Groundwater Monitoring 2025 Annual Report

for Compliance with the Michigan Part 115 CCR Solid Waste Regulations

Former Erickson Power Station

Lansing Board of Water & Light

January 29, 2026

Table of Contents

1.0 Introduction 3
2.0 Facility Description 5
2.1 Hydrogeology 8
2.2 Monitoring Well Network 8
2.2.1 Additional Wells 8
3.0 Monitoring 11
3.1 Frequency 11
3.1.1 Water Levels and Sample Collection 16
3.1.2 Analytical Testing 16
3.1.3 Data Validation and Data Management 17
4.0 Monitoring Results 18
4.1 Water Levels and Groundwater Flow Direction 18
4.2 Water Quality 24
5.0 Remedy Selection Progress Update 28
5.1 Plume Delineation 28
5.2 Groundwater Extraction and Treatment Data Collection 28
5.3 Monitored Natural Attenuation Data Collection 28
5.4 In-Situ Treatability Data Collection 29
5.5 Next Steps 30
6.0 Summary 31
7.0 References 32

List of Tables

Table 1. Construction Details for Monitoring Well Network Wells Installed in 2025 9
Table 2. Dates of Groundwater Samples Collected for each Well in 2025 and Monitoring Purpose for the Erickson Impoundments 12
Table 3. Constituents of Interest 17
Table 4. Groundwater Elevations Measured in 2025 20
Table 5. Wells in the Glacial Aquifer with SSLs over GPS – Calculated through the January/February 2025 Assessment Monitoring Event 24
Table 6. SSLs in Bedrock Wells– Calculated through the February 2025 Assessment Monitoring Event 25
Table 7. Wells in the Glacial Aquifer with SSLs over GPS – Calculated through the August 2025 Assessment Monitoring Event 26
Table 8. SSLs in Bedrock Wells– Calculated through the August 2025 Assessment Monitoring Event 26

List of Figures

Figure 1. Vicinity Map for the former Erickson Power Station 6
Figure 2. Former Erickson Power Station Facility Layout 7
Figure 3. Former Erickson Station CCR Units and Monitoring Wells 10
Figure 4. Former Erickson Power Station Groundwater Elevations 22
Figure 5. Former Erickson Power Station Paired Glacial and Bedrock Well Groundwater Elevations 23

List of Appendices

Appendix A: Groundwater Potentiometric Maps

Appendix B: Background Values and Groundwater Protection Standards

Appendix C: Lab Results Summary Tables

Appendix D: Lab Reports and Data Validation Reports

Appendix E: Statistical Output Reports

1.0 Introduction

The U.S. Environmental Protection Agency's (EPA) final Coal Combustion Residuals (CCR) Rule 40 CFR §257 and Michigan's Part 115 Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451 (Part 115), establishes a comprehensive set of requirements for the management and disposal of CCR (or coal ash) in surface impoundments by electric utilities. The former Erickson Power Station (Erickson or Site) was an electrical power generation facility located at 3725 South Canal Road in Delta Township, Eaton County, Michigan owned and operated by Lansing Board of Water & Light (BWL) (**Figure 1**). Erickson contained a single coal-fired generator that was capable of producing 165 megawatts of electricity. It ceased operations in November 2022. Erickson had three CCR impoundments: the Forebay, Retention Basin, and Clear Water Pond (CWP) (**Figure 2**). The three CCR impoundments were physically closed by removal of CCR in 2024, with ongoing groundwater monitoring.

The BWL former CCR surface impoundments, Forebay, Retention Basin, and CWP, are not licensed under Part 115 because Michigan Department of Environment, Great Lakes, and Energy (EGLE) denied BWL's permit application; however, BWL continues to work with EGLE and submits compliance documentation for EGLE as if the impoundments were permitted under an operating permit. BWL implements both the federal and state compliance groundwater monitoring programs concurrently to comply with both the federal CCR Rule and Part 115 solid waste regulations. The Part 115 permit requirements include approval of a Hydrogeologic Monitoring Plan (HMP). The current HMP was approved by EGLE and describes the monitoring network, sampling and analysis plan, and data validation and statical procedures for the monitoring program to comply with Part 115 solid waste rules (HDR, 2024c).

BWL completed numerous tasks in 2025 to characterize the impact to groundwater and progress toward selecting a remedy for corrective action. In 2025, BWL completed the following tasks listed below:

- Updated the Monitoring Well Installation Report and Groundwater Monitoring Network System Certification, both published on May 15, 2025.
- Performed a Tier I Evaluation for Monitored Natural Attenuation (MNA) of the site contaminants of concern (COCs) related to the former CCR surface impoundments.
- Developed and implemented a sampling strategy for collecting soil, groundwater, and well sediments to support subsequent Tier II MNA evaluation and bench tests to evaluate the treatability of groundwater in-situ via various potential reagents.
- Completed the installation of six monitoring wells (MW-7D, MW-19A, MW-19B, MW-19C, MW-19D, and MW-20) for groundwater plume delineation.
- Completed two semiannual assessment monitoring events and subsequent analysis in February and August 2025.
- Performed sampling and analysis for higher frequency background monitoring for newly installed MW-17 series, MW-18 series, and MW-19 series multi-level wells.
- Completed site restoration efforts for the former Forebay, Retention Basin, and CWP following the removal of CCR source materials.

This Annual Groundwater Monitoring Report presents these activities, and the sampling and analysis completed in 2025.

2.0 Facility Description

Erickson was an electrical power generation facility located at 3725 South Canal Road in Delta Township, Eaton County, Michigan, owned and operated by the Lansing Board of Water & Light (BWL) (**Figure 1**). During active operations, a single coal-fired generator was capable of producing 165 megawatts of electricity and CCR was stored in dewatering tanks (hydro-bins). After the majority of the CCR was removed from the waste stream at the hydro-bins, flow was discharged into three former CCR impoundments in sequence: the Forebay, Retention Basin, and Clear Water Pond (CWP) (**Figure 2**).

Erickson ceased coal-fired power generation operations on November 27, 2022. The plant pipelines were washed down and CCR waste disposal ceased to the CCR impoundments on December 29, 2022. The non-CCR stormwater flow to the impoundments ceased January 3, 2023. A CCR removal contractor was selected and mobilized to the site in February 2023 to begin dewatering operations for the three impoundments. The water removed from the surface impoundments was treated onsite, monitored, and discharged into nearby Lake Delta in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. Coal ash and liner material was removed and transported offsite to Granger Wood Street Landfill from all three impoundments. Ash removal verification efforts for the Forebay, Retention Basin, and CWP were completed and the removal activities are documented within the CCR Removal Report published on November 4, 2024 and approved by EGLE on November 8, 2024.

Figure 1. Vicinity Map for the former Erickson Power Station

Figure 2. Former Erickson Power Station Facility Layout

2.1 Hydrogeology

The three former CCR impoundments at Erickson are in areas underlain with unconsolidated clay, silt, sand, and gravel of glacial origin that rest upon approximately 10,000 feet of consolidated bedrock sediments composed of limestone, shale, siltstone, sandstone, salt, and gypsum. Depth to the uppermost groundwater under the impoundments is determined to be approximately 2 to 17 feet below surface. The bedrock surface is between 36 and 61 feet below surface and the upper glacial aquifer thickness is between 25 and 53 feet thick. The groundwater flow direction is east directly under the former CCR impoundments and has a consistent flow direction throughout the year (**Appendix A**). Further east, closer to Creyts Road, the groundwater flow direction is west, towards the wetland along the BWL eastern property boundary. Groundwater flow turns towards the north following Carrier Creek, consistent with the Carrier Creek Subwatershed topography. The glacial and bedrock aquifers follow the same flow directions (**Appendix A**).

2.2 Monitoring Well Network

The certified monitoring system for the former CCR impoundments includes the following wells (**Figure 3**):

- Glacial aquifer background (upgradient) wells: MW-1, MW-4, MW-11, and MW-12.
- Glacial aquifer waste boundary compliance wells: MW-2, MW-5, MW-6, and MW-14.

2.2.1 Additional Wells

The certified groundwater monitoring system includes additional wells installed to characterize the aquifer and evaluate groundwater further downgradient of the impoundments in response to identification of concentrations of constituents at statistically significant levels (SSLs) over groundwater protection standards (GPS) in the impoundment compliance wells (**Figure 3**):

- Glacial aquifer wells: MW-7, MW-7C, MW-8, MW-9, MW-10, MW-13, MW-15, MW-16A, MW-16B, MW-17A, MW-17B, MW-17C, MW-18A, MW-18B, MW-19A, MW-19B, MW-100A, MW-100B.
- Bedrock aquifer background (upgradient) wells: MW-11B, MW-12B
- Bedrock aquifer wells: MW-7B, MW-7D, MW-16C, MW-16D, MW-17D, MW-17E, MW-18C, MW-18D, MW-19C, MW-19D, MW-100C, and MW-100D
- Wells included for water level only: MW-20

Five monitoring wells (MW-19A, MW-19B, MW-19C, MW-19D, and MW-20) were installed in May 2025 located at the northern end of the BWL property boundary for plume delineation (**Figure 3**). These new monitoring wells were sited north of the wetland to avoid wetland disturbance and associated long permitting timelines for work in a wetland. Additionally, a shallow bedrock aquifer monitoring well (MW-7D) was installed at the MW-7 well series in September 2025 (**Figure 3**). While monitoring well MW-7B had been monitoring groundwater in the bedrock aquifer, monitoring well MW-7D was installed to evaluate any difference in groundwater quality between shallow bedrock (MW-7D screened between 69 and 74 feet below

ground surface) and deeper bedrock groundwater quality (MW-7B screened between 110 and 120 feet below ground surface). Details regarding the construction of these newly installed wells are included in **Table 1** below. These wells will be included in a revision to the Monitoring Well Installation Report and Groundwater Monitoring Network System Certification in 2026. No wells were repaired or abandoned in 2025.

Table 1. Construction Details for Monitoring Well Network Wells Installed in 2025

Well	Screen Interval (ft bgs)	Screen Interval Elevations (ft amsl)	Aquifer	Screen Lithology
MW-7D	69-74	Not Yet Surveyed	Bedrock	Shale (100%)
MW-19A	13-23	842-852	Glacial	Silty sand, lean clay, sandy lean clay, poorly graded sand
MW-19B	33-38	827-832	Glacial	Poorly graded gravel, lean clay with gravel
MW-19C	60-70	795-805	Bedrock	Shale (100%)
MW-19D	124-129	736-741	Bedrock	Shale (100%)
MW-20	15-25	848-858	Glacial	Poorly graded sand, lean clay with sand, silty sand, silty sandy lean clay, poorly graded sand with clay

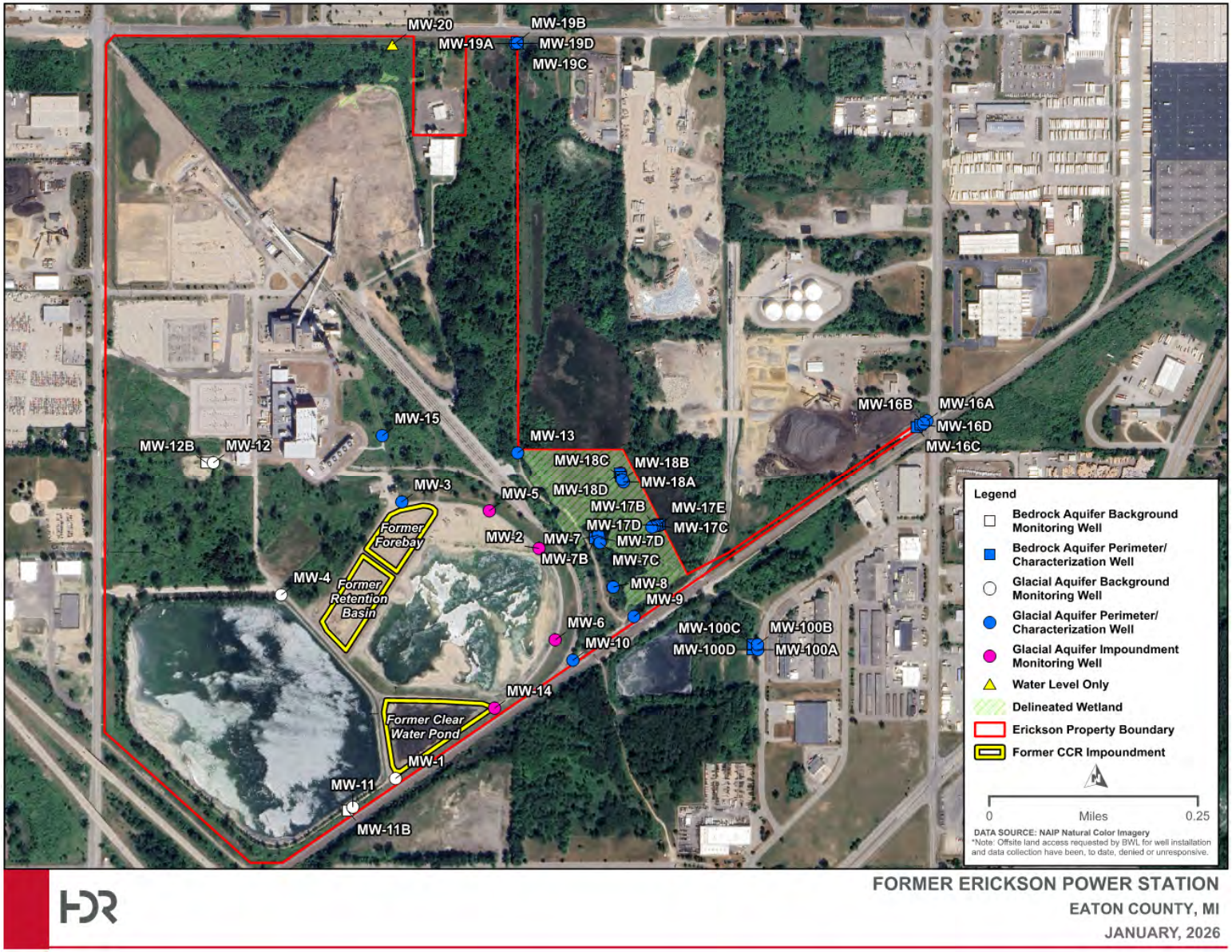


Figure 3. Former Erickson Station CCR Units and Monitoring Wells

3.0 Monitoring

3.1 Frequency

Table 2 provides the well identification number, well location, and the dates and purpose of the samples collected. Assessment monitoring for Erickson in 2025 was conducted in January/February and August.

In May 2025, four new monitoring wells (MW-19 series A-D) and a piezometer to validate the groundwater contours for the site (MW-20) were installed. Well MW-7D was installed in September 2025 to monitor conditions in the bedrock aquifer. As new wells are added to the monitoring system, they are initially sampled on a 5-week frequency for a total of eight rounds to establish background in each well per §257.94(b). This expedited frequency develops the statistical strength recommended before using the data in the semiannual sampling events, provided the evaluation of the data for autocorrelation is acceptable. After the initial eight sampling events are completed, semiannual sampling aligns with the above sampling schedule. To date, seven sample events have been completed for the MW-19 series wells and two sample events have been completed for well MW-7D.

Additional sampling events for 2025 included the collection of additional groundwater samples from select wells to further assess in-situ treatability and the MNA remedial alternative.

Table 2. Dates of Groundwater Samples Collected for each Well in 2025 and Monitoring Purpose for the Erickson Impoundments

Monitoring Well I.D.	Well Location	Aquifer Monitored	Dates Monitored	Monitoring Purpose
MW-1	Background/ Upgradient	Glacial	February 4, 2025 August 8, 2025	Assessment Monitoring
MW-2	Downgradient	Glacial	February 4, 2025 August 6, 2025	Assessment Monitoring
			November 19, 2025	MNA Data Collection
MW-3	Cross-Gradient	Glacial	February 6, 2025 August 6, 2025	Assessment Monitoring
			November 18, 2025	MNA Data Collection
MW-4	Background/ Upgradient	Glacial	February 4, 2025 August 11, 2025	Assessment Monitoring
MW-5	Downgradient	Glacial	February 4, 2025 August 6, 2025	Assessment Monitoring
			November 18, 2025	MNA Data Collection
MW-6	Downgradient	Glacial	February 4, 2025 August 6, 2025	Assessment Monitoring
			November 17, 2025	MNA Data Collection
MW-7	Downgradient	Glacial	February 5, 2025 August 8, 2025	Assessment Monitoring
			November 17, 2025	MNA Data Collection
MW-7B	Downgradient	Bedrock	February 5, 2025 August 8, 2025	Assessment Monitoring
MW-7C	Downgradient	Glacial	February 5, 2025 August 7, 2025	Assessment Monitoring
			October 14, 2025	In-Situ Bench Testing
			November 17, 2025	MNA Data Collection
MW-7D (installed September 10, 2025)	Downgradient	Bedrock	September 30, 2025 November 4, 2025	Background Monitoring
			November 17, 2025	MNA Data Collection
			December 9, 2025*	Background Monitoring
MW-8	Downgradient	Glacial	February 5, 2025 August 7, 2025	Assessment Monitoring
MW-9	Downgradient	Glacial	February 5, 2025 August 7, 2025	Assessment Monitoring
MW-10	Downgradient	Glacial	February 5, 2025 August 7, 2025	Assessment Monitoring
MW-11	Background/ Upgradient	Glacial	February 4, 2025 August 6, 2025	Assessment Monitoring
MW-11B	Background/ Upgradient	Bedrock	February 4, 2025 August 6, 2025	Assessment Monitoring
MW-12	Background/ Upgradient	Glacial	February 4, 2025 August 6, 2025	Assessment Monitoring
			November 19, 2025	MNA Data Collection

Monitoring Well I.D.	Well Location	Aquifer Monitored	Dates Monitored	Monitoring Purpose
MW-12B	Background/ Upgradient	Bedrock	February 4, 2025 August 6, 2025	Assessment Monitoring
			November 19, 2025	MNA Data Collection
MW-13	Downgradient	Glacial	February 6, 2025 August 8, 2025	Assessment Monitoring
MW-14	Downgradient	Glacial	February 4, 2025 August 6, 2025	Assessment Monitoring
			November 17, 2025	MNA Data Collection
MW-15	Downgradient	Glacial	February 4, 2025 August 7, 2025	Assessment Monitoring
MW-16A	Downgradient	Glacial	February 6, 2025 August 11, 2025	Assessment Monitoring
MW-16B	Downgradient	Glacial	February 6, 2025 August 11, 2025	Assessment Monitoring
MW-16C	Downgradient	Bedrock	February 6, 2025 August 11, 2025	Assessment Monitoring
MW-16D	Downgradient	Bedrock	February 6, 2025 August 11, 2025	Assessment Monitoring
MW-17A	Downgradient	Glacial	January 23, 2025	Background Monitoring / Assessment Monitoring / MNA Data Collection
			February 27, 2025 April 3, 2025[1] April 24, 2025[1] May 29, 2025[1] July 1, 2025	Background Monitoring
			August 5, 2025	Background Monitoring / Assessment Monitoring
			September 11, 2025	Background Monitoring
			November 17, 2025	MNA Data Collection
MW-17B	Downgradient	Glacial	January 23, 2025	Background Monitoring / Assessment Monitoring / MNA Data Collection
			February 27, 2025 April 3, 2025[1] April 24, 2025[1] May 29, 2025[1] July 1, 2025	Background Monitoring
			August 5, 2025	Background Monitoring / Assessment Monitoring
			September 11, 2025	Background Monitoring
			November 17, 2025	MNA Data Collection

Monitoring Well I.D.	Well Location	Aquifer Monitored	Dates Monitored	Monitoring Purpose
MW-17C	Downgradient	Glacial	January 23, 2025	Background Monitoring / Assessment Monitoring / MNA Data Collection
			February 27, 2025 April 3, 2025[1] April 24, 2025[1] May 29, 2025[1] July 1, 2025	Background Monitoring
			August 5, 2025	Background Monitoring / Assessment Monitoring
			September 11, 2025	Background Monitoring
			November 17, 2025	MNA Data Collection
MW-17D	Downgradient	Bedrock	January 23, 2025	Background Monitoring / Assessment Monitoring / MNA Data Collection
			February 27, 2025 April 3, 2025[1] April 24, 2025[1] May 29, 2025[1]	Background Monitoring
			August 5, 2025	Background Monitoring / Assessment Monitoring
			September 11, 2025	Background Monitoring
			November 17, 2025	MNA Data Collection
MW-17E	Downgradient	Bedrock	January 23, 2025	Background Monitoring / Assessment Monitoring / MNA Data Collection
			February 27, 2025 April 3, 2025[1] April 24, 2025[1] May 29, 2025[1] July 1, 2025	Background Monitoring
			August 5, 2025	Background Monitoring / Assessment Monitoring
			September 11, 2025	Background Monitoring
			November 17, 2025	MNA Data Collection
MW-18A	Downgradient	Glacial	January 23, 2025	Background Monitoring / Assessment Monitoring / MNA Data Collection
			February 27, 2025 April 3, 2025[1] April 24, 2025 May 29, 2025 July 8, 2025	Background Monitoring
			August 8, 2025	Assessment Monitoring
			November 17, 2025	MNA Data Collection

Monitoring Well I.D.	Well Location	Aquifer Monitored	Dates Monitored	Monitoring Purpose
MW-18B	Downgradient	Glacial	January 23, 2025	Background Monitoring / Assessment Monitoring / MNA Data Collection
			February 27, 2025 April 3, 2025[1] April 24, 2025 May 29, 2025 July 8, 2025	Background Monitoring
			August 8, 2025	Assessment Monitoring
			November 18, 2025	MNA Data Collection
MW-18C	Downgradient	Bedrock	January 23, 2025	Background Monitoring / Assessment Monitoring / MNA Data Collection
			February 27, 2025 April 3, 2025[1] April 24, 2025 May 29, 2025* July 8, 2025	Background Monitoring
			August 8, 2025	Assessment Monitoring
			October 15, 2025 November 18, 2025	MNA Data Collection
MW-18D	Downgradient	Bedrock	January 23, 2025	Background Monitoring / Assessment Monitoring / MNA Data Collection
			February 27, 2025 April 3, 2025[1] April 24, 2025 May 29, 2025 July 8, 2025	Background Monitoring
			August 8, 2025	Assessment Monitoring
			November 18, 2025	MNA Data Collection
MW-19A (installed May 1, 2025)	Downgradient	Glacial	May 12, 2025 June 17, 2025 July 22, 2025 August 26, 2025 September 30, 2025 November 4, 2025	Background Monitoring
			November 18, 2025	MNA Data Collection
			December 9, 2025*	Background Monitoring
MW-19B (installed May 1, 2025)	Downgradient	Glacial	May 12, 2025 June 17, 2025 July 22, 2025 August 26, 2025 September 30, 2025 November 4, 2025	Background Monitoring
			November 18, 2025	MNA Data Collection
			December 9, 2025*	Background Monitoring

Monitoring Well I.D.	Well Location	Aquifer Monitored	Dates Monitored	Monitoring Purpose
MW-19C (installed April 30, 2025)	Downgradient	Bedrock	May 12, 2025 June 17, 2025 July 22, 2025 August 26, 2025 September 30, 2025 November 4, 2025	Background Monitoring
			November 18, 2025	MNA Data Collection
			December 9, 2025*	Background Monitoring
MW-19D (installed April 30, 2025)	Downgradient	Bedrock	May 12, 2025 June 17, 2025 July 22, 2025 August 26, 2025 September 30, 2025 November 4, 2025	Background Monitoring
			November 18, 2025	MNA Data Collection
			December 9, 2025*	Background Monitoring
MW-100A	Downgradient	Glacial	February 5, 2025 August 7, 2025	Assessment Monitoring
MW-100B	Downgradient	Glacial	February 5, 2025 August 7, 2025	Assessment Monitoring
MW-100C	Downgradient	Bedrock	February 5, 2025 August 7, 2025	Assessment Monitoring
MW-100D	Downgradient	Bedrock	February 5, 2025 August 7, 2025	Assessment Monitoring

[1]On this monitoring date, the monitoring location was scheduled for monitoring; however, the monitoring point was inaccessible due to ponded water and the well was unable to be sampled.

*Data analysis from these sample events are incomplete.

3.1.1 Water Levels and Sample Collection

Water levels were collected in each well following the Groundwater Level Monitoring Standard Operating Procedure (SOP) for Erickson (HDR, 2024b). Water levels were measured before purging the wells began. Wells were purged with a peristaltic pump until field parameters (pH, turbidity, conductivity, dissolved oxygen, temperature, and oxidation reduction potential) stabilized. The results of field measurements were recorded on a field data form, which is maintained as part of the field records. After field parameters stabilized, samples were collected and tested for the parameters listed in **Table 3**. For quality control, one field duplicate and one equipment blank sample were collected on each sampling date for each sampling event. Samples were shipped under Chain of Custody to Eurofins Laboratories of Cleveland, Ohio.

3.1.2 Analytical Testing

Samples collected for background monitoring and assessment monitoring events were analyzed for the parameters listed in **Table 3**. In addition to the required list in **Table 3**, on occasion, wells were analyzed for general water quality parameters including alkalinity, magnesium, potassium, and sodium.

Table 3. Constituents of Interest

Constituents for Assessment Monitoring	
Boron	Fluoride
Calcium	Iron
Chloride	Lead
Fluoride	Lithium
pH	Mercury
Sulfate	Molybdenum
Total Dissolved Solids (TDS)	Nickel
Antimony	Selenium
Arsenic	Silver
Barium	Thallium
Beryllium	Radium 226 and 228 combined
Cadmium	Vanadium
Chromium	Zinc
Cobalt	**Additional Parameters**
Copper	Total Suspended Solids (TSS)

3.1.3 Data Validation and Data Management

Data validation and data management tasks were performed per the Data Management and Statistical Procedures Plan for Compliance with the Coal Combustion Residuals Rule (HDR, 2020a). Data validation was conducted to eliminate data that did not meet validation criteria and designate a data qualifier for data quality limitation discovered.

Samples and quality control (QC) were reviewed and evaluated, and no samples were rejected. Quality Control analyses were within reportable limits; however, when QC was outside limit controls, samples were reported as estimated. Field and laboratory precision and accuracy goals were nearly met for all samples analyzed. Where failures of field and laboratory precision and accuracy were outside of control limits, data was qualified as necessary. Data analyses required minimal qualifications, and data were usable, even when qualified. A summary table of the lab results may be found in **Appendix C**. Laboratory reports and data validation reports for the sampling completed in 2025 may be found in **Appendix D.**

4.0 Monitoring Results

4.1 Water Levels and Groundwater Flow Direction

Water levels for the former Erickson Power Station are provided in **Table 4**. Groundwater beneath the area of the impoundments is between 852 to 876 feet amsl. Groundwater elevations fluctuate approximately 1 to 6 feet throughout the year and are higher in the spring and lower in the fall (**Figure 4**). Based on the potentiometric contours, the groundwater flow under the former CCR impoundments is generally east, however flow farther east of the wetlands at MW-16 appears to be flowing west, back towards the BWL property and then following the surface topography towards the north. Groundwater flows north under the wetland area within both the glacial and bedrock aquifers consistent with the Carrier Creek Subwatershed topography. Additional information detailing the groundwater flow direction at former Erickson Power Station may be found in the revised Groundwater Monitoring Network System Certification for Erickson Power Station published in May 2025 (HDR, 2025b).

Water levels in the multi-level glacial and bedrock wells is inconsistent between the sets (**Figure 4**). As shown in **Table 4**, glacial wells MW-11 and MW-12 have higher water levels than the paired bedrock wells MW-11B and MW-12B (approximately 9 feet and 4 feet higher, respectively), indicating a downward vertical gradient. Similarly, groundwater elevations in the MW-16 series decrease with well depth, indicating a downward vertical gradient, except for bedrock well MW-16D which is hydraulically disconnected from the other wells at Erickson. In the MW-100 well series, groundwater elevations in MW-100B and MW-100C are similar, while MW-100A is one foot higher and MW-100D is also one foot higher. These wells are all located farther from and surrounding the wetland where groundwater converges from both sides and turns and flows north consistent with the Carrier Creek Subwatershed topography. Wells that are closer to or within the wetland and where groundwater converges and flows north, bedrock well MW-7B has historically had a slightly higher water level than glacial paired well MW-7, indicating an upward vertical gradient, however, data collected since its installation in 2022 indicate that this trend may be seasonally dependent as the gradient has been inconsistent. Well MW-7D is not yet surveyed, therefore vertical groundwater flow gradient could not yet be determined for this well. Groundwater elevation data for the MW-17 series wells indicate a downward vertical gradient, except for MW-17D which appears to have an upward gradient from the shallow bedrock to the glacial aquifer. Additionally, the vertical gradient of the shallow glacial wells MW-17A and MW-17B may be seasonally dependent as MW-17B has been observed at slightly higher elevations than that of MW-17A during Q1 and Q2 2025. Likewise, MW-18 series wells have also indicated a downward vertical gradient, with an upward vertical gradient being observed between MW-18A, -18B, and -18C during of 2025. Groundwater elevation data collected from the MW-19 series wells indicate an upward gradient within this well series farther north. Groundwater elevation in wells MW-19B and MW-19C are similar and both are approximately 1 foot higher than well MW-19A. Groundwater elevations in well MW-19D is approximately a foot higher than MW-19B and MW-19C and approximately two feet higher than well MW-19A.

Because the groundwater elevations differed between glacial wells and bedrock wells, two separate sets of potentiometric contour maps were developed, one for wells screened in the glacial aquifer and one for the wells screened in the shale/sandstone bedrock aquifer. Potentiometric surface maps were developed for the glacial and bedrock aquifers for the January, May, and August 2025 water level measurement dates. Maps displaying the groundwater elevations at the wells and the groundwater contours and are provided in **Appendix A**.

The potentiometric surface maps and hydrographs indicate that monitoring wells MW-1, MW-4, MW-11, MW-12 are located upgradient in the glacial aquifer and wells MW-11B and MW-12B are upgradient in the bedrock aquifer relative to the former Forebay, Retention Pond, and CWP and are appropriate to represent background water quality.

Table 4. Groundwater Elevations Measured in 2025

Monitoring Well ID	Aquifer Monitored	TOC Elevation (ft amsl)	Groundwater Elevations (ft amsl)															
			1/23/2025	1/31/2025	2/27/2025	4/24/2025	5/12/2025	5/28/2025	5/29/2025	6/17/2025	7/1/2025	7/8/2025	7/22/2025	8/4/2025	8/26/2025	9/11/2025	9/30/2025	11/4/2025	12/9/2025
MW-1	Glacial	888.74	NM	873.83	NM	NM	NM	874.41	NM	NM	NM	NM	NM	872.87	NM	NM	NM	NM	NM
MW-2	Glacial	885.97	NM	864.59	NM	NM	NM	866.40	NM	NM	NM	NM	NM	864.69	NM	NM	NM	NM	NM
MW-3	Glacial	884.81	NM	869.24	NM	NM	NM	872.50	NM	NM	NM	NM	NM	870.38	NM	NM	NM	NM	NM
MW-4	Glacial	889.15	NM	870.61	NM	NM	NM	873.68	NM	NM	NM	NM	NM	871.73	NM	NM	NM	NM	NM
MW-5	Glacial	885.50	NM	866.13	NM	NM	NM	867.05	NM	NM	NM	NM	NM	866.26	NM	NM	NM	NM	NM
MW-6	Glacial	885.53	NM	864.18	NM	NM	NM	866.19	NM	NM	NM	NM	NM	864.41	NM	NM	NM	NM	NM
MW-7	Glacial	870.14	NM	863.72	NM	NM	NM	864.91	NM	NM	NM	NM	NM	863.49	NM	NM	NM	NM	NM
MW-7B	Bedrock	870.28	NM	863.61	NM	NM	NM	868.16	NM	NM	NM	NM	NM	863.86	NM	NM	NM	NM	NM
MW-7C	Glacial	871.53	NM	864.04	NM	NM	NM	865.35	NM	NM	NM	NM	NM	864	NM	NM	NM	NM	NM
MW-7D	Bedrock	Not Yet Surveyed	Well installed on September 10, 2025.													Not Yet Surveyed			
MW-8	Glacial	873.74	NM	863.93	NM	NM	NM	865.37	NM	NM	NM	NM	NM	863.94	NM	NM	NM	NM	NM
MW-9	Glacial	872.60	NM	863.74	NM	NM	NM	865.14	NM	NM	NM	NM	NM	863.73	NM	NM	NM	NM	NM
MW-10	Glacial	875.65	NM	864.40	NM	NM	NM	866.66	NM	NM	NM	NM	NM	864.61	NM	NM	NM	NM	NM
MW-11	Glacial	885.64	NM	875.06	NM	NM	NM	875.53	NM	NM	NM	NM	NM	874.71	NM	NM	NM	NM	NM
MW-11B	Bedrock	885.58	NM	865.27	NM	NM	NM	866.41	NM	NM	NM	NM	NM	865.39	NM	NM	NM	NM	NM
MW-12	Glacial	886.19	NM	869.14	NM	NM	NM	872.01	NM	NM	NM	NM	NM	870.15	NM	NM	NM	NM	NM
MW-12B	Bedrock	886.27	NM	866.38	NM	NM	NM	867.86	NM	NM	NM	NM	NM	866.92	NM	NM	NM	NM	NM
MW-13	Glacial	871.80	NM	863.11	NM	NM	NM	864.60	NM	NM	NM	NM	NM	862.43	NM	NM	NM	NM	NM
MW-14	Glacial	884.59	NM	869.02	NM	NM	NM	869.83	NM	NM	NM	NM	NM	867.99	NM	NM	NM	NM	NM
MW-15	Glacial	880.24	NM	874.11	NM	NM	NM	874.96	NM	NM	NM	NM	NM	871.51	NM	NM	NM	NM	NM
MW-16A	Glacial	877.48	NM	869.87	NM	NM	NM	871.87	NM	NM	NM	NM	NM	869.82	NM	NM	NM	NM	NM
MW-16B	Glacial	877.49	NM	866.52	NM	NM	NM	868.25	NM	NM	NM	NM	NM	866.88	NM	NM	NM	NM	NM
MW-16C	Bedrock	877.49	NM	866.27	NM	NM	NM	867.93	NM	NM	NM	NM	NM	866.56	NM	NM	NM	NM	NM
MW-16D	Bedrock	877.53	NM	852.58	NM	NM	NM	853.10	NM	NM	NM	NM	NM	852.79	NM	NM	NM	NM	NM
MW-17A	Glacial	864.43	863.44	863.65	863.93	NM	NM	NM	NM	NM	864.19	NM	NM	863.37	NM	862.66	NM	NM	NM
MW-17B	Glacial	864.49	863.51	863.56	863.98	NM	NM	NM	NM	NM	864.16	NM	NM	863.42	NM	862.72	NM	NM	NM
MW-17C	Glacial	864.51	862.95	863.57	863.26	NM	NM	NM	NM	NM	864.20	NM	NM	863.44	NM	862.75	NM	NM	NM
MW-17D	Bedrock	864.42	863.39	863.73	863.62	NM	NM	NM	NM	NM	864.39	NM	NM	863.73	NM	862.88	NM	NM	NM
MW-17E	Bedrock	864.36	862.08	863.66	862.16	NM	NM	NM	NM	NM	864.24	NM	NM	863.75	NM	862.90	NM	NM	NM
MW-18A	Glacial	865.59	863.63	863.69	864.19	864.76	NM	864.84	864.82	NM	NM	864.24	NM	863.38	NM	NM	NM	NM	NM
MW-18B	Glacial	865.60	863.68	863.70	864.25	864.82	NM	864.92	864.87	NM	NM	864.27	NM	863.47	NM	NM	NM	NM	NM
MW-18C	Bedrock	865.58	863.60	863.68	864.08	864.82	NM	864.92	864.91	NM	NM	864.26	NM	863.51	NM	NM	NM	NM	NM
MW-18D	Bedrock	865.59	861.18	863.25	861.75	864.52	NM	864.59	864.58	NM	NM	864.22	NM	863.31	NM	NM	NM	NM	NM
MW-19A	Glacial	868.30	Well installed on May 1, 2025.				858.55	858.29	NM	857.47	NM	NM	856.57	NM	855.73	NM	855.21	855.35	855.26
MW-19B	Glacial	868.28	Well installed on May 1, 2025.				859.46	859.28	NM	858.50	NM	NM	857.48	NM	856.65	NM	856.03	856.18	856.10
MW-19C	Bedrock	868.57	Well installed on April 30, 2025.				860.44	859.77	NM	858.89	NM	NM	857.83	NM	856.95	NM	856.31	856.47	856.35
MW-19D	Bedrock	868.62	Well installed on April 30, 2025.				861.07	860.28	NM	859.32	NM	NM	858.69	NM	857.74	NM	857.01	857.13	856.98
MW-20	Glacial	875.95	Well installed on April 29, 2025.				NM	863.99	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-100A	Glacial	879.77	NM	NM	NM	NM	NM	864.92	NM	NM	NM	NM	NM	864.17	NM	NM	NM	NM	NM
MW-100B	Glacial	879.74	NM	NM	NM	NM	NM	864.52	NM	NM	NM	NM	NM	863.54	NM	NM	NM	NM	NM

Monitoring Well ID	Aquifer Monitored	TOC Elevation (ft amsl)	Groundwater Elevations (ft amsl)																
			1/23/2025	1/31/2025	2/27/2025	4/24/2025	5/12/2025	5/28/2025	5/29/2025	6/17/2025	7/1/2025	7/8/2025	7/22/2025	8/4/2025	8/26/2025	9/11/2025	9/30/2025	11/4/2025	12/9/2025
MW-100C	Bedrock	879.72	NM	NM	NM	NM	NM	864.79	NM	NM	NM	NM	NM	863.79	NM	NM	NM	NM	NM
MW-100D	Bedrock	879.70	NM	NM	NM	NM	NM	865.18	NM	NM	NM	NM	NM	864.06	NM	NM	NM	NM	NM

NM – Not measured.

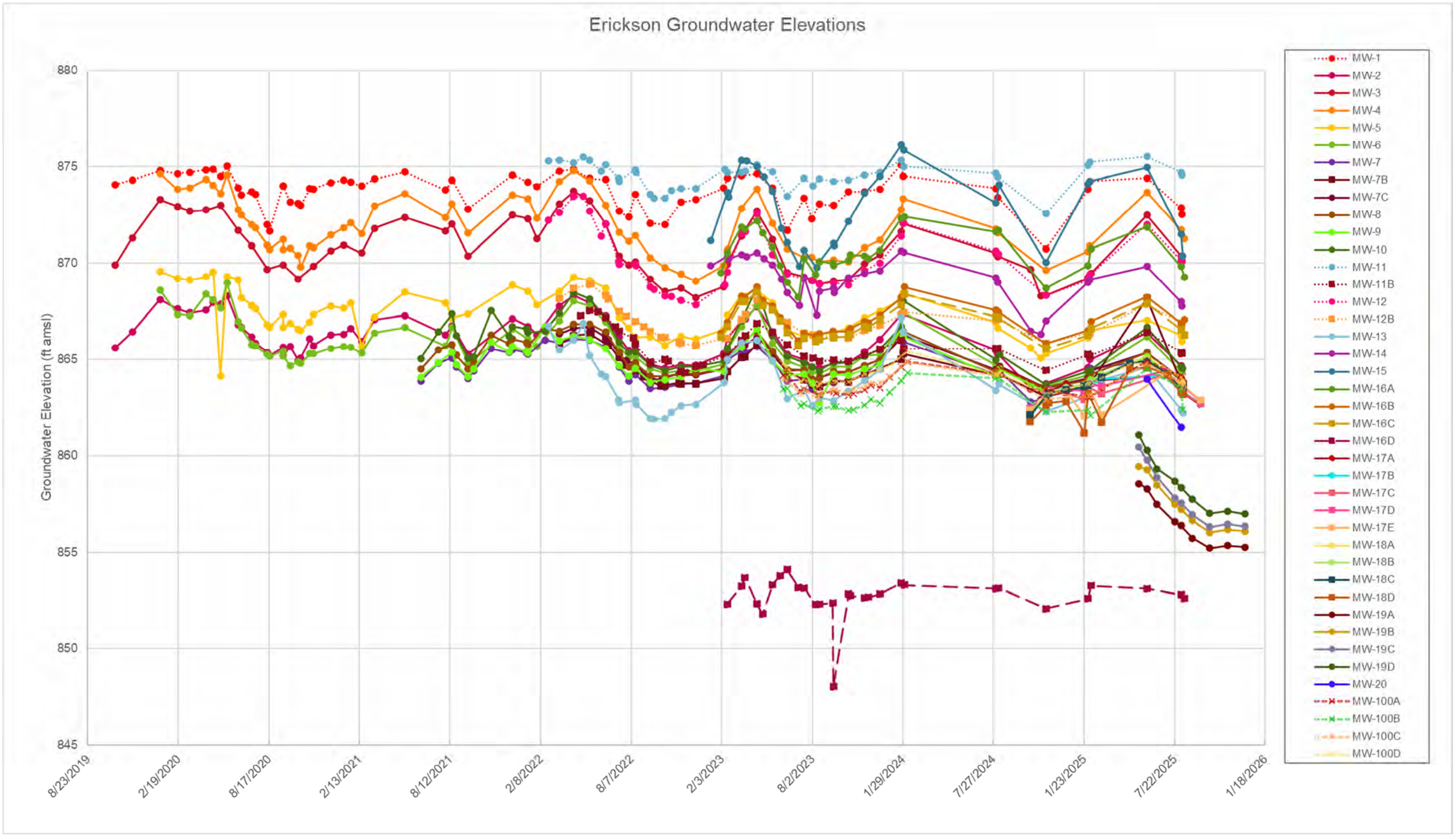


Figure 4. Former Erickson Power Station Groundwater Elevations

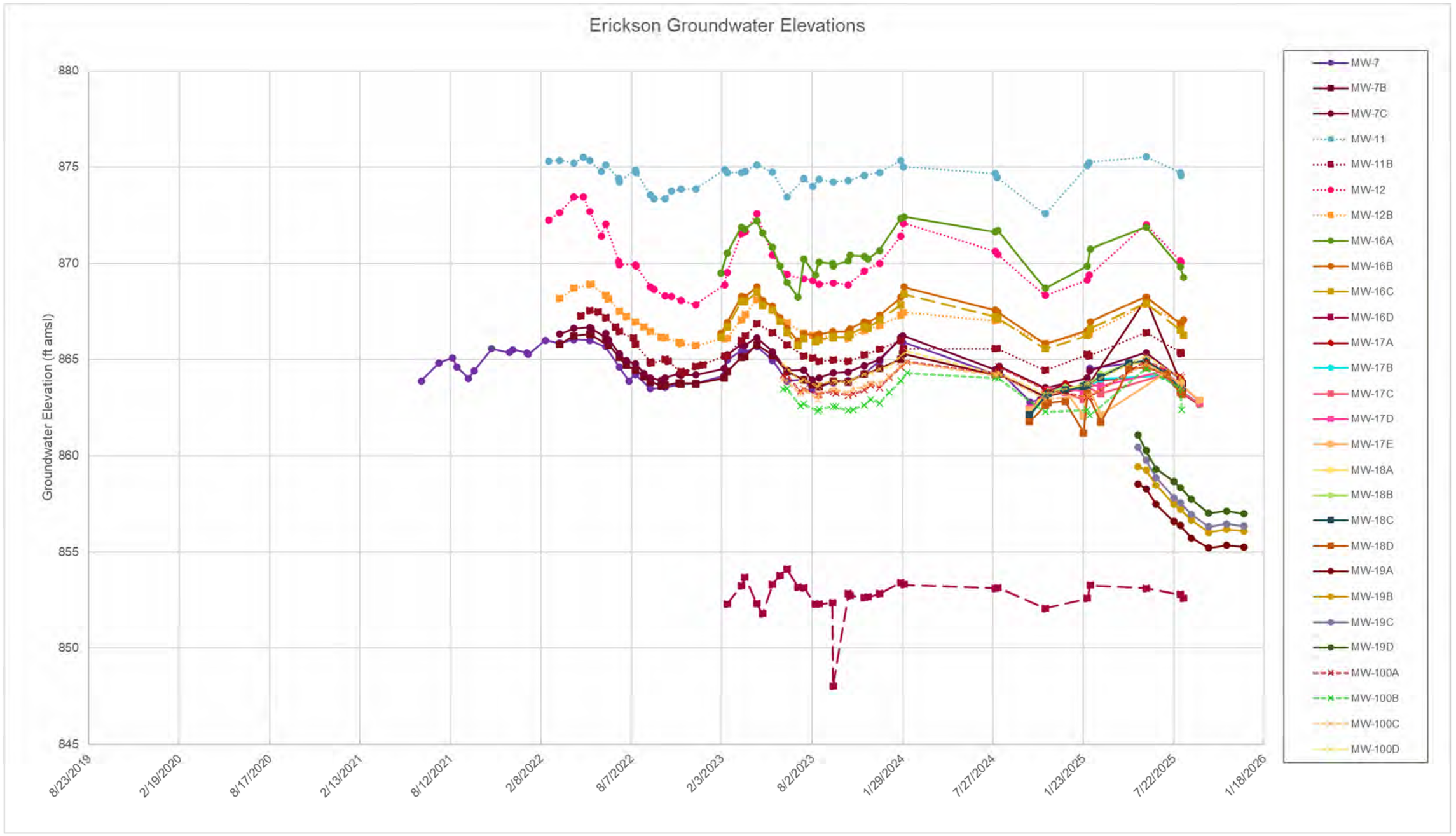


Figure 5. Former Erickson Power Station Paired Glacial and Bedrock Well Groundwater Elevations

4.2 Water Quality

Site-specific Background Values and Groundwater Protection Standards for the glacial and bedrock aquifers may be found in **Appendix B**. A table summary of the analytical data is provided in **Appendix C** and laboratory reports are provided in **Appendix D**.

Assessment Monitoring Event – January/February 2025

Thirty-six (36) wells were sampled during January/February 2025 assessment monitoring event as presented in **Table 2**. The following wells had concentrations of one or more constituents that exceeded GPS: MW-2, MW-3, MW-5, MW-6, MW-7, MW-7C, MW-14, MW-16A, and MW-16D. In accordance with Michigan Rule R 299.4441, downgradient well concentrations were statistically evaluated to determine if constituents are detected at SSLs above the GPS. To determine if an exceedance of a GPS value was statistically significant, the 95% lower confidence limit (95LCL) was calculated for each of the downgradient wells. Statistical output files are in **Appendix E**.

Glacial Aquifer

Monitoring wells MW-2 and MW-5 had SSLs of boron, calcium, lithium, and sulfate over the GPS (**Table 5**). In previous assessment monitoring events, wells MW-2 and MW-5 also had SSLs of TDS above the GPS; however, the 95LCL dropped below the GPS after the February 2025 sample event. Monitoring wells MW-6 and MW-14 had SSLs of boron and lithium over the GPS, and well MW-7 had SSLs of boron, lithium, and molybdenum over the GPS (**Table 5**). Well MW-7C had SSLs of boron, calcium, lithium, molybdenum, sulfate, and TDS over the GPS (**Table 5**). Well MW-3 continued to demonstrate SSLs of boron, calcium, lithium, molybdenum, sulfate, and TDS over the GPS (**Table 5**).

Table 5. Wells in the Glacial Aquifer with SSLs over GPS – Calculated through the January/February 2025 Assessment Monitoring Event

Monitoring Well	Constituent	Boron	Calcium	Chloride	Lithium	Molybdenum	Sulfate	TDS
	State Glacial GPS	0.50 mg/l	188 mg/l	250 mg/l	0.040 mg/l	0.10 mg/l	344 mg/l	1,169 mg/l
MW-2	95% LCL	4.3	220	-	0.051	-	410	-
MW-3	95% LCL	5.5	240	-	0.078	0.16	690	1,400
MW-5	95% LCL	3.5	190	-	0.061	-	490	-
MW-6	95% LCL	0.71	-	-	0.044	-	-	-
MW-7	95% LCL	1.7	-	-	0.083	0.17	-	-
MW-7C	95% LCL	6.4	240	-	0.12	0.39	670	1,300
MW-14	95% LCL	2.1	-	-	0.11	-	-	-
MW-16A*	95% LCL	-	-	420	-	-	-	1,300

*An ASD was submitted to EGLE July 2024 for the SSLs observed within this well.
"-" Denotes the LCL did not exceed GPS along with wells not listed.

Bedrock Aquifer

After the January/February 2025 assessment monitoring event monitoring well MW-16D continued to demonstrate an SSL of boron over the GPS (**Table 6**).

Table 6. SSLs in Bedrock Wells– Calculated through the February 2025 Assessment Monitoring Event

Monitoring Well	Constituent	Boron
	State Glacial GPS	3.52 mg/l
MW-16D*	95% LCL	4.5

*An ASD was submitted to EGLE July 2024 for the SSL observed within this well.

Multiple lines of evidence have indicated that the SSL of boron in well MW-16D is naturally occurring.

Assessment Monitoring Event – August, September 2025

Thirty-six (36) wells were sampled during August 2025 assessment monitoring event as presented in **Table 2**. MW-17 and MW-18 series wells were installed and sampled concurrently; however, due to seasonal inundation, the 8th background sampling event for MW-17 series wells were delayed from their scheduled completion during the August 2025 sampling event. As shown in **Table 2** background sampling events for MW-17 series wells were completed in October, November, and December 2024 and January, February, July, August, and September 2025. Therefore, this section represents the LCL values calculated after the August 2025 assessment monitoring event for all wells except the MW-17 series wells, which were completed after the September 2025 sampling event.

The following wells had concentrations of one or more constituents that exceeded GPS: MW-2, MW-3, MW-5, MW-6, MW-7, MW-7C, MW-14, MW-16A, MW-16C, MW-16D, MW-17A, MW-17B, MW-17C, MW-18A, MW-18B, MW-18C, and MW-18D. In accordance with Michigan Rule R 299.4441, downgradient well concentrations were statistically evaluated to determine if constituents are detected at SSLs above the GPS. To determine if an exceedance of a GPS value was statistically significant, the 95% lower confidence limit (95LCL) was calculated for each of the downgradient wells. Statistical output files are in **Appendix E**.

Glacial Aquifer

Wells MW-2 and MW-5 had SSLs of boron, calcium, lithium, and sulfate over the GPS (**Table 9**). In previous assessment monitoring events, wells MW-2 and MW-5 also had SSLs of TDS above the GPS; however, the 95LCL dropped below the GPS after the February 2025 sample event and remained under the GPS for the August 2025 sample event. Wells MW-6 and MW-14 had SSLs of boron and lithium over the GPS, and well MW-7 had SSLs of boron, lithium, and molybdenum, over the GPS (**Table 7**). Well MW-7C had SSLs of boron, calcium, lithium, molybdenum, sulfate, and TDS over the GPS (**Table 7**). Well MW-3 continued to demonstrate SSLs of boron, calcium, lithium, molybdenum, sulfate, and TDS over the GPS (**Table 7**). After achieving enough sample events to be statistically significant, wells MW-17A, MW-17B, MW-17C, MW-18A, and MW-18B demonstrated SSLs of boron and lithium over the GPS (**Table 7**). Additionally, wells MW-17A and MW-17C demonstrated SSLs of sulfate above the GPS and MW-17C demonstrated an SSL of TDS above the GPS (**Table 7**).

Table 7. Wells in the Glacial Aquifer with SSLs over GPS – Calculated through the August 2025 Assessment Monitoring Event

Monitoring Well	Constituent	Boron	Calcium	Chloride	Lithium	Molybdenum	Sulfate	TDS
	State Glacial GPS	0.50 mg/l	188 mg/l	250 mg/l	0.040 mg/l	0.10 mg/l	344 mg/l	1,169 mg/l
MW-2	95% LCL	4.2	200	-	0.050	-	350	-
MW-3	95% LCL	5.6	230	-	0.078	0.16	680	1,200
MW-5	95% LCL	3.4	190	-	0.062	-	470	-
MW-6	95% LCL	0.71	-	-	0.044	-	-	-
MW-7	95% LCL	1.7	-	-	0.082	0.17	-	-
MW-7C	95% LCL	6.4	230	-	0.12	0.38	660	1,300
MW-14	95% LCL	2.0	-	-	0.10	-	-	-
MW-16A*	95% LCL	-	-	410	-	-	-	1,300
MW-17A[1]	95% LCL	3.8			0.050		630	1,300
MW-17B[1]	95% LCL	1.8			0.078			
MW-17C[1]	95% LCL	2.0			0.052		420	
MW-18A	95% LCL	0.93	-	-	0.059	-	-	-
MW-18B	95% LCL	2.0	-	-	0.096	-	-	-

*An ASD was submitted to EGLE July 2024 for the SSLs observed within this well.
"-" Denotes the LCL did not exceed GPS along with wells not listed.
[1]Calculated through the September 2025 background sampling events.

Bedrock Aquifer

After the August 2025 sample event three bedrock wells had new SSLs identified for the first time. Monitoring well MW-16C had an SSL for calcium above the GPS (**Table 8**). Well MW-16D continued to demonstrate an SSL of boron over the GPS during the January/February 2025 assessment monitoring event (**Table 8**). Wells MW-18C and MW-18D had SSLs above the GPS for lithium and additionally well MW-18C had SSLs for calcium, sulfate, and TDS (**Table 8**); however, these constituent concentrations were decreasing over the 9 sampled events (October 2024 to August 2025). BWL will be reviewing data for a potential alternate source. No SSLs were observed for wells MW-17D or MW-17E after completing their 8th sample event in September 2025.

Table 8. SSLs in Bedrock Wells– Calculated through the August 2025 Assessment Monitoring Event

Monitoring Well	Constituent	Boron	Calcium	Lithium	Sulfate	TDS
	State Glacial GPS	3.52 mg/l	69.6 mg/L	0.051 mg/L	250 mg/L	500 mg/L
MW-16C	95% LCL	-	70	-	-	-
MW-16D*	95% LCL	4.5	-	-	-	-
MW-18C	95% LCL	-	140	0.076	340	820
MW-18D	95% LCL	-	-	0.059	-	-

*An ASD was submitted to EGLE July 2024 for the SSL observed within this well.
"-" Denotes the LCL did not exceed GPS along with wells not listed.

Multiple lines of evidence have indicated that the SSL of boron in well MW-16D is naturally occurring. Similarly, due to its upgradient location within the MW-16 series, downward vertical gradient for wells within the series (except MW-16D which is hydraulically disconnected), observed calcium concentrations within wells MW-16A and MW-16B, and lack of detection of exceedances of other constituents known to be migrating from Erickson, the calcium exceedance appears to be same naturally occurring source of calcium observed within the MW-16 series wells. Therefore, an addendum to the July 2024 ASD will be prepared for the calcium SSL in MW-16C.

Background Monitoring Events – May, June, July, August, September, November, and December 2025

Background monitoring events for newly installed MW-19 series wells (MW-19A, MW-19B, MW-19C, and MW-19D) and MW-7D were completed in 2025. Sampling for background monitoring events is shown in **Table 2** and described in **Section 3.1**.

After installation and development of monitoring well series MW-19 in May 2025, they were sampled in May, June, July, August, September, November, and December 2025. Additionally, after the installation and development of well MW-7D in September 2025, this well was sampled concurrently with the MW-19 series wells in September, November, and December 2025. To date, seven sample events have been completed for the MW-19 series wells and three sample events have been completed for well MW-7D. At the time of this report, the full data analysis has not been completed for the December 2025 sampling event for the MW-19 series wells and MW-7D and the wells have not yet been sampled for enough events to establish statistical significance.

5.0 Remedy Selection Progress Update

5.1 Plume Delineation

Groundwater monitoring network data currently suggest that the plume is delineated to the east and south of the former CCR impoundments, as stated in previous groundwater monitoring reports. In 2025, delineation efforts to the north have continued.

Data collected from the MW-17 and MW-18 series wells through 2025 (installed in September 2024) indicate that concentrations above GPS for multiple constituents of concern have been identified in both the glacial and bedrock aquifers for these multi-level series wells. Based on the results of the MW-17 and MW-18 series wells, BWL evaluated potential paths in order to continue to delineate the groundwater plume to the north of the MW-18 wells and in May 2025, a new monitoring well cluster (MW-19A, MW-19B, MW-19C, and MW-19D) and new piezometer (MW-20) were installed on the northern Erickson property boundary, north of the wetlands (**Figure 3**). These were sited north of the wetland to avoid wetland disturbance and associated long permitting timelines. To date, seven background sample events have been completed for the MW-19 well series; therefore, these discrete exceedances have not been established as SSLs above GPS due to lacking enough sample events to be considered statistically significant.

5.2 Groundwater Extraction and Treatment Data Collection

To assist in evaluating the feasibility of groundwater extraction and treatment as a viable remedy for site groundwater, a discharge options evaluation is currently underway. This evaluation will provide a high-level assessment of potential discharge pathways for the treated groundwater, including direct discharge to surface water under a National Discharge Elimination System (NPDES) permit, permitted discharge to a publicly owned treatment works (POTW), and discharge back to the subsurface (e.g. through reinjection or infiltration) within the site boundaries. Notably, discharge to the POTW has been ruled out based on feedback from Delta Township staff to BWL, due to volume capacity limitations of the Delta Township wastewater system.

5.3 Monitored Natural Attenuation Data Collection

In 2025, BWL continued to collect and evaluate additional data to continue the MNA investigation. An initial evaluation of the MNA data collected was detailed in Monitored Natural Attenuation Evaluation: Insights from Initial Data (HDR, 2025d). This memo included a Tier I MNA evaluation of boron, which concluded with a recommendation to advance boron to a Tier II MNA evaluation and to complete a comprehensive Tier I MNA Evaluation for the remaining site COCs (calcium, lithium, molybdenum, sulfate, and total dissolved solids). The comprehensive Tier I MNA evaluation for all site contaminants was performed and drafted in the second half of 2025 and the associated report is anticipated to be finalized in the first quarter of 2026.

Additionally, a Tier II MNA evaluation is currently in progress. Well solids were collected from 13 site monitoring wells (MW-3, MW-5, MW-6, MW-7, MW-7C, MW-7D, MW-12, MW-12B, MW-14, MW-18A, MW-18B, MW-18C, and MW-18D) in October 2025 and submitted to Anchor QEA's laboratory in Portland, Oregon. Based on the sample recovery results from the October 2025 samples, additional well solids sample collection was performed in November 2025 at 5 of the

monitoring wells (MW-3, MW-7C, MW-12B, MW-18B, and MW-18C) and also submitted to Anchor QEA. Well solids from 8 of the monitoring wells (MW-3, MW-5, MW-7C, MW-12, MW-12B, MW-14, MW-18B, and MW-18C) were then advanced to a Phase 1 screening analysis, utilizing:

- X-ray fluorescence (XRF)
- Laser-induced breakdown spectroscopy (LIBS)

Based on the Phase 1 screening results, well solids samples from 7 of these wells (MW-3, MW-7C, MW-12, MW-12B, MW-14, MW-18B, and MW-18C) were advanced to Phase 2 analysis, including:

- Selective sequential extraction (SSE)
- Scanning electron microscopy with energy dispersive spectrometry (SEM with EDS)
- X-ray diffraction (XRD)

Three rounds of MNA groundwater samples are additionally being collected from site monitoring wells within the groundwater plume. The first round of these MNA groundwater sampling events was conducted in November 2025, with the second and third rounds of sampling anticipated to be completed in the first quarter of 2026. These groundwater samples will be delivered to Eurofins Laboratories of Cleveland, Ohio for analysis of dissolved metals, sulfide, total organic carbon, nitrate, and nitrite not included in the assessment monitoring program.

5.4 In-Situ Treatability Data Collection

BWL coordinated with Evonik Industries in 2025 to develop a work plan to evaluate the potential for in-situ treatment of site COCs. In September 2025, a 6 kg soil sample was collected from 50-60 feet below ground surface (the screened interval of MW-7C) during the drilling and installation of the new shallow bedrock monitoring well MW-7D. In October 2025, 19 liters of groundwater was collected from MW-7C into two 9.5 liter nitrogen flushed stainless steel canisters, and both the soil and groundwater samples were submitted to ReSolution Partners, LLC's (RSP) lab in Madison, Wisconsin. Subsamples of the groundwater and homogenized soil sample were submitted to CT Laboratories in Baraboo, Wisconsin, for baseline characterization of:

- Boron, lithium, and molybdenum by EPA Method 6010C
- Sulfate by EPA Method 300

In November 2025, RSP commenced a first phase of bench-scale batch testing of the soil and groundwater samples in combination with a variety of different reagents. The purpose of these batch tests are to investigate the efficacy of different reagents and dosages in lowering the aqueous concentrations of site COCs in the presence of the soil and groundwater samples collected from the site. The first phase of batch testing includes two suites of tests: one suite includes reagents (EHC®, MetaFix® I-3, acetic acid) intended to target boron, molybdenum, and sulfate, with the other suite including reagents (TSP, $FeSO_4$, $MnSO_4$, $KHCO_3$, CaO, TMT15®) intended to target lithium. Pending the results of the first phase of batch testing, expected in January of 2026, it will be determined if a second phase of batch testing and/or a field-scale pilot test are warranted to further investigate the potential for in-situ treatability of site COCs in groundwater.

5.5 Next Steps

BWLs efforts to install additional monitoring wells offsite have been unsuccessful as all adjacent landowners have not allowed the installation of monitoring wells offsite of the BWL property, aside from the 100-series monitoring well cluster installed in May 2023. Nevertheless, BWL has continued to install wells along their property boundaries to continue to evaluate the potential extent of contamination. Data collected from wells along the eastern, western, and southern boundaries of the site suggest the plume is contained within the boundaries of wells in these directions and data collected from wells along the northern property, although limited, suggest that the boundaries of the plume has been identified.

The following activities are proposed to be completed or initiated in the next 6-month period:

- Continue semiannual groundwater assessment monitoring;
- Continue 5-week frequency monitoring for wells undergoing background monitoring;
- Evaluation of potential alternate sources of lithium exceedances at the MW-18 series bedrock monitoring wells,
- Update of the site background threshold values (BTVs) with data collected through the first semiannual assessment monitoring event in 2026,
- Create an addendum to the July 2024 ASD for the calcium SSL in MW-16C.
- Continue the tiered MNA evaluations to assess viability of MNA as a remedial option;
- Continue the in-situ treatability data collection;
- Update the groundwater flow and transport model and run simulations to compare the effectiveness of the remedial strategies;
- Continue analysis of results obtained from multi-level well series MW-19 to confirm plume delineation efforts

BWL will be making efforts to comply with both State and Federal regulations concurrently.

6.0 Summary

The following observations are based on CCR Rule compliance groundwater monitoring program development between in 2025:

- Four new monitoring wells (MW-19A, MW-19B, MW-19C, and MW-19D) and one water level monitoring piezometer (MW-20) were installed in May 2025 along the north and northeast of the former Erickson property.
- One new bedrock monitoring well to monitor shallow bedrock conditions (MW-7D) was installed in September 2025 clustered with the other MW-7 series wells.
- Assessment monitoring for the first half of 2025 was completed in January and February for thirty-six (36) wells. Monitoring data was statistically evaluated, and SSLs above the GPS were observed at MW-2, MW-3, MW-5, MW-6, MW-7, MW-7C, and MW-14 for lithium and boron. Additionally, SSLs above the GPS were observed at MW-2, MW-3, MW-5, and MW-7C for calcium and sulfate, in MW-7 for molybdenum, and in MW-3 and MW-7C for molybdenum and TDS. These wells are all glacial wells.
- Assessment monitoring for the second half of 2025 was completed in August for thirty-six (36) wells. Monitoring data was statistically evaluated, and SSLs above the GPS were observed at MW-2, MW-3, MW-5, MW-6, MW-7, MW-7C, MW-14, MW-18A, and MW-18B for lithium and boron. Additionally, SSLs above the GPS were observed at MW-2, MW-3, MW-5, and MW-7C for calcium and sulfate, in MW-7 for molybdenum, and in MW-3 and MW-7C for molybdenum and TDS. These wells are all glacial wells. SSLs above the GPS for wells within the bedrock aquifer were observed for MW-18C for calcium, lithium, sulfate, and TDS, and in MW-18D for lithium only.
- Glacial monitoring well MW-16A had SSLs of chloride and TDS over GPS and bedrock well MW-16D had SSLs of boron over GPS. Additionally, an SSL of calcium over GPS at bedrock well MW-16C was observed following the August 2025 assessment monitoring event. Groundwater flow direction at the site does not indicate that these SSLs are indicative of impact from the former Erickson CCR impoundments. Data collected this year at well MW-16D continues to indicate that this well is not hydraulically connected to the currently established well network at Erickson Station.
- Well series MW-17 completed enough monitoring events to achieve statistical significance in September 2025. Monitoring data was statistically evaluated and SSLs above the GPS were observed in wells MW-17A, MW-17B, and MW-17C for boron and lithium. Additionally, SSLs above the GPS were observed in MW-17A for calcium and TDS, and in wells MW-17A and MW-17C for sulfate.
- Monitoring was completed at a five-week frequency at the newly installed multi-level series at MW-19 and well MW-7D. To date, seven sampling events have been completed for the MW-19 series wells and three sampling events have been completed for well MW-7D.
- Further collection of data to assess remedy alternatives for the site including continued plume delineation to the north, an assessment of discharge alternatives, Tier 1 MNA evaluation of site contaminants of concern and collection of well solids to support a Tier II MNA evaluation, and collection of bulk samples for in-situ bench testing.

7.0 References

HDR, 2020. Determination of Statistically Significant Increases over Background. November 23, 2020.

HDR, 2020a. Erickson Power Station Statistical Procedures Plan. May 11, 2020.

HDR, 2021. Assessment Monitoring Plan (AMP). March 26, 2021.

HDR, 2021b. Response Action Plan (RAP). March 26, 2021.

HDR, 2021c. Conceptual Site Model and Assessment of Corrective Measures. November 5, 2021

HDR, 2024. Assessment of Corrective Measures Data Collection Work Plan. February 15, 2024.

HDR, 2024a. Background Water Quality Statistical Certification. March 8, 2024.

HDR, 2024b. Groundwater Level Monitoring Standard Operating Procedure (SOP). Revised July 2, 2024.

HDR, 2024c. Hydrogeologic Monitoring Plan (HMP). July 3, 2024.

HDR, 2025a. Groundwater Monitoring 2024 Annual Report, Former Erickson Power Station. January 30, 2025.

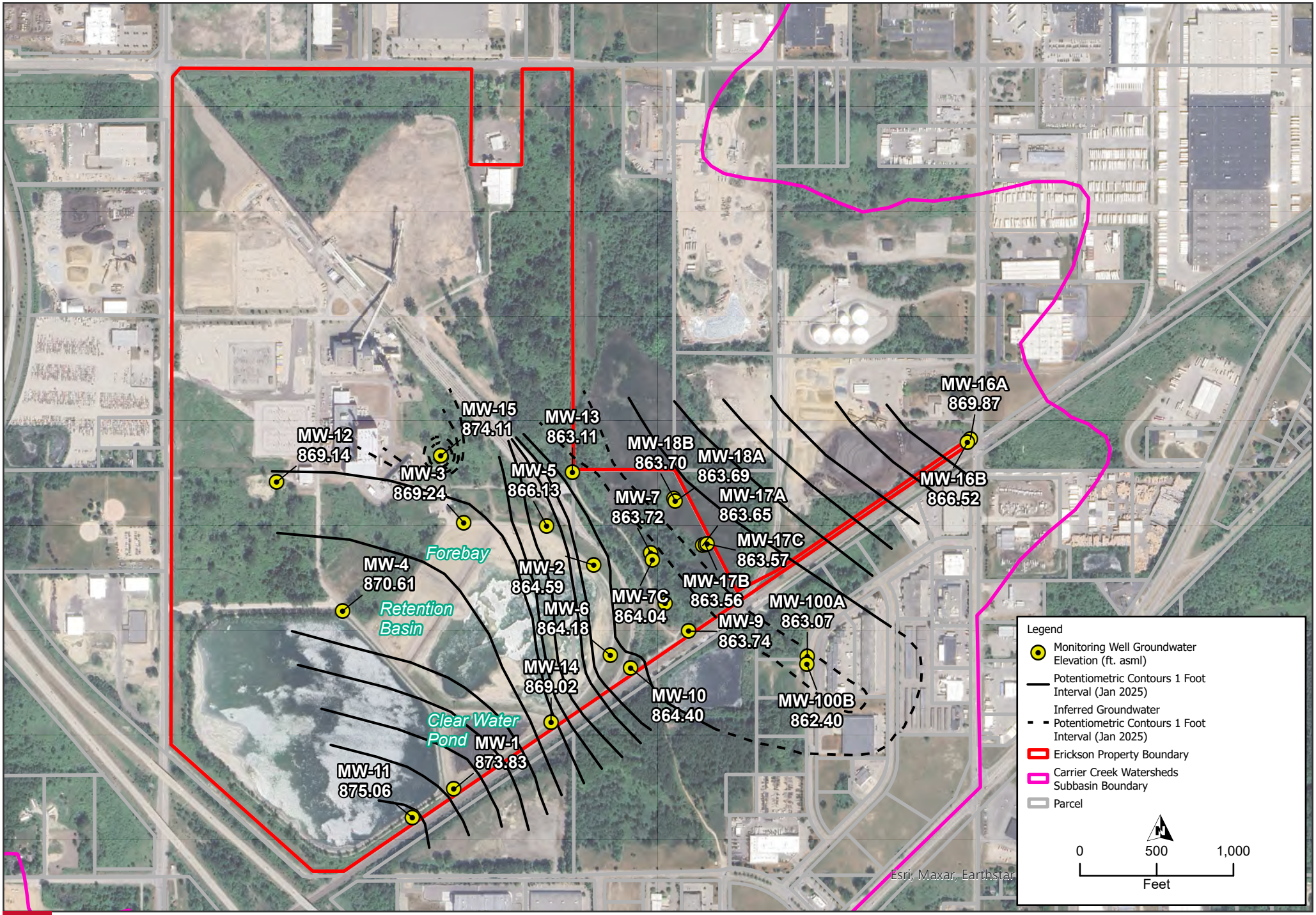
HDR, 2025b. Groundwater Monitoring Network System Certification, Former Erickson Power Station. May 15, 2025.

HDR, 2025c. Monitoring Well Installation Report, Former Erickson Power Station. May 15, 2025.

HDR, 2025d. Monitored Natural Attenuation Evaluation: Insights from Initial Data. July 23, 2025.

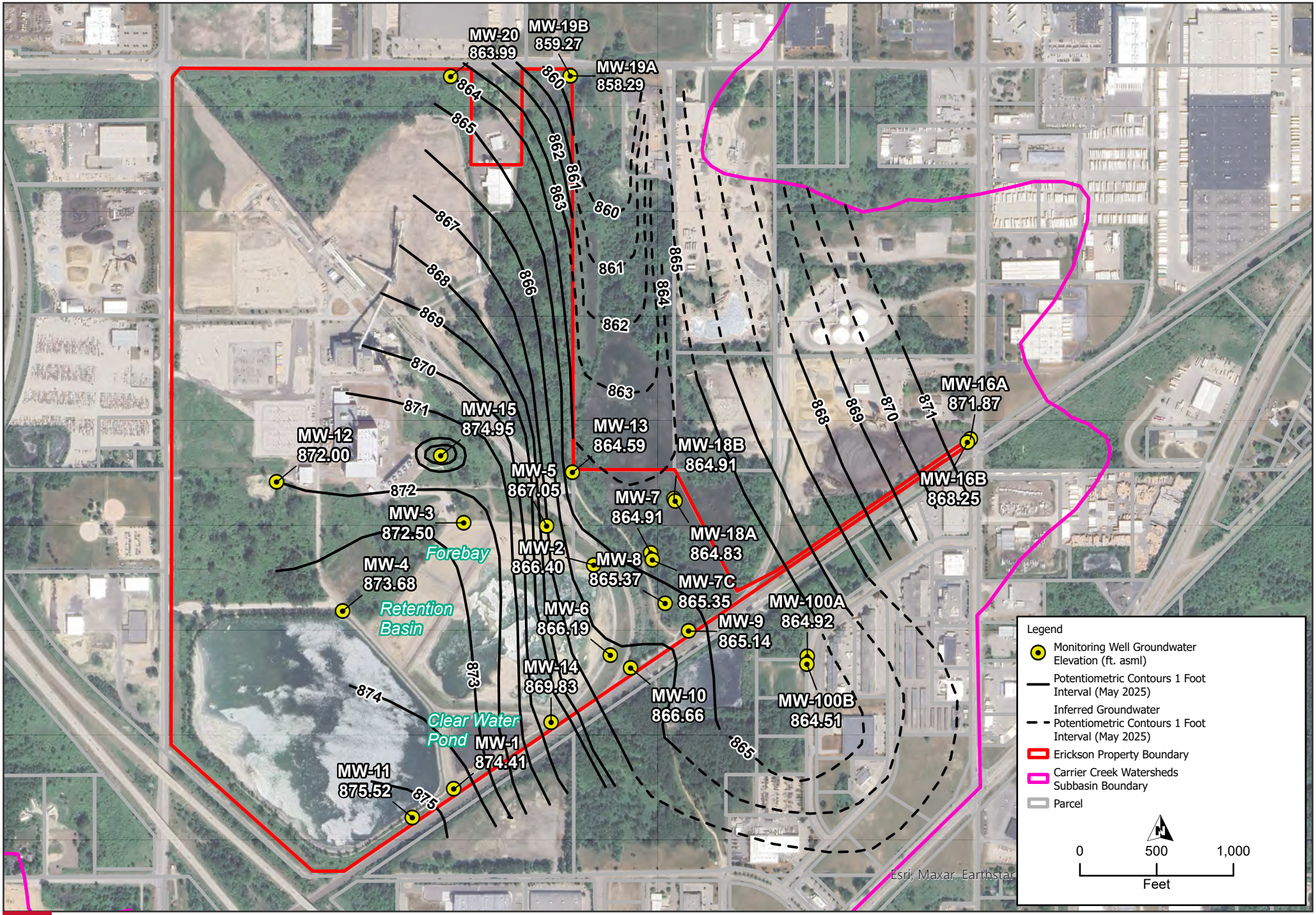
Appendix A

Potentiometric Surface Maps



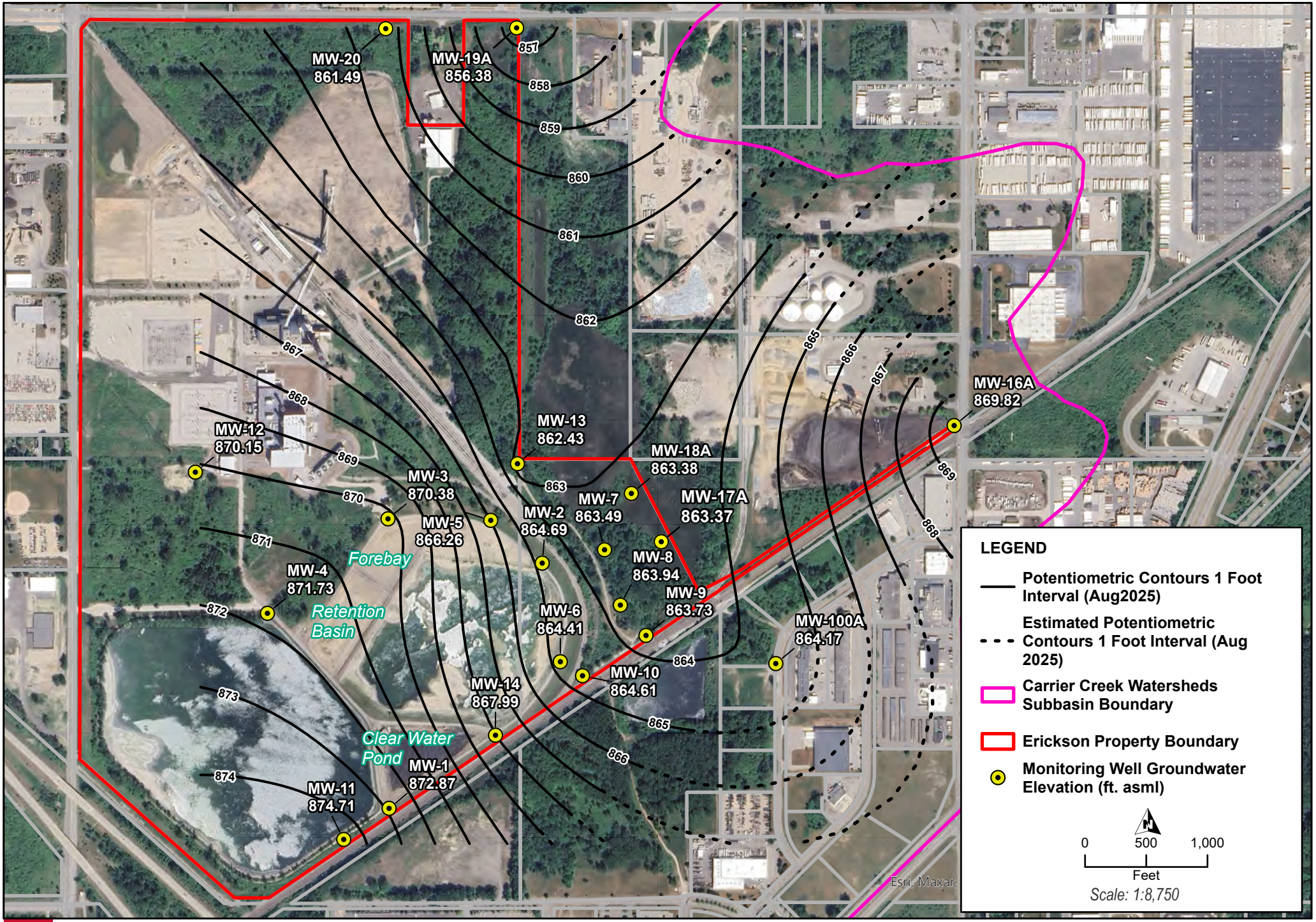
HDR

ERICKSON POWER STATION
EATON COUNTY, MI



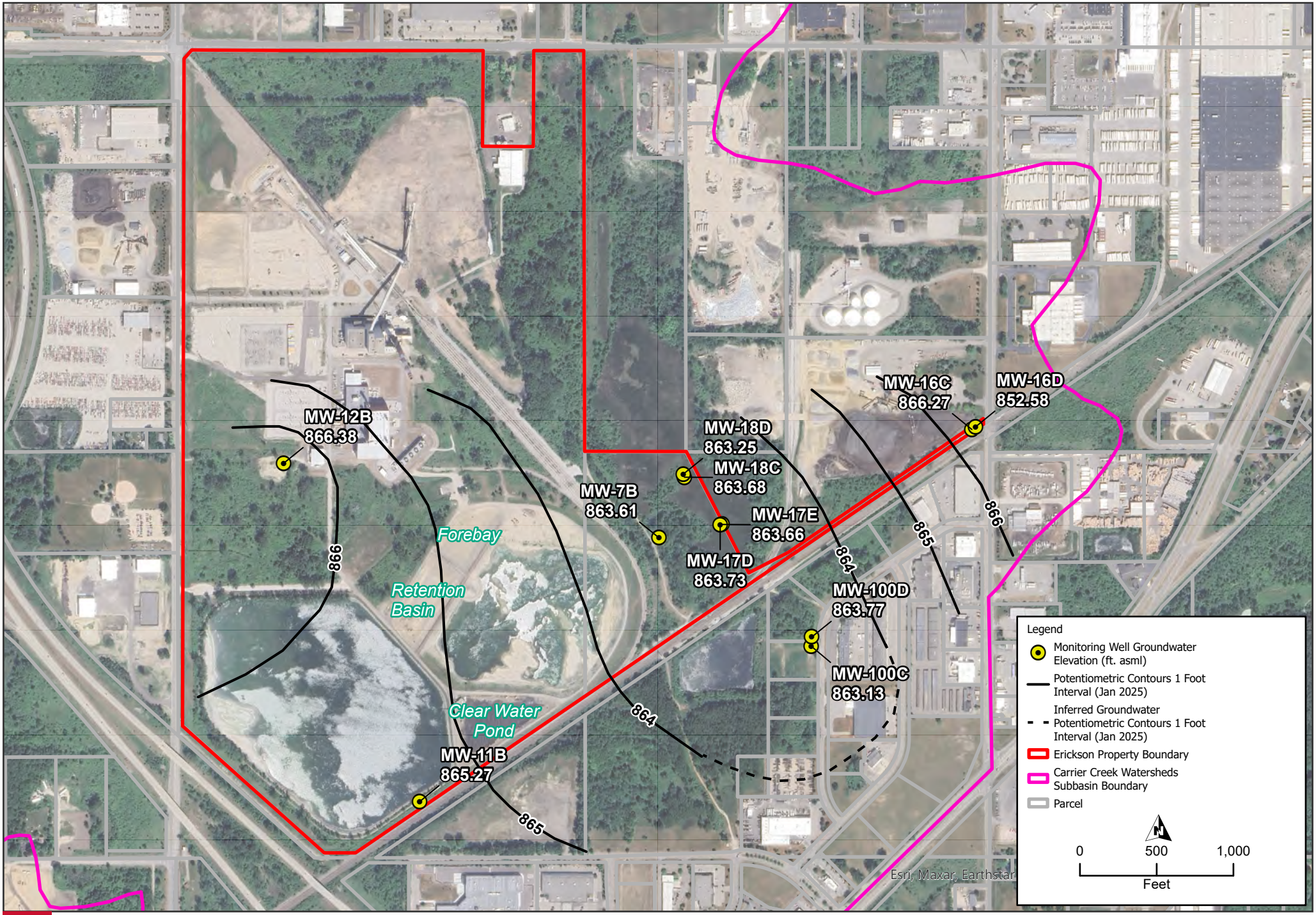
ERICKSON POWER STATION

EATON COUNTY, MI



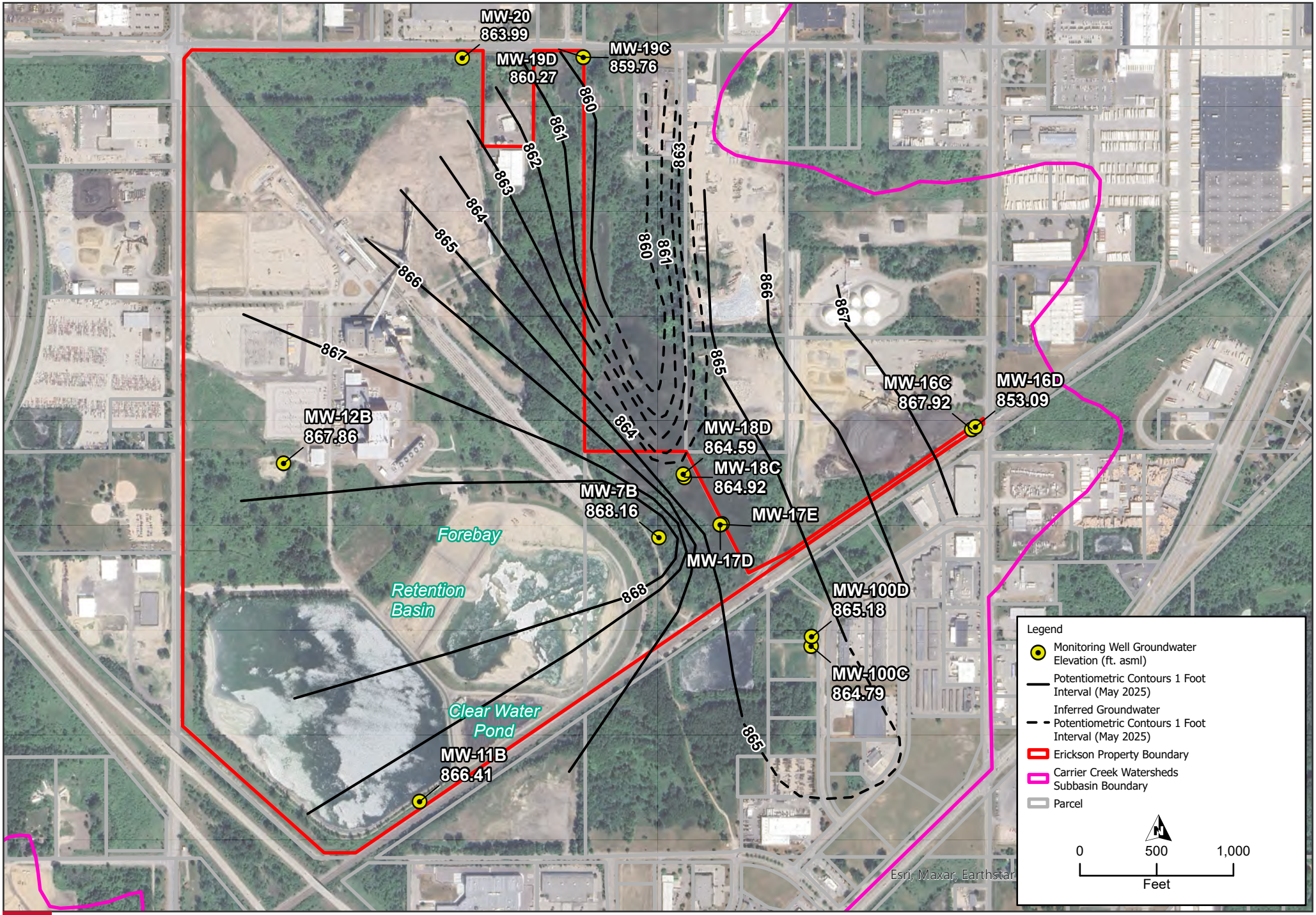
HDR

ERICKSON POWER STATION
EATON COUNTY, MI



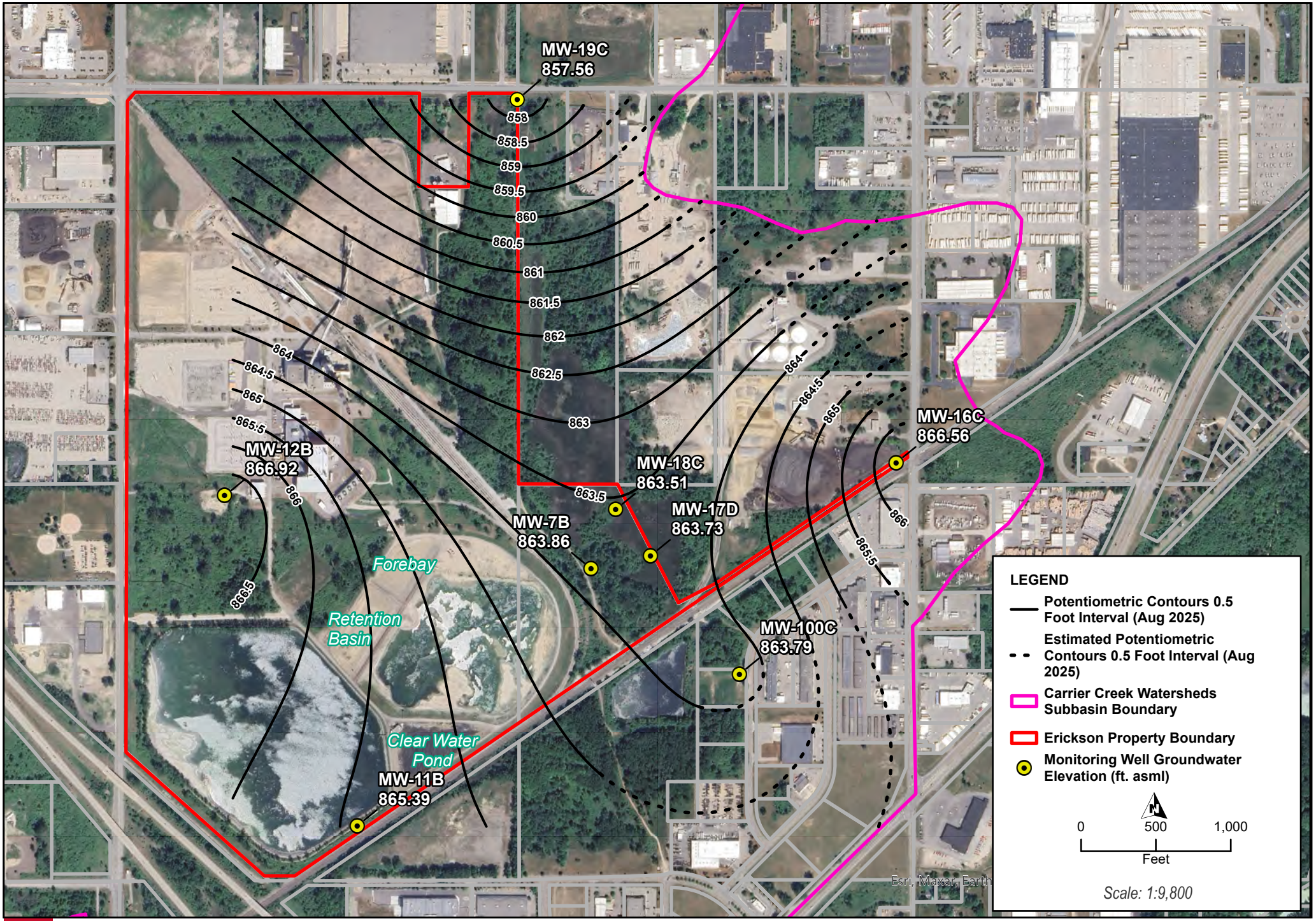
HDR

ERICKSON POWER STATION
EATON COUNTY, MI



HDR

ERICKSON POWER STATION
EATON COUNTY, MI



HDR

ERICKSON POWER STATION
EATON COUNTY, MI

Appendix B

Site Specific Background Values and Groundwater Protection Standards

Background Values and Groundwater Protection Standards for the Glacial Aquifer

Parameter		Site-Specific Glacial Background Level Upper Tolerance Limit (UTL)[1] (mg/L)	Federal Maximum Contaminant Level (mg/L)	State Non-Residential Drinking Water Cleanup Criteria for Groundwater[2] (mg/L)	Glacial Groundwater Protection Standards for Site (mg/L)
Sb, total	Antimony	0.005	0.006	0.006	0.006
As, total	Arsenic	0.021	0.01	0.01	0.021
Ba, total	Barium	0.168	2	2	2
Be, total	Beryllium	0.001	0.004	0.004	0.004
B, total	Boron	0.48	NV	0.5	0.5
Cd, total	Cadmium	0.0005	0.005	0.005	0.005
Cr, total	Chromium	0.005	0.1	0.1	0.1
Co, total	Cobalt	0.005	0.006	0.1	0.006
Cu, total	Copper	0.005	1.3	1	1
Fe, total	Iron	23.5	0.3	0.3	23.5
Pb, total	Lead	0.003	0.015	0.004	0.004
Li, total	Lithium	0.0397	0.04	0.35	0.04
Hg, total	Mercury	0.0002	0.002	0.002	0.002
Mo, total	Molybdenum	0.024	0.1	0.21	0.1
Ni, total	Nickel	0.021	NV	0.1	0.1
Se, total	Selenium	0.005	0.05	0.05	0.05
Ag, total	Silver	0.0005	0.1	0.098	0.098
Tl, total	Thallium	0.002	0.002	0.002	0.002
V, total	Vanadium	0.005	NV	0.062	0.062
Zn, total	Zinc	0.036	5	5	5
Ca	Calcium	188	NV	NV	188
F	Fluoride	1	4	2	2
Cl	Chloride	94.377	250	250	250
SO_4	Sulfate	344	250	250	344
TDS	Total Dissolved Solids	1168.639	500	500	1168.639
Ra226/228	Radium 226 and 228 combined	5.00 pCi/L	5 pCi/L	NV	5 pCi/L

[1] Calculated by pooling background wells MW-1, MW-4, MW-11, and MW-12, through February 9, 2023, data. Background values calculated in October 2023.

[2] Cleanup Criteria Requirements for Response Activity (Formerly the Part 201 Generic Cleanup Criteria and Screening Levels) found in R 299.44 Generic groundwater cleanup criteria.

NV=no value

Background Values and Groundwater Protection Standards for the Bedrock Aquifer

Parameter		Site-Specific Bedrock Background Level Upper Tolerance Limit (UTL)[1] (mg/L)	Federal Maximum Contaminant Level (mg/L)	State Non-Residential Drinking Water Cleanup Criteria for Groundwater[2] (mg/L)	Bedrock Groundwater Protection Standards for Site (mg/L)
Sb, total	Antimony	0.005	0.006	0.006	0.006
As, total	Arsenic	0.009	0.01	0.01	0.01
Ba, total	Barium	0.081	2	2	2
Be, total	Beryllium	0.001	0.004	0.004	0.004
B, total	Boron	3.52	NV	0.5	3.52
Cd, total	Cadmium	0.0005	0.005	0.005	0.005
Cr, total	Chromium	0.005	0.1	0.1	0.1
Co, total	Cobalt	0.005	0.006	0.1	0.006
Cu, total	Copper	0.005	1.3	1	1
Fe, total	Iron	3.04	0.3	0.3	3.04
Pb, total	Lead	0.003	0.015	0.004	0.004
Li, total	Lithium	0.051	0.04	0.35	0.051
Hg, total	Mercury	0.0002	0.002	0.002	0.002
Mo, total	Molybdenum	0.011	0.1	0.21	0.1
Ni, total	Nickel	0.011	NV	0.1	0.1
Se, total	Selenium	0.005	0.05	0.05	0.05
Ag, total	Silver	0.0005	0.1	0.098	0.098
Tl, total	Thallium	0.002	0.002	0.002	0.002
V, total	Vanadium	0.005	NV	0.062	0.062
Zn, total	Zinc	0.042	5	5	5
Ca	Calcium	69.6	NV	NV	69.6
F	Fluoride	1	4	2	2
Cl	Chloride	5	250	250	250
SO_4	Sulfate	5	250	250	250
TDS	Total Dissolved Solids	380	500	500	500
Ra226/228	Radium 226 and 228 combined	5.5 pCi/L	5 pCi/L	NV	5.5 pCi/L

[1] Calculated by pooling wells MW-11B and MW-12B, through February 9, 2023, data. BTVs calculated in October 2023.

[2] Cleanup Criteria Requirements for Response Activity (Formerly the Part 201 Generic Cleanup Criteria and Screening Levels) found in R 299.44 Generic groundwater cleanup criteria.

NV=no value

Appendix C

Lab Reports Summary Tables

Groundwater Sampling Results for MW-1

LBWL Erickson Station

Sample Location:		MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1
Sample Date:		4/28/2020	5/26/2020	6/23/2020	7/21/2020	8/18/2020	9/15/2020	9/28/2020	10/12/2020	10/19/2020	10/19/2020	11/6/2020	1/27/2021
Sample Type:		N	N	N	N	N	N	N	N	N	FD	N	N
Gradient:		Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Initial AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	6.81	6.62	6.75	6.85	6.89	6.9	6.77	6.78	7.15	7.15	6.87	6.82
Specific Conductivity	mS/cm	1.175	1.199	1.218	1.209	1.22	1.215	1.177	1.185	1.21	1.21	1.205	1.24
Turbidity	NTU	28.2	40.21	17.1	32.3	21.45	15.61	7.32	7.05	8.64	8.64	8.02	9.95
Dissolved Oxygen	mg/L	0	0.01	0.08	0.05	0.52	0.01	0.05	0.3	0.09	0.09	0.21	0.09
Temperature	deg C	11.3	15.2	13.5	16.5	15.6	15.5	13.8	15.1	13.9	13.9	15.9	9.8
Oxidation Reduction Potential	mV	-43.2	-28.5	-87.2	-53	-34.7	-109.8	-62.7	-59.4	-79.2	-79.2	-78.8	-27.5
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	5.05	5.26	8.44	6.09	6.32	8.04	5.98	6.02	6.14 J	6.15 J	7.12	5.45
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	< 0.005	0.036	< 0.005	< 0.005	< 0.005	0.007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Appendix III													
Boron	mg/L	0.48	0.27	0.39	0.38	0.41	0.44	0.45	0.37	0.41	0.39	--	0.21
Calcium	mg/L	162	180	165	156 J	161	170	153	167	156 J	150 J	--	173
Chloride	mg/L	74	52	70	64	65	59	61	59	52	53	--	44
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
pH (Field Measure)	su	6.81	6.62	6.75	6.85	6.89	6.9	6.77	6.78	7.15	7.15	6.87	6.82
Sulfate	mg/L	38	69	59	75	75	77	80	81	84	85	--	78
Total Dissolved Solids	mg/L	728	794	774	782	776	768	796	774	806	784	--	776
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	0.004	0.005	0.007	0.004	0.006	0.006	0.006	0.006	0.005	0.006	0.007	0.005
Barium	mg/L	0.149	0.15	0.168	0.128	0.152	0.148	0.145	0.129	0.136	0.135	0.133	0.121
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	0.036	0.023	0.032	0.033	0.034	0.039	0.041	0.037	0.036	0.036	0.034	0.019
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Radium-226	pCi/L	1.1	0.34	0.518	0.299	0.4	0.618	-0.0627	0.717	0.812 J+	0.464 J-	0.533	0.504
Radium-228	pCi/L	0.518	0.457	-0.166	0.254	1.47	0.217	-0.778	0.031	0.00457 J-	1.14 J+	-0.0288	0.85
Radium-226/228	pCi/L	1.61	0.796	0.518	0.553	1.87	0.889	0	0.748	0.816 J-	1.61 J+	0.533	1.35
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	31	45	43	37	48	55	19	20	31	32	19	14
Bicarbonate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hardness (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--

Groundwater Sampling Results for MW-1

LBWL Erickson Station

Sample Location:		MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1
Sample Date:		5/4/2021	8/3/2021	2/1/2022	8/2/2022	2/7/2023	8/1/2023	1/29/2024	8/5/2024	2/4/2025	8/6/2025
Sample Type:		N	N	N	N	N	N	N	N	N	N
Gradient:		Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient
Sampling Phase:		AM	AM	AM	AM	AM	AM	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T
Constituent	Unit										
Field Parameters											
pH	su	6.7	6.73	6.77	6.84	6.88	6.73	6.96	6.79	6.93	6.67
Specific Conductivity	mS/cm	1.2	1.185	1.188	1.208	1.098	1.172	1.22	1.12	1.128	1.206
Turbidity	NTU	8.5	7.95	5.51	5.85	9.09	6.68	8.15	0.85	18.98	9.55
Dissolved Oxygen	mg/L	0.1	0.08	0.07	0.14	0.22	0.14	0.22	0.18	-0.08	0.21
Temperature	deg C	12	15.7	11.7	14.6	10.7	15.9	10.3	17.3	11.9	15
Oxidation Reduction Potential	mV	-20.1	-63.4	-46.6	-95.2	-67.2	-64	-35.6	-50.8	-67.4	-61.5
Part 115											
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0017 U	< 0.0017 U
Iron	mg/L	4.84	6.61	6.92	12	9.57	7.21	2.34	3.37	5.7	5.5
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0015 U	0.002
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0027 J	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0044 JB	< 0.00093 U
Appendix III											
Boron	mg/L	0.19	0.22	0.27	0.34	0.32	0.16	0.07	0.12	0.19	0.095 J
Calcium	mg/L	156	153	166	158	150	169	174	178	160	170
Chloride	mg/L	48	46	52	66	61	42	26.5	33.4	44	33
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.11	0.11
pH (Field Measure)	su	6.7	6.73	6.77	6.84	6.88	6.73	6.96	6.79	6.93	6.67
Sulfate	mg/L	65	57	49	37	31	54	80.3	74.8	51	76
Total Dissolved Solids	mg/L	760	748	746	742	546	746	764	766	660	740
Appendix IV											
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.005	0.005	0.007	0.007	0.007	0.007	0.005	0.003	0.0046 J	0.0052 B
Barium	mg/L	0.113	0.109	0.122	0.155	0.14	0.11	0.079	0.079	0.087	0.081
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000077 U	0.000099 J
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0018 J	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0018	0.0021
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.11	0.11
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.015	0.016	0.021	0.027	0.031	0.014	0.006	0.007	0.011	0.0056 J
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0023 J	0.0017 J
Radium-226	pCi/L	0.56	0.301	0.816	0.715	0.3	0.0656	0.24	3.13	< 0.487 U	0.138
Radium-228	pCi/L	3.47	0.0172	1.76	0.891 J+	1.24	0.576	-0.206	0.277	< 0.778 U	< 0.556 U
Radium-226/228	pCi/L	4.03	0.318	2.58	1.61 J+	1.54	0.641	0.24	3.41	< 0.778 U	< 0.556 U
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U
Other											
Total Suspended Solids	mg/L	14	11	13	36	32	19.4	7	8.4	35	13
Bicarbonate	mg/L	--	--	--	650	636	690	743	700	520	540
Carbonate	mg/L	--	--	--	< 10	< 10	< 10	< 10	< 10	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	--	--	--	588	546	638	680	712	600	660
Magnesium	mg/L	--	--	--	43.1	41.3	52.7	58.1	54.6	50	55
Potassium	mg/L	--	--	--	1.14	1.08	0.96	0.89	0.9	1.2	1 J
Sodium	mg/L	--	--	--	40.4	41	30.9	22.1	21.9	28	22

Groundwater Sampling Results for MW-2

LBWL Erickson Station

Sample Location:		MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2
Sample Date:		4/28/2020	5/26/2020	6/23/2020	7/21/2020	8/18/2020	9/15/2020	9/28/2020	10/12/2020	10/19/2020	11/6/2020	1/27/2021	5/4/2021
Sample Type:		N	N	N	N	N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	Initial AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	6.77	6.54	6.69	6.75	6.8	6.83	6.7	6.72	7.08	6.83	6.76	6.7
Specific Conductivity	mS/cm	1.602	1.556	1.699	1.744	1.762	1.794	1.761	1.762	1.798	1.792	1.734	1.7
Turbidity	NTU	72.31	8.27	8.95	9.42	5.95	4.15	7.11	9.56	6.28	11.27	10.15	10
Dissolved Oxygen	mg/L	0.02	0.02	0.07	0.19	0.15	0.12	0.03	0.34	0.03	0.19	0.08	0.21
Temperature	deg C	11.6	14.2	12.9	15	13.9	13.7	12.7	14.5	12.3	14.3	9.1	12
Oxidation Reduction Potential	mV	-42.5	36	-40.2	32.5	38.2	-75.8	56.1	35.3	22.1	-29	55.9	181.8
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	0.91	0.67	0.48	0.44	0.62	0.51	0.51	0.67 J	0.63 J	0.54	0.49	0.55
Nickel	mg/L	0.018	0.019	0.022	0.024	0.026	0.027	0.027	0.028	0.027	0.027	0.026	0.025
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	< 0.005	0.041	< 0.005	< 0.005	0.007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Appendix III													
Boron	mg/L	3.56	3.38	4.05	4.61	5.19	5.97	5.94	5.97	5.97	--	5.8	5.04
Calcium	mg/L	251	256	268	271 J	272	270	265	270	270 J	--	260	254
Chloride	mg/L	67	68	75	81	85	88	84	88	88	--	94	77
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
pH (Field Measure)	su	6.77	6.54	6.69	6.75	6.8	6.83	6.7	6.72	7.08	6.83	6.76	6.7
Sulfate	mg/L	386	386	484	549	580	560	586	560	560	--	506	505
Total Dissolved Solids	mg/L	1170	1180	1300	1390	1430	1390	1420	1390	1390	--	1320	1250
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.002	< 0.002	< 0.002	< 0.002	< 0.002
Barium	mg/L	0.039	0.043	0.045	0.036	0.045	0.039	0.041	0.041	0.041	0.042	0.041	0.041
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	0.055	0.047	0.055	0.053	0.057	0.066	0.066	0.065	0.07	0.063	0.067	0.061
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	0.01	0.008	0.01	0.007	0.011	0.011	0.012	0.012	0.012	0.012	0.01	0.009
Radium-226	pCi/L	0.813	0.0551	0.754	0.329	0.171	0.183	0.263	0.151	0.405	0.539	0.296	0.366
Radium-228	pCi/L	1.05	0.0833	-0.139	0.0326	0.573	-0.0154	0.0604	1.3	0.0896	0.874	0.713	0.15
Radium-226/228	pCi/L	1.86	0.138	0.754	0.362	0.745	0.183	0.323	1.45	0.495	1.41	1.01	0.515
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	< 3	1 U	< 3	< 3	14	< 3	2 U	6	3 U	10	10	12
Bicarbonate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hardness (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--

Groundwater Sampling Results for MW-2

LBWL Erickson Station

Sample Location:		MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2
Sample Date:		8/3/2021	2/1/2022	8/2/2022	2/7/2023	8/1/2023	1/29/2024	8/5/2024	2/4/2025	8/6/2025
Sample Type:		N	N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		AM	AM	AM	AM	AM	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T
Constituent	Unit									
Field Parameters										
pH	su	6.65	6.73	6.86	6.85	6.75	6.88	6.74	6.81	6.65
Specific Conductivity	mS/cm	1.655	1.614	1.395	1.411	1.344	1.418	1.285	1.333	1.367
Turbidity	NTU	9.62	9.95	9.01	8.25	2.38	17.8	11.91	6.23	20.48
Dissolved Oxygen	mg/L	0.02	0.2	1.01	0.37	0.49	0	0.3	0.23	0.44
Temperature	deg C	14.3	11.7	15.4	11.7	14.1	10	16.2	11.8	15
Oxidation Reduction Potential	mV	94.5	46.6	21	54.2	75.4	16.5	53.6	54.7	85.8
Part 115										
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0017 U	< 0.0017 U
Iron	mg/L	0.66	1.93	0.93	1.3	0.79	0.52	0.35	0.22	0.28
Nickel	mg/L	0.025	0.026	0.018	0.02	0.017	0.017	0.014	0.012	0.014
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	0.007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0019 JB	0.0021 J
Appendix III										
Boron	mg/L	6.17	5.33	4.76	5.1	4.44	4.07	3.32	3.3	3.4
Calcium	mg/L	226	237	204	204	198	192	198	190	200
Chloride	mg/L	79	87	87	88	82	81.7	70	59	70
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.062	0.052
pH (Field Measure)	su	6.65	6.73	6.86	6.85	6.75	6.88	6.74	6.81	6.65
Sulfate	mg/L	504	398	330	322	278	281	238	220	220
Total Dissolved Solids	mg/L	1300	1180	1020	1050	1010	1000	950	910	860
Appendix IV										
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.002	0.004	< 0.002	0.002	0.003	< 0.002	< 0.002	< 0.00075 U	0.0011 JB
Barium	mg/L	0.039	0.048	0.043	0.037	0.034	0.036	0.034	0.04	0.042
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000099 J	0.00013 J
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0036	0.0039
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.062	0.052
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.058	0.058	0.051	0.05	0.049	0.041	0.041	0.038	0.039
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.012	0.011	0.013	0.015	0.014	0.01	0.012	0.01	0.0064
Radium-226	pCi/L	0.17	0.63	0.29	0.184	0.423	-0.0321	3.25	< 0.303 U	< 0.138 U
Radium-228	pCi/L	1.02	1.49	-0.338 J+	-0.445	0.623	-0.595	-0.503	< 0.592 U	< 0.475 U
Radium-226/228	pCi/L	1.19	2.12	0.29 J+	0.184	1.05	0	3.25	< 0.592 U	< 0.475 U
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U
Other										
Total Suspended Solids	mg/L	10	12	19	22	34.1	9.4	10.4	3.6 J	7
Bicarbonate	mg/L	--	--	410	454	470	550	560	460	460
Carbonate	mg/L	--	--	< 10	< 10	< 10	< 10	< 10	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	--	--	654	708	680	714	704	690	700
Magnesium	mg/L	--	--	50.5	50.2	50.6	48.4	50.6	50	51
Potassium	mg/L	--	--	2.7	0.87	0.86	0.6	0.73	0.98 J	0.83 J
Sodium	mg/L	--	--	61.6	68.3	64.5	50.3	46.8	46	49

Groundwater Sampling Results for MW-3

LBWL Erickson Station

Sample Location:		MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3
Sample Date:		5/4/2021	8/3/2021	2/1/2022	8/2/2022	2/7/2023	8/1/2023	1/29/2024	8/5/2024	2/6/2025	2/6/2025	8/6/2025
Sample Type:		N	N	N	N	N	N	N	N	N	FD	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit											
Field Parameters												
pH	su	7.2	7.15	7.23	7.27	7.28	7.18	7.38	7.24	7.33	7.33	7.17
Specific Conductivity	mS/cm	1.8	1.796	1.815	1.829	1.765	1.726	1.765	1.695	1.647	1.647	1.688
Turbidity	NTU	2.1	8.01	4.83	5.19	4.15	4.95	0.98	0.02	2.48	2.48	2.11
Dissolved Oxygen	mg/L	0.1	0.03	0.16	0.17	0.35	0.12	0.08	0.09	0.09	0.09	0.16
Temperature	deg C	12	14.1	10.6	14.2	12.2	14.2	9.9	17.5	11.5	11.5	15.1
Oxidation Reduction Potential	mV	-37.5	-65.2	-40.3	-92.1	-74.2	-64.1	-55.7	-25.1	-59.9	-59.9	-70.2
Part 115												
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0017 U	< 0.0017 U	0.0029
Iron	mg/L	2.01	2.05	1.94	1.8	2.03	1.7	1.84	1.52	1.6	1.6	1.4
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0022	0.0023	0.0032
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000053 U	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0018 J	0.0019 J	0.0023 J
Appendix III												
Boron	mg/L	5.41	6.16	5.62	5.89	5.63	5.67	5.68	5.34	5.6	5.6	5.9
Calcium	mg/L	243	223	255	241	248	253	252	257	230	230	220
Chloride	mg/L	89	92	94	101	102	99	99.5	103	95	95	90
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.19	0.18	0.16
pH (Field Measure)	su	7.2	7.15	7.23	7.27	7.28	7.18	7.38	7.24	7.33	7.33	7.17
Sulfate	mg/L	698	727	682	704	727	675	689	732	690	670	640
Total Dissolved Solids	mg/L	1490	1500	1480	1440	1450	1440	1430	1430	1200	1300	1100
Appendix IV												
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.003	0.003	0.003	0.003	0.003	0.004	0.006	0.003	0.0026 J	0.0023 J	0.0031 JB
Barium	mg/L	0.021	0.021	0.02	0.019	0.019	0.019	0.017	0.017	0.016	0.017	0.016
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000077 U	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0012 U	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00049 J	0.00048 J	0.00068 J
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.19	0.18	0.16
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U	0.00067 J
Lithium	mg/L	0.077	0.086	0.086	0.091	0.082	0.079	0.08	0.075	0.075	0.073	0.083
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.162	0.153	0.164	0.162	0.182	0.166	0.176	0.156	0.15	0.15	0.15
Radium-226	pCi/L	0.437	0.152	0.554	0.355	0.566	0.176	0.0361	0.628	< 0.331 UJ	< 0.226 UJ	< 0.119 U
Radium-228	pCi/L	0.76	0.963	1.9	2.56 J+	1.61	0.236	0.837	0.413	< 0.676 UJ	< 0.598 UJ	< 0.683 U
Radium-226/228	pCi/L	1.2	1.11	2.45	2.92 J+	2.18	0.412	0.873	1.04	< 0.676 UJ	< 0.598 UJ	< 0.683 U
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U	< 0.00051 U
Other												
Total Suspended Solids	mg/L	3	1 U	2 U	4	< 3	3.3	3.2	3.3	4.1	4 J	2.9 J
Bicarbonate	mg/L	--	--	--	210	215	210	228	240	180 B	180 B	190
Carbonate	mg/L	--	--	--	< 10	< 10	< 10	< 10	< 10	< 2.6 U	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	--	--	--	784	795	794	774	802	760	760	740
Magnesium	mg/L	--	--	--	45.9	46.5	49.8	50.7	49.2	46	46	44
Potassium	mg/L	--	--	--	1.67	1.67	1.73	1.81	1.67	1.5	1.5	1.4 J
Sodium	mg/L	--	--	--	111	113	121	119	119	110	110	110

Groundwater Sampling Results for MW-4

LBWL Erickson Station

Sample Location:		MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
Sample Date:		4/28/2020	4/28/2020	5/26/2020	5/26/2020	6/23/2020	6/23/2020	7/21/2020	7/21/2020	8/18/2020	8/18/2020	9/15/2020	9/15/2020
Sample Type:		N	FD	N	FD	N	FD	N	FD	N	FD	N	FD
Gradient:		Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.18	7.18	7.13	7.13	7.11	7.11	7.23	7.23	7.24	7.24	7.28	7.28
Specific Conductivity	mS/cm	0.902	0.902	0.894	0.894	0.911	0.911	0.89	0.89	0.88	0.88	0.888	0.888
Turbidity	NTU	2.57	2.57	0.26	0.26	3.01	3.01	1.7	1.7	1.56	1.56	1.64	1.64
Dissolved Oxygen	mg/L	0.31	0.31	0.29	0.29	0.02	0.02	0.03	0.03	0.01	0.01	0.02	0.02
Temperature	deg C	10.2	10.2	14.1	14.1	13.5	13.5	14.7	14.7	14.2	14.2	13.7	13.7
Oxidation Reduction Potential	mV	-76.7	-76.7	-45.2	-45.2	-174.8	-174.8	-68.4	-68.4	-75	-75	-153.2	-153.2
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	1.03	1.03	1.13	1.19	1.24	1.26	1.37	1.38	1.33	1.33	1.33	1.32
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	< 0.005	< 0.005	0.031	0.035	< 0.005	< 0.005	0.006	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Appendix III													
Boron	mg/L	0.05	0.05	0.06	0.06	0.06	0.05	0.06	0.05	0.06	0.06	0.07	0.07
Calcium	mg/L	113	111	115	114	108	108	105 J	102	111	107	108	110
Chloride	mg/L	70	70	72	72	72	73	72	72	70	71	68	70
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
pH (Field Measure)	su	7.18	7.18	7.13	7.13	7.11	7.11	7.23	7.23	7.24	7.24	7.28	7.28
Sulfate	mg/L	59	60	57	56	57	57	56	56	58	59	58	58
Total Dissolved Solids	mg/L	548	546	566	562	558	582	540	534	582	552	572	542
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.007	0.008	0.007	0.009	0.007
Barium	mg/L	0.157	0.155	0.165	0.168	0.165	0.17	0.146	0.147	0.166	0.167	0.163	0.163
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	< 0.01	< 0.01	0.009	0.009	0.008	0.008	0.009	0.008	< 0.01	< 0.01	0.01	0.01
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	< 0.005	< 0.005	< 0.005	0.005	< 0.005	0.006	< 0.005	< 0.005	< 0.005	< 0.005	0.005	< 0.005
Radium-226	pCi/L	0.839	0.953	0.599	0.265	0.368 J-	0.568 J+	0.339	1.06	0.527 J+	0.34 J-	0.583 J-	1.01 J+
Radium-228	pCi/L	1.08	1.38	-0.093	0.357	-0.141 J-	0.771 J+	0.863	-0.0421	2.46 J+	1.22 J-	0.113 J-	0.641 J+
Radium-226/228	pCi/L	1.92	2.33	0.599	0.622	0.368 J-	1.34 J+	1.2	1.06	2.99 J+	1.56 J-	0.696 J-	1.65 J+
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	< 3	< 3	1 U	1 U	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Bicarbonate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hardness (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--

Groundwater Sampling Results for MW-4

LBWL Erickson Station

Sample Location:		MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
Sample Date:		9/28/2020	9/28/2020	10/12/2020	10/12/2020	10/19/2020	11/6/2020	11/6/2020	1/27/2021	1/27/2021	5/4/2021	5/4/2021	8/3/2021
Sample Type:		N	FD	N	FD	N	N	FD	N	FD	N	FD	N
Gradient:		Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient
Sampling Phase:		Background	Background	Background	Background	Background	Initial AM	Initial AM	AM	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.14	7.14	7.13	7.13	7.87	7.22	7.22	7.14	7.14	7.1	7.1	7.03
Specific Conductivity	mS/cm	0.859	0.859	0.866	0.866	0.875	0.876	0.876	0.9	0.9	0.91	0.91	0.884
Turbidity	NTU	1.08	1.08	1.39	1.39	1.25	1.21	1.21	1.57	1.57	2	2	1.84
Dissolved Oxygen	mg/L	0.02	0.02	0.35	0.35	0.04	0.18	0.18	0.13	0.13	0.19	0.19	0.03
Temperature	deg C	13.4	13.4	14	14	12.9	14.4	14.4	9.7	9.7	13	13	14.4
Oxidation Reduction Potential	mV	-77.3	-77.3	-63.8	-63.8	-78.1	-119.1	-119.1	-21.9	-21.9	-22.5	-22.5	-66.4
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	1.3	1.29	1.33	1.35	1.25 J	1.32	1.34	1.15	1.21	1.23	1.27	1.43
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Appendix III													
Boron	mg/L	0.07	0.07	0.06	0.05	0.06	--	--	0.05	0.05	0.05	0.05	0.08
Calcium	mg/L	102	105 J	111	110	99.7 J	--	--	112	109	102	107	98.4
Chloride	mg/L	69	70	71	71	68	--	--	70	70	72	75	68
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
pH (Field Measure)	su	7.14	7.14	7.13	7.13	7.87	7.22	7.22	7.14	7.14	7.1	7.1	7.03
Sulfate	mg/L	58	58	60	59	57	--	--	57	57	56	58	52
Total Dissolved Solids	mg/L	538	544	538	534	554	--	--	522	514	532	526	568
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.007	0.007	0.006	0.007	0.008
Barium	mg/L	0.163	0.168	0.151	0.155	0.16	0.16	0.159	0.157	0.153	0.156	0.156	0.155
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	0.01	0.011	0.01	< 0.01	0.01	0.011	0.011	0.012	0.01	< 0.01	0.011	0.01
Mercury	mg/L	< 0.0002	< 0.0005	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	< 0.005	0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.009
Radium-226	pCi/L	0.797 J+	0.175 J-	0.35	0.31	0.357	0.742	0.393	0.524 J+	0.297 J-	2.12	0.626	0.232 J-
Radium-228	pCi/L	0.839 J+	0.27 J-	1.65 J+	0.237 J-	0.232	0.0791	0.426	-0.957 J-	0.956 J+	2.89	-0.91	-0.362 J-
Radium-226/228	pCi/L	1.64 J+	0.445 J-	2 J+	0.547 J-	0.589	0.821	0.819	0.524 J-	1.25 J+	5 J+	0.626 J-	0.232 J-
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	2 U	2 U	< 3	1 U	3 U	1 U	1 U	1 U	< 3	1 U	< 3	1 U
Bicarbonate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hardness (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--

Groundwater Sampling Results for MW-4

LBWL Erickson Station

Sample Location:		MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
Sample Date:		8/3/2021	2/1/2022	2/1/2022	8/2/2022	8/2/2022	2/7/2023	2/7/2023	8/1/2023	8/1/2023	1/29/2024	8/5/2024	2/4/2025
Sample Type:		FD	N	FD	N	FD	N	FD	N	FD	N	N	N
Gradient:		Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient
Sampling Phase:		AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.03	7.13	7.13	7.19	7.19	7.19	7.19	7.06	7.06	7.26	7.13	7.25
Specific Conductivity	mS/cm	0.884	0.911	0.911	0.429	0.429	0.882	0.882	0.893	0.893	0.92	0.832	0.872
Turbidity	NTU	1.84	2.54	2.54	0.75	0.75	3.28	3.28	1.97	1.97	1.01	1.97	1.33
Dissolved Oxygen	mg/L	0.03	0.37	0.37	0.12	0.12	0.44	0.44	0.08	0.08	0.31	0.26	0.29
Temperature	deg C	14.4	10.6	10.6	13.8	13.8	11.5	11.5	14.1	14.1	10.2	15.8	10.7
Oxidation Reduction Potential	mV	-66.4	-34	-34	-88.8	-88.8	-44.2	-44.2	-68.3	-68.3	-55.1	-73.2	-50.7
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0017 U
Iron	mg/L	1.46	1.26	1.23	1.53	1.54	1.31	1.3	1.39	1.44	1.09	1.44	0.96
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0015 U
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0014 JB
Appendix III													
Boron	mg/L	0.07	0.07	0.06	0.06	0.07	0.06	0.06	0.08	0.06	0.07	0.06	0.073 J
Calcium	mg/L	94.6	110	110	110	109	106	106	112	114	110	115	110
Chloride	mg/L	68	72	74	75	76	74	75	77	77	73.6	76.2	66
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.15
pH (Field Measure)	su	7.03	7.13	7.13	7.19	7.19	7.19	7.19	7.06	7.06	7.26	7.13	7.25
Sulfate	mg/L	53	54	53	51	52	56	56	52	52	57.5	53.4	56
Total Dissolved Solids	mg/L	570	548	540	554	574	532	530	558	572	556	588	510
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00065 J
Arsenic	mg/L	0.008	0.008	0.008	0.008	0.008	0.007	0.007	0.007	0.008	0.009	0.008	0.0056
Barium	mg/L	0.159	0.163	0.162	0.167	0.165	0.166	0.163	0.169	0.166	0.159	0.162	0.16
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000085 J
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00023 J
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.15
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.00045 U
Lithium	mg/L	0.01	0.01	0.011	0.009	0.009	0.011	0.01	0.009	0.01	0.012	0.011	0.011
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U
Molybdenum	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0047 J
Radium-226	pCi/L	0.532 J+	0.606 J+	0.322 J-	0.393	0.457	0.701	0.898	0.744	0.501	0.434	1.59	< 0.305 U
Radium-228	pCi/L	1.81 J+	2.17 J+	1.41 J-	-0.793 J	2.88 J+	0.692 J+	-0.593 J-	0.877 J+	0.0402 J-	-0.253	1.86	0.727
Radium-226/228	pCi/L	2.34 J+	2.78 J+	1.74 J-	0.393 J	3.34 J+	1.39 J+	0.898 J-	0.744 J+	0.541 J-	0.434	3.44	0.995
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U
Other													
Total Suspended Solids	mg/L	1 U	2 U	1 U	3 J+	< 3 UJ	< 3	< 3	1.8	2.1	1.5	2.4	1.4 J
Bicarbonate	mg/L	--	--	--	400	410	406	407	420	400	416	420	320
Carbonate	mg/L	--	--	--	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 2.6 U
Hardness (as CaCO3)	mg/L	--	--	--	412	426	420	431	450	434	428	442	420
Magnesium	mg/L	--	--	--	39.3	38.8	38.3	38.9	39.6	40.5	38.9	40.8	37
Potassium	mg/L	--	--	--	1.41	1.41	1.39	1.41	1.45	1.49	1.47	1.41	1.4
Sodium	mg/L	--	--	--	28.9	28.3	28.5	28.2	31.2	31.7	33.9	33.2	31

Groundwater Sampling Results for MW-4

LBWL Erickson Station

Sample Location:		MW-4	MW-4
Sample Date:		8/11/2025	8/11/2025
Sample Type:		N	FD
Gradient:		Upgradient	Upgradient
Sampling Phase:		AM	AM
Fraction:		T	T
Constituent	Unit		
Field Parameters			
pH	su	6.92	6.92
Specific Conductivity	mS/cm	0.904	0.904
Turbidity	NTU	1.97	1.97
Dissolved Oxygen	mg/L	0.19	0.19
Temperature	deg C	15	15
Oxidation Reduction Potential	mV	-74.8	-74.8
Part 115			
Copper	mg/L	< 0.0017 U	< 0.0017 U
Iron	mg/L	1.4	1.4
Nickel	mg/L	< 0.0015 U	< 0.0015 U
Silver	mg/L	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.00082 U	< 0.00082 U
Zinc	mg/L	0.0012 J+	< 0.00093 UJ
Appendix III			
Boron	mg/L	0.066 J	0.068 J
Calcium	mg/L	110	110
Chloride	mg/L	69	69
Fluoride	mg/L	0.17	0.16
pH (Field Measure)	su	6.92	6.92
Sulfate	mg/L	51	51
Total Dissolved Solids	mg/L	480	510
Appendix IV			
Antimony	mg/L	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.007	0.0062
Barium	mg/L	0.15	0.15
Beryllium	mg/L	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	0.000082 J+	< 0.000077 UJ
Chromium	mg/L	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	0.00028 J	0.00025 J
Fluoride	mg/L	0.17	0.16
Lead	mg/L	< 0.00045 U*+	< 0.00045 U*+
Lithium	mg/L	0.01	0.01
Mercury	mg/L	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.0041 J	0.0037 J
Radium-226	pCi/L	< 0.39 UJ	< 0.314 UJ
Radium-228	pCi/L	0.841 J+	0.524 J-
Radium-226/228	pCi/L	1.12 J+	0.682 J-
Selenium	mg/L	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.00051 U*+	< 0.00051 U*+
Other			
Total Suspended Solids	mg/L	2 J-	3.2 J+
Bicarbonate	mg/L	320	320
Carbonate	mg/L	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	420	420
Magnesium	mg/L	38	38
Potassium	mg/L	1.5 J	1.4 J
Sodium	mg/L	31	32

Groundwater Sampling Results for MW-5

LBWL Erickson Station

Sample Location:		MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
Sample Date:		4/28/2020	5/26/2020	6/23/2020	7/21/2020	8/18/2020	9/15/2020	9/28/2020	10/12/2020	10/19/2020	11/6/2020	1/27/2021	5/4/2021
Sample Type:		N	N	N	N	N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	Initial AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.27	7.24	7.31	7.34	7.3	7.17	6.71	7.34	7.45	7.16	7.35	6.4
Specific Conductivity	mS/cm	1.576	1.882	1.97	1.869	1.75	1.893	1.945	2.493	1.425	2.234	1.295	1.6
Turbidity	NTU	179.57	69.71	17.91	15.1	20.25	19.02	15.75	12.35	9.58	18.49	15.25	21
Dissolved Oxygen	mg/L	0.55	0.65	2.61	3.85	2.5	0.64	1.27	3.49	4.25	1.02	2.34	2.45
Temperature	deg C	11.6	13.9	15.2	17.5	12.7	12.3	12.5	15.5	11.6	12.5	8.6	13
Oxidation Reduction Potential	mV	-33	28.7	-34.8	58.4	69.5	-24.8	180.1	-31.2	130.2	17.5	191.2	248.4
Part 115													
Copper	mg/L	0.009	< 0.005	< 0.005	0.026	0.005	< 0.005	< 0.005	0.011	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	8	1.93	0.39	0.27	2.45	0.21	0.18	1.74	0.18 J	< 0.02	0.63	0.9
Nickel	mg/L	0.019	0.016	0.013	0.011	0.013	0.011	0.016	0.018	0.014	0.007	0.01	0.01
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	0.012	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	0.023	0.033	0.026	0.007	0.011	< 0.005	0.006	0.014	< 0.005	< 0.005	0.098	< 0.005
Appendix III													
Boron	mg/L	4.99	5.19	4.59	4.57	4.48	5	5.09	5	5.75	--	4.61	3.66
Calcium	mg/L	245	320	289	251 J	266	266	283	372	319 J	--	245	221
Chloride	mg/L	68	82	75	80	76	77	78	81	83	--	66	73
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
pH (Field Measure)	su	7.27	7.24	7.31	7.34	7.3	7.17	6.71	7.34	7.45	7.16	7.35	6.4
Sulfate	mg/L	591	930	931	877	714	791	873	1080	1170	--	578	581
Total Dissolved Solids	mg/L	1280	1770	1720	1640	1520	1540	1660	1960	2020	--	1220	1230
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	0.005	0.002	< 0.002	< 0.002	0.003	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.002
Barium	mg/L	0.064	0.056	0.049	0.041	0.056	0.043	0.043	0.048	0.042	0.033	0.039	0.038
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	0.006	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Lead	mg/L	0.005	< 0.003	< 0.003	< 0.003	0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	0.091	0.051	0.061	0.074	0.085	0.091	0.07	0.054	0.046	0.057	0.08	0.073
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	0.096	0.051	0.05	0.052	0.067	0.053	0.044	0.038	0.035	0.032	0.054	0.05
Radium-226	pCi/L	1.1	1.08	0.223	0.811	0.3	0.773	0.759	0.709	0.6	3.3	0.787	0.349
Radium-228	pCi/L	0.187	0.28	0.302	0.721	0.253	-0.641	1.47	1.38	-0.262	0.921	3.2 J	0.726
Radium-226/228	pCi/L	1.29	1.36	0.524	1.53	0.552	0.773	2.23	2.09	0.6	4.22	3.99 J	1.08
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	161	21	23	37	20	61	6	14	7	4	7	8
Bicarbonate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hardness (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--

Groundwater Sampling Results for MW-5

LBWL Erickson Station

Sample Location:		MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
Sample Date:		8/3/2021	2/1/2022	8/2/2022	2/7/2023	8/1/2023	1/29/2024	8/5/2024	2/4/2025	8/6/2025
Sample Type:		N	N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		AM	AM	AM	AM	AM	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T
Constituent	Unit									
Field Parameters										
pH	su	7.22	7.18	7.4	7.13	7.24	7.38	7.27	7.33	7.08
Specific Conductivity	mS/cm	1.772	1.238	1.643	1.304	1.076	1.002	1.029	1.042	0.94
Turbidity	NTU	9.52	14.21	20.19	23.53	15.85	25.15	24.7	12.18	12.2
Dissolved Oxygen	mg/L	2.45	3.21	5.42	3.52	3.81	3.16	4.45	2.41	5.74
Temperature	deg C	13.3	10.1	15.3	10.5	16.1	6.9	18.8	6.4	23.2
Oxidation Reduction Potential	mV	132.6	59.1	28.6	164.6	158	119.2	133.8	110.4	60.2
Part 115										
Copper	mg/L	< 0.005	0.019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0026	0.0018 J
Iron	mg/L	1.12	4.69	0.75	0.53	1.25	0.33	1.24	0.16	0.53
Nickel	mg/L	0.01	0.008	0.011	0.006	0.006	0.005	0.007	0.0047	0.0035
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000088 J	< 0.000053 U
Vanadium	mg/L	< 0.005	0.009	< 0.005	< 0.005	< 0.005	0.005	< 0.005	0.0015 J	< 0.00082 U
Zinc	mg/L	0.005	0.048	0.009	0.005	0.006	< 0.005	0.008	0.0037 JB	0.004 J
Appendix III										
Boron	mg/L	4.82	0.37	4.29	3.53	2.77	2.86	2.89	3.9	3
Calcium	mg/L	229	70.1	223	187	173	153	160	150	120
Chloride	mg/L	66	43	66	56	51	37.2	36.5	34	37
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.11	0.14
pH (Field Measure)	su	7.22	7.18	7.4	7.13	7.24	7.38	7.27	7.33	7.08
Sulfate	mg/L	700	186	598	411	288	319	335	310	200
Total Dissolved Solids	mg/L	1390	592	1210	984	792	788	816	760	540
Appendix IV										
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.002	0.007	< 0.002	< 0.002	< 0.002	0.004	< 0.002	< 0.00075 U	0.00087 JB
Barium	mg/L	0.04	0.055	0.044	0.04	0.047	0.04	0.045	0.043	0.038
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000092 J	< 0.000077 U
Chromium	mg/L	< 0.005	0.007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0014 J	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00062 J	0.00031 J
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.11	0.14
Lead	mg/L	< 0.003	0.014	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.00069 J	0.00045 J
Lithium	mg/L	0.078	0.016	0.076	0.083	0.085	0.069	0.065	0.06	0.058
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.039	0.01	0.063	0.055	0.072	0.082	0.081	0.058	0.078
Radium-226	pCi/L	0.374	0.252	0.525	0.558	0.409	0.857	1.09	< 0.285 U	< 0.154 U
Radium-228	pCi/L	0.271	1.54	0.33 J+	1.22	1.24	1.88	0.615	< 0.67 U	< 0.658 U
Radium-226/228	pCi/L	0.644	1.79	0.855 J+	1.78	1.65	2.73	1.71	< 0.67 U	< 0.658 U
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U
Other										
Total Suspended Solids	mg/L	4	63	17	21	8.6	7.7	10.3	8.7	1.6 J
Bicarbonate	mg/L	--	--	280	320	290	298	290	240	220
Carbonate	mg/L	--	--	< 10	< 10	< 10	< 10	< 10	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	--	--	748	629	530	502	534	510	420
Magnesium	mg/L	--	--	54.5	42.3	38.1	33.3	36.7	34	27
Potassium	mg/L	--	--	3.77	4.44	4.61	4.34	4.52	4.4	3.6
Sodium	mg/L	--	--	69.5	57.4	47.8	45.6	49.1	49	37

Groundwater Sampling Results for MW-6

LBWL Erickson Station

Sample Location:		MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
Sample Date:		4/28/2020	5/26/2020	6/23/2020	7/21/2020	8/18/2020	9/15/2020	9/28/2020	10/12/2020	10/19/2020	11/6/2020	1/27/2021	5/4/2021
Sample Type:		N	N	N	N	N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	Initial AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	6.64	6.35	6.68	6.76	6.8	6.85	6.69	6.71	7.11	6.76	6.72	7
Specific Conductivity	mS/cm	0.954	0.902	1.044	1.075	1.13	1.251	1.149	1.205	1.275	1.169	1.178	1
Turbidity	NTU	16.71	17.8	33.6	6.61	8.99	6.95	5.42	8.45	8.35	9.69	1.19	8
Dissolved Oxygen	mg/L	0.05	0.01	0.09	0.09	0.05	0.04	0.02	0.24	0.04	0.18	0.12	0.1
Temperature	deg C	10.5	14.2	11.7	13.4	13	13.6	12.6	14.3	12.8	15.2	11	12
Oxidation Reduction Potential	mV	-26.9	102.4	-45.9	139.7	91.1	-66.5	59.5	88.9	91.2	12	122.9	70.8
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	0.08	0.2	0.07	0.05	0.03	< 0.02	< 0.02	< 0.02	< 0.02 UJ	< 0.02	< 0.02	< 0.02
Nickel	mg/L	0.005	< 0.005	0.007	0.007	0.008	0.007	0.008	0.007	0.007	0.007	0.006	0.006
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	< 0.005	0.034	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Appendix III													
Boron	mg/L	0.56	0.49	0.65	0.75	0.86	1.05	0.97	0.99	1.09	--	0.91	0.64
Calcium	mg/L	142	143	154	161 J	170	192	175	189	173 J	--	191	149
Chloride	mg/L	26	24	29	33	37	43	39	41	42	--	38	27
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
pH (Field Measure)	su	6.64	6.35	6.68	6.76	6.8	6.85	6.69	6.71	7.11	6.76	6.72	7
Sulfate	mg/L	135	123	154	183	222	264	214	242	263	--	198	133
Total Dissolved Solids	mg/L	642	598	706	738	820	880	822	868	898	--	798	658
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Barium	mg/L	0.042	0.05	0.042	0.044	0.053	0.054	0.055	0.054	0.057	0.052	0.052	0.044
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	0.037	0.038	0.037	0.041	0.044	0.055	0.053	0.052	0.059	0.058	0.048	0.048
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	0.021	0.021	0.026	0.025	0.03	0.031	0.028	0.029	0.034	0.028	0.024	0.024
Radium-226	pCi/L	0.212	-0.0419	0.379	-0.0445	0.415	0.458	0.533	0.461	0.537	0.343	0.263	0.32
Radium-228	pCi/L	0.384	-0.481	-0.299	0.46	1.06	-0.00462	0.225	0.176	-0.866	1.36	1.72	1.13
Radium-226/228	pCi/L	0.596	0	0.379	0.46	1.48	0.458	0.758	0.637	0.537	1.7	1.98	1.45
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	< 3	6	< 3	< 3	< 3	< 3	< 3	< 3	1 U	< 3	< 3	< 3
Bicarbonate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hardness (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--

Groundwater Sampling Results for MW-6

LBWL Erickson Station

Sample Location:		MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
Sample Date:		8/3/2021	2/1/2022	8/2/2022	2/7/2023	8/1/2023	1/29/2024	1/29/2024	8/5/2024	2/4/2025	2/4/2025	8/6/2025	8/6/2025
Sample Type:		N	N	N	N	N	N	FD	N	N	FD	N	FD
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	6.51	6.69	6.79	6.74	6.71	6.78	6.78	6.79	6.83	6.83	6.68	6.68
Specific Conductivity	mS/cm	1.022	1.045	1.091	1.224	1.133	1.006	1.006	1.068	1.293	1.293	1.189	1.189
Turbidity	NTU	8.74	4.52	2.65	4.43	2.15	1.41	1.41	3.67	1.3	1.3	5.18	5.18
Dissolved Oxygen	mg/L	0.07	0.08	0.44	0.19	0.33	0.29	0.29	2.03	0	0	0.37	0.37
Temperature	deg C	13.2	13.4	14.4	12.8	14.2	10.2	10.2	15.8	12.7	12.7	14.2	14.2
Oxidation Reduction Potential	mV	168.5	68.6	18.3	30.1	202.1	96.1	96.1	117.2	33.2	33.2	114	114
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U
Iron	mg/L	0.02	0.04	0.02	< 0.02	0.03	< 0.02	< 0.02	< 0.02	< 0.013 U	< 0.013 U	0.028 J+	0.017 J-
Nickel	mg/L	0.007	0.007	< 0.005	0.006	< 0.005	< 0.005	< 0.005	< 0.005	0.0033	0.0032	0.0019 J	0.0018 J
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.002 J+	0.0011 J-	0.0012 J	0.00099 JB
Appendix III													
Boron	mg/L	0.76	0.68	0.8	0.99	0.85	0.57	0.61	0.71	1	0.99	0.83	0.8
Calcium	mg/L	146	160	169	193	189	161	161	191	200	190	180	180
Chloride	mg/L	27	27	35	42	39	26.5	26.5	38.4	49	49	40	41
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.24	0.24	0.2	0.22
pH (Field Measure)	su	6.51	6.69	6.79	6.74	6.71	6.78	6.78	6.79	6.83	6.83	6.68	6.68
Sulfate	mg/L	139	131	172	233	185	118	119	180	250	240	170	170
Total Dissolved Solids	mg/L	692	688	728	866	822	660	658	792	900	860	780	750
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.003	0.003	< 0.002	< 0.00075 U	< 0.00075 U	0.00075 J+	< 0.00075 UJ
Barium	mg/L	0.043	0.044	0.038	0.046	0.05	0.049	0.049	0.053	0.062	0.061	0.05	0.051
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.00015 J+	0.000081 J-	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00053 J	0.00054 J	0.00034 J	0.00037 J
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.24	0.24	0.2	0.22
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.047	0.044	0.046	0.054	0.049	0.032	0.034	0.05	0.067	0.066	0.047	0.046
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.029	0.036	0.016	0.027	0.021	0.012	0.013	0.018	0.029	0.029	0.012	0.012
Radium-226	pCi/L	0.116	0.571	0.0773	0.961	0.462	0.435 J+	0.19 J-	3.59	0.261 J+	< 0.277 UJ	< 0.152 UJ	< 0.131 UJ
Radium-228	pCi/L	1.3	2.04	0.324 J+	-1.09	0.201	0.746 J-	2.24 J+	0.704	< 0.544 UJ	2.32 J+	< 0.633 UJ	< 0.53 UJ
Radium-226/228	pCi/L	1.42	2.61	0.401 J+	0.961	0.663	1.18 J-	2.43 J+	4.29	< 0.544 UJ	2.49 J+	< 0.633 UJ	< 0.53 UJ
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U
Other													
Total Suspended Solids	mg/L	2 U	32	< 3	< 3	1.4	< 3	< 3	1.1	< 0.4 U	< 0.4 U	0.9 J+	0.6 J-
Bicarbonate	mg/L	--	--	480	543	530	516	510	530	440	440	430	430
Carbonate	mg/L	--	--	< 10	< 10	< 10	< 10	< 10	< 10	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	--	--	532	624	616	522	512	638	690	680	600	600
Magnesium	mg/L	--	--	32.9	39.4	40.3	29.9	30.5	40.1	48	47	37	38
Potassium	mg/L	--	--	6.4	6.85	7.02	6.77	6.72	7.06	7.7	7.7	6.5	6.8
Sodium	mg/L	--	--	38.8	43.9	34.3	32.4	32.7	29.5	38	38	29	30

Groundwater Sampling Results for MW-7

LBWL Erickson Station

Sample Location:		MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7
Sample Date:		6/15/2021	7/20/2021	8/24/2021	9/28/2021	11/2/2021	12/7/2021	1/11/2022	2/17/2022	8/2/2022	2/8/2023	8/2/2023	1/30/2024
Sample Type:		N	N	N	N	N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	8.18	7.4	7.4	7.47	7.37	7.47	7.56	7.24	7.58	7.58	7.44	7.09
Specific Conductivity	mS/cm	0.879	0.9	0.916	0.925	0.462	0.972	0.964	1.129	0.965	0.78	0.845	1.21
Turbidity	NTU	1.71	5	5.37	16.01	5.18	2.2	2.49	2.21	2.65	3.53	1.45	4.98
Dissolved Oxygen	mg/L	0.03	< 0.1	0.01	0.02	0	0.02	0.49	0.01	0.16	0.04	0.01	0.08
Temperature	deg C	12.9	14	17	14.3	13	11	9.1	6.2	14.6	9.9	15.9	8.2
Oxidation Reduction Potential	mV	-142.1	-117.2	-139.5	-128.3	-146.5	-157.1	-112.6	-36.9	-129	-81.3	-146.9	-100.6
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	1.34	1.25	1.31	1.37	1.49	1.5	1.52	2.81	1.19	1	1.04	1.91
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.006
Zinc	mg/L	< 0.005	0.007	0.014	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.007	< 0.005	< 0.005	< 0.005
Appendix III													
Boron	mg/L	1.88	1.78	1.89	1.81	2.12	2.19	2.14	2.75	1.43	1.36	1.08	1.72
Calcium	mg/L	110	111	112	108	122	126	121	149	104	98.8	97.2	165
Chloride	mg/L	73	74	74	75	73	72.2	78	75	98	82	81	82.9
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	0.338	< 1	< 1	< 1	< 1	< 1	< 1
pH (Field Measure)	su	8.18	7.4	7.4	7.47	7.37	7.47	7.56	7.24	7.58	7.58	7.44	7.09
Sulfate	mg/L	189	181	184	191	212	203	214	260	175	198	172	270
Total Dissolved Solids	mg/L	586	574	592	588	622	634	624	758	590	564	548	864
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	0.006	0.006	0.007	0.006	0.005	0.006	0.006	0.005	0.004	0.004	0.006	0.006
Barium	mg/L	0.056	0.06	0.052	0.051	0.054	0.056	0.055	0.062	0.047	0.049	0.05	0.036
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	0.338	< 1	< 1	< 1	< 1	< 1	< 1
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	0.089	0.096	0.093	0.097	0.1	0.1	0.1	0.112	0.086	0.073	0.063	0.082
Mercury	mg/L	0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	0.259	0.26	0.292	0.276	0.276	0.293	0.296	0.284	0.146	0.173	0.156	0.184
Radium-226	pCi/L	0.253	1.4	0.766	0.829	0.666 J	2.64	0.676	0.818	0.568	1.06	0.619	0 J-
Radium-228	pCi/L	1.85 J+	3.42	0.535	2.49	0.115	0.179	-0.65	1.51	1.27 J+	4.38	1.18	0.514 J-
Radium-226/228	pCi/L	2.11 J+	4.82	1.3	3.32	0.781 J	2.82	0.676	2.33	1.84 J+	5.44	1.8	0.514 J-
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	1 U	< 3	< 3	< 3	2.6
Bicarbonate	mg/L	--	--	--	--	--	--	--	--	180	163	150	334
Carbonate	mg/L	--	--	--	--	--	--	--	--	< 10	< 10	< 10	< 10
Hardness (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	305	290	289	496
Magnesium	mg/L	--	--	--	--	--	--	--	--	12.3	12.3	12.1	20.5
Potassium	mg/L	--	--	--	--	--	--	--	--	9.53	8.9	9.44	5.77
Sodium	mg/L	--	--	--	--	--	--	--	--	71.1	66.5	68.1	83.9

Groundwater Sampling Results for MW-7

LBWL Erickson Station

Sample Location:		MW-7	MW-7	MW-7	MW-7	MW-7
Sample Date:		1/30/2024	8/8/2024	2/5/2025	8/8/2025	8/8/2025
Sample Type:		FD	N	N	N	FD
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		AM	AM	AM	AM	AM
Fraction:		T	T	T	T	T
Constituent	Unit					
Field Parameters						
pH	su	7.09	7.42	7.36	7.21	7.21
Specific Conductivity	mS/cm	1.21	0.909	0.97	0.961	0.961
Turbidity	NTU	4.98	6.68	3.02	7.19	7.19
Dissolved Oxygen	mg/L	0.08	0.43	-0.28	0.19	0.19
Temperature	deg C	8.2	15.3	7.9	14.7	14.7
Oxidation Reduction Potential	mV	-100.6	-90	-60.4	-123.3	-123.3
Part 115						
Copper	mg/L	< 0.005	< 0.005	< 0.0017 U	< 0.0017 U	< 0.0017 U
Iron	mg/L	1.89	1.4	0.9	1.2	1.3
Nickel	mg/L	< 0.005	< 0.005	< 0.0015 U	< 0.0015 U	< 0.0015 U
Silver	mg/L	< 0.0005	< 0.0005	< 0.000053 U	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	0.005	< 0.005	< 0.00082 U	< 0.00082 UJ	0.00088 J+
Zinc	mg/L	< 0.005	< 0.005	< 0.00093 U	0.0013 J+	< 0.00093 UJ
Appendix III						
Boron	mg/L	1.67	2.03	2	1.9	1.8
Calcium	mg/L	159	111	110	110	100
Chloride	mg/L	81.7	87.6	81	78	78
Fluoride	mg/L	< 1	0.3	0.37	0.42	0.42
pH (Field Measure)	su	7.09	7.42	7.36	7.21	7.21
Sulfate	mg/L	267	171	190	200	200
Total Dissolved Solids	mg/L	866	614	610	610	600
Appendix IV						
Antimony	mg/L	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.006	0.005	0.0027 J	0.0053	0.0055
Barium	mg/L	0.037	0.056	0.048	0.06	0.059
Beryllium	mg/L	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.000077 U	< 0.000077 U	0.00013 J
Chromium	mg/L	< 0.005	0.007	< 0.0012 U	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	0.00026 J	0.00016 J+	0.00013 J-
Fluoride	mg/L	< 1	0.3	0.37	0.42	0.42
Lead	mg/L	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.079	0.08	0.075	0.079	0.075
Mercury	mg/L	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.186	0.196	0.17	0.16	0.16
Radium-226	pCi/L	0.693 J+	0.946	0.272	< 0.449 U	0.36
Radium-228	pCi/L	0.906 J+	0.87	< 0.726 U	0.629	0.647
Radium-226/228	pCi/L	1.6 J+	1.82	0.983	1.02	1.01
Selenium	mg/L	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U	< 0.00051 U*+
Other						
Total Suspended Solids	mg/L	3.3	< 3	0.6 J	< 0.4 UJ	1.2 J+
Bicarbonate	mg/L	346	240	190	180	170
Carbonate	mg/L	< 10	< 10	< 2.6 U	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	510	338	320	340	320
Magnesium	mg/L	20.4	15.1	14	16 F1	15
Potassium	mg/L	5.69	9.98	7.9	8.7	8.9
Sodium	mg/L	83.9	72.3	67	69	71

Groundwater Sampling Results for MW-7B

LBWL Erickson Station

Sample Location:		MW-7B	MW-7B	MW-7B	MW-7B	MW-7B	MW-7B	MW-7B	MW-7B	MW-7B	MW-7B	MW-7B	MW-7B
Sample Date:		3/9/2022	3/9/2022	4/13/2022	4/13/2022	5/19/2022	6/23/2022	7/28/2022	9/1/2022	10/6/2022	11/10/2022	2/8/2023	8/2/2023
Sample Type:		N	FD	N	FD	N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	8.14	8.14	8.04	8.04	8.07	7.73	7.81	7.9	7.8	7.85	8.15	7.87
Specific Conductivity	mS/cm	0.73	0.73	0.588	0.588	0.589	0.586	0.588	0.58	0.587	0.577	0.577	0.565
Turbidity	NTU	0.02	0.02	7.01	7.01	6.25	6.01	4.05	4.2	5.25	6.01	3.12	0.98
Dissolved Oxygen	mg/L	0.85	0.85	0.26	0.26	0.1	0.09	0.11	0.67	0.16	0.12	0.07	0.02
Temperature	deg C	11.7	11.7	11	11	13.1	13.3	14.1	14	13.3	13.4	11.2	14.9
Oxidation Reduction Potential	mV	19.2	19.2	-95.1	-95.1	-135.8	-38.8	-108.9	-117.5	-98.2	-106.9	-130.1	-138.4
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	0.06	0.06	0.03	0.03	0.03	0.05 J	0.04	0.05	0.06	0.07	0.08	0.09
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Appendix III													
Boron	mg/L	3.07	3.09	2.9	2.88	3.02	3.04	2.98	3.17	2.91	2.94	3	3.06
Calcium	mg/L	10.2	10.4	9.59	9.28	8.24	9.22	9.25	9.14	8.73	9.24	8.77	9.36
Chloride	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
pH (Field Measure)	su	8.14	8.14	8.04	8.04	8.07	7.73	7.81	7.9	7.8	7.85	8.15	7.87
Sulfate	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Total Dissolved Solids	mg/L	366	366	362	370	366	362	376	356	376	368	362	356
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	< 0.002	< 0.002	0.003	0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Barium	mg/L	0.01	0.009	0.011	0.011	0.01	0.009	0.009	0.009	0.01	0.008	0.009	0.008
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.012	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	0.034	0.035	0.028	0.029	0.031	0.031	0.032	0.032	0.032	0.032	0.032	0.031
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Radium-226	pCi/L	0.451	0.629	0.439	0.52	0.378	0.547	0.278	0.44	0.988	0.463	0.504	0.434
Radium-228	pCi/L	1.27	0.536	0.872	0.428	-0.123	1.88	0.136 J+	0.286	0.103	1.3	-0.879	1.13
Radium-226/228	pCi/L	1.72	1.16	1.31	0.948	0.378	2.43	0.414 J+	0.726	1.09	1.77	0.504	1.57
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Bicarbonate	mg/L	390	390	390	400	400	380	390	390	390	400	418	400
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hardness (as CaCO3)	mg/L	38	40	37	51	29	31	30	29	30	29	29	38
Magnesium	mg/L	2.93	3	2.99	2.93	2.43	2.75	2.79	2.84	2.75	2.78	2.81	2.81
Potassium	mg/L	5.48	5.57	5.64	5.57	4.8	5.57	5.72	5.61	5.53	5.85	5.58	5.78
Sodium	mg/L	132	131	136	133	116	135	138	140	138	137	142	146

Groundwater Sampling Results for MW-7B

LBWL Erickson Station

Sample Location:		MW-7B	MW-7B	MW-7B	MW-7B
Sample Date:		1/30/2024	8/8/2024	2/5/2025	8/8/2025
Sample Type:		N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		AM	AM	AM	AM
Fraction:		T	T	T	T
Constituent	Unit				
Field Parameters					
pH	su	8.17	8	8.04	7.75
Specific Conductivity	mS/cm	0.579	0.585	0.559	0.584
Turbidity	NTU	6.39	9.44	6.11	4.19
Dissolved Oxygen	mg/L	0.1	0.3	-0.19	0.18
Temperature	deg C	9.4	14.3	10.1	14.3
Oxidation Reduction Potential	mV	-153	-114.8	-119.4	-141.1
Part 115					
Copper	mg/L	< 0.005	< 0.005	< 0.0017 U	< 0.0017 U
Iron	mg/L	0.09	0.12	0.095 J	0.084 J
Nickel	mg/L	< 0.005	< 0.005	< 0.0015 U	< 0.0015 U
Silver	mg/L	< 0.0005	< 0.0005	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	0.0011 JB	< 0.00093 U
Appendix III					
Boron	mg/L	2.92	2.95	2.8	3
Calcium	mg/L	8.83	8.87	7.6	8
Chloride	mg/L	1.9	1.9	0.82 J	0.92 J
Fluoride	mg/L	0.3	0.6	0.74	0.81
pH (Field Measure)	su	8.17	8	8.04	7.75
Sulfate	mg/L	1.3	1.1	2.4	0.55 J
Total Dissolved Solids	mg/L	372	358	350	360
Appendix IV					
Antimony	mg/L	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.003	< 0.002	< 0.00075 U	0.0021 J
Barium	mg/L	0.008	0.008	0.0075	0.0077
Beryllium	mg/L	< 0.001	< 0.001	< 0.00027 U	0.00027 J
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.000077 U	0.00015 J
Chromium	mg/L	< 0.005	< 0.005	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.000086 U	0.0001 J
Fluoride	mg/L	0.3	0.6	0.74	0.81
Lead	mg/L	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.033	0.032	0.031	0.033
Mercury	mg/L	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	< 0.005	< 0.005	< 0.0011 U	< 0.0011 U
Radium-226	pCi/L	0.355	0.623	< 0.279 U	< 0.416 U
Radium-228	pCi/L	1.01	0.207	2.61	< 0.623 U
Radium-226/228	pCi/L	1.36	0.83	2.73	< 0.623 U
Selenium	mg/L	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U
Other					
Total Suspended Solids	mg/L	1	1	0.9 J	0.7 J
Bicarbonate	mg/L	395	380	310	290
Carbonate	mg/L	< 10	< 10	8	22
Hardness (as CaCO3)	mg/L	29.5	27	< 33 U	< 33 U
Magnesium	mg/L	2.69	2.65	2.4	2.5
Potassium	mg/L	5.63	5.71	5.3	5.2
Sodium	mg/L	87.5	139	130	130

Groundwater Sampling Results for MW-7C

LBWL Erickson Station

Sample Location:		MW-7C	MW-7C	MW-7C	MW-7C	MW-7C	MW-7C	MW-7C	MW-7C	MW-7C	MW-7C	MW-7C	MW-7C
Sample Date:		3/10/2022	3/10/2022	4/14/2022	5/19/2022	6/23/2022	7/28/2022	9/1/2022	10/6/2022	11/10/2022	2/8/2023	8/2/2023	1/30/2024
Sample Type:		N	FD	N	N	N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.32	7.32	7.51	7.49	7.28	7.24	7.3	7.23	7.35	7.41	7.24	7.44
Specific Conductivity	mS/cm	2.01	2.01	1.811	1.758	1.651	1.672	1.7	1.33	1.678	1.537	1.619	1.563
Turbidity	NTU	0.02	0.02	5.87	3.95	2.59	1.97	2.8	4.2	4.01	7.29	0.65	5.95
Dissolved Oxygen	mg/L	1.77	1.77	0.23	0.07	0.08	0.09	0.61	0.12	0.09	0.09	0.06	0.07
Temperature	deg C	12.3	12.3	11	13.7	13.8	14.3	16	13.7	13.8	11.3	16.4	9.2
Oxidation Reduction Potential	mV	-39	-39	-121.4	-182.8	-110.2	-151.5	-136.4	-128.8	-120.4	-111.5	-130	-134.4
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	4.15	4.11	4.34	4.28	3.77 J	3.84	4.11	3.81	4.11	3.67	4.02	4.41
Nickel	mg/L	0.01	0.011	0.008	0.008	0.007	0.008	0.008	0.007	0.007	0.007	0.007	0.008
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	< 0.005	0.007	< 0.005	< 0.005	< 0.005	0.006	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Appendix III													
Boron	mg/L	6.54	6.55	6.44	6.74	6.46	6.7	7.24	6.29	6.62	6.46	6.68	6.62
Calcium	mg/L	277	272	255	183	245	241	247	234	243	246	235	238
Chloride	mg/L	96	95	101	93	91	90	93	93	92	94	93	90.1
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
pH (Field Measure)	su	7.32	7.32	7.51	7.49	7.28	7.24	7.3	7.23	7.35	7.41	7.24	7.44
Sulfate	mg/L	751	761	736	723	668	660	703	675	685	687	656	650
Total Dissolved Solids	mg/L	1500	1500	1450	1420	1360	1360	1370	1360	1360	1360	1350	1330
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	0.007	0.007	0.006	0.007	0.006	0.006	0.006	0.006	0.005	0.006	0.007	0.01
Barium	mg/L	0.045	0.046	0.043	0.046	0.041	0.042	0.047	0.041	0.044	0.041	0.044	0.042
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	0.0007	< 0.0005	< 0.0005	0.0008	< 0.0005	0.0009	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	0.132	0.129	0.121	0.13	0.127	0.138	0.137	0.128	0.125	0.125	0.126	0.126
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	0.409	0.409	0.402	0.422	0.379	0.39	0.405	0.377	0.415	0.386	0.397	0.409
Radium-226	pCi/L	0.867	0.916	0.566	0.444	0.958	0.193	0.606	0.595	0.68	1.11	0.795	0.768
Radium-228	pCi/L	2.79	2.11	3.09	0.55	2.35	0.58 J+	0.204	1.39	1.08	2.17	0.451	0.361
Radium-226/228	pCi/L	3.66	3.03	3.65	0.994	3.31	0.773 J+	0.81	1.99	1.76	3.27	1.25	1.13
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	27 J+	13 J-	10	9	8	< 3	< 3	< 3	6	7	7.4	5.4
Bicarbonate	mg/L	150	160	160	170	160	160	170	150	150	172	170	167
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hardness (as CaCO3)	mg/L	840	860	812	812	777	740	764	750	754	742	779	558
Magnesium	mg/L	44.1	44.9	43.1	33.7	40	40	42.2	42.1	41	42.7	41.5	44.3
Potassium	mg/L	5.34	5.04	5.68	4.92	5.89	5.71	5.88	6.14	5.96	6.07	5.79	5.75
Sodium	mg/L	97.9	97.1	96.8	79	94.2	95.7	99.1	95.7	98.7	99.8	96.6	94.7

Groundwater Sampling Results for MW-7C

LBWL Erickson Station

Sample Location:		MW-7C	MW-7C	MW-7C
Sample Date:		8/8/2024	2/5/2025	8/7/2025
Sample Type:		N	N	N
Gradient:		Downgradient	Downgradient	Downgradient
Sampling Phase:		AM	AM	AM
Fraction:		T	T	T
Constituent	Unit			
Field Parameters				
pH	su	7.3	7.39	7.29
Specific Conductivity	mS/cm	1.514	1.574	1.612
Turbidity	NTU	8.57	5.15	6.62
Dissolved Oxygen	mg/L	0.28	-0.25	1.17
Temperature	deg C	14.7	10	15.6
Oxidation Reduction Potential	mV	-103.3	-109.9	-93.8
Part 115				
Copper	mg/L	< 0.005	< 0.0017 U	< 0.0017 UF2F1
Iron	mg/L	4.3	3.9	2.8
Nickel	mg/L	0.007	0.0059	0.0075 F2F1
Silver	mg/L	< 0.0005	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.00082 U	< 0.00082 UF2F1
Zinc	mg/L	< 0.005	0.0012 JB	0.0023 J
Appendix III				
Boron	mg/L	6.38	6.2	6.5
Calcium	mg/L	241	220	220
Chloride	mg/L	105	83	86
Fluoride	mg/L	< 1	0.24	0.3
pH (Field Measure)	su	7.3	7.39	7.29
Sulfate	mg/L	663	640	630
Total Dissolved Solids	mg/L	1310	1200	1100
Appendix IV				
Antimony	mg/L	< 0.005	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.007	0.0053	0.0064 F2F1
Barium	mg/L	0.039	0.039	0.038 F2F1
Beryllium	mg/L	< 0.001	< 0.00027 U	< 0.00027 UF2F1
Cadmium	mg/L	< 0.0005	< 0.000077 U	0.00016 JF2F1
Chromium	mg/L	< 0.005	< 0.0012 U	< 0.0012 UF2F1
Cobalt	mg/L	< 0.005	< 0.000086 U	0.0002 JF2F1
Fluoride	mg/L	< 1	0.24	0.3
Lead	mg/L	< 0.003	< 0.00045 U	< 0.00045 UF2F1
Lithium	mg/L	0.119	0.11	0.11 F2F1
Mercury	mg/L	< 0.0002	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.388	0.35	0.36 F2F1
Radium-226	pCi/L	0.887	0.425	< 0.269 U
Radium-228	pCi/L	0.784	1.79	1 J+
Radium-226/228	pCi/L	1.67	2.21	1.24
Selenium	mg/L	< 0.005	< 0.00089 U	< 0.00089 UF2F1
Thallium	mg/L	< 0.002	< 0.00051 U	< 0.00051 UF2F1
Other				
Total Suspended Solids	mg/L	9.1	9.9	7 J
Bicarbonate	mg/L	180	140	140
Carbonate	mg/L	< 10	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	770	720	720
Magnesium	mg/L	42.6	42	42
Potassium	mg/L	5.82	5.3	5.9
Sodium	mg/L	93.1	85	86

Groundwater Sampling Results for MW-7D

LBWL Erickson Station

Sample Location:		MW-7D	MW-7D
Sample Date:		9/30/2025	11/4/2025
Sample Type:		N	N
Gradient:		Downgradient	Downgradient
Sampling Phase:		Background	Background
Fraction:		T	T
Constituent	Unit		
Field Parameters			
pH	su	7.19	7.33
Specific Conductivity	mS/cm	0.555	0.524
Turbidity	NTU	3.38	7.79
Dissolved Oxygen	mg/L	0.15	0.24
Temperature	deg C	14.5	12.8
Oxidation Reduction Potential	mV	-41.2	-35.4
Part 115			
Copper	mg/L	< 0.0017 U	< 0.0017 U
Iron	mg/L	0.11	0.19
Nickel	mg/L	< 0.0015 U	< 0.0015 U
Silver	mg/L	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	0.00088 J	< 0.00082 U
Zinc	mg/L	< 0.00093 U	< 0.00093 U
Appendix III			
Boron	mg/L	1.5	1.5
Calcium	mg/L	72	71
Chloride	mg/L	2.7	2.3
Fluoride	mg/L	0.36	0.31
pH (Field Measure)	su	7.19	7.33
Sulfate	mg/L	1.8	13
Total Dissolved Solids	mg/L	280	300
Appendix IV			
Antimony	mg/L	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.0011 J	< 0.00075 U
Barium	mg/L	0.055	0.053
Beryllium	mg/L	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	0.00017 J	0.000085 J
Chromium	mg/L	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	0.00027 J	0.00021 J
Fluoride	mg/L	0.36	0.31
Lead	mg/L	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.033	0.036
Mercury	mg/L	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	< 0.0011 U	0.0014 J
Radium-226	pCi/L	< 0.307 U	0.538
Radium-228	pCi/L	< 0.579 U	0.995
Radium-226/228	pCi/L	0.812	1.53
Selenium	mg/L	0.0011 J	< 0.00089 U
Thallium	mg/L	< 0.00051 U	< 0.00051 U
Other			
Total Suspended Solids	mg/L	1.6 J	2.1 J
Bicarbonate	mg/L	290	310
Carbonate	mg/L	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	280	280
Magnesium	mg/L	25	24
Potassium	mg/L	9.5	10
Sodium	mg/L	13	14

Groundwater Sampling Results for MW-8

LBWL Erickson Station

Sample Location:		MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8
Sample Date:		6/15/2021	7/20/2021	8/24/2021	9/28/2021	11/2/2021	12/7/2021	1/11/2022	2/17/2022	8/2/2022	2/8/2023	8/2/2023	1/30/2024
Sample Type:		N	N	N	N	N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.78	7	6.99	7.24	7.03	7.12	7.26	6.99	7.18	7.18	7.06	7.14
Specific Conductivity	mS/cm	0.62	0.64	0.62	0.721	0.656	0.653	0.637	0.638	0.665	0.634	0.744	0.617
Turbidity	NTU	2.24	7	7.18	6.53	5.25	2.95	5.43	2	4.31	6.17	2.75	5.15
Dissolved Oxygen	mg/L	2.29	1	1.66	0.04	7.83	1.76	2.24	1.64	0.88	2.92	0.01	5.24
Temperature	deg C	10.7	14	16.4	14.3	14	11.2	9.2	5.9	14.4	9.4	14.2	7.8
Oxidation Reduction Potential	mV	72.1	280.5	325.9	112.7	228.5	122	234.6	365.3	100.5	249.8	114.5	116
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01
Iron	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.007
Appendix III													
Boron	mg/L	0.11	0.1	0.08	0.21	0.08	0.05	0.04	< 0.04	0.08	0.08	0.14	0.05
Calcium	mg/L	91.2	94.6	89.8	86.5	93	98.5	98.6	100	95.3	104	86.9	97.3
Chloride	mg/L	11	17	10	59	8	4.45	< 5	< 5	15	24	66	10.5
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	0.0587	< 1	< 1	< 1	< 1	< 1	< 1
pH (Field Measure)	su	7.78	7	6.99	7.24	7.03	7.12	7.26	6.99	7.18	7.18	7.06	7.14
Sulfate	mg/L	25	35	17	48	16	13.8	11	11	15	32	52	21.4
Total Dissolved Solids	mg/L	392	384	362	414	368	370	372	382	382	430	460	388
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.002
Barium	mg/L	0.028	0.021	0.022	0.026	0.021	0.021	0.018	0.017	0.019	0.022	0.026	0.021
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	0.0587	< 1	< 1	< 1	< 1	< 1	< 1
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	< 0.01	< 0.005	< 0.005	0.013	0.009	0.006	< 0.005	< 0.005	0.005	0.007	0.009	< 0.005
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002 UJ	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	< 0.011	0.006	< 0.005	0.013	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Radium-226	pCi/L	0.287	0.389	0.437	0.228	0.228 J	1.7	1.77	0.843	0.201	0.118	0.245	0.515
Radium-228	pCi/L	0.396 J+	-0.103	0.114	0.469	1.71	0.583	4.44	2	3.04 J+	-0.133	4.3	1.33
Radium-226/228	pCi/L	0.683 J+	0.389	0.551	0.697	1.93 J	2.28	6.21	2.84	3.24 J+	0.118	4.55	1.85
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	< 3	< 3	< 3	< 3	< 3	2 U	< 3	< 3	< 3	< 3	< 3	< 3
Bicarbonate	mg/L	--	--	--	--	--	--	--	--	410	440	320	403
Carbonate	mg/L	--	--	--	--	--	--	--	--	< 10	< 10	< 10	< 10
Hardness (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	347	384	326	364
Magnesium	mg/L	--	--	--	--	--	--	--	--	28.9	31.8	25.3	28.8
Potassium	mg/L	--	--	--	--	--	--	--	--	0.57	0.53	0.76	< 0.5
Sodium	mg/L	--	--	--	--	--	--	--	--	12.7	14.2	40.9	13.9

Groundwater Sampling Results for MW-8

LBWL Erickson Station

Sample Location:		MW-8	MW-8	MW-8
Sample Date:		8/8/2024	2/5/2025	8/7/2025
Sample Type:		N	N	N
Gradient:		Downgradient	Downgradient	Downgradient
Sampling Phase:		AM	AM	AM
Fraction:		T	T	T
Constituent	Unit			
Field Parameters				
pH	su	7.1	7.17	7.01
Specific Conductivity	mS/cm	0.661	0.668	0.773
Turbidity	NTU	2.15	2.4	3.08
Dissolved Oxygen	mg/L	0.47	2.32	1.3
Temperature	deg C	14.9	8.9	15.4
Oxidation Reduction Potential	mV	193.6	136	-0.7
Part 115				
Copper	mg/L	< 0.005	< 0.0017 U	< 0.0017 U
Iron	mg/L	< 0.02	< 0.013 U	0.045 J
Nickel	mg/L	< 0.005	< 0.0015 U	< 0.0015 U
Silver	mg/L	< 0.0005	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.00093 U	0.0018 J
Appendix III				
Boron	mg/L	0.08	0.094 J	0.084 J
Calcium	mg/L	93.3	87	90
Chloride	mg/L	28.5	38	22
Fluoride	mg/L	< 1	0.054	0.056
pH (Field Measure)	su	7.1	7.17	7.01
Sulfate	mg/L	27.5	25	22
Total Dissolved Solids	mg/L	406	360	340
Appendix IV				
Antimony	mg/L	< 0.005	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.002	< 0.00075 U	0.0015 J
Barium	mg/L	0.021	0.023	0.022
Beryllium	mg/L	< 0.001	< 0.00027 U	0.00031 J
Cadmium	mg/L	< 0.0005	< 0.000077 U	0.00021 J
Chromium	mg/L	< 0.005	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.000086 U	0.00037 J
Fluoride	mg/L	< 1	0.054	0.056
Lead	mg/L	< 0.003	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.005	0.01	0.0072 J
Mercury	mg/L	< 0.0002	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	< 0.005	0.0054	0.0038 J
Radium-226	pCi/L	0.219	< 0.329 U	< 0.295 U
Radium-228	pCi/L	0.454	1.34	0.849 J+
Radium-226/228	pCi/L	0.673	1.5	0.903
Selenium	mg/L	< 0.005	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.00051 U	0.00056 J
Other				
Total Suspended Solids	mg/L	< 3	0.5 J	1.1 J
Bicarbonate	mg/L	390	300	300
Carbonate	mg/L	< 10	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	340	310	340
Magnesium	mg/L	26.8	24	27
Potassium	mg/L	0.52	0.78 J	0.65 J
Sodium	mg/L	23.9	29	16

Groundwater Sampling Results for MW-9

LBWL Erickson Station

Sample Location:		MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9
Sample Date:		6/15/2021	6/15/2021	7/20/2021	7/20/2021	8/24/2021	8/24/2021	9/28/2021	9/28/2021	11/2/2021	11/2/2021	12/7/2021	12/7/2021
Sample Type:		N	FD	N	FD	N	FD	N	FD	N	FD	N	FD
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.74	7.74	7.2	7.2	7.21	7.21	7.28	7.28	7.14	7.14	7.27	7.27
Specific Conductivity	mS/cm	0.393	0.393	0.42	0.42	0.44	0.44	0.444	0.444	0.471	0.471	0.459	0.459
Turbidity	NTU	1.6	1.6	6.7	6.7	6.15	6.15	5.25	5.25	5.61	5.61	2.21	2.21
Dissolved Oxygen	mg/L	5.48	5.48	5.35	5.35	4.52	4.52	4.5	4.5	4.89	4.89	5.42	5.42
Temperature	deg C	12.9	12.9	17	17	19	19	17.1	17.1	13.8	13.8	9.5	9.5
Oxidation Reduction Potential	mV	164.1	164.1	310.7	310.7	329.2	329.2	171.8	171.8	238.1	238.1	135.9	135.9
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.009	< 0.005
Appendix III													
Boron	mg/L	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Calcium	mg/L	62.1	64.2	66.3	67.5	69.2	68.8	71	71.5	78	80.7	76.6	75.8
Chloride	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	1.11	1.07
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.033	0.033
pH (Field Measure)	su	7.74	7.74	7.2	7.2	7.21	7.21	7.28	7.28	7.14	7.14	7.27	7.27
Sulfate	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	3.58	3.52
Total Dissolved Solids	mg/L	232	240	242	232	242	256	246	244	252	268	244	246
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Barium	mg/L	0.015	0.015	0.013	0.014	0.015	0.014	0.014	0.015	0.015	0.016	0.014	0.015
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.033	0.033
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	< 0.01	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002 UJ	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Radium-226	pCi/L	0.625	0.646	0.189	0.166	0.266 J-	0.421 J+	0.797	0.368	0.177 J-	0.534 J+	1.67	1.69
Radium-228	pCi/L	0.218 J+	0.171 J+	0.286 J+	-0.125 J-	-0.359 J-	1.65 J+	0.453	0.846	-0.0915 J	0.483 J+	0.666	0.826
Radium-226/228	pCi/L	0.844 J+	0.817 J+	0.475 J+	0.166 J-	0.266 J-	2.07 J+	1.25	1.21	0.177 J	1.02 J+	2.34	2.51
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Bicarbonate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Hardness (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--

Groundwater Sampling Results for MW-9

LBWL Erickson Station

Sample Location:		MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9
Sample Date:		1/11/2022	1/11/2022	2/17/2022	2/17/2022	8/2/2022	2/8/2023	8/2/2023	1/30/2024	8/8/2024	2/5/2025	8/7/2025
Sample Type:		N	FD	N	FD	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	AM	AM	AM	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit											
Field Parameters												
pH	su	7.35	7.35	7.16	7.16	7.44	7.45	7.13	7.28	7.06	7.42	7.05
Specific Conductivity	mS/cm	0.455	0.455	0.471	0.471	0.42	0.424	0.474	0.54	0.585	0.596	0.66
Turbidity	NTU	2.89	2.89	1.6	1.6	3.44	3.01	2.2	5.02	2.59	5.22	3.31
Dissolved Oxygen	mg/L	6.13	6.13	6.17	6.17	3.96	6.33	3.35	6.22	3.96	5.95	4.71
Temperature	deg C	7	7	4.7	4.7	19.2	7.3	16.5	5.3	17.9	6.7	18.5
Oxidation Reduction Potential	mV	260.1	260.1	380.9	380.9	99.2	252.1	132.5	108.1	215.3	131.4	197.9
Part 115												
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0017 U	< 0.0017 U
Iron	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.013 U	< 0.013 U
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0015 U	< 0.0015 U
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0012 J	< 0.00093 U
Appendix III												
Boron	mg/L	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	0.04	< 0.057 U	< 0.057 U
Calcium	mg/L	76.9	75	77.6	78	61.8	76.9	75.7	98.8	100	96	86
Chloride	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	5.5	6.1	4.6	2.5
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.024 U	< 0.024 U
pH (Field Measure)	su	7.35	7.35	7.16	7.16	7.44	7.45	7.13	7.28	7.06	7.42	7.05
Sulfate	mg/L	< 5	< 5	< 5	< 5	5	< 5	6	11.9	12.6	16	8.2
Total Dissolved Solids	mg/L	264	266	280	276	242	274	282	348	360	340	260
Appendix IV												
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.003	< 0.002	< 0.00075 U	0.0011 J
Barium	mg/L	0.013	0.013	0.013	0.013	0.013	0.014	0.016	0.017	0.02	0.017	0.017
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U	0.00028 J
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000077 U	0.00016 J
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.000086 U	0.00016 J
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.024 U	< 0.024 U
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U
Lithium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0034 U	< 0.0034 U
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0011 U	< 0.0011 U
Radium-226	pCi/L	0.838 J-	1.22 J+	0.533	0.657	0.0527	0.372	0.305	0	0.924	0.222	< 0.292 U
Radium-228	pCi/L	1.53 J+	-0.724 J-	0.0438 J	0.283 J+	1.88 J+	1.6	-0.426	-0.442	0.555	1.21	0.702 J+
Radium-226/228	pCi/L	2.37 J+	1.22 J-	0.576 J	0.94 J+	1.94 J+	1.97	0.305	0	1.48	1.44	0.789
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U
Other												
Total Suspended Solids	mg/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	0.4 J	< 0.4 U
Bicarbonate	mg/L	--	--	--	--	260	336	310	378	380	330	280
Carbonate	mg/L	--	--	--	--	< 10	< 10	< 10	< 10	< 10	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	--	--	--	--	218	261	270	342	340	340	300
Magnesium	mg/L	--	--	--	--	15.2	19.4	19.5	23.3	23.4	25	21
Potassium	mg/L	--	--	--	--	1.09	0.93	1.28	0.93	1.47	1	1.5 J
Sodium	mg/L	--	--	--	--	2.41	2.86	3.84	4.11	3.67	3	3.1

Groundwater Sampling Results for MW-10

LBWL Erickson Station

Sample Location:		MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10
Sample Date:		6/15/2021	7/20/2021	8/24/2021	9/28/2021	11/2/2021	12/7/2021	1/11/2022	2/17/2022	8/2/2022	2/8/2023	2/8/2023	8/2/2023
Sample Type:		N	N	N	N	N	N	N	N	N	N	FD	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.3	6.6	6.7	6.89	6.57	6.69	6.68	6.49	6.85	6.73	6.73	6.52
Specific Conductivity	mS/cm	0.725	0.71	0.741	0.664	0.78	0.753	0.807	0.784	0.691	0.679	0.679	0.739
Turbidity	NTU	1.79	2.3	1.95	5.99	1.29	2.09	2.98	3.76	3.57	1.88	1.88	2.34
Dissolved Oxygen	mg/L	2.05	3.3	3.2	2.43	2.83	2.89	3.92	3.61	2.82	4.03	4.03	3.15
Temperature	deg C	12	14	15.5	15	14.2	11.6	9.7	8.6	15.4	9.5	9.5	14.4
Oxidation Reduction Potential	mV	121.2	240	330.1	164.1	230.9	147.9	283.3	391.8	98.9	238	238	163.5
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.005	0.009	< 0.005	< 0.005	< 0.005
Appendix III													
Boron	mg/L	0.05	0.05	0.06	0.05	0.07	0.05	0.06	0.05	0.05	0.04	0.05	0.05
Calcium	mg/L	132	128	129	113	137	128	141	142	117	136	140	131
Chloride	mg/L	< 5	< 5	< 5	< 5	< 5	1.03	< 5	< 5	< 5	< 5	< 5	6
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	0.066	< 1	< 1	< 1	< 1	< 1	< 1
pH (Field Measure)	su	7.3	6.6	6.7	6.89	6.57	6.69	6.68	6.49	6.85	6.73	6.73	6.52
Sulfate	mg/L	12	15	14	9	17	14.5	18	16	10	13	13	18
Total Dissolved Solids	mg/L	446	410	432	376	436	428	474	482	398	494	482	452
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Barium	mg/L	0.044	0.041	0.047	0.041	0.044	0.043	0.04	0.038	0.037	0.036	0.036	0.037
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	0.066	< 1	< 1	< 1	< 1	< 1	< 1
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Mercury	mg/L	0.0002	< 0.0002	< 0.0002	< 0.0002 UJ	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Radium-226	pCi/L	0.548	0.262	0.183	0.701	0.381 J	1.46	1.59	0.894	0.195	0.407	0.443	0.519 J-
Radium-228	pCi/L	0.123 J+	-0.994	0.187	-0.076	0.225	0.929	0.142	-0.916	0.402 J+	-0.255 J-	0.758 J+	-0.799 J-
Radium-226/228	pCi/L	0.671 J+	0.262	0.371	0.701	0.605 J	2.39	1.73	0.894	0.597 J+	0.407 J-	1.2 J+	0.519 J-
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Bicarbonate	mg/L	--	--	--	--	--	--	--	--	440	525	522	450
Carbonate	mg/L	--	--	--	--	--	--	--	--	< 10	< 10	< 10	< 10
Hardness (as CaCO3)	mg/L	--	--	--	--	--	--	--	--	382	461	460	433
Magnesium	mg/L	--	--	--	--	--	--	--	--	23.6	29.5	29.2	25.8
Potassium	mg/L	--	--	--	--	--	--	--	--	0.73	0.62	0.7	0.68
Sodium	mg/L	--	--	--	--	--	--	--	--	2.24	2.54	2.73	4.55

Groundwater Sampling Results for MW-10

LBWL Erickson Station

Sample Location:		MW-10	MW-10	MW-10	MW-10	MW-10	MW-10
Sample Date:		8/2/2023	1/30/2024	8/8/2024	8/8/2024	2/5/2025	8/7/2025
Sample Type:		FD	N	N	FD	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		AM	AM	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T
Constituent	Unit						
Field Parameters							
pH	su	6.52	6.81	6.85	6.85	6.87	6.75
Specific Conductivity	mS/cm	0.739	0.695	0.625	0.625	0.657	0.775
Turbidity	NTU	2.34	4.91	3.51	3.51	3.19	2.62
Dissolved Oxygen	mg/L	3.15	4.29	2.53	2.53	4.74	2.73
Temperature	deg C	14.4	8.4	15.8	15.8	9.8	16.5
Oxidation Reduction Potential	mV	163.5	100.1	272.9	272.9	143.6	166.2
Part 115							
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0017 U	< 0.0017 U
Iron	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.013 U	< 0.013 U
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0015 U	< 0.0015 U
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00093 U	0.0016 J
Appendix III							
Boron	mg/L	0.06	0.04	0.06	0.06	< 0.057 U	0.059 J
Calcium	mg/L	129	118	119	116	120	110
Chloride	mg/L	6	9.3	2.2	2.2	1.5	1.5
Fluoride	mg/L	< 1	< 1	< 1	< 1	0.05	0.083
pH (Field Measure)	su	6.52	6.81	6.85	6.85	6.87	6.75
Sulfate	mg/L	17	27.8	10.6	10.6	14	8.9
Total Dissolved Solids	mg/L	450	452	384	392	360	340
Appendix IV							
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.002	0.002	< 0.002	< 0.002	< 0.00075 U	0.00095 J
Barium	mg/L	0.037	0.041	0.033	0.035	0.03	0.033
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000077 U	0.000099 J
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.000086 U	0.000086 J
Fluoride	mg/L	< 1	< 1	< 1	< 1	0.05	0.083
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U
Lithium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0034 U	< 0.0034 U
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0011 U	< 0.0011 U
Radium-226	pCi/L	0.84 J+	0.366	0.528	0.129	< 0.236 U	< 0.29 U
Radium-228	pCi/L	0.502 J+	2.54	2.77 J+	2.21 J-	2.43	0.853 J+
Radium-226/228	pCi/L	1.34 J+	2.91	3.3 J+	2.34 J-	2.51	0.906
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	0.0015 J	0.0013 J
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U
Other							
Total Suspended Solids	mg/L	< 3	< 3	< 3	< 3	< 0.4 U	0.5 J
Bicarbonate	mg/L	450	449	420	430	370	340
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	420	396	386	386	390	380
Magnesium	mg/L	25.6	27	22.8	22.5	24	23
Potassium	mg/L	0.68	< 0.5	1	0.99	0.71 J	0.77 J
Sodium	mg/L	4.64	19	2.72	2.67	3.2	2.6

Groundwater Sampling Results for MW-11

LBWL Erickson Station

Sample Location:		MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11
Sample Date:		2/23/2022	2/23/2022	3/30/2022	3/30/2022	5/4/2022	6/8/2022	6/8/2022	7/13/2022	7/13/2022	8/17/2022	8/17/2022	9/21/2022
Sample Type:		N	FD	N	FD	N	N	FD	N	FD	N	FD	N
Gradient:		Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	6.84	6.84	6.64	6.64	6.78	6.76	6.76	6.73	6.73	6.88	6.88	6.91
Specific Conductivity	mS/cm	1.083	1.083	1.119	1.119	1.093	1.11	1.11	1.008	1.008	1.117	1.117	1.122
Turbidity	NTU	9.65	9.65	8.95	8.95	9.22	6.98	6.98	3.02	3.02	4.01	4.01	5.25
Dissolved Oxygen	mg/L	0.01	0.01	0.07	0.07	0.06	0.56	0.56	0.08	0.08	0.21	0.21	0.18
Temperature	deg C	9.5	9.5	9.8	9.8	12	11.3	11.3	12.8	12.8	14.4	14.4	15.7
Oxidation Reduction Potential	mV	-88.9	-88.9	-83.9	-83.9	-103.4	-109.6	-109.6	-97.3	-97.3	-129.8	-129.8	-122.9
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	22.2	22	23.2	23	23.5	21.4	21.9	22	21.8 J	21.4	20.9	21.5
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.009	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005
Appendix III													
Boron	mg/L	0.22	0.22	0.2	0.22	0.21	0.22	0.22	0.21	0.2	0.21	0.2	0.22
Calcium	mg/L	136	130	138	140	144	139	138	134	135	140	138	141
Chloride	mg/L	67	67	67	67	63	63	63	61	62	63	64	61
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
pH (Field Measure)	su	6.84	6.84	6.64	6.64	6.78	6.76	6.76	6.73	6.73	6.88	6.88	6.91
Sulfate	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Total Dissolved Solids	mg/L	632	532	642	636	612	644	654	666	644	368	344	652
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	0.018	0.018	0.018	0.017	0.02	0.018	0.018	0.019	0.018	0.021	0.019	0.021
Barium	mg/L	0.147	0.146	0.144	0.145	0.146	0.142	0.144	0.143	0.147	0.15	0.146	0.167
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	< 0.005	< 0.005	< 0.005	0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005 UJ
Radium-226	pCi/L	0.273 J-	0.472 J+	0.358 J-	0.603 J+	0.545	0.618 J	1.52 J	0.325 J+	0.942 J+	0.542 J-	0.971 J+	0.396
Radium-228	pCi/L	0 J-	0.248 J+	0.757 J+	-0.419 J	0.479 J	0.573 J	0.63 J	0.925	0.383	0.0495 J-	0.835 J+	0.0525 J-
Radium-226/228	pCi/L	0.273 J-	0.72 J+	1.11 J+	0.603 J-	1.02	1.19 J	2.15 J	1.25 J+	1.33 J+	0.591 J-	1.81 J+	0.449 J-
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	48	41	32	32	23	32	31	29	28	20	23	23
Bicarbonate	mg/L	--	--	--	--	610	595	593	600	610	620	630	600
Carbonate	mg/L	--	--	--	--	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hardness (as CaCO3)	mg/L	--	--	--	--	506	495	490	503	512	529	502	512
Magnesium	mg/L	--	--	39	37.8	40.8	39.4	39.1	38.8	38.3	39.8	39	40.8
Potassium	mg/L	--	--	1.47	1.45	1.38	1.3	1.32	1.31	1.3	1.38	1.34	1.55
Sodium	mg/L	--	--	40.4	39.6	39.7	37.5	38.8	38.9	37	38.7	37.8	39.7

Groundwater Sampling Results for MW-11

LBWL Erickson Station

Sample Location:		MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11
Sample Date:		9/21/2022	10/26/2022	10/26/2022	2/9/2023	8/3/2023	1/31/2024	8/5/2024	2/4/2025	8/6/2025
Sample Type:		FD	N	FD	N	N	N	N	N	N
Gradient:		Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient
Sampling Phase:		Background	Background	Background	AM	AM	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T
Constituent	Unit									
Field Parameters										
pH	su	6.91	6.77	6.77	7.43	6.74	6.77	6.79	6.77	6.85
Specific Conductivity	mS/cm	1.122	1.075	1.075	1.082	1.095	1.084	1.052	1.032	1.12
Turbidity	NTU	5.25	5.78	5.78	25.29	0.98	7.22	0.02	6.15	3.85
Dissolved Oxygen	mg/L	0.18	0.37	0.37	0.33	0.06	0	0.14	0.02	1.07
Temperature	deg C	15.7	12.2	12.2	10.9	13.8	11.1	15.2	10.9	14.8
Oxidation Reduction Potential	mV	-122.1	-99.1	-99.1	-191.1	-97.1	-177.2	-86.5	-100.1	-65.9
Part 115										
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0017 U	< 0.0017 U
Iron	mg/L	20.8	19.8	20.6	15.5	24.3	25.1	23.1	20	20
Nickel	mg/L	< 0.005	0.007 J+	< 0.005 UJ	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0015 U	< 0.0015 U
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0025 J	0.0025 J
Zinc	mg/L	0.006	0.018 J+	0.006 J-	< 0.005	0.007	< 0.005	< 0.005	< 0.00093 U	0.0014 J
Appendix III										
Boron	mg/L	0.22	0.21	0.21	0.21	0.2	0.19	0.19	0.21	0.2
Calcium	mg/L	142	138	139	140	140	138	145	130	130
Chloride	mg/L	62	62	62	59	62	68	62	56	55
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.17	0.27
pH (Field Measure)	su	6.91	6.77	6.77	7.43	6.74	6.77	6.79	6.77	6.85
Sulfate	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 0.35 U	< 0.35 U
Total Dissolved Solids	mg/L	658	664	664	668	682	660	678	580	540
Appendix IV										
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.02	0.02	0.02	0.017	0.017	0.019	0.019	0.017	0.022 B
Barium	mg/L	0.165	0.158	0.154	0.151	0.17	0.181	0.174	0.18	0.15
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00044 J	0.00057 J
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.17	0.27
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U
Lithium	mg/L	< 0.005	< 0.005	< 0.005	0.005	< 0.005	< 0.005	< 0.005	< 0.0034 U	< 0.0034 U
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.005 J+	< 0.005	< 0.005	0.006	< 0.005	< 0.005	< 0.005	0.0038 J	0.0038 J
Radium-226	pCi/L	0.443	0.981	0.59	0.194	1.58	0.528	1.61	< 0.441 U	< 0.181 U
Radium-228	pCi/L	0.994 J+	1.53	1.18	0.824	1.58	0.161	0.702	< 0.654 U	< 0.709 U
Radium-226/228	pCi/L	1.44 J+	2.51	1.77	1.02	3.16	0.689	2.31	0.792	< 0.709 U
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U
Other										
Total Suspended Solids	mg/L	20	29	32	35	19.8	40.6	46	44	46
Bicarbonate	mg/L	620	601	604	645	630	680	620	460	470
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 50	< 10	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	508	512	518	509	538	524	518	480	500
Magnesium	mg/L	39.6	39.4	39.3	40.5	41.2	37.4	41.3	37	39
Potassium	mg/L	1.52	1.47	1.45	11.4	3.01	2.61	1.7	1.4	1.4 J
Sodium	mg/L	38.5	39.1	38.3	37.5	37.4	35.4	35.1	36	38

Groundwater Sampling Results for MW-11B

LBWL Erickson Station

Sample Location:		MW-11B	MW-11B	MW-11B	MW-11B	MW-11B	MW-11B	MW-11B	MW-11B	MW-11B	MW-11B	MW-11B	MW-11B
Sample Date:		4/28/2022	4/28/2022	6/2/2022	6/2/2022	7/7/2022	7/7/2022	8/11/2022	8/11/2022	9/15/2022	9/15/2022	10/20/2022	10/20/2022
Sample Type:		N	FD	N	FD	N	FD	N	FD	N	FD	N	FD
Gradient:		Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.95	7.95	7.28	7.28	7.15	7.15	7.37	7.37	7.33	7.33	7.29	7.29
Specific Conductivity	mS/cm	0.538	0.538	0.544	0.544	0.537	0.537	0.527	0.527	0.535	0.535	0.535	0.535
Turbidity	NTU	1.12	1.12	8.03	8.03	8.02	8.02	6.15	6.15	4.14	4.14	5.15	5.15
Dissolved Oxygen	mg/L	11.68	11.68	0.35	0.35	0.22	0.22	0.24	0.24	0.07	0.07	0.03	0.03
Temperature	deg C	12.3	12.3	13.7	13.7	14.6	14.6	13.4	13.4	13.2	13.2	11.4	11.4
Oxidation Reduction Potential	mV	228	228	-74.2	-74.2	-110.4	-110.4	-158.4	-158.4	-189.3	-189.4	-138.1	-138.1
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	0.1	0.11	0.96	0.98	2.59	2.66	3.04	3	2.48	2.44	1.82	1.83
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	0.011 J+	< 0.005 UJ	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	0.042 J+	< 0.005 UJ	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Appendix III													
Boron	mg/L	0.62	0.63	0.65	0.66	0.69	0.71	0.77	0.75	0.73	0.72	0.72	0.71
Calcium	mg/L	64.6	63.9	63.8	65	66.1	66.1	66.6	65.6	64	64.7	60.3	59.9
Chloride	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 0.5	< 0.5	< 1	< 1	< 1	< 1
pH (Field Measure)	su	7.95	7.95	7.28	7.28	7.15	7.15	7.37	7.37	7.33	7.33	7.29	7.29
Sulfate	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Total Dissolved Solids	mg/L	304	294	300	308	296	306	308	288	300	300	304	314
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	0.003	0.003	0.004	0.004	0.007	0.008	0.009	0.009	0.009	0.009	0.008	0.008
Barium	mg/L	0.081	0.08	0.07	0.072	0.07	0.071	0.068	0.069	0.068	0.069	0.066	0.066
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 0.5	< 0.5	< 1	< 1	< 1	< 1
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	0.032	0.032	0.024	0.024	0.024	0.025	0.025	0.024	0.026	0.028	0.026	0.025
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	< 0.005	< 0.005	0.005	0.005	0.007	0.007	0.007	0.006	0.006	0.006	< 0.005	< 0.005
Radium-226	pCi/L	1.01	1.44	1.72	1.79	0.638 J+	0.0501 J-	0.702	1.06	0.518	0.509	0.633	0.527
Radium-228	pCi/L	1.68	2.14	0.633	1.68	0.753 J+	0.445 J-	-1.33 J-	1.32 J+	0.773 J+	0.0951 J	1.33 J	2.6 J+
Radium-226/228	pCi/L	2.69	3.59	2.35	3.47	1.39 J+	0.495 J-	0.702 J-	2.38 J+	1.29 J+	0.604 J	1.96 J	3.13 J+
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	1.7 U	2.7 U	< 3	< 3	3	4	< 3 UJ	4 J+	5	5	4	3
Bicarbonate	mg/L	350	350	350	350	350	360	370	370	350	360	360	360
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hardness (as CaCO3)	mg/L	265	265	260	260	260	260	261	258	261	258	261	260
Magnesium	mg/L	24.3	24.8	23.3	23.1	24.6	24.3	24.3	24.2	23.4	23.7	21.3	21.2
Potassium	mg/L	6.07	6.12	6.08	6.07	6.28	6.24	6.4	6.31	5.98	6.24	5.81	5.82
Sodium	mg/L	13.5	13.7	17.6	17.2	17.9	17.9	17.7	17.3	16	16.2	14.5	14.3

Groundwater Sampling Results for MW-11B

LBWL Erickson Station

Sample Location:		MW-11B	MW-11B	MW-11B	MW-11B	MW-11B	MW-11B	MW-11B	MW-11B	MW-11B	MW-11B	MW-11B	MW-11B
Sample Date:		11/22/2022	11/22/2022	12/27/2022	12/27/2022	2/9/2023	2/9/2023	8/3/2023	1/31/2024	1/31/2024	8/5/2024	8/5/2024	2/4/2025
Sample Type:		N	FD	N	FD	N	FD	N	N	FD	N	FD	N
Gradient:		Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient
Sampling Phase:		Background	Background	Background	Background	AM	AM	AM	AM	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.1	7.1	7.16	7.16	7.35	7.35	7.18	7.26	7.26	7.32	7.32	7.31
Specific Conductivity	mS/cm	0.532	0.532	0.515	0.515	0.522	0.522	0.527	0.53	0.53	0.502	0.502	0.516
Turbidity	NTU	6.15	6.15	8.45	8.45	7.12	7.12	0.45	2.02	2.02	0.25	0.25	6.81
Dissolved Oxygen	mg/L	0.12	0.12	0.09	0.09	0.23	0.23	0.2	0.04	0.04	0.28	0.28	0.11
Temperature	deg C	11.8	11.8	11.4	11.4	11.9	11.9	17	10.8	10.8	18.4	18.4	10.5
Oxidation Reduction Potential	mV	-92.6	-92.6	-94.7	-94.7	-133.1	-133.1	-95.6	-181.1	-181.1	-85.4	-85.4	-85.1
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0017 U
Iron	mg/L	1.32	1.3	2.3	2.25	1.23	1.24	1.1	0.84	0.83	0.76	0.79	0.7
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0015 U
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	0.012 J+	< 0.005 UJ	< 0.005	< 0.005	< 0.005	< 0.005	0.005	0.0012 JB
Appendix III													
Boron	mg/L	0.73	0.73	0.83	0.83	0.8	0.82	0.85	0.76	0.79	0.69	0.65	0.69
Calcium	mg/L	66.3	66.2	69.6	67	65.7	66	65.6	62.7	62.9	68.9	66.1	64
Chloride	mg/L	1.7 U	1.7 U	< 5	< 5	< 5	< 5	< 5	2.1	2.1	1.5	1.5	0.84 J
Fluoride	mg/L	< 1	0.16	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.2	0.2	0.38
pH (Field Measure)	su	7.1	7.1	7.16	7.16	7.35	7.35	7.18	7.26	7.26	7.32	7.32	7.31
Sulfate	mg/L	2.58 U	2.78 U	< 5	< 5	< 5	< 5	< 5	4	4	3.6	3.8	5.5
Total Dissolved Solids	mg/L	294	268	294	268	292	294	298	296	304	304	314	270
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00057 U
Arsenic	mg/L	0.007	0.007	0.008	0.007	0.006	0.006	0.006	0.005	0.005	0.004	0.004	0.0037 J
Barium	mg/L	0.059	0.06	0.062	0.062	0.063	0.065	0.064	0.069	0.068	0.066	0.067	0.068
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.000086 U
Fluoride	mg/L	< 1	0.16	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.2	0.2	0.38
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.00045 U
Lithium	mg/L	0.029	0.027	0.029	0.028	0.031	0.031	0.032	0.03	0.033	0.034	0.033	0.032
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U
Molybdenum	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0027 J
Radium-226	pCi/L	0.919	1.07	0.926	0.773	1.46	1.39	1.43	1.32 J+	0.366 J-	1.93 J+	1.16 J-	0.415
Radium-228	pCi/L	2.4 J+	0.745 J-	2.63 J+	0.56 J	0.131	0.583	3.26	0.581 J-	0.791 J+	-0.308 J-	1.84 J+	< 0.695 U
Radium-226/228	pCi/L	3.32 J+	1.81 J-	3.56 J+	1.33 J	1.59	1.97	4.7	1.9 J+	1.16 J-	1.93 J-	3 J+	< 0.695 U
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U
Other													
Total Suspended Solids	mg/L	< 3	< 3	54 J+	32 J-	< 3	< 3	2.4	1.4	1.3	1.3 J-	1.8 J+	1.4 J
Bicarbonate	mg/L	360	360	371	372	378	377	370	356	381	350	360	290
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 2.6 U
Hardness (as CaCO3)	mg/L	260	260	265	268	264	262	258	268	269	258	268	260
Magnesium	mg/L	23.9	24.1	24.4	24.5	24.4	24.7	23.9	22.1	22.2	23.7	23.7	24
Potassium	mg/L	6.28	6.41	6.93	6.61	6.43	6.46	6.37	6.38	6.49	6.57	6.25	6.2
Sodium	mg/L	15.8	15.9	16.2	16	16.1	16.4	16.5	14.7	14.5	15.1	14.9	15

Groundwater Sampling Results for MW-11B

LBWL Erickson Station

	Sample Location:	MW-11B
	Sample Date:	8/6/2025
	Sample Type:	N
	Gradient:	Upgradient
	Sampling Phase:	AM
	Fraction:	T
Constituent	Unit	
Field Parameters		
pH	su	7.23
Specific Conductivity	mS/cm	0.605
Turbidity	NTU	8.15
Dissolved Oxygen	mg/L	1.61
Temperature	deg C	16.9
Oxidation Reduction Potential	mV	-53.8
Part 115		
Copper	mg/L	< 0.0017 U
Iron	mg/L	0.63
Nickel	mg/L	< 0.0015 U
Silver	mg/L	< 0.000053 U
Vanadium	mg/L	< 0.00082 U
Zinc	mg/L	0.0035 J
Appendix III		
Boron	mg/L	0.85
Calcium	mg/L	65
Chloride	mg/L	0.96 J
Fluoride	mg/L	0.41
pH (Field Measure)	su	7.23
Sulfate	mg/L	3.6
Total Dissolved Solids	mg/L	250
Appendix IV		
Antimony	mg/L	< 0.00057 U
Arsenic	mg/L	0.0037 JB
Barium	mg/L	0.069
Beryllium	mg/L	< 0.00027 U
Cadmium	mg/L	< 0.000077 U
Chromium	mg/L	< 0.0012 U
Cobalt	mg/L	< 0.000086 U
Fluoride	mg/L	0.41
Lead	mg/L	< 0.00045 U
Lithium	mg/L	0.034
Mercury	mg/L	< 0.00013 U
Molybdenum	mg/L	0.0023 J
Radium-226	pCi/L	0.475
Radium-228	pCi/L	< 0.663 U
Radium-226/228	pCi/L	0.824
Selenium	mg/L	< 0.00089 U
Thallium	mg/L	< 0.00051 U
Other		
Total Suspended Solids	mg/L	2.4 J
Bicarbonate	mg/L	270
Carbonate	mg/L	16
Hardness (as CaCO3)	mg/L	260
Magnesium	mg/L	23
Potassium	mg/L	6.1
Sodium	mg/L	15

Groundwater Sampling Results for MW-12

LBWL Erickson Station

Sample Location:		MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12
Sample Date:		2/23/2022	3/30/2022	5/4/2022	6/8/2022	7/13/2022	8/17/2022	9/21/2022	10/26/2022	2/9/2023	8/3/2023	1/31/2024	8/6/2024
Sample Type:		N	N	N	N	N	N	N	N	N	N	N	N
Gradient:		Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.22	6.81	7.26	7.24	7.02	7.24	7.38	7.05	7.13	7.1	6.92	7.06
Specific Conductivity	mS/cm	0.746	1.648	1.734	1.797	1.686	1.586	1.6	1.387	1.391	1.457	1.392	1.393
Turbidity	NTU	65.25	44.12	16.45	31.26	30.26	45.15	46.25	26.2	17.01	10.32	16.45	35.44
Dissolved Oxygen	mg/L	5.45	3.95	3.34	5.25	3.2	4.64	1.95	3.57	2.95	3.41	2.15	4.52
Temperature	deg C	8.4	8.5	12	15.4	16.8	16.9	15.9	11.8	11.5	16	8.5	15.3
Oxidation Reduction Potential	mV	-113.5	188.2	-35	140.2	14.2	-17.9	15.2	155.8	-27.4	122.7	-32.4	110.7
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	3.83	2.24	2.05	1	1.82	1.37	1.25	0.96	0.6	0.74	1.19	1.18
Nickel	mg/L	0.021	0.02	0.018	0.018	0.017	0.018	0.018	0.018	0.017	0.015	0.014	0.013
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	< 0.005	0.009	0.005	< 0.005	0.007	0.006	0.008	< 0.005	< 0.005	0.005	< 0.005	< 0.005
Appendix III													
Boron	mg/L	0.05	0.09	0.08	0.1	0.07	0.07	0.08	0.08	0.07	0.06	0.07	0.07
Calcium	mg/L	185	157	149	149	147	157	154	156	143	156	158	166
Chloride	mg/L	90	94	90	82	83	83	80	78	71	70	69.2	63.7
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
pH (Field Measure)	su	7.22	6.81	7.26	7.24	7.02	7.24	7.38	7.05	7.13	7.1	6.92	7.06
Sulfate	mg/L	344	308	283	254	250	256	255	252	207	184	177	187
Total Dissolved Solids	mg/L	1090	1110	1140	1080	1090	1050	1020	1020	948	928	916	946
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	< 0.002	0.003	0.004	< 0.002	0.002	0.002	0.002	0.002	< 0.002	0.002	0.003	0.002
Barium	mg/L	0.069	0.074	0.07	0.064	0.067	0.064	0.064	0.057	0.058	0.052	0.052	0.049
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	0.02	0.021	0.023	0.025	0.022	0.019	0.022	0.021	0.027	0.02	0.019	0.018
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	0.013	0.024	0.023	0.019	0.017	0.014	0.015	0.013	0.011	0.007	0.006	0.005
Radium-226	pCi/L	0.252	0.783	1.23	1.9	0.394	0.398	0.739	0.628	0.836	0.663	0.475	0.591
Radium-228	pCi/L	0.948	2.33	0.237	0.721	1.23	1.8	-0.692	2.11	2.6	0.731	0.866	0.644
Radium-226/228	pCi/L	1.2	3.11	1.46	2.62	1.63	2.2	0.739	2.74	3.43	1.39	1.34	1.24
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	24	39	22	17	50	23	43	16	9	8.4	12	15.7
Bicarbonate	mg/L	--	--	650	695	670	620	610	631	689	700	703	710
Carbonate	mg/L	--	--	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hardness (as CaCO3)	mg/L	--	--	572	565	566	609	611	618	575	628	658	678
Magnesium	mg/L	--	58.8	56.4	56.2	56.2	58.8	58.6	59.9	56.8	64.2	60.1	64.6
Potassium	mg/L	--	3.93	3.73	3.91	3.3	3.33	3.65	3.71	3.01	2.74	2.67	2.44
Sodium	mg/L	--	168	193	199	171	145	145	139	136	109	94.4	101

Groundwater Sampling Results for MW-12

LBWL Erickson Station

Sample Location:		MW-12	MW-12
Sample Date:		2/4/2025	8/6/2025
Sample Type:		N	N
Gradient:		Upgradient	Upgradient
Sampling Phase:		AM	AM
Fraction:		T	T
Constituent	Unit		
Field Parameters			
pH	su	7	6.92
Specific Conductivity	mS/cm	1.38	1.432
Turbidity	NTU	24.13	56.25
Dissolved Oxygen	mg/L	3.55	2.5
Temperature	deg C	10	16.3
Oxidation Reduction Potential	mV	185.5	3.5
Part 115			
Copper	mg/L	< 0.0017 U	< 0.0017 U
Iron	mg/L	1.2	2.3
Nickel	mg/L	0.01	0.012
Silver	mg/L	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.00082 U	< 0.00082 U
Zinc	mg/L	0.0025 JB	0.0042 J
Appendix III			
Boron	mg/L	0.092 J	0.075 J
Calcium	mg/L	150	160
Chloride	mg/L	53	53
Fluoride	mg/L	0.13	0.14
pH (Field Measure)	su	7	6.92
Sulfate	mg/L	160	160
Total Dissolved Solids	mg/L	870	860
Appendix IV			
Antimony	mg/L	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.0014 J	0.0025 JB
Barium	mg/L	0.05	0.049
Beryllium	mg/L	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	0.002	0.0019
Fluoride	mg/L	0.13	0.14
Lead	mg/L	< 0.00045 U	0.00053 J
Lithium	mg/L	0.018	0.017
Mercury	mg/L	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.005	0.0038 J
Radium-226	pCi/L	< 0.247 U	0.124
Radium-228	pCi/L	1.33	0.489
Radium-226/228	pCi/L	1.51	0.613
Selenium	mg/L	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.00051 U	< 0.00051 U
Other			
Total Suspended Solids	mg/L	15	5.2
Bicarbonate	mg/L	560	550
Carbonate	mg/L	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	620	660
Magnesium	mg/L	59	62
Potassium	mg/L	2.3	2.3 J
Sodium	mg/L	95	95

Groundwater Sampling Results for MW-12B

LBWL Erickson Station

Sample Location:		MW-12B	MW-12B	MW-12B	MW-12B	MW-12B	MW-12B	MW-12B	MW-12B	MW-12B	MW-12B	MW-12B	MW-12B
Sample Date:		3/8/2022	3/8/2022	4/14/2022	5/19/2022	5/19/2022	6/23/2022	6/23/2022	7/28/2022	7/28/2022	9/1/2022	9/1/2022	10/6/2022
Sample Type:		N	FD	N	N	FD	N	FD	N	FD	N	FD	N
Gradient:		Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	8	8	7.68	7.86	7.86	7.51	7.51	7.5	7.5	7.6	7.6	7.5
Specific Conductivity	mS/cm	0.72	0.72	0.611	0.61	0.61	0.601	0.601	0.602	0.602	0.6	0.6	0.593
Turbidity	NTU	10.2	10.2	9.89	9.72	9.72	6.89	6.89	8.35	8.35	6.7	6.7	7.15
Dissolved Oxygen	mg/L	3.58	3.58	0.31	0.05	0.05	0.2	0.2	0.22	0.22	0.74	0.74	0.24
Temperature	deg C	10.8	10.8	10.1	12	12	12.8	12.8	14	14	13	13	12.7
Oxidation Reduction Potential	mV	100.9	100.9	-80.1	-97.8	-97.8	-73.2	-73.2	-141	-141	-124.1	-124.1	-117.2
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005 UJ	0.007 J+	< 0.005	< 0.005	< 0.005
Iron	mg/L	0.34	0.36	0.24	0.33	0.33	0.3 J	0.28 J	0.29	0.3	0.37	0.37	0.41
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005 UJ	0.015 J+	< 0.005	< 0.005	< 0.005
Appendix III													
Boron	mg/L	3.25 J	3.2	3.16	3.34	3.3	3.32	3.38	3.37	3.37	3.52	3.35	3.22
Calcium	mg/L	23.7	24	24	21.5	21.7	26.1	25.5	25.7	25.4	26.2	26.2	26.2
Chloride	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
pH (Field Measure)	su	8	8	7.68	7.86	7.86	7.51	7.51	7.5	7.5	7.6	7.6	7.5
Sulfate	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Total Dissolved Solids	mg/L	380	374	376	370	372	364	372	380	374	360	370	362
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Barium	mg/L	0.025	0.025	0.026	0.027	0.026	0.026	0.025	0.023	0.024	0.028	0.028	0.027
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	0.042	0.043	0.036	0.038	0.038	0.041	0.039	0.041	0.043	0.041	0.038	0.039
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0002	0.0002	< 0.0002
Molybdenum	mg/L	< 0.005	< 0.005	< 0.005	0.011 J+	0.005 J-	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Radium-226	pCi/L	0.48 J+	0.302 J-	0.264	0.611	0.657	1 J-	1.89 J+	0.581 J-	2.17 J+	0.398	0.519	0.37 J-
Radium-228	pCi/L	0.275 J-	1.03 J+	0.116	0.421 J-	1.1 J+	0.209 J-	1.47 J+	-0.356 J+	-1.12 J	-0.204 J-	1.34 J+	1.26 J+
Radium-226/228	pCi/L	0.755 J-	1.33 J+	0.38	1.03 J-	1.76 J+	1.21 J-	3.37 J+	0.581 J	2.17 J+	0.398 J-	1.86 J+	1.63 J+
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	28	31	3 U	7	7	5	< 3	< 3	< 3	< 3 UJ	3 J+	1 U
Bicarbonate	mg/L	390	400	410	410	420	400	390	410	420	400	400	400
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hardness (as CaCO3)	mg/L	96	83	99	93	96	94	97	90	90	91	95	100
Magnesium	mg/L	7.5	7.36	8.12	6.63	6.68	8.31	8.14	8.22	8.02	8.33	8.65	8.39
Potassium	mg/L	8.99	8.61	8.26	6.93	7.07	8.27	8.15	8.28	8.07	8.18	8.36	8.32
Sodium	mg/L	116	117	109	90.9	92.4	111	107	107	107	113	115	112

Groundwater Sampling Results for MW-12B

LBWL Erickson Station

Sample Location:		MW-12B	MW-12B	MW-12B	MW-12B	MW-12B	MW-12B	MW-12B	MW-12B	MW-12B	MW-12B
Sample Date:		10/6/2022	11/10/2022	11/10/2022	2/9/2023	8/3/2023	8/3/2023	1/31/2024	8/6/2024	2/4/2025	8/6/2025
Sample Type:		FD	N	FD	N	N	FD	N	N	N	N
Gradient:		Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient	Upgradient
Sampling Phase:		Background	Background	Background	AM	AM	AM	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T
Constituent	Unit										
Field Parameters											
pH	su	7.5	7.61	7.61	7.71	7.52	7.52	7.59	7.67	7.71	7.52
Specific Conductivity	mS/cm	0.593	0.591	0.591	0.587	0.582	0.582	0.59	0.587	0.581	0.687
Turbidity	NTU	7.15	6.35	6.35	8.18	2.25	2.25	1.99	0.71	6.15	3.2
Dissolved Oxygen	mg/L	0.24	0.18	0.18	0.29	0.13	0.13	0.04	0.4	0.18	1.36
Temperature	deg C	12.7	13.1	13.1	10.9	15.1	15.1	9.8	14.5	9.4	16.2
Oxidation Reduction Potential	mV	-117.2	-100.3	-100.3	-107.5	-113.5	-113.5	-193.1	-86.7	-104.8	-81.7
Part 115											
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0017 U	< 0.0017 U
Iron	mg/L	0.34	0.31	0.3	0.22	0.26	0.25	0.2	0.3	0.2	0.2 B
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0015 U	< 0.0015 U
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00093 U	0.0023 JB
Appendix III											
Boron	mg/L	3.3	3.35	3.19	3.33	3.33	3.38	3.29	3.22	3.3	2.9
Calcium	mg/L	25.9	25.7	26.2	26.3	25.8	25.9	26.3	25.2	26	24
Chloride	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	2	1.5	0.92 J	1.2 F1F2
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	0.4	0.5	0.63	0.76 F1F2
pH (Field Measure)	su	7.5	7.61	7.61	7.71	7.52	7.52	7.59	7.67	7.71	7.52
Sulfate	mg/L	< 5	< 5	< 5	< 5	< 5	< 5	0.8	< 5	2.4	0.45 JF1F2
Total Dissolved Solids	mg/L	374	358	356	356	364	362	366	370	330	350
Appendix IV											
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00075 U	< 0.00075 U
Barium	mg/L	0.026	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.024
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.000086 U	< 0.000086 U
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	0.4	0.5	0.63	0.76 F1F2
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.042	0.04	0.037	0.043	0.04	0.041	0.041	0.039	0.04	0.039
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0011 U	< 0.0011 U
Radium-226	pCi/L	0.615 J+	0.608	0.619	0.831	1.13 J-	0.88 J+	0.458	0.811	0.47	0.382
Radium-228	pCi/L	0.165 J-	0.638	0.282	3.31	0.848 J-	2.68 J+	0.845	1.83	1.31	1
Radium-226/228	pCi/L	0.779 J-	1.25	0.901	4.14	1.98 J-	3.56 J+	1.3	2.64	1.78	1.38
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U
Other											
Total Suspended Solids	mg/L	< 3	< 3	< 3	< 3	1.1	1.2	< 3	1.7	0.4 J	< 0.4 U
Bicarbonate	mg/L	400	390	390	417	360	390	424	400	330	320
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	90	96	96	98	92	110	653	107	98	93
Magnesium	mg/L	8.33	8.2	8.15	8.61	8.48	8.52	8.01	8.16	8.1	7.6
Potassium	mg/L	8.14	8.19	8.15	7.88	8.19	8.15	8.19	8.16	8.2	7.7
Sodium	mg/L	109	109	110	112	117	114	106	108.971	110	110

Groundwater Sampling Results for MW-13

LBWL Erickson Station

Sample Location:		MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13
Sample Date:		2/23/2022	3/30/2022	5/4/2022	5/4/2022	6/8/2022	7/13/2022	8/17/2022	9/21/2022	10/26/2022	2/8/2023	8/2/2023	1/30/2024
Sample Type:		N	N	N	FD	N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	6.91	6.75	7.01	7.01	7.07	7.06	7.22	7.25	7.11	7.04	6.39	6.98
Specific Conductivity	mS/cm	0.782	0.733	0.549	0.549	0.585	0.661	0.595	0.635	0.624	0.672	0.777	0.887
Turbidity	NTU	7.11	7.9	4.15	4.15	6.5	1.79	3.55	4.24	3.75	6.01	0.3	5.73
Dissolved Oxygen	mg/L	1.31	2.61	6.23	6.23	5.42	6.21	4.94	3.83	2.39	0.65	4.69	0.13
Temperature	deg C	5.8	6.9	8.5	8.5	12.2	14.5	17.5	17.4	13.8	8.4	16.1	6.3
Oxidation Reduction Potential	mV	163	151.8	96.4	96.4	101.6	66.9	89.1	84.8	216.8	61.2	-48.6	-159.2
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	0.04	0.02	< 0.02	0.02	0.08	0.03	0.02	0.03	0.04	0.06	0.16	1.03
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Appendix III													
Boron	mg/L	0.16	0.14	0.14	0.14	0.18	0.18	0.17	0.2	0.22	0.18	0.17	0.15
Calcium	mg/L	138	128	95.8	97.6	96.1	107	94.1	100	101	132	124	157
Chloride	mg/L	< 5	< 5	9	9	13	16	16	20	32	43	45	25.3
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
pH (Field Measure)	su	6.91	6.75	7.01	7.01	7.07	7.06	7.22	7.25	7.11	7.04	6.39	6.98
Sulfate	mg/L	32	45	16	16	17	55	33	30	22	37	87	122
Total Dissolved Solids	mg/L	478	430	336	342	354	396	380	384	386	476	492	638
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.004	0.008
Barium	mg/L	0.03	0.026	0.02	0.019	0.023	0.027	0.029	0.027	0.028	0.028	0.034	0.038
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Radium-226	pCi/L	0.3	0.755	0.322 J+	0.149 J-	0.657	0.291 J+	0.402	0.286	0.392	0	0.0699	0.937
Radium-228	pCi/L	-0.842	1.32	0.0544 J	0.893 J+	1.66	1.35	0.0071	-0.0026	0.291	0.188	-0.6698	1.05
Radium-226/228	pCi/L	0.3	2.08	0.376 J-	1.04 J+	2.31	1.64 J+	0.41	0.286	0.683	0.188	0.0699	1.99
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Bicarbonate	mg/L	--	--	340	330	349	330	320	340	351	437	330	496
Carbonate	mg/L	--	--	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hardness (as CaCO3)	mg/L	--	--	309	308	310	353	312	333	358	444	428	550
Magnesium	mg/L	--	26.3	19.7	20.1	20.7	23.1	20.6	21.9	23	29	26.9	35.9
Potassium	mg/L	--	0.75	0.69	0.7	0.83	0.779	0.78	0.82	0.81	0.76	0.94	1
Sodium	mg/L	--	3.05	2.45	2.51	2.59	5.59	4.6	5.7	4.99	4.68	8.34	13.2

Groundwater Sampling Results for MW-13

LBWL Erickson Station

Sample Location:		MW-13	MW-13	MW-13
Sample Date:		8/7/2024	2/6/2025	8/8/2025
Sample Type:		N	N	N
Gradient:		Downgradient	Downgradient	Downgradient
Sampling Phase:		AM	AM	AM
Fraction:		T	T	T
Constituent	Unit			
Field Parameters				
pH	su	6.76	7.06	6.73
Specific Conductivity	mS/cm	0.91	0.936	1.006
Turbidity	NTU	6.55	3.11	4.15
Dissolved Oxygen	mg/L	0.4	0.26	3.53
Temperature	deg C	16.5	8.7	16.6
Oxidation Reduction Potential	mV	-64.5	-49	107.2
Part 115				
Copper	mg/L	< 0.005	< 0.0017 U	< 0.0017 U
Iron	mg/L	0.94	1.2	0.031 J
Nickel	mg/L	< 0.005	< 0.0015 U	< 0.0015 U
Silver	mg/L	< 0.0005	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.00082 U	0.0015 J
Zinc	mg/L	< 0.005	0.0033 J	< 0.00093 U
Appendix III				
Boron	mg/L	0.17	0.18	0.2
Calcium	mg/L	158	140	160
Chloride	mg/L	20.7	11	18
Fluoride	mg/L	< 1	0.14	0.17
pH (Field Measure)	su	6.76	7.06	6.73
Sulfate	mg/L	174	110	210
Total Dissolved Solids	mg/L	642	520	700
Appendix IV				
Antimony	mg/L	< 0.005	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.007	0.0057	0.0019 J
Barium	mg/L	0.044	0.036	0.06
Beryllium	mg/L	< 0.001	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	0.00091 J	0.00045 J
Fluoride	mg/L	< 1	0.14	0.17
Lead	mg/L	< 0.003	< 0.00045 U	< 0.00045 U
Lithium	mg/L	< 0.005	< 0.0034 U	< 0.0034 U
Mercury	mg/L	< 0.0002	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	< 0.005	< 0.0011 U	< 0.0011 U
Radium-226	pCi/L	0.607	< 0.285 U	< 0.43 U
Radium-228	pCi/L	1.38	< 0.701 U	< 0.567 U
Radium-226/228	pCi/L	1.99	< 0.701 U	0.68
Selenium	mg/L	< 0.005	< 0.00089 U	0.006
Thallium	mg/L	< 0.002	< 0.00051 U	< 0.00051 U
Other				
Total Suspended Solids	mg/L	1.4	1.9 J	0.7 J
Bicarbonate	mg/L	390	360 B	320
Carbonate	mg/L	< 10	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	524	490	530
Magnesium	mg/L	32.4	32	33
Potassium	mg/L	0.76	0.95 J	0.88 J
Sodium	mg/L	13.4	13	15

Groundwater Sampling Results for MW-14

LBWL Erickson Station

Sample Location:		MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14
Sample Date:		1/12/2023	1/12/2023	2/17/2023	2/17/2023	3/24/2023	3/24/2023	4/28/2023	4/28/2023	6/2/2023	6/2/2023	7/7/2023	7/7/2023
Sample Type:		N	FD	N	FD	N	FD	N	FD	N	FD	N	FD
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.04	7.04	7.11	7.11	6.98	6.98	7.13	7.13	7	7	7.06	7.06
Specific Conductivity	mS/cm	1.27	1.27	1.091	1.091	1.295	1.295	1.323	1.323	1.307	1.307	1.285	1.285
Turbidity	NTU	6.31	6.31	5.34	5.34	3.95	3.95	4.05	4.05	5.42	5.42	3.24	3.24
Dissolved Oxygen	mg/L	0.45	0.45	0.39	0.39	0.07	0.07	0.09	0.09	0.21	0.21	0.06	0.06
Temperature	deg C	10.9	10.9	10.1	10.1	10.5	10.5	10.3	10.3	13.3	13.3	13.7	13.7
Oxidation Reduction Potential	mV	-105.6	-105.6	-89.4	-89.4	-104.3	-104.3	-124.8	-124.8	-114.2	-114.2	-96.5	-96.5
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	6.58	6.78	9.46	9.35	10.2	10.4	11.2	11.2 J	11.5	11.8	11.4	11.5 J
Nickel	mg/L	0.006	0.007	0.005 J+	< 0.005 UJ	< 0.005 UJ	0.005 J+	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005 UJ	0.005 J+
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005 UJ	0.005 J+
Zinc	mg/L	< 0.005 UJ	0.007 J+	< 0.005	< 0.005	< 0.005 UJ	0.013 J+	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Appendix III													
Boron	mg/L	2.29	2.32	2.23	2.2	2.11	2.2	2.03	2.06	2.06	2.02	2.16	2.14
Calcium	mg/L	147	149	144	144	144	148	143	140 J	141	141	148	148
Chloride	mg/L	108	109	111	112	114	114	115	115	114	114	113	114
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
pH (Field Measure)	su	7.04	7.04	7.11	7.11	6.98	6.98	7.13	7.13	7	7	7.06	7.06
Sulfate	mg/L	30	30	22	21	748	748	17	16	19	19	20	19
Total Dissolved Solids	mg/L	774	768	732	716	< 0.005	< 0.005	796	782	792	784	784	774
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	0.004	0.004	0.006	0.005	0.005	0.006	0.006	0.005	0.005	0.006	0.007	0.008
Barium	mg/L	0.177	0.122	0.119	0.116	0.128	0.126	0.12	0.119	0.126	0.128	0.134	0.131
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	0.125	0.132	0.122	0.126	0.113	0.113	0.111	0.111	0.106	0.106	0.108	0.106
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	0.012	0.013	0.015	0.014	0.014	0.014	0.013	0.012	0.014	0.015	0.016	0.016
Radium-226	pCi/L	0.907	0.322	0.396	0.363	0.964 J+	0.321 J-	0.26 J-	1.27 J+	0.275	0.271	0.388	0.244
Radium-228	pCi/L	3.53	3.07	0.272 J-	1.07 J+	0.853	1.1	1.2 J+	0.807 J+	0.601 J-	0.983 J+	0.0761 J-	0.915 J+
Radium-226/228	pCi/L	4.44	3.39	0.668 J-	1.43 J+	1.82	1.41	1.46 J	2.08 J+	0.876 J-	1.25 J+	0.464 J-	1.16 J+
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.009	0.009	0.013	0.012
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	16	16	4 J-	7 J+	22.2	22	23.4	24.3	26	26	24.8	26.3
Bicarbonate	mg/L	600	610	601	606	650	650	660	670	630	630	640	650
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hardness (as CaCO3)	mg/L	556	554	498	506	536	548	566	562	540	550	536	548
Magnesium	mg/L	42.3	42.2	41.3	41.2	40.3	42.1	39.7	38.5	40	39.5	41.9	41
Potassium	mg/L	4.79	4.76	5.82	5.81	4.72	4.82	4.55	4.43	4.65	4.72	5.03	5.08
Sodium	mg/L	79.2	80.4	78.3	77.9	75.8	77.3	72.5	70.9	73.7	73.9	79	77

Groundwater Sampling Results for MW-14

LBWL Erickson Station

Sample Location:		MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14
Sample Date:		8/11/2023	8/11/2023	9/15/2023	9/15/2023	1/31/2024	8/5/2024	2/4/2025	8/6/2025
Sample Type:		N	FD	N	FD	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T
Constituent	Unit								
Field Parameters									
pH	su	6.95	6.95	6.92	6.92	6.95	7.04	7.04	6.93
Specific Conductivity	mS/cm	1.285	1.285	1.277	1.277	1.358	1.324	1.346	1.387
Turbidity	NTU	3.1	3.1	6.35	6.35	1.74	6.94	7.74	1.93
Dissolved Oxygen	mg/L	0.02	0.02	0	0	0.18	0.62	-0.04	0.2
Temperature	deg C	14.1	14.1	13.5	13.5	10.6	18	11.5	14.5
Oxidation Reduction Potential	mV	-116.2	-116.2	-127.9	-127.9	-175.1	-109.4	-131.4	-112.8
Part 115									
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0017 U	< 0.0017 U
Iron	mg/L	12.9	12.7	11.9	11.7	14.7	14.4	15	15 B
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	0.005	0.005	0.0038	0.0041
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0019 J	0.0015 J
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	0.024	< 0.005	0.018 B	< 0.00093 U
Appendix III									
Boron	mg/L	2.14	2.1	2.17	2.13	2.22	1.96	2	1.9
Calcium	mg/L	147	149	154	155	161	173	160	160
Chloride	mg/L	118	118	111	110	119	115	100	110
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	0.15	0.19
pH (Field Measure)	su	6.95	6.95	6.92	6.92	6.95	7.04	7.04	6.93
Sulfate	mg/L	16	16	16	16	8.5	5.9	6.7	5
Total Dissolved Solids	mg/L	804	804	808	824	818	866	750	730
Appendix IV									
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.007	0.007	0.008	0.007	0.008	0.006	0.0064	0.0067 B
Barium	mg/L	0.122	0.124	0.132	0.138	0.131	0.131	0.14	0.12
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00069 J	0.00053 J
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	0.15	0.19
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.111	0.109	0.109	0.112	0.109	0.102	0.099	0.092
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.013	0.014	0.014	0.014	0.012	0.012	0.012	0.01
Radium-226	pCi/L	0.624	0.465	0.442 J	1.06 J+	0.16	5.03	< 0.358 U	0.248
Radium-228	pCi/L	0.326 J+	0.147 J-	0.497 J	0.821 J+	0.833	1.84	< 1.02 UG	< 0.882 U
Radium-226/228	pCi/L	0.951 J+	0.612 J-	0.939 J	1.88 J+	0.994	6.88	< 1.02 U	< 0.882 U
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U
Other									
Total Suspended Solids	mg/L	25.9	26.6	24.8	25.4	27.6	30.3	37	28
Bicarbonate	mg/L	690	680	670	660	850	770	570	550
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 50	< 10	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	588	630	574	584	610	610	590	580
Magnesium	mg/L	42.2	42.1	42.1	43.8	44.1	46.4	44	44
Potassium	mg/L	4.96	5.07	5.43	5.58	5.71	5.38	5.4	4.6
Sodium	mg/L	77.8	78.3	79.4	80.4	77.4	78.5	74	73

Groundwater Sampling Results for MW-15

LBWL Erickson Station

Sample Location:		MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15
Sample Date:		1/12/2023	2/17/2023	3/24/2023	4/28/2023	6/2/2023	7/7/2023	8/11/2023	9/15/2023	1/31/2024	8/7/2024	2/4/2025	8/7/2025
Sample Type:		N	N	N	N	N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	6.86	6.98	6.9	6.99	6.84	6.83	6.7	6.69	6.7	6.68	6.74	6.65
Specific Conductivity	mS/cm	1.319	0.872	0.912	0.851	0.879	0.945	1.007	1.021	0.451	0.893	1.029	1.091
Turbidity	NTU	2.4	5.15	4.15	4.84	6.51	5.75	3.33	5.64	7.52	4.23	7.59	2.23
Dissolved Oxygen	mg/L	5.41	4.81	3.72	2.48	0.89	0.38	0.87	0.67	0.22	0.01	4.35	1.7
Temperature	deg C	7.9	7.5	7.3	8.4	13	13.3	14.5	14.6	8.1	15.9	8	16.4
Oxidation Reduction Potential	mV	195.6	153.9	59.8	133.9	113.8	11.3	30.8	44.2	-153.9	1.1	225.1	94.8
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0017 U	< 0.0017 U
Iron	mg/L	< 0.02	0.04	0.02	0.03	0.11	0.11	0.05	0.14	0.12	0.38	0.031 J	0.071 J
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0015 U	0.0019 J
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	0.021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00093 U	0.0019 J
Appendix III													
Boron	mg/L	0.37	0.34	0.33	0.34	0.35	0.4	0.41	0.44	0.39	0.41	0.3	0.42
Calcium	mg/L	183	140	119	104	115	133	140	145	131	131	150	130
Chloride	mg/L	100	84	72	60	59	65	73	78	69.3	74.7	91	89
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.047 J	0.048 J
pH (Field Measure)	su	6.86	6.98	6.9	6.99	6.84	6.83	6.7	6.69	6.7	6.68	6.74	6.65
Sulfate	mg/L	238	135	124	109	109	117	117	109	95	49.7	110	89
Total Dissolved Solids	mg/L	878	606	690	528	578	638	670	680	604	554	650	580
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.002	< 0.002	0.00097 J	0.00099 J
Barium	mg/L	0.077	0.05	0.047	0.042	0.049	0.061	0.067	0.069	0.055	0.058	0.059	0.059
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000077 U	0.00008 J
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.000086 U	0.00057 J
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.047 J	0.048 J
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.014	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0034 U	< 0.0034 U
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0011 U	< 0.0011 U
Radium-226	pCi/L	0.629	0.334	0.868	0.464	0.876	0.525	0.75	0.491	0.31	0.425	< 0.228 U	< 0.231 U
Radium-228	pCi/L	1.43	-0.367	-0.188	1.51 J+	-0.108	-0.119	0.47	1.46	0.00555	0.495	1.1	0.806 J+
Radium-226/228	pCi/L	2.06	0.334	0.868	1.97 J+	0.876	0.525	1.22	1.95	0.316	0.921	1.26	0.867
Selenium	mg/L	0.01	0.026	0.034	0.021	0.011	0.009	< 0.005	< 0.005	< 0.005	< 0.005	0.019	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U
Other													
Total Suspended Solids	mg/L	< 3	< 3	< 3	< 3	1.8	1.6	< 3	< 3	< 3	0.8	< 0.4 U	1 J
Bicarbonate	mg/L	410	354	330	330	350	380	430	440	433	430	330	320
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	464	473	426	406	420	460	512	506	484	442	520	470
Magnesium	mg/L	47.2	35.1	31.1	25.7	28.9	32.2	34.2	34.2	31.6	31.4	38	33
Potassium	mg/L	0.61	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.36 J	0.65 J
Sodium	mg/L	40.5	30.3	29.5	28.3	27.4	28.5	29.7	38.8	30.4	29.4	38	39

Groundwater Sampling Results for MW-16A

LBWL Erickson Station

Sample Location:		MW-16A	MW-16A	MW-16A	MW-16A	MW-16A	MW-16A	MW-16A	MW-16A	MW-16A	MW-16A	MW-16A	MW-16A
Sample Date:		2/2/2023	2/2/2023	3/21/2023	3/21/2023	4/25/2023	4/25/2023	5/30/2023	5/30/2023	7/5/2023	7/5/2023	8/8/2023	8/8/2023
Sample Type:		N	FD	N	FD	N	FD	N	FD	N	FD	N	FD
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	6.95	6.95	6.91	6.91	7	7	6.72	6.72	6.79	6.79	6.84	6.84
Specific Conductivity	mS/cm	2.219	2.219	1.871	1.871	1.948	1.948	1.875	1.875	2.163	2.163	2.271	2.271
Turbidity	NTU	3.06	3.06	4.15	4.15	6.54	6.54	4.01	4.01	6.18	6.18	3.81	3.81
Dissolved Oxygen	mg/L	0.22	0.22	0.2	0.2	0.1	0.1	0.05	0.05	0.43	0.43	0.07	0.07
Temperature	deg C	7.3	7.3	8.6	8.6	8.3	8.3	12.5	12.5	15.6	15.6	16.5	16.5
Oxidation Reduction Potential	mV	-51	-51	-48.6	-48.6	-65.2	-65.2	-49.9	-49.9	-102.3	-102.3	-67.3	-67.3
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	3.71	3.7	3.15	3.14	2.96	2.99	2.59	2.52	2.69	2.72	2.63	2.54
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Appendix III													
Boron	mg/L	0.21	0.21	0.11	0.11	0.1	0.1	0.1	0.11	0.11	0.11	0.16	0.17
Calcium	mg/L	179	176	147	150	145	148	172	171	173	174	172	167
Chloride	mg/L	383	383	405	411	391	397	401	400	436	439	423	442
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 2	< 2
pH (Field Measure)	su	6.95	6.95	6.91	6.91	7	7	6.72	6.72	6.79	6.79	6.84	6.84
Sulfate	mg/L	145	146	86	85	92	92	132	132	151	154	131	130
Total Dissolved Solids	mg/L	1360	1350	1180	1180	1170	1170	1260	1270	1370	1340	1390	1390
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	0.003	0.004	0.003	0.003	0.003	0.003	0.002	0.002	0.003	0.004	0.004	0.004
Barium	mg/L	0.16	0.156	0.118	0.119	0.108	0.111	0.126	0.121	0.136	0.138	0.132	0.135
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 2	< 2
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	0.005 J+	< 0.005 UJ	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Radium-226	pCi/L	0.385	0.325	0.51 J-	1.22 J+	0.781	0.721	0.585 J+	0.261 J-	6.13 J+	1.17 J-	0.232 J-	1.18 J+
Radium-228	pCi/L	0.178 J+	-0.723 J-	0.698	0.907	1.59 J+	-2.75 J	-0.313 J-	4.94 J+	1.33 J+	-0.181 UJ	0.945	1.01
Radium-226/228	pCi/L	0.562 J	0.325 J	1.21 J-	2.13 J+	2.37 J+	0.721 J	0.585 J-	5.2 J+	7.46 J+	1.17 J-	1.18 J-	2.19 J+
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	7	7	< 3	< 3	2	1.6	5.7	5.2	2.5 J	2 J	2.1 J+	1.2 J-
Bicarbonate	mg/L	610	620	460	470	420	420	440	430	460	470	510	500
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hardness (as CaCO3)	mg/L	608	605	524	522	526	519	570	576	598	600	578	568
Magnesium	mg/L	42.4	42.3	33.9	34.1	33.2	34.4	37.2	36.6	39.9	38.5	38.5	38.7
Potassium	mg/L	2.12	2.06	1.58	1.58	1.34	1.45	1.16	1.04	1.24	1.23	1.25	1.21
Sodium	mg/L	276	281	244	247	229	243	241	240	253	258	279	262

Groundwater Sampling Results for MW-16A

LBWL Erickson Station

Sample Location:		MW-16A	MW-16A	MW-16A	MW-16A	MW-16A	MW-16A	MW-16A	MW-16A	MW-16A	MW-16A
Sample Date:		9/12/2023	9/12/2023	10/17/2023	10/17/2023	11/21/2023	11/21/2023	2/1/2024	8/6/2024	2/6/2025	8/11/2025
Sample Type:		N	FD	N	FD	N	FD	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T
Constituent	Unit										
Field Parameters											
pH	su	6.76	6.76	6.78	6.78	6.82	6.82	6.99	6.81	6.74	6.67
Specific Conductivity	mS/cm	2.579	2.579	2.599	2.599	2.44	2.44	2.606	2.37	2.561	2.231
Turbidity	NTU	5.28	5.28	6.41	6.41	4.39	4.39	5.41	5.44	5.76	3.01
Dissolved Oxygen	mg/L	0.34	0.34	0.01	0.01	0.01	0.01	0.12	0.03	0.28	0.16
Temperature	deg C	16.8	16.8	15.8	15.8	13.6	13.6	9.2	16.2	8.6	18
Oxidation Reduction Potential	mV	-59.8	-59.8	-3.1	-3.1	-43.9	-43.9	-42.4	-39.6	17.8	-47.2
Part 115											
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0017 U	< 0.0017 U
Iron	mg/L	4.13	4.11	3.78	3.81	3.08	3.04	4.38	3.04	3.2	2.3
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0015 J	0.0022
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00093 U	< 0.00093 U
Appendix III											
Boron	mg/L	0.23	0.22	0.21	0.21	0.19	0.2	0.16	0.25	0.21	0.24
Calcium	mg/L	220	219	226	226	210	211	208	196	200	170
Chloride	mg/L	484	493	505	505	459	455	448	492	480	370
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	0.098	0.14
pH (Field Measure)	su	6.76	6.76	6.78	6.78	6.82	6.82	6.99	6.81	6.74	6.67
Sulfate	mg/L	239	250	257	257	264	257	341	235	240	190
Total Dissolved Solids	mg/L	1640	1630	1720	1730	1580	1590	1590	1560	1500	1300
Appendix IV											
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00057 U	0.00071 J
Arsenic	mg/L	0.003	0.004	0.004	0.004	0.004	0.003	0.005	0.003	0.0018 J	0.0034 J
Barium	mg/L	0.178	0.172	0.177	0.181	0.163	0.166	0.158	0.146	0.16	0.13
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000077 U	0.00024 J
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0012	0.0011
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	0.098	0.14
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U*+
Lithium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0035 J	0.0039 J
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0017 J	0.0029 J
Radium-226	pCi/L	0.421 J-	1.06 J+	0.892	0.682	2.26	1.78	1.63	0.413	0.285	< 0.386 U
Radium-228	pCi/L	0.285 J-	1.05 J+	2.26	2.85	0.548 J-	1.23 J+	2.12	0.189	< 0.527 U	0.763
Radium-226/228	pCi/L	0.705 J-	2.1 J+	3.15	3.53	2.8	3.01	3.74	0.602	0.709	0.987
Selenium	mg/L	0.005 J+	< 0.005 UJ	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U	0.00062 J*+
Other											
Total Suspended Solids	mg/L	3.5	3.9	4.5	4.5	1.2 J+	< 3 UJ	6.5	1.7	6.8	4.3
Bicarbonate	mg/L	520	520	520	510	510	510	588	530	420 B	420
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 50	< 10	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	840	860	732	724	754	766	756	698	720	590
Magnesium	mg/L	52.2	52.2	51.1	51.7	52.4	52.1	46.9	46.3	52	42
Potassium	mg/L	1.4	1.44	1.45	1.4	1.49	1.49	1.57	1.72	1.5	1.5 J
Sodium	mg/L	307	308	324	322	312	294	277	297	300	250

Groundwater Sampling Results for MW-16B

LBWL Erickson Station

Sample Location:		MW-16B	MW-16B	MW-16B	MW-16B	MW-16B	MW-16B	MW-16B	MW-16B	MW-16B	MW-16B	MW-16B	MW-16B
Sample Date:		2/2/2023	3/21/2023	4/25/2023	5/30/2023	7/5/2023	8/8/2023	9/12/2023	10/17/2023	11/21/2023	2/1/2024	2/1/2024	8/6/2024
Sample Type:		N	N	N	N	N	N	N	N	N	N	FD	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.49	7.45	7.5	7.25	7.34	7.42	7.32	7.46	7.47	7.56	7.56	7.41
Specific Conductivity	mS/cm	0.623	0.587	0.619	0.578	0.613	0.635	0.59	0.634	0.625	0.615	0.615	0.604
Turbidity	NTU	7.42	5.65	6.29	3.94	4.41	4.32	0.44	1.32	6.34	6.45	6.45	9.34
Dissolved Oxygen	mg/L	0.18	0.12	0.11	0.09	0.37	0.05	0	0.01	0	0.08	0.08	0.03
Temperature	deg C	9.2	12	11.1	14.4	15.8	15.6	14.5	13.6	13	11.8	11.8	14.8
Oxidation Reduction Potential	mV	-125.7	-107	-102.1	-104.2	-130.4	-101.2	-136.1	-63.3	-127.7	-88.2	-88.2	-87.7
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	0.93	0.62	0.51	0.67	0.43	0.42	0.41	0.45	0.39	0.33	0.32	0.39
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Appendix III													
Boron	mg/L	0.12	0.13	0.12	0.13	0.11	0.12	0.11	0.11	0.12	0.11	0.12	0.11
Calcium	mg/L	74.5	76.9	78.4	79.5	80.8	81.7	80.2	85.4	83.9	81.8	79.9	84.5
Chloride	mg/L	< 5	11	5	< 5	< 5	3.7	< 5	< 5	3.1	4.1	4	3.5
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	0.31	< 1	< 1	< 1	0.7	0.7	0.8
pH (Field Measure)	su	7.49	7.45	7.5	7.25	7.34	7.42	7.32	7.46	7.47	7.56	7.56	7.41
Sulfate	mg/L	18	16	16	15	17	17	18	18	17.8	17.4	17.4	19.9
Total Dissolved Solids	mg/L	366	366	350	358	366	366	366	378	370	364	366	376
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Barium	mg/L	0.09	0.085	0.085	0.082	0.089	0.085	0.086	0.089	0.091	0.089	0.087	0.085
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	0.31	< 1	< 1	< 1	0.7	0.7	0.8
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	0.023	0.023	0.022	0.022	0.019	0.022	0.021	0.02	0.021	0.02	0.021	0.02
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	0.008	0.006	0.006	0.005	0.006	0.006	0.006	0.007	0.006	0.006	0.006	0.006
Radium-226	pCi/L	0.997	0.761	0.49	0.16	3.03	0.391	1.31	1.56	0.804	1.32 J+	0.608 J-	0.591
Radium-228	pCi/L	0.829	1.79	1.3 J+	1.81	1.07	0.644	1.09	4.87	0.831	0.767 J+	0.495 J-	1.32 J+
Radium-226/228	pCi/L	1.83	2.56	1.79 J+	1.97	4.09	1.04	2.4	6.43	1.63	2.09 J+	1.1 J-	1.91 J+
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.006	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	7	< 3	1.4	2.4	1	< 3	< 3	< 3	< 3	1	< 3	0.6
Bicarbonate	mg/L	390	400	400	420	410	410	400	400	400	414	422	420
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hardness (as CaCO3)	mg/L	322	329	335	324	334	344	380	348	355	358	377	352
Magnesium	mg/L	29.7	32.7	33.3	32.6	35.6	35	33.4	34.5	36.4	32.4	32.1	34.6
Potassium	mg/L	3.81	3.17	3	2.89	2.97	2.91	2.86	2.8	3.02	2.9	2.9	2.86
Sodium	mg/L	24.5	15.5	12.6	12.2	11.1	11.1	10.6	11.1	11	10.3	10.3	10.7

Groundwater Sampling Results for MW-16B

LBWL Erickson Station

Sample Location:		MW-16B	MW-16B	MW-16B
Sample Date:		8/6/2024	2/6/2025	8/11/2025
Sample Type:		FD	N	N
Gradient:		Downgradient	Downgradient	Downgradient
Sampling Phase:		AM	AM	AM
Fraction:		T	T	T
Constituent	Unit			
Field Parameters				
pH	su	7.41	7.43	7.3
Specific Conductivity	mS/cm	0.604	0.628	0.66
Turbidity	NTU	9.34	6.75	4.98
Dissolved Oxygen	mg/L	0.03	0.02	0.13
Temperature	deg C	14.8	11.3	16.7
Oxidation Reduction Potential	mV	-87.7	-75.7	-97.3
Part 115				
Copper	mg/L	< 0.005	< 0.0017 U	< 0.0017 U
Iron	mg/L	0.39	0.4	0.32
Nickel	mg/L	< 0.005	< 0.0015 U	< 0.0015 U
Silver	mg/L	< 0.0005	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.00093 U	0.0025 J
Appendix III				
Boron	mg/L	0.11	0.11	0.11
Calcium	mg/L	84.5	82	83
Chloride	mg/L	3.7	2.8	3.7
Fluoride	mg/L	0.8	1	0.99
pH (Field Measure)	su	7.41	7.43	7.3
Sulfate	mg/L	20.6	21	22
Total Dissolved Solids	mg/L	368	350	350
Appendix IV				
Antimony	mg/L	< 0.005	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.002	< 0.00075 U	< 0.00075 U
Barium	mg/L	0.084	0.086	0.084
Beryllium	mg/L	< 0.001	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.000086 U	< 0.000086 U
Fluoride	mg/L	0.8	1	0.99
Lead	mg/L	< 0.003	< 0.00045 U	< 0.00045 U*+
Lithium	mg/L	0.021	0.021	0.021
Mercury	mg/L	< 0.0002	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.006	0.0062	0.0063
Radium-226	pCi/L	0.508	0.458	0.485
Radium-228	pCi/L	0.491 J-	0.65	0.818
Radium-226/228	pCi/L	0.998 J-	1.11	1.3
Selenium	mg/L	< 0.005	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.00051 U	< 0.00051 U*+
Other				
Total Suspended Solids	mg/L	1.1	1.4 J	1 J
Bicarbonate	mg/L	440	340 B	330
Carbonate	mg/L	< 10	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	350	350	350
Magnesium	mg/L	35	35	35
Potassium	mg/L	2.9	2.8	3.1 J
Sodium	mg/L	10.8	11	12

Groundwater Sampling Results for MW-16C

LBWL Erickson Station

Sample Location:		MW-16C	MW-16C	MW-16C	MW-16C	MW-16C	MW-16C	MW-16C	MW-16C	MW-16C	MW-16C	MW-16C	MW-16C
Sample Date:		2/2/2023	3/21/2023	4/25/2023	5/30/2023	7/5/2023	8/8/2023	9/12/2023	10/17/2023	11/21/2023	2/1/2024	8/6/2024	2/6/2025
Sample Type:		N	N	N	N	N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.44	7.46	7.41	7.17	7.18	7.25	7.25	7.36	7.36	7.46	7.22	7.32
Specific Conductivity	mS/cm	0.601	0.575	0.585	0.529	0.58	0.59	0.562	0.592	0.586	0.565	0.557	0.573
Turbidity	NTU	34.25	7.24	6.41	2.58	1.81	0.45	1.02	4.01	6.01	6.15	6.29	6.45
Dissolved Oxygen	mg/L	0.1	0.17	0.12	0.02	0.36	0.04	0	0	0	0.07	0.26	0.03
Temperature	deg C	9.9	11.9	11	14.2	1.1	14.8	14.3	13.7	13.2	11.6	14.9	11
Oxidation Reduction Potential	mV	-62.2	-103.8	-97.3	-89	-126.5	-108.1	-139.6	-92.6	-145.6	-93.4	-42.2	-68.6
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0017 U
Iron	mg/L	0.76	1.1	0.64	0.61	0.51	0.48	0.48	0.47	0.45	0.46	0.45	0.36
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0015 U
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00093 U
Appendix III													
Boron	mg/L	0.4	0.4	0.39	0.4	0.39	0.41	0.4	0.4	0.43	0.42	0.41	0.39
Calcium	mg/L	63.2	62.1	66.5	70.5	73.4	73.9	71.7	77.1	76.8	72.6	77.2	75
Chloride	mg/L	8	< 5	< 5	< 5	< 5	2.5	< 5	< 5	2.2	2.3	1.8	1.1
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 0.5	< 1	< 1	0.2	0.2	0.4	0.51
pH (Field Measure)	su	7.44	7.46	7.41	7.17	7.18	7.25	7.25	7.36	7.36	7.46	7.22	7.32
Sulfate	mg/L	19	8	7	7	8	7.2	8	8	7.9	7.5	9.9	11
Total Dissolved Solids	mg/L	418	370	330	344	320	322	334	332	340	328	332	320
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00057 U
Arsenic	mg/L	0.002	0.003	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.003	< 0.002	< 0.00075 U
Barium	mg/L	0.051	0.061	0.05	0.041	0.035	0.032	0.033	0.031	0.03	0.031	0.027	0.027
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.011	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.000086 U
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 0.5	< 1	< 1	0.2	0.2	0.4	0.51
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.00045 U
Lithium	mg/L	0.03	0.026	0.027	0.026	0.026	0.029	0.027	0.026	0.029	0.029	0.029	0.028
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U
Molybdenum	mg/L	0.007	0.009	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0011 U
Radium-226	pCi/L	0.23	0.509	0.478	0.255	1.14	0.45	0.3	0.101	0.821	1.46	0.978	0.365
Radium-228	pCi/L	0.0142	3.09	-0.309 J+	-0.804	1.39	1.14	0.492	2.16	0.48	0.845	0.285	< 0.849 U
Radium-226/228	pCi/L	0.244	3.6	0.478 J+	0.225	2.52	1.59	0.796	2.26	1.3	2.3	1.26	< 0.849 U
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U
Other													
Total Suspended Solids	mg/L	40	11.6	1.6	5.8	1.2	< 3	1.1	1.4	< 3	< 3	0.5	0.9 J
Bicarbonate	mg/L	370	400	400	470	410	400	400	410	390	414	400	320 B
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 2.6 U
Hardness (as CaCO3)	mg/L	263	253	272	292	293	298	310	304	318	305	308	320
Magnesium	mg/L	24.4	25.6	27.3	27	29.9	31.1	29.9	30.5	31.4	27.9	30	31
Potassium	mg/L	3.72	3.56	3.97	4.08	4.86	4.65	4.93	4.75	5.11	4.93	5.08	5
Sodium	mg/L	39.4	41.4	28.5	25.4	17.2	15.6	15.7	15.7	15.7	15.8	12.5	12

Groundwater Sampling Results for MW-16C

LBWL Erickson Station

	Sample Location:	MW-16C
	Sample Date:	8/11/2025
	Sample Type:	N
	Gradient:	Downgradient
	Sampling Phase:	AM
	Fraction:	T
Constituent	Unit	
Field Parameters		
pH	su	7.14
Specific Conductivity	mS/cm	0.6
Turbidity	NTU	5.35
Dissolved Oxygen	mg/L	0.13
Temperature	deg C	16.3
Oxidation Reduction Potential	mV	-79.8
Part 115		
Copper	mg/L	< 0.0017 U
Iron	mg/L	0.32
Nickel	mg/L	< 0.0015 U
Silver	mg/L	< 0.000053 U
Vanadium	mg/L	< 0.00082 U
Zinc	mg/L	0.0014 J
Appendix III		
Boron	mg/L	0.41
Calcium	mg/L	77
Chloride	mg/L	1.1
Fluoride	mg/L	0.51
pH (Field Measure)	su	7.14
Sulfate	mg/L	11
Total Dissolved Solids	mg/L	310
Appendix IV		
Antimony	mg/L	< 0.00057 U
Arsenic	mg/L	< 0.00075 U
Barium	mg/L	0.026
Beryllium	mg/L	< 0.00027 U
Cadmium	mg/L	< 0.000077 U
Chromium	mg/L	< 0.0012 U
Cobalt	mg/L	< 0.000086 U
Fluoride	mg/L	0.51
Lead	mg/L	< 0.00045 U*+
Lithium	mg/L	0.028
Mercury	mg/L	< 0.00013 U
Molybdenum	mg/L	0.0011 J
Radium-226	pCi/L	< 0.35 U
Radium-228	pCi/L	< 0.607 U
Radium-226/228	pCi/L	< 0.607 U
Selenium	mg/L	< 0.00089 U
Thallium	mg/L	< 0.00051 U*+
Other		
Total Suspended Solids	mg/L	0.8 J
Bicarbonate	mg/L	310
Carbonate	mg/L	< 2.6 U
Hardness (as CaCO3)	mg/L	320
Magnesium	mg/L	31
Potassium	mg/L	5.2
Sodium	mg/L	11

Groundwater Sampling Results for MW-16D

LBWL Erickson Station

Sample Location:		MW-16D	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D	MW-16D
Sample Date:		2/2/2023	3/21/2023	4/25/2023	5/30/2023	7/5/2023	8/8/2023	9/12/2023	10/17/2023	11/21/2023	2/1/2024	8/6/2024	2/6/2025
Sample Type:		N	N	N	N	N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.67	7.56	7.73	7.44	7.52	7.53	7.47	7.49	7.45	7.83	7.58	7.6
Specific Conductivity	mS/cm	0.582	0.596	0.62	0.638	0.624	0.614	0.588	0.612	0.601	0.614	0.609	0.596
Turbidity	NTU	8.31	7.31	4.95	7.05	4.32	5.12	7.02	7.95	6.01	6.85	5.02	1.53
Dissolved Oxygen	mg/L	4.82	0.39	0.38	0.28	0.28	0.07	0.19	0.17	0.08	0.06	0.41	0.32
Temperature	deg C	8.6	8.4	3.9	19.6	22.5	19	15.2	12.5	11.2	9.8	16.5	5.4
Oxidation Reduction Potential	mV	44.3	85.9	-44.2	-3.5	-106.7	-101.2	-141.5	-103.6	-122.4	-200.1	-102.9	-119.9
Part 115													
Copper	mg/L	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0017 U
Iron	mg/L	0.16	0.06	0.08	0.38	0.25	0.28	0.34	0.45	0.28	0.48	0.55	0.4
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0015 U
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00082 U
Zinc	mg/L	0.11	0.271	0.183	0.036	0.025	0.011	0.008	0.023	0.014	0.008	< 0.005	0.0014 J
Appendix III													
Boron	mg/L	4.65	4.59	4.59	4.7	4.39	4.7	4.69	4.62	4.85	5.01	4.33	4.3
Calcium	mg/L	29.3	29	28.9	28.9	28.5	29.3	29.4	30.5	30	29.3	30.5	29
Chloride	mg/L	6	7	8	8	8	6.8	7	7	7.25	7.6	7.2	6.5
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 0.5	< 1	< 1	0.36	0.4	0.5	0.76
pH (Field Measure)	su	7.67	7.56	7.73	7.44	7.52	7.53	7.47	7.49	7.45	7.83	7.58	7.6
Sulfate	mg/L	< 5	9	13	7	7	6.2	6	5	4.47	4.2	4.3	5.9
Total Dissolved Solids	mg/L	366	364	380	396	374	376	376	380	372	380	378	370
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00057 U
Arsenic	mg/L	< 0.002	< 0.002	0.004	0.003	0.003	0.004	< 0.002	0.004	0.003	0.004	0.003	0.0023 J
Barium	mg/L	0.037	0.036	0.038	0.037	0.036	0.034	0.036	0.035	0.035	0.035	0.033	0.033
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.000086 U
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 0.5	< 1	< 1	0.36	0.4	0.5	0.76
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.00045 U
Lithium	mg/L	0.039	0.032	0.022	0.026	0.028	0.03	0.03	0.03	0.031	0.028	0.03	0.03
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U
Molybdenum	mg/L	0.005	0.011	0.012	0.01	0.011	0.011	0.01	0.011	0.01	0.01	0.01	0.0096
Radium-226	pCi/L	0.591	0.763	2.21	0.515	1.21	0.542 J+	0.461	0.593	0.5	0.569	0.461	< 0.324 U
Radium-228	pCi/L	1.84	0.757	1.93 J+	-0.743	0.128	0.276	0.773	2.25	1.34	0.243	2.71	< 0.615 U
Radium-226/228	pCi/L	2.43	1.52	4.14 J+	0.515	1.33	0.818	1.23	2.85	1.84	0.812	3.17	< 0.615 U
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.006	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U
Other													
Total Suspended Solids	mg/L	5	3.8	2	14	6.4	12.4	7.3	12	2	3	2.8	1.8 J
Bicarbonate	mg/L	380	390	380	430	400	380	400	390	400	394	400	320 B
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 2.6 U
Hardness (as CaCO3)	mg/L	96	107	103	101	97	96	100	105	118	124	120	100
Magnesium	mg/L	6.99	7.31	7.28	7.41	7.39	7.33	7.45	7.69	7.68	7.1	7.49	7.5
Potassium	mg/L	9.4	9.79	9.65	9.9	9.38	9.21	9.61	9.18	9.83	9.3	9.54	9.2
Sodium	mg/L	106	110	115	115	112	108	108	116	114	95	110	110

Groundwater Sampling Results for MW-16D

LBWL Erickson Station

	Sample Location:	MW-16D
	Sample Date:	8/11/2025
	Sample Type:	N
	Gradient:	Downgradient
	Sampling Phase:	AM
	Fraction:	T
Constituent	Unit	
Field Parameters		
pH	su	7.5
Specific Conductivity	mS/cm	0.707
Turbidity	NTU	3.56
Dissolved Oxygen	mg/L	2.04
Temperature	deg C	23.5
Oxidation Reduction Potential	mV	-110.2
Part 115		
Copper	mg/L	< 0.0017 U
Iron	mg/L	0.36
Nickel	mg/L	< 0.0015 U
Silver	mg/L	< 0.000053 U
Vanadium	mg/L	< 0.00082 U
Zinc	mg/L	0.0011 J
Appendix III		
Boron	mg/L	4.6
Calcium	mg/L	29
Chloride	mg/L	6.8
Fluoride	mg/L	0.75
pH (Field Measure)	su	7.5
Sulfate	mg/L	5.8
Total Dissolved Solids	mg/L	360
Appendix IV		
Antimony	mg/L	< 0.00057 U
Arsenic	mg/L	0.0028 J
Barium	mg/L	0.03
Beryllium	mg/L	< 0.00027 U
Cadmium	mg/L	< 0.000077 U
Chromium	mg/L	< 0.0012 U
Cobalt	mg/L	< 0.000086 U
Fluoride	mg/L	0.75
Lead	mg/L	< 0.00045 U*+
Lithium	mg/L	0.031
Mercury	mg/L	< 0.00013 U
Molybdenum	mg/L	0.0082
Radium-226	pCi/L	< 0.39 U
Radium-228	pCi/L	< 0.644 U
Radium-226/228	pCi/L	0.645
Selenium	mg/L	< 0.00089 U
Thallium	mg/L	< 0.00051 U*+
Other		
Total Suspended Solids	mg/L	1.4 J
Bicarbonate	mg/L	310
Carbonate	mg/L	< 2.6 U
Hardness (as CaCO3)	mg/L	110
Magnesium	mg/L	7.6
Potassium	mg/L	9
Sodium	mg/L	110

Groundwater Sampling Results for MW-17A

LBWL Erickson Station

Sample Location:		MW-17A	MW-17A	MW-17A	MW-17A	MW-17A	MW-17A	MW-17A	MW-17A	MW-17A	MW-17A	MW-17A	MW-17A
Sample Date:		10/8/2024	10/8/2024	11/13/2024	11/13/2024	12/18/2024	12/18/2024	1/23/2025	1/23/2025	2/27/2025	2/27/2025	7/1/2025	7/1/2025
Sample Type:		N	FD	N	FD	N	FD	N	FD	N	FD	N	FD
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.2	7.2	7.15	7.15	7.31	7.31	7.17	7.17	7.16	7.16	7.1	7.1
Specific Conductivity	mS/cm	1.6	1.6	1.67	1.67	1.671	1.671	1.654	1.654	1.602	1.602	1.455	1.455
Turbidity	NTU	7.6	7.6	3.02	3.02	7.18	7.18	9.6	9.6	9.72	9.72	3.92	3.92
Dissolved Oxygen	mg/L	< 0.1	< 0.1	0.24	0.24	0	0	0.03	0.03	-0.1	-0.1	0.15	0.15
Temperature	deg C	12	12	11.6	11.6	10.2	10.2	8.5	8.5	8.8	8.8	13.2	13.2
Oxidation Reduction Potential	mV	-119.4	-119.4	-100.8	-100.8	-91.1	-91.1	-98.1	-98.1	71.1	71.1	71.5	71.5
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.05	< 0.05	< 0.005	< 0.005	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U
Iron	mg/L	6.32	6.39	7.39 J+	1.51 J-	7.47	7.62	6.5	7	6.5	6.2	6.8	6.7
Nickel	mg/L	0.011	0.011	< 0.05	< 0.05	0.015	0.016	0.013	0.014	0.014	0.014	0.013	0.013
Silver	mg/L	< 0.0005	< 0.0005	< 0.005	< 0.005	< 0.0005	< 0.0005	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.015 U	< 0.015 U	0.0013 J	0.0015 J	0.016	0.016
Appendix III													
Boron	mg/L	3.84	3.66	4.07	3.75	3.71	3.88	4	4.3	4.7	4.4	4.6	4.6
Calcium	mg/L	249	247	244 J+	73.4 J-	266	266	240	250	240	240	240	250
Chloride	mg/L	68.7	68.6	68.3 J+	41.8 J-	68.5	73.1	68	68	67	67	75	75
Fluoride	mg/L	< 0.05	< 0.5	< 0.5 UJ	0.56 J+	< 1	< 1	0.25	0.25	0.44 J+	0.22 J-	0.27	0.23
pH (Field Measure)	su	7.2	7.2	7.15	7.15	7.31	7.31	7.17	7.17	7.16	7.16	7.1	7.1
Sulfate	mg/L	569	577	656 J+	209 J-	644	635	670	670	650	640	720	720
Total Dissolved Solids	mg/L	1290	1320	1400 J+	694 J-	1400	1400	1300	1300	1300	1300	1300	1400
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.002	< 0.002	0.002 J+	< 0.002 UJ	0.002	0.002	0.0017 J	0.0014 J	0.0011 J	0.00095 J	0.0017 J+	0.0012 UJ
Barium	mg/L	0.048	0.049	0.046 J+	0.028 J-	0.046	0.046	0.037	0.04	0.038	0.038	0.038	0.038
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.005	< 0.005	< 0.0005	< 0.0005	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U	0.00012 J+	< 0.000077 UJ
Chromium	mg/L	< 0.005	< 0.005	< 0.05	< 0.05	< 0.005	< 0.005	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U	0.00013 J+	< 0.000086 UJ
Fluoride	mg/L	< 0.05	< 0.5	< 0.5 UJ	0.56 J+	< 1	< 1	0.25	0.25	0.44 J+	0.22 J-	0.27	0.23
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.059	0.059	0.059 J-	0.086 J+	0.059	0.059	0.053	0.055	0.053	0.053	0.053	0.053
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.014	0.014	0.015 J-	0.078 J+	0.017	0.017	0.015	0.016	0.018	0.016	0.022	0.022
Radium-226	pCi/L	0.418 J-	0.812 J+	0.6	0.588	2.45 J+	0.889 J-	0.171	0.162	< 0.163 U	< 0.15 U	0.432 J+	< 0.375 UJ
Radium-228	pCi/L	1.12 J-	3.06 J+	0.0963 UJ	2.84 J+	3.07	2.53	< 0.613 UJ	0.79 J+	< 0.644 UJ	< 0.619 UJ	< 0.528 UJ	< 0.641 UJ
Radium-226/228	pCi/L	1.54 J-	3.87 J+	0.697 J-	3.43 J+	5.52 J+	3.42 J-	< 0.613 UJ	0.953 J+	0.65 J+	< 0.619 UJ	0.83 J+	< 0.641 UJ
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	0.001 J+	< 0.00089 UJ
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	0.00079 J+	< 0.00051 UJ
Other													
Total Suspended Solids	mg/L	9.8	10	13.7 J+	2 J-	14	13.9	14	16	14	15	16 J-	20 J+
Bicarbonate	mg/L	360	360	330	340	320	320	250 B	250	250	250	240	240
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	900	910	1100 J+	260 J-	946	978	870	920	890	880	890	920
Magnesium	mg/L	66.8	65.8	68.6 J+	14.5 J-	76	74.6	66	71	70	70	67	69
Potassium	mg/L	2.78	2.78	2.65 J-	5.7 J+	2.97	2.85	2.5	2.6	2.8	2.7	2.4	2.5
Sodium	mg/L	52.8	52.3	48.5 J-	140 J+	54.5	53	48	51	52	52	51	52

Groundwater Sampling Results for MW-17A

LBWL Erickson Station

Sample Location:		MW-17A	MW-17A	MW-17A	MW-17A
Sample Date:		8/5/2025	8/5/2025	9/11/2025	9/11/2025
Sample Type:		N	FD	N	FD
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background
Fraction:		T	T	T	T
Constituent	Unit				
Field Parameters					
pH	su	7.09	7.09	7.23	7.23
Specific Conductivity	mS/cm	1.359	1.359	1.682	1.682
Turbidity	NTU	2.67	2.67	3.19	3.19
Dissolved Oxygen	mg/L	0.4	0.4	0.12	0.12
Temperature	deg C	12.2	12.2	11.9	11.9
Oxidation Reduction Potential	mV	-10.8	-10.8	-121.8	-121.8
Part 115					
Copper	mg/L	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U
Iron	mg/L	9.3	8	7.1	7.4
Nickel	mg/L	0.012	0.012	0.011	0.012
Silver	mg/L	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U
Zinc	mg/L	0.0034 JB	0.0033 J	0.0012 J+	< 0.00093 UJ
Appendix III					
Boron	mg/L	3.9	4	3.6	3.8
Calcium	mg/L	270	270 B	220	240
Chloride	mg/L	71	71	70	70
Fluoride	mg/L	0.28	0.26	0.23	0.25
pH (Field Measure)	su	7.09	7.09	7.23	7.23
Sulfate	mg/L	690	680	680	660
Total Dissolved Solids	mg/L	1300	1300	1300	1300
Appendix IV					
Antimony	mg/L	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.0012 J	0.0014 J	0.0011 J-	0.0014 J+
Barium	mg/L	0.04	0.04	0.035	0.037
Beryllium	mg/L	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U
Fluoride	mg/L	0.28	0.26	0.23	0.25
Lead	mg/L	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.051	0.051	0.044	0.047
Mercury	mg/L	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.019	0.019	0.017	0.017
Radium-226	pCi/L	< 0.27 UJ	< 0.347 UJ	< 0.324 U	< 0.299 U
Radium-228	pCi/L	< 0.576 UJ	< 0.657 UJ	0.939 J+	< 0.61 UJ
Radium-226/228	pCi/L	0.614 J+	< 0.657 UJ	1.07 J+	< 0.61 UJ
Selenium	mg/L	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U
Other					
Total Suspended Solids	mg/L	18	15	12 J-	16 J+
Bicarbonate	mg/L	250	260	250	250
Carbonate	mg/L	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	960	960	810	870
Magnesium	mg/L	69	69 B	61	65
Potassium	mg/L	2.4 J	2.8 J	2.8 J	2.9 J
Sodium	mg/L	53	58 B	52	53

Groundwater Sampling Results for MW-17B

LBWL Erickson Station

Sample Location:		MW-17B	MW-17B	MW-17B	MW-17B	MW-17B	MW-17B	MW-17B	MW-17B
Sample Date:		10/8/2024	11/13/2024	12/18/2024	1/23/2025	2/27/2025	7/1/2025	8/5/2025	9/11/2025
Sample Type:		N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background
Fraction:		T	T	T	T	T	T	T	T
Constituent	Unit								
Field Parameters									
pH	su	7.4	7.48	7.65	7.26	7.25	7.36	7.35	7.32
Specific Conductivity	mS/cm	1.2	0.986	1.167	1.218	1.22	1.091	1.038	1.098
Turbidity	NTU	3.1	3.48	7.37	3.75	2.29	1.75	4.57	0.55
Dissolved Oxygen	mg/L	< 0.1	0.53	0	-0.1	-0.22	0.14	0.39	0.08
Temperature	deg C	12	11.3	9.3	8.7	9.2	13.6	12.9	12.4
Oxidation Reduction Potential	mV	-171.4	-132.7	-127.6	-96.8	10.5	-12.7	-50.7	-119
Part 115									
Copper	mg/L	< 0.005	< 0.05	< 0.005	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U
Iron	mg/L	2.59	7.27	2.87	2.4	2.3	1.8	2.1	1.9
Nickel	mg/L	< 0.005	< 0.05	< 0.005	0.004	0.0043	0.0039	0.0035	0.003
Silver	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	0.12	0.045	0.02	0.012 B	0.0091
Appendix III									
Boron	mg/L	2.16	4.1	1.8	1.9	2.1	2	1.9	1.7
Calcium	mg/L	144	243	127	140	140	110	120 B	110
Chloride	mg/L	80.9	68.3	72.1	67	67	74	74	75
Fluoride	mg/L	< 0.05	< 0.5	0.13	0.33	0.32	0.35	0.38	0.34
pH (Field Measure)	su	7.4	7.48	7.65	7.26	7.25	7.36	7.35	7.32
Sulfate	mg/L	352	643	331	400	390	370	330	320
Total Dissolved Solids	mg/L	856	1400	846	870	860	830	660	730
Appendix IV									
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.002	0.002	0.004	0.0036 J	0.0018 J	0.0019 J	0.0022 J	0.0019 J
Barium	mg/L	0.058	0.044	0.07	0.054	0.05	0.037	0.041	0.037
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.000077 U	< 0.000077 U	0.000097 J	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.05	< 0.005	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	0.00026 J	0.0001 JB	0.000094 J	< 0.000086 U	< 0.000086 U
Fluoride	mg/L	< 0.05	< 0.5	0.13	0.33	0.32	0.35	0.38	0.34
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.117	0.059	0.094	0.085	0.091	0.085	0.096	0.085
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.111	0.018	0.115	0.092	0.097	0.089	0.1	0.098
Radium-226	pCi/L	0.551	0.474	1.05	< 0.182 U	0.199	< 0.364 U	< 0.334 U	< 0.315 U
Radium-228	pCi/L	2.11	1.92	0.461	< 0.625 U	< 0.685 U	< 0.626 U	0.691	0.657
Radium-226/228	pCi/L	2.66	2.4	1.51	0.662	< 0.685 U	0.723	0.781	0.778
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U
Other									
Total Suspended Solids	mg/L	3.2	16	4.9	5.7	6	3.6 J	4.1	1.8 J
Bicarbonate	mg/L	190	320	220	180 B	190	170	170	160
Carbonate	mg/L	< 10	< 10	< 10	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	490	1110	440	490	470	380	430	390
Magnesium	mg/L	30.7	67.3	30.8	34	32	25	29 B	26
Potassium	mg/L	4.26	2.58	4.25	7.9	6.5	4.3	4	4.4
Sodium	mg/L	81	47.8	111	92	100	81	84	75

Groundwater Sampling Results for MW-17C

LBWL Erickson Station

Sample Location:		MW-17C	MW-17C	MW-17C	MW-17C	MW-17C	MW-17C	MW-17C	MW-17C
Sample Date:		10/8/2024	11/13/2024	12/18/2024	1/23/2025	2/27/2025	7/1/2025	8/5/2025	9/11/2025
Sample Type:		N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background
Fraction:		T	T	T	T	T	T	T	T
Constituent	Unit								
Field Parameters									
pH	su	7.5	7.57	7.16	7.14	7.06	7.08	7.11	7.17
Specific Conductivity	mS/cm	1.2	1.039	1.531	1.505	1.569	1.451	1.334	1.454
Turbidity	NTU	9.1	5.72	4.07	8.87	7.15	8.15	4.61	3.86
Dissolved Oxygen	mg/L	< 0.1	0.47	0	-0.1	-0.23	0.18	0.39	0.1
Temperature	deg C	13	11.3	9.3	8.4	9.4	14.1	13.1	12.9
Oxidation Reduction Potential	mV	-200.1	-136.8	-114.7	-71.2	25.1	-29.3	-47.5	-101.2
Part 115									
Copper	mg/L	< 0.005	< 0.05	< 0.005	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U
Iron	mg/L	1.26	2.7	4.33	2.3	1.9	4.9	4.7	2.7
Nickel	mg/L	0.011	< 0.05	0.009	0.0064	0.0089	0.0095	0.01	0.0082
Silver	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	0.056	0.0038 J	0.0055 J	0.003 J	< 0.00093 U
Appendix III									
Boron	mg/L	1.78	1.88	2.09	2.2	2.7	2.9	2.9	2.3
Calcium	mg/L	114	120	152	160	180	170	210 B	150
Chloride	mg/L	73.6	74.5	57.8	57	59	63	59	56
Fluoride	mg/L	< 0.5	0.23	< 1	0.34	0.3	0.33	0.34	0.34
pH (Field Measure)	su	7.5	7.57	7.16	7.14	7.06	7.08	7.11	7.17
Sulfate	mg/L	329	321	505	530	560	620	590	490
Total Dissolved Solids	mg/L	818	820	1190	1100	1100	1300	1100	1000
Appendix IV									
Antimony	mg/L	< 0.005	< 0.005	< 0.005	0.00072 J	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.002	0.002	0.006	0.004 J	0.0024 J	0.0037 J	0.0027 J	0.0025 J
Barium	mg/L	0.064	0.063	0.088	0.065	0.06	0.055	0.066	0.054
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.05	< 0.005	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	0.00023 J	0.0001 JB	0.00013 J	< 0.000086 U	0.000097 JB
Fluoride	mg/L	< 0.5	0.23	< 1	0.34	0.3	0.33	0.34	0.34
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U	0.00082 J	0.00069 J	0.0008 J
Lithium	mg/L	0.088	0.094	0.055	0.056	0.056	0.046	0.052	0.053
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.107	0.098	0.072	0.055	0.047	0.027	0.026	0.05
Radium-226	pCi/L	1.33	0.4	0.945	0.267	0.337	< 0.363 U	< 0.336 U	0.55
Radium-228	pCi/L	0.165	1.53	1.57	0.617	< 0.539 U	< 0.629 U	1.09	1.07
Radium-226/228	pCi/L	1.5	1.93	2.51	0.884	0.738	0.795	1.4	1.62
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U
Other									
Total Suspended Solids	mg/L	6.8	4.3	10.1	7.4	5	12	8.3	2.5 J
Bicarbonate	mg/L	220	220	330	230 B	270	250	250	230
Carbonate	mg/L	< 10	< 10	< 10	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	400	620	664	570	650	620	740	530
Magnesium	mg/L	28.6	29.8	42.9	42	48	47	56 B	40
Potassium	mg/L	4.12	3.83	5.66	9	6.9	5.1	6.9	6.7
Sodium	mg/L	105	82.2	142	110	120	97	100 B	120

Groundwater Sampling Results for MW-17D

LBWL Erickson Station

Sample Location:		MW-17D	MW-17D	MW-17D	MW-17D	MW-17D	MW-17D	MW-17D	MW-17D
Sample Date:		10/8/2024	11/13/2024	12/18/2024	1/23/2025	2/27/2025	7/1/2025	8/5/2025	9/11/2025
Sample Type:		N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background
Fraction:		T	T	T	T	T	T	T	T
Constituent	Unit								
Field Parameters									
pH	su	7.6	7.37	7.49	7.52	7.49	7.46	7.45	7.48
Specific Conductivity	mS/cm	0.53	0.529	0.54	0.504	0.513	0.5	0.489	0.539
Turbidity	NTU	9.5	1.33	7.12	3.67	4.24	2.57	2.78	1
Dissolved Oxygen	mg/L	< 0.1	0.16	0.01	-0.11	-0.24	0.2	0.37	0.08
Temperature	deg C	12	10.6	9.6	8.4	9.4	14.8	13.5	13.1
Oxidation Reduction Potential	mV	-94.5	-44	-122.9	-125.6	-67.1	-78.1	-80.5	-125.9
Part 115									
Copper	mg/L	< 0.005	< 0.05	< 0.005	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U
Iron	mg/L	0.23	1.98	0.77	0.77	0.77	0.7	0.6	0.67
Nickel	mg/L	< 0.005	< 0.05	< 0.005	< 0.0015 U	< 0.0015 U	< 0.0015 U	< 0.0015 U	< 0.0015 U
Silver	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.015 U	0.001 J	0.0031 J	0.0021 J	< 0.00093 U
Appendix III									
Boron	mg/L	2.47	1.67	2.52	2.6	2.5	2.6	2.4	2.3
Calcium	mg/L	52.3	92.5	52	50	50	51	51 B	50
Chloride	mg/L	9.9	65.9	9.3	7.3	6.3	4.4	3.7	3.6
Fluoride	mg/L	0.29	0.27	0.3	0.47	0.43	0.47	0.45	0.43
pH (Field Measure)	su	7.6	7.37	7.49	7.52	7.49	7.46	7.45	7.48
Sulfate	mg/L	8.9	315	8.1	8	7.3	4	2	3.7
Total Dissolved Solids	mg/L	314	828	304	280	290	280	290	290
Appendix IV									
Antimony	mg/L	< 0.005	< 0.005	< 0.005	0.00066 J	0.00059 J	< 0.00057 U	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.002	0.004	0.002	0.0017 J	0.0013 J	0.001 J	< 0.00075 U	0.00089 J
Barium	mg/L	0.043	0.072	0.049	0.043	0.044	0.042	0.039	0.04
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.000077 U	0.00017 J	< 0.000077 U	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.05	< 0.005	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U
Fluoride	mg/L	0.29	0.27	0.3	0.47	0.43	0.47	0.45	0.43
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.037	0.069	0.036	0.033	0.032	0.036	0.037	0.034
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	< 0.005	0.105	0.007	0.0052	0.0048 J	0.0034 J	0.0024 J	0.0035 J
Radium-226	pCi/L	0.737	0.664	1.38	0.47	0.311	< 0.366 U	0.383	< 0.43 U
Radium-228	pCi/L	2.2	1.41	2.45	0.654	0.777	0.929	< 0.569 U	< 0.635 U
Radium-226/228	pCi/L	2.94	2.08	3.83	1.12	1.09	1.25	< 0.569 U	0.961
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U
Other									
Total Suspended Solids	mg/L	7.4	5.6	1.7	2.5 J	1.9 J	1.4 J	1.7 J	0.9 J
Bicarbonate	mg/L	330	260	330	280 B	290	290	280	280
Carbonate	mg/L	< 10	< 10	< 10	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	8.9	540	197	190	190	190	200	190
Magnesium	mg/L	16.4	27.9	15.9	17	16	15	16 B	16
Potassium	mg/L	9.15	4.05	9.03	9.1	9.6	9	9.4	8.9
Sodium	mg/L	44.4	122	49.7	46	46	43	46 B	43

Groundwater Sampling Results for MW-17E

LBWL Erickson Station

Sample Location:		MW-17E	MW-17E	MW-17E	MW-17E	MW-17E	MW-17E	MW-17E	MW-17E
Sample Date:		10/8/2024	11/13/2024	12/18/2024	1/23/2025	2/27/2025	7/1/2025	8/5/2025	9/11/2025
Sample Type:		N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background
Fraction:		T	T	T	T	T	T	T	T
Constituent	Unit								
Field Parameters									
pH	su	8.1	7.82	8.15	8.15	8.07	8.03	8.02	8.04
Specific Conductivity	mS/cm	0.61	0.596	0.603	0.587	0.596	0.615	0.628	0.628
Turbidity	NTU	9	3.15	5.01	3.39	3.98	3.3	1.54	1.35
Dissolved Oxygen	mg/L	< 0.1	0.08	0.07	-0.09	-0.22	0.25	0.37	0.07
Temperature	deg C	12	10.4	9.7	8.3	9.6	14.7	14	13
Oxidation Reduction Potential	mV	-4.8	101.3	-97.3	-129.9	-45.1	-46.3	-57.9	-132
Part 115									
Copper	mg/L	< 0.005	< 0.05	< 0.005	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U
Iron	mg/L	0.08	0.26	0.07	0.05 J	0.05 J	0.029 J	0.018 J	0.017 J
Nickel	mg/L	< 0.005	< 0.05	< 0.005	< 0.0015 U	< 0.0015 U	< 0.0015 U	< 0.0015 U	< 0.0015 U
Silver	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.015 U	0.0013 J	< 0.00093 U	0.0013 J	< 0.00093 U
Appendix III									
Boron	mg/L	3.19	2.36	3.09	3.3	3.4	3.5	3.3	3
Calcium	mg/L	5.98	46.7	6.17	5.2	5.4	5.5	5.3 B	5.2
Chloride	mg/L	2.7	10.2	2.5	1.5	1.4	1.4	1.3	1.3
Fluoride	mg/L	0.99	0.22	0.97	1.3	1.2	1.3	1.2	1.2
pH (Field Measure)	su	8.1	7.82	8.15	8.15	8.07	8.03	8.02	8.04
Sulfate	mg/L	0.04	10.8	1.1	2	< 0.35 U	0.96 J	< 0.35 U	< 0.35 U
Total Dissolved Solids	mg/L	388	316	388	370	360	360	360	350
Appendix IV									
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.002	< 0.002	< 0.002	< 0.00075 U	< 0.00075 U	< 0.00075 U	< 0.00075 U	< 0.00075 U
Barium	mg/L	0.005	0.042	0.006	0.0051	0.0047 J	0.0046 J	0.0042 J	0.0041 J
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.05	< 0.005	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U
Fluoride	mg/L	0.99	0.22	0.97	1.3	1.2	1.3	1.2	1.2
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.028	0.033	0.027	0.023	0.024	0.026	0.025	0.024
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	< 0.005	0.01	< 0.005	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0011 U
Radium-226	pCi/L	0.39	1.06	0.946	< 0.0982 U	< 0.149 U	< 0.342 U	< 0.371 U	< 0.35 U
Radium-228	pCi/L	4.03	1.29	-0.468	< 0.531 U	< 0.63 U	< 0.597 U	< 0.64 U	< 0.611 U
Radium-226/228	pCi/L	4.42	2.35	0.946	< 0.531 U	< 0.63 U	< 0.597 U	< 0.64 U	0.674
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U
Other									
Total Suspended Solids	mg/L	1	4.2	1.6	0.5 J	0.7 J	0.9 J	0.5 J	0.4 J
Bicarbonate	mg/L	420	340	410	350 B	330	330	310	320
Carbonate	mg/L	< 10	< 10	< 10	< 2.6 U	21	8	24	11
Hardness (as CaCO3)	mg/L	1.5	340	19	< 33 U	< 33 U	< 33 U	< 33 U	< 33 U
Magnesium	mg/L	1.66	15.1	1.67	1.5	1.6	1.5	1.4 B	1.4
Potassium	mg/L	4.13	8.38	4.39	4.1	4.6	4.3	4.4	4.5
Sodium	mg/L	152	47.4	154	150	160	160	160 B	150

Groundwater Sampling Results for MW-18A

LBWL Erickson Station

Sample Location:		MW-18A	MW-18A	MW-18A	MW-18A	MW-18A	MW-18A	MW-18A	MW-18A	MW-18A	MW-18A	MW-18A	MW-18A
Sample Date:		10/8/2024	11/13/2024	12/18/2024	1/23/2025	2/27/2025	4/24/2025	4/24/2025	5/29/2025	5/29/2025	7/8/2025	7/8/2025	8/8/2025
Sample Type:		N	N	N	N	N	N	FD	N	FD	N	FD	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.6	7.33	7.2	7.16	6.89	7.67	7.67	7.43	7.43	7.39	7.39	7.43
Specific Conductivity	mS/cm	0.82	0.8	0.899	0.857	0.738	0.809	0.809	0.809	0.809	0.804	0.804	0.948
Turbidity	NTU	5.9	0.59	3.55	4.84	2.79	2.7	2.7	1.26	1.26	1.51	1.51	1.42
Dissolved Oxygen	mg/L	< 0.1	0.19	0	-0.03	-0.15	-0.12	-0.12	-0.17	-0.17	0.25	0.25	0.99
Temperature	deg C	14	12.6	10.3	9	8.2	9.8	9.8	10.2	10.2	12.8	12.8	13.8
Oxidation Reduction Potential	mV	-177.9	-120.9	-99.1	-66.7	-61.2	-137.5	-137.5	-86.2	-86.2	-107.4	-107.4	-115.8
Part 115													
Copper	mg/L	< 0.005	< 0.05	< 0.005	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	0.002
Iron	mg/L	1.67	0.03	3.36	3	3.4	1.5 B	1.5	1.4	1.3	1.3	1.2	1
Nickel	mg/L	< 0.005	< 0.05	< 0.005	< 0.0015 U	< 0.0015 U	< 0.0015 U	< 0.0015 U	< 0.0015 U	< 0.0015 U	< 0.0015 U	< 0.0015 U	< 0.0015 U
Silver	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.015 U	0.0011 J	< 0.00093 U	< 0.00093 U	0.001 J+	< 0.00093 UJ	0.0015 J+	0.0011 J-	< 0.00093 U
Appendix III													
Boron	mg/L	0.8	3.47	1.13	1.3	1.2	0.79	0.78	0.85	0.84	0.79	0.78	0.79
Calcium	mg/L	88.7	5.69	105	110	110	90	89	92	90	88	84	87
Chloride	mg/L	79.8	2.2	66.8	66	64	78	79	81	81	82	82	80
Fluoride	mg/L	0.5	0.89	0.29	0.59	0.5	0.48	0.51	0.55	0.55	0.69	0.69	0.66
pH (Field Measure)	su	7.6	7.33	7.2	7.16	6.89	7.67	7.67	--	--	7.39	7.39	7.43
Sulfate	mg/L	175	0.9	146	150	150	170	170	180	180	180	180	170
Total Dissolved Solids	mg/L	524	392	586	560	580	510	500	480	470	500	500	530
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.002	< 0.002	0.005	0.0019 J	0.0017 J	0.00076 J	0.00077 J	< 0.00075 U	< 0.00075 U	0.00096 J+	< 0.00075 UJ	0.0011 J
Barium	mg/L	0.055	0.005	0.077	0.067	0.072	0.042	0.043	0.042 B	0.041 B	0.04	0.039	0.038
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.05	< 0.005	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U
Fluoride	mg/L	0.5	0.89	0.29	0.59	0.5	0.48	0.51	0.55	0.55	0.69	0.69	0.66
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U	0.00045 J+	< 0.00045 UJ	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	0.00046 J
Lithium	mg/L	0.072	0.026	0.105	0.11	0.093	0.066	0.063	0.07	0.064	0.065	0.064	0.064
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.12	< 0.005	0.097	0.072	0.073	0.11	0.11	0.12	0.11	0.11	0.11	0.11
Radium-226	pCi/L	0.776	0.451	0.482	< 0.184 U	0.221	0.26	0.226	0.324	< 0.333 U	0.476	0.512	0.373
Radium-228	pCi/L	2.42	0.447	1.12	< 0.626 U	< 0.673 U	< 0.623 UJ	< 0.707 UJ	1.04 J+	< 0.543 UJ	0.788	0.809	0.812
Radium-226/228	pCi/L	3.19	0.897	1.61	< 0.626 U	< 0.673 U	0.676 J+	< 0.707 UJ	1.37 J+	0.863 J-	1.26	1.32	1.19
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U	0.0015 J+	< 0.00089 UJ	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U
Other													
Total Suspended Solids	mg/L	2.1	0.8	6.93	6.6	10	1.3 J-	2.7 J+	1.3 J	1.9 J	1.6 J+	1.1 J-	0.6 J
Bicarbonate	mg/L	160	430	270	240 B	240	130	130	130	130	130	130	130
Carbonate	mg/L	< 10	< 10	< 10	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	0.5	30	349	350	360	280	280	290	290	280	270	280
Magnesium	mg/L	15.4	1.6	19.9	21	21	14	14	15	15	15	15	15
Potassium	mg/L	7.15	4.09	8.22	8	8.3	6.8	6.7	7.1	7	6.9	6.9	6
Sodium	mg/L	61.5	152	66.3	65	67	63	63	62 B	61 B	58	57	54

Groundwater Sampling Results for MW-18B

LBWL Erickson Station

Sample Location:		MW-18B	MW-18B	MW-18B	MW-18B	MW-18B	MW-18B	MW-18B	MW-18B	MW-18B
Sample Date:		10/8/2024	11/13/2024	12/18/2024	1/23/2025	2/27/2025	4/24/2025	5/29/2025	7/8/2025	8/8/2025
Sample Type:		N	N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	AM
Fraction:		T	T	T	T	T	T	T	T	T
Constituent	Unit									
Field Parameters										
pH	su	7.4	7.34	7.38	7.32	7.16	7.41	7.25	7.23	7.26
Specific Conductivity	mS/cm	1.2	1.22	1.231	1.247	0.994	1.304	1.329	1.234	1.339
Turbidity	NTU	7.1	1.25	1.92	2.54	1.03	2.8	1.14	4.12	3.15
Dissolved Oxygen	mg/L	< 0.1	0.12	0	-0.05	-0.18	-0.12	-0.21	0.21	0.98
Temperature	deg C	13	11.2	9.9	9.9	9.8	11.8	11	13.1	14.5
Oxidation Reduction Potential	mV	-132.7	-113.7	-120.8	-99.2	-88.5	-118.4	-98.1	31.8	-100.2
Part 115										
Copper	mg/L	< 0.005	< 0.05	< 0.005	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U
Iron	mg/L	2.65	2.64	2.9	2.9	2.3	2.6 B	2.7	2.6	2.8
Nickel	mg/L	0.007	< 0.05	0.009	0.0077	0.0059	0.0081	0.0091	0.0098	0.011
Silver	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.015 U	< 0.00093 U	< 0.00093 U	< 0.00093 U	0.0015 JB	0.0025 J
Appendix III										
Boron	mg/L	3.08	1.09	2.63	3.4	2	3.2	3.3	3	3.1
Calcium	mg/L	146	89.8	153	160	130	160	170	170	170
Chloride	mg/L	87.5	70.7	86.5	85	81	87	89	91	89
Fluoride	mg/L	0.12	0.35	< 1	0.33	0.34	0.21	0.26	0.37	0.36
pH (Field Measure)	su	7.4	7.34	7.38	7.32	7.16	7.41	--	7.23	7.26
Sulfate	mg/L	371	143	383	410	350	410	450	460	460
Total Dissolved Solids	mg/L	874	562	908	890	770	910	870	930	1000
Appendix IV										
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.002	0.005	< 0.002	< 0.00075 U	< 0.00075 U	< 0.00075 U	< 0.00075 U	< 0.00075 U	0.0012 J
Barium	mg/L	0.055	0.064	0.059	0.055	0.043	0.056	0.059 B	0.058	0.06
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.05	< 0.005	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U
Fluoride	mg/L	0.12	0.35	< 1	0.33	0.34	0.21	0.26	0.37	0.36
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.132	0.092	0.127	0.13	0.096	0.13	0.13	0.12	0.13
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.14	0.1	0.143	0.15	0.1	0.14	0.15	0.13	0.14
Radium-226	pCi/L	1.45	1.61	0.992	0.375	0.382	0.561	1.02	0.549	0.598
Radium-228	pCi/L	4.31	1.79	1.87	0.894	< 0.607 U	0.906	1.94	1.77	1.34
Radium-226/228	pCi/L	5.76	3.4	2.86	1.27	0.902	1.47	2.96	2.32	1.94
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U
Other										
Total Suspended Solids	mg/L	4.8	2.2	1.8	5.4	2.7 J	1.9 J	4	4.9	1.5 J
Bicarbonate	mg/L	200	240	180	160 B	160	170	170	170	180
Carbonate	mg/L	< 10	< 10	< 10	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	510	324	494	530	430	540	550	540	560
Magnesium	mg/L	26.3	17.3	28.8	31	25	31	30	31	32
Potassium	mg/L	8.07	7.21	8.66	8.9	8.7	8.3	8.8	8.8	8.7
Sodium	mg/L	81.7	62.2	88.1	89	80	88	89 B	85	91

Groundwater Sampling Results for MW-18C

LBWL Erickson Station

Sample Location:		MW-18C	MW-18C	MW-18C	MW-18C	MW-18C	MW-18C	MW-18C	MW-18C	MW-18C
Sample Date:		10/8/2024	11/13/2024	12/18/2024	1/23/2025	2/27/2025	4/24/2025	5/29/2025	7/8/2025	8/8/2025
Sample Type:		N	N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	AM
Fraction:		T	T	T	T	T	T	T	T	T
Constituent	Unit									
Field Parameters										
pH	su	7.3	7.28	7.34	7.27	7.07	7.35	7.2	7.2	7.24
Specific Conductivity	mS/cm	1.4	1.314	1.56	1.471	1.151	1.285	1.175	1.135	0.907
Turbidity	NTU	8.4	3.41	6.59	3.7	1.34	5.58	1.85	3.94	2.81
Dissolved Oxygen	mg/L	< 0.1	0.4	0	-0.01	-0.18	-0.11	-0.21	0.22	1.02
Temperature	deg C	14	11.4	10.1	10.4	10.2	12.4	11.5	13.8	14.2
Oxidation Reduction Potential	mV	-111.7	-109.3	-104.7	-88.7	-76.5	-102	-87	15.8	-85.1
Part 115										
Copper	mg/L	< 0.005	< 0.05	< 0.005	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U
Iron	mg/L	2.71	2.53	4.09	3.6	3.4	2.7 B	2.1	2.3	0.89
Nickel	mg/L	0.009	< 0.05	0.012	0.0095	0.01	0.0076	0.0066	0.0068	0.0025
Silver	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.015 U	0.00096 J	< 0.00093 U	< 0.00093 U	0.0012 JB	0.002 J
Appendix III										
Boron	mg/L	2.28	2.8	2.49	3.1	3	3	2.9	2.6	2.3
Calcium	mg/L	179	143	220	190	200	170	150	150	95
Chloride	mg/L	82.4	86.8	95.2	89	87	70	56	63	23
Fluoride	mg/L	0.11	< 0.5	< 1	0.23	0.19	0.16	0.2	0.26	0.32
pH (Field Measure)	su	7.3	7.28	7.34	7.27	7.07	7.35	--	7.2	7.24
Sulfate	mg/L	484	365	582	540	560	420	360	380	140
Total Dissolved Solids	mg/L	1080	914	1260	1000	1100	940	790	870	550
Appendix IV										
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U	0.00067 J	< 0.00057 U	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.002	< 0.002	0.002	0.001 J	< 0.00075 U	< 0.00075 U	< 0.00075 U	< 0.00075 U	0.0013 J
Barium	mg/L	0.06	0.052	0.06	0.054	0.053	0.049	0.044 B	0.043	0.028
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.000077 U	< 0.000077 U	0.000096 J	< 0.000077 U	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.05	< 0.005	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.000086 U	< 0.000086 U	0.00015 J	0.00014 J	0.0001 J	0.00013 J
Fluoride	mg/L	0.11	< 0.5	< 1	0.23	0.19	0.16	0.2	0.26	0.32
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.078	0.123	0.086	0.093	0.085	0.093	0.08	0.082	0.057
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.088	0.134	0.117	0.11	0.12	0.1	0.08	0.093	0.03
Radium-226	pCi/L	1.59	1.17	1.32	0.429	0.562	0.684	0.52	0.81	0.517
Radium-228	pCi/L	2.38	2.16	1.24	1.01	0.939	0.768	1.14	1.44	1.72
Radium-226/228	pCi/L	3.97	3.33	2.57	1.44	1.5	1.45	1.66	2.25	2.24
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U	0.0016 J	< 0.00089 U	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U
Other										
Total Suspended Solids	mg/L	6.3	2.1	6.9	8.7	5.4	4.9	4.2	4.8 J	1.4 J
Bicarbonate	mg/L	240	200	220	180 B	180	220	230	220	270
Carbonate	mg/L	< 10	< 10	< 10	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	660	501	772	660	710	600	530	520	350
Magnesium	mg/L	48.1	27.7	57.7	47	53	44	38	38	27
Potassium	mg/L	5.95	7.91	4.22	4.2	4.4	6.2	7.5	7.2	8.8
Sodium	mg/L	78.8	81.3	82.8	88	80	81	69 B	69	49

Groundwater Sampling Results for MW-18D

LBWL Erickson Station

Sample Location:		MW-18D	MW-18D	MW-18D	MW-18D	MW-18D	MW-18D	MW-18D	MW-18D	MW-18D
Sample Date:		10/8/2024	11/13/2024	12/18/2024	1/23/2025	2/27/2025	4/24/2025	5/29/2025	7/8/2025	8/8/2025
Sample Type:		N	N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	AM
Fraction:		T	T	T	T	T	T	T	T	T
Constituent	Unit									
Field Parameters										
pH	su	7.7	7.84	7.91	7.93	7.71	8.01	7.83	7.78	7.78
Specific Conductivity	mS/cm	1.1	0.955	1.058	0.946	0.824	0.9	0.903	0.9	0.916
Turbidity	NTU	7.5	2.98	7.63	3.08	2.83	4.07	1.95	3.79	4.13
Dissolved Oxygen	mg/L	< 0.1	0.58	0	0.03	-0.14	-0.12	-0.16	0.24	0.95
Temperature	deg C	14	11.6	9.7	9.6	10.5	13	11.6	14.8	15.5
Oxidation Reduction Potential	mV	-170.1	-166.3	-158.8	-158.2	-156.4	-176.4	-156.1	-110.2	-165.3
Part 115										
Copper	mg/L	< 0.005	< 0.05	< 0.005	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U
Iron	mg/L	1.22	3.73	1.88	1.2	1.7	1.1 B	0.99	0.95	0.56
Nickel	mg/L	0.005	< 0.05	0.005	0.0032	0.004	0.0027	0.0028	0.0027	0.0015 J
Silver	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.015 U	0.0015 J	< 0.00093 U	< 0.00093 U	0.0012 JB	0.0024 J
Appendix III										
Boron	mg/L	3.58	2.66	3.43	3.8	3.9	3.7	3.6	3.4	3.5
Calcium	mg/L	82.4	202	89.1	61	77	55	50	53	34
Chloride	mg/L	48.5	94.1	45.2	36	37	26	23	25	13
Fluoride	mg/L	0.55	< 0.5	0.66	1	0.91	1	1.1	1.2	1.3
pH (Field Measure)	su	7.7	7.84	7.91	7.93	7.71	8.01	--	7.78	7.78
Sulfate	mg/L	252	601	224	190	200	140	130	130	70
Total Dissolved Solids	mg/L	752	1260	714	600	620	560	520	< 78 U	450
Appendix IV										
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.002	< 0.002	< 0.002	< 0.00075 U	< 0.00075 U	< 0.00075 U	< 0.00075 U	< 0.00075 U	< 0.00075 U
Barium	mg/L	0.038	0.056	0.032	0.023	0.028	0.022	0.019 B	0.019	0.014
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.05	< 0.005	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.000086 U	0.00017 JB	< 0.000086 U	0.00016 J	0.0001 J	< 0.000086 U
Fluoride	mg/L	0.55	< 0.5	0.66	1	0.91	1	1.1	1.2	1.3
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.088	0.087	0.092	0.067	0.077	0.059	0.056	0.059	0.042
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	0.00013 J	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.081	0.116	0.087	0.052	0.069	0.044	0.042	0.043	0.022
Radium-226	pCi/L	1.03	1.06	1.17	0.26	0.341	0.206	0.498	< 0.343 U	< 0.327 U
Radium-228	pCi/L	0.736	4.11	2.42	0.739	< 0.629 U	< 0.645 U	< 0.649 U	0.774	< 0.605 U
Radium-226/228	pCi/L	1.76	5.17	3.59	0.999	< 0.629 U	0.683	< 0.649 U	1.03	< 0.605 U
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U
Other										
Total Suspended Solids	mg/L	6.1	2.6	5	2.3 J	1.3 J	1.4 J	1 J	0.9 J	0.7 J
Bicarbonate	mg/L	330	220	330	290 B	290	310	300	310	310
Carbonate	mg/L	< 10	< 10	< 10	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	11
Hardness (as CaCO3)	mg/L	320	745	291	200	250	180	160	180	110
Magnesium	mg/L	15.5	53.9	16.8	13	15	9.9	9.7	11	6.9
Potassium	mg/L	6.82	3.85	6.28	5.5	6.5	5.5	5.5	5.8	5
Sodium	mg/L	147	82.1	113	130	140	150	140 B	130	140

Groundwater Sampling Results for MW-19A

LBWL Erickson Station

Sample Location:		MW-19A	MW-19A	MW-19A	MW-19A	MW-19A	MW-19A	MW-19A	MW-19A	MW-19A	MW-19A	MW-19A	MW-19A
Sample Date:		5/12/2025	5/12/2025	6/17/2025	6/17/2025	7/22/2025	7/22/2025	8/26/2025	8/26/2025	9/30/2025	9/30/2025	11/4/2025	11/4/2025
Sample Type:		N	FD	N	FD	N	FD	N	FD	N	FD	N	FD
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	6.84	6.84	6.93	6.93	6.85	6.85	7.09	7.09	6.97	6.97	6.94	6.94
Specific Conductivity	mS/cm	1.483	1.483	1.352	1.352	1.432	1.432	1.49	1.49	1.434	1.434	1.409	1.409
Turbidity	NTU	1.63	1.63	4.92	4.92	4.38	4.38	3.52	3.52	3.18	3.18	5.3	5.3
Dissolved Oxygen	mg/L	0.11	0.11	0.19	0.19	0.23	0.23	0.22	0.22	0	0	0.22	0.22
Temperature	deg C	11	11	11	11	11.1	11.1	11.1	11.1	13	13	11.1	11.1
Oxidation Reduction Potential	mV	-307.1	-307.1	-91.3	-91.3	-66.9	-66.9	-80.8	-80.8	-138.9	-138.9	-66.9	-66.9
Part 115													
Copper	mg/L	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U
Iron	mg/L	4.5	4.5	5.3	5.3	5.6 B	5.5 B	5.3	5.5	4.9	5.2	4.6	4.8
Nickel	mg/L	0.011	0.01	0.01 B	0.01 B	0.01	0.01	0.012	0.01	0.012	0.011	0.012	0.011
Silver	mg/L	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U
Zinc	mg/L	0.0025 J+	0.0018 J-	< 0.00093 U	< 0.00093 U	< 0.00093 U	< 0.00093 U	< 0.00093 U	< 0.00093 U	< 0.00093 U	< 0.00093 U	< 0.00093 U	< 0.00093 U
Appendix III													
Boron	mg/L	0.23	0.24	0.24	0.24	0.26	0.25	0.24	0.25	0.25	0.25	0.26	0.27
Calcium	mg/L	200	190	200 J-	200	190	190	190	170	210	210	200	200
Chloride	mg/L	120	120	110	120	120	110	120	120	120	120	120	120
Fluoride	mg/L	0.13	0.12	0.14	0.14	0.13 J-	0.16 J+	0.19	0.17	0.2	0.22	0.15	0.15
pH (Field Measure)	su	6.84	6.84	6.93	6.93	6.85	6.85	7.09	7.09	6.97	6.97	6.94	6.94
Sulfate	mg/L	290	280	290	260	240	270	230	230	240	250	240	240
Total Dissolved Solids	mg/L	930	970	950	970	880	900	970	940	970	930	970	1000
Appendix IV													
Antimony	mg/L	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	0.00076 J+	< 0.00057 UJ	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.0027 J	0.0026 J	0.0044 J	0.004 J	0.0043 J	0.0042 J	0.005 J+	0.0037 J-	0.005 J+	0.0037 J-	0.005	0.0048 J
Barium	mg/L	0.11	0.11	0.099	0.098	0.094	0.093	0.088	0.08	0.095	0.093	0.098	0.097
Beryllium	mg/L	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	0.000081 J+	< 0.000077 UJ	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U	0.00013 J+	< 0.000077 UJ	0.00021 J+	< 0.000077 UJ	0.00013 J+	< 0.000077 UJ
Chromium	mg/L	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	0.00054 J	0.00049 J	0.000098 JB	0.000087 JB	0.00011 J+	< 0.000086 UJ	0.0001 J+	< 0.000086 UJ	0.00015 J+	< 0.000086 UJ	< 0.000086 U	< 0.000086 U
Fluoride	mg/L	0.13	0.12	0.14	0.14	0.13 J-	0.16 J+	0.19	0.17	0.2	0.22	0.15	0.15
Lead	mg/L	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.013	0.013	0.012	0.012	0.012	0.012	0.013	0.011	0.01	0.0092	0.013	0.013
Mercury	mg/L	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.003 J	0.0025 J	0.0023 J	0.0023 J	0.0027 J	0.0023 J	0.0028 J+	0.0019 J-	0.0025 J+	0.002 J-	0.0028 J+	0.0021 J-
Radium-226	pCi/L	< 0.36 UJ	0.402 J+	< 0.417 UJ	0.321 J+	0.309 J+	0.211 J-	< 0.207 UJ	0.276 J+	< 0.353 U	< 0.322 U	0.376 J+	< 0.243 UJ
Radium-228	pCi/L	< 0.507 U	< 0.541 U	< 0.686 U	0.805 J+	< 0.686 UJ	0.822 J+	< 0.87 U	< 0.896 U	0.901	0.855	< 0.93 U	< 0.771 U
Radium-226/228	pCi/L	0.554 J-	0.866 J+	0.791 J-	1.13 J+	< 0.686 UJ	1.03 J+	< 0.87 U	< 0.896 U	1.09	1.08	< 0.93 UJ	0.947 J+
Selenium	mg/L	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	0.0013 J+	< 0.00089 UJ	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	0.00051 J+	< 0.00051 UJ	0.00067 J+	< 0.00051 UJ	< 0.00051 U	< 0.00051 U
Other													
Total Suspended Solids	mg/L	7 J-	8.8 J+	11	12	12	10	8.9	9.5	9.1	9.9	7.9	9.3
Bicarbonate	mg/L	390 B	390 B	370 B	370	390	370	390	390	380	380	390	390
Carbonate	mg/L	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	750	730	770	790	730	740	720	650	820	810	760	760
Magnesium	mg/L	63	61	65	67	61	63	61	55	70	68	65	65
Potassium	mg/L	2.3	2.2	2	2	2.3 J	2.1 J	1.7 J	1.8 J	2.2 J	2.2 J	2.2 J	2.2 J
Sodium	mg/L	49	48	43	43	46	42	38	41	42	42	45	47

Groundwater Sampling Results for MW-19B

LBWL Erickson Station

Sample Location:		MW-19B	MW-19B	MW-19B	MW-19B	MW-19B	MW-19B
Sample Date:		5/12/2025	6/17/2025	7/22/2025	8/26/2025	9/30/2025	11/4/2025
Sample Type:		N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background
Fraction:		T	T	T	T	T	T
Constituent	Unit						
Field Parameters							
pH	su	7.2	7.18	7.11	7.29	7.2	7.19
Specific Conductivity	mS/cm	1.385	1.21	1.343	1.41	1.355	1.316
Turbidity	NTU	2.28	6.2	5.02	2.96	4.73	6.3
Dissolved Oxygen	mg/L	0.11	0.17	0.19	0.12	0	0.23
Temperature	deg C	11.8	12.1	11.2	11.2	12.6	10.9
Oxidation Reduction Potential	mV	-104.9	-84	-60.4	-88.2	-120.1	-76.7
Part 115							
Copper	mg/L	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U
Iron	mg/L	2.1	1.9	1.8 B	2	1.7	1.6
Nickel	mg/L	0.015	0.017 B	0.015	0.014	0.015	0.015
Silver	mg/L	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.00093 U	< 0.00093 U	< 0.00093 U	< 0.00093 U	< 0.00093 U	< 0.00093 U
Appendix III							
Boron	mg/L	0.55	0.55	0.52	0.5	0.53	0.5
Calcium	mg/L	180	190	180	170	190	180
Chloride	mg/L	67	68	67	67	68	67
Fluoride	mg/L	0.18	0.24	0.24	0.26	0.26	0.19
pH (Field Measure)	su	7.2	7.18	7.11	7.29	7.2	7.19
Sulfate	mg/L	310	310	310	290	290	290
Total Dissolved Solids	mg/L	940	940	840	940	960	940
Appendix IV							
Antimony	mg/L	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.0036 J	0.0043 J	0.0037 J	0.0034 J	0.0038 J	0.0038 J
Barium	mg/L	0.057	0.059	0.056	0.051	0.055	0.053
Beryllium	mg/L	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	0.00018 J	0.00019 JB	0.00014 J	< 0.000077 U	0.00012 J	< 0.000077 U
Chromium	mg/L	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	0.00012 J	0.00015 JB	0.00013 J	< 0.000086 U	< 0.000086 U	< 0.000086 U
Fluoride	mg/L	0.18	0.24	0.24	0.26	0.26	0.19
Lead	mg/L	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.017	0.017	0.016	0.016	0.014	0.017
Mercury	mg/L	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.0029 J	0.0028 J	0.0064	0.0021 J	0.0022 J	0.0022 J
Radium-226	pCi/L	< 0.352 U	< 0.35 U	0.411	0.314	0.537	0.363
Radium-228	pCi/L	0.495	0.942 J+	0.712	< 0.984 U	1.03	< 0.852 U
Radium-226/228	pCi/L	0.807	1.2	1.12	< 0.984 U	1.57	< 0.852 U
Selenium	mg/L	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U
Thallium	mg/L	0.00057 J	0.00059 J	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U
Other							
Total Suspended Solids	mg/L	4.8	4.3	4.1	4.7	4.8	5
Bicarbonate	mg/L	420 B	380 B	390	390	380	390
Carbonate	mg/L	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	730	750	720	680	770	710
Magnesium	mg/L	66	68	64	61	69	64
Potassium	mg/L	3.1	3.1	3.2 J	2.9 J	3.2 J	3.2 J
Sodium	mg/L	32	34	34	32	33	33

Groundwater Sampling Results for MW-19C

LBWL Erickson Station

Sample Location:		MW-19C	MW-19C	MW-19C	MW-19C	MW-19C	MW-19C
Sample Date:		5/12/2025	6/17/2025	7/22/2025	8/26/2025	9/30/2025	11/4/2025
Sample Type:		N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background
Fraction:		T	T	T	T	T	T
Constituent	Unit						
Field Parameters							
pH	su	7.32	7.2	7.34	7.49	7.42	7.35
Specific Conductivity	mS/cm	0.596	0.573	0.74	0.604	0.589	0.568
Turbidity	NTU	9.3	7.72	6.01	6.31	7.44	8.14
Dissolved Oxygen	mg/L	0.06	0.11	0.03	0.19	0.17	0.22
Temperature	deg C	13.2	15.1	13.2	12.8	17	12.5
Oxidation Reduction Potential	mV	-142.3	-109.1	-95.9	-95.7	-116.5	-82.9
Part 115							
Copper	mg/L	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U
Iron	mg/L	0.8	0.86	0.71 B	0.53	0.61	0.52
Nickel	mg/L	< 0.0015 U	< 0.0015 U	< 0.0015 U	< 0.0015 U	< 0.0015 U	< 0.0015 U
Silver	mg/L	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U
Zinc	mg/L	0.0011 J	0.0039 J	< 0.00093 U	< 0.00093 U	< 0.00093 U	< 0.00093 U
Appendix III							
Boron	mg/L	0.64	1.2	1.5	1.6	1.7	1.7
Calcium	mg/L	67	60	57	60	61	59
Chloride	mg/L	2	3.1	2.9	2.5	2.3	1.9
Fluoride	mg/L	0.35	0.4	0.42	0.41	0.41	0.33
pH (Field Measure)	su	7.32	7.2	7.34	7.49	7.42	7.35
Sulfate	mg/L	15	5.6	2.2	1.5	1.3	1.1
Total Dissolved Solids	mg/L	300	330	260	310	330	320
Appendix IV							
Antimony	mg/L	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.00075 U	< 0.00075 U	0.00087 J	0.0008 J	0.0011 J	< 0.00075 U
Barium	mg/L	0.054	0.046	0.038	0.035	0.036	0.036
Beryllium	mg/L	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	0.00013 J	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U
Fluoride	mg/L	0.35	0.4	0.42	0.41	0.41	0.33
Lead	mg/L	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.026	0.026	0.027	0.028	0.024	0.028
Mercury	mg/L	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.002 J	0.0018 J	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0011 U
Radium-226	pCi/L	0.581	< 0.299 U	0.414	0.364	< 0.436 U	< 0.307 U
Radium-228	pCi/L	< 0.625 U	< 0.628 U	< 0.488 U	0.863	< 0.542 U	< 0.946 U
Radium-226/228	pCi/L	0.902	< 0.628 U	0.628	1.23	< 0.542 U	1.19
Selenium	mg/L	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U
Other							
Total Suspended Solids	mg/L	8.2	3.7 J	2.3 J	2.3 J	2.5 J	2.3 J
Bicarbonate	mg/L	320 B	310	310	320	310	320
Carbonate	mg/L	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	260	240	230	230	240	230
Magnesium	mg/L	23	22	20	20	22	20
Potassium	mg/L	6.1	7.1	7.5	4.7	7.6	7.9
Sodium	mg/L	35	44	43	29	43	43

Groundwater Sampling Results for MW-19D

LBWL Erickson Station

Sample Location:		MW-19D	MW-19D	MW-19D	MW-19D	MW-19D	MW-19D
Sample Date:		5/12/2025	6/17/2025	7/22/2025	8/26/2025	9/30/2025	11/4/2025
Sample Type:		N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background
Fraction:		T	T	T	T	T	T
Constituent	Unit						
Field Parameters							
pH	su	8.61	7.16	7.34	7.11	7.42	7.43
Specific Conductivity	mS/cm	0.665	0.565	0.74	0.579	0.586	0.538
Turbidity	NTU	97.65	21.75	8.53	6.65	4.95	5.13
Dissolved Oxygen	mg/L	0.27	0.32	0.18	0.4	0.2	0.3
Temperature	deg C	14.4	14.5	12.9	11.8	13	10.2
Oxidation Reduction Potential	mV	-9.5	-80.8	-60.1	-23.5	-83.5	-47.2
Part 115							
Copper	mg/L	< 0.0017 U	< 0.0017 U	< 0.0017 U	0.014	< 0.0017 U	< 0.0017 U
Iron	mg/L	3.7	0.66	0.42 B	0.32	0.34	0.54
Nickel	mg/L	0.0047	< 0.0015 U	< 0.0015 U	< 0.0015 U	< 0.0015 U	< 0.0015 U
Silver	mg/L	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	0.0053	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U
Zinc	mg/L	0.0099	0.0042 J	< 0.00093 U	< 0.00093 U	0.00096 J	< 0.00093 U
Appendix III							
Boron	mg/L	3.2	0.58	0.58	0.55	0.58	0.58
Calcium	mg/L	6.4	69	66	64	67	66
Chloride	mg/L	7.7	1.3	1.4	1.3	1.3	1
Fluoride	mg/L	1.5	0.39	0.42	0.42	0.42	0.37
pH (Field Measure)	su	8.61	7.16	7.34	7.11	7.42	7.43
Sulfate	mg/L	3.1	10	10	11	11	12
Total Dissolved Solids	mg/L	510	310	300	300	330	340
Appendix IV							
Antimony	mg/L	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.0021 J	< 0.00075 U	< 0.00075 U	< 0.00075 U	< 0.00075 U	< 0.00075 U
Barium	mg/L	0.034	0.056	0.054	0.049	0.05	0.051
Beryllium	mg/L	0.00073 J	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U
Chromium	mg/L	0.0049 J	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	0.0019	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U
Fluoride	mg/L	1.5	0.39	0.42	0.42	0.42	0.37
Lead	mg/L	0.0043	< 0.00045 U	< 0.00045 U	0.0039	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.025	0.024	0.025	0.025	0.022	0.025
Mercury	mg/L	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.0015 J	0.0015 J	0.002 J	0.0019 J	0.002 J	0.0016 J
Radium-226	pCi/L	< 0.747 U	0.347	< 0.313 U	0.217	< 0.323 U	< 0.257 U
Radium-228	pCi/L	< 2.03 UG	0.592 J+	< 0.675 U	< 0.892 U	1.03	< 0.742 U
Radium-226/228	pCi/L	< 2.03 U	0.939	< 0.675 U	< 0.892 U	1.26	< 0.742 U
Selenium	mg/L	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U
Other							
Total Suspended Solids	mg/L	36	3.7 J	1.4 J	0.8 J	1.1 J	< 0.4 U
Bicarbonate	mg/L	330 B	290	300	310	310	320
Carbonate	mg/L	52	11	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	< 33 U	270	260	250	270	260
Magnesium	mg/L	3.1	25	23	22	24	23
Potassium	mg/L	3	5.9	5.8	5	5.7	6
Sodium	mg/L	180	31	33	30	31	30

Groundwater Sampling Results for MW-100A

LBWL Erickson Station

Sample Location:		MW-100A	MW-100A	MW-100A	MW-100A	MW-100A	MW-100A	MW-100A	MW-100A	MW-100A	MW-100A	MW-100A
Sample Date:		6/5/2023	7/10/2023	8/14/2023	9/18/2023	10/23/2023	11/27/2023	1/3/2024	2/7/2024	8/7/2024	2/5/2025	8/7/2025
Sample Type:		N	N	N	N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit											
Field Parameters												
pH	su	7.29	7.21	7.31	7.28	7.34	7.08	7.36	7.4	7.22	7.19	7.17
Specific Conductivity	mS/cm	0.75	0.766	0.728	0.719	0.725	0.68	0.593	0.665	0.672	0.65	0.729
Turbidity	NTU	3.52	7.95	0.65	4.21	7.35	3.32	4.45	6.3	6.81	3.31	4.54
Dissolved Oxygen	mg/L	4.15	1.31	1.15	0.98	0.45	0.39	0.41	0.51	1.02	2.42	0.87
Temperature	deg C	14.2	17.2	14.6	16.8	14.9	10.2	11.2	10	14.7	11	16
Oxidation Reduction Potential	mV	60.9	-55.8	-130.6	-98.1	-117.7	-98.9	-125.2	-74.9	-8.9	-40.4	-80.4
Part 115												
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0017 U	< 0.0017 U
Iron	mg/L	0.63	1.25	3.75	3.59	3.04	2.88	2.51	2.59	2.55	2.3	1.8
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0015 U	< 0.0015 U
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.006	< 0.005	< 0.005	0.0028 J	0.0012 J
Appendix III												
Boron	mg/L	0.04	0.05	0.05	0.05	0.05	0.04	0.05	0.05	0.05	< 0.057 U	< 0.057 U
Calcium	mg/L	92.3	95.3	93	94	92.8	92.1	88.6	90.9	92.1	89	89
Chloride	mg/L	10	10	10	10	10	10	10.3	10.6	10.3	10	11
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	0.22	< 1	0.4	0.57	0.57
pH (Field Measure)	su	7.29	7.21	7.31	7.28	7.34	7.08	7.36	7.4	7.22	7.19	7.17
Sulfate	mg/L	35	38	28	22	21	16.2	17.1	21.7	21.2	25	29
Total Dissolved Solids	mg/L	418	434	424	414	416	402	408	410	414	360	340
Appendix IV												
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.009	0.01	0.015	0.017	0.016	0.014	0.015	0.018	0.014	0.012	0.013
Barium	mg/L	0.206	0.202	0.206	0.207	0.201	0.199	0.189	0.2	0.189	0.19	0.19
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00033 J	0.00022 J
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	0.22	< 1	0.4	0.57	0.57
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.017	0.018	0.019	0.02	0.018	0.016	0.014	0.014	0.012	0.011	0.011
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.012	0.012	0.012	0.013	0.011	0.01	0.009	0.008	0.008	0.0069	0.0074
Radium-226	pCi/L	0.869	0.47	1.14 J+	0.32 J+	-0.164 J+	1.09 J+	0.0203	0.57	0.328	0.253	< 0.319 U
Radium-228	pCi/L	1.64	0.716	0.4	0.0819	0.527	0.0586	0.391	0.529	1.86	< 0.468 U	1.11 J+
Radium-226/228	pCi/L	2.5	0.857	1.54	0.402	0.527	1.15	0.411	1.1	2.19	0.611	1.37
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U
05 Other												
Total Suspended Solids	mg/L	< 3	25	7.5	7.4	4.9	8.6	8	5.3	5.6	4.6	5.7
Bicarbonate	mg/L	450	430	460	440	450	410	430	431	440	360	340
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	390	393	396	394	398	398	368	400	388	380	380
Magnesium	mg/L	38.4	40.3	40	39	38.9	39.9	38.2	36	38.3	39	38
Potassium	mg/L	2.35	2.62	2.27	2.23	2.16	2.19	2.18	1.83	1.94	1.9	1.9 J
Sodium	mg/L	12.6	11.8	11.3	11.6	11	11.3	11.1	10.4	11	12	11

Groundwater Sampling Results for MW-100B

LBWL Erickson Station

Sample Location:		MW-100B	MW-100B	MW-100B	MW-100B	MW-100B	MW-100B	MW-100B	MW-100B	MW-100B	MW-100B	MW-100B	MW-100B
Sample Date:		6/5/2023	6/5/2023	7/10/2023	7/10/2023	8/14/2023	8/14/2023	9/18/2023	9/18/2023	10/23/2023	11/27/2023	1/3/2024	2/7/2024
Sample Type:		N	FD	N	FD	N	FD	N	FD	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.34	7.34	7.33	7.33	7.4	7.4	7.34	7.34	7.44	7.4	7.58	7.62
Specific Conductivity	mS/cm	0.799	0.799	0.805	0.805	0.776	0.776	0.745	0.745	0.752	0.713	0.759	0.737
Turbidity	NTU	4.02	4.02	4.15	4.15	4.15	4.15	0.81	0.81	5.16	5.01	0.95	4.18
Dissolved Oxygen	mg/L	0.03	0.03	0.08	0.08	0.19	0.19	0	0	0	0	0	0.02
Temperature	deg C	13.8	13.8	13.9	13.9	14.2	14.2	12.9	12.9	12.1	10.6	11.5	11.1
Oxidation Reduction Potential	mV	-129.9	-129.9	-145.9	-145.9	-176.8	-176.8	-149.9	-149.9	-154.8	-141.7	-157	-132.9
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	1.77	1.79	3.54	3.43	2.89	2.88	2.34	2.36	2.33	2.35	2.43	2.4
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Appendix III													
Boron	mg/L	0.21	0.23	0.23	0.23	0.25	0.25	0.25	0.24	0.26	0.29	0.26	0.26
Calcium	mg/L	108	106	102	101	98	99.2	97.8	100	95.9	94.5	94.2	96.8
Chloride	mg/L	22	22	23	23	25	25	25	25	24	24	23.8	22.3
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.15	< 1	< 1
pH (Field Measure)	su	7.34	7.34	7.33	7.33	7.4	7.4	7.34	7.34	7.44	7.4	7.58	7.62
Sulfate	mg/L	136	135	126	126	116	116	110	110	108	105	112	107
Total Dissolved Solids	mg/L	538	534	534	526	508	510	492	496	490	482	490	496
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	0.009	0.008	0.01	0.01	0.011	0.01	0.011	0.012	0.01	0.01	0.011	0.011
Barium	mg/L	0.164	0.163	0.159	0.156	0.153	0.154	0.154	0.159	0.145	0.147	0.142	0.147
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.15	< 1	< 1
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	0.017	0.018	0.016	0.016	0.017	0.017	0.019	0.017	0.017	0.018	0.018	0.017
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	0.009	0.008	0.011	0.011	0.01	0.01	0.009	0.008	0.009	0.009	0.008	0.009
Radium-226	pCi/L	0.549 UJ	0.295 UJ	0.576 UJ	0.395 UJ	1.31 J+	0.2 J-	0.983 J+	0.188 J	0.732 J+	0.868 J+	0.201	1.03
Radium-228	pCi/L	1.61 J+	1.5 J-	1.52 J+	1.17 J-	0.682	0.96	0.0316	0.832 J+	0.613	0.953	0.293	0.482
Radium-226/228	pCi/L	2.16 J	1.8 J	1.62 J+	1.23 J-	1.99 J+	1.16 J-	1.01	1.02	1.35	1.82	0.494	1.51
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	3	2.3	7.1	6.7	3	3.4	3.7	4.7	4.1	2.5	4.5	4.9
Bicarbonate	mg/L	350	360	440	350	360	360	320	330	330	310	330	339
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hardness (as CaCO3)	mg/L	410	410	397	393	364	364	374	378	364	369	376	367
Magnesium	mg/L	35.7	38	35	34.9	35.8	35.5	32.7	33.5	33.2	32.5	32.3	29.4
Potassium	mg/L	3.34	3.35	3.5	3.54	3.46	3.54	3.51	3.61	3.69	3.76	3.59	3.46
Sodium	mg/L	23.2	23	26.9	27.1	24.8	24.9	25.9	24.8	27.4	30.3	27.1	27.1

Groundwater Sampling Results for MW-100B

LBWL Erickson Station

Sample Location:		MW-100B	MW-100B	MW-100B
Sample Date:		8/7/2024	2/5/2025	8/7/2025
Sample Type:		N	N	N
Gradient:		Downgradient	Downgradient	Downgradient
Sampling Phase:		AM	AM	AM
Fraction:		T	T	T
Constituent	Unit			
Field Parameters				
pH	su	7.41	7.46	7.26
Specific Conductivity	mS/cm	0.73	0.559	0.79
Turbidity	NTU	2.42	4.74	6.42
Dissolved Oxygen	mg/L	0.26	-0.16	0.16
Temperature	deg C	13.6	10.9	14.8
Oxidation Reduction Potential	mV	-118.3	-147.1	-134.5
Part 115				
Copper	mg/L	< 0.005	< 0.0017 U	< 0.0017 U
Iron	mg/L	2.85	2.2	2.3
Nickel	mg/L	< 0.005	< 0.0015 U	0.002
Silver	mg/L	< 0.0005	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	0.0019 J	< 0.00093 U
Appendix III				
Boron	mg/L	0.22	0.3	0.26
Calcium	mg/L	102	89	96
Chloride	mg/L	19	19	18
Fluoride	mg/L	0.3	0.44	0.4
pH (Field Measure)	su	7.41	7.46	7.26
Sulfate	mg/L	118	110	120
Total Dissolved Solids	mg/L	520	440	440
Appendix IV				
Antimony	mg/L	< 0.005	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	0.01	0.0073	0.0087
Barium	mg/L	0.143	0.14	0.14
Beryllium	mg/L	< 0.001	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.000086 U	< 0.000086 U
Fluoride	mg/L	0.3	0.44	0.4
Lead	mg/L	< 0.003	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.018	0.019	0.019
Mercury	mg/L	< 0.0002	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	0.006	0.0065	0.0054
Radium-226	pCi/L	0.532	0.331	0.389
Radium-228	pCi/L	-0.297	< 0.62 U	1.27 J+
Radium-226/228	pCi/L	0.532	< 0.62 U	1.66
Selenium	mg/L	< 0.005	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.00051 U	< 0.00051 U
Other				
Total Suspended Solids	mg/L	2.4	5.6 J	2.7 J
Bicarbonate	mg/L	360	270	280
Carbonate	mg/L	< 10	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	398	350	380
Magnesium	mg/L	35.7	32	34
Potassium	mg/L	3.45	3.6	3.5
Sodium	mg/L	30.8	32	28

Groundwater Sampling Results for MW-100C

LBWL Erickson Station

Sample Location:		MW-100C	MW-100C	MW-100C	MW-100C	MW-100C	MW-100C	MW-100C	MW-100C	MW-100C	MW-100C	MW-100C	MW-100C
Sample Date:		6/5/2023	7/10/2023	8/14/2023	9/18/2023	10/23/2023	10/23/2023	11/27/2023	11/27/2023	1/3/2024	1/3/2024	2/7/2024	2/7/2024
Sample Type:		N	N	N	N	N	FD	N	FD	N	FD	N	FD
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background	Background
Fraction:		T	T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit												
Field Parameters													
pH	su	7.54	7.3	7.34	7.23	7.29	7.29	7.27	7.27	7.43	7.43	7.46	7.46
Specific Conductivity	mS/cm	0.544	0.539	0.537	0.525	0.538	0.538	0.523	0.523	0.533	0.533	0.52	0.52
Turbidity	NTU	4.68	4.02	5.89	0.81	5.15	5.15	4.15	4.15	1.44	1.44	5.78	5.78
Dissolved Oxygen	mg/L	0.02	0.06	0.23	0.01	0	0	0	0	0	0	0	0
Temperature	deg C	13.5	13.7	14	12.8	12.3	12.3	10.2	10.2	11.3	11.3	11.3	11.3
Oxidation Reduction Potential	mV	-95.6	-131.4	-129.7	-113.3	-115.8	-115.8	-107.2	-107.2	-133.5	-133.5	-89.9	-89.9
Part 115													
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Iron	mg/L	0.31	1	0.97	0.76	0.66	0.66	0.64	0.66	0.63	0.61	0.59	0.58
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Appendix III													
Boron	mg/L	1.54	1.68	1.81	1.83	1.76	1.76	1.82	1.84	1.79	1.71	1.87	1.81
Calcium	mg/L	55.9	56.3	55.2	59.8	61.2	61.5	61.1	60.7	60.3	58.4	58.7	59.5
Chloride	mg/L	14	10	8	6	5	5	5.01	5.04	4.8	4.8	4.7	4.8
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	0.13	< 1	< 1	< 1	< 1	< 1
pH (Field Measure)	su	7.54	7.3	7.34	7.23	7.29	7.29	7.27	7.27	7.43	7.43	7.46	7.46
Sulfate	mg/L	27	14	13	8	7	6	5.59	5.66	5.4	4.9	5.8	5.6
Total Dissolved Solids	mg/L	310	300	314	302	302	298	306	302	282	298	300	298
Appendix IV													
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Arsenic	mg/L	< 0.002	< 0.002	< 0.002	0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Barium	mg/L	0.067	0.082	0.082	0.092	0.082	0.083	0.081	0.085	0.073	0.074	0.075	0.073
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	0.13	< 1	< 1	< 1	< 1	< 1
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lithium	mg/L	0.029	0.028	0.031	0.035	0.034	0.032	0.032	0.032	0.033	0.032	0.033	0.032
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Molybdenum	mg/L	0.009	0.009	0.007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Radium-226	pCi/L	0.677	0.52	1.2	0.581 J+	0.542 J	1.07 J+	1.69 J+	0.45 J	0.327 J+	0.158 J-	1.21 J+	0.682 J-
Radium-228	pCi/L	-0.307	0.827	-0.958	0.276	0.836	1.02	-0.293 J-	0.906 J+	0.198	0.211	0.346 J-	2.56 J+
Radium-226/228	pCi/L	0.677	0.977	1.2	0.857	1.38	2.09	1.69	1.36	0.525	0.369	1.56 J-	3.25 J+
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Other													
Total Suspended Solids	mg/L	1.8	1.4	8.9	2.8	< 3	< 3	1.2 J+	< 3 UJ	1.4	1.4	< 3	< 3
Bicarbonate	mg/L	310	100	340	340	340	340	330	340	350	350	350	354
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hardness (as CaCO3)	mg/L	200	204	218	232	232	238	237	237	233	233	238	230
Magnesium	mg/L	18.1	18.1	18.5	19.1	19.5	19.2	19.3	19.7	19.8	20.2	17.3	17.5
Potassium	mg/L	6.4	6.59	6.49	6.67	6.83	6.9	6.56	6.68	6.98	6.99	6.12	6.03
Sodium	mg/L	44.1	38.2	36.4	30.5	29.2	29.1	28.3	28.2	29.5	29	25.7	26

Groundwater Sampling Results for MW-100C

LBWL Erickson Station

Sample Location:		MW-100C	MW-100C	MW-100C	MW-100C	MW-100C	MW-100C
Sample Date:		8/7/2024	8/7/2024	2/5/2025	2/5/2025	8/7/2025	8/7/2025
Sample Type:		N	FD	N	FD	N	FD
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		AM	AM	AM	AM	AM	AM
Fraction:		T	T	T	T	T	T
Constituent	Unit						
Field Parameters							
pH	su	7.39	7.39	7.32	7.32	7.15	7.15
Specific Conductivity	mS/cm	0.512	0.512	0.433	0.433	0.525	0.525
Turbidity	NTU	0.02	0.02	8.44	8.44	7.4	7.4
Dissolved Oxygen	mg/L	0.23	0.23	-0.13	-0.13	0.16	0.16
Temperature	deg C	14.1	14.1	11.7	11.7	14.4	14.4
Oxidation Reduction Potential	mV	-112.5	-112.5	-108.9	-108.9	-90.7	-90.7
Part 115							
Copper	mg/L	< 0.005	< 0.005	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U
Iron	mg/L	0.69	0.71	0.58	0.61	0.59	0.58
Nickel	mg/L	< 0.005	< 0.005	< 0.0015 U	< 0.0015 U	< 0.0015 U	< 0.0015 U
Silver	mg/L	< 0.0005	< 0.0005	< 0.000053 U	< 0.000053 U	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	0.0014 J+	< 0.00093 UJ	0.001 J+	< 0.00093 UJ
Appendix III							
Boron	mg/L	1.91	1.9	1.9	1.9	1.9	1.9
Calcium	mg/L	59.4	59.2	59	60	56	57
Chloride	mg/L	4.6	4.6	2.8	2.7	3	3
Fluoride	mg/L	0.3	0.3	0.43	0.43	0.43	0.5
pH (Field Measure)	su	7.39	7.39	7.32	7.32	7.15	7.15
Sulfate	mg/L	6	6.1	4.2	4.3	3.4	3.5
Total Dissolved Solids	mg/L	298	300	280	270	240	240
Appendix IV							
Antimony	mg/L	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.002	< 0.002	< 0.00075 U	< 0.00075 U	0.0021 J+	0.0017 J-
Barium	mg/L	0.062	0.06	0.062	0.064	0.051	0.052
Beryllium	mg/L	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.000077 U	< 0.000077 U	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.005	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.000086 U	< 0.000086 U	< 0.000086 U	< 0.000086 U
Fluoride	mg/L	0.3	0.3	0.43	0.43	0.43	0.5
Lead	mg/L	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.033	0.031	0.032	0.032	0.032	0.032
Mercury	mg/L	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	< 0.005	< 0.005	0.0011 J	0.0011 J	0.0015 J	0.0015 J
Radium-226	pCi/L	0.377	0.369	0.268	0.248	0.25 J+	< 0.254 UJ
Radium-228	pCi/L	1.2 J+	0.745 J-	< 0.621 UJ	< 0.483 UJ	< 0.603 UJ	0.977 J+
Radium-226/228	pCi/L	1.58 J+	1.11 J-	0.851 J+	< 0.483 UJ	< 0.603 UJ	1.15 J+
Selenium	mg/L	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U	< 0.00051 U	< 0.00051 U
Other							
Total Suspended Solids	mg/L	0.9	1.2	1.2 J	1.1 J	2.8 J	3.1 J
Bicarbonate	mg/L	360	350	290	290	270	270
Carbonate	mg/L	< 10	< 10	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	218	216	230	230	220	220
Magnesium	mg/L	19	18.8	20	20	18	19
Potassium	mg/L	6.85	6.66	6.5	6.6	6.7	6.5
Sodium	mg/L	32.7	33.4	28	28	31	32

Groundwater Sampling Results for MW-100D

LBWL Erickson Station

Sample Location:		MW-100D	MW-100D	MW-100D	MW-100D	MW-100D	MW-100D	MW-100D	MW-100D	MW-100D	MW-100D	MW-100D
Sample Date:		6/5/2023	7/10/2023	8/14/2023	9/18/2023	10/23/2023	11/27/2023	1/3/2024	2/7/2024	8/7/2024	2/5/2025	8/7/2025
Sample Type:		N	N	N	N	N	N	N	N	N	N	N
Gradient:		Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
Sampling Phase:		Background	Background	Background	Background	Background	Background	Background	Background	AM	AM	AM
Fraction:		T	T	T	T	T	T	T	T	T	T	T
Constituent	Unit											
Field Parameters												
pH	su	8.04	7.82	7.9	7.58	7.59	8.01	8.22	7.74	7.21	7.41	6.85
Specific Conductivity	mS/cm	0.575	0.585	0.598	0.597	0.6	0.592	0.597	0.737	0.927	0.662	1.149
Turbidity	NTU	8.78	8.15	7.95	5.58	5.05	4.95	3.08	6.19	6.9	8.62	4.02
Dissolved Oxygen	mg/L	0.01	0.05	0.15	0.02	0.01	0	0	0.02	0.23	-0.18	0.16
Temperature	deg C	13.8	14.3	14.5	13	13	9.9	11.1	11.6	14.2	11.4	14.8
Oxidation Reduction Potential	mV	-73.2	-90.1	-184.8	-201.5	-182.6	-163.3	-209.3	-81	-97.9	-132	-1.2
Part 115												
Copper	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0017 U	< 0.0017 U
Iron	mg/L	0.24	0.64	0.45	0.38	0.15	0.12	0.12	0.13	0.77	0.3	0.24
Nickel	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0015 U	0.0018 J
Silver	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000053 U	< 0.000053 U
Vanadium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00082 U	< 0.00082 U
Zinc	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.002 J	0.0053 J
Appendix III												
Boron	mg/L	3.45	3.23	3.39	3.35	3.22	3.37	3.19	2.84	1.89	2.7	2
Calcium	mg/L	7.77	7.18	6.27	6.21	5.86	5.57	5.26	20.2	56.5	21	68
Chloride	mg/L	< 5	< 5	5	< 5	< 5	4.2	4.2	9.1	13.1	6.2	16
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	0.5	0.49	0.3	0.4	0.85	0.63
pH (Field Measure)	su	8.04	7.82	7.9	7.58	7.59	8.01	8.22	7.74	7.21	7.41	6.85
Sulfate	mg/L	< 5	6	14	11	10	9.17	9.8	31	60.5	33	110
Total Dissolved Solids	mg/L	366	392	414	396	390	388	372	468	584	430	650
Appendix IV												
Antimony	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00057 U	< 0.00057 U
Arsenic	mg/L	< 0.002	< 0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.0016 J	0.0025 J
Barium	mg/L	0.01	0.011	0.01	0.01	0.008	0.008	0.007	0.012	0.019	0.0098	0.015
Beryllium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00027 U	< 0.00027 U
Cadmium	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.000077 U	< 0.000077 U
Chromium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0012 U	< 0.0012 U
Cobalt	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.000086 U	0.00042 J
Fluoride	mg/L	< 1	< 1	< 1	< 1	< 1	0.5	0.49	0.3	0.4	0.85	0.63
Lead	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.00045 U	< 0.00045 U
Lithium	mg/L	0.031	0.016	0.016	0.017	0.017	0.018	0.018	0.02	0.016	0.018	0.018
Mercury	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00013 U	< 0.00013 U
Molybdenum	mg/L	< 0.005	0.01	0.012	0.01	0.009	0.008	0.008	0.007	0.007	0.0056	0.0064
Radium-226	pCi/L	0.509	0.426	1.32	0.535 J+	0.649 J+	0.893 J+	0.0752	0.515	0.153	< 0.122 U	< 0.321 U
Radium-228	pCi/L	4.56	0.921	0.135	0.261	0.947	-0.914	0.402	0.00918	1.22	< 0.593 U	0.658 J+
Radium-226/228	pCi/L	5.06	1.01	1.46	0.796	1.6	0.893	0.477	0.524	1.37	< 0.593 U	0.737
Selenium	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.00089 U	< 0.00089 U
Thallium	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.00051 U	< 0.00051 U
Other												
Total Suspended Solids	mg/L	2.7	2.7	2.2	2	< 3	< 3	< 3	1.8	9.5	2.2 J	2.7 J
Bicarbonate	mg/L	390	390	390	380	390	370	390	443	550	360	480
Carbonate	mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 2.6 U	< 2.6 U
Hardness (as CaCO3)	mg/L	30	32	19	17	19	49	28	69	178	68	220
Magnesium	mg/L	2.03	1.81	1.47	1.46	1.28	1.27	1.27	3.68	9.5	3.9	13
Potassium	mg/L	4.92	4.62	4.22	4.48	4.35	4.03	4.18	4	5.37	4.4	4.1
Sodium	mg/L	147	152	151	158	148	151	134	136	160	150	190

Notes:

ug/l - micrograms per liter.

mg/l = milligrams per liter.

su - standard pH units (pH is a field parameter)

pCi/L = picocuries per liter.

All metals were analyzed as total unless otherwise indicated.

Qualifiers:

U The analyte was analyzed for, but was not detected at, a level greater than or equal to the level of the adjusted reporting limit (RL) for the sample and method.

J The analyte was positively identified, and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain QC criteria were not met, or to the concentration of the analyte being below the RL).

J+ Same as J, and the reported concentration is potentially biased high.

J– Same as J, and the reported concentration is potentially biased low.

UJ The analyte was not detected at a level greater than or equal to the adjusted method detection limit (MDL). However, the reported adjusted MDL is approximate and might be inaccurate or imprecise.

R The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte might or might not be present in the sample.

Appendix D

Lab Reports and Data Validation Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 8/18/2025 11:52:36 AM Revision 3

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-218141-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

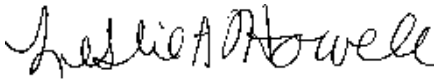
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
8/18/2025 11:52:36 AM
Revision 3

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 14
Tracer Carrier Summary 36
QC Sample Results 37
QC Association Summary 47
Lab Chronicle 53
Certification Summary 60
Chain of Custody 62
Receipt Checklists 76

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
240-218141-1

REVISION

The report being provided is a revision of the original report sent on 2/25/2025. The report (revision 3) is being revised due to Molybdenum added to list of metals..

Report revision history
Revision 2 - 7/26/2025 - Reason - Potassium and Sodium added to reporting list of 200.8 from Cleveland analysis..
Revision 1 - 4/2/2025 - Reason - Trip Blank sample ID should be 11 instead of 01..

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 1/25/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.2°C, 0.2°C, 0.4°C and 0.5°C.

Metals
Method 200.8_CWA: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample: L501182-01 MW17A (240-218141-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Gas Flow Proportional Counter
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218141-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396
EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566
EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218141-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-218141-1	L501182-01 MW17A	Water	01/23/25 09:37	01/25/25 08:00	Michigan
240-218141-2	L501182-02 MW17B	Water	01/23/25 11:46	01/25/25 08:00	Michigan
240-218141-3	L501182-03 MW17C	Water	01/23/25 13:32	01/25/25 08:00	Michigan
240-218141-4	L501182-04 MW17D	Water	01/23/25 14:44	01/25/25 08:00	Michigan
240-218141-5	L501182-05 MW17E	Water	01/23/25 16:01	01/25/25 08:00	Michigan
240-218141-6	L501182-06 MW18A	Water	01/23/25 09:33	01/25/25 08:00	Michigan
240-218141-7	L501182-07 MW18B	Water	01/23/25 11:08	01/25/25 08:00	Michigan
240-218141-8	L501182-08 MW18C	Water	01/23/25 12:43	01/25/25 08:00	Michigan
240-218141-9	L501182-09 MW18D	Water	01/23/25 14:08	01/25/25 08:00	Michigan
240-218141-10	L501182-10 MWT-17A	Water	01/23/25 09:37	01/25/25 08:00	Michigan
240-218141-11	L501182-11 FIELD BLANK	Water	01/23/25 08:20	01/25/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218141-1

Client Sample ID: L501182-01 MW17A — Lab Sample ID: 240-218141-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	4.0		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0017	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.037		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.013		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	240		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	66		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.053		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	48		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	2.5		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.015		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	6.8		1.0	0.13	mg/L	10		200.8	Total/NA
Hardness as calcium carbonate	870		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	250	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1300		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	14		8.0	0.80	mg/L	1		2540D-2020	Total/NA
Chloride	68		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.25		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	670		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L501182-02 MW17B — Lab Sample ID: 240-218141-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.9		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0036	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.054		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00026	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0040		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	140		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	34		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.085		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	92		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	7.9		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.092		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.1		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.098		0.0070	0.00093	mg/L	1		200.8	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L501182-02 MW17B (Continued) — Lab Sample ID: 240-218141-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Hardness as calcium carbonate	490		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	180	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	870		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	5.7		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	67		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.33		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	400		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L501182-03 MW17C — Lab Sample ID: 240-218141-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.2		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0040	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.065		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00023	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0064		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Antimony	0.00072	J	0.0020	0.00057	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	160		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	42		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.056		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	110		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	9.0		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.055		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.2		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.052		0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	570		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	230	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1100		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	7.4		5.9	0.59	mg/L	1		2540D-2020	Total/NA
Chloride	57		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.34		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	530		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L501182-04 MW17D — Lab Sample ID: 240-218141-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.6		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0017	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.043		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L501182-04 MW17D (Continued) — Lab Sample ID: 240-218141-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.00066	J	0.0020	0.00057	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	50		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	17		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.033		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	46		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	9.1		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0052		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.75		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	190		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	280	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	280		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	2.5	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	7.3		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.47		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	8.0		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L501182-05 MW17E — Lab Sample ID: 240-218141-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.3		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.0051		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	5.2		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	1.5		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.023		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	150		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	4.1		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.069	J	0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0012	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Bicarbonate Alkalinity as CaCO3	350	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	370		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.50	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	1.5		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	1.3		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	2.0		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L501182-06 MW18A — Lab Sample ID: 240-218141-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.3		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L501182-06 MW18A (Continued) — Lab Sample ID: 240-218141-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0019	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.067		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	110		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	21		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.11		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	65		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	8.0		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.072		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.8		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	350		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	240	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	560		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	6.6		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	66		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.59		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	150		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L501182-07 MW18B — Lab Sample ID: 240-218141-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.4		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.055		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0077		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	160		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	31		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.13		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	89		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	8.9		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.15		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.6		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0010	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	530		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	160	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	890		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	5.4		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	85		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.33		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L501182-07 MW18B (Continued) — Lab Sample ID: 240-218141-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	410		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L501182-08 MW18C — Lab Sample ID: 240-218141-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.1		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0010	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.054		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0095		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	190		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	47		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.093		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	88		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	4.2		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.11		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	3.6		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0012	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	660		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	180	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1000		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	8.7		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	89		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.23		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	540		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L501182-09 MW18D — Lab Sample ID: 240-218141-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.8		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.023		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0032		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	61		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	13		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.067		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	130		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	5.5		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.052		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L501182-09 MW18D (Continued) — Lab Sample ID: 240-218141-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	1.3		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	200		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	290	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	600		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	2.3	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	36		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	1.0		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L501182-10 MWT-17A — Lab Sample ID: 240-218141-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	4.3		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0014	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.040		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.014		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	250		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	71		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.055		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	51		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	2.6		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.016		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	6.9		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0010	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	920		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	250		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1300		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	16		8.0	0.80	mg/L	1		2540D-2020	Total/NA
Chloride	68		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.25		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	670		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L501182-11 FIELD BLANK — Lab Sample ID: 240-218141-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	0.0017	J	0.0070	0.00093	mg/L	1		200.8	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L501182-01 MW17A

Date Collected: 01/23/25 09:37
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-1

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**4.0**		0.10	0.057	mg/L		01/27/25 14:00	01/29/25 14:39	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		01/27/25 14:00	01/28/25 18:20	1
Arsenic	**0.0017**	**J**	0.0050	0.00075	mg/L		01/27/25 14:00	01/28/25 18:20	1
Barium	**0.037**		0.0050	0.00077	mg/L		01/27/25 14:00	01/28/25 18:20	1
Beryllium	ND		0.0010	0.00027	mg/L		01/27/25 14:00	01/28/25 18:20	1
Cadmium	ND		0.0010	0.000077	mg/L		01/27/25 14:00	01/28/25 18:20	1
Cobalt	ND		0.0010	0.000086	mg/L		01/27/25 14:00	01/28/25 18:20	1
Chromium	ND		0.0050	0.0012	mg/L		01/27/25 14:00	01/28/25 18:20	1
Copper	ND		0.0020	0.0017	mg/L		01/27/25 14:00	01/28/25 18:20	1
Nickel	**0.013**		0.0020	0.0015	mg/L		01/27/25 14:00	01/28/25 18:20	1
Lead	ND		0.0010	0.00045	mg/L		01/27/25 14:00	01/28/25 18:20	1
Antimony	ND		0.0020	0.00057	mg/L		01/27/25 14:00	01/28/25 18:20	1
Selenium	ND		0.0050	0.00089	mg/L		01/27/25 14:00	01/28/25 18:20	1
Thallium	ND		0.0010	0.00051	mg/L		01/27/25 14:00	01/28/25 18:20	1
Vanadium	ND		0.0050	0.00082	mg/L		01/27/25 14:00	01/28/25 18:20	1
Calcium	**240**		1.0	0.25	mg/L		01/27/25 14:00	01/28/25 18:20	1
Magnesium	**66**		1.0	0.061	mg/L		01/27/25 14:00	01/28/25 18:20	1
Lithium	**0.053**		0.0080	0.0034	mg/L		01/27/25 14:00	01/28/25 18:20	1
Sodium	**48**		1.0	0.88	mg/L		01/27/25 14:00	01/28/25 18:20	1
Potassium	**2.5**		1.0	0.22	mg/L		01/27/25 14:00	01/28/25 18:20	1
Molybdenum	**0.015**		0.0050	0.0011	mg/L		01/27/25 14:00	01/28/25 18:20	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**6.8**		1.0	0.13	mg/L		02/04/25 15:37	02/05/25 14:15	10
Zinc	ND		0.070	0.0093	mg/L		02/04/25 15:37	02/05/25 14:15	10

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**870**		33	33	mg/L			02/03/25 10:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		01/27/25 14:00	01/28/25 13:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**250**	**B**	5.0	2.6	mg/L			01/27/25 14:13	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			01/27/25 14:13	1
Total Dissolved Solids (SM 2540 C-2020)	**1300**		20	16	mg/L			01/28/25 09:59	1
Total Suspended Solids (SM 2540D-2020)	**14**		8.0	0.80	mg/L			01/27/25 10:24	1
Chloride (EPA 300.0-1993 R2.1)	**68**		1.0	0.13	mg/L			01/27/25 13:20	1
Fluoride (EPA 300.0-1993 R2.1)	**0.25**		0.050	0.024	mg/L			01/27/25 13:20	1
Sulfate (EPA 300.0-1993 R2.1)	**670**		5.0	1.7	mg/L			01/27/25 14:25	5

Client Sample ID: L501182-01 MW17A

Date Collected: 01/23/25 09:37
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-1

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.171**		0.100	0.102	1.00	0.127	pCi/L	01/29/25 07:58	02/20/25 07:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.9*		*30 - 110*	*01/29/25 07:58*	*02/20/25 07:35*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.171	U	0.351	0.351	1.00	0.613	pCi/L	01/29/25 08:01	02/14/25 11:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.9*		*30 - 110*	*01/29/25 08:01*	*02/14/25 11:51*	*1*
Y Carrier	*78.5*		*30 - 110*	*01/29/25 08:01*	*02/14/25 11:51*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.342	U	0.365	0.366	5.00	0.613	pCi/L		02/24/25 10:58	1

Client Sample ID: L501182-02 MW17B

Date Collected: 01/23/25 11:46
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-2

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.9**		0.10	0.057	mg/L		01/27/25 14:00	01/29/25 15:00	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		01/27/25 14:00	01/28/25 18:23	1
Arsenic	**0.0036**	**J**	0.0050	0.00075	mg/L		01/27/25 14:00	01/28/25 18:23	1
Barium	**0.054**		0.0050	0.00077	mg/L		01/27/25 14:00	01/28/25 18:23	1
Beryllium	ND		0.0010	0.00027	mg/L		01/27/25 14:00	01/28/25 18:23	1
Cadmium	ND		0.0010	0.000077	mg/L		01/27/25 14:00	01/28/25 18:23	1
Cobalt	**0.00026**	**J**	0.0010	0.000086	mg/L		01/27/25 14:00	01/28/25 18:23	1
Chromium	ND		0.0050	0.0012	mg/L		01/27/25 14:00	01/28/25 18:23	1
Copper	ND		0.0020	0.0017	mg/L		01/27/25 14:00	01/28/25 18:23	1
Nickel	**0.0040**		0.0020	0.0015	mg/L		01/27/25 14:00	01/28/25 18:23	1
Lead	ND		0.0010	0.00045	mg/L		01/27/25 14:00	01/28/25 18:23	1
Antimony	ND		0.0020	0.00057	mg/L		01/27/25 14:00	01/28/25 18:23	1
Selenium	ND		0.0050	0.00089	mg/L		01/27/25 14:00	01/28/25 18:23	1
Thallium	ND		0.0010	0.00051	mg/L		01/27/25 14:00	01/28/25 18:23	1
Vanadium	ND		0.0050	0.00082	mg/L		01/27/25 14:00	01/28/25 18:23	1
Calcium	**140**		1.0	0.25	mg/L		01/27/25 14:00	01/28/25 18:23	1
Magnesium	**34**		1.0	0.061	mg/L		01/27/25 14:00	01/28/25 18:23	1
Lithium	**0.085**		0.0080	0.0034	mg/L		01/27/25 14:00	01/28/25 18:23	1
Sodium	**92**		1.0	0.88	mg/L		01/27/25 14:00	01/28/25 18:23	1
Potassium	**7.9**		1.0	0.22	mg/L		01/27/25 14:00	01/28/25 18:23	1
Molybdenum	**0.092**		0.0050	0.0011	mg/L		01/27/25 14:00	01/28/25 18:23	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.1**		0.10	0.013	mg/L		02/04/25 15:37	02/05/25 13:58	1
Zinc	**0.098**		0.0070	0.00093	mg/L		02/04/25 15:37	02/05/25 13:58	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**490**		33	33	mg/L			02/03/25 10:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		01/27/25 14:00	01/28/25 13:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**180**	**B**	5.0	2.6	mg/L			01/27/25 14:20	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			01/27/25 14:20	1
Total Dissolved Solids (SM 2540 C-2020)	**870**		10	7.8	mg/L			01/28/25 09:59	1
Total Suspended Solids (SM 2540D-2020)	**5.7**		4.0	0.40	mg/L			01/27/25 10:24	1
Chloride (EPA 300.0-1993 R2.1)	**67**		1.0	0.13	mg/L			01/27/25 15:30	1
Fluoride (EPA 300.0-1993 R2.1)	**0.33**		0.050	0.024	mg/L			01/27/25 15:30	1
Sulfate (EPA 300.0-1993 R2.1)	**400**		5.0	1.7	mg/L			01/27/25 15:52	5

Client Sample ID: L501182-02 MW17B

Date Collected: 01/23/25 11:46
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-2

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.123	U	0.116	0.117	1.00	0.182	pCi/L	01/29/25 07:58	02/20/25 07:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*70.7*		*30 - 110*	*01/29/25 07:58*	*02/20/25 07:44*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.540	U	0.412	0.415	1.00	0.625	pCi/L	01/29/25 08:01	02/14/25 11:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*70.7*		*30 - 110*	*01/29/25 08:01*	*02/14/25 11:51*	*1*
Y Carrier	*80.0*		*30 - 110*	*01/29/25 08:01*	*02/14/25 11:51*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.662**		0.428	0.431	5.00	0.625	pCi/L		02/24/25 10:58	1

Client Sample ID: L501182-03 MW17C

Date Collected: 01/23/25 13:32
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-3

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.2**		0.10	0.057	mg/L		01/27/25 14:00	01/29/25 15:04	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		01/27/25 14:00	01/28/25 18:31	1
Arsenic	**0.0040**	**J**	0.0050	0.00075	mg/L		01/27/25 14:00	01/28/25 18:31	1
Barium	**0.065**		0.0050	0.00077	mg/L		01/27/25 14:00	01/28/25 18:31	1
Beryllium	ND		0.0010	0.00027	mg/L		01/27/25 14:00	01/28/25 18:31	1
Cadmium	ND		0.0010	0.000077	mg/L		01/27/25 14:00	01/28/25 18:31	1
Cobalt	**0.00023**	**J**	0.0010	0.000086	mg/L		01/27/25 14:00	01/28/25 18:31	1
Chromium	ND		0.0050	0.0012	mg/L		01/27/25 14:00	01/28/25 18:31	1
Copper	ND		0.0020	0.0017	mg/L		01/27/25 14:00	01/28/25 18:31	1
Nickel	**0.0064**		0.0020	0.0015	mg/L		01/27/25 14:00	01/28/25 18:31	1
Lead	ND		0.0010	0.00045	mg/L		01/27/25 14:00	01/28/25 18:31	1
Antimony	**0.00072**	**J**	0.0020	0.00057	mg/L		01/27/25 14:00	01/28/25 18:31	1
Selenium	ND		0.0050	0.00089	mg/L		01/27/25 14:00	01/28/25 18:31	1
Thallium	ND		0.0010	0.00051	mg/L		01/27/25 14:00	01/28/25 18:31	1
Vanadium	ND		0.0050	0.00082	mg/L		01/27/25 14:00	01/28/25 18:31	1
Calcium	**160**		1.0	0.25	mg/L		01/27/25 14:00	01/28/25 18:31	1
Magnesium	**42**		1.0	0.061	mg/L		01/27/25 14:00	01/28/25 18:31	1
Lithium	**0.056**		0.0080	0.0034	mg/L		01/27/25 14:00	01/28/25 18:31	1
Sodium	**110**		1.0	0.88	mg/L		01/27/25 14:00	01/28/25 18:31	1
Potassium	**9.0**		1.0	0.22	mg/L		01/27/25 14:00	01/28/25 18:31	1
Molybdenum	**0.055**		0.0050	0.0011	mg/L		01/27/25 14:00	01/28/25 18:31	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.2**		0.10	0.013	mg/L		02/04/25 15:37	02/05/25 14:00	1
Zinc	**0.052**		0.0070	0.00093	mg/L		02/04/25 15:37	02/05/25 14:00	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**570**		33	33	mg/L			02/03/25 10:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		01/27/25 14:00	01/28/25 14:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**230**	**B**	5.0	2.6	mg/L			01/27/25 14:24	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			01/27/25 14:24	1
Total Dissolved Solids (SM 2540 C-2020)	**1100**		20	16	mg/L			01/28/25 09:59	1
Total Suspended Solids (SM 2540D-2020)	**7.4**		5.9	0.59	mg/L			01/27/25 10:24	1
Chloride (EPA 300.0-1993 R2.1)	**57**		1.0	0.13	mg/L			01/27/25 16:57	1
Fluoride (EPA 300.0-1993 R2.1)	**0.34**		0.050	0.024	mg/L			01/27/25 16:57	1
Sulfate (EPA 300.0-1993 R2.1)	**530**		5.0	1.7	mg/L			01/27/25 17:19	5

Client Sample ID: L501182-03 MW17C

Date Collected: 01/23/25 13:32
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-3

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.267		0.135	0.137	1.00	0.172	pCi/L	01/29/25 07:58	02/20/25 07:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.0*		*30 - 110*	*01/29/25 07:58*	*02/20/25 07:44*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.617		0.389	0.393	1.00	0.564	pCi/L	01/29/25 08:01	02/14/25 11:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.0*		*30 - 110*	*01/29/25 08:01*	*02/14/25 11:51*	*1*
Y Carrier	*83.0*		*30 - 110*	*01/29/25 08:01*	*02/14/25 11:51*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.884		0.412	0.416	5.00	0.564	pCi/L		02/24/25 10:58	1

Client Sample ID: L501182-04 MW17D

Date Collected: 01/23/25 14:44
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-4

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.6**		0.10	0.057	mg/L		01/27/25 14:00	01/29/25 15:08	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		01/27/25 14:00	01/28/25 18:39	1
Arsenic	**0.0017**	**J**	0.0050	0.00075	mg/L		01/27/25 14:00	01/28/25 18:39	1
Barium	**0.043**		0.0050	0.00077	mg/L		01/27/25 14:00	01/28/25 18:39	1
Beryllium	ND		0.0010	0.00027	mg/L		01/27/25 14:00	01/28/25 18:39	1
Cadmium	ND		0.0010	0.000077	mg/L		01/27/25 14:00	01/28/25 18:39	1
Cobalt	ND		0.0010	0.000086	mg/L		01/27/25 14:00	01/28/25 18:39	1
Chromium	ND		0.0050	0.0012	mg/L		01/27/25 14:00	01/28/25 18:39	1
Copper	ND		0.0020	0.0017	mg/L		01/27/25 14:00	01/28/25 18:39	1
Nickel	ND		0.0020	0.0015	mg/L		01/27/25 14:00	01/28/25 18:39	1
Lead	ND		0.0010	0.00045	mg/L		01/27/25 14:00	01/28/25 18:39	1
Antimony	**0.00066**	**J**	0.0020	0.00057	mg/L		01/27/25 14:00	01/28/25 18:39	1
Selenium	ND		0.0050	0.00089	mg/L		01/27/25 14:00	01/28/25 18:39	1
Thallium	ND		0.0010	0.00051	mg/L		01/27/25 14:00	01/28/25 18:39	1
Vanadium	ND		0.0050	0.00082	mg/L		01/27/25 14:00	01/28/25 18:39	1
Calcium	**50**		1.0	0.25	mg/L		01/27/25 14:00	01/28/25 18:39	1
Magnesium	**17**		1.0	0.061	mg/L		01/27/25 14:00	01/28/25 18:39	1
Lithium	**0.033**		0.0080	0.0034	mg/L		01/27/25 14:00	01/28/25 18:39	1
Sodium	**46**		1.0	0.88	mg/L		01/27/25 14:00	01/28/25 18:39	1
Potassium	**9.1**		1.0	0.22	mg/L		01/27/25 14:00	01/28/25 18:39	1
Molybdenum	**0.0052**		0.0050	0.0011	mg/L		01/27/25 14:00	01/28/25 18:39	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.75**		0.10	0.013	mg/L		02/04/25 15:37	02/05/25 14:08	1
Zinc	ND		0.0070	0.00093	mg/L		02/04/25 15:37	02/05/25 14:08	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**190**		33	33	mg/L			02/03/25 10:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		01/27/25 14:00	01/28/25 14:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**280**	**B**	5.0	2.6	mg/L			01/27/25 14:29	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			01/27/25 14:29	1
Total Dissolved Solids (SM 2540 C-2020)	**280**		10	7.8	mg/L			01/28/25 09:59	1
Total Suspended Solids (SM 2540D-2020)	**2.5**	**J**	4.0	0.40	mg/L			01/27/25 10:24	1
Chloride (EPA 300.0-1993 R2.1)	**7.3**		1.0	0.13	mg/L			01/27/25 17:40	1
Fluoride (EPA 300.0-1993 R2.1)	**0.47**		0.050	0.024	mg/L			01/27/25 17:40	1
Sulfate (EPA 300.0-1993 R2.1)	**8.0**		1.0	0.35	mg/L			01/27/25 17:40	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218141-1

Client Sample ID: L501182-04 MW17D

Date Collected: 01/23/25 14:44
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-4

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.470		0.138	0.144	1.00	0.109	pCi/L	01/29/25 07:58	02/20/25 07:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*30 - 110*	*01/29/25 07:58*	*02/20/25 07:44*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.654		0.368	0.373	1.00	0.519	pCi/L	01/29/25 08:01	02/14/25 12:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*30 - 110*	*01/29/25 08:01*	*02/14/25 12:00*	*1*
Y Carrier	*80.0*		*30 - 110*	*01/29/25 08:01*	*02/14/25 12:00*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.12		0.393	0.400	5.00	0.519	pCi/L		02/24/25 10:58	1

Client Sample ID: L501182-05 MW17E

Date Collected: 01/23/25 16:01
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-5

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.3**		0.10	0.057	mg/L		01/27/25 14:00	01/29/25 15:13	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		01/27/25 14:00	01/28/25 18:48	1
Arsenic	ND		0.0050	0.00075	mg/L		01/27/25 14:00	01/28/25 18:48	1
Barium	**0.0051**		0.0050	0.00077	mg/L		01/27/25 14:00	01/28/25 18:48	1
Beryllium	ND		0.0010	0.00027	mg/L		01/27/25 14:00	01/28/25 18:48	1
Cadmium	ND		0.0010	0.000077	mg/L		01/27/25 14:00	01/28/25 18:48	1
Cobalt	ND		0.0010	0.000086	mg/L		01/27/25 14:00	01/28/25 18:48	1
Chromium	ND		0.0050	0.0012	mg/L		01/27/25 14:00	01/28/25 18:48	1
Copper	ND		0.0020	0.0017	mg/L		01/27/25 14:00	01/28/25 18:48	1
Nickel	ND		0.0020	0.0015	mg/L		01/27/25 14:00	01/28/25 18:48	1
Lead	ND		0.0010	0.00045	mg/L		01/27/25 14:00	01/28/25 18:48	1
Antimony	ND		0.0020	0.00057	mg/L		01/27/25 14:00	01/28/25 18:48	1
Selenium	ND		0.0050	0.00089	mg/L		01/27/25 14:00	01/28/25 18:48	1
Thallium	ND		0.0010	0.00051	mg/L		01/27/25 14:00	01/28/25 18:48	1
Vanadium	ND		0.0050	0.00082	mg/L		01/27/25 14:00	01/28/25 18:48	1
Calcium	**5.2**		1.0	0.25	mg/L		01/27/25 14:00	01/28/25 18:48	1
Magnesium	**1.5**		1.0	0.061	mg/L		01/27/25 14:00	01/28/25 18:48	1
Lithium	**0.023**		0.0080	0.0034	mg/L		01/27/25 14:00	01/28/25 18:48	1
Sodium	**150**		1.0	0.88	mg/L		01/27/25 14:00	01/28/25 18:48	1
Potassium	**4.1**		1.0	0.22	mg/L		01/27/25 14:00	01/28/25 18:48	1
Molybdenum	ND		0.0050	0.0011	mg/L		01/27/25 14:00	01/28/25 18:48	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.069**	**J**	0.10	0.013	mg/L		02/04/25 15:37	02/05/25 14:18	1
Zinc	**0.0012**	**J**	0.0070	0.00093	mg/L		02/04/25 15:37	02/05/25 14:18	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			02/03/25 10:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		01/27/25 14:00	01/28/25 14:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**350**	**B**	5.0	2.6	mg/L			01/27/25 14:35	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			01/27/25 14:35	1
Total Dissolved Solids (SM 2540 C-2020)	**370**		10	7.8	mg/L			01/28/25 09:59	1
Total Suspended Solids (SM 2540D-2020)	**0.50**	**J**	4.0	0.40	mg/L			01/27/25 10:24	1
Chloride (EPA 300.0-1993 R2.1)	**1.5**		1.0	0.13	mg/L			01/27/25 18:02	1
Fluoride (EPA 300.0-1993 R2.1)	**1.3**		0.050	0.024	mg/L			01/27/25 18:02	1
Sulfate (EPA 300.0-1993 R2.1)	**2.0**		1.0	0.35	mg/L			01/27/25 18:02	1

Client Sample ID: L501182-05 MW17E

Date Collected: 01/23/25 16:01
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-5

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0624	U	0.0637	0.0639	1.00	0.0982	pCi/L	01/29/25 07:58	02/20/25 07:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.2*		*30 - 110*	*01/29/25 07:58*	*02/20/25 07:44*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.444	U	0.344	0.346	1.00	0.531	pCi/L	01/29/25 08:01	02/14/25 12:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.2*		*30 - 110*	*01/29/25 08:01*	*02/14/25 12:00*	*1*
Y Carrier	*81.9*		*30 - 110*	*01/29/25 08:01*	*02/14/25 12:00*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.507	U	0.350	0.352	5.00	0.531	pCi/L		02/24/25 10:58	1

Client Sample ID: L501182-06 MW18A

Date Collected: 01/23/25 09:33
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-6

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.3**		0.10	0.057	mg/L		01/27/25 14:00	01/29/25 15:17	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		01/27/25 14:00	01/28/25 18:50	1
Arsenic	**0.0019**	**J**	0.0050	0.00075	mg/L		01/27/25 14:00	01/28/25 18:50	1
Barium	**0.067**		0.0050	0.00077	mg/L		01/27/25 14:00	01/28/25 18:50	1
Beryllium	ND		0.0010	0.00027	mg/L		01/27/25 14:00	01/28/25 18:50	1
Cadmium	ND		0.0010	0.000077	mg/L		01/27/25 14:00	01/28/25 18:50	1
Cobalt	ND		0.0010	0.000086	mg/L		01/27/25 14:00	01/28/25 18:50	1
Chromium	ND		0.0050	0.0012	mg/L		01/27/25 14:00	01/28/25 18:50	1
Copper	ND		0.0020	0.0017	mg/L		01/27/25 14:00	01/28/25 18:50	1
Nickel	ND		0.0020	0.0015	mg/L		01/27/25 14:00	01/28/25 18:50	1
Lead	ND		0.0010	0.00045	mg/L		01/27/25 14:00	01/28/25 18:50	1
Antimony	ND		0.0020	0.00057	mg/L		01/27/25 14:00	01/28/25 18:50	1
Selenium	ND		0.0050	0.00089	mg/L		01/27/25 14:00	01/28/25 18:50	1
Thallium	ND		0.0010	0.00051	mg/L		01/27/25 14:00	01/28/25 18:50	1
Vanadium	ND		0.0050	0.00082	mg/L		01/27/25 14:00	01/28/25 18:50	1
Calcium	**110**		1.0	0.25	mg/L		01/27/25 14:00	01/28/25 18:50	1
Magnesium	**21**		1.0	0.061	mg/L		01/27/25 14:00	01/28/25 18:50	1
Lithium	**0.11**		0.0080	0.0034	mg/L		01/27/25 14:00	01/28/25 18:50	1
Sodium	**65**		1.0	0.88	mg/L		01/27/25 14:00	01/28/25 18:50	1
Potassium	**8.0**		1.0	0.22	mg/L		01/27/25 14:00	01/28/25 18:50	1
Molybdenum	**0.072**		0.0050	0.0011	mg/L		01/27/25 14:00	01/28/25 18:50	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.8**		0.10	0.013	mg/L		02/04/25 15:37	02/05/25 14:20	1
Zinc	ND		0.0070	0.00093	mg/L		02/04/25 15:37	02/05/25 14:20	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**350**		33	33	mg/L			02/03/25 10:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		01/27/25 14:00	01/28/25 14:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**240**	**B**	5.0	2.6	mg/L			01/27/25 14:40	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			01/27/25 14:40	1
Total Dissolved Solids (SM 2540 C-2020)	**560**		10	7.8	mg/L			01/28/25 09:59	1
Total Suspended Solids (SM 2540D-2020)	**6.6**		4.0	0.40	mg/L			01/27/25 10:24	1
Chloride (EPA 300.0-1993 R2.1)	**66**		1.0	0.13	mg/L			01/27/25 18:24	1
Fluoride (EPA 300.0-1993 R2.1)	**0.59**		0.050	0.024	mg/L			01/27/25 18:24	1
Sulfate (EPA 300.0-1993 R2.1)	**150**		1.0	0.35	mg/L			01/27/25 18:24	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218141-1

Client Sample ID: L501182-06 MW18A

Date Collected: 01/23/25 09:33
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-6

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0881	U	0.111	0.111	1.00	0.184	pCi/L	01/29/25 07:58	02/20/25 07:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.4*		*30 - 110*	*01/29/25 07:58*	*02/20/25 07:44*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.484	U	0.400	0.403	1.00	0.626	pCi/L	01/29/25 08:01	02/14/25 12:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.4*		*30 - 110*	*01/29/25 08:01*	*02/14/25 12:00*	*1*
Y Carrier	*83.0*		*30 - 110*	*01/29/25 08:01*	*02/14/25 12:00*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.572	U	0.415	0.418	5.00	0.626	pCi/L		02/24/25 10:58	1

Client Sample ID: L501182-07 MW18B

Date Collected: 01/23/25 11:08
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-7

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.4**		0.10	0.057	mg/L		01/27/25 14:00	01/29/25 15:21	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		01/27/25 14:00	01/28/25 18:53	1
Arsenic	ND		0.0050	0.00075	mg/L		01/27/25 14:00	01/28/25 18:53	1
Barium	**0.055**		0.0050	0.00077	mg/L		01/27/25 14:00	01/28/25 18:53	1
Beryllium	ND		0.0010	0.00027	mg/L		01/27/25 14:00	01/28/25 18:53	1
Cadmium	ND		0.0010	0.000077	mg/L		01/27/25 14:00	01/28/25 18:53	1
Cobalt	ND		0.0010	0.000086	mg/L		01/27/25 14:00	01/28/25 18:53	1
Chromium	ND		0.0050	0.0012	mg/L		01/27/25 14:00	01/28/25 18:53	1
Copper	ND		0.0020	0.0017	mg/L		01/27/25 14:00	01/28/25 18:53	1
Nickel	**0.0077**		0.0020	0.0015	mg/L		01/27/25 14:00	01/28/25 18:53	1
Lead	ND		0.0010	0.00045	mg/L		01/27/25 14:00	01/28/25 18:53	1
Antimony	ND		0.0020	0.00057	mg/L		01/27/25 14:00	01/28/25 18:53	1
Selenium	ND		0.0050	0.00089	mg/L		01/27/25 14:00	01/28/25 18:53	1
Thallium	ND		0.0010	0.00051	mg/L		01/27/25 14:00	01/28/25 18:53	1
Vanadium	ND		0.0050	0.00082	mg/L		01/27/25 14:00	01/28/25 18:53	1
Calcium	**160**		1.0	0.25	mg/L		01/27/25 14:00	01/28/25 18:53	1
Magnesium	**31**		1.0	0.061	mg/L		01/27/25 14:00	01/28/25 18:53	1
Lithium	**0.13**		0.0080	0.0034	mg/L		01/27/25 14:00	01/28/25 18:53	1
Sodium	**89**		1.0	0.88	mg/L		01/27/25 14:00	01/28/25 18:53	1
Potassium	**8.9**		1.0	0.22	mg/L		01/27/25 14:00	01/28/25 18:53	1
Molybdenum	**0.15**		0.0050	0.0011	mg/L		01/27/25 14:00	01/28/25 18:53	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.6**		0.10	0.013	mg/L		02/04/25 15:37	02/05/25 14:23	1
Zinc	**0.0010**	**J**	0.0070	0.00093	mg/L		02/04/25 15:37	02/05/25 14:23	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**530**		33	33	mg/L			02/03/25 10:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		01/27/25 14:00	01/28/25 14:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**160**	**B**	5.0	2.6	mg/L			01/27/25 14:46	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			01/27/25 14:46	1
Total Dissolved Solids (SM 2540 C-2020)	**890**		10	7.8	mg/L			01/28/25 09:59	1
Total Suspended Solids (SM 2540D-2020)	**5.4**		4.0	0.40	mg/L			01/27/25 10:24	1
Chloride (EPA 300.0-1993 R2.1)	**85**		1.0	0.13	mg/L			01/27/25 19:07	1
Fluoride (EPA 300.0-1993 R2.1)	**0.33**		0.050	0.024	mg/L			01/27/25 19:07	1
Sulfate (EPA 300.0-1993 R2.1)	**410**		5.0	1.7	mg/L			01/27/25 19:29	5

Client Sample ID: L501182-07 MW18B

Date Collected: 01/23/25 11:08
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-7

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.375		0.130	0.135	1.00	0.119	pCi/L	01/29/25 07:58	02/20/25 07:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.6*		*30 - 110*	*01/29/25 07:58*	*02/20/25 07:44*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.894		0.475	0.483	1.00	0.680	pCi/L	01/29/25 08:01	02/14/25 12:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.6*		*30 - 110*	*01/29/25 08:01*	*02/14/25 12:00*	*1*
Y Carrier	*82.2*		*30 - 110*	*01/29/25 08:01*	*02/14/25 12:00*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.27		0.492	0.502	5.00	0.680	pCi/L		02/24/25 10:58	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218141-1

Client Sample ID: L501182-08 MW18C

Date Collected: 01/23/25 12:43
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-8

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.1**		0.10	0.057	mg/L		01/27/25 14:00	01/29/25 15:25	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		01/27/25 14:00	01/28/25 18:56	1
Arsenic	**0.0010**	**J**	0.0050	0.00075	mg/L		01/27/25 14:00	01/28/25 18:56	1
Barium	**0.054**		0.0050	0.00077	mg/L		01/27/25 14:00	01/28/25 18:56	1
Beryllium	ND		0.0010	0.00027	mg/L		01/27/25 14:00	01/28/25 18:56	1
Cadmium	ND		0.0010	0.000077	mg/L		01/27/25 14:00	01/28/25 18:56	1
Cobalt	ND		0.0010	0.000086	mg/L		01/27/25 14:00	01/28/25 18:56	1
Chromium	ND		0.0050	0.0012	mg/L		01/27/25 14:00	01/28/25 18:56	1
Copper	ND		0.0020	0.0017	mg/L		01/27/25 14:00	01/28/25 18:56	1
Nickel	**0.0095**		0.0020	0.0015	mg/L		01/27/25 14:00	01/28/25 18:56	1
Lead	ND		0.0010	0.00045	mg/L		01/27/25 14:00	01/28/25 18:56	1
Antimony	ND		0.0020	0.00057	mg/L		01/27/25 14:00	01/28/25 18:56	1
Selenium	ND		0.0050	0.00089	mg/L		01/27/25 14:00	01/28/25 18:56	1
Thallium	ND		0.0010	0.00051	mg/L		01/27/25 14:00	01/28/25 18:56	1
Vanadium	ND		0.0050	0.00082	mg/L		01/27/25 14:00	01/28/25 18:56	1
Calcium	**190**		1.0	0.25	mg/L		01/27/25 14:00	01/28/25 18:56	1
Magnesium	**47**		1.0	0.061	mg/L		01/27/25 14:00	01/28/25 18:56	1
Lithium	**0.093**		0.0080	0.0034	mg/L		01/27/25 14:00	01/28/25 18:56	1
Sodium	**88**		1.0	0.88	mg/L		01/27/25 14:00	01/28/25 18:56	1
Potassium	**4.2**		1.0	0.22	mg/L		01/27/25 14:00	01/28/25 18:56	1
Molybdenum	**0.11**		0.0050	0.0011	mg/L		01/27/25 14:00	01/28/25 18:56	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**3.6**		0.10	0.013	mg/L		02/04/25 15:37	02/05/25 14:26	1
Zinc	**0.0012**	**J**	0.0070	0.00093	mg/L		02/04/25 15:37	02/05/25 14:26	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**660**		33	33	mg/L			02/03/25 10:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		01/27/25 14:00	01/28/25 14:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**180**	**B**	5.0	2.6	mg/L			01/27/25 14:55	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			01/27/25 14:55	1
Total Dissolved Solids (SM 2540 C-2020)	**1000**		20	16	mg/L			01/28/25 09:59	1
Total Suspended Solids (SM 2540D-2020)	**8.7**		4.0	0.40	mg/L			01/27/25 10:24	1
Chloride (EPA 300.0-1993 R2.1)	**89**		1.0	0.13	mg/L			01/27/25 19:51	1
Fluoride (EPA 300.0-1993 R2.1)	**0.23**		0.050	0.024	mg/L			01/27/25 19:51	1
Sulfate (EPA 300.0-1993 R2.1)	**540**		5.0	1.7	mg/L			01/27/25 20:12	5

Client Sample ID: L501182-08 MW18C

Date Collected: 01/23/25 12:43
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-8

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.429		0.151	0.156	1.00	0.157	pCi/L	01/29/25 07:58	02/20/25 07:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.7*		*30 - 110*	*01/29/25 07:58*	*02/20/25 07:45*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.01		0.444	0.453	1.00	0.590	pCi/L	01/29/25 08:01	02/14/25 12:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.7*		*30 - 110*	*01/29/25 08:01*	*02/14/25 12:00*	*1*
Y Carrier	*80.7*		*30 - 110*	*01/29/25 08:01*	*02/14/25 12:00*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.44		0.469	0.479	5.00	0.590	pCi/L		02/24/25 10:58	1

Client Sample ID: L501182-09 MW18D

Date Collected: 01/23/25 14:08
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-9

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.8**		0.10	0.057	mg/L		01/27/25 14:00	01/29/25 15:29	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		01/27/25 14:00	01/28/25 18:59	1
Arsenic	ND		0.0050	0.00075	mg/L		01/27/25 14:00	01/28/25 18:59	1
Barium	**0.023**		0.0050	0.00077	mg/L		01/27/25 14:00	01/28/25 18:59	1
Beryllium	ND		0.0010	0.00027	mg/L		01/27/25 14:00	01/28/25 18:59	1
Cadmium	ND		0.0010	0.000077	mg/L		01/27/25 14:00	01/28/25 18:59	1
Cobalt	ND		0.0010	0.000086	mg/L		01/27/25 14:00	01/28/25 18:59	1
Chromium	ND		0.0050	0.0012	mg/L		01/27/25 14:00	01/28/25 18:59	1
Copper	ND		0.0020	0.0017	mg/L		01/27/25 14:00	01/28/25 18:59	1
Nickel	**0.0032**		0.0020	0.0015	mg/L		01/27/25 14:00	01/28/25 18:59	1
Lead	ND		0.0010	0.00045	mg/L		01/27/25 14:00	01/28/25 18:59	1
Antimony	ND		0.0020	0.00057	mg/L		01/27/25 14:00	01/28/25 18:59	1
Selenium	ND		0.0050	0.00089	mg/L		01/27/25 14:00	01/28/25 18:59	1
Thallium	ND		0.0010	0.00051	mg/L		01/27/25 14:00	01/28/25 18:59	1
Vanadium	ND		0.0050	0.00082	mg/L		01/27/25 14:00	01/28/25 18:59	1
Calcium	**61**		1.0	0.25	mg/L		01/27/25 14:00	01/28/25 18:59	1
Magnesium	**13**		1.0	0.061	mg/L		01/27/25 14:00	01/28/25 18:59	1
Lithium	**0.067**		0.0080	0.0034	mg/L		01/27/25 14:00	01/28/25 18:59	1
Sodium	**130**		1.0	0.88	mg/L		01/27/25 14:00	01/28/25 18:59	1
Potassium	**5.5**		1.0	0.22	mg/L		01/27/25 14:00	01/28/25 18:59	1
Molybdenum	**0.052**		0.0050	0.0011	mg/L		01/27/25 14:00	01/28/25 18:59	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.3**		0.10	0.013	mg/L		02/04/25 15:37	02/05/25 14:28	1
Zinc	ND		0.0070	0.00093	mg/L		02/04/25 15:37	02/05/25 14:28	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**200**		33	33	mg/L			02/03/25 10:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		01/27/25 14:00	01/28/25 14:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**290**	**B**	5.0	2.6	mg/L			01/27/25 15:00	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			01/27/25 15:00	1
Total Dissolved Solids (SM 2540 C-2020)	**600**		10	7.8	mg/L			01/28/25 09:59	1
Total Suspended Solids (SM 2540D-2020)	**2.3**	**J**	4.0	0.40	mg/L			01/27/25 10:24	1
Chloride (EPA 300.0-1993 R2.1)	**36**		1.0	0.13	mg/L			01/27/25 21:17	1
Fluoride (EPA 300.0-1993 R2.1)	**1.0**		0.050	0.024	mg/L			01/27/25 21:17	1
Sulfate (EPA 300.0-1993 R2.1)	**190**		1.0	0.35	mg/L			01/27/25 21:17	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218141-1

Client Sample ID: L501182-09 MW18D

Date Collected: 01/23/25 14:08
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-9

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.260		0.116	0.118	1.00	0.125	pCi/L	01/29/25 07:58	02/20/25 07:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.3*		*30 - 110*	*01/29/25 07:58*	*02/20/25 07:45*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.739		0.445	0.450	1.00	0.650	pCi/L	01/29/25 08:01	02/14/25 12:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.3*		*30 - 110*	*01/29/25 08:01*	*02/14/25 12:00*	*1*
Y Carrier	*82.6*		*30 - 110*	*01/29/25 08:01*	*02/14/25 12:00*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.999		0.460	0.465	5.00	0.650	pCi/L		02/24/25 10:58	1

Client Sample ID: L501182-10 MWT-17A

Date Collected: 01/23/25 09:37
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-10

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**4.3**		0.10	0.057	mg/L		01/27/25 14:00	01/29/25 15:46	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		01/27/25 14:00	01/28/25 19:04	1
Arsenic	**0.0014**	**J**	0.0050	0.00075	mg/L		01/27/25 14:00	01/28/25 19:04	1
Barium	**0.040**		0.0050	0.00077	mg/L		01/27/25 14:00	01/28/25 19:04	1
Beryllium	ND		0.0010	0.00027	mg/L		01/27/25 14:00	01/28/25 19:04	1
Cadmium	ND		0.0010	0.000077	mg/L		01/27/25 14:00	01/28/25 19:04	1
Cobalt	ND		0.0010	0.000086	mg/L		01/27/25 14:00	01/28/25 19:04	1
Chromium	ND		0.0050	0.0012	mg/L		01/27/25 14:00	01/28/25 19:04	1
Copper	ND		0.0020	0.0017	mg/L		01/27/25 14:00	01/28/25 19:04	1
Nickel	**0.014**		0.0020	0.0015	mg/L		01/27/25 14:00	01/28/25 19:04	1
Lead	ND		0.0010	0.00045	mg/L		01/27/25 14:00	01/28/25 19:04	1
Antimony	ND		0.0020	0.00057	mg/L		01/27/25 14:00	01/28/25 19:04	1
Selenium	ND		0.0050	0.00089	mg/L		01/27/25 14:00	01/28/25 19:04	1
Thallium	ND		0.0010	0.00051	mg/L		01/27/25 14:00	01/28/25 19:04	1
Vanadium	ND		0.0050	0.00082	mg/L		01/27/25 14:00	01/28/25 19:04	1
Calcium	**250**		1.0	0.25	mg/L		01/27/25 14:00	01/28/25 19:04	1
Magnesium	**71**		1.0	0.061	mg/L		01/27/25 14:00	01/28/25 19:04	1
Lithium	**0.055**		0.0080	0.0034	mg/L		01/27/25 14:00	01/28/25 19:04	1
Sodium	**51**		1.0	0.88	mg/L		01/27/25 14:00	01/28/25 19:04	1
Potassium	**2.6**		1.0	0.22	mg/L		01/27/25 14:00	01/28/25 19:04	1
Molybdenum	**0.016**		0.0050	0.0011	mg/L		01/27/25 14:00	01/28/25 19:04	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**6.9**		0.10	0.013	mg/L		02/04/25 15:37	02/05/25 14:31	1
Zinc	**0.0010**	**J**	0.0070	0.00093	mg/L		02/04/25 15:37	02/05/25 14:31	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**920**		33	33	mg/L			02/03/25 10:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		01/27/25 14:00	01/28/25 14:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**250**		5.0	2.6	mg/L			01/30/25 20:12	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			01/30/25 20:12	1
Total Dissolved Solids (SM 2540 C-2020)	**1300**		20	16	mg/L			01/28/25 09:59	1
Total Suspended Solids (SM 2540D-2020)	**16**		8.0	0.80	mg/L			01/27/25 10:24	1
Chloride (EPA 300.0-1993 R2.1)	**68**		1.0	0.13	mg/L			01/27/25 22:01	1
Fluoride (EPA 300.0-1993 R2.1)	**0.25**		0.050	0.024	mg/L			01/27/25 22:01	1
Sulfate (EPA 300.0-1993 R2.1)	**670**		5.0	1.7	mg/L			01/27/25 22:22	5

Client Sample ID: L501182-10 MWT-17A

Date Collected: 01/23/25 09:37
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-10

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.162		0.109	0.110	1.00	0.151	pCi/L	01/29/25 07:58	02/20/25 07:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.3*		*30 - 110*	*01/29/25 07:58*	*02/20/25 07:45*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.790		0.468	0.474	1.00	0.680	pCi/L	01/29/25 08:01	02/14/25 12:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.3*		*30 - 110*	*01/29/25 08:01*	*02/14/25 12:01*	*1*
Y Carrier	*77.8*		*30 - 110*	*01/29/25 08:01*	*02/14/25 12:01*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.953		0.481	0.487	5.00	0.680	pCi/L		02/24/25 10:58	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218141-1

Client Sample ID: L501182-11 FIELD BLANK

Date Collected: 01/23/25 08:20
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-11

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		01/27/25 14:00	01/29/25 15:34	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		01/27/25 14:00	01/28/25 19:01	1
Arsenic	ND		0.0050	0.00075	mg/L		01/27/25 14:00	01/28/25 19:01	1
Barium	ND		0.0050	0.00077	mg/L		01/27/25 14:00	01/28/25 19:01	1
Beryllium	ND		0.0010	0.00027	mg/L		01/27/25 14:00	01/28/25 19:01	1
Cadmium	ND		0.0010	0.000077	mg/L		01/27/25 14:00	01/28/25 19:01	1
Cobalt	ND		0.0010	0.000086	mg/L		01/27/25 14:00	01/28/25 19:01	1
Chromium	ND		0.0050	0.0012	mg/L		01/27/25 14:00	01/28/25 19:01	1
Copper	ND		0.0020	0.0017	mg/L		01/27/25 14:00	01/28/25 19:01	1
Nickel	ND		0.0020	0.0015	mg/L		01/27/25 14:00	01/28/25 19:01	1
Lead	ND		0.0010	0.00045	mg/L		01/27/25 14:00	01/28/25 19:01	1
Antimony	ND		0.0020	0.00057	mg/L		01/27/25 14:00	01/28/25 19:01	1
Selenium	ND		0.0050	0.00089	mg/L		01/27/25 14:00	01/28/25 19:01	1
Thallium	ND		0.0010	0.00051	mg/L		01/27/25 14:00	01/28/25 19:01	1
Vanadium	ND		0.0050	0.00082	mg/L		01/27/25 14:00	01/28/25 19:01	1
Calcium	ND		1.0	0.25	mg/L		01/27/25 14:00	01/28/25 19:01	1
Magnesium	ND		1.0	0.061	mg/L		01/27/25 14:00	01/28/25 19:01	1
Lithium	ND		0.0080	0.0034	mg/L		01/27/25 14:00	01/28/25 19:01	1
Sodium	ND		1.0	0.88	mg/L		01/27/25 14:00	01/28/25 19:01	1
Potassium	ND		1.0	0.22	mg/L		01/27/25 14:00	01/28/25 19:01	1
Molybdenum	ND		0.0050	0.0011	mg/L		01/27/25 14:00	01/28/25 19:01	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		02/04/25 15:37	02/05/25 14:33	1
Zinc	**0.0017**	**J**	0.0070	0.00093	mg/L		02/04/25 15:37	02/05/25 14:33	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			02/03/25 10:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		01/27/25 14:00	01/28/25 14:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			01/28/25 14:03	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			01/28/25 14:03	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			01/28/25 09:59	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			01/27/25 10:24	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			01/27/25 22:44	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			01/27/25 22:44	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			01/27/25 22:44	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218141-1

Client Sample ID: L501182-11 FIELD BLANK

Date Collected: 01/23/25 08:20
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-11

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0148	U	0.0910	0.0910	1.00	0.182	pCi/L	01/29/25 07:58	02/20/25 07:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.4*		*30 - 110*	*01/29/25 07:58*	*02/20/25 07:45*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0279	U	0.271	0.271	1.00	0.508	pCi/L	01/29/25 08:01	02/14/25 12:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.4*		*30 - 110*	*01/29/25 08:01*	*02/14/25 12:01*	*1*
Y Carrier	*85.2*		*30 - 110*	*01/29/25 08:01*	*02/14/25 12:01*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.0279	U	0.286	0.286	5.00	0.508	pCi/L		02/24/25 10:58	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218141-1

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
Lab Sample ID	Client Sample ID	Ba (30-110)
240-218141-1	L501182-01 MW17A	80.9
240-218141-2	L501182-02 MW17B	70.7
240-218141-3	L501182-03 MW17C	76.0
240-218141-3 DU	L501182-03 MW17C	85.5
240-218141-4	L501182-04 MW17D	88.3
240-218141-5	L501182-05 MW17E	96.2
240-218141-6	L501182-06 MW18A	82.4
240-218141-7	L501182-07 MW18B	80.6
240-218141-8	L501182-08 MW18C	85.7
240-218141-9	L501182-09 MW18D	78.3
240-218141-10	L501182-10 MWT-17A	76.3
240-218141-11	L501182-11 FIELD BLANK	84.4
LCS 160-700312/2-A	Lab Control Sample	96.7
MB 160-700312/1-A	Method Blank	90.8

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-218141-1	L501182-01 MW17A	80.9	78.5
240-218141-2	L501182-02 MW17B	70.7	80.0
240-218141-3	L501182-03 MW17C	76.0	83.0
240-218141-3 DU	L501182-03 MW17C	85.5	84.1
240-218141-4	L501182-04 MW17D	88.3	80.0
240-218141-5	L501182-05 MW17E	96.2	81.9
240-218141-6	L501182-06 MW18A	82.4	83.0
240-218141-7	L501182-07 MW18B	80.6	82.2
240-218141-8	L501182-08 MW18C	85.7	80.7
240-218141-9	L501182-09 MW18D	78.3	82.6
240-218141-10	L501182-10 MWT-17A	76.3	77.8
240-218141-11	L501182-11 FIELD BLANK	84.4	85.2
LCS 160-700314/2-A	Lab Control Sample	96.7	84.1
MB 160-700314/1-A	Method Blank	90.8	81.9

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-642669/1-A
Matrix: Water
Analysis Batch: 643012

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 642669

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		01/27/25 14:00	01/29/25 14:14	1

Lab Sample ID: LCS 240-642669/2-A
Matrix: Water
Analysis Batch: 643012

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 642669

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.03		mg/L		103	85 - 115

Lab Sample ID: 240-218141-1 MS
Matrix: Water
Analysis Batch: 643012

Client Sample ID: L501182-01 MW17A
Prep Type: Total Recoverable
Prep Batch: 642669

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	4.0		1.00	5.21		mg/L		122	70 - 130

Lab Sample ID: 240-218141-1 MSD
Matrix: Water
Analysis Batch: 643012

Client Sample ID: L501182-01 MW17A
Prep Type: Total Recoverable
Prep Batch: 642669

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	4.0		1.00	5.29		mg/L		130	70 - 130	1	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-4800/25-A
Matrix: Water
Analysis Batch: 4835

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4800

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		02/04/25 15:37	02/05/25 13:00	1
Zinc	ND		0.0070	0.00093	mg/L		02/04/25 15:37	02/05/25 13:00	1

Lab Sample ID: LCS 350-4800/26-A
Matrix: Water
Analysis Batch: 4835

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4800

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	20.0		mg/L		100	85 - 115
Zinc	1.00	0.991		mg/L		99	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-642669/1-A
Matrix: Water
Analysis Batch: 642849

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 642669

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		01/27/25 14:00	01/28/25 18:14	1
Arsenic	ND		0.0050	0.00075	mg/L		01/27/25 14:00	01/28/25 18:14	1

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-642669/1-A
Matrix: Water
Analysis Batch: 642849

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 642669

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.0050	0.00077	mg/L		01/27/25 14:00	01/28/25 18:14	1
Beryllium	ND		0.0010	0.00027	mg/L		01/27/25 14:00	01/28/25 18:14	1
Cadmium	ND		0.0010	0.000077	mg/L		01/27/25 14:00	01/28/25 18:14	1
Cobalt	ND		0.0010	0.000086	mg/L		01/27/25 14:00	01/28/25 18:14	1
Chromium	ND		0.0050	0.0012	mg/L		01/27/25 14:00	01/28/25 18:14	1
Copper	ND		0.0020	0.0017	mg/L		01/27/25 14:00	01/28/25 18:14	1
Nickel	ND		0.0020	0.0015	mg/L		01/27/25 14:00	01/28/25 18:14	1
Lead	ND		0.0010	0.00045	mg/L		01/27/25 14:00	01/28/25 18:14	1
Antimony	ND		0.0020	0.00057	mg/L		01/27/25 14:00	01/28/25 18:14	1
Selenium	ND		0.0050	0.00089	mg/L		01/27/25 14:00	01/28/25 18:14	1
Thallium	ND		0.0010	0.00051	mg/L		01/27/25 14:00	01/28/25 18:14	1
Vanadium	ND		0.0050	0.00082	mg/L		01/27/25 14:00	01/28/25 18:14	1
Calcium	ND		1.0	0.25	mg/L		01/27/25 14:00	01/28/25 18:14	1
Magnesium	ND		1.0	0.061	mg/L		01/27/25 14:00	01/28/25 18:14	1
Lithium	ND		0.0080	0.0034	mg/L		01/27/25 14:00	01/28/25 18:14	1
Sodium	ND		1.0	0.88	mg/L		01/27/25 14:00	01/28/25 18:14	1
Potassium	ND		1.0	0.22	mg/L		01/27/25 14:00	01/28/25 18:14	1
Molybdenum	ND		0.0050	0.0011	mg/L		01/27/25 14:00	01/28/25 18:14	1

Lab Sample ID: LCS 240-642669/3-A
Matrix: Water
Analysis Batch: 642849

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 642669

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.101		mg/L		101	85 - 115
Arsenic	1.00	0.995		mg/L		100	85 - 115
Barium	1.00	0.991		mg/L		99	85 - 115
Beryllium	0.500	0.512		mg/L		102	85 - 115
Cadmium	0.500	0.483		mg/L		97	85 - 115
Cobalt	0.500	0.514		mg/L		103	85 - 115
Chromium	0.500	0.503		mg/L		101	85 - 115
Copper	0.500	0.492		mg/L		98	85 - 115
Nickel	0.500	0.498		mg/L		100	85 - 115
Lead	0.500	0.535		mg/L		107	85 - 115
Antimony	0.100	0.0994		mg/L		99	85 - 115
Selenium	1.00	0.977		mg/L		98	85 - 115
Thallium	1.00	1.10		mg/L		110	85 - 115
Vanadium	0.500	0.509		mg/L		102	85 - 115
Calcium	25.0	25.2		mg/L		101	85 - 115
Magnesium	25.0	25.7		mg/L		103	85 - 115
Lithium	0.500	0.510		mg/L		102	85 - 115
Sodium	25.0	25.4		mg/L		102	85 - 115
Potassium	25.0	26.2		mg/L		105	85 - 115
Molybdenum	0.500	0.494		mg/L		99	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-218141-2 MS
Matrix: Water
Analysis Batch: 642849

Client Sample ID: L501182-02 MW17B
Prep Type: Total Recoverable
Prep Batch: 642669

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.100		mg/L		100	70 - 130
Arsenic	0.0036	J	1.00	0.995		mg/L		99	70 - 130
Barium	0.054		1.00	1.02		mg/L		97	70 - 130
Beryllium	ND		0.500	0.487		mg/L		97	70 - 130
Cadmium	ND		0.500	0.468		mg/L		94	70 - 130
Cobalt	0.00026	J	0.500	0.502		mg/L		100	70 - 130
Chromium	ND		0.500	0.493		mg/L		99	70 - 130
Copper	ND		0.500	0.481		mg/L		96	70 - 130
Nickel	0.0040		0.500	0.491		mg/L		97	70 - 130
Lead	ND		0.500	0.522		mg/L		104	70 - 130
Antimony	ND		0.100	0.0997		mg/L		100	70 - 130
Selenium	ND		1.00	0.952		mg/L		95	70 - 130
Thallium	ND		1.00	1.09		mg/L		109	70 - 130
Vanadium	ND		0.500	0.501		mg/L		100	70 - 130
Calcium	140		25.0	157	4	mg/L		65	70 - 130
Magnesium	34		25.0	55.9		mg/L		90	70 - 130
Lithium	0.085		0.500	0.577		mg/L		98	70 - 130
Sodium	92		25.0	112		mg/L		79	70 - 130
Potassium	7.9		25.0	32.7		mg/L		99	70 - 130
Molybdenum	0.092		0.500	0.580		mg/L		98	70 - 130

Lab Sample ID: 240-218141-2 MSD
Matrix: Water
Analysis Batch: 642849

Client Sample ID: L501182-02 MW17B
Prep Type: Total Recoverable
Prep Batch: 642669

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.102		mg/L		102	70 - 130	2	20
Arsenic	0.0036	J	1.00	1.03		mg/L		103	70 - 130	4	20
Barium	0.054		1.00	1.06		mg/L		100	70 - 130	3	20
Beryllium	ND		0.500	0.516		mg/L		103	70 - 130	6	20
Cadmium	ND		0.500	0.481		mg/L		96	70 - 130	3	20
Cobalt	0.00026	J	0.500	0.518		mg/L		104	70 - 130	3	20
Chromium	ND		0.500	0.508		mg/L		102	70 - 130	3	20
Copper	ND		0.500	0.505		mg/L		101	70 - 130	5	20
Nickel	0.0040		0.500	0.503		mg/L		100	70 - 130	3	20
Lead	ND		0.500	0.545		mg/L		109	70 - 130	4	20
Antimony	ND		0.100	0.100		mg/L		100	70 - 130	0	20
Selenium	ND		1.00	0.983		mg/L		98	70 - 130	3	20
Thallium	ND		1.00	1.10		mg/L		110	70 - 130	1	20
Vanadium	ND		0.500	0.517		mg/L		103	70 - 130	3	20
Calcium	140		25.0	163	4	mg/L		88	70 - 130	4	20
Magnesium	34		25.0	57.5		mg/L		96	70 - 130	3	20
Lithium	0.085		0.500	0.612		mg/L		105	70 - 130	6	20
Sodium	92		25.0	115		mg/L		90	70 - 130	2	20
Potassium	7.9		25.0	33.6		mg/L		103	70 - 130	3	20
Molybdenum	0.092		0.500	0.595		mg/L		101	70 - 130	2	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-218141-3 MS
Matrix: Water
Analysis Batch: 642849

Client Sample ID: L501182-03 MW17C
Prep Type: Total Recoverable
Prep Batch: 642669

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.104		mg/L		104	70 - 130
Arsenic	0.0040	J	1.00	1.04		mg/L		104	70 - 130
Barium	0.065		1.00	1.09		mg/L		102	70 - 130
Beryllium	ND		0.500	0.522		mg/L		104	70 - 130
Cadmium	ND		0.500	0.490		mg/L		98	70 - 130
Cobalt	0.00023	J	0.500	0.526		mg/L		105	70 - 130
Chromium	ND		0.500	0.521		mg/L		104	70 - 130
Copper	ND		0.500	0.503		mg/L		101	70 - 130
Nickel	0.0064		0.500	0.512		mg/L		101	70 - 130
Lead	ND		0.500	0.549		mg/L		110	70 - 130
Antimony	0.00072	J	0.100	0.104		mg/L		103	70 - 130
Selenium	ND		1.00	0.994		mg/L		99	70 - 130
Thallium	ND		1.00	1.13		mg/L		113	70 - 130
Vanadium	ND		0.500	0.529		mg/L		106	70 - 130
Calcium	160		25.0	184	4	mg/L		104	70 - 130
Magnesium	42		25.0	68.1		mg/L		104	70 - 130
Lithium	0.056		0.500	0.581		mg/L		105	70 - 130
Sodium	110		25.0	138	4	mg/L		106	70 - 130
Potassium	9.0		25.0	35.6		mg/L		106	70 - 130
Molybdenum	0.055		0.500	0.571		mg/L		103	70 - 130

Lab Sample ID: 240-218141-3 MSD
Matrix: Water
Analysis Batch: 642849

Client Sample ID: L501182-03 MW17C
Prep Type: Total Recoverable
Prep Batch: 642669

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.0957		mg/L		96	70 - 130	8	20
Arsenic	0.0040	J	1.00	0.961		mg/L		96	70 - 130	8	20
Barium	0.065		1.00	1.01		mg/L		94	70 - 130	7	20
Beryllium	ND		0.500	0.483		mg/L		97	70 - 130	8	20
Cadmium	ND		0.500	0.452		mg/L		90	70 - 130	8	20
Cobalt	0.00023	J	0.500	0.484		mg/L		97	70 - 130	8	20
Chromium	ND		0.500	0.477		mg/L		95	70 - 130	9	20
Copper	ND		0.500	0.466		mg/L		93	70 - 130	8	20
Nickel	0.0064		0.500	0.473		mg/L		93	70 - 130	8	20
Lead	ND		0.500	0.508		mg/L		102	70 - 130	8	20
Antimony	0.00072	J	0.100	0.0953		mg/L		95	70 - 130	9	20
Selenium	ND		1.00	0.919		mg/L		92	70 - 130	8	20
Thallium	ND		1.00	1.06		mg/L		106	70 - 130	6	20
Vanadium	ND		0.500	0.484		mg/L		97	70 - 130	9	20
Calcium	160		25.0	171	4	mg/L		51	70 - 130	7	20
Magnesium	42		25.0	62.6		mg/L		82	70 - 130	8	20
Lithium	0.056		0.500	0.533		mg/L		95	70 - 130	9	20
Sodium	110		25.0	128	4	mg/L		67	70 - 130	7	20
Potassium	9.0		25.0	31.9		mg/L		92	70 - 130	11	20
Molybdenum	0.055		0.500	0.526		mg/L		94	70 - 130	8	20

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-642676/1-A
Matrix: Water
Analysis Batch: 642857

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 642676

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		01/27/25 14:00	01/28/25 13:47	1

Lab Sample ID: LCS 240-642676/2-A
Matrix: Water
Analysis Batch: 642857

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 642676

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00466		mg/L		93	85 - 115

Lab Sample ID: 240-218141-1 MS
Matrix: Water
Analysis Batch: 642857

Client Sample ID: L501182-01 MW17A
Prep Type: Total/NA
Prep Batch: 642676

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00100	0.000945		mg/L		94	70 - 130

Lab Sample ID: 240-218141-1 MSD
Matrix: Water
Analysis Batch: 642857

Client Sample ID: L501182-01 MW17A
Prep Type: Total/NA
Prep Batch: 642676

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.000928		mg/L		93	70 - 130	2	20

Lab Sample ID: 240-218141-2 MS
Matrix: Water
Analysis Batch: 642857

Client Sample ID: L501182-02 MW17B
Prep Type: Total/NA
Prep Batch: 642676

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00100	0.000943		mg/L		94	70 - 130

Lab Sample ID: 240-218141-2 MSD
Matrix: Water
Analysis Batch: 642857

Client Sample ID: L501182-02 MW17B
Prep Type: Total/NA
Prep Batch: 642676

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.000924		mg/L		92	70 - 130	2	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-642804/30
Matrix: Water
Analysis Batch: 642804

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	3.53	J	5.0	2.6	mg/L			01/27/25 13:48	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			01/27/25 13:48	1

Method: 2320 B-2021 - Alkalinity (Continued)

Lab Sample ID: 240-218141-7 DU
Matrix: Water
Analysis Batch: 642804

Client Sample ID: L501182-07 MW18B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	160	B		164		mg/L				0.6	20
Carbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20

Lab Sample ID: MB 240-642865/4
Matrix: Water
Analysis Batch: 642865

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			01/28/25 12:18	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			01/28/25 12:18	1

Lab Sample ID: MB 240-643198/4
Matrix: Water
Analysis Batch: 643198

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			01/30/25 20:08	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			01/30/25 20:08	1

Lab Sample ID: 240-218141-10 DU
Matrix: Water
Analysis Batch: 643198

Client Sample ID: L501182-10 MWT-17A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	250			248		mg/L				0.3	20
Carbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-642800/1
Matrix: Water
Analysis Batch: 642800

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			01/28/25 09:59	1

Lab Sample ID: LCS 240-642800/2
Matrix: Water
Analysis Batch: 642800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			242	217		mg/L		90	80 - 120		

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-642672/1
Matrix: Water
Analysis Batch: 642672

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			01/27/25 10:24	1

Lab Sample ID: LCS 240-642672/2
Matrix: Water
Analysis Batch: 642672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	72.7	65.0		mg/L		89	64 - 120

Lab Sample ID: 240-218141-1 DU
Matrix: Water
Analysis Batch: 642672

Client Sample ID: L501182-01 MW17A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	14		14.8		mg/L		3	10

Lab Sample ID: 240-218141-10 DU
Matrix: Water
Analysis Batch: 642672

Client Sample ID: L501182-10 MWT-17A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	16		15.4		mg/L		3	10

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-642682/3
Matrix: Water
Analysis Batch: 642682

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			01/27/25 12:37	1
Fluoride	ND		0.050	0.024	mg/L			01/27/25 12:37	1
Sulfate	ND		1.0	0.35	mg/L			01/27/25 12:37	1

Lab Sample ID: LCS 240-642682/4
Matrix: Water
Analysis Batch: 642682

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.4		mg/L		99	90 - 110
Fluoride	2.50	2.70		mg/L		108	90 - 110
Sulfate	50.0	51.3		mg/L		103	90 - 110

Lab Sample ID: 240-218141-1 MS
Matrix: Water
Analysis Batch: 642682

Client Sample ID: L501182-01 MW17A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	68		50.0	116		mg/L		96	80 - 120
Fluoride	0.25		2.50	2.86		mg/L		104	80 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-218141-1 MS
Matrix: Water
Analysis Batch: 642682

Client Sample ID: L501182-01 MW17A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	670		250	895		mg/L		92	80 - 120

Lab Sample ID: 240-218141-1 MSD
Matrix: Water
Analysis Batch: 642682

Client Sample ID: L501182-01 MW17A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	68		50.0	117		mg/L		98	80 - 120	1	15
Fluoride	0.25		2.50	2.88		mg/L		105	80 - 120	1	15

Lab Sample ID: 240-218141-1 MSD
Matrix: Water
Analysis Batch: 642682

Client Sample ID: L501182-01 MW17A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	670		250	895		mg/L		92	80 - 120	0	15

Lab Sample ID: 240-218141-11 MS
Matrix: Water
Analysis Batch: 642682

Client Sample ID: L501182-11 FIELD BLANK
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		50.0	51.4		mg/L		103	80 - 120
Fluoride	ND		2.50	2.72		mg/L		109	80 - 120
Sulfate	ND		50.0	52.5		mg/L		105	80 - 120

Lab Sample ID: 240-218141-11 MSD
Matrix: Water
Analysis Batch: 642682

Client Sample ID: L501182-11 FIELD BLANK
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		50.0	51.8		mg/L		104	80 - 120	1	15
Fluoride	ND		2.50	2.74		mg/L		110	80 - 120	1	15
Sulfate	ND		50.0	52.7		mg/L		105	80 - 120	0	15

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-700312/1-A
Matrix: Water
Analysis Batch: 703901

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 700312

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.02623	U	0.0601	0.0601	1.00	0.112	pCi/L	01/29/25 07:58	02/20/25 07:35	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.8*		*30 - 110*	*01/29/25 07:58*	*02/20/25 07:35*	*1*

Method: 903.0 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-700312/2-A
Matrix: Water
Analysis Batch: 703901

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 700312

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.58	8.008		0.888	1.00	0.122	pCi/L	84	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*96.7*		*30 - 110*

Lab Sample ID: 240-218141-3 DU
Matrix: Water
Analysis Batch: 703902

Client Sample ID: L501182-03 MW17C
Prep Type: Total/NA
Prep Batch: 700312

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.267			0.2119		0.104	1.00	0.112	pCi/L			0.23	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*85.5*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-700314/1-A
Matrix: Water
Analysis Batch: 703039

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 700314

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5429		0.358	0.361	1.00	0.531	pCi/L	01/29/25 08:01	02/14/25 11:49	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.8*		*30 - 110*	*01/29/25 08:01*	*02/14/25 11:49*	*1*
Y Carrier	*81.9*		*30 - 110*	*01/29/25 08:01*	*02/14/25 11:49*	*1*

Lab Sample ID: LCS 160-700314/2-A
Matrix: Water
Analysis Batch: 703039

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 700314

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			8.10	8.051		1.13	1.00	0.495	pCi/L	99	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*96.7*		*30 - 110*
Y Carrier	*84.1*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: 240-218141-3 DU
Matrix: Water
Analysis Batch: 703039

Client Sample ID: L501182-03 MW17C
Prep Type: Total/NA
Prep Batch: 700314

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.617			0.9081		0.407	1.00	0.517	pCi/L			0.36	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*85.5*		*30 - 110*
Y Carrier	*84.1*		*30 - 110*

Metals

Prep Batch: 4800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-1	L501182-01 MW17A	Total/NA	Water	200.8	
240-218141-2	L501182-02 MW17B	Total/NA	Water	200.8	
240-218141-3	L501182-03 MW17C	Total/NA	Water	200.8	
240-218141-4	L501182-04 MW17D	Total/NA	Water	200.8	
240-218141-5	L501182-05 MW17E	Total/NA	Water	200.8	
240-218141-6	L501182-06 MW18A	Total/NA	Water	200.8	
240-218141-7	L501182-07 MW18B	Total/NA	Water	200.8	
240-218141-8	L501182-08 MW18C	Total/NA	Water	200.8	
240-218141-9	L501182-09 MW18D	Total/NA	Water	200.8	
240-218141-10	L501182-10 MWT-17A	Total/NA	Water	200.8	
240-218141-11	L501182-11 FIELD BLANK	Total/NA	Water	200.8	
MB 350-4800/25-A	Method Blank	Total/NA	Water	200.8	
LCS 350-4800/26-A	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 4835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-1	L501182-01 MW17A	Total/NA	Water	200.8	4800
240-218141-2	L501182-02 MW17B	Total/NA	Water	200.8	4800
240-218141-3	L501182-03 MW17C	Total/NA	Water	200.8	4800
240-218141-4	L501182-04 MW17D	Total/NA	Water	200.8	4800
240-218141-5	L501182-05 MW17E	Total/NA	Water	200.8	4800
240-218141-6	L501182-06 MW18A	Total/NA	Water	200.8	4800
240-218141-7	L501182-07 MW18B	Total/NA	Water	200.8	4800
240-218141-8	L501182-08 MW18C	Total/NA	Water	200.8	4800
240-218141-9	L501182-09 MW18D	Total/NA	Water	200.8	4800
240-218141-10	L501182-10 MWT-17A	Total/NA	Water	200.8	4800
240-218141-11	L501182-11 FIELD BLANK	Total/NA	Water	200.8	4800
MB 350-4800/25-A	Method Blank	Total/NA	Water	200.8	4800
LCS 350-4800/26-A	Lab Control Sample	Total/NA	Water	200.8	4800

Prep Batch: 642669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-1	L501182-01 MW17A	Total Recoverable	Water	200.7	
240-218141-2	L501182-02 MW17B	Total Recoverable	Water	200.7	
240-218141-3	L501182-03 MW17C	Total Recoverable	Water	200.7	
240-218141-4	L501182-04 MW17D	Total Recoverable	Water	200.7	
240-218141-5	L501182-05 MW17E	Total Recoverable	Water	200.7	
240-218141-6	L501182-06 MW18A	Total Recoverable	Water	200.7	
240-218141-7	L501182-07 MW18B	Total Recoverable	Water	200.7	
240-218141-8	L501182-08 MW18C	Total Recoverable	Water	200.7	
240-218141-9	L501182-09 MW18D	Total Recoverable	Water	200.7	
240-218141-10	L501182-10 MWT-17A	Total Recoverable	Water	200.7	
240-218141-11	L501182-11 FIELD BLANK	Total Recoverable	Water	200.7	
MB 240-642669/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-642669/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-642669/3-A	Lab Control Sample	Total Recoverable	Water	200.7	
240-218141-1 MS	L501182-01 MW17A	Total Recoverable	Water	200.7	
240-218141-1 MSD	L501182-01 MW17A	Total Recoverable	Water	200.7	
240-218141-2 MS	L501182-02 MW17B	Total Recoverable	Water	200.7	
240-218141-2 MSD	L501182-02 MW17B	Total Recoverable	Water	200.7	
240-218141-3 MS	L501182-03 MW17C	Total Recoverable	Water	200.7	

Metals (Continued)

Prep Batch: 642669 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-3 MSD	L501182-03 MW17C	Total Recoverable	Water	200.7	

Prep Batch: 642676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-1	L501182-01 MW17A	Total/NA	Water	245.1-1994 R3.0	
240-218141-2	L501182-02 MW17B	Total/NA	Water	245.1-1994 R3.0	
240-218141-3	L501182-03 MW17C	Total/NA	Water	245.1-1994 R3.0	
240-218141-4	L501182-04 MW17D	Total/NA	Water	245.1-1994 R3.0	
240-218141-5	L501182-05 MW17E	Total/NA	Water	245.1-1994 R3.0	
240-218141-6	L501182-06 MW18A	Total/NA	Water	245.1-1994 R3.0	
240-218141-7	L501182-07 MW18B	Total/NA	Water	245.1-1994 R3.0	
240-218141-8	L501182-08 MW18C	Total/NA	Water	245.1-1994 R3.0	
240-218141-9	L501182-09 MW18D	Total/NA	Water	245.1-1994 R3.0	
240-218141-10	L501182-10 MWT-17A	Total/NA	Water	245.1-1994 R3.0	
240-218141-11	L501182-11 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	
MB 240-642676/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-642676/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	
240-218141-1 MS	L501182-01 MW17A	Total/NA	Water	245.1-1994 R3.0	
240-218141-1 MSD	L501182-01 MW17A	Total/NA	Water	245.1-1994 R3.0	
240-218141-2 MS	L501182-02 MW17B	Total/NA	Water	245.1-1994 R3.0	
240-218141-2 MSD	L501182-02 MW17B	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 642849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-1	L501182-01 MW17A	Total Recoverable	Water	200.8-1994 R5.4	642669
240-218141-2	L501182-02 MW17B	Total Recoverable	Water	200.8-1994 R5.4	642669
240-218141-3	L501182-03 MW17C	Total Recoverable	Water	200.8-1994 R5.4	642669
240-218141-4	L501182-04 MW17D	Total Recoverable	Water	200.8-1994 R5.4	642669
240-218141-5	L501182-05 MW17E	Total Recoverable	Water	200.8-1994 R5.4	642669
240-218141-6	L501182-06 MW18A	Total Recoverable	Water	200.8-1994 R5.4	642669
240-218141-7	L501182-07 MW18B	Total Recoverable	Water	200.8-1994 R5.4	642669
240-218141-8	L501182-08 MW18C	Total Recoverable	Water	200.8-1994 R5.4	642669
240-218141-9	L501182-09 MW18D	Total Recoverable	Water	200.8-1994 R5.4	642669
240-218141-10	L501182-10 MWT-17A	Total Recoverable	Water	200.8-1994 R5.4	642669
240-218141-11	L501182-11 FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	642669
MB 240-642669/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	642669
LCS 240-642669/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	642669
240-218141-2 MS	L501182-02 MW17B	Total Recoverable	Water	200.8-1994 R5.4	642669
240-218141-2 MSD	L501182-02 MW17B	Total Recoverable	Water	200.8-1994 R5.4	642669
240-218141-3 MS	L501182-03 MW17C	Total Recoverable	Water	200.8-1994 R5.4	642669
240-218141-3 MSD	L501182-03 MW17C	Total Recoverable	Water	200.8-1994 R5.4	642669

Analysis Batch: 642857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-1	L501182-01 MW17A	Total/NA	Water	245.1-1994 R3.0	642676
240-218141-2	L501182-02 MW17B	Total/NA	Water	245.1-1994 R3.0	642676
240-218141-3	L501182-03 MW17C	Total/NA	Water	245.1-1994 R3.0	642676
240-218141-4	L501182-04 MW17D	Total/NA	Water	245.1-1994 R3.0	642676
240-218141-5	L501182-05 MW17E	Total/NA	Water	245.1-1994 R3.0	642676
240-218141-6	L501182-06 MW18A	Total/NA	Water	245.1-1994 R3.0	642676
240-218141-7	L501182-07 MW18B	Total/NA	Water	245.1-1994 R3.0	642676

Metals (Continued)

Analysis Batch: 642857 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-8	L501182-08 MW18C	Total/NA	Water	245.1-1994 R3.0	642676
240-218141-9	L501182-09 MW18D	Total/NA	Water	245.1-1994 R3.0	642676
240-218141-10	L501182-10 MWT-17A	Total/NA	Water	245.1-1994 R3.0	642676
240-218141-11	L501182-11 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	642676
MB 240-642676/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	642676
LCS 240-642676/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	642676
240-218141-1 MS	L501182-01 MW17A	Total/NA	Water	245.1-1994 R3.0	642676
240-218141-1 MSD	L501182-01 MW17A	Total/NA	Water	245.1-1994 R3.0	642676
240-218141-2 MS	L501182-02 MW17B	Total/NA	Water	245.1-1994 R3.0	642676
240-218141-2 MSD	L501182-02 MW17B	Total/NA	Water	245.1-1994 R3.0	642676

Analysis Batch: 643012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-1	L501182-01 MW17A	Total Recoverable	Water	200.7 R4.4-1994	642669
240-218141-2	L501182-02 MW17B	Total Recoverable	Water	200.7 R4.4-1994	642669
240-218141-3	L501182-03 MW17C	Total Recoverable	Water	200.7 R4.4-1994	642669
240-218141-4	L501182-04 MW17D	Total Recoverable	Water	200.7 R4.4-1994	642669
240-218141-5	L501182-05 MW17E	Total Recoverable	Water	200.7 R4.4-1994	642669
240-218141-6	L501182-06 MW18A	Total Recoverable	Water	200.7 R4.4-1994	642669
240-218141-7	L501182-07 MW18B	Total Recoverable	Water	200.7 R4.4-1994	642669
240-218141-8	L501182-08 MW18C	Total Recoverable	Water	200.7 R4.4-1994	642669
240-218141-9	L501182-09 MW18D	Total Recoverable	Water	200.7 R4.4-1994	642669
240-218141-10	L501182-10 MWT-17A	Total Recoverable	Water	200.7 R4.4-1994	642669
240-218141-11	L501182-11 FIELD BLANK	Total Recoverable	Water	200.7 R4.4-1994	642669
MB 240-642669/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	642669
LCS 240-642669/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	642669
240-218141-1 MS	L501182-01 MW17A	Total Recoverable	Water	200.7 R4.4-1994	642669
240-218141-1 MSD	L501182-01 MW17A	Total Recoverable	Water	200.7 R4.4-1994	642669

Analysis Batch: 643365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-1	L501182-01 MW17A	Total Recoverable	Water	2340 B-2021	
240-218141-2	L501182-02 MW17B	Total Recoverable	Water	2340 B-2021	
240-218141-3	L501182-03 MW17C	Total Recoverable	Water	2340 B-2021	
240-218141-4	L501182-04 MW17D	Total Recoverable	Water	2340 B-2021	
240-218141-5	L501182-05 MW17E	Total Recoverable	Water	2340 B-2021	
240-218141-6	L501182-06 MW18A	Total Recoverable	Water	2340 B-2021	
240-218141-7	L501182-07 MW18B	Total Recoverable	Water	2340 B-2021	
240-218141-8	L501182-08 MW18C	Total Recoverable	Water	2340 B-2021	
240-218141-9	L501182-09 MW18D	Total Recoverable	Water	2340 B-2021	
240-218141-10	L501182-10 MWT-17A	Total Recoverable	Water	2340 B-2021	
240-218141-11	L501182-11 FIELD BLANK	Total Recoverable	Water	2340 B-2021	

General Chemistry

Analysis Batch: 642672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-1	L501182-01 MW17A	Total/NA	Water	2540D-2020	
240-218141-2	L501182-02 MW17B	Total/NA	Water	2540D-2020	
240-218141-3	L501182-03 MW17C	Total/NA	Water	2540D-2020	
240-218141-4	L501182-04 MW17D	Total/NA	Water	2540D-2020	

General Chemistry (Continued)

Analysis Batch: 642672 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-5	L501182-05 MW17E	Total/NA	Water	2540D-2020	
240-218141-6	L501182-06 MW18A	Total/NA	Water	2540D-2020	
240-218141-7	L501182-07 MW18B	Total/NA	Water	2540D-2020	
240-218141-8	L501182-08 MW18C	Total/NA	Water	2540D-2020	
240-218141-9	L501182-09 MW18D	Total/NA	Water	2540D-2020	
240-218141-10	L501182-10 MWT-17A	Total/NA	Water	2540D-2020	
240-218141-11	L501182-11 FIELD BLANK	Total/NA	Water	2540D-2020	
MB 240-642672/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-642672/2	Lab Control Sample	Total/NA	Water	2540D-2020	
240-218141-1 DU	L501182-01 MW17A	Total/NA	Water	2540D-2020	
240-218141-10 DU	L501182-10 MWT-17A	Total/NA	Water	2540D-2020	

Analysis Batch: 642682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-1	L501182-01 MW17A	Total/NA	Water	300.0-1993 R2.1	
240-218141-1	L501182-01 MW17A	Total/NA	Water	300.0-1993 R2.1	
240-218141-2	L501182-02 MW17B	Total/NA	Water	300.0-1993 R2.1	
240-218141-2	L501182-02 MW17B	Total/NA	Water	300.0-1993 R2.1	
240-218141-3	L501182-03 MW17C	Total/NA	Water	300.0-1993 R2.1	
240-218141-3	L501182-03 MW17C	Total/NA	Water	300.0-1993 R2.1	
240-218141-4	L501182-04 MW17D	Total/NA	Water	300.0-1993 R2.1	
240-218141-5	L501182-05 MW17E	Total/NA	Water	300.0-1993 R2.1	
240-218141-6	L501182-06 MW18A	Total/NA	Water	300.0-1993 R2.1	
240-218141-7	L501182-07 MW18B	Total/NA	Water	300.0-1993 R2.1	
240-218141-7	L501182-07 MW18B	Total/NA	Water	300.0-1993 R2.1	
240-218141-8	L501182-08 MW18C	Total/NA	Water	300.0-1993 R2.1	
240-218141-8	L501182-08 MW18C	Total/NA	Water	300.0-1993 R2.1	
240-218141-9	L501182-09 MW18D	Total/NA	Water	300.0-1993 R2.1	
240-218141-10	L501182-10 MWT-17A	Total/NA	Water	300.0-1993 R2.1	
240-218141-10	L501182-10 MWT-17A	Total/NA	Water	300.0-1993 R2.1	
240-218141-11	L501182-11 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
MB 240-642682/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-642682/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-218141-1 MS	L501182-01 MW17A	Total/NA	Water	300.0-1993 R2.1	
240-218141-1 MS	L501182-01 MW17A	Total/NA	Water	300.0-1993 R2.1	
240-218141-1 MSD	L501182-01 MW17A	Total/NA	Water	300.0-1993 R2.1	
240-218141-1 MSD	L501182-01 MW17A	Total/NA	Water	300.0-1993 R2.1	
240-218141-11 MS	L501182-11 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
240-218141-11 MSD	L501182-11 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 642800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-1	L501182-01 MW17A	Total/NA	Water	2540 C-2020	
240-218141-2	L501182-02 MW17B	Total/NA	Water	2540 C-2020	
240-218141-3	L501182-03 MW17C	Total/NA	Water	2540 C-2020	
240-218141-4	L501182-04 MW17D	Total/NA	Water	2540 C-2020	
240-218141-5	L501182-05 MW17E	Total/NA	Water	2540 C-2020	
240-218141-6	L501182-06 MW18A	Total/NA	Water	2540 C-2020	
240-218141-7	L501182-07 MW18B	Total/NA	Water	2540 C-2020	
240-218141-8	L501182-08 MW18C	Total/NA	Water	2540 C-2020	
240-218141-9	L501182-09 MW18D	Total/NA	Water	2540 C-2020	

General Chemistry (Continued)

Analysis Batch: 642800 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-10	L501182-10 MWT-17A	Total/NA	Water	2540 C-2020	
240-218141-11	L501182-11 FIELD BLANK	Total/NA	Water	2540 C-2020	
MB 240-642800/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-642800/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 642804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-1	L501182-01 MW17A	Total/NA	Water	2320 B-2021	
240-218141-2	L501182-02 MW17B	Total/NA	Water	2320 B-2021	
240-218141-3	L501182-03 MW17C	Total/NA	Water	2320 B-2021	
240-218141-4	L501182-04 MW17D	Total/NA	Water	2320 B-2021	
240-218141-5	L501182-05 MW17E	Total/NA	Water	2320 B-2021	
240-218141-6	L501182-06 MW18A	Total/NA	Water	2320 B-2021	
240-218141-7	L501182-07 MW18B	Total/NA	Water	2320 B-2021	
240-218141-8	L501182-08 MW18C	Total/NA	Water	2320 B-2021	
240-218141-9	L501182-09 MW18D	Total/NA	Water	2320 B-2021	
MB 240-642804/30	Method Blank	Total/NA	Water	2320 B-2021	
240-218141-7 DU	L501182-07 MW18B	Total/NA	Water	2320 B-2021	

Analysis Batch: 642865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-11	L501182-11 FIELD BLANK	Total/NA	Water	2320 B-2021	
MB 240-642865/4	Method Blank	Total/NA	Water	2320 B-2021	

Analysis Batch: 643198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-10	L501182-10 MWT-17A	Total/NA	Water	2320 B-2021	
MB 240-643198/4	Method Blank	Total/NA	Water	2320 B-2021	
240-218141-10 DU	L501182-10 MWT-17A	Total/NA	Water	2320 B-2021	

Rad

Prep Batch: 700312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-1	L501182-01 MW17A	Total/NA	Water	PrecSep-21	
240-218141-2	L501182-02 MW17B	Total/NA	Water	PrecSep-21	
240-218141-3	L501182-03 MW17C	Total/NA	Water	PrecSep-21	
240-218141-4	L501182-04 MW17D	Total/NA	Water	PrecSep-21	
240-218141-5	L501182-05 MW17E	Total/NA	Water	PrecSep-21	
240-218141-6	L501182-06 MW18A	Total/NA	Water	PrecSep-21	
240-218141-7	L501182-07 MW18B	Total/NA	Water	PrecSep-21	
240-218141-8	L501182-08 MW18C	Total/NA	Water	PrecSep-21	
240-218141-9	L501182-09 MW18D	Total/NA	Water	PrecSep-21	
240-218141-10	L501182-10 MWT-17A	Total/NA	Water	PrecSep-21	
240-218141-11	L501182-11 FIELD BLANK	Total/NA	Water	PrecSep-21	
MB 160-700312/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-700312/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-218141-3 DU	L501182-03 MW17C	Total/NA	Water	PrecSep-21	

QC Association Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218141-1

Rad

Prep Batch: 700314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218141-1	L501182-01 MW17A	Total/NA	Water	PrecSep_0	
240-218141-2	L501182-02 MW17B	Total/NA	Water	PrecSep_0	
240-218141-3	L501182-03 MW17C	Total/NA	Water	PrecSep_0	
240-218141-4	L501182-04 MW17D	Total/NA	Water	PrecSep_0	
240-218141-5	L501182-05 MW17E	Total/NA	Water	PrecSep_0	
240-218141-6	L501182-06 MW18A	Total/NA	Water	PrecSep_0	
240-218141-7	L501182-07 MW18B	Total/NA	Water	PrecSep_0	
240-218141-8	L501182-08 MW18C	Total/NA	Water	PrecSep_0	
240-218141-9	L501182-09 MW18D	Total/NA	Water	PrecSep_0	
240-218141-10	L501182-10 MWT-17A	Total/NA	Water	PrecSep_0	
240-218141-11	L501182-11 FIELD BLANK	Total/NA	Water	PrecSep_0	
MB 160-700314/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-700314/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-218141-3 DU	L501182-03 MW17C	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218141-1

Client Sample ID: L501182-01 MW17A

Lab Sample ID: 240-218141-1

Date Collected: 01/23/25 09:37
Date Received: 01/25/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	643012	AJC	EET CLE	01/29/25 14:39
Total/NA	Prep	200.8			4800	RMN	EET SSM	02/04/25 15:37
Total/NA	Analysis	200.8		10	4835	CW	EET SSM	02/05/25 14:15
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	642849	S4FJ	EET CLE	01/28/25 18:20
Total Recoverable	Analysis	2340 B-2021		1	643365	KLC	EET CLE	02/03/25 10:14
Total/NA	Prep	245.1-1994 R3.0			642676	MN7X	EET CLE	01/27/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	642857	GEV	EET CLE	01/28/25 13:52
Total/NA	Analysis	2320 B-2021		1	642804	PQD2	EET CLE	01/27/25 14:13
Total/NA	Analysis	2540 C-2020		1	642800	TAV2	EET CLE	01/28/25 09:59
Total/NA	Analysis	2540D-2020		1	642672	C5SV	EET CLE	01/27/25 10:24
Total/NA	Analysis	300.0-1993 R2.1		1	642682	JMR	EET CLE	01/27/25 13:20
Total/NA	Analysis	300.0-1993 R2.1		5	642682	JMR	EET CLE	01/27/25 14:25
Total/NA	Prep	PrecSep-21			700312	OGC	EET SL	01/29/25 07:58
Total/NA	Analysis	903.0		1	703901	SWS	EET SL	02/20/25 07:35
Total/NA	Prep	PrecSep_0			700314	OGC	EET SL	01/29/25 08:01
Total/NA	Analysis	904.0		1	703039	SWS	EET SL	02/14/25 11:51
Total/NA	Analysis	Ra226_Ra228 Pos		1	704548	CAH	EET SL	02/24/25 10:58

Client Sample ID: L501182-02 MW17B

Lab Sample ID: 240-218141-2

Date Collected: 01/23/25 11:46
Date Received: 01/25/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	643012	AJC	EET CLE	01/29/25 15:00
Total/NA	Prep	200.8			4800	RMN	EET SSM	02/04/25 15:37
Total/NA	Analysis	200.8		1	4835	CW	EET SSM	02/05/25 13:58
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	642849	S4FJ	EET CLE	01/28/25 18:23
Total Recoverable	Analysis	2340 B-2021		1	643365	KLC	EET CLE	02/03/25 10:14
Total/NA	Prep	245.1-1994 R3.0			642676	MN7X	EET CLE	01/27/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	642857	GEV	EET CLE	01/28/25 13:57
Total/NA	Analysis	2320 B-2021		1	642804	PQD2	EET CLE	01/27/25 14:20
Total/NA	Analysis	2540 C-2020		1	642800	TAV2	EET CLE	01/28/25 09:59
Total/NA	Analysis	2540D-2020		1	642672	C5SV	EET CLE	01/27/25 10:24
Total/NA	Analysis	300.0-1993 R2.1		1	642682	JMR	EET CLE	01/27/25 15:30
Total/NA	Analysis	300.0-1993 R2.1		5	642682	JMR	EET CLE	01/27/25 15:52
Total/NA	Prep	PrecSep-21			700312	OGC	EET SL	01/29/25 07:58
Total/NA	Analysis	903.0		1	703902	SWS	EET SL	02/20/25 07:44
Total/NA	Prep	PrecSep_0			700314	OGC	EET SL	01/29/25 08:01
Total/NA	Analysis	904.0		1	703039	SWS	EET SL	02/14/25 11:51

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218141-1

Client Sample ID: L501182-02 MW17B

Lab Sample ID: 240-218141-2

Date Collected: 01/23/25 11:46

Matrix: Water

Date Received: 01/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	704548	CAH	EET SL	02/24/25 10:58

Client Sample ID: L501182-03 MW17C

Lab Sample ID: 240-218141-3

Date Collected: 01/23/25 13:32

Matrix: Water

Date Received: 01/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	643012	AJC	EET CLE	01/29/25 15:04
Total/NA	Prep	200.8			4800	RMN	EET SSM	02/04/25 15:37
Total/NA	Analysis	200.8		1	4835	CW	EET SSM	02/05/25 14:00
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	642849	S4FJ	EET CLE	01/28/25 18:31
Total Recoverable	Analysis	2340 B-2021		1	643365	KLC	EET CLE	02/03/25 10:14
Total/NA	Prep	245.1-1994 R3.0			642676	MN7X	EET CLE	01/27/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	642857	GEV	EET CLE	01/28/25 14:06
Total/NA	Analysis	2320 B-2021		1	642804	PQD2	EET CLE	01/27/25 14:24
Total/NA	Analysis	2540 C-2020		1	642800	TAV2	EET CLE	01/28/25 09:59
Total/NA	Analysis	2540D-2020		1	642672	C5SV	EET CLE	01/27/25 10:24
Total/NA	Analysis	300.0-1993 R2.1		1	642682	JMR	EET CLE	01/27/25 16:57
Total/NA	Analysis	300.0-1993 R2.1		5	642682	JMR	EET CLE	01/27/25 17:19
Total/NA	Prep	PrecSep-21			700312	OGC	EET SL	01/29/25 07:58
Total/NA	Analysis	903.0		1	703902	SWS	EET SL	02/20/25 07:44
Total/NA	Prep	PrecSep_0			700314	OGC	EET SL	01/29/25 08:01
Total/NA	Analysis	904.0		1	703039	SWS	EET SL	02/14/25 11:51
Total/NA	Analysis	Ra226_Ra228 Pos		1	704548	CAH	EET SL	02/24/25 10:58

Client Sample ID: L501182-04 MW17D

Lab Sample ID: 240-218141-4

Date Collected: 01/23/25 14:44

Matrix: Water

Date Received: 01/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	643012	AJC	EET CLE	01/29/25 15:08
Total/NA	Prep	200.8			4800	RMN	EET SSM	02/04/25 15:37
Total/NA	Analysis	200.8		1	4835	CW	EET SSM	02/05/25 14:08
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	642849	S4FJ	EET CLE	01/28/25 18:39
Total Recoverable	Analysis	2340 B-2021		1	643365	KLC	EET CLE	02/03/25 10:14
Total/NA	Prep	245.1-1994 R3.0			642676	MN7X	EET CLE	01/27/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	642857	GEV	EET CLE	01/28/25 14:08
Total/NA	Analysis	2320 B-2021		1	642804	PQD2	EET CLE	01/27/25 14:29
Total/NA	Analysis	2540 C-2020		1	642800	TAV2	EET CLE	01/28/25 09:59
Total/NA	Analysis	2540D-2020		1	642672	C5SV	EET CLE	01/27/25 10:24

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218141-1

Client Sample ID: L501182-04 MW17D

Lab Sample ID: 240-218141-4

Date Collected: 01/23/25 14:44
Matrix: Water
Date Received: 01/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0-1993 R2.1		1	642682	JMR	EET CLE	01/27/25 17:40
Total/NA	Prep	PrecSep-21			700312	OGC	EET SL	01/29/25 07:58
Total/NA	Analysis	903.0		1	703902	SWS	EET SL	02/20/25 07:44
Total/NA	Prep	PrecSep_0			700314	OGC	EET SL	01/29/25 08:01
Total/NA	Analysis	904.0		1	703040	SWS	EET SL	02/14/25 12:00
Total/NA	Analysis	Ra226_Ra228 Pos		1	704548	CAH	EET SL	02/24/25 10:58

Client Sample ID: L501182-05 MW17E

Lab Sample ID: 240-218141-5

Date Collected: 01/23/25 16:01
Matrix: Water
Date Received: 01/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	643012	AJC	EET CLE	01/29/25 15:13
Total/NA	Prep	200.8			4800	RMN	EET SSM	02/04/25 15:37
Total/NA	Analysis	200.8		1	4835	CW	EET SSM	02/05/25 14:18
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	642849	S4FJ	EET CLE	01/28/25 18:48
Total Recoverable	Analysis	2340 B-2021		1	643365	KLC	EET CLE	02/03/25 10:14
Total/NA	Prep	245.1-1994 R3.0			642676	MN7X	EET CLE	01/27/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	642857	GEV	EET CLE	01/28/25 14:09
Total/NA	Analysis	2320 B-2021		1	642804	PQD2	EET CLE	01/27/25 14:35
Total/NA	Analysis	2540 C-2020		1	642800	TAV2	EET CLE	01/28/25 09:59
Total/NA	Analysis	2540D-2020		1	642672	C5SV	EET CLE	01/27/25 10:24
Total/NA	Analysis	300.0-1993 R2.1		1	642682	JMR	EET CLE	01/27/25 18:02
Total/NA	Prep	PrecSep-21			700312	OGC	EET SL	01/29/25 07:58
Total/NA	Analysis	903.0		1	703902	SWS	EET SL	02/20/25 07:44
Total/NA	Prep	PrecSep_0			700314	OGC	EET SL	01/29/25 08:01
Total/NA	Analysis	904.0		1	703040	SWS	EET SL	02/14/25 12:00
Total/NA	Analysis	Ra226_Ra228 Pos		1	704548	CAH	EET SL	02/24/25 10:58

Client Sample ID: L501182-06 MW18A

Lab Sample ID: 240-218141-6

Date Collected: 01/23/25 09:33
Matrix: Water
Date Received: 01/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	643012	AJC	EET CLE	01/29/25 15:17
Total/NA	Prep	200.8			4800	RMN	EET SSM	02/04/25 15:37
Total/NA	Analysis	200.8		1	4835	CW	EET SSM	02/05/25 14:20
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	642849	S4FJ	EET CLE	01/28/25 18:50
Total Recoverable	Analysis	2340 B-2021		1	643365	KLC	EET CLE	02/03/25 10:14

Client Sample ID: L501182-06 MW18A

Lab Sample ID: 240-218141-6

Date Collected: 01/23/25 09:33

Matrix: Water

Date Received: 01/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	245.1-1994 R3.0			642676	MN7X	EET CLE	01/27/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	642857	GEV	EET CLE	01/28/25 14:11
Total/NA	Analysis	2320 B-2021		1	642804	PQD2	EET CLE	01/27/25 14:40
Total/NA	Analysis	2540 C-2020		1	642800	TAV2	EET CLE	01/28/25 09:59
Total/NA	Analysis	2540D-2020		1	642672	C5SV	EET CLE	01/27/25 10:24
Total/NA	Analysis	300.0-1993 R2.1		1	642682	JMR	EET CLE	01/27/25 18:24
Total/NA	Prep	PrecSep-21			700312	OGC	EET SL	01/29/25 07:58
Total/NA	Analysis	903.0		1	703902	SWS	EET SL	02/20/25 07:44
Total/NA	Prep	PrecSep_0			700314	OGC	EET SL	01/29/25 08:01
Total/NA	Analysis	904.0		1	703040	SWS	EET SL	02/14/25 12:00
Total/NA	Analysis	Ra226_Ra228 Pos		1	704548	CAH	EET SL	02/24/25 10:58

Client Sample ID: L501182-07 MW18B

Lab Sample ID: 240-218141-7

Date Collected: 01/23/25 11:08

Matrix: Water

Date Received: 01/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	643012	AJC	EET CLE	01/29/25 15:21
Total/NA	Prep	200.8			4800	RMN	EET SSM	02/04/25 15:37
Total/NA	Analysis	200.8		1	4835	CW	EET SSM	02/05/25 14:23
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	642849	S4FJ	EET CLE	01/28/25 18:53
Total Recoverable	Analysis	2340 B-2021		1	643365	KLC	EET CLE	02/03/25 10:14
Total/NA	Prep	245.1-1994 R3.0			642676	MN7X	EET CLE	01/27/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	642857	GEV	EET CLE	01/28/25 14:13
Total/NA	Analysis	2320 B-2021		1	642804	PQD2	EET CLE	01/27/25 14:46
Total/NA	Analysis	2540 C-2020		1	642800	TAV2	EET CLE	01/28/25 09:59
Total/NA	Analysis	2540D-2020		1	642672	C5SV	EET CLE	01/27/25 10:24
Total/NA	Analysis	300.0-1993 R2.1		1	642682	JMR	EET CLE	01/27/25 19:07
Total/NA	Analysis	300.0-1993 R2.1		5	642682	JMR	EET CLE	01/27/25 19:29
Total/NA	Prep	PrecSep-21			700312	OGC	EET SL	01/29/25 07:58
Total/NA	Analysis	903.0		1	703902	SWS	EET SL	02/20/25 07:44
Total/NA	Prep	PrecSep_0			700314	OGC	EET SL	01/29/25 08:01
Total/NA	Analysis	904.0		1	703040	SWS	EET SL	02/14/25 12:00
Total/NA	Analysis	Ra226_Ra228 Pos		1	704548	CAH	EET SL	02/24/25 10:58

Client Sample ID: L501182-08 MW18C

Lab Sample ID: 240-218141-8

Date Collected: 01/23/25 12:43

Matrix: Water

Date Received: 01/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	643012	AJC	EET CLE	01/29/25 15:25

Client Sample ID: L501182-08 MW18C

Lab Sample ID: 240-218141-8

Date Collected: 01/23/25 12:43

Matrix: Water

Date Received: 01/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.8			4800	RMN	EET SSM	02/04/25 15:37
Total/NA	Analysis	200.8		1	4835	CW	EET SSM	02/05/25 14:26
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	642849	S4FJ	EET CLE	01/28/25 18:56
Total Recoverable	Analysis	2340 B-2021		1	643365	KLC	EET CLE	02/03/25 10:14
Total/NA	Prep	245.1-1994 R3.0			642676	MN7X	EET CLE	01/27/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	642857	GEV	EET CLE	01/28/25 14:14
Total/NA	Analysis	2320 B-2021		1	642804	PQD2	EET CLE	01/27/25 14:55
Total/NA	Analysis	2540 C-2020		1	642800	TAV2	EET CLE	01/28/25 09:59
Total/NA	Analysis	2540D-2020		1	642672	C5SV	EET CLE	01/27/25 10:24
Total/NA	Analysis	300.0-1993 R2.1		1	642682	JMR	EET CLE	01/27/25 19:51
Total/NA	Analysis	300.0-1993 R2.1		5	642682	JMR	EET CLE	01/27/25 20:12
Total/NA	Prep	PrecSep-21			700312	OGC	EET SL	01/29/25 07:58
Total/NA	Analysis	903.0		1	703902	SWS	EET SL	02/20/25 07:45
Total/NA	Prep	PrecSep_0			700314	OGC	EET SL	01/29/25 08:01
Total/NA	Analysis	904.0		1	703040	SWS	EET SL	02/14/25 12:00
Total/NA	Analysis	Ra226_Ra228 Pos		1	704548	CAH	EET SL	02/24/25 10:58

Client Sample ID: L501182-09 MW18D

Lab Sample ID: 240-218141-9

Date Collected: 01/23/25 14:08

Matrix: Water

Date Received: 01/25/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	643012	AJC	EET CLE	01/29/25 15:29
Total/NA	Prep	200.8			4800	RMN	EET SSM	02/04/25 15:37
Total/NA	Analysis	200.8		1	4835	CW	EET SSM	02/05/25 14:28
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	642849	S4FJ	EET CLE	01/28/25 18:59
Total Recoverable	Analysis	2340 B-2021		1	643365	KLC	EET CLE	02/03/25 10:14
Total/NA	Prep	245.1-1994 R3.0			642676	MN7X	EET CLE	01/27/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	642857	GEV	EET CLE	01/28/25 14:16
Total/NA	Analysis	2320 B-2021		1	642804	PQD2	EET CLE	01/27/25 15:00
Total/NA	Analysis	2540 C-2020		1	642800	TAV2	EET CLE	01/28/25 09:59
Total/NA	Analysis	2540D-2020		1	642672	C5SV	EET CLE	01/27/25 10:24
Total/NA	Analysis	300.0-1993 R2.1		1	642682	JMR	EET CLE	01/27/25 21:17
Total/NA	Prep	PrecSep-21			700312	OGC	EET SL	01/29/25 07:58
Total/NA	Analysis	903.0		1	703902	SWS	EET SL	02/20/25 07:45
Total/NA	Prep	PrecSep_0			700314	OGC	EET SL	01/29/25 08:01
Total/NA	Analysis	904.0		1	703040	SWS	EET SL	02/14/25 12:00
Total/NA	Analysis	Ra226_Ra228 Pos		1	704548	CAH	EET SL	02/24/25 10:58

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218141-1

Client Sample ID: L501182-10 MWT-17A

Date Collected: 01/23/25 09:37
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	643012	AJC	EET CLE	01/29/25 15:46
Total/NA	Prep	200.8			4800	RMN	EET SSM	02/04/25 15:37
Total/NA	Analysis	200.8		1	4835	CW	EET SSM	02/05/25 14:31
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	642849	S4FJ	EET CLE	01/28/25 19:04
Total Recoverable	Analysis	2340 B-2021		1	643365	KLC	EET CLE	02/03/25 10:14
Total/NA	Prep	245.1-1994 R3.0			642676	MN7X	EET CLE	01/27/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	642857	GEV	EET CLE	01/28/25 14:20
Total/NA	Analysis	2320 B-2021		1	643198	PQD2	EET CLE	01/30/25 20:12
Total/NA	Analysis	2540 C-2020		1	642800	TAV2	EET CLE	01/28/25 09:59
Total/NA	Analysis	2540D-2020		1	642672	C5SV	EET CLE	01/27/25 10:24
Total/NA	Analysis	300.0-1993 R2.1		1	642682	JMR	EET CLE	01/27/25 22:01
Total/NA	Analysis	300.0-1993 R2.1		5	642682	JMR	EET CLE	01/27/25 22:22
Total/NA	Prep	PrecSep-21			700312	OGC	EET SL	01/29/25 07:58
Total/NA	Analysis	903.0		1	703902	SWS	EET SL	02/20/25 07:45
Total/NA	Prep	PrecSep_0			700314	OGC	EET SL	01/29/25 08:01
Total/NA	Analysis	904.0		1	703040	SWS	EET SL	02/14/25 12:01
Total/NA	Analysis	Ra226_Ra228 Pos		1	704548	CAH	EET SL	02/24/25 10:58

Client Sample ID: L501182-11 FIELD BLANK

Date Collected: 01/23/25 08:20
Date Received: 01/25/25 08:00

Lab Sample ID: 240-218141-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	643012	AJC	EET CLE	01/29/25 15:34
Total/NA	Prep	200.8			4800	RMN	EET SSM	02/04/25 15:37
Total/NA	Analysis	200.8		1	4835	CW	EET SSM	02/05/25 14:33
Total Recoverable	Prep	200.7			642669	MN7X	EET CLE	01/27/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	642849	S4FJ	EET CLE	01/28/25 19:01
Total Recoverable	Analysis	2340 B-2021		1	643365	KLC	EET CLE	02/03/25 10:14
Total/NA	Prep	245.1-1994 R3.0			642676	MN7X	EET CLE	01/27/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	642857	GEV	EET CLE	01/28/25 14:18
Total/NA	Analysis	2320 B-2021		1	642865	PQD2	EET CLE	01/28/25 14:03
Total/NA	Analysis	2540 C-2020		1	642800	TAV2	EET CLE	01/28/25 09:59
Total/NA	Analysis	2540D-2020		1	642672	C5SV	EET CLE	01/27/25 10:24
Total/NA	Analysis	300.0-1993 R2.1		1	642682	JMR	EET CLE	01/27/25 22:44
Total/NA	Prep	PrecSep-21			700312	OGC	EET SL	01/29/25 07:58
Total/NA	Analysis	903.0		1	703902	SWS	EET SL	02/20/25 07:45
Total/NA	Prep	PrecSep_0			700314	OGC	EET SL	01/29/25 08:01
Total/NA	Analysis	904.0		1	703040	SWS	EET SL	02/14/25 12:01
Total/NA	Analysis	Ra226_Ra228 Pos		1	704548	CAH	EET SL	02/24/25 10:58

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218141-1

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Job ID: 240-218141-1
Project/Site: Erickson Projects

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-25

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-17-25
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	02-20-25
Florida	NELAP	E87575	06-30-25
Louisiana (All)	NELAP	03073	06-30-25
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-25
New York	NELAP	11662	03-31-25
Oregon	NELAP	4167-008	07-07-25
US Fish & Wildlife	US Federal Programs	A20571	06-30-25
USDA	US Federal Programs	525-23-4-22573	04-08-25
Washington	State	C788-23a	07-13-25
Wisconsin	State	399133460	07-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	04-21-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-06-25
ANAB	ISO/IEC 17025	L2305	04-08-25
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Job ID: 240-218141-1
Project/Site: Erickson Projects

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-25
North Carolina (DW)	State	29700	06-08-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-14-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-01-25
Texas	NELAP	T104704193	06-25-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	05-14-25
West Virginia DEP	State	381	10-31-25

Chain of Custody Record 713134

eurofins | Environment Testing America

Address: _____

Regulatory Program: ☐ DW ☒ NPDES ☒ RCRA ☐ Other: TAL-8210

Client Contact	Project Manager: Jennifer Caporale	Site Contact: Jennifer Caporale	Date:	COC No: 353947
Company Name: Lansing Board of Water & Light	Tel/Email: Environmental_Laboratory@	Lab Contact: Jennifer Caporale	Carrier:	1 of 1 COCs
Address: 1110 South Pennsylvania	Analysis Turnaround Time (CALENDAR DAYS / WORKING DAYS)			Sampler: Marc Wahrer & Julie Maltby
City/State/Zip: Lansing, Mi 48901	TAT if different from Below: ☐ 2 weeks ☒ 1 week ☐ 2 days ☐ 1 day			For Lab Use Only: Walk-in Client: Lab Sampling:
Phone: 517-702-6872				Job / SDG No.:
Fax:				
Project Name: Erickson Wellfield				
Site: Erickson Wells T1-MNA				
P O # N/A				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Sample Specific Notes:
L501182-01 MW 17A	01/23/25	0937	G	W	7			Please see eCOC 353947 for methods.
-02 17B		1146						
-03 17C		1332						
-04 17D		1444						
-05 17E		1601						
-06 18A		0933						
-07 18B		1108						
-08 18C		1243						
-09 18D		1408						
-10 MWT-17A		0937						
-11 Field Blank		0820		WQT				

JSC 01/21/25

240-218141 COC

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments: Please follow the attached RL's all methods must be approved 40CFR136

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by: JCaporale	Company: LBWL	Date/Time: 01/24/25 1040	Received by:	Company: EETA	Date/Time: 1/24/25 0946
Relinquished by:	Company: EETA	Date/Time: JSC 01/24/25	Received by: JMOROSKO	Company: Eurofins	Date/Time: 01/25/25 0800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Chain of Custody

Return Samples to Eurofins Marathon
3980 Overseas Hwy
Marathon, FL 33050

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address
1110 South Pennsylvania

Address 2:

City State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com; Environmental_laboratory@l

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:
10_Days

Project Number:
24034575

Sample State: MI

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
Marc Wahrer & Julie Maltby

Description:
Erickson Wellfield

Site Name:
Erickson Projects

Special Instructions:
Please send EDD using Promium template with report,
Please follow the attached RL's,
All methods must be approved 40 CFR 136.

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	200.7 Total Boron	903.0 Standard Target List	SM2340B Total Hardness (as CaCO3) by calculation	2540C_Calcd Total Dissolved Solids	904.0 Standard Target List	245.1 Mercury	300.0_28D Chloride, Fluoride & Sulfate	2540D Solids, Total Suspended (TSS)	Ra226_228AS_P Combined Radium-226 and Radium-228	200.8 Project List (19)	2320B Bicarbonate & Carbonate Alkalinity	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	200.7 R4.4-1994 / Metals (ICP) / Total Boron	300.0-1993 R2.1 / Anions, Ion Chromatography / Chloride, Fluoride & Sulfa	245.1-1994 R3.0 / Mercury (CVAA) / Mercury	Plastic 500ml unpreserved	Plastic 1 liter Nitric Acid	Plastic 500ml with Nitric Acid	Plastic 1 liter unpreserved	Plastic 60 mL unpreserved	Total Bottles For Sample
1	L501182-01 MW-17A	Grab	Water	01/23/25 09:03				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
2	L501182-02 MW-17B	Grab	Water	01/23/25 11:46				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
3	L501182-03 MW-17C	Grab	Water	01/23/25 13:32				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
4	L501182-04 MW-17D	Grab	Water	01/23/25 14:44				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
5	L501182-05 MW-17E	Grab	Water	01/23/25 16:01				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
6	L501182-06 MW-18A	Grab	Water	01/23/25 09:33				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
7	L501182-07 MW-18B	Grab	Water	01/23/25 11:00				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
8	L501182-08 MW-18C	Grab	Water	01/23/25 12:43				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
9	L501182-09 MW-18D	Grab	Water	01/23/25 14:08				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
10	L501182-10 MWT-17A	Grab	Water	01/23/25 08:37				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
11	L501182-11 Field Blank	Grab	Water	01/23/25 08:20				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished To: Eurofins Laboratory	Date/Time:	Samples Received From: Eurofins Laboratory	Date/Time:	eCOC Finalized By:	Date/Time:
Jennifer Caporale	01/24/25 09:46	Jennifer Caporale	01/24/25 09:46	Morosko, Jessica A	01/25/25 08:45	Morosko, Jessica A	01/25/25 08:45

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250121A001								
MIC20250124A001								
MIC20250124A001								
MIC20250124A001								

8/18/2025 (Rev. 3)

3.2 Sampling Procedures

Appendix D of the HMP provides the sample collection and safety procedures (HDR, 2021). These same procedures will be followed for collection of Assessment Monitoring samples. Procedures are consistent with EPA guidelines and R 299.4440-4445 and R 299.4905-4908 of the Part 115 rules. BWL or a Contracted Consultant (CC) will collect all samples.

3.2.1 Quality Control

Quality Control (QC) checks of both the field procedures and laboratory analyses are described in the HMP and the same process will be used to assess and document data quality for assessment monitoring as described in the HMP for background and detection monitoring data. Laboratory data will be reviewed, validated and qualified if necessary prior to use. The laboratory data validation procedure is described in Section 3.5 of the HMP.

3.3 Monitoring Parameters and Analytical Methods

3.3.1 Sample Parameters

Parameters to be analyzed for each semiannual assessment monitoring event are shown on Table 4. These parameters include all of the constituents required for groundwater sampling by the Part 115. Analytical testing of water samples will be performed by the BWL approved contract laboratory. Field measurements will be collected by the sampling team during the purging process. The field measurements are specific conductance, temperature, dissolved oxygen, pH, turbidity, and oxidation/reduction potential (ORP).

Table 4. Groundwater Quality Parameters to be Analyzed

Constituents Analyzed in Assessment Monitoring	
Boron	Fluoride
Calcium	Lead
Chloride	Lithium
Fluoride	Mercury
pH	Molybdenum
Sulfate	Selenium
Total Dissolved Solids (TDS)	Thallium
Antimony	Radium 226 and 228 combined
Arsenic	Iron
Barium	Copper

8/18/2025 (Rev. 3)

Table 5. Water Quality Parameters to be Analyzed

Cu, total	Copper	250 mL plastic	mg/L	Nitric Acid	200.8	6 mos	0.005
F	Fluoride	250 mL plastic	mg/L	None	9056	28 d	1.0
Fe, total	Iron	250 mL plastic	mg/L	Nitric Acid	300.0	6 mos	0.02
Pb, total	Lead	250 mL plastic	mg/L	Nitric Acid	200.8	6 mos	0.003
Li, total	Lithium	250 mL plastic	mg/L	Nitric Acid	200.8	6 mos	0.005
Hg, total	Mercury	250 mL plastic	mg/L	HNO_3	245.1	28 d	0.0002
Mo, total	Molybdenum	250 mL plastic	mg/L	Nitric Acid	200.8	6 mos	0.005
Ni, total	Nickel	250 mL plastic	mg/L	Nitric Acid	200.8	6 mos	0.005
RA226/228	Radium 226 and 228 combined	(2) 1 L plastic	pCi/L	HNO_3	SM 7500	6 mos	2.0 combined
Se, total	Selenium	250 mL plastic	mg/L	Nitric Acid	200.8	6 mos	0.005
Ag, total	Silver	250 mL plastic	mg/L	Nitric Acid	200.8	6 mos	0.0005
SO_4	Sulfate	250 mL plastic	mg/L	Chill	300.0	28 d	10
Tl, total	Thallium	250 mL plastic	mg/L	Nitric Acid	200.8	6 mos	0.002
TDS	Total Dissolved Solids	1 L plastic	mg/L	None	SM 2540C	NA	20
TSS	Total Suspended Solids	1 L plastic	mg/L	None	SM 2540D	NA	3
V, total	Vanadium	250 mL plastic	mg/L	Nitric Acid	200.8	6 mos	0.005
Zn, total	Zinc	250 mL plastic	mg/L	Nitric Acid	200.8	6 mos	0.005

3.4 Data Validation

The processes for data review and validation for assessment monitoring will be consistent with that described in the HMP (HDR, 2021). BWL or its CC will perform the data validation, statistical analysis, interpretation, and reporting. The scanned field forms, the laboratory reports

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client Lansing Board of Water & Light Site Name _____ Cooler unpacked by: JMOROSKO

Cooler Received on 01125125 Opened on 01125125

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used. Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt [X] See Multiple Cooler Form

IR GUN # 13 (CF 10.0 °C) Observed Cooler Temp _____ °C Corrected Cooler Temp _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 *Could all bottle labels (ID/Date/Time) be reconciled with the COC?*	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC448976
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

_____

_____

_____

_____

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved. _____ Preservative(s) added/Lot number(s). _____

VOA Sample Preservation - Date/Time VOAs Frozen. _____

Login # : _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	0.4	0.4	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.2	0.2	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.2	0.2	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: ↓	0.5	0.5	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice

1/25/2025

Login Container Summary Report

240-218141

8/18/2025 (Rev. 3)

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L501182-01 MW17A	240-218141-A-1	Plastic 60 mL - unpreserved				
L501182-01 MW17A	240-218141-B-1	Plastic 60 mL - unpreserved				
L501182-01 MW17A	240-218141-C-1	Plastic 500ml - unpreserved				
L501182-01 MW17A	240-218141-D-1	Plastic 500ml - with Nitric Acid	<2			
L501182-01 MW17A	240-218141-E-1	Plastic 1 liter - unpreserved				
L501182-01 MW17A	240-218141-F-1	Plastic 1 liter - Nitric Acid	<2			
L501182-01 MW17A	240-218141-G-1	Plastic 1 liter - Nitric Acid	<2			
L501182-02 MW17B	240-218141-A-2	Plastic 60 mL - unpreserved				
L501182-02 MW17B	240-218141-B-2	Plastic 60 mL - unpreserved				
L501182-02 MW17B	240-218141-C-2	Plastic 500ml - unpreserved				
L501182-02 MW17B	240-218141-D-2	Plastic 500ml - with Nitric Acid	<2			
L501182-02 MW17B	240-218141-E-2	Plastic 1 liter - unpreserved				
L501182-02 MW17B	240-218141-F-2	Plastic 1 liter - Nitric Acid	<2			
L501182-02 MW17B	240-218141-G-2	Plastic 1 liter - Nitric Acid	<2			
L501182-03 MW17C	240-218141-A-3	Plastic 60 mL - unpreserved				
L501182-03 MW17C	240-218141-B-3	Plastic 60 mL - unpreserved				
L501182-03 MW17C	240-218141-C-3	Plastic 500ml - unpreserved				
L501182-03 MW17C	240-218141-D-3	Plastic 500ml - with Nitric Acid	<2			
L501182-03 MW17C	240-218141-E-3	Plastic 1 liter - unpreserved				
L501182-03 MW17C	240-218141-F-3	Plastic 1 liter - Nitric Acid	<2			
L501182-03 MW17C	240-218141-G-3	Plastic 1 liter - Nitric Acid	<2			
L501182-04 MW17D	240-218141-A-4	Plastic 60 mL - unpreserved				
L501182-04 MW17D	240-218141-B-4	Plastic 60 mL - unpreserved				
L501182-04 MW17D	240-218141-C-4	Plastic 500ml - unpreserved				
L501182-04 MW17D	240-218141-D-4	Plastic 500ml - with Nitric Acid	<2			
L501182-04 MW17D	240-218141-E-4	Plastic 1 liter - unpreserved				
L501182-04 MW17D	240-218141-F-4	Plastic 1 liter - Nitric Acid	<2			
L501182-04 MW17D	240-218141-G-4	Plastic 1 liter - Nitric Acid	<2			
L501182-05 MW17E	240-218141-A-5	Plastic 60 mL - unpreserved				
L501182-05 MW17E	240-218141-B-5	Plastic 60 mL - unpreserved				
L501182-05 MW17E	240-218141-C-5	Plastic 500ml - unpreserved				
L501182-05 MW17E	240-218141-D-5	Plastic 500ml - with Nitric Acid	<2			
L501182-05 MW17E	240-218141-E-5	Plastic 1 liter - unpreserved				
L501182-05 MW17E	240-218141-F-5	Plastic 1 liter - Nitric Acid	<2			
L501182-05 MW17E	240-218141-G-5	Plastic 1 liter - Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L501182-06 MW18A	240-218141-A-6	Plastic 60 mL - unpreserved				
L501182-06 MW18A	240-218141-B-6	Plastic 60 mL - unpreserved				
L501182-06 MW18A	240-218141-C-6	Plastic 500ml - unpreserved				
L501182-06 MW18A	240-218141-D-6	Plastic 500ml - with Nitric Acid	<2			
L501182-06 MW18A	240-218141-E-6	Plastic 1 liter - unpreserved				
L501182-06 MW18A	240-218141-F-6	Plastic 1 liter - Nitric Acid	<2			
L501182-06 MW18A	240-218141-G-6	Plastic 1 liter - Nitric Acid	<2			
L501182-07 MW18B	240-218141-A-7	Plastic 60 mL - unpreserved				
L501182-07 MW18B	240-218141-B-7	Plastic 60 mL - unpreserved				
L501182-07 MW18B	240-218141-C-7	Plastic 500ml - unpreserved				
L501182-07 MW18B	240-218141-D-7	Plastic 500ml - with Nitric Acid	<2			
L501182-07 MW18B	240-218141-E-7	Plastic 1 liter - unpreserved				
L501182-07 MW18B	240-218141-F-7	Plastic 1 liter - Nitric Acid	<2			
L501182-07 MW18B	240-218141-G-7	Plastic 1 liter - Nitric Acid	<2			
L501182-08 MW18C	240-218141-A-8	Plastic 60 mL - unpreserved				
L501182-08 MW18C	240-218141-B-8	Plastic 60 mL - unpreserved				
L501182-08 MW18C	240-218141-C-8	Plastic 500ml - unpreserved				
L501182-08 MW18C	240-218141-D-8	Plastic 500ml - with Nitric Acid	<2			
L501182-08 MW18C	240-218141-E-8	Plastic 1 liter - unpreserved				
L501182-08 MW18C	240-218141-F-8	Plastic 1 liter - Nitric Acid	<2			
L501182-08 MW18C	240-218141-G-8	Plastic 1 liter - Nitric Acid	<2			
L501182-09 MW18D	240-218141-A-9	Plastic 60 mL - unpreserved				
L501182-09 MW18D	240-218141-B-9	Plastic 60 mL - unpreserved				
L501182-09 MW18D	240-218141-C-9	Plastic 500ml - unpreserved				
L501182-09 MW18D	240-218141-D-9	Plastic 500ml - with Nitric Acid	<2			
L501182-09 MW18D	240-218141-E-9	Plastic 1 liter - unpreserved				
L501182-09 MW18D	240-218141-F-9	Plastic 1 liter - Nitric Acid	<2			
L501182-09 MW18D	240-218141-G-9	Plastic 1 liter - Nitric Acid	<2			
L501182-10 MWT-17A	240-218141-A-10	Plastic 60 mL - unpreserved				
L501182-10 MWT-17A	240-218141-B-10	Plastic 60 mL - unpreserved				
L501182-10 MWT-17A	240-218141-C-10	Plastic 500ml - unpreserved				
L501182-10 MWT-17A	240-218141-D-10	Plastic 500ml - with Nitric Acid	<2			
L501182-10 MWT-17A	240-218141-E-10	Plastic 1 liter - unpreserved				
L501182-10 MWT-17A	240-218141-F-10	Plastic 1 liter - Nitric Acid	<2			
L501182-10 MWT-17A	240-218141-G-10	Plastic 1 liter - Nitric Acid	<2			
L501182-01 FIELD BLANK	240-218141-A-11	Plastic 60 mL - unpreserved				
L501182-01 FIELD BLANK	240-218141-B-11	Plastic 60 mL - unpreserved				
L501182-01 FIELD BLANK	240-218141-C-11	Plastic 500ml - unpreserved				

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L501182-01 FIELD BLANK	240-218141-D-11	Plastic 500ml - with Nitric Acid	<2			
L501182-01 FIELD BLANK	240-218141-E-11	Plastic 1 liter - unpreserved				
L501182-01 FIELD BLANK	240-218141-F-11	Plastic 1 liter - Nitric Acid	<2			
L501182-01 FIELD BLANK	240-218141-G-11	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-197129.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-218141-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 2/3/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226_228AS_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L501182-01 MW17A (240-218141-1)	1/23/25	09:37 Eastern	G	Water			X	X	X	2	
L501182-02 MW17B (240-218141-2)	1/23/25	11:46 Eastern	G	Water			X	X	X	2	
L501182-03 MW17C (240-218141-3)	1/23/25	13:32 Eastern	G	Water			X	X	X	2	
L501182-04 MW17D (240-218141-4)	1/23/25	14:44 Eastern	G	Water			X	X	X	2	
L501182-05 MW17E (240-218141-5)	1/23/25	16:01 Eastern	G	Water			X	X	X	2	
L501182-06 MW18A (240-218141-6)	1/23/25	09:33 Eastern	G	Water			X	X	X	2	
L501182-07 MW18B (240-218141-7)	1/23/25	11:08 Eastern	G	Water			X	X	X	2	
L501182-08 MW18C (240-218141-8)	1/23/25	12:43 Eastern	G	Water			X	X	X	2	
L501182-09 MW18D (240-218141-9)	1/23/25	14:08 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by: MALISSA LOAR	Date/Time: 1-27-25	Company	Received by:	Date/Time: 0905 JAN 28 2025	Company: ETA-STL
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-197129.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-218141-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 2/3/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226_228AS_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L501182-10 MWT-17A (240-218141-10)	1/23/25	09:37 Eastern	G	Water			X	X	X	2	
L501182-01 FIELD BLANK (240-218141-11)	1/23/25	08:20 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: MALISSA LOAR	Date/Time: 1/27/25	Company	Received by: [signature]	Date/Time: 0905 JAN 28 2025	Company: ETA-STL
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-197658.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 2
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note): NELAP - Oregon		Job #: 240-218141-1
Address: 5755 8th Street East, ,	Due Date Requested: 2/24/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT (MOD) Custom List 2: 2-3 Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
L501182-01 MW17A (240-218141-1)	1/23/25	09:37 Eastern	G	Water			X	1	
L501182-02 MW17B (240-218141-2)	1/23/25	11:46 Eastern	G	Water			X	1	
L501182-03 MW17C (240-218141-3)	1/23/25	13:32 Eastern	G	Water			X	1	
L501182-04 MW17D (240-218141-4)	1/23/25	14:44 Eastern	G	Water			X	1	
L501182-05 MW17E (240-218141-5)	1/23/25	16:01 Eastern	G	Water			X	1	
L501182-06 MW18A (240-218141-6)	1/23/25	09:33 Eastern	G	Water			X	1	
L501182-07 MW18B (240-218141-7)	1/23/25	11:08 Eastern	G	Water			X	1	
L501182-08 MW18C (240-218141-8)	1/23/25	12:43 Eastern	G	Water			X	1	
L501182-09 MW18D (240-218141-9)	1/23/25	14:08 Eastern	G	Water			X	1	

Mel Blk

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said c

Therm. ID: SC04 Cust. Seal: Y
Uncorr./Corr. Temp: 13.5/13.5 °C
Delivery: UPS / FedEx / Other
Ice Type: Blue / Dry / Wet / None
Label Ver. V Packing: D

Possible Hazard Identification *Unconfirmed*		***Sample Disposal (A fee may be assessed if sam*** ☐ *Return To Client* ☐ *Disposal By Lab*
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2	Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date:	Time: / Method of Shi

Relinquished by: MALISSA LOAR	Date/Time: 2/3/25	Company	Received by:	Date/Time: 2/4/25 5:45	Company EUCW
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

8/18/2025 (Rev. 3)

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-197658.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 2
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note): NELAP - Oregon		Job #: 240-218141-1
Address: 5755 8th Street East, ,	Due Date Requested: 2/24/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			Other: N/A
Site: N/A	SSOW#: N/A			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT (MOD) Custom List 2: 2-3 Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
L501182-01 MW17A (240-218141-1)	1/23/25	09:37 Eastern	G	Water			X	1	
L501182-02 MW17B (240-218141-2)	1/23/25	11:46 Eastern	G	Water			X	1	
L501182-03 MW17C (240-218141-3)	1/23/25	13:32 Eastern	G	Water			X	1	
L501182-04 MW17D (240-218141-4)	1/23/25	14:44 Eastern	G	Water			X	1	
L501182-05 MW17E (240-218141-5)	1/23/25	16:01 Eastern	G	Water			X	1	
L501182-06 MW18A (240-218141-6)	1/23/25	09:33 Eastern	G	Water			X	1	
L501182-07 MW18B (240-218141-7)	1/23/25	11:08 Eastern	G	Water			X	1	
L501182-08 MW18C (240-218141-8)	1/23/25	12:43 Eastern	G	Water			X	1	
L501182-09 MW18D (240-218141-9)	1/23/25	14:08 Eastern	G	Water			X	1	

Analysis Requested

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said c

Therm. ID: SC04 Cust. Seal: Y
Uncorr./Corr. Temp: 13.8/13.5 °C
Delivery: UPS / FedEx / Other
Ice Type: Blue / Dry / Wet / None
Label Ver.: V Packing: D

Possible Hazard Identification	Sample Disposal (A fee may be assessed if sam
Unconfirmed	☐ Return To Client ☐ Disposal By Lab
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shi

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
MALISSA LOAR	2/3/25			2/4/25 5:45	EUN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

8/18/2025 (Rev. 3)

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-218141-1

Login Number: 218141
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 02/04/25 02:08 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-218141-1

Login Number: 218141
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 01/28/25 12:32 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 7/25/2025 12:03:59 PM Revision 1

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-218633-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

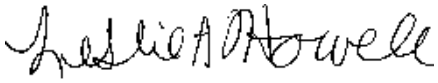
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
7/25/2025 12:03:59 PM
Revision 1

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 22
Tracer Carrier Summary 75
QC Sample Results 77
QC Association Summary 94
Lab Chronicle 106
Certification Summary 121
Chain of Custody 123
Receipt Checklists 135

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
240-218633-1

REVISION

The report being provided is a revision of the original report sent on 3/11/2025. The report (revision 1) is being revised due to Potassium and Sodium added to reporting list of 200.8 from Cleveland analysis..

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 2/7/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 8 coolers at receipt time were 1.2°C, 1.7°C, 2.1°C, 2.1°C, 2.2°C, 2.6°C, 2.8°C and 3.1°C.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 2540D: The sample duplicate (DUP) precision for analytical batch 240-644521 was outside control limits. Sample non-homogeneity is suspected.

Method 2540D: The sample duplicate (DUP) precision for analytical batch 240-644521 was outside control limits. Sample non-homogeneity is suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Gas Flow Proportional Counter
Method 904.0: Radium 228 Batch 702326

The detection goal was not met for the following sample due to a reduced sample volume used in prep attributed to the presence of matrix interferences. L502153-10 MW-14 (240-218633-10)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396
EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566
EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-218633-1	L502153-01 MW-1	Water	02/04/25 16:25	02/07/25 08:00
240-218633-2	L502153-02 MW-2	Water	02/04/25 12:30	02/07/25 08:00
240-218633-3	L502153-03 MW-4	Water	02/04/25 14:20	02/07/25 08:00
240-218633-4	L502153-04 MW-5	Water	02/04/25 16:57	02/07/25 08:00
240-218633-5	L502153-05 MW-6	Water	02/04/25 09:38	02/07/25 08:00
240-218633-6	L502153-06 MW-11	Water	02/04/25 10:40	02/07/25 08:00
240-218633-7	L502153-07 MW-11B	Water	02/04/25 11:52	02/07/25 08:00
240-218633-8	L502153-08 MW-12	Water	02/04/25 14:16	02/07/25 08:00
240-218633-9	L502153-09 MW-12B	Water	02/04/25 15:49	02/07/25 08:00
240-218633-10	L502153-10 MW-14	Water	02/04/25 07:55	02/07/25 08:00
240-218633-11	L502153-11 MW-15	Water	02/04/25 13:35	02/07/25 08:00
240-218633-12	L502153-12 MWT-6	Water	02/04/25 09:38	02/07/25 08:00
240-218633-13	L502153-13 FB	Water	02/04/25 06:55	02/07/25 08:00
240-218633-14	L502160-01 MW-7	Water	02/05/25 14:56	02/07/25 08:00
240-218633-15	L502160-02 MW-7B	Water	02/05/25 16:09	02/07/25 08:00
240-218633-16	L502160-03 MW-7C	Water	02/05/25 17:24	02/07/25 08:00
240-218633-17	L502160-04 MW-8	Water	02/05/25 13:36	02/07/25 08:00
240-218633-18	L502160-05 MW-9	Water	02/05/25 12:14	02/07/25 08:00
240-218633-19	L502160-06 MW-10	Water	02/05/25 10:53	02/07/25 08:00
240-218633-20	L502160-07 FB	Water	02/05/25 10:00	02/07/25 08:00
240-218633-21	L502161-01 MW-100A	Water	02/05/25 16:15	02/07/25 08:00
240-218633-22	L502161-02 MW-100B	Water	02/05/25 12:45	02/07/25 08:00
240-218633-23	L502161-03 MW-100C	Water	02/05/25 14:07	02/07/25 08:00
240-218633-24	L502161-04 MW-100D	Water	02/05/25 15:40	02/07/25 08:00
240-218633-25	L502161-05 MWT-100C	Water	02/05/25 14:07	02/07/25 08:00

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502153-01 MW-1 — Lab Sample ID: 240-218633-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.19		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Boron, dissolved	180		100	57	ug/L	1		200.7 R4.4-1994	Dissolved
Arsenic	0.0046	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.087		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.0018		0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Chromium	0.0018	J	0.0050	0.0012	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0023	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Vanadium	0.0027	J	0.0050	0.00082	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	160		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	50		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.011		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	28		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	1.2		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Arsenic, Dissolved	3.0	J	5.0	0.75	ug/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	78		5.0	0.77	ug/L	1		200.8-1994 R5.4	Dissolved
Cobalt, Dissolved	1.5		1.0	0.086	ug/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, dissolved	1.5	J	5.0	1.1	ug/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	140000		1000	250	ug/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	45000		1000	61	ug/L	1		200.8-1994 R5.4	Dissolved
Lithium, dissolved	8.5		8.0	3.4	ug/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	26000		1000	880	ug/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	820	J	1000	220	ug/L	1		200.8-1994 R5.4	Dissolved
Iron	5.7		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0044	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Iron, Dissolved	5.5		0.10	0.013	mg/L	1		200.8	Dissolved
Zinc, Dissolved	0.00097	J B	0.0070	0.00093	mg/L	1		200.8	Dissolved
Hardness as calcium carbonate	600		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	520		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	660		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	35		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	44		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.11		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	51		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502153-02 MW-2 — Lab Sample ID: 240-218633-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.3		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.040		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502153-02 MW-2 (Continued) — Lab Sample ID: 240-218633-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.000099	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.0036		0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.010		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.012		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	190		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	50		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.038		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	46		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	0.98	J	1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.22		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0019	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	690		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	460		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	910		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	3.6	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	59		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.062		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	220		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L502153-03 MW-4 — Lab Sample ID: 240-218633-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.073	J	0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0056		0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.16		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.000085	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00023	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0047	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Antimony	0.00065	J	0.0020	0.00057	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	110		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	37		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.011		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	31		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	1.4		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.96		0.10	0.013	mg/L	1		200.8	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502153-03 MW-4 (Continued) — Lab Sample ID: 240-218633-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	0.0014	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	420		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	320		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	510		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.4	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	66		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	56		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502153-04 MW-5 — Lab Sample ID: 240-218633-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.9		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Boron, dissolved	4000		100	57	ug/L	1		200.7 R4.4-1994	Dissolved
Silver	0.000088	J	0.0010	0.000053	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.043		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.000092	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00062	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Chromium	0.0014	J	0.0050	0.0012	mg/L	1		200.8-1994 R5.4	Total Recoverable
Copper	0.0026		0.0020	0.0017	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.058		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0047		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lead	0.00069	J	0.0010	0.00045	mg/L	1		200.8-1994 R5.4	Total Recoverable
Vanadium	0.0015	J	0.0050	0.00082	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	150		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	34		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.060		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	49		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	4.4		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium, Dissolved	38		5.0	0.77	ug/L	1		200.8-1994 R5.4	Dissolved
Cobalt, Dissolved	0.32	J	1.0	0.086	ug/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, dissolved	53		5.0	1.1	ug/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	3.8		2.0	1.5	ug/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	140000		1000	250	ug/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	31000		1000	61	ug/L	1		200.8-1994 R5.4	Dissolved
Lithium, dissolved	56		8.0	3.4	ug/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	46000		1000	880	ug/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	3800		1000	220	ug/L	1		200.8-1994 R5.4	Dissolved
Iron	0.16		0.10	0.013	mg/L	1		200.8	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502153-04 MW-5 (Continued) — Lab Sample ID: 240-218633-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	0.0037	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Iron, Dissolved	0.12		0.10	0.013	mg/L	1		200.8	Dissolved
Zinc, Dissolved	0.0044	J B	0.0070	0.00093	mg/L	1		200.8	Dissolved
Hardness as calcium carbonate	510		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	760		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	8.7		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	34		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.11		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	310		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L502153-05 MW-6 — Lab Sample ID: 240-218633-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.0		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.062		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.00015	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00053	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.029		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0033		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	200		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	48		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.067		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	38		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	7.7		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Zinc	0.0020	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	690		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	440		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	900		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	49		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.24		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	250		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L502153-06 MW-11 — Lab Sample ID: 240-218633-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.21		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.017		0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.18		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502153-06 MW-11 (Continued) — Lab Sample ID: 240-218633-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.00044	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0038	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Vanadium	0.0025	J	0.0050	0.00082	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	130		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	37		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	36		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	1.4		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	20		0.50	0.067	mg/L	5		200.8	Total/NA
Hardness as calcium carbonate	480		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	460		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	580		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	44		8.0	0.80	mg/L	1		2540D-2020	Total/NA
Chloride	56		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.17		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502153-07 MW-11B — Lab Sample ID: 240-218633-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.69		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0037	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.068		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0027	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	64		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	24		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.032		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	15		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	6.2		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.70		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0012	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	260		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	290		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	270		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.4	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	0.84	J	1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.38		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	5.5		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502153-08 MW-12 — Lab Sample ID: 240-218633-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.092	J	0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Boron, dissolved	73	J	100	57	ug/L	1		200.7 R4.4-1994	Dissolved
Arsenic	0.0014	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.050		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.0020		0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0050		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.010		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	150		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	59		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.018		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	95		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	2.3		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Arsenic, Dissolved	1.0	J	5.0	0.75	ug/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	44		5.0	0.77	ug/L	1		200.8-1994 R5.4	Dissolved
Cobalt, Dissolved	1.5		1.0	0.086	ug/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, dissolved	4.4	J	5.0	1.1	ug/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	9.0		2.0	1.5	ug/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	130000		1000	250	ug/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	53000		1000	61	ug/L	1		200.8-1994 R5.4	Dissolved
Lithium, dissolved	15		8.0	3.4	ug/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	84000		1000	880	ug/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	1900		1000	220	ug/L	1		200.8-1994 R5.4	Dissolved
Iron	1.2		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0025	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Iron, Dissolved	0.92		0.10	0.013	mg/L	1		200.8	Dissolved
Zinc, Dissolved	0.0024	J B	0.0070	0.00093	mg/L	1		200.8	Dissolved
Hardness as calcium carbonate	620		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	560		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	870		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	15		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	53		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.13		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	160		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502153-09 MW-12B — Lab Sample ID: 240-218633-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.3		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.025		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	26		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502153-09 MW-12B (Continued) — Lab Sample ID: 240-218633-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	8.1		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.040		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	110		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	8.2		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.20		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	98		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	330		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	330		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.40	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	0.92	J	1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.63		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	2.4		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502153-10 MW-14 — Lab Sample ID: 240-218633-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.0		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0064		0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.14		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00069	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.012		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0038		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Vanadium	0.0019	J	0.0050	0.00082	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	160		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	44		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.099		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	74		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	5.4		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	15		0.50	0.067	mg/L	5		200.8	Total/NA
Zinc	0.018	B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Zinc	0.019	J B	0.035	0.0046	mg/L	5		200.8	Total/NA
Hardness as calcium carbonate	590		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	570		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	750		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	37		8.0	0.80	mg/L	1		2540D-2020	Total/NA
Chloride	100		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	6.7		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502153-11 MW-15 — Lab Sample ID: 240-218633-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.30		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.00097	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.059		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Selenium	0.019		0.0050	0.00089	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	150		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	38		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	38		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	0.36	J	1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.031	J	0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	520		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	330		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	650		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	91		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.047	J	0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	110		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502153-12 MWT-6 — Lab Sample ID: 240-218633-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.99		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.061		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.000081	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00054	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.029		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0032		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	190		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	47		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.066		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	38		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	7.7		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Zinc	0.0011	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	680		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	440		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	860		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	49		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.24		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502153-12 MWT-6 (Continued) — Lab Sample ID: 240-218633-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	240		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L502153-13 FB — Lab Sample ID: 240-218633-13

No Detections.

Client Sample ID: L502160-01 MW-7 — Lab Sample ID: 240-218633-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.0		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0027	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.048		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00026	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.17		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	110		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	14		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.075		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	67		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	7.9		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.90		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	320		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	190		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	610		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.60	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	81		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.37		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502160-02 MW-7B — Lab Sample ID: 240-218633-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.8		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.0075		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	7.6		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	2.4		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.031		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	130		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	5.3		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.095	J	0.10	0.013	mg/L	1		200.8	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502160-02 MW-7B (Continued) — Lab Sample ID: 240-218633-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	0.0011	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Bicarbonate Alkalinity as CaCO3	310		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	8.0		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	350		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.90	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	0.82	J	1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.74		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	2.4		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502160-03 MW-7C — Lab Sample ID: 240-218633-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	6.2		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0053		0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.039		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.35		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0059		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	220		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	42		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.11		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	85		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	5.3		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	3.9		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0012	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	720		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	140		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1200		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	9.9		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	83		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.24		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	640		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L502160-04 MW-8 — Lab Sample ID: 240-218633-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.094	J	0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.023		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0054		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	87		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	24		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502160-04 MW-8 (Continued) — Lab Sample ID: 240-218633-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.010		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	29		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	0.78	J	1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Hardness as calcium carbonate	310		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	300		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	360		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.50	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	38		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.054		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	25		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502160-05 MW-9 — Lab Sample ID: 240-218633-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.017		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	96		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	25		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	3.0		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	1.0		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Zinc	0.0012	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	340		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	330		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	340		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.40	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	4.6		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	16		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502160-06 MW-10 — Lab Sample ID: 240-218633-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.030		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Selenium	0.0015	J	0.0050	0.00089	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	120		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	24		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	3.2		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	0.71	J	1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Hardness as calcium carbonate	390		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	370		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	360		10	7.8	mg/L	1		2540 C-2020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502160-06 MW-10 (Continued) — Lab Sample ID: 240-218633-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.5		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.050		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	14		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502160-07 FB — Lab Sample ID: 240-218633-20

No Detections.

Client Sample ID: L502161-01 MW-100A — Lab Sample ID: 240-218633-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.012		0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.19		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00033	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0069		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	89		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	39		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.011		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	12		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	1.9		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.3		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0028	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	380		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	360		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	360		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	4.6		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	10		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.57		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	25		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502161-02 MW-100B — Lab Sample ID: 240-218633-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.30		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0073		0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.14		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0065		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	89		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	32		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.019		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502161-02 MW-100B (Continued) — Lab Sample ID: 240-218633-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	32		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	3.6		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.2		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0019	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	350		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	270		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	440		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	5.6	J	8.0	0.80	mg/L	1		2540D-2020	Total/NA
Chloride	19		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.44		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	110		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502161-03 MW-100C — Lab Sample ID: 240-218633-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.9		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.062		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0011	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	59		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	20		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.032		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	28		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	6.5		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.58		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0014	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	230		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	290		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	280		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.2	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	2.8		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.43		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	4.2		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502161-04 MW-100D — Lab Sample ID: 240-218633-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.7		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0016	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.0098		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0056		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502161-04 MW-100D (Continued) — Lab Sample ID: 240-218633-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	21		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	3.9		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.018		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	150		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	4.4		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.30		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0020	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	68		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	360		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	430		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	2.2	J	8.0	0.80	mg/L	1		2540D-2020	Total/NA
Chloride	6.2		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.85		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	33		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502161-05 MWT-100C — Lab Sample ID: 240-218633-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.9		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.064		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0011	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	60		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	20		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.032		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	28		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	6.6		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.61		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	230		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	290		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	270		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.1	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	2.7		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.43		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	4.3		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502153-01 MW-1

Date Collected: 02/04/25 16:25
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-1

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.19**		0.10	0.057	mg/L		02/10/25 14:00	02/11/25 23:18	1

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, dissolved	**180**		100	57	ug/L		02/12/25 14:00	02/17/25 15:55	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 12:44	1
Arsenic	**0.0046**	**J**	0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 12:44	1
Barium	**0.087**		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 12:44	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 12:44	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 12:44	1
Cobalt	**0.0018**		0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 12:44	1
Chromium	**0.0018**	**J**	0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 12:44	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 12:44	1
Molybdenum	**0.0023**	**J**	0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 12:44	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 12:44	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 12:44	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 12:44	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 12:44	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 12:44	1
Vanadium	**0.0027**	**J**	0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 12:44	1
Calcium	**160**		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 12:44	1
Magnesium	**50**		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 12:44	1
Lithium	**0.011**		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 12:44	1
Sodium	**28**		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 12:44	1
Potassium	**1.2**		1.0	0.22	mg/L		02/10/25 14:00	02/12/25 12:44	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver, Dissolved	ND		1.0	0.053	ug/L		02/12/25 14:00	02/13/25 16:34	1
Arsenic, Dissolved	**3.0**	**J**	5.0	0.75	ug/L		02/12/25 14:00	02/13/25 16:34	1
Barium, Dissolved	**78**		5.0	0.77	ug/L		02/12/25 14:00	02/13/25 16:34	1
Beryllium, Dissolved	ND		1.0	0.27	ug/L		02/12/25 14:00	02/13/25 16:34	1
Cadmium, Dissolved	ND		1.0	0.077	ug/L		02/12/25 14:00	02/13/25 16:34	1
Cobalt, Dissolved	**1.5**		1.0	0.086	ug/L		02/12/25 14:00	02/13/25 16:34	1
Chromium, Dissolved	ND		5.0	1.2	ug/L		02/12/25 14:00	02/13/25 16:34	1
Copper, Dissolved	ND		2.0	1.7	ug/L		02/12/25 14:00	02/13/25 16:34	1
Molybdenum, dissolved	**1.5**	**J**	5.0	1.1	ug/L		02/12/25 14:00	02/13/25 16:34	1
Nickel, Dissolved	ND		2.0	1.5	ug/L		02/12/25 14:00	02/13/25 16:34	1
Lead, dissolved	ND		1.0	0.45	ug/L		02/12/25 14:00	02/13/25 16:34	1
Antimony, Dissolved	ND		2.0	0.57	ug/L		02/12/25 14:00	02/13/25 16:34	1
Selenium, Dissolved	ND		5.0	0.89	ug/L		02/12/25 14:00	02/13/25 16:34	1
Thallium, Dissolved	ND		1.0	0.51	ug/L		02/12/25 14:00	02/13/25 16:34	1
Vanadium, Dissolved	ND		5.0	0.82	ug/L		02/12/25 14:00	02/13/25 16:34	1
Calcium, Dissolved	**140000**		1000	250	ug/L		02/12/25 14:00	02/13/25 16:34	1
Magnesium, Dissolved	**45000**		1000	61	ug/L		02/12/25 14:00	02/13/25 16:34	1
Lithium, dissolved	**8.5**		8.0	3.4	ug/L		02/12/25 14:00	02/13/25 16:34	1
Sodium, Dissolved	**26000**		1000	880	ug/L		02/12/25 14:00	02/13/25 16:34	1

Client Sample ID: L502153-01 MW-1

Date Collected: 02/04/25 16:25
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-1

Matrix: Water

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium, Dissolved	820	J	1000	220	ug/L		02/12/25 14:00	02/13/25 16:34	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	5.7		0.10	0.013	mg/L		02/12/25 14:31	02/13/25 15:16	1
Zinc	0.0044	J B	0.0070	0.00093	mg/L		02/12/25 14:31	02/13/25 15:16	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	5.5		0.10	0.013	mg/L		02/12/25 14:25	02/13/25 14:23	1
Zinc, Dissolved	0.00097	J B	0.0070	0.00093	mg/L		02/12/25 14:25	02/13/25 14:23	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	600		33	33	mg/L			02/18/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:17	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.20	0.13	ug/L		02/12/25 14:00	02/13/25 10:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	520		5.0	2.6	mg/L			02/11/25 23:12	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/11/25 23:12	1
Total Dissolved Solids (SM 2540 C-2020)	660		10	7.8	mg/L			02/10/25 10:53	1
Total Suspended Solids (SM 2540D-2020)	35		4.0	0.40	mg/L			02/11/25 09:45	1
Chloride (EPA 300.0-1993 R2.1)	44		1.0	0.13	mg/L			02/11/25 21:39	1
Fluoride (EPA 300.0-1993 R2.1)	0.11		0.050	0.024	mg/L			02/11/25 21:39	1
Sulfate (EPA 300.0-1993 R2.1)	51		1.0	0.35	mg/L			02/11/25 21:39	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0332	U	0.256	0.256	1.00	0.487	pCi/L	02/11/25 07:07	03/07/25 07:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.8*		*30 - 110*	*02/11/25 07:07*	*03/07/25 07:54*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0833	U	0.422	0.422	1.00	0.778	pCi/L	02/11/25 07:11	03/06/25 12:26	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502153-01 MW-1
Date Collected: 02/04/25 16:25
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.8*		*30 - 110*	*02/11/25 07:11*	*03/06/25 12:26*	*1*
Y Carrier	*77.8*		*30 - 110*	*02/11/25 07:11*	*03/06/25 12:26*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.116	U	0.494	0.494	5.00	0.778	pCi/L		03/07/25 16:17	1

Client Sample ID: L502153-02 MW-2

Date Collected: 02/04/25 12:30
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-2

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.3**		0.10	0.057	mg/L		02/10/25 14:00	02/11/25 23:43	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 12:58	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 12:58	1
Barium	**0.040**		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 12:58	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 12:58	1
Cadmium	**0.000099**	**J**	0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 12:58	1
Cobalt	**0.0036**		0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 12:58	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 12:58	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 12:58	1
Molybdenum	**0.010**		0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 12:58	1
Nickel	**0.012**		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 12:58	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 12:58	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 12:58	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 12:58	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 12:58	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 12:58	1
Calcium	**190**		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 12:58	1
Magnesium	**50**		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 12:58	1
Lithium	**0.038**		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 12:58	1
Sodium	**46**		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 12:58	1
Potassium	**0.98**	**J**	1.0	0.22	mg/L		02/10/25 14:00	02/12/25 12:58	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.22**		0.10	0.013	mg/L		02/12/25 14:31	02/13/25 15:19	1
Zinc	**0.0019**	**J B**	0.0070	0.00093	mg/L		02/12/25 14:31	02/13/25 15:19	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**690**		33	33	mg/L			02/18/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**460**		5.0	2.6	mg/L			02/11/25 23:18	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/11/25 23:18	1
Total Dissolved Solids (SM 2540 C-2020)	**910**		10	7.8	mg/L			02/10/25 10:54	1
Total Suspended Solids (SM 2540D-2020)	**3.6**	**J**	4.0	0.40	mg/L			02/11/25 09:45	1
Chloride (EPA 300.0-1993 R2.1)	**59**		1.0	0.13	mg/L			02/11/25 22:21	1
Fluoride (EPA 300.0-1993 R2.1)	**0.062**		0.050	0.024	mg/L			02/11/25 22:21	1
Sulfate (EPA 300.0-1993 R2.1)	**220**		5.0	1.7	mg/L			02/11/25 22:42	5

Client Sample ID: L502153-02 MW-2

Date Collected: 02/04/25 12:30
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-2

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.144	U	0.182	0.183	1.00	0.303	pCi/L	02/11/25 07:07	03/07/25 07:48	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.8*		*30 - 110*	*02/11/25 07:07*	*03/07/25 07:48*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0512	U	0.321	0.321	1.00	0.592	pCi/L	02/11/25 07:11	03/06/25 12:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.8*		*30 - 110*	*02/11/25 07:11*	*03/06/25 12:26*	*1*
Y Carrier	*78.1*		*30 - 110*	*02/11/25 07:11*	*03/06/25 12:26*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.195	U	0.369	0.369	5.00	0.592	pCi/L		03/07/25 16:17	1

Client Sample ID: L502153-03 MW-4

Date Collected: 02/04/25 14:20
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-3

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.073**	**J**	0.10	0.057	mg/L		02/10/25 14:00	02/11/25 23:56	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 13:06	1
Arsenic	**0.0056**		0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 13:06	1
Barium	**0.16**		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 13:06	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 13:06	1
Cadmium	**0.000085**	**J**	0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 13:06	1
Cobalt	**0.00023**	**J**	0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 13:06	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 13:06	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 13:06	1
Molybdenum	**0.0047**	**J**	0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 13:06	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 13:06	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 13:06	1
Antimony	**0.00065**	**J**	0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 13:06	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 13:06	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 13:06	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 13:06	1
Calcium	**110**		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 13:06	1
Magnesium	**37**		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 13:06	1
Lithium	**0.011**		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 13:06	1
Sodium	**31**		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 13:06	1
Potassium	**1.4**		1.0	0.22	mg/L		02/10/25 14:00	02/12/25 13:06	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.96**		0.10	0.013	mg/L		02/12/25 14:31	02/13/25 15:21	1
Zinc	**0.0014**	**J B**	0.0070	0.00093	mg/L		02/12/25 14:31	02/13/25 15:21	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**420**		33	33	mg/L			02/18/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**320**		5.0	2.6	mg/L			02/11/25 23:26	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/11/25 23:26	1
Total Dissolved Solids (SM 2540 C-2020)	**510**		10	7.8	mg/L			02/10/25 13:54	1
Total Suspended Solids (SM 2540D-2020)	**1.4**	**J**	4.0	0.40	mg/L			02/11/25 09:45	1
Chloride (EPA 300.0-1993 R2.1)	**66**		1.0	0.13	mg/L			02/11/25 23:03	1
Fluoride (EPA 300.0-1993 R2.1)	**0.15**		0.050	0.024	mg/L			02/11/25 23:03	1
Sulfate (EPA 300.0-1993 R2.1)	**56**		1.0	0.35	mg/L			02/11/25 23:03	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502153-03 MW-4

Date Collected: 02/04/25 14:20
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-3

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.268	U	0.209	0.210	1.00	0.305	pCi/L	02/11/25 07:07	03/07/25 07:48	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.6*		*30 - 110*	*02/11/25 07:07*	*03/07/25 07:48*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.727**		0.485	0.489	1.00	0.726	pCi/L	02/11/25 07:11	03/06/25 12:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.6*		*30 - 110*	*02/11/25 07:11*	*03/06/25 12:26*	*1*
Y Carrier	*78.5*		*30 - 110*	*02/11/25 07:11*	*03/06/25 12:26*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.995**		0.528	0.532	5.00	0.726	pCi/L		03/07/25 16:17	1

Client Sample ID: L502153-04 MW-5

Date Collected: 02/04/25 16:57
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-4

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.9**		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 00:00	1

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, dissolved	**4000**		100	57	ug/L		02/12/25 14:00	02/17/25 16:00	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**0.000088**	**J**	0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 13:09	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 13:09	1
Barium	**0.043**		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 13:09	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 13:09	1
Cadmium	**0.000092**	**J**	0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 13:09	1
Cobalt	**0.00062**	**J**	0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 13:09	1
Chromium	**0.0014**	**J**	0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 13:09	1
Copper	**0.0026**		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 13:09	1
Molybdenum	**0.058**		0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 13:09	1
Nickel	**0.0047**		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 13:09	1
Lead	**0.00069**	**J**	0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 13:09	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 13:09	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 13:09	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 13:09	1
Vanadium	**0.0015**	**J**	0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 13:09	1
Calcium	**150**		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 13:09	1
Magnesium	**34**		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 13:09	1
Lithium	**0.060**		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 13:09	1
Sodium	**49**		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 13:09	1
Potassium	**4.4**		1.0	0.22	mg/L		02/10/25 14:00	02/12/25 13:09	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver, Dissolved	ND		1.0	0.053	ug/L		02/12/25 14:00	02/13/25 16:37	1
Arsenic, Dissolved	ND		5.0	0.75	ug/L		02/12/25 14:00	02/13/25 16:37	1
Barium, Dissolved	**38**		5.0	0.77	ug/L		02/12/25 14:00	02/13/25 16:37	1
Beryllium, Dissolved	ND		1.0	0.27	ug/L		02/12/25 14:00	02/13/25 16:37	1
Cadmium, Dissolved	ND		1.0	0.077	ug/L		02/12/25 14:00	02/13/25 16:37	1
Cobalt, Dissolved	**0.32**	**J**	1.0	0.086	ug/L		02/12/25 14:00	02/13/25 16:37	1
Chromium, Dissolved	ND		5.0	1.2	ug/L		02/12/25 14:00	02/13/25 16:37	1
Copper, Dissolved	ND		2.0	1.7	ug/L		02/12/25 14:00	02/13/25 16:37	1
Molybdenum, dissolved	**53**		5.0	1.1	ug/L		02/12/25 14:00	02/13/25 16:37	1
Nickel, Dissolved	**3.8**		2.0	1.5	ug/L		02/12/25 14:00	02/13/25 16:37	1
Lead, dissolved	ND		1.0	0.45	ug/L		02/12/25 14:00	02/13/25 16:37	1
Antimony, Dissolved	ND		2.0	0.57	ug/L		02/12/25 14:00	02/13/25 16:37	1
Selenium, Dissolved	ND		5.0	0.89	ug/L		02/12/25 14:00	02/13/25 16:37	1
Thallium, Dissolved	ND		1.0	0.51	ug/L		02/12/25 14:00	02/13/25 16:37	1
Vanadium, Dissolved	ND		5.0	0.82	ug/L		02/12/25 14:00	02/13/25 16:37	1
Calcium, Dissolved	**140000**		1000	250	ug/L		02/12/25 14:00	02/13/25 16:37	1
Magnesium, Dissolved	**31000**		1000	61	ug/L		02/12/25 14:00	02/13/25 16:37	1
Lithium, dissolved	**56**		8.0	3.4	ug/L		02/12/25 14:00	02/13/25 16:37	1
Sodium, Dissolved	**46000**		1000	880	ug/L		02/12/25 14:00	02/13/25 16:37	1

Client Sample ID: L502153-04 MW-5

Date Collected: 02/04/25 16:57
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-4

Matrix: Water

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium, Dissolved	3800		1000	220	ug/L		02/12/25 14:00	02/13/25 16:37	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.16		0.10	0.013	mg/L		02/12/25 14:31	02/13/25 15:24	1
Zinc	0.0037	J B	0.0070	0.00093	mg/L		02/12/25 14:31	02/13/25 15:24	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	0.12		0.10	0.013	mg/L		02/12/25 14:25	02/13/25 14:26	1
Zinc, Dissolved	0.0044	J B	0.0070	0.00093	mg/L		02/12/25 14:25	02/13/25 14:26	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	510		33	33	mg/L			02/18/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:22	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.20	0.13	ug/L		02/12/25 14:00	02/13/25 10:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	240		5.0	2.6	mg/L			02/11/25 23:32	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/11/25 23:32	1
Total Dissolved Solids (SM 2540 C-2020)	760		10	7.8	mg/L			02/10/25 13:54	1
Total Suspended Solids (SM 2540D-2020)	8.7		4.0	0.40	mg/L			02/11/25 09:45	1
Chloride (EPA 300.0-1993 R2.1)	34		1.0	0.13	mg/L			02/12/25 00:28	1
Fluoride (EPA 300.0-1993 R2.1)	0.11		0.050	0.024	mg/L			02/12/25 00:28	1
Sulfate (EPA 300.0-1993 R2.1)	310		5.0	1.7	mg/L			02/12/25 00:49	5

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.242	U	0.195	0.196	1.00	0.285	pCi/L	02/11/25 07:07	03/07/25 07:48	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.4*		*30 - 110*	*02/11/25 07:07*	*03/07/25 07:48*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.384	U	0.412	0.413	1.00	0.670	pCi/L	02/11/25 07:11	03/06/25 12:26	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502153-04 MW-5
Date Collected: 02/04/25 16:57
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-4
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.4*		*30 - 110*	*02/11/25 07:11*	*03/06/25 12:26*	*1*
Y Carrier	*77.8*		*30 - 110*	*02/11/25 07:11*	*03/06/25 12:26*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.627	U	0.456	0.457	5.00	0.670	pCi/L		03/07/25 16:17	1

Client Sample ID: L502153-05 MW-6

Date Collected: 02/04/25 09:38
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-5

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.0**		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 00:04	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 13:12	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 13:12	1
Barium	**0.062**		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 13:12	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 13:12	1
Cadmium	**0.00015**	**J**	0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 13:12	1
Cobalt	**0.00053**	**J**	0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 13:12	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 13:12	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 13:12	1
Molybdenum	**0.029**		0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 13:12	1
Nickel	**0.0033**		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 13:12	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 13:12	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 13:12	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 13:12	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 13:12	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 13:12	1
Calcium	**200**		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 13:12	1
Magnesium	**48**		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 13:12	1
Lithium	**0.067**		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 13:12	1
Sodium	**38**		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 13:12	1
Potassium	**7.7**		1.0	0.22	mg/L		02/10/25 14:00	02/12/25 13:12	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		02/12/25 14:31	02/13/25 15:32	1
Zinc	**0.0020**	**J B**	0.0070	0.00093	mg/L		02/12/25 14:31	02/13/25 15:32	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**690**		33	33	mg/L			02/18/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**440**		5.0	2.6	mg/L			02/11/25 23:37	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/11/25 23:37	1
Total Dissolved Solids (SM 2540 C-2020)	**900**		10	7.8	mg/L			02/10/25 13:54	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			02/11/25 09:45	1
Chloride (EPA 300.0-1993 R2.1)	**49**		1.0	0.13	mg/L			02/12/25 01:10	1
Fluoride (EPA 300.0-1993 R2.1)	**0.24**		0.050	0.024	mg/L			02/12/25 01:10	1
Sulfate (EPA 300.0-1993 R2.1)	**250**		5.0	1.7	mg/L			02/12/25 01:31	5

Client Sample ID: L502153-05 MW-6

Date Collected: 02/04/25 09:38
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-5

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.261**		0.183	0.185	1.00	0.255	pCi/L	02/11/25 07:07	03/07/25 07:48	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.1*		*30 - 110*	*02/11/25 07:07*	*03/07/25 07:48*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.128	U	0.265	0.266	1.00	0.544	pCi/L	02/11/25 07:11	03/06/25 12:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.1*		*30 - 110*	*02/11/25 07:11*	*03/06/25 12:26*	*1*
Y Carrier	*81.5*		*30 - 110*	*02/11/25 07:11*	*03/06/25 12:26*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.261	U	0.322	0.324	5.00	0.544	pCi/L		03/07/25 16:17	1

Client Sample ID: L502153-06 MW-11

Date Collected: 02/04/25 10:40
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-6

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.21**		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 00:08	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 13:15	1
Arsenic	**0.017**		0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 13:15	1
Barium	**0.18**		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 13:15	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 13:15	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 13:15	1
Cobalt	**0.00044**	**J**	0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 13:15	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 13:15	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 13:15	1
Molybdenum	**0.0038**	**J**	0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 13:15	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 13:15	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 13:15	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 13:15	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 13:15	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 13:15	1
Vanadium	**0.0025**	**J**	0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 13:15	1
Calcium	**130**		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 13:15	1
Magnesium	**37**		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 13:15	1
Lithium	ND		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 13:15	1
Sodium	**36**		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 13:15	1
Potassium	**1.4**		1.0	0.22	mg/L		02/10/25 14:00	02/12/25 13:15	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**20**		0.50	0.067	mg/L		02/12/25 14:31	02/13/25 15:38	5
Zinc	ND		0.0070	0.00093	mg/L		02/12/25 14:31	02/13/25 15:35	1
Zinc	ND		0.035	0.0046	mg/L		02/12/25 14:31	02/13/25 15:38	5

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**480**		33	33	mg/L			02/18/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**460**		5.0	2.6	mg/L			02/11/25 23:54	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/11/25 23:54	1
Total Dissolved Solids (SM 2540 C-2020)	**580**		10	7.8	mg/L			02/10/25 13:54	1
Total Suspended Solids (SM 2540D-2020)	**44**		8.0	0.80	mg/L			02/11/25 09:45	1
Chloride (EPA 300.0-1993 R2.1)	**56**		1.0	0.13	mg/L			02/12/25 01:52	1
Fluoride (EPA 300.0-1993 R2.1)	**0.17**		0.050	0.024	mg/L			02/12/25 01:52	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			02/12/25 01:52	1

Client Sample ID: L502153-06 MW-11

Date Collected: 02/04/25 10:40
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-6

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.433	U	0.304	0.306	1.00	0.441	pCi/L	02/11/25 07:07	03/07/25 07:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*30 - 110*	*02/11/25 07:07*	*03/07/25 07:49*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.359	U	0.402	0.403	1.00	0.654	pCi/L	02/11/25 07:11	03/06/25 12:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*30 - 110*	*02/11/25 07:11*	*03/06/25 12:26*	*1*
Y Carrier	*80.0*		*30 - 110*	*02/11/25 07:11*	*03/06/25 12:26*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.792**		0.504	0.506	5.00	0.654	pCi/L		03/07/25 16:17	1

Client Sample ID: L502153-07 MW-11B

Date Collected: 02/04/25 11:52
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-7

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.69**		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 00:21	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 13:18	1
Arsenic	**0.0037**	**J**	0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 13:18	1
Barium	**0.068**		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 13:18	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 13:18	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 13:18	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 13:18	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 13:18	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 13:18	1
Molybdenum	**0.0027**	**J**	0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 13:18	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 13:18	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 13:18	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 13:18	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 13:18	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 13:18	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 13:18	1
Calcium	**64**		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 13:18	1
Magnesium	**24**		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 13:18	1
Lithium	**0.032**		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 13:18	1
Sodium	**15**		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 13:18	1
Potassium	**6.2**		1.0	0.22	mg/L		02/10/25 14:00	02/12/25 13:18	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.70**		0.10	0.013	mg/L		02/12/25 14:31	02/13/25 15:41	1
Zinc	**0.0012**	**J B**	0.0070	0.00093	mg/L		02/12/25 14:31	02/13/25 15:41	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**260**		33	33	mg/L			02/18/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**290**		5.0	2.6	mg/L			02/12/25 00:07	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 00:07	1
Total Dissolved Solids (SM 2540 C-2020)	**270**		10	7.8	mg/L			02/10/25 13:54	1
Total Suspended Solids (SM 2540D-2020)	**1.4**	**J**	4.0	0.40	mg/L			02/11/25 09:45	1
Chloride (EPA 300.0-1993 R2.1)	**0.84**	**J**	1.0	0.13	mg/L			02/11/25 20:35	1
Fluoride (EPA 300.0-1993 R2.1)	**0.38**		0.050	0.024	mg/L			02/11/25 20:35	1
Sulfate (EPA 300.0-1993 R2.1)	**5.5**		1.0	0.35	mg/L			02/11/25 20:35	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502153-07 MW-11B

Date Collected: 02/04/25 11:52
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-7

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.415		0.219	0.222	1.00	0.274	pCi/L	02/11/25 07:07	03/07/25 07:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.6*		*30 - 110*	*02/11/25 07:07*	*03/07/25 07:49*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0980	U	0.389	0.390	1.00	0.695	pCi/L	02/11/25 07:11	03/06/25 12:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.6*		*30 - 110*	*02/11/25 07:11*	*03/06/25 12:26*	*1*
Y Carrier	*80.0*		*30 - 110*	*02/11/25 07:11*	*03/06/25 12:26*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.513	U	0.446	0.449	5.00	0.695	pCi/L		03/07/25 16:17	1

Client Sample ID: L502153-08 MW-12

Lab Sample ID: 240-218633-8

Date Collected: 02/04/25 14:16

Matrix: Water

Date Received: 02/07/25 08:00

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.092**	**J**	0.10	0.057	mg/L		02/10/25 14:00	02/12/25 00:25	1

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, dissolved	**73**	**J**	100	57	ug/L		02/12/25 14:00	02/17/25 16:04	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 13:20	1
Arsenic	**0.0014**	**J**	0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 13:20	1
Barium	**0.050**		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 13:20	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 13:20	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 13:20	1
Cobalt	**0.0020**		0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 13:20	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 13:20	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 13:20	1
Molybdenum	**0.0050**		0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 13:20	1
Nickel	**0.010**		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 13:20	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 13:20	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 13:20	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 13:20	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 13:20	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 13:20	1
Calcium	**150**		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 13:20	1
Magnesium	**59**		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 13:20	1
Lithium	**0.018**		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 13:20	1
Sodium	**95**		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 13:20	1
Potassium	**2.3**		1.0	0.22	mg/L		02/10/25 14:00	02/12/25 13:20	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver, Dissolved	ND		1.0	0.053	ug/L		02/12/25 14:00	02/13/25 16:39	1
Arsenic, Dissolved	**1.0**	**J**	5.0	0.75	ug/L		02/12/25 14:00	02/13/25 16:39	1
Barium, Dissolved	**44**		5.0	0.77	ug/L		02/12/25 14:00	02/13/25 16:39	1
Beryllium, Dissolved	ND		1.0	0.27	ug/L		02/12/25 14:00	02/13/25 16:39	1
Cadmium, Dissolved	ND		1.0	0.077	ug/L		02/12/25 14:00	02/13/25 16:39	1
Cobalt, Dissolved	**1.5**		1.0	0.086	ug/L		02/12/25 14:00	02/13/25 16:39	1
Chromium, Dissolved	ND		5.0	1.2	ug/L		02/12/25 14:00	02/13/25 16:39	1
Copper, Dissolved	ND		2.0	1.7	ug/L		02/12/25 14:00	02/13/25 16:39	1
Molybdenum, dissolved	**4.4**	**J**	5.0	1.1	ug/L		02/12/25 14:00	02/13/25 16:39	1
Nickel, Dissolved	**9.0**		2.0	1.5	ug/L		02/12/25 14:00	02/13/25 16:39	1
Lead, dissolved	ND		1.0	0.45	ug/L		02/12/25 14:00	02/13/25 16:39	1
Antimony, Dissolved	ND		2.0	0.57	ug/L		02/12/25 14:00	02/13/25 16:39	1
Selenium, Dissolved	ND		5.0	0.89	ug/L		02/12/25 14:00	02/13/25 16:39	1
Thallium, Dissolved	ND		1.0	0.51	ug/L		02/12/25 14:00	02/13/25 16:39	1
Vanadium, Dissolved	ND		5.0	0.82	ug/L		02/12/25 14:00	02/13/25 16:39	1
Calcium, Dissolved	**130000**		1000	250	ug/L		02/12/25 14:00	02/13/25 16:39	1
Magnesium, Dissolved	**53000**		1000	61	ug/L		02/12/25 14:00	02/13/25 16:39	1
Lithium, dissolved	**15**		8.0	3.4	ug/L		02/12/25 14:00	02/13/25 16:39	1
Sodium, Dissolved	**84000**		1000	880	ug/L		02/12/25 14:00	02/13/25 16:39	1

Client Sample ID: L502153-08 MW-12

Date Collected: 02/04/25 14:16
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-8

Matrix: Water

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium, Dissolved	1900		1000	220	ug/L		02/12/25 14:00	02/13/25 16:39	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1.2		0.10	0.013	mg/L		02/12/25 14:31	02/13/25 15:43	1
Zinc	0.0025	J B	0.0070	0.00093	mg/L		02/12/25 14:31	02/13/25 15:43	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	0.92		0.10	0.013	mg/L		02/12/25 14:25	02/13/25 14:28	1
Zinc, Dissolved	0.0024	J B	0.0070	0.00093	mg/L		02/12/25 14:25	02/13/25 14:28	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	620		33	33	mg/L			02/18/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:32	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.20	0.13	ug/L		02/12/25 14:00	02/13/25 10:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	560		5.0	2.6	mg/L			02/12/25 00:14	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 00:14	1
Total Dissolved Solids (SM 2540 C-2020)	870		10	7.8	mg/L			02/10/25 13:54	1
Total Suspended Solids (SM 2540D-2020)	15		4.0	0.40	mg/L			02/11/25 09:45	1
Chloride (EPA 300.0-1993 R2.1)	53		1.0	0.13	mg/L			02/12/25 02:35	1
Fluoride (EPA 300.0-1993 R2.1)	0.13		0.050	0.024	mg/L			02/12/25 02:35	1
Sulfate (EPA 300.0-1993 R2.1)	160		1.0	0.35	mg/L			02/12/25 02:35	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.170	U	0.161	0.162	1.00	0.247	pCi/L	02/11/25 07:07	03/07/25 09:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.3*		*30 - 110*	*02/11/25 07:07*	*03/07/25 09:44*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.33		0.580	0.593	1.00	0.777	pCi/L	02/11/25 07:11	03/06/25 14:20	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502153-08 MW-12
Date Collected: 02/04/25 14:16
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-8
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.3*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:20*	*1*
Y Carrier	*81.1*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:20*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.51**		0.602	0.615	5.00	0.777	pCi/L		03/07/25 16:17	1

Client Sample ID: L502153-09 MW-12B

Date Collected: 02/04/25 15:49
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-9

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.3**		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 00:29	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 13:23	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 13:23	1
Barium	**0.025**		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 13:23	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 13:23	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 13:23	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 13:23	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 13:23	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 13:23	1
Molybdenum	ND		0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 13:23	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 13:23	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 13:23	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 13:23	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 13:23	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 13:23	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 13:23	1
Calcium	**26**		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 13:23	1
Magnesium	**8.1**		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 13:23	1
Lithium	**0.040**		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 13:23	1
Sodium	**110**		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 13:23	1
Potassium	**8.2**		1.0	0.22	mg/L		02/10/25 14:00	02/12/25 13:23	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.20**		0.10	0.013	mg/L		02/12/25 14:31	02/13/25 15:46	1
Zinc	ND		0.0070	0.00093	mg/L		02/12/25 14:31	02/13/25 15:46	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**98**		33	33	mg/L			02/18/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**330**		5.0	2.6	mg/L			02/12/25 00:21	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 00:21	1
Total Dissolved Solids (SM 2540 C-2020)	**330**		10	7.8	mg/L			02/10/25 13:54	1
Total Suspended Solids (SM 2540D-2020)	**0.40**	**J**	4.0	0.40	mg/L			02/11/25 09:45	1
Chloride (EPA 300.0-1993 R2.1)	**0.92**	**J**	1.0	0.13	mg/L			02/12/25 03:17	1
Fluoride (EPA 300.0-1993 R2.1)	**0.63**		0.050	0.024	mg/L			02/12/25 03:17	1
Sulfate (EPA 300.0-1993 R2.1)	**2.4**		1.0	0.35	mg/L			02/12/25 03:17	1

Client Sample ID: L502153-09 MW-12B

Date Collected: 02/04/25 15:49
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-9

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.470		0.220	0.224	1.00	0.257	pCi/L	02/11/25 07:07	03/07/25 09:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*30 - 110*	*02/11/25 07:07*	*03/07/25 09:44*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.31		0.536	0.550	1.00	0.678	pCi/L	02/11/25 07:11	03/06/25 14:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:20*	*1*
Y Carrier	*79.3*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:20*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.78		0.579	0.594	5.00	0.678	pCi/L		03/07/25 16:17	1

Client Sample ID: L502153-10 MW-14

Date Collected: 02/04/25 07:55
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-10

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.0**		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 00:34	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 13:32	1
Arsenic	**0.0064**		0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 13:32	1
Barium	**0.14**		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 13:32	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 13:32	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 13:32	1
Cobalt	**0.00069**	**J**	0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 13:32	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 13:32	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 13:32	1
Molybdenum	**0.012**		0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 13:32	1
Nickel	**0.0038**		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 13:32	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 13:32	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 13:32	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 13:32	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 13:32	1
Vanadium	**0.0019**	**J**	0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 13:32	1
Calcium	**160**		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 13:32	1
Magnesium	**44**		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 13:32	1
Lithium	**0.099**		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 13:32	1
Sodium	**74**		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 13:32	1
Potassium	**5.4**		1.0	0.22	mg/L		02/10/25 14:00	02/12/25 13:32	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**15**		0.50	0.067	mg/L		02/12/25 14:31	02/13/25 15:52	5
Zinc	**0.018**	**B**	0.0070	0.00093	mg/L		02/12/25 14:31	02/13/25 15:49	1
Zinc	**0.019**	**J B**	0.035	0.0046	mg/L		02/12/25 14:31	02/13/25 15:52	5

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**590**		33	33	mg/L			02/18/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**570**		5.0	2.6	mg/L			02/12/25 00:27	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 00:27	1
Total Dissolved Solids (SM 2540 C-2020)	**750**		10	7.8	mg/L			02/10/25 13:54	1
Total Suspended Solids (SM 2540D-2020)	**37**		8.0	0.80	mg/L			02/11/25 09:45	1
Chloride (EPA 300.0-1993 R2.1)	**100**		1.0	0.13	mg/L			02/12/25 04:20	1
Fluoride (EPA 300.0-1993 R2.1)	**0.15**		0.050	0.024	mg/L			02/12/25 04:20	1
Sulfate (EPA 300.0-1993 R2.1)	**6.7**		1.0	0.35	mg/L			02/12/25 04:20	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502153-10 MW-14

Date Collected: 02/04/25 07:55
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-10

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.230	U	0.230	0.231	1.00	0.358	pCi/L	02/11/25 07:07	03/07/25 09:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.6*		*30 - 110*	*02/11/25 07:07*	*03/07/25 09:44*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.111	U G	0.553	0.553	1.00	1.02	pCi/L	02/11/25 07:11	03/06/25 14:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.6*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:20*	*1*
Y Carrier	*77.4*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:20*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.341	U	0.599	0.599	5.00	1.02	pCi/L		03/10/25 11:02	1

Client Sample ID: L502153-11 MW-15

Date Collected: 02/04/25 13:35
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-11

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.30**		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 00:38	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 13:34	1
Arsenic	**0.00097**	**J**	0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 13:34	1
Barium	**0.059**		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 13:34	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 13:34	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 13:34	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 13:34	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 13:34	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 13:34	1
Molybdenum	ND		0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 13:34	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 13:34	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 13:34	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 13:34	1
Selenium	**0.019**		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 13:34	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 13:34	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 13:34	1
Calcium	**150**		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 13:34	1
Magnesium	**38**		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 13:34	1
Lithium	ND		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 13:34	1
Sodium	**38**		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 13:34	1
Potassium	**0.36**	**J**	1.0	0.22	mg/L		02/10/25 14:00	02/12/25 13:34	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.031**	**J**	0.10	0.013	mg/L		02/12/25 14:31	02/13/25 15:54	1
Zinc	ND		0.0070	0.00093	mg/L		02/12/25 14:31	02/13/25 15:54	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**520**		33	33	mg/L			02/18/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**330**		5.0	2.6	mg/L			02/12/25 00:34	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 00:34	1
Total Dissolved Solids (SM 2540 C-2020)	**650**		10	7.8	mg/L			02/10/25 13:54	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			02/11/25 09:45	1
Chloride (EPA 300.0-1993 R2.1)	**91**		1.0	0.13	mg/L			02/12/25 06:06	1
Fluoride (EPA 300.0-1993 R2.1)	**0.047**	**J**	0.050	0.024	mg/L			02/12/25 06:06	1
Sulfate (EPA 300.0-1993 R2.1)	**110**		1.0	0.35	mg/L			02/12/25 06:06	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502153-11 MW-15

Date Collected: 02/04/25 13:35
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-11

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.153	U	0.149	0.150	1.00	0.228	pCi/L	02/11/25 07:07	03/07/25 09:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.3*		*30 - 110*	*02/11/25 07:07*	*03/07/25 09:44*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.10**		0.599	0.608	1.00	0.855	pCi/L	02/11/25 07:11	03/06/25 14:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.3*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:20*	*1*
Y Carrier	*76.6*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:20*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.26**		0.617	0.626	5.00	0.855	pCi/L		03/10/25 11:02	1

Client Sample ID: L502153-12 MWT-6

Date Collected: 02/04/25 09:38
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-12

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.99**		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 00:42	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 13:37	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 13:37	1
Barium	**0.061**		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 13:37	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 13:37	1
Cadmium	**0.000081**	**J**	0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 13:37	1
Cobalt	**0.00054**	**J**	0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 13:37	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 13:37	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 13:37	1
Molybdenum	**0.029**		0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 13:37	1
Nickel	**0.0032**		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 13:37	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 13:37	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 13:37	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 13:37	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 13:37	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 13:37	1
Calcium	**190**		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 13:37	1
Magnesium	**47**		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 13:37	1
Lithium	**0.066**		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 13:37	1
Sodium	**38**		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 13:37	1
Potassium	**7.7**		1.0	0.22	mg/L		02/10/25 14:00	02/12/25 13:37	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		02/12/25 14:31	02/13/25 15:57	1
Zinc	**0.0011**	**J B**	0.0070	0.00093	mg/L		02/12/25 14:31	02/13/25 15:57	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**680**		33	33	mg/L			02/18/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**440**		5.0	2.6	mg/L			02/12/25 00:39	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 00:39	1
Total Dissolved Solids (SM 2540 C-2020)	**860**		10	7.8	mg/L			02/10/25 13:54	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			02/11/25 09:45	1
Chloride (EPA 300.0-1993 R2.1)	**49**		1.0	0.13	mg/L			02/12/25 06:48	1
Fluoride (EPA 300.0-1993 R2.1)	**0.24**		0.050	0.024	mg/L			02/12/25 06:48	1
Sulfate (EPA 300.0-1993 R2.1)	**240**		5.0	1.7	mg/L			02/12/25 07:09	5

Client Sample ID: L502153-12 MWT-6

Date Collected: 02/04/25 09:38
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-12

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.174	U	0.177	0.178	1.00	0.277	pCi/L	02/11/25 07:07	03/07/25 09:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.4*		*30 - 110*	*02/11/25 07:07*	*03/07/25 09:44*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**2.32**		0.698	0.730	1.00	0.779	pCi/L	02/11/25 07:11	03/06/25 14:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.4*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:20*	*1*
Y Carrier	*79.6*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:20*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**2.49**		0.720	0.751	5.00	0.779	pCi/L		03/10/25 11:02	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502153-13 FB

Date Collected: 02/04/25 06:55
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-13

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 00:46	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 13:40	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 13:40	1
Barium	ND		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 13:40	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 13:40	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 13:40	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 13:40	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 13:40	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 13:40	1
Molybdenum	ND		0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 13:40	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 13:40	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 13:40	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 13:40	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 13:40	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 13:40	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 13:40	1
Calcium	ND		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 13:40	1
Magnesium	ND		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 13:40	1
Lithium	ND		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 13:40	1
Sodium	ND		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 13:40	1
Potassium	ND		1.0	0.22	mg/L		02/10/25 14:00	02/12/25 13:40	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		02/12/25 14:31	02/13/25 16:05	1
Zinc	ND		0.0070	0.00093	mg/L		02/12/25 14:31	02/13/25 16:05	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			02/18/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 00:46	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 00:46	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			02/10/25 13:54	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			02/11/25 09:45	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			02/12/25 05:03	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			02/12/25 05:03	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			02/12/25 05:03	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502153-13 FB

Date Collected: 02/04/25 06:55
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-13

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0703	U	0.144	0.144	1.00	0.262	pCi/L	02/11/25 07:07	03/07/25 09:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.9*		*30 - 110*	*02/11/25 07:07*	*03/07/25 09:44*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.405	U	0.534	0.535	1.00	0.891	pCi/L	02/11/25 07:11	03/06/25 14:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.9*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:20*	*1*
Y Carrier	*82.2*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:20*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.475	U	0.553	0.554	5.00	0.891	pCi/L		03/10/25 11:02	1

Client Sample ID: L502160-01 MW-7

Date Collected: 02/05/25 14:56
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-14

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.0**		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 00:51	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 13:43	1
Arsenic	**0.0027**	**J**	0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 13:43	1
Barium	**0.048**		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 13:43	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 13:43	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 13:43	1
Cobalt	**0.00026**	**J**	0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 13:43	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 13:43	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 13:43	1
Molybdenum	**0.17**		0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 13:43	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 13:43	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 13:43	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 13:43	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 13:43	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 13:43	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 13:43	1
Calcium	**110**		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 13:43	1
Magnesium	**14**		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 13:43	1
Lithium	**0.075**		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 13:43	1
Sodium	**67**		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 13:43	1
Potassium	**7.9**		1.0	0.22	mg/L		02/10/25 14:00	02/12/25 13:43	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.90**		0.10	0.013	mg/L		02/12/25 14:31	02/13/25 16:08	1
Zinc	ND		0.0070	0.00093	mg/L		02/12/25 14:31	02/13/25 16:08	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**320**		33	33	mg/L			02/18/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**190**		5.0	2.6	mg/L			02/12/25 00:50	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 00:50	1
Total Dissolved Solids (SM 2540 C-2020)	**610**		10	7.8	mg/L			02/11/25 12:06	1
Total Suspended Solids (SM 2540D-2020)	**0.60**	**J**	4.0	0.40	mg/L			02/11/25 09:50	1
Chloride (EPA 300.0-1993 R2.1)	**81**		1.0	0.13	mg/L			02/12/25 07:31	1
Fluoride (EPA 300.0-1993 R2.1)	**0.37**		0.050	0.024	mg/L			02/12/25 07:31	1
Sulfate (EPA 300.0-1993 R2.1)	**190**		1.0	0.35	mg/L			02/12/25 07:31	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502160-01 MW-7

Date Collected: 02/05/25 14:56
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-14

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.272**		0.190	0.192	1.00	0.263	pCi/L	02/11/25 07:07	03/07/25 09:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.6*		*30 - 110*	*02/11/25 07:07*	*03/07/25 09:53*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.711	U	0.487	0.491	1.00	0.726	pCi/L	02/11/25 07:11	03/06/25 14:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.6*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:22*	*1*
Y Carrier	*81.1*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:22*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.983**		0.523	0.527	5.00	0.726	pCi/L		03/10/25 11:02	1

Client Sample ID: L502160-02 MW-7B

Date Collected: 02/05/25 16:09
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-15

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.8**		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 00:55	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 13:46	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 13:46	1
Barium	**0.0075**		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 13:46	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 13:46	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 13:46	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 13:46	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 13:46	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 13:46	1
Molybdenum	ND		0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 13:46	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 13:46	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 13:46	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 13:46	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 13:46	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 13:46	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 13:46	1
Calcium	**7.6**		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 13:46	1
Magnesium	**2.4**		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 13:46	1
Lithium	**0.031**		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 13:46	1
Sodium	**130**		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 13:46	1
Potassium	**5.3**		1.0	0.22	mg/L		02/10/25 14:00	02/12/25 13:46	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.095**	**J**	0.10	0.013	mg/L		02/12/25 14:31	02/13/25 16:10	1
Zinc	**0.0011**	**J B**	0.0070	0.00093	mg/L		02/12/25 14:31	02/13/25 16:10	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			02/18/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**310**		5.0	2.6	mg/L			02/12/25 00:59	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**8.0**		5.0	2.6	mg/L			02/12/25 00:59	1
Total Dissolved Solids (SM 2540 C-2020)	**350**		10	7.8	mg/L			02/11/25 12:06	1
Total Suspended Solids (SM 2540D-2020)	**0.90**	**J**	4.0	0.40	mg/L			02/12/25 09:36	1
Chloride (EPA 300.0-1993 R2.1)	**0.82**	**J**	1.0	0.13	mg/L			02/12/25 08:57	1
Fluoride (EPA 300.0-1993 R2.1)	**0.74**		0.050	0.024	mg/L			02/12/25 08:57	1
Sulfate (EPA 300.0-1993 R2.1)	**2.4**		1.0	0.35	mg/L			02/12/25 08:57	1

Client Sample ID: L502160-02 MW-7B

Date Collected: 02/05/25 16:09
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-15

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.118	U	0.165	0.165	1.00	0.279	pCi/L	02/11/25 07:07	03/07/25 09:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.1*		*30 - 110*	*02/11/25 07:07*	*03/07/25 09:53*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**2.61**		0.755	0.792	1.00	0.864	pCi/L	02/11/25 07:11	03/06/25 14:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.1*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:22*	*1*
Y Carrier	*78.5*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:22*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**2.73**		0.773	0.809	5.00	0.864	pCi/L		03/10/25 11:02	1

Client Sample ID: L502160-03 MW-7C

Date Collected: 02/05/25 17:24
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-16

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**6.2**		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 00:59	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 13:49	1
Arsenic	**0.0053**		0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 13:49	1
Barium	**0.039**		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 13:49	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 13:49	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 13:49	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 13:49	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 13:49	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 13:49	1
Molybdenum	**0.35**		0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 13:49	1
Nickel	**0.0059**		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 13:49	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 13:49	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 13:49	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 13:49	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 13:49	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 13:49	1
Calcium	**220**		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 13:49	1
Magnesium	**42**		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 13:49	1
Lithium	**0.11**		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 13:49	1
Sodium	**85**		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 13:49	1
Potassium	**5.3**		1.0	0.22	mg/L		02/10/25 14:00	02/12/25 13:49	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**3.9**		0.10	0.013	mg/L		02/12/25 14:25	02/13/25 14:36	1
Zinc	**0.0012**	**J B**	0.0070	0.00093	mg/L		02/12/25 14:25	02/13/25 14:36	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**720**		33	33	mg/L			02/18/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**140**		5.0	2.6	mg/L			02/12/25 01:05	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 01:05	1
Total Dissolved Solids (SM 2540 C-2020)	**1200**		20	16	mg/L			02/11/25 12:06	1
Total Suspended Solids (SM 2540D-2020)	**9.9**		4.0	0.40	mg/L			02/12/25 09:36	1
Chloride (EPA 300.0-1993 R2.1)	**83**		1.0	0.13	mg/L			02/12/25 09:19	1
Fluoride (EPA 300.0-1993 R2.1)	**0.24**		0.050	0.024	mg/L			02/12/25 09:19	1
Sulfate (EPA 300.0-1993 R2.1)	**640**		5.0	1.7	mg/L			02/12/25 09:40	5

Client Sample ID: L502160-03 MW-7C

Date Collected: 02/05/25 17:24
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-16

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.425		0.226	0.230	1.00	0.292	pCi/L	02/11/25 07:07	03/07/25 09:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.5*		*30 - 110*	*02/11/25 07:07*	*03/07/25 09:53*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.79		0.628	0.650	1.00	0.805	pCi/L	02/11/25 07:11	03/06/25 14:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.5*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:22*	*1*
Y Carrier	*82.2*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:22*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	2.21		0.667	0.689	5.00	0.805	pCi/L		03/10/25 11:02	1

Client Sample ID: L502160-04 MW-8

Date Collected: 02/05/25 13:36
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-17

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.094**	**J**	0.10	0.057	mg/L		02/10/25 14:00	02/12/25 01:12	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 13:51	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 13:51	1
Barium	**0.023**		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 13:51	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 13:51	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 13:51	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 13:51	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 13:51	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 13:51	1
Molybdenum	**0.0054**		0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 13:51	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 13:51	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 13:51	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 13:51	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 13:51	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 13:51	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 13:51	1
Calcium	**87**		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 13:51	1
Magnesium	**24**		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 13:51	1
Lithium	**0.010**		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 13:51	1
Sodium	**29**		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 13:51	1
Potassium	**0.78**	**J**	1.0	0.22	mg/L		02/10/25 14:00	02/12/25 13:51	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		02/13/25 14:44	02/14/25 14:30	1
Zinc	ND		0.0070	0.00093	mg/L		02/13/25 14:44	02/14/25 14:30	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**310**		33	33	mg/L			02/18/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**300**		5.0	2.6	mg/L			02/12/25 01:15	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 01:15	1
Total Dissolved Solids (SM 2540 C-2020)	**360**		10	7.8	mg/L			02/11/25 12:06	1
Total Suspended Solids (SM 2540D-2020)	**0.50**	**J**	4.0	0.40	mg/L			02/12/25 09:36	1
Chloride (EPA 300.0-1993 R2.1)	**38**		1.0	0.13	mg/L			02/12/25 10:01	1
Fluoride (EPA 300.0-1993 R2.1)	**0.054**		0.050	0.024	mg/L			02/12/25 10:01	1
Sulfate (EPA 300.0-1993 R2.1)	**25**		1.0	0.35	mg/L			02/12/25 10:01	1

Client Sample ID: L502160-04 MW-8

Date Collected: 02/05/25 13:36
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-17

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.158	U	0.199	0.199	1.00	0.329	pCi/L	02/11/25 07:07	03/07/25 09:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.9*		*30 - 110*	*02/11/25 07:07*	*03/07/25 09:53*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.34**		0.673	0.684	1.00	0.943	pCi/L	02/11/25 07:11	03/06/25 14:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.9*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:22*	*1*
Y Carrier	*77.0*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:22*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.50**		0.702	0.712	5.00	0.943	pCi/L		03/10/25 11:02	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502160-05 MW-9

Date Collected: 02/05/25 12:14
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-18

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 01:16	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 13:54	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 13:54	1
Barium	**0.017**		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 13:54	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 13:54	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 13:54	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 13:54	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 13:54	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 13:54	1
Molybdenum	ND		0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 13:54	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 13:54	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 13:54	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 13:54	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 13:54	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 13:54	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 13:54	1
Calcium	**96**		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 13:54	1
Magnesium	**25**		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 13:54	1
Lithium	ND		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 13:54	1
Sodium	**3.0**		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 13:54	1
Potassium	**1.0**		1.0	0.22	mg/L		02/10/25 14:00	02/12/25 13:54	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		02/13/25 14:44	02/14/25 14:33	1
Zinc	**0.0012**	**J**	0.0070	0.00093	mg/L		02/13/25 14:44	02/14/25 14:33	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**340**		33	33	mg/L			02/18/25 15:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**330**		5.0	2.6	mg/L			02/12/25 01:21	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 01:21	1
Total Dissolved Solids (SM 2540 C-2020)	**340**		10	7.8	mg/L			02/11/25 12:06	1
Total Suspended Solids (SM 2540D-2020)	**0.40**	**J**	4.0	0.40	mg/L			02/12/25 09:36	1
Chloride (EPA 300.0-1993 R2.1)	**4.6**		1.0	0.13	mg/L			02/12/25 10:22	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			02/12/25 10:22	1
Sulfate (EPA 300.0-1993 R2.1)	**16**		1.0	0.35	mg/L			02/12/25 10:22	1

Client Sample ID: L502160-05 MW-9

Date Collected: 02/05/25 12:14
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-18

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.222		0.159	0.161	1.00	0.216	pCi/L	02/11/25 07:07	03/07/25 09:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*30 - 110*	*02/11/25 07:07*	*03/07/25 09:53*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.21		0.651	0.660	1.00	0.922	pCi/L	02/11/25 07:11	03/06/25 14:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:22*	*1*
Y Carrier	*63.9*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:22*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.44		0.670	0.679	5.00	0.922	pCi/L		03/10/25 11:02	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502160-06 MW-10

Date Collected: 02/05/25 10:53
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-19

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 01:20	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 13:57	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 13:57	1
Barium	**0.030**		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 13:57	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 13:57	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 13:57	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 13:57	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 13:57	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 13:57	1
Molybdenum	ND		0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 13:57	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 13:57	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 13:57	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 13:57	1
Selenium	**0.0015**	**J**	0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 13:57	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 13:57	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 13:57	1
Calcium	**120**		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 13:57	1
Magnesium	**24**		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 13:57	1
Lithium	ND		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 13:57	1
Sodium	**3.2**		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 13:57	1
Potassium	**0.71**	**J**	1.0	0.22	mg/L		02/10/25 14:00	02/12/25 13:57	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		02/13/25 14:44	02/14/25 14:35	1
Zinc	ND		0.0070	0.00093	mg/L		02/13/25 14:44	02/14/25 14:35	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**390**		33	33	mg/L			02/18/25 15:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**370**		5.0	2.6	mg/L			02/12/25 01:26	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 01:26	1
Total Dissolved Solids (SM 2540 C-2020)	**360**		10	7.8	mg/L			02/11/25 12:06	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			02/12/25 09:36	1
Chloride (EPA 300.0-1993 R2.1)	**1.5**		1.0	0.13	mg/L			02/12/25 10:43	1
Fluoride (EPA 300.0-1993 R2.1)	**0.050**		0.050	0.024	mg/L			02/12/25 10:43	1
Sulfate (EPA 300.0-1993 R2.1)	**14**		1.0	0.35	mg/L			02/12/25 10:43	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502160-06 MW-10

Date Collected: 02/05/25 10:53
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-19

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0761	U	0.133	0.133	1.00	0.236	pCi/L	02/11/25 07:07	03/07/25 09:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.1*		*30 - 110*	*02/11/25 07:07*	*03/07/25 09:53*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**2.43**		0.711	0.745	1.00	0.809	pCi/L	02/11/25 07:11	03/06/25 14:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.1*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:22*	*1*
Y Carrier	*77.4*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:22*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**2.51**		0.723	0.757	5.00	0.809	pCi/L		03/10/25 11:02	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502160-07 FB

Date Collected: 02/05/25 10:00
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-20

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 01:25	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 14:05	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 14:05	1
Barium	ND		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 14:05	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 14:05	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 14:05	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 14:05	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 14:05	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 14:05	1
Molybdenum	ND		0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 14:05	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 14:05	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 14:05	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 14:05	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 14:05	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 14:05	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 14:05	1
Calcium	ND		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 14:05	1
Magnesium	ND		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 14:05	1
Lithium	ND		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 14:05	1
Sodium	ND		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 14:05	1
Potassium	ND		1.0	0.22	mg/L		02/10/25 14:00	02/12/25 14:05	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		02/13/25 14:44	02/14/25 14:38	1
Zinc	ND		0.0070	0.00093	mg/L		02/13/25 14:44	02/14/25 14:38	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			02/18/25 15:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 01:32	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 01:32	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			02/11/25 12:06	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			02/12/25 09:36	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			02/12/25 11:04	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			02/12/25 11:04	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			02/12/25 11:04	1

Client Sample ID: L502160-07 FB

Date Collected: 02/05/25 10:00
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-20

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.102	U	0.196	0.196	1.00	0.345	pCi/L	02/11/25 07:07	03/07/25 09:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.8*		*30 - 110*	*02/11/25 07:07*	*03/07/25 09:53*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.936**		0.518	0.525	1.00	0.735	pCi/L	02/11/25 07:11	03/06/25 14:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.8*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:22*	*1*
Y Carrier	*80.7*		*30 - 110*	*02/11/25 07:11*	*03/06/25 14:22*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.04**		0.554	0.560	5.00	0.735	pCi/L		03/10/25 11:02	1

Client Sample ID: L502161-01 MW-100A

Lab Sample ID: 240-218633-21

Date Collected: 02/05/25 16:15

Matrix: Water

Date Received: 02/07/25 08:00

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 06:59	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/11/25 17:59	1
Arsenic	**0.012**		0.0050	0.00075	mg/L		02/10/25 14:00	02/11/25 17:59	1
Barium	**0.19**		0.0050	0.00077	mg/L		02/10/25 14:00	02/11/25 17:59	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/11/25 17:59	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/11/25 17:59	1
Cobalt	**0.00033**	**J**	0.0010	0.000086	mg/L		02/10/25 14:00	02/11/25 17:59	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/11/25 17:59	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/11/25 17:59	1
Molybdenum	**0.0069**		0.0050	0.0011	mg/L		02/10/25 14:00	02/11/25 17:59	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/11/25 17:59	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/11/25 17:59	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/11/25 17:59	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/11/25 17:59	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/11/25 17:59	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/11/25 17:59	1
Calcium	**89**		1.0	0.25	mg/L		02/10/25 14:00	02/11/25 17:59	1
Magnesium	**39**		1.0	0.061	mg/L		02/10/25 14:00	02/11/25 17:59	1
Lithium	**0.011**		0.0080	0.0034	mg/L		02/10/25 14:00	02/11/25 17:59	1
Sodium	**12**		1.0	0.88	mg/L		02/10/25 14:00	02/11/25 17:59	1
Potassium	**1.9**		1.0	0.22	mg/L		02/10/25 14:00	02/11/25 17:59	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.3**		0.10	0.013	mg/L		02/13/25 14:44	02/14/25 14:41	1
Zinc	**0.0028**	**J**	0.0070	0.00093	mg/L		02/13/25 14:44	02/14/25 14:41	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**380**		33	33	mg/L			02/18/25 15:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 10:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**360**		5.0	2.6	mg/L			02/12/25 01:36	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 01:36	1
Total Dissolved Solids (SM 2540 C-2020)	**360**		10	7.8	mg/L			02/11/25 12:06	1
Total Suspended Solids (SM 2540D-2020)	**4.6**		4.0	0.40	mg/L			02/12/25 09:36	1
Chloride (EPA 300.0-1993 R2.1)	**10**		1.0	0.13	mg/L			02/12/25 06:19	1
Fluoride (EPA 300.0-1993 R2.1)	**0.57**		0.050	0.024	mg/L			02/12/25 06:19	1
Sulfate (EPA 300.0-1993 R2.1)	**25**		1.0	0.35	mg/L			02/12/25 06:19	1

Client Sample ID: L502161-01 MW-100A

Date Collected: 02/05/25 16:15
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-21

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.253**		0.125	0.127	1.00	0.163	pCi/L	02/11/25 07:12	03/05/25 10:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*30 - 110*	*02/11/25 07:12*	*03/05/25 10:15*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.358	U	0.303	0.304	1.00	0.468	pCi/L	02/11/25 07:15	02/27/25 12:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*30 - 110*	*02/11/25 07:15*	*02/27/25 12:16*	*1*
Y Carrier	*83.4*		*30 - 110*	*02/11/25 07:15*	*02/27/25 12:16*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.611**		0.328	0.329	5.00	0.468	pCi/L		03/10/25 11:02	1

Client Sample ID: L502161-02 MW-100B

Date Collected: 02/05/25 12:45
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-22

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.30**		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 07:16	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/11/25 18:01	1
Arsenic	**0.0073**		0.0050	0.00075	mg/L		02/10/25 14:00	02/11/25 18:01	1
Barium	**0.14**		0.0050	0.00077	mg/L		02/10/25 14:00	02/11/25 18:01	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/11/25 18:01	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/11/25 18:01	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/11/25 18:01	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/11/25 18:01	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/11/25 18:01	1
Molybdenum	**0.0065**		0.0050	0.0011	mg/L		02/10/25 14:00	02/11/25 18:01	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/11/25 18:01	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/11/25 18:01	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/11/25 18:01	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/11/25 18:01	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/11/25 18:01	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/11/25 18:01	1
Calcium	**89**		1.0	0.25	mg/L		02/10/25 14:00	02/11/25 18:01	1
Magnesium	**32**		1.0	0.061	mg/L		02/10/25 14:00	02/11/25 18:01	1
Lithium	**0.019**		0.0080	0.0034	mg/L		02/10/25 14:00	02/11/25 18:01	1
Sodium	**32**		1.0	0.88	mg/L		02/10/25 14:00	02/11/25 18:01	1
Potassium	**3.6**		1.0	0.22	mg/L		02/10/25 14:00	02/11/25 18:01	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.2**		0.10	0.013	mg/L		02/13/25 16:37	02/14/25 15:25	1
Zinc	**0.0019**	**J**	0.0070	0.00093	mg/L		02/13/25 16:37	02/14/25 15:25	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**350**		33	33	mg/L			02/18/25 15:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 10:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**270**		5.0	2.6	mg/L			02/12/25 01:42	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 01:42	1
Total Dissolved Solids (SM 2540 C-2020)	**440**		10	7.8	mg/L			02/11/25 12:06	1
Total Suspended Solids (SM 2540D-2020)	**5.6**	**J**	8.0	0.80	mg/L			02/12/25 09:36	1
Chloride (EPA 300.0-1993 R2.1)	**19**		1.0	0.13	mg/L			02/12/25 07:25	1
Fluoride (EPA 300.0-1993 R2.1)	**0.44**		0.050	0.024	mg/L			02/12/25 07:25	1
Sulfate (EPA 300.0-1993 R2.1)	**110**		1.0	0.35	mg/L			02/12/25 07:25	1

Client Sample ID: L502161-02 MW-100B
Date Collected: 02/05/25 12:45
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-22
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.331		0.127	0.130	1.00	0.139	pCi/L	02/11/25 07:12	03/05/25 10:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.0*		*30 - 110*	*02/11/25 07:12*	*03/05/25 10:15*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.111	U	0.349	0.349	1.00	0.620	pCi/L	02/11/25 07:15	02/27/25 12:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.0*		*30 - 110*	*02/11/25 07:15*	*02/27/25 12:16*	*1*
Y Carrier	*82.6*		*30 - 110*	*02/11/25 07:15*	*02/27/25 12:16*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.442	U	0.371	0.372	5.00	0.620	pCi/L		03/10/25 11:02	1

Client Sample ID: L502161-03 MW-100C

Date Collected: 02/05/25 14:07
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-23

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.9**		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 07:20	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/11/25 18:04	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/11/25 18:04	1
Barium	**0.062**		0.0050	0.00077	mg/L		02/10/25 14:00	02/11/25 18:04	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/11/25 18:04	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/11/25 18:04	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/11/25 18:04	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/11/25 18:04	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/11/25 18:04	1
Molybdenum	**0.0011**	**J**	0.0050	0.0011	mg/L		02/10/25 14:00	02/11/25 18:04	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/11/25 18:04	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/11/25 18:04	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/11/25 18:04	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/11/25 18:04	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/11/25 18:04	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/11/25 18:04	1
Calcium	**59**		1.0	0.25	mg/L		02/10/25 14:00	02/11/25 18:04	1
Magnesium	**20**		1.0	0.061	mg/L		02/10/25 14:00	02/11/25 18:04	1
Lithium	**0.032**		0.0080	0.0034	mg/L		02/10/25 14:00	02/11/25 18:04	1
Sodium	**28**		1.0	0.88	mg/L		02/10/25 14:00	02/11/25 18:04	1
Potassium	**6.5**		1.0	0.22	mg/L		02/10/25 14:00	02/11/25 18:04	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.58**		0.10	0.013	mg/L		02/13/25 16:37	02/14/25 15:27	1
Zinc	**0.0014**	**J**	0.0070	0.00093	mg/L		02/13/25 16:37	02/14/25 15:27	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**230**		33	33	mg/L			02/18/25 15:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 10:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**290**		5.0	2.6	mg/L			02/12/25 01:48	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 01:48	1
Total Dissolved Solids (SM 2540 C-2020)	**280**		10	7.8	mg/L			02/11/25 12:06	1
Total Suspended Solids (SM 2540D-2020)	**1.2**	**J**	4.0	0.40	mg/L			02/12/25 09:36	1
Chloride (EPA 300.0-1993 R2.1)	**2.8**		1.0	0.13	mg/L			02/12/25 07:46	1
Fluoride (EPA 300.0-1993 R2.1)	**0.43**		0.050	0.024	mg/L			02/12/25 07:46	1
Sulfate (EPA 300.0-1993 R2.1)	**4.2**		1.0	0.35	mg/L			02/12/25 07:46	1

Client Sample ID: L502161-03 MW-100C

Date Collected: 02/05/25 14:07
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-23

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.268**		0.113	0.116	1.00	0.123	pCi/L	02/11/25 07:12	03/05/25 10:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.7*		*30 - 110*	*02/11/25 07:12*	*03/05/25 10:15*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.582	U	0.412	0.415	1.00	0.621	pCi/L	02/11/25 07:15	02/27/25 12:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.7*		*30 - 110*	*02/11/25 07:15*	*02/27/25 12:16*	*1*
Y Carrier	*77.0*		*30 - 110*	*02/11/25 07:15*	*02/27/25 12:16*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.851**		0.427	0.431	5.00	0.621	pCi/L		03/10/25 11:02	1

Client Sample ID: L502161-04 MW-100D

Date Collected: 02/05/25 15:40
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-24

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.7**		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 07:24	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/11/25 18:07	1
Arsenic	**0.0016**	**J**	0.0050	0.00075	mg/L		02/10/25 14:00	02/11/25 18:07	1
Barium	**0.0098**		0.0050	0.00077	mg/L		02/10/25 14:00	02/11/25 18:07	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/11/25 18:07	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/11/25 18:07	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/11/25 18:07	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/11/25 18:07	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/11/25 18:07	1
Molybdenum	**0.0056**		0.0050	0.0011	mg/L		02/10/25 14:00	02/11/25 18:07	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/11/25 18:07	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/11/25 18:07	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/11/25 18:07	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/11/25 18:07	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/11/25 18:07	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/11/25 18:07	1
Calcium	**21**		1.0	0.25	mg/L		02/10/25 14:00	02/11/25 18:07	1
Magnesium	**3.9**		1.0	0.061	mg/L		02/10/25 14:00	02/11/25 18:07	1
Lithium	**0.018**		0.0080	0.0034	mg/L		02/10/25 14:00	02/11/25 18:07	1
Sodium	**150**		1.0	0.88	mg/L		02/10/25 14:00	02/11/25 18:07	1
Potassium	**4.4**		1.0	0.22	mg/L		02/10/25 14:00	02/11/25 18:07	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.30**		0.10	0.013	mg/L		02/13/25 16:37	02/14/25 15:35	1
Zinc	**0.0020**	**J**	0.0070	0.00093	mg/L		02/13/25 16:37	02/14/25 15:35	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**68**		33	33	mg/L			02/18/25 15:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 10:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**360**		5.0	2.6	mg/L			02/12/25 01:57	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 01:57	1
Total Dissolved Solids (SM 2540 C-2020)	**430**		10	7.8	mg/L			02/11/25 12:06	1
Total Suspended Solids (SM 2540D-2020)	**2.2**	**J**	8.0	0.80	mg/L			02/12/25 09:36	1
Chloride (EPA 300.0-1993 R2.1)	**6.2**		1.0	0.13	mg/L			02/12/25 08:08	1
Fluoride (EPA 300.0-1993 R2.1)	**0.85**		0.050	0.024	mg/L			02/12/25 08:08	1
Sulfate (EPA 300.0-1993 R2.1)	**33**		1.0	0.35	mg/L			02/12/25 08:08	1

Client Sample ID: L502161-04 MW-100D

Lab Sample ID: 240-218633-24

Date Collected: 02/05/25 15:40

Matrix: Water

Date Received: 02/07/25 08:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00583	U	0.0604	0.0604	1.00	0.122	pCi/L	02/11/25 07:12	03/05/25 10:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.3*		*30 - 110*	*02/11/25 07:12*	*03/05/25 10:15*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.403	U	0.372	0.374	1.00	0.593	pCi/L	02/11/25 07:15	02/27/25 12:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.3*		*30 - 110*	*02/11/25 07:15*	*02/27/25 12:16*	*1*
Y Carrier	*81.1*		*30 - 110*	*02/11/25 07:15*	*02/27/25 12:16*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.408	U	0.377	0.379	5.00	0.593	pCi/L		03/10/25 11:02	1

Client Sample ID: L502161-05 MWT-100C

Date Collected: 02/05/25 14:07
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-25

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.9**		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 07:29	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/11/25 18:10	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/11/25 18:10	1
Barium	**0.064**		0.0050	0.00077	mg/L		02/10/25 14:00	02/11/25 18:10	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/11/25 18:10	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/11/25 18:10	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/11/25 18:10	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/11/25 18:10	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/11/25 18:10	1
Molybdenum	**0.0011**	**J**	0.0050	0.0011	mg/L		02/10/25 14:00	02/11/25 18:10	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/11/25 18:10	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/11/25 18:10	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/11/25 18:10	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/11/25 18:10	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/11/25 18:10	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/11/25 18:10	1
Calcium	**60**		1.0	0.25	mg/L		02/10/25 14:00	02/11/25 18:10	1
Magnesium	**20**		1.0	0.061	mg/L		02/10/25 14:00	02/11/25 18:10	1
Lithium	**0.032**		0.0080	0.0034	mg/L		02/10/25 14:00	02/11/25 18:10	1
Sodium	**28**		1.0	0.88	mg/L		02/10/25 14:00	02/11/25 18:10	1
Potassium	**6.6**		1.0	0.22	mg/L		02/10/25 14:00	02/11/25 18:10	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.61**		0.10	0.013	mg/L		02/13/25 16:37	02/14/25 15:38	1
Zinc	ND		0.0070	0.00093	mg/L		02/13/25 16:37	02/14/25 15:38	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**230**		33	33	mg/L			02/18/25 15:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 10:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**290**		5.0	2.6	mg/L			02/12/25 02:03	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 02:03	1
Total Dissolved Solids (SM 2540 C-2020)	**270**		10	7.8	mg/L			02/11/25 12:06	1
Total Suspended Solids (SM 2540D-2020)	**1.1**	**J**	4.0	0.40	mg/L			02/12/25 09:36	1
Chloride (EPA 300.0-1993 R2.1)	**2.7**		1.0	0.13	mg/L			02/12/25 08:30	1
Fluoride (EPA 300.0-1993 R2.1)	**0.43**		0.050	0.024	mg/L			02/12/25 08:30	1
Sulfate (EPA 300.0-1993 R2.1)	**4.3**		1.0	0.35	mg/L			02/12/25 08:30	1

Client Sample ID: L502161-05 MWT-100C

Date Collected: 02/05/25 14:07
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-25

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.248**		0.107	0.109	1.00	0.117	pCi/L	02/11/25 07:12	03/05/25 10:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.2*		*30 - 110*	*02/11/25 07:12*	*03/05/25 10:15*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0901	U	0.270	0.270	1.00	0.483	pCi/L	02/11/25 07:15	02/27/25 12:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.2*		*30 - 110*	*02/11/25 07:15*	*02/27/25 12:17*	*1*
Y Carrier	*86.0*		*30 - 110*	*02/11/25 07:15*	*02/27/25 12:17*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.338	U	0.290	0.291	5.00	0.483	pCi/L		03/10/25 11:02	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-218633-1	L502153-01 MW-1	84.8
240-218633-2	L502153-02 MW-2	85.8
240-218633-3	L502153-03 MW-4	75.6
240-218633-4	L502153-04 MW-5	77.4
240-218633-5	L502153-05 MW-6	88.1
240-218633-6	L502153-06 MW-11	88.3
240-218633-7	L502153-07 MW-11B	87.6
240-218633-7 DU	L502153-07 MW-11B	79.4
240-218633-8	L502153-08 MW-12	86.3
240-218633-9	L502153-09 MW-12B	88.3
240-218633-10	L502153-10 MW-14	76.6
240-218633-11	L502153-11 MW-15	84.3
240-218633-12	L502153-12 MWT-6	78.4
240-218633-13	L502153-13 FB	76.9
240-218633-14	L502160-01 MW-7	84.6
240-218633-15	L502160-02 MW-7B	80.1
240-218633-16	L502160-03 MW-7C	92.5
240-218633-17	L502160-04 MW-8	75.9
240-218633-18	L502160-05 MW-9	90.0
240-218633-19	L502160-06 MW-10	85.1
240-218633-20	L502160-07 FB	86.8
240-218633-21	L502161-01 MW-100A	90.3
240-218633-22	L502161-02 MW-100B	88.0
240-218633-23	L502161-03 MW-100C	84.7
240-218633-24	L502161-04 MW-100D	92.3
240-218633-25	L502161-05 MWT-100C	95.2
LCS 160-702324/2-A	Lab Control Sample	80.8
LCS 160-702327/2-A	Lab Control Sample	85.7
MB 160-702324/1-A	Method Blank	93.3
MB 160-702327/1-A	Method Blank	82.7

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
		Ba	Y
Lab Sample ID	Client Sample ID	(30-110)	(30-110)
240-218633-1	L502153-01 MW-1	84.8	77.8
240-218633-2	L502153-02 MW-2	85.8	78.1
240-218633-3	L502153-03 MW-4	75.6	78.5
240-218633-4	L502153-04 MW-5	77.4	77.8
240-218633-5	L502153-05 MW-6	88.1	81.5
240-218633-6	L502153-06 MW-11	88.3	80.0
240-218633-7	L502153-07 MW-11B	87.6	80.0
240-218633-7 DU	L502153-07 MW-11B	79.4	81.1
240-218633-8	L502153-08 MW-12	86.3	81.1
240-218633-9	L502153-09 MW-12B	88.3	79.3

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Job ID: 240-218633-1
Project/Site: Erickson Projects

Method: 904.0 - Radium-228 (GFPC) (Continued)

Matrix: Water
Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-218633-10	L502153-10 MW-14	76.6	77.4
240-218633-11	L502153-11 MW-15	84.3	76.6
240-218633-12	L502153-12 MWT-6	78.4	79.6
240-218633-13	L502153-13 FB	76.9	82.2
240-218633-14	L502160-01 MW-7	84.6	81.1
240-218633-15	L502160-02 MW-7B	80.1	78.5
240-218633-16	L502160-03 MW-7C	92.5	82.2
240-218633-17	L502160-04 MW-8	75.9	77.0
240-218633-18	L502160-05 MW-9	90.0	63.9
240-218633-19	L502160-06 MW-10	85.1	77.4
240-218633-20	L502160-07 FB	86.8	80.7
240-218633-21	L502161-01 MW-100A	90.3	83.4
240-218633-22	L502161-02 MW-100B	88.0	82.6
240-218633-23	L502161-03 MW-100C	84.7	77.0
240-218633-24	L502161-04 MW-100D	92.3	81.1
240-218633-25	L502161-05 MWT-100C	95.2	86.0
LCS 160-702326/2-A	Lab Control Sample	80.8	80.0
LCS 160-702328/2-A	Lab Control Sample	85.7	78.1
MB 160-702326/1-A	Method Blank	93.3	78.1
MB 160-702328/1-A	Method Blank	82.7	77.0

Tracer/Carrier Legend

Ba = Ba Carrier
Y = Y Carrier

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-644187/1-A
Matrix: Water
Analysis Batch: 644428

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 644187

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		02/10/25 14:00	02/11/25 23:10	1

Lab Sample ID: LCS 240-644187/2-A
Matrix: Water
Analysis Batch: 644428

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 644187

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.00		mg/L		100	85 - 115

Lab Sample ID: 240-218633-1 MS
Matrix: Water
Analysis Batch: 644428

Client Sample ID: L502153-01 MW-1
Prep Type: Total Recoverable
Prep Batch: 644187

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.19		1.00	1.23		mg/L		104	70 - 130

Lab Sample ID: 240-218633-1 MSD
Matrix: Water
Analysis Batch: 644428

Client Sample ID: L502153-01 MW-1
Prep Type: Total Recoverable
Prep Batch: 644187

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.19		1.00	1.24		mg/L		105	70 - 130	1	20

Lab Sample ID: 240-218633-2 MS
Matrix: Water
Analysis Batch: 644428

Client Sample ID: L502153-02 MW-2
Prep Type: Total Recoverable
Prep Batch: 644187

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	3.3		1.00	4.34		mg/L		103	70 - 130

Lab Sample ID: 240-218633-2 MSD
Matrix: Water
Analysis Batch: 644428

Client Sample ID: L502153-02 MW-2
Prep Type: Total Recoverable
Prep Batch: 644187

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	3.3		1.00	4.47		mg/L		116	70 - 130	3	20

Lab Sample ID: MB 240-644195/1-A
Matrix: Water
Analysis Batch: 644428

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 644195

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		02/10/25 14:00	02/12/25 05:34	1

Lab Sample ID: LCS 240-644195/2-A
Matrix: Water
Analysis Batch: 644428

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 644195

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.02		mg/L		102	85 - 115

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-644579/1-A
Matrix: Water
Analysis Batch: 645131

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 644579

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, dissolved	ND		100	57	ug/L		02/12/25 14:00	02/17/25 15:47	1

Lab Sample ID: LCS 240-644579/2-A
Matrix: Water
Analysis Batch: 645131

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 644579

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron, dissolved	1000	964		ug/L		96	85 - 115

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-4968/25-A
Matrix: Water
Analysis Batch: 5013

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4968

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		02/12/25 14:25	02/13/25 13:17	1
Iron, Dissolved	ND		0.10	0.013	mg/L		02/12/25 14:25	02/13/25 13:17	1
Zinc	0.00121	J	0.0070	0.00093	mg/L		02/12/25 14:25	02/13/25 13:17	1
Zinc, Dissolved	0.00121	J	0.0070	0.00093	mg/L		02/12/25 14:25	02/13/25 13:17	1

Lab Sample ID: LCS 350-4968/26-A
Matrix: Water
Analysis Batch: 5013

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4968

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	19.4		mg/L		97	85 - 115
Iron, Dissolved	20.0	19.4		mg/L		97	85 - 115
Zinc	1.00	1.04		mg/L		104	85 - 115
Zinc, Dissolved	1.00	1.04		mg/L		104	85 - 115

Lab Sample ID: MB 350-4970/25-A
Matrix: Water
Analysis Batch: 5013

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4970

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		02/12/25 14:31	02/13/25 14:39	1
Zinc	0.00126	J	0.0070	0.00093	mg/L		02/12/25 14:31	02/13/25 14:39	1

Lab Sample ID: LCS 350-4970/26-A
Matrix: Water
Analysis Batch: 5013

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4970

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	19.5		mg/L		98	85 - 115
Zinc	1.00	1.03		mg/L		103	85 - 115

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 350-5003/25-A
Matrix: Water
Analysis Batch: 5032

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5003

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		02/13/25 14:44	02/14/25 13:17	1
Zinc	ND		0.0070	0.00093	mg/L		02/13/25 14:44	02/14/25 13:17	1

Lab Sample ID: LCS 350-5003/26-A
Matrix: Water
Analysis Batch: 5032

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5003

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	19.8		mg/L		99	85 - 115
Zinc	1.00	0.961		mg/L		96	85 - 115

Lab Sample ID: MB 350-5006/25-A
Matrix: Water
Analysis Batch: 5032

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5006

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		02/13/25 16:37	02/14/25 14:46	1
Zinc	ND		0.0070	0.00093	mg/L		02/13/25 16:37	02/14/25 14:46	1

Lab Sample ID: LCS 350-5006/26-A
Matrix: Water
Analysis Batch: 5032

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5006

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	19.9		mg/L		99	85 - 115
Zinc	1.00	0.975		mg/L		97	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-644187/1-A
Matrix: Water
Analysis Batch: 644581

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 644187

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/12/25 12:38	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/12/25 12:38	1
Barium	ND		0.0050	0.00077	mg/L		02/10/25 14:00	02/12/25 12:38	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/12/25 12:38	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/12/25 12:38	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/12/25 12:38	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/12/25 12:38	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/12/25 12:38	1
Molybdenum	ND		0.0050	0.0011	mg/L		02/10/25 14:00	02/12/25 12:38	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/12/25 12:38	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/12/25 12:38	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/12/25 12:38	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/12/25 12:38	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/12/25 12:38	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/12/25 12:38	1
Calcium	ND		1.0	0.25	mg/L		02/10/25 14:00	02/12/25 12:38	1

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-644187/1-A
Matrix: Water
Analysis Batch: 644581

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 644187

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	ND		1.0	0.061	mg/L		02/10/25 14:00	02/12/25 12:38	1
Lithium	ND		0.0080	0.0034	mg/L		02/10/25 14:00	02/12/25 12:38	1
Sodium	ND		1.0	0.88	mg/L		02/10/25 14:00	02/12/25 12:38	1
Potassium	ND		1.0	0.22	mg/L		02/10/25 14:00	02/12/25 12:38	1

Lab Sample ID: LCS 240-644187/3-A
Matrix: Water
Analysis Batch: 644581

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 644187

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.0915		mg/L		92	85 - 115
Arsenic	1.00	0.932		mg/L		93	85 - 115
Barium	1.00	0.940		mg/L		94	85 - 115
Beryllium	0.500	0.469		mg/L		94	85 - 115
Cadmium	0.500	0.469		mg/L		94	85 - 115
Cobalt	0.500	0.460		mg/L		92	85 - 115
Chromium	0.500	0.481		mg/L		96	85 - 115
Copper	0.500	0.468		mg/L		94	85 - 115
Molybdenum	0.500	0.472		mg/L		94	85 - 115
Nickel	0.500	0.470		mg/L		94	85 - 115
Lead	0.500	0.507		mg/L		101	85 - 115
Antimony	0.100	0.0966		mg/L		97	85 - 115
Selenium	1.00	0.933		mg/L		93	85 - 115
Thallium	1.00	1.04		mg/L		104	85 - 115
Vanadium	0.500	0.485		mg/L		97	85 - 115
Calcium	25.0	23.6		mg/L		94	85 - 115
Magnesium	25.0	24.3		mg/L		97	85 - 115
Lithium	0.500	0.487		mg/L		97	85 - 115
Sodium	25.0	24.2		mg/L		97	85 - 115
Potassium	25.0	24.8		mg/L		99	85 - 115

Lab Sample ID: 240-218633-1 MS
Matrix: Water
Analysis Batch: 644581

Client Sample ID: L502153-01 MW-1
Prep Type: Total Recoverable
Prep Batch: 644187

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.0918		mg/L		92	70 - 130
Arsenic	0.0046	J	1.00	0.949		mg/L		94	70 - 130
Barium	0.087		1.00	1.03		mg/L		94	70 - 130
Beryllium	ND		0.500	0.462		mg/L		92	70 - 130
Cadmium	ND		0.500	0.465		mg/L		93	70 - 130
Cobalt	0.0018		0.500	0.459		mg/L		91	70 - 130
Chromium	0.0018	J	0.500	0.479		mg/L		95	70 - 130
Copper	ND		0.500	0.465		mg/L		93	70 - 130
Molybdenum	0.0023	J	0.500	0.479		mg/L		95	70 - 130
Nickel	ND		0.500	0.467		mg/L		93	70 - 130
Lead	ND		0.500	0.502		mg/L		100	70 - 130
Antimony	ND		0.100	0.0964		mg/L		96	70 - 130
Selenium	ND		1.00	0.920		mg/L		92	70 - 130

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-218633-1 MS
Matrix: Water
Analysis Batch: 644581

Client Sample ID: L502153-01 MW-1
Prep Type: Total Recoverable
Prep Batch: 644187

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	ND		1.00	1.04		mg/L		104	70 - 130
Vanadium	0.0027	J	0.500	0.483		mg/L		96	70 - 130
Calcium	160		25.0	178	4	mg/L		81	70 - 130
Magnesium	50		25.0	71.8		mg/L		89	70 - 130
Lithium	0.011		0.500	0.490		mg/L		96	70 - 130
Sodium	28		25.0	50.1		mg/L		90	70 - 130
Potassium	1.2		25.0	26.0		mg/L		100	70 - 130

Lab Sample ID: 240-218633-1 MSD
Matrix: Water
Analysis Batch: 644581

Client Sample ID: L502153-01 MW-1
Prep Type: Total Recoverable
Prep Batch: 644187

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.0945		mg/L		95	70 - 130	3	20
Arsenic	0.0046	J	1.00	0.972		mg/L		97	70 - 130	2	20
Barium	0.087		1.00	1.06		mg/L		97	70 - 130	3	20
Beryllium	ND		0.500	0.479		mg/L		96	70 - 130	4	20
Cadmium	ND		0.500	0.477		mg/L		95	70 - 130	2	20
Cobalt	0.0018		0.500	0.475		mg/L		95	70 - 130	4	20
Chromium	0.0018	J	0.500	0.492		mg/L		98	70 - 130	3	20
Copper	ND		0.500	0.479		mg/L		96	70 - 130	3	20
Molybdenum	0.0023	J	0.500	0.492		mg/L		98	70 - 130	3	20
Nickel	ND		0.500	0.478		mg/L		96	70 - 130	2	20
Lead	ND		0.500	0.522		mg/L		104	70 - 130	4	20
Antimony	ND		0.100	0.0999		mg/L		100	70 - 130	4	20
Selenium	ND		1.00	0.935		mg/L		93	70 - 130	2	20
Thallium	ND		1.00	1.07		mg/L		107	70 - 130	3	20
Vanadium	0.0027	J	0.500	0.497		mg/L		99	70 - 130	3	20
Calcium	160		25.0	183	4	mg/L		101	70 - 130	3	20
Magnesium	50		25.0	73.6		mg/L		96	70 - 130	2	20
Lithium	0.011		0.500	0.522		mg/L		102	70 - 130	6	20
Sodium	28		25.0	51.7		mg/L		96	70 - 130	3	20
Potassium	1.2		25.0	26.3		mg/L		101	70 - 130	1	20

Lab Sample ID: 240-218633-2 MS
Matrix: Water
Analysis Batch: 644581

Client Sample ID: L502153-02 MW-2
Prep Type: Total Recoverable
Prep Batch: 644187

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.0954		mg/L		95	70 - 130
Arsenic	ND		1.00	0.984		mg/L		98	70 - 130
Barium	0.040		1.00	1.02		mg/L		98	70 - 130
Beryllium	ND		0.500	0.470		mg/L		94	70 - 130
Cadmium	0.000099	J	0.500	0.483		mg/L		97	70 - 130
Cobalt	0.0036		0.500	0.486		mg/L		97	70 - 130
Chromium	ND		0.500	0.499		mg/L		100	70 - 130
Copper	ND		0.500	0.484		mg/L		97	70 - 130
Molybdenum	0.010		0.500	0.511		mg/L		100	70 - 130
Nickel	0.012		0.500	0.495		mg/L		97	70 - 130

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-218633-2 MS
Matrix: Water
Analysis Batch: 644581

Client Sample ID: L502153-02 MW-2
Prep Type: Total Recoverable
Prep Batch: 644187

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	ND		0.500	0.535		mg/L		107	70 - 130
Antimony	ND		0.100	0.102		mg/L		102	70 - 130
Selenium	ND		1.00	0.968		mg/L		97	70 - 130
Thallium	ND		1.00	1.09		mg/L		109	70 - 130
Vanadium	ND		0.500	0.506		mg/L		101	70 - 130
Calcium	190		25.0	216	4	mg/L		89	70 - 130
Magnesium	50		25.0	74.5		mg/L		96	70 - 130
Lithium	0.038		0.500	0.546		mg/L		102	70 - 130
Sodium	46		25.0	70.7		mg/L		97	70 - 130
Potassium	0.98	J	25.0	26.6		mg/L		102	70 - 130

Lab Sample ID: 240-218633-2 MSD
Matrix: Water
Analysis Batch: 644581

Client Sample ID: L502153-02 MW-2
Prep Type: Total Recoverable
Prep Batch: 644187

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.0955		mg/L		96	70 - 130	0	20
Arsenic	ND		1.00	0.990		mg/L		99	70 - 130	1	20
Barium	0.040		1.00	1.03		mg/L		99	70 - 130	0	20
Beryllium	ND		0.500	0.464		mg/L		93	70 - 130	1	20
Cadmium	0.000099	J	0.500	0.485		mg/L		97	70 - 130	0	20
Cobalt	0.0036		0.500	0.483		mg/L		96	70 - 130	1	20
Chromium	ND		0.500	0.501		mg/L		100	70 - 130	0	20
Copper	ND		0.500	0.484		mg/L		97	70 - 130	0	20
Molybdenum	0.010		0.500	0.511		mg/L		100	70 - 130	0	20
Nickel	0.012		0.500	0.496		mg/L		97	70 - 130	0	20
Lead	ND		0.500	0.535		mg/L		107	70 - 130	0	20
Antimony	ND		0.100	0.102		mg/L		102	70 - 130	0	20
Selenium	ND		1.00	0.966		mg/L		97	70 - 130	0	20
Thallium	ND		1.00	1.09		mg/L		109	70 - 130	0	20
Vanadium	ND		0.500	0.506		mg/L		101	70 - 130	0	20
Calcium	190		25.0	212	4	mg/L		74	70 - 130	2	20
Magnesium	50		25.0	73.7		mg/L		93	70 - 130	1	20
Lithium	0.038		0.500	0.540		mg/L		100	70 - 130	1	20
Sodium	46		25.0	70.2		mg/L		95	70 - 130	1	20
Potassium	0.98	J	25.0	26.7		mg/L		103	70 - 130	1	20

Lab Sample ID: MB 240-644195/1-A
Matrix: Water
Analysis Batch: 644422

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 644195

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/11/25 12:22	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/11/25 12:22	1
Barium	ND		0.0050	0.00077	mg/L		02/10/25 14:00	02/11/25 12:22	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/11/25 12:22	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/11/25 12:22	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/11/25 12:22	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/11/25 12:22	1

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-644195/1-A
Matrix: Water
Analysis Batch: 644422

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 644195

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/11/25 12:22	1
Molybdenum	ND		0.0050	0.0011	mg/L		02/10/25 14:00	02/11/25 12:22	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/11/25 12:22	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/11/25 12:22	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/11/25 12:22	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/11/25 12:22	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/11/25 12:22	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/11/25 12:22	1
Calcium	ND		1.0	0.25	mg/L		02/10/25 14:00	02/11/25 12:22	1
Magnesium	ND		1.0	0.061	mg/L		02/10/25 14:00	02/11/25 12:22	1
Lithium	ND		0.0080	0.0034	mg/L		02/10/25 14:00	02/11/25 12:22	1
Sodium	ND		1.0	0.88	mg/L		02/10/25 14:00	02/11/25 12:22	1
Potassium	ND		1.0	0.22	mg/L		02/10/25 14:00	02/11/25 12:22	1

Lab Sample ID: LCS 240-644195/3-A
Matrix: Water
Analysis Batch: 644422

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 644195

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.0935		mg/L		94	85 - 115
Arsenic	1.00	0.966		mg/L		97	85 - 115
Barium	1.00	0.939		mg/L		94	85 - 115
Beryllium	0.500	0.447		mg/L		89	85 - 115
Cadmium	0.500	0.461		mg/L		92	85 - 115
Cobalt	0.500	0.488		mg/L		98	85 - 115
Chromium	0.500	0.484		mg/L		97	85 - 115
Copper	0.500	0.484		mg/L		97	85 - 115
Molybdenum	0.500	0.484		mg/L		97	85 - 115
Nickel	0.500	0.487		mg/L		97	85 - 115
Lead	0.500	0.506		mg/L		101	85 - 115
Antimony	0.100	0.0971		mg/L		97	85 - 115
Selenium	1.00	0.964		mg/L		96	85 - 115
Thallium	1.00	1.03		mg/L		103	85 - 115
Vanadium	0.500	0.486		mg/L		97	85 - 115
Calcium	25.0	23.8		mg/L		95	85 - 115
Magnesium	25.0	24.2		mg/L		97	85 - 115
Lithium	0.500	0.500		mg/L		100	85 - 115
Sodium	25.0	24.1		mg/L		96	85 - 115
Potassium	25.0	25.0		mg/L		100	85 - 115

Lab Sample ID: MB 240-644579/1-A
Matrix: Water
Analysis Batch: 644732

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 644579

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver, Dissolved	ND		1.0	0.053	ug/L		02/12/25 14:00	02/13/25 15:44	1
Arsenic, Dissolved	ND		5.0	0.75	ug/L		02/12/25 14:00	02/13/25 15:44	1
Barium, Dissolved	ND		5.0	0.77	ug/L		02/12/25 14:00	02/13/25 15:44	1
Beryllium, Dissolved	ND		1.0	0.27	ug/L		02/12/25 14:00	02/13/25 15:44	1

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-644579/1-A
Matrix: Water
Analysis Batch: 644732

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 644579

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium, Dissolved	ND		1.0	0.077	ug/L		02/12/25 14:00	02/13/25 15:44	1
Cobalt, Dissolved	ND		1.0	0.086	ug/L		02/12/25 14:00	02/13/25 15:44	1
Chromium, Dissolved	ND		5.0	1.2	ug/L		02/12/25 14:00	02/13/25 15:44	1
Copper, Dissolved	ND		2.0	1.7	ug/L		02/12/25 14:00	02/13/25 15:44	1
Molybdenum, dissolved	ND		5.0	1.1	ug/L		02/12/25 14:00	02/13/25 15:44	1
Nickel, Dissolved	ND		2.0	1.5	ug/L		02/12/25 14:00	02/13/25 15:44	1
Lead, dissolved	ND		1.0	0.45	ug/L		02/12/25 14:00	02/13/25 15:44	1
Antimony, Dissolved	ND		2.0	0.57	ug/L		02/12/25 14:00	02/13/25 15:44	1
Selenium, Dissolved	ND		5.0	0.89	ug/L		02/12/25 14:00	02/13/25 15:44	1
Thallium, Dissolved	ND		1.0	0.51	ug/L		02/12/25 14:00	02/13/25 15:44	1
Vanadium, Dissolved	ND		5.0	0.82	ug/L		02/12/25 14:00	02/13/25 15:44	1
Calcium, Dissolved	ND		1000	250	ug/L		02/12/25 14:00	02/13/25 15:44	1
Magnesium, Dissolved	ND		1000	61	ug/L		02/12/25 14:00	02/13/25 15:44	1
Lithium, dissolved	ND		8.0	3.4	ug/L		02/12/25 14:00	02/13/25 15:44	1
Sodium, Dissolved	ND		1000	880	ug/L		02/12/25 14:00	02/13/25 15:44	1
Potassium, Dissolved	ND		1000	220	ug/L		02/12/25 14:00	02/13/25 15:44	1

Lab Sample ID: LCS 240-644579/3-A
Matrix: Water
Analysis Batch: 644732

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 644579

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver, Dissolved	100	91.5		ug/L		91	85 - 115
Arsenic, Dissolved	1000	945		ug/L		95	85 - 115
Barium, Dissolved	1000	952		ug/L		95	85 - 115
Beryllium, Dissolved	500	449		ug/L		90	85 - 115
Cadmium, Dissolved	500	461		ug/L		92	85 - 115
Cobalt, Dissolved	500	455		ug/L		91	85 - 115
Chromium, Dissolved	500	481		ug/L		96	85 - 115
Copper, Dissolved	500	465		ug/L		93	85 - 115
Molybdenum, dissolved	500	463		ug/L		93	85 - 115
Nickel, Dissolved	500	461		ug/L		92	85 - 115
Lead, dissolved	500	502		ug/L		100	85 - 115
Antimony, Dissolved	100	98.2		ug/L		98	85 - 115
Selenium, Dissolved	1000	910		ug/L		91	85 - 115
Thallium, Dissolved	1000	1040		ug/L		104	85 - 115
Vanadium, Dissolved	500	482		ug/L		96	85 - 115
Calcium, Dissolved	25000	23600		ug/L		94	85 - 115
Magnesium, Dissolved	25000	24000		ug/L		96	85 - 115
Lithium, dissolved	500	466		ug/L		93	85 - 115
Sodium, Dissolved	25000	24100		ug/L		97	85 - 115
Potassium, Dissolved	25000	24900		ug/L		100	85 - 115

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-644189/1-A
Matrix: Water
Analysis Batch: 644600

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 644189

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/12/25 09:13	1

Lab Sample ID: LCS 240-644189/2-A
Matrix: Water
Analysis Batch: 644600

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 644189

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00471		mg/L		94	85 - 115

Lab Sample ID: 240-218633-19 MS
Matrix: Water
Analysis Batch: 644600

Client Sample ID: L502160-06 MW-10
Prep Type: Total/NA
Prep Batch: 644189

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00100	0.000961		mg/L		96	70 - 130

Lab Sample ID: 240-218633-19 MSD
Matrix: Water
Analysis Batch: 644600

Client Sample ID: L502160-06 MW-10
Prep Type: Total/NA
Prep Batch: 644189

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.00101		mg/L		101	70 - 130	5	20

Lab Sample ID: 240-218633-20 MS
Matrix: Water
Analysis Batch: 644600

Client Sample ID: L502160-07 FB
Prep Type: Total/NA
Prep Batch: 644189

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00100	0.00105		mg/L		105	70 - 130

Lab Sample ID: 240-218633-20 MSD
Matrix: Water
Analysis Batch: 644600

Client Sample ID: L502160-07 FB
Prep Type: Total/NA
Prep Batch: 644189

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.00105		mg/L		105	70 - 130	0	20

Lab Sample ID: MB 240-644197/1-A
Matrix: Water
Analysis Batch: 644433

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 644197

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/11/25 13:32	1

Lab Sample ID: LCS 240-644197/2-A
Matrix: Water
Analysis Batch: 644433

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 644197

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00459		mg/L		92	85 - 115

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-644584/1-A
Matrix: Water
Analysis Batch: 644747

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 644584

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.20	0.13	ug/L		02/12/25 14:00	02/13/25 09:56	1

Lab Sample ID: LCS 240-644584/2-A
Matrix: Water
Analysis Batch: 644747

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 644584

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury, Dissolved	5.00	4.79		ug/L		96	85 - 115

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-644524/30
Matrix: Water
Analysis Batch: 644524

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			02/11/25 21:21	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			02/11/25 21:21	1

Lab Sample ID: MB 240-644524/4
Matrix: Water
Analysis Batch: 644524

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			02/11/25 19:02	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			02/11/25 19:02	1

Lab Sample ID: MB 240-644524/56
Matrix: Water
Analysis Batch: 644524

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			02/11/25 23:48	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			02/11/25 23:48	1

Lab Sample ID: 240-218633-6 DU
Matrix: Water
Analysis Batch: 644524

Client Sample ID: L502153-06 MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	460		461		mg/L		0.2	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Lab Sample ID: 240-218633-16 DU
Matrix: Water
Analysis Batch: 644524

Client Sample ID: L502160-03 MW-7C
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	140		137		mg/L		0.3	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-644180/1
Matrix: Water
Analysis Batch: 644180

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			02/10/25 10:53	1

Lab Sample ID: LCS 240-644180/2
Matrix: Water
Analysis Batch: 644180

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			242	227		mg/L		94	80 - 120		

Lab Sample ID: MB 240-644245/1
Matrix: Water
Analysis Batch: 644245

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			02/10/25 13:54	1

Lab Sample ID: LCS 240-644245/2
Matrix: Water
Analysis Batch: 644245

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			242	232		mg/L		96	80 - 120		

Lab Sample ID: 240-218633-3 DU
Matrix: Water
Analysis Batch: 644245

Client Sample ID: L502153-03 MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	510			505		mg/L				0.2	20

Lab Sample ID: MB 240-644397/1
Matrix: Water
Analysis Batch: 644397

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			02/11/25 12:06	1

Lab Sample ID: LCS 240-644397/2
Matrix: Water
Analysis Batch: 644397

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			242	227		mg/L		94	80 - 120		

Lab Sample ID: 240-218633-18 DU
Matrix: Water
Analysis Batch: 644397

Client Sample ID: L502160-05 MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	340			324		mg/L				5	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: 240-218633-24 DU
Matrix: Water
Analysis Batch: 644397

Client Sample ID: L502161-04 MW-100D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	430		428		mg/L		0	20

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-644338/1
Matrix: Water
Analysis Batch: 644338

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			02/11/25 09:45	1

Lab Sample ID: LCS 240-644338/2
Matrix: Water
Analysis Batch: 644338

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	26.1	20.0	J	mg/L		77	64 - 120

Lab Sample ID: 240-218633-6 DU
Matrix: Water
Analysis Batch: 644338

Client Sample ID: L502153-06 MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	44		47.0		mg/L		6	10

Lab Sample ID: 240-218633-10 DU
Matrix: Water
Analysis Batch: 644338

Client Sample ID: L502153-10 MW-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	37		37.2		mg/L		2	10

Lab Sample ID: MB 240-644343/1
Matrix: Water
Analysis Batch: 644343

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			02/11/25 09:50	1

Lab Sample ID: LCS 240-644343/2
Matrix: Water
Analysis Batch: 644343

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	26.1	21.0	J	mg/L		80	64 - 120

Method: 2540D-2020 - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: MB 240-644521/1
Matrix: Water
Analysis Batch: 644521

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			02/12/25 09:36	1

Lab Sample ID: LCS 240-644521/2
Matrix: Water
Analysis Batch: 644521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	26.1	25.0	J	mg/L		96	64 - 120

Lab Sample ID: 240-218633-22 DU
Matrix: Water
Analysis Batch: 644521

Client Sample ID: L502161-02 MW-100B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	5.6	J	7.40	J F5	mg/L		28	10

Lab Sample ID: 240-218633-24 DU
Matrix: Water
Analysis Batch: 644521

Client Sample ID: L502161-04 MW-100D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	2.2	J	3.00	J F5	mg/L		31	10

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-644447/3
Matrix: Water
Analysis Batch: 644447

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			02/11/25 19:53	1
Fluoride	ND		0.050	0.024	mg/L			02/11/25 19:53	1
Sulfate	ND		1.0	0.35	mg/L			02/11/25 19:53	1

Lab Sample ID: LCS 240-644447/4
Matrix: Water
Analysis Batch: 644447

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	48.8		mg/L		98	90 - 110
Fluoride	2.50	2.49		mg/L		100	90 - 110
Sulfate	50.0	50.0		mg/L		100	90 - 110

Lab Sample ID: 240-218633-7 MS
Matrix: Water
Analysis Batch: 644447

Client Sample ID: L502153-07 MW-11B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.84	J	50.0	53.0		mg/L		104	80 - 120
Fluoride	0.38		2.50	2.93		mg/L		102	80 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-218633-7 MS
Matrix: Water
Analysis Batch: 644447

Client Sample ID: L502153-07 MW-11B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	5.5		50.0	57.7		mg/L		104	80 - 120

Lab Sample ID: 240-218633-7 MSD
Matrix: Water
Analysis Batch: 644447

Client Sample ID: L502153-07 MW-11B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	0.84	J	50.0	53.5		mg/L		105	80 - 120	1	15
Fluoride	0.38		2.50	2.96		mg/L		103	80 - 120	1	15
Sulfate	5.5		50.0	58.2		mg/L		105	80 - 120	1	15

Lab Sample ID: 240-218633-13 MS
Matrix: Water
Analysis Batch: 644447

Client Sample ID: L502153-13 FB
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		50.0	50.6		mg/L		101	80 - 120
Fluoride	ND		2.50	2.54		mg/L		102	80 - 120
Sulfate	ND		50.0	51.5		mg/L		103	80 - 120

Lab Sample ID: 240-218633-13 MSD
Matrix: Water
Analysis Batch: 644447

Client Sample ID: L502153-13 FB
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		50.0	51.8		mg/L		104	80 - 120	2	15
Fluoride	ND		2.50	2.59		mg/L		104	80 - 120	2	15
Sulfate	ND		50.0	52.7		mg/L		105	80 - 120	2	15

Lab Sample ID: MB 240-644448/3
Matrix: Water
Analysis Batch: 644448

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			02/12/25 05:36	1
Fluoride	ND		0.050	0.024	mg/L			02/12/25 05:36	1
Sulfate	ND		1.0	0.35	mg/L			02/12/25 05:36	1

Lab Sample ID: LCS 240-644448/4
Matrix: Water
Analysis Batch: 644448

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	48.5		mg/L		97	90 - 110
Fluoride	2.50	2.60		mg/L		104	90 - 110
Sulfate	50.0	50.0		mg/L		100	90 - 110

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-218633-21 MS
Matrix: Water
Analysis Batch: 644448

Client Sample ID: L502161-01 MW-100A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10		50.0	56.3		mg/L		93	80 - 120
Fluoride	0.57		2.50	2.98		mg/L		97	80 - 120
Sulfate	25		50.0	71.6		mg/L		94	80 - 120

Lab Sample ID: 240-218633-21 MSD
Matrix: Water
Analysis Batch: 644448

Client Sample ID: L502161-01 MW-100A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10		50.0	56.2		mg/L		92	80 - 120	0	15
Fluoride	0.57		2.50	2.98		mg/L		96	80 - 120	0	15
Sulfate	25		50.0	71.5		mg/L		93	80 - 120	0	15

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-702324/1-A
Matrix: Water
Analysis Batch: 706560

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 702324

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.01756	U	0.111	0.111	1.00	0.244	pCi/L	02/11/25 07:07	03/07/25 07:54	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.3*		*30 - 110*	*02/11/25 07:07*	*03/07/25 07:54*	*1*

Lab Sample ID: LCS 160-702324/2-A
Matrix: Water
Analysis Batch: 706560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 702324

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.58	9.475		1.22	1.00	0.297	pCi/L	99	75 - 125

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*80.8*		*30 - 110*

Lab Sample ID: 240-218633-7 DU
Matrix: Water
Analysis Batch: 706559

Client Sample ID: L502153-07 MW-11B
Prep Type: Total/NA
Prep Batch: 702324

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.415		0.2710		0.188	1.00	0.253	pCi/L	0.35	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*79.4*		*30 - 110*

Method: 903.0 - Radium-226 (GFPC) (Continued)

Lab Sample ID: MB 160-702327/1-A
Matrix: Water
Analysis Batch: 706177

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 702327

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.009114	U	0.0607	0.0607	1.00	0.132	pCi/L	02/11/25 07:12	03/05/25 07:37	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.7*		*30 - 110*	*02/11/25 07:12*	*03/05/25 07:37*	*1*

Lab Sample ID: LCS 160-702327/2-A
Matrix: Water
Analysis Batch: 706177

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 702327

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.58	9.284		1.02	1.00	0.163	pCi/L	97	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*85.7*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-702326/1-A
Matrix: Water
Analysis Batch: 706429

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 702326

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2026	U	0.332	0.333	1.00	0.567	pCi/L	02/11/25 07:11	03/06/25 12:26	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.3*		*30 - 110*	*02/11/25 07:11*	*03/06/25 12:26*	*1*
Y Carrier	*78.1*		*30 - 110*	*02/11/25 07:11*	*03/06/25 12:26*	*1*

Lab Sample ID: LCS 160-702326/2-A
Matrix: Water
Analysis Batch: 706429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 702326

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			8.04	9.019		1.33	1.00	0.683	pCi/L	112	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*80.8*		*30 - 110*
Y Carrier	*80.0*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: 240-218633-7 DU
Matrix: Water
Analysis Batch: 706383

Client Sample ID: L502153-07 MW-11B
Prep Type: Total/NA
Prep Batch: 702326

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.0980	U		0.8338		0.426	1.00	0.564	pCi/L			0.90	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*79.4*		*30 - 110*
Y Carrier	*81.1*		*30 - 110*

Lab Sample ID: MB 160-702328/1-A
Matrix: Water
Analysis Batch: 705036

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 702328

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.09046	U	0.345	0.346	1.00	0.671	pCi/L	02/11/25 07:15	02/27/25 12:16	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.7*		*30 - 110*	*02/11/25 07:15*	*02/27/25 12:16*	*1*
Y Carrier	*77.0*		*30 - 110*	*02/11/25 07:15*	*02/27/25 12:16*	*1*

Lab Sample ID: LCS 160-702328/2-A
Matrix: Water
Analysis Batch: 705036

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 702328

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			8.06	8.288		1.24	1.00	0.602	pCi/L	103	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*85.7*		*30 - 110*
Y Carrier	*78.1*		*30 - 110*

Metals

Prep Batch: 4968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Dissolved	Water	200.8	
240-218633-4	L502153-04 MW-5	Dissolved	Water	200.8	
240-218633-8	L502153-08 MW-12	Dissolved	Water	200.8	
240-218633-16	L502160-03 MW-7C	Total/NA	Water	200.8	
MB 350-4968/25-A	Method Blank	Total/NA	Water	200.8	
LCS 350-4968/26-A	Lab Control Sample	Total/NA	Water	200.8	

Prep Batch: 4970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Total/NA	Water	200.8	
240-218633-2	L502153-02 MW-2	Total/NA	Water	200.8	
240-218633-3	L502153-03 MW-4	Total/NA	Water	200.8	
240-218633-4	L502153-04 MW-5	Total/NA	Water	200.8	
240-218633-5	L502153-05 MW-6	Total/NA	Water	200.8	
240-218633-6	L502153-06 MW-11	Total/NA	Water	200.8	
240-218633-7	L502153-07 MW-11B	Total/NA	Water	200.8	
240-218633-8	L502153-08 MW-12	Total/NA	Water	200.8	
240-218633-9	L502153-09 MW-12B	Total/NA	Water	200.8	
240-218633-10	L502153-10 MW-14	Total/NA	Water	200.8	
240-218633-11	L502153-11 MW-15	Total/NA	Water	200.8	
240-218633-12	L502153-12 MWT-6	Total/NA	Water	200.8	
240-218633-13	L502153-13 FB	Total/NA	Water	200.8	
240-218633-14	L502160-01 MW-7	Total/NA	Water	200.8	
240-218633-15	L502160-02 MW-7B	Total/NA	Water	200.8	
MB 350-4970/25-A	Method Blank	Total/NA	Water	200.8	
LCS 350-4970/26-A	Lab Control Sample	Total/NA	Water	200.8	

Prep Batch: 5003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-17	L502160-04 MW-8	Total/NA	Water	200.8	
240-218633-18	L502160-05 MW-9	Total/NA	Water	200.8	
240-218633-19	L502160-06 MW-10	Total/NA	Water	200.8	
240-218633-20	L502160-07 FB	Total/NA	Water	200.8	
240-218633-21	L502161-01 MW-100A	Total/NA	Water	200.8	
MB 350-5003/25-A	Method Blank	Total/NA	Water	200.8	
LCS 350-5003/26-A	Lab Control Sample	Total/NA	Water	200.8	

Prep Batch: 5006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-22	L502161-02 MW-100B	Total/NA	Water	200.8	
240-218633-23	L502161-03 MW-100C	Total/NA	Water	200.8	
240-218633-24	L502161-04 MW-100D	Total/NA	Water	200.8	
240-218633-25	L502161-05 MWT-100C	Total/NA	Water	200.8	
MB 350-5006/25-A	Method Blank	Total/NA	Water	200.8	
LCS 350-5006/26-A	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 5013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Dissolved	Water	200.8	4968
240-218633-1	L502153-01 MW-1	Total/NA	Water	200.8	4970
240-218633-2	L502153-02 MW-2	Total/NA	Water	200.8	4970

Metals (Continued)

Analysis Batch: 5013 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-3	L502153-03 MW-4	Total/NA	Water	200.8	4970
240-218633-4	L502153-04 MW-5	Dissolved	Water	200.8	4968
240-218633-4	L502153-04 MW-5	Total/NA	Water	200.8	4970
240-218633-5	L502153-05 MW-6	Total/NA	Water	200.8	4970
240-218633-6	L502153-06 MW-11	Total/NA	Water	200.8	4970
240-218633-6	L502153-06 MW-11	Total/NA	Water	200.8	4970
240-218633-7	L502153-07 MW-11B	Total/NA	Water	200.8	4970
240-218633-8	L502153-08 MW-12	Dissolved	Water	200.8	4968
240-218633-8	L502153-08 MW-12	Total/NA	Water	200.8	4970
240-218633-9	L502153-09 MW-12B	Total/NA	Water	200.8	4970
240-218633-10	L502153-10 MW-14	Total/NA	Water	200.8	4970
240-218633-10	L502153-10 MW-14	Total/NA	Water	200.8	4970
240-218633-11	L502153-11 MW-15	Total/NA	Water	200.8	4970
240-218633-12	L502153-12 MWT-6	Total/NA	Water	200.8	4970
240-218633-13	L502153-13 FB	Total/NA	Water	200.8	4970
240-218633-14	L502160-01 MW-7	Total/NA	Water	200.8	4970
240-218633-15	L502160-02 MW-7B	Total/NA	Water	200.8	4970
240-218633-16	L502160-03 MW-7C	Total/NA	Water	200.8	4968
MB 350-4968/25-A	Method Blank	Total/NA	Water	200.8	4968
MB 350-4970/25-A	Method Blank	Total/NA	Water	200.8	4970
LCS 350-4968/26-A	Lab Control Sample	Total/NA	Water	200.8	4968
LCS 350-4970/26-A	Lab Control Sample	Total/NA	Water	200.8	4970

Analysis Batch: 5032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-17	L502160-04 MW-8	Total/NA	Water	200.8	5003
240-218633-18	L502160-05 MW-9	Total/NA	Water	200.8	5003
240-218633-19	L502160-06 MW-10	Total/NA	Water	200.8	5003
240-218633-20	L502160-07 FB	Total/NA	Water	200.8	5003
240-218633-21	L502161-01 MW-100A	Total/NA	Water	200.8	5003
240-218633-22	L502161-02 MW-100B	Total/NA	Water	200.8	5006
240-218633-23	L502161-03 MW-100C	Total/NA	Water	200.8	5006
240-218633-24	L502161-04 MW-100D	Total/NA	Water	200.8	5006
240-218633-25	L502161-05 MWT-100C	Total/NA	Water	200.8	5006
MB 350-5003/25-A	Method Blank	Total/NA	Water	200.8	5003
MB 350-5006/25-A	Method Blank	Total/NA	Water	200.8	5006
LCS 350-5003/26-A	Lab Control Sample	Total/NA	Water	200.8	5003
LCS 350-5006/26-A	Lab Control Sample	Total/NA	Water	200.8	5006

Prep Batch: 644187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Total Recoverable	Water	200.7	
240-218633-2	L502153-02 MW-2	Total Recoverable	Water	200.7	
240-218633-3	L502153-03 MW-4	Total Recoverable	Water	200.7	
240-218633-4	L502153-04 MW-5	Total Recoverable	Water	200.7	
240-218633-5	L502153-05 MW-6	Total Recoverable	Water	200.7	
240-218633-6	L502153-06 MW-11	Total Recoverable	Water	200.7	
240-218633-7	L502153-07 MW-11B	Total Recoverable	Water	200.7	
240-218633-8	L502153-08 MW-12	Total Recoverable	Water	200.7	
240-218633-9	L502153-09 MW-12B	Total Recoverable	Water	200.7	
240-218633-10	L502153-10 MW-14	Total Recoverable	Water	200.7	

Metals (Continued)

Prep Batch: 644187 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-11	L502153-11 MW-15	Total Recoverable	Water	200.7	
240-218633-12	L502153-12 MWT-6	Total Recoverable	Water	200.7	
240-218633-13	L502153-13 FB	Total Recoverable	Water	200.7	
240-218633-14	L502160-01 MW-7	Total Recoverable	Water	200.7	
240-218633-15	L502160-02 MW-7B	Total Recoverable	Water	200.7	
240-218633-16	L502160-03 MW-7C	Total Recoverable	Water	200.7	
240-218633-17	L502160-04 MW-8	Total Recoverable	Water	200.7	
240-218633-18	L502160-05 MW-9	Total Recoverable	Water	200.7	
240-218633-19	L502160-06 MW-10	Total Recoverable	Water	200.7	
240-218633-20	L502160-07 FB	Total Recoverable	Water	200.7	
MB 240-644187/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-644187/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-644187/3-A	Lab Control Sample	Total Recoverable	Water	200.7	
240-218633-1 MS	L502153-01 MW-1	Total Recoverable	Water	200.7	
240-218633-1 MS	L502153-01 MW-1	Total Recoverable	Water	200.8-1994 R5.4	
240-218633-1 MSD	L502153-01 MW-1	Total Recoverable	Water	200.7	
240-218633-1 MSD	L502153-01 MW-1	Total Recoverable	Water	200.8-1994 R5.4	
240-218633-2 MS	L502153-02 MW-2	Total Recoverable	Water	200.7	
240-218633-2 MS	L502153-02 MW-2	Total Recoverable	Water	200.8-1994 R5.4	
240-218633-2 MSD	L502153-02 MW-2	Total Recoverable	Water	200.7	
240-218633-2 MSD	L502153-02 MW-2	Total Recoverable	Water	200.8-1994 R5.4	

Prep Batch: 644189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Total/NA	Water	245.1-1994 R3.0	
240-218633-2	L502153-02 MW-2	Total/NA	Water	245.1-1994 R3.0	
240-218633-3	L502153-03 MW-4	Total/NA	Water	245.1-1994 R3.0	
240-218633-4	L502153-04 MW-5	Total/NA	Water	245.1-1994 R3.0	
240-218633-5	L502153-05 MW-6	Total/NA	Water	245.1-1994 R3.0	
240-218633-6	L502153-06 MW-11	Total/NA	Water	245.1-1994 R3.0	
240-218633-7	L502153-07 MW-11B	Total/NA	Water	245.1-1994 R3.0	
240-218633-8	L502153-08 MW-12	Total/NA	Water	245.1-1994 R3.0	
240-218633-9	L502153-09 MW-12B	Total/NA	Water	245.1-1994 R3.0	
240-218633-10	L502153-10 MW-14	Total/NA	Water	245.1-1994 R3.0	
240-218633-11	L502153-11 MW-15	Total/NA	Water	245.1-1994 R3.0	
240-218633-12	L502153-12 MWT-6	Total/NA	Water	245.1-1994 R3.0	
240-218633-13	L502153-13 FB	Total/NA	Water	245.1-1994 R3.0	
240-218633-14	L502160-01 MW-7	Total/NA	Water	245.1-1994 R3.0	
240-218633-15	L502160-02 MW-7B	Total/NA	Water	245.1-1994 R3.0	
240-218633-16	L502160-03 MW-7C	Total/NA	Water	245.1-1994 R3.0	
240-218633-17	L502160-04 MW-8	Total/NA	Water	245.1-1994 R3.0	
240-218633-18	L502160-05 MW-9	Total/NA	Water	245.1-1994 R3.0	
240-218633-19	L502160-06 MW-10	Total/NA	Water	245.1-1994 R3.0	
240-218633-20	L502160-07 FB	Total/NA	Water	245.1-1994 R3.0	
MB 240-644189/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-644189/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	
240-218633-19 MS	L502160-06 MW-10	Total/NA	Water	245.1-1994 R3.0	
240-218633-19 MSD	L502160-06 MW-10	Total/NA	Water	245.1-1994 R3.0	
240-218633-20 MS	L502160-07 FB	Total/NA	Water	245.1-1994 R3.0	
240-218633-20 MSD	L502160-07 FB	Total/NA	Water	245.1-1994 R3.0	

Metals

Prep Batch: 644195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-21	L502161-01 MW-100A	Total Recoverable	Water	200.7	
240-218633-22	L502161-02 MW-100B	Total Recoverable	Water	200.7	
240-218633-23	L502161-03 MW-100C	Total Recoverable	Water	200.7	
240-218633-24	L502161-04 MW-100D	Total Recoverable	Water	200.7	
240-218633-25	L502161-05 MWT-100C	Total Recoverable	Water	200.7	
MB 240-644195/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-644195/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-644195/3-A	Lab Control Sample	Total Recoverable	Water	200.7	

Prep Batch: 644197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-21	L502161-01 MW-100A	Total/NA	Water	245.1-1994 R3.0	
240-218633-22	L502161-02 MW-100B	Total/NA	Water	245.1-1994 R3.0	
240-218633-23	L502161-03 MW-100C	Total/NA	Water	245.1-1994 R3.0	
240-218633-24	L502161-04 MW-100D	Total/NA	Water	245.1-1994 R3.0	
240-218633-25	L502161-05 MWT-100C	Total/NA	Water	245.1-1994 R3.0	
MB 240-644197/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-644197/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 644422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-21	L502161-01 MW-100A	Total Recoverable	Water	200.8-1994 R5.4	644195
240-218633-22	L502161-02 MW-100B	Total Recoverable	Water	200.8-1994 R5.4	644195
240-218633-23	L502161-03 MW-100C	Total Recoverable	Water	200.8-1994 R5.4	644195
240-218633-24	L502161-04 MW-100D	Total Recoverable	Water	200.8-1994 R5.4	644195
240-218633-25	L502161-05 MWT-100C	Total Recoverable	Water	200.8-1994 R5.4	644195
MB 240-644195/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	644195
LCS 240-644195/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	644195

Analysis Batch: 644428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-2	L502153-02 MW-2	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-3	L502153-03 MW-4	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-4	L502153-04 MW-5	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-5	L502153-05 MW-6	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-6	L502153-06 MW-11	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-7	L502153-07 MW-11B	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-8	L502153-08 MW-12	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-9	L502153-09 MW-12B	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-10	L502153-10 MW-14	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-11	L502153-11 MW-15	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-12	L502153-12 MWT-6	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-13	L502153-13 FB	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-14	L502160-01 MW-7	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-15	L502160-02 MW-7B	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-16	L502160-03 MW-7C	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-17	L502160-04 MW-8	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-18	L502160-05 MW-9	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-19	L502160-06 MW-10	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-20	L502160-07 FB	Total Recoverable	Water	200.7 R4.4-1994	644187

Metals (Continued)

Analysis Batch: 644428 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-21	L502161-01 MW-100A	Total Recoverable	Water	200.7 R4.4-1994	644195
240-218633-22	L502161-02 MW-100B	Total Recoverable	Water	200.7 R4.4-1994	644195
240-218633-23	L502161-03 MW-100C	Total Recoverable	Water	200.7 R4.4-1994	644195
240-218633-24	L502161-04 MW-100D	Total Recoverable	Water	200.7 R4.4-1994	644195
240-218633-25	L502161-05 MWT-100C	Total Recoverable	Water	200.7 R4.4-1994	644195
MB 240-644187/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	644187
MB 240-644195/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	644195
LCS 240-644187/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	644187
LCS 240-644195/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	644195
240-218633-1 MS	L502153-01 MW-1	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-1 MSD	L502153-01 MW-1	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-2 MS	L502153-02 MW-2	Total Recoverable	Water	200.7 R4.4-1994	644187
240-218633-2 MSD	L502153-02 MW-2	Total Recoverable	Water	200.7 R4.4-1994	644187

Analysis Batch: 644433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-644197/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	644197
LCS 240-644197/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	644197

Prep Batch: 644579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Dissolved	Water	200.8-1994 R5.4	
240-218633-4	L502153-04 MW-5	Dissolved	Water	200.8-1994 R5.4	
240-218633-8	L502153-08 MW-12	Dissolved	Water	200.8-1994 R5.4	
MB 240-644579/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	
LCS 240-644579/2-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	
LCS 240-644579/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	

Analysis Batch: 644581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-2	L502153-02 MW-2	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-3	L502153-03 MW-4	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-4	L502153-04 MW-5	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-5	L502153-05 MW-6	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-6	L502153-06 MW-11	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-7	L502153-07 MW-11B	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-8	L502153-08 MW-12	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-9	L502153-09 MW-12B	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-10	L502153-10 MW-14	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-11	L502153-11 MW-15	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-12	L502153-12 MWT-6	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-13	L502153-13 FB	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-14	L502160-01 MW-7	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-15	L502160-02 MW-7B	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-16	L502160-03 MW-7C	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-17	L502160-04 MW-8	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-18	L502160-05 MW-9	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-19	L502160-06 MW-10	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-20	L502160-07 FB	Total Recoverable	Water	200.8-1994 R5.4	644187
MB 240-644187/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	644187

Metals (Continued)

Analysis Batch: 644581 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-644187/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-1 MS	L502153-01 MW-1	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-1 MSD	L502153-01 MW-1	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-2 MS	L502153-02 MW-2	Total Recoverable	Water	200.8-1994 R5.4	644187
240-218633-2 MSD	L502153-02 MW-2	Total Recoverable	Water	200.8-1994 R5.4	644187

Prep Batch: 644584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Dissolved	Water	245.1-1994 R3.0	
240-218633-4	L502153-04 MW-5	Dissolved	Water	245.1-1994 R3.0	
240-218633-8	L502153-08 MW-12	Dissolved	Water	245.1-1994 R3.0	
MB 240-644584/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-644584/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 644600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-2	L502153-02 MW-2	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-3	L502153-03 MW-4	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-4	L502153-04 MW-5	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-5	L502153-05 MW-6	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-6	L502153-06 MW-11	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-7	L502153-07 MW-11B	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-8	L502153-08 MW-12	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-9	L502153-09 MW-12B	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-10	L502153-10 MW-14	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-11	L502153-11 MW-15	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-12	L502153-12 MWT-6	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-13	L502153-13 FB	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-14	L502160-01 MW-7	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-15	L502160-02 MW-7B	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-16	L502160-03 MW-7C	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-17	L502160-04 MW-8	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-18	L502160-05 MW-9	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-19	L502160-06 MW-10	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-20	L502160-07 FB	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-21	L502161-01 MW-100A	Total/NA	Water	245.1-1994 R3.0	644197
240-218633-22	L502161-02 MW-100B	Total/NA	Water	245.1-1994 R3.0	644197
240-218633-23	L502161-03 MW-100C	Total/NA	Water	245.1-1994 R3.0	644197
240-218633-24	L502161-04 MW-100D	Total/NA	Water	245.1-1994 R3.0	644197
240-218633-25	L502161-05 MWT-100C	Total/NA	Water	245.1-1994 R3.0	644197
MB 240-644189/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	644189
LCS 240-644189/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-19 MS	L502160-06 MW-10	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-19 MSD	L502160-06 MW-10	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-20 MS	L502160-07 FB	Total/NA	Water	245.1-1994 R3.0	644189
240-218633-20 MSD	L502160-07 FB	Total/NA	Water	245.1-1994 R3.0	644189

Analysis Batch: 644732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Dissolved	Water	200.8-1994 R5.4	644579

Metals (Continued)

Analysis Batch: 644732 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-4	L502153-04 MW-5	Dissolved	Water	200.8-1994 R5.4	644579
240-218633-8	L502153-08 MW-12	Dissolved	Water	200.8-1994 R5.4	644579
MB 240-644579/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	644579
LCS 240-644579/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	644579

Analysis Batch: 644747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Dissolved	Water	245.1-1994 R3.0	644584
240-218633-4	L502153-04 MW-5	Dissolved	Water	245.1-1994 R3.0	644584
240-218633-8	L502153-08 MW-12	Dissolved	Water	245.1-1994 R3.0	644584
MB 240-644584/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	644584
LCS 240-644584/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	644584

Analysis Batch: 645131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Dissolved	Water	200.7 R4.4-1994	644579
240-218633-4	L502153-04 MW-5	Dissolved	Water	200.7 R4.4-1994	644579
240-218633-8	L502153-08 MW-12	Dissolved	Water	200.7 R4.4-1994	644579
MB 240-644579/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	644579
LCS 240-644579/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	644579

Analysis Batch: 645307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Total Recoverable	Water	2340 B-2021	
240-218633-2	L502153-02 MW-2	Total Recoverable	Water	2340 B-2021	
240-218633-3	L502153-03 MW-4	Total Recoverable	Water	2340 B-2021	
240-218633-4	L502153-04 MW-5	Total Recoverable	Water	2340 B-2021	
240-218633-5	L502153-05 MW-6	Total Recoverable	Water	2340 B-2021	
240-218633-6	L502153-06 MW-11	Total Recoverable	Water	2340 B-2021	
240-218633-7	L502153-07 MW-11B	Total Recoverable	Water	2340 B-2021	
240-218633-8	L502153-08 MW-12	Total Recoverable	Water	2340 B-2021	
240-218633-9	L502153-09 MW-12B	Total Recoverable	Water	2340 B-2021	
240-218633-10	L502153-10 MW-14	Total Recoverable	Water	2340 B-2021	
240-218633-11	L502153-11 MW-15	Total Recoverable	Water	2340 B-2021	
240-218633-12	L502153-12 MWT-6	Total Recoverable	Water	2340 B-2021	
240-218633-13	L502153-13 FB	Total Recoverable	Water	2340 B-2021	
240-218633-14	L502160-01 MW-7	Total Recoverable	Water	2340 B-2021	
240-218633-15	L502160-02 MW-7B	Total Recoverable	Water	2340 B-2021	
240-218633-16	L502160-03 MW-7C	Total Recoverable	Water	2340 B-2021	
240-218633-17	L502160-04 MW-8	Total Recoverable	Water	2340 B-2021	
240-218633-18	L502160-05 MW-9	Total Recoverable	Water	2340 B-2021	
240-218633-19	L502160-06 MW-10	Total Recoverable	Water	2340 B-2021	
240-218633-20	L502160-07 FB	Total Recoverable	Water	2340 B-2021	
240-218633-21	L502161-01 MW-100A	Total Recoverable	Water	2340 B-2021	
240-218633-22	L502161-02 MW-100B	Total Recoverable	Water	2340 B-2021	
240-218633-23	L502161-03 MW-100C	Total Recoverable	Water	2340 B-2021	
240-218633-24	L502161-04 MW-100D	Total Recoverable	Water	2340 B-2021	
240-218633-25	L502161-05 MWT-100C	Total Recoverable	Water	2340 B-2021	

General Chemistry

Analysis Batch: 644180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Total/NA	Water	2540 C-2020	
240-218633-2	L502153-02 MW-2	Total/NA	Water	2540 C-2020	
MB 240-644180/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-644180/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 644245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-3	L502153-03 MW-4	Total/NA	Water	2540 C-2020	
240-218633-4	L502153-04 MW-5	Total/NA	Water	2540 C-2020	
240-218633-5	L502153-05 MW-6	Total/NA	Water	2540 C-2020	
240-218633-6	L502153-06 MW-11	Total/NA	Water	2540 C-2020	
240-218633-7	L502153-07 MW-11B	Total/NA	Water	2540 C-2020	
240-218633-8	L502153-08 MW-12	Total/NA	Water	2540 C-2020	
240-218633-9	L502153-09 MW-12B	Total/NA	Water	2540 C-2020	
240-218633-10	L502153-10 MW-14	Total/NA	Water	2540 C-2020	
240-218633-11	L502153-11 MW-15	Total/NA	Water	2540 C-2020	
240-218633-12	L502153-12 MWT-6	Total/NA	Water	2540 C-2020	
240-218633-13	L502153-13 FB	Total/NA	Water	2540 C-2020	
MB 240-644245/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-644245/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-218633-3 DU	L502153-03 MW-4	Total/NA	Water	2540 C-2020	

Analysis Batch: 644338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Total/NA	Water	2540D-2020	
240-218633-2	L502153-02 MW-2	Total/NA	Water	2540D-2020	
240-218633-3	L502153-03 MW-4	Total/NA	Water	2540D-2020	
240-218633-4	L502153-04 MW-5	Total/NA	Water	2540D-2020	
240-218633-5	L502153-05 MW-6	Total/NA	Water	2540D-2020	
240-218633-6	L502153-06 MW-11	Total/NA	Water	2540D-2020	
240-218633-7	L502153-07 MW-11B	Total/NA	Water	2540D-2020	
240-218633-8	L502153-08 MW-12	Total/NA	Water	2540D-2020	
240-218633-9	L502153-09 MW-12B	Total/NA	Water	2540D-2020	
240-218633-10	L502153-10 MW-14	Total/NA	Water	2540D-2020	
240-218633-11	L502153-11 MW-15	Total/NA	Water	2540D-2020	
240-218633-12	L502153-12 MWT-6	Total/NA	Water	2540D-2020	
240-218633-13	L502153-13 FB	Total/NA	Water	2540D-2020	
MB 240-644338/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-644338/2	Lab Control Sample	Total/NA	Water	2540D-2020	
240-218633-6 DU	L502153-06 MW-11	Total/NA	Water	2540D-2020	
240-218633-10 DU	L502153-10 MW-14	Total/NA	Water	2540D-2020	

Analysis Batch: 644343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-14	L502160-01 MW-7	Total/NA	Water	2540D-2020	
MB 240-644343/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-644343/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 644397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-14	L502160-01 MW-7	Total/NA	Water	2540 C-2020	

General Chemistry (Continued)

Analysis Batch: 644397 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-15	L502160-02 MW-7B	Total/NA	Water	2540 C-2020	
240-218633-16	L502160-03 MW-7C	Total/NA	Water	2540 C-2020	
240-218633-17	L502160-04 MW-8	Total/NA	Water	2540 C-2020	
240-218633-18	L502160-05 MW-9	Total/NA	Water	2540 C-2020	
240-218633-19	L502160-06 MW-10	Total/NA	Water	2540 C-2020	
240-218633-20	L502160-07 FB	Total/NA	Water	2540 C-2020	
240-218633-21	L502161-01 MW-100A	Total/NA	Water	2540 C-2020	
240-218633-22	L502161-02 MW-100B	Total/NA	Water	2540 C-2020	
240-218633-23	L502161-03 MW-100C	Total/NA	Water	2540 C-2020	
240-218633-24	L502161-04 MW-100D	Total/NA	Water	2540 C-2020	
240-218633-25	L502161-05 MWT-100C	Total/NA	Water	2540 C-2020	
MB 240-644397/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-644397/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-218633-18 DU	L502160-05 MW-9	Total/NA	Water	2540 C-2020	
240-218633-24 DU	L502161-04 MW-100D	Total/NA	Water	2540 C-2020	

Analysis Batch: 644447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Total/NA	Water	300.0-1993 R2.1	
240-218633-2	L502153-02 MW-2	Total/NA	Water	300.0-1993 R2.1	
240-218633-2	L502153-02 MW-2	Total/NA	Water	300.0-1993 R2.1	
240-218633-3	L502153-03 MW-4	Total/NA	Water	300.0-1993 R2.1	
240-218633-4	L502153-04 MW-5	Total/NA	Water	300.0-1993 R2.1	
240-218633-4	L502153-04 MW-5	Total/NA	Water	300.0-1993 R2.1	
240-218633-5	L502153-05 MW-6	Total/NA	Water	300.0-1993 R2.1	
240-218633-5	L502153-05 MW-6	Total/NA	Water	300.0-1993 R2.1	
240-218633-6	L502153-06 MW-11	Total/NA	Water	300.0-1993 R2.1	
240-218633-7	L502153-07 MW-11B	Total/NA	Water	300.0-1993 R2.1	
240-218633-8	L502153-08 MW-12	Total/NA	Water	300.0-1993 R2.1	
240-218633-9	L502153-09 MW-12B	Total/NA	Water	300.0-1993 R2.1	
240-218633-10	L502153-10 MW-14	Total/NA	Water	300.0-1993 R2.1	
240-218633-11	L502153-11 MW-15	Total/NA	Water	300.0-1993 R2.1	
240-218633-12	L502153-12 MWT-6	Total/NA	Water	300.0-1993 R2.1	
240-218633-12	L502153-12 MWT-6	Total/NA	Water	300.0-1993 R2.1	
240-218633-13	L502153-13 FB	Total/NA	Water	300.0-1993 R2.1	
240-218633-14	L502160-01 MW-7	Total/NA	Water	300.0-1993 R2.1	
240-218633-15	L502160-02 MW-7B	Total/NA	Water	300.0-1993 R2.1	
240-218633-16	L502160-03 MW-7C	Total/NA	Water	300.0-1993 R2.1	
240-218633-16	L502160-03 MW-7C	Total/NA	Water	300.0-1993 R2.1	
240-218633-17	L502160-04 MW-8	Total/NA	Water	300.0-1993 R2.1	
240-218633-18	L502160-05 MW-9	Total/NA	Water	300.0-1993 R2.1	
240-218633-19	L502160-06 MW-10	Total/NA	Water	300.0-1993 R2.1	
240-218633-20	L502160-07 FB	Total/NA	Water	300.0-1993 R2.1	
MB 240-644447/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-644447/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-218633-7 MS	L502153-07 MW-11B	Total/NA	Water	300.0-1993 R2.1	
240-218633-7 MSD	L502153-07 MW-11B	Total/NA	Water	300.0-1993 R2.1	
240-218633-13 MS	L502153-13 FB	Total/NA	Water	300.0-1993 R2.1	
240-218633-13 MSD	L502153-13 FB	Total/NA	Water	300.0-1993 R2.1	

General Chemistry

Analysis Batch: 644448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-21	L502161-01 MW-100A	Total/NA	Water	300.0-1993 R2.1	
240-218633-22	L502161-02 MW-100B	Total/NA	Water	300.0-1993 R2.1	
240-218633-23	L502161-03 MW-100C	Total/NA	Water	300.0-1993 R2.1	
240-218633-24	L502161-04 MW-100D	Total/NA	Water	300.0-1993 R2.1	
240-218633-25	L502161-05 MWT-100C	Total/NA	Water	300.0-1993 R2.1	
MB 240-644448/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-644448/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-218633-21 MS	L502161-01 MW-100A	Total/NA	Water	300.0-1993 R2.1	
240-218633-21 MSD	L502161-01 MW-100A	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 644521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-15	L502160-02 MW-7B	Total/NA	Water	2540D-2020	
240-218633-16	L502160-03 MW-7C	Total/NA	Water	2540D-2020	
240-218633-17	L502160-04 MW-8	Total/NA	Water	2540D-2020	
240-218633-18	L502160-05 MW-9	Total/NA	Water	2540D-2020	
240-218633-19	L502160-06 MW-10	Total/NA	Water	2540D-2020	
240-218633-20	L502160-07 FB	Total/NA	Water	2540D-2020	
240-218633-21	L502161-01 MW-100A	Total/NA	Water	2540D-2020	
240-218633-22	L502161-02 MW-100B	Total/NA	Water	2540D-2020	
240-218633-23	L502161-03 MW-100C	Total/NA	Water	2540D-2020	
240-218633-24	L502161-04 MW-100D	Total/NA	Water	2540D-2020	
240-218633-25	L502161-05 MWT-100C	Total/NA	Water	2540D-2020	
MB 240-644521/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-644521/2	Lab Control Sample	Total/NA	Water	2540D-2020	
240-218633-22 DU	L502161-02 MW-100B	Total/NA	Water	2540D-2020	
240-218633-24 DU	L502161-04 MW-100D	Total/NA	Water	2540D-2020	

Analysis Batch: 644524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Total/NA	Water	2320 B-2021	
240-218633-2	L502153-02 MW-2	Total/NA	Water	2320 B-2021	
240-218633-3	L502153-03 MW-4	Total/NA	Water	2320 B-2021	
240-218633-4	L502153-04 MW-5	Total/NA	Water	2320 B-2021	
240-218633-5	L502153-05 MW-6	Total/NA	Water	2320 B-2021	
240-218633-6	L502153-06 MW-11	Total/NA	Water	2320 B-2021	
240-218633-7	L502153-07 MW-11B	Total/NA	Water	2320 B-2021	
240-218633-8	L502153-08 MW-12	Total/NA	Water	2320 B-2021	
240-218633-9	L502153-09 MW-12B	Total/NA	Water	2320 B-2021	
240-218633-10	L502153-10 MW-14	Total/NA	Water	2320 B-2021	
240-218633-11	L502153-11 MW-15	Total/NA	Water	2320 B-2021	
240-218633-12	L502153-12 MWT-6	Total/NA	Water	2320 B-2021	
240-218633-13	L502153-13 FB	Total/NA	Water	2320 B-2021	
240-218633-14	L502160-01 MW-7	Total/NA	Water	2320 B-2021	
240-218633-15	L502160-02 MW-7B	Total/NA	Water	2320 B-2021	
240-218633-16	L502160-03 MW-7C	Total/NA	Water	2320 B-2021	
240-218633-17	L502160-04 MW-8	Total/NA	Water	2320 B-2021	
240-218633-18	L502160-05 MW-9	Total/NA	Water	2320 B-2021	
240-218633-19	L502160-06 MW-10	Total/NA	Water	2320 B-2021	
240-218633-20	L502160-07 FB	Total/NA	Water	2320 B-2021	
240-218633-21	L502161-01 MW-100A	Total/NA	Water	2320 B-2021	

General Chemistry (Continued)

Analysis Batch: 644524 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-22	L502161-02 MW-100B	Total/NA	Water	2320 B-2021	
240-218633-23	L502161-03 MW-100C	Total/NA	Water	2320 B-2021	
240-218633-24	L502161-04 MW-100D	Total/NA	Water	2320 B-2021	
240-218633-25	L502161-05 MWT-100C	Total/NA	Water	2320 B-2021	
MB 240-644524/30	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-644524/4	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-644524/56	Method Blank	Total/NA	Water	2320 B-2021	
240-218633-6 DU	L502153-06 MW-11	Total/NA	Water	2320 B-2021	
240-218633-16 DU	L502160-03 MW-7C	Total/NA	Water	2320 B-2021	

Rad

Prep Batch: 702324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Total/NA	Water	PrecSep-21	
240-218633-2	L502153-02 MW-2	Total/NA	Water	PrecSep-21	
240-218633-3	L502153-03 MW-4	Total/NA	Water	PrecSep-21	
240-218633-4	L502153-04 MW-5	Total/NA	Water	PrecSep-21	
240-218633-5	L502153-05 MW-6	Total/NA	Water	PrecSep-21	
240-218633-6	L502153-06 MW-11	Total/NA	Water	PrecSep-21	
240-218633-7	L502153-07 MW-11B	Total/NA	Water	PrecSep-21	
240-218633-8	L502153-08 MW-12	Total/NA	Water	PrecSep-21	
240-218633-9	L502153-09 MW-12B	Total/NA	Water	PrecSep-21	
240-218633-10	L502153-10 MW-14	Total/NA	Water	PrecSep-21	
240-218633-11	L502153-11 MW-15	Total/NA	Water	PrecSep-21	
240-218633-12	L502153-12 MWT-6	Total/NA	Water	PrecSep-21	
240-218633-13	L502153-13 FB	Total/NA	Water	PrecSep-21	
240-218633-14	L502160-01 MW-7	Total/NA	Water	PrecSep-21	
240-218633-15	L502160-02 MW-7B	Total/NA	Water	PrecSep-21	
240-218633-16	L502160-03 MW-7C	Total/NA	Water	PrecSep-21	
240-218633-17	L502160-04 MW-8	Total/NA	Water	PrecSep-21	
240-218633-18	L502160-05 MW-9	Total/NA	Water	PrecSep-21	
240-218633-19	L502160-06 MW-10	Total/NA	Water	PrecSep-21	
240-218633-20	L502160-07 FB	Total/NA	Water	PrecSep-21	
MB 160-702324/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-702324/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-218633-7 DU	L502153-07 MW-11B	Total/NA	Water	PrecSep-21	

Prep Batch: 702326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-1	L502153-01 MW-1	Total/NA	Water	PrecSep_0	
240-218633-2	L502153-02 MW-2	Total/NA	Water	PrecSep_0	
240-218633-3	L502153-03 MW-4	Total/NA	Water	PrecSep_0	
240-218633-4	L502153-04 MW-5	Total/NA	Water	PrecSep_0	
240-218633-5	L502153-05 MW-6	Total/NA	Water	PrecSep_0	
240-218633-6	L502153-06 MW-11	Total/NA	Water	PrecSep_0	
240-218633-7	L502153-07 MW-11B	Total/NA	Water	PrecSep_0	
240-218633-8	L502153-08 MW-12	Total/NA	Water	PrecSep_0	
240-218633-9	L502153-09 MW-12B	Total/NA	Water	PrecSep_0	
240-218633-10	L502153-10 MW-14	Total/NA	Water	PrecSep_0	
240-218633-11	L502153-11 MW-15	Total/NA	Water	PrecSep_0	

Rad (Continued)

Prep Batch: 702326 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-12	L502153-12 MWT-6	Total/NA	Water	PrecSep_0	
240-218633-13	L502153-13 FB	Total/NA	Water	PrecSep_0	
240-218633-14	L502160-01 MW-7	Total/NA	Water	PrecSep_0	
240-218633-15	L502160-02 MW-7B	Total/NA	Water	PrecSep_0	
240-218633-16	L502160-03 MW-7C	Total/NA	Water	PrecSep_0	
240-218633-17	L502160-04 MW-8	Total/NA	Water	PrecSep_0	
240-218633-18	L502160-05 MW-9	Total/NA	Water	PrecSep_0	
240-218633-19	L502160-06 MW-10	Total/NA	Water	PrecSep_0	
240-218633-20	L502160-07 FB	Total/NA	Water	PrecSep_0	
MB 160-702326/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-702326/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-218633-7 DU	L502153-07 MW-11B	Total/NA	Water	PrecSep_0	

Prep Batch: 702327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-21	L502161-01 MW-100A	Total/NA	Water	PrecSep-21	
240-218633-22	L502161-02 MW-100B	Total/NA	Water	PrecSep-21	
240-218633-23	L502161-03 MW-100C	Total/NA	Water	PrecSep-21	
240-218633-24	L502161-04 MW-100D	Total/NA	Water	PrecSep-21	
240-218633-25	L502161-05 MWT-100C	Total/NA	Water	PrecSep-21	
MB 160-702327/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-702327/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 702328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218633-21	L502161-01 MW-100A	Total/NA	Water	PrecSep_0	
240-218633-22	L502161-02 MW-100B	Total/NA	Water	PrecSep_0	
240-218633-23	L502161-03 MW-100C	Total/NA	Water	PrecSep_0	
240-218633-24	L502161-04 MW-100D	Total/NA	Water	PrecSep_0	
240-218633-25	L502161-05 MWT-100C	Total/NA	Water	PrecSep_0	
MB 160-702328/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-702328/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Client Sample ID: L502153-01 MW-1

Lab Sample ID: 240-218633-1

Date Collected: 02/04/25 16:25

Matrix: Water

Date Received: 02/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.8-1994 R5.4			644579	MN7X	EET CLE	02/12/25 14:00
Dissolved	Analysis	200.7 R4.4-1994		1	645131	AJC	EET CLE	02/17/25 15:55
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/11/25 23:18
Dissolved	Prep	200.8			4968	RMN	EET SSM	02/12/25 14:25
Dissolved	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 14:23
Total/NA	Prep	200.8			4970	RMN	EET SSM	02/12/25 14:31
Total/NA	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 15:16
Dissolved	Prep	200.8-1994 R5.4			644579	MN7X	EET CLE	02/12/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	644732	S4FJ	EET CLE	02/13/25 16:34
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 12:44
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:00
Dissolved	Prep	245.1-1994 R3.0			644584	MN7X	EET CLE	02/12/25 14:00
Dissolved	Analysis	245.1-1994 R3.0		1	644747	TQ6W	EET CLE	02/13/25 10:24
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:17
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/11/25 23:12
Total/NA	Analysis	2540 C-2020		1	644180	PQD2	EET CLE	02/10/25 10:53
Total/NA	Analysis	2540D-2020		1	644338	C5SV	EET CLE	02/11/25 09:45
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/11/25 21:39
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706560	SWS	EET SL	03/07/25 07:54
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706429	SWS	EET SL	03/06/25 12:26
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/07/25 16:17

Client Sample ID: L502153-02 MW-2

Lab Sample ID: 240-218633-2

Date Collected: 02/04/25 12:30

Matrix: Water

Date Received: 02/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/11/25 23:43
Total/NA	Prep	200.8			4970	RMN	EET SSM	02/12/25 14:31
Total/NA	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 15:19
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 12:58
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:00
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:18
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/11/25 23:18
Total/NA	Analysis	2540 C-2020		1	644180	PQD2	EET CLE	02/10/25 10:54

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502153-02 MW-2

Date Collected: 02/04/25 12:30
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540D-2020		1	644338	C5SV	EET CLE	02/11/25 09:45
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/11/25 22:21
Total/NA	Analysis	300.0-1993 R2.1		5	644447	JMR	EET CLE	02/11/25 22:42
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706561	SWS	EET SL	03/07/25 07:48
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706429	SWS	EET SL	03/06/25 12:26
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/07/25 16:17

Client Sample ID: L502153-03 MW-4

Date Collected: 02/04/25 14:20
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/11/25 23:56
Total/NA	Prep	200.8			4970	RMN	EET SSM	02/12/25 14:31
Total/NA	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 15:21
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 13:06
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:00
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:20
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/11/25 23:26
Total/NA	Analysis	2540 C-2020		1	644245	PQD2	EET CLE	02/10/25 13:54
Total/NA	Analysis	2540D-2020		1	644338	C5SV	EET CLE	02/11/25 09:45
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/11/25 23:03
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706561	SWS	EET SL	03/07/25 07:48
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706429	SWS	EET SL	03/06/25 12:26
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/07/25 16:17

Client Sample ID: L502153-04 MW-5

Date Collected: 02/04/25 16:57
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.8-1994 R5.4			644579	MN7X	EET CLE	02/12/25 14:00
Dissolved	Analysis	200.7 R4.4-1994		1	645131	AJC	EET CLE	02/17/25 16:00
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 00:00
Dissolved	Prep	200.8			4968	RMN	EET SSM	02/12/25 14:25
Dissolved	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 14:26

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502153-04 MW-5

Date Collected: 02/04/25 16:57
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.8			4970	RMN	EET SSM	02/12/25 14:31
Total/NA	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 15:24
Dissolved	Prep	200.8-1994 R5.4			644579	MN7X	EET CLE	02/12/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	644732	S4FJ	EET CLE	02/13/25 16:37
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 13:09
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:00
Dissolved	Prep	245.1-1994 R3.0			644584	MN7X	EET CLE	02/12/25 14:00
Dissolved	Analysis	245.1-1994 R3.0		1	644747	TQ6W	EET CLE	02/13/25 10:25
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:22
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/11/25 23:32
Total/NA	Analysis	2540 C-2020		1	644245	PQD2	EET CLE	02/10/25 13:54
Total/NA	Analysis	2540D-2020		1	644338	C5SV	EET CLE	02/11/25 09:45
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/12/25 00:28
Total/NA	Analysis	300.0-1993 R2.1		5	644447	JMR	EET CLE	02/12/25 00:49
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706561	SWS	EET SL	03/07/25 07:48
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706429	SWS	EET SL	03/06/25 12:26
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/07/25 16:17

Client Sample ID: L502153-05 MW-6

Date Collected: 02/04/25 09:38
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 00:04
Total/NA	Prep	200.8			4970	RMN	EET SSM	02/12/25 14:31
Total/NA	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 15:32
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 13:12
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:00
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:23
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/11/25 23:37
Total/NA	Analysis	2540 C-2020		1	644245	PQD2	EET CLE	02/10/25 13:54
Total/NA	Analysis	2540D-2020		1	644338	C5SV	EET CLE	02/11/25 09:45
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/12/25 01:10
Total/NA	Analysis	300.0-1993 R2.1		5	644447	JMR	EET CLE	02/12/25 01:31
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706561	SWS	EET SL	03/07/25 07:48

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502153-05 MW-6

Lab Sample ID: 240-218633-5

Date Collected: 02/04/25 09:38

Matrix: Water

Date Received: 02/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706429	SWS	EET SL	03/06/25 12:26
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/07/25 16:17

Client Sample ID: L502153-06 MW-11

Lab Sample ID: 240-218633-6

Date Collected: 02/04/25 10:40

Matrix: Water

Date Received: 02/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 00:08
Total/NA	Prep	200.8			4970	RMN	EET SSM	02/12/25 14:31
Total/NA	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 15:35
Total/NA	Prep	200.8			4970	RMN	EET SSM	02/12/25 14:31
Total/NA	Analysis	200.8		5	5013	CW	EET SSM	02/13/25 15:38
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 13:15
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:00
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:25
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/11/25 23:54
Total/NA	Analysis	2540 C-2020		1	644245	PQD2	EET CLE	02/10/25 13:54
Total/NA	Analysis	2540D-2020		1	644338	C5SV	EET CLE	02/11/25 09:45
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/12/25 01:52
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706561	SWS	EET SL	03/07/25 07:49
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706429	SWS	EET SL	03/06/25 12:26
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/07/25 16:17

Client Sample ID: L502153-07 MW-11B

Lab Sample ID: 240-218633-7

Date Collected: 02/04/25 11:52

Matrix: Water

Date Received: 02/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 00:21
Total/NA	Prep	200.8			4970	RMN	EET SSM	02/12/25 14:31
Total/NA	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 15:41
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 13:18
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:00
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:27

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502153-07 MW-11B

Lab Sample ID: 240-218633-7

Date Collected: 02/04/25 11:52
Matrix: Water
Date Received: 02/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 00:07
Total/NA	Analysis	2540 C-2020		1	644245	PQD2	EET CLE	02/10/25 13:54
Total/NA	Analysis	2540D-2020		1	644338	C5SV	EET CLE	02/11/25 09:45
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/11/25 20:35
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706561	SWS	EET SL	03/07/25 07:49
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706429	SWS	EET SL	03/06/25 12:26
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/07/25 16:17

Client Sample ID: L502153-08 MW-12

Lab Sample ID: 240-218633-8

Date Collected: 02/04/25 14:16
Matrix: Water
Date Received: 02/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.8-1994 R5.4			644579	MN7X	EET CLE	02/12/25 14:00
Dissolved	Analysis	200.7 R4.4-1994		1	645131	AJC	EET CLE	02/17/25 16:04
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 00:25
Dissolved	Prep	200.8			4968	RMN	EET SSM	02/12/25 14:25
Dissolved	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 14:28
Total/NA	Prep	200.8			4970	RMN	EET SSM	02/12/25 14:31
Total/NA	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 15:43
Dissolved	Prep	200.8-1994 R5.4			644579	MN7X	EET CLE	02/12/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	644732	S4FJ	EET CLE	02/13/25 16:39
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 13:20
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:00
Dissolved	Prep	245.1-1994 R3.0			644584	MN7X	EET CLE	02/12/25 14:00
Dissolved	Analysis	245.1-1994 R3.0		1	644747	TQ6W	EET CLE	02/13/25 10:27
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:32
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 00:14
Total/NA	Analysis	2540 C-2020		1	644245	PQD2	EET CLE	02/10/25 13:54
Total/NA	Analysis	2540D-2020		1	644338	C5SV	EET CLE	02/11/25 09:45
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/12/25 02:35
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706559	SWS	EET SL	03/07/25 09:44
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 14:20
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/07/25 16:17

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502153-09 MW-12B

Lab Sample ID: 240-218633-9

Date Collected: 02/04/25 15:49
Date Received: 02/07/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 00:29
Total/NA	Prep	200.8			4970	RMN	EET SSM	02/12/25 14:31
Total/NA	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 15:46
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 13:23
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:00
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:34
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 00:21
Total/NA	Analysis	2540 C-2020		1	644245	PQD2	EET CLE	02/10/25 13:54
Total/NA	Analysis	2540D-2020		1	644338	C5SV	EET CLE	02/11/25 09:45
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/12/25 03:17
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706559	SWS	EET SL	03/07/25 09:44
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 14:20
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/07/25 16:17

Client Sample ID: L502153-10 MW-14

Lab Sample ID: 240-218633-10

Date Collected: 02/04/25 07:55
Date Received: 02/07/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 00:34
Total/NA	Prep	200.8			4970	RMN	EET SSM	02/12/25 14:31
Total/NA	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 15:49
Total/NA	Prep	200.8			4970	RMN	EET SSM	02/12/25 14:31
Total/NA	Analysis	200.8		5	5013	CW	EET SSM	02/13/25 15:52
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 13:32
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:00
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:35
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 00:27
Total/NA	Analysis	2540 C-2020		1	644245	PQD2	EET CLE	02/10/25 13:54
Total/NA	Analysis	2540D-2020		1	644338	C5SV	EET CLE	02/11/25 09:45
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/12/25 04:20
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706559	SWS	EET SL	03/07/25 09:44
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 14:20

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502153-10 MW-14

Date Collected: 02/04/25 07:55
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/10/25 11:02

Client Sample ID: L502153-11 MW-15

Date Collected: 02/04/25 13:35
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 00:38
Total/NA	Prep	200.8			4970	RMN	EET SSM	02/12/25 14:31
Total/NA	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 15:54
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 13:34
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:00
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:37
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 00:34
Total/NA	Analysis	2540 C-2020		1	644245	PQD2	EET CLE	02/10/25 13:54
Total/NA	Analysis	2540D-2020		1	644338	C5SV	EET CLE	02/11/25 09:45
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/12/25 06:06
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706559	SWS	EET SL	03/07/25 09:44
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 14:20
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/10/25 11:02

Client Sample ID: L502153-12 MWT-6

Date Collected: 02/04/25 09:38
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 00:42
Total/NA	Prep	200.8			4970	RMN	EET SSM	02/12/25 14:31
Total/NA	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 15:57
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 13:37
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:00
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:39
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 00:39
Total/NA	Analysis	2540 C-2020		1	644245	PQD2	EET CLE	02/10/25 13:54
Total/NA	Analysis	2540D-2020		1	644338	C5SV	EET CLE	02/11/25 09:45
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/12/25 06:48

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502153-12 MWT-6

Lab Sample ID: 240-218633-12
Matrix: Water
Date Collected: 02/04/25 09:38
Date Received: 02/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0-1993 R2.1		5	644447	JMR	EET CLE	02/12/25 07:09
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706559	SWS	EET SL	03/07/25 09:44
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 14:20
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/10/25 11:02

Client Sample ID: L502153-13 FB

Lab Sample ID: 240-218633-13
Matrix: Water
Date Collected: 02/04/25 06:55
Date Received: 02/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 00:46
Total/NA	Prep	200.8			4970	RMN	EET SSM	02/12/25 14:31
Total/NA	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 16:05
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 13:40
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:00
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:41
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 00:46
Total/NA	Analysis	2540 C-2020		1	644245	PQD2	EET CLE	02/10/25 13:54
Total/NA	Analysis	2540D-2020		1	644338	C5SV	EET CLE	02/11/25 09:45
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/12/25 05:03
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706559	SWS	EET SL	03/07/25 09:44
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 14:20
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/10/25 11:02

Client Sample ID: L502160-01 MW-7

Lab Sample ID: 240-218633-14
Matrix: Water
Date Collected: 02/05/25 14:56
Date Received: 02/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 00:51
Total/NA	Prep	200.8			4970	RMN	EET SSM	02/12/25 14:31
Total/NA	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 16:08
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 13:43
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:00

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502160-01 MW-7

Date Collected: 02/05/25 14:56
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:42
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 00:50
Total/NA	Analysis	2540 C-2020		1	644397	C5SV	EET CLE	02/11/25 12:06
Total/NA	Analysis	2540D-2020		1	644343	C5SV	EET CLE	02/11/25 09:50
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/12/25 07:31
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706560	SWS	EET SL	03/07/25 09:53
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 14:22
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/10/25 11:02

Client Sample ID: L502160-02 MW-7B

Date Collected: 02/05/25 16:09
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 00:55
Total/NA	Prep	200.8			4970	RMN	EET SSM	02/12/25 14:31
Total/NA	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 16:10
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 13:46
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:00
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:44
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 00:59
Total/NA	Analysis	2540 C-2020		1	644397	C5SV	EET CLE	02/11/25 12:06
Total/NA	Analysis	2540D-2020		1	644521	TAV2	EET CLE	02/12/25 09:36
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/12/25 08:57
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706560	SWS	EET SL	03/07/25 09:53
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 14:22
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/10/25 11:02

Client Sample ID: L502160-03 MW-7C

Date Collected: 02/05/25 17:24
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 00:59

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502160-03 MW-7C

Date Collected: 02/05/25 17:24
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.8			4968	RMN	EET SSM	02/12/25 14:25
Total/NA	Analysis	200.8		1	5013	CW	EET SSM	02/13/25 14:36
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 13:49
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:00
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:46
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 01:05
Total/NA	Analysis	2540 C-2020		1	644397	C5SV	EET CLE	02/11/25 12:06
Total/NA	Analysis	2540D-2020		1	644521	TAV2	EET CLE	02/12/25 09:36
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/12/25 09:19
Total/NA	Analysis	300.0-1993 R2.1		5	644447	JMR	EET CLE	02/12/25 09:40
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706560	SWS	EET SL	03/07/25 09:53
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 14:22
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/10/25 11:02

Client Sample ID: L502160-04 MW-8

Date Collected: 02/05/25 13:36
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 01:12
Total/NA	Prep	200.8			5003	RMN	EET SSM	02/13/25 14:44
Total/NA	Analysis	200.8		1	5032	CW	EET SSM	02/14/25 14:30
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 13:51
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:00
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:47
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 01:15
Total/NA	Analysis	2540 C-2020		1	644397	C5SV	EET CLE	02/11/25 12:06
Total/NA	Analysis	2540D-2020		1	644521	TAV2	EET CLE	02/12/25 09:36
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/12/25 10:01
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706560	SWS	EET SL	03/07/25 09:53
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 14:22
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/10/25 11:02

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502160-05 MW-9

Date Collected: 02/05/25 12:14
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 01:16
Total/NA	Prep	200.8			5003	RMN	EET SSM	02/13/25 14:44
Total/NA	Analysis	200.8		1	5032	CW	EET SSM	02/14/25 14:33
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 13:54
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:02
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:53
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 01:21
Total/NA	Analysis	2540 C-2020		1	644397	C5SV	EET CLE	02/11/25 12:06
Total/NA	Analysis	2540D-2020		1	644521	TAV2	EET CLE	02/12/25 09:36
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/12/25 10:22
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706560	SWS	EET SL	03/07/25 09:53
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 14:22
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/10/25 11:02

Client Sample ID: L502160-06 MW-10

Date Collected: 02/05/25 10:53
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 01:20
Total/NA	Prep	200.8			5003	RMN	EET SSM	02/13/25 14:44
Total/NA	Analysis	200.8		1	5032	CW	EET SSM	02/14/25 14:35
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 13:57
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:02
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:54
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 01:26
Total/NA	Analysis	2540 C-2020		1	644397	C5SV	EET CLE	02/11/25 12:06
Total/NA	Analysis	2540D-2020		1	644521	TAV2	EET CLE	02/12/25 09:36
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/12/25 10:43
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706560	SWS	EET SL	03/07/25 09:53
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 14:22
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/10/25 11:02

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502160-07 FB

Date Collected: 02/05/25 10:00
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 01:25
Total/NA	Prep	200.8			5003	RMN	EET SSM	02/13/25 14:44
Total/NA	Analysis	200.8		1	5032	CW	EET SSM	02/14/25 14:38
Total Recoverable	Prep	200.7			644187	BN	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644581	AJC	EET CLE	02/12/25 14:05
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:02
Total/NA	Prep	245.1-1994 R3.0			644189	BN	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 09:59
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 01:32
Total/NA	Analysis	2540 C-2020		1	644397	C5SV	EET CLE	02/11/25 12:06
Total/NA	Analysis	2540D-2020		1	644521	TAV2	EET CLE	02/12/25 09:36
Total/NA	Analysis	300.0-1993 R2.1		1	644447	JMR	EET CLE	02/12/25 11:04
Total/NA	Prep	PrecSep-21			702324	OGC	EET SL	02/11/25 07:07
Total/NA	Analysis	903.0		1	706560	SWS	EET SL	03/07/25 09:53
Total/NA	Prep	PrecSep_0			702326	OGC	EET SL	02/11/25 07:11
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 14:22
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/10/25 11:02

Client Sample ID: L502161-01 MW-100A

Date Collected: 02/05/25 16:15
Date Received: 02/07/25 08:00

Lab Sample ID: 240-218633-21

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644195	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 06:59
Total/NA	Prep	200.8			5003	RMN	EET SSM	02/13/25 14:44
Total/NA	Analysis	200.8		1	5032	CW	EET SSM	02/14/25 14:41
Total Recoverable	Prep	200.7			644195	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644422	S4FJ	EET CLE	02/11/25 17:59
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:02
Total/NA	Prep	245.1-1994 R3.0			644197	MN7X	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 10:04
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 01:36
Total/NA	Analysis	2540 C-2020		1	644397	C5SV	EET CLE	02/11/25 12:06
Total/NA	Analysis	2540D-2020		1	644521	TAV2	EET CLE	02/12/25 09:36
Total/NA	Analysis	300.0-1993 R2.1		1	644448	JMR	EET CLE	02/12/25 06:19
Total/NA	Prep	PrecSep-21			702327	OGC	EET SL	02/11/25 07:12
Total/NA	Analysis	903.0		1	706173	SWS	EET SL	03/05/25 10:15
Total/NA	Prep	PrecSep_0			702328	OGC	EET SL	02/11/25 07:15
Total/NA	Analysis	904.0		1	705036	SWS	EET SL	02/27/25 12:16
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/10/25 11:02

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Client Sample ID: L502161-02 MW-100B

Lab Sample ID: 240-218633-22

Date Collected: 02/05/25 12:45
Date Received: 02/07/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644195	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 07:16
Total/NA	Prep	200.8			5006	RMN	EET SSM	02/13/25 16:37
Total/NA	Analysis	200.8		1	5032	CW	EET SSM	02/14/25 15:25
Total Recoverable	Prep	200.7			644195	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644422	S4FJ	EET CLE	02/11/25 18:01
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:02
Total/NA	Prep	245.1-1994 R3.0			644197	MN7X	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 10:06
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 01:42
Total/NA	Analysis	2540 C-2020		1	644397	C5SV	EET CLE	02/11/25 12:06
Total/NA	Analysis	2540D-2020		1	644521	TAV2	EET CLE	02/12/25 09:36
Total/NA	Analysis	300.0-1993 R2.1		1	644448	JMR	EET CLE	02/12/25 07:25
Total/NA	Prep	PrecSep-21			702327	OGC	EET SL	02/11/25 07:12
Total/NA	Analysis	903.0		1	706173	SWS	EET SL	03/05/25 10:15
Total/NA	Prep	PrecSep_0			702328	OGC	EET SL	02/11/25 07:15
Total/NA	Analysis	904.0		1	705036	SWS	EET SL	02/27/25 12:16
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/10/25 11:02

Client Sample ID: L502161-03 MW-100C

Lab Sample ID: 240-218633-23

Date Collected: 02/05/25 14:07
Date Received: 02/07/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644195	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 07:20
Total/NA	Prep	200.8			5006	RMN	EET SSM	02/13/25 16:37
Total/NA	Analysis	200.8		1	5032	CW	EET SSM	02/14/25 15:27
Total Recoverable	Prep	200.7			644195	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644422	S4FJ	EET CLE	02/11/25 18:04
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:02
Total/NA	Prep	245.1-1994 R3.0			644197	MN7X	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 10:08
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 01:48
Total/NA	Analysis	2540 C-2020		1	644397	C5SV	EET CLE	02/11/25 12:06
Total/NA	Analysis	2540D-2020		1	644521	TAV2	EET CLE	02/12/25 09:36
Total/NA	Analysis	300.0-1993 R2.1		1	644448	JMR	EET CLE	02/12/25 07:46
Total/NA	Prep	PrecSep-21			702327	OGC	EET SL	02/11/25 07:12
Total/NA	Analysis	903.0		1	706173	SWS	EET SL	03/05/25 10:15
Total/NA	Prep	PrecSep_0			702328	OGC	EET SL	02/11/25 07:15
Total/NA	Analysis	904.0		1	705036	SWS	EET SL	02/27/25 12:16
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/10/25 11:02

Client Sample ID: L502161-04 MW-100D

Lab Sample ID: 240-218633-24

Date Collected: 02/05/25 15:40

Matrix: Water

Date Received: 02/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644195	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 07:24
Total/NA	Prep	200.8			5006	RMN	EET SSM	02/13/25 16:37
Total/NA	Analysis	200.8		1	5032	CW	EET SSM	02/14/25 15:35
Total Recoverable	Prep	200.7			644195	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644422	S4FJ	EET CLE	02/11/25 18:07
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:02
Total/NA	Prep	245.1-1994 R3.0			644197	MN7X	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 10:13
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 01:57
Total/NA	Analysis	2540 C-2020		1	644397	C5SV	EET CLE	02/11/25 12:06
Total/NA	Analysis	2540D-2020		1	644521	TAV2	EET CLE	02/12/25 09:36
Total/NA	Analysis	300.0-1993 R2.1		1	644448	JMR	EET CLE	02/12/25 08:08
Total/NA	Prep	PrecSep-21			702327	OGC	EET SL	02/11/25 07:12
Total/NA	Analysis	903.0		1	706173	SWS	EET SL	03/05/25 10:15
Total/NA	Prep	PrecSep_0			702328	OGC	EET SL	02/11/25 07:15
Total/NA	Analysis	904.0		1	705036	SWS	EET SL	02/27/25 12:16
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/10/25 11:02

Client Sample ID: L502161-05 MWT-100C

Lab Sample ID: 240-218633-25

Date Collected: 02/05/25 14:07

Matrix: Water

Date Received: 02/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644195	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/12/25 07:29
Total/NA	Prep	200.8			5006	RMN	EET SSM	02/13/25 16:37
Total/NA	Analysis	200.8		1	5032	CW	EET SSM	02/14/25 15:38
Total Recoverable	Prep	200.7			644195	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644422	S4FJ	EET CLE	02/11/25 18:10
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:02
Total/NA	Prep	245.1-1994 R3.0			644197	MN7X	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644600	GEV	EET CLE	02/12/25 10:15
Total/NA	Analysis	2320 B-2021		1	644524	PQD2	EET CLE	02/12/25 02:03
Total/NA	Analysis	2540 C-2020		1	644397	C5SV	EET CLE	02/11/25 12:06
Total/NA	Analysis	2540D-2020		1	644521	TAV2	EET CLE	02/12/25 09:36
Total/NA	Analysis	300.0-1993 R2.1		1	644448	JMR	EET CLE	02/12/25 08:30
Total/NA	Prep	PrecSep-21			702327	OGC	EET SL	02/11/25 07:12
Total/NA	Analysis	903.0		1	706173	SWS	EET SL	03/05/25 10:15
Total/NA	Prep	PrecSep_0			702328	OGC	EET SL	02/11/25 07:15
Total/NA	Analysis	904.0		1	705036	SWS	EET SL	02/27/25 12:17
Total/NA	Analysis	Ra226_Ra228 Pos		1	706456	SCB	EET SL	03/10/25 11:02

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218633-1

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Job ID: 240-218633-1
Project/Site: Erickson Projects

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-25

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-17-25
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	02-20-25
Florida	NELAP	E87575	06-30-25
Louisiana (All)	NELAP	03073	06-30-25
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-25
New York	NELAP	11662	03-31-25
Oregon	NELAP	4167-008	07-07-25
US Fish & Wildlife	US Federal Programs	A20571	06-30-25
USDA	US Federal Programs	525-23-4-22573	04-08-25
Washington	State	C788-23a	07-13-25
Wisconsin	State	399133460	07-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	04-21-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-06-25
ANAB	ISO/IEC 17025	L2305	04-08-25
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Job ID: 240-218633-1
Project/Site: Erickson Projects

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-25
North Carolina (DW)	State	29700	06-08-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-01-25
Texas	NELAP	T104704193	06-25-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	05-14-25
West Virginia DEP	State	381	10-31-25

Chain of Custody

Return Samples to: Eurofins Michigan
10448 Citation Drive
Brighton, MI 48116

Contains Rush Work: ❑ Contains Methods That May Expire Soon: ❑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Project Manager:
Howell, Leslie

Purchase Order:
Purchase Order not required

Project Reference:

Work Order:

Sampler:
Marc Wahrer and Julie Maltby

Requested TAT:

Description:
Erickson Wellfield

Project Number:
24034575

Site Name:
Erickson Projects

Sample State:

Special Instructions:
Please send EDD using Promium template with report, Please follow the attached RL's, All methods must be approved 40 CFR 136.

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	904.0/PrecSep_0 Standard Target List [STD]	Ra226_228AS_P Local Method [160]	200.7/200.7_P_TR (MOD) 1 element, including prep [C01]	300.0_28D (MOD) All Anions [ANY]	903.0/PrecSep_21 Standard Target List [STD]	2540D Solids, Total Suspended (TSS) [TSS]	245.1/245.1_Prep Mercury [MER]	2540C_Calcd Total Dissolved Solids [TDS]	200.8/200.8_P_TR (MOD) 1 element, including prep [C01]	SM2340B/Auto_TotalRec Total Hardness (as CaCO3) by calculation [HAR]	2320B (MOD) Any Analyte [ANY]	200.8 / Metals (ICP/MS) / Custom List 2: 2-3 Metals	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved Solids	200.7 Rev 4.4 / Metals (ICP) / Custom List 2: 2-3 Metals	Plastic 60 mL - unpreserved	Plastic 500ml - with Nitric Acid	Plastic 1 liter - unpreserved	Plastic 500ml - unpreserved	Plastic 1 liter - Nitric Acid	Total Bottles For Sample
1	L502153-01 MW-1	Grab	Water	02/04/25 16:25				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	**8**
2	L502153-02 MW-2	Grab	Water	02/04/25 12:30				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	**7**
3	L502153-03 MW-4	Grab	Water	02/04/25 14:20				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	**7**
4	L502153-04 MW-5	Grab	Water	02/04/25 16:57				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	**8**
5	L502153-05 MW-6	Grab	Water	02/04/25 09:38				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	**7**
6	L502153-06 MW-11	Grab	Water	02/04/25 10:40				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	**7**
7	L502153-07 MW-11B	Grab	Water	02/04/25 11:52				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	**7**
8	L502153-08 MW-12	Grab	Water	02/04/25 14:16				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	**8**
9	L502153-09 MW-12B	Grab	Water	02/04/25 15:49				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	**7**
10	L502153-10 MW-14	Grab	Water	02/04/25 07:55				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	**7**
11	L502153-11 MW-15	Grab	Water	02/04/25 13:35				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	**7**
12	L502153-12 MWT-6	Grab	Water	02/04/25 09:38				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	**7**

Chain of Custody

Return Samples to: Eurofins Michigan
10448 Citation Drive
Brighton, MI 48116

Contains Rush Work: ❑ Contains Methods That May Expire Soon: ❑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Project Manager:
Howell, Leslie

Purchase Order:
Purchase Order not required

Project Reference:

Work Order:

Sampler:
Marc Wahrer and Julie Maltby

Requested TAT:

Description:
Erickson Wellfield

Project Number:
24034575

Site Name:
Erickson Projects

Sample State:

Special Instructions:
Please send EDD using Promium template with report, Please follow the attached RL's, All methods must be approved 40 CFR 136.

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	904.0/PrecSep_0 Standard Target List [STD]	Ra226_228AS_P Local Method [160]	200.7/200.7_P_TR (MOD) 1 element, including prep [C01]	300.0_28D (MOD) All Anions [ANY]	903.0/PrecSep_21 Standard Target List [STD]	2540D Solids, Total Suspended (TSS) [TSS]	245.1/245.1_Prep Mercury [MER]	2540C_Calcd Total Dissolved Solids [TDS]	200.8/200.8_P_TR (MOD) 1 element, including prep [C01]	SM2340B/Auto_TotalRec Total Hardness (as CaCO3) by calculation [HAR]	2320B (MOD) Any Analyte [ANY]	200.8 / Metals (ICP/MS) / Custom List 2: 2-3 Metals	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved Solids	200.7 Rev 4.4 / Metals (ICP) / Custom List 2: 2-3 Metals	Plastic 60 mL - unpreserved	Plastic 500ml - with Nitric Acid	Plastic 1 liter - unpreserved	Plastic 500ml - unpreserved	Plastic 1 liter - Nitric Acid	Total Bottles For Sample
13	L502153-13 FB	Grab	Water	02/04/25 06:55				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
14	L502160-01 MW-7	Grab	Water	02/05/25 14:56				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
15	L502160-02 MW-7B	Grab	Water	02/05/25 16:09				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
16	L502160-03 MW-7C	Grab	Water	02/05/25 17:24				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
17	L502160-04 MW-8	Grab	Water	02/05/25 13:36				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
18	L502160-05 MW-9	Grab	Water	02/05/25 12:14				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
19	L502160-06 MW-10	Grab	Water	02/05/25 10:53				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
20	L502160-07 FB	Grab	Water	02/05/25 10:00				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
21	L502161-01 MW-100A	Grab	Water	02/05/25 16:15				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
22	L502161-02 MW-100B	Grab	Water	02/05/25 12:45				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
23	L502161-03 MW-100C	Grab	Water	02/05/25 14:07				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
24	L502161-04 MW-100D	Grab	Water	02/05/25 15:40				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7

Chain of Custody

Return Samples to: Eurofins Michigan
10448 Citation Drive
Brighton, MI 48116

Contains Rush Work: ❑ Contains Methods That May Expire Soon: ❑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Project Manager:
Howell, Leslie

Purchase Order:
Purchase Order not required

Project Reference:

Work Order:

Sampler:
Marc Wahrer and Julie Maltby

Requested TAT:

Description:
Erickson Wellfield

Project Number:
24034575

Site Name:
Erickson Projects

Sample State:

Special Instructions:
Please send EDD using Promium template with report, Please follow the attached RL's, All methods must be approved 40 CFR 136.

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	904.0/PrecSep_0 Standard Target List [STD]	Ra226_228AS_P Local Method [160]	200.7/200.7_P_TR (MOD) 1 element, including prep [C01]	300.0_28D (MOD) All Anions [ANY]	903.0/PrecSep_21 Standard Target List [STD]	2540D Solids, Total Suspended (TSS) [TSS]	245.1/245.1_Prep Mercury [MER]	2540C_Calcd Total Dissolved Solids [TDS]	200.8/200.8_P_TR (MOD) 1 element, including prep [C01]	SM2340B/Auto_TotalRec Total Hardness (as CaCO3) by calculation [HAR]	2320B (MOD) Any Analyte [ANY]	200.8 / Metals (ICP/MS) / Custom List 2: 2-3 Metals	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved Solids	200.7 Rev 4.4 / Metals (ICP) / Custom List 2: 2-3 Metals	Plastic 60 mL - unpreserved	Plastic 500ml - with Nitric Acid	Plastic 1 liter - unpreserved	Plastic 500ml - unpreserved	Plastic 1 liter - Nitric Acid	Total Bottles For Sample
25	L502161-05 MWT-100C	Grab	Water	02/05/25 14:07				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) :

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished To:	Date/Time:
Jennifer Caporale	02/06/25 09:08	Michigan - Waypoint courier Jennifer Caporale	02/06/25 09:08

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250206A003								
MIC20250206A003								
MIC20250206A005								
MIC20250206A006								
MIC20250206A006								
MIC20250206A012								
MIC20250206A015								
MIC20250206A016								

Chain of Custody

Return Samples to: Eurofins Michigan
10448 Citation Drive
Brighton, MI 48116

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☐

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Project Manager:
Howell, Leslie

Purchase Order:
Purchase Order not required

Project Reference:

Work Order:

Sampler:
Marc Wahrer and Julie Maltby

Requested TAT:

Description:
Erickson Wellfield

Project Number:
24034575

Site Name:
Erickson Projects

Sample State:

Special Instructions:
Please send EDD using Promium template with report, Please follow the attached RL's, All methods must be approved 40 CFR 136.

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	904.0/PrecSep_0 Standard Target List [STD]	Ra226_228AS_P Local Method [160]	200.7/200.7_P_TR (MOD) 1 element, including prep [C01]	300.0_28D (MOD) All Anions [ANY]	903.0/PrecSep_21 Standard Target List [STD]	2540D Solids, Total Suspended (TSS) [TSS]	245.1/245.1_Prep Mercury [MER]	2540C_Calcd Total Dissolved Solids [TDS]	200.8/200.8_P_TR (MOD) 1 element, including prep [C01]	SM2340B/Auto_TotalRec Total Hardness (as CaCO3) by calculation [HAR]	2320B (MOD) Any Analyte [ANY]	200.8 / Metals (ICP/MS) / Custom List 2: 2-3 Metals	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved Solids	200.7 Rev 4.4 / Metals (ICP) / Custom List 2: 2-3 Metals	Plastic 60 mL - unpreserved	Plastic 500ml - with Nitric Acid	Plastic 1 liter - unpreserved	Plastic 500ml - unpreserved	Plastic 1 liter - Nitric Acid	Total Bottles For Sample
1	L502153-01 MW-1	Grab	Water	02/04/25 16:25				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	8
2	L502153-02 MW-2	Grab	Water	02/04/25 12:30				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
3	L502153-03 MW-4	Grab	Water	02/04/25 14:20				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
4	L502153-04 MW-5	Grab	Water	02/04/25 16:57				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	8
5	L502153-05 MW-6	Grab	Water	02/04/25 09:38				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
6	L502153-06 MW-11	Grab	Water	02/04/25 10:40				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
7	L502153-07 MW-11B	Grab	Water	02/04/25 11:52				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
8	L502153-08 MW-12	Grab	Water	02/04/25 14:16				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	8
9	L502153-09 MW-12B	Grab	Water	02/04/25 15:49				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
10	L502153-10 MW-14	Grab	Water	02/04/25 07:55																						0	2	7
11	L502153-11 MW-15	Grab	Water	02/04/25 13:35				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7
12	L502153-12 MWT-6	Grab	Water	02/04/25 09:38				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	2	7

240-218633 COC

Chain of Custody Number: **359983**

*H – Analysis on hold.

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-198044.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-218633-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 2/20/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226_228AS_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L502153-01 MW-1 (240-218633-1)	2/4/25	16:25 Eastern	G	Water			X	X	X	2	
L502153-02 MW-2 (240-218633-2)	2/4/25	12:30 Eastern	G	Water			X	X	X	2	
L502153-03 MW-4 (240-218633-3)	2/4/25	14:20 Eastern	G	Water			X	X	X	2	
L502153-04 MW-5 (240-218633-4)	2/4/25	16:57 Eastern	G	Water			X	X	X	2	
L502153-05 MW-6 (240-218633-5)	2/4/25	09:38 Eastern	G	Water			X	X	X	2	
L502153-06 MW-11 (240-218633-6)	2/4/25	10:40 Eastern	G	Water			X	X	X	2	
L502153-07 MW-11B (240-218633-7)	2/4/25	11:52 Eastern	G	Water			X	X	X	2	
L502153-08 MW-12 (240-218633-8)	2/4/25	14:16 Eastern	G	Water			X	X	X	2	
L502153-09 MW-12B (240-218633-9)	2/4/25	15:49 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 2/7/25	Company: TAL	Received by: Sierra Worthington	Date/Time: FEB 10 2025 0820	Company: EPASL
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-198044.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 2 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-218633-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 2/20/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226_228AS_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L502153-10 MW-14 (240-218633-10)	2/4/25	07:55 Eastern	G	Water			X	X	X	2	
L502153-11 MW-15 (240-218633-11)	2/4/25	13:35 Eastern	G	Water			X	X	X	2	
L502153-12 MWT-6 (240-218633-12)	2/4/25	09:38 Eastern	G	Water			X	X	X	2	
L502153-13 FB (240-218633-13)	2/4/25	06:55 Eastern	G	Water			X	X	X	2	
L502160-01 MW-7 (240-218633-14)	2/5/25	14:56 Eastern	G	Water			X	X	X	2	
L502160-02 MW-7B (240-218633-15)	2/5/25	16:09 Eastern	G	Water			X	X	X	2	
L502160-03 MW-7C (240-218633-16)	2/5/25	17:24 Eastern	G	Water			X	X	X	2	
L502160-04 MW-8 (240-218633-17)	2/5/25	13:36 Eastern	G	Water			X	X	X	2	
L502160-05 MW-9 (240-218633-18)	2/5/25	12:14 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	2/7/25	Euro	Sierra Worthington	FEB 10 2025 0820	Eurofins
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-198044.3
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 3 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-218633-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 2/20/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes:
-

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226_228AS_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L502160-06 MW-10 (240-218633-19)	2/5/25	10:53 Eastern	G	Water			X	X	X	2	
L502160-07 FB (240-218633-20)	2/5/25	10:00 Eastern	G	Water			X	X	X	2	
L502161-01 MW-100A (240-218633-21)	2/5/25	16:15 Eastern	G	Water			X	X	X	2	
L502161-02 MW-100B (240-218633-22)	2/5/25	12:45 Eastern	G	Water			X	X	X	2	
L502161-03 MW-100C (240-218633-23)	2/5/25	14:07 Eastern	G	Water			X	X	X	2	
L502161-04 MW-100D (240-218633-24)	2/5/25	15:40 Eastern	G	Water			X	X	X	2	
L502161-05 MWT-100C (240-218633-25)	2/5/25	14:07 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	2/7/25	Eurofins	Sierra Worthington	FEB 10 2025 0820	Erickson
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-198146.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note): NELAP - Oregon		Job #: 240-218633-1
Address: 5755 8th Street East, ,	Due Date Requested: 2/20/2025			Preservation Codes:
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT (MOD) Custom List 2: 2-3 Metals	200.8_CWA/FIELD_FLTRD (MOD) Custom List 2: 2-3 Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
L502153-01 MW-1 (240-218633-1)	2/4/25	16:25 Eastern	G	Water			X	X		
L502153-04 MW-5 (240-218633-4)	2/4/25	16:57 Eastern	G	Water			X	X		
L502153-08 MW-12 (240-218633-8)	2/4/25	14:16 Eastern	G	Water			X	X		

Therm. ID: SC03 Cust. Seal: (N)
Uncorr./Corr. Temp: 2.2/0.1 °C
Delivery: UPS / (FedEx) / Other: ____
Ice Type: Blue / Dry / (Wet) / None
Label Ver.: ____ Packing: B

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to sa.

Possible Hazard Identification: Unconfirmed 4238 4614 6434	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	2/6/25			2/11/25	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-198116.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 3
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note): NELAP - Oregon		Job #: 240-218633-1
Address: 5755 8th Street East, ,	Due Date Requested: 2/20/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT (MOD) Custom List 2: 2-3 Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
L502153-01 MW-1 (240-218633-1)	2/4/25	16:25 Eastern	G	Water			X	1	
L502153-02 MW-2 (240-218633-2)	2/4/25	12:30 Eastern	G	Water			X	1	
L502153-03 MW-4 (240-218633-3)	2/4/25	14:20 Eastern	G	Water			X	1	
L502153-04 MW-5 (240-218633-4)	2/4/25	16:57 Eastern	G	Water			X	1	
L502153-05 MW-6 (240-218633-5)	2/4/25	09:38 Eastern	G	Water			X	1	
L502153-06 MW-11 (240-218633-6)	2/4/25	10:40 Eastern	G	Water			X	1	
L502153-07 MW-11B (240-218633-7)	2/4/25	11:52 Eastern	G	Water			X	1	
L502153-08 MW-12 (240-218633-8)	2/4/25	14:16 Eastern	G	Water			X	1	
L502153-09 MW-12B (240-218633-9)	2/4/25	15:49 Eastern	G	Water			X	1	Med Blue

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said co

Therm. ID: SC04 Cust. Seal: (Y) / N
Uncorr./Corr. Temp: 4.3 / 0.0 °C
Delivery: UPS / FedEx / Other: ____
Ice Type: Blue / Dry / Wet / None
Label Ver.: N Packing: B

Possible Hazard Identification: Unconfirmed	4238 4014 5942	Sample Disposal (A fee may be assessed if samp: ☐ Return To Client ☐ Disposal By Lab
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipn

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	2/10/25	ET		2/11/25 10:10	ET PN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-198116.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 2 of 3
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note): NELAP - Oregon		Job #: 240-218633-1
Address: 5755 8th Street East, ,	Due Date Requested: 2/20/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT (MOD) Custom List 2: 2-3 Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
L502153-10 MW-14 (240-218633-10)	2/4/25	07:55 Eastern	G	Water			X	1	
L502153-11 MW-15 (240-218633-11)	2/4/25	13:35 Eastern	G	Water			X	1	
L502153-12 MWT-6 (240-218633-12)	2/4/25	09:38 Eastern	G	Water			X	1	
L502153-13 FB (240-218633-13)	2/4/25	06:55 Eastern	G	Water			X	1	
L502160-01 MW-7 (240-218633-14)	2/5/25	14:56 Eastern	G	Water			X	1	
L502160-02 MW-7B (240-218633-15)	2/5/25	16:09 Eastern	G	Water			X	1	
L502160-03 MW-7C (240-218633-16)	2/5/25	17:24 Eastern	G	Water			X	1	
L502160-04 MW-8 (240-218633-17)	2/5/25	13:36 Eastern	G	Water			X	1	
L502160-05 MW-9 (240-218633-18)	2/5/25	12:14 Eastern	G	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	2/10/25	ET		2/11/25 10:10	ET-EN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-198116.3
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 3 of 3
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note): NELAP - Oregon		Job #: 240-218633-1
Address: 5755 8th Street East, ,	Due Date Requested: 2/20/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT (MOD) Custom List 2: 2-3 Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
L502160-06 MW-10 (240-218633-19)	2/5/25	10:53 Eastern	G	Water			X	1	
L502160-07 FB (240-218633-20)	2/5/25	10:00 Eastern	G	Water			X	1	
L502161-01 MW-100A (240-218633-21)	2/5/25	16:15 Eastern	G	Water			X	1	
L502161-02 MW-100B (240-218633-22)	2/5/25	12:45 Eastern	G	Water			X	1	
L502161-03 MW-100C (240-218633-23)	2/5/25	14:07 Eastern	G	Water			X	1	
L502161-04 MW-100D (240-218633-24)	2/5/25	15:40 Eastern	G	Water			X	1	
L502161-05 MWT-100C (240-218633-25)	2/5/25	14:07 Eastern	G	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	2/10/25			2/11/25 10:10	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-218633-1

Login Number: 218633
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 02/11/25 12:57 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-218633-1

Login Number: 218633
List Number: 2
Creator: Pinette, Meadow L

List Source: Eurofins St. Louis
List Creation: 02/10/25 11:11 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 7/25/2025 12:30:14 PM Revision 1

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-218718-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

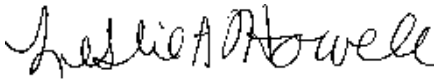
See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
7/25/2025 12:30:14 PM
Revision 1

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 13
Tracer Carrier Summary 29
QC Sample Results 30
QC Association Summary 35
Lab Chronicle 39
Certification Summary 44
Chain of Custody 46
Receipt Checklists 62

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218718-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
240-218718-1

REVISION

The report being provided is a revision of the original report sent on 3/11/2025. The report (revision 1) is being revised due to Potassium and Sodium added to reporting list of 200.8 from Cleveland analysis..

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 2/8/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 3.2°C, 3.8°C and 5.5°C.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 2540D: The sample duplicate (DUP) precision for analytical batch 240-644566 was outside control limits. Sample non-homogeneity is suspected.

Method 2540D: The sample duplicate (DUP) precision for analytical batch 240-644566 was outside control limits. Sample non-homogeneity is suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Gas Flow Proportional Counter
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218718-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396
EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566
EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218718-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-218718-26	L502169-01 MW-3	Water	02/06/25 09:42	02/08/25 08:00
240-218718-27	L502169-02 MW-13	Water	02/06/25 11:40	02/08/25 08:00
240-218718-28	L502169-03 MWT-3	Water	02/06/25 09:42	02/08/25 08:00
240-218718-29	L502169-04 MW-16A	Water	02/06/25 11:38	02/08/25 08:00
240-218718-30	L502169-05 MW-16B	Water	02/06/25 13:13	02/08/25 08:00
240-218718-31	L502169-06 MW-16C	Water	02/06/25 14:45	02/08/25 08:00
240-218718-32	L502169-07 MW-16D	Water	02/06/25 13:41	02/08/25 08:00
240-218718-33	L502169-08 FLD BLK	Water	02/06/25 10:10	02/08/25 08:00

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218718-1

Client Sample ID: L502169-01 MW-3

Lab Sample ID: 240-218718-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	5.6		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0026	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.016		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00049	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.15		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0022		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	230		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	46		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.075		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	110		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	1.5		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.6		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0018	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	760		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	180	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1200		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	4.1		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	95		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.19		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	690		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L502169-02 MW-13

Lab Sample ID: 240-218718-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.18		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0057		0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.036		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00091	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	140		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	32		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	13		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	0.95	J	1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.2		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0033	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	490		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	360	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502169-02 MW-13 (Continued) — Lab Sample ID: 240-218718-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	520		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.9	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	11		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.14		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	110		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502169-03 MWT-3 — Lab Sample ID: 240-218718-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	5.6		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0023	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.017		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00048	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.15		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0023		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	230		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	46		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.073		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	110		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	1.5		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.6		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0019	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	760		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	180	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1300		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	4.0	J	8.0	0.80	mg/L	1		2540D-2020	Total/NA
Chloride	95		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.18		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	670		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L502169-04 MW-16A — Lab Sample ID: 240-218718-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.21		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0018	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.16		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.0012		0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0017	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502169-04 MW-16A (Continued) — Lab Sample ID: 240-218718-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.0015	J	0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	200		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	52		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.0035	J	0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	300		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	1.5		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	3.2		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	720		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	420	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1500		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	6.8		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	480		10	1.3	mg/L	10		300.0-1993 R2.1	Total/NA
Fluoride	0.098		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	240		10	3.5	mg/L	10		300.0-1993 R2.1	Total/NA

Client Sample ID: L502169-05 MW-16B — Lab Sample ID: 240-218718-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.11		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.086		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0062		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	82		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	35		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.021		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	11		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	2.8		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.40		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	350		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	340	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	350		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.4	J	8.0	0.80	mg/L	1		2540D-2020	Total/NA
Chloride	2.8		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	1.0		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	21		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502169-06 MW-16C — Lab Sample ID: 240-218718-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.39		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502169-06 MW-16C (Continued) — Lab Sample ID: 240-218718-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.027		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	75		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	31		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.028		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	12		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	5.0		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.36		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	320		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	320	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	320		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.90	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	1.1		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.51		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	11		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502169-07 MW-16D — Lab Sample ID: 240-218718-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	4.3		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0023	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.033		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0096		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	29		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	7.5		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.030		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	110		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	9.2		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.40		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0014	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	100		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	320	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	370		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.8	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	6.5		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.76		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	5.9		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218718-1

Client Sample ID: L502169-08 FLD BLK

Lab Sample ID: 240-218718-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	0.0011	J	0.0070	0.00093	mg/L	1		200.8	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218718-1

Client Sample ID: L502169-01 MW-3

Date Collected: 02/06/25 09:42
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-26

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**5.6**		0.10	0.057	mg/L		02/10/25 14:00	02/11/25 22:27	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/11/25 18:49	1
Arsenic	**0.0026**	**J**	0.0050	0.00075	mg/L		02/10/25 14:00	02/11/25 18:49	1
Barium	**0.016**		0.0050	0.00077	mg/L		02/10/25 14:00	02/11/25 18:49	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/11/25 18:49	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/11/25 18:49	1
Cobalt	**0.00049**	**J**	0.0010	0.000086	mg/L		02/10/25 14:00	02/11/25 18:49	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/11/25 18:49	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/11/25 18:49	1
Molybdenum	**0.15**		0.0050	0.0011	mg/L		02/10/25 14:00	02/11/25 18:49	1
Nickel	**0.0022**		0.0020	0.0015	mg/L		02/10/25 14:00	02/11/25 18:49	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/11/25 18:49	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/11/25 18:49	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/11/25 18:49	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/11/25 18:49	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/11/25 18:49	1
Zinc	ND		0.020	0.015	mg/L		02/10/25 14:00	02/11/25 18:49	1
Calcium	**230**		1.0	0.25	mg/L		02/10/25 14:00	02/11/25 18:49	1
Magnesium	**46**		1.0	0.061	mg/L		02/10/25 14:00	02/11/25 18:49	1
Lithium	**0.075**		0.0080	0.0034	mg/L		02/10/25 14:00	02/11/25 18:49	1
Sodium	**110**		1.0	0.88	mg/L		02/10/25 14:00	02/11/25 18:49	1
Potassium	**1.5**		1.0	0.22	mg/L		02/10/25 14:00	02/11/25 18:49	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.6**		0.10	0.013	mg/L		02/13/25 16:37	02/14/25 15:07	1
Zinc	**0.0018**	**J**	0.0070	0.00093	mg/L		02/13/25 16:37	02/14/25 15:07	1
Zinc	ND		0.035	0.0046	mg/L		02/13/25 16:37	02/14/25 15:10	5

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**760**		33	33	mg/L			02/18/25 15:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/11/25 11:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**180**	**B**	5.0	2.6	mg/L			02/12/25 16:29	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 16:29	1
Total Dissolved Solids (SM 2540 C-2020)	**1200**		20	16	mg/L			02/13/25 11:23	1
Total Suspended Solids (SM 2540D-2020)	**4.1**		4.0	0.40	mg/L			02/12/25 10:29	1
Chloride (EPA 300.0-1993 R2.1)	**95**		1.0	0.13	mg/L			02/18/25 15:54	1
Fluoride (EPA 300.0-1993 R2.1)	**0.19**		0.050	0.024	mg/L			02/18/25 15:54	1

Client Sample ID: L502169-01 MW-3
Date Collected: 02/06/25 09:42
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-26
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate (EPA 300.0-1993 R2.1)	690		5.0	1.7	mg/L			02/18/25 16:16	5

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0695	U	0.183	0.183	1.00	0.331	pCi/L	02/13/25 07:57	03/07/25 09:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.1*		*30 - 110*	*02/13/25 07:57*	*03/07/25 09:50*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.179	U	0.388	0.388	1.00	0.676	pCi/L	02/13/25 08:01	03/06/25 12:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.1*		*30 - 110*	*02/13/25 08:01*	*03/06/25 12:31*	*1*
Y Carrier	*77.0*		*30 - 110*	*02/13/25 08:01*	*03/06/25 12:31*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.249	U	0.429	0.429	5.00	0.676	pCi/L		03/10/25 11:34	1

Client Sample ID: L502169-02 MW-13

Date Collected: 02/06/25 11:40
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-27

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.18**		0.10	0.057	mg/L		02/10/25 14:00	02/11/25 22:40	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/11/25 18:52	1
Arsenic	**0.0057**		0.0050	0.00075	mg/L		02/10/25 14:00	02/11/25 18:52	1
Barium	**0.036**		0.0050	0.00077	mg/L		02/10/25 14:00	02/11/25 18:52	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/11/25 18:52	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/11/25 18:52	1
Cobalt	**0.00091**	**J**	0.0010	0.000086	mg/L		02/10/25 14:00	02/11/25 18:52	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/11/25 18:52	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/11/25 18:52	1
Molybdenum	ND		0.0050	0.0011	mg/L		02/10/25 14:00	02/11/25 18:52	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/11/25 18:52	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/11/25 18:52	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/11/25 18:52	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/11/25 18:52	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/11/25 18:52	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/11/25 18:52	1
Zinc	ND		0.020	0.015	mg/L		02/10/25 14:00	02/11/25 18:52	1
Calcium	**140**		1.0	0.25	mg/L		02/10/25 14:00	02/11/25 18:52	1
Magnesium	**32**		1.0	0.061	mg/L		02/10/25 14:00	02/11/25 18:52	1
Lithium	ND		0.0080	0.0034	mg/L		02/10/25 14:00	02/11/25 18:52	1
Sodium	**13**		1.0	0.88	mg/L		02/10/25 14:00	02/11/25 18:52	1
Potassium	**0.95**	**J**	1.0	0.22	mg/L		02/10/25 14:00	02/11/25 18:52	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.2**		0.10	0.013	mg/L		02/13/25 16:37	02/14/25 15:41	1
Zinc	**0.0033**	**J**	0.0070	0.00093	mg/L		02/13/25 16:37	02/14/25 15:41	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**490**		33	33	mg/L			02/18/25 15:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/11/25 11:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**360**	**B**	5.0	2.6	mg/L			02/12/25 16:34	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 16:34	1
Total Dissolved Solids (SM 2540 C-2020)	**520**		10	7.8	mg/L			02/13/25 11:23	1
Total Suspended Solids (SM 2540D-2020)	**1.9**	**J**	4.0	0.40	mg/L			02/12/25 10:29	1
Chloride (EPA 300.0-1993 R2.1)	**11**		1.0	0.13	mg/L			02/18/25 16:38	1
Fluoride (EPA 300.0-1993 R2.1)	**0.14**		0.050	0.024	mg/L			02/18/25 16:38	1
Sulfate (EPA 300.0-1993 R2.1)	**110**		1.0	0.35	mg/L			02/18/25 16:38	1

Client Sample ID: L502169-02 MW-13

Date Collected: 02/06/25 11:40
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-27

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0719	U	0.157	0.157	1.00	0.285	pCi/L	02/13/25 07:57	03/07/25 09:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.8*		*30 - 110*	*02/13/25 07:57*	*03/07/25 09:50*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.334	U	0.422	0.423	1.00	0.701	pCi/L	02/13/25 08:01	03/06/25 12:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.8*		*30 - 110*	*02/13/25 08:01*	*03/06/25 12:31*	*1*
Y Carrier	*77.4*		*30 - 110*	*02/13/25 08:01*	*03/06/25 12:31*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.406	U	0.450	0.451	5.00	0.701	pCi/L		03/10/25 11:34	1

Client Sample ID: L502169-03 MWT-3

Date Collected: 02/06/25 09:42
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-28

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**5.6**		0.10	0.057	mg/L		02/10/25 14:00	02/11/25 22:44	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/11/25 18:54	1
Arsenic	**0.0023**	**J**	0.0050	0.00075	mg/L		02/10/25 14:00	02/11/25 18:54	1
Barium	**0.017**		0.0050	0.00077	mg/L		02/10/25 14:00	02/11/25 18:54	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/11/25 18:54	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/11/25 18:54	1
Cobalt	**0.00048**	**J**	0.0010	0.000086	mg/L		02/10/25 14:00	02/11/25 18:54	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/11/25 18:54	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/11/25 18:54	1
Molybdenum	**0.15**		0.0050	0.0011	mg/L		02/10/25 14:00	02/11/25 18:54	1
Nickel	**0.0023**		0.0020	0.0015	mg/L		02/10/25 14:00	02/11/25 18:54	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/11/25 18:54	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/11/25 18:54	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/11/25 18:54	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/11/25 18:54	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/11/25 18:54	1
Zinc	ND		0.020	0.015	mg/L		02/10/25 14:00	02/11/25 18:54	1
Calcium	**230**		1.0	0.25	mg/L		02/10/25 14:00	02/11/25 18:54	1
Magnesium	**46**		1.0	0.061	mg/L		02/10/25 14:00	02/11/25 18:54	1
Lithium	**0.073**		0.0080	0.0034	mg/L		02/10/25 14:00	02/11/25 18:54	1
Sodium	**110**		1.0	0.88	mg/L		02/10/25 14:00	02/11/25 18:54	1
Potassium	**1.5**		1.0	0.22	mg/L		02/10/25 14:00	02/11/25 18:54	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.6**		0.10	0.013	mg/L		02/13/25 16:37	02/14/25 15:43	1
Zinc	**0.0019**	**J**	0.0070	0.00093	mg/L		02/13/25 16:37	02/14/25 15:43	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**760**		33	33	mg/L			02/18/25 15:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/11/25 11:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**180**	**B**	5.0	2.6	mg/L			02/12/25 16:39	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 16:39	1
Total Dissolved Solids (SM 2540 C-2020)	**1300**		20	16	mg/L			02/13/25 11:23	1
Total Suspended Solids (SM 2540D-2020)	**4.0**	**J**	8.0	0.80	mg/L			02/12/25 11:19	1
Chloride (EPA 300.0-1993 R2.1)	**95**		1.0	0.13	mg/L			02/18/25 17:21	1
Fluoride (EPA 300.0-1993 R2.1)	**0.18**		0.050	0.024	mg/L			02/18/25 17:21	1
Sulfate (EPA 300.0-1993 R2.1)	**670**		5.0	1.7	mg/L			02/18/25 18:26	5

Client Sample ID: L502169-03 MWT-3

Date Collected: 02/06/25 09:42
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-28

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0173	U	0.114	0.114	1.00	0.226	pCi/L	02/13/25 07:57	03/07/25 14:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.5*		*30 - 110*	*02/13/25 07:57*	*03/07/25 14:52*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.340	U	0.367	0.368	1.00	0.598	pCi/L	02/13/25 08:01	03/06/25 12:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.5*		*30 - 110*	*02/13/25 08:01*	*03/06/25 12:11*	*1*
Y Carrier	*79.6*		*30 - 110*	*02/13/25 08:01*	*03/06/25 12:11*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.357	U	0.384	0.385	5.00	0.598	pCi/L		03/10/25 11:34	1

Client Sample ID: L502169-04 MW-16A

Date Collected: 02/06/25 11:38
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-29

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.21**		0.10	0.057	mg/L		02/10/25 14:00	02/11/25 22:49	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/11/25 18:57	1
Arsenic	**0.0018**	**J**	0.0050	0.00075	mg/L		02/10/25 14:00	02/11/25 18:57	1
Barium	**0.16**		0.0050	0.00077	mg/L		02/10/25 14:00	02/11/25 18:57	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/11/25 18:57	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/11/25 18:57	1
Cobalt	**0.0012**		0.0010	0.000086	mg/L		02/10/25 14:00	02/11/25 18:57	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/11/25 18:57	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/11/25 18:57	1
Molybdenum	**0.0017**	**J**	0.0050	0.0011	mg/L		02/10/25 14:00	02/11/25 18:57	1
Nickel	**0.0015**	**J**	0.0020	0.0015	mg/L		02/10/25 14:00	02/11/25 18:57	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/11/25 18:57	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/11/25 18:57	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/11/25 18:57	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/11/25 18:57	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/11/25 18:57	1
Zinc	ND		0.020	0.015	mg/L		02/10/25 14:00	02/11/25 18:57	1
Calcium	**200**		1.0	0.25	mg/L		02/10/25 14:00	02/11/25 18:57	1
Magnesium	**52**		1.0	0.061	mg/L		02/10/25 14:00	02/11/25 18:57	1
Lithium	**0.0035**	**J**	0.0080	0.0034	mg/L		02/10/25 14:00	02/11/25 18:57	1
Sodium	**300**		1.0	0.88	mg/L		02/10/25 14:00	02/11/25 18:57	1
Potassium	**1.5**		1.0	0.22	mg/L		02/10/25 14:00	02/11/25 18:57	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**3.2**		0.10	0.013	mg/L		02/13/25 16:37	02/14/25 15:46	1
Zinc	ND		0.0070	0.00093	mg/L		02/13/25 16:37	02/14/25 15:46	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**720**		33	33	mg/L			02/18/25 15:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/11/25 11:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**420**	**B**	5.0	2.6	mg/L			02/12/25 16:44	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 16:44	1
Total Dissolved Solids (SM 2540 C-2020)	**1500**		20	16	mg/L			02/13/25 11:23	1
Total Suspended Solids (SM 2540D-2020)	**6.8**		4.0	0.40	mg/L			02/12/25 11:19	1
Chloride (EPA 300.0-1993 R2.1)	**480**		10	1.3	mg/L			02/18/25 19:10	10
Fluoride (EPA 300.0-1993 R2.1)	**0.098**		0.050	0.024	mg/L			02/18/25 18:48	1
Sulfate (EPA 300.0-1993 R2.1)	**240**		10	3.5	mg/L			02/18/25 19:10	10

Client Sample ID: L502169-04 MW-16A

Date Collected: 02/06/25 11:38
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-29

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.285**		0.200	0.201	1.00	0.283	pCi/L	02/13/25 07:57	03/07/25 14:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*02/13/25 07:57*	*03/07/25 14:53*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.425	U	0.342	0.344	1.00	0.527	pCi/L	02/13/25 08:01	03/06/25 12:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*02/13/25 08:01*	*03/06/25 12:12*	*1*
Y Carrier	*83.4*		*30 - 110*	*02/13/25 08:01*	*03/06/25 12:12*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.709**		0.396	0.398	5.00	0.527	pCi/L		03/10/25 11:34	1

Client Sample ID: L502169-05 MW-16B

Date Collected: 02/06/25 13:13
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-30

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.11**		0.10	0.057	mg/L		02/10/25 14:00	02/11/25 22:53	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/11/25 19:06	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/11/25 19:06	1
Barium	**0.086**		0.0050	0.00077	mg/L		02/10/25 14:00	02/11/25 19:06	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/11/25 19:06	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/11/25 19:06	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/11/25 19:06	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/11/25 19:06	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/11/25 19:06	1
Molybdenum	**0.0062**		0.0050	0.0011	mg/L		02/10/25 14:00	02/11/25 19:06	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/11/25 19:06	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/11/25 19:06	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/11/25 19:06	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/11/25 19:06	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/11/25 19:06	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/11/25 19:06	1
Zinc	ND		0.020	0.015	mg/L		02/10/25 14:00	02/11/25 19:06	1
Calcium	**82**		1.0	0.25	mg/L		02/10/25 14:00	02/11/25 19:06	1
Magnesium	**35**		1.0	0.061	mg/L		02/10/25 14:00	02/11/25 19:06	1
Lithium	**0.021**		0.0080	0.0034	mg/L		02/10/25 14:00	02/11/25 19:06	1
Sodium	**11**		1.0	0.88	mg/L		02/10/25 14:00	02/11/25 19:06	1
Potassium	**2.8**		1.0	0.22	mg/L		02/10/25 14:00	02/11/25 19:06	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.40**		0.10	0.013	mg/L		02/13/25 16:37	02/14/25 15:48	1
Zinc	ND		0.0070	0.00093	mg/L		02/13/25 16:37	02/14/25 15:48	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**350**		33	33	mg/L			02/18/25 15:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/11/25 11:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**340**	**B**	5.0	2.6	mg/L			02/12/25 16:51	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 16:51	1
Total Dissolved Solids (SM 2540 C-2020)	**350**		10	7.8	mg/L			02/13/25 11:23	1
Total Suspended Solids (SM 2540D-2020)	**1.4**	**J**	8.0	0.80	mg/L			02/12/25 11:19	1
Chloride (EPA 300.0-1993 R2.1)	**2.8**		1.0	0.13	mg/L			02/18/25 19:31	1
Fluoride (EPA 300.0-1993 R2.1)	**1.0**		0.050	0.024	mg/L			02/18/25 19:31	1
Sulfate (EPA 300.0-1993 R2.1)	**21**		1.0	0.35	mg/L			02/18/25 19:31	1

Client Sample ID: L502169-05 MW-16B

Date Collected: 02/06/25 13:13
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-30

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.458		0.209	0.213	1.00	0.236	pCi/L	02/13/25 07:57	03/07/25 14:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.1*		*30 - 110*	*02/13/25 07:57*	*03/07/25 14:53*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.650		0.415	0.419	1.00	0.616	pCi/L	02/13/25 08:01	03/06/25 12:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.1*		*30 - 110*	*02/13/25 08:01*	*03/06/25 12:12*	*1*
Y Carrier	*79.3*		*30 - 110*	*02/13/25 08:01*	*03/06/25 12:12*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.11		0.465	0.470	5.00	0.616	pCi/L		03/10/25 11:34	1

Client Sample ID: L502169-06 MW-16C

Date Collected: 02/06/25 14:45
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-31

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.39**		0.10	0.057	mg/L		02/10/25 14:00	02/11/25 22:57	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/11/25 19:09	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/11/25 19:09	1
Barium	**0.027**		0.0050	0.00077	mg/L		02/10/25 14:00	02/11/25 19:09	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/11/25 19:09	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/11/25 19:09	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/11/25 19:09	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/11/25 19:09	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/11/25 19:09	1
Molybdenum	ND		0.0050	0.0011	mg/L		02/10/25 14:00	02/11/25 19:09	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/11/25 19:09	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/11/25 19:09	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/11/25 19:09	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/11/25 19:09	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/11/25 19:09	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/11/25 19:09	1
Zinc	ND		0.020	0.015	mg/L		02/10/25 14:00	02/11/25 19:09	1
Calcium	**75**		1.0	0.25	mg/L		02/10/25 14:00	02/11/25 19:09	1
Magnesium	**31**		1.0	0.061	mg/L		02/10/25 14:00	02/11/25 19:09	1
Lithium	**0.028**		0.0080	0.0034	mg/L		02/10/25 14:00	02/11/25 19:09	1
Sodium	**12**		1.0	0.88	mg/L		02/10/25 14:00	02/11/25 19:09	1
Potassium	**5.0**		1.0	0.22	mg/L		02/10/25 14:00	02/11/25 19:09	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.36**		0.10	0.013	mg/L		02/13/25 16:37	02/14/25 15:51	1
Zinc	ND		0.0070	0.00093	mg/L		02/13/25 16:37	02/14/25 15:51	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**320**		33	33	mg/L			02/18/25 15:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/11/25 11:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**320**	**B**	5.0	2.6	mg/L			02/12/25 16:59	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 16:59	1
Total Dissolved Solids (SM 2540 C-2020)	**320**		10	7.8	mg/L			02/13/25 11:23	1
Total Suspended Solids (SM 2540D-2020)	**0.90**	**J**	4.0	0.40	mg/L			02/12/25 11:19	1
Chloride (EPA 300.0-1993 R2.1)	**1.1**		1.0	0.13	mg/L			02/18/25 19:53	1
Fluoride (EPA 300.0-1993 R2.1)	**0.51**		0.050	0.024	mg/L			02/18/25 19:53	1
Sulfate (EPA 300.0-1993 R2.1)	**11**		1.0	0.35	mg/L			02/18/25 19:53	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218718-1

Client Sample ID: L502169-06 MW-16C

Date Collected: 02/06/25 14:45
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-31

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.365		0.220	0.223	1.00	0.292	pCi/L	02/13/25 07:57	03/07/25 14:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.9*		*30 - 110*	*02/13/25 07:57*	*03/07/25 14:53*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0300	U	0.466	0.466	1.00	0.849	pCi/L	02/13/25 08:01	03/06/25 12:13	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.9*		*30 - 110*	*02/13/25 08:01*	*03/06/25 12:13*	*1*
Y Carrier	*76.3*		*30 - 110*	*02/13/25 08:01*	*03/06/25 12:13*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.395	U	0.515	0.517	5.00	0.849	pCi/L		03/10/25 11:34	1

Client Sample ID: L502169-07 MW-16D

Date Collected: 02/06/25 13:41
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-32

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**4.3**		0.10	0.057	mg/L		02/10/25 14:00	02/11/25 23:01	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/11/25 19:11	1
Arsenic	**0.0023**	**J**	0.0050	0.00075	mg/L		02/10/25 14:00	02/11/25 19:11	1
Barium	**0.033**		0.0050	0.00077	mg/L		02/10/25 14:00	02/11/25 19:11	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/11/25 19:11	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/11/25 19:11	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/11/25 19:11	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/11/25 19:11	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/11/25 19:11	1
Molybdenum	**0.0096**		0.0050	0.0011	mg/L		02/10/25 14:00	02/11/25 19:11	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/11/25 19:11	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/11/25 19:11	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/11/25 19:11	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/11/25 19:11	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/11/25 19:11	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/11/25 19:11	1
Zinc	ND		0.020	0.015	mg/L		02/10/25 14:00	02/11/25 19:11	1
Calcium	**29**		1.0	0.25	mg/L		02/10/25 14:00	02/11/25 19:11	1
Magnesium	**7.5**		1.0	0.061	mg/L		02/10/25 14:00	02/11/25 19:11	1
Lithium	**0.030**		0.0080	0.0034	mg/L		02/10/25 14:00	02/11/25 19:11	1
Sodium	**110**		1.0	0.88	mg/L		02/10/25 14:00	02/11/25 19:11	1
Potassium	**9.2**		1.0	0.22	mg/L		02/10/25 14:00	02/11/25 19:11	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.40**		0.10	0.013	mg/L		02/13/25 16:37	02/14/25 15:54	1
Zinc	**0.0014**	**J**	0.0070	0.00093	mg/L		02/13/25 16:37	02/14/25 15:54	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**100**		33	33	mg/L			02/18/25 15:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/11/25 11:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**320**	**B**	5.0	2.6	mg/L			02/12/25 17:04	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 17:04	1
Total Dissolved Solids (SM 2540 C-2020)	**370**		10	7.8	mg/L			02/13/25 11:23	1
Total Suspended Solids (SM 2540D-2020)	**1.8**	**J**	4.0	0.40	mg/L			02/12/25 11:19	1
Chloride (EPA 300.0-1993 R2.1)	**6.5**		1.0	0.13	mg/L			02/18/25 20:15	1
Fluoride (EPA 300.0-1993 R2.1)	**0.76**		0.050	0.024	mg/L			02/18/25 20:15	1
Sulfate (EPA 300.0-1993 R2.1)	**5.9**		1.0	0.35	mg/L			02/18/25 20:15	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218718-1

Client Sample ID: L502169-07 MW-16D

Date Collected: 02/06/25 13:41
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-32

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0390	U	0.174	0.174	1.00	0.324	pCi/L	02/13/25 07:57	03/07/25 14:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.1*		*30 - 110*	*02/13/25 07:57*	*03/07/25 14:53*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.441	U	0.389	0.391	1.00	0.615	pCi/L	02/13/25 08:01	03/06/25 12:13	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.1*		*30 - 110*	*02/13/25 08:01*	*03/06/25 12:13*	*1*
Y Carrier	*79.6*		*30 - 110*	*02/13/25 08:01*	*03/06/25 12:13*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.480	U	0.426	0.428	5.00	0.615	pCi/L		03/10/25 11:34	1

Client Sample ID: L502169-08 FLD BLK

Date Collected: 02/06/25 10:10
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-33

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		02/10/25 14:00	02/11/25 23:06	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/11/25 19:14	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/11/25 19:14	1
Barium	ND		0.0050	0.00077	mg/L		02/10/25 14:00	02/11/25 19:14	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/11/25 19:14	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/11/25 19:14	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/11/25 19:14	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/11/25 19:14	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/11/25 19:14	1
Molybdenum	ND		0.0050	0.0011	mg/L		02/10/25 14:00	02/11/25 19:14	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/11/25 19:14	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/11/25 19:14	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/11/25 19:14	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/11/25 19:14	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/11/25 19:14	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/11/25 19:14	1
Zinc	ND		0.020	0.015	mg/L		02/10/25 14:00	02/11/25 19:14	1
Calcium	ND		1.0	0.25	mg/L		02/10/25 14:00	02/11/25 19:14	1
Magnesium	ND		1.0	0.061	mg/L		02/10/25 14:00	02/11/25 19:14	1
Lithium	ND		0.0080	0.0034	mg/L		02/10/25 14:00	02/11/25 19:14	1
Sodium	ND		1.0	0.88	mg/L		02/10/25 14:00	02/11/25 19:14	1
Potassium	ND		1.0	0.22	mg/L		02/10/25 14:00	02/11/25 19:14	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		02/13/25 16:37	02/14/25 15:56	1
Zinc	**0.0011**	**J**	0.0070	0.00093	mg/L		02/13/25 16:37	02/14/25 15:56	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			02/18/25 15:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/11/25 11:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 17:11	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			02/12/25 17:11	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			02/13/25 11:23	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			02/12/25 11:19	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			02/18/25 20:37	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			02/18/25 20:37	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			02/18/25 20:37	1

Client Sample ID: L502169-08 FLD BLK

Date Collected: 02/06/25 10:10
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-33

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0514	U	0.131	0.131	1.00	0.288	pCi/L	02/13/25 07:57	03/07/25 14:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.8*		*30 - 110*	*02/13/25 07:57*	*03/07/25 14:47*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.191	U	0.306	0.307	1.00	0.630	pCi/L	02/13/25 08:01	03/06/25 12:13	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.8*		*30 - 110*	*02/13/25 08:01*	*03/06/25 12:13*	*1*
Y Carrier	*81.1*		*30 - 110*	*02/13/25 08:01*	*03/06/25 12:13*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.000	U	0.333	0.334	5.00	0.630	pCi/L		03/10/25 11:34	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218718-1

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
Lab Sample ID	Client Sample ID	Ba (30-110)
240-218718-26	L502169-01 MW-3	85.1
240-218718-27	L502169-02 MW-13	80.8
240-218718-28	L502169-03 MWT-3	92.5
240-218718-29	L502169-04 MW-16A	88.8
240-218718-30	L502169-05 MW-16B	87.1
240-218718-31	L502169-06 MW-16C	73.9
240-218718-32	L502169-07 MW-16D	88.1
240-218718-33	L502169-08 FLD BLK	81.8
LCS 160-702736/2-A	Lab Control Sample	86.3
MB 160-702736/1-A	Method Blank	85.3

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	Y (30-110)
240-218718-26	L502169-01 MW-3	85.1	77.0
240-218718-27	L502169-02 MW-13	80.8	77.4
240-218718-28	L502169-03 MWT-3	92.5	79.6
240-218718-29	L502169-04 MW-16A	88.8	83.4
240-218718-30	L502169-05 MW-16B	87.1	79.3
240-218718-31	L502169-06 MW-16C	73.9	76.3
240-218718-32	L502169-07 MW-16D	88.1	79.6
240-218718-33	L502169-08 FLD BLK	81.8	81.1
LCS 160-702740/2-A	Lab Control Sample	86.3	78.9
MB 160-702740/1-A	Method Blank	85.3	75.9

Tracer/Carrier Legend

Ba = Ba Carrier
Y = Y Carrier

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-644186/1-A
Matrix: Water
Analysis Batch: 644428

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 644186

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		02/10/25 14:00	02/11/25 21:58	1

Lab Sample ID: LCS 240-644186/2-A
Matrix: Water
Analysis Batch: 644428

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 644186

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1.00	1.03		mg/L		103	85 - 115		

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-5006/25-A
Matrix: Water
Analysis Batch: 5032

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5006

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		02/13/25 16:37	02/14/25 14:46	1
Zinc	ND		0.0070	0.00093	mg/L		02/13/25 16:37	02/14/25 14:46	1

Lab Sample ID: LCS 350-5006/26-A
Matrix: Water
Analysis Batch: 5032

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5006

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron			20.0	19.9		mg/L		99	85 - 115		
Zinc			1.00	0.975		mg/L		97	85 - 115		

Lab Sample ID: 240-218718-26 MS
Matrix: Water
Analysis Batch: 5032

Client Sample ID: L502169-01 MW-3
Prep Type: Total/NA
Prep Batch: 5006

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron	1.6		20.0	22.0		mg/L		102	70 - 130		
Zinc	ND		1.00	0.968		mg/L		97	70 - 130		

Lab Sample ID: 240-218718-26 MSD
Matrix: Water
Analysis Batch: 5032

Client Sample ID: L502169-01 MW-3
Prep Type: Total/NA
Prep Batch: 5006

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	1.6		20.0	22.4		mg/L		104	70 - 130	2	20
Zinc	ND		1.00	0.950		mg/L		95	70 - 130	2	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-644186/1-A
Matrix: Water
Analysis Batch: 644422

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 644186

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		02/10/25 14:00	02/11/25 12:27	1
Arsenic	ND		0.0050	0.00075	mg/L		02/10/25 14:00	02/11/25 12:27	1
Barium	ND		0.0050	0.00077	mg/L		02/10/25 14:00	02/11/25 12:27	1
Beryllium	ND		0.0010	0.00027	mg/L		02/10/25 14:00	02/11/25 12:27	1
Cadmium	ND		0.0010	0.000077	mg/L		02/10/25 14:00	02/11/25 12:27	1
Cobalt	ND		0.0010	0.000086	mg/L		02/10/25 14:00	02/11/25 12:27	1
Chromium	ND		0.0050	0.0012	mg/L		02/10/25 14:00	02/11/25 12:27	1
Copper	ND		0.0020	0.0017	mg/L		02/10/25 14:00	02/11/25 12:27	1
Molybdenum	ND		0.0050	0.0011	mg/L		02/10/25 14:00	02/11/25 12:27	1
Nickel	ND		0.0020	0.0015	mg/L		02/10/25 14:00	02/11/25 12:27	1
Lead	ND		0.0010	0.00045	mg/L		02/10/25 14:00	02/11/25 12:27	1
Antimony	ND		0.0020	0.00057	mg/L		02/10/25 14:00	02/11/25 12:27	1
Selenium	ND		0.0050	0.00089	mg/L		02/10/25 14:00	02/11/25 12:27	1
Thallium	ND		0.0010	0.00051	mg/L		02/10/25 14:00	02/11/25 12:27	1
Vanadium	ND		0.0050	0.00082	mg/L		02/10/25 14:00	02/11/25 12:27	1
Zinc	ND		0.020	0.015	mg/L		02/10/25 14:00	02/11/25 12:27	1
Calcium	ND		1.0	0.25	mg/L		02/10/25 14:00	02/11/25 12:27	1
Magnesium	ND		1.0	0.061	mg/L		02/10/25 14:00	02/11/25 12:27	1
Lithium	ND		0.0080	0.0034	mg/L		02/10/25 14:00	02/11/25 12:27	1
Sodium	ND		1.0	0.88	mg/L		02/10/25 14:00	02/11/25 12:27	1
Potassium	ND		1.0	0.22	mg/L		02/10/25 14:00	02/11/25 12:27	1

Lab Sample ID: LCS 240-644186/3-A
Matrix: Water
Analysis Batch: 644422

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 644186

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.0926		mg/L		93	85 - 115
Arsenic	1.00	0.948		mg/L		95	85 - 115
Barium	1.00	0.922		mg/L		92	85 - 115
Beryllium	0.500	0.438		mg/L		88	85 - 115
Cadmium	0.500	0.455		mg/L		91	85 - 115
Cobalt	0.500	0.480		mg/L		96	85 - 115
Chromium	0.500	0.476		mg/L		95	85 - 115
Copper	0.500	0.475		mg/L		95	85 - 115
Molybdenum	0.500	0.474		mg/L		95	85 - 115
Nickel	0.500	0.478		mg/L		96	85 - 115
Lead	0.500	0.490		mg/L		98	85 - 115
Antimony	0.100	0.0951		mg/L		95	85 - 115
Selenium	1.00	0.932		mg/L		93	85 - 115
Thallium	1.00	1.03		mg/L		103	85 - 115
Vanadium	0.500	0.478		mg/L		96	85 - 115
Zinc	0.500	0.491		mg/L		98	85 - 115
Calcium	25.0	23.4		mg/L		94	85 - 115
Magnesium	25.0	23.8		mg/L		95	85 - 115
Lithium	0.500	0.484		mg/L		97	85 - 115
Sodium	25.0	23.6		mg/L		94	85 - 115
Potassium	25.0	24.7		mg/L		99	85 - 115

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-644192/1-A
Matrix: Water
Analysis Batch: 644433

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 644192

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		02/10/25 14:00	02/11/25 11:17	1

Lab Sample ID: LCS 240-644192/2-A
Matrix: Water
Analysis Batch: 644433

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 644192

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00482		mg/L		96	85 - 115

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-644780/5
Matrix: Water
Analysis Batch: 644780

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	3.90	J	5.0	2.6	mg/L			02/12/25 16:12	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			02/12/25 16:12	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-644719/1
Matrix: Water
Analysis Batch: 644719

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			02/13/25 11:23	1

Lab Sample ID: LCS 240-644719/2
Matrix: Water
Analysis Batch: 644719

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	569	542		mg/L		95	80 - 120

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-644534/1
Matrix: Water
Analysis Batch: 644534

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			02/12/25 10:29	1

Lab Sample ID: LCS 240-644534/2
Matrix: Water
Analysis Batch: 644534

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	26.1	24.0	J	mg/L		92	64 - 120

Method: 2540D-2020 - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: MB 240-644566/1
Matrix: Water
Analysis Batch: 644566

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			02/12/25 11:19	1

Lab Sample ID: LCS 240-644566/2
Matrix: Water
Analysis Batch: 644566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	26.1	26.0	J	mg/L		100	64 - 120

Lab Sample ID: 240-218718-28 DU
Matrix: Water
Analysis Batch: 644566

Client Sample ID: L502169-03 MWT-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	4.0	J	4.60	J F5	mg/L		14	10

Lab Sample ID: 240-218718-30 DU
Matrix: Water
Analysis Batch: 644566

Client Sample ID: L502169-05 MW-16B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	1.4	J	0.800	J F5	mg/L		55	10

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-645270/3
Matrix: Water
Analysis Batch: 645270

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			02/18/25 14:06	1
Fluoride	ND		0.050	0.024	mg/L			02/18/25 14:06	1
Sulfate	ND		1.0	0.35	mg/L			02/18/25 14:06	1

Lab Sample ID: LCS 240-645270/4
Matrix: Water
Analysis Batch: 645270

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	48.7		mg/L		97	90 - 110
Fluoride	2.50	2.64		mg/L		106	90 - 110
Sulfate	50.0	50.4		mg/L		101	90 - 110

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-702736/1-A
Matrix: Water
Analysis Batch: 706560

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 702736

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.05537	U	0.139	0.139	1.00	0.257	pCi/L	02/13/25 07:57	03/07/25 09:55	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.3*		*30 - 110*	*02/13/25 07:57*	*03/07/25 09:55*	*1*

Lab Sample ID: LCS 160-702736/2-A
Matrix: Water
Analysis Batch: 706560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 702736

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.58	8.205		1.10	1.00	0.308	pCi/L	86	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*86.3*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-702740/1-A
Matrix: Water
Analysis Batch: 706383

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 702740

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.1634	U	0.329	0.329	1.00	0.660	pCi/L	02/13/25 08:01	03/06/25 12:10	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.3*		*30 - 110*	*02/13/25 08:01*	*03/06/25 12:10*	*1*
Y Carrier	*75.9*		*30 - 110*	*02/13/25 08:01*	*03/06/25 12:10*	*1*

Lab Sample ID: LCS 160-702740/2-A
Matrix: Water
Analysis Batch: 706383

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 702740

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			8.04	8.591		1.25	1.00	0.547	pCi/L	107	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*86.3*		*30 - 110*
Y Carrier	*78.9*		*30 - 110*

Metals

Prep Batch: 5006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218718-26	L502169-01 MW-3	Total/NA	Water	200.8	
240-218718-27	L502169-02 MW-13	Total/NA	Water	200.8	
240-218718-28	L502169-03 MWT-3	Total/NA	Water	200.8	
240-218718-29	L502169-04 MW-16A	Total/NA	Water	200.8	
240-218718-30	L502169-05 MW-16B	Total/NA	Water	200.8	
240-218718-31	L502169-06 MW-16C	Total/NA	Water	200.8	
240-218718-32	L502169-07 MW-16D	Total/NA	Water	200.8	
240-218718-33	L502169-08 FLD BLK	Total/NA	Water	200.8	
MB 350-5006/25-A	Method Blank	Total/NA	Water	200.8	
LCS 350-5006/26-A	Lab Control Sample	Total/NA	Water	200.8	
240-218718-26 MS	L502169-01 MW-3	Total/NA	Water	200.8	
240-218718-26 MSD	L502169-01 MW-3	Total/NA	Water	200.8	

Analysis Batch: 5032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218718-26	L502169-01 MW-3	Total/NA	Water	200.8	5006
240-218718-26	L502169-01 MW-3	Total/NA	Water	200.8	5006
240-218718-27	L502169-02 MW-13	Total/NA	Water	200.8	5006
240-218718-28	L502169-03 MWT-3	Total/NA	Water	200.8	5006
240-218718-29	L502169-04 MW-16A	Total/NA	Water	200.8	5006
240-218718-30	L502169-05 MW-16B	Total/NA	Water	200.8	5006
240-218718-31	L502169-06 MW-16C	Total/NA	Water	200.8	5006
240-218718-32	L502169-07 MW-16D	Total/NA	Water	200.8	5006
240-218718-33	L502169-08 FLD BLK	Total/NA	Water	200.8	5006
MB 350-5006/25-A	Method Blank	Total/NA	Water	200.8	5006
LCS 350-5006/26-A	Lab Control Sample	Total/NA	Water	200.8	5006
240-218718-26 MS	L502169-01 MW-3	Total/NA	Water	200.8	5006
240-218718-26 MSD	L502169-01 MW-3	Total/NA	Water	200.8	5006

Prep Batch: 644186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218718-26	L502169-01 MW-3	Total Recoverable	Water	200.7	
240-218718-27	L502169-02 MW-13	Total Recoverable	Water	200.7	
240-218718-28	L502169-03 MWT-3	Total Recoverable	Water	200.7	
240-218718-29	L502169-04 MW-16A	Total Recoverable	Water	200.7	
240-218718-30	L502169-05 MW-16B	Total Recoverable	Water	200.7	
240-218718-31	L502169-06 MW-16C	Total Recoverable	Water	200.7	
240-218718-32	L502169-07 MW-16D	Total Recoverable	Water	200.8-1994 R5.4	
240-218718-33	L502169-08 FLD BLK	Total Recoverable	Water	200.8-1994 R5.4	
MB 240-644186/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-644186/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-644186/3-A	Lab Control Sample	Total Recoverable	Water	200.7	

Prep Batch: 644192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218718-26	L502169-01 MW-3	Total/NA	Water	245.1-1994 R3.0	
240-218718-27	L502169-02 MW-13	Total/NA	Water	245.1-1994 R3.0	
240-218718-28	L502169-03 MWT-3	Total/NA	Water	245.1-1994 R3.0	
240-218718-29	L502169-04 MW-16A	Total/NA	Water	245.1-1994 R3.0	
240-218718-30	L502169-05 MW-16B	Total/NA	Water	245.1-1994 R3.0	
240-218718-31	L502169-06 MW-16C	Total/NA	Water	245.1-1994 R3.0	

Metals (Continued)

Prep Batch: 644192 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218718-32	L502169-07 MW-16D	Total/NA	Water	245.1-1994 R3.0	
240-218718-33	L502169-08 FLD BLK	Total/NA	Water	245.1-1994 R3.0	
MB 240-644192/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-644192/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 644422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218718-26	L502169-01 MW-3	Total Recoverable	Water	200.8-1994 R5.4	644186
240-218718-27	L502169-02 MW-13	Total Recoverable	Water	200.8-1994 R5.4	644186
240-218718-28	L502169-03 MWT-3	Total Recoverable	Water	200.8-1994 R5.4	644186
240-218718-29	L502169-04 MW-16A	Total Recoverable	Water	200.8-1994 R5.4	644186
240-218718-30	L502169-05 MW-16B	Total Recoverable	Water	200.8-1994 R5.4	644186
240-218718-31	L502169-06 MW-16C	Total Recoverable	Water	200.8-1994 R5.4	644186
240-218718-32	L502169-07 MW-16D	Total Recoverable	Water	200.8-1994 R5.4	644186
240-218718-33	L502169-08 FLD BLK	Total Recoverable	Water	200.8-1994 R5.4	644186
MB 240-644186/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	644186
LCS 240-644186/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	644186

Analysis Batch: 644428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218718-26	L502169-01 MW-3	Total Recoverable	Water	200.7 R4.4-1994	644186
240-218718-27	L502169-02 MW-13	Total Recoverable	Water	200.7 R4.4-1994	644186
240-218718-28	L502169-03 MWT-3	Total Recoverable	Water	200.7 R4.4-1994	644186
240-218718-29	L502169-04 MW-16A	Total Recoverable	Water	200.7 R4.4-1994	644186
240-218718-30	L502169-05 MW-16B	Total Recoverable	Water	200.7 R4.4-1994	644186
240-218718-31	L502169-06 MW-16C	Total Recoverable	Water	200.7 R4.4-1994	644186
240-218718-32	L502169-07 MW-16D	Total Recoverable	Water	200.7 R4.4-1994	644186
240-218718-33	L502169-08 FLD BLK	Total Recoverable	Water	200.7 R4.4-1994	644186
MB 240-644186/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	644186
LCS 240-644186/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	644186

Analysis Batch: 644433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218718-26	L502169-01 MW-3	Total/NA	Water	245.1-1994 R3.0	644192
240-218718-27	L502169-02 MW-13	Total/NA	Water	245.1-1994 R3.0	644192
240-218718-28	L502169-03 MWT-3	Total/NA	Water	245.1-1994 R3.0	644192
240-218718-29	L502169-04 MW-16A	Total/NA	Water	245.1-1994 R3.0	644192
240-218718-30	L502169-05 MW-16B	Total/NA	Water	245.1-1994 R3.0	644192
240-218718-31	L502169-06 MW-16C	Total/NA	Water	245.1-1994 R3.0	644192
240-218718-32	L502169-07 MW-16D	Total/NA	Water	245.1-1994 R3.0	644192
240-218718-33	L502169-08 FLD BLK	Total/NA	Water	245.1-1994 R3.0	644192
MB 240-644192/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	644192
LCS 240-644192/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	644192

Analysis Batch: 645307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218718-26	L502169-01 MW-3	Total Recoverable	Water	2340 B-2021	
240-218718-27	L502169-02 MW-13	Total Recoverable	Water	2340 B-2021	
240-218718-28	L502169-03 MWT-3	Total Recoverable	Water	2340 B-2021	
240-218718-29	L502169-04 MW-16A	Total Recoverable	Water	2340 B-2021	
240-218718-30	L502169-05 MW-16B	Total Recoverable	Water	2340 B-2021	

Metals (Continued)

Analysis Batch: 645307 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218718-31	L502169-06 MW-16C	Total Recoverable	Water	2340 B-2021	
240-218718-32	L502169-07 MW-16D	Total Recoverable	Water	2340 B-2021	
240-218718-33	L502169-08 FLD BLK	Total Recoverable	Water	2340 B-2021	

General Chemistry

Analysis Batch: 644534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218718-26	L502169-01 MW-3	Total/NA	Water	2540D-2020	
240-218718-27	L502169-02 MW-13	Total/NA	Water	2540D-2020	
MB 240-644534/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-644534/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 644566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218718-28	L502169-03 MWT-3	Total/NA	Water	2540D-2020	
240-218718-29	L502169-04 MW-16A	Total/NA	Water	2540D-2020	
240-218718-30	L502169-05 MW-16B	Total/NA	Water	2540D-2020	
240-218718-31	L502169-06 MW-16C	Total/NA	Water	2540D-2020	
240-218718-32	L502169-07 MW-16D	Total/NA	Water	2540D-2020	
240-218718-33	L502169-08 FLD BLK	Total/NA	Water	2540D-2020	
MB 240-644566/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-644566/2	Lab Control Sample	Total/NA	Water	2540D-2020	
240-218718-28 DU	L502169-03 MWT-3	Total/NA	Water	2540D-2020	
240-218718-30 DU	L502169-05 MW-16B	Total/NA	Water	2540D-2020	

Analysis Batch: 644719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218718-26	L502169-01 MW-3	Total/NA	Water	2540 C-2020	
240-218718-27	L502169-02 MW-13	Total/NA	Water	2540 C-2020	
240-218718-28	L502169-03 MWT-3	Total/NA	Water	2540 C-2020	
240-218718-29	L502169-04 MW-16A	Total/NA	Water	2540 C-2020	
240-218718-30	L502169-05 MW-16B	Total/NA	Water	2540 C-2020	
240-218718-31	L502169-06 MW-16C	Total/NA	Water	2540 C-2020	
240-218718-32	L502169-07 MW-16D	Total/NA	Water	2540 C-2020	
240-218718-33	L502169-08 FLD BLK	Total/NA	Water	2540 C-2020	
MB 240-644719/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-644719/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 644780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218718-26	L502169-01 MW-3	Total/NA	Water	2320 B-2021	
240-218718-27	L502169-02 MW-13	Total/NA	Water	2320 B-2021	
240-218718-28	L502169-03 MWT-3	Total/NA	Water	2320 B-2021	
240-218718-29	L502169-04 MW-16A	Total/NA	Water	2320 B-2021	
240-218718-30	L502169-05 MW-16B	Total/NA	Water	2320 B-2021	
240-218718-31	L502169-06 MW-16C	Total/NA	Water	2320 B-2021	
240-218718-32	L502169-07 MW-16D	Total/NA	Water	2320 B-2021	
240-218718-33	L502169-08 FLD BLK	Total/NA	Water	2320 B-2021	
MB 240-644780/5	Method Blank	Total/NA	Water	2320 B-2021	

QC Association Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218718-1

General Chemistry

Analysis Batch: 645270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218718-26	L502169-01 MW-3	Total/NA	Water	300.0-1993 R2.1	
240-218718-26	L502169-01 MW-3	Total/NA	Water	300.0-1993 R2.1	
240-218718-27	L502169-02 MW-13	Total/NA	Water	300.0-1993 R2.1	
240-218718-28	L502169-03 MWT-3	Total/NA	Water	300.0-1993 R2.1	
240-218718-28	L502169-03 MWT-3	Total/NA	Water	300.0-1993 R2.1	
240-218718-29	L502169-04 MW-16A	Total/NA	Water	300.0-1993 R2.1	
240-218718-29	L502169-04 MW-16A	Total/NA	Water	300.0-1993 R2.1	
240-218718-30	L502169-05 MW-16B	Total/NA	Water	300.0-1993 R2.1	
240-218718-31	L502169-06 MW-16C	Total/NA	Water	300.0-1993 R2.1	
240-218718-32	L502169-07 MW-16D	Total/NA	Water	300.0-1993 R2.1	
240-218718-33	L502169-08 FLD BLK	Total/NA	Water	300.0-1993 R2.1	
MB 240-645270/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-645270/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Rad

Prep Batch: 702736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218718-26	L502169-01 MW-3	Total/NA	Water	PrecSep-21	
240-218718-27	L502169-02 MW-13	Total/NA	Water	PrecSep-21	
240-218718-28	L502169-03 MWT-3	Total/NA	Water	PrecSep-21	
240-218718-29	L502169-04 MW-16A	Total/NA	Water	PrecSep-21	
240-218718-30	L502169-05 MW-16B	Total/NA	Water	PrecSep-21	
240-218718-31	L502169-06 MW-16C	Total/NA	Water	PrecSep-21	
240-218718-32	L502169-07 MW-16D	Total/NA	Water	PrecSep-21	
240-218718-33	L502169-08 FLD BLK	Total/NA	Water	PrecSep-21	
MB 160-702736/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-702736/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 702740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-218718-26	L502169-01 MW-3	Total/NA	Water	PrecSep_0	
240-218718-27	L502169-02 MW-13	Total/NA	Water	PrecSep_0	
240-218718-28	L502169-03 MWT-3	Total/NA	Water	PrecSep_0	
240-218718-29	L502169-04 MW-16A	Total/NA	Water	PrecSep_0	
240-218718-30	L502169-05 MW-16B	Total/NA	Water	PrecSep_0	
240-218718-31	L502169-06 MW-16C	Total/NA	Water	PrecSep_0	
240-218718-32	L502169-07 MW-16D	Total/NA	Water	PrecSep_0	
240-218718-33	L502169-08 FLD BLK	Total/NA	Water	PrecSep_0	
MB 160-702740/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-702740/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218718-1

Client Sample ID: L502169-01 MW-3

Lab Sample ID: 240-218718-26

Date Collected: 02/06/25 09:42
Date Received: 02/08/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644186	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/11/25 22:27
Total/NA	Prep	200.8			5006	RMN	EET SSM	02/13/25 16:37
Total/NA	Analysis	200.8		1	5032	CW	EET SSM	02/14/25 15:07
Total/NA	Prep	200.8			5006	RMN	EET SSM	02/13/25 16:37
Total/NA	Analysis	200.8		5	5032	CW	EET SSM	02/14/25 15:10
Total Recoverable	Prep	200.7			644186	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644422	S4FJ	EET CLE	02/11/25 18:49
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:02
Total/NA	Prep	245.1-1994 R3.0			644192	MN7X	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644433	TQ6W	EET CLE	02/11/25 11:36
Total/NA	Analysis	2320 B-2021		1	644780	PQD2	EET CLE	02/12/25 16:29
Total/NA	Analysis	2540 C-2020		1	644719	PQD2	EET CLE	02/13/25 11:23
Total/NA	Analysis	2540D-2020		1	644534	TAV2	EET CLE	02/12/25 10:29
Total/NA	Analysis	300.0-1993 R2.1		1	645270	JMR	EET CLE	02/18/25 15:54
Total/NA	Analysis	300.0-1993 R2.1		5	645270	JMR	EET CLE	02/18/25 16:16
Total/NA	Prep	PrecSep-21			702736	OGC	EET SL	02/13/25 07:57
Total/NA	Analysis	903.0		1	706561	SWS	EET SL	03/07/25 09:50
Total/NA	Prep	PrecSep_0			702740	OGC	EET SL	02/13/25 08:01
Total/NA	Analysis	904.0		1	706428	SWS	EET SL	03/06/25 12:31
Total/NA	Analysis	Ra226_Ra228 Pos		1	706940	SCB	EET SL	03/10/25 11:34

Client Sample ID: L502169-02 MW-13

Lab Sample ID: 240-218718-27

Date Collected: 02/06/25 11:40
Date Received: 02/08/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644186	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/11/25 22:40
Total/NA	Prep	200.8			5006	RMN	EET SSM	02/13/25 16:37
Total/NA	Analysis	200.8		1	5032	CW	EET SSM	02/14/25 15:41
Total Recoverable	Prep	200.7			644186	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644422	S4FJ	EET CLE	02/11/25 18:52
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:02
Total/NA	Prep	245.1-1994 R3.0			644192	MN7X	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644433	TQ6W	EET CLE	02/11/25 11:38
Total/NA	Analysis	2320 B-2021		1	644780	PQD2	EET CLE	02/12/25 16:34
Total/NA	Analysis	2540 C-2020		1	644719	PQD2	EET CLE	02/13/25 11:23
Total/NA	Analysis	2540D-2020		1	644534	TAV2	EET CLE	02/12/25 10:29
Total/NA	Analysis	300.0-1993 R2.1		1	645270	JMR	EET CLE	02/18/25 16:38
Total/NA	Prep	PrecSep-21			702736	OGC	EET SL	02/13/25 07:57
Total/NA	Analysis	903.0		1	706561	SWS	EET SL	03/07/25 09:50

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218718-1

Client Sample ID: L502169-02 MW-13

Date Collected: 02/06/25 11:40
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-27

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep_0			702740	OGC	EET SL	02/13/25 08:01
Total/NA	Analysis	904.0		1	706428	SWS	EET SL	03/06/25 12:31
Total/NA	Analysis	Ra226_Ra228 Pos		1	706940	SCB	EET SL	03/10/25 11:34

Client Sample ID: L502169-03 MWT-3

Date Collected: 02/06/25 09:42
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-28

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644186	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/11/25 22:44
Total/NA	Prep	200.8			5006	RMN	EET SSM	02/13/25 16:37
Total/NA	Analysis	200.8		1	5032	CW	EET SSM	02/14/25 15:43
Total Recoverable	Prep	200.7			644186	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644422	S4FJ	EET CLE	02/11/25 18:54
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:02
Total/NA	Prep	245.1-1994 R3.0			644192	MN7X	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644433	TQ6W	EET CLE	02/11/25 11:39
Total/NA	Analysis	2320 B-2021		1	644780	PQD2	EET CLE	02/12/25 16:39
Total/NA	Analysis	2540 C-2020		1	644719	PQD2	EET CLE	02/13/25 11:23
Total/NA	Analysis	2540D-2020		1	644566	TAV2	EET CLE	02/12/25 11:19
Total/NA	Analysis	300.0-1993 R2.1		1	645270	JMR	EET CLE	02/18/25 17:21
Total/NA	Analysis	300.0-1993 R2.1		5	645270	JMR	EET CLE	02/18/25 18:26
Total/NA	Prep	PrecSep-21			702736	OGC	EET SL	02/13/25 07:57
Total/NA	Analysis	903.0		1	706560	SWS	EET SL	03/07/25 14:52
Total/NA	Prep	PrecSep_0			702740	OGC	EET SL	02/13/25 08:01
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 12:11
Total/NA	Analysis	Ra226_Ra228 Pos		1	706940	SCB	EET SL	03/10/25 11:34

Client Sample ID: L502169-04 MW-16A

Date Collected: 02/06/25 11:38
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-29

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644186	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/11/25 22:49
Total/NA	Prep	200.8			5006	RMN	EET SSM	02/13/25 16:37
Total/NA	Analysis	200.8		1	5032	CW	EET SSM	02/14/25 15:46
Total Recoverable	Prep	200.7			644186	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644422	S4FJ	EET CLE	02/11/25 18:57
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:02
Total/NA	Prep	245.1-1994 R3.0			644192	MN7X	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644433	TQ6W	EET CLE	02/11/25 11:41
Total/NA	Analysis	2320 B-2021		1	644780	PQD2	EET CLE	02/12/25 16:44

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218718-1

Client Sample ID: L502169-04 MW-16A

Date Collected: 02/06/25 11:38
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-29

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540 C-2020		1	644719	PQD2	EET CLE	02/13/25 11:23
Total/NA	Analysis	2540D-2020		1	644566	TAV2	EET CLE	02/12/25 11:19
Total/NA	Analysis	300.0-1993 R2.1		1	645270	JMR	EET CLE	02/18/25 18:48
Total/NA	Analysis	300.0-1993 R2.1		10	645270	JMR	EET CLE	02/18/25 19:10
Total/NA	Prep	PrecSep-21			702736	OGC	EET SL	02/13/25 07:57
Total/NA	Analysis	903.0		1	706560	SWS	EET SL	03/07/25 14:53
Total/NA	Prep	PrecSep_0			702740	OGC	EET SL	02/13/25 08:01
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 12:12
Total/NA	Analysis	Ra226_Ra228 Pos		1	706940	SCB	EET SL	03/10/25 11:34

Client Sample ID: L502169-05 MW-16B

Date Collected: 02/06/25 13:13
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644186	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/11/25 22:53
Total/NA	Prep	200.8			5006	RMN	EET SSM	02/13/25 16:37
Total/NA	Analysis	200.8		1	5032	CW	EET SSM	02/14/25 15:48
Total Recoverable	Prep	200.7			644186	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644422	S4FJ	EET CLE	02/11/25 19:06
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:02
Total/NA	Prep	245.1-1994 R3.0			644192	MN7X	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644433	TQ6W	EET CLE	02/11/25 11:43
Total/NA	Analysis	2320 B-2021		1	644780	PQD2	EET CLE	02/12/25 16:51
Total/NA	Analysis	2540 C-2020		1	644719	PQD2	EET CLE	02/13/25 11:23
Total/NA	Analysis	2540D-2020		1	644566	TAV2	EET CLE	02/12/25 11:19
Total/NA	Analysis	300.0-1993 R2.1		1	645270	JMR	EET CLE	02/18/25 19:31
Total/NA	Prep	PrecSep-21			702736	OGC	EET SL	02/13/25 07:57
Total/NA	Analysis	903.0		1	706560	SWS	EET SL	03/07/25 14:53
Total/NA	Prep	PrecSep_0			702740	OGC	EET SL	02/13/25 08:01
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 12:12
Total/NA	Analysis	Ra226_Ra228 Pos		1	706940	SCB	EET SL	03/10/25 11:34

Client Sample ID: L502169-06 MW-16C

Date Collected: 02/06/25 14:45
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-31

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644186	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/11/25 22:57
Total/NA	Prep	200.8			5006	RMN	EET SSM	02/13/25 16:37
Total/NA	Analysis	200.8		1	5032	CW	EET SSM	02/14/25 15:51

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218718-1

Client Sample ID: L502169-06 MW-16C

Date Collected: 02/06/25 14:45
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-31

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			644186	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644422	S4FJ	EET CLE	02/11/25 19:09
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:02
Total/NA	Prep	245.1-1994 R3.0			644192	MN7X	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644433	TQ6W	EET CLE	02/11/25 11:44
Total/NA	Analysis	2320 B-2021		1	644780	PQD2	EET CLE	02/12/25 16:59
Total/NA	Analysis	2540 C-2020		1	644719	PQD2	EET CLE	02/13/25 11:23
Total/NA	Analysis	2540D-2020		1	644566	TAV2	EET CLE	02/12/25 11:19
Total/NA	Analysis	300.0-1993 R2.1		1	645270	JMR	EET CLE	02/18/25 19:53
Total/NA	Prep	PrecSep-21			702736	OGC	EET SL	02/13/25 07:57
Total/NA	Analysis	903.0		1	706560	SWS	EET SL	03/07/25 14:53
Total/NA	Prep	PrecSep_0			702740	OGC	EET SL	02/13/25 08:01
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 12:13
Total/NA	Analysis	Ra226_Ra228 Pos		1	706940	SCB	EET SL	03/10/25 11:34

Client Sample ID: L502169-07 MW-16D

Date Collected: 02/06/25 13:41
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-32

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.8-1994 R5.4			644186	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/11/25 23:01
Total/NA	Prep	200.8			5006	RMN	EET SSM	02/13/25 16:37
Total/NA	Analysis	200.8		1	5032	CW	EET SSM	02/14/25 15:54
Total Recoverable	Prep	200.8-1994 R5.4			644186	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644422	S4FJ	EET CLE	02/11/25 19:11
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:02
Total/NA	Prep	245.1-1994 R3.0			644192	MN7X	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644433	TQ6W	EET CLE	02/11/25 11:50
Total/NA	Analysis	2320 B-2021		1	644780	PQD2	EET CLE	02/12/25 17:04
Total/NA	Analysis	2540 C-2020		1	644719	PQD2	EET CLE	02/13/25 11:23
Total/NA	Analysis	2540D-2020		1	644566	TAV2	EET CLE	02/12/25 11:19
Total/NA	Analysis	300.0-1993 R2.1		1	645270	JMR	EET CLE	02/18/25 20:15
Total/NA	Prep	PrecSep-21			702736	OGC	EET SL	02/13/25 07:57
Total/NA	Analysis	903.0		1	706560	SWS	EET SL	03/07/25 14:53
Total/NA	Prep	PrecSep_0			702740	OGC	EET SL	02/13/25 08:01
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 12:13
Total/NA	Analysis	Ra226_Ra228 Pos		1	706940	SCB	EET SL	03/10/25 11:34

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-218718-1

Client Sample ID: L502169-08 FLD BLK

Date Collected: 02/06/25 10:10
Date Received: 02/08/25 08:00

Lab Sample ID: 240-218718-33

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.8-1994 R5.4			644186	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	644428	AJC	EET CLE	02/11/25 23:06
Total/NA	Prep	200.8			5006	RMN	EET SSM	02/13/25 16:37
Total/NA	Analysis	200.8		1	5032	CW	EET SSM	02/14/25 15:56
Total Recoverable	Prep	200.8-1994 R5.4			644186	MN7X	EET CLE	02/10/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	644422	S4FJ	EET CLE	02/11/25 19:14
Total Recoverable	Analysis	2340 B-2021		1	645307	KLC	EET CLE	02/18/25 15:02
Total/NA	Prep	245.1-1994 R3.0			644192	MN7X	EET CLE	02/10/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	644433	TQ6W	EET CLE	02/11/25 11:51
Total/NA	Analysis	2320 B-2021		1	644780	PQD2	EET CLE	02/12/25 17:11
Total/NA	Analysis	2540 C-2020		1	644719	PQD2	EET CLE	02/13/25 11:23
Total/NA	Analysis	2540D-2020		1	644566	TAV2	EET CLE	02/12/25 11:19
Total/NA	Analysis	300.0-1993 R2.1		1	645270	JMR	EET CLE	02/18/25 20:37
Total/NA	Prep	PrecSep-21			702736	OGC	EET SL	02/13/25 07:57
Total/NA	Analysis	903.0		1	706561	SWS	EET SL	03/07/25 14:47
Total/NA	Prep	PrecSep_0			702740	OGC	EET SL	02/13/25 08:01
Total/NA	Analysis	904.0		1	706383	SWS	EET SL	03/06/25 12:13
Total/NA	Analysis	Ra226_Ra228 Pos		1	706940	SCB	EET SL	03/10/25 11:34

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Job ID: 240-218718-1
Project/Site: Erickson Projects

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-25

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-17-25
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	02-20-25
Florida	NELAP	E87575	06-30-25
Louisiana (All)	NELAP	03073	06-30-25
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-25
New York	NELAP	11662	03-31-25
Oregon	NELAP	4167-008	07-07-25
US Fish & Wildlife	US Federal Programs	A20571	06-30-25
USDA	US Federal Programs	525-23-4-22573	04-08-25
Washington	State	C788-23a	07-13-25
Wisconsin	State	399133460	07-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	04-21-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-06-25
ANAB	ISO/IEC 17025	L2305	04-08-25
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Job ID: 240-218718-1
Project/Site: Erickson Projects

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-25
North Carolina (DW)	State	29700	06-08-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-01-25
Texas	NELAP	T104704193	06-25-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	05-14-25
West Virginia DEP	State	381	10-31-25

Chain of Custody

Return Samples to: Eurofins Michigan
10448 Citation Drive
Brighton, MI 48116

Contains Rush Work: ❑ Contains Methods That May Expire Soon: ❑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:

Project Number:
24034575

Sample State: MI

Special Instructions:

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
Marc Wahrer and Julie Maltby

Description:
Erickson Wellfield

Site Name:
Erickson Projects

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	300.0_28D (MOD) All Anions [ANY]	SM2340B/Auto_TotalRec Total Hardness (as CaCO3) by calculation [HAR]	2540C_Calcd Total Dissolved Solids [TDS]	903.0/PrecSep_21 Standard Target List [STD]	Ra226_228AS_P Local Method [160]	245.1/245.1_Prep Mercury [MER]	2320B (MOD) Any Analyte [ANY]	200.7/200.7_P_TR (MOD) 1 element, including prep [C01]	904.0/PrecSep_0 Standard Target List [STD]	2540D Solids, Total Suspended (TSS) [TSS]	200.8/200.8_P_TR (MOD) 1 element, including prep [C01]	200.7 R4.4-1994 / Metals (ICP) / Total Boron	300.0-1993 R2.1 / Anions, Ion Chromatography / Chloride, Fluoride & Sulfa	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved Solids	245.1-1994 R3.0 / Mercury (CVAA) / Mercury	Plastic 500ml - with Nitric Acid	Plastic 1 liter - Nitric Acid	Plastic 60 mL - unpreserved	Plastic 500ml - unpreserved	Plastic 1 liter - unpreserved	Total Bottles For Sample
1	L502169-01 MW-3	Grab	Water	02/06/25 09:42				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
2	L502169-02 MW-13	Grab	Water	02/06/25 11:40				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
3	L502169-03 MWT-3	Grab	Water	02/06/25 09:42				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
4	L502169-04 MW-16A	Grab	Water	02/06/25 11:38				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
5	L502169-05 MW-16B	Grab	Water	02/06/25 13:13				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
6	L502169-06 MW-16C	Grab	Water	02/06/25 14:45				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
7	L502169-07 MW-16D	Grab	Water	02/06/25 13:41				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
8	L502169-08 FLD BLK	Grab	Water	02/06/25 10:10				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished To:	Date/Time:		
		Cleveland - Waypoint courier			
Jennifer Caporale	02/07/25 13:10	Jennifer Caporale	02/07/25 13:10		

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250207A001								
MIC20250207A001								
MIC20250207A002								

Chain of Custody

Return Samples to: Eurofins Michigan
10448 Citation Drive
Brighton, MI 48116

Contains Rush Work: ❑ Contains Methods That May Expire Soon: ❑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:

Project Number:
24034575

Sample State: MI

Special Instructions:

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
Marc Wahrer and Julie Maltby

Description:
Erickson Wellfield

Site Name:
Erickson Projects

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	300.0_28D (MOD) All Anions [ANY]	SM2340B/Auto_TotalRec Total Hardness (as CaCO3) by calculation [HAR]	2540C_Calcd Total Dissolved Solids [TDS]	903.0/PrecSep_21 Standard Target List [STD]	Ra226_228AS_P Local Method [160]	245.1/245.1_Prep Mercury [MER]	2320B (MOD) Any Analyte [ANY]	200.7/200.7_P_TR (MOD) 1 element, including prep [C01]	904.0/PrecSep_0 Standard Target List [STD]	2540D Solids, Total Suspended (TSS) [TSS]	200.8/200.8_P_TR (MOD) 1 element, including prep [C01]	200.7 R4.4-1994 / Metals (ICP) / Total Boron	300.0-1993 R2.1 / Anions, Ion Chromatography / Chloride, Fluoride & Sulfa	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved Solids	245.1-1994 R3.0 / Mercury (CVAA) / Mercury	Plastic 500ml - with Nitric Acid	Plastic 1 liter - Nitric Acid	Plastic 60 mL - unpreserved	Plastic 500ml - unpreserved	Plastic 1 liter - unpreserved	Total Bottles For Sample
1	L502169-01 MW-3	Grab	Water	02/06/25 09:42				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
2	L502169-02 MW-13	Grab	Water	02/06/25 11:40				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
3	L502169-03 MWT-3	Grab	Water	02/06/25 09:42				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
4	L502169-04 MW-16A	Grab	Water	02/06/25 11:38				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
5	L502169-05 MW-16B	Grab	Water	02/06/25 13:13				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
6	L502169-06 MW-16C	Grab	Water	02/06/25 14:45				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
7	L502169-07 MW-16D	Grab	Water	02/06/25 13:41				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
8	L502169-08 FLD BLK	Grab	Water	02/06/25 10:10				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished To:	Date/Time:		
		Cleveland - Waypoint courier			
Jennifer Caporale	02/07/25 13:10	Jennifer Caporale	02/07/25 13:10		

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250207A001								
MIC20250207A001								
MIC20250207A002								

Chain of Custody

Return Samples to: Eurofins Michigan
10448 Citation Drive
Brighton, MI 48116

240-218718 COC

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☐

Client Contact Info

Name: Jennifer Caporale
Address : 1110 South Pennsylvania
Address 2:
City, State Zip: Lansing, Michigan 48901
Phone: 517-702-6482
Email: Jennifer.Caporale@LBWL.com
Deliverables:

Project Info

Company: Lansing Board of Water & Light
Purchase Order: Purchase Order not required
Work Order:
Requested TAT:
Project Number: 24034575
Sample State: MI
Special Instructions:

Project Manager: Howell, Leslie
Project Reference:
Sampler: Marc Wahrer and Julie Maltby
Description: Erickson Wellfield
Site Name: Erickson Projects

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	300.0_28D (MOD) All Anions [ANY]	SM2340B/Auto_TotalRec Total Hardness (as CaCO3) by calculation [HAR]	2540C_Calcd Total Dissolved Solids [TDS]	903.0/PrecSep_21 Standard Target List [STD]	Ra226_228AS_P Local Method [160]	245.1/245.1_Prep Mercury [MER]	2320B (MOD) Any Analyte [ANY]	200.7/200.7_P_TR (MOD) 1 element, including prep [C01]	904.0/PrecSep_0 Standard Target List [STD]	2540D Solids, Total Suspended (TSS) [TSS]	200.8/200.8_P_TR (MOD) 1 element, including prep [C01]	200.7 R4.4-1994 / Metals (ICP) / Total Boron	300.0-1993 R2.1 / Anions, Ion Chromatography / Chloride, Fluoride & Sulfa	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved Solids	245.1-1994 R3.0 / Mercury (CVAA) / Mercury	Plastic 500ml - with Nitric Acid	Plastic 1 liter - Nitric Acid	Plastic 60 mL - unpreserved	Plastic 500ml - unpreserved	Plastic 1 liter - unpreserved	Total Bottles For Sample
1	L502169-01 MW-3	Grab	Water	02/06/25 09:42				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
2	L502169-02 MW-13	Grab	Water	02/06/25 11:40				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
3	L502169-03 MWT-3	Grab	Water	02/06/25 09:42				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
4	L502169-04 MW-16A	Grab	Water	02/06/25 11:38				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
5	L502169-05 MW-16B	Grab	Water	02/06/25 13:13				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
6	L502169-06 MW-16C	Grab	Water	02/06/25 14:45				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
7	L502169-07 MW-16D	Grab	Water	02/06/25 13:41				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
8	L502169-08 FLD BLK	Grab	Water	02/06/25 10:10				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Chain of Custody Number: **356563**

*H -- Analysis on hold.

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished To:	Date/Time:		
Jennifer Caporale	02/07/25 13:10	Cleveland Waypoint courier Jennifer Caporale	02/07/25 13:10	JMOROSKO 2/8/25 Euro 0800	

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250207A001								
MIC20250207A001								
MIC20250207A002								

Chain of Custody Number: **356563**

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :**
Barberton Facility

Client Lansing Board of Water Site Name

Cooler unpacked by: JMOROSKO

Cooler Received on 2/8/25 Opened on 2/8/25

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours Drop-off Date/Time Storage Location

Eurofins Cooler # EC Foam Box Client Cooler Box Other

Packing material used. Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt [X] See Multiple Cooler Form

IR GUN # 21 (CF +1.1 °C) Observed Cooler Temp °C Corrected Cooler Temp °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12 Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC448976
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	Yes	No
17 Was a LL Hg or Me Hg trip blank present?	Yes	No

Tests that are not checked for pH by Receiving

VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by

19 SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired

Sample(s) were received in a broken container

Sample(s) were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory

Time preserved. Preservative(s) added/Lot number(s):

VOA Sample Preservation - Date/Time VOAs Frozen

Login # : _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 21	21	32	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 1	44	55	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 1	27	38	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
☐ See Temperature Excursion Form				

Chain of Custody

Return Samples to: Eurofins Michigan
10448 Citation Drive
Brighton, MI 48116

240-218718 COC

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☐

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:

Project Number:
24034575

Sample State: MI

Special Instructions:

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
Marc Wahrer and Julie Maltby

Description:
Erickson Wellfield

Site Name:
Erickson Projects

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	Methods and Bottles: 300.0_28D (MOD) All Anions [ANY]	SM2340B/Auto_TotalRec Total Hardness (as CaCO3) by calculation [HAR]	2540C_Calcd Total Dissolved Solids [TDS]	903.0/PrecSep_21 Standard Target List [STD]	Ra226_228AS_P Local Method [160]	245.1/245.1_Prep Mercury [MER]	2320B (MOD) Any Analyte [ANY]	200.7/200.7_P_TR (MOD) 1 element, including prep [C01]	904.0/PrecSep_0 Standard Target List [STD]	2540D Solids, Total Suspended (TSS) [TSS]	200.8/200.8_P_TR (MOD) 1 element, including prep [C01]	200.7 R4.4-1994 / Metals (ICP) / Total Boron	300.0-1993 R2.1 / Anions, Ion Chromatography / Chloride, Fluoride & Sulfa	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved Solids	245.1-1994 R3.0 / Mercury (CVAA) / Mercury	Plastic 500ml - with Nitric Acid	Plastic 1 liter - Nitric Acid	Plastic 60 mL - unpreserved	Plastic 500ml - unpreserved	Plastic 1 liter - unpreserved	Total Bottles For Sample
1	L502169-01 MW-3	Grab	Water	02/06/25 09:42				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
2	L502169-02 MW-13	Grab	Water	02/06/25 11:40				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
3	L502169-03 MWT-3	Grab	Water	02/06/25 09:42				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
4	L502169-04 MW-16A	Grab	Water	02/06/25 11:38				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
5	L502169-05 MW-16B	Grab	Water	02/06/25 13:13				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
6	L502169-06 MW-16C	Grab	Water	02/06/25 14:45				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
7	L502169-07 MW-16D	Grab	Water	02/06/25 13:41				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7
8	L502169-08 FLD BLK	Grab	Water	02/06/25 10:10				X	X	X	X	X	X	X	X	X	X	X					0	0	0	0	1	7

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Chain of Custody Number: **356563**

*H -- Analysis on hold.

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By	Date/Time:	Samples Relinquished To:	Date/Time:		
Jennifer Caporale	02/07/25 13:10	Cleveland Waypoint courier Jennifer Caporale	02/07/25 13:10	JMOROSKO 2/8/25 Euro 0800	

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250207A001								
MIC20250207A001								
MIC20250207A002								

Chain of Custody Number: **356563**

Eurofins – Cleveland Sample Receipt Form/Narrative Login # :
Barberton Facility

Client Lansing Board of Water Site Name

Cooler Received on 2/8/25 Opened on 2/8/25

Cooler unpacked by: JMOROSKO

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours Drop-off Date/Time Storage Location

Eurofins Cooler # EC Foam Box Client Cooler Box Other

Packing material used. Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt [X] See Multiple Cooler Form

IR GUN # 21 (CF +1.1 °C) Observed Cooler Temp °C Corrected Cooler Temp °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12 Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC448976
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	Yes	No
17 Was a LL Hg or Me Hg trip blank present?	Yes	No

Tests that are not checked for pH by Receiving

VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by

19 SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired

Sample(s) were received in a broken container

Sample(s) were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory

Time preserved. Preservative(s) added/Lot number(s):

VOA Sample Preservation - Date/Time VOAs Frozen

Login # : _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 21	21	32	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 1	44	55	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 1	27	38	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
☐ See Temperature Excursion Form				

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-198113.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-218718-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 2/24/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226_228AS_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L502169-01 MW-3 (240-218718-26)	2/6/25	09:42 Eastern	G	Water			X	X	X	2	
L502169-02 MW-13 (240-218718-27)	2/6/25	11:40 Eastern	G	Water			X	X	X	2	
L502169-03 MWT-3 (240-218718-28)	2/6/25	09:42 Eastern	G	Water			X	X	X	2	
L502169-04 MW-16A (240-218718-29)	2/6/25	11:38 Eastern	G	Water			X	X	X	2	
L502169-05 MW-16B (240-218718-30)	2/6/25	13:13 Eastern	G	Water			X	X	X	2	
L502169-06 MW-16C (240-218718-31)	2/6/25	14:45 Eastern	G	Water			X	X	X	2	
L502169-07 MW-16D (240-218718-32)	2/6/25	13:41 Eastern	G	Water			X	X	X	2	
L502169-08 FLD BLK (240-218718-33)	2/6/25	10:10 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 2/10/25	Company	Received by:	Date/Time: 0845 FEB 11 2025	Company EA-SR
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-198113.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-218718-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 2/24/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226_228AS_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L502169-01 MW-3 (240-218718-26)	2/6/25	09:42 Eastern	G	Water			X	X	X	2	
L502169-02 MW-13 (240-218718-27)	2/6/25	11:40 Eastern	G	Water			X	X	X	2	
L502169-03 MWT-3 (240-218718-28)	2/6/25	09:42 Eastern	G	Water			X	X	X	2	
L502169-04 MW-16A (240-218718-29)	2/6/25	11:38 Eastern	G	Water			X	X	X	2	
L502169-05 MW-16B (240-218718-30)	2/6/25	13:13 Eastern	G	Water			X	X	X	2	
L502169-06 MW-16C (240-218718-31)	2/6/25	14:45 Eastern	G	Water			X	X	X	2	
L502169-07 MW-16D (240-218718-32)	2/6/25	13:41 Eastern	G	Water			X	X	X	2	
L502169-08 FLD BLK (240-218718-33)	2/6/25	10:10 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 2/10/25	Company	Received by:	Date/Time: 0845 FEB 11 2025	Company EA-SLC
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-198116.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note): NELAP - Oregon		Job #: 240-218718-1
Address: 5755 8th Street East, ,	Due Date Requested: 2/24/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT (MOD) Custom List 2: 2-3 Metals	Total Number of Containers	Special Instructions/Note:
			Preservation Code:						
L502169-01 MW-3 (240-218718-26)	2/6/25	09:42 Eastern	G	Water			X	1	
L502169-02 MW-13 (240-218718-27)	2/6/25	11:40 Eastern	G	Water			X	1	
L502169-03 MWT-3 (240-218718-28)	2/6/25	09:42 Eastern	G	Water			X	1	
L502169-04 MW-16A (240-218718-29)	2/6/25	11:38 Eastern	G	Water			X	1	
L502169-05 MW-16B (240-218718-30)	2/6/25	13:13 Eastern	G	Water			X	1	
L502169-06 MW-16C (240-218718-31)	2/6/25	14:45 Eastern	G	Water			X	1	
L502169-07 MW-16D (240-218718-32)	2/6/25	13:41 Eastern	G	Water			X	1	Med Blue
L502169-08 FLD BLK (240-218718-33)	2/6/25	10:10 Eastern	G	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to

Therm. ID: SC04 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 0.3 / 0.0 °C
Delivery: UPS / FedEx / Other: ____
Ice Type: Blue / Dry / (Wet) / None
Label Ver.: R Packing: B

Possible Hazard Identification: Unconfirmed 4278 4614 5942	Sample Disposal (A fee may be assessed if ☐ Return To Client ☐ Disposal By L
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:				
Relinquished by:	Date/Time: 2/10/25	Company EC	Received by:	Date/Time: 2/11/25 10:10	Company ESTN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

7/25/2025 (Rev. 1)

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-198116.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note): NELAP - Oregon		Job #: 240-218718-1
Address: 5755 8th Street East, ,	Due Date Requested: 2/24/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT (MOD) Custom List 2: 2-3 Metals	Total Number of Containers	Special Instructions/Note:
			Preservation Code:		X	X			
L502169-01 MW-3 (240-218718-26)	2/6/25	09:42 Eastern	G	Water			X	1	
L502169-02 MW-13 (240-218718-27)	2/6/25	11:40 Eastern	G	Water			X	1	
L502169-03 MWT-3 (240-218718-28)	2/6/25	09:42 Eastern	G	Water			X	1	
L502169-04 MW-16A (240-218718-29)	2/6/25	11:38 Eastern	G	Water			X	1	
L502169-05 MW-16B (240-218718-30)	2/6/25	13:13 Eastern	G	Water			X	1	
L502169-06 MW-16C (240-218718-31)	2/6/25	14:45 Eastern	G	Water			X	1	
L502169-07 MW-16D (240-218718-32)	2/6/25	13:41 Eastern	G	Water			X	1	Med Blue
L502169-08 FLD BLK (240-218718-33)	2/6/25	10:10 Eastern	G	Water			X	1	

Therm. ID: SC04 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 0.3 / 0.0 °C
Delivery: UPS / FedEx / Other: ____
Ice Type: Blue / Dry / (Wet) / None
Label Ver.: R Packing: B

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to

Possible Hazard Identification: Unconfirmed 4278 4614 5942	Sample Disposal (A fee may be assessed if : ☐ Return To Client ☐ Disposal By L
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	2/10/25	EC		2/11/25 10:10	ET
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-218718-1

Login Number: 218718
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 02/11/25 01:03 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-218718-1

Login Number: 218718
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 02/11/25 01:03 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 7/25/2025 12:38:06 PM Revision 1

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-219708-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

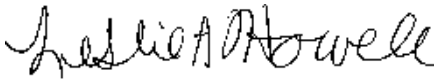
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
7/25/2025 12:38:06 PM
Revision 1

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 14
Tracer Carrier Summary 36
QC Sample Results 37
QC Association Summary 47
Lab Chronicle 53
Certification Summary 60
Chain of Custody 62
Receipt Checklists 74

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-219708-1

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-219708-1 — Eurofins Cleveland

Job Narrative
240-219708-1

REVISION

The report being provided is a revision of the original report sent on 4/2/2025. The report (revision 1) is being revised due to Potassium and Sodium added to reporting list of 200.8 from Cleveland analysis..

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/1/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 1.9°C, 2.9°C, 4.1°C and 5.5°C.

Metals
Method 200.8_CWA: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample: L502194-02 MW-17B (240-219708-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Gas Flow Proportional Counter
Method 904.0: Radium 228 batch 706366
The LCS recovered at (128%). The limits in our LIMS system at 75-125 reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of (68-154%) per method requirements. The LCS passes, no further action is required (LCS 160-706366/2-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-219708-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396
EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566
EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-219708-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-219708-1	L502194-01 MW-17A	Water	02/27/25 09:28	03/01/25 08:00
240-219708-2	L502194-02 MW-17B	Water	02/27/25 10:59	03/01/25 08:00
240-219708-3	L502194-03 MW-17C	Water	02/27/25 12:37	03/01/25 08:00
240-219708-4	L502194-04 MW-17D	Water	02/27/25 13:59	03/01/25 08:00
240-219708-5	L502194-05 MW-17E	Water	02/27/25 15:13	03/01/25 08:00
240-219708-6	L502194-06 MW-18A	Water	02/27/25 08:53	03/01/25 08:00
240-219708-7	L502194-07 MW-18B	Water	02/27/25 10:13	03/01/25 08:00
240-219708-8	L502194-08 MW-18C	Water	02/27/25 11:41	03/01/25 08:00
240-219708-9	L502194-09 MW-18D	Water	02/27/25 13:01	03/01/25 08:00
240-219708-10	L502194-10 MWT-17A	Water	02/27/25 09:28	03/01/25 08:00
240-219708-11	L502194-11 FB	Water	02/27/25 07:45	03/01/25 08:00

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-219708-1

Client Sample ID: L502194-01 MW-17A — Lab Sample ID: 240-219708-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	4.7		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0011	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.038		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.018		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.014		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	240		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	70		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.053		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	52		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	2.8		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	6.5		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0013	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	890		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	250		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1300		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	14		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	67		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.44		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	650		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L502194-02 MW-17B — Lab Sample ID: 240-219708-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.1		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0018	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.050		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00010	J B	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.097		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0043		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	140		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	32		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.091		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	100		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	6.5		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.3		0.50	0.067	mg/L	5		200.8	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502194-02 MW-17B (Continued) — Lab Sample ID: 240-219708-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	0.045		0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	470		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	190		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	860		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	6.0		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	67		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.32		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	390		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L502194-03 MW-17C — Lab Sample ID: 240-219708-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.7		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0024	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.060		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00010	J B	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.047		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0089		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	180		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	48		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.056		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	120		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	6.9		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.9		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0038	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	650		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	270		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1100		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	5.0		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	59		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.30		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	560		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L502194-04 MW-17D — Lab Sample ID: 240-219708-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.5		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0013	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.044		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502194-04 MW-17D (Continued) — Lab Sample ID: 240-219708-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.00017	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0048	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Antimony	0.00059	J	0.0020	0.00057	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	50		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	16		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.032		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	46		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	9.6		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.77		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0010	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	190		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	290		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	290		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.9	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	6.3		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.43		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	7.3		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502194-05 MW-17E — Lab Sample ID: 240-219708-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.4		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.0047	J	0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	5.4		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	1.6		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.024		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	160		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	4.6		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.050	J	0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0013	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Bicarbonate Alkalinity as CaCO3	330		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	21		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	360		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.70	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	1.4		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	1.2		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-219708-1

Client Sample ID: L502194-06 MW-18A — Lab Sample ID: 240-219708-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.2		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0017	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.072		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.073		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	110		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	21		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.093		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	67		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	8.3		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	3.4		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0011	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	360		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	580		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	10		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	64		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.50		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	150		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502194-07 MW-18B — Lab Sample ID: 240-219708-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.0		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.043		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.10		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0059		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	130		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	25		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.096		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	80		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	8.7		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.3		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	430		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	770		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	2.7	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502194-07 MW-18B (Continued) — Lab Sample ID: 240-219708-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	81		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.34		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	350		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L502194-08 MW-18C — Lab Sample ID: 240-219708-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.0		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.053		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.12		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.010		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	200		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	53		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.085		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	80		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	4.4		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	3.4		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.00096	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	710		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	180		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1100		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	5.4		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	87		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.19		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	560		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L502194-09 MW-18D — Lab Sample ID: 240-219708-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.9		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.028		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00017	J B	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.069		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0040		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	77		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	15		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.077		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	140		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-219708-1

Client Sample ID: L502194-09 MW-18D (Continued) — Lab Sample ID: 240-219708-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	6.5		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.7		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0015	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	250		33	33	mg/L	1		2340 B-2021	Total Recoverable
Mercury	0.00013	J	0.00020	0.00013	mg/L	1		245.1-1994 R3.0	Total/NA
Bicarbonate Alkalinity as CaCO3	290		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	620		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.3	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	37		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.91		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	200		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L502194-10 MWT-17A — Lab Sample ID: 240-219708-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	4.4		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.00095	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.038		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.016		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.014		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	240		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	70		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.053		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	52		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	2.7		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	6.2		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0015	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	880		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	250		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1300		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	15		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	67		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.22		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	640		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L502194-11 FB — Lab Sample ID: 240-219708-11

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: L502194-01 MW-17A

Date Collected: 02/27/25 09:28
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-1

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**4.7**		0.10	0.057	mg/L		03/03/25 14:00	03/04/25 20:04	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		03/03/25 14:00	03/05/25 17:26	1
Arsenic	**0.0011**	**J**	0.0050	0.00075	mg/L		03/03/25 14:00	03/05/25 17:26	1
Barium	**0.038**		0.0050	0.00077	mg/L		03/03/25 14:00	03/05/25 17:26	1
Beryllium	ND		0.0010	0.00027	mg/L		03/03/25 14:00	03/05/25 17:26	1
Cadmium	ND		0.0010	0.000077	mg/L		03/03/25 14:00	03/05/25 17:26	1
Cobalt	ND		0.0010	0.000086	mg/L		03/03/25 14:00	03/05/25 17:26	1
Chromium	ND		0.0050	0.0012	mg/L		03/03/25 14:00	03/05/25 17:26	1
Copper	ND		0.0020	0.0017	mg/L		03/03/25 14:00	03/05/25 17:26	1
Molybdenum	**0.018**		0.0050	0.0011	mg/L		03/03/25 14:00	03/05/25 17:26	1
Nickel	**0.014**		0.0020	0.0015	mg/L		03/03/25 14:00	03/05/25 17:26	1
Lead	ND		0.0010	0.00045	mg/L		03/03/25 14:00	03/05/25 17:26	1
Antimony	ND		0.0020	0.00057	mg/L		03/03/25 14:00	03/05/25 17:26	1
Selenium	ND		0.0050	0.00089	mg/L		03/03/25 14:00	03/05/25 17:26	1
Thallium	ND		0.0010	0.00051	mg/L		03/03/25 14:00	03/05/25 17:26	1
Vanadium	ND		0.0050	0.00082	mg/L		03/03/25 14:00	03/05/25 17:26	1
Calcium	**240**		1.0	0.25	mg/L		03/03/25 14:00	03/05/25 17:26	1
Magnesium	**70**		1.0	0.061	mg/L		03/03/25 14:00	03/05/25 17:26	1
Lithium	**0.053**		0.0080	0.0034	mg/L		03/03/25 14:00	03/05/25 17:26	1
Sodium	**52**		1.0	0.88	mg/L		03/03/25 14:00	03/05/25 17:26	1
Potassium	**2.8**		1.0	0.22	mg/L		03/03/25 14:00	03/05/25 17:26	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**6.5**		0.10	0.013	mg/L		03/25/25 14:42	03/26/25 15:24	1
Zinc	**0.0013**	**J**	0.0070	0.00093	mg/L		03/25/25 14:42	03/26/25 15:24	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**890**		33	33	mg/L			03/07/25 08:56	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		03/03/25 14:00	03/04/25 15:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**250**		5.0	2.6	mg/L			03/08/25 01:33	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/08/25 01:33	1
Total Dissolved Solids (SM 2540 C-2020)	**1300**		20	16	mg/L			03/06/25 10:24	1
Total Suspended Solids (SM 2540D-2020)	**14**		4.0	0.40	mg/L			03/04/25 07:47	1
Chloride (EPA 300.0-1993 R2.1)	**67**		1.0	0.13	mg/L			03/05/25 18:09	1
Fluoride (EPA 300.0-1993 R2.1)	**0.44**		0.050	0.024	mg/L			03/05/25 18:09	1
Sulfate (EPA 300.0-1993 R2.1)	**650**		5.0	1.7	mg/L			03/05/25 18:30	5

Client Sample ID: L502194-01 MW-17A

Date Collected: 02/27/25 09:28
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-1

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.116	U	0.107	0.108	1.00	0.163	pCi/L	03/06/25 07:45	03/31/25 22:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.8*		*30 - 110*	*03/06/25 07:45*	*03/31/25 22:11*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.534	U	0.416	0.419	1.00	0.644	pCi/L	03/06/25 07:47	03/28/25 14:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.8*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:15*	*1*
Y Carrier	*77.4*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:15*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.650**		0.430	0.433	5.00	0.644	pCi/L		03/31/25 19:07	1

Client Sample ID: L502194-02 MW-17B

Date Collected: 02/27/25 10:59
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-2

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.1**		0.10	0.057	mg/L		03/03/25 14:00	03/05/25 19:49	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		03/03/25 14:00	03/05/25 18:10	1
Arsenic	**0.0018**	**J**	0.0050	0.00075	mg/L		03/03/25 14:00	03/05/25 18:10	1
Barium	**0.050**		0.0050	0.00077	mg/L		03/03/25 14:00	03/05/25 18:10	1
Beryllium	ND		0.0010	0.00027	mg/L		03/03/25 14:00	03/05/25 18:10	1
Cadmium	ND		0.0010	0.000077	mg/L		03/03/25 14:00	03/05/25 18:10	1
Cobalt	**0.00010**	**J B**	0.0010	0.000086	mg/L		03/03/25 14:00	03/05/25 18:10	1
Chromium	ND		0.0050	0.0012	mg/L		03/03/25 14:00	03/05/25 18:10	1
Copper	ND		0.0020	0.0017	mg/L		03/03/25 14:00	03/05/25 18:10	1
Molybdenum	**0.097**		0.0050	0.0011	mg/L		03/03/25 14:00	03/05/25 18:10	1
Nickel	**0.0043**		0.0020	0.0015	mg/L		03/03/25 14:00	03/05/25 18:10	1
Lead	ND		0.0010	0.00045	mg/L		03/03/25 14:00	03/05/25 18:10	1
Antimony	ND		0.0020	0.00057	mg/L		03/03/25 14:00	03/05/25 18:10	1
Selenium	ND		0.0050	0.00089	mg/L		03/03/25 14:00	03/05/25 18:10	1
Thallium	ND		0.0010	0.00051	mg/L		03/03/25 14:00	03/05/25 18:10	1
Vanadium	ND		0.0050	0.00082	mg/L		03/03/25 14:00	03/05/25 18:10	1
Calcium	**140**		1.0	0.25	mg/L		03/03/25 14:00	03/05/25 18:10	1
Magnesium	**32**		1.0	0.061	mg/L		03/03/25 14:00	03/05/25 18:10	1
Lithium	**0.091**		0.0080	0.0034	mg/L		03/03/25 14:00	03/05/25 18:10	1
Sodium	**100**		1.0	0.88	mg/L		03/03/25 14:00	03/05/25 18:10	1
Potassium	**6.5**		1.0	0.22	mg/L		03/03/25 14:00	03/05/25 18:10	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.3**		0.50	0.067	mg/L		03/25/25 14:42	03/27/25 12:49	5
Zinc	**0.045**		0.0070	0.00093	mg/L		03/25/25 14:42	03/26/25 16:10	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**470**		33	33	mg/L			03/07/25 09:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		03/03/25 14:00	03/04/25 16:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**190**		5.0	2.6	mg/L			03/08/25 01:39	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/08/25 01:39	1
Total Dissolved Solids (SM 2540 C-2020)	**860**		10	7.8	mg/L			03/06/25 10:24	1
Total Suspended Solids (SM 2540D-2020)	**6.0**		4.0	0.40	mg/L			03/04/25 07:47	1
Chloride (EPA 300.0-1993 R2.1)	**67**		1.0	0.13	mg/L			03/05/25 18:51	1
Fluoride (EPA 300.0-1993 R2.1)	**0.32**		0.050	0.024	mg/L			03/05/25 18:51	1
Sulfate (EPA 300.0-1993 R2.1)	**390**		5.0	1.7	mg/L			03/05/25 19:12	5

Client Sample ID: L502194-02 MW-17B

Date Collected: 02/27/25 10:59
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-2

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.199**		0.132	0.133	1.00	0.179	pCi/L	03/06/25 07:45	03/31/25 22:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.3*		*30 - 110*	*03/06/25 07:45*	*03/31/25 22:11*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0674	U	0.355	0.355	1.00	0.685	pCi/L	03/06/25 07:47	03/28/25 14:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.3*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:15*	*1*
Y Carrier	*75.9*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:15*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.199	U	0.379	0.379	5.00	0.685	pCi/L		03/31/25 19:07	1

Client Sample ID: L502194-03 MW-17C

Date Collected: 02/27/25 12:37
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-3

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.7**		0.10	0.057	mg/L		03/03/25 14:00	03/05/25 19:53	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		03/03/25 14:00	03/05/25 18:13	1
Arsenic	**0.0024**	**J**	0.0050	0.00075	mg/L		03/03/25 14:00	03/05/25 18:13	1
Barium	**0.060**		0.0050	0.00077	mg/L		03/03/25 14:00	03/05/25 18:13	1
Beryllium	ND		0.0010	0.00027	mg/L		03/03/25 14:00	03/05/25 18:13	1
Cadmium	ND		0.0010	0.000077	mg/L		03/03/25 14:00	03/05/25 18:13	1
Cobalt	**0.00010**	**J B**	0.0010	0.000086	mg/L		03/03/25 14:00	03/05/25 18:13	1
Chromium	ND		0.0050	0.0012	mg/L		03/03/25 14:00	03/05/25 18:13	1
Copper	ND		0.0020	0.0017	mg/L		03/03/25 14:00	03/05/25 18:13	1
Molybdenum	**0.047**		0.0050	0.0011	mg/L		03/03/25 14:00	03/05/25 18:13	1
Nickel	**0.0089**		0.0020	0.0015	mg/L		03/03/25 14:00	03/05/25 18:13	1
Lead	ND		0.0010	0.00045	mg/L		03/03/25 14:00	03/05/25 18:13	1
Antimony	ND		0.0020	0.00057	mg/L		03/03/25 14:00	03/05/25 18:13	1
Selenium	ND		0.0050	0.00089	mg/L		03/03/25 14:00	03/05/25 18:13	1
Thallium	ND		0.0010	0.00051	mg/L		03/03/25 14:00	03/05/25 18:13	1
Vanadium	ND		0.0050	0.00082	mg/L		03/03/25 14:00	03/05/25 18:13	1
Calcium	**180**		1.0	0.25	mg/L		03/03/25 14:00	03/05/25 18:13	1
Magnesium	**48**		1.0	0.061	mg/L		03/03/25 14:00	03/05/25 18:13	1
Lithium	**0.056**		0.0080	0.0034	mg/L		03/03/25 14:00	03/05/25 18:13	1
Sodium	**120**		1.0	0.88	mg/L		03/03/25 14:00	03/05/25 18:13	1
Potassium	**6.9**		1.0	0.22	mg/L		03/03/25 14:00	03/05/25 18:13	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.9**		0.10	0.013	mg/L		03/25/25 14:42	03/26/25 16:13	1
Zinc	**0.0038**	**J**	0.0070	0.00093	mg/L		03/25/25 14:42	03/26/25 16:13	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**650**		33	33	mg/L			03/07/25 09:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		03/03/25 14:00	03/04/25 16:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**270**		5.0	2.6	mg/L			03/08/25 01:44	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/08/25 01:44	1
Total Dissolved Solids (SM 2540 C-2020)	**1100**		20	16	mg/L			03/06/25 10:24	1
Total Suspended Solids (SM 2540D-2020)	**5.0**		4.0	0.40	mg/L			03/04/25 07:47	1
Chloride (EPA 300.0-1993 R2.1)	**59**		1.0	0.13	mg/L			03/05/25 19:33	1
Fluoride (EPA 300.0-1993 R2.1)	**0.30**		0.050	0.024	mg/L			03/05/25 19:33	1
Sulfate (EPA 300.0-1993 R2.1)	**560**		5.0	1.7	mg/L			03/05/25 20:37	5

Client Sample ID: L502194-03 MW-17C

Date Collected: 02/27/25 12:37
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-3

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.337**		0.137	0.140	1.00	0.140	pCi/L	03/06/25 07:45	03/31/25 22:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.1*		*30 - 110*	*03/06/25 07:45*	*03/31/25 22:11*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.401	U	0.345	0.347	1.00	0.539	pCi/L	03/06/25 07:47	03/28/25 14:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.1*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:15*	*1*
Y Carrier	*74.0*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:15*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.738**		0.371	0.374	5.00	0.539	pCi/L		03/31/25 19:07	1

Client Sample ID: L502194-04 MW-17D

Date Collected: 02/27/25 13:59
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-4

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.5		0.10	0.057	mg/L		03/03/25 14:00	03/05/25 18:50	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		03/03/25 14:00	03/05/25 17:34	1
Arsenic	0.0013	J	0.0050	0.00075	mg/L		03/03/25 14:00	03/05/25 17:34	1
Barium	0.044		0.0050	0.00077	mg/L		03/03/25 14:00	03/05/25 17:34	1
Beryllium	ND		0.0010	0.00027	mg/L		03/03/25 14:00	03/05/25 17:34	1
Cadmium	0.00017	J	0.0010	0.000077	mg/L		03/03/25 14:00	03/05/25 17:34	1
Cobalt	ND		0.0010	0.000086	mg/L		03/03/25 14:00	03/05/25 17:34	1
Chromium	ND		0.0050	0.0012	mg/L		03/03/25 14:00	03/05/25 17:34	1
Copper	ND		0.0020	0.0017	mg/L		03/03/25 14:00	03/05/25 17:34	1
Molybdenum	0.0048	J	0.0050	0.0011	mg/L		03/03/25 14:00	03/05/25 17:34	1
Nickel	ND		0.0020	0.0015	mg/L		03/03/25 14:00	03/05/25 17:34	1
Lead	ND		0.0010	0.00045	mg/L		03/03/25 14:00	03/05/25 17:34	1
Antimony	0.00059	J	0.0020	0.00057	mg/L		03/03/25 14:00	03/05/25 17:34	1
Selenium	ND		0.0050	0.00089	mg/L		03/03/25 14:00	03/05/25 17:34	1
Thallium	ND		0.0010	0.00051	mg/L		03/03/25 14:00	03/05/25 17:34	1
Vanadium	ND		0.0050	0.00082	mg/L		03/03/25 14:00	03/05/25 17:34	1
Calcium	50		1.0	0.25	mg/L		03/03/25 14:00	03/05/25 17:34	1
Magnesium	16		1.0	0.061	mg/L		03/03/25 14:00	03/05/25 17:34	1
Lithium	0.032		0.0080	0.0034	mg/L		03/03/25 14:00	03/05/25 17:34	1
Sodium	46		1.0	0.88	mg/L		03/03/25 14:00	03/05/25 17:34	1
Potassium	9.6		1.0	0.22	mg/L		03/03/25 14:00	03/05/25 17:34	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.77		0.10	0.013	mg/L		03/25/25 14:42	03/26/25 16:16	1
Zinc	0.0010	J	0.0070	0.00093	mg/L		03/25/25 14:42	03/26/25 16:16	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	190		33	33	mg/L			03/07/25 09:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		03/03/25 14:00	03/04/25 15:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	290		5.0	2.6	mg/L			03/08/25 01:49	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/08/25 01:49	1
Total Dissolved Solids (SM 2540 C-2020)	290		10	7.8	mg/L			03/06/25 10:24	1
Total Suspended Solids (SM 2540D-2020)	1.9	J	4.0	0.40	mg/L			03/04/25 07:47	1
Chloride (EPA 300.0-1993 R2.1)	6.3		1.0	0.13	mg/L			03/05/25 20:58	1
Fluoride (EPA 300.0-1993 R2.1)	0.43		0.050	0.024	mg/L			03/05/25 20:58	1
Sulfate (EPA 300.0-1993 R2.1)	7.3		1.0	0.35	mg/L			03/05/25 20:58	1

Client Sample ID: L502194-04 MW-17D

Date Collected: 02/27/25 13:59
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-4

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.311		0.160	0.162	1.00	0.207	pCi/L	03/06/25 07:45	03/31/25 22:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.5*		*30 - 110*	*03/06/25 07:45*	*03/31/25 22:11*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.777		0.400	0.406	1.00	0.562	pCi/L	03/06/25 07:47	03/28/25 14:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.5*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:15*	*1*
Y Carrier	*80.4*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:15*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.09		0.431	0.437	5.00	0.562	pCi/L		03/31/25 19:07	1

Client Sample ID: L502194-05 MW-17E

Date Collected: 02/27/25 15:13
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-5

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.4**		0.10	0.057	mg/L		03/03/25 14:00	03/05/25 19:57	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		03/03/25 14:00	03/05/25 18:16	1
Arsenic	ND		0.0050	0.00075	mg/L		03/03/25 14:00	03/05/25 18:16	1
Barium	**0.0047**	**J**	0.0050	0.00077	mg/L		03/03/25 14:00	03/05/25 18:16	1
Beryllium	ND		0.0010	0.00027	mg/L		03/03/25 14:00	03/05/25 18:16	1
Cadmium	ND		0.0010	0.000077	mg/L		03/03/25 14:00	03/05/25 18:16	1
Cobalt	ND		0.0010	0.000086	mg/L		03/03/25 14:00	03/05/25 18:16	1
Chromium	ND		0.0050	0.0012	mg/L		03/03/25 14:00	03/05/25 18:16	1
Copper	ND		0.0020	0.0017	mg/L		03/03/25 14:00	03/05/25 18:16	1
Molybdenum	ND		0.0050	0.0011	mg/L		03/03/25 14:00	03/05/25 18:16	1
Nickel	ND		0.0020	0.0015	mg/L		03/03/25 14:00	03/05/25 18:16	1
Lead	ND		0.0010	0.00045	mg/L		03/03/25 14:00	03/05/25 18:16	1
Antimony	ND		0.0020	0.00057	mg/L		03/03/25 14:00	03/05/25 18:16	1
Selenium	ND		0.0050	0.00089	mg/L		03/03/25 14:00	03/05/25 18:16	1
Thallium	ND		0.0010	0.00051	mg/L		03/03/25 14:00	03/05/25 18:16	1
Vanadium	ND		0.0050	0.00082	mg/L		03/03/25 14:00	03/05/25 18:16	1
Calcium	**5.4**		1.0	0.25	mg/L		03/03/25 14:00	03/05/25 18:16	1
Magnesium	**1.6**		1.0	0.061	mg/L		03/03/25 14:00	03/05/25 18:16	1
Lithium	**0.024**		0.0080	0.0034	mg/L		03/03/25 14:00	03/05/25 18:16	1
Sodium	**160**		1.0	0.88	mg/L		03/03/25 14:00	03/05/25 18:16	1
Potassium	**4.6**		1.0	0.22	mg/L		03/03/25 14:00	03/05/25 18:16	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.050**	**J**	0.10	0.013	mg/L		03/25/25 14:42	03/26/25 16:24	1
Zinc	**0.0013**	**J**	0.0070	0.00093	mg/L		03/25/25 14:42	03/26/25 16:24	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			03/07/25 09:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		03/03/25 14:00	03/04/25 16:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**330**		5.0	2.6	mg/L			03/08/25 02:05	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**21**		5.0	2.6	mg/L			03/08/25 02:05	1
Total Dissolved Solids (SM 2540 C-2020)	**360**		10	7.8	mg/L			03/06/25 10:24	1
Total Suspended Solids (SM 2540D-2020)	**0.70**	**J**	4.0	0.40	mg/L			03/04/25 07:47	1
Chloride (EPA 300.0-1993 R2.1)	**1.4**		1.0	0.13	mg/L			03/05/25 21:19	1
Fluoride (EPA 300.0-1993 R2.1)	**1.2**		0.050	0.024	mg/L			03/05/25 21:19	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			03/05/25 21:19	1

Client Sample ID: L502194-05 MW-17E

Date Collected: 02/27/25 15:13
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-5

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.136	U	0.104	0.105	1.00	0.149	pCi/L	03/06/25 07:45	03/31/25 22:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*30 - 110*	*03/06/25 07:45*	*03/31/25 22:11*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0730	U	0.349	0.349	1.00	0.630	pCi/L	03/06/25 07:47	03/28/25 14:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:16*	*1*
Y Carrier	*75.5*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:16*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.209	U	0.364	0.364	5.00	0.630	pCi/L		03/31/25 19:07	1

Client Sample ID: L502194-06 MW-18A

Date Collected: 02/27/25 08:53
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-6

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.2**		0.10	0.057	mg/L		03/03/25 14:00	03/05/25 20:02	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		03/03/25 14:00	03/05/25 18:19	1
Arsenic	**0.0017**	**J**	0.0050	0.00075	mg/L		03/03/25 14:00	03/05/25 18:19	1
Barium	**0.072**		0.0050	0.00077	mg/L		03/03/25 14:00	03/05/25 18:19	1
Beryllium	ND		0.0010	0.00027	mg/L		03/03/25 14:00	03/05/25 18:19	1
Cadmium	ND		0.0010	0.000077	mg/L		03/03/25 14:00	03/05/25 18:19	1
Cobalt	ND		0.0010	0.000086	mg/L		03/03/25 14:00	03/05/25 18:19	1
Chromium	ND		0.0050	0.0012	mg/L		03/03/25 14:00	03/05/25 18:19	1
Copper	ND		0.0020	0.0017	mg/L		03/03/25 14:00	03/05/25 18:19	1
Molybdenum	**0.073**		0.0050	0.0011	mg/L		03/03/25 14:00	03/05/25 18:19	1
Nickel	ND		0.0020	0.0015	mg/L		03/03/25 14:00	03/05/25 18:19	1
Lead	ND		0.0010	0.00045	mg/L		03/03/25 14:00	03/05/25 18:19	1
Antimony	ND		0.0020	0.00057	mg/L		03/03/25 14:00	03/05/25 18:19	1
Selenium	ND		0.0050	0.00089	mg/L		03/03/25 14:00	03/05/25 18:19	1
Thallium	ND		0.0010	0.00051	mg/L		03/03/25 14:00	03/05/25 18:19	1
Vanadium	ND		0.0050	0.00082	mg/L		03/03/25 14:00	03/05/25 18:19	1
Calcium	**110**		1.0	0.25	mg/L		03/03/25 14:00	03/05/25 18:19	1
Magnesium	**21**		1.0	0.061	mg/L		03/03/25 14:00	03/05/25 18:19	1
Lithium	**0.093**		0.0080	0.0034	mg/L		03/03/25 14:00	03/05/25 18:19	1
Sodium	**67**		1.0	0.88	mg/L		03/03/25 14:00	03/05/25 18:19	1
Potassium	**8.3**		1.0	0.22	mg/L		03/03/25 14:00	03/05/25 18:19	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**3.4**		0.10	0.013	mg/L		03/25/25 14:42	03/26/25 16:27	1
Zinc	**0.0011**	**J**	0.0070	0.00093	mg/L		03/25/25 14:42	03/26/25 16:27	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**360**		33	33	mg/L			03/07/25 09:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		03/03/25 14:00	03/04/25 16:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**240**		5.0	2.6	mg/L			03/08/25 02:21	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/08/25 02:21	1
Total Dissolved Solids (SM 2540 C-2020)	**580**		10	7.8	mg/L			03/06/25 10:24	1
Total Suspended Solids (SM 2540D-2020)	**10**		4.0	0.40	mg/L			03/05/25 10:43	1
Chloride (EPA 300.0-1993 R2.1)	**64**		1.0	0.13	mg/L			03/05/25 21:40	1
Fluoride (EPA 300.0-1993 R2.1)	**0.50**		0.050	0.024	mg/L			03/05/25 21:40	1
Sulfate (EPA 300.0-1993 R2.1)	**150**		1.0	0.35	mg/L			03/05/25 21:40	1

Client Sample ID: L502194-06 MW-18A

Date Collected: 02/27/25 08:53
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-6

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.221**		0.145	0.146	1.00	0.199	pCi/L	03/06/25 07:45	03/31/25 22:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.2*		*30 - 110*	*03/06/25 07:45*	*03/31/25 22:11*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.135	U	0.381	0.381	1.00	0.673	pCi/L	03/06/25 07:47	03/28/25 14:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.2*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:10*	*1*
Y Carrier	*77.4*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:10*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.357	U	0.408	0.408	5.00	0.673	pCi/L		03/31/25 19:07	1

Client Sample ID: L502194-07 MW-18B

Date Collected: 02/27/25 10:13
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-7

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.0**		0.10	0.057	mg/L		03/03/25 14:00	03/05/25 20:06	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		03/03/25 14:00	03/05/25 18:21	1
Arsenic	ND		0.0050	0.00075	mg/L		03/03/25 14:00	03/05/25 18:21	1
Barium	**0.043**		0.0050	0.00077	mg/L		03/03/25 14:00	03/05/25 18:21	1
Beryllium	ND		0.0010	0.00027	mg/L		03/03/25 14:00	03/05/25 18:21	1
Cadmium	ND		0.0010	0.000077	mg/L		03/03/25 14:00	03/05/25 18:21	1
Cobalt	ND		0.0010	0.000086	mg/L		03/03/25 14:00	03/05/25 18:21	1
Chromium	ND		0.0050	0.0012	mg/L		03/03/25 14:00	03/05/25 18:21	1
Copper	ND		0.0020	0.0017	mg/L		03/03/25 14:00	03/05/25 18:21	1
Molybdenum	**0.10**		0.0050	0.0011	mg/L		03/03/25 14:00	03/05/25 18:21	1
Nickel	**0.0059**		0.0020	0.0015	mg/L		03/03/25 14:00	03/05/25 18:21	1
Lead	ND		0.0010	0.00045	mg/L		03/03/25 14:00	03/05/25 18:21	1
Antimony	ND		0.0020	0.00057	mg/L		03/03/25 14:00	03/05/25 18:21	1
Selenium	ND		0.0050	0.00089	mg/L		03/03/25 14:00	03/05/25 18:21	1
Thallium	ND		0.0010	0.00051	mg/L		03/03/25 14:00	03/05/25 18:21	1
Vanadium	ND		0.0050	0.00082	mg/L		03/03/25 14:00	03/05/25 18:21	1
Calcium	**130**		1.0	0.25	mg/L		03/03/25 14:00	03/05/25 18:21	1
Magnesium	**25**		1.0	0.061	mg/L		03/03/25 14:00	03/05/25 18:21	1
Lithium	**0.096**		0.0080	0.0034	mg/L		03/03/25 14:00	03/05/25 18:21	1
Sodium	**80**		1.0	0.88	mg/L		03/03/25 14:00	03/05/25 18:21	1
Potassium	**8.7**		1.0	0.22	mg/L		03/03/25 14:00	03/05/25 18:21	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.3**		0.10	0.013	mg/L		03/25/25 14:42	03/26/25 15:40	1
Zinc	ND		0.0070	0.00093	mg/L		03/25/25 14:42	03/26/25 15:40	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**430**		33	33	mg/L			03/07/25 09:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		03/03/25 14:00	03/04/25 16:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**160**		5.0	2.6	mg/L			03/08/25 02:26	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/08/25 02:26	1
Total Dissolved Solids (SM 2540 C-2020)	**770**		10	7.8	mg/L			03/06/25 10:24	1
Total Suspended Solids (SM 2540D-2020)	**2.7**	**J**	4.0	0.40	mg/L			03/05/25 10:43	1
Chloride (EPA 300.0-1993 R2.1)	**81**		1.0	0.13	mg/L			03/05/25 22:22	1
Fluoride (EPA 300.0-1993 R2.1)	**0.34**		0.050	0.024	mg/L			03/05/25 22:22	1
Sulfate (EPA 300.0-1993 R2.1)	**350**		5.0	1.7	mg/L			03/05/25 22:44	5

Client Sample ID: L502194-07 MW-18B

Date Collected: 02/27/25 10:13
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-7

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.382**		0.149	0.153	1.00	0.153	pCi/L	03/06/25 07:45	03/31/25 22:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.9*		*30 - 110*	*03/06/25 07:45*	*03/31/25 22:11*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.520	U	0.394	0.397	1.00	0.607	pCi/L	03/06/25 07:47	03/28/25 14:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.9*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:10*	*1*
Y Carrier	*79.3*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:10*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.902**		0.421	0.425	5.00	0.607	pCi/L		03/31/25 19:07	1

Client Sample ID: L502194-08 MW-18C

Date Collected: 02/27/25 11:41
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-8

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.0**		0.10	0.057	mg/L		03/03/25 14:00	03/05/25 20:19	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		03/03/25 14:00	03/05/25 18:30	1
Arsenic	ND		0.0050	0.00075	mg/L		03/03/25 14:00	03/05/25 18:30	1
Barium	**0.053**		0.0050	0.00077	mg/L		03/03/25 14:00	03/05/25 18:30	1
Beryllium	ND		0.0010	0.00027	mg/L		03/03/25 14:00	03/05/25 18:30	1
Cadmium	ND		0.0010	0.000077	mg/L		03/03/25 14:00	03/05/25 18:30	1
Cobalt	ND		0.0010	0.000086	mg/L		03/03/25 14:00	03/05/25 18:30	1
Chromium	ND		0.0050	0.0012	mg/L		03/03/25 14:00	03/05/25 18:30	1
Copper	ND		0.0020	0.0017	mg/L		03/03/25 14:00	03/05/25 18:30	1
Molybdenum	**0.12**		0.0050	0.0011	mg/L		03/03/25 14:00	03/05/25 18:30	1
Nickel	**0.010**		0.0020	0.0015	mg/L		03/03/25 14:00	03/05/25 18:30	1
Lead	ND		0.0010	0.00045	mg/L		03/03/25 14:00	03/05/25 18:30	1
Antimony	ND		0.0020	0.00057	mg/L		03/03/25 14:00	03/05/25 18:30	1
Selenium	ND		0.0050	0.00089	mg/L		03/03/25 14:00	03/05/25 18:30	1
Thallium	ND		0.0010	0.00051	mg/L		03/03/25 14:00	03/05/25 18:30	1
Vanadium	ND		0.0050	0.00082	mg/L		03/03/25 14:00	03/05/25 18:30	1
Calcium	**200**		1.0	0.25	mg/L		03/03/25 14:00	03/05/25 18:30	1
Magnesium	**53**		1.0	0.061	mg/L		03/03/25 14:00	03/05/25 18:30	1
Lithium	**0.085**		0.0080	0.0034	mg/L		03/03/25 14:00	03/05/25 18:30	1
Sodium	**80**		1.0	0.88	mg/L		03/03/25 14:00	03/05/25 18:30	1
Potassium	**4.4**		1.0	0.22	mg/L		03/03/25 14:00	03/05/25 18:30	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**3.4**		0.10	0.013	mg/L		03/25/25 14:42	03/26/25 16:30	1
Zinc	**0.00096**	**J**	0.0070	0.00093	mg/L		03/25/25 14:42	03/26/25 16:30	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**710**		33	33	mg/L			03/07/25 09:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		03/03/25 14:00	03/04/25 16:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**180**		5.0	2.6	mg/L			03/08/25 02:31	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/08/25 02:31	1
Total Dissolved Solids (SM 2540 C-2020)	**1100**		20	16	mg/L			03/06/25 10:24	1
Total Suspended Solids (SM 2540D-2020)	**5.4**		4.0	0.40	mg/L			03/05/25 10:43	1
Chloride (EPA 300.0-1993 R2.1)	**87**		1.0	0.13	mg/L			03/05/25 23:05	1
Fluoride (EPA 300.0-1993 R2.1)	**0.19**		0.050	0.024	mg/L			03/05/25 23:05	1
Sulfate (EPA 300.0-1993 R2.1)	**560**		5.0	1.7	mg/L			03/05/25 23:26	5

Client Sample ID: L502194-08 MW-18C

Date Collected: 02/27/25 11:41
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-8

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.562		0.180	0.187	1.00	0.171	pCi/L	03/06/25 07:45	03/31/25 22:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.9*		*30 - 110*	*03/06/25 07:45*	*03/31/25 22:12*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.939		0.428	0.436	1.00	0.576	pCi/L	03/06/25 07:47	03/28/25 14:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.9*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:10*	*1*
Y Carrier	*79.3*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:10*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.50		0.464	0.474	5.00	0.576	pCi/L		03/31/25 19:07	1

Client Sample ID: L502194-09 MW-18D

Date Collected: 02/27/25 13:01
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-9

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.9**		0.10	0.057	mg/L		03/03/25 14:00	03/05/25 20:23	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		03/03/25 14:00	03/05/25 18:33	1
Arsenic	ND		0.0050	0.00075	mg/L		03/03/25 14:00	03/05/25 18:33	1
Barium	**0.028**		0.0050	0.00077	mg/L		03/03/25 14:00	03/05/25 18:33	1
Beryllium	ND		0.0010	0.00027	mg/L		03/03/25 14:00	03/05/25 18:33	1
Cadmium	ND		0.0010	0.000077	mg/L		03/03/25 14:00	03/05/25 18:33	1
Cobalt	**0.00017**	**J B**	0.0010	0.000086	mg/L		03/03/25 14:00	03/05/25 18:33	1
Chromium	ND		0.0050	0.0012	mg/L		03/03/25 14:00	03/05/25 18:33	1
Copper	ND		0.0020	0.0017	mg/L		03/03/25 14:00	03/05/25 18:33	1
Molybdenum	**0.069**		0.0050	0.0011	mg/L		03/03/25 14:00	03/05/25 18:33	1
Nickel	**0.0040**		0.0020	0.0015	mg/L		03/03/25 14:00	03/05/25 18:33	1
Lead	ND		0.0010	0.00045	mg/L		03/03/25 14:00	03/05/25 18:33	1
Antimony	ND		0.0020	0.00057	mg/L		03/03/25 14:00	03/05/25 18:33	1
Selenium	ND		0.0050	0.00089	mg/L		03/03/25 14:00	03/05/25 18:33	1
Thallium	ND		0.0010	0.00051	mg/L		03/03/25 14:00	03/05/25 18:33	1
Vanadium	ND		0.0050	0.00082	mg/L		03/03/25 14:00	03/05/25 18:33	1
Calcium	**77**		1.0	0.25	mg/L		03/03/25 14:00	03/05/25 18:33	1
Magnesium	**15**		1.0	0.061	mg/L		03/03/25 14:00	03/05/25 18:33	1
Lithium	**0.077**		0.0080	0.0034	mg/L		03/03/25 14:00	03/05/25 18:33	1
Sodium	**140**		1.0	0.88	mg/L		03/03/25 14:00	03/05/25 18:33	1
Potassium	**6.5**		1.0	0.22	mg/L		03/03/25 14:00	03/05/25 18:33	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.7**		0.10	0.013	mg/L		03/25/25 14:42	03/26/25 16:32	1
Zinc	**0.0015**	**J**	0.0070	0.00093	mg/L		03/25/25 14:42	03/26/25 16:32	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**250**		33	33	mg/L			03/07/25 09:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00013**	**J**	0.00020	0.00013	mg/L		03/03/25 14:00	03/04/25 16:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**290**		5.0	2.6	mg/L			03/08/25 02:36	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/08/25 02:36	1
Total Dissolved Solids (SM 2540 C-2020)	**620**		10	7.8	mg/L			03/06/25 14:42	1
Total Suspended Solids (SM 2540D-2020)	**1.3**	**J**	4.0	0.40	mg/L			03/05/25 10:43	1
Chloride (EPA 300.0-1993 R2.1)	**37**		1.0	0.13	mg/L			03/05/25 23:47	1
Fluoride (EPA 300.0-1993 R2.1)	**0.91**		0.050	0.024	mg/L			03/05/25 23:47	1
Sulfate (EPA 300.0-1993 R2.1)	**200**		1.0	0.35	mg/L			03/05/25 23:47	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-219708-1

Client Sample ID: L502194-09 MW-18D

Date Collected: 02/27/25 13:01
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-9

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.341		0.178	0.181	1.00	0.237	pCi/L	03/06/25 07:45	03/31/25 22:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*30 - 110*	*03/06/25 07:45*	*03/31/25 22:12*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0971	U	0.352	0.352	1.00	0.629	pCi/L	03/06/25 07:47	03/28/25 14:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:10*	*1*
Y Carrier	*81.5*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:10*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.439	U	0.394	0.396	5.00	0.629	pCi/L		03/31/25 19:07	1

Client Sample ID: L502194-10 MWT-17A

Date Collected: 02/27/25 09:28
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-10

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**4.4**		0.10	0.057	mg/L		03/03/25 14:00	03/05/25 20:27	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		03/03/25 14:00	03/05/25 18:35	1
Arsenic	**0.00095**	**J**	0.0050	0.00075	mg/L		03/03/25 14:00	03/05/25 18:35	1
Barium	**0.038**		0.0050	0.00077	mg/L		03/03/25 14:00	03/05/25 18:35	1
Beryllium	ND		0.0010	0.00027	mg/L		03/03/25 14:00	03/05/25 18:35	1
Cadmium	ND		0.0010	0.000077	mg/L		03/03/25 14:00	03/05/25 18:35	1
Cobalt	ND		0.0010	0.000086	mg/L		03/03/25 14:00	03/05/25 18:35	1
Chromium	ND		0.0050	0.0012	mg/L		03/03/25 14:00	03/05/25 18:35	1
Copper	ND		0.0020	0.0017	mg/L		03/03/25 14:00	03/05/25 18:35	1
Molybdenum	**0.016**		0.0050	0.0011	mg/L		03/03/25 14:00	03/05/25 18:35	1
Nickel	**0.014**		0.0020	0.0015	mg/L		03/03/25 14:00	03/05/25 18:35	1
Lead	ND		0.0010	0.00045	mg/L		03/03/25 14:00	03/05/25 18:35	1
Antimony	ND		0.0020	0.00057	mg/L		03/03/25 14:00	03/05/25 18:35	1
Selenium	ND		0.0050	0.00089	mg/L		03/03/25 14:00	03/05/25 18:35	1
Thallium	ND		0.0010	0.00051	mg/L		03/03/25 14:00	03/05/25 18:35	1
Vanadium	ND		0.0050	0.00082	mg/L		03/03/25 14:00	03/05/25 18:35	1
Calcium	**240**		1.0	0.25	mg/L		03/03/25 14:00	03/05/25 18:35	1
Magnesium	**70**		1.0	0.061	mg/L		03/03/25 14:00	03/05/25 18:35	1
Lithium	**0.053**		0.0080	0.0034	mg/L		03/03/25 14:00	03/05/25 18:35	1
Sodium	**52**		1.0	0.88	mg/L		03/03/25 14:00	03/05/25 18:35	1
Potassium	**2.7**		1.0	0.22	mg/L		03/03/25 14:00	03/05/25 18:35	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**6.2**		0.10	0.013	mg/L		03/25/25 14:42	03/26/25 16:35	1
Zinc	**0.0015**	**J**	0.0070	0.00093	mg/L		03/25/25 14:42	03/26/25 16:35	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**880**		33	33	mg/L			03/07/25 09:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		03/03/25 14:00	03/04/25 16:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**250**		5.0	2.6	mg/L			03/08/25 02:42	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/08/25 02:42	1
Total Dissolved Solids (SM 2540 C-2020)	**1300**		20	16	mg/L			03/06/25 10:24	1
Total Suspended Solids (SM 2540D-2020)	**15**		4.0	0.40	mg/L			03/05/25 10:43	1
Chloride (EPA 300.0-1993 R2.1)	**67**		1.0	0.13	mg/L			03/06/25 01:12	1
Fluoride (EPA 300.0-1993 R2.1)	**0.22**		0.050	0.024	mg/L			03/06/25 01:12	1
Sulfate (EPA 300.0-1993 R2.1)	**640**		5.0	1.7	mg/L			03/06/25 01:33	5

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-219708-1

Client Sample ID: L502194-10 MWT-17A

Date Collected: 02/27/25 09:28
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-10

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.139	U	0.107	0.108	1.00	0.150	pCi/L	03/06/25 07:45	03/31/25 22:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*30 - 110*	*03/06/25 07:45*	*03/31/25 22:05*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.105	U	0.347	0.347	1.00	0.619	pCi/L	03/06/25 07:47	03/28/25 14:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:10*	*1*
Y Carrier	*81.1*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:10*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.245	U	0.363	0.363	5.00	0.619	pCi/L		03/31/25 19:07	1

Client Sample ID: L502194-11 FB

Date Collected: 02/27/25 07:45
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-11

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		03/03/25 14:00	03/05/25 20:31	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		03/03/25 14:00	03/05/25 18:38	1
Arsenic	ND		0.0050	0.00075	mg/L		03/03/25 14:00	03/05/25 18:38	1
Barium	ND		0.0050	0.00077	mg/L		03/03/25 14:00	03/05/25 18:38	1
Beryllium	ND		0.0010	0.00027	mg/L		03/03/25 14:00	03/05/25 18:38	1
Cadmium	ND		0.0010	0.000077	mg/L		03/03/25 14:00	03/05/25 18:38	1
Cobalt	ND		0.0010	0.000086	mg/L		03/03/25 14:00	03/05/25 18:38	1
Chromium	ND		0.0050	0.0012	mg/L		03/03/25 14:00	03/05/25 18:38	1
Copper	ND		0.0020	0.0017	mg/L		03/03/25 14:00	03/05/25 18:38	1
Molybdenum	ND		0.0050	0.0011	mg/L		03/03/25 14:00	03/05/25 18:38	1
Nickel	ND		0.0020	0.0015	mg/L		03/03/25 14:00	03/05/25 18:38	1
Lead	ND		0.0010	0.00045	mg/L		03/03/25 14:00	03/05/25 18:38	1
Antimony	ND		0.0020	0.00057	mg/L		03/03/25 14:00	03/05/25 18:38	1
Selenium	ND		0.0050	0.00089	mg/L		03/03/25 14:00	03/05/25 18:38	1
Thallium	ND		0.0010	0.00051	mg/L		03/03/25 14:00	03/05/25 18:38	1
Vanadium	ND		0.0050	0.00082	mg/L		03/03/25 14:00	03/05/25 18:38	1
Calcium	ND		1.0	0.25	mg/L		03/03/25 14:00	03/05/25 18:38	1
Magnesium	ND		1.0	0.061	mg/L		03/03/25 14:00	03/05/25 18:38	1
Lithium	ND		0.0080	0.0034	mg/L		03/03/25 14:00	03/05/25 18:38	1
Sodium	ND		1.0	0.88	mg/L		03/03/25 14:00	03/05/25 18:38	1
Potassium	ND		1.0	0.22	mg/L		03/03/25 14:00	03/05/25 18:38	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		03/25/25 14:42	03/26/25 16:38	1
Zinc	ND		0.0070	0.00093	mg/L		03/25/25 14:42	03/26/25 16:38	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			03/07/25 09:02	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		03/03/25 14:00	03/04/25 16:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/08/25 02:47	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/08/25 02:47	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			03/06/25 10:24	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			03/05/25 10:43	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			03/06/25 01:54	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			03/06/25 01:54	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			03/06/25 01:54	1

Client Sample ID: L502194-11 FB

Date Collected: 02/27/25 07:45
Date Received: 03/01/25 08:00

Lab Sample ID: 240-219708-11

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0606	U	0.0263	0.0269	1.00	0.122	pCi/L	03/06/25 07:45	03/31/25 22:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.8*		*30 - 110*	*03/06/25 07:45*	*03/31/25 22:05*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.172	U	0.307	0.308	1.00	0.529	pCi/L	03/06/25 07:47	03/28/25 14:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.8*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:10*	*1*
Y Carrier	*74.8*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:10*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.172	U	0.308	0.309	5.00	0.529	pCi/L		03/31/25 19:07	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-219708-1

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-219708-1	L502194-01 MW-17A	81.8
240-219708-2	L502194-02 MW-17B	75.3
240-219708-3	L502194-03 MW-17C	91.1
240-219708-4	L502194-04 MW-17D	88.5
240-219708-5	L502194-05 MW-17E	88.3
240-219708-6	L502194-06 MW-18A	79.2
240-219708-7	L502194-07 MW-18B	85.9
240-219708-8	L502194-08 MW-18C	83.9
240-219708-9	L502194-09 MW-18D	80.2
240-219708-10	L502194-10 MWT-17A	80.2
240-219708-11	L502194-11 FB	94.8
LCS 160-706363/2-A	Lab Control Sample	87.5
MB 160-706363/1-A	Method Blank	83.3

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
		Ba	Y
Lab Sample ID	Client Sample ID	(30-110)	(30-110)
240-219708-1	L502194-01 MW-17A	81.8	77.4
240-219708-2	L502194-02 MW-17B	75.3	75.9
240-219708-3	L502194-03 MW-17C	91.1	74.0
240-219708-4	L502194-04 MW-17D	88.5	80.4
240-219708-5	L502194-05 MW-17E	88.3	75.5
240-219708-6	L502194-06 MW-18A	79.2	77.4
240-219708-7	L502194-07 MW-18B	85.9	79.3
240-219708-8	L502194-08 MW-18C	83.9	79.3
240-219708-9	L502194-09 MW-18D	80.2	81.5
240-219708-10	L502194-10 MWT-17A	80.2	81.1
240-219708-11	L502194-11 FB	94.8	74.8
LCS 160-706366/2-A	Lab Control Sample	87.5	80.0
MB 160-706366/1-A	Method Blank	83.3	79.6

Tracer/Carrier Legend

Ba = Ba Carrier
Y = Y Carrier

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-646631/1-A
Matrix: Water
Analysis Batch: 646866

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 646631

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		03/03/25 14:00	03/04/25 19:55	1

Lab Sample ID: LCS 240-646631/2-A
Matrix: Water
Analysis Batch: 646866

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 646631

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.13		mg/L		113	85 - 115

Lab Sample ID: 240-219708-1 MS
Matrix: Water
Analysis Batch: 646866

Client Sample ID: L502194-01 MW-17A
Prep Type: Total Recoverable
Prep Batch: 646631

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	4.7		1.00	5.92	4 ^+	mg/L		124	70 - 130

Lab Sample ID: 240-219708-1 MSD
Matrix: Water
Analysis Batch: 646866

Client Sample ID: L502194-01 MW-17A
Prep Type: Total Recoverable
Prep Batch: 646631

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	4.7		1.00	5.93	4 ^+	mg/L		125	70 - 130	0	20

Lab Sample ID: 240-219708-4 MS
Matrix: Water
Analysis Batch: 647025

Client Sample ID: L502194-04 MW-17D
Prep Type: Total Recoverable
Prep Batch: 646631

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	2.5		1.00	3.69		mg/L		120	70 - 130

Lab Sample ID: 240-219708-4 MSD
Matrix: Water
Analysis Batch: 647025

Client Sample ID: L502194-04 MW-17D
Prep Type: Total Recoverable
Prep Batch: 646631

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	2.5		1.00	3.68		mg/L		120	70 - 130	0	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-5773/7-A
Matrix: Water
Analysis Batch: 5820

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5773

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		03/25/25 11:52	03/26/25 15:04	1
Zinc	ND		0.0070	0.00093	mg/L		03/25/25 11:52	03/26/25 15:04	1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 350-5773/8-A
Matrix: Water
Analysis Batch: 5820

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5773

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron			20.0	20.1		mg/L		100	85 - 115		
Zinc			1.00	1.03		mg/L		103	85 - 115		

Lab Sample ID: 240-219708-1 MS
Matrix: Water
Analysis Batch: 5820

Client Sample ID: L502194-01 MW-17A
Prep Type: Total/NA
Prep Batch: 5773

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron	6.5		20.0	27.8		mg/L		107	70 - 130		
Zinc	0.0013	J	1.00	1.03		mg/L		103	70 - 130		

Lab Sample ID: 240-219708-1 MSD
Matrix: Water
Analysis Batch: 5820

Client Sample ID: L502194-01 MW-17A
Prep Type: Total/NA
Prep Batch: 5773

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	6.5		20.0	27.7		mg/L		106	70 - 130	0	20
Zinc	0.0013	J	1.00	1.03		mg/L		103	70 - 130	0	20

Lab Sample ID: 240-219708-7 MS
Matrix: Water
Analysis Batch: 5820

Client Sample ID: L502194-07 MW-18B
Prep Type: Total/NA
Prep Batch: 5773

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron	2.3		20.0	22.8		mg/L		102	70 - 130		
Zinc	ND		1.00	1.04		mg/L		104	70 - 130		

Lab Sample ID: 240-219708-7 MSD
Matrix: Water
Analysis Batch: 5820

Client Sample ID: L502194-07 MW-18B
Prep Type: Total/NA
Prep Batch: 5773

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	2.3		20.0	22.2		mg/L		100	70 - 130	3	20
Zinc	ND		1.00	1.00		mg/L		100	70 - 130	4	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-646631/1-A
Matrix: Water
Analysis Batch: 647046

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 646631

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		03/03/25 14:00	03/05/25 15:06	1
Arsenic	ND		0.0050	0.00075	mg/L		03/03/25 14:00	03/05/25 15:06	1
Barium	ND		0.0050	0.00077	mg/L		03/03/25 14:00	03/05/25 15:06	1
Beryllium	ND		0.0010	0.00027	mg/L		03/03/25 14:00	03/05/25 15:06	1
Cadmium	ND		0.0010	0.000077	mg/L		03/03/25 14:00	03/05/25 15:06	1
Cobalt	0.0000960	J	0.0010	0.000086	mg/L		03/03/25 14:00	03/05/25 15:06	1
Chromium	ND		0.0050	0.0012	mg/L		03/03/25 14:00	03/05/25 15:06	1
Copper	ND		0.0020	0.0017	mg/L		03/03/25 14:00	03/05/25 15:06	1

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-646631/1-A
Matrix: Water
Analysis Batch: 647046

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 646631

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.0050	0.0011	mg/L		03/03/25 14:00	03/05/25 15:06	1
Nickel	ND		0.0020	0.0015	mg/L		03/03/25 14:00	03/05/25 15:06	1
Lead	0.000455	J	0.0010	0.00045	mg/L		03/03/25 14:00	03/05/25 15:06	1
Antimony	ND		0.0020	0.00057	mg/L		03/03/25 14:00	03/05/25 15:06	1
Selenium	ND		0.0050	0.00089	mg/L		03/03/25 14:00	03/05/25 15:06	1
Thallium	ND		0.0010	0.00051	mg/L		03/03/25 14:00	03/05/25 15:06	1
Vanadium	ND		0.0050	0.00082	mg/L		03/03/25 14:00	03/05/25 15:06	1
Calcium	ND		1.0	0.25	mg/L		03/03/25 14:00	03/05/25 15:06	1
Magnesium	ND		1.0	0.061	mg/L		03/03/25 14:00	03/05/25 15:06	1
Lithium	ND		0.0080	0.0034	mg/L		03/03/25 14:00	03/05/25 15:06	1
Sodium	ND		1.0	0.88	mg/L		03/03/25 14:00	03/05/25 15:06	1
Potassium	ND		1.0	0.22	mg/L		03/03/25 14:00	03/05/25 15:06	1

Lab Sample ID: LCS 240-646631/3-A
Matrix: Water
Analysis Batch: 647046

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 646631

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.0964		mg/L		96	85 - 115
Arsenic	1.00	0.988		mg/L		99	85 - 115
Barium	1.00	0.954		mg/L		95	85 - 115
Beryllium	0.500	0.471		mg/L		94	85 - 115
Cadmium	0.500	0.471		mg/L		94	85 - 115
Cobalt	0.500	0.470		mg/L		94	85 - 115
Chromium	0.500	0.485		mg/L		97	85 - 115
Copper	0.500	0.481		mg/L		96	85 - 115
Molybdenum	0.500	0.472		mg/L		94	85 - 115
Nickel	0.500	0.479		mg/L		96	85 - 115
Lead	0.500	0.499		mg/L		100	85 - 115
Antimony	0.100	0.101		mg/L		101	85 - 115
Selenium	1.00	0.960		mg/L		96	85 - 115
Thallium	1.00	1.03		mg/L		103	85 - 115
Vanadium	0.500	0.489		mg/L		98	85 - 115
Calcium	25.0	24.6		mg/L		98	85 - 115
Magnesium	25.0	25.0		mg/L		100	85 - 115
Lithium	0.500	0.447		mg/L		89	85 - 115
Sodium	25.0	25.2		mg/L		101	85 - 115
Potassium	25.0	26.2		mg/L		105	85 - 115

Lab Sample ID: 240-219708-1 MS
Matrix: Water
Analysis Batch: 647046

Client Sample ID: L502194-01 MW-17A
Prep Type: Total Recoverable
Prep Batch: 646631

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.100		mg/L		100	70 - 130
Arsenic	0.0011	J	1.00	1.06		mg/L		106	70 - 130
Barium	0.038		1.00	1.06		mg/L		102	70 - 130
Beryllium	ND		0.500	0.499		mg/L		100	70 - 130
Cadmium	ND		0.500	0.487		mg/L		97	70 - 130

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-219708-1 MS
Matrix: Water
Analysis Batch: 647046

Client Sample ID: L502194-01 MW-17A
Prep Type: Total Recoverable
Prep Batch: 646631

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt	ND		0.500	0.495		mg/L		99	70 - 130
Chromium	ND		0.500	0.513		mg/L		103	70 - 130
Copper	ND		0.500	0.504		mg/L		101	70 - 130
Molybdenum	0.018		0.500	0.533		mg/L		103	70 - 130
Nickel	0.014		0.500	0.516		mg/L		100	70 - 130
Lead	ND		0.500	0.535		mg/L		107	70 - 130
Antimony	ND		0.100	0.105		mg/L		105	70 - 130
Selenium	ND		1.00	0.989		mg/L		99	70 - 130
Thallium	ND		1.00	1.10		mg/L		110	70 - 130
Vanadium	ND		0.500	0.519		mg/L		104	70 - 130
Calcium	240		25.0	268	4	mg/L		114	70 - 130
Magnesium	70		25.0	96.0		mg/L		103	70 - 130
Lithium	0.053		0.500	0.524		mg/L		94	70 - 130
Sodium	52		25.0	77.6		mg/L		103	70 - 130
Potassium	2.8		25.0	30.3		mg/L		110	70 - 130

Lab Sample ID: 240-219708-1 MSD
Matrix: Water
Analysis Batch: 647046

Client Sample ID: L502194-01 MW-17A
Prep Type: Total Recoverable
Prep Batch: 646631

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.101		mg/L		101	70 - 130	1	20
Arsenic	0.0011	J	1.00	1.06		mg/L		106	70 - 130	0	20
Barium	0.038		1.00	1.07		mg/L		103	70 - 130	1	20
Beryllium	ND		0.500	0.500		mg/L		100	70 - 130	0	20
Cadmium	ND		0.500	0.496		mg/L		99	70 - 130	2	20
Cobalt	ND		0.500	0.493		mg/L		99	70 - 130	0	20
Chromium	ND		0.500	0.514		mg/L		103	70 - 130	0	20
Copper	ND		0.500	0.500		mg/L		100	70 - 130	1	20
Molybdenum	0.018		0.500	0.532		mg/L		103	70 - 130	0	20
Nickel	0.014		0.500	0.515		mg/L		100	70 - 130	0	20
Lead	ND		0.500	0.541		mg/L		108	70 - 130	1	20
Antimony	ND		0.100	0.107		mg/L		107	70 - 130	2	20
Selenium	ND		1.00	1.00		mg/L		100	70 - 130	2	20
Thallium	ND		1.00	1.11		mg/L		111	70 - 130	1	20
Vanadium	ND		0.500	0.519		mg/L		104	70 - 130	0	20
Calcium	240		25.0	265	4	mg/L		101	70 - 130	1	20
Magnesium	70		25.0	95.6		mg/L		101	70 - 130	0	20
Lithium	0.053		0.500	0.529		mg/L		95	70 - 130	1	20
Sodium	52		25.0	78.0		mg/L		105	70 - 130	0	20
Potassium	2.8		25.0	30.3		mg/L		110	70 - 130	0	20

Lab Sample ID: 240-219708-4 MS
Matrix: Water
Analysis Batch: 647046

Client Sample ID: L502194-04 MW-17D
Prep Type: Total Recoverable
Prep Batch: 646631

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.0992		mg/L		99	70 - 130
Arsenic	0.0013	J	1.00	1.03		mg/L		103	70 - 130

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-219708-4 MS
Matrix: Water
Analysis Batch: 647046

Client Sample ID: L502194-04 MW-17D
Prep Type: Total Recoverable
Prep Batch: 646631

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	0.044		1.00	1.05		mg/L		101	70 - 130
Beryllium	ND		0.500	0.503		mg/L		101	70 - 130
Cadmium	0.00017	J	0.500	0.490		mg/L		98	70 - 130
Cobalt	ND		0.500	0.490		mg/L		98	70 - 130
Chromium	ND		0.500	0.512		mg/L		102	70 - 130
Copper	ND		0.500	0.500		mg/L		100	70 - 130
Molybdenum	0.0048	J	0.500	0.509		mg/L		101	70 - 130
Nickel	ND		0.500	0.498		mg/L		100	70 - 130
Lead	ND		0.500	0.528		mg/L		106	70 - 130
Antimony	0.00059	J	0.100	0.105		mg/L		104	70 - 130
Selenium	ND		1.00	0.980		mg/L		98	70 - 130
Thallium	ND		1.00	1.10		mg/L		110	70 - 130
Vanadium	ND		0.500	0.516		mg/L		103	70 - 130
Calcium	50		25.0	75.6		mg/L		102	70 - 130
Magnesium	16		25.0	42.7		mg/L		105	70 - 130
Lithium	0.032		0.500	0.516		mg/L		97	70 - 130
Sodium	46		25.0	71.7		mg/L		104	70 - 130
Potassium	9.6		25.0	36.8		mg/L		109	70 - 130

Lab Sample ID: 240-219708-4 MSD
Matrix: Water
Analysis Batch: 647046

Client Sample ID: L502194-04 MW-17D
Prep Type: Total Recoverable
Prep Batch: 646631

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.0990		mg/L		99	70 - 130	0	20
Arsenic	0.0013	J	1.00	1.03		mg/L		103	70 - 130	0	20
Barium	0.044		1.00	1.07		mg/L		102	70 - 130	2	20
Beryllium	ND		0.500	0.502		mg/L		100	70 - 130	0	20
Cadmium	0.00017	J	0.500	0.498		mg/L		100	70 - 130	2	20
Cobalt	ND		0.500	0.491		mg/L		98	70 - 130	0	20
Chromium	ND		0.500	0.521		mg/L		104	70 - 130	2	20
Copper	ND		0.500	0.504		mg/L		101	70 - 130	1	20
Molybdenum	0.0048	J	0.500	0.511		mg/L		101	70 - 130	0	20
Nickel	ND		0.500	0.502		mg/L		100	70 - 130	1	20
Lead	ND		0.500	0.535		mg/L		107	70 - 130	1	20
Antimony	0.00059	J	0.100	0.106		mg/L		105	70 - 130	1	20
Selenium	ND		1.00	1.00		mg/L		100	70 - 130	2	20
Thallium	ND		1.00	1.11		mg/L		111	70 - 130	1	20
Vanadium	ND		0.500	0.524		mg/L		105	70 - 130	2	20
Calcium	50		25.0	76.0		mg/L		104	70 - 130	0	20
Magnesium	16		25.0	43.1		mg/L		107	70 - 130	1	20
Lithium	0.032		0.500	0.507		mg/L		95	70 - 130	2	20
Sodium	46		25.0	72.8		mg/L		109	70 - 130	2	20
Potassium	9.6		25.0	36.8		mg/L		109	70 - 130	0	20

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-646633/1-A
Matrix: Water
Analysis Batch: 646914

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 646633

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		03/03/25 14:00	03/04/25 15:29	1

Lab Sample ID: LCS 240-646633/2-A
Matrix: Water
Analysis Batch: 646914

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 646633

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00529		mg/L		106	85 - 115

Lab Sample ID: 240-219708-1 MS
Matrix: Water
Analysis Batch: 646914

Client Sample ID: L502194-01 MW-17A
Prep Type: Total/NA
Prep Batch: 646633

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00100	0.00113		mg/L		113	70 - 130

Lab Sample ID: 240-219708-1 MSD
Matrix: Water
Analysis Batch: 646914

Client Sample ID: L502194-01 MW-17A
Prep Type: Total/NA
Prep Batch: 646633

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.00113		mg/L		113	70 - 130	0	20

Lab Sample ID: 240-219708-4 MS
Matrix: Water
Analysis Batch: 646914

Client Sample ID: L502194-04 MW-17D
Prep Type: Total/NA
Prep Batch: 646633

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00100	0.00115		mg/L		115	70 - 130

Lab Sample ID: 240-219708-4 MSD
Matrix: Water
Analysis Batch: 646914

Client Sample ID: L502194-04 MW-17D
Prep Type: Total/NA
Prep Batch: 646633

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.00111		mg/L		111	70 - 130	3	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-647464/46
Matrix: Water
Analysis Batch: 647464

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/07/25 23:05	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/07/25 23:05	1

Method: 2320 B-2021 - Alkalinity (Continued)

Lab Sample ID: MB 240-647464/66
Matrix: Water
Analysis Batch: 647464

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/08/25 00:41	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/08/25 00:41	1

Lab Sample ID: MB 240-647464/86
Matrix: Water
Analysis Batch: 647464

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/08/25 02:17	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/08/25 02:17	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-647107/1
Matrix: Water
Analysis Batch: 647107

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			03/06/25 10:24	1

Lab Sample ID: LCS 240-647107/2
Matrix: Water
Analysis Batch: 647107

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	569	473		mg/L		83	80 - 120

Lab Sample ID: 240-219708-4 DU
Matrix: Water
Analysis Batch: 647107

Client Sample ID: L502194-04 MW-17D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	290		271		mg/L		5	20

Lab Sample ID: MB 240-647166/1
Matrix: Water
Analysis Batch: 647166

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			03/06/25 14:42	1

Lab Sample ID: LCS 240-647166/2
Matrix: Water
Analysis Batch: 647166

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	569	549		mg/L		96	80 - 120

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-646765/1
Matrix: Water
Analysis Batch: 646765

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			03/04/25 07:47	1

Lab Sample ID: LCS 240-646765/2
Matrix: Water
Analysis Batch: 646765

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	26.1	25.0	J	mg/L		96	64 - 120

Lab Sample ID: MB 240-646968/1
Matrix: Water
Analysis Batch: 646968

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			03/05/25 10:43	1

Lab Sample ID: LCS 240-646968/2
Matrix: Water
Analysis Batch: 646968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	26.1	18.0	J	mg/L		69	64 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-646882/3
Matrix: Water
Analysis Batch: 646882

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			03/05/25 16:23	1
Fluoride	ND		0.050	0.024	mg/L			03/05/25 16:23	1
Sulfate	ND		1.0	0.35	mg/L			03/05/25 16:23	1

Lab Sample ID: LCS 240-646882/4
Matrix: Water
Analysis Batch: 646882

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.5		mg/L		99	90 - 110
Fluoride	2.50	2.57		mg/L		103	90 - 110
Sulfate	50.0	50.9		mg/L		102	90 - 110

Lab Sample ID: 240-219708-11 MS
Matrix: Water
Analysis Batch: 646882

Client Sample ID: L502194-11 FB
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		50.0	47.0		mg/L		94	80 - 120
Fluoride	ND		2.50	2.42		mg/L		97	80 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-219708-11 MS
Matrix: Water
Analysis Batch: 646882

Client Sample ID: L502194-11 FB
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	ND		50.0	47.9		mg/L		96	80 - 120

Lab Sample ID: 240-219708-11 MSD
Matrix: Water
Analysis Batch: 646882

Client Sample ID: L502194-11 FB
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		50.0	48.0		mg/L		96	80 - 120	2	15
Fluoride	ND		2.50	2.47		mg/L		99	80 - 120	2	15
Sulfate	ND		50.0	48.9		mg/L		98	80 - 120	2	15

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-706363/1-A
Matrix: Water
Analysis Batch: 710059

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 706363

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.01387	U	0.0870	0.0870	1.00	0.172	pCi/L	03/06/25 07:45	03/31/25 22:11	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.3*		*30 - 110*	*03/06/25 07:45*	*03/31/25 22:11*	*1*

Lab Sample ID: LCS 160-706363/2-A
Matrix: Water
Analysis Batch: 710059

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 706363

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.58	9.107		1.05	1.00	0.205	pCi/L	95	75 - 125

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*87.5*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-706366/1-A
Matrix: Water
Analysis Batch: 709818

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 706366

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2816	U	0.367	0.368	1.00	0.612	pCi/L	03/06/25 07:47	03/28/25 14:04	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.3*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:04*	*1*
Y Carrier	*79.6*		*30 - 110*	*03/06/25 07:47*	*03/28/25 14:04*	*1*

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-706366/2-A
Matrix: Water
Analysis Batch: 709818

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 706366

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			7.98	10.26		1.38	1.00	0.506	pCi/L	128	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*87.5*		*30 - 110*
Y Carrier	*80.0*		*30 - 110*

Metals

Prep Batch: 5773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-1	L502194-01 MW-17A	Total/NA	Water	200.8	
240-219708-2	L502194-02 MW-17B	Total/NA	Water	200.8	
240-219708-3	L502194-03 MW-17C	Total/NA	Water	200.8	
240-219708-4	L502194-04 MW-17D	Total/NA	Water	200.8	
240-219708-5	L502194-05 MW-17E	Total/NA	Water	200.8	
240-219708-6	L502194-06 MW-18A	Total/NA	Water	200.8	
240-219708-7	L502194-07 MW-18B	Total/NA	Water	200.8	
240-219708-8	L502194-08 MW-18C	Total/NA	Water	200.8	
240-219708-9	L502194-09 MW-18D	Total/NA	Water	200.8	
240-219708-10	L502194-10 MWT-17A	Total/NA	Water	200.8	
240-219708-11	L502194-11 FB	Total/NA	Water	200.8	
MB 350-5773/7-A	Method Blank	Total/NA	Water	200.8	
LCS 350-5773/8-A	Lab Control Sample	Total/NA	Water	200.8	
240-219708-1 MS	L502194-01 MW-17A	Total/NA	Water	200.8	
240-219708-1 MSD	L502194-01 MW-17A	Total/NA	Water	200.8	
240-219708-7 MS	L502194-07 MW-18B	Total/NA	Water	200.8	
240-219708-7 MSD	L502194-07 MW-18B	Total/NA	Water	200.8	

Analysis Batch: 5820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-1	L502194-01 MW-17A	Total/NA	Water	200.8	5773
240-219708-2	L502194-02 MW-17B	Total/NA	Water	200.8	5773
240-219708-3	L502194-03 MW-17C	Total/NA	Water	200.8	5773
240-219708-4	L502194-04 MW-17D	Total/NA	Water	200.8	5773
240-219708-5	L502194-05 MW-17E	Total/NA	Water	200.8	5773
240-219708-6	L502194-06 MW-18A	Total/NA	Water	200.8	5773
240-219708-7	L502194-07 MW-18B	Total/NA	Water	200.8	5773
240-219708-8	L502194-08 MW-18C	Total/NA	Water	200.8	5773
240-219708-9	L502194-09 MW-18D	Total/NA	Water	200.8	5773
240-219708-10	L502194-10 MWT-17A	Total/NA	Water	200.8	5773
240-219708-11	L502194-11 FB	Total/NA	Water	200.8	5773
MB 350-5773/7-A	Method Blank	Total/NA	Water	200.8	5773
LCS 350-5773/8-A	Lab Control Sample	Total/NA	Water	200.8	5773
240-219708-1 MS	L502194-01 MW-17A	Total/NA	Water	200.8	5773
240-219708-1 MSD	L502194-01 MW-17A	Total/NA	Water	200.8	5773
240-219708-7 MS	L502194-07 MW-18B	Total/NA	Water	200.8	5773
240-219708-7 MSD	L502194-07 MW-18B	Total/NA	Water	200.8	5773

Analysis Batch: 5844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-2	L502194-02 MW-17B	Total/NA	Water	200.8	5773

Prep Batch: 646631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-1	L502194-01 MW-17A	Total Recoverable	Water	200.7	
240-219708-2	L502194-02 MW-17B	Total Recoverable	Water	200.7	
240-219708-3	L502194-03 MW-17C	Total Recoverable	Water	200.7	
240-219708-4	L502194-04 MW-17D	Total Recoverable	Water	200.7	
240-219708-5	L502194-05 MW-17E	Total Recoverable	Water	200.7	
240-219708-6	L502194-06 MW-18A	Total Recoverable	Water	200.7	
240-219708-7	L502194-07 MW-18B	Total Recoverable	Water	200.7	

Metals (Continued)

Prep Batch: 646631 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-8	L502194-08 MW-18C	Total Recoverable	Water	200.7	
240-219708-9	L502194-09 MW-18D	Total Recoverable	Water	200.7	
240-219708-10	L502194-10 MWT-17A	Total Recoverable	Water	200.7	
240-219708-11	L502194-11 FB	Total Recoverable	Water	200.7	
MB 240-646631/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-646631/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-646631/3-A	Lab Control Sample	Total Recoverable	Water	200.7	
240-219708-1 MS	L502194-01 MW-17A	Total Recoverable	Water	200.7	
240-219708-1 MS	L502194-01 MW-17A	Total Recoverable	Water	200.7	
240-219708-1 MSD	L502194-01 MW-17A	Total Recoverable	Water	200.7	
240-219708-1 MSD	L502194-01 MW-17A	Total Recoverable	Water	200.7	
240-219708-4 MS	L502194-04 MW-17D	Total Recoverable	Water	200.7	
240-219708-4 MS	L502194-04 MW-17D	Total Recoverable	Water	200.7	
240-219708-4 MSD	L502194-04 MW-17D	Total Recoverable	Water	200.7	
240-219708-4 MSD	L502194-04 MW-17D	Total Recoverable	Water	200.7	

Prep Batch: 646633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-1	L502194-01 MW-17A	Total/NA	Water	245.1-1994 R3.0	
240-219708-2	L502194-02 MW-17B	Total/NA	Water	245.1-1994 R3.0	
240-219708-3	L502194-03 MW-17C	Total/NA	Water	245.1-1994 R3.0	
240-219708-4	L502194-04 MW-17D	Total/NA	Water	245.1-1994 R3.0	
240-219708-5	L502194-05 MW-17E	Total/NA	Water	245.1-1994 R3.0	
240-219708-6	L502194-06 MW-18A	Total/NA	Water	245.1-1994 R3.0	
240-219708-7	L502194-07 MW-18B	Total/NA	Water	245.1-1994 R3.0	
240-219708-8	L502194-08 MW-18C	Total/NA	Water	245.1-1994 R3.0	
240-219708-9	L502194-09 MW-18D	Total/NA	Water	245.1-1994 R3.0	
240-219708-10	L502194-10 MWT-17A	Total/NA	Water	245.1-1994 R3.0	
240-219708-11	L502194-11 FB	Total/NA	Water	245.1-1994 R3.0	
MB 240-646633/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-646633/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	
240-219708-1 MS	L502194-01 MW-17A	Total/NA	Water	245.1-1994 R3.0	
240-219708-1 MSD	L502194-01 MW-17A	Total/NA	Water	245.1-1994 R3.0	
240-219708-4 MS	L502194-04 MW-17D	Total/NA	Water	245.1-1994 R3.0	
240-219708-4 MSD	L502194-04 MW-17D	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 646866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-1	L502194-01 MW-17A	Total Recoverable	Water	200.7 R4.4-1994	646631
MB 240-646631/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	646631
LCS 240-646631/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	646631
240-219708-1 MS	L502194-01 MW-17A	Total Recoverable	Water	200.7 R4.4-1994	646631
240-219708-1 MSD	L502194-01 MW-17A	Total Recoverable	Water	200.7 R4.4-1994	646631

Analysis Batch: 646914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-1	L502194-01 MW-17A	Total/NA	Water	245.1-1994 R3.0	646633
240-219708-2	L502194-02 MW-17B	Total/NA	Water	245.1-1994 R3.0	646633
240-219708-3	L502194-03 MW-17C	Total/NA	Water	245.1-1994 R3.0	646633
240-219708-4	L502194-04 MW-17D	Total/NA	Water	245.1-1994 R3.0	646633
240-219708-5	L502194-05 MW-17E	Total/NA	Water	245.1-1994 R3.0	646633

Metals (Continued)

Analysis Batch: 646914 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-6	L502194-06 MW-18A	Total/NA	Water	245.1-1994 R3.0	646633
240-219708-7	L502194-07 MW-18B	Total/NA	Water	245.1-1994 R3.0	646633
240-219708-8	L502194-08 MW-18C	Total/NA	Water	245.1-1994 R3.0	646633
240-219708-9	L502194-09 MW-18D	Total/NA	Water	245.1-1994 R3.0	646633
240-219708-10	L502194-10 MWT-17A	Total/NA	Water	245.1-1994 R3.0	646633
240-219708-11	L502194-11 FB	Total/NA	Water	245.1-1994 R3.0	646633
MB 240-646633/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	646633
LCS 240-646633/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	646633
240-219708-1 MS	L502194-01 MW-17A	Total/NA	Water	245.1-1994 R3.0	646633
240-219708-1 MSD	L502194-01 MW-17A	Total/NA	Water	245.1-1994 R3.0	646633
240-219708-4 MS	L502194-04 MW-17D	Total/NA	Water	245.1-1994 R3.0	646633
240-219708-4 MSD	L502194-04 MW-17D	Total/NA	Water	245.1-1994 R3.0	646633

Analysis Batch: 647025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-2	L502194-02 MW-17B	Total Recoverable	Water	200.7 R4.4-1994	646631
240-219708-3	L502194-03 MW-17C	Total Recoverable	Water	200.7 R4.4-1994	646631
240-219708-4	L502194-04 MW-17D	Total Recoverable	Water	200.7 R4.4-1994	646631
240-219708-5	L502194-05 MW-17E	Total Recoverable	Water	200.7 R4.4-1994	646631
240-219708-6	L502194-06 MW-18A	Total Recoverable	Water	200.7 R4.4-1994	646631
240-219708-7	L502194-07 MW-18B	Total Recoverable	Water	200.7 R4.4-1994	646631
240-219708-8	L502194-08 MW-18C	Total Recoverable	Water	200.7 R4.4-1994	646631
240-219708-9	L502194-09 MW-18D	Total Recoverable	Water	200.7 R4.4-1994	646631
240-219708-10	L502194-10 MWT-17A	Total Recoverable	Water	200.7 R4.4-1994	646631
240-219708-11	L502194-11 FB	Total Recoverable	Water	200.7 R4.4-1994	646631
240-219708-4 MS	L502194-04 MW-17D	Total Recoverable	Water	200.7 R4.4-1994	646631
240-219708-4 MSD	L502194-04 MW-17D	Total Recoverable	Water	200.7 R4.4-1994	646631

Analysis Batch: 647046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-1	L502194-01 MW-17A	Total Recoverable	Water	200.8-1994 R5.4	646631
240-219708-2	L502194-02 MW-17B	Total Recoverable	Water	200.8-1994 R5.4	646631
240-219708-3	L502194-03 MW-17C	Total Recoverable	Water	200.8-1994 R5.4	646631
240-219708-4	L502194-04 MW-17D	Total Recoverable	Water	200.8-1994 R5.4	646631
240-219708-5	L502194-05 MW-17E	Total Recoverable	Water	200.8-1994 R5.4	646631
240-219708-6	L502194-06 MW-18A	Total Recoverable	Water	200.8-1994 R5.4	646631
240-219708-7	L502194-07 MW-18B	Total Recoverable	Water	200.8-1994 R5.4	646631
240-219708-8	L502194-08 MW-18C	Total Recoverable	Water	200.8-1994 R5.4	646631
240-219708-9	L502194-09 MW-18D	Total Recoverable	Water	200.8-1994 R5.4	646631
240-219708-10	L502194-10 MWT-17A	Total Recoverable	Water	200.8-1994 R5.4	646631
240-219708-11	L502194-11 FB	Total Recoverable	Water	200.8-1994 R5.4	646631
MB 240-646631/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	646631
LCS 240-646631/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	646631
240-219708-1 MS	L502194-01 MW-17A	Total Recoverable	Water	200.8-1994 R5.4	646631
240-219708-1 MSD	L502194-01 MW-17A	Total Recoverable	Water	200.8-1994 R5.4	646631
240-219708-4 MS	L502194-04 MW-17D	Total Recoverable	Water	200.8-1994 R5.4	646631
240-219708-4 MSD	L502194-04 MW-17D	Total Recoverable	Water	200.8-1994 R5.4	646631

Analysis Batch: 647231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-1	L502194-01 MW-17A	Total Recoverable	Water	2340 B-2021	

Metals (Continued)

Analysis Batch: 647231 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-2	L502194-02 MW-17B	Total Recoverable	Water	2340 B-2021	
240-219708-3	L502194-03 MW-17C	Total Recoverable	Water	2340 B-2021	
240-219708-4	L502194-04 MW-17D	Total Recoverable	Water	2340 B-2021	
240-219708-5	L502194-05 MW-17E	Total Recoverable	Water	2340 B-2021	
240-219708-6	L502194-06 MW-18A	Total Recoverable	Water	2340 B-2021	
240-219708-7	L502194-07 MW-18B	Total Recoverable	Water	2340 B-2021	
240-219708-8	L502194-08 MW-18C	Total Recoverable	Water	2340 B-2021	
240-219708-9	L502194-09 MW-18D	Total Recoverable	Water	2340 B-2021	
240-219708-10	L502194-10 MWT-17A	Total Recoverable	Water	2340 B-2021	
240-219708-11	L502194-11 FB	Total Recoverable	Water	2340 B-2021	

General Chemistry

Analysis Batch: 646765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-1	L502194-01 MW-17A	Total/NA	Water	2540D-2020	
240-219708-2	L502194-02 MW-17B	Total/NA	Water	2540D-2020	
240-219708-3	L502194-03 MW-17C	Total/NA	Water	2540D-2020	
240-219708-4	L502194-04 MW-17D	Total/NA	Water	2540D-2020	
240-219708-5	L502194-05 MW-17E	Total/NA	Water	2540D-2020	
MB 240-646765/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-646765/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 646882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-1	L502194-01 MW-17A	Total/NA	Water	300.0-1993 R2.1	
240-219708-1	L502194-01 MW-17A	Total/NA	Water	300.0-1993 R2.1	
240-219708-2	L502194-02 MW-17B	Total/NA	Water	300.0-1993 R2.1	
240-219708-2	L502194-02 MW-17B	Total/NA	Water	300.0-1993 R2.1	
240-219708-3	L502194-03 MW-17C	Total/NA	Water	300.0-1993 R2.1	
240-219708-3	L502194-03 MW-17C	Total/NA	Water	300.0-1993 R2.1	
240-219708-4	L502194-04 MW-17D	Total/NA	Water	300.0-1993 R2.1	
240-219708-5	L502194-05 MW-17E	Total/NA	Water	300.0-1993 R2.1	
240-219708-6	L502194-06 MW-18A	Total/NA	Water	300.0-1993 R2.1	
240-219708-7	L502194-07 MW-18B	Total/NA	Water	300.0-1993 R2.1	
240-219708-7	L502194-07 MW-18B	Total/NA	Water	300.0-1993 R2.1	
240-219708-8	L502194-08 MW-18C	Total/NA	Water	300.0-1993 R2.1	
240-219708-8	L502194-08 MW-18C	Total/NA	Water	300.0-1993 R2.1	
240-219708-9	L502194-09 MW-18D	Total/NA	Water	300.0-1993 R2.1	
240-219708-10	L502194-10 MWT-17A	Total/NA	Water	300.0-1993 R2.1	
240-219708-10	L502194-10 MWT-17A	Total/NA	Water	300.0-1993 R2.1	
240-219708-11	L502194-11 FB	Total/NA	Water	300.0-1993 R2.1	
MB 240-646882/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-646882/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-219708-11 MS	L502194-11 FB	Total/NA	Water	300.0-1993 R2.1	
240-219708-11 MSD	L502194-11 FB	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 646968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-6	L502194-06 MW-18A	Total/NA	Water	2540D-2020	
240-219708-7	L502194-07 MW-18B	Total/NA	Water	2540D-2020	

General Chemistry (Continued)

Analysis Batch: 646968 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-8	L502194-08 MW-18C	Total/NA	Water	2540D-2020	
240-219708-9	L502194-09 MW-18D	Total/NA	Water	2540D-2020	
240-219708-10	L502194-10 MWT-17A	Total/NA	Water	2540D-2020	
240-219708-11	L502194-11 FB	Total/NA	Water	2540D-2020	
MB 240-646968/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-646968/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 647107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-1	L502194-01 MW-17A	Total/NA	Water	2540 C-2020	
240-219708-2	L502194-02 MW-17B	Total/NA	Water	2540 C-2020	
240-219708-3	L502194-03 MW-17C	Total/NA	Water	2540 C-2020	
240-219708-4	L502194-04 MW-17D	Total/NA	Water	2540 C-2020	
240-219708-5	L502194-05 MW-17E	Total/NA	Water	2540 C-2020	
240-219708-6	L502194-06 MW-18A	Total/NA	Water	2540 C-2020	
240-219708-7	L502194-07 MW-18B	Total/NA	Water	2540 C-2020	
240-219708-8	L502194-08 MW-18C	Total/NA	Water	2540 C-2020	
240-219708-10	L502194-10 MWT-17A	Total/NA	Water	2540 C-2020	
240-219708-11	L502194-11 FB	Total/NA	Water	2540 C-2020	
MB 240-647107/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-647107/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-219708-4 DU	L502194-04 MW-17D	Total/NA	Water	2540 C-2020	

Analysis Batch: 647166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-9	L502194-09 MW-18D	Total/NA	Water	2540 C-2020	
MB 240-647166/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-647166/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 647464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-1	L502194-01 MW-17A	Total/NA	Water	2320 B-2021	
240-219708-2	L502194-02 MW-17B	Total/NA	Water	2320 B-2021	
240-219708-3	L502194-03 MW-17C	Total/NA	Water	2320 B-2021	
240-219708-4	L502194-04 MW-17D	Total/NA	Water	2320 B-2021	
240-219708-5	L502194-05 MW-17E	Total/NA	Water	2320 B-2021	
240-219708-6	L502194-06 MW-18A	Total/NA	Water	2320 B-2021	
240-219708-7	L502194-07 MW-18B	Total/NA	Water	2320 B-2021	
240-219708-8	L502194-08 MW-18C	Total/NA	Water	2320 B-2021	
240-219708-9	L502194-09 MW-18D	Total/NA	Water	2320 B-2021	
240-219708-10	L502194-10 MWT-17A	Total/NA	Water	2320 B-2021	
240-219708-11	L502194-11 FB	Total/NA	Water	2320 B-2021	
MB 240-647464/46	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-647464/66	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-647464/86	Method Blank	Total/NA	Water	2320 B-2021	

Rad

Prep Batch: 706363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-1	L502194-01 MW-17A	Total/NA	Water	PrecSep-21	

Rad (Continued)

Prep Batch: 706363 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-2	L502194-02 MW-17B	Total/NA	Water	PrecSep-21	
240-219708-3	L502194-03 MW-17C	Total/NA	Water	PrecSep-21	
240-219708-4	L502194-04 MW-17D	Total/NA	Water	PrecSep-21	
240-219708-5	L502194-05 MW-17E	Total/NA	Water	PrecSep-21	
240-219708-6	L502194-06 MW-18A	Total/NA	Water	PrecSep-21	
240-219708-7	L502194-07 MW-18B	Total/NA	Water	PrecSep-21	
240-219708-8	L502194-08 MW-18C	Total/NA	Water	PrecSep-21	
240-219708-9	L502194-09 MW-18D	Total/NA	Water	PrecSep-21	
240-219708-10	L502194-10 MWT-17A	Total/NA	Water	PrecSep-21	
240-219708-11	L502194-11 FB	Total/NA	Water	PrecSep-21	
MB 160-706363/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-706363/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 706366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219708-1	L502194-01 MW-17A	Total/NA	Water	PrecSep_0	
240-219708-2	L502194-02 MW-17B	Total/NA	Water	PrecSep_0	
240-219708-3	L502194-03 MW-17C	Total/NA	Water	PrecSep_0	
240-219708-4	L502194-04 MW-17D	Total/NA	Water	PrecSep_0	
240-219708-5	L502194-05 MW-17E	Total/NA	Water	PrecSep_0	
240-219708-6	L502194-06 MW-18A	Total/NA	Water	PrecSep_0	
240-219708-7	L502194-07 MW-18B	Total/NA	Water	PrecSep_0	
240-219708-8	L502194-08 MW-18C	Total/NA	Water	PrecSep_0	
240-219708-9	L502194-09 MW-18D	Total/NA	Water	PrecSep_0	
240-219708-10	L502194-10 MWT-17A	Total/NA	Water	PrecSep_0	
240-219708-11	L502194-11 FB	Total/NA	Water	PrecSep_0	
MB 160-706366/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-706366/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-219708-1

Client Sample ID: L502194-01 MW-17A

Lab Sample ID: 240-219708-1

Date Collected: 02/27/25 09:28

Matrix: Water

Date Received: 03/01/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	646866	AJC	EET CLE	03/04/25 20:04
Total/NA	Prep	200.8			5773	CW	EET SSM	03/25/25 14:42
Total/NA	Analysis	200.8		1	5820	CW	EET SSM	03/26/25 15:24
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	647046	S4FJ	EET CLE	03/05/25 17:26
Total Recoverable	Analysis	2340 B-2021		1	647231	KLC	EET CLE	03/07/25 08:56
Total/NA	Prep	245.1-1994 R3.0			646633	BN	EET CLE	03/03/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	646914	GEV	EET CLE	03/04/25 15:36
Total/NA	Analysis	2320 B-2021		1	647464	PQD2	EET CLE	03/08/25 01:33
Total/NA	Analysis	2540 C-2020		1	647107	TAV2	EET CLE	03/06/25 10:24
Total/NA	Analysis	2540D-2020		1	646765	TAV2	EET CLE	03/04/25 07:47
Total/NA	Analysis	300.0-1993 R2.1		1	646882	JMR	EET CLE	03/05/25 18:09
Total/NA	Analysis	300.0-1993 R2.1		5	646882	JMR	EET CLE	03/05/25 18:30
Total/NA	Prep	PrecSep-21			706363	OGC	EET SL	03/06/25 07:45
Total/NA	Analysis	903.0		1	710059	FLC	EET SL	03/31/25 22:11
Total/NA	Prep	PrecSep_0			706366	OGC	EET SL	03/06/25 07:47
Total/NA	Analysis	904.0		1	709817	FLC	EET SL	03/28/25 14:15
Total/NA	Analysis	Ra226_Ra228 Pos		1	710138	EMH	EET SL	03/31/25 19:07

Client Sample ID: L502194-02 MW-17B

Lab Sample ID: 240-219708-2

Date Collected: 02/27/25 10:59

Matrix: Water

Date Received: 03/01/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	647025	AJC	EET CLE	03/05/25 19:49
Total/NA	Prep	200.8			5773	CW	EET SSM	03/25/25 14:42
Total/NA	Analysis	200.8		1	5820	CW	EET SSM	03/26/25 16:10
Total/NA	Prep	200.8			5773	CW	EET SSM	03/25/25 14:42
Total/NA	Analysis	200.8		5	5844	CW	EET SSM	03/27/25 12:49
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	647046	S4FJ	EET CLE	03/05/25 18:10
Total Recoverable	Analysis	2340 B-2021		1	647231	KLC	EET CLE	03/07/25 09:02
Total/NA	Prep	245.1-1994 R3.0			646633	BN	EET CLE	03/03/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	646914	GEV	EET CLE	03/04/25 16:05
Total/NA	Analysis	2320 B-2021		1	647464	PQD2	EET CLE	03/08/25 01:39
Total/NA	Analysis	2540 C-2020		1	647107	TAV2	EET CLE	03/06/25 10:24
Total/NA	Analysis	2540D-2020		1	646765	TAV2	EET CLE	03/04/25 07:47
Total/NA	Analysis	300.0-1993 R2.1		1	646882	JMR	EET CLE	03/05/25 18:51
Total/NA	Analysis	300.0-1993 R2.1		5	646882	JMR	EET CLE	03/05/25 19:12
Total/NA	Prep	PrecSep-21			706363	OGC	EET SL	03/06/25 07:45
Total/NA	Analysis	903.0		1	710059	FLC	EET SL	03/31/25 22:11

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-219708-1

Client Sample ID: L502194-02 MW-17B

Lab Sample ID: 240-219708-2

Date Collected: 02/27/25 10:59

Matrix: Water

Date Received: 03/01/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep_0			706366	OGC	EET SL	03/06/25 07:47
Total/NA	Analysis	904.0		1	709817	FLC	EET SL	03/28/25 14:15
Total/NA	Analysis	Ra226_Ra228 Pos		1	710138	EMH	EET SL	03/31/25 19:07

Client Sample ID: L502194-03 MW-17C

Lab Sample ID: 240-219708-3

Date Collected: 02/27/25 12:37

Matrix: Water

Date Received: 03/01/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	647025	AJC	EET CLE	03/05/25 19:53
Total/NA	Prep	200.8			5773	CW	EET SSM	03/25/25 14:42
Total/NA	Analysis	200.8		1	5820	CW	EET SSM	03/26/25 16:13
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	647046	S4FJ	EET CLE	03/05/25 18:13
Total Recoverable	Analysis	2340 B-2021		1	647231	KLC	EET CLE	03/07/25 09:02
Total/NA	Prep	245.1-1994 R3.0			646633	BN	EET CLE	03/03/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	646914	GEV	EET CLE	03/04/25 16:06
Total/NA	Analysis	2320 B-2021		1	647464	PQD2	EET CLE	03/08/25 01:44
Total/NA	Analysis	2540 C-2020		1	647107	TAV2	EET CLE	03/06/25 10:24
Total/NA	Analysis	2540D-2020		1	646765	TAV2	EET CLE	03/04/25 07:47
Total/NA	Analysis	300.0-1993 R2.1		1	646882	JMR	EET CLE	03/05/25 19:33
Total/NA	Analysis	300.0-1993 R2.1		5	646882	JMR	EET CLE	03/05/25 20:37
Total/NA	Prep	PrecSep-21			706363	OGC	EET SL	03/06/25 07:45
Total/NA	Analysis	903.0		1	710059	FLC	EET SL	03/31/25 22:11
Total/NA	Prep	PrecSep_0			706366	OGC	EET SL	03/06/25 07:47
Total/NA	Analysis	904.0		1	709817	FLC	EET SL	03/28/25 14:15
Total/NA	Analysis	Ra226_Ra228 Pos		1	710138	EMH	EET SL	03/31/25 19:07

Client Sample ID: L502194-04 MW-17D

Lab Sample ID: 240-219708-4

Date Collected: 02/27/25 13:59

Matrix: Water

Date Received: 03/01/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	647025	AJC	EET CLE	03/05/25 18:50
Total/NA	Prep	200.8			5773	CW	EET SSM	03/25/25 14:42
Total/NA	Analysis	200.8		1	5820	CW	EET SSM	03/26/25 16:16
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	647046	S4FJ	EET CLE	03/05/25 17:34
Total Recoverable	Analysis	2340 B-2021		1	647231	KLC	EET CLE	03/07/25 09:02
Total/NA	Prep	245.1-1994 R3.0			646633	BN	EET CLE	03/03/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	646914	GEV	EET CLE	03/04/25 15:41
Total/NA	Analysis	2320 B-2021		1	647464	PQD2	EET CLE	03/08/25 01:49

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-219708-1

Client Sample ID: L502194-04 MW-17D

Lab Sample ID: 240-219708-4

Date Collected: 02/27/25 13:59
Matrix: Water
Date Received: 03/01/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540 C-2020		1	647107	TAV2	EET CLE	03/06/25 10:24
Total/NA	Analysis	2540D-2020		1	646765	TAV2	EET CLE	03/04/25 07:47
Total/NA	Analysis	300.0-1993 R2.1		1	646882	JMR	EET CLE	03/05/25 20:58
Total/NA	Prep	PrecSep-21			706363	OGC	EET SL	03/06/25 07:45
Total/NA	Analysis	903.0		1	710059	FLC	EET SL	03/31/25 22:11
Total/NA	Prep	PrecSep_0			706366	OGC	EET SL	03/06/25 07:47
Total/NA	Analysis	904.0		1	709817	FLC	EET SL	03/28/25 14:15
Total/NA	Analysis	Ra226_Ra228 Pos		1	710138	EMH	EET SL	03/31/25 19:07

Client Sample ID: L502194-05 MW-17E

Lab Sample ID: 240-219708-5

Date Collected: 02/27/25 15:13
Matrix: Water
Date Received: 03/01/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	647025	AJC	EET CLE	03/05/25 19:57
Total/NA	Prep	200.8			5773	CW	EET SSM	03/25/25 14:42
Total/NA	Analysis	200.8		1	5820	CW	EET SSM	03/26/25 16:24
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	647046	S4FJ	EET CLE	03/05/25 18:16
Total Recoverable	Analysis	2340 B-2021		1	647231	KLC	EET CLE	03/07/25 09:02
Total/NA	Prep	245.1-1994 R3.0			646633	BN	EET CLE	03/03/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	646914	GEV	EET CLE	03/04/25 16:08
Total/NA	Analysis	2320 B-2021		1	647464	PQD2	EET CLE	03/08/25 02:05
Total/NA	Analysis	2540 C-2020		1	647107	TAV2	EET CLE	03/06/25 10:24
Total/NA	Analysis	2540D-2020		1	646765	TAV2	EET CLE	03/04/25 07:47
Total/NA	Analysis	300.0-1993 R2.1		1	646882	JMR	EET CLE	03/05/25 21:19
Total/NA	Prep	PrecSep-21			706363	OGC	EET SL	03/06/25 07:45
Total/NA	Analysis	903.0		1	710059	FLC	EET SL	03/31/25 22:11
Total/NA	Prep	PrecSep_0			706366	OGC	EET SL	03/06/25 07:47
Total/NA	Analysis	904.0		1	709817	FLC	EET SL	03/28/25 14:16
Total/NA	Analysis	Ra226_Ra228 Pos		1	710138	EMH	EET SL	03/31/25 19:07

Client Sample ID: L502194-06 MW-18A

Lab Sample ID: 240-219708-6

Date Collected: 02/27/25 08:53
Matrix: Water
Date Received: 03/01/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	647025	AJC	EET CLE	03/05/25 20:02
Total/NA	Prep	200.8			5773	CW	EET SSM	03/25/25 14:42
Total/NA	Analysis	200.8		1	5820	CW	EET SSM	03/26/25 16:27
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	647046	S4FJ	EET CLE	03/05/25 18:19

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-219708-1

Client Sample ID: L502194-06 MW-18A

Lab Sample ID: 240-219708-6

Date Collected: 02/27/25 08:53
Matrix: Water
Date Received: 03/01/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Analysis	2340 B-2021		1	647231	KLC	EET CLE	03/07/25 09:02
Total/NA	Prep	245.1-1994 R3.0			646633	BN	EET CLE	03/03/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	646914	GEV	EET CLE	03/04/25 16:10
Total/NA	Analysis	2320 B-2021		1	647464	PQD2	EET CLE	03/08/25 02:21
Total/NA	Analysis	2540 C-2020		1	647107	TAV2	EET CLE	03/06/25 10:24
Total/NA	Analysis	2540D-2020		1	646968	PQD2	EET CLE	03/05/25 10:43
Total/NA	Analysis	300.0-1993 R2.1		1	646882	JMR	EET CLE	03/05/25 21:40
Total/NA	Prep	PrecSep-21			706363	OGC	EET SL	03/06/25 07:45
Total/NA	Analysis	903.0		1	710059	FLC	EET SL	03/31/25 22:11
Total/NA	Prep	PrecSep_0			706366	OGC	EET SL	03/06/25 07:47
Total/NA	Analysis	904.0		1	709819	FLC	EET SL	03/28/25 14:10
Total/NA	Analysis	Ra226_Ra228 Pos		1	710138	EMH	EET SL	03/31/25 19:07

Client Sample ID: L502194-07 MW-18B

Lab Sample ID: 240-219708-7

Date Collected: 02/27/25 10:13
Matrix: Water
Date Received: 03/01/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	647025	AJC	EET CLE	03/05/25 20:06
Total/NA	Prep	200.8			5773	CW	EET SSM	03/25/25 14:42
Total/NA	Analysis	200.8		1	5820	CW	EET SSM	03/26/25 15:40
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	647046	S4FJ	EET CLE	03/05/25 18:21
Total Recoverable	Analysis	2340 B-2021		1	647231	KLC	EET CLE	03/07/25 09:02
Total/NA	Prep	245.1-1994 R3.0			646633	BN	EET CLE	03/03/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	646914	GEV	EET CLE	03/04/25 16:12
Total/NA	Analysis	2320 B-2021		1	647464	PQD2	EET CLE	03/08/25 02:26
Total/NA	Analysis	2540 C-2020		1	647107	TAV2	EET CLE	03/06/25 10:24
Total/NA	Analysis	2540D-2020		1	646968	PQD2	EET CLE	03/05/25 10:43
Total/NA	Analysis	300.0-1993 R2.1		1	646882	JMR	EET CLE	03/05/25 22:22
Total/NA	Analysis	300.0-1993 R2.1		5	646882	JMR	EET CLE	03/05/25 22:44
Total/NA	Prep	PrecSep-21			706363	OGC	EET SL	03/06/25 07:45
Total/NA	Analysis	903.0		1	710059	FLC	EET SL	03/31/25 22:11
Total/NA	Prep	PrecSep_0			706366	OGC	EET SL	03/06/25 07:47
Total/NA	Analysis	904.0		1	709819	FLC	EET SL	03/28/25 14:10
Total/NA	Analysis	Ra226_Ra228 Pos		1	710138	EMH	EET SL	03/31/25 19:07

Client Sample ID: L502194-08 MW-18C

Lab Sample ID: 240-219708-8

Date Collected: 02/27/25 11:41

Matrix: Water

Date Received: 03/01/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	647025	AJC	EET CLE	03/05/25 20:19
Total/NA	Prep	200.8			5773	CW	EET SSM	03/25/25 14:42
Total/NA	Analysis	200.8		1	5820	CW	EET SSM	03/26/25 16:30
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	647046	S4FJ	EET CLE	03/05/25 18:30
Total Recoverable	Analysis	2340 B-2021		1	647231	KLC	EET CLE	03/07/25 09:02
Total/NA	Prep	245.1-1994 R3.0			646633	BN	EET CLE	03/03/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	646914	GEV	EET CLE	03/04/25 16:17
Total/NA	Analysis	2320 B-2021		1	647464	PQD2	EET CLE	03/08/25 02:31
Total/NA	Analysis	2540 C-2020		1	647107	TAV2	EET CLE	03/06/25 10:24
Total/NA	Analysis	2540D-2020		1	646968	PQD2	EET CLE	03/05/25 10:43
Total/NA	Analysis	300.0-1993 R2.1		1	646882	JMR	EET CLE	03/05/25 23:05
Total/NA	Analysis	300.0-1993 R2.1		5	646882	JMR	EET CLE	03/05/25 23:26
Total/NA	Prep	PrecSep-21			706363	OGC	EET SL	03/06/25 07:45
Total/NA	Analysis	903.0		1	710059	FLC	EET SL	03/31/25 22:12
Total/NA	Prep	PrecSep_0			706366	OGC	EET SL	03/06/25 07:47
Total/NA	Analysis	904.0		1	709819	FLC	EET SL	03/28/25 14:10
Total/NA	Analysis	Ra226_Ra228 Pos		1	710138	EMH	EET SL	03/31/25 19:07

Client Sample ID: L502194-09 MW-18D

Lab Sample ID: 240-219708-9

Date Collected: 02/27/25 13:01

Matrix: Water

Date Received: 03/01/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	647025	AJC	EET CLE	03/05/25 20:23
Total/NA	Prep	200.8			5773	CW	EET SSM	03/25/25 14:42
Total/NA	Analysis	200.8		1	5820	CW	EET SSM	03/26/25 16:32
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	647046	S4FJ	EET CLE	03/05/25 18:33
Total Recoverable	Analysis	2340 B-2021		1	647231	KLC	EET CLE	03/07/25 09:02
Total/NA	Prep	245.1-1994 R3.0			646633	BN	EET CLE	03/03/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	646914	GEV	EET CLE	03/04/25 16:18
Total/NA	Analysis	2320 B-2021		1	647464	PQD2	EET CLE	03/08/25 02:36
Total/NA	Analysis	2540 C-2020		1	647166	TAV2	EET CLE	03/06/25 14:42
Total/NA	Analysis	2540D-2020		1	646968	PQD2	EET CLE	03/05/25 10:43
Total/NA	Analysis	300.0-1993 R2.1		1	646882	JMR	EET CLE	03/05/25 23:47
Total/NA	Prep	PrecSep-21			706363	OGC	EET SL	03/06/25 07:45
Total/NA	Analysis	903.0		1	710059	FLC	EET SL	03/31/25 22:12
Total/NA	Prep	PrecSep_0			706366	OGC	EET SL	03/06/25 07:47
Total/NA	Analysis	904.0		1	709819	FLC	EET SL	03/28/25 14:10
Total/NA	Analysis	Ra226_Ra228 Pos		1	710138	EMH	EET SL	03/31/25 19:07

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-219708-1

Client Sample ID: L502194-10 MWT-17A

Lab Sample ID: 240-219708-10

Date Collected: 02/27/25 09:28

Matrix: Water

Date Received: 03/01/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	647025	AJC	EET CLE	03/05/25 20:27
Total/NA	Prep	200.8			5773	CW	EET SSM	03/25/25 14:42
Total/NA	Analysis	200.8		1	5820	CW	EET SSM	03/26/25 16:35
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	647046	S4FJ	EET CLE	03/05/25 18:35
Total Recoverable	Analysis	2340 B-2021		1	647231	KLC	EET CLE	03/07/25 09:02
Total/NA	Prep	245.1-1994 R3.0			646633	BN	EET CLE	03/03/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	646914	GEV	EET CLE	03/04/25 16:20
Total/NA	Analysis	2320 B-2021		1	647464	PQD2	EET CLE	03/08/25 02:42
Total/NA	Analysis	2540 C-2020		1	647107	TAV2	EET CLE	03/06/25 10:24
Total/NA	Analysis	2540D-2020		1	646968	PQD2	EET CLE	03/05/25 10:43
Total/NA	Analysis	300.0-1993 R2.1		1	646882	JMR	EET CLE	03/06/25 01:12
Total/NA	Analysis	300.0-1993 R2.1		5	646882	JMR	EET CLE	03/06/25 01:33
Total/NA	Prep	PrecSep-21			706363	OGC	EET SL	03/06/25 07:45
Total/NA	Analysis	903.0		1	710061	FLC	EET SL	03/31/25 22:05
Total/NA	Prep	PrecSep_0			706366	OGC	EET SL	03/06/25 07:47
Total/NA	Analysis	904.0		1	709819	FLC	EET SL	03/28/25 14:10
Total/NA	Analysis	Ra226_Ra228 Pos		1	710138	EMH	EET SL	03/31/25 19:07

Client Sample ID: L502194-11 FB

Lab Sample ID: 240-219708-11

Date Collected: 02/27/25 07:45

Matrix: Water

Date Received: 03/01/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	647025	AJC	EET CLE	03/05/25 20:31
Total/NA	Prep	200.8			5773	CW	EET SSM	03/25/25 14:42
Total/NA	Analysis	200.8		1	5820	CW	EET SSM	03/26/25 16:38
Total Recoverable	Prep	200.7			646631	BN	EET CLE	03/03/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	647046	S4FJ	EET CLE	03/05/25 18:38
Total Recoverable	Analysis	2340 B-2021		1	647231	KLC	EET CLE	03/07/25 09:02
Total/NA	Prep	245.1-1994 R3.0			646633	BN	EET CLE	03/03/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	646914	GEV	EET CLE	03/04/25 16:22
Total/NA	Analysis	2320 B-2021		1	647464	PQD2	EET CLE	03/08/25 02:47
Total/NA	Analysis	2540 C-2020		1	647107	TAV2	EET CLE	03/06/25 10:24
Total/NA	Analysis	2540D-2020		1	646968	PQD2	EET CLE	03/05/25 10:43
Total/NA	Analysis	300.0-1993 R2.1		1	646882	JMR	EET CLE	03/06/25 01:54
Total/NA	Prep	PrecSep-21			706363	OGC	EET SL	03/06/25 07:45
Total/NA	Analysis	903.0		1	710061	FLC	EET SL	03/31/25 22:05
Total/NA	Prep	PrecSep_0			706366	OGC	EET SL	03/06/25 07:47
Total/NA	Analysis	904.0		1	709819	FLC	EET SL	03/28/25 14:10
Total/NA	Analysis	Ra226_Ra228 Pos		1	710138	EMH	EET SL	03/31/25 19:07

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-219708-1

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Job ID: 240-219708-1
Project/Site: Erickson Projects

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-08-26
Florida	NELAP	E87575	06-30-25
Louisiana (All)	NELAP	03073	06-30-25
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-25
New York	NELAP	11662	03-31-25
Oregon	NELAP	4167-008	07-07-25
US Fish & Wildlife	US Federal Programs	A20571	06-30-25
USDA	US Federal Programs	525-23-4-22573	04-08-25
Washington	State	C788-23a	07-13-25
Wisconsin	State	399133460	07-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	04-21-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-06-25
ANAB	ISO/IEC 17025	L2305	04-08-25
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Job ID: 240-219708-1
Project/Site: Erickson Projects

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-25
North Carolina (DW)	State	29700	06-08-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-01-25
Texas	NELAP	T104704193	06-25-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	05-14-25
West Virginia DEP	State	381	10-31-25

Chain of Custody

Return Samples to: Eurofins Michigan
38855 Hills Tech Dr.
Farmington Hills, MI 48331

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:

Project Number:
24034575

Sample State: MI

Special Instructions:
Need EDD and Level 4 report.

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
Jennifer Caporale

Description:
Erickson Projects

Site Name:
Erickson Projects

240-219708 COC

Samples

Methods and Bottles

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	245.1 Mercury	2540C_Calcd Total Dissolved Solids	2320B Bicarbonate & Carbonate Alkalinity	200.8_CWA Custom List 2: 2-3 Metals	2540D Solids, Total Suspended (TSS)	200.7 Total Boron	SM2340B Total Hardness (as CaCO3) by calculation	903.0 Standard Target List	Ra226_228AS_P Combined Radium-226 and Radium-228	200.8 Project List (19)	300.0_28D Chloride, Fluoride & Sulfate	904.0 Standard Target List			Plastic 500ml - with Nitric Acid	Plastic 60 mL - unpreserved	Plastic 250ml - with Nitric Acid	Plastic 500ml - unpreserved	Plastic 1 liter - Nitric Acid	Plastic 1 liter - unpreserved	Total Bottles For Sample
1	L502194-01 MW-17A	Grab	Water	02/27/25 09:28				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
2	L502194-02 MW-17B	Grab	Water	02/27/25 10:59				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
3	L502194-03 MW-17C	Grab	Water	02/27/25 12:37				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
4	L502194-04 MW-17D	Grab	Water	02/27/25 13:59				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
5	L502194-05 MW-17E	Grab	Water	02/27/25 15:13				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
6	L502194-06 MW-18A	Grab	Water	02/27/25 08:53				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
7	L502194-07 MW-18B	Grab	Water	02/27/25 10:13				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
8	L502194-08 MW-18C	Grab	Water	02/27/25 11:41																								
9	L502194-09 MW-18D	Grab	Water	02/27/25 13:01				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
10	L502194-10 MWT-17A	Grab	Water	02/27/25 09:28				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
11	L502194-11 FB	Grab	Water	02/27/25 07:45				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8

Chain of Custody Number: **363992**

*H -- Analysis on hold.

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By	Date/Time	Samples Relinquished By	Date/Time.		
Jennifer Caporale	02/28/25 10:04	Jennifer Caporale	02/28/25 10:04	JMOROSKO 3/1/25 0800	

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250228A001								
MIC20250228A001								
MIC20250228A003								
MIC20250228A003								

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client Lansing Board of Water & Light Site Name _____ Cooler unpacked by: KMartin

Cooler Received on (3/1) 3:44 3/1/25 Opened on 3/1/25

FedEx· 1st Grd Exp UPS FAS (Waypoint) Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used. (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT· (Wet Ice) Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☒ See Multiple Cooler Form

IR GUN # 21 (CF +1.1 °C) Observed Cooler Temp _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes)	No
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes)	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
-Were tamper/custody seals intact and uncompromised?	(Yes)	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	(No)
4. Did custody papers accompany the sample(s)?	(Yes)	No
5 Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	(Yes)	No
7 Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes)	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
11 Sufficient quantity received to perform indicated analyses?	(Yes)	No
12 Are these work share samples and all listed on the COC?	Yes	(No)
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	(Yes)	No NA pH Strip Lot# HC448976
14 Were VOAs on the COC?	Yes	(No)
15 Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this	Yes	No (NA)
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	(No)
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	(No)

Tests that are not checked for pH by Receiving·
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by·

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container
Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory
Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen. _____

Login # : _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 21	0 8	1 9	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 1	4 4	5 5	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 1	3 0	4 1	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 1	1 8	2 9	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice

3/1/2025

Login Container Summary Report

240-219708

7/25/2025 (Rev. 1)

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L502194-01 MW-17A	240-219708-I-1	Plastic 60 mL - unpreserved				
L502194-01 MW-17A	240-219708-J-1	Plastic 60 mL - unpreserved				
L502194-01 MW-17A	240-219708-K-1	Plastic 250ml - with Nitric Acid	<2			
L502194-01 MW-17A	240-219708-L-1	Plastic 500ml - unpreserved				
L502194-01 MW-17A	240-219708-M-1	Plastic 500ml - with Nitric Acid	<2			
L502194-01 MW-17A	240-219708-N-1	Plastic 1 liter - unpreserved				
L502194-01 MW-17A	240-219708-O-1	Plastic 1 liter - Nitric Acid				
L502194-01 MW-17A	240-219708-P-1	Plastic 1 liter - Nitric Acid				
L502194-02 MW-17B	240-219708-I-2	Plastic 60 mL - unpreserved				
L502194-02 MW-17B	240-219708-J-2	Plastic 60 mL - unpreserved				
L502194-02 MW-17B	240-219708-K-2	Plastic 250ml - with Nitric Acid	<2			
L502194-02 MW-17B	240-219708-L-2	Plastic 500ml - unpreserved				
L502194-02 MW-17B	240-219708-M-2	Plastic 500ml - with Nitric Acid	<2			
L502194-02 MW-17B	240-219708-N-2	Plastic 1 liter - unpreserved				
L502194-02 MW-17B	240-219708-O-2	Plastic 1 liter - Nitric Acid				
L502194-02 MW-17B	240-219708-P-2	Plastic 1 liter - Nitric Acid				
L502194-03 MW-17C	240-219708-I-3	Plastic 60 mL - unpreserved				
L502194-03 MW-17C	240-219708-J-3	Plastic 60 mL - unpreserved				
L502194-03 MW-17C	240-219708-K-3	Plastic 250ml - with Nitric Acid	<2			
L502194-03 MW-17C	240-219708-L-3	Plastic 500ml - unpreserved				
L502194-03 MW-17C	240-219708-M-3	Plastic 500ml - with Nitric Acid	<2			
L502194-03 MW-17C	240-219708-N-3	Plastic 1 liter - unpreserved				
L502194-03 MW-17C	240-219708-O-3	Plastic 1 liter - Nitric Acid				
L502194-03 MW-17C	240-219708-P-3	Plastic 1 liter - Nitric Acid				
L502194-04 MW-17D	240-219708-I-4	Plastic 60 mL - unpreserved				
L502194-04 MW-17D	240-219708-J-4	Plastic 60 mL - unpreserved				
L502194-04 MW-17D	240-219708-K-4	Plastic 250ml - with Nitric Acid	<2			
L502194-04 MW-17D	240-219708-L-4	Plastic 500ml - unpreserved				
L502194-04 MW-17D	240-219708-M-4	Plastic 500ml - with Nitric Acid	<2			
L502194-04 MW-17D	240-219708-N-4	Plastic 1 liter - unpreserved				
L502194-04 MW-17D	240-219708-O-4	Plastic 1 liter - Nitric Acid				
L502194-04 MW-17D	240-219708-P-4	Plastic 1 liter - Nitric Acid				
L502194-05 MW-17E	240-219708-I-5	Plastic 60 mL - unpreserved				
L502194-05 MW-17E	240-219708-J-5	Plastic 60 mL - unpreserved				
L502194-05 MW-17E	240-219708-K-5	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L502194-05 MW-17E	240-219708-L-5	Plastic 500ml - unpreserved				
L502194-05 MW-17E	240-219708-M-5	Plastic 500ml - with Nitric Acid	<2			
L502194-05 MW-17E	240-219708-N-5	Plastic 1 liter - unpreserved				
L502194-05 MW-17E	240-219708-O-5	Plastic 1 liter - Nitric Acid				
L502194-05 MW-17E	240-219708-P-5	Plastic 1 liter - Nitric Acid				
L502194-06 MW-18A	240-219708-I-6	Plastic 60 mL - unpreserved				
L502194-06 MW-18A	240-219708-J-6	Plastic 60 mL - unpreserved				
L502194-06 MW-18A	240-219708-K-6	Plastic 250ml - with Nitric Acid	<2			
L502194-06 MW-18A	240-219708-L-6	Plastic 500ml - unpreserved				
L502194-06 MW-18A	240-219708-M-6	Plastic 500ml - with Nitric Acid	<2			
L502194-06 MW-18A	240-219708-N-6	Plastic 1 liter - unpreserved				
L502194-06 MW-18A	240-219708-O-6	Plastic 1 liter - Nitric Acid				
L502194-06 MW-18A	240-219708-P-6	Plastic 1 liter - Nitric Acid				
L502194-07 MW-18B	240-219708-I-7	Plastic 60 mL - unpreserved				
L502194-07 MW-18B	240-219708-J-7	Plastic 60 mL - unpreserved				
L502194-07 MW-18B	240-219708-K-7	Plastic 250ml - with Nitric Acid	<2			
L502194-07 MW-18B	240-219708-L-7	Plastic 500ml - unpreserved				
L502194-07 MW-18B	240-219708-M-7	Plastic 500ml - with Nitric Acid	<2			
L502194-07 MW-18B	240-219708-N-7	Plastic 1 liter - unpreserved				
L502194-07 MW-18B	240-219708-O-7	Plastic 1 liter - Nitric Acid				
L502194-07 MW-18B	240-219708-P-7	Plastic 1 liter - Nitric Acid				
L502194-08 MW-18C	240-219708-I-8	Plastic 60 mL - unpreserved				
L502194-08 MW-18C	240-219708-J-8	Plastic 60 mL - unpreserved				
L502194-08 MW-18C	240-219708-K-8	Plastic 250ml - with Nitric Acid	<2			
L502194-08 MW-18C	240-219708-L-8	Plastic 500ml - unpreserved				
L502194-08 MW-18C	240-219708-M-8	Plastic 500ml - with Nitric Acid	<2			
L502194-08 MW-18C	240-219708-N-8	Plastic 1 liter - unpreserved				
L502194-08 MW-18C	240-219708-O-8	Plastic 1 liter - Nitric Acid				
L502194-08 MW-18C	240-219708-P-8	Plastic 1 liter - Nitric Acid				
L502194-09 MW-18D	240-219708-I-9	Plastic 60 mL - unpreserved				
L502194-09 MW-18D	240-219708-J-9	Plastic 60 mL - unpreserved				
L502194-09 MW-18D	240-219708-K-9	Plastic 250ml - with Nitric Acid	<2			
L502194-09 MW-18D	240-219708-L-9	Plastic 500ml - unpreserved				
L502194-09 MW-18D	240-219708-M-9	Plastic 500ml - with Nitric Acid	<2			
L502194-09 MW-18D	240-219708-N-9	Plastic 1 liter - unpreserved				
L502194-09 MW-18D	240-219708-O-9	Plastic 1 liter - Nitric Acid				
L502194-09 MW-18D	240-219708-P-9	Plastic 1 liter - Nitric Acid				
L502194-10 MWT-17A	240-219708-I-10	Plastic 60 mL - unpreserved				

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L502194-10 MWT-17A	240-219708-J-10	Plastic 60 mL - unpreserved				
L502194-10 MWT-17A	240-219708-K-10	Plastic 250ml - with Nitric Acid	<2			
L502194-10 MWT-17A	240-219708-L-10	Plastic 500ml - unpreserved				
L502194-10 MWT-17A	240-219708-M-10	Plastic 500ml - with Nitric Acid	<2			
L502194-10 MWT-17A	240-219708-N-10	Plastic 1 liter - unpreserved				
L502194-10 MWT-17A	240-219708-O-10	Plastic 1 liter - Nitric Acid				
L502194-10 MWT-17A	240-219708-P-10	Plastic 1 liter - Nitric Acid				
L502194-11 FB	240-219708-I-11	Plastic 60 mL - unpreserved				
L502194-11 FB	240-219708-J-11	Plastic 60 mL - unpreserved				
L502194-11 FB	240-219708-K-11	Plastic 250ml - with Nitric Acid	<2			
L502194-11 FB	240-219708-L-11	Plastic 500ml - unpreserved				
L502194-11 FB	240-219708-M-11	Plastic 500ml - with Nitric Acid	<2			
L502194-11 FB	240-219708-N-11	Plastic 1 liter - unpreserved				
L502194-11 FB	240-219708-O-11	Plastic 1 liter - Nitric Acid				
L502194-11 FB	240-219708-P-11	Plastic 1 liter - Nitric Acid				

Chain of Custody

Return Samples to: Eurofins Michigan
38855 Hills Tech Dr.
Farmington Hills, MI 48331

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:

Project Number:
24034575

Sample State: MI

Special Instructions:
Need EDD and Level 4 report.

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
~~Jennifer Caporale~~
Marc Wahrer andJulie Maltby
LAH 3-3-2025

Description:
Erickson Projects

Site Name:
Erickson Projects

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	245.1 Mercury	2540C_Calcd Total Dissolved Solids	2320B Bicarbonate & Carbonate Alkalinity	200.8_CWA Custom List 2: 2-3 Metals	2540D Solids, Total Suspended (TSS)	200.7 Total Boron	SM2340B Total Hardness (as CaCO3) by calculation	903.0 Standard Target List	Ra226_228AS_P Combined Radium-226 and Radium-228	200.8 Project List (19)	300.0_28D Chloride, Fluoride & Sulfate	904.0 Standard Target List			Plastic 500ml - with Nitric Acid	Plastic 60 mL - unpreserved	Plastic 250ml - with Nitric Acid	Plastic 500ml - unpreserved	Plastic 1 liter - Nitric Acid	Plastic 1 liter - unpreserved	Total Bottles For Sample
1	L502194-01 MW-17A	Grab	Water	02/27/25 09:28				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
2	L502194-02 MW-17B	Grab	Water	02/27/25 10:59				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
3	L502194-03 MW-17C	Grab	Water	02/27/25 12:37				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
4	L502194-04 MW-17D	Grab	Water	02/27/25 13:59				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
5	L502194-05 MW-17E	Grab	Water	02/27/25 15:13				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
6	L502194-06 MW-18A	Grab	Water	02/27/25 08:53				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
7	L502194-07 MW-18B	Grab	Water	02/27/25 10:13				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
8	L502194-08 MW-18C	Grab	Water	02/27/25 11:41				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
9	L502194-09 MW-18D	Grab	Water	02/27/25 13:01				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
10	L502194-10 MWT-17A	Grab	Water	02/27/25 09:28				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
11	L502194-11 FB	Grab	Water	02/27/25 07:45				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-199151.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-219708-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/9/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
L502194-01 MW-17A (240-219708-1)	2/27/25	09:28 Eastern	G	Water			X	X	2	
L502194-02 MW-17B (240-219708-2)	2/27/25	10:59 Eastern	G	Water			X	X	2	
L502194-03 MW-17C (240-219708-3)	2/27/25	12:37 Eastern	G	Water			X	X	2	
L502194-04 MW-17D (240-219708-4)	2/27/25	13:59 Eastern	G	Water			X	X	2	
L502194-05 MW-17E (240-219708-5)	2/27/25	15:13 Eastern	G	Water			X	X	2	
L502194-06 MW-18A (240-219708-6)	2/27/25	08:53 Eastern	G	Water			X	X	2	
L502194-07 MW-18B (240-219708-7)	2/27/25	10:13 Eastern	G	Water			X	X	2	
L502194-08 MW-18C (240-219708-8)	2/27/25	11:41 Eastern	G	Water			X	X	2	
L502194-09 MW-18D (240-219708-9)	2/27/25	13:01 Eastern	G	Water			X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 3/3/25	Company EC	Received by:	Date/Time: 0835 MAR 0 4 2025	Company ETASTL
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-199151.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-219708-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/9/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
L502194-10 MWT-17A (240-219708-10)	2/27/25	09:28 Eastern	G	Water			X	X	2	
L502194-11 FB (240-219708-11)	2/27/25	07:45 Eastern	G	Water			X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 3/3/25	Company TC	Received by:	Date/Time: 0835 MAR 0 4 2025	Company FEDEX
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-200232.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 2
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note): NELAP - Oregon		Job #: 240-219708-1
Address: 5755 8th Street East, ,	Due Date Requested: 3/31/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			Other: N/A
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT (MOD) Custom List 2: 2-3 Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
L502194-01 MW-17A (240-219708-1)	2/27/25	09:28 Eastern	G	Water			X	1	
L502194-02 MW-17B (240-219708-2)	2/27/25	10:59 Eastern	G	Water			X	1	
L502194-03 MW-17C (240-219708-3)	2/27/25	12:37 Eastern	G	Water			X	1	
L502194-04 MW-17D (240-219708-4)	2/27/25	13:59 Eastern	G	Water			X	1	
L502194-05 MW-17E (240-219708-5)	2/27/25	15:13 Eastern	G	Water			X	1	
L502194-06 MW-18A (240-219708-6)	2/27/25	08:53 Eastern	G	Water			X	1	
L502194-07 MW-18B (240-219708-7)	2/27/25	10:13 Eastern	G	Water			X	1	
L502194-08 MW-18C (240-219708-8)	2/27/25	11:41 Eastern	G	Water			X	1	
L502194-09 MW-18D (240-219708-9)	2/27/25	13:01 Eastern	G	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This s
laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC la
accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said com

Therm. ID: SC0 2 Cust. Seal: Y / N
Uncorr./Corr. Temp: 14.5 / 14.3 °C
Delivery: UPS / FedEx / Other: ____
Ice Type: Blue / Dry / Wet / None
Label Ver.: R Packing: B

Possible Hazard Identification: Unconfirmed 4238 4616 5186	Sample Disposal (A fee may be assessed if sampl: ☐ Return To Client ☐ Disposal By Lab
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date: Time: Method of Shipm

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

7/25/2025 (Rev. 1)

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-200232.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 2 of 2
Company: Eurofins Environment Testing Northwest,		Accreditations Required (See note): NELAP - Oregon		Job #: 240-219708-1
Address: 5755 8th Street East, ,	Due Date Requested: 3/31/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT (MOD) Custom List 2: 2-3 Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
L502194-10 MWT-17A (240-219708-10)	2/27/25	09:28 Eastern	G	Water			X	1	
L502194-11 FB (240-219708-11)	2/27/25	07:45 Eastern	G	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification *Unconfirmed*	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date: Time: Method of Shipment:

Relinquished by: JMOROSKO	Date/Time: 7/24/25	Company Eurofins	Received by:	Date/Time: 3/25/25 9:34	Company BCTW
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-219708-1

Login Number: 219708
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 03/25/25 11:45 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-219708-1

Login Number: 219708
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 03/04/25 01:08 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 7/25/2025 12:46:54 PM Revision 1

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-223130-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

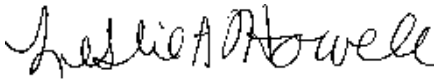
See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
7/25/2025 12:46:54 PM
Revision 1

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 11
Tracer Carrier Summary 23
QC Sample Results 24
QC Association Summary 33
Lab Chronicle 38
Certification Summary 42
Chain of Custody 44
Receipt Checklists 52

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-223130-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
240-223130-1

REVISION

The report being provided is a revision of the original report sent on 5/27/2025. The report (revision 1) is being revised due to Potassium and Sodium added to reporting list of 200.8 from Cleveland analysis..

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 4/26/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.6°C and 0.8°C.

Metals
Method 200.8_CWA: The method blank for preparation batch 350-6586 contained Zinc above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Gas Flow Proportional Counter
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-223130-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396
EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566
EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-223130-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-223130-1	L504149-01 MW-18A	Water	04/24/25 09:37	04/26/25 08:00
240-223130-2	L504149-02 MW-18B	Water	04/24/25 10:58	04/26/25 08:00
240-223130-3	L504149-03 MW-18C	Water	04/24/25 12:12	04/26/25 08:00
240-223130-4	L504149-04 MW-18D	Water	04/24/25 13:27	04/26/25 08:00
240-223130-5	L504149-05 MWT-18A	Water	04/24/25 09:37	04/26/25 08:00
240-223130-6	L504149-06 FB	Water	04/24/25 08:24	04/26/25 08:00

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-223130-1

Client Sample ID: L504149-01 MW-18A — Lab Sample ID: 240-223130-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.79		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.00076	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.042		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.11		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lead	0.00045	J	0.0010	0.00045	mg/L	1		200.8-1994 R5.4	Total Recoverable
Selenium	0.0015	J	0.0050	0.00089	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	90		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	14		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.066		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	63		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	6.8		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.5	B	0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	280		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	510		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.3	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	78		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.48		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	170		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L504149-02 MW-18B — Lab Sample ID: 240-223130-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.2		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.056		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.14		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0081		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	160		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	31		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.13		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	88		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	8.3		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.6	B	0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	540		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	170		5.0	2.6	mg/L	1		2320 B-2021	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L504149-02 MW-18B (Continued) — Lab Sample ID: 240-223130-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	910		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.9	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	87		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.21		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	410		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L504149-03 MW-18C — Lab Sample ID: 240-223130-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.0		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.049		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.000096	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00015	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.10		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0076		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Antimony	0.00067	J	0.0020	0.00057	mg/L	1		200.8-1994 R5.4	Total Recoverable
Selenium	0.0016	J	0.0050	0.00089	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	170		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	44		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.093		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	81		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	6.2		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.7	B	0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	600		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	940		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	4.9		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	70		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.16		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	420		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L504149-04 MW-18D — Lab Sample ID: 240-223130-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.7		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.022		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.044		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0027		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L504149-04 MW-18D (Continued) — Lab Sample ID: 240-223130-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	55		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	9.9		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.059		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	150		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	5.5		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.1	B	0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	180		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	310		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	560		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.4	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	26		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	1.0		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	140		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L504149-05 MWT-18A — Lab Sample ID: 240-223130-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.78		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.00077	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.043		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.11		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	89		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	14		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.063		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	63		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	6.7		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.5		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	280		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	500		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	2.7	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	79		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.51		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	170		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L504149-06 FB — Lab Sample ID: 240-223130-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.019	J	0.10	0.013	mg/L	1		200.8	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L504149-01 MW-18A
Date Collected: 04/24/25 09:37
Date Received: 04/26/25 08:00

Lab Sample ID: 240-223130-1
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.79**		0.10	0.057	mg/L		04/28/25 14:00	04/30/25 06:15	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		04/28/25 14:00	04/29/25 17:52	1
Arsenic	**0.00076**	**J**	0.0050	0.00075	mg/L		04/28/25 14:00	04/29/25 17:52	1
Barium	**0.042**		0.0050	0.00077	mg/L		04/28/25 14:00	04/29/25 17:52	1
Beryllium	ND		0.0010	0.00027	mg/L		04/28/25 14:00	04/29/25 17:52	1
Cadmium	ND		0.0010	0.000077	mg/L		04/28/25 14:00	04/29/25 17:52	1
Cobalt	ND		0.0010	0.000086	mg/L		04/28/25 14:00	04/29/25 17:52	1
Chromium	ND		0.0050	0.0012	mg/L		04/28/25 14:00	04/29/25 17:52	1
Copper	ND		0.0020	0.0017	mg/L		04/28/25 14:00	04/29/25 17:52	1
Molybdenum	**0.11**		0.0050	0.0011	mg/L		04/28/25 14:00	04/29/25 17:52	1
Nickel	ND		0.0020	0.0015	mg/L		04/28/25 14:00	04/29/25 17:52	1
Lead	**0.00045**	**J**	0.0010	0.00045	mg/L		04/28/25 14:00	04/30/25 17:21	1
Antimony	ND		0.0020	0.00057	mg/L		04/28/25 14:00	04/29/25 17:52	1
Selenium	**0.0015**	**J**	0.0050	0.00089	mg/L		04/28/25 14:00	04/29/25 17:52	1
Thallium	ND		0.0010	0.00051	mg/L		04/28/25 14:00	04/30/25 17:21	1
Vanadium	ND		0.0050	0.00082	mg/L		04/28/25 14:00	04/29/25 17:52	1
Calcium	**90**		1.0	0.25	mg/L		04/28/25 14:00	04/29/25 17:52	1
Magnesium	**14**		1.0	0.061	mg/L		04/28/25 14:00	04/29/25 17:52	1
Lithium	**0.066**		0.0080	0.0034	mg/L		04/28/25 14:00	04/29/25 17:52	1
Sodium	**63**		1.0	0.88	mg/L		04/28/25 14:00	04/29/25 17:52	1
Potassium	**6.8**		1.0	0.22	mg/L		04/28/25 14:00	04/29/25 17:52	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.5**	**B**	0.10	0.013	mg/L		05/01/25 17:53	05/02/25 15:19	1
Zinc	ND		0.0070	0.00093	mg/L		05/02/25 16:38	05/05/25 13:08	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**280**		33	33	mg/L			05/01/25 06:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		04/28/25 14:00	04/30/25 10:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**130**		5.0	2.6	mg/L			05/01/25 15:07	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			05/01/25 15:07	1
Total Dissolved Solids (SM 2540 C-2020)	**510**		10	7.8	mg/L			04/29/25 10:50	1
Total Suspended Solids (SM 2540D-2020)	**1.3**	**J**	4.0	0.40	mg/L			04/28/25 09:59	1
Chloride (EPA 300.0-1993 R2.1)	**78**		1.0	0.13	mg/L			05/02/25 10:50	1
Fluoride (EPA 300.0-1993 R2.1)	**0.48**		0.050	0.024	mg/L			05/02/25 10:50	1
Sulfate (EPA 300.0-1993 R2.1)	**170**		1.0	0.35	mg/L			05/02/25 10:50	1

Client Sample ID: L504149-01 MW-18A

Date Collected: 04/24/25 09:37
Date Received: 04/26/25 08:00

Lab Sample ID: 240-223130-1

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.260**		0.123	0.125	1.00	0.144	pCi/L	04/30/25 12:53	05/27/25 08:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.8*		*30 - 110*	*04/30/25 12:53*	*05/27/25 08:20*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.417	U	0.391	0.393	1.00	0.623	pCi/L	04/30/25 12:57	05/23/25 14:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.8*		*30 - 110*	*04/30/25 12:57*	*05/23/25 14:33*	*1*
Y Carrier	*77.8*		*30 - 110*	*04/30/25 12:57*	*05/23/25 14:33*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.676**		0.410	0.412	5.00	0.623	pCi/L		05/27/25 14:18	1

Client Sample ID: L504149-02 MW-18B

Date Collected: 04/24/25 10:58
Date Received: 04/26/25 08:00

Lab Sample ID: 240-223130-2

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.2**		0.10	0.057	mg/L		04/28/25 14:00	04/30/25 06:37	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		04/28/25 14:00	04/29/25 17:55	1
Arsenic	ND		0.0050	0.00075	mg/L		04/28/25 14:00	04/29/25 17:55	1
Barium	**0.056**		0.0050	0.00077	mg/L		04/28/25 14:00	04/29/25 17:55	1
Beryllium	ND		0.0010	0.00027	mg/L		04/28/25 14:00	04/29/25 17:55	1
Cadmium	ND		0.0010	0.000077	mg/L		04/28/25 14:00	04/29/25 17:55	1
Cobalt	ND		0.0010	0.000086	mg/L		04/28/25 14:00	04/29/25 17:55	1
Chromium	ND		0.0050	0.0012	mg/L		04/28/25 14:00	04/29/25 17:55	1
Copper	ND		0.0020	0.0017	mg/L		04/28/25 14:00	04/29/25 17:55	1
Molybdenum	**0.14**		0.0050	0.0011	mg/L		04/28/25 14:00	04/29/25 17:55	1
Nickel	**0.0081**		0.0020	0.0015	mg/L		04/28/25 14:00	04/29/25 17:55	1
Lead	ND		0.0010	0.00045	mg/L		04/28/25 14:00	04/30/25 17:23	1
Antimony	ND		0.0020	0.00057	mg/L		04/28/25 14:00	04/29/25 17:55	1
Selenium	ND		0.0050	0.00089	mg/L		04/28/25 14:00	04/29/25 17:55	1
Thallium	ND		0.0010	0.00051	mg/L		04/28/25 14:00	04/30/25 17:23	1
Vanadium	ND		0.0050	0.00082	mg/L		04/28/25 14:00	04/29/25 17:55	1
Calcium	**160**		1.0	0.25	mg/L		04/28/25 14:00	04/29/25 17:55	1
Magnesium	**31**		1.0	0.061	mg/L		04/28/25 14:00	04/29/25 17:55	1
Lithium	**0.13**		0.0080	0.0034	mg/L		04/28/25 14:00	04/29/25 17:55	1
Sodium	**88**		1.0	0.88	mg/L		04/28/25 14:00	04/29/25 17:55	1
Potassium	**8.3**		1.0	0.22	mg/L		04/28/25 14:00	04/29/25 17:55	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.6**	**B**	0.10	0.013	mg/L		05/01/25 17:53	05/02/25 15:33	1
Zinc	ND		0.0070	0.00093	mg/L		05/01/25 17:53	05/02/25 15:33	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**540**		33	33	mg/L			05/01/25 06:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		04/28/25 14:00	04/30/25 10:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**170**		5.0	2.6	mg/L			05/01/25 15:17	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			05/01/25 15:17	1
Total Dissolved Solids (SM 2540 C-2020)	**910**		10	7.8	mg/L			04/29/25 10:50	1
Total Suspended Solids (SM 2540D-2020)	**1.9**	**J**	4.0	0.40	mg/L			04/28/25 09:59	1
Chloride (EPA 300.0-1993 R2.1)	**87**		1.0	0.13	mg/L			05/02/25 11:08	1
Fluoride (EPA 300.0-1993 R2.1)	**0.21**		0.050	0.024	mg/L			05/02/25 11:08	1
Sulfate (EPA 300.0-1993 R2.1)	**410**		5.0	1.7	mg/L			05/02/25 11:18	5

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-223130-1

Client Sample ID: L504149-02 MW-18B

Date Collected: 04/24/25 10:58
Date Received: 04/26/25 08:00

Lab Sample ID: 240-223130-2

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.561		0.163	0.170	1.00	0.139	pCi/L	04/30/25 12:53	05/27/25 08:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.4*		*30 - 110*	*04/30/25 12:53*	*05/27/25 08:20*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.906		0.408	0.417	1.00	0.553	pCi/L	04/30/25 12:57	05/23/25 14:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.4*		*30 - 110*	*04/30/25 12:57*	*05/23/25 14:33*	*1*
Y Carrier	*89.0*		*30 - 110*	*04/30/25 12:57*	*05/23/25 14:33*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.47		0.439	0.450	5.00	0.553	pCi/L		05/27/25 14:18	1

Client Sample ID: L504149-03 MW-18C
Date Collected: 04/24/25 12:12
Date Received: 04/26/25 08:00

Lab Sample ID: 240-223130-3
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.0**		0.10	0.057	mg/L		04/28/25 14:00	04/30/25 06:50	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		04/28/25 14:00	04/29/25 18:08	1
Arsenic	ND		0.0050	0.00075	mg/L		04/28/25 14:00	04/29/25 18:08	1
Barium	**0.049**		0.0050	0.00077	mg/L		04/28/25 14:00	04/29/25 18:08	1
Beryllium	ND		0.0010	0.00027	mg/L		04/28/25 14:00	04/29/25 18:08	1
Cadmium	**0.000096**	**J**	0.0010	0.000077	mg/L		04/28/25 14:00	04/29/25 18:08	1
Cobalt	**0.00015**	**J**	0.0010	0.000086	mg/L		04/28/25 14:00	04/29/25 18:08	1
Chromium	ND		0.0050	0.0012	mg/L		04/28/25 14:00	04/29/25 18:08	1
Copper	ND		0.0020	0.0017	mg/L		04/28/25 14:00	04/29/25 18:08	1
Molybdenum	**0.10**		0.0050	0.0011	mg/L		04/28/25 14:00	04/29/25 18:08	1
Nickel	**0.0076**		0.0020	0.0015	mg/L		04/28/25 14:00	04/29/25 18:08	1
Lead	ND		0.0010	0.00045	mg/L		04/28/25 14:00	04/30/25 17:34	1
Antimony	**0.00067**	**J**	0.0020	0.00057	mg/L		04/28/25 14:00	04/29/25 18:08	1
Selenium	**0.0016**	**J**	0.0050	0.00089	mg/L		04/28/25 14:00	04/29/25 18:08	1
Thallium	ND		0.0010	0.00051	mg/L		04/28/25 14:00	04/30/25 17:34	1
Vanadium	ND		0.0050	0.00082	mg/L		04/28/25 14:00	04/29/25 18:08	1
Calcium	**170**		1.0	0.25	mg/L		04/28/25 14:00	04/29/25 18:08	1
Magnesium	**44**		1.0	0.061	mg/L		04/28/25 14:00	04/29/25 18:08	1
Lithium	**0.093**		0.0080	0.0034	mg/L		04/28/25 14:00	04/29/25 18:08	1
Sodium	**81**		1.0	0.88	mg/L		04/28/25 14:00	04/29/25 18:08	1
Potassium	**6.2**		1.0	0.22	mg/L		04/28/25 14:00	04/29/25 18:08	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.7**	**B**	0.10	0.013	mg/L		05/01/25 17:53	05/02/25 15:35	1
Zinc	ND		0.0070	0.00093	mg/L		05/02/25 16:38	05/05/25 13:27	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**600**		33	33	mg/L			05/01/25 06:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		04/28/25 14:00	04/30/25 10:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**220**		5.0	2.6	mg/L			05/01/25 15:21	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			05/01/25 15:21	1
Total Dissolved Solids (SM 2540 C-2020)	**940**		10	7.8	mg/L			04/29/25 10:50	1
Total Suspended Solids (SM 2540D-2020)	**4.9**		4.0	0.40	mg/L			04/28/25 09:59	1
Chloride (EPA 300.0-1993 R2.1)	**70**		1.0	0.13	mg/L			05/02/25 11:27	1
Fluoride (EPA 300.0-1993 R2.1)	**0.16**		0.050	0.024	mg/L			05/02/25 11:27	1
Sulfate (EPA 300.0-1993 R2.1)	**420**		5.0	1.7	mg/L			05/02/25 11:36	5

Client Sample ID: L504149-03 MW-18C

Date Collected: 04/24/25 12:12
Date Received: 04/26/25 08:00

Lab Sample ID: 240-223130-3

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.684		0.196	0.205	1.00	0.190	pCi/L	04/30/25 12:53	05/27/25 10:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.3*		*30 - 110*	*04/30/25 12:53*	*05/27/25 10:18*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.768		0.500	0.505	1.00	0.744	pCi/L	04/30/25 12:57	05/23/25 14:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.3*		*30 - 110*	*04/30/25 12:57*	*05/23/25 14:33*	*1*
Y Carrier	*68.4*		*30 - 110*	*04/30/25 12:57*	*05/23/25 14:33*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.45		0.537	0.545	5.00	0.744	pCi/L		05/27/25 14:18	1

Client Sample ID: L504149-04 MW-18D

Date Collected: 04/24/25 13:27
Date Received: 04/26/25 08:00

Lab Sample ID: 240-223130-4

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.7**		0.10	0.057	mg/L		04/28/25 14:00	04/30/25 06:55	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		04/28/25 14:00	04/29/25 18:11	1
Arsenic	ND		0.0050	0.00075	mg/L		04/28/25 14:00	04/29/25 18:11	1
Barium	**0.022**		0.0050	0.00077	mg/L		04/28/25 14:00	04/29/25 18:11	1
Beryllium	ND		0.0010	0.00027	mg/L		04/28/25 14:00	04/29/25 18:11	1
Cadmium	ND		0.0010	0.000077	mg/L		04/28/25 14:00	04/29/25 18:11	1
Cobalt	ND		0.0010	0.000086	mg/L		04/28/25 14:00	04/29/25 18:11	1
Chromium	ND		0.0050	0.0012	mg/L		04/28/25 14:00	04/29/25 18:11	1
Copper	ND		0.0020	0.0017	mg/L		04/28/25 14:00	04/29/25 18:11	1
Molybdenum	**0.044**		0.0050	0.0011	mg/L		04/28/25 14:00	04/29/25 18:11	1
Nickel	**0.0027**		0.0020	0.0015	mg/L		04/28/25 14:00	04/29/25 18:11	1
Lead	ND		0.0010	0.00045	mg/L		04/28/25 14:00	04/30/25 17:37	1
Antimony	ND		0.0020	0.00057	mg/L		04/28/25 14:00	04/29/25 18:11	1
Selenium	ND		0.0050	0.00089	mg/L		04/28/25 14:00	04/29/25 18:11	1
Thallium	ND		0.0010	0.00051	mg/L		04/28/25 14:00	04/30/25 17:37	1
Vanadium	ND		0.0050	0.00082	mg/L		04/28/25 14:00	04/29/25 18:11	1
Calcium	**55**		1.0	0.25	mg/L		04/28/25 14:00	04/29/25 18:11	1
Magnesium	**9.9**		1.0	0.061	mg/L		04/28/25 14:00	04/29/25 18:11	1
Lithium	**0.059**		0.0080	0.0034	mg/L		04/28/25 14:00	04/29/25 18:11	1
Sodium	**150**		1.0	0.88	mg/L		04/28/25 14:00	04/29/25 18:11	1
Potassium	**5.5**		1.0	0.22	mg/L		04/28/25 14:00	04/29/25 18:11	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.1**	**B**	0.10	0.013	mg/L		05/01/25 17:53	05/02/25 15:38	1
Zinc	ND		0.0070	0.00093	mg/L		05/01/25 17:53	05/02/25 15:38	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**180**		33	33	mg/L			05/01/25 06:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		04/28/25 14:00	04/30/25 10:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**310**		5.0	2.6	mg/L			05/01/25 15:27	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			05/01/25 15:27	1
Total Dissolved Solids (SM 2540 C-2020)	**560**		10	7.8	mg/L			04/29/25 10:50	1
Total Suspended Solids (SM 2540D-2020)	**1.4**	**J**	4.0	0.40	mg/L			04/28/25 11:17	1
Chloride (EPA 300.0-1993 R2.1)	**26**		1.0	0.13	mg/L			05/02/25 11:45	1
Fluoride (EPA 300.0-1993 R2.1)	**1.0**		0.050	0.024	mg/L			05/02/25 11:45	1
Sulfate (EPA 300.0-1993 R2.1)	**140**		1.0	0.35	mg/L			05/02/25 11:45	1

Client Sample ID: L504149-04 MW-18D

Date Collected: 04/24/25 13:27
Date Received: 04/26/25 08:00

Lab Sample ID: 240-223130-4

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.206**		0.140	0.141	1.00	0.202	pCi/L	04/30/25 12:53	05/27/25 10:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.1*		*30 - 110*	*04/30/25 12:53*	*05/27/25 10:18*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.476	U	0.411	0.413	1.00	0.645	pCi/L	04/30/25 12:57	05/23/25 14:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.1*		*30 - 110*	*04/30/25 12:57*	*05/23/25 14:34*	*1*
Y Carrier	*75.5*		*30 - 110*	*04/30/25 12:57*	*05/23/25 14:34*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.683**		0.434	0.436	5.00	0.645	pCi/L		05/27/25 14:18	1

Client Sample ID: L504149-05 MWT-18A

Date Collected: 04/24/25 09:37
Date Received: 04/26/25 08:00

Lab Sample ID: 240-223130-5

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.78**		0.10	0.057	mg/L		04/28/25 14:00	04/30/25 07:00	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		04/28/25 14:00	04/29/25 18:13	1
Arsenic	**0.00077**	**J**	0.0050	0.00075	mg/L		04/28/25 14:00	04/29/25 18:13	1
Barium	**0.043**		0.0050	0.00077	mg/L		04/28/25 14:00	04/29/25 18:13	1
Beryllium	ND		0.0010	0.00027	mg/L		04/28/25 14:00	04/29/25 18:13	1
Cadmium	ND		0.0010	0.000077	mg/L		04/28/25 14:00	04/29/25 18:13	1
Cobalt	ND		0.0010	0.000086	mg/L		04/28/25 14:00	04/29/25 18:13	1
Chromium	ND		0.0050	0.0012	mg/L		04/28/25 14:00	04/29/25 18:13	1
Copper	ND		0.0020	0.0017	mg/L		04/28/25 14:00	04/29/25 18:13	1
Molybdenum	**0.11**		0.0050	0.0011	mg/L		04/28/25 14:00	04/29/25 18:13	1
Nickel	ND		0.0020	0.0015	mg/L		04/28/25 14:00	04/29/25 18:13	1
Lead	ND		0.0010	0.00045	mg/L		04/28/25 14:00	04/30/25 17:39	1
Antimony	ND		0.0020	0.00057	mg/L		04/28/25 14:00	04/29/25 18:13	1
Selenium	ND		0.0050	0.00089	mg/L		04/28/25 14:00	04/29/25 18:13	1
Thallium	ND		0.0010	0.00051	mg/L		04/28/25 14:00	04/30/25 17:39	1
Vanadium	ND		0.0050	0.00082	mg/L		04/28/25 14:00	04/29/25 18:13	1
Calcium	**89**		1.0	0.25	mg/L		04/28/25 14:00	04/29/25 18:13	1
Magnesium	**14**		1.0	0.061	mg/L		04/28/25 14:00	04/29/25 18:13	1
Lithium	**0.063**		0.0080	0.0034	mg/L		04/28/25 14:00	04/29/25 18:13	1
Sodium	**63**		1.0	0.88	mg/L		04/28/25 14:00	04/29/25 18:13	1
Potassium	**6.7**		1.0	0.22	mg/L		04/28/25 14:00	04/29/25 18:13	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.5**		0.10	0.013	mg/L		05/07/25 16:31	05/08/25 14:25	1
Zinc	ND		0.0070	0.00093	mg/L		05/07/25 16:31	05/08/25 14:25	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**280**		33	33	mg/L			05/01/25 06:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		04/28/25 14:00	04/30/25 10:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**130**		5.0	2.6	mg/L			05/01/25 15:34	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			05/01/25 15:34	1
Total Dissolved Solids (SM 2540 C-2020)	**500**		10	7.8	mg/L			04/29/25 10:50	1
Total Suspended Solids (SM 2540D-2020)	**2.7**	**J**	4.0	0.40	mg/L			04/28/25 11:17	1
Chloride (EPA 300.0-1993 R2.1)	**79**		1.0	0.13	mg/L			05/03/25 00:01	1
Fluoride (EPA 300.0-1993 R2.1)	**0.51**		0.050	0.024	mg/L			05/03/25 00:01	1
Sulfate (EPA 300.0-1993 R2.1)	**170**		1.0	0.35	mg/L			05/03/25 00:01	1

Client Sample ID: L504149-05 MWT-18A

Date Collected: 04/24/25 09:37
Date Received: 04/26/25 08:00

Lab Sample ID: 240-223130-5

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.226**		0.146	0.148	1.00	0.209	pCi/L	04/30/25 12:53	05/27/25 10:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.5*		*30 - 110*	*04/30/25 12:53*	*05/27/25 10:18*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.278	U	0.417	0.418	1.00	0.707	pCi/L	04/30/25 12:57	05/23/25 14:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.5*		*30 - 110*	*04/30/25 12:57*	*05/23/25 14:34*	*1*
Y Carrier	*69.5*		*30 - 110*	*04/30/25 12:57*	*05/23/25 14:34*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.504	U	0.442	0.443	5.00	0.707	pCi/L		05/27/25 14:18	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-223130-1

Client Sample ID: L504149-06 FB

Date Collected: 04/24/25 08:24
Date Received: 04/26/25 08:00

Lab Sample ID: 240-223130-6

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		04/28/25 14:00	04/30/25 07:04	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		04/28/25 14:00	04/29/25 18:21	1
Arsenic	ND		0.0050	0.00075	mg/L		04/28/25 14:00	04/29/25 18:21	1
Barium	ND		0.0050	0.00077	mg/L		04/28/25 14:00	04/29/25 18:21	1
Beryllium	ND		0.0010	0.00027	mg/L		04/28/25 14:00	04/29/25 18:21	1
Cadmium	ND		0.0010	0.000077	mg/L		04/28/25 14:00	04/29/25 18:21	1
Cobalt	ND		0.0010	0.000086	mg/L		04/28/25 14:00	04/29/25 18:21	1
Chromium	ND		0.0050	0.0012	mg/L		04/28/25 14:00	04/29/25 18:21	1
Copper	ND		0.0020	0.0017	mg/L		04/28/25 14:00	04/29/25 18:21	1
Molybdenum	ND		0.0050	0.0011	mg/L		04/28/25 14:00	04/29/25 18:21	1
Nickel	ND		0.0020	0.0015	mg/L		04/28/25 14:00	04/29/25 18:21	1
Lead	ND		0.0010	0.00045	mg/L		04/28/25 14:00	04/30/25 17:47	1
Antimony	ND		0.0020	0.00057	mg/L		04/28/25 14:00	04/29/25 18:21	1
Selenium	ND		0.0050	0.00089	mg/L		04/28/25 14:00	04/29/25 18:21	1
Thallium	ND		0.0010	0.00051	mg/L		04/28/25 14:00	04/30/25 17:47	1
Vanadium	ND		0.0050	0.00082	mg/L		04/28/25 14:00	04/29/25 18:21	1
Calcium	ND		1.0	0.25	mg/L		04/28/25 14:00	04/29/25 18:21	1
Magnesium	ND		1.0	0.061	mg/L		04/28/25 14:00	04/29/25 18:21	1
Lithium	ND		0.0080	0.0034	mg/L		04/28/25 14:00	04/29/25 18:21	1
Sodium	ND		1.0	0.88	mg/L		04/28/25 14:00	04/29/25 18:21	1
Potassium	ND		1.0	0.22	mg/L		04/28/25 14:00	04/29/25 18:21	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.019**	**J**	0.10	0.013	mg/L		05/08/25 16:08	05/09/25 12:41	1
Zinc	ND		0.0070	0.00093	mg/L		05/08/25 16:08	05/09/25 12:41	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			05/01/25 06:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		04/28/25 14:00	04/30/25 10:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			05/01/25 15:39	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			05/01/25 15:39	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			04/29/25 10:50	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			04/28/25 11:17	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			05/03/25 00:19	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			05/03/25 00:19	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			05/03/25 00:19	1

Client Sample ID: L504149-06 FB

Date Collected: 04/24/25 08:24
Date Received: 04/26/25 08:00

Lab Sample ID: 240-223130-6

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00290	U	0.0813	0.0813	1.00	0.164	pCi/L	04/30/25 12:53	05/27/25 10:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.6*		*30 - 110*	*04/30/25 12:53*	*05/27/25 10:18*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0154	U	0.295	0.295	1.00	0.567	pCi/L	04/30/25 12:57	05/23/25 14:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.6*		*30 - 110*	*04/30/25 12:57*	*05/23/25 14:34*	*1*
Y Carrier	*77.0*		*30 - 110*	*04/30/25 12:57*	*05/23/25 14:34*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.000	U	0.306	0.306	5.00	0.567	pCi/L		05/27/25 14:18	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-223130-1

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-223130-1	L504149-01 MW-18A	92.8
240-223130-2	L504149-02 MW-18B	94.4
240-223130-3	L504149-03 MW-18C	89.3
240-223130-4	L504149-04 MW-18D	92.1
240-223130-5	L504149-05 MWT-18A	88.5
240-223130-6	L504149-06 FB	92.6
LCS 160-715328/2-A	Lab Control Sample	89.0
MB 160-715328/1-A	Method Blank	81.3

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
		Ba	Y
Lab Sample ID	Client Sample ID	(30-110)	(30-110)
240-223130-1	L504149-01 MW-18A	92.8	77.8
240-223130-2	L504149-02 MW-18B	94.4	89.0
240-223130-3	L504149-03 MW-18C	89.3	68.4
240-223130-4	L504149-04 MW-18D	92.1	75.5
240-223130-5	L504149-05 MWT-18A	88.5	69.5
240-223130-6	L504149-06 FB	92.6	77.0
LCS 160-715329/2-A	Lab Control Sample	89.0	77.8
MB 160-715329/1-A	Method Blank	81.3	74.8

Tracer/Carrier Legend

Ba = Ba Carrier
Y = Y Carrier

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-653842/1-A
Matrix: Water
Analysis Batch: 654139

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 653842

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		04/28/25 14:00	04/30/25 06:06	1

Lab Sample ID: LCS 240-653842/2-A
Matrix: Water
Analysis Batch: 654139

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 653842

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.02		mg/L		102	85 - 115

Lab Sample ID: 240-223130-1 MS
Matrix: Water
Analysis Batch: 654139

Client Sample ID: L504149-01 MW-18A
Prep Type: Total Recoverable
Prep Batch: 653842

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.79		1.00	1.82		mg/L		104	70 - 130

Lab Sample ID: 240-223130-1 MSD
Matrix: Water
Analysis Batch: 654139

Client Sample ID: L504149-01 MW-18A
Prep Type: Total Recoverable
Prep Batch: 653842

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.79		1.00	1.81		mg/L		102	70 - 130	1	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-6586/25-A
Matrix: Water
Analysis Batch: 6606

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6586

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.0132	J	0.10	0.013	mg/L		05/01/25 17:53	05/02/25 15:13	1
Zinc	0.00856		0.0070	0.00093	mg/L		05/01/25 17:53	05/02/25 15:13	1

Lab Sample ID: LCS 350-6586/26-A
Matrix: Water
Analysis Batch: 6606

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6586

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	20.1		mg/L		101	85 - 115
Zinc	1.00	1.02		mg/L		102	85 - 115

Lab Sample ID: 240-223130-1 MS
Matrix: Water
Analysis Batch: 6606

Client Sample ID: L504149-01 MW-18A
Prep Type: Total/NA
Prep Batch: 6586

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	1.5	B	20.0	21.9		mg/L		102	70 - 130
Zinc	0.0026	J B	1.00	1.04		mg/L		104	70 - 130

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-223130-1 MSD
Matrix: Water
Analysis Batch: 6606

Client Sample ID: L504149-01 MW-18A
Prep Type: Total/NA
Prep Batch: 6586

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	1.5	B	20.0	22.3		mg/L		104	70 - 130	2	20
Zinc	0.0026	J B	1.00	1.04		mg/L		104	70 - 130	0	20

Lab Sample ID: MB 350-6607/13-A
Matrix: Water
Analysis Batch: 6623

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6607

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.0213	J	0.10	0.013	mg/L		05/02/25 16:38	05/05/25 12:47	1
Zinc	ND		0.0070	0.00093	mg/L		05/02/25 16:38	05/05/25 12:47	1

Lab Sample ID: LCS 350-6607/14-A
Matrix: Water
Analysis Batch: 6623

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	21.2		mg/L		106	85 - 115
Zinc	1.00	1.06		mg/L		106	85 - 115

Lab Sample ID: MB 350-6680/13-A
Matrix: Water
Analysis Batch: 6711

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6680

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		05/07/25 16:31	05/08/25 14:20	1
Zinc	ND		0.0070	0.00093	mg/L		05/07/25 16:31	05/08/25 14:20	1

Lab Sample ID: LCS 350-6680/14-A
Matrix: Water
Analysis Batch: 6711

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6680

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	21.3		mg/L		106	85 - 115
Zinc	1.00	1.07		mg/L		107	85 - 115

Lab Sample ID: 240-223130-5 MS
Matrix: Water
Analysis Batch: 6711

Client Sample ID: L504149-05 MWT-18A
Prep Type: Total/NA
Prep Batch: 6680

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	1.5		20.0	21.5		mg/L		100	70 - 130
Zinc	ND		1.00	0.967		mg/L		97	70 - 130

Lab Sample ID: 240-223130-5 MSD
Matrix: Water
Analysis Batch: 6711

Client Sample ID: L504149-05 MWT-18A
Prep Type: Total/NA
Prep Batch: 6680

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	1.5		20.0	22.1		mg/L		103	70 - 130	2	20
Zinc	ND		1.00	1.02		mg/L		102	70 - 130	5	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-6701/25-A
Matrix: Water
Analysis Batch: 6733

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6701

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		05/08/25 16:08	05/09/25 11:36	1
Zinc	ND		0.0070	0.00093	mg/L		05/08/25 16:08	05/09/25 11:36	1

Lab Sample ID: LCS 350-6701/26-A
Matrix: Water
Analysis Batch: 6733

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6701

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	20.9		mg/L		105	85 - 115
Zinc	1.00	1.03		mg/L		103	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-653842/1-A
Matrix: Water
Analysis Batch: 654111

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 653842

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		04/28/25 14:00	04/29/25 17:42	1
Arsenic	ND		0.0050	0.00075	mg/L		04/28/25 14:00	04/29/25 17:42	1
Barium	ND		0.0050	0.00077	mg/L		04/28/25 14:00	04/29/25 17:42	1
Beryllium	ND		0.0010	0.00027	mg/L		04/28/25 14:00	04/29/25 17:42	1
Cadmium	ND		0.0010	0.000077	mg/L		04/28/25 14:00	04/29/25 17:42	1
Cobalt	ND		0.0010	0.000086	mg/L		04/28/25 14:00	04/29/25 17:42	1
Chromium	ND		0.0050	0.0012	mg/L		04/28/25 14:00	04/29/25 17:42	1
Copper	ND		0.0020	0.0017	mg/L		04/28/25 14:00	04/29/25 17:42	1
Molybdenum	ND		0.0050	0.0011	mg/L		04/28/25 14:00	04/29/25 17:42	1
Nickel	ND		0.0020	0.0015	mg/L		04/28/25 14:00	04/29/25 17:42	1
Antimony	ND		0.0020	0.00057	mg/L		04/28/25 14:00	04/29/25 17:42	1
Selenium	ND		0.0050	0.00089	mg/L		04/28/25 14:00	04/29/25 17:42	1
Vanadium	ND		0.0050	0.00082	mg/L		04/28/25 14:00	04/29/25 17:42	1
Calcium	ND		1.0	0.25	mg/L		04/28/25 14:00	04/29/25 17:42	1
Magnesium	ND		1.0	0.061	mg/L		04/28/25 14:00	04/29/25 17:42	1
Lithium	ND		0.0080	0.0034	mg/L		04/28/25 14:00	04/29/25 17:42	1
Sodium	ND		1.0	0.88	mg/L		04/28/25 14:00	04/29/25 17:42	1
Potassium	ND		1.0	0.22	mg/L		04/28/25 14:00	04/29/25 17:42	1

Lab Sample ID: MB 240-653842/1-A
Matrix: Water
Analysis Batch: 654281

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 653842

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0010	0.00045	mg/L		04/28/25 14:00	04/30/25 17:15	1
Thallium	ND		0.0010	0.00051	mg/L		04/28/25 14:00	04/30/25 17:15	1

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-653842/3-A
Matrix: Water
Analysis Batch: 654111

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 653842

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.0939		mg/L		94	85 - 115
Arsenic	1.00	0.992		mg/L		99	85 - 115
Barium	1.00	0.992		mg/L		99	85 - 115
Beryllium	0.500	0.483		mg/L		97	85 - 115
Cadmium	0.500	0.494		mg/L		99	85 - 115
Cobalt	0.500	0.483		mg/L		97	85 - 115
Chromium	0.500	0.504		mg/L		101	85 - 115
Copper	0.500	0.497		mg/L		99	85 - 115
Molybdenum	0.500	0.472		mg/L		94	85 - 115
Nickel	0.500	0.460		mg/L		92	85 - 115
Antimony	0.100	0.0997		mg/L		100	85 - 115
Selenium	1.00	0.962		mg/L		96	85 - 115
Vanadium	0.500	0.502		mg/L		100	85 - 115
Calcium	25.0	26.1		mg/L		104	85 - 115
Magnesium	25.0	24.8		mg/L		99	85 - 115
Lithium	0.500	0.508		mg/L		102	85 - 115
Sodium	25.0	26.9		mg/L		108	85 - 115
Potassium	25.0	24.8		mg/L		99	85 - 115

Lab Sample ID: LCS 240-653842/3-A
Matrix: Water
Analysis Batch: 654281

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 653842

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.500	0.511		mg/L		102	85 - 115
Thallium	1.00	1.11		mg/L		111	85 - 115

Lab Sample ID: 240-223130-2 MS
Matrix: Water
Analysis Batch: 654111

Client Sample ID: L504149-02 MW-18B
Prep Type: Total Recoverable
Prep Batch: 653842

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.0879		mg/L		88	70 - 130
Arsenic	ND		1.00	0.985		mg/L		99	70 - 130
Barium	0.056		1.00	1.03		mg/L		98	70 - 130
Beryllium	ND		0.500	0.461		mg/L		92	70 - 130
Cadmium	ND		0.500	0.480		mg/L		96	70 - 130
Cobalt	ND		0.500	0.470		mg/L		94	70 - 130
Chromium	ND		0.500	0.494		mg/L		99	70 - 130
Copper	ND		0.500	0.476		mg/L		95	70 - 130
Molybdenum	0.14		0.500	0.614		mg/L		95	70 - 130
Nickel	0.0081		0.500	0.456		mg/L		90	70 - 130
Antimony	ND		0.100	0.0977		mg/L		98	70 - 130
Selenium	ND		1.00	0.923		mg/L		92	70 - 130
Vanadium	ND		0.500	0.500		mg/L		100	70 - 130
Calcium	160		25.0	190	4	mg/L		107	70 - 130
Magnesium	31		25.0	58.0		mg/L		109	70 - 130
Lithium	0.13		0.500	0.611		mg/L		96	70 - 130
Sodium	88		25.0	116		mg/L		110	70 - 130

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-223130-2 MS
Matrix: Water
Analysis Batch: 654111

Client Sample ID: L504149-02 MW-18B
Prep Type: Total Recoverable
Prep Batch: 653842

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Potassium	8.3		25.0	33.2		mg/L		100	70 - 130

Lab Sample ID: 240-223130-2 MS
Matrix: Water
Analysis Batch: 654281

Client Sample ID: L504149-02 MW-18B
Prep Type: Total Recoverable
Prep Batch: 653842

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	ND		0.500	0.512		mg/L		102	70 - 130
Thallium	ND		1.00	1.11		mg/L		111	70 - 130

Lab Sample ID: 240-223130-2 MSD
Matrix: Water
Analysis Batch: 654111

Client Sample ID: L504149-02 MW-18B
Prep Type: Total Recoverable
Prep Batch: 653842

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.0957		mg/L		96	70 - 130	9	20
Arsenic	ND		1.00	1.00		mg/L		100	70 - 130	2	20
Barium	0.056		1.00	1.06		mg/L		101	70 - 130	3	20
Beryllium	ND		0.500	0.473		mg/L		95	70 - 130	3	20
Cadmium	ND		0.500	0.493		mg/L		99	70 - 130	3	20
Cobalt	ND		0.500	0.481		mg/L		96	70 - 130	2	20
Chromium	ND		0.500	0.502		mg/L		100	70 - 130	2	20
Copper	ND		0.500	0.490		mg/L		98	70 - 130	3	20
Molybdenum	0.14		0.500	0.627		mg/L		98	70 - 130	2	20
Nickel	0.0081		0.500	0.464		mg/L		91	70 - 130	2	20
Antimony	ND		0.100	0.105		mg/L		105	70 - 130	7	20
Selenium	ND		1.00	0.956		mg/L		96	70 - 130	4	20
Vanadium	ND		0.500	0.504		mg/L		101	70 - 130	1	20
Calcium	160		25.0	189	4	mg/L		99	70 - 130	1	20
Magnesium	31		25.0	54.7		mg/L		95	70 - 130	6	20
Lithium	0.13		0.500	0.623		mg/L		99	70 - 130	2	20
Sodium	88		25.0	112		mg/L		98	70 - 130	3	20
Potassium	8.3		25.0	30.3		mg/L		88	70 - 130	9	20

Lab Sample ID: 240-223130-2 MSD
Matrix: Water
Analysis Batch: 654281

Client Sample ID: L504149-02 MW-18B
Prep Type: Total Recoverable
Prep Batch: 653842

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	ND		0.500	0.517		mg/L		103	70 - 130	1	20
Thallium	ND		1.00	1.12		mg/L		112	70 - 130	1	20

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-653846/1-A
Matrix: Water
Analysis Batch: 654220

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 653846

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		04/28/25 14:00	04/30/25 10:04	1

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: LCS 240-653846/2-A
Matrix: Water
Analysis Batch: 654220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 653846

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00477		mg/L		95	85 - 115		

Lab Sample ID: 240-223130-1 MS
Matrix: Water
Analysis Batch: 654220

Client Sample ID: L504149-01 MW-18A
Prep Type: Total/NA
Prep Batch: 653846

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00100	0.000994		mg/L		99	70 - 130		

Lab Sample ID: 240-223130-1 MSD
Matrix: Water
Analysis Batch: 654220

Client Sample ID: L504149-01 MW-18A
Prep Type: Total/NA
Prep Batch: 653846

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.000995		mg/L		99	70 - 130	0	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-654559/4
Matrix: Water
Analysis Batch: 654559

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			05/01/25 15:03	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			05/01/25 15:03	1

Lab Sample ID: 240-223130-1 DU
Matrix: Water
Analysis Batch: 654559

Client Sample ID: L504149-01 MW-18A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	130		132		mg/L		0.4	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-654012/1
Matrix: Water
Analysis Batch: 654012

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			04/29/25 10:50	1

Lab Sample ID: LCS 240-654012/2
Matrix: Water
Analysis Batch: 654012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			176	172		mg/L		98	80 - 120		

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-653809/1
Matrix: Water
Analysis Batch: 653809

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			04/28/25 09:59	1

Lab Sample ID: LCS 240-653809/2
Matrix: Water
Analysis Batch: 653809

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	76.1	68.0		mg/L		89	64 - 120

Lab Sample ID: MB 240-653852/1
Matrix: Water
Analysis Batch: 653852

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			04/28/25 11:17	1

Lab Sample ID: LCS 240-653852/2
Matrix: Water
Analysis Batch: 653852

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	76.1	77.0		mg/L		101	64 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-654067/3
Matrix: Water
Analysis Batch: 654067

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			05/02/25 07:10	1
Fluoride	ND		0.050	0.024	mg/L			05/02/25 07:10	1
Sulfate	ND		1.0	0.35	mg/L			05/02/25 07:10	1

Lab Sample ID: LCS 240-654067/4
Matrix: Water
Analysis Batch: 654067

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	48.7		mg/L		97	90 - 110
Fluoride	2.50	2.41		mg/L		96	90 - 110
Sulfate	50.0	47.4		mg/L		95	90 - 110

Lab Sample ID: 240-223130-4 MS
Matrix: Water
Analysis Batch: 654067

Client Sample ID: L504149-04 MW-18D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	26		50.0	76.7		mg/L		102	80 - 120
Fluoride	1.0		2.50	3.47		mg/L		97	80 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-223130-4 MS
Matrix: Water
Analysis Batch: 654067

Client Sample ID: L504149-04 MW-18D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	140		50.0	183		mg/L		93	80 - 120

Lab Sample ID: 240-223130-4 MS
Matrix: Water
Analysis Batch: 654067

Client Sample ID: L504149-04 MW-18D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25		250	282		mg/L		103	80 - 120
Fluoride	0.75		12.5	13.5		mg/L		102	80 - 120
Sulfate	140		250	386		mg/L		100	80 - 120

Lab Sample ID: 240-223130-4 MSD
Matrix: Water
Analysis Batch: 654067

Client Sample ID: L504149-04 MW-18D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	26		50.0	76.7		mg/L		102	80 - 120	0	15
Fluoride	1.0		2.50	3.47		mg/L		97	80 - 120	0	15
Sulfate	140		50.0	183		mg/L		92	80 - 120	0	15

Lab Sample ID: 240-223130-4 MSD
Matrix: Water
Analysis Batch: 654067

Client Sample ID: L504149-04 MW-18D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	25		250	283		mg/L		103	80 - 120	0	15
Fluoride	0.75		12.5	13.5		mg/L		102	80 - 120	0	15
Sulfate	140		250	386		mg/L		100	80 - 120	0	15

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-715328/1-A
Matrix: Water
Analysis Batch: 719413

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 715328

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1802		0.119	0.120	1.00	0.161	pCi/L	04/30/25 12:53	05/27/25 08:19	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.3*		*30 - 110*	*04/30/25 12:53*	*05/27/25 08:19*	*1*

Lab Sample ID: LCS 160-715328/2-A
Matrix: Water
Analysis Batch: 719413

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 715328

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.58	9.232		1.04	1.00	0.204	pCi/L	96	75 - 125

Method: 903.0 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-715328/2-A
Matrix: Water
Analysis Batch: 719413

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 715328

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	89.0		30 - 110

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-715329/1-A
Matrix: Water
Analysis Batch: 719017

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 715329

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.1528	U	0.388	0.389	1.00	0.777	pCi/L	04/30/25 12:57	05/23/25 14:26	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	81.3		30 - 110	04/30/25 12:57	05/23/25 14:26	1
Y Carrier	74.8		30 - 110	04/30/25 12:57	05/23/25 14:26	1

Lab Sample ID: LCS 160-715329/2-A
Matrix: Water
Analysis Batch: 719017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 715329

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.42	11.79		1.64	1.00	0.816	pCi/L	125	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	89.0		30 - 110
Y Carrier	77.8		30 - 110

Metals

Prep Batch: 6586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-1	L504149-01 MW-18A	Total/NA	Water	200.8	
240-223130-2	L504149-02 MW-18B	Total/NA	Water	200.8	
240-223130-3	L504149-03 MW-18C	Total/NA	Water	200.8	
240-223130-4	L504149-04 MW-18D	Total/NA	Water	200.8	
MB 350-6586/25-A	Method Blank	Total/NA	Water	200.8	
LCS 350-6586/26-A	Lab Control Sample	Total/NA	Water	200.8	
240-223130-1 MS	L504149-01 MW-18A	Total/NA	Water	200.8	
240-223130-1 MSD	L504149-01 MW-18A	Total/NA	Water	200.8	

Analysis Batch: 6606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-1	L504149-01 MW-18A	Total/NA	Water	200.8	6586
240-223130-2	L504149-02 MW-18B	Total/NA	Water	200.8	6586
240-223130-3	L504149-03 MW-18C	Total/NA	Water	200.8	6586
240-223130-4	L504149-04 MW-18D	Total/NA	Water	200.8	6586
MB 350-6586/25-A	Method Blank	Total/NA	Water	200.8	6586
LCS 350-6586/26-A	Lab Control Sample	Total/NA	Water	200.8	6586
240-223130-1 MS	L504149-01 MW-18A	Total/NA	Water	200.8	6586
240-223130-1 MSD	L504149-01 MW-18A	Total/NA	Water	200.8	6586

Prep Batch: 6607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-1	L504149-01 MW-18A	Total/NA	Water	200.8	
240-223130-3	L504149-03 MW-18C	Total/NA	Water	200.8	
MB 350-6607/13-A	Method Blank	Total/NA	Water	200.8	
LCS 350-6607/14-A	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 6623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-1	L504149-01 MW-18A	Total/NA	Water	200.8	6607
240-223130-3	L504149-03 MW-18C	Total/NA	Water	200.8	6607
MB 350-6607/13-A	Method Blank	Total/NA	Water	200.8	6607
LCS 350-6607/14-A	Lab Control Sample	Total/NA	Water	200.8	6607

Prep Batch: 6680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-5	L504149-05 MWT-18A	Total/NA	Water	200.8	
MB 350-6680/13-A	Method Blank	Total/NA	Water	200.8	
LCS 350-6680/14-A	Lab Control Sample	Total/NA	Water	200.8	
240-223130-5 MS	L504149-05 MWT-18A	Total/NA	Water	200.8	
240-223130-5 MSD	L504149-05 MWT-18A	Total/NA	Water	200.8	

Prep Batch: 6701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-6	L504149-06 FB	Total/NA	Water	200.8	
MB 350-6701/25-A	Method Blank	Total/NA	Water	200.8	
LCS 350-6701/26-A	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 6711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-5	L504149-05 MWT-18A	Total/NA	Water	200.8	6680

Metals (Continued)

Analysis Batch: 6711 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 350-6680/13-A	Method Blank	Total/NA	Water	200.8	6680
LCS 350-6680/14-A	Lab Control Sample	Total/NA	Water	200.8	6680
240-223130-5 MS	L504149-05 MWT-18A	Total/NA	Water	200.8	6680
240-223130-5 MSD	L504149-05 MWT-18A	Total/NA	Water	200.8	6680

Analysis Batch: 6733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-6	L504149-06 FB	Total/NA	Water	200.8	6701
MB 350-6701/25-A	Method Blank	Total/NA	Water	200.8	6701
LCS 350-6701/26-A	Lab Control Sample	Total/NA	Water	200.8	6701

Prep Batch: 653842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-1	L504149-01 MW-18A	Total Recoverable	Water	200.7	
240-223130-2	L504149-02 MW-18B	Total Recoverable	Water	200.7	
240-223130-3	L504149-03 MW-18C	Total Recoverable	Water	200.7	
240-223130-4	L504149-04 MW-18D	Total Recoverable	Water	200.7	
240-223130-5	L504149-05 MWT-18A	Total Recoverable	Water	200.7	
240-223130-6	L504149-06 FB	Total Recoverable	Water	200.7	
MB 240-653842/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-653842/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-653842/3-A	Lab Control Sample	Total Recoverable	Water	200.7	
240-223130-1 MS	L504149-01 MW-18A	Total Recoverable	Water	200.7	
240-223130-1 MSD	L504149-01 MW-18A	Total Recoverable	Water	200.7	
240-223130-2 MS	L504149-02 MW-18B	Total Recoverable	Water	200.7	
240-223130-2 MSD	L504149-02 MW-18B	Total Recoverable	Water	200.7	

Prep Batch: 653846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-1	L504149-01 MW-18A	Total/NA	Water	245.1-1994 R3.0	
240-223130-2	L504149-02 MW-18B	Total/NA	Water	245.1-1994 R3.0	
240-223130-3	L504149-03 MW-18C	Total/NA	Water	245.1-1994 R3.0	
240-223130-4	L504149-04 MW-18D	Total/NA	Water	245.1-1994 R3.0	
240-223130-5	L504149-05 MWT-18A	Total/NA	Water	245.1-1994 R3.0	
240-223130-6	L504149-06 FB	Total/NA	Water	245.1-1994 R3.0	
MB 240-653846/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-653846/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	
240-223130-1 MS	L504149-01 MW-18A	Total/NA	Water	245.1-1994 R3.0	
240-223130-1 MSD	L504149-01 MW-18A	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 654111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-1	L504149-01 MW-18A	Total Recoverable	Water	200.8-1994 R5.4	653842
240-223130-2	L504149-02 MW-18B	Total Recoverable	Water	200.8-1994 R5.4	653842
240-223130-3	L504149-03 MW-18C	Total Recoverable	Water	200.8-1994 R5.4	653842
240-223130-4	L504149-04 MW-18D	Total Recoverable	Water	200.8-1994 R5.4	653842
240-223130-5	L504149-05 MWT-18A	Total Recoverable	Water	200.8-1994 R5.4	653842
240-223130-6	L504149-06 FB	Total Recoverable	Water	200.8-1994 R5.4	653842
MB 240-653842/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	653842
LCS 240-653842/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	653842
240-223130-2 MS	L504149-02 MW-18B	Total Recoverable	Water	200.8-1994 R5.4	653842

Metals (Continued)

Analysis Batch: 654111 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-2 MSD	L504149-02 MW-18B	Total Recoverable	Water	200.8-1994 R5.4	653842

Analysis Batch: 654139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-1	L504149-01 MW-18A	Total Recoverable	Water	200.7 R4.4-1994	653842
240-223130-2	L504149-02 MW-18B	Total Recoverable	Water	200.7 R4.4-1994	653842
240-223130-3	L504149-03 MW-18C	Total Recoverable	Water	200.7 R4.4-1994	653842
240-223130-4	L504149-04 MW-18D	Total Recoverable	Water	200.7 R4.4-1994	653842
240-223130-5	L504149-05 MWT-18A	Total Recoverable	Water	200.7 R4.4-1994	653842
240-223130-6	L504149-06 FB	Total Recoverable	Water	200.7 R4.4-1994	653842
MB 240-653842/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	653842
LCS 240-653842/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	653842
240-223130-1 MS	L504149-01 MW-18A	Total Recoverable	Water	200.7 R4.4-1994	653842
240-223130-1 MSD	L504149-01 MW-18A	Total Recoverable	Water	200.7 R4.4-1994	653842

Analysis Batch: 654220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-1	L504149-01 MW-18A	Total/NA	Water	245.1-1994 R3.0	653846
240-223130-2	L504149-02 MW-18B	Total/NA	Water	245.1-1994 R3.0	653846
240-223130-3	L504149-03 MW-18C	Total/NA	Water	245.1-1994 R3.0	653846
240-223130-4	L504149-04 MW-18D	Total/NA	Water	245.1-1994 R3.0	653846
240-223130-5	L504149-05 MWT-18A	Total/NA	Water	245.1-1994 R3.0	653846
240-223130-6	L504149-06 FB	Total/NA	Water	245.1-1994 R3.0	653846
MB 240-653846/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	653846
LCS 240-653846/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	653846
240-223130-1 MS	L504149-01 MW-18A	Total/NA	Water	245.1-1994 R3.0	653846
240-223130-1 MSD	L504149-01 MW-18A	Total/NA	Water	245.1-1994 R3.0	653846

Analysis Batch: 654273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-1	L504149-01 MW-18A	Total Recoverable	Water	2340 B-2021	
240-223130-2	L504149-02 MW-18B	Total Recoverable	Water	2340 B-2021	
240-223130-3	L504149-03 MW-18C	Total Recoverable	Water	2340 B-2021	
240-223130-4	L504149-04 MW-18D	Total Recoverable	Water	2340 B-2021	
240-223130-5	L504149-05 MWT-18A	Total Recoverable	Water	2340 B-2021	
240-223130-6	L504149-06 FB	Total Recoverable	Water	2340 B-2021	

Analysis Batch: 654281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-1	L504149-01 MW-18A	Total Recoverable	Water	200.8-1994 R5.4	653842
240-223130-2	L504149-02 MW-18B	Total Recoverable	Water	200.8-1994 R5.4	653842
240-223130-3	L504149-03 MW-18C	Total Recoverable	Water	200.8-1994 R5.4	653842
240-223130-4	L504149-04 MW-18D	Total Recoverable	Water	200.8-1994 R5.4	653842
240-223130-5	L504149-05 MWT-18A	Total Recoverable	Water	200.8-1994 R5.4	653842
240-223130-6	L504149-06 FB	Total Recoverable	Water	200.8-1994 R5.4	653842
MB 240-653842/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	653842
LCS 240-653842/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	653842
240-223130-2 MS	L504149-02 MW-18B	Total Recoverable	Water	200.8-1994 R5.4	653842
240-223130-2 MSD	L504149-02 MW-18B	Total Recoverable	Water	200.8-1994 R5.4	653842

General Chemistry

Analysis Batch: 653809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-1	L504149-01 MW-18A	Total/NA	Water	2540D-2020	
240-223130-2	L504149-02 MW-18B	Total/NA	Water	2540D-2020	
240-223130-3	L504149-03 MW-18C	Total/NA	Water	2540D-2020	
MB 240-653809/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-653809/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 653852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-4	L504149-04 MW-18D	Total/NA	Water	2540D-2020	
240-223130-5	L504149-05 MWT-18A	Total/NA	Water	2540D-2020	
240-223130-6	L504149-06 FB	Total/NA	Water	2540D-2020	
MB 240-653852/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-653852/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 654012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-1	L504149-01 MW-18A	Total/NA	Water	2540 C-2020	
240-223130-2	L504149-02 MW-18B	Total/NA	Water	2540 C-2020	
240-223130-3	L504149-03 MW-18C	Total/NA	Water	2540 C-2020	
240-223130-4	L504149-04 MW-18D	Total/NA	Water	2540 C-2020	
240-223130-5	L504149-05 MWT-18A	Total/NA	Water	2540 C-2020	
240-223130-6	L504149-06 FB	Total/NA	Water	2540 C-2020	
MB 240-654012/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-654012/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 654067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-1	L504149-01 MW-18A	Total/NA	Water	300.0-1993 R2.1	
240-223130-2	L504149-02 MW-18B	Total/NA	Water	300.0-1993 R2.1	
240-223130-2	L504149-02 MW-18B	Total/NA	Water	300.0-1993 R2.1	
240-223130-3	L504149-03 MW-18C	Total/NA	Water	300.0-1993 R2.1	
240-223130-3	L504149-03 MW-18C	Total/NA	Water	300.0-1993 R2.1	
240-223130-4	L504149-04 MW-18D	Total/NA	Water	300.0-1993 R2.1	
240-223130-5	L504149-05 MWT-18A	Total/NA	Water	300.0-1993 R2.1	
240-223130-6	L504149-06 FB	Total/NA	Water	300.0-1993 R2.1	
MB 240-654067/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-654067/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-223130-4 MS	L504149-04 MW-18D	Total/NA	Water	300.0-1993 R2.1	
240-223130-4 MS	L504149-04 MW-18D	Total/NA	Water	300.0-1993 R2.1	
240-223130-4 MSD	L504149-04 MW-18D	Total/NA	Water	300.0-1993 R2.1	
240-223130-4 MSD	L504149-04 MW-18D	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 654559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-1	L504149-01 MW-18A	Total/NA	Water	2320 B-2021	
240-223130-2	L504149-02 MW-18B	Total/NA	Water	2320 B-2021	
240-223130-3	L504149-03 MW-18C	Total/NA	Water	2320 B-2021	
240-223130-4	L504149-04 MW-18D	Total/NA	Water	2320 B-2021	
240-223130-5	L504149-05 MWT-18A	Total/NA	Water	2320 B-2021	
240-223130-6	L504149-06 FB	Total/NA	Water	2320 B-2021	
MB 240-654559/4	Method Blank	Total/NA	Water	2320 B-2021	

General Chemistry (Continued)

Analysis Batch: 654559 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-1 DU	L504149-01 MW-18A	Total/NA	Water	2320 B-2021	

Rad

Prep Batch: 715328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-1	L504149-01 MW-18A	Total/NA	Water	PrecSep-21	
240-223130-2	L504149-02 MW-18B	Total/NA	Water	PrecSep-21	
240-223130-3	L504149-03 MW-18C	Total/NA	Water	PrecSep-21	
240-223130-4	L504149-04 MW-18D	Total/NA	Water	PrecSep-21	
240-223130-5	L504149-05 MWT-18A	Total/NA	Water	PrecSep-21	
240-223130-6	L504149-06 FB	Total/NA	Water	PrecSep-21	
MB 160-715328/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-715328/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 715329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-223130-1	L504149-01 MW-18A	Total/NA	Water	PrecSep_0	
240-223130-2	L504149-02 MW-18B	Total/NA	Water	PrecSep_0	
240-223130-3	L504149-03 MW-18C	Total/NA	Water	PrecSep_0	
240-223130-4	L504149-04 MW-18D	Total/NA	Water	PrecSep_0	
240-223130-5	L504149-05 MWT-18A	Total/NA	Water	PrecSep_0	
240-223130-6	L504149-06 FB	Total/NA	Water	PrecSep_0	
MB 160-715329/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-715329/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-223130-1

Client Sample ID: L504149-01 MW-18A

Lab Sample ID: 240-223130-1

Date Collected: 04/24/25 09:37
Matrix: Water
Date Received: 04/26/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			653842	BN	EET CLE	04/28/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	654139	AJC	EET CLE	04/30/25 06:15
Total/NA	Prep	200.8			6586	MCMS	EET SSM	05/01/25 17:53
Total/NA	Analysis	200.8		1	6606	CW	EET SSM	05/02/25 15:19
Total/NA	Prep	200.8			6607	MCMS	EET SSM	05/02/25 16:38
Total/NA	Analysis	200.8		1	6623	CW	EET SSM	05/05/25 13:08
Total Recoverable	Prep	200.7			653842	BN	EET CLE	04/28/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	654111	S4FJ	EET CLE	04/29/25 17:52
Total Recoverable	Prep	200.7			653842	BN	EET CLE	04/28/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	654281	S4FJ	EET CLE	04/30/25 17:21
Total Recoverable	Analysis	2340 B-2021		1	654273	KLC	EET CLE	05/01/25 06:00
Total/NA	Prep	245.1-1994 R3.0			653846	BN	EET CLE	04/28/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	654220	GEV	EET CLE	04/30/25 10:07
Total/NA	Analysis	2320 B-2021		1	654559	PQD2	EET CLE	05/01/25 15:07
Total/NA	Analysis	2540 C-2020		1	654012	TAV2	EET CLE	04/29/25 10:50
Total/NA	Analysis	2540D-2020		1	653809	AAP	EET CLE	04/28/25 09:59
Total/NA	Analysis	300.0-1993 R2.1		1	654067	JMR	EET CLE	05/02/25 10:50
Total/NA	Prep	PrecSep-21			715328	MLT	EET SL	04/30/25 12:53
Total/NA	Analysis	903.0		1	719420	SWS	EET SL	05/27/25 08:20
Total/NA	Prep	PrecSep_0			715329	MLT	EET SL	04/30/25 12:57
Total/NA	Analysis	904.0		1	719032	SCB	EET SL	05/23/25 14:33
Total/NA	Analysis	Ra226_Ra228 Pos		1	719432	SCB	EET SL	05/27/25 14:18

Client Sample ID: L504149-02 MW-18B

Lab Sample ID: 240-223130-2

Date Collected: 04/24/25 10:58
Matrix: Water
Date Received: 04/26/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			653842	BN	EET CLE	04/28/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	654139	AJC	EET CLE	04/30/25 06:37
Total/NA	Prep	200.8			6586	MCMS	EET SSM	05/01/25 17:53
Total/NA	Analysis	200.8		1	6606	CW	EET SSM	05/02/25 15:33
Total Recoverable	Prep	200.7			653842	BN	EET CLE	04/28/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	654111	S4FJ	EET CLE	04/29/25 17:55
Total Recoverable	Prep	200.7			653842	BN	EET CLE	04/28/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	654281	S4FJ	EET CLE	04/30/25 17:23
Total Recoverable	Analysis	2340 B-2021		1	654273	KLC	EET CLE	05/01/25 06:00
Total/NA	Prep	245.1-1994 R3.0			653846	BN	EET CLE	04/28/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	654220	GEV	EET CLE	04/30/25 10:12
Total/NA	Analysis	2320 B-2021		1	654559	PQD2	EET CLE	05/01/25 15:17
Total/NA	Analysis	2540 C-2020		1	654012	TAV2	EET CLE	04/29/25 10:50
Total/NA	Analysis	2540D-2020		1	653809	AAP	EET CLE	04/28/25 09:59
Total/NA	Analysis	300.0-1993 R2.1		1	654067	JMR	EET CLE	05/02/25 11:08

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-223130-1

Client Sample ID: L504149-02 MW-18B

Lab Sample ID: 240-223130-2

Date Collected: 04/24/25 10:58

Matrix: Water

Date Received: 04/26/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0-1993 R2.1		5	654067	JMR	EET CLE	05/02/25 11:18
Total/NA	Prep	PrecSep-21			715328	MLT	EET SL	04/30/25 12:53
Total/NA	Analysis	903.0		1	719420	SWS	EET SL	05/27/25 08:20
Total/NA	Prep	PrecSep_0			715329	MLT	EET SL	04/30/25 12:57
Total/NA	Analysis	904.0		1	719032	SCB	EET SL	05/23/25 14:33
Total/NA	Analysis	Ra226_Ra228 Pos		1	719432	SCB	EET SL	05/27/25 14:18

Client Sample ID: L504149-03 MW-18C

Lab Sample ID: 240-223130-3

Date Collected: 04/24/25 12:12

Matrix: Water

Date Received: 04/26/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			653842	BN	EET CLE	04/28/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	654139	AJC	EET CLE	04/30/25 06:50
Total/NA	Prep	200.8			6586	MCMS	EET SSM	05/01/25 17:53
Total/NA	Analysis	200.8		1	6606	CW	EET SSM	05/02/25 15:35
Total/NA	Prep	200.8			6607	MCMS	EET SSM	05/02/25 16:38
Total/NA	Analysis	200.8		1	6623	CW	EET SSM	05/05/25 13:27
Total Recoverable	Prep	200.7			653842	BN	EET CLE	04/28/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	654111	S4FJ	EET CLE	04/29/25 18:08
Total Recoverable	Prep	200.7			653842	BN	EET CLE	04/28/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	654281	S4FJ	EET CLE	04/30/25 17:34
Total Recoverable	Analysis	2340 B-2021		1	654273	KLC	EET CLE	05/01/25 06:00
Total/NA	Prep	245.1-1994 R3.0			653846	BN	EET CLE	04/28/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	654220	GEV	EET CLE	04/30/25 10:14
Total/NA	Analysis	2320 B-2021		1	654559	PQD2	EET CLE	05/01/25 15:21
Total/NA	Analysis	2540 C-2020		1	654012	TAV2	EET CLE	04/29/25 10:50
Total/NA	Analysis	2540D-2020		1	653809	AAP	EET CLE	04/28/25 09:59
Total/NA	Analysis	300.0-1993 R2.1		1	654067	JMR	EET CLE	05/02/25 11:27
Total/NA	Analysis	300.0-1993 R2.1		5	654067	JMR	EET CLE	05/02/25 11:36
Total/NA	Prep	PrecSep-21			715328	MLT	EET SL	04/30/25 12:53
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 10:18
Total/NA	Prep	PrecSep_0			715329	MLT	EET SL	04/30/25 12:57
Total/NA	Analysis	904.0		1	719032	SCB	EET SL	05/23/25 14:33
Total/NA	Analysis	Ra226_Ra228 Pos		1	719432	SCB	EET SL	05/27/25 14:18

Client Sample ID: L504149-04 MW-18D

Lab Sample ID: 240-223130-4

Date Collected: 04/24/25 13:27

Matrix: Water

Date Received: 04/26/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			653842	BN	EET CLE	04/28/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	654139	AJC	EET CLE	04/30/25 06:55

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-223130-1

Client Sample ID: L504149-04 MW-18D

Lab Sample ID: 240-223130-4

Date Collected: 04/24/25 13:27

Matrix: Water

Date Received: 04/26/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.8			6586	MCMS	EET SSM	05/01/25 17:53
Total/NA	Analysis	200.8		1	6606	CW	EET SSM	05/02/25 15:38
Total Recoverable	Prep	200.7			653842	BN	EET CLE	04/28/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	654111	S4FJ	EET CLE	04/29/25 18:11
Total Recoverable	Prep	200.7			653842	BN	EET CLE	04/28/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	654281	S4FJ	EET CLE	04/30/25 17:37
Total Recoverable	Analysis	2340 B-2021		1	654273	KLC	EET CLE	05/01/25 06:00
Total/NA	Prep	245.1-1994 R3.0			653846	BN	EET CLE	04/28/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	654220	GEV	EET CLE	04/30/25 10:16
Total/NA	Analysis	2320 B-2021		1	654559	PQD2	EET CLE	05/01/25 15:27
Total/NA	Analysis	2540 C-2020		1	654012	TAV2	EET CLE	04/29/25 10:50
Total/NA	Analysis	2540D-2020		1	653852	AAP	EET CLE	04/28/25 11:17
Total/NA	Analysis	300.0-1993 R2.1		1	654067	JMR	EET CLE	05/02/25 11:45
Total/NA	Prep	PrecSep-21			715328	MLT	EET SL	04/30/25 12:53
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 10:18
Total/NA	Prep	PrecSep_0			715329	MLT	EET SL	04/30/25 12:57
Total/NA	Analysis	904.0		1	719032	SCB	EET SL	05/23/25 14:34
Total/NA	Analysis	Ra226_Ra228 Pos		1	719432	SCB	EET SL	05/27/25 14:18

Client Sample ID: L504149-05 MWT-18A

Lab Sample ID: 240-223130-5

Date Collected: 04/24/25 09:37

Matrix: Water

Date Received: 04/26/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			653842	BN	EET CLE	04/28/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	654139	AJC	EET CLE	04/30/25 07:00
Total/NA	Prep	200.8			6680	RMN	EET SSM	05/07/25 16:31
Total/NA	Analysis	200.8		1	6711	CW	EET SSM	05/08/25 14:25
Total Recoverable	Prep	200.7			653842	BN	EET CLE	04/28/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	654111	S4FJ	EET CLE	04/29/25 18:13
Total Recoverable	Prep	200.7			653842	BN	EET CLE	04/28/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	654281	S4FJ	EET CLE	04/30/25 17:39
Total Recoverable	Analysis	2340 B-2021		1	654273	KLC	EET CLE	05/01/25 06:00
Total/NA	Prep	245.1-1994 R3.0			653846	BN	EET CLE	04/28/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	654220	GEV	EET CLE	04/30/25 10:18
Total/NA	Analysis	2320 B-2021		1	654559	PQD2	EET CLE	05/01/25 15:34
Total/NA	Analysis	2540 C-2020		1	654012	TAV2	EET CLE	04/29/25 10:50
Total/NA	Analysis	2540D-2020		1	653852	AAP	EET CLE	04/28/25 11:17
Total/NA	Analysis	300.0-1993 R2.1		1	654067	JMR	EET CLE	05/03/25 00:01
Total/NA	Prep	PrecSep-21			715328	MLT	EET SL	04/30/25 12:53
Total/NA	Analysis	903.0		1	719413	SWS	EET SL	05/27/25 10:18
Total/NA	Prep	PrecSep_0			715329	MLT	EET SL	04/30/25 12:57
Total/NA	Analysis	904.0		1	719032	SCB	EET SL	05/23/25 14:34

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-223130-1

Client Sample ID: L504149-05 MWT-18A

Lab Sample ID: 240-223130-5

Date Collected: 04/24/25 09:37
Matrix: Water
Date Received: 04/26/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Ra226_Ra228 Pos		1	719432	SCB	EET SL	05/27/25 14:18

Client Sample ID: L504149-06 FB

Lab Sample ID: 240-223130-6

Date Collected: 04/24/25 08:24
Matrix: Water
Date Received: 04/26/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			653842	BN	EET CLE	04/28/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	654139	AJC	EET CLE	04/30/25 07:04
Total/NA	Prep	200.8			6701	RMN	EET SSM	05/08/25 16:08
Total/NA	Analysis	200.8		1	6733	CW	EET SSM	05/09/25 12:41
Total Recoverable	Prep	200.7			653842	BN	EET CLE	04/28/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	654111	S4FJ	EET CLE	04/29/25 18:21
Total Recoverable	Prep	200.7			653842	BN	EET CLE	04/28/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	654281	S4FJ	EET CLE	04/30/25 17:47
Total Recoverable	Analysis	2340 B-2021		1	654273	KLC	EET CLE	05/01/25 06:00
Total/NA	Prep	245.1-1994 R3.0			653846	BN	EET CLE	04/28/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	654220	GEV	EET CLE	04/30/25 10:19
Total/NA	Analysis	2320 B-2021		1	654559	PQD2	EET CLE	05/01/25 15:39
Total/NA	Analysis	2540 C-2020		1	654012	TAV2	EET CLE	04/29/25 10:50
Total/NA	Analysis	2540D-2020		1	653852	AAP	EET CLE	04/28/25 11:17
Total/NA	Analysis	300.0-1993 R2.1		1	654067	JMR	EET CLE	05/03/25 00:19
Total/NA	Prep	PrecSep-21			715328	MLT	EET SL	04/30/25 12:53
Total/NA	Analysis	903.0		1	719420	SWS	EET SL	05/27/25 10:18
Total/NA	Prep	PrecSep_0			715329	MLT	EET SL	04/30/25 12:57
Total/NA	Analysis	904.0		1	719032	SCB	EET SL	05/23/25 14:34
Total/NA	Analysis	Ra226_Ra228 Pos		1	719432	SCB	EET SL	05/27/25 14:18

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Job ID: 240-223130-1
Project/Site: Erickson Projects

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-08-26
Florida	NELAP	E87575	06-30-25
Louisiana (All)	NELAP	03073	06-30-25
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-25
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167-008	07-07-25
US Fish & Wildlife	US Federal Programs	A20571	06-30-25
USDA	US Federal Programs	525-23-4-22573	01-24-28
Washington	State	C788-23a	07-13-25
Wisconsin	State	399133460	07-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Job ID: 240-223130-1
Project/Site: Erickson Projects

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-08-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-01-25
Texas	NELAP	T104704193	06-25-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

Chain of Custody

Return Samples to: Eurofins Michigan
38855 Hills Tech Dr.
Farmington Hills, MI 48331

240-223130 COC

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Project Manager:
Howell, Leslie

Purchase Order:
Purchase Order not required

Project Reference:

Work Order:

Sampler:
Marc Wahrer

Requested TAT:

Description:
Erickson Projects

Project Number:
24034575

Site Name:
Erickson Projects

Sample State: MI

Special Instructions:
Needs to have Promium EDD; Level 4 report.
Please use the reporting limits that are attached to this project.

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	Methods and Bottles: 300.0_28D Chloride, Fluoride & Sulfate	200.8 Project List (19)	2320B Bicarbonate & Carbonate Alkalinity	Ra226_228AS_P Combined Radium-226 and Radium-228	245.1 Mercury	SM2340B Total Hardness (as CaCO3) by calculation	200.7 Total Boron	904.0 Standard Target List	200.8_CWA Iron & Zinc	2540C_Calcd Total Dissolved Solids	903.0 Standard Target List	2540D Solids, Total Suspended (TSS)			Plastic 250ml - with Nitric Acid	Plastic 500ml - unpreserved	Plastic 1 liter - unpreserved	Plastic 60 mL - unpreserved	Plastic 500ml - with Nitric Acid	Plastic 1 liter - Nitric Acid	Total Bottles For Sample
1	L504149-01 MW-18A	Grab	Water	04/24/25 09:37				X	X	X	X	X	X	X	X	X	X	X	X			1	1	1	2	1	2	8
2	L504149-02 MW-18B	Grab	Water	04/24/25 10:58				X	X	X	X	X	X	X	X	X	X	X	X			1	1	1	2	1	2	8
3	L504149-03 MW-18C	Grab	Water	04/24/25 12:12				X	X	X	X	X	X	X	X	X	X	X	X			1	1	1	2	1	2	8
4	L504149-04 MW-18D	Grab	Water	04/24/25 13:27				X	X	X	X	X	X	X	X	X	X	X	X			1	1	1	2	1	2	8
5	L504149-05 MWT-18A	Grab	Water	04/24/25 09:37				X	X	X	X	X	X	X	X	X	X	X	X			1	1	1	2	1	2	8
6	L504149-06 FB	Grab	Water	04/24/25 08:24				X	X	X	X	X	X	X	X	X	X	X	X			1	1	1	2	1	2	8

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished To:	Date/Time:	
Jennifer Caporale	04/25/25 12:56	FedEX Jennifer Caporale	04/25/25 12:56	Received By: JMORSKO 4/26/25 08W

Chain of Custody Number: **374576**

*H – Analysis on hold.

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250425A001								
MIC20250425A001								

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client Lansing Board of Water & Light Site Name

Cooler Received on 4/26/25 Opened on 4/26/25

Cooler unpacked by: JMOROSKO

FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours Drop-off Date/Time Storage Location

Eurofins Cooler # EC Foam Box Client Cooler Box Other

Packing material used. Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☒ See Multiple Cooler Form

IR GUN # 13 (CF +0.5 °C) Observed Cooler Temp 7.0 °C Corrected Cooler Temp. 7.5 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12 Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC457151
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container
Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory
Time preserved. _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen _____

Login # : _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	0.3	0.8	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: ~~17~~	0.1	0.6	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice

4/26/2025

Login Container Summary Report

240-223130

7/25/2025 (Rev. 1)

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L504149-01 MW-18A	240-223130-A-1	Plastic 60 mL - unpreserved				
L504149-01 MW-18A	240-223130-B-1	Plastic 60 mL - unpreserved				
L504149-01 MW-18A	240-223130-C-1	Plastic 250ml - with Nitric Acid				
L504149-01 MW-18A	240-223130-D-1	Plastic 500ml - unpreserved				
L504149-01 MW-18A	240-223130-E-1	Plastic 500ml - with Nitric Acid	<2			
L504149-01 MW-18A	240-223130-F-1	Plastic 1 liter - unpreserved				
L504149-01 MW-18A	240-223130-G-1	Plastic 1 liter - Nitric Acid				
L504149-01 MW-18A	240-223130-H-1	Plastic 1 liter - Nitric Acid				
L504149-02 MW-18B	240-223130-A-2	Plastic 60 mL - unpreserved				
L504149-02 MW-18B	240-223130-B-2	Plastic 60 mL - unpreserved				
L504149-02 MW-18B	240-223130-C-2	Plastic 250ml - with Nitric Acid				
L504149-02 MW-18B	240-223130-D-2	Plastic 500ml - unpreserved				
L504149-02 MW-18B	240-223130-E-2	Plastic 500ml - with Nitric Acid	<2			
L504149-02 MW-18B	240-223130-F-2	Plastic 1 liter - unpreserved				
L504149-02 MW-18B	240-223130-G-2	Plastic 1 liter - Nitric Acid				
L504149-02 MW-18B	240-223130-H-2	Plastic 1 liter - Nitric Acid				
L504149-03 MW-18C	240-223130-A-3	Plastic 60 mL - unpreserved				
L504149-03 MW-18C	240-223130-B-3	Plastic 60 mL - unpreserved				
L504149-03 MW-18C	240-223130-C-3	Plastic 250ml - with Nitric Acid				
L504149-03 MW-18C	240-223130-D-3	Plastic 500ml - unpreserved				
L504149-03 MW-18C	240-223130-E-3	Plastic 500ml - with Nitric Acid	<2			
L504149-03 MW-18C	240-223130-F-3	Plastic 1 liter - unpreserved				
L504149-03 MW-18C	240-223130-G-3	Plastic 1 liter - Nitric Acid				
L504149-03 MW-18C	240-223130-H-3	Plastic 1 liter - Nitric Acid				
L504149-04 MW-18D	240-223130-A-4	Plastic 60 mL - unpreserved				
L504149-04 MW-18D	240-223130-B-4	Plastic 60 mL - unpreserved				
L504149-04 MW-18D	240-223130-C-4	Plastic 250ml - with Nitric Acid				
L504149-04 MW-18D	240-223130-D-4	Plastic 500ml - unpreserved				
L504149-04 MW-18D	240-223130-E-4	Plastic 500ml - with Nitric Acid	<2			
L504149-04 MW-18D	240-223130-F-4	Plastic 1 liter - unpreserved				
L504149-04 MW-18D	240-223130-G-4	Plastic 1 liter - Nitric Acid				
L504149-04 MW-18D	240-223130-H-4	Plastic 1 liter - Nitric Acid				
L504149-05 MWT-18A	240-223130-A-5	Plastic 60 mL - unpreserved				
L504149-05 MWT-18A	240-223130-B-5	Plastic 60 mL - unpreserved				
L504149-05 MWT-18A	240-223130-C-5	Plastic 250ml - with Nitric Acid				

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L504149-05 MWT-18A	240-223130-D-5	Plastic 500ml - unpreserved				
L504149-05 MWT-18A	240-223130-E-5	Plastic 500ml - with Nitric Acid	<2			
L504149-05 MWT-18A	240-223130-F-5	Plastic 1 liter - unpreserved				
L504149-05 MWT-18A	240-223130-G-5	Plastic 1 liter - Nitric Acid				
L504149-05 MWT-18A	240-223130-H-5	Plastic 1 liter - Nitric Acid				
L504149-06 FB	240-223130-A-6	Plastic 60 mL - unpreserved				
L504149-06 FB	240-223130-B-6	Plastic 60 mL - unpreserved				
L504149-06 FB	240-223130-C-6	Plastic 250ml - with Nitric Acid				
L504149-06 FB	240-223130-D-6	Plastic 500ml - unpreserved				
L504149-06 FB	240-223130-E-6	Plastic 500ml - with Nitric Acid	<2			
L504149-06 FB	240-223130-F-6	Plastic 1 liter - unpreserved				
L504149-06 FB	240-223130-G-6	Plastic 1 liter - Nitric Acid				
L504149-06 FB	240-223130-H-6	Plastic 1 liter - Nitric Acid				

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-201669.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-223130-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 5/12/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226_228GFPC_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L504149-01 MW-18A (240-223130-1)	4/24/25	09:37 Eastern	G	Water			X	X	X	2	
L504149-02 MW-18B (240-223130-2)	4/24/25	10:58 Eastern	G	Water			X	X	X	2	
L504149-03 MW-18C (240-223130-3)	4/24/25	12:12 Eastern	G	Water			X	X	X	2	
L504149-04 MW-18D (240-223130-4)	4/24/25	13:27 Eastern	G	Water			X	X	X	2	
L504149-05 MWT-18A (240-223130-5)	4/24/25	09:37 Eastern	G	Water			X	X	X	2	
L504149-06 FB (240-223130-6)	4/24/25	08:24 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: MALISSA LOAR	Date/Time: 4/28/25 8am	Company	Received by: M. Pinette	Date/Time: APR 29 2025 0840	Company
Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-201675.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-223130-1
Address: 5755 8th Street East, ,	Due Date Requested: 5/12/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT (MOD) Iron & Zinc	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
L504149-01 MW-18A (240-223130-1)	4/24/25	09:37 Eastern	G	Water			X	1	
L504149-02 MW-18B (240-223130-2)	4/24/25	10:58 Eastern	G	Water			X	1	
L504149-03 MW-18C (240-223130-3)	4/24/25	12:12 Eastern	G	Water			X	1	
L504149-04 MW-18D (240-223130-4)	4/24/25	13:27 Eastern	G	Water			X	1	
L504149-05 MWT-18A (240-223130-5)	4/24/25	09:37 Eastern	G	Water			X	1	
L504149-06 FB (240-223130-6)	4/24/25	08:24 Eastern	G	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This s
laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC lat
accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said com

Therm. ID: SC03 Cust. Seal: Y / N
Uncorr./Corr. Temp: 0.2 / 0.3 °C
Delivery: UPS / FedEx / Other: ____
Ice Type: Blue / Dry / Wet / None
Label Ver.: D Packing: D

Possible Hazard Identification: Unconfirmed 4238 4618 2112	Sample Disposal (A fee may be assessed if sample ☐ Return To Client ☐ Disposal By Lab
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4/28/25 0830	EC		4/28/25 1610	BEW
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

7/25/2025 (Rev. 1)

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-223130-1

Login Number: 223130
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 04/29/25 01:03 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-223130-1

Login Number: 223130
List Number: 2
Creator: Pinette, Meadow L

List Source: Eurofins St. Louis
List Creation: 04/29/25 11:05 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11 12 13 14

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 7/25/2025 12:56:12 PM Revision 1

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-224360-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

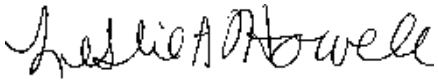
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
7/25/2025 12:56:12 PM
Revision 1

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 12
QC Sample Results 22
QC Association Summary 31
Lab Chronicle 35
Certification Summary 39
Chain of Custody 40
Receipt Checklists 47

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-224360-1 — Eurofins Cleveland

Job Narrative
240-224360-1

REVISION

The report being provided is a revision of the original report sent on 6/4/2025. The report (revision 1) is being revised due to Potassium and Sodium added to reporting list of 200.8 from Cleveland analysis..

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 5/14/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.9°C, 3.2°C and 3.6°C.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-224360-1	L505202-01 MW-19A	Water	05/12/25 11:02	05/14/25 08:00
240-224360-2	L505202-02 MW-19B	Water	05/12/25 12:42	05/14/25 08:00
240-224360-3	L505202-03 MW-19C	Water	05/12/25 14:27	05/14/25 08:00
240-224360-4	L505202-04 MW-19D	Water	05/12/25 13:20	05/14/25 08:00
240-224360-5	L505202-05 MWT-19A	Water	05/12/25 11:02	05/14/25 08:00
240-224360-6	FIELD BLANK	Water	05/12/25 09:25	05/14/25 08:00
240-224360-7	EQUIPMENT BLANK	Water	05/12/25 09:10	05/14/25 08:00

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-1

Client Sample ID: L505202-01 MW-19A — Lab Sample ID: 240-224360-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.23		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0027	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.11		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.000081	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00054	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0030	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.011		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	200		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	63		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.013		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	49		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	2.3		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	4.5		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0025	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	750		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	390	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	930		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	7.0		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	120		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.13		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	290		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L505202-02 MW-19B — Lab Sample ID: 240-224360-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.55		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0036	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.057		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.00018	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00012	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0029	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.015		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Thallium	0.00057	J	0.0010	0.00051	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	180		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L505202-02 MW-19B (Continued) — Lab Sample ID: 240-224360-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	66		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.017		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	32		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	3.1		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.1		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	730		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	420	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	940		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	4.8		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	67		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.18		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	310		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L505202-03 MW-19C — Lab Sample ID: 240-224360-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.64		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.054		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00013	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0020	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	67		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	23		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.026		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	35		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	6.1		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.80		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0011	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	260		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	320	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	300		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	8.2		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	2.0		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.35		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	15		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L505202-04 MW-19D — Lab Sample ID: 240-224360-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.2		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Boron, Dissolved	3.1		0.10	0.057	mg/L	1		200.7 R4.4-1994	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: L505202-04 MW-19D (Continued)

Lab Sample ID: 240-224360-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0021	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.034		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Beryllium	0.00073	J	0.0010	0.00027	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.0019		0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Chromium	0.0049	J	0.0050	0.0012	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0015	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0047		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lead	0.0043		0.0010	0.00045	mg/L	1		200.8-1994 R5.4	Total Recoverable
Vanadium	0.0053		0.0050	0.00082	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	6.4		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	3.1		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.025		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	180		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	3.0		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Arsenic, Dissolved	0.0017	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	0.010		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Cobalt, Dissolved	0.00034	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.0016	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Antimony, Dissolved	0.00063	J	0.0020	0.00057	mg/L	1		200.8-1994 R5.4	Dissolved
Vanadium, Dissolved	0.0011	J	0.0050	0.00082	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	3.8		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	1.2		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.019		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	180		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	2.3		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Iron	3.7		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0099		0.0070	0.00093	mg/L	1		200.8	Total/NA
Iron, Dissolved	0.32		0.10	0.013	mg/L	1		200.8	Dissolved
Zinc, Dissolved	0.0031	J	0.0070	0.00093	mg/L	1		200.8	Dissolved
Bicarbonate Alkalinity as CaCO3	330	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	52		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	510		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	36		6.2	0.62	mg/L	1		2540D-2020	Total/NA
Chloride	7.7		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	1.5		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	3.1		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-1

Client Sample ID: L505202-05 MWT-19A — Lab Sample ID: 240-224360-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.24		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0026	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.11		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00049	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0025	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.010		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	190		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	61		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.013		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	48		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	2.2		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	4.5		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0018	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	730		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	390	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	970		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	8.8		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	120		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.12		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	280		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: FIELD BLANK — Lab Sample ID: 240-224360-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	0.00097	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Bicarbonate Alkalinity as CaCO3	7.1	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA

Client Sample ID: EQUIPMENT BLANK — Lab Sample ID: 240-224360-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: L505202-01 MW-19A

Lab Sample ID: 240-224360-1

Date Collected: 05/12/25 11:02

Matrix: Water

Date Received: 05/14/25 08:00

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.23**		0.10	0.057	mg/L		05/15/25 14:00	05/19/25 13:40	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		05/15/25 14:00	05/19/25 18:02	1
Arsenic	**0.0027**	**J**	0.0050	0.00075	mg/L		05/15/25 14:00	05/19/25 18:02	1
Barium	**0.11**		0.0050	0.00077	mg/L		05/15/25 14:00	05/19/25 18:02	1
Beryllium	ND		0.0010	0.00027	mg/L		05/15/25 14:00	05/19/25 18:02	1
Cadmium	**0.000081**	**J**	0.0010	0.000077	mg/L		05/15/25 14:00	05/19/25 18:02	1
Cobalt	**0.00054**	**J**	0.0010	0.000086	mg/L		05/15/25 14:00	05/19/25 18:02	1
Chromium	ND		0.0050	0.0012	mg/L		05/15/25 14:00	05/19/25 18:02	1
Copper	ND		0.0020	0.0017	mg/L		05/15/25 14:00	05/19/25 18:02	1
Molybdenum	**0.0030**	**J**	0.0050	0.0011	mg/L		05/15/25 14:00	05/19/25 18:02	1
Nickel	**0.011**		0.0020	0.0015	mg/L		05/15/25 14:00	05/19/25 18:02	1
Lead	ND		0.0010	0.00045	mg/L		05/15/25 14:00	05/19/25 18:02	1
Antimony	ND		0.0020	0.00057	mg/L		05/15/25 14:00	05/19/25 18:02	1
Selenium	ND		0.0050	0.00089	mg/L		05/15/25 14:00	05/19/25 18:02	1
Thallium	ND		0.0010	0.00051	mg/L		05/15/25 14:00	05/19/25 18:02	1
Vanadium	ND		0.0050	0.00082	mg/L		05/15/25 14:00	05/19/25 18:02	1
Calcium	**200**		1.0	0.25	mg/L		05/15/25 14:00	05/19/25 18:02	1
Magnesium	**63**		1.0	0.061	mg/L		05/15/25 14:00	05/19/25 18:02	1
Lithium	**0.013**		0.0080	0.0034	mg/L		05/15/25 14:00	05/19/25 18:02	1
Sodium	**49**		1.0	0.88	mg/L		05/15/25 14:00	05/19/25 18:02	1
Potassium	**2.3**		1.0	0.22	mg/L		05/15/25 14:00	05/19/25 18:02	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**4.5**		0.10	0.013	mg/L		05/16/25 14:59	05/19/25 14:27	1
Zinc	**0.0025**	**J**	0.0070	0.00093	mg/L		05/16/25 14:59	05/19/25 14:27	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**750**		33	33	mg/L			05/22/25 08:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		05/15/25 14:00	05/16/25 14:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**390**	**B**	5.0	2.6	mg/L			05/14/25 19:01	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			05/14/25 19:01	1
Total Dissolved Solids (SM 2540 C-2020)	**930**		10	7.8	mg/L			05/15/25 09:45	1
Total Suspended Solids (SM 2540D-2020)	**7.0**		4.0	0.40	mg/L			05/15/25 11:43	1
Chloride (EPA 300.0-1993 R2.1)	**120**		1.0	0.13	mg/L			05/17/25 22:23	1
Fluoride (EPA 300.0-1993 R2.1)	**0.13**		0.050	0.024	mg/L			05/17/25 22:23	1
Sulfate (EPA 300.0-1993 R2.1)	**290**		5.0	1.7	mg/L			05/17/25 22:44	5

Client Sample ID: L505202-02 MW-19B

Date Collected: 05/12/25 12:42
Date Received: 05/14/25 08:00

Lab Sample ID: 240-224360-2

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.55**		0.10	0.057	mg/L		05/15/25 14:00	05/19/25 14:02	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		05/15/25 14:00	05/19/25 18:15	1
Arsenic	**0.0036**	**J**	0.0050	0.00075	mg/L		05/15/25 14:00	05/19/25 18:15	1
Barium	**0.057**		0.0050	0.00077	mg/L		05/15/25 14:00	05/19/25 18:15	1
Beryllium	ND		0.0010	0.00027	mg/L		05/15/25 14:00	05/19/25 18:15	1
Cadmium	**0.00018**	**J**	0.0010	0.000077	mg/L		05/15/25 14:00	05/19/25 18:15	1
Cobalt	**0.00012**	**J**	0.0010	0.000086	mg/L		05/15/25 14:00	05/19/25 18:15	1
Chromium	ND		0.0050	0.0012	mg/L		05/15/25 14:00	05/19/25 18:15	1
Copper	ND		0.0020	0.0017	mg/L		05/15/25 14:00	05/19/25 18:15	1
Molybdenum	**0.0029**	**J**	0.0050	0.0011	mg/L		05/15/25 14:00	05/19/25 18:15	1
Nickel	**0.015**		0.0020	0.0015	mg/L		05/15/25 14:00	05/19/25 18:15	1
Lead	ND		0.0010	0.00045	mg/L		05/15/25 14:00	05/19/25 18:15	1
Antimony	ND		0.0020	0.00057	mg/L		05/15/25 14:00	05/19/25 18:15	1
Selenium	ND		0.0050	0.00089	mg/L		05/15/25 14:00	05/19/25 18:15	1
Thallium	**0.00057**	**J**	0.0010	0.00051	mg/L		05/15/25 14:00	05/19/25 18:15	1
Vanadium	ND		0.0050	0.00082	mg/L		05/15/25 14:00	05/19/25 18:15	1
Calcium	**180**		1.0	0.25	mg/L		05/15/25 14:00	05/19/25 18:15	1
Magnesium	**66**		1.0	0.061	mg/L		05/15/25 14:00	05/19/25 18:15	1
Lithium	**0.017**		0.0080	0.0034	mg/L		05/15/25 14:00	05/19/25 18:15	1
Sodium	**32**		1.0	0.88	mg/L		05/15/25 14:00	05/19/25 18:15	1
Potassium	**3.1**		1.0	0.22	mg/L		05/15/25 14:00	05/19/25 18:15	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.1**		0.10	0.013	mg/L		05/16/25 14:59	05/19/25 14:41	1
Zinc	ND		0.0070	0.00093	mg/L		05/16/25 14:59	05/19/25 14:41	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**730**		33	33	mg/L			05/22/25 08:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		05/15/25 14:00	05/16/25 14:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**420**	**B**	5.0	2.6	mg/L			05/14/25 19:07	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			05/14/25 19:07	1
Total Dissolved Solids (SM 2540 C-2020)	**940**		10	7.8	mg/L			05/15/25 09:45	1
Total Suspended Solids (SM 2540D-2020)	**4.8**		4.0	0.40	mg/L			05/15/25 11:43	1
Chloride (EPA 300.0-1993 R2.1)	**67**		1.0	0.13	mg/L			05/17/25 23:05	1
Fluoride (EPA 300.0-1993 R2.1)	**0.18**		0.050	0.024	mg/L			05/17/25 23:05	1
Sulfate (EPA 300.0-1993 R2.1)	**310**		5.0	1.7	mg/L			05/17/25 23:26	5

Client Sample ID: L505202-03 MW-19C

Date Collected: 05/12/25 14:27
Date Received: 05/14/25 08:00

Lab Sample ID: 240-224360-3

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.64**		0.10	0.057	mg/L		05/15/25 14:00	05/19/25 14:07	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		05/15/25 14:00	05/19/25 18:18	1
Arsenic	ND		0.0050	0.00075	mg/L		05/15/25 14:00	05/19/25 18:18	1
Barium	**0.054**		0.0050	0.00077	mg/L		05/15/25 14:00	05/19/25 18:18	1
Beryllium	ND		0.0010	0.00027	mg/L		05/15/25 14:00	05/19/25 18:18	1
Cadmium	ND		0.0010	0.000077	mg/L		05/15/25 14:00	05/19/25 18:18	1
Cobalt	**0.00013**	**J**	0.0010	0.000086	mg/L		05/15/25 14:00	05/19/25 18:18	1
Chromium	ND		0.0050	0.0012	mg/L		05/15/25 14:00	05/19/25 18:18	1
Copper	ND		0.0020	0.0017	mg/L		05/15/25 14:00	05/19/25 18:18	1
Molybdenum	**0.0020**	**J**	0.0050	0.0011	mg/L		05/15/25 14:00	05/19/25 18:18	1
Nickel	ND		0.0020	0.0015	mg/L		05/15/25 14:00	05/19/25 18:18	1
Lead	ND		0.0010	0.00045	mg/L		05/15/25 14:00	05/19/25 18:18	1
Antimony	ND		0.0020	0.00057	mg/L		05/15/25 14:00	05/19/25 18:18	1
Selenium	ND		0.0050	0.00089	mg/L		05/15/25 14:00	05/19/25 18:18	1
Thallium	ND		0.0010	0.00051	mg/L		05/15/25 14:00	05/19/25 18:18	1
Vanadium	ND		0.0050	0.00082	mg/L		05/15/25 14:00	05/19/25 18:18	1
Calcium	**67**		1.0	0.25	mg/L		05/15/25 14:00	05/19/25 18:18	1
Magnesium	**23**		1.0	0.061	mg/L		05/15/25 14:00	05/19/25 18:18	1
Lithium	**0.026**		0.0080	0.0034	mg/L		05/15/25 14:00	05/19/25 18:18	1
Sodium	**35**		1.0	0.88	mg/L		05/15/25 14:00	05/19/25 18:18	1
Potassium	**6.1**		1.0	0.22	mg/L		05/15/25 14:00	05/19/25 18:18	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.80**		0.10	0.013	mg/L		05/16/25 14:59	05/19/25 15:14	1
Zinc	**0.0011**	**J**	0.0070	0.00093	mg/L		05/16/25 14:59	05/19/25 15:14	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**260**		33	33	mg/L			05/22/25 08:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		05/15/25 14:00	05/16/25 14:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**320**	**B**	5.0	2.6	mg/L			05/14/25 19:14	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			05/14/25 19:14	1
Total Dissolved Solids (SM 2540 C-2020)	**300**		10	7.8	mg/L			05/15/25 09:45	1
Total Suspended Solids (SM 2540D-2020)	**8.2**		4.0	0.40	mg/L			05/15/25 11:43	1
Chloride (EPA 300.0-1993 R2.1)	**2.0**		1.0	0.13	mg/L			05/18/25 02:16	1
Fluoride (EPA 300.0-1993 R2.1)	**0.35**		0.050	0.024	mg/L			05/18/25 02:16	1
Sulfate (EPA 300.0-1993 R2.1)	**15**		1.0	0.35	mg/L			05/18/25 02:16	1

Client Sample ID: L505202-04 MW-19D

Date Collected: 05/12/25 13:20
Date Received: 05/14/25 08:00

Lab Sample ID: 240-224360-4

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.2**		0.10	0.057	mg/L		05/15/25 14:00	05/19/25 14:20	1

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**3.1**		0.10	0.057	mg/L		05/15/25 14:00	05/19/25 14:24	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		05/15/25 14:00	05/19/25 18:25	1
Arsenic	**0.0021**	**J**	0.0050	0.00075	mg/L		05/15/25 14:00	05/19/25 18:25	1
Barium	**0.034**		0.0050	0.00077	mg/L		05/15/25 14:00	05/19/25 18:25	1
Beryllium	**0.00073**	**J**	0.0010	0.00027	mg/L		05/15/25 14:00	05/19/25 18:25	1
Cadmium	ND		0.0010	0.000077	mg/L		05/15/25 14:00	05/19/25 18:25	1
Cobalt	**0.0019**		0.0010	0.000086	mg/L		05/15/25 14:00	05/19/25 18:25	1
Chromium	**0.0049**	**J**	0.0050	0.0012	mg/L		05/15/25 14:00	05/19/25 18:25	1
Copper	ND		0.0020	0.0017	mg/L		05/15/25 14:00	05/19/25 18:25	1
Molybdenum	**0.0015**	**J**	0.0050	0.0011	mg/L		05/15/25 14:00	05/19/25 18:25	1
Nickel	**0.0047**		0.0020	0.0015	mg/L		05/15/25 14:00	05/19/25 18:25	1
Lead	**0.0043**		0.0010	0.00045	mg/L		05/15/25 14:00	05/19/25 18:25	1
Antimony	ND		0.0020	0.00057	mg/L		05/15/25 14:00	05/19/25 18:25	1
Selenium	ND		0.0050	0.00089	mg/L		05/15/25 14:00	05/19/25 18:25	1
Thallium	ND		0.0010	0.00051	mg/L		05/15/25 14:00	05/19/25 18:25	1
Vanadium	**0.0053**		0.0050	0.00082	mg/L		05/15/25 14:00	05/19/25 18:25	1
Calcium	**6.4**		1.0	0.25	mg/L		05/15/25 14:00	05/19/25 18:25	1
Magnesium	**3.1**		1.0	0.061	mg/L		05/15/25 14:00	05/19/25 18:25	1
Lithium	**0.025**		0.0080	0.0034	mg/L		05/15/25 14:00	05/19/25 18:25	1
Sodium	**180**		1.0	0.88	mg/L		05/15/25 14:00	05/19/25 18:25	1
Potassium	**3.0**		1.0	0.22	mg/L		05/15/25 14:00	05/19/25 18:25	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver, Dissolved	ND		0.0010	0.000053	mg/L		05/15/25 14:00	05/19/25 18:28	1
Arsenic, Dissolved	**0.0017**	**J**	0.0050	0.00075	mg/L		05/15/25 14:00	05/19/25 18:28	1
Barium, Dissolved	**0.010**		0.0050	0.00077	mg/L		05/15/25 14:00	05/19/25 18:28	1
Beryllium, Dissolved	ND		0.0010	0.00027	mg/L		05/15/25 14:00	05/19/25 18:28	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		05/15/25 14:00	05/19/25 18:28	1
Cobalt, Dissolved	**0.00034**	**J**	0.0010	0.000086	mg/L		05/15/25 14:00	05/19/25 18:28	1
Chromium, Dissolved	ND		0.0050	0.0012	mg/L		05/15/25 14:00	05/19/25 18:28	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		05/15/25 14:00	05/19/25 18:28	1
Molybdenum, Dissolved	**0.0016**	**J**	0.0050	0.0011	mg/L		05/15/25 14:00	05/19/25 18:28	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		05/15/25 14:00	05/19/25 18:28	1
Lead, Dissolved	ND		0.0010	0.00045	mg/L		05/15/25 14:00	05/19/25 18:28	1
Antimony, Dissolved	**0.00063**	**J**	0.0020	0.00057	mg/L		05/15/25 14:00	05/19/25 18:28	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		05/15/25 14:00	05/19/25 18:28	1
Thallium, Dissolved	ND		0.0010	0.00051	mg/L		05/15/25 14:00	05/19/25 18:28	1
Vanadium, Dissolved	**0.0011**	**J**	0.0050	0.00082	mg/L		05/15/25 14:00	05/19/25 18:28	1
Calcium, Dissolved	**3.8**		1.0	0.25	mg/L		05/15/25 14:00	05/19/25 18:28	1
Magnesium, Dissolved	**1.2**		1.0	0.061	mg/L		05/15/25 14:00	05/19/25 18:28	1
Lithium, Dissolved	**0.019**		0.0080	0.0034	mg/L		05/15/25 14:00	05/19/25 18:28	1
Sodium, Dissolved	**180**		1.0	0.88	mg/L		05/15/25 14:00	05/19/25 18:28	1

Client Sample ID: L505202-04 MW-19D

Lab Sample ID: 240-224360-4

Date Collected: 05/12/25 13:20

Matrix: Water

Date Received: 05/14/25 08:00

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium, Dissolved	2.3		1.0	0.22	mg/L		05/15/25 14:00	05/19/25 18:28	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	3.7		0.10	0.013	mg/L		05/16/25 14:59	05/19/25 15:19	1
Zinc	0.0099		0.0070	0.00093	mg/L		05/16/25 14:59	05/19/25 15:19	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	0.32		0.10	0.013	mg/L		05/16/25 14:59	05/19/25 15:17	1
Zinc, Dissolved	0.0031	J	0.0070	0.00093	mg/L		05/16/25 14:59	05/19/25 15:17	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			05/22/25 08:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		05/15/25 14:00	05/16/25 14:22	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.00013	mg/L		05/15/25 14:00	05/16/25 14:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	330	B	5.0	2.6	mg/L			05/14/25 19:22	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	52		5.0	2.6	mg/L			05/14/25 19:22	1
Total Dissolved Solids (SM 2540 C-2020)	510		10	7.8	mg/L			05/15/25 09:45	1
Total Suspended Solids (SM 2540D-2020)	36		6.2	0.62	mg/L			05/15/25 11:43	1
Chloride (EPA 300.0-1993 R2.1)	7.7		1.0	0.13	mg/L			05/18/25 03:20	1
Fluoride (EPA 300.0-1993 R2.1)	1.5		0.050	0.024	mg/L			05/18/25 03:20	1
Sulfate (EPA 300.0-1993 R2.1)	3.1		1.0	0.35	mg/L			05/18/25 03:20	1

Client Sample ID: L505202-05 MWT-19A

Date Collected: 05/12/25 11:02
Date Received: 05/14/25 08:00

Lab Sample ID: 240-224360-5

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.24**		0.10	0.057	mg/L		05/15/25 14:00	05/19/25 14:29	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		05/15/25 14:00	05/19/25 18:30	1
Arsenic	**0.0026**	**J**	0.0050	0.00075	mg/L		05/15/25 14:00	05/19/25 18:30	1
Barium	**0.11**		0.0050	0.00077	mg/L		05/15/25 14:00	05/19/25 18:30	1
Beryllium	ND		0.0010	0.00027	mg/L		05/15/25 14:00	05/19/25 18:30	1
Cadmium	ND		0.0010	0.000077	mg/L		05/15/25 14:00	05/19/25 18:30	1
Cobalt	**0.00049**	**J**	0.0010	0.000086	mg/L		05/15/25 14:00	05/19/25 18:30	1
Chromium	ND		0.0050	0.0012	mg/L		05/15/25 14:00	05/19/25 18:30	1
Copper	ND		0.0020	0.0017	mg/L		05/15/25 14:00	05/19/25 18:30	1
Molybdenum	**0.0025**	**J**	0.0050	0.0011	mg/L		05/15/25 14:00	05/19/25 18:30	1
Nickel	**0.010**		0.0020	0.0015	mg/L		05/15/25 14:00	05/19/25 18:30	1
Lead	ND		0.0010	0.00045	mg/L		05/15/25 14:00	05/19/25 18:30	1
Antimony	ND		0.0020	0.00057	mg/L		05/15/25 14:00	05/19/25 18:30	1
Selenium	ND		0.0050	0.00089	mg/L		05/15/25 14:00	05/19/25 18:30	1
Thallium	ND		0.0010	0.00051	mg/L		05/15/25 14:00	05/19/25 18:30	1
Vanadium	ND		0.0050	0.00082	mg/L		05/15/25 14:00	05/19/25 18:30	1
Calcium	**190**		1.0	0.25	mg/L		05/15/25 14:00	05/19/25 18:30	1
Magnesium	**61**		1.0	0.061	mg/L		05/15/25 14:00	05/19/25 18:30	1
Lithium	**0.013**		0.0080	0.0034	mg/L		05/15/25 14:00	05/19/25 18:30	1
Sodium	**48**		1.0	0.88	mg/L		05/15/25 14:00	05/19/25 18:30	1
Potassium	**2.2**		1.0	0.22	mg/L		05/15/25 14:00	05/19/25 18:30	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**4.5**		0.10	0.013	mg/L		05/16/25 14:59	05/19/25 15:27	1
Zinc	**0.0018**	**J**	0.0070	0.00093	mg/L		05/16/25 14:59	05/19/25 15:27	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**730**		33	33	mg/L			05/22/25 08:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		05/15/25 14:00	05/16/25 14:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**390**	**B**	5.0	2.6	mg/L			05/14/25 19:28	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			05/14/25 19:28	1
Total Dissolved Solids (SM 2540 C-2020)	**970**		10	7.8	mg/L			05/15/25 09:45	1
Total Suspended Solids (SM 2540D-2020)	**8.8**		4.0	0.40	mg/L			05/15/25 11:43	1
Chloride (EPA 300.0-1993 R2.1)	**120**		1.0	0.13	mg/L			05/18/25 03:41	1
Fluoride (EPA 300.0-1993 R2.1)	**0.12**		0.050	0.024	mg/L			05/18/25 03:41	1
Sulfate (EPA 300.0-1993 R2.1)	**280**		5.0	1.7	mg/L			05/18/25 04:02	5

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-1

Client Sample ID: FIELD BLANK

Date Collected: 05/12/25 09:25
Date Received: 05/14/25 08:00

Lab Sample ID: 240-224360-6

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		05/15/25 14:00	05/19/25 14:33	1

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	ND		0.10	0.057	mg/L		05/15/25 14:00	05/19/25 14:38	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		05/15/25 14:00	05/19/25 18:33	1
Arsenic	ND		0.0050	0.00075	mg/L		05/15/25 14:00	05/19/25 18:33	1
Barium	ND		0.0050	0.00077	mg/L		05/15/25 14:00	05/19/25 18:33	1
Beryllium	ND		0.0010	0.00027	mg/L		05/15/25 14:00	05/19/25 18:33	1
Cadmium	ND		0.0010	0.000077	mg/L		05/15/25 14:00	05/19/25 18:33	1
Cobalt	ND		0.0010	0.000086	mg/L		05/15/25 14:00	05/19/25 18:33	1
Chromium	ND		0.0050	0.0012	mg/L		05/15/25 14:00	05/19/25 18:33	1
Copper	ND		0.0020	0.0017	mg/L		05/15/25 14:00	05/19/25 18:33	1
Molybdenum	ND		0.0050	0.0011	mg/L		05/15/25 14:00	05/19/25 18:33	1
Nickel	ND		0.0020	0.0015	mg/L		05/15/25 14:00	05/19/25 18:33	1
Lead	ND		0.0010	0.00045	mg/L		05/15/25 14:00	05/19/25 18:33	1
Antimony	ND		0.0020	0.00057	mg/L		05/15/25 14:00	05/19/25 18:33	1
Selenium	ND		0.0050	0.00089	mg/L		05/15/25 14:00	05/19/25 18:33	1
Thallium	ND		0.0010	0.00051	mg/L		05/15/25 14:00	05/19/25 18:33	1
Vanadium	ND		0.0050	0.00082	mg/L		05/15/25 14:00	05/19/25 18:33	1
Calcium	ND		1.0	0.25	mg/L		05/15/25 14:00	05/19/25 18:33	1
Magnesium	ND		1.0	0.061	mg/L		05/15/25 14:00	05/19/25 18:33	1
Lithium	ND		0.0080	0.0034	mg/L		05/15/25 14:00	05/19/25 18:33	1
Sodium	ND		1.0	0.88	mg/L		05/15/25 14:00	05/19/25 18:33	1
Potassium	ND		1.0	0.22	mg/L		05/15/25 14:00	05/19/25 18:33	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver, Dissolved	ND		0.0010	0.000053	mg/L		05/15/25 14:00	05/19/25 18:36	1
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		05/15/25 14:00	05/19/25 18:36	1
Barium, Dissolved	ND		0.0050	0.00077	mg/L		05/15/25 14:00	05/19/25 18:36	1
Beryllium, Dissolved	ND		0.0010	0.00027	mg/L		05/15/25 14:00	05/19/25 18:36	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		05/15/25 14:00	05/19/25 18:36	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		05/15/25 14:00	05/19/25 18:36	1
Chromium, Dissolved	ND		0.0050	0.0012	mg/L		05/15/25 14:00	05/19/25 18:36	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		05/15/25 14:00	05/19/25 18:36	1
Molybdenum, Dissolved	ND		0.0050	0.0011	mg/L		05/15/25 14:00	05/19/25 18:36	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		05/15/25 14:00	05/19/25 18:36	1
Lead, Dissolved	ND		0.0010	0.00045	mg/L		05/15/25 14:00	05/19/25 18:36	1
Antimony, Dissolved	ND		0.0020	0.00057	mg/L		05/15/25 14:00	05/19/25 18:36	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		05/15/25 14:00	05/19/25 18:36	1
Thallium, Dissolved	ND		0.0010	0.00051	mg/L		05/15/25 14:00	05/19/25 18:36	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		05/15/25 14:00	05/19/25 18:36	1
Calcium, Dissolved	ND		1.0	0.25	mg/L		05/15/25 14:00	05/19/25 18:36	1
Magnesium, Dissolved	ND		1.0	0.061	mg/L		05/15/25 14:00	05/19/25 18:36	1
Lithium, Dissolved	ND		0.0080	0.0034	mg/L		05/15/25 14:00	05/19/25 18:36	1
Sodium, Dissolved	ND		1.0	0.88	mg/L		05/15/25 14:00	05/19/25 18:36	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-1

Client Sample ID: FIELD BLANK

Date Collected: 05/12/25 09:25
Date Received: 05/14/25 08:00

Lab Sample ID: 240-224360-6

Matrix: Water

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium, Dissolved	ND		1.0	0.22	mg/L		05/15/25 14:00	05/19/25 18:36	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		05/16/25 14:59	05/19/25 15:30	1
Zinc	**0.00097**	**J**	0.0070	0.00093	mg/L		05/16/25 14:59	05/19/25 15:30	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.10	0.013	mg/L		05/16/25 15:07	05/19/25 16:38	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		05/16/25 15:07	05/19/25 16:38	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			05/22/25 08:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		05/15/25 14:00	05/16/25 14:31	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.00013	mg/L		05/15/25 14:00	05/16/25 14:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**7.1**	**B**	5.0	2.6	mg/L			05/14/25 19:34	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			05/14/25 19:34	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			05/15/25 09:45	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			05/15/25 11:43	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			05/18/25 04:23	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			05/18/25 04:23	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			05/18/25 04:23	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-1

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID: 240-224360-7

Date Collected: 05/12/25 09:10

Matrix: Water

Date Received: 05/14/25 08:00

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		05/15/25 14:00	05/19/25 14:42	1

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	ND		0.10	0.057	mg/L		05/15/25 14:00	05/19/25 14:47	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		05/15/25 14:00	05/19/25 18:38	1
Arsenic	ND		0.0050	0.00075	mg/L		05/15/25 14:00	05/19/25 18:38	1
Barium	ND		0.0050	0.00077	mg/L		05/15/25 14:00	05/19/25 18:38	1
Beryllium	ND		0.0010	0.00027	mg/L		05/15/25 14:00	05/19/25 18:38	1
Cadmium	ND		0.0010	0.000077	mg/L		05/15/25 14:00	05/19/25 18:38	1
Cobalt	ND		0.0010	0.000086	mg/L		05/15/25 14:00	05/19/25 18:38	1
Chromium	ND		0.0050	0.0012	mg/L		05/15/25 14:00	05/19/25 18:38	1
Copper	ND		0.0020	0.0017	mg/L		05/15/25 14:00	05/19/25 18:38	1
Molybdenum	ND		0.0050	0.0011	mg/L		05/15/25 14:00	05/19/25 18:38	1
Nickel	ND		0.0020	0.0015	mg/L		05/15/25 14:00	05/19/25 18:38	1
Lead	ND		0.0010	0.00045	mg/L		05/15/25 14:00	05/19/25 18:38	1
Antimony	ND		0.0020	0.00057	mg/L		05/15/25 14:00	05/19/25 18:38	1
Selenium	ND		0.0050	0.00089	mg/L		05/15/25 14:00	05/19/25 18:38	1
Thallium	ND		0.0010	0.00051	mg/L		05/15/25 14:00	05/19/25 18:38	1
Vanadium	ND		0.0050	0.00082	mg/L		05/15/25 14:00	05/19/25 18:38	1
Calcium	ND		1.0	0.25	mg/L		05/15/25 14:00	05/19/25 18:38	1
Magnesium	ND		1.0	0.061	mg/L		05/15/25 14:00	05/19/25 18:38	1
Lithium	ND		0.0080	0.0034	mg/L		05/15/25 14:00	05/19/25 18:38	1
Sodium	ND		1.0	0.88	mg/L		05/15/25 14:00	05/19/25 18:38	1
Potassium	ND		1.0	0.22	mg/L		05/15/25 14:00	05/19/25 18:38	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver, Dissolved	ND		0.0010	0.000053	mg/L		05/15/25 14:00	05/19/25 18:41	1
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		05/15/25 14:00	05/19/25 18:41	1
Barium, Dissolved	ND		0.0050	0.00077	mg/L		05/15/25 14:00	05/19/25 18:41	1
Beryllium, Dissolved	ND		0.0010	0.00027	mg/L		05/15/25 14:00	05/19/25 18:41	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		05/15/25 14:00	05/19/25 18:41	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		05/15/25 14:00	05/19/25 18:41	1
Chromium, Dissolved	ND		0.0050	0.0012	mg/L		05/15/25 14:00	05/19/25 18:41	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		05/15/25 14:00	05/19/25 18:41	1
Molybdenum, Dissolved	ND		0.0050	0.0011	mg/L		05/15/25 14:00	05/19/25 18:41	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		05/15/25 14:00	05/19/25 18:41	1
Lead, Dissolved	ND		0.0010	0.00045	mg/L		05/15/25 14:00	05/19/25 18:41	1
Antimony, Dissolved	ND		0.0020	0.00057	mg/L		05/15/25 14:00	05/19/25 18:41	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		05/15/25 14:00	05/19/25 18:41	1
Thallium, Dissolved	ND		0.0010	0.00051	mg/L		05/15/25 14:00	05/19/25 18:41	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		05/15/25 14:00	05/19/25 18:41	1
Calcium, Dissolved	ND		1.0	0.25	mg/L		05/15/25 14:00	05/19/25 18:41	1
Magnesium, Dissolved	ND		1.0	0.061	mg/L		05/15/25 14:00	05/19/25 18:41	1
Lithium, Dissolved	ND		0.0080	0.0034	mg/L		05/15/25 14:00	05/19/25 18:41	1
Sodium, Dissolved	ND		1.0	0.88	mg/L		05/15/25 14:00	05/19/25 18:41	1

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID: 240-224360-7

Date Collected: 05/12/25 09:10

Matrix: Water

Date Received: 05/14/25 08:00

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium, Dissolved	ND		1.0	0.22	mg/L		05/15/25 14:00	05/19/25 18:41	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		05/16/25 14:59	05/19/25 15:32	1
Zinc	ND		0.0070	0.00093	mg/L		05/16/25 14:59	05/19/25 15:32	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.10	0.013	mg/L		05/16/25 15:07	05/19/25 16:41	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		05/16/25 15:07	05/19/25 16:41	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			05/22/25 08:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		05/15/25 14:00	05/16/25 14:34	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.00013	mg/L		05/15/25 14:00	05/16/25 14:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			05/14/25 19:37	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			05/14/25 19:37	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			05/15/25 09:45	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			05/15/25 11:43	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			05/18/25 04:44	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			05/18/25 04:44	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			05/18/25 04:44	1

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-656178/1-A
Matrix: Water
Analysis Batch: 656663

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 656178

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		05/15/25 14:00	05/19/25 13:12	1
Boron, Dissolved	ND		0.10	0.057	mg/L		05/15/25 14:00	05/19/25 13:12	1

Lab Sample ID: LCS 240-656178/2-A
Matrix: Water
Analysis Batch: 656663

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 656178

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.01		mg/L		101	85 - 115
Boron, Dissolved	1.00	1.01		mg/L		101	85 - 115

Lab Sample ID: 240-224360-1 MS
Matrix: Water
Analysis Batch: 656663

Client Sample ID: L505202-01 MW-19A
Prep Type: Total Recoverable
Prep Batch: 656178

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.23		1.00	1.29		mg/L		106	70 - 130
Boron, Dissolved	0.23		1.00	1.29		mg/L		106	70 - 130

Lab Sample ID: 240-224360-1 MSD
Matrix: Water
Analysis Batch: 656663

Client Sample ID: L505202-01 MW-19A
Prep Type: Total Recoverable
Prep Batch: 656178

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.23		1.00	1.30		mg/L		106	70 - 130	1	20
Boron, Dissolved	0.23		1.00	1.30		mg/L		106	70 - 130	1	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-6851/25-A
Matrix: Water
Analysis Batch: 6904

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6851

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		05/16/25 14:59	05/19/25 14:21	1
Iron, Dissolved	ND		0.10	0.013	mg/L		05/16/25 14:59	05/19/25 14:21	1
Zinc	ND		0.0070	0.00093	mg/L		05/16/25 14:59	05/19/25 14:21	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		05/16/25 14:59	05/19/25 14:21	1

Lab Sample ID: LCS 350-6851/26-A
Matrix: Water
Analysis Batch: 6904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6851

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	21.2		mg/L		106	85 - 115
Iron, Dissolved	20.0	21.2		mg/L		106	85 - 115
Zinc	1.00	1.08		mg/L		108	85 - 115
Zinc, Dissolved	1.00	1.08		mg/L		108	85 - 115

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-224360-1 MS
Matrix: Water
Analysis Batch: 6904

Client Sample ID: L505202-01 MW-19A
Prep Type: Total/NA
Prep Batch: 6851

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	4.5		20.0	25.5		mg/L		105	70 - 130
Zinc	0.0025	J	1.00	1.08		mg/L		108	70 - 130

Lab Sample ID: 240-224360-1 MSD
Matrix: Water
Analysis Batch: 6904

Client Sample ID: L505202-01 MW-19A
Prep Type: Total/NA
Prep Batch: 6851

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	4.5		20.0	24.7		mg/L		101	70 - 130	3	20
Zinc	0.0025	J	1.00	1.06		mg/L		106	70 - 130	1	20

Lab Sample ID: 240-224360-2 MS
Matrix: Water
Analysis Batch: 6904

Client Sample ID: L505202-02 MW-19B
Prep Type: Total/NA
Prep Batch: 6851

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	2.1		20.0	23.2		mg/L		106	70 - 130
Iron, Dissolved	2.1		20.0	23.2		mg/L		106	70 - 130
Zinc	ND		1.00	1.07		mg/L		107	70 - 130
Zinc, Dissolved	ND		1.00	1.07		mg/L		107	70 - 130

Lab Sample ID: 240-224360-2 MSD
Matrix: Water
Analysis Batch: 6904

Client Sample ID: L505202-02 MW-19B
Prep Type: Total/NA
Prep Batch: 6851

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	2.1		20.0	23.5		mg/L		107	70 - 130	1	20
Iron, Dissolved	2.1		20.0	23.5		mg/L		107	70 - 130	1	20
Zinc	ND		1.00	1.08		mg/L		108	70 - 130	2	20
Zinc, Dissolved	ND		1.00	1.08		mg/L		108	70 - 130	2	20

Lab Sample ID: MB 350-6853/25-A
Matrix: Water
Analysis Batch: 6904

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6853

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.10	0.013	mg/L		05/16/25 15:07	05/19/25 15:52	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		05/16/25 15:07	05/19/25 15:52	1

Lab Sample ID: LCS 350-6853/26-A
Matrix: Water
Analysis Batch: 6904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6853

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron, Dissolved	20.0	20.7		mg/L		104	85 - 115
Zinc, Dissolved	1.00	1.06		mg/L		106	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-656178/1-A
Matrix: Water
Analysis Batch: 656675

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 656178

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		05/15/25 14:00	05/19/25 17:57	1
Silver, Dissolved	ND		0.0010	0.000053	mg/L		05/15/25 14:00	05/19/25 17:57	1
Arsenic	ND		0.0050	0.00075	mg/L		05/15/25 14:00	05/19/25 17:57	1
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		05/15/25 14:00	05/19/25 17:57	1
Barium	ND		0.0050	0.00077	mg/L		05/15/25 14:00	05/19/25 17:57	1
Barium, Dissolved	ND		0.0050	0.00077	mg/L		05/15/25 14:00	05/19/25 17:57	1
Beryllium	ND		0.0010	0.00027	mg/L		05/15/25 14:00	05/19/25 17:57	1
Beryllium, Dissolved	ND		0.0010	0.00027	mg/L		05/15/25 14:00	05/19/25 17:57	1
Cadmium	ND		0.0010	0.000077	mg/L		05/15/25 14:00	05/19/25 17:57	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		05/15/25 14:00	05/19/25 17:57	1
Cobalt	ND		0.0010	0.000086	mg/L		05/15/25 14:00	05/19/25 17:57	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		05/15/25 14:00	05/19/25 17:57	1
Chromium	ND		0.0050	0.0012	mg/L		05/15/25 14:00	05/19/25 17:57	1
Chromium, Dissolved	ND		0.0050	0.0012	mg/L		05/15/25 14:00	05/19/25 17:57	1
Copper	ND		0.0020	0.0017	mg/L		05/15/25 14:00	05/19/25 17:57	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		05/15/25 14:00	05/19/25 17:57	1
Molybdenum	ND		0.0050	0.0011	mg/L		05/15/25 14:00	05/19/25 17:57	1
Molybdenum, Dissolved	ND		0.0050	0.0011	mg/L		05/15/25 14:00	05/19/25 17:57	1
Nickel	ND		0.0020	0.0015	mg/L		05/15/25 14:00	05/19/25 17:57	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		05/15/25 14:00	05/19/25 17:57	1
Lead	ND		0.0010	0.00045	mg/L		05/15/25 14:00	05/19/25 17:57	1
Lead, Dissolved	ND		0.0010	0.00045	mg/L		05/15/25 14:00	05/19/25 17:57	1
Antimony	ND		0.0020	0.00057	mg/L		05/15/25 14:00	05/19/25 17:57	1
Antimony, Dissolved	ND		0.0020	0.00057	mg/L		05/15/25 14:00	05/19/25 17:57	1
Selenium	ND		0.0050	0.00089	mg/L		05/15/25 14:00	05/19/25 17:57	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		05/15/25 14:00	05/19/25 17:57	1
Thallium	ND		0.0010	0.00051	mg/L		05/15/25 14:00	05/19/25 17:57	1
Thallium, Dissolved	ND		0.0010	0.00051	mg/L		05/15/25 14:00	05/19/25 17:57	1
Vanadium	ND		0.0050	0.00082	mg/L		05/15/25 14:00	05/19/25 17:57	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		05/15/25 14:00	05/19/25 17:57	1
Calcium	ND		1.0	0.25	mg/L		05/15/25 14:00	05/19/25 17:57	1
Calcium, Dissolved	ND		1.0	0.25	mg/L		05/15/25 14:00	05/19/25 17:57	1
Magnesium	ND		1.0	0.061	mg/L		05/15/25 14:00	05/19/25 17:57	1
Magnesium, Dissolved	ND		1.0	0.061	mg/L		05/15/25 14:00	05/19/25 17:57	1
Lithium	ND		0.0080	0.0034	mg/L		05/15/25 14:00	05/19/25 17:57	1
Lithium, Dissolved	ND		0.0080	0.0034	mg/L		05/15/25 14:00	05/19/25 17:57	1
Sodium	ND		1.0	0.88	mg/L		05/15/25 14:00	05/19/25 17:57	1
Sodium, Dissolved	ND		1.0	0.88	mg/L		05/15/25 14:00	05/19/25 17:57	1
Potassium	ND		1.0	0.22	mg/L		05/15/25 14:00	05/19/25 17:57	1
Potassium, Dissolved	ND		1.0	0.22	mg/L		05/15/25 14:00	05/19/25 17:57	1

Lab Sample ID: LCS 240-656178/3-A
Matrix: Water
Analysis Batch: 656675

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 656178

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.103		mg/L		103	85 - 115
Silver, Dissolved	0.100	0.103		mg/L		103	85 - 115
Arsenic	1.00	1.01		mg/L		101	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-656178/3-A
Matrix: Water
Analysis Batch: 656675

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 656178

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic, Dissolved	1.00	1.01		mg/L		101	85 - 115
Barium	1.00	0.988		mg/L		99	85 - 115
Barium, Dissolved	1.00	0.988		mg/L		99	85 - 115
Beryllium	0.500	0.487		mg/L		97	85 - 115
Beryllium, Dissolved	0.500	0.487		mg/L		97	85 - 115
Cadmium	0.500	0.485		mg/L		97	85 - 115
Cadmium, Dissolved	0.500	0.485		mg/L		97	85 - 115
Cobalt	0.500	0.509		mg/L		102	85 - 115
Cobalt, Dissolved	0.500	0.509		mg/L		102	85 - 115
Chromium	0.500	0.499		mg/L		100	85 - 115
Chromium, Dissolved	0.500	0.499		mg/L		100	85 - 115
Copper	0.500	0.501		mg/L		100	85 - 115
Copper, Dissolved	0.500	0.501		mg/L		100	85 - 115
Molybdenum	0.500	0.501		mg/L		100	85 - 115
Molybdenum, Dissolved	0.500	0.501		mg/L		100	85 - 115
Nickel	0.500	0.495		mg/L		99	85 - 115
Nickel, Dissolved	0.500	0.495		mg/L		99	85 - 115
Lead	0.500	0.535		mg/L		107	85 - 115
Lead, Dissolved	0.500	0.535		mg/L		107	85 - 115
Antimony	0.100	0.0997		mg/L		100	85 - 115
Antimony, Dissolved	0.100	0.0997		mg/L		100	85 - 115
Selenium	1.00	0.978		mg/L		98	85 - 115
Selenium, Dissolved	1.00	0.978		mg/L		98	85 - 115
Thallium	1.00	1.13		mg/L		113	85 - 115
Thallium, Dissolved	1.00	1.13		mg/L		113	85 - 115
Vanadium	0.500	0.492		mg/L		98	85 - 115
Vanadium, Dissolved	0.500	0.492		mg/L		98	85 - 115
Calcium	25.0	25.3		mg/L		101	85 - 115
Calcium, Dissolved	25.0	25.3		mg/L		101	85 - 115
Magnesium	25.0	25.7		mg/L		103	85 - 115
Magnesium, Dissolved	25.0	25.7		mg/L		103	85 - 115
Lithium	0.500	0.523		mg/L		105	85 - 115
Lithium, Dissolved	0.500	0.523		mg/L		105	85 - 115
Sodium	25.0	25.3		mg/L		101	85 - 115
Sodium, Dissolved	25.0	25.3		mg/L		101	85 - 115
Potassium	25.0	26.5		mg/L		106	85 - 115
Potassium, Dissolved	25.0	26.5		mg/L		106	85 - 115

Lab Sample ID: 240-224360-1 MS
Matrix: Water
Analysis Batch: 656675

Client Sample ID: L505202-01 MW-19A
Prep Type: Total Recoverable
Prep Batch: 656178

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.103		mg/L		103	70 - 130
Silver, Dissolved	ND		0.100	0.103		mg/L		103	70 - 130
Arsenic	0.0027	J	1.00	1.02		mg/L		102	70 - 130
Arsenic, Dissolved	0.0027	J	1.00	1.02		mg/L		102	70 - 130
Barium	0.11		1.00	1.10		mg/L		99	70 - 130
Barium, Dissolved	0.11		1.00	1.10		mg/L		99	70 - 130

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-224360-1 MS
Matrix: Water
Analysis Batch: 656675

Client Sample ID: L505202-01 MW-19A
Prep Type: Total Recoverable
Prep Batch: 656178

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	ND		0.500	0.486		mg/L		97	70 - 130
Beryllium, Dissolved	ND		0.500	0.486		mg/L		97	70 - 130
Cadmium	0.000081	J	0.500	0.481		mg/L		96	70 - 130
Cadmium, Dissolved	0.000081	J	0.500	0.481		mg/L		96	70 - 130
Cobalt	0.00054	J	0.500	0.514		mg/L		103	70 - 130
Cobalt, Dissolved	0.00054	J	0.500	0.514		mg/L		103	70 - 130
Chromium	ND		0.500	0.500		mg/L		100	70 - 130
Chromium, Dissolved	ND		0.500	0.500		mg/L		100	70 - 130
Copper	ND		0.500	0.499		mg/L		100	70 - 130
Copper, Dissolved	ND		0.500	0.499		mg/L		100	70 - 130
Molybdenum	0.0030	J	0.500	0.516		mg/L		103	70 - 130
Molybdenum, Dissolved	0.0030	J	0.500	0.516		mg/L		103	70 - 130
Nickel	0.011		0.500	0.503		mg/L		99	70 - 130
Nickel, Dissolved	0.011		0.500	0.503		mg/L		99	70 - 130
Lead	ND		0.500	0.530		mg/L		106	70 - 130
Lead, Dissolved	ND		0.500	0.530		mg/L		106	70 - 130
Antimony	ND		0.100	0.101		mg/L		101	70 - 130
Antimony, Dissolved	ND		0.100	0.101		mg/L		101	70 - 130
Selenium	ND		1.00	0.972		mg/L		97	70 - 130
Selenium, Dissolved	ND		1.00	0.972		mg/L		97	70 - 130
Thallium	ND		1.00	1.13		mg/L		113	70 - 130
Thallium, Dissolved	ND		1.00	1.13		mg/L		113	70 - 130
Vanadium	ND		0.500	0.496		mg/L		99	70 - 130
Vanadium, Dissolved	ND		0.500	0.496		mg/L		99	70 - 130
Calcium	200		25.0	216	4	mg/L		72	70 - 130
Calcium, Dissolved	200		25.0	216	4	mg/L		72	70 - 130
Magnesium	63		25.0	84.6		mg/L		87	70 - 130
Magnesium, Dissolved	63		25.0	84.6		mg/L		87	70 - 130
Lithium	0.013		0.500	0.531		mg/L		104	70 - 130
Lithium, Dissolved	0.013		0.500	0.531		mg/L		104	70 - 130
Sodium	49		25.0	72.5		mg/L		93	70 - 130
Sodium, Dissolved	49		25.0	72.5		mg/L		93	70 - 130
Potassium	2.3		25.0	29.0		mg/L		107	70 - 130
Potassium, Dissolved	2.3		25.0	29.0		mg/L		107	70 - 130

Lab Sample ID: 240-224360-1 MSD
Matrix: Water
Analysis Batch: 656675

Client Sample ID: L505202-01 MW-19A
Prep Type: Total Recoverable
Prep Batch: 656178

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.103		mg/L		103	70 - 130	1	20
Silver, Dissolved	ND		0.100	0.103		mg/L		103	70 - 130	1	20
Arsenic	0.0027	J	1.00	1.02		mg/L		102	70 - 130	0	20
Arsenic, Dissolved	0.0027	J	1.00	1.02		mg/L		102	70 - 130	0	20
Barium	0.11		1.00	1.09		mg/L		98	70 - 130	1	20
Barium, Dissolved	0.11		1.00	1.09		mg/L		98	70 - 130	1	20
Beryllium	ND		0.500	0.485		mg/L		97	70 - 130	0	20
Beryllium, Dissolved	ND		0.500	0.485		mg/L		97	70 - 130	0	20
Cadmium	0.000081	J	0.500	0.476		mg/L		95	70 - 130	1	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-224360-1 MSD
Matrix: Water
Analysis Batch: 656675

Client Sample ID: L505202-01 MW-19A
Prep Type: Total Recoverable
Prep Batch: 656178

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium, Dissolved	0.000081	J	0.500	0.476		mg/L		95	70 - 130	1	20
Cobalt	0.00054	J	0.500	0.516		mg/L		103	70 - 130	0	20
Cobalt, Dissolved	0.00054	J	0.500	0.516		mg/L		103	70 - 130	0	20
Chromium	ND		0.500	0.500		mg/L		100	70 - 130	0	20
Chromium, Dissolved	ND		0.500	0.500		mg/L		100	70 - 130	0	20
Copper	ND		0.500	0.498		mg/L		100	70 - 130	0	20
Copper, Dissolved	ND		0.500	0.498		mg/L		100	70 - 130	0	20
Molybdenum	0.0030	J	0.500	0.512		mg/L		102	70 - 130	1	20
Molybdenum, Dissolved	0.0030	J	0.500	0.512		mg/L		102	70 - 130	1	20
Nickel	0.011		0.500	0.501		mg/L		98	70 - 130	0	20
Nickel, Dissolved	0.011		0.500	0.501		mg/L		98	70 - 130	0	20
Lead	ND		0.500	0.533		mg/L		107	70 - 130	1	20
Lead, Dissolved	ND		0.500	0.533		mg/L		107	70 - 130	1	20
Antimony	ND		0.100	0.100		mg/L		100	70 - 130	1	20
Antimony, Dissolved	ND		0.100	0.100		mg/L		100	70 - 130	1	20
Selenium	ND		1.00	0.981		mg/L		98	70 - 130	1	20
Selenium, Dissolved	ND		1.00	0.981		mg/L		98	70 - 130	1	20
Thallium	ND		1.00	1.13		mg/L		113	70 - 130	0	20
Thallium, Dissolved	ND		1.00	1.13		mg/L		113	70 - 130	0	20
Vanadium	ND		0.500	0.497		mg/L		99	70 - 130	0	20
Vanadium, Dissolved	ND		0.500	0.497		mg/L		99	70 - 130	0	20
Calcium	200		25.0	221	4	mg/L		91	70 - 130	2	20
Calcium, Dissolved	200		25.0	221	4	mg/L		91	70 - 130	2	20
Magnesium	63		25.0	86.1		mg/L		93	70 - 130	2	20
Magnesium, Dissolved	63		25.0	86.1		mg/L		93	70 - 130	2	20
Lithium	0.013		0.500	0.537		mg/L		105	70 - 130	1	20
Lithium, Dissolved	0.013		0.500	0.537		mg/L		105	70 - 130	1	20
Sodium	49		25.0	72.8		mg/L		94	70 - 130	0	20
Sodium, Dissolved	49		25.0	72.8		mg/L		94	70 - 130	0	20
Potassium	2.3		25.0	28.5		mg/L		105	70 - 130	2	20
Potassium, Dissolved	2.3		25.0	28.5		mg/L		105	70 - 130	2	20

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-656179/1-A
Matrix: Water
Analysis Batch: 656390

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 656179

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		05/15/25 14:00	05/16/25 14:10	1
Mercury, Dissolved	ND		0.00020	0.00013	mg/L		05/15/25 14:00	05/16/25 14:10	1

Lab Sample ID: LCS 240-656179/2-A
Matrix: Water
Analysis Batch: 656390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 656179

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00502		mg/L		100	85 - 115
Mercury, Dissolved	0.00500	0.00502		mg/L		100	85 - 115

Method: 245.1-1994 R3.0 - Mercury (CVAA) (Continued)

Lab Sample ID: 240-224360-1 MS
Matrix: Water
Analysis Batch: 656390

Client Sample ID: L505202-01 MW-19A
Prep Type: Total/NA
Prep Batch: 656179

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00100	0.00100		mg/L		100	70 - 130
Mercury, Dissolved	ND		0.00100	0.00100		mg/L		100	70 - 130

Lab Sample ID: 240-224360-1 MSD
Matrix: Water
Analysis Batch: 656390

Client Sample ID: L505202-01 MW-19A
Prep Type: Total/NA
Prep Batch: 656179

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.00102		mg/L		102	70 - 130	2	20
Mercury, Dissolved	ND		0.00100	0.00102		mg/L		102	70 - 130	2	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-656143/30
Matrix: Water
Analysis Batch: 656143

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			05/14/25 15:33	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			05/14/25 15:33	1

Lab Sample ID: MB 240-656143/57
Matrix: Water
Analysis Batch: 656143

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	4.48	J	5.0	2.6	mg/L			05/14/25 17:46	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			05/14/25 17:46	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-656139/1
Matrix: Water
Analysis Batch: 656139

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			05/15/25 09:45	1

Lab Sample ID: LCS 240-656139/2
Matrix: Water
Analysis Batch: 656139

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	240	205		mg/L		85	80 - 120

Method: 2540 C-2020 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 240-224360-1 DU
Matrix: Water
Analysis Batch: 656139

Client Sample ID: L505202-01 MW-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	930		914		mg/L		2	20

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-656189/1
Matrix: Water
Analysis Batch: 656189

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			05/15/25 11:43	1

Lab Sample ID: LCS 240-656189/2
Matrix: Water
Analysis Batch: 656189

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	30.0	24.0		mg/L		80	64 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-656398/3
Matrix: Water
Analysis Batch: 656398

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			05/17/25 07:54	1
Fluoride	ND		0.050	0.024	mg/L			05/17/25 07:54	1
Sulfate	ND		1.0	0.35	mg/L			05/17/25 07:54	1

Lab Sample ID: LCS 240-656398/4
Matrix: Water
Analysis Batch: 656398

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	50.3		mg/L		101	90 - 110
Fluoride	2.50	2.46		mg/L		99	90 - 110
Sulfate	50.0	51.3		mg/L		103	90 - 110

Lab Sample ID: MB 240-656402/4
Matrix: Water
Analysis Batch: 656402

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			05/18/25 01:34	1
Fluoride	ND		0.050	0.024	mg/L			05/18/25 01:34	1
Sulfate	ND		1.0	0.35	mg/L			05/18/25 01:34	1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-656402/5
Matrix: Water
Analysis Batch: 656402

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	50.3		mg/L		101	90 - 110		
Fluoride			2.50	2.46		mg/L		99	90 - 110		
Sulfate			50.0	51.1		mg/L		102	90 - 110		

Lab Sample ID: 240-224360-3 MS
Matrix: Water
Analysis Batch: 656402

Client Sample ID: L505202-03 MW-19C
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	2.0		50.0	54.3		mg/L		105	80 - 120		
Fluoride	0.35		2.50	2.86		mg/L		101	80 - 120		
Sulfate	15		50.0	67.4		mg/L		106	80 - 120		

Lab Sample ID: 240-224360-3 MSD
Matrix: Water
Analysis Batch: 656402

Client Sample ID: L505202-03 MW-19C
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2.0		50.0	52.6		mg/L		101	80 - 120	3	15
Fluoride	0.35		2.50	2.78		mg/L		97	80 - 120	3	15
Sulfate	15		50.0	65.6		mg/L		102	80 - 120	3	15

Metals

Prep Batch: 6851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-1	L505202-01 MW-19A	Total/NA	Water	200.8	
240-224360-2	L505202-02 MW-19B	Total/NA	Water	200.8	
240-224360-3	L505202-03 MW-19C	Total/NA	Water	200.8	
240-224360-4	L505202-04 MW-19D	Dissolved	Water	200.8	
240-224360-4	L505202-04 MW-19D	Total/NA	Water	200.8	
240-224360-5	L505202-05 MWT-19A	Total/NA	Water	200.8	
240-224360-6	FIELD BLANK	Total/NA	Water	200.8	
240-224360-7	EQUIPMENT BLANK	Total/NA	Water	200.8	
MB 350-6851/25-A	Method Blank	Total/NA	Water	200.8	
LCS 350-6851/26-A	Lab Control Sample	Total/NA	Water	200.8	
240-224360-1 MS	L505202-01 MW-19A	Total/NA	Water	200.8	
240-224360-1 MSD	L505202-01 MW-19A	Total/NA	Water	200.8	
240-224360-2 MS	L505202-02 MW-19B	Total/NA	Water	200.8	
240-224360-2 MSD	L505202-02 MW-19B	Total/NA	Water	200.8	

Prep Batch: 6853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-6	FIELD BLANK	Dissolved	Water	200.8	
240-224360-7	EQUIPMENT BLANK	Dissolved	Water	200.8	
MB 350-6853/25-A	Method Blank	Total/NA	Water	200.8	
LCS 350-6853/26-A	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 6904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-1	L505202-01 MW-19A	Total/NA	Water	200.8	6851
240-224360-2	L505202-02 MW-19B	Total/NA	Water	200.8	6851
240-224360-3	L505202-03 MW-19C	Total/NA	Water	200.8	6851
240-224360-4	L505202-04 MW-19D	Dissolved	Water	200.8	6851
240-224360-4	L505202-04 MW-19D	Total/NA	Water	200.8	6851
240-224360-5	L505202-05 MWT-19A	Total/NA	Water	200.8	6851
240-224360-6	FIELD BLANK	Dissolved	Water	200.8	6853
240-224360-6	FIELD BLANK	Total/NA	Water	200.8	6851
240-224360-7	EQUIPMENT BLANK	Dissolved	Water	200.8	6853
240-224360-7	EQUIPMENT BLANK	Total/NA	Water	200.8	6851
MB 350-6851/25-A	Method Blank	Total/NA	Water	200.8	6851
MB 350-6853/25-A	Method Blank	Total/NA	Water	200.8	6853
LCS 350-6851/26-A	Lab Control Sample	Total/NA	Water	200.8	6851
LCS 350-6853/26-A	Lab Control Sample	Total/NA	Water	200.8	6853
240-224360-1 MS	L505202-01 MW-19A	Total/NA	Water	200.8	6851
240-224360-1 MSD	L505202-01 MW-19A	Total/NA	Water	200.8	6851
240-224360-2 MS	L505202-02 MW-19B	Total/NA	Water	200.8	6851
240-224360-2 MSD	L505202-02 MW-19B	Total/NA	Water	200.8	6851

Prep Batch: 656178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-1	L505202-01 MW-19A	Total Recoverable	Water	200.7	
240-224360-2	L505202-02 MW-19B	Total Recoverable	Water	200.7	
240-224360-3	L505202-03 MW-19C	Total Recoverable	Water	200.7	
240-224360-4	L505202-04 MW-19D	Dissolved	Water	200.8-1994 R5.4	
240-224360-4	L505202-04 MW-19D	Total Recoverable	Water	200.7	
240-224360-5	L505202-05 MWT-19A	Total Recoverable	Water	200.7	

Metals (Continued)

Prep Batch: 656178 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-6	FIELD BLANK	Dissolved	Water	200.8-1994 R5.4	
240-224360-6	FIELD BLANK	Total Recoverable	Water	200.7	
240-224360-7	EQUIPMENT BLANK	Dissolved	Water	200.8-1994 R5.4	
240-224360-7	EQUIPMENT BLANK	Total Recoverable	Water	200.7	
MB 240-656178/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-656178/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-656178/3-A	Lab Control Sample	Total Recoverable	Water	200.7	
240-224360-1 MS	L505202-01 MW-19A	Total Recoverable	Water	200.8-1994 R5.4	
240-224360-1 MS	L505202-01 MW-19A	Total Recoverable	Water	200.7	
240-224360-1 MSD	L505202-01 MW-19A	Total Recoverable	Water	200.8-1994 R5.4	
240-224360-1 MSD	L505202-01 MW-19A	Total Recoverable	Water	200.7	

Prep Batch: 656179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-1	L505202-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	
240-224360-2	L505202-02 MW-19B	Total/NA	Water	245.1-1994 R3.0	
240-224360-3	L505202-03 MW-19C	Total/NA	Water	245.1-1994 R3.0	
240-224360-4	L505202-04 MW-19D	Dissolved	Water	245.1-1994 R3.0	
240-224360-4	L505202-04 MW-19D	Total/NA	Water	245.1-1994 R3.0	
240-224360-5	L505202-05 MWT-19A	Total/NA	Water	245.1-1994 R3.0	
240-224360-6	FIELD BLANK	Dissolved	Water	245.1-1994 R3.0	
240-224360-6	FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	
240-224360-7	EQUIPMENT BLANK	Dissolved	Water	245.1-1994 R3.0	
240-224360-7	EQUIPMENT BLANK	Total/NA	Water	245.1-1994 R3.0	
MB 240-656179/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-656179/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	
240-224360-1 MS	L505202-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	
240-224360-1 MSD	L505202-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 656390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-1	L505202-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	656179
240-224360-2	L505202-02 MW-19B	Total/NA	Water	245.1-1994 R3.0	656179
240-224360-3	L505202-03 MW-19C	Total/NA	Water	245.1-1994 R3.0	656179
240-224360-4	L505202-04 MW-19D	Dissolved	Water	245.1-1994 R3.0	656179
240-224360-4	L505202-04 MW-19D	Total/NA	Water	245.1-1994 R3.0	656179
240-224360-5	L505202-05 MWT-19A	Total/NA	Water	245.1-1994 R3.0	656179
240-224360-6	FIELD BLANK	Dissolved	Water	245.1-1994 R3.0	656179
240-224360-6	FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	656179
240-224360-7	EQUIPMENT BLANK	Dissolved	Water	245.1-1994 R3.0	656179
240-224360-7	EQUIPMENT BLANK	Total/NA	Water	245.1-1994 R3.0	656179
MB 240-656179/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	656179
LCS 240-656179/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	656179
240-224360-1 MS	L505202-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	656179
240-224360-1 MSD	L505202-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	656179

Analysis Batch: 656663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-1	L505202-01 MW-19A	Total Recoverable	Water	200.7 R4.4-1994	656178
240-224360-2	L505202-02 MW-19B	Total Recoverable	Water	200.7 R4.4-1994	656178
240-224360-3	L505202-03 MW-19C	Total Recoverable	Water	200.7 R4.4-1994	656178

Metals (Continued)

Analysis Batch: 656663 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-4	L505202-04 MW-19D	Dissolved	Water	200.7 R4.4-1994	656178
240-224360-4	L505202-04 MW-19D	Total Recoverable	Water	200.7 R4.4-1994	656178
240-224360-5	L505202-05 MWT-19A	Total Recoverable	Water	200.7 R4.4-1994	656178
240-224360-6	FIELD BLANK	Dissolved	Water	200.7 R4.4-1994	656178
240-224360-6	FIELD BLANK	Total Recoverable	Water	200.7 R4.4-1994	656178
240-224360-7	EQUIPMENT BLANK	Dissolved	Water	200.7 R4.4-1994	656178
240-224360-7	EQUIPMENT BLANK	Total Recoverable	Water	200.7 R4.4-1994	656178
MB 240-656178/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	656178
LCS 240-656178/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	656178
240-224360-1 MS	L505202-01 MW-19A	Total Recoverable	Water	200.7 R4.4-1994	656178
240-224360-1 MSD	L505202-01 MW-19A	Total Recoverable	Water	200.7 R4.4-1994	656178

Analysis Batch: 656675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-1	L505202-01 MW-19A	Total Recoverable	Water	200.8-1994 R5.4	656178
240-224360-2	L505202-02 MW-19B	Total Recoverable	Water	200.8-1994 R5.4	656178
240-224360-3	L505202-03 MW-19C	Total Recoverable	Water	200.8-1994 R5.4	656178
240-224360-4	L505202-04 MW-19D	Dissolved	Water	200.8-1994 R5.4	656178
240-224360-4	L505202-04 MW-19D	Total Recoverable	Water	200.8-1994 R5.4	656178
240-224360-5	L505202-05 MWT-19A	Total Recoverable	Water	200.8-1994 R5.4	656178
240-224360-6	FIELD BLANK	Dissolved	Water	200.8-1994 R5.4	656178
240-224360-6	FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	656178
240-224360-7	EQUIPMENT BLANK	Dissolved	Water	200.8-1994 R5.4	656178
240-224360-7	EQUIPMENT BLANK	Total Recoverable	Water	200.8-1994 R5.4	656178
MB 240-656178/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	656178
LCS 240-656178/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	656178
240-224360-1 MS	L505202-01 MW-19A	Total Recoverable	Water	200.8-1994 R5.4	656178
240-224360-1 MSD	L505202-01 MW-19A	Total Recoverable	Water	200.8-1994 R5.4	656178

Analysis Batch: 657024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-1	L505202-01 MW-19A	Total Recoverable	Water	2340 B-2021	
240-224360-2	L505202-02 MW-19B	Total Recoverable	Water	2340 B-2021	
240-224360-3	L505202-03 MW-19C	Total Recoverable	Water	2340 B-2021	
240-224360-4	L505202-04 MW-19D	Total Recoverable	Water	2340 B-2021	
240-224360-5	L505202-05 MWT-19A	Total Recoverable	Water	2340 B-2021	
240-224360-6	FIELD BLANK	Total Recoverable	Water	2340 B-2021	
240-224360-7	EQUIPMENT BLANK	Total Recoverable	Water	2340 B-2021	

General Chemistry

Analysis Batch: 656139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-1	L505202-01 MW-19A	Total/NA	Water	2540 C-2020	
240-224360-2	L505202-02 MW-19B	Total/NA	Water	2540 C-2020	
240-224360-3	L505202-03 MW-19C	Total/NA	Water	2540 C-2020	
240-224360-4	L505202-04 MW-19D	Total/NA	Water	2540 C-2020	
240-224360-5	L505202-05 MWT-19A	Total/NA	Water	2540 C-2020	
240-224360-6	FIELD BLANK	Total/NA	Water	2540 C-2020	
240-224360-7	EQUIPMENT BLANK	Total/NA	Water	2540 C-2020	
MB 240-656139/1	Method Blank	Total/NA	Water	2540 C-2020	

General Chemistry (Continued)

Analysis Batch: 656139 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-656139/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-224360-1 DU	L505202-01 MW-19A	Total/NA	Water	2540 C-2020	

Analysis Batch: 656143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-1	L505202-01 MW-19A	Total/NA	Water	2320 B-2021	
240-224360-2	L505202-02 MW-19B	Total/NA	Water	2320 B-2021	
240-224360-3	L505202-03 MW-19C	Total/NA	Water	2320 B-2021	
240-224360-4	L505202-04 MW-19D	Total/NA	Water	2320 B-2021	
240-224360-5	L505202-05 MWT-19A	Total/NA	Water	2320 B-2021	
240-224360-6	FIELD BLANK	Total/NA	Water	2320 B-2021	
240-224360-7	EQUIPMENT BLANK	Total/NA	Water	2320 B-2021	
MB 240-656143/30	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-656143/57	Method Blank	Total/NA	Water	2320 B-2021	

Analysis Batch: 656189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-1	L505202-01 MW-19A	Total/NA	Water	2540D-2020	
240-224360-2	L505202-02 MW-19B	Total/NA	Water	2540D-2020	
240-224360-3	L505202-03 MW-19C	Total/NA	Water	2540D-2020	
240-224360-4	L505202-04 MW-19D	Total/NA	Water	2540D-2020	
240-224360-5	L505202-05 MWT-19A	Total/NA	Water	2540D-2020	
240-224360-6	FIELD BLANK	Total/NA	Water	2540D-2020	
240-224360-7	EQUIPMENT BLANK	Total/NA	Water	2540D-2020	
MB 240-656189/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-656189/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 656398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-1	L505202-01 MW-19A	Total/NA	Water	300.0-1993 R2.1	
240-224360-1	L505202-01 MW-19A	Total/NA	Water	300.0-1993 R2.1	
240-224360-2	L505202-02 MW-19B	Total/NA	Water	300.0-1993 R2.1	
240-224360-2	L505202-02 MW-19B	Total/NA	Water	300.0-1993 R2.1	
MB 240-656398/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-656398/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 656402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-3	L505202-03 MW-19C	Total/NA	Water	300.0-1993 R2.1	
240-224360-4	L505202-04 MW-19D	Total/NA	Water	300.0-1993 R2.1	
240-224360-5	L505202-05 MWT-19A	Total/NA	Water	300.0-1993 R2.1	
240-224360-5	L505202-05 MWT-19A	Total/NA	Water	300.0-1993 R2.1	
240-224360-6	FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
240-224360-7	EQUIPMENT BLANK	Total/NA	Water	300.0-1993 R2.1	
MB 240-656402/4	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-656402/5	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-224360-3 MS	L505202-03 MW-19C	Total/NA	Water	300.0-1993 R2.1	
240-224360-3 MSD	L505202-03 MW-19C	Total/NA	Water	300.0-1993 R2.1	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-1

Client Sample ID: L505202-01 MW-19A

Lab Sample ID: 240-224360-1

Date Collected: 05/12/25 11:02
Date Received: 05/14/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			656178	MN7X	EET CLE	05/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	656663	KLC	EET CLE	05/19/25 13:40
Total/NA	Prep	200.8			6851	RMN	EET SSM	05/16/25 14:59
Total/NA	Analysis	200.8		1	6904	CW	EET SSM	05/19/25 14:27
Total Recoverable	Prep	200.7			656178	MN7X	EET CLE	05/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	656675	S4FJ	EET CLE	05/19/25 18:02
Total Recoverable	Analysis	2340 B-2021		1	657024	KLC	EET CLE	05/22/25 08:14
Total/NA	Prep	245.1-1994 R3.0			656179	MN7X	EET CLE	05/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	656390	S4FJ	EET CLE	05/16/25 14:14
Total/NA	Analysis	2320 B-2021		1	656143	PQD2	EET CLE	05/14/25 19:01
Total/NA	Analysis	2540 C-2020		1	656139	AAP	EET CLE	05/15/25 09:45
Total/NA	Analysis	2540D-2020		1	656189	AAP	EET CLE	05/15/25 11:43
Total/NA	Analysis	300.0-1993 R2.1		1	656398	JMR	EET CLE	05/17/25 22:23
Total/NA	Analysis	300.0-1993 R2.1		5	656398	JMR	EET CLE	05/17/25 22:44

Client Sample ID: L505202-02 MW-19B

Lab Sample ID: 240-224360-2

Date Collected: 05/12/25 12:42
Date Received: 05/14/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			656178	MN7X	EET CLE	05/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	656663	KLC	EET CLE	05/19/25 14:02
Total/NA	Prep	200.8			6851	RMN	EET SSM	05/16/25 14:59
Total/NA	Analysis	200.8		1	6904	CW	EET SSM	05/19/25 14:41
Total Recoverable	Prep	200.7			656178	MN7X	EET CLE	05/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	656675	S4FJ	EET CLE	05/19/25 18:15
Total Recoverable	Analysis	2340 B-2021		1	657024	KLC	EET CLE	05/22/25 08:14
Total/NA	Prep	245.1-1994 R3.0			656179	MN7X	EET CLE	05/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	656390	S4FJ	EET CLE	05/16/25 14:19
Total/NA	Analysis	2320 B-2021		1	656143	PQD2	EET CLE	05/14/25 19:07
Total/NA	Analysis	2540 C-2020		1	656139	AAP	EET CLE	05/15/25 09:45
Total/NA	Analysis	2540D-2020		1	656189	AAP	EET CLE	05/15/25 11:43
Total/NA	Analysis	300.0-1993 R2.1		1	656398	JMR	EET CLE	05/17/25 23:05
Total/NA	Analysis	300.0-1993 R2.1		5	656398	JMR	EET CLE	05/17/25 23:26

Client Sample ID: L505202-03 MW-19C

Lab Sample ID: 240-224360-3

Date Collected: 05/12/25 14:27
Date Received: 05/14/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			656178	MN7X	EET CLE	05/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	656663	KLC	EET CLE	05/19/25 14:07
Total/NA	Prep	200.8			6851	RMN	EET SSM	05/16/25 14:59
Total/NA	Analysis	200.8		1	6904	CW	EET SSM	05/19/25 15:14

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-1

Client Sample ID: L505202-03 MW-19C

Lab Sample ID: 240-224360-3

Date Collected: 05/12/25 14:27
Matrix: Water
Date Received: 05/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			656178	MN7X	EET CLE	05/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	656675	S4FJ	EET CLE	05/19/25 18:18
Total Recoverable	Analysis	2340 B-2021		1	657024	KLC	EET CLE	05/22/25 08:14
Total/NA	Prep	245.1-1994 R3.0			656179	MN7X	EET CLE	05/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	656390	S4FJ	EET CLE	05/16/25 14:20
Total/NA	Analysis	2320 B-2021		1	656143	PQD2	EET CLE	05/14/25 19:14
Total/NA	Analysis	2540 C-2020		1	656139	AAP	EET CLE	05/15/25 09:45
Total/NA	Analysis	2540D-2020		1	656189	AAP	EET CLE	05/15/25 11:43
Total/NA	Analysis	300.0-1993 R2.1		1	656402	JMR	EET CLE	05/18/25 02:16

Client Sample ID: L505202-04 MW-19D

Lab Sample ID: 240-224360-4

Date Collected: 05/12/25 13:20
Matrix: Water
Date Received: 05/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.8-1994 R5.4			656178	MN7X	EET CLE	05/15/25 14:00
Dissolved	Analysis	200.7 R4.4-1994		1	656663	KLC	EET CLE	05/19/25 14:24
Total Recoverable	Prep	200.7			656178	MN7X	EET CLE	05/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	656663	KLC	EET CLE	05/19/25 14:20
Dissolved	Prep	200.8			6851	RMN	EET SSM	05/16/25 14:59
Dissolved	Analysis	200.8		1	6904	CW	EET SSM	05/19/25 15:17
Total/NA	Prep	200.8			6851	RMN	EET SSM	05/16/25 14:59
Total/NA	Analysis	200.8		1	6904	CW	EET SSM	05/19/25 15:19
Dissolved	Prep	200.8-1994 R5.4			656178	MN7X	EET CLE	05/15/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	656675	S4FJ	EET CLE	05/19/25 18:28
Total Recoverable	Prep	200.7			656178	MN7X	EET CLE	05/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	656675	S4FJ	EET CLE	05/19/25 18:25
Total Recoverable	Analysis	2340 B-2021		1	657024	KLC	EET CLE	05/22/25 08:14
Dissolved	Prep	245.1-1994 R3.0			656179	MN7X	EET CLE	05/15/25 14:00
Dissolved	Analysis	245.1-1994 R3.0		1	656390	S4FJ	EET CLE	05/16/25 14:24
Total/NA	Prep	245.1-1994 R3.0			656179	MN7X	EET CLE	05/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	656390	S4FJ	EET CLE	05/16/25 14:22
Total/NA	Analysis	2320 B-2021		1	656143	PQD2	EET CLE	05/14/25 19:22
Total/NA	Analysis	2540 C-2020		1	656139	AAP	EET CLE	05/15/25 09:45
Total/NA	Analysis	2540D-2020		1	656189	AAP	EET CLE	05/15/25 11:43
Total/NA	Analysis	300.0-1993 R2.1		1	656402	JMR	EET CLE	05/18/25 03:20

Client Sample ID: L505202-05 MWT-19A

Lab Sample ID: 240-224360-5

Date Collected: 05/12/25 11:02
Matrix: Water
Date Received: 05/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			656178	MN7X	EET CLE	05/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	656663	KLC	EET CLE	05/19/25 14:29

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-1

Client Sample ID: L505202-05 MWT-19A

Lab Sample ID: 240-224360-5

Date Collected: 05/12/25 11:02

Matrix: Water

Date Received: 05/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.8			6851	RMN	EET SSM	05/16/25 14:59
Total/NA	Analysis	200.8		1	6904	CW	EET SSM	05/19/25 15:27
Total Recoverable	Prep	200.7			656178	MN7X	EET CLE	05/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	656675	S4FJ	EET CLE	05/19/25 18:30
Total Recoverable	Analysis	2340 B-2021		1	657024	KLC	EET CLE	05/22/25 08:14
Total/NA	Prep	245.1-1994 R3.0			656179	MN7X	EET CLE	05/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	656390	S4FJ	EET CLE	05/16/25 14:29
Total/NA	Analysis	2320 B-2021		1	656143	PQD2	EET CLE	05/14/25 19:28
Total/NA	Analysis	2540 C-2020		1	656139	AAP	EET CLE	05/15/25 09:45
Total/NA	Analysis	2540D-2020		1	656189	AAP	EET CLE	05/15/25 11:43
Total/NA	Analysis	300.0-1993 R2.1		1	656402	JMR	EET CLE	05/18/25 03:41
Total/NA	Analysis	300.0-1993 R2.1		5	656402	JMR	EET CLE	05/18/25 04:02

Client Sample ID: FIELD BLANK

Lab Sample ID: 240-224360-6

Date Collected: 05/12/25 09:25

Matrix: Water

Date Received: 05/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.8-1994 R5.4			656178	MN7X	EET CLE	05/15/25 14:00
Dissolved	Analysis	200.7 R4.4-1994		1	656663	KLC	EET CLE	05/19/25 14:38
Total Recoverable	Prep	200.7			656178	MN7X	EET CLE	05/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	656663	KLC	EET CLE	05/19/25 14:33
Dissolved	Prep	200.8			6853	RMN	EET SSM	05/16/25 15:07
Dissolved	Analysis	200.8		1	6904	CW	EET SSM	05/19/25 16:38
Total/NA	Prep	200.8			6851	RMN	EET SSM	05/16/25 14:59
Total/NA	Analysis	200.8		1	6904	CW	EET SSM	05/19/25 15:30
Dissolved	Prep	200.8-1994 R5.4			656178	MN7X	EET CLE	05/15/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	656675	S4FJ	EET CLE	05/19/25 18:36
Total Recoverable	Prep	200.7			656178	MN7X	EET CLE	05/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	656675	S4FJ	EET CLE	05/19/25 18:33
Total Recoverable	Analysis	2340 B-2021		1	657024	KLC	EET CLE	05/22/25 08:14
Dissolved	Prep	245.1-1994 R3.0			656179	MN7X	EET CLE	05/15/25 14:00
Dissolved	Analysis	245.1-1994 R3.0		1	656390	S4FJ	EET CLE	05/16/25 14:32
Total/NA	Prep	245.1-1994 R3.0			656179	MN7X	EET CLE	05/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	656390	S4FJ	EET CLE	05/16/25 14:31
Total/NA	Analysis	2320 B-2021		1	656143	PQD2	EET CLE	05/14/25 19:34
Total/NA	Analysis	2540 C-2020		1	656139	AAP	EET CLE	05/15/25 09:45
Total/NA	Analysis	2540D-2020		1	656189	AAP	EET CLE	05/15/25 11:43
Total/NA	Analysis	300.0-1993 R2.1		1	656402	JMR	EET CLE	05/18/25 04:23

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-1

Client Sample ID: EQUIPMENT BLANK

Date Collected: 05/12/25 09:10
Date Received: 05/14/25 08:00

Lab Sample ID: 240-224360-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.8-1994 R5.4			656178	MN7X	EET CLE	05/15/25 14:00
Dissolved	Analysis	200.7 R4.4-1994		1	656663	KLC	EET CLE	05/19/25 14:47
Total Recoverable	Prep	200.7			656178	MN7X	EET CLE	05/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	656663	KLC	EET CLE	05/19/25 14:42
Dissolved	Prep	200.8			6853	RMN	EET SSM	05/16/25 15:07
Dissolved	Analysis	200.8		1	6904	CW	EET SSM	05/19/25 16:41
Total/NA	Prep	200.8			6851	RMN	EET SSM	05/16/25 14:59
Total/NA	Analysis	200.8		1	6904	CW	EET SSM	05/19/25 15:32
Dissolved	Prep	200.8-1994 R5.4			656178	MN7X	EET CLE	05/15/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	656675	S4FJ	EET CLE	05/19/25 18:41
Total Recoverable	Prep	200.7			656178	MN7X	EET CLE	05/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	656675	S4FJ	EET CLE	05/19/25 18:38
Total Recoverable	Analysis	2340 B-2021		1	657024	KLC	EET CLE	05/22/25 08:14
Dissolved	Prep	245.1-1994 R3.0			656179	MN7X	EET CLE	05/15/25 14:00
Dissolved	Analysis	245.1-1994 R3.0		1	656390	S4FJ	EET CLE	05/16/25 14:36
Total/NA	Prep	245.1-1994 R3.0			656179	MN7X	EET CLE	05/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	656390	S4FJ	EET CLE	05/16/25 14:34
Total/NA	Analysis	2320 B-2021		1	656143	PQD2	EET CLE	05/14/25 19:37
Total/NA	Analysis	2540 C-2020		1	656139	AAP	EET CLE	05/15/25 09:45
Total/NA	Analysis	2540D-2020		1	656189	AAP	EET CLE	05/15/25 11:43
Total/NA	Analysis	300.0-1993 R2.1		1	656402	JMR	EET CLE	05/18/25 04:44

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Job ID: 240-224360-1
Project/Site: Erickson Projects

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-08-26
Florida	NELAP	E87575	06-30-25
Louisiana (All)	NELAP	03073	06-30-25
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-25
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167-008	07-07-25
US Fish & Wildlife	US Federal Programs	A20571	06-30-25
USDA	US Federal Programs	525-23-4-22573	01-24-28
Washington	State	C788-23a	07-13-25
Wisconsin	State	399133460	07-31-25

Chain of Custody

Return Samples to: Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203

240-224360 COC

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☐

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Project Manager:
Howell, Leslie

Purchase Order:
Purchase Order not required

Project Reference:

Work Order:

Sampler:
Marc Wahrer and Julie Maltby

Requested TAT:

Description:
Erickson Projects

Project Number:
24034575

Site Name:
Erickson Projects

Sample State: MI

Special Instructions:
Need Promium EDD; Level 4 Report; Please use the reporting limits that are attached to this project.

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	200.7/200.7_P_TR Total Boron [C01]	200.8/200.8_P_TR Project List (19) [C01]	2540C_Calcd Total Dissolved Solids [TDS]	903.0/PrecSep_21 Standard Target List [STD]	904.0/PrecSep_0 Standard Target List [STD]	245.1/245.1_Prep Mercury [MER]	2540D Solids, Total Suspended (TSS) [TSS]	300.0_28D Chloride, Fluoride & Sulfate [ANY]	SM2340B/Auto_TotalRec Total Hardness (as CaCO3) by calculation [HAR]	200.8_CWA Iron & Zinc	Ra226_228AS_P Combined Radium-226 & 228 [160]	2320B Bicarbonate & Carbonate Alkalinity [ANY]		Plastic 1 liter - unpreserved	Plastic 500ml - unpreserved	Plastic 250ml - with Nitric Acid	Plastic 1 liter - Nitric Acid	Plastic 500ml - with Nitric Acid	Plastic 60 mL - unpreserved	Plastic 500ml - w/ Nitric - Dis.	Total Bottles For Sample
1	L505202-01 MW-19A	Grab	Water	05/12/25 11:02				X	X	X	X	X	X	X	X	X	X	X	X		1	1	1	2	1	2		8
2	L505202-02 MW-19B	Grab	Water	05/12/25 12:42				X	X	X	X	X	X	X	X	X	X	X	X		1	1	1	2	1	2		8
3	L505202-03 MW-19C	Grab	Water	05/12/25 14:27				X	X	X	X	X	X	X	X	X	X	X	X		1	1	1	2	1	2		8
4	L505202-04 MW-19D	Grab	Water	05/12/25 13:20		Please add dissolved metals		X	X	X	X	X	X	X	X	X	X	X	X		1	1	1	2	1	2	1	9
5	L505202-05 MWT-19A	Grab	Water	05/12/25 11:02				X	X	X	X	X	X	X	X	X	X	X	X		1	1	1	2	1	2		8
6	FIELD BLANK	Grab	Water	05/12/25 09:25		Please add dissolved metals		X	X	X	X	X	X	X	X	X	X	X	X		1	1	1	2	1	2	1	9
7	EQUIPMENT BLANK	Grab	Water	05/12/25 09:10		Please add dissolved metals and all other analyses															1	1	1	2	1	2	1	9

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished To:	Date/Time:	Received by:
Jennifer Caporale	05/13/25 09:56	FedEx Jennifer Caporale	05/13/25 09:56	JMOROSKO 5/14/25 800

Chain of Custody Number: **381024**

*H – Analysis on hold.

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client Lansing Board of Water Site Name _____ Cooler unpacked by:

Cooler Received on 5/14/25 Opened on 5/14/25 JMOROSKO

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt [X] See Multiple Cooler Form
   IR GUN # 13 (CF T0.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC457151
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

_____

_____

_____

_____

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Login # : _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: _____	3.1	3.6	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____	2.7	3.2	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____	2.4	2.9	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____	

Login Container Summary Report

240-224360

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L505202-01 MW-19A	240-224360-A-1	Plastic 60 mL - unpreserved				
L505202-01 MW-19A	240-224360-B-1	Plastic 60 mL - unpreserved				
L505202-01 MW-19A	240-224360-C-1	Plastic 250ml - with Nitric Acid				
L505202-01 MW-19A	240-224360-D-1	Plastic 500ml - unpreserved				
L505202-01 MW-19A	240-224360-E-1	Plastic 500ml - with Nitric Acid	<2			
L505202-01 MW-19A	240-224360-F-1	Plastic 1 liter - unpreserved				
L505202-01 MW-19A	240-224360-G-1	Plastic 1 liter - Nitric Acid	<2			
L505202-01 MW-19A	240-224360-H-1	Plastic 1 liter - Nitric Acid	<2			
L505202-02 MW-19B	240-224360-A-2	Plastic 60 mL - unpreserved				
L505202-02 MW-19B	240-224360-B-2	Plastic 60 mL - unpreserved				
L505202-02 MW-19B	240-224360-C-2	Plastic 250ml - with Nitric Acid				
L505202-02 MW-19B	240-224360-D-2	Plastic 500ml - unpreserved				
L505202-02 MW-19B	240-224360-E-2	Plastic 500ml - with Nitric Acid	<2			
L505202-02 MW-19B	240-224360-F-2	Plastic 1 liter - unpreserved				
L505202-02 MW-19B	240-224360-G-2	Plastic 1 liter - Nitric Acid	<2			
L505202-02 MW-19B	240-224360-H-2	Plastic 1 liter - Nitric Acid	<2			
L505202-03 MW-19C	240-224360-A-3	Plastic 60 mL - unpreserved				
L505202-03 MW-19C	240-224360-B-3	Plastic 60 mL - unpreserved				
L505202-03 MW-19C	240-224360-C-3	Plastic 250ml - with Nitric Acid				
L505202-03 MW-19C	240-224360-D-3	Plastic 500ml - unpreserved				
L505202-03 MW-19C	240-224360-E-3	Plastic 500ml - with Nitric Acid	<2			
L505202-03 MW-19C	240-224360-F-3	Plastic 1 liter - unpreserved				
L505202-03 MW-19C	240-224360-G-3	Plastic 1 liter - Nitric Acid	<2			
L505202-03 MW-19C	240-224360-H-3	Plastic 1 liter - Nitric Acid	<2			
L505202-04 MW-19D	240-224360-A-4	Plastic 60 mL - unpreserved				
L505202-04 MW-19D	240-224360-B-4	Plastic 60 mL - unpreserved				
L505202-04 MW-19D	240-224360-C-4	Plastic 250ml - with Nitric Acid				
L505202-04 MW-19D	240-224360-D-4	Plastic 500ml - unpreserved				
L505202-04 MW-19D	240-224360-E-4	Plastic 500ml - with Nitric Acid	<2			
L505202-04 MW-19D	240-224360-F-4	Plastic 500ml - w/ Nitric - Dis.	<2			
L505202-04 MW-19D	240-224360-G-4	Plastic 1 liter - unpreserved				
L505202-04 MW-19D	240-224360-H-4	Plastic 1 liter - Nitric Acid	<2			
L505202-04 MW-19D	240-224360-I-4	Plastic 1 liter - Nitric Acid	<2			
L505202-04 MW-19D	240-224360-J-4	Plastic 250ml - w/nitric - dis	<2			
L505202-05 MWT-19A	240-224360-A-5	Plastic 60 mL - unpreserved				

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L505202-05 MWT-19A	240-224360-B-5	Plastic 60 mL - unpreserved				
L505202-05 MWT-19A	240-224360-C-5	Plastic 250ml - with Nitric Acid				
L505202-05 MWT-19A	240-224360-D-5	Plastic 500ml - unpreserved				
L505202-05 MWT-19A	240-224360-E-5	Plastic 500ml - with Nitric Acid	<2			
L505202-05 MWT-19A	240-224360-F-5	Plastic 1 liter - unpreserved				
L505202-05 MWT-19A	240-224360-G-5	Plastic 1 liter - Nitric Acid	<2			
L505202-05 MWT-19A	240-224360-H-5	Plastic 1 liter - Nitric Acid	<2			
FIELD BLANK	240-224360-A-6	Plastic 60 mL - unpreserved				
FIELD BLANK	240-224360-B-6	Plastic 60 mL - unpreserved				
FIELD BLANK	240-224360-C-6	Plastic 250ml - with Nitric Acid				
FIELD BLANK	240-224360-D-6	Plastic 500ml - unpreserved				
FIELD BLANK	240-224360-E-6	Plastic 500ml - with Nitric Acid	<2			
FIELD BLANK	240-224360-F-6	Plastic 500ml - w/ Nitric - Dis.	<2			
FIELD BLANK	240-224360-G-6	Plastic 1 liter - unpreserved				
FIELD BLANK	240-224360-H-6	Plastic 1 liter - Nitric Acid	<2			
FIELD BLANK	240-224360-I-6	Plastic 1 liter - Nitric Acid	<2			
FIELD BLANK	240-224360-J-6	Plastic 250ml - w/nitric - dis	<2			
EQUIPMENT BLANK	240-224360-A-7	Plastic 60 mL - unpreserved				
EQUIPMENT BLANK	240-224360-B-7	Plastic 60 mL - unpreserved				
EQUIPMENT BLANK	240-224360-C-7	Plastic 250ml - with Nitric Acid				
EQUIPMENT BLANK	240-224360-D-7	Plastic 500ml - unpreserved				
EQUIPMENT BLANK	240-224360-E-7	Plastic 500ml - with Nitric Acid	<2			
EQUIPMENT BLANK	240-224360-F-7	Plastic 500ml - w/ Nitric - Dis.	<2			
EQUIPMENT BLANK	240-224360-G-7	Plastic 1 liter - unpreserved				
EQUIPMENT BLANK	240-224360-H-7	Plastic 1 liter - Nitric Acid	<2			
EQUIPMENT BLANK	240-224360-I-7	Plastic 1 liter - Nitric Acid	<2			
EQUIPMENT BLANK	240-224360-J-7	Plastic 250ml - w/nitric - dis	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-202394.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-224360-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 5/28/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226_228GFPC_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L505202-01 MW-19A (240-224360-1)	5/12/25	11:02 Eastern	G	Water			X	X	X	2	
L505202-02 MW-19B (240-224360-2)	5/12/25	12:42 Eastern	G	Water			X	X	X	2	
L505202-03 MW-19C (240-224360-3)	5/12/25	14:27 Eastern	G	Water			X	X	X	2	
L505202-04 MW-19D (240-224360-4)	5/12/25	13:20 Eastern	G	Water			X	X	X	2	
L505202-05 MWT-19A (240-224360-5)	5/12/25	11:02 Eastern	G	Water			X	X	X	2	
FIELD BLANK (240-224360-6)	5/12/25	09:25 Eastern	G	Water			X	X	X	2	
EQUIPMENT BLANK (240-224360-7)	5/12/25	09:10 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	JCollins	5/14/25	PCW		0825 MAY 15 2025	
	Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-202399.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-224360-1
Address: 5755 8th Street East, ,	Due Date Requested: 5/28/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT (MOD) Iron & Zinc	200.8_CWA/FIELD_FLTRD (MOD) Custom List 2: 2-3 Metals	Total Number of containers	Special Instructions/Note:
Preservation Code:										
L505202-01 MW-19A (240-224360-1)	5/12/25	11:02 Eastern	G	Water			X		1	
L505202-02 MW-19B (240-224360-2)	5/12/25	12:42 Eastern	G	Water			X		1	
L505202-03 MW-19C (240-224360-3)	5/12/25	14:27 Eastern	G	Water			X		1	
L505202-04 MW-19D (240-224360-4)	5/12/25	13:20 Eastern	G	Water			X	X	2	
L505202-05 MWT-19A (240-224360-5)	5/12/25	11:02 Eastern	G	Water			X		1	
FIELD BLANK (240-224360-6)	5/12/25	09:25 Eastern	G	Water			X	X	2	
EQUIPMENT BLANK (240-224360-7)	5/12/25	09:10 Eastern	G	Water			X	X	2	

Therm. ID: SC04 Cust. Seal: Y / N
Uncorr./Corr. Temp: 20.1/19.8 °C
Delivery: UPS / FedEx / Other:
Ice Type: Blue / Dry / Wet / None
Label Ver.: 1 Packing: B

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sa laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC labo accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said comp

Possible Hazard Identification: Unconfirmed 4238 4619 2845	Sample Disposal (A fee may be assessed if sample: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
J Collins	5/14/25	EUR		5/15/25 9:30	EEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

7/25/2025 (Rev. 1)

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-224360-1

Login Number: 224360
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 05/15/25 01:12 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 6/13/2025 9:29:24 AM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-224360-2

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

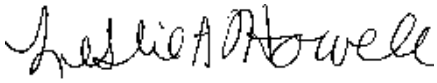
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
6/13/2025 9:29:24 AM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 9
Tracer Carrier Summary 16
QC Sample Results 17
QC Association Summary 20
Lab Chronicle 21
Certification Summary 23
Chain of Custody 24
Receipt Checklists 29

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-2

Qualifiers

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-224360-2 — Eurofins Cleveland

Job Narrative
240-224360-2

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 5/14/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.9°C, 3.2°C and 3.6°C.

Gas Flow Proportional Counter
Method 904.0: Radium-228 batch 717725
The detection goal was not met for the following sample due to the reduced sample volume used in prep attributed to the presence of matrix interferences: L505202-04 MW-19D (240-224360-4). Analytical results are reported with the detection limit achieved.

Method 904.0: Radium 228 batch 718191
The LCS recovered at (128%). The limits in our LIMS system at 75-125 reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of (68%-154%) per method requirements. The LCS passes, no further action is required

(LCS 160-718191/2-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-224360-1	L505202-01 MW-19A	Water	05/12/25 11:02	05/14/25 08:00
240-224360-2	L505202-02 MW-19B	Water	05/12/25 12:42	05/14/25 08:00
240-224360-3	L505202-03 MW-19C	Water	05/12/25 14:27	05/14/25 08:00
240-224360-4	L505202-04 MW-19D	Water	05/12/25 13:20	05/14/25 08:00
240-224360-5	L505202-05 MWT-19A	Water	05/12/25 11:02	05/14/25 08:00
240-224360-6	FIELD BLANK	Water	05/12/25 09:25	05/14/25 08:00
240-224360-7	EQUIPMENT BLANK	Water	05/12/25 09:10	05/14/25 08:00

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-2

Client Sample ID: L505202-01 MW-19A — Lab Sample ID: 240-224360-1

No Detections.

Client Sample ID: L505202-02 MW-19B — Lab Sample ID: 240-224360-2

No Detections.

Client Sample ID: L505202-03 MW-19C — Lab Sample ID: 240-224360-3

No Detections.

Client Sample ID: L505202-04 MW-19D — Lab Sample ID: 240-224360-4

No Detections.

Client Sample ID: L505202-05 MWT-19A — Lab Sample ID: 240-224360-5

No Detections.

Client Sample ID: FIELD BLANK — Lab Sample ID: 240-224360-6

No Detections.

Client Sample ID: EQUIPMENT BLANK — Lab Sample ID: 240-224360-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-2

Client Sample ID: L505202-01 MW-19A

Date Collected: 05/12/25 11:02
Date Received: 05/14/25 08:00

Lab Sample ID: 240-224360-1

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0852	U	0.201	0.201	1.00	0.360	pCi/L	05/15/25 15:57	06/11/25 09:23	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.3*		*30 - 110*	*05/15/25 15:57*	*06/11/25 09:23*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.468	U	0.338	0.340	1.00	0.507	pCi/L	05/15/25 16:00	06/10/25 12:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.3*		*30 - 110*	*05/15/25 16:00*	*06/10/25 12:01*	*1*
Y Carrier	*80.0*		*30 - 110*	*05/15/25 16:00*	*06/10/25 12:01*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.554**		0.393	0.395	5.00	0.507	pCi/L		06/11/25 17:00	1

Client Sample ID: L505202-02 MW-19B

Date Collected: 05/12/25 12:42
Date Received: 05/14/25 08:00

Lab Sample ID: 240-224360-2

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.312	U	0.238	0.240	1.00	0.352	pCi/L	05/15/25 15:57	06/10/25 20:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.6*		*30 - 110*	*05/15/25 15:57*	*06/10/25 20:21*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.495**		0.328	0.332	1.00	0.478	pCi/L	05/15/25 16:00	06/10/25 12:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.6*		*30 - 110*	*05/15/25 16:00*	*06/10/25 12:01*	*1*
Y Carrier	*76.6*		*30 - 110*	*05/15/25 16:00*	*06/10/25 12:01*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.807**		0.405	0.410	5.00	0.478	pCi/L		06/11/25 17:00	1

Client Sample ID: L505202-03 MW-19C

Date Collected: 05/12/25 14:27
Date Received: 05/14/25 08:00

Lab Sample ID: 240-224360-3

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.581**		0.294	0.299	1.00	0.373	pCi/L	05/15/25 15:57	06/10/25 21:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.6*		*30 - 110*	*05/15/25 15:57*	*06/10/25 21:27*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.321	U	0.379	0.380	1.00	0.625	pCi/L	05/15/25 16:00	06/10/25 12:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.6*		*30 - 110*	*05/15/25 16:00*	*06/10/25 12:01*	*1*
Y Carrier	*81.5*		*30 - 110*	*05/15/25 16:00*	*06/10/25 12:01*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.902**		0.480	0.484	5.00	0.625	pCi/L		06/11/25 17:00	1

Client Sample ID: L505202-04 MW-19D

Date Collected: 05/12/25 13:20
Date Received: 05/14/25 08:00

Lab Sample ID: 240-224360-4

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.680	U	0.526	0.530	1.00	0.747	pCi/L	05/15/25 15:57	06/10/25 21:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*60.9*		*30 - 110*	*05/15/25 15:57*	*06/10/25 21:28*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.33	U G	1.26	1.27	1.00	2.03	pCi/L	05/15/25 16:00	06/10/25 12:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*60.9*		*30 - 110*	*05/15/25 16:00*	*06/10/25 12:01*	*1*
Y Carrier	*74.0*		*30 - 110*	*05/15/25 16:00*	*06/10/25 12:01*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	2.01	U	1.37	1.38	5.00	2.03	pCi/L		06/11/25 17:00	1

Client Sample ID: L505202-05 MWT-19A

Date Collected: 05/12/25 11:02
Date Received: 05/14/25 08:00

Lab Sample ID: 240-224360-5

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.402**		0.268	0.270	1.00	0.379	pCi/L	05/19/25 08:18	06/10/25 15:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.5*		*30 - 110*	*05/19/25 08:18*	*06/10/25 15:51*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.464	U	0.351	0.354	1.00	0.541	pCi/L	05/19/25 08:24	06/10/25 11:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.5*		*30 - 110*	*05/19/25 08:24*	*06/10/25 11:57*	*1*
Y Carrier	*87.1*		*30 - 110*	*05/19/25 08:24*	*06/10/25 11:57*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.866**		0.442	0.445	5.00	0.541	pCi/L		06/11/25 17:00	1

Client Sample ID: FIELD BLANK

Date Collected: 05/12/25 09:25
Date Received: 05/14/25 08:00

Lab Sample ID: 240-224360-6

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0935	U	0.189	0.189	1.00	0.337	pCi/L	05/15/25 15:57	06/10/25 21:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.0*		*30 - 110*	*05/15/25 15:57*	*06/10/25 21:28*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.312	U	0.325	0.326	1.00	0.526	pCi/L	05/15/25 16:00	06/10/25 12:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.0*		*30 - 110*	*05/15/25 16:00*	*06/10/25 12:01*	*1*
Y Carrier	*83.7*		*30 - 110*	*05/15/25 16:00*	*06/10/25 12:01*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.406	U	0.376	0.377	5.00	0.526	pCi/L		06/11/25 17:00	1

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID: 240-224360-7

Date Collected: 05/12/25 09:10

Matrix: Water

Date Received: 05/14/25 08:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.215	U	0.196	0.197	1.00	0.300	pCi/L	05/15/25 15:57	06/10/25 21:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.0*		*30 - 110*	*05/15/25 15:57*	*06/10/25 21:28*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.263	U	0.334	0.335	1.00	0.556	pCi/L	05/15/25 16:00	06/10/25 12:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.0*		*30 - 110*	*05/15/25 16:00*	*06/10/25 12:01*	*1*
Y Carrier	*77.4*		*30 - 110*	*05/15/25 16:00*	*06/10/25 12:01*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.478	U	0.387	0.389	5.00	0.556	pCi/L		06/11/25 17:00	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-224360-1	L505202-01 MW-19A	89.3
240-224360-2	L505202-02 MW-19B	89.6
240-224360-3	L505202-03 MW-19C	79.6
240-224360-4	L505202-04 MW-19D	60.9
240-224360-5	L505202-05 MWT-19A	90.5
240-224360-6	FIELD BLANK	93.0
240-224360-7	EQUIPMENT BLANK	94.0
LCS 160-717724/2-A	Lab Control Sample	89.6
LCS 160-718079/2-A	Lab Control Sample	81.6
LCSD 160-718079/24-A	Lab Control Sample Dup	92.8
MB 160-717724/1-A	Method Blank	89.1
MB 160-718079/1-A	Method Blank	83.8

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
		Ba	Y
Lab Sample ID	Client Sample ID	(30-110)	(30-110)
240-224360-1	L505202-01 MW-19A	89.3	80.0
240-224360-2	L505202-02 MW-19B	89.6	76.6
240-224360-3	L505202-03 MW-19C	79.6	81.5
240-224360-4	L505202-04 MW-19D	60.9	74.0
240-224360-5	L505202-05 MWT-19A	90.5	87.1
240-224360-6	FIELD BLANK	93.0	83.7
240-224360-7	EQUIPMENT BLANK	94.0	77.4
LCS 160-717725/2-A	Lab Control Sample	89.6	79.6
LCS 160-718191/2-A	Lab Control Sample	81.6	85.6
LCSD 160-718191/24-A	Lab Control Sample Dup	92.8	91.2
MB 160-717725/1-A	Method Blank	89.1	81.5
MB 160-718191/1-A	Method Blank	83.8	86.7

Tracer/Carrier Legend

Ba = Ba Carrier
Y = Y Carrier

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-717724/1-A
Matrix: Water
Analysis Batch: 721799

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 717724

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.001782	U	0.124	0.124	1.00	0.256	pCi/L	05/15/25 15:57	06/11/25 09:23	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.1*		*30 - 110*	*05/15/25 15:57*	*06/11/25 09:23*	*1*

Lab Sample ID: LCS 160-717724/2-A
Matrix: Water
Analysis Batch: 721799

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 717724

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.58	9.398		1.19	1.00	0.348	pCi/L	98	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*89.6*		*30 - 110*

Lab Sample ID: MB 160-718079/1-A
Matrix: Water
Analysis Batch: 721722

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 718079

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.06883	U	0.214	0.214	1.00	0.451	pCi/L	05/19/25 08:18	06/10/25 15:52	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.8*		*30 - 110*	*05/19/25 08:18*	*06/10/25 15:52*	*1*

Lab Sample ID: LCS 160-718079/2-A
Matrix: Water
Analysis Batch: 721722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 718079

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.58	10.14		1.36	1.00	0.326	pCi/L	106	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*81.6*		*30 - 110*

Lab Sample ID: LCSD 160-718079/24-A
Matrix: Water
Analysis Batch: 721725

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 718079

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226			9.58	9.041		1.22	1.00	0.367	pCi/L	94	75 - 125	0.43	1

Method: 903.0 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCSD 160-718079/24-A
Matrix: Water
Analysis Batch: 721725

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 718079

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	92.8		30 - 110

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-717725/1-A
Matrix: Water
Analysis Batch: 721730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 717725

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1829	U	0.343	0.344	1.00	0.592	pCi/L	05/15/25 16:00	06/10/25 12:01	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	89.1		30 - 110	05/15/25 16:00	06/10/25 12:01	1
Y Carrier	81.5		30 - 110	05/15/25 16:00	06/10/25 12:01	1

Lab Sample ID: LCS 160-717725/2-A
Matrix: Water
Analysis Batch: 721730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 717725

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.36	11.11		1.47	1.00	0.561	pCi/L	119	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	89.6		30 - 110
Y Carrier	79.6		30 - 110

Lab Sample ID: MB 160-718191/1-A
Matrix: Water
Analysis Batch: 721722

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 718191

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5560		0.371	0.374	1.00	0.555	pCi/L	05/19/25 08:24	06/10/25 11:48	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	83.8		30 - 110	05/19/25 08:24	06/10/25 11:48	1
Y Carrier	86.7		30 - 110	05/19/25 08:24	06/10/25 11:48	1

Lab Sample ID: LCS 160-718191/2-A
Matrix: Water
Analysis Batch: 721722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 718191

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.36	11.96		1.55	1.00	0.557	pCi/L	128	75 - 125		

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-718191/2-A
Matrix: Water
Analysis Batch: 721722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 718191

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	81.6		30 - 110
Y Carrier	85.6		30 - 110

Lab Sample ID: LCSD 160-718191/24-A
Matrix: Water
Analysis Batch: 721730

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 718191

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-228			9.36	10.07		1.30	1.00	0.432	pCi/L	108	75 - 125	0.66	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	92.8		30 - 110
Y Carrier	91.2		30 - 110

Rad

Prep Batch: 717724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-1	L505202-01 MW-19A	Total/NA	Water	PrecSep-21	
240-224360-2	L505202-02 MW-19B	Total/NA	Water	PrecSep-21	
240-224360-3	L505202-03 MW-19C	Total/NA	Water	PrecSep-21	
240-224360-4	L505202-04 MW-19D	Total/NA	Water	PrecSep-21	
240-224360-6	FIELD BLANK	Total/NA	Water	PrecSep-21	
240-224360-7	EQUIPMENT BLANK	Total/NA	Water	PrecSep-21	
MB 160-717724/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-717724/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 717725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-1	L505202-01 MW-19A	Total/NA	Water	PrecSep_0	
240-224360-2	L505202-02 MW-19B	Total/NA	Water	PrecSep_0	
240-224360-3	L505202-03 MW-19C	Total/NA	Water	PrecSep_0	
240-224360-4	L505202-04 MW-19D	Total/NA	Water	PrecSep_0	
240-224360-6	FIELD BLANK	Total/NA	Water	PrecSep_0	
240-224360-7	EQUIPMENT BLANK	Total/NA	Water	PrecSep_0	
MB 160-717725/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-717725/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 718079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-5	L505202-05 MWT-19A	Total/NA	Water	PrecSep-21	
MB 160-718079/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-718079/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-718079/24-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 718191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-224360-5	L505202-05 MWT-19A	Total/NA	Water	PrecSep_0	
MB 160-718191/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-718191/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-718191/24-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-2

Client Sample ID: L505202-01 MW-19A
Lab Sample ID: 240-224360-1
Date Collected: 05/12/25 11:02
Matrix: Water
Date Received: 05/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			717724	OGC	EET SL	05/15/25 15:57
Total/NA	Analysis	903.0		1	721799	SWS	EET SL	06/11/25 09:23
Total/NA	Prep	PrecSep_0			717725	OGC	EET SL	05/15/25 16:00
Total/NA	Analysis	904.0		1	721730	SCB	EET SL	06/10/25 12:01
Total/NA	Analysis	Ra226_Ra228 Pos		1	721966	SCB	EET SL	06/11/25 17:00

Client Sample ID: L505202-02 MW-19B
Lab Sample ID: 240-224360-2
Date Collected: 05/12/25 12:42
Matrix: Water
Date Received: 05/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			717724	OGC	EET SL	05/15/25 15:57
Total/NA	Analysis	903.0		1	721725	FLC	EET SL	06/10/25 20:21
Total/NA	Prep	PrecSep_0			717725	OGC	EET SL	05/15/25 16:00
Total/NA	Analysis	904.0		1	721730	SCB	EET SL	06/10/25 12:01
Total/NA	Analysis	Ra226_Ra228 Pos		1	721966	SCB	EET SL	06/11/25 17:00

Client Sample ID: L505202-03 MW-19C
Lab Sample ID: 240-224360-3
Date Collected: 05/12/25 14:27
Matrix: Water
Date Received: 05/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			717724	OGC	EET SL	05/15/25 15:57
Total/NA	Analysis	903.0		1	721725	FLC	EET SL	06/10/25 21:27
Total/NA	Prep	PrecSep_0			717725	OGC	EET SL	05/15/25 16:00
Total/NA	Analysis	904.0		1	721730	SCB	EET SL	06/10/25 12:01
Total/NA	Analysis	Ra226_Ra228 Pos		1	721966	SCB	EET SL	06/11/25 17:00

Client Sample ID: L505202-04 MW-19D
Lab Sample ID: 240-224360-4
Date Collected: 05/12/25 13:20
Matrix: Water
Date Received: 05/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			717724	OGC	EET SL	05/15/25 15:57
Total/NA	Analysis	903.0		1	721725	FLC	EET SL	06/10/25 21:28
Total/NA	Prep	PrecSep_0			717725	OGC	EET SL	05/15/25 16:00
Total/NA	Analysis	904.0		1	721730	SCB	EET SL	06/10/25 12:01
Total/NA	Analysis	Ra226_Ra228 Pos		1	721966	SCB	EET SL	06/11/25 17:00

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-224360-2

Client Sample ID: L505202-05 MWT-19A

Lab Sample ID: 240-224360-5

Date Collected: 05/12/25 11:02
Matrix: Water
Date Received: 05/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			718079	OGC	EET SL	05/19/25 08:18
Total/NA	Analysis	903.0		1	721725	FLC	EET SL	06/10/25 15:51
Total/NA	Prep	PrecSep_0			718191	OGC	EET SL	05/19/25 08:24
Total/NA	Analysis	904.0		1	721730	SCB	EET SL	06/10/25 11:57
Total/NA	Analysis	Ra226_Ra228 Pos		1	721966	SCB	EET SL	06/11/25 17:00

Client Sample ID: FIELD BLANK

Lab Sample ID: 240-224360-6

Date Collected: 05/12/25 09:25
Matrix: Water
Date Received: 05/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			717724	OGC	EET SL	05/15/25 15:57
Total/NA	Analysis	903.0		1	721725	FLC	EET SL	06/10/25 21:28
Total/NA	Prep	PrecSep_0			717725	OGC	EET SL	05/15/25 16:00
Total/NA	Analysis	904.0		1	721730	SCB	EET SL	06/10/25 12:01
Total/NA	Analysis	Ra226_Ra228 Pos		1	721966	SCB	EET SL	06/11/25 17:00

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID: 240-224360-7

Date Collected: 05/12/25 09:10
Matrix: Water
Date Received: 05/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			717724	OGC	EET SL	05/15/25 15:57
Total/NA	Analysis	903.0		1	721725	FLC	EET SL	06/10/25 21:28
Total/NA	Prep	PrecSep_0			717725	OGC	EET SL	05/15/25 16:00
Total/NA	Analysis	904.0		1	721730	SCB	EET SL	06/10/25 12:01
Total/NA	Analysis	Ra226_Ra228 Pos		1	721966	SCB	EET SL	06/11/25 17:00

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Job ID: 240-224360-2
Project/Site: Erickson Projects

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	08-02-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody

Return Samples to: Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203

240-224360 COC

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☐

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Project Manager:
Howell, Leslie

Purchase Order:
Purchase Order not required

Project Reference:

Work Order:

Sampler:
Marc Wahrer and Julie Maltby

Requested TAT:

Description:
Erickson Projects

Project Number:
24034575

Site Name:
Erickson Projects

Sample State: MI

Special Instructions:
Need Promium EDD; Level 4 Report; Please use the reporting limits that are attached to this project.

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	200.7/200.7_P_TR Total Boron [C01]	200.8/200.8_P_TR Project List (19) [C01]	2540C_Calcd Total Dissolved Solids [TDS]	903.0/PrecSep_21 Standard Target List [STD]	904.0/PrecSep_0 Standard Target List [STD]	245.1/245.1_Prep Mercury [MER]	2540D Solids, Total Suspended (TSS) [TSS]	300.0_28D Chloride, Fluoride & Sulfate [ANY]	SM2340B/Auto_TotalRec Total Hardness (as CaCO3) by calculation [HAR]	200.8_CWA Iron & Zinc	Ra226_228AS_P Combined Radium-226 & 228 [160]	2320B Bicarbonate & Carbonate Alkalinity [ANY]		Plastic 1 liter - unpreserved	Plastic 500ml - unpreserved	Plastic 250ml - with Nitric Acid	Plastic 1 liter - Nitric Acid	Plastic 500ml - with Nitric Acid	Plastic 60 mL - unpreserved	Plastic 500ml - w/ Nitric - Dis.	Total Bottles For Sample
1	L505202-01 MW-19A	Grab	Water	05/12/25 11:02				X	X	X	X	X	X	X	X	X	X	X	X		1	1	1	2	1	2		8
2	L505202-02 MW-19B	Grab	Water	05/12/25 12:42				X	X	X	X	X	X	X	X	X	X	X	X		1	1	1	2	1	2		8
3	L505202-03 MW-19C	Grab	Water	05/12/25 14:27				X	X	X	X	X	X	X	X	X	X	X	X		1	1	1	2	1	2		8
4	L505202-04 MW-19D	Grab	Water	05/12/25 13:20		Please add dissolved metals		X	X	X	X	X	X	X	X	X	X	X	X		1	1	1	2	1	2	1	9
5	L505202-05 MWT-19A	Grab	Water	05/12/25 11:02				X	X	X	X	X	X	X	X	X	X	X	X		1	1	1	2	1	2		8
6	FIELD BLANK	Grab	Water	05/12/25 09:25		Please add dissolved metals		X	X	X	X	X	X	X	X	X	X	X	X		1	1	1	2	1	2	1	9
7	EQUIPMENT BLANK	Grab	Water	05/12/25 09:10		Please add dissolved metals and all other analyses															1	1	1	2	1	2	1	9

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished To:	Date/Time:	
Jennifer Caporale	05/13/25 09:56	FedEx Jennifer Caporale	05/13/25 09:56	Received by: JMOROSKO 5/14/25 800

Chain of Custody Number: **381024**

*H – Analysis on hold.

6/13/2025

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client Lansing Board of Water Site Name _____ Cooler unpacked by:

Cooler Received on 5/14/25 Opened on 5/14/25 JMOROSKO

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt [X] See Multiple Cooler Form
   IR GUN # 13 (CF T0.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No ____
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC457151
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

_____

_____

_____

_____

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Login # : _____

6/13/2025

Eurofins - Cleveland Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: _____	3.1	3.6	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____	2.7	3.2	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____	2.4	2.9	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____	

Login Container Summary Report

240-224360

6/13/2025

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L505202-01 MW-19A	240-224360-A-1	Plastic 60 mL - unpreserved				
L505202-01 MW-19A	240-224360-B-1	Plastic 60 mL - unpreserved				
L505202-01 MW-19A	240-224360-C-1	Plastic 250ml - with Nitric Acid				
L505202-01 MW-19A	240-224360-D-1	Plastic 500ml - unpreserved				
L505202-01 MW-19A	240-224360-E-1	Plastic 500ml - with Nitric Acid	<2			
L505202-01 MW-19A	240-224360-F-1	Plastic 1 liter - unpreserved				
L505202-01 MW-19A	240-224360-G-1	Plastic 1 liter - Nitric Acid	<2			
L505202-01 MW-19A	240-224360-H-1	Plastic 1 liter - Nitric Acid	<2			
L505202-02 MW-19B	240-224360-A-2	Plastic 60 mL - unpreserved				
L505202-02 MW-19B	240-224360-B-2	Plastic 60 mL - unpreserved				
L505202-02 MW-19B	240-224360-C-2	Plastic 250ml - with Nitric Acid				
L505202-02 MW-19B	240-224360-D-2	Plastic 500ml - unpreserved				
L505202-02 MW-19B	240-224360-E-2	Plastic 500ml - with Nitric Acid	<2			
L505202-02 MW-19B	240-224360-F-2	Plastic 1 liter - unpreserved				
L505202-02 MW-19B	240-224360-G-2	Plastic 1 liter - Nitric Acid	<2			
L505202-02 MW-19B	240-224360-H-2	Plastic 1 liter - Nitric Acid	<2			
L505202-03 MW-19C	240-224360-A-3	Plastic 60 mL - unpreserved				
L505202-03 MW-19C	240-224360-B-3	Plastic 60 mL - unpreserved				
L505202-03 MW-19C	240-224360-C-3	Plastic 250ml - with Nitric Acid				
L505202-03 MW-19C	240-224360-D-3	Plastic 500ml - unpreserved				
L505202-03 MW-19C	240-224360-E-3	Plastic 500ml - with Nitric Acid	<2			
L505202-03 MW-19C	240-224360-F-3	Plastic 1 liter - unpreserved				
L505202-03 MW-19C	240-224360-G-3	Plastic 1 liter - Nitric Acid	<2			
L505202-03 MW-19C	240-224360-H-3	Plastic 1 liter - Nitric Acid	<2			
L505202-04 MW-19D	240-224360-A-4	Plastic 60 mL - unpreserved				
L505202-04 MW-19D	240-224360-B-4	Plastic 60 mL - unpreserved				
L505202-04 MW-19D	240-224360-C-4	Plastic 250ml - with Nitric Acid				
L505202-04 MW-19D	240-224360-D-4	Plastic 500ml - unpreserved				
L505202-04 MW-19D	240-224360-E-4	Plastic 500ml - with Nitric Acid	<2			
L505202-04 MW-19D	240-224360-F-4	Plastic 500ml - w/ Nitric - Dis.	<2			
L505202-04 MW-19D	240-224360-G-4	Plastic 1 liter - unpreserved				
L505202-04 MW-19D	240-224360-H-4	Plastic 1 liter - Nitric Acid	<2			
L505202-04 MW-19D	240-224360-I-4	Plastic 1 liter - Nitric Acid	<2			
L505202-04 MW-19D	240-224360-J-4	Plastic 250ml - w/nitric - dis	<2			
L505202-05 MWT-19A	240-224360-A-5	Plastic 60 mL - unpreserved				

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L505202-05 MWT-19A	240-224360-B-5	Plastic 60 mL - unpreserved				
L505202-05 MWT-19A	240-224360-C-5	Plastic 250ml - with Nitric Acid				
L505202-05 MWT-19A	240-224360-D-5	Plastic 500ml - unpreserved				
L505202-05 MWT-19A	240-224360-E-5	Plastic 500ml - with Nitric Acid	<2			
L505202-05 MWT-19A	240-224360-F-5	Plastic 1 liter - unpreserved				
L505202-05 MWT-19A	240-224360-G-5	Plastic 1 liter - Nitric Acid	<2			
L505202-05 MWT-19A	240-224360-H-5	Plastic 1 liter - Nitric Acid	<2			
FIELD BLANK	240-224360-A-6	Plastic 60 mL - unpreserved				
FIELD BLANK	240-224360-B-6	Plastic 60 mL - unpreserved				
FIELD BLANK	240-224360-C-6	Plastic 250ml - with Nitric Acid				
FIELD BLANK	240-224360-D-6	Plastic 500ml - unpreserved				
FIELD BLANK	240-224360-E-6	Plastic 500ml - with Nitric Acid	<2			
FIELD BLANK	240-224360-F-6	Plastic 500ml - w/ Nitric - Dis.	<2			
FIELD BLANK	240-224360-G-6	Plastic 1 liter - unpreserved				
FIELD BLANK	240-224360-H-6	Plastic 1 liter - Nitric Acid	<2			
FIELD BLANK	240-224360-I-6	Plastic 1 liter - Nitric Acid	<2			
FIELD BLANK	240-224360-J-6	Plastic 250ml - w/nitric - dis	<2			
EQUIPMENT BLANK	240-224360-A-7	Plastic 60 mL - unpreserved				
EQUIPMENT BLANK	240-224360-B-7	Plastic 60 mL - unpreserved				
EQUIPMENT BLANK	240-224360-C-7	Plastic 250ml - with Nitric Acid				
EQUIPMENT BLANK	240-224360-D-7	Plastic 500ml - unpreserved				
EQUIPMENT BLANK	240-224360-E-7	Plastic 500ml - with Nitric Acid	<2			
EQUIPMENT BLANK	240-224360-F-7	Plastic 500ml - w/ Nitric - Dis.	<2			
EQUIPMENT BLANK	240-224360-G-7	Plastic 1 liter - unpreserved				
EQUIPMENT BLANK	240-224360-H-7	Plastic 1 liter - Nitric Acid	<2			
EQUIPMENT BLANK	240-224360-I-7	Plastic 1 liter - Nitric Acid	<2			
EQUIPMENT BLANK	240-224360-J-7	Plastic 250ml - w/nitric - dis	<2			

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-224360-2

Login Number: 224360
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 05/15/25 11:17 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 7/25/2025 1:02:44 PM Revision 1

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-225634-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

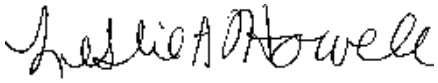
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
7/25/2025 1:02:44 PM
Revision 1

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 11
Tracer Carrier Summary 23
QC Sample Results 24
QC Association Summary 29
Lab Chronicle 33
Certification Summary 37
Chain of Custody 39
Receipt Checklists 46

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-225634-1

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
240-225634-1

REVISION

The report being provided is a revision of the original report sent on 6/30/2025. The report (revision 1) is being revised due to Potassium and Sodium added to reporting list of 200.8 from Cleveland analysis..

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 5/31/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.2°C and 2.7°C.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Gas Flow Proportional Counter
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-225634-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396
EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566
EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-225634-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-225634-1	L505238-01 MW-18A	Water	05/29/25 09:10	05/31/25 08:00
240-225634-2	L505238-02 MW-18B	Water	05/29/25 10:43	05/31/25 08:00
240-225634-3	L505238-03 MW-18C	Water	05/29/25 11:56	05/31/25 08:00
240-225634-4	L505238-04 MW-18D	Water	05/29/25 13:07	05/31/25 08:00
240-225634-5	L505238-05 MWT-18A	Water	05/29/25 09:10	05/31/25 08:00
240-225634-6	L505238-06 FIELD BLANK	Water	05/29/25 08:10	05/31/25 08:00

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-225634-1

Client Sample ID: L505238-01 MW-18A — Lab Sample ID: 240-225634-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.85		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.042	B	0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.12		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	92		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	15		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.070		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	62	B	1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	7.1		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.4		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0010	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	290		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	480		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.3	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	81		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.55		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	180		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L505238-02 MW-18B — Lab Sample ID: 240-225634-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.3		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.059	B	0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.15		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0091		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	170		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	30		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.13		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	89	B	1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	8.8		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.7		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	550		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	170		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	870		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	4.0		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	89		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.26		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L505238-02 MW-18B (Continued) — Lab Sample ID: 240-225634-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	450		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L505238-03 MW-18C — Lab Sample ID: 240-225634-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.9		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.044	B	0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00014	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.080		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0066		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	150		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	38		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.080		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	69	B	1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	7.5		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.1		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	530		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	790		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	4.2		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	56		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.20		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	360		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L505238-04 MW-18D — Lab Sample ID: 240-225634-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.6		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.019	B	0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00016	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.042		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0028		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	50		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	9.7		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.056		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	140	B	1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L505238-04 MW-18D (Continued) — Lab Sample ID: 240-225634-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	5.5		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.99		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	160		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	300		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	520		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.0	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	23		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	1.1		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	130		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L505238-05 MWT-18A — Lab Sample ID: 240-225634-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.84		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.041	B	0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.11		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	90		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	15		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.064		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	61	B	1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	7.0		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.3		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	290		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	470		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.9	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	81		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.55		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	180		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L505238-06 FIELD BLANK — Lab Sample ID: 240-225634-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	0.00094	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L505238-01 MW-18A

Date Collected: 05/29/25 09:10
Date Received: 05/31/25 08:00

Lab Sample ID: 240-225634-1

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.85**		0.10	0.057	mg/L		06/02/25 14:00	06/03/25 12:41	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		06/02/25 14:00	06/03/25 16:30	1
Arsenic	ND		0.0050	0.00075	mg/L		06/02/25 14:00	06/03/25 16:30	1
Barium	**0.042**	**B**	0.0050	0.00077	mg/L		06/02/25 14:00	06/03/25 16:30	1
Beryllium	ND		0.0010	0.00027	mg/L		06/02/25 14:00	06/03/25 16:30	1
Cadmium	ND		0.0010	0.000077	mg/L		06/02/25 14:00	06/03/25 16:30	1
Cobalt	ND		0.0010	0.000086	mg/L		06/02/25 14:00	06/03/25 16:30	1
Chromium	ND		0.0050	0.0012	mg/L		06/02/25 14:00	06/03/25 16:30	1
Copper	ND		0.0020	0.0017	mg/L		06/02/25 14:00	06/03/25 16:30	1
Molybdenum	**0.12**		0.0050	0.0011	mg/L		06/02/25 14:00	06/03/25 16:30	1
Nickel	ND		0.0020	0.0015	mg/L		06/02/25 14:00	06/03/25 16:30	1
Lead	ND		0.0010	0.00045	mg/L		06/02/25 14:00	06/03/25 16:30	1
Antimony	ND		0.0020	0.00057	mg/L		06/02/25 14:00	06/03/25 16:30	1
Selenium	ND		0.0050	0.00089	mg/L		06/02/25 14:00	06/03/25 16:30	1
Thallium	ND		0.0010	0.00051	mg/L		06/02/25 14:00	06/03/25 16:30	1
Vanadium	ND		0.0050	0.00082	mg/L		06/02/25 14:00	06/03/25 16:30	1
Calcium	**92**		1.0	0.25	mg/L		06/02/25 14:00	06/03/25 16:30	1
Magnesium	**15**		1.0	0.061	mg/L		06/02/25 14:00	06/03/25 16:30	1
Lithium	**0.070**		0.0080	0.0034	mg/L		06/02/25 14:00	06/03/25 16:30	1
Sodium	**62**	**B**	1.0	0.88	mg/L		06/02/25 14:00	06/03/25 16:30	1
Potassium	**7.1**		1.0	0.22	mg/L		06/02/25 14:00	06/03/25 16:30	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.4**		0.10	0.013	mg/L		06/03/25 15:35	06/04/25 13:24	1
Zinc	**0.0010**	**J**	0.0070	0.00093	mg/L		06/03/25 15:35	06/04/25 13:24	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**290**		33	33	mg/L			06/05/25 07:05	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		06/02/25 14:00	06/03/25 15:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**130**		5.0	2.6	mg/L			06/02/25 14:26	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			06/02/25 14:26	1
Total Dissolved Solids (SM 2540 C-2020)	**480**		10	7.8	mg/L			06/04/25 08:50	1
Total Suspended Solids (SM 2540D-2020)	**1.3**	**J**	4.0	0.40	mg/L			06/03/25 10:43	1
Chloride (EPA 300.0-1993 R2.1)	**81**		1.0	0.13	mg/L			06/05/25 08:11	1
Fluoride (EPA 300.0-1993 R2.1)	**0.55**		0.050	0.024	mg/L			06/05/25 08:11	1
Sulfate (EPA 300.0-1993 R2.1)	**180**		1.0	0.35	mg/L			06/05/25 08:11	1

Client Sample ID: L505238-01 MW-18A

Date Collected: 05/29/25 09:10
Date Received: 05/31/25 08:00

Lab Sample ID: 240-225634-1

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.324		0.222	0.224	1.00	0.295	pCi/L	06/05/25 07:42	06/27/25 16:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.1*		*30 - 110*	*06/05/25 07:42*	*06/27/25 16:15*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.04		0.476	0.486	1.00	0.644	pCi/L	06/05/25 07:46	06/27/25 12:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.1*		*30 - 110*	*06/05/25 07:46*	*06/27/25 12:14*	*1*
Y Carrier	*77.0*		*30 - 110*	*06/05/25 07:46*	*06/27/25 12:14*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.37		0.525	0.535	5.00	0.644	pCi/L		06/30/25 09:25	1

Client Sample ID: L505238-02 MW-18B

Date Collected: 05/29/25 10:43
Date Received: 05/31/25 08:00

Lab Sample ID: 240-225634-2

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.3**		0.10	0.057	mg/L		06/02/25 14:00	06/03/25 12:54	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		06/02/25 14:00	06/03/25 16:32	1
Arsenic	ND		0.0050	0.00075	mg/L		06/02/25 14:00	06/03/25 16:32	1
Barium	**0.059**	**B**	0.0050	0.00077	mg/L		06/02/25 14:00	06/03/25 16:32	1
Beryllium	ND		0.0010	0.00027	mg/L		06/02/25 14:00	06/03/25 16:32	1
Cadmium	ND		0.0010	0.000077	mg/L		06/02/25 14:00	06/03/25 16:32	1
Cobalt	ND		0.0010	0.000086	mg/L		06/02/25 14:00	06/03/25 16:32	1
Chromium	ND		0.0050	0.0012	mg/L		06/02/25 14:00	06/03/25 16:32	1
Copper	ND		0.0020	0.0017	mg/L		06/02/25 14:00	06/03/25 16:32	1
Molybdenum	**0.15**		0.0050	0.0011	mg/L		06/02/25 14:00	06/03/25 16:32	1
Nickel	**0.0091**		0.0020	0.0015	mg/L		06/02/25 14:00	06/03/25 16:32	1
Lead	ND		0.0010	0.00045	mg/L		06/02/25 14:00	06/03/25 16:32	1
Antimony	ND		0.0020	0.00057	mg/L		06/02/25 14:00	06/03/25 16:32	1
Selenium	ND		0.0050	0.00089	mg/L		06/02/25 14:00	06/03/25 16:32	1
Thallium	ND		0.0010	0.00051	mg/L		06/02/25 14:00	06/03/25 16:32	1
Vanadium	ND		0.0050	0.00082	mg/L		06/02/25 14:00	06/03/25 16:32	1
Calcium	**170**		1.0	0.25	mg/L		06/02/25 14:00	06/03/25 16:32	1
Magnesium	**30**		1.0	0.061	mg/L		06/02/25 14:00	06/03/25 16:32	1
Lithium	**0.13**		0.0080	0.0034	mg/L		06/02/25 14:00	06/03/25 16:32	1
Sodium	**89**	**B**	1.0	0.88	mg/L		06/02/25 14:00	06/03/25 16:32	1
Potassium	**8.8**		1.0	0.22	mg/L		06/02/25 14:00	06/03/25 16:32	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.7**		0.10	0.013	mg/L		06/03/25 15:35	06/04/25 13:42	1
Zinc	ND		0.0070	0.00093	mg/L		06/03/25 15:35	06/04/25 13:42	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**550**		33	33	mg/L			06/05/25 07:05	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		06/02/25 14:00	06/03/25 15:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**170**		5.0	2.6	mg/L			06/02/25 14:31	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			06/02/25 14:31	1
Total Dissolved Solids (SM 2540 C-2020)	**870**		10	7.8	mg/L			06/04/25 08:50	1
Total Suspended Solids (SM 2540D-2020)	**4.0**		4.0	0.40	mg/L			06/03/25 10:43	1
Chloride (EPA 300.0-1993 R2.1)	**89**		1.0	0.13	mg/L			06/05/25 08:53	1
Fluoride (EPA 300.0-1993 R2.1)	**0.26**		0.050	0.024	mg/L			06/05/25 08:53	1
Sulfate (EPA 300.0-1993 R2.1)	**450**		5.0	1.7	mg/L			06/05/25 09:14	5

Client Sample ID: L505238-02 MW-18B

Date Collected: 05/29/25 10:43
Date Received: 05/31/25 08:00

Lab Sample ID: 240-225634-2

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.02		0.345	0.357	1.00	0.309	pCi/L	06/05/25 07:42	06/27/25 16:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.3*		*30 - 110*	*06/05/25 07:42*	*06/27/25 16:15*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.94		0.546	0.574	1.00	0.604	pCi/L	06/05/25 07:46	06/27/25 12:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.3*		*30 - 110*	*06/05/25 07:46*	*06/27/25 12:14*	*1*
Y Carrier	*80.0*		*30 - 110*	*06/05/25 07:46*	*06/27/25 12:14*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	2.96		0.646	0.676	5.00	0.604	pCi/L		06/30/25 09:25	1

Client Sample ID: L505238-03 MW-18C

Date Collected: 05/29/25 11:56
Date Received: 05/31/25 08:00

Lab Sample ID: 240-225634-3

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.9**		0.10	0.057	mg/L		06/02/25 14:00	06/03/25 12:59	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		06/02/25 14:00	06/03/25 16:35	1
Arsenic	ND		0.0050	0.00075	mg/L		06/02/25 14:00	06/03/25 16:35	1
Barium	**0.044**	**B**	0.0050	0.00077	mg/L		06/02/25 14:00	06/03/25 16:35	1
Beryllium	ND		0.0010	0.00027	mg/L		06/02/25 14:00	06/03/25 16:35	1
Cadmium	ND		0.0010	0.000077	mg/L		06/02/25 14:00	06/03/25 16:35	1
Cobalt	**0.00014**	**J**	0.0010	0.000086	mg/L		06/02/25 14:00	06/03/25 16:35	1
Chromium	ND		0.0050	0.0012	mg/L		06/02/25 14:00	06/03/25 16:35	1
Copper	ND		0.0020	0.0017	mg/L		06/02/25 14:00	06/03/25 16:35	1
Molybdenum	**0.080**		0.0050	0.0011	mg/L		06/02/25 14:00	06/03/25 16:35	1
Nickel	**0.0066**		0.0020	0.0015	mg/L		06/02/25 14:00	06/03/25 16:35	1
Lead	ND		0.0010	0.00045	mg/L		06/02/25 14:00	06/03/25 16:35	1
Antimony	ND		0.0020	0.00057	mg/L		06/02/25 14:00	06/03/25 16:35	1
Selenium	ND		0.0050	0.00089	mg/L		06/02/25 14:00	06/03/25 16:35	1
Thallium	ND		0.0010	0.00051	mg/L		06/02/25 14:00	06/03/25 16:35	1
Vanadium	ND		0.0050	0.00082	mg/L		06/02/25 14:00	06/03/25 16:35	1
Calcium	**150**		1.0	0.25	mg/L		06/02/25 14:00	06/03/25 16:35	1
Magnesium	**38**		1.0	0.061	mg/L		06/02/25 14:00	06/03/25 16:35	1
Lithium	**0.080**		0.0080	0.0034	mg/L		06/02/25 14:00	06/03/25 16:35	1
Sodium	**69**	**B**	1.0	0.88	mg/L		06/02/25 14:00	06/03/25 16:35	1
Potassium	**7.5**		1.0	0.22	mg/L		06/02/25 14:00	06/03/25 16:35	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.1**		0.10	0.013	mg/L		06/03/25 15:35	06/04/25 13:44	1
Zinc	ND		0.0070	0.00093	mg/L		06/03/25 15:35	06/04/25 13:44	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**530**		33	33	mg/L			06/05/25 07:05	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		06/02/25 14:00	06/03/25 15:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**230**		5.0	2.6	mg/L			06/02/25 14:55	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			06/02/25 14:55	1
Total Dissolved Solids (SM 2540 C-2020)	**790**		10	7.8	mg/L			06/04/25 08:50	1
Total Suspended Solids (SM 2540D-2020)	**4.2**		4.0	0.40	mg/L			06/03/25 10:43	1
Chloride (EPA 300.0-1993 R2.1)	**56**		1.0	0.13	mg/L			06/05/25 10:18	1
Fluoride (EPA 300.0-1993 R2.1)	**0.20**		0.050	0.024	mg/L			06/05/25 10:18	1
Sulfate (EPA 300.0-1993 R2.1)	**360**		5.0	1.7	mg/L			06/05/25 10:39	5

Client Sample ID: L505238-03 MW-18C

Date Collected: 05/29/25 11:56
Date Received: 05/31/25 08:00

Lab Sample ID: 240-225634-3

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.520		0.265	0.270	1.00	0.315	pCi/L	06/05/25 07:42	06/27/25 16:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.1*		*30 - 110*	*06/05/25 07:42*	*06/27/25 16:15*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.14		0.506	0.517	1.00	0.688	pCi/L	06/05/25 07:46	06/27/25 12:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.1*		*30 - 110*	*06/05/25 07:46*	*06/27/25 12:14*	*1*
Y Carrier	*78.5*		*30 - 110*	*06/05/25 07:46*	*06/27/25 12:14*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.66		0.571	0.583	5.00	0.688	pCi/L		06/30/25 09:25	1

Client Sample ID: L505238-04 MW-18D

Date Collected: 05/29/25 13:07
Date Received: 05/31/25 08:00

Lab Sample ID: 240-225634-4

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.6**		0.10	0.057	mg/L		06/02/25 14:00	06/03/25 13:03	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		06/02/25 14:00	06/03/25 16:43	1
Arsenic	ND		0.0050	0.00075	mg/L		06/02/25 14:00	06/03/25 16:43	1
Barium	**0.019**	**B**	0.0050	0.00077	mg/L		06/02/25 14:00	06/03/25 16:43	1
Beryllium	ND		0.0010	0.00027	mg/L		06/02/25 14:00	06/03/25 16:43	1
Cadmium	ND		0.0010	0.000077	mg/L		06/02/25 14:00	06/03/25 16:43	1
Cobalt	**0.00016**	**J**	0.0010	0.000086	mg/L		06/02/25 14:00	06/03/25 16:43	1
Chromium	ND		0.0050	0.0012	mg/L		06/02/25 14:00	06/03/25 16:43	1
Copper	ND		0.0020	0.0017	mg/L		06/02/25 14:00	06/03/25 16:43	1
Molybdenum	**0.042**		0.0050	0.0011	mg/L		06/02/25 14:00	06/03/25 16:43	1
Nickel	**0.0028**		0.0020	0.0015	mg/L		06/02/25 14:00	06/03/25 16:43	1
Lead	ND		0.0010	0.00045	mg/L		06/02/25 14:00	06/03/25 16:43	1
Antimony	ND		0.0020	0.00057	mg/L		06/02/25 14:00	06/03/25 16:43	1
Selenium	ND		0.0050	0.00089	mg/L		06/02/25 14:00	06/03/25 16:43	1
Thallium	ND		0.0010	0.00051	mg/L		06/02/25 14:00	06/03/25 16:43	1
Vanadium	ND		0.0050	0.00082	mg/L		06/02/25 14:00	06/03/25 16:43	1
Calcium	**50**		1.0	0.25	mg/L		06/02/25 14:00	06/03/25 16:43	1
Magnesium	**9.7**		1.0	0.061	mg/L		06/02/25 14:00	06/03/25 16:43	1
Lithium	**0.056**		0.0080	0.0034	mg/L		06/02/25 14:00	06/03/25 16:43	1
Sodium	**140**	**B**	1.0	0.88	mg/L		06/02/25 14:00	06/03/25 16:43	1
Potassium	**5.5**		1.0	0.22	mg/L		06/02/25 14:00	06/03/25 16:43	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.99**		0.10	0.013	mg/L		06/03/25 15:35	06/04/25 13:52	1
Zinc	ND		0.0070	0.00093	mg/L		06/03/25 15:35	06/04/25 13:52	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**160**		33	33	mg/L			06/05/25 07:05	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		06/02/25 14:00	06/03/25 15:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**300**		5.0	2.6	mg/L			06/02/25 15:00	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			06/02/25 15:00	1
Total Dissolved Solids (SM 2540 C-2020)	**520**		10	7.8	mg/L			06/04/25 08:50	1
Total Suspended Solids (SM 2540D-2020)	**1.0**	**J**	4.0	0.40	mg/L			06/03/25 10:43	1
Chloride (EPA 300.0-1993 R2.1)	**23**		1.0	0.13	mg/L			06/05/25 11:00	1
Fluoride (EPA 300.0-1993 R2.1)	**1.1**		0.050	0.024	mg/L			06/05/25 11:00	1
Sulfate (EPA 300.0-1993 R2.1)	**130**		1.0	0.35	mg/L			06/05/25 11:00	1

Client Sample Results

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-225634-1

Client Sample ID: L505238-04 MW-18D

Date Collected: 05/29/25 13:07
Date Received: 05/31/25 08:00

Lab Sample ID: 240-225634-4

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.498**		0.259	0.263	1.00	0.302	pCi/L	06/05/25 07:42	06/27/25 16:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.6*		*30 - 110*	*06/05/25 07:42*	*06/27/25 16:16*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0124	U	0.348	0.348	1.00	0.649	pCi/L	06/05/25 07:46	06/27/25 12:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.6*		*30 - 110*	*06/05/25 07:46*	*06/27/25 12:14*	*1*
Y Carrier	*80.4*		*30 - 110*	*06/05/25 07:46*	*06/27/25 12:14*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.498	U	0.434	0.436	5.00	0.649	pCi/L		06/30/25 09:25	1

Client Sample ID: L505238-05 MWT-18A

Date Collected: 05/29/25 09:10
Date Received: 05/31/25 08:00

Lab Sample ID: 240-225634-5

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.84**		0.10	0.057	mg/L		06/02/25 14:00	06/03/25 13:08	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		06/02/25 14:00	06/03/25 16:46	1
Arsenic	ND		0.0050	0.00075	mg/L		06/02/25 14:00	06/03/25 16:46	1
Barium	**0.041**	**B**	0.0050	0.00077	mg/L		06/02/25 14:00	06/03/25 16:46	1
Beryllium	ND		0.0010	0.00027	mg/L		06/02/25 14:00	06/03/25 16:46	1
Cadmium	ND		0.0010	0.000077	mg/L		06/02/25 14:00	06/03/25 16:46	1
Cobalt	ND		0.0010	0.000086	mg/L		06/02/25 14:00	06/03/25 16:46	1
Chromium	ND		0.0050	0.0012	mg/L		06/02/25 14:00	06/03/25 16:46	1
Copper	ND		0.0020	0.0017	mg/L		06/02/25 14:00	06/03/25 16:46	1
Molybdenum	**0.11**		0.0050	0.0011	mg/L		06/02/25 14:00	06/03/25 16:46	1
Nickel	ND		0.0020	0.0015	mg/L		06/02/25 14:00	06/03/25 16:46	1
Lead	ND		0.0010	0.00045	mg/L		06/02/25 14:00	06/03/25 16:46	1
Antimony	ND		0.0020	0.00057	mg/L		06/02/25 14:00	06/03/25 16:46	1
Selenium	ND		0.0050	0.00089	mg/L		06/02/25 14:00	06/03/25 16:46	1
Thallium	ND		0.0010	0.00051	mg/L		06/02/25 14:00	06/03/25 16:46	1
Vanadium	ND		0.0050	0.00082	mg/L		06/02/25 14:00	06/03/25 16:46	1
Calcium	**90**		1.0	0.25	mg/L		06/02/25 14:00	06/03/25 16:46	1
Magnesium	**15**		1.0	0.061	mg/L		06/02/25 14:00	06/03/25 16:46	1
Lithium	**0.064**		0.0080	0.0034	mg/L		06/02/25 14:00	06/03/25 16:46	1
Sodium	**61**	**B**	1.0	0.88	mg/L		06/02/25 14:00	06/03/25 16:46	1
Potassium	**7.0**		1.0	0.22	mg/L		06/02/25 14:00	06/03/25 16:46	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.3**		0.10	0.013	mg/L		06/03/25 15:35	06/04/25 13:54	1
Zinc	ND		0.0070	0.00093	mg/L		06/03/25 15:35	06/04/25 13:54	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**290**		33	33	mg/L			06/05/25 07:05	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		06/02/25 14:00	06/03/25 15:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**130**		5.0	2.6	mg/L			06/02/25 15:06	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			06/02/25 15:06	1
Total Dissolved Solids (SM 2540 C-2020)	**470**		10	7.8	mg/L			06/04/25 08:50	1
Total Suspended Solids (SM 2540D-2020)	**1.9**	**J**	4.0	0.40	mg/L			06/03/25 10:43	1
Chloride (EPA 300.0-1993 R2.1)	**81**		1.0	0.13	mg/L			06/05/25 11:43	1
Fluoride (EPA 300.0-1993 R2.1)	**0.55**		0.050	0.024	mg/L			06/05/25 11:43	1
Sulfate (EPA 300.0-1993 R2.1)	**180**		1.0	0.35	mg/L			06/05/25 11:43	1

Client Sample ID: L505238-05 MWT-18A

Date Collected: 05/29/25 09:10
Date Received: 05/31/25 08:00

Lab Sample ID: 240-225634-5

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.326	U	0.236	0.238	1.00	0.333	pCi/L	06/05/25 07:42	06/27/25 16:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*30 - 110*	*06/05/25 07:42*	*06/27/25 16:16*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.536	U	0.365	0.369	1.00	0.543	pCi/L	06/05/25 07:46	06/27/25 12:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*30 - 110*	*06/05/25 07:46*	*06/27/25 12:14*	*1*
Y Carrier	*79.6*		*30 - 110*	*06/05/25 07:46*	*06/27/25 12:14*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.863**		0.435	0.439	5.00	0.543	pCi/L		06/30/25 09:25	1

Client Sample ID: L505238-06 FIELD BLANK

Date Collected: 05/29/25 08:10
Date Received: 05/31/25 08:00

Lab Sample ID: 240-225634-6

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		06/02/25 14:00	06/03/25 13:12	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		06/02/25 14:00	06/03/25 16:48	1
Arsenic	ND		0.0050	0.00075	mg/L		06/02/25 14:00	06/03/25 16:48	1
Barium	ND		0.0050	0.00077	mg/L		06/02/25 14:00	06/03/25 16:48	1
Beryllium	ND		0.0010	0.00027	mg/L		06/02/25 14:00	06/03/25 16:48	1
Cadmium	ND		0.0010	0.000077	mg/L		06/02/25 14:00	06/03/25 16:48	1
Cobalt	ND		0.0010	0.000086	mg/L		06/02/25 14:00	06/03/25 16:48	1
Chromium	ND		0.0050	0.0012	mg/L		06/02/25 14:00	06/03/25 16:48	1
Copper	ND		0.0020	0.0017	mg/L		06/02/25 14:00	06/03/25 16:48	1
Molybdenum	ND		0.0050	0.0011	mg/L		06/02/25 14:00	06/03/25 16:48	1
Nickel	ND		0.0020	0.0015	mg/L		06/02/25 14:00	06/03/25 16:48	1
Lead	ND		0.0010	0.00045	mg/L		06/02/25 14:00	06/03/25 16:48	1
Antimony	ND		0.0020	0.00057	mg/L		06/02/25 14:00	06/03/25 16:48	1
Selenium	ND		0.0050	0.00089	mg/L		06/02/25 14:00	06/03/25 16:48	1
Thallium	ND		0.0010	0.00051	mg/L		06/02/25 14:00	06/03/25 16:48	1
Vanadium	ND		0.0050	0.00082	mg/L		06/02/25 14:00	06/03/25 16:48	1
Calcium	ND		1.0	0.25	mg/L		06/02/25 14:00	06/03/25 16:48	1
Magnesium	ND		1.0	0.061	mg/L		06/02/25 14:00	06/03/25 16:48	1
Lithium	ND		0.0080	0.0034	mg/L		06/02/25 14:00	06/03/25 16:48	1
Sodium	ND		1.0	0.88	mg/L		06/02/25 14:00	06/03/25 16:48	1
Potassium	ND		1.0	0.22	mg/L		06/02/25 14:00	06/03/25 16:48	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		06/04/25 17:07	06/05/25 15:04	1
Zinc	**0.00094**	**J B**	0.0070	0.00093	mg/L		06/04/25 17:07	06/05/25 15:04	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			06/05/25 07:05	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		06/02/25 14:00	06/03/25 15:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			06/02/25 15:11	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			06/02/25 15:11	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			06/04/25 08:50	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			06/03/25 10:43	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			06/05/25 07:50	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			06/05/25 07:50	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			06/05/25 07:50	1

Client Sample ID: L505238-06 FIELD BLANK

Lab Sample ID: 240-225634-6

Date Collected: 05/29/25 08:10

Matrix: Water

Date Received: 05/31/25 08:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0326	U	0.238	0.238	1.00	0.451	pCi/L	06/05/25 07:42	06/27/25 16:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.1*		*30 - 110*	*06/05/25 07:42*	*06/27/25 16:16*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0237	U	0.333	0.333	1.00	0.613	pCi/L	06/05/25 07:46	06/27/25 12:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.1*		*30 - 110*	*06/05/25 07:46*	*06/27/25 12:14*	*1*
Y Carrier	*81.9*		*30 - 110*	*06/05/25 07:46*	*06/27/25 12:14*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.0563	U	0.409	0.409	5.00	0.613	pCi/L		06/30/25 09:25	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-225634-1

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-225634-1	L505238-01 MW-18A	85.1
240-225634-2	L505238-02 MW-18B	84.3
240-225634-3	L505238-03 MW-18C	85.1
240-225634-4	L505238-04 MW-18D	85.6
240-225634-5	L505238-05 MWT-18A	88.3
240-225634-6	L505238-06 FIELD BLANK	89.1
LCS 160-720839/2-A	Lab Control Sample	89.8
MB 160-720839/1-A	Method Blank	91.8

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
		Ba	Y
Lab Sample ID	Client Sample ID	(30-110)	(30-110)
240-225634-1	L505238-01 MW-18A	85.1	77.0
240-225634-2	L505238-02 MW-18B	84.3	80.0
240-225634-3	L505238-03 MW-18C	85.1	78.5
240-225634-4	L505238-04 MW-18D	85.6	80.4
240-225634-5	L505238-05 MWT-18A	88.3	79.6
240-225634-6	L505238-06 FIELD BLANK	89.1	81.9
LCS 160-720840/2-A	Lab Control Sample	89.8	80.7
MB 160-720840/1-A	Method Blank	91.8	78.1

Tracer/Carrier Legend

Ba = Ba Carrier
Y = Y Carrier

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-658211/1-A
Matrix: Water
Analysis Batch: 658378

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 658211

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		06/02/25 14:00	06/03/25 11:19	1

Lab Sample ID: LCS 240-658211/2-A
Matrix: Water
Analysis Batch: 658378

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 658211

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	0.976		mg/L		98	85 - 115

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-7189/13-A
Matrix: Water
Analysis Batch: 7220

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7189

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		06/03/25 15:35	06/04/25 13:18	1
Zinc	ND		0.0070	0.00093	mg/L		06/03/25 15:35	06/04/25 13:18	1

Lab Sample ID: LCS 350-7189/14-A
Matrix: Water
Analysis Batch: 7220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7189

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	20.1		mg/L		101	85 - 115
Zinc	1.00	1.02		mg/L		102	85 - 115

Lab Sample ID: 240-225634-1 MS
Matrix: Water
Analysis Batch: 7220

Client Sample ID: L505238-01 MW-18A
Prep Type: Total/NA
Prep Batch: 7189

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	1.4		20.0	21.8		mg/L		102	70 - 130
Zinc	0.0010	J	1.00	1.02		mg/L		102	70 - 130

Lab Sample ID: 240-225634-1 MSD
Matrix: Water
Analysis Batch: 7220

Client Sample ID: L505238-01 MW-18A
Prep Type: Total/NA
Prep Batch: 7189

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	1.4		20.0	21.8		mg/L		102	70 - 130	0	20
Zinc	0.0010	J	1.00	1.03		mg/L		103	70 - 130	0	20

Lab Sample ID: MB 350-7186/6-B
Matrix: Water
Analysis Batch: 7237

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7215

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		06/04/25 17:07	06/05/25 14:03	1
Zinc	0.00157	J	0.0070	0.00093	mg/L		06/04/25 17:07	06/05/25 14:03	1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 350-7186/7-B
Matrix: Water
Analysis Batch: 7237

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7215

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	21.6		mg/L		108	85 - 115
Zinc	1.00	1.07		mg/L		107	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-658211/1-A
Matrix: Water
Analysis Batch: 658454

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 658211

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		06/02/25 14:00	06/03/25 15:30	1
Arsenic	ND		0.0050	0.00075	mg/L		06/02/25 14:00	06/03/25 15:30	1
Barium	0.00189	J	0.0050	0.00077	mg/L		06/02/25 14:00	06/03/25 15:30	1
Beryllium	ND		0.0010	0.00027	mg/L		06/02/25 14:00	06/03/25 15:30	1
Cadmium	ND		0.0010	0.000077	mg/L		06/02/25 14:00	06/03/25 15:30	1
Cobalt	ND		0.0010	0.000086	mg/L		06/02/25 14:00	06/03/25 15:30	1
Chromium	ND		0.0050	0.0012	mg/L		06/02/25 14:00	06/03/25 15:30	1
Copper	ND		0.0020	0.0017	mg/L		06/02/25 14:00	06/03/25 15:30	1
Molybdenum	ND		0.0050	0.0011	mg/L		06/02/25 14:00	06/03/25 15:30	1
Nickel	ND		0.0020	0.0015	mg/L		06/02/25 14:00	06/03/25 15:30	1
Lead	ND		0.0010	0.00045	mg/L		06/02/25 14:00	06/03/25 15:30	1
Antimony	ND		0.0020	0.00057	mg/L		06/02/25 14:00	06/03/25 15:30	1
Selenium	ND		0.0050	0.00089	mg/L		06/02/25 14:00	06/03/25 15:30	1
Thallium	ND		0.0010	0.00051	mg/L		06/02/25 14:00	06/03/25 15:30	1
Vanadium	ND		0.0050	0.00082	mg/L		06/02/25 14:00	06/03/25 15:30	1
Calcium	ND		1.0	0.25	mg/L		06/02/25 14:00	06/03/25 15:30	1
Magnesium	ND		1.0	0.061	mg/L		06/02/25 14:00	06/03/25 15:30	1
Lithium	ND		0.0080	0.0034	mg/L		06/02/25 14:00	06/03/25 15:30	1
Sodium	1.66		1.0	0.88	mg/L		06/02/25 14:00	06/03/25 15:30	1
Potassium	ND		1.0	0.22	mg/L		06/02/25 14:00	06/03/25 15:30	1

Lab Sample ID: LCS 240-658211/3-A
Matrix: Water
Analysis Batch: 658454

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 658211

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.103		mg/L		103	85 - 115
Arsenic	1.00	1.01		mg/L		101	85 - 115
Barium	1.00	0.973		mg/L		97	85 - 115
Beryllium	0.500	0.503		mg/L		101	85 - 115
Cadmium	0.500	0.481		mg/L		96	85 - 115
Cobalt	0.500	0.479		mg/L		96	85 - 115
Chromium	0.500	0.499		mg/L		100	85 - 115
Copper	0.500	0.501		mg/L		100	85 - 115
Molybdenum	0.500	0.499		mg/L		100	85 - 115
Nickel	0.500	0.493		mg/L		99	85 - 115
Lead	0.500	0.496		mg/L		99	85 - 115
Antimony	0.100	0.0994		mg/L		99	85 - 115
Selenium	1.00	0.943		mg/L		94	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-658211/3-A
Matrix: Water
Analysis Batch: 658454

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 658211

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	1.00	1.15		mg/L		115	85 - 115
Vanadium	0.500	0.491		mg/L		98	85 - 115
Calcium	25.0	25.9		mg/L		104	85 - 115
Magnesium	25.0	25.2		mg/L		101	85 - 115
Lithium	0.500	0.520		mg/L		104	85 - 115
Sodium	25.0	26.5		mg/L		106	85 - 115
Potassium	25.0	26.0		mg/L		104	85 - 115

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-658215/1-A
Matrix: Water
Analysis Batch: 658484

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 658215

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		06/02/25 14:00	06/03/25 15:16	1

Lab Sample ID: LCS 240-658215/2-A
Matrix: Water
Analysis Batch: 658484

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 658215

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00486		mg/L		97	85 - 115

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-658346/30
Matrix: Water
Analysis Batch: 658346

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/02/25 14:51	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/02/25 14:51	1

Lab Sample ID: MB 240-658346/4
Matrix: Water
Analysis Batch: 658346

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/02/25 12:48	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/02/25 12:48	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-658498/1
Matrix: Water
Analysis Batch: 658498

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			06/04/25 08:50	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 240-658498/2
Matrix: Water
Analysis Batch: 658498

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	240	203		mg/L		85	80 - 120

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-658360/1
Matrix: Water
Analysis Batch: 658360

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			06/03/25 10:43	1

Lab Sample ID: LCS 240-658360/2
Matrix: Water
Analysis Batch: 658360

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	30.0	26.5		mg/L		88	64 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-658424/3
Matrix: Water
Analysis Batch: 658424

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			06/05/25 06:04	1
Fluoride	ND		0.050	0.024	mg/L			06/05/25 06:04	1
Sulfate	ND		1.0	0.35	mg/L			06/05/25 06:04	1

Lab Sample ID: LCS 240-658424/4
Matrix: Water
Analysis Batch: 658424

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	50.2		mg/L		100	90 - 110
Fluoride	2.50	2.44		mg/L		98	90 - 110
Sulfate	50.0	50.8		mg/L		102	90 - 110

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-720839/1-A
Matrix: Water
Analysis Batch: 724793

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 720839

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1449	U	0.186	0.187	1.00	0.310	pCi/L	06/05/25 07:42	06/27/25 16:15	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.8*		*30 - 110*	*06/05/25 07:42*	*06/27/25 16:15*	*1*

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: LCS 160-720839/2-A
Matrix: Water
Analysis Batch: 724793

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 720839

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.58	9.055		1.24	1.00	0.306	pCi/L	95	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*89.8*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-720840/1-A
Matrix: Water
Analysis Batch: 724793

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 720840

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4534	U	0.358	0.360	1.00	0.552	pCi/L	06/05/25 07:46	06/27/25 12:14	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.8*		*30 - 110*	*06/05/25 07:46*	*06/27/25 12:14*	*1*
Y Carrier	*78.1*		*30 - 110*	*06/05/25 07:46*	*06/27/25 12:14*	*1*

Lab Sample ID: LCS 160-720840/2-A
Matrix: Water
Analysis Batch: 724793

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 720840

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.31	10.35		1.40	1.00	0.516	pCi/L	111	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*89.8*		*30 - 110*
Y Carrier	*80.7*		*30 - 110*

Metals

Filtration Batch: 7186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 350-7186/6-B	Method Blank	Total/NA	Water	FILTRATION	
LCS 350-7186/7-B	Lab Control Sample	Total/NA	Water	FILTRATION	

Prep Batch: 7189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225634-1	L505238-01 MW-18A	Total/NA	Water	200.8	
240-225634-2	L505238-02 MW-18B	Total/NA	Water	200.8	
240-225634-3	L505238-03 MW-18C	Total/NA	Water	200.8	
240-225634-4	L505238-04 MW-18D	Total/NA	Water	200.8	
240-225634-5	L505238-05 MWT-18A	Total/NA	Water	200.8	
MB 350-7189/13-A	Method Blank	Total/NA	Water	200.8	
LCS 350-7189/14-A	Lab Control Sample	Total/NA	Water	200.8	
240-225634-1 MS	L505238-01 MW-18A	Total/NA	Water	200.8	
240-225634-1 MSD	L505238-01 MW-18A	Total/NA	Water	200.8	

Prep Batch: 7215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225634-6	L505238-06 FIELD BLANK	Total/NA	Water	200.8	
MB 350-7186/6-B	Method Blank	Total/NA	Water	200.8	7186
LCS 350-7186/7-B	Lab Control Sample	Total/NA	Water	200.8	7186

Analysis Batch: 7220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225634-1	L505238-01 MW-18A	Total/NA	Water	200.8	7189
240-225634-2	L505238-02 MW-18B	Total/NA	Water	200.8	7189
240-225634-3	L505238-03 MW-18C	Total/NA	Water	200.8	7189
240-225634-4	L505238-04 MW-18D	Total/NA	Water	200.8	7189
240-225634-5	L505238-05 MWT-18A	Total/NA	Water	200.8	7189
MB 350-7189/13-A	Method Blank	Total/NA	Water	200.8	7189
LCS 350-7189/14-A	Lab Control Sample	Total/NA	Water	200.8	7189
240-225634-1 MS	L505238-01 MW-18A	Total/NA	Water	200.8	7189
240-225634-1 MSD	L505238-01 MW-18A	Total/NA	Water	200.8	7189

Analysis Batch: 7237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225634-6	L505238-06 FIELD BLANK	Total/NA	Water	200.8	7215
MB 350-7186/6-B	Method Blank	Total/NA	Water	200.8	7215
LCS 350-7186/7-B	Lab Control Sample	Total/NA	Water	200.8	7215

Prep Batch: 658211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225634-1	L505238-01 MW-18A	Total Recoverable	Water	200.7	
240-225634-2	L505238-02 MW-18B	Total Recoverable	Water	200.7	
240-225634-3	L505238-03 MW-18C	Total Recoverable	Water	200.7	
240-225634-4	L505238-04 MW-18D	Total Recoverable	Water	200.7	
240-225634-5	L505238-05 MWT-18A	Total Recoverable	Water	200.7	
240-225634-6	L505238-06 FIELD BLANK	Total Recoverable	Water	200.7	
MB 240-658211/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-658211/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-658211/3-A	Lab Control Sample	Total Recoverable	Water	200.7	

Metals

Prep Batch: 658215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225634-1	L505238-01 MW-18A	Total/NA	Water	245.1-1994 R3.0	
240-225634-2	L505238-02 MW-18B	Total/NA	Water	245.1-1994 R3.0	
240-225634-3	L505238-03 MW-18C	Total/NA	Water	245.1-1994 R3.0	
240-225634-4	L505238-04 MW-18D	Total/NA	Water	245.1-1994 R3.0	
240-225634-5	L505238-05 MWT-18A	Total/NA	Water	245.1-1994 R3.0	
240-225634-6	L505238-06 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	
MB 240-658215/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-658215/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 658378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225634-1	L505238-01 MW-18A	Total Recoverable	Water	200.7 R4.4-1994	658211
240-225634-2	L505238-02 MW-18B	Total Recoverable	Water	200.7 R4.4-1994	658211
240-225634-3	L505238-03 MW-18C	Total Recoverable	Water	200.7 R4.4-1994	658211
240-225634-4	L505238-04 MW-18D	Total Recoverable	Water	200.7 R4.4-1994	658211
240-225634-5	L505238-05 MWT-18A	Total Recoverable	Water	200.7 R4.4-1994	658211
240-225634-6	L505238-06 FIELD BLANK	Total Recoverable	Water	200.7 R4.4-1994	658211
MB 240-658211/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	658211
LCS 240-658211/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	658211

Analysis Batch: 658454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225634-1	L505238-01 MW-18A	Total Recoverable	Water	200.8-1994 R5.4	658211
240-225634-2	L505238-02 MW-18B	Total Recoverable	Water	200.8-1994 R5.4	658211
240-225634-3	L505238-03 MW-18C	Total Recoverable	Water	200.8-1994 R5.4	658211
240-225634-4	L505238-04 MW-18D	Total Recoverable	Water	200.8-1994 R5.4	658211
240-225634-5	L505238-05 MWT-18A	Total Recoverable	Water	200.8-1994 R5.4	658211
240-225634-6	L505238-06 FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	658211
MB 240-658211/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	658211
LCS 240-658211/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	658211

Analysis Batch: 658484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225634-1	L505238-01 MW-18A	Total/NA	Water	245.1-1994 R3.0	658215
240-225634-2	L505238-02 MW-18B	Total/NA	Water	245.1-1994 R3.0	658215
240-225634-3	L505238-03 MW-18C	Total/NA	Water	245.1-1994 R3.0	658215
240-225634-4	L505238-04 MW-18D	Total/NA	Water	245.1-1994 R3.0	658215
240-225634-5	L505238-05 MWT-18A	Total/NA	Water	245.1-1994 R3.0	658215
240-225634-6	L505238-06 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	658215
MB 240-658215/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	658215
LCS 240-658215/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	658215

Analysis Batch: 658630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225634-1	L505238-01 MW-18A	Total Recoverable	Water	2340 B-2021	
240-225634-2	L505238-02 MW-18B	Total Recoverable	Water	2340 B-2021	
240-225634-3	L505238-03 MW-18C	Total Recoverable	Water	2340 B-2021	
240-225634-4	L505238-04 MW-18D	Total Recoverable	Water	2340 B-2021	
240-225634-5	L505238-05 MWT-18A	Total Recoverable	Water	2340 B-2021	
240-225634-6	L505238-06 FIELD BLANK	Total Recoverable	Water	2340 B-2021	

General Chemistry

Analysis Batch: 658346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225634-1	L505238-01 MW-18A	Total/NA	Water	2320 B-2021	
240-225634-2	L505238-02 MW-18B	Total/NA	Water	2320 B-2021	
240-225634-3	L505238-03 MW-18C	Total/NA	Water	2320 B-2021	
240-225634-4	L505238-04 MW-18D	Total/NA	Water	2320 B-2021	
240-225634-5	L505238-05 MWT-18A	Total/NA	Water	2320 B-2021	
240-225634-6	L505238-06 FIELD BLANK	Total/NA	Water	2320 B-2021	
MB 240-658346/30	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-658346/4	Method Blank	Total/NA	Water	2320 B-2021	

Analysis Batch: 658360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225634-1	L505238-01 MW-18A	Total/NA	Water	2540D-2020	
240-225634-2	L505238-02 MW-18B	Total/NA	Water	2540D-2020	
240-225634-3	L505238-03 MW-18C	Total/NA	Water	2540D-2020	
240-225634-4	L505238-04 MW-18D	Total/NA	Water	2540D-2020	
240-225634-5	L505238-05 MWT-18A	Total/NA	Water	2540D-2020	
240-225634-6	L505238-06 FIELD BLANK	Total/NA	Water	2540D-2020	
MB 240-658360/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-658360/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 658424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225634-1	L505238-01 MW-18A	Total/NA	Water	300.0-1993 R2.1	
240-225634-2	L505238-02 MW-18B	Total/NA	Water	300.0-1993 R2.1	
240-225634-2	L505238-02 MW-18B	Total/NA	Water	300.0-1993 R2.1	
240-225634-3	L505238-03 MW-18C	Total/NA	Water	300.0-1993 R2.1	
240-225634-3	L505238-03 MW-18C	Total/NA	Water	300.0-1993 R2.1	
240-225634-4	L505238-04 MW-18D	Total/NA	Water	300.0-1993 R2.1	
240-225634-5	L505238-05 MWT-18A	Total/NA	Water	300.0-1993 R2.1	
240-225634-6	L505238-06 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
MB 240-658424/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-658424/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 658498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225634-1	L505238-01 MW-18A	Total/NA	Water	2540 C-2020	
240-225634-2	L505238-02 MW-18B	Total/NA	Water	2540 C-2020	
240-225634-3	L505238-03 MW-18C	Total/NA	Water	2540 C-2020	
240-225634-4	L505238-04 MW-18D	Total/NA	Water	2540 C-2020	
240-225634-5	L505238-05 MWT-18A	Total/NA	Water	2540 C-2020	
240-225634-6	L505238-06 FIELD BLANK	Total/NA	Water	2540 C-2020	
MB 240-658498/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-658498/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Rad

Prep Batch: 720839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225634-1	L505238-01 MW-18A	Total/NA	Water	PrecSep-21	
240-225634-2	L505238-02 MW-18B	Total/NA	Water	PrecSep-21	
240-225634-3	L505238-03 MW-18C	Total/NA	Water	PrecSep-21	

Rad (Continued)

Prep Batch: 720839 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225634-4	L505238-04 MW-18D	Total/NA	Water	PrecSep-21	
240-225634-5	L505238-05 MWT-18A	Total/NA	Water	PrecSep-21	
240-225634-6	L505238-06 FIELD BLANK	Total/NA	Water	PrecSep-21	
MB 160-720839/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-720839/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 720840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-225634-1	L505238-01 MW-18A	Total/NA	Water	PrecSep_0	
240-225634-2	L505238-02 MW-18B	Total/NA	Water	PrecSep_0	
240-225634-3	L505238-03 MW-18C	Total/NA	Water	PrecSep_0	
240-225634-4	L505238-04 MW-18D	Total/NA	Water	PrecSep_0	
240-225634-5	L505238-05 MWT-18A	Total/NA	Water	PrecSep_0	
240-225634-6	L505238-06 FIELD BLANK	Total/NA	Water	PrecSep_0	
MB 160-720840/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-720840/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-225634-1

Client Sample ID: L505238-01 MW-18A

Lab Sample ID: 240-225634-1

Date Collected: 05/29/25 09:10

Matrix: Water

Date Received: 05/31/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			658211	BN	EET CLE	06/02/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	658378	AJC	EET CLE	06/03/25 12:41
Total/NA	Prep	200.8			7189	RMN	EET SSM	06/03/25 15:35
Total/NA	Analysis	200.8		1	7220	JLS	EET SSM	06/04/25 13:24
Total Recoverable	Prep	200.7			658211	BN	EET CLE	06/02/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	658454	S4FJ	EET CLE	06/03/25 16:30
Total Recoverable	Analysis	2340 B-2021		1	658630	KLC	EET CLE	06/05/25 07:05
Total/NA	Prep	245.1-1994 R3.0			658215	BN	EET CLE	06/02/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	658484	GEV	EET CLE	06/03/25 15:50
Total/NA	Analysis	2320 B-2021		1	658346	PQD2	EET CLE	06/02/25 14:26
Total/NA	Analysis	2540 C-2020		1	658498	TAV2	EET CLE	06/04/25 08:50
Total/NA	Analysis	2540D-2020		1	658360	C5SV	EET CLE	06/03/25 10:43
Total/NA	Analysis	300.0-1993 R2.1		1	658424	JMR	EET CLE	06/05/25 08:11
Total/NA	Prep	PrecSep-21			720839	JTR	EET SL	06/05/25 07:42
Total/NA	Analysis	903.0		1	724793	SWS	EET SL	06/27/25 16:15
Total/NA	Prep	PrecSep_0			720840	JTR	EET SL	06/05/25 07:46
Total/NA	Analysis	904.0		1	724793	SWS	EET SL	06/27/25 12:14
Total/NA	Analysis	Ra226_Ra228 Pos		1	725109	SCB	EET SL	06/30/25 09:25

Client Sample ID: L505238-02 MW-18B

Lab Sample ID: 240-225634-2

Date Collected: 05/29/25 10:43

Matrix: Water

Date Received: 05/31/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			658211	BN	EET CLE	06/02/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	658378	AJC	EET CLE	06/03/25 12:54
Total/NA	Prep	200.8			7189	RMN	EET SSM	06/03/25 15:35
Total/NA	Analysis	200.8		1	7220	JLS	EET SSM	06/04/25 13:42
Total Recoverable	Prep	200.7			658211	BN	EET CLE	06/02/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	658454	S4FJ	EET CLE	06/03/25 16:32
Total Recoverable	Analysis	2340 B-2021		1	658630	KLC	EET CLE	06/05/25 07:05
Total/NA	Prep	245.1-1994 R3.0			658215	BN	EET CLE	06/02/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	658484	GEV	EET CLE	06/03/25 15:52
Total/NA	Analysis	2320 B-2021		1	658346	PQD2	EET CLE	06/02/25 14:31
Total/NA	Analysis	2540 C-2020		1	658498	TAV2	EET CLE	06/04/25 08:50
Total/NA	Analysis	2540D-2020		1	658360	C5SV	EET CLE	06/03/25 10:43
Total/NA	Analysis	300.0-1993 R2.1		1	658424	JMR	EET CLE	06/05/25 08:53
Total/NA	Analysis	300.0-1993 R2.1		5	658424	JMR	EET CLE	06/05/25 09:14
Total/NA	Prep	PrecSep-21			720839	JTR	EET SL	06/05/25 07:42
Total/NA	Analysis	903.0		1	724793	SWS	EET SL	06/27/25 16:15
Total/NA	Prep	PrecSep_0			720840	JTR	EET SL	06/05/25 07:46
Total/NA	Analysis	904.0		1	724793	SWS	EET SL	06/27/25 12:14
Total/NA	Analysis	Ra226_Ra228 Pos		1	725109	SCB	EET SL	06/30/25 09:25

Client Sample ID: L505238-03 MW-18C

Lab Sample ID: 240-225634-3

Date Collected: 05/29/25 11:56

Matrix: Water

Date Received: 05/31/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			658211	BN	EET CLE	06/02/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	658378	AJC	EET CLE	06/03/25 12:59
Total/NA	Prep	200.8			7189	RMN	EET SSM	06/03/25 15:35
Total/NA	Analysis	200.8		1	7220	JLS	EET SSM	06/04/25 13:44
Total Recoverable	Prep	200.7			658211	BN	EET CLE	06/02/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	658454	S4FJ	EET CLE	06/03/25 16:35
Total Recoverable	Analysis	2340 B-2021		1	658630	KLC	EET CLE	06/05/25 07:05
Total/NA	Prep	245.1-1994 R3.0			658215	BN	EET CLE	06/02/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	658484	GEV	EET CLE	06/03/25 15:54
Total/NA	Analysis	2320 B-2021		1	658346	PQD2	EET CLE	06/02/25 14:55
Total/NA	Analysis	2540 C-2020		1	658498	TAV2	EET CLE	06/04/25 08:50
Total/NA	Analysis	2540D-2020		1	658360	C5SV	EET CLE	06/03/25 10:43
Total/NA	Analysis	300.0-1993 R2.1		1	658424	JMR	EET CLE	06/05/25 10:18
Total/NA	Analysis	300.0-1993 R2.1		5	658424	JMR	EET CLE	06/05/25 10:39
Total/NA	Prep	PrecSep-21			720839	JTR	EET SL	06/05/25 07:42
Total/NA	Analysis	903.0		1	724793	SWS	EET SL	06/27/25 16:15
Total/NA	Prep	PrecSep_0			720840	JTR	EET SL	06/05/25 07:46
Total/NA	Analysis	904.0		1	724793	SWS	EET SL	06/27/25 12:14
Total/NA	Analysis	Ra226_Ra228 Pos		1	725109	SCB	EET SL	06/30/25 09:25

Client Sample ID: L505238-04 MW-18D

Lab Sample ID: 240-225634-4

Date Collected: 05/29/25 13:07

Matrix: Water

Date Received: 05/31/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			658211	BN	EET CLE	06/02/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	658378	AJC	EET CLE	06/03/25 13:03
Total/NA	Prep	200.8			7189	RMN	EET SSM	06/03/25 15:35
Total/NA	Analysis	200.8		1	7220	JLS	EET SSM	06/04/25 13:52
Total Recoverable	Prep	200.7			658211	BN	EET CLE	06/02/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	658454	S4FJ	EET CLE	06/03/25 16:43
Total Recoverable	Analysis	2340 B-2021		1	658630	KLC	EET CLE	06/05/25 07:05
Total/NA	Prep	245.1-1994 R3.0			658215	BN	EET CLE	06/02/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	658484	GEV	EET CLE	06/03/25 15:56
Total/NA	Analysis	2320 B-2021		1	658346	PQD2	EET CLE	06/02/25 15:00
Total/NA	Analysis	2540 C-2020		1	658498	TAV2	EET CLE	06/04/25 08:50
Total/NA	Analysis	2540D-2020		1	658360	C5SV	EET CLE	06/03/25 10:43
Total/NA	Analysis	300.0-1993 R2.1		1	658424	JMR	EET CLE	06/05/25 11:00
Total/NA	Prep	PrecSep-21			720839	JTR	EET SL	06/05/25 07:42
Total/NA	Analysis	903.0		1	724793	SWS	EET SL	06/27/25 16:16
Total/NA	Prep	PrecSep_0			720840	JTR	EET SL	06/05/25 07:46
Total/NA	Analysis	904.0		1	724793	SWS	EET SL	06/27/25 12:14
Total/NA	Analysis	Ra226_Ra228 Pos		1	725109	SCB	EET SL	06/30/25 09:25

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-225634-1

Client Sample ID: L505238-05 MWT-18A

Lab Sample ID: 240-225634-5

Date Collected: 05/29/25 09:10
Date Received: 05/31/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			658211	BN	EET CLE	06/02/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	658378	AJC	EET CLE	06/03/25 13:08
Total/NA	Prep	200.8			7189	RMN	EET SSM	06/03/25 15:35
Total/NA	Analysis	200.8		1	7220	JLS	EET SSM	06/04/25 13:54
Total Recoverable	Prep	200.7			658211	BN	EET CLE	06/02/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	658454	S4FJ	EET CLE	06/03/25 16:46
Total Recoverable	Analysis	2340 B-2021		1	658630	KLC	EET CLE	06/05/25 07:05
Total/NA	Prep	245.1-1994 R3.0			658215	BN	EET CLE	06/02/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	658484	GEV	EET CLE	06/03/25 15:57
Total/NA	Analysis	2320 B-2021		1	658346	PQD2	EET CLE	06/02/25 15:06
Total/NA	Analysis	2540 C-2020		1	658498	TAV2	EET CLE	06/04/25 08:50
Total/NA	Analysis	2540D-2020		1	658360	C5SV	EET CLE	06/03/25 10:43
Total/NA	Analysis	300.0-1993 R2.1		1	658424	JMR	EET CLE	06/05/25 11:43
Total/NA	Prep	PrecSep-21			720839	JTR	EET SL	06/05/25 07:42
Total/NA	Analysis	903.0		1	724793	SWS	EET SL	06/27/25 16:16
Total/NA	Prep	PrecSep_0			720840	JTR	EET SL	06/05/25 07:46
Total/NA	Analysis	904.0		1	724793	SWS	EET SL	06/27/25 12:14
Total/NA	Analysis	Ra226_Ra228 Pos		1	725109	SCB	EET SL	06/30/25 09:25

Client Sample ID: L505238-06 FIELD BLANK

Lab Sample ID: 240-225634-6

Date Collected: 05/29/25 08:10
Date Received: 05/31/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			658211	BN	EET CLE	06/02/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	658378	AJC	EET CLE	06/03/25 13:12
Total/NA	Prep	200.8			7215	RMN	EET SSM	06/04/25 17:07
Total/NA	Analysis	200.8		1	7237	CW	EET SSM	06/05/25 15:04
Total Recoverable	Prep	200.7			658211	BN	EET CLE	06/02/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	658454	S4FJ	EET CLE	06/03/25 16:48
Total Recoverable	Analysis	2340 B-2021		1	658630	KLC	EET CLE	06/05/25 07:05
Total/NA	Prep	245.1-1994 R3.0			658215	BN	EET CLE	06/02/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	658484	GEV	EET CLE	06/03/25 15:59
Total/NA	Analysis	2320 B-2021		1	658346	PQD2	EET CLE	06/02/25 15:11
Total/NA	Analysis	2540 C-2020		1	658498	TAV2	EET CLE	06/04/25 08:50
Total/NA	Analysis	2540D-2020		1	658360	C5SV	EET CLE	06/03/25 10:43
Total/NA	Analysis	300.0-1993 R2.1		1	658424	JMR	EET CLE	06/05/25 07:50
Total/NA	Prep	PrecSep-21			720839	JTR	EET SL	06/05/25 07:42
Total/NA	Analysis	903.0		1	724793	SWS	EET SL	06/27/25 16:16
Total/NA	Prep	PrecSep_0			720840	JTR	EET SL	06/05/25 07:46
Total/NA	Analysis	904.0		1	724793	SWS	EET SL	06/27/25 12:14
Total/NA	Analysis	Ra226_Ra228 Pos		1	725109	SCB	EET SL	06/30/25 09:25

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-225634-1

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Job ID: 240-225634-1
Project/Site: Erickson Projects

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-08-26
Florida	NELAP	E87575	06-30-25
Louisiana (All)	NELAP	03073	06-30-25
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-25
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167-008	07-07-25
US Fish & Wildlife	US Federal Programs	A20571	06-30-25
USDA	US Federal Programs	525-23-4-22573	01-24-28
Washington	State	C788-23a	07-13-25
Wisconsin	State	399133460	07-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-225634-1

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	08-02-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

Chain of Custody

Return Samples to: Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☐

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Project Manager:
Howell, Leslie

Purchase Order:
Purchase Order not required

Project Reference:

Work Order:

Sampler:
Marc Wahrer

Requested TAT:

Description:
Erickson Projects

Project Number:
24034575

Site Name:
Erickson Projects

Sample State: MI

Special Instructions:
Need Promium EDD; Level 4 Report; Please use the reporting limits that are attached to this project.

Methods and Bottles

240-225634 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	200.8 Project List (19)	200.8_CWA Iron & Zinc	2320B Bicarbonate & Carbonate Alkalinity	Ra226_228GFPC_P Combined Radium-226 and Radium-228	200.7 Total Boron	2540D Solids, Total Suspended (TSS)	SM2340B Total Hardness (as CaCO3) by calculation	300.0_28D Chloride, Fluoride & Sulfate	245.1 Mercury	904.0 Standard Target List	903.0 Standard Target List	2540C_Calcd Total Dissolved Solids			Plastic 500ml - with Nitric Acid	Plastic 1 liter - unpreserved	Plastic 60 mL - unpreserved	Plastic 250ml - with Nitric Acid	Plastic 1 liter - Nitric Acid	Plastic 500ml - unpreserved	Total Bottles For Sample
1	L505238-01 MW-18A	Grab	Water	05/29/25 09:10				X	X	X	X	X	X	X	X	X	X	X	X			1	1	2	1	2	1	8
2	L505238-02 MW-18B	Grab	Water	05/29/25 10:43				X	X	X	X	X	X	X	X	X	X	X	X			1	1	2	1	2	1	8
3	L505238-03 MW-18C	Grab	Water	05/29/25 11:56				X	X	X	X	X	X	X	X	X	X	X	X			1	1	2	1	2	1	8
4	L505238-04 MW-18D	Grab	Water	05/29/25 13:07				X	X	X	X	X	X	X	X	X	X	X	X			1	1	2	1	2	1	8
5	L505238-05 MWT-18A	Grab	Water	05/29/25 09:10				X	X	X	X	X	X	X	X	X	X	X	X			1	1	2	1	2	1	8
6	L505238-06 FIELD BLANK	Grab	Water	05/29/25 08:10				X	X	X	X	X	X	X	X	X	X	X	X			1	1	2	1	2	1	8

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished To:	Date/Time:		
Jennifer Caporale	05/30/25 11:03	FedEX Jennifer Caporale	05/30/25 11:03	EC	5-31-25 800

Chain of Custody Number: **388143**

*H – Analysis on hold.

Eurofins – Cleveland Sample Receipt Form/Narrative Login # ·_____
Barberton Facility

Client Lansing Board of Water Site Name_____ Cooler unpacked by·

Cooler Received on 5-31-25 Opened on 5-31-25

FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours Drop-off Date/Time Storage Location

Eurofins Cooler # EC Foam Box Client Cooler Box Other

Packing material used. Bubble Wrap Foam Plastic Bag None Other

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☑ See Multiple Cooler Form

IR GUN # 17 (CF 0.2°C) Observed Cooler Temp._____°C Corrected Cooler Temp _____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12 Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC463162
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving.

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by·

Labels Verified by·

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved. _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen _____

Login # : _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: 17	1.0	1.2	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 17	2.5	2.7	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	

5/31/2025

Login Container Summary Report

240-225634

7/25/2025 (Rev. 1)

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L505238-01 MW-18A	240-225634-A-1	Plastic 60 mL - unpreserved				
L505238-01 MW-18A	240-225634-B-1	Plastic 60 mL - unpreserved				
L505238-01 MW-18A	240-225634-C-1	Plastic 250ml - with Nitric Acid	<2			
L505238-01 MW-18A	240-225634-D-1	Plastic 500ml - unpreserved				
L505238-01 MW-18A	240-225634-E-1	Plastic 500ml - with Nitric Acid	<2			
L505238-01 MW-18A	240-225634-F-1	Plastic 1 liter - unpreserved				
L505238-01 MW-18A	240-225634-G-1	Plastic 1 liter - Nitric Acid	<2			
L505238-01 MW-18A	240-225634-H-1	Plastic 1 liter - Nitric Acid	<2			
L505238-02 MW-18B	240-225634-A-2	Plastic 60 mL - unpreserved				
L505238-02 MW-18B	240-225634-B-2	Plastic 60 mL - unpreserved				
L505238-02 MW-18B	240-225634-C-2	Plastic 250ml - with Nitric Acid	<2			
L505238-02 MW-18B	240-225634-D-2	Plastic 500ml - unpreserved				
L505238-02 MW-18B	240-225634-E-2	Plastic 500ml - with Nitric Acid	<2			
L505238-02 MW-18B	240-225634-F-2	Plastic 1 liter - unpreserved				
L505238-02 MW-18B	240-225634-G-2	Plastic 1 liter - Nitric Acid	<2			
L505238-02 MW-18B	240-225634-H-2	Plastic 1 liter - Nitric Acid	<2			
L505238-03 MW-18C	240-225634-A-3	Plastic 60 mL - unpreserved				
L505238-03 MW-18C	240-225634-B-3	Plastic 60 mL - unpreserved				
L505238-03 MW-18C	240-225634-C-3	Plastic 250ml - with Nitric Acid	<2			
L505238-03 MW-18C	240-225634-D-3	Plastic 500ml - unpreserved				
L505238-03 MW-18C	240-225634-E-3	Plastic 500ml - with Nitric Acid	<2			
L505238-03 MW-18C	240-225634-F-3	Plastic 1 liter - unpreserved				
L505238-03 MW-18C	240-225634-G-3	Plastic 1 liter - Nitric Acid	<2			
L505238-03 MW-18C	240-225634-H-3	Plastic 1 liter - Nitric Acid	<2			
L505238-04 MW-18D	240-225634-A-4	Plastic 60 mL - unpreserved				
L505238-04 MW-18D	240-225634-B-4	Plastic 60 mL - unpreserved				
L505238-04 MW-18D	240-225634-C-4	Plastic 250ml - with Nitric Acid	<2			
L505238-04 MW-18D	240-225634-D-4	Plastic 500ml - unpreserved				
L505238-04 MW-18D	240-225634-E-4	Plastic 500ml - with Nitric Acid	<2			
L505238-04 MW-18D	240-225634-F-4	Plastic 1 liter - unpreserved				
L505238-04 MW-18D	240-225634-G-4	Plastic 1 liter - Nitric Acid	<2			
L505238-04 MW-18D	240-225634-H-4	Plastic 1 liter - Nitric Acid	<2			
L505238-05 MWT-18A	240-225634-A-5	Plastic 60 mL - unpreserved				
L505238-05 MWT-18A	240-225634-B-5	Plastic 60 mL - unpreserved				
L505238-05 MWT-18A	240-225634-C-5	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L505238-05 MWT-18A	240-225634-D-5	Plastic 500ml - unpreserved				
L505238-05 MWT-18A	240-225634-E-5	Plastic 500ml - with Nitric Acid	<2			
L505238-05 MWT-18A	240-225634-F-5	Plastic 1 liter - unpreserved				
L505238-05 MWT-18A	240-225634-G-5	Plastic 1 liter - Nitric Acid	<2			
L505238-05 MWT-18A	240-225634-H-5	Plastic 1 liter - Nitric Acid	<2			
L505238-06 FIELD BLANK	240-225634-A-6	Plastic 60 mL - unpreserved				
L505238-06 FIELD BLANK	240-225634-B-6	Plastic 60 mL - unpreserved				
L505238-06 FIELD BLANK	240-225634-C-6	Plastic 250ml - with Nitric Acid	<2			
L505238-06 FIELD BLANK	240-225634-D-6	Plastic 500ml - unpreserved				
L505238-06 FIELD BLANK	240-225634-E-6	Plastic 500ml - with Nitric Acid	<2			
L505238-06 FIELD BLANK	240-225634-F-6	Plastic 1 liter - unpreserved				
L505238-06 FIELD BLANK	240-225634-G-6	Plastic 1 liter - Nitric Acid	<2			
L505238-06 FIELD BLANK	240-225634-H-6	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-203168.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-225634-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 6/16/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Standard Target List	904.0/PrecSep_0 Standard Target List	Ra226_228GFPC_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L505238-01 MW-18A (240-225634-1)	5/29/25	09:10 Eastern	G	Water			X	X	X	2	
L505238-02 MW-18B (240-225634-2)	5/29/25	10:43 Eastern	G	Water			X	X	X	2	
L505238-03 MW-18C (240-225634-3)	5/29/25	11:56 Eastern	G	Water			X	X	X	2	
L505238-04 MW-18D (240-225634-4)	5/29/25	13:07 Eastern	G	Water			X	X	X	2	
L505238-05 MWT-18A (240-225634-5)	5/29/25	09:10 Eastern	G	Water			X	X	X	2	
L505238-06 FIELD BLANK (240-225634-6)	5/29/25	08:10 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: MALISSA LOAR	Date/Time: 6/2/25 8Am	Company	Received by: M. Pinette	Date/Time: JUN 04 2025 0810	Company
Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-203166.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-225634-1
Address: 5755 8th Street East, ,	Due Date Requested: 6/16/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT (MOD) Iron & Zinc	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
L505238-01 MW-18A (240-225634-1)	5/29/25	09:10 Eastern	G	Water			X	1	
L505238-02 MW-18B (240-225634-2)	5/29/25	10:43 Eastern	G	Water			X	1	
L505238-03 MW-18C (240-225634-3)	5/29/25	11:56 Eastern	G	Water			X	1	
L505238-04 MW-18D (240-225634-4)	5/29/25	13:07 Eastern	G	Water			X	1	
L505238-05 MWT-18A (240-225634-5)	5/29/25	09:10 Eastern	G	Water			X	1	
L505238-06 FIELD BLANK (240-225634-6)	5/29/25	08:10 Eastern	G	Water			X	1	
									Filtered

Therm. ID: SC03 Cust. Seal: (Y) / N
Uncorr./Corr. Temp: 19.3 / 19.2 °C
Delivery: UPS / FedEx / Other:
Ice Type: Blue / Dry / Wet / None
Label Ver.: 2 Packing: B

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. Thi laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said c

Possible Hazard Identification Unconfirmed 4238 4620 2563	*Sample Disposal (A fee may be assessed if sam* ☐ *Return To Client* ☐ *Disposal By Lab*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by: MALISSA LOAR	Date/Time: 6/2/25 8Pm	Company	Received by:	Date/Time: 6/3/25 9:45	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

7/25/2025 (Rev. 1)

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-225634-1

Login Number: 225634
List Number: 2
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 06/03/25 11:42 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-225634-1

Login Number: 225634
List Number: 3
Creator: Pinette, Meadow L

List Source: Eurofins St. Louis
List Creation: 06/04/25 11:46 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 7/25/2025 1:12:14 PM Revision 1

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-227065-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

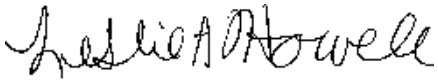
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
7/25/2025 1:12:14 PM
Revision 1

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 12
QC Sample Results 20
QC Association Summary 30
Lab Chronicle 34
Certification Summary 37
Chain of Custody 38
Receipt Checklists 49

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-227065-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
240-227065-1

REVISION

The report being provided is a revision of the original report sent on 7/1/2025. The report (revision 1) is being revised due to Potassium and Sodium added to reporting list of 200.8 from Cleveland analysis..

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 6/19/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.6°C and 1.1°C.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-227065-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-227065-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-227065-1	L506251-01 MW-19A	Water	06/17/25 07:33	06/19/25 08:00
240-227065-2	L506251-02 MW-19B	Water	06/17/25 09:23	06/19/25 08:00
240-227065-3	L506251-03 MW-19C	Water	06/17/25 10:55	06/19/25 08:00
240-227065-4	L506251-04 MW-19D	Water	06/17/25 08:45	06/19/25 08:00
240-227065-5	L506251-05 MWT-19A	Water	06/17/25 07:33	06/19/25 08:00
240-227065-6	L506251-06 FIELD BLANK	Water	06/17/25 08:50	06/19/25 08:00

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-227065-1

Client Sample ID: L506251-01 MW-19A — Lab Sample ID: 240-227065-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.24		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0044	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.099		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.000098	J B	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0023	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.010	B	0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	200		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	65		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.012		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	43		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	2.0		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	5.3		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	770		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	370	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	950		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	11		5.7	0.57	mg/L	1		2540D-2020	Total/NA
Chloride	110		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.14		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	290		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L506251-02 MW-19B — Lab Sample ID: 240-227065-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.55		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0043	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.059		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.00019	J B	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00015	J B	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0028	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.017	B	0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Thallium	0.00059	J	0.0010	0.00051	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	190		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	68		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.017		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L506251-02 MW-19B (Continued) — Lab Sample ID: 240-227065-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	34		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	3.1		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.9		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	750		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	380	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	940		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	4.3		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	68		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.24		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	310		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L506251-03 MW-19C — Lab Sample ID: 240-227065-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.2		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.046		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0018	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	60		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	22		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.026		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	44		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	7.1		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.86		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0039	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	240		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	310		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	330		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	3.7	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	3.1		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.40		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	5.6		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L506251-04 MW-19D — Lab Sample ID: 240-227065-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.58		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Boron, Dissolved	590		100	57	ug/L	1		200.7 R4.4-1994	Dissolved
Barium	0.056		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0015	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	69		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L506251-04 MW-19D (Continued) — Lab Sample ID: 240-227065-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	25		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.024		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	31		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	5.9		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium, Dissolved	56		5.0	0.77	ug/L	1		200.8-1994 R5.4	Dissolved
Cobalt, Dissolved	0.13	J B	1.0	0.086	ug/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	1.4	J	5.0	1.1	ug/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	69000		1000	250	ug/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	24000		1000	61	ug/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	25		8.0	3.4	ug/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	31000		1000	880	ug/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	5900		1000	220	ug/L	1		200.8-1994 R5.4	Dissolved
Iron	0.66		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0042	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Iron, Dissolved	0.60		0.10	0.013	mg/L	1		200.8	Dissolved
Zinc, Dissolved	0.0010	J	0.0070	0.00093	mg/L	1		200.8	Dissolved
Hardness as calcium carbonate	270		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	290		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	11		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	310		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	3.7	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	1.3		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.39		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	10		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L506251-05 MWT-19A — Lab Sample ID: 240-227065-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.24		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0040	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.098		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.000087	J B	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0023	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.010	B	0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	200		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	67		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.012		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	43		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	2.0		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-227065-1

Client Sample ID: L506251-05 MWT-19A (Continued) — Lab Sample ID: 240-227065-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	5.3		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	790		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	370		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	970		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	12		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	120		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.14		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	260		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L506251-06 FIELD BLANK — Lab Sample ID: 240-227065-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.016	J	0.10	0.013	mg/L	1		200.8	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L506251-01 MW-19A
Date Collected: 06/17/25 07:33
Date Received: 06/19/25 08:00

Lab Sample ID: 240-227065-1
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.24**		0.10	0.057	mg/L		06/20/25 14:00	06/23/25 12:53	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		06/20/25 14:00	06/23/25 14:33	1
Arsenic	**0.0044**	**J**	0.0050	0.00075	mg/L		06/20/25 14:00	06/23/25 14:33	1
Barium	**0.099**		0.0050	0.00077	mg/L		06/20/25 14:00	06/23/25 14:33	1
Beryllium	ND		0.0010	0.00027	mg/L		06/20/25 14:00	06/23/25 14:33	1
Cadmium	ND		0.0010	0.000077	mg/L		06/20/25 14:00	06/23/25 14:33	1
Cobalt	**0.000098**	**J B**	0.0010	0.000086	mg/L		06/20/25 14:00	06/23/25 14:33	1
Chromium	ND		0.0050	0.0012	mg/L		06/20/25 14:00	06/23/25 14:33	1
Copper	ND		0.0020	0.0017	mg/L		06/20/25 14:00	06/23/25 14:33	1
Molybdenum	**0.0023**	**J**	0.0050	0.0011	mg/L		06/20/25 14:00	06/23/25 14:33	1
Nickel	**0.010**	**B**	0.0020	0.0015	mg/L		06/20/25 14:00	06/23/25 14:33	1
Lead	ND		0.0010	0.00045	mg/L		06/20/25 14:00	06/23/25 14:33	1
Antimony	ND		0.0020	0.00057	mg/L		06/20/25 14:00	06/23/25 14:33	1
Selenium	ND		0.0050	0.00089	mg/L		06/20/25 14:00	06/23/25 14:33	1
Thallium	ND		0.0010	0.00051	mg/L		06/20/25 14:00	06/23/25 14:33	1
Vanadium	ND		0.0050	0.00082	mg/L		06/20/25 14:00	06/23/25 14:33	1
Calcium	**200**		1.0	0.25	mg/L		06/20/25 14:00	06/23/25 14:33	1
Magnesium	**65**		1.0	0.061	mg/L		06/20/25 14:00	06/23/25 14:33	1
Lithium	**0.012**		0.0080	0.0034	mg/L		06/20/25 14:00	06/23/25 14:33	1
Sodium	**43**		1.0	0.88	mg/L		06/20/25 14:00	06/23/25 14:33	1
Potassium	**2.0**		1.0	0.22	mg/L		06/20/25 14:00	06/23/25 14:33	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**5.3**		0.10	0.013	mg/L		06/20/25 11:42	06/23/25 22:06	1
Zinc	ND		0.0070	0.00093	mg/L		06/20/25 11:42	06/23/25 22:06	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**770**		33	33	mg/L			06/25/25 10:13	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		06/20/25 14:00	06/23/25 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**370**	**B**	5.0	2.6	mg/L			06/20/25 19:45	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			06/20/25 19:45	1
Total Dissolved Solids (SM 2540 C-2020)	**950**		10	7.8	mg/L			06/23/25 08:07	1
Total Suspended Solids (SM 2540D-2020)	**11**		5.7	0.57	mg/L			06/23/25 08:56	1
Chloride (EPA 300.0-1993 R2.1)	**110**		1.0	0.13	mg/L			06/23/25 19:09	1
Fluoride (EPA 300.0-1993 R2.1)	**0.14**		0.050	0.024	mg/L			06/23/25 19:09	1
Sulfate (EPA 300.0-1993 R2.1)	**290**		5.0	1.7	mg/L			06/23/25 19:31	5

Client Sample ID: L506251-02 MW-19B
Date Collected: 06/17/25 09:23
Date Received: 06/19/25 08:00

Lab Sample ID: 240-227065-2
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.55		0.10	0.057	mg/L		06/20/25 14:00	06/23/25 13:10	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		06/20/25 14:00	06/23/25 14:46	1
Arsenic	0.0043	J	0.0050	0.00075	mg/L		06/20/25 14:00	06/23/25 14:46	1
Barium	0.059		0.0050	0.00077	mg/L		06/20/25 14:00	06/23/25 14:46	1
Beryllium	ND		0.0010	0.00027	mg/L		06/20/25 14:00	06/23/25 14:46	1
Cadmium	0.00019	J B	0.0010	0.000077	mg/L		06/20/25 14:00	06/23/25 14:46	1
Cobalt	0.00015	J B	0.0010	0.000086	mg/L		06/20/25 14:00	06/23/25 14:46	1
Chromium	ND		0.0050	0.0012	mg/L		06/20/25 14:00	06/23/25 14:46	1
Copper	ND		0.0020	0.0017	mg/L		06/20/25 14:00	06/23/25 14:46	1
Molybdenum	0.0028	J	0.0050	0.0011	mg/L		06/20/25 14:00	06/23/25 14:46	1
Nickel	0.017	B	0.0020	0.0015	mg/L		06/20/25 14:00	06/23/25 14:46	1
Lead	ND		0.0010	0.00045	mg/L		06/20/25 14:00	06/23/25 14:46	1
Antimony	ND		0.0020	0.00057	mg/L		06/20/25 14:00	06/23/25 14:46	1
Selenium	ND		0.0050	0.00089	mg/L		06/20/25 14:00	06/23/25 14:46	1
Thallium	0.00059	J	0.0010	0.00051	mg/L		06/20/25 14:00	06/23/25 14:46	1
Vanadium	ND		0.0050	0.00082	mg/L		06/20/25 14:00	06/23/25 14:46	1
Calcium	190		1.0	0.25	mg/L		06/20/25 14:00	06/23/25 14:46	1
Magnesium	68		1.0	0.061	mg/L		06/20/25 14:00	06/23/25 14:46	1
Lithium	0.017		0.0080	0.0034	mg/L		06/20/25 14:00	06/23/25 14:46	1
Sodium	34		1.0	0.88	mg/L		06/20/25 14:00	06/23/25 14:46	1
Potassium	3.1		1.0	0.22	mg/L		06/20/25 14:00	06/23/25 14:46	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1.9		0.10	0.013	mg/L		06/20/25 11:42	06/23/25 22:09	1
Zinc	ND		0.0070	0.00093	mg/L		06/20/25 11:42	06/23/25 22:09	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	750		33	33	mg/L			06/25/25 10:13	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		06/20/25 14:00	06/23/25 14:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	380	B	5.0	2.6	mg/L			06/20/25 19:52	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			06/20/25 19:52	1
Total Dissolved Solids (SM 2540 C-2020)	940		10	7.8	mg/L			06/23/25 08:07	1
Total Suspended Solids (SM 2540D-2020)	4.3		4.0	0.40	mg/L			06/23/25 08:56	1
Chloride (EPA 300.0-1993 R2.1)	68		1.0	0.13	mg/L			06/23/25 19:52	1
Fluoride (EPA 300.0-1993 R2.1)	0.24		0.050	0.024	mg/L			06/23/25 19:52	1
Sulfate (EPA 300.0-1993 R2.1)	310		5.0	1.7	mg/L			06/23/25 20:13	5

Client Sample ID: L506251-03 MW-19C

Date Collected: 06/17/25 10:55
Date Received: 06/19/25 08:00

Lab Sample ID: 240-227065-3

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.2**		0.10	0.057	mg/L		06/20/25 14:00	06/23/25 14:10	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		06/20/25 14:00	06/23/25 15:40	1
Arsenic	ND		0.0050	0.00075	mg/L		06/20/25 14:00	06/23/25 15:40	1
Barium	**0.046**		0.0050	0.00077	mg/L		06/20/25 14:00	06/23/25 15:40	1
Beryllium	ND		0.0010	0.00027	mg/L		06/20/25 14:00	06/23/25 15:40	1
Cadmium	ND		0.0010	0.000077	mg/L		06/20/25 14:00	06/23/25 15:40	1
Cobalt	ND		0.0010	0.000086	mg/L		06/20/25 14:00	06/23/25 15:40	1
Chromium	ND		0.0050	0.0012	mg/L		06/20/25 14:00	06/23/25 15:40	1
Copper	ND		0.0020	0.0017	mg/L		06/20/25 14:00	06/23/25 15:40	1
Molybdenum	**0.0018**	**J**	0.0050	0.0011	mg/L		06/20/25 14:00	06/23/25 15:40	1
Nickel	ND		0.0020	0.0015	mg/L		06/20/25 14:00	06/23/25 15:40	1
Lead	ND		0.0010	0.00045	mg/L		06/20/25 14:00	06/23/25 15:40	1
Antimony	ND		0.0020	0.00057	mg/L		06/20/25 14:00	06/23/25 15:40	1
Selenium	ND		0.0050	0.00089	mg/L		06/20/25 14:00	06/23/25 15:40	1
Thallium	ND		0.0010	0.00051	mg/L		06/20/25 14:00	06/23/25 15:40	1
Vanadium	ND		0.0050	0.00082	mg/L		06/20/25 14:00	06/23/25 15:40	1
Calcium	**60**		1.0	0.25	mg/L		06/20/25 14:00	06/23/25 15:40	1
Magnesium	**22**		1.0	0.061	mg/L		06/20/25 14:00	06/23/25 15:40	1
Lithium	**0.026**		0.0080	0.0034	mg/L		06/20/25 14:00	06/23/25 15:40	1
Sodium	**44**		1.0	0.88	mg/L		06/20/25 14:00	06/23/25 15:40	1
Potassium	**7.1**		1.0	0.22	mg/L		06/20/25 14:00	06/23/25 15:40	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.86**		0.10	0.013	mg/L		06/20/25 11:42	06/23/25 22:12	1
Zinc	**0.0039**	**J**	0.0070	0.00093	mg/L		06/20/25 11:42	06/23/25 22:12	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**240**		33	33	mg/L			06/25/25 10:13	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		06/20/25 14:00	06/23/25 15:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**310**		5.0	2.6	mg/L			06/20/25 21:16	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			06/20/25 21:16	1
Total Dissolved Solids (SM 2540 C-2020)	**330**		10	7.8	mg/L			06/23/25 08:07	1
Total Suspended Solids (SM 2540D-2020)	**3.7**	**J**	4.0	0.40	mg/L			06/23/25 08:56	1
Chloride (EPA 300.0-1993 R2.1)	**3.1**		1.0	0.13	mg/L			06/23/25 21:17	1
Fluoride (EPA 300.0-1993 R2.1)	**0.40**		0.050	0.024	mg/L			06/23/25 21:17	1
Sulfate (EPA 300.0-1993 R2.1)	**5.6**		1.0	0.35	mg/L			06/23/25 21:17	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-227065-1

Client Sample ID: L506251-04 MW-19D

Date Collected: 06/17/25 08:45
Date Received: 06/19/25 08:00

Lab Sample ID: 240-227065-4

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.58**		0.10	0.057	mg/L		06/20/25 14:00	06/23/25 14:23	1

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**590**		100	57	ug/L		06/20/25 14:00	06/23/25 14:28	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		06/20/25 14:00	06/23/25 15:43	1
Arsenic	ND		0.0050	0.00075	mg/L		06/20/25 14:00	06/23/25 15:43	1
Barium	**0.056**		0.0050	0.00077	mg/L		06/20/25 14:00	06/23/25 15:43	1
Beryllium	ND		0.0010	0.00027	mg/L		06/20/25 14:00	06/23/25 15:43	1
Cadmium	ND		0.0010	0.000077	mg/L		06/20/25 14:00	06/23/25 15:43	1
Cobalt	ND		0.0010	0.000086	mg/L		06/20/25 14:00	06/23/25 15:43	1
Chromium	ND		0.0050	0.0012	mg/L		06/20/25 14:00	06/23/25 15:43	1
Copper	ND		0.0020	0.0017	mg/L		06/20/25 14:00	06/23/25 15:43	1
Molybdenum	**0.0015**	**J**	0.0050	0.0011	mg/L		06/20/25 14:00	06/23/25 15:43	1
Nickel	ND		0.0020	0.0015	mg/L		06/20/25 14:00	06/23/25 15:43	1
Lead	ND		0.0010	0.00045	mg/L		06/20/25 14:00	06/23/25 15:43	1
Antimony	ND		0.0020	0.00057	mg/L		06/20/25 14:00	06/23/25 15:43	1
Selenium	ND		0.0050	0.00089	mg/L		06/20/25 14:00	06/23/25 15:43	1
Thallium	ND		0.0010	0.00051	mg/L		06/20/25 14:00	06/23/25 15:43	1
Vanadium	ND		0.0050	0.00082	mg/L		06/20/25 14:00	06/23/25 15:43	1
Calcium	**69**		1.0	0.25	mg/L		06/20/25 14:00	06/23/25 15:43	1
Magnesium	**25**		1.0	0.061	mg/L		06/20/25 14:00	06/23/25 15:43	1
Lithium	**0.024**		0.0080	0.0034	mg/L		06/20/25 14:00	06/23/25 15:43	1
Sodium	**31**		1.0	0.88	mg/L		06/20/25 14:00	06/23/25 15:43	1
Potassium	**5.9**		1.0	0.22	mg/L		06/20/25 14:00	06/23/25 15:43	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver, Dissolved	ND		1.0	0.053	ug/L		06/20/25 14:00	06/23/25 15:46	1
Arsenic, Dissolved	ND		5.0	0.75	ug/L		06/20/25 14:00	06/23/25 15:46	1
Barium, Dissolved	**56**		5.0	0.77	ug/L		06/20/25 14:00	06/23/25 15:46	1
Beryllium, Dissolved	ND		1.0	0.27	ug/L		06/20/25 14:00	06/23/25 15:46	1
Cadmium, Dissolved	ND		1.0	0.077	ug/L		06/20/25 14:00	06/23/25 15:46	1
Cobalt, Dissolved	**0.13**	**J B**	1.0	0.086	ug/L		06/20/25 14:00	06/23/25 15:46	1
Chromium, Dissolved	ND		5.0	1.2	ug/L		06/20/25 14:00	06/23/25 15:46	1
Copper, Dissolved	ND		2.0	1.7	ug/L		06/20/25 14:00	06/23/25 15:46	1
Molybdenum, Dissolved	**1.4**	**J**	5.0	1.1	ug/L		06/20/25 14:00	06/23/25 15:46	1
Nickel, Dissolved	ND		2.0	1.5	ug/L		06/20/25 14:00	06/23/25 15:46	1
Lead, Dissolved	ND		1.0	0.45	ug/L		06/20/25 14:00	06/23/25 15:46	1
Antimony, Dissolved	ND		2.0	0.57	ug/L		06/20/25 14:00	06/23/25 15:46	1
Selenium, Dissolved	ND		5.0	0.89	ug/L		06/20/25 14:00	06/23/25 15:46	1
Thallium, Dissolved	ND		1.0	0.51	ug/L		06/20/25 14:00	06/23/25 15:46	1
Vanadium, Dissolved	ND		5.0	0.82	ug/L		06/20/25 14:00	06/23/25 15:46	1
Calcium, Dissolved	**69000**		1000	250	ug/L		06/20/25 14:00	06/23/25 15:46	1
Magnesium, Dissolved	**24000**		1000	61	ug/L		06/20/25 14:00	06/23/25 15:46	1
Lithium, Dissolved	**25**		8.0	3.4	ug/L		06/20/25 14:00	06/23/25 15:46	1
Sodium, Dissolved	**31000**		1000	880	ug/L		06/20/25 14:00	06/23/25 15:46	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-227065-1

Client Sample ID: L506251-04 MW-19D

Date Collected: 06/17/25 08:45
Date Received: 06/19/25 08:00

Lab Sample ID: 240-227065-4

Matrix: Water

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium, Dissolved	5900		1000	220	ug/L		06/20/25 14:00	06/23/25 15:46	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.66		0.10	0.013	mg/L		06/20/25 11:42	06/23/25 22:15	1
Zinc	0.0042	J	0.0070	0.00093	mg/L		06/20/25 11:42	06/23/25 22:15	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	0.60		0.10	0.013	mg/L		06/20/25 11:42	06/23/25 22:17	1
Zinc, Dissolved	0.0010	J	0.0070	0.00093	mg/L		06/20/25 11:42	06/23/25 22:17	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	270		33	33	mg/L			06/25/25 10:13	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		06/20/25 14:00	06/23/25 15:12	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.20	0.13	ug/L		06/20/25 14:00	06/23/25 15:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	290		5.0	2.6	mg/L			06/24/25 19:14	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	11		5.0	2.6	mg/L			06/24/25 19:14	1
Total Dissolved Solids (SM 2540 C-2020)	310		10	7.8	mg/L			06/23/25 08:07	1
Total Suspended Solids (SM 2540D-2020)	3.7	J	4.0	0.40	mg/L			06/23/25 08:56	1
Chloride (EPA 300.0-1993 R2.1)	1.3		1.0	0.13	mg/L			06/23/25 21:38	1
Fluoride (EPA 300.0-1993 R2.1)	0.39		0.050	0.024	mg/L			06/23/25 21:38	1
Sulfate (EPA 300.0-1993 R2.1)	10		1.0	0.35	mg/L			06/23/25 21:38	1

Client Sample ID: L506251-05 MWT-19A

Lab Sample ID: 240-227065-5

Date Collected: 06/17/25 07:33

Matrix: Water

Date Received: 06/19/25 08:00

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.24**		0.10	0.057	mg/L		06/20/25 14:00	06/23/25 14:32	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		06/20/25 14:00	06/23/25 15:48	1
Arsenic	**0.0040**	**J**	0.0050	0.00075	mg/L		06/20/25 14:00	06/23/25 15:48	1
Barium	**0.098**		0.0050	0.00077	mg/L		06/20/25 14:00	06/23/25 15:48	1
Beryllium	ND		0.0010	0.00027	mg/L		06/20/25 14:00	06/23/25 15:48	1
Cadmium	ND		0.0010	0.000077	mg/L		06/20/25 14:00	06/23/25 15:48	1
Cobalt	**0.000087**	**J B**	0.0010	0.000086	mg/L		06/20/25 14:00	06/23/25 15:48	1
Chromium	ND		0.0050	0.0012	mg/L		06/20/25 14:00	06/23/25 15:48	1
Copper	ND		0.0020	0.0017	mg/L		06/20/25 14:00	06/23/25 15:48	1
Molybdenum	**0.0023**	**J**	0.0050	0.0011	mg/L		06/20/25 14:00	06/23/25 15:48	1
Nickel	**0.010**	**B**	0.0020	0.0015	mg/L		06/20/25 14:00	06/23/25 15:48	1
Lead	ND		0.0010	0.00045	mg/L		06/20/25 14:00	06/23/25 15:48	1
Antimony	ND		0.0020	0.00057	mg/L		06/20/25 14:00	06/23/25 15:48	1
Selenium	ND		0.0050	0.00089	mg/L		06/20/25 14:00	06/23/25 15:48	1
Thallium	ND		0.0010	0.00051	mg/L		06/20/25 14:00	06/23/25 15:48	1
Vanadium	ND		0.0050	0.00082	mg/L		06/20/25 14:00	06/23/25 15:48	1
Calcium	**200**		1.0	0.25	mg/L		06/20/25 14:00	06/23/25 15:48	1
Magnesium	**67**		1.0	0.061	mg/L		06/20/25 14:00	06/23/25 15:48	1
Lithium	**0.012**		0.0080	0.0034	mg/L		06/20/25 14:00	06/23/25 15:48	1
Sodium	**43**		1.0	0.88	mg/L		06/20/25 14:00	06/23/25 15:48	1
Potassium	**2.0**		1.0	0.22	mg/L		06/20/25 14:00	06/23/25 15:48	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**5.3**		0.10	0.013	mg/L		06/23/25 16:04	06/24/25 12:45	1
Zinc	ND		0.0070	0.00093	mg/L		06/23/25 16:04	06/24/25 12:45	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**790**		33	33	mg/L			06/25/25 10:13	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		06/20/25 14:00	06/25/25 12:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**370**		5.0	2.6	mg/L			06/24/25 19:23	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			06/24/25 19:23	1
Total Dissolved Solids (SM 2540 C-2020)	**970**		10	7.8	mg/L			06/23/25 08:07	1
Total Suspended Solids (SM 2540D-2020)	**12**		4.0	0.40	mg/L			06/23/25 08:56	1
Chloride (EPA 300.0-1993 R2.1)	**120**		1.0	0.13	mg/L			06/23/25 21:59	1
Fluoride (EPA 300.0-1993 R2.1)	**0.14**		0.050	0.024	mg/L			06/23/25 21:59	1
Sulfate (EPA 300.0-1993 R2.1)	**260**		5.0	1.7	mg/L			06/23/25 22:20	5

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-227065-1

Client Sample ID: L506251-06 FIELD BLANK

Lab Sample ID: 240-227065-6

Date Collected: 06/17/25 08:50

Matrix: Water

Date Received: 06/19/25 08:00

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		06/20/25 14:00	06/23/25 14:37	1

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	ND		100	57	ug/L		06/20/25 14:00	06/23/25 14:41	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		06/20/25 14:00	06/23/25 15:51	1
Arsenic	ND		0.0050	0.00075	mg/L		06/20/25 14:00	06/23/25 15:51	1
Barium	ND		0.0050	0.00077	mg/L		06/20/25 14:00	06/23/25 15:51	1
Beryllium	ND		0.0010	0.00027	mg/L		06/20/25 14:00	06/23/25 15:51	1
Cadmium	ND		0.0010	0.000077	mg/L		06/20/25 14:00	06/23/25 15:51	1
Cobalt	ND		0.0010	0.000086	mg/L		06/20/25 14:00	06/23/25 15:51	1
Chromium	ND		0.0050	0.0012	mg/L		06/20/25 14:00	06/23/25 15:51	1
Copper	ND		0.0020	0.0017	mg/L		06/20/25 14:00	06/23/25 15:51	1
Molybdenum	ND		0.0050	0.0011	mg/L		06/20/25 14:00	06/23/25 15:51	1
Nickel	ND		0.0020	0.0015	mg/L		06/20/25 14:00	06/23/25 15:51	1
Lead	ND		0.0010	0.00045	mg/L		06/20/25 14:00	06/23/25 15:51	1
Antimony	ND		0.0020	0.00057	mg/L		06/20/25 14:00	06/23/25 15:51	1
Selenium	ND		0.0050	0.00089	mg/L		06/20/25 14:00	06/23/25 15:51	1
Thallium	ND		0.0010	0.00051	mg/L		06/20/25 14:00	06/23/25 15:51	1
Vanadium	ND		0.0050	0.00082	mg/L		06/20/25 14:00	06/23/25 15:51	1
Calcium	ND		1.0	0.25	mg/L		06/20/25 14:00	06/23/25 15:51	1
Magnesium	ND		1.0	0.061	mg/L		06/20/25 14:00	06/23/25 15:51	1
Lithium	ND		0.0080	0.0034	mg/L		06/20/25 14:00	06/23/25 15:51	1
Sodium	ND		1.0	0.88	mg/L		06/20/25 14:00	06/23/25 15:51	1
Potassium	ND		1.0	0.22	mg/L		06/20/25 14:00	06/23/25 15:51	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver, Dissolved	ND		1.0	0.053	ug/L		06/20/25 14:00	06/23/25 15:54	1
Arsenic, Dissolved	ND		5.0	0.75	ug/L		06/20/25 14:00	06/23/25 15:54	1
Barium, Dissolved	ND		5.0	0.77	ug/L		06/20/25 14:00	06/23/25 15:54	1
Beryllium, Dissolved	ND		1.0	0.27	ug/L		06/20/25 14:00	06/23/25 15:54	1
Cadmium, Dissolved	ND		1.0	0.077	ug/L		06/20/25 14:00	06/23/25 15:54	1
Cobalt, Dissolved	ND		1.0	0.086	ug/L		06/20/25 14:00	06/23/25 15:54	1
Chromium, Dissolved	ND		5.0	1.2	ug/L		06/20/25 14:00	06/23/25 15:54	1
Copper, Dissolved	ND		2.0	1.7	ug/L		06/20/25 14:00	06/23/25 15:54	1
Molybdenum, Dissolved	ND		5.0	1.1	ug/L		06/20/25 14:00	06/23/25 15:54	1
Nickel, Dissolved	ND		2.0	1.5	ug/L		06/20/25 14:00	06/23/25 15:54	1
Lead, Dissolved	ND		1.0	0.45	ug/L		06/20/25 14:00	06/23/25 15:54	1
Antimony, Dissolved	ND		2.0	0.57	ug/L		06/20/25 14:00	06/23/25 15:54	1
Selenium, Dissolved	ND		5.0	0.89	ug/L		06/20/25 14:00	06/23/25 15:54	1
Thallium, Dissolved	ND		1.0	0.51	ug/L		06/20/25 14:00	06/23/25 15:54	1
Vanadium, Dissolved	ND		5.0	0.82	ug/L		06/20/25 14:00	06/23/25 15:54	1
Calcium, Dissolved	ND		1000	250	ug/L		06/20/25 14:00	06/23/25 15:54	1
Magnesium, Dissolved	ND		1000	61	ug/L		06/20/25 14:00	06/23/25 15:54	1
Lithium, Dissolved	ND		8.0	3.4	ug/L		06/20/25 14:00	06/23/25 15:54	1
Sodium, Dissolved	ND		1000	880	ug/L		06/20/25 14:00	06/23/25 15:54	1

Client Sample ID: L506251-06 FIELD BLANK
Date Collected: 06/17/25 08:50
Date Received: 06/19/25 08:00

Lab Sample ID: 240-227065-6
Matrix: Water

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium, Dissolved	ND		1000	220	ug/L		06/20/25 14:00	06/23/25 15:54	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.016**	**J**	0.10	0.013	mg/L		06/23/25 16:04	06/24/25 12:26	1
Zinc	ND		0.0070	0.00093	mg/L		06/23/25 16:04	06/24/25 12:26	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.10	0.013	mg/L		06/23/25 16:04	06/24/25 12:42	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		06/23/25 16:04	06/24/25 12:42	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			06/25/25 10:13	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		06/20/25 14:00	06/25/25 12:31	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.20	0.13	ug/L		06/20/25 14:00	06/25/25 12:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			06/24/25 19:28	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			06/24/25 19:28	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			06/23/25 08:07	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			06/23/25 08:56	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			06/23/25 22:42	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			06/23/25 22:42	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			06/23/25 22:42	1

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-660763/1-A
Matrix: Water
Analysis Batch: 661086

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 660763

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		06/20/25 14:00	06/23/25 12:44	1
Boron, Dissolved	ND		0.10	0.057	mg/L		06/20/25 14:00	06/23/25 12:44	1

Lab Sample ID: LCS 240-660763/2-A
Matrix: Water
Analysis Batch: 661086

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 660763

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.02		mg/L		102	85 - 115
Boron, Dissolved	1.00	1.02		mg/L		102	85 - 115

Lab Sample ID: 240-227065-1 MS
Matrix: Water
Analysis Batch: 661086

Client Sample ID: L506251-01 MW-19A
Prep Type: Total Recoverable
Prep Batch: 660763

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.24		1.00	1.34		mg/L		110	70 - 130

Lab Sample ID: 240-227065-1 MSD
Matrix: Water
Analysis Batch: 661086

Client Sample ID: L506251-01 MW-19A
Prep Type: Total Recoverable
Prep Batch: 660763

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.24		1.00	1.38		mg/L		114	70 - 130	3	20

Lab Sample ID: 240-227065-2 MS
Matrix: Water
Analysis Batch: 661086

Client Sample ID: L506251-02 MW-19B
Prep Type: Total Recoverable
Prep Batch: 660763

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.55		1.00	1.65		mg/L		110	70 - 130
Boron, Dissolved	0.55		1.00	1.65		mg/L		110	70 - 130

Lab Sample ID: 240-227065-2 MSD
Matrix: Water
Analysis Batch: 661086

Client Sample ID: L506251-02 MW-19B
Prep Type: Total Recoverable
Prep Batch: 660763

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.55		1.00	1.60		mg/L		105	70 - 130	3	20
Boron, Dissolved	0.55		1.00	1.60		mg/L		105	70 - 130	3	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-7508/13-A
Matrix: Water
Analysis Batch: 7544

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7508

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		06/20/25 11:42	06/23/25 21:25	1
Iron, Dissolved	ND		0.10	0.013	mg/L		06/20/25 11:42	06/23/25 21:25	1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 350-7508/13-A
Matrix: Water
Analysis Batch: 7544

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7508

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.0070	0.00093	mg/L		06/20/25 11:42	06/23/25 21:25	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		06/20/25 11:42	06/23/25 21:25	1

Lab Sample ID: LCS 350-7508/14-A
Matrix: Water
Analysis Batch: 7544

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7508

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	19.6		mg/L		98	85 - 115
Iron, Dissolved	20.0	19.6		mg/L		98	85 - 115
Zinc	1.00	1.01		mg/L		101	85 - 115
Zinc, Dissolved	1.00	1.01		mg/L		101	85 - 115

Lab Sample ID: MB 350-7539/13-A
Matrix: Water
Analysis Batch: 7584

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7539

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		06/23/25 16:04	06/24/25 12:20	1
Iron, Dissolved	ND		0.10	0.013	mg/L		06/23/25 16:04	06/24/25 12:20	1
Zinc	ND		0.0070	0.00093	mg/L		06/23/25 16:04	06/24/25 12:20	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		06/23/25 16:04	06/24/25 12:20	1

Lab Sample ID: LCS 350-7539/14-A
Matrix: Water
Analysis Batch: 7584

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7539

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	20.4		mg/L		102	85 - 115
Iron, Dissolved	20.0	20.4		mg/L		102	85 - 115
Zinc	1.00	1.03		mg/L		103	85 - 115
Zinc, Dissolved	1.00	1.03		mg/L		103	85 - 115

Lab Sample ID: 240-227065-6 MS
Matrix: Water
Analysis Batch: 7584

Client Sample ID: L506251-06 FIELD BLANK
Prep Type: Total/NA
Prep Batch: 7539

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	0.016	J	20.0	19.7		mg/L		98	70 - 130
Iron, Dissolved	0.016	J	20.0	19.7		mg/L		98	70 - 130
Zinc	ND		1.00	0.996		mg/L		100	70 - 130
Zinc, Dissolved	ND		1.00	0.996		mg/L		100	70 - 130

Lab Sample ID: 240-227065-6 MSD
Matrix: Water
Analysis Batch: 7584

Client Sample ID: L506251-06 FIELD BLANK
Prep Type: Total/NA
Prep Batch: 7539

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	0.016	J	20.0	19.5		mg/L		98	70 - 130	1	20
Iron, Dissolved	0.016	J	20.0	19.5		mg/L		98	70 - 130	1	20

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-227065-6 MSD
Matrix: Water
Analysis Batch: 7584

Client Sample ID: L506251-06 FIELD BLANK
Prep Type: Total/NA
Prep Batch: 7539

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	ND		1.00	0.990		mg/L		99	70 - 130	1	20
Zinc, Dissolved	ND		1.00	0.990		mg/L		99	70 - 130	1	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-660763/1-A
Matrix: Water
Analysis Batch: 661083

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 660763

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		06/20/25 14:00	06/23/25 14:30	1
Silver, Dissolved	ND		0.0010	0.000053	mg/L		06/20/25 14:00	06/23/25 14:30	1
Arsenic	ND		0.0050	0.00075	mg/L		06/20/25 14:00	06/23/25 14:30	1
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		06/20/25 14:00	06/23/25 14:30	1
Barium	ND		0.0050	0.00077	mg/L		06/20/25 14:00	06/23/25 14:30	1
Barium, Dissolved	ND		0.0050	0.00077	mg/L		06/20/25 14:00	06/23/25 14:30	1
Beryllium	ND		0.0010	0.00027	mg/L		06/20/25 14:00	06/23/25 14:30	1
Beryllium, Dissolved	ND		0.0010	0.00027	mg/L		06/20/25 14:00	06/23/25 14:30	1
Cadmium	0.000122	J	0.0010	0.000077	mg/L		06/20/25 14:00	06/23/25 14:30	1
Cadmium, Dissolved	0.000122	J	0.0010	0.000077	mg/L		06/20/25 14:00	06/23/25 14:30	1
Cobalt	0.000151	J	0.0010	0.000086	mg/L		06/20/25 14:00	06/23/25 14:30	1
Cobalt, Dissolved	0.000151	J	0.0010	0.000086	mg/L		06/20/25 14:00	06/23/25 14:30	1
Chromium	0.00365	J	0.0050	0.0012	mg/L		06/20/25 14:00	06/23/25 14:30	1
Chromium, Dissolved	0.00365	J	0.0050	0.0012	mg/L		06/20/25 14:00	06/23/25 14:30	1
Copper	ND		0.0020	0.0017	mg/L		06/20/25 14:00	06/23/25 14:30	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		06/20/25 14:00	06/23/25 14:30	1
Molybdenum	ND		0.0050	0.0011	mg/L		06/20/25 14:00	06/23/25 14:30	1
Molybdenum, Dissolved	ND		0.0050	0.0011	mg/L		06/20/25 14:00	06/23/25 14:30	1
Nickel	0.00184	J	0.0020	0.0015	mg/L		06/20/25 14:00	06/23/25 14:30	1
Nickel, Dissolved	0.00184	J	0.0020	0.0015	mg/L		06/20/25 14:00	06/23/25 14:30	1
Lead	ND		0.0010	0.00045	mg/L		06/20/25 14:00	06/23/25 14:30	1
Lead, Dissolved	ND		0.0010	0.00045	mg/L		06/20/25 14:00	06/23/25 14:30	1
Antimony	ND		0.0020	0.00057	mg/L		06/20/25 14:00	06/23/25 14:30	1
Antimony, Dissolved	ND		0.0020	0.00057	mg/L		06/20/25 14:00	06/23/25 14:30	1
Selenium	ND		0.0050	0.00089	mg/L		06/20/25 14:00	06/23/25 14:30	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		06/20/25 14:00	06/23/25 14:30	1
Thallium	ND		0.0010	0.00051	mg/L		06/20/25 14:00	06/23/25 14:30	1
Thallium, Dissolved	ND		0.0010	0.00051	mg/L		06/20/25 14:00	06/23/25 14:30	1
Vanadium	ND		0.0050	0.00082	mg/L		06/20/25 14:00	06/23/25 14:30	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		06/20/25 14:00	06/23/25 14:30	1
Calcium	ND		1.0	0.25	mg/L		06/20/25 14:00	06/23/25 14:30	1
Calcium, Dissolved	ND		1.0	0.25	mg/L		06/20/25 14:00	06/23/25 14:30	1
Magnesium	ND		1.0	0.061	mg/L		06/20/25 14:00	06/23/25 14:30	1
Magnesium, Dissolved	ND		1.0	0.061	mg/L		06/20/25 14:00	06/23/25 14:30	1
Lithium	ND		0.0080	0.0034	mg/L		06/20/25 14:00	06/23/25 14:30	1
Lithium, Dissolved	ND		0.0080	0.0034	mg/L		06/20/25 14:00	06/23/25 14:30	1
Sodium	ND		1.0	0.88	mg/L		06/20/25 14:00	06/23/25 14:30	1
Sodium, Dissolved	ND		1.0	0.88	mg/L		06/20/25 14:00	06/23/25 14:30	1
Potassium	ND		1.0	0.22	mg/L		06/20/25 14:00	06/23/25 14:30	1

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-660763/1-A
Matrix: Water
Analysis Batch: 661083

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 660763

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium, Dissolved	ND		1.0	0.22	mg/L		06/20/25 14:00	06/23/25 14:30	1

Lab Sample ID: LCS 240-660763/3-A
Matrix: Water
Analysis Batch: 661083

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 660763

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.0949		mg/L		95	85 - 115
Silver, Dissolved	0.100	0.0949		mg/L		95	85 - 115
Arsenic	1.00	1.02		mg/L		102	85 - 115
Arsenic, Dissolved	1.00	1.02		mg/L		102	85 - 115
Barium	1.00	1.01		mg/L		101	85 - 115
Barium, Dissolved	1.00	1.01		mg/L		101	85 - 115
Beryllium	0.500	0.483		mg/L		97	85 - 115
Beryllium, Dissolved	0.500	0.483		mg/L		97	85 - 115
Cadmium	0.500	0.467		mg/L		93	85 - 115
Cadmium, Dissolved	0.500	0.467		mg/L		93	85 - 115
Cobalt	0.500	0.489		mg/L		98	85 - 115
Cobalt, Dissolved	0.500	0.489		mg/L		98	85 - 115
Chromium	0.500	0.501		mg/L		100	85 - 115
Chromium, Dissolved	0.500	0.501		mg/L		100	85 - 115
Copper	0.500	0.500		mg/L		100	85 - 115
Copper, Dissolved	0.500	0.500		mg/L		100	85 - 115
Molybdenum	0.500	0.497		mg/L		99	85 - 115
Molybdenum, Dissolved	0.500	0.497		mg/L		99	85 - 115
Nickel	0.500	0.498		mg/L		100	85 - 115
Nickel, Dissolved	0.500	0.498		mg/L		100	85 - 115
Lead	0.500	0.520		mg/L		104	85 - 115
Lead, Dissolved	0.500	0.520		mg/L		104	85 - 115
Antimony	0.100	0.0931		mg/L		93	85 - 115
Antimony, Dissolved	0.100	0.0931		mg/L		93	85 - 115
Selenium	1.00	0.984		mg/L		98	85 - 115
Selenium, Dissolved	1.00	0.984		mg/L		98	85 - 115
Thallium	1.00	1.10		mg/L		110	85 - 115
Thallium, Dissolved	1.00	1.10		mg/L		110	85 - 115
Vanadium	0.500	0.503		mg/L		101	85 - 115
Vanadium, Dissolved	0.500	0.503		mg/L		101	85 - 115
Calcium	25.0	25.3		mg/L		101	85 - 115
Calcium, Dissolved	25.0	25.3		mg/L		101	85 - 115
Magnesium	25.0	25.9		mg/L		103	85 - 115
Magnesium, Dissolved	25.0	25.9		mg/L		103	85 - 115
Lithium	0.500	0.499		mg/L		100	85 - 115
Lithium, Dissolved	0.500	0.499		mg/L		100	85 - 115
Sodium	25.0	26.3		mg/L		105	85 - 115
Sodium, Dissolved	25.0	26.3		mg/L		105	85 - 115
Potassium	25.0	26.0		mg/L		104	85 - 115
Potassium, Dissolved	25.0	26.0		mg/L		104	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-227065-1 MS
Matrix: Water
Analysis Batch: 661083

Client Sample ID: L506251-01 MW-19A
Prep Type: Total Recoverable
Prep Batch: 660763

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.0951		mg/L		95	70 - 130
Arsenic	0.0044	J	1.00	1.02		mg/L		101	70 - 130
Barium	0.099		1.00	1.07		mg/L		97	70 - 130
Beryllium	ND		0.500	0.486		mg/L		97	70 - 130
Cadmium	ND		0.500	0.469		mg/L		94	70 - 130
Cobalt	0.000098	J B	0.500	0.476		mg/L		95	70 - 130
Chromium	ND		0.500	0.495		mg/L		99	70 - 130
Copper	ND		0.500	0.489		mg/L		98	70 - 130
Molybdenum	0.0023	J	0.500	0.505		mg/L		100	70 - 130
Nickel	0.010	B	0.500	0.495		mg/L		97	70 - 130
Lead	ND		0.500	0.513		mg/L		103	70 - 130
Antimony	ND		0.100	0.0949		mg/L		95	70 - 130
Selenium	ND		1.00	0.984		mg/L		98	70 - 130
Thallium	ND		1.00	1.10		mg/L		110	70 - 130
Vanadium	ND		0.500	0.500		mg/L		100	70 - 130
Calcium	200		25.0	220	4	mg/L		68	70 - 130
Magnesium	65		25.0	87.1		mg/L		87	70 - 130
Lithium	0.012		0.500	0.514		mg/L		101	70 - 130
Sodium	43		25.0	66.3		mg/L		94	70 - 130
Potassium	2.0		25.0	27.2		mg/L		101	70 - 130

Lab Sample ID: 240-227065-1 MSD
Matrix: Water
Analysis Batch: 661083

Client Sample ID: L506251-01 MW-19A
Prep Type: Total Recoverable
Prep Batch: 660763

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.0947		mg/L		95	70 - 130	0	20
Arsenic	0.0044	J	1.00	1.02		mg/L		102	70 - 130	1	20
Barium	0.099		1.00	1.09		mg/L		99	70 - 130	2	20
Beryllium	ND		0.500	0.490		mg/L		98	70 - 130	1	20
Cadmium	ND		0.500	0.477		mg/L		95	70 - 130	2	20
Cobalt	0.000098	J B	0.500	0.482		mg/L		96	70 - 130	1	20
Chromium	ND		0.500	0.502		mg/L		100	70 - 130	1	20
Copper	ND		0.500	0.492		mg/L		98	70 - 130	0	20
Molybdenum	0.0023	J	0.500	0.509		mg/L		101	70 - 130	1	20
Nickel	0.010	B	0.500	0.499		mg/L		98	70 - 130	1	20
Lead	ND		0.500	0.524		mg/L		105	70 - 130	2	20
Antimony	ND		0.100	0.0950		mg/L		95	70 - 130	0	20
Selenium	ND		1.00	0.991		mg/L		99	70 - 130	1	20
Thallium	ND		1.00	1.11		mg/L		111	70 - 130	1	20
Vanadium	ND		0.500	0.506		mg/L		101	70 - 130	1	20
Calcium	200		25.0	223	4	mg/L		81	70 - 130	1	20
Magnesium	65		25.0	89.2		mg/L		96	70 - 130	2	20
Lithium	0.012		0.500	0.517		mg/L		101	70 - 130	1	20
Sodium	43		25.0	67.3		mg/L		98	70 - 130	1	20
Potassium	2.0		25.0	27.8		mg/L		103	70 - 130	2	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-227065-2 MS
Matrix: Water
Analysis Batch: 661083

Client Sample ID: L506251-02 MW-19B
Prep Type: Total Recoverable
Prep Batch: 660763

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.0981		mg/L		98	70 - 130
Silver, Dissolved	ND		0.100	0.0981		mg/L		98	70 - 130
Arsenic	0.0043	J	1.00	1.06		mg/L		105	70 - 130
Arsenic, Dissolved	0.0043	J	1.00	1.06		mg/L		105	70 - 130
Barium	0.059		1.00	1.07		mg/L		101	70 - 130
Barium, Dissolved	0.059		1.00	1.07		mg/L		101	70 - 130
Beryllium	ND		0.500	0.511		mg/L		102	70 - 130
Beryllium, Dissolved	ND		0.500	0.511		mg/L		102	70 - 130
Cadmium	0.00019	J B	0.500	0.487		mg/L		97	70 - 130
Cadmium, Dissolved	0.00019	J B	0.500	0.487		mg/L		97	70 - 130
Cobalt	0.00015	J B	0.500	0.495		mg/L		99	70 - 130
Cobalt, Dissolved	0.00015	J B	0.500	0.495		mg/L		99	70 - 130
Chromium	ND		0.500	0.513		mg/L		103	70 - 130
Chromium, Dissolved	ND		0.500	0.513		mg/L		103	70 - 130
Copper	ND		0.500	0.506		mg/L		101	70 - 130
Copper, Dissolved	ND		0.500	0.506		mg/L		101	70 - 130
Molybdenum	0.0028	J	0.500	0.524		mg/L		104	70 - 130
Molybdenum, Dissolved	0.0028	J	0.500	0.524		mg/L		104	70 - 130
Nickel	0.017	B	0.500	0.516		mg/L		100	70 - 130
Nickel, Dissolved	0.017	B	0.500	0.516		mg/L		100	70 - 130
Lead	ND		0.500	0.541		mg/L		108	70 - 130
Lead, Dissolved	ND		0.500	0.541		mg/L		108	70 - 130
Antimony	ND		0.100	0.0967		mg/L		97	70 - 130
Antimony, Dissolved	ND		0.100	0.0967		mg/L		97	70 - 130
Selenium	ND		1.00	1.03		mg/L		103	70 - 130
Selenium, Dissolved	ND		1.00	1.03		mg/L		103	70 - 130
Thallium	0.00059	J	1.00	1.14		mg/L		114	70 - 130
Thallium, Dissolved	0.00059	J	1.00	1.14		mg/L		114	70 - 130
Vanadium	ND		0.500	0.517		mg/L		103	70 - 130
Vanadium, Dissolved	ND		0.500	0.517		mg/L		103	70 - 130
Calcium	190		25.0	210	4	mg/L		84	70 - 130
Calcium, Dissolved	190		25.0	210	4	mg/L		84	70 - 130
Magnesium	68		25.0	91.5		mg/L		94	70 - 130
Magnesium, Dissolved	68		25.0	91.5		mg/L		94	70 - 130
Lithium	0.017		0.500	0.537		mg/L		104	70 - 130
Lithium, Dissolved	0.017		0.500	0.537		mg/L		104	70 - 130
Sodium	34		25.0	59.4		mg/L		100	70 - 130
Sodium, Dissolved	34		25.0	59.4		mg/L		100	70 - 130
Potassium	3.1		25.0	29.6		mg/L		106	70 - 130
Potassium, Dissolved	3.1		25.0	29.6		mg/L		106	70 - 130

Lab Sample ID: 240-227065-2 MSD
Matrix: Water
Analysis Batch: 661083

Client Sample ID: L506251-02 MW-19B
Prep Type: Total Recoverable
Prep Batch: 660763

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.0971		mg/L		97	70 - 130	1	20
Silver, Dissolved	ND		0.100	0.0971		mg/L		97	70 - 130	1	20
Arsenic	0.0043	J	1.00	1.04		mg/L		104	70 - 130	1	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-227065-2 MSD
Matrix: Water
Analysis Batch: 661083

Client Sample ID: L506251-02 MW-19B
Prep Type: Total Recoverable
Prep Batch: 660763

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic, Dissolved	0.0043	J	1.00	1.04		mg/L		104	70 - 130	1	20
Barium	0.059		1.00	1.06		mg/L		100	70 - 130	1	20
Barium, Dissolved	0.059		1.00	1.06		mg/L		100	70 - 130	1	20
Beryllium	ND		0.500	0.496		mg/L		99	70 - 130	3	20
Beryllium, Dissolved	ND		0.500	0.496		mg/L		99	70 - 130	3	20
Cadmium	0.00019	J B	0.500	0.477		mg/L		95	70 - 130	2	20
Cadmium, Dissolved	0.00019	J B	0.500	0.477		mg/L		95	70 - 130	2	20
Cobalt	0.00015	J B	0.500	0.489		mg/L		98	70 - 130	1	20
Cobalt, Dissolved	0.00015	J B	0.500	0.489		mg/L		98	70 - 130	1	20
Chromium	ND		0.500	0.506		mg/L		101	70 - 130	1	20
Chromium, Dissolved	ND		0.500	0.506		mg/L		101	70 - 130	1	20
Copper	ND		0.500	0.500		mg/L		100	70 - 130	1	20
Copper, Dissolved	ND		0.500	0.500		mg/L		100	70 - 130	1	20
Molybdenum	0.0028	J	0.500	0.516		mg/L		103	70 - 130	2	20
Molybdenum, Dissolved	0.0028	J	0.500	0.516		mg/L		103	70 - 130	2	20
Nickel	0.017	B	0.500	0.512		mg/L		99	70 - 130	1	20
Nickel, Dissolved	0.017	B	0.500	0.512		mg/L		99	70 - 130	1	20
Lead	ND		0.500	0.529		mg/L		106	70 - 130	2	20
Lead, Dissolved	ND		0.500	0.529		mg/L		106	70 - 130	2	20
Antimony	ND		0.100	0.0946		mg/L		95	70 - 130	2	20
Antimony, Dissolved	ND		0.100	0.0946		mg/L		95	70 - 130	2	20
Selenium	ND		1.00	0.991		mg/L		99	70 - 130	4	20
Selenium, Dissolved	ND		1.00	0.991		mg/L		99	70 - 130	4	20
Thallium	0.00059	J	1.00	1.13		mg/L		112	70 - 130	2	20
Thallium, Dissolved	0.00059	J	1.00	1.13		mg/L		112	70 - 130	2	20
Vanadium	ND		0.500	0.510		mg/L		102	70 - 130	1	20
Vanadium, Dissolved	ND		0.500	0.510		mg/L		102	70 - 130	1	20
Calcium	190		25.0	211	4	mg/L		89	70 - 130	1	20
Calcium, Dissolved	190		25.0	211	4	mg/L		89	70 - 130	1	20
Magnesium	68		25.0	92.7		mg/L		99	70 - 130	1	20
Magnesium, Dissolved	68		25.0	92.7		mg/L		99	70 - 130	1	20
Lithium	0.017		0.500	0.516		mg/L		100	70 - 130	4	20
Lithium, Dissolved	0.017		0.500	0.516		mg/L		100	70 - 130	4	20
Sodium	34		25.0	59.9		mg/L		102	70 - 130	1	20
Sodium, Dissolved	34		25.0	59.9		mg/L		102	70 - 130	1	20
Potassium	3.1		25.0	29.0		mg/L		104	70 - 130	2	20
Potassium, Dissolved	3.1		25.0	29.0		mg/L		104	70 - 130	2	20

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-660771/1-A
Matrix: Water
Analysis Batch: 661160

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 660771

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		06/20/25 14:00	06/23/25 14:40	1
Mercury, Dissolved	ND		0.00020	0.00013	mg/L		06/20/25 14:00	06/23/25 14:40	1

Method: 245.1-1994 R3.0 - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-660771/2-A
Matrix: Water
Analysis Batch: 661160

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 660771

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00507		mg/L		101	85 - 115		
Mercury, Dissolved			0.00500	0.00507		mg/L		101	85 - 115		

Lab Sample ID: 240-227065-1 MS
Matrix: Water
Analysis Batch: 661160

Client Sample ID: L506251-01 MW-19A
Prep Type: Total/NA
Prep Batch: 660771

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00100	0.00104		mg/L		104	70 - 130		
Mercury, Dissolved	ND		0.00100	0.00104		mg/L		104	70 - 130		

Lab Sample ID: 240-227065-1 MSD
Matrix: Water
Analysis Batch: 661160

Client Sample ID: L506251-01 MW-19A
Prep Type: Total/NA
Prep Batch: 660771

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.00105		mg/L		105	70 - 130	1	20
Mercury, Dissolved	ND		0.00100	0.00105		mg/L		105	70 - 130	1	20

Lab Sample ID: 240-227065-2 MS
Matrix: Water
Analysis Batch: 661160

Client Sample ID: L506251-02 MW-19B
Prep Type: Total/NA
Prep Batch: 660771

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00100	0.00106		mg/L		106	70 - 130		
Mercury, Dissolved	ND		0.00100	0.00106		mg/L		106	70 - 130		

Lab Sample ID: 240-227065-2 MSD
Matrix: Water
Analysis Batch: 661160

Client Sample ID: L506251-02 MW-19B
Prep Type: Total/NA
Prep Batch: 660771

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.00106		mg/L		106	70 - 130	0	20
Mercury, Dissolved	ND		0.00100	0.00106		mg/L		106	70 - 130	0	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-660976/33
Matrix: Water
Analysis Batch: 660976

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/20/25 20:28	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/20/25 20:28	1

Method: 2320 B-2021 - Alkalinity (Continued)

Lab Sample ID: MB 240-660976/4
Matrix: Water
Analysis Batch: 660976

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	4.42	J	5.0	2.6	mg/L			06/20/25 17:41	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/20/25 17:41	1

Lab Sample ID: MB 240-661349/4
Matrix: Water
Analysis Batch: 661349

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/24/25 18:33	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			06/24/25 18:33	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-660914/1
Matrix: Water
Analysis Batch: 660914

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			06/23/25 08:07	1

Lab Sample ID: LCS 240-660914/2
Matrix: Water
Analysis Batch: 660914

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	240	229		mg/L		95	80 - 120

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-660935/1
Matrix: Water
Analysis Batch: 660935

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			06/23/25 08:56	1

Lab Sample ID: LCS 240-660935/2
Matrix: Water
Analysis Batch: 660935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	30.0	29.0	J	mg/L		97	64 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-661045/4
Matrix: Water
Analysis Batch: 661045

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			06/23/25 17:02	1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 240-661045/4
Matrix: Water
Analysis Batch: 661045

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.050	0.024	mg/L			06/23/25 17:02	1
Sulfate	ND		1.0	0.35	mg/L			06/23/25 17:02	1

Lab Sample ID: LCS 240-661045/5
Matrix: Water
Analysis Batch: 661045

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.7		mg/L		103	90 - 110
Fluoride	2.50	2.64		mg/L		106	90 - 110
Sulfate	50.0	53.1		mg/L		106	90 - 110

Metals

Prep Batch: 7508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227065-1	L506251-01 MW-19A	Total/NA	Water	200.8	
240-227065-2	L506251-02 MW-19B	Total/NA	Water	200.8	
240-227065-3	L506251-03 MW-19C	Total/NA	Water	200.8	
240-227065-4	L506251-04 MW-19D	Dissolved	Water	200.8	
240-227065-4	L506251-04 MW-19D	Total/NA	Water	200.8	
MB 350-7508/13-A	Method Blank	Total/NA	Water	200.8	
LCS 350-7508/14-A	Lab Control Sample	Total/NA	Water	200.8	

Prep Batch: 7539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227065-5	L506251-05 MWT-19A	Total/NA	Water	200.8	
240-227065-6	L506251-06 FIELD BLANK	Dissolved	Water	200.8	
240-227065-6	L506251-06 FIELD BLANK	Total/NA	Water	200.8	
MB 350-7539/13-A	Method Blank	Total/NA	Water	200.8	
LCS 350-7539/14-A	Lab Control Sample	Total/NA	Water	200.8	
240-227065-6 MS	L506251-06 FIELD BLANK	Total/NA	Water	200.8	
240-227065-6 MSD	L506251-06 FIELD BLANK	Total/NA	Water	200.8	

Analysis Batch: 7544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227065-1	L506251-01 MW-19A	Total/NA	Water	200.8	7508
240-227065-2	L506251-02 MW-19B	Total/NA	Water	200.8	7508
240-227065-3	L506251-03 MW-19C	Total/NA	Water	200.8	7508
240-227065-4	L506251-04 MW-19D	Dissolved	Water	200.8	7508
240-227065-4	L506251-04 MW-19D	Total/NA	Water	200.8	7508
MB 350-7508/13-A	Method Blank	Total/NA	Water	200.8	7508
LCS 350-7508/14-A	Lab Control Sample	Total/NA	Water	200.8	7508

Analysis Batch: 7584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227065-5	L506251-05 MWT-19A	Total/NA	Water	200.8	7539
240-227065-6	L506251-06 FIELD BLANK	Dissolved	Water	200.8	7539
240-227065-6	L506251-06 FIELD BLANK	Total/NA	Water	200.8	7539
MB 350-7539/13-A	Method Blank	Total/NA	Water	200.8	7539
LCS 350-7539/14-A	Lab Control Sample	Total/NA	Water	200.8	7539
240-227065-6 MS	L506251-06 FIELD BLANK	Total/NA	Water	200.8	7539
240-227065-6 MSD	L506251-06 FIELD BLANK	Total/NA	Water	200.8	7539

Prep Batch: 660763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227065-1	L506251-01 MW-19A	Total Recoverable	Water	200.7	
240-227065-2	L506251-02 MW-19B	Total Recoverable	Water	200.7	
240-227065-3	L506251-03 MW-19C	Total Recoverable	Water	200.7	
240-227065-4	L506251-04 MW-19D	Dissolved	Water	200.8-1994 R5.4	
240-227065-4	L506251-04 MW-19D	Total Recoverable	Water	200.7	
240-227065-5	L506251-05 MWT-19A	Total Recoverable	Water	200.7	
240-227065-6	L506251-06 FIELD BLANK	Dissolved	Water	200.8-1994 R5.4	
240-227065-6	L506251-06 FIELD BLANK	Total Recoverable	Water	200.7	
MB 240-660763/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-660763/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-660763/3-A	Lab Control Sample	Total Recoverable	Water	200.7	

Metals (Continued)

Prep Batch: 660763 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227065-1 MS	L506251-01 MW-19A	Total Recoverable	Water	200.8-1994 R5.4	
240-227065-1 MS	L506251-01 MW-19A	Total Recoverable	Water	200.7	
240-227065-1 MSD	L506251-01 MW-19A	Total Recoverable	Water	200.8-1994 R5.4	
240-227065-1 MSD	L506251-01 MW-19A	Total Recoverable	Water	200.7	
240-227065-2 MS	L506251-02 MW-19B	Total Recoverable	Water	200.8-1994 R5.4	
240-227065-2 MS	L506251-02 MW-19B	Total Recoverable	Water	200.7	
240-227065-2 MSD	L506251-02 MW-19B	Total Recoverable	Water	200.8-1994 R5.4	
240-227065-2 MSD	L506251-02 MW-19B	Total Recoverable	Water	200.7	

Prep Batch: 660771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227065-1	L506251-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	
240-227065-2	L506251-02 MW-19B	Total/NA	Water	245.1-1994 R3.0	
240-227065-3	L506251-03 MW-19C	Total/NA	Water	245.1-1994 R3.0	
240-227065-4	L506251-04 MW-19D	Dissolved	Water	245.1-1994 R3.0	
240-227065-4	L506251-04 MW-19D	Total/NA	Water	245.1-1994 R3.0	
240-227065-5	L506251-05 MWT-19A	Total/NA	Water	245.1-1994 R3.0	
240-227065-6	L506251-06 FIELD BLANK	Dissolved	Water	245.1-1994 R3.0	
240-227065-6	L506251-06 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	
MB 240-660771/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-660771/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	
240-227065-1 MS	L506251-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	
240-227065-1 MSD	L506251-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	
240-227065-2 MS	L506251-02 MW-19B	Total/NA	Water	245.1-1994 R3.0	
240-227065-2 MSD	L506251-02 MW-19B	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 661083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227065-1	L506251-01 MW-19A	Total Recoverable	Water	200.8-1994 R5.4	660763
240-227065-2	L506251-02 MW-19B	Total Recoverable	Water	200.8-1994 R5.4	660763
240-227065-3	L506251-03 MW-19C	Total Recoverable	Water	200.8-1994 R5.4	660763
240-227065-4	L506251-04 MW-19D	Dissolved	Water	200.8-1994 R5.4	660763
240-227065-4	L506251-04 MW-19D	Total Recoverable	Water	200.8-1994 R5.4	660763
240-227065-5	L506251-05 MWT-19A	Total Recoverable	Water	200.8-1994 R5.4	660763
240-227065-6	L506251-06 FIELD BLANK	Dissolved	Water	200.8-1994 R5.4	660763
240-227065-6	L506251-06 FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	660763
MB 240-660763/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	660763
LCS 240-660763/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	660763
240-227065-1 MS	L506251-01 MW-19A	Total Recoverable	Water	200.8-1994 R5.4	660763
240-227065-1 MSD	L506251-01 MW-19A	Total Recoverable	Water	200.8-1994 R5.4	660763
240-227065-2 MS	L506251-02 MW-19B	Total Recoverable	Water	200.8-1994 R5.4	660763
240-227065-2 MSD	L506251-02 MW-19B	Total Recoverable	Water	200.8-1994 R5.4	660763

Analysis Batch: 661086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227065-1	L506251-01 MW-19A	Total Recoverable	Water	200.7 R4.4-1994	660763
240-227065-2	L506251-02 MW-19B	Total Recoverable	Water	200.7 R4.4-1994	660763
240-227065-3	L506251-03 MW-19C	Total Recoverable	Water	200.7 R4.4-1994	660763
240-227065-4	L506251-04 MW-19D	Dissolved	Water	200.7 R4.4-1994	660763
240-227065-4	L506251-04 MW-19D	Total Recoverable	Water	200.7 R4.4-1994	660763
240-227065-5	L506251-05 MWT-19A	Total Recoverable	Water	200.7 R4.4-1994	660763

Metals (Continued)

Analysis Batch: 661086 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227065-6	L506251-06 FIELD BLANK	Dissolved	Water	200.7 R4.4-1994	660763
240-227065-6	L506251-06 FIELD BLANK	Total Recoverable	Water	200.7 R4.4-1994	660763
MB 240-660763/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	660763
LCS 240-660763/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	660763
240-227065-1 MS	L506251-01 MW-19A	Total Recoverable	Water	200.7 R4.4-1994	660763
240-227065-1 MSD	L506251-01 MW-19A	Total Recoverable	Water	200.7 R4.4-1994	660763
240-227065-2 MS	L506251-02 MW-19B	Total Recoverable	Water	200.7 R4.4-1994	660763
240-227065-2 MSD	L506251-02 MW-19B	Total Recoverable	Water	200.7 R4.4-1994	660763

Analysis Batch: 661160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227065-1	L506251-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	660771
240-227065-2	L506251-02 MW-19B	Total/NA	Water	245.1-1994 R3.0	660771
240-227065-3	L506251-03 MW-19C	Total/NA	Water	245.1-1994 R3.0	660771
240-227065-4	L506251-04 MW-19D	Dissolved	Water	245.1-1994 R3.0	660771
240-227065-4	L506251-04 MW-19D	Total/NA	Water	245.1-1994 R3.0	660771
MB 240-660771/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	660771
LCS 240-660771/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	660771
240-227065-1 MS	L506251-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	660771
240-227065-1 MSD	L506251-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	660771
240-227065-2 MS	L506251-02 MW-19B	Total/NA	Water	245.1-1994 R3.0	660771
240-227065-2 MSD	L506251-02 MW-19B	Total/NA	Water	245.1-1994 R3.0	660771

Analysis Batch: 661345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227065-1	L506251-01 MW-19A	Total Recoverable	Water	2340 B-2021	
240-227065-2	L506251-02 MW-19B	Total Recoverable	Water	2340 B-2021	
240-227065-3	L506251-03 MW-19C	Total Recoverable	Water	2340 B-2021	
240-227065-4	L506251-04 MW-19D	Total Recoverable	Water	2340 B-2021	
240-227065-5	L506251-05 MWT-19A	Total Recoverable	Water	2340 B-2021	
240-227065-6	L506251-06 FIELD BLANK	Total Recoverable	Water	2340 B-2021	

Analysis Batch: 661431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227065-5	L506251-05 MWT-19A	Total/NA	Water	245.1-1994 R3.0	660771
240-227065-6	L506251-06 FIELD BLANK	Dissolved	Water	245.1-1994 R3.0	660771
240-227065-6	L506251-06 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	660771

General Chemistry

Analysis Batch: 660914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227065-1	L506251-01 MW-19A	Total/NA	Water	2540 C-2020	
240-227065-2	L506251-02 MW-19B	Total/NA	Water	2540 C-2020	
240-227065-3	L506251-03 MW-19C	Total/NA	Water	2540 C-2020	
240-227065-4	L506251-04 MW-19D	Total/NA	Water	2540 C-2020	
240-227065-5	L506251-05 MWT-19A	Total/NA	Water	2540 C-2020	
240-227065-6	L506251-06 FIELD BLANK	Total/NA	Water	2540 C-2020	
MB 240-660914/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-660914/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

QC Association Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-227065-1

General Chemistry

Analysis Batch: 660935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227065-1	L506251-01 MW-19A	Total/NA	Water	2540D-2020	
240-227065-2	L506251-02 MW-19B	Total/NA	Water	2540D-2020	
240-227065-3	L506251-03 MW-19C	Total/NA	Water	2540D-2020	
240-227065-4	L506251-04 MW-19D	Total/NA	Water	2540D-2020	
240-227065-5	L506251-05 MWT-19A	Total/NA	Water	2540D-2020	
240-227065-6	L506251-06 FIELD BLANK	Total/NA	Water	2540D-2020	
MB 240-660935/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-660935/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 660976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227065-1	L506251-01 MW-19A	Total/NA	Water	2320 B-2021	
240-227065-2	L506251-02 MW-19B	Total/NA	Water	2320 B-2021	
240-227065-3	L506251-03 MW-19C	Total/NA	Water	2320 B-2021	
MB 240-660976/33	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-660976/4	Method Blank	Total/NA	Water	2320 B-2021	

Analysis Batch: 661045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227065-1	L506251-01 MW-19A	Total/NA	Water	300.0-1993 R2.1	
240-227065-1	L506251-01 MW-19A	Total/NA	Water	300.0-1993 R2.1	
240-227065-2	L506251-02 MW-19B	Total/NA	Water	300.0-1993 R2.1	
240-227065-2	L506251-02 MW-19B	Total/NA	Water	300.0-1993 R2.1	
240-227065-3	L506251-03 MW-19C	Total/NA	Water	300.0-1993 R2.1	
240-227065-4	L506251-04 MW-19D	Total/NA	Water	300.0-1993 R2.1	
240-227065-5	L506251-05 MWT-19A	Total/NA	Water	300.0-1993 R2.1	
240-227065-5	L506251-05 MWT-19A	Total/NA	Water	300.0-1993 R2.1	
240-227065-6	L506251-06 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
MB 240-661045/4	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-661045/5	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 661349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-227065-4	L506251-04 MW-19D	Total/NA	Water	2320 B-2021	
240-227065-5	L506251-05 MWT-19A	Total/NA	Water	2320 B-2021	
240-227065-6	L506251-06 FIELD BLANK	Total/NA	Water	2320 B-2021	
MB 240-661349/4	Method Blank	Total/NA	Water	2320 B-2021	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-227065-1

Client Sample ID: L506251-01 MW-19A

Lab Sample ID: 240-227065-1

Date Collected: 06/17/25 07:33
Date Received: 06/19/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			660763	MN7X	EET CLE	06/20/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	661086	RKT	EET CLE	06/23/25 12:53
Total/NA	Prep	200.8			7508	RMN	EET SSM	06/20/25 11:42
Total/NA	Analysis	200.8		1	7544	CW	EET SSM	06/23/25 22:06
Total Recoverable	Prep	200.7			660763	MN7X	EET CLE	06/20/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	661083	AJC	EET CLE	06/23/25 14:33
Total Recoverable	Analysis	2340 B-2021		1	661345	KLC	EET CLE	06/25/25 10:13
Total/NA	Prep	245.1-1994 R3.0			660771	MN7X	EET CLE	06/20/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	661160	BN	EET CLE	06/23/25 14:43
Total/NA	Analysis	2320 B-2021		1	660976	PQD2	EET CLE	06/20/25 19:45
Total/NA	Analysis	2540 C-2020		1	660914	TAV2	EET CLE	06/23/25 08:07
Total/NA	Analysis	2540D-2020		1	660935	TAV2	EET CLE	06/23/25 08:56
Total/NA	Analysis	300.0-1993 R2.1		1	661045	JWW	EET CLE	06/23/25 19:09
Total/NA	Analysis	300.0-1993 R2.1		5	661045	JWW	EET CLE	06/23/25 19:31

Client Sample ID: L506251-02 MW-19B

Lab Sample ID: 240-227065-2

Date Collected: 06/17/25 09:23
Date Received: 06/19/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			660763	MN7X	EET CLE	06/20/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	661086	RKT	EET CLE	06/23/25 13:10
Total/NA	Prep	200.8			7508	RMN	EET SSM	06/20/25 11:42
Total/NA	Analysis	200.8		1	7544	CW	EET SSM	06/23/25 22:09
Total Recoverable	Prep	200.7			660763	MN7X	EET CLE	06/20/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	661083	AJC	EET CLE	06/23/25 14:46
Total Recoverable	Analysis	2340 B-2021		1	661345	KLC	EET CLE	06/25/25 10:13
Total/NA	Prep	245.1-1994 R3.0			660771	MN7X	EET CLE	06/20/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	661160	BN	EET CLE	06/23/25 14:48
Total/NA	Analysis	2320 B-2021		1	660976	PQD2	EET CLE	06/20/25 19:52
Total/NA	Analysis	2540 C-2020		1	660914	TAV2	EET CLE	06/23/25 08:07
Total/NA	Analysis	2540D-2020		1	660935	TAV2	EET CLE	06/23/25 08:56
Total/NA	Analysis	300.0-1993 R2.1		1	661045	JWW	EET CLE	06/23/25 19:52
Total/NA	Analysis	300.0-1993 R2.1		5	661045	JWW	EET CLE	06/23/25 20:13

Client Sample ID: L506251-03 MW-19C

Lab Sample ID: 240-227065-3

Date Collected: 06/17/25 10:55
Date Received: 06/19/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			660763	MN7X	EET CLE	06/20/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	661086	RKT	EET CLE	06/23/25 14:10
Total/NA	Prep	200.8			7508	RMN	EET SSM	06/20/25 11:42
Total/NA	Analysis	200.8		1	7544	CW	EET SSM	06/23/25 22:12

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-227065-1

Client Sample ID: L506251-03 MW-19C

Lab Sample ID: 240-227065-3

Date Collected: 06/17/25 10:55

Matrix: Water

Date Received: 06/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			660763	MN7X	EET CLE	06/20/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	661083	AJC	EET CLE	06/23/25 15:40
Total Recoverable	Analysis	2340 B-2021		1	661345	KLC	EET CLE	06/25/25 10:13
Total/NA	Prep	245.1-1994 R3.0			660771	MN7X	EET CLE	06/20/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	661160	BN	EET CLE	06/23/25 15:11
Total/NA	Analysis	2320 B-2021		1	660976	PQD2	EET CLE	06/20/25 21:16
Total/NA	Analysis	2540 C-2020		1	660914	TAV2	EET CLE	06/23/25 08:07
Total/NA	Analysis	2540D-2020		1	660935	TAV2	EET CLE	06/23/25 08:56
Total/NA	Analysis	300.0-1993 R2.1		1	661045	JWW	EET CLE	06/23/25 21:17

Client Sample ID: L506251-04 MW-19D

Lab Sample ID: 240-227065-4

Date Collected: 06/17/25 08:45

Matrix: Water

Date Received: 06/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.8-1994 R5.4			660763	MN7X	EET CLE	06/20/25 14:00
Dissolved	Analysis	200.7 R4.4-1994		1	661086	RKT	EET CLE	06/23/25 14:28
Total Recoverable	Prep	200.7			660763	MN7X	EET CLE	06/20/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	661086	RKT	EET CLE	06/23/25 14:23
Dissolved	Prep	200.8			7508	RMN	EET SSM	06/20/25 11:42
Dissolved	Analysis	200.8		1	7544	CW	EET SSM	06/23/25 22:17
Total/NA	Prep	200.8			7508	RMN	EET SSM	06/20/25 11:42
Total/NA	Analysis	200.8		1	7544	CW	EET SSM	06/23/25 22:15
Dissolved	Prep	200.8-1994 R5.4			660763	MN7X	EET CLE	06/20/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	661083	AJC	EET CLE	06/23/25 15:46
Total Recoverable	Prep	200.7			660763	MN7X	EET CLE	06/20/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	661083	AJC	EET CLE	06/23/25 15:43
Total Recoverable	Analysis	2340 B-2021		1	661345	KLC	EET CLE	06/25/25 10:13
Dissolved	Prep	245.1-1994 R3.0			660771	MN7X	EET CLE	06/20/25 14:00
Dissolved	Analysis	245.1-1994 R3.0		1	661160	BN	EET CLE	06/23/25 15:14
Total/NA	Prep	245.1-1994 R3.0			660771	MN7X	EET CLE	06/20/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	661160	BN	EET CLE	06/23/25 15:12
Total/NA	Analysis	2320 B-2021		1	661349	PQD2	EET CLE	06/24/25 19:14
Total/NA	Analysis	2540 C-2020		1	660914	TAV2	EET CLE	06/23/25 08:07
Total/NA	Analysis	2540D-2020		1	660935	TAV2	EET CLE	06/23/25 08:56
Total/NA	Analysis	300.0-1993 R2.1		1	661045	JWW	EET CLE	06/23/25 21:38

Client Sample ID: L506251-05 MWT-19A

Lab Sample ID: 240-227065-5

Date Collected: 06/17/25 07:33

Matrix: Water

Date Received: 06/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			660763	MN7X	EET CLE	06/20/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	661086	RKT	EET CLE	06/23/25 14:32

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-227065-1

Client Sample ID: L506251-05 MWT-19A

Lab Sample ID: 240-227065-5

Date Collected: 06/17/25 07:33
Date Received: 06/19/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.8			7539	MCMS	EET SSM	06/23/25 16:04
Total/NA	Analysis	200.8		1	7584	CW	EET SSM	06/24/25 12:45
Total Recoverable	Prep	200.7			660763	MN7X	EET CLE	06/20/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	661083	AJC	EET CLE	06/23/25 15:48
Total Recoverable	Analysis	2340 B-2021		1	661345	KLC	EET CLE	06/25/25 10:13
Total/NA	Prep	245.1-1994 R3.0			660771	MN7X	EET CLE	06/20/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	661431	BN	EET CLE	06/25/25 12:30
Total/NA	Analysis	2320 B-2021		1	661349	PQD2	EET CLE	06/24/25 19:23
Total/NA	Analysis	2540 C-2020		1	660914	TAV2	EET CLE	06/23/25 08:07
Total/NA	Analysis	2540D-2020		1	660935	TAV2	EET CLE	06/23/25 08:56
Total/NA	Analysis	300.0-1993 R2.1		1	661045	JWW	EET CLE	06/23/25 21:59
Total/NA	Analysis	300.0-1993 R2.1		5	661045	JWW	EET CLE	06/23/25 22:20

Client Sample ID: L506251-06 FIELD BLANK

Lab Sample ID: 240-227065-6

Date Collected: 06/17/25 08:50
Date Received: 06/19/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.8-1994 R5.4			660763	MN7X	EET CLE	06/20/25 14:00
Dissolved	Analysis	200.7 R4.4-1994		1	661086	RKT	EET CLE	06/23/25 14:41
Total Recoverable	Prep	200.7			660763	MN7X	EET CLE	06/20/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	661086	RKT	EET CLE	06/23/25 14:37
Dissolved	Prep	200.8			7539	MCMS	EET SSM	06/23/25 16:04
Dissolved	Analysis	200.8		1	7584	CW	EET SSM	06/24/25 12:42
Total/NA	Prep	200.8			7539	MCMS	EET SSM	06/23/25 16:04
Total/NA	Analysis	200.8		1	7584	CW	EET SSM	06/24/25 12:26
Dissolved	Prep	200.8-1994 R5.4			660763	MN7X	EET CLE	06/20/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	661083	AJC	EET CLE	06/23/25 15:54
Total Recoverable	Prep	200.7			660763	MN7X	EET CLE	06/20/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	661083	AJC	EET CLE	06/23/25 15:51
Total Recoverable	Analysis	2340 B-2021		1	661345	KLC	EET CLE	06/25/25 10:13
Dissolved	Prep	245.1-1994 R3.0			660771	MN7X	EET CLE	06/20/25 14:00
Dissolved	Analysis	245.1-1994 R3.0		1	661431	BN	EET CLE	06/25/25 12:33
Total/NA	Prep	245.1-1994 R3.0			660771	MN7X	EET CLE	06/20/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	661431	BN	EET CLE	06/25/25 12:31
Total/NA	Analysis	2320 B-2021		1	661349	PQD2	EET CLE	06/24/25 19:28
Total/NA	Analysis	2540 C-2020		1	660914	TAV2	EET CLE	06/23/25 08:07
Total/NA	Analysis	2540D-2020		1	660935	TAV2	EET CLE	06/23/25 08:56
Total/NA	Analysis	300.0-1993 R2.1		1	661045	JWW	EET CLE	06/23/25 22:42

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Job ID: 240-227065-1
Project/Site: Erickson Projects

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-08-26
Florida	NELAP	E87575	06-30-25
Louisiana (All)	NELAP	03073	06-30-25
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-25
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167-008	07-07-25
US Fish & Wildlife	US Federal Programs	A20571	06-30-25
USDA	US Federal Programs	525-23-4-22573	01-24-28
Washington	State	C788-23a	07-13-25
Wisconsin	State	399133460	07-31-25

Chain of Custody

Return Samples to: Eurofins Michigan
38855 Hills Tech Dr.
Farmington Hills, MI 48331

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:

Project Number:
24034575

Sample State: MI

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
Marc Wahrer and Julie Maltby

Description:
Erickson Projects

Site Name:
Erickson Projects

Special Instructions:
Need Promium EDD and Level 4 report; Please use the reporting limits that are attached to this project.
Please break off Radium so we can get the other results sooner.

See following pages for Method and Container information.

240-227065 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L506251-01 MW-19A	Grab	Water	06/17/25 07:33			
2	L506251-02 MW-19B	Grab	Water	06/17/25 09:23			
3	L506251-03 MW-19C	Grab	Water	06/17/25 10:55			
4	L506251-04 MW-19D	Grab	Water	06/17/25 08:45			
5	L506251-05 MWT-19A	Grab	Water	06/17/25 07:33			
6	L506251-06 Field Blank	Grab	Water	06/17/25 08:50			

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished By:	Date/Time:		
Jennifer Caporale	06/18/25 09:44	Jennifer Caporale	06/18/25 09:44	Received By:	

JESSE MOROSKO 6/19/25 0800

Chain of Custody Number: **361691**

"H – Analysis on hold.

Coolers								
Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250617A001								
MIC20250617A002								

Received By

JESSE MOROSKO 6/19/25 @ 8:00

Chain of Custody Number 361691

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																				
#	Sample Name	2540D Solids, Total Suspended (TSS)	2540C_Calcd Total Dissolved Solids	2320B Bicarbonate & Carbonate Alkalinity	Ra226_228AS_P Combined Radium-226 and Radium-228	904 0 Standard Target List	245.1 1994 R3.0 / Mercury (CVAA) / Mercury	SM2340B Total Hardness (as CaCO3) by calculation	245 1 Mercury	200.8_CWA Custom List 2: 2-3 Metals	200.8 / Metals (ICP/MS) / Custom List 2: 2-3 Metals	200.8 Project List (19)	903.0 Standard Target List	200.7 R4.4-1994 / Metals (ICP) / Total Boron	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	200 7 Total Boron	300.0_28D Chloride, Fluoride & Sulfate					
1	L506251-01 MW-19A	X	X	X	X	X		X	X	X		X	X			X	X					
2	L506251-02 MW-19B	X	X	X	X	X		X	X	X		X	X			X	X					
3	L506251-03 MW-19C	X	X	X	X	X		X	X	X		X	X			X	X					
4	L506251-04 MW-19D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
5	L506251-05 MWT-19A	X	X	X	X	X		X	X	X		X	X			X	X					
6	L506251-06 Field Blank	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					

Received By:
JESSE MOROSKO 6/19/25 @ 8W

Chain of Custody Bottles

eurofins | Environment Testing

Bottle Name	Total Bottles
Plastic 500ml - w/ Nitric - Dis.	2
Plastic 250ml - with Nitric Acid	7
Plastic 1 liter Nitric Acid	14
Plastic 500ml - unpreserved	7
Plastic 60 mL unpreserved	14
Plastic 1 liter - unpreserved	7
Plastic 500ml with Nitric Acid	7

Samples		Bottles																					
#	Sample Name	Total Bottles For Sample	Plastic 500ml w/ Nitric Dis.	Plastic 250ml - with Nitric Acid	Plastic 1 liter - Nitric Acid	Plastic 500ml - unpreserved	Plastic 60 mL unpreserved	Plastic 1 liter - unpreserved	Plastic 500ml - with Nitric Acid														
1	L506251-01 MW-19A	8		1	2	1	2	1	1														
2	L506251-02 MW-19B	8		1	2	1	2	1	1														
3	L506251-03 MW-19C	8		1	2	1	2	1	1														
4	L506251-04 MW-19D	9	1	1	2	1	2	1	1														
5	L506251-05 MWT 19A	8		1	2	1	2	1	1														
6	L506251-06 Field Blank	9	1	1	2	1	2	1	1														

Received By:

JESSE MOROSKO

6/19/25 @ 8w

Chain of Custody Number: 361691

Received By:

JESSE MOROSKO

6/19/25 @ 8W

Chain of Custody Number: 361691

Eurofins – Cleveland Sample Receipt Form/Narrative **Login #** _____
Barberton Facility

Client Lansing Board of Water Site Name _____ Cooler unpacked by: JESSE MOROSKO

Cooler Received on 6/19/25 Opened on 6/19/25

FedEx 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used. Bubble Wrap Foam Plastic Bag None Other _____

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☒ See Multiple Cooler Form

IR GUN # 13 (CF +0.5 °C) Observed Cooler Temp _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
~~5 Were the custody papers relinquished & signed in the appropriate place?~~	~~Yes~~	~~No~~
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12 Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC463162
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20 SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved. _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	01	06	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 13	06	11	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice

6/19/2025

Login Container Summary Report

240-227065

7/25/2025 (Rev. 1)

Temperature readings. _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L506251-01 MW-19A	240-227065-A-1	Plastic 60 mL - unpreserved				
L506251-01 MW-19A	240-227065-B-1	Plastic 60 mL - unpreserved				
L506251-01 MW-19A	240-227065-C-1	Plastic 250ml - with Nitric Acid	<2			
L506251-01 MW-19A	240-227065-D-1	Plastic 500ml - unpreserved				
L506251-01 MW-19A	240-227065-E-1	Plastic 500ml - with Nitric Acid	<2			
L506251-01 MW-19A	240-227065-G-1	Plastic 1 liter - unpreserved				
L506251-01 MW-19A	240-227065-H-1	Plastic 1 liter - Nitric Acid	<2			
L506251-01 MW-19A	240-227065-I-1	Plastic 1 liter - Nitric Acid	<2			
L506251-02 MW-19B	240-227065-A-2	Plastic 60 mL - unpreserved				
L506251-02 MW-19B	240-227065-B-2	Plastic 60 mL - unpreserved				
L506251-02 MW-19B	240-227065-C-2	Plastic 250ml - with Nitric Acid	<2			
L506251-02 MW-19B	240-227065-D-2	Plastic 500ml - unpreserved				
L506251-02 MW-19B	240-227065-E-2	Plastic 500ml - with Nitric Acid	<2			
L506251-02 MW-19B	240-227065-G-2	Plastic 1 liter - unpreserved				
L506251-02 MW-19B	240-227065-H-2	Plastic 1 liter - Nitric Acid	<2			
L506251-02 MW-19B	240-227065-I-2	Plastic 1 liter - Nitric Acid	<2			
L506251-03 MW-19C	240-227065-A-3	Plastic 60 mL - unpreserved				
L506251-03 MW-19C	240-227065-B-3	Plastic 60 mL - unpreserved				
L506251-03 MW-19C	240-227065-C-3	Plastic 250ml - with Nitric Acid	<2			
L506251-03 MW-19C	240-227065-D-3	Plastic 500ml - unpreserved				
L506251-03 MW-19C	240-227065-E-3	Plastic 500ml - with Nitric Acid	<2			
L506251-03 MW-19C	240-227065-G-3	Plastic 1 liter - unpreserved				
L506251-03 MW-19C	240-227065-H-3	Plastic 1 liter - Nitric Acid	<2			
L506251-03 MW-19C	240-227065-I-3	Plastic 1 liter - Nitric Acid	<2			
L506251-04 MW-19D	240-227065-A-4	Plastic 60 mL - unpreserved				
L506251-04 MW-19D	240-227065-B-4	Plastic 60 mL - unpreserved				
L506251-04 MW-19D	240-227065-C-4	Plastic 250ml - with Nitric Acid	<2			
L506251-04 MW-19D	240-227065-D-4	Plastic 500ml - unpreserved				
L506251-04 MW-19D	240-227065-E-4	Plastic 500ml - with Nitric Acid	<2			
L506251-04 MW-19D	240-227065-F-4	Plastic 500ml - w/ Nitric - Dis.	<2			
L506251-04 MW-19D	240-227065-G-4	Plastic 1 liter - unpreserved				
L506251-04 MW-19D	240-227065-H-4	Plastic 1 liter - Nitric Acid	<2			
L506251-04 MW-19D	240-227065-I-4	Plastic 1 liter - Nitric Acid	<2			
L506251-04 MW-19D	240-227065-J-4	Plastic 250ml - w/nitric - dis	<2			
L506251-05 MWT-19A	240-227065-A-5	Plastic 60 mL - unpreserved				

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L506251-05 MWT-19A	240-227065-B-5	Plastic 60 mL - unpreserved				
L506251-05 MWT-19A	240-227065-C-5	Plastic 250ml - with Nitric Acid	<2			
L506251-05 MWT-19A	240-227065-D-5	Plastic 500ml - unpreserved				
L506251-05 MWT-19A	240-227065-E-5	Plastic 500ml - with Nitric Acid	<2			
L506251-05 MWT-19A	240-227065-G-5	Plastic 1 liter - unpreserved				
L506251-05 MWT-19A	240-227065-H-5	Plastic 1 liter - Nitric Acid	<2			
L506251-05 MWT-19A	240-227065-I-5	Plastic 1 liter - Nitric Acid	<2			
L506251-06 FIELD BLANK	240-227065-A-6	Plastic 60 mL - unpreserved				
L506251-06 FIELD BLANK	240-227065-B-6	Plastic 60 mL - unpreserved				
L506251-06 FIELD BLANK	240-227065-C-6	Plastic 250ml - with Nitric Acid	<2			
L506251-06 FIELD BLANK	240-227065-D-6	Plastic 500ml - unpreserved				
L506251-06 FIELD BLANK	240-227065-E-6	Plastic 500ml - with Nitric Acid	<2			
L506251-06 FIELD BLANK	240-227065-F-6	Plastic 500ml - w/ Nitric - Dis	<2			
L506251-06 FIELD BLANK	240-227065-G-6	Plastic 1 liter - unpreserved				
L506251-06 FIELD BLANK	240-227065-H-6	Plastic 1 liter - Nitric Acid	<2			
L506251-06 FIELD BLANK	240-227065-I-6	Plastic 1 liter - Nitric Acid	<2			
L506251-06 FIELD BLANK	240-227065-J-6	Plastic 250ml - w/nitric - dis	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-203954.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-227065-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 7/2/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21Standard Target List	904.0/PrecSep_0Standard Target List	Ra226_228GFPC_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L506251-01 MW-19A (240-227065-1)	6/17/25	07:33 Eastern	G	Water			X	X	X	2	
L506251-02 MW-19B (240-227065-2)	6/17/25	09:23 Eastern	G	Water			X	X	X	2	
L506251-03 MW-19C (240-227065-3)	6/17/25	10:55 Eastern	G	Water			X	X	X	2	
L506251-04 MW-19D (240-227065-4)	6/17/25	08:45 Eastern	G	Water			X	X	X	2	
L506251-05 MWT-19A (240-227065-5)	6/17/25	07:33 Eastern	G	Water			X	X	X	2	
L506251-06 FIELD BLANK (240-227065-6)	6/17/25	08:50 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: JCollins	Date/Time: 6-19-25	Company	Received by:	Date/Time: 0825 JUN 20 2025	Company
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-203963.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-227065-1
Address: 5755 8th Street East, ,	Due Date Requested: 7/2/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT(MOD) Iron & Zinc	200.8_CWA/FIELD_FLTRD(MOD) Custom List 2: 2-3 Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
L506251-01 MW-19A (240-227065-1)	6/17/25	07:33 Eastern	G	Water			X		1	
L506251-02 MW-19B (240-227065-2)	6/17/25	09:23 Eastern	G	Water			X		1	
L506251-03 MW-19C (240-227065-3)	6/17/25	10:55 Eastern	G	Water			X		1	
L506251-04 MW-19D (240-227065-4)	6/17/25	08:45 Eastern	G	Water			X	X	2	
L506251-05 MWT-19A (240-227065-5)	6/17/25	07:33 Eastern	G	Water			X		1	
L506251-06 FIELD BLANK (240-227065-6)	6/17/25	08:50 Eastern	G	Water			X	X	2	

Mud White

Therm. ID: SC02 Cust. Seal: Y / N
Uncorr./Corr. Temp: 16.2/16.0 °C
Delivery: UPS / FedEx / Other:
Ice Type: Blue / Dry / Wet / None
Label Ver.: 2 Packing: B

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laborator
laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Cent
accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting t

Possible Hazard Identification	Sample Disposal (A fee may be assessed
Unconfirmed 4616 0296 0241	☐ Return To Client ☐ Disposal By
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JCollins	6-19-25	ETN		6/20/25 5:30	ETN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-227065-1

Login Number: 227065
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 06/20/25 01:22 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 7/25/2025 4:39:56 PM Revision 1

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-228090-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

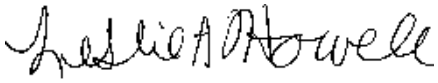
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
7/25/2025 4:39:56 PM
Revision 1

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 12
QC Sample Results 19
QC Association Summary 23
Lab Chronicle 26
Certification Summary 30
Chain of Custody 31
Receipt Checklists 44

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-228090-1 Eurofins Cleveland

Sample time updated to 0910 for MW-17A per client correction.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-228090-1	L507195-01 MW-17A	Water	07/01/25 09:10	07/03/25 07:45
240-228090-2	L507195-02 MW-17B	Water	07/01/25 10:56	07/03/25 07:45
240-228090-3	L507195-03 MW-17C	Water	07/01/25 12:17	07/03/25 07:45
240-228090-4	L507195-04 MW-17D	Water	07/01/25 13:49	07/03/25 07:45
240-228090-5	L507195-05 MW-17E	Water	07/01/25 15:13	07/03/25 07:45
240-228090-6	L507195-06 MWT-17A	Water	07/01/25 09:10	07/03/25 07:45
240-228090-7	L507195-07 FIELD BLANK	Water	07/01/25 08:15	07/03/25 07:45

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-1

Client Sample ID: L507195-01 MW-17A — Lab Sample ID: 240-228090-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	4.6		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0017	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.038		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.00012	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00013	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.022		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.013		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Selenium	0.0010	J	0.0050	0.00089	mg/L	1		200.8-1994 R5.4	Total Recoverable
Thallium	0.00079	J	0.0010	0.00051	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	240		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	67		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.053		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	51		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	2.4		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	6.8		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.016		0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	890		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1300		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	16		8.0	0.80	mg/L	1		2540D-2020	Total/NA
Chloride	75		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.27		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	720		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L507195-02 MW-17B — Lab Sample ID: 240-228090-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.0		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0019	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.037		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.000097	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.000094	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.089		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0039		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L507195-02 MW-17B (Continued) — Lab Sample ID: 240-228090-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	110		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	25		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.085		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	81		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	4.3		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.8		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.020		0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	380		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	170		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	830		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	3.6	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	74		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.35		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	370		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L507195-03 MW-17C — Lab Sample ID: 240-228090-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.9		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0037	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.055		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00013	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.027		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0095		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lead	0.00082	J	0.0010	0.00045	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	170		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	47		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.046		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	97		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	5.1		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	4.9		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0055	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	620		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	250		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1300		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	12		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	63		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L507195-03 MW-17C (Continued) — Lab Sample ID: 240-228090-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.33		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	620		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L507195-04 MW-17D — Lab Sample ID: 240-228090-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.6		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0010	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.042		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0034	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	51		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	15		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.036		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	43		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	9.0		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.70		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0031	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	190		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	290		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	280		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.4	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	4.4		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.47		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	4.0		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L507195-05 MW-17E — Lab Sample ID: 240-228090-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.5		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Barium	0.0046	J	0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	5.5		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	1.5		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.026		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	160		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	4.3		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.029	J	0.10	0.013	mg/L	1		200.8	Total/NA
Bicarbonate Alkalinity as CaCO3	330		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	8.0		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	360		10	7.8	mg/L	1		2540 C-2020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L507195-05 MW-17E (Continued) — Lab Sample ID: 240-228090-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	0.90	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	1.4		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	1.3		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	0.96	J	1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L507195-06 MWT-17A — Lab Sample ID: 240-228090-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	4.6		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Arsenic	0.0012	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.038		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.022		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.013		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	250		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	69		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.053		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Sodium	52		1.0	0.88	mg/L	1		200.8-1994 R5.4	Total Recoverable
Potassium	2.5		1.0	0.22	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	6.7		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.016		0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	920		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1400		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	20		8.0	0.80	mg/L	1		2540D-2020	Total/NA
Chloride	75		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.23		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	720		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L507195-07 FIELD BLANK — Lab Sample ID: 240-228090-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	1.0	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L507195-01 MW-17A

Date Collected: 07/01/25 09:10
Date Received: 07/03/25 07:45

Lab Sample ID: 240-228090-1

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**4.6**		0.10	0.057	mg/L		07/07/25 14:00	07/08/25 17:56	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/07/25 14:00	07/08/25 16:41	1
Arsenic	**0.0017**	**J**	0.0050	0.00075	mg/L		07/07/25 14:00	07/08/25 16:41	1
Barium	**0.038**		0.0050	0.00077	mg/L		07/07/25 14:00	07/08/25 16:41	1
Beryllium	ND		0.0010	0.00027	mg/L		07/07/25 14:00	07/08/25 16:41	1
Cadmium	**0.00012**	**J**	0.0010	0.000077	mg/L		07/07/25 14:00	07/08/25 16:41	1
Cobalt	**0.00013**	**J**	0.0010	0.000086	mg/L		07/07/25 14:00	07/08/25 16:41	1
Chromium	ND		0.0050	0.0012	mg/L		07/07/25 14:00	07/08/25 16:41	1
Copper	ND		0.0020	0.0017	mg/L		07/07/25 14:00	07/08/25 16:41	1
Molybdenum	**0.022**		0.0050	0.0011	mg/L		07/07/25 14:00	07/08/25 16:41	1
Nickel	**0.013**		0.0020	0.0015	mg/L		07/07/25 14:00	07/08/25 16:41	1
Lead	ND		0.0010	0.00045	mg/L		07/07/25 14:00	07/08/25 16:41	1
Antimony	ND		0.0020	0.00057	mg/L		07/07/25 14:00	07/08/25 16:41	1
Selenium	**0.0010**	**J**	0.0050	0.00089	mg/L		07/07/25 14:00	07/08/25 16:41	1
Thallium	**0.00079**	**J**	0.0010	0.00051	mg/L		07/07/25 14:00	07/08/25 16:41	1
Vanadium	ND		0.0050	0.00082	mg/L		07/07/25 14:00	07/08/25 16:41	1
Calcium	**240**		1.0	0.25	mg/L		07/07/25 14:00	07/08/25 16:41	1
Magnesium	**67**		1.0	0.061	mg/L		07/07/25 14:00	07/08/25 16:41	1
Lithium	**0.053**		0.0080	0.0034	mg/L		07/07/25 14:00	07/08/25 16:41	1
Sodium	**51**		1.0	0.88	mg/L		07/07/25 14:00	07/08/25 16:41	1
Potassium	**2.4**		1.0	0.22	mg/L		07/07/25 14:00	07/08/25 16:41	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**6.8**		0.10	0.013	mg/L		07/08/25 15:39	07/09/25 14:58	1
Zinc	**0.016**		0.0070	0.00093	mg/L		07/08/25 15:39	07/09/25 14:58	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**890**		33	33	mg/L			07/10/25 05:57	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/08/25 14:00	07/09/25 11:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**240**		5.0	2.6	mg/L			07/07/25 13:39	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/07/25 13:39	1
Total Dissolved Solids (SM 2540 C-2020)	**1300**		20	16	mg/L			07/07/25 08:48	1
Total Suspended Solids (SM 2540D-2020)	**16**		8.0	0.80	mg/L			07/07/25 09:59	1
Chloride (EPA 300.0-1993 R2.1)	**75**		1.0	0.13	mg/L			07/07/25 22:08	1
Fluoride (EPA 300.0-1993 R2.1)	**0.27**		0.050	0.024	mg/L			07/07/25 22:08	1
Sulfate (EPA 300.0-1993 R2.1)	**720**		5.0	1.7	mg/L			07/07/25 22:36	5

Client Sample ID: L507195-02 MW-17B

Date Collected: 07/01/25 10:56
Date Received: 07/03/25 07:45

Lab Sample ID: 240-228090-2

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.0**		0.10	0.057	mg/L		07/07/25 14:00	07/08/25 18:01	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/07/25 14:00	07/08/25 16:44	1
Arsenic	**0.0019**	**J**	0.0050	0.00075	mg/L		07/07/25 14:00	07/08/25 16:44	1
Barium	**0.037**		0.0050	0.00077	mg/L		07/07/25 14:00	07/08/25 16:44	1
Beryllium	ND		0.0010	0.00027	mg/L		07/07/25 14:00	07/08/25 16:44	1
Cadmium	**0.000097**	**J**	0.0010	0.000077	mg/L		07/07/25 14:00	07/08/25 16:44	1
Cobalt	**0.000094**	**J**	0.0010	0.000086	mg/L		07/07/25 14:00	07/08/25 16:44	1
Chromium	ND		0.0050	0.0012	mg/L		07/07/25 14:00	07/08/25 16:44	1
Copper	ND		0.0020	0.0017	mg/L		07/07/25 14:00	07/08/25 16:44	1
Molybdenum	**0.089**		0.0050	0.0011	mg/L		07/07/25 14:00	07/08/25 16:44	1
Nickel	**0.0039**		0.0020	0.0015	mg/L		07/07/25 14:00	07/08/25 16:44	1
Lead	ND		0.0010	0.00045	mg/L		07/07/25 14:00	07/08/25 16:44	1
Antimony	ND		0.0020	0.00057	mg/L		07/07/25 14:00	07/08/25 16:44	1
Selenium	ND		0.0050	0.00089	mg/L		07/07/25 14:00	07/08/25 16:44	1
Thallium	ND		0.0010	0.00051	mg/L		07/07/25 14:00	07/08/25 16:44	1
Vanadium	ND		0.0050	0.00082	mg/L		07/07/25 14:00	07/08/25 16:44	1
Calcium	**110**		1.0	0.25	mg/L		07/07/25 14:00	07/08/25 16:44	1
Magnesium	**25**		1.0	0.061	mg/L		07/07/25 14:00	07/08/25 16:44	1
Lithium	**0.085**		0.0080	0.0034	mg/L		07/07/25 14:00	07/08/25 16:44	1
Sodium	**81**		1.0	0.88	mg/L		07/07/25 14:00	07/08/25 16:44	1
Potassium	**4.3**		1.0	0.22	mg/L		07/07/25 14:00	07/08/25 16:44	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.8**		0.10	0.013	mg/L		07/08/25 15:39	07/09/25 15:01	1
Zinc	**0.020**		0.0070	0.00093	mg/L		07/08/25 15:39	07/09/25 15:01	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**380**		33	33	mg/L			07/10/25 05:57	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/08/25 14:00	07/09/25 11:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**170**		5.0	2.6	mg/L			07/07/25 13:44	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/07/25 13:44	1
Total Dissolved Solids (SM 2540 C-2020)	**830**		10	7.8	mg/L			07/07/25 08:48	1
Total Suspended Solids (SM 2540D-2020)	**3.6**	**J**	4.0	0.40	mg/L			07/07/25 09:59	1
Chloride (EPA 300.0-1993 R2.1)	**74**		1.0	0.13	mg/L			07/07/25 22:45	1
Fluoride (EPA 300.0-1993 R2.1)	**0.35**		0.050	0.024	mg/L			07/07/25 22:45	1
Sulfate (EPA 300.0-1993 R2.1)	**370**		5.0	1.7	mg/L			07/07/25 22:54	5

Client Sample ID: L507195-03 MW-17C

Date Collected: 07/01/25 12:17
Date Received: 07/03/25 07:45

Lab Sample ID: 240-228090-3

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.9**		0.10	0.057	mg/L		07/07/25 14:00	07/08/25 18:05	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/07/25 14:00	07/08/25 16:47	1
Arsenic	**0.0037**	**J**	0.0050	0.00075	mg/L		07/07/25 14:00	07/08/25 16:47	1
Barium	**0.055**		0.0050	0.00077	mg/L		07/07/25 14:00	07/08/25 16:47	1
Beryllium	ND		0.0010	0.00027	mg/L		07/07/25 14:00	07/08/25 16:47	1
Cadmium	ND		0.0010	0.000077	mg/L		07/07/25 14:00	07/08/25 16:47	1
Cobalt	**0.00013**	**J**	0.0010	0.000086	mg/L		07/07/25 14:00	07/08/25 16:47	1
Chromium	ND		0.0050	0.0012	mg/L		07/07/25 14:00	07/08/25 16:47	1
Copper	ND		0.0020	0.0017	mg/L		07/07/25 14:00	07/08/25 16:47	1
Molybdenum	**0.027**		0.0050	0.0011	mg/L		07/07/25 14:00	07/08/25 16:47	1
Nickel	**0.0095**		0.0020	0.0015	mg/L		07/07/25 14:00	07/08/25 16:47	1
Lead	**0.00082**	**J**	0.0010	0.00045	mg/L		07/07/25 14:00	07/08/25 16:47	1
Antimony	ND		0.0020	0.00057	mg/L		07/07/25 14:00	07/08/25 16:47	1
Selenium	ND		0.0050	0.00089	mg/L		07/07/25 14:00	07/08/25 16:47	1
Thallium	ND		0.0010	0.00051	mg/L		07/07/25 14:00	07/08/25 16:47	1
Vanadium	ND		0.0050	0.00082	mg/L		07/07/25 14:00	07/08/25 16:47	1
Calcium	**170**		1.0	0.25	mg/L		07/07/25 14:00	07/08/25 16:47	1
Magnesium	**47**		1.0	0.061	mg/L		07/07/25 14:00	07/08/25 16:47	1
Lithium	**0.046**		0.0080	0.0034	mg/L		07/07/25 14:00	07/08/25 16:47	1
Sodium	**97**		1.0	0.88	mg/L		07/07/25 14:00	07/08/25 16:47	1
Potassium	**5.1**		1.0	0.22	mg/L		07/07/25 14:00	07/08/25 16:47	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**4.9**		0.10	0.013	mg/L		07/08/25 15:39	07/09/25 15:03	1
Zinc	**0.0055**	**J**	0.0070	0.00093	mg/L		07/08/25 15:39	07/09/25 15:03	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**620**		33	33	mg/L			07/10/25 05:57	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/08/25 14:00	07/09/25 11:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**250**		5.0	2.6	mg/L			07/07/25 13:49	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/07/25 13:49	1
Total Dissolved Solids (SM 2540 C-2020)	**1300**		20	16	mg/L			07/07/25 12:51	1
Total Suspended Solids (SM 2540D-2020)	**12**		4.0	0.40	mg/L			07/07/25 09:59	1
Chloride (EPA 300.0-1993 R2.1)	**63**		1.0	0.13	mg/L			07/07/25 23:04	1
Fluoride (EPA 300.0-1993 R2.1)	**0.33**		0.050	0.024	mg/L			07/07/25 23:04	1
Sulfate (EPA 300.0-1993 R2.1)	**620**		5.0	1.7	mg/L			07/07/25 23:13	5

Client Sample ID: L507195-04 MW-17D

Date Collected: 07/01/25 13:49
Date Received: 07/03/25 07:45

Lab Sample ID: 240-228090-4

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.6**		0.10	0.057	mg/L		07/07/25 14:00	07/08/25 18:19	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/07/25 14:00	07/08/25 16:49	1
Arsenic	**0.0010**	**J**	0.0050	0.00075	mg/L		07/07/25 14:00	07/08/25 16:49	1
Barium	**0.042**		0.0050	0.00077	mg/L		07/07/25 14:00	07/08/25 16:49	1
Beryllium	ND		0.0010	0.00027	mg/L		07/07/25 14:00	07/08/25 16:49	1
Cadmium	ND		0.0010	0.000077	mg/L		07/07/25 14:00	07/08/25 16:49	1
Cobalt	ND		0.0010	0.000086	mg/L		07/07/25 14:00	07/08/25 16:49	1
Chromium	ND		0.0050	0.0012	mg/L		07/07/25 14:00	07/08/25 16:49	1
Copper	ND		0.0020	0.0017	mg/L		07/07/25 14:00	07/08/25 16:49	1
Molybdenum	**0.0034**	**J**	0.0050	0.0011	mg/L		07/07/25 14:00	07/08/25 16:49	1
Nickel	ND		0.0020	0.0015	mg/L		07/07/25 14:00	07/08/25 16:49	1
Lead	ND		0.0010	0.00045	mg/L		07/07/25 14:00	07/08/25 16:49	1
Antimony	ND		0.0020	0.00057	mg/L		07/07/25 14:00	07/08/25 16:49	1
Selenium	ND		0.0050	0.00089	mg/L		07/07/25 14:00	07/08/25 16:49	1
Thallium	ND		0.0010	0.00051	mg/L		07/07/25 14:00	07/08/25 16:49	1
Vanadium	ND		0.0050	0.00082	mg/L		07/07/25 14:00	07/08/25 16:49	1
Calcium	**51**		1.0	0.25	mg/L		07/07/25 14:00	07/08/25 16:49	1
Magnesium	**15**		1.0	0.061	mg/L		07/07/25 14:00	07/08/25 16:49	1
Lithium	**0.036**		0.0080	0.0034	mg/L		07/07/25 14:00	07/08/25 16:49	1
Sodium	**43**		1.0	0.88	mg/L		07/07/25 14:00	07/08/25 16:49	1
Potassium	**9.0**		1.0	0.22	mg/L		07/07/25 14:00	07/08/25 16:49	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.70**		0.10	0.013	mg/L		07/08/25 15:39	07/09/25 15:06	1
Zinc	**0.0031**	**J**	0.0070	0.00093	mg/L		07/08/25 15:39	07/09/25 15:06	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**190**		33	33	mg/L			07/10/25 05:57	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/08/25 14:00	07/09/25 11:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**290**		5.0	2.6	mg/L			07/07/25 13:54	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/07/25 13:54	1
Total Dissolved Solids (SM 2540 C-2020)	**280**		10	7.8	mg/L			07/07/25 12:51	1
Total Suspended Solids (SM 2540D-2020)	**1.4**	**J**	4.0	0.40	mg/L			07/07/25 09:59	1
Chloride (EPA 300.0-1993 R2.1)	**4.4**		1.0	0.13	mg/L			07/07/25 21:04	1
Fluoride (EPA 300.0-1993 R2.1)	**0.47**		0.050	0.024	mg/L			07/07/25 21:04	1
Sulfate (EPA 300.0-1993 R2.1)	**4.0**		1.0	0.35	mg/L			07/07/25 21:04	1

Client Sample ID: L507195-05 MW-17E

Date Collected: 07/01/25 15:13
Date Received: 07/03/25 07:45

Lab Sample ID: 240-228090-5

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.5**		0.10	0.057	mg/L		07/07/25 14:00	07/08/25 18:23	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/07/25 14:00	07/08/25 16:52	1
Arsenic	ND		0.0050	0.00075	mg/L		07/07/25 14:00	07/08/25 16:52	1
Barium	**0.0046**	**J**	0.0050	0.00077	mg/L		07/07/25 14:00	07/08/25 16:52	1
Beryllium	ND		0.0010	0.00027	mg/L		07/07/25 14:00	07/08/25 16:52	1
Cadmium	ND		0.0010	0.000077	mg/L		07/07/25 14:00	07/08/25 16:52	1
Cobalt	ND		0.0010	0.000086	mg/L		07/07/25 14:00	07/08/25 16:52	1
Chromium	ND		0.0050	0.0012	mg/L		07/07/25 14:00	07/08/25 16:52	1
Copper	ND		0.0020	0.0017	mg/L		07/07/25 14:00	07/08/25 16:52	1
Molybdenum	ND		0.0050	0.0011	mg/L		07/07/25 14:00	07/08/25 16:52	1
Nickel	ND		0.0020	0.0015	mg/L		07/07/25 14:00	07/08/25 16:52	1
Lead	ND		0.0010	0.00045	mg/L		07/07/25 14:00	07/08/25 16:52	1
Antimony	ND		0.0020	0.00057	mg/L		07/07/25 14:00	07/08/25 16:52	1
Selenium	ND		0.0050	0.00089	mg/L		07/07/25 14:00	07/08/25 16:52	1
Thallium	ND		0.0010	0.00051	mg/L		07/07/25 14:00	07/08/25 16:52	1
Vanadium	ND		0.0050	0.00082	mg/L		07/07/25 14:00	07/08/25 16:52	1
Calcium	**5.5**		1.0	0.25	mg/L		07/07/25 14:00	07/08/25 16:52	1
Magnesium	**1.5**		1.0	0.061	mg/L		07/07/25 14:00	07/08/25 16:52	1
Lithium	**0.026**		0.0080	0.0034	mg/L		07/07/25 14:00	07/08/25 16:52	1
Sodium	**160**		1.0	0.88	mg/L		07/07/25 14:00	07/08/25 16:52	1
Potassium	**4.3**		1.0	0.22	mg/L		07/07/25 14:00	07/08/25 16:52	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.029**	**J**	0.10	0.013	mg/L		07/08/25 15:39	07/09/25 15:09	1
Zinc	ND		0.0070	0.00093	mg/L		07/08/25 15:39	07/09/25 15:09	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			07/10/25 05:57	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/08/25 14:00	07/09/25 11:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**330**		5.0	2.6	mg/L			07/07/25 14:00	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**8.0**		5.0	2.6	mg/L			07/07/25 14:00	1
Total Dissolved Solids (SM 2540 C-2020)	**360**		10	7.8	mg/L			07/07/25 12:51	1
Total Suspended Solids (SM 2540D-2020)	**0.90**	**J**	4.0	0.40	mg/L			07/07/25 09:59	1
Chloride (EPA 300.0-1993 R2.1)	**1.4**		1.0	0.13	mg/L			07/07/25 23:22	1
Fluoride (EPA 300.0-1993 R2.1)	**1.3**		0.050	0.024	mg/L			07/07/25 23:22	1
Sulfate (EPA 300.0-1993 R2.1)	**0.96**	**J**	1.0	0.35	mg/L			07/07/25 23:22	1

Client Sample ID: L507195-06 MWT-17A

Date Collected: 07/01/25 09:10
Date Received: 07/03/25 07:45

Lab Sample ID: 240-228090-6

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**4.6**		0.10	0.057	mg/L		07/07/25 14:00	07/08/25 18:28	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/07/25 14:00	07/08/25 17:00	1
Arsenic	**0.0012**	**J**	0.0050	0.00075	mg/L		07/07/25 14:00	07/08/25 17:00	1
Barium	**0.038**		0.0050	0.00077	mg/L		07/07/25 14:00	07/08/25 17:00	1
Beryllium	ND		0.0010	0.00027	mg/L		07/07/25 14:00	07/08/25 17:00	1
Cadmium	ND		0.0010	0.000077	mg/L		07/07/25 14:00	07/08/25 17:00	1
Cobalt	ND		0.0010	0.000086	mg/L		07/07/25 14:00	07/08/25 17:00	1
Chromium	ND		0.0050	0.0012	mg/L		07/07/25 14:00	07/08/25 17:00	1
Copper	ND		0.0020	0.0017	mg/L		07/07/25 14:00	07/08/25 17:00	1
Molybdenum	**0.022**		0.0050	0.0011	mg/L		07/07/25 14:00	07/08/25 17:00	1
Nickel	**0.013**		0.0020	0.0015	mg/L		07/07/25 14:00	07/08/25 17:00	1
Lead	ND		0.0010	0.00045	mg/L		07/07/25 14:00	07/08/25 17:00	1
Antimony	ND		0.0020	0.00057	mg/L		07/07/25 14:00	07/08/25 17:00	1
Selenium	ND		0.0050	0.00089	mg/L		07/07/25 14:00	07/08/25 17:00	1
Thallium	ND		0.0010	0.00051	mg/L		07/07/25 14:00	07/08/25 17:00	1
Vanadium	ND		0.0050	0.00082	mg/L		07/07/25 14:00	07/08/25 17:00	1
Calcium	**250**		1.0	0.25	mg/L		07/07/25 14:00	07/08/25 17:00	1
Magnesium	**69**		1.0	0.061	mg/L		07/07/25 14:00	07/08/25 17:00	1
Lithium	**0.053**		0.0080	0.0034	mg/L		07/07/25 14:00	07/08/25 17:00	1
Sodium	**52**		1.0	0.88	mg/L		07/07/25 14:00	07/08/25 17:00	1
Potassium	**2.5**		1.0	0.22	mg/L		07/07/25 14:00	07/08/25 17:00	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**6.7**		0.10	0.013	mg/L		07/08/25 15:39	07/09/25 15:12	1
Zinc	**0.016**		0.0070	0.00093	mg/L		07/08/25 15:39	07/09/25 15:12	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**920**		33	33	mg/L			07/10/25 05:57	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/08/25 14:00	07/09/25 11:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**240**		5.0	2.6	mg/L			07/07/25 14:08	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/07/25 14:08	1
Total Dissolved Solids (SM 2540 C-2020)	**1400**		20	16	mg/L			07/07/25 12:51	1
Total Suspended Solids (SM 2540D-2020)	**20**		8.0	0.80	mg/L			07/07/25 09:59	1
Chloride (EPA 300.0-1993 R2.1)	**75**		1.0	0.13	mg/L			07/07/25 23:31	1
Fluoride (EPA 300.0-1993 R2.1)	**0.23**		0.050	0.024	mg/L			07/07/25 23:31	1
Sulfate (EPA 300.0-1993 R2.1)	**720**		5.0	1.7	mg/L			07/07/25 23:40	5

Client Sample ID: L507195-07 FIELD BLANK

Date Collected: 07/01/25 08:15
Date Received: 07/03/25 07:45

Lab Sample ID: 240-228090-7

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		07/07/25 14:00	07/08/25 18:32	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/07/25 14:00	07/08/25 17:03	1
Arsenic	ND		0.0050	0.00075	mg/L		07/07/25 14:00	07/08/25 17:03	1
Barium	ND		0.0050	0.00077	mg/L		07/07/25 14:00	07/08/25 17:03	1
Beryllium	ND		0.0010	0.00027	mg/L		07/07/25 14:00	07/08/25 17:03	1
Cadmium	ND		0.0010	0.000077	mg/L		07/07/25 14:00	07/08/25 17:03	1
Cobalt	ND		0.0010	0.000086	mg/L		07/07/25 14:00	07/08/25 17:03	1
Chromium	ND		0.0050	0.0012	mg/L		07/07/25 14:00	07/08/25 17:03	1
Copper	ND		0.0020	0.0017	mg/L		07/07/25 14:00	07/08/25 17:03	1
Molybdenum	ND		0.0050	0.0011	mg/L		07/07/25 14:00	07/08/25 17:03	1
Nickel	ND		0.0020	0.0015	mg/L		07/07/25 14:00	07/08/25 17:03	1
Lead	ND		0.0010	0.00045	mg/L		07/07/25 14:00	07/08/25 17:03	1
Antimony	ND		0.0020	0.00057	mg/L		07/07/25 14:00	07/08/25 17:03	1
Selenium	ND		0.0050	0.00089	mg/L		07/07/25 14:00	07/08/25 17:03	1
Thallium	ND		0.0010	0.00051	mg/L		07/07/25 14:00	07/08/25 17:03	1
Vanadium	ND		0.0050	0.00082	mg/L		07/07/25 14:00	07/08/25 17:03	1
Calcium	ND		1.0	0.25	mg/L		07/07/25 14:00	07/08/25 17:03	1
Magnesium	ND		1.0	0.061	mg/L		07/07/25 14:00	07/08/25 17:03	1
Lithium	ND		0.0080	0.0034	mg/L		07/07/25 14:00	07/08/25 17:03	1
Sodium	ND		1.0	0.88	mg/L		07/07/25 14:00	07/08/25 17:03	1
Potassium	ND		1.0	0.22	mg/L		07/07/25 14:00	07/08/25 17:03	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		07/08/25 15:39	07/09/25 15:20	1
Zinc	ND		0.0070	0.00093	mg/L		07/08/25 15:39	07/09/25 15:20	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			07/10/25 05:57	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/08/25 14:00	07/09/25 11:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/07/25 14:13	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/07/25 14:13	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			07/07/25 12:51	1
Total Suspended Solids (SM 2540D-2020)	**1.0**	**J**	4.0	0.40	mg/L			07/07/25 09:59	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			07/07/25 23:50	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			07/07/25 23:50	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			07/07/25 23:50	1

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-662684/1-A
Matrix: Water
Analysis Batch: 662993

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 662684

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		07/07/25 14:00	07/08/25 16:59	1

Lab Sample ID: LCS 240-662684/2-A
Matrix: Water
Analysis Batch: 662993

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 662684

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.10		mg/L		110	85 - 115

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-7894/25-A
Matrix: Water
Analysis Batch: 7935

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		07/08/25 15:39	07/09/25 14:09	1
Zinc	ND		0.0070	0.00093	mg/L		07/08/25 15:39	07/09/25 14:09	1

Lab Sample ID: LCS 350-7894/26-A
Matrix: Water
Analysis Batch: 7935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	18.0		mg/L		90	85 - 115
Zinc	1.00	0.898		mg/L		90	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-662684/1-A
Matrix: Water
Analysis Batch: 662982

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 662684

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/07/25 14:00	07/08/25 16:17	1
Arsenic	ND		0.0050	0.00075	mg/L		07/07/25 14:00	07/08/25 16:17	1
Barium	ND		0.0050	0.00077	mg/L		07/07/25 14:00	07/08/25 16:17	1
Beryllium	ND		0.0010	0.00027	mg/L		07/07/25 14:00	07/08/25 16:17	1
Cadmium	ND		0.0010	0.000077	mg/L		07/07/25 14:00	07/08/25 16:17	1
Cobalt	ND		0.0010	0.000086	mg/L		07/07/25 14:00	07/08/25 16:17	1
Chromium	ND		0.0050	0.0012	mg/L		07/07/25 14:00	07/08/25 16:17	1
Copper	ND		0.0020	0.0017	mg/L		07/07/25 14:00	07/08/25 16:17	1
Molybdenum	ND		0.0050	0.0011	mg/L		07/07/25 14:00	07/08/25 16:17	1
Nickel	ND		0.0020	0.0015	mg/L		07/07/25 14:00	07/08/25 16:17	1
Lead	ND		0.0010	0.00045	mg/L		07/07/25 14:00	07/08/25 16:17	1
Antimony	ND		0.0020	0.00057	mg/L		07/07/25 14:00	07/08/25 16:17	1
Selenium	ND		0.0050	0.00089	mg/L		07/07/25 14:00	07/08/25 16:17	1
Thallium	ND		0.0010	0.00051	mg/L		07/07/25 14:00	07/08/25 16:17	1
Vanadium	ND		0.0050	0.00082	mg/L		07/07/25 14:00	07/08/25 16:17	1
Calcium	ND		1.0	0.25	mg/L		07/07/25 14:00	07/08/25 16:17	1

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-662684/1-A
Matrix: Water
Analysis Batch: 662982

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 662684

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	ND		1.0	0.061	mg/L		07/07/25 14:00	07/08/25 16:17	1
Lithium	ND		0.0080	0.0034	mg/L		07/07/25 14:00	07/08/25 16:17	1
Sodium	ND		1.0	0.88	mg/L		07/07/25 14:00	07/08/25 16:17	1
Potassium	ND		1.0	0.22	mg/L		07/07/25 14:00	07/08/25 16:17	1

Lab Sample ID: LCS 240-662684/3-A
Matrix: Water
Analysis Batch: 662982

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 662684

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.102		mg/L		102	85 - 115
Arsenic	1.00	1.02		mg/L		102	85 - 115
Barium	1.00	0.995		mg/L		100	85 - 115
Beryllium	0.500	0.494		mg/L		99	85 - 115
Cadmium	0.500	0.483		mg/L		97	85 - 115
Cobalt	0.500	0.488		mg/L		98	85 - 115
Chromium	0.500	0.508		mg/L		102	85 - 115
Copper	0.500	0.502		mg/L		100	85 - 115
Molybdenum	0.500	0.496		mg/L		99	85 - 115
Nickel	0.500	0.495		mg/L		99	85 - 115
Lead	0.500	0.497		mg/L		99	85 - 115
Antimony	0.100	0.103		mg/L		103	85 - 115
Selenium	1.00	0.940		mg/L		94	85 - 115
Thallium	1.00	1.14		mg/L		114	85 - 115
Vanadium	0.500	0.510		mg/L		102	85 - 115
Calcium	25.0	25.3		mg/L		101	85 - 115
Magnesium	25.0	24.4		mg/L		98	85 - 115
Lithium	0.500	0.505		mg/L		101	85 - 115
Sodium	25.0	25.4		mg/L		101	85 - 115
Potassium	25.0	25.8		mg/L		103	85 - 115

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-662922/1-A
Matrix: Water
Analysis Batch: 663093

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 662922

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/08/25 14:00	07/09/25 11:00	1

Lab Sample ID: LCS 240-662922/2-A
Matrix: Water
Analysis Batch: 663093

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 662922

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00465		mg/L		93	85 - 115

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-662786/4
Matrix: Water
Analysis Batch: 662786

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			07/07/25 12:02	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			07/07/25 12:02	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-662637/1
Matrix: Water
Analysis Batch: 662637

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			07/07/25 08:48	1

Lab Sample ID: LCS 240-662637/2
Matrix: Water
Analysis Batch: 662637

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	240	204		mg/L		85	80 - 120

Lab Sample ID: MB 240-662737/1
Matrix: Water
Analysis Batch: 662737

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			07/07/25 12:51	1

Lab Sample ID: LCS 240-662737/2
Matrix: Water
Analysis Batch: 662737

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	240	210		mg/L		88	80 - 120

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-662685/1
Matrix: Water
Analysis Batch: 662685

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			07/07/25 09:59	1

Lab Sample ID: LCS 240-662685/2
Matrix: Water
Analysis Batch: 662685

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	30.0	27.0		mg/L		90	64 - 120

Method: 2540D-2020 - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: 240-228090-1 DU
Matrix: Water
Analysis Batch: 662685

Client Sample ID: L507195-01 MW-17A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	16		15.4		mg/L		5	10

Lab Sample ID: 240-228090-6 DU
Matrix: Water
Analysis Batch: 662685

Client Sample ID: L507195-06 MWT-17A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	20		12.6	F5	mg/L		44	10

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-662746/3
Matrix: Water
Analysis Batch: 662746

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			07/07/25 20:46	1
Fluoride	ND		0.050	0.024	mg/L			07/07/25 20:46	1
Sulfate	ND		1.0	0.35	mg/L			07/07/25 20:46	1

Lab Sample ID: LCS 240-662746/4
Matrix: Water
Analysis Batch: 662746

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.4		mg/L		99	90 - 110
Fluoride	2.50	2.54		mg/L		102	90 - 110
Sulfate	50.0	49.5		mg/L		99	90 - 110

Lab Sample ID: 240-228090-4 MS
Matrix: Water
Analysis Batch: 662746

Client Sample ID: L507195-04 MW-17D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	4.4		50.0	56.2		mg/L		104	80 - 120
Fluoride	0.47		2.50	3.00		mg/L		101	80 - 120
Sulfate	4.0		50.0	54.7		mg/L		101	80 - 120

Lab Sample ID: 240-228090-4 MSD
Matrix: Water
Analysis Batch: 662746

Client Sample ID: L507195-04 MW-17D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	4.4		50.0	55.8		mg/L		103	80 - 120	1	15
Fluoride	0.47		2.50	2.99		mg/L		101	80 - 120	1	15
Sulfate	4.0		50.0	54.3		mg/L		101	80 - 120	1	15

Metals

Prep Batch: 7894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228090-1	L507195-01 MW-17A	Total/NA	Water	200.8	
240-228090-2	L507195-02 MW-17B	Total/NA	Water	200.8	
240-228090-3	L507195-03 MW-17C	Total/NA	Water	200.8	
240-228090-4	L507195-04 MW-17D	Total/NA	Water	200.8	
240-228090-5	L507195-05 MW-17E	Total/NA	Water	200.8	
240-228090-6	L507195-06 MWT-17A	Total/NA	Water	200.8	
240-228090-7	L507195-07 FIELD BLANK	Total/NA	Water	200.8	
MB 350-7894/25-A	Method Blank	Total/NA	Water	200.8	
LCS 350-7894/26-A	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 7935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228090-1	L507195-01 MW-17A	Total/NA	Water	200.8	7894
240-228090-2	L507195-02 MW-17B	Total/NA	Water	200.8	7894
240-228090-3	L507195-03 MW-17C	Total/NA	Water	200.8	7894
240-228090-4	L507195-04 MW-17D	Total/NA	Water	200.8	7894
240-228090-5	L507195-05 MW-17E	Total/NA	Water	200.8	7894
240-228090-6	L507195-06 MWT-17A	Total/NA	Water	200.8	7894
240-228090-7	L507195-07 FIELD BLANK	Total/NA	Water	200.8	7894
MB 350-7894/25-A	Method Blank	Total/NA	Water	200.8	7894
LCS 350-7894/26-A	Lab Control Sample	Total/NA	Water	200.8	7894

Prep Batch: 662684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228090-1	L507195-01 MW-17A	Total Recoverable	Water	200.7	
240-228090-2	L507195-02 MW-17B	Total Recoverable	Water	200.7	
240-228090-3	L507195-03 MW-17C	Total Recoverable	Water	200.7	
240-228090-4	L507195-04 MW-17D	Total Recoverable	Water	200.7	
240-228090-5	L507195-05 MW-17E	Total Recoverable	Water	200.7	
240-228090-6	L507195-06 MWT-17A	Total Recoverable	Water	200.7	
240-228090-7	L507195-07 FIELD BLANK	Total Recoverable	Water	200.7	
MB 240-662684/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-662684/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-662684/3-A	Lab Control Sample	Total Recoverable	Water	200.7	

Prep Batch: 662922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228090-1	L507195-01 MW-17A	Total/NA	Water	245.1-1994 R3.0	
240-228090-2	L507195-02 MW-17B	Total/NA	Water	245.1-1994 R3.0	
240-228090-3	L507195-03 MW-17C	Total/NA	Water	245.1-1994 R3.0	
240-228090-4	L507195-04 MW-17D	Total/NA	Water	245.1-1994 R3.0	
240-228090-5	L507195-05 MW-17E	Total/NA	Water	245.1-1994 R3.0	
240-228090-6	L507195-06 MWT-17A	Total/NA	Water	245.1-1994 R3.0	
240-228090-7	L507195-07 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	
MB 240-662922/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-662922/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 662982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228090-1	L507195-01 MW-17A	Total Recoverable	Water	200.8-1994 R5.4	662684
240-228090-2	L507195-02 MW-17B	Total Recoverable	Water	200.8-1994 R5.4	662684

Metals (Continued)

Analysis Batch: 662982 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228090-3	L507195-03 MW-17C	Total Recoverable	Water	200.8-1994 R5.4	662684
240-228090-4	L507195-04 MW-17D	Total Recoverable	Water	200.8-1994 R5.4	662684
240-228090-5	L507195-05 MW-17E	Total Recoverable	Water	200.8-1994 R5.4	662684
240-228090-6	L507195-06 MWT-17A	Total Recoverable	Water	200.8-1994 R5.4	662684
240-228090-7	L507195-07 FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	662684
MB 240-662684/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	662684
LCS 240-662684/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	662684

Analysis Batch: 662993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228090-1	L507195-01 MW-17A	Total Recoverable	Water	200.7 R4.4-1994	662684
240-228090-2	L507195-02 MW-17B	Total Recoverable	Water	200.7 R4.4-1994	662684
240-228090-3	L507195-03 MW-17C	Total Recoverable	Water	200.7 R4.4-1994	662684
240-228090-4	L507195-04 MW-17D	Total Recoverable	Water	200.7 R4.4-1994	662684
240-228090-5	L507195-05 MW-17E	Total Recoverable	Water	200.7 R4.4-1994	662684
240-228090-6	L507195-06 MWT-17A	Total Recoverable	Water	200.7 R4.4-1994	662684
240-228090-7	L507195-07 FIELD BLANK	Total Recoverable	Water	200.7 R4.4-1994	662684
MB 240-662684/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	662684
LCS 240-662684/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	662684

Analysis Batch: 663093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228090-1	L507195-01 MW-17A	Total/NA	Water	245.1-1994 R3.0	662922
240-228090-2	L507195-02 MW-17B	Total/NA	Water	245.1-1994 R3.0	662922
240-228090-3	L507195-03 MW-17C	Total/NA	Water	245.1-1994 R3.0	662922
240-228090-4	L507195-04 MW-17D	Total/NA	Water	245.1-1994 R3.0	662922
240-228090-5	L507195-05 MW-17E	Total/NA	Water	245.1-1994 R3.0	662922
240-228090-6	L507195-06 MWT-17A	Total/NA	Water	245.1-1994 R3.0	662922
240-228090-7	L507195-07 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	662922
MB 240-662922/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	662922
LCS 240-662922/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	662922

Analysis Batch: 663149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228090-1	L507195-01 MW-17A	Total Recoverable	Water	2340 B-2021	
240-228090-2	L507195-02 MW-17B	Total Recoverable	Water	2340 B-2021	
240-228090-3	L507195-03 MW-17C	Total Recoverable	Water	2340 B-2021	
240-228090-4	L507195-04 MW-17D	Total Recoverable	Water	2340 B-2021	
240-228090-5	L507195-05 MW-17E	Total Recoverable	Water	2340 B-2021	
240-228090-6	L507195-06 MWT-17A	Total Recoverable	Water	2340 B-2021	
240-228090-7	L507195-07 FIELD BLANK	Total Recoverable	Water	2340 B-2021	

General Chemistry

Analysis Batch: 662637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228090-1	L507195-01 MW-17A	Total/NA	Water	2540 C-2020	
240-228090-2	L507195-02 MW-17B	Total/NA	Water	2540 C-2020	
MB 240-662637/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-662637/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

General Chemistry

Analysis Batch: 662685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228090-1	L507195-01 MW-17A	Total/NA	Water	2540D-2020	
240-228090-2	L507195-02 MW-17B	Total/NA	Water	2540D-2020	
240-228090-3	L507195-03 MW-17C	Total/NA	Water	2540D-2020	
240-228090-4	L507195-04 MW-17D	Total/NA	Water	2540D-2020	
240-228090-5	L507195-05 MW-17E	Total/NA	Water	2540D-2020	
240-228090-6	L507195-06 MWT-17A	Total/NA	Water	2540D-2020	
240-228090-7	L507195-07 FIELD BLANK	Total/NA	Water	2540D-2020	
MB 240-662685/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-662685/2	Lab Control Sample	Total/NA	Water	2540D-2020	
240-228090-1 DU	L507195-01 MW-17A	Total/NA	Water	2540D-2020	
240-228090-6 DU	L507195-06 MWT-17A	Total/NA	Water	2540D-2020	

Analysis Batch: 662737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228090-3	L507195-03 MW-17C	Total/NA	Water	2540 C-2020	
240-228090-4	L507195-04 MW-17D	Total/NA	Water	2540 C-2020	
240-228090-5	L507195-05 MW-17E	Total/NA	Water	2540 C-2020	
240-228090-6	L507195-06 MWT-17A	Total/NA	Water	2540 C-2020	
240-228090-7	L507195-07 FIELD BLANK	Total/NA	Water	2540 C-2020	
MB 240-662737/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-662737/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 662746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228090-1	L507195-01 MW-17A	Total/NA	Water	300.0-1993 R2.1	
240-228090-1	L507195-01 MW-17A	Total/NA	Water	300.0-1993 R2.1	
240-228090-2	L507195-02 MW-17B	Total/NA	Water	300.0-1993 R2.1	
240-228090-2	L507195-02 MW-17B	Total/NA	Water	300.0-1993 R2.1	
240-228090-3	L507195-03 MW-17C	Total/NA	Water	300.0-1993 R2.1	
240-228090-3	L507195-03 MW-17C	Total/NA	Water	300.0-1993 R2.1	
240-228090-4	L507195-04 MW-17D	Total/NA	Water	300.0-1993 R2.1	
240-228090-5	L507195-05 MW-17E	Total/NA	Water	300.0-1993 R2.1	
240-228090-6	L507195-06 MWT-17A	Total/NA	Water	300.0-1993 R2.1	
240-228090-6	L507195-06 MWT-17A	Total/NA	Water	300.0-1993 R2.1	
240-228090-7	L507195-07 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
MB 240-662746/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-662746/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-228090-4 MS	L507195-04 MW-17D	Total/NA	Water	300.0-1993 R2.1	
240-228090-4 MSD	L507195-04 MW-17D	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 662786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228090-1	L507195-01 MW-17A	Total/NA	Water	2320 B-2021	
240-228090-2	L507195-02 MW-17B	Total/NA	Water	2320 B-2021	
240-228090-3	L507195-03 MW-17C	Total/NA	Water	2320 B-2021	
240-228090-4	L507195-04 MW-17D	Total/NA	Water	2320 B-2021	
240-228090-5	L507195-05 MW-17E	Total/NA	Water	2320 B-2021	
240-228090-6	L507195-06 MWT-17A	Total/NA	Water	2320 B-2021	
240-228090-7	L507195-07 FIELD BLANK	Total/NA	Water	2320 B-2021	
MB 240-662786/4	Method Blank	Total/NA	Water	2320 B-2021	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-1

Client Sample ID: L507195-01 MW-17A

Lab Sample ID: 240-228090-1

Date Collected: 07/01/25 09:10
Date Received: 07/03/25 07:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			662684	MN7X	EET CLE	07/07/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	662993	RKT	EET CLE	07/08/25 17:56
Total/NA	Prep	200.8			7894	RMN	EET SSM	07/08/25 15:39
Total/NA	Analysis	200.8		1	7935	CW	EET SSM	07/09/25 14:58
Total Recoverable	Prep	200.7			662684	MN7X	EET CLE	07/07/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	662982	S4FJ	EET CLE	07/08/25 16:41
Total Recoverable	Analysis	2340 B-2021		1	663149	KLC	EET CLE	07/10/25 05:57
Total/NA	Prep	245.1-1994 R3.0			662922	MN7X	EET CLE	07/08/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	663093	TQ6W	EET CLE	07/09/25 11:16
Total/NA	Analysis	2320 B-2021		1	662786	PQD2	EET CLE	07/07/25 13:39
Total/NA	Analysis	2540 C-2020		1	662637	C5SV	EET CLE	07/07/25 08:48
Total/NA	Analysis	2540D-2020		1	662685	C5SV	EET CLE	07/07/25 09:59
Total/NA	Analysis	300.0-1993 R2.1		1	662746	JMR	EET CLE	07/07/25 22:08
Total/NA	Analysis	300.0-1993 R2.1		5	662746	JMR	EET CLE	07/07/25 22:36

Client Sample ID: L507195-02 MW-17B

Lab Sample ID: 240-228090-2

Date Collected: 07/01/25 10:56
Date Received: 07/03/25 07:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			662684	MN7X	EET CLE	07/07/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	662993	RKT	EET CLE	07/08/25 18:01
Total/NA	Prep	200.8			7894	RMN	EET SSM	07/08/25 15:39
Total/NA	Analysis	200.8		1	7935	CW	EET SSM	07/09/25 15:01
Total Recoverable	Prep	200.7			662684	MN7X	EET CLE	07/07/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	662982	S4FJ	EET CLE	07/08/25 16:44
Total Recoverable	Analysis	2340 B-2021		1	663149	KLC	EET CLE	07/10/25 05:57
Total/NA	Prep	245.1-1994 R3.0			662922	MN7X	EET CLE	07/08/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	663093	TQ6W	EET CLE	07/09/25 11:17
Total/NA	Analysis	2320 B-2021		1	662786	PQD2	EET CLE	07/07/25 13:44
Total/NA	Analysis	2540 C-2020		1	662637	C5SV	EET CLE	07/07/25 08:48
Total/NA	Analysis	2540D-2020		1	662685	C5SV	EET CLE	07/07/25 09:59
Total/NA	Analysis	300.0-1993 R2.1		1	662746	JMR	EET CLE	07/07/25 22:45
Total/NA	Analysis	300.0-1993 R2.1		5	662746	JMR	EET CLE	07/07/25 22:54

Client Sample ID: L507195-03 MW-17C

Lab Sample ID: 240-228090-3

Date Collected: 07/01/25 12:17
Date Received: 07/03/25 07:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			662684	MN7X	EET CLE	07/07/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	662993	RKT	EET CLE	07/08/25 18:05
Total/NA	Prep	200.8			7894	RMN	EET SSM	07/08/25 15:39
Total/NA	Analysis	200.8		1	7935	CW	EET SSM	07/09/25 15:03

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-1

Client Sample ID: L507195-03 MW-17C

Lab Sample ID: 240-228090-3

Date Collected: 07/01/25 12:17

Matrix: Water

Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			662684	MN7X	EET CLE	07/07/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	662982	S4FJ	EET CLE	07/08/25 16:47
Total Recoverable	Analysis	2340 B-2021		1	663149	KLC	EET CLE	07/10/25 05:57
Total/NA	Prep	245.1-1994 R3.0			662922	MN7X	EET CLE	07/08/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	663093	TQ6W	EET CLE	07/09/25 11:19
Total/NA	Analysis	2320 B-2021		1	662786	PQD2	EET CLE	07/07/25 13:49
Total/NA	Analysis	2540 C-2020		1	662737	C5SV	EET CLE	07/07/25 12:51
Total/NA	Analysis	2540D-2020		1	662685	C5SV	EET CLE	07/07/25 09:59
Total/NA	Analysis	300.0-1993 R2.1		1	662746	JMR	EET CLE	07/07/25 23:04
Total/NA	Analysis	300.0-1993 R2.1		5	662746	JMR	EET CLE	07/07/25 23:13

Client Sample ID: L507195-04 MW-17D

Lab Sample ID: 240-228090-4

Date Collected: 07/01/25 13:49

Matrix: Water

Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			662684	MN7X	EET CLE	07/07/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	662993	RKT	EET CLE	07/08/25 18:19
Total/NA	Prep	200.8			7894	RMN	EET SSM	07/08/25 15:39
Total/NA	Analysis	200.8		1	7935	CW	EET SSM	07/09/25 15:06
Total Recoverable	Prep	200.7			662684	MN7X	EET CLE	07/07/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	662982	S4FJ	EET CLE	07/08/25 16:49
Total Recoverable	Analysis	2340 B-2021		1	663149	KLC	EET CLE	07/10/25 05:57
Total/NA	Prep	245.1-1994 R3.0			662922	MN7X	EET CLE	07/08/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	663093	TQ6W	EET CLE	07/09/25 11:21
Total/NA	Analysis	2320 B-2021		1	662786	PQD2	EET CLE	07/07/25 13:54
Total/NA	Analysis	2540 C-2020		1	662737	C5SV	EET CLE	07/07/25 12:51
Total/NA	Analysis	2540D-2020		1	662685	C5SV	EET CLE	07/07/25 09:59
Total/NA	Analysis	300.0-1993 R2.1		1	662746	JMR	EET CLE	07/07/25 21:04

Client Sample ID: L507195-05 MW-17E

Lab Sample ID: 240-228090-5

Date Collected: 07/01/25 15:13

Matrix: Water

Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			662684	MN7X	EET CLE	07/07/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	662993	RKT	EET CLE	07/08/25 18:23
Total/NA	Prep	200.8			7894	RMN	EET SSM	07/08/25 15:39
Total/NA	Analysis	200.8		1	7935	CW	EET SSM	07/09/25 15:09
Total Recoverable	Prep	200.7			662684	MN7X	EET CLE	07/07/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	662982	S4FJ	EET CLE	07/08/25 16:52
Total Recoverable	Analysis	2340 B-2021		1	663149	KLC	EET CLE	07/10/25 05:57
Total/NA	Prep	245.1-1994 R3.0			662922	MN7X	EET CLE	07/08/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	663093	TQ6W	EET CLE	07/09/25 11:22

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-1

Client Sample ID: L507195-05 MW-17E

Lab Sample ID: 240-228090-5

Date Collected: 07/01/25 15:13
Date Received: 07/03/25 07:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320 B-2021		1	662786	PQD2	EET CLE	07/07/25 14:00
Total/NA	Analysis	2540 C-2020		1	662737	C5SV	EET CLE	07/07/25 12:51
Total/NA	Analysis	2540D-2020		1	662685	C5SV	EET CLE	07/07/25 09:59
Total/NA	Analysis	300.0-1993 R2.1		1	662746	JMR	EET CLE	07/07/25 23:22

Client Sample ID: L507195-06 MWT-17A

Lab Sample ID: 240-228090-6

Date Collected: 07/01/25 09:10
Date Received: 07/03/25 07:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			662684	MN7X	EET CLE	07/07/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	662993	RKT	EET CLE	07/08/25 18:28
Total/NA	Prep	200.8			7894	RMN	EET SSM	07/08/25 15:39
Total/NA	Analysis	200.8		1	7935	CW	EET SSM	07/09/25 15:12
Total Recoverable	Prep	200.7			662684	MN7X	EET CLE	07/07/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	662982	S4FJ	EET CLE	07/08/25 17:00
Total Recoverable	Analysis	2340 B-2021		1	663149	KLC	EET CLE	07/10/25 05:57
Total/NA	Prep	245.1-1994 R3.0			662922	MN7X	EET CLE	07/08/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	663093	TQ6W	EET CLE	07/09/25 11:24
Total/NA	Analysis	2320 B-2021		1	662786	PQD2	EET CLE	07/07/25 14:08
Total/NA	Analysis	2540 C-2020		1	662737	C5SV	EET CLE	07/07/25 12:51
Total/NA	Analysis	2540D-2020		1	662685	C5SV	EET CLE	07/07/25 09:59
Total/NA	Analysis	300.0-1993 R2.1		1	662746	JMR	EET CLE	07/07/25 23:31
Total/NA	Analysis	300.0-1993 R2.1		5	662746	JMR	EET CLE	07/07/25 23:40

Client Sample ID: L507195-07 FIELD BLANK

Lab Sample ID: 240-228090-7

Date Collected: 07/01/25 08:15
Date Received: 07/03/25 07:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			662684	MN7X	EET CLE	07/07/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	662993	RKT	EET CLE	07/08/25 18:32
Total/NA	Prep	200.8			7894	RMN	EET SSM	07/08/25 15:39
Total/NA	Analysis	200.8		1	7935	CW	EET SSM	07/09/25 15:20
Total Recoverable	Prep	200.7			662684	MN7X	EET CLE	07/07/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	662982	S4FJ	EET CLE	07/08/25 17:03
Total Recoverable	Analysis	2340 B-2021		1	663149	KLC	EET CLE	07/10/25 05:57
Total/NA	Prep	245.1-1994 R3.0			662922	MN7X	EET CLE	07/08/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	663093	TQ6W	EET CLE	07/09/25 11:29
Total/NA	Analysis	2320 B-2021		1	662786	PQD2	EET CLE	07/07/25 14:13
Total/NA	Analysis	2540 C-2020		1	662737	C5SV	EET CLE	07/07/25 12:51
Total/NA	Analysis	2540D-2020		1	662685	C5SV	EET CLE	07/07/25 09:59
Total/NA	Analysis	300.0-1993 R2.1		1	662746	JMR	EET CLE	07/07/25 23:50

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-1

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Job ID: 240-228090-1
Project/Site: Erickson Projects

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-08-26
Florida	NELAP	E87575	06-30-26
Louisiana (All)	NELAP	03073	07-01-26
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-26
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167-008	07-10-25
US Fish & Wildlife	US Federal Programs	A20571	06-30-26
USDA	US Federal Programs	525-23-4-22573	01-24-28
Washington	State	C788-23a	07-13-25
Wisconsin	State	399133460	07-31-25

Chain of Custody

Return Samples to: Eurofins Michigan
38855 Hills Tech Dr.
Farmington Hills, MI 48331

Contains Rush Work: ❑ Contains Methods That May Expire Soon: ❑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Project Manager:
Howell, Leslie

Purchase Order:
Purchase Order not required

Project Reference:

Work Order:

Sampler:
Marc Wahrer

Requested TAT:

Description:
Erickson Projects

Project Number:
24034575

Site Name:
Erickson Projects

Sample State: MI

Special Instructions:
Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner .

See following pages for Method and Container information.

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L507195-01 MW-17A	Grab	Water	07/01/25 13:10			
2	L507195-02 MW-17B	Grab	Water	07/01/25 10:56			
3	L507195-03 MW-17C	Grab	Water	07/01/25 12:17			
4	L507195-04 MW-17D	Grab	Water	07/01/25 13:49			
5	L507195-05 MW-17E	Grab	Water	07/01/25 15:13			
6	L507195-06 MWT-17A	Grab	Water	07/01/25 09:10			
7	L507195-07 Field Blank	Grab	Water	07/01/25 08:15			

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) **:** Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished By:	Date/Time:		
Jennifer Caporale	07/02/25 09:53	Jennifer Caporale	07/02/25 09:53		

Coolers								
Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250702A001	Dark blue cooler							
MIC20250702A001	Baby blue cooler							

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																				
#	Sample Name	2340 B-2021 / Total Hardness (as CaCO3) by calculation	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	200.8 / Metals (ICP/MS) / Custom List 1: 1 Metals	300.0-1993 R2.1 / Anions, Ion Chromatography / Chloride, Fluor	200.8 / Metals (ICP/MS) / Custom List 2: 2-3 Metals	200.8 / Metals (ICP/MS) / Iron & Zinc	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	903.0 / Radium-226 (GFPC) / Standard Target List	904.0 / Radium-228 (GFPC) / Standard Target List	200.7 R4.4-1994 / Metals (ICP) / Total Boron	200.8 / Metals (ICP/MS) / Custom List 2: 2-3 Metals	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved S	245.1-1994 R3.0 / Mercury (CVAA) / Mercury	2320 B-2021 / Alkalinity / Bicarbonate & Carbonate Alkalinity	2540D-2020 / Solids, Total Suspended (TSS)						
1	L507195-01 MW-17A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
2	L507195-02 MW-17B	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
3	L507195-03 MW-17C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
4	L507195-04 MW-17D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
5	L507195-05 MW-17E	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
6	L507195-06 MWT-17A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
7	L507195-07 Field Blank	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						

Chain of Custody Bottles

eurofins | Environment Testing

Bottle Name	Total Bottles
Plastic 500ml - with Nitric Acid	7
Plastic 250ml - with Nitric Acid	7
Plastic 1 liter - unpreserved	7
Plastic 500ml - unpreserved	7
Plastic 60 mL - unpreserved	14
Plastic 1 liter - Nitric Acid	14

Samples	
#	Sample Name
1	L507195-01 MW-17A
2	L507195-02 MW-17B
3	L507195-03 MW-17C
4	L507195-04 MW-17D
5	L507195-05 MW-17E
6	L507195-06 MWT-17A
7	L507195-07 Field Blank

Bottles																					
Total Bottles For Sample	Plastic 500ml - with Nitric Acid	Plastic 250ml - with Nitric Acid	Plastic 1 liter - unpreserved	Plastic 500ml - unpreserved	Plastic 60 mL - unpreserved	Plastic 1 liter - Nitric Acid															
8	1	1	1	1	2	2															
8	1	1	1	1	2	2															
8	1	1	1	1	2	2															
8	1	1	1	1	2	2															
8	1	1	1	1	2	2															
8	1	1	1	1	2	2															
8	1	1	1	1	2	2															

Chain of Custody

Return Samples to: Eurofins Michigan
38855 Hills Tech Dr.
Farmington Hills, MI 48331

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☐

Client Contact Info

Name:
Jennifer Caporale
Address :
1110 South Pennsylvania
Address 2:
City, State Zip:
Lansing, Michigan 48901
Phone:
517-702-6482
Email:
Jennifer.Caporale@LBWL.com
Deliverables:

Project Info

Company:
Lansing Board of Water & Light
Purchase Order:
Purchase Order not required
Work Order:
Requested TAT:
Project Number:
24034575
Sample State: MI
Project Manager:
Howell, Leslie
Project Reference:
Sampler:
Marc Wahrer
Description:
Erickson Projects
Site Name:
Erickson Projects
Special Instructions:
Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner.

See following pages for Method and Container information.

240-228090 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L507195-01 MW-17A	Grab	Water	07/01/25 13:10			
2	L507195-02 MW-17B	Grab	Water	07/01/25 10:56			
3	L507195-03 MW-17C	Grab	Water	07/01/25 12:17			
4	L507195-04 MW-17D	Grab	Water	07/01/25 13:49			
5	L507195-05 MW-17E	Grab	Water	07/01/25 15:13			
6	L507195-06 MWT-17A	Grab	Water	07/01/25 09:10			
7	L507195-07 Field Blank	Grab	Water	07/01/25 08:15			

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished By:	Date/Time:			
Jennifer Caporale	07/02/25 09:53	Jennifer Caporale	07/02/25 09:53		7-3-25	7:45 EC

Chain of Custody Number: **359674**

*H – Analysis on hold.

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Lansing Board of Water Site Name _____ Cooler unpacked by

Cooler Received on 7-3-25 Opened on 7-3-25

FedEx 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used. Bubble Wrap Foam Plastic Bag None Other _____

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☑ See Multiple Cooler Form

IR GUN # 17 (CF +0.2 °C) Observed Cooler Temp _____ °C Corrected Cooler Temp _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12 Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC463162
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20 SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved. _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation Date/Time VOAs Frozen _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: _____	1.7	1.9	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____	1.2	1.4	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____	240—34		Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____

7/3/2025

Login Container Summary Report

240-228090

7/25/2025 (Rev. 1)

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L507195-01 MW 17A	240-228090-A 1	Plastic 60 mL - unpreserved				
L507195-01 MW 17A	240-228090-B-1	Plastic 60 mL - unpreserved				
L507195-01 MW 17A	240-228090-C-1	Plastic 250ml with Nitric Acid	<2			
L507195-01 MW 17A	240-228090-D-1	Plastic 500ml unpreserved				
L507195-01 MW-17A	240-228090-E-1	Plastic 500ml - with Nitric Acid	<2			
L507195-01 MW 17A	240-228090-F-1	Plastic 1 liter unpreserved				
L507195-01 MW-17A	240-228090-G-1	Plastic 1 liter - Nitric Acid	<2			
L507195-01 MW-17A	240 228090-H-1	Plastic 1 liter Nitric Acid	<2			
L507195-02 MW-17B	240-228090-A-2	Plastic 60 mL - unpreserved				
L507195-02 MW-17B	240 228090-B 2	Plastic 60 mL unpreserved				
L507195-02 MW-17B	240-228090-C-2	Plastic 250ml - with Nitric Acid	<2			
L507195-02 MW 17B	240 228090-D-2	Plastic 500ml - unpreserved				
L507195-02 MW 17B	240-228090-E-2	Plastic 500ml - with Nitric Acid	<2			
L507195-02 MW 17B	240-228090-F-2	Plastic 1 liter - unpreserved				
L507195-02 MW-17B	240-228090-G-2	Plastic 1 liter - Nitric Acid	<2			
L507195-02 MW 17B	240-228090-H-2	Plastic 1 liter - Nitric Acid	<2			
L507195-03 MW-17C	240-228090-A-3	Plastic 60 mL - unpreserved				
L507195-03 MW 17C	240-228090-B-3	Plastic 60 mL - unpreserved				
L507195-03 MW-17C	240-228090-C-3	Plastic 250ml - with Nitric Acid	<2			
L507195-03 MW 17C	240-228090 D-3	Plastic 500ml - unpreserved				
L507195-03 MW-17C	240-228090-E-3	Plastic 500ml - with Nitric Acid	<2			
L507195-03 MW 17C	240-228090-F 3	Plastic 1 liter unpreserved				
L507195-03 MW-17C	240-228090-G-3	Plastic 1 liter - Nitric Acid	<2			
L507195-03 MW-17C	240-228090-H-3	Plastic 1 liter - Nitric Acid	<2			
L507195-04 MW-17D	240-228090 A-4	Plastic 60 mL - unpreserved				
L507195-04 MW 17D	240-228090-B-4	Plastic 60 mL - unpreserved				
L507195-04 MW-17D	240-228090-C-4	Plastic 250ml - with Nitric Acid	<2			
L507195-04 MW 17D	240-228090-D-4	Plastic 500ml unpreserved				
L507195-04 MW-17D	240 228090-E-4	Plastic 500ml with Nitric Acid	<2			
L507195-04 MW-17D	240 228090-F-4	Plastic 1 liter - unpreserved				
L507195-04 MW-17D	240-228090-G-4	Plastic 1 liter - Nitric Acid	<2			
L507195-04 MW-17D	240-228090-H-4	Plastic 1 liter - Nitric Acid	<2			
L507195-05 MW-17E	240-228090-A-5	Plastic 60 mL - unpreserved				
L507195-05 MW-17E	240-228090 B-5	Plastic 60 mL - unpreserved				
L507195-05 MW 17E	240-228090-C-5	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L507195-05 MW-17E	240 228090-D-5	Plastic 500ml - unpreserved				
L507195-05 MW 17E	240-228090-E-5	Plastic 500ml - with Nitric Acid	<2			
L507195-05 MW-17E	240-228090-F 5	Plastic 1 liter - unpreserved				
L507195-05 MW 17E	240-228090-G-5	Plastic 1 liter - Nitric Acid	<2			
L507195-05 MW-17E	240-228090 H 5	Plastic 1 liter - Nitric Acid	<2			
L507195-06 MWT-17A	240-228090-A-6	Plastic 60 mL - unpreserved				
L507195-06 MWT-17A	240-228090-B-6	Plastic 60 mL - unpreserved				
L507195-06 MWT 17A	240-228090-C-6	Plastic 250ml - with Nitric Acid	<2			
L507195-06 MWT-17A	240-228090-D-6	Plastic 500ml - unpreserved				
L507195-06 MWT-17A	240-228090-E-6	Plastic 500ml - with Nitric Acid	<2			
L507195-06 MWT-17A	240 228090-F-6	Plastic 1 liter - unpreserved				
L507195-06 MWT-17A	240-228090-G-6	Plastic 1 liter - Nitric Acid	<2			
L507195-06 MWT-17A	240-228090-H-6	Plastic 1 liter Nitric Acid	<2			
L507195-07 FIELD BLANK	240-228090-A-7	Plastic 60 mL - unpreserved				
L507195-07 FIELD BLANK	240-228090-B-7	Plastic 60 mL - unpreserved				
L507195-07 FIELD BLANK	240-228090-C-7	Plastic 250ml - with Nitric Acid	<2			
L507195-07 FIELD BLANK	240-228090-D-7	Plastic 500ml - unpreserved				
L507195-07 FIELD BLANK	240-228090-E-7	Plastic 500ml - with Nitric Acid	<2			
L507195-07 FIELD BLANK	240-228090-F-7	Plastic 1 liter - unpreserved				
L507195-07 FIELD BLANK	240-228090-G-7	Plastic 1 liter - Nitric Acid	<2			
L507195-07 FIELD BLANK	240-228090-H 7	Plastic 1 liter - Nitric Acid	<2			

ORIGIN ID:LANA (517) 702-6290
BOARD OF WATER & LIGHT WAREHSE
1110 S PENNSYLVANIA AVE
LANSING, MI 48912
UNITED STATES US

SHIP DATE: 02JUL25
ACTWGT: 66.35 LB
CAD: 6994398/SSFE2600
DIMS: 24x14x14 IN
BILL THIRD PARTY

Part # 156287-435 RRDW2 EXP 02/26

TO EUROFINS CLEVELAND
ATTN LAB
180 S VAN BUREN AVE

BARBERTON OH 44203
(111) 111-1111
INV:
PO:
REF:
DEPT:

FedEx Express

1 of 2
TRK# 0201 3906 0183 0313
MASTER
N1 CAKA

THU - 03 JUL 8:00A
FIRST OVERNIGHT
DSR AHS
44203
OH-US CLE

ORIGIN ID:LANA (517) 702-6290
BOARD OF WATER & LIGHT WAREHSE
1110 S PENNSYLVANIA AVE
LANSING, MI 48912
UNITED STATES US

SHIP DATE: 02JUL25
ACTWGT: 65.35 LB
CAD: 6994398/SSFE2600
DIMS: 24x14x14 IN
BILL THIRD PARTY

Part # 156287-435 RR

TO EUROFINS CLEVELAND
ATTN LAB
180 S VAN BUREN AVE

BARBERTON OH 44203
(111) 111-1111
INV:
PO:
REF:
DEPT:

240-228090 Waybi

FedEx Express

2 of 2
MPS# 0263 3906 0183 0324
Mstr# 3906 0183 0313 0201
N1 CAKA

THU - 03 JUL 8:00A
FIRST OVERNIGHT
DSR
44203
OH-US CLE

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-204630.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-228090-1
Address: 5755 8th Street East, ,	Due Date Requested: 7/17/2025			Preservation Codes:
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Therm. ID: SC0 3 Cust. Seal: Y / N
Uncorr./Corr. Temp: 0.6 0.5 °C
Delivery: UPS / FedEx / Other: ____
Ice Type: Blue / Dry / Wet / None
Label Ver.: 6 Packing: B
4 Red

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT(MOD) Iron & Zinc	Total Number of containe	Special Instructions/Note:
			Preservation Code:						
L507195-05 MW-17E (240-228090-5)	7/1/25	15:13 Eastern	G	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification: Unconfirmed 4616 0296 9960	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 7/2/25	Company EE	Received by:	Date/Time: 7/8/25 9:45	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: -	Cooler Temperature(s) °C and Other Remarks:

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-204626.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-228090-1
Address: 5755 8th Street East, ,	Due Date Requested: 7/17/2025			
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Therm. ID: SC0 3 Cust. Seal: (Y) / N
Uncorr./Corr. Temp: 0.6 / 0.5 °C
Delivery: UPS / FedEx / Other: ____
Ice Type: Blue / Dry / Wet / None
Label Ver.: N Packing: D
4 RMJ

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT(MOD) Iron & Zinc	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
L507195-01 MW-17A (240-228090-1)	7/1/25	13:10 Eastern	G	Water			X	1	
L507195-02 MW-17B (240-228090-2)	7/1/25	10:56 Eastern	G	Water			X	1	
L507195-03 MW-17C (240-228090-3)	7/1/25	12:17 Eastern	G	Water			X	1	
L507195-04 MW-17D (240-228090-4)	7/1/25	13:49 Eastern	G	Water			X	1	
L507195-06 MWT-17A (240-228090-6)	7/1/25	09:10 Eastern	G	Water			X	1	
L507195-07 FIELD BLANK (240-228090-7)	7/1/25	08:15 Eastern	G	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification: Unconfirmed 4616 0296 5560	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 7/7/25	Company EC	Received by:	Date/Time: 7/8/25 9:45	Company EC/W
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-228090-1

Login Number: 228090
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 07/08/25 12:49 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 8/4/2025 4:33:42 PM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-228090-2

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

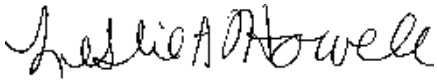
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
8/4/2025 4:33:42 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 9
Tracer Carrier Summary 16
QC Sample Results 17
QC Association Summary 20
Lab Chronicle 21
Certification Summary 23
Chain of Custody 24
Receipt Checklists 37

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-2

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-228090-2 Eurofins Cleveland

Sample time updated to 0910 for MW-17A per client correction.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-228090-1	L507195-01 MW-17A	Water	07/01/25 09:10	07/03/25 07:45
240-228090-2	L507195-02 MW-17B	Water	07/01/25 10:56	07/03/25 07:45
240-228090-3	L507195-03 MW-17C	Water	07/01/25 12:17	07/03/25 07:45
240-228090-4	L507195-04 MW-17D	Water	07/01/25 13:49	07/03/25 07:45
240-228090-5	L507195-05 MW-17E	Water	07/01/25 15:13	07/03/25 07:45
240-228090-6	L507195-06 MWT-17A	Water	07/01/25 09:10	07/03/25 07:45
240-228090-7	L507195-07 FIELD BLANK	Water	07/01/25 08:15	07/03/25 07:45

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-2

Client Sample ID: L507195-01 MW-17A — **Lab Sample ID: 240-228090-1**

No Detections.

Client Sample ID: L507195-02 MW-17B — **Lab Sample ID: 240-228090-2**

No Detections.

Client Sample ID: L507195-03 MW-17C — **Lab Sample ID: 240-228090-3**

No Detections.

Client Sample ID: L507195-04 MW-17D — **Lab Sample ID: 240-228090-4**

No Detections.

Client Sample ID: L507195-05 MW-17E — **Lab Sample ID: 240-228090-5**

No Detections.

Client Sample ID: L507195-06 MWT-17A — **Lab Sample ID: 240-228090-6**

No Detections.

Client Sample ID: L507195-07 FIELD BLANK — **Lab Sample ID: 240-228090-7**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-2

Client Sample ID: L507195-01 MW-17A

Date Collected: 07/01/25 09:10
Date Received: 07/03/25 07:45

Lab Sample ID: 240-228090-1

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.432**		0.245	0.248	1.00	0.338	pCi/L	07/09/25 08:13	07/31/25 09:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.2*		*30 - 110*	*07/09/25 08:13*	*07/31/25 09:18*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.398	U	0.337	0.339	1.00	0.528	pCi/L	07/09/25 08:18	07/30/25 11:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.2*		*30 - 110*	*07/09/25 08:18*	*07/30/25 11:54*	*1*
Y Carrier	*83.7*		*30 - 110*	*07/09/25 08:18*	*07/30/25 11:54*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.830**		0.417	0.420	5.00	0.528	pCi/L		07/31/25 15:00	1

Client Sample Results

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-2

Client Sample ID: L507195-02 MW-17B

Date Collected: 07/01/25 10:56
Date Received: 07/03/25 07:45

Lab Sample ID: 240-228090-2

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.113	U	0.206	0.206	1.00	0.364	pCi/L	07/09/25 07:54	08/01/25 17:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.9*		*30 - 110*	*07/09/25 07:54*	*08/01/25 17:53*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.611	U	0.415	0.418	1.00	0.626	pCi/L	07/09/25 07:59	08/01/25 11:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.9*		*30 - 110*	*07/09/25 07:59*	*08/01/25 11:59*	*1*
Y Carrier	*83.0*		*30 - 110*	*07/09/25 07:59*	*08/01/25 11:59*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.723**		0.463	0.466	5.00	0.626	pCi/L		08/04/25 15:19	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-2

Client Sample ID: L507195-03 MW-17C
Date Collected: 07/01/25 12:17
Date Received: 07/03/25 07:45

Lab Sample ID: 240-228090-3
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.317	U	0.247	0.248	1.00	0.363	pCi/L	07/09/25 07:54	08/01/25 17:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.2*		*30 - 110*	*07/09/25 07:54*	*08/01/25 17:54*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.478	U	0.401	0.403	1.00	0.629	pCi/L	07/09/25 07:59	08/01/25 11:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.2*		*30 - 110*	*07/09/25 07:59*	*08/01/25 11:59*	*1*
Y Carrier	*78.9*		*30 - 110*	*07/09/25 07:59*	*08/01/25 11:59*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.795**		0.471	0.473	5.00	0.629	pCi/L		08/04/25 15:19	1

Client Sample ID: L507195-04 MW-17D

Date Collected: 07/01/25 13:49
Date Received: 07/03/25 07:45

Lab Sample ID: 240-228090-4

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.321	U	0.246	0.248	1.00	0.366	pCi/L	07/09/25 07:54	08/01/25 19:48	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.4*		*30 - 110*	*07/09/25 07:54*	*08/01/25 19:48*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.929**		0.423	0.431	1.00	0.568	pCi/L	07/09/25 07:59	08/01/25 11:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.4*		*30 - 110*	*07/09/25 07:59*	*08/01/25 11:59*	*1*
Y Carrier	*80.0*		*30 - 110*	*07/09/25 07:59*	*08/01/25 11:59*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.25**		0.489	0.497	5.00	0.568	pCi/L		08/04/25 15:19	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-2

Client Sample ID: L507195-05 MW-17E
Date Collected: 07/01/25 15:13
Date Received: 07/03/25 07:45

Lab Sample ID: 240-228090-5
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.157	U	0.123	0.124	1.00	0.342	pCi/L	07/09/25 07:54	08/01/25 19:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*30 - 110*	*07/09/25 07:54*	*08/01/25 19:49*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.276	U	0.358	0.359	1.00	0.597	pCi/L	07/09/25 07:59	08/01/25 11:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*30 - 110*	*07/09/25 07:59*	*08/01/25 11:59*	*1*
Y Carrier	*78.1*		*30 - 110*	*07/09/25 07:59*	*08/01/25 11:59*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.276	U	0.379	0.380	5.00	0.597	pCi/L		08/04/25 15:19	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-2

Client Sample ID: L507195-06 MWT-17A
Date Collected: 07/01/25 09:10
Date Received: 07/03/25 07:45

Lab Sample ID: 240-228090-6
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0133	U	0.191	0.191	1.00	0.375	pCi/L	07/09/25 07:54	08/01/25 19:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.6*		*30 - 110*	*07/09/25 07:54*	*08/01/25 19:49*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.174	U	0.368	0.368	1.00	0.641	pCi/L	07/09/25 07:59	08/01/25 11:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.6*		*30 - 110*	*07/09/25 07:59*	*08/01/25 11:59*	*1*
Y Carrier	*77.0*		*30 - 110*	*07/09/25 07:59*	*08/01/25 11:59*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.188	U	0.415	0.415	5.00	0.641	pCi/L		08/04/25 15:19	1

Client Sample ID: L507195-07 FIELD BLANK

Lab Sample ID: 240-228090-7

Date Collected: 07/01/25 08:15

Matrix: Water

Date Received: 07/03/25 07:45

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.202	U	0.105	0.107	1.00	0.336	pCi/L	07/09/25 07:54	08/01/25 19:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.4*		*30 - 110*	*07/09/25 07:54*	*08/01/25 19:49*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.109	U	0.310	0.310	1.00	0.552	pCi/L	07/09/25 07:59	08/01/25 11:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.4*		*30 - 110*	*07/09/25 07:59*	*08/01/25 11:59*	*1*
Y Carrier	*78.9*		*30 - 110*	*07/09/25 07:59*	*08/01/25 11:59*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.109	U	0.327	0.328	5.00	0.552	pCi/L		08/04/25 15:19	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)						
		Ba						
Lab Sample ID	Client Sample ID	(30-110)						
240-228090-1	L507195-01 MW-17A	93.2						
240-228090-1 DU	L507195-01 MW-17A	88.9						
240-228090-2	L507195-02 MW-17B	83.9						
240-228090-3	L507195-03 MW-17C	88.2						
240-228090-4	L507195-04 MW-17D	90.4						
240-228090-5	L507195-05 MW-17E	86.6						
240-228090-6	L507195-06 MWT-17A	83.6						
240-228090-7	L507195-07 FIELD BLANK	92.4						
LCS 160-726348/2-A	Lab Control Sample	86.9						
LCS 160-726352/2-A	Lab Control Sample	89.7						
MB 160-726348/1-A	Method Blank	86.9						
MB 160-726352/1-A	Method Blank	81.6						

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)						
		Ba	Y					
Lab Sample ID	Client Sample ID	(30-110)	(30-110)					
240-228090-1	L507195-01 MW-17A	93.2	83.7					
240-228090-1 DU	L507195-01 MW-17A	88.9	87.1					
240-228090-2	L507195-02 MW-17B	83.9	83.0					
240-228090-3	L507195-03 MW-17C	88.2	78.9					
240-228090-4	L507195-04 MW-17D	90.4	80.0					
240-228090-5	L507195-05 MW-17E	86.6	78.1					
240-228090-6	L507195-06 MWT-17A	83.6	77.0					
240-228090-7	L507195-07 FIELD BLANK	92.4	78.9					
LCS 160-726349/2-A	Lab Control Sample	86.9	83.7					
LCS 160-726353/2-A	Lab Control Sample	89.7	86.0					
MB 160-726349/1-A	Method Blank	86.9	83.4					
MB 160-726353/1-A	Method Blank	81.6	80.4					

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-726348/1-A
Matrix: Water
Analysis Batch: 730101

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 726348

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.06295	U	0.165	0.165	1.00	0.366	pCi/L	07/09/25 07:54	08/01/25 17:53	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.9*		*30 - 110*	*07/09/25 07:54*	*08/01/25 17:53*	*1*

Lab Sample ID: LCS 160-726348/2-A
Matrix: Water
Analysis Batch: 730101

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 726348

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.58	10.73		1.39	1.00	0.339	pCi/L	112	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*86.9*		*30 - 110*

Lab Sample ID: MB 160-726352/1-A
Matrix: Water
Analysis Batch: 729882

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 726352

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.05647	U	0.154	0.154	1.00	0.337	pCi/L	07/09/25 08:13	07/31/25 07:28	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.6*		*30 - 110*	*07/09/25 08:13*	*07/31/25 07:28*	*1*

Lab Sample ID: LCS 160-726352/2-A
Matrix: Water
Analysis Batch: 729882

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 726352

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.58	8.811		1.14	1.00	0.307	pCi/L	92	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*89.7*		*30 - 110*

Lab Sample ID: 240-228090-1 DU
Matrix: Water
Analysis Batch: 729882

Client Sample ID: L507195-01 MW-17A
Prep Type: Total/NA
Prep Batch: 726352

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.432			0.5400		0.272	1.00	0.346	pCi/L			0.21	1

Method: 903.0 - Radium-226 (GFPC) (Continued)

Lab Sample ID: 240-228090-1 DU
Matrix: Water
Analysis Batch: 729882

Client Sample ID: L507195-01 MW-17A
Prep Type: Total/NA
Prep Batch: 726352

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	88.9		30 - 110

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-726349/1-A
Matrix: Water
Analysis Batch: 730088

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 726349

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5756		0.379	0.383	1.00	0.566	pCi/L	07/09/25 07:59	08/01/25 11:58	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	86.9		30 - 110	07/09/25 07:59	08/01/25 11:58	1
Y Carrier	83.4		30 - 110	07/09/25 07:59	08/01/25 11:58	1

Lab Sample ID: LCS 160-726349/2-A
Matrix: Water
Analysis Batch: 730088

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 726349

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.20	9.589		1.32	1.00	0.499	pCi/L	104	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	86.9		30 - 110
Y Carrier	83.7		30 - 110

Lab Sample ID: MB 160-726353/1-A
Matrix: Water
Analysis Batch: 729753

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 726353

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3582	U	0.384	0.386	1.00	0.625	pCi/L	07/09/25 08:18	07/30/25 11:59	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	81.6		30 - 110	07/09/25 08:18	07/30/25 11:59	1
Y Carrier	80.4		30 - 110	07/09/25 08:18	07/30/25 11:59	1

Lab Sample ID: LCS 160-726353/2-A
Matrix: Water
Analysis Batch: 729753

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 726353

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.21	9.986		1.33	1.00	0.472	pCi/L	108	75 - 125		

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-726353/2-A
Matrix: Water
Analysis Batch: 729753

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 726353

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	89.7		30 - 110
Y Carrier	86.0		30 - 110

Lab Sample ID: 240-228090-1 DU
Matrix: Water
Analysis Batch: 729769

Client Sample ID: L507195-01 MW-17A
Prep Type: Total/NA
Prep Batch: 726353

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.398	U		0.2353	U	0.281	1.00	0.462	pCi/L			0.26	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	88.9		30 - 110
Y Carrier	87.1		30 - 110

Rad

Prep Batch: 726348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228090-2	L507195-02 MW-17B	Total/NA	Water	PrecSep-21	
240-228090-3	L507195-03 MW-17C	Total/NA	Water	PrecSep-21	
240-228090-4	L507195-04 MW-17D	Total/NA	Water	PrecSep-21	
240-228090-5	L507195-05 MW-17E	Total/NA	Water	PrecSep-21	
240-228090-6	L507195-06 MWT-17A	Total/NA	Water	PrecSep-21	
240-228090-7	L507195-07 FIELD BLANK	Total/NA	Water	PrecSep-21	
MB 160-726348/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-726348/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 726349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228090-2	L507195-02 MW-17B	Total/NA	Water	PrecSep_0	
240-228090-3	L507195-03 MW-17C	Total/NA	Water	PrecSep_0	
240-228090-4	L507195-04 MW-17D	Total/NA	Water	PrecSep_0	
240-228090-5	L507195-05 MW-17E	Total/NA	Water	PrecSep_0	
240-228090-6	L507195-06 MWT-17A	Total/NA	Water	PrecSep_0	
240-228090-7	L507195-07 FIELD BLANK	Total/NA	Water	PrecSep_0	
MB 160-726349/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-726349/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 726352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228090-1	L507195-01 MW-17A	Total/NA	Water	PrecSep-21	
MB 160-726352/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-726352/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-228090-1 DU	L507195-01 MW-17A	Total/NA	Water	PrecSep-21	

Prep Batch: 726353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228090-1	L507195-01 MW-17A	Total/NA	Water	PrecSep_0	
MB 160-726353/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-726353/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-228090-1 DU	L507195-01 MW-17A	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-2

Client Sample ID: L507195-01 MW-17A

Lab Sample ID: 240-228090-1

Date Collected: 07/01/25 09:10

Matrix: Water

Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			726352	JTR	EET SL	07/09/25 08:13
Total/NA	Analysis	903.0		1	729882	SWS	EET SL	07/31/25 09:18
Total/NA	Prep	PrecSep_0			726353	JTR	EET SL	07/09/25 08:18
Total/NA	Analysis	904.0		1	729769	SWS	EET SL	07/30/25 11:54
Total/NA	Analysis	Ra226_Ra228 Pos		1	729953	SCB	EET SL	07/31/25 15:00

Client Sample ID: L507195-02 MW-17B

Lab Sample ID: 240-228090-2

Date Collected: 07/01/25 10:56

Matrix: Water

Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			726348	JTR	EET SL	07/09/25 07:54
Total/NA	Analysis	903.0		1	730101	SWS	EET SL	08/01/25 17:53
Total/NA	Prep	PrecSep_0			726349	JTR	EET SL	07/09/25 07:59
Total/NA	Analysis	904.0		1	730088	SWS	EET SL	08/01/25 11:59
Total/NA	Analysis	Ra226_Ra228 Pos		1	730462	EMH	EET SL	08/04/25 15:19

Client Sample ID: L507195-03 MW-17C

Lab Sample ID: 240-228090-3

Date Collected: 07/01/25 12:17

Matrix: Water

Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			726348	JTR	EET SL	07/09/25 07:54
Total/NA	Analysis	903.0		1	730101	SWS	EET SL	08/01/25 17:54
Total/NA	Prep	PrecSep_0			726349	JTR	EET SL	07/09/25 07:59
Total/NA	Analysis	904.0		1	730088	SWS	EET SL	08/01/25 11:59
Total/NA	Analysis	Ra226_Ra228 Pos		1	730462	EMH	EET SL	08/04/25 15:19

Client Sample ID: L507195-04 MW-17D

Lab Sample ID: 240-228090-4

Date Collected: 07/01/25 13:49

Matrix: Water

Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			726348	JTR	EET SL	07/09/25 07:54
Total/NA	Analysis	903.0		1	730101	SWS	EET SL	08/01/25 19:48
Total/NA	Prep	PrecSep_0			726349	JTR	EET SL	07/09/25 07:59
Total/NA	Analysis	904.0		1	730088	SWS	EET SL	08/01/25 11:59
Total/NA	Analysis	Ra226_Ra228 Pos		1	730462	EMH	EET SL	08/04/25 15:19

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-2

Client Sample ID: L507195-05 MW-17E

Lab Sample ID: 240-228090-5

Date Collected: 07/01/25 15:13
Matrix: Water
Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			726348	JTR	EET SL	07/09/25 07:54
Total/NA	Analysis	903.0		1	730101	SWS	EET SL	08/01/25 19:49
Total/NA	Prep	PrecSep_0			726349	JTR	EET SL	07/09/25 07:59
Total/NA	Analysis	904.0		1	730088	SWS	EET SL	08/01/25 11:59
Total/NA	Analysis	Ra226_Ra228 Pos		1	730462	EMH	EET SL	08/04/25 15:19

Client Sample ID: L507195-06 MWT-17A

Lab Sample ID: 240-228090-6

Date Collected: 07/01/25 09:10
Matrix: Water
Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			726348	JTR	EET SL	07/09/25 07:54
Total/NA	Analysis	903.0		1	730101	SWS	EET SL	08/01/25 19:49
Total/NA	Prep	PrecSep_0			726349	JTR	EET SL	07/09/25 07:59
Total/NA	Analysis	904.0		1	730088	SWS	EET SL	08/01/25 11:59
Total/NA	Analysis	Ra226_Ra228 Pos		1	730462	EMH	EET SL	08/04/25 15:19

Client Sample ID: L507195-07 FIELD BLANK

Lab Sample ID: 240-228090-7

Date Collected: 07/01/25 08:15
Matrix: Water
Date Received: 07/03/25 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			726348	JTR	EET SL	07/09/25 07:54
Total/NA	Analysis	903.0		1	730101	SWS	EET SL	08/01/25 19:49
Total/NA	Prep	PrecSep_0			726349	JTR	EET SL	07/09/25 07:59
Total/NA	Analysis	904.0		1	730088	SWS	EET SL	08/01/25 11:59
Total/NA	Analysis	Ra226_Ra228 Pos		1	730462	EMH	EET SL	08/04/25 15:19

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228090-2

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25 *
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-25 *
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-25 *
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-25 *
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25 *
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody

Return Samples to: Eurofins Michigan
38855 Hills Tech Dr.
Farmington Hills, MI 48331

Contains Rush Work: ❑ Contains Methods That May Expire Soon: ❑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Project Manager:
Howell, Leslie

Purchase Order:
Purchase Order not required

Project Reference:

Work Order:

Sampler:
Marc Wahrer

Requested TAT:

Description:
Erickson Projects

Project Number:
24034575

Site Name:
Erickson Projects

Sample State: MI

Special Instructions:
Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner .

See following pages for Method and Container information.

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L507195-01 MW-17A	Grab	Water	07/01/25 13:10			
2	L507195-02 MW-17B	Grab	Water	07/01/25 10:56			
3	L507195-03 MW-17C	Grab	Water	07/01/25 12:17			
4	L507195-04 MW-17D	Grab	Water	07/01/25 13:49			
5	L507195-05 MW-17E	Grab	Water	07/01/25 15:13			
6	L507195-06 MWT-17A	Grab	Water	07/01/25 09:10			
7	L507195-07 Field Blank	Grab	Water	07/01/25 08:15			

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) **:** Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished By:	Date/Time:		
Jennifer Caporale	07/02/25 09:53	Jennifer Caporale	07/02/25 09:53		

Coolers								
Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250702A001	Dark blue cooler							
MIC20250702A001	Baby blue cooler							

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																				
#	Sample Name	2340 B-2021 / Total Hardness (as CaCO3) by calculation	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	200.8 / Metals (ICP/MS) / Custom List 1: 1 Metals	300.0-1993 R2.1 / Anions, Ion Chromatography / Chloride, Fluor	200.8 / Metals (ICP/MS) / Custom List 2: 2-3 Metals	200.8 / Metals (ICP/MS) / Iron & Zinc	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	903.0 / Radium-226 (GFPC) / Standard Target List	904.0 / Radium-228 (GFPC) / Standard Target List	200.7 R4.4-1994 / Metals (ICP) / Total Boron	200.8 / Metals (ICP/MS) / Custom List 2: 2-3 Metals	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved S	245.1-1994 R3.0 / Mercury (CVAA) / Mercury	2320 B-2021 / Alkalinity / Bicarbonate & Carbonate Alkalinity	2540D-2020 / Solids, Total Suspended (TSS)						
1	L507195-01 MW-17A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
2	L507195-02 MW-17B	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
3	L507195-03 MW-17C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
4	L507195-04 MW-17D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
5	L507195-05 MW-17E	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
6	L507195-06 MWT-17A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
7	L507195-07 Field Blank	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						

Chain of Custody Bottles

eurofins | Environment Testing

Bottle Name	Total Bottles
Plastic 500ml - with Nitric Acid	7
Plastic 250ml - with Nitric Acid	7
Plastic 1 liter - unpreserved	7
Plastic 500ml - unpreserved	7
Plastic 60 mL - unpreserved	14
Plastic 1 liter - Nitric Acid	14

Samples		Bottles																				
#	Sample Name	Total Bottles For Sample	Plastic 500ml - with Nitric Acid	Plastic 250ml - with Nitric Acid	Plastic 1 liter - unpreserved	Plastic 500ml - unpreserved	Plastic 60 mL - unpreserved	Plastic 1 liter - Nitric Acid														
1	L507195-01 MW-17A	8	1	1	1	1	2	2														
2	L507195-02 MW-17B	8	1	1	1	1	2	2														
3	L507195-03 MW-17C	8	1	1	1	1	2	2														
4	L507195-04 MW-17D	8	1	1	1	1	2	2														
5	L507195-05 MW-17E	8	1	1	1	1	2	2														
6	L507195-06 MWT-17A	8	1	1	1	1	2	2														
7	L507195-07 Field Blank	8	1	1	1	1	2	2														

Chain of Custody

Return Samples to: Eurofins Michigan
38855 Hills Tech Dr.
Farmington Hills, MI 48331

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☐

Client Contact Info

Name:
Jennifer Caporale
Address :
1110 South Pennsylvania
Address 2:
City, State Zip:
Lansing, Michigan 48901
Phone:
517-702-6482
Email:
Jennifer.Caporale@LBWL.com
Deliverables:

Project Info

Company:
Lansing Board of Water & Light
Purchase Order:
Purchase Order not required
Work Order:
Requested TAT:
Project Number:
24034575
Sample State: MI
Project Manager:
Howell, Leslie
Project Reference:
Sampler:
Marc Wahrer
Description:
Erickson Projects
Site Name:
Erickson Projects
Special Instructions:
Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner.

See following pages for Method and Container information.

240-228090 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L507195-01 MW-17A	Grab	Water	07/01/25 13:10			
2	L507195-02 MW-17B	Grab	Water	07/01/25 10:56			
3	L507195-03 MW-17C	Grab	Water	07/01/25 12:17			
4	L507195-04 MW-17D	Grab	Water	07/01/25 13:49			
5	L507195-05 MW-17E	Grab	Water	07/01/25 15:13			
6	L507195-06 MWT-17A	Grab	Water	07/01/25 09:10			
7	L507195-07 Field Blank	Grab	Water	07/01/25 08:15			

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished By:	Date/Time:			
Jennifer Caporale	07/02/25 09:53	Jennifer Caporale	07/02/25 09:53		7-3-25	7:45 EC

Chain of Custody Number: 359674

*H – Analysis on hold.

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Lansing Board of Water Site Name _____ Cooler unpacked by

Cooler Received on 7-3-25 Opened on 7-3-25

FedEx 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used. Bubble Wrap Foam Plastic Bag None Other _____

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☑ See Multiple Cooler Form

IR GUN # 17 (CF +0.2 °C) Observed Cooler Temp _____ °C Corrected Cooler Temp _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12 Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC463162
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20 SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved. _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation Date/Time VOAs Frozen _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: _____	1.7	1.9	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____	1.2	1.4	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____	240—34		Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____

7/3/2025

Login Container Summary Report

240-228090

8/4/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L507195-01 MW 17A	240-228090-A 1	Plastic 60 mL - unpreserved				
L507195-01 MW 17A	240-228090-B-1	Plastic 60 mL - unpreserved				
L507195-01 MW 17A	240-228090-C-1	Plastic 250ml with Nitric Acid	<2			
L507195-01 MW 17A	240-228090-D-1	Plastic 500ml unpreserved				
L507195-01 MW-17A	240-228090-E-1	Plastic 500ml - with Nitric Acid	<2			
L507195-01 MW 17A	240-228090-F-1	Plastic 1 liter unpreserved				
L507195-01 MW-17A	240-228090-G-1	Plastic 1 liter - Nitric Acid	<2			
L507195-01 MW-17A	240 228090-H-1	Plastic 1 liter Nitric Acid	<2			
L507195-02 MW-17B	240-228090-A-2	Plastic 60 mL - unpreserved				
L507195-02 MW-17B	240 228090-B 2	Plastic 60 mL unpreserved				
L507195-02 MW-17B	240-228090-C-2	Plastic 250ml - with Nitric Acid	<2			
L507195-02 MW 17B	240 228090-D-2	Plastic 500ml - unpreserved				
L507195-02 MW 17B	240-228090-E-2	Plastic 500ml - with Nitric Acid	<2			
L507195-02 MW 17B	240-228090-F-2	Plastic 1 liter - unpreserved				
L507195-02 MW-17B	240-228090-G-2	Plastic 1 liter - Nitric Acid	<2			
L507195-02 MW 17B	240-228090-H-2	Plastic 1 liter - Nitric Acid	<2			
L507195-03 MW-17C	240-228090-A-3	Plastic 60 mL - unpreserved				
L507195-03 MW 17C	240-228090-B-3	Plastic 60 mL - unpreserved				
L507195-03 MW-17C	240-228090-C-3	Plastic 250ml - with Nitric Acid	<2			
L507195-03 MW 17C	240-228090 D-3	Plastic 500ml - unpreserved				
L507195-03 MW-17C	240-228090-E-3	Plastic 500ml - with Nitric Acid	<2			
L507195-03 MW 17C	240-228090-F 3	Plastic 1 liter unpreserved				
L507195-03 MW-17C	240-228090-G-3	Plastic 1 liter - Nitric Acid	<2			
L507195-03 MW-17C	240-228090-H-3	Plastic 1 liter - Nitric Acid	<2			
L507195-04 MW-17D	240-228090 A-4	Plastic 60 mL - unpreserved				
L507195-04 MW 17D	240-228090-B-4	Plastic 60 mL - unpreserved				
L507195-04 MW-17D	240-228090-C-4	Plastic 250ml - with Nitric Acid	<2			
L507195-04 MW 17D	240-228090-D-4	Plastic 500ml unpreserved				
L507195-04 MW-17D	240 228090-E-4	Plastic 500ml with Nitric Acid	<2			
L507195-04 MW-17D	240 228090-F-4	Plastic 1 liter - unpreserved				
L507195-04 MW-17D	240-228090-G-4	Plastic 1 liter - Nitric Acid	<2			
L507195-04 MW-17D	240-228090-H-4	Plastic 1 liter - Nitric Acid	<2			
L507195-05 MW-17E	240-228090-A-5	Plastic 60 mL - unpreserved				
L507195-05 MW-17E	240-228090 B-5	Plastic 60 mL - unpreserved				
L507195-05 MW 17E	240-228090-C-5	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L507195-05 MW-17E	240 228090-D-5	Plastic 500ml - unpreserved				
L507195-05 MW 17E	240-228090-E-5	Plastic 500ml - with Nitric Acid	<2			
L507195-05 MW-17E	240-228090-F 5	Plastic 1 liter - unpreserved				
L507195-05 MW 17E	240-228090-G-5	Plastic 1 liter - Nitric Acid	<2			
L507195-05 MW-17E	240-228090 H 5	Plastic 1 liter - Nitric Acid	<2			
L507195-06 MWT-17A	240-228090-A-6	Plastic 60 mL - unpreserved				
L507195-06 MWT-17A	240-228090-B-6	Plastic 60 mL - unpreserved				
L507195-06 MWT 17A	240-228090-C-6	Plastic 250ml - with Nitric Acid	<2			
L507195-06 MWT-17A	240-228090-D-6	Plastic 500ml - unpreserved				
L507195-06 MWT-17A	240-228090-E-6	Plastic 500ml - with Nitric Acid	<2			
L507195-06 MWT-17A	240 228090-F-6	Plastic 1 liter - unpreserved				
L507195-06 MWT-17A	240-228090-G-6	Plastic 1 liter - Nitric Acid	<2			
L507195-06 MWT-17A	240-228090-H-6	Plastic 1 liter Nitric Acid	<2			
L507195-07 FIELD BLANK	240-228090-A-7	Plastic 60 mL - unpreserved				
L507195-07 FIELD BLANK	240-228090-B-7	Plastic 60 mL - unpreserved				
L507195-07 FIELD BLANK	240-228090-C-7	Plastic 250ml - with Nitric Acid	<2			
L507195-07 FIELD BLANK	240-228090-D-7	Plastic 500ml - unpreserved				
L507195-07 FIELD BLANK	240-228090-E-7	Plastic 500ml - with Nitric Acid	<2			
L507195-07 FIELD BLANK	240-228090-F-7	Plastic 1 liter - unpreserved				
L507195-07 FIELD BLANK	240-228090-G-7	Plastic 1 liter - Nitric Acid	<2			
L507195-07 FIELD BLANK	240-228090-H 7	Plastic 1 liter - Nitric Acid	<2			

ORIGIN ID:LANA (517) 702-6290
BOARD OF WATER & LIGHT WAREHSE
1110 S PENNSYLVANIA AVE
LANSING, MI 48912
UNITED STATES US

SHIP DATE: 02JUL25
ACTWGT: 66.35 LB
CAD: 6994398/SSFE2600
DIMS: 24x14x14 IN
BILL THIRD PARTY

Part # 156287-435 RRDW2 EXP 02/26

TO EUROFINS CLEVELAND
ATTN LAB
180 S VAN BUREN AVE

BARBERTON OH 44203
(111) 111-1111
INV:
PO:
REF:
DEPT:

FedEx Express

1 of 2
TRK# 0201 3906 0183 0313
MASTER
N1 CAKA

THU - 03 JUL 8:00A
FIRST OVERNIGHT
DSR AHS
44203
OH-US CLE

ORIGIN ID:LANA (517) 702-6290
BOARD OF WATER & LIGHT WAREHSE
1110 S PENNSYLVANIA AVE
LANSING, MI 48912
UNITED STATES US

SHIP DATE: 02JUL25
ACTWGT: 65.35 LB
CAD: 6994398/SSFE2600
DIMS: 24x14x14 IN
BILL THIRD PARTY

Part # 156287-435 RR

TO EUROFINS CLEVELAND
ATTN LAB
180 S VAN BUREN AVE

BARBERTON OH 44203
(111) 111-1111
INV:
PO:
REF:
DEPT:

240-228090 Waybi

FedEx Express

2 of 2
MPS# 0263 3906 0183 0324
Mstr# 3906 0183 0313 0201
N1 CAKA

THU - 03 JUL 8:00A
FIRST OVERNIGHT
DSR
44203
OH-US CLE

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-204616.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-228090-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 7/17/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21Standard Target List	904.0/PrecSep_0Standard Target List	Ra226_228GFPC_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L507195-01 MW-17A (240-228090-1)	7/1/25	13:10 Eastern	G	Water			X	X	X	2	
L507195-02 MW-17B (240-228090-2)	7/1/25	10:56 Eastern	G	Water			X	X	X	2	
L507195-03 MW-17C (240-228090-3)	7/1/25	12:17 Eastern	G	Water			X	X	X	2	
L507195-04 MW-17D (240-228090-4)	7/1/25	13:49 Eastern	G	Water			X	X	X	2	
L507195-05 MW-17E (240-228090-5)	7/1/25	15:13 Eastern	G	Water			X	X	X	2	
L507195-06 MWT-17A (240-228090-6)	7/1/25	09:10 Eastern	G	Water			X	X	X	2	
L507195-07 FIELD BLANK (240-228090-7)	7/1/25	08:15 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	7/7/25	ET	Sierra Worthington	JUL 0 8 2025 0850	GMSR
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

eurofins | Environment Testing

280-210026 Login
PM: Bieniulis, Dylan T
Company: HSG LLC

CONDITION UPON RECEIPT FORM (CUR)

Client: Denver

Initiated by: MLP Date: JUL 08 2025 Time: 0850 Shipper: FE Package Quantity: 2

- Mercury solid samples must be received at 0- 6°C. If not, note temp below.
- Metal solid samples must be refrigerated (0- 6°C) upon receipt.
- If samples are from West Virginia, please fill out form ADMIN-0031.

Thermometer ID and CF (Circle One):		
ID:	CF:	ID: IR-4 CF: +1.3°C

	Shipping #(s)	Uncorrected Package Temp (°C)	Corrected Package Temp (°C)
1.	4569 8137 1939	19.4	20.7
2.	1941	13.4	14.7
3.			
4.			
5.			
6.			

Condition Circle "Y" for yes, "N" for no and "N/A" for not applicable.
Inspected by: SMW

1.	(Y) N	Are there custody seals present on the cooler?	9.	Y N (N/A)	Do custody seals on bottles appear to be tampered with?
2.	Y (N) N/A	Do custody seals on cooler appear to be tampered with?	10.	(Y) N	Sample received in proper containers?
3.	(Y) N	Were contents of cooler frisked after opening, but before unpacking?	11.	Y N (N/A)	Headspace in Rn-222 samples? • Any air bubble must have NCM • If Yes, note sample ID's below
4.	(Y) N	Sample received with Chain of Custody (COC)?	12.	(Y) N N/A	Individual containers frisked after unpacking? CLF
5.	(Y) N	Does the COC include the following : • sample ID's that match the container(s)? • location, date and time of collection? • collector's name? • sample preservation type?	13.	(Y) N N/A	Was sample received with proper pH? pH strip lot #: LRS-4801 If not: • contact PM (do not adjust without approval) • Record sample ID and pH in notes • If pH is adjusted, record info below
6.	Y (N)	Was sample received broken?	14.	(Y) N N/A	Are containers for Rn-222, C-14, Cl-36, H-3 & I-129/131 marked with "Do Not Preserve" label?
7.	(Y) N	Is sample volume sufficient for analysis?	15.	Y N (N/A)	Are soil containers for C-14, H-3 & I-129/131 marked with "Do Not Dry" label?
8.	Y (N)	Are there custody seals present on bottles?			

Notes:

pH Adjustment (if needed)	Date/Time of Preservation:
Preservative and lot#:	Final pH checked by (initials/date):
Amount of Preservative:	Final pH and pH strip lot#:

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-228090-2

Login Number: 228090
List Number: 2
Creator: Worthington, Sierra M

List Source: Eurofins St. Louis
List Creation: 07/08/25 11:57 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 7/25/2025 5:08:43 PM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-228528-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

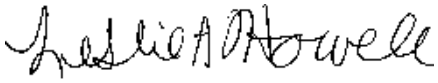
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
7/25/2025 5:08:43 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 11
QC Sample Results 23
QC Association Summary 28
Lab Chronicle 32
Certification Summary 35
Chain of Custody 36
Receipt Checklists 43

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-1

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-228528-1 — Eurofins Cleveland

Job Narrative
240-228528-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 7/10/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.0°C and 1.4°C.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 2540D: The sample duplicate (DUP) precision for analytical batch 240-663433 was outside control limits. Sample non-homogeneity is suspected.

Method 300.0_28D: The volume of spiking solution was inadvertently not added to the matrix spike (MS), and matrix spike duplicate (MSD) associated with analytical batch 240-663480.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.7 Rev 4.4	Metals (ICP)	EPA	EET SSM
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.7	Preparation, Total Metals	EPA	EET SSM
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-228528-1	L507211-01 MW-18A	Water	07/08/25 09:10	07/10/25 08:00
240-228528-2	L507211-02 MW-18B	Water	07/08/25 10:48	07/10/25 08:00
240-228528-3	L507211-03 MW-18C	Water	07/08/25 12:02	07/10/25 08:00
240-228528-4	L507211-04 MW-18D	Water	07/08/25 13:18	07/10/25 08:00
240-228528-5	L507211-05 MWT-18A	Water	07/08/25 09:10	07/10/25 08:00
240-228528-6	L507211-06 FIELD BLANK	Water	07/08/25 08:05	07/10/25 08:00

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-1

Client Sample ID: L507211-01 MW-18A

Lab Sample ID: 240-228528-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.79		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	6.9		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	58		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.00096	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.040		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.11		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	88		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	15		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.065		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.3		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0015	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	280		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	500		100	78	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.6	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	82		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.69		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	180		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L507211-02 MW-18B

Lab Sample ID: 240-228528-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.0		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	8.8		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	85		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.058		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.13		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0098		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	170		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	31		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.12		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.6		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0015	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	540		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	170		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	930		100	78	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	4.9		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	91		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.37		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-1

Client Sample ID: L507211-02 MW-18B (Continued) — Lab Sample ID: 240-228528-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	460		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L507211-03 MW-18C — Lab Sample ID: 240-228528-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.6		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	7.2		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	69		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.043		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00010	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.093		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0068		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	150		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	38		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.082		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.3		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0012	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	520		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	870		100	78	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	4.8	J	8.0	0.80	mg/L	1		2540D-2020	Total/NA
Chloride	63		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.26		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	380		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L507211-04 MW-18D — Lab Sample ID: 240-228528-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.4		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	5.8		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	130		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.019		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00010	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.043		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0027		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	53		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	11		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.059		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.95		0.10	0.013	mg/L	1		200.8	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L507211-04 MW-18D (Continued)

Lab Sample ID: 240-228528-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	0.0012	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	180		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	310		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Suspended Solids	0.90	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	25		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	1.2		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	130		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L507211-05 MWT-18A

Lab Sample ID: 240-228528-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.78		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	6.9		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	57		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.039		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.11		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	84		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	15		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.064		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.2		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0011	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	270		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	500		100	78	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.1	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	82		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.69		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	180		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L507211-06 FIELD BLANK

Lab Sample ID: 240-228528-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	0.0016	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Total Suspended Solids	0.50	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L507211-01 MW-18A
Date Collected: 07/08/25 09:10
Date Received: 07/10/25 08:00

Lab Sample ID: 240-228528-1
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.79**		0.10	0.057	mg/L		07/11/25 14:00	07/15/25 00:29	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**6.9**		3.3	0.17	mg/L		07/11/25 17:06	07/24/25 18:02	1
Na	**58**		0.60	0.33	mg/L		07/11/25 17:06	07/24/25 18:02	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/11/25 14:00	07/14/25 20:27	1
Arsenic	**0.00096**	**J**	0.0050	0.00075	mg/L		07/11/25 14:00	07/14/25 20:27	1
Barium	**0.040**		0.0050	0.00077	mg/L		07/11/25 14:00	07/14/25 20:27	1
Beryllium	ND		0.0010	0.00027	mg/L		07/11/25 14:00	07/14/25 20:27	1
Cadmium	ND		0.0010	0.000077	mg/L		07/11/25 14:00	07/14/25 20:27	1
Cobalt	ND		0.0010	0.000086	mg/L		07/11/25 14:00	07/14/25 20:27	1
Chromium	ND		0.0050	0.0012	mg/L		07/11/25 14:00	07/14/25 20:27	1
Copper	ND		0.0020	0.0017	mg/L		07/11/25 14:00	07/14/25 20:27	1
Molybdenum	**0.11**		0.0050	0.0011	mg/L		07/11/25 14:00	07/14/25 20:27	1
Nickel	ND		0.0020	0.0015	mg/L		07/11/25 14:00	07/14/25 20:27	1
Lead	ND		0.0010	0.00045	mg/L		07/11/25 14:00	07/14/25 20:27	1
Antimony	ND		0.0020	0.00057	mg/L		07/11/25 14:00	07/14/25 20:27	1
Selenium	ND		0.0050	0.00089	mg/L		07/11/25 14:00	07/14/25 20:27	1
Thallium	ND		0.0010	0.00051	mg/L		07/11/25 14:00	07/14/25 20:27	1
Vanadium	ND		0.0050	0.00082	mg/L		07/11/25 14:00	07/14/25 20:27	1
Calcium	**88**		1.0	0.25	mg/L		07/11/25 14:00	07/14/25 20:27	1
Magnesium	**15**		1.0	0.061	mg/L		07/11/25 14:00	07/14/25 20:27	1
Lithium	**0.065**		0.0080	0.0034	mg/L		07/11/25 14:00	07/14/25 20:27	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.3**		0.10	0.013	mg/L		07/11/25 17:06	07/22/25 11:27	1
Zinc	**0.0015**	**J B**	0.0070	0.00093	mg/L		07/11/25 17:06	07/22/25 11:27	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**280**		33	33	mg/L			07/17/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/11/25 14:00	07/14/25 13:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**130**		5.0	2.6	mg/L			07/16/25 13:14	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/16/25 13:14	1
Total Dissolved Solids (SM 2540 C-2020)	**500**		100	78	mg/L			07/11/25 11:34	1
Total Suspended Solids (SM 2540D-2020)	**1.6**	**J**	4.0	0.40	mg/L			07/11/25 10:52	1
Chloride (EPA 300.0-1993 R2.1)	**82**		1.0	0.13	mg/L			07/12/25 03:23	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-1

Client Sample ID: L507211-01 MW-18A
Date Collected: 07/08/25 09:10
Date Received: 07/10/25 08:00

Lab Sample ID: 240-228528-1
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.69		0.050	0.024	mg/L			07/12/25 03:23	1
Sulfate (EPA 300.0-1993 R2.1)	180		1.0	0.35	mg/L			07/12/25 03:23	1

Client Sample ID: L507211-02 MW-18B
Date Collected: 07/08/25 10:48
Date Received: 07/10/25 08:00

Lab Sample ID: 240-228528-2
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.0**		0.10	0.057	mg/L		07/11/25 14:00	07/15/25 00:34	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**8.8**		3.3	0.17	mg/L		07/11/25 17:06	07/24/25 18:05	1
Na	**85**		0.60	0.33	mg/L		07/11/25 17:06	07/24/25 18:05	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/11/25 14:00	07/14/25 20:29	1
Arsenic	ND		0.0050	0.00075	mg/L		07/11/25 14:00	07/14/25 20:29	1
Barium	**0.058**		0.0050	0.00077	mg/L		07/11/25 14:00	07/14/25 20:29	1
Beryllium	ND		0.0010	0.00027	mg/L		07/11/25 14:00	07/14/25 20:29	1
Cadmium	ND		0.0010	0.000077	mg/L		07/11/25 14:00	07/14/25 20:29	1
Cobalt	ND		0.0010	0.000086	mg/L		07/11/25 14:00	07/14/25 20:29	1
Chromium	ND		0.0050	0.0012	mg/L		07/11/25 14:00	07/14/25 20:29	1
Copper	ND		0.0020	0.0017	mg/L		07/11/25 14:00	07/14/25 20:29	1
Molybdenum	**0.13**		0.0050	0.0011	mg/L		07/11/25 14:00	07/14/25 20:29	1
Nickel	**0.0098**		0.0020	0.0015	mg/L		07/11/25 14:00	07/14/25 20:29	1
Lead	ND		0.0010	0.00045	mg/L		07/11/25 14:00	07/14/25 20:29	1
Antimony	ND		0.0020	0.00057	mg/L		07/11/25 14:00	07/14/25 20:29	1
Selenium	ND		0.0050	0.00089	mg/L		07/11/25 14:00	07/14/25 20:29	1
Thallium	ND		0.0010	0.00051	mg/L		07/11/25 14:00	07/14/25 20:29	1
Vanadium	ND		0.0050	0.00082	mg/L		07/11/25 14:00	07/14/25 20:29	1
Calcium	**170**		1.0	0.25	mg/L		07/11/25 14:00	07/14/25 20:29	1
Magnesium	**31**		1.0	0.061	mg/L		07/11/25 14:00	07/14/25 20:29	1
Lithium	**0.12**		0.0080	0.0034	mg/L		07/11/25 14:00	07/14/25 20:29	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.6**		0.10	0.013	mg/L		07/11/25 17:06	07/22/25 11:30	1
Zinc	**0.0015**	**J B**	0.0070	0.00093	mg/L		07/11/25 17:06	07/22/25 11:30	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**540**		33	33	mg/L			07/17/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/11/25 14:00	07/14/25 13:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**170**		5.0	2.6	mg/L			07/16/25 13:21	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/16/25 13:21	1
Total Dissolved Solids (SM 2540 C-2020)	**930**		100	78	mg/L			07/11/25 11:34	1
Total Suspended Solids (SM 2540D-2020)	**4.9**		4.0	0.40	mg/L			07/11/25 10:52	1
Chloride (EPA 300.0-1993 R2.1)	**91**		1.0	0.13	mg/L			07/12/25 03:42	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-1

Client Sample ID: L507211-02 MW-18B
Date Collected: 07/08/25 10:48
Date Received: 07/10/25 08:00

Lab Sample ID: 240-228528-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.37		0.050	0.024	mg/L			07/12/25 03:42	1
Sulfate (EPA 300.0-1993 R2.1)	460		5.0	1.7	mg/L			07/12/25 03:51	5

Client Sample ID: L507211-03 MW-18C
Date Collected: 07/08/25 12:02
Date Received: 07/10/25 08:00

Lab Sample ID: 240-228528-3
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.6		0.10	0.057	mg/L		07/11/25 14:00	07/15/25 00:38	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	7.2		3.3	0.17	mg/L		07/11/25 17:06	07/24/25 18:09	1
Na	69		0.60	0.33	mg/L		07/11/25 17:06	07/24/25 18:09	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/11/25 14:00	07/14/25 20:37	1
Arsenic	ND		0.0050	0.00075	mg/L		07/11/25 14:00	07/14/25 20:37	1
Barium	0.043		0.0050	0.00077	mg/L		07/11/25 14:00	07/14/25 20:37	1
Beryllium	ND		0.0010	0.00027	mg/L		07/11/25 14:00	07/14/25 20:37	1
Cadmium	ND		0.0010	0.000077	mg/L		07/11/25 14:00	07/14/25 20:37	1
Cobalt	0.00010	J	0.0010	0.000086	mg/L		07/11/25 14:00	07/14/25 20:37	1
Chromium	ND		0.0050	0.0012	mg/L		07/11/25 14:00	07/14/25 20:37	1
Copper	ND		0.0020	0.0017	mg/L		07/11/25 14:00	07/14/25 20:37	1
Molybdenum	0.093		0.0050	0.0011	mg/L		07/11/25 14:00	07/14/25 20:37	1
Nickel	0.0068		0.0020	0.0015	mg/L		07/11/25 14:00	07/14/25 20:37	1
Lead	ND		0.0010	0.00045	mg/L		07/11/25 14:00	07/14/25 20:37	1
Antimony	ND		0.0020	0.00057	mg/L		07/11/25 14:00	07/14/25 20:37	1
Selenium	ND		0.0050	0.00089	mg/L		07/11/25 14:00	07/14/25 20:37	1
Thallium	ND		0.0010	0.00051	mg/L		07/11/25 14:00	07/14/25 20:37	1
Vanadium	ND		0.0050	0.00082	mg/L		07/11/25 14:00	07/14/25 20:37	1
Calcium	150		1.0	0.25	mg/L		07/11/25 14:00	07/14/25 20:37	1
Magnesium	38		1.0	0.061	mg/L		07/11/25 14:00	07/14/25 20:37	1
Lithium	0.082		0.0080	0.0034	mg/L		07/11/25 14:00	07/14/25 20:37	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	2.3		0.10	0.013	mg/L		07/11/25 17:06	07/22/25 11:33	1
Zinc	0.0012	J B	0.0070	0.00093	mg/L		07/11/25 17:06	07/22/25 11:33	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	520		33	33	mg/L			07/17/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/11/25 14:00	07/14/25 13:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	220		5.0	2.6	mg/L			07/16/25 13:26	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/16/25 13:26	1
Total Dissolved Solids (SM 2540 C-2020)	870		100	78	mg/L			07/11/25 11:34	1
Total Suspended Solids (SM 2540D-2020)	4.8	J	8.0	0.80	mg/L			07/11/25 10:52	1
Chloride (EPA 300.0-1993 R2.1)	63		1.0	0.13	mg/L			07/12/25 04:00	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-1

Client Sample ID: L507211-03 MW-18C
Date Collected: 07/08/25 12:02
Date Received: 07/10/25 08:00

Lab Sample ID: 240-228528-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.26		0.050	0.024	mg/L			07/12/25 04:00	1
Sulfate (EPA 300.0-1993 R2.1)	380		5.0	1.7	mg/L			07/12/25 04:09	5

Client Sample ID: L507211-04 MW-18D
Date Collected: 07/08/25 13:18
Date Received: 07/10/25 08:00

Lab Sample ID: 240-228528-4
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.4**		0.10	0.057	mg/L		07/11/25 14:00	07/15/25 00:42	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**5.8**		3.3	0.17	mg/L		07/11/25 17:06	07/24/25 18:12	1
Na	**130**		0.60	0.33	mg/L		07/11/25 17:06	07/24/25 18:12	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/11/25 14:00	07/14/25 20:40	1
Arsenic	ND		0.0050	0.00075	mg/L		07/11/25 14:00	07/14/25 20:40	1
Barium	**0.019**		0.0050	0.00077	mg/L		07/11/25 14:00	07/14/25 20:40	1
Beryllium	ND		0.0010	0.00027	mg/L		07/11/25 14:00	07/14/25 20:40	1
Cadmium	ND		0.0010	0.000077	mg/L		07/11/25 14:00	07/14/25 20:40	1
Cobalt	**0.00010**	**J**	0.0010	0.000086	mg/L		07/11/25 14:00	07/14/25 20:40	1
Chromium	ND		0.0050	0.0012	mg/L		07/11/25 14:00	07/14/25 20:40	1
Copper	ND		0.0020	0.0017	mg/L		07/11/25 14:00	07/14/25 20:40	1
Molybdenum	**0.043**		0.0050	0.0011	mg/L		07/11/25 14:00	07/14/25 20:40	1
Nickel	**0.0027**		0.0020	0.0015	mg/L		07/11/25 14:00	07/14/25 20:40	1
Lead	ND		0.0010	0.00045	mg/L		07/11/25 14:00	07/14/25 20:40	1
Antimony	ND		0.0020	0.00057	mg/L		07/11/25 14:00	07/14/25 20:40	1
Selenium	ND		0.0050	0.00089	mg/L		07/11/25 14:00	07/14/25 20:40	1
Thallium	ND		0.0010	0.00051	mg/L		07/11/25 14:00	07/14/25 20:40	1
Vanadium	ND		0.0050	0.00082	mg/L		07/11/25 14:00	07/14/25 20:40	1
Calcium	**53**		1.0	0.25	mg/L		07/11/25 14:00	07/14/25 20:40	1
Magnesium	**11**		1.0	0.061	mg/L		07/11/25 14:00	07/14/25 20:40	1
Lithium	**0.059**		0.0080	0.0034	mg/L		07/11/25 14:00	07/14/25 20:40	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.95**		0.10	0.013	mg/L		07/11/25 17:06	07/22/25 11:36	1
Zinc	**0.0012**	**J B**	0.0070	0.00093	mg/L		07/11/25 17:06	07/22/25 11:36	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**180**		33	33	mg/L			07/17/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/11/25 14:00	07/14/25 13:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**310**		5.0	2.6	mg/L			07/16/25 13:31	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/16/25 13:31	1
Total Dissolved Solids (SM 2540 C-2020)	ND		100	78	mg/L			07/11/25 11:34	1
Total Suspended Solids (SM 2540D-2020)	**0.90**	**J**	4.0	0.40	mg/L			07/11/25 10:52	1
Chloride (EPA 300.0-1993 R2.1)	**25**		1.0	0.13	mg/L			07/12/25 04:18	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-1

Client Sample ID: L507211-04 MW-18D
Date Collected: 07/08/25 13:18
Date Received: 07/10/25 08:00

Lab Sample ID: 240-228528-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	1.2		0.050	0.024	mg/L			07/12/25 04:18	1
Sulfate (EPA 300.0-1993 R2.1)	130		1.0	0.35	mg/L			07/12/25 04:18	1

Client Sample ID: L507211-05 MWT-18A
Date Collected: 07/08/25 09:10
Date Received: 07/10/25 08:00

Lab Sample ID: 240-228528-5
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.78**		0.10	0.057	mg/L		07/11/25 14:00	07/15/25 00:47	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**6.9**		3.3	0.17	mg/L		07/11/25 17:06	07/24/25 18:15	1
Na	**57**		0.60	0.33	mg/L		07/11/25 17:06	07/24/25 18:15	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/11/25 14:00	07/14/25 20:43	1
Arsenic	ND		0.0050	0.00075	mg/L		07/11/25 14:00	07/14/25 20:43	1
Barium	**0.039**		0.0050	0.00077	mg/L		07/11/25 14:00	07/14/25 20:43	1
Beryllium	ND		0.0010	0.00027	mg/L		07/11/25 14:00	07/14/25 20:43	1
Cadmium	ND		0.0010	0.000077	mg/L		07/11/25 14:00	07/14/25 20:43	1
Cobalt	ND		0.0010	0.000086	mg/L		07/11/25 14:00	07/14/25 20:43	1
Chromium	ND		0.0050	0.0012	mg/L		07/11/25 14:00	07/14/25 20:43	1
Copper	ND		0.0020	0.0017	mg/L		07/11/25 14:00	07/14/25 20:43	1
Molybdenum	**0.11**		0.0050	0.0011	mg/L		07/11/25 14:00	07/14/25 20:43	1
Nickel	ND		0.0020	0.0015	mg/L		07/11/25 14:00	07/14/25 20:43	1
Lead	ND		0.0010	0.00045	mg/L		07/11/25 14:00	07/14/25 20:43	1
Antimony	ND		0.0020	0.00057	mg/L		07/11/25 14:00	07/14/25 20:43	1
Selenium	ND		0.0050	0.00089	mg/L		07/11/25 14:00	07/14/25 20:43	1
Thallium	ND		0.0010	0.00051	mg/L		07/11/25 14:00	07/14/25 20:43	1
Vanadium	ND		0.0050	0.00082	mg/L		07/11/25 14:00	07/14/25 20:43	1
Calcium	**84**		1.0	0.25	mg/L		07/11/25 14:00	07/14/25 20:43	1
Magnesium	**15**		1.0	0.061	mg/L		07/11/25 14:00	07/14/25 20:43	1
Lithium	**0.064**		0.0080	0.0034	mg/L		07/11/25 14:00	07/14/25 20:43	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.2**		0.10	0.013	mg/L		07/11/25 17:06	07/22/25 11:39	1
Zinc	**0.0011**	**J B**	0.0070	0.00093	mg/L		07/11/25 17:06	07/22/25 11:39	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**270**		33	33	mg/L			07/17/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/11/25 14:00	07/14/25 13:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**130**		5.0	2.6	mg/L			07/16/25 13:47	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/16/25 13:47	1
Total Dissolved Solids (SM 2540 C-2020)	**500**		100	78	mg/L			07/11/25 11:34	1
Total Suspended Solids (SM 2540D-2020)	**1.1**	**J**	4.0	0.40	mg/L			07/11/25 10:52	1
Chloride (EPA 300.0-1993 R2.1)	**82**		1.0	0.13	mg/L			07/12/25 05:23	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-1

Client Sample ID: L507211-05 MWT-18A
Date Collected: 07/08/25 09:10
Date Received: 07/10/25 08:00

Lab Sample ID: 240-228528-5
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.69		0.050	0.024	mg/L			07/12/25 05:23	1
Sulfate (EPA 300.0-1993 R2.1)	180		1.0	0.35	mg/L			07/12/25 05:23	1

Client Sample ID: L507211-06 FIELD BLANK
Date Collected: 07/08/25 08:05
Date Received: 07/10/25 08:00

Lab Sample ID: 240-228528-6
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		07/11/25 14:00	07/15/25 00:51	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		07/14/25 18:59	07/24/25 18:18	1
Na	ND		0.60	0.33	mg/L		07/14/25 18:59	07/24/25 18:18	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/11/25 14:00	07/14/25 20:45	1
Arsenic	ND		0.0050	0.00075	mg/L		07/11/25 14:00	07/14/25 20:45	1
Barium	ND		0.0050	0.00077	mg/L		07/11/25 14:00	07/14/25 20:45	1
Beryllium	ND		0.0010	0.00027	mg/L		07/11/25 14:00	07/14/25 20:45	1
Cadmium	ND		0.0010	0.000077	mg/L		07/11/25 14:00	07/14/25 20:45	1
Cobalt	ND		0.0010	0.000086	mg/L		07/11/25 14:00	07/14/25 20:45	1
Chromium	ND		0.0050	0.0012	mg/L		07/11/25 14:00	07/14/25 20:45	1
Copper	ND		0.0020	0.0017	mg/L		07/11/25 14:00	07/14/25 20:45	1
Molybdenum	ND		0.0050	0.0011	mg/L		07/11/25 14:00	07/14/25 20:45	1
Nickel	ND		0.0020	0.0015	mg/L		07/11/25 14:00	07/14/25 20:45	1
Lead	ND		0.0010	0.00045	mg/L		07/11/25 14:00	07/14/25 20:45	1
Antimony	ND		0.0020	0.00057	mg/L		07/11/25 14:00	07/14/25 20:45	1
Selenium	ND		0.0050	0.00089	mg/L		07/11/25 14:00	07/14/25 20:45	1
Thallium	ND		0.0010	0.00051	mg/L		07/11/25 14:00	07/14/25 20:45	1
Vanadium	ND		0.0050	0.00082	mg/L		07/11/25 14:00	07/14/25 20:45	1
Calcium	ND		1.0	0.25	mg/L		07/11/25 14:00	07/14/25 20:45	1
Magnesium	ND		1.0	0.061	mg/L		07/11/25 14:00	07/14/25 20:45	1
Lithium	ND		0.0080	0.0034	mg/L		07/11/25 14:00	07/14/25 20:45	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		07/14/25 18:59	07/16/25 14:58	1
Zinc	**0.0016**	**J B**	0.0070	0.00093	mg/L		07/14/25 18:59	07/16/25 14:58	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			07/17/25 15:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/11/25 14:00	07/14/25 13:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/16/25 13:52	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/16/25 13:52	1
Total Dissolved Solids (SM 2540 C-2020)	ND		100	78	mg/L			07/11/25 11:34	1
Total Suspended Solids (SM 2540D-2020)	**0.50**	**J**	4.0	0.40	mg/L			07/11/25 10:52	1
Chloride (EPA 300.0-1993 R2.1)	ND	F1	1.0	0.13	mg/L			07/12/25 04:55	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-1

Client Sample ID: L507211-06 FIELD BLANK
Date Collected: 07/08/25 08:05
Date Received: 07/10/25 08:00

Lab Sample ID: 240-228528-6
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	ND	F1	0.050	0.024	mg/L			07/12/25 04:55	1
Sulfate (EPA 300.0-1993 R2.1)	ND	F1	1.0	0.35	mg/L			07/12/25 04:55	1

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-663425/1-A
Matrix: Water
Analysis Batch: 663725

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 663425

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		07/11/25 14:00	07/14/25 22:52	1

Lab Sample ID: LCS 240-663425/2-A
Matrix: Water
Analysis Batch: 663725

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 663425

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.05		mg/L		105	85 - 115

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-8011/25-A
Matrix: Water
Analysis Batch: 8281

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8011

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		07/11/25 17:06	07/22/25 10:45	1
Zinc	0.00120	J	0.0070	0.00093	mg/L		07/11/25 17:06	07/22/25 10:45	1

Lab Sample ID: LCS 350-8011/26-A
Matrix: Water
Analysis Batch: 8281

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8011

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	18.7		mg/L		94	85 - 115
Zinc	1.00	0.915		mg/L		92	85 - 115

Lab Sample ID: MB 350-8058/24-A
Matrix: Water
Analysis Batch: 8133

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8058

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		07/14/25 18:59	07/16/25 13:53	1
Zinc	0.00491	J	0.0070	0.00093	mg/L		07/14/25 18:59	07/16/25 13:53	1

Lab Sample ID: LCS 350-8058/25-A
Matrix: Water
Analysis Batch: 8133

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8058

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	19.0		mg/L		95	85 - 115
Zinc	1.00	0.942		mg/L		94	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-663425/1-A
Matrix: Water
Analysis Batch: 663769

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 663425

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/11/25 14:00	07/14/25 19:34	1
Arsenic	ND		0.0050	0.00075	mg/L		07/11/25 14:00	07/14/25 19:34	1
Barium	ND		0.0050	0.00077	mg/L		07/11/25 14:00	07/14/25 19:34	1
Beryllium	ND		0.0010	0.00027	mg/L		07/11/25 14:00	07/14/25 19:34	1
Cadmium	ND		0.0010	0.000077	mg/L		07/11/25 14:00	07/14/25 19:34	1
Cobalt	ND		0.0010	0.000086	mg/L		07/11/25 14:00	07/14/25 19:34	1
Chromium	ND		0.0050	0.0012	mg/L		07/11/25 14:00	07/14/25 19:34	1
Copper	ND		0.0020	0.0017	mg/L		07/11/25 14:00	07/14/25 19:34	1
Molybdenum	ND		0.0050	0.0011	mg/L		07/11/25 14:00	07/14/25 19:34	1
Nickel	ND		0.0020	0.0015	mg/L		07/11/25 14:00	07/14/25 19:34	1
Lead	ND		0.0010	0.00045	mg/L		07/11/25 14:00	07/14/25 19:34	1
Antimony	ND		0.0020	0.00057	mg/L		07/11/25 14:00	07/14/25 19:34	1
Selenium	ND		0.0050	0.00089	mg/L		07/11/25 14:00	07/14/25 19:34	1
Thallium	ND		0.0010	0.00051	mg/L		07/11/25 14:00	07/14/25 19:34	1
Vanadium	ND		0.0050	0.00082	mg/L		07/11/25 14:00	07/14/25 19:34	1
Calcium	ND		1.0	0.25	mg/L		07/11/25 14:00	07/14/25 19:34	1
Magnesium	ND		1.0	0.061	mg/L		07/11/25 14:00	07/14/25 19:34	1
Lithium	ND		0.0080	0.0034	mg/L		07/11/25 14:00	07/14/25 19:34	1

Lab Sample ID: LCS 240-663425/3-A
Matrix: Water
Analysis Batch: 663769

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 663425

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.0948		mg/L		95	85 - 115
Arsenic	1.00	0.941		mg/L		94	85 - 115
Barium	1.00	0.917		mg/L		92	85 - 115
Beryllium	0.500	0.457		mg/L		91	85 - 115
Cadmium	0.500	0.451		mg/L		90	85 - 115
Cobalt	0.500	0.483		mg/L		97	85 - 115
Chromium	0.500	0.465		mg/L		93	85 - 115
Copper	0.500	0.463		mg/L		93	85 - 115
Molybdenum	0.500	0.463		mg/L		93	85 - 115
Nickel	0.500	0.461		mg/L		92	85 - 115
Lead	0.500	0.514		mg/L		103	85 - 115
Antimony	0.100	0.0936		mg/L		94	85 - 115
Selenium	1.00	0.906		mg/L		91	85 - 115
Thallium	1.00	1.07		mg/L		107	85 - 115
Vanadium	0.500	0.469		mg/L		94	85 - 115
Calcium	25.0	23.5		mg/L		94	85 - 115
Magnesium	25.0	23.7		mg/L		95	85 - 115
Lithium	0.500	0.486		mg/L		97	85 - 115

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-663423/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 663722 — **Prep Batch: 663423**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/11/25 14:00	07/14/25 13:30	1

Lab Sample ID: LCS 240-663423/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 663722 — **Prep Batch: 663423**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00497		mg/L		99	85 - 115

Lab Sample ID: 240-228528-1 MS — **Client Sample ID: L507211-01 MW-18A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 663722 — **Prep Batch: 663423**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00100	0.000986		mg/L		99	70 - 130

Lab Sample ID: 240-228528-1 MSD — **Client Sample ID: L507211-01 MW-18A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 663722 — **Prep Batch: 663423**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.000947		mg/L		95	70 - 130	4	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-664072/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 664072

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			07/16/25 12:36	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			07/16/25 12:36	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-663448/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 663448

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		100	78	mg/L			07/11/25 11:34	1

Lab Sample ID: LCS 240-663448/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 663448

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	240	191		mg/L		80	80 - 120

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-663433/1
Matrix: Water
Analysis Batch: 663433

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			07/11/25 10:52	1

Lab Sample ID: LCS 240-663433/2
Matrix: Water
Analysis Batch: 663433

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	30.0	27.0		mg/L		90	64 - 120

Lab Sample ID: 240-228528-3 DU
Matrix: Water
Analysis Batch: 663433

Client Sample ID: L507211-03 MW-18C
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	4.8	J	5.40	J F5	mg/L		12	10

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-663480/3
Matrix: Water
Analysis Batch: 663480

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			07/12/25 01:06	1
Fluoride	ND		0.050	0.024	mg/L			07/12/25 01:06	1
Sulfate	ND		1.0	0.35	mg/L			07/12/25 01:06	1

Lab Sample ID: LCS 240-663480/4
Matrix: Water
Analysis Batch: 663480

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.5		mg/L		99	90 - 110
Fluoride	2.50	2.54		mg/L		102	90 - 110
Sulfate	50.0	49.6		mg/L		99	90 - 110

Lab Sample ID: 240-228528-6 MS
Matrix: Water
Analysis Batch: 663480

Client Sample ID: L507211-06 FIELD BLANK
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND	F1	50.0	ND	F1	mg/L		0	80 - 120
Fluoride	ND	F1	2.50	ND	F1	mg/L		0	80 - 120
Sulfate	ND	F1	50.0	ND	F1	mg/L		0	80 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-228528-6 MSD
Matrix: Water
Analysis Batch: 663480

Client Sample ID: L507211-06 FIELD BLANK
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND	F1	50.0	ND	F1	mg/L		0	80 - 120	NC	15
Fluoride	ND	F1	2.50	ND	F1	mg/L		0	80 - 120	NC	15
Sulfate	ND	F1	50.0	ND	F1	mg/L		0	80 - 120	NC	15

Metals

Prep Batch: 8011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228528-1	L507211-01 MW-18A	Total/NA	Water	200.7	
240-228528-2	L507211-02 MW-18B	Total/NA	Water	200.7	
240-228528-3	L507211-03 MW-18C	Total/NA	Water	200.7	
240-228528-4	L507211-04 MW-18D	Total/NA	Water	200.7	
240-228528-5	L507211-05 MWT-18A	Total/NA	Water	200.7	
MB 350-8011/25-A	Method Blank	Total/NA	Water	200.7	
LCS 350-8011/26-A	Lab Control Sample	Total/NA	Water	200.7	

Prep Batch: 8058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228528-6	L507211-06 FIELD BLANK	Total/NA	Water	200.7	
MB 350-8058/24-A	Method Blank	Total/NA	Water	200.7	
LCS 350-8058/25-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 8133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228528-6	L507211-06 FIELD BLANK	Total/NA	Water	200.8	8058
MB 350-8058/24-A	Method Blank	Total/NA	Water	200.8	8058
LCS 350-8058/25-A	Lab Control Sample	Total/NA	Water	200.8	8058

Analysis Batch: 8281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228528-1	L507211-01 MW-18A	Total/NA	Water	200.8	8011
240-228528-2	L507211-02 MW-18B	Total/NA	Water	200.8	8011
240-228528-3	L507211-03 MW-18C	Total/NA	Water	200.8	8011
240-228528-4	L507211-04 MW-18D	Total/NA	Water	200.8	8011
240-228528-5	L507211-05 MWT-18A	Total/NA	Water	200.8	8011
MB 350-8011/25-A	Method Blank	Total/NA	Water	200.8	8011
LCS 350-8011/26-A	Lab Control Sample	Total/NA	Water	200.8	8011

Analysis Batch: 8378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228528-1	L507211-01 MW-18A	Total/NA	Water	200.7 Rev 4.4	8011
240-228528-2	L507211-02 MW-18B	Total/NA	Water	200.7 Rev 4.4	8011
240-228528-3	L507211-03 MW-18C	Total/NA	Water	200.7 Rev 4.4	8011
240-228528-4	L507211-04 MW-18D	Total/NA	Water	200.7 Rev 4.4	8011
240-228528-5	L507211-05 MWT-18A	Total/NA	Water	200.7 Rev 4.4	8011
240-228528-6	L507211-06 FIELD BLANK	Total/NA	Water	200.7 Rev 4.4	8058

Prep Batch: 663423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228528-1	L507211-01 MW-18A	Total/NA	Water	245.1-1994 R3.0	
240-228528-2	L507211-02 MW-18B	Total/NA	Water	245.1-1994 R3.0	
240-228528-3	L507211-03 MW-18C	Total/NA	Water	245.1-1994 R3.0	
240-228528-4	L507211-04 MW-18D	Total/NA	Water	245.1-1994 R3.0	
240-228528-5	L507211-05 MWT-18A	Total/NA	Water	245.1-1994 R3.0	
240-228528-6	L507211-06 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	
MB 240-663423/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-663423/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	
240-228528-1 MS	L507211-01 MW-18A	Total/NA	Water	245.1-1994 R3.0	
240-228528-1 MSD	L507211-01 MW-18A	Total/NA	Water	245.1-1994 R3.0	

Metals

Prep Batch: 663425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228528-1	L507211-01 MW-18A	Total Recoverable	Water	200.7	
240-228528-2	L507211-02 MW-18B	Total Recoverable	Water	200.7	
240-228528-3	L507211-03 MW-18C	Total Recoverable	Water	200.7	
240-228528-4	L507211-04 MW-18D	Total Recoverable	Water	200.7	
240-228528-5	L507211-05 MWT-18A	Total Recoverable	Water	200.7	
240-228528-6	L507211-06 FIELD BLANK	Total Recoverable	Water	200.7	
MB 240-663425/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-663425/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-663425/3-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 663722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228528-1	L507211-01 MW-18A	Total/NA	Water	245.1-1994 R3.0	663423
240-228528-2	L507211-02 MW-18B	Total/NA	Water	245.1-1994 R3.0	663423
240-228528-3	L507211-03 MW-18C	Total/NA	Water	245.1-1994 R3.0	663423
240-228528-4	L507211-04 MW-18D	Total/NA	Water	245.1-1994 R3.0	663423
240-228528-5	L507211-05 MWT-18A	Total/NA	Water	245.1-1994 R3.0	663423
240-228528-6	L507211-06 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	663423
MB 240-663423/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	663423
LCS 240-663423/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	663423
240-228528-1 MS	L507211-01 MW-18A	Total/NA	Water	245.1-1994 R3.0	663423
240-228528-1 MSD	L507211-01 MW-18A	Total/NA	Water	245.1-1994 R3.0	663423

Analysis Batch: 663725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228528-1	L507211-01 MW-18A	Total Recoverable	Water	200.7 R4.4-1994	663425
240-228528-2	L507211-02 MW-18B	Total Recoverable	Water	200.7 R4.4-1994	663425
240-228528-3	L507211-03 MW-18C	Total Recoverable	Water	200.7 R4.4-1994	663425
240-228528-4	L507211-04 MW-18D	Total Recoverable	Water	200.7 R4.4-1994	663425
240-228528-5	L507211-05 MWT-18A	Total Recoverable	Water	200.7 R4.4-1994	663425
240-228528-6	L507211-06 FIELD BLANK	Total Recoverable	Water	200.7 R4.4-1994	663425
MB 240-663425/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	663425
LCS 240-663425/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	663425

Analysis Batch: 663769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228528-1	L507211-01 MW-18A	Total Recoverable	Water	200.8-1994 R5.4	663425
240-228528-2	L507211-02 MW-18B	Total Recoverable	Water	200.8-1994 R5.4	663425
240-228528-3	L507211-03 MW-18C	Total Recoverable	Water	200.8-1994 R5.4	663425
240-228528-4	L507211-04 MW-18D	Total Recoverable	Water	200.8-1994 R5.4	663425
240-228528-5	L507211-05 MWT-18A	Total Recoverable	Water	200.8-1994 R5.4	663425
240-228528-6	L507211-06 FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	663425
MB 240-663425/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	663425
LCS 240-663425/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	663425

Analysis Batch: 664253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228528-1	L507211-01 MW-18A	Total Recoverable	Water	2340 B-2021	
240-228528-2	L507211-02 MW-18B	Total Recoverable	Water	2340 B-2021	
240-228528-3	L507211-03 MW-18C	Total Recoverable	Water	2340 B-2021	
240-228528-4	L507211-04 MW-18D	Total Recoverable	Water	2340 B-2021	

Metals (Continued)

Analysis Batch: 664253 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228528-5	L507211-05 MWT-18A	Total Recoverable	Water	2340 B-2021	
240-228528-6	L507211-06 FIELD BLANK	Total Recoverable	Water	2340 B-2021	

General Chemistry

Analysis Batch: 663433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228528-1	L507211-01 MW-18A	Total/NA	Water	2540D-2020	
240-228528-2	L507211-02 MW-18B	Total/NA	Water	2540D-2020	
240-228528-3	L507211-03 MW-18C	Total/NA	Water	2540D-2020	
240-228528-4	L507211-04 MW-18D	Total/NA	Water	2540D-2020	
240-228528-5	L507211-05 MWT-18A	Total/NA	Water	2540D-2020	
240-228528-6	L507211-06 FIELD BLANK	Total/NA	Water	2540D-2020	
MB 240-663433/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-663433/2	Lab Control Sample	Total/NA	Water	2540D-2020	
240-228528-3 DU	L507211-03 MW-18C	Total/NA	Water	2540D-2020	

Analysis Batch: 663448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228528-1	L507211-01 MW-18A	Total/NA	Water	2540 C-2020	
240-228528-2	L507211-02 MW-18B	Total/NA	Water	2540 C-2020	
240-228528-3	L507211-03 MW-18C	Total/NA	Water	2540 C-2020	
240-228528-4	L507211-04 MW-18D	Total/NA	Water	2540 C-2020	
240-228528-5	L507211-05 MWT-18A	Total/NA	Water	2540 C-2020	
240-228528-6	L507211-06 FIELD BLANK	Total/NA	Water	2540 C-2020	
MB 240-663448/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-663448/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 663480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228528-1	L507211-01 MW-18A	Total/NA	Water	300.0-1993 R2.1	
240-228528-2	L507211-02 MW-18B	Total/NA	Water	300.0-1993 R2.1	
240-228528-2	L507211-02 MW-18B	Total/NA	Water	300.0-1993 R2.1	
240-228528-3	L507211-03 MW-18C	Total/NA	Water	300.0-1993 R2.1	
240-228528-3	L507211-03 MW-18C	Total/NA	Water	300.0-1993 R2.1	
240-228528-4	L507211-04 MW-18D	Total/NA	Water	300.0-1993 R2.1	
240-228528-5	L507211-05 MWT-18A	Total/NA	Water	300.0-1993 R2.1	
240-228528-6	L507211-06 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
MB 240-663480/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-663480/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-228528-6 MS	L507211-06 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
240-228528-6 MSD	L507211-06 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 664072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228528-1	L507211-01 MW-18A	Total/NA	Water	2320 B-2021	
240-228528-2	L507211-02 MW-18B	Total/NA	Water	2320 B-2021	
240-228528-3	L507211-03 MW-18C	Total/NA	Water	2320 B-2021	
240-228528-4	L507211-04 MW-18D	Total/NA	Water	2320 B-2021	
240-228528-5	L507211-05 MWT-18A	Total/NA	Water	2320 B-2021	
240-228528-6	L507211-06 FIELD BLANK	Total/NA	Water	2320 B-2021	

General Chemistry (Continued)

Analysis Batch: 664072 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-664072/4	Method Blank	Total/NA	Water	2320 B-2021	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-1

Client Sample ID: L507211-01 MW-18A

Lab Sample ID: 240-228528-1

Date Collected: 07/08/25 09:10
Matrix: Water
Date Received: 07/10/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			663425	MN7X	EET CLE	07/11/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	663725	AJC	EET CLE	07/15/25 00:29
Total/NA	Prep	200.7			8011	MCMS	EET SSM	07/11/25 17:06
Total/NA	Analysis	200.7 Rev 4.4		1	8378	JLS	EET SSM	07/24/25 18:02
Total/NA	Prep	200.7			8011	MCMS	EET SSM	07/11/25 17:06
Total/NA	Analysis	200.8		1	8281	CW	EET SSM	07/22/25 11:27
Total Recoverable	Prep	200.7			663425	MN7X	EET CLE	07/11/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	663769	S4FJ	EET CLE	07/14/25 20:27
Total Recoverable	Analysis	2340 B-2021		1	664253	RKT	EET CLE	07/17/25 15:00
Total/NA	Prep	245.1-1994 R3.0			663423	MN7X	EET CLE	07/11/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	663722	TQ6W	EET CLE	07/14/25 13:33
Total/NA	Analysis	2320 B-2021		1	664072	PQD2	EET CLE	07/16/25 13:14
Total/NA	Analysis	2540 C-2020		1	663448	C5SV	EET CLE	07/11/25 11:34
Total/NA	Analysis	2540D-2020		1	663433	C5SV	EET CLE	07/11/25 10:52
Total/NA	Analysis	300.0-1993 R2.1		1	663480	JMR	EET CLE	07/12/25 03:23

Client Sample ID: L507211-02 MW-18B

Lab Sample ID: 240-228528-2

Date Collected: 07/08/25 10:48
Matrix: Water
Date Received: 07/10/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			663425	MN7X	EET CLE	07/11/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	663725	AJC	EET CLE	07/15/25 00:34
Total/NA	Prep	200.7			8011	MCMS	EET SSM	07/11/25 17:06
Total/NA	Analysis	200.7 Rev 4.4		1	8378	JLS	EET SSM	07/24/25 18:05
Total/NA	Prep	200.7			8011	MCMS	EET SSM	07/11/25 17:06
Total/NA	Analysis	200.8		1	8281	CW	EET SSM	07/22/25 11:30
Total Recoverable	Prep	200.7			663425	MN7X	EET CLE	07/11/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	663769	S4FJ	EET CLE	07/14/25 20:29
Total Recoverable	Analysis	2340 B-2021		1	664253	RKT	EET CLE	07/17/25 15:00
Total/NA	Prep	245.1-1994 R3.0			663423	MN7X	EET CLE	07/11/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	663722	TQ6W	EET CLE	07/14/25 13:42
Total/NA	Analysis	2320 B-2021		1	664072	PQD2	EET CLE	07/16/25 13:21
Total/NA	Analysis	2540 C-2020		1	663448	C5SV	EET CLE	07/11/25 11:34
Total/NA	Analysis	2540D-2020		1	663433	C5SV	EET CLE	07/11/25 10:52
Total/NA	Analysis	300.0-1993 R2.1		1	663480	JMR	EET CLE	07/12/25 03:42
Total/NA	Analysis	300.0-1993 R2.1		5	663480	JMR	EET CLE	07/12/25 03:51

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-1

Client Sample ID: L507211-03 MW-18C

Lab Sample ID: 240-228528-3

Date Collected: 07/08/25 12:02
Matrix: Water
Date Received: 07/10/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			663425	MN7X	EET CLE	07/11/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	663725	AJC	EET CLE	07/15/25 00:38
Total/NA	Prep	200.7			8011	MCMS	EET SSM	07/11/25 17:06
Total/NA	Analysis	200.7 Rev 4.4		1	8378	JLS	EET SSM	07/24/25 18:09
Total/NA	Prep	200.7			8011	MCMS	EET SSM	07/11/25 17:06
Total/NA	Analysis	200.8		1	8281	CW	EET SSM	07/22/25 11:33
Total Recoverable	Prep	200.7			663425	MN7X	EET CLE	07/11/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	663769	S4FJ	EET CLE	07/14/25 20:37
Total Recoverable	Analysis	2340 B-2021		1	664253	RKT	EET CLE	07/17/25 15:00
Total/NA	Prep	245.1-1994 R3.0			663423	MN7X	EET CLE	07/11/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	663722	TQ6W	EET CLE	07/14/25 13:43
Total/NA	Analysis	2320 B-2021		1	664072	PQD2	EET CLE	07/16/25 13:26
Total/NA	Analysis	2540 C-2020		1	663448	C5SV	EET CLE	07/11/25 11:34
Total/NA	Analysis	2540D-2020		1	663433	C5SV	EET CLE	07/11/25 10:52
Total/NA	Analysis	300.0-1993 R2.1		1	663480	JMR	EET CLE	07/12/25 04:00
Total/NA	Analysis	300.0-1993 R2.1		5	663480	JMR	EET CLE	07/12/25 04:09

Client Sample ID: L507211-04 MW-18D

Lab Sample ID: 240-228528-4

Date Collected: 07/08/25 13:18
Matrix: Water
Date Received: 07/10/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			663425	MN7X	EET CLE	07/11/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	663725	AJC	EET CLE	07/15/25 00:42
Total/NA	Prep	200.7			8011	MCMS	EET SSM	07/11/25 17:06
Total/NA	Analysis	200.7 Rev 4.4		1	8378	JLS	EET SSM	07/24/25 18:12
Total/NA	Prep	200.7			8011	MCMS	EET SSM	07/11/25 17:06
Total/NA	Analysis	200.8		1	8281	CW	EET SSM	07/22/25 11:36
Total Recoverable	Prep	200.7			663425	MN7X	EET CLE	07/11/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	663769	S4FJ	EET CLE	07/14/25 20:40
Total Recoverable	Analysis	2340 B-2021		1	664253	RKT	EET CLE	07/17/25 15:00
Total/NA	Prep	245.1-1994 R3.0			663423	MN7X	EET CLE	07/11/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	663722	TQ6W	EET CLE	07/14/25 13:45
Total/NA	Analysis	2320 B-2021		1	664072	PQD2	EET CLE	07/16/25 13:31
Total/NA	Analysis	2540 C-2020		1	663448	C5SV	EET CLE	07/11/25 11:34
Total/NA	Analysis	2540D-2020		1	663433	C5SV	EET CLE	07/11/25 10:52
Total/NA	Analysis	300.0-1993 R2.1		1	663480	JMR	EET CLE	07/12/25 04:18

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-1

Client Sample ID: L507211-05 MWT-18A

Lab Sample ID: 240-228528-5

Date Collected: 07/08/25 09:10
Matrix: Water
Date Received: 07/10/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			663425	MN7X	EET CLE	07/11/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	663725	AJC	EET CLE	07/15/25 00:47
Total/NA	Prep	200.7			8011	MCMS	EET SSM	07/11/25 17:06
Total/NA	Analysis	200.7 Rev 4.4		1	8378	JLS	EET SSM	07/24/25 18:15
Total/NA	Prep	200.7			8011	MCMS	EET SSM	07/11/25 17:06
Total/NA	Analysis	200.8		1	8281	CW	EET SSM	07/22/25 11:39
Total Recoverable	Prep	200.7			663425	MN7X	EET CLE	07/11/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	663769	S4FJ	EET CLE	07/14/25 20:43
Total Recoverable	Analysis	2340 B-2021		1	664253	RKT	EET CLE	07/17/25 15:00
Total/NA	Prep	245.1-1994 R3.0			663423	MN7X	EET CLE	07/11/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	663722	TQ6W	EET CLE	07/14/25 13:47
Total/NA	Analysis	2320 B-2021		1	664072	PQD2	EET CLE	07/16/25 13:47
Total/NA	Analysis	2540 C-2020		1	663448	C5SV	EET CLE	07/11/25 11:34
Total/NA	Analysis	2540D-2020		1	663433	C5SV	EET CLE	07/11/25 10:52
Total/NA	Analysis	300.0-1993 R2.1		1	663480	JMR	EET CLE	07/12/25 05:23

Client Sample ID: L507211-06 FIELD BLANK

Lab Sample ID: 240-228528-6

Date Collected: 07/08/25 08:05
Matrix: Water
Date Received: 07/10/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			663425	MN7X	EET CLE	07/11/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	663725	AJC	EET CLE	07/15/25 00:51
Total/NA	Prep	200.7			8058	RMN	EET SSM	07/14/25 18:59
Total/NA	Analysis	200.7 Rev 4.4		1	8378	JLS	EET SSM	07/24/25 18:18
Total/NA	Prep	200.7			8058	RMN	EET SSM	07/14/25 18:59
Total/NA	Analysis	200.8		1	8133	CW	EET SSM	07/16/25 14:58
Total Recoverable	Prep	200.7			663425	MN7X	EET CLE	07/11/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	663769	S4FJ	EET CLE	07/14/25 20:45
Total Recoverable	Analysis	2340 B-2021		1	664253	RKT	EET CLE	07/17/25 15:00
Total/NA	Prep	245.1-1994 R3.0			663423	MN7X	EET CLE	07/11/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	663722	TQ6W	EET CLE	07/14/25 13:48
Total/NA	Analysis	2320 B-2021		1	664072	PQD2	EET CLE	07/16/25 13:52
Total/NA	Analysis	2540 C-2020		1	663448	C5SV	EET CLE	07/11/25 11:34
Total/NA	Analysis	2540D-2020		1	663433	C5SV	EET CLE	07/11/25 10:52
Total/NA	Analysis	300.0-1993 R2.1		1	663480	JMR	EET CLE	07/12/25 04:55

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-1

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-08-26
Florida	NELAP	E87575	06-30-26
Louisiana (All)	NELAP	03073	07-01-26
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-26
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167-008	07-08-26
US Fish & Wildlife	US Federal Programs	A20571	06-30-26
USDA	US Federal Programs	525-23-4-22573	01-24-28
Wisconsin	State	399133460	07-31-25

Chain of Custody

Return Samples to: Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☐

240-228528 COC

Client Contact Info

Name:
Jennifer Caporale
Address :
1110 South Pennsylvania
Address 2:
City, State Zip:
Lansing, Michigan 48901
Phone:
517-702-6482
Email:
Jennifer.Caporale@LBWL.com
Deliverables:

Project Info

Company:
Lansing Board of Water & Light
Purchase Order:
Purchase Order not required
Work Order:
Requested TAT:
Project Number:
24034575
Sample State: MI
Project Manager:
Howell, Leslie
Project Reference:
Sampler:
Marc Wahrer
Description:
Erickson Projects
Site Name:
Erickson Projects
Special Instructions:
Need Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner.

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	903.0 Standard Target List	SM2340B Total Hardness (as CaCO3) by calculation	2320B Bicarbonate & Carbonate Alkalinity	2540D Solids, Total Suspended (TSS)	2540C_Calcd Total Dissolved Solids	300.0_28D Chloride, Fluoride & Sulfate	200.7 Total Boron	200.8_CWA Iron & Zinc	245.1 Mercury	Ra226_228GFPC_P Combined Radium-226 and Radium-228	200.8 Project List (19)	904.0 Standard Target List			Plastic 500ml - unpreserved	Plastic 60 mL - unpreserved	Plastic 250ml - with Nitric Acid	Plastic 1 liter - Nitric Acid	Plastic 1 liter - unpreserved	Plastic 500ml - with Nitric Acid	Total Bottles For Sample
1	L507211-01 MW-18A	Grab	Water	07/08/25 09:10				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	2	1	1	8
2	L507211-02 MW-18B	Grab	Water	07/08/25 10:48				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	2	1	1	8
3	L507211-03 MW-18C	Grab	Water	07/08/25 12:02				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	2	1	1	8
4	L507211-04 MW-18D	Grab	Water	07/08/25 13:18				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	2	1	1	8
5	L507211-05 MWT-18A	Grab	Water	07/08/25 09:10				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	2	1	1	8
6	L507211-06 Field Blank	Grab	Water	07/08/25 08:05				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	2	1	1	8

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished To:	Date/Time:	
Jennifer Caporale	07/09/25 10:16	Cleveland - Waypoint courier Jennifer Caporale	07/09/25 10:16	Received by: JMOROSKO 7/10/25 ~~940~~ 800 JM 7.10

Chain of Custody Number: **395728**

*H – Analysis on hold.

Coolers								
Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250709A001								
MIC20250709A001								

JMOROSKO 7/10/25 ~~940~~ JM 7 10
8w

Chain of Custody Number: **395728**

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Lansing Board of Water Site Name _____ Cooler unpacked by: JMOROSKO

Cooler Received on 7/10/25 Opened on 7/10/25

FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used. Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt X See Multiple Cooler Form

IR GUN # 17 (CF 0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12 Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC463162
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen _____

Login # : _____

7/25/2025

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 17	0.8	1.0	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	1.2	1.4	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	

7/10/2025

Login Container Summary Report

240-228528

7/25/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L507211-01 MW-18A	240-228528-A-1	Plastic 60 mL - unpreserved				
L507211-01 MW-18A	240-228528-B-1	Plastic 60 mL - unpreserved				
L507211-01 MW 18A	240-228528-C-1	Plastic 250ml - with Nitric Acid	<2			
L507211-01 MW-18A	240-228528-D-1	Plastic 500ml - unpreserved				
L507211-01 MW 18A	240-228528-E-1	Plastic 500ml - with Nitric Acid	<2			
L507211-01 MW-18A	240-228528 F 1	Plastic 1 liter unpreserved				
L507211-01 MW-18A	240 228528-G-1	Plastic 1 liter - Nitric Acid	<2			
L507211-01 MW-18A	240-228528 H-1	Plastic 1 liter Nitric Acid	<2			
L507211-02 MW-18B	240-228528-A-2	Plastic 60 mL - unpreserved				
L507211-02 MW-18B	240-228528 B-2	Plastic 60 mL - unpreserved				
L507211-02 MW-18B	240-228528-C-2	Plastic 250ml - with Nitric Acid	<2			
L507211-02 MW-18B	240-228528 D-2	Plastic 500ml unpreserved				
L507211-02 MW-18B	240-228528-E-2	Plastic 500ml - with Nitric Acid	<2			
L507211-02 MW-18B	240-228528 F-2	Plastic 1 liter - unpreserved				
L507211-02 MW 18B	240-228528-G-2	Plastic 1 liter - Nitric Acid	<2			
L507211-02 MW-18B	240 228528-H-2	Plastic 1 liter - Nitric Acid	<2			
L507211-03 MW 18C	240-228528 A 3	Plastic 60 mL unpreserved				
L507211-03 MW-18C	240-228528-B-3	Plastic 60 mL - unpreserved				
L507211-03 MW 18C	240-228528-C-3	Plastic 250ml with Nitric Acid	<2			
L507211-03 MW-18C	240 228528-D-3	Plastic 500ml - unpreserved				
L507211-03 MW-18C	240 228528-E-3	Plastic 500ml - with Nitric Acid	<2			
L507211-03 MW-18C	240-228528-F-3	Plastic 1 liter - unpreserved				
L507211-03 MW 18C	240-228528-G-3	Plastic 1 liter Nitric Acid	<2			
L507211-03 MW-18C	240-228528 H 3	Plastic 1 liter - Nitric Acid	<2			
L507211-04 MW-18D	240-228528 A-4	Plastic 60 mL - unpreserved				
L507211-04 MW-18D	240-228528-B-4	Plastic 60 mL - unpreserved				
L507211-04 MW-18D	240-228528-C-4	Plastic 250ml with Nitric Acid	<2			
L507211-04 MW 18D	240 228528-D-4	Plastic 500ml - unpreserved				
L507211-04 MW-18D	240 228528-E-4	Plastic 500ml - with Nitric Acid	<2			
L507211-04 MW-18D	240-228528 F-4	Plastic 1 liter - unpreserved				
L507211-04 MW-18D	240-228528-G-4	Plastic 1 liter Nitric Acid	<2			
L507211-04 MW-18D	240-228528 H-4	Plastic 1 liter - Nitric Acid	<2			
L507211-05 MWT 18A	240-228528 A-5	Plastic 60 mL - unpreserved				
L507211-05 MWT-18A	240-228528-B-5	Plastic 60 mL - unpreserved				
L507211-05 MWT 18A	240-228528-C-5	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L507211-05 MWT-18A	240-228528-D-5	Plastic 500ml unpreserved				
L507211-05 MWT-18A	240-228528-E-5	Plastic 500ml - with Nitric Acid	<2			
L507211-05 MWT-18A	240-228528 F-5	Plastic 1 liter - unpreserved				
L507211-05 MWT 18A	240-228528-G-5	Plastic 1 liter Nitric Acid	<2			
L507211-05 MWT-18A	240 228528-H-5	Plastic 1 liter - Nitric Acid	<2			
L507211-06 FIELD BLANK	240-228528-A-6	Plastic 60 mL unpreserved				
L507211-06 FIELD BLANK	240-228528 B-6	Plastic 60 mL - unpreserved				
L507211-06 FIELD BLANK	240-228528-C-6	Plastic 250ml - with Nitric Acid	<2			
L507211-06 FIELD BLANK	240-228528-D-6	Plastic 500ml unpreserved				
L507211-06 FIELD BLANK	240-228528-E-6	Plastic 500ml - with Nitric Acid	<2			
L507211-06 FIELD BLANK	240-228528 F-6	Plastic 1 liter - unpreserved				
L507211-06 FIELD BLANK	240-228528-G-6	Plastic 1 liter - Nitric Acid	<2			
L507211-06 FIELD BLANK	240-228528-H-6	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-204841.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-228528-1
Address: 5755 [illegible]eet East, Tacoma	Due Date Requested: 7/23/2025	Analysis Requested		Preservation Codes: -
State, Zip: WA, 98424	TAT Requested (days): N/A			
Phone: 253-922-2310(Tel)	PO #: N/A			Other: N/A
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT(MOD) Iron & Zinc	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
L507211-01 MW-18A (240-228528-1)	7/8/25	09:10 Eastern	G	Water			X	1	
L507211-02 MW-18B (240-228528-2)	7/8/25	10:48 Eastern	G	Water			X	1	
L507211-03 MW-18C (240-228528-3)	7/8/25	12:02 Eastern	G	Water			X	1	
L507211-04 MW-18D (240-228528-4)	7/8/25	13:18 Eastern	G	Water			X	1	
L507211-05 MWT-18A (240-228528-5)	7/8/25	09:10 Eastern	G	Water			X	1	
L507211-06 FIELD BLANK (240-228528-6)	7/8/25	08:05 Eastern	G	Water			X	1	

Therm. ID: SC0__ Cust. Seal: Y / N
Uncorr./Corr. Temp: [illegible] °C
Delivery: UPS / FedEx / Other: ____
Ice Type: Blue / Dry / Wet / None
Packing: ____
Label Ver.: ____

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This [illegible] laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC la[illegible] accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said com[illegible]

Possible Hazard Identification: Unconfirmed 4616 0257 2520	Sample Disposal (A fee may be assessed if sample [illegible] longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: JAYDEN COLLINS	Date/Time: 7-16-25	Company: eur	Received by:	Date/Time: 7/16/25 9:14	Company: EEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-228528-1

Login Number: 228528
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 07/11/25 01:35 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 8/7/2025 12:33:23 PM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-228528-2

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

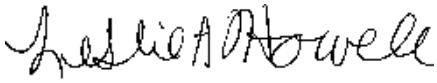
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
8/7/2025 12:33:23 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 9
Tracer Carrier Summary 15
QC Sample Results 16
QC Association Summary 18
Lab Chronicle 19
Certification Summary 21
Chain of Custody 22
Receipt Checklists 30

Definitions/Glossary

Client: Lansing Board of Water & Light
Job ID: 240-228528-2
Project/Site: Erickson Projects

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-228528-2 — Eurofins Cleveland

Job Narrative
240-228528-2

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 7/10/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.0°C and 1.4°C.

Gas Flow Proportional Counter
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-228528-1	L507211-01 MW-18A	Water	07/08/25 09:10	07/10/25 08:00	Michigan
240-228528-2	L507211-02 MW-18B	Water	07/08/25 10:48	07/10/25 08:00	Michigan
240-228528-3	L507211-03 MW-18C	Water	07/08/25 12:02	07/10/25 08:00	Michigan
240-228528-4	L507211-04 MW-18D	Water	07/08/25 13:18	07/10/25 08:00	Michigan
240-228528-5	L507211-05 MWT-18A	Water	07/08/25 09:10	07/10/25 08:00	Michigan
240-228528-6	L507211-06 FIELD BLANK	Water	07/08/25 08:05	07/10/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Job ID: 240-228528-2
Project/Site: Erickson Projects

Client Sample ID: L507211-01 MW-18A — Lab Sample ID: 240-228528-1

No Detections.

Client Sample ID: L507211-02 MW-18B — Lab Sample ID: 240-228528-2

No Detections.

Client Sample ID: L507211-03 MW-18C — Lab Sample ID: 240-228528-3

No Detections.

Client Sample ID: L507211-04 MW-18D — Lab Sample ID: 240-228528-4

No Detections.

Client Sample ID: L507211-05 MWT-18A — Lab Sample ID: 240-228528-5

No Detections.

Client Sample ID: L507211-06 FIELD BLANK — Lab Sample ID: 240-228528-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: L507211-01 MW-18A
Date Collected: 07/08/25 09:10
Date Received: 07/10/25 08:00

Lab Sample ID: 240-228528-1
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.476		0.266	0.269	1.00	0.338	pCi/L	07/14/25 09:35	08/06/25 15:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.4*		*30 - 110*	*07/14/25 09:35*	*08/06/25 15:31*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.788		0.390	0.396	1.00	0.538	pCi/L	07/14/25 09:40	08/06/25 11:48	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.4*		*30 - 110*	*07/14/25 09:40*	*08/06/25 11:48*	*1*
Y Carrier	*84.5*		*30 - 110*	*07/14/25 09:40*	*08/06/25 11:48*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.26		0.472	0.479	5.00	0.538	pCi/L		08/07/25 11:17	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-2

Client Sample ID: L507211-02 MW-18B
Date Collected: 07/08/25 10:48
Date Received: 07/10/25 08:00

Lab Sample ID: 240-228528-2
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.549		0.319	0.323	1.00	0.442	pCi/L	07/14/25 09:35	08/06/25 15:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.7*		*30 - 110*	*07/14/25 09:35*	*08/06/25 15:31*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.77		0.537	0.561	1.00	0.649	pCi/L	07/14/25 09:40	08/06/25 11:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.7*		*30 - 110*	*07/14/25 09:40*	*08/06/25 11:49*	*1*
Y Carrier	*78.1*		*30 - 110*	*07/14/25 09:40*	*08/06/25 11:49*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	2.32		0.625	0.647	5.00	0.649	pCi/L		08/07/25 11:17	1

Client Sample ID: L507211-03 MW-18C
Date Collected: 07/08/25 12:02
Date Received: 07/10/25 08:00

Lab Sample ID: 240-228528-3
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.810		0.333	0.341	1.00	0.373	pCi/L	07/14/25 09:35	08/06/25 15:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.1*		*30 - 110*	*07/14/25 09:35*	*08/06/25 15:31*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.44		0.486	0.504	1.00	0.590	pCi/L	07/14/25 09:40	08/06/25 11:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.1*		*30 - 110*	*07/14/25 09:40*	*08/06/25 11:49*	*1*
Y Carrier	*80.4*		*30 - 110*	*07/14/25 09:40*	*08/06/25 11:49*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	2.25		0.589	0.609	5.00	0.590	pCi/L		08/07/25 11:17	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-2

Client Sample ID: L507211-04 MW-18D
Date Collected: 07/08/25 13:18
Date Received: 07/10/25 08:00

Lab Sample ID: 240-228528-4
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.260	U	0.227	0.228	1.00	0.343	pCi/L	07/14/25 09:35	08/06/25 15:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.2*		*30 - 110*	*07/14/25 09:35*	*08/06/25 15:36*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.774**		0.352	0.359	1.00	0.467	pCi/L	07/14/25 09:40	08/06/25 11:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.2*		*30 - 110*	*07/14/25 09:40*	*08/06/25 11:49*	*1*
Y Carrier	*89.3*		*30 - 110*	*07/14/25 09:40*	*08/06/25 11:49*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.03**		0.419	0.425	5.00	0.467	pCi/L		08/07/25 11:17	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-2

Client Sample ID: L507211-05 MWT-18A

Date Collected: 07/08/25 09:10
Date Received: 07/10/25 08:00

Lab Sample ID: 240-228528-5

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.512		0.261	0.265	1.00	0.312	pCi/L	07/14/25 09:35	08/06/25 15:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.2*		*30 - 110*	*07/14/25 09:35*	*08/06/25 15:36*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.809		0.408	0.415	1.00	0.571	pCi/L	07/14/25 09:40	08/06/25 11:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.2*		*30 - 110*	*07/14/25 09:40*	*08/06/25 11:49*	*1*
Y Carrier	*78.5*		*30 - 110*	*07/14/25 09:40*	*08/06/25 11:49*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.32		0.484	0.492	5.00	0.571	pCi/L		08/07/25 11:17	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-2

Client Sample ID: L507211-06 FIELD BLANK

Lab Sample ID: 240-228528-6

Date Collected: 07/08/25 08:05

Matrix: Water

Date Received: 07/10/25 08:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0272	U	0.214	0.214	1.00	0.429	pCi/L	07/14/25 09:35	08/06/25 15:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.7*		*30 - 110*	*07/14/25 09:35*	*08/06/25 15:36*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.391	U	0.322	0.324	1.00	0.502	pCi/L	07/14/25 09:40	08/06/25 11:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.7*		*30 - 110*	*07/14/25 09:40*	*08/06/25 11:49*	*1*
Y Carrier	*89.0*		*30 - 110*	*07/14/25 09:40*	*08/06/25 11:49*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.391	U	0.387	0.388	5.00	0.502	pCi/L		08/07/25 11:17	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)						
		Ba						
Lab Sample ID	Client Sample ID	(30-110)						
240-228528-1	L507211-01 MW-18A	88.4						
240-228528-1 DU	L507211-01 MW-18A	89.7						
240-228528-2	L507211-02 MW-18B	90.7						
240-228528-3	L507211-03 MW-18C	86.1						
240-228528-4	L507211-04 MW-18D	91.2						
240-228528-5	L507211-05 MWT-18A	92.2						
240-228528-6	L507211-06 FIELD BLANK	91.7						
LCS 160-727181/2-A	Lab Control Sample	85.6						
MB 160-727181/1-A	Method Blank	87.7						

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)						
		Ba	Y					
Lab Sample ID	Client Sample ID	(30-110)	(30-110)					
240-228528-1	L507211-01 MW-18A	88.4	84.5					
240-228528-1 DU	L507211-01 MW-18A	89.7	83.4					
240-228528-2	L507211-02 MW-18B	90.7	78.1					
240-228528-3	L507211-03 MW-18C	86.1	80.4					
240-228528-4	L507211-04 MW-18D	91.2	89.3					
240-228528-5	L507211-05 MWT-18A	92.2	78.5					
240-228528-6	L507211-06 FIELD BLANK	91.7	89.0					
LCS 160-727182/2-A	Lab Control Sample	85.6	81.1					
MB 160-727182/1-A	Method Blank	87.7	74.4					

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-727181/1-A
Matrix: Water
Analysis Batch: 730866

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 727181

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.1693	U	0.164	0.165	1.00	0.407	pCi/L	07/14/25 09:35	08/06/25 15:30	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.7*		*30 - 110*	*07/14/25 09:35*	*08/06/25 15:30*	*1*

Lab Sample ID: LCS 160-727181/2-A
Matrix: Water
Analysis Batch: 730866

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 727181

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.58	9.260		1.26	1.00	0.376	pCi/L	97	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*85.6*		*30 - 110*

Lab Sample ID: 240-228528-1 DU
Matrix: Water
Analysis Batch: 730866

Client Sample ID: L507211-01 MW-18A
Prep Type: Total/NA
Prep Batch: 727181

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.476			0.6433		0.310	1.00	0.371	pCi/L			0.29	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*89.7*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-727182/1-A
Matrix: Water
Analysis Batch: 730808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 727182

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4810	U	0.419	0.421	1.00	0.662	pCi/L	07/14/25 09:40	08/06/25 11:48	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.7*		*30 - 110*	*07/14/25 09:40*	*08/06/25 11:48*	*1*
Y Carrier	*74.4*		*30 - 110*	*07/14/25 09:40*	*08/06/25 11:48*	*1*

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-727182/2-A
Matrix: Water
Analysis Batch: 730808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 727182

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.19	10.70		1.44	1.00	0.545	pCi/L	117	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*85.6*		*30 - 110*
Y Carrier	*81.1*		*30 - 110*

Lab Sample ID: 240-228528-1 DU
Matrix: Water
Analysis Batch: 730808

Client Sample ID: L507211-01 MW-18A
Prep Type: Total/NA
Prep Batch: 727182

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.788			0.9659		0.435	1.00	0.578	pCi/L			0.21	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*89.7*		*30 - 110*
Y Carrier	*83.4*		*30 - 110*

QC Association Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-2

Rad

Prep Batch: 727181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228528-1	L507211-01 MW-18A	Total/NA	Water	PrecSep-21	
240-228528-2	L507211-02 MW-18B	Total/NA	Water	PrecSep-21	
240-228528-3	L507211-03 MW-18C	Total/NA	Water	PrecSep-21	
240-228528-4	L507211-04 MW-18D	Total/NA	Water	PrecSep-21	
240-228528-5	L507211-05 MWT-18A	Total/NA	Water	PrecSep-21	
240-228528-6	L507211-06 FIELD BLANK	Total/NA	Water	PrecSep-21	
MB 160-727181/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-727181/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-228528-1 DU	L507211-01 MW-18A	Total/NA	Water	PrecSep-21	

Prep Batch: 727182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-228528-1	L507211-01 MW-18A	Total/NA	Water	PrecSep_0	
240-228528-2	L507211-02 MW-18B	Total/NA	Water	PrecSep_0	
240-228528-3	L507211-03 MW-18C	Total/NA	Water	PrecSep_0	
240-228528-4	L507211-04 MW-18D	Total/NA	Water	PrecSep_0	
240-228528-5	L507211-05 MWT-18A	Total/NA	Water	PrecSep_0	
240-228528-6	L507211-06 FIELD BLANK	Total/NA	Water	PrecSep_0	
MB 160-727182/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-727182/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-228528-1 DU	L507211-01 MW-18A	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-2

Client Sample ID: L507211-01 MW-18A

Lab Sample ID: 240-228528-1

Date Collected: 07/08/25 09:10
Matrix: Water
Date Received: 07/10/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			727181	JTR	EET SL	07/14/25 09:35
Total/NA	Analysis	903.0		1	730866	FLC	EET SL	08/06/25 15:31
Total/NA	Prep	PrecSep_0			727182	JTR	EET SL	07/14/25 09:40
Total/NA	Analysis	904.0		1	730808	SWS	EET SL	08/06/25 11:48
Total/NA	Analysis	Ra226_Ra228 Pos		1	730462	EMH	EET SL	08/07/25 11:17

Client Sample ID: L507211-02 MW-18B

Lab Sample ID: 240-228528-2

Date Collected: 07/08/25 10:48
Matrix: Water
Date Received: 07/10/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			727181	JTR	EET SL	07/14/25 09:35
Total/NA	Analysis	903.0		1	730866	FLC	EET SL	08/06/25 15:31
Total/NA	Prep	PrecSep_0			727182	JTR	EET SL	07/14/25 09:40
Total/NA	Analysis	904.0		1	730808	SWS	EET SL	08/06/25 11:49
Total/NA	Analysis	Ra226_Ra228 Pos		1	730462	EMH	EET SL	08/07/25 11:17

Client Sample ID: L507211-03 MW-18C

Lab Sample ID: 240-228528-3

Date Collected: 07/08/25 12:02
Matrix: Water
Date Received: 07/10/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			727181	JTR	EET SL	07/14/25 09:35
Total/NA	Analysis	903.0		1	730866	FLC	EET SL	08/06/25 15:31
Total/NA	Prep	PrecSep_0			727182	JTR	EET SL	07/14/25 09:40
Total/NA	Analysis	904.0		1	730808	SWS	EET SL	08/06/25 11:49
Total/NA	Analysis	Ra226_Ra228 Pos		1	730462	EMH	EET SL	08/07/25 11:17

Client Sample ID: L507211-04 MW-18D

Lab Sample ID: 240-228528-4

Date Collected: 07/08/25 13:18
Matrix: Water
Date Received: 07/10/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			727181	JTR	EET SL	07/14/25 09:35
Total/NA	Analysis	903.0		1	730808	SWS	EET SL	08/06/25 15:36
Total/NA	Prep	PrecSep_0			727182	JTR	EET SL	07/14/25 09:40
Total/NA	Analysis	904.0		1	730808	SWS	EET SL	08/06/25 11:49
Total/NA	Analysis	Ra226_Ra228 Pos		1	730462	EMH	EET SL	08/07/25 11:17

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-2

Client Sample ID: L507211-05 MWT-18A

Lab Sample ID: 240-228528-5

Date Collected: 07/08/25 09:10
Date Received: 07/10/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			727181	JTR	EET SL	07/14/25 09:35
Total/NA	Analysis	903.0		1	730808	SWS	EET SL	08/06/25 15:36
Total/NA	Prep	PrecSep_0			727182	JTR	EET SL	07/14/25 09:40
Total/NA	Analysis	904.0		1	730808	SWS	EET SL	08/06/25 11:49
Total/NA	Analysis	Ra226_Ra228 Pos		1	730462	EMH	EET SL	08/07/25 11:17

Client Sample ID: L507211-06 FIELD BLANK

Lab Sample ID: 240-228528-6

Date Collected: 07/08/25 08:05
Date Received: 07/10/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			727181	JTR	EET SL	07/14/25 09:35
Total/NA	Analysis	903.0		1	730808	SWS	EET SL	08/06/25 15:36
Total/NA	Prep	PrecSep_0			727182	JTR	EET SL	07/14/25 09:40
Total/NA	Analysis	904.0		1	730808	SWS	EET SL	08/06/25 11:49
Total/NA	Analysis	Ra226_Ra228 Pos		1	730462	EMH	EET SL	08/07/25 11:17

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-228528-2

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25 *
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-25 *
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-25 *
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-25 *
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25 *
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody

Return Samples to: Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☐

240-228528 COC

Client Contact Info

Name: Jennifer Caporale
Address : 1110 South Pennsylvania
Address 2:
City, State Zip: Lansing, Michigan 48901
Phone: 517-702-6482
Email: Jennifer.Caporale@LBWL.com
Deliverables:

Project Info

Company: Lansing Board of Water & Light
Purchase Order: Purchase Order not required
Work Order:
Requested TAT:
Project Number: 24034575
Sample State: MI
Project Manager: Howell, Leslie
Project Reference:
Sampler: Marc Wahrer
Description: Erickson Projects
Site Name: Erickson Projects
Special Instructions: Need Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner.

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	903.0 Standard Target List	SM2340B Total Hardness (as CaCO3) by calculation	2320B Bicarbonate & Carbonate Alkalinity	2540D Solids, Total Suspended (TSS)	2540C_Calcd Total Dissolved Solids	300.0_28D Chloride, Fluoride & Sulfate	200.7 Total Boron	200.8_CWA Iron & Zinc	245.1 Mercury	Ra226_228GFPC_P Combined Radium-226 and Radium-228	200.8 Project List (19)	904.0 Standard Target List			Plastic 500ml - unpreserved	Plastic 60 mL - unpreserved	Plastic 250ml - with Nitric Acid	Plastic 1 liter - Nitric Acid	Plastic 1 liter - unpreserved	Plastic 500ml - with Nitric Acid	Total Bottles For Sample
1	L507211-01 MW-18A	Grab	Water	07/08/25 09:10				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	2	1	1	8
2	L507211-02 MW-18B	Grab	Water	07/08/25 10:48				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	2	1	1	8
3	L507211-03 MW-18C	Grab	Water	07/08/25 12:02				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	2	1	1	8
4	L507211-04 MW-18D	Grab	Water	07/08/25 13:18				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	2	1	1	8
5	L507211-05 MWT-18A	Grab	Water	07/08/25 09:10				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	2	1	1	8
6	L507211-06 Field Blank	Grab	Water	07/08/25 08:05				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	2	1	1	8

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished To:	Date/Time:	
Jennifer Caporale	07/09/25 10:16	Cleveland - Waypoint courier Jennifer Caporale	07/09/25 10:16	Received by: JMOROSKO 7/10/25 ~~940~~ 800 JM 7.10

Chain of Custody Number: **395728**

*H – Analysis on hold.

Coolers								
Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250709A001								
MIC20250709A001								

JMOROSKO 7/10/25 ~~940~~ JM 7 10
8w

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Lansing Board of Water Site Name _____ Cooler unpacked by: JMOROSKO

Cooler Received on 7/10/25 Opened on 7/10/25

FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used. Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt X See Multiple Cooler Form

IR GUN # 17 (CF 0.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12 Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC463162
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen _____

Login # : _____

8/7/2025

Eurofins - Cleveland Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 17	0.8	1.0	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	1.2	1.4	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	

7/10/2025

Login Container Summary Report

240-228528

8/7/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L507211-01 MW-18A	240-228528-A-1	Plastic 60 mL - unpreserved				
L507211-01 MW-18A	240-228528-B-1	Plastic 60 mL - unpreserved				
L507211-01 MW 18A	240-228528-C-1	Plastic 250ml - with Nitric Acid	<2			
L507211-01 MW-18A	240-228528-D-1	Plastic 500ml - unpreserved				
L507211-01 MW 18A	240-228528-E-1	Plastic 500ml - with Nitric Acid	<2			
L507211-01 MW-18A	240-228528 F 1	Plastic 1 liter unpreserved				
L507211-01 MW-18A	240 228528-G-1	Plastic 1 liter - Nitric Acid	<2			
L507211-01 MW-18A	240-228528 H-1	Plastic 1 liter Nitric Acid	<2			
L507211-02 MW-18B	240-228528-A-2	Plastic 60 mL - unpreserved				
L507211-02 MW-18B	240-228528 B-2	Plastic 60 mL - unpreserved				
L507211-02 MW-18B	240-228528-C-2	Plastic 250ml - with Nitric Acid	<2			
L507211-02 MW-18B	240-228528 D-2	Plastic 500ml unpreserved				
L507211-02 MW-18B	240-228528-E-2	Plastic 500ml - with Nitric Acid	<2			
L507211-02 MW-18B	240-228528 F-2	Plastic 1 liter - unpreserved				
L507211-02 MW 18B	240-228528-G-2	Plastic 1 liter - Nitric Acid	<2			
L507211-02 MW-18B	240 228528-H-2	Plastic 1 liter - Nitric Acid	<2			
L507211-03 MW 18C	240-228528 A 3	Plastic 60 mL unpreserved				
L507211-03 MW-18C	240-228528-B-3	Plastic 60 mL - unpreserved				
L507211-03 MW 18C	240-228528-C-3	Plastic 250ml with Nitric Acid	<2			
L507211-03 MW-18C	240 228528-D-3	Plastic 500ml - unpreserved				
L507211-03 MW-18C	240 228528-E-3	Plastic 500ml - with Nitric Acid	<2			
L507211-03 MW-18C	240-228528-F-3	Plastic 1 liter - unpreserved				
L507211-03 MW 18C	240-228528-G-3	Plastic 1 liter Nitric Acid	<2			
L507211-03 MW-18C	240-228528 H 3	Plastic 1 liter - Nitric Acid	<2			
L507211-04 MW-18D	240-228528 A-4	Plastic 60 mL - unpreserved				
L507211-04 MW-18D	240-228528-B-4	Plastic 60 mL - unpreserved				
L507211-04 MW-18D	240-228528-C-4	Plastic 250ml with Nitric Acid	<2			
L507211-04 MW 18D	240 228528-D-4	Plastic 500ml - unpreserved				
L507211-04 MW-18D	240 228528-E-4	Plastic 500ml - with Nitric Acid	<2			
L507211-04 MW-18D	240-228528 F-4	Plastic 1 liter - unpreserved				
L507211-04 MW-18D	240-228528-G-4	Plastic 1 liter Nitric Acid	<2			
L507211-04 MW-18D	240-228528 H-4	Plastic 1 liter - Nitric Acid	<2			
L507211-05 MWT 18A	240-228528 A-5	Plastic 60 mL - unpreserved				
L507211-05 MWT-18A	240-228528-B-5	Plastic 60 mL - unpreserved				
L507211-05 MWT 18A	240-228528-C-5	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L507211-05 MWT-18A	240-228528-D-5	Plastic 500ml unpreserved				
L507211-05 MWT-18A	240-228528-E-5	Plastic 500ml - with Nitric Acid	<2			
L507211-05 MWT-18A	240-228528 F-5	Plastic 1 liter - unpreserved				
L507211-05 MWT 18A	240-228528-G-5	Plastic 1 liter Nitric Acid	<2			
L507211-05 MWT-18A	240 228528-H-5	Plastic 1 liter - Nitric Acid	<2			
L507211-06 FIELD BLANK	240-228528-A-6	Plastic 60 mL unpreserved				
L507211-06 FIELD BLANK	240-228528 B-6	Plastic 60 mL - unpreserved				
L507211-06 FIELD BLANK	240-228528-C-6	Plastic 250ml - with Nitric Acid	<2			
L507211-06 FIELD BLANK	240-228528-D-6	Plastic 500ml unpreserved				
L507211-06 FIELD BLANK	240-228528-E-6	Plastic 500ml - with Nitric Acid	<2			
L507211-06 FIELD BLANK	240-228528 F-6	Plastic 1 liter - unpreserved				
L507211-06 FIELD BLANK	240-228528-G-6	Plastic 1 liter - Nitric Acid	<2			
L507211-06 FIELD BLANK	240-228528-H-6	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-204834.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-228528-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 7/23/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21Standard Target List	904.0/PrecSep_0Standard Target List	Ra226_228/GFPC_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L507211-01 MW-18A (240-228528-1)	7/8/25	09:10 Eastern	G	Water			X	X	X	2	
L507211-02 MW-18B (240-228528-2)	7/8/25	10:48 Eastern	G	Water			X	X	X	2	
L507211-03 MW-18C (240-228528-3)	7/8/25	12:02 Eastern	G	Water			X	X	X	2	
L507211-04 MW-18D (240-228528-4)	7/8/25	13:18 Eastern	G	Water			X	X	X	2	
L507211-05 MWT-18A (240-228528-5)	7/8/25	09:10 Eastern	G	Water			X	X	X	2	
L507211-06 FIELD BLANK (240-228528-6)	7/8/25	08:05 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date: Time: Method of Shipment:

Relinquished by: JAYDEN COLLINS	Date/Time: 7-10-25	Company: Eurofins	Received by: Cheyenne Forrest	Date/Time: 0820	Company
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

8/7/2025

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-204834.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-228528-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 7/23/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21Standard Target List	904.0/PrecSep_0Standard Target List	Ra226_228GFPC_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L507211-01 MW-18A (240-228528-1)	7/8/25	09:10 Eastern	G	Water			X	X	X	2	
L507211-02 MW-18B (240-228528-2)	7/8/25	10:48 Eastern	G	Water			X	X	X	2	
L507211-03 MW-18C (240-228528-3)	7/8/25	12:02 Eastern	G	Water			X	X	X	2	
L507211-04 MW-18D (240-228528-4)	7/8/25	13:18 Eastern	G	Water			X	X	X	2	
L507211-05 MWT-18A (240-228528-5)	7/8/25	09:10 Eastern	G	Water			X	X	X	2	
L507211-06 FIELD BLANK (240-228528-6)	7/8/25	08:05 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: JAYDEN COLLINS	Date/Time: 7-10-25	Company: EWR	Received by:	Date/Time: 0820	Company	
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time: Cheyenne Forrest	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

8/7/2025

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-228528-2

Login Number: 228528
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 07/11/25 12:12 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 7/31/2025 5:48:51 PM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-229387-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

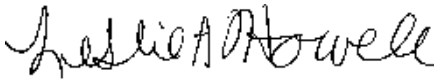
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
7/31/2025 5:48:51 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 11
QC Sample Results 23
QC Association Summary 29
Lab Chronicle 33
Certification Summary 36
Chain of Custody 37
Receipt Checklists 45

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-229387-1 — Eurofins Cleveland

Job Narrative
240-229387-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 7/24/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.7°C and 3.2°C.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.7 Rev 4.4	Metals (ICP)	EPA	EET SSM
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.7	Preparation, Total Metals	EPA	EET SSM
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-229387-1	L507255-01 MW-19A	Water	07/22/25 06:57	07/24/25 08:00
240-229387-2	L507255-02 MW-19B	Water	07/22/25 08:37	07/24/25 08:00
240-229387-3	L507255-03 MW-19C	Water	07/22/25 09:40	07/24/25 08:00
240-229387-4	L507255-04 MW-19D	Water	07/22/25 07:36	07/24/25 08:00
240-229387-5	L507255-05 MWT-19A	Water	07/22/25 06:57	07/24/25 08:00
240-229387-6	L507255-06 FIELD BLANK	Water	07/22/25 07:45	07/24/25 08:00

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-1

Client Sample ID: L507255-01 MW-19A — Lab Sample ID: 240-229387-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.26		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	2.3	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	46		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0043	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.094		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00011	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0027	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.010		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	190		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	61		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.012		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	5.6	B	0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	730		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	390		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	880		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	12		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	120		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.13		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	240		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L507255-02 MW-19B — Lab Sample ID: 240-229387-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.52		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	3.2	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	34		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0037	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.056		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.00014	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00013	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0064		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.015		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	180		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	64		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.016		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.8	B	0.10	0.013	mg/L	1		200.8	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L507255-02 MW-19B (Continued) — Lab Sample ID: 240-229387-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Hardness as calcium carbonate	720		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	390		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	840		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	4.1		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	67		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.24		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	310		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L507255-03 MW-19C — Lab Sample ID: 240-229387-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.5		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	7.5		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	43		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.00087	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.038		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	57		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	20		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.027		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.71	B	0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	230		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	310		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	260		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	2.3	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	2.9		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.42		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	2.2		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L507255-04 MW-19D — Lab Sample ID: 240-229387-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.58		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	5.8		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	33		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.054		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0020	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	66		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	23		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.025		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.42	B	0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	260		33	33	mg/L	1		2340 B-2021	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L507255-04 MW-19D (Continued) — Lab Sample ID: 240-229387-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bicarbonate Alkalinity as CaCO3	300		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	300		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.4	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	1.4		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.42		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	10		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L507255-05 MWT-19A — Lab Sample ID: 240-229387-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.25		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	2.1	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	42		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0042	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.093		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0023	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.010		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	190		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	63		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.012		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	5.5	B	0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	740		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	370		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	900		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	10		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	110		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.16		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	270		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L507255-06 FIELD BLANK — Lab Sample ID: 240-229387-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	0.60	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L507255-01 MW-19A
Date Collected: 07/22/25 06:57
Date Received: 07/24/25 08:00

Lab Sample ID: 240-229387-1
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.26		0.10	0.057	mg/L		07/25/25 14:00	07/29/25 00:10	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	2.3	J	3.3	0.17	mg/L		07/28/25 18:10	07/30/25 19:07	1
Na	46		0.60	0.33	mg/L		07/28/25 18:10	07/30/25 19:07	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/25/25 14:00	07/28/25 16:56	1
Arsenic	0.0043	J	0.0050	0.00075	mg/L		07/25/25 14:00	07/28/25 16:56	1
Barium	0.094		0.0050	0.00077	mg/L		07/25/25 14:00	07/28/25 16:56	1
Beryllium	ND		0.0010	0.00027	mg/L		07/25/25 14:00	07/28/25 16:56	1
Cadmium	ND		0.0010	0.000077	mg/L		07/25/25 14:00	07/28/25 16:56	1
Cobalt	0.00011	J	0.0010	0.000086	mg/L		07/25/25 14:00	07/28/25 16:56	1
Chromium	ND		0.0050	0.0012	mg/L		07/25/25 14:00	07/28/25 16:56	1
Copper	ND		0.0020	0.0017	mg/L		07/25/25 14:00	07/28/25 16:56	1
Molybdenum	0.0027	J	0.0050	0.0011	mg/L		07/25/25 14:00	07/28/25 16:56	1
Nickel	0.010		0.0020	0.0015	mg/L		07/25/25 14:00	07/28/25 16:56	1
Lead	ND		0.0010	0.00045	mg/L		07/25/25 14:00	07/28/25 16:56	1
Antimony	ND		0.0020	0.00057	mg/L		07/25/25 14:00	07/28/25 16:56	1
Selenium	ND		0.0050	0.00089	mg/L		07/25/25 14:00	07/28/25 16:56	1
Thallium	ND		0.0010	0.00051	mg/L		07/25/25 14:00	07/28/25 16:56	1
Vanadium	ND		0.0050	0.00082	mg/L		07/25/25 14:00	07/28/25 16:56	1
Calcium	190		1.0	0.25	mg/L		07/25/25 14:00	07/28/25 16:56	1
Magnesium	61		1.0	0.061	mg/L		07/25/25 14:00	07/28/25 16:56	1
Lithium	0.012		0.0080	0.0034	mg/L		07/25/25 14:00	07/28/25 16:56	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	5.6	B	0.10	0.013	mg/L		07/28/25 18:10	07/30/25 20:40	1
Zinc	ND		0.0070	0.00093	mg/L		07/28/25 18:10	07/30/25 20:40	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	730		33	33	mg/L			07/29/25 06:27	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/25/25 14:00	07/28/25 14:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	390		5.0	2.6	mg/L			07/25/25 13:08	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/25/25 13:08	1
Total Dissolved Solids (SM 2540 C-2020)	880		10	7.8	mg/L			07/24/25 10:29	1
Total Suspended Solids (SM 2540D-2020)	12		4.0	0.40	mg/L			07/25/25 11:37	1
Chloride (EPA 300.0-1993 R2.1)	120		1.0	0.13	mg/L			07/25/25 22:53	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-1

Client Sample ID: L507255-01 MW-19A
Date Collected: 07/22/25 06:57
Date Received: 07/24/25 08:00

Lab Sample ID: 240-229387-1
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.13		0.050	0.024	mg/L			07/25/25 22:53	1
Sulfate (EPA 300.0-1993 R2.1)	240		5.0	1.7	mg/L			07/25/25 23:03	5

Client Sample ID: L507255-02 MW-19B
Date Collected: 07/22/25 08:37
Date Received: 07/24/25 08:00

Lab Sample ID: 240-229387-2
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.52		0.10	0.057	mg/L		07/25/25 14:00	07/29/25 00:36	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	3.2	J	3.3	0.17	mg/L		07/28/25 18:10	07/30/25 19:18	1
Na	34		0.60	0.33	mg/L		07/28/25 18:10	07/30/25 19:18	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/25/25 14:00	07/28/25 17:14	1
Arsenic	0.0037	J	0.0050	0.00075	mg/L		07/25/25 14:00	07/28/25 17:14	1
Barium	0.056		0.0050	0.00077	mg/L		07/25/25 14:00	07/28/25 17:14	1
Beryllium	ND		0.0010	0.00027	mg/L		07/25/25 14:00	07/28/25 17:14	1
Cadmium	0.00014	J	0.0010	0.000077	mg/L		07/25/25 14:00	07/28/25 17:14	1
Cobalt	0.00013	J	0.0010	0.000086	mg/L		07/25/25 14:00	07/28/25 17:14	1
Chromium	ND		0.0050	0.0012	mg/L		07/25/25 14:00	07/28/25 17:14	1
Copper	ND		0.0020	0.0017	mg/L		07/25/25 14:00	07/28/25 17:14	1
Molybdenum	0.0064		0.0050	0.0011	mg/L		07/25/25 14:00	07/28/25 17:14	1
Nickel	0.015		0.0020	0.0015	mg/L		07/25/25 14:00	07/28/25 17:14	1
Lead	ND		0.0010	0.00045	mg/L		07/25/25 14:00	07/28/25 17:14	1
Antimony	ND		0.0020	0.00057	mg/L		07/25/25 14:00	07/28/25 17:14	1
Selenium	ND		0.0050	0.00089	mg/L		07/25/25 14:00	07/28/25 17:14	1
Thallium	ND		0.0010	0.00051	mg/L		07/25/25 14:00	07/28/25 17:14	1
Vanadium	ND		0.0050	0.00082	mg/L		07/25/25 14:00	07/28/25 17:14	1
Calcium	180		1.0	0.25	mg/L		07/25/25 14:00	07/28/25 17:14	1
Magnesium	64		1.0	0.061	mg/L		07/25/25 14:00	07/28/25 17:14	1
Lithium	0.016		0.0080	0.0034	mg/L		07/25/25 14:00	07/28/25 17:14	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1.8	B	0.10	0.013	mg/L		07/28/25 18:10	07/30/25 20:43	1
Zinc	ND		0.0070	0.00093	mg/L		07/28/25 18:10	07/30/25 20:43	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	720		33	33	mg/L			07/29/25 06:27	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/25/25 14:00	07/28/25 14:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	390		5.0	2.6	mg/L			07/25/25 13:14	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/25/25 13:14	1
Total Dissolved Solids (SM 2540 C-2020)	840		10	7.8	mg/L			07/24/25 10:29	1
Total Suspended Solids (SM 2540D-2020)	4.1		4.0	0.40	mg/L			07/25/25 11:37	1
Chloride (EPA 300.0-1993 R2.1)	67		1.0	0.13	mg/L			07/25/25 23:12	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-1

Client Sample ID: L507255-02 MW-19B
Date Collected: 07/22/25 08:37
Date Received: 07/24/25 08:00

Lab Sample ID: 240-229387-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.24		0.050	0.024	mg/L			07/25/25 23:12	1
Sulfate (EPA 300.0-1993 R2.1)	310		5.0	1.7	mg/L			07/25/25 23:42	5

Client Sample ID: L507255-03 MW-19C
Date Collected: 07/22/25 09:40
Date Received: 07/24/25 08:00

Lab Sample ID: 240-229387-3
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.5**		0.10	0.057	mg/L		07/25/25 14:00	07/29/25 00:41	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**7.5**		3.3	0.17	mg/L		07/28/25 18:10	07/30/25 19:21	1
Na	**43**		0.60	0.33	mg/L		07/28/25 18:10	07/30/25 19:21	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/25/25 14:00	07/28/25 17:17	1
Arsenic	**0.00087**	**J**	0.0050	0.00075	mg/L		07/25/25 14:00	07/28/25 17:17	1
Barium	**0.038**		0.0050	0.00077	mg/L		07/25/25 14:00	07/28/25 17:17	1
Beryllium	ND		0.0010	0.00027	mg/L		07/25/25 14:00	07/28/25 17:17	1
Cadmium	ND		0.0010	0.000077	mg/L		07/25/25 14:00	07/28/25 17:17	1
Cobalt	ND		0.0010	0.000086	mg/L		07/25/25 14:00	07/28/25 17:17	1
Chromium	ND		0.0050	0.0012	mg/L		07/25/25 14:00	07/28/25 17:17	1
Copper	ND		0.0020	0.0017	mg/L		07/25/25 14:00	07/28/25 17:17	1
Molybdenum	ND		0.0050	0.0011	mg/L		07/25/25 14:00	07/28/25 17:17	1
Nickel	ND		0.0020	0.0015	mg/L		07/25/25 14:00	07/28/25 17:17	1
Lead	ND		0.0010	0.00045	mg/L		07/25/25 14:00	07/28/25 17:17	1
Antimony	ND		0.0020	0.00057	mg/L		07/25/25 14:00	07/28/25 17:17	1
Selenium	ND		0.0050	0.00089	mg/L		07/25/25 14:00	07/28/25 17:17	1
Thallium	ND		0.0010	0.00051	mg/L		07/25/25 14:00	07/28/25 17:17	1
Vanadium	ND		0.0050	0.00082	mg/L		07/25/25 14:00	07/28/25 17:17	1
Calcium	**57**		1.0	0.25	mg/L		07/25/25 14:00	07/28/25 17:17	1
Magnesium	**20**		1.0	0.061	mg/L		07/25/25 14:00	07/28/25 17:17	1
Lithium	**0.027**		0.0080	0.0034	mg/L		07/25/25 14:00	07/28/25 17:17	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.71**	**B**	0.10	0.013	mg/L		07/28/25 18:10	07/30/25 20:46	1
Zinc	ND		0.0070	0.00093	mg/L		07/28/25 18:10	07/30/25 20:46	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**230**		33	33	mg/L			07/29/25 06:27	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/25/25 14:00	07/28/25 14:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**310**		5.0	2.6	mg/L			07/25/25 13:20	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/25/25 13:20	1
Total Dissolved Solids (SM 2540 C-2020)	**260**		10	7.8	mg/L			07/24/25 10:29	1
Total Suspended Solids (SM 2540D-2020)	**2.3**	**J**	4.0	0.40	mg/L			07/25/25 11:37	1
Chloride (EPA 300.0-1993 R2.1)	**2.9**		1.0	0.13	mg/L			07/25/25 23:52	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-1

Client Sample ID: L507255-03 MW-19C
Date Collected: 07/22/25 09:40
Date Received: 07/24/25 08:00

Lab Sample ID: 240-229387-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.42		0.050	0.024	mg/L			07/25/25 23:52	1
Sulfate (EPA 300.0-1993 R2.1)	2.2		1.0	0.35	mg/L			07/25/25 23:52	1

Client Sample ID: L507255-04 MW-19D
Date Collected: 07/22/25 07:36
Date Received: 07/24/25 08:00

Lab Sample ID: 240-229387-4
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.58**		0.10	0.057	mg/L		07/25/25 14:00	07/29/25 00:45	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**5.8**		3.3	0.17	mg/L		07/28/25 18:10	07/30/25 19:24	1
Na	**33**		0.60	0.33	mg/L		07/28/25 18:10	07/30/25 19:24	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/25/25 14:00	07/28/25 17:20	1
Arsenic	ND		0.0050	0.00075	mg/L		07/25/25 14:00	07/28/25 17:20	1
Barium	**0.054**		0.0050	0.00077	mg/L		07/25/25 14:00	07/28/25 17:20	1
Beryllium	ND		0.0010	0.00027	mg/L		07/25/25 14:00	07/28/25 17:20	1
Cadmium	ND		0.0010	0.000077	mg/L		07/25/25 14:00	07/28/25 17:20	1
Cobalt	ND		0.0010	0.000086	mg/L		07/25/25 14:00	07/28/25 17:20	1
Chromium	ND		0.0050	0.0012	mg/L		07/25/25 14:00	07/28/25 17:20	1
Copper	ND		0.0020	0.0017	mg/L		07/25/25 14:00	07/28/25 17:20	1
Molybdenum	**0.0020**	**J**	0.0050	0.0011	mg/L		07/25/25 14:00	07/28/25 17:20	1
Nickel	ND		0.0020	0.0015	mg/L		07/25/25 14:00	07/28/25 17:20	1
Lead	ND		0.0010	0.00045	mg/L		07/25/25 14:00	07/28/25 17:20	1
Antimony	ND		0.0020	0.00057	mg/L		07/25/25 14:00	07/28/25 17:20	1
Selenium	ND		0.0050	0.00089	mg/L		07/25/25 14:00	07/28/25 17:20	1
Thallium	ND		0.0010	0.00051	mg/L		07/25/25 14:00	07/28/25 17:20	1
Vanadium	ND		0.0050	0.00082	mg/L		07/25/25 14:00	07/28/25 17:20	1
Calcium	**66**		1.0	0.25	mg/L		07/25/25 14:00	07/28/25 17:20	1
Magnesium	**23**		1.0	0.061	mg/L		07/25/25 14:00	07/28/25 17:20	1
Lithium	**0.025**		0.0080	0.0034	mg/L		07/25/25 14:00	07/28/25 17:20	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.42**	**B**	0.10	0.013	mg/L		07/28/25 18:10	07/30/25 20:49	1
Zinc	ND		0.0070	0.00093	mg/L		07/28/25 18:10	07/30/25 20:49	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**260**		33	33	mg/L			07/29/25 06:27	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/25/25 14:00	07/28/25 14:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**300**		5.0	2.6	mg/L			07/25/25 13:25	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/25/25 13:25	1
Total Dissolved Solids (SM 2540 C-2020)	**300**		10	7.8	mg/L			07/24/25 10:29	1
Total Suspended Solids (SM 2540D-2020)	**1.4**	**J**	4.0	0.40	mg/L			07/25/25 11:37	1
Chloride (EPA 300.0-1993 R2.1)	**1.4**		1.0	0.13	mg/L			07/26/25 00:01	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-1

Client Sample ID: L507255-04 MW-19D
Date Collected: 07/22/25 07:36
Date Received: 07/24/25 08:00

Lab Sample ID: 240-229387-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.42		0.050	0.024	mg/L			07/26/25 00:01	1
Sulfate (EPA 300.0-1993 R2.1)	10		1.0	0.35	mg/L			07/26/25 00:01	1

Client Sample ID: L507255-05 MWT-19A

Lab Sample ID: 240-229387-5

Date Collected: 07/22/25 06:57

Matrix: Water

Date Received: 07/24/25 08:00

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.25**		0.10	0.057	mg/L		07/25/25 14:00	07/29/25 00:59	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**2.1**	**J**	3.3	0.17	mg/L		07/28/25 18:10	07/30/25 19:28	1
Na	**42**		0.60	0.33	mg/L		07/28/25 18:10	07/30/25 19:28	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/25/25 14:00	07/28/25 17:22	1
Arsenic	**0.0042**	**J**	0.0050	0.00075	mg/L		07/25/25 14:00	07/28/25 17:22	1
Barium	**0.093**		0.0050	0.00077	mg/L		07/25/25 14:00	07/28/25 17:22	1
Beryllium	ND		0.0010	0.00027	mg/L		07/25/25 14:00	07/28/25 17:22	1
Cadmium	ND		0.0010	0.000077	mg/L		07/25/25 14:00	07/28/25 17:22	1
Cobalt	ND		0.0010	0.000086	mg/L		07/25/25 14:00	07/28/25 17:22	1
Chromium	ND		0.0050	0.0012	mg/L		07/25/25 14:00	07/28/25 17:22	1
Copper	ND		0.0020	0.0017	mg/L		07/25/25 14:00	07/28/25 17:22	1
Molybdenum	**0.0023**	**J**	0.0050	0.0011	mg/L		07/25/25 14:00	07/28/25 17:22	1
Nickel	**0.010**		0.0020	0.0015	mg/L		07/25/25 14:00	07/28/25 17:22	1
Lead	ND		0.0010	0.00045	mg/L		07/25/25 14:00	07/28/25 17:22	1
Antimony	ND		0.0020	0.00057	mg/L		07/25/25 14:00	07/28/25 17:22	1
Selenium	ND		0.0050	0.00089	mg/L		07/25/25 14:00	07/28/25 17:22	1
Thallium	ND		0.0010	0.00051	mg/L		07/25/25 14:00	07/28/25 17:22	1
Vanadium	ND		0.0050	0.00082	mg/L		07/25/25 14:00	07/28/25 17:22	1
Calcium	**190**		1.0	0.25	mg/L		07/25/25 14:00	07/28/25 17:22	1
Magnesium	**63**		1.0	0.061	mg/L		07/25/25 14:00	07/28/25 17:22	1
Lithium	**0.012**		0.0080	0.0034	mg/L		07/25/25 14:00	07/28/25 17:22	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**5.5**	**B**	0.10	0.013	mg/L		07/28/25 18:10	07/30/25 20:52	1
Zinc	ND		0.0070	0.00093	mg/L		07/28/25 18:10	07/30/25 20:52	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**740**		33	33	mg/L			07/29/25 06:27	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/25/25 14:00	07/28/25 15:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**370**		5.0	2.6	mg/L			07/25/25 13:36	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/25/25 13:36	1
Total Dissolved Solids (SM 2540 C-2020)	**900**		10	7.8	mg/L			07/24/25 10:29	1
Total Suspended Solids (SM 2540D-2020)	**10**		4.0	0.40	mg/L			07/25/25 11:37	1
Chloride (EPA 300.0-1993 R2.1)	**110**		1.0	0.13	mg/L			07/25/25 10:10	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-1

Client Sample ID: L507255-05 MWT-19A
Date Collected: 07/22/25 06:57
Date Received: 07/24/25 08:00

Lab Sample ID: 240-229387-5
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.16		0.050	0.024	mg/L			07/25/25 10:10	1
Sulfate (EPA 300.0-1993 R2.1)	270		5.0	1.7	mg/L			07/25/25 10:39	5

Client Sample ID: L507255-06 FIELD BLANK
Date Collected: 07/22/25 07:45
Date Received: 07/24/25 08:00

Lab Sample ID: 240-229387-6
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		07/25/25 14:00	07/29/25 01:03	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		07/28/25 18:10	07/30/25 19:31	1
Na	ND		0.60	0.33	mg/L		07/28/25 18:10	07/30/25 19:31	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/25/25 14:00	07/28/25 17:25	1
Arsenic	ND		0.0050	0.00075	mg/L		07/25/25 14:00	07/28/25 17:25	1
Barium	ND		0.0050	0.00077	mg/L		07/25/25 14:00	07/28/25 17:25	1
Beryllium	ND		0.0010	0.00027	mg/L		07/25/25 14:00	07/28/25 17:25	1
Cadmium	ND		0.0010	0.000077	mg/L		07/25/25 14:00	07/28/25 17:25	1
Cobalt	ND		0.0010	0.000086	mg/L		07/25/25 14:00	07/28/25 17:25	1
Chromium	ND		0.0050	0.0012	mg/L		07/25/25 14:00	07/28/25 17:25	1
Copper	ND		0.0020	0.0017	mg/L		07/25/25 14:00	07/28/25 17:25	1
Molybdenum	ND		0.0050	0.0011	mg/L		07/25/25 14:00	07/28/25 17:25	1
Nickel	ND		0.0020	0.0015	mg/L		07/25/25 14:00	07/28/25 17:25	1
Lead	ND		0.0010	0.00045	mg/L		07/25/25 14:00	07/28/25 17:25	1
Antimony	ND		0.0020	0.00057	mg/L		07/25/25 14:00	07/28/25 17:25	1
Selenium	ND		0.0050	0.00089	mg/L		07/25/25 14:00	07/28/25 17:25	1
Thallium	ND		0.0010	0.00051	mg/L		07/25/25 14:00	07/28/25 17:25	1
Vanadium	ND		0.0050	0.00082	mg/L		07/25/25 14:00	07/28/25 17:25	1
Calcium	ND		1.0	0.25	mg/L		07/25/25 14:00	07/28/25 17:25	1
Magnesium	ND		1.0	0.061	mg/L		07/25/25 14:00	07/28/25 17:25	1
Lithium	ND		0.0080	0.0034	mg/L		07/25/25 14:00	07/28/25 17:25	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		07/28/25 18:10	07/30/25 20:54	1
Zinc	ND		0.0070	0.00093	mg/L		07/28/25 18:10	07/30/25 20:54	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			07/29/25 06:27	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/25/25 14:00	07/28/25 15:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/25/25 13:43	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			07/25/25 13:43	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			07/24/25 10:29	1
Total Suspended Solids (SM 2540D-2020)	**0.60**	**J**	4.0	0.40	mg/L			07/25/25 11:37	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			07/25/25 11:08	1

Client Sample ID: L507255-06 FIELD BLANK
Lab Sample ID: 240-229387-6
Date Collected: 07/22/25 07:45
Matrix: Water
Date Received: 07/24/25 08:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			07/25/25 11:08	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			07/25/25 11:08	1

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-665311/1-A
Matrix: Water
Analysis Batch: 665511

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 665311

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		07/25/25 14:00	07/28/25 23:53	1

Lab Sample ID: LCS 240-665311/2-A
Matrix: Water
Analysis Batch: 665511

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 665311

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	0.974		mg/L		97	85 - 115

Lab Sample ID: 240-229387-1 MS
Matrix: Water
Analysis Batch: 665511

Client Sample ID: L507255-01 MW-19A
Prep Type: Total Recoverable
Prep Batch: 665311

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.26		1.00	1.43		mg/L		116	70 - 130

Lab Sample ID: 240-229387-1 MSD
Matrix: Water
Analysis Batch: 665511

Client Sample ID: L507255-01 MW-19A
Prep Type: Total Recoverable
Prep Batch: 665311

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.26		1.00	1.38		mg/L		112	70 - 130	3	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 350-8438/25-A
Matrix: Water
Analysis Batch: 8528

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8438

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		07/28/25 18:10	07/30/25 18:13	1
Na	ND		0.60	0.33	mg/L		07/28/25 18:10	07/30/25 18:13	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-8438/25-A
Matrix: Water
Analysis Batch: 8518

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8438

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.0170	J	0.10	0.013	mg/L		07/28/25 18:10	07/30/25 19:50	1
Zinc	ND		0.0070	0.00093	mg/L		07/28/25 18:10	07/30/25 19:50	1

Lab Sample ID: LCS 350-8438/26-A
Matrix: Water
Analysis Batch: 8518

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8438

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	16.9		mg/L		85	85 - 115
Zinc	1.00	0.875		mg/L		88	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-665311/1-A
Matrix: Water
Analysis Batch: 665578

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 665311

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		07/25/25 14:00	07/28/25 16:51	1
Arsenic	ND		0.0050	0.00075	mg/L		07/25/25 14:00	07/28/25 16:51	1
Barium	ND		0.0050	0.00077	mg/L		07/25/25 14:00	07/28/25 16:51	1
Beryllium	ND		0.0010	0.00027	mg/L		07/25/25 14:00	07/28/25 16:51	1
Cadmium	ND		0.0010	0.000077	mg/L		07/25/25 14:00	07/28/25 16:51	1
Cobalt	ND		0.0010	0.000086	mg/L		07/25/25 14:00	07/28/25 16:51	1
Chromium	ND		0.0050	0.0012	mg/L		07/25/25 14:00	07/28/25 16:51	1
Copper	ND		0.0020	0.0017	mg/L		07/25/25 14:00	07/28/25 16:51	1
Molybdenum	ND		0.0050	0.0011	mg/L		07/25/25 14:00	07/28/25 16:51	1
Nickel	ND		0.0020	0.0015	mg/L		07/25/25 14:00	07/28/25 16:51	1
Lead	ND		0.0010	0.00045	mg/L		07/25/25 14:00	07/28/25 16:51	1
Antimony	ND		0.0020	0.00057	mg/L		07/25/25 14:00	07/28/25 16:51	1
Selenium	ND		0.0050	0.00089	mg/L		07/25/25 14:00	07/28/25 16:51	1
Thallium	ND		0.0010	0.00051	mg/L		07/25/25 14:00	07/28/25 16:51	1
Vanadium	ND		0.0050	0.00082	mg/L		07/25/25 14:00	07/28/25 16:51	1
Calcium	ND		1.0	0.25	mg/L		07/25/25 14:00	07/28/25 16:51	1
Magnesium	ND		1.0	0.061	mg/L		07/25/25 14:00	07/28/25 16:51	1
Lithium	ND		0.0080	0.0034	mg/L		07/25/25 14:00	07/28/25 16:51	1

Lab Sample ID: LCS 240-665311/3-A
Matrix: Water
Analysis Batch: 665578

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 665311

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.0993		mg/L		99	85 - 115
Arsenic	1.00	1.02		mg/L		102	85 - 115
Barium	1.00	1.00		mg/L		100	85 - 115
Beryllium	0.500	0.493		mg/L		99	85 - 115
Cadmium	0.500	0.479		mg/L		96	85 - 115
Cobalt	0.500	0.500		mg/L		100	85 - 115
Chromium	0.500	0.496		mg/L		99	85 - 115
Copper	0.500	0.483		mg/L		97	85 - 115
Molybdenum	0.500	0.472		mg/L		94	85 - 115
Nickel	0.500	0.484		mg/L		97	85 - 115
Lead	0.500	0.550		mg/L		110	85 - 115
Antimony	0.100	0.0984		mg/L		98	85 - 115
Selenium	1.00	0.958		mg/L		96	85 - 115
Thallium	1.00	1.13		mg/L		113	85 - 115
Vanadium	0.500	0.499		mg/L		100	85 - 115
Calcium	25.0	25.0		mg/L		100	85 - 115
Magnesium	25.0	25.2		mg/L		101	85 - 115
Lithium	0.500	0.505		mg/L		101	85 - 115

Lab Sample ID: 240-229387-1 MS
Matrix: Water
Analysis Batch: 665578

Client Sample ID: L507255-01 MW-19A
Prep Type: Total Recoverable
Prep Batch: 665311

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.104		mg/L		104	70 - 130

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-229387-1 MS
Matrix: Water
Analysis Batch: 665578

Client Sample ID: L507255-01 MW-19A
Prep Type: Total Recoverable
Prep Batch: 665311

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.0043	J	1.00	1.07		mg/L		107	70 - 130
Barium	0.094		1.00	1.13		mg/L		104	70 - 130
Beryllium	ND		0.500	0.516		mg/L		103	70 - 130
Cadmium	ND		0.500	0.497		mg/L		99	70 - 130
Cobalt	0.00011	J	0.500	0.521		mg/L		104	70 - 130
Chromium	ND		0.500	0.513		mg/L		103	70 - 130
Copper	ND		0.500	0.499		mg/L		100	70 - 130
Molybdenum	0.0027	J	0.500	0.507		mg/L		101	70 - 130
Nickel	0.010		0.500	0.508		mg/L		100	70 - 130
Lead	ND		0.500	0.572		mg/L		114	70 - 130
Antimony	ND		0.100	0.105		mg/L		105	70 - 130
Selenium	ND		1.00	1.00		mg/L		100	70 - 130
Thallium	ND		1.00	1.18		mg/L		118	70 - 130
Vanadium	ND		0.500	0.520		mg/L		104	70 - 130
Calcium	190		25.0	214	4	mg/L		95	70 - 130
Magnesium	61		25.0	85.3		mg/L		95	70 - 130
Lithium	0.012		0.500	0.539		mg/L		105	70 - 130

Lab Sample ID: 240-229387-1 MSD
Matrix: Water
Analysis Batch: 665578

Client Sample ID: L507255-01 MW-19A
Prep Type: Total Recoverable
Prep Batch: 665311

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.104		mg/L		104	70 - 130	0	20
Arsenic	0.0043	J	1.00	1.07		mg/L		106	70 - 130	1	20
Barium	0.094		1.00	1.13		mg/L		103	70 - 130	1	20
Beryllium	ND		0.500	0.509		mg/L		102	70 - 130	1	20
Cadmium	ND		0.500	0.498		mg/L		100	70 - 130	0	20
Cobalt	0.00011	J	0.500	0.515		mg/L		103	70 - 130	1	20
Chromium	ND		0.500	0.507		mg/L		101	70 - 130	1	20
Copper	ND		0.500	0.496		mg/L		99	70 - 130	1	20
Molybdenum	0.0027	J	0.500	0.506		mg/L		101	70 - 130	0	20
Nickel	0.010		0.500	0.504		mg/L		99	70 - 130	1	20
Lead	ND		0.500	0.568		mg/L		114	70 - 130	1	20
Antimony	ND		0.100	0.103		mg/L		103	70 - 130	2	20
Selenium	ND		1.00	1.00		mg/L		100	70 - 130	0	20
Thallium	ND		1.00	1.18		mg/L		118	70 - 130	0	20
Vanadium	ND		0.500	0.513		mg/L		103	70 - 130	1	20
Calcium	190		25.0	222	4	mg/L		124	70 - 130	3	20
Magnesium	61		25.0	87.3		mg/L		103	70 - 130	2	20
Lithium	0.012		0.500	0.550		mg/L		107	70 - 130	2	20

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-665313/1-A
Matrix: Water
Analysis Batch: 665558

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 665313

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		07/25/25 14:00	07/28/25 14:41	1

Lab Sample ID: LCS 240-665313/2-A
Matrix: Water
Analysis Batch: 665558

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 665313

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00459		mg/L		92	85 - 115

Lab Sample ID: 240-229387-1 MS
Matrix: Water
Analysis Batch: 665558

Client Sample ID: L507255-01 MW-19A
Prep Type: Total/NA
Prep Batch: 665313

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00100	0.000851		mg/L		85	70 - 130

Lab Sample ID: 240-229387-1 MSD
Matrix: Water
Analysis Batch: 665558

Client Sample ID: L507255-01 MW-19A
Prep Type: Total/NA
Prep Batch: 665313

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.000848		mg/L		85	70 - 130	0	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-665350/4
Matrix: Water
Analysis Batch: 665350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			07/25/25 12:11	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			07/25/25 12:11	1

Lab Sample ID: 240-229387-4 DU
Matrix: Water
Analysis Batch: 665350

Client Sample ID: L507255-04 MW-19D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	300		302		mg/L		0.2	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-665123/1
Matrix: Water
Analysis Batch: 665123

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			07/24/25 10:29	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 240-665123/2
Matrix: Water
Analysis Batch: 665123

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	240	212		mg/L		88	80 - 120

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-665320/1
Matrix: Water
Analysis Batch: 665320

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			07/25/25 11:37	1

Lab Sample ID: LCS 240-665320/2
Matrix: Water
Analysis Batch: 665320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	30.0	29.5		mg/L		98	64 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-665151/4
Matrix: Water
Analysis Batch: 665151

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			07/25/25 17:54	1
Fluoride	ND		0.050	0.024	mg/L			07/25/25 17:54	1
Sulfate	ND		1.0	0.35	mg/L			07/25/25 17:54	1

Lab Sample ID: LCS 240-665151/5
Matrix: Water
Analysis Batch: 665151

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	48.4		mg/L		97	90 - 110
Fluoride	2.50	2.49		mg/L		100	90 - 110
Sulfate	50.0	47.8		mg/L		96	90 - 110

Lab Sample ID: MB 240-665152/3
Matrix: Water
Analysis Batch: 665152

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			07/25/25 09:50	1
Fluoride	ND		0.050	0.024	mg/L			07/25/25 09:50	1
Sulfate	ND		1.0	0.35	mg/L			07/25/25 09:50	1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-665152/4
Matrix: Water
Analysis Batch: 665152

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	48.6		mg/L		97	90 - 110
Fluoride	2.50	2.51		mg/L		100	90 - 110
Sulfate	50.0	48.1		mg/L		96	90 - 110

Lab Sample ID: 240-229387-5 MS
Matrix: Water
Analysis Batch: 665152

Client Sample ID: L507255-05 MWT-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	110		50.0	156		mg/L		90	80 - 120
Fluoride	0.16		2.50	2.69		mg/L		101	80 - 120

Lab Sample ID: 240-229387-5 MS
Matrix: Water
Analysis Batch: 665152

Client Sample ID: L507255-05 MWT-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	110		250	359		mg/L		98	80 - 120
Fluoride	0.16	J	12.5	12.9		mg/L		102	80 - 120
Sulfate	270		250	499		mg/L		92	80 - 120

Lab Sample ID: 240-229387-5 MSD
Matrix: Water
Analysis Batch: 665152

Client Sample ID: L507255-05 MWT-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	110		50.0	155		mg/L		89	80 - 120	0	15
Fluoride	0.16		2.50	2.67		mg/L		100	80 - 120	1	15

Lab Sample ID: 240-229387-5 MSD
Matrix: Water
Analysis Batch: 665152

Client Sample ID: L507255-05 MWT-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	110		250	359		mg/L		98	80 - 120	0	15
Fluoride	0.16	J	12.5	12.8		mg/L		102	80 - 120	0	15
Sulfate	270		250	500		mg/L		93	80 - 120	0	15

Metals

Prep Batch: 8438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-1	L507255-01 MW-19A	Total/NA	Water	200.7	
240-229387-2	L507255-02 MW-19B	Total/NA	Water	200.7	
240-229387-3	L507255-03 MW-19C	Total/NA	Water	200.7	
240-229387-4	L507255-04 MW-19D	Total/NA	Water	200.7	
240-229387-5	L507255-05 MWT-19A	Total/NA	Water	200.7	
240-229387-6	L507255-06 FIELD BLANK	Total/NA	Water	200.7	
MB 350-8438/25-A	Method Blank	Total/NA	Water	200.7	
LCS 350-8438/26-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 8518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-1	L507255-01 MW-19A	Total/NA	Water	200.8	8438
240-229387-2	L507255-02 MW-19B	Total/NA	Water	200.8	8438
240-229387-3	L507255-03 MW-19C	Total/NA	Water	200.8	8438
240-229387-4	L507255-04 MW-19D	Total/NA	Water	200.8	8438
240-229387-5	L507255-05 MWT-19A	Total/NA	Water	200.8	8438
240-229387-6	L507255-06 FIELD BLANK	Total/NA	Water	200.8	8438
MB 350-8438/25-A	Method Blank	Total/NA	Water	200.8	8438
LCS 350-8438/26-A	Lab Control Sample	Total/NA	Water	200.8	8438

Analysis Batch: 8528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-1	L507255-01 MW-19A	Total/NA	Water	200.7 Rev 4.4	8438
240-229387-2	L507255-02 MW-19B	Total/NA	Water	200.7 Rev 4.4	8438
240-229387-3	L507255-03 MW-19C	Total/NA	Water	200.7 Rev 4.4	8438
240-229387-4	L507255-04 MW-19D	Total/NA	Water	200.7 Rev 4.4	8438
240-229387-5	L507255-05 MWT-19A	Total/NA	Water	200.7 Rev 4.4	8438
240-229387-6	L507255-06 FIELD BLANK	Total/NA	Water	200.7 Rev 4.4	8438
MB 350-8438/25-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	8438
LCS 350-8438/26-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	8438

Prep Batch: 665311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-1	L507255-01 MW-19A	Total Recoverable	Water	200.7	
240-229387-2	L507255-02 MW-19B	Total Recoverable	Water	200.7	
240-229387-3	L507255-03 MW-19C	Total Recoverable	Water	200.7	
240-229387-4	L507255-04 MW-19D	Total Recoverable	Water	200.7	
240-229387-5	L507255-05 MWT-19A	Total Recoverable	Water	200.7	
240-229387-6	L507255-06 FIELD BLANK	Total Recoverable	Water	200.7	
MB 240-665311/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-665311/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-665311/3-A	Lab Control Sample	Total Recoverable	Water	200.7	
240-229387-1 MS	L507255-01 MW-19A	Total Recoverable	Water	200.7	
240-229387-1 MS	L507255-01 MW-19A	Total Recoverable	Water	200.7	
240-229387-1 MSD	L507255-01 MW-19A	Total Recoverable	Water	200.7	
240-229387-1 MSD	L507255-01 MW-19A	Total Recoverable	Water	200.7	

Prep Batch: 665313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-1	L507255-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	
240-229387-2	L507255-02 MW-19B	Total/NA	Water	245.1-1994 R3.0	

Metals (Continued)

Prep Batch: 665313 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-3	L507255-03 MW-19C	Total/NA	Water	245.1-1994 R3.0	
240-229387-4	L507255-04 MW-19D	Total/NA	Water	245.1-1994 R3.0	
240-229387-5	L507255-05 MWT-19A	Total/NA	Water	245.1-1994 R3.0	
240-229387-6	L507255-06 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	
MB 240-665313/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-665313/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	
240-229387-1 MS	L507255-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	
240-229387-1 MSD	L507255-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 665511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-1	L507255-01 MW-19A	Total Recoverable	Water	200.7 R4.4-1994	665311
240-229387-2	L507255-02 MW-19B	Total Recoverable	Water	200.7 R4.4-1994	665311
240-229387-3	L507255-03 MW-19C	Total Recoverable	Water	200.7 R4.4-1994	665311
240-229387-4	L507255-04 MW-19D	Total Recoverable	Water	200.7 R4.4-1994	665311
240-229387-5	L507255-05 MWT-19A	Total Recoverable	Water	200.7 R4.4-1994	665311
240-229387-6	L507255-06 FIELD BLANK	Total Recoverable	Water	200.7 R4.4-1994	665311
MB 240-665311/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	665311
LCS 240-665311/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	665311
240-229387-1 MS	L507255-01 MW-19A	Total Recoverable	Water	200.7 R4.4-1994	665311
240-229387-1 MSD	L507255-01 MW-19A	Total Recoverable	Water	200.7 R4.4-1994	665311

Analysis Batch: 665558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-1	L507255-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	665313
240-229387-2	L507255-02 MW-19B	Total/NA	Water	245.1-1994 R3.0	665313
240-229387-3	L507255-03 MW-19C	Total/NA	Water	245.1-1994 R3.0	665313
240-229387-4	L507255-04 MW-19D	Total/NA	Water	245.1-1994 R3.0	665313
240-229387-5	L507255-05 MWT-19A	Total/NA	Water	245.1-1994 R3.0	665313
240-229387-6	L507255-06 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	665313
MB 240-665313/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	665313
LCS 240-665313/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	665313
240-229387-1 MS	L507255-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	665313
240-229387-1 MSD	L507255-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	665313

Analysis Batch: 665577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-1	L507255-01 MW-19A	Total Recoverable	Water	2340 B-2021	
240-229387-2	L507255-02 MW-19B	Total Recoverable	Water	2340 B-2021	
240-229387-3	L507255-03 MW-19C	Total Recoverable	Water	2340 B-2021	
240-229387-4	L507255-04 MW-19D	Total Recoverable	Water	2340 B-2021	
240-229387-5	L507255-05 MWT-19A	Total Recoverable	Water	2340 B-2021	
240-229387-6	L507255-06 FIELD BLANK	Total Recoverable	Water	2340 B-2021	

Analysis Batch: 665578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-1	L507255-01 MW-19A	Total Recoverable	Water	200.8-1994 R5.4	665311
240-229387-2	L507255-02 MW-19B	Total Recoverable	Water	200.8-1994 R5.4	665311
240-229387-3	L507255-03 MW-19C	Total Recoverable	Water	200.8-1994 R5.4	665311
240-229387-4	L507255-04 MW-19D	Total Recoverable	Water	200.8-1994 R5.4	665311
240-229387-5	L507255-05 MWT-19A	Total Recoverable	Water	200.8-1994 R5.4	665311

Metals (Continued)

Analysis Batch: 665578 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-6	L507255-06 FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	665311
MB 240-665311/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	665311
LCS 240-665311/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	665311
240-229387-1 MS	L507255-01 MW-19A	Total Recoverable	Water	200.8-1994 R5.4	665311
240-229387-1 MSD	L507255-01 MW-19A	Total Recoverable	Water	200.8-1994 R5.4	665311

General Chemistry

Analysis Batch: 665123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-1	L507255-01 MW-19A	Total/NA	Water	2540 C-2020	
240-229387-2	L507255-02 MW-19B	Total/NA	Water	2540 C-2020	
240-229387-3	L507255-03 MW-19C	Total/NA	Water	2540 C-2020	
240-229387-4	L507255-04 MW-19D	Total/NA	Water	2540 C-2020	
240-229387-5	L507255-05 MWT-19A	Total/NA	Water	2540 C-2020	
240-229387-6	L507255-06 FIELD BLANK	Total/NA	Water	2540 C-2020	
MB 240-665123/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-665123/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 665151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-1	L507255-01 MW-19A	Total/NA	Water	300.0-1993 R2.1	
240-229387-1	L507255-01 MW-19A	Total/NA	Water	300.0-1993 R2.1	
240-229387-2	L507255-02 MW-19B	Total/NA	Water	300.0-1993 R2.1	
240-229387-2	L507255-02 MW-19B	Total/NA	Water	300.0-1993 R2.1	
240-229387-3	L507255-03 MW-19C	Total/NA	Water	300.0-1993 R2.1	
240-229387-4	L507255-04 MW-19D	Total/NA	Water	300.0-1993 R2.1	
MB 240-665151/4	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-665151/5	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 665152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-5	L507255-05 MWT-19A	Total/NA	Water	300.0-1993 R2.1	
240-229387-5	L507255-05 MWT-19A	Total/NA	Water	300.0-1993 R2.1	
240-229387-6	L507255-06 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
MB 240-665152/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-665152/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-229387-5 MS	L507255-05 MWT-19A	Total/NA	Water	300.0-1993 R2.1	
240-229387-5 MS	L507255-05 MWT-19A	Total/NA	Water	300.0-1993 R2.1	
240-229387-5 MSD	L507255-05 MWT-19A	Total/NA	Water	300.0-1993 R2.1	
240-229387-5 MSD	L507255-05 MWT-19A	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 665320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-1	L507255-01 MW-19A	Total/NA	Water	2540D-2020	
240-229387-2	L507255-02 MW-19B	Total/NA	Water	2540D-2020	
240-229387-3	L507255-03 MW-19C	Total/NA	Water	2540D-2020	
240-229387-4	L507255-04 MW-19D	Total/NA	Water	2540D-2020	
240-229387-5	L507255-05 MWT-19A	Total/NA	Water	2540D-2020	
240-229387-6	L507255-06 FIELD BLANK	Total/NA	Water	2540D-2020	
MB 240-665320/1	Method Blank	Total/NA	Water	2540D-2020	

General Chemistry (Continued)

Analysis Batch: 665320 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-665320/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 665350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-1	L507255-01 MW-19A	Total/NA	Water	2320 B-2021	
240-229387-2	L507255-02 MW-19B	Total/NA	Water	2320 B-2021	
240-229387-3	L507255-03 MW-19C	Total/NA	Water	2320 B-2021	
240-229387-4	L507255-04 MW-19D	Total/NA	Water	2320 B-2021	
240-229387-5	L507255-05 MWT-19A	Total/NA	Water	2320 B-2021	
240-229387-6	L507255-06 FIELD BLANK	Total/NA	Water	2320 B-2021	
MB 240-665350/4	Method Blank	Total/NA	Water	2320 B-2021	
240-229387-4 DU	L507255-04 MW-19D	Total/NA	Water	2320 B-2021	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-1

Client Sample ID: L507255-01 MW-19A

Lab Sample ID: 240-229387-1

Date Collected: 07/22/25 06:57
Matrix: Water
Date Received: 07/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			665311	GEV	EET CLE	07/25/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	665511	AJC	EET CLE	07/29/25 00:10
Total/NA	Prep	200.7			8438	RMN	EET SSM	07/28/25 18:10
Total/NA	Analysis	200.7 Rev 4.4		1	8528	JLS	EET SSM	07/30/25 19:07
Total/NA	Prep	200.7			8438	RMN	EET SSM	07/28/25 18:10
Total/NA	Analysis	200.8		1	8518	CW	EET SSM	07/30/25 20:40
Total Recoverable	Prep	200.7			665311	GEV	EET CLE	07/25/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	665578	S4FJ	EET CLE	07/28/25 16:56
Total Recoverable	Analysis	2340 B-2021		1	665577	KLC	EET CLE	07/29/25 06:27
Total/NA	Prep	245.1-1994 R3.0			665313	GEV	EET CLE	07/25/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	665558	GEV	EET CLE	07/28/25 14:45
Total/NA	Analysis	2320 B-2021		1	665350	JMR	EET CLE	07/25/25 13:08
Total/NA	Analysis	2540 C-2020		1	665123	TAV2	EET CLE	07/24/25 10:29
Total/NA	Analysis	2540D-2020		1	665320	VH6H	EET CLE	07/25/25 11:37
Total/NA	Analysis	300.0-1993 R2.1		1	665151	JMR	EET CLE	07/25/25 22:53
Total/NA	Analysis	300.0-1993 R2.1		5	665151	JMR	EET CLE	07/25/25 23:03

Client Sample ID: L507255-02 MW-19B

Lab Sample ID: 240-229387-2

Date Collected: 07/22/25 08:37
Matrix: Water
Date Received: 07/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			665311	GEV	EET CLE	07/25/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	665511	AJC	EET CLE	07/29/25 00:36
Total/NA	Prep	200.7			8438	RMN	EET SSM	07/28/25 18:10
Total/NA	Analysis	200.7 Rev 4.4		1	8528	JLS	EET SSM	07/30/25 19:18
Total/NA	Prep	200.7			8438	RMN	EET SSM	07/28/25 18:10
Total/NA	Analysis	200.8		1	8518	CW	EET SSM	07/30/25 20:43
Total Recoverable	Prep	200.7			665311	GEV	EET CLE	07/25/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	665578	S4FJ	EET CLE	07/28/25 17:14
Total Recoverable	Analysis	2340 B-2021		1	665577	KLC	EET CLE	07/29/25 06:27
Total/NA	Prep	245.1-1994 R3.0			665313	GEV	EET CLE	07/25/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	665558	GEV	EET CLE	07/28/25 14:51
Total/NA	Analysis	2320 B-2021		1	665350	JMR	EET CLE	07/25/25 13:14
Total/NA	Analysis	2540 C-2020		1	665123	TAV2	EET CLE	07/24/25 10:29
Total/NA	Analysis	2540D-2020		1	665320	VH6H	EET CLE	07/25/25 11:37
Total/NA	Analysis	300.0-1993 R2.1		1	665151	JMR	EET CLE	07/25/25 23:12
Total/NA	Analysis	300.0-1993 R2.1		5	665151	JMR	EET CLE	07/25/25 23:42

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-1

Client Sample ID: L507255-03 MW-19C

Lab Sample ID: 240-229387-3

Date Collected: 07/22/25 09:40
Matrix: Water
Date Received: 07/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			665311	GEV	EET CLE	07/25/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	665511	AJC	EET CLE	07/29/25 00:41
Total/NA	Prep	200.7			8438	RMN	EET SSM	07/28/25 18:10
Total/NA	Analysis	200.7 Rev 4.4		1	8528	JLS	EET SSM	07/30/25 19:21
Total/NA	Prep	200.7			8438	RMN	EET SSM	07/28/25 18:10
Total/NA	Analysis	200.8		1	8518	CW	EET SSM	07/30/25 20:46
Total Recoverable	Prep	200.7			665311	GEV	EET CLE	07/25/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	665578	S4FJ	EET CLE	07/28/25 17:17
Total Recoverable	Analysis	2340 B-2021		1	665577	KLC	EET CLE	07/29/25 06:27
Total/NA	Prep	245.1-1994 R3.0			665313	GEV	EET CLE	07/25/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	665558	GEV	EET CLE	07/28/25 14:53
Total/NA	Analysis	2320 B-2021		1	665350	JMR	EET CLE	07/25/25 13:20
Total/NA	Analysis	2540 C-2020		1	665123	TAV2	EET CLE	07/24/25 10:29
Total/NA	Analysis	2540D-2020		1	665320	VH6H	EET CLE	07/25/25 11:37
Total/NA	Analysis	300.0-1993 R2.1		1	665151	JMR	EET CLE	07/25/25 23:52

Client Sample ID: L507255-04 MW-19D

Lab Sample ID: 240-229387-4

Date Collected: 07/22/25 07:36
Matrix: Water
Date Received: 07/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			665311	GEV	EET CLE	07/25/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	665511	AJC	EET CLE	07/29/25 00:45
Total/NA	Prep	200.7			8438	RMN	EET SSM	07/28/25 18:10
Total/NA	Analysis	200.7 Rev 4.4		1	8528	JLS	EET SSM	07/30/25 19:24
Total/NA	Prep	200.7			8438	RMN	EET SSM	07/28/25 18:10
Total/NA	Analysis	200.8		1	8518	CW	EET SSM	07/30/25 20:49
Total Recoverable	Prep	200.7			665311	GEV	EET CLE	07/25/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	665578	S4FJ	EET CLE	07/28/25 17:20
Total Recoverable	Analysis	2340 B-2021		1	665577	KLC	EET CLE	07/29/25 06:27
Total/NA	Prep	245.1-1994 R3.0			665313	GEV	EET CLE	07/25/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	665558	GEV	EET CLE	07/28/25 14:58
Total/NA	Analysis	2320 B-2021		1	665350	JMR	EET CLE	07/25/25 13:25
Total/NA	Analysis	2540 C-2020		1	665123	TAV2	EET CLE	07/24/25 10:29
Total/NA	Analysis	2540D-2020		1	665320	VH6H	EET CLE	07/25/25 11:37
Total/NA	Analysis	300.0-1993 R2.1		1	665151	JMR	EET CLE	07/26/25 00:01

Client Sample ID: L507255-05 MWT-19A

Lab Sample ID: 240-229387-5

Date Collected: 07/22/25 06:57
Matrix: Water
Date Received: 07/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			665311	GEV	EET CLE	07/25/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	665511	AJC	EET CLE	07/29/25 00:59

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-1

Client Sample ID: L507255-05 MWT-19A

Lab Sample ID: 240-229387-5

Date Collected: 07/22/25 06:57
Matrix: Water
Date Received: 07/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			8438	RMN	EET SSM	07/28/25 18:10
Total/NA	Analysis	200.7 Rev 4.4		1	8528	JLS	EET SSM	07/30/25 19:28
Total/NA	Prep	200.7			8438	RMN	EET SSM	07/28/25 18:10
Total/NA	Analysis	200.8		1	8518	CW	EET SSM	07/30/25 20:52
Total Recoverable	Prep	200.7			665311	GEV	EET CLE	07/25/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	665578	S4FJ	EET CLE	07/28/25 17:22
Total Recoverable	Analysis	2340 B-2021		1	665577	KLC	EET CLE	07/29/25 06:27
Total/NA	Prep	245.1-1994 R3.0			665313	GEV	EET CLE	07/25/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	665558	GEV	EET CLE	07/28/25 15:00
Total/NA	Analysis	2320 B-2021		1	665350	JMR	EET CLE	07/25/25 13:36
Total/NA	Analysis	2540 C-2020		1	665123	TAV2	EET CLE	07/24/25 10:29
Total/NA	Analysis	2540D-2020		1	665320	VH6H	EET CLE	07/25/25 11:37
Total/NA	Analysis	300.0-1993 R2.1		1	665152	JMR	EET CLE	07/25/25 10:10
Total/NA	Analysis	300.0-1993 R2.1		5	665152	JMR	EET CLE	07/25/25 10:39

Client Sample ID: L507255-06 FIELD BLANK

Lab Sample ID: 240-229387-6

Date Collected: 07/22/25 07:45
Matrix: Water
Date Received: 07/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			665311	GEV	EET CLE	07/25/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	665511	AJC	EET CLE	07/29/25 01:03
Total/NA	Prep	200.7			8438	RMN	EET SSM	07/28/25 18:10
Total/NA	Analysis	200.7 Rev 4.4		1	8528	JLS	EET SSM	07/30/25 19:31
Total/NA	Prep	200.7			8438	RMN	EET SSM	07/28/25 18:10
Total/NA	Analysis	200.8		1	8518	CW	EET SSM	07/30/25 20:54
Total Recoverable	Prep	200.7			665311	GEV	EET CLE	07/25/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	665578	S4FJ	EET CLE	07/28/25 17:25
Total Recoverable	Analysis	2340 B-2021		1	665577	KLC	EET CLE	07/29/25 06:27
Total/NA	Prep	245.1-1994 R3.0			665313	GEV	EET CLE	07/25/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	665558	GEV	EET CLE	07/28/25 15:02
Total/NA	Analysis	2320 B-2021		1	665350	JMR	EET CLE	07/25/25 13:43
Total/NA	Analysis	2540 C-2020		1	665123	TAV2	EET CLE	07/24/25 10:29
Total/NA	Analysis	2540D-2020		1	665320	VH6H	EET CLE	07/25/25 11:37
Total/NA	Analysis	300.0-1993 R2.1		1	665152	JMR	EET CLE	07/25/25 11:08

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-1

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-08-26
Florida	NELAP	E87575	06-30-26
Louisiana (All)	NELAP	03073	07-01-26
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-26
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167-008	07-08-26
US Fish & Wildlife	US Federal Programs	A20571	06-30-26
USDA	US Federal Programs	525-23-4-22573	01-24-28
Wisconsin	State	399133460	07-31-25

Chain of Custody

Return Samples to: Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☐

Client Contact Info

Name: Jennifer Caporale
Address : 1110 South Pennsylvania
Address 2:
City, State Zip: Lansing, Michigan 48901
Phone: 517-702-6482
Email: Jennifer.Caporale@LBWL.com
Deliverables:

Project Info

Company: Lansing Board of Water & Light
Purchase Order: Purchase Order not required
Work Order:
Requested TAT:
Project Number: 24034575
Sample State: MI
Project Manager: Howell, Leslie
Project Reference:
Sampler: Marc Wahrer and Julie Maltby
Description: Erickson Projects
Site Name: Erickson Projects
Special Instructions: Need Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project. Please split off Radium so we can get the other results sooner.

Methods and Bottles

240-229387 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	2540C_Calcd Total Dissolved Solids [TDS]	SM2340B/Auto_TotalRec Total Hardness (as CaCO3) by calculation [HAR]	200.8/200.8_P_TR (MOD) 1 element, including prep [C01]	2320B (MOD) Any Analyte [ANY]	245.1/245.1_Prep Mercury [MER]	300.0_28D (MOD) All Anions [ANY]	2540D Solids, Total Suspended (TSS) [TSS]	903.0/PrecSep_21 Standard Target List [STD]	Ra226_228GFPC_P Local Method [160]	904.0/PrecSep_0 Standard Target List [STD]	200.7/200.7_P_TR (MOD) 1 element, including prep [C01]	200.8_CWA/200.8_P_TOT (MOD) Iron & Zinc [M02]			Plastic 1 liter - unpreserved	Plastic 60 mL - unpreserved	Plastic 250ml - with Nitric Acid	Plastic 500ml - unpreserved	Plastic 1 liter - Nitric Acid	Plastic 500ml - with Nitric Acid	Total Bottles For Sample
1	L507255-01 MW-19A	Grab	Water	07/22/25 06:57				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
2	L507255-02 MW-19B	Grab	Water	07/22/25 08:37				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
3	L507255-03 MW-19C	Grab	Water	07/22/25 09:40				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
4	L507255-04 MW-19D	Grab	Water	07/22/25 07:36				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
5	L507255-05 MWT-19A	Grab	Water	07/22/25 06:57				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
6	L507255-06 Field Blank	Grab	Water	07/22/25 07:45				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

y History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished By:	Date/Time:	
Jennifer Caporale	07/23/25 09:30	Jennifer Caporale	07/23/25 09:30	Received By: JMOROSKO 7/24/25 8:45

Chain of Custody Number: 395739

*H – Analysis on hold.

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250723A001								
MIC20250723A002								

Received By: JMOROSKO 7/24/25 8w

Chain of Custody Number: 395739

Eurofins – Cleveland Sample Receipt Form/Narrative Login # :_____
Barberton Facility

Client ERICKSON Projects Site Name_____ Cooler unpacked by:

Cooler Received on 7/24/25 Opened on 7/24/25 JMOROSKO

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other_____

Receipt After-hours: Drop-off Date/Time_____ Storage Location_____

Eurofins Cooler # EC Foam Box Client Cooler Box Other_____

Packing material used: Bubble Wrap Foam Plastic Bag None Other_____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☒ See Multiple Cooler Form
   IR GUN # 17 (CF 10.2 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC463162
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

_____

_____

_____

_____

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s):_____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Login # : _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: 17	1.5	1.7	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	3.0	3.2	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	

7/24/2025

Login Container Summary Report

240-229387

7/31/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L507255-01 MW-19A	240-229387-A-1	Plastic 60 mL unpreserved				
L507255-01 MW-19A	240-229387-B-1	Plastic 60 mL - unpreserved				
L507255-01 MW-19A	240-229387-C-1	Plastic 250ml - with Nitric Acid	<2			
L507255-01 MW-19A	240-229387-D-1	Plastic 500ml - unpreserved				
L507255-01 MW-19A	240-229387-E-1	Plastic 500ml - with Nitric Acid	<2			
L507255-01 MW-19A	240-229387-F-1	Plastic 1 liter - unpreserved				
L507255-01 MW-19A	240-229387-G-1	Plastic 1 liter - Nitric Acid	<2			
L507255-01 MW 19A	240-229387-H-1	Plastic 1 liter - Nitric Acid	<2			
L507255-02 MW-19B	240-229387-A-2	Plastic 60 mL - unpreserved				
L507255-02 MW-19B	240-229387 B-2	Plastic 60 mL - unpreserved				
L507255-02 MW-19B	240-229387-C-2	Plastic 250ml - with Nitric Acid	<2			
L507255-02 MW-19B	240-229387-D-2	Plastic 500ml - unpreserved				
L507255-02 MW-19B	240-229387-E-2	Plastic 500ml - with Nitric Acid	<2			
L507255-02 MW-19B	240-229387-F-2	Plastic 1 liter - unpreserved				
L507255-02 MW-19B	240-229387-G-2	Plastic 1 liter - Nitric Acid	<2			
L507255-02 MW 19B	240-229387-H-2	Plastic 1 liter - Nitric Acid	<2			
L507255-03 MW 19C	240-229387 A-3	Plastic 60 mL - unpreserved				
L507255-03 MW-19C	240-229387-B-3	Plastic 60 mL - unpreserved				
L507255-03 MW 19C	240-229387-C-3	Plastic 250ml - with Nitric Acid	<2			
L507255-03 MW-19C	240-229387-D-3	Plastic 500ml - unpreserved				
L507255-03 MW 19C	240-229387-E-3	Plastic 500ml - with Nitric Acid	<2			
L507255-03 MW-19C	240-229387-F-3	Plastic 1 liter unpreserved				
L507255-03 MW 19C	240-229387-G-3	Plastic 1 liter - Nitric Acid	<2			
L507255-03 MW-19C	240-229387-H 3	Plastic 1 liter - Nitric Acid	<2			
L507255-04 MW-19D	240-229387-A-4	Plastic 60 mL - unpreserved				
L507255-04 MW-19D	240-229387-B-4	Plastic 60 mL - unpreserved				
L507255-04 MW-19D	240-229387-C-4	Plastic 250ml - with Nitric Acid	<2			
L507255-04 MW-19D	240-229387-D-4	Plastic 500ml unpreserved				
L507255-04 MW-19D	240-229387 E-4	Plastic 500ml - with Nitric Acid	<2			
L507255-04 MW-19D	240-229387 F-4	Plastic 1 liter - unpreserved				
L507255-04 MW-19D	240-229387-G-4	Plastic 1 liter - Nitric Acid	<2			
L507255-04 MW-19D	240-229387 H-4	Plastic 1 liter - Nitric Acid	<2			
L507255-05 MWT-19A	240-229387 A 5	Plastic 60 mL - unpreserved				
L507255-05 MWT-19A	240-229387-B-5	Plastic 60 mL - unpreserved				
L507255-05 MWT 19A	240-229387-C-5	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L507255-05 MWT-19A	240-229387-D-5	Plastic 500ml - unpreserved				
L507255-05 MWT-19A	240-229387-E-5	Plastic 500ml - with Nitric Acid	<2			
L507255-05 MWT-19A	240-229387-F 5	Plastic 1 liter - unpreserved				
L507255-05 MWT-19A	240-229387-G-5	Plastic 1 liter - Nitric Acid	<2			
L507255-05 MWT-19A	240-229387-H-5	Plastic 1 liter - Nitric Acid	<2			
L507255-06 FIELD BLANK	240-229387-A-6	Plastic 60 mL - unpreserved				
L507255-06 FIELD BLANK	240-229387-B-6	Plastic 60 mL - unpreserved				
L507255-06 FIELD BLANK	240-229387-C-6	Plastic 250ml - with Nitric Acid	<2			
L507255-06 FIELD BLANK	240-229387-D-6	Plastic 500ml - unpreserved				
L507255-06 FIELD BLANK	240-229387 E-6	Plastic 500ml - with Nitric Acid	<2			
L507255-06 FIELD BLANK	240-229387-F-6	Plastic 1 liter - unpreserved				
L507255-06 FIELD BLANK	240-229387-G-6	Plastic 1 liter - Nitric Acid	<2			
L507255-06 FIELD BLANK	240-229387-H-6	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-205507.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-229387-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 8/6/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21Standard Target List	904.0/PrecSep_0Standard Target List	Ra226_228GFPC_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L507255-01 MW-19A (240-229387-1)	7/22/25	06:57 Eastern	G	Water			X	X	X	2	
L507255-02 MW-19B (240-229387-2)	7/22/25	08:37 Eastern	G	Water			X	X	X	2	
L507255-03 MW-19C (240-229387-3)	7/22/25	09:40 Eastern	G	Water			X	X	X	2	
L507255-04 MW-19D (240-229387-4)	7/22/25	07:36 Eastern	G	Water			X	X	X	2	
L507255-05 MWT-19A (240-229387-5)	7/22/25	06:57 Eastern	G	Water			X	X	X	2	
L507255-06 FIELD BLANK (240-229387-6)	7/22/25	07:45 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
J Collins	7-24-25	PLW	M. Pinette	JUL 25 2025 0830	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			Meadow Pinette		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-205497.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-229387-1
Address: 5755 8th Street East, ,	Due Date Requested: 8/6/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

medium white igloo

Therm. ID: SC04 Cust. Seal: Y (N)
Uncorr./Corr. Temp: 21.6 / 21.7 °C
Delivery: UPS (FedEx) Other:
Ice Type: Blue / Dry / Wet / (None)
Label Ver.: JS Packing: Bubble
7/25/25

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT(MOD) Iron & Zinc	200.7_CWA/200.7_P_TOT(MOD) Iron & Zinc	Total Number	Special Instructions/Note:
			Preservation Code:							
L507255-01 MW-19A (240-229387-1)	7/22/25	06:57 Eastern	G	Water			X	X	1	
L507255-02 MW-19B (240-229387-2)	7/22/25	08:37 Eastern	G	Water			X	X	1	
L507255-03 MW-19C (240-229387-3)	7/22/25	09:40 Eastern	G	Water			X	X	1	
L507255-04 MW-19D (240-229387-4)	7/22/25	07:36 Eastern	G	Water			X	X	1	
L507255-05 MWT-19A (240-229387-5)	7/22/25	06:57 Eastern	G	Water			X	X	1	
L507255-06 FIELD BLANK (240-229387-6)	7/22/25	07:45 Eastern	G	Water			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JCollins	7-24-25	EEN	Jesse Sipp	7/25/25 10:00	CETN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

FedEx PO Trk#: 4616 0297 9718

Ver: 10/10/2024

7/31/2025

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-229387-1

Login Number: 229387
List Number: 3
Creator: Singh, Jaskaran

List Source: Eurofins Seattle Specialty Metals
List Creation: 07/25/25 05:41 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 9/11/2025 3:08:11 PM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-229387-2

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

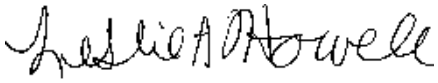
See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
9/11/2025 3:08:11 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 9
Tracer Carrier Summary 15
QC Sample Results 16
QC Association Summary 19
Lab Chronicle 20
Certification Summary 22
Chain of Custody 23
Receipt Checklists 29

Definitions/Glossary

Client: Lansing Board of Water & Light
Job ID: 240-229387-2
Project/Site: Erickson Projects

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
240-229387-2

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 7/24/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.7°C and 3.2°C.

Gas Flow Proportional Counter
Method 903.0: Radium 226 Prep Batch 160-732823

Insufficient sample volume was available to perform a sample duplicate for the following samples: L507255-05 MWT-19A (240-229387-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method 904.0: Radium 228 Prep Batch 160-732825

Insufficient sample volume was available to perform a sample duplicate for the following samples: L507255-05 MWT-19A (240-229387-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-229387-1	L507255-01 MW-19A	Water	07/22/25 06:57	07/24/25 08:00	Michigan
240-229387-2	L507255-02 MW-19B	Water	07/22/25 08:37	07/24/25 08:00	Michigan
240-229387-3	L507255-03 MW-19C	Water	07/22/25 09:40	07/24/25 08:00	Michigan
240-229387-4	L507255-04 MW-19D	Water	07/22/25 07:36	07/24/25 08:00	Michigan
240-229387-5	L507255-05 MWT-19A	Water	07/22/25 06:57	07/24/25 08:00	Michigan
240-229387-6	L507255-06 FIELD BLANK	Water	07/22/25 07:45	07/24/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Job ID: 240-229387-2
Project/Site: Erickson Projects

Client Sample ID: L507255-01 MW-19A — Lab Sample ID: 240-229387-1

No Detections.

Client Sample ID: L507255-02 MW-19B — Lab Sample ID: 240-229387-2

No Detections.

Client Sample ID: L507255-03 MW-19C — Lab Sample ID: 240-229387-3

No Detections.

Client Sample ID: L507255-04 MW-19D — Lab Sample ID: 240-229387-4

No Detections.

Client Sample ID: L507255-05 MWT-19A — Lab Sample ID: 240-229387-5

No Detections.

Client Sample ID: L507255-06 FIELD BLANK — Lab Sample ID: 240-229387-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: L507255-01 MW-19A

Date Collected: 07/22/25 06:57
Date Received: 07/24/25 08:00

Lab Sample ID: 240-229387-1

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.309		0.222	0.224	1.00	0.303	pCi/L	07/28/25 08:19	08/20/25 15:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.9*		*30 - 110*	*07/28/25 08:19*	*08/20/25 15:51*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.118	U	0.389	0.389	1.00	0.686	pCi/L	07/28/25 08:25	08/20/25 11:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.9*		*30 - 110*	*07/28/25 08:25*	*08/20/25 11:53*	*1*
Y Carrier	*84.9*		*30 - 110*	*07/28/25 08:25*	*08/20/25 11:53*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.427	U	0.448	0.449	5.00	0.686	pCi/L		09/11/25 13:58	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-2

Client Sample ID: L507255-02 MW-19B
Date Collected: 07/22/25 08:37
Date Received: 07/24/25 08:00

Lab Sample ID: 240-229387-2
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.411		0.256	0.259	1.00	0.342	pCi/L	07/28/25 08:19	08/20/25 15:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*07/28/25 08:19*	*08/20/25 15:51*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.712		0.354	0.360	1.00	0.484	pCi/L	07/28/25 08:25	08/20/25 11:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*07/28/25 08:25*	*08/20/25 11:53*	*1*
Y Carrier	*89.0*		*30 - 110*	*07/28/25 08:25*	*08/20/25 11:53*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.12		0.437	0.443	5.00	0.484	pCi/L		09/11/25 13:58	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-2

Client Sample ID: L507255-03 MW-19C
Date Collected: 07/22/25 09:40
Date Received: 07/24/25 08:00

Lab Sample ID: 240-229387-3
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.414**		0.245	0.248	1.00	0.317	pCi/L	07/28/25 08:19	08/20/25 15:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.1*		*30 - 110*	*07/28/25 08:19*	*08/20/25 15:57*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.214	U	0.291	0.292	1.00	0.488	pCi/L	07/28/25 08:25	08/20/25 11:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.1*		*30 - 110*	*07/28/25 08:25*	*08/20/25 11:53*	*1*
Y Carrier	*89.0*		*30 - 110*	*07/28/25 08:25*	*08/20/25 11:53*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.628**		0.380	0.383	5.00	0.488	pCi/L		09/11/25 13:58	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-2

Client Sample ID: L507255-04 MW-19D
Date Collected: 07/22/25 07:36
Date Received: 07/24/25 08:00

Lab Sample ID: 240-229387-4
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.277	U	0.217	0.219	1.00	0.313	pCi/L	07/28/25 08:19	08/20/25 15:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.1*		*30 - 110*	*07/28/25 08:19*	*08/20/25 15:57*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.182	U	0.388	0.389	1.00	0.675	pCi/L	07/28/25 08:25	08/20/25 12:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.1*		*30 - 110*	*07/28/25 08:25*	*08/20/25 12:58*	*1*
Y Carrier	*78.1*		*30 - 110*	*07/28/25 08:25*	*08/20/25 12:58*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.458	U	0.445	0.446	5.00	0.675	pCi/L		09/11/25 13:58	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-2

Client Sample ID: L507255-05 MWT-19A
Date Collected: 07/22/25 06:57
Date Received: 07/24/25 08:00

Lab Sample ID: 240-229387-5
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.211		0.0908	0.0928	1.00	0.105	pCi/L	08/20/25 10:16	09/11/25 07:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.7*		*30 - 110*	*08/20/25 10:16*	*09/11/25 07:49*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.822		0.432	0.438	1.00	0.614	pCi/L	08/20/25 10:19	08/25/25 11:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.7*		*30 - 110*	*08/20/25 10:19*	*08/25/25 11:44*	*1*
Y Carrier	*77.8*		*30 - 110*	*08/20/25 10:19*	*08/25/25 11:44*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.03		0.441	0.448	5.00	0.614	pCi/L		09/11/25 13:58	1

Client Sample ID: L507255-06 FIELD BLANK
Date Collected: 07/22/25 07:45
Date Received: 07/24/25 08:00

Lab Sample ID: 240-229387-6
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0760	U	0.196	0.196	1.00	0.366	pCi/L	07/28/25 08:19	08/20/25 15:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.9*		*30 - 110*	*07/28/25 08:19*	*08/20/25 15:57*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.151	U	0.429	0.429	1.00	0.828	pCi/L	07/28/25 08:25	08/20/25 12:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.9*		*30 - 110*	*07/28/25 08:25*	*08/20/25 12:58*	*1*
Y Carrier	*81.5*		*30 - 110*	*07/28/25 08:25*	*08/20/25 12:58*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.0760	U	0.472	0.472	5.00	0.828	pCi/L		09/11/25 13:58	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)						
		Ba						
Lab Sample ID	Client Sample ID	(30-110)						
240-229387-1	L507255-01 MW-19A	85.9						
240-229387-2	L507255-02 MW-19B	88.8						
240-229387-3	L507255-03 MW-19C	93.1						
240-229387-3 DU	L507255-03 MW-19C	91.8						
240-229387-4	L507255-04 MW-19D	93.1						
240-229387-5	L507255-05 MWT-19A	89.7						
240-229387-6	L507255-06 FIELD BLANK	77.9						
LCS 160-729209/2-A	Lab Control Sample	96.8						
LCS 160-732823/2-A	Lab Control Sample	85.1						
LCSD 160-732823/3-A	Lab Control Sample Dup	92.9						
MB 160-729209/1-A	Method Blank	93.3						
MB 160-732823/1-A	Method Blank	89.7						

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)						
		Ba	Y					
Lab Sample ID	Client Sample ID	(30-110)	(30-110)					
240-229387-1	L507255-01 MW-19A	85.9	84.9					
240-229387-2	L507255-02 MW-19B	88.8	89.0					
240-229387-3	L507255-03 MW-19C	93.1	89.0					
240-229387-3 DU	L507255-03 MW-19C	91.8	87.1					
240-229387-4	L507255-04 MW-19D	93.1	78.1					
240-229387-5	L507255-05 MWT-19A	89.7	77.8					
240-229387-6	L507255-06 FIELD BLANK	77.9	81.5					
LCS 160-729211/2-A	Lab Control Sample	96.8	79.6					
LCS 160-732825/2-A	Lab Control Sample	85.1	76.3					
LCSD 160-732825/3-A	Lab Control Sample Dup	92.9	83.4					
MB 160-729211/1-A	Method Blank	93.3	79.6					
MB 160-732825/1-A	Method Blank	89.7	81.9					

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-729209/1-A
Matrix: Water
Analysis Batch: 732822

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 729209

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.07390	U	0.178	0.179	1.00	0.387	pCi/L	07/28/25 08:19	08/20/25 15:46	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.3*		*30 - 110*	*07/28/25 08:19*	*08/20/25 15:46*	*1*

Lab Sample ID: LCS 160-729209/2-A
Matrix: Water
Analysis Batch: 732822

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 729209

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.57	9.371		1.24	1.00	0.341	pCi/L	98	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*96.8*		*30 - 110*

Lab Sample ID: 240-229387-3 DU
Matrix: Water
Analysis Batch: 732821

Client Sample ID: L507255-03 MW-19C
Prep Type: Total/NA
Prep Batch: 729209

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.414			0.3709		0.232	1.00	0.293	pCi/L			0.09	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*91.8*		*30 - 110*

Lab Sample ID: MB 160-732823/1-A
Matrix: Water
Analysis Batch: 735577

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 732823

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.03307	U	0.0517	0.0518	1.00	0.117	pCi/L	08/20/25 10:16	09/11/25 07:48	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.7*		*30 - 110*	*08/20/25 10:16*	*09/11/25 07:48*	*1*

Lab Sample ID: LCS 160-732823/2-A
Matrix: Water
Analysis Batch: 735577

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 732823

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.57	9.988		1.04	1.00	0.112	pCi/L	104	75 - 125		

Method: 903.0 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-732823/2-A
Matrix: Water
Analysis Batch: 735577

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 732823

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	85.1		30 - 110

Lab Sample ID: LCSD 160-732823/3-A
Matrix: Water
Analysis Batch: 735577

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 732823

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-226			9.57	8.674		0.912	1.00	0.0979	pCi/L	91	75 - 125	0.67	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	92.9		30 - 110

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-729211/1-A
Matrix: Water
Analysis Batch: 732822

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 729211

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4203	U	0.371	0.373	1.00	0.588	pCi/L	07/28/25 08:25	08/20/25 11:56	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	93.3		30 - 110	07/28/25 08:25	08/20/25 11:56	1
Y Carrier	79.6		30 - 110	07/28/25 08:25	08/20/25 11:56	1

Lab Sample ID: LCS 160-729211/2-A
Matrix: Water
Analysis Batch: 732822

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 729211

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.15	9.339		1.27	1.00	0.525	pCi/L	102	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	96.8		30 - 110
Y Carrier	79.6		30 - 110

Lab Sample ID: 240-229387-3 DU
Matrix: Water
Analysis Batch: 732816

Client Sample ID: L507255-03 MW-19C
Prep Type: Total/NA
Prep Batch: 729211

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.214	U		0.4325	U	0.377	1.00	0.591	pCi/L			0.33	1

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: 240-229387-3 DU
Matrix: Water
Analysis Batch: 732816

Client Sample ID: L507255-03 MW-19C
Prep Type: Total/NA
Prep Batch: 729211

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	91.8		30 - 110
Y Carrier	87.1		30 - 110

Lab Sample ID: MB 160-732825/1-A
Matrix: Water
Analysis Batch: 733501

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 732825

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.8731		0.416	0.424	1.00	0.575	pCi/L	08/20/25 10:19	08/25/25 11:44	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		30 - 110	08/20/25 10:19	08/25/25 11:44	1
Y Carrier	81.9		30 - 110	08/20/25 10:19	08/25/25 11:44	1

Lab Sample ID: LCS 160-732825/2-A
Matrix: Water
Analysis Batch: 733501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 732825

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.13	10.44		1.44	1.00	0.586	pCi/L	114	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	85.1		30 - 110
Y Carrier	76.3		30 - 110

Lab Sample ID: LCSD 160-732825/3-A
Matrix: Water
Analysis Batch: 733501

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 732825

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits	RER	RER Limit
Radium-228			9.13	9.063		1.24	1.00	0.484	pCi/L	99	75 - 125	0.52	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	92.9		30 - 110
Y Carrier	83.4		30 - 110

QC Association Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-2

Rad

Prep Batch: 729209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-1	L507255-01 MW-19A	Total/NA	Water	PrecSep-21	
240-229387-2	L507255-02 MW-19B	Total/NA	Water	PrecSep-21	
240-229387-3	L507255-03 MW-19C	Total/NA	Water	PrecSep-21	
240-229387-4	L507255-04 MW-19D	Total/NA	Water	PrecSep-21	
240-229387-6	L507255-06 FIELD BLANK	Total/NA	Water	PrecSep-21	
MB 160-729209/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-729209/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-229387-3 DU	L507255-03 MW-19C	Total/NA	Water	PrecSep-21	

Prep Batch: 729211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-1	L507255-01 MW-19A	Total/NA	Water	PrecSep_0	
240-229387-2	L507255-02 MW-19B	Total/NA	Water	PrecSep_0	
240-229387-3	L507255-03 MW-19C	Total/NA	Water	PrecSep_0	
240-229387-4	L507255-04 MW-19D	Total/NA	Water	PrecSep_0	
240-229387-6	L507255-06 FIELD BLANK	Total/NA	Water	PrecSep_0	
MB 160-729211/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-729211/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-229387-3 DU	L507255-03 MW-19C	Total/NA	Water	PrecSep_0	

Prep Batch: 732823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-5	L507255-05 MWT-19A	Total/NA	Water	PrecSep-21	
MB 160-732823/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-732823/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-732823/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 732825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-229387-5	L507255-05 MWT-19A	Total/NA	Water	PrecSep_0	
MB 160-732825/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-732825/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-732825/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-2

Client Sample ID: L507255-01 MW-19A

Lab Sample ID: 240-229387-1

Date Collected: 07/22/25 06:57
Matrix: Water
Date Received: 07/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			729209	JTR	EET SL	07/28/25 08:19
Total/NA	Analysis	903.0		1	732816	SWS	EET SL	08/20/25 15:51
Total/NA	Prep	PrecSep_0			729211	JTR	EET SL	07/28/25 08:25
Total/NA	Analysis	904.0		1	732816	SWS	EET SL	08/20/25 11:53
Total/NA	Analysis	Ra226_Ra228 Pos		1	735340	SCB	EET SL	09/11/25 13:58

Client Sample ID: L507255-02 MW-19B

Lab Sample ID: 240-229387-2

Date Collected: 07/22/25 08:37
Matrix: Water
Date Received: 07/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			729209	JTR	EET SL	07/28/25 08:19
Total/NA	Analysis	903.0		1	732816	SWS	EET SL	08/20/25 15:51
Total/NA	Prep	PrecSep_0			729211	JTR	EET SL	07/28/25 08:25
Total/NA	Analysis	904.0		1	732816	SWS	EET SL	08/20/25 11:53
Total/NA	Analysis	Ra226_Ra228 Pos		1	735340	SCB	EET SL	09/11/25 13:58

Client Sample ID: L507255-03 MW-19C

Lab Sample ID: 240-229387-3

Date Collected: 07/22/25 09:40
Matrix: Water
Date Received: 07/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			729209	JTR	EET SL	07/28/25 08:19
Total/NA	Analysis	903.0		1	732821	SWS	EET SL	08/20/25 15:57
Total/NA	Prep	PrecSep_0			729211	JTR	EET SL	07/28/25 08:25
Total/NA	Analysis	904.0		1	732816	SWS	EET SL	08/20/25 11:53
Total/NA	Analysis	Ra226_Ra228 Pos		1	735340	SCB	EET SL	09/11/25 13:58

Client Sample ID: L507255-04 MW-19D

Lab Sample ID: 240-229387-4

Date Collected: 07/22/25 07:36
Matrix: Water
Date Received: 07/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			729209	JTR	EET SL	07/28/25 08:19
Total/NA	Analysis	903.0		1	732821	SWS	EET SL	08/20/25 15:57
Total/NA	Prep	PrecSep_0			729211	JTR	EET SL	07/28/25 08:25
Total/NA	Analysis	904.0		1	732816	SWS	EET SL	08/20/25 12:58
Total/NA	Analysis	Ra226_Ra228 Pos		1	735340	SCB	EET SL	09/11/25 13:58

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-2

Client Sample ID: L507255-05 MWT-19A

Lab Sample ID: 240-229387-5

Date Collected: 07/22/25 06:57
Matrix: Water
Date Received: 07/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			732823	JTR	EET SL	08/20/25 10:16
Total/NA	Analysis	903.0		1	735577	SWS	EET SL	09/11/25 07:49
Total/NA	Prep	PrecSep_0			732825	JTR	EET SL	08/20/25 10:19
Total/NA	Analysis	904.0		1	733501	SWS	EET SL	08/25/25 11:44
Total/NA	Analysis	Ra226_Ra228 Pos		1	735340	SCB	EET SL	09/11/25 13:58

Client Sample ID: L507255-06 FIELD BLANK

Lab Sample ID: 240-229387-6

Date Collected: 07/22/25 07:45
Matrix: Water
Date Received: 07/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			729209	JTR	EET SL	07/28/25 08:19
Total/NA	Analysis	903.0		1	732821	SWS	EET SL	08/20/25 15:57
Total/NA	Prep	PrecSep_0			729211	JTR	EET SL	07/28/25 08:25
Total/NA	Analysis	904.0		1	732816	SWS	EET SL	08/20/25 12:58
Total/NA	Analysis	Ra226_Ra228 Pos		1	735340	SCB	EET SL	09/11/25 13:58

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-229387-2

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25 *
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	10-01-26
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25 *
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-30-25 *
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody

Return Samples to: Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☐

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:

Project Number:
24034575

Sample State: MI

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
Marc Wahrer and Julie Maltby

Description:
Erickson Projects

Site Name:
Erickson Projects

Special Instructions:
Need Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project. Please split off Radium so we can get the other results sooner.

Methods and Bottles

240-229387 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	2540C_Calcd Total Dissolved Solids [TDS]	SM2340B/Auto_TotalRec Total Hardness (as CaCO3) by calculation [HAR]	200.8/200.8_P_TR (MOD) 1 element, including prep [C01]	2320B (MOD) Any Analyte [ANY]	245.1/245.1_Prep Mercury [MER]	300.0_28D (MOD) All Anions [ANY]	2540D Solids, Total Suspended (TSS) [TSS]	903.0/PrecSep_21 Standard Target List [STD]	Ra226_228GFPC_P Local Method [160]	904.0/PrecSep_0 Standard Target List [STD]	200.7/200.7_P_TR (MOD) 1 element, including prep [C01]	200.8_CWA/200.8_P_TOT (MOD) Iron & Zinc [M02]			Plastic 1 liter - unpreserved	Plastic 60 mL - unpreserved	Plastic 250ml - with Nitric Acid	Plastic 500ml - unpreserved	Plastic 1 liter - Nitric Acid	Plastic 500ml - with Nitric Acid	Total Bottles For Sample
1	L507255-01 MW-19A	Grab	Water	07/22/25 06:57				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
2	L507255-02 MW-19B	Grab	Water	07/22/25 08:37				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
3	L507255-03 MW-19C	Grab	Water	07/22/25 09:40				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
4	L507255-04 MW-19D	Grab	Water	07/22/25 07:36				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
5	L507255-05 MWT-19A	Grab	Water	07/22/25 06:57				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8
6	L507255-06 Field Blank	Grab	Water	07/22/25 07:45				X	X	X	X	X	X	X	X	X	X	X	X			1	2	1	1	2	1	8

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

y History (All dates and times have been nverted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished By:	Date/Time:		
Jennifer Caporale	07/23/25 09:30	Jennifer Caporale	07/23/25 09:30	Received By: JMOROSKO	7/24/25 8:45

Chain of Custody Number: 395739

*H – Analysis on hold.

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250723A001								
MIC20250723A002								

Received By: JMOROSKO 7/24/25
8W

Chain of Custody Number: 395739

Eurofins – Cleveland Sample Receipt Form/Narrative Login # :_____
Barberton Facility

Client ERICKSON Projects Site Name_____ Cooler unpacked by:

Cooler Received on 7/24/25 Opened on 7/24/25 JMOROSKO

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other_____

Receipt After-hours: Drop-off Date/Time_____ Storage Location_____

Eurofins Cooler # EC Foam Box Client Cooler Box Other_____

Packing material used: Bubble Wrap Foam Plastic Bag None Other_____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☒ See Multiple Cooler Form

IR GUN # 17 (CF 10.2 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC463162
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

_____

_____

_____

_____

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s):_____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Login # : _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 17	1.5	1.7	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	3.0	3.2	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	

7/24/2025

Login Container Summary Report

240-229387

9/11/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L507255-01 MW-19A	240-229387-A-1	Plastic 60 mL unpreserved				
L507255-01 MW-19A	240-229387-B-1	Plastic 60 mL - unpreserved				
L507255-01 MW-19A	240-229387-C-1	Plastic 250ml - with Nitric Acid	<2			
L507255-01 MW-19A	240-229387-D-1	Plastic 500ml - unpreserved				
L507255-01 MW-19A	240-229387-E-1	Plastic 500ml - with Nitric Acid	<2			
L507255-01 MW-19A	240-229387-F-1	Plastic 1 liter - unpreserved				
L507255-01 MW-19A	240-229387-G-1	Plastic 1 liter - Nitric Acid	<2			
L507255-01 MW 19A	240-229387-H-1	Plastic 1 liter - Nitric Acid	<2			
L507255-02 MW-19B	240-229387-A-2	Plastic 60 mL - unpreserved				
L507255-02 MW-19B	240-229387 B-2	Plastic 60 mL - unpreserved				
L507255-02 MW-19B	240-229387-C-2	Plastic 250ml - with Nitric Acid	<2			
L507255-02 MW-19B	240-229387-D-2	Plastic 500ml - unpreserved				
L507255-02 MW-19B	240-229387-E-2	Plastic 500ml - with Nitric Acid	<2			
L507255-02 MW-19B	240-229387-F-2	Plastic 1 liter - unpreserved				
L507255-02 MW-19B	240-229387-G-2	Plastic 1 liter - Nitric Acid	<2			
L507255-02 MW 19B	240-229387-H-2	Plastic 1 liter - Nitric Acid	<2			
L507255-03 MW 19C	240-229387 A-3	Plastic 60 mL - unpreserved				
L507255-03 MW-19C	240-229387-B-3	Plastic 60 mL - unpreserved				
L507255-03 MW 19C	240-229387-C-3	Plastic 250ml - with Nitric Acid	<2			
L507255-03 MW-19C	240-229387-D-3	Plastic 500ml - unpreserved				
L507255-03 MW 19C	240-229387-E-3	Plastic 500ml - with Nitric Acid	<2			
L507255-03 MW-19C	240-229387-F-3	Plastic 1 liter unpreserved				
L507255-03 MW 19C	240-229387-G-3	Plastic 1 liter - Nitric Acid	<2			
L507255-03 MW-19C	240-229387-H 3	Plastic 1 liter - Nitric Acid	<2			
L507255-04 MW-19D	240-229387-A-4	Plastic 60 mL - unpreserved				
L507255-04 MW-19D	240-229387-B-4	Plastic 60 mL - unpreserved				
L507255-04 MW-19D	240-229387-C-4	Plastic 250ml - with Nitric Acid	<2			
L507255-04 MW-19D	240-229387-D-4	Plastic 500ml unpreserved				
L507255-04 MW-19D	240-229387 E-4	Plastic 500ml - with Nitric Acid	<2			
L507255-04 MW-19D	240-229387 F-4	Plastic 1 liter - unpreserved				
L507255-04 MW-19D	240-229387-G-4	Plastic 1 liter - Nitric Acid	<2			
L507255-04 MW-19D	240-229387 H-4	Plastic 1 liter - Nitric Acid	<2			
L507255-05 MWT-19A	240-229387 A 5	Plastic 60 mL - unpreserved				
L507255-05 MWT-19A	240-229387-B-5	Plastic 60 mL - unpreserved				
L507255-05 MWT 19A	240-229387-C-5	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L507255-05 MWT-19A	240-229387-D-5	Plastic 500ml - unpreserved				
L507255-05 MWT-19A	240-229387-E-5	Plastic 500ml - with Nitric Acid	<2			
L507255-05 MWT-19A	240-229387-F 5	Plastic 1 liter - unpreserved				
L507255-05 MWT-19A	240-229387-G-5	Plastic 1 liter - Nitric Acid	<2			
L507255-05 MWT-19A	240-229387-H-5	Plastic 1 liter - Nitric Acid	<2			
L507255-06 FIELD BLANK	240-229387-A-6	Plastic 60 mL - unpreserved				
L507255-06 FIELD BLANK	240-229387-B-6	Plastic 60 mL - unpreserved				
L507255-06 FIELD BLANK	240-229387-C-6	Plastic 250ml - with Nitric Acid	<2			
L507255-06 FIELD BLANK	240-229387-D-6	Plastic 500ml - unpreserved				
L507255-06 FIELD BLANK	240-229387 E-6	Plastic 500ml - with Nitric Acid	<2			
L507255-06 FIELD BLANK	240-229387-F-6	Plastic 1 liter - unpreserved				
L507255-06 FIELD BLANK	240-229387-G-6	Plastic 1 liter - Nitric Acid	<2			
L507255-06 FIELD BLANK	240-229387-H-6	Plastic 1 liter - Nitric Acid	<2			

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-229387-2

Login Number: 229387
List Number: 2
Creator: Pinette, Meadow L

List Source: Eurofins St. Louis
List Creation: 07/25/25 12:22 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 8/15/2025 4:39:01 PM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-230293-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

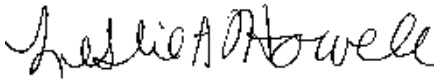
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
8/15/2025 4:39:01 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 12
QC Sample Results 26
QC Association Summary 34
Lab Chronicle 39
Certification Summary 43
Chain of Custody 44
Receipt Checklists 51

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-1

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-230293-1 — Eurofins Cleveland

Job Narrative
240-230293-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 8/7/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.5°C.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.7 Rev 4.4	Metals (ICP)	EPA	EET SSM
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.7	Preparation, Total Metals	EPA	EET SSM
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-230293-1	L508215-01 MW-17A	Water	08/05/25 09:32	08/07/25 08:00	Michigan
240-230293-2	L508215-02 MW-17B	Water	08/05/25 11:00	08/07/25 08:00	Michigan
240-230293-3	L508215-03 MW-17C	Water	08/05/25 12:13	08/07/25 08:00	Michigan
240-230293-4	L508215-04 MW-17D	Water	08/05/25 13:33	08/07/25 08:00	Michigan
240-230293-5	L508215-05 MW-17E	Water	08/05/25 14:52	08/07/25 08:00	Michigan
240-230293-6	L508215-06 MWT-17A	Water	08/05/25 09:32	08/07/25 08:00	Michigan
240-230293-7	L508215-07 FIELD BLANK	Water	08/05/25 08:35	08/07/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-1

Client Sample ID: L508215-01 MW-17A — Lab Sample ID: 240-230293-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.9		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	2.4	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	53		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0012	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.040		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.019		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.012		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	270		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	69		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.051		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	9.3		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0034	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	960		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	250		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1300		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	18		8.0	0.80	mg/L	1		2540D-2020	Total/NA
Chloride	71		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.28		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	690		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L508215-02 MW-17B — Lab Sample ID: 240-230293-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.9		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	4.0		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	84		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0022	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.041		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.10		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0035		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	120	B	1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	29	B	1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.096		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.1		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.012	B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	430		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	170		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	660		10	7.8	mg/L	1		2540 C-2020	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-1

Client Sample ID: L508215-02 MW-17B (Continued) — Lab Sample ID: 240-230293-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	4.1		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	74		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.38		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	330		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L508215-03 MW-17C — Lab Sample ID: 240-230293-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.9		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	6.9		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	100	B	0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0027	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.066		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.026		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.010		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lead	0.00069	J	0.0010	0.00045	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	210	B	1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	56	B	1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.052		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	4.7		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0030	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	740		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	250		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1100		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	8.3		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	59		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.34		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	590		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L508215-04 MW-17D — Lab Sample ID: 240-230293-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.4		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	9.4		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	46	B	0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.039		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0024	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	51	B	1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	16	B	1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.037		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508215-04 MW-17D (Continued) — Lab Sample ID: 240-230293-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.60		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0021	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	200		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	280		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	290		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.7	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	3.7		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.45		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	2.0		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508215-05 MW-17E — Lab Sample ID: 240-230293-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.3		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	4.4		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	160	B	0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.0042	J	0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	5.3	B	1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	1.4	B	1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.025		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.018	J	0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0013	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Bicarbonate Alkalinity as CaCO3	310		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	24		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	360		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.50	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	1.3		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	1.2		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508215-06 MWT-17A — Lab Sample ID: 240-230293-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	4.0		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	2.8	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	58	B	0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0014	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.040		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.019		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.012		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	270	B	1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	69	B	1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508215-06 MWT-17A (Continued)

Lab Sample ID: 240-230293-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.051		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	8.0		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0033	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	960		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	260		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1300		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	15		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	71		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.26		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	680		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L508215-07 FIELD BLANK

Lab Sample ID: 240-230293-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Na	0.45	J B	0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508215-01 MW-17A
Date Collected: 08/05/25 09:32
Date Received: 08/07/25 08:00

Lab Sample ID: 240-230293-1
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.9**		0.10	0.057	mg/L		08/08/25 14:00	08/11/25 21:36	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**2.4**	**J**	3.3	0.17	mg/L		08/11/25 17:00	08/12/25 16:00	1
Na	**53**		0.60	0.33	mg/L		08/11/25 17:00	08/12/25 16:00	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/08/25 14:00	08/11/25 19:55	1
Arsenic	**0.0012**	**J**	0.0050	0.00075	mg/L		08/08/25 14:00	08/11/25 19:55	1
Barium	**0.040**		0.0050	0.00077	mg/L		08/08/25 14:00	08/11/25 19:55	1
Beryllium	ND		0.0010	0.00027	mg/L		08/08/25 14:00	08/11/25 19:55	1
Cadmium	ND		0.0010	0.000077	mg/L		08/08/25 14:00	08/11/25 19:55	1
Cobalt	ND		0.0010	0.000086	mg/L		08/08/25 14:00	08/11/25 19:55	1
Chromium	ND		0.0050	0.0012	mg/L		08/08/25 14:00	08/11/25 19:55	1
Copper	ND		0.0020	0.0017	mg/L		08/08/25 14:00	08/11/25 19:55	1
Molybdenum	**0.019**		0.0050	0.0011	mg/L		08/08/25 14:00	08/11/25 19:55	1
Nickel	**0.012**		0.0020	0.0015	mg/L		08/08/25 14:00	08/11/25 19:55	1
Lead	ND		0.0010	0.00045	mg/L		08/08/25 14:00	08/11/25 19:55	1
Antimony	ND		0.0020	0.00057	mg/L		08/08/25 14:00	08/11/25 19:55	1
Selenium	ND		0.0050	0.00089	mg/L		08/08/25 14:00	08/11/25 19:55	1
Thallium	ND		0.0010	0.00051	mg/L		08/08/25 14:00	08/11/25 19:55	1
Vanadium	ND		0.0050	0.00082	mg/L		08/08/25 14:00	08/11/25 19:55	1
Calcium	**270**		1.0	0.25	mg/L		08/08/25 14:00	08/11/25 19:55	1
Magnesium	**69**		1.0	0.061	mg/L		08/08/25 14:00	08/11/25 19:55	1
Lithium	**0.051**		0.0080	0.0034	mg/L		08/08/25 14:00	08/11/25 19:55	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**9.3**		0.10	0.013	mg/L		08/11/25 17:00	08/12/25 20:39	1
Zinc	**0.0034**	**J B**	0.0070	0.00093	mg/L		08/11/25 17:00	08/12/25 20:39	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**960**		33	33	mg/L			08/13/25 13:27	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/08/25 14:00	08/11/25 14:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**250**		5.0	2.6	mg/L			08/12/25 10:36	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 10:36	1
Total Dissolved Solids (SM 2540 C-2020)	**1300**		20	16	mg/L			08/08/25 08:43	1
Total Suspended Solids (SM 2540D-2020)	**18**		8.0	0.80	mg/L			08/08/25 10:11	1
Chloride (EPA 300.0-1993 R2.1)	**71**		1.0	0.13	mg/L			08/08/25 15:11	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-1

Client Sample ID: L508215-01 MW-17A
Date Collected: 08/05/25 09:32
Date Received: 08/07/25 08:00

Lab Sample ID: 240-230293-1
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.28		0.050	0.024	mg/L			08/08/25 15:11	1
Sulfate (EPA 300.0-1993 R2.1)	690		5.0	1.7	mg/L			08/08/25 15:40	5

Client Sample ID: L508215-02 MW-17B
Date Collected: 08/05/25 11:00
Date Received: 08/07/25 08:00

Lab Sample ID: 240-230293-2
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.9**		0.10	0.057	mg/L		08/08/25 14:00	08/12/25 07:14	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**4.0**		3.3	0.17	mg/L		08/11/25 17:00	08/12/25 16:16	1
Na	**84**		0.60	0.33	mg/L		08/11/25 17:00	08/12/25 16:16	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/08/25 14:00	08/11/25 18:12	1
Arsenic	**0.0022**	**J**	0.0050	0.00075	mg/L		08/08/25 14:00	08/11/25 18:12	1
Barium	**0.041**		0.0050	0.00077	mg/L		08/08/25 14:00	08/11/25 18:12	1
Beryllium	ND		0.0010	0.00027	mg/L		08/08/25 14:00	08/11/25 18:12	1
Cadmium	ND		0.0010	0.000077	mg/L		08/08/25 14:00	08/11/25 18:12	1
Cobalt	ND		0.0010	0.000086	mg/L		08/08/25 14:00	08/11/25 18:12	1
Chromium	ND		0.0050	0.0012	mg/L		08/08/25 14:00	08/11/25 18:12	1
Copper	ND		0.0020	0.0017	mg/L		08/08/25 14:00	08/11/25 18:12	1
Molybdenum	**0.10**		0.0050	0.0011	mg/L		08/08/25 14:00	08/11/25 18:12	1
Nickel	**0.0035**		0.0020	0.0015	mg/L		08/08/25 14:00	08/11/25 18:12	1
Lead	ND		0.0010	0.00045	mg/L		08/08/25 14:00	08/11/25 18:12	1
Antimony	ND		0.0020	0.00057	mg/L		08/08/25 14:00	08/11/25 18:12	1
Selenium	ND		0.0050	0.00089	mg/L		08/08/25 14:00	08/11/25 18:12	1
Thallium	ND		0.0010	0.00051	mg/L		08/08/25 14:00	08/11/25 18:12	1
Vanadium	ND		0.0050	0.00082	mg/L		08/08/25 14:00	08/11/25 18:12	1
Calcium	**120**	**B**	1.0	0.25	mg/L		08/08/25 14:00	08/11/25 18:12	1
Magnesium	**29**	**B**	1.0	0.061	mg/L		08/08/25 14:00	08/11/25 18:12	1
Lithium	**0.096**		0.0080	0.0034	mg/L		08/08/25 14:00	08/11/25 18:12	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.1**		0.10	0.013	mg/L		08/11/25 17:00	08/12/25 20:54	1
Zinc	**0.012**	**B**	0.0070	0.00093	mg/L		08/11/25 17:00	08/12/25 20:54	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**430**		33	33	mg/L			08/13/25 13:27	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/08/25 14:00	08/11/25 15:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**170**		5.0	2.6	mg/L			08/12/25 10:41	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 10:41	1
Total Dissolved Solids (SM 2540 C-2020)	**660**		10	7.8	mg/L			08/08/25 08:43	1
Total Suspended Solids (SM 2540D-2020)	**4.1**		4.0	0.40	mg/L			08/08/25 10:11	1
Chloride (EPA 300.0-1993 R2.1)	**74**		1.0	0.13	mg/L			08/08/25 15:50	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-1

Client Sample ID: L508215-02 MW-17B
Date Collected: 08/05/25 11:00
Date Received: 08/07/25 08:00

Lab Sample ID: 240-230293-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.38		0.050	0.024	mg/L			08/08/25 15:50	1
Sulfate (EPA 300.0-1993 R2.1)	330		5.0	1.7	mg/L			08/08/25 15:59	5

Client Sample ID: L508215-03 MW-17C
Date Collected: 08/05/25 12:13
Date Received: 08/07/25 08:00

Lab Sample ID: 240-230293-3
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.9		0.10	0.057	mg/L		08/08/25 14:00	08/12/25 07:18	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	6.9		3.3	0.17	mg/L		08/12/25 18:05	08/14/25 17:25	1
Na	100	B	0.60	0.33	mg/L		08/12/25 18:05	08/14/25 17:25	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/08/25 14:00	08/11/25 18:15	1
Arsenic	0.0027	J	0.0050	0.00075	mg/L		08/08/25 14:00	08/11/25 18:15	1
Barium	0.066		0.0050	0.00077	mg/L		08/08/25 14:00	08/11/25 18:15	1
Beryllium	ND		0.0010	0.00027	mg/L		08/08/25 14:00	08/11/25 18:15	1
Cadmium	ND		0.0010	0.000077	mg/L		08/08/25 14:00	08/11/25 18:15	1
Cobalt	ND		0.0010	0.000086	mg/L		08/08/25 14:00	08/11/25 18:15	1
Chromium	ND		0.0050	0.0012	mg/L		08/08/25 14:00	08/11/25 18:15	1
Copper	ND		0.0020	0.0017	mg/L		08/08/25 14:00	08/11/25 18:15	1
Molybdenum	0.026		0.0050	0.0011	mg/L		08/08/25 14:00	08/11/25 18:15	1
Nickel	0.010		0.0020	0.0015	mg/L		08/08/25 14:00	08/11/25 18:15	1
Lead	0.00069	J	0.0010	0.00045	mg/L		08/08/25 14:00	08/11/25 18:15	1
Antimony	ND		0.0020	0.00057	mg/L		08/08/25 14:00	08/11/25 18:15	1
Selenium	ND		0.0050	0.00089	mg/L		08/08/25 14:00	08/11/25 18:15	1
Thallium	ND		0.0010	0.00051	mg/L		08/08/25 14:00	08/11/25 18:15	1
Vanadium	ND		0.0050	0.00082	mg/L		08/08/25 14:00	08/11/25 18:15	1
Calcium	210	B	1.0	0.25	mg/L		08/08/25 14:00	08/11/25 18:15	1
Magnesium	56	B	1.0	0.061	mg/L		08/08/25 14:00	08/11/25 18:15	1
Lithium	0.052		0.0080	0.0034	mg/L		08/08/25 14:00	08/11/25 18:15	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	4.7		0.10	0.013	mg/L		08/12/25 18:05	08/13/25 12:45	1
Zinc	0.0030	J	0.0070	0.00093	mg/L		08/12/25 18:05	08/13/25 12:45	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	740		33	33	mg/L			08/13/25 13:27	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/08/25 14:00	08/11/25 15:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	250		5.0	2.6	mg/L			08/12/25 10:50	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 10:50	1
Total Dissolved Solids (SM 2540 C-2020)	1100		20	16	mg/L			08/11/25 09:47	1
Total Suspended Solids (SM 2540D-2020)	8.3		4.0	0.40	mg/L			08/08/25 10:11	1
Chloride (EPA 300.0-1993 R2.1)	59		1.0	0.13	mg/L			08/08/25 16:09	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-1

Client Sample ID: L508215-03 MW-17C
Date Collected: 08/05/25 12:13
Date Received: 08/07/25 08:00

Lab Sample ID: 240-230293-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.34		0.050	0.024	mg/L			08/08/25 16:09	1
Sulfate (EPA 300.0-1993 R2.1)	590		5.0	1.7	mg/L			08/08/25 16:19	5

Client Sample ID: L508215-04 MW-17D
Date Collected: 08/05/25 13:33
Date Received: 08/07/25 08:00

Lab Sample ID: 240-230293-4
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.4**		0.10	0.057	mg/L		08/08/25 14:00	08/12/25 07:23	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**9.4**		3.3	0.17	mg/L		08/12/25 18:05	08/14/25 17:28	1
Na	**46**	**B**	0.60	0.33	mg/L		08/12/25 18:05	08/14/25 17:28	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/08/25 14:00	08/11/25 18:17	1
Arsenic	ND		0.0050	0.00075	mg/L		08/08/25 14:00	08/11/25 18:17	1
Barium	**0.039**		0.0050	0.00077	mg/L		08/08/25 14:00	08/11/25 18:17	1
Beryllium	ND		0.0010	0.00027	mg/L		08/08/25 14:00	08/11/25 18:17	1
Cadmium	ND		0.0010	0.000077	mg/L		08/08/25 14:00	08/11/25 18:17	1
Cobalt	ND		0.0010	0.000086	mg/L		08/08/25 14:00	08/11/25 18:17	1
Chromium	ND		0.0050	0.0012	mg/L		08/08/25 14:00	08/11/25 18:17	1
Copper	ND		0.0020	0.0017	mg/L		08/08/25 14:00	08/11/25 18:17	1
Molybdenum	**0.0024**	**J**	0.0050	0.0011	mg/L		08/08/25 14:00	08/11/25 18:17	1
Nickel	ND		0.0020	0.0015	mg/L		08/08/25 14:00	08/11/25 18:17	1
Lead	ND		0.0010	0.00045	mg/L		08/08/25 14:00	08/11/25 18:17	1
Antimony	ND		0.0020	0.00057	mg/L		08/08/25 14:00	08/11/25 18:17	1
Selenium	ND		0.0050	0.00089	mg/L		08/08/25 14:00	08/11/25 18:17	1
Thallium	ND		0.0010	0.00051	mg/L		08/08/25 14:00	08/11/25 18:17	1
Vanadium	ND		0.0050	0.00082	mg/L		08/08/25 14:00	08/11/25 18:17	1
Calcium	**51**	**B**	1.0	0.25	mg/L		08/08/25 14:00	08/11/25 18:17	1
Magnesium	**16**	**B**	1.0	0.061	mg/L		08/08/25 14:00	08/11/25 18:17	1
Lithium	**0.037**		0.0080	0.0034	mg/L		08/08/25 14:00	08/11/25 18:17	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.60**		0.10	0.013	mg/L		08/12/25 18:05	08/13/25 12:47	1
Zinc	**0.0021**	**J**	0.0070	0.00093	mg/L		08/12/25 18:05	08/13/25 12:47	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**200**		33	33	mg/L			08/13/25 13:27	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/08/25 14:00	08/11/25 15:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**280**		5.0	2.6	mg/L			08/12/25 10:55	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 10:55	1
Total Dissolved Solids (SM 2540 C-2020)	**290**		10	7.8	mg/L			08/11/25 09:47	1
Total Suspended Solids (SM 2540D-2020)	**1.7**	**J**	4.0	0.40	mg/L			08/08/25 10:11	1
Chloride (EPA 300.0-1993 R2.1)	**3.7**		1.0	0.13	mg/L			08/08/25 14:03	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-1

Client Sample ID: L508215-04 MW-17D
Date Collected: 08/05/25 13:33
Date Received: 08/07/25 08:00

Lab Sample ID: 240-230293-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.45		0.050	0.024	mg/L			08/08/25 14:03	1
Sulfate (EPA 300.0-1993 R2.1)	2.0		1.0	0.35	mg/L			08/08/25 14:03	1

Client Sample ID: L508215-05 MW-17E

Lab Sample ID: 240-230293-5

Date Collected: 08/05/25 14:52

Matrix: Water

Date Received: 08/07/25 08:00

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.3		0.10	0.057	mg/L		08/08/25 14:00	08/12/25 07:27	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	4.4		3.3	0.17	mg/L		08/12/25 18:05	08/14/25 17:31	1
Na	160	B	0.60	0.33	mg/L		08/12/25 18:05	08/14/25 17:31	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/08/25 14:00	08/11/25 18:20	1
Arsenic	ND		0.0050	0.00075	mg/L		08/08/25 14:00	08/11/25 18:20	1
Barium	0.0042	J	0.0050	0.00077	mg/L		08/08/25 14:00	08/11/25 18:20	1
Beryllium	ND		0.0010	0.00027	mg/L		08/08/25 14:00	08/11/25 18:20	1
Cadmium	ND		0.0010	0.000077	mg/L		08/08/25 14:00	08/11/25 18:20	1
Cobalt	ND		0.0010	0.000086	mg/L		08/08/25 14:00	08/11/25 18:20	1
Chromium	ND		0.0050	0.0012	mg/L		08/08/25 14:00	08/11/25 18:20	1
Copper	ND		0.0020	0.0017	mg/L		08/08/25 14:00	08/11/25 18:20	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/08/25 14:00	08/11/25 18:20	1
Nickel	ND		0.0020	0.0015	mg/L		08/08/25 14:00	08/11/25 18:20	1
Lead	ND		0.0010	0.00045	mg/L		08/08/25 14:00	08/11/25 18:20	1
Antimony	ND		0.0020	0.00057	mg/L		08/08/25 14:00	08/11/25 18:20	1
Selenium	ND		0.0050	0.00089	mg/L		08/08/25 14:00	08/11/25 18:20	1
Thallium	ND		0.0010	0.00051	mg/L		08/08/25 14:00	08/11/25 18:20	1
Vanadium	ND		0.0050	0.00082	mg/L		08/08/25 14:00	08/11/25 18:20	1
Calcium	5.3	B	1.0	0.25	mg/L		08/08/25 14:00	08/11/25 18:20	1
Magnesium	1.4	B	1.0	0.061	mg/L		08/08/25 14:00	08/11/25 18:20	1
Lithium	0.025		0.0080	0.0034	mg/L		08/08/25 14:00	08/11/25 18:20	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.018	J	0.10	0.013	mg/L		08/12/25 18:05	08/13/25 12:50	1
Zinc	0.0013	J	0.0070	0.00093	mg/L		08/12/25 18:05	08/13/25 12:50	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			08/13/25 13:27	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/08/25 14:00	08/11/25 15:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	310		5.0	2.6	mg/L			08/12/25 11:01	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	24		5.0	2.6	mg/L			08/12/25 11:01	1
Total Dissolved Solids (SM 2540 C-2020)	360		10	7.8	mg/L			08/11/25 09:47	1
Total Suspended Solids (SM 2540D-2020)	0.50	J	4.0	0.40	mg/L			08/08/25 10:11	1
Chloride (EPA 300.0-1993 R2.1)	1.3		1.0	0.13	mg/L			08/08/25 16:29	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-1

Client Sample ID: L508215-05 MW-17E
Date Collected: 08/05/25 14:52
Date Received: 08/07/25 08:00

Lab Sample ID: 240-230293-5
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	1.2		0.050	0.024	mg/L			08/08/25 16:29	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			08/08/25 16:29	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-1

Client Sample ID: L508215-06 MWT-17A

Date Collected: 08/05/25 09:32
Date Received: 08/07/25 08:00

Lab Sample ID: 240-230293-6

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**4.0**		0.10	0.057	mg/L		08/08/25 14:00	08/12/25 07:32	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**2.8**	**J**	3.3	0.17	mg/L		08/12/25 18:05	08/14/25 17:34	1
Na	**58**	**B**	0.60	0.33	mg/L		08/12/25 18:05	08/14/25 17:34	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/08/25 14:00	08/11/25 18:23	1
Arsenic	**0.0014**	**J**	0.0050	0.00075	mg/L		08/08/25 14:00	08/11/25 18:23	1
Barium	**0.040**		0.0050	0.00077	mg/L		08/08/25 14:00	08/11/25 18:23	1
Beryllium	ND		0.0010	0.00027	mg/L		08/08/25 14:00	08/11/25 18:23	1
Cadmium	ND		0.0010	0.000077	mg/L		08/08/25 14:00	08/11/25 18:23	1
Cobalt	ND		0.0010	0.000086	mg/L		08/08/25 14:00	08/11/25 18:23	1
Chromium	ND		0.0050	0.0012	mg/L		08/08/25 14:00	08/11/25 18:23	1
Copper	ND		0.0020	0.0017	mg/L		08/08/25 14:00	08/11/25 18:23	1
Molybdenum	**0.019**		0.0050	0.0011	mg/L		08/08/25 14:00	08/11/25 18:23	1
Nickel	**0.012**		0.0020	0.0015	mg/L		08/08/25 14:00	08/11/25 18:23	1
Lead	ND		0.0010	0.00045	mg/L		08/08/25 14:00	08/11/25 18:23	1
Antimony	ND		0.0020	0.00057	mg/L		08/08/25 14:00	08/11/25 18:23	1
Selenium	ND		0.0050	0.00089	mg/L		08/08/25 14:00	08/11/25 18:23	1
Thallium	ND		0.0010	0.00051	mg/L		08/08/25 14:00	08/11/25 18:23	1
Vanadium	ND		0.0050	0.00082	mg/L		08/08/25 14:00	08/11/25 18:23	1
Calcium	**270**	**B**	1.0	0.25	mg/L		08/08/25 14:00	08/11/25 18:23	1
Magnesium	**69**	**B**	1.0	0.061	mg/L		08/08/25 14:00	08/11/25 18:23	1
Lithium	**0.051**		0.0080	0.0034	mg/L		08/08/25 14:00	08/11/25 18:23	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**8.0**		0.10	0.013	mg/L		08/12/25 18:05	08/13/25 12:53	1
Zinc	**0.0033**	**J**	0.0070	0.00093	mg/L		08/12/25 18:05	08/13/25 12:53	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**960**		33	33	mg/L			08/13/25 13:27	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/08/25 14:00	08/11/25 15:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**260**		5.0	2.6	mg/L			08/12/25 11:06	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 11:06	1
Total Dissolved Solids (SM 2540 C-2020)	**1300**		20	16	mg/L			08/11/25 09:47	1
Total Suspended Solids (SM 2540D-2020)	**15**		4.0	0.40	mg/L			08/08/25 10:11	1
Chloride (EPA 300.0-1993 R2.1)	**71**		1.0	0.13	mg/L			08/08/25 16:38	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-1

Client Sample ID: L508215-06 MWT-17A
Date Collected: 08/05/25 09:32
Date Received: 08/07/25 08:00

Lab Sample ID: 240-230293-6
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.26		0.050	0.024	mg/L			08/08/25 16:38	1
Sulfate (EPA 300.0-1993 R2.1)	680		5.0	1.7	mg/L			08/08/25 16:48	5

Client Sample ID: L508215-07 FIELD BLANK

Lab Sample ID: 240-230293-7

Date Collected: 08/05/25 08:35

Matrix: Water

Date Received: 08/07/25 08:00

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		08/08/25 14:00	08/12/25 07:36	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		08/12/25 18:05	08/14/25 17:38	1
Na	**0.45**	**J B**	0.60	0.33	mg/L		08/12/25 18:05	08/14/25 17:38	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/08/25 14:00	08/11/25 18:25	1
Arsenic	ND		0.0050	0.00075	mg/L		08/08/25 14:00	08/11/25 18:25	1
Barium	ND		0.0050	0.00077	mg/L		08/08/25 14:00	08/11/25 18:25	1
Beryllium	ND		0.0010	0.00027	mg/L		08/08/25 14:00	08/11/25 18:25	1
Cadmium	ND		0.0010	0.000077	mg/L		08/08/25 14:00	08/11/25 18:25	1
Cobalt	ND		0.0010	0.000086	mg/L		08/08/25 14:00	08/11/25 18:25	1
Chromium	ND		0.0050	0.0012	mg/L		08/08/25 14:00	08/11/25 18:25	1
Copper	ND		0.0020	0.0017	mg/L		08/08/25 14:00	08/11/25 18:25	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/08/25 14:00	08/11/25 18:25	1
Nickel	ND		0.0020	0.0015	mg/L		08/08/25 14:00	08/11/25 18:25	1
Lead	ND		0.0010	0.00045	mg/L		08/08/25 14:00	08/11/25 18:25	1
Antimony	ND		0.0020	0.00057	mg/L		08/08/25 14:00	08/11/25 18:25	1
Selenium	ND		0.0050	0.00089	mg/L		08/08/25 14:00	08/11/25 18:25	1
Thallium	ND		0.0010	0.00051	mg/L		08/08/25 14:00	08/11/25 18:25	1
Vanadium	ND		0.0050	0.00082	mg/L		08/08/25 14:00	08/11/25 18:25	1
Calcium	ND		1.0	0.25	mg/L		08/08/25 14:00	08/11/25 18:25	1
Magnesium	ND		1.0	0.061	mg/L		08/08/25 14:00	08/11/25 18:25	1
Lithium	ND		0.0080	0.0034	mg/L		08/08/25 14:00	08/11/25 18:25	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		08/12/25 18:05	08/13/25 12:56	1
Zinc	ND		0.0070	0.00093	mg/L		08/12/25 18:05	08/13/25 12:56	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			08/13/25 13:27	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/08/25 14:00	08/11/25 15:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 11:21	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 11:21	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			08/11/25 09:47	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			08/08/25 10:11	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			08/08/25 16:58	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-1

Client Sample ID: L508215-07 FIELD BLANK
Date Collected: 08/05/25 08:35
Date Received: 08/07/25 08:00

Lab Sample ID: 240-230293-7
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			08/08/25 16:58	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			08/08/25 16:58	1

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-666954/1-A
Matrix: Water
Analysis Batch: 667295

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 666954

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		08/08/25 14:00	08/12/25 05:50	1

Lab Sample ID: LCS 240-666954/2-A
Matrix: Water
Analysis Batch: 667295

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 666954

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.01		mg/L		101	85 - 115

Lab Sample ID: MB 240-666965/1-A
Matrix: Water
Analysis Batch: 667295

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 666965

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		08/08/25 14:00	08/11/25 21:27	1

Lab Sample ID: LCS 240-666965/2-A
Matrix: Water
Analysis Batch: 667295

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 666965

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.07		mg/L		107	85 - 115

Lab Sample ID: 240-230293-1 MS
Matrix: Water
Analysis Batch: 667295

Client Sample ID: L508215-01 MW-17A
Prep Type: Total Recoverable
Prep Batch: 666965

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	3.9		1.00	5.06		mg/L		120	70 - 130

Lab Sample ID: 240-230293-1 MSD
Matrix: Water
Analysis Batch: 667295

Client Sample ID: L508215-01 MW-17A
Prep Type: Total Recoverable
Prep Batch: 666965

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	3.9		1.00	4.89		mg/L		103	70 - 130	3	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 350-8750/2-B
Matrix: Water
Analysis Batch: 8835

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8781

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		08/11/25 17:00	08/12/25 15:54	1
Na	ND		0.60	0.33	mg/L		08/11/25 17:00	08/12/25 15:54	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 350-8816/25-A
Matrix: Water
Analysis Batch: 8915

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8816

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		08/12/25 18:05	08/14/25 17:15	1
Na	0.331	J	0.60	0.33	mg/L		08/12/25 18:05	08/14/25 17:15	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-8750/2-B
Matrix: Water
Analysis Batch: 8824

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8781

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		08/11/25 17:00	08/12/25 20:29	1
Zinc	0.00117	J	0.0070	0.00093	mg/L		08/11/25 17:00	08/12/25 20:29	1

Lab Sample ID: LCS 350-8750/3-B
Matrix: Water
Analysis Batch: 8824

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8781

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron			20.0	20.5		mg/L		102	85 - 115		
Zinc			1.00	1.01		mg/L		101	85 - 115		

Lab Sample ID: LCSD 350-8750/2-B
Matrix: Water
Analysis Batch: 8824

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 8781

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron			20.0	20.0		mg/L		100	85 - 115	2	20
Zinc			1.00	1.01		mg/L		101	85 - 115	1	20

Lab Sample ID: 240-230293-1 MS
Matrix: Water
Analysis Batch: 8824

Client Sample ID: L508215-01 MW-17A
Prep Type: Total/NA
Prep Batch: 8781

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron	9.3		20.0	28.6		mg/L		97	70 - 130		
Zinc	0.0034	J B	1.00	0.971		mg/L		97	70 - 130		

Lab Sample ID: 240-230293-1 MSD
Matrix: Water
Analysis Batch: 8824

Client Sample ID: L508215-01 MW-17A
Prep Type: Total/NA
Prep Batch: 8781

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	9.3		20.0	28.3		mg/L		95	70 - 130	1	20
Zinc	0.0034	J B	1.00	0.961		mg/L		96	70 - 130	1	20

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-230293-2 MS
Matrix: Water
Analysis Batch: 8824

Client Sample ID: L508215-02 MW-17B
Prep Type: Total/NA
Prep Batch: 8781

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	2.1		20.0	21.5		mg/L		97	70 - 130
Zinc	0.012	B	1.00	0.988		mg/L		98	70 - 130

Lab Sample ID: 240-230293-2 MSD
Matrix: Water
Analysis Batch: 8824

Client Sample ID: L508215-02 MW-17B
Prep Type: Total/NA
Prep Batch: 8781

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	2.1		20.0	22.5		mg/L		102	70 - 130	4	20
Zinc	0.012	B	1.00	1.01		mg/L		99	70 - 130	2	20

Lab Sample ID: MB 350-8816/25-A
Matrix: Water
Analysis Batch: 8851

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8816

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		08/12/25 18:05	08/13/25 12:03	1
Zinc	ND		0.0070	0.00093	mg/L		08/12/25 18:05	08/13/25 12:03	1

Lab Sample ID: LCS 350-8816/26-A
Matrix: Water
Analysis Batch: 8851

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8816

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	18.3		mg/L		91	85 - 115
Zinc	1.00	0.899		mg/L		90	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-666954/1-A
Matrix: Water
Analysis Batch: 667242

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 666954

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/08/25 14:00	08/11/25 17:22	1
Arsenic	ND		0.0050	0.00075	mg/L		08/08/25 14:00	08/11/25 17:22	1
Barium	ND		0.0050	0.00077	mg/L		08/08/25 14:00	08/11/25 17:22	1
Beryllium	ND		0.0010	0.00027	mg/L		08/08/25 14:00	08/11/25 17:22	1
Cadmium	ND		0.0010	0.000077	mg/L		08/08/25 14:00	08/11/25 17:22	1
Cobalt	ND		0.0010	0.000086	mg/L		08/08/25 14:00	08/11/25 17:22	1
Chromium	ND		0.0050	0.0012	mg/L		08/08/25 14:00	08/11/25 17:22	1
Copper	ND		0.0020	0.0017	mg/L		08/08/25 14:00	08/11/25 17:22	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/08/25 14:00	08/11/25 17:22	1
Nickel	ND		0.0020	0.0015	mg/L		08/08/25 14:00	08/11/25 17:22	1
Lead	ND		0.0010	0.00045	mg/L		08/08/25 14:00	08/11/25 17:22	1
Antimony	ND		0.0020	0.00057	mg/L		08/08/25 14:00	08/11/25 17:22	1
Selenium	ND		0.0050	0.00089	mg/L		08/08/25 14:00	08/11/25 17:22	1
Thallium	ND		0.0010	0.00051	mg/L		08/08/25 14:00	08/11/25 17:22	1
Vanadium	ND		0.0050	0.00082	mg/L		08/08/25 14:00	08/11/25 17:22	1
Calcium	0.371	J	1.0	0.25	mg/L		08/08/25 14:00	08/11/25 17:22	1

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-666954/1-A
Matrix: Water
Analysis Batch: 667242

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 666954

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	0.0788	J	1.0	0.061	mg/L		08/08/25 14:00	08/11/25 17:22	1
Lithium	ND		0.0080	0.0034	mg/L		08/08/25 14:00	08/11/25 17:22	1

Lab Sample ID: LCS 240-666954/27-A
Matrix: Water
Analysis Batch: 667242

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 666954

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.0993		mg/L		99	85 - 115
Arsenic	1.00	0.974		mg/L		97	85 - 115
Barium	1.00	0.959		mg/L		96	85 - 115
Beryllium	0.500	0.504		mg/L		101	85 - 115
Cadmium	0.500	0.467		mg/L		93	85 - 115
Cobalt	0.500	0.490		mg/L		98	85 - 115
Chromium	0.500	0.483		mg/L		97	85 - 115
Copper	0.500	0.476		mg/L		95	85 - 115
Molybdenum	0.500	0.472		mg/L		94	85 - 115
Nickel	0.500	0.472		mg/L		94	85 - 115
Lead	0.500	0.539		mg/L		108	85 - 115
Antimony	0.100	0.0974		mg/L		97	85 - 115
Selenium	1.00	0.954		mg/L		95	85 - 115
Thallium	1.00	1.11		mg/L		111	85 - 115
Vanadium	0.500	0.485		mg/L		97	85 - 115
Calcium	25.0	25.1		mg/L		100	85 - 115
Magnesium	25.0	25.6		mg/L		103	85 - 115
Lithium	0.500	0.509		mg/L		102	85 - 115

Lab Sample ID: MB 240-666966/1-A
Matrix: Water
Analysis Batch: 667242

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 666966

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/08/25 14:00	08/11/25 18:28	1
Arsenic	ND		0.0050	0.00075	mg/L		08/08/25 14:00	08/11/25 18:28	1
Barium	ND		0.0050	0.00077	mg/L		08/08/25 14:00	08/11/25 18:28	1
Beryllium	ND		0.0010	0.00027	mg/L		08/08/25 14:00	08/11/25 18:28	1
Cadmium	ND		0.0010	0.000077	mg/L		08/08/25 14:00	08/11/25 18:28	1
Cobalt	ND		0.0010	0.000086	mg/L		08/08/25 14:00	08/11/25 18:28	1
Chromium	ND		0.0050	0.0012	mg/L		08/08/25 14:00	08/11/25 18:28	1
Copper	ND		0.0020	0.0017	mg/L		08/08/25 14:00	08/11/25 18:28	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/08/25 14:00	08/11/25 18:28	1
Nickel	ND		0.0020	0.0015	mg/L		08/08/25 14:00	08/11/25 18:28	1
Lead	ND		0.0010	0.00045	mg/L		08/08/25 14:00	08/11/25 18:28	1
Antimony	ND		0.0020	0.00057	mg/L		08/08/25 14:00	08/11/25 18:28	1
Selenium	ND		0.0050	0.00089	mg/L		08/08/25 14:00	08/11/25 18:28	1
Thallium	ND		0.0010	0.00051	mg/L		08/08/25 14:00	08/11/25 18:28	1
Vanadium	ND		0.0050	0.00082	mg/L		08/08/25 14:00	08/11/25 18:28	1
Calcium	ND		1.0	0.25	mg/L		08/08/25 14:00	08/11/25 18:28	1
Magnesium	ND		1.0	0.061	mg/L		08/08/25 14:00	08/11/25 18:28	1

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-666966/1-A
Matrix: Water
Analysis Batch: 667242

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 666966

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		0.0080	0.0034	mg/L		08/08/25 14:00	08/11/25 18:28	1

Lab Sample ID: LCS 240-666966/2-A
Matrix: Water
Analysis Batch: 667242

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 666966

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.0982		mg/L		98	85 - 115
Arsenic	1.00	0.986		mg/L		99	85 - 115
Barium	1.00	0.967		mg/L		97	85 - 115
Beryllium	0.500	0.500		mg/L		100	85 - 115
Cadmium	0.500	0.470		mg/L		94	85 - 115
Cobalt	0.500	0.493		mg/L		99	85 - 115
Chromium	0.500	0.487		mg/L		97	85 - 115
Copper	0.500	0.480		mg/L		96	85 - 115
Molybdenum	0.500	0.476		mg/L		95	85 - 115
Nickel	0.500	0.477		mg/L		95	85 - 115
Lead	0.500	0.544		mg/L		109	85 - 115
Antimony	0.100	0.0971		mg/L		97	85 - 115
Selenium	1.00	0.970		mg/L		97	85 - 115
Thallium	1.00	1.12		mg/L		112	85 - 115
Vanadium	0.500	0.491		mg/L		98	85 - 115
Calcium	25.0	25.1		mg/L		100	85 - 115
Magnesium	25.0	25.6		mg/L		102	85 - 115
Lithium	0.500	0.521		mg/L		104	85 - 115

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-666958/1-A
Matrix: Water
Analysis Batch: 667257

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 666958

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/08/25 14:00	08/11/25 14:37	1

Lab Sample ID: LCS 240-666958/2-A
Matrix: Water
Analysis Batch: 667257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 666958

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00484		mg/L		97	85 - 115

Lab Sample ID: MB 240-666969/1-A
Matrix: Water
Analysis Batch: 667257

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 666969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/08/25 14:00	08/11/25 13:42	1

Method: 245.1-1994 R3.0 - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-666969/2-A
Matrix: Water
Analysis Batch: 667257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 666969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00502		mg/L		100	85 - 115

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-667415/29
Matrix: Water
Analysis Batch: 667415

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/12/25 11:17	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/12/25 11:17	1

Lab Sample ID: MB 240-667415/3
Matrix: Water
Analysis Batch: 667415

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/12/25 09:05	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/12/25 09:05	1

Lab Sample ID: 240-230293-7 DU
Matrix: Water
Analysis Batch: 667415

Client Sample ID: L508215-07 FIELD BLANK
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-666917/1
Matrix: Water
Analysis Batch: 666917

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			08/08/25 08:43	1

Lab Sample ID: LCS 240-666917/2
Matrix: Water
Analysis Batch: 666917

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	240	191		mg/L		80	80 - 120

Lab Sample ID: MB 240-667134/1
Matrix: Water
Analysis Batch: 667134

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			08/11/25 09:47	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 240-667134/2
Matrix: Water
Analysis Batch: 667134

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			240	216		mg/L		90	80 - 120		

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-666943/1
Matrix: Water
Analysis Batch: 666943

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			08/08/25 10:11	1
Total Suspended Solids	ND		4.0	0.40	mg/L			08/08/25 10:11	1

Lab Sample ID: LCS 240-666943/2
Matrix: Water
Analysis Batch: 666943

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			30.0	35.0	J	mg/L		117	64 - 120		
Total Suspended Solids			30.0	35.0	J	mg/L		117	64 - 120		

Lab Sample ID: 240-230293-1 DU
Matrix: Water
Analysis Batch: 666943

Client Sample ID: L508215-01 MW-17A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	18			17.8		mg/L				3	10
Total Suspended Solids	18			17.8		mg/L				3	10

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-666991/3
Matrix: Water
Analysis Batch: 666991

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			08/08/25 13:44	1
Fluoride	ND		0.050	0.024	mg/L			08/08/25 13:44	1
Sulfate	ND		1.0	0.35	mg/L			08/08/25 13:44	1

Lab Sample ID: LCS 240-666991/4
Matrix: Water
Analysis Batch: 666991

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	50.7		mg/L		101	90 - 110		
Fluoride			2.50	2.61		mg/L		104	90 - 110		
Sulfate			50.0	50.4		mg/L		101	90 - 110		

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-230293-4 MS
Matrix: Water
Analysis Batch: 666991

Client Sample ID: L508215-04 MW-17D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	3.7		50.0	55.3		mg/L		103	80 - 120
Fluoride	0.45		2.50	2.97		mg/L		101	80 - 120
Sulfate	2.0		50.0	53.4		mg/L		103	80 - 120

Lab Sample ID: 240-230293-4 MSD
Matrix: Water
Analysis Batch: 666991

Client Sample ID: L508215-04 MW-17D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	3.7		50.0	55.5		mg/L		104	80 - 120	0	15
Fluoride	0.45		2.50	2.98		mg/L		101	80 - 120	0	15
Sulfate	2.0		50.0	53.6		mg/L		103	80 - 120	0	15

Metals

Filtration Batch: 8750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 350-8750/2-B	Method Blank	Total/NA	Water	FILTRATION	
LCS 350-8750/3-B	Lab Control Sample	Total/NA	Water	FILTRATION	
LCSD 350-8750/2-B	Lab Control Sample Dup	Total/NA	Water	FILTRATION	

Prep Batch: 8781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-1	L508215-01 MW-17A	Total/NA	Water	200.7	
240-230293-2	L508215-02 MW-17B	Total/NA	Water	200.7	
MB 350-8750/2-B	Method Blank	Total/NA	Water	200.7	8750
LCS 350-8750/3-B	Lab Control Sample	Total/NA	Water	200.7	8750
LCSD 350-8750/2-B	Lab Control Sample Dup	Total/NA	Water	200.7	8750
240-230293-1 MS	L508215-01 MW-17A	Total/NA	Water	200.7	
240-230293-1 MSD	L508215-01 MW-17A	Total/NA	Water	200.7	
240-230293-2 MS	L508215-02 MW-17B	Total/NA	Water	200.7	
240-230293-2 MSD	L508215-02 MW-17B	Total/NA	Water	200.7	

Prep Batch: 8816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-3	L508215-03 MW-17C	Total/NA	Water	200.7	
240-230293-4	L508215-04 MW-17D	Total/NA	Water	200.7	
240-230293-5	L508215-05 MW-17E	Total/NA	Water	200.7	
240-230293-6	L508215-06 MWT-17A	Total/NA	Water	200.7	
240-230293-7	L508215-07 FIELD BLANK	Total/NA	Water	200.7	
MB 350-8816/25-A	Method Blank	Total/NA	Water	200.7	
LCS 350-8816/26-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 8824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-1	L508215-01 MW-17A	Total/NA	Water	200.8	8781
240-230293-2	L508215-02 MW-17B	Total/NA	Water	200.8	8781
MB 350-8750/2-B	Method Blank	Total/NA	Water	200.8	8781
LCS 350-8750/3-B	Lab Control Sample	Total/NA	Water	200.8	8781
LCSD 350-8750/2-B	Lab Control Sample Dup	Total/NA	Water	200.8	8781
240-230293-1 MS	L508215-01 MW-17A	Total/NA	Water	200.8	8781
240-230293-1 MSD	L508215-01 MW-17A	Total/NA	Water	200.8	8781
240-230293-2 MS	L508215-02 MW-17B	Total/NA	Water	200.8	8781
240-230293-2 MSD	L508215-02 MW-17B	Total/NA	Water	200.8	8781

Analysis Batch: 8835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-1	L508215-01 MW-17A	Total/NA	Water	200.7 Rev 4.4	8781
240-230293-2	L508215-02 MW-17B	Total/NA	Water	200.7 Rev 4.4	8781
MB 350-8750/2-B	Method Blank	Total/NA	Water	200.7 Rev 4.4	8781
LCS 350-8750/3-B	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	8781
240-230293-1 MS	L508215-01 MW-17A	Total/NA	Water	200.7 Rev 4.4	8781
240-230293-1 MSD	L508215-01 MW-17A	Total/NA	Water	200.7 Rev 4.4	8781
240-230293-2 MS	L508215-02 MW-17B	Total/NA	Water	200.7 Rev 4.4	8781
240-230293-2 MSD	L508215-02 MW-17B	Total/NA	Water	200.7 Rev 4.4	8781

Metals

Analysis Batch: 8851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-3	L508215-03 MW-17C	Total/NA	Water	200.8	8816
240-230293-4	L508215-04 MW-17D	Total/NA	Water	200.8	8816
240-230293-5	L508215-05 MW-17E	Total/NA	Water	200.8	8816
240-230293-6	L508215-06 MWT-17A	Total/NA	Water	200.8	8816
240-230293-7	L508215-07 FIELD BLANK	Total/NA	Water	200.8	8816
MB 350-8816/25-A	Method Blank	Total/NA	Water	200.8	8816
LCS 350-8816/26-A	Lab Control Sample	Total/NA	Water	200.8	8816

Analysis Batch: 8915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-3	L508215-03 MW-17C	Total/NA	Water	200.7 Rev 4.4	8816
240-230293-4	L508215-04 MW-17D	Total/NA	Water	200.7 Rev 4.4	8816
240-230293-5	L508215-05 MW-17E	Total/NA	Water	200.7 Rev 4.4	8816
240-230293-6	L508215-06 MWT-17A	Total/NA	Water	200.7 Rev 4.4	8816
240-230293-7	L508215-07 FIELD BLANK	Total/NA	Water	200.7 Rev 4.4	8816
MB 350-8816/25-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	8816
LCS 350-8816/26-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	8816

Prep Batch: 666954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-2	L508215-02 MW-17B	Total Recoverable	Water	200.7	
240-230293-3	L508215-03 MW-17C	Total Recoverable	Water	200.7	
240-230293-4	L508215-04 MW-17D	Total Recoverable	Water	200.7	
240-230293-5	L508215-05 MW-17E	Total Recoverable	Water	200.7	
240-230293-6	L508215-06 MWT-17A	Total Recoverable	Water	200.7	
240-230293-7	L508215-07 FIELD BLANK	Total Recoverable	Water	200.7	
MB 240-666954/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-666954/27-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-666954/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Prep Batch: 666958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-2	L508215-02 MW-17B	Total/NA	Water	245.1-1994 R3.0	
240-230293-3	L508215-03 MW-17C	Total/NA	Water	245.1-1994 R3.0	
240-230293-4	L508215-04 MW-17D	Total/NA	Water	245.1-1994 R3.0	
240-230293-5	L508215-05 MW-17E	Total/NA	Water	245.1-1994 R3.0	
240-230293-6	L508215-06 MWT-17A	Total/NA	Water	245.1-1994 R3.0	
240-230293-7	L508215-07 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	
MB 240-666958/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-666958/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	

Prep Batch: 666965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-1	L508215-01 MW-17A	Total Recoverable	Water	200.7	
MB 240-666965/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-666965/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
240-230293-1 MS	L508215-01 MW-17A	Total Recoverable	Water	200.7	
240-230293-1 MSD	L508215-01 MW-17A	Total Recoverable	Water	200.7	

Metals

Prep Batch: 666966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-1	L508215-01 MW-17A	Total Recoverable	Water	200.8-1994 R5.4	
MB 240-666966/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	
LCS 240-666966/2-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	

Prep Batch: 666969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-1	L508215-01 MW-17A	Total/NA	Water	245.1-1994 R3.0	
MB 240-666969/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-666969/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 667242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-1	L508215-01 MW-17A	Total Recoverable	Water	200.8-1994 R5.4	666966
240-230293-2	L508215-02 MW-17B	Total Recoverable	Water	200.8-1994 R5.4	666954
240-230293-3	L508215-03 MW-17C	Total Recoverable	Water	200.8-1994 R5.4	666954
240-230293-4	L508215-04 MW-17D	Total Recoverable	Water	200.8-1994 R5.4	666954
240-230293-5	L508215-05 MW-17E	Total Recoverable	Water	200.8-1994 R5.4	666954
240-230293-6	L508215-06 MWT-17A	Total Recoverable	Water	200.8-1994 R5.4	666954
240-230293-7	L508215-07 FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	666954
MB 240-666954/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	666954
MB 240-666966/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	666966
LCS 240-666954/27-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	666954
LCS 240-666966/2-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	666966

Analysis Batch: 667257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-1	L508215-01 MW-17A	Total/NA	Water	245.1-1994 R3.0	666969
240-230293-2	L508215-02 MW-17B	Total/NA	Water	245.1-1994 R3.0	666958
240-230293-3	L508215-03 MW-17C	Total/NA	Water	245.1-1994 R3.0	666958
240-230293-4	L508215-04 MW-17D	Total/NA	Water	245.1-1994 R3.0	666958
240-230293-5	L508215-05 MW-17E	Total/NA	Water	245.1-1994 R3.0	666958
240-230293-6	L508215-06 MWT-17A	Total/NA	Water	245.1-1994 R3.0	666958
240-230293-7	L508215-07 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	666958
MB 240-666958/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	666958
MB 240-666969/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	666969
LCS 240-666958/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	666958
LCS 240-666969/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	666969

Analysis Batch: 667295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-1	L508215-01 MW-17A	Total Recoverable	Water	200.7 R4.4-1994	666965
240-230293-2	L508215-02 MW-17B	Total Recoverable	Water	200.7 R4.4-1994	666954
240-230293-3	L508215-03 MW-17C	Total Recoverable	Water	200.7 R4.4-1994	666954
240-230293-4	L508215-04 MW-17D	Total Recoverable	Water	200.7 R4.4-1994	666954
240-230293-5	L508215-05 MW-17E	Total Recoverable	Water	200.7 R4.4-1994	666954
240-230293-6	L508215-06 MWT-17A	Total Recoverable	Water	200.7 R4.4-1994	666954
240-230293-7	L508215-07 FIELD BLANK	Total Recoverable	Water	200.7 R4.4-1994	666954
MB 240-666954/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	666954
MB 240-666965/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	666965
LCS 240-666954/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	666954
LCS 240-666965/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	666965

Metals (Continued)

Analysis Batch: 667295 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-1 MS	L508215-01 MW-17A	Total Recoverable	Water	200.7 R4.4-1994	666965
240-230293-1 MSD	L508215-01 MW-17A	Total Recoverable	Water	200.7 R4.4-1994	666965

Analysis Batch: 667541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-1	L508215-01 MW-17A	Total Recoverable	Water	2340 B-2021	
240-230293-2	L508215-02 MW-17B	Total Recoverable	Water	2340 B-2021	
240-230293-3	L508215-03 MW-17C	Total Recoverable	Water	2340 B-2021	
240-230293-4	L508215-04 MW-17D	Total Recoverable	Water	2340 B-2021	
240-230293-5	L508215-05 MW-17E	Total Recoverable	Water	2340 B-2021	
240-230293-6	L508215-06 MWT-17A	Total Recoverable	Water	2340 B-2021	
240-230293-7	L508215-07 FIELD BLANK	Total Recoverable	Water	2340 B-2021	

General Chemistry

Analysis Batch: 666917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-1	L508215-01 MW-17A	Total/NA	Water	2540 C-2020	
240-230293-2	L508215-02 MW-17B	Total/NA	Water	2540 C-2020	
MB 240-666917/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-666917/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 666943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-1	L508215-01 MW-17A	Total/NA	Water	2540D-2020	
240-230293-2	L508215-02 MW-17B	Total/NA	Water	2540D-2020	
240-230293-3	L508215-03 MW-17C	Total/NA	Water	2540D-2020	
240-230293-4	L508215-04 MW-17D	Total/NA	Water	2540D-2020	
240-230293-5	L508215-05 MW-17E	Total/NA	Water	2540D-2020	
240-230293-6	L508215-06 MWT-17A	Total/NA	Water	2540D-2020	
240-230293-7	L508215-07 FIELD BLANK	Total/NA	Water	2540D-2020	
MB 240-666943/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-666943/2	Lab Control Sample	Total/NA	Water	2540D-2020	
240-230293-1 DU	L508215-01 MW-17A	Total/NA	Water	2540D-2020	

Analysis Batch: 666991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-1	L508215-01 MW-17A	Total/NA	Water	300.0-1993 R2.1	
240-230293-1	L508215-01 MW-17A	Total/NA	Water	300.0-1993 R2.1	
240-230293-2	L508215-02 MW-17B	Total/NA	Water	300.0-1993 R2.1	
240-230293-2	L508215-02 MW-17B	Total/NA	Water	300.0-1993 R2.1	
240-230293-3	L508215-03 MW-17C	Total/NA	Water	300.0-1993 R2.1	
240-230293-3	L508215-03 MW-17C	Total/NA	Water	300.0-1993 R2.1	
240-230293-4	L508215-04 MW-17D	Total/NA	Water	300.0-1993 R2.1	
240-230293-5	L508215-05 MW-17E	Total/NA	Water	300.0-1993 R2.1	
240-230293-6	L508215-06 MWT-17A	Total/NA	Water	300.0-1993 R2.1	
240-230293-6	L508215-06 MWT-17A	Total/NA	Water	300.0-1993 R2.1	
240-230293-7	L508215-07 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
MB 240-666991/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-666991/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-230293-4 MS	L508215-04 MW-17D	Total/NA	Water	300.0-1993 R2.1	

General Chemistry (Continued)

Analysis Batch: 666991 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-4 MSD	L508215-04 MW-17D	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 667134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-3	L508215-03 MW-17C	Total/NA	Water	2540 C-2020	
240-230293-4	L508215-04 MW-17D	Total/NA	Water	2540 C-2020	
240-230293-5	L508215-05 MW-17E	Total/NA	Water	2540 C-2020	
240-230293-6	L508215-06 MWT-17A	Total/NA	Water	2540 C-2020	
240-230293-7	L508215-07 FIELD BLANK	Total/NA	Water	2540 C-2020	
MB 240-667134/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-667134/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 667415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-1	L508215-01 MW-17A	Total/NA	Water	2320 B-2021	
240-230293-2	L508215-02 MW-17B	Total/NA	Water	2320 B-2021	
240-230293-3	L508215-03 MW-17C	Total/NA	Water	2320 B-2021	
240-230293-4	L508215-04 MW-17D	Total/NA	Water	2320 B-2021	
240-230293-5	L508215-05 MW-17E	Total/NA	Water	2320 B-2021	
240-230293-6	L508215-06 MWT-17A	Total/NA	Water	2320 B-2021	
240-230293-7	L508215-07 FIELD BLANK	Total/NA	Water	2320 B-2021	
MB 240-667415/29	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-667415/3	Method Blank	Total/NA	Water	2320 B-2021	
240-230293-7 DU	L508215-07 FIELD BLANK	Total/NA	Water	2320 B-2021	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-1

Client Sample ID: L508215-01 MW-17A

Lab Sample ID: 240-230293-1

Date Collected: 08/05/25 09:32

Matrix: Water

Date Received: 08/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			666965	MN7X	EET CLE	08/08/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667295	RKT	EET CLE	08/11/25 21:36
Total/NA	Prep	200.7			8781	RMN	EET SSM	08/11/25 17:00
Total/NA	Analysis	200.7 Rev 4.4		1	8835	JLS	EET SSM	08/12/25 16:00
Total/NA	Prep	200.7			8781	RMN	EET SSM	08/11/25 17:00
Total/NA	Analysis	200.8		1	8824	CW	EET SSM	08/12/25 20:39
Total Recoverable	Prep	200.8-1994 R5.4			666966	MN7X	EET CLE	08/08/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667242	S4FJ	EET CLE	08/11/25 19:55
Total Recoverable	Analysis	2340 B-2021		1	667541	KLC	EET CLE	08/13/25 13:27
Total/NA	Prep	245.1-1994 R3.0			666969	MN7X	EET CLE	08/08/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667257	BN	EET CLE	08/11/25 14:28
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 10:36
Total/NA	Analysis	2540 C-2020		1	666917	TAV2	EET CLE	08/08/25 08:43
Total/NA	Analysis	2540D-2020		1	666943	TAV2	EET CLE	08/08/25 10:11
Total/NA	Analysis	300.0-1993 R2.1		1	666991	JMR	EET CLE	08/08/25 15:11
Total/NA	Analysis	300.0-1993 R2.1		5	666991	JMR	EET CLE	08/08/25 15:40

Client Sample ID: L508215-02 MW-17B

Lab Sample ID: 240-230293-2

Date Collected: 08/05/25 11:00

Matrix: Water

Date Received: 08/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			666954	F3PF	EET CLE	08/08/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667295	RKT	EET CLE	08/12/25 07:14
Total/NA	Prep	200.7			8781	RMN	EET SSM	08/11/25 17:00
Total/NA	Analysis	200.7 Rev 4.4		1	8835	JLS	EET SSM	08/12/25 16:16
Total/NA	Prep	200.7			8781	RMN	EET SSM	08/11/25 17:00
Total/NA	Analysis	200.8		1	8824	CW	EET SSM	08/12/25 20:54
Total Recoverable	Prep	200.7			666954	F3PF	EET CLE	08/08/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667242	S4FJ	EET CLE	08/11/25 18:12
Total Recoverable	Analysis	2340 B-2021		1	667541	KLC	EET CLE	08/13/25 13:27
Total/NA	Prep	245.1-1994 R3.0			666958	F3PF	EET CLE	08/08/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667257	BN	EET CLE	08/11/25 15:05
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 10:41
Total/NA	Analysis	2540 C-2020		1	666917	TAV2	EET CLE	08/08/25 08:43
Total/NA	Analysis	2540D-2020		1	666943	TAV2	EET CLE	08/08/25 10:11
Total/NA	Analysis	300.0-1993 R2.1		1	666991	JMR	EET CLE	08/08/25 15:50
Total/NA	Analysis	300.0-1993 R2.1		5	666991	JMR	EET CLE	08/08/25 15:59

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-1

Client Sample ID: L508215-03 MW-17C

Lab Sample ID: 240-230293-3

Date Collected: 08/05/25 12:13

Matrix: Water

Date Received: 08/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			666954	F3PF	EET CLE	08/08/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667295	RKT	EET CLE	08/12/25 07:18
Total/NA	Prep	200.7			8816	RMN	EET SSM	08/12/25 18:05
Total/NA	Analysis	200.7 Rev 4.4		1	8915	JLS	EET SSM	08/14/25 17:25
Total/NA	Prep	200.7			8816	RMN	EET SSM	08/12/25 18:05
Total/NA	Analysis	200.8		1	8851	CW	EET SSM	08/13/25 12:45
Total Recoverable	Prep	200.7			666954	F3PF	EET CLE	08/08/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667242	S4FJ	EET CLE	08/11/25 18:15
Total Recoverable	Analysis	2340 B-2021		1	667541	KLC	EET CLE	08/13/25 13:27
Total/NA	Prep	245.1-1994 R3.0			666958	F3PF	EET CLE	08/08/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667257	BN	EET CLE	08/11/25 15:07
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 10:50
Total/NA	Analysis	2540 C-2020		1	667134	AAP	EET CLE	08/11/25 09:47
Total/NA	Analysis	2540D-2020		1	666943	TAV2	EET CLE	08/08/25 10:11
Total/NA	Analysis	300.0-1993 R2.1		1	666991	JMR	EET CLE	08/08/25 16:09
Total/NA	Analysis	300.0-1993 R2.1		5	666991	JMR	EET CLE	08/08/25 16:19

Client Sample ID: L508215-04 MW-17D

Lab Sample ID: 240-230293-4

Date Collected: 08/05/25 13:33

Matrix: Water

Date Received: 08/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			666954	F3PF	EET CLE	08/08/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667295	RKT	EET CLE	08/12/25 07:23
Total/NA	Prep	200.7			8816	RMN	EET SSM	08/12/25 18:05
Total/NA	Analysis	200.7 Rev 4.4		1	8915	JLS	EET SSM	08/14/25 17:28
Total/NA	Prep	200.7			8816	RMN	EET SSM	08/12/25 18:05
Total/NA	Analysis	200.8		1	8851	CW	EET SSM	08/13/25 12:47
Total Recoverable	Prep	200.7			666954	F3PF	EET CLE	08/08/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667242	S4FJ	EET CLE	08/11/25 18:17
Total Recoverable	Analysis	2340 B-2021		1	667541	KLC	EET CLE	08/13/25 13:27
Total/NA	Prep	245.1-1994 R3.0			666958	F3PF	EET CLE	08/08/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667257	BN	EET CLE	08/11/25 15:09
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 10:55
Total/NA	Analysis	2540 C-2020		1	667134	AAP	EET CLE	08/11/25 09:47
Total/NA	Analysis	2540D-2020		1	666943	TAV2	EET CLE	08/08/25 10:11
Total/NA	Analysis	300.0-1993 R2.1		1	666991	JMR	EET CLE	08/08/25 14:03

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-1

Client Sample ID: L508215-05 MW-17E

Lab Sample ID: 240-230293-5

Date Collected: 08/05/25 14:52
Matrix: Water
Date Received: 08/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			666954	F3PF	EET CLE	08/08/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667295	RKT	EET CLE	08/12/25 07:27
Total/NA	Prep	200.7			8816	RMN	EET SSM	08/12/25 18:05
Total/NA	Analysis	200.7 Rev 4.4		1	8915	JLS	EET SSM	08/14/25 17:31
Total/NA	Prep	200.7			8816	RMN	EET SSM	08/12/25 18:05
Total/NA	Analysis	200.8		1	8851	CW	EET SSM	08/13/25 12:50
Total Recoverable	Prep	200.7			666954	F3PF	EET CLE	08/08/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667242	S4FJ	EET CLE	08/11/25 18:20
Total Recoverable	Analysis	2340 B-2021		1	667541	KLC	EET CLE	08/13/25 13:27
Total/NA	Prep	245.1-1994 R3.0			666958	F3PF	EET CLE	08/08/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667257	BN	EET CLE	08/11/25 15:10
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 11:01
Total/NA	Analysis	2540 C-2020		1	667134	AAP	EET CLE	08/11/25 09:47
Total/NA	Analysis	2540D-2020		1	666943	TAV2	EET CLE	08/08/25 10:11
Total/NA	Analysis	300.0-1993 R2.1		1	666991	JMR	EET CLE	08/08/25 16:29

Client Sample ID: L508215-06 MWT-17A

Lab Sample ID: 240-230293-6

Date Collected: 08/05/25 09:32
Matrix: Water
Date Received: 08/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			666954	F3PF	EET CLE	08/08/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667295	RKT	EET CLE	08/12/25 07:32
Total/NA	Prep	200.7			8816	RMN	EET SSM	08/12/25 18:05
Total/NA	Analysis	200.7 Rev 4.4		1	8915	JLS	EET SSM	08/14/25 17:34
Total/NA	Prep	200.7			8816	RMN	EET SSM	08/12/25 18:05
Total/NA	Analysis	200.8		1	8851	CW	EET SSM	08/13/25 12:53
Total Recoverable	Prep	200.7			666954	F3PF	EET CLE	08/08/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667242	S4FJ	EET CLE	08/11/25 18:23
Total Recoverable	Analysis	2340 B-2021		1	667541	KLC	EET CLE	08/13/25 13:27
Total/NA	Prep	245.1-1994 R3.0			666958	F3PF	EET CLE	08/08/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667257	BN	EET CLE	08/11/25 15:12
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 11:06
Total/NA	Analysis	2540 C-2020		1	667134	AAP	EET CLE	08/11/25 09:47
Total/NA	Analysis	2540D-2020		1	666943	TAV2	EET CLE	08/08/25 10:11
Total/NA	Analysis	300.0-1993 R2.1		1	666991	JMR	EET CLE	08/08/25 16:38
Total/NA	Analysis	300.0-1993 R2.1		5	666991	JMR	EET CLE	08/08/25 16:48

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-1

Client Sample ID: L508215-07 FIELD BLANK

Lab Sample ID: 240-230293-7

Date Collected: 08/05/25 08:35

Matrix: Water

Date Received: 08/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			666954	F3PF	EET CLE	08/08/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667295	RKT	EET CLE	08/12/25 07:36
Total/NA	Prep	200.7			8816	RMN	EET SSM	08/12/25 18:05
Total/NA	Analysis	200.7 Rev 4.4		1	8915	JLS	EET SSM	08/14/25 17:38
Total/NA	Prep	200.7			8816	RMN	EET SSM	08/12/25 18:05
Total/NA	Analysis	200.8		1	8851	CW	EET SSM	08/13/25 12:56
Total Recoverable	Prep	200.7			666954	F3PF	EET CLE	08/08/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667242	S4FJ	EET CLE	08/11/25 18:25
Total Recoverable	Analysis	2340 B-2021		1	667541	KLC	EET CLE	08/13/25 13:27
Total/NA	Prep	245.1-1994 R3.0			666958	F3PF	EET CLE	08/08/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667257	BN	EET CLE	08/11/25 15:14
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 11:21
Total/NA	Analysis	2540 C-2020		1	667134	AAP	EET CLE	08/11/25 09:47
Total/NA	Analysis	2540D-2020		1	666943	TAV2	EET CLE	08/08/25 10:11
Total/NA	Analysis	300.0-1993 R2.1		1	666991	JMR	EET CLE	08/08/25 16:58

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-1

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-08-26
Florida	NELAP	E87575	06-30-26
Louisiana (All)	NELAP	03073	07-01-26
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-26
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167-008	07-08-26
US Fish & Wildlife	US Federal Programs	A20571	06-30-26
USDA	US Federal Programs	525-23-4-22573	01-24-28

Chain of Custody

3.8
4w

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☐

Client Contact Info

Name: Jennifer Caporale

Address : 1110 South Pennsylvania

Address 2:

City, State Zip: Lansing, Michigan 48901

Phone: 517-702-6482

Email: Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company: Lansing Board of Water & Light

Purchase Order: Purchase Order not required

Work Order:

Requested TAT:

Project Number: 24034575

Sample State: MI

Project Manager: Howell, Leslie

Project Reference:

Sampler: Marc Wahrer

Description: Erickson 8-5-25

Site Name: Erickson Projects

240-230293 COC

6123
M63

Special Instructions:

Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner. Please add Na and K for 200.7 on specialty metals.

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	300.0-1993 R2.1 / Anions, Ion Chromatography / Chloride, Fluoride & Sulfa	200.7 R4.4-1994 / Metals (ICP) / Total Boron	2540D-2020 / Solids, Total Suspended (TSS)	245.1-1994 R3.0 / Mercury (CVAA) / Mercury	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	903.0 / Radium-226 (GFPC) / Standard Target List	904.0 / Radium-228 (GFPC) / Standard Target List	2340 B-2021 / Total Hardness (as CaCO3) by calculation	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved Solids	2320 B-2021 / Alkalinity / Bicarbonate & Carbonate Alkalinity	200.8 / Metals (ICP/MS) / Iron & Zinc	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	200.8 / Metals (ICP/MS) / Custom List 2: 2-3 Metals	200.8 / Metals (ICP/MS) / Custom List 1: 1 Metals	Plastic 60 mL - unpreserved	Plastic 1 liter - unpreserved	Plastic 250ml - with Nitric Acid	Plastic 500ml - with Nitric Acid	Plastic 500ml - unpreserved	Plastic 1 liter - Nitric Acid	Total Bottles For Sample
1	L508215-01 MW-17A	Grab	Water	08/05/25 09:32				X	X	X	X	X	X	X	X	X	X	X	X			0	0	0	0	0	2	8
2	L508215-02 MW-17B	Grab	Water	08/05/25 11:00				X	X	X	X	X	X	X	X	X	X	X	X			0	0	0	0	0	2	8
3	L508215-03 MW-17C	Grab	Water	08/05/25 12:13				X	X	X	X	X	X	X	X	X	X	X	X			0	0	0	0	0	2	8
4	L508215-04 MW-17D	Grab	Water	08/05/25 13:33				X	X	X	X	X	X	X	X	X	X	X	X			0	0	0	0	0	2	8
5	L508215-05 MW-17E	Grab	Water	08/05/25 14:52				X	X	X	X	X	X	X	X	X	X	X	X			0	0	0	0	0	2	8
6	L508215-06 MWT-17A	Grab	Water	08/05/25 09:32				X	X	X	X	X	X	X	X	X	X	X	X			0	0	0	0	0	2	8
7	L508215-07 Field Blank	Grab	Water	08/05/25 08:35				X	X	X	X	X	X	X	X	X	X	X	X			0	0	0	0	0	2	8

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished By:	Date/Time:	
Jennifer Caporale	08/06/25 09:50	Jennifer Caporale	08/06/25 09:50	8/7/25 0820

Chain of Custody Number: **402743**

*H – Analysis on hold.

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Lansing Board of Water & Light Site Name _____ Cooler unpacked by:

Cooler Received on 8/12/25 Opened on 8/12/25

FedEx 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used Bubble Wrap Foam Plastic Bag None Other _____

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 17 (CF +0.2°C) Observed Cooler Temp. 1.3 °C Corrected Cooler Temp 1.5 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?	Yes	No
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC463162
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving.

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen _____

Coolers								
Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250806A001	Blue							
MIC20250806A002	Blue							

Ren Skea 8/7/25 0800

Ron Shea 8/7/25 0800

8/7/2025

Login Container Summary Report

240-230293

8/15/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508215-01 MW-17A	240-230293-A-1	Plastic 60 mL - unpreserved				
L508215-01 MW-17A	240 230293 B-1	Plastic 60 mL unpreserved				
L508215-01 MW-17A	240-230293-C-1	Plastic 250ml - with Nitric Acid	<2			
L508215-01 MW-17A	240-230293-D-1	Plastic 500ml - unpreserved				
L508215-01 MW 17A	240-230293-E-1	Plastic 500ml with Nitric Acid	<2			
L508215-01 MW-17A	240-230293 F 1	Plastic 1 liter - unpreserved				
L508215-01 MW-17A	240-230293-G-1	Plastic 1 liter - Nitric Acid	<2			
L508215-01 MW-17A	240-230293-H 1	Plastic 1 liter - Nitric Acid	<2			
L508215-02 MW-17B	240-230293-A-2	Plastic 60 mL - unpreserved				
L508215-02 MW-17B	240-230293-B-2	Plastic 60 mL - unpreserved				
L508215-02 MW 17B	240-230293 C-2	Plastic 250ml - with Nitric Acid	<2			
L508215-02 MW-17B	240-230293 D-2	Plastic 500ml unpreserved				
L508215-02 MW-17B	240-230293 E-2	Plastic 500ml - with Nitric Acid	<2			
L508215-02 MW-17B	240-230293-F 2	Plastic 1 liter - unpreserved				
L508215-02 MW 17B	240-230293-G-2	Plastic 1 liter - Nitric Acid	<2			
L508215-02 MW-17B	240-230293-H 2	Plastic 1 liter - Nitric Acid	<2			
L508215-03 MW-17C	240-230293-A-3	Plastic 60 mL - unpreserved				
L508215-03 MW-17C	240-230293 B-3	Plastic 60 mL unpreserved				
L508215-03 MW 17C	240-230293-C-3	Plastic 250ml - with Nitric Acid	<2			
L508215-03 MW-17C	240-230293 D-3	Plastic 500ml - unpreserved				
L508215-03 MW-17C	240 230293-E-3	Plastic 500ml - with Nitric Acid	<2			
L508215-03 MW-17C	240-230293 F 3	Plastic 1 liter unpreserved				
L508215-03 MW 17C	240-230293-G-3	Plastic 1 liter - Nitric Acid	<2			
L508215-03 MW-17C	240-230293 H-3	Plastic 1 liter - Nitric Acid	<2			
L508215-04 MW-17D	240-230293-A-4	Plastic 60 mL - unpreserved				
L508215-04 MW-17D	240-230293 B-4	Plastic 60 mL - unpreserved				
L508215-04 MW-17D	240 230293-C-4	Plastic 250ml - with Nitric Acid	<2			
L508215-04 MW-17D	240 230293-D-4	Plastic 500ml - unpreserved				
L508215-04 MW-17D	240-230293-E-4	Plastic 500ml - with Nitric Acid	<2			
L508215-04 MW-17D	240-230293 F-4	Plastic 1 liter - unpreserved				
L508215-04 MW-17D	240-230293-G-4	Plastic 1 liter - Nitric Acid	<2			
L508215-04 MW 17D	240-230293-H-4	Plastic 1 liter - Nitric Acid	<2			
L508215-05 MW-17E	240-230293-A 5	Plastic 60 mL unpreserved				
L508215-05 MW 17E	240-230293-B 5	Plastic 60 mL - unpreserved				
L508215-05 MW 17E	240 230293-C-5	Plastic 250ml with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508215-05 MW 17E	240-230293-D-5	Plastic 500ml - unpreserved				
L508215-05 MW-17E	240-230293-E-5	Plastic 500ml - with Nitric Acid	<2			
L508215-05 MW-17E	240-230293-F-5	Plastic 1 liter unpreserved				
L508215-05 MW-17E	240-230293-G-5	Plastic 1 liter - Nitric Acid	<2			
L508215-05 MW-17E	240-230293-H 5	Plastic 1 liter Nitric Acid	<2			
L508215-06 MWT-17A	240 230293 A-6	Plastic 60 mL - unpreserved				
L508215-06 MWT-17A	240-230293-B-6	Plastic 60 mL - unpreserved				
L508215-06 MWT 17A	240-230293-C-6	Plastic 250ml - with Nitric Acid	<2			
L508215-06 MWT-17A	240-230293-D-6	Plastic 500ml - unpreserved				
L508215-06 MWT-17A	240-230293-E-6	Plastic 500ml - with Nitric Acid	<2			
L508215-06 MWT 17A	240-230293-F-6	Plastic 1 liter - unpreserved				
L508215-06 MWT-17A	240-230293-G-6	Plastic 1 liter - Nitric Acid	<2			
L508215-06 MWT-17A	240-230293-H-6	Plastic 1 liter - Nitric Acid	<2			
L508215-07 FIELD BLANK	240-230293 A 7	Plastic 60 mL - unpreserved				
L508215-07 FIELD BLANK	240-230293-B-7	Plastic 60 mL - unpreserved				
L508215-07 FIELD BLANK	240-230293-C-7	Plastic 250ml - with Nitric Acid	<2			
L508215-07 FIELD BLANK	240-230293-D-7	Plastic 500ml - unpreserved				
L508215-07 FIELD BLANK	240-230293-E-7	Plastic 500ml - with Nitric Acid	<2			
L508215-07 FIELD BLANK	240-230293-F-7	Plastic 1 liter - unpreserved				
L508215-07 FIELD BLANK	240-230293-G-7	Plastic 1 liter Nitric Acid	<2			
L508215-07 FIELD BLANK	240-230293-H-7	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-206134.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-230293-1
Address: 5755 8th Street East, ,	Due Date Requested: 8/20/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Therm. ID: SC04 Cust. Seal: (Y) / N
Uncorr./Corr. Temp: 19.1/19.4 °C
Delivery: UPS / FedEx / Other:
Ice Type: Blue / Dry / Wet / None
Label Ver.: 2 Packing: B
Other: Sm Blue

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT(MOD) Iron & Zinc	200.7_CWA/200.7_P_TOT(MOD) Iron & Zinc	Total Number of containe	Special Instructions/Note:
			Preservation Code:							
L508215-01 MW-17A (240-230293-1)	8/5/25	09:32 Eastern	G	Water			X	X	1	
L508215-02 MW-17B (240-230293-2)	8/5/25	11:00 Eastern	G	Water			X	X	1	
L508215-03 MW-17C (240-230293-3)	8/5/25	12:13 Eastern	G	Water			X	X	1	
L508215-04 MW-17D (240-230293-4)	8/5/25	13:33 Eastern	G	Water			X	X	1	
L508215-05 MW-17E (240-230293-5)	8/5/25	14:52 Eastern	G	Water			X	X	1	
L508215-06 MWT-17A (240-230293-6)	8/5/25	09:32 Eastern	G	Water			X	X	1	
L508215-07 FIELD BLANK (240-230293-7)	8/5/25	08:35 Eastern	G	Water			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification: Unconfirmed 4616 0258 7458	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JM	8/7/25	EC		8/8/25 9:50	ET IW
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-230293-1

Login Number: 230293
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 08/08/25 01:11 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 9/5/2025 8:57:57 AM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-230293-2

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

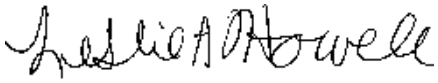
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
9/5/2025 8:57:57 AM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 9
Tracer Carrier Summary 16
QC Sample Results 17
QC Association Summary 18
Lab Chronicle 19
Certification Summary 21
Chain of Custody 22
Receipt Checklists 29

Definitions/Glossary

Client: Lansing Board of Water & Light
Job ID: 240-230293-2
Project/Site: Erickson Projects

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-230293-2 — Eurofins Cleveland

Job Narrative
240-230293-2

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 8/7/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.5°C.

Gas Flow Proportional Counter
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-230293-1	L508215-01 MW-17A	Water	08/05/25 09:32	08/07/25 08:00	Michigan
240-230293-2	L508215-02 MW-17B	Water	08/05/25 11:00	08/07/25 08:00	Michigan
240-230293-3	L508215-03 MW-17C	Water	08/05/25 12:13	08/07/25 08:00	Michigan
240-230293-4	L508215-04 MW-17D	Water	08/05/25 13:33	08/07/25 08:00	Michigan
240-230293-5	L508215-05 MW-17E	Water	08/05/25 14:52	08/07/25 08:00	Michigan
240-230293-6	L508215-06 MWT-17A	Water	08/05/25 09:32	08/07/25 08:00	Michigan
240-230293-7	L508215-07 FIELD BLANK	Water	08/05/25 08:35	08/07/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-2

Client Sample ID: L508215-01 MW-17A — **Lab Sample ID: 240-230293-1**

No Detections.

Client Sample ID: L508215-02 MW-17B — **Lab Sample ID: 240-230293-2**

No Detections.

Client Sample ID: L508215-03 MW-17C — **Lab Sample ID: 240-230293-3**

No Detections.

Client Sample ID: L508215-04 MW-17D — **Lab Sample ID: 240-230293-4**

No Detections.

Client Sample ID: L508215-05 MW-17E — **Lab Sample ID: 240-230293-5**

No Detections.

Client Sample ID: L508215-06 MWT-17A — **Lab Sample ID: 240-230293-6**

No Detections.

Client Sample ID: L508215-07 FIELD BLANK — **Lab Sample ID: 240-230293-7**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-2

Client Sample ID: L508215-01 MW-17A

Date Collected: 08/05/25 09:32
Date Received: 08/07/25 08:00

Lab Sample ID: 240-230293-1

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.153	U	0.170	0.170	1.00	0.270	pCi/L	08/11/25 08:44	09/04/25 14:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.6*		*30 - 110*	*08/11/25 08:44*	*09/04/25 14:54*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.462	U	0.371	0.373	1.00	0.576	pCi/L	08/11/25 08:49	09/04/25 11:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.6*		*30 - 110*	*08/11/25 08:49*	*09/04/25 11:57*	*1*
Y Carrier	*77.0*		*30 - 110*	*08/11/25 08:49*	*09/04/25 11:57*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.614**		0.408	0.410	5.00	0.576	pCi/L		09/02/25 09:21	1

Client Sample ID: L508215-02 MW-17B

Date Collected: 08/05/25 11:00
Date Received: 08/07/25 08:00

Lab Sample ID: 240-230293-2

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0895	U	0.186	0.186	1.00	0.334	pCi/L	08/11/25 08:44	09/04/25 14:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.6*		*30 - 110*	*08/11/25 08:44*	*09/04/25 14:54*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.691**		0.430	0.435	1.00	0.637	pCi/L	08/11/25 08:49	09/04/25 11:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.6*		*30 - 110*	*08/11/25 08:49*	*09/04/25 11:57*	*1*
Y Carrier	*74.0*		*30 - 110*	*08/11/25 08:49*	*09/04/25 11:57*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.781**		0.469	0.473	5.00	0.637	pCi/L		09/02/25 09:21	1

Client Sample ID: L508215-03 MW-17C

Date Collected: 08/05/25 12:13
Date Received: 08/07/25 08:00

Lab Sample ID: 240-230293-3

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.310	U	0.236	0.237	1.00	0.336	pCi/L	08/11/25 08:44	09/04/25 14:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*30 - 110*	*08/11/25 08:44*	*09/04/25 14:54*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.09**		0.466	0.477	1.00	0.621	pCi/L	08/11/25 08:49	09/04/25 11:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*30 - 110*	*08/11/25 08:49*	*09/04/25 11:57*	*1*
Y Carrier	*76.3*		*30 - 110*	*08/11/25 08:49*	*09/04/25 11:57*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.40**		0.522	0.533	5.00	0.621	pCi/L		09/02/25 09:21	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-2

Client Sample ID: L508215-04 MW-17D

Date Collected: 08/05/25 13:33
Date Received: 08/07/25 08:00

Lab Sample ID: 240-230293-4

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.383		0.237	0.240	1.00	0.302	pCi/L	08/11/25 08:44	09/04/25 14:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.8*		*30 - 110*	*08/11/25 08:44*	*09/04/25 14:54*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.174	U	0.329	0.330	1.00	0.569	pCi/L	08/11/25 08:49	09/04/25 11:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.8*		*30 - 110*	*08/11/25 08:49*	*09/04/25 11:57*	*1*
Y Carrier	*83.0*		*30 - 110*	*08/11/25 08:49*	*09/04/25 11:57*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.557	U	0.405	0.408	5.00	0.569	pCi/L		09/02/25 09:21	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-2

Client Sample ID: L508215-05 MW-17E
Date Collected: 08/05/25 14:52
Date Received: 08/07/25 08:00

Lab Sample ID: 240-230293-5
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0393	U	0.193	0.193	1.00	0.371	pCi/L	08/11/25 08:44	09/04/25 15:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*30 - 110*	*08/11/25 08:44*	*09/04/25 15:00*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0568	U	0.354	0.354	1.00	0.640	pCi/L	08/11/25 08:49	09/04/25 11:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*30 - 110*	*08/11/25 08:49*	*09/04/25 11:57*	*1*
Y Carrier	*78.1*		*30 - 110*	*08/11/25 08:49*	*09/04/25 11:57*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.0961	U	0.403	0.403	5.00	0.640	pCi/L		09/02/25 09:21	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-2

Client Sample ID: L508215-06 MWT-17A

Date Collected: 08/05/25 09:32
Date Received: 08/07/25 08:00

Lab Sample ID: 240-230293-6

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.102	U	0.132	0.132	1.00	0.347	pCi/L	08/11/25 08:44	09/04/25 15:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.6*		*30 - 110*	*08/11/25 08:44*	*09/04/25 15:00*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0849	U	0.364	0.364	1.00	0.657	pCi/L	08/11/25 08:49	09/04/25 11:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.6*		*30 - 110*	*08/11/25 08:49*	*09/04/25 11:57*	*1*
Y Carrier	*73.6*		*30 - 110*	*08/11/25 08:49*	*09/04/25 11:57*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.0849	U	0.387	0.387	5.00	0.657	pCi/L		09/05/25 07:44	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-2

Client Sample ID: L508215-07 FIELD BLANK

Lab Sample ID: 240-230293-7

Date Collected: 08/05/25 08:35

Matrix: Water

Date Received: 08/07/25 08:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00690	U	0.167	0.167	1.00	0.347	pCi/L	08/11/25 08:44	09/04/25 15:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.3*		*30 - 110*	*08/11/25 08:44*	*09/04/25 15:00*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.219	U	0.261	0.261	1.00	0.560	pCi/L	08/11/25 08:49	09/04/25 11:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.3*		*30 - 110*	*08/11/25 08:49*	*09/04/25 11:58*	*1*
Y Carrier	*76.6*		*30 - 110*	*08/11/25 08:49*	*09/04/25 11:58*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.000	U	0.310	0.310	5.00	0.560	pCi/L		09/05/25 07:44	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-230293-1	L508215-01 MW-17A	92.6
240-230293-2	L508215-02 MW-17B	92.6
240-230293-3	L508215-03 MW-17C	87.3
240-230293-4	L508215-04 MW-17D	87.8
240-230293-5	L508215-05 MW-17E	90.3
240-230293-6	L508215-06 MWT-17A	83.6
240-230293-7	L508215-07 FIELD BLANK	91.3
LCS 160-731427/2-A	Lab Control Sample	91.8
MB 160-731427/1-A	Method Blank	90.3

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
		Ba	Y
Lab Sample ID	Client Sample ID	(30-110)	(30-110)
240-230293-1	L508215-01 MW-17A	92.6	77.0
240-230293-2	L508215-02 MW-17B	92.6	74.0
240-230293-3	L508215-03 MW-17C	87.3	76.3
240-230293-4	L508215-04 MW-17D	87.8	83.0
240-230293-5	L508215-05 MW-17E	90.3	78.1
240-230293-6	L508215-06 MWT-17A	83.6	73.6
240-230293-7	L508215-07 FIELD BLANK	91.3	76.6
LCS 160-731430/2-A	Lab Control Sample	91.8	82.2
MB 160-731430/1-A	Method Blank	90.3	79.6

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-731427/1-A
Matrix: Water
Analysis Batch: 734802

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 731427

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.09118	U	0.212	0.212	1.00	0.383	pCi/L	08/11/25 08:44	09/04/25 14:53	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*30 - 110*	*08/11/25 08:44*	*09/04/25 14:53*	*1*

Lab Sample ID: LCS 160-731427/2-A
Matrix: Water
Analysis Batch: 734802

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 731427

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.57	9.356		1.25	1.00	0.312	pCi/L	98	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*91.8*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-731430/1-A
Matrix: Water
Analysis Batch: 734807

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 731430

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1503	U	0.329	0.329	1.00	0.574	pCi/L	08/11/25 08:49	09/04/25 11:57	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*30 - 110*	*08/11/25 08:49*	*09/04/25 11:57*	*1*
Y Carrier	*79.6*		*30 - 110*	*08/11/25 08:49*	*09/04/25 11:57*	*1*

Lab Sample ID: LCS 160-731430/2-A
Matrix: Water
Analysis Batch: 734807

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 731430

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.10	9.986		1.34	1.00	0.493	pCi/L	110	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*91.8*		*30 - 110*
Y Carrier	*82.2*		*30 - 110*

QC Association Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-2

Rad

Prep Batch: 731427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-1	L508215-01 MW-17A	Total/NA	Water	PrecSep-21	
240-230293-2	L508215-02 MW-17B	Total/NA	Water	PrecSep-21	
240-230293-3	L508215-03 MW-17C	Total/NA	Water	PrecSep-21	
240-230293-4	L508215-04 MW-17D	Total/NA	Water	PrecSep-21	
240-230293-5	L508215-05 MW-17E	Total/NA	Water	PrecSep-21	
240-230293-6	L508215-06 MWT-17A	Total/NA	Water	PrecSep-21	
240-230293-7	L508215-07 FIELD BLANK	Total/NA	Water	PrecSep-21	
MB 160-731427/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-731427/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 731430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230293-1	L508215-01 MW-17A	Total/NA	Water	PrecSep_0	
240-230293-2	L508215-02 MW-17B	Total/NA	Water	PrecSep_0	
240-230293-3	L508215-03 MW-17C	Total/NA	Water	PrecSep_0	
240-230293-4	L508215-04 MW-17D	Total/NA	Water	PrecSep_0	
240-230293-5	L508215-05 MW-17E	Total/NA	Water	PrecSep_0	
240-230293-6	L508215-06 MWT-17A	Total/NA	Water	PrecSep_0	
240-230293-7	L508215-07 FIELD BLANK	Total/NA	Water	PrecSep_0	
MB 160-731430/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-731430/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-2

Client Sample ID: L508215-01 MW-17A

Lab Sample ID: 240-230293-1

Date Collected: 08/05/25 09:32
Matrix: Water
Date Received: 08/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731427	JTR	EET SL	08/11/25 08:44
Total/NA	Analysis	903.0		1	734802	SWS	EET SL	09/04/25 14:54
Total/NA	Prep	PrecSep_0			731430	JTR	EET SL	08/11/25 08:49
Total/NA	Analysis	904.0		1	734807	SWS	EET SL	09/04/25 11:57
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/02/25 09:21

Client Sample ID: L508215-02 MW-17B

Lab Sample ID: 240-230293-2

Date Collected: 08/05/25 11:00
Matrix: Water
Date Received: 08/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731427	JTR	EET SL	08/11/25 08:44
Total/NA	Analysis	903.0		1	734802	SWS	EET SL	09/04/25 14:54
Total/NA	Prep	PrecSep_0			731430	JTR	EET SL	08/11/25 08:49
Total/NA	Analysis	904.0		1	734807	SWS	EET SL	09/04/25 11:57
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/02/25 09:21

Client Sample ID: L508215-03 MW-17C

Lab Sample ID: 240-230293-3

Date Collected: 08/05/25 12:13
Matrix: Water
Date Received: 08/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731427	JTR	EET SL	08/11/25 08:44
Total/NA	Analysis	903.0		1	734802	SWS	EET SL	09/04/25 14:54
Total/NA	Prep	PrecSep_0			731430	JTR	EET SL	08/11/25 08:49
Total/NA	Analysis	904.0		1	734807	SWS	EET SL	09/04/25 11:57
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/02/25 09:21

Client Sample ID: L508215-04 MW-17D

Lab Sample ID: 240-230293-4

Date Collected: 08/05/25 13:33
Matrix: Water
Date Received: 08/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731427	JTR	EET SL	08/11/25 08:44
Total/NA	Analysis	903.0		1	734802	SWS	EET SL	09/04/25 14:54
Total/NA	Prep	PrecSep_0			731430	JTR	EET SL	08/11/25 08:49
Total/NA	Analysis	904.0		1	734807	SWS	EET SL	09/04/25 11:57
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/02/25 09:21

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-2

Client Sample ID: L508215-05 MW-17E

Lab Sample ID: 240-230293-5

Date Collected: 08/05/25 14:52
Matrix: Water
Date Received: 08/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731427	JTR	EET SL	08/11/25 08:44
Total/NA	Analysis	903.0		1	734807	SWS	EET SL	09/04/25 15:00
Total/NA	Prep	PrecSep_0			731430	JTR	EET SL	08/11/25 08:49
Total/NA	Analysis	904.0		1	734807	SWS	EET SL	09/04/25 11:57
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/02/25 09:21

Client Sample ID: L508215-06 MWT-17A

Lab Sample ID: 240-230293-6

Date Collected: 08/05/25 09:32
Matrix: Water
Date Received: 08/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731427	JTR	EET SL	08/11/25 08:44
Total/NA	Analysis	903.0		1	734807	SWS	EET SL	09/04/25 15:00
Total/NA	Prep	PrecSep_0			731430	JTR	EET SL	08/11/25 08:49
Total/NA	Analysis	904.0		1	734807	SWS	EET SL	09/04/25 11:57
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 07:44

Client Sample ID: L508215-07 FIELD BLANK

Lab Sample ID: 240-230293-7

Date Collected: 08/05/25 08:35
Matrix: Water
Date Received: 08/07/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731427	JTR	EET SL	08/11/25 08:44
Total/NA	Analysis	903.0		1	734807	SWS	EET SL	09/04/25 15:00
Total/NA	Prep	PrecSep_0			731430	JTR	EET SL	08/11/25 08:49
Total/NA	Analysis	904.0		1	734807	SWS	EET SL	09/04/25 11:58
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 07:44

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230293-2

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25 *
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25 *
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-30-25 *
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody

3.8
4w

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☐

Client Contact Info

Name: Jennifer Caporale

Address : 1110 South Pennsylvania

Address 2:

City, State Zip: Lansing, Michigan 48901

Phone: 517-702-6482

Email: Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company: Lansing Board of Water & Light

Purchase Order: Purchase Order not required

Work Order:

Requested TAT:

Project Number: 24034575

Sample State: MI

Project Manager: Howell, Leslie

Project Reference:

Sampler: Marc Wahrer

Description: Erickson 8-5-25

Site Name: Erickson Projects

240-230293 COC

6123
M63

Special Instructions:

Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner. Please add Na and K for 200.7 on specialty metals.

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	300.0-1993 R2.1 / Anions, Ion Chromatography / Chloride, Fluoride & Sulfa	200.7 R4.4-1994 / Metals (ICP) / Total Boron	2540D-2020 / Solids, Total Suspended (TSS)	245.1-1994 R3.0 / Mercury (CVAA) / Mercury	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	903.0 / Radium-226 (GFPC) / Standard Target List	904.0 / Radium-228 (GFPC) / Standard Target List	2340 B-2021 / Total Hardness (as CaCO3) by calculation	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved Solids	2320 B-2021 / Alkalinity / Bicarbonate & Carbonate Alkalinity	200.8 / Metals (ICP/MS) / Iron & Zinc	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	200.8 / Metals (ICP/MS) / Custom List 2: 2-3 Metals	200.8 / Metals (ICP/MS) / Custom List 1: 1 Metals	Plastic 60 mL - unpreserved	Plastic 1 liter - unpreserved	Plastic 250ml - with Nitric Acid	Plastic 500ml - with Nitric Acid	Plastic 500ml - unpreserved	Plastic 1 liter - Nitric Acid	Total Bottles For Sample
1	L508215-01 MW-17A	Grab	Water	08/05/25 09:32				X	X	X	X	X	X	X	X	X	X	X	X			0	0	0	0	0	2	8
2	L508215-02 MW-17B	Grab	Water	08/05/25 11:00				X	X	X	X	X	X	X	X	X	X	X	X			0	0	0	0	0	2	8
3	L508215-03 MW-17C	Grab	Water	08/05/25 12:13				X	X	X	X	X	X	X	X	X	X	X	X			0	0	0	0	0	2	8
4	L508215-04 MW-17D	Grab	Water	08/05/25 13:33				X	X	X	X	X	X	X	X	X	X	X	X			0	0	0	0	0	2	8
5	L508215-05 MW-17E	Grab	Water	08/05/25 14:52				X	X	X	X	X	X	X	X	X	X	X	X			0	0	0	0	0	2	8
6	L508215-06 MWT-17A	Grab	Water	08/05/25 09:32				X	X	X	X	X	X	X	X	X	X	X	X			0	0	0	0	0	2	8
7	L508215-07 Field Blank	Grab	Water	08/05/25 08:35				X	X	X	X	X	X	X	X	X	X	X	X			0	0	0	0	0	2	8

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished By:	Date/Time:	
Jennifer Caporale	08/06/25 09:50	Jennifer Caporale	08/06/25 09:50	8/7/25 08

Chain of Custody Number: **402743**

*H – Analysis on hold.

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Lansing Board of Water & Light Site Name _____ Cooler unpacked by:

Cooler Received on 8/7/25 Opened on 8/7/25

FedEx 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used Bubble Wrap Foam Plastic Bag None Other _____

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 17 (CF +0.2°C) Observed Cooler Temp. 1.3 °C Corrected Cooler Temp 1.5 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?	Yes	No
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC463162
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving.

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen _____

Coolers								
Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250806A001	Blue							
MIC20250806A002	Blue							

Ron Skea 8/7/25 0800

Ron Shea 8/7/25 0800

8/7/2025

Login Container Summary Report

240-230293

9/5/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508215-01 MW-17A	240-230293-A-1	Plastic 60 mL - unpreserved				
L508215-01 MW-17A	240 230293 B-1	Plastic 60 mL unpreserved				
L508215-01 MW-17A	240-230293-C-1	Plastic 250ml - with Nitric Acid	<2			
L508215-01 MW-17A	240-230293-D-1	Plastic 500ml - unpreserved				
L508215-01 MW 17A	240-230293-E-1	Plastic 500ml with Nitric Acid	<2			
L508215-01 MW-17A	240-230293 F 1	Plastic 1 liter - unpreserved				
L508215-01 MW-17A	240-230293-G-1	Plastic 1 liter - Nitric Acid	<2			
L508215-01 MW-17A	240-230293-H 1	Plastic 1 liter - Nitric Acid	<2			
L508215-02 MW-17B	240-230293-A-2	Plastic 60 mL - unpreserved				
L508215-02 MW-17B	240-230293-B-2	Plastic 60 mL - unpreserved				
L508215-02 MW 17B	240-230293 C-2	Plastic 250ml - with Nitric Acid	<2			
L508215-02 MW-17B	240-230293 D-2	Plastic 500ml unpreserved				
L508215-02 MW-17B	240-230293 E-2	Plastic 500ml - with Nitric Acid	<2			
L508215-02 MW-17B	240-230293-F 2	Plastic 1 liter - unpreserved				
L508215-02 MW 17B	240-230293-G-2	Plastic 1 liter - Nitric Acid	<2			
L508215-02 MW-17B	240-230293-H 2	Plastic 1 liter - Nitric Acid	<2			
L508215-03 MW-17C	240-230293-A-3	Plastic 60 mL - unpreserved				
L508215-03 MW-17C	240-230293 B-3	Plastic 60 mL unpreserved				
L508215-03 MW 17C	240-230293-C-3	Plastic 250ml - with Nitric Acid	<2			
L508215-03 MW-17C	240-230293 D-3	Plastic 500ml - unpreserved				
L508215-03 MW-17C	240 230293-E-3	Plastic 500ml - with Nitric Acid	<2			
L508215-03 MW-17C	240-230293 F 3	Plastic 1 liter unpreserved				
L508215-03 MW 17C	240-230293-G-3	Plastic 1 liter - Nitric Acid	<2			
L508215-03 MW-17C	240-230293 H-3	Plastic 1 liter - Nitric Acid	<2			
L508215-04 MW-17D	240-230293-A-4	Plastic 60 mL - unpreserved				
L508215-04 MW-17D	240-230293 B-4	Plastic 60 mL - unpreserved				
L508215-04 MW-17D	240 230293-C-4	Plastic 250ml - with Nitric Acid	<2			
L508215-04 MW-17D	240 230293-D-4	Plastic 500ml - unpreserved				
L508215-04 MW-17D	240-230293-E-4	Plastic 500ml - with Nitric Acid	<2			
L508215-04 MW-17D	240-230293 F-4	Plastic 1 liter - unpreserved				
L508215-04 MW-17D	240-230293-G-4	Plastic 1 liter - Nitric Acid	<2			
L508215-04 MW 17D	240-230293-H-4	Plastic 1 liter - Nitric Acid	<2			
L508215-05 MW-17E	240-230293-A 5	Plastic 60 mL unpreserved				
L508215-05 MW 17E	240-230293-B 5	Plastic 60 mL - unpreserved				
L508215-05 MW 17E	240 230293-C-5	Plastic 250ml with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508215-05 MW 17E	240-230293-D-5	Plastic 500ml - unpreserved				
L508215-05 MW-17E	240-230293-E-5	Plastic 500ml - with Nitric Acid	<2			
L508215-05 MW-17E	240-230293-F-5	Plastic 1 liter unpreserved				
L508215-05 MW-17E	240-230293-G-5	Plastic 1 liter - Nitric Acid	<2			
L508215-05 MW-17E	240-230293-H 5	Plastic 1 liter Nitric Acid	<2			
L508215-06 MWT-17A	240 230293 A-6	Plastic 60 mL - unpreserved				
L508215-06 MWT-17A	240-230293-B-6	Plastic 60 mL - unpreserved				
L508215-06 MWT 17A	240-230293-C-6	Plastic 250ml - with Nitric Acid	<2			
L508215-06 MWT-17A	240-230293-D-6	Plastic 500ml - unpreserved				
L508215-06 MWT-17A	240-230293-E-6	Plastic 500ml - with Nitric Acid	<2			
L508215-06 MWT 17A	240-230293-F-6	Plastic 1 liter - unpreserved				
L508215-06 MWT-17A	240-230293-G-6	Plastic 1 liter - Nitric Acid	<2			
L508215-06 MWT-17A	240-230293-H-6	Plastic 1 liter - Nitric Acid	<2			
L508215-07 FIELD BLANK	240-230293 A 7	Plastic 60 mL - unpreserved				
L508215-07 FIELD BLANK	240-230293-B-7	Plastic 60 mL - unpreserved				
L508215-07 FIELD BLANK	240-230293-C-7	Plastic 250ml - with Nitric Acid	<2			
L508215-07 FIELD BLANK	240-230293-D-7	Plastic 500ml - unpreserved				
L508215-07 FIELD BLANK	240-230293-E-7	Plastic 500ml - with Nitric Acid	<2			
L508215-07 FIELD BLANK	240-230293-F-7	Plastic 1 liter - unpreserved				
L508215-07 FIELD BLANK	240-230293-G-7	Plastic 1 liter Nitric Acid	<2			
L508215-07 FIELD BLANK	240-230293-H-7	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-206135.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-230293-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 8/21/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21Standard Target List	904.0/PrecSep_0Standard Target List	Ra226_228GFPC_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L508215-01 MW-17A (240-230293-1)	8/5/25	09:32 Eastern	G	Water			X	X	X	2	
L508215-02 MW-17B (240-230293-2)	8/5/25	11:00 Eastern	G	Water			X	X	X	2	
L508215-03 MW-17C (240-230293-3)	8/5/25	12:13 Eastern	G	Water			X	X	X	2	
L508215-04 MW-17D (240-230293-4)	8/5/25	13:33 Eastern	G	Water			X	X	X	2	
L508215-05 MW-17E (240-230293-5)	8/5/25	14:52 Eastern	G	Water			X	X	X	2	
L508215-06 MWT-17A (240-230293-6)	8/5/25	09:32 Eastern	G	Water			X	X	X	2	
L508215-07 FIELD BLANK (240-230293-7)	8/5/25	08:35 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JLM	8/7/25	EC	M. Pinette	AUG 08 2025 0820	
Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-230293-2

Login Number: 230293
List Number: 2
Creator: Pinette, Meadow L

List Source: Eurofins St. Louis
List Creation: 08/08/25 11:49 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 8/18/2025 3:13:18 PM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-230513-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

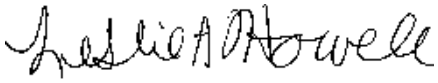
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
8/18/2025 3:13:18 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 14
QC Sample Results 36
QC Association Summary 44
Lab Chronicle 49
Certification Summary 55
Chain of Custody 56
Receipt Checklists 68

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
240-230513-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 8/9/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.5°C, 0.6°C, 0.9°C and 3.9°C.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 2540D: The sample duplicate (DUP) precision for analytical batch 240-667340 was outside control limits. Sample non-homogeneity is suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.7 Rev 4.4	Metals (ICP)	EPA	EET SSM
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.7	Preparation, Total Metals	EPA	EET SSM
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-230513-1	L508226-01 MW-7C	Water	08/07/25 16:09	08/09/25 08:00	Michigan
240-230513-2	L508226-02 MW-8	Water	08/07/25 14:44	08/09/25 08:00	Michigan
240-230513-3	L508226-03 MW-9	Water	08/07/25 13:24	08/09/25 08:00	Michigan
240-230513-4	L508226-04 MW-10	Water	08/07/25 11:59	08/09/25 08:00	Michigan
240-230513-5	L508226-05 MW-15	Water	08/07/25 10:15	08/09/25 08:00	Michigan
240-230513-6	L508226-06 MW-100A	Water	08/07/25 15:55	08/09/25 08:00	Michigan
240-230513-7	L508226-07 MW-100B	Water	08/07/25 11:54	08/09/25 08:00	Michigan
240-230513-8	L508226-08 MW-100C	Water	08/07/25 13:19	08/09/25 08:00	Michigan
240-230513-9	L508226-09 MW-100D	Water	08/07/25 15:00	08/09/25 08:00	Michigan
240-230513-10	L508226-10 MWT-100C	Water	08/07/25 13:19	08/09/25 08:00	Michigan
240-230513-11	L508226-11 FIELD BLANK	Water	08/07/25 09:00	08/09/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Client Sample ID: L508226-01 MW-7C — Lab Sample ID: 240-230513-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	6.5		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	5.9		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	86		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0064	F2 F1	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.038	F2 F1	0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.00016	J F2 F1	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00020	J F2 F1	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.36	F2 F1	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0075	F2 F1	0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	220		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	42		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.11	F2 F1	0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.8		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0023	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	720		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	140		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1100		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	7.0	J	8.0	0.80	mg/L	1		2540D-2020	Total/NA
Chloride	86		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.30		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	630		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L508226-02 MW-8 — Lab Sample ID: 240-230513-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.084	J	0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	0.65	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	16		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0015	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.022		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Beryllium	0.00031	J	0.0010	0.00027	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.00021	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00037	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0038	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Thallium	0.00056	J	0.0010	0.00051	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	90		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508226-02 MW-8 (Continued) — Lab Sample ID: 240-230513-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	27		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.0072	J	0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.045	J	0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0018	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	340		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	300		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	340		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.1	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	22		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.056		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	22		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508226-03 MW-9 — Lab Sample ID: 240-230513-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
K	1.5	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	3.1		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0011	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.017		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Beryllium	0.00028	J	0.0010	0.00027	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.00016	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00016	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	86		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	21		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Hardness as calcium carbonate	300		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	280		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	260		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	2.5		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	8.2		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508226-04 MW-10 — Lab Sample ID: 240-230513-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.059	J	0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	0.77	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	2.6		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.00095	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.033		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.000099	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.000086	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508226-04 MW-10 (Continued) — Lab Sample ID: 240-230513-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	0.0013	J	0.0050	0.00089	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	110		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	23		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Zinc	0.0016	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	380		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	340		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	340		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.50	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	1.5		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.083		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	8.9		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508226-05 MW-15 — Lab Sample ID: 240-230513-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.42		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	0.65	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	39		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.00099	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.059		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.000080	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00057	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0019	J	0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	130		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	33		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.071	J	0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0019	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	470		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	320		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	580		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.0	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	89		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.048	J	0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	89		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508226-06 MW-100A — Lab Sample ID: 240-230513-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
K	1.9	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	11		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.013		0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508226-06 MW-100A (Continued)

Lab Sample ID: 240-230513-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.19		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00022	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0074		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	89		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	38		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.011		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.8		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0012	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	380		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	340		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	340		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	5.7		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	11		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.57		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	29		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508226-07 MW-100B

Lab Sample ID: 240-230513-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.26		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	3.5		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	28		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0087		0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.14		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0054		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0020		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	96		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	34		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.019		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.3		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	380		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	280		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	440		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	2.7	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	18		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.40		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	120		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Client Sample ID: L508226-08 MW-100C — Lab Sample ID: 240-230513-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.9		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	6.7		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	31		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0021	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.051		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0015	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	56		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	18		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.032		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.59		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0010	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	220		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	270		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	240		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	2.8	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	3.0		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.43		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	3.4		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508226-09 MW-100D — Lab Sample ID: 240-230513-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.0		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	4.1		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	190		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0025	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.015		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00042	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0064		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0018	J	0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	68		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	13		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.018		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.24		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0053	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	220		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	480		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	650		10	7.8	mg/L	1		2540 C-2020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508226-09 MW-100D (Continued)

Lab Sample ID: 240-230513-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	2.7	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	16		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.63		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	110		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508226-10 MWT-100C

Lab Sample ID: 240-230513-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.9		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	6.5		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	32		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0017	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.052		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0015	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	57		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	19		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.032		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.58		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	220		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	270		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	240		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	3.1	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	3.0		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.50		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	3.5		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508226-11 FIELD BLANK

Lab Sample ID: 240-230513-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00097	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508226-01 MW-7C
Date Collected: 08/07/25 16:09
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-1
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**6.5**		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 16:30	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**5.9**		3.3	0.17	mg/L		08/12/25 18:09	08/15/25 17:53	1
Na	**86**		0.60	0.33	mg/L		08/12/25 18:09	08/15/25 17:53	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 14:20	1
Arsenic	**0.0064**	**F2 F1**	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 14:20	1
Barium	**0.038**	**F2 F1**	0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 14:20	1
Beryllium	ND	F2 F1	0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 14:20	1
Cadmium	**0.00016**	**J F2 F1**	0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 14:20	1
Cobalt	**0.00020**	**J F2 F1**	0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 14:20	1
Chromium	ND	F2 F1	0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 14:20	1
Copper	ND	F2 F1	0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 14:20	1
Molybdenum	**0.36**	**F2 F1**	0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 14:20	1
Nickel	**0.0075**	**F2 F1**	0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 14:20	1
Lead	ND	F2 F1	0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 14:20	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 14:20	1
Selenium	ND	F2 F1	0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 14:20	1
Thallium	ND	F2 F1	0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 14:20	1
Vanadium	ND	F2 F1	0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 14:20	1
Calcium	**220**		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 14:20	1
Magnesium	**42**		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 14:20	1
Lithium	**0.11**	**F2 F1**	0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 14:20	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.8**		0.10	0.013	mg/L		08/12/25 18:09	08/13/25 14:14	1
Zinc	**0.0023**	**J**	0.0070	0.00093	mg/L		08/12/25 18:09	08/13/25 14:14	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**720**		33	33	mg/L			08/18/25 05:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 14:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**140**		5.0	2.6	mg/L			08/12/25 14:02	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 14:02	1
Total Dissolved Solids (SM 2540 C-2020)	**1100**		20	16	mg/L			08/12/25 09:29	1
Total Suspended Solids (SM 2540D-2020)	**7.0**	**J**	8.0	0.80	mg/L			08/12/25 11:51	1
Chloride (EPA 300.0-1993 R2.1)	**86**		1.0	0.13	mg/L			08/11/25 17:55	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Client Sample ID: L508226-01 MW-7C
Date Collected: 08/07/25 16:09
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-1
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.30		0.050	0.024	mg/L			08/11/25 17:55	1
Sulfate (EPA 300.0-1993 R2.1)	630		5.0	1.7	mg/L			08/11/25 18:24	5

Client Sample ID: L508226-02 MW-8
Date Collected: 08/07/25 14:44
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-2
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.084	J	0.10	0.057	mg/L		08/12/25 14:00	08/14/25 16:52	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	0.65	J	3.3	0.17	mg/L		08/12/25 18:09	08/15/25 17:57	1
Na	16		0.60	0.33	mg/L		08/12/25 18:09	08/15/25 17:57	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 14:33	1
Arsenic	0.0015	J	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 14:33	1
Barium	0.022		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 14:33	1
Beryllium	0.00031	J	0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 14:33	1
Cadmium	0.00021	J	0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 14:33	1
Cobalt	0.00037	J	0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 14:33	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 14:33	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 14:33	1
Molybdenum	0.0038	J	0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 14:33	1
Nickel	ND		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 14:33	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 14:33	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 14:33	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 14:33	1
Thallium	0.00056	J	0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 14:33	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 14:33	1
Calcium	90		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 14:33	1
Magnesium	27		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 14:33	1
Lithium	0.0072	J	0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 14:33	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.045	J	0.10	0.013	mg/L		08/12/25 18:09	08/13/25 14:17	1
Zinc	0.0018	J	0.0070	0.00093	mg/L		08/12/25 18:09	08/13/25 14:17	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	340		33	33	mg/L			08/18/25 05:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 14:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	300		5.0	2.6	mg/L			08/12/25 14:07	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 14:07	1
Total Dissolved Solids (SM 2540 C-2020)	340		10	7.8	mg/L			08/12/25 09:29	1
Total Suspended Solids (SM 2540D-2020)	1.1	J	4.0	0.40	mg/L			08/12/25 11:51	1
Chloride (EPA 300.0-1993 R2.1)	22		1.0	0.13	mg/L			08/11/25 18:33	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Client Sample ID: L508226-02 MW-8
Date Collected: 08/07/25 14:44
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.056		0.050	0.024	mg/L			08/11/25 18:33	1
Sulfate (EPA 300.0-1993 R2.1)	22		1.0	0.35	mg/L			08/11/25 18:33	1

Client Sample ID: L508226-03 MW-9
Date Collected: 08/07/25 13:24
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-3
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 17:05	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**1.5**	**J**	3.3	0.17	mg/L		08/12/25 18:09	08/15/25 18:00	1
Na	**3.1**		0.60	0.33	mg/L		08/12/25 18:09	08/15/25 18:00	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 14:46	1
Arsenic	**0.0011**	**J**	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 14:46	1
Barium	**0.017**		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 14:46	1
Beryllium	**0.00028**	**J**	0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 14:46	1
Cadmium	**0.00016**	**J**	0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 14:46	1
Cobalt	**0.00016**	**J**	0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 14:46	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 14:46	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 14:46	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 14:46	1
Nickel	ND		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 14:46	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 14:46	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 14:46	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 14:46	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 14:46	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 14:46	1
Calcium	**86**		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 14:46	1
Magnesium	**21**		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 14:46	1
Lithium	ND		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 14:46	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		08/12/25 18:09	08/13/25 14:20	1
Zinc	ND		0.0070	0.00093	mg/L		08/12/25 18:09	08/13/25 14:20	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**300**		33	33	mg/L			08/18/25 05:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 14:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**280**		5.0	2.6	mg/L			08/12/25 14:14	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 14:14	1
Total Dissolved Solids (SM 2540 C-2020)	**260**		10	7.8	mg/L			08/12/25 09:29	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			08/12/25 11:51	1
Chloride (EPA 300.0-1993 R2.1)	**2.5**		1.0	0.13	mg/L			08/11/25 18:43	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Client Sample ID: L508226-03 MW-9
Date Collected: 08/07/25 13:24
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			08/11/25 18:43	1
Sulfate (EPA 300.0-1993 R2.1)	**8.2**		1.0	0.35	mg/L			08/11/25 18:43	1

Client Sample ID: L508226-04 MW-10
Date Collected: 08/07/25 11:59
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-4
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.059	J	0.10	0.057	mg/L		08/12/25 14:00	08/14/25 17:18	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	0.77	J	3.3	0.17	mg/L		08/12/25 18:09	08/15/25 18:03	1
Na	2.6		0.60	0.33	mg/L		08/12/25 18:09	08/15/25 18:03	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 14:49	1
Arsenic	0.00095	J	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 14:49	1
Barium	0.033		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 14:49	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 14:49	1
Cadmium	0.000099	J	0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 14:49	1
Cobalt	0.000086	J	0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 14:49	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 14:49	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 14:49	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 14:49	1
Nickel	ND		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 14:49	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 14:49	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 14:49	1
Selenium	0.0013	J	0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 14:49	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 14:49	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 14:49	1
Calcium	110		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 14:49	1
Magnesium	23		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 14:49	1
Lithium	ND		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 14:49	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		08/12/25 18:09	08/13/25 14:22	1
Zinc	0.0016	J	0.0070	0.00093	mg/L		08/12/25 18:09	08/13/25 14:22	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	380		33	33	mg/L			08/18/25 05:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 14:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	340		5.0	2.6	mg/L			08/12/25 14:20	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 14:20	1
Total Dissolved Solids (SM 2540 C-2020)	340		10	7.8	mg/L			08/12/25 09:29	1
Total Suspended Solids (SM 2540D-2020)	0.50	J	4.0	0.40	mg/L			08/12/25 11:51	1
Chloride (EPA 300.0-1993 R2.1)	1.5		1.0	0.13	mg/L			08/11/25 18:53	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Client Sample ID: L508226-04 MW-10
Date Collected: 08/07/25 11:59
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.083		0.050	0.024	mg/L			08/11/25 18:53	1
Sulfate (EPA 300.0-1993 R2.1)	8.9		1.0	0.35	mg/L			08/11/25 18:53	1

Client Sample ID: L508226-05 MW-15
Date Collected: 08/07/25 10:15
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-5
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.42		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 17:22	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	0.65	J	3.3	0.17	mg/L		08/12/25 18:09	08/15/25 18:07	1
Na	39		0.60	0.33	mg/L		08/12/25 18:09	08/15/25 18:07	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 14:51	1
Arsenic	0.00099	J	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 14:51	1
Barium	0.059		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 14:51	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 14:51	1
Cadmium	0.000080	J	0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 14:51	1
Cobalt	0.00057	J	0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 14:51	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 14:51	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 14:51	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 14:51	1
Nickel	0.0019	J	0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 14:51	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 14:51	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 14:51	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 14:51	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 14:51	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 14:51	1
Calcium	130		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 14:51	1
Magnesium	33		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 14:51	1
Lithium	ND		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 14:51	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.071	J	0.10	0.013	mg/L		08/12/25 18:09	08/13/25 14:25	1
Zinc	0.0019	J	0.0070	0.00093	mg/L		08/12/25 18:09	08/13/25 14:25	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	470		33	33	mg/L			08/18/25 05:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 14:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	320		5.0	2.6	mg/L			08/12/25 14:28	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 14:28	1
Total Dissolved Solids (SM 2540 C-2020)	580		10	7.8	mg/L			08/12/25 09:29	1
Total Suspended Solids (SM 2540D-2020)	1.0	J	4.0	0.40	mg/L			08/12/25 11:51	1
Chloride (EPA 300.0-1993 R2.1)	89		1.0	0.13	mg/L			08/11/25 19:02	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Client Sample ID: L508226-05 MW-15
Date Collected: 08/07/25 10:15
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-5
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.048	J	0.050	0.024	mg/L			08/11/25 19:02	1
Sulfate (EPA 300.0-1993 R2.1)	89		1.0	0.35	mg/L			08/11/25 19:02	1

Client Sample ID: L508226-06 MW-100A
Date Collected: 08/07/25 15:55
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-6
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 17:27	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**1.9**	**J**	3.3	0.17	mg/L		08/12/25 18:09	08/15/25 18:10	1
Na	**11**		0.60	0.33	mg/L		08/12/25 18:09	08/15/25 18:10	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 14:54	1
Arsenic	**0.013**		0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 14:54	1
Barium	**0.19**		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 14:54	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 14:54	1
Cadmium	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 14:54	1
Cobalt	**0.00022**	**J**	0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 14:54	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 14:54	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 14:54	1
Molybdenum	**0.0074**		0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 14:54	1
Nickel	ND		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 14:54	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 14:54	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 14:54	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 14:54	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 14:54	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 14:54	1
Calcium	**89**		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 14:54	1
Magnesium	**38**		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 14:54	1
Lithium	**0.011**		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 14:54	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.8**		0.10	0.013	mg/L		08/12/25 18:09	08/13/25 14:28	1
Zinc	**0.0012**	**J**	0.0070	0.00093	mg/L		08/12/25 18:09	08/13/25 14:28	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**380**		33	33	mg/L			08/18/25 05:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 14:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**340**		5.0	2.6	mg/L			08/12/25 14:34	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 14:34	1
Total Dissolved Solids (SM 2540 C-2020)	**340**		10	7.8	mg/L			08/12/25 09:29	1
Total Suspended Solids (SM 2540D-2020)	**5.7**		4.0	0.40	mg/L			08/12/25 11:51	1
Chloride (EPA 300.0-1993 R2.1)	**11**		1.0	0.13	mg/L			08/11/25 19:22	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Client Sample ID: L508226-06 MW-100A
Date Collected: 08/07/25 15:55
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-6
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.57		0.050	0.024	mg/L			08/11/25 19:22	1
Sulfate (EPA 300.0-1993 R2.1)	29		1.0	0.35	mg/L			08/11/25 19:22	1

Client Sample ID: L508226-07 MW-100B
Date Collected: 08/07/25 11:54
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-7
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.26		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 17:31	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	3.5		3.3	0.17	mg/L		08/12/25 18:09	08/15/25 18:13	1
Na	28		0.60	0.33	mg/L		08/12/25 18:09	08/15/25 18:13	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 14:57	1
Arsenic	0.0087		0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 14:57	1
Barium	0.14		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 14:57	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 14:57	1
Cadmium	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 14:57	1
Cobalt	ND		0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 14:57	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 14:57	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 14:57	1
Molybdenum	0.0054		0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 14:57	1
Nickel	0.0020		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 14:57	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 14:57	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 14:57	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 14:57	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 14:57	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 14:57	1
Calcium	96		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 14:57	1
Magnesium	34		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 14:57	1
Lithium	0.019		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 14:57	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	2.3		0.10	0.013	mg/L		08/12/25 18:09	08/13/25 14:36	1
Zinc	ND		0.0070	0.00093	mg/L		08/12/25 18:09	08/13/25 14:36	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	380		33	33	mg/L			08/18/25 05:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 14:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	280		5.0	2.6	mg/L			08/12/25 14:45	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 14:45	1
Total Dissolved Solids (SM 2540 C-2020)	440		10	7.8	mg/L			08/12/25 09:29	1
Total Suspended Solids (SM 2540D-2020)	2.7	J	4.0	0.40	mg/L			08/12/25 11:51	1
Chloride (EPA 300.0-1993 R2.1)	18		1.0	0.13	mg/L			08/11/25 19:31	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Client Sample ID: L508226-07 MW-100B
Date Collected: 08/07/25 11:54
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-7
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.40		0.050	0.024	mg/L			08/11/25 19:31	1
Sulfate (EPA 300.0-1993 R2.1)	120		1.0	0.35	mg/L			08/11/25 19:31	1

Client Sample ID: L508226-08 MW-100C
Date Collected: 08/07/25 13:19
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-8
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.9**		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 17:36	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**6.7**		3.3	0.17	mg/L		08/12/25 18:09	08/15/25 18:17	1
Na	**31**		0.60	0.33	mg/L		08/12/25 18:09	08/15/25 18:17	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 14:59	1
Arsenic	**0.0021**	**J**	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 14:59	1
Barium	**0.051**		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 14:59	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 14:59	1
Cadmium	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 14:59	1
Cobalt	ND		0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 14:59	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 14:59	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 14:59	1
Molybdenum	**0.0015**	**J**	0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 14:59	1
Nickel	ND		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 14:59	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 14:59	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 14:59	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 14:59	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 14:59	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 14:59	1
Calcium	**56**		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 14:59	1
Magnesium	**18**		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 14:59	1
Lithium	**0.032**		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 14:59	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.59**		0.10	0.013	mg/L		08/12/25 18:09	08/13/25 14:39	1
Zinc	**0.0010**	**J**	0.0070	0.00093	mg/L		08/12/25 18:09	08/13/25 14:39	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**220**		33	33	mg/L			08/18/25 05:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 14:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**270**		5.0	2.6	mg/L			08/12/25 14:51	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 14:51	1
Total Dissolved Solids (SM 2540 C-2020)	**240**		10	7.8	mg/L			08/12/25 15:51	1
Total Suspended Solids (SM 2540D-2020)	**2.8**	**J**	4.0	0.40	mg/L			08/12/25 11:51	1
Chloride (EPA 300.0-1993 R2.1)	**3.0**		1.0	0.13	mg/L			08/11/25 19:41	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Client Sample ID: L508226-08 MW-100C
Date Collected: 08/07/25 13:19
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-8
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.43		0.050	0.024	mg/L			08/11/25 19:41	1
Sulfate (EPA 300.0-1993 R2.1)	3.4		1.0	0.35	mg/L			08/11/25 19:41	1

Client Sample ID: L508226-09 MW-100D
Date Collected: 08/07/25 15:00
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-9
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.0		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 17:40	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	4.1		3.3	0.17	mg/L		08/12/25 18:09	08/15/25 18:20	1
Na	190		0.60	0.33	mg/L		08/12/25 18:09	08/15/25 18:20	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 15:02	1
Arsenic	0.0025	J	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 15:02	1
Barium	0.015		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 15:02	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 15:02	1
Cadmium	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 15:02	1
Cobalt	0.00042	J	0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 15:02	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 15:02	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 15:02	1
Molybdenum	0.0064		0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 15:02	1
Nickel	0.0018	J	0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 15:02	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 15:02	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 15:02	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 15:02	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 15:02	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 15:02	1
Calcium	68		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 15:02	1
Magnesium	13		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 15:02	1
Lithium	0.018		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 15:02	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.24		0.10	0.013	mg/L		08/12/25 18:09	08/13/25 14:42	1
Zinc	0.0053	J	0.0070	0.00093	mg/L		08/12/25 18:09	08/13/25 14:42	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	220		33	33	mg/L			08/18/25 05:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 14:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	480		5.0	2.6	mg/L			08/12/25 14:56	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 14:56	1
Total Dissolved Solids (SM 2540 C-2020)	650		10	7.8	mg/L			08/12/25 15:51	1
Total Suspended Solids (SM 2540D-2020)	2.7	J	4.0	0.40	mg/L			08/12/25 11:51	1
Chloride (EPA 300.0-1993 R2.1)	16		1.0	0.13	mg/L			08/11/25 21:56	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Client Sample ID: L508226-09 MW-100D
Date Collected: 08/07/25 15:00
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-9
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.63		0.050	0.024	mg/L			08/11/25 21:56	1
Sulfate (EPA 300.0-1993 R2.1)	110		1.0	0.35	mg/L			08/11/25 21:56	1

Client Sample ID: L508226-10 MWT-100C
Date Collected: 08/07/25 13:19
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-10
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.9**		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 17:44	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**6.5**		3.3	0.17	mg/L		08/12/25 18:09	08/15/25 18:23	1
Na	**32**		0.60	0.33	mg/L		08/12/25 18:09	08/15/25 18:23	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 15:10	1
Arsenic	**0.0017**	**J**	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 15:10	1
Barium	**0.052**		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 15:10	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 15:10	1
Cadmium	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 15:10	1
Cobalt	ND		0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 15:10	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 15:10	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 15:10	1
Molybdenum	**0.0015**	**J**	0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 15:10	1
Nickel	ND		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 15:10	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 15:10	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 15:10	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 15:10	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 15:10	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 15:10	1
Calcium	**57**		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 15:10	1
Magnesium	**19**		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 15:10	1
Lithium	**0.032**		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 15:10	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.58**		0.10	0.013	mg/L		08/12/25 18:09	08/13/25 14:45	1
Zinc	ND		0.0070	0.00093	mg/L		08/12/25 18:09	08/13/25 14:45	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**220**		33	33	mg/L			08/18/25 05:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 14:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**270**		5.0	2.6	mg/L			08/12/25 15:04	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 15:04	1
Total Dissolved Solids (SM 2540 C-2020)	**240**		10	7.8	mg/L			08/12/25 15:51	1
Total Suspended Solids (SM 2540D-2020)	**3.1**	**J**	4.0	0.40	mg/L			08/12/25 11:51	1
Chloride (EPA 300.0-1993 R2.1)	**3.0**		1.0	0.13	mg/L			08/11/25 21:28	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Client Sample ID: L508226-10 MWT-100C
Date Collected: 08/07/25 13:19
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-10
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.50		0.050	0.024	mg/L			08/11/25 21:28	1
Sulfate (EPA 300.0-1993 R2.1)	3.5		1.0	0.35	mg/L			08/11/25 21:28	1

Client Sample ID: L508226-11 FIELD BLANK

Date Collected: 08/07/25 09:00
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-11

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 17:49	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		08/12/25 18:09	08/15/25 18:33	1
Na	ND		0.60	0.33	mg/L		08/12/25 18:09	08/15/25 18:33	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 15:12	1
Arsenic	**0.00097**	**J**	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 15:12	1
Barium	ND		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 15:12	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 15:12	1
Cadmium	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 15:12	1
Cobalt	ND		0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 15:12	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 15:12	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 15:12	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 15:12	1
Nickel	ND		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 15:12	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 15:12	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 15:12	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 15:12	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 15:12	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 15:12	1
Calcium	ND		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 15:12	1
Magnesium	ND		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 15:12	1
Lithium	ND		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 15:12	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		08/12/25 18:09	08/13/25 14:47	1
Zinc	ND		0.0070	0.00093	mg/L		08/12/25 18:09	08/13/25 14:47	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			08/18/25 05:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 14:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 15:09	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 15:09	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			08/12/25 15:51	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			08/13/25 11:33	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			08/11/25 22:16	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Client Sample ID: L508226-11 FIELD BLANK
Date Collected: 08/07/25 09:00
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-11
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			08/11/25 22:16	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			08/11/25 22:16	1

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-667328/1-A
Matrix: Water
Analysis Batch: 667768

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 667328

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 16:13	1

Lab Sample ID: LCS 240-667328/2-A
Matrix: Water
Analysis Batch: 667768

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 667328

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.07		mg/L		107	85 - 115

Lab Sample ID: 240-230513-1 MS
Matrix: Water
Analysis Batch: 667768

Client Sample ID: L508226-01 MW-7C
Prep Type: Total Recoverable
Prep Batch: 667328

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	6.5		1.00	7.40	4	mg/L		93	70 - 130

Lab Sample ID: 240-230513-1 MSD
Matrix: Water
Analysis Batch: 667768

Client Sample ID: L508226-01 MW-7C
Prep Type: Total Recoverable
Prep Batch: 667328

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	6.5		1.00	7.42	4	mg/L		95	70 - 130	0	20

Lab Sample ID: 240-230513-2 MS
Matrix: Water
Analysis Batch: 667768

Client Sample ID: L508226-02 MW-8
Prep Type: Total Recoverable
Prep Batch: 667328

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.084	J	1.00	1.09		mg/L		101	70 - 130

Lab Sample ID: 240-230513-2 MSD
Matrix: Water
Analysis Batch: 667768

Client Sample ID: L508226-02 MW-8
Prep Type: Total Recoverable
Prep Batch: 667328

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.084	J	1.00	1.13		mg/L		105	70 - 130	4	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 350-8817/25-A
Matrix: Water
Analysis Batch: 8942

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8817

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		08/12/25 18:09	08/15/25 17:16	1
Na	ND		0.60	0.33	mg/L		08/12/25 18:09	08/15/25 17:16	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-8817/25-A
Matrix: Water
Analysis Batch: 8851

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8817

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		08/12/25 18:09	08/13/25 13:26	1
Zinc	ND		0.0070	0.00093	mg/L		08/12/25 18:09	08/13/25 13:26	1

Lab Sample ID: LCS 350-8817/26-A
Matrix: Water
Analysis Batch: 8851

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8817

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	17.7		mg/L		88	85 - 115
Zinc	1.00	0.873		mg/L		87	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-667328/1-A
Matrix: Water
Analysis Batch: 667773

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 667328

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 14:15	1
Arsenic	ND		0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 14:15	1
Barium	ND		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 14:15	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 14:15	1
Cadmium	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 14:15	1
Cobalt	ND		0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 14:15	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 14:15	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 14:15	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 14:15	1
Nickel	ND		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 14:15	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 14:15	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 14:15	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 14:15	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 14:15	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 14:15	1
Calcium	ND		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 14:15	1
Magnesium	ND		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 14:15	1
Lithium	ND		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 14:15	1

Lab Sample ID: LCS 240-667328/3-A
Matrix: Water
Analysis Batch: 667773

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 667328

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.101		mg/L		101	85 - 115
Arsenic	1.00	1.03		mg/L		103	85 - 115
Barium	1.00	1.00		mg/L		100	85 - 115
Beryllium	0.500	0.504		mg/L		101	85 - 115
Cadmium	0.500	0.493		mg/L		99	85 - 115
Cobalt	0.500	0.497		mg/L		99	85 - 115
Chromium	0.500	0.508		mg/L		102	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-667328/3-A
Matrix: Water
Analysis Batch: 667773

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 667328

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	0.500	0.509		mg/L		102	85 - 115
Molybdenum	0.500	0.500		mg/L		100	85 - 115
Nickel	0.500	0.510		mg/L		102	85 - 115
Lead	0.500	0.554		mg/L		111	85 - 115
Antimony	0.100	0.100		mg/L		100	85 - 115
Selenium	1.00	1.01		mg/L		101	85 - 115
Thallium	1.00	1.15		mg/L		115	85 - 115
Vanadium	0.500	0.507		mg/L		101	85 - 115
Calcium	25.0	25.7		mg/L		103	85 - 115
Magnesium	25.0	25.8		mg/L		103	85 - 115
Lithium	0.500	0.541		mg/L		108	85 - 115

Lab Sample ID: 240-230513-1 MS
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508226-01 MW-7C
Prep Type: Total Recoverable
Prep Batch: 667328

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.101		mg/L		101	70 - 130
Arsenic	0.0064	F2 F1	2.00	2.05		mg/L		102	70 - 130
Barium	0.038	F2 F1	2.00	2.00		mg/L		98	70 - 130
Beryllium	ND	F2 F1	1.00	0.950		mg/L		95	70 - 130
Cadmium	0.00016	J F2 F1	1.00	0.947		mg/L		95	70 - 130
Cobalt	0.00020	J F2 F1	1.00	1.01		mg/L		101	70 - 130
Chromium	ND	F2 F1	1.00	0.995		mg/L		100	70 - 130
Copper	ND	F2 F1	1.00	1.02		mg/L		102	70 - 130
Molybdenum	0.36	F2 F1	1.00	1.40		mg/L		105	70 - 130
Nickel	0.0075	F2 F1	1.00	0.996		mg/L		99	70 - 130
Lead	ND	F2 F1	1.00	1.10		mg/L		110	70 - 130
Antimony	ND		0.100	0.101		mg/L		101	70 - 130
Selenium	ND	F2 F1	2.00	1.92		mg/L		96	70 - 130
Thallium	ND	F2 F1	2.00	2.19		mg/L		110	70 - 130
Vanadium	ND	F2 F1	1.00	0.997		mg/L		100	70 - 130
Calcium	220		25.0	239	4	mg/L		80	70 - 130
Magnesium	42		25.0	66.1		mg/L		96	70 - 130
Lithium	0.11	F2 F1	1.00	1.13		mg/L		102	70 - 130

Lab Sample ID: 240-230513-1 MSD
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508226-01 MW-7C
Prep Type: Total Recoverable
Prep Batch: 667328

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.0998		mg/L		100	70 - 130	2	20
Arsenic	0.0064	F2 F1	1.00	1.04	F2	mg/L		103	70 - 130	66	20
Barium	0.038	F2 F1	1.00	1.03	F2	mg/L		99	70 - 130	64	20
Beryllium	ND	F2 F1	0.500	0.486	F2	mg/L		97	70 - 130	65	20
Cadmium	0.00016	J F2 F1	0.500	0.486	F2	mg/L		97	70 - 130	64	20
Cobalt	0.00020	J F2 F1	0.500	0.488	F2	mg/L		98	70 - 130	70	20
Chromium	ND	F2 F1	0.500	0.498	F2	mg/L		100	70 - 130	67	20
Copper	ND	F2 F1	0.500	0.500	F2	mg/L		100	70 - 130	69	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-230513-1 MSD
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508226-01 MW-7C
Prep Type: Total Recoverable
Prep Batch: 667328

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Molybdenum	0.36	F2 F1	0.500	0.861	F2	mg/L		101	70 - 130	48	20
Nickel	0.0075	F2 F1	0.500	0.505	F2	mg/L		99	70 - 130	65	20
Lead	ND	F2 F1	0.500	0.543	F2	mg/L		109	70 - 130	68	20
Antimony	ND		0.100	0.101		mg/L		101	70 - 130	0	20
Selenium	ND	F2 F1	1.00	0.990	F2	mg/L		99	70 - 130	64	20
Thallium	ND	F2 F1	1.00	1.13	F2	mg/L		113	70 - 130	64	20
Vanadium	ND	F2 F1	0.500	0.503	F2	mg/L		101	70 - 130	66	20
Calcium	220		25.0	242	4	mg/L		92	70 - 130	1	20
Magnesium	42		25.0	66.8		mg/L		99	70 - 130	1	20
Lithium	0.11	F2 F1	0.500	0.624	F2	mg/L		103	70 - 130	58	20

Lab Sample ID: 240-230513-2 MS
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508226-02 MW-8
Prep Type: Total Recoverable
Prep Batch: 667328

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.103		mg/L		103	70 - 130
Arsenic	0.0015	J	1.00	1.02		mg/L		102	70 - 130
Barium	0.022		1.00	1.02		mg/L		100	70 - 130
Beryllium	0.00031	J	0.500	0.500		mg/L		100	70 - 130
Cadmium	0.00021	J	0.500	0.488		mg/L		98	70 - 130
Cobalt	0.00037	J	0.500	0.489		mg/L		98	70 - 130
Chromium	ND		0.500	0.496		mg/L		99	70 - 130
Copper	ND		0.500	0.498		mg/L		100	70 - 130
Molybdenum	0.0038	J	0.500	0.504		mg/L		100	70 - 130
Nickel	ND		0.500	0.500		mg/L		100	70 - 130
Lead	ND		0.500	0.542		mg/L		108	70 - 130
Antimony	ND		0.100	0.102		mg/L		102	70 - 130
Selenium	ND		1.00	0.997		mg/L		100	70 - 130
Thallium	0.00056	J	1.00	1.14		mg/L		114	70 - 130
Vanadium	ND		0.500	0.498		mg/L		100	70 - 130
Calcium	90		25.0	116		mg/L		101	70 - 130
Magnesium	27		25.0	51.4		mg/L		99	70 - 130
Lithium	0.0072	J	0.500	0.528		mg/L		104	70 - 130

Lab Sample ID: 240-230513-2 MSD
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508226-02 MW-8
Prep Type: Total Recoverable
Prep Batch: 667328

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.101		mg/L		101	70 - 130	2	20
Arsenic	0.0015	J	1.00	1.02		mg/L		102	70 - 130	0	20
Barium	0.022		1.00	1.01		mg/L		98	70 - 130	1	20
Beryllium	0.00031	J	0.500	0.494		mg/L		99	70 - 130	1	20
Cadmium	0.00021	J	0.500	0.483		mg/L		97	70 - 130	1	20
Cobalt	0.00037	J	0.500	0.483		mg/L		97	70 - 130	1	20
Chromium	ND		0.500	0.492		mg/L		98	70 - 130	1	20
Copper	ND		0.500	0.494		mg/L		99	70 - 130	1	20
Molybdenum	0.0038	J	0.500	0.499		mg/L		99	70 - 130	1	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-230513-2 MSD
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508226-02 MW-8
Prep Type: Total Recoverable
Prep Batch: 667328

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nickel	ND		0.500	0.494		mg/L		99	70 - 130	1	20
Lead	ND		0.500	0.534		mg/L		107	70 - 130	1	20
Antimony	ND		0.100	0.0998		mg/L		100	70 - 130	3	20
Selenium	ND		1.00	0.982		mg/L		98	70 - 130	1	20
Thallium	0.00056	J	1.00	1.14		mg/L		114	70 - 130	0	20
Vanadium	ND		0.500	0.496		mg/L		99	70 - 130	0	20
Calcium	90		25.0	114		mg/L		94	70 - 130	2	20
Magnesium	27		25.0	51.2		mg/L		98	70 - 130	1	20
Lithium	0.0072	J	0.500	0.522		mg/L		103	70 - 130	1	20

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-667337/1-A
Matrix: Water
Analysis Batch: 667565

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 667337

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 14:27	1

Lab Sample ID: LCS 240-667337/2-A
Matrix: Water
Analysis Batch: 667565

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 667337

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00534		mg/L		107	85 - 115

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-667415/29
Matrix: Water
Analysis Batch: 667415

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/12/25 11:17	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/12/25 11:17	1

Lab Sample ID: MB 240-667415/55
Matrix: Water
Analysis Batch: 667415

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/12/25 13:22	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/12/25 13:22	1

Lab Sample ID: 240-230513-6 DU
Matrix: Water
Analysis Batch: 667415

Client Sample ID: L508226-06 MW-100A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	340		343		mg/L		0.1	20

Method: 2320 B-2021 - Alkalinity (Continued)

Lab Sample ID: 240-230513-6 DU
Matrix: Water
Analysis Batch: 667415

Client Sample ID: L508226-06 MW-100A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-667300/1
Matrix: Water
Analysis Batch: 667300

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			08/12/25 09:29	1

Lab Sample ID: LCS 240-667300/2
Matrix: Water
Analysis Batch: 667300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	240	200		mg/L		83	80 - 120

Lab Sample ID: 240-230513-3 DU
Matrix: Water
Analysis Batch: 667300

Client Sample ID: L508226-03 MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	260		272		mg/L		5	20

Lab Sample ID: MB 240-667398/1
Matrix: Water
Analysis Batch: 667398

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			08/12/25 15:51	1

Lab Sample ID: LCS 240-667398/2
Matrix: Water
Analysis Batch: 667398

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	240	208		mg/L		87	80 - 120

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-667340/1
Matrix: Water
Analysis Batch: 667340

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			08/12/25 11:51	1

Method: 2540D-2020 - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 240-667340/2
Matrix: Water
Analysis Batch: 667340

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			30.0	33.0	J	mg/L		110	64 - 120		

Lab Sample ID: 240-230513-1 DU
Matrix: Water
Analysis Batch: 667340

Client Sample ID: L508226-01 MW-7C
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	7.0	J		8.00	F5	mg/L				13	10

Lab Sample ID: MB 240-667521/1
Matrix: Water
Analysis Batch: 667521

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			08/13/25 11:33	1

Lab Sample ID: LCS 240-667521/2
Matrix: Water
Analysis Batch: 667521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			30.0	26.5		mg/L		88	64 - 120		

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-667177/3
Matrix: Water
Analysis Batch: 667177

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			08/11/25 14:31	1
Fluoride	ND		0.050	0.024	mg/L			08/11/25 14:31	1
Sulfate	ND		1.0	0.35	mg/L			08/11/25 14:31	1

Lab Sample ID: LCS 240-667177/4
Matrix: Water
Analysis Batch: 667177

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	50.9		mg/L		102	90 - 110		
Fluoride			2.50	2.61		mg/L		104	90 - 110		
Sulfate			50.0	50.1		mg/L		100	90 - 110		

Lab Sample ID: MB 240-667184/3
Matrix: Water
Analysis Batch: 667184

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			08/11/25 21:08	1
Fluoride	ND		0.050	0.024	mg/L			08/11/25 21:08	1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 240-667184/3
Matrix: Water
Analysis Batch: 667184

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0	0.35	mg/L			08/11/25 21:08	1

Lab Sample ID: LCS 240-667184/4
Matrix: Water
Analysis Batch: 667184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	50.9		mg/L		102	90 - 110		
Fluoride			2.50	2.62		mg/L		105	90 - 110		
Sulfate			50.0	50.8		mg/L		102	90 - 110		

Lab Sample ID: 240-230513-10 MS
Matrix: Water
Analysis Batch: 667184

Client Sample ID: L508226-10 MWT-100C
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	3.0		50.0	54.5		mg/L		103	80 - 120		
Fluoride	0.50		2.50	3.05		mg/L		102	80 - 120		
Sulfate	3.5		50.0	54.6		mg/L		102	80 - 120		

Lab Sample ID: 240-230513-10 MSD
Matrix: Water
Analysis Batch: 667184

Client Sample ID: L508226-10 MWT-100C
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	3.0		50.0	54.9		mg/L		104	80 - 120	1	15
Fluoride	0.50		2.50	3.08		mg/L		103	80 - 120	1	15
Sulfate	3.5		50.0	55.2		mg/L		103	80 - 120	1	15

Metals

Prep Batch: 8817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-1	L508226-01 MW-7C	Total/NA	Water	200.7	
240-230513-2	L508226-02 MW-8	Total/NA	Water	200.7	
240-230513-3	L508226-03 MW-9	Total/NA	Water	200.7	
240-230513-4	L508226-04 MW-10	Total/NA	Water	200.7	
240-230513-5	L508226-05 MW-15	Total/NA	Water	200.7	
240-230513-6	L508226-06 MW-100A	Total/NA	Water	200.7	
240-230513-7	L508226-07 MW-100B	Total/NA	Water	200.7	
240-230513-8	L508226-08 MW-100C	Total/NA	Water	200.7	
240-230513-9	L508226-09 MW-100D	Total/NA	Water	200.7	
240-230513-10	L508226-10 MWT-100C	Total/NA	Water	200.7	
240-230513-11	L508226-11 FIELD BLANK	Total/NA	Water	200.7	
MB 350-8817/25-A	Method Blank	Total/NA	Water	200.7	
LCS 350-8817/26-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 8851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-1	L508226-01 MW-7C	Total/NA	Water	200.8	8817
240-230513-2	L508226-02 MW-8	Total/NA	Water	200.8	8817
240-230513-3	L508226-03 MW-9	Total/NA	Water	200.8	8817
240-230513-4	L508226-04 MW-10	Total/NA	Water	200.8	8817
240-230513-5	L508226-05 MW-15	Total/NA	Water	200.8	8817
240-230513-6	L508226-06 MW-100A	Total/NA	Water	200.8	8817
240-230513-7	L508226-07 MW-100B	Total/NA	Water	200.8	8817
240-230513-8	L508226-08 MW-100C	Total/NA	Water	200.8	8817
240-230513-9	L508226-09 MW-100D	Total/NA	Water	200.8	8817
240-230513-10	L508226-10 MWT-100C	Total/NA	Water	200.8	8817
240-230513-11	L508226-11 FIELD BLANK	Total/NA	Water	200.8	8817
MB 350-8817/25-A	Method Blank	Total/NA	Water	200.8	8817
LCS 350-8817/26-A	Lab Control Sample	Total/NA	Water	200.8	8817

Analysis Batch: 8942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-1	L508226-01 MW-7C	Total/NA	Water	200.7 Rev 4.4	8817
240-230513-2	L508226-02 MW-8	Total/NA	Water	200.7 Rev 4.4	8817
240-230513-3	L508226-03 MW-9	Total/NA	Water	200.7 Rev 4.4	8817
240-230513-4	L508226-04 MW-10	Total/NA	Water	200.7 Rev 4.4	8817
240-230513-5	L508226-05 MW-15	Total/NA	Water	200.7 Rev 4.4	8817
240-230513-6	L508226-06 MW-100A	Total/NA	Water	200.7 Rev 4.4	8817
240-230513-7	L508226-07 MW-100B	Total/NA	Water	200.7 Rev 4.4	8817
240-230513-8	L508226-08 MW-100C	Total/NA	Water	200.7 Rev 4.4	8817
240-230513-9	L508226-09 MW-100D	Total/NA	Water	200.7 Rev 4.4	8817
240-230513-10	L508226-10 MWT-100C	Total/NA	Water	200.7 Rev 4.4	8817
240-230513-11	L508226-11 FIELD BLANK	Total/NA	Water	200.7 Rev 4.4	8817
MB 350-8817/25-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	8817
LCS 350-8817/26-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	8817

Prep Batch: 667328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-1	L508226-01 MW-7C	Total Recoverable	Water	200.7	
240-230513-2	L508226-02 MW-8	Total Recoverable	Water	200.7	
240-230513-3	L508226-03 MW-9	Total Recoverable	Water	200.7	

Metals (Continued)

Prep Batch: 667328 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-4	L508226-04 MW-10	Total Recoverable	Water	200.7	
240-230513-5	L508226-05 MW-15	Total Recoverable	Water	200.7	
240-230513-6	L508226-06 MW-100A	Total Recoverable	Water	200.7	
240-230513-7	L508226-07 MW-100B	Total Recoverable	Water	200.7	
240-230513-8	L508226-08 MW-100C	Total Recoverable	Water	200.7	
240-230513-9	L508226-09 MW-100D	Total Recoverable	Water	200.7	
240-230513-10	L508226-10 MWT-100C	Total Recoverable	Water	200.7	
240-230513-11	L508226-11 FIELD BLANK	Total Recoverable	Water	200.7	
MB 240-667328/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-667328/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-667328/3-A	Lab Control Sample	Total Recoverable	Water	200.7	
240-230513-1 MS	L508226-01 MW-7C	Total Recoverable	Water	200.7	
240-230513-1 MS	L508226-01 MW-7C	Total Recoverable	Water	200.7	
240-230513-1 MSD	L508226-01 MW-7C	Total Recoverable	Water	200.7	
240-230513-1 MSD	L508226-01 MW-7C	Total Recoverable	Water	200.7	
240-230513-2 MS	L508226-02 MW-8	Total Recoverable	Water	200.7	
240-230513-2 MS	L508226-02 MW-8	Total Recoverable	Water	200.7	
240-230513-2 MSD	L508226-02 MW-8	Total Recoverable	Water	200.7	
240-230513-2 MSD	L508226-02 MW-8	Total Recoverable	Water	200.7	

Prep Batch: 667337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-1	L508226-01 MW-7C	Total/NA	Water	245.1-1994 R3.0	
240-230513-2	L508226-02 MW-8	Total/NA	Water	245.1-1994 R3.0	
240-230513-3	L508226-03 MW-9	Total/NA	Water	245.1-1994 R3.0	
240-230513-4	L508226-04 MW-10	Total/NA	Water	245.1-1994 R3.0	
240-230513-5	L508226-05 MW-15	Total/NA	Water	245.1-1994 R3.0	
240-230513-6	L508226-06 MW-100A	Total/NA	Water	245.1-1994 R3.0	
240-230513-7	L508226-07 MW-100B	Total/NA	Water	245.1-1994 R3.0	
240-230513-8	L508226-08 MW-100C	Total/NA	Water	245.1-1994 R3.0	
240-230513-9	L508226-09 MW-100D	Total/NA	Water	245.1-1994 R3.0	
240-230513-10	L508226-10 MWT-100C	Total/NA	Water	245.1-1994 R3.0	
240-230513-11	L508226-11 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	
MB 240-667337/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-667337/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 667565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-1	L508226-01 MW-7C	Total/NA	Water	245.1-1994 R3.0	667337
240-230513-2	L508226-02 MW-8	Total/NA	Water	245.1-1994 R3.0	667337
240-230513-3	L508226-03 MW-9	Total/NA	Water	245.1-1994 R3.0	667337
240-230513-4	L508226-04 MW-10	Total/NA	Water	245.1-1994 R3.0	667337
240-230513-5	L508226-05 MW-15	Total/NA	Water	245.1-1994 R3.0	667337
240-230513-6	L508226-06 MW-100A	Total/NA	Water	245.1-1994 R3.0	667337
240-230513-7	L508226-07 MW-100B	Total/NA	Water	245.1-1994 R3.0	667337
240-230513-8	L508226-08 MW-100C	Total/NA	Water	245.1-1994 R3.0	667337
240-230513-9	L508226-09 MW-100D	Total/NA	Water	245.1-1994 R3.0	667337
240-230513-10	L508226-10 MWT-100C	Total/NA	Water	245.1-1994 R3.0	667337
240-230513-11	L508226-11 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	667337
MB 240-667337/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	667337
LCS 240-667337/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	667337

Metals

Analysis Batch: 667768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-1	L508226-01 MW-7C	Total Recoverable	Water	200.7 R4.4-1994	667328
240-230513-2	L508226-02 MW-8	Total Recoverable	Water	200.7 R4.4-1994	667328
240-230513-3	L508226-03 MW-9	Total Recoverable	Water	200.7 R4.4-1994	667328
240-230513-4	L508226-04 MW-10	Total Recoverable	Water	200.7 R4.4-1994	667328
240-230513-5	L508226-05 MW-15	Total Recoverable	Water	200.7 R4.4-1994	667328
240-230513-6	L508226-06 MW-100A	Total Recoverable	Water	200.7 R4.4-1994	667328
240-230513-7	L508226-07 MW-100B	Total Recoverable	Water	200.7 R4.4-1994	667328
240-230513-8	L508226-08 MW-100C	Total Recoverable	Water	200.7 R4.4-1994	667328
240-230513-9	L508226-09 MW-100D	Total Recoverable	Water	200.7 R4.4-1994	667328
240-230513-10	L508226-10 MWT-100C	Total Recoverable	Water	200.7 R4.4-1994	667328
240-230513-11	L508226-11 FIELD BLANK	Total Recoverable	Water	200.7 R4.4-1994	667328
MB 240-667328/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	667328
LCS 240-667328/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	667328
240-230513-1 MS	L508226-01 MW-7C	Total Recoverable	Water	200.7 R4.4-1994	667328
240-230513-1 MSD	L508226-01 MW-7C	Total Recoverable	Water	200.7 R4.4-1994	667328
240-230513-2 MS	L508226-02 MW-8	Total Recoverable	Water	200.7 R4.4-1994	667328
240-230513-2 MSD	L508226-02 MW-8	Total Recoverable	Water	200.7 R4.4-1994	667328

Analysis Batch: 667773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-1	L508226-01 MW-7C	Total Recoverable	Water	200.8-1994 R5.4	667328
240-230513-2	L508226-02 MW-8	Total Recoverable	Water	200.8-1994 R5.4	667328
240-230513-3	L508226-03 MW-9	Total Recoverable	Water	200.8-1994 R5.4	667328
240-230513-4	L508226-04 MW-10	Total Recoverable	Water	200.8-1994 R5.4	667328
240-230513-5	L508226-05 MW-15	Total Recoverable	Water	200.8-1994 R5.4	667328
240-230513-6	L508226-06 MW-100A	Total Recoverable	Water	200.8-1994 R5.4	667328
240-230513-7	L508226-07 MW-100B	Total Recoverable	Water	200.8-1994 R5.4	667328
240-230513-8	L508226-08 MW-100C	Total Recoverable	Water	200.8-1994 R5.4	667328
240-230513-9	L508226-09 MW-100D	Total Recoverable	Water	200.8-1994 R5.4	667328
240-230513-10	L508226-10 MWT-100C	Total Recoverable	Water	200.8-1994 R5.4	667328
240-230513-11	L508226-11 FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	667328
MB 240-667328/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	667328
LCS 240-667328/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	667328
240-230513-1 MS	L508226-01 MW-7C	Total Recoverable	Water	200.8-1994 R5.4	667328
240-230513-1 MSD	L508226-01 MW-7C	Total Recoverable	Water	200.8-1994 R5.4	667328
240-230513-2 MS	L508226-02 MW-8	Total Recoverable	Water	200.8-1994 R5.4	667328
240-230513-2 MSD	L508226-02 MW-8	Total Recoverable	Water	200.8-1994 R5.4	667328

Analysis Batch: 667992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-1	L508226-01 MW-7C	Total Recoverable	Water	2340 B-2021	
240-230513-2	L508226-02 MW-8	Total Recoverable	Water	2340 B-2021	
240-230513-3	L508226-03 MW-9	Total Recoverable	Water	2340 B-2021	
240-230513-4	L508226-04 MW-10	Total Recoverable	Water	2340 B-2021	
240-230513-5	L508226-05 MW-15	Total Recoverable	Water	2340 B-2021	
240-230513-6	L508226-06 MW-100A	Total Recoverable	Water	2340 B-2021	
240-230513-7	L508226-07 MW-100B	Total Recoverable	Water	2340 B-2021	
240-230513-8	L508226-08 MW-100C	Total Recoverable	Water	2340 B-2021	
240-230513-9	L508226-09 MW-100D	Total Recoverable	Water	2340 B-2021	
240-230513-10	L508226-10 MWT-100C	Total Recoverable	Water	2340 B-2021	
240-230513-11	L508226-11 FIELD BLANK	Total Recoverable	Water	2340 B-2021	

General Chemistry

Analysis Batch: 667177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-1	L508226-01 MW-7C	Total/NA	Water	300.0-1993 R2.1	
240-230513-1	L508226-01 MW-7C	Total/NA	Water	300.0-1993 R2.1	
240-230513-2	L508226-02 MW-8	Total/NA	Water	300.0-1993 R2.1	
240-230513-3	L508226-03 MW-9	Total/NA	Water	300.0-1993 R2.1	
240-230513-4	L508226-04 MW-10	Total/NA	Water	300.0-1993 R2.1	
240-230513-5	L508226-05 MW-15	Total/NA	Water	300.0-1993 R2.1	
240-230513-6	L508226-06 MW-100A	Total/NA	Water	300.0-1993 R2.1	
240-230513-7	L508226-07 MW-100B	Total/NA	Water	300.0-1993 R2.1	
240-230513-8	L508226-08 MW-100C	Total/NA	Water	300.0-1993 R2.1	
MB 240-667177/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-667177/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 667184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-9	L508226-09 MW-100D	Total/NA	Water	300.0-1993 R2.1	
240-230513-10	L508226-10 MWT-100C	Total/NA	Water	300.0-1993 R2.1	
240-230513-11	L508226-11 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
MB 240-667184/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-667184/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-230513-10 MS	L508226-10 MWT-100C	Total/NA	Water	300.0-1993 R2.1	
240-230513-10 MSD	L508226-10 MWT-100C	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 667300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-1	L508226-01 MW-7C	Total/NA	Water	2540 C-2020	
240-230513-2	L508226-02 MW-8	Total/NA	Water	2540 C-2020	
240-230513-3	L508226-03 MW-9	Total/NA	Water	2540 C-2020	
240-230513-4	L508226-04 MW-10	Total/NA	Water	2540 C-2020	
240-230513-5	L508226-05 MW-15	Total/NA	Water	2540 C-2020	
240-230513-6	L508226-06 MW-100A	Total/NA	Water	2540 C-2020	
240-230513-7	L508226-07 MW-100B	Total/NA	Water	2540 C-2020	
MB 240-667300/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-667300/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-230513-3 DU	L508226-03 MW-9	Total/NA	Water	2540 C-2020	

Analysis Batch: 667340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-1	L508226-01 MW-7C	Total/NA	Water	2540D-2020	
240-230513-2	L508226-02 MW-8	Total/NA	Water	2540D-2020	
240-230513-3	L508226-03 MW-9	Total/NA	Water	2540D-2020	
240-230513-4	L508226-04 MW-10	Total/NA	Water	2540D-2020	
240-230513-5	L508226-05 MW-15	Total/NA	Water	2540D-2020	
240-230513-6	L508226-06 MW-100A	Total/NA	Water	2540D-2020	
240-230513-7	L508226-07 MW-100B	Total/NA	Water	2540D-2020	
240-230513-8	L508226-08 MW-100C	Total/NA	Water	2540D-2020	
240-230513-9	L508226-09 MW-100D	Total/NA	Water	2540D-2020	
240-230513-10	L508226-10 MWT-100C	Total/NA	Water	2540D-2020	
MB 240-667340/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-667340/2	Lab Control Sample	Total/NA	Water	2540D-2020	
240-230513-1 DU	L508226-01 MW-7C	Total/NA	Water	2540D-2020	

General Chemistry

Analysis Batch: 667398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-8	L508226-08 MW-100C	Total/NA	Water	2540 C-2020	
240-230513-9	L508226-09 MW-100D	Total/NA	Water	2540 C-2020	
240-230513-10	L508226-10 MWT-100C	Total/NA	Water	2540 C-2020	
240-230513-11	L508226-11 FIELD BLANK	Total/NA	Water	2540 C-2020	
MB 240-667398/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-667398/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 667415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-1	L508226-01 MW-7C	Total/NA	Water	2320 B-2021	
240-230513-2	L508226-02 MW-8	Total/NA	Water	2320 B-2021	
240-230513-3	L508226-03 MW-9	Total/NA	Water	2320 B-2021	
240-230513-4	L508226-04 MW-10	Total/NA	Water	2320 B-2021	
240-230513-5	L508226-05 MW-15	Total/NA	Water	2320 B-2021	
240-230513-6	L508226-06 MW-100A	Total/NA	Water	2320 B-2021	
240-230513-7	L508226-07 MW-100B	Total/NA	Water	2320 B-2021	
240-230513-8	L508226-08 MW-100C	Total/NA	Water	2320 B-2021	
240-230513-9	L508226-09 MW-100D	Total/NA	Water	2320 B-2021	
240-230513-10	L508226-10 MWT-100C	Total/NA	Water	2320 B-2021	
240-230513-11	L508226-11 FIELD BLANK	Total/NA	Water	2320 B-2021	
MB 240-667415/29	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-667415/55	Method Blank	Total/NA	Water	2320 B-2021	
240-230513-6 DU	L508226-06 MW-100A	Total/NA	Water	2320 B-2021	

Analysis Batch: 667521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-11	L508226-11 FIELD BLANK	Total/NA	Water	2540D-2020	
MB 240-667521/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-667521/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Client Sample ID: L508226-01 MW-7C

Lab Sample ID: 240-230513-1

Date Collected: 08/07/25 16:09
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 16:30
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 17:53
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.8		1	8851	CW	EET SSM	08/13/25 14:14
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 14:20
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:14
Total/NA	Prep	245.1-1994 R3.0			667337	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:31
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 14:02
Total/NA	Analysis	2540 C-2020		1	667300	TAV2	EET CLE	08/12/25 09:29
Total/NA	Analysis	2540D-2020		1	667340	TAV2	EET CLE	08/12/25 11:51
Total/NA	Analysis	300.0-1993 R2.1		1	667177	JMR	EET CLE	08/11/25 17:55
Total/NA	Analysis	300.0-1993 R2.1		5	667177	JMR	EET CLE	08/11/25 18:24

Client Sample ID: L508226-02 MW-8

Lab Sample ID: 240-230513-2

Date Collected: 08/07/25 14:44
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 16:52
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 17:57
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.8		1	8851	CW	EET SSM	08/13/25 14:17
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 14:33
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:14
Total/NA	Prep	245.1-1994 R3.0			667337	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:32
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 14:07
Total/NA	Analysis	2540 C-2020		1	667300	TAV2	EET CLE	08/12/25 09:29
Total/NA	Analysis	2540D-2020		1	667340	TAV2	EET CLE	08/12/25 11:51
Total/NA	Analysis	300.0-1993 R2.1		1	667177	JMR	EET CLE	08/11/25 18:33

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Client Sample ID: L508226-03 MW-9

Lab Sample ID: 240-230513-3

Date Collected: 08/07/25 13:24
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 17:05
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 18:00
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.8		1	8851	CW	EET SSM	08/13/25 14:20
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 14:46
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:14
Total/NA	Prep	245.1-1994 R3.0			667337	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:34
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 14:14
Total/NA	Analysis	2540 C-2020		1	667300	TAV2	EET CLE	08/12/25 09:29
Total/NA	Analysis	2540D-2020		1	667340	TAV2	EET CLE	08/12/25 11:51
Total/NA	Analysis	300.0-1993 R2.1		1	667177	JMR	EET CLE	08/11/25 18:43

Client Sample ID: L508226-04 MW-10

Lab Sample ID: 240-230513-4

Date Collected: 08/07/25 11:59
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 17:18
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 18:03
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.8		1	8851	CW	EET SSM	08/13/25 14:22
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 14:49
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:14
Total/NA	Prep	245.1-1994 R3.0			667337	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:36
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 14:20
Total/NA	Analysis	2540 C-2020		1	667300	TAV2	EET CLE	08/12/25 09:29
Total/NA	Analysis	2540D-2020		1	667340	TAV2	EET CLE	08/12/25 11:51
Total/NA	Analysis	300.0-1993 R2.1		1	667177	JMR	EET CLE	08/11/25 18:53

Client Sample ID: L508226-05 MW-15

Lab Sample ID: 240-230513-5

Date Collected: 08/07/25 10:15
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 17:22

Client Sample ID: L508226-05 MW-15

Lab Sample ID: 240-230513-5

Date Collected: 08/07/25 10:15

Matrix: Water

Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 18:07
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.8		1	8851	CW	EET SSM	08/13/25 14:25
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 14:51
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:14
Total/NA	Prep	245.1-1994 R3.0			667337	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:37
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 14:28
Total/NA	Analysis	2540 C-2020		1	667300	TAV2	EET CLE	08/12/25 09:29
Total/NA	Analysis	2540D-2020		1	667340	TAV2	EET CLE	08/12/25 11:51
Total/NA	Analysis	300.0-1993 R2.1		1	667177	JMR	EET CLE	08/11/25 19:02

Client Sample ID: L508226-06 MW-100A

Lab Sample ID: 240-230513-6

Date Collected: 08/07/25 15:55

Matrix: Water

Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 17:27
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 18:10
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.8		1	8851	CW	EET SSM	08/13/25 14:28
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 14:54
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:14
Total/NA	Prep	245.1-1994 R3.0			667337	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:39
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 14:34
Total/NA	Analysis	2540 C-2020		1	667300	TAV2	EET CLE	08/12/25 09:29
Total/NA	Analysis	2540D-2020		1	667340	TAV2	EET CLE	08/12/25 11:51
Total/NA	Analysis	300.0-1993 R2.1		1	667177	JMR	EET CLE	08/11/25 19:22

Client Sample ID: L508226-07 MW-100B

Lab Sample ID: 240-230513-7

Date Collected: 08/07/25 11:54

Matrix: Water

Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 17:31
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 18:13

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Client Sample ID: L508226-07 MW-100B

Lab Sample ID: 240-230513-7

Date Collected: 08/07/25 11:54
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.8		1	8851	CW	EET SSM	08/13/25 14:36
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 14:57
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:14
Total/NA	Prep	245.1-1994 R3.0			667337	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:41
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 14:45
Total/NA	Analysis	2540 C-2020		1	667300	TAV2	EET CLE	08/12/25 09:29
Total/NA	Analysis	2540D-2020		1	667340	TAV2	EET CLE	08/12/25 11:51
Total/NA	Analysis	300.0-1993 R2.1		1	667177	JMR	EET CLE	08/11/25 19:31

Client Sample ID: L508226-08 MW-100C

Lab Sample ID: 240-230513-8

Date Collected: 08/07/25 13:19
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 17:36
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 18:17
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.8		1	8851	CW	EET SSM	08/13/25 14:39
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 14:59
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:14
Total/NA	Prep	245.1-1994 R3.0			667337	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:46
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 14:51
Total/NA	Analysis	2540 C-2020		1	667398	TAV2	EET CLE	08/12/25 15:51
Total/NA	Analysis	2540D-2020		1	667340	TAV2	EET CLE	08/12/25 11:51
Total/NA	Analysis	300.0-1993 R2.1		1	667177	JMR	EET CLE	08/11/25 19:41

Client Sample ID: L508226-09 MW-100D

Lab Sample ID: 240-230513-9

Date Collected: 08/07/25 15:00
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 17:40
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 18:20
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.8		1	8851	CW	EET SSM	08/13/25 14:42

Client Sample ID: L508226-09 MW-100D

Lab Sample ID: 240-230513-9

Date Collected: 08/07/25 15:00

Matrix: Water

Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 15:02
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:14
Total/NA	Prep	245.1-1994 R3.0			667337	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:48
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 14:56
Total/NA	Analysis	2540 C-2020		1	667398	TAV2	EET CLE	08/12/25 15:51
Total/NA	Analysis	2540D-2020		1	667340	TAV2	EET CLE	08/12/25 11:51
Total/NA	Analysis	300.0-1993 R2.1		1	667184	JMR	EET CLE	08/11/25 21:56

Client Sample ID: L508226-10 MWT-100C

Lab Sample ID: 240-230513-10

Date Collected: 08/07/25 13:19

Matrix: Water

Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 17:44
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 18:23
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.8		1	8851	CW	EET SSM	08/13/25 14:45
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 15:10
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:14
Total/NA	Prep	245.1-1994 R3.0			667337	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:49
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 15:04
Total/NA	Analysis	2540 C-2020		1	667398	TAV2	EET CLE	08/12/25 15:51
Total/NA	Analysis	2540D-2020		1	667340	TAV2	EET CLE	08/12/25 11:51
Total/NA	Analysis	300.0-1993 R2.1		1	667184	JMR	EET CLE	08/11/25 21:28

Client Sample ID: L508226-11 FIELD BLANK

Lab Sample ID: 240-230513-11

Date Collected: 08/07/25 09:00

Matrix: Water

Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 17:49
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 18:33
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.8		1	8851	CW	EET SSM	08/13/25 14:47
Total Recoverable	Prep	200.7			667328	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 15:12

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Client Sample ID: L508226-11 FIELD BLANK

Lab Sample ID: 240-230513-11

Date Collected: 08/07/25 09:00

Matrix: Water

Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:14
Total/NA	Prep	245.1-1994 R3.0			667337	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:51
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 15:09
Total/NA	Analysis	2540 C-2020		1	667398	TAV2	EET CLE	08/12/25 15:51
Total/NA	Analysis	2540D-2020		1	667521	AAP	EET CLE	08/13/25 11:33
Total/NA	Analysis	300.0-1993 R2.1		1	667184	JMR	EET CLE	08/11/25 22:16

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-1

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-08-26
Florida	NELAP	E87575	06-30-26
Louisiana (All)	NELAP	03073	07-01-26
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-26
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167-008	07-08-26
US Fish & Wildlife	US Federal Programs	A20571	06-30-26
USDA	US Federal Programs	525-23-4-22573	01-24-28

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6462

Email:
Jennifer.Caporale@LBWL.com; Environmental_Laboratory@

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Project Manager:
Howell, Leslie

Purchase Order:
Purchase Order not required

Project Reference:

Work Order:

Sampler:
Marc Wahrer, Julie Maltby

Requested TAT:

Description:
Erickson 8-7-25

Project Number:
24034575

Site Name:
Erickson Projects

Sample State: MI

Special Instructions:
Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner. Please add Na and K metals

See following pages for Method and Container information.

240-230513 COC

G128,

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L508226-01 MW-7C	Grab	Water	08/07/25 16:09			
2	L508226-02 MW-8	Grab	Water	08/07/25 14:44			
3	L508226-03 MW-9	Grab	Water	08/07/25 13:24			
4	L508226-04 MW-10	Grab	Water	08/07/25 11:59			
5	L508226-05 MW-15	Grab	Water	08/07/25 10:15			
6	L508226-06 MW-100A	Grab	Water	08/07/25 15:55			
7	L508226-07 MW-100B	Grab	Water	08/07/25 11:54			
8	L508226-08 MW-100C	Grab	Water	08/07/25 13:19			
9	L508226-09 MW-100D	Grab	Water	08/07/25 15:00			
10	L508226-10 MWT-100C	Grab	Water	08/07/25 13:19			
11	L508226-11 Field Blank	Grab	Water	08/07/25 09:00			

Rinsha 8/9/25 0800

Chain of Custody Number: **403152**

*H – Analysis on hold.

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By	Date/Time:	Samples Relinquished By	Date/Time:		
Jennifer Caporale	08/08/25 13:55	Jennifer Caporale	08/08/25 13.55		

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250808A001								
MIC20250808A001								
MIC20250808A003								
MIC20250808A003								

Ransley 8/9/25 08a

Chain of Custody Number: 403152

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																				
#	Sample Name	200.7 Rev 4.4 / Metals (ICP) / Total Na & K	200 7 R4.4-1994 / Metals (ICP) / Total Boron	300 0-1993 R2.1 / Anions, Ion Chromatography / Chloride, Fluor	245.1 1994 R3.0 / Mercury (CVAA) / Mercury	200.8 / Metals (ICP/MS) / Custom List 2· 2-3 Metals	904 0 / Radium-228 (GFPC) / Standard Target List	200 7 Rev 4.4 / Metals (ICP) / Iron & Zinc	2320 B-2021 / Alkalinity / Bicarbonate & Carbonate Alkalinity	200.8 / Metals (ICP/MS) / Custom List 1 1 Metals	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	903.0 / Radium-226 (GFPC) / Standard Target List	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	2540 C-2020 / Solids Total Dissolved (TDS) / Total Dissolved S	200.8 / Metals (ICP/MS) / Iron & Zinc	2340 B-2021 / Total Hardness (as CaCO3) by calculation	2540D-2020 / Solids Total Suspended (TSS)	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228				
1	L508226-01 MW-7C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
2	L508226-02 MW-8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
3	L508226-03 MW-9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
4	L508226-04 MW-10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
5	L508226-05 MW-15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
6	L508226-06 MW-100A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
7	L508226-07 MW-100B	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
8	L508226-08 MW-100C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
9	L508226-09 MW-100D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
10	L508226-10 MWT-100C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
11	L508226-11 Field Blank	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				

Ron Sk 8/19/25 0800

Chain of Custody Bottles

eurofins | Environment Testing

Bottle Name	Total Bottles
Plastic 500ml unpreserved	12
Plastic 500ml - with Nitric Acid	12
Plastic 1 liter Nitric Acid	24
Plastic 60 mL - unpreserved	24
Plastic 250ml with Nitric Acid	12
Plastic 1 liter - unpreserved	12

Samples		Bottles																				
#	Sample Name	Total Bottles For Sample	Plastic 500ml unpreserved	Plastic 500ml with Nitric Acid	Plastic 1 liter Nitric Acid	Plastic 60 mL unpreserved	Plastic 250ml with Nitric Acid	Plastic 1 liter unpreserved														
1	L508226-01 MW-7C	8	1	1	2	2	1	1														
2	L508226-02 MW-8	8	1	1	2	2	1	1														
3	L508226-03 MW-9	8	1	1	2	2	1	1														
4	L508226-04 MW-10	8	1	1	2	2	1	1														
5	L508226-05 MW-15	8	1	1	2	2	1	1														
6	L508226-06 MW-100A	8	1	1	2	2	1	1														
7	L508226-07 MW-100B	8	1	1	2	2	1	1														
8	L508226-08 MW-100C	8	1	1	2	2	1	1														
9	L508226-09 MW-100D	8	1	1	2	2	1	1														
10	L508226-10 MWT-100C	8	1	1	2	2	1	1														
11	L508226-11 Field Blank	8	1	1	2	2	1	1														

Ron Sloa 8/9/25 0800

Ron Sley 8/9/25 0800

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Lansing Board Site Name _____ Cooler unpacked by:

Cooler Received on 8/14/25 Opened on 8/14/25

FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # 1EC Foam Box Client Cooler Box Other _____

Packing material used. Bubble Wrap Foam Plastic Bag None Other _____

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # _____ (CF _____ °C) Observed Cooler Temp _____ °C Corrected Cooler Temp _____ °C

2	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes No
	Were the seals on the outside of the cooler(s) signed & dated?	Yes No NA
	-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes No
	-Were tamper/custody seals intact and uncompromised?	Yes No NA
3	Shippers' packing slip attached to the cooler(s)?	Yes No
4	Did custody papers accompany the sample(s)?	Yes No
5	Were the custody papers relinquished & signed in the appropriate place?	Yes No
6	Was/were the person(s) who collected the samples clearly identified on the COC?	Yes No
7	Did all bottles arrive in good condition (Unbroken)?	Yes No
8	Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes No
9	For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?	
10	Were correct bottle(s) used for the test(s) indicated?	Yes No
11	Sufficient quantity received to perform indicated analyses?	Yes No
12	Are these work share samples and all listed on the COC?	Yes No
	If yes, Questions 13 17 have been checked at the originating laboratory	
13	Were all preserved sample(s) at the correct pH upon receipt?	Yes No NA pH Strip Lot# HC463162
14	Were VOAs on the COC?	Yes No
15	Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes No NA
16	Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes No
17	Was a LL Hg or Me Hg trip blank present? _____	Yes No

Tests that are not checked for pH by Receiving.

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18 CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by

Labels Verified by:

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20 SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation Date/Time VOAs Frozen _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	0.0	0.5	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 13	0.4	0.9	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 13	3.5	3.9	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 13	0.1	0.6	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice

8/9/2025

Login Container Summary Report

240-230513

8/18/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508226-01 MW-7C	240-230513 A-1	Plastic 60 mL - unpreserved				
L508226-01 MW-7C	240-230513-B-1	Plastic 60 mL - unpreserved				
L508226-01 MW 7C	240-230513-C-1	Plastic 250ml - with Nitric Acid	<2			
L508226-01 MW-7C	240-230513-D-1	Plastic 500ml - unpreserved				
L508226-01 MW-7C	240-230513-E-1	Plastic 500ml - with Nitric Acid	<2			
L508226-01 MW-7C	240-230513-F-1	Plastic 1 liter - unpreserved				
L508226-01 MW-7C	240-230513-G-1	Plastic 1 liter - Nitric Acid	<2			
L508226-01 MW-7C	240-230513-H-1	Plastic 1 liter - Nitric Acid	<2			
L508226-02 MW-8	240-230513-A 2	Plastic 60 mL - unpreserved				
L508226-02 MW-8	240-230513-B-2	Plastic 60 mL - unpreserved				
L508226-02 MW-8	240-230513-C-2	Plastic 250ml - with Nitric Acid	<2			
L508226-02 MW-8	240-230513-D-2	Plastic 500ml - unpreserved				
L508226-02 MW-8	240-230513-E-2	Plastic 500ml - with Nitric Acid	<2			
L508226-02 MW-8	240-230513 F-2	Plastic 1 liter - unpreserved				
L508226-02 MW-8	240-230513-G-2	Plastic 1 liter - Nitric Acid	<2			
L508226-02 MW-8	240-230513-H 2	Plastic 1 liter - Nitric Acid	<2			
L508226-03 MW-9	240-230513-A 3	Plastic 60 mL - unpreserved				
L508226-03 MW-9	240-230513-B-3	Plastic 60 mL - unpreserved				
L508226-03 MW-9	240-230513-C-3	Plastic 250ml - with Nitric Acid	<2			
L508226-03 MW-9	240-230513 D-3	Plastic 500ml - unpreserved				
L508226-03 MW-9	240-230513-E-3	Plastic 500ml - with Nitric Acid	<2			
L508226-03 MW-9	240-230513 F-3	Plastic 1 liter - unpreserved				
L508226-03 MW-9	240-230513-G-3	Plastic 1 liter - Nitric Acid	<2			
L508226-03 MW-9	240-230513 H-3	Plastic 1 liter Nitric Acid	<2			
L508226-04 MW-10	240-230513-A-4	Plastic 60 mL - unpreserved				
L508226-04 MW 10	240-230513-B-4	Plastic 60 mL - unpreserved				
L508226-04 MW-10	240-230513-C-4	Plastic 250ml - with Nitric Acid	<2			
L508226-04 MW 10	240-230513-D-4	Plastic 500ml - unpreserved				
L508226-04 MW-10	240-230513 E-4	Plastic 500ml - with Nitric Acid	<2			
L508226-04 MW 10	240-230513-F-4	Plastic 1 liter - unpreserved				
L508226-04 MW-10	240-230513-G-4	Plastic 1 liter - Nitric Acid	<2			
L508226-04 MW 10	240-230513-H-4	Plastic 1 liter - Nitric Acid	<2			
L508226-05 MW-15	240-230513-A-5	Plastic 60 mL unpreserved				
L508226-05 MW 15	240-230513-B-5	Plastic 60 mL - unpreserved				
L508226-05 MW-15	240-230513-C-5	Plastic 250ml with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508226-05 MW 15	240-230513-D-5	Plastic 500ml - unpreserved				
L508226-05 MW-15	240-230513-E-5	Plastic 500ml with Nitric Acid	<2			
L508226-05 MW-15	240-230513-F-5	Plastic 1 liter - unpreserved				
L508226-05 MW-15	240-230513-G-5	Plastic 1 liter Nitric Acid	<2			
L508226-05 MW-15	240-230513-H 5	Plastic 1 liter - Nitric Acid	<2			
L508226-06 MW-100A	240 230513-A-6	Plastic 60 mL - unpreserved				
L508226-06 MW 100A	240 230513-B-6	Plastic 60 mL - unpreserved				
L508226-06 MW-100A	240-230513-C-6	Plastic 250ml - with Nitric Acid	<2			
L508226-06 MW-100A	240-230513-D-6	Plastic 500ml - unpreserved				
L508226-06 MW 100A	240-230513-E-6	Plastic 500ml - with Nitric Acid	<2			
L508226-06 MW-100A	240-230513-F-6	Plastic 1 liter unpreserved				
L508226-06 MW-100A	240-230513-G-6	Plastic 1 liter - Nitric Acid	<2			
L508226-06 MW-100A	240-230513-H-6	Plastic 1 liter - Nitric Acid	<2			
L508226-07 MW-100B	240-230513-A 7	Plastic 60 mL - unpreserved				
L508226-07 MW-100B	240-230513-B-7	Plastic 60 mL unpreserved				
L508226-07 MW-100B	240-230513-C-7	Plastic 250ml - with Nitric Acid	<2			
L508226-07 MW-100B	240-230513 D-7	Plastic 500ml unpreserved				
L508226-07 MW 100B	240-230513-E-7	Plastic 500ml - with Nitric Acid	<2			
L508226-07 MW-100B	240-230513-F 7	Plastic 1 liter unpreserved				
L508226-07 MW-100B	240-230513-G-7	Plastic 1 liter - Nitric Acid	<2			
L508226-07 MW-100B	240-230513-H 7	Plastic 1 liter - Nitric Acid	<2			
L508226-08 MW-100C	240-230513-A-8	Plastic 60 mL - unpreserved				
L508226-08 MW-100C	240-230513-B-8	Plastic 60 mL - unpreserved				
L508226-08 MW-100C	240 230513-C-8	Plastic 250ml - with Nitric Acid	<2			
L508226-08 MW-100C	240-230513-D-8	Plastic 500ml unpreserved				
L508226-08 MW-100C	240-230513 E-8	Plastic 500ml - with Nitric Acid	<2			
L508226-08 MW-100C	240-230513-F-8	Plastic 1 liter unpreserved				
L508226-08 MW-100C	240-230513-G-8	Plastic 1 liter - Nitric Acid	<2			
L508226-08 MW-100C	240-230513-H-8	Plastic 1 liter Nitric Acid	<2			
L508226-09 MW-100D	240-230513-A-9	Plastic 60 mL - unpreserved				
L508226-09 MW-100D	240-230513-B-9	Plastic 60 mL unpreserved				
L508226-09 MW-100D	240-230513-C-9	Plastic 250ml - with Nitric Acid	<2			
L508226-09 MW-100D	240-230513 D-9	Plastic 500ml - unpreserved				
L508226-09 MW 100D	240 230513-E-9	Plastic 500ml - with Nitric Acid	<2			
L508226-09 MW-100D	240-230513-F-9	Plastic 1 liter unpreserved				
L508226-09 MW-100D	240-230513-G-9	Plastic 1 liter - Nitric Acid	<2			
L508226-09 MW-100D	240-230513 H-9	Plastic 1 liter - Nitric Acid	<2			
L508226-10 MWT-100C	240-230513-A 10	Plastic 60 mL - unpreserved				

8/18/2025

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508226-10 MWT-100C	240-230513 B-10	Plastic 60 mL - unpreserved				
L508226-10 MWT 100C	240-230513-C-10	Plastic 250ml - with Nitric Acid	<2			
L508226-10 MWT-100C	240-230513-D-10	Plastic 500ml - unpreserved				
L508226-10 MWT-100C	240-230513 E-10	Plastic 500ml - with Nitric Acid	<2			
L508226-10 MWT-100C	240-230513-F-10	Plastic 1 liter - unpreserved				
L508226-10 MWT-100C	240-230513-G-10	Plastic 1 liter - Nitric Acid	<2			
L508226-10 MWT 100C	240-230513 H-10	Plastic 1 liter - Nitric Acid	<2			
L508226-11 FIELD BLANK	240-230513-A 11	Plastic 60 mL - unpreserved				
L508226-11 FIELD BLANK	240-230513-B-11	Plastic 60 mL - unpreserved				
L508226-11 FIELD BLANK	240-230513-C-11	Plastic 250ml - with Nitric Acid	<2			
L508226-11 FIELD BLANK	240-230513 D-11	Plastic 500ml - unpreserved				
L508226-11 FIELD BLANK	240-230513-E-11	Plastic 500ml - with Nitric Acid	<2			
L508226-11 FIELD BLANK	240-230513-F 11	Plastic 1 liter - unpreserved				
L508226-11 FIELD BLANK	240-230513-G-11	Plastic 1 liter - Nitric Acid	<2			
L508226-11 FIELD BLANK	240-230513 H-11	Plastic 1 liter Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

8/18/2025

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-206255.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 2
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-230513-1
Address: 5755 8th Street East,	Due Date Requested: 8/25/2025			
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Therm. ID: SC03 Cust. Seal: Y / N
Uncorr./Corr. Temp: 20.8/20.5 °C
Delivery: UPS / FedEx / Other:
Ice Type: Blue / Dry / Wet / None
Label Ver.: V Packing: B
med Blue

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT(MOD) Iron & Zinc	200.7_CWA/200.7_P_TOT(MOD) Iron & Zinc	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
L508226-01 MW-7C (240-230513-1)	8/7/25	16:09 Eastern	G	Water			X	X	1	
L508226-02 MW-8 (240-230513-2)	8/7/25	14:44 Eastern	G	Water			X	X	1	
L508226-03 MW-9 (240-230513-3)	8/7/25	13:24 Eastern	G	Water			X	X	1	
L508226-04 MW-10 (240-230513-4)	8/7/25	11:59 Eastern	G	Water			X	X	1	
L508226-05 MW-15 (240-230513-5)	8/7/25	10:15 Eastern	G	Water			X	X	1	
L508226-06 MW-100A (240-230513-6)	8/7/25	15:55 Eastern	G	Water			X	X	1	
L508226-07 MW-100B (240-230513-7)	8/7/25	11:54 Eastern	G	Water			X	X	1	
L508226-08 MW-100C (240-230513-8)	8/7/25	13:19 Eastern	G	Water			X	X	1	
L508226-09 MW-100D (240-230513-9)	8/7/25	15:00 Eastern	G	Water			X	X	1	

Other: N/A

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		8/11/25	FC		8/12/25 9:50	FEIN
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S Van Buren Avenue
Barberton, OH 44203
Phone 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-206255 2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et eurofinsus com	State of Origin: Michigan	Page: Page 2 of 2
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-230513-1
Address: 5755 8th Street East, ,	Due Date Requested: 8/25/2025			
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT(MOD) Iron & Zinc	200.7_CWA/200.7_P_TOT(MOD) Iron & Zinc	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
L508226-10 MWT-100C (240-230513-10)	8/7/25	13 19 Eastern	G	Water			X	X	1	
L508226-11 FIELD BLANK (240-230513-11)	8/7/25	09 00 Eastern	G	Water			X	X	1	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by:	Date/Time: 8/11/25	Company: EC	Received by:	Date/Time: 8/12/25 9:30	Company: EC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:

Ver 10/10/2024

8/18/2025

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-230513-1

Login Number: 230513
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 08/12/25 01:31 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 9/5/2025 4:08:09 PM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-230513-2

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

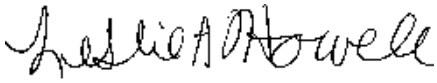
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
9/5/2025 4:08:09 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 9
Tracer Carrier Summary 20
QC Sample Results 21
QC Association Summary 23
Lab Chronicle 24
Certification Summary 27
Chain of Custody 28
Receipt Checklists 40

Definitions/Glossary

Client: Lansing Board of Water & Light
Job ID: 240-230513-2
Project/Site: Erickson Projects

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-230513-2 — Eurofins Cleveland

Job Narrative
240-230513-2

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 8/9/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.5°C, 0.6°C, 0.9°C and 3.9°C.

Gas Flow Proportional Counter
Method 904.0: Radium 228 Batch 731801

The Radium-228 laboratory control sample (LCS) associated with the following samples recovered at 131%: (LCS 160-731801/2-A). The limits in our LIMS system at (75-125%) reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of (68-154%). The LCS is within criteria and no further action is required.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-230513-1	L508226-01 MW-7C	Water	08/07/25 16:09	08/09/25 08:00	Michigan
240-230513-2	L508226-02 MW-8	Water	08/07/25 14:44	08/09/25 08:00	Michigan
240-230513-3	L508226-03 MW-9	Water	08/07/25 13:24	08/09/25 08:00	Michigan
240-230513-4	L508226-04 MW-10	Water	08/07/25 11:59	08/09/25 08:00	Michigan
240-230513-5	L508226-05 MW-15	Water	08/07/25 10:15	08/09/25 08:00	Michigan
240-230513-6	L508226-06 MW-100A	Water	08/07/25 15:55	08/09/25 08:00	Michigan
240-230513-7	L508226-07 MW-100B	Water	08/07/25 11:54	08/09/25 08:00	Michigan
240-230513-8	L508226-08 MW-100C	Water	08/07/25 13:19	08/09/25 08:00	Michigan
240-230513-9	L508226-09 MW-100D	Water	08/07/25 15:00	08/09/25 08:00	Michigan
240-230513-10	L508226-10 MWT-100C	Water	08/07/25 13:19	08/09/25 08:00	Michigan
240-230513-11	L508226-11 FIELD BLANK	Water	08/07/25 09:00	08/09/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-2

Client Sample ID: L508226-01 MW-7C — **Lab Sample ID: 240-230513-1**

No Detections.

Client Sample ID: L508226-02 MW-8 — **Lab Sample ID: 240-230513-2**

No Detections.

Client Sample ID: L508226-03 MW-9 — **Lab Sample ID: 240-230513-3**

No Detections.

Client Sample ID: L508226-04 MW-10 — **Lab Sample ID: 240-230513-4**

No Detections.

Client Sample ID: L508226-05 MW-15 — **Lab Sample ID: 240-230513-5**

No Detections.

Client Sample ID: L508226-06 MW-100A — **Lab Sample ID: 240-230513-6**

No Detections.

Client Sample ID: L508226-07 MW-100B — **Lab Sample ID: 240-230513-7**

No Detections.

Client Sample ID: L508226-08 MW-100C — **Lab Sample ID: 240-230513-8**

No Detections.

Client Sample ID: L508226-09 MW-100D — **Lab Sample ID: 240-230513-9**

No Detections.

Client Sample ID: L508226-10 MWT-100C — **Lab Sample ID: 240-230513-10**

No Detections.

Client Sample ID: L508226-11 FIELD BLANK — **Lab Sample ID: 240-230513-11**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508226-01 MW-7C

Date Collected: 08/07/25 16:09
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-1

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.237	U	0.183	0.185	1.00	0.269	pCi/L	08/13/25 08:19	09/05/25 07:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.6*		*30 - 110*	*08/13/25 08:19*	*09/05/25 07:35*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.00**		0.424	0.434	1.00	0.566	pCi/L	08/13/25 08:22	09/04/25 09:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.6*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:40*	*1*
Y Carrier	*83.4*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:40*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.24**		0.462	0.472	5.00	0.566	pCi/L		09/05/25 14:17	1

Client Sample ID: L508226-02 MW-8
Date Collected: 08/07/25 14:44
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-2
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0537	U	0.160	0.160	1.00	0.295	pCi/L	08/13/25 08:19	09/05/25 07:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.6*		*30 - 110*	*08/13/25 08:19*	*09/05/25 07:35*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.849**		0.399	0.406	1.00	0.546	pCi/L	08/13/25 08:22	09/04/25 09:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.6*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:40*	*1*
Y Carrier	*81.5*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:40*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.903**		0.430	0.436	5.00	0.546	pCi/L		09/05/25 14:17	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-2

Client Sample ID: L508226-03 MW-9
Date Collected: 08/07/25 13:24
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-3
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0871	U	0.165	0.165	1.00	0.292	pCi/L	08/13/25 08:19	09/05/25 07:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*30 - 110*	*08/13/25 08:19*	*09/05/25 07:35*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.702**		0.435	0.439	1.00	0.646	pCi/L	08/13/25 08:22	09/04/25 09:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:40*	*1*
Y Carrier	*77.8*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:40*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.789**		0.465	0.469	5.00	0.646	pCi/L		09/05/25 14:53	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-2

Client Sample ID: L508226-04 MW-10
Date Collected: 08/07/25 11:59
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-4
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0532	U	0.156	0.157	1.00	0.290	pCi/L	08/13/25 08:19	09/05/25 08:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.4*		*30 - 110*	*08/13/25 08:19*	*09/05/25 08:04*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.853**		0.431	0.438	1.00	0.600	pCi/L	08/13/25 08:22	09/04/25 09:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.4*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:41*	*1*
Y Carrier	*76.3*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:41*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.906**		0.458	0.465	5.00	0.600	pCi/L		09/05/25 14:53	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-2

Client Sample ID: L508226-05 MW-15

Date Collected: 08/07/25 10:15
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-5

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0607	U	0.127	0.127	1.00	0.231	pCi/L	08/13/25 08:19	09/05/25 09:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.8*		*30 - 110*	*08/13/25 08:19*	*09/05/25 09:21*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.806**		0.362	0.370	1.00	0.483	pCi/L	08/13/25 08:22	09/04/25 09:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.8*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:41*	*1*
Y Carrier	*85.6*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:41*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.867**		0.384	0.391	5.00	0.483	pCi/L		09/05/25 14:53	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-2

Client Sample ID: L508226-06 MW-100A
Date Collected: 08/07/25 15:55
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-6
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.259	U	0.210	0.212	1.00	0.319	pCi/L	08/13/25 08:19	09/05/25 09:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.1*		*30 - 110*	*08/13/25 08:19*	*09/05/25 09:21*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.11**		0.430	0.442	1.00	0.537	pCi/L	08/13/25 08:22	09/04/25 09:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.1*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:41*	*1*
Y Carrier	*75.5*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:41*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.37**		0.479	0.490	5.00	0.537	pCi/L		09/05/25 14:53	1

Client Sample ID: L508226-07 MW-100B

Date Collected: 08/07/25 11:54
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-7

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.389		0.209	0.212	1.00	0.273	pCi/L	08/13/25 08:19	09/05/25 09:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.3*		*30 - 110*	*08/13/25 08:19*	*09/05/25 09:21*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.27		0.455	0.470	1.00	0.572	pCi/L	08/13/25 08:22	09/04/25 09:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.3*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:41*	*1*
Y Carrier	*77.0*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:41*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.66		0.501	0.516	5.00	0.572	pCi/L		09/05/25 14:53	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-2

Client Sample ID: L508226-08 MW-100C
Date Collected: 08/07/25 13:19
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-8
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.250**		0.168	0.169	1.00	0.232	pCi/L	08/13/25 08:19	09/05/25 09:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.5*		*30 - 110*	*08/13/25 08:19*	*09/05/25 09:27*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.319	U	0.367	0.368	1.00	0.603	pCi/L	08/13/25 08:22	09/04/25 09:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.5*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:41*	*1*
Y Carrier	*78.9*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:41*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.569	U	0.404	0.405	5.00	0.603	pCi/L		09/05/25 14:53	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-2

Client Sample ID: L508226-09 MW-100D
Date Collected: 08/07/25 15:00
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-9
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0787	U	0.178	0.179	1.00	0.321	pCi/L	08/13/25 08:19	09/05/25 09:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.1*		*30 - 110*	*08/13/25 08:19*	*09/05/25 09:27*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.658**		0.429	0.433	1.00	0.644	pCi/L	08/13/25 08:22	09/04/25 09:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.1*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:41*	*1*
Y Carrier	*77.0*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:41*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.737**		0.464	0.469	5.00	0.644	pCi/L		09/05/25 14:53	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-2

Client Sample ID: L508226-10 MWT-100C
Date Collected: 08/07/25 13:19
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230513-10
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.174	U	0.164	0.164	1.00	0.254	pCi/L	08/13/25 08:19	09/05/25 09:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.8*		*30 - 110*	*08/13/25 08:19*	*09/05/25 09:28*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.977**		0.398	0.408	1.00	0.507	pCi/L	08/13/25 08:22	09/04/25 09:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.8*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:41*	*1*
Y Carrier	*78.1*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:41*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.15**		0.430	0.440	5.00	0.507	pCi/L		09/05/25 14:53	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-2

Client Sample ID: L508226-11 FIELD BLANK

Lab Sample ID: 240-230513-11

Date Collected: 08/07/25 09:00

Matrix: Water

Date Received: 08/09/25 08:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0387	U	0.123	0.123	1.00	0.270	pCi/L	08/13/25 08:19	09/05/25 09:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.8*		*30 - 110*	*08/13/25 08:19*	*09/05/25 09:28*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.182	U	0.376	0.377	1.00	0.650	pCi/L	08/13/25 08:22	09/04/25 09:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.8*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:41*	*1*
Y Carrier	*79.3*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:41*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.182	U	0.396	0.397	5.00	0.650	pCi/L		09/05/25 14:53	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water | **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-230513-1	L508226-01 MW-7C	90.6
240-230513-2	L508226-02 MW-8	90.6
240-230513-2 DU	L508226-02 MW-8	85.1
240-230513-3	L508226-03 MW-9	87.3
240-230513-4	L508226-04 MW-10	86.4
240-230513-5	L508226-05 MW-15	92.8
240-230513-6	L508226-06 MW-100A	89.1
240-230513-7	L508226-07 MW-100B	93.3
240-230513-8	L508226-08 MW-100C	97.5
240-230513-9	L508226-09 MW-100D	88.1
240-230513-10	L508226-10 MWT-100C	94.8
240-230513-11	L508226-11 FIELD BLANK	91.8
LCS 160-731800/2-A	Lab Control Sample	92.3
MB 160-731800/1-A	Method Blank	88.6

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water | **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)	
		Ba	Y
Lab Sample ID	Client Sample ID	(30-110)	(30-110)
240-230513-1	L508226-01 MW-7C	90.6	83.4
240-230513-2	L508226-02 MW-8	90.6	81.5
240-230513-2 DU	L508226-02 MW-8	85.1	82.6
240-230513-3	L508226-03 MW-9	87.3	77.8
240-230513-4	L508226-04 MW-10	86.4	76.3
240-230513-5	L508226-05 MW-15	92.8	85.6
240-230513-6	L508226-06 MW-100A	89.1	75.5
240-230513-7	L508226-07 MW-100B	93.3	77.0
240-230513-8	L508226-08 MW-100C	97.5	78.9
240-230513-9	L508226-09 MW-100D	88.1	77.0
240-230513-10	L508226-10 MWT-100C	94.8	78.1
240-230513-11	L508226-11 FIELD BLANK	91.8	79.3
LCS 160-731801/2-A	Lab Control Sample	92.3	80.0
MB 160-731801/1-A	Method Blank	88.6	77.8

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-731800/1-A
Matrix: Water
Analysis Batch: 734919

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 731800

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.04226	U	0.143	0.143	1.00	0.302	pCi/L	08/13/25 08:19	09/05/25 07:34	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*30 - 110*	*08/13/25 08:19*	*09/05/25 07:34*	*1*

Lab Sample ID: LCS 160-731800/2-A
Matrix: Water
Analysis Batch: 734919

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 731800

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.57	9.202		1.15	1.00	0.298	pCi/L	96	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*92.3*		*30 - 110*

Lab Sample ID: 240-230513-2 DU
Matrix: Water
Analysis Batch: 734919

Client Sample ID: L508226-02 MW-8
Prep Type: Total/NA
Prep Batch: 731800

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.0537	U		0.0000	U	0.145	1.00	0.293	pCi/L			0.18	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*85.1*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-731801/1-A
Matrix: Water
Analysis Batch: 734807

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 731801

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5927		0.391	0.394	1.00	0.584	pCi/L	08/13/25 08:22	09/04/25 09:40	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:40*	*1*
Y Carrier	*77.8*		*30 - 110*	*08/13/25 08:22*	*09/04/25 09:40*	*1*

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-731801/2-A
Matrix: Water
Analysis Batch: 734807

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 731801

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.10	11.95		1.53	1.00	0.491	pCi/L	131	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*92.3*		*30 - 110*
Y Carrier	*80.0*		*30 - 110*

Lab Sample ID: 240-230513-2 DU
Matrix: Water
Analysis Batch: 734807

Client Sample ID: L508226-02 MW-8
Prep Type: Total/NA
Prep Batch: 731801

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.849			0.9289		0.432	1.00	0.575	pCi/L			0.1	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*85.1*		*30 - 110*
Y Carrier	*82.6*		*30 - 110*

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-2

Rad

Prep Batch: 731800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-1	L508226-01 MW-7C	Total/NA	Water	PrecSep-21	
240-230513-2	L508226-02 MW-8	Total/NA	Water	PrecSep-21	
240-230513-3	L508226-03 MW-9	Total/NA	Water	PrecSep-21	
240-230513-4	L508226-04 MW-10	Total/NA	Water	PrecSep-21	
240-230513-5	L508226-05 MW-15	Total/NA	Water	PrecSep-21	
240-230513-6	L508226-06 MW-100A	Total/NA	Water	PrecSep-21	
240-230513-7	L508226-07 MW-100B	Total/NA	Water	PrecSep-21	
240-230513-8	L508226-08 MW-100C	Total/NA	Water	PrecSep-21	
240-230513-9	L508226-09 MW-100D	Total/NA	Water	PrecSep-21	
240-230513-10	L508226-10 MWT-100C	Total/NA	Water	PrecSep-21	
240-230513-11	L508226-11 FIELD BLANK	Total/NA	Water	PrecSep-21	
MB 160-731800/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-731800/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-230513-2 DU	L508226-02 MW-8	Total/NA	Water	PrecSep-21	

Prep Batch: 731801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230513-1	L508226-01 MW-7C	Total/NA	Water	PrecSep_0	
240-230513-2	L508226-02 MW-8	Total/NA	Water	PrecSep_0	
240-230513-3	L508226-03 MW-9	Total/NA	Water	PrecSep_0	
240-230513-4	L508226-04 MW-10	Total/NA	Water	PrecSep_0	
240-230513-5	L508226-05 MW-15	Total/NA	Water	PrecSep_0	
240-230513-6	L508226-06 MW-100A	Total/NA	Water	PrecSep_0	
240-230513-7	L508226-07 MW-100B	Total/NA	Water	PrecSep_0	
240-230513-8	L508226-08 MW-100C	Total/NA	Water	PrecSep_0	
240-230513-9	L508226-09 MW-100D	Total/NA	Water	PrecSep_0	
240-230513-10	L508226-10 MWT-100C	Total/NA	Water	PrecSep_0	
240-230513-11	L508226-11 FIELD BLANK	Total/NA	Water	PrecSep_0	
MB 160-731801/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-731801/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-230513-2 DU	L508226-02 MW-8	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-2

Client Sample ID: L508226-01 MW-7C

Lab Sample ID: 240-230513-1

Date Collected: 08/07/25 16:09
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731800	JTR	EET SL	08/13/25 08:19
Total/NA	Analysis	903.0		1	734919	SWS	EET SL	09/05/25 07:35
Total/NA	Prep	PrecSep_0			731801	JTR	EET SL	08/13/25 08:22
Total/NA	Analysis	904.0		1	734807	SWS	EET SL	09/04/25 09:40
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 14:17

Client Sample ID: L508226-02 MW-8

Lab Sample ID: 240-230513-2

Date Collected: 08/07/25 14:44
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731800	JTR	EET SL	08/13/25 08:19
Total/NA	Analysis	903.0		1	734919	SWS	EET SL	09/05/25 07:35
Total/NA	Prep	PrecSep_0			731801	JTR	EET SL	08/13/25 08:22
Total/NA	Analysis	904.0		1	734807	SWS	EET SL	09/04/25 09:40
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 14:17

Client Sample ID: L508226-03 MW-9

Lab Sample ID: 240-230513-3

Date Collected: 08/07/25 13:24
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731800	JTR	EET SL	08/13/25 08:19
Total/NA	Analysis	903.0		1	734919	SWS	EET SL	09/05/25 07:35
Total/NA	Prep	PrecSep_0			731801	JTR	EET SL	08/13/25 08:22
Total/NA	Analysis	904.0		1	734807	SWS	EET SL	09/04/25 09:40
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 14:53

Client Sample ID: L508226-04 MW-10

Lab Sample ID: 240-230513-4

Date Collected: 08/07/25 11:59
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731800	JTR	EET SL	08/13/25 08:19
Total/NA	Analysis	903.0		1	734919	SWS	EET SL	09/05/25 08:04
Total/NA	Prep	PrecSep_0			731801	JTR	EET SL	08/13/25 08:22
Total/NA	Analysis	904.0		1	734807	SWS	EET SL	09/04/25 09:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 14:53

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-2

Client Sample ID: L508226-05 MW-15

Lab Sample ID: 240-230513-5

Date Collected: 08/07/25 10:15
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731800	JTR	EET SL	08/13/25 08:19
Total/NA	Analysis	903.0		1	734901	SWS	EET SL	09/05/25 09:21
Total/NA	Prep	PrecSep_0			731801	JTR	EET SL	08/13/25 08:22
Total/NA	Analysis	904.0		1	734807	SWS	EET SL	09/04/25 09:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 14:53

Client Sample ID: L508226-06 MW-100A

Lab Sample ID: 240-230513-6

Date Collected: 08/07/25 15:55
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731800	JTR	EET SL	08/13/25 08:19
Total/NA	Analysis	903.0		1	734901	SWS	EET SL	09/05/25 09:21
Total/NA	Prep	PrecSep_0			731801	JTR	EET SL	08/13/25 08:22
Total/NA	Analysis	904.0		1	734807	SWS	EET SL	09/04/25 09:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 14:53

Client Sample ID: L508226-07 MW-100B

Lab Sample ID: 240-230513-7

Date Collected: 08/07/25 11:54
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731800	JTR	EET SL	08/13/25 08:19
Total/NA	Analysis	903.0		1	734901	SWS	EET SL	09/05/25 09:21
Total/NA	Prep	PrecSep_0			731801	JTR	EET SL	08/13/25 08:22
Total/NA	Analysis	904.0		1	734807	SWS	EET SL	09/04/25 09:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 14:53

Client Sample ID: L508226-08 MW-100C

Lab Sample ID: 240-230513-8

Date Collected: 08/07/25 13:19
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731800	JTR	EET SL	08/13/25 08:19
Total/NA	Analysis	903.0		1	734903	SWS	EET SL	09/05/25 09:27
Total/NA	Prep	PrecSep_0			731801	JTR	EET SL	08/13/25 08:22
Total/NA	Analysis	904.0		1	734807	SWS	EET SL	09/04/25 09:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 14:53

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-2

Client Sample ID: L508226-09 MW-100D

Lab Sample ID: 240-230513-9

Date Collected: 08/07/25 15:00
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731800	JTR	EET SL	08/13/25 08:19
Total/NA	Analysis	903.0		1	734903	SWS	EET SL	09/05/25 09:27
Total/NA	Prep	PrecSep_0			731801	JTR	EET SL	08/13/25 08:22
Total/NA	Analysis	904.0		1	734807	SWS	EET SL	09/04/25 09:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 14:53

Client Sample ID: L508226-10 MWT-100C

Lab Sample ID: 240-230513-10

Date Collected: 08/07/25 13:19
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731800	JTR	EET SL	08/13/25 08:19
Total/NA	Analysis	903.0		1	734903	SWS	EET SL	09/05/25 09:28
Total/NA	Prep	PrecSep_0			731801	JTR	EET SL	08/13/25 08:22
Total/NA	Analysis	904.0		1	734807	SWS	EET SL	09/04/25 09:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 14:53

Client Sample ID: L508226-11 FIELD BLANK

Lab Sample ID: 240-230513-11

Date Collected: 08/07/25 09:00
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731800	JTR	EET SL	08/13/25 08:19
Total/NA	Analysis	903.0		1	734903	SWS	EET SL	09/05/25 09:28
Total/NA	Prep	PrecSep_0			731801	JTR	EET SL	08/13/25 08:22
Total/NA	Analysis	904.0		1	734807	SWS	EET SL	09/04/25 09:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 14:53

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230513-2

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25 *
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25 *
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-30-25 *
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6462

Email:
Jennifer.Caporale@LBWL.com; Environmental_Laboratory@

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Project Manager:
Howell, Leslie

Purchase Order:
Purchase Order not required

Project Reference:

Work Order:

Sampler:
Marc Wahrer, Julie Maltby

Requested TAT:

Description:
Erickson 8-7-25

Project Number:
24034575

Site Name:
Erickson Projects

Sample State: MI

Special Instructions:
Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner. Please add Na and K metals

See following pages for Method and Container information.

240-230513 COC

G128,

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L508226-01 MW-7C	Grab	Water	08/07/25 16:09			
2	L508226-02 MW-8	Grab	Water	08/07/25 14:44			
3	L508226-03 MW-9	Grab	Water	08/07/25 13:24			
4	L508226-04 MW-10	Grab	Water	08/07/25 11:59			
5	L508226-05 MW-15	Grab	Water	08/07/25 10:15			
6	L508226-06 MW-100A	Grab	Water	08/07/25 15:55			
7	L508226-07 MW-100B	Grab	Water	08/07/25 11:54			
8	L508226-08 MW-100C	Grab	Water	08/07/25 13:19			
9	L508226-09 MW-100D	Grab	Water	08/07/25 15:00			
10	L508226-10 MWT-100C	Grab	Water	08/07/25 13:19			
11	L508226-11 Field Blank	Grab	Water	08/07/25 09:00			

Rinsha 8/9/25 0800

Chain of Custody Number: **403152**

*H – Analysis on hold.

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By	Date/Time:	Samples Relinquished By	Date/Time:		
Jennifer Caporale	08/08/25 13:55	Jennifer Caporale	08/08/25 13.55		

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250808A001								
MIC20250808A001								
MIC20250808A003								
MIC20250808A003								

Ransley 8/9/25 0820

Chain of Custody Number: 403152

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																				
#	Sample Name	200.7 Rev 4.4 / Metals (ICP) / Total Na & K	200 7 R4.4-1994 / Metals (ICP) / Total Boron	300 0-1993 R2.1 / Anions, Ion Chromatography / Chloride, Fluor	245.1 1994 R3.0 / Mercury (CVAA) / Mercury	200.8 / Metals (ICP/MS) / Custom List 2· 2-3 Metals	904 0 / Radium-228 (GFPC) / Standard Target List	200 7 Rev 4.4 / Metals (ICP) / Iron & Zinc	2320 B-2021 / Alkalinity / Bicarbonate & Carbonate Alkalinity	200.8 / Metals (ICP/MS) / Custom List 1 1 Metals	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	903.0 / Radium-226 (GFPC) / Standard Target List	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	2540 C-2020 / Solids Total Dissolved (TDS) / Total Dissolved S	200.8 / Metals (ICP/MS) / Iron & Zinc	2340 B-2021 / Total Hardness (as CaCO3) by calculation	2540D-2020 / Solids Total Suspended (TSS)	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228				
1	L508226-01 MW-7C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
2	L508226-02 MW-8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
3	L508226-03 MW-9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
4	L508226-04 MW-10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
5	L508226-05 MW-15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
6	L508226-06 MW-100A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
7	L508226-07 MW-100B	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
8	L508226-08 MW-100C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
9	L508226-09 MW-100D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
10	L508226-10 MWT-100C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
11	L508226-11 Field Blank	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				

Ron Sk 8/4/25 0800

Chain of Custody Number 403152

Chain of Custody Bottles

eurofins | Environment Testing

Bottle Name	Total Bottles
Plastic 500ml unpreserved	12
Plastic 500ml - with Nitric Acid	12
Plastic 1 liter Nitric Acid	24
Plastic 60 mL - unpreserved	24
Plastic 250ml with Nitric Acid	12
Plastic 1 liter - unpreserved	12

Samples		Bottles																				
#	Sample Name	Total Bottles For Sample	Plastic 500ml unpreserved	Plastic 500ml with Nitric Acid	Plastic 1 liter Nitric Acid	Plastic 60 mL unpreserved	Plastic 250ml with Nitric Acid	Plastic 1 liter unpreserved														
1	L508226-01 MW-7C	8	1	1	2	2	1	1														
2	L508226-02 MW-8	8	1	1	2	2	1	1														
3	L508226-03 MW-9	8	1	1	2	2	1	1														
4	L508226-04 MW-10	8	1	1	2	2	1	1														
5	L508226-05 MW-15	8	1	1	2	2	1	1														
6	L508226-06 MW-100A	8	1	1	2	2	1	1														
7	L508226-07 MW-100B	8	1	1	2	2	1	1														
8	L508226-08 MW-100C	8	1	1	2	2	1	1														
9	L508226-09 MW-100D	8	1	1	2	2	1	1														
10	L508226-10 MWT-100C	8	1	1	2	2	1	1														
11	L508226-11 Field Blank	8	1	1	2	2	1	1														

Ron Sloa 8/9/25 0800

Chain of Custody Number 403152

Ron Sley 8/9/25 0800

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Lansing Board Site Name _____ Cooler unpacked by:

Cooler Received on 8/9/25 Opened on 8/9/25

FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # 1EC Foam Box Client Cooler Box Other _____

Packing material used. Bubble Wrap Foam Plastic Bag None Other _____

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # _____ (CF _____ °C) Observed Cooler Temp _____ °C Corrected Cooler Temp _____ °C

2	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes No
	Were the seals on the outside of the cooler(s) signed & dated?	Yes No NA
	-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes No
	-Were tamper/custody seals intact and uncompromised?	Yes No NA
3	Shippers' packing slip attached to the cooler(s)?	Yes No
4	Did custody papers accompany the sample(s)?	Yes No
5	Were the custody papers relinquished & signed in the appropriate place?	Yes No
6	Was/were the person(s) who collected the samples clearly identified on the COC?	Yes No
7	Did all bottles arrive in good condition (Unbroken)?	Yes No
8	Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes No
9	For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?	
10	Were correct bottle(s) used for the test(s) indicated?	Yes No
11	Sufficient quantity received to perform indicated analyses?	Yes No
12	Are these work share samples and all listed on the COC?	Yes No
	If yes, Questions 13 17 have been checked at the originating laboratory	
13	Were all preserved sample(s) at the correct pH upon receipt?	Yes No NA pH Strip Lot# HC463162
14	Were VOAs on the COC?	Yes No
15	Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes No NA
16	Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes No
17	Was a LL Hg or Me Hg trip blank present? _____	Yes No

Tests that are not checked for pH by Receiving.

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18 CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by

Labels Verified by:

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20 SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation Date/Time VOAs Frozen _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	0.0	0.5	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 13	0.4	0.9	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 13	3.5	3.9	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 13	0.1	0.6	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice

8/9/2025

Login Container Summary Report

240-230513

9/5/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508226-01 MW-7C	240-230513 A-1	Plastic 60 mL - unpreserved				
L508226-01 MW-7C	240-230513-B-1	Plastic 60 mL - unpreserved				
L508226-01 MW 7C	240-230513-C-1	Plastic 250ml - with Nitric Acid	<2			
L508226-01 MW-7C	240-230513-D-1	Plastic 500ml - unpreserved				
L508226-01 MW-7C	240-230513-E-1	Plastic 500ml - with Nitric Acid	<2			
L508226-01 MW-7C	240-230513-F-1	Plastic 1 liter - unpreserved				
L508226-01 MW-7C	240-230513-G-1	Plastic 1 liter - Nitric Acid	<2			
L508226-01 MW-7C	240-230513-H-1	Plastic 1 liter - Nitric Acid	<2			
L508226-02 MW-8	240-230513-A 2	Plastic 60 mL - unpreserved				
L508226-02 MW-8	240-230513-B-2	Plastic 60 mL - unpreserved				
L508226-02 MW-8	240-230513-C-2	Plastic 250ml - with Nitric Acid	<2			
L508226-02 MW-8	240-230513-D-2	Plastic 500ml - unpreserved				
L508226-02 MW-8	240-230513-E-2	Plastic 500ml - with Nitric Acid	<2			
L508226-02 MW-8	240-230513 F-2	Plastic 1 liter - unpreserved				
L508226-02 MW-8	240-230513-G-2	Plastic 1 liter - Nitric Acid	<2			
L508226-02 MW-8	240-230513-H 2	Plastic 1 liter - Nitric Acid	<2			
L508226-03 MW-9	240-230513-A 3	Plastic 60 mL - unpreserved				
L508226-03 MW-9	240-230513-B-3	Plastic 60 mL - unpreserved				
L508226-03 MW-9	240-230513-C-3	Plastic 250ml - with Nitric Acid	<2			
L508226-03 MW-9	240-230513 D-3	Plastic 500ml - unpreserved				
L508226-03 MW-9	240-230513-E-3	Plastic 500ml - with Nitric Acid	<2			
L508226-03 MW-9	240-230513 F-3	Plastic 1 liter - unpreserved				
L508226-03 MW-9	240-230513-G-3	Plastic 1 liter - Nitric Acid	<2			
L508226-03 MW-9	240-230513 H-3	Plastic 1 liter Nitric Acid	<2			
L508226-04 MW-10	240-230513-A-4	Plastic 60 mL - unpreserved				
L508226-04 MW 10	240-230513-B-4	Plastic 60 mL - unpreserved				
L508226-04 MW-10	240-230513-C-4	Plastic 250ml - with Nitric Acid	<2			
L508226-04 MW 10	240-230513-D-4	Plastic 500ml - unpreserved				
L508226-04 MW-10	240-230513 E-4	Plastic 500ml - with Nitric Acid	<2			
L508226-04 MW 10	240-230513-F-4	Plastic 1 liter - unpreserved				
L508226-04 MW-10	240-230513-G-4	Plastic 1 liter - Nitric Acid	<2			
L508226-04 MW 10	240-230513-H-4	Plastic 1 liter - Nitric Acid	<2			
L508226-05 MW-15	240-230513-A-5	Plastic 60 mL unpreserved				
L508226-05 MW 15	240-230513-B-5	Plastic 60 mL - unpreserved				
L508226-05 MW-15	240-230513-C-5	Plastic 250ml with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508226-05 MW 15	240-230513-D-5	Plastic 500ml - unpreserved				
L508226-05 MW-15	240-230513-E-5	Plastic 500ml with Nitric Acid	<2			
L508226-05 MW-15	240-230513-F-5	Plastic 1 liter - unpreserved				
L508226-05 MW-15	240-230513-G-5	Plastic 1 liter Nitric Acid	<2			
L508226-05 MW-15	240-230513-H 5	Plastic 1 liter - Nitric Acid	<2			
L508226-06 MW-100A	240 230513-A-6	Plastic 60 mL - unpreserved				
L508226-06 MW 100A	240 230513-B-6	Plastic 60 mL - unpreserved				
L508226-06 MW-100A	240-230513-C-6	Plastic 250ml - with Nitric Acid	<2			
L508226-06 MW-100A	240-230513-D-6	Plastic 500ml - unpreserved				
L508226-06 MW 100A	240-230513-E-6	Plastic 500ml - with Nitric Acid	<2			
L508226-06 MW-100A	240-230513-F-6	Plastic 1 liter unpreserved				
L508226-06 MW-100A	240-230513-G-6	Plastic 1 liter - Nitric Acid	<2			
L508226-06 MW-100A	240-230513-H-6	Plastic 1 liter - Nitric Acid	<2			
L508226-07 MW-100B	240-230513-A 7	Plastic 60 mL - unpreserved				
L508226-07 MW-100B	240-230513-B-7	Plastic 60 mL unpreserved				
L508226-07 MW-100B	240-230513-C-7	Plastic 250ml - with Nitric Acid	<2			
L508226-07 MW-100B	240-230513 D-7	Plastic 500ml unpreserved				
L508226-07 MW 100B	240-230513-E-7	Plastic 500ml - with Nitric Acid	<2			
L508226-07 MW-100B	240-230513-F 7	Plastic 1 liter unpreserved				
L508226-07 MW-100B	240-230513-G-7	Plastic 1 liter - Nitric Acid	<2			
L508226-07 MW-100B	240-230513-H 7	Plastic 1 liter - Nitric Acid	<2			
L508226-08 MW-100C	240-230513-A-8	Plastic 60 mL - unpreserved				
L508226-08 MW-100C	240-230513-B-8	Plastic 60 mL - unpreserved				
L508226-08 MW-100C	240 230513-C-8	Plastic 250ml - with Nitric Acid	<2			
L508226-08 MW-100C	240-230513-D-8	Plastic 500ml unpreserved				
L508226-08 MW-100C	240-230513 E-8	Plastic 500ml - with Nitric Acid	<2			
L508226-08 MW-100C	240-230513-F-8	Plastic 1 liter unpreserved				
L508226-08 MW-100C	240-230513-G-8	Plastic 1 liter - Nitric Acid	<2			
L508226-08 MW-100C	240-230513-H-8	Plastic 1 liter Nitric Acid	<2			
L508226-09 MW-100D	240-230513-A-9	Plastic 60 mL - unpreserved				
L508226-09 MW-100D	240-230513-B-9	Plastic 60 mL unpreserved				
L508226-09 MW-100D	240-230513-C-9	Plastic 250ml - with Nitric Acid	<2			
L508226-09 MW-100D	240-230513 D-9	Plastic 500ml - unpreserved				
L508226-09 MW 100D	240 230513-E-9	Plastic 500ml - with Nitric Acid	<2			
L508226-09 MW-100D	240-230513-F-9	Plastic 1 liter unpreserved				
L508226-09 MW-100D	240-230513-G-9	Plastic 1 liter - Nitric Acid	<2			
L508226-09 MW-100D	240-230513 H-9	Plastic 1 liter - Nitric Acid	<2			
L508226-10 MWT-100C	240-230513-A 10	Plastic 60 mL - unpreserved				

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508226-10 MWT-100C	240-230513 B-10	Plastic 60 mL - unpreserved				
L508226-10 MWT 100C	240-230513-C-10	Plastic 250ml - with Nitric Acid	<2			
L508226-10 MWT-100C	240-230513-D-10	Plastic 500ml - unpreserved				
L508226-10 MWT-100C	240-230513 E-10	Plastic 500ml - with Nitric Acid	<2			
L508226-10 MWT-100C	240-230513-F-10	Plastic 1 liter - unpreserved				
L508226-10 MWT-100C	240-230513-G-10	Plastic 1 liter - Nitric Acid	<2			
L508226-10 MWT 100C	240-230513 H-10	Plastic 1 liter - Nitric Acid	<2			
L508226-11 FIELD BLANK	240-230513-A 11	Plastic 60 mL - unpreserved				
L508226-11 FIELD BLANK	240-230513-B-11	Plastic 60 mL - unpreserved				
L508226-11 FIELD BLANK	240-230513-C-11	Plastic 250ml - with Nitric Acid	<2			
L508226-11 FIELD BLANK	240-230513 D-11	Plastic 500ml - unpreserved				
L508226-11 FIELD BLANK	240-230513-E-11	Plastic 500ml - with Nitric Acid	<2			
L508226-11 FIELD BLANK	240-230513-F 11	Plastic 1 liter - unpreserved				
L508226-11 FIELD BLANK	240-230513-G-11	Plastic 1 liter - Nitric Acid	<2			
L508226-11 FIELD BLANK	240-230513 H-11	Plastic 1 liter Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-206254.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-230513-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 8/25/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21Standard Target List	904.0/PrecSep_0Standard Target List	Ra226_228GFPC_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L508226-01 MW-7C (240-230513-1)	8/7/25	16:09 Eastern	G	Water			X	X	X	2	
L508226-02 MW-8 (240-230513-2)	8/7/25	14:44 Eastern	G	Water			X	X	X	2	
L508226-03 MW-9 (240-230513-3)	8/7/25	13:24 Eastern	G	Water			X	X	X	2	
L508226-04 MW-10 (240-230513-4)	8/7/25	11:59 Eastern	G	Water			X	X	X	2	
L508226-05 MW-15 (240-230513-5)	8/7/25	10:15 Eastern	G	Water			X	X	X	2	
L508226-06 MW-100A (240-230513-6)	8/7/25	15:55 Eastern	G	Water			X	X	X	2	
L508226-07 MW-100B (240-230513-7)	8/7/25	11:54 Eastern	G	Water			X	X	X	2	
L508226-08 MW-100C (240-230513-8)	8/7/25	13:19 Eastern	G	Water			X	X	X	2	
L508226-09 MW-100D (240-230513-9)	8/7/25	15:00 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8/11/25	ET		0830 AUG 12 2025	
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-206254.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-230513-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 8/25/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21Standard Target List	904.0/PrecSep_0Standard Target List	Ra226_228GFPC_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L508226-10 MWT-100C (240-230513-10)	8/7/25	13:19 Eastern	G	Water			X	X	X	2	
L508226-11 FIELD BLANK (240-230513-11)	8/7/25	09:00 Eastern	G	Water			X	X	X	2	

Analysis Requested

Preservation Codes: -

Other: N/A

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 8/11/25	Company EC	Received by: Date/Time: 0830 AUG 12 2025 Company
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest Date/Time: Company
Relinquished by:	Date/Time:	Company	Received by: Date/Time: Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-230513-2

Login Number: 230513
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 08/12/25 11:20 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 8/18/2025 3:14:06 PM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-230530-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

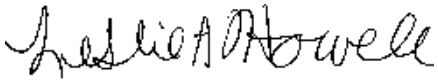
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
8/18/2025 3:14:06 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 16
QC Sample Results 40
QC Association Summary 51
Lab Chronicle 58
Certification Summary 65
Chain of Custody 66
Receipt Checklists 79

Client: Lansing Board of Water & Light
Job ID: 240-230530-1
Project/Site: Erickson Projects

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-230530-1 — Eurofins Cleveland

Job Narrative
240-230530-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 8/9/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.6°C, 0.7°C, 2.9°C and 4.6°C.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 2540D: The sample duplicate (DUP) precision for analytical batch 240-667308 was outside control limits. Sample non-homogeneity is suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.7 Rev 4.4	Metals (ICP)	EPA	EET SSM
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.7	Preparation, Total Metals	EPA	EET SSM
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-230530-1	L508217-01 MW-1	Water	08/06/25 07:43	08/09/25 08:00	Michigan
240-230530-2	L508217-08 MW-12	Water	08/06/25 13:38	08/09/25 08:00	Michigan
240-230530-3	L508217-09 MW-12B	Water	08/06/25 15:18	08/09/25 08:00	Michigan
240-230530-4	L508217-10 MW-14	Water	08/06/25 09:27	08/09/25 08:00	Michigan
240-230530-5	L508217-11 MWT-6	Water	08/06/25 11:14	08/09/25 08:00	Michigan
240-230530-6	L508217-12 FIELD BLANK	Water	08/06/25 07:45	08/09/25 08:00	Michigan
240-230530-7	L508217-02 MW-2	Water	08/06/25 13:39	08/09/25 08:00	Michigan
240-230530-8	L508217-03 MW-3	Water	08/06/25 15:37	08/09/25 08:00	Michigan
240-230530-9	L508217-04 MW-5	Water	08/06/25 16:12	08/09/25 08:00	Michigan
240-230530-10	L508217-05 MW-6	Water	08/06/25 11:14	08/09/25 08:00	Michigan
240-230530-11	L508217-06 MW-11	Water	08/06/25 11:18	08/09/25 08:00	Michigan
240-230530-12	L508217-07 MW-11B	Water	08/06/25 12:40	08/09/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Client Sample ID: L508217-01 MW-1 — Lab Sample ID: 240-230530-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.095	J	0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	1.0	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	22		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0052	B	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.081		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.000099	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.0021		0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0017	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0020		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	170		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	55		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.0056	J	0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	5.5		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	660		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	540		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	740		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	13		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	33		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.11		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	76		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508217-08 MW-12 — Lab Sample ID: 240-230530-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.075	J	0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Boron, Dissolved	76	J	100	57	ug/L	1		200.7 R4.4-1994	Dissolved
K	2.3	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	95		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Potassium, Dissolved	2.1	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Dissolved
Sodium, Dissolved	95		0.60	0.33	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic	0.0025	J B	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.049		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.0019		0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0038	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.012		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lead	0.00053	J	0.0010	0.00045	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	160		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508217-08 MW-12 (Continued)

Lab Sample ID: 240-230530-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	62		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.017		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Arsenic, Dissolved	2.4	J B	5.0	0.75	ug/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	46		5.0	0.77	ug/L	1		200.8-1994 R5.4	Dissolved
Beryllium, Dissolved	0.28	J	1.0	0.27	ug/L	1		200.8-1994 R5.4	Dissolved
Cadmium, Dissolved	0.14	J	1.0	0.077	ug/L	1		200.8-1994 R5.4	Dissolved
Cobalt, Dissolved	1.9		1.0	0.086	ug/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	4.9	J	5.0	1.1	ug/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	11		2.0	1.5	ug/L	1		200.8-1994 R5.4	Dissolved
Thallium, Dissolved	0.52	J	1.0	0.51	ug/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	150000		1000	250	ug/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	61000		1000	61	ug/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	18		8.0	3.4	ug/L	1		200.8-1994 R5.4	Dissolved
Iron	2.3		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0042	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Iron, Dissolved	0.87	B	0.10	0.013	mg/L	1		200.8	Dissolved
Zinc, Dissolved	0.0021	J B	0.0070	0.00093	mg/L	1		200.8	Dissolved
Hardness as calcium carbonate	660		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	550		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	860		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	5.2		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	53		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.14		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	160		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508217-09 MW-12B

Lab Sample ID: 240-230530-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.9		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	7.7		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	110		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.024		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	24		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	7.6		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.039		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.20	B	0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0023	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	93		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	320		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	350		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	1.2	F1 F2	1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.76	F1 F2	0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	0.45	J F1 F2	1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Client Sample ID: L508217-10 MW-14 — Lab Sample ID: 240-230530-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.9		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	4.6		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	73		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0067	B	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.12		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00053	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.010		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0041		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Vanadium	0.0015	J	0.0050	0.00082	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	160		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	44		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.092		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	15	B	0.50	0.067	mg/L	5		200.8	Total/NA
Hardness as calcium carbonate	580		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	550		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	730		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	28		6.7	0.67	mg/L	1		2540D-2020	Total/NA
Chloride	110		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.19		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	5.0		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508217-11 MWT-6 — Lab Sample ID: 240-230530-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.80		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	6.8		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	30		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.051		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00037	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.012		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0018	J	0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	180		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	38		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.046		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.017	J B	0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.00099	J B	0.0070	0.00093	mg/L	1		200.8	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Client Sample ID: L508217-11 MWT-6 (Continued) — Lab Sample ID: 240-230530-5

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Hardness as calcium carbonate	600		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	430		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	750		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.60	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	41		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.22		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	170		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508217-12 FIELD BLANK — Lab Sample ID: 240-230530-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic, Dissolved	0.77	J B	5.0	0.75	ug/L	1		200.8-1994 R5.4	Dissolved

Client Sample ID: L508217-02 MW-2 — Lab Sample ID: 240-230530-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.4		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Boron, Dissolved	3200		100	57	ug/L	1		200.7 R4.4-1994	Dissolved
K	0.83	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	49		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Potassium, Dissolved	0.68	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Dissolved
Sodium, Dissolved	50		0.60	0.33	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic	0.0011	J B	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.042		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.00013	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.0039		0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0064		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.014		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	200		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	51		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.039		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Arsenic, Dissolved	0.96	J B	5.0	0.75	ug/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	41		5.0	0.77	ug/L	1		200.8-1994 R5.4	Dissolved
Cadmium, Dissolved	0.13	J	1.0	0.077	ug/L	1		200.8-1994 R5.4	Dissolved
Cobalt, Dissolved	3.8		1.0	0.086	ug/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	6.7		5.0	1.1	ug/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	14		2.0	1.5	ug/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	190000		1000	250	ug/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	49000		1000	61	ug/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	38		8.0	3.4	ug/L	1		200.8-1994 R5.4	Dissolved
Iron	0.28		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0021	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Iron, Dissolved	0.036	J	0.10	0.013	mg/L	1		200.8	Dissolved
Zinc, Dissolved	0.0012	J	0.0070	0.00093	mg/L	1		200.8	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508217-02 MW-2 (Continued) — Lab Sample ID: 240-230530-7

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Hardness as calcium carbonate	700		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	460		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	860		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	7.0		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	70		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.052		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	220		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L508217-03 MW-3 — Lab Sample ID: 240-230530-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	5.9		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	1.4	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	110		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0031	J B	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.016		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00068	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Copper	0.0029		0.0020	0.0017	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.15		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0032		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lead	0.00067	J	0.0010	0.00045	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	220		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	44		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.083		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.4		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0023	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	740		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	190		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1100		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	2.9	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	90		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.16		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	640		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L508217-04 MW-5 — Lab Sample ID: 240-230530-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.0		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
Boron, Dissolved	2900		100	57	ug/L	1		200.7 R4.4-1994	Dissolved
K	3.6		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	37		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508217-04 MW-5 (Continued)

Lab Sample ID: 240-230530-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium, Dissolved	3.3		3.3	0.17	mg/L	1		200.7 Rev 4.4	Dissolved
Sodium, Dissolved	35		0.60	0.33	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic	0.00087	J B	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.038		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00031	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Copper	0.0018	J	0.0020	0.0017	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.078		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0035		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lead	0.00045	J	0.0010	0.00045	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	120		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	27		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.058		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Arsenic, Dissolved	1.1	J B	5.0	0.75	ug/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	34		5.0	0.77	ug/L	1		200.8-1994 R5.4	Dissolved
Cobalt, Dissolved	0.15	J	1.0	0.086	ug/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	77		5.0	1.1	ug/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	2.5		2.0	1.5	ug/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	120000		1000	250	ug/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	24000		1000	61	ug/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	56		8.0	3.4	ug/L	1		200.8-1994 R5.4	Dissolved
Iron	0.53		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0040	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Zinc, Dissolved	0.0015	J	0.0070	0.00093	mg/L	1		200.8	Dissolved
Hardness as calcium carbonate	420		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	540		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.6	J	8.0	0.80	mg/L	1		2540D-2020	Total/NA
Chloride	37		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.14		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	200		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508217-05 MW-6

Lab Sample ID: 240-230530-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.83		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	6.5		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	29		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.00075	J B	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.050		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00034	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508217-05 MW-6 (Continued)

Lab Sample ID: 240-230530-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Molybdenum	0.012		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0019	J	0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	180		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	37		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.047		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.028	J	0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0012	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	600		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	430		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	780		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.90	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	40		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.20		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	170		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508217-06 MW-11

Lab Sample ID: 240-230530-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.20		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	1.4	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	38		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.022	B	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.15		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00057	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0038	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Vanadium	0.0025	J	0.0050	0.00082	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	130		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	39		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	20		0.50	0.067	mg/L	5		200.8	Total/NA
Zinc	0.0014	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	500		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	470		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	540		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	46		10	1.0	mg/L	1		2540D-2020	Total/NA
Chloride	55		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.27		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Client Sample ID: L508217-07 MW-11B

Lab Sample ID: 240-230530-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.85		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	6.1		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	15		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0037	J B	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.069		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0023	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	65		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	23		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.034		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.63		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0035	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	260		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	270		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	16		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	250		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	2.4	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	0.96	J	1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.41		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	3.6		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508217-01 MW-1
Date Collected: 08/06/25 07:43
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-1
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.095	J	0.10	0.057	mg/L		08/12/25 14:00	08/14/25 03:50	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	1.0	J	3.3	0.17	mg/L		08/12/25 18:09	08/15/25 18:37	1
Na	22		0.60	0.33	mg/L		08/12/25 18:09	08/15/25 18:37	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 15:49	1
Arsenic	0.0052	B	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 15:49	1
Barium	0.081		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 15:49	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 15:49	1
Cadmium	0.000099	J	0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 15:49	1
Cobalt	0.0021		0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 15:49	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 15:49	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 15:49	1
Molybdenum	0.0017	J	0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 15:49	1
Nickel	0.0020		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 15:49	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 15:49	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 15:49	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 15:49	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 15:49	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 15:49	1
Calcium	170		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 15:49	1
Magnesium	55		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 15:49	1
Lithium	0.0056	J	0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 15:49	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	5.5		0.10	0.013	mg/L		08/12/25 18:09	08/13/25 14:50	1
Zinc	ND		0.0070	0.00093	mg/L		08/12/25 18:09	08/13/25 14:50	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	660		33	33	mg/L			08/18/25 05:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 13:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	540		5.0	2.6	mg/L			08/12/25 15:13	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 15:13	1
Total Dissolved Solids (SM 2540 C-2020)	740		10	7.8	mg/L			08/11/25 12:38	1
Total Suspended Solids (SM 2540D-2020)	13		4.0	0.40	mg/L			08/12/25 10:17	1
Chloride (EPA 300.0-1993 R2.1)	33		1.0	0.13	mg/L			08/11/25 23:53	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Client Sample ID: L508217-01 MW-1
Date Collected: 08/06/25 07:43
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-1
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.11		0.050	0.024	mg/L			08/11/25 23:53	1
Sulfate (EPA 300.0-1993 R2.1)	76		1.0	0.35	mg/L			08/11/25 23:53	1

Client Sample ID: L508217-08 MW-12
Date Collected: 08/06/25 13:38
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-2
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.075	J	0.10	0.057	mg/L		08/12/25 14:00	08/14/25 04:13	1

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	76	J	100	57	ug/L		08/12/25 14:00	08/14/25 04:26	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	2.3	J	3.3	0.17	mg/L		08/12/25 18:09	08/15/25 18:40	1
Na	95		0.60	0.33	mg/L		08/12/25 18:09	08/15/25 18:40	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium, Dissolved	2.1	J	3.3	0.17	mg/L		08/13/25 17:01	08/15/25 19:12	1
Sodium, Dissolved	95		0.60	0.33	mg/L		08/13/25 17:01	08/15/25 19:12	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 16:08	1
Arsenic	0.0025	J B	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 16:08	1
Barium	0.049		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 16:08	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 16:08	1
Cadmium	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 16:08	1
Cobalt	0.0019		0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 16:08	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 16:08	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 16:08	1
Molybdenum	0.0038	J	0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 16:08	1
Nickel	0.012		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 16:08	1
Lead	0.00053	J	0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 16:08	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 16:08	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 16:08	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 16:08	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 16:08	1
Calcium	160		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 16:08	1
Magnesium	62		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 16:08	1
Lithium	0.017		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 16:08	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver, Dissolved	ND		1.0	0.053	ug/L		08/12/25 14:00	08/14/25 16:16	1
Arsenic, Dissolved	2.4	J B	5.0	0.75	ug/L		08/12/25 14:00	08/14/25 16:16	1
Barium, Dissolved	46		5.0	0.77	ug/L		08/12/25 14:00	08/14/25 16:16	1
Beryllium, Dissolved	0.28	J	1.0	0.27	ug/L		08/12/25 14:00	08/14/25 16:16	1
Cadmium, Dissolved	0.14	J	1.0	0.077	ug/L		08/12/25 14:00	08/14/25 16:16	1
Cobalt, Dissolved	1.9		1.0	0.086	ug/L		08/12/25 14:00	08/14/25 16:16	1
Chromium, Dissolved	ND		5.0	1.2	ug/L		08/12/25 14:00	08/14/25 16:16	1
Copper, Dissolved	ND		2.0	1.7	ug/L		08/12/25 14:00	08/14/25 16:16	1
Molybdenum, Dissolved	4.9	J	5.0	1.1	ug/L		08/12/25 14:00	08/14/25 16:16	1
Nickel, Dissolved	11		2.0	1.5	ug/L		08/12/25 14:00	08/14/25 16:16	1
Lead, Dissolved	ND		1.0	0.45	ug/L		08/12/25 14:00	08/14/25 16:16	1
Antimony, Dissolved	ND		2.0	0.57	ug/L		08/12/25 14:00	08/14/25 16:16	1

Client Sample ID: L508217-08 MW-12
Date Collected: 08/06/25 13:38
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-2
Matrix: Water

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium, Dissolved	ND		5.0	0.89	ug/L		08/12/25 14:00	08/14/25 16:16	1
Thallium, Dissolved	**0.52**	**J**	1.0	0.51	ug/L		08/12/25 14:00	08/14/25 16:16	1
Vanadium, Dissolved	ND		5.0	0.82	ug/L		08/12/25 14:00	08/14/25 16:16	1
Calcium, Dissolved	**150000**		1000	250	ug/L		08/12/25 14:00	08/14/25 16:16	1
Magnesium, Dissolved	**61000**		1000	61	ug/L		08/12/25 14:00	08/14/25 16:16	1
Lithium, Dissolved	**18**		8.0	3.4	ug/L		08/12/25 14:00	08/14/25 16:16	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.3**		0.10	0.013	mg/L		08/12/25 18:09	08/13/25 14:53	1
Zinc	**0.0042**	**J**	0.0070	0.00093	mg/L		08/12/25 18:09	08/13/25 14:53	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**0.87**	**B**	0.10	0.013	mg/L		08/13/25 17:01	08/14/25 18:47	1
Zinc, Dissolved	**0.0021**	**J B**	0.0070	0.00093	mg/L		08/13/25 17:01	08/14/25 18:47	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**660**		33	33	mg/L			08/18/25 05:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 13:48	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.20	0.13	ug/L		08/12/25 14:00	08/13/25 13:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**550**		5.0	2.6	mg/L			08/12/25 15:20	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 15:20	1
Total Dissolved Solids (SM 2540 C-2020)	**860**		10	7.8	mg/L			08/11/25 12:38	1
Total Suspended Solids (SM 2540D-2020)	**5.2**		4.0	0.40	mg/L			08/12/25 10:17	1
Chloride (EPA 300.0-1993 R2.1)	**53**		1.0	0.13	mg/L			08/12/25 00:12	1
Fluoride (EPA 300.0-1993 R2.1)	**0.14**		0.050	0.024	mg/L			08/12/25 00:12	1
Sulfate (EPA 300.0-1993 R2.1)	**160**		1.0	0.35	mg/L			08/12/25 00:12	1

Client Sample ID: L508217-09 MW-12B
Date Collected: 08/06/25 15:18
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-3
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.9**		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 04:30	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**7.7**		3.3	0.17	mg/L		08/13/25 17:01	08/15/25 18:50	1
Na	**110**		0.60	0.33	mg/L		08/13/25 17:01	08/15/25 18:50	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 16:19	1
Arsenic	ND		0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 16:19	1
Barium	**0.024**		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 16:19	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 16:19	1
Cadmium	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 16:19	1
Cobalt	ND		0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 16:19	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 16:19	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 16:19	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 16:19	1
Nickel	ND		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 16:19	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 16:19	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 16:19	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 16:19	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 16:19	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 16:19	1
Calcium	**24**		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 16:19	1
Magnesium	**7.6**		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 16:19	1
Lithium	**0.039**		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 16:19	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.20**	**B**	0.10	0.013	mg/L		08/13/25 17:01	08/14/25 17:18	1
Zinc	**0.0023**	**J B**	0.0070	0.00093	mg/L		08/13/25 17:01	08/14/25 17:18	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**93**		33	33	mg/L			08/18/25 05:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 13:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**320**		5.0	2.6	mg/L			08/12/25 15:29	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 15:29	1
Total Dissolved Solids (SM 2540 C-2020)	**350**		10	7.8	mg/L			08/11/25 12:38	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			08/12/25 10:17	1
Chloride (EPA 300.0-1993 R2.1)	**1.2**	**F1 F2**	1.0	0.13	mg/L			08/12/25 01:10	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Client Sample ID: L508217-09 MW-12B
Date Collected: 08/06/25 15:18
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.76	F1 F2	0.050	0.024	mg/L			08/12/25 01:10	1
Sulfate (EPA 300.0-1993 R2.1)	0.45	J F1 F2	1.0	0.35	mg/L			08/12/25 01:10	1

Client Sample ID: L508217-10 MW-14
Date Collected: 08/06/25 09:27
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-4
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.9		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 06:53	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	4.6		3.3	0.17	mg/L		08/13/25 17:01	08/15/25 19:15	1
Na	73		0.60	0.33	mg/L		08/13/25 17:01	08/15/25 19:15	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 16:21	1
Arsenic	0.0067	B	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 16:21	1
Barium	0.12		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 16:21	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 16:21	1
Cadmium	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 16:21	1
Cobalt	0.00053	J	0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 16:21	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 16:21	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 16:21	1
Molybdenum	0.010		0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 16:21	1
Nickel	0.0041		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 16:21	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 16:21	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 16:21	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 16:21	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 16:21	1
Vanadium	0.0015	J	0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 16:21	1
Calcium	160		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 16:21	1
Magnesium	44		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 16:21	1
Lithium	0.092		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 16:21	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	15	B	0.50	0.067	mg/L		08/13/25 17:01	08/14/25 18:53	5
Zinc	ND		0.0070	0.00093	mg/L		08/13/25 17:01	08/14/25 18:50	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	580		33	33	mg/L			08/18/25 05:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 13:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	550		5.0	2.6	mg/L			08/12/25 15:35	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 15:35	1
Total Dissolved Solids (SM 2540 C-2020)	730		10	7.8	mg/L			08/12/25 09:29	1
Total Suspended Solids (SM 2540D-2020)	28		6.7	0.67	mg/L			08/12/25 10:17	1
Chloride (EPA 300.0-1993 R2.1)	110		1.0	0.13	mg/L			08/12/25 00:31	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Client Sample ID: L508217-10 MW-14
Date Collected: 08/06/25 09:27
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.19		0.050	0.024	mg/L			08/12/25 00:31	1
Sulfate (EPA 300.0-1993 R2.1)	5.0		1.0	0.35	mg/L			08/12/25 00:31	1

Client Sample ID: L508217-11 MWT-6
Date Collected: 08/06/25 11:14
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-5
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.80**		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 06:57	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**6.8**		3.3	0.17	mg/L		08/13/25 17:01	08/15/25 19:18	1
Na	**30**		0.60	0.33	mg/L		08/13/25 17:01	08/15/25 19:18	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 16:24	1
Arsenic	ND		0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 16:24	1
Barium	**0.051**		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 16:24	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 16:24	1
Cadmium	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 16:24	1
Cobalt	**0.00037**	**J**	0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 16:24	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 16:24	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 16:24	1
Molybdenum	**0.012**		0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 16:24	1
Nickel	**0.0018**	**J**	0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 16:24	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 16:24	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 16:24	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 16:24	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 16:24	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 16:24	1
Calcium	**180**		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 16:24	1
Magnesium	**38**		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 16:24	1
Lithium	**0.046**		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 16:24	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.017**	**J B**	0.10	0.013	mg/L		08/13/25 17:01	08/14/25 18:56	1
Zinc	**0.00099**	**J B**	0.0070	0.00093	mg/L		08/13/25 17:01	08/14/25 18:56	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**600**		33	33	mg/L			08/18/25 05:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 13:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**430**		5.0	2.6	mg/L			08/12/25 15:53	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 15:53	1
Total Dissolved Solids (SM 2540 C-2020)	**750**		10	7.8	mg/L			08/12/25 09:29	1
Total Suspended Solids (SM 2540D-2020)	**0.60**	**J**	4.0	0.40	mg/L			08/12/25 10:17	1
Chloride (EPA 300.0-1993 R2.1)	**41**		1.0	0.13	mg/L			08/12/25 01:39	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Client Sample ID: L508217-11 MWT-6
Date Collected: 08/06/25 11:14
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-5
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.22		0.050	0.024	mg/L			08/12/25 01:39	1
Sulfate (EPA 300.0-1993 R2.1)	170		1.0	0.35	mg/L			08/12/25 01:39	1

Client Sample ID: L508217-12 FIELD BLANK
Date Collected: 08/06/25 07:45
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-6
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 07:02	1

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	ND		100	57	ug/L		08/12/25 14:00	08/14/25 07:06	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		08/13/25 17:01	08/15/25 19:22	1
Na	ND		0.60	0.33	mg/L		08/13/25 17:01	08/15/25 19:22	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium, Dissolved	ND		3.3	0.17	mg/L		08/14/25 17:59	08/15/25 16:07	1
Sodium, Dissolved	ND		0.60	0.33	mg/L		08/14/25 17:59	08/15/25 16:07	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 16:27	1
Arsenic	ND		0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 16:27	1
Barium	ND		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 16:27	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 16:27	1
Cadmium	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 16:27	1
Cobalt	ND		0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 16:27	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 16:27	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 16:27	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 16:27	1
Nickel	ND		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 16:27	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 16:27	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 16:27	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 16:27	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 16:27	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 16:27	1
Calcium	ND		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 16:27	1
Magnesium	ND		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 16:27	1
Lithium	ND		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 16:27	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver, Dissolved	ND		1.0	0.053	ug/L		08/12/25 14:00	08/14/25 16:29	1
Arsenic, Dissolved	**0.77**	**J B**	5.0	0.75	ug/L		08/12/25 14:00	08/14/25 16:29	1
Barium, Dissolved	ND		5.0	0.77	ug/L		08/12/25 14:00	08/14/25 16:29	1
Beryllium, Dissolved	ND		1.0	0.27	ug/L		08/12/25 14:00	08/14/25 16:29	1
Cadmium, Dissolved	ND		1.0	0.077	ug/L		08/12/25 14:00	08/14/25 16:29	1
Cobalt, Dissolved	ND		1.0	0.086	ug/L		08/12/25 14:00	08/14/25 16:29	1
Chromium, Dissolved	ND		5.0	1.2	ug/L		08/12/25 14:00	08/14/25 16:29	1
Copper, Dissolved	ND		2.0	1.7	ug/L		08/12/25 14:00	08/14/25 16:29	1
Molybdenum, Dissolved	ND		5.0	1.1	ug/L		08/12/25 14:00	08/14/25 16:29	1
Nickel, Dissolved	ND		2.0	1.5	ug/L		08/12/25 14:00	08/14/25 16:29	1
Lead, Dissolved	ND		1.0	0.45	ug/L		08/12/25 14:00	08/14/25 16:29	1
Antimony, Dissolved	ND		2.0	0.57	ug/L		08/12/25 14:00	08/14/25 16:29	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Client Sample ID: L508217-12 FIELD BLANK
Date Collected: 08/06/25 07:45
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-6
Matrix: Water

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium, Dissolved	ND		5.0	0.89	ug/L		08/12/25 14:00	08/14/25 16:29	1
Thallium, Dissolved	ND		1.0	0.51	ug/L		08/12/25 14:00	08/14/25 16:29	1
Vanadium, Dissolved	ND		5.0	0.82	ug/L		08/12/25 14:00	08/14/25 16:29	1
Calcium, Dissolved	ND		1000	250	ug/L		08/12/25 14:00	08/14/25 16:29	1
Magnesium, Dissolved	ND		1000	61	ug/L		08/12/25 14:00	08/14/25 16:29	1
Lithium, Dissolved	ND		8.0	3.4	ug/L		08/12/25 14:00	08/14/25 16:29	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		08/13/25 17:01	08/14/25 19:04	1
Zinc	ND		0.0070	0.00093	mg/L		08/13/25 17:01	08/14/25 19:04	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.10	0.013	mg/L		08/14/25 17:59	08/15/25 14:21	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		08/14/25 17:59	08/15/25 14:21	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			08/18/25 05:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 13:56	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.20	0.13	ug/L		08/12/25 14:00	08/13/25 13:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 16:05	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 16:05	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			08/12/25 09:29	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			08/12/25 10:17	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			08/12/25 01:58	1
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			08/12/25 01:58	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			08/12/25 01:58	1

Client Sample ID: L508217-02 MW-2
Date Collected: 08/06/25 13:39
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-7
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.4		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 07:11	1

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	3200		100	57	ug/L		08/12/25 14:00	08/14/25 07:24	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	0.83	J	3.3	0.17	mg/L		08/13/25 18:30	08/15/25 20:09	1
Na	49		0.60	0.33	mg/L		08/13/25 18:30	08/15/25 20:09	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium, Dissolved	0.68	J	3.3	0.17	mg/L		08/14/25 17:59	08/15/25 16:11	1
Sodium, Dissolved	50		0.60	0.33	mg/L		08/14/25 17:59	08/15/25 16:11	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 16:37	1
Arsenic	0.0011	J B	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 16:37	1
Barium	0.042		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 16:37	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 16:37	1
Cadmium	0.00013	J	0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 16:37	1
Cobalt	0.0039		0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 16:37	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 16:37	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 16:37	1
Molybdenum	0.0064		0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 16:37	1
Nickel	0.014		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 16:37	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 16:37	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 16:37	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 16:37	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 16:37	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 16:37	1
Calcium	200		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 16:37	1
Magnesium	51		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 16:37	1
Lithium	0.039		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 16:37	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver, Dissolved	ND		1.0	0.053	ug/L		08/12/25 14:00	08/14/25 16:40	1
Arsenic, Dissolved	0.96	J B	5.0	0.75	ug/L		08/12/25 14:00	08/14/25 16:40	1
Barium, Dissolved	41		5.0	0.77	ug/L		08/12/25 14:00	08/14/25 16:40	1
Beryllium, Dissolved	ND		1.0	0.27	ug/L		08/12/25 14:00	08/14/25 16:40	1
Cadmium, Dissolved	0.13	J	1.0	0.077	ug/L		08/12/25 14:00	08/14/25 16:40	1
Cobalt, Dissolved	3.8		1.0	0.086	ug/L		08/12/25 14:00	08/14/25 16:40	1
Chromium, Dissolved	ND		5.0	1.2	ug/L		08/12/25 14:00	08/14/25 16:40	1
Copper, Dissolved	ND		2.0	1.7	ug/L		08/12/25 14:00	08/14/25 16:40	1
Molybdenum, Dissolved	6.7		5.0	1.1	ug/L		08/12/25 14:00	08/14/25 16:40	1
Nickel, Dissolved	14		2.0	1.5	ug/L		08/12/25 14:00	08/14/25 16:40	1
Lead, Dissolved	ND		1.0	0.45	ug/L		08/12/25 14:00	08/14/25 16:40	1
Antimony, Dissolved	ND		2.0	0.57	ug/L		08/12/25 14:00	08/14/25 16:40	1

Client Sample ID: L508217-02 MW-2
Date Collected: 08/06/25 13:39
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-7
Matrix: Water

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium, Dissolved	ND		5.0	0.89	ug/L		08/12/25 14:00	08/14/25 16:40	1
Thallium, Dissolved	ND		1.0	0.51	ug/L		08/12/25 14:00	08/14/25 16:40	1
Vanadium, Dissolved	ND		5.0	0.82	ug/L		08/12/25 14:00	08/14/25 16:40	1
Calcium, Dissolved	**190000**		1000	250	ug/L		08/12/25 14:00	08/14/25 16:40	1
Magnesium, Dissolved	**49000**		1000	61	ug/L		08/12/25 14:00	08/14/25 16:40	1
Lithium, Dissolved	**38**		8.0	3.4	ug/L		08/12/25 14:00	08/14/25 16:40	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.28**		0.10	0.013	mg/L		08/13/25 18:30	08/14/25 19:55	1
Zinc	**0.0021**	**J**	0.0070	0.00093	mg/L		08/13/25 18:30	08/14/25 19:55	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**0.036**	**J**	0.10	0.013	mg/L		08/14/25 17:59	08/15/25 14:24	1
Zinc, Dissolved	**0.0012**	**J**	0.0070	0.00093	mg/L		08/14/25 17:59	08/15/25 14:24	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**700**		33	33	mg/L			08/18/25 05:14	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 14:00	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.20	0.13	ug/L		08/12/25 14:00	08/13/25 14:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**460**		5.0	2.6	mg/L			08/12/25 16:09	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 16:09	1
Total Dissolved Solids (SM 2540 C-2020)	**860**		10	7.8	mg/L			08/12/25 09:29	1
Total Suspended Solids (SM 2540D-2020)	**7.0**		4.0	0.40	mg/L			08/12/25 10:17	1
Chloride (EPA 300.0-1993 R2.1)	**70**		1.0	0.13	mg/L			08/12/25 02:08	1
Fluoride (EPA 300.0-1993 R2.1)	**0.052**		0.050	0.024	mg/L			08/12/25 02:08	1
Sulfate (EPA 300.0-1993 R2.1)	**220**		5.0	1.7	mg/L			08/12/25 02:18	5

Client Sample ID: L508217-03 MW-3

Lab Sample ID: 240-230530-8

Date Collected: 08/06/25 15:37

Matrix: Water

Date Received: 08/09/25 08:00

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**5.9**		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 07:28	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**1.4**	**J**	3.3	0.17	mg/L		08/13/25 18:30	08/15/25 20:13	1
Na	**110**		0.60	0.33	mg/L		08/13/25 18:30	08/15/25 20:13	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 16:42	1
Arsenic	**0.0031**	**J B**	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 16:42	1
Barium	**0.016**		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 16:42	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 16:42	1
Cadmium	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 16:42	1
Cobalt	**0.00068**	**J**	0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 16:42	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 16:42	1
Copper	**0.0029**		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 16:42	1
Molybdenum	**0.15**		0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 16:42	1
Nickel	**0.0032**		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 16:42	1
Lead	**0.00067**	**J**	0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 16:42	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 16:42	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 16:42	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 16:42	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 16:42	1
Calcium	**220**		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 16:42	1
Magnesium	**44**		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 16:42	1
Lithium	**0.083**		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 16:42	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.4**		0.10	0.013	mg/L		08/13/25 18:30	08/14/25 19:58	1
Zinc	**0.0023**	**J**	0.0070	0.00093	mg/L		08/13/25 18:30	08/14/25 19:58	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**740**		33	33	mg/L			08/18/25 05:16	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 14:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**190**		5.0	2.6	mg/L			08/12/25 16:15	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 16:15	1
Total Dissolved Solids (SM 2540 C-2020)	**1100**		20	16	mg/L			08/12/25 09:29	1
Total Suspended Solids (SM 2540D-2020)	**2.9**	**J**	4.0	0.40	mg/L			08/12/25 10:17	1
Chloride (EPA 300.0-1993 R2.1)	**90**		1.0	0.13	mg/L			08/12/25 02:27	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Client Sample ID: L508217-03 MW-3
Date Collected: 08/06/25 15:37
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-8
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.16		0.050	0.024	mg/L			08/12/25 02:27	1
Sulfate (EPA 300.0-1993 R2.1)	640		5.0	1.7	mg/L			08/12/25 02:56	5

Client Sample ID: L508217-04 MW-5
Date Collected: 08/06/25 16:12
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-9
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.0		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 07:33	1

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	2900		100	57	ug/L		08/12/25 14:00	08/14/25 07:37	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	3.6		3.3	0.17	mg/L		08/13/25 18:30	08/15/25 20:16	1
Na	37		0.60	0.33	mg/L		08/13/25 18:30	08/15/25 20:16	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium, Dissolved	3.3		3.3	0.17	mg/L		08/14/25 17:59	08/15/25 16:14	1
Sodium, Dissolved	35		0.60	0.33	mg/L		08/14/25 17:59	08/15/25 16:14	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 16:45	1
Arsenic	0.00087	J B	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 16:45	1
Barium	0.038		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 16:45	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 16:45	1
Cadmium	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 16:45	1
Cobalt	0.00031	J	0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 16:45	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 16:45	1
Copper	0.0018	J	0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 16:45	1
Molybdenum	0.078		0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 16:45	1
Nickel	0.0035		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 16:45	1
Lead	0.00045	J	0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 16:45	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 16:45	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 16:45	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 16:45	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 16:45	1
Calcium	120		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 16:45	1
Magnesium	27		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 16:45	1
Lithium	0.058		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 16:45	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver, Dissolved	ND		1.0	0.053	ug/L		08/12/25 14:00	08/14/25 16:48	1
Arsenic, Dissolved	1.1	J B	5.0	0.75	ug/L		08/12/25 14:00	08/14/25 16:48	1
Barium, Dissolved	34		5.0	0.77	ug/L		08/12/25 14:00	08/14/25 16:48	1
Beryllium, Dissolved	ND		1.0	0.27	ug/L		08/12/25 14:00	08/14/25 16:48	1
Cadmium, Dissolved	ND		1.0	0.077	ug/L		08/12/25 14:00	08/14/25 16:48	1
Cobalt, Dissolved	0.15	J	1.0	0.086	ug/L		08/12/25 14:00	08/14/25 16:48	1
Chromium, Dissolved	ND		5.0	1.2	ug/L		08/12/25 14:00	08/14/25 16:48	1
Copper, Dissolved	ND		2.0	1.7	ug/L		08/12/25 14:00	08/14/25 16:48	1
Molybdenum, Dissolved	77		5.0	1.1	ug/L		08/12/25 14:00	08/14/25 16:48	1
Nickel, Dissolved	2.5		2.0	1.5	ug/L		08/12/25 14:00	08/14/25 16:48	1
Lead, Dissolved	ND		1.0	0.45	ug/L		08/12/25 14:00	08/14/25 16:48	1
Antimony, Dissolved	ND		2.0	0.57	ug/L		08/12/25 14:00	08/14/25 16:48	1

Client Sample ID: L508217-04 MW-5
Date Collected: 08/06/25 16:12
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-9
Matrix: Water

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium, Dissolved	ND		5.0	0.89	ug/L		08/12/25 14:00	08/14/25 16:48	1
Thallium, Dissolved	ND		1.0	0.51	ug/L		08/12/25 14:00	08/14/25 16:48	1
Vanadium, Dissolved	ND		5.0	0.82	ug/L		08/12/25 14:00	08/14/25 16:48	1
Calcium, Dissolved	**120000**		1000	250	ug/L		08/12/25 14:00	08/14/25 16:48	1
Magnesium, Dissolved	**24000**		1000	61	ug/L		08/12/25 14:00	08/14/25 16:48	1
Lithium, Dissolved	**56**		8.0	3.4	ug/L		08/12/25 14:00	08/14/25 16:48	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.53**		0.10	0.013	mg/L		08/13/25 18:30	08/14/25 20:00	1
Zinc	**0.0040**	**J**	0.0070	0.00093	mg/L		08/13/25 18:30	08/14/25 20:00	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.10	0.013	mg/L		08/14/25 17:59	08/15/25 14:26	1
Zinc, Dissolved	**0.0015**	**J**	0.0070	0.00093	mg/L		08/14/25 17:59	08/15/25 14:26	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**420**		33	33	mg/L			08/18/25 05:16	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 14:08	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.20	0.13	ug/L		08/12/25 14:00	08/13/25 14:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**220**		5.0	2.6	mg/L			08/12/25 16:21	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 16:21	1
Total Dissolved Solids (SM 2540 C-2020)	**540**		10	7.8	mg/L			08/12/25 09:29	1
Total Suspended Solids (SM 2540D-2020)	**1.6**	**J**	8.0	0.80	mg/L			08/12/25 10:17	1
Chloride (EPA 300.0-1993 R2.1)	**37**		1.0	0.13	mg/L			08/12/25 03:06	1
Fluoride (EPA 300.0-1993 R2.1)	**0.14**		0.050	0.024	mg/L			08/12/25 03:06	1
Sulfate (EPA 300.0-1993 R2.1)	**200**		1.0	0.35	mg/L			08/12/25 03:06	1

Client Sample ID: L508217-05 MW-6
Date Collected: 08/06/25 11:14
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-10
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.83		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 07:42	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	6.5		3.3	0.17	mg/L		08/13/25 18:30	08/15/25 20:19	1
Na	29		0.60	0.33	mg/L		08/13/25 18:30	08/15/25 20:19	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 16:50	1
Arsenic	0.00075	J B	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 16:50	1
Barium	0.050		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 16:50	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 16:50	1
Cadmium	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 16:50	1
Cobalt	0.00034	J	0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 16:50	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 16:50	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 16:50	1
Molybdenum	0.012		0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 16:50	1
Nickel	0.0019	J	0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 16:50	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 16:50	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 16:50	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 16:50	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 16:50	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 16:50	1
Calcium	180		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 16:50	1
Magnesium	37		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 16:50	1
Lithium	0.047		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 16:50	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.028	J	0.10	0.013	mg/L		08/13/25 18:30	08/14/25 20:03	1
Zinc	0.0012	J	0.0070	0.00093	mg/L		08/13/25 18:30	08/14/25 20:03	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	600		33	33	mg/L			08/18/25 05:16	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 14:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	430		5.0	2.6	mg/L			08/12/25 16:29	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 16:29	1
Total Dissolved Solids (SM 2540 C-2020)	780		10	7.8	mg/L			08/12/25 09:29	1
Total Suspended Solids (SM 2540D-2020)	0.90	J	4.0	0.40	mg/L			08/12/25 10:17	1
Chloride (EPA 300.0-1993 R2.1)	40		1.0	0.13	mg/L			08/12/25 03:25	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Client Sample ID: L508217-05 MW-6
Date Collected: 08/06/25 11:14
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-10
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.20		0.050	0.024	mg/L			08/12/25 03:25	1
Sulfate (EPA 300.0-1993 R2.1)	170		1.0	0.35	mg/L			08/12/25 03:25	1

Client Sample ID: L508217-06 MW-11
Date Collected: 08/06/25 11:18
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-11
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.20		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 07:46	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	1.4	J	3.3	0.17	mg/L		08/13/25 18:30	08/15/25 20:29	1
Na	38		0.60	0.33	mg/L		08/13/25 18:30	08/15/25 20:29	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 16:53	1
Arsenic	0.022	B	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 16:53	1
Barium	0.15		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 16:53	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 16:53	1
Cadmium	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 16:53	1
Cobalt	0.00057	J	0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 16:53	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 16:53	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 16:53	1
Molybdenum	0.0038	J	0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 16:53	1
Nickel	ND		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 16:53	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 16:53	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 16:53	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 16:53	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 16:53	1
Vanadium	0.0025	J	0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 16:53	1
Calcium	130		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 16:53	1
Magnesium	39		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 16:53	1
Lithium	ND		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 16:53	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	20		0.50	0.067	mg/L		08/13/25 18:30	08/14/25 20:09	5
Zinc	0.0014	J	0.0070	0.00093	mg/L		08/13/25 18:30	08/14/25 20:06	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	500		33	33	mg/L			08/18/25 05:16	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 14:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	470		5.0	2.6	mg/L			08/12/25 16:35	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/12/25 16:35	1
Total Dissolved Solids (SM 2540 C-2020)	540		10	7.8	mg/L			08/12/25 09:29	1
Total Suspended Solids (SM 2540D-2020)	46		10	1.0	mg/L			08/12/25 10:17	1
Chloride (EPA 300.0-1993 R2.1)	55		1.0	0.13	mg/L			08/12/25 03:45	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Client Sample ID: L508217-06 MW-11
Date Collected: 08/06/25 11:18
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-11
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.27		0.050	0.024	mg/L			08/12/25 03:45	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			08/12/25 03:45	1

Client Sample ID: L508217-07 MW-11B
Date Collected: 08/06/25 12:40
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-12
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.85		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 07:51	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	6.1		3.3	0.17	mg/L		08/13/25 18:30	08/15/25 20:33	1
Na	15		0.60	0.33	mg/L		08/13/25 18:30	08/15/25 20:33	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 16:56	1
Arsenic	0.0037	J B	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 16:56	1
Barium	0.069		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 16:56	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 16:56	1
Cadmium	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 16:56	1
Cobalt	ND		0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 16:56	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 16:56	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 16:56	1
Molybdenum	0.0023	J	0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 16:56	1
Nickel	ND		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 16:56	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 16:56	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 16:56	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 16:56	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 16:56	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 16:56	1
Calcium	65		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 16:56	1
Magnesium	23		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 16:56	1
Lithium	0.034		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 16:56	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.63		0.10	0.013	mg/L		08/13/25 18:30	08/14/25 20:12	1
Zinc	0.0035	J	0.0070	0.00093	mg/L		08/13/25 18:30	08/14/25 20:12	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	260		33	33	mg/L			08/18/25 05:16	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 14:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	270		5.0	2.6	mg/L			08/12/25 16:42	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	16		5.0	2.6	mg/L			08/12/25 16:42	1
Total Dissolved Solids (SM 2540 C-2020)	250		10	7.8	mg/L			08/12/25 09:29	1
Total Suspended Solids (SM 2540D-2020)	2.4	J	4.0	0.40	mg/L			08/12/25 10:17	1
Chloride (EPA 300.0-1993 R2.1)	0.96	J	1.0	0.13	mg/L			08/12/25 04:04	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Client Sample ID: L508217-07 MW-11B
Date Collected: 08/06/25 12:40
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-12
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.41		0.050	0.024	mg/L			08/12/25 04:04	1
Sulfate (EPA 300.0-1993 R2.1)	3.6		1.0	0.35	mg/L			08/12/25 04:04	1

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-667341/1-A
Matrix: Water
Analysis Batch: 667542

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 667341

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 03:33	1
Boron, Dissolved	ND		0.10	0.057	mg/L		08/12/25 14:00	08/14/25 03:33	1

Lab Sample ID: LCS 240-667341/2-A
Matrix: Water
Analysis Batch: 667542

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 667341

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	0.936		mg/L		94	85 - 115
Boron, Dissolved	1.00	0.936		mg/L		94	85 - 115

Lab Sample ID: 240-230530-1 MS
Matrix: Water
Analysis Batch: 667542

Client Sample ID: L508217-01 MW-1
Prep Type: Total Recoverable
Prep Batch: 667341

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.095	J	1.00	1.04		mg/L		94	70 - 130

Lab Sample ID: 240-230530-1 MSD
Matrix: Water
Analysis Batch: 667542

Client Sample ID: L508217-01 MW-1
Prep Type: Total Recoverable
Prep Batch: 667341

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.095	J	1.00	1.05		mg/L		96	70 - 130	1	20

Lab Sample ID: 240-230530-2 MS
Matrix: Water
Analysis Batch: 667542

Client Sample ID: L508217-08 MW-12
Prep Type: Total Recoverable
Prep Batch: 667341

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.075	J	1.00	1.11		mg/L		103	70 - 130
Boron, Dissolved	0.075	J	1.00	1.11		mg/L		103	70 - 130

Lab Sample ID: 240-230530-2 MSD
Matrix: Water
Analysis Batch: 667542

Client Sample ID: L508217-08 MW-12
Prep Type: Total Recoverable
Prep Batch: 667341

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.075	J	1.00	1.09		mg/L		102	70 - 130	1	20
Boron, Dissolved	0.075	J	1.00	1.09		mg/L		102	70 - 130	1	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 350-8817/25-A
Matrix: Water
Analysis Batch: 8942

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8817

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		08/12/25 18:09	08/15/25 17:16	1
Na	ND		0.60	0.33	mg/L		08/12/25 18:09	08/15/25 17:16	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: MB 350-8855/25-A
Matrix: Water
Analysis Batch: 8942

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8855

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		08/13/25 17:01	08/15/25 18:43	1
Potassium, Dissolved	ND		3.3	0.17	mg/L		08/13/25 17:01	08/15/25 18:43	1
Na	ND		0.60	0.33	mg/L		08/13/25 17:01	08/15/25 18:43	1
Sodium, Dissolved	ND		0.60	0.33	mg/L		08/13/25 17:01	08/15/25 18:43	1

Lab Sample ID: MB 350-8859/25-A
Matrix: Water
Analysis Batch: 8942

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8859

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		08/13/25 18:30	08/15/25 19:25	1
Na	ND		0.60	0.33	mg/L		08/13/25 18:30	08/15/25 19:25	1

Lab Sample ID: MB 350-8897/22-A
Matrix: Water
Analysis Batch: 8942

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8897

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium, Dissolved	ND		3.3	0.17	mg/L		08/14/25 17:59	08/15/25 15:45	1
Sodium, Dissolved	ND		0.60	0.33	mg/L		08/14/25 17:59	08/15/25 15:45	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-8817/25-A
Matrix: Water
Analysis Batch: 8851

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8817

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		08/12/25 18:09	08/13/25 13:26	1
Zinc	ND		0.0070	0.00093	mg/L		08/12/25 18:09	08/13/25 13:26	1

Lab Sample ID: LCS 350-8817/26-A
Matrix: Water
Analysis Batch: 8851

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8817

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	17.7		mg/L		88	85 - 115
Zinc	1.00	0.873		mg/L		87	85 - 115

Lab Sample ID: MB 350-8855/25-A
Matrix: Water
Analysis Batch: 8905

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8855

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.0250	J	0.10	0.013	mg/L		08/13/25 17:01	08/14/25 17:12	1
Iron, Dissolved	0.0250	J	0.10	0.013	mg/L		08/13/25 17:01	08/14/25 17:12	1
Zinc	0.00106	J	0.0070	0.00093	mg/L		08/13/25 17:01	08/14/25 17:12	1
Zinc, Dissolved	0.00106	J	0.0070	0.00093	mg/L		08/13/25 17:01	08/14/25 17:12	1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 350-8855/26-A
Matrix: Water
Analysis Batch: 8905

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8855

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron			20.0	18.2		mg/L		91	85 - 115		
Iron, Dissolved			20.0	18.2		mg/L		91	85 - 115		
Zinc			1.00	0.925		mg/L		92	85 - 115		
Zinc, Dissolved			1.00	0.925		mg/L		92	85 - 115		

Lab Sample ID: 240-230530-3 MS
Matrix: Water
Analysis Batch: 8905

Client Sample ID: L508217-09 MW-12B
Prep Type: Total/NA
Prep Batch: 8855

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron	0.20	B	20.0	18.7		mg/L		92	70 - 130		
Iron, Dissolved	0.20	B	20.0	18.7		mg/L		92	70 - 130		
Zinc	0.0023	J B	1.00	0.937		mg/L		93	70 - 130		
Zinc, Dissolved	0.0023	J B	1.00	0.937		mg/L		93	70 - 130		

Lab Sample ID: 240-230530-3 MSD
Matrix: Water
Analysis Batch: 8905

Client Sample ID: L508217-09 MW-12B
Prep Type: Total/NA
Prep Batch: 8855

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	0.20	B	20.0	20.5		mg/L		101	70 - 130	9	20
Iron, Dissolved	0.20	B	20.0	20.5		mg/L		101	70 - 130	9	20
Zinc	0.0023	J B	1.00	1.02		mg/L		102	70 - 130	8	20
Zinc, Dissolved	0.0023	J B	1.00	1.02		mg/L		102	70 - 130	8	20

Lab Sample ID: MB 350-8859/25-A
Matrix: Water
Analysis Batch: 8905

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8859

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		08/13/25 18:30	08/14/25 19:12	1
Zinc	ND		0.0070	0.00093	mg/L		08/13/25 18:30	08/14/25 19:12	1

Lab Sample ID: LCS 350-8859/26-A
Matrix: Water
Analysis Batch: 8905

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8859

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron			20.0	19.1		mg/L		95	85 - 115		
Zinc			1.00	0.963		mg/L		96	85 - 115		

Lab Sample ID: MB 350-8897/22-A
Matrix: Water
Analysis Batch: 8926

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8897

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.10	0.013	mg/L		08/14/25 17:59	08/15/25 13:44	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		08/14/25 17:59	08/15/25 13:44	1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 350-8897/23-A
Matrix: Water
Analysis Batch: 8926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8897

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron, Dissolved	20.0	19.2		mg/L		96	85 - 115
Zinc, Dissolved	1.00	0.955		mg/L		95	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-667341/1-A
Matrix: Water
Analysis Batch: 667773

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 667341

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 15:44	1
Silver, Dissolved	ND		0.0010	0.000053	mg/L		08/12/25 14:00	08/14/25 15:44	1
Arsenic	0.000941	J	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 15:44	1
Arsenic, Dissolved	0.000941	J	0.0050	0.00075	mg/L		08/12/25 14:00	08/14/25 15:44	1
Barium	ND		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 15:44	1
Barium, Dissolved	ND		0.0050	0.00077	mg/L		08/12/25 14:00	08/14/25 15:44	1
Beryllium	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 15:44	1
Beryllium, Dissolved	ND		0.0010	0.00027	mg/L		08/12/25 14:00	08/14/25 15:44	1
Cadmium	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 15:44	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		08/12/25 14:00	08/14/25 15:44	1
Cobalt	ND		0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 15:44	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		08/12/25 14:00	08/14/25 15:44	1
Chromium	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 15:44	1
Chromium, Dissolved	ND		0.0050	0.0012	mg/L		08/12/25 14:00	08/14/25 15:44	1
Copper	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 15:44	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		08/12/25 14:00	08/14/25 15:44	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 15:44	1
Molybdenum, Dissolved	ND		0.0050	0.0011	mg/L		08/12/25 14:00	08/14/25 15:44	1
Nickel	ND		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 15:44	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		08/12/25 14:00	08/14/25 15:44	1
Lead	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 15:44	1
Lead, Dissolved	ND		0.0010	0.00045	mg/L		08/12/25 14:00	08/14/25 15:44	1
Antimony	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 15:44	1
Antimony, Dissolved	ND		0.0020	0.00057	mg/L		08/12/25 14:00	08/14/25 15:44	1
Selenium	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 15:44	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		08/12/25 14:00	08/14/25 15:44	1
Thallium	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 15:44	1
Thallium, Dissolved	ND		0.0010	0.00051	mg/L		08/12/25 14:00	08/14/25 15:44	1
Vanadium	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 15:44	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		08/12/25 14:00	08/14/25 15:44	1
Calcium	ND		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 15:44	1
Calcium, Dissolved	ND		1.0	0.25	mg/L		08/12/25 14:00	08/14/25 15:44	1
Magnesium	ND		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 15:44	1
Magnesium, Dissolved	ND		1.0	0.061	mg/L		08/12/25 14:00	08/14/25 15:44	1
Lithium	ND		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 15:44	1
Lithium, Dissolved	ND		0.0080	0.0034	mg/L		08/12/25 14:00	08/14/25 15:44	1

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-667341/3-A
Matrix: Water
Analysis Batch: 667773

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 667341

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.102		mg/L		102	85 - 115
Silver, Dissolved	0.100	0.102		mg/L		102	85 - 115
Arsenic	1.00	1.03		mg/L		103	85 - 115
Arsenic, Dissolved	1.00	1.03		mg/L		103	85 - 115
Barium	1.00	0.999		mg/L		100	85 - 115
Barium, Dissolved	1.00	0.999		mg/L		100	85 - 115
Beryllium	0.500	0.496		mg/L		99	85 - 115
Beryllium, Dissolved	0.500	0.496		mg/L		99	85 - 115
Cadmium	0.500	0.492		mg/L		98	85 - 115
Cadmium, Dissolved	0.500	0.492		mg/L		98	85 - 115
Cobalt	0.500	0.496		mg/L		99	85 - 115
Cobalt, Dissolved	0.500	0.496		mg/L		99	85 - 115
Chromium	0.500	0.506		mg/L		101	85 - 115
Chromium, Dissolved	0.500	0.506		mg/L		101	85 - 115
Copper	0.500	0.511		mg/L		102	85 - 115
Copper, Dissolved	0.500	0.511		mg/L		102	85 - 115
Molybdenum	0.500	0.497		mg/L		99	85 - 115
Molybdenum, Dissolved	0.500	0.497		mg/L		99	85 - 115
Nickel	0.500	0.508		mg/L		102	85 - 115
Nickel, Dissolved	0.500	0.508		mg/L		102	85 - 115
Lead	0.500	0.556		mg/L		111	85 - 115
Lead, Dissolved	0.500	0.556		mg/L		111	85 - 115
Antimony	0.100	0.101		mg/L		101	85 - 115
Antimony, Dissolved	0.100	0.101		mg/L		101	85 - 115
Selenium	1.00	1.00		mg/L		100	85 - 115
Selenium, Dissolved	1.00	1.00		mg/L		100	85 - 115
Thallium	1.00	1.15		mg/L		115	85 - 115
Thallium, Dissolved	1.00	1.15		mg/L		115	85 - 115
Vanadium	0.500	0.504		mg/L		101	85 - 115
Vanadium, Dissolved	0.500	0.504		mg/L		101	85 - 115
Calcium	25.0	25.5		mg/L		102	85 - 115
Calcium, Dissolved	25.0	25.5		mg/L		102	85 - 115
Magnesium	25.0	25.9		mg/L		104	85 - 115
Magnesium, Dissolved	25.0	25.9		mg/L		104	85 - 115
Lithium	0.500	0.522		mg/L		104	85 - 115
Lithium, Dissolved	0.500	0.522		mg/L		104	85 - 115

Lab Sample ID: 240-230530-1 MS
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508217-01 MW-1
Prep Type: Total Recoverable
Prep Batch: 667341

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.101		mg/L		101	70 - 130
Arsenic	0.0052	B	1.00	1.03		mg/L		102	70 - 130
Barium	0.081		1.00	1.08		mg/L		100	70 - 130
Beryllium	ND		0.500	0.499		mg/L		100	70 - 130
Cadmium	0.000099	J	0.500	0.491		mg/L		98	70 - 130
Cobalt	0.0021		0.500	0.488		mg/L		97	70 - 130
Chromium	ND		0.500	0.496		mg/L		99	70 - 130

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-230530-1 MS
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508217-01 MW-1
Prep Type: Total Recoverable
Prep Batch: 667341

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	ND		0.500	0.500		mg/L		100	70 - 130
Molybdenum	0.0017	J	0.500	0.501		mg/L		100	70 - 130
Nickel	0.0020		0.500	0.501		mg/L		100	70 - 130
Lead	ND		0.500	0.549		mg/L		110	70 - 130
Antimony	ND		0.100	0.102		mg/L		102	70 - 130
Selenium	ND		1.00	1.00		mg/L		100	70 - 130
Thallium	ND		1.00	1.14		mg/L		114	70 - 130
Vanadium	ND		0.500	0.498		mg/L		100	70 - 130
Calcium	170		25.0	200	4	mg/L		102	70 - 130
Magnesium	55		25.0	80.5		mg/L		101	70 - 130
Lithium	0.0056	J	0.500	0.529		mg/L		105	70 - 130

Lab Sample ID: 240-230530-1 MSD
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508217-01 MW-1
Prep Type: Total Recoverable
Prep Batch: 667341

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.102		mg/L		102	70 - 130	1	20
Arsenic	0.0052	B	1.00	1.03		mg/L		102	70 - 130	0	20
Barium	0.081		1.00	1.08		mg/L		100	70 - 130	1	20
Beryllium	ND		0.500	0.499		mg/L		100	70 - 130	0	20
Cadmium	0.000099	J	0.500	0.489		mg/L		98	70 - 130	0	20
Cobalt	0.0021		0.500	0.485		mg/L		97	70 - 130	1	20
Chromium	ND		0.500	0.495		mg/L		99	70 - 130	0	20
Copper	ND		0.500	0.496		mg/L		99	70 - 130	1	20
Molybdenum	0.0017	J	0.500	0.502		mg/L		100	70 - 130	0	20
Nickel	0.0020		0.500	0.493		mg/L		98	70 - 130	1	20
Lead	ND		0.500	0.538		mg/L		108	70 - 130	2	20
Antimony	ND		0.100	0.101		mg/L		101	70 - 130	0	20
Selenium	ND		1.00	0.993		mg/L		99	70 - 130	1	20
Thallium	ND		1.00	1.12		mg/L		112	70 - 130	2	20
Vanadium	ND		0.500	0.498		mg/L		100	70 - 130	0	20
Calcium	170		25.0	199	4	mg/L		100	70 - 130	0	20
Magnesium	55		25.0	80.0		mg/L		99	70 - 130	1	20
Lithium	0.0056	J	0.500	0.530		mg/L		105	70 - 130	0	20

Lab Sample ID: 240-230530-2 MS
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508217-08 MW-12
Prep Type: Total Recoverable
Prep Batch: 667341

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.101		mg/L		101	70 - 130
Silver, Dissolved	ND		0.100	0.101		mg/L		101	70 - 130
Arsenic	0.0025	J B	1.00	1.04		mg/L		104	70 - 130
Arsenic, Dissolved	0.0025	J B	1.00	1.04		mg/L		104	70 - 130
Barium	0.049		1.00	1.06		mg/L		101	70 - 130
Barium, Dissolved	0.049		1.00	1.06		mg/L		101	70 - 130
Beryllium	ND		0.500	0.506		mg/L		101	70 - 130
Beryllium, Dissolved	ND		0.500	0.506		mg/L		101	70 - 130

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-230530-2 MS
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508217-08 MW-12
Prep Type: Total Recoverable
Prep Batch: 667341

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	ND		0.500	0.488		mg/L		98	70 - 130
Cadmium, Dissolved	ND		0.500	0.488		mg/L		98	70 - 130
Cobalt	0.0019		0.500	0.490		mg/L		98	70 - 130
Cobalt, Dissolved	0.0019		0.500	0.490		mg/L		98	70 - 130
Chromium	ND		0.500	0.501		mg/L		100	70 - 130
Chromium, Dissolved	ND		0.500	0.501		mg/L		100	70 - 130
Copper	ND		0.500	0.502		mg/L		100	70 - 130
Copper, Dissolved	ND		0.500	0.502		mg/L		100	70 - 130
Molybdenum	0.0038	J	0.500	0.505		mg/L		100	70 - 130
Molybdenum, Dissolved	0.0038	J	0.500	0.505		mg/L		100	70 - 130
Nickel	0.012		0.500	0.509		mg/L		99	70 - 130
Nickel, Dissolved	0.012		0.500	0.509		mg/L		99	70 - 130
Lead	0.00053	J	0.500	0.542		mg/L		108	70 - 130
Lead, Dissolved	0.00053	J	0.500	0.542		mg/L		108	70 - 130
Antimony	ND		0.100	0.100		mg/L		100	70 - 130
Antimony, Dissolved	ND		0.100	0.100		mg/L		100	70 - 130
Selenium	ND		1.00	0.997		mg/L		100	70 - 130
Selenium, Dissolved	ND		1.00	0.997		mg/L		100	70 - 130
Thallium	ND		1.00	1.13		mg/L		113	70 - 130
Thallium, Dissolved	ND		1.00	1.13		mg/L		113	70 - 130
Vanadium	ND		0.500	0.505		mg/L		101	70 - 130
Vanadium, Dissolved	ND		0.500	0.505		mg/L		101	70 - 130
Calcium	160		25.0	186	4	mg/L		98	70 - 130
Calcium, Dissolved	160		25.0	186	4	mg/L		98	70 - 130
Magnesium	62		25.0	86.7		mg/L		98	70 - 130
Magnesium, Dissolved	62		25.0	86.7		mg/L		98	70 - 130
Lithium	0.017		0.500	0.552		mg/L		107	70 - 130
Lithium, Dissolved	0.017		0.500	0.552		mg/L		107	70 - 130

Lab Sample ID: 240-230530-2 MSD
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508217-08 MW-12
Prep Type: Total Recoverable
Prep Batch: 667341

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.0992		mg/L		99	70 - 130	1	20
Silver, Dissolved	ND		0.100	0.0992		mg/L		99	70 - 130	1	20
Arsenic	0.0025	J B	1.00	1.03		mg/L		103	70 - 130	1	20
Arsenic, Dissolved	0.0025	J B	1.00	1.03		mg/L		103	70 - 130	1	20
Barium	0.049		1.00	1.03		mg/L		98	70 - 130	2	20
Barium, Dissolved	0.049		1.00	1.03		mg/L		98	70 - 130	2	20
Beryllium	ND		0.500	0.498		mg/L		100	70 - 130	2	20
Beryllium, Dissolved	ND		0.500	0.498		mg/L		100	70 - 130	2	20
Cadmium	ND		0.500	0.480		mg/L		96	70 - 130	2	20
Cadmium, Dissolved	ND		0.500	0.480		mg/L		96	70 - 130	2	20
Cobalt	0.0019		0.500	0.482		mg/L		96	70 - 130	2	20
Cobalt, Dissolved	0.0019		0.500	0.482		mg/L		96	70 - 130	2	20
Chromium	ND		0.500	0.495		mg/L		99	70 - 130	1	20
Chromium, Dissolved	ND		0.500	0.495		mg/L		99	70 - 130	1	20
Copper	ND		0.500	0.495		mg/L		99	70 - 130	1	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-230530-2 MSD
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508217-08 MW-12
Prep Type: Total Recoverable
Prep Batch: 667341

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper, Dissolved	ND		0.500	0.495		mg/L		99	70 - 130	1	20
Molybdenum	0.0038	J	0.500	0.499		mg/L		99	70 - 130	1	20
Molybdenum, Dissolved	0.0038	J	0.500	0.499		mg/L		99	70 - 130	1	20
Nickel	0.012		0.500	0.503		mg/L		98	70 - 130	1	20
Nickel, Dissolved	0.012		0.500	0.503		mg/L		98	70 - 130	1	20
Lead	0.00053	J	0.500	0.526		mg/L		105	70 - 130	3	20
Lead, Dissolved	0.00053	J	0.500	0.526		mg/L		105	70 - 130	3	20
Antimony	ND		0.100	0.0988		mg/L		99	70 - 130	2	20
Antimony, Dissolved	ND		0.100	0.0988		mg/L		99	70 - 130	2	20
Selenium	ND		1.00	0.989		mg/L		99	70 - 130	1	20
Selenium, Dissolved	ND		1.00	0.989		mg/L		99	70 - 130	1	20
Thallium	ND		1.00	1.10		mg/L		110	70 - 130	3	20
Thallium, Dissolved	ND		1.00	1.10		mg/L		110	70 - 130	3	20
Vanadium	ND		0.500	0.497		mg/L		99	70 - 130	1	20
Vanadium, Dissolved	ND		0.500	0.497		mg/L		99	70 - 130	1	20
Calcium	160		25.0	183	4	mg/L		89	70 - 130	1	20
Calcium, Dissolved	160		25.0	183	4	mg/L		89	70 - 130	1	20
Magnesium	62		25.0	85.6		mg/L		93	70 - 130	1	20
Magnesium, Dissolved	62		25.0	85.6		mg/L		93	70 - 130	1	20
Lithium	0.017		0.500	0.538		mg/L		104	70 - 130	2	20
Lithium, Dissolved	0.017		0.500	0.538		mg/L		104	70 - 130	2	20

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-667347/1-A
Matrix: Water
Analysis Batch: 667565

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 667347

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 13:39	1
Mercury, Dissolved	ND		0.00020	0.00013	mg/L		08/12/25 14:00	08/13/25 13:39	1

Lab Sample ID: LCS 240-667347/2-A
Matrix: Water
Analysis Batch: 667565

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 667347

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00524		mg/L		105	85 - 115
Mercury, Dissolved	0.00500	0.00524		mg/L		105	85 - 115

Lab Sample ID: 240-230530-11 MS
Matrix: Water
Analysis Batch: 667565

Client Sample ID: L508217-06 MW-11
Prep Type: Total/NA
Prep Batch: 667347

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00100	0.000964		mg/L		96	70 - 130
Mercury, Dissolved	ND		0.00100	0.000964		mg/L		96	70 - 130

Method: 245.1-1994 R3.0 - Mercury (CVAA) (Continued)

Lab Sample ID: 240-230530-11 MSD — **Client Sample ID: L508217-06 MW-11**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 667565 — **Prep Batch: 667347**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.000962		mg/L		96	70 - 130	0	20
Mercury, Dissolved	ND		0.00100	0.000962		mg/L		96	70 - 130	0	20

Lab Sample ID: 240-230530-12 MS — **Client Sample ID: L508217-07 MW-11B**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 667565 — **Prep Batch: 667347**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00100	0.000901		mg/L		90	70 - 130

Lab Sample ID: 240-230530-12 MSD — **Client Sample ID: L508217-07 MW-11B**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 667565 — **Prep Batch: 667347**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.000933		mg/L		93	70 - 130	3	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-667415/29 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 667415

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/12/25 11:17	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/12/25 11:17	1

Lab Sample ID: MB 240-667415/55 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 667415

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/12/25 13:22	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/12/25 13:22	1

Lab Sample ID: MB 240-667415/82 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 667415

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/12/25 15:49	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/12/25 15:49	1

Lab Sample ID: 240-230530-5 DU — **Client Sample ID: L508217-11 MWT-6**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 667415

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	430		435		mg/L		0.5	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-667192/1
Matrix: Water
Analysis Batch: 667192

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			08/11/25 12:38	1

Lab Sample ID: LCS 240-667192/2
Matrix: Water
Analysis Batch: 667192

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	240	229		mg/L		95	80 - 120

Lab Sample ID: MB 240-667300/1
Matrix: Water
Analysis Batch: 667300

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			08/12/25 09:29	1

Lab Sample ID: LCS 240-667300/2
Matrix: Water
Analysis Batch: 667300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	240	200		mg/L		83	80 - 120

Lab Sample ID: 240-230530-12 DU
Matrix: Water
Analysis Batch: 667300

Client Sample ID: L508217-07 MW-11B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	250		254		mg/L		3	20

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-667308/1
Matrix: Water
Analysis Batch: 667308

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			08/12/25 10:17	1

Lab Sample ID: LCS 240-667308/2
Matrix: Water
Analysis Batch: 667308

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	30.0	29.0	J	mg/L		97	64 - 120

Method: 2540D-2020 - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: 240-230530-9 DU
Matrix: Water
Analysis Batch: 667308

Client Sample ID: L508217-04 MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	1.6	J	9.20	F5	mg/L		141	10

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-667184/3
Matrix: Water
Analysis Batch: 667184

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			08/11/25 21:08	1
Fluoride	ND		0.050	0.024	mg/L			08/11/25 21:08	1
Sulfate	ND		1.0	0.35	mg/L			08/11/25 21:08	1

Lab Sample ID: LCS 240-667184/4
Matrix: Water
Analysis Batch: 667184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	50.9		mg/L		102	90 - 110
Fluoride	2.50	2.62		mg/L		105	90 - 110
Sulfate	50.0	50.8		mg/L		102	90 - 110

Lab Sample ID: 240-230530-3 MS
Matrix: Water
Analysis Batch: 667184

Client Sample ID: L508217-09 MW-12B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1.2	F1 F2	50.0	42.4		mg/L		82	80 - 120
Fluoride	0.76	F1 F2	2.50	2.79		mg/L		81	80 - 120
Sulfate	0.45	J F1 F2	50.0	41.2		mg/L		82	80 - 120

Lab Sample ID: 240-230530-3 MSD
Matrix: Water
Analysis Batch: 667184

Client Sample ID: L508217-09 MW-12B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1.2	F1 F2	50.0	63.4	F1 F2	mg/L		124	80 - 120	40	15
Fluoride	0.76	F1 F2	2.50	3.80	F1 F2	mg/L		122	80 - 120	31	15
Sulfate	0.45	J F1 F2	50.0	61.9	F1 F2	mg/L		123	80 - 120	40	15

Metals

Prep Batch: 8817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-1	L508217-01 MW-1	Total/NA	Water	200.7	
240-230530-2	L508217-08 MW-12	Total/NA	Water	200.7	
MB 350-8817/25-A	Method Blank	Total/NA	Water	200.7	
LCS 350-8817/26-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 8851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-1	L508217-01 MW-1	Total/NA	Water	200.8	8817
240-230530-2	L508217-08 MW-12	Total/NA	Water	200.8	8817
MB 350-8817/25-A	Method Blank	Total/NA	Water	200.8	8817
LCS 350-8817/26-A	Lab Control Sample	Total/NA	Water	200.8	8817

Prep Batch: 8855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-2	L508217-08 MW-12	Dissolved	Water	200.7	
240-230530-3	L508217-09 MW-12B	Total/NA	Water	200.7	
240-230530-4	L508217-10 MW-14	Total/NA	Water	200.7	
240-230530-5	L508217-11 MWT-6	Total/NA	Water	200.7	
240-230530-6	L508217-12 FIELD BLANK	Total/NA	Water	200.7	
MB 350-8855/25-A	Method Blank	Total/NA	Water	200.7	
LCS 350-8855/26-A	Lab Control Sample	Total/NA	Water	200.7	
240-230530-3 MS	L508217-09 MW-12B	Total/NA	Water	200.7	
240-230530-3 MSD	L508217-09 MW-12B	Total/NA	Water	200.7	

Prep Batch: 8859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-7	L508217-02 MW-2	Total/NA	Water	200.7	
240-230530-8	L508217-03 MW-3	Total/NA	Water	200.7	
240-230530-9	L508217-04 MW-5	Total/NA	Water	200.7	
240-230530-10	L508217-05 MW-6	Total/NA	Water	200.7	
240-230530-11	L508217-06 MW-11	Total/NA	Water	200.7	
240-230530-12	L508217-07 MW-11B	Total/NA	Water	200.7	
MB 350-8859/25-A	Method Blank	Total/NA	Water	200.7	
LCS 350-8859/26-A	Lab Control Sample	Total/NA	Water	200.7	

Prep Batch: 8897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-6	L508217-12 FIELD BLANK	Dissolved	Water	200.7	
240-230530-7	L508217-02 MW-2	Dissolved	Water	200.7	
240-230530-9	L508217-04 MW-5	Dissolved	Water	200.7	
MB 350-8897/22-A	Method Blank	Total/NA	Water	200.7	
LCS 350-8897/23-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 8905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-2	L508217-08 MW-12	Dissolved	Water	200.8	8855
240-230530-3	L508217-09 MW-12B	Total/NA	Water	200.8	8855
240-230530-4	L508217-10 MW-14	Total/NA	Water	200.8	8855
240-230530-4	L508217-10 MW-14	Total/NA	Water	200.8	8855
240-230530-5	L508217-11 MWT-6	Total/NA	Water	200.8	8855
240-230530-6	L508217-12 FIELD BLANK	Total/NA	Water	200.8	8855

Metals (Continued)

Analysis Batch: 8905 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-7	L508217-02 MW-2	Total/NA	Water	200.8	8859
240-230530-8	L508217-03 MW-3	Total/NA	Water	200.8	8859
240-230530-9	L508217-04 MW-5	Total/NA	Water	200.8	8859
240-230530-10	L508217-05 MW-6	Total/NA	Water	200.8	8859
240-230530-11	L508217-06 MW-11	Total/NA	Water	200.8	8859
240-230530-11	L508217-06 MW-11	Total/NA	Water	200.8	8859
240-230530-12	L508217-07 MW-11B	Total/NA	Water	200.8	8859
MB 350-8855/25-A	Method Blank	Total/NA	Water	200.8	8855
MB 350-8859/25-A	Method Blank	Total/NA	Water	200.8	8859
LCS 350-8855/26-A	Lab Control Sample	Total/NA	Water	200.8	8855
LCS 350-8859/26-A	Lab Control Sample	Total/NA	Water	200.8	8859
240-230530-3 MS	L508217-09 MW-12B	Total/NA	Water	200.8	8855
240-230530-3 MSD	L508217-09 MW-12B	Total/NA	Water	200.8	8855

Analysis Batch: 8926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-6	L508217-12 FIELD BLANK	Dissolved	Water	200.8	8897
240-230530-7	L508217-02 MW-2	Dissolved	Water	200.8	8897
240-230530-9	L508217-04 MW-5	Dissolved	Water	200.8	8897
MB 350-8897/22-A	Method Blank	Total/NA	Water	200.8	8897
LCS 350-8897/23-A	Lab Control Sample	Total/NA	Water	200.8	8897

Analysis Batch: 8942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-1	L508217-01 MW-1	Total/NA	Water	200.7 Rev 4.4	8817
240-230530-2	L508217-08 MW-12	Dissolved	Water	200.7 Rev 4.4	8855
240-230530-2	L508217-08 MW-12	Total/NA	Water	200.7 Rev 4.4	8817
240-230530-3	L508217-09 MW-12B	Total/NA	Water	200.7 Rev 4.4	8855
240-230530-4	L508217-10 MW-14	Total/NA	Water	200.7 Rev 4.4	8855
240-230530-5	L508217-11 MWT-6	Total/NA	Water	200.7 Rev 4.4	8855
240-230530-6	L508217-12 FIELD BLANK	Dissolved	Water	200.7 Rev 4.4	8897
240-230530-6	L508217-12 FIELD BLANK	Total/NA	Water	200.7 Rev 4.4	8855
240-230530-7	L508217-02 MW-2	Dissolved	Water	200.7 Rev 4.4	8897
240-230530-7	L508217-02 MW-2	Total/NA	Water	200.7 Rev 4.4	8859
240-230530-8	L508217-03 MW-3	Total/NA	Water	200.7 Rev 4.4	8859
240-230530-9	L508217-04 MW-5	Dissolved	Water	200.7 Rev 4.4	8897
240-230530-9	L508217-04 MW-5	Total/NA	Water	200.7 Rev 4.4	8859
240-230530-10	L508217-05 MW-6	Total/NA	Water	200.7 Rev 4.4	8859
240-230530-11	L508217-06 MW-11	Total/NA	Water	200.7 Rev 4.4	8859
240-230530-12	L508217-07 MW-11B	Total/NA	Water	200.7 Rev 4.4	8859
MB 350-8817/25-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	8817
MB 350-8855/25-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	8855
MB 350-8859/25-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	8859
MB 350-8897/22-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	8897
LCS 350-8817/26-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	8817
LCS 350-8855/26-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	8855
LCS 350-8859/26-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	8859
LCS 350-8897/23-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	8897
240-230530-3 MS	L508217-09 MW-12B	Total/NA	Water	200.7 Rev 4.4	8855
240-230530-3 MSD	L508217-09 MW-12B	Total/NA	Water	200.7 Rev 4.4	8855

Metals

Prep Batch: 667341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-1	L508217-01 MW-1	Total Recoverable	Water	200.7	
240-230530-2	L508217-08 MW-12	Dissolved	Water	200.8-1994 R5.4	
240-230530-2	L508217-08 MW-12	Total Recoverable	Water	200.7	
240-230530-3	L508217-09 MW-12B	Total Recoverable	Water	200.7	
240-230530-4	L508217-10 MW-14	Total Recoverable	Water	200.7	
240-230530-5	L508217-11 MWT-6	Total Recoverable	Water	200.7	
240-230530-6	L508217-12 FIELD BLANK	Dissolved	Water	200.8-1994 R5.4	
240-230530-6	L508217-12 FIELD BLANK	Total Recoverable	Water	200.7	
240-230530-7	L508217-02 MW-2	Dissolved	Water	200.8-1994 R5.4	
240-230530-7	L508217-02 MW-2	Total Recoverable	Water	200.7	
240-230530-8	L508217-03 MW-3	Total Recoverable	Water	200.7	
240-230530-9	L508217-04 MW-5	Dissolved	Water	200.8-1994 R5.4	
240-230530-9	L508217-04 MW-5	Total Recoverable	Water	200.7	
240-230530-10	L508217-05 MW-6	Total Recoverable	Water	200.7	
240-230530-11	L508217-06 MW-11	Total Recoverable	Water	200.7	
240-230530-12	L508217-07 MW-11B	Total Recoverable	Water	200.7	
MB 240-667341/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-667341/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-667341/3-A	Lab Control Sample	Total Recoverable	Water	200.7	
240-230530-1 MS	L508217-01 MW-1	Total Recoverable	Water	200.8-1994 R5.4	
240-230530-1 MS	L508217-01 MW-1	Total Recoverable	Water	200.7	
240-230530-1 MSD	L508217-01 MW-1	Total Recoverable	Water	200.8-1994 R5.4	
240-230530-1 MSD	L508217-01 MW-1	Total Recoverable	Water	200.7	
240-230530-2 MS	L508217-08 MW-12	Total Recoverable	Water	200.8-1994 R5.4	
240-230530-2 MS	L508217-08 MW-12	Total Recoverable	Water	200.7	
240-230530-2 MSD	L508217-08 MW-12	Total Recoverable	Water	200.8-1994 R5.4	
240-230530-2 MSD	L508217-08 MW-12	Total Recoverable	Water	200.7	

Prep Batch: 667347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-1	L508217-01 MW-1	Total/NA	Water	245.1-1994 R3.0	
240-230530-2	L508217-08 MW-12	Dissolved	Water	245.1-1994 R3.0	
240-230530-2	L508217-08 MW-12	Total/NA	Water	245.1-1994 R3.0	
240-230530-3	L508217-09 MW-12B	Total/NA	Water	245.1-1994 R3.0	
240-230530-4	L508217-10 MW-14	Total/NA	Water	245.1-1994 R3.0	
240-230530-5	L508217-11 MWT-6	Total/NA	Water	245.1-1994 R3.0	
240-230530-6	L508217-12 FIELD BLANK	Dissolved	Water	245.1-1994 R3.0	
240-230530-6	L508217-12 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	
240-230530-7	L508217-02 MW-2	Dissolved	Water	245.1-1994 R3.0	
240-230530-7	L508217-02 MW-2	Total/NA	Water	245.1-1994 R3.0	
240-230530-8	L508217-03 MW-3	Total/NA	Water	245.1-1994 R3.0	
240-230530-9	L508217-04 MW-5	Dissolved	Water	245.1-1994 R3.0	
240-230530-9	L508217-04 MW-5	Total/NA	Water	245.1-1994 R3.0	
240-230530-10	L508217-05 MW-6	Total/NA	Water	245.1-1994 R3.0	
240-230530-11	L508217-06 MW-11	Total/NA	Water	245.1-1994 R3.0	
240-230530-12	L508217-07 MW-11B	Total/NA	Water	245.1-1994 R3.0	
MB 240-667347/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-667347/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	
240-230530-11 MS	L508217-06 MW-11	Total/NA	Water	245.1-1994 R3.0	
240-230530-11 MSD	L508217-06 MW-11	Total/NA	Water	245.1-1994 R3.0	
240-230530-12 MS	L508217-07 MW-11B	Total/NA	Water	245.1-1994 R3.0	

Metals (Continued)

Prep Batch: 667347 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-12 MSD	L508217-07 MW-11B	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 667542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-1	L508217-01 MW-1	Total Recoverable	Water	200.7 R4.4-1994	667341
240-230530-2	L508217-08 MW-12	Dissolved	Water	200.7 R4.4-1994	667341
240-230530-2	L508217-08 MW-12	Total Recoverable	Water	200.7 R4.4-1994	667341
240-230530-3	L508217-09 MW-12B	Total Recoverable	Water	200.7 R4.4-1994	667341
240-230530-4	L508217-10 MW-14	Total Recoverable	Water	200.7 R4.4-1994	667341
240-230530-5	L508217-11 MWT-6	Total Recoverable	Water	200.7 R4.4-1994	667341
240-230530-6	L508217-12 FIELD BLANK	Dissolved	Water	200.7 R4.4-1994	667341
240-230530-6	L508217-12 FIELD BLANK	Total Recoverable	Water	200.7 R4.4-1994	667341
240-230530-7	L508217-02 MW-2	Dissolved	Water	200.7 R4.4-1994	667341
240-230530-7	L508217-02 MW-2	Total Recoverable	Water	200.7 R4.4-1994	667341
240-230530-8	L508217-03 MW-3	Total Recoverable	Water	200.7 R4.4-1994	667341
240-230530-9	L508217-04 MW-5	Dissolved	Water	200.7 R4.4-1994	667341
240-230530-9	L508217-04 MW-5	Total Recoverable	Water	200.7 R4.4-1994	667341
240-230530-10	L508217-05 MW-6	Total Recoverable	Water	200.7 R4.4-1994	667341
240-230530-11	L508217-06 MW-11	Total Recoverable	Water	200.7 R4.4-1994	667341
240-230530-12	L508217-07 MW-11B	Total Recoverable	Water	200.7 R4.4-1994	667341
MB 240-667341/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	667341
LCS 240-667341/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	667341
240-230530-1 MS	L508217-01 MW-1	Total Recoverable	Water	200.7 R4.4-1994	667341
240-230530-1 MSD	L508217-01 MW-1	Total Recoverable	Water	200.7 R4.4-1994	667341
240-230530-2 MS	L508217-08 MW-12	Total Recoverable	Water	200.7 R4.4-1994	667341
240-230530-2 MSD	L508217-08 MW-12	Total Recoverable	Water	200.7 R4.4-1994	667341

Analysis Batch: 667565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-1	L508217-01 MW-1	Total/NA	Water	245.1-1994 R3.0	667347
240-230530-2	L508217-08 MW-12	Dissolved	Water	245.1-1994 R3.0	667347
240-230530-2	L508217-08 MW-12	Total/NA	Water	245.1-1994 R3.0	667347
240-230530-3	L508217-09 MW-12B	Total/NA	Water	245.1-1994 R3.0	667347
240-230530-4	L508217-10 MW-14	Total/NA	Water	245.1-1994 R3.0	667347
240-230530-5	L508217-11 MWT-6	Total/NA	Water	245.1-1994 R3.0	667347
240-230530-6	L508217-12 FIELD BLANK	Dissolved	Water	245.1-1994 R3.0	667347
240-230530-6	L508217-12 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	667347
240-230530-7	L508217-02 MW-2	Dissolved	Water	245.1-1994 R3.0	667347
240-230530-7	L508217-02 MW-2	Total/NA	Water	245.1-1994 R3.0	667347
240-230530-8	L508217-03 MW-3	Total/NA	Water	245.1-1994 R3.0	667347
240-230530-9	L508217-04 MW-5	Dissolved	Water	245.1-1994 R3.0	667347
240-230530-9	L508217-04 MW-5	Total/NA	Water	245.1-1994 R3.0	667347
240-230530-10	L508217-05 MW-6	Total/NA	Water	245.1-1994 R3.0	667347
240-230530-11	L508217-06 MW-11	Total/NA	Water	245.1-1994 R3.0	667347
240-230530-12	L508217-07 MW-11B	Total/NA	Water	245.1-1994 R3.0	667347
MB 240-667347/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	667347
LCS 240-667347/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	667347
240-230530-11 MS	L508217-06 MW-11	Total/NA	Water	245.1-1994 R3.0	667347
240-230530-11 MSD	L508217-06 MW-11	Total/NA	Water	245.1-1994 R3.0	667347
240-230530-12 MS	L508217-07 MW-11B	Total/NA	Water	245.1-1994 R3.0	667347
240-230530-12 MSD	L508217-07 MW-11B	Total/NA	Water	245.1-1994 R3.0	667347

Metals

Analysis Batch: 667773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-1	L508217-01 MW-1	Total Recoverable	Water	200.8-1994 R5.4	667341
240-230530-2	L508217-08 MW-12	Dissolved	Water	200.8-1994 R5.4	667341
240-230530-2	L508217-08 MW-12	Total Recoverable	Water	200.8-1994 R5.4	667341
240-230530-3	L508217-09 MW-12B	Total Recoverable	Water	200.8-1994 R5.4	667341
240-230530-4	L508217-10 MW-14	Total Recoverable	Water	200.8-1994 R5.4	667341
240-230530-5	L508217-11 MWT-6	Total Recoverable	Water	200.8-1994 R5.4	667341
240-230530-6	L508217-12 FIELD BLANK	Dissolved	Water	200.8-1994 R5.4	667341
240-230530-6	L508217-12 FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	667341
240-230530-7	L508217-02 MW-2	Dissolved	Water	200.8-1994 R5.4	667341
240-230530-7	L508217-02 MW-2	Total Recoverable	Water	200.8-1994 R5.4	667341
240-230530-8	L508217-03 MW-3	Total Recoverable	Water	200.8-1994 R5.4	667341
240-230530-9	L508217-04 MW-5	Dissolved	Water	200.8-1994 R5.4	667341
240-230530-9	L508217-04 MW-5	Total Recoverable	Water	200.8-1994 R5.4	667341
240-230530-10	L508217-05 MW-6	Total Recoverable	Water	200.8-1994 R5.4	667341
240-230530-11	L508217-06 MW-11	Total Recoverable	Water	200.8-1994 R5.4	667341
240-230530-12	L508217-07 MW-11B	Total Recoverable	Water	200.8-1994 R5.4	667341
MB 240-667341/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	667341
LCS 240-667341/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	667341
240-230530-1 MS	L508217-01 MW-1	Total Recoverable	Water	200.8-1994 R5.4	667341
240-230530-1 MSD	L508217-01 MW-1	Total Recoverable	Water	200.8-1994 R5.4	667341
240-230530-2 MS	L508217-08 MW-12	Total Recoverable	Water	200.8-1994 R5.4	667341
240-230530-2 MSD	L508217-08 MW-12	Total Recoverable	Water	200.8-1994 R5.4	667341

Analysis Batch: 667992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-1	L508217-01 MW-1	Total Recoverable	Water	2340 B-2021	
240-230530-2	L508217-08 MW-12	Total Recoverable	Water	2340 B-2021	
240-230530-3	L508217-09 MW-12B	Total Recoverable	Water	2340 B-2021	
240-230530-4	L508217-10 MW-14	Total Recoverable	Water	2340 B-2021	
240-230530-5	L508217-11 MWT-6	Total Recoverable	Water	2340 B-2021	
240-230530-6	L508217-12 FIELD BLANK	Total Recoverable	Water	2340 B-2021	
240-230530-7	L508217-02 MW-2	Total Recoverable	Water	2340 B-2021	
240-230530-8	L508217-03 MW-3	Total Recoverable	Water	2340 B-2021	
240-230530-9	L508217-04 MW-5	Total Recoverable	Water	2340 B-2021	
240-230530-10	L508217-05 MW-6	Total Recoverable	Water	2340 B-2021	
240-230530-11	L508217-06 MW-11	Total Recoverable	Water	2340 B-2021	
240-230530-12	L508217-07 MW-11B	Total Recoverable	Water	2340 B-2021	

General Chemistry

Analysis Batch: 667184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-1	L508217-01 MW-1	Total/NA	Water	300.0-1993 R2.1	
240-230530-2	L508217-08 MW-12	Total/NA	Water	300.0-1993 R2.1	
240-230530-3	L508217-09 MW-12B	Total/NA	Water	300.0-1993 R2.1	
240-230530-4	L508217-10 MW-14	Total/NA	Water	300.0-1993 R2.1	
240-230530-5	L508217-11 MWT-6	Total/NA	Water	300.0-1993 R2.1	
240-230530-6	L508217-12 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
240-230530-7	L508217-02 MW-2	Total/NA	Water	300.0-1993 R2.1	
240-230530-7	L508217-02 MW-2	Total/NA	Water	300.0-1993 R2.1	
240-230530-8	L508217-03 MW-3	Total/NA	Water	300.0-1993 R2.1	

General Chemistry (Continued)

Analysis Batch: 667184 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-8	L508217-03 MW-3	Total/NA	Water	300.0-1993 R2.1	
240-230530-9	L508217-04 MW-5	Total/NA	Water	300.0-1993 R2.1	
240-230530-10	L508217-05 MW-6	Total/NA	Water	300.0-1993 R2.1	
240-230530-11	L508217-06 MW-11	Total/NA	Water	300.0-1993 R2.1	
240-230530-12	L508217-07 MW-11B	Total/NA	Water	300.0-1993 R2.1	
MB 240-667184/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-667184/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-230530-3 MS	L508217-09 MW-12B	Total/NA	Water	300.0-1993 R2.1	
240-230530-3 MSD	L508217-09 MW-12B	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 667192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-1	L508217-01 MW-1	Total/NA	Water	2540 C-2020	
240-230530-2	L508217-08 MW-12	Total/NA	Water	2540 C-2020	
240-230530-3	L508217-09 MW-12B	Total/NA	Water	2540 C-2020	
MB 240-667192/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-667192/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 667300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-4	L508217-10 MW-14	Total/NA	Water	2540 C-2020	
240-230530-5	L508217-11 MWT-6	Total/NA	Water	2540 C-2020	
240-230530-6	L508217-12 FIELD BLANK	Total/NA	Water	2540 C-2020	
240-230530-7	L508217-02 MW-2	Total/NA	Water	2540 C-2020	
240-230530-8	L508217-03 MW-3	Total/NA	Water	2540 C-2020	
240-230530-9	L508217-04 MW-5	Total/NA	Water	2540 C-2020	
240-230530-10	L508217-05 MW-6	Total/NA	Water	2540 C-2020	
240-230530-11	L508217-06 MW-11	Total/NA	Water	2540 C-2020	
240-230530-12	L508217-07 MW-11B	Total/NA	Water	2540 C-2020	
MB 240-667300/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-667300/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-230530-12 DU	L508217-07 MW-11B	Total/NA	Water	2540 C-2020	

Analysis Batch: 667308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-1	L508217-01 MW-1	Total/NA	Water	2540D-2020	
240-230530-2	L508217-08 MW-12	Total/NA	Water	2540D-2020	
240-230530-3	L508217-09 MW-12B	Total/NA	Water	2540D-2020	
240-230530-4	L508217-10 MW-14	Total/NA	Water	2540D-2020	
240-230530-5	L508217-11 MWT-6	Total/NA	Water	2540D-2020	
240-230530-6	L508217-12 FIELD BLANK	Total/NA	Water	2540D-2020	
240-230530-7	L508217-02 MW-2	Total/NA	Water	2540D-2020	
240-230530-8	L508217-03 MW-3	Total/NA	Water	2540D-2020	
240-230530-9	L508217-04 MW-5	Total/NA	Water	2540D-2020	
240-230530-10	L508217-05 MW-6	Total/NA	Water	2540D-2020	
240-230530-11	L508217-06 MW-11	Total/NA	Water	2540D-2020	
240-230530-12	L508217-07 MW-11B	Total/NA	Water	2540D-2020	
MB 240-667308/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-667308/2	Lab Control Sample	Total/NA	Water	2540D-2020	
240-230530-9 DU	L508217-04 MW-5	Total/NA	Water	2540D-2020	

QC Association Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

General Chemistry

Analysis Batch: 667415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-1	L508217-01 MW-1	Total/NA	Water	2320 B-2021	
240-230530-2	L508217-08 MW-12	Total/NA	Water	2320 B-2021	
240-230530-3	L508217-09 MW-12B	Total/NA	Water	2320 B-2021	
240-230530-4	L508217-10 MW-14	Total/NA	Water	2320 B-2021	
240-230530-5	L508217-11 MWT-6	Total/NA	Water	2320 B-2021	
240-230530-6	L508217-12 FIELD BLANK	Total/NA	Water	2320 B-2021	
240-230530-7	L508217-02 MW-2	Total/NA	Water	2320 B-2021	
240-230530-8	L508217-03 MW-3	Total/NA	Water	2320 B-2021	
240-230530-9	L508217-04 MW-5	Total/NA	Water	2320 B-2021	
240-230530-10	L508217-05 MW-6	Total/NA	Water	2320 B-2021	
240-230530-11	L508217-06 MW-11	Total/NA	Water	2320 B-2021	
240-230530-12	L508217-07 MW-11B	Total/NA	Water	2320 B-2021	
MB 240-667415/29	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-667415/55	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-667415/82	Method Blank	Total/NA	Water	2320 B-2021	
240-230530-5 DU	L508217-11 MWT-6	Total/NA	Water	2320 B-2021	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Client Sample ID: L508217-01 MW-1

Lab Sample ID: 240-230530-1

Date Collected: 08/06/25 07:43
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667542	RKT	EET CLE	08/14/25 03:50
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 18:37
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.8		1	8851	CW	EET SSM	08/13/25 14:50
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 15:49
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:14
Total/NA	Prep	245.1-1994 R3.0			667347	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 13:46
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 15:13
Total/NA	Analysis	2540 C-2020		1	667192	AAP	EET CLE	08/11/25 12:38
Total/NA	Analysis	2540D-2020		1	667308	TAV2	EET CLE	08/12/25 10:17
Total/NA	Analysis	300.0-1993 R2.1		1	667184	JMR	EET CLE	08/11/25 23:53

Client Sample ID: L508217-08 MW-12

Lab Sample ID: 240-230530-2

Date Collected: 08/06/25 13:38
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.8-1994 R5.4			667341	TQ6W	EET CLE	08/12/25 14:00
Dissolved	Analysis	200.7 R4.4-1994		1	667542	RKT	EET CLE	08/14/25 04:26
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667542	RKT	EET CLE	08/14/25 04:13
Dissolved	Prep	200.7			8855	JR	EET SSM	08/13/25 17:01
Dissolved	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 19:12
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 18:40
Dissolved	Prep	200.7			8855	JR	EET SSM	08/13/25 17:01
Dissolved	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 18:47
Total/NA	Prep	200.7			8817	RMN	EET SSM	08/12/25 18:09
Total/NA	Analysis	200.8		1	8851	CW	EET SSM	08/13/25 14:53
Dissolved	Prep	200.8-1994 R5.4			667341	TQ6W	EET CLE	08/12/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 16:16
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 16:08
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:14
Dissolved	Prep	245.1-1994 R3.0			667347	TQ6W	EET CLE	08/12/25 14:00
Dissolved	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 13:49
Total/NA	Prep	245.1-1994 R3.0			667347	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 13:48
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 15:20
Total/NA	Analysis	2540 C-2020		1	667192	AAP	EET CLE	08/11/25 12:38

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Client Sample ID: L508217-08 MW-12

Lab Sample ID: 240-230530-2

Date Collected: 08/06/25 13:38
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540D-2020		1	667308	TAV2	EET CLE	08/12/25 10:17
Total/NA	Analysis	300.0-1993 R2.1		1	667184	JMR	EET CLE	08/12/25 00:12

Client Sample ID: L508217-09 MW-12B

Lab Sample ID: 240-230530-3

Date Collected: 08/06/25 15:18
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667542	RKT	EET CLE	08/14/25 04:30
Total/NA	Prep	200.7			8855	JR	EET SSM	08/13/25 17:01
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 18:50
Total/NA	Prep	200.7			8855	JR	EET SSM	08/13/25 17:01
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 17:18
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 16:19
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:14
Total/NA	Prep	245.1-1994 R3.0			667347	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 13:51
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 15:29
Total/NA	Analysis	2540 C-2020		1	667192	AAP	EET CLE	08/11/25 12:38
Total/NA	Analysis	2540D-2020		1	667308	TAV2	EET CLE	08/12/25 10:17
Total/NA	Analysis	300.0-1993 R2.1		1	667184	JMR	EET CLE	08/12/25 01:10

Client Sample ID: L508217-10 MW-14

Lab Sample ID: 240-230530-4

Date Collected: 08/06/25 09:27
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667542	RKT	EET CLE	08/14/25 06:53
Total/NA	Prep	200.7			8855	JR	EET SSM	08/13/25 17:01
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 19:15
Total/NA	Prep	200.7			8855	JR	EET SSM	08/13/25 17:01
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 18:50
Total/NA	Prep	200.7			8855	JR	EET SSM	08/13/25 17:01
Total/NA	Analysis	200.8		5	8905	CW	EET SSM	08/14/25 18:53
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 16:21
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:14
Total/NA	Prep	245.1-1994 R3.0			667347	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 13:53
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 15:35
Total/NA	Analysis	2540 C-2020		1	667300	TAV2	EET CLE	08/12/25 09:29

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Client Sample ID: L508217-10 MW-14

Lab Sample ID: 240-230530-4

Date Collected: 08/06/25 09:27
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540D-2020		1	667308	TAV2	EET CLE	08/12/25 10:17
Total/NA	Analysis	300.0-1993 R2.1		1	667184	JMR	EET CLE	08/12/25 00:31

Client Sample ID: L508217-11 MWT-6

Lab Sample ID: 240-230530-5

Date Collected: 08/06/25 11:14
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667542	RKT	EET CLE	08/14/25 06:57
Total/NA	Prep	200.7			8855	JR	EET SSM	08/13/25 17:01
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 19:18
Total/NA	Prep	200.7			8855	JR	EET SSM	08/13/25 17:01
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 18:56
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 16:24
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:14
Total/NA	Prep	245.1-1994 R3.0			667347	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 13:55
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 15:53
Total/NA	Analysis	2540 C-2020		1	667300	TAV2	EET CLE	08/12/25 09:29
Total/NA	Analysis	2540D-2020		1	667308	TAV2	EET CLE	08/12/25 10:17
Total/NA	Analysis	300.0-1993 R2.1		1	667184	JMR	EET CLE	08/12/25 01:39

Client Sample ID: L508217-12 FIELD BLANK

Lab Sample ID: 240-230530-6

Date Collected: 08/06/25 07:45
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.8-1994 R5.4			667341	TQ6W	EET CLE	08/12/25 14:00
Dissolved	Analysis	200.7 R4.4-1994		1	667542	RKT	EET CLE	08/14/25 07:06
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667542	RKT	EET CLE	08/14/25 07:02
Dissolved	Prep	200.7			8897	JR	EET SSM	08/14/25 17:59
Dissolved	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 16:07
Total/NA	Prep	200.7			8855	JR	EET SSM	08/13/25 17:01
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 19:22
Dissolved	Prep	200.7			8897	JR	EET SSM	08/14/25 17:59
Dissolved	Analysis	200.8		1	8926	CW	EET SSM	08/15/25 14:21
Total/NA	Prep	200.7			8855	JR	EET SSM	08/13/25 17:01
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 19:04
Dissolved	Prep	200.8-1994 R5.4			667341	TQ6W	EET CLE	08/12/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 16:29

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Client Sample ID: L508217-12 FIELD BLANK

Lab Sample ID: 240-230530-6

Date Collected: 08/06/25 07:45

Matrix: Water

Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 16:27
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:14
Dissolved	Prep	245.1-1994 R3.0			667347	TQ6W	EET CLE	08/12/25 14:00
Dissolved	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 13:58
Total/NA	Prep	245.1-1994 R3.0			667347	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 13:56
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 16:05
Total/NA	Analysis	2540 C-2020		1	667300	TAV2	EET CLE	08/12/25 09:29
Total/NA	Analysis	2540D-2020		1	667308	TAV2	EET CLE	08/12/25 10:17
Total/NA	Analysis	300.0-1993 R2.1		1	667184	JMR	EET CLE	08/12/25 01:58

Client Sample ID: L508217-02 MW-2

Lab Sample ID: 240-230530-7

Date Collected: 08/06/25 13:39

Matrix: Water

Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.8-1994 R5.4			667341	TQ6W	EET CLE	08/12/25 14:00
Dissolved	Analysis	200.7 R4.4-1994		1	667542	RKT	EET CLE	08/14/25 07:24
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667542	RKT	EET CLE	08/14/25 07:11
Dissolved	Prep	200.7			8897	JR	EET SSM	08/14/25 17:59
Dissolved	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 16:11
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 20:09
Dissolved	Prep	200.7			8897	JR	EET SSM	08/14/25 17:59
Dissolved	Analysis	200.8		1	8926	CW	EET SSM	08/15/25 14:24
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 19:55
Dissolved	Prep	200.8-1994 R5.4			667341	TQ6W	EET CLE	08/12/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 16:40
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 16:37
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:14
Dissolved	Prep	245.1-1994 R3.0			667347	TQ6W	EET CLE	08/12/25 14:00
Dissolved	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:05
Total/NA	Prep	245.1-1994 R3.0			667347	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:00
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 16:09
Total/NA	Analysis	2540 C-2020		1	667300	TAV2	EET CLE	08/12/25 09:29
Total/NA	Analysis	2540D-2020		1	667308	TAV2	EET CLE	08/12/25 10:17
Total/NA	Analysis	300.0-1993 R2.1		1	667184	JMR	EET CLE	08/12/25 02:08
Total/NA	Analysis	300.0-1993 R2.1		5	667184	JMR	EET CLE	08/12/25 02:18

Lab Chronicle

Client: Lansing Board of Water & Light
Job ID: 240-230530-1
Project/Site: Erickson Projects

Client Sample ID: L508217-03 MW-3
Lab Sample ID: 240-230530-8
Date Collected: 08/06/25 15:37
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667542	RKT	EET CLE	08/14/25 07:28
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 20:13
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 19:58
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 16:42
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:16
Total/NA	Prep	245.1-1994 R3.0			667347	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:07
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 16:15
Total/NA	Analysis	2540 C-2020		1	667300	TAV2	EET CLE	08/12/25 09:29
Total/NA	Analysis	2540D-2020		1	667308	TAV2	EET CLE	08/12/25 10:17
Total/NA	Analysis	300.0-1993 R2.1		1	667184	JMR	EET CLE	08/12/25 02:27
Total/NA	Analysis	300.0-1993 R2.1		5	667184	JMR	EET CLE	08/12/25 02:56

Client Sample ID: L508217-04 MW-5
Lab Sample ID: 240-230530-9
Date Collected: 08/06/25 16:12
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.8-1994 R5.4			667341	TQ6W	EET CLE	08/12/25 14:00
Dissolved	Analysis	200.7 R4.4-1994		1	667542	RKT	EET CLE	08/14/25 07:37
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667542	RKT	EET CLE	08/14/25 07:33
Dissolved	Prep	200.7			8897	JR	EET SSM	08/14/25 17:59
Dissolved	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 16:14
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 20:16
Dissolved	Prep	200.7			8897	JR	EET SSM	08/14/25 17:59
Dissolved	Analysis	200.8		1	8926	CW	EET SSM	08/15/25 14:26
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 20:00
Dissolved	Prep	200.8-1994 R5.4			667341	TQ6W	EET CLE	08/12/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 16:48
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 16:45
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:16
Dissolved	Prep	245.1-1994 R3.0			667347	TQ6W	EET CLE	08/12/25 14:00
Dissolved	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:10
Total/NA	Prep	245.1-1994 R3.0			667347	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:08
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 16:21

Client Sample ID: L508217-04 MW-5

Lab Sample ID: 240-230530-9

Date Collected: 08/06/25 16:12

Matrix: Water

Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540 C-2020		1	667300	TAV2	EET CLE	08/12/25 09:29
Total/NA	Analysis	2540D-2020		1	667308	TAV2	EET CLE	08/12/25 10:17
Total/NA	Analysis	300.0-1993 R2.1		1	667184	JMR	EET CLE	08/12/25 03:06

Client Sample ID: L508217-05 MW-6

Lab Sample ID: 240-230530-10

Date Collected: 08/06/25 11:14

Matrix: Water

Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667542	RKT	EET CLE	08/14/25 07:42
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 20:19
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 20:03
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 16:50
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:16
Total/NA	Prep	245.1-1994 R3.0			667347	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:12
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 16:29
Total/NA	Analysis	2540 C-2020		1	667300	TAV2	EET CLE	08/12/25 09:29
Total/NA	Analysis	2540D-2020		1	667308	TAV2	EET CLE	08/12/25 10:17
Total/NA	Analysis	300.0-1993 R2.1		1	667184	JMR	EET CLE	08/12/25 03:25

Client Sample ID: L508217-06 MW-11

Lab Sample ID: 240-230530-11

Date Collected: 08/06/25 11:18

Matrix: Water

Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667542	RKT	EET CLE	08/14/25 07:46
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 20:29
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 20:06
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.8		5	8905	CW	EET SSM	08/14/25 20:09
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 16:53
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:16
Total/NA	Prep	245.1-1994 R3.0			667347	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:13
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 16:35

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Client Sample ID: L508217-06 MW-11

Lab Sample ID: 240-230530-11

Date Collected: 08/06/25 11:18
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540 C-2020		1	667300	TAV2	EET CLE	08/12/25 09:29
Total/NA	Analysis	2540D-2020		1	667308	TAV2	EET CLE	08/12/25 10:17
Total/NA	Analysis	300.0-1993 R2.1		1	667184	JMR	EET CLE	08/12/25 03:45

Client Sample ID: L508217-07 MW-11B

Lab Sample ID: 240-230530-12

Date Collected: 08/06/25 12:40
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667542	RKT	EET CLE	08/14/25 07:51
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 20:33
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 20:12
Total Recoverable	Prep	200.7			667341	TQ6W	EET CLE	08/12/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 16:56
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:16
Total/NA	Prep	245.1-1994 R3.0			667347	TQ6W	EET CLE	08/12/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667565	GEV	EET CLE	08/13/25 14:19
Total/NA	Analysis	2320 B-2021		1	667415	JMR	EET CLE	08/12/25 16:42
Total/NA	Analysis	2540 C-2020		1	667300	TAV2	EET CLE	08/12/25 09:29
Total/NA	Analysis	2540D-2020		1	667308	TAV2	EET CLE	08/12/25 10:17
Total/NA	Analysis	300.0-1993 R2.1		1	667184	JMR	EET CLE	08/12/25 04:04

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-1

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-08-26
Florida	NELAP	E87575	06-30-26
Louisiana (All)	NELAP	03073	07-01-26
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-26
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167-008	07-08-26
US Fish & Wildlife	US Federal Programs	A20571	06-30-26
USDA	US Federal Programs	525-23-4-22573	01-24-28

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☐

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com; Environmental_Laboratory@

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:

Project Number:
24034575

Sample State: MI

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
Marc Wahrer, Julie Maltby

Description:
Erickson 8-6-25

Site Name:
Erickson Projects

Special Instructions:
Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner. Please add Na and K metals

See following pages for Method and Container information.

240-230530 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L508217-01 MW-1	Grab	Water	08/06/25 07:43			
2	L508217-08 MW-12	Grab	Water	08/06/25 13:38		Needs all Dissolved Metals	
3	L508217-09 MW-12B	Grab	Water	08/06/25 15:18			
4	L508217-10 MW-14	Grab	Water	08/06/25 09:27			
5	L508217-11 MWT-6	Grab	Water	08/06/25 11:14			
6	L508217-12 Field Blank	Grab	Water	08/06/25 07:45		Needs all Dissolved Metals	
7	L508217-02 MW-2	Grab	Water	08/06/25 13:39		Needs all Dissolved Metals	
8	L508217-03 MW-3	Grab	Water	08/06/25 15:37			
9	L508217-04 MW-5	Grab	Water	08/06/25 16:12		Needs all Dissolved Metals	
10	L508217-05 MW-8	Grab	Water	08/06/25 11:14			
11	L508217-06 MW-11	Grab	Water	08/06/25 11:18			
12	L508217-07 MW-11B	Grab	Water	08/06/25 12:40			

Chain of Custody Number: **395794**

Ron Shea 8/19/25 0800

*H – Analysis on hold.

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By	Date/Time:	Samples Relinquished By	Date/Time:		
Jennifer Caporale	08/08/25 13:55	Jennifer Caporale	08/08/25 13:55		

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250807A001								
MIC20250807A001								
MIC20250807A002								
MIC20250807A004								

Ren Shen 8/9/25 0800

Chain of Custody Number: **395794**

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																			
#	Sample Name	200.8 / Metals (ICP/MS) / Iron & Zinc	2540D-2020 / Solids Total Suspended (TSS)	200.8 / Metals (ICP/MS) / Custom List 2, 2-3 Metals	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	200 7 R4.4-1994 / Metals (ICP) / Total Boron	200.8 / Metals (ICP/MS) / Custom List 2 2-3 Metals	904.0 / Radium-228 (GFPC) / Standard Target List	200 7 R4.4-1994 / Metals (ICP) / Total Boron	2320 B-2021 / Alkalinity / Bicarbonate & Carbonate Alkalinity	200 7 Rev 4.4 / Metals (ICP) / Total Na & K	300.0-1993 R2.1 / Anions, Ion Chromatography / Chloride, Fluor	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	245.1 1994 R3.0 / Mercury (CVAA) / Mercury	200.8 / Metals (ICP/MS) / Custom List 1 1 Metals	200 7 Rev 4.4 / Metals (ICP) / Iron & Zinc	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	245 1 1994 R3.0 / Mercury (CVAA) / Mercury	903.0 / Radium-226 (GFPC) / Standard Target List	2340 B-2021 / Total Hardness (as CaCO3) by calculation	200.7 Rev 4.4 / Metals (ICP) / Iron & Zinc	2540 C-2020 / Solids Total Dissolved (TDS) / Total Dissolved S
1	L508217-01 MW-1		X		X	X	X	X		X	X	X	X	X	X				X	X	X	X
2	L508217-08 MW-12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3	L508217-09 MW-12B		X		X	X	X	X		X	X	X	X	X	X				X	X	X	X
4	L508217-10 MW-14		X		X	X	X	X		X	X	X	X	X	X				X	X	X	X
5	L508217 11 MWT-6		X		X	X	X	X		X	X	X	X	X	X				X	X	X	X
6	L508217-12 Field Blank	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7	L508217-02 MW-2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8	L508217-03 MW-3		X		X	X	X	X		X	X	X	X	X	X				X	X	X	X
9	L508217-04 MW-5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10	L508217-05 MW-6		X		X	X	X	X		X	X	X	X	X	X				X	X	X	X
11	L508217-06 MW-11		X		X	X	X	X		X	X	X	X	X	X				X	X	X	X
12	L508217-07 MW-11B		X		X	X	X	X		X	X	X	X	X	X				X	X	X	X

Run Seq 8/19/25 0802

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																						
#	Sample Name	200.7 Rev 4.4 / Metals (ICP) / Dissolved Na & K	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	200.8 / Metals (ICP/MS) / Iron & Zinc																				
1	L508217-01 MW-1		X	X																				
2	L508217-08 MW-12	X	X	X																				
3	L508217-09 MW-12B		X	X																				
4	L508217-10 MW-14		X	X																				
5	L508217 11 MWT-6		X	X																				
6	L508217-12 Field Blank	X	X	X																				
7	L508217-02 MW-2	X	X	X																				
8	L508217-03 MW-3		X	X																				
9	L508217-04 MW-5	X	X	X																				
10	L508217-05 MW-6		X	X																				
11	L508217-06 MW-11		X	X																				
12	L508217-07 MW-11B		X	X																				

Ran Sloan 8/19/25 0800

Chain of Custody Bottles

eurofins | Environment Testing

Bottle Name	Total Bottles
Plastic 1 liter unpreserved	12
Plastic 60 mL - unpreserved	24
Plastic 1 liter Nitric Acid	24
Plastic 250ml - with Nitric Acid	12
Plastic 500ml with Nitric Acid	12
Plastic 500ml - unpreserved	16

Samples		Bottles							
#	Sample Name	Total Bottles For Sample	Plastic 1 liter unpreserved	Plastic 60 mL unpreserved	Plastic 1 liter Nitric Acid	Plastic 250ml with Nitric Acid	Plastic 500ml with Nitric Acid	Plastic 500ml unpreserved	
1	L508217-01 MW-1	8	1	2	2	1	1	1	
2	L508217-08 MW-12	9	1	2	2	1	1	2	
3	L508217-09 MW-12B	8	1	2	2	1	1	1	
4	L508217-10 MW-14	8	1	2	2	1	1	1	
5	L508217-11 MWT-6	8	1	2	2	1	1	1	
6	L508217-12 Field Blank	9	1	2	2	1	1	2	
7	L508217-02 MW-2	9	1	2	2	1	1	2	
8	L508217-03 MW-3	8	1	2	2	1	1	1	
9	L508217-04 MW-5	9	1	2	2	1	1	2	
10	L508217-05 MW-6	8	1	2	2	1	1	1	
11	L508217-06 MW-11	8	1	2	2	1	1	1	
12	L508217-07 MW-11B	8	1	2	2	1	1	1	

Rm Slg 8/9/25 0800

Ron Sloan 8/9/25
0800

Eurofins – Cleveland Sample Receipt Form/Narrative **Login #** _____
Barberton Facility

Client Lansing Board Site Name _____ Cooler unpacked by: _____

Cooler Received on 8/14/25 Opened on 8/14/25

FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # 1EC Foam Box Client Cooler Box Other _____

Packing material used. Bubble Wrap Foam Plastic Bag None Other _____

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # _____ (CF _____ °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12 Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC463162
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18 CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by: MG
Labels Verified by: MB

_____
_____
_____
_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired
Sample(s) _____ were received in a broken container
Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory
Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation Date/Time VOAs Frozen _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: 13	0.1	0.6	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 13	0.2	0.7	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 13	4.1	4.6	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 13	2.4	2.9	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	

8/11/2025

Login Container Summary Report

240-230530

8/18/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508217-01 MW-1	240-230530-A-1	Plastic 60 mL - unpreserved				
L508217-01 MW-1	240-230530-B-1	Plastic 60 mL - unpreserved				
L508217-01 MW-1	240-230530-C-1	Plastic 250ml - with Nitric Acid	<2			
L508217-01 MW-1	240-230530-D-1	Plastic 500ml - unpreserved				
L508217-01 MW-1	240-230530-E-1	Plastic 500ml with Nitric Acid	<2			
L508217-01 MW-1	240-230530-F-1	Plastic 1 liter - unpreserved				
L508217-01 MW-1	240-230530-G-1	Plastic 1 liter - Nitric Acid	<2			
L508217-01 MW-1	240-230530-H-1	Plastic 1 liter - Nitric Acid	<2			
L508217-08 MW-12	240-230530-A-2	Plastic 60 mL unpreserved				
L508217-08 MW-12	240-230530-B-2	Plastic 60 mL - unpreserved				
L508217-08 MW-12	240-230530-C-2	Plastic 250ml with Nitric Acid	<2			
L508217-08 MW-12	240-230530-D-2	Plastic 500ml - unpreserved				
L508217-08 MW-12	240-230530-E-2	Plastic 500ml with Nitric Acid	<2			
L508217-08 MW 12	240-230530-F-2	Plastic 500ml - w/ Nitric - Dis	<2			
L508217-08 MW-12	240-230530-G-2	Plastic 1 liter - unpreserved				
L508217-08 MW-12	240-230530-H-2	Plastic 1 liter - Nitric Acid	<2			
L508217-08 MW-12	240-230530-I-2	Plastic 1 liter - Nitric Acid	<2			
L508217-08 MW-12	240-230530-J-2	Plastic 250ml - w/nitric - dis	<2			
L508217-09 MW-12B	240 230530-A-3	Plastic 60 mL unpreserved				
L508217-09 MW-12B	240-230530-B-3	Plastic 60 mL - unpreserved				
L508217-09 MW-12B	240-230530-C-3	Plastic 250ml - with Nitric Acid	<2			
L508217-09 MW 12B	240-230530-D-3	Plastic 500ml - unpreserved				
L508217-09 MW-12B	240-230530-E-3	Plastic 500ml - with Nitric Acid	<2			
L508217-09 MW-12B	240-230530-F-3	Plastic 1 liter - unpreserved				
L508217-09 MW-12B	240-230530-G-3	Plastic 1 liter - Nitric Acid	<2			
L508217-09 MW-12B	240-230530-H-3	Plastic 1 liter - Nitric Acid	<2			
L508217 10 MW-14	240-230530-A-4	Plastic 60 mL - unpreserved				
L508217-10 MW-14	240-230530-B-4	Plastic 60 mL - unpreserved				
L508217-10 MW-14	240-230530-C-4	Plastic 250ml - with Nitric Acid	<2			
L508217-10 MW-14	240-230530-D-4	Plastic 500ml - unpreserved				
L508217-10 MW-14	240-230530-E-4	Plastic 500ml - with Nitric Acid	<2			
L508217-10 MW-14	240-230530-F-4	Plastic 1 liter - unpreserved				
L508217-10 MW-14	240-230530-G-4	Plastic 1 liter - Nitric Acid	<2			
L508217-10 MW 14	240-230530-H-4	Plastic 1 liter - Nitric Acid	<2			
L508217-11 MWT-6	240-230530-A-5	Plastic 60 mL - unpreserved				

8/18/2025

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508217 11 MWT-6	240-230530-B-5	Plastic 60 mL - unpreserved				
L508217-11 MWT-6	240-230530-C-5	Plastic 250ml - with Nitric Acid	<2			
L508217-11 MWT-6	240-230530-D-5	Plastic 500ml - unpreserved				
L508217-11 MWT-6	240-230530-E-5	Plastic 500ml - with Nitric Acid	<2			
L508217-11 MWT-6	240-230530-F-5	Plastic 1 liter - unpreserved				
L508217-11 MWT-6	240-230530-G-5	Plastic 1 liter - Nitric Acid	<2			
L508217-11 MWT-6	240-230530-H-5	Plastic 1 liter - Nitric Acid	<2			
L508217-12 FIELD BLANK	240-230530-A-6	Plastic 60 mL - unpreserved				
L508217-12 FIELD BLANK	240-230530-B-6	Plastic 60 mL - unpreserved				
L508217-12 FIELD BLANK	240-230530-C-6	Plastic 250ml - with Nitric Acid	<2			
L508217-12 FIELD BLANK	240-230530-D-6	Plastic 500ml - unpreserved				
L508217-12 FIELD BLANK	240-230530-E-6	Plastic 500ml with Nitric Acid	<2			
L508217-12 FIELD BLANK	240-230530-F-6	Plastic 500ml - w/ Nitric - Dis	<2			
L508217-12 FIELD BLANK	240-230530-G-6	Plastic 1 liter - unpreserved				
L508217 12 FIELD BLANK	240-230530-H-6	Plastic 1 liter - Nitric Acid	<2			
L508217-12 FIELD BLANK	240-230530-I-6	Plastic 1 liter - Nitric Acid	<2			
L508217 12 FIELD BLANK	240-230530-J-6	Plastic 250ml - w/nitric - dis	<2			
L508217-02 MW-2	240-230530-A 7	Plastic 60 mL - unpreserved				
L508217-02 MW-2	240-230530-B-7	Plastic 60 mL - unpreserved				
L508217-02 MW 2	240-230530-C-7	Plastic 250ml - with Nitric Acid	<2			
L508217-02 MW-2	240 230530-D-7	Plastic 500ml - unpreserved				
L508217-02 MW-2	240-230530-E-7	Plastic 500ml with Nitric Acid	<2			
L508217-02 MW-2	240-230530-F-7	Plastic 500ml - w/ Nitric - Dis	<2			
L508217-02 MW-2	240-230530-G-7	Plastic 1 liter - unpreserved				
L508217-02 MW-2	240-230530-H-7	Plastic 1 liter - Nitric Acid	<2			
L508217-02 MW-2	240-230530-I-7	Plastic 1 liter Nitric Acid	<2			
L508217-02 MW-2	240-230530-J-7	Plastic 250ml - w/nitric - dis	<2			
L508217-03 MW-3	240-230530-A-8	Plastic 60 mL - unpreserved				
L508217-03 MW-3	240-230530-B-8	Plastic 60 mL - unpreserved				
L508217-03 MW-3	240-230530-C-8	Plastic 250ml - with Nitric Acid	<2			
L508217-03 MW-3	240-230530-D-8	Plastic 500ml - unpreserved				
L508217-03 MW-3	240-230530-E-8	Plastic 500ml - with Nitric Acid	<2			
L508217-03 MW 3	240-230530-F 8	Plastic 1 liter - unpreserved				
L508217-03 MW-3	240-230530-G-8	Plastic 1 liter - Nitric Acid	<2			
L508217-03 MW 3	240 230530-H-8	Plastic 1 liter Nitric Acid	<2			
L508217-04 MW-5	240-230530-A-9	Plastic 60 mL - unpreserved				
L508217-04 MW 5	240-230530-B-9	Plastic 60 mL - unpreserved				
L508217-04 MW-5	240-230530-C-9	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508217-04 MW-5	240-230530-D-9	Plastic 500ml - unpreserved				
L508217-04 MW-5	240-230530-E-9	Plastic 500ml - with Nitric Acid	<2			
L508217-04 MW-5	240-230530-F-9	Plastic 500ml - w/ Nitric - Dis	<2			
L508217-04 MW-5	240-230530-G-9	Plastic 1 liter - unpreserved				
L508217-04 MW-5	240-230530-H-9	Plastic 1 liter - Nitric Acid	<2			
L508217-04 MW-5	240-230530-I-9	Plastic 1 liter - Nitric Acid	<2			
L508217-04 MW-5	240-230530-J-9	Plastic 250ml - w/nitric - dis	<2			
L508217-05 MW-6	240-230530-A-10	Plastic 60 mL unpreserved				
L508217-05 MW-6	240-230530-B-10	Plastic 60 mL - unpreserved				
L508217-05 MW-6	240-230530-C-10	Plastic 250ml - with Nitric Acid	<2			
L508217-05 MW 6	240-230530-D-10	Plastic 500ml - unpreserved				
L508217-05 MW-6	240-230530-E-10	Plastic 500ml - with Nitric Acid	<2			
L508217-05 MW-6	240-230530-F-10	Plastic 1 liter unpreserved				
L508217-05 MW-6	240-230530-G-10	Plastic 1 liter - Nitric Acid	<2			
L508217-05 MW-6	240-230530-H-10	Plastic 1 liter - Nitric Acid	<2			
L508217-06 MW-11	240-230530 A-11	Plastic 60 mL - unpreserved				
L508217-06 MW-11	240-230530-B-11	Plastic 60 mL - unpreserved				
L508217-06 MW-11	240-230530-C-11	Plastic 250ml - with Nitric Acid	<2			
L508217-06 MW-11	240-230530-D-11	Plastic 500ml - unpreserved				
L508217-06 MW-11	240-230530-E-11	Plastic 500ml - with Nitric Acid	<2			
L508217-06 MW-11	240-230530-F 11	Plastic 1 liter - unpreserved				
L508217-06 MW 11	240-230530-G-11	Plastic 1 liter - Nitric Acid	<2			
L508217-06 MW-11	240 230530-H 11	Plastic 1 liter - Nitric Acid	<2			
L508217-07 MW-11B	240-230530-A-12	Plastic 60 mL - unpreserved				
L508217-07 MW-11B	240-230530-B-12	Plastic 60 mL - unpreserved				
L508217-07 MW-11B	240-230530-C-12	Plastic 250ml - with Nitric Acid	<2			
L508217-07 MW-11B	240-230530-D-12	Plastic 500ml unpreserved				
L508217-07 MW-11B	240-230530-E-12	Plastic 500ml - with Nitric Acid	<2			
L508217-07 MW-11B	240-230530-F-12	Plastic 1 liter - unpreserved				
L508217-07 MW-11B	240-230530-G-12	Plastic 1 liter - Nitric Acid	<2			
L508217-07 MW-11B	240-230530-H-12	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-206255.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 2
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-230530-1
Address: 5755 8th Street East, ,	Due Date Requested: 8/25/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Therm. ID: SC03 Cust. Seal: (Y) / N
Uncorr./Corr. Temp: 20.8/20.7 °C
Delivery: UPS / (FedEx) / Other:
Ice Type: Blue / Dry / Wet / (None)
Label Ver.: V2 Packing: B
Med Blk

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT(MOD) Iron & Zinc	200.7_CWA/200.7_P_TOT(MOD) Iron & Zinc	200.8_CWA/FIELD_FLTRD(MOD) Custom List 2: 2-3 Metals	200.7_CWA/FIELD_FLTRD(MOD) Iron & Zinc	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
L508217-01 MW-1 (240-230530-1)	8/6/25	07:43 Eastern	G	Water			X	X			1	
L508217-08 MW-12 (240-230530-2)	8/6/25	13:38 Eastern	G	Water			X	X	X	X	2	
L508217-09 MW-12B (240-230530-3)	8/6/25	15:18 Eastern	G	Water			X	X			1	
L508217-10 MW-14 (240-230530-4)	8/6/25	09:27 Eastern	G	Water			X	X			1	
L508217-11 MWT-6 (240-230530-5)	8/6/25	11:14 Eastern	G	Water			X	X			1	
L508217-12 FIELD BLANK (240-230530-6)	8/6/25	07:45 Eastern	G	Water			X	X	X	X	2	
L508217-02 MW-2 (240-230530-7)	8/6/25	13:39 Eastern	G	Water			X	X	X	X	2	
L508217-03 MW-3 (240-230530-8)	8/6/25	15:37 Eastern	G	Water			X	X			1	
L508217-04 MW-5 (240-230530-9)	8/6/25	16:12 Eastern	G	Water			X	X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		8/11/25	EC		8/12/25 9:56	ET
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

8/18/2025

Eurofins Cleveland
180 S Van Buren Avenue
Barberton, OH 44203
Phone 330-497-9396 Fax 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No.: 240-206255 2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie Howell@et eurofinsus com	State of Origin: Michigan	Page: Page 2 of 2
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-230530-1
Address: 5755 8th Street East, ,	Due Date Requested: 8/25/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT(MOD) Iron & Zinc	200.7_CWA/200.7_P_TOT(MOD) Iron & Zinc	200.8_CWA/FIELD_FLTRD(MOD) Custom List 2: 2-3 Metals	200.7_CWA/FIELD_FLTRD(MOD) Iron & Zinc	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
L508217-05 MW-6 (240-230530-10)	8/6/25	11 14 Eastern	G	Water			X	X			1	
L508217-06 MW-11 (240-230530-11)	8/6/25	11 18 Eastern	G	Water			X	X			1	
L508217-07 MW-11B (240-230530-12)	8/6/25	12 40 Eastern	G	Water			X	X			1	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date:	Time	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	8/11/25	ET		8/12/25 9:50	ET
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver 10/10/2024

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-230530-1

Login Number: 230530
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 08/12/25 01:37 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 9/5/2025 3:32:53 PM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-230530-2

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

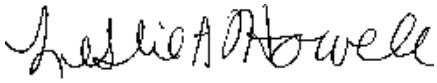
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
9/5/2025 3:32:53 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 9
Tracer Carrier Summary 21
QC Sample Results 22
QC Association Summary 24
Lab Chronicle 25
Certification Summary 28
Chain of Custody 29
Receipt Checklists 42

Definitions/Glossary

Client: Lansing Board of Water & Light
Job ID: 240-230530-2
Project/Site: Erickson Projects

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-230530-2 — Eurofins Cleveland

Job Narrative
240-230530-2

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 8/9/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.6°C, 0.7°C, 2.9°C and 4.6°C.

Gas Flow Proportional Counter
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-230530-1	L508217-01 MW-1	Water	08/06/25 07:43	08/09/25 08:00	Michigan
240-230530-2	L508217-08 MW-12	Water	08/06/25 13:38	08/09/25 08:00	Michigan
240-230530-3	L508217-09 MW-12B	Water	08/06/25 15:18	08/09/25 08:00	Michigan
240-230530-4	L508217-10 MW-14	Water	08/06/25 09:27	08/09/25 08:00	Michigan
240-230530-5	L508217-11 MWT-6	Water	08/06/25 11:14	08/09/25 08:00	Michigan
240-230530-6	L508217-12 FIELD BLANK	Water	08/06/25 07:45	08/09/25 08:00	Michigan
240-230530-7	L508217-02 MW-2	Water	08/06/25 13:39	08/09/25 08:00	Michigan
240-230530-8	L508217-03 MW-3	Water	08/06/25 15:37	08/09/25 08:00	Michigan
240-230530-9	L508217-04 MW-5	Water	08/06/25 16:12	08/09/25 08:00	Michigan
240-230530-10	L508217-05 MW-6	Water	08/06/25 11:14	08/09/25 08:00	Michigan
240-230530-11	L508217-06 MW-11	Water	08/06/25 11:18	08/09/25 08:00	Michigan
240-230530-12	L508217-07 MW-11B	Water	08/06/25 12:40	08/09/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-2

Client Sample ID: L508217-01 MW-1 — **Lab Sample ID: 240-230530-1**

No Detections.

Client Sample ID: L508217-08 MW-12 — **Lab Sample ID: 240-230530-2**

No Detections.

Client Sample ID: L508217-09 MW-12B — **Lab Sample ID: 240-230530-3**

No Detections.

Client Sample ID: L508217-10 MW-14 — **Lab Sample ID: 240-230530-4**

No Detections.

Client Sample ID: L508217-11 MWT-6 — **Lab Sample ID: 240-230530-5**

No Detections.

Client Sample ID: L508217-12 FIELD BLANK — **Lab Sample ID: 240-230530-6**

No Detections.

Client Sample ID: L508217-02 MW-2 — **Lab Sample ID: 240-230530-7**

No Detections.

Client Sample ID: L508217-03 MW-3 — **Lab Sample ID: 240-230530-8**

No Detections.

Client Sample ID: L508217-04 MW-5 — **Lab Sample ID: 240-230530-9**

No Detections.

Client Sample ID: L508217-05 MW-6 — **Lab Sample ID: 240-230530-10**

No Detections.

Client Sample ID: L508217-06 MW-11 — **Lab Sample ID: 240-230530-11**

No Detections.

Client Sample ID: L508217-07 MW-11B — **Lab Sample ID: 240-230530-12**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508217-01 MW-1

Date Collected: 08/06/25 07:43
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-1

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.138		0.0881	0.0890	1.00	0.118	pCi/L	08/13/25 08:12	09/04/25 07:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*30 - 110*	*08/13/25 08:12*	*09/04/25 07:26*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.126	U	0.315	0.316	1.00	0.556	pCi/L	08/13/25 08:17	08/28/25 11:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:47*	*1*
Y Carrier	*83.7*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:47*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.264	U	0.327	0.328	5.00	0.556	pCi/L		09/05/25 07:44	1

Client Sample ID: L508217-08 MW-12

Date Collected: 08/06/25 13:38
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-2

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.124		0.0848	0.0855	1.00	0.116	pCi/L	08/13/25 08:12	09/04/25 07:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.6*		*30 - 110*	*08/13/25 08:12*	*09/04/25 07:26*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.489		0.304	0.308	1.00	0.439	pCi/L	08/13/25 08:17	08/28/25 11:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.6*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:47*	*1*
Y Carrier	*88.6*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:47*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.613		0.316	0.320	5.00	0.439	pCi/L		09/05/25 07:44	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-2

Client Sample ID: L508217-09 MW-12B
Date Collected: 08/06/25 15:18
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-3
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.382		0.132	0.136	1.00	0.132	pCi/L	08/13/25 08:12	09/04/25 07:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.4*		*30 - 110*	*08/13/25 08:12*	*09/04/25 07:26*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.00		0.420	0.430	1.00	0.534	pCi/L	08/13/25 08:17	08/28/25 11:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.4*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:47*	*1*
Y Carrier	*78.1*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:47*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.38		0.440	0.451	5.00	0.534	pCi/L		09/05/25 07:44	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-2

Client Sample ID: L508217-10 MW-14

Date Collected: 08/06/25 09:27
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-4

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.248**		0.144	0.146	1.00	0.189	pCi/L	08/13/25 08:12	09/04/25 09:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.7*		*30 - 110*	*08/13/25 08:12*	*09/04/25 09:18*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.430	U	0.532	0.533	1.00	0.882	pCi/L	08/13/25 08:17	08/28/25 11:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.7*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:47*	*1*
Y Carrier	*79.6*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:47*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.678	U	0.551	0.553	5.00	0.882	pCi/L		09/05/25 07:44	1

Client Sample ID: L508217-11 MWT-6

Date Collected: 08/06/25 11:14
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-5

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.124	U	0.0918	0.0924	1.00	0.131	pCi/L	08/13/25 08:12	09/04/25 09:23	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.9*		*30 - 110*	*08/13/25 08:12*	*09/04/25 09:23*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.315	U	0.329	0.330	1.00	0.530	pCi/L	08/13/25 08:17	08/28/25 11:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.9*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:47*	*1*
Y Carrier	*84.9*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:47*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.439	U	0.342	0.343	5.00	0.530	pCi/L		09/05/25 07:44	1

Client Sample ID: L508217-12 FIELD BLANK

Lab Sample ID: 240-230530-6

Date Collected: 08/06/25 07:45

Matrix: Water

Date Received: 08/09/25 08:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0192	U	0.0796	0.0796	1.00	0.150	pCi/L	08/13/25 08:12	09/04/25 09:23	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.1*		*30 - 110*	*08/13/25 08:12*	*09/04/25 09:23*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.503**		0.337	0.340	1.00	0.496	pCi/L	08/13/25 08:17	08/28/25 11:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.1*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:47*	*1*
Y Carrier	*77.0*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:47*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.522**		0.346	0.349	5.00	0.496	pCi/L		09/05/25 07:44	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-2

Client Sample ID: L508217-02 MW-2

Date Collected: 08/06/25 13:39
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-7

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0271	U	0.0756	0.0757	1.00	0.138	pCi/L	08/13/25 08:12	09/04/25 09:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.1*		*30 - 110*	*08/13/25 08:12*	*09/04/25 09:21*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.161	U	0.276	0.276	1.00	0.475	pCi/L	08/13/25 08:17	08/28/25 11:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.1*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:47*	*1*
Y Carrier	*84.5*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:47*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.189	U	0.286	0.286	5.00	0.475	pCi/L		09/05/25 07:44	1

Client Sample ID: L508217-03 MW-3
Date Collected: 08/06/25 15:37
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-8
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0713	U	0.0748	0.0751	1.00	0.119	pCi/L	08/13/25 08:12	09/04/25 12:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.8*		*30 - 110*	*08/13/25 08:12*	*09/04/25 12:22*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.285	U	0.406	0.407	1.00	0.683	pCi/L	08/13/25 08:17	08/28/25 11:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.8*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:50*	*1*
Y Carrier	*64.7*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:50*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.356	U	0.413	0.414	5.00	0.683	pCi/L		09/05/25 07:44	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-2

Client Sample ID: L508217-04 MW-5
Date Collected: 08/06/25 16:12
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-9
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0942	U	0.0975	0.0979	1.00	0.154	pCi/L	08/13/25 08:12	09/04/25 12:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.1*		*30 - 110*	*08/13/25 08:12*	*09/04/25 12:27*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0238	U	0.355	0.355	1.00	0.658	pCi/L	08/13/25 08:17	08/28/25 11:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.1*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:50*	*1*
Y Carrier	*87.5*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:50*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.118	U	0.368	0.368	5.00	0.658	pCi/L		09/05/25 14:17	1

Client Sample ID: L508217-05 MW-6
Date Collected: 08/06/25 11:14
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-10
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0194	U	0.0804	0.0804	1.00	0.152	pCi/L	08/13/25 08:12	09/04/25 12:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.6*		*30 - 110*	*08/13/25 08:12*	*09/04/25 12:27*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.375	U	0.391	0.392	1.00	0.633	pCi/L	08/13/25 08:17	08/28/25 11:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.6*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:50*	*1*
Y Carrier	*72.5*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:50*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.395	U	0.399	0.400	5.00	0.633	pCi/L		09/05/25 14:17	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-2

Client Sample ID: L508217-06 MW-11
Date Collected: 08/06/25 11:18
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-11
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.117	U	0.114	0.115	1.00	0.181	pCi/L	08/13/25 08:12	09/04/25 12:25	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.3*		*30 - 110*	*08/13/25 08:12*	*09/04/25 12:25*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.182	U	0.405	0.405	1.00	0.709	pCi/L	08/13/25 08:17	08/28/25 11:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.3*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:50*	*1*
Y Carrier	*80.4*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:50*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.299	U	0.421	0.421	5.00	0.709	pCi/L		09/05/25 14:17	1

Client Sample ID: L508217-07 MW-11B

Date Collected: 08/06/25 12:40
Date Received: 08/09/25 08:00

Lab Sample ID: 240-230530-12

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.475**		0.146	0.153	1.00	0.137	pCi/L	08/13/25 08:12	09/04/25 14:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.9*		*30 - 110*	*08/13/25 08:12*	*09/04/25 14:12*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.350	U	0.404	0.405	1.00	0.663	pCi/L	08/13/25 08:17	08/28/25 11:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.9*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:51*	*1*
Y Carrier	*69.9*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:51*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.824**		0.430	0.433	5.00	0.663	pCi/L		09/05/25 14:17	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)						
		Ba						
Lab Sample ID	Client Sample ID	(30-110)						
240-230530-1	L508217-01 MW-1	86.6						
240-230530-2	L508217-08 MW-12	90.6						
240-230530-3	L508217-09 MW-12B	85.4						
240-230530-3 DU	L508217-09 MW-12B	95.3						
240-230530-4	L508217-10 MW-14	78.7						
240-230530-5	L508217-11 MWT-6	79.9						
240-230530-6	L508217-12 FIELD BLANK	92.1						
240-230530-7	L508217-02 MW-2	91.1						
240-230530-8	L508217-03 MW-3	96.8						
240-230530-9	L508217-04 MW-5	92.1						
240-230530-10	L508217-05 MW-6	90.6						
240-230530-11	L508217-06 MW-11	92.3						
240-230530-12	L508217-07 MW-11B	80.9						
LCS 160-731798/2-A	Lab Control Sample	92.6						
MB 160-731798/1-A	Method Blank	92.1						

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)						
		Ba	Y					
Lab Sample ID	Client Sample ID	(30-110)	(30-110)					
240-230530-1	L508217-01 MW-1	86.6	83.7					
240-230530-2	L508217-08 MW-12	90.6	88.6					
240-230530-3	L508217-09 MW-12B	85.4	78.1					
240-230530-3 DU	L508217-09 MW-12B	95.3	78.1					
240-230530-4	L508217-10 MW-14	78.7	79.6					
240-230530-5	L508217-11 MWT-6	79.9	84.9					
240-230530-6	L508217-12 FIELD BLANK	92.1	77.0					
240-230530-7	L508217-02 MW-2	91.1	84.5					
240-230530-8	L508217-03 MW-3	96.8	64.7					
240-230530-9	L508217-04 MW-5	92.1	87.5					
240-230530-10	L508217-05 MW-6	90.6	72.5					
240-230530-11	L508217-06 MW-11	92.3	80.4					
240-230530-12	L508217-07 MW-11B	80.9	69.9					
LCS 160-731799/2-A	Lab Control Sample	92.6	82.2					
MB 160-731799/1-A	Method Blank	92.1	80.4					

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-731798/1-A
Matrix: Water
Analysis Batch: 734802

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 731798

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.008647	U	0.0407	0.0407	1.00	0.0959	pCi/L	08/13/25 08:12	09/04/25 07:25	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.1*		*30 - 110*	*08/13/25 08:12*	*09/04/25 07:25*	*1*

Lab Sample ID: LCS 160-731798/2-A
Matrix: Water
Analysis Batch: 734802

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 731798

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.57	9.556		1.02	1.00	0.119	pCi/L	100	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*92.6*		*30 - 110*

Lab Sample ID: 240-230530-3 DU
Matrix: Water
Analysis Batch: 734802

Client Sample ID: L508217-09 MW-12B
Prep Type: Total/NA
Prep Batch: 731798

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.382			0.2298		0.0993	1.00	0.100	pCi/L			0.64	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*95.3*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-731799/1-A
Matrix: Water
Analysis Batch: 734026

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 731799

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.06391	U	0.304	0.304	1.00	0.581	pCi/L	08/13/25 08:17	08/28/25 11:46	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.1*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:46*	*1*
Y Carrier	*80.4*		*30 - 110*	*08/13/25 08:17*	*08/28/25 11:46*	*1*

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-731799/2-A
Matrix: Water
Analysis Batch: 734026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 731799

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.12	9.854		1.33	1.00	0.603	pCi/L	108	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*92.6*		*30 - 110*
Y Carrier	*82.2*		*30 - 110*

Lab Sample ID: 240-230530-3 DU
Matrix: Water
Analysis Batch: 734026

Client Sample ID: L508217-09 MW-12B
Prep Type: Total/NA
Prep Batch: 731799

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	1.00			0.5883		0.341	1.00	0.477	pCi/L			0.54	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*95.3*		*30 - 110*
Y Carrier	*78.1*		*30 - 110*

Rad

Prep Batch: 731798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-1	L508217-01 MW-1	Total/NA	Water	PrecSep-21	
240-230530-2	L508217-08 MW-12	Total/NA	Water	PrecSep-21	
240-230530-3	L508217-09 MW-12B	Total/NA	Water	PrecSep-21	
240-230530-4	L508217-10 MW-14	Total/NA	Water	PrecSep-21	
240-230530-5	L508217-11 MWT-6	Total/NA	Water	PrecSep-21	
240-230530-6	L508217-12 FIELD BLANK	Total/NA	Water	PrecSep-21	
240-230530-7	L508217-02 MW-2	Total/NA	Water	PrecSep-21	
240-230530-8	L508217-03 MW-3	Total/NA	Water	PrecSep-21	
240-230530-9	L508217-04 MW-5	Total/NA	Water	PrecSep-21	
240-230530-10	L508217-05 MW-6	Total/NA	Water	PrecSep-21	
240-230530-11	L508217-06 MW-11	Total/NA	Water	PrecSep-21	
240-230530-12	L508217-07 MW-11B	Total/NA	Water	PrecSep-21	
MB 160-731798/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-731798/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-230530-3 DU	L508217-09 MW-12B	Total/NA	Water	PrecSep-21	

Prep Batch: 731799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230530-1	L508217-01 MW-1	Total/NA	Water	PrecSep_0	
240-230530-2	L508217-08 MW-12	Total/NA	Water	PrecSep_0	
240-230530-3	L508217-09 MW-12B	Total/NA	Water	PrecSep_0	
240-230530-4	L508217-10 MW-14	Total/NA	Water	PrecSep_0	
240-230530-5	L508217-11 MWT-6	Total/NA	Water	PrecSep_0	
240-230530-6	L508217-12 FIELD BLANK	Total/NA	Water	PrecSep_0	
240-230530-7	L508217-02 MW-2	Total/NA	Water	PrecSep_0	
240-230530-8	L508217-03 MW-3	Total/NA	Water	PrecSep_0	
240-230530-9	L508217-04 MW-5	Total/NA	Water	PrecSep_0	
240-230530-10	L508217-05 MW-6	Total/NA	Water	PrecSep_0	
240-230530-11	L508217-06 MW-11	Total/NA	Water	PrecSep_0	
240-230530-12	L508217-07 MW-11B	Total/NA	Water	PrecSep_0	
MB 160-731799/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-731799/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-230530-3 DU	L508217-09 MW-12B	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-2

Client Sample ID: L508217-01 MW-1

Lab Sample ID: 240-230530-1

Date Collected: 08/06/25 07:43
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731798	JTR	EET SL	08/13/25 08:12
Total/NA	Analysis	903.0		1	734802	SWS	EET SL	09/04/25 07:26
Total/NA	Prep	PrecSep_0			731799	JTR	EET SL	08/13/25 08:17
Total/NA	Analysis	904.0		1	734026	SWS	EET SL	08/28/25 11:47
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 07:44

Client Sample ID: L508217-08 MW-12

Lab Sample ID: 240-230530-2

Date Collected: 08/06/25 13:38
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731798	JTR	EET SL	08/13/25 08:12
Total/NA	Analysis	903.0		1	734802	SWS	EET SL	09/04/25 07:26
Total/NA	Prep	PrecSep_0			731799	JTR	EET SL	08/13/25 08:17
Total/NA	Analysis	904.0		1	734026	SWS	EET SL	08/28/25 11:47
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 07:44

Client Sample ID: L508217-09 MW-12B

Lab Sample ID: 240-230530-3

Date Collected: 08/06/25 15:18
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731798	JTR	EET SL	08/13/25 08:12
Total/NA	Analysis	903.0		1	734802	SWS	EET SL	09/04/25 07:26
Total/NA	Prep	PrecSep_0			731799	JTR	EET SL	08/13/25 08:17
Total/NA	Analysis	904.0		1	734026	SWS	EET SL	08/28/25 11:47
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 07:44

Client Sample ID: L508217-10 MW-14

Lab Sample ID: 240-230530-4

Date Collected: 08/06/25 09:27
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731798	JTR	EET SL	08/13/25 08:12
Total/NA	Analysis	903.0		1	734802	SWS	EET SL	09/04/25 09:18
Total/NA	Prep	PrecSep_0			731799	JTR	EET SL	08/13/25 08:17
Total/NA	Analysis	904.0		1	734026	SWS	EET SL	08/28/25 11:47
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 07:44

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-2

Client Sample ID: L508217-11 MWT-6

Lab Sample ID: 240-230530-5

Date Collected: 08/06/25 11:14
Date Received: 08/09/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731798	JTR	EET SL	08/13/25 08:12
Total/NA	Analysis	903.0		1	734807	SWS	EET SL	09/04/25 09:23
Total/NA	Prep	PrecSep_0			731799	JTR	EET SL	08/13/25 08:17
Total/NA	Analysis	904.0		1	734026	SWS	EET SL	08/28/25 11:47
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 07:44

Client Sample ID: L508217-12 FIELD BLANK

Lab Sample ID: 240-230530-6

Date Collected: 08/06/25 07:45
Date Received: 08/09/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731798	JTR	EET SL	08/13/25 08:12
Total/NA	Analysis	903.0		1	734807	SWS	EET SL	09/04/25 09:23
Total/NA	Prep	PrecSep_0			731799	JTR	EET SL	08/13/25 08:17
Total/NA	Analysis	904.0		1	734026	SWS	EET SL	08/28/25 11:47
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 07:44

Client Sample ID: L508217-02 MW-2

Lab Sample ID: 240-230530-7

Date Collected: 08/06/25 13:39
Date Received: 08/09/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731798	JTR	EET SL	08/13/25 08:12
Total/NA	Analysis	903.0		1	734808	SWS	EET SL	09/04/25 09:21
Total/NA	Prep	PrecSep_0			731799	JTR	EET SL	08/13/25 08:17
Total/NA	Analysis	904.0		1	734026	SWS	EET SL	08/28/25 11:47
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 07:44

Client Sample ID: L508217-03 MW-3

Lab Sample ID: 240-230530-8

Date Collected: 08/06/25 15:37
Date Received: 08/09/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731798	JTR	EET SL	08/13/25 08:12
Total/NA	Analysis	903.0		1	734802	SWS	EET SL	09/04/25 12:22
Total/NA	Prep	PrecSep_0			731799	JTR	EET SL	08/13/25 08:17
Total/NA	Analysis	904.0		1	734041	SWS	EET SL	08/28/25 11:50
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 07:44

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-2

Client Sample ID: L508217-04 MW-5

Lab Sample ID: 240-230530-9

Date Collected: 08/06/25 16:12
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731798	JTR	EET SL	08/13/25 08:12
Total/NA	Analysis	903.0		1	734807	SWS	EET SL	09/04/25 12:27
Total/NA	Prep	PrecSep_0			731799	JTR	EET SL	08/13/25 08:17
Total/NA	Analysis	904.0		1	734041	SWS	EET SL	08/28/25 11:50
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 14:17

Client Sample ID: L508217-05 MW-6

Lab Sample ID: 240-230530-10

Date Collected: 08/06/25 11:14
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731798	JTR	EET SL	08/13/25 08:12
Total/NA	Analysis	903.0		1	734807	SWS	EET SL	09/04/25 12:27
Total/NA	Prep	PrecSep_0			731799	JTR	EET SL	08/13/25 08:17
Total/NA	Analysis	904.0		1	734041	SWS	EET SL	08/28/25 11:50
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 14:17

Client Sample ID: L508217-06 MW-11

Lab Sample ID: 240-230530-11

Date Collected: 08/06/25 11:18
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731798	JTR	EET SL	08/13/25 08:12
Total/NA	Analysis	903.0		1	734808	SWS	EET SL	09/04/25 12:25
Total/NA	Prep	PrecSep_0			731799	JTR	EET SL	08/13/25 08:17
Total/NA	Analysis	904.0		1	734041	SWS	EET SL	08/28/25 11:50
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 14:17

Client Sample ID: L508217-07 MW-11B

Lab Sample ID: 240-230530-12

Date Collected: 08/06/25 12:40
Matrix: Water
Date Received: 08/09/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731798	JTR	EET SL	08/13/25 08:12
Total/NA	Analysis	903.0		1	734802	SWS	EET SL	09/04/25 14:12
Total/NA	Prep	PrecSep_0			731799	JTR	EET SL	08/13/25 08:17
Total/NA	Analysis	904.0		1	734041	SWS	EET SL	08/28/25 11:51
Total/NA	Analysis	Ra226_Ra228 Pos		1	734332	FLC	EET SL	09/05/25 14:17

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230530-2

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25 *
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25 *
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-30-25 *
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☐

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com; Environmental_Laboratory@

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:

Project Number:
24034575

Sample State: MI

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
Marc Wahrer, Julie Maltby

Description:
Erickson 8-6-25

Site Name:
Erickson Projects

Special Instructions:
Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner. Please add Na and K metals

See following pages for Method and Container information.

240-230530 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L508217-01 MW-1	Grab	Water	08/06/25 07:43			
2	L508217-08 MW-12	Grab	Water	08/06/25 13:38		Needs all Dissolved Metals	
3	L508217-09 MW-12B	Grab	Water	08/06/25 15:18			
4	L508217-10 MW-14	Grab	Water	08/06/25 09:27			
5	L508217-11 MWT-6	Grab	Water	08/06/25 11:14			
6	L508217-12 Field Blank	Grab	Water	08/06/25 07:45		Needs all Dissolved Metals	
7	L508217-02 MW-2	Grab	Water	08/06/25 13:39		Needs all Dissolved Metals	
8	L508217-03 MW-3	Grab	Water	08/06/25 15:37			
9	L508217-04 MW-5	Grab	Water	08/06/25 16:12		Needs all Dissolved Metals	
10	L508217-05 MW-8	Grab	Water	08/06/25 11:14			
11	L508217-06 MW-11	Grab	Water	08/06/25 11:18			
12	L508217-07 MW-11B	Grab	Water	08/06/25 12:40			

Chain of Custody Number: **395794**

Ron Shea 8/9/25 0800

*H – Analysis on hold.

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By	Date/Time:	Samples Relinquished By	Date/Time:		
Jennifer Caporale	08/08/25 13:55	Jennifer Caporale	08/08/25 13:55		

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250807A001								
MIC20250807A001								
MIC20250807A002								
MIC20250807A004								

Ren Shen 8/9/25 0800

Chain of Custody Number: **395794**

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																			
#	Sample Name	200.8 / Metals (ICP/MS) / Iron & Zinc	2540D-2020 / Solids Total Suspended (TSS)	200.8 / Metals (ICP/MS) / Custom List 2, 2-3 Metals	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	200 7 R4.4-1994 / Metals (ICP) / Total Boron	200.8 / Metals (ICP/MS) / Custom List 2 2-3 Metals	904.0 / Radium-228 (GFPC) / Standard Target List	200 7 R4.4-1994 / Metals (ICP) / Total Boron	2320 B-2021 / Alkalinity / Bicarbonate & Carbonate Alkalinity	200 7 Rev 4.4 / Metals (ICP) / Total Na & K	300.0-1993 R2.1 / Anions, Ion Chromatography / Chloride, Fluor	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	245.1 1994 R3.0 / Mercury (CVAA) / Mercury	200.8 / Metals (ICP/MS) / Custom List 1 1 Metals	200 7 Rev 4.4 / Metals (ICP) / Iron & Zinc	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	245 1 1994 R3.0 / Mercury (CVAA) / Mercury	903.0 / Radium-226 (GFPC) / Standard Target List	2340 B-2021 / Total Hardness (as CaCO3) by calculation	200.7 Rev 4.4 / Metals (ICP) / Iron & Zinc	2540 C-2020 / Solids Total Dissolved (TDS) / Total Dissolved S
1	L508217-01 MW-1		X		X	X	X	X		X	X	X	X	X	X				X	X	X	X
2	L508217-08 MW-12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3	L508217-09 MW-12B		X		X	X	X	X		X	X	X	X	X	X				X	X	X	X
4	L508217-10 MW-14		X		X	X	X	X		X	X	X	X	X	X				X	X	X	X
5	L508217 11 MWT-6		X		X	X	X	X		X	X	X	X	X	X				X	X	X	X
6	L508217-12 Field Blank	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7	L508217-02 MW-2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8	L508217-03 MW-3		X		X	X	X	X		X	X	X	X	X	X				X	X	X	X
9	L508217-04 MW-5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10	L508217-05 MW-6		X		X	X	X	X		X	X	X	X	X	X				X	X	X	X
11	L508217-06 MW-11		X		X	X	X	X		X	X	X	X	X	X				X	X	X	X
12	L508217-07 MW-11B		X		X	X	X	X		X	X	X	X	X	X				X	X	X	X

Rec Sleg 8/9/25 0800

Chain of Custody Number 395794

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																						
#	Sample Name	200.7 Rev 4.4 / Metals (ICP) / Dissolved Na & K	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	200.8 / Metals (ICP/MS) / Iron & Zinc																				
1	L508217-01 MW-1		X	X																				
2	L508217-08 MW-12	X	X	X																				
3	L508217-09 MW-12B		X	X																				
4	L508217-10 MW-14		X	X																				
5	L508217 11 MWT-6		X	X																				
6	L508217-12 Field Blank	X	X	X																				
7	L508217-02 MW-2	X	X	X																				
8	L508217-03 MW-3		X	X																				
9	L508217-04 MW-5	X	X	X																				
10	L508217-05 MW-6		X	X																				
11	L508217-06 MW-11		X	X																				
12	L508217-07 MW-11B		X	X																				

Ran Sloan 8/9/25 0800

Chain of Custody Bottles

eurofins | Environment Testing

Bottle Name	Total Bottles
Plastic 1 liter unpreserved	12
Plastic 60 mL - unpreserved	24
Plastic 1 liter Nitric Acid	24
Plastic 250ml - with Nitric Acid	12
Plastic 500ml with Nitric Acid	12
Plastic 500ml - unpreserved	16

Samples		Bottles							
#	Sample Name	Total Bottles For Sample	Plastic 1 liter unpreserved	Plastic 60 mL unpreserved	Plastic 1 liter Nitric Acid	Plastic 250ml with Nitric Acid	Plastic 500ml with Nitric Acid	Plastic 500ml unpreserved	
1	L508217-01 MW-1	8	1	2	2	1	1	1	
2	L508217-08 MW-12	9	1	2	2	1	1	2	
3	L508217-09 MW-12B	8	1	2	2	1	1	1	
4	L508217-10 MW-14	8	1	2	2	1	1	1	
5	L508217-11 MWT-6	8	1	2	2	1	1	1	
6	L508217-12 Field Blank	9	1	2	2	1	1	2	
7	L508217-02 MW-2	9	1	2	2	1	1	2	
8	L508217-03 MW-3	8	1	2	2	1	1	1	
9	L508217-04 MW-5	9	1	2	2	1	1	2	
10	L508217-05 MW-6	8	1	2	2	1	1	1	
11	L508217-06 MW-11	8	1	2	2	1	1	1	
12	L508217-07 MW-11B	8	1	2	2	1	1	1	

Ran Slg 8/9/25 0800

Ron Sloan 8/9/25
0800

Eurofins – Cleveland Sample Receipt Form/Narrative **Login #** _____
Barberton Facility

Client Lansing Board Site Name _____ Cooler unpacked by: [signature]

Cooler Received on 8/4/25 Opened on 8/6/25

FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # 1EC Foam Box Client Cooler Box Other _____

Packing material used. Bubble Wrap Foam Plastic Bag None Other _____

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # _____ (CF _____ °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12 Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC463162
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18 CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by: MG
Labels Verified by: MB

_____
_____
_____
_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired
Sample(s) _____ were received in a broken container
Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory
Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation Date/Time VOAs Frozen _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	0.1	0.6	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 13	0.2	0.7	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 13	4.1	4.6	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 13	2.4	2.9	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice

8/11/2025

Login Container Summary Report

240-230530

9/5/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508217-01 MW-1	240-230530-A-1	Plastic 60 mL - unpreserved				
L508217-01 MW-1	240-230530-B-1	Plastic 60 mL - unpreserved				
L508217-01 MW-1	240-230530-C-1	Plastic 250ml - with Nitric Acid	<2			
L508217-01 MW-1	240-230530-D-1	Plastic 500ml - unpreserved				
L508217-01 MW-1	240-230530-E-1	Plastic 500ml with Nitric Acid	<2			
L508217-01 MW-1	240-230530-F-1	Plastic 1 liter - unpreserved				
L508217-01 MW-1	240-230530-G-1	Plastic 1 liter - Nitric Acid	<2			
L508217-01 MW-1	240-230530-H-1	Plastic 1 liter - Nitric Acid	<2			
L508217-08 MW-12	240-230530-A-2	Plastic 60 mL unpreserved				
L508217-08 MW-12	240-230530-B-2	Plastic 60 mL - unpreserved				
L508217-08 MW-12	240-230530-C-2	Plastic 250ml with Nitric Acid	<2			
L508217-08 MW-12	240-230530-D-2	Plastic 500ml - unpreserved				
L508217-08 MW-12	240-230530-E-2	Plastic 500ml with Nitric Acid	<2			
L508217-08 MW 12	240-230530-F-2	Plastic 500ml - w/ Nitric - Dis	<2			
L508217-08 MW-12	240-230530-G-2	Plastic 1 liter - unpreserved				
L508217-08 MW-12	240-230530-H-2	Plastic 1 liter - Nitric Acid	<2			
L508217-08 MW-12	240-230530-I-2	Plastic 1 liter - Nitric Acid	<2			
L508217-08 MW-12	240-230530-J-2	Plastic 250ml - w/nitric - dis	<2			
L508217-09 MW-12B	240 230530-A-3	Plastic 60 mL unpreserved				
L508217-09 MW-12B	240-230530-B-3	Plastic 60 mL - unpreserved				
L508217-09 MW-12B	240-230530-C-3	Plastic 250ml - with Nitric Acid	<2			
L508217-09 MW 12B	240-230530-D-3	Plastic 500ml - unpreserved				
L508217-09 MW-12B	240-230530-E-3	Plastic 500ml - with Nitric Acid	<2			
L508217-09 MW-12B	240-230530-F-3	Plastic 1 liter - unpreserved				
L508217-09 MW-12B	240-230530-G-3	Plastic 1 liter - Nitric Acid	<2			
L508217-09 MW-12B	240-230530-H-3	Plastic 1 liter - Nitric Acid	<2			
L508217 10 MW-14	240-230530-A-4	Plastic 60 mL - unpreserved				
L508217-10 MW-14	240-230530-B-4	Plastic 60 mL - unpreserved				
L508217-10 MW-14	240-230530-C-4	Plastic 250ml - with Nitric Acid	<2			
L508217-10 MW-14	240-230530-D-4	Plastic 500ml - unpreserved				
L508217-10 MW-14	240-230530-E-4	Plastic 500ml - with Nitric Acid	<2			
L508217-10 MW-14	240-230530-F-4	Plastic 1 liter - unpreserved				
L508217-10 MW-14	240-230530-G-4	Plastic 1 liter - Nitric Acid	<2			
L508217-10 MW 14	240-230530-H-4	Plastic 1 liter - Nitric Acid	<2			
L508217-11 MWT-6	240-230530-A-5	Plastic 60 mL - unpreserved				

9/5/2025

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508217 11 MWT-6	240-230530-B-5	Plastic 60 mL - unpreserved				
L508217-11 MWT-6	240-230530-C-5	Plastic 250ml - with Nitric Acid	<2			
L508217-11 MWT-6	240-230530-D-5	Plastic 500ml - unpreserved				
L508217-11 MWT-6	240-230530-E-5	Plastic 500ml - with Nitric Acid	<2			
L508217-11 MWT-6	240-230530-F-5	Plastic 1 liter - unpreserved				
L508217-11 MWT-6	240-230530-G-5	Plastic 1 liter - Nitric Acid	<2			
L508217-11 MWT-6	240-230530-H-5	Plastic 1 liter - Nitric Acid	<2			
L508217-12 FIELD BLANK	240-230530-A-6	Plastic 60 mL - unpreserved				
L508217-12 FIELD BLANK	240-230530-B-6	Plastic 60 mL - unpreserved				
L508217-12 FIELD BLANK	240-230530-C-6	Plastic 250ml - with Nitric Acid	<2			
L508217-12 FIELD BLANK	240-230530-D-6	Plastic 500ml - unpreserved				
L508217-12 FIELD BLANK	240-230530-E-6	Plastic 500ml with Nitric Acid	<2			
L508217-12 FIELD BLANK	240-230530-F-6	Plastic 500ml - w/ Nitric - Dis	<2			
L508217-12 FIELD BLANK	240-230530-G-6	Plastic 1 liter - unpreserved				
L508217 12 FIELD BLANK	240-230530-H-6	Plastic 1 liter - Nitric Acid	<2			
L508217-12 FIELD BLANK	240-230530-I-6	Plastic 1 liter - Nitric Acid	<2			
L508217 12 FIELD BLANK	240-230530-J-6	Plastic 250ml - w/nitric - dis	<2			
L508217-02 MW-2	240-230530-A 7	Plastic 60 mL - unpreserved				
L508217-02 MW-2	240-230530-B-7	Plastic 60 mL - unpreserved				
L508217-02 MW 2	240-230530-C-7	Plastic 250ml - with Nitric Acid	<2			
L508217-02 MW-2	240 230530-D-7	Plastic 500ml - unpreserved				
L508217-02 MW-2	240-230530-E-7	Plastic 500ml with Nitric Acid	<2			
L508217-02 MW-2	240-230530-F-7	Plastic 500ml - w/ Nitric - Dis	<2			
L508217-02 MW-2	240-230530-G-7	Plastic 1 liter - unpreserved				
L508217-02 MW-2	240-230530-H-7	Plastic 1 liter - Nitric Acid	<2			
L508217-02 MW-2	240-230530-I-7	Plastic 1 liter Nitric Acid	<2			
L508217-02 MW-2	240-230530-J-7	Plastic 250ml - w/nitric - dis	<2			
L508217-03 MW-3	240-230530-A-8	Plastic 60 mL - unpreserved				
L508217-03 MW-3	240-230530-B-8	Plastic 60 mL - unpreserved				
L508217-03 MW-3	240-230530-C-8	Plastic 250ml - with Nitric Acid	<2			
L508217-03 MW-3	240-230530-D-8	Plastic 500ml - unpreserved				
L508217-03 MW-3	240-230530-E-8	Plastic 500ml - with Nitric Acid	<2			
L508217-03 MW 3	240-230530-F 8	Plastic 1 liter - unpreserved				
L508217-03 MW-3	240-230530-G-8	Plastic 1 liter - Nitric Acid	<2			
L508217-03 MW 3	240 230530-H-8	Plastic 1 liter Nitric Acid	<2			
L508217-04 MW-5	240-230530-A-9	Plastic 60 mL - unpreserved				
L508217-04 MW 5	240-230530-B-9	Plastic 60 mL - unpreserved				
L508217-04 MW-5	240-230530-C-9	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508217-04 MW-5	240-230530-D-9	Plastic 500ml - unpreserved				
L508217-04 MW-5	240-230530-E-9	Plastic 500ml - with Nitric Acid	<2			
L508217-04 MW-5	240-230530-F-9	Plastic 500ml - w/ Nitric - Dis	<2			
L508217-04 MW-5	240-230530-G-9	Plastic 1 liter - unpreserved				
L508217-04 MW-5	240-230530-H-9	Plastic 1 liter - Nitric Acid	<2			
L508217-04 MW-5	240-230530-I-9	Plastic 1 liter - Nitric Acid	<2			
L508217-04 MW-5	240-230530-J-9	Plastic 250ml - w/nitric - dis	<2			
L508217-05 MW-6	240-230530-A-10	Plastic 60 mL unpreserved				
L508217-05 MW-6	240-230530-B-10	Plastic 60 mL - unpreserved				
L508217-05 MW-6	240-230530-C-10	Plastic 250ml - with Nitric Acid	<2			
L508217-05 MW 6	240-230530-D-10	Plastic 500ml - unpreserved				
L508217-05 MW-6	240-230530-E-10	Plastic 500ml - with Nitric Acid	<2			
L508217-05 MW-6	240-230530-F-10	Plastic 1 liter unpreserved				
L508217-05 MW-6	240-230530-G-10	Plastic 1 liter - Nitric Acid	<2			
L508217-05 MW-6	240-230530-H-10	Plastic 1 liter - Nitric Acid	<2			
L508217-06 MW-11	240-230530 A-11	Plastic 60 mL - unpreserved				
L508217-06 MW-11	240-230530-B-11	Plastic 60 mL - unpreserved				
L508217-06 MW-11	240-230530-C-11	Plastic 250ml - with Nitric Acid	<2			
L508217-06 MW-11	240-230530-D-11	Plastic 500ml - unpreserved				
L508217-06 MW-11	240-230530-E-11	Plastic 500ml - with Nitric Acid	<2			
L508217-06 MW-11	240-230530-F 11	Plastic 1 liter - unpreserved				
L508217-06 MW 11	240-230530-G-11	Plastic 1 liter - Nitric Acid	<2			
L508217-06 MW-11	240 230530-H 11	Plastic 1 liter - Nitric Acid	<2			
L508217-07 MW-11B	240-230530-A-12	Plastic 60 mL - unpreserved				
L508217-07 MW-11B	240-230530-B-12	Plastic 60 mL - unpreserved				
L508217-07 MW-11B	240-230530-C-12	Plastic 250ml - with Nitric Acid	<2			
L508217-07 MW-11B	240-230530-D-12	Plastic 500ml unpreserved				
L508217-07 MW-11B	240-230530-E-12	Plastic 500ml - with Nitric Acid	<2			
L508217-07 MW-11B	240-230530-F-12	Plastic 1 liter - unpreserved				
L508217-07 MW-11B	240-230530-G-12	Plastic 1 liter - Nitric Acid	<2			
L508217-07 MW-11B	240-230530-H-12	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-206254.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-230530-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 8/25/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21Standard Target List	904.0/PrecSep_0Standard Target List	Ra226_228GFPC_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L508217-01 MW-1 (240-230530-1)	8/6/25	07:43 Eastern	G	Water			X	X	X	2	
L508217-08 MW-12 (240-230530-2)	8/6/25	13:38 Eastern	G	Water			X	X	X	2	
L508217-09 MW-12B (240-230530-3)	8/6/25	15:18 Eastern	G	Water			X	X	X	2	
L508217-10 MW-14 (240-230530-4)	8/6/25	09:27 Eastern	G	Water			X	X	X	2	
L508217-11 MWT-6 (240-230530-5)	8/6/25	11:14 Eastern	G	Water			X	X	X	2	
L508217-12 FIELD BLANK (240-230530-6)	8/6/25	07:45 Eastern	G	Water			X	X	X	2	
L508217-02 MW-2 (240-230530-7)	8/6/25	13:39 Eastern	G	Water			X	X	X	2	
L508217-03 MW-3 (240-230530-8)	8/6/25	15:37 Eastern	G	Water			X	X	X	2	
L508217-04 MW-5 (240-230530-9)	8/6/25	16:12 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 8/11/25	Company EC	Received by:	Date/Time: 0830 AUG 12 2025	Company
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-206254.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-230530-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 8/25/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21Standard Target List	904.0/PrecSep_0Standard Target List	Ra226_228GFPC_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L508217-05 MW-6 (240-230530-10)	8/6/25	11:14 Eastern	G	Water			X	X	X	2	
L508217-06 MW-11 (240-230530-11)	8/6/25	11:18 Eastern	G	Water			X	X	X	2	
L508217-07 MW-11B (240-230530-12)	8/6/25	12:40 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8/11/25			0830 AUG 12 2025	
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-230530-2

Login Number: 230530
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 08/12/25 11:20 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 8/21/2025 6:28:02 AM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-230600-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

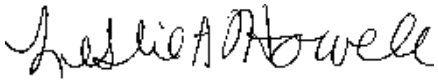
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
8/21/2025 6:28:02 AM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 13
QC Sample Results 31
QC Association Summary 44
Lab Chronicle 50
Certification Summary 55
Chain of Custody 56
Receipt Checklists 69

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-1

Qualifiers

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-230600-1 — Eurofins Cleveland

Job Narrative
240-230600-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 8/12/2025 9:50 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.9°C, 5.3°C and 5.9°C.

Metals
Method 200.8 - Total Recoverable: The laboratory control sample (LCS) for preparation batch 240-667493 and analytical batch 240-667773 recovered outside control limits for thallium. This analyte was biased high in the LCS and were below the reporting limit in the associated samples; therefore, the data has been reported. L508232-08 MWT-7 (240-230600-8) and L508232-09 FIELD BLANK (240-230600-9)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.7 Rev 4.4	Metals (ICP)	EPA	EET SSM
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.7	Preparation, Total Metals	EPA	EET SSM
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-230600-1	L508232-01 MW-7	Water	08/08/25 10:10	08/12/25 09:50	Michigan
240-230600-2	L508232-02 MW-7B	Water	08/08/25 11:40	08/12/25 09:50	Michigan
240-230600-3	L508232-03 MW-13	Water	08/08/25 13:20	08/12/25 09:50	Michigan
240-230600-4	L508232-04 MW-18A	Water	08/08/25 10:06	08/12/25 09:50	Michigan
240-230600-5	L508232-05 MW-18B	Water	08/08/25 11:17	08/12/25 09:50	Michigan
240-230600-6	L508232-06 MW-18C	Water	08/08/25 12:31	08/12/25 09:50	Michigan
240-230600-7	L508232-07 MW-18D	Water	08/08/25 13:45	08/12/25 09:50	Michigan
240-230600-8	L508232-08 MWT-7	Water	08/08/25 10:10	08/12/25 09:50	Michigan
240-230600-9	L508232-09 FIELD BLANK	Water	08/08/25 08:35	08/12/25 09:50	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-1

Client Sample ID: L508232-01 MW-7

Lab Sample ID: 240-230600-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.9		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	8.7		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	69		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0053		0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.060		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00016	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.16		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	110		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	16	F1	1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.079		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.2		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0013	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	340		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	180		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	610		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	78		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.42		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	200		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508232-02 MW-7B

Lab Sample ID: 240-230600-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.0		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	5.2		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	130		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0021	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.0077		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Beryllium	0.00027	J	0.0010	0.00027	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.00015	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00010	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	8.0		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	2.5		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.033		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.084	J	0.10	0.013	mg/L	1		200.8	Total/NA
Bicarbonate Alkalinity as CaCO3	290		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	22		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	360		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.70	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508232-02 MW-7B (Continued)

Lab Sample ID: 240-230600-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	0.92	J	1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.81		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	0.55	J	1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508232-03 MW-13

Lab Sample ID: 240-230600-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.20		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	0.88	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	15		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0019	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.060		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00045	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Selenium	0.0060		0.0050	0.00089	mg/L	1		200.8-1994 R5.4	Total Recoverable
Vanadium	0.0015	J	0.0050	0.00082	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	160		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	33		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.031	J	0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	530		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	320		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	700		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.70	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	18		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.17		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	210		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L508232-04 MW-18A

Lab Sample ID: 240-230600-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.79		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	6.0		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	54		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0011	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.038		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Copper	0.0020		0.0020	0.0017	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.11		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lead	0.00046	J	0.0010	0.00045	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	87		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	15		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508232-04 MW-18A (Continued) — Lab Sample ID: 240-230600-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.064		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.0		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	280		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	530		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.60	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	80		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.66		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	170		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508232-05 MW-18B — Lab Sample ID: 240-230600-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.1		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	8.7		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	91		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0012	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.060		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.14		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.011		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	170		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	32		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.13		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.8		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0025	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	560		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	180		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1000		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.5	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	89		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.36		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	460		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L508232-06 MW-18C — Lab Sample ID: 240-230600-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.3		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	8.8		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	49		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0013	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.028		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508232-06 MW-18C (Continued)

Lab Sample ID: 240-230600-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.00013	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.030		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0025		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	95		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	27		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.057		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.89		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0020	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	350		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	270		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	550		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.4	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	23		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.32		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	140		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508232-07 MW-18D

Lab Sample ID: 240-230600-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.5		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	5.0		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	140		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.014		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.022		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0015	J	0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	34		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	6.9		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.042		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.56		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0024	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	110		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	310		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	11		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	450		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.70	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	13		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	1.3		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	70		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-1

Client Sample ID: L508232-08 MWT-7 — Lab Sample ID: 240-230600-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.8		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	8.9		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	71		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0055		0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.059		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.00013	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00013	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.16		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Vanadium	0.00088	J	0.0050	0.00082	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	100		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	15		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.075		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.3		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	320		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	170		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	600		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.2	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	78		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.42		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	200		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508232-09 FIELD BLANK — Lab Sample ID: 240-230600-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00098	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Beryllium	0.00030	J	0.0010	0.00027	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.00016	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.000092	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Thallium	0.00064	J *+	0.0010	0.00051	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508232-01 MW-7

Date Collected: 08/08/25 10:10
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-1

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.9**		0.10	0.057	mg/L		08/13/25 19:30	08/14/25 14:15	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**8.7**		3.3	0.17	mg/L		08/13/25 18:30	08/15/25 20:36	1
Na	**69**		0.60	0.33	mg/L		08/13/25 18:30	08/15/25 20:36	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/13/25 19:30	08/14/25 13:09	1
Arsenic	**0.0053**		0.0050	0.00075	mg/L		08/13/25 19:30	08/14/25 13:09	1
Barium	**0.060**		0.0050	0.00077	mg/L		08/13/25 19:30	08/14/25 13:09	1
Beryllium	ND		0.0010	0.00027	mg/L		08/13/25 19:30	08/14/25 13:09	1
Cadmium	ND		0.0010	0.000077	mg/L		08/13/25 19:30	08/14/25 13:09	1
Cobalt	**0.00016**	**J**	0.0010	0.000086	mg/L		08/13/25 19:30	08/14/25 13:09	1
Chromium	ND		0.0050	0.0012	mg/L		08/13/25 19:30	08/14/25 13:09	1
Copper	ND		0.0020	0.0017	mg/L		08/13/25 19:30	08/14/25 13:09	1
Molybdenum	**0.16**		0.0050	0.0011	mg/L		08/13/25 19:30	08/14/25 13:09	1
Nickel	ND		0.0020	0.0015	mg/L		08/13/25 19:30	08/14/25 13:09	1
Lead	ND		0.0010	0.00045	mg/L		08/13/25 19:30	08/14/25 13:09	1
Antimony	ND		0.0020	0.00057	mg/L		08/13/25 19:30	08/14/25 13:09	1
Selenium	ND		0.0050	0.00089	mg/L		08/13/25 19:30	08/14/25 13:09	1
Thallium	ND		0.0010	0.00051	mg/L		08/13/25 19:30	08/14/25 13:09	1
Vanadium	ND		0.0050	0.00082	mg/L		08/13/25 19:30	08/14/25 13:09	1
Calcium	**110**		1.0	0.25	mg/L		08/13/25 19:30	08/14/25 13:09	1
Magnesium	**16**	**F1**	1.0	0.061	mg/L		08/13/25 19:30	08/14/25 13:09	1
Lithium	**0.079**		0.0080	0.0034	mg/L		08/13/25 19:30	08/14/25 13:09	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.2**		0.10	0.013	mg/L		08/13/25 18:30	08/14/25 20:15	1
Zinc	**0.0013**	**J**	0.0070	0.00093	mg/L		08/13/25 18:30	08/14/25 20:15	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**340**		33	33	mg/L			08/18/25 05:42	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/13/25 14:00	08/14/25 11:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**180**		5.0	2.6	mg/L			08/15/25 18:16	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/15/25 18:16	1
Total Dissolved Solids (SM 2540 C-2020)	**610**		10	7.8	mg/L			08/13/25 09:35	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			08/13/25 11:33	1
Chloride (EPA 300.0-1993 R2.1)	**78**		1.0	0.13	mg/L			08/13/25 02:09	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-1

Client Sample ID: L508232-01 MW-7
Date Collected: 08/08/25 10:10
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-1
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.42		0.050	0.024	mg/L			08/13/25 02:09	1
Sulfate (EPA 300.0-1993 R2.1)	200		1.0	0.35	mg/L			08/13/25 02:09	1

Client Sample ID: L508232-02 MW-7B
Date Collected: 08/08/25 11:40
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-2
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.0		0.10	0.057	mg/L		08/13/25 19:30	08/14/25 14:41	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	5.2		3.3	0.17	mg/L		08/13/25 18:30	08/15/25 20:39	1
Na	130		0.60	0.33	mg/L		08/13/25 18:30	08/15/25 20:39	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/13/25 19:30	08/14/25 13:22	1
Arsenic	0.0021	J	0.0050	0.00075	mg/L		08/13/25 19:30	08/14/25 13:22	1
Barium	0.0077		0.0050	0.00077	mg/L		08/13/25 19:30	08/14/25 13:22	1
Beryllium	0.00027	J	0.0010	0.00027	mg/L		08/13/25 19:30	08/14/25 13:22	1
Cadmium	0.00015	J	0.0010	0.000077	mg/L		08/13/25 19:30	08/14/25 13:22	1
Cobalt	0.00010	J	0.0010	0.000086	mg/L		08/13/25 19:30	08/14/25 13:22	1
Chromium	ND		0.0050	0.0012	mg/L		08/13/25 19:30	08/14/25 13:22	1
Copper	ND		0.0020	0.0017	mg/L		08/13/25 19:30	08/14/25 13:22	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/13/25 19:30	08/14/25 13:22	1
Nickel	ND		0.0020	0.0015	mg/L		08/13/25 19:30	08/14/25 13:22	1
Lead	ND		0.0010	0.00045	mg/L		08/13/25 19:30	08/14/25 13:22	1
Antimony	ND		0.0020	0.00057	mg/L		08/13/25 19:30	08/14/25 13:22	1
Selenium	ND		0.0050	0.00089	mg/L		08/13/25 19:30	08/14/25 13:22	1
Thallium	ND		0.0010	0.00051	mg/L		08/13/25 19:30	08/14/25 13:22	1
Vanadium	ND		0.0050	0.00082	mg/L		08/13/25 19:30	08/14/25 13:22	1
Calcium	8.0		1.0	0.25	mg/L		08/13/25 19:30	08/14/25 13:22	1
Magnesium	2.5		1.0	0.061	mg/L		08/13/25 19:30	08/14/25 13:22	1
Lithium	0.033		0.0080	0.0034	mg/L		08/13/25 19:30	08/14/25 13:22	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.084	J	0.10	0.013	mg/L		08/13/25 18:30	08/14/25 20:23	1
Zinc	ND		0.0070	0.00093	mg/L		08/13/25 18:30	08/14/25 20:23	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			08/18/25 05:42	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/13/25 14:00	08/14/25 11:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	290		5.0	2.6	mg/L			08/15/25 18:30	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	22		5.0	2.6	mg/L			08/15/25 18:30	1
Total Dissolved Solids (SM 2540 C-2020)	360		10	7.8	mg/L			08/13/25 09:35	1
Total Suspended Solids (SM 2540D-2020)	0.70	J	4.0	0.40	mg/L			08/13/25 11:33	1
Chloride (EPA 300.0-1993 R2.1)	0.92	J	1.0	0.13	mg/L			08/13/25 03:26	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-1

Client Sample ID: L508232-02 MW-7B
Date Collected: 08/08/25 11:40
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.81		0.050	0.024	mg/L			08/13/25 03:26	1
Sulfate (EPA 300.0-1993 R2.1)	0.55	J	1.0	0.35	mg/L			08/13/25 03:26	1

Client Sample ID: L508232-03 MW-13

Date Collected: 08/08/25 13:20
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-3

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.20**		0.10	0.057	mg/L		08/13/25 19:30	08/14/25 14:50	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**0.88**	**J**	3.3	0.17	mg/L		08/13/25 18:30	08/15/25 20:42	1
Na	**15**		0.60	0.33	mg/L		08/13/25 18:30	08/15/25 20:42	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/13/25 19:30	08/14/25 13:41	1
Arsenic	**0.0019**	**J**	0.0050	0.00075	mg/L		08/13/25 19:30	08/14/25 13:41	1
Barium	**0.060**		0.0050	0.00077	mg/L		08/13/25 19:30	08/14/25 13:41	1
Beryllium	ND		0.0010	0.00027	mg/L		08/13/25 19:30	08/14/25 13:41	1
Cadmium	ND		0.0010	0.000077	mg/L		08/13/25 19:30	08/14/25 13:41	1
Cobalt	**0.00045**	**J**	0.0010	0.000086	mg/L		08/13/25 19:30	08/14/25 13:41	1
Chromium	ND		0.0050	0.0012	mg/L		08/13/25 19:30	08/14/25 13:41	1
Copper	ND		0.0020	0.0017	mg/L		08/13/25 19:30	08/14/25 13:41	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/13/25 19:30	08/14/25 13:41	1
Nickel	ND		0.0020	0.0015	mg/L		08/13/25 19:30	08/14/25 13:41	1
Lead	ND		0.0010	0.00045	mg/L		08/13/25 19:30	08/14/25 13:41	1
Antimony	ND		0.0020	0.00057	mg/L		08/13/25 19:30	08/14/25 13:41	1
Selenium	**0.0060**		0.0050	0.00089	mg/L		08/13/25 19:30	08/14/25 13:41	1
Thallium	ND		0.0010	0.00051	mg/L		08/13/25 19:30	08/14/25 13:41	1
Vanadium	**0.0015**	**J**	0.0050	0.00082	mg/L		08/13/25 19:30	08/14/25 13:41	1
Calcium	**160**		1.0	0.25	mg/L		08/13/25 19:30	08/14/25 13:41	1
Magnesium	**33**		1.0	0.061	mg/L		08/13/25 19:30	08/14/25 13:41	1
Lithium	ND		0.0080	0.0034	mg/L		08/13/25 19:30	08/14/25 13:41	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.031**	**J**	0.10	0.013	mg/L		08/13/25 18:30	08/14/25 20:26	1
Zinc	ND		0.0070	0.00093	mg/L		08/13/25 18:30	08/14/25 20:26	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**530**		33	33	mg/L			08/18/25 05:42	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/13/25 14:00	08/14/25 11:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**320**		5.0	2.6	mg/L			08/15/25 18:42	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/15/25 18:42	1
Total Dissolved Solids (SM 2540 C-2020)	**700**		10	7.8	mg/L			08/13/25 09:35	1
Total Suspended Solids (SM 2540D-2020)	**0.70**	**J**	4.0	0.40	mg/L			08/13/25 11:33	1
Chloride (EPA 300.0-1993 R2.1)	**18**		1.0	0.13	mg/L			08/13/25 02:28	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-1

Client Sample ID: L508232-03 MW-13
Date Collected: 08/08/25 13:20
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.17		0.050	0.024	mg/L			08/13/25 02:28	1
Sulfate (EPA 300.0-1993 R2.1)	210		5.0	1.7	mg/L			08/13/25 02:38	5

Client Sample ID: L508232-04 MW-18A

Lab Sample ID: 240-230600-4

Date Collected: 08/08/25 10:06

Matrix: Water

Date Received: 08/12/25 09:50

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.79**		0.10	0.057	mg/L		08/13/25 19:30	08/14/25 14:54	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**6.0**		3.3	0.17	mg/L		08/13/25 18:30	08/15/25 20:46	1
Na	**54**		0.60	0.33	mg/L		08/13/25 18:30	08/15/25 20:46	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/13/25 19:30	08/14/25 13:43	1
Arsenic	**0.0011**	**J**	0.0050	0.00075	mg/L		08/13/25 19:30	08/14/25 13:43	1
Barium	**0.038**		0.0050	0.00077	mg/L		08/13/25 19:30	08/14/25 13:43	1
Beryllium	ND		0.0010	0.00027	mg/L		08/13/25 19:30	08/14/25 13:43	1
Cadmium	ND		0.0010	0.000077	mg/L		08/13/25 19:30	08/14/25 13:43	1
Cobalt	ND		0.0010	0.000086	mg/L		08/13/25 19:30	08/14/25 13:43	1
Chromium	ND		0.0050	0.0012	mg/L		08/13/25 19:30	08/14/25 13:43	1
Copper	**0.0020**		0.0020	0.0017	mg/L		08/13/25 19:30	08/14/25 13:43	1
Molybdenum	**0.11**		0.0050	0.0011	mg/L		08/13/25 19:30	08/14/25 13:43	1
Nickel	ND		0.0020	0.0015	mg/L		08/13/25 19:30	08/14/25 13:43	1
Lead	**0.00046**	**J**	0.0010	0.00045	mg/L		08/13/25 19:30	08/14/25 13:43	1
Antimony	ND		0.0020	0.00057	mg/L		08/13/25 19:30	08/14/25 13:43	1
Selenium	ND		0.0050	0.00089	mg/L		08/13/25 19:30	08/14/25 13:43	1
Thallium	ND		0.0010	0.00051	mg/L		08/13/25 19:30	08/14/25 13:43	1
Vanadium	ND		0.0050	0.00082	mg/L		08/13/25 19:30	08/14/25 13:43	1
Calcium	**87**		1.0	0.25	mg/L		08/13/25 19:30	08/14/25 13:43	1
Magnesium	**15**		1.0	0.061	mg/L		08/13/25 19:30	08/14/25 13:43	1
Lithium	**0.064**		0.0080	0.0034	mg/L		08/13/25 19:30	08/14/25 13:43	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.0**		0.10	0.013	mg/L		08/13/25 18:30	08/14/25 20:29	1
Zinc	ND		0.0070	0.00093	mg/L		08/13/25 18:30	08/14/25 20:29	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**280**		33	33	mg/L			08/18/25 05:42	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/13/25 14:00	08/14/25 11:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**130**		5.0	2.6	mg/L			08/15/25 18:47	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/15/25 18:47	1
Total Dissolved Solids (SM 2540 C-2020)	**530**		10	7.8	mg/L			08/13/25 09:35	1
Total Suspended Solids (SM 2540D-2020)	**0.60**	**J**	4.0	0.40	mg/L			08/13/25 11:33	1
Chloride (EPA 300.0-1993 R2.1)	**80**		1.0	0.13	mg/L			08/13/25 03:07	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-1

Client Sample ID: L508232-04 MW-18A
Date Collected: 08/08/25 10:06
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.66		0.050	0.024	mg/L			08/13/25 03:07	1
Sulfate (EPA 300.0-1993 R2.1)	170		1.0	0.35	mg/L			08/13/25 03:07	1

Client Sample ID: L508232-05 MW-18B
Date Collected: 08/08/25 11:17
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-5
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.1**		0.10	0.057	mg/L		08/13/25 19:30	08/14/25 14:59	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**8.7**		3.3	0.17	mg/L		08/13/25 18:30	08/15/25 19:54	1
Na	**91**		0.60	0.33	mg/L		08/13/25 18:30	08/15/25 19:54	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/13/25 19:30	08/14/25 13:46	1
Arsenic	**0.0012**	**J**	0.0050	0.00075	mg/L		08/13/25 19:30	08/14/25 13:46	1
Barium	**0.060**		0.0050	0.00077	mg/L		08/13/25 19:30	08/14/25 13:46	1
Beryllium	ND		0.0010	0.00027	mg/L		08/13/25 19:30	08/14/25 13:46	1
Cadmium	ND		0.0010	0.000077	mg/L		08/13/25 19:30	08/14/25 13:46	1
Cobalt	ND		0.0010	0.000086	mg/L		08/13/25 19:30	08/14/25 13:46	1
Chromium	ND		0.0050	0.0012	mg/L		08/13/25 19:30	08/14/25 13:46	1
Copper	ND		0.0020	0.0017	mg/L		08/13/25 19:30	08/14/25 13:46	1
Molybdenum	**0.14**		0.0050	0.0011	mg/L		08/13/25 19:30	08/14/25 13:46	1
Nickel	**0.011**		0.0020	0.0015	mg/L		08/13/25 19:30	08/14/25 13:46	1
Lead	ND		0.0010	0.00045	mg/L		08/13/25 19:30	08/14/25 13:46	1
Antimony	ND		0.0020	0.00057	mg/L		08/13/25 19:30	08/14/25 13:46	1
Selenium	ND		0.0050	0.00089	mg/L		08/13/25 19:30	08/14/25 13:46	1
Thallium	ND		0.0010	0.00051	mg/L		08/13/25 19:30	08/14/25 13:46	1
Vanadium	ND		0.0050	0.00082	mg/L		08/13/25 19:30	08/14/25 13:46	1
Calcium	**170**		1.0	0.25	mg/L		08/13/25 19:30	08/14/25 13:46	1
Magnesium	**32**		1.0	0.061	mg/L		08/13/25 19:30	08/14/25 13:46	1
Lithium	**0.13**		0.0080	0.0034	mg/L		08/13/25 19:30	08/14/25 13:46	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.8**		0.10	0.013	mg/L		08/13/25 18:30	08/14/25 19:34	1
Zinc	**0.0025**	**J**	0.0070	0.00093	mg/L		08/13/25 18:30	08/14/25 19:34	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**560**		33	33	mg/L			08/18/25 05:42	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/13/25 14:00	08/14/25 11:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**180**		5.0	2.6	mg/L			08/15/25 18:54	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/15/25 18:54	1
Total Dissolved Solids (SM 2540 C-2020)	**1000**		10	7.8	mg/L			08/13/25 09:35	1
Total Suspended Solids (SM 2540D-2020)	**1.5**	**J**	4.0	0.40	mg/L			08/13/25 11:33	1
Chloride (EPA 300.0-1993 R2.1)	**89**		1.0	0.13	mg/L			08/13/25 03:55	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-1

Client Sample ID: L508232-05 MW-18B
Date Collected: 08/08/25 11:17
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-5
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.36		0.050	0.024	mg/L			08/13/25 03:55	1
Sulfate (EPA 300.0-1993 R2.1)	460		5.0	1.7	mg/L			08/13/25 04:05	5

Client Sample ID: L508232-06 MW-18C
Date Collected: 08/08/25 12:31
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-6
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.3		0.10	0.057	mg/L		08/13/25 19:30	08/14/25 15:03	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	8.8		3.3	0.17	mg/L		08/13/25 18:30	08/15/25 20:49	1
Na	49		0.60	0.33	mg/L		08/13/25 18:30	08/15/25 20:49	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/13/25 19:30	08/14/25 13:48	1
Arsenic	0.0013	J	0.0050	0.00075	mg/L		08/13/25 19:30	08/14/25 13:48	1
Barium	0.028		0.0050	0.00077	mg/L		08/13/25 19:30	08/14/25 13:48	1
Beryllium	ND		0.0010	0.00027	mg/L		08/13/25 19:30	08/14/25 13:48	1
Cadmium	ND		0.0010	0.000077	mg/L		08/13/25 19:30	08/14/25 13:48	1
Cobalt	0.00013	J	0.0010	0.000086	mg/L		08/13/25 19:30	08/14/25 13:48	1
Chromium	ND		0.0050	0.0012	mg/L		08/13/25 19:30	08/14/25 13:48	1
Copper	ND		0.0020	0.0017	mg/L		08/13/25 19:30	08/14/25 13:48	1
Molybdenum	0.030		0.0050	0.0011	mg/L		08/13/25 19:30	08/14/25 13:48	1
Nickel	0.0025		0.0020	0.0015	mg/L		08/13/25 19:30	08/14/25 13:48	1
Lead	ND		0.0010	0.00045	mg/L		08/13/25 19:30	08/14/25 13:48	1
Antimony	ND		0.0020	0.00057	mg/L		08/13/25 19:30	08/14/25 13:48	1
Selenium	ND		0.0050	0.00089	mg/L		08/13/25 19:30	08/14/25 13:48	1
Thallium	ND		0.0010	0.00051	mg/L		08/13/25 19:30	08/14/25 13:48	1
Vanadium	ND		0.0050	0.00082	mg/L		08/13/25 19:30	08/14/25 13:48	1
Calcium	95		1.0	0.25	mg/L		08/13/25 19:30	08/14/25 13:48	1
Magnesium	27		1.0	0.061	mg/L		08/13/25 19:30	08/14/25 13:48	1
Lithium	0.057		0.0080	0.0034	mg/L		08/13/25 19:30	08/14/25 13:48	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.89		0.10	0.013	mg/L		08/13/25 18:30	08/14/25 20:32	1
Zinc	0.0020	J	0.0070	0.00093	mg/L		08/13/25 18:30	08/14/25 20:32	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	350		33	33	mg/L			08/18/25 05:42	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/13/25 14:00	08/14/25 11:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	270		5.0	2.6	mg/L			08/15/25 18:59	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/15/25 18:59	1
Total Dissolved Solids (SM 2540 C-2020)	550		10	7.8	mg/L			08/13/25 09:35	1
Total Suspended Solids (SM 2540D-2020)	1.4	J	4.0	0.40	mg/L			08/14/25 10:47	1
Chloride (EPA 300.0-1993 R2.1)	23		1.0	0.13	mg/L			08/13/25 04:14	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-1

Client Sample ID: L508232-06 MW-18C
Date Collected: 08/08/25 12:31
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-6
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.32		0.050	0.024	mg/L			08/13/25 04:14	1
Sulfate (EPA 300.0-1993 R2.1)	140		1.0	0.35	mg/L			08/13/25 04:14	1

Client Sample ID: L508232-07 MW-18D
Date Collected: 08/08/25 13:45
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-7
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.5		0.10	0.057	mg/L		08/13/25 19:30	08/14/25 15:07	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	5.0		3.3	0.17	mg/L		08/13/25 18:30	08/15/25 20:52	1
Na	140		0.60	0.33	mg/L		08/13/25 18:30	08/15/25 20:52	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/13/25 19:30	08/14/25 13:51	1
Arsenic	ND		0.0050	0.00075	mg/L		08/13/25 19:30	08/14/25 13:51	1
Barium	0.014		0.0050	0.00077	mg/L		08/13/25 19:30	08/14/25 13:51	1
Beryllium	ND		0.0010	0.00027	mg/L		08/13/25 19:30	08/14/25 13:51	1
Cadmium	ND		0.0010	0.000077	mg/L		08/13/25 19:30	08/14/25 13:51	1
Cobalt	ND		0.0010	0.000086	mg/L		08/13/25 19:30	08/14/25 13:51	1
Chromium	ND		0.0050	0.0012	mg/L		08/13/25 19:30	08/14/25 13:51	1
Copper	ND		0.0020	0.0017	mg/L		08/13/25 19:30	08/14/25 13:51	1
Molybdenum	0.022		0.0050	0.0011	mg/L		08/13/25 19:30	08/14/25 13:51	1
Nickel	0.0015	J	0.0020	0.0015	mg/L		08/13/25 19:30	08/14/25 13:51	1
Lead	ND		0.0010	0.00045	mg/L		08/13/25 19:30	08/14/25 13:51	1
Antimony	ND		0.0020	0.00057	mg/L		08/13/25 19:30	08/14/25 13:51	1
Selenium	ND		0.0050	0.00089	mg/L		08/13/25 19:30	08/14/25 13:51	1
Thallium	ND		0.0010	0.00051	mg/L		08/13/25 19:30	08/14/25 13:51	1
Vanadium	ND		0.0050	0.00082	mg/L		08/13/25 19:30	08/14/25 13:51	1
Calcium	34		1.0	0.25	mg/L		08/13/25 19:30	08/14/25 13:51	1
Magnesium	6.9		1.0	0.061	mg/L		08/13/25 19:30	08/14/25 13:51	1
Lithium	0.042		0.0080	0.0034	mg/L		08/13/25 19:30	08/14/25 13:51	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.56		0.10	0.013	mg/L		08/13/25 18:30	08/14/25 20:34	1
Zinc	0.0024	J	0.0070	0.00093	mg/L		08/13/25 18:30	08/14/25 20:34	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	110		33	33	mg/L			08/18/25 05:42	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/13/25 14:00	08/14/25 11:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	310		5.0	2.6	mg/L			08/15/25 19:05	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	11		5.0	2.6	mg/L			08/15/25 19:05	1
Total Dissolved Solids (SM 2540 C-2020)	450		10	7.8	mg/L			08/13/25 09:35	1
Total Suspended Solids (SM 2540D-2020)	0.70	J	4.0	0.40	mg/L			08/14/25 10:47	1
Chloride (EPA 300.0-1993 R2.1)	13		1.0	0.13	mg/L			08/13/25 04:34	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-1

Client Sample ID: L508232-07 MW-18D
Date Collected: 08/08/25 13:45
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-7
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	1.3		0.050	0.024	mg/L			08/13/25 04:34	1
Sulfate (EPA 300.0-1993 R2.1)	70		1.0	0.35	mg/L			08/13/25 04:34	1

Client Sample ID: L508232-08 MWT-7
Date Collected: 08/08/25 10:10
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-8
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.8**		0.10	0.057	mg/L		08/13/25 14:00	08/14/25 18:47	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**8.9**		3.3	0.17	mg/L		08/13/25 18:30	08/15/25 19:31	1
Na	**71**		0.60	0.33	mg/L		08/13/25 18:30	08/15/25 19:31	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/13/25 14:00	08/14/25 20:30	1
Arsenic	**0.0055**		0.0050	0.00075	mg/L		08/13/25 14:00	08/14/25 20:30	1
Barium	**0.059**		0.0050	0.00077	mg/L		08/13/25 14:00	08/14/25 20:30	1
Beryllium	ND		0.0010	0.00027	mg/L		08/13/25 14:00	08/14/25 20:30	1
Cadmium	**0.00013**	**J**	0.0010	0.000077	mg/L		08/13/25 14:00	08/14/25 20:30	1
Cobalt	**0.00013**	**J**	0.0010	0.000086	mg/L		08/13/25 14:00	08/14/25 20:30	1
Chromium	ND		0.0050	0.0012	mg/L		08/13/25 14:00	08/14/25 20:30	1
Copper	ND		0.0020	0.0017	mg/L		08/13/25 14:00	08/14/25 20:30	1
Molybdenum	**0.16**		0.0050	0.0011	mg/L		08/13/25 14:00	08/14/25 20:30	1
Nickel	ND		0.0020	0.0015	mg/L		08/13/25 14:00	08/14/25 20:30	1
Lead	ND		0.0010	0.00045	mg/L		08/13/25 14:00	08/14/25 20:30	1
Antimony	ND		0.0020	0.00057	mg/L		08/13/25 14:00	08/14/25 20:30	1
Selenium	ND		0.0050	0.00089	mg/L		08/13/25 14:00	08/14/25 20:30	1
Thallium	ND	*+	0.0010	0.00051	mg/L		08/13/25 14:00	08/14/25 20:30	1
Vanadium	**0.00088**	**J**	0.0050	0.00082	mg/L		08/13/25 14:00	08/14/25 20:30	1
Calcium	**100**		1.0	0.25	mg/L		08/13/25 14:00	08/14/25 20:30	1
Magnesium	**15**		1.0	0.061	mg/L		08/13/25 14:00	08/14/25 20:30	1
Lithium	**0.075**		0.0080	0.0034	mg/L		08/13/25 14:00	08/14/25 20:30	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.3**		0.10	0.013	mg/L		08/13/25 18:30	08/14/25 19:19	1
Zinc	ND		0.0070	0.00093	mg/L		08/13/25 18:30	08/14/25 19:19	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**320**		33	33	mg/L			08/18/25 05:42	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/13/25 14:00	08/14/25 12:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**170**		5.0	2.6	mg/L			08/15/25 19:11	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/15/25 19:11	1
Total Dissolved Solids (SM 2540 C-2020)	**600**		10	7.8	mg/L			08/13/25 09:35	1
Total Suspended Solids (SM 2540D-2020)	**1.2**	**J**	4.0	0.40	mg/L			08/14/25 10:47	1
Chloride (EPA 300.0-1993 R2.1)	**78**		1.0	0.13	mg/L			08/13/25 05:12	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-1

Client Sample ID: L508232-08 MWT-7
Date Collected: 08/08/25 10:10
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-8
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.42		0.050	0.024	mg/L			08/13/25 05:12	1
Sulfate (EPA 300.0-1993 R2.1)	200		1.0	0.35	mg/L			08/13/25 05:12	1

Client Sample ID: L508232-09 FIELD BLANK
Date Collected: 08/08/25 08:35
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-9
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		08/13/25 14:00	08/14/25 19:17	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		08/13/25 18:30	08/15/25 20:56	1
Na	ND		0.60	0.33	mg/L		08/13/25 18:30	08/15/25 20:56	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/13/25 14:00	08/14/25 20:38	1
Arsenic	**0.00098**	**J**	0.0050	0.00075	mg/L		08/13/25 14:00	08/14/25 20:38	1
Barium	ND		0.0050	0.00077	mg/L		08/13/25 14:00	08/14/25 20:38	1
Beryllium	**0.00030**	**J**	0.0010	0.00027	mg/L		08/13/25 14:00	08/14/25 20:38	1
Cadmium	**0.00016**	**J**	0.0010	0.000077	mg/L		08/13/25 14:00	08/14/25 20:38	1
Cobalt	**0.000092**	**J**	0.0010	0.000086	mg/L		08/13/25 14:00	08/14/25 20:38	1
Chromium	ND		0.0050	0.0012	mg/L		08/13/25 14:00	08/14/25 20:38	1
Copper	ND		0.0020	0.0017	mg/L		08/13/25 14:00	08/14/25 20:38	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/13/25 14:00	08/14/25 20:38	1
Nickel	ND		0.0020	0.0015	mg/L		08/13/25 14:00	08/14/25 20:38	1
Lead	ND		0.0010	0.00045	mg/L		08/13/25 14:00	08/14/25 20:38	1
Antimony	ND		0.0020	0.00057	mg/L		08/13/25 14:00	08/14/25 20:38	1
Selenium	ND		0.0050	0.00089	mg/L		08/13/25 14:00	08/14/25 20:38	1
Thallium	**0.00064**	**J *+**	0.0010	0.00051	mg/L		08/13/25 14:00	08/14/25 20:38	1
Vanadium	ND		0.0050	0.00082	mg/L		08/13/25 14:00	08/14/25 20:38	1
Calcium	ND		1.0	0.25	mg/L		08/13/25 14:00	08/14/25 20:38	1
Magnesium	ND		1.0	0.061	mg/L		08/13/25 14:00	08/14/25 20:38	1
Lithium	ND		0.0080	0.0034	mg/L		08/13/25 14:00	08/14/25 20:38	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		08/13/25 18:30	08/14/25 20:37	1
Zinc	ND		0.0070	0.00093	mg/L		08/13/25 18:30	08/14/25 20:37	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			08/18/25 05:42	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/13/25 14:00	08/14/25 12:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/15/25 19:16	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/15/25 19:16	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			08/13/25 09:35	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			08/14/25 10:47	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			08/13/25 05:32	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-1

Client Sample ID: L508232-09 FIELD BLANK
Date Collected: 08/08/25 08:35
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-9
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			08/13/25 05:32	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			08/13/25 05:32	1

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-667478/1-A
Matrix: Water
Analysis Batch: 667768

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 667478

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		08/13/25 19:30	08/14/25 14:07	1

Lab Sample ID: LCS 240-667478/2-A
Matrix: Water
Analysis Batch: 667768

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 667478

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.03		mg/L		103	85 - 115

Lab Sample ID: 240-230600-1 MS
Matrix: Water
Analysis Batch: 667768

Client Sample ID: L508232-01 MW-7
Prep Type: Total Recoverable
Prep Batch: 667478

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.9		1.00	3.09		mg/L		120	70 - 130

Lab Sample ID: 240-230600-1 MSD
Matrix: Water
Analysis Batch: 667768

Client Sample ID: L508232-01 MW-7
Prep Type: Total Recoverable
Prep Batch: 667478

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	1.9		1.00	2.93		mg/L		103	70 - 130	5	20

Lab Sample ID: MB 240-667493/1-A
Matrix: Water
Analysis Batch: 667768

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 667493

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		08/13/25 14:00	08/14/25 18:38	1

Lab Sample ID: LCS 240-667493/2-A
Matrix: Water
Analysis Batch: 667768

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 667493

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.01		mg/L		101	85 - 115

Lab Sample ID: 240-230600-8 MS
Matrix: Water
Analysis Batch: 667768

Client Sample ID: L508232-08 MWT-7
Prep Type: Total Recoverable
Prep Batch: 667493

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.8		1.00	2.76		mg/L		96	70 - 130

Lab Sample ID: 240-230600-8 MSD
Matrix: Water
Analysis Batch: 667768

Client Sample ID: L508232-08 MWT-7
Prep Type: Total Recoverable
Prep Batch: 667493

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	1.8		1.00	2.60		mg/L		80	70 - 130	6	20

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: 240-230600-9 MS
Matrix: Water
Analysis Batch: 667768

Client Sample ID: L508232-09 FIELD BLANK
Prep Type: Total Recoverable
Prep Batch: 667493

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	ND		1.00	1.02		mg/L		102	70 - 130

Lab Sample ID: 240-230600-9 MSD
Matrix: Water
Analysis Batch: 667768

Client Sample ID: L508232-09 FIELD BLANK
Prep Type: Total Recoverable
Prep Batch: 667493

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	ND		1.00	0.944		mg/L		94	70 - 130	7	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 350-8859/25-A
Matrix: Water
Analysis Batch: 8942

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8859

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		08/13/25 18:30	08/15/25 19:25	1
Na	ND		0.60	0.33	mg/L		08/13/25 18:30	08/15/25 19:25	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-8859/25-A
Matrix: Water
Analysis Batch: 8905

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8859

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		08/13/25 18:30	08/14/25 19:12	1
Zinc	ND		0.0070	0.00093	mg/L		08/13/25 18:30	08/14/25 19:12	1

Lab Sample ID: LCS 350-8859/26-A
Matrix: Water
Analysis Batch: 8905

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8859

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	19.1		mg/L		95	85 - 115
Zinc	1.00	0.963		mg/L		96	85 - 115

Lab Sample ID: 240-230600-5 MS
Matrix: Water
Analysis Batch: 8905

Client Sample ID: L508232-05 MW-18B
Prep Type: Total/NA
Prep Batch: 8859

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	2.8		20.0	22.7		mg/L		100	70 - 130
Zinc	0.0025	J	1.00	1.01		mg/L		101	70 - 130

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-230600-5 MSD
Matrix: Water
Analysis Batch: 8905

Client Sample ID: L508232-05 MW-18B
Prep Type: Total/NA
Prep Batch: 8859

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	2.8		20.0	22.8		mg/L		100	70 - 130	0	20
Zinc	0.0025	J	1.00	1.00		mg/L		100	70 - 130	1	20

Lab Sample ID: 240-230600-8 MS
Matrix: Water
Analysis Batch: 8905

Client Sample ID: L508232-08 MWT-7
Prep Type: Total/NA
Prep Batch: 8859

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	1.3		20.0	19.6		mg/L		91	70 - 130
Zinc	ND		1.00	0.932		mg/L		93	70 - 130

Lab Sample ID: 240-230600-8 MSD
Matrix: Water
Analysis Batch: 8905

Client Sample ID: L508232-08 MWT-7
Prep Type: Total/NA
Prep Batch: 8859

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	1.3		20.0	21.4		mg/L		100	70 - 130	9	20
Zinc	ND		1.00	1.02		mg/L		102	70 - 130	9	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-667478/1-A
Matrix: Water
Analysis Batch: 667714

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 667478

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/13/25 19:30	08/14/25 11:58	1
Arsenic	ND		0.0050	0.00075	mg/L		08/13/25 19:30	08/14/25 11:58	1
Barium	ND		0.0050	0.00077	mg/L		08/13/25 19:30	08/14/25 11:58	1
Beryllium	ND		0.0010	0.00027	mg/L		08/13/25 19:30	08/14/25 11:58	1
Cadmium	ND		0.0010	0.000077	mg/L		08/13/25 19:30	08/14/25 11:58	1
Cobalt	ND		0.0010	0.000086	mg/L		08/13/25 19:30	08/14/25 11:58	1
Chromium	ND		0.0050	0.0012	mg/L		08/13/25 19:30	08/14/25 11:58	1
Copper	ND		0.0020	0.0017	mg/L		08/13/25 19:30	08/14/25 11:58	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/13/25 19:30	08/14/25 11:58	1
Nickel	ND		0.0020	0.0015	mg/L		08/13/25 19:30	08/14/25 11:58	1
Lead	ND		0.0010	0.00045	mg/L		08/13/25 19:30	08/14/25 11:58	1
Antimony	ND		0.0020	0.00057	mg/L		08/13/25 19:30	08/14/25 11:58	1
Selenium	ND		0.0050	0.00089	mg/L		08/13/25 19:30	08/14/25 11:58	1
Thallium	ND		0.0010	0.00051	mg/L		08/13/25 19:30	08/14/25 11:58	1
Vanadium	ND		0.0050	0.00082	mg/L		08/13/25 19:30	08/14/25 11:58	1
Calcium	ND		1.0	0.25	mg/L		08/13/25 19:30	08/14/25 11:58	1
Magnesium	ND		1.0	0.061	mg/L		08/13/25 19:30	08/14/25 11:58	1
Lithium	ND		0.0080	0.0034	mg/L		08/13/25 19:30	08/14/25 11:58	1

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-667478/3-A
Matrix: Water
Analysis Batch: 667714

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 667478

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Silver			0.100	0.105		mg/L		105	85 - 115		
Arsenic			1.00	1.02		mg/L		102	85 - 115		
Barium			1.00	0.997		mg/L		100	85 - 115		
Beryllium			0.500	0.488		mg/L		98	85 - 115		
Cadmium			0.500	0.492		mg/L		98	85 - 115		
Cobalt			0.500	0.502		mg/L		100	85 - 115		
Chromium			0.500	0.505		mg/L		101	85 - 115		
Copper			0.500	0.516		mg/L		103	85 - 115		
Molybdenum			0.500	0.502		mg/L		100	85 - 115		
Nickel			0.500	0.515		mg/L		103	85 - 115		
Lead			0.500	0.550		mg/L		110	85 - 115		
Antimony			0.100	0.101		mg/L		101	85 - 115		
Selenium			1.00	1.01		mg/L		101	85 - 115		
Thallium			1.00	1.15		mg/L		115	85 - 115		
Vanadium			0.500	0.506		mg/L		101	85 - 115		
Calcium			25.0	25.2		mg/L		101	85 - 115		
Magnesium			25.0	25.5		mg/L		102	85 - 115		
Lithium			0.500	0.514		mg/L		103	85 - 115		

Lab Sample ID: 240-230600-1 MS
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508232-01 MW-7
Prep Type: Total Recoverable
Prep Batch: 667478

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Silver	ND		0.100	0.101		mg/L		101	70 - 130		
Arsenic	0.0053		1.00	1.03		mg/L		103	70 - 130		
Barium	0.060		1.00	1.05		mg/L		99	70 - 130		
Beryllium	ND		0.500	0.490		mg/L		98	70 - 130		
Cadmium	ND		0.500	0.484		mg/L		97	70 - 130		
Cobalt	0.00016	J	0.500	0.488		mg/L		97	70 - 130		
Chromium	ND		0.500	0.494		mg/L		99	70 - 130		
Copper	ND		0.500	0.503		mg/L		101	70 - 130		
Molybdenum	0.16		0.500	0.654		mg/L		98	70 - 130		
Nickel	ND		0.500	0.500		mg/L		100	70 - 130		
Lead	ND		0.500	0.537		mg/L		107	70 - 130		
Antimony	ND		0.100	0.103		mg/L		103	70 - 130		
Selenium	ND		1.00	0.995		mg/L		100	70 - 130		
Thallium	ND		1.00	1.12		mg/L		112	70 - 130		
Vanadium	ND		0.500	0.500		mg/L		100	70 - 130		
Calcium	110		25.0	123	4	mg/L		56	70 - 130		
Magnesium	16	F1	25.0	33.2	F1	mg/L		69	70 - 130		
Lithium	0.079		0.500	0.598		mg/L		104	70 - 130		

Lab Sample ID: 240-230600-1 MSD
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508232-01 MW-7
Prep Type: Total Recoverable
Prep Batch: 667478

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.102		mg/L		102	70 - 130	1	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-230600-1 MSD
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508232-01 MW-7
Prep Type: Total Recoverable
Prep Batch: 667478

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	0.0053		1.00	1.06		mg/L		105	70 - 130	2	20
Barium	0.060		1.00	1.06		mg/L		100	70 - 130	1	20
Beryllium	ND		0.500	0.504		mg/L		101	70 - 130	3	20
Cadmium	ND		0.500	0.490		mg/L		98	70 - 130	1	20
Cobalt	0.00016	J	0.500	0.496		mg/L		99	70 - 130	2	20
Chromium	ND		0.500	0.503		mg/L		101	70 - 130	2	20
Copper	ND		0.500	0.508		mg/L		102	70 - 130	1	20
Molybdenum	0.16		0.500	0.657		mg/L		99	70 - 130	0	20
Nickel	ND		0.500	0.507		mg/L		101	70 - 130	1	20
Lead	ND		0.500	0.545		mg/L		109	70 - 130	1	20
Antimony	ND		0.100	0.102		mg/L		102	70 - 130	1	20
Selenium	ND		1.00	0.997		mg/L		100	70 - 130	0	20
Thallium	ND		1.00	1.12		mg/L		112	70 - 130	1	20
Vanadium	ND		0.500	0.504		mg/L		101	70 - 130	1	20
Calcium	110		25.0	129	4	mg/L		76	70 - 130	4	20
Magnesium	16	F1	25.0	40.1		mg/L		97	70 - 130	19	20
Lithium	0.079		0.500	0.610		mg/L		106	70 - 130	2	20

Lab Sample ID: 240-230600-2 MS
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508232-02 MW-7B
Prep Type: Total Recoverable
Prep Batch: 667478

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.101		mg/L		101	70 - 130
Arsenic	0.0021	J	1.00	1.04		mg/L		103	70 - 130
Barium	0.0077		1.00	1.01		mg/L		100	70 - 130
Beryllium	0.00027	J	0.500	0.501		mg/L		100	70 - 130
Cadmium	0.00015	J	0.500	0.488		mg/L		98	70 - 130
Cobalt	0.00010	J	0.500	0.495		mg/L		99	70 - 130
Chromium	ND		0.500	0.499		mg/L		100	70 - 130
Copper	ND		0.500	0.511		mg/L		102	70 - 130
Molybdenum	ND		0.500	0.505		mg/L		101	70 - 130
Nickel	ND		0.500	0.505		mg/L		101	70 - 130
Lead	ND		0.500	0.531		mg/L		106	70 - 130
Antimony	ND		0.100	0.101		mg/L		101	70 - 130
Selenium	ND		1.00	1.01		mg/L		101	70 - 130
Thallium	ND		1.00	1.12		mg/L		112	70 - 130
Vanadium	ND		0.500	0.502		mg/L		100	70 - 130
Calcium	8.0		25.0	33.3		mg/L		101	70 - 130
Magnesium	2.5		25.0	28.4		mg/L		104	70 - 130
Lithium	0.033		0.500	0.555		mg/L		104	70 - 130

Lab Sample ID: 240-230600-2 MSD
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508232-02 MW-7B
Prep Type: Total Recoverable
Prep Batch: 667478

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.101		mg/L		101	70 - 130	0	20
Arsenic	0.0021	J	1.00	1.02		mg/L		102	70 - 130	1	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-230600-2 MSD
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508232-02 MW-7B
Prep Type: Total Recoverable
Prep Batch: 667478

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Barium	0.0077		1.00	0.994		mg/L		99	70 - 130	1	20
Beryllium	0.00027	J	0.500	0.499		mg/L		100	70 - 130	0	20
Cadmium	0.00015	J	0.500	0.488		mg/L		98	70 - 130	0	20
Cobalt	0.00010	J	0.500	0.489		mg/L		98	70 - 130	1	20
Chromium	ND		0.500	0.497		mg/L		99	70 - 130	0	20
Copper	ND		0.500	0.503		mg/L		101	70 - 130	2	20
Molybdenum	ND		0.500	0.497		mg/L		99	70 - 130	2	20
Nickel	ND		0.500	0.501		mg/L		100	70 - 130	1	20
Lead	ND		0.500	0.536		mg/L		107	70 - 130	1	20
Antimony	ND		0.100	0.101		mg/L		101	70 - 130	1	20
Selenium	ND		1.00	0.991		mg/L		99	70 - 130	1	20
Thallium	ND		1.00	1.11		mg/L		111	70 - 130	1	20
Vanadium	ND		0.500	0.501		mg/L		100	70 - 130	0	20
Calcium	8.0		25.0	33.3		mg/L		101	70 - 130	0	20
Magnesium	2.5		25.0	28.2		mg/L		103	70 - 130	1	20
Lithium	0.033		0.500	0.559		mg/L		105	70 - 130	1	20

Lab Sample ID: MB 240-667493/1-A
Matrix: Water
Analysis Batch: 667773

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 667493

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/13/25 14:00	08/14/25 20:25	1
Arsenic	ND		0.0050	0.00075	mg/L		08/13/25 14:00	08/14/25 20:25	1
Barium	ND		0.0050	0.00077	mg/L		08/13/25 14:00	08/14/25 20:25	1
Beryllium	ND		0.0010	0.00027	mg/L		08/13/25 14:00	08/14/25 20:25	1
Cadmium	ND		0.0010	0.000077	mg/L		08/13/25 14:00	08/14/25 20:25	1
Cobalt	ND		0.0010	0.000086	mg/L		08/13/25 14:00	08/14/25 20:25	1
Chromium	ND		0.0050	0.0012	mg/L		08/13/25 14:00	08/14/25 20:25	1
Copper	ND		0.0020	0.0017	mg/L		08/13/25 14:00	08/14/25 20:25	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/13/25 14:00	08/14/25 20:25	1
Nickel	ND		0.0020	0.0015	mg/L		08/13/25 14:00	08/14/25 20:25	1
Lead	ND		0.0010	0.00045	mg/L		08/13/25 14:00	08/14/25 20:25	1
Antimony	ND		0.0020	0.00057	mg/L		08/13/25 14:00	08/14/25 20:25	1
Selenium	ND		0.0050	0.00089	mg/L		08/13/25 14:00	08/14/25 20:25	1
Thallium	ND		0.0010	0.00051	mg/L		08/13/25 14:00	08/14/25 20:25	1
Vanadium	ND		0.0050	0.00082	mg/L		08/13/25 14:00	08/14/25 20:25	1
Calcium	ND		1.0	0.25	mg/L		08/13/25 14:00	08/14/25 20:25	1
Magnesium	ND		1.0	0.061	mg/L		08/13/25 14:00	08/14/25 20:25	1
Lithium	ND		0.0080	0.0034	mg/L		08/13/25 14:00	08/14/25 20:25	1

Lab Sample ID: LCS 240-667493/3-A
Matrix: Water
Analysis Batch: 667773

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 667493

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.103		mg/L		103	85 - 115
Arsenic	1.00	0.951		mg/L		95	85 - 115
Barium	1.00	0.994		mg/L		99	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-667493/3-A
Matrix: Water
Analysis Batch: 667773

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 667493

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	0.500	0.478		mg/L		96	85 - 115
Cadmium	0.500	0.496		mg/L		99	85 - 115
Cobalt	0.500	0.458		mg/L		92	85 - 115
Chromium	0.500	0.501		mg/L		100	85 - 115
Copper	0.500	0.480		mg/L		96	85 - 115
Molybdenum	0.500	0.479		mg/L		96	85 - 115
Nickel	0.500	0.471		mg/L		94	85 - 115
Lead	0.500	0.542		mg/L		108	85 - 115
Antimony	0.100	0.103		mg/L		103	85 - 115
Selenium	1.00	0.933		mg/L		93	85 - 115
Thallium	1.00	1.16	*+	mg/L		116	85 - 115
Vanadium	0.500	0.496		mg/L		99	85 - 115
Calcium	25.0	25.1		mg/L		100	85 - 115
Magnesium	25.0	26.2		mg/L		105	85 - 115
Lithium	0.500	0.508		mg/L		102	85 - 115

Lab Sample ID: 240-230600-8 MS
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508232-08 MWT-7
Prep Type: Total Recoverable
Prep Batch: 667493

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.101		mg/L		101	70 - 130
Arsenic	0.0055		1.00	0.959		mg/L		95	70 - 130
Barium	0.059		1.00	1.05		mg/L		99	70 - 130
Beryllium	ND		0.500	0.472		mg/L		94	70 - 130
Cadmium	0.00013	J	0.500	0.494		mg/L		99	70 - 130
Cobalt	0.00013	J	0.500	0.460		mg/L		92	70 - 130
Chromium	ND		0.500	0.496		mg/L		99	70 - 130
Copper	ND		0.500	0.476		mg/L		95	70 - 130
Molybdenum	0.16		0.500	0.641		mg/L		97	70 - 130
Nickel	ND		0.500	0.472		mg/L		94	70 - 130
Lead	ND		0.500	0.532		mg/L		106	70 - 130
Antimony	ND		0.100	0.101		mg/L		101	70 - 130
Selenium	ND		1.00	0.922		mg/L		92	70 - 130
Thallium	ND	*+	1.00	1.14		mg/L		114	70 - 130
Vanadium	0.00088	J	0.500	0.495		mg/L		99	70 - 130
Calcium	100		25.0	126	4	mg/L		85	70 - 130
Magnesium	15		25.0	40.1		mg/L		99	70 - 130
Lithium	0.075		0.500	0.589		mg/L		103	70 - 130

Lab Sample ID: 240-230600-8 MSD
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508232-08 MWT-7
Prep Type: Total Recoverable
Prep Batch: 667493

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.102		mg/L		102	70 - 130	1	20
Arsenic	0.0055		1.00	0.969		mg/L		96	70 - 130	1	20
Barium	0.059		1.00	1.05		mg/L		99	70 - 130	1	20
Beryllium	ND		0.500	0.473		mg/L		95	70 - 130	0	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-230600-8 MSD
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508232-08 MWT-7
Prep Type: Total Recoverable
Prep Batch: 667493

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	0.00013	J	0.500	0.490		mg/L		98	70 - 130	1	20
Cobalt	0.00013	J	0.500	0.461		mg/L		92	70 - 130	0	20
Chromium	ND		0.500	0.496		mg/L		99	70 - 130	0	20
Copper	ND		0.500	0.477		mg/L		95	70 - 130	0	20
Molybdenum	0.16		0.500	0.641		mg/L		97	70 - 130	0	20
Nickel	ND		0.500	0.472		mg/L		94	70 - 130	0	20
Lead	ND		0.500	0.536		mg/L		107	70 - 130	1	20
Antimony	ND		0.100	0.102		mg/L		102	70 - 130	0	20
Selenium	ND		1.00	0.924		mg/L		92	70 - 130	0	20
Thallium	ND	*+	1.00	1.14		mg/L		114	70 - 130	1	20
Vanadium	0.00088	J	0.500	0.495		mg/L		99	70 - 130	0	20
Calcium	100		25.0	127	4	mg/L		89	70 - 130	1	20
Magnesium	15		25.0	40.1		mg/L		99	70 - 130	0	20
Lithium	0.075		0.500	0.591		mg/L		103	70 - 130	0	20

Lab Sample ID: 240-230600-9 MS
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508232-09 FIELD BLANK
Prep Type: Total Recoverable
Prep Batch: 667493

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.100		mg/L		100	70 - 130
Arsenic	0.00098	J	1.00	0.938		mg/L		94	70 - 130
Barium	ND		1.00	0.982		mg/L		98	70 - 130
Beryllium	0.00030	J	0.500	0.463		mg/L		92	70 - 130
Cadmium	0.00016	J	0.500	0.490		mg/L		98	70 - 130
Cobalt	0.000092	J	0.500	0.457		mg/L		91	70 - 130
Chromium	ND		0.500	0.499		mg/L		100	70 - 130
Copper	ND		0.500	0.475		mg/L		95	70 - 130
Molybdenum	ND		0.500	0.479		mg/L		96	70 - 130
Nickel	ND		0.500	0.468		mg/L		94	70 - 130
Lead	ND		0.500	0.537		mg/L		107	70 - 130
Antimony	ND		0.100	0.100		mg/L		100	70 - 130
Selenium	ND		1.00	0.945		mg/L		95	70 - 130
Thallium	0.00064	J *+	1.00	1.14		mg/L		114	70 - 130
Vanadium	ND		0.500	0.494		mg/L		99	70 - 130
Calcium	ND		25.0	24.6		mg/L		98	70 - 130
Magnesium	ND		25.0	25.4		mg/L		102	70 - 130
Lithium	ND		0.500	0.489		mg/L		98	70 - 130

Lab Sample ID: 240-230600-9 MSD
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508232-09 FIELD BLANK
Prep Type: Total Recoverable
Prep Batch: 667493

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.0975		mg/L		97	70 - 130	3	20
Arsenic	0.00098	J	1.00	0.930		mg/L		93	70 - 130	1	20
Barium	ND		1.00	0.972		mg/L		97	70 - 130	1	20
Beryllium	0.00030	J	0.500	0.462		mg/L		92	70 - 130	0	20
Cadmium	0.00016	J	0.500	0.483		mg/L		97	70 - 130	1	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-230600-9 MSD
Matrix: Water
Analysis Batch: 667773

Client Sample ID: L508232-09 FIELD BLANK
Prep Type: Total Recoverable
Prep Batch: 667493

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	0.000092	J	0.500	0.453		mg/L		91	70 - 130	1	20
Chromium	ND		0.500	0.495		mg/L		99	70 - 130	1	20
Copper	ND		0.500	0.470		mg/L		94	70 - 130	1	20
Molybdenum	ND		0.500	0.474		mg/L		95	70 - 130	1	20
Nickel	ND		0.500	0.465		mg/L		93	70 - 130	1	20
Lead	ND		0.500	0.536		mg/L		107	70 - 130	0	20
Antimony	ND		0.100	0.0972		mg/L		97	70 - 130	3	20
Selenium	ND		1.00	0.924		mg/L		92	70 - 130	2	20
Thallium	0.00064	J *+	1.00	1.14		mg/L		114	70 - 130	0	20
Vanadium	ND		0.500	0.490		mg/L		98	70 - 130	1	20
Calcium	ND		25.0	24.1		mg/L		97	70 - 130	2	20
Magnesium	ND		25.0	25.2		mg/L		101	70 - 130	1	20
Lithium	ND		0.500	0.506		mg/L		101	70 - 130	3	20

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-667486/1-A
Matrix: Water
Analysis Batch: 667738

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 667486

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/13/25 14:00	08/14/25 11:04	1

Lab Sample ID: LCS 240-667486/2-A
Matrix: Water
Analysis Batch: 667738

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 667486

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00516		mg/L		103	85 - 115

Lab Sample ID: 240-230600-1 MS
Matrix: Water
Analysis Batch: 667738

Client Sample ID: L508232-01 MW-7
Prep Type: Total/NA
Prep Batch: 667486

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00100	0.00103		mg/L		103	70 - 130

Lab Sample ID: 240-230600-1 MSD
Matrix: Water
Analysis Batch: 667738

Client Sample ID: L508232-01 MW-7
Prep Type: Total/NA
Prep Batch: 667486

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.00103		mg/L		103	70 - 130	0	20

Lab Sample ID: 240-230600-2 MS
Matrix: Water
Analysis Batch: 667738

Client Sample ID: L508232-02 MW-7B
Prep Type: Total/NA
Prep Batch: 667486

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00100	0.00106		mg/L		106	70 - 130

Method: 245.1-1994 R3.0 - Mercury (CVAA) (Continued)

Lab Sample ID: 240-230600-2 MSD
Matrix: Water
Analysis Batch: 667738

Client Sample ID: L508232-02 MW-7B
Prep Type: Total/NA
Prep Batch: 667486

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.00105		mg/L		105	70 - 130	1	20

Lab Sample ID: MB 240-667505/1-A
Matrix: Water
Analysis Batch: 667738

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 667505

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/13/25 14:00	08/14/25 12:41	1

Lab Sample ID: LCS 240-667505/2-A
Matrix: Water
Analysis Batch: 667738

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 667505

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00565		mg/L		113	85 - 115

Lab Sample ID: 240-230600-8 MS
Matrix: Water
Analysis Batch: 667738

Client Sample ID: L508232-08 MWT-7
Prep Type: Total/NA
Prep Batch: 667505

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00100	0.00105		mg/L		105	70 - 130

Lab Sample ID: 240-230600-8 MSD
Matrix: Water
Analysis Batch: 667738

Client Sample ID: L508232-08 MWT-7
Prep Type: Total/NA
Prep Batch: 667505

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.00105		mg/L		105	70 - 130	0	20

Lab Sample ID: 240-230600-9 MS
Matrix: Water
Analysis Batch: 667738

Client Sample ID: L508232-09 FIELD BLANK
Prep Type: Total/NA
Prep Batch: 667505

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00100	0.00105		mg/L		105	70 - 130

Lab Sample ID: 240-230600-9 MSD
Matrix: Water
Analysis Batch: 667738

Client Sample ID: L508232-09 FIELD BLANK
Prep Type: Total/NA
Prep Batch: 667505

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.00105		mg/L		105	70 - 130	1	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-668047/30
Matrix: Water
Analysis Batch: 668047

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/15/25 18:27	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/15/25 18:27	1

Lab Sample ID: MB 240-668047/4
Matrix: Water
Analysis Batch: 668047

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/15/25 16:16	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/15/25 16:16	1

Lab Sample ID: 240-230600-2 DU
Matrix: Water
Analysis Batch: 668047

Client Sample ID: L508232-02 MW-7B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	290		291		mg/L		0.06	20
Carbonate Alkalinity as CaCO3	22		24.2		mg/L		11	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-667476/1
Matrix: Water
Analysis Batch: 667476

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			08/13/25 09:35	1

Lab Sample ID: LCS 240-667476/2
Matrix: Water
Analysis Batch: 667476

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	240	232		mg/L		97	80 - 120

Lab Sample ID: 240-230600-7 DU
Matrix: Water
Analysis Batch: 667476

Client Sample ID: L508232-07 MW-18D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	450		468		mg/L		4	20

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-667521/1
Matrix: Water
Analysis Batch: 667521

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			08/13/25 11:33	1

Method: 2540D-2020 - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 240-667521/2
Matrix: Water
Analysis Batch: 667521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	30.0	26.5		mg/L		88	64 - 120

Lab Sample ID: MB 240-667677/1
Matrix: Water
Analysis Batch: 667677

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			08/14/25 10:47	1

Lab Sample ID: LCS 240-667677/2
Matrix: Water
Analysis Batch: 667677

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	30.0	29.0		mg/L		97	64 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-667361/3
Matrix: Water
Analysis Batch: 667361

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			08/12/25 23:15	1
Fluoride	ND		0.050	0.024	mg/L			08/12/25 23:15	1
Sulfate	ND		1.0	0.35	mg/L			08/12/25 23:15	1

Lab Sample ID: LCS 240-667361/4
Matrix: Water
Analysis Batch: 667361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	50.9		mg/L		102	90 - 110
Fluoride	2.50	2.63		mg/L		105	90 - 110
Sulfate	50.0	50.5		mg/L		101	90 - 110

Lab Sample ID: 240-230600-2 MS
Matrix: Water
Analysis Batch: 667361

Client Sample ID: L508232-02 MW-7B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.92	J	50.0	53.5		mg/L		105	80 - 120
Fluoride	0.81		2.50	3.37		mg/L		103	80 - 120
Sulfate	0.55	J	50.0	52.7		mg/L		104	80 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-230600-2 MSD
Matrix: Water
Analysis Batch: 667361

Client Sample ID: L508232-02 MW-7B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	0.92	J	50.0	53.6		mg/L		105	80 - 120	0	15
Fluoride	0.81		2.50	3.38		mg/L		103	80 - 120	0	15
Sulfate	0.55	J	50.0	52.7		mg/L		104	80 - 120	0	15

Metals

Prep Batch: 8859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-1	L508232-01 MW-7	Total/NA	Water	200.7	
240-230600-2	L508232-02 MW-7B	Total/NA	Water	200.7	
240-230600-3	L508232-03 MW-13	Total/NA	Water	200.7	
240-230600-4	L508232-04 MW-18A	Total/NA	Water	200.7	
240-230600-5	L508232-05 MW-18B	Total/NA	Water	200.7	
240-230600-6	L508232-06 MW-18C	Total/NA	Water	200.7	
240-230600-7	L508232-07 MW-18D	Total/NA	Water	200.7	
240-230600-8	L508232-08 MWT-7	Total/NA	Water	200.7	
240-230600-9	L508232-09 FIELD BLANK	Total/NA	Water	200.7	
MB 350-8859/25-A	Method Blank	Total/NA	Water	200.7	
LCS 350-8859/26-A	Lab Control Sample	Total/NA	Water	200.7	
240-230600-5 MS	L508232-05 MW-18B	Total/NA	Water	200.7	
240-230600-5 MSD	L508232-05 MW-18B	Total/NA	Water	200.7	
240-230600-8 MS	L508232-08 MWT-7	Total/NA	Water	200.7	
240-230600-8 MSD	L508232-08 MWT-7	Total/NA	Water	200.7	

Analysis Batch: 8905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-1	L508232-01 MW-7	Total/NA	Water	200.8	8859
240-230600-2	L508232-02 MW-7B	Total/NA	Water	200.8	8859
240-230600-3	L508232-03 MW-13	Total/NA	Water	200.8	8859
240-230600-4	L508232-04 MW-18A	Total/NA	Water	200.8	8859
240-230600-5	L508232-05 MW-18B	Total/NA	Water	200.8	8859
240-230600-6	L508232-06 MW-18C	Total/NA	Water	200.8	8859
240-230600-7	L508232-07 MW-18D	Total/NA	Water	200.8	8859
240-230600-8	L508232-08 MWT-7	Total/NA	Water	200.8	8859
240-230600-9	L508232-09 FIELD BLANK	Total/NA	Water	200.8	8859
MB 350-8859/25-A	Method Blank	Total/NA	Water	200.8	8859
LCS 350-8859/26-A	Lab Control Sample	Total/NA	Water	200.8	8859
240-230600-5 MS	L508232-05 MW-18B	Total/NA	Water	200.8	8859
240-230600-5 MSD	L508232-05 MW-18B	Total/NA	Water	200.8	8859
240-230600-8 MS	L508232-08 MWT-7	Total/NA	Water	200.8	8859
240-230600-8 MSD	L508232-08 MWT-7	Total/NA	Water	200.8	8859

Analysis Batch: 8942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-1	L508232-01 MW-7	Total/NA	Water	200.7 Rev 4.4	8859
240-230600-2	L508232-02 MW-7B	Total/NA	Water	200.7 Rev 4.4	8859
240-230600-3	L508232-03 MW-13	Total/NA	Water	200.7 Rev 4.4	8859
240-230600-4	L508232-04 MW-18A	Total/NA	Water	200.7 Rev 4.4	8859
240-230600-5	L508232-05 MW-18B	Total/NA	Water	200.7 Rev 4.4	8859
240-230600-6	L508232-06 MW-18C	Total/NA	Water	200.7 Rev 4.4	8859
240-230600-7	L508232-07 MW-18D	Total/NA	Water	200.7 Rev 4.4	8859
240-230600-8	L508232-08 MWT-7	Total/NA	Water	200.7 Rev 4.4	8859
240-230600-9	L508232-09 FIELD BLANK	Total/NA	Water	200.7 Rev 4.4	8859
MB 350-8859/25-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	8859
LCS 350-8859/26-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	8859
240-230600-5 MS	L508232-05 MW-18B	Total/NA	Water	200.7 Rev 4.4	8859
240-230600-5 MSD	L508232-05 MW-18B	Total/NA	Water	200.7 Rev 4.4	8859
240-230600-8 MS	L508232-08 MWT-7	Total/NA	Water	200.7 Rev 4.4	8859
240-230600-8 MSD	L508232-08 MWT-7	Total/NA	Water	200.7 Rev 4.4	8859

Metals

Prep Batch: 667478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-1	L508232-01 MW-7	Total Recoverable	Water	200.7	
240-230600-2	L508232-02 MW-7B	Total Recoverable	Water	200.7	
240-230600-3	L508232-03 MW-13	Total Recoverable	Water	200.7	
240-230600-4	L508232-04 MW-18A	Total Recoverable	Water	200.7	
240-230600-5	L508232-05 MW-18B	Total Recoverable	Water	200.7	
240-230600-6	L508232-06 MW-18C	Total Recoverable	Water	200.7	
240-230600-7	L508232-07 MW-18D	Total Recoverable	Water	200.7	
MB 240-667478/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-667478/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-667478/3-A	Lab Control Sample	Total Recoverable	Water	200.7	
240-230600-1 MS	L508232-01 MW-7	Total Recoverable	Water	200.7	
240-230600-1 MS	L508232-01 MW-7	Total Recoverable	Water	200.7	
240-230600-1 MSD	L508232-01 MW-7	Total Recoverable	Water	200.7	
240-230600-1 MSD	L508232-01 MW-7	Total Recoverable	Water	200.7	
240-230600-2 MS	L508232-02 MW-7B	Total Recoverable	Water	200.7	
240-230600-2 MSD	L508232-02 MW-7B	Total Recoverable	Water	200.7	

Prep Batch: 667486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-1	L508232-01 MW-7	Total/NA	Water	245.1-1994 R3.0	
240-230600-2	L508232-02 MW-7B	Total/NA	Water	245.1-1994 R3.0	
240-230600-3	L508232-03 MW-13	Total/NA	Water	245.1-1994 R3.0	
240-230600-4	L508232-04 MW-18A	Total/NA	Water	245.1-1994 R3.0	
240-230600-5	L508232-05 MW-18B	Total/NA	Water	245.1-1994 R3.0	
240-230600-6	L508232-06 MW-18C	Total/NA	Water	245.1-1994 R3.0	
240-230600-7	L508232-07 MW-18D	Total/NA	Water	245.1-1994 R3.0	
MB 240-667486/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-667486/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	
240-230600-1 MS	L508232-01 MW-7	Total/NA	Water	245.1-1994 R3.0	
240-230600-1 MSD	L508232-01 MW-7	Total/NA	Water	245.1-1994 R3.0	
240-230600-2 MS	L508232-02 MW-7B	Total/NA	Water	245.1-1994 R3.0	
240-230600-2 MSD	L508232-02 MW-7B	Total/NA	Water	245.1-1994 R3.0	

Prep Batch: 667493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-8	L508232-08 MWT-7	Total Recoverable	Water	200.7	
240-230600-9	L508232-09 FIELD BLANK	Total Recoverable	Water	200.7	
MB 240-667493/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-667493/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-667493/3-A	Lab Control Sample	Total Recoverable	Water	200.7	
240-230600-8 MS	L508232-08 MWT-7	Total Recoverable	Water	200.7	
240-230600-8 MS	L508232-08 MWT-7	Total Recoverable	Water	200.7	
240-230600-8 MSD	L508232-08 MWT-7	Total Recoverable	Water	200.7	
240-230600-8 MSD	L508232-08 MWT-7	Total Recoverable	Water	200.7	
240-230600-9 MS	L508232-09 FIELD BLANK	Total Recoverable	Water	200.7	
240-230600-9 MS	L508232-09 FIELD BLANK	Total Recoverable	Water	200.7	
240-230600-9 MSD	L508232-09 FIELD BLANK	Total Recoverable	Water	200.7	
240-230600-9 MSD	L508232-09 FIELD BLANK	Total Recoverable	Water	200.7	

Metals

Prep Batch: 667505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-8	L508232-08 MWT-7	Total/NA	Water	245.1-1994 R3.0	
240-230600-9	L508232-09 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	
MB 240-667505/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-667505/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	
240-230600-8 MS	L508232-08 MWT-7	Total/NA	Water	245.1-1994 R3.0	
240-230600-8 MSD	L508232-08 MWT-7	Total/NA	Water	245.1-1994 R3.0	
240-230600-9 MS	L508232-09 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	
240-230600-9 MSD	L508232-09 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 667714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-667478/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	667478
LCS 240-667478/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	667478

Analysis Batch: 667738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-1	L508232-01 MW-7	Total/NA	Water	245.1-1994 R3.0	667486
240-230600-2	L508232-02 MW-7B	Total/NA	Water	245.1-1994 R3.0	667486
240-230600-3	L508232-03 MW-13	Total/NA	Water	245.1-1994 R3.0	667486
240-230600-4	L508232-04 MW-18A	Total/NA	Water	245.1-1994 R3.0	667486
240-230600-5	L508232-05 MW-18B	Total/NA	Water	245.1-1994 R3.0	667486
240-230600-6	L508232-06 MW-18C	Total/NA	Water	245.1-1994 R3.0	667486
240-230600-7	L508232-07 MW-18D	Total/NA	Water	245.1-1994 R3.0	667486
240-230600-8	L508232-08 MWT-7	Total/NA	Water	245.1-1994 R3.0	667505
240-230600-9	L508232-09 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	667505
MB 240-667486/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	667486
MB 240-667505/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	667505
LCS 240-667486/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	667486
LCS 240-667505/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	667505
240-230600-1 MS	L508232-01 MW-7	Total/NA	Water	245.1-1994 R3.0	667486
240-230600-1 MSD	L508232-01 MW-7	Total/NA	Water	245.1-1994 R3.0	667486
240-230600-2 MS	L508232-02 MW-7B	Total/NA	Water	245.1-1994 R3.0	667486
240-230600-2 MSD	L508232-02 MW-7B	Total/NA	Water	245.1-1994 R3.0	667486
240-230600-8 MS	L508232-08 MWT-7	Total/NA	Water	245.1-1994 R3.0	667505
240-230600-8 MSD	L508232-08 MWT-7	Total/NA	Water	245.1-1994 R3.0	667505
240-230600-9 MS	L508232-09 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	667505
240-230600-9 MSD	L508232-09 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	667505

Analysis Batch: 667768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-1	L508232-01 MW-7	Total Recoverable	Water	200.7 R4.4-1994	667478
240-230600-2	L508232-02 MW-7B	Total Recoverable	Water	200.7 R4.4-1994	667478
240-230600-3	L508232-03 MW-13	Total Recoverable	Water	200.7 R4.4-1994	667478
240-230600-4	L508232-04 MW-18A	Total Recoverable	Water	200.7 R4.4-1994	667478
240-230600-5	L508232-05 MW-18B	Total Recoverable	Water	200.7 R4.4-1994	667478
240-230600-6	L508232-06 MW-18C	Total Recoverable	Water	200.7 R4.4-1994	667478
240-230600-7	L508232-07 MW-18D	Total Recoverable	Water	200.7 R4.4-1994	667478
240-230600-8	L508232-08 MWT-7	Total Recoverable	Water	200.7 R4.4-1994	667493
240-230600-9	L508232-09 FIELD BLANK	Total Recoverable	Water	200.7 R4.4-1994	667493
MB 240-667478/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	667478
MB 240-667493/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	667493

Metals (Continued)

Analysis Batch: 667768 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-667478/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	667478
LCS 240-667493/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	667493
240-230600-1 MS	L508232-01 MW-7	Total Recoverable	Water	200.7 R4.4-1994	667478
240-230600-1 MSD	L508232-01 MW-7	Total Recoverable	Water	200.7 R4.4-1994	667478
240-230600-8 MS	L508232-08 MWT-7	Total Recoverable	Water	200.7 R4.4-1994	667493
240-230600-8 MSD	L508232-08 MWT-7	Total Recoverable	Water	200.7 R4.4-1994	667493
240-230600-9 MS	L508232-09 FIELD BLANK	Total Recoverable	Water	200.7 R4.4-1994	667493
240-230600-9 MSD	L508232-09 FIELD BLANK	Total Recoverable	Water	200.7 R4.4-1994	667493

Analysis Batch: 667773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-1	L508232-01 MW-7	Total Recoverable	Water	200.8-1994 R5.4	667478
240-230600-2	L508232-02 MW-7B	Total Recoverable	Water	200.8-1994 R5.4	667478
240-230600-3	L508232-03 MW-13	Total Recoverable	Water	200.8-1994 R5.4	667478
240-230600-4	L508232-04 MW-18A	Total Recoverable	Water	200.8-1994 R5.4	667478
240-230600-5	L508232-05 MW-18B	Total Recoverable	Water	200.8-1994 R5.4	667478
240-230600-6	L508232-06 MW-18C	Total Recoverable	Water	200.8-1994 R5.4	667478
240-230600-7	L508232-07 MW-18D	Total Recoverable	Water	200.8-1994 R5.4	667478
240-230600-8	L508232-08 MWT-7	Total Recoverable	Water	200.8-1994 R5.4	667493
240-230600-9	L508232-09 FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	667493
MB 240-667493/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	667493
LCS 240-667493/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	667493
240-230600-1 MS	L508232-01 MW-7	Total Recoverable	Water	200.8-1994 R5.4	667478
240-230600-1 MSD	L508232-01 MW-7	Total Recoverable	Water	200.8-1994 R5.4	667478
240-230600-2 MS	L508232-02 MW-7B	Total Recoverable	Water	200.8-1994 R5.4	667478
240-230600-2 MSD	L508232-02 MW-7B	Total Recoverable	Water	200.8-1994 R5.4	667478
240-230600-8 MS	L508232-08 MWT-7	Total Recoverable	Water	200.8-1994 R5.4	667493
240-230600-8 MSD	L508232-08 MWT-7	Total Recoverable	Water	200.8-1994 R5.4	667493
240-230600-9 MS	L508232-09 FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	667493
240-230600-9 MSD	L508232-09 FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	667493

Analysis Batch: 667992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-1	L508232-01 MW-7	Total Recoverable	Water	2340 B-2021	
240-230600-2	L508232-02 MW-7B	Total Recoverable	Water	2340 B-2021	
240-230600-3	L508232-03 MW-13	Total Recoverable	Water	2340 B-2021	
240-230600-4	L508232-04 MW-18A	Total Recoverable	Water	2340 B-2021	
240-230600-5	L508232-05 MW-18B	Total Recoverable	Water	2340 B-2021	
240-230600-6	L508232-06 MW-18C	Total Recoverable	Water	2340 B-2021	
240-230600-7	L508232-07 MW-18D	Total Recoverable	Water	2340 B-2021	
240-230600-8	L508232-08 MWT-7	Total Recoverable	Water	2340 B-2021	
240-230600-9	L508232-09 FIELD BLANK	Total Recoverable	Water	2340 B-2021	

General Chemistry

Analysis Batch: 667361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-1	L508232-01 MW-7	Total/NA	Water	300.0-1993 R2.1	
240-230600-2	L508232-02 MW-7B	Total/NA	Water	300.0-1993 R2.1	
240-230600-3	L508232-03 MW-13	Total/NA	Water	300.0-1993 R2.1	
240-230600-3	L508232-03 MW-13	Total/NA	Water	300.0-1993 R2.1	

General Chemistry (Continued)

Analysis Batch: 667361 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-4	L508232-04 MW-18A	Total/NA	Water	300.0-1993 R2.1	
240-230600-5	L508232-05 MW-18B	Total/NA	Water	300.0-1993 R2.1	
240-230600-5	L508232-05 MW-18B	Total/NA	Water	300.0-1993 R2.1	
240-230600-6	L508232-06 MW-18C	Total/NA	Water	300.0-1993 R2.1	
240-230600-7	L508232-07 MW-18D	Total/NA	Water	300.0-1993 R2.1	
240-230600-8	L508232-08 MWT-7	Total/NA	Water	300.0-1993 R2.1	
240-230600-9	L508232-09 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
MB 240-667361/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-667361/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-230600-2 MS	L508232-02 MW-7B	Total/NA	Water	300.0-1993 R2.1	
240-230600-2 MSD	L508232-02 MW-7B	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 667476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-1	L508232-01 MW-7	Total/NA	Water	2540 C-2020	
240-230600-2	L508232-02 MW-7B	Total/NA	Water	2540 C-2020	
240-230600-3	L508232-03 MW-13	Total/NA	Water	2540 C-2020	
240-230600-4	L508232-04 MW-18A	Total/NA	Water	2540 C-2020	
240-230600-5	L508232-05 MW-18B	Total/NA	Water	2540 C-2020	
240-230600-6	L508232-06 MW-18C	Total/NA	Water	2540 C-2020	
240-230600-7	L508232-07 MW-18D	Total/NA	Water	2540 C-2020	
240-230600-8	L508232-08 MWT-7	Total/NA	Water	2540 C-2020	
240-230600-9	L508232-09 FIELD BLANK	Total/NA	Water	2540 C-2020	
MB 240-667476/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-667476/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-230600-7 DU	L508232-07 MW-18D	Total/NA	Water	2540 C-2020	

Analysis Batch: 667521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-1	L508232-01 MW-7	Total/NA	Water	2540D-2020	
240-230600-2	L508232-02 MW-7B	Total/NA	Water	2540D-2020	
240-230600-3	L508232-03 MW-13	Total/NA	Water	2540D-2020	
240-230600-4	L508232-04 MW-18A	Total/NA	Water	2540D-2020	
240-230600-5	L508232-05 MW-18B	Total/NA	Water	2540D-2020	
MB 240-667521/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-667521/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 667677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-6	L508232-06 MW-18C	Total/NA	Water	2540D-2020	
240-230600-7	L508232-07 MW-18D	Total/NA	Water	2540D-2020	
240-230600-8	L508232-08 MWT-7	Total/NA	Water	2540D-2020	
240-230600-9	L508232-09 FIELD BLANK	Total/NA	Water	2540D-2020	
MB 240-667677/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-667677/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 668047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-1	L508232-01 MW-7	Total/NA	Water	2320 B-2021	
240-230600-2	L508232-02 MW-7B	Total/NA	Water	2320 B-2021	
240-230600-3	L508232-03 MW-13	Total/NA	Water	2320 B-2021	

General Chemistry (Continued)

Analysis Batch: 668047 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-4	L508232-04 MW-18A	Total/NA	Water	2320 B-2021	
240-230600-5	L508232-05 MW-18B	Total/NA	Water	2320 B-2021	
240-230600-6	L508232-06 MW-18C	Total/NA	Water	2320 B-2021	
240-230600-7	L508232-07 MW-18D	Total/NA	Water	2320 B-2021	
240-230600-8	L508232-08 MWT-7	Total/NA	Water	2320 B-2021	
240-230600-9	L508232-09 FIELD BLANK	Total/NA	Water	2320 B-2021	
MB 240-668047/30	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-668047/4	Method Blank	Total/NA	Water	2320 B-2021	
240-230600-2 DU	L508232-02 MW-7B	Total/NA	Water	2320 B-2021	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-1

Client Sample ID: L508232-01 MW-7

Lab Sample ID: 240-230600-1

Date Collected: 08/08/25 10:10
Matrix: Water
Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667478	F3PF	EET CLE	08/13/25 19:30
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 14:15
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 20:36
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 20:15
Total Recoverable	Prep	200.7			667478	F3PF	EET CLE	08/13/25 19:30
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 13:09
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:42
Total/NA	Prep	245.1-1994 R3.0			667486	F3PF	EET CLE	08/13/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667738	GEV	EET CLE	08/14/25 11:07
Total/NA	Analysis	2320 B-2021		1	668047	JMR	EET CLE	08/15/25 18:16
Total/NA	Analysis	2540 C-2020		1	667476	AAP	EET CLE	08/13/25 09:35
Total/NA	Analysis	2540D-2020		1	667521	AAP	EET CLE	08/13/25 11:33
Total/NA	Analysis	300.0-1993 R2.1		1	667361	JMR	EET CLE	08/13/25 02:09

Client Sample ID: L508232-02 MW-7B

Lab Sample ID: 240-230600-2

Date Collected: 08/08/25 11:40
Matrix: Water
Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667478	F3PF	EET CLE	08/13/25 19:30
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 14:41
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 20:39
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 20:23
Total Recoverable	Prep	200.7			667478	F3PF	EET CLE	08/13/25 19:30
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 13:22
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:42
Total/NA	Prep	245.1-1994 R3.0			667486	F3PF	EET CLE	08/13/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667738	GEV	EET CLE	08/14/25 11:12
Total/NA	Analysis	2320 B-2021		1	668047	JMR	EET CLE	08/15/25 18:30
Total/NA	Analysis	2540 C-2020		1	667476	AAP	EET CLE	08/13/25 09:35
Total/NA	Analysis	2540D-2020		1	667521	AAP	EET CLE	08/13/25 11:33
Total/NA	Analysis	300.0-1993 R2.1		1	667361	JMR	EET CLE	08/13/25 03:26

Client Sample ID: L508232-03 MW-13

Lab Sample ID: 240-230600-3

Date Collected: 08/08/25 13:20
Matrix: Water
Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667478	F3PF	EET CLE	08/13/25 19:30
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 14:50

Client Sample ID: L508232-03 MW-13

Lab Sample ID: 240-230600-3

Date Collected: 08/08/25 13:20

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 20:42
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 20:26
Total Recoverable	Prep	200.7			667478	F3PF	EET CLE	08/13/25 19:30
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 13:41
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:42
Total/NA	Prep	245.1-1994 R3.0			667486	F3PF	EET CLE	08/13/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667738	GEV	EET CLE	08/14/25 11:33
Total/NA	Analysis	2320 B-2021		1	668047	JMR	EET CLE	08/15/25 18:42
Total/NA	Analysis	2540 C-2020		1	667476	AAP	EET CLE	08/13/25 09:35
Total/NA	Analysis	2540D-2020		1	667521	AAP	EET CLE	08/13/25 11:33
Total/NA	Analysis	300.0-1993 R2.1		1	667361	JMR	EET CLE	08/13/25 02:28
Total/NA	Analysis	300.0-1993 R2.1		5	667361	JMR	EET CLE	08/13/25 02:38

Client Sample ID: L508232-04 MW-18A

Lab Sample ID: 240-230600-4

Date Collected: 08/08/25 10:06

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667478	F3PF	EET CLE	08/13/25 19:30
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 14:54
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 20:46
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 20:29
Total Recoverable	Prep	200.7			667478	F3PF	EET CLE	08/13/25 19:30
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 13:43
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:42
Total/NA	Prep	245.1-1994 R3.0			667486	F3PF	EET CLE	08/13/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667738	GEV	EET CLE	08/14/25 11:34
Total/NA	Analysis	2320 B-2021		1	668047	JMR	EET CLE	08/15/25 18:47
Total/NA	Analysis	2540 C-2020		1	667476	AAP	EET CLE	08/13/25 09:35
Total/NA	Analysis	2540D-2020		1	667521	AAP	EET CLE	08/13/25 11:33
Total/NA	Analysis	300.0-1993 R2.1		1	667361	JMR	EET CLE	08/13/25 03:07

Client Sample ID: L508232-05 MW-18B

Lab Sample ID: 240-230600-5

Date Collected: 08/08/25 11:17

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667478	F3PF	EET CLE	08/13/25 19:30
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 14:59

Client Sample ID: L508232-05 MW-18B

Lab Sample ID: 240-230600-5

Date Collected: 08/08/25 11:17

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 19:54
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 19:34
Total Recoverable	Prep	200.7			667478	F3PF	EET CLE	08/13/25 19:30
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 13:46
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:42
Total/NA	Prep	245.1-1994 R3.0			667486	F3PF	EET CLE	08/13/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667738	GEV	EET CLE	08/14/25 11:36
Total/NA	Analysis	2320 B-2021		1	668047	JMR	EET CLE	08/15/25 18:54
Total/NA	Analysis	2540 C-2020		1	667476	AAP	EET CLE	08/13/25 09:35
Total/NA	Analysis	2540D-2020		1	667521	AAP	EET CLE	08/13/25 11:33
Total/NA	Analysis	300.0-1993 R2.1		1	667361	JMR	EET CLE	08/13/25 03:55
Total/NA	Analysis	300.0-1993 R2.1		5	667361	JMR	EET CLE	08/13/25 04:05

Client Sample ID: L508232-06 MW-18C

Lab Sample ID: 240-230600-6

Date Collected: 08/08/25 12:31

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667478	F3PF	EET CLE	08/13/25 19:30
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 15:03
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 20:49
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 20:32
Total Recoverable	Prep	200.7			667478	F3PF	EET CLE	08/13/25 19:30
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 13:48
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:42
Total/NA	Prep	245.1-1994 R3.0			667486	F3PF	EET CLE	08/13/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667738	GEV	EET CLE	08/14/25 11:38
Total/NA	Analysis	2320 B-2021		1	668047	JMR	EET CLE	08/15/25 18:59
Total/NA	Analysis	2540 C-2020		1	667476	AAP	EET CLE	08/13/25 09:35
Total/NA	Analysis	2540D-2020		1	667677	C5SV	EET CLE	08/14/25 10:47
Total/NA	Analysis	300.0-1993 R2.1		1	667361	JMR	EET CLE	08/13/25 04:14

Client Sample ID: L508232-07 MW-18D

Lab Sample ID: 240-230600-7

Date Collected: 08/08/25 13:45

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667478	F3PF	EET CLE	08/13/25 19:30
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 15:07

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-1

Client Sample ID: L508232-07 MW-18D

Lab Sample ID: 240-230600-7

Date Collected: 08/08/25 13:45

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 20:52
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 20:34
Total Recoverable	Prep	200.7			667478	F3PF	EET CLE	08/13/25 19:30
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 13:51
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:42
Total/NA	Prep	245.1-1994 R3.0			667486	F3PF	EET CLE	08/13/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667738	GEV	EET CLE	08/14/25 11:40
Total/NA	Analysis	2320 B-2021		1	668047	JMR	EET CLE	08/15/25 19:05
Total/NA	Analysis	2540 C-2020		1	667476	AAP	EET CLE	08/13/25 09:35
Total/NA	Analysis	2540D-2020		1	667677	C5SV	EET CLE	08/14/25 10:47
Total/NA	Analysis	300.0-1993 R2.1		1	667361	JMR	EET CLE	08/13/25 04:34

Client Sample ID: L508232-08 MWT-7

Lab Sample ID: 240-230600-8

Date Collected: 08/08/25 10:10

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667493	F3PF	EET CLE	08/13/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 18:47
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 19:31
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 19:19
Total Recoverable	Prep	200.7			667493	F3PF	EET CLE	08/13/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 20:30
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:42
Total/NA	Prep	245.1-1994 R3.0			667505	F3PF	EET CLE	08/13/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667738	GEV	EET CLE	08/14/25 12:48
Total/NA	Analysis	2320 B-2021		1	668047	JMR	EET CLE	08/15/25 19:11
Total/NA	Analysis	2540 C-2020		1	667476	AAP	EET CLE	08/13/25 09:35
Total/NA	Analysis	2540D-2020		1	667677	C5SV	EET CLE	08/14/25 10:47
Total/NA	Analysis	300.0-1993 R2.1		1	667361	JMR	EET CLE	08/13/25 05:12

Client Sample ID: L508232-09 FIELD BLANK

Lab Sample ID: 240-230600-9

Date Collected: 08/08/25 08:35

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667493	F3PF	EET CLE	08/13/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	667768	RKT	EET CLE	08/14/25 19:17
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.7 Rev 4.4		1	8942	JLS	EET SSM	08/15/25 20:56

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-1

Client Sample ID: L508232-09 FIELD BLANK

Lab Sample ID: 240-230600-9

Date Collected: 08/08/25 08:35

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			8859	JR	EET SSM	08/13/25 18:30
Total/NA	Analysis	200.8		1	8905	CW	EET SSM	08/14/25 20:37
Total Recoverable	Prep	200.7			667493	F3PF	EET CLE	08/13/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	667773	S4FJ	EET CLE	08/14/25 20:38
Total Recoverable	Analysis	2340 B-2021		1	667992	KLC	EET CLE	08/18/25 05:42
Total/NA	Prep	245.1-1994 R3.0			667505	F3PF	EET CLE	08/13/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	667738	GEV	EET CLE	08/14/25 12:53
Total/NA	Analysis	2320 B-2021		1	668047	JMR	EET CLE	08/15/25 19:16
Total/NA	Analysis	2540 C-2020		1	667476	AAP	EET CLE	08/13/25 09:35
Total/NA	Analysis	2540D-2020		1	667677	C5SV	EET CLE	08/14/25 10:47
Total/NA	Analysis	300.0-1993 R2.1		1	667361	JMR	EET CLE	08/13/25 05:32

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-1

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-08-26
Florida	NELAP	E87575	06-30-26
Louisiana (All)	NELAP	03073	07-01-26
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-26
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167-008	07-08-26
US Fish & Wildlife	US Federal Programs	A20571	06-30-26
USDA	US Federal Programs	525-23-4-22573	01-24-28
Washington	State	C788-23a	07-13-26
Wisconsin	State	399133460	08-31-26

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com; Environmental_Laboratory@

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:

Project Number:
24034575

Sample State: MI

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
Marc Wahrer, Julie Mattby

Description:
Erickson Wellfield 8-8-25

Site Name:
Erickson Projects

Special Instructions:
Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner. Please add Na and K metals

See following pages for Method and Container information.

240-230600 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L508232-01 MW-7	Grab	Water	08/08/25 10:10			
2	L508232-02 MW-7B	Grab	Water	08/08/25 11:40			
3	L508232-03 MW-13	Grab	Water	08/08/25 13:20			
4	L508232-04 MW-18A	Grab	Water	08/08/25 10:06			
5	L508232-05 MW-18B	Grab	Water	08/08/25 11:17			
6	L508232-06 MW-18C	Grab	Water	08/08/25 12:31			
7	L508232-07 MW-18D	Grab	Water	08/08/25 13:45			
8	L508232-08 MWT-7	Grab	Water	08/08/25 10:10			
9	L508232-09 Field Blank	Grab	Water	08/08/25 08:35			

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Jordan Pyles 8/12/25 0950 EURO

Chain of Custody Number: 403469

*H – Analysis on hold.

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By	Date/Time	Samples Relinquished By	Date/Time:		
Jennifer Caporale	08/11/25 10:06	Jennifer Caporale	08/11/25 10:06		

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250811A001								
MIC20250811A001								
MIC20250811A002								

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																				
#	Sample Name	200.8 / Metals (ICP/MS) / Iron & Zinc	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved S	903.0 / Radium-226 (GFPC) / Standard Target List	300.0-1993 R2.1 / Anions Ion Chromatography / Chloride Fluor	200 7 Rev 4.4 / Metals (ICP) / Iron & Zinc	2340 B-2021 / Total Hardness (as CaCO3) by calculation	2320 B-2021 / Alkalinity / Bicarbonate & Carbonate Alkalinity	200.8 / Metals (ICP/MS) / Custom List 2- 2-3 Metals	2540D-2020 / Solids Total Suspended (TSS)	200 7 R4.4-1994 / Metals (ICP) / Total Boron	904 0 / Radium-228 (GFPC) / Standard Target List	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	200.7 Rev 4.4 / Metals (ICP) / Total Na & K	245.1 1994 R3.0 / Mercury (CVAA) / Mercury	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	200.8 / Metals (ICP/MS) / Custom List 1 1 Metals	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)				
1	L508232-01 MW-7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
2	L508232-02 MW-7B	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
3	L508232-03 MW-13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
4	L508232-04 MW-18A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
5	L508232-05 MW-18B	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
6	L508232-06 MW-18C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
7	L508232-07 MW-18D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
8	L508232-08 MWT-7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
9	L508232-09 Field Blank	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				

Jordan Pyles 8/12/25 0950 EURO

Chain of Custody Bottles

eurofins | Environment Testing

Bottle Name	Total Bottles
Plastic 60 mL unpreserved	22
Plastic 500ml - with Nitric Acid	11
Plastic 250ml with Nitric Acid	11
Plastic 500ml - unpreserved	11
Plastic 1 liter unpreserved	11
Plastic 1 liter - Nitric Acid	22

Samples		Bottles																					
#	Sample Name	Total Bottles For Sample	Plastic 60 mL unpreserved	Plastic 500ml with Nitric Acid	Plastic 250ml with Nitric Acid	Plastic 500ml unpreserved	Plastic 1 liter unpreserved	Plastic 1 liter Nitric Acid															
1	L508232-01 MW-7	8	2	1	1	1	1	2															
2	L508232-02 MW-7B	8	2	1	1	1	1	2															
3	L508232-03 MW-13	8	2	1	1	1	1	2															
4	L508232-04 MW-18A	8	2	1	1	1	1	2															
5	L508232-05 MW-18B	8	2	1	1	1	1	2															
6	L508232-06 MW-18C	8	2	1	1	1	1	2															
7	L508232-07 MW-18D	8	2	1	1	1	1	2															
8	L508232-08 MWT-7	8	2	1	1	1	1	2															
9	L508232-09 Field Blank	8	2	1	1	1	1	2															

Jordan Pyles 8/12/25 0950 EURO

Chain of Custody Number 403469

Jordan Pyles Jordan Pyles 8/12/25 0950 EURO

Eurofins – Cleveland Sample Receipt Form/Narrative Login # ·_____

Barberton Facility

Client Lansing Board of Water & Light Site Name_____ Cooler unpacked by· JPYIES

Cooler Received on 8/12/25 Opened on 8/12/25

FedEx· 1st Grd (Exp) UPS FAS Waypoint Client Drop Off Eurofins Courier Other_____

Receipt After-hours Drop-off Date/Time_____ Storage Location_____

Eurofins Cooler # EC Foam Box Client Cooler Box Other_____

Packing material used. Bubble Wrap Foam (Plastic Bag) None Other_____

COOLANT (Wet Ice) Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt [X] See Multiple Cooler Form

IR GUN # 13 (CF 1.5 °C) Observed Cooler Temp._____°C Corrected Cooler Temp _____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2	(Yes)	No
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes)	No NA
Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
-Were tamper/custody seals intact and uncompromised?	Yes	No (NA)
3 Shippers packing slip attached to the cooler(s)?	(Yes)	No
4 Did custody papers accompany the sample(s)?	(Yes)	No
5 Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	(No)
7 Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes)	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
11 Sufficient quantity received to perform indicated analyses?	(Yes)	No
12. Are these work share samples and all listed on the COC?	Yes	(No)
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	(Yes)	No NA pH Strip Lot# HC463162
14 Were VOAs on the COC?	Yes	(No)
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes	No (NA)
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	(No)
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	(No)

Tests that are not checked for pH by Receiving

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by·

Labels Verified by·

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation Date/Time VOAs Frozen _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 12	5,4	5,9	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 13	2,4	2,9	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 13	4,8	5,3	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice

8/12/2025

Login Container Summary Report

240-230600

8/21/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508232-01 MW-7	240-230600-A 1	Plastic 60 mL - unpreserved				
L508232-01 MW-7	240-230600 B 1	Plastic 60 mL - unpreserved				
L508232-01 MW-7	240-230600-C-1	Plastic 250ml - with Nitric Acid	<2			
L508232-01 MW-7	240-230600-D-1	Plastic 500ml unpreserved				
L508232-01 MW 7	240-230600 E-1	Plastic 500ml - with Nitric Acid	<2			
L508232-01 MW-7	240-230600-F-1	Plastic 1 liter - unpreserved				
L508232-01 MW-7	240-230600-G-1	Plastic 1 liter - Nitric Acid	<2			
L508232-01 MW-7	240-230600-H-1	Plastic 1 liter Nitric Acid	<2			
L508232-02 MW-7B	240-230600 A 2	Plastic 60 mL - unpreserved				
L508232-02 MW-7B	240-230600-B-2	Plastic 60 mL unpreserved				
L508232-02 MW 7B	240-230600-C-2	Plastic 250ml - with Nitric Acid	<2			
L508232-02 MW-7B	240-230600-D-2	Plastic 500ml - unpreserved				
L508232-02 MW-7B	240-230600-E-2	Plastic 500ml - with Nitric Acid	<2			
L508232-02 MW-7B	240-230600-F-2	Plastic 1 liter unpreserved				
L508232-02 MW-7B	240-230600-G-2	Plastic 1 liter Nitric Acid	<2			
L508232-02 MW-7B	240-230600-H-2	Plastic 1 liter - Nitric Acid	<2			
L508232-03 MW-13	240-230600-A 3	Plastic 60 mL unpreserved				
L508232-03 MW-13	240-230600-B-3	Plastic 60 mL - unpreserved				
L508232-03 MW-13	240-230600-C-3	Plastic 250ml - with Nitric Acid	<2			
L508232-03 MW 13	240-230600-D-3	Plastic 500ml - unpreserved				
L508232-03 MW-13	240-230600 E-3	Plastic 500ml - with Nitric Acid	<2			
L508232-03 MW-13	240-230600 F-3	Plastic 1 liter - unpreserved				
L508232-03 MW-13	240-230600-G-3	Plastic 1 liter - Nitric Acid	<2			
L508232-03 MW 13	240-230600-H-3	Plastic 1 liter - Nitric Acid	<2			
L508232-04 MW-18A	240-230600-A-4	Plastic 60 mL - unpreserved				
L508232-04 MW-18A	240-230600-B-4	Plastic 60 mL - unpreserved				
L508232-04 MW-18A	240-230600-C-4	Plastic 250ml - with Nitric Acid	<2			
L508232-04 MW-18A	240-230600 D-4	Plastic 500ml - unpreserved				
L508232-04 MW-18A	240 230600-E-4	Plastic 500ml - with Nitric Acid	<2			
L508232-04 MW-18A	240-230600-F-4	Plastic 1 liter - unpreserved				
L508232-04 MW 18A	240-230600-G-4	Plastic 1 liter Nitric Acid	<2			
L508232-04 MW-18A	240-230600-H-4	Plastic 1 liter Nitric Acid	<2			
L508232-05 MW-18B	240-230600-A 5	Plastic 60 mL - unpreserved				
L508232-05 MW-18B	240-230600-B-5	Plastic 60 mL - unpreserved				
L508232-05 MW-18B	240-230600-C-5	Plastic 250ml - with Nitric Acid	<2			

8/21/2025

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508232-05 MW-18B	240-230600-D-5	Plastic 500ml unpreserved				
L508232-05 MW-18B	240-230600-E-5	Plastic 500ml - with Nitric Acid	<2			
L508232-05 MW 18B	240-230600-F-5	Plastic 1 liter - unpreserved				
L508232-05 MW-18B	240-230600-G-5	Plastic 1 liter - Nitric Acid	<2			
L508232-05 MW 18B	240-230600-H-5	Plastic 1 liter - Nitric Acid	<2			
L508232-06 MW-18C	240-230600-A-6	Plastic 60 mL unpreserved				
L508232-06 MW-18C	240-230600-B-6	Plastic 60 mL - unpreserved				
L508232-06 MW-18C	240-230600-C-6	Plastic 250ml - with Nitric Acid	<2			
L508232-06 MW-18C	240-230600-D-6	Plastic 500ml - unpreserved				
L508232-06 MW-18C	240-230600-E-6	Plastic 500ml - with Nitric Acid	<2			
L508232-06 MW-18C	240-230600-F-6	Plastic 1 liter - unpreserved				
L508232-06 MW-18C	240-230600-G-6	Plastic 1 liter - Nitric Acid	<2			
L508232-06 MW-18C	240-230600-H-6	Plastic 1 liter - Nitric Acid	<2			
L508232-07 MW-18D	240-230600-A-7	Plastic 60 mL - unpreserved				
L508232-07 MW 18D	240-230600-B-7	Plastic 60 mL - unpreserved				
L508232-07 MW-18D	240-230600-C-7	Plastic 250ml - with Nitric Acid	<2			
L508232-07 MW-18D	240-230600-D-7	Plastic 500ml - unpreserved				
L508232-07 MW-18D	240-230600-E-7	Plastic 500ml with Nitric Acid	<2			
L508232-07 MW-18D	240-230600 F 7	Plastic 1 liter - unpreserved				
L508232-07 MW-18D	240-230600-G-7	Plastic 1 liter - Nitric Acid	<2			
L508232-07 MW-18D	240-230600-H-7	Plastic 1 liter - Nitric Acid	<2			
L508232-08 MWT-7	240-230600-A 8	Plastic 60 mL - unpreserved				
L508232-08 MWT-7	240 230600-B-8	Plastic 60 mL - unpreserved				
L508232-08 MWT 7	240-230600-C-8	Plastic 250ml - with Nitric Acid	<2			
L508232-08 MWT-7	240-230600-D-8	Plastic 500ml - unpreserved				
L508232-08 MWT-7	240-230600-E-8	Plastic 500ml - with Nitric Acid	<2			
L508232-08 MWT-7	240-230600-F-8	Plastic 1 liter - unpreserved				
L508232-08 MWT-7	240-230600-G-8	Plastic 1 liter Nitric Acid	<2			
L508232-08 MWT-7	240-230600-H-8	Plastic 1 liter - Nitric Acid	<2			
L508232-09 FIELD BLANK	240-230600-A-9	Plastic 60 mL - unpreserved				
L508232-09 FIELD BLANK	240-230600-B-9	Plastic 60 mL - unpreserved				
L508232-09 FIELD BLANK	240-230600-C-9	Plastic 250ml - with Nitric Acid	<2			
L508232-09 FIELD BLANK	240-230600-D 9	Plastic 500ml - unpreserved				
L508232-09 FIELD BLANK	240-230600-E-9	Plastic 500ml with Nitric Acid	<2			
L508232-09 FIELD BLANK	240-230600-F-9	Plastic 1 liter unpreserved				
L508232-09 FIELD BLANK	240-230600-G-9	Plastic 1 liter - Nitric Acid	<2			
L508232-09 FIELD BLANK	240-230600-H-9	Plastic 1 liter - Nitric Acid	<2			

ED STATES US
BILL SENDER
EUROFINS BARBERTON
EUROFINS BARBERTON
180 S. VAN BUREN AVENUE
BARBERTON OH 44203
30) 497-9396
REF:
DEPT:
FedEx Express
TUE - 12 AUG 10:30A
PRIORITY OVERNIGHT
1 of 3
TRK#
0201
8834 7857 0338
MASTER
64 CAKA
44203
OH-US
CLE

240-230600 Waybill

UNITED STATES US
EUROFINS BARBERTON
EUROFINS BARBERTON
180 S. VAN BUREN AVENUE
BARBERTON OH 44203
(330) 497-9396
REF:
INV:
PO:
DEPT:
FedEx Express
1 of 3
TRK# 0201 8834 7857 0338
MASTER
64 CAKA
TUE - 12 AUG 10:30A
PRIORITY OVERNIGHT
44203
OH-US
CLE

240-230600 Waybill

240-230600 Waybill

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-206326.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-230600-1
Address: 5755 8th Street East, ,	Due Date Requested: 8/25/2025			Preservation Codes:
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Therm. ID: SC0 4 Cust. Seal: (Y) / N
Uncorr./Corr. Temp: 21.0 / 20.7 °C
Delivery: UPS / FedEx / Other:
Ice Type: Blue / Dry / Wet / None
Label Ver.: 8 Packing: B
5 — Blk

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT(MOD) Iron & Zinc	200.7_CWA/200.7_P_TOT(MOD) K & Na	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
L508232-01 MW-7 (240-230600-1)	8/8/25	10:10 Eastern	G	Water			X	X	1	
L508232-02 MW-7B (240-230600-2)	8/8/25	11:40 Eastern	G	Water			X	X	1	
L508232-03 MW-13 (240-230600-3)	8/8/25	13:20 Eastern	G	Water			X	X	1	
L508232-04 MW-18A (240-230600-4)	8/8/25	10:06 Eastern	G	Water			X	X	1	
L508232-05 MW-18B (240-230600-5)	8/8/25	11:17 Eastern	G	Water			X	X	1	
L508232-06 MW-18C (240-230600-6)	8/8/25	12:31 Eastern	G	Water			X	X	1	
L508232-07 MW-18D (240-230600-7)	8/8/25	13:45 Eastern	G	Water			X	X	1	
L508232-08 MWT-7 (240-230600-8)	8/8/25	10:10 Eastern	G	Water			X	X	1	
L508232-09 FIELD BLANK (240-230600-9)	8/8/25	08:35 Eastern	G	Water			X	X	1	

Other: N/A

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification Unconfirmed 4616 0299 0244	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JLM	8/12/25	EC		8/13/25 9:30	EUN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-230600-1

Login Number: 230600
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 08/13/25 12:38 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 9/9/2025 12:27:37 PM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-230600-2

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

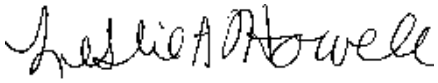
See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
9/9/2025 12:27:37 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 9
Tracer Carrier Summary 18
QC Sample Results 19
QC Association Summary 20
Lab Chronicle 21
Certification Summary 24
Chain of Custody 25
Receipt Checklists 38

Definitions/Glossary

Client: Lansing Board of Water & Light
Job ID: 240-230600-2
Project/Site: Erickson Projects

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-230600-2 — Eurofins Cleveland

Job Narrative
240-230600-2

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 8/12/2025 9:50 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.9°C, 5.3°C and 5.9°C.

Gas Flow Proportional Counter
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-230600-1	L508232-01 MW-7	Water	08/08/25 10:10	08/12/25 09:50	Michigan
240-230600-2	L508232-02 MW-7B	Water	08/08/25 11:40	08/12/25 09:50	Michigan
240-230600-3	L508232-03 MW-13	Water	08/08/25 13:20	08/12/25 09:50	Michigan
240-230600-4	L508232-04 MW-18A	Water	08/08/25 10:06	08/12/25 09:50	Michigan
240-230600-5	L508232-05 MW-18B	Water	08/08/25 11:17	08/12/25 09:50	Michigan
240-230600-6	L508232-06 MW-18C	Water	08/08/25 12:31	08/12/25 09:50	Michigan
240-230600-7	L508232-07 MW-18D	Water	08/08/25 13:45	08/12/25 09:50	Michigan
240-230600-8	L508232-08 MWT-7	Water	08/08/25 10:10	08/12/25 09:50	Michigan
240-230600-9	L508232-09 FIELD BLANK	Water	08/08/25 08:35	08/12/25 09:50	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Job ID: 240-230600-2
Project/Site: Erickson Projects

Client Sample ID: L508232-01 MW-7 **Lab Sample ID: 240-230600-1**

No Detections.

Client Sample ID: L508232-02 MW-7B **Lab Sample ID: 240-230600-2**

No Detections.

Client Sample ID: L508232-03 MW-13 **Lab Sample ID: 240-230600-3**

No Detections.

Client Sample ID: L508232-04 MW-18A **Lab Sample ID: 240-230600-4**

No Detections.

Client Sample ID: L508232-05 MW-18B **Lab Sample ID: 240-230600-5**

No Detections.

Client Sample ID: L508232-06 MW-18C **Lab Sample ID: 240-230600-6**

No Detections.

Client Sample ID: L508232-07 MW-18D **Lab Sample ID: 240-230600-7**

No Detections.

Client Sample ID: L508232-08 MWT-7 **Lab Sample ID: 240-230600-8**

No Detections.

Client Sample ID: L508232-09 FIELD BLANK **Lab Sample ID: 240-230600-9**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-2

Client Sample ID: L508232-01 MW-7

Date Collected: 08/08/25 10:10
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-1

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.386	U	0.299	0.301	1.00	0.449	pCi/L	08/14/25 08:13	09/08/25 15:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*08/14/25 08:13*	*09/08/25 15:37*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.629**		0.375	0.379	1.00	0.543	pCi/L	08/14/25 08:19	09/08/25 11:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:46*	*1*
Y Carrier	*79.3*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:46*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.02**		0.480	0.484	5.00	0.543	pCi/L		09/09/25 11:05	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-2

Client Sample ID: L508232-02 MW-7B
Date Collected: 08/08/25 11:40
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-2
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.104	U	0.182	0.182	1.00	0.416	pCi/L	08/14/25 08:13	09/08/25 15:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.1*		*30 - 110*	*08/14/25 08:13*	*09/08/25 15:37*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.493	U	0.400	0.403	1.00	0.623	pCi/L	08/14/25 08:19	09/08/25 11:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.1*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:46*	*1*
Y Carrier	*75.9*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:46*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.493	U	0.439	0.442	5.00	0.623	pCi/L		09/09/25 11:05	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-2

Client Sample ID: L508232-03 MW-13
Date Collected: 08/08/25 13:20
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-3
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.119	U	0.242	0.242	1.00	0.430	pCi/L	08/14/25 08:13	09/08/25 15:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.8*		*30 - 110*	*08/14/25 08:13*	*09/08/25 15:37*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.561	U	0.379	0.383	1.00	0.567	pCi/L	08/14/25 08:19	09/08/25 11:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.8*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:46*	*1*
Y Carrier	*79.3*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:46*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.680**		0.450	0.453	5.00	0.567	pCi/L		09/09/25 11:05	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-2

Client Sample ID: L508232-04 MW-18A
Date Collected: 08/08/25 10:06
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-4
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.373		0.244	0.246	1.00	0.332	pCi/L	08/14/25 08:13	09/08/25 15:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.4*		*30 - 110*	*08/14/25 08:13*	*09/08/25 15:37*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.812		0.368	0.376	1.00	0.488	pCi/L	08/14/25 08:19	09/08/25 11:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.4*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:46*	*1*
Y Carrier	*80.7*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:46*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.19		0.442	0.449	5.00	0.488	pCi/L		09/09/25 11:05	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-2

Client Sample ID: L508232-05 MW-18B
Date Collected: 08/08/25 11:17
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-5
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.598		0.299	0.304	1.00	0.360	pCi/L	08/14/25 08:13	09/08/25 15:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.8*		*30 - 110*	*08/14/25 08:13*	*09/08/25 15:37*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.34		0.453	0.469	1.00	0.522	pCi/L	08/14/25 08:19	09/08/25 11:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.8*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:47*	*1*
Y Carrier	*78.9*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:47*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.94		0.543	0.559	5.00	0.522	pCi/L		09/09/25 11:05	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-2

Client Sample ID: L508232-06 MW-18C
Date Collected: 08/08/25 12:31
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-6
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.517		0.262	0.266	1.00	0.313	pCi/L	08/14/25 08:13	09/08/25 15:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.2*		*30 - 110*	*08/14/25 08:13*	*09/08/25 15:37*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.72		0.493	0.518	1.00	0.568	pCi/L	08/14/25 08:19	09/08/25 11:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.2*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:46*	*1*
Y Carrier	*80.4*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:46*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	2.24		0.558	0.582	5.00	0.568	pCi/L		09/09/25 11:05	1

Client Sample ID: L508232-07 MW-18D

Date Collected: 08/08/25 13:45
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-7

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.231	U	0.215	0.216	1.00	0.327	pCi/L	08/14/25 08:13	09/08/25 15:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*30 - 110*	*08/14/25 08:13*	*09/08/25 15:37*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.366	U	0.374	0.376	1.00	0.605	pCi/L	08/14/25 08:19	09/08/25 11:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:46*	*1*
Y Carrier	*77.0*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:46*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.597	U	0.431	0.434	5.00	0.605	pCi/L		09/09/25 11:05	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-2

Client Sample ID: L508232-08 MWT-7
Date Collected: 08/08/25 10:10
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-8
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.360		0.241	0.244	1.00	0.333	pCi/L	08/14/25 08:13	09/08/25 15:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.9*		*30 - 110*	*08/14/25 08:13*	*09/08/25 15:37*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.647		0.391	0.396	1.00	0.575	pCi/L	08/14/25 08:19	09/08/25 11:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.9*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:46*	*1*
Y Carrier	*80.0*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:46*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.01		0.459	0.465	5.00	0.575	pCi/L		09/09/25 11:05	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-2

Client Sample ID: L508232-09 FIELD BLANK

Date Collected: 08/08/25 08:35
Date Received: 08/12/25 09:50

Lab Sample ID: 240-230600-9

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00510	U	0.221	0.221	1.00	0.438	pCi/L	08/14/25 08:13	09/08/25 15:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.2*		*30 - 110*	*08/14/25 08:13*	*09/08/25 15:37*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.243	U	0.390	0.391	1.00	0.662	pCi/L	08/14/25 08:19	09/08/25 11:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.2*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:46*	*1*
Y Carrier	*81.5*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:46*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.248	U	0.448	0.449	5.00	0.662	pCi/L		09/09/25 11:05	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-230600-1	L508232-01 MW-7	88.8
240-230600-2	L508232-02 MW-7B	85.1
240-230600-3	L508232-03 MW-13	86.8
240-230600-4	L508232-04 MW-18A	94.4
240-230600-5	L508232-05 MW-18B	84.8
240-230600-6	L508232-06 MW-18C	93.2
240-230600-7	L508232-07 MW-18D	87.5
240-230600-8	L508232-08 MWT-7	91.9
240-230600-9	L508232-09 FIELD BLANK	89.2
LCS 160-731963/2-A	Lab Control Sample	92.7
MB 160-731963/1-A	Method Blank	97.3

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
		Ba	Y
Lab Sample ID	Client Sample ID	(30-110)	(30-110)
240-230600-1	L508232-01 MW-7	88.8	79.3
240-230600-2	L508232-02 MW-7B	85.1	75.9
240-230600-3	L508232-03 MW-13	86.8	79.3
240-230600-4	L508232-04 MW-18A	94.4	80.7
240-230600-5	L508232-05 MW-18B	84.8	78.9
240-230600-6	L508232-06 MW-18C	93.2	80.4
240-230600-7	L508232-07 MW-18D	87.5	77.0
240-230600-8	L508232-08 MWT-7	91.9	80.0
240-230600-9	L508232-09 FIELD BLANK	89.2	81.5
LCS 160-731979/2-A	Lab Control Sample	92.7	76.6
MB 160-731979/1-A	Method Blank	97.3	80.4

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-731963/1-A
Matrix: Water
Analysis Batch: 735036

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 731963

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.004382	U	0.211	0.211	1.00	0.411	pCi/L	08/14/25 08:13	09/08/25 15:26	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.3*		*30 - 110*	*08/14/25 08:13*	*09/08/25 15:26*	*1*

Lab Sample ID: LCS 160-731963/2-A
Matrix: Water
Analysis Batch: 735036

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 731963

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.57	8.583		1.18	1.00	0.377	pCi/L	90	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*92.7*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-731979/1-A
Matrix: Water
Analysis Batch: 735047

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 731979

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.06324	U	0.296	0.296	1.00	0.533	pCi/L	08/14/25 08:19	09/08/25 11:46	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.3*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:46*	*1*
Y Carrier	*80.4*		*30 - 110*	*08/14/25 08:19*	*09/08/25 11:46*	*1*

Lab Sample ID: LCS 160-731979/2-A
Matrix: Water
Analysis Batch: 735047

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 731979

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.09	9.428		1.30	1.00	0.578	pCi/L	104	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*92.7*		*30 - 110*
Y Carrier	*76.6*		*30 - 110*

Rad

Prep Batch: 731963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-1	L508232-01 MW-7	Total/NA	Water	PrecSep-21	
240-230600-2	L508232-02 MW-7B	Total/NA	Water	PrecSep-21	
240-230600-3	L508232-03 MW-13	Total/NA	Water	PrecSep-21	
240-230600-4	L508232-04 MW-18A	Total/NA	Water	PrecSep-21	
240-230600-5	L508232-05 MW-18B	Total/NA	Water	PrecSep-21	
240-230600-6	L508232-06 MW-18C	Total/NA	Water	PrecSep-21	
240-230600-7	L508232-07 MW-18D	Total/NA	Water	PrecSep-21	
240-230600-8	L508232-08 MWT-7	Total/NA	Water	PrecSep-21	
240-230600-9	L508232-09 FIELD BLANK	Total/NA	Water	PrecSep-21	
MB 160-731963/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-731963/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 731979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230600-1	L508232-01 MW-7	Total/NA	Water	PrecSep_0	
240-230600-2	L508232-02 MW-7B	Total/NA	Water	PrecSep_0	
240-230600-3	L508232-03 MW-13	Total/NA	Water	PrecSep_0	
240-230600-4	L508232-04 MW-18A	Total/NA	Water	PrecSep_0	
240-230600-5	L508232-05 MW-18B	Total/NA	Water	PrecSep_0	
240-230600-6	L508232-06 MW-18C	Total/NA	Water	PrecSep_0	
240-230600-7	L508232-07 MW-18D	Total/NA	Water	PrecSep_0	
240-230600-8	L508232-08 MWT-7	Total/NA	Water	PrecSep_0	
240-230600-9	L508232-09 FIELD BLANK	Total/NA	Water	PrecSep_0	
MB 160-731979/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-731979/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-2

Client Sample ID: L508232-01 MW-7

Lab Sample ID: 240-230600-1

Date Collected: 08/08/25 10:10

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731963	JTR	EET SL	08/14/25 08:13
Total/NA	Analysis	903.0		1	735046	FLC	EET SL	09/08/25 15:37
Total/NA	Prep	PrecSep_0			731979	JTR	EET SL	08/14/25 08:19
Total/NA	Analysis	904.0		1	735047	SWS	EET SL	09/08/25 11:46
Total/NA	Analysis	Ra226_Ra228 Pos		1	735306	SCB	EET SL	09/09/25 11:05

Client Sample ID: L508232-02 MW-7B

Lab Sample ID: 240-230600-2

Date Collected: 08/08/25 11:40

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731963	JTR	EET SL	08/14/25 08:13
Total/NA	Analysis	903.0		1	735046	FLC	EET SL	09/08/25 15:37
Total/NA	Prep	PrecSep_0			731979	JTR	EET SL	08/14/25 08:19
Total/NA	Analysis	904.0		1	735047	SWS	EET SL	09/08/25 11:46
Total/NA	Analysis	Ra226_Ra228 Pos		1	735306	SCB	EET SL	09/09/25 11:05

Client Sample ID: L508232-03 MW-13

Lab Sample ID: 240-230600-3

Date Collected: 08/08/25 13:20

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731963	JTR	EET SL	08/14/25 08:13
Total/NA	Analysis	903.0		1	735046	FLC	EET SL	09/08/25 15:37
Total/NA	Prep	PrecSep_0			731979	JTR	EET SL	08/14/25 08:19
Total/NA	Analysis	904.0		1	735047	SWS	EET SL	09/08/25 11:46
Total/NA	Analysis	Ra226_Ra228 Pos		1	735306	SCB	EET SL	09/09/25 11:05

Client Sample ID: L508232-04 MW-18A

Lab Sample ID: 240-230600-4

Date Collected: 08/08/25 10:06

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731963	JTR	EET SL	08/14/25 08:13
Total/NA	Analysis	903.0		1	735046	FLC	EET SL	09/08/25 15:37
Total/NA	Prep	PrecSep_0			731979	JTR	EET SL	08/14/25 08:19
Total/NA	Analysis	904.0		1	735047	SWS	EET SL	09/08/25 11:46
Total/NA	Analysis	Ra226_Ra228 Pos		1	735306	SCB	EET SL	09/09/25 11:05

Client Sample ID: L508232-05 MW-18B

Lab Sample ID: 240-230600-5

Date Collected: 08/08/25 11:17

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731963	JTR	EET SL	08/14/25 08:13
Total/NA	Analysis	903.0		1	735046	FLC	EET SL	09/08/25 15:37
Total/NA	Prep	PrecSep_0			731979	JTR	EET SL	08/14/25 08:19
Total/NA	Analysis	904.0		1	735047	SWS	EET SL	09/08/25 11:47
Total/NA	Analysis	Ra226_Ra228 Pos		1	735306	SCB	EET SL	09/09/25 11:05

Client Sample ID: L508232-06 MW-18C

Lab Sample ID: 240-230600-6

Date Collected: 08/08/25 12:31

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731963	JTR	EET SL	08/14/25 08:13
Total/NA	Analysis	903.0		1	735046	FLC	EET SL	09/08/25 15:37
Total/NA	Prep	PrecSep_0			731979	JTR	EET SL	08/14/25 08:19
Total/NA	Analysis	904.0		1	735036	SWS	EET SL	09/08/25 11:46
Total/NA	Analysis	Ra226_Ra228 Pos		1	735306	SCB	EET SL	09/09/25 11:05

Client Sample ID: L508232-07 MW-18D

Lab Sample ID: 240-230600-7

Date Collected: 08/08/25 13:45

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731963	JTR	EET SL	08/14/25 08:13
Total/NA	Analysis	903.0		1	735046	FLC	EET SL	09/08/25 15:37
Total/NA	Prep	PrecSep_0			731979	JTR	EET SL	08/14/25 08:19
Total/NA	Analysis	904.0		1	735036	SWS	EET SL	09/08/25 11:46
Total/NA	Analysis	Ra226_Ra228 Pos		1	735306	SCB	EET SL	09/09/25 11:05

Client Sample ID: L508232-08 MWT-7

Lab Sample ID: 240-230600-8

Date Collected: 08/08/25 10:10

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731963	JTR	EET SL	08/14/25 08:13
Total/NA	Analysis	903.0		1	735046	FLC	EET SL	09/08/25 15:37
Total/NA	Prep	PrecSep_0			731979	JTR	EET SL	08/14/25 08:19
Total/NA	Analysis	904.0		1	735036	SWS	EET SL	09/08/25 11:46
Total/NA	Analysis	Ra226_Ra228 Pos		1	735306	SCB	EET SL	09/09/25 11:05

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-2

Client Sample ID: L508232-09 FIELD BLANK

Lab Sample ID: 240-230600-9

Date Collected: 08/08/25 08:35

Matrix: Water

Date Received: 08/12/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			731963	JTR	EET SL	08/14/25 08:13
Total/NA	Analysis	903.0		1	735046	FLC	EET SL	09/08/25 15:37
Total/NA	Prep	PrecSep_0			731979	JTR	EET SL	08/14/25 08:19
Total/NA	Analysis	904.0		1	735036	SWS	EET SL	09/08/25 11:46
Total/NA	Analysis	Ra226_Ra228 Pos		1	735306	SCB	EET SL	09/09/25 11:05

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230600-2

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25 *
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25 *
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-30-25 *
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com; Environmental_Laboratory@

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:

Project Number:
24034575

Sample State: MI

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
Marc Wahrer, Julie Mattby

Description:
Erickson Wellfield 8-8-25

Site Name:
Erickson Projects

Special Instructions:
Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner. Please add Na and K metals

See following pages for Method and Container information.

240-230600 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L508232-01 MW-7	Grab	Water	08/08/25 10:10			
2	L508232-02 MW-7B	Grab	Water	08/08/25 11:40			
3	L508232-03 MW-13	Grab	Water	08/08/25 13:20			
4	L508232-04 MW-18A	Grab	Water	08/08/25 10:06			
5	L508232-05 MW-18B	Grab	Water	08/08/25 11:17			
6	L508232-06 MW-18C	Grab	Water	08/08/25 12:31			
7	L508232-07 MW-18D	Grab	Water	08/08/25 13:45			
8	L508232-08 MWT-7	Grab	Water	08/08/25 10:10			
9	L508232-09 Field Blank	Grab	Water	08/08/25 08:35			

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Jordan Pyles 8/12/25 0950 EURO

Chain of Custody Number: 403469

*H – Analysis on hold.

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time	Samples Relinquished By:	Date/Time:		
Jennifer Caporale	08/11/25 10:06	Jennifer Caporale	08/11/25 10:06		

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250811A001								
MIC20250811A001								
MIC20250811A002								

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																				
#	Sample Name	200.8 / Metals (ICP/MS) / Iron & Zinc	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved S	903.0 / Radium-226 (GFPC) / Standard Target List	300.0-1993 R2.1 / Anions Ion Chromatography / Chloride Fluor	200 7 Rev 4.4 / Metals (ICP) / Iron & Zinc	2340 B-2021 / Total Hardness (as CaCO3) by calculation	2320 B-2021 / Alkalinity / Bicarbonate & Carbonate Alkalinity	200.8 / Metals (ICP/MS) / Custom List 2- 2-3 Metals	2540D-2020 / Solids Total Suspended (TSS)	200 7 R4.4-1994 / Metals (ICP) / Total Boron	904 0 / Radium-228 (GFPC) / Standard Target List	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	200.7 Rev 4.4 / Metals (ICP) / Total Na & K	245.1 1994 R3.0 / Mercury (CVAA) / Mercury	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	200.8 / Metals (ICP/MS) / Custom List 1 1 Metals	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)				
1	L508232-01 MW-7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
2	L508232-02 MW-7B	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
3	L508232-03 MW-13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
4	L508232-04 MW-18A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
5	L508232-05 MW-18B	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
6	L508232-06 MW-18C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
7	L508232-07 MW-18D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
8	L508232-08 MWT-7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
9	L508232-09 Field Blank	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				

Jordan Pyles 8/12/25 0950 EURO

Chain of Custody Number: 403469

Chain of Custody Bottles

eurofins | Environment Testing

Bottle Name	Total Bottles
Plastic 60 mL unpreserved	22
Plastic 500ml - with Nitric Acid	11
Plastic 250ml with Nitric Acid	11
Plastic 500ml - unpreserved	11
Plastic 1 liter unpreserved	11
Plastic 1 liter - Nitric Acid	22

Samples		Bottles																				
#	Sample Name	Total Bottles For Sample	Plastic 60 mL unpreserved	Plastic 500ml with Nitric Acid	Plastic 250ml with Nitric Acid	Plastic 500ml unpreserved	Plastic 1 liter unpreserved	Plastic 1 liter Nitric Acid														
1	L508232-01 MW-7	8	2	1	1	1	1	2														
2	L508232-02 MW-7B	8	2	1	1	1	1	2														
3	L508232-03 MW-13	8	2	1	1	1	1	2														
4	L508232-04 MW-18A	8	2	1	1	1	1	2														
5	L508232-05 MW-18B	8	2	1	1	1	1	2														
6	L508232-06 MW-18C	8	2	1	1	1	1	2														
7	L508232-07 MW-18D	8	2	1	1	1	1	2														
8	L508232-08 MWT-7	8	2	1	1	1	1	2														
9	L508232-09 Field Blank	8	2	1	1	1	1	2														

Jordan Pyles 8/12/25 0950 EURO

Chain of Custody Number 403469

Jordan Pyles Jordan Pyles 8/12/25 0950 EURO

Eurofins – Cleveland Sample Receipt Form/Narrative Login # ·_____

Barberton Facility

Client Lansing Board of Water & Light Site Name_____ Cooler unpacked by· JPYIES

Cooler Received on 8/12/25 Opened on 8/12/25

FedEx· 1st Grd (Exp) UPS FAS Waypoint Client Drop Off Eurofins Courier Other_____

Receipt After-hours Drop-off Date/Time_____ Storage Location_____

Eurofins Cooler # FC Foam Box Client Cooler Box Other_____

Packing material used. Bubble Wrap Foam (Plastic Bag) None Other_____

COOLANT (Wet Ice) Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt [X] See Multiple Cooler Form

IR GUN # 13 (CF 1.5 °C) Observed Cooler Temp._____°C Corrected Cooler Temp _____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2	(Yes)	No
-Were the seals on the outside of the cooler(s) signed & dated?	(Yes)	No NA
Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
-Were tamper/custody seals intact and uncompromised?	Yes	No (NA)
3 Shippers packing slip attached to the cooler(s)?	(Yes)	No
4 Did custody papers accompany the sample(s)?	(Yes)	No
5 Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	(No)
7 Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes)	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
11 Sufficient quantity received to perform indicated analyses?	(Yes)	No
12. Are these work share samples and all listed on the COC?	Yes	(No)
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	(Yes)	No NA pH Strip Lot# HC463162
14 Were VOAs on the COC?	Yes	(No)
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes	No (NA)
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	(No)
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	(No)

Tests that are not checked for pH by Receiving

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by·

Labels Verified by·

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation Date/Time VOAs Frozen _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 12	5,4	5,9	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 13	2,4	2,9	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 13	4,8	5,3	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice

8/12/2025

Login Container Summary Report

240-230600

9/9/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508232-01 MW-7	240-230600-A 1	Plastic 60 mL - unpreserved				
L508232-01 MW-7	240-230600 B 1	Plastic 60 mL - unpreserved				
L508232-01 MW-7	240-230600-C-1	Plastic 250ml - with Nitric Acid	<2			
L508232-01 MW-7	240-230600-D-1	Plastic 500ml unpreserved				
L508232-01 MW 7	240-230600 E-1	Plastic 500ml - with Nitric Acid	<2			
L508232-01 MW-7	240-230600-F-1	Plastic 1 liter - unpreserved				
L508232-01 MW-7	240-230600-G-1	Plastic 1 liter - Nitric Acid	<2			
L508232-01 MW-7	240-230600-H-1	Plastic 1 liter Nitric Acid	<2			
L508232-02 MW-7B	240-230600 A 2	Plastic 60 mL - unpreserved				
L508232-02 MW-7B	240-230600-B-2	Plastic 60 mL unpreserved				
L508232-02 MW 7B	240-230600-C-2	Plastic 250ml - with Nitric Acid	<2			
L508232-02 MW-7B	240-230600-D-2	Plastic 500ml - unpreserved				
L508232-02 MW-7B	240-230600-E-2	Plastic 500ml - with Nitric Acid	<2			
L508232-02 MW-7B	240-230600-F-2	Plastic 1 liter unpreserved				
L508232-02 MW-7B	240-230600-G-2	Plastic 1 liter Nitric Acid	<2			
L508232-02 MW-7B	240-230600-H-2	Plastic 1 liter - Nitric Acid	<2			
L508232-03 MW-13	240-230600-A 3	Plastic 60 mL unpreserved				
L508232-03 MW-13	240-230600-B-3	Plastic 60 mL - unpreserved				
L508232-03 MW-13	240-230600-C-3	Plastic 250ml - with Nitric Acid	<2			
L508232-03 MW 13	240-230600-D-3	Plastic 500ml - unpreserved				
L508232-03 MW-13	240-230600 E-3	Plastic 500ml - with Nitric Acid	<2			
L508232-03 MW-13	240-230600 F-3	Plastic 1 liter - unpreserved				
L508232-03 MW-13	240-230600-G-3	Plastic 1 liter - Nitric Acid	<2			
L508232-03 MW 13	240-230600-H-3	Plastic 1 liter - Nitric Acid	<2			
L508232-04 MW-18A	240-230600-A-4	Plastic 60 mL - unpreserved				
L508232-04 MW-18A	240-230600-B-4	Plastic 60 mL - unpreserved				
L508232-04 MW-18A	240-230600-C-4	Plastic 250ml - with Nitric Acid	<2			
L508232-04 MW-18A	240-230600 D-4	Plastic 500ml - unpreserved				
L508232-04 MW-18A	240 230600-E-4	Plastic 500ml - with Nitric Acid	<2			
L508232-04 MW-18A	240-230600-F-4	Plastic 1 liter - unpreserved				
L508232-04 MW 18A	240-230600-G-4	Plastic 1 liter Nitric Acid	<2			
L508232-04 MW-18A	240-230600-H-4	Plastic 1 liter Nitric Acid	<2			
L508232-05 MW-18B	240-230600-A 5	Plastic 60 mL - unpreserved				
L508232-05 MW-18B	240-230600-B-5	Plastic 60 mL - unpreserved				
L508232-05 MW-18B	240-230600-C-5	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508232-05 MW-18B	240-230600-D-5	Plastic 500ml unpreserved				
L508232-05 MW-18B	240-230600-E-5	Plastic 500ml - with Nitric Acid	<2			
L508232-05 MW 18B	240-230600-F-5	Plastic 1 liter - unpreserved				
L508232-05 MW-18B	240-230600-G-5	Plastic 1 liter - Nitric Acid	<2			
L508232-05 MW 18B	240-230600-H-5	Plastic 1 liter - Nitric Acid	<2			
L508232-06 MW-18C	240-230600-A-6	Plastic 60 mL unpreserved				
L508232-06 MW-18C	240-230600-B-6	Plastic 60 mL - unpreserved				
L508232-06 MW-18C	240-230600-C-6	Plastic 250ml - with Nitric Acid	<2			
L508232-06 MW-18C	240-230600-D-6	Plastic 500ml - unpreserved				
L508232-06 MW-18C	240-230600-E-6	Plastic 500ml - with Nitric Acid	<2			
L508232-06 MW-18C	240-230600-F-6	Plastic 1 liter - unpreserved				
L508232-06 MW-18C	240-230600-G-6	Plastic 1 liter - Nitric Acid	<2			
L508232-06 MW-18C	240-230600-H-6	Plastic 1 liter - Nitric Acid	<2			
L508232-07 MW-18D	240-230600-A-7	Plastic 60 mL - unpreserved				
L508232-07 MW 18D	240-230600-B-7	Plastic 60 mL - unpreserved				
L508232-07 MW-18D	240-230600-C-7	Plastic 250ml - with Nitric Acid	<2			
L508232-07 MW-18D	240-230600-D-7	Plastic 500ml - unpreserved				
L508232-07 MW-18D	240-230600-E-7	Plastic 500ml with Nitric Acid	<2			
L508232-07 MW-18D	240-230600 F 7	Plastic 1 liter - unpreserved				
L508232-07 MW-18D	240-230600-G-7	Plastic 1 liter - Nitric Acid	<2			
L508232-07 MW-18D	240-230600-H-7	Plastic 1 liter - Nitric Acid	<2			
L508232-08 MWT-7	240-230600-A 8	Plastic 60 mL - unpreserved				
L508232-08 MWT-7	240 230600-B-8	Plastic 60 mL - unpreserved				
L508232-08 MWT 7	240-230600-C-8	Plastic 250ml - with Nitric Acid	<2			
L508232-08 MWT-7	240-230600-D-8	Plastic 500ml - unpreserved				
L508232-08 MWT-7	240-230600-E-8	Plastic 500ml - with Nitric Acid	<2			
L508232-08 MWT-7	240-230600-F-8	Plastic 1 liter - unpreserved				
L508232-08 MWT-7	240-230600-G-8	Plastic 1 liter Nitric Acid	<2			
L508232-08 MWT-7	240-230600-H-8	Plastic 1 liter - Nitric Acid	<2			
L508232-09 FIELD BLANK	240-230600-A-9	Plastic 60 mL - unpreserved				
L508232-09 FIELD BLANK	240-230600-B-9	Plastic 60 mL - unpreserved				
L508232-09 FIELD BLANK	240-230600-C-9	Plastic 250ml - with Nitric Acid	<2			
L508232-09 FIELD BLANK	240-230600-D 9	Plastic 500ml - unpreserved				
L508232-09 FIELD BLANK	240-230600-E-9	Plastic 500ml with Nitric Acid	<2			
L508232-09 FIELD BLANK	240-230600-F-9	Plastic 1 liter unpreserved				
L508232-09 FIELD BLANK	240-230600-G-9	Plastic 1 liter - Nitric Acid	<2			
L508232-09 FIELD BLANK	240-230600-H-9	Plastic 1 liter - Nitric Acid	<2			

ED STATES US
BILL SENDER
EUROFINS BARBERTON
EUROFINS BARBERTON
180 S. VAN BUREN AVENUE
BARBERTON OH 44203
30) 497-9396
REF:
DEPT:
FedEx Express
1 of 3
TRK#
0201
8834 7857 0338
MASTER
64 CAKA
TUE - 12 AUG 10:30A
PRIORITY OVERNIGHT
44203
OH-US
CLE

240-230600 Waybill

UNITED STATES US

EUROFINS BARBERTON
EUROFINS BARBERTON
180 S. VAN BUREN AVENUE

BARBERTON OH 44203
(330) 497-9396 REF:
INV:
PO: DEPT:

FedEx Express

1 of 3
TRK# 0201 8834 7857 0338
MASTER
64 CAKA

TUE - 12 AUG 10:30A
PRIORITY OVERNIGHT

44203
OH-US CLE

240-230600 Waybill

240-230600 Waybill

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-206328.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-230600-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/10/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21Standard Target List	904.0/PrecSep_0Standard Target List	Ra226_228GFPC_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L508232-01 MW-7 (240-230600-1)	8/8/25	10:10 Eastern	G	Water			X	X	X	2	
L508232-02 MW-7B (240-230600-2)	8/8/25	11:40 Eastern	G	Water			X	X	X	2	
L508232-03 MW-13 (240-230600-3)	8/8/25	13:20 Eastern	G	Water			X	X	X	2	
L508232-04 MW-18A (240-230600-4)	8/8/25	10:06 Eastern	G	Water			X	X	X	2	
L508232-05 MW-18B (240-230600-5)	8/8/25	11:17 Eastern	G	Water			X	X	X	2	
L508232-06 MW-18C (240-230600-6)	8/8/25	12:31 Eastern	G	Water			X	X	X	2	
L508232-07 MW-18D (240-230600-7)	8/8/25	13:45 Eastern	G	Water			X	X	X	2	
L508232-08 MWT-7 (240-230600-8)	8/8/25	10:10 Eastern	G	Water			X	X	X	2	
L508232-09 FIELD BLANK (240-230600-9)	8/8/25	08:35 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: JM	Date/Time: 8/12/25	Company E	Received by: [signature]	Date/Time: 0830 AUG 13 2025	Company
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

9/9/2025

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-230600-2

Login Number: 230600
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 08/13/25 11:46 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 8/21/2025 12:48:03 AM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-230809-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

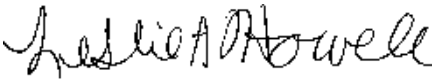
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
8/21/2025 12:48:03 AM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 12
QC Sample Results 26
QC Association Summary 33
Lab Chronicle 37
Certification Summary 41
Chain of Custody 42
Receipt Checklists 50

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-1

Qualifiers

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-230809-1 — Eurofins Cleveland

Job Narrative
240-230809-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 8/14/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.8°C and 1.1°C.

Metals
Method 200.8 - Total Recoverable: The laboratory control sample (LCS) for preparation batch 240-667889 and analytical batch 240-668199 recovered outside control limits for the following analytes: Lead and Thallium. These analytes were biased high in the LCS and were below the reporting limit in the associated samples; therefore, the data have been reported. L508239-01 MW-4 (240-230809-1), L508239-02 MW-16A (240-230809-2), L508239-03 MW-16B (240-230809-3), L508239-04 MW-16C (240-230809-4), L508239-05 MW-16D (240-230809-5), L508239-06 MWT-4 (240-230809-6) and L508239-07 FIELD BLANK (240-230809-7)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.7 Rev 4.4	Metals (ICP)	EPA	EET SSM
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.7	Preparation, Total Metals	EPA	EET SSM
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-230809-1	L508239-01 MW-4	Water	08/11/25 09:52	08/14/25 08:00	Michigan
240-230809-2	L508239-02 MW-16A	Water	08/11/25 11:38	08/14/25 08:00	Michigan
240-230809-3	L508239-03 MW-16B	Water	08/11/25 13:06	08/14/25 08:00	Michigan
240-230809-4	L508239-04 MW-16C	Water	08/11/25 14:22	08/14/25 08:00	Michigan
240-230809-5	L508239-05 MW-16D	Water	08/11/25 12:25	08/14/25 08:00	Michigan
240-230809-6	L508239-06 MWT-4	Water	08/11/25 09:52	08/14/25 08:00	Michigan
240-230809-7	L508239-07 FIELD BLANK	Water	08/11/25 08:45	08/14/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-1

Client Sample ID: L508239-01 MW-4

Lab Sample ID: 240-230809-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.066	J	0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	1.5	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	31		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0070		0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.15		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.000082	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00028	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0041	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	110		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	38		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.010		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.4		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0012	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	420		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	320		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	480		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	2.0	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	69		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.17		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	51		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508239-02 MW-16A

Lab Sample ID: 240-230809-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.24		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	1.5	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	250		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0034	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.13		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.00024	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.0011		0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0029	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0022		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Antimony	0.00071	J	0.0020	0.00057	mg/L	1		200.8-1994 R5.4	Total Recoverable
Thallium	0.00062	J *+	0.0010	0.00051	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	170		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508239-02 MW-16A (Continued) — Lab Sample ID: 240-230809-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	42		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.0039	J	0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.3		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	590		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	420		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1300		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	4.3		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	370		10	1.3	mg/L	10		300.0-1993 R2.1	Total/NA
Fluoride	0.14		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	190		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508239-03 MW-16B — Lab Sample ID: 240-230809-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.11		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	3.1	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	12		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.084		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0063		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	83		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	35		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.021		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.32		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0025	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	350		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	330		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	350		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.0	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	3.7		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.99		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	22		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508239-04 MW-16C — Lab Sample ID: 240-230809-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.41		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	5.2		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	11		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.026		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0011	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	77		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508239-04 MW-16C (Continued) — Lab Sample ID: 240-230809-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	31		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.028		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.32		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0014	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	320		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	310		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	310		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.80	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	1.1		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.51		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	11		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508239-05 MW-16D — Lab Sample ID: 240-230809-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	4.6		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	9.0		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	110		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0028	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.030		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0082		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	29		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	7.6		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.031		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.36		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0011	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	110		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	310		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	360		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.4	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	6.8		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.75		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	5.8		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508239-06 MWT-4 — Lab Sample ID: 240-230809-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.068	J	0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	1.4	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	32		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0062		0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508239-06 MWT-4 (Continued)

Lab Sample ID: 240-230809-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.15		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00025	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0037	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	110		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	38		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.010		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.4		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	420		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	320		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	510		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	3.2	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	69		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.16		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	51		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508239-07 FIELD BLANK

Lab Sample ID: 240-230809-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	0.50	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508239-01 MW-4

Lab Sample ID: 240-230809-1

Date Collected: 08/11/25 09:52

Matrix: Water

Date Received: 08/14/25 08:00

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.066**	**J**	0.10	0.057	mg/L		08/15/25 14:00	08/19/25 00:27	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**1.5**	**J**	3.3	0.17	mg/L		08/15/25 17:05	08/19/25 19:27	1
Na	**31**		0.60	0.33	mg/L		08/15/25 17:05	08/19/25 19:27	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/15/25 14:00	08/18/25 18:47	1
Arsenic	**0.0070**		0.0050	0.00075	mg/L		08/15/25 14:00	08/18/25 18:47	1
Barium	**0.15**		0.0050	0.00077	mg/L		08/15/25 14:00	08/18/25 18:47	1
Beryllium	ND		0.0010	0.00027	mg/L		08/15/25 14:00	08/18/25 18:47	1
Cadmium	**0.000082**	**J**	0.0010	0.000077	mg/L		08/15/25 14:00	08/18/25 18:47	1
Cobalt	**0.00028**	**J**	0.0010	0.000086	mg/L		08/15/25 14:00	08/18/25 18:47	1
Chromium	ND		0.0050	0.0012	mg/L		08/15/25 14:00	08/18/25 18:47	1
Copper	ND		0.0020	0.0017	mg/L		08/15/25 14:00	08/18/25 18:47	1
Molybdenum	**0.0041**	**J**	0.0050	0.0011	mg/L		08/15/25 14:00	08/18/25 18:47	1
Nickel	ND		0.0020	0.0015	mg/L		08/15/25 14:00	08/18/25 18:47	1
Lead	ND	*+	0.0010	0.00045	mg/L		08/15/25 14:00	08/18/25 18:47	1
Antimony	ND		0.0020	0.00057	mg/L		08/15/25 14:00	08/18/25 18:47	1
Selenium	ND		0.0050	0.00089	mg/L		08/15/25 14:00	08/19/25 17:11	1
Thallium	ND	*+	0.0010	0.00051	mg/L		08/15/25 14:00	08/18/25 18:47	1
Vanadium	ND		0.0050	0.00082	mg/L		08/15/25 14:00	08/18/25 18:47	1
Calcium	**110**		1.0	0.25	mg/L		08/15/25 14:00	08/18/25 18:47	1
Magnesium	**38**		1.0	0.061	mg/L		08/15/25 14:00	08/18/25 18:47	1
Lithium	**0.010**		0.0080	0.0034	mg/L		08/15/25 14:00	08/18/25 18:47	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.4**		0.10	0.013	mg/L		08/15/25 17:05	08/18/25 13:09	1
Zinc	**0.0012**	**J**	0.0070	0.00093	mg/L		08/15/25 17:05	08/18/25 13:09	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**420**		33	33	mg/L			08/20/25 05:13	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/15/25 14:00	08/18/25 15:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**320**		5.0	2.6	mg/L			08/18/25 12:47	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/18/25 12:47	1
Total Dissolved Solids (SM 2540 C-2020)	**480**		10	7.8	mg/L			08/15/25 09:34	1
Total Suspended Solids (SM 2540D-2020)	**2.0**	**J**	4.0	0.40	mg/L			08/15/25 09:54	1
Chloride (EPA 300.0-1993 R2.1)	**69**		1.0	0.13	mg/L			08/15/25 18:01	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-1

Client Sample ID: L508239-01 MW-4
Date Collected: 08/11/25 09:52
Date Received: 08/14/25 08:00

Lab Sample ID: 240-230809-1
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.17		0.050	0.024	mg/L			08/15/25 18:01	1
Sulfate (EPA 300.0-1993 R2.1)	51		1.0	0.35	mg/L			08/15/25 18:01	1

Client Sample ID: L508239-02 MW-16A
Date Collected: 08/11/25 11:38
Date Received: 08/14/25 08:00

Lab Sample ID: 240-230809-2
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.24		0.10	0.057	mg/L		08/15/25 14:00	08/19/25 00:57	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	1.5	J	3.3	0.17	mg/L		08/15/25 17:05	08/19/25 19:42	1
Na	250		0.60	0.33	mg/L		08/15/25 17:05	08/19/25 19:42	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/15/25 14:00	08/18/25 19:06	1
Arsenic	0.0034	J	0.0050	0.00075	mg/L		08/15/25 14:00	08/18/25 19:06	1
Barium	0.13		0.0050	0.00077	mg/L		08/15/25 14:00	08/18/25 19:06	1
Beryllium	ND		0.0010	0.00027	mg/L		08/15/25 14:00	08/18/25 19:06	1
Cadmium	0.00024	J	0.0010	0.000077	mg/L		08/15/25 14:00	08/18/25 19:06	1
Cobalt	0.0011		0.0010	0.000086	mg/L		08/15/25 14:00	08/18/25 19:06	1
Chromium	ND		0.0050	0.0012	mg/L		08/15/25 14:00	08/18/25 19:06	1
Copper	ND		0.0020	0.0017	mg/L		08/15/25 14:00	08/18/25 19:06	1
Molybdenum	0.0029	J	0.0050	0.0011	mg/L		08/15/25 14:00	08/18/25 19:06	1
Nickel	0.0022		0.0020	0.0015	mg/L		08/15/25 14:00	08/18/25 19:06	1
Lead	ND	*+	0.0010	0.00045	mg/L		08/15/25 14:00	08/18/25 19:06	1
Antimony	0.00071	J	0.0020	0.00057	mg/L		08/15/25 14:00	08/18/25 19:06	1
Selenium	ND		0.0050	0.00089	mg/L		08/15/25 14:00	08/18/25 19:06	1
Thallium	0.00062	J *+	0.0010	0.00051	mg/L		08/15/25 14:00	08/18/25 19:06	1
Vanadium	ND		0.0050	0.00082	mg/L		08/15/25 14:00	08/18/25 19:06	1
Calcium	170		1.0	0.25	mg/L		08/15/25 14:00	08/18/25 19:06	1
Magnesium	42		1.0	0.061	mg/L		08/15/25 14:00	08/18/25 19:06	1
Lithium	0.0039	J	0.0080	0.0034	mg/L		08/15/25 14:00	08/18/25 19:06	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	2.3		0.10	0.013	mg/L		08/15/25 17:05	08/18/25 13:24	1
Zinc	ND		0.0070	0.00093	mg/L		08/15/25 17:05	08/18/25 13:24	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	590		33	33	mg/L			08/20/25 05:13	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/15/25 14:00	08/18/25 15:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	420		5.0	2.6	mg/L			08/18/25 12:53	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/18/25 12:53	1
Total Dissolved Solids (SM 2540 C-2020)	1300		20	16	mg/L			08/15/25 09:34	1
Total Suspended Solids (SM 2540D-2020)	4.3		4.0	0.40	mg/L			08/15/25 09:54	1
Chloride (EPA 300.0-1993 R2.1)	370		10	1.3	mg/L			08/15/25 18:30	10

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-1

Client Sample ID: L508239-02 MW-16A
Date Collected: 08/11/25 11:38
Date Received: 08/14/25 08:00

Lab Sample ID: 240-230809-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.14		0.050	0.024	mg/L			08/15/25 18:20	1
Sulfate (EPA 300.0-1993 R2.1)	190		1.0	0.35	mg/L			08/15/25 18:20	1

Client Sample ID: L508239-03 MW-16B
Date Collected: 08/11/25 13:06
Date Received: 08/14/25 08:00

Lab Sample ID: 240-230809-3
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.11**		0.10	0.057	mg/L		08/15/25 14:00	08/19/25 01:02	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**3.1**	**J**	3.3	0.17	mg/L		08/15/25 17:05	08/19/25 19:59	1
Na	**12**		0.60	0.33	mg/L		08/15/25 17:05	08/19/25 19:59	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/15/25 14:00	08/18/25 19:09	1
Arsenic	ND		0.0050	0.00075	mg/L		08/15/25 14:00	08/18/25 19:09	1
Barium	**0.084**		0.0050	0.00077	mg/L		08/15/25 14:00	08/18/25 19:09	1
Beryllium	ND		0.0010	0.00027	mg/L		08/15/25 14:00	08/18/25 19:09	1
Cadmium	ND		0.0010	0.000077	mg/L		08/15/25 14:00	08/18/25 19:09	1
Cobalt	ND		0.0010	0.000086	mg/L		08/15/25 14:00	08/18/25 19:09	1
Chromium	ND		0.0050	0.0012	mg/L		08/15/25 14:00	08/18/25 19:09	1
Copper	ND		0.0020	0.0017	mg/L		08/15/25 14:00	08/18/25 19:09	1
Molybdenum	**0.0063**		0.0050	0.0011	mg/L		08/15/25 14:00	08/18/25 19:09	1
Nickel	ND		0.0020	0.0015	mg/L		08/15/25 14:00	08/18/25 19:09	1
Lead	ND	*+	0.0010	0.00045	mg/L		08/15/25 14:00	08/18/25 19:09	1
Antimony	ND		0.0020	0.00057	mg/L		08/15/25 14:00	08/18/25 19:09	1
Selenium	ND		0.0050	0.00089	mg/L		08/15/25 14:00	08/18/25 19:09	1
Thallium	ND	*+	0.0010	0.00051	mg/L		08/15/25 14:00	08/18/25 19:09	1
Vanadium	ND		0.0050	0.00082	mg/L		08/15/25 14:00	08/18/25 19:09	1
Calcium	**83**		1.0	0.25	mg/L		08/15/25 14:00	08/18/25 19:09	1
Magnesium	**35**		1.0	0.061	mg/L		08/15/25 14:00	08/18/25 19:09	1
Lithium	**0.021**		0.0080	0.0034	mg/L		08/15/25 14:00	08/18/25 19:09	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.32**		0.10	0.013	mg/L		08/15/25 17:05	08/18/25 13:39	1
Zinc	**0.0025**	**J**	0.0070	0.00093	mg/L		08/15/25 17:05	08/18/25 13:39	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**350**		33	33	mg/L			08/20/25 05:13	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/15/25 14:00	08/18/25 17:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**330**		5.0	2.6	mg/L			08/18/25 13:01	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/18/25 13:01	1
Total Dissolved Solids (SM 2540 C-2020)	**350**		10	7.8	mg/L			08/15/25 09:34	1
Total Suspended Solids (SM 2540D-2020)	**1.0**	**J**	4.0	0.40	mg/L			08/15/25 09:54	1
Chloride (EPA 300.0-1993 R2.1)	**3.7**		1.0	0.13	mg/L			08/15/25 18:39	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-1

Client Sample ID: L508239-03 MW-16B
Date Collected: 08/11/25 13:06
Date Received: 08/14/25 08:00

Lab Sample ID: 240-230809-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.99		0.050	0.024	mg/L			08/15/25 18:39	1
Sulfate (EPA 300.0-1993 R2.1)	22		1.0	0.35	mg/L			08/15/25 18:39	1

Client Sample ID: L508239-04 MW-16C
Date Collected: 08/11/25 14:22
Date Received: 08/14/25 08:00

Lab Sample ID: 240-230809-4
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.41**		0.10	0.057	mg/L		08/15/25 14:00	08/19/25 01:06	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**5.2**		3.3	0.17	mg/L		08/15/25 17:05	08/19/25 20:03	1
Na	**11**		0.60	0.33	mg/L		08/15/25 17:05	08/19/25 20:03	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/15/25 14:00	08/18/25 19:11	1
Arsenic	ND		0.0050	0.00075	mg/L		08/15/25 14:00	08/18/25 19:11	1
Barium	**0.026**		0.0050	0.00077	mg/L		08/15/25 14:00	08/18/25 19:11	1
Beryllium	ND		0.0010	0.00027	mg/L		08/15/25 14:00	08/18/25 19:11	1
Cadmium	ND		0.0010	0.000077	mg/L		08/15/25 14:00	08/18/25 19:11	1
Cobalt	ND		0.0010	0.000086	mg/L		08/15/25 14:00	08/18/25 19:11	1
Chromium	ND		0.0050	0.0012	mg/L		08/15/25 14:00	08/18/25 19:11	1
Copper	ND		0.0020	0.0017	mg/L		08/15/25 14:00	08/18/25 19:11	1
Molybdenum	**0.0011**	**J**	0.0050	0.0011	mg/L		08/15/25 14:00	08/18/25 19:11	1
Nickel	ND		0.0020	0.0015	mg/L		08/15/25 14:00	08/18/25 19:11	1
Lead	ND	*+	0.0010	0.00045	mg/L		08/15/25 14:00	08/18/25 19:11	1
Antimony	ND		0.0020	0.00057	mg/L		08/15/25 14:00	08/18/25 19:11	1
Selenium	ND		0.0050	0.00089	mg/L		08/15/25 14:00	08/18/25 19:11	1
Thallium	ND	*+	0.0010	0.00051	mg/L		08/15/25 14:00	08/18/25 19:11	1
Vanadium	ND		0.0050	0.00082	mg/L		08/15/25 14:00	08/18/25 19:11	1
Calcium	**77**		1.0	0.25	mg/L		08/15/25 14:00	08/18/25 19:11	1
Magnesium	**31**		1.0	0.061	mg/L		08/15/25 14:00	08/18/25 19:11	1
Lithium	**0.028**		0.0080	0.0034	mg/L		08/15/25 14:00	08/18/25 19:11	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.32**		0.10	0.013	mg/L		08/15/25 17:05	08/18/25 13:42	1
Zinc	**0.0014**	**J**	0.0070	0.00093	mg/L		08/15/25 17:05	08/18/25 13:42	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**320**		33	33	mg/L			08/20/25 05:13	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/15/25 14:00	08/18/25 15:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**310**		5.0	2.6	mg/L			08/18/25 13:08	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/18/25 13:08	1
Total Dissolved Solids (SM 2540 C-2020)	**310**		10	7.8	mg/L			08/15/25 09:34	1
Total Suspended Solids (SM 2540D-2020)	**0.80**	**J**	4.0	0.40	mg/L			08/15/25 09:54	1
Chloride (EPA 300.0-1993 R2.1)	**1.1**		1.0	0.13	mg/L			08/15/25 18:49	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-1

Client Sample ID: L508239-04 MW-16C
Date Collected: 08/11/25 14:22
Date Received: 08/14/25 08:00

Lab Sample ID: 240-230809-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.51		0.050	0.024	mg/L			08/15/25 18:49	1
Sulfate (EPA 300.0-1993 R2.1)	11		1.0	0.35	mg/L			08/15/25 18:49	1

Client Sample ID: L508239-05 MW-16D

Lab Sample ID: 240-230809-5

Date Collected: 08/11/25 12:25

Matrix: Water

Date Received: 08/14/25 08:00

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**4.6**		0.10	0.057	mg/L		08/15/25 14:00	08/19/25 01:11	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**9.0**		3.3	0.17	mg/L		08/15/25 17:05	08/19/25 20:06	1
Na	**110**		0.60	0.33	mg/L		08/15/25 17:05	08/19/25 20:06	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/15/25 14:00	08/18/25 19:14	1
Arsenic	**0.0028**	**J**	0.0050	0.00075	mg/L		08/15/25 14:00	08/18/25 19:14	1
Barium	**0.030**		0.0050	0.00077	mg/L		08/15/25 14:00	08/18/25 19:14	1
Beryllium	ND		0.0010	0.00027	mg/L		08/15/25 14:00	08/18/25 19:14	1
Cadmium	ND		0.0010	0.000077	mg/L		08/15/25 14:00	08/18/25 19:14	1
Cobalt	ND		0.0010	0.000086	mg/L		08/15/25 14:00	08/18/25 19:14	1
Chromium	ND		0.0050	0.0012	mg/L		08/15/25 14:00	08/18/25 19:14	1
Copper	ND		0.0020	0.0017	mg/L		08/15/25 14:00	08/18/25 19:14	1
Molybdenum	**0.0082**		0.0050	0.0011	mg/L		08/15/25 14:00	08/18/25 19:14	1
Nickel	ND		0.0020	0.0015	mg/L		08/15/25 14:00	08/18/25 19:14	1
Lead	ND	*+	0.0010	0.00045	mg/L		08/15/25 14:00	08/18/25 19:14	1
Antimony	ND		0.0020	0.00057	mg/L		08/15/25 14:00	08/18/25 19:14	1
Selenium	ND		0.0050	0.00089	mg/L		08/15/25 14:00	08/18/25 19:14	1
Thallium	ND	*+	0.0010	0.00051	mg/L		08/15/25 14:00	08/18/25 19:14	1
Vanadium	ND		0.0050	0.00082	mg/L		08/15/25 14:00	08/18/25 19:14	1
Calcium	**29**		1.0	0.25	mg/L		08/15/25 14:00	08/18/25 19:14	1
Magnesium	**7.6**		1.0	0.061	mg/L		08/15/25 14:00	08/18/25 19:14	1
Lithium	**0.031**		0.0080	0.0034	mg/L		08/15/25 14:00	08/18/25 19:14	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.36**		0.10	0.013	mg/L		08/15/25 17:05	08/18/25 13:45	1
Zinc	**0.0011**	**J**	0.0070	0.00093	mg/L		08/15/25 17:05	08/18/25 13:45	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**110**		33	33	mg/L			08/20/25 05:13	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/15/25 14:00	08/18/25 16:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**310**		5.0	2.6	mg/L			08/18/25 13:13	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/18/25 13:13	1
Total Dissolved Solids (SM 2540 C-2020)	**360**		10	7.8	mg/L			08/15/25 09:34	1
Total Suspended Solids (SM 2540D-2020)	**1.4**	**J**	4.0	0.40	mg/L			08/15/25 10:24	1
Chloride (EPA 300.0-1993 R2.1)	**6.8**		1.0	0.13	mg/L			08/15/25 18:59	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-1

Client Sample ID: L508239-05 MW-16D
Date Collected: 08/11/25 12:25
Date Received: 08/14/25 08:00

Lab Sample ID: 240-230809-5
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.75		0.050	0.024	mg/L			08/15/25 18:59	1
Sulfate (EPA 300.0-1993 R2.1)	5.8		1.0	0.35	mg/L			08/15/25 18:59	1

Client Sample ID: L508239-06 MWT-4
Date Collected: 08/11/25 09:52
Date Received: 08/14/25 08:00

Lab Sample ID: 240-230809-6
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.068	J	0.10	0.057	mg/L		08/15/25 14:00	08/19/25 01:15	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	1.4	J	3.3	0.17	mg/L		08/15/25 17:05	08/19/25 20:09	1
Na	32		0.60	0.33	mg/L		08/15/25 17:05	08/19/25 20:09	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/15/25 14:00	08/18/25 19:17	1
Arsenic	0.0062		0.0050	0.00075	mg/L		08/15/25 14:00	08/18/25 19:17	1
Barium	0.15		0.0050	0.00077	mg/L		08/15/25 14:00	08/18/25 19:17	1
Beryllium	ND		0.0010	0.00027	mg/L		08/15/25 14:00	08/18/25 19:17	1
Cadmium	ND		0.0010	0.000077	mg/L		08/15/25 14:00	08/18/25 19:17	1
Cobalt	0.00025	J	0.0010	0.000086	mg/L		08/15/25 14:00	08/18/25 19:17	1
Chromium	ND		0.0050	0.0012	mg/L		08/15/25 14:00	08/18/25 19:17	1
Copper	ND		0.0020	0.0017	mg/L		08/15/25 14:00	08/18/25 19:17	1
Molybdenum	0.0037	J	0.0050	0.0011	mg/L		08/15/25 14:00	08/18/25 19:17	1
Nickel	ND		0.0020	0.0015	mg/L		08/15/25 14:00	08/18/25 19:17	1
Lead	ND	*+	0.0010	0.00045	mg/L		08/15/25 14:00	08/18/25 19:17	1
Antimony	ND		0.0020	0.00057	mg/L		08/15/25 14:00	08/18/25 19:17	1
Selenium	ND		0.0050	0.00089	mg/L		08/15/25 14:00	08/18/25 19:17	1
Thallium	ND	*+	0.0010	0.00051	mg/L		08/15/25 14:00	08/18/25 19:17	1
Vanadium	ND		0.0050	0.00082	mg/L		08/15/25 14:00	08/18/25 19:17	1
Calcium	110		1.0	0.25	mg/L		08/15/25 14:00	08/18/25 19:17	1
Magnesium	38		1.0	0.061	mg/L		08/15/25 14:00	08/18/25 19:17	1
Lithium	0.010		0.0080	0.0034	mg/L		08/15/25 14:00	08/18/25 19:17	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1.4		0.10	0.013	mg/L		08/15/25 17:05	08/18/25 13:48	1
Zinc	ND		0.0070	0.00093	mg/L		08/15/25 17:05	08/18/25 13:48	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	420		33	33	mg/L			08/20/25 05:13	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/15/25 14:00	08/18/25 16:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	320		5.0	2.6	mg/L			08/18/25 13:19	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/18/25 13:19	1
Total Dissolved Solids (SM 2540 C-2020)	510		10	7.8	mg/L			08/15/25 09:34	1
Total Suspended Solids (SM 2540D-2020)	3.2	J	4.0	0.40	mg/L			08/15/25 09:54	1
Chloride (EPA 300.0-1993 R2.1)	69		1.0	0.13	mg/L			08/15/25 19:09	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-1

Client Sample ID: L508239-06 MWT-4
Date Collected: 08/11/25 09:52
Date Received: 08/14/25 08:00

Lab Sample ID: 240-230809-6
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.16		0.050	0.024	mg/L			08/15/25 19:09	1
Sulfate (EPA 300.0-1993 R2.1)	51		1.0	0.35	mg/L			08/15/25 19:09	1

Client Sample ID: L508239-07 FIELD BLANK
Date Collected: 08/11/25 08:45
Date Received: 08/14/25 08:00

Lab Sample ID: 240-230809-7
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		08/15/25 14:00	08/19/25 01:19	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		08/15/25 17:05	08/19/25 20:13	1
Na	ND		0.60	0.33	mg/L		08/15/25 17:05	08/19/25 20:13	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/15/25 14:00	08/18/25 19:20	1
Arsenic	ND		0.0050	0.00075	mg/L		08/15/25 14:00	08/18/25 19:20	1
Barium	ND		0.0050	0.00077	mg/L		08/15/25 14:00	08/18/25 19:20	1
Beryllium	ND		0.0010	0.00027	mg/L		08/15/25 14:00	08/18/25 19:20	1
Cadmium	ND		0.0010	0.000077	mg/L		08/15/25 14:00	08/18/25 19:20	1
Cobalt	ND		0.0010	0.000086	mg/L		08/15/25 14:00	08/18/25 19:20	1
Chromium	ND		0.0050	0.0012	mg/L		08/15/25 14:00	08/18/25 19:20	1
Copper	ND		0.0020	0.0017	mg/L		08/15/25 14:00	08/18/25 19:20	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/15/25 14:00	08/18/25 19:20	1
Nickel	ND		0.0020	0.0015	mg/L		08/15/25 14:00	08/18/25 19:20	1
Lead	ND	*+	0.0010	0.00045	mg/L		08/15/25 14:00	08/18/25 19:20	1
Antimony	ND		0.0020	0.00057	mg/L		08/15/25 14:00	08/18/25 19:20	1
Selenium	ND		0.0050	0.00089	mg/L		08/15/25 14:00	08/19/25 17:22	1
Thallium	ND	*+	0.0010	0.00051	mg/L		08/15/25 14:00	08/18/25 19:20	1
Vanadium	ND		0.0050	0.00082	mg/L		08/15/25 14:00	08/18/25 19:20	1
Calcium	ND		1.0	0.25	mg/L		08/15/25 14:00	08/18/25 19:20	1
Magnesium	ND		1.0	0.061	mg/L		08/15/25 14:00	08/18/25 19:20	1
Lithium	ND		0.0080	0.0034	mg/L		08/15/25 14:00	08/18/25 19:20	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		08/15/25 17:05	08/18/25 13:50	1
Zinc	ND		0.0070	0.00093	mg/L		08/15/25 17:05	08/18/25 13:50	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			08/20/25 05:13	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/15/25 14:00	08/18/25 16:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/18/25 13:30	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/18/25 13:30	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			08/15/25 09:34	1
Total Suspended Solids (SM 2540D-2020)	**0.50**	**J**	4.0	0.40	mg/L			08/15/25 09:54	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			08/15/25 19:28	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-1

Client Sample ID: L508239-07 FIELD BLANK
Date Collected: 08/11/25 08:45
Date Received: 08/14/25 08:00

Lab Sample ID: 240-230809-7
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			08/15/25 19:28	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			08/15/25 19:28	1

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-667889/1-A
Matrix: Water
Analysis Batch: 668159

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 667889

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		08/15/25 14:00	08/19/25 00:18	1

Lab Sample ID: LCS 240-667889/2-A
Matrix: Water
Analysis Batch: 668159

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 667889

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.06		mg/L		106	85 - 115

Lab Sample ID: 240-230809-1 MS
Matrix: Water
Analysis Batch: 668159

Client Sample ID: L508239-01 MW-4
Prep Type: Total Recoverable
Prep Batch: 667889

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.066	J	1.00	1.13		mg/L		106	70 - 130

Lab Sample ID: 240-230809-1 MSD
Matrix: Water
Analysis Batch: 668159

Client Sample ID: L508239-01 MW-4
Prep Type: Total Recoverable
Prep Batch: 667889

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.066	J	1.00	1.10		mg/L		103	70 - 130	2	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 350-8930/23-A
Matrix: Water
Analysis Batch: 9003

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8930

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		08/15/25 17:05	08/19/25 19:20	1
Na	ND		0.60	0.33	mg/L		08/15/25 17:05	08/19/25 19:20	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-8930/23-A
Matrix: Water
Analysis Batch: 8956

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8930

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		08/15/25 17:05	08/18/25 13:02	1
Zinc	ND		0.0070	0.00093	mg/L		08/15/25 17:05	08/18/25 13:02	1

Lab Sample ID: LCS 350-8930/24-A
Matrix: Water
Analysis Batch: 8956

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8930

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	18.9		mg/L		95	85 - 115
Zinc	1.00	0.941		mg/L		94	85 - 115

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-230809-1 MS
Matrix: Water
Analysis Batch: 8956

Client Sample ID: L508239-01 MW-4
Prep Type: Total/NA
Prep Batch: 8930

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	1.4		20.0	20.7		mg/L		96	70 - 130
Zinc	0.0012	J	1.00	0.943		mg/L		94	70 - 130

Lab Sample ID: 240-230809-1 MSD
Matrix: Water
Analysis Batch: 8956

Client Sample ID: L508239-01 MW-4
Prep Type: Total/NA
Prep Batch: 8930

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	1.4		20.0	20.7		mg/L		97	70 - 130	0	20
Zinc	0.0012	J	1.00	0.986		mg/L		98	70 - 130	4	20

Lab Sample ID: 240-230809-2 MS
Matrix: Water
Analysis Batch: 8956

Client Sample ID: L508239-02 MW-16A
Prep Type: Total/NA
Prep Batch: 8930

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	2.3		20.0	21.2		mg/L		95	70 - 130
Zinc	ND		1.00	0.949		mg/L		95	70 - 130

Lab Sample ID: 240-230809-2 MSD
Matrix: Water
Analysis Batch: 8956

Client Sample ID: L508239-02 MW-16A
Prep Type: Total/NA
Prep Batch: 8930

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	2.3		20.0	21.9		mg/L		98	70 - 130	3	20
Zinc	ND		1.00	0.966		mg/L		97	70 - 130	2	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-667889/1-A
Matrix: Water
Analysis Batch: 668199

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 667889

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/15/25 14:00	08/18/25 18:41	1
Arsenic	ND		0.0050	0.00075	mg/L		08/15/25 14:00	08/18/25 18:41	1
Barium	ND		0.0050	0.00077	mg/L		08/15/25 14:00	08/18/25 18:41	1
Beryllium	ND		0.0010	0.00027	mg/L		08/15/25 14:00	08/18/25 18:41	1
Cadmium	ND		0.0010	0.000077	mg/L		08/15/25 14:00	08/18/25 18:41	1
Cobalt	ND		0.0010	0.000086	mg/L		08/15/25 14:00	08/18/25 18:41	1
Chromium	ND		0.0050	0.0012	mg/L		08/15/25 14:00	08/18/25 18:41	1
Copper	ND		0.0020	0.0017	mg/L		08/15/25 14:00	08/18/25 18:41	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/15/25 14:00	08/18/25 18:41	1
Nickel	ND		0.0020	0.0015	mg/L		08/15/25 14:00	08/18/25 18:41	1
Lead	ND		0.0010	0.00045	mg/L		08/15/25 14:00	08/18/25 18:41	1
Antimony	ND		0.0020	0.00057	mg/L		08/15/25 14:00	08/18/25 18:41	1
Selenium	ND		0.0050	0.00089	mg/L		08/15/25 14:00	08/18/25 18:41	1
Thallium	ND		0.0010	0.00051	mg/L		08/15/25 14:00	08/18/25 18:41	1
Vanadium	ND		0.0050	0.00082	mg/L		08/15/25 14:00	08/18/25 18:41	1
Calcium	ND		1.0	0.25	mg/L		08/15/25 14:00	08/18/25 18:41	1

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-667889/1-A
Matrix: Water
Analysis Batch: 668199

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 667889

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	ND		1.0	0.061	mg/L		08/15/25 14:00	08/18/25 18:41	1
Lithium	ND		0.0080	0.0034	mg/L		08/15/25 14:00	08/18/25 18:41	1

Lab Sample ID: LCS 240-667889/3-A
Matrix: Water
Analysis Batch: 668199

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 667889

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.101		mg/L		101	85 - 115
Arsenic	1.00	1.03		mg/L		103	85 - 115
Barium	1.00	0.997		mg/L		100	85 - 115
Beryllium	0.500	0.515		mg/L		103	85 - 115
Cadmium	0.500	0.494		mg/L		99	85 - 115
Cobalt	0.500	0.528		mg/L		106	85 - 115
Chromium	0.500	0.510		mg/L		102	85 - 115
Copper	0.500	0.514		mg/L		103	85 - 115
Molybdenum	0.500	0.496		mg/L		99	85 - 115
Nickel	0.500	0.514		mg/L		103	85 - 115
Lead	0.500	0.578	*+	mg/L		116	85 - 115
Antimony	0.100	0.0989		mg/L		99	85 - 115
Selenium	1.00	1.01		mg/L		101	85 - 115
Thallium	1.00	1.16	*+	mg/L		116	85 - 115
Vanadium	0.500	0.519		mg/L		104	85 - 115
Calcium	25.0	26.3		mg/L		105	85 - 115
Magnesium	25.0	26.5		mg/L		106	85 - 115
Lithium	0.500	0.514		mg/L		103	85 - 115

Lab Sample ID: 240-230809-1 MS
Matrix: Water
Analysis Batch: 668199

Client Sample ID: L508239-01 MW-4
Prep Type: Total Recoverable
Prep Batch: 667889

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.102		mg/L		102	70 - 130
Arsenic	0.0070		1.00	1.04		mg/L		103	70 - 130
Barium	0.15		1.00	1.15		mg/L		100	70 - 130
Beryllium	ND		0.500	0.496		mg/L		99	70 - 130
Cadmium	0.000082	J	0.500	0.488		mg/L		98	70 - 130
Cobalt	0.00028	J	0.500	0.513		mg/L		103	70 - 130
Chromium	ND		0.500	0.496		mg/L		99	70 - 130
Copper	ND		0.500	0.508		mg/L		102	70 - 130
Molybdenum	0.0041	J	0.500	0.505		mg/L		100	70 - 130
Nickel	ND		0.500	0.503		mg/L		101	70 - 130
Lead	ND	*+	0.500	0.547		mg/L		109	70 - 130
Antimony	ND		0.100	0.103		mg/L		103	70 - 130
Thallium	ND	*+	1.00	1.12		mg/L		112	70 - 130
Vanadium	ND		0.500	0.508		mg/L		102	70 - 130
Calcium	110		25.0	132	4	mg/L		103	70 - 130
Magnesium	38		25.0	62.9		mg/L		98	70 - 130
Lithium	0.010		0.500	0.524		mg/L		103	70 - 130

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-230809-1 MS
Matrix: Water
Analysis Batch: 668444

Client Sample ID: L508239-01 MW-4
Prep Type: Total Recoverable
Prep Batch: 667889

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Selenium	ND		1.00	0.995		mg/L		99	70 - 130		

Lab Sample ID: 240-230809-1 MSD
Matrix: Water
Analysis Batch: 668199

Client Sample ID: L508239-01 MW-4
Prep Type: Total Recoverable
Prep Batch: 667889

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.101		mg/L		101	70 - 130	1	20
Arsenic	0.0070		1.00	1.05		mg/L		104	70 - 130	1	20
Barium	0.15		1.00	1.16		mg/L		101	70 - 130	1	20
Beryllium	ND		0.500	0.505		mg/L		101	70 - 130	2	20
Cadmium	0.000082	J	0.500	0.487		mg/L		97	70 - 130	0	20
Cobalt	0.00028	J	0.500	0.517		mg/L		103	70 - 130	1	20
Chromium	ND		0.500	0.499		mg/L		100	70 - 130	1	20
Copper	ND		0.500	0.500		mg/L		100	70 - 130	1	20
Molybdenum	0.0041	J	0.500	0.504		mg/L		100	70 - 130	0	20
Nickel	ND		0.500	0.501		mg/L		100	70 - 130	0	20
Lead	ND	*+	0.500	0.560		mg/L		112	70 - 130	2	20
Antimony	ND		0.100	0.101		mg/L		101	70 - 130	2	20
Thallium	ND	*+	1.00	1.13		mg/L		113	70 - 130	1	20
Vanadium	ND		0.500	0.511		mg/L		102	70 - 130	1	20
Calcium	110		25.0	137	4	mg/L		123	70 - 130	4	20
Magnesium	38		25.0	64.5		mg/L		104	70 - 130	2	20
Lithium	0.010		0.500	0.532		mg/L		104	70 - 130	2	20

Lab Sample ID: 240-230809-1 MSD
Matrix: Water
Analysis Batch: 668444

Client Sample ID: L508239-01 MW-4
Prep Type: Total Recoverable
Prep Batch: 667889

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium	ND		1.00	1.01		mg/L		101	70 - 130	1	20

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-667895/1-A
Matrix: Water
Analysis Batch: 668293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 667895

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/15/25 14:00	08/18/25 15:43	1

Lab Sample ID: LCS 240-667895/2-A
Matrix: Water
Analysis Batch: 668293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 667895

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00488		mg/L		98	85 - 115		

Method: 245.1-1994 R3.0 - Mercury (CVAA) (Continued)

Lab Sample ID: 240-230809-1 MS
Matrix: Water
Analysis Batch: 668293

Client Sample ID: L508239-01 MW-4
Prep Type: Total/NA
Prep Batch: 667895

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00100	0.000946		mg/L		95	70 - 130

Lab Sample ID: 240-230809-1 MSD
Matrix: Water
Analysis Batch: 668293

Client Sample ID: L508239-01 MW-4
Prep Type: Total/NA
Prep Batch: 667895

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.000948		mg/L		95	70 - 130	0	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-668279/4
Matrix: Water
Analysis Batch: 668279

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/18/25 12:14	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/18/25 12:14	1

Lab Sample ID: 240-230809-6 DU
Matrix: Water
Analysis Batch: 668279

Client Sample ID: L508239-06 MWT-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	320		326		mg/L		0.6	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-667838/1
Matrix: Water
Analysis Batch: 667838

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			08/15/25 09:34	1

Lab Sample ID: LCS 240-667838/2
Matrix: Water
Analysis Batch: 667838

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	240	216		mg/L		90	80 - 120

Lab Sample ID: 240-230809-1 DU
Matrix: Water
Analysis Batch: 667838

Client Sample ID: L508239-01 MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	480		495		mg/L		2	20

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-667847/1
Matrix: Water
Analysis Batch: 667847

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			08/15/25 09:54	1

Lab Sample ID: LCS 240-667847/2
Matrix: Water
Analysis Batch: 667847

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	30.0	27.0		mg/L		90	64 - 120

Lab Sample ID: MB 240-667852/1
Matrix: Water
Analysis Batch: 667852

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			08/15/25 10:24	1

Lab Sample ID: LCS 240-667852/2
Matrix: Water
Analysis Batch: 667852

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	30.0	25.5		mg/L		85	64 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-667941/4
Matrix: Water
Analysis Batch: 667941

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			08/15/25 16:05	1
Fluoride	ND		0.050	0.024	mg/L			08/15/25 16:05	1
Sulfate	ND		1.0	0.35	mg/L			08/15/25 16:05	1

Lab Sample ID: LCS 240-667941/5
Matrix: Water
Analysis Batch: 667941

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.1		mg/L		102	90 - 110
Fluoride	2.50	2.64		mg/L		106	90 - 110
Sulfate	50.0	50.6		mg/L		101	90 - 110

Lab Sample ID: 240-230809-7 MS
Matrix: Water
Analysis Batch: 667941

Client Sample ID: L508239-07 FIELD BLANK
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		50.0	55.2		mg/L		110	80 - 120
Fluoride	ND		2.50	2.80		mg/L		112	80 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-230809-7 MS
Matrix: Water
Analysis Batch: 667941

Client Sample ID: L508239-07 FIELD BLANK
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfate	ND		50.0	53.9		mg/L		108	80 - 120		

Lab Sample ID: 240-230809-7 MSD
Matrix: Water
Analysis Batch: 667941

Client Sample ID: L508239-07 FIELD BLANK
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		50.0	56.4		mg/L		113	80 - 120	2	15
Fluoride	ND		2.50	2.87		mg/L		115	80 - 120	3	15
Sulfate	ND		50.0	55.3		mg/L		111	80 - 120	3	15

Metals

Prep Batch: 8930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-1	L508239-01 MW-4	Total/NA	Water	200.7	
240-230809-2	L508239-02 MW-16A	Total/NA	Water	200.7	
240-230809-3	L508239-03 MW-16B	Total/NA	Water	200.7	
240-230809-4	L508239-04 MW-16C	Total/NA	Water	200.7	
240-230809-5	L508239-05 MW-16D	Total/NA	Water	200.7	
240-230809-6	L508239-06 MWT-4	Total/NA	Water	200.7	
240-230809-7	L508239-07 FIELD BLANK	Total/NA	Water	200.7	
MB 350-8930/23-A	Method Blank	Total/NA	Water	200.7	
LCS 350-8930/24-A	Lab Control Sample	Total/NA	Water	200.7	
240-230809-1 MS	L508239-01 MW-4	Total/NA	Water	200.7	
240-230809-1 MSD	L508239-01 MW-4	Total/NA	Water	200.7	
240-230809-2 MS	L508239-02 MW-16A	Total/NA	Water	200.7	
240-230809-2 MSD	L508239-02 MW-16A	Total/NA	Water	200.7	

Analysis Batch: 8956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-1	L508239-01 MW-4	Total/NA	Water	200.8	8930
240-230809-2	L508239-02 MW-16A	Total/NA	Water	200.8	8930
240-230809-3	L508239-03 MW-16B	Total/NA	Water	200.8	8930
240-230809-4	L508239-04 MW-16C	Total/NA	Water	200.8	8930
240-230809-5	L508239-05 MW-16D	Total/NA	Water	200.8	8930
240-230809-6	L508239-06 MWT-4	Total/NA	Water	200.8	8930
240-230809-7	L508239-07 FIELD BLANK	Total/NA	Water	200.8	8930
MB 350-8930/23-A	Method Blank	Total/NA	Water	200.8	8930
LCS 350-8930/24-A	Lab Control Sample	Total/NA	Water	200.8	8930
240-230809-1 MS	L508239-01 MW-4	Total/NA	Water	200.8	8930
240-230809-1 MSD	L508239-01 MW-4	Total/NA	Water	200.8	8930
240-230809-2 MS	L508239-02 MW-16A	Total/NA	Water	200.8	8930
240-230809-2 MSD	L508239-02 MW-16A	Total/NA	Water	200.8	8930

Analysis Batch: 9003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-1	L508239-01 MW-4	Total/NA	Water	200.7 Rev 4.4	8930
240-230809-2	L508239-02 MW-16A	Total/NA	Water	200.7 Rev 4.4	8930
240-230809-3	L508239-03 MW-16B	Total/NA	Water	200.7 Rev 4.4	8930
240-230809-4	L508239-04 MW-16C	Total/NA	Water	200.7 Rev 4.4	8930
240-230809-5	L508239-05 MW-16D	Total/NA	Water	200.7 Rev 4.4	8930
240-230809-6	L508239-06 MWT-4	Total/NA	Water	200.7 Rev 4.4	8930
240-230809-7	L508239-07 FIELD BLANK	Total/NA	Water	200.7 Rev 4.4	8930
MB 350-8930/23-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	8930
LCS 350-8930/24-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	8930
240-230809-1 MS	L508239-01 MW-4	Total/NA	Water	200.7 Rev 4.4	8930
240-230809-1 MSD	L508239-01 MW-4	Total/NA	Water	200.7 Rev 4.4	8930
240-230809-2 MS	L508239-02 MW-16A	Total/NA	Water	200.7 Rev 4.4	8930
240-230809-2 MSD	L508239-02 MW-16A	Total/NA	Water	200.7 Rev 4.4	8930

Prep Batch: 667889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-1	L508239-01 MW-4	Total Recoverable	Water	200.7	
240-230809-2	L508239-02 MW-16A	Total Recoverable	Water	200.7	
240-230809-3	L508239-03 MW-16B	Total Recoverable	Water	200.7	

Metals (Continued)

Prep Batch: 667889 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-4	L508239-04 MW-16C	Total Recoverable	Water	200.7	
240-230809-5	L508239-05 MW-16D	Total Recoverable	Water	200.7	
240-230809-6	L508239-06 MWT-4	Total Recoverable	Water	200.7	
240-230809-7	L508239-07 FIELD BLANK	Total Recoverable	Water	200.7	
MB 240-667889/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-667889/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-667889/3-A	Lab Control Sample	Total Recoverable	Water	200.7	
240-230809-1 MS	L508239-01 MW-4	Total Recoverable	Water	200.7	
240-230809-1 MS	L508239-01 MW-4	Total Recoverable	Water	200.7	
240-230809-1 MSD	L508239-01 MW-4	Total Recoverable	Water	200.7	
240-230809-1 MSD	L508239-01 MW-4	Total Recoverable	Water	200.7	

Prep Batch: 667895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-1	L508239-01 MW-4	Total/NA	Water	245.1-1994 R3.0	
240-230809-2	L508239-02 MW-16A	Total/NA	Water	245.1-1994 R3.0	
240-230809-3	L508239-03 MW-16B	Total/NA	Water	245.1-1994 R3.0	
240-230809-4	L508239-04 MW-16C	Total/NA	Water	245.1-1994 R3.0	
240-230809-5	L508239-05 MW-16D	Total/NA	Water	245.1-1994 R3.0	
240-230809-6	L508239-06 MWT-4	Total/NA	Water	245.1-1994 R3.0	
240-230809-7	L508239-07 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	
MB 240-667895/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-667895/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	
240-230809-1 MS	L508239-01 MW-4	Total/NA	Water	245.1-1994 R3.0	
240-230809-1 MSD	L508239-01 MW-4	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 668159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-1	L508239-01 MW-4	Total Recoverable	Water	200.7 R4.4-1994	667889
240-230809-2	L508239-02 MW-16A	Total Recoverable	Water	200.7 R4.4-1994	667889
240-230809-3	L508239-03 MW-16B	Total Recoverable	Water	200.7 R4.4-1994	667889
240-230809-4	L508239-04 MW-16C	Total Recoverable	Water	200.7 R4.4-1994	667889
240-230809-5	L508239-05 MW-16D	Total Recoverable	Water	200.7 R4.4-1994	667889
240-230809-6	L508239-06 MWT-4	Total Recoverable	Water	200.7 R4.4-1994	667889
240-230809-7	L508239-07 FIELD BLANK	Total Recoverable	Water	200.7 R4.4-1994	667889
MB 240-667889/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	667889
LCS 240-667889/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	667889
240-230809-1 MS	L508239-01 MW-4	Total Recoverable	Water	200.7 R4.4-1994	667889
240-230809-1 MSD	L508239-01 MW-4	Total Recoverable	Water	200.7 R4.4-1994	667889

Analysis Batch: 668199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-1	L508239-01 MW-4	Total Recoverable	Water	200.8-1994 R5.4	667889
240-230809-2	L508239-02 MW-16A	Total Recoverable	Water	200.8-1994 R5.4	667889
240-230809-3	L508239-03 MW-16B	Total Recoverable	Water	200.8-1994 R5.4	667889
240-230809-4	L508239-04 MW-16C	Total Recoverable	Water	200.8-1994 R5.4	667889
240-230809-5	L508239-05 MW-16D	Total Recoverable	Water	200.8-1994 R5.4	667889
240-230809-6	L508239-06 MWT-4	Total Recoverable	Water	200.8-1994 R5.4	667889
240-230809-7	L508239-07 FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	667889
MB 240-667889/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	667889
LCS 240-667889/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	667889

Metals (Continued)

Analysis Batch: 668199 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-1 MS	L508239-01 MW-4	Total Recoverable	Water	200.8-1994 R5.4	667889
240-230809-1 MSD	L508239-01 MW-4	Total Recoverable	Water	200.8-1994 R5.4	667889

Analysis Batch: 668293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-1	L508239-01 MW-4	Total/NA	Water	245.1-1994 R3.0	667895
240-230809-2	L508239-02 MW-16A	Total/NA	Water	245.1-1994 R3.0	667895
240-230809-3	L508239-03 MW-16B	Total/NA	Water	245.1-1994 R3.0	667895
240-230809-4	L508239-04 MW-16C	Total/NA	Water	245.1-1994 R3.0	667895
240-230809-5	L508239-05 MW-16D	Total/NA	Water	245.1-1994 R3.0	667895
240-230809-6	L508239-06 MWT-4	Total/NA	Water	245.1-1994 R3.0	667895
240-230809-7	L508239-07 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	667895
MB 240-667895/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	667895
LCS 240-667895/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	667895
240-230809-1 MS	L508239-01 MW-4	Total/NA	Water	245.1-1994 R3.0	667895
240-230809-1 MSD	L508239-01 MW-4	Total/NA	Water	245.1-1994 R3.0	667895

Analysis Batch: 668432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-1	L508239-01 MW-4	Total Recoverable	Water	2340 B-2021	
240-230809-2	L508239-02 MW-16A	Total Recoverable	Water	2340 B-2021	
240-230809-3	L508239-03 MW-16B	Total Recoverable	Water	2340 B-2021	
240-230809-4	L508239-04 MW-16C	Total Recoverable	Water	2340 B-2021	
240-230809-5	L508239-05 MW-16D	Total Recoverable	Water	2340 B-2021	
240-230809-6	L508239-06 MWT-4	Total Recoverable	Water	2340 B-2021	
240-230809-7	L508239-07 FIELD BLANK	Total Recoverable	Water	2340 B-2021	

Analysis Batch: 668444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-1	L508239-01 MW-4	Total Recoverable	Water	200.8-1994 R5.4	667889
240-230809-7	L508239-07 FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	667889
240-230809-1 MS	L508239-01 MW-4	Total Recoverable	Water	200.8-1994 R5.4	667889
240-230809-1 MSD	L508239-01 MW-4	Total Recoverable	Water	200.8-1994 R5.4	667889

General Chemistry

Analysis Batch: 667838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-1	L508239-01 MW-4	Total/NA	Water	2540 C-2020	
240-230809-2	L508239-02 MW-16A	Total/NA	Water	2540 C-2020	
240-230809-3	L508239-03 MW-16B	Total/NA	Water	2540 C-2020	
240-230809-4	L508239-04 MW-16C	Total/NA	Water	2540 C-2020	
240-230809-5	L508239-05 MW-16D	Total/NA	Water	2540 C-2020	
240-230809-6	L508239-06 MWT-4	Total/NA	Water	2540 C-2020	
240-230809-7	L508239-07 FIELD BLANK	Total/NA	Water	2540 C-2020	
MB 240-667838/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-667838/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-230809-1 DU	L508239-01 MW-4	Total/NA	Water	2540 C-2020	

General Chemistry

Analysis Batch: 667847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-1	L508239-01 MW-4	Total/NA	Water	2540D-2020	
240-230809-2	L508239-02 MW-16A	Total/NA	Water	2540D-2020	
240-230809-3	L508239-03 MW-16B	Total/NA	Water	2540D-2020	
240-230809-4	L508239-04 MW-16C	Total/NA	Water	2540D-2020	
240-230809-6	L508239-06 MWT-4	Total/NA	Water	2540D-2020	
240-230809-7	L508239-07 FIELD BLANK	Total/NA	Water	2540D-2020	
MB 240-667847/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-667847/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 667852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-5	L508239-05 MW-16D	Total/NA	Water	2540D-2020	
MB 240-667852/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-667852/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 667941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-1	L508239-01 MW-4	Total/NA	Water	300.0-1993 R2.1	
240-230809-2	L508239-02 MW-16A	Total/NA	Water	300.0-1993 R2.1	
240-230809-2	L508239-02 MW-16A	Total/NA	Water	300.0-1993 R2.1	
240-230809-3	L508239-03 MW-16B	Total/NA	Water	300.0-1993 R2.1	
240-230809-4	L508239-04 MW-16C	Total/NA	Water	300.0-1993 R2.1	
240-230809-5	L508239-05 MW-16D	Total/NA	Water	300.0-1993 R2.1	
240-230809-6	L508239-06 MWT-4	Total/NA	Water	300.0-1993 R2.1	
240-230809-7	L508239-07 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
MB 240-667941/4	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-667941/5	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-230809-7 MS	L508239-07 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
240-230809-7 MSD	L508239-07 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 668279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-1	L508239-01 MW-4	Total/NA	Water	2320 B-2021	
240-230809-2	L508239-02 MW-16A	Total/NA	Water	2320 B-2021	
240-230809-3	L508239-03 MW-16B	Total/NA	Water	2320 B-2021	
240-230809-4	L508239-04 MW-16C	Total/NA	Water	2320 B-2021	
240-230809-5	L508239-05 MW-16D	Total/NA	Water	2320 B-2021	
240-230809-6	L508239-06 MWT-4	Total/NA	Water	2320 B-2021	
240-230809-7	L508239-07 FIELD BLANK	Total/NA	Water	2320 B-2021	
MB 240-668279/4	Method Blank	Total/NA	Water	2320 B-2021	
240-230809-6 DU	L508239-06 MWT-4	Total/NA	Water	2320 B-2021	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-1

Client Sample ID: L508239-01 MW-4

Lab Sample ID: 240-230809-1

Date Collected: 08/11/25 09:52
Matrix: Water
Date Received: 08/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667889	F3PF	EET CLE	08/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	668159	AJC	EET CLE	08/19/25 00:27
Total/NA	Prep	200.7			8930	RMN	EET SSM	08/15/25 17:05
Total/NA	Analysis	200.7 Rev 4.4		1	9003	JLS	EET SSM	08/19/25 19:27
Total/NA	Prep	200.7			8930	RMN	EET SSM	08/15/25 17:05
Total/NA	Analysis	200.8		1	8956	CW	EET SSM	08/18/25 13:09
Total Recoverable	Prep	200.7			667889	F3PF	EET CLE	08/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	668199	S4FJ	EET CLE	08/18/25 18:47
Total Recoverable	Prep	200.7			667889	F3PF	EET CLE	08/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	668444	RKT	EET CLE	08/19/25 17:11
Total Recoverable	Analysis	2340 B-2021		1	668432	KLC	EET CLE	08/20/25 05:13
Total/NA	Prep	245.1-1994 R3.0			667895	F3PF	EET CLE	08/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	668293	TQ6W	EET CLE	08/18/25 15:47
Total/NA	Analysis	2320 B-2021		1	668279	PQD2	EET CLE	08/18/25 12:47
Total/NA	Analysis	2540 C-2020		1	667838	VH6H	EET CLE	08/15/25 09:34
Total/NA	Analysis	2540D-2020		1	667847	AAP	EET CLE	08/15/25 09:54
Total/NA	Analysis	300.0-1993 R2.1		1	667941	JMR	EET CLE	08/15/25 18:01

Client Sample ID: L508239-02 MW-16A

Lab Sample ID: 240-230809-2

Date Collected: 08/11/25 11:38
Matrix: Water
Date Received: 08/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667889	F3PF	EET CLE	08/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	668159	AJC	EET CLE	08/19/25 00:57
Total/NA	Prep	200.7			8930	RMN	EET SSM	08/15/25 17:05
Total/NA	Analysis	200.7 Rev 4.4		1	9003	JLS	EET SSM	08/19/25 19:42
Total/NA	Prep	200.7			8930	RMN	EET SSM	08/15/25 17:05
Total/NA	Analysis	200.8		1	8956	CW	EET SSM	08/18/25 13:24
Total Recoverable	Prep	200.7			667889	F3PF	EET CLE	08/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	668199	S4FJ	EET CLE	08/18/25 19:06
Total Recoverable	Analysis	2340 B-2021		1	668432	KLC	EET CLE	08/20/25 05:13
Total/NA	Prep	245.1-1994 R3.0			667895	F3PF	EET CLE	08/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	668293	TQ6W	EET CLE	08/18/25 15:52
Total/NA	Analysis	2320 B-2021		1	668279	PQD2	EET CLE	08/18/25 12:53
Total/NA	Analysis	2540 C-2020		1	667838	VH6H	EET CLE	08/15/25 09:34
Total/NA	Analysis	2540D-2020		1	667847	AAP	EET CLE	08/15/25 09:54
Total/NA	Analysis	300.0-1993 R2.1		1	667941	JMR	EET CLE	08/15/25 18:20
Total/NA	Analysis	300.0-1993 R2.1		10	667941	JMR	EET CLE	08/15/25 18:30

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-1

Client Sample ID: L508239-03 MW-16B

Lab Sample ID: 240-230809-3

Date Collected: 08/11/25 13:06
Matrix: Water
Date Received: 08/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667889	F3PF	EET CLE	08/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	668159	AJC	EET CLE	08/19/25 01:02
Total/NA	Prep	200.7			8930	RMN	EET SSM	08/15/25 17:05
Total/NA	Analysis	200.7 Rev 4.4		1	9003	JLS	EET SSM	08/19/25 19:59
Total/NA	Prep	200.7			8930	RMN	EET SSM	08/15/25 17:05
Total/NA	Analysis	200.8		1	8956	CW	EET SSM	08/18/25 13:39
Total Recoverable	Prep	200.7			667889	F3PF	EET CLE	08/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	668199	S4FJ	EET CLE	08/18/25 19:09
Total Recoverable	Analysis	2340 B-2021		1	668432	KLC	EET CLE	08/20/25 05:13
Total/NA	Prep	245.1-1994 R3.0			667895	F3PF	EET CLE	08/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	668293	TQ6W	EET CLE	08/18/25 17:36
Total/NA	Analysis	2320 B-2021		1	668279	PQD2	EET CLE	08/18/25 13:01
Total/NA	Analysis	2540 C-2020		1	667838	VH6H	EET CLE	08/15/25 09:34
Total/NA	Analysis	2540D-2020		1	667847	AAP	EET CLE	08/15/25 09:54
Total/NA	Analysis	300.0-1993 R2.1		1	667941	JMR	EET CLE	08/15/25 18:39

Client Sample ID: L508239-04 MW-16C

Lab Sample ID: 240-230809-4

Date Collected: 08/11/25 14:22
Matrix: Water
Date Received: 08/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667889	F3PF	EET CLE	08/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	668159	AJC	EET CLE	08/19/25 01:06
Total/NA	Prep	200.7			8930	RMN	EET SSM	08/15/25 17:05
Total/NA	Analysis	200.7 Rev 4.4		1	9003	JLS	EET SSM	08/19/25 20:03
Total/NA	Prep	200.7			8930	RMN	EET SSM	08/15/25 17:05
Total/NA	Analysis	200.8		1	8956	CW	EET SSM	08/18/25 13:42
Total Recoverable	Prep	200.7			667889	F3PF	EET CLE	08/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	668199	S4FJ	EET CLE	08/18/25 19:11
Total Recoverable	Analysis	2340 B-2021		1	668432	KLC	EET CLE	08/20/25 05:13
Total/NA	Prep	245.1-1994 R3.0			667895	F3PF	EET CLE	08/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	668293	TQ6W	EET CLE	08/18/25 15:59
Total/NA	Analysis	2320 B-2021		1	668279	PQD2	EET CLE	08/18/25 13:08
Total/NA	Analysis	2540 C-2020		1	667838	VH6H	EET CLE	08/15/25 09:34
Total/NA	Analysis	2540D-2020		1	667847	AAP	EET CLE	08/15/25 09:54
Total/NA	Analysis	300.0-1993 R2.1		1	667941	JMR	EET CLE	08/15/25 18:49

Client Sample ID: L508239-05 MW-16D

Lab Sample ID: 240-230809-5

Date Collected: 08/11/25 12:25
Matrix: Water
Date Received: 08/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667889	F3PF	EET CLE	08/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	668159	AJC	EET CLE	08/19/25 01:11

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-1

Client Sample ID: L508239-05 MW-16D

Lab Sample ID: 240-230809-5

Date Collected: 08/11/25 12:25
Matrix: Water
Date Received: 08/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			8930	RMN	EET SSM	08/15/25 17:05
Total/NA	Analysis	200.7 Rev 4.4		1	9003	JLS	EET SSM	08/19/25 20:06
Total/NA	Prep	200.7			8930	RMN	EET SSM	08/15/25 17:05
Total/NA	Analysis	200.8		1	8956	CW	EET SSM	08/18/25 13:45
Total Recoverable	Prep	200.7			667889	F3PF	EET CLE	08/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	668199	S4FJ	EET CLE	08/18/25 19:14
Total Recoverable	Analysis	2340 B-2021		1	668432	KLC	EET CLE	08/20/25 05:13
Total/NA	Prep	245.1-1994 R3.0			667895	F3PF	EET CLE	08/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	668293	TQ6W	EET CLE	08/18/25 16:00
Total/NA	Analysis	2320 B-2021		1	668279	PQD2	EET CLE	08/18/25 13:13
Total/NA	Analysis	2540 C-2020		1	667838	VH6H	EET CLE	08/15/25 09:34
Total/NA	Analysis	2540D-2020		1	667852	AAP	EET CLE	08/15/25 10:24
Total/NA	Analysis	300.0-1993 R2.1		1	667941	JMR	EET CLE	08/15/25 18:59

Client Sample ID: L508239-06 MWT-4

Lab Sample ID: 240-230809-6

Date Collected: 08/11/25 09:52
Matrix: Water
Date Received: 08/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667889	F3PF	EET CLE	08/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	668159	AJC	EET CLE	08/19/25 01:15
Total/NA	Prep	200.7			8930	RMN	EET SSM	08/15/25 17:05
Total/NA	Analysis	200.7 Rev 4.4		1	9003	JLS	EET SSM	08/19/25 20:09
Total/NA	Prep	200.7			8930	RMN	EET SSM	08/15/25 17:05
Total/NA	Analysis	200.8		1	8956	CW	EET SSM	08/18/25 13:48
Total Recoverable	Prep	200.7			667889	F3PF	EET CLE	08/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	668199	S4FJ	EET CLE	08/18/25 19:17
Total Recoverable	Analysis	2340 B-2021		1	668432	KLC	EET CLE	08/20/25 05:13
Total/NA	Prep	245.1-1994 R3.0			667895	F3PF	EET CLE	08/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	668293	TQ6W	EET CLE	08/18/25 16:02
Total/NA	Analysis	2320 B-2021		1	668279	PQD2	EET CLE	08/18/25 13:19
Total/NA	Analysis	2540 C-2020		1	667838	VH6H	EET CLE	08/15/25 09:34
Total/NA	Analysis	2540D-2020		1	667847	AAP	EET CLE	08/15/25 09:54
Total/NA	Analysis	300.0-1993 R2.1		1	667941	JMR	EET CLE	08/15/25 19:09

Client Sample ID: L508239-07 FIELD BLANK

Lab Sample ID: 240-230809-7

Date Collected: 08/11/25 08:45
Matrix: Water
Date Received: 08/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			667889	F3PF	EET CLE	08/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	668159	AJC	EET CLE	08/19/25 01:19
Total/NA	Prep	200.7			8930	RMN	EET SSM	08/15/25 17:05
Total/NA	Analysis	200.7 Rev 4.4		1	9003	JLS	EET SSM	08/19/25 20:13

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-1

Client Sample ID: L508239-07 FIELD BLANK

Lab Sample ID: 240-230809-7

Date Collected: 08/11/25 08:45

Matrix: Water

Date Received: 08/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			8930	RMN	EET SSM	08/15/25 17:05
Total/NA	Analysis	200.8		1	8956	CW	EET SSM	08/18/25 13:50
Total Recoverable	Prep	200.7			667889	F3PF	EET CLE	08/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	668199	S4FJ	EET CLE	08/18/25 19:20
Total Recoverable	Prep	200.7			667889	F3PF	EET CLE	08/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	668444	RKT	EET CLE	08/19/25 17:22
Total Recoverable	Analysis	2340 B-2021		1	668432	KLC	EET CLE	08/20/25 05:13
Total/NA	Prep	245.1-1994 R3.0			667895	F3PF	EET CLE	08/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	668293	TQ6W	EET CLE	08/18/25 16:04
Total/NA	Analysis	2320 B-2021		1	668279	PQD2	EET CLE	08/18/25 13:30
Total/NA	Analysis	2540 C-2020		1	667838	VH6H	EET CLE	08/15/25 09:34
Total/NA	Analysis	2540D-2020		1	667847	AAP	EET CLE	08/15/25 09:54
Total/NA	Analysis	300.0-1993 R2.1		1	667941	JMR	EET CLE	08/15/25 19:28

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-1

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-08-26
Florida	NELAP	E87575	06-30-26
Louisiana (All)	NELAP	03073	07-01-26
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-26
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167-008	07-08-26
US Fish & Wildlife	US Federal Programs	A20571	06-30-26
USDA	US Federal Programs	525-23-4-22573	01-24-28
Washington	State	C788-23a	07-13-26
Wisconsin	State	399133460	08-31-26

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☐

Client Contact Info

Name: Jennifer Caporale

Address : 1110 South Pennsylvania

Address 2:

City, State Zip: Lansing, Michigan 48901

Phone: 517-702-6482

Email: Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company: Lansing Board of Water & Light

Purchase Order: Purchase Order not required

Work Order:

Requested TAT:

Project Number: 24034575

Sample State: MI

Project Manager: Howell, Leslie

Project Reference:

Sampler: Marc Wahrer and Julie Maltby

Description: Erickson

Site Name: Erickson Projects

Special Instructions:

Need Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project. Please split off Radium so we can get the other results sooner.

Methods and Bottles

240-230809 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	300.0_28D (MOD) All Anions [ANY]	200.8_CWA/200.8_P_TOT (MOD) Iron & Zinc [M02]	245.1/245.1_Prep Mercury [MER]	2540C_Calcd Total Dissolved Solids [TDS]	SM2340B/Auto_TotalRec Total Hardness (as CaCO3) by calculation [HAR]	903.0/PrecSep_21 Standard Target List [STD]	200.8/200.8_P_TR (MOD) 1 element, including prep [C01]	200.7/200.7_P_TR (MOD) 1 element, including prep [C01]	904.0/PrecSep_0 Standard Target List [STD]	Ra226_228GFPC_P Local Method [160]	2540D Solids, Total Suspended (TSS) [TSS]	2320B (MOD) Any Analyte [ANY]			Plastic 1 liter - unpreserved	Plastic 250ml - with Nitric Acid	Plastic 1 liter - Nitric Acid	Plastic 500ml - unpreserved	Plastic 500ml - with Nitric Acid	Plastic 60 mL - unpreserved	Total Bottles For Sample
1	L508239-01 MW-4	Grab	Water	08/11/25 09:52				X	X	X	X	X	X	X	X	X	X	X	X			1	1	2	1	1	2	8
2	L508239-02 MW-16A	Grab	Water	08/11/25 11:38				X	X	X	X	X	X	X	X	X	X	X	X			1	1	2	1	1	2	8
3	L508239-03 MW-16B	Grab	Water	08/11/25 13:06				X	X	X	X	X	X	X	X	X	X	X	X			1	1	2	1	1	2	8
4	L508239-04 MW-16C	Grab	Water	08/11/25 14:22				X	X	X	X	X	X	X	X	X	X	X	X			1	1	2	1	1	2	8
5	L508239-05 MW-16D	Grab	Water	08/11/25 12:25				X	X	X	X	X	X	X	X	X	X	X	X			1	1	2	1	1	2	8
6	L508239-06 MWT-4	Grab	Water	08/11/25 09:52				X	X	X	X	X	X	X	X	X	X	X	X			1	1	2	1	1	2	8
7	L508239-07 Field Blank	Grab	Water	08/11/25 08:45																								0

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

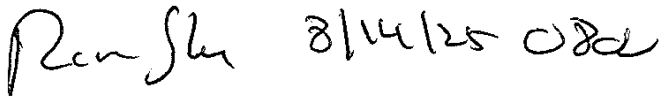
eCOC Submitted By:	Date/Time:	Samples Relinquished By:	Date/Time:	
Jennifer Caporale	08/13/25 09:42	Jennifer Caporale	08/13/25 09:42	Ron Sha 8/14/25 0820

Chain of Custody Number: 402811

*H – Analysis on hold.

Coolers								
Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250813A001								
MIC20250813A001								

Ron Shea 8/14/25 0806



Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :**_____
Barberton Facility

Client Lansing Board Site Name_____ Cooler unpacked by:

Cooler Received on 8/14/25 Opened on 8/14/25

FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other_____

Receipt After-hours Drop-off Date/Time_____ Storage Location_____

Eurofins Cooler # 5 Foam Box Client Cooler Box Other_____

Packing material used. Bubble Wrap Foam Plastic Bag None Other_____

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # _____ (CF_____°C) Observed Cooler Temp._____°C Corrected Cooler Temp _____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12 Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC463162
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving.

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved. _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen. _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: 17	09	11	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 1	06	08	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	

8/14/2025

Login Container Summary Report

240-230809

8/21/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508239-01 MW-4	240 230809-A-1	Plastic 60 mL - unpreserved				
L508239-01 MW-4	240-230809-B-1	Plastic 60 mL - unpreserved				
L508239-01 MW-4	240-230809-C-1	Plastic 250ml - with Nitric Acid	<2			
L508239-01 MW-4	240-230809-D-1	Plastic 500ml - unpreserved				
L508239-01 MW-4	240-230809-E-1	Plastic 500ml - with Nitric Acid	<2			
L508239-01 MW-4	240-230809-F-1	Plastic 1 liter - unpreserved				
L508239-01 MW-4	240-230809-G-1	Plastic 1 liter - Nitric Acid				
L508239-01 MW-4	240-230809-H-1	Plastic 1 liter - Nitric Acid				
L508239-02 MW-16A	240-230809 A-2	Plastic 60 mL - unpreserved				
L508239-02 MW-16A	240-230809-B-2	Plastic 60 mL - unpreserved				
L508239-02 MW-16A	240-230809-C-2	Plastic 250ml - with Nitric Acid	<2			
L508239-02 MW-16A	240 230809-D-2	Plastic 500ml - unpreserved				
L508239-02 MW-16A	240-230809-E-2	Plastic 500ml - with Nitric Acid	<2			
L508239-02 MW-16A	240-230809-F-2	Plastic 1 liter - unpreserved				
L508239-02 MW 16A	240-230809-G-2	Plastic 1 liter - Nitric Acid				
L508239-02 MW-16A	240-230809-H-2	Plastic 1 liter - Nitric Acid				
L508239-03 MW-16B	240-230809-A-3	Plastic 60 mL - unpreserved				
L508239-03 MW-16B	240 230809-B-3	Plastic 60 mL - unpreserved				
L508239-03 MW 16B	240 230809-C-3	Plastic 250ml - with Nitric Acid	<2			
L508239-03 MW-16B	240-230809-D-3	Plastic 500ml - unpreserved				
L508239-03 MW-16B	240-230809-E-3	Plastic 500ml - with Nitric Acid	<2			
L508239-03 MW-16B	240-230809-F-3	Plastic 1 liter - unpreserved				
L508239-03 MW 16B	240-230809-G-3	Plastic 1 liter - Nitric Acid				
L508239-03 MW-16B	240-230809-H 3	Plastic 1 liter - Nitric Acid				
L508239-04 MW-16C	240-230809-A-4	Plastic 60 mL - unpreserved				
L508239-04 MW-16C	240-230809 B-4	Plastic 60 mL - unpreserved				
L508239-04 MW 16C	240 230809-C-4	Plastic 250ml - with Nitric Acid	<2			
L508239-04 MW-16C	240 230809-D-4	Plastic 500ml - unpreserved				
L508239-04 MW-16C	240-230809-E-4	Plastic 500ml - with Nitric Acid	<2			
L508239-04 MW-16C	240-230809-F-4	Plastic 1 liter unpreserved				
L508239-04 MW-16C	240-230809-G-4	Plastic 1 liter - Nitric Acid				
L508239-04 MW-16C	240-230809-H-4	Plastic 1 liter - Nitric Acid				
L508239-05 MW-16D	240-230809-A-5	Plastic 60 mL - unpreserved				
L508239-05 MW-16D	240 230809-B-5	Plastic 60 mL unpreserved				
L508239-05 MW 16D	240-230809-C-5	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508239-05 MW-16D	240-230809-D-5	Plastic 500ml - unpreserved				
L508239-05 MW-16D	240-230809-E-5	Plastic 500ml - with Nitric Acid	<2			
L508239-05 MW-16D	240-230809-F-5	Plastic 1 liter - unpreserved				
L508239-05 MW-16D	240-230809-G-5	Plastic 1 liter - Nitric Acid				
L508239-05 MW-16D	240-230809-H-5	Plastic 1 liter - Nitric Acid				
L508239-06 MWT-4	240-230809-A-6	Plastic 60 mL - unpreserved				
L508239-06 MWT-4	240-230809-B-6	Plastic 60 mL - unpreserved				
L508239-06 MWT-4	240-230809-C-6	Plastic 250ml - with Nitric Acid	<2			
L508239-06 MWT-4	240-230809-D-6	Plastic 500ml - unpreserved				
L508239-06 MWT-4	240-230809 E-6	Plastic 500ml - with Nitric Acid	<2			
L508239-06 MWT-4	240-230809-F-6	Plastic 1 liter - unpreserved				
L508239-06 MWT-4	240-230809-G-6	Plastic 1 liter - Nitric Acid				
L508239-06 MWT-4	240-230809-H-6	Plastic 1 liter - Nitric Acid				
L508239-07 FIELD BLANK	240-230809-A 7	Plastic 60 mL - unpreserved				
L508239-07 FIELD BLANK	240-230809-B-7	Plastic 60 mL - unpreserved				
L508239-07 FIELD BLANK	240-230809-C-7	Plastic 250ml - with Nitric Acid	<2			
L508239-07 FIELD BLANK	240-230809-D-7	Plastic 500ml - unpreserved				
L508239-07 FIELD BLANK	240-230809-E-7	Plastic 500ml - with Nitric Acid	<2			
L508239-07 FIELD BLANK	240-230809-F-7	Plastic 1 liter - unpreserved				
L508239-07 FIELD BLANK	240-230809-G-7	Plastic 1 liter - Nitric Acid				
L508239-07 FIELD BLANK	240-230809-H-7	Plastic 1 liter - Nitric Acid				

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-206460.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-230809-1
Address: 5755 8th Street East, ,	Due Date Requested: 8/27/2025			
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Therm. ID: SC02 Cust. Seal: Q / N
Uncorr./Corr. Temp: 21.6/21.8 °C
Delivery: UPS / FedEx / Other:
Ice Type: Blue / Dry / Wet / None
Label Ver.: 12 Packing: B

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT(MOD) Iron & Zinc	200.7_CWA/200.7_P_TOT(MOD) Iron & Zinc	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
L508239-01 MW-4 (240-230809-1)	8/11/25	09:52 Eastern	G	Water			X	X	1	
L508239-02 MW-16A (240-230809-2)	8/11/25	11:38 Eastern	G	Water			X	X	1	
L508239-03 MW-16B (240-230809-3)	8/11/25	13:06 Eastern	G	Water			X	X	1	
L508239-04 MW-16C (240-230809-4)	8/11/25	14:22 Eastern	G	Water			X	X	1	
L508239-05 MW-16D (240-230809-5)	8/11/25	12:25 Eastern	G	Water			X	X	1	
L508239-06 MWT-4 (240-230809-6)	8/11/25	09:52 Eastern	G	Water			X	X	1	
L508239-07 FIELD BLANK (240-230809-7)	8/11/25	08:45 Eastern	G	Water			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification: Unconfirmed 4616 0295 1755	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JLM	8/14/25	EC		8/15/25 9:45	EBN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-230809-1

Login Number: 230809
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 08/15/25 01:01 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 9/10/2025 10:13:06 AM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-230809-2

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

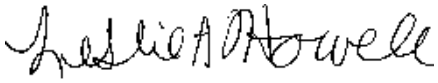
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
9/10/2025 10:13:06 AM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 9
Tracer Carrier Summary 16
QC Sample Results 17
QC Association Summary 18
Lab Chronicle 19
Certification Summary 21
Chain of Custody 22
Receipt Checklists 30

Definitions/Glossary

Client: Lansing Board of Water & Light
Job ID: 240-230809-2
Project/Site: Erickson Projects

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-230809-2 — Eurofins Cleveland

Job Narrative
240-230809-2

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 8/14/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.8°C and 1.1°C.

Gas Flow Proportional Counter
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-230809-1	L508239-01 MW-4	Water	08/11/25 09:52	08/14/25 08:00	Michigan
240-230809-2	L508239-02 MW-16A	Water	08/11/25 11:38	08/14/25 08:00	Michigan
240-230809-3	L508239-03 MW-16B	Water	08/11/25 13:06	08/14/25 08:00	Michigan
240-230809-4	L508239-04 MW-16C	Water	08/11/25 14:22	08/14/25 08:00	Michigan
240-230809-5	L508239-05 MW-16D	Water	08/11/25 12:25	08/14/25 08:00	Michigan
240-230809-6	L508239-06 MWT-4	Water	08/11/25 09:52	08/14/25 08:00	Michigan
240-230809-7	L508239-07 FIELD BLANK	Water	08/11/25 08:45	08/14/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-2

Client Sample ID: L508239-01 MW-4 — **Lab Sample ID: 240-230809-1**

No Detections.

Client Sample ID: L508239-02 MW-16A — **Lab Sample ID: 240-230809-2**

No Detections.

Client Sample ID: L508239-03 MW-16B — **Lab Sample ID: 240-230809-3**

No Detections.

Client Sample ID: L508239-04 MW-16C — **Lab Sample ID: 240-230809-4**

No Detections.

Client Sample ID: L508239-05 MW-16D — **Lab Sample ID: 240-230809-5**

No Detections.

Client Sample ID: L508239-06 MWT-4 — **Lab Sample ID: 240-230809-6**

No Detections.

Client Sample ID: L508239-07 FIELD BLANK — **Lab Sample ID: 240-230809-7**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-2

Client Sample ID: L508239-01 MW-4

Date Collected: 08/11/25 09:52
Date Received: 08/14/25 08:00

Lab Sample ID: 240-230809-1

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.279	U	0.253	0.254	1.00	0.390	pCi/L	08/18/25 08:00	09/09/25 17:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.5*		*30 - 110*	*08/18/25 08:00*	*09/09/25 17:29*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.841**		0.402	0.410	1.00	0.542	pCi/L	08/18/25 08:08	09/09/25 11:43	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.5*		*30 - 110*	*08/18/25 08:08*	*09/09/25 11:43*	*1*
Y Carrier	*80.0*		*30 - 110*	*08/18/25 08:08*	*09/09/25 11:43*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.12**		0.475	0.482	5.00	0.542	pCi/L		09/09/25 16:10	1

Client Sample ID: L508239-02 MW-16A
Date Collected: 08/11/25 11:38
Date Received: 08/14/25 08:00

Lab Sample ID: 240-230809-2
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.224	U	0.240	0.241	1.00	0.386	pCi/L	08/18/25 08:00	09/09/25 17:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*08/18/25 08:00*	*09/09/25 17:29*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.763**		0.390	0.396	1.00	0.543	pCi/L	08/18/25 08:08	09/09/25 11:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*08/18/25 08:08*	*09/09/25 11:44*	*1*
Y Carrier	*80.7*		*30 - 110*	*08/18/25 08:08*	*09/09/25 11:44*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.987**		0.458	0.464	5.00	0.543	pCi/L		09/09/25 16:10	1

Client Sample ID: L508239-03 MW-16B
Date Collected: 08/11/25 13:06
Date Received: 08/14/25 08:00

Lab Sample ID: 240-230809-3
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.485		0.297	0.300	1.00	0.411	pCi/L	08/18/25 08:00	09/09/25 17:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.8*		*30 - 110*	*08/18/25 08:00*	*09/09/25 17:29*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.818		0.417	0.424	1.00	0.583	pCi/L	08/18/25 08:08	09/09/25 11:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.8*		*30 - 110*	*08/18/25 08:08*	*09/09/25 11:44*	*1*
Y Carrier	*77.4*		*30 - 110*	*08/18/25 08:08*	*09/09/25 11:44*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.30		0.512	0.519	5.00	0.583	pCi/L		09/09/25 16:10	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-2

Client Sample ID: L508239-04 MW-16C
Date Collected: 08/11/25 14:22
Date Received: 08/14/25 08:00

Lab Sample ID: 240-230809-4
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.226	U	0.224	0.225	1.00	0.350	pCi/L	08/18/25 08:00	09/09/25 17:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.6*		*30 - 110*	*08/18/25 08:00*	*09/09/25 17:29*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.162	U	0.348	0.349	1.00	0.607	pCi/L	08/18/25 08:08	09/09/25 11:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.6*		*30 - 110*	*08/18/25 08:08*	*09/09/25 11:44*	*1*
Y Carrier	*78.1*		*30 - 110*	*08/18/25 08:08*	*09/09/25 11:44*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.388	U	0.414	0.415	5.00	0.607	pCi/L		09/09/25 16:10	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-2

Client Sample ID: L508239-05 MW-16D
Date Collected: 08/11/25 12:25
Date Received: 08/14/25 08:00

Lab Sample ID: 240-230809-5
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.189	U	0.236	0.237	1.00	0.390	pCi/L	08/18/25 08:00	09/09/25 17:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.6*		*30 - 110*	*08/18/25 08:00*	*09/09/25 17:29*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.456	U	0.409	0.411	1.00	0.644	pCi/L	08/18/25 08:08	09/09/25 11:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.6*		*30 - 110*	*08/18/25 08:08*	*09/09/25 11:44*	*1*
Y Carrier	*78.1*		*30 - 110*	*08/18/25 08:08*	*09/09/25 11:44*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.645**		0.472	0.474	5.00	0.644	pCi/L		09/09/25 16:10	1

Client Sample ID: L508239-06 MWT-4
Date Collected: 08/11/25 09:52
Date Received: 08/14/25 08:00

Lab Sample ID: 240-230809-6
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.158	U	0.191	0.192	1.00	0.314	pCi/L	08/18/25 08:00	09/09/25 17:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*08/18/25 08:00*	*09/09/25 17:29*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.524**		0.333	0.337	1.00	0.483	pCi/L	08/18/25 08:08	09/09/25 11:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*08/18/25 08:08*	*09/09/25 11:44*	*1*
Y Carrier	*80.7*		*30 - 110*	*08/18/25 08:08*	*09/09/25 11:44*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.682**		0.384	0.388	5.00	0.483	pCi/L		09/09/25 16:10	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-2

Client Sample ID: L508239-07 FIELD BLANK

Lab Sample ID: 240-230809-7

Date Collected: 08/11/25 08:45

Matrix: Water

Date Received: 08/14/25 08:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0780	U	0.121	0.121	1.00	0.311	pCi/L	08/18/25 08:00	09/09/25 17:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*30 - 110*	*08/18/25 08:00*	*09/09/25 17:29*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.209	U	0.367	0.367	1.00	0.628	pCi/L	08/18/25 08:08	09/09/25 11:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*30 - 110*	*08/18/25 08:08*	*09/09/25 11:44*	*1*
Y Carrier	*79.3*		*30 - 110*	*08/18/25 08:08*	*09/09/25 11:44*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.209	U	0.386	0.386	5.00	0.628	pCi/L		09/09/25 16:10	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-230809-1	L508239-01 MW-4	88.5
240-230809-2	L508239-02 MW-16A	88.8
240-230809-3	L508239-03 MW-16B	87.8
240-230809-4	L508239-04 MW-16C	83.6
240-230809-5	L508239-05 MW-16D	73.6
240-230809-6	L508239-06 MWT-4	88.8
240-230809-7	L508239-07 FIELD BLANK	88.3
LCS 160-732413/2-A	Lab Control Sample	83.9
MB 160-732413/1-A	Method Blank	90.0

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
		Ba	Y
Lab Sample ID	Client Sample ID	(30-110)	(30-110)
240-230809-1	L508239-01 MW-4	88.5	80.0
240-230809-2	L508239-02 MW-16A	88.8	80.7
240-230809-3	L508239-03 MW-16B	87.8	77.4
240-230809-4	L508239-04 MW-16C	83.6	78.1
240-230809-5	L508239-05 MW-16D	73.6	78.1
240-230809-6	L508239-06 MWT-4	88.8	80.7
240-230809-7	L508239-07 FIELD BLANK	88.3	79.3
LCS 160-732414/2-A	Lab Control Sample	83.9	80.7
MB 160-732414/1-A	Method Blank	90.0	78.5

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-732413/1-A
Matrix: Water
Analysis Batch: 735288

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 732413

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.01388	U	0.161	0.161	1.00	0.327	pCi/L	08/18/25 08:00	09/09/25 15:05	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*30 - 110*	*08/18/25 08:00*	*09/09/25 15:05*	*1*

Lab Sample ID: LCS 160-732413/2-A
Matrix: Water
Analysis Batch: 735288

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 732413

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.57	8.808		1.24	1.00	0.353	pCi/L	92	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*83.9*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-732414/1-A
Matrix: Water
Analysis Batch: 735313

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 732414

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5181	U	0.382	0.385	1.00	0.586	pCi/L	08/18/25 08:08	09/09/25 11:42	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*30 - 110*	*08/18/25 08:08*	*09/09/25 11:42*	*1*
Y Carrier	*78.5*		*30 - 110*	*08/18/25 08:08*	*09/09/25 11:42*	*1*

Lab Sample ID: LCS 160-732414/2-A
Matrix: Water
Analysis Batch: 735312

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 732414

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.09	11.35		1.51	1.00	0.603	pCi/L	125	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*83.9*		*30 - 110*
Y Carrier	*80.7*		*30 - 110*

QC Association Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-2

Rad

Prep Batch: 732413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-1	L508239-01 MW-4	Total/NA	Water	PrecSep-21	
240-230809-2	L508239-02 MW-16A	Total/NA	Water	PrecSep-21	
240-230809-3	L508239-03 MW-16B	Total/NA	Water	PrecSep-21	
240-230809-4	L508239-04 MW-16C	Total/NA	Water	PrecSep-21	
240-230809-5	L508239-05 MW-16D	Total/NA	Water	PrecSep-21	
240-230809-6	L508239-06 MWT-4	Total/NA	Water	PrecSep-21	
240-230809-7	L508239-07 FIELD BLANK	Total/NA	Water	PrecSep-21	
MB 160-732413/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-732413/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 732414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-230809-1	L508239-01 MW-4	Total/NA	Water	PrecSep_0	
240-230809-2	L508239-02 MW-16A	Total/NA	Water	PrecSep_0	
240-230809-3	L508239-03 MW-16B	Total/NA	Water	PrecSep_0	
240-230809-4	L508239-04 MW-16C	Total/NA	Water	PrecSep_0	
240-230809-5	L508239-05 MW-16D	Total/NA	Water	PrecSep_0	
240-230809-6	L508239-06 MWT-4	Total/NA	Water	PrecSep_0	
240-230809-7	L508239-07 FIELD BLANK	Total/NA	Water	PrecSep_0	
MB 160-732414/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-732414/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-2

Client Sample ID: L508239-01 MW-4

Lab Sample ID: 240-230809-1

Date Collected: 08/11/25 09:52
Matrix: Water
Date Received: 08/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			732413	JTR	EET SL	08/18/25 08:00
Total/NA	Analysis	903.0		1	735312	FLC	EET SL	09/09/25 17:29
Total/NA	Prep	PrecSep_0			732414	JTR	EET SL	08/18/25 08:08
Total/NA	Analysis	904.0		1	735313	FLC	EET SL	09/09/25 11:43
Total/NA	Analysis	Ra226_Ra228 Pos		1	735340	SCB	EET SL	09/09/25 16:10

Client Sample ID: L508239-02 MW-16A

Lab Sample ID: 240-230809-2

Date Collected: 08/11/25 11:38
Matrix: Water
Date Received: 08/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			732413	JTR	EET SL	08/18/25 08:00
Total/NA	Analysis	903.0		1	735312	FLC	EET SL	09/09/25 17:29
Total/NA	Prep	PrecSep_0			732414	JTR	EET SL	08/18/25 08:08
Total/NA	Analysis	904.0		1	735313	FLC	EET SL	09/09/25 11:44
Total/NA	Analysis	Ra226_Ra228 Pos		1	735340	SCB	EET SL	09/09/25 16:10

Client Sample ID: L508239-03 MW-16B

Lab Sample ID: 240-230809-3

Date Collected: 08/11/25 13:06
Matrix: Water
Date Received: 08/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			732413	JTR	EET SL	08/18/25 08:00
Total/NA	Analysis	903.0		1	735312	FLC	EET SL	09/09/25 17:29
Total/NA	Prep	PrecSep_0			732414	JTR	EET SL	08/18/25 08:08
Total/NA	Analysis	904.0		1	735313	FLC	EET SL	09/09/25 11:44
Total/NA	Analysis	Ra226_Ra228 Pos		1	735340	SCB	EET SL	09/09/25 16:10

Client Sample ID: L508239-04 MW-16C

Lab Sample ID: 240-230809-4

Date Collected: 08/11/25 14:22
Matrix: Water
Date Received: 08/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			732413	JTR	EET SL	08/18/25 08:00
Total/NA	Analysis	903.0		1	735312	FLC	EET SL	09/09/25 17:29
Total/NA	Prep	PrecSep_0			732414	JTR	EET SL	08/18/25 08:08
Total/NA	Analysis	904.0		1	735313	FLC	EET SL	09/09/25 11:44
Total/NA	Analysis	Ra226_Ra228 Pos		1	735340	SCB	EET SL	09/09/25 16:10

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-2

Client Sample ID: L508239-05 MW-16D

Lab Sample ID: 240-230809-5

Date Collected: 08/11/25 12:25
Matrix: Water
Date Received: 08/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			732413	JTR	EET SL	08/18/25 08:00
Total/NA	Analysis	903.0		1	735312	FLC	EET SL	09/09/25 17:29
Total/NA	Prep	PrecSep_0			732414	JTR	EET SL	08/18/25 08:08
Total/NA	Analysis	904.0		1	735313	FLC	EET SL	09/09/25 11:44
Total/NA	Analysis	Ra226_Ra228 Pos		1	735340	SCB	EET SL	09/09/25 16:10

Client Sample ID: L508239-06 MWT-4

Lab Sample ID: 240-230809-6

Date Collected: 08/11/25 09:52
Matrix: Water
Date Received: 08/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			732413	JTR	EET SL	08/18/25 08:00
Total/NA	Analysis	903.0		1	735312	FLC	EET SL	09/09/25 17:29
Total/NA	Prep	PrecSep_0			732414	JTR	EET SL	08/18/25 08:08
Total/NA	Analysis	904.0		1	735313	FLC	EET SL	09/09/25 11:44
Total/NA	Analysis	Ra226_Ra228 Pos		1	735340	SCB	EET SL	09/09/25 16:10

Client Sample ID: L508239-07 FIELD BLANK

Lab Sample ID: 240-230809-7

Date Collected: 08/11/25 08:45
Matrix: Water
Date Received: 08/14/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			732413	JTR	EET SL	08/18/25 08:00
Total/NA	Analysis	903.0		1	735312	FLC	EET SL	09/09/25 17:29
Total/NA	Prep	PrecSep_0			732414	JTR	EET SL	08/18/25 08:08
Total/NA	Analysis	904.0		1	735313	FLC	EET SL	09/09/25 11:44
Total/NA	Analysis	Ra226_Ra228 Pos		1	735340	SCB	EET SL	09/09/25 16:10

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-230809-2

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25 *
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25 *
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-30-25 *
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☐

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:

Project Number:
24034575

Sample State: MI

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
Marc Wahrer and Julie Maltby

Description:
Erickson

Site Name:
Erickson Projects

Special Instructions:
Need Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project. Please split off Radium so we can get the other results sooner.

Methods and Bottles

240-230809 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	300.0_28D (MOD) All Anions [ANY]	200.8_CWA/200.8_P_TOT (MOD) Iron & Zinc [M02]	245.1/245.1_Prep Mercury [MER]	2540C_Calcd Total Dissolved Solids [TDS]	SM2340B/Auto_TotalRec Total Hardness (as CaCO3) by calculation [HAR]	903.0/PrecSep_21 Standard Target List [STD]	200.8/200.8_P_TR (MOD) 1 element, including prep [C01]	200.7/200.7_P_TR (MOD) 1 element, including prep [C01]	904.0/PrecSep_0 Standard Target List [STD]	Ra226_228GFPC_P Local Method [160]	2540D Solids, Total Suspended (TSS) [TSS]	2320B (MOD) Any Analyte [ANY]			Plastic 1 liter - unpreserved	Plastic 250ml - with Nitric Acid	Plastic 1 liter - Nitric Acid	Plastic 500ml - unpreserved	Plastic 500ml - with Nitric Acid	Plastic 60 mL - unpreserved	Total Bottles For Sample
1	L508239-01 MW-4	Grab	Water	08/11/25 09:52				X	X	X	X	X	X	X	X	X	X	X	X			1	1	2	1	1	2	8
2	L508239-02 MW-16A	Grab	Water	08/11/25 11:38				X	X	X	X	X	X	X	X	X	X	X	X			1	1	2	1	1	2	8
3	L508239-03 MW-16B	Grab	Water	08/11/25 13:06				X	X	X	X	X	X	X	X	X	X	X	X			1	1	2	1	1	2	8
4	L508239-04 MW-16C	Grab	Water	08/11/25 14:22				X	X	X	X	X	X	X	X	X	X	X	X			1	1	2	1	1	2	8
5	L508239-05 MW-16D	Grab	Water	08/11/25 12:25				X	X	X	X	X	X	X	X	X	X	X	X			1	1	2	1	1	2	8
6	L508239-06 MWT-4	Grab	Water	08/11/25 09:52				X	X	X	X	X	X	X	X	X	X	X	X			1	1	2	1	1	2	8
7	L508239-07 Field Blank	Grab	Water	08/11/25 08:45																								0

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished By:	Date/Time:	
Jennifer Caporale	08/13/25 09:42	Jennifer Caporale	08/13/25 09:42	Ron Sha 8/14/25 0820

Chain of Custody Number: 402811

*H – Analysis on hold.

Page 1 of 3

Coolers								
Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250813A001								
MIC20250813A001								

Ron Shea 8/14/25 0806

8/14/25 0820

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :**_____
Barberton Facility

Client Lansing Board of Water & Light Site Name_____ Cooler unpacked by:

Cooler Received on 8/14/25 Opened on 8/14/25

FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other_____

Receipt After-hours Drop-off Date/Time_____ Storage Location_____

Eurofins Cooler # 5C Foam Box Client Cooler Box Other_____

Packing material used. Bubble Wrap Foam Plastic Bag None Other_____

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # _____ (CF_____°C) Observed Cooler Temp._____°C Corrected Cooler Temp _____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12 Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC463162
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving.

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved. _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen. _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: 17	09	11	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 1	06	08	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	

8/14/2025

Login Container Summary Report

240-230809

9/10/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508239-01 MW-4	240 230809-A-1	Plastic 60 mL - unpreserved				
L508239-01 MW-4	240-230809-B-1	Plastic 60 mL - unpreserved				
L508239-01 MW-4	240-230809-C-1	Plastic 250ml - with Nitric Acid	<2			
L508239-01 MW-4	240-230809-D-1	Plastic 500ml - unpreserved				
L508239-01 MW-4	240-230809-E-1	Plastic 500ml - with Nitric Acid	<2			
L508239-01 MW-4	240-230809-F-1	Plastic 1 liter - unpreserved				
L508239-01 MW-4	240-230809-G-1	Plastic 1 liter - Nitric Acid				
L508239-01 MW-4	240-230809-H-1	Plastic 1 liter - Nitric Acid				
L508239-02 MW-16A	240-230809 A-2	Plastic 60 mL - unpreserved				
L508239-02 MW-16A	240-230809-B-2	Plastic 60 mL - unpreserved				
L508239-02 MW-16A	240-230809-C-2	Plastic 250ml - with Nitric Acid	<2			
L508239-02 MW-16A	240 230809-D-2	Plastic 500ml - unpreserved				
L508239-02 MW-16A	240-230809-E-2	Plastic 500ml - with Nitric Acid	<2			
L508239-02 MW-16A	240-230809-F-2	Plastic 1 liter - unpreserved				
L508239-02 MW 16A	240-230809-G-2	Plastic 1 liter - Nitric Acid				
L508239-02 MW-16A	240-230809-H-2	Plastic 1 liter - Nitric Acid				
L508239-03 MW-16B	240-230809-A-3	Plastic 60 mL - unpreserved				
L508239-03 MW-16B	240 230809-B-3	Plastic 60 mL - unpreserved				
L508239-03 MW 16B	240 230809-C-3	Plastic 250ml - with Nitric Acid	<2			
L508239-03 MW-16B	240-230809-D-3	Plastic 500ml - unpreserved				
L508239-03 MW-16B	240-230809-E-3	Plastic 500ml - with Nitric Acid	<2			
L508239-03 MW-16B	240-230809-F-3	Plastic 1 liter - unpreserved				
L508239-03 MW 16B	240-230809-G-3	Plastic 1 liter - Nitric Acid				
L508239-03 MW-16B	240-230809-H 3	Plastic 1 liter - Nitric Acid				
L508239-04 MW-16C	240-230809-A-4	Plastic 60 mL - unpreserved				
L508239-04 MW-16C	240-230809 B-4	Plastic 60 mL - unpreserved				
L508239-04 MW 16C	240 230809-C-4	Plastic 250ml - with Nitric Acid	<2			
L508239-04 MW-16C	240 230809-D-4	Plastic 500ml - unpreserved				
L508239-04 MW-16C	240-230809-E-4	Plastic 500ml - with Nitric Acid	<2			
L508239-04 MW-16C	240-230809-F-4	Plastic 1 liter unpreserved				
L508239-04 MW-16C	240-230809-G-4	Plastic 1 liter - Nitric Acid				
L508239-04 MW-16C	240-230809-H-4	Plastic 1 liter - Nitric Acid				
L508239-05 MW-16D	240-230809-A-5	Plastic 60 mL - unpreserved				
L508239-05 MW-16D	240 230809-B-5	Plastic 60 mL unpreserved				
L508239-05 MW 16D	240-230809-C-5	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508239-05 MW-16D	240-230809-D-5	Plastic 500ml - unpreserved				
L508239-05 MW-16D	240-230809-E-5	Plastic 500ml - with Nitric Acid	<2			
L508239-05 MW-16D	240-230809-F-5	Plastic 1 liter - unpreserved				
L508239-05 MW-16D	240-230809-G-5	Plastic 1 liter - Nitric Acid				
L508239-05 MW-16D	240-230809-H-5	Plastic 1 liter - Nitric Acid				
L508239-06 MWT-4	240-230809-A-6	Plastic 60 mL - unpreserved				
L508239-06 MWT-4	240-230809-B-6	Plastic 60 mL - unpreserved				
L508239-06 MWT-4	240-230809-C-6	Plastic 250ml - with Nitric Acid	<2			
L508239-06 MWT-4	240-230809-D-6	Plastic 500ml - unpreserved				
L508239-06 MWT-4	240-230809 E-6	Plastic 500ml - with Nitric Acid	<2			
L508239-06 MWT-4	240-230809-F-6	Plastic 1 liter - unpreserved				
L508239-06 MWT-4	240-230809-G-6	Plastic 1 liter - Nitric Acid				
L508239-06 MWT-4	240-230809-H-6	Plastic 1 liter - Nitric Acid				
L508239-07 FIELD BLANK	240-230809-A 7	Plastic 60 mL - unpreserved				
L508239-07 FIELD BLANK	240-230809-B-7	Plastic 60 mL - unpreserved				
L508239-07 FIELD BLANK	240-230809-C-7	Plastic 250ml - with Nitric Acid	<2			
L508239-07 FIELD BLANK	240-230809-D-7	Plastic 500ml - unpreserved				
L508239-07 FIELD BLANK	240-230809-E-7	Plastic 500ml - with Nitric Acid	<2			
L508239-07 FIELD BLANK	240-230809-F-7	Plastic 1 liter - unpreserved				
L508239-07 FIELD BLANK	240-230809-G-7	Plastic 1 liter - Nitric Acid				
L508239-07 FIELD BLANK	240-230809-H-7	Plastic 1 liter - Nitric Acid				

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-206447.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-230809-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 8/27/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21Standard Target List	904.0/PrecSep_0Standard Target List	Ra226_228GFPC_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L508239-02 MW-16A (240-230809-2)	8/11/25	11:38 Eastern	G	Water			X	X	X	2	
L508239-03 MW-16B (240-230809-3)	8/11/25	13:06 Eastern	G	Water			X	X	X	2	
L508239-04 MW-16C (240-230809-4)	8/11/25	14:22 Eastern	G	Water			X	X	X	2	
L508239-05 MW-16D (240-230809-5)	8/11/25	12:25 Eastern	G	Water			X	X	X	2	
L508239-06 MWT-4 (240-230809-6)	8/11/25	09:52 Eastern	G	Water			X	X	X	2	
L508239-07 FIELD BLANK (240-230809-7)	8/11/25	08:45 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: JLM	8/14/25	EC			
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-230809-2

Login Number: 230809
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 08/15/25 12:25 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 9/5/2025 9:13:03 PM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-231817-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

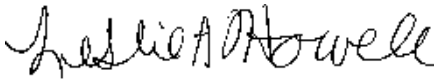
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
9/5/2025 9:13:03 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 11
QC Sample Results 23
QC Association Summary 28
Lab Chronicle 31
Certification Summary 34
Chain of Custody 35
Receipt Checklists 45

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-1

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-231817-1 — Eurofins Cleveland

Job Narrative
240-231817-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 8/28/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.5°C and 2.4°C.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 2540D: Insufficient sample volume was available to perform a sample duplicate (DUP) associated with analytical batch 240-669866.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.7 Rev 4.4	Metals (ICP)	EPA	EET SSM
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.7	Preparation, Total Metals	EPA	EET SSM
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-231817-1	L508287-01 MW-19A	Water	08/26/25 07:27	08/28/25 08:00	Michigan
240-231817-2	L508287-02 MW-19B	Water	08/26/25 09:12	08/28/25 08:00	Michigan
240-231817-3	L508287-03 MW-19C	Water	08/26/25 10:32	08/28/25 08:00	Michigan
240-231817-4	L508287-04 MW-19D	Water	08/26/25 08:13	08/28/25 08:00	Michigan
240-231817-5	L508287-05 MWT-19A	Water	08/26/25 07:27	08/28/25 08:00	Michigan
240-231817-6	L508287-06 FIELD BLANK	Water	08/26/25 06:40	08/28/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-1

Client Sample ID: L508287-01 MW-19A — Lab Sample ID: 240-231817-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.24		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	1.7	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	38		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0050		0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.088		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.00013	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00010	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0028	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.012		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Antimony	0.00076	J	0.0020	0.00057	mg/L	1		200.8-1994 R5.4	Total Recoverable
Thallium	0.00051	J	0.0010	0.00051	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	190		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	61		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.013		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	5.3	F1	0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	720		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	390		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	970		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	8.9		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	120		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.19		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	230		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L508287-02 MW-19B — Lab Sample ID: 240-231817-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.50		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	2.9	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	32		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0034	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.051		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0021	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.014		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	170		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	61		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.016		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508287-02 MW-19B (Continued) — Lab Sample ID: 240-231817-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	2.0		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	680		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	390		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	940		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	4.7		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	67		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.26		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	290		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L508287-03 MW-19C — Lab Sample ID: 240-231817-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.6		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	4.7		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	29		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.00080	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.035		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	60		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	20		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.028		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.53		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	230		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	320		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	310		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	2.3	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	2.5		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.41		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	1.5		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508287-04 MW-19D — Lab Sample ID: 240-231817-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.55		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	5.0		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	30		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.049		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Copper	0.014		0.0020	0.0017	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0019	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lead	0.0039		0.0010	0.00045	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	64		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	22		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-1

Client Sample ID: L508287-04 MW-19D (Continued) — Lab Sample ID: 240-231817-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.025		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.32		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	250		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	310		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	300		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.80	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	1.3		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.42		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	11		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L508287-05 MWT-19A — Lab Sample ID: 240-231817-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.25		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	1.8	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	41		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0037	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.080		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0019	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.010		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	170		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	55		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.011		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	5.5		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	650		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	390		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	940		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	9.5		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	120		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.17		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	230		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L508287-06 FIELD BLANK — Lab Sample ID: 240-231817-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: L508287-01 MW-19A
Date Collected: 08/26/25 07:27
Date Received: 08/28/25 08:00

Lab Sample ID: 240-231817-1
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.24		0.10	0.057	mg/L		08/29/25 14:00	09/02/25 17:32	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	1.7	J	3.3	0.17	mg/L		08/29/25 16:07	09/02/25 16:00	1
Na	38		0.60	0.33	mg/L		08/29/25 16:07	09/02/25 16:00	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/29/25 14:00	09/02/25 12:16	1
Arsenic	0.0050		0.0050	0.00075	mg/L		08/29/25 14:00	09/02/25 12:16	1
Barium	0.088		0.0050	0.00077	mg/L		08/29/25 14:00	09/02/25 12:16	1
Beryllium	ND		0.0010	0.00027	mg/L		08/29/25 14:00	09/02/25 12:16	1
Cadmium	0.00013	J	0.0010	0.000077	mg/L		08/29/25 14:00	09/02/25 12:16	1
Cobalt	0.00010	J	0.0010	0.000086	mg/L		08/29/25 14:00	09/02/25 12:16	1
Chromium	ND		0.0050	0.0012	mg/L		08/29/25 14:00	09/02/25 12:16	1
Copper	ND		0.0020	0.0017	mg/L		08/29/25 14:00	09/02/25 12:16	1
Molybdenum	0.0028	J	0.0050	0.0011	mg/L		08/29/25 14:00	09/02/25 12:16	1
Nickel	0.012		0.0020	0.0015	mg/L		08/29/25 14:00	09/02/25 12:16	1
Lead	ND		0.0010	0.00045	mg/L		08/29/25 14:00	09/02/25 12:16	1
Antimony	0.00076	J	0.0020	0.00057	mg/L		08/29/25 14:00	09/02/25 12:16	1
Selenium	ND		0.0050	0.00089	mg/L		08/29/25 14:00	09/02/25 12:16	1
Thallium	0.00051	J	0.0010	0.00051	mg/L		08/29/25 14:00	09/02/25 12:16	1
Vanadium	ND		0.0050	0.00082	mg/L		08/29/25 14:00	09/02/25 12:16	1
Calcium	190		1.0	0.25	mg/L		08/29/25 14:00	09/02/25 12:16	1
Magnesium	61		1.0	0.061	mg/L		08/29/25 14:00	09/02/25 12:16	1
Lithium	0.013		0.0080	0.0034	mg/L		08/29/25 14:00	09/02/25 12:16	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	5.3	F1	0.10	0.013	mg/L		08/29/25 16:07	09/04/25 18:54	1
Zinc	ND		0.0070	0.00093	mg/L		08/29/25 16:07	09/04/25 18:54	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	720		33	33	mg/L			09/04/25 08:03	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/29/25 14:00	09/02/25 19:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	390		5.0	2.6	mg/L			08/29/25 20:45	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/29/25 20:45	1
Total Dissolved Solids (SM 2540 C-2020)	970		10	7.8	mg/L			08/28/25 10:58	1
Total Suspended Solids (SM 2540D-2020)	8.9		4.0	0.40	mg/L			08/29/25 11:38	1
Chloride (EPA 300.0-1993 R2.1)	120		1.0	0.13	mg/L			08/28/25 17:39	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-1

Client Sample ID: L508287-01 MW-19A
Date Collected: 08/26/25 07:27
Date Received: 08/28/25 08:00

Lab Sample ID: 240-231817-1
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.19		0.050	0.024	mg/L			08/28/25 17:39	1
Sulfate (EPA 300.0-1993 R2.1)	230		5.0	1.7	mg/L			08/28/25 17:49	5

Client Sample ID: L508287-02 MW-19B
Date Collected: 08/26/25 09:12
Date Received: 08/28/25 08:00

Lab Sample ID: 240-231817-2
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.50**		0.10	0.057	mg/L		08/29/25 14:00	09/02/25 18:03	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**2.9**	**J**	3.3	0.17	mg/L		08/29/25 16:07	09/02/25 16:23	1
Na	**32**		0.60	0.33	mg/L		08/29/25 16:07	09/02/25 16:23	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/29/25 14:00	09/02/25 12:19	1
Arsenic	**0.0034**	**J**	0.0050	0.00075	mg/L		08/29/25 14:00	09/02/25 12:19	1
Barium	**0.051**		0.0050	0.00077	mg/L		08/29/25 14:00	09/02/25 12:19	1
Beryllium	ND		0.0010	0.00027	mg/L		08/29/25 14:00	09/02/25 12:19	1
Cadmium	ND		0.0010	0.000077	mg/L		08/29/25 14:00	09/02/25 12:19	1
Cobalt	ND		0.0010	0.000086	mg/L		08/29/25 14:00	09/02/25 12:19	1
Chromium	ND		0.0050	0.0012	mg/L		08/29/25 14:00	09/02/25 12:19	1
Copper	ND		0.0020	0.0017	mg/L		08/29/25 14:00	09/02/25 12:19	1
Molybdenum	**0.0021**	**J**	0.0050	0.0011	mg/L		08/29/25 14:00	09/02/25 12:19	1
Nickel	**0.014**		0.0020	0.0015	mg/L		08/29/25 14:00	09/02/25 12:19	1
Lead	ND		0.0010	0.00045	mg/L		08/29/25 14:00	09/02/25 12:19	1
Antimony	ND		0.0020	0.00057	mg/L		08/29/25 14:00	09/02/25 12:19	1
Selenium	ND		0.0050	0.00089	mg/L		08/29/25 14:00	09/02/25 12:19	1
Thallium	ND		0.0010	0.00051	mg/L		08/29/25 14:00	09/02/25 12:19	1
Vanadium	ND		0.0050	0.00082	mg/L		08/29/25 14:00	09/02/25 12:19	1
Calcium	**170**		1.0	0.25	mg/L		08/29/25 14:00	09/02/25 12:19	1
Magnesium	**61**		1.0	0.061	mg/L		08/29/25 14:00	09/02/25 12:19	1
Lithium	**0.016**		0.0080	0.0034	mg/L		08/29/25 14:00	09/02/25 12:19	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.0**		0.10	0.013	mg/L		08/29/25 16:07	09/04/25 19:34	1
Zinc	ND		0.0070	0.00093	mg/L		08/29/25 16:07	09/04/25 19:34	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**680**		33	33	mg/L			09/04/25 08:03	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/29/25 14:00	09/02/25 19:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**390**		5.0	2.6	mg/L			08/29/25 20:51	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/29/25 20:51	1
Total Dissolved Solids (SM 2540 C-2020)	**940**		10	7.8	mg/L			08/28/25 10:58	1
Total Suspended Solids (SM 2540D-2020)	**4.7**		4.0	0.40	mg/L			08/29/25 11:38	1
Chloride (EPA 300.0-1993 R2.1)	**67**		1.0	0.13	mg/L			08/28/25 17:59	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-1

Client Sample ID: L508287-02 MW-19B
Date Collected: 08/26/25 09:12
Date Received: 08/28/25 08:00

Lab Sample ID: 240-231817-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.26		0.050	0.024	mg/L			08/28/25 17:59	1
Sulfate (EPA 300.0-1993 R2.1)	290		5.0	1.7	mg/L			08/28/25 18:08	5

Client Sample ID: L508287-03 MW-19C
Date Collected: 08/26/25 10:32
Date Received: 08/28/25 08:00

Lab Sample ID: 240-231817-3
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.6**		0.10	0.057	mg/L		08/29/25 14:00	09/02/25 18:07	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**4.7**		3.3	0.17	mg/L		08/29/25 16:07	09/02/25 16:26	1
Na	**29**		0.60	0.33	mg/L		08/29/25 16:07	09/02/25 16:26	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/29/25 14:00	09/02/25 12:27	1
Arsenic	**0.00080**	**J**	0.0050	0.00075	mg/L		08/29/25 14:00	09/02/25 12:27	1
Barium	**0.035**		0.0050	0.00077	mg/L		08/29/25 14:00	09/02/25 12:27	1
Beryllium	ND		0.0010	0.00027	mg/L		08/29/25 14:00	09/02/25 12:27	1
Cadmium	ND		0.0010	0.000077	mg/L		08/29/25 14:00	09/02/25 12:27	1
Cobalt	ND		0.0010	0.000086	mg/L		08/29/25 14:00	09/02/25 12:27	1
Chromium	ND		0.0050	0.0012	mg/L		08/29/25 14:00	09/02/25 12:27	1
Copper	ND		0.0020	0.0017	mg/L		08/29/25 14:00	09/02/25 12:27	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/29/25 14:00	09/02/25 12:27	1
Nickel	ND		0.0020	0.0015	mg/L		08/29/25 14:00	09/02/25 12:27	1
Lead	ND		0.0010	0.00045	mg/L		08/29/25 14:00	09/02/25 12:27	1
Antimony	ND		0.0020	0.00057	mg/L		08/29/25 14:00	09/02/25 12:27	1
Selenium	ND		0.0050	0.00089	mg/L		08/29/25 14:00	09/02/25 12:27	1
Thallium	ND		0.0010	0.00051	mg/L		08/29/25 14:00	09/02/25 12:27	1
Vanadium	ND		0.0050	0.00082	mg/L		08/29/25 14:00	09/02/25 12:27	1
Calcium	**60**		1.0	0.25	mg/L		08/29/25 14:00	09/02/25 12:27	1
Magnesium	**20**		1.0	0.061	mg/L		08/29/25 14:00	09/02/25 12:27	1
Lithium	**0.028**		0.0080	0.0034	mg/L		08/29/25 14:00	09/02/25 12:27	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.53**		0.10	0.013	mg/L		08/29/25 16:07	09/04/25 19:37	1
Zinc	ND		0.0070	0.00093	mg/L		08/29/25 16:07	09/04/25 19:37	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**230**		33	33	mg/L			09/04/25 08:03	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/29/25 14:00	09/02/25 19:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**320**		5.0	2.6	mg/L			08/29/25 20:59	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/29/25 20:59	1
Total Dissolved Solids (SM 2540 C-2020)	**310**		10	7.8	mg/L			08/28/25 10:58	1
Total Suspended Solids (SM 2540D-2020)	**2.3**	**J**	4.0	0.40	mg/L			08/29/25 11:38	1
Chloride (EPA 300.0-1993 R2.1)	**2.5**		1.0	0.13	mg/L			08/28/25 18:37	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-1

Client Sample ID: L508287-03 MW-19C
Date Collected: 08/26/25 10:32
Date Received: 08/28/25 08:00

Lab Sample ID: 240-231817-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.41		0.050	0.024	mg/L			08/28/25 18:37	1
Sulfate (EPA 300.0-1993 R2.1)	1.5		1.0	0.35	mg/L			08/28/25 18:37	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-1

Client Sample ID: L508287-04 MW-19D

Date Collected: 08/26/25 08:13
Date Received: 08/28/25 08:00

Lab Sample ID: 240-231817-4

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.55**		0.10	0.057	mg/L		08/29/25 14:00	09/02/25 18:12	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**5.0**		3.3	0.17	mg/L		08/29/25 16:07	09/02/25 16:29	1
Na	**30**		0.60	0.33	mg/L		08/29/25 16:07	09/02/25 16:29	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/29/25 14:00	09/02/25 12:30	1
Arsenic	ND		0.0050	0.00075	mg/L		08/29/25 14:00	09/02/25 12:30	1
Barium	**0.049**		0.0050	0.00077	mg/L		08/29/25 14:00	09/02/25 12:30	1
Beryllium	ND		0.0010	0.00027	mg/L		08/29/25 14:00	09/02/25 12:30	1
Cadmium	ND		0.0010	0.000077	mg/L		08/29/25 14:00	09/02/25 12:30	1
Cobalt	ND		0.0010	0.000086	mg/L		08/29/25 14:00	09/02/25 12:30	1
Chromium	ND		0.0050	0.0012	mg/L		08/29/25 14:00	09/02/25 12:30	1
Copper	**0.014**		0.0020	0.0017	mg/L		08/29/25 14:00	09/02/25 12:30	1
Molybdenum	**0.0019**	**J**	0.0050	0.0011	mg/L		08/29/25 14:00	09/02/25 12:30	1
Nickel	ND		0.0020	0.0015	mg/L		08/29/25 14:00	09/02/25 12:30	1
Lead	**0.0039**		0.0010	0.00045	mg/L		08/29/25 14:00	09/02/25 12:30	1
Antimony	ND		0.0020	0.00057	mg/L		08/29/25 14:00	09/02/25 12:30	1
Selenium	ND		0.0050	0.00089	mg/L		08/29/25 14:00	09/02/25 12:30	1
Thallium	ND		0.0010	0.00051	mg/L		08/29/25 14:00	09/02/25 12:30	1
Vanadium	ND		0.0050	0.00082	mg/L		08/29/25 14:00	09/02/25 12:30	1
Calcium	**64**		1.0	0.25	mg/L		08/29/25 14:00	09/02/25 12:30	1
Magnesium	**22**		1.0	0.061	mg/L		08/29/25 14:00	09/02/25 12:30	1
Lithium	**0.025**		0.0080	0.0034	mg/L		08/29/25 14:00	09/02/25 12:30	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.32**		0.10	0.013	mg/L		08/29/25 16:07	09/04/25 19:46	1
Zinc	ND		0.0070	0.00093	mg/L		08/29/25 16:07	09/04/25 19:46	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**250**		33	33	mg/L			09/04/25 08:03	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/29/25 14:00	09/02/25 19:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**310**		5.0	2.6	mg/L			08/29/25 21:04	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/29/25 21:04	1
Total Dissolved Solids (SM 2540 C-2020)	**300**		10	7.8	mg/L			08/28/25 10:58	1
Total Suspended Solids (SM 2540D-2020)	**0.80**	**J**	4.0	0.40	mg/L			08/29/25 11:38	1
Chloride (EPA 300.0-1993 R2.1)	**1.3**		1.0	0.13	mg/L			08/28/25 18:47	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-1

Client Sample ID: L508287-04 MW-19D
Date Collected: 08/26/25 08:13
Date Received: 08/28/25 08:00

Lab Sample ID: 240-231817-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.42		0.050	0.024	mg/L			08/28/25 18:47	1
Sulfate (EPA 300.0-1993 R2.1)	11		1.0	0.35	mg/L			08/28/25 18:47	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-1

Client Sample ID: L508287-05 MWT-19A

Date Collected: 08/26/25 07:27
Date Received: 08/28/25 08:00

Lab Sample ID: 240-231817-5

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.25**		0.10	0.057	mg/L		08/29/25 14:00	09/02/25 18:16	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**1.8**	**J**	3.3	0.17	mg/L		08/29/25 16:07	09/02/25 16:33	1
Na	**41**		0.60	0.33	mg/L		08/29/25 16:07	09/02/25 16:33	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/29/25 14:00	09/02/25 12:32	1
Arsenic	**0.0037**	**J**	0.0050	0.00075	mg/L		08/29/25 14:00	09/02/25 12:32	1
Barium	**0.080**		0.0050	0.00077	mg/L		08/29/25 14:00	09/02/25 12:32	1
Beryllium	ND		0.0010	0.00027	mg/L		08/29/25 14:00	09/02/25 12:32	1
Cadmium	ND		0.0010	0.000077	mg/L		08/29/25 14:00	09/02/25 12:32	1
Cobalt	ND		0.0010	0.000086	mg/L		08/29/25 14:00	09/02/25 12:32	1
Chromium	ND		0.0050	0.0012	mg/L		08/29/25 14:00	09/02/25 12:32	1
Copper	ND		0.0020	0.0017	mg/L		08/29/25 14:00	09/02/25 12:32	1
Molybdenum	**0.0019**	**J**	0.0050	0.0011	mg/L		08/29/25 14:00	09/02/25 12:32	1
Nickel	**0.010**		0.0020	0.0015	mg/L		08/29/25 14:00	09/02/25 12:32	1
Lead	ND		0.0010	0.00045	mg/L		08/29/25 14:00	09/02/25 12:32	1
Antimony	ND		0.0020	0.00057	mg/L		08/29/25 14:00	09/02/25 12:32	1
Selenium	ND		0.0050	0.00089	mg/L		08/29/25 14:00	09/02/25 12:32	1
Thallium	ND		0.0010	0.00051	mg/L		08/29/25 14:00	09/02/25 12:32	1
Vanadium	ND		0.0050	0.00082	mg/L		08/29/25 14:00	09/02/25 12:32	1
Calcium	**170**		1.0	0.25	mg/L		08/29/25 14:00	09/02/25 12:32	1
Magnesium	**55**		1.0	0.061	mg/L		08/29/25 14:00	09/02/25 12:32	1
Lithium	**0.011**		0.0080	0.0034	mg/L		08/29/25 14:00	09/02/25 12:32	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**5.5**		0.10	0.013	mg/L		08/29/25 16:07	09/04/25 19:49	1
Zinc	ND		0.0070	0.00093	mg/L		08/29/25 16:07	09/04/25 19:49	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**650**		33	33	mg/L			09/04/25 08:03	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/29/25 14:00	09/02/25 19:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**390**		5.0	2.6	mg/L			08/29/25 21:10	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/29/25 21:10	1
Total Dissolved Solids (SM 2540 C-2020)	**940**		10	7.8	mg/L			08/28/25 10:58	1
Total Suspended Solids (SM 2540D-2020)	**9.5**		4.0	0.40	mg/L			08/29/25 11:38	1
Chloride (EPA 300.0-1993 R2.1)	**120**		1.0	0.13	mg/L			08/28/25 18:57	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-1

Client Sample ID: L508287-05 MWT-19A
Date Collected: 08/26/25 07:27
Date Received: 08/28/25 08:00

Lab Sample ID: 240-231817-5
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.17		0.050	0.024	mg/L			08/28/25 18:57	1
Sulfate (EPA 300.0-1993 R2.1)	230		5.0	1.7	mg/L			08/28/25 19:06	5

Client Sample ID: L508287-06 FIELD BLANK

Lab Sample ID: 240-231817-6

Date Collected: 08/26/25 06:40

Matrix: Water

Date Received: 08/28/25 08:00

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		08/29/25 14:00	09/02/25 18:21	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		08/29/25 16:07	09/02/25 16:36	1
Na	ND		0.60	0.33	mg/L		08/29/25 16:07	09/02/25 16:36	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/29/25 14:00	09/02/25 12:35	1
Arsenic	ND		0.0050	0.00075	mg/L		08/29/25 14:00	09/02/25 12:35	1
Barium	ND		0.0050	0.00077	mg/L		08/29/25 14:00	09/02/25 12:35	1
Beryllium	ND		0.0010	0.00027	mg/L		08/29/25 14:00	09/02/25 12:35	1
Cadmium	ND		0.0010	0.000077	mg/L		08/29/25 14:00	09/02/25 12:35	1
Cobalt	ND		0.0010	0.000086	mg/L		08/29/25 14:00	09/02/25 12:35	1
Chromium	ND		0.0050	0.0012	mg/L		08/29/25 14:00	09/02/25 12:35	1
Copper	ND		0.0020	0.0017	mg/L		08/29/25 14:00	09/02/25 12:35	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/29/25 14:00	09/02/25 12:35	1
Nickel	ND		0.0020	0.0015	mg/L		08/29/25 14:00	09/02/25 12:35	1
Lead	ND		0.0010	0.00045	mg/L		08/29/25 14:00	09/02/25 12:35	1
Antimony	ND		0.0020	0.00057	mg/L		08/29/25 14:00	09/02/25 12:35	1
Selenium	ND		0.0050	0.00089	mg/L		08/29/25 14:00	09/02/25 12:35	1
Thallium	ND		0.0010	0.00051	mg/L		08/29/25 14:00	09/02/25 12:35	1
Vanadium	ND		0.0050	0.00082	mg/L		08/29/25 14:00	09/02/25 12:35	1
Calcium	ND		1.0	0.25	mg/L		08/29/25 14:00	09/02/25 12:35	1
Magnesium	ND		1.0	0.061	mg/L		08/29/25 14:00	09/02/25 12:35	1
Lithium	ND		0.0080	0.0034	mg/L		08/29/25 14:00	09/02/25 12:35	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		08/29/25 16:07	09/04/25 19:52	1
Zinc	ND		0.0070	0.00093	mg/L		08/29/25 16:07	09/04/25 19:52	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			09/04/25 08:03	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/29/25 14:00	09/02/25 19:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/29/25 21:16	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			08/29/25 21:16	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			08/28/25 10:58	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			08/29/25 11:38	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			08/28/25 19:16	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-1

Client Sample ID: L508287-06 FIELD BLANK
Date Collected: 08/26/25 06:40
Date Received: 08/28/25 08:00

Lab Sample ID: 240-231817-6
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			08/28/25 19:16	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			08/28/25 19:16	1

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-669843/1-A
Matrix: Water
Analysis Batch: 670217

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 669843

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		08/29/25 14:00	09/02/25 17:24	1

Lab Sample ID: LCS 240-669843/2-A
Matrix: Water
Analysis Batch: 670217

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 669843

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.03		mg/L		103	85 - 115

Lab Sample ID: 240-231817-1 MS
Matrix: Water
Analysis Batch: 670217

Client Sample ID: L508287-01 MW-19A
Prep Type: Total Recoverable
Prep Batch: 669843

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.24		1.00	1.27		mg/L		103	70 - 130

Lab Sample ID: 240-231817-1 MSD
Matrix: Water
Analysis Batch: 670217

Client Sample ID: L508287-01 MW-19A
Prep Type: Total Recoverable
Prep Batch: 669843

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.24		1.00	1.26		mg/L		101	70 - 130	1	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 350-9248/25-A
Matrix: Water
Analysis Batch: 9299

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9248

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		08/29/25 16:07	09/02/25 15:54	1
Na	ND		0.60	0.33	mg/L		08/29/25 16:07	09/02/25 15:54	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-9248/25-A
Matrix: Water
Analysis Batch: 9375

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9248

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		08/29/25 16:07	09/04/25 18:48	1
Zinc	ND		0.0070	0.00093	mg/L		08/29/25 16:07	09/04/25 18:48	1

Lab Sample ID: LCS 350-9248/26-A
Matrix: Water
Analysis Batch: 9375

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9248

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	21.5		mg/L		108	85 - 115
Zinc	1.00	1.05		mg/L		105	85 - 115

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-231817-1 MS
Matrix: Water
Analysis Batch: 9375

Client Sample ID: L508287-01 MW-19A
Prep Type: Total/NA
Prep Batch: 9248

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	ND	F1	20.0	25.7		mg/L		128	70 - 130
Zinc	ND		1.00	1.03		mg/L		103	70 - 130

Lab Sample ID: 240-231817-1 MSD
Matrix: Water
Analysis Batch: 9375

Client Sample ID: L508287-01 MW-19A
Prep Type: Total/NA
Prep Batch: 9248

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	ND	F1	20.0	27.2	F1	mg/L		136	70 - 130	6	20
Zinc	ND		1.00	1.04		mg/L		104	70 - 130	2	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-669843/1-A
Matrix: Water
Analysis Batch: 670121

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 669843

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		08/29/25 14:00	09/02/25 11:58	1
Arsenic	ND		0.0050	0.00075	mg/L		08/29/25 14:00	09/02/25 11:58	1
Barium	ND		0.0050	0.00077	mg/L		08/29/25 14:00	09/02/25 11:58	1
Beryllium	ND		0.0010	0.00027	mg/L		08/29/25 14:00	09/02/25 11:58	1
Cadmium	ND		0.0010	0.000077	mg/L		08/29/25 14:00	09/02/25 11:58	1
Cobalt	ND		0.0010	0.000086	mg/L		08/29/25 14:00	09/02/25 11:58	1
Chromium	ND		0.0050	0.0012	mg/L		08/29/25 14:00	09/02/25 11:58	1
Copper	ND		0.0020	0.0017	mg/L		08/29/25 14:00	09/02/25 11:58	1
Molybdenum	ND		0.0050	0.0011	mg/L		08/29/25 14:00	09/02/25 11:58	1
Nickel	ND		0.0020	0.0015	mg/L		08/29/25 14:00	09/02/25 11:58	1
Lead	ND		0.0010	0.00045	mg/L		08/29/25 14:00	09/02/25 11:58	1
Antimony	ND		0.0020	0.00057	mg/L		08/29/25 14:00	09/02/25 11:58	1
Selenium	ND		0.0050	0.00089	mg/L		08/29/25 14:00	09/02/25 11:58	1
Thallium	ND		0.0010	0.00051	mg/L		08/29/25 14:00	09/02/25 11:58	1
Vanadium	ND		0.0050	0.00082	mg/L		08/29/25 14:00	09/02/25 11:58	1
Calcium	ND		1.0	0.25	mg/L		08/29/25 14:00	09/02/25 11:58	1
Magnesium	ND		1.0	0.061	mg/L		08/29/25 14:00	09/02/25 11:58	1
Lithium	ND		0.0080	0.0034	mg/L		08/29/25 14:00	09/02/25 11:58	1

Lab Sample ID: LCS 240-669843/3-A
Matrix: Water
Analysis Batch: 670121

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 669843

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.0999		mg/L		100	85 - 115
Arsenic	1.00	1.05		mg/L		105	85 - 115
Barium	1.00	0.971		mg/L		97	85 - 115
Beryllium	0.500	0.497		mg/L		99	85 - 115
Cadmium	0.500	0.468		mg/L		94	85 - 115
Cobalt	0.500	0.517		mg/L		103	85 - 115
Chromium	0.500	0.488		mg/L		98	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-669843/3-A
Matrix: Water
Analysis Batch: 670121

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 669843

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	0.500	0.507		mg/L		101	85 - 115
Molybdenum	0.500	0.491		mg/L		98	85 - 115
Nickel	0.500	0.507		mg/L		101	85 - 115
Lead	0.500	0.519		mg/L		104	85 - 115
Antimony	0.100	0.0978		mg/L		98	85 - 115
Selenium	1.00	1.00		mg/L		100	85 - 115
Thallium	1.00	1.09		mg/L		109	85 - 115
Vanadium	0.500	0.493		mg/L		99	85 - 115
Calcium	25.0	25.3		mg/L		101	85 - 115
Magnesium	25.0	25.2		mg/L		101	85 - 115
Lithium	0.500	0.512		mg/L		102	85 - 115

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-669848/1-A
Matrix: Water
Analysis Batch: 670278

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 669848

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		08/29/25 14:00	09/02/25 19:12	1

Lab Sample ID: LCS 240-669848/2-A
Matrix: Water
Analysis Batch: 670278

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 669848

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00510		mg/L		102	85 - 115

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-669989/29
Matrix: Water
Analysis Batch: 669989

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/29/25 20:04	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/29/25 20:04	1

Lab Sample ID: MB 240-669989/3
Matrix: Water
Analysis Batch: 669989

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/29/25 17:45	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			08/29/25 17:45	1

Method: 2320 B-2021 - Alkalinity (Continued)

Lab Sample ID: 240-231817-6 DU
Matrix: Water
Analysis Batch: 669989

Client Sample ID: L508287-06 FIELD BLANK
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-669615/1
Matrix: Water
Analysis Batch: 669615

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			08/28/25 08:55	1

Lab Sample ID: LCS 240-669615/2
Matrix: Water
Analysis Batch: 669615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	495	484		mg/L		98	80 - 120

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-669866/1
Matrix: Water
Analysis Batch: 669866

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			08/29/25 11:38	1

Lab Sample ID: LCS 240-669866/2
Matrix: Water
Analysis Batch: 669866

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	76.1	74.5		mg/L		98	64 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-669725/3
Matrix: Water
Analysis Batch: 669725

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			08/28/25 16:41	1
Fluoride	ND		0.050	0.024	mg/L			08/28/25 16:41	1
Sulfate	ND		1.0	0.35	mg/L			08/28/25 16:41	1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-669725/4
Matrix: Water
Analysis Batch: 669725

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	47.6		mg/L		95	90 - 110
Fluoride	2.50	2.43		mg/L		97	90 - 110
Sulfate	50.0	47.7		mg/L		95	90 - 110

Metals

Prep Batch: 9248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231817-1	L508287-01 MW-19A	Total/NA	Water	200.7	
240-231817-2	L508287-02 MW-19B	Total/NA	Water	200.7	
240-231817-3	L508287-03 MW-19C	Total/NA	Water	200.7	
240-231817-4	L508287-04 MW-19D	Total/NA	Water	200.7	
240-231817-5	L508287-05 MWT-19A	Total/NA	Water	200.7	
240-231817-6	L508287-06 FIELD BLANK	Total/NA	Water	200.7	
MB 350-9248/25-A	Method Blank	Total/NA	Water	200.7	
LCS 350-9248/26-A	Lab Control Sample	Total/NA	Water	200.7	
240-231817-1 MS	L508287-01 MW-19A	Total/NA	Water	200.7	
240-231817-1 MSD	L508287-01 MW-19A	Total/NA	Water	200.7	

Analysis Batch: 9299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231817-1	L508287-01 MW-19A	Total/NA	Water	200.7 Rev 4.4	9248
240-231817-2	L508287-02 MW-19B	Total/NA	Water	200.7 Rev 4.4	9248
240-231817-3	L508287-03 MW-19C	Total/NA	Water	200.7 Rev 4.4	9248
240-231817-4	L508287-04 MW-19D	Total/NA	Water	200.7 Rev 4.4	9248
240-231817-5	L508287-05 MWT-19A	Total/NA	Water	200.7 Rev 4.4	9248
240-231817-6	L508287-06 FIELD BLANK	Total/NA	Water	200.7 Rev 4.4	9248
MB 350-9248/25-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	9248
LCS 350-9248/26-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	9248
240-231817-1 MS	L508287-01 MW-19A	Total/NA	Water	200.7 Rev 4.4	9248
240-231817-1 MSD	L508287-01 MW-19A	Total/NA	Water	200.7 Rev 4.4	9248

Analysis Batch: 9375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231817-1	L508287-01 MW-19A	Total/NA	Water	200.8	9248
240-231817-2	L508287-02 MW-19B	Total/NA	Water	200.8	9248
240-231817-3	L508287-03 MW-19C	Total/NA	Water	200.8	9248
240-231817-4	L508287-04 MW-19D	Total/NA	Water	200.8	9248
240-231817-5	L508287-05 MWT-19A	Total/NA	Water	200.8	9248
240-231817-6	L508287-06 FIELD BLANK	Total/NA	Water	200.8	9248
MB 350-9248/25-A	Method Blank	Total/NA	Water	200.8	9248
LCS 350-9248/26-A	Lab Control Sample	Total/NA	Water	200.8	9248
240-231817-1 MS	L508287-01 MW-19A	Total/NA	Water	200.8	9248
240-231817-1 MSD	L508287-01 MW-19A	Total/NA	Water	200.8	9248

Prep Batch: 669843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231817-1	L508287-01 MW-19A	Total Recoverable	Water	200.7	
240-231817-2	L508287-02 MW-19B	Total Recoverable	Water	200.7	
240-231817-3	L508287-03 MW-19C	Total Recoverable	Water	200.7	
240-231817-4	L508287-04 MW-19D	Total Recoverable	Water	200.7	
240-231817-5	L508287-05 MWT-19A	Total Recoverable	Water	200.7	
240-231817-6	L508287-06 FIELD BLANK	Total Recoverable	Water	200.7	
MB 240-669843/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-669843/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-669843/3-A	Lab Control Sample	Total Recoverable	Water	200.7	
240-231817-1 MS	L508287-01 MW-19A	Total Recoverable	Water	200.7	
240-231817-1 MSD	L508287-01 MW-19A	Total Recoverable	Water	200.7	

Metals

Prep Batch: 669848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231817-1	L508287-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	
240-231817-2	L508287-02 MW-19B	Total/NA	Water	245.1-1994 R3.0	
240-231817-3	L508287-03 MW-19C	Total/NA	Water	245.1-1994 R3.0	
240-231817-4	L508287-04 MW-19D	Total/NA	Water	245.1-1994 R3.0	
240-231817-5	L508287-05 MWT-19A	Total/NA	Water	245.1-1994 R3.0	
240-231817-6	L508287-06 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	
MB 240-669848/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-669848/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 670121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231817-1	L508287-01 MW-19A	Total Recoverable	Water	200.8-1994 R5.4	669843
240-231817-2	L508287-02 MW-19B	Total Recoverable	Water	200.8-1994 R5.4	669843
240-231817-3	L508287-03 MW-19C	Total Recoverable	Water	200.8-1994 R5.4	669843
240-231817-4	L508287-04 MW-19D	Total Recoverable	Water	200.8-1994 R5.4	669843
240-231817-5	L508287-05 MWT-19A	Total Recoverable	Water	200.8-1994 R5.4	669843
240-231817-6	L508287-06 FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	669843
MB 240-669843/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	669843
LCS 240-669843/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	669843

Analysis Batch: 670217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231817-1	L508287-01 MW-19A	Total Recoverable	Water	200.7 R4.4-1994	669843
240-231817-2	L508287-02 MW-19B	Total Recoverable	Water	200.7 R4.4-1994	669843
240-231817-3	L508287-03 MW-19C	Total Recoverable	Water	200.7 R4.4-1994	669843
240-231817-4	L508287-04 MW-19D	Total Recoverable	Water	200.7 R4.4-1994	669843
240-231817-5	L508287-05 MWT-19A	Total Recoverable	Water	200.7 R4.4-1994	669843
240-231817-6	L508287-06 FIELD BLANK	Total Recoverable	Water	200.7 R4.4-1994	669843
MB 240-669843/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	669843
LCS 240-669843/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	669843
240-231817-1 MS	L508287-01 MW-19A	Total Recoverable	Water	200.7 R4.4-1994	669843
240-231817-1 MSD	L508287-01 MW-19A	Total Recoverable	Water	200.7 R4.4-1994	669843

Analysis Batch: 670278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231817-1	L508287-01 MW-19A	Total/NA	Water	245.1-1994 R3.0	669848
240-231817-2	L508287-02 MW-19B	Total/NA	Water	245.1-1994 R3.0	669848
240-231817-3	L508287-03 MW-19C	Total/NA	Water	245.1-1994 R3.0	669848
240-231817-4	L508287-04 MW-19D	Total/NA	Water	245.1-1994 R3.0	669848
240-231817-5	L508287-05 MWT-19A	Total/NA	Water	245.1-1994 R3.0	669848
240-231817-6	L508287-06 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	669848
MB 240-669848/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	669848
LCS 240-669848/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	669848

Analysis Batch: 670383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231817-1	L508287-01 MW-19A	Total Recoverable	Water	2340 B-2021	
240-231817-2	L508287-02 MW-19B	Total Recoverable	Water	2340 B-2021	
240-231817-3	L508287-03 MW-19C	Total Recoverable	Water	2340 B-2021	
240-231817-4	L508287-04 MW-19D	Total Recoverable	Water	2340 B-2021	
240-231817-5	L508287-05 MWT-19A	Total Recoverable	Water	2340 B-2021	

Metals (Continued)

Analysis Batch: 670383 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231817-6	L508287-06 FIELD BLANK	Total Recoverable	Water	2340 B-2021	

General Chemistry

Analysis Batch: 669615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231817-1	L508287-01 MW-19A	Total/NA	Water	2540 C-2020	
240-231817-2	L508287-02 MW-19B	Total/NA	Water	2540 C-2020	
240-231817-3	L508287-03 MW-19C	Total/NA	Water	2540 C-2020	
240-231817-4	L508287-04 MW-19D	Total/NA	Water	2540 C-2020	
240-231817-5	L508287-05 MWT-19A	Total/NA	Water	2540 C-2020	
240-231817-6	L508287-06 FIELD BLANK	Total/NA	Water	2540 C-2020	
MB 240-669615/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-669615/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 669725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231817-1	L508287-01 MW-19A	Total/NA	Water	300.0-1993 R2.1	
240-231817-1	L508287-01 MW-19A	Total/NA	Water	300.0-1993 R2.1	
240-231817-2	L508287-02 MW-19B	Total/NA	Water	300.0-1993 R2.1	
240-231817-2	L508287-02 MW-19B	Total/NA	Water	300.0-1993 R2.1	
240-231817-3	L508287-03 MW-19C	Total/NA	Water	300.0-1993 R2.1	
240-231817-4	L508287-04 MW-19D	Total/NA	Water	300.0-1993 R2.1	
240-231817-5	L508287-05 MWT-19A	Total/NA	Water	300.0-1993 R2.1	
240-231817-5	L508287-05 MWT-19A	Total/NA	Water	300.0-1993 R2.1	
240-231817-6	L508287-06 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
MB 240-669725/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-669725/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 669866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231817-1	L508287-01 MW-19A	Total/NA	Water	2540D-2020	
240-231817-2	L508287-02 MW-19B	Total/NA	Water	2540D-2020	
240-231817-3	L508287-03 MW-19C	Total/NA	Water	2540D-2020	
240-231817-4	L508287-04 MW-19D	Total/NA	Water	2540D-2020	
240-231817-5	L508287-05 MWT-19A	Total/NA	Water	2540D-2020	
240-231817-6	L508287-06 FIELD BLANK	Total/NA	Water	2540D-2020	
MB 240-669866/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-669866/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 669989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231817-1	L508287-01 MW-19A	Total/NA	Water	2320 B-2021	
240-231817-2	L508287-02 MW-19B	Total/NA	Water	2320 B-2021	
240-231817-3	L508287-03 MW-19C	Total/NA	Water	2320 B-2021	
240-231817-4	L508287-04 MW-19D	Total/NA	Water	2320 B-2021	
240-231817-5	L508287-05 MWT-19A	Total/NA	Water	2320 B-2021	
240-231817-6	L508287-06 FIELD BLANK	Total/NA	Water	2320 B-2021	
MB 240-669989/29	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-669989/3	Method Blank	Total/NA	Water	2320 B-2021	
240-231817-6 DU	L508287-06 FIELD BLANK	Total/NA	Water	2320 B-2021	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-1

Client Sample ID: L508287-01 MW-19A

Lab Sample ID: 240-231817-1

Date Collected: 08/26/25 07:27

Matrix: Water

Date Received: 08/28/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			669843	MN7X	EET CLE	08/29/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	670217	AJC	EET CLE	09/02/25 17:32
Total/NA	Prep	200.7			9248	JR	EET SSM	08/29/25 16:07
Total/NA	Analysis	200.7 Rev 4.4		1	9299	JLS	EET SSM	09/02/25 16:00
Total/NA	Prep	200.7			9248	JR	EET SSM	08/29/25 16:07
Total/NA	Analysis	200.8		1	9375	CW	EET SSM	09/04/25 18:54
Total Recoverable	Prep	200.7			669843	MN7X	EET CLE	08/29/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	670121	S4FJ	EET CLE	09/02/25 12:16
Total Recoverable	Analysis	2340 B-2021		1	670383	KLC	EET CLE	09/04/25 08:03
Total/NA	Prep	245.1-1994 R3.0			669848	MN7X	EET CLE	08/29/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	670278	GEV	EET CLE	09/02/25 19:21
Total/NA	Analysis	2320 B-2021		1	669989	JMR	EET CLE	08/29/25 20:45
Total/NA	Analysis	2540 C-2020		1	669615	C5SV	EET CLE	08/28/25 10:58
Total/NA	Analysis	2540D-2020		1	669866	AAP	EET CLE	08/29/25 11:38
Total/NA	Analysis	300.0-1993 R2.1		1	669725	JMR	EET CLE	08/28/25 17:39
Total/NA	Analysis	300.0-1993 R2.1		5	669725	JMR	EET CLE	08/28/25 17:49

Client Sample ID: L508287-02 MW-19B

Lab Sample ID: 240-231817-2

Date Collected: 08/26/25 09:12

Matrix: Water

Date Received: 08/28/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			669843	MN7X	EET CLE	08/29/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	670217	AJC	EET CLE	09/02/25 18:03
Total/NA	Prep	200.7			9248	JR	EET SSM	08/29/25 16:07
Total/NA	Analysis	200.7 Rev 4.4		1	9299	JLS	EET SSM	09/02/25 16:23
Total/NA	Prep	200.7			9248	JR	EET SSM	08/29/25 16:07
Total/NA	Analysis	200.8		1	9375	CW	EET SSM	09/04/25 19:34
Total Recoverable	Prep	200.7			669843	MN7X	EET CLE	08/29/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	670121	S4FJ	EET CLE	09/02/25 12:19
Total Recoverable	Analysis	2340 B-2021		1	670383	KLC	EET CLE	09/04/25 08:03
Total/NA	Prep	245.1-1994 R3.0			669848	MN7X	EET CLE	08/29/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	670278	GEV	EET CLE	09/02/25 19:22
Total/NA	Analysis	2320 B-2021		1	669989	JMR	EET CLE	08/29/25 20:51
Total/NA	Analysis	2540 C-2020		1	669615	C5SV	EET CLE	08/28/25 10:58
Total/NA	Analysis	2540D-2020		1	669866	AAP	EET CLE	08/29/25 11:38
Total/NA	Analysis	300.0-1993 R2.1		1	669725	JMR	EET CLE	08/28/25 17:59
Total/NA	Analysis	300.0-1993 R2.1		5	669725	JMR	EET CLE	08/28/25 18:08

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-1

Client Sample ID: L508287-03 MW-19C

Lab Sample ID: 240-231817-3

Date Collected: 08/26/25 10:32
Matrix: Water
Date Received: 08/28/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			669843	MN7X	EET CLE	08/29/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	670217	AJC	EET CLE	09/02/25 18:07
Total/NA	Prep	200.7			9248	JR	EET SSM	08/29/25 16:07
Total/NA	Analysis	200.7 Rev 4.4		1	9299	JLS	EET SSM	09/02/25 16:26
Total/NA	Prep	200.7			9248	JR	EET SSM	08/29/25 16:07
Total/NA	Analysis	200.8		1	9375	CW	EET SSM	09/04/25 19:37
Total Recoverable	Prep	200.7			669843	MN7X	EET CLE	08/29/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	670121	S4FJ	EET CLE	09/02/25 12:27
Total Recoverable	Analysis	2340 B-2021		1	670383	KLC	EET CLE	09/04/25 08:03
Total/NA	Prep	245.1-1994 R3.0			669848	MN7X	EET CLE	08/29/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	670278	GEV	EET CLE	09/02/25 19:24
Total/NA	Analysis	2320 B-2021		1	669989	JMR	EET CLE	08/29/25 20:59
Total/NA	Analysis	2540 C-2020		1	669615	C5SV	EET CLE	08/28/25 10:58
Total/NA	Analysis	2540D-2020		1	669866	AAP	EET CLE	08/29/25 11:38
Total/NA	Analysis	300.0-1993 R2.1		1	669725	JMR	EET CLE	08/28/25 18:37

Client Sample ID: L508287-04 MW-19D

Lab Sample ID: 240-231817-4

Date Collected: 08/26/25 08:13
Matrix: Water
Date Received: 08/28/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			669843	MN7X	EET CLE	08/29/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	670217	AJC	EET CLE	09/02/25 18:12
Total/NA	Prep	200.7			9248	JR	EET SSM	08/29/25 16:07
Total/NA	Analysis	200.7 Rev 4.4		1	9299	JLS	EET SSM	09/02/25 16:29
Total/NA	Prep	200.7			9248	JR	EET SSM	08/29/25 16:07
Total/NA	Analysis	200.8		1	9375	CW	EET SSM	09/04/25 19:46
Total Recoverable	Prep	200.7			669843	MN7X	EET CLE	08/29/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	670121	S4FJ	EET CLE	09/02/25 12:30
Total Recoverable	Analysis	2340 B-2021		1	670383	KLC	EET CLE	09/04/25 08:03
Total/NA	Prep	245.1-1994 R3.0			669848	MN7X	EET CLE	08/29/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	670278	GEV	EET CLE	09/02/25 19:26
Total/NA	Analysis	2320 B-2021		1	669989	JMR	EET CLE	08/29/25 21:04
Total/NA	Analysis	2540 C-2020		1	669615	C5SV	EET CLE	08/28/25 10:58
Total/NA	Analysis	2540D-2020		1	669866	AAP	EET CLE	08/29/25 11:38
Total/NA	Analysis	300.0-1993 R2.1		1	669725	JMR	EET CLE	08/28/25 18:47

Client Sample ID: L508287-05 MWT-19A

Lab Sample ID: 240-231817-5

Date Collected: 08/26/25 07:27
Matrix: Water
Date Received: 08/28/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			669843	MN7X	EET CLE	08/29/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	670217	AJC	EET CLE	09/02/25 18:16

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-1

Client Sample ID: L508287-05 MWT-19A

Lab Sample ID: 240-231817-5

Date Collected: 08/26/25 07:27
Matrix: Water
Date Received: 08/28/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	200.7			9248	JR	EET SSM	08/29/25 16:07
Total/NA	Analysis	200.7 Rev 4.4		1	9299	JLS	EET SSM	09/02/25 16:33
Total/NA	Prep	200.7			9248	JR	EET SSM	08/29/25 16:07
Total/NA	Analysis	200.8		1	9375	CW	EET SSM	09/04/25 19:49
Total Recoverable	Prep	200.7			669843	MN7X	EET CLE	08/29/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	670121	S4FJ	EET CLE	09/02/25 12:32
Total Recoverable	Analysis	2340 B-2021		1	670383	KLC	EET CLE	09/04/25 08:03
Total/NA	Prep	245.1-1994 R3.0			669848	MN7X	EET CLE	08/29/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	670278	GEV	EET CLE	09/02/25 19:31
Total/NA	Analysis	2320 B-2021		1	669989	JMR	EET CLE	08/29/25 21:10
Total/NA	Analysis	2540 C-2020		1	669615	C5SV	EET CLE	08/28/25 10:58
Total/NA	Analysis	2540D-2020		1	669866	AAP	EET CLE	08/29/25 11:38
Total/NA	Analysis	300.0-1993 R2.1		1	669725	JMR	EET CLE	08/28/25 18:57
Total/NA	Analysis	300.0-1993 R2.1		5	669725	JMR	EET CLE	08/28/25 19:06

Client Sample ID: L508287-06 FIELD BLANK

Lab Sample ID: 240-231817-6

Date Collected: 08/26/25 06:40
Matrix: Water
Date Received: 08/28/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			669843	MN7X	EET CLE	08/29/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	670217	AJC	EET CLE	09/02/25 18:21
Total/NA	Prep	200.7			9248	JR	EET SSM	08/29/25 16:07
Total/NA	Analysis	200.7 Rev 4.4		1	9299	JLS	EET SSM	09/02/25 16:36
Total/NA	Prep	200.7			9248	JR	EET SSM	08/29/25 16:07
Total/NA	Analysis	200.8		1	9375	CW	EET SSM	09/04/25 19:52
Total Recoverable	Prep	200.7			669843	MN7X	EET CLE	08/29/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	670121	S4FJ	EET CLE	09/02/25 12:35
Total Recoverable	Analysis	2340 B-2021		1	670383	KLC	EET CLE	09/04/25 08:03
Total/NA	Prep	245.1-1994 R3.0			669848	MN7X	EET CLE	08/29/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	670278	GEV	EET CLE	09/02/25 19:33
Total/NA	Analysis	2320 B-2021		1	669989	JMR	EET CLE	08/29/25 21:16
Total/NA	Analysis	2540 C-2020		1	669615	C5SV	EET CLE	08/28/25 10:58
Total/NA	Analysis	2540D-2020		1	669866	AAP	EET CLE	08/29/25 11:38
Total/NA	Analysis	300.0-1993 R2.1		1	669725	JMR	EET CLE	08/28/25 19:16

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-1

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-08-26
Florida	NELAP	E87575	06-30-26
Louisiana (All)	NELAP	03073	07-01-26
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-26
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167-008	07-08-26
US Fish & Wildlife	US Federal Programs	A20571	06-30-26
USDA	US Federal Programs	525-23-4-22573	01-24-28
Washington	State	C788-23a	07-13-26
Wisconsin	State	399133460	08-31-26

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com; Environmental_Laboratory@

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Project Manager:
Howell, Leslie

Purchase Order:
Purchase Order not required

Project Reference:

Work Order:

Sampler:
Marc Wahrer, Julie Maltby

Requested TAT:

Description:
Erickson 8--26-25

Project Number:
24034575

Site Name:
Erickson Projects

Sample State: MI

Special Instructions:
Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner. Please add Na and K metals

See following pages for Method and Container information.

240-231817 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L508287-01 MW-19A	Grab	Water	08/26/25 07:27			
2	L508287-02 MW-19B	Grab	Water	08/26/25 09:12			
3	L508287-03 MW-19C	Grab	Water	08/26/25 10:32			
4	L508287-04 MW-19D	Grab	Water	08/26/25 08:13			
5	L508287-05 MWT-19A	Grab	Water	08/26/25 07:27			
6	L508287-06 Field Blank	Grab	Water	08/26/25 06:40			

612, 1M59, Out Spec Met. Out St. Laws

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished To:	Date/Time:		
Jennifer Caporale	08/27/25 09:26	FedEX Jennifer Caporale	08/27/25 09:26	Rec Sh	8/28/25 0800

Chain of Custody Number: **403733**

*H – Analysis on hold.

Coolers								
Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250827A001								
MIC20250827A001								

Rm Shea 8/28/25 0800

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																				
#	Sample Name	2340 B-2021 / Total Hardness (as CaCO3) by calculation	200.7 Rev 4.4 / Metals (ICP) / Total Na & K	300 0-1993 R2 1 / Anions, Ion Chromatography / Chloride Fluor	2540D-2020 / Solids Total Suspended (TSS)	200.8 / Metals (ICP/MS) / Custom List 1 1 Metals	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	200.7 Rev 4.4 / Metals (ICP) / Iron & Zinc	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	903.0 / Radium-226 (GFPC) / Standard Target List	2320 B-2021 / Alkalinity / Bicarbonate & Carbonate Alkalinity	904.0 / Radium-228 (GFPC) / Standard Target List	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved S	245 1 1994 R3.0 / Mercury (CVAA) / Mercury	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	200.8 / Metals (ICP/MS) / Custom List 2 2-3 Metals	200.7 R4.4-1994 / Metals (ICP) / Total Boron	200.8 / Metals (ICP/MS) / Iron & Zinc				
1	L508287-01 MW-19A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
2	L508287-02 MW-19B	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
3	L508287-03 MW-19C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
4	L508287-04 MW-19D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
5	L508287-05 MWT-19A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
6	L508287-06 Field Blank	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				

Ron Shea 8/28/25 0800

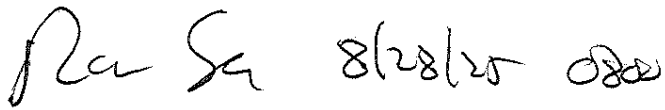
Chain of Custody Bottles

eurofins | Environment Testing

Bottle Name	Total Bottles
Plastic 250ml with Nitric Acid	9
Plastic 500ml - unpreserved	9
Plastic 1 liter Nitric Acid	18
Plastic 500ml - with Nitric Acid	9
Plastic 1 liter - unpreserved	9
Plastic 60 mL - unpreserved	18

Samples		Bottles																					
#	Sample Name	Total Bottles For Sample	Plastic 250ml - with Nitric Acid	Plastic 500ml unpreserved	Plastic 1 liter Nitric Acid	Plastic 500ml with Nitric Acid	Plastic 1 liter unpreserved	Plastic 60 mL unpreserved															
1	L508287-01 MW-19A	8	1	1	2	1	1	2															
2	L508287-02 MW-19B	8	1	1	2	1	1	2															
3	L508287-03 MW-19C	8	1	1	2	1	1	2															
4	L508287-04 MW-19D	8	1	1	2	1	1	2															
5	L508287-05 MWT-19A	8	1	1	2	1	1	2															
6	L508287-06 Field Blank	8	1	1	2	1	1	2															

Ran Sla 8/28/25 0930



Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client Lansing Board Site Name _____ Cooler unpacked by:

Cooler Received on 8/28/25 Opened on 8/28/25

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # 5C Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # _____ (CF _____ °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC463162
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by: RS

Labels Verified by:

_____

_____

_____

_____

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: 13	2.2	2.4	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 1	0.3	0.5	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

8/28/2025

Login Container Summary Report

240-231817

9/5/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508287-01 MW 19A	240-231817-A-1	Plastic 60 mL - unpreserved				
L508287-01 MW-19A	240-231817-B-1	Plastic 60 mL - unpreserved				
L508287-01 MW 19A	240-231817-C-1	Plastic 250ml - with Nitric Acid	<2			
L508287-01 MW-19A	240-231817-D-1	Plastic 500ml - unpreserved				
L508287-01 MW-19A	240-231817-E-1	Plastic 500ml - with Nitric Acid	<2			
L508287-01 MW-19A	240-231817-F-1	Plastic 1 liter - unpreserved				
L508287-01 MW-19A	240-231817-G-1	Plastic 1 liter - Nitric Acid	<2			
L508287-01 MW-19A	240-231817-H-1	Plastic 1 liter - Nitric Acid	<2			
L508287-02 MW-19B	240-231817 A 2	Plastic 60 mL - unpreserved				
L508287-02 MW 19B	240 231817-B-2	Plastic 60 mL - unpreserved				
L508287-02 MW-19B	240-231817-C-2	Plastic 250ml - with Nitric Acid	<2			
L508287-02 MW-19B	240-231817-D-2	Plastic 500ml - unpreserved				
L508287-02 MW-19B	240-231817 E-2	Plastic 500ml - with Nitric Acid	<2			
L508287-02 MW-19B	240-231817-F-2	Plastic 1 liter - unpreserved				
L508287-02 MW-19B	240-231817-G-2	Plastic 1 liter - Nitric Acid	<2			
L508287-02 MW-19B	240-231817-H-2	Plastic 1 liter - Nitric Acid	<2			
L508287-03 MW-19C	240-231817-A-3	Plastic 60 mL - unpreserved				
L508287-03 MW-19C	240-231817-B-3	Plastic 60 mL - unpreserved				
L508287-03 MW-19C	240 231817-C-3	Plastic 250ml - with Nitric Acid	<2			
L508287-03 MW-19C	240-231817-D-3	Plastic 500ml - unpreserved				
L508287-03 MW-19C	240-231817-E-3	Plastic 500ml - with Nitric Acid	<2			
L508287-03 MW 19C	240-231817-F-3	Plastic 1 liter - unpreserved				
L508287-03 MW-19C	240 231817-G-3	Plastic 1 liter - Nitric Acid	<2			
L508287-03 MW-19C	240-231817 H 3	Plastic 1 liter - Nitric Acid	<2			
L508287-04 MW-19D	240 231817-A-4	Plastic 60 mL - unpreserved				
L508287-04 MW 19D	240-231817-B-4	Plastic 60 mL - unpreserved				
L508287-04 MW-19D	240 231817-C-4	Plastic 250ml - with Nitric Acid	<2			
L508287-04 MW-19D	240-231817-D-4	Plastic 500ml - unpreserved				
L508287-04 MW-19D	240 231817-E-4	Plastic 500ml - with Nitric Acid	<2			
L508287-04 MW 19D	240-231817 F-4	Plastic 1 liter - unpreserved				
L508287-04 MW-19D	240 231817-G-4	Plastic 1 liter - Nitric Acid	<2			
L508287-04 MW 19D	240-231817 H-4	Plastic 1 liter - Nitric Acid	<2			
L508287-05 MWT-19A	240-231817-A-5	Plastic 60 mL - unpreserved				
L508287-05 MWT 19A	240-231817 B 5	Plastic 60 mL - unpreserved				
L508287-05 MWT-19A	240-231817-C-5	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508287-05 MWT-19A	240-231817-D-5	Plastic 500ml - unpreserved				
L508287-05 MWT 19A	240-231817 E-5	Plastic 500ml - with Nitric Acid	<2			
L508287-05 MWT-19A	240-231817-F-5	Plastic 1 liter - unpreserved				
L508287-05 MWT-19A	240 231817-G-5	Plastic 1 liter - Nitric Acid	<2			
L508287-05 MWT-19A	240-231817-H-5	Plastic 1 liter - Nitric Acid	<2			
L508287-06 FIELD BLANK	240-231817-A-6	Plastic 60 mL - unpreserved				
L508287-06 FIELD BLANK	240-231817-B-6	Plastic 60 mL - unpreserved				
L508287-06 FIELD BLANK	240-231817-C-6	Plastic 250ml - with Nitric Acid	<2			
L508287-06 FIELD BLANK	240-231817-D-6	Plastic 500ml - unpreserved				
L508287-06 FIELD BLANK	240-231817 E-6	Plastic 500ml - with Nitric Acid	<2			
L508287-06 FIELD BLANK	240-231817-F-6	Plastic 1 liter - unpreserved				
L508287-06 FIELD BLANK	240-231817-G-6	Plastic 1 liter - Nitric Acid	<2			
L508287-06 FIELD BLANK	240-231817-H-6	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-207109.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-231817-1
Address: 5755 8th Street East, ,	Due Date Requested: 9/11/2025			
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Therm. ID: SCO4 Cust. Seal: Y / N
Uncorr./Corr. Temp: 20.0/20.0 °C
Delivery: UPS / FedEx / Other
Ice Type: Blue / Dry / Wet / None
Label Ver.: 2 Packing: B

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT(MOD) Iron & Zinc	200.7_CWA/200.7_P_TOT(MOD) Iron & Zinc	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
L508287-01 MW-19A (240-231817-1)	8/26/25	07:27 Eastern	G	Water			X	X	1	
L508287-02 MW-19B (240-231817-2)	8/26/25	09:12 Eastern	G	Water			X	X	1	
L508287-03 MW-19C (240-231817-3)	8/26/25	10:32 Eastern	G	Water			X	X	1	
L508287-04 MW-19D (240-231817-4)	8/26/25	08:13 Eastern	G	Water			X	X	1	
L508287-05 MWT-19A (240-231817-5)	8/26/25	07:27 Eastern	G	Water			X	X	1	
L508287-06 FIELD BLANK (240-231817-6)	8/26/25	06:40 Eastern	G	Water			X	X	1	

Other: N/A

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification Unconfirmed 4618 0300 4587	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date: Time: Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JM	8/28/25	E		8/28/25 9:30	ET
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

9/5/2025

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-231817-1

Login Number: 231817
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 08/29/25 01:11 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 9/29/2025 5:12:49 PM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-231817-2

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

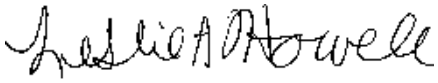
See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
9/29/2025 5:12:49 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 9
Tracer Carrier Summary 15
QC Sample Results 16
QC Association Summary 17
Lab Chronicle 18
Certification Summary 20
Chain of Custody 21
Receipt Checklists 30

Definitions/Glossary

Client: Lansing Board of Water & Light
Job ID: 240-231817-2
Project/Site: Erickson Projects

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-231817-2 — Eurofins Cleveland

Job Narrative
240-231817-2

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 8/28/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.5°C and 2.4°C.

Gas Flow Proportional Counter
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-231817-1	L508287-01 MW-19A	Water	08/26/25 07:27	08/28/25 08:00	Michigan
240-231817-2	L508287-02 MW-19B	Water	08/26/25 09:12	08/28/25 08:00	Michigan
240-231817-3	L508287-03 MW-19C	Water	08/26/25 10:32	08/28/25 08:00	Michigan
240-231817-4	L508287-04 MW-19D	Water	08/26/25 08:13	08/28/25 08:00	Michigan
240-231817-5	L508287-05 MWT-19A	Water	08/26/25 07:27	08/28/25 08:00	Michigan
240-231817-6	L508287-06 FIELD BLANK	Water	08/26/25 06:40	08/28/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-2

Client Sample ID: L508287-01 MW-19A — **Lab Sample ID: 240-231817-1**

No Detections.

Client Sample ID: L508287-02 MW-19B — **Lab Sample ID: 240-231817-2**

No Detections.

Client Sample ID: L508287-03 MW-19C — **Lab Sample ID: 240-231817-3**

No Detections.

Client Sample ID: L508287-04 MW-19D — **Lab Sample ID: 240-231817-4**

No Detections.

Client Sample ID: L508287-05 MWT-19A — **Lab Sample ID: 240-231817-5**

No Detections.

Client Sample ID: L508287-06 FIELD BLANK — **Lab Sample ID: 240-231817-6**

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-2

Client Sample ID: L508287-01 MW-19A
Date Collected: 08/26/25 07:27
Date Received: 08/28/25 08:00

Lab Sample ID: 240-231817-1
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.172	U	0.139	0.140	1.00	0.207	pCi/L	09/03/25 07:54	09/28/25 18:25	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.0*		*30 - 110*	*09/03/25 07:54*	*09/28/25 18:25*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.258	U	0.502	0.502	1.00	0.870	pCi/L	09/03/25 07:58	09/26/25 15:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.0*		*30 - 110*	*09/03/25 07:58*	*09/26/25 15:51*	*1*
Y Carrier	*80.4*		*30 - 110*	*09/03/25 07:58*	*09/26/25 15:51*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.430	U	0.521	0.521	5.00	0.870	pCi/L		09/29/25 16:00	1

Client Sample ID: L508287-02 MW-19B
Date Collected: 08/26/25 09:12
Date Received: 08/28/25 08:00

Lab Sample ID: 240-231817-2
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.314		0.161	0.163	1.00	0.201	pCi/L	09/03/25 07:54	09/28/25 18:25	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.6*		*30 - 110*	*09/03/25 07:54*	*09/28/25 18:25*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.546	U	0.602	0.604	1.00	0.984	pCi/L	09/03/25 07:58	09/26/25 15:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.6*		*30 - 110*	*09/03/25 07:58*	*09/26/25 15:57*	*1*
Y Carrier	*76.3*		*30 - 110*	*09/03/25 07:58*	*09/26/25 15:57*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.860	U	0.623	0.626	5.00	0.984	pCi/L		09/29/25 16:00	1

Client Sample ID: L508287-03 MW-19C
Date Collected: 08/26/25 10:32
Date Received: 08/28/25 08:00

Lab Sample ID: 240-231817-3
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.364		0.184	0.187	1.00	0.242	pCi/L	09/03/25 07:54	09/28/25 18:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*30 - 110*	*09/03/25 07:54*	*09/28/25 18:26*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.863		0.417	0.425	1.00	0.576	pCi/L	09/03/25 07:58	09/26/25 11:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*30 - 110*	*09/03/25 07:58*	*09/26/25 11:57*	*1*
Y Carrier	*79.6*		*30 - 110*	*09/03/25 07:58*	*09/26/25 11:57*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.23		0.456	0.464	5.00	0.576	pCi/L		09/29/25 16:00	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-2

Client Sample ID: L508287-04 MW-19D

Date Collected: 08/26/25 08:13
Date Received: 08/28/25 08:00

Lab Sample ID: 240-231817-4

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.217		0.148	0.149	1.00	0.209	pCi/L	09/03/25 07:54	09/28/25 18:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.3*		*30 - 110*	*09/03/25 07:54*	*09/28/25 18:26*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.324	U	0.524	0.524	1.00	0.892	pCi/L	09/03/25 07:58	09/26/25 15:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.3*		*30 - 110*	*09/03/25 07:58*	*09/26/25 15:57*	*1*
Y Carrier	*80.0*		*30 - 110*	*09/03/25 07:58*	*09/26/25 15:57*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.541	U	0.544	0.545	5.00	0.892	pCi/L		09/29/25 16:00	1

Client Sample Results

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-2

Client Sample ID: L508287-05 MWT-19A

Lab Sample ID: 240-231817-5

Date Collected: 08/26/25 07:27

Matrix: Water

Date Received: 08/28/25 08:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.276**		0.158	0.160	1.00	0.209	pCi/L	09/03/25 07:54	09/28/25 18:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.5*		*30 - 110*	*09/03/25 07:54*	*09/28/25 18:32*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.243	U	0.515	0.516	1.00	0.896	pCi/L	09/03/25 07:58	09/26/25 15:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.5*		*30 - 110*	*09/03/25 07:58*	*09/26/25 15:56*	*1*
Y Carrier	*81.9*		*30 - 110*	*09/03/25 07:58*	*09/26/25 15:56*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.520	U	0.539	0.540	5.00	0.896	pCi/L		09/29/25 16:00	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-2

Client Sample ID: L508287-06 FIELD BLANK

Lab Sample ID: 240-231817-6

Date Collected: 08/26/25 06:40

Matrix: Water

Date Received: 08/28/25 08:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0502	U	0.105	0.105	1.00	0.232	pCi/L	09/03/25 07:54	09/28/25 18:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*30 - 110*	*09/03/25 07:54*	*09/28/25 18:32*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.358	U	0.481	0.482	1.00	0.980	pCi/L	09/03/25 07:58	09/26/25 15:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*30 - 110*	*09/03/25 07:58*	*09/26/25 15:56*	*1*
Y Carrier	*79.6*		*30 - 110*	*09/03/25 07:58*	*09/26/25 15:56*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.000	U	0.492	0.493	5.00	0.980	pCi/L		09/29/25 16:00	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-231817-1	L508287-01 MW-19A	89.0
240-231817-2	L508287-02 MW-19B	87.6
240-231817-3	L508287-03 MW-19C	89.8
240-231817-4	L508287-04 MW-19D	89.3
240-231817-5	L508287-05 MWT-19A	89.5
240-231817-6	L508287-06 FIELD BLANK	90.0
LCS 160-734579/2-A	Lab Control Sample	87.1
MB 160-734579/1-A	Method Blank	91.0

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)	
		Ba	Y
Lab Sample ID	Client Sample ID	(30-110)	(30-110)
240-231817-1	L508287-01 MW-19A	89.0	80.4
240-231817-2	L508287-02 MW-19B	87.6	76.3
240-231817-3	L508287-03 MW-19C	89.8	79.6
240-231817-4	L508287-04 MW-19D	89.3	80.0
240-231817-5	L508287-05 MWT-19A	89.5	81.9
240-231817-6	L508287-06 FIELD BLANK	90.0	79.6
LCS 160-734580/2-A	Lab Control Sample	87.1	77.4
MB 160-734580/1-A	Method Blank	91.0	81.1

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-734579/1-A
Matrix: Water
Analysis Batch: 737912

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 734579

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.01129	U	0.0915	0.0915	1.00	0.193	pCi/L	09/03/25 07:54	09/28/25 14:58	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.0*		*30 - 110*	*09/03/25 07:54*	*09/28/25 14:58*	*1*

Lab Sample ID: LCS 160-734579/2-A
Matrix: Water
Analysis Batch: 737912

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 734579

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.57	9.383		1.10	1.00	0.193	pCi/L	98	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*87.1*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-734580/1-A
Matrix: Water
Analysis Batch: 737860

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 734580

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3491	U	0.513	0.514	1.00	0.867	pCi/L	09/03/25 07:58	09/26/25 15:49	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.0*		*30 - 110*	*09/03/25 07:58*	*09/26/25 15:49*	*1*
Y Carrier	*81.1*		*30 - 110*	*09/03/25 07:58*	*09/26/25 15:49*	*1*

Lab Sample ID: LCS 160-734580/2-A
Matrix: Water
Analysis Batch: 737875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 734580

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.03	11.02		1.48	1.00	0.656	pCi/L	122	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*87.1*		*30 - 110*
Y Carrier	*77.4*		*30 - 110*

QC Association Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-2

Rad

Prep Batch: 734579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231817-1	L508287-01 MW-19A	Total/NA	Water	PrecSep-21	
240-231817-2	L508287-02 MW-19B	Total/NA	Water	PrecSep-21	
240-231817-3	L508287-03 MW-19C	Total/NA	Water	PrecSep-21	
240-231817-4	L508287-04 MW-19D	Total/NA	Water	PrecSep-21	
240-231817-5	L508287-05 MWT-19A	Total/NA	Water	PrecSep-21	
240-231817-6	L508287-06 FIELD BLANK	Total/NA	Water	PrecSep-21	
MB 160-734579/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-734579/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 734580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-231817-1	L508287-01 MW-19A	Total/NA	Water	PrecSep_0	
240-231817-2	L508287-02 MW-19B	Total/NA	Water	PrecSep_0	
240-231817-3	L508287-03 MW-19C	Total/NA	Water	PrecSep_0	
240-231817-4	L508287-04 MW-19D	Total/NA	Water	PrecSep_0	
240-231817-5	L508287-05 MWT-19A	Total/NA	Water	PrecSep_0	
240-231817-6	L508287-06 FIELD BLANK	Total/NA	Water	PrecSep_0	
MB 160-734580/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-734580/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-2

Client Sample ID: L508287-01 MW-19A

Lab Sample ID: 240-231817-1

Date Collected: 08/26/25 07:27
Matrix: Water
Date Received: 08/28/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			734579	JTR	EET SL	09/03/25 07:54
Total/NA	Analysis	903.0		1	737912	SWS	EET SL	09/28/25 18:25
Total/NA	Prep	PrecSep_0			734580	JTR	EET SL	09/03/25 07:58
Total/NA	Analysis	904.0		1	737860	SWS	EET SL	09/26/25 15:51
Total/NA	Analysis	Ra226_Ra228 Pos		1	738212	CAH	EET SL	09/29/25 16:00

Client Sample ID: L508287-02 MW-19B

Lab Sample ID: 240-231817-2

Date Collected: 08/26/25 09:12
Matrix: Water
Date Received: 08/28/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			734579	JTR	EET SL	09/03/25 07:54
Total/NA	Analysis	903.0		1	737912	SWS	EET SL	09/28/25 18:25
Total/NA	Prep	PrecSep_0			734580	JTR	EET SL	09/03/25 07:58
Total/NA	Analysis	904.0		1	737862	SWS	EET SL	09/26/25 15:57
Total/NA	Analysis	Ra226_Ra228 Pos		1	738212	CAH	EET SL	09/29/25 16:00

Client Sample ID: L508287-03 MW-19C

Lab Sample ID: 240-231817-3

Date Collected: 08/26/25 10:32
Matrix: Water
Date Received: 08/28/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			734579	JTR	EET SL	09/03/25 07:54
Total/NA	Analysis	903.0		1	737912	SWS	EET SL	09/28/25 18:26
Total/NA	Prep	PrecSep_0			734580	JTR	EET SL	09/03/25 07:58
Total/NA	Analysis	904.0		1	737862	SWS	EET SL	09/26/25 11:57
Total/NA	Analysis	Ra226_Ra228 Pos		1	738212	CAH	EET SL	09/29/25 16:00

Client Sample ID: L508287-04 MW-19D

Lab Sample ID: 240-231817-4

Date Collected: 08/26/25 08:13
Matrix: Water
Date Received: 08/28/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			734579	JTR	EET SL	09/03/25 07:54
Total/NA	Analysis	903.0		1	737912	SWS	EET SL	09/28/25 18:26
Total/NA	Prep	PrecSep_0			734580	JTR	EET SL	09/03/25 07:58
Total/NA	Analysis	904.0		1	737862	SWS	EET SL	09/26/25 15:57
Total/NA	Analysis	Ra226_Ra228 Pos		1	738212	CAH	EET SL	09/29/25 16:00

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-2

Client Sample ID: L508287-05 MWT-19A

Lab Sample ID: 240-231817-5

Date Collected: 08/26/25 07:27
Matrix: Water
Date Received: 08/28/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			734579	JTR	EET SL	09/03/25 07:54
Total/NA	Analysis	903.0		1	737911	SWS	EET SL	09/28/25 18:32
Total/NA	Prep	PrecSep_0			734580	JTR	EET SL	09/03/25 07:58
Total/NA	Analysis	904.0		1	737875	SCB	EET SL	09/26/25 15:56
Total/NA	Analysis	Ra226_Ra228 Pos		1	738212	CAH	EET SL	09/29/25 16:00

Client Sample ID: L508287-06 FIELD BLANK

Lab Sample ID: 240-231817-6

Date Collected: 08/26/25 06:40
Matrix: Water
Date Received: 08/28/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			734579	JTR	EET SL	09/03/25 07:54
Total/NA	Analysis	903.0		1	737911	SWS	EET SL	09/28/25 18:32
Total/NA	Prep	PrecSep_0			734580	JTR	EET SL	09/03/25 07:58
Total/NA	Analysis	904.0		1	737875	SCB	EET SL	09/26/25 15:56
Total/NA	Analysis	Ra226_Ra228 Pos		1	738212	CAH	EET SL	09/29/25 16:00

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-231817-2

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	07-01-26
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	10-01-26
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25 *
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-31-26
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com; Environmental_Laboratory@

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Project Manager:
Howell, Leslie

Purchase Order:
Purchase Order not required

Project Reference:

Work Order:

Sampler:
Marc Wahrer, Julie Maltby

Requested TAT:

Description:
Erickson 8--26-25

Project Number:
24034575

Site Name:
Erickson Projects

Sample State: MI

Special Instructions:
Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner. Please add Na and K metals

See following pages for Method and Container information.

240-231817 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L508287-01 MW-19A	Grab	Water	08/26/25 07:27			
2	L508287-02 MW-19B	Grab	Water	08/26/25 09:12			
3	L508287-03 MW-19C	Grab	Water	08/26/25 10:32			
4	L508287-04 MW-19D	Grab	Water	08/26/25 08:13			
5	L508287-05 MWT-19A	Grab	Water	08/26/25 07:27			
6	L508287-06 Field Blank	Grab	Water	08/26/25 06:40			

612, 1M59, Out Spec Met. Out St. Laws

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished To:	Date/Time:		
Jennifer Caporale	08/27/25 09:26	FedEX Jennifer Caporale	08/27/25 09:26	Rec Sh	8/28/25 0800

Chain of Custody Number: **403733**

*H – Analysis on hold.

Coolers								
Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250827A001								
MIC20250827A001								

Rm Shea 8/28/25 0800

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																				
#	Sample Name	2340 B-2021 / Total Hardness (as CaCO3) by calculation	200.7 Rev 4.4 / Metals (ICP) / Total Na & K	300 0-1993 R2 1 / Anions, Ion Chromatography / Chloride Fluor	2540D-2020 / Solids Total Suspended (TSS)	200.8 / Metals (ICP/MS) / Custom List 1 1 Metals	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	200.7 Rev 4.4 / Metals (ICP) / Iron & Zinc	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	903.0 / Radium-226 (GFPC) / Standard Target List	2320 B-2021 / Alkalinity / Bicarbonate & Carbonate Alkalinity	904.0 / Radium-228 (GFPC) / Standard Target List	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved S	245 1 1994 R3.0 / Mercury (CVAA) / Mercury	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	200.8 / Metals (ICP/MS) / Custom List 2 2-3 Metals	200.7 R4.4-1994 / Metals (ICP) / Total Boron	200.8 / Metals (ICP/MS) / Iron & Zinc				
1	L508287-01 MW-19A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
2	L508287-02 MW-19B	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
3	L508287-03 MW-19C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
4	L508287-04 MW-19D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
5	L508287-05 MWT-19A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
6	L508287-06 Field Blank	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				

Ron Shea 8/28/25 0800

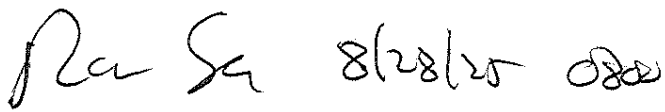
Chain of Custody Bottles

eurofins | Environment Testing

Bottle Name	Total Bottles
Plastic 250ml with Nitric Acid	9
Plastic 500ml - unpreserved	9
Plastic 1 liter Nitric Acid	18
Plastic 500ml - with Nitric Acid	9
Plastic 1 liter - unpreserved	9
Plastic 60 mL - unpreserved	18

Samples		Bottles																				
#	Sample Name	Total Bottles For Sample	Plastic 250ml - with Nitric Acid	Plastic 500ml unpreserved	Plastic 1 liter Nitric Acid	Plastic 500ml with Nitric Acid	Plastic 1 liter unpreserved	Plastic 60 mL unpreserved														
1	L508287-01 MW-19A	8	1	1	2	1	1	2														
2	L508287-02 MW-19B	8	1	1	2	1	1	2														
3	L508287-03 MW-19C	8	1	1	2	1	1	2														
4	L508287-04 MW-19D	8	1	1	2	1	1	2														
5	L508287-05 MWT-19A	8	1	1	2	1	1	2														
6	L508287-06 Field Blank	8	1	1	2	1	1	2														

Ran Sla 8/28/25 0930



Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client Lansing Board Site Name _____ Cooler unpacked by:

Cooler Received on 8/28/25 Opened on 8/28/25

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # 5C Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # _____ (CF _____ °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC463162
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by: RS

Labels Verified by:

_____

_____

_____

_____

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: 13	2.2	2.4	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 1	0.3	0.5	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

8/28/2025

Login Container Summary Report

240-231817

9/29/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508287-01 MW 19A	240-231817-A-1	Plastic 60 mL - unpreserved				
L508287-01 MW-19A	240-231817-B-1	Plastic 60 mL - unpreserved				
L508287-01 MW 19A	240-231817-C-1	Plastic 250ml - with Nitric Acid	<2			
L508287-01 MW-19A	240-231817-D-1	Plastic 500ml - unpreserved				
L508287-01 MW-19A	240-231817-E-1	Plastic 500ml - with Nitric Acid	<2			
L508287-01 MW-19A	240-231817-F-1	Plastic 1 liter - unpreserved				
L508287-01 MW-19A	240-231817-G-1	Plastic 1 liter - Nitric Acid	<2			
L508287-01 MW-19A	240-231817-H-1	Plastic 1 liter - Nitric Acid	<2			
L508287-02 MW-19B	240-231817 A 2	Plastic 60 mL - unpreserved				
L508287-02 MW 19B	240 231817-B-2	Plastic 60 mL - unpreserved				
L508287-02 MW-19B	240-231817-C-2	Plastic 250ml - with Nitric Acid	<2			
L508287-02 MW-19B	240-231817-D-2	Plastic 500ml - unpreserved				
L508287-02 MW-19B	240-231817 E-2	Plastic 500ml - with Nitric Acid	<2			
L508287-02 MW-19B	240-231817-F-2	Plastic 1 liter - unpreserved				
L508287-02 MW-19B	240-231817-G-2	Plastic 1 liter - Nitric Acid	<2			
L508287-02 MW-19B	240-231817-H-2	Plastic 1 liter - Nitric Acid	<2			
L508287-03 MW-19C	240-231817-A-3	Plastic 60 mL - unpreserved				
L508287-03 MW-19C	240-231817-B-3	Plastic 60 mL - unpreserved				
L508287-03 MW-19C	240 231817-C-3	Plastic 250ml - with Nitric Acid	<2			
L508287-03 MW-19C	240-231817-D-3	Plastic 500ml - unpreserved				
L508287-03 MW-19C	240-231817-E-3	Plastic 500ml - with Nitric Acid	<2			
L508287-03 MW 19C	240-231817-F-3	Plastic 1 liter - unpreserved				
L508287-03 MW-19C	240 231817-G-3	Plastic 1 liter - Nitric Acid	<2			
L508287-03 MW-19C	240-231817 H 3	Plastic 1 liter - Nitric Acid	<2			
L508287-04 MW-19D	240 231817-A-4	Plastic 60 mL - unpreserved				
L508287-04 MW 19D	240-231817-B-4	Plastic 60 mL - unpreserved				
L508287-04 MW-19D	240 231817-C-4	Plastic 250ml - with Nitric Acid	<2			
L508287-04 MW-19D	240-231817-D-4	Plastic 500ml - unpreserved				
L508287-04 MW-19D	240 231817-E-4	Plastic 500ml - with Nitric Acid	<2			
L508287-04 MW 19D	240-231817 F-4	Plastic 1 liter - unpreserved				
L508287-04 MW-19D	240 231817-G-4	Plastic 1 liter - Nitric Acid	<2			
L508287-04 MW 19D	240-231817 H-4	Plastic 1 liter - Nitric Acid	<2			
L508287-05 MWT-19A	240-231817-A-5	Plastic 60 mL - unpreserved				
L508287-05 MWT 19A	240-231817 B 5	Plastic 60 mL - unpreserved				
L508287-05 MWT-19A	240-231817-C-5	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L508287-05 MWT-19A	240-231817-D-5	Plastic 500ml - unpreserved				
L508287-05 MWT 19A	240-231817 E-5	Plastic 500ml - with Nitric Acid	<2			
L508287-05 MWT-19A	240-231817-F-5	Plastic 1 liter - unpreserved				
L508287-05 MWT-19A	240 231817-G-5	Plastic 1 liter - Nitric Acid	<2			
L508287-05 MWT-19A	240-231817-H-5	Plastic 1 liter - Nitric Acid	<2			
L508287-06 FIELD BLANK	240-231817-A-6	Plastic 60 mL - unpreserved				
L508287-06 FIELD BLANK	240-231817-B-6	Plastic 60 mL - unpreserved				
L508287-06 FIELD BLANK	240-231817-C-6	Plastic 250ml - with Nitric Acid	<2			
L508287-06 FIELD BLANK	240-231817-D-6	Plastic 500ml - unpreserved				
L508287-06 FIELD BLANK	240-231817 E-6	Plastic 500ml - with Nitric Acid	<2			
L508287-06 FIELD BLANK	240-231817-F-6	Plastic 1 liter - unpreserved				
L508287-06 FIELD BLANK	240-231817-G-6	Plastic 1 liter - Nitric Acid	<2			
L508287-06 FIELD BLANK	240-231817-H-6	Plastic 1 liter - Nitric Acid	<2			

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-231817-2

Login Number: 231817
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 08/29/25 01:06 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 9/24/2025 3:28:08 PM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-232981-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

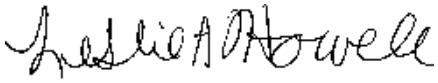
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
9/24/2025 3:28:08 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 12
QC Sample Results 26
QC Association Summary 32
Lab Chronicle 36
Certification Summary 40
Chain of Custody 41
Receipt Checklists 51

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-1

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-232981-1 — Eurofins Cleveland

Job Narrative
240-232981-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 9/13/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.0°C and 1.8°C.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 2540D: The sample duplicate (DUP) precision for analytical batch 240-671723 was outside control limits. Sample non-homogeneity is suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.7 Rev 4.4	Metals (ICP)	EPA	EET SSM
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.7	Preparation, Total Metals	EPA	EET SSM
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-232981-1	L509229-01 MW-17A	Water	09/11/25 09:20	09/13/25 08:00	Michigan
240-232981-2	L509229-02 MW-17B	Water	09/11/25 10:51	09/13/25 08:00	Michigan
240-232981-3	L509229-03 MW-17C	Water	09/11/25 12:07	09/13/25 08:00	Michigan
240-232981-4	L509229-04 MW-17D	Water	09/11/25 13:30	09/13/25 08:00	Michigan
240-232981-5	L509229-05 MW-17E	Water	09/11/25 14:44	09/13/25 08:00	Michigan
240-232981-6	L509229-06 MWT-17A	Water	09/11/25 09:20	09/13/25 08:00	Michigan
240-232981-7	L509229-07 FIELD BLANK	Water	09/11/25 08:30	09/13/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-1

Client Sample ID: L509229-01 MW-17A — Lab Sample ID: 240-232981-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.6		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	2.8	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	52		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0011	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.035		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.017		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.011		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	220		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	61		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.044		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	7.1		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0012	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	810		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	250		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1300		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	12		8.0	0.80	mg/L	1		2540D-2020	Total/NA
Chloride	70		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.23		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	680		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L509229-02 MW-17B — Lab Sample ID: 240-232981-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.7		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	4.4		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	75		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0019	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.037		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.098		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0030		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	110		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	26		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.085		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.9		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.0091		0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	390		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	730		10	7.8	mg/L	1		2540 C-2020	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-1

Client Sample ID: L509229-02 MW-17B (Continued) — Lab Sample ID: 240-232981-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	1.8	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	75		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.34		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	320		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L509229-03 MW-17C — Lab Sample ID: 240-232981-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.3		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	6.7		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	120		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0025	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.054		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.000097	J B	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.050		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.0082		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lead	0.00080	J	0.0010	0.00045	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	150		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	40		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.053		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	2.7		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	530		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1000		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	2.5	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	56		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.34		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	490		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L509229-04 MW-17D — Lab Sample ID: 240-232981-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	2.3		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	8.9		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	43		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.00089	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.040		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0035	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	50		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L509229-04 MW-17D (Continued) — Lab Sample ID: 240-232981-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	16		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.034		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.67		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	190		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	280		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	290		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.90	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	3.6		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.43		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	3.7		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L509229-05 MW-17E — Lab Sample ID: 240-232981-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.0		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	4.5		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	150		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.0041	J	0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	5.2		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	1.4		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.024		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.017	J	0.10	0.013	mg/L	1		200.8	Total/NA
Bicarbonate Alkalinity as CaCO3	320		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	11		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	350		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	0.40	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	1.3		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	1.2		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L509229-06 MWT-17A — Lab Sample ID: 240-232981-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	3.8		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	2.9	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	53		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0014	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.037		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.017		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.012		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	240		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	65		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L509229-06 MWT-17A (Continued)

Lab Sample ID: 240-232981-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.047		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	7.4		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	870		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	250		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1300		20	16	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	16		8.0	0.80	mg/L	1		2540D-2020	Total/NA
Chloride	70		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.25		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	660		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L509229-07 FIELD BLANK

Lab Sample ID: 240-232981-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	0.77	J	1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	0.19	J	1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Bicarbonate Alkalinity as CaCO3	3.8	J	5.0	2.6	mg/L	1		2320 B-2021	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L509229-01 MW-17A
Date Collected: 09/11/25 09:20
Date Received: 09/13/25 08:00

Lab Sample ID: 240-232981-1
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.6**		0.10	0.057	mg/L		09/15/25 14:00	09/18/25 02:47	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**2.8**	**J**	3.3	0.17	mg/L		09/16/25 15:59	09/23/25 21:12	1
Na	**52**		0.60	0.33	mg/L		09/16/25 15:59	09/23/25 21:12	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		09/15/25 14:00	09/16/25 19:08	1
Arsenic	**0.0011**	**J**	0.0050	0.00075	mg/L		09/15/25 14:00	09/16/25 19:08	1
Barium	**0.035**		0.0050	0.00077	mg/L		09/15/25 14:00	09/16/25 19:08	1
Beryllium	ND		0.0010	0.00027	mg/L		09/15/25 14:00	09/16/25 19:08	1
Cadmium	ND		0.0010	0.000077	mg/L		09/15/25 14:00	09/16/25 19:08	1
Cobalt	ND		0.0010	0.000086	mg/L		09/15/25 14:00	09/16/25 19:08	1
Chromium	ND		0.0050	0.0012	mg/L		09/15/25 14:00	09/16/25 19:08	1
Copper	ND		0.0020	0.0017	mg/L		09/15/25 14:00	09/16/25 19:08	1
Molybdenum	**0.017**		0.0050	0.0011	mg/L		09/15/25 14:00	09/16/25 19:08	1
Nickel	**0.011**		0.0020	0.0015	mg/L		09/15/25 14:00	09/16/25 19:08	1
Lead	ND		0.0010	0.00045	mg/L		09/15/25 14:00	09/16/25 19:08	1
Antimony	ND		0.0020	0.00057	mg/L		09/15/25 14:00	09/16/25 19:08	1
Selenium	ND		0.0050	0.00089	mg/L		09/15/25 14:00	09/16/25 19:08	1
Thallium	ND		0.0010	0.00051	mg/L		09/15/25 14:00	09/16/25 19:08	1
Vanadium	ND		0.0050	0.00082	mg/L		09/15/25 14:00	09/16/25 19:08	1
Calcium	**220**		1.0	0.25	mg/L		09/15/25 14:00	09/16/25 19:08	1
Magnesium	**61**		1.0	0.061	mg/L		09/15/25 14:00	09/16/25 19:08	1
Lithium	**0.044**		0.0080	0.0034	mg/L		09/15/25 14:00	09/16/25 19:08	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**7.1**		0.10	0.013	mg/L		09/16/25 15:59	09/17/25 15:05	1
Zinc	**0.0012**	**J**	0.0070	0.00093	mg/L		09/16/25 15:59	09/17/25 15:05	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**810**		33	33	mg/L			09/18/25 05:49	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		09/15/25 14:00	09/16/25 18:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**250**		5.0	2.6	mg/L			09/15/25 15:11	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/15/25 15:11	1
Total Dissolved Solids (SM 2540 C-2020)	**1300**		20	16	mg/L			09/15/25 16:35	1
Total Suspended Solids (SM 2540D-2020)	**12**		8.0	0.80	mg/L			09/15/25 11:32	1
Chloride (EPA 300.0-1993 R2.1)	**70**		1.0	0.13	mg/L			09/15/25 22:52	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-1

Client Sample ID: L509229-01 MW-17A
Date Collected: 09/11/25 09:20
Date Received: 09/13/25 08:00

Lab Sample ID: 240-232981-1
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.23		0.050	0.024	mg/L			09/15/25 22:52	1
Sulfate (EPA 300.0-1993 R2.1)	680		5.0	1.7	mg/L			09/15/25 23:01	5

Client Sample ID: L509229-02 MW-17B
Date Collected: 09/11/25 10:51
Date Received: 09/13/25 08:00

Lab Sample ID: 240-232981-2
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.7**		0.10	0.057	mg/L		09/15/25 14:00	09/18/25 03:00	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**4.4**		3.3	0.17	mg/L		09/16/25 15:59	09/23/25 21:28	1
Na	**75**		0.60	0.33	mg/L		09/16/25 15:59	09/23/25 21:28	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		09/15/25 14:00	09/16/25 19:10	1
Arsenic	**0.0019**	**J**	0.0050	0.00075	mg/L		09/15/25 14:00	09/16/25 19:10	1
Barium	**0.037**		0.0050	0.00077	mg/L		09/15/25 14:00	09/16/25 19:10	1
Beryllium	ND		0.0010	0.00027	mg/L		09/15/25 14:00	09/16/25 19:10	1
Cadmium	ND		0.0010	0.000077	mg/L		09/15/25 14:00	09/16/25 19:10	1
Cobalt	ND		0.0010	0.000086	mg/L		09/15/25 14:00	09/16/25 19:10	1
Chromium	ND		0.0050	0.0012	mg/L		09/15/25 14:00	09/16/25 19:10	1
Copper	ND		0.0020	0.0017	mg/L		09/15/25 14:00	09/16/25 19:10	1
Molybdenum	**0.098**		0.0050	0.0011	mg/L		09/15/25 14:00	09/16/25 19:10	1
Nickel	**0.0030**		0.0020	0.0015	mg/L		09/15/25 14:00	09/16/25 19:10	1
Lead	ND		0.0010	0.00045	mg/L		09/15/25 14:00	09/16/25 19:10	1
Antimony	ND		0.0020	0.00057	mg/L		09/15/25 14:00	09/16/25 19:10	1
Selenium	ND		0.0050	0.00089	mg/L		09/15/25 14:00	09/16/25 19:10	1
Thallium	ND		0.0010	0.00051	mg/L		09/15/25 14:00	09/16/25 19:10	1
Vanadium	ND		0.0050	0.00082	mg/L		09/15/25 14:00	09/16/25 19:10	1
Calcium	**110**		1.0	0.25	mg/L		09/15/25 14:00	09/16/25 19:10	1
Magnesium	**26**		1.0	0.061	mg/L		09/15/25 14:00	09/16/25 19:10	1
Lithium	**0.085**		0.0080	0.0034	mg/L		09/15/25 14:00	09/16/25 19:10	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.9**		0.10	0.013	mg/L		09/16/25 15:59	09/17/25 15:36	1
Zinc	**0.0091**		0.0070	0.00093	mg/L		09/16/25 15:59	09/17/25 15:36	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**390**		33	33	mg/L			09/18/25 05:49	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		09/15/25 14:00	09/16/25 18:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**160**		5.0	2.6	mg/L			09/15/25 15:18	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/15/25 15:18	1
Total Dissolved Solids (SM 2540 C-2020)	**730**		10	7.8	mg/L			09/15/25 16:35	1
Total Suspended Solids (SM 2540D-2020)	**1.8**	**J**	4.0	0.40	mg/L			09/15/25 11:32	1
Chloride (EPA 300.0-1993 R2.1)	**75**		1.0	0.13	mg/L			09/15/25 23:09	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-1

Client Sample ID: L509229-02 MW-17B
Date Collected: 09/11/25 10:51
Date Received: 09/13/25 08:00

Lab Sample ID: 240-232981-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.34		0.050	0.024	mg/L			09/15/25 23:09	1
Sulfate (EPA 300.0-1993 R2.1)	320		5.0	1.7	mg/L			09/15/25 23:18	5

Client Sample ID: L509229-03 MW-17C
Date Collected: 09/11/25 12:07
Date Received: 09/13/25 08:00

Lab Sample ID: 240-232981-3
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.3**		0.10	0.057	mg/L		09/15/25 14:00	09/18/25 03:05	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**6.7**		3.3	0.17	mg/L		09/16/25 15:59	09/23/25 21:31	1
Na	**120**		0.60	0.33	mg/L		09/16/25 15:59	09/23/25 21:31	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		09/15/25 14:00	09/16/25 19:13	1
Arsenic	**0.0025**	**J**	0.0050	0.00075	mg/L		09/15/25 14:00	09/16/25 19:13	1
Barium	**0.054**		0.0050	0.00077	mg/L		09/15/25 14:00	09/16/25 19:13	1
Beryllium	ND		0.0010	0.00027	mg/L		09/15/25 14:00	09/16/25 19:13	1
Cadmium	ND		0.0010	0.000077	mg/L		09/15/25 14:00	09/16/25 19:13	1
Cobalt	**0.000097**	**J B**	0.0010	0.000086	mg/L		09/15/25 14:00	09/16/25 19:13	1
Chromium	ND		0.0050	0.0012	mg/L		09/15/25 14:00	09/16/25 19:13	1
Copper	ND		0.0020	0.0017	mg/L		09/15/25 14:00	09/16/25 19:13	1
Molybdenum	**0.050**		0.0050	0.0011	mg/L		09/15/25 14:00	09/16/25 19:13	1
Nickel	**0.0082**		0.0020	0.0015	mg/L		09/15/25 14:00	09/16/25 19:13	1
Lead	**0.00080**	**J**	0.0010	0.00045	mg/L		09/15/25 14:00	09/16/25 19:13	1
Antimony	ND		0.0020	0.00057	mg/L		09/15/25 14:00	09/16/25 19:13	1
Selenium	ND		0.0050	0.00089	mg/L		09/15/25 14:00	09/16/25 19:13	1
Thallium	ND		0.0010	0.00051	mg/L		09/15/25 14:00	09/16/25 19:13	1
Vanadium	ND		0.0050	0.00082	mg/L		09/15/25 14:00	09/16/25 19:13	1
Calcium	**150**		1.0	0.25	mg/L		09/15/25 14:00	09/16/25 19:13	1
Magnesium	**40**		1.0	0.061	mg/L		09/15/25 14:00	09/16/25 19:13	1
Lithium	**0.053**		0.0080	0.0034	mg/L		09/15/25 14:00	09/16/25 19:13	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.7**		0.10	0.013	mg/L		09/16/25 15:59	09/17/25 15:39	1
Zinc	ND		0.0070	0.00093	mg/L		09/16/25 15:59	09/17/25 15:39	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**530**		33	33	mg/L			09/18/25 05:49	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		09/15/25 14:00	09/16/25 19:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**230**		5.0	2.6	mg/L			09/15/25 15:24	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/15/25 15:24	1
Total Dissolved Solids (SM 2540 C-2020)	**1000**		10	7.8	mg/L			09/16/25 10:04	1
Total Suspended Solids (SM 2540D-2020)	**2.5**	**J**	4.0	0.40	mg/L			09/15/25 11:32	1
Chloride (EPA 300.0-1993 R2.1)	**56**		1.0	0.13	mg/L			09/15/25 23:27	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-1

Client Sample ID: L509229-03 MW-17C
Date Collected: 09/11/25 12:07
Date Received: 09/13/25 08:00

Lab Sample ID: 240-232981-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.34		0.050	0.024	mg/L			09/15/25 23:27	1
Sulfate (EPA 300.0-1993 R2.1)	490		5.0	1.7	mg/L			09/15/25 23:53	5

Client Sample ID: L509229-04 MW-17D
Date Collected: 09/11/25 13:30
Date Received: 09/13/25 08:00

Lab Sample ID: 240-232981-4
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**2.3**		0.10	0.057	mg/L		09/15/25 14:00	09/18/25 03:09	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**8.9**		3.3	0.17	mg/L		09/16/25 15:59	09/23/25 21:34	1
Na	**43**		0.60	0.33	mg/L		09/16/25 15:59	09/23/25 21:34	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		09/15/25 14:00	09/16/25 19:16	1
Arsenic	**0.00089**	**J**	0.0050	0.00075	mg/L		09/15/25 14:00	09/16/25 19:16	1
Barium	**0.040**		0.0050	0.00077	mg/L		09/15/25 14:00	09/16/25 19:16	1
Beryllium	ND		0.0010	0.00027	mg/L		09/15/25 14:00	09/16/25 19:16	1
Cadmium	ND		0.0010	0.000077	mg/L		09/15/25 14:00	09/16/25 19:16	1
Cobalt	ND		0.0010	0.000086	mg/L		09/15/25 14:00	09/16/25 19:16	1
Chromium	ND		0.0050	0.0012	mg/L		09/15/25 14:00	09/16/25 19:16	1
Copper	ND		0.0020	0.0017	mg/L		09/15/25 14:00	09/16/25 19:16	1
Molybdenum	**0.0035**	**J**	0.0050	0.0011	mg/L		09/15/25 14:00	09/16/25 19:16	1
Nickel	ND		0.0020	0.0015	mg/L		09/15/25 14:00	09/16/25 19:16	1
Lead	ND		0.0010	0.00045	mg/L		09/15/25 14:00	09/16/25 19:16	1
Antimony	ND		0.0020	0.00057	mg/L		09/15/25 14:00	09/16/25 19:16	1
Selenium	ND		0.0050	0.00089	mg/L		09/15/25 14:00	09/16/25 19:16	1
Thallium	ND		0.0010	0.00051	mg/L		09/15/25 14:00	09/16/25 19:16	1
Vanadium	ND		0.0050	0.00082	mg/L		09/15/25 14:00	09/16/25 19:16	1
Calcium	**50**		1.0	0.25	mg/L		09/15/25 14:00	09/16/25 19:16	1
Magnesium	**16**		1.0	0.061	mg/L		09/15/25 14:00	09/16/25 19:16	1
Lithium	**0.034**		0.0080	0.0034	mg/L		09/15/25 14:00	09/16/25 19:16	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.67**		0.10	0.013	mg/L		09/16/25 15:59	09/17/25 15:42	1
Zinc	ND		0.0070	0.00093	mg/L		09/16/25 15:59	09/17/25 15:42	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**190**		33	33	mg/L			09/18/25 05:49	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		09/15/25 14:00	09/16/25 19:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**280**		5.0	2.6	mg/L			09/15/25 15:32	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/15/25 15:32	1
Total Dissolved Solids (SM 2540 C-2020)	**290**		10	7.8	mg/L			09/16/25 10:04	1
Total Suspended Solids (SM 2540D-2020)	**0.90**	**J**	4.0	0.40	mg/L			09/15/25 11:32	1
Chloride (EPA 300.0-1993 R2.1)	**3.6**		1.0	0.13	mg/L			09/16/25 01:11	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-1

Client Sample ID: L509229-04 MW-17D
Date Collected: 09/11/25 13:30
Date Received: 09/13/25 08:00

Lab Sample ID: 240-232981-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.43		0.050	0.024	mg/L			09/16/25 01:11	1
Sulfate (EPA 300.0-1993 R2.1)	3.7		1.0	0.35	mg/L			09/16/25 01:11	1

Client Sample ID: L509229-05 MW-17E
Date Collected: 09/11/25 14:44
Date Received: 09/13/25 08:00

Lab Sample ID: 240-232981-5
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.0		0.10	0.057	mg/L		09/15/25 14:00	09/18/25 03:14	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	4.5		3.3	0.17	mg/L		09/16/25 15:59	09/23/25 21:45	1
Na	150		0.60	0.33	mg/L		09/16/25 15:59	09/23/25 21:45	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		09/15/25 14:00	09/16/25 19:18	1
Arsenic	ND		0.0050	0.00075	mg/L		09/15/25 14:00	09/16/25 19:18	1
Barium	0.0041	J	0.0050	0.00077	mg/L		09/15/25 14:00	09/16/25 19:18	1
Beryllium	ND		0.0010	0.00027	mg/L		09/15/25 14:00	09/16/25 19:18	1
Cadmium	ND		0.0010	0.000077	mg/L		09/15/25 14:00	09/16/25 19:18	1
Cobalt	ND		0.0010	0.000086	mg/L		09/15/25 14:00	09/16/25 19:18	1
Chromium	ND		0.0050	0.0012	mg/L		09/15/25 14:00	09/16/25 19:18	1
Copper	ND		0.0020	0.0017	mg/L		09/15/25 14:00	09/16/25 19:18	1
Molybdenum	ND		0.0050	0.0011	mg/L		09/15/25 14:00	09/16/25 19:18	1
Nickel	ND		0.0020	0.0015	mg/L		09/15/25 14:00	09/16/25 19:18	1
Lead	ND		0.0010	0.00045	mg/L		09/15/25 14:00	09/16/25 19:18	1
Antimony	ND		0.0020	0.00057	mg/L		09/15/25 14:00	09/16/25 19:18	1
Selenium	ND		0.0050	0.00089	mg/L		09/15/25 14:00	09/16/25 19:18	1
Thallium	ND		0.0010	0.00051	mg/L		09/15/25 14:00	09/16/25 19:18	1
Vanadium	ND		0.0050	0.00082	mg/L		09/15/25 14:00	09/16/25 19:18	1
Calcium	5.2		1.0	0.25	mg/L		09/15/25 14:00	09/16/25 19:18	1
Magnesium	1.4		1.0	0.061	mg/L		09/15/25 14:00	09/16/25 19:18	1
Lithium	0.024		0.0080	0.0034	mg/L		09/15/25 14:00	09/16/25 19:18	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.017	J	0.10	0.013	mg/L		09/16/25 15:59	09/17/25 15:45	1
Zinc	ND		0.0070	0.00093	mg/L		09/16/25 15:59	09/17/25 15:45	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			09/18/25 05:49	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		09/15/25 14:00	09/16/25 19:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	320		5.0	2.6	mg/L			09/15/25 15:40	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	11		5.0	2.6	mg/L			09/15/25 15:40	1
Total Dissolved Solids (SM 2540 C-2020)	350		10	7.8	mg/L			09/16/25 10:04	1
Total Suspended Solids (SM 2540D-2020)	0.40	J	4.0	0.40	mg/L			09/16/25 10:58	1
Chloride (EPA 300.0-1993 R2.1)	1.3		1.0	0.13	mg/L			09/16/25 01:37	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-1

Client Sample ID: L509229-05 MW-17E
Date Collected: 09/11/25 14:44
Date Received: 09/13/25 08:00

Lab Sample ID: 240-232981-5
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	1.2		0.050	0.024	mg/L			09/16/25 01:37	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			09/16/25 01:37	1

Client Sample ID: L509229-06 MWT-17A
Date Collected: 09/11/25 09:20
Date Received: 09/13/25 08:00

Lab Sample ID: 240-232981-6
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.8**		0.10	0.057	mg/L		09/15/25 14:00	09/18/25 03:18	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**2.9**	**J**	3.3	0.17	mg/L		09/16/25 15:59	09/23/25 21:48	1
Na	**53**		0.60	0.33	mg/L		09/16/25 15:59	09/23/25 21:48	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		09/15/25 14:00	09/16/25 19:21	1
Arsenic	**0.0014**	**J**	0.0050	0.00075	mg/L		09/15/25 14:00	09/16/25 19:21	1
Barium	**0.037**		0.0050	0.00077	mg/L		09/15/25 14:00	09/16/25 19:21	1
Beryllium	ND		0.0010	0.00027	mg/L		09/15/25 14:00	09/16/25 19:21	1
Cadmium	ND		0.0010	0.000077	mg/L		09/15/25 14:00	09/16/25 19:21	1
Cobalt	ND		0.0010	0.000086	mg/L		09/15/25 14:00	09/16/25 19:21	1
Chromium	ND		0.0050	0.0012	mg/L		09/15/25 14:00	09/16/25 19:21	1
Copper	ND		0.0020	0.0017	mg/L		09/15/25 14:00	09/16/25 19:21	1
Molybdenum	**0.017**		0.0050	0.0011	mg/L		09/15/25 14:00	09/16/25 19:21	1
Nickel	**0.012**		0.0020	0.0015	mg/L		09/15/25 14:00	09/16/25 19:21	1
Lead	ND		0.0010	0.00045	mg/L		09/15/25 14:00	09/16/25 19:21	1
Antimony	ND		0.0020	0.00057	mg/L		09/15/25 14:00	09/16/25 19:21	1
Selenium	ND		0.0050	0.00089	mg/L		09/15/25 14:00	09/16/25 19:21	1
Thallium	ND		0.0010	0.00051	mg/L		09/15/25 14:00	09/16/25 19:21	1
Vanadium	ND		0.0050	0.00082	mg/L		09/15/25 14:00	09/16/25 19:21	1
Calcium	**240**		1.0	0.25	mg/L		09/15/25 14:00	09/16/25 19:21	1
Magnesium	**65**		1.0	0.061	mg/L		09/15/25 14:00	09/16/25 19:21	1
Lithium	**0.047**		0.0080	0.0034	mg/L		09/15/25 14:00	09/16/25 19:21	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**7.4**		0.10	0.013	mg/L		09/16/25 15:59	09/17/25 15:47	1
Zinc	ND		0.0070	0.00093	mg/L		09/16/25 15:59	09/17/25 15:47	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**870**		33	33	mg/L			09/18/25 05:49	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		09/15/25 14:00	09/16/25 19:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**250**		5.0	2.6	mg/L			09/15/25 15:48	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/15/25 15:48	1
Total Dissolved Solids (SM 2540 C-2020)	**1300**		20	16	mg/L			09/16/25 10:04	1
Total Suspended Solids (SM 2540D-2020)	**16**		8.0	0.80	mg/L			09/16/25 10:58	1
Chloride (EPA 300.0-1993 R2.1)	**70**		1.0	0.13	mg/L			09/16/25 01:45	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-1

Client Sample ID: L509229-06 MWT-17A
Date Collected: 09/11/25 09:20
Date Received: 09/13/25 08:00

Lab Sample ID: 240-232981-6
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.25		0.050	0.024	mg/L			09/16/25 01:45	1
Sulfate (EPA 300.0-1993 R2.1)	660		5.0	1.7	mg/L			09/16/25 01:54	5

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-1

Client Sample ID: L509229-07 FIELD BLANK

Lab Sample ID: 240-232981-7

Date Collected: 09/11/25 08:30

Matrix: Water

Date Received: 09/13/25 08:00

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		09/15/25 14:00	09/18/25 03:23	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		09/16/25 15:59	09/23/25 21:52	1
Na	ND		0.60	0.33	mg/L		09/16/25 15:59	09/23/25 21:52	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		09/15/25 14:00	09/16/25 19:24	1
Arsenic	ND		0.0050	0.00075	mg/L		09/15/25 14:00	09/16/25 19:24	1
Barium	ND		0.0050	0.00077	mg/L		09/15/25 14:00	09/16/25 19:24	1
Beryllium	ND		0.0010	0.00027	mg/L		09/15/25 14:00	09/16/25 19:24	1
Cadmium	ND		0.0010	0.000077	mg/L		09/15/25 14:00	09/16/25 19:24	1
Cobalt	ND		0.0010	0.000086	mg/L		09/15/25 14:00	09/16/25 19:24	1
Chromium	ND		0.0050	0.0012	mg/L		09/15/25 14:00	09/16/25 19:24	1
Copper	ND		0.0020	0.0017	mg/L		09/15/25 14:00	09/16/25 19:24	1
Molybdenum	ND		0.0050	0.0011	mg/L		09/15/25 14:00	09/16/25 19:24	1
Nickel	ND		0.0020	0.0015	mg/L		09/15/25 14:00	09/16/25 19:24	1
Lead	ND		0.0010	0.00045	mg/L		09/15/25 14:00	09/16/25 19:24	1
Antimony	ND		0.0020	0.00057	mg/L		09/15/25 14:00	09/16/25 19:24	1
Selenium	ND		0.0050	0.00089	mg/L		09/15/25 14:00	09/16/25 19:24	1
Thallium	ND		0.0010	0.00051	mg/L		09/15/25 14:00	09/16/25 19:24	1
Vanadium	ND		0.0050	0.00082	mg/L		09/15/25 14:00	09/16/25 19:24	1
Calcium	**0.77**	**J**	1.0	0.25	mg/L		09/15/25 14:00	09/16/25 19:24	1
Magnesium	**0.19**	**J**	1.0	0.061	mg/L		09/15/25 14:00	09/16/25 19:24	1
Lithium	ND		0.0080	0.0034	mg/L		09/15/25 14:00	09/16/25 19:24	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		09/16/25 15:59	09/17/25 15:50	1
Zinc	ND		0.0070	0.00093	mg/L		09/16/25 15:59	09/17/25 15:50	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			09/18/25 05:49	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		09/15/25 14:00	09/16/25 19:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**3.8**	**J**	5.0	2.6	mg/L			09/15/25 15:55	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/15/25 15:55	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			09/16/25 10:04	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			09/16/25 10:58	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			09/16/25 02:03	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-1

Client Sample ID: L509229-07 FIELD BLANK
Date Collected: 09/11/25 08:30
Date Received: 09/13/25 08:00

Lab Sample ID: 240-232981-7
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			09/16/25 02:03	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			09/16/25 02:03	1

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-671711/1-A
Matrix: Water
Analysis Batch: 672194

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 671711

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		09/15/25 14:00	09/18/25 02:16	1

Lab Sample ID: LCS 240-671711/2-A
Matrix: Water
Analysis Batch: 672194

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 671711

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	0.950		mg/L		95	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 350-9626/25-A
Matrix: Water
Analysis Batch: 9800

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9626

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		09/16/25 15:59	09/23/25 21:06	1
Na	ND		0.60	0.33	mg/L		09/16/25 15:59	09/23/25 21:06	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-9626/25-A
Matrix: Water
Analysis Batch: 9667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 9626

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		09/16/25 15:59	09/17/25 14:59	1
Zinc	ND		0.0070	0.00093	mg/L		09/16/25 15:59	09/17/25 14:59	1

Lab Sample ID: LCS 350-9626/26-A
Matrix: Water
Analysis Batch: 9693

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 9626

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	20.7		mg/L		103	85 - 115
Zinc	1.00	1.02		mg/L		102	85 - 115

Lab Sample ID: 240-232981-1 MS
Matrix: Water
Analysis Batch: 9667

Client Sample ID: L509229-01 MW-17A
Prep Type: Total/NA
Prep Batch: 9626

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	7.1		20.0	23.9		mg/L		84	70 - 130
Zinc	0.0012	J	1.00	0.822		mg/L		82	70 - 130

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-232981-1 MSD
Matrix: Water
Analysis Batch: 9667

Client Sample ID: L509229-01 MW-17A
Prep Type: Total/NA
Prep Batch: 9626

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	7.1		20.0	26.7		mg/L		98	70 - 130	11	20
Zinc	0.0012	J	1.00	0.933		mg/L		93	70 - 130	13	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-671711/1-A
Matrix: Water
Analysis Batch: 671935

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 671711

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		09/15/25 14:00	09/16/25 11:55	1
Arsenic	ND		0.0050	0.00075	mg/L		09/15/25 14:00	09/16/25 11:55	1
Barium	ND		0.0050	0.00077	mg/L		09/15/25 14:00	09/16/25 11:55	1
Beryllium	ND		0.0010	0.00027	mg/L		09/15/25 14:00	09/16/25 11:55	1
Cadmium	ND		0.0010	0.000077	mg/L		09/15/25 14:00	09/16/25 11:55	1
Cobalt	0.000136	J	0.0010	0.000086	mg/L		09/15/25 14:00	09/16/25 11:55	1
Chromium	ND		0.0050	0.0012	mg/L		09/15/25 14:00	09/16/25 11:55	1
Copper	ND		0.0020	0.0017	mg/L		09/15/25 14:00	09/16/25 11:55	1
Molybdenum	ND		0.0050	0.0011	mg/L		09/15/25 14:00	09/16/25 11:55	1
Nickel	ND		0.0020	0.0015	mg/L		09/15/25 14:00	09/16/25 11:55	1
Lead	ND		0.0010	0.00045	mg/L		09/15/25 14:00	09/16/25 11:55	1
Antimony	ND		0.0020	0.00057	mg/L		09/15/25 14:00	09/16/25 11:55	1
Selenium	ND		0.0050	0.00089	mg/L		09/15/25 14:00	09/16/25 11:55	1
Thallium	ND		0.0010	0.00051	mg/L		09/15/25 14:00	09/16/25 11:55	1
Vanadium	ND		0.0050	0.00082	mg/L		09/15/25 14:00	09/16/25 11:55	1
Calcium	ND		1.0	0.25	mg/L		09/15/25 14:00	09/16/25 11:55	1
Magnesium	ND		1.0	0.061	mg/L		09/15/25 14:00	09/16/25 11:55	1
Lithium	ND		0.0080	0.0034	mg/L		09/15/25 14:00	09/16/25 11:55	1

Lab Sample ID: LCS 240-671711/3-A
Matrix: Water
Analysis Batch: 671935

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 671711

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.0960		mg/L		96	85 - 115
Arsenic	1.00	0.965		mg/L		97	85 - 115
Barium	1.00	0.955		mg/L		95	85 - 115
Beryllium	0.500	0.469		mg/L		94	85 - 115
Cadmium	0.500	0.462		mg/L		92	85 - 115
Cobalt	0.500	0.466		mg/L		93	85 - 115
Chromium	0.500	0.471		mg/L		94	85 - 115
Copper	0.500	0.477		mg/L		95	85 - 115
Molybdenum	0.500	0.474		mg/L		95	85 - 115
Nickel	0.500	0.477		mg/L		95	85 - 115
Lead	0.500	0.508		mg/L		102	85 - 115
Antimony	0.100	0.0966		mg/L		97	85 - 115
Selenium	1.00	0.931		mg/L		93	85 - 115
Thallium	1.00	1.09		mg/L		109	85 - 115
Vanadium	0.500	0.475		mg/L		95	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-671711/3-A
Matrix: Water
Analysis Batch: 671935

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 671711

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25.0	24.1		mg/L		96	85 - 115
Magnesium	25.0	23.9		mg/L		96	85 - 115
Lithium	0.500	0.482		mg/L		96	85 - 115

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-671720/1-A
Matrix: Water
Analysis Batch: 672010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 671720

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		09/15/25 14:00	09/16/25 18:33	1

Lab Sample ID: LCS 240-671720/2-A
Matrix: Water
Analysis Batch: 672010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 671720

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00481		mg/L		96	85 - 115

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-671881/33
Matrix: Water
Analysis Batch: 671881

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/15/25 14:58	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/15/25 14:58	1

Lab Sample ID: MB 240-671881/4
Matrix: Water
Analysis Batch: 671881

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	3.19	J	5.0	2.6	mg/L			09/15/25 11:49	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/15/25 11:49	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-671819/1
Matrix: Water
Analysis Batch: 671819

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			09/15/25 16:35	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 240-671819/2
Matrix: Water
Analysis Batch: 671819

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	176	163		mg/L		93	80 - 120

Lab Sample ID: MB 240-671886/1
Matrix: Water
Analysis Batch: 671886

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			09/16/25 10:04	1

Lab Sample ID: LCS 240-671886/2
Matrix: Water
Analysis Batch: 671886

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	176	161		mg/L		91	80 - 120

Lab Sample ID: 240-232981-3 DU
Matrix: Water
Analysis Batch: 671886

Client Sample ID: L509229-03 MW-17C
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1000		1020		mg/L		2	20

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-671723/1
Matrix: Water
Analysis Batch: 671723

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			09/15/25 11:32	1

Lab Sample ID: LCS 240-671723/2
Matrix: Water
Analysis Batch: 671723

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	76.1	74.0		mg/L		97	64 - 120

Lab Sample ID: 240-232981-1 DU
Matrix: Water
Analysis Batch: 671723

Client Sample ID: L509229-01 MW-17A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	12		10.8	F5	mg/L		12	10

Method: 2540D-2020 - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: MB 240-671906/1
Matrix: Water
Analysis Batch: 671906

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			09/16/25 10:58	1

Lab Sample ID: LCS 240-671906/2
Matrix: Water
Analysis Batch: 671906

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	76.1	78.0		mg/L		102	64 - 120

Lab Sample ID: 240-232981-6 DU
Matrix: Water
Analysis Batch: 671906

Client Sample ID: L509229-06 MWT-17A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	16		16.2		mg/L		0	10

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-671801/3
Matrix: Water
Analysis Batch: 671801

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			09/15/25 16:56	1
Fluoride	ND		0.050	0.024	mg/L			09/15/25 16:56	1
Sulfate	ND		1.0	0.35	mg/L			09/15/25 16:56	1

Lab Sample ID: LCS 240-671801/4
Matrix: Water
Analysis Batch: 671801

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.2		mg/L		98	90 - 110
Fluoride	2.50	2.51		mg/L		100	90 - 110
Sulfate	50.0	49.3		mg/L		99	90 - 110

Lab Sample ID: MB 240-671804/3
Matrix: Water
Analysis Batch: 671804

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			09/16/25 00:53	1
Fluoride	ND		0.050	0.024	mg/L			09/16/25 00:53	1
Sulfate	ND		1.0	0.35	mg/L			09/16/25 00:53	1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-671804/4
Matrix: Water
Analysis Batch: 671804

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	49.1		mg/L		98	90 - 110		
Fluoride			2.50	2.51		mg/L		101	90 - 110		
Sulfate			50.0	48.2		mg/L		96	90 - 110		

Lab Sample ID: 240-232981-4 MS
Matrix: Water
Analysis Batch: 671804

Client Sample ID: L509229-04 MW-17D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	3.6		50.0	55.3		mg/L		103	80 - 120		
Fluoride	0.43		2.50	3.01		mg/L		103	80 - 120		
Sulfate	3.7		50.0	52.8		mg/L		98	80 - 120		

Lab Sample ID: 240-232981-4 MSD
Matrix: Water
Analysis Batch: 671804

Client Sample ID: L509229-04 MW-17D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	3.6		50.0	56.2		mg/L		105	80 - 120	2	15
Fluoride	0.43		2.50	3.05		mg/L		105	80 - 120	1	15
Sulfate	3.7		50.0	53.7		mg/L		100	80 - 120	2	15

Metals

Prep Batch: 9626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-1	L509229-01 MW-17A	Total/NA	Water	200.7	
240-232981-2	L509229-02 MW-17B	Total/NA	Water	200.7	
240-232981-3	L509229-03 MW-17C	Total/NA	Water	200.7	
240-232981-4	L509229-04 MW-17D	Total/NA	Water	200.7	
240-232981-5	L509229-05 MW-17E	Total/NA	Water	200.7	
240-232981-6	L509229-06 MWT-17A	Total/NA	Water	200.7	
240-232981-7	L509229-07 FIELD BLANK	Total/NA	Water	200.7	
MB 350-9626/25-A	Method Blank	Total/NA	Water	200.7	
LCS 350-9626/26-A	Lab Control Sample	Total/NA	Water	200.7	
240-232981-1 MS	L509229-01 MW-17A	Total/NA	Water	200.7	
240-232981-1 MSD	L509229-01 MW-17A	Total/NA	Water	200.7	

Analysis Batch: 9667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-1	L509229-01 MW-17A	Total/NA	Water	200.8	9626
240-232981-2	L509229-02 MW-17B	Total/NA	Water	200.8	9626
240-232981-3	L509229-03 MW-17C	Total/NA	Water	200.8	9626
240-232981-4	L509229-04 MW-17D	Total/NA	Water	200.8	9626
240-232981-5	L509229-05 MW-17E	Total/NA	Water	200.8	9626
240-232981-6	L509229-06 MWT-17A	Total/NA	Water	200.8	9626
240-232981-7	L509229-07 FIELD BLANK	Total/NA	Water	200.8	9626
MB 350-9626/25-A	Method Blank	Total/NA	Water	200.8	9626
240-232981-1 MS	L509229-01 MW-17A	Total/NA	Water	200.8	9626
240-232981-1 MSD	L509229-01 MW-17A	Total/NA	Water	200.8	9626

Analysis Batch: 9693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 350-9626/26-A	Lab Control Sample	Total/NA	Water	200.8	9626

Analysis Batch: 9800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-1	L509229-01 MW-17A	Total/NA	Water	200.7 Rev 4.4	9626
240-232981-2	L509229-02 MW-17B	Total/NA	Water	200.7 Rev 4.4	9626
240-232981-3	L509229-03 MW-17C	Total/NA	Water	200.7 Rev 4.4	9626
240-232981-4	L509229-04 MW-17D	Total/NA	Water	200.7 Rev 4.4	9626
240-232981-5	L509229-05 MW-17E	Total/NA	Water	200.7 Rev 4.4	9626
240-232981-6	L509229-06 MWT-17A	Total/NA	Water	200.7 Rev 4.4	9626
240-232981-7	L509229-07 FIELD BLANK	Total/NA	Water	200.7 Rev 4.4	9626
MB 350-9626/25-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	9626
LCS 350-9626/26-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	9626
240-232981-1 MS	L509229-01 MW-17A	Total/NA	Water	200.7 Rev 4.4	9626
240-232981-1 MSD	L509229-01 MW-17A	Total/NA	Water	200.7 Rev 4.4	9626

Prep Batch: 671711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-1	L509229-01 MW-17A	Total Recoverable	Water	200.7	
240-232981-2	L509229-02 MW-17B	Total Recoverable	Water	200.7	
240-232981-3	L509229-03 MW-17C	Total Recoverable	Water	200.7	
240-232981-4	L509229-04 MW-17D	Total Recoverable	Water	200.7	
240-232981-5	L509229-05 MW-17E	Total Recoverable	Water	200.7	
240-232981-6	L509229-06 MWT-17A	Total Recoverable	Water	200.7	

Metals (Continued)

Prep Batch: 671711 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-7	L509229-07 FIELD BLANK	Total Recoverable	Water	200.7	
MB 240-671711/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-671711/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-671711/3-A	Lab Control Sample	Total Recoverable	Water	200.7	

Prep Batch: 671720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-1	L509229-01 MW-17A	Total/NA	Water	245.1-1994 R3.0	
240-232981-2	L509229-02 MW-17B	Total/NA	Water	245.1-1994 R3.0	
240-232981-3	L509229-03 MW-17C	Total/NA	Water	245.1-1994 R3.0	
240-232981-4	L509229-04 MW-17D	Total/NA	Water	245.1-1994 R3.0	
240-232981-5	L509229-05 MW-17E	Total/NA	Water	245.1-1994 R3.0	
240-232981-6	L509229-06 MWT-17A	Total/NA	Water	245.1-1994 R3.0	
240-232981-7	L509229-07 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	
MB 240-671720/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-671720/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 671935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-1	L509229-01 MW-17A	Total Recoverable	Water	200.8-1994 R5.4	671711
240-232981-2	L509229-02 MW-17B	Total Recoverable	Water	200.8-1994 R5.4	671711
240-232981-3	L509229-03 MW-17C	Total Recoverable	Water	200.8-1994 R5.4	671711
240-232981-4	L509229-04 MW-17D	Total Recoverable	Water	200.8-1994 R5.4	671711
240-232981-5	L509229-05 MW-17E	Total Recoverable	Water	200.8-1994 R5.4	671711
240-232981-6	L509229-06 MWT-17A	Total Recoverable	Water	200.8-1994 R5.4	671711
240-232981-7	L509229-07 FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	671711
MB 240-671711/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	671711
LCS 240-671711/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	671711

Analysis Batch: 672010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-1	L509229-01 MW-17A	Total/NA	Water	245.1-1994 R3.0	671720
240-232981-2	L509229-02 MW-17B	Total/NA	Water	245.1-1994 R3.0	671720
240-232981-3	L509229-03 MW-17C	Total/NA	Water	245.1-1994 R3.0	671720
240-232981-4	L509229-04 MW-17D	Total/NA	Water	245.1-1994 R3.0	671720
240-232981-5	L509229-05 MW-17E	Total/NA	Water	245.1-1994 R3.0	671720
240-232981-6	L509229-06 MWT-17A	Total/NA	Water	245.1-1994 R3.0	671720
240-232981-7	L509229-07 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	671720
MB 240-671720/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	671720
LCS 240-671720/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	671720

Analysis Batch: 672159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-1	L509229-01 MW-17A	Total Recoverable	Water	2340 B-2021	
240-232981-2	L509229-02 MW-17B	Total Recoverable	Water	2340 B-2021	
240-232981-3	L509229-03 MW-17C	Total Recoverable	Water	2340 B-2021	
240-232981-4	L509229-04 MW-17D	Total Recoverable	Water	2340 B-2021	
240-232981-5	L509229-05 MW-17E	Total Recoverable	Water	2340 B-2021	
240-232981-6	L509229-06 MWT-17A	Total Recoverable	Water	2340 B-2021	
240-232981-7	L509229-07 FIELD BLANK	Total Recoverable	Water	2340 B-2021	

Metals

Analysis Batch: 672194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-1	L509229-01 MW-17A	Total Recoverable	Water	200.7 R4.4-1994	671711
240-232981-2	L509229-02 MW-17B	Total Recoverable	Water	200.7 R4.4-1994	671711
240-232981-3	L509229-03 MW-17C	Total Recoverable	Water	200.7 R4.4-1994	671711
240-232981-4	L509229-04 MW-17D	Total Recoverable	Water	200.7 R4.4-1994	671711
240-232981-5	L509229-05 MW-17E	Total Recoverable	Water	200.7 R4.4-1994	671711
240-232981-6	L509229-06 MWT-17A	Total Recoverable	Water	200.7 R4.4-1994	671711
240-232981-7	L509229-07 FIELD BLANK	Total Recoverable	Water	200.7 R4.4-1994	671711
MB 240-671711/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	671711
LCS 240-671711/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	671711

General Chemistry

Analysis Batch: 671723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-1	L509229-01 MW-17A	Total/NA	Water	2540D-2020	
240-232981-2	L509229-02 MW-17B	Total/NA	Water	2540D-2020	
240-232981-3	L509229-03 MW-17C	Total/NA	Water	2540D-2020	
240-232981-4	L509229-04 MW-17D	Total/NA	Water	2540D-2020	
MB 240-671723/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-671723/2	Lab Control Sample	Total/NA	Water	2540D-2020	
240-232981-1 DU	L509229-01 MW-17A	Total/NA	Water	2540D-2020	

Analysis Batch: 671801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-1	L509229-01 MW-17A	Total/NA	Water	300.0-1993 R2.1	
240-232981-1	L509229-01 MW-17A	Total/NA	Water	300.0-1993 R2.1	
240-232981-2	L509229-02 MW-17B	Total/NA	Water	300.0-1993 R2.1	
240-232981-2	L509229-02 MW-17B	Total/NA	Water	300.0-1993 R2.1	
240-232981-3	L509229-03 MW-17C	Total/NA	Water	300.0-1993 R2.1	
240-232981-3	L509229-03 MW-17C	Total/NA	Water	300.0-1993 R2.1	
MB 240-671801/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-671801/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 671804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-4	L509229-04 MW-17D	Total/NA	Water	300.0-1993 R2.1	
240-232981-5	L509229-05 MW-17E	Total/NA	Water	300.0-1993 R2.1	
240-232981-6	L509229-06 MWT-17A	Total/NA	Water	300.0-1993 R2.1	
240-232981-6	L509229-06 MWT-17A	Total/NA	Water	300.0-1993 R2.1	
240-232981-7	L509229-07 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
MB 240-671804/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-671804/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-232981-4 MS	L509229-04 MW-17D	Total/NA	Water	300.0-1993 R2.1	
240-232981-4 MSD	L509229-04 MW-17D	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 671819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-1	L509229-01 MW-17A	Total/NA	Water	2540 C-2020	
240-232981-2	L509229-02 MW-17B	Total/NA	Water	2540 C-2020	
MB 240-671819/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-671819/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

General Chemistry

Analysis Batch: 671881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-1	L509229-01 MW-17A	Total/NA	Water	2320 B-2021	
240-232981-2	L509229-02 MW-17B	Total/NA	Water	2320 B-2021	
240-232981-3	L509229-03 MW-17C	Total/NA	Water	2320 B-2021	
240-232981-4	L509229-04 MW-17D	Total/NA	Water	2320 B-2021	
240-232981-5	L509229-05 MW-17E	Total/NA	Water	2320 B-2021	
240-232981-6	L509229-06 MWT-17A	Total/NA	Water	2320 B-2021	
240-232981-7	L509229-07 FIELD BLANK	Total/NA	Water	2320 B-2021	
MB 240-671881/33	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-671881/4	Method Blank	Total/NA	Water	2320 B-2021	

Analysis Batch: 671886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-3	L509229-03 MW-17C	Total/NA	Water	2540 C-2020	
240-232981-4	L509229-04 MW-17D	Total/NA	Water	2540 C-2020	
240-232981-5	L509229-05 MW-17E	Total/NA	Water	2540 C-2020	
240-232981-6	L509229-06 MWT-17A	Total/NA	Water	2540 C-2020	
240-232981-7	L509229-07 FIELD BLANK	Total/NA	Water	2540 C-2020	
MB 240-671886/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-671886/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-232981-3 DU	L509229-03 MW-17C	Total/NA	Water	2540 C-2020	

Analysis Batch: 671906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-5	L509229-05 MW-17E	Total/NA	Water	2540D-2020	
240-232981-6	L509229-06 MWT-17A	Total/NA	Water	2540D-2020	
240-232981-7	L509229-07 FIELD BLANK	Total/NA	Water	2540D-2020	
MB 240-671906/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-671906/2	Lab Control Sample	Total/NA	Water	2540D-2020	
240-232981-6 DU	L509229-06 MWT-17A	Total/NA	Water	2540D-2020	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-1

Client Sample ID: L509229-01 MW-17A

Lab Sample ID: 240-232981-1

Date Collected: 09/11/25 09:20
Matrix: Water
Date Received: 09/13/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	672194	AJC	EET CLE	09/18/25 02:47
Total/NA	Prep	200.7			9626	RMN	EET SSM	09/16/25 15:59
Total/NA	Analysis	200.7 Rev 4.4		1	9800	JLS	EET SSM	09/23/25 21:12
Total/NA	Prep	200.7			9626	RMN	EET SSM	09/16/25 15:59
Total/NA	Analysis	200.8		1	9667	CW	EET SSM	09/17/25 15:05
Total Recoverable	Prep	200.7			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	671935	S4FJ	EET CLE	09/16/25 19:08
Total Recoverable	Analysis	2340 B-2021		1	672159	KLC	EET CLE	09/18/25 05:49
Total/NA	Prep	245.1-1994 R3.0			671720	F3PF	EET CLE	09/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	672010	GEV	EET CLE	09/16/25 18:57
Total/NA	Analysis	2320 B-2021		1	671881	PQD2	EET CLE	09/15/25 15:11
Total/NA	Analysis	2540 C-2020		1	671819	PQD2	EET CLE	09/15/25 16:35
Total/NA	Analysis	2540D-2020		1	671723	C5SV	EET CLE	09/15/25 11:32
Total/NA	Analysis	300.0-1993 R2.1		1	671801	JMR	EET CLE	09/15/25 22:52
Total/NA	Analysis	300.0-1993 R2.1		5	671801	JMR	EET CLE	09/15/25 23:01

Client Sample ID: L509229-02 MW-17B

Lab Sample ID: 240-232981-2

Date Collected: 09/11/25 10:51
Matrix: Water
Date Received: 09/13/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	672194	AJC	EET CLE	09/18/25 03:00
Total/NA	Prep	200.7			9626	RMN	EET SSM	09/16/25 15:59
Total/NA	Analysis	200.7 Rev 4.4		1	9800	JLS	EET SSM	09/23/25 21:28
Total/NA	Prep	200.7			9626	RMN	EET SSM	09/16/25 15:59
Total/NA	Analysis	200.8		1	9667	CW	EET SSM	09/17/25 15:36
Total Recoverable	Prep	200.7			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	671935	S4FJ	EET CLE	09/16/25 19:10
Total Recoverable	Analysis	2340 B-2021		1	672159	KLC	EET CLE	09/18/25 05:49
Total/NA	Prep	245.1-1994 R3.0			671720	F3PF	EET CLE	09/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	672010	GEV	EET CLE	09/16/25 18:58
Total/NA	Analysis	2320 B-2021		1	671881	PQD2	EET CLE	09/15/25 15:18
Total/NA	Analysis	2540 C-2020		1	671819	PQD2	EET CLE	09/15/25 16:35
Total/NA	Analysis	2540D-2020		1	671723	C5SV	EET CLE	09/15/25 11:32
Total/NA	Analysis	300.0-1993 R2.1		1	671801	JMR	EET CLE	09/15/25 23:09
Total/NA	Analysis	300.0-1993 R2.1		5	671801	JMR	EET CLE	09/15/25 23:18

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-1

Client Sample ID: L509229-03 MW-17C

Lab Sample ID: 240-232981-3

Date Collected: 09/11/25 12:07
Matrix: Water
Date Received: 09/13/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	672194	AJC	EET CLE	09/18/25 03:05
Total/NA	Prep	200.7			9626	RMN	EET SSM	09/16/25 15:59
Total/NA	Analysis	200.7 Rev 4.4		1	9800	JLS	EET SSM	09/23/25 21:31
Total/NA	Prep	200.7			9626	RMN	EET SSM	09/16/25 15:59
Total/NA	Analysis	200.8		1	9667	CW	EET SSM	09/17/25 15:39
Total Recoverable	Prep	200.7			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	671935	S4FJ	EET CLE	09/16/25 19:13
Total Recoverable	Analysis	2340 B-2021		1	672159	KLC	EET CLE	09/18/25 05:49
Total/NA	Prep	245.1-1994 R3.0			671720	F3PF	EET CLE	09/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	672010	GEV	EET CLE	09/16/25 19:00
Total/NA	Analysis	2320 B-2021		1	671881	PQD2	EET CLE	09/15/25 15:24
Total/NA	Analysis	2540 C-2020		1	671886	TAV2	EET CLE	09/16/25 10:04
Total/NA	Analysis	2540D-2020		1	671723	C5SV	EET CLE	09/15/25 11:32
Total/NA	Analysis	300.0-1993 R2.1		1	671801	JMR	EET CLE	09/15/25 23:27
Total/NA	Analysis	300.0-1993 R2.1		5	671801	JMR	EET CLE	09/15/25 23:53

Client Sample ID: L509229-04 MW-17D

Lab Sample ID: 240-232981-4

Date Collected: 09/11/25 13:30
Matrix: Water
Date Received: 09/13/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	672194	AJC	EET CLE	09/18/25 03:09
Total/NA	Prep	200.7			9626	RMN	EET SSM	09/16/25 15:59
Total/NA	Analysis	200.7 Rev 4.4		1	9800	JLS	EET SSM	09/23/25 21:34
Total/NA	Prep	200.7			9626	RMN	EET SSM	09/16/25 15:59
Total/NA	Analysis	200.8		1	9667	CW	EET SSM	09/17/25 15:42
Total Recoverable	Prep	200.7			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	671935	S4FJ	EET CLE	09/16/25 19:16
Total Recoverable	Analysis	2340 B-2021		1	672159	KLC	EET CLE	09/18/25 05:49
Total/NA	Prep	245.1-1994 R3.0			671720	F3PF	EET CLE	09/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	672010	GEV	EET CLE	09/16/25 19:05
Total/NA	Analysis	2320 B-2021		1	671881	PQD2	EET CLE	09/15/25 15:32
Total/NA	Analysis	2540 C-2020		1	671886	TAV2	EET CLE	09/16/25 10:04
Total/NA	Analysis	2540D-2020		1	671723	C5SV	EET CLE	09/15/25 11:32
Total/NA	Analysis	300.0-1993 R2.1		1	671804	JMR	EET CLE	09/16/25 01:11

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-1

Client Sample ID: L509229-05 MW-17E

Lab Sample ID: 240-232981-5

Date Collected: 09/11/25 14:44
Matrix: Water
Date Received: 09/13/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	672194	AJC	EET CLE	09/18/25 03:14
Total/NA	Prep	200.7			9626	RMN	EET SSM	09/16/25 15:59
Total/NA	Analysis	200.7 Rev 4.4		1	9800	JLS	EET SSM	09/23/25 21:45
Total/NA	Prep	200.7			9626	RMN	EET SSM	09/16/25 15:59
Total/NA	Analysis	200.8		1	9667	CW	EET SSM	09/17/25 15:45
Total Recoverable	Prep	200.7			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	671935	S4FJ	EET CLE	09/16/25 19:18
Total Recoverable	Analysis	2340 B-2021		1	672159	KLC	EET CLE	09/18/25 05:49
Total/NA	Prep	245.1-1994 R3.0			671720	F3PF	EET CLE	09/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	672010	GEV	EET CLE	09/16/25 19:07
Total/NA	Analysis	2320 B-2021		1	671881	PQD2	EET CLE	09/15/25 15:40
Total/NA	Analysis	2540 C-2020		1	671886	TAV2	EET CLE	09/16/25 10:04
Total/NA	Analysis	2540D-2020		1	671906	TAV2	EET CLE	09/16/25 10:58
Total/NA	Analysis	300.0-1993 R2.1		1	671804	JMR	EET CLE	09/16/25 01:37

Client Sample ID: L509229-06 MWT-17A

Lab Sample ID: 240-232981-6

Date Collected: 09/11/25 09:20
Matrix: Water
Date Received: 09/13/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	672194	AJC	EET CLE	09/18/25 03:18
Total/NA	Prep	200.7			9626	RMN	EET SSM	09/16/25 15:59
Total/NA	Analysis	200.7 Rev 4.4		1	9800	JLS	EET SSM	09/23/25 21:48
Total/NA	Prep	200.7			9626	RMN	EET SSM	09/16/25 15:59
Total/NA	Analysis	200.8		1	9667	CW	EET SSM	09/17/25 15:47
Total Recoverable	Prep	200.7			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	671935	S4FJ	EET CLE	09/16/25 19:21
Total Recoverable	Analysis	2340 B-2021		1	672159	KLC	EET CLE	09/18/25 05:49
Total/NA	Prep	245.1-1994 R3.0			671720	F3PF	EET CLE	09/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	672010	GEV	EET CLE	09/16/25 19:09
Total/NA	Analysis	2320 B-2021		1	671881	PQD2	EET CLE	09/15/25 15:48
Total/NA	Analysis	2540 C-2020		1	671886	TAV2	EET CLE	09/16/25 10:04
Total/NA	Analysis	2540D-2020		1	671906	TAV2	EET CLE	09/16/25 10:58
Total/NA	Analysis	300.0-1993 R2.1		1	671804	JMR	EET CLE	09/16/25 01:45
Total/NA	Analysis	300.0-1993 R2.1		5	671804	JMR	EET CLE	09/16/25 01:54

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-1

Client Sample ID: L509229-07 FIELD BLANK

Lab Sample ID: 240-232981-7

Date Collected: 09/11/25 08:30

Matrix: Water

Date Received: 09/13/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	672194	AJC	EET CLE	09/18/25 03:23
Total/NA	Prep	200.7			9626	RMN	EET SSM	09/16/25 15:59
Total/NA	Analysis	200.7 Rev 4.4		1	9800	JLS	EET SSM	09/23/25 21:52
Total/NA	Prep	200.7			9626	RMN	EET SSM	09/16/25 15:59
Total/NA	Analysis	200.8		1	9667	CW	EET SSM	09/17/25 15:50
Total Recoverable	Prep	200.7			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	671935	S4FJ	EET CLE	09/16/25 19:24
Total Recoverable	Analysis	2340 B-2021		1	672159	KLC	EET CLE	09/18/25 05:49
Total/NA	Prep	245.1-1994 R3.0			671720	F3PF	EET CLE	09/15/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	672010	GEV	EET CLE	09/16/25 19:10
Total/NA	Analysis	2320 B-2021		1	671881	PQD2	EET CLE	09/15/25 15:55
Total/NA	Analysis	2540 C-2020		1	671886	TAV2	EET CLE	09/16/25 10:04
Total/NA	Analysis	2540D-2020		1	671906	TAV2	EET CLE	09/16/25 10:58
Total/NA	Analysis	300.0-1993 R2.1		1	671804	JMR	EET CLE	09/16/25 02:03

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-1

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-08-26
Florida	NELAP	E87575	06-30-26
Louisiana (All)	NELAP	03073	07-01-26
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-26
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167	07-08-26
US Fish & Wildlife	US Federal Programs	A20571	06-30-26
USDA	US Federal Programs	525-23-4-22573	01-24-28
Washington	State	C788	07-13-26
Wisconsin	State	399133460	08-31-26

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com; Environmental_Laboratory@

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:

Project Number:
24034575

Sample State: MI

Special Instructions:
Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner. Please add Na and K metals

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
Marc Wahrer

Description:
Erickson Wellfield 8/26/25

Site Name:
Erickson Projects

See following pages for Method and Container information.

240-232981 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L509229-01 MW-17A	Grab	Water	09/11/25 09:20			
2	L509229-02 MW-17B	Grab	Water	09/11/25 10:51			
3	L509229-03 MW-17C	Grab	Water	09/11/25 12:07			
4	L509229-04 MW-17D	Grab	Water	09/11/25 13:30			
5	L509229-05 MW-17E	Grab	Water	09/11/25 14:44			
6	L509229-06 MWT-17A	Grab	Water	09/11/25 09:20			
7	L509229-07 Field Blank	Grab	Water	09/11/25 08:30			

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished By:	Date/Time:		
Jennifer Caporale	09/12/25 09:53	Jennifer Caporale	09/12/25 09:53	JORDAN N PYLES	9/13/25 0800 ELKO

Chain of Custody Number: **405454**

*H – Analysis on hold.

Coolers								
Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250912A001								
MIC20250912A001								

JORDAN N PYLES 9/13/25 0800 Euro

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																				
#	Sample Name	200.7 Rev 4.4 / Metals (ICP) / Iron & Zinc	200.8 / Metals (ICP/MS) / Custom List 1 1 Metals	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	2320 B-2021 / Alkalinity / Bicarbonate & Carbonate Alkalinity	200.7 R4.4-1994 / Metals (ICP) / Total Boron	903.0 / Radium-226 (GFPC) / Standard Target List	2340 B-2021 / Total Hardness (as CaCO3) by calculation	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	245.1 1994 R3.0 / Mercury (CVAA) / Mercury	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved S	200.7 Rev 4.4 / Metals (ICP) / Total Na & K	904.0 / Radium-228 (GFPC) / Standard Target List	300.0-1993 R2 1 / Anions Ion Chromatography / Chloride Fluor	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	2540D-2020 / Solids, Total Suspended (TSS)	200.8 / Metals (ICP/MS) / Iron & Zinc	200.8 / Metals (ICP/MS) / Custom List 2 2-3 Metals				
1	L509229-01 MW-17A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
2	L509229-02 MW-17B	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
3	L509229-03 MW-17C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
4	L509229-04 MW-17D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
5	L509229-05 MW-17E	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
6	L509229-06 MWT-17A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
7	L509229-07 Field Blank	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				

JORDAN N PYLES 9/13/25 0800 EURO

Chain of Custody Number 405454

Chain of Custody Bottles

eurofins | Environment Testing

Bottle Name	Total Bottles
Plastic 500ml unpreserved	11
Plastic 1 liter - Nitric Acid	22
Plastic 1 liter unpreserved	11
Plastic 500ml - with Nitric Acid	11
Plastic 250ml - with Nitric Acid	11
Plastic 60 mL - unpreserved	22

Samples		Bottles																				
#	Sample Name	Total Bottles For Sample	Plastic 500ml unpreserved	Plastic 1 liter Nitric Acid	Plastic 1 liter unpreserved	Plastic 500ml with Nitric Acid	Plastic 250ml with Nitric Acid	Plastic 60 mL unpreserved														
1	L509229-01 MW-17A	8	1	2	1	1	1	2														
2	L509229-02 MW-17B	8	1	2	1	1	1	2														
3	L509229-03 MW-17C	8	1	2	1	1	1	2														
4	L509229-04 MW-17D	8	1	2	1	1	1	2														
5	L509229-05 MW-17E	8	1	2	1	1	1	2														
6	L509229-06 MWT-17A	8	1	2	1	1	1	2														
7	L509229-07 Field Blank	8	1	2	1	1	1	2														

JORDAN N PYLES 9/13/25 0800 EWO

JORDAN N PYLES 9/13/25 0800 EWRO

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # .**_____
Barberton Facility

Client Lansing Board of Water & Light Site Name_____

Cooler unpacked by JPYLES

Cooler Received on 9/13/25 Opened on 9/13/25

FedEx 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other_____

Receipt After-hours Drop-off Date/Time_____ Storage Location_____

Eurofins Cooler # EC Foam Box Client Cooler Box Other_____

Packing material used Bubble Wrap Foam Plastic Bag None Other_____

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt [X] See Multiple Cooler Form

IR GUN # 13 (CF +.2 °C) Observed Cooler Temp._____°C Corrected Cooler Temp _____°C

2.	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity_____	Yes No
	-Were the seals on the outside of the cooler(s) signed & dated?	Yes No NA
	-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes No
	-Were tamper/custody seals intact and uncompromised?	Yes No NA
3	Shippers' packing slip attached to the cooler(s)?	Yes No
4	Did custody papers accompany the sample(s)?	Yes No
5	Were the custody papers relinquished & signed in the appropriate place?	Yes No
6	Was/were the person(s) who collected the samples clearly identified on the COC?	Yes No
7	Did all bottles arrive in good condition (Unbroken)?	Yes No
8	Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes No
9	For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?	
10	Were correct bottle(s) used for the test(s) indicated?	Yes No
11	Sufficient quantity received to perform indicated analyses?	Yes No
12.	Are these work share samples and all listed on the COC?	Yes No
	If yes, Questions 13-17 have been checked at the originating laboratory	
13	Were all preserved sample(s) at the correct pH upon receipt?	Yes No NA pH Strip Lot# ~~HC461227~~ HC567196
14	Were VOAs on the COC?	Yes No
15	Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes No NA
16	Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes No
17	Was a LL Hg or Me Hg trip blank present? _____	Yes No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20 SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	0.8	1.0	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 4	1.6	1.8	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice

9/13/2025

Login Container Summary Report

240-232981

9/24/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L509229-01 MW-17A	240-232981-A-1	Plastic 60 mL - unpreserved				
L509229-01 MW-17A	240-232981-B 1	Plastic 60 mL - unpreserved				
L509229-01 MW-17A	240-232981-C-1	Plastic 250ml - with Nitric Acid	<2			
L509229-01 MW-17A	240-232981-D-1	Plastic 500ml - unpreserved				
L509229-01 MW-17A	240-232981-E-1	Plastic 500ml - with Nitric Acid	<2			
L509229-01 MW-17A	240-232981-F-1	Plastic 1 liter - unpreserved				
L509229-01 MW-17A	240-232981-G-1	Plastic 1 liter - Nitric Acid	<2			
L509229-01 MW-17A	240-232981-H-1	Plastic 1 liter - Nitric Acid	<2			
L509229-02 MW-17B	240-232981-A-2	Plastic 60 mL - unpreserved				
L509229-02 MW-17B	240-232981 B-2	Plastic 60 mL - unpreserved				
L509229-02 MW-17B	240-232981-C-2	Plastic 250ml - with Nitric Acid	<2			
L509229-02 MW-17B	240 232981-D-2	Plastic 500ml - unpreserved				
L509229-02 MW-17B	240-232981-E-2	Plastic 500ml - with Nitric Acid	<2			
L509229-02 MW-17B	240-232981-F-2	Plastic 1 liter - unpreserved				
L509229-02 MW-17B	240-232981-G-2	Plastic 1 liter - Nitric Acid	<2			
L509229-02 MW-17B	240-232981-H-2	Plastic 1 liter - Nitric Acid	<2			
L509229-03 MW-17C	240-232981 A 3	Plastic 60 mL - unpreserved				
L509229-03 MW-17C	240-232981-B-3	Plastic 60 mL - unpreserved				
L509229-03 MW-17C	240 232981-C-3	Plastic 250ml - with Nitric Acid	<2			
L509229-03 MW-17C	240-232981-D-3	Plastic 500ml - unpreserved				
L509229-03 MW-17C	240 232981-E-3	Plastic 500ml - with Nitric Acid	<2			
L509229-03 MW-17C	240-232981-F-3	Plastic 1 liter - unpreserved				
L509229-03 MW-17C	240-232981-G-3	Plastic 1 liter - Nitric Acid	<2			
L509229-03 MW-17C	240-232981-H-3	Plastic 1 liter - Nitric Acid	<2			
L509229-04 MW-17D	240-232981-A-4	Plastic 60 mL - unpreserved				
L509229-04 MW-17D	240-232981-B-4	Plastic 60 mL - unpreserved				
L509229-04 MW-17D	240-232981-C-4	Plastic 250ml - with Nitric Acid	<2			
L509229-04 MW-17D	240-232981-D-4	Plastic 500ml - unpreserved				
L509229-04 MW-17D	240-232981-E-4	Plastic 500ml - with Nitric Acid	<2			
L509229-04 MW-17D	240-232981 F-4	Plastic 1 liter - unpreserved				
L509229-04 MW-17D	240-232981-G-4	Plastic 1 liter - Nitric Acid	<2			
L509229-04 MW-17D	240-232981-H-4	Plastic 1 liter - Nitric Acid	<2			
L509229-05 MW-17E	240-232981-A-5	Plastic 60 mL - unpreserved				
L509229-05 MW 17E	240-232981-B-5	Plastic 60 mL - unpreserved				
L509229-05 MW-17E	240-232981-C-5	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L509229-05 MW-17E	240-232981 D-5	Plastic 500ml - unpreserved				
L509229-05 MW-17E	240-232981-E-5	Plastic 500ml - with Nitric Acid	<2			
L509229-05 MW-17E	240 232981-F-5	Plastic 1 liter - unpreserved				
L509229-05 MW-17E	240-232981-G-5	Plastic 1 liter - Nitric Acid	<2			
L509229-05 MW-17E	240-232981-H-5	Plastic 1 liter - Nitric Acid	<2			
L509229-06 MWT-17A	240-232981-A-6	Plastic 60 mL - unpreserved				
L509229-06 MWT-17A	240-232981-B-6	Plastic 60 mL - unpreserved				
L509229-06 MWT-17A	240-232981-C-6	Plastic 250ml - with Nitric Acid	<2			
L509229-06 MWT-17A	240-232981-D-6	Plastic 500ml - unpreserved				
L509229-06 MWT 17A	240-232981-E-6	Plastic 500ml - with Nitric Acid	<2			
L509229-06 MWT-17A	240-232981-F-6	Plastic 1 liter - unpreserved				
L509229-06 MWT-17A	240-232981-G-6	Plastic 1 liter - Nitric Acid	<2			
L509229-06 MWT-17A	240-232981-H-6	Plastic 1 liter - Nitric Acid	<2			
L509229-07 FIELD BLANK	240-232981-A-7	Plastic 60 mL - unpreserved				
L509229-07 FIELD BLANK	240-232981-B-7	Plastic 60 mL - unpreserved				
L509229-07 FIELD BLANK	240-232981-C-7	Plastic 250ml - with Nitric Acid	<2			
L509229-07 FIELD BLANK	240-232981-D-7	Plastic 500ml - unpreserved				
L509229-07 FIELD BLANK	240-232981-E-7	Plastic 500ml - with Nitric Acid	<2			
L509229-07 FIELD BLANK	240-232981-F-7	Plastic 1 liter - unpreserved				
L509229-07 FIELD BLANK	240-232981-G-7	Plastic 1 liter - Nitric Acid	<2			
L509229-07 FIELD BLANK	240-232981-H-7	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-207879.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-232981-1
Address: 5755 8th Street East, ,	Due Date Requested: 9/29/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Therm. ID: SC03 Cust. Seal: (Y) / N
Uncorr./Corr. Temp: 19.2/19.8 °C
Delivery: UPS / FedEx / Other
Ice Type: Blue / Dry / Wet / None
Label Ver.: N Packing: B
S Blue

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT(MOD) Iron & Zinc	200.7_CWA/200.7_P_TOT(MOD) Iron & Zinc	Total Number of containe	Special Instructions/Note:
			Preservation Code:							
L509229-01 MW-17A (240-232981-1)	9/11/25	09:20 Eastern	G	Water			X	X	1	
L509229-02 MW-17B (240-232981-2)	9/11/25	10:51 Eastern	G	Water			X	X	1	
L509229-03 MW-17C (240-232981-3)	9/11/25	12:07 Eastern	G	Water			X	X	1	
L509229-04 MW-17D (240-232981-4)	9/11/25	13:30 Eastern	G	Water			X	X	1	
L509229-05 MW-17E (240-232981-5)	9/11/25	14:44 Eastern	G	Water			X	X	1	
L509229-06 MWT-17A (240-232981-6)	9/11/25	09:20 Eastern	G	Water			X	X	1	
L509229-07 FIELD BLANK (240-232981-7)	9/11/25	08:30 Eastern	G	Water			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification Unconfirmed 4616 0301 0238

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished By:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	9/15/25 1500	EC		9/16/25 9:40	ES TW
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

9/24/2025

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-232981-1

Login Number: 232981
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 09/16/25 12:58 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 10/10/2025 2:07:46 PM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-232981-2

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

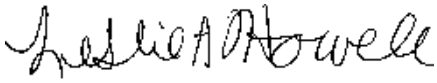
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
10/10/2025 2:07:46 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 9
Tracer Carrier Summary 16
QC Sample Results 17
QC Association Summary 18
Lab Chronicle 19
Certification Summary 21
Chain of Custody 22
Receipt Checklists 31

Definitions/Glossary

Client: Lansing Board of Water & Light
Job ID: 240-232981-2
Project/Site: Erickson Projects

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-232981-2 — Eurofins Cleveland

Job Narrative
240-232981-2

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 9/13/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.0°C and 1.8°C.

Gas Flow Proportional Counter
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-232981-1	L509229-01 MW-17A	Water	09/11/25 09:20	09/13/25 08:00	Michigan
240-232981-2	L509229-02 MW-17B	Water	09/11/25 10:51	09/13/25 08:00	Michigan
240-232981-3	L509229-03 MW-17C	Water	09/11/25 12:07	09/13/25 08:00	Michigan
240-232981-4	L509229-04 MW-17D	Water	09/11/25 13:30	09/13/25 08:00	Michigan
240-232981-5	L509229-05 MW-17E	Water	09/11/25 14:44	09/13/25 08:00	Michigan
240-232981-6	L509229-06 MWT-17A	Water	09/11/25 09:20	09/13/25 08:00	Michigan
240-232981-7	L509229-07 FIELD BLANK	Water	09/11/25 08:30	09/13/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-2

Client Sample ID: L509229-01 MW-17A — **Lab Sample ID: 240-232981-1**

No Detections.

Client Sample ID: L509229-02 MW-17B — **Lab Sample ID: 240-232981-2**

No Detections.

Client Sample ID: L509229-03 MW-17C — **Lab Sample ID: 240-232981-3**

No Detections.

Client Sample ID: L509229-04 MW-17D — **Lab Sample ID: 240-232981-4**

No Detections.

Client Sample ID: L509229-05 MW-17E — **Lab Sample ID: 240-232981-5**

No Detections.

Client Sample ID: L509229-06 MWT-17A — **Lab Sample ID: 240-232981-6**

No Detections.

Client Sample ID: L509229-07 FIELD BLANK — **Lab Sample ID: 240-232981-7**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-2

Client Sample ID: L509229-01 MW-17A

Lab Sample ID: 240-232981-1

Date Collected: 09/11/25 09:20

Matrix: Water

Date Received: 09/13/25 08:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.134	U	0.190	0.191	1.00	0.324	pCi/L	09/17/25 07:59	10/09/25 14:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*09/17/25 07:59*	*10/09/25 14:35*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.939**		0.403	0.412	1.00	0.533	pCi/L	09/17/25 08:06	10/09/25 09:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*09/17/25 08:06*	*10/09/25 09:42*	*1*
Y Carrier	*83.0*		*30 - 110*	*09/17/25 08:06*	*10/09/25 09:42*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.07**		0.446	0.454	5.00	0.533	pCi/L		10/10/25 12:53	1

Client Sample ID: L509229-02 MW-17B
Date Collected: 09/11/25 10:51
Date Received: 09/13/25 08:00

Lab Sample ID: 240-232981-2
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.120	U	0.183	0.183	1.00	0.315	pCi/L	09/17/25 07:59	10/09/25 14:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.2*		*30 - 110*	*09/17/25 07:59*	*10/09/25 14:35*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.657**		0.397	0.402	1.00	0.582	pCi/L	09/17/25 08:06	10/09/25 09:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.2*		*30 - 110*	*09/17/25 08:06*	*10/09/25 09:42*	*1*
Y Carrier	*82.2*		*30 - 110*	*09/17/25 08:06*	*10/09/25 09:42*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.778**		0.437	0.442	5.00	0.582	pCi/L		10/10/25 12:53	1

Client Sample ID: L509229-03 MW-17C

Date Collected: 09/11/25 12:07
Date Received: 09/13/25 08:00

Lab Sample ID: 240-232981-3

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.550		0.274	0.279	1.00	0.326	pCi/L	09/17/25 07:59	10/09/25 17:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.7*		*30 - 110*	*09/17/25 07:59*	*10/09/25 17:41*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.07		0.514	0.523	1.00	0.721	pCi/L	09/17/25 08:06	10/09/25 09:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.7*		*30 - 110*	*09/17/25 08:06*	*10/09/25 09:42*	*1*
Y Carrier	*77.4*		*30 - 110*	*09/17/25 08:06*	*10/09/25 09:42*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.62		0.582	0.593	5.00	0.721	pCi/L		10/10/25 12:53	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-2

Client Sample ID: L509229-04 MW-17D
Date Collected: 09/11/25 13:30
Date Received: 09/13/25 08:00

Lab Sample ID: 240-232981-4
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.392	U	0.289	0.291	1.00	0.430	pCi/L	09/17/25 07:59	10/09/25 17:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.3*		*30 - 110*	*09/17/25 07:59*	*10/09/25 17:41*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.569	U	0.416	0.420	1.00	0.635	pCi/L	09/17/25 08:06	10/09/25 09:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.3*		*30 - 110*	*09/17/25 08:06*	*10/09/25 09:40*	*1*
Y Carrier	*79.6*		*30 - 110*	*09/17/25 08:06*	*10/09/25 09:40*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.961**		0.507	0.511	5.00	0.635	pCi/L		10/10/25 12:53	1

Client Sample ID: L509229-05 MW-17E

Date Collected: 09/11/25 14:44
Date Received: 09/13/25 08:00

Lab Sample ID: 240-232981-5

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.195	U	0.216	0.217	1.00	0.350	pCi/L	09/17/25 07:59	10/09/25 17:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.2*		*30 - 110*	*09/17/25 07:59*	*10/09/25 17:41*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.479	U	0.391	0.393	1.00	0.611	pCi/L	09/17/25 08:06	10/09/25 09:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.2*		*30 - 110*	*09/17/25 08:06*	*10/09/25 09:41*	*1*
Y Carrier	*84.5*		*30 - 110*	*09/17/25 08:06*	*10/09/25 09:41*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.674**		0.447	0.449	5.00	0.611	pCi/L		10/10/25 12:53	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-2

Client Sample ID: L509229-06 MWT-17A
Date Collected: 09/11/25 09:20
Date Received: 09/13/25 08:00

Lab Sample ID: 240-232981-6
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0819	U	0.165	0.165	1.00	0.299	pCi/L	09/17/25 07:59	10/09/25 17:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.4*		*30 - 110*	*09/17/25 07:59*	*10/09/25 17:42*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.232	U	0.359	0.360	1.00	0.610	pCi/L	09/17/25 08:06	10/09/25 09:43	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.4*		*30 - 110*	*09/17/25 08:06*	*10/09/25 09:43*	*1*
Y Carrier	*77.4*		*30 - 110*	*09/17/25 08:06*	*10/09/25 09:43*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.314	U	0.395	0.396	5.00	0.610	pCi/L		10/10/25 12:53	1

Client Sample ID: L509229-07 FIELD BLANK

Lab Sample ID: 240-232981-7

Date Collected: 09/11/25 08:30

Matrix: Water

Date Received: 09/13/25 08:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0406	U	0.136	0.136	1.00	0.308	pCi/L	09/17/25 07:59	10/09/25 17:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*30 - 110*	*09/17/25 07:59*	*10/09/25 17:42*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.545	U	0.382	0.385	1.00	0.573	pCi/L	09/17/25 08:06	10/09/25 09:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*30 - 110*	*09/17/25 08:06*	*10/09/25 09:45*	*1*
Y Carrier	*74.4*		*30 - 110*	*09/17/25 08:06*	*10/09/25 09:45*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.545	U	0.405	0.408	5.00	0.573	pCi/L		10/10/25 12:53	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-232981-1	L509229-01 MW-17A	88.8
240-232981-2	L509229-02 MW-17B	83.2
240-232981-3	L509229-03 MW-17C	80.7
240-232981-4	L509229-04 MW-17D	86.3
240-232981-5	L509229-05 MW-17E	91.2
240-232981-6	L509229-06 MWT-17A	85.4
240-232981-7	L509229-07 FIELD BLANK	87.3
LCS 160-736373/2-A	Lab Control Sample	73.9
MB 160-736373/1-A	Method Blank	89.0

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
		Ba	Y
Lab Sample ID	Client Sample ID	(30-110)	(30-110)
240-232981-1	L509229-01 MW-17A	88.8	83.0
240-232981-2	L509229-02 MW-17B	83.2	82.2
240-232981-3	L509229-03 MW-17C	80.7	77.4
240-232981-4	L509229-04 MW-17D	86.3	79.6
240-232981-5	L509229-05 MW-17E	91.2	84.5
240-232981-6	L509229-06 MWT-17A	85.4	77.4
240-232981-7	L509229-07 FIELD BLANK	87.3	74.4
LCS 160-736374/2-A	Lab Control Sample	73.9	82.2
MB 160-736374/1-A	Method Blank	89.0	81.5

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-736373/1-A
Matrix: Water
Analysis Batch: 739914

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 736373

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1389	U	0.175	0.176	1.00	0.289	pCi/L	09/17/25 07:59	10/09/25 14:35	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.0*		*30 - 110*	*09/17/25 07:59*	*10/09/25 14:35*	*1*

Lab Sample ID: LCS 160-736373/2-A
Matrix: Water
Analysis Batch: 739914

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 736373

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.57	10.38		1.43	1.00	0.363	pCi/L	108	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*73.9*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-736374/1-A
Matrix: Water
Analysis Batch: 739925

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 736374

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.06480	U	0.310	0.310	1.00	0.559	pCi/L	09/17/25 08:06	10/09/25 09:42	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.0*		*30 - 110*	*09/17/25 08:06*	*10/09/25 09:42*	*1*
Y Carrier	*81.5*		*30 - 110*	*09/17/25 08:06*	*10/09/25 09:42*	*1*

Lab Sample ID: LCS 160-736374/2-A
Matrix: Water
Analysis Batch: 739925

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 736374

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.00	9.387		1.37	1.00	0.615	pCi/L	104	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*73.9*		*30 - 110*
Y Carrier	*82.2*		*30 - 110*

QC Association Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-2

Rad

Prep Batch: 736373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-1	L509229-01 MW-17A	Total/NA	Water	PrecSep-21	
240-232981-2	L509229-02 MW-17B	Total/NA	Water	PrecSep-21	
240-232981-3	L509229-03 MW-17C	Total/NA	Water	PrecSep-21	
240-232981-4	L509229-04 MW-17D	Total/NA	Water	PrecSep-21	
240-232981-5	L509229-05 MW-17E	Total/NA	Water	PrecSep-21	
240-232981-6	L509229-06 MWT-17A	Total/NA	Water	PrecSep-21	
240-232981-7	L509229-07 FIELD BLANK	Total/NA	Water	PrecSep-21	
MB 160-736373/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-736373/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 736374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232981-1	L509229-01 MW-17A	Total/NA	Water	PrecSep_0	
240-232981-2	L509229-02 MW-17B	Total/NA	Water	PrecSep_0	
240-232981-3	L509229-03 MW-17C	Total/NA	Water	PrecSep_0	
240-232981-4	L509229-04 MW-17D	Total/NA	Water	PrecSep_0	
240-232981-5	L509229-05 MW-17E	Total/NA	Water	PrecSep_0	
240-232981-6	L509229-06 MWT-17A	Total/NA	Water	PrecSep_0	
240-232981-7	L509229-07 FIELD BLANK	Total/NA	Water	PrecSep_0	
MB 160-736374/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-736374/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-2

Client Sample ID: L509229-01 MW-17A

Lab Sample ID: 240-232981-1

Date Collected: 09/11/25 09:20
Matrix: Water
Date Received: 09/13/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			736373	JTR	EET SL	09/17/25 07:59
Total/NA	Analysis	903.0		1	739914	SWS	EET SL	10/09/25 14:35
Total/NA	Prep	PrecSep_0			736374	JTR	EET SL	09/17/25 08:06
Total/NA	Analysis	904.0		1	739925	SWS	EET SL	10/09/25 09:42
Total/NA	Analysis	Ra226_Ra228 Pos		1	740133	SCB	EET SL	10/10/25 12:53

Client Sample ID: L509229-02 MW-17B

Lab Sample ID: 240-232981-2

Date Collected: 09/11/25 10:51
Matrix: Water
Date Received: 09/13/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			736373	JTR	EET SL	09/17/25 07:59
Total/NA	Analysis	903.0		1	739914	SWS	EET SL	10/09/25 14:35
Total/NA	Prep	PrecSep_0			736374	JTR	EET SL	09/17/25 08:06
Total/NA	Analysis	904.0		1	739925	SWS	EET SL	10/09/25 09:42
Total/NA	Analysis	Ra226_Ra228 Pos		1	740133	SCB	EET SL	10/10/25 12:53

Client Sample ID: L509229-03 MW-17C

Lab Sample ID: 240-232981-3

Date Collected: 09/11/25 12:07
Matrix: Water
Date Received: 09/13/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			736373	JTR	EET SL	09/17/25 07:59
Total/NA	Analysis	903.0		1	739914	SWS	EET SL	10/09/25 17:41
Total/NA	Prep	PrecSep_0			736374	JTR	EET SL	09/17/25 08:06
Total/NA	Analysis	904.0		1	739925	SWS	EET SL	10/09/25 09:42
Total/NA	Analysis	Ra226_Ra228 Pos		1	740133	SCB	EET SL	10/10/25 12:53

Client Sample ID: L509229-04 MW-17D

Lab Sample ID: 240-232981-4

Date Collected: 09/11/25 13:30
Matrix: Water
Date Received: 09/13/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			736373	JTR	EET SL	09/17/25 07:59
Total/NA	Analysis	903.0		1	739914	SWS	EET SL	10/09/25 17:41
Total/NA	Prep	PrecSep_0			736374	JTR	EET SL	09/17/25 08:06
Total/NA	Analysis	904.0		1	739924	SWS	EET SL	10/09/25 09:40
Total/NA	Analysis	Ra226_Ra228 Pos		1	740133	SCB	EET SL	10/10/25 12:53

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-2

Client Sample ID: L509229-05 MW-17E

Lab Sample ID: 240-232981-5

Date Collected: 09/11/25 14:44
Matrix: Water
Date Received: 09/13/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			736373	JTR	EET SL	09/17/25 07:59
Total/NA	Analysis	903.0		1	739914	SWS	EET SL	10/09/25 17:41
Total/NA	Prep	PrecSep_0			736374	JTR	EET SL	09/17/25 08:06
Total/NA	Analysis	904.0		1	739924	SWS	EET SL	10/09/25 09:41
Total/NA	Analysis	Ra226_Ra228 Pos		1	740133	SCB	EET SL	10/10/25 12:53

Client Sample ID: L509229-06 MWT-17A

Lab Sample ID: 240-232981-6

Date Collected: 09/11/25 09:20
Matrix: Water
Date Received: 09/13/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			736373	JTR	EET SL	09/17/25 07:59
Total/NA	Analysis	903.0		1	739914	SWS	EET SL	10/09/25 17:42
Total/NA	Prep	PrecSep_0			736374	JTR	EET SL	09/17/25 08:06
Total/NA	Analysis	904.0		1	739914	SWS	EET SL	10/09/25 09:43
Total/NA	Analysis	Ra226_Ra228 Pos		1	740133	SCB	EET SL	10/10/25 12:53

Client Sample ID: L509229-07 FIELD BLANK

Lab Sample ID: 240-232981-7

Date Collected: 09/11/25 08:30
Matrix: Water
Date Received: 09/13/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			736373	JTR	EET SL	09/17/25 07:59
Total/NA	Analysis	903.0		1	739914	SWS	EET SL	10/09/25 17:42
Total/NA	Prep	PrecSep_0			736374	JTR	EET SL	09/17/25 08:06
Total/NA	Analysis	904.0		1	739914	SWS	EET SL	10/09/25 09:45
Total/NA	Analysis	Ra226_Ra228 Pos		1	740133	SCB	EET SL	10/10/25 12:53

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-232981-2

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	07-01-26
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	10-01-26
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-26
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-31-26
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com; Environmental_Laboratory@

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:

Project Number:
24034575

Sample State: MI

Special Instructions:
Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner. Please add Na and K metals

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
Marc Wahrer

Description:
Erickson Wellfield 8/26/25

Site Name:
Erickson Projects

See following pages for Method and Container information.

240-232981 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L509229-01 MW-17A	Grab	Water	09/11/25 09:20			
2	L509229-02 MW-17B	Grab	Water	09/11/25 10:51			
3	L509229-03 MW-17C	Grab	Water	09/11/25 12:07			
4	L509229-04 MW-17D	Grab	Water	09/11/25 13:30			
5	L509229-05 MW-17E	Grab	Water	09/11/25 14:44			
6	L509229-06 MWT-17A	Grab	Water	09/11/25 09:20			
7	L509229-07 Field Blank	Grab	Water	09/11/25 08:30			

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished By:	Date/Time:		
Jennifer Caporale	09/12/25 09:53	Jennifer Caporale	09/12/25 09:53	JORDAN N PYLES	9/13/25 0800 EUROFINS

Chain of Custody Number: **405454**

*H – Analysis on hold.

Coolers								
Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20250912A001								
MIC20250912A001								

JORDAN N PYLES 9/13/25 0800 EURO

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																				
#	Sample Name	200.7 Rev 4.4 / Metals (ICP) / Iron & Zinc	200.8 / Metals (ICP/MS) / Custom List 1 1 Metals	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	2320 B-2021 / Alkalinity / Bicarbonate & Carbonate Alkalinity	200.7 R4.4-1994 / Metals (ICP) / Total Boron	903.0 / Radium-226 (GFPC) / Standard Target List	2340 B-2021 / Total Hardness (as CaCO3) by calculation	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	245.1 1994 R3.0 / Mercury (CVAA) / Mercury	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved S	200.7 Rev 4.4 / Metals (ICP) / Total Na & K	904.0 / Radium-228 (GFPC) / Standard Target List	300.0-1993 R2 1 / Anions Ion Chromatography / Chloride Fluor	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	2540D-2020 / Solids, Total Suspended (TSS)	200.8 / Metals (ICP/MS) / Iron & Zinc	200.8 / Metals (ICP/MS) / Custom List 2 2-3 Metals				
1	L509229-01 MW-17A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
2	L509229-02 MW-17B	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
3	L509229-03 MW-17C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
4	L509229-04 MW-17D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
5	L509229-05 MW-17E	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
6	L509229-06 MWT-17A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
7	L509229-07 Field Blank	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				

JORDAN N PYLES 9/13/25 0800 EURO

Chain of Custody Bottles

eurofins | Environment Testing

Bottle Name	Total Bottles
Plastic 500ml unpreserved	11
Plastic 1 liter - Nitric Acid	22
Plastic 1 liter unpreserved	11
Plastic 500ml - with Nitric Acid	11
Plastic 250ml - with Nitric Acid	11
Plastic 60 mL - unpreserved	22

Samples		Bottles																				
#	Sample Name	Total Bottles For Sample	Plastic 500ml unpreserved	Plastic 1 liter Nitric Acid	Plastic 1 liter unpreserved	Plastic 500ml with Nitric Acid	Plastic 250ml with Nitric Acid	Plastic 60 mL unpreserved														
1	L509229-01 MW-17A	8	1	2	1	1	1	2														
2	L509229-02 MW-17B	8	1	2	1	1	1	2														
3	L509229-03 MW-17C	8	1	2	1	1	1	2														
4	L509229-04 MW-17D	8	1	2	1	1	1	2														
5	L509229-05 MW-17E	8	1	2	1	1	1	2														
6	L509229-06 MWT-17A	8	1	2	1	1	1	2														
7	L509229-07 Field Blank	8	1	2	1	1	1	2														

JORDAN N PYLES 9/13/25 0800 EWO

JORDAN N PYLES 9/13/25 0800 EWRO

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # .**_____
Barberton Facility

Client Lansing Board of Water & Light Site Name_____

Cooler unpacked by JPYIES

Cooler Received on 9/13/25 Opened on 9/13/25

FedEx 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other_____

Receipt After-hours Drop-off Date/Time_____ Storage Location_____

Eurofins Cooler # EC Foam Box Client Cooler Box Other_____

Packing material used Bubble Wrap Foam Plastic Bag None Other_____

COOLANT Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt [X] See Multiple Cooler Form

IR GUN # 13 (CF +.2 °C) Observed Cooler Temp._____°C Corrected Cooler Temp _____°C

2.	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity_____	Yes No
	-Were the seals on the outside of the cooler(s) signed & dated?	Yes No NA
	-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes No
	-Were tamper/custody seals intact and uncompromised?	Yes No NA
3	Shippers' packing slip attached to the cooler(s)?	Yes No
4	Did custody papers accompany the sample(s)?	Yes No
5	Were the custody papers relinquished & signed in the appropriate place?	Yes No
6	Was/were the person(s) who collected the samples clearly identified on the COC?	Yes No
7	Did all bottles arrive in good condition (Unbroken)?	Yes No
8	Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes No
9	For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?	
10	Were correct bottle(s) used for the test(s) indicated?	Yes No
11	Sufficient quantity received to perform indicated analyses?	Yes No
12.	Are these work share samples and all listed on the COC?	Yes No
	If yes, Questions 13-17 have been checked at the originating laboratory	
13	Were all preserved sample(s) at the correct pH upon receipt?	Yes No NA pH Strip Lot# ~~HC461227~~ HC567196
14	Were VOAs on the COC?	Yes No
15	Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes No NA
16	Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes No
17	Was a LL Hg or Me Hg trip blank present? _____	Yes No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20 SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	0.8	1.0	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 4	1.6	1.8	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice

9/13/2025

Login Container Summary Report

240-232981

10/10/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L509229-01 MW-17A	240-232981-A-1	Plastic 60 mL - unpreserved				
L509229-01 MW-17A	240-232981-B 1	Plastic 60 mL - unpreserved				
L509229-01 MW-17A	240-232981-C-1	Plastic 250ml - with Nitric Acid	<2			
L509229-01 MW-17A	240-232981-D-1	Plastic 500ml - unpreserved				
L509229-01 MW-17A	240-232981-E-1	Plastic 500ml - with Nitric Acid	<2			
L509229-01 MW-17A	240-232981-F-1	Plastic 1 liter - unpreserved				
L509229-01 MW-17A	240-232981-G-1	Plastic 1 liter - Nitric Acid	<2			
L509229-01 MW-17A	240-232981-H-1	Plastic 1 liter - Nitric Acid	<2			
L509229-02 MW-17B	240-232981-A-2	Plastic 60 mL - unpreserved				
L509229-02 MW-17B	240-232981 B-2	Plastic 60 mL - unpreserved				
L509229-02 MW-17B	240-232981-C-2	Plastic 250ml - with Nitric Acid	<2			
L509229-02 MW-17B	240 232981-D-2	Plastic 500ml - unpreserved				
L509229-02 MW-17B	240-232981-E-2	Plastic 500ml - with Nitric Acid	<2			
L509229-02 MW-17B	240-232981-F-2	Plastic 1 liter - unpreserved				
L509229-02 MW-17B	240-232981-G-2	Plastic 1 liter - Nitric Acid	<2			
L509229-02 MW-17B	240-232981-H-2	Plastic 1 liter - Nitric Acid	<2			
L509229-03 MW-17C	240-232981 A 3	Plastic 60 mL - unpreserved				
L509229-03 MW-17C	240-232981-B-3	Plastic 60 mL - unpreserved				
L509229-03 MW-17C	240 232981-C-3	Plastic 250ml - with Nitric Acid	<2			
L509229-03 MW-17C	240-232981-D-3	Plastic 500ml - unpreserved				
L509229-03 MW-17C	240 232981-E-3	Plastic 500ml - with Nitric Acid	<2			
L509229-03 MW-17C	240-232981-F-3	Plastic 1 liter - unpreserved				
L509229-03 MW-17C	240-232981-G-3	Plastic 1 liter - Nitric Acid	<2			
L509229-03 MW-17C	240-232981-H-3	Plastic 1 liter - Nitric Acid	<2			
L509229-04 MW-17D	240-232981-A-4	Plastic 60 mL - unpreserved				
L509229-04 MW-17D	240-232981-B-4	Plastic 60 mL - unpreserved				
L509229-04 MW-17D	240-232981-C-4	Plastic 250ml - with Nitric Acid	<2			
L509229-04 MW-17D	240-232981-D-4	Plastic 500ml - unpreserved				
L509229-04 MW-17D	240-232981-E-4	Plastic 500ml - with Nitric Acid	<2			
L509229-04 MW-17D	240-232981 F-4	Plastic 1 liter - unpreserved				
L509229-04 MW-17D	240-232981-G-4	Plastic 1 liter - Nitric Acid	<2			
L509229-04 MW-17D	240-232981-H-4	Plastic 1 liter - Nitric Acid	<2			
L509229-05 MW-17E	240-232981-A-5	Plastic 60 mL - unpreserved				
L509229-05 MW 17E	240-232981-B-5	Plastic 60 mL - unpreserved				
L509229-05 MW-17E	240-232981-C-5	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L509229-05 MW-17E	240-232981 D-5	Plastic 500ml - unpreserved				
L509229-05 MW-17E	240-232981-E-5	Plastic 500ml - with Nitric Acid	<2			
L509229-05 MW-17E	240 232981-F-5	Plastic 1 liter - unpreserved				
L509229-05 MW-17E	240-232981-G-5	Plastic 1 liter - Nitric Acid	<2			
L509229-05 MW-17E	240-232981-H-5	Plastic 1 liter - Nitric Acid	<2			
L509229-06 MWT-17A	240-232981-A-6	Plastic 60 mL - unpreserved				
L509229-06 MWT-17A	240-232981-B-6	Plastic 60 mL - unpreserved				
L509229-06 MWT-17A	240-232981-C-6	Plastic 250ml - with Nitric Acid	<2			
L509229-06 MWT-17A	240-232981-D-6	Plastic 500ml - unpreserved				
L509229-06 MWT 17A	240-232981-E-6	Plastic 500ml - with Nitric Acid	<2			
L509229-06 MWT-17A	240-232981-F-6	Plastic 1 liter - unpreserved				
L509229-06 MWT-17A	240-232981-G-6	Plastic 1 liter - Nitric Acid	<2			
L509229-06 MWT-17A	240-232981-H-6	Plastic 1 liter - Nitric Acid	<2			
L509229-07 FIELD BLANK	240-232981-A-7	Plastic 60 mL - unpreserved				
L509229-07 FIELD BLANK	240-232981-B-7	Plastic 60 mL - unpreserved				
L509229-07 FIELD BLANK	240-232981-C-7	Plastic 250ml - with Nitric Acid	<2			
L509229-07 FIELD BLANK	240-232981-D-7	Plastic 500ml - unpreserved				
L509229-07 FIELD BLANK	240-232981-E-7	Plastic 500ml - with Nitric Acid	<2			
L509229-07 FIELD BLANK	240-232981-F-7	Plastic 1 liter - unpreserved				
L509229-07 FIELD BLANK	240-232981-G-7	Plastic 1 liter - Nitric Acid	<2			
L509229-07 FIELD BLANK	240-232981-H-7	Plastic 1 liter - Nitric Acid	<2			

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-232981-2

Login Number: 232981
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 09/16/25 01:42 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11 12 13 14

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 10/11/2025 11:58:19 PM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-234327-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

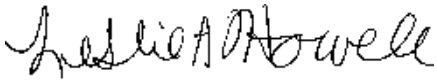
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
10/11/2025 11:58:19 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 12
QC Sample Results 26
QC Association Summary 33
Lab Chronicle 37
Certification Summary 41
Chain of Custody 42
Receipt Checklists 52

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-234327-1 — Eurofins Cleveland

Job Narrative
240-234327-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 10/2/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.1°C and 1.3°C.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.7 Rev 4.4	Metals (ICP)	EPA	EET SSM
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.7	Preparation, Total Metals	EPA	EET SSM
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-234327-1	L509281-01 MW-7D	Water	09/30/25 12:22	10/02/25 08:00	Michigan
240-234327-2	L509281-02 MW-19A	Water	09/30/25 10:07	10/02/25 08:00	Michigan
240-234327-3	L509281-03 MW-19B	Water	09/30/25 12:07	10/02/25 08:00	Michigan
240-234327-4	L509281-04 MW-19C	Water	09/30/25 13:22	10/02/25 08:00	Michigan
240-234327-5	L509281-05 MW-19D	Water	09/30/25 10:00	10/02/25 08:00	Michigan
240-234327-6	L509281-06 MWT-19A	Water	09/30/25 10:07	10/02/25 08:00	Michigan
240-234327-7	L509281-07 FIELD BLANK	Water	09/30/25 08:15	10/02/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-1

Client Sample ID: L509281-01 MW-7D — Lab Sample ID: 240-234327-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.5		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	9.5		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	13		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0011	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.055		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.00017	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00027	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Selenium	0.0011	J	0.0050	0.00089	mg/L	1		200.8-1994 R5.4	Total Recoverable
Vanadium	0.00088	J	0.0050	0.00082	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	72		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	25		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.033		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.11		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	280		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	290		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	280		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.6	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	2.7		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.36		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	1.8		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L509281-02 MW-19A — Lab Sample ID: 240-234327-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.25		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	2.2	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	42		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0050		0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.095		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.00021	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00015	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0025	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.012		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Selenium	0.0013	J	0.0050	0.00089	mg/L	1		200.8-1994 R5.4	Total Recoverable
Thallium	0.00067	J	0.0010	0.00051	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	210		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L509281-02 MW-19A (Continued) — Lab Sample ID: 240-234327-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	70		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.010		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	4.9		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	820		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	380		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	970		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	9.1		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	120		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.20		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	240		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L509281-03 MW-19B — Lab Sample ID: 240-234327-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.53		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	3.2	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	33		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0038	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.055		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.00012	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0022	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.015		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	190		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	69		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.014		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.7		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	770		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	380		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	960		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	4.8		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	68		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.26		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	290		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L509281-04 MW-19C — Lab Sample ID: 240-234327-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.7		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	7.6		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	43		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0011	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L509281-04 MW-19C (Continued) — Lab Sample ID: 240-234327-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.036		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	61		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	22		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.024		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.61		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	240		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	310		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	330		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	2.5	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	2.3		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.41		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	1.3		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L509281-05 MW-19D — Lab Sample ID: 240-234327-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.58		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	5.7		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	31		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.050		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0020	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	67		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	24		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.022		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.34		0.10	0.013	mg/L	1		200.8	Total/NA
Zinc	0.00096	J	0.0070	0.00093	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	270		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	310		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	330		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	1.1	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	1.3		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.42		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	11		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L509281-06 MWT-19A — Lab Sample ID: 240-234327-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.25		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	2.2	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	42		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0037	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: L509281-06 MWT-19A (Continued)

Lab Sample ID: 240-234327-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.093		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0020	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.011		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	210		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	68		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.0092		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	5.2		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	810		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	380		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	930		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	9.9		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	120		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.22		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	250		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L509281-07 FIELD BLANK

Lab Sample ID: 240-234327-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: L509281-01 MW-7D
Date Collected: 09/30/25 12:22
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-1
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.5**		0.10	0.057	mg/L		10/03/25 14:00	10/06/25 14:48	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**9.5**		3.3	0.17	mg/L		10/07/25 18:55	10/11/25 16:03	1
Na	**13**		0.60	0.33	mg/L		10/07/25 18:55	10/11/25 16:03	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		10/03/25 14:00	10/06/25 11:41	1
Arsenic	**0.0011**	**J**	0.0050	0.00075	mg/L		10/03/25 14:00	10/06/25 11:41	1
Barium	**0.055**		0.0050	0.00077	mg/L		10/03/25 14:00	10/06/25 11:41	1
Beryllium	ND		0.0010	0.00027	mg/L		10/03/25 14:00	10/06/25 11:41	1
Cadmium	**0.00017**	**J**	0.0010	0.000077	mg/L		10/03/25 14:00	10/06/25 11:41	1
Cobalt	**0.00027**	**J**	0.0010	0.000086	mg/L		10/03/25 14:00	10/06/25 11:41	1
Chromium	ND		0.0050	0.0012	mg/L		10/03/25 14:00	10/06/25 11:41	1
Copper	ND		0.0020	0.0017	mg/L		10/03/25 14:00	10/06/25 11:41	1
Molybdenum	ND		0.0050	0.0011	mg/L		10/03/25 14:00	10/06/25 11:41	1
Nickel	ND		0.0020	0.0015	mg/L		10/03/25 14:00	10/06/25 11:41	1
Lead	ND		0.0010	0.00045	mg/L		10/03/25 14:00	10/06/25 11:41	1
Antimony	ND		0.0020	0.00057	mg/L		10/03/25 14:00	10/06/25 11:41	1
Selenium	**0.0011**	**J**	0.0050	0.00089	mg/L		10/03/25 14:00	10/06/25 11:41	1
Thallium	ND		0.0010	0.00051	mg/L		10/03/25 14:00	10/06/25 11:41	1
Vanadium	**0.00088**	**J**	0.0050	0.00082	mg/L		10/03/25 14:00	10/06/25 11:41	1
Calcium	**72**		1.0	0.25	mg/L		10/03/25 14:00	10/06/25 11:41	1
Magnesium	**25**		1.0	0.061	mg/L		10/03/25 14:00	10/06/25 11:41	1
Lithium	**0.033**		0.0080	0.0034	mg/L		10/03/25 14:00	10/06/25 11:41	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.11**		0.10	0.013	mg/L		10/07/25 18:55	10/09/25 14:16	1
Zinc	ND		0.0070	0.00093	mg/L		10/07/25 18:55	10/09/25 14:16	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**280**		33	33	mg/L			10/08/25 05:12	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		10/03/25 14:00	10/07/25 09:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**290**		5.0	2.6	mg/L			10/06/25 20:13	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			10/06/25 20:13	1
Total Dissolved Solids (SM 2540 C-2020)	**280**		10	7.8	mg/L			10/06/25 13:34	1
Total Suspended Solids (SM 2540D-2020)	**1.6**	**J**	4.0	0.40	mg/L			10/03/25 10:50	1
Chloride (EPA 300.0-1993 R2.1)	**2.7**		1.0	0.13	mg/L			10/03/25 14:13	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-1

Client Sample ID: L509281-01 MW-7D
Date Collected: 09/30/25 12:22
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-1
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.36		0.050	0.024	mg/L			10/03/25 14:13	1
Sulfate (EPA 300.0-1993 R2.1)	1.8		1.0	0.35	mg/L			10/03/25 14:13	1

Client Sample ID: L509281-02 MW-19A

Date Collected: 09/30/25 10:07
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-2

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.25**		0.10	0.057	mg/L		10/03/25 14:00	10/06/25 15:17	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**2.2**	**J**	3.3	0.17	mg/L		10/07/25 18:55	10/11/25 16:14	1
Na	**42**		0.60	0.33	mg/L		10/07/25 18:55	10/11/25 16:14	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		10/03/25 14:00	10/06/25 11:59	1
Arsenic	**0.0050**		0.0050	0.00075	mg/L		10/03/25 14:00	10/06/25 11:59	1
Barium	**0.095**		0.0050	0.00077	mg/L		10/03/25 14:00	10/06/25 11:59	1
Beryllium	ND		0.0010	0.00027	mg/L		10/03/25 14:00	10/06/25 11:59	1
Cadmium	**0.00021**	**J**	0.0010	0.000077	mg/L		10/03/25 14:00	10/06/25 11:59	1
Cobalt	**0.00015**	**J**	0.0010	0.000086	mg/L		10/03/25 14:00	10/06/25 11:59	1
Chromium	ND		0.0050	0.0012	mg/L		10/03/25 14:00	10/06/25 11:59	1
Copper	ND		0.0020	0.0017	mg/L		10/03/25 14:00	10/06/25 11:59	1
Molybdenum	**0.0025**	**J**	0.0050	0.0011	mg/L		10/03/25 14:00	10/06/25 11:59	1
Nickel	**0.012**		0.0020	0.0015	mg/L		10/03/25 14:00	10/06/25 11:59	1
Lead	ND		0.0010	0.00045	mg/L		10/03/25 14:00	10/06/25 11:59	1
Antimony	ND		0.0020	0.00057	mg/L		10/03/25 14:00	10/06/25 11:59	1
Selenium	**0.0013**	**J**	0.0050	0.00089	mg/L		10/03/25 14:00	10/06/25 11:59	1
Thallium	**0.00067**	**J**	0.0010	0.00051	mg/L		10/03/25 14:00	10/06/25 11:59	1
Vanadium	ND		0.0050	0.00082	mg/L		10/03/25 14:00	10/06/25 11:59	1
Calcium	**210**		1.0	0.25	mg/L		10/03/25 14:00	10/06/25 11:59	1
Magnesium	**70**		1.0	0.061	mg/L		10/03/25 14:00	10/06/25 11:59	1
Lithium	**0.010**		0.0080	0.0034	mg/L		10/03/25 14:00	10/06/25 11:59	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**4.9**		0.10	0.013	mg/L		10/07/25 18:55	10/09/25 14:18	1
Zinc	ND		0.0070	0.00093	mg/L		10/07/25 18:55	10/09/25 14:18	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**820**		33	33	mg/L			10/08/25 05:12	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		10/03/25 14:00	10/07/25 10:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**380**		5.0	2.6	mg/L			10/06/25 17:34	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			10/06/25 17:34	1
Total Dissolved Solids (SM 2540 C-2020)	**970**		10	7.8	mg/L			10/06/25 13:34	1
Total Suspended Solids (SM 2540D-2020)	**9.1**		4.0	0.40	mg/L			10/03/25 10:50	1
Chloride (EPA 300.0-1993 R2.1)	**120**		1.0	0.13	mg/L			10/03/25 14:22	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-1

Client Sample ID: L509281-02 MW-19A
Date Collected: 09/30/25 10:07
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.20		0.050	0.024	mg/L			10/03/25 14:22	1
Sulfate (EPA 300.0-1993 R2.1)	240		5.0	1.7	mg/L			10/03/25 14:31	5

Client Sample ID: L509281-03 MW-19B

Lab Sample ID: 240-234327-3

Date Collected: 09/30/25 12:07

Matrix: Water

Date Received: 10/02/25 08:00

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.53**		0.10	0.057	mg/L		10/03/25 14:00	10/06/25 15:29	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**3.2**	**J**	3.3	0.17	mg/L		10/07/25 18:55	10/11/25 16:17	1
Na	**33**		0.60	0.33	mg/L		10/07/25 18:55	10/11/25 16:17	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		10/03/25 14:00	10/06/25 12:01	1
Arsenic	**0.0038**	**J**	0.0050	0.00075	mg/L		10/03/25 14:00	10/06/25 12:01	1
Barium	**0.055**		0.0050	0.00077	mg/L		10/03/25 14:00	10/06/25 12:01	1
Beryllium	ND		0.0010	0.00027	mg/L		10/03/25 14:00	10/06/25 12:01	1
Cadmium	**0.00012**	**J**	0.0010	0.000077	mg/L		10/03/25 14:00	10/06/25 12:01	1
Cobalt	ND		0.0010	0.000086	mg/L		10/03/25 14:00	10/06/25 12:01	1
Chromium	ND		0.0050	0.0012	mg/L		10/03/25 14:00	10/06/25 12:01	1
Copper	ND		0.0020	0.0017	mg/L		10/03/25 14:00	10/06/25 12:01	1
Molybdenum	**0.0022**	**J**	0.0050	0.0011	mg/L		10/03/25 14:00	10/06/25 12:01	1
Nickel	**0.015**		0.0020	0.0015	mg/L		10/03/25 14:00	10/06/25 12:01	1
Lead	ND		0.0010	0.00045	mg/L		10/03/25 14:00	10/06/25 12:01	1
Antimony	ND		0.0020	0.00057	mg/L		10/03/25 14:00	10/06/25 12:01	1
Selenium	ND		0.0050	0.00089	mg/L		10/03/25 14:00	10/06/25 12:01	1
Thallium	ND		0.0010	0.00051	mg/L		10/03/25 14:00	10/06/25 12:01	1
Vanadium	ND		0.0050	0.00082	mg/L		10/03/25 14:00	10/06/25 12:01	1
Calcium	**190**		1.0	0.25	mg/L		10/03/25 14:00	10/06/25 12:01	1
Magnesium	**69**		1.0	0.061	mg/L		10/03/25 14:00	10/06/25 12:01	1
Lithium	**0.014**		0.0080	0.0034	mg/L		10/03/25 14:00	10/06/25 12:01	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.7**		0.10	0.013	mg/L		10/07/25 18:55	10/09/25 14:21	1
Zinc	ND		0.0070	0.00093	mg/L		10/07/25 18:55	10/09/25 14:21	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**770**		33	33	mg/L			10/08/25 05:12	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		10/03/25 14:00	10/07/25 10:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**380**		5.0	2.6	mg/L			10/06/25 17:42	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			10/06/25 17:42	1
Total Dissolved Solids (SM 2540 C-2020)	**960**		10	7.8	mg/L			10/06/25 13:34	1
Total Suspended Solids (SM 2540D-2020)	**4.8**		4.0	0.40	mg/L			10/03/25 10:50	1
Chloride (EPA 300.0-1993 R2.1)	**68**		1.0	0.13	mg/L			10/03/25 14:39	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-1

Client Sample ID: L509281-03 MW-19B
Date Collected: 09/30/25 12:07
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.26		0.050	0.024	mg/L			10/03/25 14:39	1
Sulfate (EPA 300.0-1993 R2.1)	290		5.0	1.7	mg/L			10/03/25 14:48	5

Client Sample ID: L509281-04 MW-19C
Date Collected: 09/30/25 13:22
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-4
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.7**		0.10	0.057	mg/L		10/03/25 14:00	10/06/25 15:33	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**7.6**		3.3	0.17	mg/L		10/07/25 18:55	10/11/25 16:20	1
Na	**43**		0.60	0.33	mg/L		10/07/25 18:55	10/11/25 16:20	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		10/03/25 14:00	10/06/25 12:04	1
Arsenic	**0.0011**	**J**	0.0050	0.00075	mg/L		10/03/25 14:00	10/06/25 12:04	1
Barium	**0.036**		0.0050	0.00077	mg/L		10/03/25 14:00	10/06/25 12:04	1
Beryllium	ND		0.0010	0.00027	mg/L		10/03/25 14:00	10/06/25 12:04	1
Cadmium	ND		0.0010	0.000077	mg/L		10/03/25 14:00	10/06/25 12:04	1
Cobalt	ND		0.0010	0.000086	mg/L		10/03/25 14:00	10/06/25 12:04	1
Chromium	ND		0.0050	0.0012	mg/L		10/03/25 14:00	10/06/25 12:04	1
Copper	ND		0.0020	0.0017	mg/L		10/03/25 14:00	10/06/25 12:04	1
Molybdenum	ND		0.0050	0.0011	mg/L		10/03/25 14:00	10/06/25 12:04	1
Nickel	ND		0.0020	0.0015	mg/L		10/03/25 14:00	10/06/25 12:04	1
Lead	ND		0.0010	0.00045	mg/L		10/03/25 14:00	10/06/25 12:04	1
Antimony	ND		0.0020	0.00057	mg/L		10/03/25 14:00	10/06/25 12:04	1
Selenium	ND		0.0050	0.00089	mg/L		10/03/25 14:00	10/06/25 12:04	1
Thallium	ND		0.0010	0.00051	mg/L		10/03/25 14:00	10/06/25 12:04	1
Vanadium	ND		0.0050	0.00082	mg/L		10/03/25 14:00	10/06/25 12:04	1
Calcium	**61**		1.0	0.25	mg/L		10/03/25 14:00	10/06/25 12:04	1
Magnesium	**22**		1.0	0.061	mg/L		10/03/25 14:00	10/06/25 12:04	1
Lithium	**0.024**		0.0080	0.0034	mg/L		10/03/25 14:00	10/06/25 12:04	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.61**		0.10	0.013	mg/L		10/07/25 18:55	10/09/25 14:24	1
Zinc	ND		0.0070	0.00093	mg/L		10/07/25 18:55	10/09/25 14:24	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**240**		33	33	mg/L			10/08/25 05:12	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		10/03/25 14:00	10/07/25 10:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**310**		5.0	2.6	mg/L			10/06/25 17:50	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			10/06/25 17:50	1
Total Dissolved Solids (SM 2540 C-2020)	**330**		10	7.8	mg/L			10/06/25 13:34	1
Total Suspended Solids (SM 2540D-2020)	**2.5**	**J**	4.0	0.40	mg/L			10/03/25 10:50	1
Chloride (EPA 300.0-1993 R2.1)	**2.3**		1.0	0.13	mg/L			10/03/25 14:57	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-1

Client Sample ID: L509281-04 MW-19C
Date Collected: 09/30/25 13:22
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.41		0.050	0.024	mg/L			10/03/25 14:57	1
Sulfate (EPA 300.0-1993 R2.1)	1.3		1.0	0.35	mg/L			10/03/25 14:57	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-1

Client Sample ID: L509281-05 MW-19D

Date Collected: 09/30/25 10:00
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-5

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.58**		0.10	0.057	mg/L		10/03/25 14:00	10/06/25 15:38	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**5.7**		3.3	0.17	mg/L		10/07/25 18:55	10/11/25 16:24	1
Na	**31**		0.60	0.33	mg/L		10/07/25 18:55	10/11/25 16:24	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		10/03/25 14:00	10/06/25 12:06	1
Arsenic	ND		0.0050	0.00075	mg/L		10/03/25 14:00	10/06/25 12:06	1
Barium	**0.050**		0.0050	0.00077	mg/L		10/03/25 14:00	10/06/25 12:06	1
Beryllium	ND		0.0010	0.00027	mg/L		10/03/25 14:00	10/06/25 12:06	1
Cadmium	ND		0.0010	0.000077	mg/L		10/03/25 14:00	10/06/25 12:06	1
Cobalt	ND		0.0010	0.000086	mg/L		10/03/25 14:00	10/06/25 12:06	1
Chromium	ND		0.0050	0.0012	mg/L		10/03/25 14:00	10/06/25 12:06	1
Copper	ND		0.0020	0.0017	mg/L		10/03/25 14:00	10/06/25 12:06	1
Molybdenum	**0.0020**	**J**	0.0050	0.0011	mg/L		10/03/25 14:00	10/06/25 12:06	1
Nickel	ND		0.0020	0.0015	mg/L		10/03/25 14:00	10/06/25 12:06	1
Lead	ND		0.0010	0.00045	mg/L		10/03/25 14:00	10/06/25 12:06	1
Antimony	ND		0.0020	0.00057	mg/L		10/03/25 14:00	10/06/25 12:06	1
Selenium	ND		0.0050	0.00089	mg/L		10/03/25 14:00	10/06/25 12:06	1
Thallium	ND		0.0010	0.00051	mg/L		10/03/25 14:00	10/06/25 12:06	1
Vanadium	ND		0.0050	0.00082	mg/L		10/03/25 14:00	10/06/25 12:06	1
Calcium	**67**		1.0	0.25	mg/L		10/03/25 14:00	10/06/25 12:06	1
Magnesium	**24**		1.0	0.061	mg/L		10/03/25 14:00	10/06/25 12:06	1
Lithium	**0.022**		0.0080	0.0034	mg/L		10/03/25 14:00	10/06/25 12:06	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.34**		0.10	0.013	mg/L		10/07/25 18:55	10/09/25 14:27	1
Zinc	**0.00096**	**J**	0.0070	0.00093	mg/L		10/07/25 18:55	10/09/25 14:27	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**270**		33	33	mg/L			10/08/25 05:12	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		10/03/25 14:00	10/07/25 10:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**310**		5.0	2.6	mg/L			10/06/25 21:21	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			10/06/25 21:21	1
Total Dissolved Solids (SM 2540 C-2020)	**330**		10	7.8	mg/L			10/06/25 13:34	1
Total Suspended Solids (SM 2540D-2020)	**1.1**	**J**	4.0	0.40	mg/L			10/03/25 10:50	1
Chloride (EPA 300.0-1993 R2.1)	**1.3**		1.0	0.13	mg/L			10/03/25 15:05	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-1

Client Sample ID: L509281-05 MW-19D
Date Collected: 09/30/25 10:00
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-5
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.42		0.050	0.024	mg/L			10/03/25 15:05	1
Sulfate (EPA 300.0-1993 R2.1)	11		1.0	0.35	mg/L			10/03/25 15:05	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-1

Client Sample ID: L509281-06 MWT-19A

Date Collected: 09/30/25 10:07
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-6

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.25**		0.10	0.057	mg/L		10/03/25 14:00	10/06/25 15:42	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**2.2**	**J**	3.3	0.17	mg/L		10/07/25 18:55	10/11/25 15:38	1
Na	**42**		0.60	0.33	mg/L		10/07/25 18:55	10/11/25 15:38	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		10/03/25 14:00	10/06/25 12:09	1
Arsenic	**0.0037**	**J**	0.0050	0.00075	mg/L		10/03/25 14:00	10/06/25 12:09	1
Barium	**0.093**		0.0050	0.00077	mg/L		10/03/25 14:00	10/06/25 12:09	1
Beryllium	ND		0.0010	0.00027	mg/L		10/03/25 14:00	10/06/25 12:09	1
Cadmium	ND		0.0010	0.000077	mg/L		10/03/25 14:00	10/06/25 12:09	1
Cobalt	ND		0.0010	0.000086	mg/L		10/03/25 14:00	10/06/25 12:09	1
Chromium	ND		0.0050	0.0012	mg/L		10/03/25 14:00	10/06/25 12:09	1
Copper	ND		0.0020	0.0017	mg/L		10/03/25 14:00	10/06/25 12:09	1
Molybdenum	**0.0020**	**J**	0.0050	0.0011	mg/L		10/03/25 14:00	10/06/25 12:09	1
Nickel	**0.011**		0.0020	0.0015	mg/L		10/03/25 14:00	10/06/25 12:09	1
Lead	ND		0.0010	0.00045	mg/L		10/03/25 14:00	10/06/25 12:09	1
Antimony	ND		0.0020	0.00057	mg/L		10/03/25 14:00	10/06/25 12:09	1
Selenium	ND		0.0050	0.00089	mg/L		10/03/25 14:00	10/06/25 12:09	1
Thallium	ND		0.0010	0.00051	mg/L		10/03/25 14:00	10/06/25 12:09	1
Vanadium	ND		0.0050	0.00082	mg/L		10/03/25 14:00	10/06/25 12:09	1
Calcium	**210**		1.0	0.25	mg/L		10/03/25 14:00	10/06/25 12:09	1
Magnesium	**68**		1.0	0.061	mg/L		10/03/25 14:00	10/06/25 12:09	1
Lithium	**0.0092**		0.0080	0.0034	mg/L		10/03/25 14:00	10/06/25 12:09	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**5.2**		0.10	0.013	mg/L		10/07/25 18:55	10/09/25 13:31	1
Zinc	ND		0.0070	0.00093	mg/L		10/07/25 18:55	10/09/25 13:31	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**810**		33	33	mg/L			10/08/25 05:12	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		10/03/25 14:00	10/07/25 10:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**380**		5.0	2.6	mg/L			10/06/25 21:12	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			10/06/25 21:12	1
Total Dissolved Solids (SM 2540 C-2020)	**930**		10	7.8	mg/L			10/06/25 13:34	1
Total Suspended Solids (SM 2540D-2020)	**9.9**		4.0	0.40	mg/L			10/06/25 11:48	1
Chloride (EPA 300.0-1993 R2.1)	**120**		1.0	0.13	mg/L			10/03/25 15:57	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-1

Client Sample ID: L509281-06 MWT-19A
Date Collected: 09/30/25 10:07
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-6
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.22		0.050	0.024	mg/L			10/03/25 15:57	1
Sulfate (EPA 300.0-1993 R2.1)	250		5.0	1.7	mg/L			10/03/25 16:06	5

Client Sample ID: L509281-07 FIELD BLANK

Date Collected: 09/30/25 08:15
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-7

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		10/03/25 14:00	10/06/25 15:46	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		10/07/25 18:55	10/11/25 15:53	1
Na	ND		0.60	0.33	mg/L		10/07/25 18:55	10/11/25 15:53	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		10/03/25 14:00	10/06/25 12:12	1
Arsenic	ND		0.0050	0.00075	mg/L		10/03/25 14:00	10/06/25 12:12	1
Barium	ND		0.0050	0.00077	mg/L		10/03/25 14:00	10/06/25 12:12	1
Beryllium	ND		0.0010	0.00027	mg/L		10/03/25 14:00	10/06/25 12:12	1
Cadmium	ND		0.0010	0.000077	mg/L		10/03/25 14:00	10/06/25 12:12	1
Cobalt	ND		0.0010	0.000086	mg/L		10/03/25 14:00	10/06/25 12:12	1
Chromium	ND		0.0050	0.0012	mg/L		10/03/25 14:00	10/06/25 12:12	1
Copper	ND		0.0020	0.0017	mg/L		10/03/25 14:00	10/06/25 12:12	1
Molybdenum	ND		0.0050	0.0011	mg/L		10/03/25 14:00	10/06/25 12:12	1
Nickel	ND		0.0020	0.0015	mg/L		10/03/25 14:00	10/06/25 12:12	1
Lead	ND		0.0010	0.00045	mg/L		10/03/25 14:00	10/06/25 12:12	1
Antimony	ND		0.0020	0.00057	mg/L		10/03/25 14:00	10/06/25 12:12	1
Selenium	ND		0.0050	0.00089	mg/L		10/03/25 14:00	10/06/25 12:12	1
Thallium	ND		0.0010	0.00051	mg/L		10/03/25 14:00	10/06/25 12:12	1
Vanadium	ND		0.0050	0.00082	mg/L		10/03/25 14:00	10/06/25 12:12	1
Calcium	ND		1.0	0.25	mg/L		10/03/25 14:00	10/06/25 12:12	1
Magnesium	ND		1.0	0.061	mg/L		10/03/25 14:00	10/06/25 12:12	1
Lithium	ND		0.0080	0.0034	mg/L		10/03/25 14:00	10/06/25 12:12	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		10/07/25 18:55	10/09/25 13:47	1
Zinc	ND		0.0070	0.00093	mg/L		10/07/25 18:55	10/09/25 13:47	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			10/08/25 05:12	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		10/03/25 14:00	10/07/25 10:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			10/06/25 21:29	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			10/06/25 21:29	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			10/07/25 15:51	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			10/06/25 11:48	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			10/03/25 16:15	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-1

Client Sample ID: L509281-07 FIELD BLANK
Date Collected: 09/30/25 08:15
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-7
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			10/03/25 16:15	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			10/03/25 16:15	1

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-674460/1-A
Matrix: Water
Analysis Batch: 674694

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 674460

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		10/03/25 14:00	10/06/25 14:39	1

Lab Sample ID: LCS 240-674460/2-A
Matrix: Water
Analysis Batch: 674694

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 674460

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.09		mg/L		109	85 - 115

Lab Sample ID: 240-234327-1 MS
Matrix: Water
Analysis Batch: 674694

Client Sample ID: L509281-01 MW-7D
Prep Type: Total Recoverable
Prep Batch: 674460

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.5		1.00	2.52		mg/L		100	70 - 130

Lab Sample ID: 240-234327-1 MSD
Matrix: Water
Analysis Batch: 674694

Client Sample ID: L509281-01 MW-7D
Prep Type: Total Recoverable
Prep Batch: 674460

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	1.5		1.00	2.65		mg/L		112	70 - 130	5	20

Lab Sample ID: 240-234327-2 MS
Matrix: Water
Analysis Batch: 674694

Client Sample ID: L509281-02 MW-19A
Prep Type: Total Recoverable
Prep Batch: 674460

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.25		1.00	1.38		mg/L		114	70 - 130

Lab Sample ID: 240-234327-2 MSD
Matrix: Water
Analysis Batch: 674694

Client Sample ID: L509281-02 MW-19A
Prep Type: Total Recoverable
Prep Batch: 674460

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.25		1.00	1.34		mg/L		110	70 - 130	3	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 350-10168/25-A
Matrix: Water
Analysis Batch: 10280

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10168

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		10/07/25 18:55	10/11/25 15:24	1
Na	ND		0.60	0.33	mg/L		10/07/25 18:55	10/11/25 15:24	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-10168/25-A
Matrix: Water
Analysis Batch: 10233

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 10168

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		10/07/25 18:55	10/09/25 13:25	1
Zinc	ND		0.0070	0.00093	mg/L		10/07/25 18:55	10/09/25 13:25	1

Lab Sample ID: LCS 350-10168/26-A
Matrix: Water
Analysis Batch: 10233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 10168

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	17.9		mg/L		90	85 - 115
Zinc	1.00	0.885		mg/L		88	85 - 115

Lab Sample ID: 240-234327-6 MS
Matrix: Water
Analysis Batch: 10233

Client Sample ID: L509281-06 MWT-19A
Prep Type: Total/NA
Prep Batch: 10168

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	5.2		20.0	24.5		mg/L		97	70 - 130
Zinc	ND		1.00	0.948		mg/L		95	70 - 130

Lab Sample ID: 240-234327-6 MSD
Matrix: Water
Analysis Batch: 10233

Client Sample ID: L509281-06 MWT-19A
Prep Type: Total/NA
Prep Batch: 10168

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	5.2		20.0	25.0		mg/L		99	70 - 130	2	20
Zinc	ND		1.00	0.959		mg/L		96	70 - 130	1	20

Lab Sample ID: 240-234327-7 MS
Matrix: Water
Analysis Batch: 10233

Client Sample ID: L509281-07 FIELD BLANK
Prep Type: Total/NA
Prep Batch: 10168

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	ND		20.0	18.6		mg/L		93	70 - 130
Zinc	ND		1.00	0.893		mg/L		89	70 - 130

Lab Sample ID: 240-234327-7 MSD
Matrix: Water
Analysis Batch: 10233

Client Sample ID: L509281-07 FIELD BLANK
Prep Type: Total/NA
Prep Batch: 10168

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	ND		20.0	20.5		mg/L		103	70 - 130	10	20
Zinc	ND		1.00	1.02		mg/L		102	70 - 130	13	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-674460/1-A
Matrix: Water
Analysis Batch: 674832

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 674460

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		10/03/25 14:00	10/06/25 11:35	1
Arsenic	ND		0.0050	0.00075	mg/L		10/03/25 14:00	10/06/25 11:35	1
Barium	ND		0.0050	0.00077	mg/L		10/03/25 14:00	10/06/25 11:35	1
Beryllium	ND		0.0010	0.00027	mg/L		10/03/25 14:00	10/06/25 11:35	1
Cadmium	ND		0.0010	0.000077	mg/L		10/03/25 14:00	10/06/25 11:35	1
Cobalt	ND		0.0010	0.000086	mg/L		10/03/25 14:00	10/06/25 11:35	1
Chromium	ND		0.0050	0.0012	mg/L		10/03/25 14:00	10/06/25 11:35	1
Copper	ND		0.0020	0.0017	mg/L		10/03/25 14:00	10/06/25 11:35	1
Molybdenum	ND		0.0050	0.0011	mg/L		10/03/25 14:00	10/06/25 11:35	1
Nickel	ND		0.0020	0.0015	mg/L		10/03/25 14:00	10/06/25 11:35	1
Lead	ND		0.0010	0.00045	mg/L		10/03/25 14:00	10/06/25 11:35	1
Antimony	ND		0.0020	0.00057	mg/L		10/03/25 14:00	10/06/25 11:35	1
Selenium	ND		0.0050	0.00089	mg/L		10/03/25 14:00	10/06/25 11:35	1
Thallium	ND		0.0010	0.00051	mg/L		10/03/25 14:00	10/06/25 11:35	1
Vanadium	ND		0.0050	0.00082	mg/L		10/03/25 14:00	10/06/25 11:35	1
Calcium	ND		1.0	0.25	mg/L		10/03/25 14:00	10/06/25 11:35	1
Magnesium	ND		1.0	0.061	mg/L		10/03/25 14:00	10/06/25 11:35	1
Lithium	ND		0.0080	0.0034	mg/L		10/03/25 14:00	10/06/25 11:35	1

Lab Sample ID: LCS 240-674460/3-A
Matrix: Water
Analysis Batch: 674832

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 674460

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.100		mg/L		100	85 - 115
Arsenic	1.00	0.985		mg/L		99	85 - 115
Barium	1.00	0.958		mg/L		96	85 - 115
Beryllium	0.500	0.478		mg/L		96	85 - 115
Cadmium	0.500	0.475		mg/L		95	85 - 115
Cobalt	0.500	0.473		mg/L		95	85 - 115
Chromium	0.500	0.498		mg/L		100	85 - 115
Copper	0.500	0.492		mg/L		98	85 - 115
Molybdenum	0.500	0.494		mg/L		99	85 - 115
Nickel	0.500	0.490		mg/L		98	85 - 115
Lead	0.500	0.497		mg/L		99	85 - 115
Antimony	0.100	0.0993		mg/L		99	85 - 115
Selenium	1.00	0.964		mg/L		96	85 - 115
Thallium	1.00	1.02		mg/L		102	85 - 115
Vanadium	0.500	0.502		mg/L		100	85 - 115
Calcium	25.0	25.3		mg/L		101	85 - 115
Magnesium	25.0	26.0		mg/L		104	85 - 115
Lithium	0.500	0.502		mg/L		100	85 - 115

Lab Sample ID: 240-234327-1 MS
Matrix: Water
Analysis Batch: 674832

Client Sample ID: L509281-01 MW-7D
Prep Type: Total Recoverable
Prep Batch: 674460

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.101		mg/L		101	70 - 130

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-234327-1 MS
Matrix: Water
Analysis Batch: 674832

Client Sample ID: L509281-01 MW-7D
Prep Type: Total Recoverable
Prep Batch: 674460

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.0011	J	1.00	1.01		mg/L		100	70 - 130
Barium	0.055		1.00	1.03		mg/L		98	70 - 130
Beryllium	ND		0.500	0.491		mg/L		98	70 - 130
Cadmium	0.00017	J	0.500	0.484		mg/L		97	70 - 130
Cobalt	0.00027	J	0.500	0.476		mg/L		95	70 - 130
Chromium	ND		0.500	0.504		mg/L		101	70 - 130
Copper	ND		0.500	0.492		mg/L		98	70 - 130
Molybdenum	ND		0.500	0.505		mg/L		101	70 - 130
Nickel	ND		0.500	0.492		mg/L		98	70 - 130
Lead	ND		0.500	0.509		mg/L		102	70 - 130
Antimony	ND		0.100	0.102		mg/L		102	70 - 130
Selenium	0.0011	J	1.00	0.977		mg/L		98	70 - 130
Thallium	ND		1.00	1.04		mg/L		104	70 - 130
Vanadium	0.00088	J	0.500	0.512		mg/L		102	70 - 130
Calcium	72		25.0	95.7		mg/L		96	70 - 130
Magnesium	25		25.0	50.2		mg/L		99	70 - 130
Lithium	0.033		0.500	0.552		mg/L		104	70 - 130

Lab Sample ID: 240-234327-1 MSD
Matrix: Water
Analysis Batch: 674832

Client Sample ID: L509281-01 MW-7D
Prep Type: Total Recoverable
Prep Batch: 674460

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.102		mg/L		102	70 - 130	1	20
Arsenic	0.0011	J	1.00	1.00		mg/L		100	70 - 130	0	20
Barium	0.055		1.00	1.05		mg/L		99	70 - 130	2	20
Beryllium	ND		0.500	0.497		mg/L		99	70 - 130	1	20
Cadmium	0.00017	J	0.500	0.489		mg/L		98	70 - 130	1	20
Cobalt	0.00027	J	0.500	0.478		mg/L		96	70 - 130	1	20
Chromium	ND		0.500	0.510		mg/L		102	70 - 130	1	20
Copper	ND		0.500	0.495		mg/L		99	70 - 130	1	20
Molybdenum	ND		0.500	0.511		mg/L		102	70 - 130	1	20
Nickel	ND		0.500	0.496		mg/L		99	70 - 130	1	20
Lead	ND		0.500	0.507		mg/L		101	70 - 130	0	20
Antimony	ND		0.100	0.102		mg/L		102	70 - 130	1	20
Selenium	0.0011	J	1.00	0.985		mg/L		98	70 - 130	1	20
Thallium	ND		1.00	1.05		mg/L		105	70 - 130	1	20
Vanadium	0.00088	J	0.500	0.520		mg/L		104	70 - 130	2	20
Calcium	72		25.0	97.2		mg/L		102	70 - 130	2	20
Magnesium	25		25.0	51.3		mg/L		104	70 - 130	2	20
Lithium	0.033		0.500	0.561		mg/L		106	70 - 130	2	20

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-674468/1-A
Matrix: Water
Analysis Batch: 674938

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 674468

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		10/03/25 14:00	10/07/25 09:49	1

Lab Sample ID: LCS 240-674468/2-A
Matrix: Water
Analysis Batch: 674938

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 674468

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00500	0.00483		mg/L		97	85 - 115

Lab Sample ID: 240-234327-1 MS
Matrix: Water
Analysis Batch: 674938

Client Sample ID: L509281-01 MW-7D
Prep Type: Total/NA
Prep Batch: 674468

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00100	0.00102		mg/L		102	70 - 130

Lab Sample ID: 240-234327-1 MSD
Matrix: Water
Analysis Batch: 674938

Client Sample ID: L509281-01 MW-7D
Prep Type: Total/NA
Prep Batch: 674468

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.00112		mg/L		112	70 - 130	9	20

Lab Sample ID: 240-234327-2 MS
Matrix: Water
Analysis Batch: 674938

Client Sample ID: L509281-02 MW-19A
Prep Type: Total/NA
Prep Batch: 674468

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00100	0.000984		mg/L		98	70 - 130

Lab Sample ID: 240-234327-2 MSD
Matrix: Water
Analysis Batch: 674938

Client Sample ID: L509281-02 MW-19A
Prep Type: Total/NA
Prep Batch: 674468

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.00102		mg/L		102	70 - 130	4	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-674800/31
Matrix: Water
Analysis Batch: 674800

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/06/25 15:58	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/06/25 15:58	1

Method: 2320 B-2021 - Alkalinity (Continued)

Lab Sample ID: MB 240-674800/4
Matrix: Water
Analysis Batch: 674800

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/06/25 13:13	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/06/25 13:13	1

Lab Sample ID: MB 240-674959/3
Matrix: Water
Analysis Batch: 674959

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/06/25 20:09	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/06/25 20:09	1

Lab Sample ID: 240-234327-1 DU
Matrix: Water
Analysis Batch: 674959

Client Sample ID: L509281-01 MW-7D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity as CaCO3	290			295		mg/L				1	20
Carbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-674762/1
Matrix: Water
Analysis Batch: 674762

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			10/06/25 13:34	1

Lab Sample ID: LCS 240-674762/2
Matrix: Water
Analysis Batch: 674762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			495	471		mg/L		95	80 - 120		

Lab Sample ID: MB 240-674979/1
Matrix: Water
Analysis Batch: 674979

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			10/07/25 15:51	1

Lab Sample ID: LCS 240-674979/2
Matrix: Water
Analysis Batch: 674979

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			495	478		mg/L		97	80 - 120		

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-674459/1
Matrix: Water
Analysis Batch: 674459

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			10/03/25 10:50	1

Lab Sample ID: LCS 240-674459/2
Matrix: Water
Analysis Batch: 674459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	76.1	74.0		mg/L		97	64 - 120

Lab Sample ID: MB 240-674733/1
Matrix: Water
Analysis Batch: 674733

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			10/06/25 11:48	1

Lab Sample ID: LCS 240-674733/2
Matrix: Water
Analysis Batch: 674733

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	76.1	69.0		mg/L		91	64 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-674481/3
Matrix: Water
Analysis Batch: 674481

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			10/03/25 12:20	1
Fluoride	ND		0.050	0.024	mg/L			10/03/25 12:20	1
Sulfate	ND		1.0	0.35	mg/L			10/03/25 12:20	1

Lab Sample ID: LCS 240-674481/4
Matrix: Water
Analysis Batch: 674481

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	50.0		mg/L		100	90 - 110
Fluoride	2.50	2.57		mg/L		103	90 - 110
Sulfate	50.0	51.1		mg/L		102	90 - 110

Metals

Prep Batch: 10168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-1	L509281-01 MW-7D	Total/NA	Water	200.7	
240-234327-2	L509281-02 MW-19A	Total/NA	Water	200.7	
240-234327-3	L509281-03 MW-19B	Total/NA	Water	200.7	
240-234327-4	L509281-04 MW-19C	Total/NA	Water	200.7	
240-234327-5	L509281-05 MW-19D	Total/NA	Water	200.7	
240-234327-6	L509281-06 MWT-19A	Total/NA	Water	200.7	
240-234327-7	L509281-07 FIELD BLANK	Total/NA	Water	200.7	
MB 350-10168/25-A	Method Blank	Total/NA	Water	200.7	
LCS 350-10168/26-A	Lab Control Sample	Total/NA	Water	200.7	
240-234327-6 MS	L509281-06 MWT-19A	Total/NA	Water	200.7	
240-234327-6 MSD	L509281-06 MWT-19A	Total/NA	Water	200.7	
240-234327-7 MS	L509281-07 FIELD BLANK	Total/NA	Water	200.7	
240-234327-7 MSD	L509281-07 FIELD BLANK	Total/NA	Water	200.7	

Analysis Batch: 10233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-1	L509281-01 MW-7D	Total/NA	Water	200.8	10168
240-234327-2	L509281-02 MW-19A	Total/NA	Water	200.8	10168
240-234327-3	L509281-03 MW-19B	Total/NA	Water	200.8	10168
240-234327-4	L509281-04 MW-19C	Total/NA	Water	200.8	10168
240-234327-5	L509281-05 MW-19D	Total/NA	Water	200.8	10168
240-234327-6	L509281-06 MWT-19A	Total/NA	Water	200.8	10168
240-234327-7	L509281-07 FIELD BLANK	Total/NA	Water	200.8	10168
MB 350-10168/25-A	Method Blank	Total/NA	Water	200.8	10168
LCS 350-10168/26-A	Lab Control Sample	Total/NA	Water	200.8	10168
240-234327-6 MS	L509281-06 MWT-19A	Total/NA	Water	200.8	10168
240-234327-6 MSD	L509281-06 MWT-19A	Total/NA	Water	200.8	10168
240-234327-7 MS	L509281-07 FIELD BLANK	Total/NA	Water	200.8	10168
240-234327-7 MSD	L509281-07 FIELD BLANK	Total/NA	Water	200.8	10168

Analysis Batch: 10280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-1	L509281-01 MW-7D	Total/NA	Water	200.7 Rev 4.4	10168
240-234327-2	L509281-02 MW-19A	Total/NA	Water	200.7 Rev 4.4	10168
240-234327-3	L509281-03 MW-19B	Total/NA	Water	200.7 Rev 4.4	10168
240-234327-4	L509281-04 MW-19C	Total/NA	Water	200.7 Rev 4.4	10168
240-234327-5	L509281-05 MW-19D	Total/NA	Water	200.7 Rev 4.4	10168
240-234327-6	L509281-06 MWT-19A	Total/NA	Water	200.7 Rev 4.4	10168
240-234327-7	L509281-07 FIELD BLANK	Total/NA	Water	200.7 Rev 4.4	10168
MB 350-10168/25-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	10168
LCS 350-10168/26-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	10168
240-234327-6 MS	L509281-06 MWT-19A	Total/NA	Water	200.7 Rev 4.4	10168
240-234327-6 MSD	L509281-06 MWT-19A	Total/NA	Water	200.7 Rev 4.4	10168
240-234327-7 MS	L509281-07 FIELD BLANK	Total/NA	Water	200.7 Rev 4.4	10168
240-234327-7 MSD	L509281-07 FIELD BLANK	Total/NA	Water	200.7 Rev 4.4	10168

Prep Batch: 674460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-1	L509281-01 MW-7D	Total Recoverable	Water	200.7	
240-234327-2	L509281-02 MW-19A	Total Recoverable	Water	200.7	
240-234327-3	L509281-03 MW-19B	Total Recoverable	Water	200.7	

Metals (Continued)

Prep Batch: 674460 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-4	L509281-04 MW-19C	Total Recoverable	Water	200.7	
240-234327-5	L509281-05 MW-19D	Total Recoverable	Water	200.7	
240-234327-6	L509281-06 MWT-19A	Total Recoverable	Water	200.7	
240-234327-7	L509281-07 FIELD BLANK	Total Recoverable	Water	200.7	
MB 240-674460/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-674460/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-674460/3-A	Lab Control Sample	Total Recoverable	Water	200.7	
240-234327-1 MS	L509281-01 MW-7D	Total Recoverable	Water	200.7	
240-234327-1 MS	L509281-01 MW-7D	Total Recoverable	Water	200.7	
240-234327-1 MSD	L509281-01 MW-7D	Total Recoverable	Water	200.7	
240-234327-1 MSD	L509281-01 MW-7D	Total Recoverable	Water	200.7	
240-234327-2 MS	L509281-02 MW-19A	Total Recoverable	Water	200.7	
240-234327-2 MSD	L509281-02 MW-19A	Total Recoverable	Water	200.7	

Prep Batch: 674468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-1	L509281-01 MW-7D	Total/NA	Water	245.1-1994 R3.0	
240-234327-2	L509281-02 MW-19A	Total/NA	Water	245.1-1994 R3.0	
240-234327-3	L509281-03 MW-19B	Total/NA	Water	245.1-1994 R3.0	
240-234327-4	L509281-04 MW-19C	Total/NA	Water	245.1-1994 R3.0	
240-234327-5	L509281-05 MW-19D	Total/NA	Water	245.1-1994 R3.0	
240-234327-6	L509281-06 MWT-19A	Total/NA	Water	245.1-1994 R3.0	
240-234327-7	L509281-07 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	
MB 240-674468/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-674468/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	
240-234327-1 MS	L509281-01 MW-7D	Total/NA	Water	245.1-1994 R3.0	
240-234327-1 MSD	L509281-01 MW-7D	Total/NA	Water	245.1-1994 R3.0	
240-234327-2 MS	L509281-02 MW-19A	Total/NA	Water	245.1-1994 R3.0	
240-234327-2 MSD	L509281-02 MW-19A	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 674694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-1	L509281-01 MW-7D	Total Recoverable	Water	200.7 R4.4-1994	674460
240-234327-2	L509281-02 MW-19A	Total Recoverable	Water	200.7 R4.4-1994	674460
240-234327-3	L509281-03 MW-19B	Total Recoverable	Water	200.7 R4.4-1994	674460
240-234327-4	L509281-04 MW-19C	Total Recoverable	Water	200.7 R4.4-1994	674460
240-234327-5	L509281-05 MW-19D	Total Recoverable	Water	200.7 R4.4-1994	674460
240-234327-6	L509281-06 MWT-19A	Total Recoverable	Water	200.7 R4.4-1994	674460
240-234327-7	L509281-07 FIELD BLANK	Total Recoverable	Water	200.7 R4.4-1994	674460
MB 240-674460/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	674460
LCS 240-674460/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	674460
240-234327-1 MS	L509281-01 MW-7D	Total Recoverable	Water	200.7 R4.4-1994	674460
240-234327-1 MSD	L509281-01 MW-7D	Total Recoverable	Water	200.7 R4.4-1994	674460
240-234327-2 MS	L509281-02 MW-19A	Total Recoverable	Water	200.7 R4.4-1994	674460
240-234327-2 MSD	L509281-02 MW-19A	Total Recoverable	Water	200.7 R4.4-1994	674460

Analysis Batch: 674832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-1	L509281-01 MW-7D	Total Recoverable	Water	200.8-1994 R5.4	674460
240-234327-2	L509281-02 MW-19A	Total Recoverable	Water	200.8-1994 R5.4	674460
240-234327-3	L509281-03 MW-19B	Total Recoverable	Water	200.8-1994 R5.4	674460

Metals (Continued)

Analysis Batch: 674832 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-4	L509281-04 MW-19C	Total Recoverable	Water	200.8-1994 R5.4	674460
240-234327-5	L509281-05 MW-19D	Total Recoverable	Water	200.8-1994 R5.4	674460
240-234327-6	L509281-06 MWT-19A	Total Recoverable	Water	200.8-1994 R5.4	674460
240-234327-7	L509281-07 FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	674460
MB 240-674460/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	674460
LCS 240-674460/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	674460
240-234327-1 MS	L509281-01 MW-7D	Total Recoverable	Water	200.8-1994 R5.4	674460
240-234327-1 MSD	L509281-01 MW-7D	Total Recoverable	Water	200.8-1994 R5.4	674460

Analysis Batch: 674938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-1	L509281-01 MW-7D	Total/NA	Water	245.1-1994 R3.0	674468
240-234327-2	L509281-02 MW-19A	Total/NA	Water	245.1-1994 R3.0	674468
240-234327-3	L509281-03 MW-19B	Total/NA	Water	245.1-1994 R3.0	674468
240-234327-4	L509281-04 MW-19C	Total/NA	Water	245.1-1994 R3.0	674468
240-234327-5	L509281-05 MW-19D	Total/NA	Water	245.1-1994 R3.0	674468
240-234327-6	L509281-06 MWT-19A	Total/NA	Water	245.1-1994 R3.0	674468
240-234327-7	L509281-07 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	674468
MB 240-674468/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	674468
LCS 240-674468/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	674468
240-234327-1 MS	L509281-01 MW-7D	Total/NA	Water	245.1-1994 R3.0	674468
240-234327-1 MSD	L509281-01 MW-7D	Total/NA	Water	245.1-1994 R3.0	674468
240-234327-2 MS	L509281-02 MW-19A	Total/NA	Water	245.1-1994 R3.0	674468
240-234327-2 MSD	L509281-02 MW-19A	Total/NA	Water	245.1-1994 R3.0	674468

Analysis Batch: 675001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-1	L509281-01 MW-7D	Total Recoverable	Water	2340 B-2021	
240-234327-2	L509281-02 MW-19A	Total Recoverable	Water	2340 B-2021	
240-234327-3	L509281-03 MW-19B	Total Recoverable	Water	2340 B-2021	
240-234327-4	L509281-04 MW-19C	Total Recoverable	Water	2340 B-2021	
240-234327-5	L509281-05 MW-19D	Total Recoverable	Water	2340 B-2021	
240-234327-6	L509281-06 MWT-19A	Total Recoverable	Water	2340 B-2021	
240-234327-7	L509281-07 FIELD BLANK	Total Recoverable	Water	2340 B-2021	

General Chemistry

Analysis Batch: 674459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-1	L509281-01 MW-7D	Total/NA	Water	2540D-2020	
240-234327-2	L509281-02 MW-19A	Total/NA	Water	2540D-2020	
240-234327-3	L509281-03 MW-19B	Total/NA	Water	2540D-2020	
240-234327-4	L509281-04 MW-19C	Total/NA	Water	2540D-2020	
240-234327-5	L509281-05 MW-19D	Total/NA	Water	2540D-2020	
MB 240-674459/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-674459/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 674481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-1	L509281-01 MW-7D	Total/NA	Water	300.0-1993 R2.1	
240-234327-2	L509281-02 MW-19A	Total/NA	Water	300.0-1993 R2.1	

General Chemistry (Continued)

Analysis Batch: 674481 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-2	L509281-02 MW-19A	Total/NA	Water	300.0-1993 R2.1	
240-234327-3	L509281-03 MW-19B	Total/NA	Water	300.0-1993 R2.1	
240-234327-3	L509281-03 MW-19B	Total/NA	Water	300.0-1993 R2.1	
240-234327-4	L509281-04 MW-19C	Total/NA	Water	300.0-1993 R2.1	
240-234327-5	L509281-05 MW-19D	Total/NA	Water	300.0-1993 R2.1	
240-234327-6	L509281-06 MWT-19A	Total/NA	Water	300.0-1993 R2.1	
240-234327-6	L509281-06 MWT-19A	Total/NA	Water	300.0-1993 R2.1	
240-234327-7	L509281-07 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
MB 240-674481/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-674481/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 674733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-6	L509281-06 MWT-19A	Total/NA	Water	2540D-2020	
240-234327-7	L509281-07 FIELD BLANK	Total/NA	Water	2540D-2020	
MB 240-674733/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-674733/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 674762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-1	L509281-01 MW-7D	Total/NA	Water	2540 C-2020	
240-234327-2	L509281-02 MW-19A	Total/NA	Water	2540 C-2020	
240-234327-3	L509281-03 MW-19B	Total/NA	Water	2540 C-2020	
240-234327-4	L509281-04 MW-19C	Total/NA	Water	2540 C-2020	
240-234327-5	L509281-05 MW-19D	Total/NA	Water	2540 C-2020	
240-234327-6	L509281-06 MWT-19A	Total/NA	Water	2540 C-2020	
MB 240-674762/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-674762/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 674800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-2	L509281-02 MW-19A	Total/NA	Water	2320 B-2021	
240-234327-3	L509281-03 MW-19B	Total/NA	Water	2320 B-2021	
240-234327-4	L509281-04 MW-19C	Total/NA	Water	2320 B-2021	
MB 240-674800/31	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-674800/4	Method Blank	Total/NA	Water	2320 B-2021	

Analysis Batch: 674959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-1	L509281-01 MW-7D	Total/NA	Water	2320 B-2021	
240-234327-5	L509281-05 MW-19D	Total/NA	Water	2320 B-2021	
240-234327-6	L509281-06 MWT-19A	Total/NA	Water	2320 B-2021	
240-234327-7	L509281-07 FIELD BLANK	Total/NA	Water	2320 B-2021	
MB 240-674959/3	Method Blank	Total/NA	Water	2320 B-2021	
240-234327-1 DU	L509281-01 MW-7D	Total/NA	Water	2320 B-2021	

Analysis Batch: 674979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-7	L509281-07 FIELD BLANK	Total/NA	Water	2540 C-2020	
MB 240-674979/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-674979/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-1

Client Sample ID: L509281-01 MW-7D

Lab Sample ID: 240-234327-1

Date Collected: 09/30/25 12:22
Date Received: 10/02/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			674460	F3PF	EET CLE	10/03/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	674694	KLC	EET CLE	10/06/25 14:48
Total/NA	Prep	200.7			10168	MCMS	EET SSM	10/07/25 18:55
Total/NA	Analysis	200.7 Rev 4.4		1	10280	JLS	EET SSM	10/11/25 16:03
Total/NA	Prep	200.7			10168	MCMS	EET SSM	10/07/25 18:55
Total/NA	Analysis	200.8		1	10233	CW	EET SSM	10/09/25 14:16
Total Recoverable	Prep	200.7			674460	F3PF	EET CLE	10/03/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	674832	RKT	EET CLE	10/06/25 11:41
Total Recoverable	Analysis	2340 B-2021		1	675001	KLC	EET CLE	10/08/25 05:12
Total/NA	Prep	245.1-1994 R3.0			674468	F3PF	EET CLE	10/03/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	674938	TQ6W	EET CLE	10/07/25 09:52
Total/NA	Analysis	2320 B-2021		1	674959	PQD2	EET CLE	10/06/25 20:13
Total/NA	Analysis	2540 C-2020		1	674762	AAP	EET CLE	10/06/25 13:34
Total/NA	Analysis	2540D-2020		1	674459	TAV2	EET CLE	10/03/25 10:50
Total/NA	Analysis	300.0-1993 R2.1		1	674481	JMR	EET CLE	10/03/25 14:13

Client Sample ID: L509281-02 MW-19A

Lab Sample ID: 240-234327-2

Date Collected: 09/30/25 10:07
Date Received: 10/02/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			674460	F3PF	EET CLE	10/03/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	674694	KLC	EET CLE	10/06/25 15:17
Total/NA	Prep	200.7			10168	MCMS	EET SSM	10/07/25 18:55
Total/NA	Analysis	200.7 Rev 4.4		1	10280	JLS	EET SSM	10/11/25 16:14
Total/NA	Prep	200.7			10168	MCMS	EET SSM	10/07/25 18:55
Total/NA	Analysis	200.8		1	10233	CW	EET SSM	10/09/25 14:18
Total Recoverable	Prep	200.7			674460	F3PF	EET CLE	10/03/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	674832	RKT	EET CLE	10/06/25 11:59
Total Recoverable	Analysis	2340 B-2021		1	675001	KLC	EET CLE	10/08/25 05:12
Total/NA	Prep	245.1-1994 R3.0			674468	F3PF	EET CLE	10/03/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	674938	TQ6W	EET CLE	10/07/25 10:01
Total/NA	Analysis	2320 B-2021		1	674800	PQD2	EET CLE	10/06/25 17:34
Total/NA	Analysis	2540 C-2020		1	674762	AAP	EET CLE	10/06/25 13:34
Total/NA	Analysis	2540D-2020		1	674459	TAV2	EET CLE	10/03/25 10:50
Total/NA	Analysis	300.0-1993 R2.1		1	674481	JMR	EET CLE	10/03/25 14:22
Total/NA	Analysis	300.0-1993 R2.1		5	674481	JMR	EET CLE	10/03/25 14:31

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-1

Client Sample ID: L509281-03 MW-19B

Lab Sample ID: 240-234327-3

Date Collected: 09/30/25 12:07

Matrix: Water

Date Received: 10/02/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			674460	F3PF	EET CLE	10/03/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	674694	KLC	EET CLE	10/06/25 15:29
Total/NA	Prep	200.7			10168	MCMS	EET SSM	10/07/25 18:55
Total/NA	Analysis	200.7 Rev 4.4		1	10280	JLS	EET SSM	10/11/25 16:17
Total/NA	Prep	200.7			10168	MCMS	EET SSM	10/07/25 18:55
Total/NA	Analysis	200.8		1	10233	CW	EET SSM	10/09/25 14:21
Total Recoverable	Prep	200.7			674460	F3PF	EET CLE	10/03/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	674832	RKT	EET CLE	10/06/25 12:01
Total Recoverable	Analysis	2340 B-2021		1	675001	KLC	EET CLE	10/08/25 05:12
Total/NA	Prep	245.1-1994 R3.0			674468	F3PF	EET CLE	10/03/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	674938	TQ6W	EET CLE	10/07/25 10:06
Total/NA	Analysis	2320 B-2021		1	674800	PQD2	EET CLE	10/06/25 17:42
Total/NA	Analysis	2540 C-2020		1	674762	AAP	EET CLE	10/06/25 13:34
Total/NA	Analysis	2540D-2020		1	674459	TAV2	EET CLE	10/03/25 10:50
Total/NA	Analysis	300.0-1993 R2.1		1	674481	JMR	EET CLE	10/03/25 14:39
Total/NA	Analysis	300.0-1993 R2.1		5	674481	JMR	EET CLE	10/03/25 14:48

Client Sample ID: L509281-04 MW-19C

Lab Sample ID: 240-234327-4

Date Collected: 09/30/25 13:22

Matrix: Water

Date Received: 10/02/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			674460	F3PF	EET CLE	10/03/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	674694	KLC	EET CLE	10/06/25 15:33
Total/NA	Prep	200.7			10168	MCMS	EET SSM	10/07/25 18:55
Total/NA	Analysis	200.7 Rev 4.4		1	10280	JLS	EET SSM	10/11/25 16:20
Total/NA	Prep	200.7			10168	MCMS	EET SSM	10/07/25 18:55
Total/NA	Analysis	200.8		1	10233	CW	EET SSM	10/09/25 14:24
Total Recoverable	Prep	200.7			674460	F3PF	EET CLE	10/03/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	674832	RKT	EET CLE	10/06/25 12:04
Total Recoverable	Analysis	2340 B-2021		1	675001	KLC	EET CLE	10/08/25 05:12
Total/NA	Prep	245.1-1994 R3.0			674468	F3PF	EET CLE	10/03/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	674938	TQ6W	EET CLE	10/07/25 10:08
Total/NA	Analysis	2320 B-2021		1	674800	PQD2	EET CLE	10/06/25 17:50
Total/NA	Analysis	2540 C-2020		1	674762	AAP	EET CLE	10/06/25 13:34
Total/NA	Analysis	2540D-2020		1	674459	TAV2	EET CLE	10/03/25 10:50
Total/NA	Analysis	300.0-1993 R2.1		1	674481	JMR	EET CLE	10/03/25 14:57

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-1

Client Sample ID: L509281-05 MW-19D

Lab Sample ID: 240-234327-5

Date Collected: 09/30/25 10:00
Matrix: Water
Date Received: 10/02/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			674460	F3PF	EET CLE	10/03/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	674694	KLC	EET CLE	10/06/25 15:38
Total/NA	Prep	200.7			10168	MCMS	EET SSM	10/07/25 18:55
Total/NA	Analysis	200.7 Rev 4.4		1	10280	JLS	EET SSM	10/11/25 16:24
Total/NA	Prep	200.7			10168	MCMS	EET SSM	10/07/25 18:55
Total/NA	Analysis	200.8		1	10233	CW	EET SSM	10/09/25 14:27
Total Recoverable	Prep	200.7			674460	F3PF	EET CLE	10/03/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	674832	RKT	EET CLE	10/06/25 12:06
Total Recoverable	Analysis	2340 B-2021		1	675001	KLC	EET CLE	10/08/25 05:12
Total/NA	Prep	245.1-1994 R3.0			674468	F3PF	EET CLE	10/03/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	674938	TQ6W	EET CLE	10/07/25 10:10
Total/NA	Analysis	2320 B-2021		1	674959	PQD2	EET CLE	10/06/25 21:21
Total/NA	Analysis	2540 C-2020		1	674762	AAP	EET CLE	10/06/25 13:34
Total/NA	Analysis	2540D-2020		1	674459	TAV2	EET CLE	10/03/25 10:50
Total/NA	Analysis	300.0-1993 R2.1		1	674481	JMR	EET CLE	10/03/25 15:05

Client Sample ID: L509281-06 MWT-19A

Lab Sample ID: 240-234327-6

Date Collected: 09/30/25 10:07
Matrix: Water
Date Received: 10/02/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			674460	F3PF	EET CLE	10/03/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	674694	KLC	EET CLE	10/06/25 15:42
Total/NA	Prep	200.7			10168	MCMS	EET SSM	10/07/25 18:55
Total/NA	Analysis	200.7 Rev 4.4		1	10280	JLS	EET SSM	10/11/25 15:38
Total/NA	Prep	200.7			10168	MCMS	EET SSM	10/07/25 18:55
Total/NA	Analysis	200.8		1	10233	CW	EET SSM	10/09/25 13:31
Total Recoverable	Prep	200.7			674460	F3PF	EET CLE	10/03/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	674832	RKT	EET CLE	10/06/25 12:09
Total Recoverable	Analysis	2340 B-2021		1	675001	KLC	EET CLE	10/08/25 05:12
Total/NA	Prep	245.1-1994 R3.0			674468	F3PF	EET CLE	10/03/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	674938	TQ6W	EET CLE	10/07/25 10:11
Total/NA	Analysis	2320 B-2021		1	674959	PQD2	EET CLE	10/06/25 21:12
Total/NA	Analysis	2540 C-2020		1	674762	AAP	EET CLE	10/06/25 13:34
Total/NA	Analysis	2540D-2020		1	674733	AAP	EET CLE	10/06/25 11:48
Total/NA	Analysis	300.0-1993 R2.1		1	674481	JMR	EET CLE	10/03/25 15:57
Total/NA	Analysis	300.0-1993 R2.1		5	674481	JMR	EET CLE	10/03/25 16:06

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-1

Client Sample ID: L509281-07 FIELD BLANK

Lab Sample ID: 240-234327-7

Date Collected: 09/30/25 08:15

Matrix: Water

Date Received: 10/02/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			674460	F3PF	EET CLE	10/03/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	674694	KLC	EET CLE	10/06/25 15:46
Total/NA	Prep	200.7			10168	MCMS	EET SSM	10/07/25 18:55
Total/NA	Analysis	200.7 Rev 4.4		1	10280	JLS	EET SSM	10/11/25 15:53
Total/NA	Prep	200.7			10168	MCMS	EET SSM	10/07/25 18:55
Total/NA	Analysis	200.8		1	10233	CW	EET SSM	10/09/25 13:47
Total Recoverable	Prep	200.7			674460	F3PF	EET CLE	10/03/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	674832	RKT	EET CLE	10/06/25 12:12
Total Recoverable	Analysis	2340 B-2021		1	675001	KLC	EET CLE	10/08/25 05:12
Total/NA	Prep	245.1-1994 R3.0			674468	F3PF	EET CLE	10/03/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	674938	TQ6W	EET CLE	10/07/25 10:13
Total/NA	Analysis	2320 B-2021		1	674959	PQD2	EET CLE	10/06/25 21:29
Total/NA	Analysis	2540 C-2020		1	674979	TAV2	EET CLE	10/07/25 15:51
Total/NA	Analysis	2540D-2020		1	674733	AAP	EET CLE	10/06/25 11:48
Total/NA	Analysis	300.0-1993 R2.1		1	674481	JMR	EET CLE	10/03/25 16:15

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-1

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-07-26
Florida	NELAP	E87575	06-30-26
Louisiana (All)	NELAP	03073	07-01-26
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-26
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167	07-08-26
US Fish & Wildlife	US Federal Programs	A20571	06-30-26
USDA	US Federal Programs	525-23-4-22573	01-24-28
Washington	State	C788	07-13-26
Wisconsin	State	399133460	08-31-26

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com; Environmental_Laboratory@

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Project Manager:
Howell, Leslie

Purchase Order:
Purchase Order not required

Project Reference:

Work Order:

Sampler:
Marc Wahrer and Julie Maltby

Requested TAT:

Description:
Erickson Wellfield 9/30/25

Project Number:
24034575

Site Name:
Erickson Projects

Sample State: MI

Special Instructions:
Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner. Please add Na and K metals

See following pages for Method and Container information.

240-234327 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L509281-01 MW-7D	Grab	Water	09/30/25 12:22			
2	L509281-02 MW-19A	Grab	Water	09/30/25 10:07			
3	L509281-03 MW-19B	Grab	Water	09/30/25 12:07			
4	L509281-04 MW-19C	Grab	Water	09/30/25 13:22			
5	L509281-05 MW-19D	Grab	Water	09/30/25 10:00			
6	L509281-06 MWT-19A	Grab	Water	09/30/25 10:07			
7	L509281-07 Field Blank	Grab	Water	09/30/25 08:15			

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished By:	Date/Time:	
Jennifer Caporale	10/01/25 09:31	Jennifer Caporale	10/01/25 09:31	Received by - 10/2/25 0800 MT

Chain of Custody Number: **415869**

*H – Analysis on hold.

Coolers								
Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20251001A001								
MIC20251001A001								

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																			
#	Sample Name	2540D-2020 / Solids Total Suspended (TSS)	300.0-1993 R2 1 / Anions Ion Chromatography / Chloride, Fluor	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	200.8 / Metals (ICP/MS) / Iron & Zinc	2540 C-2020 / Solids Total Dissolved (TDS) / Total Dissolved S	200.7 R4.4-1994 / Metals (ICP) / Total Boron	200.8 / Metals (ICP/MS) / Custom List 2- 2-3 Metals	200.7 Rev 4.4 / Metals (ICP) / Iron & Zinc	200.8 / Metals (ICP/MS) / Custom List 1 1 Metals	903.0 / Radium-226 (GFPC) / Standard Target List	245 1 1994 R3 0 / Mercury (CVAA) / Mercury	200.7 Rev 4.4 / Metals (ICP) / Total Na & K	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	2340 B-2021 / Total Hardness (as CaCO3) by calculation	2320 B-2021 / Alkalinity / Bicarbonate & Carbonate Alkalinity	904 0 / Radium-228 (GFPC) / Standard Target List	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)			
1	L509281-01 MW-7D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
2	L509281-02 MW-19A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
3	L509281-03 MW-19B	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
4	L509281-04 MW-19C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
5	L509281-05 MW-19D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
6	L509281-06 MWT-19A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
7	L509281-07 Field Blank	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			

Chain of Custody Bottles

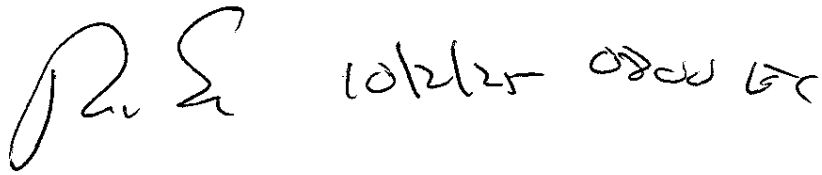
eurofins | Environment Testing

Bottle Name	Total Bottles
Plastic 1 liter Nitric Acid	14
Plastic 500ml - with Nitric Acid	7
Plastic 60 mL unpreserved	14
Plastic 250ml - with Nitric Acid	7
Plastic 1 liter unpreserved	7
Plastic 500ml - unpreserved	7

Samples		Bottles																				
#	Sample Name	Total Bottles For Sample	Plastic 1 liter Nitric Acid	Plastic 500ml - with Nitric Acid	Plastic 60 mL unpreserved	Plastic 250ml with Nitric Acid	Plastic 1 liter unpreserved	Plastic 500ml unpreserved														
1	L509281-01 MW-7D	8	2	1	2	1	1	1														
2	L509281-02 MW-19A	8	2	1	2	1	1	1														
3	L509281-03 MW-19B	8	2	1	2	1	1	1														
4	L509281-04 MW-19C	8	2	1	2	1	1	1														
5	L509281-05 MW-19D	8	2	1	2	1	1	1														
6	L509281-06 MWT-19A	8	2	1	2	1	1	1														
7	L509281-07 Field Blank	8	2	1	2	1	1	1														

10/2/25 08:00 EC

Chain of Custody Number 415869



Eurofins – Cleveland Sample Receipt Form/Narrative **Login # .**
Barberton Facility

Client Lansing Board Site Name
Cooler Received on 10/2/25 Opened on 10/2/25
FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other
Cooler unpacked by:

Receipt After-hours Drop-off Date/Time Storage Location

Eurofins Cooler # 5 Foam Box Client Cooler Box Other
Packing material used. Bubble Wrap Foam Plastic Bag None Other
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form
IR GUN # (CF °C) Observed Cooler Temp. °C Corrected Cooler Temp °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC567196
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #	Yes	No
17 Was a LL Hg or Me Hg trip blank present?	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

18 CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:
Labels Verified by:

19 SAMPLE CONDITION
Sample(s) were received after the recommended holding time had expired
Sample(s) were received in a broken container
Sample(s) were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory
Time preserved Preservative(s) added/Lot number(s)

VOA Sample Preservation - Date/Time VOAs Frozen

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	0.9	1.1	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 1	1.1	1.3	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice

10/2/2025

Login Container Summary Report

240-234327

10/11/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L509281-01 MW-7D	240-234327 A-1	Plastic 60 mL - unpreserved				
L509281-01 MW 7D	240-234327-B-1	Plastic 60 mL - unpreserved				
L509281-01 MW-7D	240-234327-C-1	Plastic 250ml - with Nitric Acid	<2			
L509281-01 MW-7D	240-234327-D-1	Plastic 500ml - unpreserved				
L509281-01 MW-7D	240-234327 E-1	Plastic 500ml with Nitric Acid	<2			
L509281-01 MW-7D	240-234327-F-1	Plastic 1 liter - unpreserved				
L509281-01 MW 7D	240-234327-G-1	Plastic 1 liter - Nitric Acid	<2			
L509281-01 MW-7D	240-234327-H-1	Plastic 1 liter - Nitric Acid	<2			
L509281-02 MW 19A	240-234327 A 2	Plastic 60 mL unpreserved				
L509281-02 MW-19A	240 234327-B-2	Plastic 60 mL - unpreserved				
L509281-02 MW-19A	240-234327-C-2	Plastic 250ml - with Nitric Acid	<2			
L509281-02 MW-19A	240-234327-D-2	Plastic 500ml - unpreserved				
L509281-02 MW 19A	240-234327-E-2	Plastic 500ml - with Nitric Acid	<2			
L509281-02 MW-19A	240-234327-F-2	Plastic 1 liter - unpreserved				
L509281-02 MW-19A	240 234327-G-2	Plastic 1 liter - Nitric Acid	<2			
L509281-02 MW-19A	240-234327-H-2	Plastic 1 liter - Nitric Acid	<2			
L509281-03 MW 19B	240-234327-A-3	Plastic 60 mL - unpreserved				
L509281-03 MW 19B	240-234327 B-3	Plastic 60 mL - unpreserved				
L509281-03 MW-19B	240 234327-C-3	Plastic 250ml with Nitric Acid	<2			
L509281-03 MW-19B	240-234327 D-3	Plastic 500ml - unpreserved				
L509281-03 MW-19B	240-234327-E-3	Plastic 500ml with Nitric Acid	<2			
L509281-03 MW-19B	240-234327 F 3	Plastic 1 liter - unpreserved				
L509281-03 MW-19B	240-234327-G-3	Plastic 1 liter Nitric Acid	<2			
L509281-03 MW 19B	240-234327-H-3	Plastic 1 liter - Nitric Acid	<2			
L509281-04 MW 19C	240-234327-A-4	Plastic 60 mL - unpreserved				
L509281-04 MW-19C	240-234327-B-4	Plastic 60 mL - unpreserved				
L509281-04 MW-19C	240-234327-C-4	Plastic 250ml - with Nitric Acid	<2			
L509281-04 MW-19C	240-234327 D-4	Plastic 500ml unpreserved				
L509281-04 MW-19C	240 234327-E-4	Plastic 500ml - with Nitric Acid	<2			
L509281-04 MW-19C	240 234327-F-4	Plastic 1 liter - unpreserved				
L509281-04 MW 19C	240-234327-G-4	Plastic 1 liter Nitric Acid	<2			
L509281-04 MW-19C	240-234327-H-4	Plastic 1 liter - Nitric Acid	<2			
L509281-05 MW-19D	240-234327 A 5	Plastic 60 mL unpreserved				
L509281-05 MW 19D	240-234327-B-5	Plastic 60 mL - unpreserved				
L509281-05 MW-19D	240-234327-C-5	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L509281-05 MW 19D	240 234327-D-5	Plastic 500ml - unpreserved				
L509281-05 MW-19D	240-234327-E-5	Plastic 500ml - with Nitric Acid	<2			
L509281-05 MW-19D	240-234327 F 5	Plastic 1 liter - unpreserved				
L509281-05 MW-19D	240-234327-G-5	Plastic 1 liter - Nitric Acid	<2			
L509281-05 MW-19D	240-234327 H-5	Plastic 1 liter - Nitric Acid	<2			
L509281-06 MWT-19A	240 234327-A-6	Plastic 60 mL - unpreserved				
L509281-06 MWT 19A	240-234327-B-6	Plastic 60 mL - unpreserved				
L509281-06 MWT-19A	240-234327-C-6	Plastic 250ml with Nitric Acid	<2			
L509281-06 MWT-19A	240-234327-D-6	Plastic 500ml - unpreserved				
L509281-06 MWT-19A	240-234327 E-6	Plastic 500ml - with Nitric Acid	<2			
L509281-06 MWT 19A	240-234327-F-6	Plastic 1 liter - unpreserved				
L509281-06 MWT-19A	240-234327-G-6	Plastic 1 liter - Nitric Acid	<2			
L509281-06 MWT 19A	240 234327-H-6	Plastic 1 liter - Nitric Acid	<2			
L509281-07 FIELD BLANK	240-234327-A-7	Plastic 60 mL - unpreserved				
L509281-07 FIELD BLANK	240-234327-B-7	Plastic 60 mL - unpreserved				
L509281-07 FIELD BLANK	240-234327-C-7	Plastic 250ml - with Nitric Acid	<2			
L509281-07 FIELD BLANK	240-234327-D-7	Plastic 500ml - unpreserved				
L509281-07 FIELD BLANK	240-234327-E-7	Plastic 500ml with Nitric Acid	<2			
L509281-07 FIELD BLANK	240-234327-F-7	Plastic 1 liter - unpreserved				
L509281-07 FIELD BLANK	240-234327-G-7	Plastic 1 liter - Nitric Acid	<2			
L509281-07 FIELD BLANK	240-234327-H-7	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-208805.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-234327-1
Address: 5755 8th Street East, ,	Due Date Requested: 10/15/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Therm. ID: SC03 Cust. Seal: (Y) / N
Uncorr./Corr. Temp: 0.2/0.4 °C
Delivery: UPS / FedEx / Other: ____
Ice Type: Blue / Dry / Wet / None
Label Ver.: 4 Packing: B
Other: N/A 4 Blue

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT(MOD) Iron & Zinc	200.7_CWA/200.7_P_TOT(MOD) Iron & Zinc	Total Number of con	Special Instructions/Note:
			Preservation Code:							
L509281-01 MW-7D (240-234327-1)	9/30/25	12:22 Eastern	G	Water			X	X	1	
L509281-02 MW-19A (240-234327-2)	9/30/25	10:07 Eastern	G	Water			X	X	1	
L509281-03 MW-19B (240-234327-3)	9/30/25	12:07 Eastern	G	Water			X	X	1	
L509281-04 MW-19C (240-234327-4)	9/30/25	13:22 Eastern	G	Water			X	X	1	
L509281-05 MW-19D (240-234327-5)	9/30/25	10:00 Eastern	G	Water			X	X	1	
L509281-06 MWT-19A (240-234327-6)	9/30/25	10:07 Eastern	G	Water			X	X	1	
L509281-07 FIELD BLANK (240-234327-7)	9/30/25	08:15 Eastern	G	Water			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification: Unconfirmed 4616 0302 1680	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 10/2/25 1545	Company ET	Received by:	Date/Time: 10/3/25 9:30	Company JEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-234327-1

Login Number: 234327
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 10/03/25 12:27 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 10/31/2025 10:38:05 AM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-234327-2

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

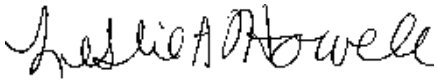
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
10/31/2025 10:38:05 AM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 9
Tracer Carrier Summary 16
QC Sample Results 17
QC Association Summary 19
Lab Chronicle 20
Certification Summary 22
Chain of Custody 23
Receipt Checklists 33

Definitions/Glossary

Client: Lansing Board of Water & Light
Job ID: 240-234327-2
Project/Site: Erickson Projects

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-234327-2 — Eurofins Cleveland

Job Narrative
240-234327-2

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 10/2/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.1°C and 1.3°C.

Gas Flow Proportional Counter
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-234327-1	L509281-01 MW-7D	Water	09/30/25 12:22	10/02/25 08:00	Michigan
240-234327-2	L509281-02 MW-19A	Water	09/30/25 10:07	10/02/25 08:00	Michigan
240-234327-3	L509281-03 MW-19B	Water	09/30/25 12:07	10/02/25 08:00	Michigan
240-234327-4	L509281-04 MW-19C	Water	09/30/25 13:22	10/02/25 08:00	Michigan
240-234327-5	L509281-05 MW-19D	Water	09/30/25 10:00	10/02/25 08:00	Michigan
240-234327-6	L509281-06 MWT-19A	Water	09/30/25 10:07	10/02/25 08:00	Michigan
240-234327-7	L509281-07 FIELD BLANK	Water	09/30/25 08:15	10/02/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Job ID: 240-234327-2
Project/Site: Erickson Projects

Client Sample ID: L509281-01 MW-7D **Lab Sample ID: 240-234327-1**

No Detections.

Client Sample ID: L509281-02 MW-19A **Lab Sample ID: 240-234327-2**

No Detections.

Client Sample ID: L509281-03 MW-19B **Lab Sample ID: 240-234327-3**

No Detections.

Client Sample ID: L509281-04 MW-19C **Lab Sample ID: 240-234327-4**

No Detections.

Client Sample ID: L509281-05 MW-19D **Lab Sample ID: 240-234327-5**

No Detections.

Client Sample ID: L509281-06 MWT-19A **Lab Sample ID: 240-234327-6**

No Detections.

Client Sample ID: L509281-07 FIELD BLANK **Lab Sample ID: 240-234327-7**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: L509281-01 MW-7D

Date Collected: 09/30/25 12:22
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-1

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.291	U	0.215	0.217	1.00	0.307	pCi/L	10/06/25 07:53	10/29/25 22:47	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*30 - 110*	*10/06/25 07:53*	*10/29/25 22:47*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.521	U	0.378	0.381	1.00	0.579	pCi/L	10/06/25 07:56	10/29/25 11:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*30 - 110*	*10/06/25 07:56*	*10/29/25 11:46*	*1*
Y Carrier	*82.6*		*30 - 110*	*10/06/25 07:56*	*10/29/25 11:46*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.812**		0.435	0.438	5.00	0.579	pCi/L		10/30/25 12:29	1

Client Sample ID: L509281-02 MW-19A
Date Collected: 09/30/25 10:07
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-2
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.191	U	0.217	0.218	1.00	0.353	pCi/L	10/06/25 07:53	10/29/25 22:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.6*		*30 - 110*	*10/06/25 07:53*	*10/29/25 22:46*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.901**		0.399	0.408	1.00	0.530	pCi/L	10/06/25 07:56	10/29/25 11:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.6*		*30 - 110*	*10/06/25 07:56*	*10/29/25 11:45*	*1*
Y Carrier	*85.2*		*30 - 110*	*10/06/25 07:56*	*10/29/25 11:45*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.09**		0.454	0.463	5.00	0.530	pCi/L		10/30/25 12:29	1

Client Sample ID: L509281-03 MW-19B
Date Collected: 09/30/25 12:07
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-3
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.537		0.313	0.317	1.00	0.437	pCi/L	10/06/25 07:53	10/29/25 22:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.3*		*30 - 110*	*10/06/25 07:53*	*10/29/25 22:46*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.03		0.394	0.405	1.00	0.480	pCi/L	10/06/25 07:56	10/29/25 11:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.3*		*30 - 110*	*10/06/25 07:56*	*10/29/25 11:45*	*1*
Y Carrier	*84.9*		*30 - 110*	*10/06/25 07:56*	*10/29/25 11:45*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.57		0.503	0.514	5.00	0.480	pCi/L		10/30/25 12:29	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-2

Client Sample ID: L509281-04 MW-19C
Date Collected: 09/30/25 13:22
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-4
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.267	U	0.273	0.274	1.00	0.436	pCi/L	10/06/25 07:53	10/29/25 22:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.8*		*30 - 110*	*10/06/25 07:53*	*10/29/25 22:46*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.105	U	0.269	0.269	1.00	0.542	pCi/L	10/06/25 07:56	10/29/25 11:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.8*		*30 - 110*	*10/06/25 07:56*	*10/29/25 11:45*	*1*
Y Carrier	*80.4*		*30 - 110*	*10/06/25 07:56*	*10/29/25 11:45*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.267	U	0.383	0.384	5.00	0.542	pCi/L		10/30/25 12:29	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-2

Client Sample ID: L509281-05 MW-19D
Date Collected: 09/30/25 10:00
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-5
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.235	U	0.214	0.215	1.00	0.323	pCi/L	10/06/25 08:00	10/30/25 16:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.3*		*30 - 110*	*10/06/25 08:00*	*10/30/25 16:45*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.03**		0.466	0.475	1.00	0.617	pCi/L	10/06/25 08:04	10/30/25 11:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.3*		*30 - 110*	*10/06/25 08:04*	*10/30/25 11:40*	*1*
Y Carrier	*73.3*		*30 - 110*	*10/06/25 08:04*	*10/30/25 11:40*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.26**		0.513	0.521	5.00	0.617	pCi/L		10/30/25 17:23	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-2

Client Sample ID: L509281-06 MWT-19A
Date Collected: 09/30/25 10:07
Date Received: 10/02/25 08:00

Lab Sample ID: 240-234327-6
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.225	U	0.210	0.211	1.00	0.322	pCi/L	10/06/25 08:00	10/30/25 16:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.8*		*30 - 110*	*10/06/25 08:00*	*10/30/25 16:45*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.855**		0.410	0.418	1.00	0.561	pCi/L	10/06/25 08:04	10/30/25 11:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.8*		*30 - 110*	*10/06/25 08:04*	*10/30/25 11:40*	*1*
Y Carrier	*78.5*		*30 - 110*	*10/06/25 08:04*	*10/30/25 11:40*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.08**		0.461	0.468	5.00	0.561	pCi/L		10/30/25 17:23	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-2

Client Sample ID: L509281-07 FIELD BLANK

Lab Sample ID: 240-234327-7

Date Collected: 09/30/25 08:15

Matrix: Water

Date Received: 10/02/25 08:00

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.157	U	0.202	0.202	1.00	0.336	pCi/L	10/06/25 08:00	10/30/25 16:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*10/06/25 08:00*	*10/30/25 16:45*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.313	U	0.323	0.324	1.00	0.522	pCi/L	10/06/25 08:04	10/30/25 11:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*10/06/25 08:04*	*10/30/25 11:40*	*1*
Y Carrier	*83.7*		*30 - 110*	*10/06/25 08:04*	*10/30/25 11:40*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.470	U	0.381	0.382	5.00	0.522	pCi/L		10/30/25 17:23	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)								
		Ba								
Lab Sample ID	Client Sample ID	(30-110)								
240-234327-1	L509281-01 MW-7D	88.6								
240-234327-2	L509281-02 MW-19A	84.6								
240-234327-3	L509281-03 MW-19B	84.3								
240-234327-4	L509281-04 MW-19C	85.8								
240-234327-5	L509281-05 MW-19D	80.3								
240-234327-6	L509281-06 MWT-19A	87.8								
240-234327-7	L509281-07 FIELD BLANK	88.8								
LCS 160-739221/2-A	Lab Control Sample	90.3								
LCS 160-739223/2-A	Lab Control Sample	82.6								
MB 160-739221/1-A	Method Blank	88.6								
MB 160-739223/1-A	Method Blank	89.1								

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)								
		Ba	Y							
Lab Sample ID	Client Sample ID	(30-110)	(30-110)							
240-234327-1	L509281-01 MW-7D	88.6	82.6							
240-234327-2	L509281-02 MW-19A	84.6	85.2							
240-234327-3	L509281-03 MW-19B	84.3	84.9							
240-234327-4	L509281-04 MW-19C	85.8	80.4							
240-234327-5	L509281-05 MW-19D	80.3	73.3							
240-234327-6	L509281-06 MWT-19A	87.8	78.5							
240-234327-7	L509281-07 FIELD BLANK	88.8	83.7							
LCS 160-739222/2-A	Lab Control Sample	90.3	83.0							
LCS 160-739239/2-A	Lab Control Sample	82.6	83.0							
MB 160-739222/1-A	Method Blank	88.6	79.3							
MB 160-739239/1-A	Method Blank	89.1	77.4							

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-739221/1-A
Matrix: Water
Analysis Batch: 742802

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 739221

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.01930	U	0.0745	0.0745	1.00	0.189	pCi/L	10/06/25 07:53	10/29/25 22:33	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*30 - 110*	*10/06/25 07:53*	*10/29/25 22:33*	*1*

Lab Sample ID: LCS 160-739221/2-A
Matrix: Water
Analysis Batch: 742802

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 739221

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.57	7.915		1.03	1.00	0.193	pCi/L	83	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*90.3*		*30 - 110*

Lab Sample ID: MB 160-739223/1-A
Matrix: Water
Analysis Batch: 742990

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 739223

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.04016	U	0.170	0.170	1.00	0.363	pCi/L	10/06/25 08:00	10/30/25 16:44	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.1*		*30 - 110*	*10/06/25 08:00*	*10/30/25 16:44*	*1*

Lab Sample ID: LCS 160-739223/2-A
Matrix: Water
Analysis Batch: 742990

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 739223

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.57	7.953		1.13	1.00	0.337	pCi/L	83	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*82.6*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-739222/1-A
Matrix: Water
Analysis Batch: 742802

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 739222

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4859	U	0.429	0.431	1.00	0.680	pCi/L	10/06/25 07:56	10/29/25 11:44	1

Method: 904.0 - Radium-228 (GFPC) (Continued)

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	88.6		30 - 110	10/06/25 07:56	10/29/25 11:44	1
Y Carrier	79.3		30 - 110	10/06/25 07:56	10/29/25 11:44	1

Lab Sample ID: LCS 160-739222/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 742802 — **Prep Batch: 739222**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			7.97	9.819		1.37	1.00	0.669	pCi/L	123	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	90.3		30 - 110
Y Carrier	83.0		30 - 110

Lab Sample ID: MB 160-739239/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 742990 — **Prep Batch: 739239**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1083	U	0.370	0.370	1.00	0.655	pCi/L	10/06/25 08:04	10/30/25 11:39	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	89.1		30 - 110	10/06/25 08:04	10/30/25 11:39	1
Y Carrier	77.4		30 - 110	10/06/25 08:04	10/30/25 11:39	1

Lab Sample ID: LCS 160-739239/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 742990 — **Prep Batch: 739239**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			7.97	8.440		1.22	1.00	0.553	pCi/L	106	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	82.6		30 - 110
Y Carrier	83.0		30 - 110

QC Association Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-2

Rad

Prep Batch: 739221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-1	L509281-01 MW-7D	Total/NA	Water	PrecSep-21	
240-234327-2	L509281-02 MW-19A	Total/NA	Water	PrecSep-21	
240-234327-3	L509281-03 MW-19B	Total/NA	Water	PrecSep-21	
240-234327-4	L509281-04 MW-19C	Total/NA	Water	PrecSep-21	
MB 160-739221/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-739221/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 739222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-1	L509281-01 MW-7D	Total/NA	Water	PrecSep_0	
240-234327-2	L509281-02 MW-19A	Total/NA	Water	PrecSep_0	
240-234327-3	L509281-03 MW-19B	Total/NA	Water	PrecSep_0	
240-234327-4	L509281-04 MW-19C	Total/NA	Water	PrecSep_0	
MB 160-739222/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-739222/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 739223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-5	L509281-05 MW-19D	Total/NA	Water	PrecSep-21	
240-234327-6	L509281-06 MWT-19A	Total/NA	Water	PrecSep-21	
240-234327-7	L509281-07 FIELD BLANK	Total/NA	Water	PrecSep-21	
MB 160-739223/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-739223/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 739239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234327-5	L509281-05 MW-19D	Total/NA	Water	PrecSep_0	
240-234327-6	L509281-06 MWT-19A	Total/NA	Water	PrecSep_0	
240-234327-7	L509281-07 FIELD BLANK	Total/NA	Water	PrecSep_0	
MB 160-739239/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-739239/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-2

Client Sample ID: L509281-01 MW-7D

Lab Sample ID: 240-234327-1

Date Collected: 09/30/25 12:22
Date Received: 10/02/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			739221	AMS	EET SL	10/06/25 07:53
Total/NA	Analysis	903.0		1	742793	SWS	EET SL	10/29/25 22:47
Total/NA	Prep	PrecSep_0			739222	AMS	EET SL	10/06/25 07:56
Total/NA	Analysis	904.0		1	742792	SWS	EET SL	10/29/25 11:46
Total/NA	Analysis	Ra226_Ra228 Pos		1	743040	SCB	EET SL	10/30/25 12:29

Client Sample ID: L509281-02 MW-19A

Lab Sample ID: 240-234327-2

Date Collected: 09/30/25 10:07
Date Received: 10/02/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			739221	AMS	EET SL	10/06/25 07:53
Total/NA	Analysis	903.0		1	742793	SWS	EET SL	10/29/25 22:46
Total/NA	Prep	PrecSep_0			739222	AMS	EET SL	10/06/25 07:56
Total/NA	Analysis	904.0		1	742792	SWS	EET SL	10/29/25 11:45
Total/NA	Analysis	Ra226_Ra228 Pos		1	743040	SCB	EET SL	10/30/25 12:29

Client Sample ID: L509281-03 MW-19B

Lab Sample ID: 240-234327-3

Date Collected: 09/30/25 12:07
Date Received: 10/02/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			739221	AMS	EET SL	10/06/25 07:53
Total/NA	Analysis	903.0		1	742793	SWS	EET SL	10/29/25 22:46
Total/NA	Prep	PrecSep_0			739222	AMS	EET SL	10/06/25 07:56
Total/NA	Analysis	904.0		1	742792	SWS	EET SL	10/29/25 11:45
Total/NA	Analysis	Ra226_Ra228 Pos		1	743040	SCB	EET SL	10/30/25 12:29

Client Sample ID: L509281-04 MW-19C

Lab Sample ID: 240-234327-4

Date Collected: 09/30/25 13:22
Date Received: 10/02/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			739221	AMS	EET SL	10/06/25 07:53
Total/NA	Analysis	903.0		1	742793	SWS	EET SL	10/29/25 22:46
Total/NA	Prep	PrecSep_0			739222	AMS	EET SL	10/06/25 07:56
Total/NA	Analysis	904.0		1	742792	SWS	EET SL	10/29/25 11:45
Total/NA	Analysis	Ra226_Ra228 Pos		1	743040	SCB	EET SL	10/30/25 12:29

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-2

Client Sample ID: L509281-05 MW-19D

Lab Sample ID: 240-234327-5

Date Collected: 09/30/25 10:00
Matrix: Water
Date Received: 10/02/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			739223	AMS	EET SL	10/06/25 08:00
Total/NA	Analysis	903.0		1	742990	SWS	EET SL	10/30/25 16:45
Total/NA	Prep	PrecSep_0			739239	AMS	EET SL	10/06/25 08:04
Total/NA	Analysis	904.0		1	742990	SWS	EET SL	10/30/25 11:40
Total/NA	Analysis	Ra226_Ra228 Pos		1	743092	SCB	EET SL	10/30/25 17:23

Client Sample ID: L509281-06 MWT-19A

Lab Sample ID: 240-234327-6

Date Collected: 09/30/25 10:07
Matrix: Water
Date Received: 10/02/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			739223	AMS	EET SL	10/06/25 08:00
Total/NA	Analysis	903.0		1	742990	SWS	EET SL	10/30/25 16:45
Total/NA	Prep	PrecSep_0			739239	AMS	EET SL	10/06/25 08:04
Total/NA	Analysis	904.0		1	742990	SWS	EET SL	10/30/25 11:40
Total/NA	Analysis	Ra226_Ra228 Pos		1	743092	SCB	EET SL	10/30/25 17:23

Client Sample ID: L509281-07 FIELD BLANK

Lab Sample ID: 240-234327-7

Date Collected: 09/30/25 08:15
Matrix: Water
Date Received: 10/02/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			739223	AMS	EET SL	10/06/25 08:00
Total/NA	Analysis	903.0		1	742990	SWS	EET SL	10/30/25 16:45
Total/NA	Prep	PrecSep_0			739239	AMS	EET SL	10/06/25 08:04
Total/NA	Analysis	904.0		1	742990	SWS	EET SL	10/30/25 11:40
Total/NA	Analysis	Ra226_Ra228 Pos		1	743092	SCB	EET SL	10/30/25 17:23

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-234327-2

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	07-01-26
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	10-01-26
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-26
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-31-26
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com; Environmental_Laboratory@

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Project Manager:
Howell, Leslie

Purchase Order:
Purchase Order not required

Project Reference:

Work Order:

Sampler:
Marc Wahrer and Julie Maltby

Requested TAT:

Description:
Erickson Wellfield 9/30/25

Project Number:
24034575

Site Name:
Erickson Projects

Sample State: MI

Special Instructions:
Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner. Please add Na and K metals

See following pages for Method and Container information.

240-234327 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L509281-01 MW-7D	Grab	Water	09/30/25 12:22			
2	L509281-02 MW-19A	Grab	Water	09/30/25 10:07			
3	L509281-03 MW-19B	Grab	Water	09/30/25 12:07			
4	L509281-04 MW-19C	Grab	Water	09/30/25 13:22			
5	L509281-05 MW-19D	Grab	Water	09/30/25 10:00			
6	L509281-06 MWT-19A	Grab	Water	09/30/25 10:07			
7	L509281-07 Field Blank	Grab	Water	09/30/25 08:15			

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished By:	Date/Time:	
Jennifer Caporale	10/01/25 09:31	Jennifer Caporale	10/01/25 09:31	Received by - 10/2/25 0800 MT

Chain of Custody Number: **415869**

*H – Analysis on hold.

Coolers								
Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20251001A001								
MIC20251001A001								

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																				
#	Sample Name	2540D-2020 / Solids Total Suspended (TSS)	300.0-1993 R2 1 / Anions Ion Chromatography / Chloride, Fluor	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	200.8 / Metals (ICP/MS) / Iron & Zinc	2540 C-2020 / Solids Total Dissolved (TDS) / Total Dissolved S	200.7 R4.4-1994 / Metals (ICP) / Total Boron	200.8 / Metals (ICP/MS) / Custom List 2- 2-3 Metals	200.7 Rev 4.4 / Metals (ICP) / Iron & Zinc	200.8 / Metals (ICP/MS) / Custom List 1 1 Metals	903.0 / Radium-226 (GFPC) / Standard Target List	245 1 1994 R3 0 / Mercury (CVAA) / Mercury	200.7 Rev 4.4 / Metals (ICP) / Total Na & K	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	2340 B-2021 / Total Hardness (as CaCO3) by calculation	2320 B-2021 / Alkalinity / Bicarbonate & Carbonate Alkalinity	904 0 / Radium-228 (GFPC) / Standard Target List	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)				
1	L509281-01 MW-7D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
2	L509281-02 MW-19A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
3	L509281-03 MW-19B	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
4	L509281-04 MW-19C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
5	L509281-05 MW-19D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
6	L509281-06 MWT-19A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
7	L509281-07 Field Blank	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				

Chain of Custody Bottles

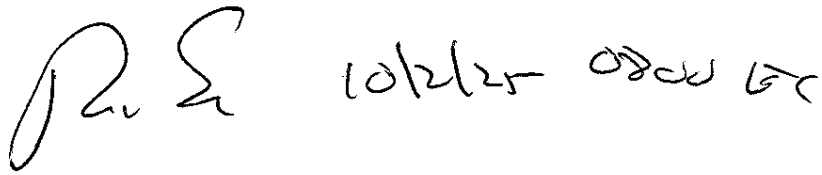
eurofins | Environment Testing

Bottle Name	Total Bottles
Plastic 1 liter Nitric Acid	14
Plastic 500ml - with Nitric Acid	7
Plastic 60 mL unpreserved	14
Plastic 250ml - with Nitric Acid	7
Plastic 1 liter unpreserved	7
Plastic 500ml - unpreserved	7

Samples		Bottles																				
#	Sample Name	Total Bottles For Sample	Plastic 1 liter Nitric Acid	Plastic 500ml - with Nitric Acid	Plastic 60 mL unpreserved	Plastic 250ml with Nitric Acid	Plastic 1 liter unpreserved	Plastic 500ml unpreserved														
1	L509281-01 MW-7D	8	2	1	2	1	1	1														
2	L509281-02 MW-19A	8	2	1	2	1	1	1														
3	L509281-03 MW-19B	8	2	1	2	1	1	1														
4	L509281-04 MW-19C	8	2	1	2	1	1	1														
5	L509281-05 MW-19D	8	2	1	2	1	1	1														
6	L509281-06 MWT-19A	8	2	1	2	1	1	1														
7	L509281-07 Field Blank	8	2	1	2	1	1	1														

10/27/25 0800 EC

Chain of Custody Number 415869



Eurofins – Cleveland Sample Receipt Form/Narrative Login # ._____
Barberton Facility

Client Lansing Board Site Name_____ Cooler unpacked by:

Cooler Received on 10/2/25 Opened on 10/2/25

FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours Drop-off Date/Time Storage Location

Eurofins Cooler # 5 Foam Box Client Cooler Box Other _____

Packing material used. Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # _____ (CF_____°C) Observed Cooler Temp._____°C Corrected Cooler Temp _____°C

2.	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes No
	-Were the seals on the outside of the cooler(s) signed & dated?	Yes No NA
	-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes No
	-Were tamper/custody seals intact and uncompromised?	Yes No NA
3	Shippers' packing slip attached to the cooler(s)?	Yes No
4	Did custody papers accompany the sample(s)?	Yes No
5	Were the custody papers relinquished & signed in the appropriate place?	Yes No
6	Was/were the person(s) who collected the samples clearly identified on the COC?	Yes No
7	Did all bottles arrive in good condition (Unbroken)?	Yes No
8	Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes No
9	For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?	
10	Were correct bottle(s) used for the test(s) indicated?	Yes No
11	Sufficient quantity received to perform indicated analyses?	Yes No
12.	Are these work share samples and all listed on the COC?	Yes No
	If yes, Questions 13-17 have been checked at the originating laboratory	
13	Were all preserved sample(s) at the correct pH upon receipt?	Yes No NA pH Strip Lot# HC567196
14	Were VOAs on the COC?	Yes No
15	Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes No NA
16	Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes No
17	Was a LL Hg or Me Hg trip blank present? _____	Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18 CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	0.9	1.1	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 1	1.1	1.3	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice

10/2/2025

Login Container Summary Report

240-234327

10/31/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L509281-01 MW-7D	240-234327 A-1	Plastic 60 mL - unpreserved				
L509281-01 MW 7D	240-234327-B-1	Plastic 60 mL - unpreserved				
L509281-01 MW-7D	240-234327-C-1	Plastic 250ml - with Nitric Acid	<2			
L509281-01 MW-7D	240-234327-D-1	Plastic 500ml - unpreserved				
L509281-01 MW-7D	240-234327 E-1	Plastic 500ml with Nitric Acid	<2			
L509281-01 MW-7D	240-234327-F-1	Plastic 1 liter - unpreserved				
L509281-01 MW 7D	240-234327-G-1	Plastic 1 liter - Nitric Acid	<2			
L509281-01 MW-7D	240-234327-H-1	Plastic 1 liter - Nitric Acid	<2			
L509281-02 MW 19A	240-234327 A 2	Plastic 60 mL unpreserved				
L509281-02 MW-19A	240 234327-B-2	Plastic 60 mL - unpreserved				
L509281-02 MW-19A	240-234327-C-2	Plastic 250ml - with Nitric Acid	<2			
L509281-02 MW-19A	240-234327-D-2	Plastic 500ml - unpreserved				
L509281-02 MW 19A	240-234327-E-2	Plastic 500ml - with Nitric Acid	<2			
L509281-02 MW-19A	240-234327-F-2	Plastic 1 liter - unpreserved				
L509281-02 MW-19A	240 234327-G-2	Plastic 1 liter - Nitric Acid	<2			
L509281-02 MW-19A	240-234327-H-2	Plastic 1 liter - Nitric Acid	<2			
L509281-03 MW 19B	240-234327-A-3	Plastic 60 mL - unpreserved				
L509281-03 MW 19B	240-234327 B-3	Plastic 60 mL - unpreserved				
L509281-03 MW-19B	240 234327-C-3	Plastic 250ml with Nitric Acid	<2			
L509281-03 MW-19B	240-234327 D-3	Plastic 500ml - unpreserved				
L509281-03 MW-19B	240-234327-E-3	Plastic 500ml with Nitric Acid	<2			
L509281-03 MW-19B	240-234327 F 3	Plastic 1 liter - unpreserved				
L509281-03 MW-19B	240-234327-G-3	Plastic 1 liter Nitric Acid	<2			
L509281-03 MW 19B	240-234327-H-3	Plastic 1 liter - Nitric Acid	<2			
L509281-04 MW 19C	240-234327-A-4	Plastic 60 mL - unpreserved				
L509281-04 MW-19C	240-234327-B-4	Plastic 60 mL - unpreserved				
L509281-04 MW-19C	240-234327-C-4	Plastic 250ml - with Nitric Acid	<2			
L509281-04 MW-19C	240-234327 D-4	Plastic 500ml unpreserved				
L509281-04 MW-19C	240 234327-E-4	Plastic 500ml - with Nitric Acid	<2			
L509281-04 MW-19C	240 234327-F-4	Plastic 1 liter - unpreserved				
L509281-04 MW 19C	240-234327-G-4	Plastic 1 liter Nitric Acid	<2			
L509281-04 MW-19C	240-234327-H-4	Plastic 1 liter - Nitric Acid	<2			
L509281-05 MW-19D	240-234327 A 5	Plastic 60 mL unpreserved				
L509281-05 MW 19D	240-234327-B-5	Plastic 60 mL - unpreserved				
L509281-05 MW-19D	240-234327-C-5	Plastic 250ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L509281-05 MW 19D	240 234327-D-5	Plastic 500ml - unpreserved				
L509281-05 MW-19D	240-234327-E-5	Plastic 500ml - with Nitric Acid	<2			
L509281-05 MW-19D	240-234327 F 5	Plastic 1 liter - unpreserved				
L509281-05 MW-19D	240-234327-G-5	Plastic 1 liter - Nitric Acid	<2			
L509281-05 MW-19D	240-234327 H-5	Plastic 1 liter - Nitric Acid	<2			
L509281-06 MWT-19A	240 234327-A-6	Plastic 60 mL - unpreserved				
L509281-06 MWT 19A	240-234327-B-6	Plastic 60 mL - unpreserved				
L509281-06 MWT-19A	240-234327-C-6	Plastic 250ml with Nitric Acid	<2			
L509281-06 MWT-19A	240-234327-D-6	Plastic 500ml - unpreserved				
L509281-06 MWT-19A	240-234327 E-6	Plastic 500ml - with Nitric Acid	<2			
L509281-06 MWT 19A	240-234327-F-6	Plastic 1 liter - unpreserved				
L509281-06 MWT-19A	240-234327-G-6	Plastic 1 liter - Nitric Acid	<2			
L509281-06 MWT 19A	240 234327-H-6	Plastic 1 liter - Nitric Acid	<2			
L509281-07 FIELD BLANK	240-234327-A-7	Plastic 60 mL - unpreserved				
L509281-07 FIELD BLANK	240-234327-B-7	Plastic 60 mL - unpreserved				
L509281-07 FIELD BLANK	240-234327-C-7	Plastic 250ml - with Nitric Acid	<2			
L509281-07 FIELD BLANK	240-234327-D-7	Plastic 500ml - unpreserved				
L509281-07 FIELD BLANK	240-234327-E-7	Plastic 500ml with Nitric Acid	<2			
L509281-07 FIELD BLANK	240-234327-F-7	Plastic 1 liter - unpreserved				
L509281-07 FIELD BLANK	240-234327-G-7	Plastic 1 liter - Nitric Acid	<2			
L509281-07 FIELD BLANK	240-234327-H-7	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-208795.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-234327-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 10/16/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21Standard Target List	904.0/PrecSep_0Standard Target List	Ra226_228GFPC_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L509281-01 MW-7D (240-234327-1)	9/30/25	12:22 Eastern	G	Water			X	X	X	2	
L509281-02 MW-19A (240-234327-2)	9/30/25	10:07 Eastern	G	Water			X	X	X	2	
L509281-03 MW-19B (240-234327-3)	9/30/25	12:07 Eastern	G	Water			X	X	X	2	
L509281-04 MW-19C (240-234327-4)	9/30/25	13:22 Eastern	G	Water			X	X	X	2	
L509281-05 MW-19D (240-234327-5)	9/30/25	10:00 Eastern	G	Water			X	X	X	2	
L509281-06 MWT-19A (240-234327-6)	9/30/25	10:07 Eastern	G	Water			X	X	X	2	
L509281-07 FIELD BLANK (240-234327-7)	9/30/25	08:15 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 10/2/25 1530	Company EC	Received by:	Date/Time: 0820 OCT 03 2025	Company
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-234327-2

Login Number: 234327
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 10/03/25 11:32 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 11/14/2025 7:03:10 PM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-237026-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

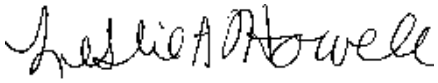
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
11/14/2025 7:03:10 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 12
QC Sample Results 26
QC Association Summary 33
Lab Chronicle 37
Certification Summary 41
Chain of Custody 42
Receipt Checklists 51

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-237026-1 — Eurofins Cleveland

Job Narrative
240-237026-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 11/6/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.8°C and 1.0°C.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-1

Method	Method Description	Protocol	Laboratory
200.7 R4.4-1994	Metals (ICP)	EPA	EET CLE
200.7 Rev 4.4	Metals (ICP)	EPA	EET SSM
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
2340 B-2021	Total Hardness (as CaCO3) by calculation	SM	EET CLE
245.1-1994 R3.0	Mercury (CVAA)	EPA	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
2540D-2020	Solids, Total Suspended (TSS)	SM	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
200.7	Preparation, Total Recoverable Metals	EPA	EET CLE
200.7	Preparation, Total Metals	EPA	EET SSM
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE
245.1-1994 R3.0	Preparation, Mercury	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-237026-1	L511159-01 MW-7D	Water	11/04/25 11:13	11/06/25 08:00	Michigan
240-237026-2	L511159-02 MW-19A	Water	11/04/25 08:07	11/06/25 08:00	Michigan
240-237026-3	L511159-03 MW-19B	Water	11/04/25 10:02	11/06/25 08:00	Michigan
240-237026-4	L511159-04 MW-19C	Water	11/04/25 11:22	11/06/25 08:00	Michigan
240-237026-5	L511159-05 MW-19D	Water	11/04/25 09:04	11/06/25 08:00	Michigan
240-237026-6	L511159-06 MWT-19A	Water	11/04/25 08:07	11/06/25 08:00	Michigan
240-237026-7	L511159-07 FIELD BLANK	Water	11/04/25 07:45	11/06/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-1

Client Sample ID: L511159-01 MW-7D — Lab Sample ID: 240-237026-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.5		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	10		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	14		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.053		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.000085	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cobalt	0.00021	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0014	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	71		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	24		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.036		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.19		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	280		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	310		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	300		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	2.1	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	2.3		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.31		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	13		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L511159-02 MW-19A — Lab Sample ID: 240-237026-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.26		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	2.2	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	45		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0050		0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.098		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Cadmium	0.00013	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0028	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.012		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	200		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	65		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.013		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	4.6		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	760		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	390		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	970		10	7.8	mg/L	1		2540 C-2020	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample ID: L511159-02 MW-19A (Continued) — Lab Sample ID: 240-237026-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	7.9		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	120		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	240		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L511159-03 MW-19B — Lab Sample ID: 240-237026-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.50		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	3.2	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	33		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0038	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.053		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0022	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.015		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	180		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	64		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.017		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	1.6		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	710		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	390		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	940		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	5.0		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	67		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.19		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	290		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L511159-04 MW-19C — Lab Sample ID: 240-237026-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1.7		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	7.9		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	43		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.036		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	59		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	20		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.028		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.52		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	230		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	320		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	320		10	7.8	mg/L	1		2540 C-2020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L511159-04 MW-19C (Continued) — Lab Sample ID: 240-237026-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	2.3	J	4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	1.9		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.33		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	1.1		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L511159-05 MW-19D — Lab Sample ID: 240-237026-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.58		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	6.0		3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	30		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Barium	0.051		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0016	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	66		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	23		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.025		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	0.54		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	260		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	320		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	340		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	1.0		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.37		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	12		1.0	0.35	mg/L	1		300.0-1993 R2.1	Total/NA

Client Sample ID: L511159-06 MWT-19A — Lab Sample ID: 240-237026-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.27		0.10	0.057	mg/L	1		200.7 R4.4-1994	Total Recoverable
K	2.2	J	3.3	0.17	mg/L	1		200.7 Rev 4.4	Total/NA
Na	47		0.60	0.33	mg/L	1		200.7 Rev 4.4	Total/NA
Arsenic	0.0048	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Total Recoverable
Barium	0.097		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Total Recoverable
Molybdenum	0.0021	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Total Recoverable
Nickel	0.011		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Total Recoverable
Calcium	200		1.0	0.25	mg/L	1		200.8-1994 R5.4	Total Recoverable
Magnesium	65		1.0	0.061	mg/L	1		200.8-1994 R5.4	Total Recoverable
Lithium	0.013		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Total Recoverable
Iron	4.8		0.10	0.013	mg/L	1		200.8	Total/NA
Hardness as calcium carbonate	760		33	33	mg/L	1		2340 B-2021	Total Recoverable
Bicarbonate Alkalinity as CaCO3	390		5.0	2.6	mg/L	1		2320 B-2021	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: L511159-06 MWT-19A (Continued)
Lab Sample ID: 240-237026-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	1000		10	7.8	mg/L	1		2540 C-2020	Total/NA
Total Suspended Solids	9.3		4.0	0.40	mg/L	1		2540D-2020	Total/NA
Chloride	120		1.0	0.13	mg/L	1		300.0-1993 R2.1	Total/NA
Fluoride	0.15		0.050	0.024	mg/L	1		300.0-1993 R2.1	Total/NA
Sulfate	240		5.0	1.7	mg/L	5		300.0-1993 R2.1	Total/NA

Client Sample ID: L511159-07 FIELD BLANK
Lab Sample ID: 240-237026-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: L511159-01 MW-7D
Date Collected: 11/04/25 11:13
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-1
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.5**		0.10	0.057	mg/L		11/07/25 14:00	11/10/25 11:42	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**10**		3.3	0.17	mg/L		11/12/25 16:43	11/13/25 21:17	1
Na	**14**		0.60	0.33	mg/L		11/12/25 16:43	11/13/25 21:17	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		11/07/25 14:00	11/10/25 17:26	1
Arsenic	ND		0.0050	0.00075	mg/L		11/07/25 14:00	11/10/25 17:26	1
Barium	**0.053**		0.0050	0.00077	mg/L		11/07/25 14:00	11/10/25 17:26	1
Beryllium	ND		0.0010	0.00027	mg/L		11/07/25 14:00	11/10/25 17:26	1
Cadmium	**0.000085**	**J**	0.0010	0.000077	mg/L		11/07/25 14:00	11/10/25 17:26	1
Cobalt	**0.00021**	**J**	0.0010	0.000086	mg/L		11/07/25 14:00	11/10/25 17:26	1
Chromium	ND		0.0050	0.0012	mg/L		11/07/25 14:00	11/10/25 17:26	1
Copper	ND		0.0020	0.0017	mg/L		11/07/25 14:00	11/10/25 17:26	1
Molybdenum	**0.0014**	**J**	0.0050	0.0011	mg/L		11/07/25 14:00	11/10/25 17:26	1
Nickel	ND		0.0020	0.0015	mg/L		11/07/25 14:00	11/10/25 17:26	1
Lead	ND		0.0010	0.00045	mg/L		11/07/25 14:00	11/10/25 17:26	1
Antimony	ND		0.0020	0.00057	mg/L		11/07/25 14:00	11/10/25 17:26	1
Selenium	ND		0.0050	0.00089	mg/L		11/07/25 14:00	11/10/25 17:26	1
Thallium	ND		0.0010	0.00051	mg/L		11/07/25 14:00	11/10/25 17:26	1
Vanadium	ND		0.0050	0.00082	mg/L		11/07/25 14:00	11/10/25 17:26	1
Calcium	**71**		1.0	0.25	mg/L		11/07/25 14:00	11/10/25 17:26	1
Magnesium	**24**		1.0	0.061	mg/L		11/07/25 14:00	11/10/25 17:26	1
Lithium	**0.036**		0.0080	0.0034	mg/L		11/07/25 14:00	11/10/25 17:26	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.19**		0.10	0.013	mg/L		11/12/25 16:43	11/13/25 20:35	1
Zinc	ND		0.0070	0.00093	mg/L		11/12/25 16:43	11/13/25 17:35	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**280**		33	33	mg/L			11/12/25 06:44	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		11/07/25 14:00	11/10/25 12:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**310**		5.0	2.6	mg/L			11/07/25 22:30	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			11/07/25 22:30	1
Total Dissolved Solids (SM 2540 C-2020)	**300**		10	7.8	mg/L			11/10/25 12:39	1
Total Suspended Solids (SM 2540D-2020)	**2.1**	**J**	4.0	0.40	mg/L			11/07/25 10:21	1
Chloride (EPA 300.0-1993 R2.1)	**2.3**		1.0	0.13	mg/L			11/10/25 17:55	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-1

Client Sample ID: L511159-01 MW-7D
Date Collected: 11/04/25 11:13
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-1
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.31		0.050	0.024	mg/L			11/10/25 17:55	1
Sulfate (EPA 300.0-1993 R2.1)	13		1.0	0.35	mg/L			11/10/25 17:55	1

Client Sample ID: L511159-02 MW-19A

Date Collected: 11/04/25 08:07
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-2

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.26**		0.10	0.057	mg/L		11/07/25 14:00	11/10/25 12:13	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**2.2**	**J**	3.3	0.17	mg/L		11/12/25 16:43	11/13/25 21:20	1
Na	**45**		0.60	0.33	mg/L		11/12/25 16:43	11/13/25 21:20	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		11/07/25 14:00	11/10/25 17:44	1
Arsenic	**0.0050**		0.0050	0.00075	mg/L		11/07/25 14:00	11/10/25 17:44	1
Barium	**0.098**		0.0050	0.00077	mg/L		11/07/25 14:00	11/10/25 17:44	1
Beryllium	ND		0.0010	0.00027	mg/L		11/07/25 14:00	11/10/25 17:44	1
Cadmium	**0.00013**	**J**	0.0010	0.000077	mg/L		11/07/25 14:00	11/10/25 17:44	1
Cobalt	ND		0.0010	0.000086	mg/L		11/07/25 14:00	11/10/25 17:44	1
Chromium	ND		0.0050	0.0012	mg/L		11/07/25 14:00	11/10/25 17:44	1
Copper	ND		0.0020	0.0017	mg/L		11/07/25 14:00	11/10/25 17:44	1
Molybdenum	**0.0028**	**J**	0.0050	0.0011	mg/L		11/07/25 14:00	11/10/25 17:44	1
Nickel	**0.012**		0.0020	0.0015	mg/L		11/07/25 14:00	11/10/25 17:44	1
Lead	ND		0.0010	0.00045	mg/L		11/07/25 14:00	11/10/25 17:44	1
Antimony	ND		0.0020	0.00057	mg/L		11/07/25 14:00	11/10/25 17:44	1
Selenium	ND		0.0050	0.00089	mg/L		11/07/25 14:00	11/10/25 17:44	1
Thallium	ND		0.0010	0.00051	mg/L		11/07/25 14:00	11/10/25 17:44	1
Vanadium	ND		0.0050	0.00082	mg/L		11/07/25 14:00	11/10/25 17:44	1
Calcium	**200**		1.0	0.25	mg/L		11/07/25 14:00	11/10/25 17:44	1
Magnesium	**65**		1.0	0.061	mg/L		11/07/25 14:00	11/10/25 17:44	1
Lithium	**0.013**		0.0080	0.0034	mg/L		11/07/25 14:00	11/10/25 17:44	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**4.6**		0.10	0.013	mg/L		11/12/25 16:43	11/13/25 20:38	1
Zinc	ND		0.0070	0.00093	mg/L		11/12/25 16:43	11/13/25 17:38	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**760**		33	33	mg/L			11/12/25 06:44	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		11/07/25 14:00	11/10/25 12:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**390**		5.0	2.6	mg/L			11/07/25 23:13	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			11/07/25 23:13	1
Total Dissolved Solids (SM 2540 C-2020)	**970**		10	7.8	mg/L			11/10/25 12:39	1
Total Suspended Solids (SM 2540D-2020)	**7.9**		4.0	0.40	mg/L			11/07/25 10:21	1
Chloride (EPA 300.0-1993 R2.1)	**120**		1.0	0.13	mg/L			11/10/25 18:04	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-1

Client Sample ID: L511159-02 MW-19A
Date Collected: 11/04/25 08:07
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.15		0.050	0.024	mg/L			11/10/25 18:04	1
Sulfate (EPA 300.0-1993 R2.1)	240		5.0	1.7	mg/L			11/10/25 18:13	5

Client Sample ID: L511159-03 MW-19B
Date Collected: 11/04/25 10:02
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-3
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.50**		0.10	0.057	mg/L		11/07/25 14:00	11/10/25 12:17	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**3.2**	**J**	3.3	0.17	mg/L		11/12/25 16:43	11/13/25 21:24	1
Na	**33**		0.60	0.33	mg/L		11/12/25 16:43	11/13/25 21:24	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		11/07/25 14:00	11/10/25 17:47	1
Arsenic	**0.0038**	**J**	0.0050	0.00075	mg/L		11/07/25 14:00	11/10/25 17:47	1
Barium	**0.053**		0.0050	0.00077	mg/L		11/07/25 14:00	11/10/25 17:47	1
Beryllium	ND		0.0010	0.00027	mg/L		11/07/25 14:00	11/10/25 17:47	1
Cadmium	ND		0.0010	0.000077	mg/L		11/07/25 14:00	11/10/25 17:47	1
Cobalt	ND		0.0010	0.000086	mg/L		11/07/25 14:00	11/10/25 17:47	1
Chromium	ND		0.0050	0.0012	mg/L		11/07/25 14:00	11/10/25 17:47	1
Copper	ND		0.0020	0.0017	mg/L		11/07/25 14:00	11/10/25 17:47	1
Molybdenum	**0.0022**	**J**	0.0050	0.0011	mg/L		11/07/25 14:00	11/10/25 17:47	1
Nickel	**0.015**		0.0020	0.0015	mg/L		11/07/25 14:00	11/10/25 17:47	1
Lead	ND		0.0010	0.00045	mg/L		11/07/25 14:00	11/10/25 17:47	1
Antimony	ND		0.0020	0.00057	mg/L		11/07/25 14:00	11/10/25 17:47	1
Selenium	ND		0.0050	0.00089	mg/L		11/07/25 14:00	11/10/25 17:47	1
Thallium	ND		0.0010	0.00051	mg/L		11/07/25 14:00	11/10/25 17:47	1
Vanadium	ND		0.0050	0.00082	mg/L		11/07/25 14:00	11/10/25 17:47	1
Calcium	**180**		1.0	0.25	mg/L		11/07/25 14:00	11/10/25 17:47	1
Magnesium	**64**		1.0	0.061	mg/L		11/07/25 14:00	11/10/25 17:47	1
Lithium	**0.017**		0.0080	0.0034	mg/L		11/07/25 14:00	11/10/25 17:47	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.6**		0.10	0.013	mg/L		11/12/25 16:43	11/13/25 20:41	1
Zinc	ND		0.0070	0.00093	mg/L		11/12/25 16:43	11/13/25 17:41	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**710**		33	33	mg/L			11/12/25 06:44	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		11/07/25 14:00	11/10/25 12:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**390**		5.0	2.6	mg/L			11/07/25 23:23	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			11/07/25 23:23	1
Total Dissolved Solids (SM 2540 C-2020)	**940**		10	7.8	mg/L			11/10/25 12:39	1
Total Suspended Solids (SM 2540D-2020)	**5.0**		4.0	0.40	mg/L			11/07/25 10:21	1
Chloride (EPA 300.0-1993 R2.1)	**67**		1.0	0.13	mg/L			11/10/25 18:23	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-1

Client Sample ID: L511159-03 MW-19B
Date Collected: 11/04/25 10:02
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.19		0.050	0.024	mg/L			11/10/25 18:23	1
Sulfate (EPA 300.0-1993 R2.1)	290		5.0	1.7	mg/L			11/10/25 18:32	5

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-1

Client Sample ID: L511159-04 MW-19C

Date Collected: 11/04/25 11:22
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-4

Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1.7**		0.10	0.057	mg/L		11/07/25 14:00	11/10/25 12:21	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**7.9**		3.3	0.17	mg/L		11/12/25 16:43	11/13/25 21:27	1
Na	**43**		0.60	0.33	mg/L		11/12/25 16:43	11/13/25 21:27	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		11/07/25 14:00	11/10/25 17:49	1
Arsenic	ND		0.0050	0.00075	mg/L		11/07/25 14:00	11/10/25 17:49	1
Barium	**0.036**		0.0050	0.00077	mg/L		11/07/25 14:00	11/10/25 17:49	1
Beryllium	ND		0.0010	0.00027	mg/L		11/07/25 14:00	11/10/25 17:49	1
Cadmium	ND		0.0010	0.000077	mg/L		11/07/25 14:00	11/10/25 17:49	1
Cobalt	ND		0.0010	0.000086	mg/L		11/07/25 14:00	11/10/25 17:49	1
Chromium	ND		0.0050	0.0012	mg/L		11/07/25 14:00	11/10/25 17:49	1
Copper	ND		0.0020	0.0017	mg/L		11/07/25 14:00	11/10/25 17:49	1
Molybdenum	ND		0.0050	0.0011	mg/L		11/07/25 14:00	11/10/25 17:49	1
Nickel	ND		0.0020	0.0015	mg/L		11/07/25 14:00	11/10/25 17:49	1
Lead	ND		0.0010	0.00045	mg/L		11/07/25 14:00	11/10/25 17:49	1
Antimony	ND		0.0020	0.00057	mg/L		11/07/25 14:00	11/10/25 17:49	1
Selenium	ND		0.0050	0.00089	mg/L		11/07/25 14:00	11/10/25 17:49	1
Thallium	ND		0.0010	0.00051	mg/L		11/07/25 14:00	11/10/25 17:49	1
Vanadium	ND		0.0050	0.00082	mg/L		11/07/25 14:00	11/10/25 17:49	1
Calcium	**59**		1.0	0.25	mg/L		11/07/25 14:00	11/10/25 17:49	1
Magnesium	**20**		1.0	0.061	mg/L		11/07/25 14:00	11/10/25 17:49	1
Lithium	**0.028**		0.0080	0.0034	mg/L		11/07/25 14:00	11/10/25 17:49	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.52**		0.10	0.013	mg/L		11/12/25 16:43	11/13/25 20:44	1
Zinc	ND		0.0070	0.00093	mg/L		11/12/25 16:43	11/13/25 17:44	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**230**		33	33	mg/L			11/12/25 06:44	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		11/07/25 14:00	11/10/25 12:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**320**		5.0	2.6	mg/L			11/07/25 23:34	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			11/07/25 23:34	1
Total Dissolved Solids (SM 2540 C-2020)	**320**		10	7.8	mg/L			11/10/25 12:39	1
Total Suspended Solids (SM 2540D-2020)	**2.3**	**J**	4.0	0.40	mg/L			11/07/25 10:21	1
Chloride (EPA 300.0-1993 R2.1)	**1.9**		1.0	0.13	mg/L			11/10/25 18:41	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-1

Client Sample ID: L511159-04 MW-19C
Date Collected: 11/04/25 11:22
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.33		0.050	0.024	mg/L			11/10/25 18:41	1
Sulfate (EPA 300.0-1993 R2.1)	1.1		1.0	0.35	mg/L			11/10/25 18:41	1

Client Sample ID: L511159-05 MW-19D

Lab Sample ID: 240-237026-5

Date Collected: 11/04/25 09:04

Matrix: Water

Date Received: 11/06/25 08:00

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.58**		0.10	0.057	mg/L		11/07/25 14:00	11/10/25 12:26	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**6.0**		3.3	0.17	mg/L		11/12/25 16:43	11/13/25 21:30	1
Na	**30**		0.60	0.33	mg/L		11/12/25 16:43	11/13/25 21:30	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		11/07/25 14:00	11/10/25 17:52	1
Arsenic	ND		0.0050	0.00075	mg/L		11/07/25 14:00	11/10/25 17:52	1
Barium	**0.051**		0.0050	0.00077	mg/L		11/07/25 14:00	11/10/25 17:52	1
Beryllium	ND		0.0010	0.00027	mg/L		11/07/25 14:00	11/10/25 17:52	1
Cadmium	ND		0.0010	0.000077	mg/L		11/07/25 14:00	11/10/25 17:52	1
Cobalt	ND		0.0010	0.000086	mg/L		11/07/25 14:00	11/10/25 17:52	1
Chromium	ND		0.0050	0.0012	mg/L		11/07/25 14:00	11/10/25 17:52	1
Copper	ND		0.0020	0.0017	mg/L		11/07/25 14:00	11/10/25 17:52	1
Molybdenum	**0.0016**	**J**	0.0050	0.0011	mg/L		11/07/25 14:00	11/10/25 17:52	1
Nickel	ND		0.0020	0.0015	mg/L		11/07/25 14:00	11/10/25 17:52	1
Lead	ND		0.0010	0.00045	mg/L		11/07/25 14:00	11/10/25 17:52	1
Antimony	ND		0.0020	0.00057	mg/L		11/07/25 14:00	11/10/25 17:52	1
Selenium	ND		0.0050	0.00089	mg/L		11/07/25 14:00	11/10/25 17:52	1
Thallium	ND		0.0010	0.00051	mg/L		11/07/25 14:00	11/10/25 17:52	1
Vanadium	ND		0.0050	0.00082	mg/L		11/07/25 14:00	11/10/25 17:52	1
Calcium	**66**		1.0	0.25	mg/L		11/07/25 14:00	11/10/25 17:52	1
Magnesium	**23**		1.0	0.061	mg/L		11/07/25 14:00	11/10/25 17:52	1
Lithium	**0.025**		0.0080	0.0034	mg/L		11/07/25 14:00	11/10/25 17:52	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.54**		0.10	0.013	mg/L		11/12/25 16:43	11/13/25 20:53	1
Zinc	ND		0.0070	0.00093	mg/L		11/12/25 16:43	11/13/25 17:47	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**260**		33	33	mg/L			11/12/25 06:44	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		11/07/25 14:00	11/10/25 12:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**320**		5.0	2.6	mg/L			11/07/25 23:42	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			11/07/25 23:42	1
Total Dissolved Solids (SM 2540 C-2020)	**340**		10	7.8	mg/L			11/11/25 10:06	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			11/10/25 10:15	1
Chloride (EPA 300.0-1993 R2.1)	**1.0**		1.0	0.13	mg/L			11/10/25 19:08	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-1

Client Sample ID: L511159-05 MW-19D
Date Collected: 11/04/25 09:04
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-5
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.37		0.050	0.024	mg/L			11/10/25 19:08	1
Sulfate (EPA 300.0-1993 R2.1)	12		1.0	0.35	mg/L			11/10/25 19:08	1

Client Sample ID: L511159-06 MWT-19A
Date Collected: 11/04/25 08:07
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-6
Matrix: Water

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.27**		0.10	0.057	mg/L		11/07/25 14:00	11/10/25 12:30	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	**2.2**	**J**	3.3	0.17	mg/L		11/12/25 16:43	11/13/25 21:34	1
Na	**47**		0.60	0.33	mg/L		11/12/25 16:43	11/13/25 21:34	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		11/07/25 14:00	11/10/25 17:55	1
Arsenic	**0.0048**	**J**	0.0050	0.00075	mg/L		11/07/25 14:00	11/10/25 17:55	1
Barium	**0.097**		0.0050	0.00077	mg/L		11/07/25 14:00	11/10/25 17:55	1
Beryllium	ND		0.0010	0.00027	mg/L		11/07/25 14:00	11/10/25 17:55	1
Cadmium	ND		0.0010	0.000077	mg/L		11/07/25 14:00	11/10/25 17:55	1
Cobalt	ND		0.0010	0.000086	mg/L		11/07/25 14:00	11/10/25 17:55	1
Chromium	ND		0.0050	0.0012	mg/L		11/07/25 14:00	11/10/25 17:55	1
Copper	ND		0.0020	0.0017	mg/L		11/07/25 14:00	11/10/25 17:55	1
Molybdenum	**0.0021**	**J**	0.0050	0.0011	mg/L		11/07/25 14:00	11/10/25 17:55	1
Nickel	**0.011**		0.0020	0.0015	mg/L		11/07/25 14:00	11/10/25 17:55	1
Lead	ND		0.0010	0.00045	mg/L		11/07/25 14:00	11/10/25 17:55	1
Antimony	ND		0.0020	0.00057	mg/L		11/07/25 14:00	11/10/25 17:55	1
Selenium	ND		0.0050	0.00089	mg/L		11/07/25 14:00	11/10/25 17:55	1
Thallium	ND		0.0010	0.00051	mg/L		11/07/25 14:00	11/10/25 17:55	1
Vanadium	ND		0.0050	0.00082	mg/L		11/07/25 14:00	11/10/25 17:55	1
Calcium	**200**		1.0	0.25	mg/L		11/07/25 14:00	11/10/25 17:55	1
Magnesium	**65**		1.0	0.061	mg/L		11/07/25 14:00	11/10/25 17:55	1
Lithium	**0.013**		0.0080	0.0034	mg/L		11/07/25 14:00	11/10/25 17:55	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**4.8**		0.10	0.013	mg/L		11/12/25 16:43	11/13/25 20:56	1
Zinc	ND		0.0070	0.00093	mg/L		11/12/25 16:43	11/13/25 17:55	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**760**		33	33	mg/L			11/12/25 06:44	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		11/07/25 14:00	11/10/25 12:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**390**		5.0	2.6	mg/L			11/07/25 23:51	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			11/07/25 23:51	1
Total Dissolved Solids (SM 2540 C-2020)	**1000**		10	7.8	mg/L			11/11/25 10:06	1
Total Suspended Solids (SM 2540D-2020)	**9.3**		4.0	0.40	mg/L			11/10/25 10:15	1
Chloride (EPA 300.0-1993 R2.1)	**120**		1.0	0.13	mg/L			11/10/25 18:50	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-1

Client Sample ID: L511159-06 MWT-19A
Date Collected: 11/04/25 08:07
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-6
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	0.15		0.050	0.024	mg/L			11/10/25 18:50	1
Sulfate (EPA 300.0-1993 R2.1)	240		5.0	1.7	mg/L			11/10/25 18:59	5

Client Sample ID: L511159-07 FIELD BLANK

Lab Sample ID: 240-237026-7

Date Collected: 11/04/25 07:45

Matrix: Water

Date Received: 11/06/25 08:00

Method: EPA 200.7 R4.4-1994 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		11/07/25 14:00	11/10/25 12:34	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		11/12/25 16:43	11/13/25 20:51	1
Na	ND		0.60	0.33	mg/L		11/12/25 16:43	11/13/25 20:51	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		11/07/25 14:00	11/10/25 17:57	1
Arsenic	ND		0.0050	0.00075	mg/L		11/07/25 14:00	11/10/25 17:57	1
Barium	ND		0.0050	0.00077	mg/L		11/07/25 14:00	11/10/25 17:57	1
Beryllium	ND		0.0010	0.00027	mg/L		11/07/25 14:00	11/10/25 17:57	1
Cadmium	ND		0.0010	0.000077	mg/L		11/07/25 14:00	11/10/25 17:57	1
Cobalt	ND		0.0010	0.000086	mg/L		11/07/25 14:00	11/10/25 17:57	1
Chromium	ND		0.0050	0.0012	mg/L		11/07/25 14:00	11/10/25 17:57	1
Copper	ND		0.0020	0.0017	mg/L		11/07/25 14:00	11/10/25 17:57	1
Molybdenum	ND		0.0050	0.0011	mg/L		11/07/25 14:00	11/10/25 17:57	1
Nickel	ND		0.0020	0.0015	mg/L		11/07/25 14:00	11/10/25 17:57	1
Lead	ND		0.0010	0.00045	mg/L		11/07/25 14:00	11/10/25 17:57	1
Antimony	ND		0.0020	0.00057	mg/L		11/07/25 14:00	11/10/25 17:57	1
Selenium	ND		0.0050	0.00089	mg/L		11/07/25 14:00	11/10/25 17:57	1
Thallium	ND		0.0010	0.00051	mg/L		11/07/25 14:00	11/10/25 17:57	1
Vanadium	ND		0.0050	0.00082	mg/L		11/07/25 14:00	11/10/25 17:57	1
Calcium	ND		1.0	0.25	mg/L		11/07/25 14:00	11/10/25 17:57	1
Magnesium	ND		1.0	0.061	mg/L		11/07/25 14:00	11/10/25 17:57	1
Lithium	ND		0.0080	0.0034	mg/L		11/07/25 14:00	11/10/25 17:57	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		11/12/25 16:43	11/13/25 16:52	1
Zinc	ND		0.0070	0.00093	mg/L		11/12/25 16:43	11/13/25 16:52	1

Method: SM 2340 B-2021 - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		33	33	mg/L			11/12/25 06:44	1

Method: EPA 245.1-1994 R3.0 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		11/07/25 14:00	11/10/25 12:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			11/08/25 00:01	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			11/08/25 00:01	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			11/11/25 10:06	1
Total Suspended Solids (SM 2540D-2020)	ND		4.0	0.40	mg/L			11/10/25 10:15	1
Chloride (EPA 300.0-1993 R2.1)	ND		1.0	0.13	mg/L			11/10/25 19:54	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-1

Client Sample ID: L511159-07 FIELD BLANK
Date Collected: 11/04/25 07:45
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-7
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (EPA 300.0-1993 R2.1)	ND		0.050	0.024	mg/L			11/10/25 19:54	1
Sulfate (EPA 300.0-1993 R2.1)	ND		1.0	0.35	mg/L			11/10/25 19:54	1

Method: 200.7 R4.4-1994 - Metals (ICP)

Lab Sample ID: MB 240-679691/1-A
Matrix: Water
Analysis Batch: 679953

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 679691

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.10	0.057	mg/L		11/07/25 14:00	11/10/25 11:33	1

Lab Sample ID: LCS 240-679691/2-A
Matrix: Water
Analysis Batch: 679953

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 679691

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.00	1.09		mg/L		109	85 - 115

Lab Sample ID: 240-237026-1 MS
Matrix: Water
Analysis Batch: 679953

Client Sample ID: L511159-01 MW-7D
Prep Type: Total Recoverable
Prep Batch: 679691

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1.5		1.00	2.55		mg/L		108	70 - 130

Lab Sample ID: 240-237026-1 MSD
Matrix: Water
Analysis Batch: 679953

Client Sample ID: L511159-01 MW-7D
Prep Type: Total Recoverable
Prep Batch: 679691

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	1.5		1.00	2.55		mg/L		108	70 - 130	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 350-11019/25-A
Matrix: Water
Analysis Batch: 11071

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11019

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
K	ND		3.3	0.17	mg/L		11/12/25 16:43	11/13/25 20:45	1
Na	ND		0.60	0.33	mg/L		11/12/25 16:43	11/13/25 20:45	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-11019/25-A
Matrix: Water
Analysis Batch: 11057

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11019

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.013	mg/L		11/12/25 16:43	11/13/25 16:24	1
Zinc	ND		0.0070	0.00093	mg/L		11/12/25 16:43	11/13/25 16:24	1

Lab Sample ID: LCS 350-11019/26-A
Matrix: Water
Analysis Batch: 11060

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11019

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	18.9		mg/L		95	85 - 115
Zinc	1.00	0.950		mg/L		95	85 - 115

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 350-11019/26-A
Matrix: Water
Analysis Batch: 11065

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11019

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	20.0	18.2		mg/L		91	85 - 115
Zinc	1.00	0.895		mg/L		90	85 - 115

Lab Sample ID: 240-237026-7 MS
Matrix: Water
Analysis Batch: 11057

Client Sample ID: L511159-07 FIELD BLANK
Prep Type: Total/NA
Prep Batch: 11019

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	ND		20.0	17.1		mg/L		85	70 - 130
Zinc	ND		1.00	0.842		mg/L		84	70 - 130

Lab Sample ID: 240-237026-7 MSD
Matrix: Water
Analysis Batch: 11057

Client Sample ID: L511159-07 FIELD BLANK
Prep Type: Total/NA
Prep Batch: 11019

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	ND		20.0	19.2		mg/L		96	70 - 130	12	20
Zinc	ND		1.00	0.965		mg/L		96	70 - 130	14	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-679691/1-A
Matrix: Water
Analysis Batch: 680060

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 679691

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0010	0.000053	mg/L		11/07/25 14:00	11/10/25 17:21	1
Arsenic	ND		0.0050	0.00075	mg/L		11/07/25 14:00	11/10/25 17:21	1
Barium	ND		0.0050	0.00077	mg/L		11/07/25 14:00	11/10/25 17:21	1
Beryllium	ND		0.0010	0.00027	mg/L		11/07/25 14:00	11/10/25 17:21	1
Cadmium	ND		0.0010	0.000077	mg/L		11/07/25 14:00	11/10/25 17:21	1
Cobalt	ND		0.0010	0.000086	mg/L		11/07/25 14:00	11/10/25 17:21	1
Chromium	ND		0.0050	0.0012	mg/L		11/07/25 14:00	11/10/25 17:21	1
Copper	ND		0.0020	0.0017	mg/L		11/07/25 14:00	11/10/25 17:21	1
Molybdenum	ND		0.0050	0.0011	mg/L		11/07/25 14:00	11/10/25 17:21	1
Nickel	ND		0.0020	0.0015	mg/L		11/07/25 14:00	11/10/25 17:21	1
Lead	ND		0.0010	0.00045	mg/L		11/07/25 14:00	11/10/25 17:21	1
Antimony	ND		0.0020	0.00057	mg/L		11/07/25 14:00	11/10/25 17:21	1
Selenium	ND		0.0050	0.00089	mg/L		11/07/25 14:00	11/10/25 17:21	1
Thallium	ND		0.0010	0.00051	mg/L		11/07/25 14:00	11/10/25 17:21	1
Vanadium	ND		0.0050	0.00082	mg/L		11/07/25 14:00	11/10/25 17:21	1
Calcium	ND		1.0	0.25	mg/L		11/07/25 14:00	11/10/25 17:21	1
Magnesium	ND		1.0	0.061	mg/L		11/07/25 14:00	11/10/25 17:21	1
Lithium	ND		0.0080	0.0034	mg/L		11/07/25 14:00	11/10/25 17:21	1

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-679691/3-A
Matrix: Water
Analysis Batch: 680060

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 679691

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.0974		mg/L		97	85 - 115
Arsenic	1.00	1.02		mg/L		102	85 - 115
Barium	1.00	0.997		mg/L		100	85 - 115
Beryllium	0.500	0.503		mg/L		101	85 - 115
Cadmium	0.500	0.485		mg/L		97	85 - 115
Cobalt	0.500	0.517		mg/L		103	85 - 115
Chromium	0.500	0.491		mg/L		98	85 - 115
Copper	0.500	0.516		mg/L		103	85 - 115
Molybdenum	0.500	0.498		mg/L		100	85 - 115
Nickel	0.500	0.501		mg/L		100	85 - 115
Lead	0.500	0.520		mg/L		104	85 - 115
Antimony	0.100	0.103		mg/L		103	85 - 115
Selenium	1.00	1.01		mg/L		101	85 - 115
Thallium	1.00	1.02		mg/L		102	85 - 115
Vanadium	0.500	0.495		mg/L		99	85 - 115
Calcium	25.0	25.7		mg/L		103	85 - 115
Magnesium	25.0	25.7		mg/L		103	85 - 115
Lithium	0.500	0.535		mg/L		107	85 - 115

Lab Sample ID: 240-237026-1 MS
Matrix: Water
Analysis Batch: 680060

Client Sample ID: L511159-01 MW-7D
Prep Type: Total Recoverable
Prep Batch: 679691

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	ND		0.100	0.0980		mg/L		98	70 - 130
Arsenic	ND		1.00	1.04		mg/L		104	70 - 130
Barium	0.053		1.00	1.07		mg/L		102	70 - 130
Beryllium	ND		0.500	0.522		mg/L		104	70 - 130
Cadmium	0.000085	J	0.500	0.490		mg/L		98	70 - 130
Cobalt	0.00021	J	0.500	0.525		mg/L		105	70 - 130
Chromium	ND		0.500	0.495		mg/L		99	70 - 130
Copper	ND		0.500	0.518		mg/L		104	70 - 130
Molybdenum	0.0014	J	0.500	0.512		mg/L		102	70 - 130
Nickel	ND		0.500	0.507		mg/L		101	70 - 130
Lead	ND		0.500	0.523		mg/L		105	70 - 130
Antimony	ND		0.100	0.107		mg/L		107	70 - 130
Selenium	ND		1.00	1.02		mg/L		102	70 - 130
Thallium	ND		1.00	1.04		mg/L		104	70 - 130
Vanadium	ND		0.500	0.501		mg/L		100	70 - 130
Calcium	71		25.0	98.0		mg/L		107	70 - 130
Magnesium	24		25.0	50.0		mg/L		102	70 - 130
Lithium	0.036		0.500	0.596		mg/L		112	70 - 130

Lab Sample ID: 240-237026-1 MSD
Matrix: Water
Analysis Batch: 680060

Client Sample ID: L511159-01 MW-7D
Prep Type: Total Recoverable
Prep Batch: 679691

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	ND		0.100	0.0969		mg/L		97	70 - 130	1	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-237026-1 MSD
Matrix: Water
Analysis Batch: 680060

Client Sample ID: L511159-01 MW-7D
Prep Type: Total Recoverable
Prep Batch: 679691

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		1.00	1.04		mg/L		104	70 - 130	0	20
Barium	0.053		1.00	1.05		mg/L		100	70 - 130	2	20
Beryllium	ND		0.500	0.513		mg/L		103	70 - 130	2	20
Cadmium	0.000085	J	0.500	0.480		mg/L		96	70 - 130	2	20
Cobalt	0.00021	J	0.500	0.527		mg/L		105	70 - 130	0	20
Chromium	ND		0.500	0.487		mg/L		97	70 - 130	1	20
Copper	ND		0.500	0.518		mg/L		104	70 - 130	0	20
Molybdenum	0.0014	J	0.500	0.510		mg/L		102	70 - 130	0	20
Nickel	ND		0.500	0.506		mg/L		101	70 - 130	0	20
Lead	ND		0.500	0.522		mg/L		104	70 - 130	0	20
Antimony	ND		0.100	0.101		mg/L		101	70 - 130	5	20
Selenium	ND		1.00	1.01		mg/L		101	70 - 130	1	20
Thallium	ND		1.00	1.03		mg/L		103	70 - 130	1	20
Vanadium	ND		0.500	0.491		mg/L		98	70 - 130	2	20
Calcium	71		25.0	96.2		mg/L		100	70 - 130	2	20
Magnesium	24		25.0	48.4		mg/L		96	70 - 130	3	20
Lithium	0.036		0.500	0.591		mg/L		111	70 - 130	1	20

Method: 245.1-1994 R3.0 - Mercury (CVAA)

Lab Sample ID: MB 240-679696/1-A
Matrix: Water
Analysis Batch: 679968

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 679696

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		11/07/25 14:00	11/10/25 12:14	1

Lab Sample ID: LCS 240-679696/2-A
Matrix: Water
Analysis Batch: 679968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 679696

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00483		mg/L		97	85 - 115		

Lab Sample ID: 240-237026-1 MS
Matrix: Water
Analysis Batch: 679968

Client Sample ID: L511159-01 MW-7D
Prep Type: Total/NA
Prep Batch: 679696

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00100	0.000947		mg/L		95	70 - 130		

Lab Sample ID: 240-237026-1 MSD
Matrix: Water
Analysis Batch: 679968

Client Sample ID: L511159-01 MW-7D
Prep Type: Total/NA
Prep Batch: 679696

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00100	0.000925		mg/L		93	70 - 130	2	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-679847/33
Matrix: Water
Analysis Batch: 679847

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			11/07/25 15:56	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			11/07/25 15:56	1

Lab Sample ID: MB 240-679847/60
Matrix: Water
Analysis Batch: 679847

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			11/07/25 20:47	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			11/07/25 20:47	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-679958/1
Matrix: Water
Analysis Batch: 679958

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			11/10/25 12:39	1

Lab Sample ID: LCS 240-679958/2
Matrix: Water
Analysis Batch: 679958

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	285	267		mg/L		94	80 - 120

Lab Sample ID: MB 240-680092/1
Matrix: Water
Analysis Batch: 680092

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	7.8	mg/L			11/11/25 10:06	1

Lab Sample ID: LCS 240-680092/2
Matrix: Water
Analysis Batch: 680092

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	285	240		mg/L		84	80 - 120

Method: 2540D-2020 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 240-679676/1
Matrix: Water
Analysis Batch: 679676

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			11/07/25 10:21	1

Method: 2540D-2020 - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 240-679676/2
Matrix: Water
Analysis Batch: 679676

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	81.9	84.0		mg/L		103	64 - 120

Lab Sample ID: MB 240-679895/1
Matrix: Water
Analysis Batch: 679895

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	0.40	mg/L			11/10/25 10:15	1

Lab Sample ID: LCS 240-679895/2
Matrix: Water
Analysis Batch: 679895

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	81.9	74.0		mg/L		90	64 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-679966/3
Matrix: Water
Analysis Batch: 679966

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			11/10/25 16:05	1
Fluoride	ND		0.050	0.024	mg/L			11/10/25 16:05	1
Sulfate	ND		1.0	0.35	mg/L			11/10/25 16:05	1

Lab Sample ID: LCS 240-679966/4
Matrix: Water
Analysis Batch: 679966

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	46.2		mg/L		92	90 - 110
Fluoride	2.50	2.31		mg/L		93	90 - 110
Sulfate	50.0	46.4		mg/L		93	90 - 110

Lab Sample ID: 240-237026-5 MS
Matrix: Water
Analysis Batch: 679966

Client Sample ID: L511159-05 MW-19D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1.0		50.0	51.2		mg/L		100	80 - 120
Fluoride	0.37		2.50	2.77		mg/L		96	80 - 120
Sulfate	12		50.0	60.4		mg/L		97	80 - 120

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-237026-5 MSD
Matrix: Water
Analysis Batch: 679966

Client Sample ID: L511159-05 MW-19D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1.0		50.0	51.2		mg/L		100	80 - 120	0	15
Fluoride	0.37		2.50	2.77		mg/L		96	80 - 120	0	15
Sulfate	12		50.0	60.4		mg/L		97	80 - 120	0	15

Metals

Prep Batch: 11019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-1	L511159-01 MW-7D	Total/NA	Water	200.7	
240-237026-2	L511159-02 MW-19A	Total/NA	Water	200.7	
240-237026-3	L511159-03 MW-19B	Total/NA	Water	200.7	
240-237026-4	L511159-04 MW-19C	Total/NA	Water	200.7	
240-237026-5	L511159-05 MW-19D	Total/NA	Water	200.7	
240-237026-6	L511159-06 MWT-19A	Total/NA	Water	200.7	
240-237026-7	L511159-07 FIELD BLANK	Total/NA	Water	200.7	
MB 350-11019/25-A	Method Blank	Total/NA	Water	200.7	
LCS 350-11019/26-A	Lab Control Sample	Total/NA	Water	200.7	
240-237026-7 MS	L511159-07 FIELD BLANK	Total/NA	Water	200.7	
240-237026-7 MSD	L511159-07 FIELD BLANK	Total/NA	Water	200.7	

Analysis Batch: 11057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-1	L511159-01 MW-7D	Total/NA	Water	200.8	11019
240-237026-2	L511159-02 MW-19A	Total/NA	Water	200.8	11019
240-237026-3	L511159-03 MW-19B	Total/NA	Water	200.8	11019
240-237026-4	L511159-04 MW-19C	Total/NA	Water	200.8	11019
240-237026-5	L511159-05 MW-19D	Total/NA	Water	200.8	11019
240-237026-6	L511159-06 MWT-19A	Total/NA	Water	200.8	11019
240-237026-7	L511159-07 FIELD BLANK	Total/NA	Water	200.8	11019
MB 350-11019/25-A	Method Blank	Total/NA	Water	200.8	11019
240-237026-7 MS	L511159-07 FIELD BLANK	Total/NA	Water	200.8	11019
240-237026-7 MSD	L511159-07 FIELD BLANK	Total/NA	Water	200.8	11019

Analysis Batch: 11060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 350-11019/26-A	Lab Control Sample	Total/NA	Water	200.8	11019

Analysis Batch: 11065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-1	L511159-01 MW-7D	Total/NA	Water	200.8	11019
240-237026-2	L511159-02 MW-19A	Total/NA	Water	200.8	11019
240-237026-3	L511159-03 MW-19B	Total/NA	Water	200.8	11019
240-237026-4	L511159-04 MW-19C	Total/NA	Water	200.8	11019
240-237026-5	L511159-05 MW-19D	Total/NA	Water	200.8	11019
240-237026-6	L511159-06 MWT-19A	Total/NA	Water	200.8	11019
LCS 350-11019/26-A	Lab Control Sample	Total/NA	Water	200.8	11019

Analysis Batch: 11071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-1	L511159-01 MW-7D	Total/NA	Water	200.7 Rev 4.4	11019
240-237026-2	L511159-02 MW-19A	Total/NA	Water	200.7 Rev 4.4	11019
240-237026-3	L511159-03 MW-19B	Total/NA	Water	200.7 Rev 4.4	11019
240-237026-4	L511159-04 MW-19C	Total/NA	Water	200.7 Rev 4.4	11019
240-237026-5	L511159-05 MW-19D	Total/NA	Water	200.7 Rev 4.4	11019
240-237026-6	L511159-06 MWT-19A	Total/NA	Water	200.7 Rev 4.4	11019
240-237026-7	L511159-07 FIELD BLANK	Total/NA	Water	200.7 Rev 4.4	11019
MB 350-11019/25-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	11019
LCS 350-11019/26-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	11019
240-237026-7 MS	L511159-07 FIELD BLANK	Total/NA	Water	200.7 Rev 4.4	11019

Metals (Continued)

Analysis Batch: 11071 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-7 MSD	L511159-07 FIELD BLANK	Total/NA	Water	200.7 Rev 4.4	11019

Prep Batch: 679691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-1	L511159-01 MW-7D	Total Recoverable	Water	200.7	
240-237026-2	L511159-02 MW-19A	Total Recoverable	Water	200.7	
240-237026-3	L511159-03 MW-19B	Total Recoverable	Water	200.7	
240-237026-4	L511159-04 MW-19C	Total Recoverable	Water	200.7	
240-237026-5	L511159-05 MW-19D	Total Recoverable	Water	200.7	
240-237026-6	L511159-06 MWT-19A	Total Recoverable	Water	200.7	
240-237026-7	L511159-07 FIELD BLANK	Total Recoverable	Water	200.7	
MB 240-679691/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 240-679691/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
LCS 240-679691/3-A	Lab Control Sample	Total Recoverable	Water	200.7	
240-237026-1 MS	L511159-01 MW-7D	Total Recoverable	Water	200.7	
240-237026-1 MS	L511159-01 MW-7D	Total Recoverable	Water	200.7	
240-237026-1 MSD	L511159-01 MW-7D	Total Recoverable	Water	200.7	
240-237026-1 MSD	L511159-01 MW-7D	Total Recoverable	Water	200.7	

Prep Batch: 679696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-1	L511159-01 MW-7D	Total/NA	Water	245.1-1994 R3.0	
240-237026-2	L511159-02 MW-19A	Total/NA	Water	245.1-1994 R3.0	
240-237026-3	L511159-03 MW-19B	Total/NA	Water	245.1-1994 R3.0	
240-237026-4	L511159-04 MW-19C	Total/NA	Water	245.1-1994 R3.0	
240-237026-5	L511159-05 MW-19D	Total/NA	Water	245.1-1994 R3.0	
240-237026-6	L511159-06 MWT-19A	Total/NA	Water	245.1-1994 R3.0	
240-237026-7	L511159-07 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	
MB 240-679696/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	
LCS 240-679696/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	
240-237026-1 MS	L511159-01 MW-7D	Total/NA	Water	245.1-1994 R3.0	
240-237026-1 MSD	L511159-01 MW-7D	Total/NA	Water	245.1-1994 R3.0	

Analysis Batch: 679953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-1	L511159-01 MW-7D	Total Recoverable	Water	200.7 R4.4-1994	679691
240-237026-2	L511159-02 MW-19A	Total Recoverable	Water	200.7 R4.4-1994	679691
240-237026-3	L511159-03 MW-19B	Total Recoverable	Water	200.7 R4.4-1994	679691
240-237026-4	L511159-04 MW-19C	Total Recoverable	Water	200.7 R4.4-1994	679691
240-237026-5	L511159-05 MW-19D	Total Recoverable	Water	200.7 R4.4-1994	679691
240-237026-6	L511159-06 MWT-19A	Total Recoverable	Water	200.7 R4.4-1994	679691
240-237026-7	L511159-07 FIELD BLANK	Total Recoverable	Water	200.7 R4.4-1994	679691
MB 240-679691/1-A	Method Blank	Total Recoverable	Water	200.7 R4.4-1994	679691
LCS 240-679691/2-A	Lab Control Sample	Total Recoverable	Water	200.7 R4.4-1994	679691
240-237026-1 MS	L511159-01 MW-7D	Total Recoverable	Water	200.7 R4.4-1994	679691
240-237026-1 MSD	L511159-01 MW-7D	Total Recoverable	Water	200.7 R4.4-1994	679691

Analysis Batch: 679968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-1	L511159-01 MW-7D	Total/NA	Water	245.1-1994 R3.0	679696
240-237026-2	L511159-02 MW-19A	Total/NA	Water	245.1-1994 R3.0	679696

Metals (Continued)

Analysis Batch: 679968 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-3	L511159-03 MW-19B	Total/NA	Water	245.1-1994 R3.0	679696
240-237026-4	L511159-04 MW-19C	Total/NA	Water	245.1-1994 R3.0	679696
240-237026-5	L511159-05 MW-19D	Total/NA	Water	245.1-1994 R3.0	679696
240-237026-6	L511159-06 MWT-19A	Total/NA	Water	245.1-1994 R3.0	679696
240-237026-7	L511159-07 FIELD BLANK	Total/NA	Water	245.1-1994 R3.0	679696
MB 240-679696/1-A	Method Blank	Total/NA	Water	245.1-1994 R3.0	679696
LCS 240-679696/2-A	Lab Control Sample	Total/NA	Water	245.1-1994 R3.0	679696
240-237026-1 MS	L511159-01 MW-7D	Total/NA	Water	245.1-1994 R3.0	679696
240-237026-1 MSD	L511159-01 MW-7D	Total/NA	Water	245.1-1994 R3.0	679696

Analysis Batch: 680060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-1	L511159-01 MW-7D	Total Recoverable	Water	200.8-1994 R5.4	679691
240-237026-2	L511159-02 MW-19A	Total Recoverable	Water	200.8-1994 R5.4	679691
240-237026-3	L511159-03 MW-19B	Total Recoverable	Water	200.8-1994 R5.4	679691
240-237026-4	L511159-04 MW-19C	Total Recoverable	Water	200.8-1994 R5.4	679691
240-237026-5	L511159-05 MW-19D	Total Recoverable	Water	200.8-1994 R5.4	679691
240-237026-6	L511159-06 MWT-19A	Total Recoverable	Water	200.8-1994 R5.4	679691
240-237026-7	L511159-07 FIELD BLANK	Total Recoverable	Water	200.8-1994 R5.4	679691
MB 240-679691/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	679691
LCS 240-679691/3-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	679691
240-237026-1 MS	L511159-01 MW-7D	Total Recoverable	Water	200.8-1994 R5.4	679691
240-237026-1 MSD	L511159-01 MW-7D	Total Recoverable	Water	200.8-1994 R5.4	679691

Analysis Batch: 680208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-1	L511159-01 MW-7D	Total Recoverable	Water	2340 B-2021	
240-237026-2	L511159-02 MW-19A	Total Recoverable	Water	2340 B-2021	
240-237026-3	L511159-03 MW-19B	Total Recoverable	Water	2340 B-2021	
240-237026-4	L511159-04 MW-19C	Total Recoverable	Water	2340 B-2021	
240-237026-5	L511159-05 MW-19D	Total Recoverable	Water	2340 B-2021	
240-237026-6	L511159-06 MWT-19A	Total Recoverable	Water	2340 B-2021	
240-237026-7	L511159-07 FIELD BLANK	Total Recoverable	Water	2340 B-2021	

General Chemistry

Analysis Batch: 679676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-1	L511159-01 MW-7D	Total/NA	Water	2540D-2020	
240-237026-2	L511159-02 MW-19A	Total/NA	Water	2540D-2020	
240-237026-3	L511159-03 MW-19B	Total/NA	Water	2540D-2020	
240-237026-4	L511159-04 MW-19C	Total/NA	Water	2540D-2020	
MB 240-679676/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-679676/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 679847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-1	L511159-01 MW-7D	Total/NA	Water	2320 B-2021	
240-237026-2	L511159-02 MW-19A	Total/NA	Water	2320 B-2021	
240-237026-3	L511159-03 MW-19B	Total/NA	Water	2320 B-2021	
240-237026-4	L511159-04 MW-19C	Total/NA	Water	2320 B-2021	

General Chemistry (Continued)

Analysis Batch: 679847 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-5	L511159-05 MW-19D	Total/NA	Water	2320 B-2021	
240-237026-6	L511159-06 MWT-19A	Total/NA	Water	2320 B-2021	
240-237026-7	L511159-07 FIELD BLANK	Total/NA	Water	2320 B-2021	
MB 240-679847/33	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-679847/60	Method Blank	Total/NA	Water	2320 B-2021	

Analysis Batch: 679895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-5	L511159-05 MW-19D	Total/NA	Water	2540D-2020	
240-237026-6	L511159-06 MWT-19A	Total/NA	Water	2540D-2020	
240-237026-7	L511159-07 FIELD BLANK	Total/NA	Water	2540D-2020	
MB 240-679895/1	Method Blank	Total/NA	Water	2540D-2020	
LCS 240-679895/2	Lab Control Sample	Total/NA	Water	2540D-2020	

Analysis Batch: 679958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-1	L511159-01 MW-7D	Total/NA	Water	2540 C-2020	
240-237026-2	L511159-02 MW-19A	Total/NA	Water	2540 C-2020	
240-237026-3	L511159-03 MW-19B	Total/NA	Water	2540 C-2020	
240-237026-4	L511159-04 MW-19C	Total/NA	Water	2540 C-2020	
MB 240-679958/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-679958/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 679966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-1	L511159-01 MW-7D	Total/NA	Water	300.0-1993 R2.1	
240-237026-2	L511159-02 MW-19A	Total/NA	Water	300.0-1993 R2.1	
240-237026-2	L511159-02 MW-19A	Total/NA	Water	300.0-1993 R2.1	
240-237026-3	L511159-03 MW-19B	Total/NA	Water	300.0-1993 R2.1	
240-237026-3	L511159-03 MW-19B	Total/NA	Water	300.0-1993 R2.1	
240-237026-4	L511159-04 MW-19C	Total/NA	Water	300.0-1993 R2.1	
240-237026-5	L511159-05 MW-19D	Total/NA	Water	300.0-1993 R2.1	
240-237026-6	L511159-06 MWT-19A	Total/NA	Water	300.0-1993 R2.1	
240-237026-6	L511159-06 MWT-19A	Total/NA	Water	300.0-1993 R2.1	
240-237026-7	L511159-07 FIELD BLANK	Total/NA	Water	300.0-1993 R2.1	
MB 240-679966/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-679966/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-237026-5 MS	L511159-05 MW-19D	Total/NA	Water	300.0-1993 R2.1	
240-237026-5 MSD	L511159-05 MW-19D	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 680092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-5	L511159-05 MW-19D	Total/NA	Water	2540 C-2020	
240-237026-6	L511159-06 MWT-19A	Total/NA	Water	2540 C-2020	
240-237026-7	L511159-07 FIELD BLANK	Total/NA	Water	2540 C-2020	
MB 240-680092/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-680092/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-1

Client Sample ID: L511159-01 MW-7D

Lab Sample ID: 240-237026-1

Date Collected: 11/04/25 11:13
Date Received: 11/06/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			679691	F3PF	EET CLE	11/07/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	679953	KLC	EET CLE	11/10/25 11:42
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.7 Rev 4.4		1	11071	JLS	EET SSM	11/13/25 21:17
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.8		1	11057	JL	EET SSM	11/13/25 17:35
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.8		1	11065	JLS	EET SSM	11/13/25 20:35
Total Recoverable	Prep	200.7			679691	F3PF	EET CLE	11/07/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	680060	AJC	EET CLE	11/10/25 17:26
Total Recoverable	Analysis	2340 B-2021		1	680208	KLC	EET CLE	11/12/25 06:44
Total/NA	Prep	245.1-1994 R3.0			679696	F3PF	EET CLE	11/07/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	679968	BN	EET CLE	11/10/25 12:17
Total/NA	Analysis	2320 B-2021		1	679847	PQD2	EET CLE	11/07/25 22:30
Total/NA	Analysis	2540 C-2020		1	679958	AAP	EET CLE	11/10/25 12:39
Total/NA	Analysis	2540D-2020		1	679676	TAV2	EET CLE	11/07/25 10:21
Total/NA	Analysis	300.0-1993 R2.1		1	679966	JMR	EET CLE	11/10/25 17:55

Client Sample ID: L511159-02 MW-19A

Lab Sample ID: 240-237026-2

Date Collected: 11/04/25 08:07
Date Received: 11/06/25 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			679691	F3PF	EET CLE	11/07/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	679953	KLC	EET CLE	11/10/25 12:13
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.7 Rev 4.4		1	11071	JLS	EET SSM	11/13/25 21:20
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.8		1	11057	JL	EET SSM	11/13/25 17:38
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.8		1	11065	JLS	EET SSM	11/13/25 20:38
Total Recoverable	Prep	200.7			679691	F3PF	EET CLE	11/07/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	680060	AJC	EET CLE	11/10/25 17:44
Total Recoverable	Analysis	2340 B-2021		1	680208	KLC	EET CLE	11/12/25 06:44
Total/NA	Prep	245.1-1994 R3.0			679696	F3PF	EET CLE	11/07/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	679968	BN	EET CLE	11/10/25 12:26
Total/NA	Analysis	2320 B-2021		1	679847	PQD2	EET CLE	11/07/25 23:13
Total/NA	Analysis	2540 C-2020		1	679958	AAP	EET CLE	11/10/25 12:39
Total/NA	Analysis	2540D-2020		1	679676	TAV2	EET CLE	11/07/25 10:21
Total/NA	Analysis	300.0-1993 R2.1		1	679966	JMR	EET CLE	11/10/25 18:04
Total/NA	Analysis	300.0-1993 R2.1		5	679966	JMR	EET CLE	11/10/25 18:13

Client Sample ID: L511159-03 MW-19B

Lab Sample ID: 240-237026-3

Date Collected: 11/04/25 10:02

Matrix: Water

Date Received: 11/06/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			679691	F3PF	EET CLE	11/07/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	679953	KLC	EET CLE	11/10/25 12:17
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.7 Rev 4.4		1	11071	JLS	EET SSM	11/13/25 21:24
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.8		1	11057	JL	EET SSM	11/13/25 17:41
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.8		1	11065	JLS	EET SSM	11/13/25 20:41
Total Recoverable	Prep	200.7			679691	F3PF	EET CLE	11/07/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	680060	AJC	EET CLE	11/10/25 17:47
Total Recoverable	Analysis	2340 B-2021		1	680208	KLC	EET CLE	11/12/25 06:44
Total/NA	Prep	245.1-1994 R3.0			679696	F3PF	EET CLE	11/07/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	679968	BN	EET CLE	11/10/25 12:28
Total/NA	Analysis	2320 B-2021		1	679847	PQD2	EET CLE	11/07/25 23:23
Total/NA	Analysis	2540 C-2020		1	679958	AAP	EET CLE	11/10/25 12:39
Total/NA	Analysis	2540D-2020		1	679676	TAV2	EET CLE	11/07/25 10:21
Total/NA	Analysis	300.0-1993 R2.1		1	679966	JMR	EET CLE	11/10/25 18:23
Total/NA	Analysis	300.0-1993 R2.1		5	679966	JMR	EET CLE	11/10/25 18:32

Client Sample ID: L511159-04 MW-19C

Lab Sample ID: 240-237026-4

Date Collected: 11/04/25 11:22

Matrix: Water

Date Received: 11/06/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			679691	F3PF	EET CLE	11/07/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	679953	KLC	EET CLE	11/10/25 12:21
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.7 Rev 4.4		1	11071	JLS	EET SSM	11/13/25 21:27
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.8		1	11057	JL	EET SSM	11/13/25 17:44
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.8		1	11065	JLS	EET SSM	11/13/25 20:44
Total Recoverable	Prep	200.7			679691	F3PF	EET CLE	11/07/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	680060	AJC	EET CLE	11/10/25 17:49
Total Recoverable	Analysis	2340 B-2021		1	680208	KLC	EET CLE	11/12/25 06:44
Total/NA	Prep	245.1-1994 R3.0			679696	F3PF	EET CLE	11/07/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	679968	BN	EET CLE	11/10/25 12:29
Total/NA	Analysis	2320 B-2021		1	679847	PQD2	EET CLE	11/07/25 23:34
Total/NA	Analysis	2540 C-2020		1	679958	AAP	EET CLE	11/10/25 12:39
Total/NA	Analysis	2540D-2020		1	679676	TAV2	EET CLE	11/07/25 10:21
Total/NA	Analysis	300.0-1993 R2.1		1	679966	JMR	EET CLE	11/10/25 18:41

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-1

Client Sample ID: L511159-05 MW-19D

Lab Sample ID: 240-237026-5

Date Collected: 11/04/25 09:04
Matrix: Water
Date Received: 11/06/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			679691	F3PF	EET CLE	11/07/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	679953	KLC	EET CLE	11/10/25 12:26
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.7 Rev 4.4		1	11071	JLS	EET SSM	11/13/25 21:30
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.8		1	11057	JL	EET SSM	11/13/25 17:47
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.8		1	11065	JLS	EET SSM	11/13/25 20:53
Total Recoverable	Prep	200.7			679691	F3PF	EET CLE	11/07/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	680060	AJC	EET CLE	11/10/25 17:52
Total Recoverable	Analysis	2340 B-2021		1	680208	KLC	EET CLE	11/12/25 06:44
Total/NA	Prep	245.1-1994 R3.0			679696	F3PF	EET CLE	11/07/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	679968	BN	EET CLE	11/10/25 12:31
Total/NA	Analysis	2320 B-2021		1	679847	PQD2	EET CLE	11/07/25 23:42
Total/NA	Analysis	2540 C-2020		1	680092	TAV2	EET CLE	11/11/25 10:06
Total/NA	Analysis	2540D-2020		1	679895	AAP	EET CLE	11/10/25 10:15
Total/NA	Analysis	300.0-1993 R2.1		1	679966	JMR	EET CLE	11/10/25 19:08

Client Sample ID: L511159-06 MWT-19A

Lab Sample ID: 240-237026-6

Date Collected: 11/04/25 08:07
Matrix: Water
Date Received: 11/06/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			679691	F3PF	EET CLE	11/07/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	679953	KLC	EET CLE	11/10/25 12:30
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.7 Rev 4.4		1	11071	JLS	EET SSM	11/13/25 21:34
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.8		1	11057	JL	EET SSM	11/13/25 17:55
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.8		1	11065	JLS	EET SSM	11/13/25 20:56
Total Recoverable	Prep	200.7			679691	F3PF	EET CLE	11/07/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	680060	AJC	EET CLE	11/10/25 17:55
Total Recoverable	Analysis	2340 B-2021		1	680208	KLC	EET CLE	11/12/25 06:44
Total/NA	Prep	245.1-1994 R3.0			679696	F3PF	EET CLE	11/07/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	679968	BN	EET CLE	11/10/25 12:33
Total/NA	Analysis	2320 B-2021		1	679847	PQD2	EET CLE	11/07/25 23:51
Total/NA	Analysis	2540 C-2020		1	680092	TAV2	EET CLE	11/11/25 10:06
Total/NA	Analysis	2540D-2020		1	679895	AAP	EET CLE	11/10/25 10:15
Total/NA	Analysis	300.0-1993 R2.1		1	679966	JMR	EET CLE	11/10/25 18:50
Total/NA	Analysis	300.0-1993 R2.1		5	679966	JMR	EET CLE	11/10/25 18:59

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-1

Client Sample ID: L511159-07 FIELD BLANK

Lab Sample ID: 240-237026-7

Date Collected: 11/04/25 07:45

Matrix: Water

Date Received: 11/06/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	200.7			679691	F3PF	EET CLE	11/07/25 14:00
Total Recoverable	Analysis	200.7 R4.4-1994		1	679953	KLC	EET CLE	11/10/25 12:34
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.7 Rev 4.4		1	11071	JLS	EET SSM	11/13/25 20:51
Total/NA	Prep	200.7			11019	RMN	EET SSM	11/12/25 16:43
Total/NA	Analysis	200.8		1	11057	JL	EET SSM	11/13/25 16:52
Total Recoverable	Prep	200.7			679691	F3PF	EET CLE	11/07/25 14:00
Total Recoverable	Analysis	200.8-1994 R5.4		1	680060	AJC	EET CLE	11/10/25 17:57
Total Recoverable	Analysis	2340 B-2021		1	680208	KLC	EET CLE	11/12/25 06:44
Total/NA	Prep	245.1-1994 R3.0			679696	F3PF	EET CLE	11/07/25 14:00
Total/NA	Analysis	245.1-1994 R3.0		1	679968	BN	EET CLE	11/10/25 12:34
Total/NA	Analysis	2320 B-2021		1	679847	PQD2	EET CLE	11/08/25 00:01
Total/NA	Analysis	2540 C-2020		1	680092	TAV2	EET CLE	11/11/25 10:06
Total/NA	Analysis	2540D-2020		1	679895	AAP	EET CLE	11/10/25 10:15
Total/NA	Analysis	300.0-1993 R2.1		1	679966	JMR	EET CLE	11/10/25 19:54

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-1

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-07-26
Florida	NELAP	E87575	06-30-26
Louisiana (All)	NELAP	03073	07-01-26
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-26
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167	07-08-26
US Fish & Wildlife	US Federal Programs	A20571	06-30-26
USDA	US Federal Programs	525-23-4-22573	01-24-28
Washington	State	C788	07-13-26
Wisconsin	State	399133460	08-31-26

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com; Environmental_Laboratory@

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:

Project Number:
24034575

Sample State: MI

Special Instructions:
Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner. Please add Na and K metals

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
Marc Wahrer and Julie Maltby

Description:
Erickson Wellfield 11.4.25

Site Name:
Erickson Projects

See following pages for Method and Container information.

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L511159-01 MW-7D	Grab	Water	11/04/25 11:13			
2	L511159-02 MW-19A	Grab	Water	11/04/25 08:07			
3	L511159-03 MW-19B	Grab	Water	11/04/25 10:02			
4	L511159-04 MW-19C	Grab	Water	11/04/25 11:22			
5	L511159-05 MW-19D	Grab	Water	11/04/25 09:04			
6	L511159-06 MWT-19A	Grab	Water	11/04/25 08:07			
7	L511159-07 Field Blank	Grab	Water	11/04/25 07:45			

240-237026 COC

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished By:	Date/Time:		
Jennifer Caporale	11/05/25 12:55	Jennifer Caporale	11/05/25 12:55	KMartin 11/6/25	800 Eurofins

Chain of Custody Number: **424563**

*H – Analysis on hold.

Coolers								
Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20251105A001								
MIC20251105A001								

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																				
#	Sample Name	903.0 / Radium-226 (GFPC) / Standard Target List	200.8 / Metals (ICP/MS) / Iron & Zinc	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	200.8 / Metals (ICP/MS) / Custom List 2 2-3 Metals	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	200.7 R4.4-1994 / Metals (ICP) / Total Boron	245.1 1994 R3.0 / Mercury (CVAA) / Mercury	200 7 Rev 4.4 / Metals (ICP) / Total Na & K	200.8 / Metals (ICP/MS) / Custom List 1 1 Metals	904.0 / Radium-228 (GFPC) / Standard Target List	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved S	2320 B-2021 / Alkalinity / Bicarbonate & Carbonate Alkalinity	2540D-2020 / Solids Total Suspended (TSS)	2340 B-2021 / Total Hardness (as CaCO3) by calculation	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	200.7 Rev 4.4 / Metals (ICP) / Iron & Zinc	300.0-1993 R2.1 / Anions, Ion Chromatography / Chloride, Fluor				
1	L511159-01 MW-7D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
2	L511159-02 MW-19A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
3	L511159-03 MW-19B	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
4	L511159-04 MW-19C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
5	L511159-05 MW-19D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
6	L511159-06 MWT-19A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
7	L511159-07 Field Blank	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				

Chain of Custody Bottles

eurofins | Environment Testing

Bottle Name	Total Bottles
Plastic 1 liter Nitric Acid	14
Plastic 250ml - with Nitric Acid	7
Plastic 500ml with Nitric Acid	7
Plastic 500ml - unpreserved	7
Plastic 1 liter unpreserved	7
Plastic 60 mL - unpreserved	14

Samples		Bottles																				
#	Sample Name	Total Bottles For Sample	Plastic 1 liter - Nitric Acid	Plastic 250ml with Nitric Acid	Plastic 500ml with Nitric Acid	Plastic 500ml unpreserved	Plastic 1 liter unpreserved	Plastic 60 mL unpreserved														
1	L511159-01 MW-7D	8	2	1	1	1	1	2														
2	L511159-02 MW-19A	8	2	1	1	1	1	2														
3	L511159-03 MW-19B	8	2	1	1	1	1	2														
4	L511159-04 MW-19C	8	2	1	1	1	1	2														
5	L511159-05 MW-19D	8	2	1	1	1	1	2														
6	L511159-06 MWT-19A	8	2	1	1	1	1	2														
7	L511159-07 Field Blank	8	2	1	1	1	1	2														

Eurofins – Cleveland Sample Receipt Form/Narrative Login # :_____
Barberton Facility

Client Lansing Board of Water & Light Site Name_____ Cooler unpacked by: KMartin

Cooler Received on 11/6/25 Opened on 11/6/25

FedEx 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other_____

Receipt After-hours Drop-off Date/Time_____ Storage Location_____

Eurofins Cooler # EC Foam Box Client Cooler Box Other_____

Packing material used Bubble Wrap Foam Plastic Bag None Other_____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☒ See Multiple Cooler Form

IR GUN # 13 (CF +0.6 °C) Observed Cooler Temp _____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC567196
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: 13	0.2	0.8	~~Wet Ice~~ Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ↓	0.4	1.0	~~Wet Ice~~ Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice

11/6/2025

Login Container Summary Report

240-237026

11/14/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L511159-01 MW-7D	240-237026 A 1	Plastic 60 mL - unpreserved				
L511159-01 MW-7D	240 237026-B-1	Plastic 60 mL - unpreserved				
L511159-01 MW-7D	240-237026-C-1	Plastic 250ml - with Nitric Acid	<2			
L511159-01 MW-7D	240-237026-D-1	Plastic 500ml - unpreserved				
L511159-01 MW-7D	240-237026-E-1	Plastic 500ml - with Nitric Acid	<2			
L511159-01 MW-7D	240-237026-F-1	Plastic 1 liter - unpreserved				
L511159-01 MW-7D	240-237026-G-1	Plastic 1 liter - Nitric Acid	<2			
L511159-01 MW-7D	240-237026 H-1	Plastic 1 liter - Nitric Acid	<2			
L511159-02 MW-19A	240-237026-A-2	Plastic 60 mL - unpreserved				
L511159-02 MW-19A	240-237026 B 2	Plastic 60 mL unpreserved				
L511159-02 MW-19A	240-237026-C-2	Plastic 250ml - with Nitric Acid	<2			
L511159-02 MW-19A	240-237026-D-2	Plastic 500ml - unpreserved				
L511159-02 MW-19A	240-237026-E-2	Plastic 500ml - with Nitric Acid	<2			
L511159-02 MW-19A	240-237026-F 2	Plastic 1 liter - unpreserved				
L511159-02 MW-19A	240-237026-G-2	Plastic 1 liter - Nitric Acid	<2			
L511159-02 MW-19A	240-237026-H-2	Plastic 1 liter - Nitric Acid	<2			
L511159-03 MW-19B	240-237026-A-3	Plastic 60 mL - unpreserved				
L511159-03 MW-19B	240-237026-B-3	Plastic 60 mL - unpreserved				
L511159-03 MW-19B	240-237026-C-3	Plastic 250ml - with Nitric Acid	<2			
L511159-03 MW-19B	240-237026-D-3	Plastic 500ml - unpreserved				
L511159-03 MW-19B	240-237026 E-3	Plastic 500ml with Nitric Acid	<2			
L511159-03 MW-19B	240-237026-F-3	Plastic 1 liter - unpreserved				
L511159-03 MW 19B	240-237026-G-3	Plastic 1 liter - Nitric Acid	<2			
L511159-03 MW-19B	240-237026-H-3	Plastic 1 liter - Nitric Acid	<2			
L511159-04 MW 19C	240-237026-A-4	Plastic 60 mL - unpreserved				
L511159-04 MW-19C	240-237026-B-4	Plastic 60 mL - unpreserved				
L511159-04 MW 19C	240-237026-C-4	Plastic 250ml - with Nitric Acid	<2			
L511159-04 MW-19C	240-237026-D-4	Plastic 500ml - unpreserved				
L511159-04 MW 19C	240-237026-E-4	Plastic 500ml - with Nitric Acid	<2			
L511159-04 MW-19C	240-237026-F-4	Plastic 1 liter - unpreserved				
L511159-04 MW 19C	240-237026-G-4	Plastic 1 liter - Nitric Acid	<2			
L511159-04 MW-19C	240-237026-H-4	Plastic 1 liter - Nitric Acid	<2			
L511159-05 MW-19D	240-237026 A 5	Plastic 60 mL unpreserved				
L511159-05 MW-19D	240-237026-B-5	Plastic 60 mL - unpreserved				
L511159-05 MW-19D	240 237026-C-5	Plastic 250ml with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L511159-05 MW 19D	240 237026-D-5	Plastic 500ml - unpreserved				
L511159-05 MW-19D	240-237026-E-5	Plastic 500ml with Nitric Acid	<2			
L511159-05 MW-19D	240-237026-F 5	Plastic 1 liter - unpreserved				
L511159-05 MW 19D	240 237026-G-5	Plastic 1 liter - Nitric Acid	<2			
L511159-05 MW-19D	240-237026-H 5	Plastic 1 liter Nitric Acid	<2			
L511159-06 MWT-19A	240-237026-A-6	Plastic 60 mL - unpreserved				
L511159-06 MWT-19A	240-237026-B-6	Plastic 60 mL - unpreserved				
L511159-06 MWT 19A	240 237026-C-6	Plastic 250ml - with Nitric Acid	<2			
L511159-06 MWT-19A	240-237026-D-6	Plastic 500ml unpreserved				
L511159-06 MWT-19A	240-237026-E-6	Plastic 500ml - with Nitric Acid	<2			
L511159-06 MWT-19A	240-237026-F-6	Plastic 1 liter - unpreserved				
L511159-06 MWT 19A	240-237026-G-6	Plastic 1 liter - Nitric Acid	<2			
L511159-06 MWT-19A	240-237026-H-6	Plastic 1 liter Nitric Acid	<2			
L511159-07 FIELD BLANK	240-237026-A 7	Plastic 60 mL - unpreserved				
L511159-07 FIELD BLANK	240-237026-B-7	Plastic 60 mL - unpreserved				
L511159-07 FIELD BLANK	240-237026-C-7	Plastic 250ml - with Nitric Acid	<2			
L511159-07 FIELD BLANK	240-237026-D-7	Plastic 500ml - unpreserved				
L511159-07 FIELD BLANK	240 237026-E-7	Plastic 500ml - with Nitric Acid	<2			
L511159-07 FIELD BLANK	240-237026-F-7	Plastic 1 liter - unpreserved				
L511159-07 FIELD BLANK	240-237026-G-7	Plastic 1 liter Nitric Acid	<2			
L511159-07 FIELD BLANK	240-237026-H-7	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

11/14/2025

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-210607.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-237026-1
Address: 5755 8th Street East, ,	Due Date Requested: 11/19/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Therm. ID: SC03 Cust. Seal: Y / N
Uncorr./Corr. Temp: 18.0 / 16.5 °C
Delivery: UPS / FedEx / Other:
Ice Type: Blue / Dry / Wet / None
Label Ver.: V2 Packing: B

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/200.8_P_TOT(MOD) Iron & Zinc	200.7_CWA/200.7_P_TOT(MOD) Iron & Zinc	Total Number of conta	Special Instructions/Note:
			Preservation Code:							
L511159-01 MW-7D (240-237026-1)	11/4/25	11:13 Eastern	G	Water			X	X	1	
L511159-02 MW-19A (240-237026-2)	11/4/25	08:07 Eastern	G	Water			X	X	1	
L511159-03 MW-19B (240-237026-3)	11/4/25	10:02 Eastern	G	Water			X	X	1	
L511159-04 MW-19C (240-237026-4)	11/4/25	11:22 Eastern	G	Water			X	X	1	
L511159-05 MW-19D (240-237026-5)	11/4/25	09:04 Eastern	G	Water			X	X	1	
L511159-06 MWT-19A (240-237026-6)	11/4/25	08:07 Eastern	G	Water			X	X	1	
L511159-07 FIELD BLANK (240-237026-7)	11/4/25	07:45 Eastern	G	Water			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification 4616 0304 2050 *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:		Method of Shipment:		
Relinquished by: JLM	Date/Time: 11/6/25 1530	Company ET	Received by:	Date/Time: 11/7/25 9:45	Company ET/JV		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-237026-1

Login Number: 237026
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 11/07/25 01:16 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 12/8/2025 3:58:11 PM

JOB DESCRIPTION

Erickson Projects

JOB NUMBER

240-237026-2

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

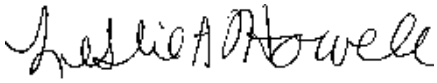
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
12/8/2025 3:58:11 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 9
Tracer Carrier Summary 16
QC Sample Results 17
QC Association Summary 18
Lab Chronicle 19
Certification Summary 21
Chain of Custody 22
Receipt Checklists 31

Definitions/Glossary

Client: Lansing Board of Water & Light
Job ID: 240-237026-2
Project/Site: Erickson Projects

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-237026-2 — Eurofins Cleveland

Job Narrative
240-237026-2

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 11/6/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.8°C and 1.0°C.

Gas Flow Proportional Counter
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Rad
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-237026-1	L511159-01 MW-7D	Water	11/04/25 11:13	11/06/25 08:00	Michigan
240-237026-2	L511159-02 MW-19A	Water	11/04/25 08:07	11/06/25 08:00	Michigan
240-237026-3	L511159-03 MW-19B	Water	11/04/25 10:02	11/06/25 08:00	Michigan
240-237026-4	L511159-04 MW-19C	Water	11/04/25 11:22	11/06/25 08:00	Michigan
240-237026-5	L511159-05 MW-19D	Water	11/04/25 09:04	11/06/25 08:00	Michigan
240-237026-6	L511159-06 MWT-19A	Water	11/04/25 08:07	11/06/25 08:00	Michigan
240-237026-7	L511159-07 FIELD BLANK	Water	11/04/25 07:45	11/06/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-2

Client Sample ID: L511159-01 MW-7D — **Lab Sample ID: 240-237026-1**

No Detections.

Client Sample ID: L511159-02 MW-19A — **Lab Sample ID: 240-237026-2**

No Detections.

Client Sample ID: L511159-03 MW-19B — **Lab Sample ID: 240-237026-3**

No Detections.

Client Sample ID: L511159-04 MW-19C — **Lab Sample ID: 240-237026-4**

No Detections.

Client Sample ID: L511159-05 MW-19D — **Lab Sample ID: 240-237026-5**

No Detections.

Client Sample ID: L511159-06 MWT-19A — **Lab Sample ID: 240-237026-6**

No Detections.

Client Sample ID: L511159-07 FIELD BLANK — **Lab Sample ID: 240-237026-7**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: L511159-01 MW-7D
Date Collected: 11/04/25 11:13
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-1
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.538		0.267	0.271	1.00	0.349	pCi/L	11/10/25 08:31	12/04/25 10:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.7*		*30 - 110*	*11/10/25 08:31*	*12/04/25 10:01*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.995		0.543	0.550	1.00	0.774	pCi/L	11/10/25 08:35	12/03/25 12:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.7*		*30 - 110*	*11/10/25 08:35*	*12/03/25 12:29*	*1*
Y Carrier	*73.3*		*30 - 110*	*11/10/25 08:35*	*12/03/25 12:29*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.53		0.605	0.613	5.00	0.774	pCi/L		12/08/25 14:51	1

Client Sample ID: L511159-02 MW-19A
Date Collected: 11/04/25 08:07
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-2
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.376		0.257	0.260	1.00	0.374	pCi/L	11/10/25 08:31	12/04/25 10:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.5*		*30 - 110*	*11/10/25 08:31*	*12/04/25 10:01*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.161	U	0.527	0.527	1.00	0.930	pCi/L	11/10/25 08:35	12/03/25 12:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.5*		*30 - 110*	*11/10/25 08:35*	*12/03/25 12:29*	*1*
Y Carrier	*74.0*		*30 - 110*	*11/10/25 08:35*	*12/03/25 12:29*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.537	U	0.586	0.588	5.00	0.930	pCi/L		12/08/25 14:51	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-2

Client Sample ID: L511159-03 MW-19B
Date Collected: 11/04/25 10:02
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-3
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.363		0.213	0.215	1.00	0.288	pCi/L	11/10/25 08:31	12/04/25 09:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*30 - 110*	*11/10/25 08:31*	*12/04/25 09:55*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.194	U	0.439	0.439	1.00	0.852	pCi/L	11/10/25 08:35	12/03/25 12:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*30 - 110*	*11/10/25 08:35*	*12/03/25 12:29*	*1*
Y Carrier	*74.4*		*30 - 110*	*11/10/25 08:35*	*12/03/25 12:29*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.363	U	0.488	0.489	5.00	0.852	pCi/L		12/08/25 14:51	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-2

Client Sample ID: L511159-04 MW-19C
Date Collected: 11/04/25 11:22
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-4
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.261	U	0.207	0.208	1.00	0.307	pCi/L	11/10/25 08:31	12/04/25 09:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*30 - 110*	*11/10/25 08:31*	*12/04/25 09:55*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.931	U	0.620	0.626	1.00	0.946	pCi/L	11/10/25 08:35	12/03/25 12:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*30 - 110*	*11/10/25 08:35*	*12/03/25 12:29*	*1*
Y Carrier	*77.0*		*30 - 110*	*11/10/25 08:35*	*12/03/25 12:29*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.19**		0.654	0.660	5.00	0.946	pCi/L		12/08/25 14:51	1

Client Sample ID: L511159-05 MW-19D
Date Collected: 11/04/25 09:04
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-5
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.240	U	0.179	0.180	1.00	0.257	pCi/L	11/10/25 08:31	12/04/25 09:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.0*		*30 - 110*	*11/10/25 08:31*	*12/04/25 09:55*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0670	U	0.409	0.409	1.00	0.742	pCi/L	11/10/25 08:35	12/03/25 12:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.0*		*30 - 110*	*11/10/25 08:35*	*12/03/25 12:29*	*1*
Y Carrier	*80.0*		*30 - 110*	*11/10/25 08:35*	*12/03/25 12:29*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.307	U	0.446	0.447	5.00	0.742	pCi/L		12/08/25 14:51	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-2

Client Sample ID: L511159-06 MWT-19A

Date Collected: 11/04/25 08:07
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-6

Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.225	U	0.171	0.172	1.00	0.243	pCi/L	11/10/25 08:31	12/04/25 09:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.2*		*30 - 110*	*11/10/25 08:31*	*12/04/25 09:55*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.722	U	0.508	0.512	1.00	0.771	pCi/L	11/10/25 08:35	12/03/25 12:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.2*		*30 - 110*	*11/10/25 08:35*	*12/03/25 12:29*	*1*
Y Carrier	*75.1*		*30 - 110*	*11/10/25 08:35*	*12/03/25 12:29*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.947**		0.536	0.540	5.00	0.771	pCi/L		12/08/25 14:51	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-2

Client Sample ID: L511159-07 FIELD BLANK
Date Collected: 11/04/25 07:45
Date Received: 11/06/25 08:00

Lab Sample ID: 240-237026-7
Matrix: Water

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0683	U	0.106	0.106	1.00	0.261	pCi/L	11/10/25 08:31	12/04/25 09:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.0*		*30 - 110*	*11/10/25 08:31*	*12/04/25 09:56*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0428	U	0.421	0.421	1.00	0.795	pCi/L	11/10/25 08:35	12/03/25 12:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.0*		*30 - 110*	*11/10/25 08:35*	*12/03/25 12:29*	*1*
Y Carrier	*74.0*		*30 - 110*	*11/10/25 08:35*	*12/03/25 12:29*	*1*

Method: TAL-STL Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.000	U	0.434	0.434	5.00	0.795	pCi/L		12/08/25 14:51	1

Tracer/Carrier Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-237026-1	L511159-01 MW-7D	84.7
240-237026-2	L511159-02 MW-19A	82.5
240-237026-3	L511159-03 MW-19B	87.5
240-237026-4	L511159-04 MW-19C	80.2
240-237026-5	L511159-05 MW-19D	85.0
240-237026-6	L511159-06 MWT-19A	85.2
240-237026-7	L511159-07 FIELD BLANK	85.0
LCS 160-744608/2-A	Lab Control Sample	87.7
MB 160-744608/1-A	Method Blank	85.5

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
		Ba	Y
Lab Sample ID	Client Sample ID	(30-110)	(30-110)
240-237026-1	L511159-01 MW-7D	84.7	73.3
240-237026-2	L511159-02 MW-19A	82.5	74.0
240-237026-3	L511159-03 MW-19B	87.5	74.4
240-237026-4	L511159-04 MW-19C	80.2	77.0
240-237026-5	L511159-05 MW-19D	85.0	80.0
240-237026-6	L511159-06 MWT-19A	85.2	75.1
240-237026-7	L511159-07 FIELD BLANK	85.0	74.0
LCS 160-744609/2-A	Lab Control Sample	87.7	81.5
MB 160-744609/1-A	Method Blank	85.5	79.3

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-744608/1-A
Matrix: Water
Analysis Batch: 747875

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744608

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04804	U	0.133	0.133	1.00	0.250	pCi/L	11/10/25 08:31	12/04/25 10:01	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*30 - 110*	*11/10/25 08:31*	*12/04/25 10:01*	*1*

Lab Sample ID: LCS 160-744608/2-A
Matrix: Water
Analysis Batch: 747875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744608

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.57	10.07		1.24	1.00	0.224	pCi/L	105	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*87.7*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-744609/1-A
Matrix: Water
Analysis Batch: 747720

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 744609

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.1678	U	0.274	0.274	1.00	0.577	pCi/L	11/10/25 08:35	12/03/25 12:25	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*30 - 110*	*11/10/25 08:35*	*12/03/25 12:25*	*1*
Y Carrier	*79.3*		*30 - 110*	*11/10/25 08:35*	*12/03/25 12:25*	*1*

Lab Sample ID: LCS 160-744609/2-A
Matrix: Water
Analysis Batch: 747720

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 744609

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			7.88	8.359		1.21	1.00	0.510	pCi/L	106	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*87.7*		*30 - 110*
Y Carrier	*81.5*		*30 - 110*

QC Association Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-2

Rad

Prep Batch: 744608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-1	L511159-01 MW-7D	Total/NA	Water	PrecSep-21	
240-237026-2	L511159-02 MW-19A	Total/NA	Water	PrecSep-21	
240-237026-3	L511159-03 MW-19B	Total/NA	Water	PrecSep-21	
240-237026-4	L511159-04 MW-19C	Total/NA	Water	PrecSep-21	
240-237026-5	L511159-05 MW-19D	Total/NA	Water	PrecSep-21	
240-237026-6	L511159-06 MWT-19A	Total/NA	Water	PrecSep-21	
240-237026-7	L511159-07 FIELD BLANK	Total/NA	Water	PrecSep-21	
MB 160-744608/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-744608/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 744609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-237026-1	L511159-01 MW-7D	Total/NA	Water	PrecSep_0	
240-237026-2	L511159-02 MW-19A	Total/NA	Water	PrecSep_0	
240-237026-3	L511159-03 MW-19B	Total/NA	Water	PrecSep_0	
240-237026-4	L511159-04 MW-19C	Total/NA	Water	PrecSep_0	
240-237026-5	L511159-05 MW-19D	Total/NA	Water	PrecSep_0	
240-237026-6	L511159-06 MWT-19A	Total/NA	Water	PrecSep_0	
240-237026-7	L511159-07 FIELD BLANK	Total/NA	Water	PrecSep_0	
MB 160-744609/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-744609/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-2

Client Sample ID: L511159-01 MW-7D

Lab Sample ID: 240-237026-1

Date Collected: 11/04/25 11:13
Matrix: Water
Date Received: 11/06/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			744608	VLQ	EET SL	11/10/25 08:31
Total/NA	Analysis	903.0		1	747875	SWS	EET SL	12/04/25 10:01
Total/NA	Prep	PrecSep_0			744609	VLQ	EET SL	11/10/25 08:35
Total/NA	Analysis	904.0		1	747764	FLC	EET SL	12/03/25 12:29
Total/NA	Analysis	Ra226_Ra228 Pos		1	748439	CAH	EET SL	12/08/25 14:51

Client Sample ID: L511159-02 MW-19A

Lab Sample ID: 240-237026-2

Date Collected: 11/04/25 08:07
Matrix: Water
Date Received: 11/06/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			744608	VLQ	EET SL	11/10/25 08:31
Total/NA	Analysis	903.0		1	747875	SWS	EET SL	12/04/25 10:01
Total/NA	Prep	PrecSep_0			744609	VLQ	EET SL	11/10/25 08:35
Total/NA	Analysis	904.0		1	747764	FLC	EET SL	12/03/25 12:29
Total/NA	Analysis	Ra226_Ra228 Pos		1	748439	CAH	EET SL	12/08/25 14:51

Client Sample ID: L511159-03 MW-19B

Lab Sample ID: 240-237026-3

Date Collected: 11/04/25 10:02
Matrix: Water
Date Received: 11/06/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			744608	VLQ	EET SL	11/10/25 08:31
Total/NA	Analysis	903.0		1	747876	SWS	EET SL	12/04/25 09:55
Total/NA	Prep	PrecSep_0			744609	VLQ	EET SL	11/10/25 08:35
Total/NA	Analysis	904.0		1	747764	FLC	EET SL	12/03/25 12:29
Total/NA	Analysis	Ra226_Ra228 Pos		1	748439	CAH	EET SL	12/08/25 14:51

Client Sample ID: L511159-04 MW-19C

Lab Sample ID: 240-237026-4

Date Collected: 11/04/25 11:22
Matrix: Water
Date Received: 11/06/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			744608	VLQ	EET SL	11/10/25 08:31
Total/NA	Analysis	903.0		1	747876	SWS	EET SL	12/04/25 09:55
Total/NA	Prep	PrecSep_0			744609	VLQ	EET SL	11/10/25 08:35
Total/NA	Analysis	904.0		1	747764	FLC	EET SL	12/03/25 12:29
Total/NA	Analysis	Ra226_Ra228 Pos		1	748439	CAH	EET SL	12/08/25 14:51

Lab Chronicle

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-2

Client Sample ID: L511159-05 MW-19D

Lab Sample ID: 240-237026-5

Date Collected: 11/04/25 09:04
Matrix: Water
Date Received: 11/06/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			744608	VLQ	EET SL	11/10/25 08:31
Total/NA	Analysis	903.0		1	747876	SWS	EET SL	12/04/25 09:55
Total/NA	Prep	PrecSep_0			744609	VLQ	EET SL	11/10/25 08:35
Total/NA	Analysis	904.0		1	747764	FLC	EET SL	12/03/25 12:29
Total/NA	Analysis	Ra226_Ra228 Pos		1	748439	CAH	EET SL	12/08/25 14:51

Client Sample ID: L511159-06 MWT-19A

Lab Sample ID: 240-237026-6

Date Collected: 11/04/25 08:07
Matrix: Water
Date Received: 11/06/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			744608	VLQ	EET SL	11/10/25 08:31
Total/NA	Analysis	903.0		1	747876	SWS	EET SL	12/04/25 09:55
Total/NA	Prep	PrecSep_0			744609	VLQ	EET SL	11/10/25 08:35
Total/NA	Analysis	904.0		1	747764	FLC	EET SL	12/03/25 12:29
Total/NA	Analysis	Ra226_Ra228 Pos		1	748439	CAH	EET SL	12/08/25 14:51

Client Sample ID: L511159-07 FIELD BLANK

Lab Sample ID: 240-237026-7

Date Collected: 11/04/25 07:45
Matrix: Water
Date Received: 11/06/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	PrecSep-21			744608	VLQ	EET SL	11/10/25 08:31
Total/NA	Analysis	903.0		1	747876	SWS	EET SL	12/04/25 09:56
Total/NA	Prep	PrecSep_0			744609	VLQ	EET SL	11/10/25 08:35
Total/NA	Analysis	904.0		1	747764	FLC	EET SL	12/03/25 12:29
Total/NA	Analysis	Ra226_Ra228 Pos		1	748439	CAH	EET SL	12/08/25 14:51

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Projects

Job ID: 240-237026-2

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	07-01-26
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25 *
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-26
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	10-01-26
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-26
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-31-26
West Virginia DEP	State	381	11-30-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com; Environmental_Laboratory@

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:

Project Number:
24034575

Sample State: MI

Special Instructions:
Promium EDD and Level 4 Report; Please use the reporting limits that are attached to this project; Please split off Radium so we can get the other results sooner. Please add Na and K metals

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
Marc Wahrer and Julie Maltby

Description:
Erickson Wellfield 11.4.25

Site Name:
Erickson Projects

See following pages for Method and Container information.

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long
1	L511159-01 MW-7D	Grab	Water	11/04/25 11:13			
2	L511159-02 MW-19A	Grab	Water	11/04/25 08:07			
3	L511159-03 MW-19B	Grab	Water	11/04/25 10:02			
4	L511159-04 MW-19C	Grab	Water	11/04/25 11:22			
5	L511159-05 MW-19D	Grab	Water	11/04/25 09:04			
6	L511159-06 MWT-19A	Grab	Water	11/04/25 08:07			
7	L511159-07 Field Blank	Grab	Water	11/04/25 07:45			

240-237026 COC

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished By:	Date/Time:		
Jennifer Caporale	11/05/25 12:55	Jennifer Caporale	11/05/25 12:55	KMartin 11/6/25	800 Eurofins

Chain of Custody Number: **424563**

*H – Analysis on hold.

Coolers								
Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20251105A001								
MIC20251105A001								

Chain of Custody Methods

eurofins | Environment Testing

Samples		Methods																				
#	Sample Name	903.0 / Radium-226 (GFPC) / Standard Target List	200.8 / Metals (ICP/MS) / Iron & Zinc	Ra226_Ra228 Pos / Combined Radium-226 and Radium-228	200.8 / Metals (ICP/MS) / Custom List 2 2-3 Metals	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	200.7 R4.4-1994 / Metals (ICP) / Total Boron	245.1 1994 R3.0 / Mercury (CVAA) / Mercury	200 7 Rev 4.4 / Metals (ICP) / Total Na & K	200.8 / Metals (ICP/MS) / Custom List 1 1 Metals	904.0 / Radium-228 (GFPC) / Standard Target List	2540 C-2020 / Solids, Total Dissolved (TDS) / Total Dissolved S	2320 B-2021 / Alkalinity / Bicarbonate & Carbonate Alkalinity	2540D-2020 / Solids Total Suspended (TSS)	2340 B-2021 / Total Hardness (as CaCO3) by calculation	200.8-1994 R5.4 / Metals (ICP/MS) / Project List (19)	200.7 Rev 4.4 / Metals (ICP) / Iron & Zinc	300.0-1993 R2.1 / Anions, Ion Chromatography / Chloride, Fluor				
1	L511159-01 MW-7D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
2	L511159-02 MW-19A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
3	L511159-03 MW-19B	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
4	L511159-04 MW-19C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
5	L511159-05 MW-19D	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
6	L511159-06 MWT-19A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
7	L511159-07 Field Blank	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				

Chain of Custody Bottles

eurofins | Environment Testing

Bottle Name	Total Bottles
Plastic 1 liter Nitric Acid	14
Plastic 250ml - with Nitric Acid	7
Plastic 500ml with Nitric Acid	7
Plastic 500ml - unpreserved	7
Plastic 1 liter unpreserved	7
Plastic 60 mL - unpreserved	14

Samples		Bottles																				
#	Sample Name	Total Bottles For Sample	Plastic 1 liter - Nitric Acid	Plastic 250ml with Nitric Acid	Plastic 500ml with Nitric Acid	Plastic 500ml unpreserved	Plastic 1 liter unpreserved	Plastic 60 mL unpreserved														
1	L511159-01 MW-7D	8	2	1	1	1	1	2														
2	L511159-02 MW-19A	8	2	1	1	1	1	2														
3	L511159-03 MW-19B	8	2	1	1	1	1	2														
4	L511159-04 MW-19C	8	2	1	1	1	1	2														
5	L511159-05 MW-19D	8	2	1	1	1	1	2														
6	L511159-06 MWT-19A	8	2	1	1	1	1	2														
7	L511159-07 Field Blank	8	2	1	1	1	1	2														

Eurofins – Cleveland Sample Receipt Form/Narrative Login # :_____
Barberton Facility

Client Lansing Board of Water + Light Site Name_____ Cooler unpacked by: KMartin

Cooler Received on 11/6/25 Opened on 11/6/25

FedEx 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other_____

Receipt After-hours Drop-off Date/Time_____ Storage Location_____

Eurofins Cooler # EC Foam Box Client Cooler Box Other_____

Packing material used Bubble Wrap Foam Plastic Bag None Other_____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☒ See Multiple Cooler Form

IR GUN # 13 (CF +0.6 °C) Observed Cooler Temp _____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC567196
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: 13	0.2	0.8	~~Wet Ice~~ Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: ↓	0.4	1.0	~~Wet Ice~~ Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice

11/6/2025

Login Container Summary Report

240-237026

12/8/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L511159-01 MW-7D	240-237026 A 1	Plastic 60 mL - unpreserved				
L511159-01 MW-7D	240 237026-B-1	Plastic 60 mL - unpreserved				
L511159-01 MW-7D	240-237026-C-1	Plastic 250ml - with Nitric Acid	<2			
L511159-01 MW-7D	240-237026-D-1	Plastic 500ml - unpreserved				
L511159-01 MW-7D	240-237026-E-1	Plastic 500ml - with Nitric Acid	<2			
L511159-01 MW-7D	240-237026-F-1	Plastic 1 liter - unpreserved				
L511159-01 MW-7D	240-237026-G-1	Plastic 1 liter - Nitric Acid	<2			
L511159-01 MW-7D	240-237026 H-1	Plastic 1 liter - Nitric Acid	<2			
L511159-02 MW-19A	240-237026-A-2	Plastic 60 mL - unpreserved				
L511159-02 MW-19A	240-237026 B 2	Plastic 60 mL unpreserved				
L511159-02 MW-19A	240-237026-C-2	Plastic 250ml - with Nitric Acid	<2			
L511159-02 MW-19A	240-237026-D-2	Plastic 500ml - unpreserved				
L511159-02 MW-19A	240-237026-E-2	Plastic 500ml - with Nitric Acid	<2			
L511159-02 MW-19A	240-237026-F 2	Plastic 1 liter - unpreserved				
L511159-02 MW-19A	240-237026-G-2	Plastic 1 liter - Nitric Acid	<2			
L511159-02 MW-19A	240-237026-H-2	Plastic 1 liter - Nitric Acid	<2			
L511159-03 MW-19B	240-237026-A-3	Plastic 60 mL - unpreserved				
L511159-03 MW-19B	240-237026-B-3	Plastic 60 mL - unpreserved				
L511159-03 MW-19B	240-237026-C-3	Plastic 250ml - with Nitric Acid	<2			
L511159-03 MW-19B	240-237026-D-3	Plastic 500ml - unpreserved				
L511159-03 MW-19B	240-237026 E-3	Plastic 500ml with Nitric Acid	<2			
L511159-03 MW-19B	240-237026-F-3	Plastic 1 liter - unpreserved				
L511159-03 MW 19B	240-237026-G-3	Plastic 1 liter - Nitric Acid	<2			
L511159-03 MW-19B	240-237026-H-3	Plastic 1 liter - Nitric Acid	<2			
L511159-04 MW 19C	240-237026-A-4	Plastic 60 mL - unpreserved				
L511159-04 MW-19C	240-237026-B-4	Plastic 60 mL - unpreserved				
L511159-04 MW 19C	240-237026-C-4	Plastic 250ml - with Nitric Acid	<2			
L511159-04 MW-19C	240-237026-D-4	Plastic 500ml - unpreserved				
L511159-04 MW 19C	240-237026-E-4	Plastic 500ml - with Nitric Acid	<2			
L511159-04 MW-19C	240-237026-F-4	Plastic 1 liter - unpreserved				
L511159-04 MW 19C	240-237026-G-4	Plastic 1 liter - Nitric Acid	<2			
L511159-04 MW-19C	240-237026-H-4	Plastic 1 liter - Nitric Acid	<2			
L511159-05 MW-19D	240-237026 A 5	Plastic 60 mL unpreserved				
L511159-05 MW-19D	240-237026-B-5	Plastic 60 mL - unpreserved				
L511159-05 MW-19D	240 237026-C-5	Plastic 250ml with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
L511159-05 MW 19D	240 237026-D-5	Plastic 500ml - unpreserved				
L511159-05 MW-19D	240-237026-E-5	Plastic 500ml with Nitric Acid	<2			
L511159-05 MW-19D	240-237026-F 5	Plastic 1 liter - unpreserved				
L511159-05 MW 19D	240 237026-G-5	Plastic 1 liter - Nitric Acid	<2			
L511159-05 MW-19D	240-237026-H 5	Plastic 1 liter Nitric Acid	<2			
L511159-06 MWT-19A	240-237026-A-6	Plastic 60 mL - unpreserved				
L511159-06 MWT-19A	240-237026-B-6	Plastic 60 mL - unpreserved				
L511159-06 MWT 19A	240 237026-C-6	Plastic 250ml - with Nitric Acid	<2			
L511159-06 MWT-19A	240-237026-D-6	Plastic 500ml unpreserved				
L511159-06 MWT-19A	240-237026-E-6	Plastic 500ml - with Nitric Acid	<2			
L511159-06 MWT-19A	240-237026-F-6	Plastic 1 liter - unpreserved				
L511159-06 MWT 19A	240-237026-G-6	Plastic 1 liter - Nitric Acid	<2			
L511159-06 MWT-19A	240-237026-H-6	Plastic 1 liter Nitric Acid	<2			
L511159-07 FIELD BLANK	240-237026-A 7	Plastic 60 mL - unpreserved				
L511159-07 FIELD BLANK	240-237026-B-7	Plastic 60 mL - unpreserved				
L511159-07 FIELD BLANK	240-237026-C-7	Plastic 250ml - with Nitric Acid	<2			
L511159-07 FIELD BLANK	240-237026-D-7	Plastic 500ml - unpreserved				
L511159-07 FIELD BLANK	240 237026-E-7	Plastic 500ml - with Nitric Acid	<2			
L511159-07 FIELD BLANK	240-237026-F-7	Plastic 1 liter - unpreserved				
L511159-07 FIELD BLANK	240-237026-G-7	Plastic 1 liter Nitric Acid	<2			
L511159-07 FIELD BLANK	240-237026-H-7	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-210611.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 240-237026-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 11/19/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21Standard Target List	904.0/PrecSep_0Standard Target List	Ra226_228GFPC_P	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
L511159-01 MW-7D (240-237026-1)	11/4/25	11:13 Eastern	G	Water			X	X	X	2	
L511159-02 MW-19A (240-237026-2)	11/4/25	08:07 Eastern	G	Water			X	X	X	2	
L511159-03 MW-19B (240-237026-3)	11/4/25	10:02 Eastern	G	Water			X	X	X	2	
L511159-04 MW-19C (240-237026-4)	11/4/25	11:22 Eastern	G	Water			X	X	X	2	
L511159-05 MW-19D (240-237026-5)	11/4/25	09:04 Eastern	G	Water			X	X	X	2	
L511159-06 MWT-19A (240-237026-6)	11/4/25	08:07 Eastern	G	Water			X	X	X	2	
L511159-07 FIELD BLANK (240-237026-7)	11/4/25	07:45 Eastern	G	Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JLS	11/6/25 1530	EE	Sierra Worthington	NOV 07 2025 0845	EMSN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-237026-2

Login Number: 237026
List Number: 2
Creator: Worthington, Sierra M

List Source: Eurofins St. Louis
List Creation: 11/07/25 12:06 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 12/3/2025 1:35:23 PM Revision 1

JOB DESCRIPTION

Erickson Project - MNA Tier II Geochem

JOB NUMBER

240-238040-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

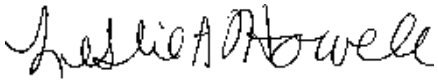
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
12/3/2025 1:35:23 PM
Revision 1

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 12
QC Sample Results 23
QC Association Summary 28
Lab Chronicle 32
Certification Summary 37
Chain of Custody 38
Receipt Checklists 52

Definitions/Glossary

Client: Lansing Board of Water & Light
Project/Site: Erickson Project - MNA Tier II Geochem

Job ID: 240-238040-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-238040-1 Eurofins Cleveland

Job Narrative
240-238040-1

REVISION

The report being provided is a revision of the original report sent on 12/2/2025. The report (revision 1) is being revised due to Sample IDs updated per client request..

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 11/19/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.7°C and 1.0°C.

Metals
Method 200.8_CWA - Dissolved: The following samples were diluted due to the abundance of non-target analytes: L511199-01 MW-6 (240-238040-1), L511199-02 MW-7C (240-238040-2), L511199-03 MW-7D (240-238040-3), L511199-04 MW-14 (240-238040-4), L511199-05 MW-17A (240-238040-5), L511199-06 MW-17B (240-238040-6), L511199-07 MW-17C (240-238040-7), L511199-08 MW-17D (240-238040-8), L511199-09 MW-17E (240-238040-9), L511199-10 MWT-17A (240-238040-10) and L511199-11 Field Blank (240-238040-11). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 300: The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: L511199-10 MWT-17A (240-238040-10) and L511199-11 Field Blank (240-238040-11).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Job ID: 240-238040-1
Project/Site: Erickson Project - MNA Tier II Geochem

Method	Method Description	Protocol	Laboratory
200.7 Rev 4.4	Metals (ICP)	EPA	EET SSM
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
300.0-1993 R2.1	Anions, Ion Chromatography	EPA	EET CLE
5310 C-2014	Total Organic Carbon/Persulfate - Ultrav	SM	EET CLE
SM 4500 S2 D	Sulfide, Total	SM	EET CAL 4
200.7	Preparation, Total Metals	EPA	EET SSM
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Project - MNA Tier II Geochem

Job ID: 240-238040-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-238040-1	L511199-01 MW-6	Water	11/17/25 15:22	11/19/25 08:00	Michigan
240-238040-2	L511199-02 MW-7C	Water	11/17/25 17:44	11/19/25 08:00	Michigan
240-238040-3	L511199-03 MW-7D	Water	11/17/25 16:40	11/19/25 08:00	Michigan
240-238040-4	L511199-04 MW-14	Water	11/17/25 13:32	11/19/25 08:00	Michigan
240-238040-5	L511199-05 MW-17A	Water	11/17/25 10:37	11/19/25 08:00	Michigan
240-238040-6	L511199-06 MW-17B	Water	11/17/25 12:00	11/19/25 08:00	Michigan
240-238040-7	L511199-07 MW-17C	Water	11/17/25 13:01	11/19/25 08:00	Michigan
240-238040-8	L511199-08 MW-17D	Water	11/17/25 14:08	11/19/25 08:00	Michigan
240-238040-9	L511199-09 MW-17E	Water	11/17/25 15:11	11/19/25 08:00	Michigan
240-238040-10	L511199-10 MWT-17A	Water	11/17/25 10:37	11/19/25 08:00	Michigan
240-238040-11	L511199-11 Field Blank	Water	11/17/25 09:40	11/19/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Job ID: 240-238040-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511199-01 MW-6 — Lab Sample ID: 240-238040-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	0.91		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic, Dissolved	0.00081	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	0.047		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	150		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Cobalt, Dissolved	0.00042	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.047		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	37		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.022		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	0.0026		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	5.5		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	27		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Total Organic Carbon	2.0		1.0	0.44	mg/L	1		5310 C-2014	Total/NA

Client Sample ID: L511199-02 MW-7C — Lab Sample ID: 240-238040-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	6.5		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic, Dissolved	0.0047	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	0.038		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	220		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.11		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	40		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.35		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	0.0062		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.22		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	4.9		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	85		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	3.7		0.50	0.067	mg/L	5		200.8	Dissolved
Total Organic Carbon	3.0		1.0	0.44	mg/L	1		5310 C-2014	Total/NA
Total Sulfide	0.043	J	0.050	0.028	mg/L	1		SM 4500 S2 D	Total/NA

Client Sample ID: L511199-03 MW-7D — Lab Sample ID: 240-238040-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	1.4		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic, Dissolved	0.00080	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	0.047		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	70		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Cobalt, Dissolved	0.00017	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.033		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	25		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.0020	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.072		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	10		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	17		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	0.16	J	0.50	0.067	mg/L	5		200.8	Dissolved

Client Sample ID: L511199-04 MW-14 — Lab Sample ID: 240-238040-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	2.0		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic, Dissolved	0.0078		0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: L511199-04 MW-14 (Continued) — Lab Sample ID: 240-238040-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium, Dissolved	0.16		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	170		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Cobalt, Dissolved	0.00056	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.10		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	45		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.014		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	0.0042		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Dissolved
Vanadium, Dissolved	0.0013	J	0.0050	0.00082	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.73		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	4.7		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	76		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	15		0.50	0.067	mg/L	5		200.8	Dissolved
Aluminum, Dissolved	0.0063	J	0.040	0.0058	mg/L	1		200.8	Dissolved
Total Organic Carbon	15		1.0	0.44	mg/L	1		5310 C-2014	Total/NA

Client Sample ID: L511199-05 MW-17A — Lab Sample ID: 240-238040-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	4.0		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic, Dissolved	0.0017	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	0.040		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	270		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.050		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	72		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.018		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	0.012		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.14		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	2.4		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	53		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	7.4		0.50	0.067	mg/L	5		200.8	Dissolved
Zinc, Dissolved	0.0014	J	0.0070	0.00093	mg/L	1		200.8	Dissolved
Total Organic Carbon	3.4		1.0	0.44	mg/L	1		5310 C-2014	Total/NA

Client Sample ID: L511199-06 MW-17B — Lab Sample ID: 240-238040-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	1.9		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic, Dissolved	0.0026	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	0.042		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	120		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.091		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	30		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.11		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	0.0034		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.080		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	3.9		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	83		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	2.1		0.50	0.067	mg/L	5		200.8	Dissolved
Zinc, Dissolved	0.0033	J	0.0070	0.00093	mg/L	1		200.8	Dissolved
Total Organic Carbon	2.3		1.0	0.44	mg/L	1		5310 C-2014	Total/NA
Total Sulfide	0.046	J	0.050	0.028	mg/L	1		SM 4500 S2 D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Project/Site: Erickson Project - MNA Tier II Geochem

Job ID: 240-238040-1

Client Sample ID: L511199-07 MW-17C — Lab Sample ID: 240-238040-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	2.6		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic, Dissolved	0.0028	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	0.058		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	180		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.048		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	49		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.033		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	0.0084		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.074		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	5.6		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	100		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	3.4		0.50	0.067	mg/L	5		200.8	Dissolved
Total Organic Carbon	3.0		1.0	0.44	mg/L	1		5310 C-2014	Total/NA
Total Sulfide	0.039	J	0.050	0.028	mg/L	1		SM 4500 S2 D	Total/NA

Client Sample ID: L511199-08 MW-17D — Lab Sample ID: 240-238040-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	2.4		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic, Dissolved	0.0011	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	0.040		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	47		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.030		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	16		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.0047	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.024		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	8.6		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	44		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	0.72		0.50	0.067	mg/L	5		200.8	Dissolved
Total Sulfide	0.058		0.050	0.028	mg/L	1		SM 4500 S2 D	Total/NA

Client Sample ID: L511199-09 MW-17E — Lab Sample ID: 240-238040-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	3.2		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Barium, Dissolved	0.0040	J	0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	5.0		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.022		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	1.4		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.0047	J	0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	3.7		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	140		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Aluminum, Dissolved	0.011	J	0.040	0.0058	mg/L	1		200.8	Dissolved

Client Sample ID: L511199-10 MWT-17A — Lab Sample ID: 240-238040-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	4.1		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic, Dissolved	0.0014	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	0.039		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	260		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.049		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Job ID: 240-238040-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511199-10 MWT-17A (Continued) — Lab Sample ID: 240-238040-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium, Dissolved	69		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.018		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	0.012		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.14		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	2.3		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	51		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	7.8		0.50	0.067	mg/L	5		200.8	Dissolved
Zinc, Dissolved	0.0013	J	0.0070	0.00093	mg/L	1		200.8	Dissolved
Total Organic Carbon	3.5		1.0	0.44	mg/L	1		5310 C-2014	Total/NA

Client Sample ID: L511199-11 Field Blank — Lab Sample ID: 240-238040-11

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Lansing Board of Water & Light
Project/Site: Erickson Project - MNA Tier II Geochem

Job ID: 240-238040-1

Client Sample ID: L511199-01 MW-6

Date Collected: 11/17/25 15:22
Date Received: 11/19/25 08:00

Lab Sample ID: 240-238040-1

Matrix: Water

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**0.91**		0.50	0.041	mg/L		11/24/25 16:15	11/25/25 21:58	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	**0.00081**	**J**	0.0050	0.00075	mg/L		11/21/25 05:00	11/22/25 16:42	1
Barium, Dissolved	**0.047**		0.0050	0.00077	mg/L		11/21/25 05:00	11/22/25 16:42	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 05:00	11/22/25 16:42	1
Calcium, Dissolved	**150**		1.0	0.25	mg/L		11/21/25 05:00	11/22/25 16:42	1
Cobalt, Dissolved	**0.00042**	**J**	0.0010	0.000086	mg/L		11/21/25 05:00	11/22/25 16:42	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 05:00	11/22/25 16:42	1
Lithium, Dissolved	**0.047**		0.0080	0.0034	mg/L		11/21/25 05:00	11/22/25 16:42	1
Magnesium, Dissolved	**37**		1.0	0.061	mg/L		11/21/25 05:00	11/22/25 16:42	1
Molybdenum, Dissolved	**0.022**		0.0050	0.0011	mg/L		11/21/25 05:00	11/22/25 16:42	1
Nickel, Dissolved	**0.0026**		0.0020	0.0015	mg/L		11/21/25 05:00	11/22/25 16:42	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 05:00	11/22/25 16:42	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 05:00	11/22/25 16:42	1
Manganese, Dissolved	ND		0.0050	0.0035	mg/L		11/21/25 05:00	11/22/25 16:42	1
Potassium, Dissolved	**5.5**		1.0	0.22	mg/L		11/21/25 05:00	11/22/25 16:42	1
Sodium, Dissolved	**27**		1.0	0.88	mg/L		11/21/25 05:00	11/22/25 16:42	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.50	0.067	mg/L		11/24/25 16:15	12/01/25 17:14	5
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/24/25 16:15	11/30/25 19:06	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/24/25 16:15	11/30/25 19:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (EPA 300.0-1993 R2.1)	ND		0.10	0.014	mg/L			11/19/25 12:31	1
Nitrate as N (EPA 300.0-1993 R2.1)	ND		0.10	0.015	mg/L			11/19/25 12:31	1
Total Organic Carbon (SM 5310 C-2014)	**2.0**		1.0	0.44	mg/L			11/23/25 10:14	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/24/25 18:44	1

Client Sample ID: L511199-02 MW-7C
Lab Sample ID: 240-238040-2

Date Collected: 11/17/25 17:44
Matrix: Water
Date Received: 11/19/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**6.5**		0.50	0.041	mg/L		11/24/25 16:15	11/25/25 22:01	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	**0.0047**	**J**	0.0050	0.00075	mg/L		11/21/25 05:00	11/22/25 16:45	1
Barium, Dissolved	**0.038**		0.0050	0.00077	mg/L		11/21/25 05:00	11/22/25 16:45	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 05:00	11/22/25 16:45	1
Calcium, Dissolved	**220**		1.0	0.25	mg/L		11/21/25 05:00	11/22/25 16:45	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 05:00	11/22/25 16:45	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 05:00	11/22/25 16:45	1
Lithium, Dissolved	**0.11**		0.0080	0.0034	mg/L		11/21/25 05:00	11/22/25 16:45	1
Magnesium, Dissolved	**40**		1.0	0.061	mg/L		11/21/25 05:00	11/22/25 16:45	1
Molybdenum, Dissolved	**0.35**		0.0050	0.0011	mg/L		11/21/25 05:00	11/22/25 16:45	1
Nickel, Dissolved	**0.0062**		0.0020	0.0015	mg/L		11/21/25 05:00	11/22/25 16:45	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 05:00	11/22/25 16:45	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 05:00	11/22/25 16:45	1
Manganese, Dissolved	**0.22**		0.0050	0.0035	mg/L		11/21/25 05:00	11/22/25 16:45	1
Potassium, Dissolved	**4.9**		1.0	0.22	mg/L		11/21/25 05:00	11/22/25 16:45	1
Sodium, Dissolved	**85**		1.0	0.88	mg/L		11/21/25 05:00	11/22/25 16:45	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**3.7**		0.50	0.067	mg/L		11/24/25 16:15	12/01/25 17:17	5
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/24/25 16:15	11/30/25 19:09	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/24/25 16:15	11/30/25 19:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (EPA 300.0-1993 R2.1)	ND		0.10	0.014	mg/L			11/19/25 13:07	1
Nitrate as N (EPA 300.0-1993 R2.1)	ND		0.10	0.015	mg/L			11/19/25 13:07	1
Total Organic Carbon (SM 5310 C-2014)	**3.0**		1.0	0.44	mg/L			11/23/25 11:49	1
Total Sulfide (SM 4500 S2 D)	**0.043**	**J**	0.050	0.028	mg/L			11/24/25 18:50	1

Client Sample ID: L511199-03 MW-7D
Lab Sample ID: 240-238040-3

Date Collected: 11/17/25 16:40
Matrix: Water
Date Received: 11/19/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**1.4**		0.50	0.041	mg/L		11/24/25 16:15	11/25/25 22:05	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	**0.00080**	**J**	0.0050	0.00075	mg/L		11/21/25 05:00	11/22/25 16:48	1
Barium, Dissolved	**0.047**		0.0050	0.00077	mg/L		11/21/25 05:00	11/22/25 16:48	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 05:00	11/22/25 16:48	1
Calcium, Dissolved	**70**		1.0	0.25	mg/L		11/21/25 05:00	11/22/25 16:48	1
Cobalt, Dissolved	**0.00017**	**J**	0.0010	0.000086	mg/L		11/21/25 05:00	11/22/25 16:48	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 05:00	11/22/25 16:48	1
Lithium, Dissolved	**0.033**		0.0080	0.0034	mg/L		11/21/25 05:00	11/22/25 16:48	1
Magnesium, Dissolved	**25**		1.0	0.061	mg/L		11/21/25 05:00	11/22/25 16:48	1
Molybdenum, Dissolved	**0.0020**	**J**	0.0050	0.0011	mg/L		11/21/25 05:00	11/22/25 16:48	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		11/21/25 05:00	11/22/25 16:48	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 05:00	11/22/25 16:48	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 05:00	11/22/25 16:48	1
Manganese, Dissolved	**0.072**		0.0050	0.0035	mg/L		11/21/25 05:00	11/22/25 16:48	1
Potassium, Dissolved	**10**		1.0	0.22	mg/L		11/21/25 05:00	11/22/25 16:48	1
Sodium, Dissolved	**17**		1.0	0.88	mg/L		11/21/25 05:00	11/22/25 16:48	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**0.16**	**J**	0.50	0.067	mg/L		11/24/25 16:15	12/01/25 17:21	5
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/24/25 16:15	11/30/25 19:12	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/24/25 16:15	11/30/25 19:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (EPA 300.0-1993 R2.1)	ND		0.10	0.014	mg/L			11/19/25 13:26	1
Nitrate as N (EPA 300.0-1993 R2.1)	ND		0.10	0.015	mg/L			11/19/25 13:26	1
Total Organic Carbon (SM 5310 C-2014)	ND		1.0	0.44	mg/L			11/23/25 12:11	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/24/25 18:52	1

Client Sample ID: L511199-04 MW-14

Lab Sample ID: 240-238040-4

Date Collected: 11/17/25 13:32

Matrix: Water

Date Received: 11/19/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**2.0**		0.50	0.041	mg/L		11/24/25 16:15	11/25/25 22:08	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	**0.0078**		0.0050	0.00075	mg/L		11/21/25 05:00	11/22/25 16:50	1
Barium, Dissolved	**0.16**		0.0050	0.00077	mg/L		11/21/25 05:00	11/22/25 16:50	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 05:00	11/22/25 16:50	1
Calcium, Dissolved	**170**		1.0	0.25	mg/L		11/21/25 05:00	11/22/25 16:50	1
Cobalt, Dissolved	**0.00056**	**J**	0.0010	0.000086	mg/L		11/21/25 05:00	11/22/25 16:50	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 05:00	11/22/25 16:50	1
Lithium, Dissolved	**0.10**		0.0080	0.0034	mg/L		11/21/25 05:00	11/22/25 16:50	1
Magnesium, Dissolved	**45**		1.0	0.061	mg/L		11/21/25 05:00	11/22/25 16:50	1
Molybdenum, Dissolved	**0.014**		0.0050	0.0011	mg/L		11/21/25 05:00	11/22/25 16:50	1
Nickel, Dissolved	**0.0042**		0.0020	0.0015	mg/L		11/21/25 05:00	11/22/25 16:50	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 05:00	11/22/25 16:50	1
Vanadium, Dissolved	**0.0013**	**J**	0.0050	0.00082	mg/L		11/21/25 05:00	11/22/25 16:50	1
Manganese, Dissolved	**0.73**		0.0050	0.0035	mg/L		11/21/25 05:00	11/22/25 16:50	1
Potassium, Dissolved	**4.7**		1.0	0.22	mg/L		11/21/25 05:00	11/22/25 16:50	1
Sodium, Dissolved	**76**		1.0	0.88	mg/L		11/21/25 05:00	11/22/25 16:50	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**15**		0.50	0.067	mg/L		11/24/25 16:15	12/01/25 17:25	5
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/24/25 16:15	11/30/25 19:14	1
Aluminum, Dissolved	**0.0063**	**J**	0.040	0.0058	mg/L		11/24/25 16:15	11/30/25 19:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (EPA 300.0-1993 R2.1)	ND		0.10	0.014	mg/L			11/19/25 11:54	1
Nitrate as N (EPA 300.0-1993 R2.1)	ND		0.10	0.015	mg/L			11/19/25 11:54	1
Total Organic Carbon (SM 5310 C-2014)	**15**		1.0	0.44	mg/L			11/23/25 12:34	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/24/25 18:54	1

Client Sample ID: L511199-05 MW-17A
Lab Sample ID: 240-238040-5

Date Collected: 11/17/25 10:37
Matrix: Water
Date Received: 11/19/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**4.0**		0.50	0.041	mg/L		11/24/25 16:15	11/25/25 22:11	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	**0.0017**	**J**	0.0050	0.00075	mg/L		11/21/25 05:00	11/22/25 16:53	1
Barium, Dissolved	**0.040**		0.0050	0.00077	mg/L		11/21/25 05:00	11/22/25 16:53	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 05:00	11/22/25 16:53	1
Calcium, Dissolved	**270**		1.0	0.25	mg/L		11/21/25 05:00	11/22/25 16:53	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 05:00	11/22/25 16:53	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 05:00	11/22/25 16:53	1
Lithium, Dissolved	**0.050**		0.0080	0.0034	mg/L		11/21/25 05:00	11/22/25 16:53	1
Magnesium, Dissolved	**72**		1.0	0.061	mg/L		11/21/25 05:00	11/22/25 16:53	1
Molybdenum, Dissolved	**0.018**		0.0050	0.0011	mg/L		11/21/25 05:00	11/22/25 16:53	1
Nickel, Dissolved	**0.012**		0.0020	0.0015	mg/L		11/21/25 05:00	11/22/25 16:53	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 05:00	11/22/25 16:53	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 05:00	11/22/25 16:53	1
Manganese, Dissolved	**0.14**		0.0050	0.0035	mg/L		11/21/25 05:00	11/22/25 16:53	1
Potassium, Dissolved	**2.4**		1.0	0.22	mg/L		11/21/25 05:00	11/22/25 16:53	1
Sodium, Dissolved	**53**		1.0	0.88	mg/L		11/21/25 05:00	11/22/25 16:53	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**7.4**		0.50	0.067	mg/L		11/24/25 16:15	12/01/25 17:28	5
Zinc, Dissolved	**0.0014**	**J**	0.0070	0.00093	mg/L		11/24/25 16:15	11/30/25 19:17	1
Aluminum, Dissolved	ND		0.20	0.029	mg/L		11/24/25 16:15	12/01/25 17:28	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (EPA 300.0-1993 R2.1)	ND		0.10	0.014	mg/L			11/19/25 10:22	1
Nitrate as N (EPA 300.0-1993 R2.1)	ND		0.10	0.015	mg/L			11/19/25 10:22	1
Total Organic Carbon (SM 5310 C-2014)	**3.4**		1.0	0.44	mg/L			11/23/25 14:27	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/24/25 18:56	1

Client Sample ID: L511199-06 MW-17B
Lab Sample ID: 240-238040-6

Date Collected: 11/17/25 12:00
Matrix: Water
Date Received: 11/19/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**1.9**		0.50	0.041	mg/L		11/24/25 16:15	11/25/25 22:14	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	**0.0026**	**J**	0.0050	0.00075	mg/L		11/21/25 05:00	11/22/25 16:56	1
Barium, Dissolved	**0.042**		0.0050	0.00077	mg/L		11/21/25 05:00	11/22/25 16:56	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 05:00	11/22/25 16:56	1
Calcium, Dissolved	**120**		1.0	0.25	mg/L		11/21/25 05:00	11/22/25 16:56	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 05:00	11/22/25 16:56	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 05:00	11/22/25 16:56	1
Lithium, Dissolved	**0.091**		0.0080	0.0034	mg/L		11/21/25 05:00	11/22/25 16:56	1
Magnesium, Dissolved	**30**		1.0	0.061	mg/L		11/21/25 05:00	11/22/25 16:56	1
Molybdenum, Dissolved	**0.11**		0.0050	0.0011	mg/L		11/21/25 05:00	11/22/25 16:56	1
Nickel, Dissolved	**0.0034**		0.0020	0.0015	mg/L		11/21/25 05:00	11/22/25 16:56	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 05:00	11/22/25 16:56	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 05:00	11/22/25 16:56	1
Manganese, Dissolved	**0.080**		0.0050	0.0035	mg/L		11/21/25 05:00	11/22/25 16:56	1
Potassium, Dissolved	**3.9**		1.0	0.22	mg/L		11/21/25 05:00	11/22/25 16:56	1
Sodium, Dissolved	**83**		1.0	0.88	mg/L		11/21/25 05:00	11/22/25 16:56	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**2.1**		0.50	0.067	mg/L		11/24/25 16:15	12/01/25 17:32	5
Zinc, Dissolved	**0.0033**	**J**	0.0070	0.00093	mg/L		11/24/25 16:15	11/30/25 19:20	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/24/25 16:15	11/30/25 19:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (EPA 300.0-1993 R2.1)	ND		0.10	0.014	mg/L			11/19/25 11:17	1
Nitrate as N (EPA 300.0-1993 R2.1)	ND		0.10	0.015	mg/L			11/19/25 11:17	1
Total Organic Carbon (SM 5310 C-2014)	**2.3**		1.0	0.44	mg/L			11/23/25 14:50	1
Total Sulfide (SM 4500 S2 D)	**0.046**	**J**	0.050	0.028	mg/L			11/24/25 18:58	1

Client Sample ID: L511199-07 MW-17C
Lab Sample ID: 240-238040-7

Date Collected: 11/17/25 13:01
Matrix: Water
Date Received: 11/19/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**2.6**		0.50	0.041	mg/L		11/24/25 16:15	11/25/25 22:18	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	**0.0028**	**J**	0.0050	0.00075	mg/L		11/21/25 05:00	11/22/25 16:59	1
Barium, Dissolved	**0.058**		0.0050	0.00077	mg/L		11/21/25 05:00	11/22/25 16:59	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 05:00	11/22/25 16:59	1
Calcium, Dissolved	**180**		1.0	0.25	mg/L		11/21/25 05:00	11/22/25 16:59	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 05:00	11/22/25 16:59	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 05:00	11/22/25 16:59	1
Lithium, Dissolved	**0.048**		0.0080	0.0034	mg/L		11/21/25 05:00	11/22/25 16:59	1
Magnesium, Dissolved	**49**		1.0	0.061	mg/L		11/21/25 05:00	11/22/25 16:59	1
Molybdenum, Dissolved	**0.033**		0.0050	0.0011	mg/L		11/21/25 05:00	11/22/25 16:59	1
Nickel, Dissolved	**0.0084**		0.0020	0.0015	mg/L		11/21/25 05:00	11/22/25 16:59	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 05:00	11/22/25 16:59	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 05:00	11/22/25 16:59	1
Manganese, Dissolved	**0.074**		0.0050	0.0035	mg/L		11/21/25 05:00	11/22/25 16:59	1
Potassium, Dissolved	**5.6**		1.0	0.22	mg/L		11/21/25 05:00	11/22/25 16:59	1
Sodium, Dissolved	**100**		1.0	0.88	mg/L		11/21/25 05:00	11/22/25 16:59	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**3.4**		0.50	0.067	mg/L		11/24/25 16:15	12/01/25 17:41	5
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/24/25 16:15	11/30/25 19:29	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/24/25 16:15	11/30/25 19:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (EPA 300.0-1993 R2.1)	ND		0.10	0.014	mg/L			11/19/25 11:35	1
Nitrate as N (EPA 300.0-1993 R2.1)	ND		0.10	0.015	mg/L			11/19/25 11:35	1
Total Organic Carbon (SM 5310 C-2014)	**3.0**		1.0	0.44	mg/L			11/23/25 16:02	1
Total Sulfide (SM 4500 S2 D)	**0.039**	**J**	0.050	0.028	mg/L			11/24/25 19:00	1

Client Sample ID: L511199-08 MW-17D
Lab Sample ID: 240-238040-8

Date Collected: 11/17/25 14:08
Matrix: Water
Date Received: 11/19/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**2.4**		0.50	0.041	mg/L		11/24/25 16:15	11/25/25 22:21	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	**0.0011**	**J**	0.0050	0.00075	mg/L		11/21/25 05:00	11/22/25 17:01	1
Barium, Dissolved	**0.040**		0.0050	0.00077	mg/L		11/21/25 05:00	11/22/25 17:01	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 05:00	11/22/25 17:01	1
Calcium, Dissolved	**47**		1.0	0.25	mg/L		11/21/25 05:00	11/22/25 17:01	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 05:00	11/22/25 17:01	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 05:00	11/22/25 17:01	1
Lithium, Dissolved	**0.030**		0.0080	0.0034	mg/L		11/21/25 05:00	11/22/25 17:01	1
Magnesium, Dissolved	**16**		1.0	0.061	mg/L		11/21/25 05:00	11/22/25 17:01	1
Molybdenum, Dissolved	**0.0047**	**J**	0.0050	0.0011	mg/L		11/21/25 05:00	11/22/25 17:01	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		11/21/25 05:00	11/22/25 17:01	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 05:00	11/22/25 17:01	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 05:00	11/22/25 17:01	1
Manganese, Dissolved	**0.024**		0.0050	0.0035	mg/L		11/21/25 05:00	11/22/25 17:01	1
Potassium, Dissolved	**8.6**		1.0	0.22	mg/L		11/21/25 05:00	11/22/25 17:01	1
Sodium, Dissolved	**44**		1.0	0.88	mg/L		11/21/25 05:00	11/22/25 17:01	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**0.72**		0.50	0.067	mg/L		11/24/25 16:15	12/01/25 17:44	5
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/24/25 16:15	11/30/25 19:32	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/24/25 16:15	11/30/25 19:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (EPA 300.0-1993 R2.1)	ND		0.10	0.014	mg/L			11/19/25 10:13	1
Nitrate as N (EPA 300.0-1993 R2.1)	ND		0.10	0.015	mg/L			11/19/25 10:13	1
Total Organic Carbon (SM 5310 C-2014)	ND		1.0	0.44	mg/L			11/23/25 16:24	1
Total Sulfide (SM 4500 S2 D)	**0.058**		0.050	0.028	mg/L			11/24/25 19:02	1

Client: Lansing Board of Water & Light
Job ID: 240-238040-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511199-09 MW-17E
Lab Sample ID: 240-238040-9

Date Collected: 11/17/25 15:11
Matrix: Water
Date Received: 11/19/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**3.2**		0.50	0.041	mg/L		11/24/25 16:15	11/25/25 22:24	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		11/21/25 05:00	11/22/25 17:04	1
Barium, Dissolved	**0.0040**	**J**	0.0050	0.00077	mg/L		11/21/25 05:00	11/22/25 17:04	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 05:00	11/22/25 17:04	1
Calcium, Dissolved	**5.0**		1.0	0.25	mg/L		11/21/25 05:00	11/22/25 17:04	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 05:00	11/22/25 17:04	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 05:00	11/22/25 17:04	1
Lithium, Dissolved	**0.022**		0.0080	0.0034	mg/L		11/21/25 05:00	11/22/25 17:04	1
Magnesium, Dissolved	**1.4**		1.0	0.061	mg/L		11/21/25 05:00	11/22/25 17:04	1
Molybdenum, Dissolved	ND		0.0050	0.0011	mg/L		11/21/25 05:00	11/22/25 17:04	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		11/21/25 05:00	11/22/25 17:04	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 05:00	11/22/25 17:04	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 05:00	11/22/25 17:04	1
Manganese, Dissolved	**0.0047**	**J**	0.0050	0.0035	mg/L		11/21/25 05:00	11/22/25 17:04	1
Potassium, Dissolved	**3.7**		1.0	0.22	mg/L		11/21/25 05:00	11/22/25 17:04	1
Sodium, Dissolved	**140**		1.0	0.88	mg/L		11/21/25 05:00	11/22/25 17:04	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.50	0.067	mg/L		11/24/25 16:15	12/01/25 17:48	5
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/24/25 16:15	11/30/25 19:35	1
Aluminum, Dissolved	**0.011**	**J**	0.040	0.0058	mg/L		11/24/25 16:15	11/30/25 19:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (EPA 300.0-1993 R2.1)	ND		0.10	0.014	mg/L			11/19/25 12:12	1
Nitrate as N (EPA 300.0-1993 R2.1)	ND		0.10	0.015	mg/L			11/19/25 12:12	1
Total Organic Carbon (SM 5310 C-2014)	ND		1.0	0.44	mg/L			11/23/25 16:47	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/24/25 19:04	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Project - MNA Tier II Geochem

Job ID: 240-238040-1

Client Sample ID: L511199-10 MWT-17A

Date Collected: 11/17/25 10:37
Date Received: 11/19/25 08:00

Lab Sample ID: 240-238040-10

Matrix: Water

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**4.1**		0.50	0.041	mg/L		11/24/25 16:15	11/25/25 22:35	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	**0.0014**	**J**	0.0050	0.00075	mg/L		11/21/25 05:00	11/22/25 17:06	1
Barium, Dissolved	**0.039**		0.0050	0.00077	mg/L		11/21/25 05:00	11/22/25 17:06	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 05:00	11/22/25 17:06	1
Calcium, Dissolved	**260**		1.0	0.25	mg/L		11/21/25 05:00	11/22/25 17:06	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 05:00	11/22/25 17:06	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 05:00	11/22/25 17:06	1
Lithium, Dissolved	**0.049**		0.0080	0.0034	mg/L		11/21/25 05:00	11/22/25 17:06	1
Magnesium, Dissolved	**69**		1.0	0.061	mg/L		11/21/25 05:00	11/22/25 17:06	1
Molybdenum, Dissolved	**0.018**		0.0050	0.0011	mg/L		11/21/25 05:00	11/22/25 17:06	1
Nickel, Dissolved	**0.012**		0.0020	0.0015	mg/L		11/21/25 05:00	11/22/25 17:06	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 05:00	11/22/25 17:06	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 05:00	11/22/25 17:06	1
Manganese, Dissolved	**0.14**		0.0050	0.0035	mg/L		11/21/25 05:00	11/22/25 17:06	1
Potassium, Dissolved	**2.3**		1.0	0.22	mg/L		11/21/25 05:00	11/22/25 17:06	1
Sodium, Dissolved	**51**		1.0	0.88	mg/L		11/21/25 05:00	11/22/25 17:06	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**7.8**		0.50	0.067	mg/L		11/24/25 16:15	12/01/25 17:52	5
Zinc, Dissolved	**0.0013**	**J**	0.0070	0.00093	mg/L		11/24/25 16:15	11/30/25 19:38	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/24/25 16:15	11/30/25 19:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (EPA 300.0-1993 R2.1)	ND	H	0.10	0.014	mg/L			11/19/25 10:41	1
Nitrate as N (EPA 300.0-1993 R2.1)	ND	H	0.10	0.015	mg/L			11/19/25 10:41	1
Total Organic Carbon (SM 5310 C-2014)	**3.5**		1.0	0.44	mg/L			11/23/25 17:10	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/24/25 19:06	1

Client: Lansing Board of Water & Light
Project/Site: Erickson Project - MNA Tier II Geochem

Job ID: 240-238040-1

Client Sample ID: L511199-11 Field Blank

Lab Sample ID: 240-238040-11

Date Collected: 11/17/25 09:40
Date Received: 11/19/25 08:00

Matrix: Water

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	ND		0.50	0.041	mg/L		11/24/25 16:15	11/25/25 22:38	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		11/21/25 05:00	11/22/25 17:14	1
Barium, Dissolved	ND		0.0050	0.00077	mg/L		11/21/25 05:00	11/22/25 17:14	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 05:00	11/22/25 17:14	1
Calcium, Dissolved	ND		1.0	0.25	mg/L		11/21/25 05:00	11/22/25 17:14	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 05:00	11/22/25 17:14	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 05:00	11/22/25 17:14	1
Lithium, Dissolved	ND		0.0080	0.0034	mg/L		11/21/25 05:00	11/22/25 17:14	1
Magnesium, Dissolved	ND		1.0	0.061	mg/L		11/21/25 05:00	11/22/25 17:14	1
Molybdenum, Dissolved	ND		0.0050	0.0011	mg/L		11/21/25 05:00	11/22/25 17:14	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		11/21/25 05:00	11/22/25 17:14	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 05:00	11/22/25 17:14	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 05:00	11/22/25 17:14	1
Manganese, Dissolved	ND		0.0050	0.0035	mg/L		11/21/25 05:00	11/22/25 17:14	1
Potassium, Dissolved	ND		1.0	0.22	mg/L		11/21/25 05:00	11/22/25 17:14	1
Sodium, Dissolved	ND		1.0	0.88	mg/L		11/21/25 05:00	11/22/25 17:14	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.50	0.067	mg/L		11/24/25 16:15	12/01/25 17:55	5
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/24/25 16:15	11/30/25 19:41	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/24/25 16:15	11/30/25 19:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (EPA 300.0-1993 R2.1)	ND	H	0.10	0.014	mg/L			11/19/25 09:45	1
Nitrate as N (EPA 300.0-1993 R2.1)	ND	H	0.10	0.015	mg/L			11/19/25 09:45	1
Total Organic Carbon (SM 5310 C-2014)	ND		1.0	0.44	mg/L			11/23/25 01:44	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/24/25 19:10	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 350-11332/25-A
Matrix: Water
Analysis Batch: 11397

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11332

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	ND		0.50	0.041	mg/L		11/24/25 16:15	11/25/25 21:16	1

Lab Sample ID: LCS 350-11332/26-A
Matrix: Water
Analysis Batch: 11397

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11332

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron, Dissolved	5.00	5.16		mg/L		103	85 - 115

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-11332/25-A
Matrix: Water
Analysis Batch: 11390

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11332

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.10	0.013	mg/L		11/24/25 16:15	11/25/25 17:57	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/24/25 16:15	11/25/25 17:57	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/24/25 16:15	11/25/25 17:57	1

Lab Sample ID: MB 350-11332/25-A
Matrix: Water
Analysis Batch: 11429

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11332

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.10	0.013	mg/L		11/24/25 16:15	11/30/25 18:25	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/24/25 16:15	11/30/25 18:25	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/24/25 16:15	11/30/25 18:25	1

Lab Sample ID: LCS 350-11332/26-A
Matrix: Water
Analysis Batch: 11390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11332

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron, Dissolved	20.0	19.5		mg/L		98	85 - 115
Zinc, Dissolved	1.00	0.959		mg/L		96	85 - 115
Aluminum, Dissolved	20.0	19.3		mg/L		97	85 - 115

Lab Sample ID: LCS 350-11332/26-A
Matrix: Water
Analysis Batch: 11429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11332

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron, Dissolved	20.0	19.9		mg/L		99	85 - 115
Zinc, Dissolved	1.00	0.984		mg/L		98	85 - 115
Aluminum, Dissolved	20.0	21.0		mg/L		105	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-681405/1-A
Matrix: Water
Analysis Batch: 681766

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 681405

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		11/21/25 05:00	11/22/25 16:02	1
Barium, Dissolved	ND		0.0050	0.00077	mg/L		11/21/25 05:00	11/22/25 16:02	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 05:00	11/22/25 16:02	1
Calcium, Dissolved	ND		1.0	0.25	mg/L		11/21/25 05:00	11/22/25 16:02	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 05:00	11/22/25 16:02	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 05:00	11/22/25 16:02	1
Lithium, Dissolved	ND		0.0080	0.0034	mg/L		11/21/25 05:00	11/22/25 16:02	1
Magnesium, Dissolved	ND		1.0	0.061	mg/L		11/21/25 05:00	11/22/25 16:02	1
Molybdenum, Dissolved	ND		0.0050	0.0011	mg/L		11/21/25 05:00	11/22/25 16:02	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		11/21/25 05:00	11/22/25 16:02	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 05:00	11/22/25 16:02	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 05:00	11/22/25 16:02	1
Manganese, Dissolved	ND		0.0050	0.0035	mg/L		11/21/25 05:00	11/22/25 16:02	1
Potassium, Dissolved	ND		1.0	0.22	mg/L		11/21/25 05:00	11/22/25 16:02	1
Sodium, Dissolved	ND		1.0	0.88	mg/L		11/21/25 05:00	11/22/25 16:02	1

Lab Sample ID: LCS 240-681405/2-A
Matrix: Water
Analysis Batch: 681766

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 681405

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic, Dissolved	1.00	0.995		mg/L		100	85 - 115
Barium, Dissolved	1.00	0.994		mg/L		99	85 - 115
Cadmium, Dissolved	0.500	0.493		mg/L		99	85 - 115
Calcium, Dissolved	25.0	25.1		mg/L		101	85 - 115
Chromium, Dissolved	0.500	0.511		mg/L		102	85 - 115
Cobalt, Dissolved	0.500	0.511		mg/L		102	85 - 115
Copper, Dissolved	0.500	0.501		mg/L		100	85 - 115
Lithium, Dissolved	0.500	0.530		mg/L		106	85 - 115
Magnesium, Dissolved	25.0	26.1		mg/L		104	85 - 115
Molybdenum, Dissolved	0.500	0.498		mg/L		100	85 - 115
Nickel, Dissolved	0.500	0.502		mg/L		100	85 - 115
Selenium, Dissolved	1.00	0.974		mg/L		97	85 - 115
Vanadium, Dissolved	0.500	0.518		mg/L		104	85 - 115
Manganese, Dissolved	0.500	0.513		mg/L		103	85 - 115
Potassium, Dissolved	25.0	25.8		mg/L		103	85 - 115
Sodium, Dissolved	25.0	25.1		mg/L		100	85 - 115

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 240-681163/3
Matrix: Water
Analysis Batch: 681163

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.10	0.014	mg/L			11/19/25 09:27	1
Nitrate as N	ND		0.10	0.015	mg/L			11/19/25 09:27	1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-681163/4
Matrix: Water
Analysis Batch: 681163

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrite as N			2.50	2.40		mg/L		96	90 - 110		
Nitrate as N			2.50	2.28		mg/L		91	90 - 110		

Lab Sample ID: 240-238040-3 MS
Matrix: Water
Analysis Batch: 681163

Client Sample ID: L511199-03 MW-7D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrite as N	ND		2.50	2.54		mg/L		102	80 - 120		
Nitrate as N	ND		2.50	2.37		mg/L		95	80 - 120		

Lab Sample ID: 240-238040-3 MSD
Matrix: Water
Analysis Batch: 681163

Client Sample ID: L511199-03 MW-7D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	ND		2.50	2.56		mg/L		102	80 - 120	1	15
Nitrate as N	ND		2.50	2.39		mg/L		96	80 - 120	1	15

Lab Sample ID: 240-238040-11 MS
Matrix: Water
Analysis Batch: 681163

Client Sample ID: L511199-11 Field Blank
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrite as N	ND	H	2.50	2.57		mg/L		103	80 - 120		
Nitrate as N	ND	H	2.50	2.23		mg/L		89	80 - 120		

Lab Sample ID: 240-238040-11 MSD
Matrix: Water
Analysis Batch: 681163

Client Sample ID: L511199-11 Field Blank
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	ND	H	2.50	2.57		mg/L		103	80 - 120	0	15
Nitrate as N	ND	H	2.50	2.25		mg/L		90	80 - 120	1	15

Method: 5310 C-2014 - Total Organic Carbon/Persulfate - Ultrav

Lab Sample ID: MB 240-681924/38
Matrix: Water
Analysis Batch: 681924

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.44	mg/L			11/23/25 06:48	1

Lab Sample ID: MB 240-681924/5
Matrix: Water
Analysis Batch: 681924

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.44	mg/L			11/22/25 18:03	1

Method: 5310 C-2014 - Total Organic Carbon/Persulfate - Ultrav (Continued)

Lab Sample ID: LCS 240-681924/21
Matrix: Water
Analysis Batch: 681924

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	28.4	26.9		mg/L		95	85 - 115
TOC Result 1	28.4	26.8		mg/L		95	85 - 115
TOC Result 2	28.4	26.8		mg/L		94	85 - 115

Lab Sample ID: LCS 240-681924/39
Matrix: Water
Analysis Batch: 681924

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	28.4	27.1		mg/L		95	85 - 115
TOC Result 1	28.4	27.3		mg/L		96	85 - 115
TOC Result 2	28.4	27.0		mg/L		95	85 - 115

Lab Sample ID: LCS 240-681924/54
Matrix: Water
Analysis Batch: 681924

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	28.4	27.2		mg/L		96	85 - 115
TOC Result 1	28.4	27.6		mg/L		97	85 - 115
TOC Result 2	28.4	26.9		mg/L		95	85 - 115

Lab Sample ID: LCS 240-681924/6
Matrix: Water
Analysis Batch: 681924

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	28.4	27.5		mg/L		97	85 - 115
TOC Result 1	28.4	27.9		mg/L		98	85 - 115
TOC Result 2	28.4	27.4		mg/L		96	85 - 115

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 570-661167/6
Matrix: Water
Analysis Batch: 661167

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Sulfide	ND		0.050	0.028	mg/L			11/24/25 18:36	1

Lab Sample ID: LCS 570-661167/8
Matrix: Water
Analysis Batch: 661167

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Sulfide	0.500	0.450		mg/L		90	70 - 130

Method: SM 4500 S2 D - Sulfide, Total (Continued)

Lab Sample ID: LCSD 570-661167/10
Matrix: Water
Analysis Batch: 661167

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Sulfide			0.500	0.431		mg/L		86	70 - 130	4	8

Lab Sample ID: MRL 570-661167/12
Matrix: Water
Analysis Batch: 661167

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Total Sulfide			0.0500	0.0613		mg/L		123	50 - 150		

Lab Sample ID: 240-238040-1 MS
Matrix: Water
Analysis Batch: 661167

Client Sample ID: L511199-01 MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Sulfide	ND		0.500	0.441		mg/L		88	70 - 130		

Lab Sample ID: 240-238040-1 MSD
Matrix: Water
Analysis Batch: 661167

Client Sample ID: L511199-01 MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Sulfide	ND		0.500	0.422		mg/L		84	70 - 130	4	20

Metals

Prep Batch: 11332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238040-1	L511199-01 MW-6	Dissolved	Water	200.7	
240-238040-2	L511199-02 MW-7C	Dissolved	Water	200.7	
240-238040-3	L511199-03 MW-7D	Dissolved	Water	200.7	
240-238040-4	L511199-04 MW-14	Dissolved	Water	200.7	
240-238040-5	L511199-05 MW-17A	Dissolved	Water	200.7	
240-238040-6	L511199-06 MW-17B	Dissolved	Water	200.7	
240-238040-7	L511199-07 MW-17C	Dissolved	Water	200.7	
240-238040-8	L511199-08 MW-17D	Dissolved	Water	200.7	
240-238040-9	L511199-09 MW-17E	Dissolved	Water	200.7	
240-238040-10	L511199-10 MWT-17A	Dissolved	Water	200.7	
240-238040-11	L511199-11 Field Blank	Dissolved	Water	200.7	
MB 350-11332/25-A	Method Blank	Total/NA	Water	200.7	
LCS 350-11332/26-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 11390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 350-11332/25-A	Method Blank	Total/NA	Water	200.8	11332
LCS 350-11332/26-A	Lab Control Sample	Total/NA	Water	200.8	11332

Analysis Batch: 11397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238040-1	L511199-01 MW-6	Dissolved	Water	200.7 Rev 4.4	11332
240-238040-2	L511199-02 MW-7C	Dissolved	Water	200.7 Rev 4.4	11332
240-238040-3	L511199-03 MW-7D	Dissolved	Water	200.7 Rev 4.4	11332
240-238040-4	L511199-04 MW-14	Dissolved	Water	200.7 Rev 4.4	11332
240-238040-5	L511199-05 MW-17A	Dissolved	Water	200.7 Rev 4.4	11332
240-238040-6	L511199-06 MW-17B	Dissolved	Water	200.7 Rev 4.4	11332
240-238040-7	L511199-07 MW-17C	Dissolved	Water	200.7 Rev 4.4	11332
240-238040-8	L511199-08 MW-17D	Dissolved	Water	200.7 Rev 4.4	11332
240-238040-9	L511199-09 MW-17E	Dissolved	Water	200.7 Rev 4.4	11332
240-238040-10	L511199-10 MWT-17A	Dissolved	Water	200.7 Rev 4.4	11332
240-238040-11	L511199-11 Field Blank	Dissolved	Water	200.7 Rev 4.4	11332
MB 350-11332/25-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	11332
LCS 350-11332/26-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	11332

Analysis Batch: 11429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238040-1	L511199-01 MW-6	Dissolved	Water	200.8	11332
240-238040-2	L511199-02 MW-7C	Dissolved	Water	200.8	11332
240-238040-3	L511199-03 MW-7D	Dissolved	Water	200.8	11332
240-238040-4	L511199-04 MW-14	Dissolved	Water	200.8	11332
240-238040-5	L511199-05 MW-17A	Dissolved	Water	200.8	11332
240-238040-6	L511199-06 MW-17B	Dissolved	Water	200.8	11332
240-238040-7	L511199-07 MW-17C	Dissolved	Water	200.8	11332
240-238040-8	L511199-08 MW-17D	Dissolved	Water	200.8	11332
240-238040-9	L511199-09 MW-17E	Dissolved	Water	200.8	11332
240-238040-10	L511199-10 MWT-17A	Dissolved	Water	200.8	11332
240-238040-11	L511199-11 Field Blank	Dissolved	Water	200.8	11332
MB 350-11332/25-A	Method Blank	Total/NA	Water	200.8	11332
LCS 350-11332/26-A	Lab Control Sample	Total/NA	Water	200.8	11332

QC Association Summary

Client: Lansing Board of Water & Light
Job ID: 240-238040-1
Project/Site: Erickson Project - MNA Tier II Geochem

Metals

Analysis Batch: 11448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238040-1	L511199-01 MW-6	Dissolved	Water	200.8	11332
240-238040-2	L511199-02 MW-7C	Dissolved	Water	200.8	11332
240-238040-3	L511199-03 MW-7D	Dissolved	Water	200.8	11332
240-238040-4	L511199-04 MW-14	Dissolved	Water	200.8	11332
240-238040-5	L511199-05 MW-17A	Dissolved	Water	200.8	11332
240-238040-6	L511199-06 MW-17B	Dissolved	Water	200.8	11332
240-238040-7	L511199-07 MW-17C	Dissolved	Water	200.8	11332
240-238040-8	L511199-08 MW-17D	Dissolved	Water	200.8	11332
240-238040-9	L511199-09 MW-17E	Dissolved	Water	200.8	11332
240-238040-10	L511199-10 MWT-17A	Dissolved	Water	200.8	11332
240-238040-11	L511199-11 Field Blank	Dissolved	Water	200.8	11332

Prep Batch: 681405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238040-1	L511199-01 MW-6	Dissolved	Water	200.8-1994 R5.4	
240-238040-2	L511199-02 MW-7C	Dissolved	Water	200.8-1994 R5.4	
240-238040-3	L511199-03 MW-7D	Dissolved	Water	200.8-1994 R5.4	
240-238040-4	L511199-04 MW-14	Dissolved	Water	200.8-1994 R5.4	
240-238040-5	L511199-05 MW-17A	Dissolved	Water	200.8-1994 R5.4	
240-238040-6	L511199-06 MW-17B	Dissolved	Water	200.8-1994 R5.4	
240-238040-7	L511199-07 MW-17C	Dissolved	Water	200.8-1994 R5.4	
240-238040-8	L511199-08 MW-17D	Dissolved	Water	200.8-1994 R5.4	
240-238040-9	L511199-09 MW-17E	Dissolved	Water	200.8-1994 R5.4	
240-238040-10	L511199-10 MWT-17A	Dissolved	Water	200.8-1994 R5.4	
240-238040-11	L511199-11 Field Blank	Dissolved	Water	200.8-1994 R5.4	
MB 240-681405/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	
LCS 240-681405/2-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	

Analysis Batch: 681766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238040-1	L511199-01 MW-6	Dissolved	Water	200.8-1994 R5.4	681405
240-238040-2	L511199-02 MW-7C	Dissolved	Water	200.8-1994 R5.4	681405
240-238040-3	L511199-03 MW-7D	Dissolved	Water	200.8-1994 R5.4	681405
240-238040-4	L511199-04 MW-14	Dissolved	Water	200.8-1994 R5.4	681405
240-238040-5	L511199-05 MW-17A	Dissolved	Water	200.8-1994 R5.4	681405
240-238040-6	L511199-06 MW-17B	Dissolved	Water	200.8-1994 R5.4	681405
240-238040-7	L511199-07 MW-17C	Dissolved	Water	200.8-1994 R5.4	681405
240-238040-8	L511199-08 MW-17D	Dissolved	Water	200.8-1994 R5.4	681405
240-238040-9	L511199-09 MW-17E	Dissolved	Water	200.8-1994 R5.4	681405
240-238040-10	L511199-10 MWT-17A	Dissolved	Water	200.8-1994 R5.4	681405
240-238040-11	L511199-11 Field Blank	Dissolved	Water	200.8-1994 R5.4	681405
MB 240-681405/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	681405
LCS 240-681405/2-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	681405

General Chemistry

Analysis Batch: 661167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238040-1	L511199-01 MW-6	Total/NA	Water	SM 4500 S2 D	
240-238040-2	L511199-02 MW-7C	Total/NA	Water	SM 4500 S2 D	
240-238040-3	L511199-03 MW-7D	Total/NA	Water	SM 4500 S2 D	

General Chemistry (Continued)

Analysis Batch: 661167 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238040-4	L511199-04 MW-14	Total/NA	Water	SM 4500 S2 D	
240-238040-5	L511199-05 MW-17A	Total/NA	Water	SM 4500 S2 D	
240-238040-6	L511199-06 MW-17B	Total/NA	Water	SM 4500 S2 D	
240-238040-7	L511199-07 MW-17C	Total/NA	Water	SM 4500 S2 D	
240-238040-8	L511199-08 MW-17D	Total/NA	Water	SM 4500 S2 D	
240-238040-9	L511199-09 MW-17E	Total/NA	Water	SM 4500 S2 D	
240-238040-10	L511199-10 MWT-17A	Total/NA	Water	SM 4500 S2 D	
240-238040-11	L511199-11 Field Blank	Total/NA	Water	SM 4500 S2 D	
MB 570-661167/6	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 570-661167/8	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 570-661167/10	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	
MRL 570-661167/12	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
240-238040-1 MS	L511199-01 MW-6	Total/NA	Water	SM 4500 S2 D	
240-238040-1 MSD	L511199-01 MW-6	Total/NA	Water	SM 4500 S2 D	

Analysis Batch: 681163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238040-1	L511199-01 MW-6	Total/NA	Water	300.0-1993 R2.1	
240-238040-2	L511199-02 MW-7C	Total/NA	Water	300.0-1993 R2.1	
240-238040-3	L511199-03 MW-7D	Total/NA	Water	300.0-1993 R2.1	
240-238040-4	L511199-04 MW-14	Total/NA	Water	300.0-1993 R2.1	
240-238040-5	L511199-05 MW-17A	Total/NA	Water	300.0-1993 R2.1	
240-238040-6	L511199-06 MW-17B	Total/NA	Water	300.0-1993 R2.1	
240-238040-7	L511199-07 MW-17C	Total/NA	Water	300.0-1993 R2.1	
240-238040-8	L511199-08 MW-17D	Total/NA	Water	300.0-1993 R2.1	
240-238040-9	L511199-09 MW-17E	Total/NA	Water	300.0-1993 R2.1	
240-238040-10	L511199-10 MWT-17A	Total/NA	Water	300.0-1993 R2.1	
240-238040-11	L511199-11 Field Blank	Total/NA	Water	300.0-1993 R2.1	
MB 240-681163/3	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 240-681163/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
240-238040-3 MS	L511199-03 MW-7D	Total/NA	Water	300.0-1993 R2.1	
240-238040-3 MSD	L511199-03 MW-7D	Total/NA	Water	300.0-1993 R2.1	
240-238040-11 MS	L511199-11 Field Blank	Total/NA	Water	300.0-1993 R2.1	
240-238040-11 MSD	L511199-11 Field Blank	Total/NA	Water	300.0-1993 R2.1	

Analysis Batch: 681924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238040-1	L511199-01 MW-6	Total/NA	Water	5310 C-2014	
240-238040-2	L511199-02 MW-7C	Total/NA	Water	5310 C-2014	
240-238040-3	L511199-03 MW-7D	Total/NA	Water	5310 C-2014	
240-238040-4	L511199-04 MW-14	Total/NA	Water	5310 C-2014	
240-238040-5	L511199-05 MW-17A	Total/NA	Water	5310 C-2014	
240-238040-6	L511199-06 MW-17B	Total/NA	Water	5310 C-2014	
240-238040-7	L511199-07 MW-17C	Total/NA	Water	5310 C-2014	
240-238040-8	L511199-08 MW-17D	Total/NA	Water	5310 C-2014	
240-238040-9	L511199-09 MW-17E	Total/NA	Water	5310 C-2014	
240-238040-10	L511199-10 MWT-17A	Total/NA	Water	5310 C-2014	
240-238040-11	L511199-11 Field Blank	Total/NA	Water	5310 C-2014	
MB 240-681924/38	Method Blank	Total/NA	Water	5310 C-2014	
MB 240-681924/5	Method Blank	Total/NA	Water	5310 C-2014	
LCS 240-681924/21	Lab Control Sample	Total/NA	Water	5310 C-2014	

General Chemistry (Continued)

Analysis Batch: 681924 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-681924/39	Lab Control Sample	Total/NA	Water	5310 C-2014	
LCS 240-681924/54	Lab Control Sample	Total/NA	Water	5310 C-2014	
LCS 240-681924/6	Lab Control Sample	Total/NA	Water	5310 C-2014	

Lab Chronicle

Client: Lansing Board of Water & Light
Job ID: 240-238040-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511199-01 MW-6
Lab Sample ID: 240-238040-1
Date Collected: 11/17/25 15:22
Matrix: Water
Date Received: 11/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.7 Rev 4.4		1	11397	JLS	EET SSM	11/25/25 21:58
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 19:06
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		5	11448	JL	EET SSM	12/01/25 17:14
Dissolved	Prep	200.8-1994 R5.4			681405	MN7X	EET CLE	11/21/25 05:00
Dissolved	Analysis	200.8-1994 R5.4		1	681766	S4FJ	EET CLE	11/22/25 16:42
Total/NA	Analysis	300.0-1993 R2.1		1	681163	JMR	EET CLE	11/19/25 12:31
Total/NA	Analysis	5310 C-2014		1	681924	JWW	EET CLE	11/23/25 10:14
Total/NA	Analysis	SM 4500 S2 D		1	661167	UAPD	EET CAL 4	11/24/25 18:44

Client Sample ID: L511199-02 MW-7C
Lab Sample ID: 240-238040-2
Date Collected: 11/17/25 17:44
Matrix: Water
Date Received: 11/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.7 Rev 4.4		1	11397	JLS	EET SSM	11/25/25 22:01
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 19:09
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		5	11448	JL	EET SSM	12/01/25 17:17
Dissolved	Prep	200.8-1994 R5.4			681405	MN7X	EET CLE	11/21/25 05:00
Dissolved	Analysis	200.8-1994 R5.4		1	681766	S4FJ	EET CLE	11/22/25 16:45
Total/NA	Analysis	300.0-1993 R2.1		1	681163	JMR	EET CLE	11/19/25 13:07
Total/NA	Analysis	5310 C-2014		1	681924	JWW	EET CLE	11/23/25 11:49
Total/NA	Analysis	SM 4500 S2 D		1	661167	UAPD	EET CAL 4	11/24/25 18:50

Client Sample ID: L511199-03 MW-7D
Lab Sample ID: 240-238040-3
Date Collected: 11/17/25 16:40
Matrix: Water
Date Received: 11/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.7 Rev 4.4		1	11397	JLS	EET SSM	11/25/25 22:05
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 19:12
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		5	11448	JL	EET SSM	12/01/25 17:21
Dissolved	Prep	200.8-1994 R5.4			681405	MN7X	EET CLE	11/21/25 05:00
Dissolved	Analysis	200.8-1994 R5.4		1	681766	S4FJ	EET CLE	11/22/25 16:48
Total/NA	Analysis	300.0-1993 R2.1		1	681163	JMR	EET CLE	11/19/25 13:26
Total/NA	Analysis	5310 C-2014		1	681924	JWW	EET CLE	11/23/25 12:11

Lab Chronicle

Client: Lansing Board of Water & Light
Job ID: 240-238040-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511199-03 MW-7D
Lab Sample ID: 240-238040-3
Date Collected: 11/17/25 16:40
Matrix: Water
Date Received: 11/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 4500 S2 D		1	661167	UAPD	EET CAL 4	11/24/25 18:52

Client Sample ID: L511199-04 MW-14
Lab Sample ID: 240-238040-4
Date Collected: 11/17/25 13:32
Matrix: Water
Date Received: 11/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.7 Rev 4.4		1	11397	JLS	EET SSM	11/25/25 22:08
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 19:14
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		5	11448	JL	EET SSM	12/01/25 17:25
Dissolved	Prep	200.8-1994 R5.4			681405	MN7X	EET CLE	11/21/25 05:00
Dissolved	Analysis	200.8-1994 R5.4		1	681766	S4FJ	EET CLE	11/22/25 16:50
Total/NA	Analysis	300.0-1993 R2.1		1	681163	JMR	EET CLE	11/19/25 11:54
Total/NA	Analysis	5310 C-2014		1	681924	JWW	EET CLE	11/23/25 12:34
Total/NA	Analysis	SM 4500 S2 D		1	661167	UAPD	EET CAL 4	11/24/25 18:54

Client Sample ID: L511199-05 MW-17A
Lab Sample ID: 240-238040-5
Date Collected: 11/17/25 10:37
Matrix: Water
Date Received: 11/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.7 Rev 4.4		1	11397	JLS	EET SSM	11/25/25 22:11
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 19:17
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		5	11448	JL	EET SSM	12/01/25 17:28
Dissolved	Prep	200.8-1994 R5.4			681405	MN7X	EET CLE	11/21/25 05:00
Dissolved	Analysis	200.8-1994 R5.4		1	681766	S4FJ	EET CLE	11/22/25 16:53
Total/NA	Analysis	300.0-1993 R2.1		1	681163	JMR	EET CLE	11/19/25 10:22
Total/NA	Analysis	5310 C-2014		1	681924	JWW	EET CLE	11/23/25 14:27
Total/NA	Analysis	SM 4500 S2 D		1	661167	UAPD	EET CAL 4	11/24/25 18:56

Client Sample ID: L511199-06 MW-17B
Lab Sample ID: 240-238040-6
Date Collected: 11/17/25 12:00
Matrix: Water
Date Received: 11/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.7 Rev 4.4		1	11397	JLS	EET SSM	11/25/25 22:14
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 19:20

Client Sample ID: L511199-06 MW-17B
Lab Sample ID: 240-238040-6

Date Collected: 11/17/25 12:00
Matrix: Water
Date Received: 11/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		5	11448	JL	EET SSM	12/01/25 17:32
Dissolved	Prep	200.8-1994 R5.4			681405	MN7X	EET CLE	11/21/25 05:00
Dissolved	Analysis	200.8-1994 R5.4		1	681766	S4FJ	EET CLE	11/22/25 16:56
Total/NA	Analysis	300.0-1993 R2.1		1	681163	JMR	EET CLE	11/19/25 11:17
Total/NA	Analysis	5310 C-2014		1	681924	JWW	EET CLE	11/23/25 14:50
Total/NA	Analysis	SM 4500 S2 D		1	661167	UAPD	EET CAL 4	11/24/25 18:58

Client Sample ID: L511199-07 MW-17C
Lab Sample ID: 240-238040-7

Date Collected: 11/17/25 13:01
Matrix: Water
Date Received: 11/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.7 Rev 4.4		1	11397	JLS	EET SSM	11/25/25 22:18
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 19:29
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		5	11448	JL	EET SSM	12/01/25 17:41
Dissolved	Prep	200.8-1994 R5.4			681405	MN7X	EET CLE	11/21/25 05:00
Dissolved	Analysis	200.8-1994 R5.4		1	681766	S4FJ	EET CLE	11/22/25 16:59
Total/NA	Analysis	300.0-1993 R2.1		1	681163	JMR	EET CLE	11/19/25 11:35
Total/NA	Analysis	5310 C-2014		1	681924	JWW	EET CLE	11/23/25 16:02
Total/NA	Analysis	SM 4500 S2 D		1	661167	UAPD	EET CAL 4	11/24/25 19:00

Client Sample ID: L511199-08 MW-17D
Lab Sample ID: 240-238040-8

Date Collected: 11/17/25 14:08
Matrix: Water
Date Received: 11/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.7 Rev 4.4		1	11397	JLS	EET SSM	11/25/25 22:21
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 19:32
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		5	11448	JL	EET SSM	12/01/25 17:44
Dissolved	Prep	200.8-1994 R5.4			681405	MN7X	EET CLE	11/21/25 05:00
Dissolved	Analysis	200.8-1994 R5.4		1	681766	S4FJ	EET CLE	11/22/25 17:01
Total/NA	Analysis	300.0-1993 R2.1		1	681163	JMR	EET CLE	11/19/25 10:13
Total/NA	Analysis	5310 C-2014		1	681924	JWW	EET CLE	11/23/25 16:24
Total/NA	Analysis	SM 4500 S2 D		1	661167	UAPD	EET CAL 4	11/24/25 19:02

Lab Chronicle

Client: Lansing Board of Water & Light
Job ID: 240-238040-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511199-09 MW-17E
Lab Sample ID: 240-238040-9
Date Collected: 11/17/25 15:11
Matrix: Water
Date Received: 11/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.7 Rev 4.4		1	11397	JLS	EET SSM	11/25/25 22:24
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 19:35
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		5	11448	JL	EET SSM	12/01/25 17:48
Dissolved	Prep	200.8-1994 R5.4			681405	MN7X	EET CLE	11/21/25 05:00
Dissolved	Analysis	200.8-1994 R5.4		1	681766	S4FJ	EET CLE	11/22/25 17:04
Total/NA	Analysis	300.0-1993 R2.1		1	681163	JMR	EET CLE	11/19/25 12:12
Total/NA	Analysis	5310 C-2014		1	681924	JWW	EET CLE	11/23/25 16:47
Total/NA	Analysis	SM 4500 S2 D		1	661167	UAPD	EET CAL 4	11/24/25 19:04

Client Sample ID: L511199-10 MWT-17A
Lab Sample ID: 240-238040-10
Date Collected: 11/17/25 10:37
Matrix: Water
Date Received: 11/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.7 Rev 4.4		1	11397	JLS	EET SSM	11/25/25 22:35
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 19:38
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		5	11448	JL	EET SSM	12/01/25 17:52
Dissolved	Prep	200.8-1994 R5.4			681405	MN7X	EET CLE	11/21/25 05:00
Dissolved	Analysis	200.8-1994 R5.4		1	681766	S4FJ	EET CLE	11/22/25 17:06
Total/NA	Analysis	300.0-1993 R2.1		1	681163	JMR	EET CLE	11/19/25 10:41
Total/NA	Analysis	5310 C-2014		1	681924	JWW	EET CLE	11/23/25 17:10
Total/NA	Analysis	SM 4500 S2 D		1	661167	UAPD	EET CAL 4	11/24/25 19:06

Client Sample ID: L511199-11 Field Blank
Lab Sample ID: 240-238040-11
Date Collected: 11/17/25 09:40
Matrix: Water
Date Received: 11/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.7 Rev 4.4		1	11397	JLS	EET SSM	11/25/25 22:38
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 19:41
Dissolved	Prep	200.7			11332	RMN	EET SSM	11/24/25 16:15
Dissolved	Analysis	200.8		5	11448	JL	EET SSM	12/01/25 17:55
Dissolved	Prep	200.8-1994 R5.4			681405	MN7X	EET CLE	11/21/25 05:00
Dissolved	Analysis	200.8-1994 R5.4		1	681766	S4FJ	EET CLE	11/22/25 17:14
Total/NA	Analysis	300.0-1993 R2.1		1	681163	JMR	EET CLE	11/19/25 09:45
Total/NA	Analysis	5310 C-2014		1	681924	JWW	EET CLE	11/23/25 01:44

Lab Chronicle

Client: Lansing Board of Water & Light
Job ID: 240-238040-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511199-11 Field Blank
Lab Sample ID: 240-238040-11

Date Collected: 11/17/25 09:40
Matrix: Water
Date Received: 11/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 4500 S2 D		1	661167	UAPD	EET CAL 4	11/24/25 19:10

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494
EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396
EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Job ID: 240-238040-1
Project/Site: Erickson Project - MNA Tier II Geochem

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Calscience

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	7296.01	11-30-26
A2LA	ISO/IEC 17025	7296.01	11-30-26
Alaska (UST)	State	25-005	03-02-26
Arizona	State	AZ0830	11-25-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-25
California	State	3082	07-31-26
Kansas	NELAP	E-10420	07-31-26
Nevada	State	CA00111	07-31-26
Oregon	NELAP	4175	02-02-26
USDA	US Federal Programs	525-23-159-97150	06-08-26
Utah	NELAP	CA00111	02-28-26
Washington	State	C916	10-11-26

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-07-26
Florida	NELAP	E87575	06-30-26
Louisiana (All)	NELAP	03073	07-01-26
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-26
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167	07-08-26
US Fish & Wildlife	US Federal Programs	A20571	06-30-26
USDA	US Federal Programs	525-23-4-22573	01-24-28
Washington	State	C788	07-13-26
Wisconsin	State	399133460	08-31-26

Chain of Custody

Return Samples to: Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale
Address :
1110 South Pennsylvania
Address 2:
City, State Zip:
Lansing, Michigan 48901
Phone:
517-702-6482
Email:
Jennifer.Caporale@LBWL.com
Deliverables:

Project Info

Company:
Lansing Board of Water & Light
Project Manager:
Howell, Leslie
Purchase Order:
Purchase Order not required
Project Reference:
Work Order:
Sampler:
Requested TAT:
Description:
Erickson Project - MNA Tier II Geochem
Project Number:
24034575
Site Name:
Erickson Project - MNA Tier II Geochem
Sample State: MI
Special Instructions:
All samples for dissolved metals were filtered in field. The label has Dis for the filtered bottle.

240-238040 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	SM4500_S2_D Total Sulfide	300 Nitrate as N & Nitrite as N	200.8 Project List (19) (Diss)	5310C TOC	Plastic 500ml - with Nitric Acid	Voa Vial 40ml - with Sulfuric Acid	Plastic 500ml - w/ Nitric - Dis.	Plastic 250ml - with Zinc Acetate & NaOH	Plastic 60 mL - unpreserved	Total Bottles For Sample
1	MW-6	Grab	Water	11/17/25 15:54				X	X	X	X	1	3	1	1	1	7
2	MW-7C	Grab	Water	11/17/25 18:16				X	X	X	X	1	3	1	1	1	7
3	MW-7D	Grab	Water	11/17/25 17:12				X	X	X	X	1	3	1	1	1	7
4	MW-14	Grab	Water	11/17/25 14:04				X	X	X	X	1	3	1	1	1	7
5	MW-17A	Grab	Water	11/17/25 11:09				X	X	X	X	1	3	1	1	1	7
6	MW-17B	Grab	Water	11/17/25 12:00				X	X	X	X	1	3	1	1	1	7
7	MW-17C	Grab	Water	11/17/25 13:01				X	X	X	X	1	3	1	1	1	7
8	MW-17D	Grab	Water	11/17/25 14:08				X	X	X	X	1	3	1	1	1	7
9	MW-17E	Grab	Water	11/17/25 15:43				X	X	X	X	1	3	1	1	1	7
10	MWT-17A	Grab	Water	11/17/25 11:09				X	X	X	X	1	3	1	1	1	7
11	Field Blank	Grab	Water	11/17/25 10:12				X	X	X	X	1	3	1	1	1	7

JORDAN PYLES 11/19/25 0800

Chain of Custody Number: **425649**

*H – Analysis on hold.

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By	Date/Time:	Samples Relinquished By	Date/Time:		
Jennifer Caporale	11/18/25 11:44	Jennifer Caporale	11/18/25 11:44	JORDAN PYLES	11/19/25 0800

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20251118A001	Large Cooler							
MIC20251118A001	Large cooler							

Eurofins – Cleveland Sample Receipt Form/Narrative Login # ·_____
Barberton Facility

Client Lansing Board of Water and Light Site Name_____ Cooler unpacked by· JPyles

Cooler Received on 11/19/25 Opened on 11/19/25

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other_____

Receipt After-hours Drop-off Date/Time_____ Storage Location_____

Eurofins Cooler # EC Foam Box Client Cooler Box Other_____

Packing material used Bubble Wrap Foam ~~Plastic Bag~~ None Other_____

COOLANT· Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☒ See Multiple Cooler Form

IR GUN # 13 (CF +0.6 °C) Observed Cooler Temp _____°C Corrected Cooler Temp _____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity_____	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	~~Yes~~	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12 Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC567196
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by·

Labels Verified by·

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved. _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	0.1	0.7	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 4	0.4	1.0	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice

11/19/2025

Login Container Summary Report

240-238040

12/3/2025 (Rev. 1)

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
MW-6	240-238040-A-1	Voa Vial 40ml - with Sulfuric Acid				
MW-6	240-238040-B-1	Voa Vial 40ml - with Sulfuric Acid				
MW-6	240-238040-C-1	Voa Vial 40ml - with Sulfuric Acid				
MW-6	240-238040-D-1	Plastic 60 mL - unpreserved				
MW-6	240-238040-E-1	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-6	240-238040-F-1	Plastic 500ml - with Nitric Acid	<2			
MW-6	240-238040-G-1	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-7C	240-238040-A-2	Voa Vial 40ml - with Sulfuric Acid				
MW-7C	240-238040-B-2	Voa Vial 40ml - with Sulfuric Acid				
MW-7C	240-238040-C-2	Voa Vial 40ml - with Sulfuric Acid				
MW-7C	240-238040-D-2	Plastic 60 mL - unpreserved				
MW-7C	240-238040-E-2	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-7C	240-238040-F-2	Plastic 500ml - with Nitric Acid	<2			
MW-7C	240-238040-G-2	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-7D	240-238040-A-3	Voa Vial 40ml - with Sulfuric Acid				
MW-7D	240-238040-B-3	Voa Vial 40ml - with Sulfuric Acid				
MW-7D	240-238040-C-3	Voa Vial 40ml - with Sulfuric Acid				
MW-7D	240-238040-D-3	Plastic 60 mL - unpreserved				
MW-7D	240-238040-E-3	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-7D	240-238040-F-3	Plastic 500ml - with Nitric Acid	<2			
MW-7D	240-238040-G-3	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-14	240-238040-A-4	Voa Vial 40ml - with Sulfuric Acid				
MW-14	240-238040-B-4	Voa Vial 40ml - with Sulfuric Acid				
MW-14	240-238040-C-4	Voa Vial 40ml - with Sulfuric Acid				
MW-14	240-238040-D-4	Plastic 60 mL - unpreserved				
MW-14	240-238040-E-4	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-14	240-238040 F-4	Plastic 500ml - with Nitric Acid	<2			
MW 14	240-238040-G-4	Plastic 500ml - w/ Nitric - Dis	<2			
MW-17A	240-238040 A-5	Voa Vial 40ml - with Sulfuric Acid				
MW-17A	240-238040-B-5	Voa Vial 40ml - with Sulfuric Acid				
MW-17A	240-238040-C-5	Voa Vial 40ml - with Sulfuric Acid				
MW-17A	240-238040-D-5	Plastic 60 mL unpreserved				
MW-17A	240-238040-E-5	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-17A	240-238040-F-5	Plastic 500ml - with Nitric Acid	<2			
MW-17A	240-238040-G-5	Plastic 500ml w/ Nitric - Dis	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
MW-17B	240-238040-A-6	Voa Vial 40ml - with Sulfuric Acid				
MW-17B	240-238040-B-6	Voa Vial 40ml - with Sulfuric Acid				
MW-17B	240-238040-C-6	Voa Vial 40ml - with Sulfuric Acid				
MW-17B	240-238040-D-6	Plastic 60 mL - unpreserved				
MW-17B	240-238040-E-6	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-17B	240-238040-F-6	Plastic 500ml - with Nitric Acid	<2			
MW-17B	240-238040-G-6	Plastic 500ml - w/ Nitric - Dis	<2			
MW-17C	240-238040-A-7	Voa Vial 40ml - with Sulfuric Acid				
MW-17C	240-238040-B-7	Voa Vial 40ml - with Sulfuric Acid				
MW-17C	240-238040-C-7	Voa Vial 40ml - with Sulfuric Acid				
MW-17C	240-238040-D-7	Plastic 60 mL - unpreserved				
MW-17C	240-238040-E-7	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-17C	240-238040-F-7	Plastic 500ml - with Nitric Acid	<2			
MW-17C	240-238040-G-7	Plastic 500ml - w/ Nitric - Dis	<2			
MW-17D	240-238040-A-8	Voa Vial 40ml - with Sulfuric Acid				
MW-17D	240-238040-B-8	Voa Vial 40ml - with Sulfuric Acid				
MW-17D	240-238040-C-8	Voa Vial 40ml - with Sulfuric Acid				
MW-17D	240-238040-D-8	Plastic 60 mL - unpreserved				
MW-17D	240-238040-E-8	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-17D	240-238040-F-8	Plastic 500ml - with Nitric Acid	<2			
MW-17D	240-238040-G-8	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-17E	240-238040-A-9	Voa Vial 40ml - with Sulfuric Acid				
MW-17E	240-238040-B-9	Voa Vial 40ml - with Sulfuric Acid				
MW-17E	240-238040-C-9	Voa Vial 40ml - with Sulfuric Acid				
MW-17E	240-238040-D-9	Plastic 60 mL - unpreserved				
MW-17E	240-238040-E-9	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-17E	240-238040-F-9	Plastic 500ml - with Nitric Acid	<2			
MW-17E	240-238040-G-9	Plastic 500ml - w/ Nitric - Dis.	<2			
MWT-17A	240-238040-A-10	Voa Vial 40ml - with Sulfuric Acid				
MWT-17A	240-238040-B-10	Voa Vial 40ml - with Sulfuric Acid				
MWT-17A	240-238040-C-10	Voa Vial 40ml - with Sulfuric Acid				
MWT-17A	240-238040-D-10	Plastic 60 mL - unpreserved				
MWT-17A	240-238040-E-10	Plastic 500ml - with Zn Acetate and NaOH	>9			
MWT-17A	240-238040-F-10	Plastic 500ml - with Nitric Acid	<2			
MWT-17A	240-238040-G-10	Plastic 500ml - w/ Nitric - Dis	<2			
Field Blank	240-238040-A-11	Voa Vial 40ml - with Sulfuric Acid				
Field Blank	240-238040-B-11	Voa Vial 40ml - with Sulfuric Acid				
Field Blank	240-238040-C-11	Voa Vial 40ml - with Sulfuric Acid				

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
Field Blank	240-238040-D-11	Plastic 60 mL - unpreserved				
Field Blank	240-238040-E-11	Plastic 500ml - with Zn Acetate and NaOH	>9			
Field Blank	240-238040-F-11	Plastic 500ml - with Nitric Acid	<2			
Field Blank	240-238040-G-11	Plastic 500ml - w/ Nitric - Dis.	<2			

Environment Testing
TestAmerica

RRDB2 EXP 05/26

ORIGIN ID:CAKA (234) 350-3243
AMIE STUFFLEBEAM
EUROFINS TESTAMERICA, BARBERTON
180 S VAN BUREN

BARBERTON, OH 44203
UNITED STATES US

SHIP DATE: 19NOV25
ACTWGT: 40.00 LB MAN
CAD: 0792304/CAFE3953

BILL SENDER

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING SOUTHW
2841 DOW AVENUE, SUITE 100

TUSTIN CA 92780
(714) 895-5494
PO: YES

REF: S240-139607

FedEx
Express

TRK# 0201 4616 0304 9102

THU - 20 NOV 10:30A
PRIORITY OVERNIGHT

NW DTHA

92780
CA-US SNA

240-238040 Waybill

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-211188.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 2
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-238040-1
Address: 5755 8th Street East, ,	Due Date Requested: 12/4/2025			Preservation Codes:
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Therm. ID: SC04 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 16.0 / 16.3 °C
Delivery: UPS / FedEx / Other: ____
Ice Type: Blue / Dry / Wet / None
Label Ver.: 7 Packing: B
Sm Blu

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/FIELD_FLTRD(MOD) Custom List 2: 2-3 Metals	200.7_CWA/FIELD_FLTRDDissolved Boron	Total Number of containers	Special Instructions/Note:
			Preservation Codes:							
MW-6 (240-238040-1)	11/17/25	15:22 Eastern	G	Water			X	X	1	
MW-7C (240-238040-2)	11/17/25	17:44 Eastern	G	Water			X	X	1	
MW-7D (240-238040-3)	11/17/25	16:40 Eastern	G	Water			X	X	1	
MW-14 (240-238040-4)	11/17/25	13:32 Eastern	G	Water			X	X	1	
MW-17A (240-238040-5)	11/17/25	10:37 Eastern	G	Water			X	X	1	
MW-17B (240-238040-6)	11/17/25	12:00 Eastern	G	Water			X	X	1	
MW-17C (240-238040-7)	11/17/25	13:01 Eastern	G	Water			X	X	1	
MW-17D (240-238040-8)	11/17/25	14:08 Eastern	G	Water			X	X	1	
MW-17E (240-238040-9)	11/17/25	15:11 Eastern	G	Water			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification 4616 0304 9021 *Unconfirmed*	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JUM	11/19/25 1500	GE		11/20/25 10:10	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-211188.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 2 of 2
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-238040-1
Address: 5755 8th Street East, ,	Due Date Requested: 12/4/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/FIELD_FLTRD(MOD) Custom List 2: 2-3 Metals	200.7_CWA/FIELD_FLTRDDissolved Boron	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MWT-17A (240-238040-10)	11/17/25	10:37 Eastern	G	Water			X	X	1	
Field Blank (240-238040-11)	11/17/25	09:40 Eastern	G	Water			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JLH	11/19/25 1500	EC		11/20/25 10:10	ETN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-211188.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 2
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-238040-1
Address: 5755 8th Street East, ,	Due Date Requested: 12/4/2025			Preservation Codes:
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Therm. ID: SC04 Cust. Seal: (Y) N
Uncorr./Corr. Temp: 16.0 / 16.3 °C
Delivery: UPS / FedEx / Other: ____
Ice Type: Blue / Dry / Wet / None
Label Ver.: 2 Packing: B

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/FIELD_FLTRD(MOD) Custom List 2: 2-3 Metals	200.7_CWA/FIELD_FLTRDDissolved Boron	Total Number of containers	Special Instructions/Note:
			Preservation Codes:							
MW-6 (240-238040-1)	11/17/25	15:22 Eastern	G	Water			X	X	1	
MW-7C (240-238040-2)	11/17/25	17:44 Eastern	G	Water			X	X	1	
MW-7D (240-238040-3)	11/17/25	16:40 Eastern	G	Water			X	X	1	
MW-14 (240-238040-4)	11/17/25	13:32 Eastern	G	Water			X	X	1	
MW-17A (240-238040-5)	11/17/25	10:37 Eastern	G	Water			X	X	1	
MW-17B (240-238040-6)	11/17/25	12:00 Eastern	G	Water			X	X	1	
MW-17C (240-238040-7)	11/17/25	13:01 Eastern	G	Water			X	X	1	
MW-17D (240-238040-8)	11/17/25	14:08 Eastern	G	Water			X	X	1	
MW-17E (240-238040-9)	11/17/25	15:11 Eastern	G	Water			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification: Unconfirmed 4616 0304 9021	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JLM	11/19/25 1500	ET		11/20/25 10:10	ESTW
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-211188.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 2 of 2
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-238040-1
Address: 5755 8th Street East, ,	Due Date Requested: 12/4/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			Other: N/A
Site: N/A	SSOW#: N/A			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/FIELD_FLTRD(MOD) Custom List 2: 2-3 Metals	200.7_CWA/FIELD_FLTRDissolved Boron	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MWT-17A (240-238040-10)	11/17/25	10:37 Eastern	G	Water			X	X	1	
Field Blank (240-238040-11)	11/17/25	09:40 Eastern	G	Water			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JLM	11/19/25 1500	EC		11/20/25 10:10	ETN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Env

Loc: 240
238040

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-211179.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 2
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): NELAP - Oregon		Job #: 240-238040-1
Address: 2841 Dow Avenue, Suite 100,	Due Date Requested: 12/4/2025			Preservation Codes: -
City: Tustin	TAT Requested (days): N/A			
State, Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_S2_DTotal Sulfide	Total Number of containers	Special Instr
			Preservation Code:						
MW-6 (240-238040-1)	11/17/25	15:22 Eastern	G	Water			X	1	
MW-7C (240-238040-2)	11/17/25	17:44 Eastern	G	Water			X	1	
MW-7D (240-238040-3)	11/17/25	16:40 Eastern	G	Water			X	1	
MW-14 (240-238040-4)	11/17/25	13:32 Eastern	G	Water			X	1	
MW-17A (240-238040-5)	11/17/25	10:37 Eastern	G	Water			X	1	
MW-17B (240-238040-6)	11/17/25	12:00 Eastern	G	Water			X	1	
MW-17C (240-238040-7)	11/17/25	13:01 Eastern	G	Water			X	1	
MW-17D (240-238040-8)	11/17/25	14:08 Eastern	G	Water			X	1	
MW-17E (240-238040-9)	11/17/25	15:11 Eastern	G	Water			X	1	

240-238040 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JLM	11/19/25 1500	ET		11/20/25 0945	ET
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.4/1.6 IR5

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-211179.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 2 of 2
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): NELAP - Oregon		Job #: 240-238040-1
Address: 2841 Dow Avenue, Suite 100, ,	Due Date Requested: 12/4/2025			Preservation Codes: -
City: Tustin	TAT Requested (days): N/A			
State, Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_S2_DTotal Sulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MWT-17A (240-238040-10)	11/17/25	10:37 Eastern	G	Water			X	1	
Field Blank (240-238040-11)	11/17/25	09:40 Eastern	G	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JM	11/19/25 1500	EC		11/20/25 0944	EC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		1.4/1.6 IR-5

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-238040-1

Login Number: 238040
List Number: 3
Creator: Khana, Piyush

List Source: Eurofins Calscience
List Creation: 11/20/25 03:03 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-238040-1

Login Number: 238040
List Number: 2
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 11/20/25 02:52 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 12/3/2025 4:58:18 PM

JOB DESCRIPTION

Erickson Project - MNA Tier II Geochem

JOB NUMBER

240-238165-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

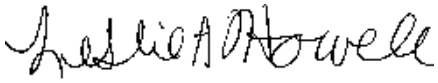
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
12/3/2025 4:58:18 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 12
QC Sample Results 25
QC Association Summary 32
Lab Chronicle 36
Certification Summary 41
Chain of Custody 42
Receipt Checklists 54

Definitions/Glossary

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-238165-1 Eurofins Cleveland

Job Narrative
240-238165-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 11/20/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.1°C and 1.8°C.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method SM4500_NO2_B: The following samples were analyzed outside of analytical holding time due to lab oversight: L511203-01 MW-3 (240-238165-1), L511203-02 MW-5 (240-238165-2), L511203-03 MW-7 (240-238165-3), L511203-04 MW-18A (240-238165-4), L511203-05 MW-18B (240-238165-5), L511203-06 MW-18C (240-238165-6), L511203-07 MW-18D (240-238165-7), L511203-08 MW-19A (240-238165-8), L511203-09 MW-19B (240-238165-9), L511203-10 MW-19C (240-238165-10), L511203-11 MW-19D (240-238165-11), L511203-12 MWT-7 (240-238165-12) and L511203-13 Field Blank (240-238165-13).

Method SM4500_NO3_D: The following sample was analyzed outside of analytical holding time due to lab oversight: L511203-01 MW-3 (240-238165-1).

Method SM4500_NO3_D: The following samples were diluted due to the presence of a precipitate which interferes with Nitrate: L511203-01 MW-3 (240-238165-1), L511203-02 MW-5 (240-238165-2), L511203-06 MW-18C (240-238165-6) and L511203-07 MW-18D (240-238165-7). Elevated reporting limits (RLs) are provided.

Method SM4500_NO3_D: Due to analyst error the MS/MSD samples were run at different dilutions and cannot link to the appropriate parent sample.

(240-238165-H-2 MS) and (240-238165-H-2 MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Method	Method Description	Protocol	Laboratory
200.7 Rev 4.4	Metals (ICP)	EPA	EET SSM
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
5310 C-2014	Total Organic Carbon/Persulfate - Ultrav	SM	EET CLE
SM 4500 NO2 B	Nitrogen, Nitrite	SM	EET MI
SM 4500 S2 D	Sulfide, Total	SM	EET CAL 4
SM4500 NO3 D	Nitrogen, Nitrate	SM	EET MI
200.7	Preparation, Total Metals	EPA	EET SSM
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET MI = Eurofins Michigan, 38855 Hills Tech Dr., Suite 600, Farmington Hills, MI 48331, TEL (810)229-2763

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-238165-1	L511203-01 MW-3	Water	11/18/25 16:02	11/20/25 08:00	Michigan
240-238165-2	L511203-02 MW-5	Water	11/18/25 17:40	11/20/25 08:00	Michigan
240-238165-3	L511203-03 MW-7	Water	11/18/25 11:34	11/20/25 08:00	Michigan
240-238165-4	L511203-04 MW-18A	Water	11/18/25 13:33	11/20/25 08:00	Michigan
240-238165-5	L511203-05 MW-18B	Water	11/18/25 14:42	11/20/25 08:00	Michigan
240-238165-6	L511203-06 MW-18C	Water	11/18/25 15:47	11/20/25 08:00	Michigan
240-238165-7	L511203-07 MW-18D	Water	11/18/25 16:50	11/20/25 08:00	Michigan
240-238165-8	L511203-08 MW-19A	Water	11/18/25 10:02	11/20/25 08:00	Michigan
240-238165-9	L511203-09 MW-19B	Water	11/18/25 11:17	11/20/25 08:00	Michigan
240-238165-10	L511203-10 MW-19C	Water	11/18/25 12:25	11/20/25 08:00	Michigan
240-238165-11	L511203-11 MW-19D	Water	11/18/25 13:42	11/20/25 08:00	Michigan
240-238165-12	L511203-12 MWT-7	Water	11/18/25 11:34	11/20/25 08:00	Michigan
240-238165-13	L511203-13 Field Blank	Water	11/18/25 10:40	11/20/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-01 MW-3
Lab Sample ID: 240-238165-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	5.7		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic, Dissolved	0.0028	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	0.015		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Cadmium, Dissolved	0.000079	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	230		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Cobalt, Dissolved	0.00052	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.078		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	44		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.18		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	0.0035		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.16		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	1.2		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	100		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	1.9		0.10	0.013	mg/L	1		200.8	Dissolved
Zinc, Dissolved	0.0022	J B	0.0070	0.00093	mg/L	1		200.8	Dissolved
Total Organic Carbon	1.6		1.0	0.44	mg/L	1		5310 C-2014	Total/NA
Nitrate as N	0.96		0.20	0.070	mg/L	1		SM4500 NO3 D	Total/NA

Client Sample ID: L511203-02 MW-5
Lab Sample ID: 240-238165-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	4.0		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Barium, Dissolved	0.040		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	140		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Cobalt, Dissolved	0.00023	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.057		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	30		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.069		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	0.0034		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Dissolved
Selenium, Dissolved	0.0013	J	0.0050	0.00089	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	3.4		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	46		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Zinc, Dissolved	0.0020	J B	0.0070	0.00093	mg/L	1		200.8	Dissolved
Total Organic Carbon	1.0		1.0	0.44	mg/L	1		5310 C-2014	Total/NA
Nitrate as N	0.64		0.20	0.070	mg/L	1		SM4500 NO3 D	Total/NA

Client Sample ID: L511203-03 MW-7
Lab Sample ID: 240-238165-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	1.9		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic, Dissolved	0.0038	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	0.056		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	99		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.073		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	14		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.14		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.19		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	8.1		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	67		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	0.84		0.10	0.013	mg/L	1		200.8	Dissolved
Aluminum, Dissolved	0.011	J	0.040	0.0058	mg/L	1		200.8	Dissolved
Total Organic Carbon	4.6		1.0	0.44	mg/L	1		5310 C-2014	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-04 MW-18A — Lab Sample ID: 240-238165-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	0.75		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic, Dissolved	0.0010	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	0.041		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	89		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.063		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	15		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.11		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.19		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	6.6		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	59		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	0.82		0.10	0.013	mg/L	1		200.8	Dissolved
Zinc, Dissolved	0.0068	J B	0.0070	0.00093	mg/L	1		200.8	Dissolved
Aluminum, Dissolved	0.0069	J	0.040	0.0058	mg/L	1		200.8	Dissolved
Total Organic Carbon	2.9		1.0	0.44	mg/L	1		5310 C-2014	Total/NA

Client Sample ID: L511203-05 MW-18B — Lab Sample ID: 240-238165-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	2.9		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Barium, Dissolved	0.056		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	170		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.13		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	31		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.12		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	0.010		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.19		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	8.0		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	88		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	2.6		0.10	0.013	mg/L	1		200.8	Dissolved
Aluminum, Dissolved	0.0082	J	0.040	0.0058	mg/L	1		200.8	Dissolved
Total Organic Carbon	4.8		1.0	0.44	mg/L	1		5310 C-2014	Total/NA
Total Sulfide	0.039	J	0.050	0.028	mg/L	1		SM 4500 S2 D	Total/NA

Client Sample ID: L511203-06 MW-18C — Lab Sample ID: 240-238165-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	3.1		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic, Dissolved	0.0010	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	0.060		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	190		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.10		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	44		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.14		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	0.011		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.14		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	5.4		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	84		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	2.6		0.10	0.013	mg/L	1		200.8	Dissolved
Aluminum, Dissolved	0.0087	J	0.040	0.0058	mg/L	1		200.8	Dissolved
Total Organic Carbon	4.3		1.0	0.44	mg/L	1		5310 C-2014	Total/NA
Nitrate as N	0.58		0.40	0.14	mg/L	2		SM4500 NO3 D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-07 MW-18D — Lab Sample ID: 240-238165-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	3.7		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Barium, Dissolved	0.026		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	78		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Cobalt, Dissolved	0.00038	J	0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.076		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	15		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.067		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	0.0046		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.079		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	5.8		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	130		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	1.2		0.10	0.013	mg/L	1		200.8	Dissolved
Aluminum, Dissolved	0.0065	J	0.040	0.0058	mg/L	1		200.8	Dissolved
Total Organic Carbon	1.7		1.0	0.44	mg/L	1		5310 C-2014	Total/NA
Nitrate as N	0.66		0.20	0.070	mg/L	1		SM4500 NO3 D	Total/NA

Client Sample ID: L511203-08 MW-19A — Lab Sample ID: 240-238165-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	0.27	J	0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic, Dissolved	0.0044	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	0.093		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	190		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.012		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	59		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.0021	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	0.010		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.15		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	1.9		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	48		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	5.1		0.10	0.013	mg/L	1		200.8	Dissolved
Total Organic Carbon	2.3		1.0	0.44	mg/L	1		5310 C-2014	Total/NA

Client Sample ID: L511203-09 MW-19B — Lab Sample ID: 240-238165-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	0.45	J	0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic, Dissolved	0.0033	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	0.052		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	180		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.015		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	64		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.0021	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	0.015		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.065		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	2.8		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	33		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	1.9		0.10	0.013	mg/L	1		200.8	Dissolved
Total Organic Carbon	1.4		1.0	0.44	mg/L	1		5310 C-2014	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-10 MW-19C — Lab Sample ID: 240-238165-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	1.6		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Barium, Dissolved	0.034		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	57		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.024		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	20		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.020		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	6.9		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	42		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	0.56		0.10	0.013	mg/L	1		200.8	Dissolved

Client Sample ID: L511203-11 MW-19D — Lab Sample ID: 240-238165-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	0.53		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Barium, Dissolved	0.051		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	66		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.023		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	23		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.0015	J	0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.027		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	5.3		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	30		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	0.54		0.10	0.013	mg/L	1		200.8	Dissolved
Zinc, Dissolved	0.0013	J	0.0070	0.00093	mg/L	1		200.8	Dissolved
Total Organic Carbon	1.3		1.0	0.44	mg/L	1		5310 C-2014	Total/NA

Client Sample ID: L511203-12 MWT-7 — Lab Sample ID: 240-238165-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	1.9		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic, Dissolved	0.0036	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	0.055		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	98		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.071		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	14		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.14		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.19		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	8.0		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	66		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	0.75		0.10	0.013	mg/L	1		200.8	Dissolved
Total Organic Carbon	4.6		1.0	0.44	mg/L	1		5310 C-2014	Total/NA

Client Sample ID: L511203-13 Field Blank — Lab Sample ID: 240-238165-13

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-01 MW-3
Lab Sample ID: 240-238165-1
Date Collected: 11/18/25 16:02
Matrix: Water
Date Received: 11/20/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**5.7**		0.50	0.041	mg/L		11/25/25 16:52	11/26/25 20:55	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	**0.0028**	**J**	0.0050	0.00075	mg/L		11/21/25 14:00	11/24/25 18:38	1
Barium, Dissolved	**0.015**		0.0050	0.00077	mg/L		11/21/25 14:00	11/24/25 18:38	1
Cadmium, Dissolved	**0.000079**	**J**	0.0010	0.000077	mg/L		11/21/25 14:00	11/24/25 18:38	1
Calcium, Dissolved	**230**		1.0	0.25	mg/L		11/21/25 14:00	11/24/25 18:38	1
Cobalt, Dissolved	**0.00052**	**J**	0.0010	0.000086	mg/L		11/21/25 14:00	11/24/25 18:38	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 14:00	11/24/25 18:38	1
Lithium, Dissolved	**0.078**		0.0080	0.0034	mg/L		11/21/25 14:00	11/24/25 18:38	1
Magnesium, Dissolved	**44**		1.0	0.061	mg/L		11/21/25 14:00	11/24/25 18:38	1
Molybdenum, Dissolved	**0.18**		0.0050	0.0011	mg/L		11/21/25 14:00	11/24/25 18:38	1
Nickel, Dissolved	**0.0035**		0.0020	0.0015	mg/L		11/21/25 14:00	11/24/25 18:38	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 14:00	11/24/25 18:38	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 14:00	11/24/25 18:38	1
Manganese, Dissolved	**0.16**		0.0050	0.0035	mg/L		11/21/25 14:00	11/24/25 18:38	1
Potassium, Dissolved	**1.2**		1.0	0.22	mg/L		11/21/25 14:00	11/24/25 18:38	1
Sodium, Dissolved	**100**		1.0	0.88	mg/L		11/21/25 14:00	11/24/25 18:38	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**1.9**		0.10	0.013	mg/L		11/25/25 16:52	11/30/25 16:04	1
Zinc, Dissolved	**0.0022**	**J B**	0.0070	0.00093	mg/L		11/25/25 16:52	11/30/25 16:04	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/25/25 16:52	11/30/25 16:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SM 5310 C-2014)	**1.6**		1.0	0.44	mg/L			11/26/25 06:01	1
Nitrite as N (SM 4500 NO2 B)	ND	H	0.10	0.0097	mg/L			11/21/25 11:31	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/25/25 20:00	1
Nitrate as N (SM4500 NO3 D)	**0.96**		0.20	0.070	mg/L			11/20/25 16:02	1

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-02 MW-5
Lab Sample ID: 240-238165-2
Date Collected: 11/18/25 17:40
Matrix: Water
Date Received: 11/20/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**4.0**		0.50	0.041	mg/L		11/25/25 16:52	11/26/25 20:58	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		11/21/25 14:00	11/24/25 18:41	1
Barium, Dissolved	**0.040**		0.0050	0.00077	mg/L		11/21/25 14:00	11/24/25 18:41	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 14:00	11/24/25 18:41	1
Calcium, Dissolved	**140**		1.0	0.25	mg/L		11/21/25 14:00	11/24/25 18:41	1
Cobalt, Dissolved	**0.00023**	**J**	0.0010	0.000086	mg/L		11/21/25 14:00	11/24/25 18:41	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 14:00	11/24/25 18:41	1
Lithium, Dissolved	**0.057**		0.0080	0.0034	mg/L		11/21/25 14:00	11/24/25 18:41	1
Magnesium, Dissolved	**30**		1.0	0.061	mg/L		11/21/25 14:00	11/24/25 18:41	1
Molybdenum, Dissolved	**0.069**		0.0050	0.0011	mg/L		11/21/25 14:00	11/24/25 18:41	1
Nickel, Dissolved	**0.0034**		0.0020	0.0015	mg/L		11/21/25 14:00	11/24/25 18:41	1
Selenium, Dissolved	**0.0013**	**J**	0.0050	0.00089	mg/L		11/21/25 14:00	11/24/25 18:41	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 14:00	11/24/25 18:41	1
Manganese, Dissolved	ND		0.0050	0.0035	mg/L		11/21/25 14:00	11/24/25 18:41	1
Potassium, Dissolved	**3.4**		1.0	0.22	mg/L		11/21/25 14:00	11/24/25 18:41	1
Sodium, Dissolved	**46**		1.0	0.88	mg/L		11/21/25 14:00	11/24/25 18:41	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.10	0.013	mg/L		11/25/25 16:52	11/30/25 16:07	1
Zinc, Dissolved	**0.0020**	**J B**	0.0070	0.00093	mg/L		11/25/25 16:52	11/30/25 16:07	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/25/25 16:52	11/30/25 16:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SM 5310 C-2014)	**1.0**		1.0	0.44	mg/L			11/26/25 07:12	1
Nitrite as N (SM 4500 NO2 B)	ND	H	0.10	0.0097	mg/L			11/21/25 11:34	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/25/25 20:06	1
Nitrate as N (SM4500 NO3 D)	**0.64**		0.20	0.070	mg/L			11/20/25 16:34	1

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-03 MW-7
Lab Sample ID: 240-238165-3

Date Collected: 11/18/25 11:34
Matrix: Water
Date Received: 11/20/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**1.9**		0.50	0.041	mg/L		11/25/25 16:52	11/26/25 21:01	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	**0.0038**	**J**	0.0050	0.00075	mg/L		11/21/25 14:00	11/24/25 18:44	1
Barium, Dissolved	**0.056**		0.0050	0.00077	mg/L		11/21/25 14:00	11/24/25 18:44	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 14:00	11/24/25 18:44	1
Calcium, Dissolved	**99**		1.0	0.25	mg/L		11/21/25 14:00	11/24/25 18:44	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 14:00	11/24/25 18:44	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 14:00	11/24/25 18:44	1
Lithium, Dissolved	**0.073**		0.0080	0.0034	mg/L		11/21/25 14:00	11/24/25 18:44	1
Magnesium, Dissolved	**14**		1.0	0.061	mg/L		11/21/25 14:00	11/24/25 18:44	1
Molybdenum, Dissolved	**0.14**		0.0050	0.0011	mg/L		11/21/25 14:00	11/24/25 18:44	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		11/21/25 14:00	11/24/25 18:44	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 14:00	11/24/25 18:44	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 14:00	11/24/25 18:44	1
Manganese, Dissolved	**0.19**		0.0050	0.0035	mg/L		11/21/25 14:00	11/24/25 18:44	1
Potassium, Dissolved	**8.1**		1.0	0.22	mg/L		11/21/25 14:00	11/24/25 18:44	1
Sodium, Dissolved	**67**		1.0	0.88	mg/L		11/21/25 14:00	11/24/25 18:44	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**0.84**		0.10	0.013	mg/L		11/25/25 16:52	11/30/25 16:10	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/25/25 16:52	11/30/25 16:10	1
Aluminum, Dissolved	**0.011**	**J**	0.040	0.0058	mg/L		11/25/25 16:52	11/30/25 16:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SM 5310 C-2014)	**4.6**		1.0	0.44	mg/L			11/26/25 08:27	1
Nitrite as N (SM 4500 NO2 B)	ND	H	0.10	0.0097	mg/L			11/21/25 11:54	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/25/25 20:08	1

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-04 MW-18A
Lab Sample ID: 240-238165-4

Date Collected: 11/18/25 13:33
Matrix: Water
Date Received: 11/20/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**0.75**		0.50	0.041	mg/L		11/25/25 16:52	11/26/25 20:32	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	**0.0010**	**J**	0.0050	0.00075	mg/L		11/21/25 14:00	11/24/25 18:46	1
Barium, Dissolved	**0.041**		0.0050	0.00077	mg/L		11/21/25 14:00	11/24/25 18:46	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 14:00	11/24/25 18:46	1
Calcium, Dissolved	**89**		1.0	0.25	mg/L		11/21/25 14:00	11/24/25 18:46	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 14:00	11/24/25 18:46	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 14:00	11/24/25 18:46	1
Lithium, Dissolved	**0.063**		0.0080	0.0034	mg/L		11/21/25 14:00	11/24/25 18:46	1
Magnesium, Dissolved	**15**		1.0	0.061	mg/L		11/21/25 14:00	11/24/25 18:46	1
Molybdenum, Dissolved	**0.11**		0.0050	0.0011	mg/L		11/21/25 14:00	11/24/25 18:46	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		11/21/25 14:00	11/24/25 18:46	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 14:00	11/24/25 18:46	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 14:00	11/24/25 18:46	1
Manganese, Dissolved	**0.19**		0.0050	0.0035	mg/L		11/21/25 14:00	11/24/25 18:46	1
Potassium, Dissolved	**6.6**		1.0	0.22	mg/L		11/21/25 14:00	11/24/25 18:46	1
Sodium, Dissolved	**59**		1.0	0.88	mg/L		11/21/25 14:00	11/24/25 18:46	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**0.82**		0.10	0.013	mg/L		11/25/25 16:52	11/26/25 17:54	1
Zinc, Dissolved	**0.0068**	**J B**	0.0070	0.00093	mg/L		11/25/25 16:52	11/26/25 17:54	1
Aluminum, Dissolved	**0.0069**	**J**	0.040	0.0058	mg/L		11/25/25 16:52	11/26/25 17:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SM 5310 C-2014)	**2.9**		1.0	0.44	mg/L			11/26/25 08:51	1
Nitrite as N (SM 4500 NO2 B)	ND	H	0.10	0.0097	mg/L			11/21/25 11:55	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/25/25 20:10	1

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-05 MW-18B
Lab Sample ID: 240-238165-5
Date Collected: 11/18/25 14:42
Matrix: Water
Date Received: 11/20/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**2.9**		0.50	0.041	mg/L		11/25/25 16:52	11/26/25 21:05	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		11/21/25 14:00	11/24/25 18:49	1
Barium, Dissolved	**0.056**		0.0050	0.00077	mg/L		11/21/25 14:00	11/24/25 18:49	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 14:00	11/24/25 18:49	1
Calcium, Dissolved	**170**		1.0	0.25	mg/L		11/21/25 14:00	11/24/25 18:49	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 14:00	11/24/25 18:49	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 14:00	11/24/25 18:49	1
Lithium, Dissolved	**0.13**		0.0080	0.0034	mg/L		11/21/25 14:00	11/24/25 18:49	1
Magnesium, Dissolved	**31**		1.0	0.061	mg/L		11/21/25 14:00	11/24/25 18:49	1
Molybdenum, Dissolved	**0.12**		0.0050	0.0011	mg/L		11/21/25 14:00	11/24/25 18:49	1
Nickel, Dissolved	**0.010**		0.0020	0.0015	mg/L		11/21/25 14:00	11/24/25 18:49	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 14:00	11/24/25 18:49	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 14:00	11/24/25 18:49	1
Manganese, Dissolved	**0.19**		0.0050	0.0035	mg/L		11/21/25 14:00	11/24/25 18:49	1
Potassium, Dissolved	**8.0**		1.0	0.22	mg/L		11/21/25 14:00	11/24/25 18:49	1
Sodium, Dissolved	**88**		1.0	0.88	mg/L		11/21/25 14:00	11/24/25 18:49	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**2.6**		0.10	0.013	mg/L		11/25/25 16:52	11/30/25 16:13	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/25/25 16:52	11/30/25 16:13	1
Aluminum, Dissolved	**0.0082**	**J**	0.040	0.0058	mg/L		11/25/25 16:52	11/30/25 16:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SM 5310 C-2014)	**4.8**		1.0	0.44	mg/L			11/26/25 09:15	1
Nitrite as N (SM 4500 NO2 B)	ND	H	0.10	0.0097	mg/L			11/21/25 11:59	1
Total Sulfide (SM 4500 S2 D)	**0.039**	**J**	0.050	0.028	mg/L			11/25/25 20:12	1

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-06 MW-18C
Lab Sample ID: 240-238165-6

Date Collected: 11/18/25 15:47
Matrix: Water
Date Received: 11/20/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**3.1**		0.50	0.041	mg/L		11/25/25 16:52	11/26/25 21:08	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	**0.0010**	**J**	0.0050	0.00075	mg/L		11/21/25 14:00	11/24/25 18:52	1
Barium, Dissolved	**0.060**		0.0050	0.00077	mg/L		11/21/25 14:00	11/24/25 18:52	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 14:00	11/24/25 18:52	1
Calcium, Dissolved	**190**		1.0	0.25	mg/L		11/21/25 14:00	11/24/25 18:52	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 14:00	11/24/25 18:52	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 14:00	11/24/25 18:52	1
Lithium, Dissolved	**0.10**		0.0080	0.0034	mg/L		11/21/25 14:00	11/24/25 18:52	1
Magnesium, Dissolved	**44**		1.0	0.061	mg/L		11/21/25 14:00	11/24/25 18:52	1
Molybdenum, Dissolved	**0.14**		0.0050	0.0011	mg/L		11/21/25 14:00	11/24/25 18:52	1
Nickel, Dissolved	**0.011**		0.0020	0.0015	mg/L		11/21/25 14:00	11/24/25 18:52	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 14:00	11/24/25 18:52	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 14:00	11/24/25 18:52	1
Manganese, Dissolved	**0.14**		0.0050	0.0035	mg/L		11/21/25 14:00	11/24/25 18:52	1
Potassium, Dissolved	**5.4**		1.0	0.22	mg/L		11/21/25 14:00	11/24/25 18:52	1
Sodium, Dissolved	**84**		1.0	0.88	mg/L		11/21/25 14:00	11/24/25 18:52	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**2.6**		0.10	0.013	mg/L		11/25/25 16:52	11/30/25 16:16	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/25/25 16:52	11/30/25 16:16	1
Aluminum, Dissolved	**0.0087**	**J**	0.040	0.0058	mg/L		11/25/25 16:52	11/30/25 16:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SM 5310 C-2014)	**4.3**		1.0	0.44	mg/L			11/26/25 09:39	1
Nitrite as N (SM 4500 NO2 B)	ND	H	0.10	0.0097	mg/L			11/21/25 11:24	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/25/25 20:14	1
Nitrate as N (SM4500 NO3 D)	**0.58**		0.40	0.14	mg/L			11/20/25 15:27	2

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-07 MW-18D
Lab Sample ID: 240-238165-7

Date Collected: 11/18/25 16:50
Matrix: Water
Date Received: 11/20/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**3.7**		0.50	0.041	mg/L		11/25/25 16:52	11/26/25 21:11	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		11/21/25 14:00	11/24/25 18:54	1
Barium, Dissolved	**0.026**		0.0050	0.00077	mg/L		11/21/25 14:00	11/24/25 18:54	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 14:00	11/24/25 18:54	1
Calcium, Dissolved	**78**		1.0	0.25	mg/L		11/21/25 14:00	11/24/25 18:54	1
Cobalt, Dissolved	**0.00038**	**J**	0.0010	0.000086	mg/L		11/21/25 14:00	11/24/25 18:54	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 14:00	11/24/25 18:54	1
Lithium, Dissolved	**0.076**		0.0080	0.0034	mg/L		11/21/25 14:00	11/24/25 18:54	1
Magnesium, Dissolved	**15**		1.0	0.061	mg/L		11/21/25 14:00	11/24/25 18:54	1
Molybdenum, Dissolved	**0.067**		0.0050	0.0011	mg/L		11/21/25 14:00	11/24/25 18:54	1
Nickel, Dissolved	**0.0046**		0.0020	0.0015	mg/L		11/21/25 14:00	11/24/25 18:54	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 14:00	11/24/25 18:54	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 14:00	11/24/25 18:54	1
Manganese, Dissolved	**0.079**		0.0050	0.0035	mg/L		11/21/25 14:00	11/24/25 18:54	1
Potassium, Dissolved	**5.8**		1.0	0.22	mg/L		11/21/25 14:00	11/24/25 18:54	1
Sodium, Dissolved	**130**		1.0	0.88	mg/L		11/21/25 14:00	11/24/25 18:54	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**1.2**		0.10	0.013	mg/L		11/25/25 16:52	11/30/25 16:19	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/25/25 16:52	11/30/25 16:19	1
Aluminum, Dissolved	**0.0065**	**J**	0.040	0.0058	mg/L		11/25/25 16:52	11/30/25 16:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SM 5310 C-2014)	**1.7**		1.0	0.44	mg/L			11/26/25 10:03	1
Nitrite as N (SM 4500 NO2 B)	ND	H	0.10	0.0097	mg/L			11/21/25 11:25	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/25/25 20:16	1
Nitrate as N (SM4500 NO3 D)	**0.66**		0.20	0.070	mg/L			11/20/25 15:43	1

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-08 MW-19A
Lab Sample ID: 240-238165-8

Date Collected: 11/18/25 10:02
Matrix: Water
Date Received: 11/20/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**0.27**	**J**	0.50	0.041	mg/L		11/25/25 16:52	11/26/25 21:15	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	**0.0044**	**J**	0.0050	0.00075	mg/L		11/21/25 14:00	11/24/25 19:02	1
Barium, Dissolved	**0.093**		0.0050	0.00077	mg/L		11/21/25 14:00	11/24/25 19:02	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 14:00	11/24/25 19:02	1
Calcium, Dissolved	**190**		1.0	0.25	mg/L		11/21/25 14:00	11/24/25 19:02	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 14:00	11/24/25 19:02	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 14:00	11/24/25 19:02	1
Lithium, Dissolved	**0.012**		0.0080	0.0034	mg/L		11/21/25 14:00	11/24/25 19:02	1
Magnesium, Dissolved	**59**		1.0	0.061	mg/L		11/21/25 14:00	11/24/25 19:02	1
Molybdenum, Dissolved	**0.0021**	**J**	0.0050	0.0011	mg/L		11/21/25 14:00	11/24/25 19:02	1
Nickel, Dissolved	**0.010**		0.0020	0.0015	mg/L		11/21/25 14:00	11/24/25 19:02	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 14:00	11/24/25 19:02	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 14:00	11/24/25 19:02	1
Manganese, Dissolved	**0.15**		0.0050	0.0035	mg/L		11/21/25 14:00	11/24/25 19:02	1
Potassium, Dissolved	**1.9**		1.0	0.22	mg/L		11/21/25 14:00	11/24/25 19:02	1
Sodium, Dissolved	**48**		1.0	0.88	mg/L		11/21/25 14:00	11/24/25 19:02	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**5.1**		0.10	0.013	mg/L		11/25/25 16:52	11/30/25 16:21	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/25/25 16:52	11/30/25 16:21	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/25/25 16:52	11/30/25 16:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SM 5310 C-2014)	**2.3**		1.0	0.44	mg/L			11/26/25 10:27	1
Nitrite as N (SM 4500 NO2 B)	ND	H	0.10	0.0097	mg/L			11/21/25 12:00	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/25/25 20:18	1

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-09 MW-19B
Lab Sample ID: 240-238165-9

Date Collected: 11/18/25 11:17
Matrix: Water
Date Received: 11/20/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**0.45**	**J**	0.50	0.041	mg/L		11/25/25 16:52	11/26/25 21:18	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	**0.0033**	**J**	0.0050	0.00075	mg/L		11/21/25 14:00	11/24/25 19:05	1
Barium, Dissolved	**0.052**		0.0050	0.00077	mg/L		11/21/25 14:00	11/24/25 19:05	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 14:00	11/24/25 19:05	1
Calcium, Dissolved	**180**		1.0	0.25	mg/L		11/21/25 14:00	11/24/25 19:05	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 14:00	11/24/25 19:05	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 14:00	11/24/25 19:05	1
Lithium, Dissolved	**0.015**		0.0080	0.0034	mg/L		11/21/25 14:00	11/24/25 19:05	1
Magnesium, Dissolved	**64**		1.0	0.061	mg/L		11/21/25 14:00	11/24/25 19:05	1
Molybdenum, Dissolved	**0.0021**	**J**	0.0050	0.0011	mg/L		11/21/25 14:00	11/24/25 19:05	1
Nickel, Dissolved	**0.015**		0.0020	0.0015	mg/L		11/21/25 14:00	11/24/25 19:05	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 14:00	11/24/25 19:05	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 14:00	11/24/25 19:05	1
Manganese, Dissolved	**0.065**		0.0050	0.0035	mg/L		11/21/25 14:00	11/24/25 19:05	1
Potassium, Dissolved	**2.8**		1.0	0.22	mg/L		11/21/25 14:00	11/24/25 19:05	1
Sodium, Dissolved	**33**		1.0	0.88	mg/L		11/21/25 14:00	11/24/25 19:05	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**1.9**		0.10	0.013	mg/L		11/25/25 16:52	11/30/25 16:42	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/25/25 16:52	11/30/25 16:42	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/25/25 16:52	11/30/25 16:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SM 5310 C-2014)	**1.4**		1.0	0.44	mg/L			11/26/25 10:51	1
Nitrite as N (SM 4500 NO2 B)	ND	H	0.10	0.0097	mg/L			11/21/25 11:39	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/25/25 20:20	1

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-10 MW-19C
Lab Sample ID: 240-238165-10
Date Collected: 11/18/25 12:25
Matrix: Water
Date Received: 11/20/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**1.6**		0.50	0.041	mg/L		11/25/25 16:53	11/26/25 19:54	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		11/21/25 14:00	11/24/25 19:08	1
Barium, Dissolved	**0.034**		0.0050	0.00077	mg/L		11/21/25 14:00	11/24/25 19:08	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 14:00	11/24/25 19:08	1
Calcium, Dissolved	**57**		1.0	0.25	mg/L		11/21/25 14:00	11/24/25 19:08	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 14:00	11/24/25 19:08	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 14:00	11/24/25 19:08	1
Lithium, Dissolved	**0.024**		0.0080	0.0034	mg/L		11/21/25 14:00	11/24/25 19:08	1
Magnesium, Dissolved	**20**		1.0	0.061	mg/L		11/21/25 14:00	11/24/25 19:08	1
Molybdenum, Dissolved	ND		0.0050	0.0011	mg/L		11/21/25 14:00	11/24/25 19:08	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		11/21/25 14:00	11/24/25 19:08	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 14:00	11/24/25 19:08	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 14:00	11/24/25 19:08	1
Manganese, Dissolved	**0.020**		0.0050	0.0035	mg/L		11/21/25 14:00	11/24/25 19:08	1
Potassium, Dissolved	**6.9**		1.0	0.22	mg/L		11/21/25 14:00	11/24/25 19:08	1
Sodium, Dissolved	**42**		1.0	0.88	mg/L		11/21/25 14:00	11/24/25 19:08	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**0.56**		0.10	0.013	mg/L		11/25/25 16:53	11/30/25 21:42	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/25/25 16:53	11/30/25 21:42	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/25/25 16:53	11/30/25 21:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SM 5310 C-2014)	ND		1.0	0.44	mg/L			11/26/25 11:15	1
Nitrite as N (SM 4500 NO2 B)	ND	H	0.10	0.0097	mg/L			11/21/25 11:41	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/25/25 20:22	1

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-11 MW-19D
Lab Sample ID: 240-238165-11

Date Collected: 11/18/25 13:42
Matrix: Water
Date Received: 11/20/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**0.53**		0.50	0.041	mg/L		11/25/25 16:53	11/26/25 20:10	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		11/21/25 14:00	11/24/25 19:10	1
Barium, Dissolved	**0.051**		0.0050	0.00077	mg/L		11/21/25 14:00	11/24/25 19:10	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 14:00	11/24/25 19:10	1
Calcium, Dissolved	**66**		1.0	0.25	mg/L		11/21/25 14:00	11/24/25 19:10	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 14:00	11/24/25 19:10	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 14:00	11/24/25 19:10	1
Lithium, Dissolved	**0.023**		0.0080	0.0034	mg/L		11/21/25 14:00	11/24/25 19:10	1
Magnesium, Dissolved	**23**		1.0	0.061	mg/L		11/21/25 14:00	11/24/25 19:10	1
Molybdenum, Dissolved	**0.0015**	**J**	0.0050	0.0011	mg/L		11/21/25 14:00	11/24/25 19:10	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		11/21/25 14:00	11/24/25 19:10	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 14:00	11/24/25 19:10	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 14:00	11/24/25 19:10	1
Manganese, Dissolved	**0.027**		0.0050	0.0035	mg/L		11/21/25 14:00	11/24/25 19:10	1
Potassium, Dissolved	**5.3**		1.0	0.22	mg/L		11/21/25 14:00	11/24/25 19:10	1
Sodium, Dissolved	**30**		1.0	0.88	mg/L		11/21/25 14:00	11/24/25 19:10	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**0.54**		0.10	0.013	mg/L		11/25/25 16:53	11/30/25 22:02	1
Zinc, Dissolved	**0.0013**	**J**	0.0070	0.00093	mg/L		11/25/25 16:53	11/30/25 22:02	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/25/25 16:53	11/30/25 22:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SM 5310 C-2014)	**1.3**		1.0	0.44	mg/L			11/26/25 13:17	1
Nitrite as N (SM 4500 NO2 B)	ND	H	0.10	0.0097	mg/L			11/21/25 11:43	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/25/25 20:26	1

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-12 MWT-7
Lab Sample ID: 240-238165-12
Date Collected: 11/18/25 11:34
Matrix: Water
Date Received: 11/20/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**1.9**		0.50	0.041	mg/L		11/25/25 16:52	11/26/25 21:28	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	**0.0036**	**J**	0.0050	0.00075	mg/L		11/21/25 14:00	11/24/25 19:13	1
Barium, Dissolved	**0.055**		0.0050	0.00077	mg/L		11/21/25 14:00	11/24/25 19:13	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 14:00	11/24/25 19:13	1
Calcium, Dissolved	**98**		1.0	0.25	mg/L		11/21/25 14:00	11/24/25 19:13	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 14:00	11/24/25 19:13	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 14:00	11/24/25 19:13	1
Lithium, Dissolved	**0.071**		0.0080	0.0034	mg/L		11/21/25 14:00	11/24/25 19:13	1
Magnesium, Dissolved	**14**		1.0	0.061	mg/L		11/21/25 14:00	11/24/25 19:13	1
Molybdenum, Dissolved	**0.14**		0.0050	0.0011	mg/L		11/21/25 14:00	11/24/25 19:13	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		11/21/25 14:00	11/24/25 19:13	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 14:00	11/24/25 19:13	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 14:00	11/24/25 19:13	1
Manganese, Dissolved	**0.19**		0.0050	0.0035	mg/L		11/21/25 14:00	11/24/25 19:13	1
Potassium, Dissolved	**8.0**		1.0	0.22	mg/L		11/21/25 14:00	11/24/25 19:13	1
Sodium, Dissolved	**66**		1.0	0.88	mg/L		11/21/25 14:00	11/24/25 19:13	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**0.75**		0.10	0.013	mg/L		11/25/25 16:52	11/30/25 16:45	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/25/25 16:52	11/30/25 16:45	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/25/25 16:52	11/30/25 16:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SM 5310 C-2014)	**4.6**		1.0	0.44	mg/L			11/26/25 14:29	1
Nitrite as N (SM 4500 NO2 B)	ND	H	0.10	0.0097	mg/L			11/21/25 11:50	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/25/25 20:28	1

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-13 Field Blank
Lab Sample ID: 240-238165-13

Date Collected: 11/18/25 10:40
Matrix: Water
Date Received: 11/20/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	ND		0.50	0.041	mg/L		11/25/25 16:52	11/26/25 21:31	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		11/21/25 14:00	11/24/25 19:16	1
Barium, Dissolved	ND		0.0050	0.00077	mg/L		11/21/25 14:00	11/24/25 19:16	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 14:00	11/24/25 19:16	1
Calcium, Dissolved	ND		1.0	0.25	mg/L		11/21/25 14:00	11/24/25 19:16	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 14:00	11/24/25 19:16	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 14:00	11/24/25 19:16	1
Lithium, Dissolved	ND		0.0080	0.0034	mg/L		11/21/25 14:00	11/24/25 19:16	1
Magnesium, Dissolved	ND		1.0	0.061	mg/L		11/21/25 14:00	11/24/25 19:16	1
Molybdenum, Dissolved	ND		0.0050	0.0011	mg/L		11/21/25 14:00	11/24/25 19:16	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		11/21/25 14:00	11/24/25 19:16	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 14:00	11/24/25 19:16	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 14:00	11/24/25 19:16	1
Manganese, Dissolved	ND		0.0050	0.0035	mg/L		11/21/25 14:00	11/24/25 19:16	1
Potassium, Dissolved	ND		1.0	0.22	mg/L		11/21/25 14:00	11/24/25 19:16	1
Sodium, Dissolved	ND		1.0	0.88	mg/L		11/21/25 14:00	11/24/25 19:16	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.10	0.013	mg/L		11/25/25 16:52	11/30/25 16:48	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/25/25 16:52	11/30/25 16:48	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/25/25 16:52	11/30/25 16:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SM 5310 C-2014)	ND		1.0	0.44	mg/L			11/26/25 14:53	1
Nitrite as N (SM 4500 NO2 B)	ND	H	0.10	0.0097	mg/L			11/21/25 11:53	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/25/25 20:30	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 350-11371/25-A
Matrix: Water
Analysis Batch: 11433

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11371

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	ND		0.50	0.041	mg/L		11/25/25 16:52	11/26/25 20:26	1

Lab Sample ID: LCS 350-11371/26-A
Matrix: Water
Analysis Batch: 11433

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11371

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron, Dissolved	5.00	5.15		mg/L		103	85 - 115

Lab Sample ID: MB 350-11372/25-A
Matrix: Water
Analysis Batch: 11433

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11372

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	ND		0.50	0.041	mg/L		11/25/25 16:53	11/26/25 19:48	1

Lab Sample ID: LCS 350-11372/26-A
Matrix: Water
Analysis Batch: 11433

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11372

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron, Dissolved	5.00	5.09		mg/L		102	85 - 115

Lab Sample ID: 240-238165-4 MS
Matrix: Water
Analysis Batch: 11433

Client Sample ID: L511203-04 MW-18A
Prep Type: Dissolved
Prep Batch: 11371

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron, Dissolved	0.75		5.00	5.77		mg/L		100	70 - 130

Lab Sample ID: 240-238165-4 MSD
Matrix: Water
Analysis Batch: 11433

Client Sample ID: L511203-04 MW-18A
Prep Type: Dissolved
Prep Batch: 11371

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron, Dissolved	0.75		5.00	5.95		mg/L		104	70 - 130	3	20

Lab Sample ID: 240-238165-10 MS
Matrix: Water
Analysis Batch: 11433

Client Sample ID: L511203-10 MW-19C
Prep Type: Dissolved
Prep Batch: 11372

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron, Dissolved	1.6		5.00	6.69		mg/L		102	70 - 130

Lab Sample ID: 240-238165-10 MSD
Matrix: Water
Analysis Batch: 11433

Client Sample ID: L511203-10 MW-19C
Prep Type: Dissolved
Prep Batch: 11372

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron, Dissolved	1.6		5.00	6.88		mg/L		106	70 - 130	3	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: 240-238165-11 MS
Matrix: Water
Analysis Batch: 11433

Client Sample ID: L511203-11 MW-19D
Prep Type: Dissolved
Prep Batch: 11372

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron, Dissolved	0.53		5.00	5.64		mg/L		102	70 - 130

Lab Sample ID: 240-238165-11 MSD
Matrix: Water
Analysis Batch: 11433

Client Sample ID: L511203-11 MW-19D
Prep Type: Dissolved
Prep Batch: 11372

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron, Dissolved	0.53		5.00	5.65		mg/L		102	70 - 130	0	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-11371/25-A
Matrix: Water
Analysis Batch: 11421

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11371

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.10	0.013	mg/L		11/25/25 16:52	11/26/25 17:31	1
Zinc, Dissolved	0.00140	J	0.0070	0.00093	mg/L		11/25/25 16:52	11/26/25 17:31	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/25/25 16:52	11/26/25 17:31	1

Lab Sample ID: LCS 350-11371/26-A
Matrix: Water
Analysis Batch: 11421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11371

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron, Dissolved	20.0	18.4		mg/L		92	85 - 115
Zinc, Dissolved	1.00	0.923		mg/L		92	85 - 115
Aluminum, Dissolved	20.0	19.7		mg/L		98	85 - 115

Lab Sample ID: MB 350-11372/25-A
Matrix: Water
Analysis Batch: 11429

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11372

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.10	0.013	mg/L		11/25/25 16:53	11/30/25 21:39	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/25/25 16:53	11/30/25 21:39	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/25/25 16:53	11/30/25 21:39	1

Lab Sample ID: LCS 350-11372/26-A
Matrix: Water
Analysis Batch: 11429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11372

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron, Dissolved	20.0	18.5		mg/L		93	85 - 115
Zinc, Dissolved	1.00	0.931		mg/L		93	85 - 115
Aluminum, Dissolved	20.0	20.2		mg/L		101	85 - 115

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-238165-4 MS
Matrix: Water
Analysis Batch: 11421

Client Sample ID: L511203-04 MW-18A
Prep Type: Dissolved
Prep Batch: 11371

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron, Dissolved	0.82		20.0	16.3		mg/L		78	70 - 130
Zinc, Dissolved	0.0068	J B	1.00	0.786		mg/L		78	70 - 130
Aluminum, Dissolved	0.0069	J	20.0	16.9		mg/L		84	70 - 130

Lab Sample ID: 240-238165-4 MSD
Matrix: Water
Analysis Batch: 11421

Client Sample ID: L511203-04 MW-18A
Prep Type: Dissolved
Prep Batch: 11371

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron, Dissolved	0.82		20.0	19.1		mg/L		91	70 - 130	16	20
Zinc, Dissolved	0.0068	J B	1.00	0.921		mg/L		91	70 - 130	16	20
Aluminum, Dissolved	0.0069	J	20.0	19.5		mg/L		97	70 - 130	14	20

Lab Sample ID: 240-238165-10 MS
Matrix: Water
Analysis Batch: 11429

Client Sample ID: L511203-10 MW-19C
Prep Type: Dissolved
Prep Batch: 11372

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron, Dissolved	0.56		20.0	18.2		mg/L		88	70 - 130
Zinc, Dissolved	ND		1.00	0.863		mg/L		86	70 - 130
Aluminum, Dissolved	ND		20.0	19.3		mg/L		96	70 - 130

Lab Sample ID: 240-238165-10 MSD
Matrix: Water
Analysis Batch: 11429

Client Sample ID: L511203-10 MW-19C
Prep Type: Dissolved
Prep Batch: 11372

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron, Dissolved	0.56		20.0	19.4		mg/L		94	70 - 130	6	20
Zinc, Dissolved	ND		1.00	0.935		mg/L		94	70 - 130	8	20
Aluminum, Dissolved	ND		20.0	20.6		mg/L		103	70 - 130	6	20

Lab Sample ID: 240-238165-11 MS
Matrix: Water
Analysis Batch: 11429

Client Sample ID: L511203-11 MW-19D
Prep Type: Dissolved
Prep Batch: 11372

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron, Dissolved	0.54		20.0	16.8		mg/L		81	70 - 130
Zinc, Dissolved	0.0013	J	1.00	0.811		mg/L		81	70 - 130
Aluminum, Dissolved	ND		20.0	17.9		mg/L		90	70 - 130

Lab Sample ID: 240-238165-11 MSD
Matrix: Water
Analysis Batch: 11429

Client Sample ID: L511203-11 MW-19D
Prep Type: Dissolved
Prep Batch: 11372

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron, Dissolved	0.54		20.0	19.9		mg/L		97	70 - 130	17	20
Zinc, Dissolved	0.0013	J	1.00	0.952		mg/L		95	70 - 130	16	20
Aluminum, Dissolved	ND		20.0	21.0		mg/L		105	70 - 130	16	20

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-681645/1-A
Matrix: Water
Analysis Batch: 681984

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 681645

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		11/21/25 14:00	11/24/25 17:59	1
Barium, Dissolved	ND		0.0050	0.00077	mg/L		11/21/25 14:00	11/24/25 17:59	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/21/25 14:00	11/24/25 17:59	1
Calcium, Dissolved	ND		1.0	0.25	mg/L		11/21/25 14:00	11/24/25 17:59	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/21/25 14:00	11/24/25 17:59	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/21/25 14:00	11/24/25 17:59	1
Lithium, Dissolved	ND		0.0080	0.0034	mg/L		11/21/25 14:00	11/24/25 17:59	1
Magnesium, Dissolved	ND		1.0	0.061	mg/L		11/21/25 14:00	11/24/25 17:59	1
Molybdenum, Dissolved	ND		0.0050	0.0011	mg/L		11/21/25 14:00	11/24/25 17:59	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		11/21/25 14:00	11/24/25 17:59	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/21/25 14:00	11/24/25 17:59	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/21/25 14:00	11/24/25 17:59	1
Manganese, Dissolved	ND		0.0050	0.0035	mg/L		11/21/25 14:00	11/24/25 17:59	1
Potassium, Dissolved	ND		1.0	0.22	mg/L		11/21/25 14:00	11/24/25 17:59	1
Sodium, Dissolved	ND		1.0	0.88	mg/L		11/21/25 14:00	11/24/25 17:59	1

Lab Sample ID: LCS 240-681645/2-A
Matrix: Water
Analysis Batch: 681984

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 681645

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic, Dissolved	1.00	0.992		mg/L		99	85 - 115
Barium, Dissolved	1.00	0.979		mg/L		98	85 - 115
Cadmium, Dissolved	0.500	0.476		mg/L		95	85 - 115
Calcium, Dissolved	25.0	24.9		mg/L		99	85 - 115
Chromium, Dissolved	0.500	0.498		mg/L		100	85 - 115
Cobalt, Dissolved	0.500	0.485		mg/L		97	85 - 115
Copper, Dissolved	0.500	0.496		mg/L		99	85 - 115
Lithium, Dissolved	0.500	0.505		mg/L		101	85 - 115
Magnesium, Dissolved	25.0	25.8		mg/L		103	85 - 115
Molybdenum, Dissolved	0.500	0.492		mg/L		98	85 - 115
Nickel, Dissolved	0.500	0.492		mg/L		98	85 - 115
Selenium, Dissolved	1.00	0.955		mg/L		96	85 - 115
Vanadium, Dissolved	0.500	0.503		mg/L		101	85 - 115
Manganese, Dissolved	0.500	0.500		mg/L		100	85 - 115
Potassium, Dissolved	25.0	25.4		mg/L		102	85 - 115
Sodium, Dissolved	25.0	25.8		mg/L		103	85 - 115

Method: 5310 C-2014 - Total Organic Carbon/Persulfate - Ultrav

Lab Sample ID: MB 240-682416/38
Matrix: Water
Analysis Batch: 682416

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.44	mg/L			11/26/25 12:29	1

Method: 5310 C-2014 - Total Organic Carbon/Persulfate - Ultrav (Continued)

Lab Sample ID: MB 240-682416/5
Matrix: Water
Analysis Batch: 682416

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.44	mg/L			11/25/25 23:11	1

Lab Sample ID: LCS 240-682416/21
Matrix: Water
Analysis Batch: 682416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	28.4	28.2		mg/L		99	85 - 115
TOC Result 1	28.4	28.7		mg/L		101	85 - 115
TOC Result 2	28.4	27.8		mg/L		98	85 - 115

Lab Sample ID: LCS 240-682416/39
Matrix: Water
Analysis Batch: 682416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	28.4	28.3		mg/L		100	85 - 115
TOC Result 1	28.4	29.1		mg/L		102	85 - 115
TOC Result 2	28.4	27.9		mg/L		98	85 - 115

Lab Sample ID: 240-238165-1 MS
Matrix: Water
Analysis Batch: 682416

Client Sample ID: L511203-01 MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	1.6		20.0	21.5		mg/L		99	76 - 124
TOC Result 1	1.6		20.0	21.9		mg/L		101	76 - 124
TOC Result 2	1.6		20.0	21.2		mg/L		98	76 - 124

Lab Sample ID: 240-238165-1 MSD
Matrix: Water
Analysis Batch: 682416

Client Sample ID: L511203-01 MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon	1.6		20.0	21.5		mg/L		100	76 - 124	0	10
TOC Result 1	1.6		20.0	21.9		mg/L		101	76 - 124	0	10
TOC Result 2	1.6		20.0	21.3		mg/L		98	76 - 124	1	10

Lab Sample ID: 240-238165-11 MS
Matrix: Water
Analysis Batch: 682416

Client Sample ID: L511203-11 MW-19D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	1.3		20.0	21.3		mg/L		100	76 - 124
TOC Result 1	1.3		20.0	21.8		mg/L		103	76 - 124
TOC Result 2	1.3		20.0	20.9		mg/L		98	76 - 124

Method: 5310 C-2014 - Total Organic Carbon/Persulfate - Ultrav (Continued)

Lab Sample ID: 240-238165-11 MSD
Matrix: Water
Analysis Batch: 682416

Client Sample ID: L511203-11 MW-19D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon	1.3		20.0	21.2		mg/L		99	76 - 124	1	10
TOC Result 1	1.3		20.0	21.6		mg/L		102	76 - 124	1	10
TOC Result 2	1.3		20.0	20.9		mg/L		98	76 - 124	0	10

Method: SM 4500 NO2 B - Nitrogen, Nitrite

Lab Sample ID: MB 190-13081/11
Matrix: Water
Analysis Batch: 13081

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.10	0.0097	mg/L			11/21/25 11:09	1

Lab Sample ID: LCS 190-13081/10
Matrix: Water
Analysis Batch: 13081

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	0.250	0.246		mg/L		98	90 - 110

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 570-661794/136
Matrix: Water
Analysis Batch: 661794

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Sulfide	ND		0.050	0.028	mg/L			11/25/25 19:54	1

Lab Sample ID: LCS 570-661794/138
Matrix: Water
Analysis Batch: 661794

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Sulfide	0.500	0.511		mg/L		102	70 - 130

Lab Sample ID: LCSD 570-661794/140
Matrix: Water
Analysis Batch: 661794

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Sulfide	0.500	0.533		mg/L		107	70 - 130	4	8

Lab Sample ID: MRL 570-661794/4
Matrix: Water
Analysis Batch: 661794

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Total Sulfide	0.0500	0.0585		mg/L		117	50 - 150

Method: SM 4500 S2 D - Sulfide, Total (Continued)

Lab Sample ID: 240-238165-1 MS
Matrix: Water
Analysis Batch: 661794

Client Sample ID: L511203-01 MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Sulfide	ND		0.500	0.495		mg/L		99	70 - 130

Lab Sample ID: 240-238165-1 MSD
Matrix: Water
Analysis Batch: 661794

Client Sample ID: L511203-01 MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Sulfide	ND		0.500	0.473		mg/L		95	70 - 130	4	20

Lab Sample ID: MRL 570-662060/4-A
Matrix: Water
Analysis Batch: 661794

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 662060

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Total Sulfide	0.0500	0.0444	J	mg/L		89	50 - 150

Method: SM4500 NO3 D - Nitrogen, Nitrate

Lab Sample ID: MB 190-13087/3
Matrix: Water
Analysis Batch: 13087

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.20	0.070	mg/L			11/20/25 15:01	1

Lab Sample ID: LCS 190-13087/4
Matrix: Water
Analysis Batch: 13087

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	10.0	9.48		mg/L		95	90 - 110

Lab Sample ID: 240-238165-2 MS
Matrix: Water
Analysis Batch: 13087

Client Sample ID: L511203-02 MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	0.29	J F2	40.0	46.0		mg/L		114	75 - 125

Lab Sample ID: 240-238165-2 MSD
Matrix: Water
Analysis Batch: 13087

Client Sample ID: L511203-02 MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	0.29	J F2	20.0	23.4	F2	mg/L		116	75 - 125	65	20

Metals

Prep Batch: 11371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238165-1	L511203-01 MW-3	Dissolved	Water	200.7	
240-238165-2	L511203-02 MW-5	Dissolved	Water	200.7	
240-238165-3	L511203-03 MW-7	Dissolved	Water	200.7	
240-238165-4	L511203-04 MW-18A	Dissolved	Water	200.7	
240-238165-5	L511203-05 MW-18B	Dissolved	Water	200.7	
240-238165-6	L511203-06 MW-18C	Dissolved	Water	200.7	
240-238165-7	L511203-07 MW-18D	Dissolved	Water	200.7	
240-238165-8	L511203-08 MW-19A	Dissolved	Water	200.7	
240-238165-9	L511203-09 MW-19B	Dissolved	Water	200.7	
240-238165-12	L511203-12 MWT-7	Dissolved	Water	200.7	
240-238165-13	L511203-13 Field Blank	Dissolved	Water	200.7	
MB 350-11371/25-A	Method Blank	Total/NA	Water	200.7	
LCS 350-11371/26-A	Lab Control Sample	Total/NA	Water	200.7	
240-238165-4 MS	L511203-04 MW-18A	Dissolved	Water	200.7	
240-238165-4 MSD	L511203-04 MW-18A	Dissolved	Water	200.7	

Prep Batch: 11372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238165-10	L511203-10 MW-19C	Dissolved	Water	200.7	
240-238165-11	L511203-11 MW-19D	Dissolved	Water	200.7	
MB 350-11372/25-A	Method Blank	Total/NA	Water	200.7	
LCS 350-11372/26-A	Lab Control Sample	Total/NA	Water	200.7	
240-238165-10 MS	L511203-10 MW-19C	Dissolved	Water	200.7	
240-238165-10 MSD	L511203-10 MW-19C	Dissolved	Water	200.7	
240-238165-11 MS	L511203-11 MW-19D	Dissolved	Water	200.7	
240-238165-11 MSD	L511203-11 MW-19D	Dissolved	Water	200.7	

Analysis Batch: 11421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238165-4	L511203-04 MW-18A	Dissolved	Water	200.8	11371
MB 350-11371/25-A	Method Blank	Total/NA	Water	200.8	11371
LCS 350-11371/26-A	Lab Control Sample	Total/NA	Water	200.8	11371
240-238165-4 MS	L511203-04 MW-18A	Dissolved	Water	200.8	11371
240-238165-4 MSD	L511203-04 MW-18A	Dissolved	Water	200.8	11371

Analysis Batch: 11429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238165-1	L511203-01 MW-3	Dissolved	Water	200.8	11371
240-238165-2	L511203-02 MW-5	Dissolved	Water	200.8	11371
240-238165-3	L511203-03 MW-7	Dissolved	Water	200.8	11371
240-238165-5	L511203-05 MW-18B	Dissolved	Water	200.8	11371
240-238165-6	L511203-06 MW-18C	Dissolved	Water	200.8	11371
240-238165-7	L511203-07 MW-18D	Dissolved	Water	200.8	11371
240-238165-8	L511203-08 MW-19A	Dissolved	Water	200.8	11371
240-238165-9	L511203-09 MW-19B	Dissolved	Water	200.8	11371
240-238165-10	L511203-10 MW-19C	Dissolved	Water	200.8	11372
240-238165-11	L511203-11 MW-19D	Dissolved	Water	200.8	11372
240-238165-12	L511203-12 MWT-7	Dissolved	Water	200.8	11371
240-238165-13	L511203-13 Field Blank	Dissolved	Water	200.8	11371
MB 350-11372/25-A	Method Blank	Total/NA	Water	200.8	11372
LCS 350-11372/26-A	Lab Control Sample	Total/NA	Water	200.8	11372

Metals (Continued)

Analysis Batch: 11429 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238165-10 MS	L511203-10 MW-19C	Dissolved	Water	200.8	11372
240-238165-10 MSD	L511203-10 MW-19C	Dissolved	Water	200.8	11372
240-238165-11 MS	L511203-11 MW-19D	Dissolved	Water	200.8	11372
240-238165-11 MSD	L511203-11 MW-19D	Dissolved	Water	200.8	11372

Analysis Batch: 11433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238165-1	L511203-01 MW-3	Dissolved	Water	200.7 Rev 4.4	11371
240-238165-2	L511203-02 MW-5	Dissolved	Water	200.7 Rev 4.4	11371
240-238165-3	L511203-03 MW-7	Dissolved	Water	200.7 Rev 4.4	11371
240-238165-4	L511203-04 MW-18A	Dissolved	Water	200.7 Rev 4.4	11371
240-238165-5	L511203-05 MW-18B	Dissolved	Water	200.7 Rev 4.4	11371
240-238165-6	L511203-06 MW-18C	Dissolved	Water	200.7 Rev 4.4	11371
240-238165-7	L511203-07 MW-18D	Dissolved	Water	200.7 Rev 4.4	11371
240-238165-8	L511203-08 MW-19A	Dissolved	Water	200.7 Rev 4.4	11371
240-238165-9	L511203-09 MW-19B	Dissolved	Water	200.7 Rev 4.4	11371
240-238165-10	L511203-10 MW-19C	Dissolved	Water	200.7 Rev 4.4	11372
240-238165-11	L511203-11 MW-19D	Dissolved	Water	200.7 Rev 4.4	11372
240-238165-12	L511203-12 MWT-7	Dissolved	Water	200.7 Rev 4.4	11371
240-238165-13	L511203-13 Field Blank	Dissolved	Water	200.7 Rev 4.4	11371
MB 350-11371/25-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	11371
MB 350-11372/25-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	11372
LCS 350-11371/26-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	11371
LCS 350-11372/26-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	11372
240-238165-4 MS	L511203-04 MW-18A	Dissolved	Water	200.7 Rev 4.4	11371
240-238165-4 MSD	L511203-04 MW-18A	Dissolved	Water	200.7 Rev 4.4	11371
240-238165-10 MS	L511203-10 MW-19C	Dissolved	Water	200.7 Rev 4.4	11372
240-238165-10 MSD	L511203-10 MW-19C	Dissolved	Water	200.7 Rev 4.4	11372
240-238165-11 MS	L511203-11 MW-19D	Dissolved	Water	200.7 Rev 4.4	11372
240-238165-11 MSD	L511203-11 MW-19D	Dissolved	Water	200.7 Rev 4.4	11372

Prep Batch: 681645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238165-1	L511203-01 MW-3	Dissolved	Water	200.8-1994 R5.4	
240-238165-2	L511203-02 MW-5	Dissolved	Water	200.8-1994 R5.4	
240-238165-3	L511203-03 MW-7	Dissolved	Water	200.8-1994 R5.4	
240-238165-4	L511203-04 MW-18A	Dissolved	Water	200.8-1994 R5.4	
240-238165-5	L511203-05 MW-18B	Dissolved	Water	200.8-1994 R5.4	
240-238165-6	L511203-06 MW-18C	Dissolved	Water	200.8-1994 R5.4	
240-238165-7	L511203-07 MW-18D	Dissolved	Water	200.8-1994 R5.4	
240-238165-8	L511203-08 MW-19A	Dissolved	Water	200.8-1994 R5.4	
240-238165-9	L511203-09 MW-19B	Dissolved	Water	200.8-1994 R5.4	
240-238165-10	L511203-10 MW-19C	Dissolved	Water	200.8-1994 R5.4	
240-238165-11	L511203-11 MW-19D	Dissolved	Water	200.8-1994 R5.4	
240-238165-12	L511203-12 MWT-7	Dissolved	Water	200.8-1994 R5.4	
240-238165-13	L511203-13 Field Blank	Dissolved	Water	200.8-1994 R5.4	
MB 240-681645/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	
LCS 240-681645/2-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	

Metals

Analysis Batch: 681984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238165-1	L511203-01 MW-3	Dissolved	Water	200.8-1994 R5.4	681645
240-238165-2	L511203-02 MW-5	Dissolved	Water	200.8-1994 R5.4	681645
240-238165-3	L511203-03 MW-7	Dissolved	Water	200.8-1994 R5.4	681645
240-238165-4	L511203-04 MW-18A	Dissolved	Water	200.8-1994 R5.4	681645
240-238165-5	L511203-05 MW-18B	Dissolved	Water	200.8-1994 R5.4	681645
240-238165-6	L511203-06 MW-18C	Dissolved	Water	200.8-1994 R5.4	681645
240-238165-7	L511203-07 MW-18D	Dissolved	Water	200.8-1994 R5.4	681645
240-238165-8	L511203-08 MW-19A	Dissolved	Water	200.8-1994 R5.4	681645
240-238165-9	L511203-09 MW-19B	Dissolved	Water	200.8-1994 R5.4	681645
240-238165-10	L511203-10 MW-19C	Dissolved	Water	200.8-1994 R5.4	681645
240-238165-11	L511203-11 MW-19D	Dissolved	Water	200.8-1994 R5.4	681645
240-238165-12	L511203-12 MWT-7	Dissolved	Water	200.8-1994 R5.4	681645
240-238165-13	L511203-13 Field Blank	Dissolved	Water	200.8-1994 R5.4	681645
MB 240-681645/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	681645
LCS 240-681645/2-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	681645

General Chemistry

Analysis Batch: 13081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238165-1	L511203-01 MW-3	Total/NA	Water	SM 4500 NO2 B	
240-238165-2	L511203-02 MW-5	Total/NA	Water	SM 4500 NO2 B	
240-238165-3	L511203-03 MW-7	Total/NA	Water	SM 4500 NO2 B	
240-238165-4	L511203-04 MW-18A	Total/NA	Water	SM 4500 NO2 B	
240-238165-5	L511203-05 MW-18B	Total/NA	Water	SM 4500 NO2 B	
240-238165-6	L511203-06 MW-18C	Total/NA	Water	SM 4500 NO2 B	
240-238165-7	L511203-07 MW-18D	Total/NA	Water	SM 4500 NO2 B	
240-238165-8	L511203-08 MW-19A	Total/NA	Water	SM 4500 NO2 B	
240-238165-9	L511203-09 MW-19B	Total/NA	Water	SM 4500 NO2 B	
240-238165-10	L511203-10 MW-19C	Total/NA	Water	SM 4500 NO2 B	
240-238165-11	L511203-11 MW-19D	Total/NA	Water	SM 4500 NO2 B	
240-238165-12	L511203-12 MWT-7	Total/NA	Water	SM 4500 NO2 B	
240-238165-13	L511203-13 Field Blank	Total/NA	Water	SM 4500 NO2 B	
MB 190-13081/11	Method Blank	Total/NA	Water	SM 4500 NO2 B	
LCS 190-13081/10	Lab Control Sample	Total/NA	Water	SM 4500 NO2 B	

Analysis Batch: 13087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238165-1	L511203-01 MW-3	Total/NA	Water	SM4500 NO3 D	
240-238165-2	L511203-02 MW-5	Total/NA	Water	SM4500 NO3 D	
240-238165-6	L511203-06 MW-18C	Total/NA	Water	SM4500 NO3 D	
240-238165-7	L511203-07 MW-18D	Total/NA	Water	SM4500 NO3 D	
MB 190-13087/3	Method Blank	Total/NA	Water	SM4500 NO3 D	
LCS 190-13087/4	Lab Control Sample	Total/NA	Water	SM4500 NO3 D	
240-238165-2 MS	L511203-02 MW-5	Total/NA	Water	SM4500 NO3 D	
240-238165-2 MSD	L511203-02 MW-5	Total/NA	Water	SM4500 NO3 D	

Analysis Batch: 661794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238165-1	L511203-01 MW-3	Total/NA	Water	SM 4500 S2 D	
240-238165-2	L511203-02 MW-5	Total/NA	Water	SM 4500 S2 D	

General Chemistry (Continued)

Analysis Batch: 661794 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238165-3	L511203-03 MW-7	Total/NA	Water	SM 4500 S2 D	
240-238165-4	L511203-04 MW-18A	Total/NA	Water	SM 4500 S2 D	
240-238165-5	L511203-05 MW-18B	Total/NA	Water	SM 4500 S2 D	
240-238165-6	L511203-06 MW-18C	Total/NA	Water	SM 4500 S2 D	
240-238165-7	L511203-07 MW-18D	Total/NA	Water	SM 4500 S2 D	
240-238165-8	L511203-08 MW-19A	Total/NA	Water	SM 4500 S2 D	
240-238165-9	L511203-09 MW-19B	Total/NA	Water	SM 4500 S2 D	
240-238165-10	L511203-10 MW-19C	Total/NA	Water	SM 4500 S2 D	
240-238165-11	L511203-11 MW-19D	Total/NA	Water	SM 4500 S2 D	
240-238165-12	L511203-12 MWT-7	Total/NA	Water	SM 4500 S2 D	
240-238165-13	L511203-13 Field Blank	Total/NA	Water	SM 4500 S2 D	
MB 570-661794/136	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 570-661794/138	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 570-661794/140	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	
MRL 570-661794/4	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
MRL 570-662060/4-A	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	662060
240-238165-1 MS	L511203-01 MW-3	Total/NA	Water	SM 4500 S2 D	
240-238165-1 MSD	L511203-01 MW-3	Total/NA	Water	SM 4500 S2 D	

Prep Batch: 662060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 570-662060/4-A	Lab Control Sample	Total/NA	Water	SM 4500 S2 B	

Analysis Batch: 682416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238165-1	L511203-01 MW-3	Total/NA	Water	5310 C-2014	
240-238165-2	L511203-02 MW-5	Total/NA	Water	5310 C-2014	
240-238165-3	L511203-03 MW-7	Total/NA	Water	5310 C-2014	
240-238165-4	L511203-04 MW-18A	Total/NA	Water	5310 C-2014	
240-238165-5	L511203-05 MW-18B	Total/NA	Water	5310 C-2014	
240-238165-6	L511203-06 MW-18C	Total/NA	Water	5310 C-2014	
240-238165-7	L511203-07 MW-18D	Total/NA	Water	5310 C-2014	
240-238165-8	L511203-08 MW-19A	Total/NA	Water	5310 C-2014	
240-238165-9	L511203-09 MW-19B	Total/NA	Water	5310 C-2014	
240-238165-10	L511203-10 MW-19C	Total/NA	Water	5310 C-2014	
240-238165-11	L511203-11 MW-19D	Total/NA	Water	5310 C-2014	
240-238165-12	L511203-12 MWT-7	Total/NA	Water	5310 C-2014	
240-238165-13	L511203-13 Field Blank	Total/NA	Water	5310 C-2014	
MB 240-682416/38	Method Blank	Total/NA	Water	5310 C-2014	
MB 240-682416/5	Method Blank	Total/NA	Water	5310 C-2014	
LCS 240-682416/21	Lab Control Sample	Total/NA	Water	5310 C-2014	
LCS 240-682416/39	Lab Control Sample	Total/NA	Water	5310 C-2014	
240-238165-1 MS	L511203-01 MW-3	Total/NA	Water	5310 C-2014	
240-238165-1 MSD	L511203-01 MW-3	Total/NA	Water	5310 C-2014	
240-238165-11 MS	L511203-11 MW-19D	Total/NA	Water	5310 C-2014	
240-238165-11 MSD	L511203-11 MW-19D	Total/NA	Water	5310 C-2014	

Lab Chronicle

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-01 MW-3
Lab Sample ID: 240-238165-1
Date Collected: 11/18/25 16:02
Matrix: Water
Date Received: 11/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.7 Rev 4.4		1	11433	JLS	EET SSM	11/26/25 20:55
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 16:04
Dissolved	Prep	200.8-1994 R5.4			681645	F3PF	EET CLE	11/21/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	681984	S4FJ	EET CLE	11/24/25 18:38
Total/NA	Analysis	5310 C-2014		1	682416	PQD2	EET CLE	11/26/25 06:01
Total/NA	Analysis	SM 4500 NO2 B		1	13081	JED	EET MI	11/21/25 11:31
Total/NA	Analysis	SM 4500 S2 D		1	661794	GG0B	EET CAL 4	11/25/25 20:00
Total/NA	Analysis	SM4500 NO3 D		1	13087	JED	EET MI	11/20/25 16:02

Client Sample ID: L511203-02 MW-5
Lab Sample ID: 240-238165-2
Date Collected: 11/18/25 17:40
Matrix: Water
Date Received: 11/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.7 Rev 4.4		1	11433	JLS	EET SSM	11/26/25 20:58
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 16:07
Dissolved	Prep	200.8-1994 R5.4			681645	F3PF	EET CLE	11/21/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	681984	S4FJ	EET CLE	11/24/25 18:41
Total/NA	Analysis	5310 C-2014		1	682416	PQD2	EET CLE	11/26/25 07:12
Total/NA	Analysis	SM 4500 NO2 B		1	13081	JED	EET MI	11/21/25 11:34
Total/NA	Analysis	SM 4500 S2 D		1	661794	GG0B	EET CAL 4	11/25/25 20:06
Total/NA	Analysis	SM4500 NO3 D		1	13087	JED	EET MI	11/20/25 16:34

Client Sample ID: L511203-03 MW-7
Lab Sample ID: 240-238165-3
Date Collected: 11/18/25 11:34
Matrix: Water
Date Received: 11/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.7 Rev 4.4		1	11433	JLS	EET SSM	11/26/25 21:01
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 16:10
Dissolved	Prep	200.8-1994 R5.4			681645	F3PF	EET CLE	11/21/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	681984	S4FJ	EET CLE	11/24/25 18:44
Total/NA	Analysis	5310 C-2014		1	682416	PQD2	EET CLE	11/26/25 08:27
Total/NA	Analysis	SM 4500 NO2 B		1	13081	JED	EET MI	11/21/25 11:54
Total/NA	Analysis	SM 4500 S2 D		1	661794	GG0B	EET CAL 4	11/25/25 20:08

Client Sample ID: L511203-04 MW-18A
Lab Sample ID: 240-238165-4

Date Collected: 11/18/25 13:33
Matrix: Water
Date Received: 11/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.7 Rev 4.4		1	11433	JLS	EET SSM	11/26/25 20:32
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.8		1	11421	JL	EET SSM	11/26/25 17:54
Dissolved	Prep	200.8-1994 R5.4			681645	F3PF	EET CLE	11/21/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	681984	S4FJ	EET CLE	11/24/25 18:46
Total/NA	Analysis	5310 C-2014		1	682416	PQD2	EET CLE	11/26/25 08:51
Total/NA	Analysis	SM 4500 NO2 B		1	13081	JED	EET MI	11/21/25 11:55
Total/NA	Analysis	SM 4500 S2 D		1	661794	GG0B	EET CAL 4	11/25/25 20:10

Client Sample ID: L511203-05 MW-18B
Lab Sample ID: 240-238165-5

Date Collected: 11/18/25 14:42
Matrix: Water
Date Received: 11/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.7 Rev 4.4		1	11433	JLS	EET SSM	11/26/25 21:05
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 16:13
Dissolved	Prep	200.8-1994 R5.4			681645	F3PF	EET CLE	11/21/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	681984	S4FJ	EET CLE	11/24/25 18:49
Total/NA	Analysis	5310 C-2014		1	682416	PQD2	EET CLE	11/26/25 09:15
Total/NA	Analysis	SM 4500 NO2 B		1	13081	JED	EET MI	11/21/25 11:59
Total/NA	Analysis	SM 4500 S2 D		1	661794	GG0B	EET CAL 4	11/25/25 20:12

Client Sample ID: L511203-06 MW-18C
Lab Sample ID: 240-238165-6

Date Collected: 11/18/25 15:47
Matrix: Water
Date Received: 11/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.7 Rev 4.4		1	11433	JLS	EET SSM	11/26/25 21:08
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 16:16
Dissolved	Prep	200.8-1994 R5.4			681645	F3PF	EET CLE	11/21/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	681984	S4FJ	EET CLE	11/24/25 18:52
Total/NA	Analysis	5310 C-2014		1	682416	PQD2	EET CLE	11/26/25 09:39
Total/NA	Analysis	SM 4500 NO2 B		1	13081	JED	EET MI	11/21/25 11:24
Total/NA	Analysis	SM 4500 S2 D		1	661794	GG0B	EET CAL 4	11/25/25 20:14
Total/NA	Analysis	SM4500 NO3 D		2	13087	JED	EET MI	11/20/25 15:27

Client Sample ID: L511203-07 MW-18D
Lab Sample ID: 240-238165-7

Date Collected: 11/18/25 16:50
Matrix: Water
Date Received: 11/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.7 Rev 4.4		1	11433	JLS	EET SSM	11/26/25 21:11
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 16:19
Dissolved	Prep	200.8-1994 R5.4			681645	F3PF	EET CLE	11/21/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	681984	S4FJ	EET CLE	11/24/25 18:54
Total/NA	Analysis	5310 C-2014		1	682416	PQD2	EET CLE	11/26/25 10:03
Total/NA	Analysis	SM 4500 NO2 B		1	13081	JED	EET MI	11/21/25 11:25
Total/NA	Analysis	SM 4500 S2 D		1	661794	GG0B	EET CAL 4	11/25/25 20:16
Total/NA	Analysis	SM4500 NO3 D		1	13087	JED	EET MI	11/20/25 15:43

Client Sample ID: L511203-08 MW-19A
Lab Sample ID: 240-238165-8

Date Collected: 11/18/25 10:02
Matrix: Water
Date Received: 11/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.7 Rev 4.4		1	11433	JLS	EET SSM	11/26/25 21:15
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 16:21
Dissolved	Prep	200.8-1994 R5.4			681645	F3PF	EET CLE	11/21/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	681984	S4FJ	EET CLE	11/24/25 19:02
Total/NA	Analysis	5310 C-2014		1	682416	PQD2	EET CLE	11/26/25 10:27
Total/NA	Analysis	SM 4500 NO2 B		1	13081	JED	EET MI	11/21/25 12:00
Total/NA	Analysis	SM 4500 S2 D		1	661794	GG0B	EET CAL 4	11/25/25 20:18

Client Sample ID: L511203-09 MW-19B
Lab Sample ID: 240-238165-9

Date Collected: 11/18/25 11:17
Matrix: Water
Date Received: 11/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.7 Rev 4.4		1	11433	JLS	EET SSM	11/26/25 21:18
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 16:42
Dissolved	Prep	200.8-1994 R5.4			681645	F3PF	EET CLE	11/21/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	681984	S4FJ	EET CLE	11/24/25 19:05
Total/NA	Analysis	5310 C-2014		1	682416	PQD2	EET CLE	11/26/25 10:51
Total/NA	Analysis	SM 4500 NO2 B		1	13081	JED	EET MI	11/21/25 11:39
Total/NA	Analysis	SM 4500 S2 D		1	661794	GG0B	EET CAL 4	11/25/25 20:20

Lab Chronicle

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-10 MW-19C
Lab Sample ID: 240-238165-10
Date Collected: 11/18/25 12:25
Matrix: Water
Date Received: 11/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11372	RMN	EET SSM	11/25/25 16:53
Dissolved	Analysis	200.7 Rev 4.4		1	11433	JLS	EET SSM	11/26/25 19:54
Dissolved	Prep	200.7			11372	RMN	EET SSM	11/25/25 16:53
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 21:42
Dissolved	Prep	200.8-1994 R5.4			681645	F3PF	EET CLE	11/21/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	681984	S4FJ	EET CLE	11/24/25 19:08
Total/NA	Analysis	5310 C-2014		1	682416	PQD2	EET CLE	11/26/25 11:15
Total/NA	Analysis	SM 4500 NO2 B		1	13081	JED	EET MI	11/21/25 11:41
Total/NA	Analysis	SM 4500 S2 D		1	661794	GG0B	EET CAL 4	11/25/25 20:22

Client Sample ID: L511203-11 MW-19D
Lab Sample ID: 240-238165-11
Date Collected: 11/18/25 13:42
Matrix: Water
Date Received: 11/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11372	RMN	EET SSM	11/25/25 16:53
Dissolved	Analysis	200.7 Rev 4.4		1	11433	JLS	EET SSM	11/26/25 20:10
Dissolved	Prep	200.7			11372	RMN	EET SSM	11/25/25 16:53
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 22:02
Dissolved	Prep	200.8-1994 R5.4			681645	F3PF	EET CLE	11/21/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	681984	S4FJ	EET CLE	11/24/25 19:10
Total/NA	Analysis	5310 C-2014		1	682416	PQD2	EET CLE	11/26/25 13:17
Total/NA	Analysis	SM 4500 NO2 B		1	13081	JED	EET MI	11/21/25 11:43
Total/NA	Analysis	SM 4500 S2 D		1	661794	GG0B	EET CAL 4	11/25/25 20:26

Client Sample ID: L511203-12 MWT-7
Lab Sample ID: 240-238165-12
Date Collected: 11/18/25 11:34
Matrix: Water
Date Received: 11/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.7 Rev 4.4		1	11433	JLS	EET SSM	11/26/25 21:28
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 16:45
Dissolved	Prep	200.8-1994 R5.4			681645	F3PF	EET CLE	11/21/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	681984	S4FJ	EET CLE	11/24/25 19:13
Total/NA	Analysis	5310 C-2014		1	682416	PQD2	EET CLE	11/26/25 14:29
Total/NA	Analysis	SM 4500 NO2 B		1	13081	JED	EET MI	11/21/25 11:50
Total/NA	Analysis	SM 4500 S2 D		1	661794	GG0B	EET CAL 4	11/25/25 20:28

Lab Chronicle

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511203-13 Field Blank
Lab Sample ID: 240-238165-13

Date Collected: 11/18/25 10:40
Matrix: Water
Date Received: 11/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.7 Rev 4.4		1	11433	JLS	EET SSM	11/26/25 21:31
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 16:48
Dissolved	Prep	200.8-1994 R5.4			681645	F3PF	EET CLE	11/21/25 14:00
Dissolved	Analysis	200.8-1994 R5.4		1	681984	S4FJ	EET CLE	11/24/25 19:16
Total/NA	Analysis	5310 C-2014		1	682416	PQD2	EET CLE	11/26/25 14:53
Total/NA	Analysis	SM 4500 NO2 B		1	13081	JED	EET MI	11/21/25 11:53
Total/NA	Analysis	SM 4500 S2 D		1	661794	GG0B	EET CAL 4	11/25/25 20:30

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET MI = Eurofins Michigan, 38855 Hills Tech Dr., Suite 600, Farmington Hills, MI 48331, TEL (810)229-2763

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Job ID: 240-238165-1
Project/Site: Erickson Project - MNA Tier II Geochem

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Calscience

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	7296.01	11-30-26
A2LA	ISO/IEC 17025	7296.01	11-30-26
Alaska (UST)	State	25-005	03-02-26
Arizona	State	AZ0830	11-25-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-25
California	State	3082	07-31-26
Kansas	NELAP	E-10420	07-31-26
Nevada	State	CA00111	07-31-26
Oregon	NELAP	4175	02-02-26
USDA	US Federal Programs	525-23-159-97150	06-08-26
Utah	NELAP	CA00111	02-28-26
Washington	State	C916	10-11-26

Laboratory: Eurofins Michigan

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Michigan	State	9180	08-07-28

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-07-26
Florida	NELAP	E87575	06-30-26
Louisiana (All)	NELAP	03073	07-01-26
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-26
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167	07-08-26
US Fish & Wildlife	US Federal Programs	A20571	06-30-26
USDA	US Federal Programs	525-23-4-22573	01-24-28
Washington	State	C788	07-13-26
Wisconsin	State	399133460	08-31-26

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:

Project Number:
24034575

Sample State: MI

Special Instructions:
All samples for dissolved metals were filtered in field, The label has Dis for the filtered bottle.

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
Marc Wahrer and Julie Maltby

Description:
Erickson Project - MNA Tier II Geochem

Site Name:
Erickson Project - MNA Tier II Geochem

240-238165 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	5310C TOC	200.8 Project List (19) (Diss)	300 Nitrate as N & Nitrite as N	SM4500_S2_D Total Sulfide	Voa Vial 40ml - with Sulfuric Acid	Plastic 1 liter - unpreserved	Plastic 250ml - with Zinc Acetate & NaOH	Plastic 500ml - w/ Nitric - Dis.	Total Bottles For Sample
1	MW-3	Grab	Water	11/18/25 16:02				X	X	X	X	3	1	1	1	6
2	MW-5	Grab	Water	11/18/25 17:40				X	X	X	X	3	1	1	1	6
3	MW-7	Grab	Water	11/18/25 11:34				X	X	X	X	3	1	1	1	6
4	MW-18A	Grab	Water	11/18/25 13:33				X	X	X	X	3	1	1	1	6
5	MW-18B	Grab	Water	11/18/25 14:42				X	X	X	X	3	1	1	1	6
6	MW-18C	Grab	Water	11/18/25 15:47				X	X	X	X	3	1	1	1	6
7	MW-18D	Grab	Water	11/18/25 16:50				X	X	X	X	3	1	1	1	6
8	MW-19A	Grab	Water	11/18/25 10:02				X	X	X	X	3	1	1	1	6
9	MW-19B	Grab	Water	11/18/25 11:17				X	X	X	X	3	1	1	1	6
10	MW-19C	Grab	Water	11/18/25 12:25				X	X	X	X	3	1	1	1	6
11	MW-19D	Grab	Water	11/18/25 13:42				X	X	X	X	3	1	1	1	6
12	MWT-7	Grab	Water	11/18/25 11:34								3	1	1	1	6

Chain of Custody Number: **428967**

*H – Analysis on hold.

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Project Manager:
Howell, Leslie

Purchase Order:
Purchase Order not required

Project Reference:

Work Order:

Sampler:
Marc Wahrer and Julie Maltby

Requested TAT:

Description:
Erickson Project - MNA Tier II Geochem

Project Number:
24034575

Site Name:
Erickson Project - MNA Tier II Geochem

Sample State: MI

Special Instructions:
All samples for dissolved metals were filtered in field. The label has Dis for the filtered bottle.

Methods and Bottles

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	5310C TOC	200.8 Project List (19) (Diss)	300 Nitrate as N & Nitrite as N	SM4500_S2_D Total Sulfide	Voa Vial 40ml - with Sulfuric Acid	Plastic 1 liter - unpreserved	Plastic 250ml - with Zinc Acetate & NaOH	Plastic 500ml - w/ Nitric - Dis.	Total Bottles For Sample
13	Field Blank	Grab	Water	11/18/25 10:40								3	1	1	1	6

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished To:	Date/Time:	
Jennifer Caporale	11/19/25 10:09	Cleveland - Waypoint courier Jennifer Caporale	11/19/25 10:09	EC 11/20/25 0840

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20251119A001								
MIC20251119A002								

Eurofins – Cleveland Sample Receipt Form/Narrative Login # : _____
Barberton Facility

Client Lansing Water + Light Site Name _____ Cooler unpacked by:

Cooler Received on 11/20/25 Opened on 11/20/25

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # 6L Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☑ See Multiple Cooler Form

IR GUN # 1 (CF _____ °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes No
-Were tamper/custody seals intact and uncompromised?	Yes No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes No
4. Did custody papers accompany the sample(s)?	Yes No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes No
7. Did all bottles arrive in good condition (Unbroken)?	Yes No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?	
10. Were correct bottle(s) used for the test(s) indicated?	Yes No
11. Sufficient quantity received to perform indicated analyses?	Yes No
12. Are these work share samples and all listed on the COC?	Yes No
If yes, Questions 13-17 have been checked at the originating laboratory.	
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes No NA pH Strip Lot# HC567196
14. Were VOAs on the COC?	Yes No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:

Labels Verified by:

_____

_____

_____

_____

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Login # : _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	1.2	1.8	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: ↓	0.5	1.1	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

11/20/2025

Login Container Summary Report

240-238165

12/3/2025

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
MW-3	240-238165-A-1	Voa Vial 40ml - with Sulfuric Acid				
MW-3	240-238165-B-1	Voa Vial 40ml - with Sulfuric Acid				
MW-3	240-238165-C-1	Voa Vial 40ml - with Sulfuric Acid				
MW-3	240-238165-D-1	Plastic 60 mL - unpreserved				
MW-3	240-238165-E-1	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-3	240-238165-F-1	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-3	240-238165-G-1	Plastic 250ml - with Nitric Acid	<2			
MW-3	240-238165-H-1	Plastic 1 liter - unpreserved				
MW-5	240-238165-A-2	Voa Vial 40ml - with Sulfuric Acid				
MW-5	240-238165-B-2	Voa Vial 40ml - with Sulfuric Acid				
MW-5	240-238165-C-2	Voa Vial 40ml - with Sulfuric Acid				
MW-5	240-238165-D-2	Plastic 60 mL - unpreserved				
MW-5	240-238165-E-2	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-5	240-238165-F-2	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-5	240-238165-G-2	Plastic 250ml - with Nitric Acid	<2			
MW-5	240-238165-H-2	Plastic 1 liter - unpreserved				
MW-7	240-238165-A-3	Voa Vial 40ml - with Sulfuric Acid				
MW-7	240-238165-B-3	Voa Vial 40ml - with Sulfuric Acid				
MW-7	240-238165-C-3	Voa Vial 40ml - with Sulfuric Acid				
MW-7	240-238165-D-3	Plastic 60 mL - unpreserved				
MW-7	240-238165-E-3	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-7	240-238165-F-3	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-7	240-238165-G-3	Plastic 250ml - with Nitric Acid	<2			
MW-7	240-238165-H-3	Plastic 1 liter - unpreserved				
MW-18A	240-238165-A-4	Voa Vial 40ml - with Sulfuric Acid				
MW-18A	240-238165-B-4	Voa Vial 40ml - with Sulfuric Acid				
MW-18A	240-238165-C-4	Voa Vial 40ml - with Sulfuric Acid				
MW-18A	240-238165-D-4	Plastic 60 mL - unpreserved				
MW-18A	240-238165-E-4	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-18A	240-238165-F-4	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-18A	240-238165-G-4	Plastic 250ml - with Nitric Acid	<2			
MW-18A	240-238165-H-4	Plastic 1 liter - unpreserved				
MW-18B	240-238165-A-5	Voa Vial 40ml - with Sulfuric Acid				
MW-18B	240-238165-B-5	Voa Vial 40ml - with Sulfuric Acid				
MW-18B	240-238165-C-5	Voa Vial 40ml - with Sulfuric Acid				

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
MW-18B	240-238165-D-5	Plastic 60 mL - unpreserved				
MW-18B	240-238165-E-5	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-18B	240-238165-F-5	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-18B	240-238165-G-5	Plastic 250ml - with Nitric Acid	<2			
MW-18B	240-238165-H-5	Plastic 1 liter - unpreserved				
MW-18C	240-238165-A-6	Voa Vial 40ml - with Sulfuric Acid				
MW-18C	240-238165-B-6	Voa Vial 40ml - with Sulfuric Acid				
MW-18C	240-238165-C-6	Voa Vial 40ml - with Sulfuric Acid				
MW-18C	240-238165-D-6	Plastic 60 mL - unpreserved				
MW-18C	240-238165-E-6	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-18C	240-238165-F-6	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-18C	240-238165-G-6	Plastic 250ml - with Nitric Acid	<2			
MW-18C	240-238165-H-6	Plastic 1 liter - unpreserved				
MW-18D	240-238165-A-7	Voa Vial 40ml - with Sulfuric Acid				
MW-18D	240-238165-B-7	Voa Vial 40ml - with Sulfuric Acid				
MW-18D	240-238165-C-7	Voa Vial 40ml - with Sulfuric Acid				
MW-18D	240-238165-D-7	Plastic 60 mL - unpreserved				
MW-18D	240-238165-E-7	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-18D	240-238165-F-7	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-18D	240-238165-G-7	Plastic 250ml - with Nitric Acid	<2			
MW-18D	240-238165-H-7	Plastic 1 liter - unpreserved				
MW-19A	240-238165-A-8	Voa Vial 40ml - with Sulfuric Acid				
MW-19A	240-238165-B-8	Voa Vial 40ml - with Sulfuric Acid				
MW-19A	240-238165-C-8	Voa Vial 40ml - with Sulfuric Acid				
MW-19A	240-238165-D-8	Plastic 60 mL - unpreserved				
MW-19A	240-238165-E-8	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-19A	240-238165-F-8	Plastic 500ml - with Nitric Acid	<2			
MW-19A	240-238165-G-8	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-19A	240-238165-H-8	Plastic 250ml - with Nitric Acid	<2			
MW-19A	240-238165-I-8	Plastic 1 liter - unpreserved				
MW-19B	240-238165-A-9	Voa Vial 40ml - with Sulfuric Acid				
MW-19B	240-238165-B-9	Voa Vial 40ml - with Sulfuric Acid				
MW-19B	240-238165-C-9	Voa Vial 40ml - with Sulfuric Acid				
MW-19B	240-238165-D-9	Plastic 60 mL - unpreserved				
MW-19B	240-238165-E-9	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-19B	240-238165-F-9	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-19B	240-238165-G-9	Plastic 250ml - with Nitric Acid	<2			
MW-19B	240-238165-H-9	Plastic 1 liter - unpreserved				

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
MW-19C	240-238165-A-10	Voa Vial 40ml - with Sulfuric Acid				
MW-19C	240-238165-B-10	Voa Vial 40ml - with Sulfuric Acid				
MW-19C	240-238165-C-10	Voa Vial 40ml - with Sulfuric Acid				
MW-19C	240-238165-D-10	Plastic 60 mL - unpreserved				
MW-19C	240-238165-E-10	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-19C	240-238165-F-10	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-19C	240-238165-G-10	Plastic 250ml - with Nitric Acid	<2			
MW-19C	240-238165-H-10	Plastic 1 liter - unpreserved				
MW-19D	240-238165-A-11	Voa Vial 40ml - with Sulfuric Acid				
MW-19D	240-238165-B-11	Voa Vial 40ml - with Sulfuric Acid				
MW-19D	240-238165-C-11	Voa Vial 40ml - with Sulfuric Acid				
MW-19D	240-238165-D-11	Plastic 60 mL - unpreserved				
MW-19D	240-238165-E-11	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-19D	240-238165-F-11	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-19D	240-238165-G-11	Plastic 250ml - with Nitric Acid	<2			
MW-19D	240-238165-H-11	Plastic 1 liter - unpreserved				
MWT-7	240-238165-A-12	Voa Vial 40ml - with Sulfuric Acid				
MWT-7	240-238165-B-12	Voa Vial 40ml - with Sulfuric Acid				
MWT-7	240-238165-C-12	Voa Vial 40ml - with Sulfuric Acid				
MWT-7	240-238165-D-12	Plastic 60 mL - unpreserved				
MWT-7	240-238165-E-12	Plastic 500ml - with Zn Acetate and NaOH	>9			
MWT-7	240-238165-F-12	Plastic 500ml - w/ Nitric - Dis.	<2			
MWT-7	240-238165-G-12	Plastic 250ml - with Nitric Acid	<2			
MWT-7	240-238165-H-12	Plastic 1 liter - unpreserved				
Fielt Blank	240-238165-A-13	Voa Vial 40ml - with Sulfuric Acid				
Fielt Blank	240-238165-B-13	Voa Vial 40ml - with Sulfuric Acid				
Fielt Blank	240-238165-C-13	Voa Vial 40ml - with Sulfuric Acid				
Fielt Blank	240-238165-D-13	Plastic 60 mL - unpreserved				
Fielt Blank	240-238165-E-13	Plastic 500ml - with Zn Acetate and NaOH	>9			
Fielt Blank	240-238165-F-13	Plastic 500ml - w/ Nitric - Dis.	<2			
Fielt Blank	240-238165-G-13	Plastic 250ml - with Nitric Acid	<2			
Fielt Blank	240-238165-H-13	Plastic 1 liter - unpreserved				

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-211229.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 2
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-238165-1
Address: 5755 8th Street East, ,	Due Date Requested: 12/8/2025			Preservation Codes:
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Therm. ID: SC02 Cust. Seal: (Y) / N
Uncorr./Corr. Temp: 16.3 / 16.1 °C
Delivery: UPS / FedEx / Other:
Ice Type: Blue / Dry / Wet / None
Label Ver.: 11 Packing: B

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/FIELD_FLTRD(MOD) Custom List 2: 2-3 Metals	200.7_CWA/FIELD_FLTRDDissolved Boron	Total Number of containe	Special Instructions/Note:
			Preservation Code:							
MW-3 (240-238165-1)	11/18/25	16:02 Eastern	G	Water			X	X	1	
MW-5 (240-238165-2)	11/18/25	17:40 Eastern	G	Water			X	X	1	
MW-7 (240-238165-3)	11/18/25	11:34 Eastern	G	Water			X	X	1	
MW-18A (240-238165-4)	11/18/25	13:33 Eastern	G	Water			X	X	1	
MW-18B (240-238165-5)	11/18/25	14:42 Eastern	G	Water			X	X	1	
MW-18C (240-238165-6)	11/18/25	15:47 Eastern	G	Water			X	X	1	
MW-18D (240-238165-7)	11/18/25	16:50 Eastern	G	Water			X	X	1	
MW-19A (240-238165-8)	11/18/25	10:02 Eastern	G	Water			X	X	1	
MW-19B (240-238165-9)	11/18/25	11:17 Eastern	G	Water			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification: Unconfirmed 4616 0304 9812	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JLM	11/20/25 1500	EC		11/21/24 10:30	EST
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

12/3/2025

Eurofins Cleveland
180 S Van Buren Avenue
Barberton, OH 44203
Phone 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-211229 2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 2 of 2
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-238165-1
Address: 5755 8th Street East, ,	Due Date Requested: 12/8/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/FIELD_FLTRD(MOD) Custom List 2: 2-3 Metals	200.7_CWA/FIELD_FLTRDDissolved Boron	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MW-19C (240-238165-10)	11/18/25	12.25 Eastern	G	Water			X	X	1	
MW-19D (240-238165-11)	11/18/25	13 42 Eastern	G	Water			X	X	1	
MWT-7 (240-238165-12)	11/18/25	11 34 Eastern	G	Water			X	X	1	
Fielt Blank (240-238165-13)	11/18/25	10 40 Eastern	G	Water			X	X	1	

Note Since laboratory accreditations are subject to change Eurofins Environment Testing North Central, LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing North Central LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central LLC.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date.	Time	Method of Shipment:

Relinquished by: JLS	Date/Time: 11/20/25 1500	Company: EE	Received by:	Date/Time: 11/21/25 10:10	Company: ESN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Envir

Loc: 240
238165

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-211225.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 2
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): NELAP - Oregon		Job #: 240-238165-1
Address: 2841 Dow Avenue, Suite 100, ,	Due Date Requested: 12/8/2025			Preservation Codes: -
City: Tustin	TAT Requested (days): N/A			
State, Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_S2_DTotal Sulfide	Total Number of containers	Special Instru
			Preservation Code:						
MW-3 (240-238165-1)	11/18/25	16:02 Eastern	G	Water			X	1	
MW-5 (240-238165-2)	11/18/25	17:40 Eastern	G	Water			X	1	
MW-7 (240-238165-3)	11/18/25	11:34 Eastern	G	Water			X	1	
MW-18A (240-238165-4)	11/18/25	13:33 Eastern	G	Water			X	1	
MW-18B (240-238165-5)	11/18/25	14:42 Eastern	G	Water			X	1	
MW-18C (240-238165-6)	11/18/25	15:47 Eastern	G	Water			X	1	
MW-18D (240-238165-7)	11/18/25	16:50 Eastern	G	Water			X	1	
MW-19A (240-238165-8)	11/18/25	10:02 Eastern	G	Water			X	1	
MW-19B (240-238165-9)	11/18/25	11:17 Eastern	G	Water			X	1	

240-238165 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: JM	Date/Time: 11/20/25 1500	Company ET	Received by:	Date/Time: 11/21/25 0900	Company ET
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.1/2.3 1K.5

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-211225.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 2 of 2
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): NELAP - Oregon		Job #: 240-238165-1
Address: 2841 Dow Avenue, Suite 100, ,	Due Date Requested: 12/8/2025			Preservation Codes: -
City: Tustin	TAT Requested (days): N/A			
State, Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Projects	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_S2_DTotal Sulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-19C (240-238165-10)	11/18/25	12:25 Eastern	G	Water			X	1	
MW-19D (240-238165-11)	11/18/25	13:42 Eastern	G	Water			X	1	
MWT-7 (240-238165-12)	11/18/25	11:34 Eastern	G	Water			X	1	
Fielt Blank (240-238165-13)	11/18/25	10:40 Eastern	G	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Jun	11/20/25 1500	EC		11/21/25 0945	EC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-238165-1

Login Number: 238165
List Number: 4
Creator: Khana, Piyush

List Source: Eurofins Calscience
List Creation: 11/21/25 06:59 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-238165-1

Login Number: 238165
List Number: 2
Creator: Daymon, Jade E

List Source: Eurofins Michigan
List Creation: 11/20/25 02:25 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	N/A	
COC is present.	N/A	
COC is filled out in ink and legible.	N/A	
COC is filled out with all pertinent information.	N/A	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-238165-1

Login Number: 238165
List Number: 3
Creator: Miller, Darren R

List Source: Eurofins Seattle Specialty Metals
List Creation: 11/21/25 03:42 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jennifer Caporale
Lansing Board of Water & Light
1110 South Pennsylvania
Lansing, Michigan 48901

Generated 12/4/2025 6:33:11 PM

JOB DESCRIPTION

Erickson Project - MNA Tier II Geochem

JOB NUMBER

240-238294-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

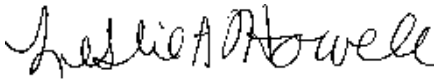
my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization



Generated
12/4/2025 6:33:11 PM

Authorized for release by
Leslie Howell, Project Manager I
Leslie.Howell@et.eurofinsus.com
(330)966-9266

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Method Summary 6
Sample Summary 7
Detection Summary 8
Client Sample Results 10
QC Sample Results 15
QC Association Summary 21
Lab Chronicle 24
Certification Summary 26
Chain of Custody 27
Receipt Checklists 35

Definitions/Glossary

Client: Lansing Board of Water & Light
Job ID: 240-238294-1
Project/Site: Erickson Project - MNA Tier II Geochem

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-238294-1 — Eurofins Cleveland

Job Narrative
240-238294-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 11/21/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°C.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method SM4500_NO2_B: The following sample was analyzed outside of analytical holding time due to lab oversight: L511206-05 Field Blank (240-238294-5).

Method SM4500_NO3_D: The following samples were analyzed outside of analytical holding time due to lab oversight: L511206-01 MW-2 (240-238294-1) and L511206-02 MW-12 (240-238294-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Method Summary

Client: Lansing Board of Water & Light
Job ID: 240-238294-1
Project/Site: Erickson Project - MNA Tier II Geochem

Method	Method Description	Protocol	Laboratory
200.7 Rev 4.4	Metals (ICP)	EPA	EET SSM
200.8	Metals (ICP/MS)	EPA	EET SSM
200.8-1994 R5.4	Metals (ICP/MS)	EPA	EET CLE
5310 C-2014	Total Organic Carbon/Persulfate - Ultrav	SM	EET CLE
SM 4500 NO2 B	Nitrogen, Nitrite	SM	EET MI
SM 4500 S2 D	Sulfide, Total	SM	EET CAL 4
SM4500 NO3 D	Nitrogen, Nitrate	SM	EET MI
200.7	Preparation, Total Metals	EPA	EET SSM
200.8	Preparation, Total Metals	EPA	EET SSM
200.8-1994 R5.4	Preparation, Total Recoverable Metals	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET MI = Eurofins Michigan, 38855 Hills Tech Dr., Suite 600, Farmington Hills, MI 48331, TEL (810)229-2763

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Lansing Board of Water & Light
Job ID: 240-238294-1
Project/Site: Erickson Project - MNA Tier II Geochem

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-238294-1	L511206-01 MW-2	Water	11/19/25 13:58	11/21/25 08:00	Michigan
240-238294-2	L511206-02 MW-12	Water	11/19/25 14:37	11/21/25 08:00	Michigan
240-238294-3	L511206-03 MW-12B	Water	11/19/25 11:45	11/21/25 08:00	Michigan
240-238294-4	L511206-04 MWT-12B	Water	11/19/25 11:45	11/21/25 08:00	Michigan
240-238294-5	L511206-05 Field Blank	Water	11/19/25 09:40	11/21/25 08:00	Michigan

Detection Summary

Client: Lansing Board of Water & Light
Job ID: 240-238294-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511206-01 MW-2 — Lab Sample ID: 240-238294-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	3.7		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Barium, Dissolved	0.053		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Cadmium, Dissolved	0.000081	J	0.0010	0.000077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	170		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Cobalt, Dissolved	0.0024		0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.052		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	37		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.018		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	0.011		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	1.2		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	2.5		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	73		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	0.039	J	0.10	0.013	mg/L	1		200.8	Dissolved
Zinc, Dissolved	0.0012	J B	0.0070	0.00093	mg/L	1		200.8	Dissolved
Total Organic Carbon	3.8		1.0	0.44	mg/L	1		5310 C-2014	Total/NA
Nitrate as N	1.2	H	0.40	0.14	mg/L	2		SM4500 NO3 D	Total/NA

Client Sample ID: L511206-02 MW-12 — Lab Sample ID: 240-238294-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	0.053	J	0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Arsenic, Dissolved	0.0028	J	0.0050	0.00075	mg/L	1		200.8-1994 R5.4	Dissolved
Barium, Dissolved	0.054		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	150		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Cobalt, Dissolved	0.0016		0.0010	0.000086	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.017		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	60		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Molybdenum, Dissolved	0.0051		0.0050	0.0011	mg/L	1		200.8-1994 R5.4	Dissolved
Nickel, Dissolved	0.012		0.0020	0.0015	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.10		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	2.1		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	96		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	1.6		0.10	0.013	mg/L	1		200.8	Dissolved
Zinc, Dissolved	0.0011	J B	0.0070	0.00093	mg/L	1		200.8	Dissolved
Total Organic Carbon	3.5		1.0	0.44	mg/L	1		5310 C-2014	Total/NA
Nitrate as N	1.3	H	0.40	0.14	mg/L	2		SM4500 NO3 D	Total/NA

Client Sample ID: L511206-03 MW-12B — Lab Sample ID: 240-238294-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	3.2		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Barium, Dissolved	0.024		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	25		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.038		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	8.0		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.013		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	7.8		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	100		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	0.24		0.10	0.013	mg/L	1		200.8	Dissolved
Total Organic Carbon	9.8		1.0	0.44	mg/L	1		5310 C-2014	Total/NA
Total Sulfide	0.14		0.050	0.028	mg/L	1		SM 4500 S2 D	Total/NA
Nitrate as N	1.4		0.40	0.14	mg/L	2		SM4500 NO3 D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Detection Summary

Client: Lansing Board of Water & Light
Job ID: 240-238294-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511206-04 MWT-12B
Lab Sample ID: 240-238294-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron, Dissolved	3.1		0.50	0.041	mg/L	1		200.7 Rev 4.4	Dissolved
Barium, Dissolved	0.025		0.0050	0.00077	mg/L	1		200.8-1994 R5.4	Dissolved
Calcium, Dissolved	25		1.0	0.25	mg/L	1		200.8-1994 R5.4	Dissolved
Lithium, Dissolved	0.039		0.0080	0.0034	mg/L	1		200.8-1994 R5.4	Dissolved
Magnesium, Dissolved	8.2		1.0	0.061	mg/L	1		200.8-1994 R5.4	Dissolved
Manganese, Dissolved	0.013		0.0050	0.0035	mg/L	1		200.8-1994 R5.4	Dissolved
Potassium, Dissolved	7.9		1.0	0.22	mg/L	1		200.8-1994 R5.4	Dissolved
Sodium, Dissolved	100		1.0	0.88	mg/L	1		200.8-1994 R5.4	Dissolved
Iron, Dissolved	0.26		0.10	0.013	mg/L	1		200.8	Dissolved
Aluminum, Dissolved	0.0059	J	0.040	0.0058	mg/L	1		200.8	Dissolved
Total Organic Carbon	9.9		1.0	0.44	mg/L	1		5310 C-2014	Total/NA
Total Sulfide	0.13		0.050	0.028	mg/L	1		SM 4500 S2 D	Total/NA

Client Sample ID: L511206-05 Field Blank
Lab Sample ID: 240-238294-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Lansing Board of Water & Light
Project/Site: Erickson Project - MNA Tier II Geochem

Job ID: 240-238294-1

Client Sample ID: L511206-01 MW-2

Date Collected: 11/19/25 13:58
Date Received: 11/21/25 08:00

Lab Sample ID: 240-238294-1

Matrix: Water

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**3.7**		0.50	0.041	mg/L		11/25/25 16:52	11/26/25 21:35	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		11/25/25 05:00	11/26/25 18:36	1
Barium, Dissolved	**0.053**		0.0050	0.00077	mg/L		11/25/25 05:00	11/26/25 18:36	1
Cadmium, Dissolved	**0.000081**	**J**	0.0010	0.000077	mg/L		11/25/25 05:00	11/26/25 18:36	1
Calcium, Dissolved	**170**		1.0	0.25	mg/L		11/25/25 05:00	11/26/25 18:36	1
Cobalt, Dissolved	**0.0024**		0.0010	0.000086	mg/L		11/25/25 05:00	11/26/25 18:36	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/25/25 05:00	11/26/25 18:36	1
Lithium, Dissolved	**0.052**		0.0080	0.0034	mg/L		11/25/25 05:00	11/26/25 18:36	1
Magnesium, Dissolved	**37**		1.0	0.061	mg/L		11/25/25 05:00	11/26/25 18:36	1
Molybdenum, Dissolved	**0.018**		0.0050	0.0011	mg/L		11/25/25 05:00	11/26/25 18:36	1
Nickel, Dissolved	**0.011**		0.0020	0.0015	mg/L		11/25/25 05:00	11/26/25 18:36	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/25/25 05:00	11/26/25 18:36	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/25/25 05:00	11/26/25 18:36	1
Manganese, Dissolved	**1.2**		0.0050	0.0035	mg/L		11/25/25 05:00	11/26/25 18:36	1
Potassium, Dissolved	**2.5**		1.0	0.22	mg/L		11/25/25 05:00	11/26/25 18:36	1
Sodium, Dissolved	**73**		1.0	0.88	mg/L		11/25/25 05:00	11/26/25 18:36	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**0.039**	**J**	0.10	0.013	mg/L		11/25/25 16:52	11/30/25 16:56	1
Zinc, Dissolved	**0.0012**	**J B**	0.0070	0.00093	mg/L		11/25/25 16:52	11/30/25 16:56	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/25/25 16:52	11/30/25 16:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SM 5310 C-2014)	**3.8**		1.0	0.44	mg/L			12/02/25 05:17	1
Nitrite as N (SM 4500 NO2 B)	ND		0.10	0.0097	mg/L			11/21/25 11:15	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/25/25 19:40	1
Nitrate as N (SM4500 NO3 D)	**1.2**	**H**	0.40	0.14	mg/L			11/24/25 16:50	2

Client: Lansing Board of Water & Light
Job ID: 240-238294-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511206-02 MW-12
Lab Sample ID: 240-238294-2
Date Collected: 11/19/25 14:37
Matrix: Water
Date Received: 11/21/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	0.053	J	0.50	0.041	mg/L		11/25/25 16:52	11/26/25 21:38	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	0.0028	J	0.0050	0.00075	mg/L		11/25/25 05:00	11/26/25 19:11	1
Barium, Dissolved	0.054		0.0050	0.00077	mg/L		11/25/25 05:00	11/26/25 19:11	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/25/25 05:00	11/26/25 19:11	1
Calcium, Dissolved	150		1.0	0.25	mg/L		11/25/25 05:00	11/26/25 19:11	1
Cobalt, Dissolved	0.0016		0.0010	0.000086	mg/L		11/25/25 05:00	11/26/25 19:11	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/25/25 05:00	11/26/25 19:11	1
Lithium, Dissolved	0.017		0.0080	0.0034	mg/L		11/25/25 05:00	11/26/25 19:11	1
Magnesium, Dissolved	60		1.0	0.061	mg/L		11/25/25 05:00	11/26/25 19:11	1
Molybdenum, Dissolved	0.0051		0.0050	0.0011	mg/L		11/25/25 05:00	11/26/25 19:11	1
Nickel, Dissolved	0.012		0.0020	0.0015	mg/L		11/25/25 05:00	11/26/25 19:11	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/25/25 05:00	11/26/25 19:11	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/25/25 05:00	11/26/25 19:11	1
Manganese, Dissolved	0.10		0.0050	0.0035	mg/L		11/25/25 05:00	11/26/25 19:11	1
Potassium, Dissolved	2.1		1.0	0.22	mg/L		11/25/25 05:00	11/26/25 19:11	1
Sodium, Dissolved	96		1.0	0.88	mg/L		11/25/25 05:00	11/26/25 19:11	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	1.6		0.10	0.013	mg/L		11/25/25 16:52	11/30/25 16:59	1
Zinc, Dissolved	0.0011	J B	0.0070	0.00093	mg/L		11/25/25 16:52	11/30/25 16:59	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/25/25 16:52	11/30/25 16:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SM 5310 C-2014)	3.5		1.0	0.44	mg/L			12/02/25 05:41	1
Nitrite as N (SM 4500 NO2 B)	ND		0.10	0.0097	mg/L			11/21/25 11:18	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/25/25 19:42	1
Nitrate as N (SM4500 NO3 D)	1.3	H	0.40	0.14	mg/L			11/24/25 17:27	2

Client: Lansing Board of Water & Light
Job ID: 240-238294-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511206-03 MW-12B
Lab Sample ID: 240-238294-3
Date Collected: 11/19/25 11:45
Matrix: Water
Date Received: 11/21/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**3.2**		0.50	0.041	mg/L		11/25/25 16:52	11/26/25 21:41	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		11/25/25 05:00	11/26/25 19:14	1
Barium, Dissolved	**0.024**		0.0050	0.00077	mg/L		11/25/25 05:00	11/26/25 19:14	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/25/25 05:00	11/26/25 19:14	1
Calcium, Dissolved	**25**		1.0	0.25	mg/L		11/25/25 05:00	11/26/25 19:14	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/25/25 05:00	11/26/25 19:14	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/25/25 05:00	11/26/25 19:14	1
Lithium, Dissolved	**0.038**		0.0080	0.0034	mg/L		11/25/25 05:00	11/26/25 19:14	1
Magnesium, Dissolved	**8.0**		1.0	0.061	mg/L		11/25/25 05:00	11/26/25 19:14	1
Molybdenum, Dissolved	ND		0.0050	0.0011	mg/L		11/25/25 05:00	11/26/25 19:14	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		11/25/25 05:00	11/26/25 19:14	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/25/25 05:00	11/26/25 19:14	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/25/25 05:00	11/26/25 19:14	1
Manganese, Dissolved	**0.013**		0.0050	0.0035	mg/L		11/25/25 05:00	11/26/25 19:14	1
Potassium, Dissolved	**7.8**		1.0	0.22	mg/L		11/25/25 05:00	11/26/25 19:14	1
Sodium, Dissolved	**100**		1.0	0.88	mg/L		11/25/25 05:00	11/26/25 19:14	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**0.24**		0.10	0.013	mg/L		11/25/25 16:52	11/30/25 17:02	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/25/25 16:52	11/30/25 17:02	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/25/25 16:52	11/30/25 17:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SM 5310 C-2014)	**9.8**		1.0	0.44	mg/L			12/02/25 06:05	1
Nitrite as N (SM 4500 NO2 B)	ND		0.10	0.0097	mg/L			11/21/25 11:19	1
Total Sulfide (SM 4500 S2 D)	**0.14**		0.050	0.028	mg/L			11/25/25 19:44	1
Nitrate as N (SM4500 NO3 D)	**1.4**		0.40	0.14	mg/L			11/20/25 18:58	2

Client: Lansing Board of Water & Light
Job ID: 240-238294-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511206-04 MWT-12B
Lab Sample ID: 240-238294-4
Date Collected: 11/19/25 11:45
Matrix: Water
Date Received: 11/21/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	**3.1**		0.50	0.041	mg/L		11/25/25 16:52	11/26/25 21:45	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		11/25/25 05:00	11/26/25 19:06	1
Barium, Dissolved	**0.025**		0.0050	0.00077	mg/L		11/25/25 05:00	11/26/25 19:06	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/25/25 05:00	11/26/25 19:06	1
Calcium, Dissolved	**25**		1.0	0.25	mg/L		11/25/25 05:00	11/26/25 19:06	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/25/25 05:00	11/26/25 19:06	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/25/25 05:00	11/26/25 19:06	1
Lithium, Dissolved	**0.039**		0.0080	0.0034	mg/L		11/25/25 05:00	11/26/25 19:06	1
Magnesium, Dissolved	**8.2**		1.0	0.061	mg/L		11/25/25 05:00	11/26/25 19:06	1
Molybdenum, Dissolved	ND		0.0050	0.0011	mg/L		11/25/25 05:00	11/26/25 19:06	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		11/25/25 05:00	11/26/25 19:06	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/25/25 05:00	11/26/25 19:06	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/25/25 05:00	11/26/25 19:06	1
Manganese, Dissolved	**0.013**		0.0050	0.0035	mg/L		11/25/25 05:00	11/26/25 19:06	1
Potassium, Dissolved	**7.9**		1.0	0.22	mg/L		11/25/25 05:00	11/26/25 19:06	1
Sodium, Dissolved	**100**		1.0	0.88	mg/L		11/25/25 05:00	11/26/25 19:06	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**0.26**		0.10	0.013	mg/L		11/25/25 16:52	11/30/25 17:05	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/25/25 16:52	11/30/25 17:05	1
Aluminum, Dissolved	**0.0059**	**J**	0.040	0.0058	mg/L		11/25/25 16:52	11/30/25 17:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SM 5310 C-2014)	**9.9**		1.0	0.44	mg/L			12/02/25 06:29	1
Nitrite as N (SM 4500 NO2 B)	ND		0.10	0.0097	mg/L			11/21/25 11:21	1
Total Sulfide (SM 4500 S2 D)	**0.13**		0.050	0.028	mg/L			11/25/25 19:46	1

Client: Lansing Board of Water & Light
Job ID: 240-238294-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511206-05 Field Blank
Lab Sample ID: 240-238294-5

Date Collected: 11/19/25 09:40
Matrix: Water
Date Received: 11/21/25 08:00

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	ND		0.50	0.041	mg/L		11/26/25 16:04	12/03/25 22:58	1

Method: EPA 200.8-1994 R5.4 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		11/25/25 05:00	11/26/25 19:09	1
Barium, Dissolved	ND		0.0050	0.00077	mg/L		11/25/25 05:00	11/26/25 19:09	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/25/25 05:00	11/26/25 19:09	1
Calcium, Dissolved	ND		1.0	0.25	mg/L		11/25/25 05:00	11/26/25 19:09	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/25/25 05:00	11/26/25 19:09	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/25/25 05:00	11/26/25 19:09	1
Lithium, Dissolved	ND		0.0080	0.0034	mg/L		11/25/25 05:00	11/26/25 19:09	1
Magnesium, Dissolved	ND		1.0	0.061	mg/L		11/25/25 05:00	11/26/25 19:09	1
Molybdenum, Dissolved	ND		0.0050	0.0011	mg/L		11/25/25 05:00	11/26/25 19:09	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		11/25/25 05:00	11/26/25 19:09	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/25/25 05:00	11/26/25 19:09	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/25/25 05:00	11/26/25 19:09	1
Manganese, Dissolved	ND		0.0050	0.0035	mg/L		11/25/25 05:00	11/26/25 19:09	1
Potassium, Dissolved	ND		1.0	0.22	mg/L		11/25/25 05:00	11/26/25 19:09	1
Sodium, Dissolved	ND		1.0	0.88	mg/L		11/25/25 05:00	11/26/25 19:09	1

Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.10	0.013	mg/L		11/26/25 16:04	12/01/25 15:51	1
Zinc, Dissolved	ND		0.0070	0.00093	mg/L		11/26/25 16:04	12/01/25 15:51	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/26/25 16:04	12/01/25 15:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon (SM 5310 C-2014)	ND		1.0	0.44	mg/L			12/02/25 06:53	1
Nitrite as N (SM 4500 NO2 B)	ND	H	0.10	0.0097	mg/L			11/21/25 11:12	1
Total Sulfide (SM 4500 S2 D)	ND		0.050	0.028	mg/L			11/25/25 19:48	1
Nitrate as N (SM4500 NO3 D)	ND		0.20	0.070	mg/L			11/20/25 18:28	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 350-11371/25-A
Matrix: Water
Analysis Batch: 11433

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11371

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	ND		0.50	0.041	mg/L		11/25/25 16:52	11/26/25 20:26	1

Lab Sample ID: LCS 350-11371/26-A
Matrix: Water
Analysis Batch: 11433

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11371

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron, Dissolved	5.00	5.15		mg/L		103	85 - 115

Lab Sample ID: MB 350-11361/4-B
Matrix: Water
Analysis Batch: 11539

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 11414

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	ND		0.50	0.041	mg/L		11/26/25 16:04	12/03/25 22:35	1

Lab Sample ID: LCS 350-11361/5-B
Matrix: Water
Analysis Batch: 11539

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 11414

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron, Dissolved	5.00	5.25		mg/L		105	85 - 115

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 350-11371/25-A
Matrix: Water
Analysis Batch: 11421

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11371

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.10	0.013	mg/L		11/25/25 16:52	11/26/25 17:31	1
Zinc, Dissolved	0.00140	J	0.0070	0.00093	mg/L		11/25/25 16:52	11/26/25 17:31	1
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/25/25 16:52	11/26/25 17:31	1

Lab Sample ID: LCS 350-11371/26-A
Matrix: Water
Analysis Batch: 11421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11371

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron, Dissolved	20.0	18.4		mg/L		92	85 - 115
Zinc, Dissolved	1.00	0.923		mg/L		92	85 - 115
Aluminum, Dissolved	20.0	19.7		mg/L		98	85 - 115

Lab Sample ID: MB 350-11361/4-B
Matrix: Water
Analysis Batch: 11440

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 11414

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.10	0.013	mg/L		11/26/25 16:04	12/01/25 13:35	1
Zinc, Dissolved	0.00128	J	0.0070	0.00093	mg/L		11/26/25 16:04	12/01/25 13:35	1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 350-11361/4-B
Matrix: Water
Analysis Batch: 11440

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 11414

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.040	0.0058	mg/L		11/26/25 16:04	12/01/25 13:35	1

Lab Sample ID: LCS 350-11361/5-B
Matrix: Water
Analysis Batch: 11440

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 11414

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron, Dissolved	20.0	20.3		mg/L		101	85 - 115
Zinc, Dissolved	1.00	1.01		mg/L		101	85 - 115
Aluminum, Dissolved	20.0	19.8		mg/L		99	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS)

Lab Sample ID: MB 240-681931/1-A
Matrix: Water
Analysis Batch: 682366

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 681931

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	ND		0.0050	0.00075	mg/L		11/25/25 05:00	11/26/25 18:25	1
Barium, Dissolved	ND		0.0050	0.00077	mg/L		11/25/25 05:00	11/26/25 18:25	1
Cadmium, Dissolved	ND		0.0010	0.000077	mg/L		11/25/25 05:00	11/26/25 18:25	1
Calcium, Dissolved	ND		1.0	0.25	mg/L		11/25/25 05:00	11/26/25 18:25	1
Cobalt, Dissolved	ND		0.0010	0.000086	mg/L		11/25/25 05:00	11/26/25 18:25	1
Copper, Dissolved	ND		0.0020	0.0017	mg/L		11/25/25 05:00	11/26/25 18:25	1
Lithium, Dissolved	ND		0.0080	0.0034	mg/L		11/25/25 05:00	11/26/25 18:25	1
Magnesium, Dissolved	ND		1.0	0.061	mg/L		11/25/25 05:00	11/26/25 18:25	1
Molybdenum, Dissolved	ND		0.0050	0.0011	mg/L		11/25/25 05:00	11/26/25 18:25	1
Nickel, Dissolved	ND		0.0020	0.0015	mg/L		11/25/25 05:00	11/26/25 18:25	1
Selenium, Dissolved	ND		0.0050	0.00089	mg/L		11/25/25 05:00	11/26/25 18:25	1
Vanadium, Dissolved	ND		0.0050	0.00082	mg/L		11/25/25 05:00	11/26/25 18:25	1
Manganese, Dissolved	ND		0.0050	0.0035	mg/L		11/25/25 05:00	11/26/25 18:25	1
Potassium, Dissolved	ND		1.0	0.22	mg/L		11/25/25 05:00	11/26/25 18:25	1
Sodium, Dissolved	ND		1.0	0.88	mg/L		11/25/25 05:00	11/26/25 18:25	1

Lab Sample ID: LCS 240-681931/2-A
Matrix: Water
Analysis Batch: 682366

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 681931

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic, Dissolved	1.00	1.01		mg/L		101	85 - 115
Barium, Dissolved	1.00	1.04		mg/L		104	85 - 115
Cadmium, Dissolved	0.500	0.509		mg/L		102	85 - 115
Calcium, Dissolved	25.0	25.7		mg/L		103	85 - 115
Chromium, Dissolved	0.500	0.520		mg/L		104	85 - 115
Cobalt, Dissolved	0.500	0.509		mg/L		102	85 - 115
Copper, Dissolved	0.500	0.511		mg/L		102	85 - 115
Lithium, Dissolved	0.500	0.539		mg/L		108	85 - 115
Magnesium, Dissolved	25.0	26.1		mg/L		105	85 - 115
Molybdenum, Dissolved	0.500	0.506		mg/L		101	85 - 115
Nickel, Dissolved	0.500	0.507		mg/L		101	85 - 115

Method: 200.8-1994 R5.4 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-681931/2-A
Matrix: Water
Analysis Batch: 682366

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 681931

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Selenium, Dissolved			1.00	1.01		mg/L		101	85 - 115		
Vanadium, Dissolved			0.500	0.520		mg/L		104	85 - 115		
Manganese, Dissolved			0.500	0.521		mg/L		104	85 - 115		
Potassium, Dissolved			25.0	25.7		mg/L		103	85 - 115		
Sodium, Dissolved			25.0	25.8		mg/L		103	85 - 115		

Lab Sample ID: 240-238294-1 MS
Matrix: Water
Analysis Batch: 682366

Client Sample ID: L511206-01 MW-2
Prep Type: Dissolved
Prep Batch: 681931

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic, Dissolved	ND		1.00	0.929		mg/L		93	70 - 130		
Barium, Dissolved	0.053		1.00	1.00		mg/L		95	70 - 130		
Cadmium, Dissolved	0.000081	J	0.500	0.456		mg/L		91	70 - 130		
Calcium, Dissolved	170		25.0	191	4	mg/L		91	70 - 130		
Chromium, Dissolved	ND		0.500	0.465		mg/L		93	70 - 130		
Cobalt, Dissolved	0.0024		0.500	0.461		mg/L		92	70 - 130		
Copper, Dissolved	ND		0.500	0.456		mg/L		91	70 - 130		
Lithium, Dissolved	0.052		0.500	0.539		mg/L		97	70 - 130		
Magnesium, Dissolved	37		25.0	60.3		mg/L		94	70 - 130		
Molybdenum, Dissolved	0.018		0.500	0.485		mg/L		93	70 - 130		
Nickel, Dissolved	0.011		0.500	0.462		mg/L		90	70 - 130		
Selenium, Dissolved	ND		1.00	0.914		mg/L		91	70 - 130		
Vanadium, Dissolved	ND		0.500	0.471		mg/L		94	70 - 130		
Manganese, Dissolved	1.2		0.500	1.63		mg/L		96	70 - 130		
Potassium, Dissolved	2.5		25.0	26.4		mg/L		96	70 - 130		
Sodium, Dissolved	73		25.0	97.3		mg/L		96	70 - 130		

Lab Sample ID: 240-238294-1 MSD
Matrix: Water
Analysis Batch: 682366

Client Sample ID: L511206-01 MW-2
Prep Type: Dissolved
Prep Batch: 681931

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic, Dissolved	ND		1.00	0.996		mg/L		100	70 - 130	7	20
Barium, Dissolved	0.053		1.00	1.07		mg/L		102	70 - 130	7	20
Cadmium, Dissolved	0.000081	J	0.500	0.488		mg/L		98	70 - 130	7	20
Calcium, Dissolved	170		25.0	200	4	mg/L		128	70 - 130	5	20
Chromium, Dissolved	ND		0.500	0.502		mg/L		100	70 - 130	8	20
Cobalt, Dissolved	0.0024		0.500	0.496		mg/L		99	70 - 130	7	20
Copper, Dissolved	ND		0.500	0.488		mg/L		98	70 - 130	7	20
Lithium, Dissolved	0.052		0.500	0.583		mg/L		106	70 - 130	8	20
Magnesium, Dissolved	37		25.0	63.2		mg/L		106	70 - 130	5	20
Molybdenum, Dissolved	0.018		0.500	0.522		mg/L		101	70 - 130	7	20
Nickel, Dissolved	0.011		0.500	0.498		mg/L		97	70 - 130	7	20
Selenium, Dissolved	ND		1.00	0.974		mg/L		97	70 - 130	6	20
Vanadium, Dissolved	ND		0.500	0.507		mg/L		101	70 - 130	7	20
Manganese, Dissolved	1.2		0.500	1.73		mg/L		115	70 - 130	6	20
Potassium, Dissolved	2.5		25.0	27.9		mg/L		102	70 - 130	6	20
Sodium, Dissolved	73		25.0	101		mg/L		112	70 - 130	4	20

Method: 5310 C-2014 - Total Organic Carbon/Persulfate - Ultrav

Lab Sample ID: MB 240-682685/5
Matrix: Water
Analysis Batch: 682685

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.44	mg/L			12/01/25 18:27	1

Lab Sample ID: LCS 240-682685/21
Matrix: Water
Analysis Batch: 682685

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Carbon			28.4	27.3		mg/L		96	85 - 115		
TOC Result 1			28.4	27.2		mg/L		96	85 - 115		
TOC Result 2			28.4	27.0		mg/L		95	85 - 115		

Method: SM 4500 NO2 B - Nitrogen, Nitrite

Lab Sample ID: MB 190-13081/11
Matrix: Water
Analysis Batch: 13081

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.10	0.0097	mg/L			11/21/25 11:09	1

Lab Sample ID: LCS 190-13081/10
Matrix: Water
Analysis Batch: 13081

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrite as N			0.250	0.246		mg/L		98	90 - 110		

Lab Sample ID: 240-238294-1 MS
Matrix: Water
Analysis Batch: 13081

Client Sample ID: L511206-01 MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrite as N	ND		1.25	1.19		mg/L		95	75 - 125		

Lab Sample ID: 240-238294-1 MSD
Matrix: Water
Analysis Batch: 13081

Client Sample ID: L511206-01 MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	ND		1.25	1.19		mg/L		95	75 - 125	0	20

Lab Sample ID: 240-238294-2 MS
Matrix: Water
Analysis Batch: 13081

Client Sample ID: L511206-02 MW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrite as N	ND		0.250	0.222		mg/L		89	75 - 125		

Method: SM 4500 NO2 B - Nitrogen, Nitrite (Continued)

Lab Sample ID: 240-238294-2 MSD — **Client Sample ID: L511206-02 MW-12**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 13081

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	ND		0.250	0.223		mg/L		89	75 - 125	0	20

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 570-661794/86 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 661794

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Sulfide	ND		0.050	0.028	mg/L			11/25/25 19:04	1

Lab Sample ID: LCS 570-661794/88 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 661794

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Sulfide	0.500	0.531		mg/L		106	70 - 130

Lab Sample ID: LCSD 570-661794/90 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 661794

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Sulfide	0.500	0.499		mg/L		100	70 - 130	6	8

Lab Sample ID: MRL 570-661794/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 661794

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Total Sulfide	0.0500	0.0585		mg/L		117	50 - 150

Lab Sample ID: MRL 570-662060/4-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 661794 — **Prep Batch: 662060**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Total Sulfide	0.0500	0.0444	J	mg/L		89	50 - 150

Method: SM4500 NO3 D - Nitrogen, Nitrate

Lab Sample ID: MB 190-13087/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 13087

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.20	0.070	mg/L			11/20/25 15:01	1

Method: SM4500 NO3 D - Nitrogen, Nitrate (Continued)

Lab Sample ID: LCS 190-13087/4
Matrix: Water
Analysis Batch: 13087

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N			10.0	9.48		mg/L		95	90 - 110		

Lab Sample ID: MB 190-13090/3
Matrix: Water
Analysis Batch: 13090

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.20	0.070	mg/L			11/24/25 15:17	1

Lab Sample ID: LCS 190-13090/4
Matrix: Water
Analysis Batch: 13090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N			10.0	10.9		mg/L		109	90 - 110		

Lab Sample ID: 240-238294-2 MS
Matrix: Water
Analysis Batch: 13090

Client Sample ID: L511206-02 MW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N	1.3	H	20.0	22.0		mg/L		103	75 - 125		

Lab Sample ID: 240-238294-2 MSD
Matrix: Water
Analysis Batch: 13090

Client Sample ID: L511206-02 MW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	1.3	H	20.0	21.6		mg/L		101	75 - 125	2	20

Metals

Filtration Batch: 11361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 350-11361/4-B	Method Blank	Dissolved	Water	FILTRATION	
LCS 350-11361/5-B	Lab Control Sample	Dissolved	Water	FILTRATION	

Prep Batch: 11371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238294-1	L511206-01 MW-2	Dissolved	Water	200.7	
240-238294-2	L511206-02 MW-12	Dissolved	Water	200.7	
240-238294-3	L511206-03 MW-12B	Dissolved	Water	200.7	
240-238294-4	L511206-04 MWT-12B	Dissolved	Water	200.7	
MB 350-11371/25-A	Method Blank	Total/NA	Water	200.7	
LCS 350-11371/26-A	Lab Control Sample	Total/NA	Water	200.7	

Prep Batch: 11414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238294-5	L511206-05 Field Blank	Dissolved	Water	200.7	
MB 350-11361/4-B	Method Blank	Dissolved	Water	200.7	11361
LCS 350-11361/5-B	Lab Control Sample	Dissolved	Water	200.7	11361

Analysis Batch: 11421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 350-11371/25-A	Method Blank	Total/NA	Water	200.8	11371
LCS 350-11371/26-A	Lab Control Sample	Total/NA	Water	200.8	11371

Analysis Batch: 11429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238294-1	L511206-01 MW-2	Dissolved	Water	200.8	11371
240-238294-2	L511206-02 MW-12	Dissolved	Water	200.8	11371
240-238294-3	L511206-03 MW-12B	Dissolved	Water	200.8	11371
240-238294-4	L511206-04 MWT-12B	Dissolved	Water	200.8	11371

Analysis Batch: 11433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238294-1	L511206-01 MW-2	Dissolved	Water	200.7 Rev 4.4	11371
240-238294-2	L511206-02 MW-12	Dissolved	Water	200.7 Rev 4.4	11371
240-238294-3	L511206-03 MW-12B	Dissolved	Water	200.7 Rev 4.4	11371
240-238294-4	L511206-04 MWT-12B	Dissolved	Water	200.7 Rev 4.4	11371
MB 350-11371/25-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	11371
LCS 350-11371/26-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	11371

Analysis Batch: 11440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 350-11361/4-B	Method Blank	Dissolved	Water	200.8	11414
LCS 350-11361/5-B	Lab Control Sample	Dissolved	Water	200.8	11414

Analysis Batch: 11448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238294-5	L511206-05 Field Blank	Dissolved	Water	200.8	11414

Analysis Batch: 11539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238294-5	L511206-05 Field Blank	Dissolved	Water	200.7 Rev 4.4	11414

Metals (Continued)

Analysis Batch: 11539 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 350-11361/4-B	Method Blank	Dissolved	Water	200.7 Rev 4.4	11414
LCS 350-11361/5-B	Lab Control Sample	Dissolved	Water	200.7 Rev 4.4	11414

Prep Batch: 681931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238294-1	L511206-01 MW-2	Dissolved	Water	200.8-1994 R5.4	
240-238294-2	L511206-02 MW-12	Dissolved	Water	200.8-1994 R5.4	
240-238294-3	L511206-03 MW-12B	Dissolved	Water	200.8-1994 R5.4	
240-238294-4	L511206-04 MWT-12B	Dissolved	Water	200.8-1994 R5.4	
240-238294-5	L511206-05 Field Blank	Dissolved	Water	200.8-1994 R5.4	
MB 240-681931/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	
LCS 240-681931/2-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	
240-238294-1 MS	L511206-01 MW-2	Dissolved	Water	200.8-1994 R5.4	
240-238294-1 MSD	L511206-01 MW-2	Dissolved	Water	200.8-1994 R5.4	

Analysis Batch: 682366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238294-1	L511206-01 MW-2	Dissolved	Water	200.8-1994 R5.4	681931
240-238294-2	L511206-02 MW-12	Dissolved	Water	200.8-1994 R5.4	681931
240-238294-3	L511206-03 MW-12B	Dissolved	Water	200.8-1994 R5.4	681931
240-238294-4	L511206-04 MWT-12B	Dissolved	Water	200.8-1994 R5.4	681931
240-238294-5	L511206-05 Field Blank	Dissolved	Water	200.8-1994 R5.4	681931
MB 240-681931/1-A	Method Blank	Total Recoverable	Water	200.8-1994 R5.4	681931
LCS 240-681931/2-A	Lab Control Sample	Total Recoverable	Water	200.8-1994 R5.4	681931
240-238294-1 MS	L511206-01 MW-2	Dissolved	Water	200.8-1994 R5.4	681931
240-238294-1 MSD	L511206-01 MW-2	Dissolved	Water	200.8-1994 R5.4	681931

General Chemistry

Analysis Batch: 13081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238294-1	L511206-01 MW-2	Total/NA	Water	SM 4500 NO2 B	
240-238294-2	L511206-02 MW-12	Total/NA	Water	SM 4500 NO2 B	
240-238294-3	L511206-03 MW-12B	Total/NA	Water	SM 4500 NO2 B	
240-238294-4	L511206-04 MWT-12B	Total/NA	Water	SM 4500 NO2 B	
240-238294-5	L511206-05 Field Blank	Total/NA	Water	SM 4500 NO2 B	
MB 190-13081/11	Method Blank	Total/NA	Water	SM 4500 NO2 B	
LCS 190-13081/10	Lab Control Sample	Total/NA	Water	SM 4500 NO2 B	
240-238294-1 MS	L511206-01 MW-2	Total/NA	Water	SM 4500 NO2 B	
240-238294-1 MSD	L511206-01 MW-2	Total/NA	Water	SM 4500 NO2 B	
240-238294-2 MS	L511206-02 MW-12	Total/NA	Water	SM 4500 NO2 B	
240-238294-2 MSD	L511206-02 MW-12	Total/NA	Water	SM 4500 NO2 B	

Analysis Batch: 13087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238294-3	L511206-03 MW-12B	Total/NA	Water	SM4500 NO3 D	
240-238294-5	L511206-05 Field Blank	Total/NA	Water	SM4500 NO3 D	
MB 190-13087/3	Method Blank	Total/NA	Water	SM4500 NO3 D	
LCS 190-13087/4	Lab Control Sample	Total/NA	Water	SM4500 NO3 D	

General Chemistry

Analysis Batch: 13090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238294-1	L511206-01 MW-2	Total/NA	Water	SM4500 NO3 D	
240-238294-2	L511206-02 MW-12	Total/NA	Water	SM4500 NO3 D	
MB 190-13090/3	Method Blank	Total/NA	Water	SM4500 NO3 D	
LCS 190-13090/4	Lab Control Sample	Total/NA	Water	SM4500 NO3 D	
240-238294-2 MS	L511206-02 MW-12	Total/NA	Water	SM4500 NO3 D	
240-238294-2 MSD	L511206-02 MW-12	Total/NA	Water	SM4500 NO3 D	

Analysis Batch: 661794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238294-1	L511206-01 MW-2	Total/NA	Water	SM 4500 S2 D	
240-238294-2	L511206-02 MW-12	Total/NA	Water	SM 4500 S2 D	
240-238294-3	L511206-03 MW-12B	Total/NA	Water	SM 4500 S2 D	
240-238294-4	L511206-04 MWT-12B	Total/NA	Water	SM 4500 S2 D	
240-238294-5	L511206-05 Field Blank	Total/NA	Water	SM 4500 S2 D	
MB 570-661794/86	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 570-661794/88	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 570-661794/90	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	
MRL 570-661794/4	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
MRL 570-662060/4-A	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	662060

Prep Batch: 662060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 570-662060/4-A	Lab Control Sample	Total/NA	Water	SM 4500 S2 B	

Analysis Batch: 682685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-238294-1	L511206-01 MW-2	Total/NA	Water	5310 C-2014	
240-238294-2	L511206-02 MW-12	Total/NA	Water	5310 C-2014	
240-238294-3	L511206-03 MW-12B	Total/NA	Water	5310 C-2014	
240-238294-4	L511206-04 MWT-12B	Total/NA	Water	5310 C-2014	
240-238294-5	L511206-05 Field Blank	Total/NA	Water	5310 C-2014	
MB 240-682685/5	Method Blank	Total/NA	Water	5310 C-2014	
LCS 240-682685/21	Lab Control Sample	Total/NA	Water	5310 C-2014	

Lab Chronicle

Client: Lansing Board of Water & Light
Job ID: 240-238294-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511206-01 MW-2
Lab Sample ID: 240-238294-1
Date Collected: 11/19/25 13:58
Matrix: Water
Date Received: 11/21/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.7 Rev 4.4		1	11433	JLS	EET SSM	11/26/25 21:35
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 16:56
Dissolved	Prep	200.8-1994 R5.4			681931	MN7X	EET CLE	11/25/25 05:00
Dissolved	Analysis	200.8-1994 R5.4		1	682366	S4FJ	EET CLE	11/26/25 18:36
Total/NA	Analysis	5310 C-2014		1	682685	PQD2	EET CLE	12/02/25 05:17
Total/NA	Analysis	SM 4500 NO2 B		1	13081	JED	EET MI	11/21/25 11:15
Total/NA	Analysis	SM 4500 S2 D		1	661794	GG0B	EET CAL 4	11/25/25 19:40
Total/NA	Analysis	SM4500 NO3 D		2	13090	JED	EET MI	11/24/25 16:50

Client Sample ID: L511206-02 MW-12
Lab Sample ID: 240-238294-2
Date Collected: 11/19/25 14:37
Matrix: Water
Date Received: 11/21/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.7 Rev 4.4		1	11433	JLS	EET SSM	11/26/25 21:38
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 16:59
Dissolved	Prep	200.8-1994 R5.4			681931	MN7X	EET CLE	11/25/25 05:00
Dissolved	Analysis	200.8-1994 R5.4		1	682366	S4FJ	EET CLE	11/26/25 19:11
Total/NA	Analysis	5310 C-2014		1	682685	PQD2	EET CLE	12/02/25 05:41
Total/NA	Analysis	SM 4500 NO2 B		1	13081	JED	EET MI	11/21/25 11:18
Total/NA	Analysis	SM 4500 S2 D		1	661794	GG0B	EET CAL 4	11/25/25 19:42
Total/NA	Analysis	SM4500 NO3 D		2	13090	JED	EET MI	11/24/25 17:27

Client Sample ID: L511206-03 MW-12B
Lab Sample ID: 240-238294-3
Date Collected: 11/19/25 11:45
Matrix: Water
Date Received: 11/21/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.7 Rev 4.4		1	11433	JLS	EET SSM	11/26/25 21:41
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 17:02
Dissolved	Prep	200.8-1994 R5.4			681931	MN7X	EET CLE	11/25/25 05:00
Dissolved	Analysis	200.8-1994 R5.4		1	682366	S4FJ	EET CLE	11/26/25 19:14
Total/NA	Analysis	5310 C-2014		1	682685	PQD2	EET CLE	12/02/25 06:05
Total/NA	Analysis	SM 4500 NO2 B		1	13081	JED	EET MI	11/21/25 11:19
Total/NA	Analysis	SM 4500 S2 D		1	661794	GG0B	EET CAL 4	11/25/25 19:44
Total/NA	Analysis	SM4500 NO3 D		2	13087	JED	EET MI	11/20/25 18:58

Lab Chronicle

Client: Lansing Board of Water & Light
Job ID: 240-238294-1
Project/Site: Erickson Project - MNA Tier II Geochem

Client Sample ID: L511206-04 MWT-12B
Lab Sample ID: 240-238294-4

Date Collected: 11/19/25 11:45
Matrix: Water
Date Received: 11/21/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.7 Rev 4.4		1	11433	JLS	EET SSM	11/26/25 21:45
Dissolved	Prep	200.7			11371	RMN	EET SSM	11/25/25 16:52
Dissolved	Analysis	200.8		1	11429	JL	EET SSM	11/30/25 17:05
Dissolved	Prep	200.8-1994 R5.4			681931	MN7X	EET CLE	11/25/25 05:00
Dissolved	Analysis	200.8-1994 R5.4		1	682366	S4FJ	EET CLE	11/26/25 19:06
Total/NA	Analysis	5310 C-2014		1	682685	PQD2	EET CLE	12/02/25 06:29
Total/NA	Analysis	SM 4500 NO2 B		1	13081	JED	EET MI	11/21/25 11:21
Total/NA	Analysis	SM 4500 S2 D		1	661794	GG0B	EET CAL 4	11/25/25 19:46

Client Sample ID: L511206-05 Field Blank
Lab Sample ID: 240-238294-5

Date Collected: 11/19/25 09:40
Matrix: Water
Date Received: 11/21/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	200.7			11414	RMN	EET SSM	11/26/25 16:04
Dissolved	Analysis	200.7 Rev 4.4		1	11539	JLS	EET SSM	12/03/25 22:58
Dissolved	Prep	200.7			11414	RMN	EET SSM	11/26/25 16:04
Dissolved	Analysis	200.8		1	11448	JL	EET SSM	12/01/25 15:51
Dissolved	Prep	200.8-1994 R5.4			681931	MN7X	EET CLE	11/25/25 05:00
Dissolved	Analysis	200.8-1994 R5.4		1	682366	S4FJ	EET CLE	11/26/25 19:09
Total/NA	Analysis	5310 C-2014		1	682685	PQD2	EET CLE	12/02/25 06:53
Total/NA	Analysis	SM 4500 NO2 B		1	13081	JED	EET MI	11/21/25 11:12
Total/NA	Analysis	SM 4500 S2 D		1	661794	GG0B	EET CAL 4	11/25/25 19:48
Total/NA	Analysis	SM4500 NO3 D		1	13087	JED	EET MI	11/20/25 18:28

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET MI = Eurofins Michigan, 38855 Hills Tech Dr., Suite 600, Farmington Hills, MI 48331, TEL (810)229-2763

EET SSM = Eurofins Seattle Specialty Metals, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Lansing Board of Water & Light
Job ID: 240-238294-1
Project/Site: Erickson Project - MNA Tier II Geochem

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4062	02-27-26

Laboratory: Eurofins Calscience

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	7296.01	11-30-26
A2LA	ISO/IEC 17025	7296.01	11-30-26
Alaska (UST)	State	25-005	03-02-26
Arizona	State	AZ0830	11-25-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-25
California	State	3082	07-31-26
Kansas	NELAP	E-10420	07-31-26
Nevada	State	CA00111	07-31-26
Oregon	NELAP	4175	02-02-26
USDA	US Federal Programs	525-23-159-97150	06-08-26
Utah	NELAP	CA00111	02-28-26
Washington	State	C916	10-11-26

Laboratory: Eurofins Michigan

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Michigan	State	9180	08-07-28

Laboratory: Eurofins Seattle Specialty Metals

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
ANAB	Dept. of Energy	L2236.01	01-19-27
ANAB	ISO/IEC 17025	L2236	01-19-27
California	State	2954	07-07-26
Florida	NELAP	E87575	06-30-26
Louisiana (All)	NELAP	03073	07-01-26
Maine	State	WA01273	05-02-26
New Jersey	NELAP	WA014	06-30-26
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167	07-08-26
US Fish & Wildlife	US Federal Programs	A20571	06-30-26
USDA	US Federal Programs	525-23-4-22573	01-24-28
Washington	State	C788	07-13-26
Wisconsin	State	399133460	08-31-26

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Purchase Order:
Purchase Order not required

Work Order:

Requested TAT:

Project Number:
24034575

Sample State: MI

Special Instructions:
All samples for dissolved metals were filtered in field. The label has Dis for the filtered bottle.

Project Manager:
Howell, Leslie

Project Reference:

Sampler:
Marc Wahrer

Description:
Erickson Project - MNA Tier II Geochem

Site Name:
Erickson Project - MNA Tier II Geochem

240-238294 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	5310C TOC	200.8 Project List (19) (Diss)	SM4500_S2_D Total Sulfide	300 Nitrate as N & Nitrite as N	Plastic 1 liter - unpreserved	Plastic 250ml - with Zinc Acetate & NaOH	Voa Vial 40ml - with Sulfuric Acid	Plastic 500ml - w/ Nitric - Dis.	Total Bottles For Sample
1	MW-2	Grab	Water	11/19/25 13:58				X	X	X	X	1	1	3	1	6
2	MW-12	Grab	Water	11/19/25 14:37				X	X	X	X	1	1	3	1	6
3	MW-12B	Grab	Water	11/19/25 11:45				X	X	X	X	1	1	3	1	6
4	MWT-12B	Grab	Water	11/19/25 11:45				X	X	X	X	1	1	3	1	6
5	Field Blank	Grab	Water	11/19/25 09:40				X	X	X	X	1	1	3	1	6

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished To:	Date/Time:
Jennifer Caporale	11/20/25 10:09	Cleveland - Waypoint courier Jennifer Caporale	11/20/25 10:09

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20251120A001								

Chain of Custody Number: **429429**

*H – Analysis on hold.

Eurofins – Cleveland Sample Receipt Form/Narrative Login # .
Barberton Facility

Client GHD Site Name

Cooler unpacked by: Alex C.

Cooler Received on 11/21/25 Opened on 11/21/25

FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

Eurofins Cooler # EC Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 13 (CF +0.6°C) Observed Cooler Temp. 2.4 °C Corrected Cooler Temp 3.0 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12 Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC567196
14. Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 64324	Yes	No
17 Was a LL Hg or Me Hg trip blank present?	Yes	No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by

Labels Verified by:

19 SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired

Sample(s) were received in a broken container

Sample(s) were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory

Time preserved. Preservative(s) added/Lot number(s)

VOA Sample Preservation Date/Time VOAs Frozen

11/22/2025

Login Container Summary Report

240-238294

12/4/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
MW-2	240-238294-A-1	Plastic 1 liter - unpreserved				
MW-2	240-238294-B-1	Voa Vial 40ml - with Sulfuric Acid				
MW-2	240-238294-C-1	Voa Vial 40ml - with Sulfuric Acid				
MW-2	240-238294-D-1	Voa Vial 40ml - with Sulfuric Acid				
MW-2	240-238294-E-1	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-2	240-238294-G-1	Plastic 500ml - w/ Nitric - Dis	<2			
MW-2	240-238294-H-1	Plastic 250ml - w/nitric - dis	<2			
MW 12	240-238294-A-2	Plastic 1 liter - unpreserved				
MW-12	240-238294-B-2	Voa Vial 40ml - with Sulfuric Acid				
MW 12	240-238294-C-2	Voa Vial 40ml - with Sulfuric Acid				
MW-12	240-238294-D-2	Voa Vial 40ml - with Sulfuric Acid				
MW-12	240-238294-E-2	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-12	240-238294-G-2	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-12	240-238294-H-2	Plastic 250ml - w/nitric - dis	<2			
MW-12B	240-238294-A 3	Plastic 1 liter - unpreserved				
MW-12B	240-238294-B-3	Voa Vial 40ml - with Sulfuric Acid				
MW-12B	240-238294-C-3	Voa Vial 40ml - with Sulfuric Acid				
MW-12B	240-238294-D-3	Voa Vial 40ml - with Sulfuric Acid				
MW-12B	240-238294-E-3	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-12B	240-238294-G-3	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-12B	240-238294-H 3	Plastic 250ml w/nitric - dis	<2			
MWT-12B	240-238294-A-4	Plastic 1 liter - unpreserved				
MWT-12B	240-238294-B-4	Voa Vial 40ml with Sulfuric Acid				
MWT-12B	240-238294-C-4	Voa Vial 40ml - with Sulfuric Acid				
MWT-12B	240-238294-D-4	Voa Vial 40ml with Sulfuric Acid				
MWT-12B	240-238294-E-4	Plastic 500ml - with Zn Acetate and NaOH	>9			
MWT-12B	240-238294-G-4	Plastic 500ml - w/ Nitric - Dis	<2			
MWT-12B	240-238294 H-4	Plastic 250ml - w/nitric - dis	<2			
Field Blank	240-238294-A-5	Plastic 1 liter - unpreserved				
Field Blank	240-238294-B-5	Voa Vial 40ml - with Sulfuric Acid				
Field Blank	240-238294-C-5	Voa Vial 40ml - with Sulfuric Acid				
Field Blank	240 238294-D-5	Voa Vial 40ml with Sulfuric Acid				
Field Blank	240-238294-E-5	Plastic 500ml - with Zn Acetate and NaOH	>9			
Field Blank	240-238294-G-5	Plastic 500ml - w/ Nitric - Dis	<2			
Field Blank	240-238294-H-5	Plastic 250ml - w/nitric dis	<2			

Chain of Custody

eurofins | Environment Testing

Contains Rush Work: ☐ Contains Methods That May Expire Soon: ☑

Client Contact Info

Name:
Jennifer Caporale

Address :
1110 South Pennsylvania

Address 2:

City, State Zip:
Lansing, Michigan 48901

Phone:
517-702-6482

Email:
Jennifer.Caporale@LBWL.com

Deliverables:

Project Info

Company:
Lansing Board of Water & Light

Project Manager:
Howell, Leslie

Purchase Order:
Purchase Order not required

Project Reference:

Work Order:

Sampler:
Marc Wahrer

Requested TAT:

Description:
Erickson Project - MNA Tier II Geochem

Project Number:
24034575

Site Name:
Erickson Project - MNA Tier II Geochem

Sample State: MI

Special Instructions:
All samples for dissolved metals were filtered in field. The label has Dis for the filtered bottle.

Methods and Bottles

240-238294 COC

Samples

#	Sample Name	Type	Matrix	Date/Time (24hr)	MS / MSD	Instructions/Comments	Lat/Long	5310C TOC	200.8 Project List (19) (Diss)	SM4500_S2_D Total Sulfide	300 Nitrate as N & Nitrite as N	Plastic 1 liter - unpreserved	Plastic 250ml - with Zinc Acetate & NaOH	Voa Vial 40ml - with Sulfuric Acid	Plastic 500ml - w/ Nitric - Dis.	Total Bottles For Sample
1	MW-2	Grab	Water	11/19/25 13:58				X	X	X	X	1	1	3	1	6
2	MW-12	Grab	Water	11/19/25 14:37				X	X	X	X	1	1	3	1	6
3	MW-12B	Grab	Water	11/19/25 11:45				X	X	X	X	1	1	3	1	6
4	MWT-12B	Grab	Water	11/19/25 11:45				X	X	X	X	1	1	3	1	6
5	Field Blank	Grab	Water	11/19/25 09:40				X	X	X	X	1	1	3	1	6

Possible Hazards : Unknown

Sample Disposal (A fee may be assessed, if samples are retained longer than 1 month) : Disposal by Lab

Custody History (All dates and times have been converted to the Eastern time zone and are in 24 Hr format.)

eCOC Submitted By:	Date/Time:	Samples Relinquished To:	Date/Time:	
Jennifer Caporale	11/20/25 10:09	Cleveland - Waypoint courier Jennifer Caporale	11/20/25 10:09	11/21/25 8:00

Coolers

Cooler Name	Cooler Description	QR/Barcode	Uncorrected Cooler Temperature (?C)	Corrected Cooler Temperature	Thermometer ID	Temperature Checked By	Cooler Ice Type	Cooler Packing Type
MIC20251120A001								

Chain of Custody Number: **429429**

*H – Analysis on hold.

Eurofins – Cleveland Sample Receipt Form/Narrative Login # .
Barberton Facility

Client GHD Site Name

Cooler unpacked by: Alex C.

Cooler Received on 11/21/25 Opened on 11/21/25

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

Eurofins Cooler # EC Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 13 (CF +0.6°C) Observed Cooler Temp. 2.4 °C Corrected Cooler Temp 3.0 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3 Shippers' packing slip attached to the cooler(s)?	Yes	No
4 Did custody papers accompany the sample(s)?	Yes	No
5 Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6 Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7 Did all bottles arrive in good condition (Unbroken)?	Yes	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	Yes	No
11 Sufficient quantity received to perform indicated analyses?	Yes	No
12 Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC567196
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 04324	Yes	No
17 Was a LL Hg or Me Hg trip blank present?	Yes	No

Tests that are not checked for pH by Receiving

VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by: AM

Labels Verified by: JUN

19 SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired

Sample(s) were received in a broken container

Sample(s) were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory

Time preserved. Preservative(s) added/Lot number(s).

VOA Sample Preservation - Date/Time VOAs Frozen

11/22/2025

Login Container Summary Report

240-238294

12/4/2025

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
MW-2	240-238294-A-1	Plastic 1 liter - unpreserved				
MW-2	240-238294-B-1	Voa Vial 40ml - with Sulfuric Acid				
MW-2	240-238294-C-1	Voa Vial 40ml - with Sulfuric Acid				
MW-2	240-238294-D-1	Voa Vial 40ml - with Sulfuric Acid				
MW-2	240-238294-E-1	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-2	240-238294-G-1	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-2	240-238294-H-1	Plastic 250ml - w/nitric - dis	<2			
MW-12	240-238294-A-2	Plastic 1 liter - unpreserved				
MW-12	240-238294-B-2	Voa Vial 40ml - with Sulfuric Acid				
MW-12	240-238294-C-2	Voa Vial 40ml - with Sulfuric Acid				
MW-12	240-238294-D-2	Voa Vial 40ml - with Sulfuric Acid				
MW-12	240-238294-E-2	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-12	240-238294-G-2	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-12	240-238294-H-2	Plastic 250ml - w/nitric - dis	<2			
MW-12B	240-238294-A-3	Plastic 1 liter - unpreserved				
MW-12B	240-238294-B-3	Voa Vial 40ml - with Sulfuric Acid				
MW-12B	240-238294-C-3	Voa Vial 40ml - with Sulfuric Acid				
MW-12B	240-238294-D-3	Voa Vial 40ml - with Sulfuric Acid				
MW-12B	240-238294-E-3	Plastic 500ml - with Zn Acetate and NaOH	>9			
MW-12B	240-238294-G-3	Plastic 500ml - w/ Nitric - Dis.	<2			
MW-12B	240-238294-H-3	Plastic 250ml - w/nitric - dis	<2			
MWT-12B	240-238294-A-4	Plastic 1 liter - unpreserved				
MWT-12B	240-238294-B-4	Voa Vial 40ml - with Sulfuric Acid				
MWT-12B	240-238294-C-4	Voa Vial 40ml - with Sulfuric Acid				
MWT-12B	240-238294-D-4	Voa Vial 40ml - with Sulfuric Acid				
MWT-12B	240-238294-E-4	Plastic 500ml - with Zn Acetate and NaOH	>9			
MWT-12B	240-238294-G-4	Plastic 500ml - w/ Nitric - Dis.	<2			
MWT-12B	240-238294-H-4	Plastic 250ml - w/nitric - dis	<2			
Field Blank	240-238294-A-5	Plastic 1 liter - unpreserved				
Field Blank	240-238294-B-5	Voa Vial 40ml - with Sulfuric Acid				
Field Blank	240-238294-C-5	Voa Vial 40ml - with Sulfuric Acid				
Field Blank	240-238294-D-5	Voa Vial 40ml - with Sulfuric Acid				
Field Blank	240-238294-E-5	Plastic 500ml - with Zn Acetate and NaOH	>9			
Field Blank	240-238294-G-5	Plastic 500ml - w/ Nitric - Dis.	<2			
Field Blank	240-238294-H-5	Plastic 250ml - w/nitric - dis	<2			

Eurofins Cleveland
180 S Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

12/4/2025

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-211373.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): NELAP - Oregon		Job #: 240-238294-1
Address: 5755 8th Street East, ,	Due Date Requested: 12/8/2025			Preservation Codes: -
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Project - MNA Tier II Geochem	Project #: 24034575			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8_CWA/FIELD_FLTRD(MOD) Custom List 2: 2-3 Metals	200.7_CWA/FIELD_FLTRDDissolved Boron	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MW-2 (240-238294-1)	11/19/25	13 58 Eastern	G	Water			X	X	1	
MW-12 (240-238294-2)	11/19/25	14 37 Eastern	G	Water			X	X	1	
MW-12B (240-238294-3)	11/19/25	11 45 Eastern	G	Water			X	X	1	
MWT-12B (240-238294-4)	11/19/25	11 45 Eastern	G	Water			X	X	1	small blue Coleman
Field Blank (240-238294-5)	11/19/25	09 40 Eastern	G	Water			X	X	1	

Therm. ID: SC03 Cust. Seal: (Y) / N
Uncorr./Corr. Temp. 16.1 / 16.6 °C
Delivery: UPS / FedEx / Other
Ice Type: Blue / Dry / Wet / (None)
Label Ver. J5 11/19/25 Packing: Bubble

Note: Since laboratory accreditations are subject to change Eurofins Environment Testing North Central, LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LL accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time:	Method of Shipment:
Relinquished by:	Date/Time: 11/24/25 1520	Company: ET	Received by: Jesse Sin
Relinquished by:	Date/Time:	Company	Received by:
Relinquished by:	Date/Time	Company	Received by:

Date/Time: 11/25/25 12:28	Company: EETN
Date/Time:	Company
Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver: 10/10/2024

FedEx PO, Trk#: 4616 8385 1319

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | En

Loc: 240
238294

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Howell, Leslie	Carrier Tracking No(s): N/A	COC No: 240-211374.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Leslie.Howell@et.eurofinsus.com	State of Origin: Michigan	Page: Page 1 of 1
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): NELAP - Oregon		Job #: 240-238294-1
Address: 2841 Dow Avenue, Suite 100, ,	Due Date Requested: 12/8/2025			
City: Tustin	TAT Requested (days): N/A			
State, Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Erickson Project - MNA Tier II Geochem	Project #: 24034575			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes:
-

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM4500_S2_DTotal Sulfide	Total Number of containers	Special
			Preservation Code:						
MW-2 (240-238294-1)	11/19/25	13:58 Eastern	G	Water			X	1	
MW-12 (240-238294-2)	11/19/25	14:37 Eastern	G	Water			X	1	
MW-12B (240-238294-3)	11/19/25	11:45 Eastern	G	Water			X	1	
MWT-12B (240-238294-4)	11/19/25	11:45 Eastern	G	Water			X	1	
Field Blank (240-238294-5)	11/19/25	09:40 Eastern	G	Water			X	1	

240-238294 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	11/24/25 1500	ET	[illegible]	11/25/25 950	ET
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.7/1.8 IR4

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-238294-1

Login Number: 238294
List Number: 3
Creator: Ferreira, Bruno

List Source: Eurofins Calscience
List Creation: 11/25/25 11:42 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-238294-1

Login Number: 238294
List Number: 2
Creator: Daymon, Jade E

List Source: Eurofins Michigan
List Creation: 11/22/25 12:52 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	N/A	
COC is present.	N/A	
COC is filled out in ink and legible.	N/A	
COC is filled out with all pertinent information.	N/A	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	N/A	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Lansing Board of Water & Light

Job Number: 240-238294-1

Login Number: 238294
List Number: 4
Creator: Singh, Jaskaran

List Source: Eurofins Seattle Specialty Metals
List Creation: 11/25/25 02:56 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Data Verification & Validation Report

Lansing Board of Water & Light – Erickson Power Station

Sampling Event (dates and purpose): Background Sampling

Data Package Number: 240-218141-1 Lab Report Date: 3/5/2025

Data Validator: Andrew Byks Data Validation Completion Date: 5/12/2025

General Overall Assessment:
_____ Data are usable without qualification.
__X__ Data are usable with qualification (as noted below).
_____ Some or all data are unusable (as noted below).

Wells planned for sampling:

Well ID	Planned for Sampling
MW-1	
MW-2	
MW-3	
MW-4	
MW-5	
MW-6	
MW-7	
MW-7B	
MW-7C	
MW-8	
MW-9	
MW-10	
MW-11	
MW-11B	
MW-12	
MW-12B	
MW-13	
MW-14	
MW-15	
MW-16A	
MW-16B	
MW-16C	
MW-16D	
MW-17A	X
MW-17B	X
MW-17C	X
MW-17D	X
MW-17E	X
MW-18A	X
MW-18B	X
MW-18C	X
MW-18D	X
MW-100A	
MW-100B	
MW-100C	
MW-100D	

Data Summary

Sample ID	Matrix	Lab ID	Date Collected	App III Metals	App IV Metals	Part 115 Metals	Anions	TDS TSS	Rad-226 Rad-228	Diss. Metals
MW-17A	GW	240-218141-1	1/27/2025	X	X	X	X	X	X	
MW-17B	GW	240-218141-2	1/27/2025	X	X	X	X	X	X	
MW-17C	GW	240-218141-3	1/27/2025	X	X	X	X	X	X	
MW-17D	GW	240-218141-4	1/27/2025	X	X	X	X	X	X	
MW-17E	GW	240-218141-5	1/27/2025	X	X	X	X	X	X	
MW-18A	GW	240-218141-6	1/27/2025	X	X	X	X	X	X	
MW-18B	GW	240-218141-7	1/27/2025	X	X	X	X	X	X	
MW-18C	GW	240-218141-8	1/27/2025	X	X	X	X	X	X	
MW-18D	GW	240-218141-9	1/27/2025	X	X	X	X	X	X	
MWT-17A	GW	240-218141-10	1/27/2025	X	X	X	X	X	X	
Field Blank	W	240-218141-11	1/27/2025	X	X	X	X	X	X	

Other analytes requested for analysis: Na, Mg, K, HCO_3, CO_3, hardness

Any planned sampling or analysis NOT completed? If yes, explain: ____

Data Verification & Validation Checklist

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Field Data							
Sample Collection Field Forms	X		Purging performed as required in the Groundwater Monitoring Plan	X			
Field Calibration Records	X		Field instruments calibrated daily according to manufacturer specifications	X			
Chain of Custody	X		Accurately reflect samples, collection dates/times, analyses, bottles, etc.	X			
Field decontamination documentation	X		Record of decontamination for non-dedicated sampling equipment	X			
Drilling logs	X		N/A	-	-	-	
Well construction logs	X		N/A	-	-	-	
Well development field forms	X		N/A	-	-	-	
Analytical Data Package							
Cover Sheet	X		N/A	-	-	-	
Case Narrative	X		Summarizes sample receipt and any exceptions to QC acceptance criteria	X			
Internal Laboratory Chain of Custody forms	X		Analyses as requested; accurate transcription of field COC	X			
Sample Chronology and Consistency	X		Accurate representation of dates, times of receipt, preparation, and analysis	X			
Communication Records with Lab	X		N/A	-	-	-	
EDD Format Consistency	X		EDD format and content as requested	X			
Sample Identification, Results Nomenclature, and Data Qualifier Consistency	X		All included in final report	X			
Method Detection Limit Consistency	X		MDLs consistent between samples	X			
Instrument Calibration Records	X		Present and no nonconformance noted	X			
Laboratory Report Complete	X		Includes QC component	X			
Holding Times	X		Analyses performed within allowed holding time	X			

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Method	X		Method as requested	X			
Reporting Limits	X		RLs as requested		X		RL for hardness not met
			MDLs<RLs	X			
			MDLs<MCLs	X			
			MDLs<GPS	X			
QC Validation							
Evaluate Accuracy							
Matrix Spike (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Laboratory Control Sample (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Evaluate Precision							
Matrix Spike Duplicate (RPD)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Field Duplicate (RPD)	X		RPD ≤ 20%		X		Field duplicate RPDs for Rad-226, combined Rad not met, see below
Evaluate Representativeness							
Equipment Blanks (if applicable)	X		Non-detect (<RL)	X			
QC Verification							
Verify Instrument Calibration & Analytical Process							
Initial Calibration Verification	X		Laboratory-determined	-	-	-	
Continuing Calibration Verification	X		Laboratory-determined	-	-	-	
Initial Calibration Blank	X		Laboratory-determined	-	-	-	
Continuing Calibration Blank	X		Laboratory-determined	-	-	-	
Serial Dilutions	X		Laboratory-determined	-	-	-	
Post-Digestion Spikes	X		Laboratory-determined	-	-	-	
Internal Standards	X		Laboratory-determined	-	-	-	
Laboratory Duplicate (RPD)	X		Laboratory-determined	-	-	-	
Method Blanks	X		Laboratory-determined	-	-	-	
Evaluate Completeness (# usable measurements/ # unusable measurements)							
Completeness	X		100%	X			

Other instances of nonconformance to QC control limits noted on case narrative:

None.

Comments:

All samples were analyzed for total iron and zinc by EPA Method E200.7 and E200.8. Historical data for the site have been analyzed via EPA Method E200.8. To keep analytical results consistent with historical data, results analyzed by EPA method E200.7 were rejected.

The RPDs of Rad-228 and Combined Rad-226+228 were outside of control limits for the MW-17A and MWT-17A parent sample and field duplicate pair. Rad-226 and Combined Rad-226+228 required qualification in parent sample MW-17A as estimated with low bias (J-) and in field duplicate MWT-17A as estimated with high bias (J+).

Data Verification & Validation Report

Lansing Board of Water & Light – Erickson Power Station

Sampling Event (dates and purpose): Background Sampling

Data Package Number: 240-219708-1 Lab Report Date: 4/1/2025

Data Validator: Andrew Byks Data Validation Completion Date: 5/12/2025

General Overall Assessment:
_____ Data are usable without qualification.
__X__ Data are usable with qualification (as noted below).
_____ Some or all data are unusable (as noted below).

Wells planned for sampling:

Well ID	Planned for Sampling
MW-1	
MW-2	
MW-3	
MW-4	
MW-5	
MW-6	
MW-7	
MW-7B	
MW-7C	
MW-8	
MW-9	
MW-10	
MW-11	
MW-11B	
MW-12	
MW-12B	
MW-13	
MW-14	
MW-15	
MW-16A	
MW-16B	
MW-16C	
MW-16D	
MW-17A	X
MW-17B	X
MW-17C	X
MW-17D	X
MW-17E	X
MW-18A	X
MW-18B	X
MW-18C	X
MW-18D	X
MW-100A	
MW-100B	
MW-100C	
MW-100D	

Data Summary

Sample ID	Matrix	Lab ID	Date Collected	App III Metals	App IV Metals	Part 115 Metals	Anions	TDS TSS	Rad-226 Rad-228	Diss. Metals
MW-17A	GW	240-219708-1	2/27/2025	X	X	X	X	X	X	
MW-17B	GW	240-219708-2	2/27/2025	X	X	X	X	X	X	
MW-17C	GW	240-219708-3	2/27/2025	X	X	X	X	X	X	
MW-17D	GW	240-219708-4	2/27/2025	X	X	X	X	X	X	
MW-17E	GW	240-219708-5	2/27/2025	X	X	X	X	X	X	
MW-18A	GW	240-219708-6	2/27/2025	X	X	X	X	X	X	
MW-18B	GW	240-219708-7	2/27/2025	X	X	X	X	X	X	
MW-18C	GW	240-219708-8	2/27/2025	X	X	X	X	X	X	
MW-18D	GW	240-219708-9	2/27/2025	X	X	X	X	X	X	
MWT-17A	GW	240-219708-10	2/27/2025	X	X	X	X	X	X	
Field Blank	W	240-219708-11	2/27/2025	X	X	X	X	X	X	

Other analytes requested for analysis: Na, Mg, K, HCO_3, CO_3, hardness

Any planned sampling or analysis NOT completed? If yes, explain: ____

Data Verification & Validation Checklist

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Field Data							
Sample Collection Field Forms	X		Purging performed as required in the Groundwater Monitoring Plan	X			
Field Calibration Records	X		Field instruments calibrated daily according to manufacturer specifications	X			
Chain of Custody	X		Accurately reflect samples, collection dates/times, analyses, bottles, etc.	X			
Field decontamination documentation	X		Record of decontamination for non-dedicated sampling equipment	X			
Drilling logs	X		N/A	-	-	-	
Well construction logs	X		N/A	-	-	-	
Well development field forms	X		N/A	-	-	-	
Analytical Data Package							
Cover Sheet	X		N/A	-	-	-	
Case Narrative	X		Summarizes sample receipt and any exceptions to QC acceptance criteria	X			
Internal Laboratory Chain of Custody forms	X		Analyses as requested; accurate transcription of field COC	X			
Sample Chronology and Consistency	X		Accurate representation of dates, times of receipt, preparation, and analysis	X			
Communication Records with Lab	X		N/A	-	-	-	
EDD Format Consistency	X		EDD format and content as requested	X			
Sample Identification, Results Nomenclature, and Data Qualifier Consistency	X		All included in final report	X			
Method Detection Limit Consistency	X		MDLs consistent between samples	X			
Instrument Calibration Records	X		Present and no nonconformance noted	X			
Laboratory Report Complete	X		Includes QC component	X			
Holding Times	X		Analyses performed within allowed holding time	X			

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Method	X		Method as requested	X			
Reporting Limits	X		RLs as requested		X		RL for hardness not met
			MDLs<RLs	X			
			MDLs<MCLs	X			
			MDLs<GPS	X			
QC Validation							
Evaluate Accuracy							
Matrix Spike (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Laboratory Control Sample (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Evaluate Precision							
Matrix Spike Duplicate (RPD)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Field Duplicate (RPD)	X		RPD ≤ 20%		X		Field duplicate RPDs for Fluoride, Rad-228, combined Rad not met, see below
Evaluate Representativeness							
Equipment Blanks (if applicable)	X		Non-detect (<RL)	X			
QC Verification							
Verify Instrument Calibration & Analytical Process							
Initial Calibration Verification	X		Laboratory-determined	-	-	-	
Continuing Calibration Verification	X		Laboratory-determined	-	-	-	
Initial Calibration Blank	X		Laboratory-determined	-	-	-	
Continuing Calibration Blank	X		Laboratory-determined	-	-	-	
Serial Dilutions	X		Laboratory-determined	-	-	-	
Post-Digestion Spikes	X		Laboratory-determined	-	-	-	
Internal Standards	X		Laboratory-determined	-	-	-	
Laboratory Duplicate (RPD)	X		Laboratory-determined	-	-	-	
Method Blanks	X		Laboratory-determined	-	-	-	
Evaluate Completeness (# usable measurements/ # unusable measurements)							
Completeness	X		100%	X			

Other instances of nonconformance to QC control limits noted on case narrative:

None.

Comments:

The RPDs of Fluoride, Rad-228, and Combined Rad-226+228 were outside of control limits for the MW-17A and MWT-17A parent sample and field duplicate pair. Fluoride, Rad-226, and Combined Rad-226+228 required qualification in parent sample MW-17A as estimated with high bias (J+) and in field duplicate MWT-17A as estimated with low bias (J-).

Data Verification & Validation Report

Lansing Board of Water & Light – Erickson Power Station

Sampling Event (dates and purpose): Background Sampling

Data Package Number: 240-218633-1, 240-218718-1

Lab Report Date: 3/11/2025

Data Validator: Andrew Byks

Data Validation Completion Date: 5/13/2025

General Overall Assessment:
_____ Data are usable without qualification.
__X__ Data are usable with qualification (as noted below).
_____ Some or all data are unusable (as noted below).

Wells planned for sampling:

Well ID	Planned for Sampling
MW-1	X
MW-2	X
MW-3	X
MW-4	X
MW-5	X
MW-6	X
MW-7	X
MW-7B	X
MW-7C	X
MW-8	X
MW-9	X
MW-10	X
MW-11	X
MW-11B	X
MW-12	X
MW-12B	X
MW-13	X
MW-14	X
MW-15	X
MW-16A	X
MW-16B	X
MW-16C	X
MW-16D	X
MW-17A	
MW-17B	
MW-17C	
MW-17D	
MW-17E	
MW-18A	
MW-18B	
MW-18C	
MW-18D	
MW-100A	X
MW-100B	X
MW-100C	X
MW-100D	X

Data Summary

Sample ID	Matrix	Lab ID	Date Collected	App III Metals	App IV Metals	Part 115 Metals	Anions	TDS TSS	Rad-226 Rad-228	Diss. Metals
MW-1	GW	240-218633-1	2/4/2025	X	X	X	X	X	X	X
MW-2	GW	240-218633-2	2/4/2025	X	X	X	X	X	X	
MW-4	GW	240-218633-3	2/4/2025	X	X	X	X	X	X	
MW-5	GW	240-218633-4	2/4/2025	X	X	X	X	X	X	X
MW-6	GW	240-218633-5	2/4/2025	X	X	X	X	X	X	
MW-11	GW	240-218633-6	2/4/2025	X	X	X	X	X	X	
MW-11B	GW	240-218633-7	2/4/2025	X	X	X	X	X	X	
MW-12	GW	240-218633-8	2/4/2025	X	X	X	X	X	X	X
MW-12B	GW	240-218633-9	2/4/2025	X	X	X	X	X	X	
MW-14	GW	240-218633-10	2/4/2025	X	X	X	X	X	X	
MW-15	GW	240-218633-11	2/4/2025	X	X	X	X	X	X	
MWT-6	GW	240-218633-12	2/4/2025	X	X	X	X	X	X	
Field Blank	W	240-218633-13	2/4/2025	X	X	X	X	X	X	
MW-7	GW	240-218633-14	2/5/2025	X	X	X	X	X	X	
MW-7B	GW	240-218633-15	2/5/2025	X	X	X	X	X	X	
MW-7C	GW	240-218633-16	2/5/2025	X	X	X	X	X	X	
MW-8	GW	240-218633-17	2/5/2025	X	X	X	X	X	X	
MW-9	GW	240-218633-18	2/5/2025	X	X	X	X	X	X	
MW-10	GW	240-218633-19	2/5/2025	X	X	X	X	X	X	
Field Blank	W	240-218633-20	2/5/2025	X	X	X	X	X	X	
MW-100A	GW	240-218633-21	2/5/2025	X	X	X	X	X	X	
MW-100B	GW	240-218633-22	2/5/2025	X	X	X	X	X	X	
MW-100C	GW	240-218633-23	2/5/2025	X	X	X	X	X	X	
MW-100D	GW	240-218633-24	2/5/2025	X	X	X	X	X	X	
MWT-100C	GW	240-218633-25	2/5/2025	X	X	X	X	X	X	
MW-3	GW	240-218718-26	2/6/2025	X	X	X	X	X	X	
MW-13	GW	240-218718-27	2/6/2025	X	X	X	X	X	X	
MWT-3	GW	240-218718-28	2/6/2025	X	X	X	X	X	X	
MW-16A	GW	240-218718-29	2/6/2025	X	X	X	X	X	X	
MW-16B	GW	240-218718-30	2/6/2025	X	X	X	X	X	X	
MW-16C	GW	240-218718-31	2/6/2025	X	X	X	X	X	X	
MW-16D	GW	240-218718-32	2/6/2025	X	X	X	X	X	X	
Field Blank	W	240-218718-33	2/6/2025	X	X	X	X	X	X	

Other analytes requested for analysis: Na, Mg, K, HCO_3, CO_3, hardness

Any planned sampling or analysis NOT completed? If yes, explain: ____

Data Verification & Validation Checklist

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Field Data							
Sample Collection Field Forms	X		Purging performed as required in the Groundwater Monitoring Plan	X			
Field Calibration Records	X		Field instruments calibrated daily according to manufacturer specifications	X			
Chain of Custody	X		Accurately reflect samples, collection dates/times, analyses, bottles, etc.	X			
Field decontamination documentation	X		Record of decontamination for non-dedicated sampling equipment	X			
Drilling logs	X		N/A	-	-	-	
Well construction logs	X		N/A	-	-	-	
Well development field forms	X		N/A	-	-	-	
Analytical Data Package							
Cover Sheet	X		N/A	-	-	-	
Case Narrative	X		Summarizes sample receipt and any exceptions to QC acceptance criteria	X			
Internal Laboratory Chain of Custody forms	X		Analyses as requested; accurate transcription of field COC	X			
Sample Chronology and Consistency	X		Accurate representation of dates, times of receipt, preparation, and analysis	X			
Communication Records with Lab	X		N/A	-	-	-	
EDD Format Consistency	X		EDD format and content as requested	X			
Sample Identification, Results Nomenclature, and Data Qualifier Consistency	X		All included in final report	X			
Method Detection Limit Consistency	X		MDLs consistent between samples	X			
Instrument Calibration Records	X		Present and no nonconformance noted	X			
Laboratory Report Complete	X		Includes QC component	X			
Holding Times	X		Analyses performed within allowed holding time	X			

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Method	X		Method as requested	X			
Reporting Limits	X		RLs as requested		X		RL for hardness not met
			MDLs<RLs	X			
			MDLs<MCLs	X			
			MDLs<GPS	X			
QC Validation							
Evaluate Accuracy							
Matrix Spike (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Laboratory Control Sample (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Evaluate Precision							
Matrix Spike Duplicate (RPD)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Field Duplicate (RPD)	X		RPD ≤ 20%		X		See Comments
Evaluate Representativeness							
Equipment Blanks (if applicable)	X		Non-detect (<RL)	X			
QC Verification							
Verify Instrument Calibration & Analytical Process							
Initial Calibration Verification	X		Laboratory-determined	-	-	-	
Continuing Calibration Verification	X		Laboratory-determined	-	-	-	
Initial Calibration Blank	X		Laboratory-determined	-	-	-	
Continuing Calibration Blank	X		Laboratory-determined	-	-	-	
Serial Dilutions	X		Laboratory-determined	-	-	-	
Post-Digestion Spikes	X		Laboratory-determined	-	-	-	
Internal Standards	X		Laboratory-determined	-	-	-	
Laboratory Duplicate (RPD)	X		Laboratory-determined	-	-	-	
Method Blanks	X		Laboratory-determined	-	-	-	
Evaluate Completeness (# usable measurements/ # unusable measurements)							
Completeness	X		100%	X			

Other instances of nonconformance to QC control limits noted on case narrative:

None.

Comments:

All samples were analyzed for total zinc by EPA Method E200.7 and E200.8. Historical data for the site have been analyzed via EPA Method E200.8. To keep analytical results consistent with historical data, results analyzed by EPA method E200.7 were rejected.

The RPDs of Rad-226, Rad-228, and Combined Rad-226+228 were outside of control limits for the MW-3 and MWT-3 parent sample and field duplicate pair. Rad-226 required qualification as estimated with high

bias (J+) in parent sample MW-3 and as estimated with low bias (J-) in field duplicate MWT-3. Rad-228 and Combined Rad-226+228 required qualification as estimated with low bias (J-) in parent sample MW-3 and as estimated with high bias (J+) in field duplicate MWT-3.

The RPDs of cadmium, zinc, Rad-226, Rad-228, and Combined Rad-226+228 were outside of control limits for the MW-6 and MWT-6 parent sample and field duplicate pair. Cadmium, zinc, and Rad-226 required qualification as estimated with high bias (J+) in parent sample MW-6 and as estimated with low bias (J-) in field duplicate MWT-6. Rad-228 and Combined Rad-226+228 required qualification as estimated with low bias (J-) in parent sample MW-6 and as estimated with high bias (J+) in field duplicate MWT-6.

Silver was not detected in parent sample MW-100C, but was detected in field duplicate MWT-100C. Silver required qualification as estimated but not detected (UJ) in parent sample MW-100C and as estimated with high bias (J+) in field duplicate MWT-100C.

Zinc was detected in parent sample MW-100C, but was not detected in field duplicate MWT-100C. Zinc required qualification as estimated with high bias (J+) in parent sample MW-100C and as estimated but not detected (UJ) in field duplicate MWT-100C.

The RPDs of Rad-228 and Combined Rad-226+228 were outside of control limits for the MW-100C and MWT-100C parent sample and field duplicate pair. Rad-228 and Combined Rad-226+228 required qualification as estimated with high bias (J+) in parent sample MW-100C and as estimated with low bias (J-) in field duplicate MWT-100C.

Data Verification & Validation Report

Lansing Board of Water & Light – Erickson Power Station

Sampling Event (dates and purpose): Background Sampling

Data Package Number: 240-223130-1 Lab Report Date: 5/27/2025

Data Validator: Andrew Byks Data Validation Completion Date: 7/7/2025

General Overall Assessment:
_____ Data are usable without qualification.
__X__ Data are usable with qualification (as noted below).
_____ Some or all data are unusable (as noted below).

Wells planned for sampling:

Well ID	Planned for Sampling
MW-1	
MW-2	
MW-3	
MW-4	
MW-5	
MW-6	
MW-7	
MW-7B	
MW-7C	
MW-8	
MW-9	
MW-10	
MW-11	
MW-11B	
MW-12	
MW-12B	
MW-13	
MW-14	
MW-15	
MW-16A	
MW-16B	
MW-16C	
MW-16D	
MW-17A	
MW-17B	
MW-17C	
MW-17D	
MW-17E	
MW-18A	X
MW-18B	X
MW-18C	X
MW-18D	X
MW-100A	
MW-100B	
MW-100C	
MW-100D	

Data Summary

Sample ID	Matrix	Lab ID	Date Collected	App III Metals	App IV Metals	Part 115 Metals	Anions	TDS TSS	Rad-226 Rad-228	Diss. Metals
MW-18A	GW	240-223130-1	4/24/2025	X	X	X	X	X	X	
MW-18B	GW	240-223130-2	4/24/2025	X	X	X	X	X	X	
MW-18C	GW	240-223130-3	4/24/2025	X	X	X	X	X	X	
MW-18D	GW	240-223130-4	4/24/2025	X	X	X	X	X	X	
MWT-18A	GW	240-223130-5	4/24/2025	X	X	X	X	X	X	
FB	GW	240-223130-6	4/24/2025	X	X	X	X	X	X	

Other analytes requested for analysis: Mg, HCO_3, CO_3, hardness

Any planned sampling or analysis NOT completed? If yes, explain:

Data Verification & Validation Checklist

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Field Data							
Sample Collection Field Forms	X		Purging performed as required in the Groundwater Monitoring Plan	X			
Field Calibration Records	X		Field instruments calibrated daily according to manufacturer specifications	X			
Chain of Custody	X		Accurately reflect samples, collection dates/times, analyses, bottles, etc.	X			
Field decontamination documentation	X		Record of decontamination for non-dedicated sampling equipment	X			
Drilling logs	X		N/A	-	-	-	
Well construction logs	X		N/A	-	-	-	
Well development field forms	X		N/A	-	-	-	
Analytical Data Package							
Cover Sheet	X		N/A	-	-	-	
Case Narrative	X		Summarizes sample receipt and any exceptions to QC acceptance criteria	X			
Internal Laboratory Chain of Custody forms	X		Analyses as requested; accurate transcription of field COC	X			
Sample Chronology and Consistency	X		Accurate representation of dates, times of receipt, preparation, and analysis	X			
Communication Records with Lab	X		N/A	-	-	-	
EDD Format Consistency	X		EDD format and content as requested	X			
Sample Identification, Results Nomenclature, and Data Qualifier Consistency	X		All included in final report	X			
Method Detection Limit Consistency	X		MDLs consistent between samples	X			
Instrument Calibration Records	X		Present and no nonconformance noted	X			
Laboratory Report Complete	X		Includes QC component	X			
Holding Times	X		Analyses performed within allowed holding time	X			

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Method	X		Method as requested	X			
Reporting Limits	X		RLs as requested		X		RL for hardness not met
			MDLs<RLs	X			
			MDLs<MCLs	X			
			MDLs<GPS	X			
QC Validation							
Evaluate Accuracy							
Matrix Spike (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Laboratory Control Sample (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Evaluate Precision							
Matrix Spike Duplicate (RPD)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Field Duplicate (RPD)	X		RPD ≤ 20%		X		See Comments
Evaluate Representativeness							
Equipment Blanks (if applicable)	X		Non-detect (<RL)	X			
QC Verification							
Verify Instrument Calibration & Analytical Process							
Initial Calibration Verification	X		Laboratory-determined	-	-	-	
Continuing Calibration Verification	X		Laboratory-determined	-	-	-	
Initial Calibration Blank	X		Laboratory-determined	-	-	-	
Continuing Calibration Blank	X		Laboratory-determined	-	-	-	
Serial Dilutions	X		Laboratory-determined	-	-	-	
Post-Digestion Spikes	X		Laboratory-determined	-	-	-	
Internal Standards	X		Laboratory-determined	-	-	-	
Laboratory Duplicate (RPD)	X		Laboratory-determined	-	-	-	
Method Blanks	X		Laboratory-determined	-	-	-	
Evaluate Completeness (# usable measurements/ # unusable measurements)							
Completeness	X		100%	X			

Other instances of nonconformance to QC control limits noted on case narrative:

None.

Comments:

Lead and selenium were detected in parent sample MW-18A, but were not detected in field duplicate MWT-18A. Lead and selenium required qualification as estimated with high bias (J+) in parent sample MW-18A and as estimated but not detected (UJ) in field duplicate MWT-18A.

The RPDs of TSS, Rad-228, and Combined Rad-226+228 were outside of control limits for the MW-18A and MWT-18A parent sample and field duplicate pair. TSS required qualification as estimated with low

bias (J-) in parent sample MW-18A and as estimated with high bias (J+) in field duplicate MWT-18. Rad-228 and Combined Rad-226+228 required qualification as estimated with high bias (J+) in parent sample MW-18A and as estimated with low bias (J-) in field duplicate MWT-18A.

Data Verification & Validation Report

Lansing Board of Water & Light – Erickson Power Station

Sampling Event (dates and purpose): Background Sampling

Data Package Number: 240-225634-1 Lab Report Date: 6/30/2025

Data Validator: Andrew Byks Data Validation Completion Date: 9/4/2025

General Overall Assessment:
_____ Data are usable without qualification.
__X__ Data are usable with qualification (as noted below).
_____ Some or all data are unusable (as noted below).

Wells planned for sampling:

Well ID	Planned for Sampling	Well ID	Planned for Sampling
MW-1		MW-17A	
MW-2		MW-17B	
MW-3		MW-17C	
MW-4		MW-17D	
MW-5		MW-17E	
MW-6		MW-18A	X
MW-7		MW-18B	X
MW-7B		MW-18C	X
MW-7C		MW-18D	X
MW-8		MW-19A	
MW-9		MW-19B	
MW-10		MW-19C	
MW-11		MW-19D	
MW-11B		MW-100A	
MW-12		MW-100B	
MW-12B		MW-100C	
MW-13		MW-100D	
MW-14			
MW-15			
MW-16A			
MW-16B			
MW-16C			
MW-16D			

Data Summary

Sample ID	Matrix	Lab ID	Date Collected	App III Metals	App IV Metals	Part 115 Metals	Anions	TDS TSS	Rad-226 Rad-228	Diss. Metals
MW-18A	GW	240-225634-1	5/29/2025	X	X	X	X	X	X	
MW-18B	GW	240-225634-2	5/29/2025	X	X	X	X	X	X	
MW-18C	GW	240-225634-3	5/29/2025	X	X	X	X	X	X	
MW-18D	GW	240-225634-4	5/29/2025	X	X	X	X	X	X	
MWT-18A	GW	240-225634-5	5/29/2025	X	X	X	X	X	X	
FIELD BLANK	GW	240-225634-6	5/29/2025	X	X	X	X	X	X	

Other analytes requested for analysis: Na, K, Mg, HCO_3, CO_3, hardness

Any planned sampling or analysis NOT completed? If yes, explain:

Data Verification & Validation Checklist

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Field Data							
Sample Collection Field Forms	X		Purging performed as required in the Groundwater Monitoring Plan	X			
Field Calibration Records	X		Field instruments calibrated daily according to manufacturer specifications	X			
Chain of Custody	X		Accurately reflect samples, collection dates/times, analyses, bottles, etc.	X			
Field decontamination documentation	X		Record of decontamination for non-dedicated sampling equipment	X			
Drilling logs	X		N/A	-	-	-	
Well construction logs	X		N/A	-	-	-	
Well development field forms	X		N/A	-	-	-	
Analytical Data Package							
Cover Sheet	X		N/A	-	-	-	
Case Narrative	X		Summarizes sample receipt and any exceptions to QC acceptance criteria	X			
Internal Laboratory Chain of Custody forms	X		Analyses as requested; accurate transcription of field COC	X			
Sample Chronology and Consistency	X		Accurate representation of dates, times of receipt, preparation, and analysis	X			
Communication Records with Lab	X		N/A	-	-	-	
EDD Format Consistency	X		EDD format and content as requested	X			
Sample Identification, Results Nomenclature, and Data Qualifier Consistency	X		All included in final report	X			
Method Detection Limit Consistency	X		MDLs consistent between samples	X			
Instrument Calibration Records	X		Present and no nonconformance noted	X			
Laboratory Report Complete	X		Includes QC component	X			
Holding Times	X		Analyses performed within allowed holding time	X			

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Method	X		Method as requested	X			
Reporting Limits	X		RLs as requested		X		RL for hardness not met
			MDLs<RLs	X			
			MDLs<MCLs	X			
			MDLs<GPS	X			
QC Validation							
Evaluate Accuracy							
Matrix Spike (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Laboratory Control Sample (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Evaluate Precision							
Matrix Spike Duplicate (RPD)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Field Duplicate (RPD)	X		RPD ≤ 20%		X		See Comments
Evaluate Representativeness							
Equipment Blanks (if applicable)	X		Non-detect (<RL)	X			
QC Verification							
Verify Instrument Calibration & Analytical Process							
Initial Calibration Verification	X		Laboratory-determined	-	-	-	
Continuing Calibration Verification	X		Laboratory-determined	-	-	-	
Initial Calibration Blank	X		Laboratory-determined	-	-	-	
Continuing Calibration Blank	X		Laboratory-determined	-	-	-	
Serial Dilutions	X		Laboratory-determined	-	-	-	
Post-Digestion Spikes	X		Laboratory-determined	-	-	-	
Internal Standards	X		Laboratory-determined	-	-	-	
Laboratory Duplicate (RPD)	X		Laboratory-determined	-	-	-	
Method Blanks	X		Laboratory-determined	-	-	-	
Evaluate Completeness (# usable measurements/ # unusable measurements)							
Completeness	X		100%	X			

Other instances of nonconformance to QC control limits noted on case narrative:

None.

Comments:

Zinc was detected in parent sample MW-18A, but was not detected in field duplicate MWT-18A. Zinc required qualification as estimated with high bias (J+) in parent sample MW-18A and as estimated but not detected (UJ) in field duplicate MWT-18A.

The RPDs of TSS, Rad-228, and Combined Rad-226+228 were outside of control limits for the MW-18A and MWT-18A parent sample and field duplicate pair. TSS required qualification as estimated with low

bias (J-) in parent sample MW-18A and as estimated with high bias (J+) in field duplicate MWT-18A. Rad-228 and Combined Rad-226+228 required qualification as estimated with high bias (J+) in parent sample MW-18A and as estimated with low bias (J-) or as estimated but not detected (UJ) in field duplicate MWT-18A.

Data Verification & Validation Report

Lansing Board of Water & Light – Erickson Power Station

Sampling Event (dates and purpose): Background Sampling

Data Package Number: 240-224360-1, 240-224360-2

Lab Report Date: 6/4/2025, 6/13/2024

Data Validator: Andrew Byks

Data Validation Completion Date: 7/7/2025

General Overall Assessment:
_____ Data are usable without qualification.
__X__ Data are usable with qualification (as noted below).
_____ Some or all data are unusable (as noted below).

Wells planned for sampling:

Well ID	Planned for Sampling	Well ID	Planned for Sampling
MW-1		MW-17A	
MW-2		MW-17B	
MW-3		MW-17C	
MW-4		MW-17D	
MW-5		MW-17E	
MW-6		MW-18A	
MW-7		MW-18B	
MW-7B		MW-18C	
MW-7C		MW-18D	
MW-8		MW-19A	X
MW-9		MW-19B	X
MW-10		MW-19C	X
MW-11		MW-19D	X
MW-11B		MW-100A	
MW-12		MW-100B	
MW-12B		MW-100C	
MW-13		MW-100D	
MW-14			
MW-15			
MW-16A			
MW-16B			
MW-16C			
MW-16D			

Data Summary

Sample ID	Matrix	Lab ID	Date Collected	App III Metals	App IV Metals	Part 115 Metals	Anions	TDS TSS	Rad-226 Rad-228	Diss. Metals
MW-19A	GW	240-224360-1	5/12/2025	X	X	X	X	X	X	
MW-19B	GW	240-224360-2	5/12/2025	X	X	X	X	X	X	
MW-19C	GW	240-224360-3	5/12/2025	X	X	X	X	X	X	
MW-19D	GW	240-224360-4	5/12/2025	X	X	X	X	X	X	X
MWT-19A	GW	240-224360-5	5/12/2025	X	X	X	X	X	X	
FIELD BLANK	GW	240-224360-6	5/12/2025	X	X	X	X	X	X	X
EQUIPMENT BLANK	GW	240-224360-7	5/12/2025	X	X	X	X	X	X	X

Other analytes requested for analysis: Mg, HCO_3, CO_3, hardness

Any planned sampling or analysis NOT completed? If yes, explain:

Data Verification & Validation Checklist

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Field Data							
Sample Collection Field Forms	X		Purging performed as required in the Groundwater Monitoring Plan	X			
Field Calibration Records	X		Field instruments calibrated daily according to manufacturer specifications	X			
Chain of Custody	X		Accurately reflect samples, collection dates/times, analyses, bottles, etc.	X			
Field decontamination documentation	X		Record of decontamination for non-dedicated sampling equipment	X			
Drilling logs	X		N/A	-	-	-	
Well construction logs	X		N/A	-	-	-	
Well development field forms	X		N/A	-	-	-	
Analytical Data Package							
Cover Sheet	X		N/A	-	-	-	
Case Narrative	X		Summarizes sample receipt and any exceptions to QC acceptance criteria	X			
Internal Laboratory Chain of Custody forms	X		Analyses as requested; accurate transcription of field COC	X			
Sample Chronology and Consistency	X		Accurate representation of dates, times of receipt, preparation, and analysis	X			
Communication Records with Lab	X		N/A	-	-	-	
EDD Format Consistency	X		EDD format and content as requested	X			
Sample Identification, Results Nomenclature, and Data Qualifier Consistency	X		All included in final report	X			
Method Detection Limit Consistency	X		MDLs consistent between samples	X			
Instrument Calibration Records	X		Present and no nonconformance noted	X			
Laboratory Report Complete	X		Includes QC component	X			
Holding Times	X		Analyses performed within allowed holding time	X			

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Method	X		Method as requested	X			
Reporting Limits	X		RLs as requested		X		RL for hardness not met
			MDLs<RLs	X			
			MDLs<MCLs	X			
			MDLs<GPS	X			
QC Validation							
Evaluate Accuracy							
Matrix Spike (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Laboratory Control Sample (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Evaluate Precision							
Matrix Spike Duplicate (RPD)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Field Duplicate (RPD)	X		RPD ≤ 20%		X		See Comments
Evaluate Representativeness							
Equipment Blanks (if applicable)	X		Non-detect (<RL)	X			
QC Verification							
Verify Instrument Calibration & Analytical Process							
Initial Calibration Verification	X		Laboratory-determined	-	-	-	
Continuing Calibration Verification	X		Laboratory-determined	-	-	-	
Initial Calibration Blank	X		Laboratory-determined	-	-	-	
Continuing Calibration Blank	X		Laboratory-determined	-	-	-	
Serial Dilutions	X		Laboratory-determined	-	-	-	
Post-Digestion Spikes	X		Laboratory-determined	-	-	-	
Internal Standards	X		Laboratory-determined	-	-	-	
Laboratory Duplicate (RPD)	X		Laboratory-determined	-	-	-	
Method Blanks	X		Laboratory-determined	-	-	-	
Evaluate Completeness (# usable measurements/ # unusable measurements)							
Completeness	X		100%	X			

Other instances of nonconformance to QC control limits noted on case narrative:

None.

Comments:

Cadmium was detected in parent sample MW-19A, but was not detected in field duplicate MWT-19A. Cadmium required qualification as estimated with high bias (J+) in parent sample MW-19A and as estimated but not detected (UJ) in field duplicate MWT-19A.

The RPDs of zinc, TSS, Rad-226, and Combined Rad-226+228 were outside of control limits for the MW-19A and MWT-19A parent sample and field duplicate pair. Zinc required qualification as estimated with

high bias (J+) in parent sample MW-19A and as estimated with low bias (J-) in field duplicate MWT-19A. TSS, Rad-226, and Rad-226+228 required qualification as estimated with low bias (J-) in parent sample MW-19A and as estimated with high bias (J+) in field duplicate MWT-19A.

Data Verification & Validation Report

Lansing Board of Water & Light – Erickson Power Station

Sampling Event (dates and purpose): Background Sampling

Data Package Number: 240-227065-1, 240-227065-2

Lab Report Date: 7/1/2025, 7/21/2024

Data Validator: Andrew Bertapelle

Data Validation Completion Date: 9/8/2025

General Overall Assessment:
_____ Data are usable without qualification.
__X__ Data are usable with qualification (as noted below).
_____ Some or all data are unusable (as noted below).

Wells planned for sampling:

Well ID	Planned for Sampling	Well ID	Planned for Sampling
MW-1		MW-17A	
MW-2		MW-17B	
MW-3		MW-17C	
MW-4		MW-17D	
MW-5		MW-17E	
MW-6		MW-18A	
MW-7		MW-18B	
MW-7B		MW-18C	
MW-7C		MW-18D	
MW-8		MW-19A	X
MW-9		MW-19B	X
MW-10		MW-19C	X
MW-11		MW-19D	X
MW-11B		MW-100A	
MW-12		MW-100B	
MW-12B		MW-100C	
MW-13		MW-100D	
MW-14			
MW-15			
MW-16A			
MW-16B			
MW-16C			
MW-16D			

Data Summary

Sample ID	Matrix	Lab ID	Date Collected	App III Metals	App IV Metals	Part 115 Metals	Anions	TDS TSS	Rad-226 Rad-228	Diss. Metals
MW-19A	GW	240-227065-1	6/17/2025	X	X	X	X	X	X	
MW-19B	GW	240-227065-2	6/17/2025	X	X	X	X	X	X	
MW-19C	GW	240-227065-3	6/17/2025	X	X	X	X	X	X	
MW-19D	GW	240-227065-4	6/17/2025	X	X	X	X	X	X	X
MWT-19A	GW	240-227065-5	6/17/2025	X	X	X	X	X	X	
FIELD BLANK	GW	240-227065-6	6/17/2025	X	X	X	X	X	X	X

Other analytes requested for analysis: Mg, HCO_3, CO_3, hardness

Any planned sampling or analysis NOT completed? If yes, explain:

Data Verification & Validation Checklist

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Field Data							
Sample Collection Field Forms	X		Purging performed as required in the Groundwater Monitoring Plan	X			DO at MW-19B last 3 measurements were 0.2, 0.18, and 0.17. Turbidity at MW-19D remained above 10 NTU. Dissolved analyses were performed.
Field Calibration Records	X		Field instruments calibrated daily according to manufacturer specifications	X			
Chain of Custody	X		Accurately reflect samples, collection dates/times, analyses, bottles, etc.	X			
Field decontamination documentation	X		Record of decontamination for non-dedicated sampling equipment	X			
Drilling logs	X		N/A	-	-	-	
Well construction logs	X		N/A	-	-	-	
Well development field forms	X		N/A	-	-	-	
Analytical Data Package							
Cover Sheet	X		N/A	-	-	-	
Case Narrative	X		Summarizes sample receipt and any exceptions to QC acceptance criteria	X			
Internal Laboratory Chain of Custody forms	X		Analyses as requested; accurate transcription of field COC	X			
Sample Chronology and Consistency	X		Accurate representation of dates, times of receipt, preparation, and analysis	X			
Communication Records with Lab	X		N/A	-	-	-	
EDD Format Consistency	X		EDD format and content as requested	X			
Sample Identification, Results Nomenclature, and Data Qualifier Consistency	X		All included in final report	X			
Method Detection Limit Consistency	X		MDLs consistent between samples	X			Sulfate, TSS, and Rad-226/228 MDLs vary
Instrument Calibration Records	X		Present and no nonconformance noted	X			
Laboratory Report Complete	X		Includes QC component	X			

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Holding Times	X		Analyses performed within allowed holding time	X			
Method	X		Method as requested	X			
Reporting Limits	X		RLs as requested	X			
			MDLs<RLs	X			Hardness MDLs = RLs
			MDLs<MCLs	X			
			MDLs<GPS	X			
QC Validation							
Evaluate Accuracy							
Matrix Spike (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table		X		MS low recovery (68%) for calcium in L506251-01 MW-19AMS. See comments.
Laboratory Control Sample (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table		X		LCS high recovery (127%) for radium-228 in LCS 160-7238542-A. See comments.
Evaluate Precision							
Matrix Spike Duplicate (RPD)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Field Duplicate (RPD)	X		RPD ≤ 20%		X		Rad-226 & Rad-226/228 at 94% & 35% RPD, respectively. See comments.
Evaluate Representativeness							
Equipment Blanks (if applicable)	X		Non-detect (<RL)	X			
QC Verification							
Verify Instrument Calibration & Analytical Process							
Initial Calibration Verification	X		Laboratory-determined	-	-	-	
Continuing Calibration Verification	X		Laboratory-determined	-	-	-	
Initial Calibration Blank	X		Laboratory-determined	-	-	-	
Continuing Calibration Blank	X		Laboratory-determined	-	-	-	
Serial Dilutions	X		Laboratory-determined	-	-	-	
Post-Digestion Spikes	X		Laboratory-determined	-	-	-	
Internal Standards	X		Laboratory-determined	-	-	-	
Laboratory Duplicate (RPD)	X		Laboratory-determined	-	-	-	
Method Blanks	X		Laboratory-determined	-	-	-	
Evaluate Completeness (# usable measurements/ # unusable measurements)							
Completeness	X		100%	X			

Other instances of nonconformance to QC control limits noted on case narrative:

___

Comments:

MW-19B was not fully stabilized for DO (>10% change within last 3 measurements). MW-19D was not fully stabilized for turbidity (>10 NTU within last 3 measurements). Additionally, the field forms used show incorrect stabilization criteria for specific conductance and turbidity (refer to site Groundwater Monitoring Plan).

No equipment blank sample was collected.

The matrix spike recovery was low for calcium (68%) in L506251-01 MW-19AMS. Therefore, calcium was qualified as estimated with low bias (J-) in parent sample MW-19A.

The LCS recovery was high for radium-228 (127%) in LCS 160-7238542-A. Therefore, radium-228 was qualified as estimated with high bias (J+) in batch samples with detections (MW-19B, MW-19D, and MWT-19A).

The RPDs of radium-226 and radium-226/228 were outside of control limits (94% and 35%, respectively) for the MW-19A and MWT-19A parent sample and field duplicate pair. Therefore, radium-226 and radium-226/228 were qualified as estimated (J) in samples MW-19A and MWT-19A.

Data Verification & Validation Report

Lansing Board of Water & Light – Erickson Power Station

Sampling Event (dates and purpose): Background Sampling

Data Package Number: 240-228090-1, 240-228090-2

Lab Report Date: 7/18/2025, 8/4/2025

Data Validator: Andrew Bertapelle

Data Validation Completion Date: 9/15/2025

General Overall Assessment:
_____ Data are usable without qualification.
__X__ Data are usable with qualification (as noted below).
_____ Some or all data are unusable (as noted below).

Wells planned for sampling:

Well ID	Planned for Sampling	Well ID	Planned for Sampling
MW-1		MW-17A	X
MW-2		MW-17B	X
MW-3		MW-17C	X
MW-4		MW-17D	X
MW-5		MW-17E	X
MW-6		MW-18A	
MW-7		MW-18B	
MW-7B		MW-18C	
MW-7C		MW-18D	
MW-7D		MW-19A	
MW-8		MW-19B	
MW-9		MW-19C	
MW-10		MW-19D	
MW-11		MW-100A	
MW-11B		MW-100B	
MW-12		MW-100C	
MW-12B		MW-100D	
MW-13			
MW-14			
MW-15			
MW-16A			
MW-16B			
MW-16C			
MW-16D			

Data Summary

Sample ID	Matrix	Lab ID	Date Collected	App III Metals	App IV Metals	Part 115 Metals	Anions	TDS TSS	Rad-226 Rad-228	Diss. Metals
MW-17A	GW	240-228090-1	7/1/2025	X	X	X	X	X	X	
MW-17B	GW	240-228090-2	7/1/2025	X	X	X	X	X	X	
MW-17C	GW	240-228090-3	7/1/2025	X	X	X	X	X	X	
MW-17D	GW	240-228090-4	7/1/2025	X	X	X	X	X	X	
MWT-17A	GW	240-228090-5	7/1/2025	X	X	X	X	X	X	
FIELD BLANK	GW	240-228090-6	7/1/2025	X	X	X	X	X	X	

Other analytes requested for analysis: Mg, HCO_3, CO_3, hardness

Any planned sampling or analysis NOT completed? If yes, explain:

Data Verification & Validation Checklist

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Field Data							
Sample Collection Field Forms	X		Purging performed as required in the Groundwater Monitoring Plan	X			
Field Calibration Records	X		Field instruments calibrated daily according to manufacturer specifications	X			
Chain of Custody	X		Accurately reflect samples, collection dates/times, analyses, bottles, etc.	X			
Field decontamination documentation	X		Record of decontamination for non-dedicated sampling equipment	X			
Drilling logs	X		N/A	-	-	-	
Well construction logs	X		N/A	-	-	-	
Well development field forms	X		N/A	-	-	-	
Analytical Data Package							
Cover Sheet	X		N/A	-	-	-	
Case Narrative	X		Summarizes sample receipt and any exceptions to QC acceptance criteria	X			
Internal Laboratory Chain of Custody forms	X		Analyses as requested; accurate transcription of field COC	X			
Sample Chronology and Consistency	X		Accurate representation of dates, times of receipt, preparation, and analysis	X			
Communication Records with Lab	X		N/A	-	-	-	
EDD Format Consistency	X		EDD format and content as requested	X			
Sample Identification, Results Nomenclature, and Data Qualifier Consistency	X		All included in final report	X			
Method Detection Limit Consistency	X		MDLs consistent between samples	X			Sulfate, TDS, and TSS MDLs vary
Instrument Calibration Records	X		Present and no nonconformance noted	X			
Laboratory Report Complete	X		Includes QC component	X			
Holding Times	X		Analyses performed within allowed holding time	X			

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Method	X		Method as requested	X			
Reporting Limits	X		RLs as requested	X			
			MDLs<RLs	X			Hardness MDLs = RLs
			MDLs<MCLs	X			
			MDLs<GPS	X			
QC Validation							
Evaluate Accuracy							
Matrix Spike (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Laboratory Control Sample (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Evaluate Precision							
Matrix Spike Duplicate (RPD)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Field Duplicate (RPD)	X		RPD ≤ 20%		X		See Comments
Evaluate Representativeness							
Equipment Blanks (if applicable)	X		Non-detect (<RL)			X	No equipment blank.
QC Verification							
Verify Instrument Calibration & Analytical Process							
Initial Calibration Verification	X		Laboratory-determined	-	-	-	
Continuing Calibration Verification	X		Laboratory-determined	-	-	-	
Initial Calibration Blank	X		Laboratory-determined	-	-	-	
Continuing Calibration Blank	X		Laboratory-determined	-	-	-	
Serial Dilutions	X		Laboratory-determined	-	-	-	
Post-Digestion Spikes	X		Laboratory-determined	-	-	-	
Internal Standards	X		Laboratory-determined	-	-	-	
Laboratory Duplicate (RPD)	X		Laboratory-determined	-	-	-	
Method Blanks	X		Laboratory-determined	-	-	-	Radium-228 detected in MB 160-7263491-A
Evaluate Completeness (# usable measurements/ # unusable measurements)							
Completeness	X		100%	X			

Other instances of nonconformance to QC control limits noted on case narrative:

None.

Comments:

The RPDs of arsenic, cadmium, cobalt, radium-226, radium-228, radium-226/228, selenium, thallium, and TSS were outside of control limits for the MW-17A and MWT-17A parent sample and field duplicate pair. Arsenic, cadmium, cobalt, radium-226, radium-226/228, selenium, and thallium were qualified as estimated with high bias (J+) in parent sample MW-17A and as estimated with low bias or estimated but not detected (J-, UJ) in duplicate sample MWT-17A. TSS was qualified as estimated with low bias (J-) in parent sample MW-17A and as estimated with high bias (J+) in

duplicate sample MWT-17A. Radium-228 was qualified as estimated but not detected (UJ) in both parent sample MW-17A and duplicate sample MWT-17A.

Data Verification & Validation Report

Lansing Board of Water & Light – Erickson Power Station

Sampling Event (dates and purpose): Background Sampling

Data Package Number: 240-228528-1, 240-228528-2

Lab Report Date: 7/25/2025, 8/7/2025

Data Validator: Andrew Bertapelle

Data Validation Completion Date: 9/22/2025

General Overall Assessment:
_____ Data are usable without qualification.
__X__ Data are usable with qualification (as noted below).
_____ Some or all data are unusable (as noted below).

Wells planned for sampling:

Well ID	Planned for Sampling	Well ID	Planned for Sampling
MW-1		MW-17A	
MW-2		MW-17B	
MW-3		MW-17C	
MW-4		MW-17D	
MW-5		MW-17E	
MW-6		MW-18A	X
MW-7		MW-18B	X
MW-7B		MW-18C	X
MW-7C		MW-18D	X
MW-8		MW-19A	
MW-9		MW-19B	
MW-10		MW-19C	
MW-11		MW-19D	
MW-11B		MW-100A	
MW-12		MW-100B	
MW-12B		MW-100C	
MW-13		MW-100D	
MW-14			
MW-15			
MW-16A			
MW-16B			
MW-16C			
MW-16D			

Data Summary

Sample ID	Matrix	Lab ID	Date Collected	App III Metals	App IV Metals	Part 115 Metals	Anions	TDS TSS	Rad-226 Rad-228	Diss. Metals
MW-18A	GW	240-228528-1	7/8/2025	X	X	X	X	X	X	
MW-18B	GW	240-228528-2	7/8/2025	X	X	X	X	X	X	
MW-18C	GW	240-228528-3	7/8/2025	X	X	X	X	X	X	
MW-18D	GW	240-228528-4	7/8/2025	X	X	X	X	X	X	
MWT-18A	GW	240-228528-5	7/8/2025	X	X	X	X	X	X	
FIELD BLANK	GW	240-228528-6	7/8/2025	X	X	X	X	X	X	

Other analytes requested for analysis: Mg, HCO_3, CO_3, hardness

Any planned sampling or analysis NOT completed? If yes, explain:

Data Verification & Validation Checklist

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Field Data							
Sample Collection Field Forms	X		Purging performed as required in the Groundwater Monitoring Plan	X			
Field Calibration Records	X		Field instruments calibrated daily according to manufacturer specifications	X			
Chain of Custody	X		Accurately reflect samples, collection dates/times, analyses, bottles, etc.	X			
Field decontamination documentation	X		Record of decontamination for non-dedicated sampling equipment	X			
Drilling logs	X		N/A	-	-	-	
Well construction logs	X		N/A	-	-	-	
Well development field forms	X		N/A	-	-	-	
Analytical Data Package							
Cover Sheet	X		N/A	-	-	-	
Case Narrative	X		Summarizes sample receipt and any exceptions to QC acceptance criteria	X			
Internal Laboratory Chain of Custody forms	X		Analyses as requested; accurate transcription of field COC	X			
Sample Chronology and Consistency	X		Accurate representation of dates, times of receipt, preparation, and analysis	X			
Communication Records with Lab	X		N/A	-	-	-	
EDD Format Consistency	X		EDD format and content as requested	X			
Sample Identification, Results Nomenclature, and Data Qualifier Consistency	X		All included in final report	X			
Method Detection Limit Consistency	X		MDLs consistent between samples	X			Sulfate and TSS MDLs vary.
Instrument Calibration Records	X		Present and no nonconformance noted	X			
Laboratory Report Complete	X		Includes QC component	X			
Holding Times	X		Analyses performed within allowed holding time	X			

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Method	X		Method as requested	X			
Reporting Limits	X		RLs as requested	X			
			MDLs<RLs	X			Hardness MDLs = RLs
			MDLs<MCLs	X			
			MDLs<GPS	X			
QC Validation							
Evaluate Accuracy							
Matrix Spike (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			See Comments.
Laboratory Control Sample (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Evaluate Precision							
Matrix Spike Duplicate (RPD)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Field Duplicate (RPD)	X		RPD ≤ 20%		X		See Comments.
Evaluate Representativeness							
Equipment Blanks (if applicable)	X		Non-detect (<RL)			X	No equipment blank.
QC Verification							
Verify Instrument Calibration & Analytical Process							
Initial Calibration Verification	X		Laboratory-determined	-	-	-	
Continuing Calibration Verification	X		Laboratory-determined	-	-	-	
Initial Calibration Blank	X		Laboratory-determined	-	-	-	
Continuing Calibration Blank	X		Laboratory-determined	-	-	-	
Serial Dilutions	X		Laboratory-determined	-	-	-	
Post-Digestion Spikes	X		Laboratory-determined	-	-	-	
Internal Standards	X		Laboratory-determined	-	-	-	
Laboratory Duplicate (RPD)	X		Laboratory-determined	-	-	-	
Method Blanks	X		Laboratory-determined	-	-	-	Zinc detected in MB350-801125-A and MB350-805824-A.
Evaluate Completeness (# usable measurements/ # unusable measurements)							
Completeness	X		100%	X			

Other instances of nonconformance to QC control limits noted on case narrative:

None.

Comments:

The RPDs of arsenic, zinc, and TSS were outside of control limits for the MW-18A and MWT-18A parent sample and field duplicate pair. Arsenic, zinc, and TSS were qualified as estimated with high bias (J+) in parent sample MW-18A and as estimated with low bias or estimated but not detected (J-, UJ) in duplicate sample MWT-18A.

Matrix spike recoveries were low (0%) for L507211-06 FIELD BLANKMS for chloride, fluoride, and sulfate. The lab report case narrative states that the spiking solution was omitted by accident. Therefore, the chloride, fluoride, and sulfate of the parent field blank sample were qualified as estimated but not detected (UJ).

Data Verification & Validation Report

Lansing Board of Water & Light – Erickson Power Station

Sampling Event (dates and purpose): Background Sampling

Data Package Number: 240-229387-1, 240-229387-2

Lab Report Date: 7/31/2025, 9/11/2025

Data Validator: Andrew Bertapelle

Data Validation Completion Date: 9/24/2025

General Overall Assessment:
_____ Data are usable without qualification.
__X__ Data are usable with qualification (as noted below).
_____ Some or all data are unusable (as noted below).

Wells planned for sampling:

Well ID	Planned for Sampling	Well ID	Planned for Sampling
MW-1		MW-17A	
MW-2		MW-17B	
MW-3		MW-17C	
MW-4		MW-17D	
MW-5		MW-17E	
MW-6		MW-18A	
MW-7		MW-18B	
MW-7B		MW-18C	
MW-7C		MW-18D	
MW-8		MW-19A	X
MW-9		MW-19B	X
MW-10		MW-19C	X
MW-11		MW-19D	X
MW-11B		MW-100A	
MW-12		MW-100B	
MW-12B		MW-100C	
MW-13		MW-100D	
MW-14			
MW-15			
MW-16A			
MW-16B			
MW-16C			
MW-16D			

Data Summary

Sample ID	Matrix	Lab ID	Date Collected	App III Metals	App IV Metals	Part 115 Metals	Anions	TDS TSS	Rad-226 Rad-228	Diss. Metals
MW-19A	GW	240-229387-1	7/22/2025	X	X	X	X	X	X	
MW-19B	GW	240-229387-2	7/22/2025	X	X	X	X	X	X	
MW-19C	GW	240-229387-3	7/22/2025	X	X	X	X	X	X	
MW-19D	GW	240-229387-4	7/22/2025	X	X	X	X	X	X	
MWT-19A	GW	240-229387-5	7/22/2025	X	X	X	X	X	X	
FIELD BLANK	GW	240-229387-6	7/22/2025	X	X	X	X	X	X	

Other analytes requested for analysis: Mg, HCO_3, CO_3, hardness

Any planned sampling or analysis NOT completed? If yes, explain:

Data Verification & Validation Checklist

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Field Data							
Sample Collection Field Forms	X		Purging performed as required in the Groundwater Monitoring Plan	X			
Field Calibration Records	X		Field instruments calibrated daily according to manufacturer specifications	X			
Chain of Custody	X		Accurately reflect samples, collection dates/times, analyses, bottles, etc.	X			
Field decontamination documentation	X		Record of decontamination for non-dedicated sampling equipment	X			
Drilling logs	X		N/A	-	-	-	
Well construction logs	X		N/A	-	-	-	
Well development field forms	X		N/A	-	-	-	
Analytical Data Package							
Cover Sheet	X		N/A	-	-	-	
Case Narrative	X		Summarizes sample receipt and any exceptions to QC acceptance criteria	X			
Internal Laboratory Chain of Custody forms	X		Analyses as requested; accurate transcription of field COC	X			
Sample Chronology and Consistency	X		Accurate representation of dates, times of receipt, preparation, and analysis	X			
Communication Records with Lab	X		N/A	-	-	-	
EDD Format Consistency	X		EDD format and content as requested	X			
Sample Identification, Results Nomenclature, and Data Qualifier Consistency	X		All included in final report	X			
Method Detection Limit Consistency	X		MDLs consistent between samples	X			MDLs for sulfate vary.
Instrument Calibration Records	X		Present and no nonconformance noted	X			
Laboratory Report Complete	X		Includes QC component	X			
Holding Times	X		Analyses performed within allowed holding time	X			

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Method	X		Method as requested	X			
Reporting Limits	X		RLs as requested		X		
			MDLs<RLs	X			Hardness MDLs = RLs
			MDLs<MCLs	X			
			MDLs<GPS	X			
QC Validation							
Evaluate Accuracy							
Matrix Spike (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Laboratory Control Sample (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Evaluate Precision							
Matrix Spike Duplicate (RPD)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Field Duplicate (RPD)	X		RPD ≤ 20%		X		See comments.
Evaluate Representativeness							
Equipment Blanks (if applicable)	X		Non-detect (<RL)	X			
QC Verification							
Verify Instrument Calibration & Analytical Process							
Initial Calibration Verification	X		Laboratory-determined	-	-	-	
Continuing Calibration Verification	X		Laboratory-determined	-	-	-	
Initial Calibration Blank	X		Laboratory-determined	-	-	-	
Continuing Calibration Blank	X		Laboratory-determined	-	-	-	
Serial Dilutions	X		Laboratory-determined	-	-	-	
Post-Digestion Spikes	X		Laboratory-determined	-	-	-	
Internal Standards	X		Laboratory-determined	-	-	-	
Laboratory Duplicate (RPD)	X		Laboratory-determined	-	-	-	
Method Blanks	X		Laboratory-determined	-	-	-	See Comments.
Evaluate Completeness (# usable measurements/ # unusable measurements)							
Completeness	X		100%	X			

Other instances of nonconformance to QC control limits noted on case narrative:

None.

Comments:

Cobalt was detected above MDL in parent sample MW-19A but was not detected above MDL in field duplicate MWT-19A. Cobalt required qualification as estimated with high bias (J+) in parent sample MW-19A and as estimated but not detected (UJ) in field duplicate MWT-19A.

Radium-228 and radium-226/228 were detected above MDL in field duplicate MWT-19A but were not detected above MDL in parent sample MW-19A. Radium-228 and radium-226/228 required qualification as estimated but not detected in parent sample MW-19A and as estimated with high bias (J+) in field duplicate MWT-19A.

The RPDs of fluoride and radium-226 were also outside of control limits for the MW-19A and MWT-19A parent sample and field duplicate pair. Fluoride required qualification as estimated with low bias (J-) in parent sample MW-19A and as estimated with high bias (J+) in field duplicate MWT-19A. Radium-226 required qualification as estimated with high bias (J+) in parent sample MW-19A and as estimated with low bias (J-) in field duplicate MWT-19A.

Iron was detected in method blank MB 350-843825-A above MDL but below RL. Lab applied B qualifier to iron results in analysis batch 8518. Radium-228 was detected in method blank MB 160-7328251-A above MDL but below RL.

Data Verification & Validation Report

Lansing Board of Water & Light – Erickson Power Station

Sampling Event (dates and purpose): Background Sampling

Data Package Number: 240-231817-1, 240-231817-2

Lab Report Date: 9/5/2025, 9/29/2025

Data Validator: Andrew Bertapelle

Data Validation Completion Date: 10/8/2025

General Overall Assessment:
_____ Data are usable without qualification.
__X__ Data are usable with qualification (as noted below).
_____ Some or all data are unusable (as noted below).

Wells planned for sampling:

Well ID	Planned for Sampling	Well ID	Planned for Sampling
MW-1		MW-17A	
MW-2		MW-17B	
MW-3		MW-17C	
MW-4		MW-17D	
MW-5		MW-17E	
MW-6		MW-18A	
MW-7		MW-18B	
MW-7B		MW-18C	
MW-7C		MW-18D	
MW-8		MW-19A	X
MW-9		MW-19B	X
MW-10		MW-19C	X
MW-11		MW-19D	X
MW-11B		MW-100A	
MW-12		MW-100B	
MW-12B		MW-100C	
MW-13		MW-100D	
MW-14			
MW-15			
MW-16A			
MW-16B			
MW-16C			
MW-16D			

Data Summary

Sample ID	Matrix	Lab ID	Date Collected	App III Metals	App IV Metals	Part 115 Metals	Anions	TDS TSS	Rad-226 Rad-228	Diss. Metals
MW-19A	GW	240-229387-1	7/22/2025	X	X	X	X	X	X	
MW-19B	GW	240-229387-2	7/22/2025	X	X	X	X	X	X	
MW-19C	GW	240-229387-3	7/22/2025	X	X	X	X	X	X	
MW-19D	GW	240-229387-4	7/22/2025	X	X	X	X	X	X	
MWT-19A	GW	240-229387-5	7/22/2025	X	X	X	X	X	X	
FIELD BLANK	GW	240-229387-6	7/22/2025	X	X	X	X	X	X	

Other analytes requested for analysis: Mg, HCO_3, CO_3, hardness

Any planned sampling or analysis NOT completed? If yes, explain:

Data Verification & Validation Checklist

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Field Data							
Sample Collection Field Forms	X		Purging performed as required in the Groundwater Monitoring Plan	X			
Field Calibration Records	X		Field instruments calibrated daily according to manufacturer specifications	X			
Chain of Custody	X		Accurately reflect samples, collection dates/times, analyses, bottles, etc.	X			
Field decontamination documentation	X		Record of decontamination for non-dedicated sampling equipment	X			
Drilling logs	X		N/A	-	-	-	
Well construction logs	X		N/A	-	-	-	
Well development field forms	X		N/A	-	-	-	
Analytical Data Package							
Cover Sheet	X		N/A	-	-	-	
Case Narrative	X		Summarizes sample receipt and any exceptions to QC acceptance criteria	X			
Internal Laboratory Chain of Custody forms	X		Analyses as requested; accurate transcription of field COC	X			
Sample Chronology and Consistency	X		Accurate representation of dates, times of receipt, preparation, and analysis	X			
Communication Records with Lab	X		N/A	-	-	-	
EDD Format Consistency	X		EDD format and content as requested	X			
Sample Identification, Results Nomenclature, and Data Qualifier Consistency	X		All included in final report	X			
Method Detection Limit Consistency	X		MDLs consistent between samples	X			MDLs for sulfate vary
Instrument Calibration Records	X		Present and no nonconformance noted	X			
Laboratory Report Complete	X		Includes QC component	X			
Holding Times	X		Analyses performed within allowed holding time	X			

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Method	X		Method as requested	X			
Reporting Limits	X		RLs as requested	X			
			MDLs<RLs	X			Hardness MDLs = RLs
			MDLs<MCLs	X			
			MDLs<GPS	X			
QC Validation							
Evaluate Accuracy							
Matrix Spike (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			See comments.
Laboratory Control Sample (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Evaluate Precision							
Matrix Spike Duplicate (RPD)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Field Duplicate (RPD)	X		RPD ≤ 20%		X		See comments.
Evaluate Representativeness							
Equipment Blanks (if applicable)	X		Non-detect (<RL)	X			
QC Verification							
Verify Instrument Calibration & Analytical Process							
Initial Calibration Verification	X		Laboratory-determined	-	-	-	
Continuing Calibration Verification	X		Laboratory-determined	-	-	-	
Initial Calibration Blank	X		Laboratory-determined	-	-	-	
Continuing Calibration Blank	X		Laboratory-determined	-	-	-	
Serial Dilutions	X		Laboratory-determined	-	-	-	
Post-Digestion Spikes	X		Laboratory-determined	-	-	-	
Internal Standards	X		Laboratory-determined	-	-	-	
Laboratory Duplicate (RPD)	X		Laboratory-determined	-	-	-	
Method Blanks	X		Laboratory-determined	-	-	-	
Evaluate Completeness (# usable measurements/ # unusable measurements)							
Completeness	X		100%	X			

Other instances of nonconformance to QC control limits noted on case narrative:

None.

Comments:

Antimony, cadmium, cobalt, and thallium were detected in parent sample MW-19A but were not detected in field duplicate MWT-19A. Antimony, cadmium, cobalt, and thallium required qualification as estimated with high bias (J+) in parent sample MW-19A and as estimated but not detected (UJ) in field duplicate MWT-19A.

Radium-226 was not detected above MDL in parent sample MW-19A but was detected in field duplicate sample MWT-19A. Radium-226 required qualification as estimated but not detected (UJ) in parent sample MW-19A and as estimated with high bias (J+) in field duplicate MWT-19A.

The RPDs of arsenic and molybdenum were outside of control limits for the MW-19A and MWT-19A parent sample and field duplicate pair. Arsenic and molybdenum required qualification as estimated with high bias (J+) in parent sample MW-19A and as estimated with low bias (J-) in field duplicate MWT-19A.

Matrix Spike L508287-01 MW-19AMS recovery for iron was reported as 128% on lab EDD. However, original concentration is shown as 5.3 mg/L, spike added is shown as 20 mg/L, and spike measured is shown as 25.7 mg/L. This indicates a spike recovery of 102%, which is inside of control limits.

Data Verification & Validation Report

Lansing Board of Water & Light – Erickson Power Station

Sampling Event (dates and purpose): SemiAnnual Sampling

Data Package Number:	Lab Report Date:
240-230293-1, -2	8/15/2025, 9/5/2025
240-230530-1, -2	8/18/2025, 9/5/2025
240-230513-1, -2	8/18/2025, 9/5/2025
240-230600-1, -2	8/21/2025, 9/9/2025
240-230809-1, -2	8/21/2025, 9/10/2025

Data Validator: Andrew Byks

Data Validation Completion Date: 9/22/2025

General Overall Assessment:
_____ Data are usable without qualification.
__X__ Data are usable with qualification (as noted below).
_____ Some or all data are unusable (as noted below).

Wells planned for sampling:

Well ID	Planned for Sampling	Well ID	Planned for Sampling
MW-1	X	MW-17A	X
MW-2	X	MW-17B	X
MW-3	X	MW-17C	X
MW-4	X	MW-17D	X
MW-5	X	MW-17E	X
MW-6	X	MW-18A	X
MW-7	X	MW-18B	X
MW-7B	X	MW-18C	X
MW-7C	X	MW-18D	X
MW-8	X	MW-19A	
MW-9	X	MW-19B	
MW-10	X	MW-19C	
MW-11	X	MW-19D	
MW-11B	X	MW-100A	X
MW-12	X	MW-100B	X
MW-12B	X	MW-100C	X
MW-13	X	MW-100D	X
MW-14	X		
MW-15	X		
MW-16A	X		
MW-16B	X		
MW-16C	X		
MW-16D	X		

Data Summary

Sample ID	Matrix	Lab ID	Date Collected	App III Metals	App IV Metals	Part 115 Metals	Anions	TDS TSS	Rad-226 Rad-228	Diss. Metals
MW-17A	GW	240-230293-1	8/5/2025	X	X	X	X	X	X	
MW-17B	GW	240-230293-2	8/5/2025	X	X	X	X	X	X	
MW-17C	GW	240-230293-3	8/5/2025	X	X	X	X	X	X	
MW-17D	GW	240-230293-4	8/5/2025	X	X	X	X	X	X	
MW-17E	GW	240-230293-5	8/5/2025	X	X	X	X	X	X	
MWT-17A	GW	240-230293-6	8/5/2025	X	X	X	X	X	X	
FIELD BLANK	GW	240-230293-7	8/5/2025	X	X	X	X	X	X	
MW-1	GW	240-230530-1	8/6/2025	X	X	X	X	X	X	
MW-12	GW	240-230530-2	8/6/2025	X	X	X	X	X	X	X
MW-12B	GW	240-230530-3	8/6/2025	X	X	X	X	X	X	
MW-14	GW	240-230530-4	8/6/2025	X	X	X	X	X	X	
MWT-6	GW	240-230530-5	8/6/2025	X	X	X	X	X	X	
FIELD BLANK	GW	240-230530-6	8/6/2025	X	X	X	X	X	X	
MW-2	GW	240-230530-7	8/6/2025	X	X	X	X	X	X	X
MW-3	GW	240-230530-8	8/6/2025	X	X	X	X	X	X	
MW-5	GW	240-230530-9	8/6/2025	X	X	X	X	X	X	X
MW-6	GW	240-230530-10	8/6/2025	X	X	X	X	X	X	
MW-11	GW	240-230530-11	8/6/2025	X	X	X	X	X	X	
MW-11B	GW	240-230530-12	8/6/2025	X	X	X	X	X	X	
MW-7C	GW	240-230513-1	8/7/2025	X	X	X	X	X	X	
MW-8	GW	240-230513-2	8/7/2025	X	X	X	X	X	X	
MW-9	GW	240-230513-3	8/7/2025	X	X	X	X	X	X	
MW-10	GW	240-230513-4	8/7/2025	X	X	X	X	X	X	
MW-15	GW	240-230513-5	8/7/2025	X	X	X	X	X	X	
MW-100A	GW	240-230513-6	8/7/2025	X	X	X	X	X	X	
MW-100B	GW	240-230513-7	8/7/2025	X	X	X	X	X	X	
MW-100C	GW	240-230513-8	8/7/2025	X	X	X	X	X	X	
MW-100D	GW	240-230513-9	8/7/2025	X	X	X	X	X	X	
MWT-100C	GW	240-230513-10	8/7/2025	X	X	X	X	X	X	
FIELD BLANK	GW	240-230513-11	8/7/2025	X	X	X	X	X	X	
MW-7	GW	240-230600-1	8/8/2025	X	X	X	X	X	X	
MW-7B	GW	240-230600-2	8/8/2025	X	X	X	X	X	X	
MW-13	GW	240-230600-3	8/8/2025	X	X	X	X	X	X	
MW-18A	GW	240-230600-4	8/8/2025	X	X	X	X	X	X	
MW-18B	GW	240-230600-5	8/8/2025	X	X	X	X	X	X	
MW-18C	GW	240-230600-6	8/8/2025	X	X	X	X	X	X	
MW-18D	GW	240-230600-7	8/8/2025	X	X	X	X	X	X	
MWT-7	GW	240-230600-8	8/8/2025	X	X	X	X	X	X	
FIELD BLANK	GW	240-230600-9	8/8/2025	X	X	X	X	X	X	
MW-4	GW	240-230809-1	8/11/2025	X	X	X	X	X	X	
MW-16A	GW	240-230809-2	8/11/2025	X	X	X	X	X	X	
MW-16B	GW	240-230809-3	8/11/2025	X	X	X	X	X	X	
MW-16C	GW	240-230809-4	8/11/2025	X	X	X	X	X	X	
MW-16D	GW	240-230809-5	8/11/2025	X	X	X	X	X	X	
MWT-4	GW	240-230809-6	8/11/2025	X	X	X	X	X	X	
FIELD BLANK	GW	240-230809-7	8/11/2025	X	X	X	X	X	X	

Other analytes requested for analysis: Mg, HCO_3, CO_3, hardness

Any planned sampling or analysis NOT completed? If yes, explain:

Data Verification & Validation Checklist

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Field Data							
Sample Collection Field Forms	X		Purging performed as required in the Groundwater Monitoring Plan	X			DO at select wells >10% variance in last samples due to equipment precision. Turbidity at MW-2, -5, and-12 remained above 10 NTU. Dissolved analyses were performed.
Field Calibration Records	X		Field instruments calibrated daily according to manufacturer specifications	X			
Chain of Custody	X		Accurately reflect samples, collection dates/times, analyses, bottles, etc.	X			
Field decontamination documentation	X		Record of decontamination for non-dedicated sampling equipment	X			
Drilling logs	X		N/A	-	-	-	
Well construction logs	X		N/A	-	-	-	
Well development field forms	X		N/A	-	-	-	
Analytical Data Package							
Cover Sheet	X		N/A	-	-	-	
Case Narrative	X		Summarizes sample receipt and any exceptions to QC acceptance criteria	X			
Internal Laboratory Chain of Custody forms	X		Analyses as requested; accurate transcription of field COC	X			
Sample Chronology and Consistency	X		Accurate representation of dates, times of receipt, preparation, and analysis	X			
Communication Records with Lab	X		N/A	-	-	-	
EDD Format Consistency	X		EDD format and content as requested	X			
Sample Identification, Results Nomenclature, and Data Qualifier Consistency	X		All included in final report	X			
Method Detection Limit Consistency	X		MDLs consistent between samples	X			Sulfate, TSS, and Rad-226/228 MDLs vary
Instrument Calibration Records	X		Present and no nonconformance noted	X			
Laboratory Report Complete	X		Includes QC component	X			

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Holding Times	X		Analyses performed within allowed holding time	X			
Method	X		Method as requested	X			
Reporting Limits	X		RLs as requested	X			
			MDLs<RLs	X			Hardness MDLs = RLs
			MDLs<MCLs	X			
			MDLs<GPS	X			
QC Validation							
Evaluate Accuracy							
Matrix Spike (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Laboratory Control Sample (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table		X		LCS high recovery (129%) for radium-228 in LCS 160-731801/2-A. See comments.
Evaluate Precision							
Matrix Spike Duplicate (RPD)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Field Duplicate (RPD)	X		RPD ≤ 20%		X		See comments.
Evaluate Representativeness							
Equipment Blanks (if applicable)	X		Non-detect (<RL)	X			All blank detections estimated under RL.
QC Verification							
Verify Instrument Calibration & Analytical Process							
Initial Calibration Verification	X		Laboratory-determined	-	-	-	
Continuing Calibration Verification	X		Laboratory-determined	-	-	-	
Initial Calibration Blank	X		Laboratory-determined	-	-	-	
Continuing Calibration Blank	X		Laboratory-determined	-	-	-	
Serial Dilutions	X		Laboratory-determined	-	-	-	
Post-Digestion Spikes	X		Laboratory-determined	-	-	-	
Internal Standards	X		Laboratory-determined	-	-	-	
Laboratory Duplicate (RPD)	X		Laboratory-determined	-	-	-	
Method Blanks	X		Laboratory-determined	-	-	-	
Evaluate Completeness (# usable measurements/ # unusable measurements)							
Completeness	X		100%	X			

Other instances of nonconformance to QC control limits noted on case narrative:

Comments:

DO at select wells >10% variance in last samples due to equipment precision.

Turbidity at MW-2, -5, and-12 remained above 10 NTU. Dissolved analyses were performed.

The LCS recovery was high for radium-228 (131%) in LCS 160-731801/2-A. Radium-228 in affected samples MW-7C, MW-8, MW-9, MW-10, MW-15, MW-100A, MW-100B, MW-100C, MW-100D, and MWT-100C required qualification as estimated with high bias (J+) or as estimated but not detected (UJ).

The RPD of Rad-226, Rad-228, and Combined Rad-226+228 were outside of control limits for the MW-17A and MWT-17A parent sample and field duplicate pair. Rad-226, Rad-228, and Combined Rad-226+228 required qualification as estimated with high bias (J+, or UJ if non-detect) in parent sample MW-17A and as estimated with low bias (J-, or UJ if non-detect) in field duplicate MWT-17A.

The RPDs of iron, Rad-226, Rad-228, Combined Rad-226+228, and TSS were outside of control limits for the MW-6 and MWT-6 parent sample and field duplicate pair. Iron, Rad-228, and TSS required qualification as estimated with high bias (J+, or UJ if non-detect) in parent sample MW-6 and as estimated with low bias (J-, or UJ if non-detect) in field duplicate MWT-6. Rad-226 and Combined Rad-228+228 required qualification as estimated with low bias (J-, or UJ if non-detect) in parent sample MW-6 and as estimated with high bias (J+) in field duplicate MWT-6.

Arsenic was detected in parent sample MW-6, but was not detected in field duplicate MWT-6. Arsenic required qualification as estimated with high bias (J+) in parent sample MW-6 and as estimated but not detected (UJ) in field duplicate MWT-6.

The RPDs of arsenic, Rad-226, Rad-228, and Combined Rad-226+228 were outside of control limits for the MW-100C and MWT-100C parent sample and field duplicate pair. Arsenic and Rad-226 required qualification as estimated with high bias (J+, or UJ if non-detect) in parent sample MW-100C and as estimated with low bias (J-, or UJ if non-detect) in field duplicate MWT-100C. Rad-228 and Combined Rad-226+228 required qualification as estimated with low bias (J-, or UJ if non-detect) in parent sample MW-100C and as estimated with high bias (J+, or UJ if non-detect) in field duplicate MWT-100C.

Zinc was detected in parent sample MW-100C, but was not detected in field duplicate MWT-100C. Zinc required qualification as estimated with high bias (J+) in parent sample MW-100C and as estimated but not detected (UJ) in field duplicate MWT-100C.

The RPD of cobalt was outside of control limits for the MW-7 and MWT-7 parent sample and field duplicate pair. Cobalt required qualification as estimated with high bias (J+) in parent sample MW-7 and as estimated with low bias (J-) in field duplicate MWT-7.

Vanadium and TSS were not detected in parent sample MW-7, but were detected in field duplicate MWT-7. Vanadium and TSS required qualification as estimated but not detected (UJ) in parent sample MW-7 and as estimated with high bias (J+) in field duplicate MWT-7.

Zinc was detected in parent sample MW-7, but was not detected in field duplicate MWT-7. Zinc required qualification as estimated with high bias (J+) in parent sample MW-7 and as estimated but not detected (UJ) in field duplicate MWT-7.

The RPDs of TSS, Rad-226, Rad-228, and Combined Rad-226+228 were outside of control limits for the MW-4 and MWT-4 parent sample and field duplicate pair. TSS required qualification as estimated with low bias (J-) in parent sample MW-4 and as estimated with high bias (J+) in field duplicate MWT-4. Rad-226, Rad-228, and Combined Rad-226+228 required qualification as estimated with high bias (J+, or UJ if non-detect) in parent sample MW-4 and as estimated with low bias (J-, or UJ if non-detect) in field duplicate MWT-4.

Cadmium and zinc were detected in parent sample MW-4, but were not detected in field duplicate MWT-4. Cadmium and zinc required qualification as estimated with high bias (J+) in parent sample MW-4, and as estimated but not detected (UJ) in field duplicate MWT-4.

Data Verification & Validation Report

Lansing Board of Water & Light – Erickson Power Station

Sampling Event (dates and purpose): Background Sampling

Data Package Number: 240-234327-1, 240-234327-2

Lab Report Date: 10/11/2025, 10/31/2025

Data Validator: Andrew Bertapelle

Data Validation Completion Date: 11/11/2025

General Overall Assessment:
_____ Data are usable without qualification.
__X__ Data are usable with qualification (as noted below).
_____ Some or all data are unusable (as noted below).

Wells planned for sampling:

Well ID	Planned for Sampling	Well ID	Planned for Sampling
MW-1		MW-17A	
MW-2		MW-17B	
MW-3		MW-17C	
MW-4		MW-17D	
MW-5		MW-17E	
MW-6		MW-18A	
MW-7		MW-18B	
MW-7B		MW-18C	
MW-7C		MW-18D	
MW-7D	X	MW-19A	X
MW-8		MW-19B	X
MW-9		MW-19C	X
MW-10		MW-19D	X
MW-11		MW-100A	
MW-11B		MW-100B	
MW-12		MW-100C	
MW-12B		MW-100D	
MW-13			
MW-14			
MW-15			
MW-16A			
MW-16B			
MW-16C			
MW-16D			

Data Summary

Sample ID	Matrix	Lab ID	Date Collected	App III Metals	App IV Metals	Part 115 Metals	Anions	TDS TSS	Rad-226 Rad-228	Diss. Metals
MW-7D	GW	240-234327-1	9/30/2025	X	X	X	X	X	X	
MW-19A	GW	240-234327-2	9/30/2025	X	X	X	X	X	X	
MW-19B	GW	240-234327-3	9/30/2025	X	X	X	X	X	X	
MW-19C	GW	240-234327-4	9/30/2025	X	X	X	X	X	X	
MW-19D	GW	240-234327-5	9/30/2025	X	X	X	X	X	X	
MWT-19A	GW	240-234327-6	9/30/2025	X	X	X	X	X	X	
FIELD BLANK	GW	240-234327-7	9/30/2025	X	X	X	X	X	X	

Other analytes requested for analysis: Mg, HCO_3, CO_3, hardness

Any planned sampling or analysis NOT completed? If yes, explain:

Data Verification & Validation Checklist

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Field Data							
Sample Collection Field Forms	X		Purging performed as required in the Groundwater Monitoring Plan	X			
Field Calibration Records	X		Field instruments calibrated daily according to manufacturer specifications	X			
Chain of Custody	X		Accurately reflect samples, collection dates/times, analyses, bottles, etc.	X			
Field decontamination documentation	X		Record of decontamination for non-dedicated sampling equipment	X			
Drilling logs	X		N/A	-	-	-	
Well construction logs	X		N/A	-	-	-	
Well development field forms	X		N/A	-	-	-	
Analytical Data Package							
Cover Sheet	X		N/A	-	-	-	
Case Narrative	X		Summarizes sample receipt and any exceptions to QC acceptance criteria	X			
Internal Laboratory Chain of Custody forms	X		Analyses as requested; accurate transcription of field COC	X			
Sample Chronology and Consistency	X		Accurate representation of dates, times of receipt, preparation, and analysis	X			
Communication Records with Lab	X		N/A	-	-	-	
EDD Format Consistency	X		EDD format and content as requested	X			
Sample Identification, Results Nomenclature, and Data Qualifier Consistency	X		All included in final report	X			
Method Detection Limit Consistency	X		MDLs consistent between samples	X			MDLs vary for sulfate
Instrument Calibration Records	X		Present and no nonconformance noted	X			
Laboratory Report Complete	X		Includes QC component	X			
Holding Times	X		Analyses performed within allowed holding time	X			

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Method	X		Method as requested	X			
Reporting Limits	X		RLs as requested	X			
			MDLs<RLs	X			Hardness MDLs = RLs
			MDLs<MCLs	X			
			MDLs<GPS	X			
QC Validation							
Evaluate Accuracy							
Matrix Spike (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Laboratory Control Sample (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Evaluate Precision							
Matrix Spike Duplicate (RPD)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Field Duplicate (RPD)	X		RPD ≤ 20%		X		See comments.
Evaluate Representativeness							
Equipment Blanks (if applicable)	X		Non-detect (<RL)	X			
QC Verification							
Verify Instrument Calibration & Analytical Process							
Initial Calibration Verification	X		Laboratory-determined	-	-	-	
Continuing Calibration Verification	X		Laboratory-determined	-	-	-	
Initial Calibration Blank	X		Laboratory-determined	-	-	-	
Continuing Calibration Blank	X		Laboratory-determined	-	-	-	
Serial Dilutions	X		Laboratory-determined	-	-	-	
Post-Digestion Spikes	X		Laboratory-determined	-	-	-	
Internal Standards	X		Laboratory-determined	-	-	-	
Laboratory Duplicate (RPD)	X		Laboratory-determined	-	-	-	
Method Blanks	X		Laboratory-determined	-	-	-	
Evaluate Completeness (# usable measurements/ # unusable measurements)							
Completeness	X		100%	X			

Other instances of nonconformance to QC control limits noted on case narrative:

None.

Comments:

The RPDs of arsenic and molybdenum were outside of control limits for the MW-19A and MWT-19A parent sample and field duplicate sample pair. Arsenic and molybdenum required qualification as estimated with high bias (J+) in parent sample MW-19A and as estimated with low bias (J-) in field duplicate sample MWT-19A.

Cadmium, cobalt, selenium, and thallium were detected in parent sample MW-19A but were not detected in field duplicate sample MWT-19A. Cadmium, cobalt, selenium, and thallium required qualification as estimated with high bias (J+) in parent sample MW-19A and as estimated but not detected (UJ) in field duplicate sample MWT-19A.

Data Verification & Validation Report

Lansing Board of Water & Light – Erickson Power Station

Sampling Event (dates and purpose): Background Sampling

Data Package Number: 240-232981-1, 240-232981-2

Lab Report Date: 9/24/2025, 10/10/2025

Data Validator: Andrew Bertapelle

Data Validation Completion Date: 11/4/2025

General Overall Assessment:
_____ Data are usable without qualification.
__X__ Data are usable with qualification (as noted below).
_____ Some or all data are unusable (as noted below).

Wells planned for sampling:

Well ID	Planned for Sampling	Well ID	Planned for Sampling
MW-1		MW-17A	X
MW-2		MW-17B	X
MW-3		MW-17C	X
MW-4		MW-17D	X
MW-5		MW-17E	X
MW-6		MW-18A	
MW-7		MW-18B	
MW-7B		MW-18C	
MW-7C		MW-18D	
MW-8		MW-19A	
MW-9		MW-19B	
MW-10		MW-19C	
MW-11		MW-19D	
MW-11B		MW-100A	
MW-12		MW-100B	
MW-12B		MW-100C	
MW-13		MW-100D	
MW-14			
MW-15			
MW-16A			
MW-16B			
MW-16C			
MW-16D			

Data Summary

Sample ID	Matrix	Lab ID	Date Collected	App III Metals	App IV Metals	Part 115 Metals	Anions	TDS TSS	Rad-226 Rad-228	Diss. Metals
MW-17A	GW	240-232981-1	9/11/2025	X	X	X	X	X	X	
MW-17B	GW	240-232981-2	9/11/2025	X	X	X	X	X	X	
MW-17C	GW	240-232981-3	9/11/2025	X	X	X	X	X	X	
MW-17D	GW	240-232981-4	9/11/2025	X	X	X	X	X	X	
MW-17E	GW	240-232981-5	9/11/2025	X	X	X	X	X	X	
MWT-17A	GW	240-232981-6	9/11/2025	X	X	X	X	X	X	
FIELD BLANK	GW	240-232981-7	9/11/2025	X	X	X	X	X	X	

Other analytes requested for analysis: Mg, HCO_3, CO_3, hardness

Any planned sampling or analysis NOT completed? If yes, explain:

Data Verification & Validation Checklist

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Field Data							
Sample Collection Field Forms	X		Purging performed as required in the Groundwater Monitoring Plan	X			
Field Calibration Records	X		Field instruments calibrated daily according to manufacturer specifications	X			
Chain of Custody	X		Accurately reflect samples, collection dates/times, analyses, bottles, etc.	X			
Field decontamination documentation	X		Record of decontamination for non-dedicated sampling equipment	X			
Drilling logs	X		N/A	-	-	-	
Well construction logs	X		N/A	-	-	-	
Well development field forms	X		N/A	-	-	-	
Analytical Data Package							
Cover Sheet	X		N/A	-	-	-	
Case Narrative	X		Summarizes sample receipt and any exceptions to QC acceptance criteria	X			
Internal Laboratory Chain of Custody forms	X		Analyses as requested; accurate transcription of field COC	X			
Sample Chronology and Consistency	X		Accurate representation of dates, times of receipt, preparation, and analysis	X			
Communication Records with Lab	X		N/A	-	-	-	
EDD Format Consistency	X		EDD format and content as requested	X			
Sample Identification, Results Nomenclature, and Data Qualifier Consistency	X		All included in final report	X			
Method Detection Limit Consistency	X		MDLs consistent between samples	X			MDLs vary for sulfate, TDS, & TSS
Instrument Calibration Records	X		Present and no nonconformance noted	X			
Laboratory Report Complete	X		Includes QC component	X			
Holding Times	X		Analyses performed within allowed holding time	X			

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Method	X		Method as requested	X			
Reporting Limits	X		RLs as requested	X			
			MDLs<RLs	X			Hardness MDLs = RLs
			MDLs<MCLs	X			
			MDLs<GPS	X			
QC Validation							
Evaluate Accuracy							
Matrix Spike (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Laboratory Control Sample (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Evaluate Precision							
Matrix Spike Duplicate (RPD)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Field Duplicate (RPD)	X		RPD ≤ 20%		X		See comments.
Evaluate Representativeness							
Equipment Blanks (if applicable)	X		Non-detect (<RL)	X			
QC Verification							
Verify Instrument Calibration & Analytical Process							
Initial Calibration Verification	X		Laboratory-determined	-	-	-	
Continuing Calibration Verification	X		Laboratory-determined	-	-	-	
Initial Calibration Blank	X		Laboratory-determined	-	-	-	
Continuing Calibration Blank	X		Laboratory-determined	-	-	-	
Serial Dilutions	X		Laboratory-determined	-	-	-	
Post-Digestion Spikes	X		Laboratory-determined	-	-	-	
Internal Standards	X		Laboratory-determined	-	-	-	
Laboratory Duplicate (RPD)	X		Laboratory-determined	-	-	-	
Method Blanks	X		Laboratory-determined	-	-	-	See comments.
Evaluate Completeness (# usable measurements/ # unusable measurements)							
Completeness	X		100%	X			

Other instances of nonconformance to QC control limits noted on case narrative:

None.

Comments:

Radium-228, radium-226/228, and zinc were detected in parent sample MW-17A but were not detected in field duplicate sample MWT-17A. Radium-228, radium-226/228, and zinc required qualification as estimated with high bias (J+) in parent sample MW-17A and as estimated but not detected (UJ) in field duplicate sample MWT-17A.

The RPDs of arsenic and TSS were outside of control limits for the MW-17A and MWT-17A parent sample and field duplicate pair. Arsenic and TSS required qualification as estimated with low bias (J-) in parent sample MW-17A and as estimated with high bias (J+) in field duplicate MWT-17A.

Cobalt was detected in method blank MB 240-6717111-A above the method detection limit but below the reporting limit. The lab qualified the cobalt detection in sample MW-17C as detected in both the sample and blank (B), accordingly. Bicarbonate alkalinity as CaCO3 was detected in method blank MB 240-6718814 above the method detection limit but below the reporting limit. A second method blank MB 240-67188133 was analyzed and bicarbonate alkalinity as CaCO3 was not detected above the method detection limit.

Data Verification & Validation Report

Lansing Board of Water & Light – Erickson Power Station

Sampling Event (dates and purpose): Background Sampling

Data Package Number: 240-237026-1, 240-237026-2

Lab Report Date: 11/14/2025, 12/8/2025

Data Validator: Andrew Bertapelle

Data Validation Completion Date: 12/16/2025

General Overall Assessment:
_____ Data are usable without qualification.
__X__ Data are usable with qualification (as noted below).
_____ Some or all data are unusable (as noted below).

Wells planned for sampling:

Well ID	Planned for Sampling	Well ID	Planned for Sampling
MW-1		MW-17A	
MW-2		MW-17B	
MW-3		MW-17C	
MW-4		MW-17D	
MW-5		MW-17E	
MW-6		MW-18A	
MW-7		MW-18B	
MW-7B		MW-18C	
MW-7C		MW-18D	
MW-7D	X	MW-19A	X
MW-8		MW-19B	X
MW-9		MW-19C	X
MW-10		MW-19D	X
MW-11		MW-100A	
MW-11B		MW-100B	
MW-12		MW-100C	
MW-12B		MW-100D	
MW-13			
MW-14			
MW-15			
MW-16A			
MW-16B			
MW-16C			
MW-16D			

Data Summary

Sample ID	Matrix	Lab ID	Date Collected	App III Metals	App IV Metals	Part 115 Metals	Anions	TDS TSS	Rad-226 Rad-228	Diss. Metals
MW-7D	GW	240-237026-1	11/4/2025	X	X	X	X	X	X	
MW-19A	GW	240-237026-2	11/4/2025	X	X	X	X	X	X	
MW-19B	GW	240-237026-3	11/4/2025	X	X	X	X	X	X	
MW-19C	GW	240-237026-4	11/4/2025	X	X	X	X	X	X	
MW-19D	GW	240-237026-5	11/4/2025	X	X	X	X	X	X	
MWT-19A	GW	240-237026-6	11/4/2025	X	X	X	X	X	X	
FIELD BLANK	GW	240-237026-7	11/4/2025	X	X	X	X	X	X	

Other analytes requested for analysis: Mg, HCO_3, CO_3, hardness

Any planned sampling or analysis NOT completed? If yes, explain:

Data Verification & Validation Checklist

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Field Data							
Sample Collection Field Forms	X		Purging performed as required in the Groundwater Monitoring Plan	X			
Field Calibration Records	X		Field instruments calibrated daily according to manufacturer specifications	X			
Chain of Custody	X		Accurately reflect samples, collection dates/times, analyses, bottles, etc.	X			
Field decontamination documentation	X		Record of decontamination for non-dedicated sampling equipment	X			
Drilling logs	X		N/A	-	-	-	
Well construction logs	X		N/A	-	-	-	
Well development field forms	X		N/A	-	-	-	
Analytical Data Package							
Cover Sheet	X		N/A	-	-	-	
Case Narrative	X		Summarizes sample receipt and any exceptions to QC acceptance criteria	X			
Internal Laboratory Chain of Custody forms	X		Analyses as requested; accurate transcription of field COC	X			
Sample Chronology and Consistency	X		Accurate representation of dates, times of receipt, preparation, and analysis	X			
Communication Records with Lab	X		N/A	-	-	-	
EDD Format Consistency	X		EDD format and content as requested	X			
Sample Identification, Results Nomenclature, and Data Qualifier Consistency	X		All included in final report	X			
Method Detection Limit Consistency	X		MDLs consistent between samples	X			MDLs vary for sulfate
Instrument Calibration Records	X		Present and no nonconformance noted	X			
Laboratory Report Complete	X		Includes QC component	X			
Holding Times	X		Analyses performed within allowed holding time	X			

Review Category	Verify Complete		Validation Criteria	Criteria Met?			Description of Nonconformance and Qualification (if applicable)
	Yes	No		Yes	No	N/A	
Method	X		Method as requested	X			
Reporting Limits	X		RLs as requested	X			
			MDLs<RLs	X			Hardness MDLs = RLs
			MDLs<MCLs	X			
			MDLs<GPS	X			
QC Validation							
Evaluate Accuracy							
Matrix Spike (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Laboratory Control Sample (Recovery)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Evaluate Precision							
Matrix Spike Duplicate (RPD)	X		See "Minimum QC Procedures for Project Parameters" table	X			
Field Duplicate (RPD)	X		RPD ≤ 20%		X		See comments.
Evaluate Representativeness							
Equipment Blanks (if applicable)	X		Non-detect (<RL)	X			
QC Verification							
Verify Instrument Calibration & Analytical Process							
Initial Calibration Verification	X		Laboratory-determined	-	-	-	
Continuing Calibration Verification	X		Laboratory-determined	-	-	-	
Initial Calibration Blank	X		Laboratory-determined	-	-	-	
Continuing Calibration Blank	X		Laboratory-determined	-	-	-	
Serial Dilutions	X		Laboratory-determined	-	-	-	
Post-Digestion Spikes	X		Laboratory-determined	-	-	-	
Internal Standards	X		Laboratory-determined	-	-	-	
Laboratory Duplicate (RPD)	X		Laboratory-determined	-	-	-	
Method Blanks	X		Laboratory-determined	-	-	-	
Evaluate Completeness (# usable measurements/ # unusable measurements)							
Completeness	X		100%	X			

Other instances of nonconformance to QC control limits noted on case narrative:

None.

Comments:

Cadmium and radium-226 were detected in parent sample MW-19A but were not detected in field duplicate MWT-19A. Cadmium and radium-226 required qualification as estimated with high bias (J+) in parent sample MW-19A and as estimated but not detected (UJ) in field duplicate MWT-19A.

Radium-226/228 was not detected in parent sample MW-19A but was detected in field duplicate MWT-19A. Radium-226/228 required qualification as estimated but not detected (UJ) in parent sample MW-19A and as estimated with high bias (J+) in field duplicate MWT-19A.

The RPD of molybdenum between parent sample MW-19A and field duplicate MWT-19A was outside of control limits. Molybdenum required qualification as estimated with high bias (J+) in parent sample MW-19A and as estimated with low bias (J-) in field duplicate MWT-19A.

Appendix E

Statistical Output Reports

LBWL Glacial, State Program, Downgradient Wells
95% Lower Confidence Limits

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	LCL	Method
13_2_105	MW-2	Appendix III	Boron	mg/l	18	0	0%	2020-04-28 to 2025-08-06	4.2	Normal LCL
13_2_107	MW-2	Appendix III	Calcium	mg/l	18	0	0%	2020-04-28 to 2025-08-06	200	Nonparametric LCL around the Median
13_2_108	MW-2	Appendix III	Chloride	mg/l	18	0	0%	2020-04-28 to 2025-08-06	75	Normal LCL
13_2_112	MW-2	Appendix III	Fluoride	mg/l	19	17	89%	2020-04-28 to 2025-08-06	1.0	Nonparametric LCL around the Median
13_2_120	MW-2	Appendix III	pH, Field	su	19	0	0%	2020-04-28 to 2025-08-06	6.7	Normal LCL
13_2_124	MW-2	Appendix III	Sulfate	mg/l	18	0	0%	2020-04-28 to 2025-08-06	350	Normal LCL
13_2_126	MW-2	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	2020-04-28 to 2025-08-06	1100	Normal LCL
13_3_101	MW-2	Appendix IV	Antimony	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
13_3_102	MW-2	Appendix IV	Arsenic	mg/l	19	14	74%	2020-04-28 to 2025-08-06	0.0020	Nonparametric LCL around the Median
13_3_103	MW-2	Appendix IV	Barium	mg/l	19	0	0%	2020-04-28 to 2025-08-06	0.039	Normal LCL
13_3_104	MW-2	Appendix IV	Beryllium	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0010	Nonparametric LCL around the Median
13_3_106	MW-2	Appendix IV	Cadmium	mg/l	19	17	89%	2020-04-28 to 2025-08-06	0.00050	Nonparametric LCL around the Median
13_3_109	MW-2	Appendix IV	Chromium	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
13_3_110	MW-2	Appendix IV	Cobalt	mg/l	19	17	89%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
13_3_113	MW-2	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	2020-04-28 to 2025-08-06	1.0	Nonparametric LCL around the Median
13_3_115	MW-2	Appendix IV	Lead	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0030	Nonparametric LCL around the Median
13_3_116	MW-2	Appendix IV	Lithium	mg/l	19	0	0%	2020-04-28 to 2025-08-06	0.050	Normal LCL
13_3_117	MW-2	Appendix IV	Mercury	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.00020	Nonparametric LCL around the Median
13_3_118	MW-2	Appendix IV	Molybdenum	mg/l	19	0	0%	2020-04-28 to 2025-08-06	0.0099	Normal LCL
13_3_121	MW-2	Appendix IV	Radium-226+228	pci/l	19	2	11%	2020-04-28 to 2025-08-06	0.51	Normal MLE LCL
13_3_122	MW-2	Appendix IV	Selenium	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
13_3_125	MW-2	Appendix IV	Thallium	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0020	Nonparametric LCL around the Median
13_5_111	MW-2	Part 115	Copper	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
13_5_114	MW-2	Part 115	Iron	mg/l	19	0	0%	2020-04-28 to 2025-08-06	0.55	Adjusted Gamma LCL
13_5_119	MW-2	Part 115	Nickel	mg/l	19	0	0%	2020-04-28 to 2025-08-06	0.019	Normal LCL
13_5_123	MW-2	Part 115	Silver	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.00050	Nonparametric LCL around the Median
13_5_128	MW-2	Part 115	Vanadium	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
13_5_129	MW-2	Part 115	Zinc	mg/l	19	14	74%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
14_2_105	MW-3	Appendix III	Boron	mg/l	10	0	0%	2021-05-04 to 2025-08-06	5.6	Normal LCL
14_2_107	MW-3	Appendix III	Calcium	mg/l	10	0	0%	2021-05-04 to 2025-08-06	230	Normal LCL
14_2_108	MW-3	Appendix III	Chloride	mg/l	10	0	0%	2021-05-04 to 2025-08-06	93	Normal LCL
14_2_112	MW-3	Appendix III	Fluoride	mg/l	10	8	80%	2021-05-04 to 2025-08-06	0.19	Nonparametric LCL around the Median
14_2_120	MW-3	Appendix III	pH, Field	su	10	0	0%	2021-05-04 to 2025-08-06	7.2	Normal LCL
14_2_124	MW-3	Appendix III	Sulfate	mg/l	10	0	0%	2021-05-04 to 2025-08-06	680	Normal LCL
14_2_126	MW-3	Appendix III	Total Dissolved Solids	mg/l	10	0	0%	2021-05-04 to 2025-08-06	1200	Nonparametric LCL around the Median
14_3_101	MW-3	Appendix IV	Antimony	mg/l	10	10	100%	2021-05-04 to 2025-08-06	0.00057	Nonparametric LCL around the Median
14_3_102	MW-3	Appendix IV	Arsenic	mg/l	10	0	0%	2021-05-04 to 2025-08-06	0.0030	Nonparametric LCL around the Median
14_3_103	MW-3	Appendix IV	Barium	mg/l	10	0	0%	2021-05-04 to 2025-08-06	0.017	Normal LCL
14_3_104	MW-3	Appendix IV	Beryllium	mg/l	10	10	100%	2021-05-04 to 2025-08-06	0.00027	Nonparametric LCL around the Median
14_3_106	MW-3	Appendix IV	Cadmium	mg/l	10	10	100%	2021-05-04 to 2025-08-06	0.000077	Nonparametric LCL around the Median
14_3_109	MW-3	Appendix IV	Chromium	mg/l	10	10	100%	2021-05-04 to 2025-08-06	0.0012	Nonparametric LCL around the Median
14_3_110	MW-3	Appendix IV	Cobalt	mg/l	10	8	80%	2021-05-04 to 2025-08-06	0.00068	Nonparametric LCL around the Median
14_3_113	MW-3	Appendix IV	Fluoride (App IV)	mg/l	10	8	80%	2021-05-04 to 2025-08-06	0.19	Nonparametric LCL around the Median
14_3_115	MW-3	Appendix IV	Lead	mg/l	10	9	90%	2021-05-04 to 2025-08-06	0.00067	Nonparametric LCL around the Median
14_3_116	MW-3	Appendix IV	Lithium	mg/l	10	0	0%	2021-05-04 to 2025-08-06	0.078	Normal LCL
14_3_117	MW-3	Appendix IV	Mercury	mg/l	10	10	100%	2021-05-04 to 2025-08-06	0.00013	Nonparametric LCL around the Median
14_3_118	MW-3	Appendix IV	Molybdenum	mg/l	10	0	0%	2021-05-04 to 2025-08-06	0.16	Normal LCL
14_3_121	MW-3	Appendix IV	Radium-226+228	pci/l	10	2	20%	2021-05-04 to 2025-08-06	0.63	Normal MLE LCL
14_3_122	MW-3	Appendix IV	Selenium	mg/l	10	10	100%	2021-05-04 to 2025-08-06	0.00089	Nonparametric LCL around the Median
14_3_125	MW-3	Appendix IV	Thallium	mg/l	10	10	100%	2021-05-04 to 2025-08-06	0.00051	Nonparametric LCL around the Median
14_5_111	MW-3	Part 115	Copper	mg/l	10	9	90%	2021-05-04 to 2025-08-06	0.0029	Nonparametric LCL around the Median
14_5_114	MW-3	Part 115	Iron	mg/l	10	0	0%	2021-05-04 to 2025-08-06	1.7	Normal LCL
14_5_119	MW-3	Part 115	Nickel	mg/l	10	8	80%	2021-05-04 to 2025-08-06	0.0032	Nonparametric LCL around the Median
14_5_123	MW-3	Part 115	Silver	mg/l	10	10	100%	2021-05-04 to 2025-08-06	0.000053	Nonparametric LCL around the Median
14_5_128	MW-3	Part 115	Vanadium	mg/l	10	10	100%	2021-05-04 to 2025-08-06	0.00082	Nonparametric LCL around the Median
14_5_129	MW-3	Part 115	Zinc	mg/l	10	8	80%	2021-05-04 to 2025-08-06	0.0023	Nonparametric LCL around the Median
15_2_105	MW-5	Appendix III	Boron	mg/l	18	0	0%	2020-04-28 to 2025-08-06	3.4	Normal LCL
15_2_107	MW-5	Appendix III	Calcium	mg/l	18	0	0%	2020-04-28 to 2025-08-06	190	Normal LCL
15_2_108	MW-5	Appendix III	Chloride	mg/l	18	0	0%	2020-04-28 to 2025-08-06	51	Nonparametric LCL around the Median
15_2_112	MW-5	Appendix III	Fluoride	mg/l	19	17	89%	2020-04-28 to 2025-08-06	1.0	Nonparametric LCL around the Median
15_2_120	MW-5	Appendix III	pH, Field	su	19	0	0%	2020-04-28 to 2025-08-06	7.2	Nonparametric LCL around the Median
15_2_124	MW-5	Appendix III	Sulfate	mg/l	18	0	0%	2020-04-28 to 2025-08-06	470	Normal LCL
15_2_126	MW-5	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	2020-04-28 to 2025-08-06	1000	Normal LCL
15_3_101	MW-5	Appendix IV	Antimony	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
15_3_102	MW-5	Appendix IV	Arsenic	mg/l	19	12	63%	2020-04-28 to 2025-08-06	0.0020	Nonparametric LCL around the Median
15_3_103	MW-5	Appendix IV	Barium	mg/l	19	0	0%	2020-04-28 to 2025-08-06	0.042	Normal LCL
15_3_104	MW-5	Appendix IV	Beryllium	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0010	Nonparametric LCL around the Median
15_3_106	MW-5	Appendix IV	Cadmium	mg/l	19	18	95%	2020-04-28 to 2025-08-06	0.00050	Nonparametric LCL around the Median
15_3_109	MW-5	Appendix IV	Chromium	mg/l	19	16	84%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
15_3_110	MW-5	Appendix IV	Cobalt	mg/l	19	16	84%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
15_3_113	MW-5	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	2020-04-28 to 2025-08-06	1.0	Nonparametric LCL around the Median
15_3_115	MW-5	Appendix IV	Lead	mg/l	19	14	74%	2020-04-28 to 2025-08-06	0.0030	Nonparametric LCL around the Median
15_3_116	MW-5	Appendix IV	Lithium	mg/l	19	0	0%	2020-04-28 to 2025-08-06	0.062	Normal LCL
15_3_117	MW-5	Appendix IV	Mercury	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.00020	Nonparametric LCL around the Median
15_3_118	MW-5	Appendix IV	Molybdenum	mg/l	19	0	0%	2020-04-28 to 2025-08-06	0.049	Normal LCL
15_3_121	MW-5	Appendix IV	Radium-226+228	pci/l	19	2	11%	2020-04-28 to 2025-08-06	1.1	Normal MLE LCL
15_3_122	MW-5	Appendix IV	Selenium	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
15_3_125	MW-5	Appendix IV	Thallium	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0020	Nonparametric LCL around the Median
15_5_111	MW-5	Part 115	Copper	mg/l	19	12	63%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
15_5_114	MW-5	Part 115	Iron	mg/l	19	1	5%	2020-04-28 to 2025-08-06	0.75	Gamma MLE Normal Approx. LCL
15_5_119	MW-5	Part 115	Nickel	mg/l	19	0	0%	2020-04-28 to 2025-08-06	0.0084	Normal LCL
15_5_123	MW-5	Part 115	Silver	mg/l	19	18	95%	2020-04-28 to 2025-08-06	0.00050	Nonparametric LCL around the Median

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	LCL	Method
15_5_128	MW-5	Part 115	Vanadium	mg/l	19	15	79%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
15_5_129	MW-5	Part 115	Zinc	mg/l	19	3	16%	2020-04-28 to 2025-08-06	0.0098	Gamma MLE Normal Approx. LCL
16_2_105	MW-6	Appendix III	Boron	mg/l	18	0	0%	2020-04-28 to 2025-08-06	0.71	Normal LCL
16_2_107	MW-6	Appendix III	Calcium	mg/l	18	0	0%	2020-04-28 to 2025-08-06	160	Normal LCL
16_2_108	MW-6	Appendix III	Chloride	mg/l	18	0	0%	2020-04-28 to 2025-08-06	32	Normal LCL
16_2_112	MW-6	Appendix III	Fluoride	mg/l	19	17	89%	2020-04-28 to 2025-08-06	1.0	Nonparametric LCL around the Median
16_2_120	MW-6	Appendix III	pH, Field	su	19	0	0%	2020-04-28 to 2025-08-06	6.7	Normal LCL
16_2_124	MW-6	Appendix III	Sulfate	mg/l	18	0	0%	2020-04-28 to 2025-08-06	160	Normal LCL
16_2_126	MW-6	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	2020-04-28 to 2025-08-06	720	Normal LCL
16_3_101	MW-6	Appendix IV	Antimony	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
16_3_102	MW-6	Appendix IV	Arsenic	mg/l	19	17	89%	2020-04-28 to 2025-08-06	0.0020	Nonparametric LCL around the Median
16_3_103	MW-6	Appendix IV	Barium	mg/l	19	0	0%	2020-04-28 to 2025-08-06	0.046	Normal LCL
16_3_104	MW-6	Appendix IV	Beryllium	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0010	Nonparametric LCL around the Median
16_3_106	MW-6	Appendix IV	Cadmium	mg/l	19	18	95%	2020-04-28 to 2025-08-06	0.00050	Nonparametric LCL around the Median
16_3_109	MW-6	Appendix IV	Chromium	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
16_3_110	MW-6	Appendix IV	Cobalt	mg/l	19	17	89%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
16_3_113	MW-6	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	2020-04-28 to 2025-08-06	1.0	Nonparametric LCL around the Median
16_3_115	MW-6	Appendix IV	Lead	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0030	Nonparametric LCL around the Median
16_3_116	MW-6	Appendix IV	Lithium	mg/l	19	0	0%	2020-04-28 to 2025-08-06	0.044	Normal LCL
16_3_117	MW-6	Appendix IV	Mercury	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.00020	Nonparametric LCL around the Median
16_3_118	MW-6	Appendix IV	Molybdenum	mg/l	19	0	0%	2020-04-28 to 2025-08-06	0.022	Normal LCL
16_3_121	MW-6	Appendix IV	Radium-226+228	pci/l	19	2	11%	2020-04-28 to 2025-08-06	0.65	Normal MLE LCL
16_3_122	MW-6	Appendix IV	Selenium	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
16_3_125	MW-6	Appendix IV	Thallium	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0020	Nonparametric LCL around the Median
16_5_111	MW-6	Part 115	Copper	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
16_5_114	MW-6	Part 115	Iron	mg/l	19	9	47%	2020-04-28 to 2025-08-06	0.02*	Nonparametric LCL around the Median
16_5_119	MW-6	Part 115	Nickel	mg/l	19	5	26%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
16_5_123	MW-6	Part 115	Silver	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.00050	Nonparametric LCL around the Median
16_5_128	MW-6	Part 115	Vanadium	mg/l	19	19	100%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
16_5_129	MW-6	Part 115	Zinc	mg/l	19	16	84%	2020-04-28 to 2025-08-06	0.0050	Nonparametric LCL around the Median
17_2_105	MW-7	Appendix III	Boron	mg/l	15	0	0%	2021-06-15 to 2025-08-08	1.7	Normal LCL
17_2_107	MW-7	Appendix III	Calcium	mg/l	15	0	0%	2021-06-15 to 2025-08-08	110	Nonparametric LCL around the Median
17_2_108	MW-7	Appendix III	Chloride	mg/l	15	0	0%	2021-06-15 to 2025-08-08	76	Normal LCL
17_2_112	MW-7	Appendix III	Fluoride	mg/l	15	11	73%	2021-06-15 to 2025-08-08	0.42	Nonparametric LCL around the Median
17_2_120	MW-7	Appendix III	pH, Field	su	15	0	0%	2021-06-15 to 2025-08-08	7.4	Nonparametric LCL around the Median
17_2_124	MW-7	Appendix III	Sulfate	mg/l	15	0	0%	2021-06-15 to 2025-08-08	190	Normal LCL
17_2_126	MW-7	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	2021-06-15 to 2025-08-08	590	Nonparametric LCL around the Median
17_3_101	MW-7	Appendix IV	Antimony	mg/l	15	15	100%	2021-06-15 to 2025-08-08	0.0050	Nonparametric LCL around the Median
17_3_102	MW-7	Appendix IV	Arsenic	mg/l	15	0	0%	2021-06-15 to 2025-08-08	0.0050	Nonparametric LCL around the Median
17_3_103	MW-7	Appendix IV	Barium	mg/l	15	0	0%	2021-06-15 to 2025-08-08	0.050	Normal LCL
17_3_104	MW-7	Appendix IV	Beryllium	mg/l	15	15	100%	2021-06-15 to 2025-08-08	0.0010	Nonparametric LCL around the Median
17_3_106	MW-7	Appendix IV	Cadmium	mg/l	15	15	100%	2021-06-15 to 2025-08-08	0.00050	Nonparametric LCL around the Median
17_3_109	MW-7	Appendix IV	Chromium	mg/l	15	14	93%	2021-06-15 to 2025-08-08	0.0050	Nonparametric LCL around the Median
17_3_110	MW-7	Appendix IV	Cobalt	mg/l	15	13	87%	2021-06-15 to 2025-08-08	0.0050	Nonparametric LCL around the Median
17_3_113	MW-7	Appendix IV	Fluoride (App IV)	mg/l	15	11	73%	2021-06-15 to 2025-08-08	0.42	Nonparametric LCL around the Median
17_3_115	MW-7	Appendix IV	Lead	mg/l	15	15	100%	2021-06-15 to 2025-08-08	0.0030	Nonparametric LCL around the Median
17_3_116	MW-7	Appendix IV	Lithium	mg/l	15	0	0%	2021-06-15 to 2025-08-08	0.082	Normal LCL
17_3_117	MW-7	Appendix IV	Mercury	mg/l	15	14	93%	2021-06-15 to 2025-08-08	0.00020	Nonparametric LCL around the Median
17_3_118	MW-7	Appendix IV	Molybdenum	mg/l	15	0	0%	2021-06-15 to 2025-08-08	0.17	Nonparametric LCL around the Median
17_3_121	MW-7	Appendix IV	Radium-226+228	pci/l	15	0	0%	2021-06-15 to 2025-08-08	1.4	Normal LCL
17_3_122	MW-7	Appendix IV	Selenium	mg/l	15	15	100%	2021-06-15 to 2025-08-08	0.0050	Nonparametric LCL around the Median
17_3_125	MW-7	Appendix IV	Thallium	mg/l	15	15	100%	2021-06-15 to 2025-08-08	0.0020	Nonparametric LCL around the Median
17_5_111	MW-7	Part 115	Copper	mg/l	15	15	100%	2021-06-15 to 2025-08-08	0.0050	Nonparametric LCL around the Median
17_5_114	MW-7	Part 115	Iron	mg/l	15	0	0%	2021-06-15 to 2025-08-08	1.2	Adjusted Gamma LCL
17_5_119	MW-7	Part 115	Nickel	mg/l	15	15	100%	2021-06-15 to 2025-08-08	0.0050	Nonparametric LCL around the Median
17_5_123	MW-7	Part 115	Silver	mg/l	15	15	100%	2021-06-15 to 2025-08-08	0.00050	Nonparametric LCL around the Median
17_5_128	MW-7	Part 115	Vanadium	mg/l	15	14	93%	2021-06-15 to 2025-08-08	0.0050	Nonparametric LCL around the Median
17_5_129	MW-7	Part 115	Zinc	mg/l	15	11	73%	2021-06-15 to 2025-08-08	0.0050	Nonparametric LCL around the Median
18_2_105	MW-7C	Appendix III	Boron	mg/l	14	0	0%	2022-03-10 to 2025-08-07	6.4	Normal LCL
18_2_107	MW-7C	Appendix III	Calcium	mg/l	14	0	0%	2022-03-10 to 2025-08-07	230	Normal LCL
18_2_108	MW-7C	Appendix III	Chloride	mg/l	14	0	0%	2022-03-10 to 2025-08-07	90	Normal LCL
18_2_112	MW-7C	Appendix III	Fluoride	mg/l	14	12	86%	2022-03-10 to 2025-08-07	1.0	Nonparametric LCL around the Median
18_2_120	MW-7C	Appendix III	pH, Field	su	14	0	0%	2022-03-10 to 2025-08-07	7.3	Normal LCL
18_2_124	MW-7C	Appendix III	Sulfate	mg/l	14	0	0%	2022-03-10 to 2025-08-07	660	Normal LCL
18_2_126	MW-7C	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	2022-03-10 to 2025-08-07	1300	Nonparametric LCL around the Median
18_3_101	MW-7C	Appendix IV	Antimony	mg/l	14	14	100%	2022-03-10 to 2025-08-07	0.0050	Nonparametric LCL around the Median
18_3_102	MW-7C	Appendix IV	Arsenic	mg/l	14	0	0%	2022-03-10 to 2025-08-07	0.0059	Adjusted Gamma LCL
18_3_103	MW-7C	Appendix IV	Barium	mg/l	14	0	0%	2022-03-10 to 2025-08-07	0.041	Normal LCL
18_3_104	MW-7C	Appendix IV	Beryllium	mg/l	14	14	100%	2022-03-10 to 2025-08-07	0.0010	Nonparametric LCL around the Median
18_3_106	MW-7C	Appendix IV	Cadmium	mg/l	14	10	71%	2022-03-10 to 2025-08-07	0.00050	Nonparametric LCL around the Median
18_3_109	MW-7C	Appendix IV	Chromium	mg/l	14	14	100%	2022-03-10 to 2025-08-07	0.0050	Nonparametric LCL around the Median
18_3_110	MW-7C	Appendix IV	Cobalt	mg/l	14	13	93%	2022-03-10 to 2025-08-07	0.0050	Nonparametric LCL around the Median
18_3_113	MW-7C	Appendix IV	Fluoride (App IV)	mg/l	14	12	86%	2022-03-10 to 2025-08-07	1.0	Nonparametric LCL around the Median
18_3_115	MW-7C	Appendix IV	Lead	mg/l	14	14	100%	2022-03-10 to 2025-08-07	0.0030	Nonparametric LCL around the Median
18_3_116	MW-7C	Appendix IV	Lithium	mg/l	14	0	0%	2022-03-10 to 2025-08-07	0.12	Normal LCL
18_3_117	MW-7C	Appendix IV	Mercury	mg/l	14	14	100%	2022-03-10 to 2025-08-07	0.00020	Nonparametric LCL around the Median
18_3_118	MW-7C	Appendix IV	Molybdenum	mg/l	14	0	0%	2022-03-10 to 2025-08-07	0.38	Normal LCL
18_3_121	MW-7C	Appendix IV	Radium-226+228	pci/l	14	0	0%	2022-03-10 to 2025-08-07	1.5	Normal LCL
18_3_122	MW-7C	Appendix IV	Selenium	mg/l	14	14	100%	2022-03-10 to 2025-08-07	0.0050	Nonparametric LCL around the Median
18_3_125	MW-7C	Appendix IV	Thallium	mg/l	14	14	100%	2022-03-10 to 2025-08-07	0.0020	Nonparametric LCL around the Median
18_5_111	MW-7C	Part 115	Copper	mg/l	14	14	100%	2022-03-10 to 2025-08-07	0.0050	Nonparametric LCL around the Median
18_5_114	MW-7C	Part 115	Iron	mg/l	14	0	0%	2022-03-10 to 2025-08-07	3.8	Normal LCL
18_5_119	MW-7C	Part 115	Nickel	mg/l	14	0	0%	2022-03-10 to 2025-08-07	0.0070	Adjusted Gamma LCL
18_5_123	MW-7C	Part 115	Silver	mg/l	14	14	100%	2022-03-10 to 2025-08-07	0.00050	Nonparametric LCL around the Median

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	LCL	Method
18_5_128	MW-7C	Part 115	Vanadium	mg/l	14	14	100%	2022-03-10 to 2025-08-07	0.0050	Nonparametric LCL around the Median
18_5_129	MW-7C	Part 115	Zinc	mg/l	14	11	79%	2022-03-10 to 2025-08-07	0.0050	Nonparametric LCL around the Median
19_2_105	MW-8	Appendix III	Boron	mg/l	15	1	7%	2021-06-15 to 2025-08-07	0.066	Normal MLE LCL
19_2_107	MW-8	Appendix III	Calcium	mg/l	15	0	0%	2021-06-15 to 2025-08-07	91	Normal LCL
19_2_108	MW-8	Appendix III	Chloride	mg/l	15	2	13%	2021-06-15 to 2025-08-07	10	Normal MLE LCL
19_2_112	MW-8	Appendix III	Fluoride	mg/l	15	12	80%	2021-06-15 to 2025-08-07	1.0	Nonparametric LCL around the Median
19_2_120	MW-8	Appendix III	pH, Field	su	15	0	0%	2021-06-15 to 2025-08-07	7.0	Nonparametric LCL around the Median
19_2_124	MW-8	Appendix III	Sulfate	mg/l	15	0	0%	2021-06-15 to 2025-08-07	19	Normal LCL
19_2_126	MW-8	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	2021-06-15 to 2025-08-07	370	Normal LCL
19_3_101	MW-8	Appendix IV	Antimony	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
19_3_102	MW-8	Appendix IV	Arsenic	mg/l	15	13	87%	2021-06-15 to 2025-08-07	0.0020	Nonparametric LCL around the Median
19_3_103	MW-8	Appendix IV	Barium	mg/l	15	0	0%	2021-06-15 to 2025-08-07	0.021	Normal LCL
19_3_104	MW-8	Appendix IV	Beryllium	mg/l	15	14	93%	2021-06-15 to 2025-08-07	0.0010	Nonparametric LCL around the Median
19_3_106	MW-8	Appendix IV	Cadmium	mg/l	15	14	93%	2021-06-15 to 2025-08-07	0.00050	Nonparametric LCL around the Median
19_3_109	MW-8	Appendix IV	Chromium	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
19_3_110	MW-8	Appendix IV	Cobalt	mg/l	15	14	93%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
19_3_113	MW-8	Appendix IV	Fluoride (App IV)	mg/l	15	12	80%	2021-06-15 to 2025-08-07	1.0	Nonparametric LCL around the Median
19_3_115	MW-8	Appendix IV	Lead	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0030	Nonparametric LCL around the Median
19_3_116	MW-8	Appendix IV	Lithium	mg/l	15	6	40%	2021-06-15 to 2025-08-07	0.0040	Normal MLE LCL
19_3_117	MW-8	Appendix IV	Mercury	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.00020	Nonparametric LCL around the Median
19_3_118	MW-8	Appendix IV	Molybdenum	mg/l	15	11	73%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
19_3_121	MW-8	Appendix IV	Radium-226+228	pci/l	15	0	0%	2021-06-15 to 2025-08-07	1.3	Adjusted Gamma LCL
19_3_122	MW-8	Appendix IV	Selenium	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
19_3_125	MW-8	Appendix IV	Thallium	mg/l	15	14	93%	2021-06-15 to 2025-08-07	0.0020	Nonparametric LCL around the Median
19_5_111	MW-8	Part 115	Copper	mg/l	15	14	93%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
19_5_114	MW-8	Part 115	Iron	mg/l	15	13	87%	2021-06-15 to 2025-08-07	0.020	Nonparametric LCL around the Median
19_5_119	MW-8	Part 115	Nickel	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
19_5_123	MW-8	Part 115	Silver	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.00050	Nonparametric LCL around the Median
19_5_128	MW-8	Part 115	Vanadium	mg/l	15	14	93%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
19_5_129	MW-8	Part 115	Zinc	mg/l	15	13	87%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
20_2_105	MW-9	Appendix III	Boron	mg/l	15	14	93%	2021-06-15 to 2025-08-07	0.040	Nonparametric LCL around the Median
20_2_107	MW-9	Appendix III	Calcium	mg/l	15	0	0%	2021-06-15 to 2025-08-07	73	Normal LCL
20_2_108	MW-9	Appendix III	Chloride	mg/l	15	10	67%	2021-06-15 to 2025-08-07	5.0	Nonparametric LCL around the Median
20_2_112	MW-9	Appendix III	Fluoride	mg/l	15	14	93%	2021-06-15 to 2025-08-07	1.0	Nonparametric LCL around the Median
20_2_120	MW-9	Appendix III	pH, Field	su	15	0	0%	2021-06-15 to 2025-08-07	7.2	Normal LCL
20_2_124	MW-9	Appendix III	Sulfate	mg/l	15	8	53%	2021-06-15 to 2025-08-07	5.0	Nonparametric LCL around the Median
20_2_126	MW-9	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	2021-06-15 to 2025-08-07	250	Adjusted Gamma LCL
20_3_101	MW-9	Appendix IV	Antimony	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
20_3_102	MW-9	Appendix IV	Arsenic	mg/l	15	13	87%	2021-06-15 to 2025-08-07	0.0020	Nonparametric LCL around the Median
20_3_103	MW-9	Appendix IV	Barium	mg/l	15	0	0%	2021-06-15 to 2025-08-07	0.014	Normal LCL
20_3_104	MW-9	Appendix IV	Beryllium	mg/l	15	14	93%	2021-06-15 to 2025-08-07	0.0010	Nonparametric LCL around the Median
20_3_106	MW-9	Appendix IV	Cadmium	mg/l	15	14	93%	2021-06-15 to 2025-08-07	0.00050	Nonparametric LCL around the Median
20_3_109	MW-9	Appendix IV	Chromium	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
20_3_110	MW-9	Appendix IV	Cobalt	mg/l	15	14	93%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
20_3_113	MW-9	Appendix IV	Fluoride (App IV)	mg/l	15	14	93%	2021-06-15 to 2025-08-07	1.0	Nonparametric LCL around the Median
20_3_115	MW-9	Appendix IV	Lead	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0030	Nonparametric LCL around the Median
20_3_116	MW-9	Appendix IV	Lithium	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
20_3_117	MW-9	Appendix IV	Mercury	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.00020	Nonparametric LCL around the Median
20_3_118	MW-9	Appendix IV	Molybdenum	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
20_3_121	MW-9	Appendix IV	Radium-226+228	pci/l	15	0	0%	2021-06-15 to 2025-08-07	0.71	Normal LCL
20_3_122	MW-9	Appendix IV	Selenium	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
20_3_125	MW-9	Appendix IV	Thallium	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0020	Nonparametric LCL around the Median
20_5_111	MW-9	Part 115	Copper	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
20_5_114	MW-9	Part 115	Iron	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.020	Nonparametric LCL around the Median
20_5_119	MW-9	Part 115	Nickel	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
20_5_123	MW-9	Part 115	Silver	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.00050	Nonparametric LCL around the Median
20_5_128	MW-9	Part 115	Vanadium	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
20_5_129	MW-9	Part 115	Zinc	mg/l	15	13	87%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
21_2_105	MW-10	Appendix III	Boron	mg/l	15	1	7%	2021-06-15 to 2025-08-07	0.049	Normal MLE LCL
21_2_107	MW-10	Appendix III	Calcium	mg/l	15	0	0%	2021-06-15 to 2025-08-07	120	Normal LCL
21_2_108	MW-10	Appendix III	Chloride	mg/l	15	9	60%	2021-06-15 to 2025-08-07	2.2	Nonparametric LCL around the Median
21_2_112	MW-10	Appendix III	Fluoride	mg/l	15	12	80%	2021-06-15 to 2025-08-07	1.0	Nonparametric LCL around the Median
21_2_120	MW-10	Appendix III	pH, Field	su	15	0	0%	2021-06-15 to 2025-08-07	6.7	Normal LCL
21_2_124	MW-10	Appendix III	Sulfate	mg/l	15	0	0%	2021-06-15 to 2025-08-07	12	Normal LCL
21_2_126	MW-10	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	2021-06-15 to 2025-08-07	400	Normal LCL
21_3_101	MW-10	Appendix IV	Antimony	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
21_3_102	MW-10	Appendix IV	Arsenic	mg/l	15	13	87%	2021-06-15 to 2025-08-07	0.0020	Nonparametric LCL around the Median
21_3_103	MW-10	Appendix IV	Barium	mg/l	15	0	0%	2021-06-15 to 2025-08-07	0.037	Normal LCL
21_3_104	MW-10	Appendix IV	Beryllium	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0010	Nonparametric LCL around the Median
21_3_106	MW-10	Appendix IV	Cadmium	mg/l	15	14	93%	2021-06-15 to 2025-08-07	0.00050	Nonparametric LCL around the Median
21_3_109	MW-10	Appendix IV	Chromium	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
21_3_110	MW-10	Appendix IV	Cobalt	mg/l	15	14	93%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
21_3_113	MW-10	Appendix IV	Fluoride (App IV)	mg/l	15	12	80%	2021-06-15 to 2025-08-07	1.0	Nonparametric LCL around the Median
21_3_115	MW-10	Appendix IV	Lead	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0030	Nonparametric LCL around the Median
21_3_116	MW-10	Appendix IV	Lithium	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
21_3_117	MW-10	Appendix IV	Mercury	mg/l	15	14	93%	2021-06-15 to 2025-08-07	0.00020	Nonparametric LCL around the Median
21_3_118	MW-10	Appendix IV	Molybdenum	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
21_3_121	MW-10	Appendix IV	Radium-226+228	pci/l	15	0	0%	2021-06-15 to 2025-08-07	0.89	Lognormal H-LCL
21_3_122	MW-10	Appendix IV	Selenium	mg/l	15	13	87%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
21_3_125	MW-10	Appendix IV	Thallium	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0020	Nonparametric LCL around the Median
21_5_111	MW-10	Part 115	Copper	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
21_5_114	MW-10	Part 115	Iron	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.020	Nonparametric LCL around the Median
21_5_119	MW-10	Part 115	Nickel	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
21_5_123	MW-10	Part 115	Silver	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.00050	Nonparametric LCL around the Median

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	LCL	Method
21_5_128	MW-10	Part 115	Vanadium	mg/l	15	15	100%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
21_5_129	MW-10	Part 115	Zinc	mg/l	15	12	80%	2021-06-15 to 2025-08-07	0.0050	Nonparametric LCL around the Median
22_2_105	MW-13	Appendix III	Boron	mg/l	14	0	0%	2022-02-23 to 2025-08-08	0.16	Normal LCL
22_2_107	MW-13	Appendix III	Calcium	mg/l	14	0	0%	2022-02-23 to 2025-08-08	110	Normal LCL
22_2_108	MW-13	Appendix III	Chloride	mg/l	14	2	14%	2022-02-23 to 2025-08-08	12	Normal MLE LCL
22_2_112	MW-13	Appendix III	Fluoride	mg/l	14	12	86%	2022-02-23 to 2025-08-08	1.0	Nonparametric LCL around the Median
22_2_120	MW-13	Appendix III	pH, Field	su	14	0	0%	2022-02-23 to 2025-08-08	6.8	Normal LCL
22_2_124	MW-13	Appendix III	Sulfate	mg/l	14	0	0%	2022-02-23 to 2025-08-08	48	Adjusted Gamma LCL
22_2_126	MW-13	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	2022-02-23 to 2025-08-08	420	Normal LCL
22_3_101	MW-13	Appendix IV	Antimony	mg/l	14	14	100%	2022-02-23 to 2025-08-08	0.0050	Nonparametric LCL around the Median
22_3_102	MW-13	Appendix IV	Arsenic	mg/l	14	9	64%	2022-02-23 to 2025-08-08	0.0020	Nonparametric LCL around the Median
22_3_103	MW-13	Appendix IV	Barium	mg/l	14	0	0%	2022-02-23 to 2025-08-08	0.028	Adjusted Gamma LCL
22_3_104	MW-13	Appendix IV	Beryllium	mg/l	14	14	100%	2022-02-23 to 2025-08-08	0.0010	Nonparametric LCL around the Median
22_3_106	MW-13	Appendix IV	Cadmium	mg/l	14	14	100%	2022-02-23 to 2025-08-08	0.00050	Nonparametric LCL around the Median
22_3_109	MW-13	Appendix IV	Chromium	mg/l	14	14	100%	2022-02-23 to 2025-08-08	0.0050	Nonparametric LCL around the Median
22_3_110	MW-13	Appendix IV	Cobalt	mg/l	14	12	86%	2022-02-23 to 2025-08-08	0.0050	Nonparametric LCL around the Median
22_3_113	MW-13	Appendix IV	Fluoride (App IV)	mg/l	14	12	86%	2022-02-23 to 2025-08-08	1.0	Nonparametric LCL around the Median
22_3_115	MW-13	Appendix IV	Lead	mg/l	14	14	100%	2022-02-23 to 2025-08-08	0.0030	Nonparametric LCL around the Median
22_3_116	MW-13	Appendix IV	Lithium	mg/l	14	14	100%	2022-02-23 to 2025-08-08	0.0050	Nonparametric LCL around the Median
22_3_117	MW-13	Appendix IV	Mercury	mg/l	14	14	100%	2022-02-23 to 2025-08-08	0.00020	Nonparametric LCL around the Median
22_3_118	MW-13	Appendix IV	Molybdenum	mg/l	14	14	100%	2022-02-23 to 2025-08-08	0.0050	Nonparametric LCL around the Median
22_3_121	MW-13	Appendix IV	Radium-226+228	pci/l	14	1	7%	2022-02-23 to 2025-08-08	0.57	Gamma MLE Normal Approx. LCL
22_3_122	MW-13	Appendix IV	Selenium	mg/l	14	13	93%	2022-02-23 to 2025-08-08	0.0050	Nonparametric LCL around the Median
22_3_125	MW-13	Appendix IV	Thallium	mg/l	14	14	100%	2022-02-23 to 2025-08-08	0.0020	Nonparametric LCL around the Median
22_5_111	MW-13	Part 115	Copper	mg/l	14	14	100%	2022-02-23 to 2025-08-08	0.0050	Nonparametric LCL around the Median
22_5_114	MW-13	Part 115	Iron	mg/l	14	1	7%	2022-02-23 to 2025-08-08	0.030	Nonparametric LCL around the Median
22_5_119	MW-13	Part 115	Nickel	mg/l	14	14	100%	2022-02-23 to 2025-08-08	0.0050	Nonparametric LCL around the Median
22_5_123	MW-13	Part 115	Silver	mg/l	14	14	100%	2022-02-23 to 2025-08-08	0.00050	Nonparametric LCL around the Median
22_5_128	MW-13	Part 115	Vanadium	mg/l	14	13	93%	2022-02-23 to 2025-08-08	0.0050	Nonparametric LCL around the Median
22_5_129	MW-13	Part 115	Zinc	mg/l	14	12	86%	2022-02-23 to 2025-08-08	0.0050	Nonparametric LCL around the Median
23_2_105	MW-14	Appendix III	Boron	mg/l	12	0	0%	2023-01-12 to 2025-08-06	2.0	Normal LCL
23_2_107	MW-14	Appendix III	Calcium	mg/l	12	0	0%	2023-01-12 to 2025-08-06	150	Normal LCL
23_2_108	MW-14	Appendix III	Chloride	mg/l	12	0	0%	2023-01-12 to 2025-08-06	110	Normal LCL
23_2_112	MW-14	Appendix III	Fluoride	mg/l	12	10	83%	2023-01-12 to 2025-08-06	1.0	Nonparametric LCL around the Median
23_2_120	MW-14	Appendix III	pH, Field	su	12	0	0%	2023-01-12 to 2025-08-06	7.0	Normal LCL
23_2_124	MW-14	Appendix III	Sulfate	mg/l	12	0	0%	2023-01-12 to 2025-08-06	6.7	Nonparametric LCL around the Median
23_2_126	MW-14	Appendix III	Total Dissolved Solids	mg/l	12	1	8%	2023-01-12 to 2025-08-06	730*	Nonparametric LCL around the Median
23_3_101	MW-14	Appendix IV	Antimony	mg/l	12	12	100%	2023-01-12 to 2025-08-06	0.0050	Nonparametric LCL around the Median
23_3_102	MW-14	Appendix IV	Arsenic	mg/l	12	0	0%	2023-01-12 to 2025-08-06	0.0056	Normal LCL
23_3_103	MW-14	Appendix IV	Barium	mg/l	12	0	0%	2023-01-12 to 2025-08-06	0.12	Nonparametric LCL around the Median
23_3_104	MW-14	Appendix IV	Beryllium	mg/l	12	12	100%	2023-01-12 to 2025-08-06	0.0010	Nonparametric LCL around the Median
23_3_106	MW-14	Appendix IV	Cadmium	mg/l	12	12	100%	2023-01-12 to 2025-08-06	0.00050	Nonparametric LCL around the Median
23_3_109	MW-14	Appendix IV	Chromium	mg/l	12	12	100%	2023-01-12 to 2025-08-06	0.0050	Nonparametric LCL around the Median
23_3_110	MW-14	Appendix IV	Cobalt	mg/l	12	10	83%	2023-01-12 to 2025-08-06	0.0050	Nonparametric LCL around the Median
23_3_113	MW-14	Appendix IV	Fluoride (App IV)	mg/l	12	10	83%	2023-01-12 to 2025-08-06	1.0	Nonparametric LCL around the Median
23_3_115	MW-14	Appendix IV	Lead	mg/l	12	12	100%	2023-01-12 to 2025-08-06	0.0030	Nonparametric LCL around the Median
23_3_116	MW-14	Appendix IV	Lithium	mg/l	12	0	0%	2023-01-12 to 2025-08-06	0.10	Normal LCL
23_3_117	MW-14	Appendix IV	Mercury	mg/l	12	12	100%	2023-01-12 to 2025-08-06	0.00020	Nonparametric LCL around the Median
23_3_118	MW-14	Appendix IV	Molybdenum	mg/l	12	0	0%	2023-01-12 to 2025-08-06	0.012	Normal LCL
23_3_121	MW-14	Appendix IV	Radium-226+228	pci/l	12	2	17%	2023-01-12 to 2025-08-06	1.1	Lognormal MLE Likelihood Profile LCL
23_3_122	MW-14	Appendix IV	Selenium	mg/l	12	10	83%	2023-01-12 to 2025-08-06	0.0050	Nonparametric LCL around the Median
23_3_125	MW-14	Appendix IV	Thallium	mg/l	12	12	100%	2023-01-12 to 2025-08-06	0.0020	Nonparametric LCL around the Median
23_5_111	MW-14	Part 115	Copper	mg/l	12	12	100%	2023-01-12 to 2025-08-06	0.0050	Nonparametric LCL around the Median
23_5_114	MW-14	Part 115	Iron	mg/l	12	0	0%	2023-01-12 to 2025-08-06	11	Normal LCL
23_5_119	MW-14	Part 115	Nickel	mg/l	12	6	50%	2023-01-12 to 2025-08-06	0.0050	Nonparametric LCL around the Median
23_5_123	MW-14	Part 115	Silver	mg/l	12	12	100%	2023-01-12 to 2025-08-06	0.00050	Nonparametric LCL around the Median
23_5_128	MW-14	Part 115	Vanadium	mg/l	12	10	83%	2023-01-12 to 2025-08-06	0.0050	Nonparametric LCL around the Median
23_5_129	MW-14	Part 115	Zinc	mg/l	12	10	83%	2023-01-12 to 2025-08-06	0.0050	Nonparametric LCL around the Median
24_2_105	MW-15	Appendix III	Boron	mg/l	12	0	0%	2023-01-12 to 2025-08-07	0.35	Normal LCL
24_2_107	MW-15	Appendix III	Calcium	mg/l	12	0	0%	2023-01-12 to 2025-08-07	120	Normal LCL
24_2_108	MW-15	Appendix III	Chloride	mg/l	12	0	0%	2023-01-12 to 2025-08-07	70	Normal LCL
24_2_112	MW-15	Appendix III	Fluoride	mg/l	12	10	83%	2023-01-12 to 2025-08-07	1.0	Nonparametric LCL around the Median
24_2_120	MW-15	Appendix III	pH, Field	su	12	0	0%	2023-01-12 to 2025-08-07	6.7	Normal LCL
24_2_124	MW-15	Appendix III	Sulfate	mg/l	12	0	0%	2023-01-12 to 2025-08-07	96	Adjusted Gamma LCL
24_2_126	MW-15	Appendix III	Total Dissolved Solids	mg/l	12	0	0%	2023-01-12 to 2025-08-07	590	Normal LCL
24_3_101	MW-15	Appendix IV	Antimony	mg/l	12	12	100%	2023-01-12 to 2025-08-07	0.0050	Nonparametric LCL around the Median
24_3_102	MW-15	Appendix IV	Arsenic	mg/l	12	9	75%	2023-01-12 to 2025-08-07	0.0020	Nonparametric LCL around the Median
24_3_103	MW-15	Appendix IV	Barium	mg/l	12	0	0%	2023-01-12 to 2025-08-07	0.053	Normal LCL
24_3_104	MW-15	Appendix IV	Beryllium	mg/l	12	12	100%	2023-01-12 to 2025-08-07	0.0010	Nonparametric LCL around the Median
24_3_106	MW-15	Appendix IV	Cadmium	mg/l	12	11	92%	2023-01-12 to 2025-08-07	0.00050	Nonparametric LCL around the Median
24_3_109	MW-15	Appendix IV	Chromium	mg/l	12	12	100%	2023-01-12 to 2025-08-07	0.0050	Nonparametric LCL around the Median
24_3_110	MW-15	Appendix IV	Cobalt	mg/l	12	11	92%	2023-01-12 to 2025-08-07	0.0050	Nonparametric LCL around the Median
24_3_113	MW-15	Appendix IV	Fluoride (App IV)	mg/l	12	10	83%	2023-01-12 to 2025-08-07	1.0	Nonparametric LCL around the Median
24_3_115	MW-15	Appendix IV	Lead	mg/l	12	12	100%	2023-01-12 to 2025-08-07	0.0030	Nonparametric LCL around the Median
24_3_116	MW-15	Appendix IV	Lithium	mg/l	12	11	92%	2023-01-12 to 2025-08-07	0.0050	Nonparametric LCL around the Median
24_3_117	MW-15	Appendix IV	Mercury	mg/l	12	12	100%	2023-01-12 to 2025-08-07	0.00020	Nonparametric LCL around the Median
24_3_118	MW-15	Appendix IV	Molybdenum	mg/l	12	12	100%	2023-01-12 to 2025-08-07	0.0050	Nonparametric LCL around the Median
24_3_121	MW-15	Appendix IV	Radium-226+228	pci/l	12	0	0%	2023-01-12 to 2025-08-07	0.78	Normal LCL
24_3_122	MW-15	Appendix IV	Selenium	mg/l	12	5	42%	2023-01-12 to 2025-08-07	0.005*	Nonparametric LCL around the Median
24_3_125	MW-15	Appendix IV	Thallium	mg/l	12	12	100%	2023-01-12 to 2025-08-07	0.0020	Nonparametric LCL around the Median
24_5_111	MW-15	Part 115	Copper	mg/l	12	12	100%	2023-01-12 to 2025-08-07	0.0050	Nonparametric LCL around the Median
24_5_114	MW-15	Part 115	Iron	mg/l	12	1	8%	2023-01-12 to 2025-08-07	0.053	Gamma MLE Normal Approx. LCL
24_5_119	MW-15	Part 115	Nickel	mg/l	12	11	92%	2023-01-12 to 2025-08-07	0.0050	Nonparametric LCL around the Median
24_5_123	MW-15	Part 115	Silver	mg/l	12	12	100%	2023-01-12 to 2025-08-07	0.00050	Nonparametric LCL around the Median

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	LCL	Method
24_5_128	MW-15	Part 115	Vanadium	mg/l	12	12	100%	2023-01-12 to 2025-08-07	0.0050	Nonparametric LCL around the Median
24_5_129	MW-15	Part 115	Zinc	mg/l	12	10	83%	2023-01-12 to 2025-08-07	0.0050	Nonparametric LCL around the Median
25_2_105	MW-16A	Appendix III	Boron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	0.15	Normal LCL
25_2_107	MW-16A	Appendix III	Calcium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	170	Normal LCL
25_2_108	MW-16A	Appendix III	Chloride	mg/l	13	0	0%	2023-02-02 to 2025-08-11	410	Normal LCL
25_2_112	MW-16A	Appendix III	Fluoride	mg/l	13	11	85%	2023-02-02 to 2025-08-11	1.0	Nonparametric LCL around the Median
25_2_120	MW-16A	Appendix III	pH, Field	su	13	0	0%	2023-02-02 to 2025-08-11	6.8	Normal LCL
25_2_124	MW-16A	Appendix III	Sulfate	mg/l	13	0	0%	2023-02-02 to 2025-08-11	150	Normal LCL
25_2_126	MW-16A	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	2023-02-02 to 2025-08-11	1300	Normal LCL
25_3_101	MW-16A	Appendix IV	Antimony	mg/l	13	12	92%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
25_3_102	MW-16A	Appendix IV	Arsenic	mg/l	13	0	0%	2023-02-02 to 2025-08-11	0.0028	Normal LCL
25_3_103	MW-16A	Appendix IV	Barium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	0.13	Normal LCL
25_3_104	MW-16A	Appendix IV	Beryllium	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0010	Nonparametric LCL around the Median
25_3_106	MW-16A	Appendix IV	Cadmium	mg/l	13	12	92%	2023-02-02 to 2025-08-11	0.00050	Nonparametric LCL around the Median
25_3_109	MW-16A	Appendix IV	Chromium	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
25_3_110	MW-16A	Appendix IV	Cobalt	mg/l	13	11	85%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
25_3_113	MW-16A	Appendix IV	Fluoride (App IV)	mg/l	13	11	85%	2023-02-02 to 2025-08-11	1.0	Nonparametric LCL around the Median
25_3_115	MW-16A	Appendix IV	Lead	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0030	Nonparametric LCL around the Median
25_3_116	MW-16A	Appendix IV	Lithium	mg/l	13	10	77%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
25_3_117	MW-16A	Appendix IV	Mercury	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.00020	Nonparametric LCL around the Median
25_3_118	MW-16A	Appendix IV	Molybdenum	mg/l	13	11	85%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
25_3_121	MW-16A	Appendix IV	Radium-226+228	pci/l	13	0	0%	2023-02-02 to 2025-08-11	1.3	Adjusted Gamma LCL
25_3_122	MW-16A	Appendix IV	Selenium	mg/l	13	12	92%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
25_3_125	MW-16A	Appendix IV	Thallium	mg/l	13	12	92%	2023-02-02 to 2025-08-11	0.0020	Nonparametric LCL around the Median
25_5_111	MW-16A	Part 115	Copper	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
25_5_114	MW-16A	Part 115	Iron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	2.9	Normal LCL
25_5_119	MW-16A	Part 115	Nickel	mg/l	13	11	85%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
25_5_123	MW-16A	Part 115	Silver	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.00050	Nonparametric LCL around the Median
25_5_128	MW-16A	Part 115	Vanadium	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
25_5_129	MW-16A	Part 115	Zinc	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
26_2_105	MW-16B	Appendix III	Boron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	0.11	Nonparametric LCL around the Median
26_2_107	MW-16B	Appendix III	Calcium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	79	Normal LCL
26_2_108	MW-16B	Appendix III	Chloride	mg/l	13	5	38%	2023-02-02 to 2025-08-11	3.3	Lognormal MLE Likelihood Profile LCL
26_2_112	MW-16B	Appendix III	Fluoride	mg/l	13	8	62%	2023-02-02 to 2025-08-11	0.99	Nonparametric LCL around the Median
26_2_120	MW-16B	Appendix III	pH, Field	su	13	0	0%	2023-02-02 to 2025-08-11	7.4	Normal LCL
26_2_124	MW-16B	Appendix III	Sulfate	mg/l	13	0	0%	2023-02-02 to 2025-08-11	17	Normal LCL
26_2_126	MW-16B	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	2023-02-02 to 2025-08-11	360	Normal LCL
26_3_101	MW-16B	Appendix IV	Antimony	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
26_3_102	MW-16B	Appendix IV	Arsenic	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0020	Nonparametric LCL around the Median
26_3_103	MW-16B	Appendix IV	Barium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	0.085	Normal LCL
26_3_104	MW-16B	Appendix IV	Beryllium	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0010	Nonparametric LCL around the Median
26_3_106	MW-16B	Appendix IV	Cadmium	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.00050	Nonparametric LCL around the Median
26_3_109	MW-16B	Appendix IV	Chromium	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
26_3_110	MW-16B	Appendix IV	Cobalt	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
26_3_113	MW-16B	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	2023-02-02 to 2025-08-11	0.99	Nonparametric LCL around the Median
26_3_115	MW-16B	Appendix IV	Lead	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0030	Nonparametric LCL around the Median
26_3_116	MW-16B	Appendix IV	Lithium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	0.021	Normal LCL
26_3_117	MW-16B	Appendix IV	Mercury	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.00020	Nonparametric LCL around the Median
26_3_118	MW-16B	Appendix IV	Molybdenum	mg/l	13	0	0%	2023-02-02 to 2025-08-11	0.0060	Nonparametric LCL around the Median
26_3_121	MW-16B	Appendix IV	Radium-226+228	pci/l	13	0	0%	2023-02-02 to 2025-08-11	1.8	Adjusted Gamma LCL
26_3_122	MW-16B	Appendix IV	Selenium	mg/l	13	12	92%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
26_3_125	MW-16B	Appendix IV	Thallium	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0020	Nonparametric LCL around the Median
26_5_111	MW-16B	Part 115	Copper	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
26_5_114	MW-16B	Part 115	Iron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	0.42	Lognormal H-LCL
26_5_119	MW-16B	Part 115	Nickel	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
26_5_123	MW-16B	Part 115	Silver	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.00050	Nonparametric LCL around the Median
26_5_128	MW-16B	Part 115	Vanadium	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
26_5_129	MW-16B	Part 115	Zinc	mg/l	13	12	92%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
27_2_105	MW-17A	Appendix III	Boron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	3.8	Normal LCL
27_2_107	MW-17A	Appendix III	Calcium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	240	Normal LCL
27_2_108	MW-17A	Appendix III	Chloride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	68	Normal LCL
27_2_112	MW-17A	Appendix III	Fluoride	mg/l	8	3	38%	2024-10-08 to 2025-09-11	0.14	Gamma MLE Normal Approx. LCL
27_2_120	MW-17A	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-09-11	7.1	Normal LCL
27_2_124	MW-17A	Appendix III	Sulfate	mg/l	8	0	0%	2024-10-08 to 2025-09-11	630	Normal LCL
27_2_126	MW-17A	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	2024-10-08 to 2025-09-11	1300	Nonparametric LCL around the Median
27_3_101	MW-17A	Appendix IV	Antimony	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00057	Nonparametric LCL around the Median
27_3_102	MW-17A	Appendix IV	Arsenic	mg/l	8	1	12%	2024-10-08 to 2025-09-11	0.0013	Normal MLE LCL
27_3_103	MW-17A	Appendix IV	Barium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.038	Normal LCL
27_3_104	MW-17A	Appendix IV	Beryllium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00027	Nonparametric LCL around the Median
27_3_106	MW-17A	Appendix IV	Cadmium	mg/l	8	7	88%	2024-10-08 to 2025-09-11	0.000077	Nonparametric LCL around the Median
27_3_109	MW-17A	Appendix IV	Chromium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.0012	Nonparametric LCL around the Median
27_3_110	MW-17A	Appendix IV	Cobalt	mg/l	8	7	88%	2024-10-08 to 2025-09-11	0.000086	Nonparametric LCL around the Median
27_3_113	MW-17A	Appendix IV	Fluoride (App IV)	mg/l	8	3	38%	2024-10-08 to 2025-09-11	0.14	Gamma MLE Normal Approx. LCL
27_3_115	MW-17A	Appendix IV	Lead	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00045	Nonparametric LCL around the Median
27_3_116	MW-17A	Appendix IV	Lithium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.050	Normal LCL
27_3_117	MW-17A	Appendix IV	Mercury	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00013	Nonparametric LCL around the Median
27_3_118	MW-17A	Appendix IV	Molybdenum	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.015	Normal LCL
27_3_121	MW-17A	Appendix IV	Radium-226+228	pci/l	8	1	12%	2024-10-08 to 2025-09-11	0.70	Gamma MLE Normal Approx. LCL
27_3_122	MW-17A	Appendix IV	Selenium	mg/l	8	7	88%	2024-10-08 to 2025-09-11	0.00089	Nonparametric LCL around the Median
27_3_125	MW-17A	Appendix IV	Thallium	mg/l	8	7	88%	2024-10-08 to 2025-09-11	0.00051	Nonparametric LCL around the Median
27_5_111	MW-17A	Part 115	Copper	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.0017	Nonparametric LCL around the Median
27_5_114	MW-17A	Part 115	Iron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	6.5	Normal LCL
27_5_119	MW-17A	Part 115	Nickel	mg/l	8	1	12%	2024-10-08 to 2025-09-11	0.012	Normal MLE LCL
27_5_123	MW-17A	Part 115	Silver	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.000053	Nonparametric LCL around the Median

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	LCL	Method
27_5_128	MW-17A	Part 115	Vanadium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00082	Nonparametric LCL around the Median
27_5_129	MW-17A	Part 115	Zinc	mg/l	8	4	50%	2024-10-08 to 2025-09-11	0.0013	Nonparametric LCL around the Median
28_2_105	MW-17B	Appendix III	Boron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	1.8	Nonparametric LCL around the Median
28_2_107	MW-17B	Appendix III	Calcium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	110	Nonparametric LCL around the Median
28_2_108	MW-17B	Appendix III	Chloride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	69	Normal LCL
28_2_112	MW-17B	Appendix III	Fluoride	mg/l	8	2	25%	2024-10-08 to 2025-09-11	0.13	Nonparametric LCL around the Median
28_2_120	MW-17B	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-09-11	7.3	Normal LCL
28_2_124	MW-17B	Appendix III	Sulfate	mg/l	8	0	0%	2024-10-08 to 2025-09-11	330	Nonparametric LCL around the Median
28_2_126	MW-17B	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	2024-10-08 to 2025-09-11	730	Nonparametric LCL around the Median
28_3_101	MW-17B	Appendix IV	Antimony	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00057	Nonparametric LCL around the Median
28_3_102	MW-17B	Appendix IV	Arsenic	mg/l	8	1	12%	2024-10-08 to 2025-09-11	0.0019	Lognormal MLE Likelihood Profile LCL
28_3_103	MW-17B	Appendix IV	Barium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.041	Normal LCL
28_3_104	MW-17B	Appendix IV	Beryllium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00027	Nonparametric LCL around the Median
28_3_106	MW-17B	Appendix IV	Cadmium	mg/l	8	7	88%	2024-10-08 to 2025-09-11	0.000077	Nonparametric LCL around the Median
28_3_109	MW-17B	Appendix IV	Chromium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.0012	Nonparametric LCL around the Median
28_3_110	MW-17B	Appendix IV	Cobalt	mg/l	8	5	62%	2024-10-08 to 2025-09-11	0.000086	Nonparametric LCL around the Median
28_3_113	MW-17B	Appendix IV	Fluoride (App IV)	mg/l	8	2	25%	2024-10-08 to 2025-09-11	0.13	Nonparametric LCL around the Median
28_3_115	MW-17B	Appendix IV	Lead	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00045	Nonparametric LCL around the Median
28_3_116	MW-17B	Appendix IV	Lithium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.078	Normal LCL
28_3_117	MW-17B	Appendix IV	Mercury	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00013	Nonparametric LCL around the Median
28_3_118	MW-17B	Appendix IV	Molybdenum	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.089	Nonparametric LCL around the Median
28_3_121	MW-17B	Appendix IV	Radium-226+228	pci/l	8	1	12%	2024-10-08 to 2025-09-11	0.87	Lognormal MLE Likelihood Profile LCL
28_3_122	MW-17B	Appendix IV	Selenium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00089	Nonparametric LCL around the Median
28_3_125	MW-17B	Appendix IV	Thallium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00051	Nonparametric LCL around the Median
28_5_111	MW-17B	Part 115	Copper	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.0017	Nonparametric LCL around the Median
28_5_114	MW-17B	Part 115	Iron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	1.9	Nonparametric LCL around the Median
28_5_119	MW-17B	Part 115	Nickel	mg/l	8	3	38%	2024-10-08 to 2025-09-11	0.0034	Normal MLE LCL
28_5_123	MW-17B	Part 115	Silver	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.000053	Nonparametric LCL around the Median
28_5_128	MW-17B	Part 115	Vanadium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00082	Nonparametric LCL around the Median
28_5_129	MW-17B	Part 115	Zinc	mg/l	8	3	38%	2024-10-08 to 2025-09-11	0.0029	Gamma MLE Normal Approx. LCL
29_2_105	MW-17C	Appendix III	Boron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	2.0	Normal LCL
29_2_107	MW-17C	Appendix III	Calcium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	140	Normal LCL
29_2_108	MW-17C	Appendix III	Chloride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	57	Nonparametric LCL around the Median
29_2_112	MW-17C	Appendix III	Fluoride	mg/l	8	2	25%	2024-10-08 to 2025-09-11	0.28	Normal MLE LCL
29_2_120	MW-17C	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-09-11	7.1	Nonparametric LCL around the Median
29_2_124	MW-17C	Appendix III	Sulfate	mg/l	8	0	0%	2024-10-08 to 2025-09-11	420	Normal LCL
29_2_126	MW-17C	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	2024-10-08 to 2025-09-11	940	Normal LCL
29_3_101	MW-17C	Appendix IV	Antimony	mg/l	8	7	88%	2024-10-08 to 2025-09-11	0.00057	Nonparametric LCL around the Median
29_3_102	MW-17C	Appendix IV	Arsenic	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.0023	Normal LCL
29_3_103	MW-17C	Appendix IV	Barium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.056	Adjusted Gamma LCL
29_3_104	MW-17C	Appendix IV	Beryllium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00027	Nonparametric LCL around the Median
29_3_106	MW-17C	Appendix IV	Cadmium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.000077	Nonparametric LCL around the Median
29_3_109	MW-17C	Appendix IV	Chromium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.0012	Nonparametric LCL around the Median
29_3_110	MW-17C	Appendix IV	Cobalt	mg/l	8	4	50%	2024-10-08 to 2025-09-11	0.000097	Nonparametric LCL around the Median
29_3_113	MW-17C	Appendix IV	Fluoride (App IV)	mg/l	8	2	25%	2024-10-08 to 2025-09-11	0.28	Normal MLE LCL
29_3_115	MW-17C	Appendix IV	Lead	mg/l	8	5	62%	2024-10-08 to 2025-09-11	0.00045	Nonparametric LCL around the Median
29_3_116	MW-17C	Appendix IV	Lithium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.052	Nonparametric LCL around the Median
29_3_117	MW-17C	Appendix IV	Mercury	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00013	Nonparametric LCL around the Median
29_3_118	MW-17C	Appendix IV	Molybdenum	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.040	Normal LCL
29_3_121	MW-17C	Appendix IV	Radium-226+228	pci/l	8	0	0%	2024-10-08 to 2025-09-11	1.0	Normal LCL
29_3_122	MW-17C	Appendix IV	Selenium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00089	Nonparametric LCL around the Median
29_3_125	MW-17C	Appendix IV	Thallium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00051	Nonparametric LCL around the Median
29_5_111	MW-17C	Part 115	Copper	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.0017	Nonparametric LCL around the Median
29_5_114	MW-17C	Part 115	Iron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	2.2	Normal LCL
29_5_119	MW-17C	Part 115	Nickel	mg/l	8	1	12%	2024-10-08 to 2025-09-11	0.0081	Normal MLE LCL
29_5_123	MW-17C	Part 115	Silver	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.000053	Nonparametric LCL around the Median
29_5_128	MW-17C	Part 115	Vanadium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00082	Nonparametric LCL around the Median
29_5_129	MW-17C	Part 115	Zinc	mg/l	8	4	50%	2024-10-08 to 2025-09-11	0.0030	Nonparametric LCL around the Median
30_2_105	MW-18A	Appendix III	Boron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	0.93	Lognormal H-LCL
30_2_107	MW-18A	Appendix III	Calcium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	87	Nonparametric LCL around the Median
30_2_108	MW-18A	Appendix III	Chloride	mg/l	9	0	0%	2024-10-08 to 2025-08-08	64	Nonparametric LCL around the Median
30_2_112	MW-18A	Appendix III	Fluoride	mg/l	9	0	0%	2024-10-08 to 2025-08-08	0.47	Normal LCL
30_2_120	MW-18A	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-08-08	7.2	Normal LCL
30_2_124	MW-18A	Appendix III	Sulfate	mg/l	9	0	0%	2024-10-08 to 2025-08-08	150	Nonparametric LCL around the Median
30_2_126	MW-18A	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	2024-10-08 to 2025-08-08	480	Normal LCL
30_3_101	MW-18A	Appendix IV	Antimony	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00057	Nonparametric LCL around the Median
30_3_102	MW-18A	Appendix IV	Arsenic	mg/l	9	3	33%	2024-10-08 to 2025-08-08	0.00089	Gamma MLE Normal Approx. LCL
30_3_103	MW-18A	Appendix IV	Barium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	0.035	Normal LCL
30_3_104	MW-18A	Appendix IV	Beryllium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00027	Nonparametric LCL around the Median
30_3_106	MW-18A	Appendix IV	Cadmium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.000077	Nonparametric LCL around the Median
30_3_109	MW-18A	Appendix IV	Chromium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.0012	Nonparametric LCL around the Median
30_3_110	MW-18A	Appendix IV	Cobalt	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.000086	Nonparametric LCL around the Median
30_3_113	MW-18A	Appendix IV	Fluoride (App IV)	mg/l	9	0	0%	2024-10-08 to 2025-08-08	0.47	Normal LCL
30_3_115	MW-18A	Appendix IV	Lead	mg/l	9	7	78%	2024-10-08 to 2025-08-08	0.00045	Nonparametric LCL around the Median
30_3_116	MW-18A	Appendix IV	Lithium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	0.059	Normal LCL
30_3_117	MW-18A	Appendix IV	Mercury	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00013	Nonparametric LCL around the Median
30_3_118	MW-18A	Appendix IV	Molybdenum	mg/l	9	1	11%	2024-10-08 to 2025-08-08	0.072	Nonparametric LCL around the Median
30_3_121	MW-18A	Appendix IV	Radium-226+228	pci/l	9	2	22%	2024-10-08 to 2025-08-08	0.53	Normal MLE LCL
30_3_122	MW-18A	Appendix IV	Selenium	mg/l	9	8	89%	2024-10-08 to 2025-08-08	0.00089	Nonparametric LCL around the Median
30_3_125	MW-18A	Appendix IV	Thallium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00051	Nonparametric LCL around the Median
30_5_111	MW-18A	Part 115	Copper	mg/l	9	8	89%	2024-10-08 to 2025-08-08	0.0017	Nonparametric LCL around the Median
30_5_114	MW-18A	Part 115	Iron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	1.0	Adjusted Gamma LCL
30_5_119	MW-18A	Part 115	Nickel	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.0015	Nonparametric LCL around the Median
30_5_123	MW-18A	Part 115	Silver	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.000053	Nonparametric LCL around the Median

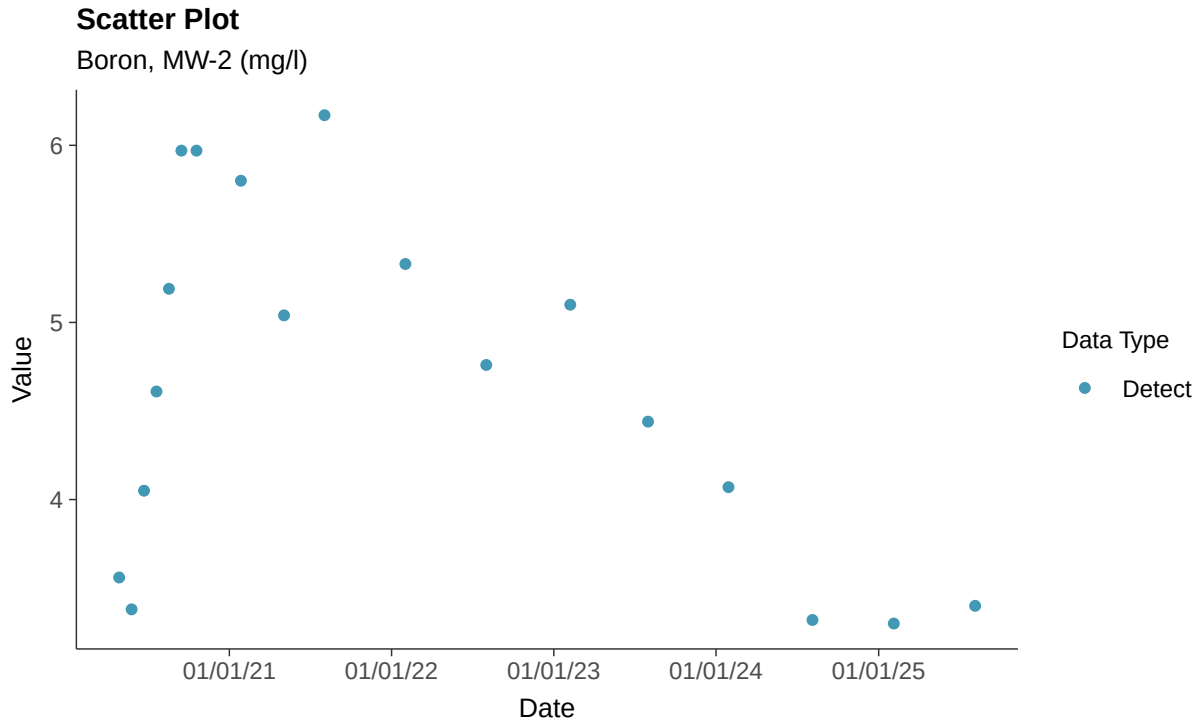
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	LCL	Method
30_5_128	MW-18A	Part 115	Vanadium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00082	Nonparametric LCL around the Median
30_5_129	MW-18A	Part 115	Zinc	mg/l	9	6	67%	2024-10-08 to 2025-08-08	0.00093	Nonparametric LCL around the Median
31_2_105	MW-18B	Appendix III	Boron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	2.0	Nonparametric LCL around the Median
31_2_107	MW-18B	Appendix III	Calcium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	130	Normal LCL
31_2_108	MW-18B	Appendix III	Chloride	mg/l	9	0	0%	2024-10-08 to 2025-08-08	81	Normal LCL
31_2_112	MW-18B	Appendix III	Fluoride	mg/l	9	1	11%	2024-10-08 to 2025-08-08	0.24	Normal MLE LCL
31_2_120	MW-18B	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-08-08	7.3	Normal LCL
31_2_124	MW-18B	Appendix III	Sulfate	mg/l	9	0	0%	2024-10-08 to 2025-08-08	320	Normal LCL
31_2_126	MW-18B	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	2024-10-08 to 2025-08-08	770	Nonparametric LCL around the Median
31_3_101	MW-18B	Appendix IV	Antimony	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00057	Nonparametric LCL around the Median
31_3_102	MW-18B	Appendix IV	Arsenic	mg/l	9	7	78%	2024-10-08 to 2025-08-08	0.00075	Nonparametric LCL around the Median
31_3_103	MW-18B	Appendix IV	Barium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	0.053	Normal LCL
31_3_104	MW-18B	Appendix IV	Beryllium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00027	Nonparametric LCL around the Median
31_3_106	MW-18B	Appendix IV	Cadmium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.000077	Nonparametric LCL around the Median
31_3_109	MW-18B	Appendix IV	Chromium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.0012	Nonparametric LCL around the Median
31_3_110	MW-18B	Appendix IV	Cobalt	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.000086	Nonparametric LCL around the Median
31_3_113	MW-18B	Appendix IV	Fluoride (App IV)	mg/l	9	1	11%	2024-10-08 to 2025-08-08	0.24	Normal MLE LCL
31_3_115	MW-18B	Appendix IV	Lead	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00045	Nonparametric LCL around the Median
31_3_116	MW-18B	Appendix IV	Lithium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	0.096	Nonparametric LCL around the Median
31_3_117	MW-18B	Appendix IV	Mercury	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00013	Nonparametric LCL around the Median
31_3_118	MW-18B	Appendix IV	Molybdenum	mg/l	9	0	0%	2024-10-08 to 2025-08-08	0.10	Nonparametric LCL around the Median
31_3_121	MW-18B	Appendix IV	Radium-226+228	pci/l	9	0	0%	2024-10-08 to 2025-08-08	1.6	Normal LCL
31_3_122	MW-18B	Appendix IV	Selenium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00089	Nonparametric LCL around the Median
31_3_125	MW-18B	Appendix IV	Thallium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00051	Nonparametric LCL around the Median
31_5_111	MW-18B	Part 115	Copper	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.0017	Nonparametric LCL around the Median
31_5_114	MW-18B	Part 115	Iron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	2.6	Normal LCL
31_5_119	MW-18B	Part 115	Nickel	mg/l	9	1	11%	2024-10-08 to 2025-08-08	0.0075	Normal MLE LCL
31_5_123	MW-18B	Part 115	Silver	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.000053	Nonparametric LCL around the Median
31_5_128	MW-18B	Part 115	Vanadium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00082	Nonparametric LCL around the Median
31_5_129	MW-18B	Part 115	Zinc	mg/l	9	7	78%	2024-10-08 to 2025-08-08	0.00093	Nonparametric LCL around the Median
32_2_105	MW-100A	Appendix III	Boron	mg/l	11	2	18%	2023-06-05 to 2025-08-07	0.050	Nonparametric LCL around the Median
32_2_107	MW-100A	Appendix III	Calcium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	91	Normal LCL
32_2_108	MW-100A	Appendix III	Chloride	mg/l	11	0	0%	2023-06-05 to 2025-08-07	10	Nonparametric LCL around the Median
32_2_112	MW-100A	Appendix III	Fluoride	mg/l	11	7	64%	2023-06-05 to 2025-08-07	0.57	Nonparametric LCL around the Median
32_2_120	MW-100A	Appendix III	pH, Field	su	11	0	0%	2023-06-05 to 2025-08-07	7.2	Normal LCL
32_2_124	MW-100A	Appendix III	Sulfate	mg/l	11	0	0%	2023-06-05 to 2025-08-07	21	Normal LCL
32_2_126	MW-100A	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	2023-06-05 to 2025-08-07	400	Nonparametric LCL around the Median
32_3_101	MW-100A	Appendix IV	Antimony	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
32_3_102	MW-100A	Appendix IV	Arsenic	mg/l	11	0	0%	2023-06-05 to 2025-08-07	0.012	Normal LCL
32_3_103	MW-100A	Appendix IV	Barium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	0.19	Normal LCL
32_3_104	MW-100A	Appendix IV	Beryllium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0010	Nonparametric LCL around the Median
32_3_106	MW-100A	Appendix IV	Cadmium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.00050	Nonparametric LCL around the Median
32_3_109	MW-100A	Appendix IV	Chromium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
32_3_110	MW-100A	Appendix IV	Cobalt	mg/l	11	9	82%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
32_3_113	MW-100A	Appendix IV	Fluoride (App IV)	mg/l	11	7	64%	2023-06-05 to 2025-08-07	0.57	Nonparametric LCL around the Median
32_3_115	MW-100A	Appendix IV	Lead	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0030	Nonparametric LCL around the Median
32_3_116	MW-100A	Appendix IV	Lithium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	0.014	Normal LCL
32_3_117	MW-100A	Appendix IV	Mercury	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.00020	Nonparametric LCL around the Median
32_3_118	MW-100A	Appendix IV	Molybdenum	mg/l	11	0	0%	2023-06-05 to 2025-08-07	0.0087	Normal LCL
32_3_121	MW-100A	Appendix IV	Radium-226+228	pci/l	11	0	0%	2023-06-05 to 2025-08-07	0.77	Normal LCL
32_3_122	MW-100A	Appendix IV	Selenium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
32_3_125	MW-100A	Appendix IV	Thallium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0020	Nonparametric LCL around the Median
32_5_111	MW-100A	Part 115	Copper	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
32_5_114	MW-100A	Part 115	Iron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	1.9	Normal LCL
32_5_119	MW-100A	Part 115	Nickel	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
32_5_123	MW-100A	Part 115	Silver	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.00050	Nonparametric LCL around the Median
32_5_128	MW-100A	Part 115	Vanadium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
32_5_129	MW-100A	Part 115	Zinc	mg/l	11	8	73%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
33_2_105	MW-100B	Appendix III	Boron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	0.24	Normal LCL
33_2_107	MW-100B	Appendix III	Calcium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	95	Normal LCL
33_2_108	MW-100B	Appendix III	Chloride	mg/l	11	0	0%	2023-06-05 to 2025-08-07	21	Normal LCL
33_2_112	MW-100B	Appendix III	Fluoride	mg/l	11	7	64%	2023-06-05 to 2025-08-07	0.40	Nonparametric LCL around the Median
33_2_120	MW-100B	Appendix III	pH, Field	su	11	0	0%	2023-06-05 to 2025-08-07	7.4	Normal LCL
33_2_124	MW-100B	Appendix III	Sulfate	mg/l	11	0	0%	2023-06-05 to 2025-08-07	110	Normal LCL
33_2_126	MW-100B	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	2023-06-05 to 2025-08-07	480	Normal LCL
33_3_101	MW-100B	Appendix IV	Antimony	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
33_3_102	MW-100B	Appendix IV	Arsenic	mg/l	11	0	0%	2023-06-05 to 2025-08-07	0.0090	Nonparametric LCL around the Median
33_3_103	MW-100B	Appendix IV	Barium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	0.14	Normal LCL
33_3_104	MW-100B	Appendix IV	Beryllium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0010	Nonparametric LCL around the Median
33_3_106	MW-100B	Appendix IV	Cadmium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.00050	Nonparametric LCL around the Median
33_3_109	MW-100B	Appendix IV	Chromium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
33_3_110	MW-100B	Appendix IV	Cobalt	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
33_3_113	MW-100B	Appendix IV	Fluoride (App IV)	mg/l	11	7	64%	2023-06-05 to 2025-08-07	0.40	Nonparametric LCL around the Median
33_3_115	MW-100B	Appendix IV	Lead	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0030	Nonparametric LCL around the Median
33_3_116	MW-100B	Appendix IV	Lithium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	0.017	Normal LCL
33_3_117	MW-100B	Appendix IV	Mercury	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.00020	Nonparametric LCL around the Median
33_3_118	MW-100B	Appendix IV	Molybdenum	mg/l	11	0	0%	2023-06-05 to 2025-08-07	0.0074	Normal LCL
33_3_121	MW-100B	Appendix IV	Radium-226+228	pci/l	11	1	9%	2023-06-05 to 2025-08-07	0.98	Normal MLE LCL
33_3_122	MW-100B	Appendix IV	Selenium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
33_3_125	MW-100B	Appendix IV	Thallium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0020	Nonparametric LCL around the Median
33_5_111	MW-100B	Part 115	Copper	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
33_5_114	MW-100B	Part 115	Iron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	2.2	Normal LCL
33_5_119	MW-100B	Part 115	Nickel	mg/l	11	10	91%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
33_5_123	MW-100B	Part 115	Silver	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.00050	Nonparametric LCL around the Median

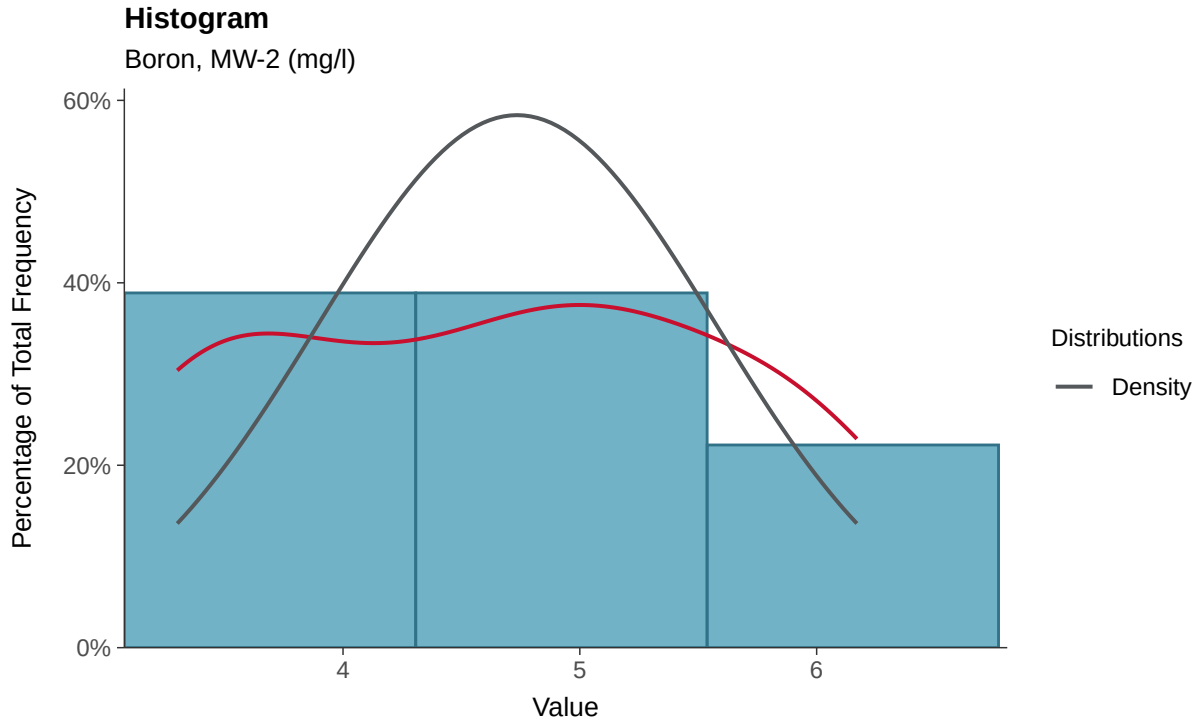
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	LCL	Method
33_5_128	MW-100B	Part 115	Vanadium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
33_5_129	MW-100B	Part 115	Zinc	mg/l	11	10	91%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median

* Due to convergence issues with one of the estimators, nonparametric method is used to provide the 95% LCL.

Appendix III: Boron, MW-2

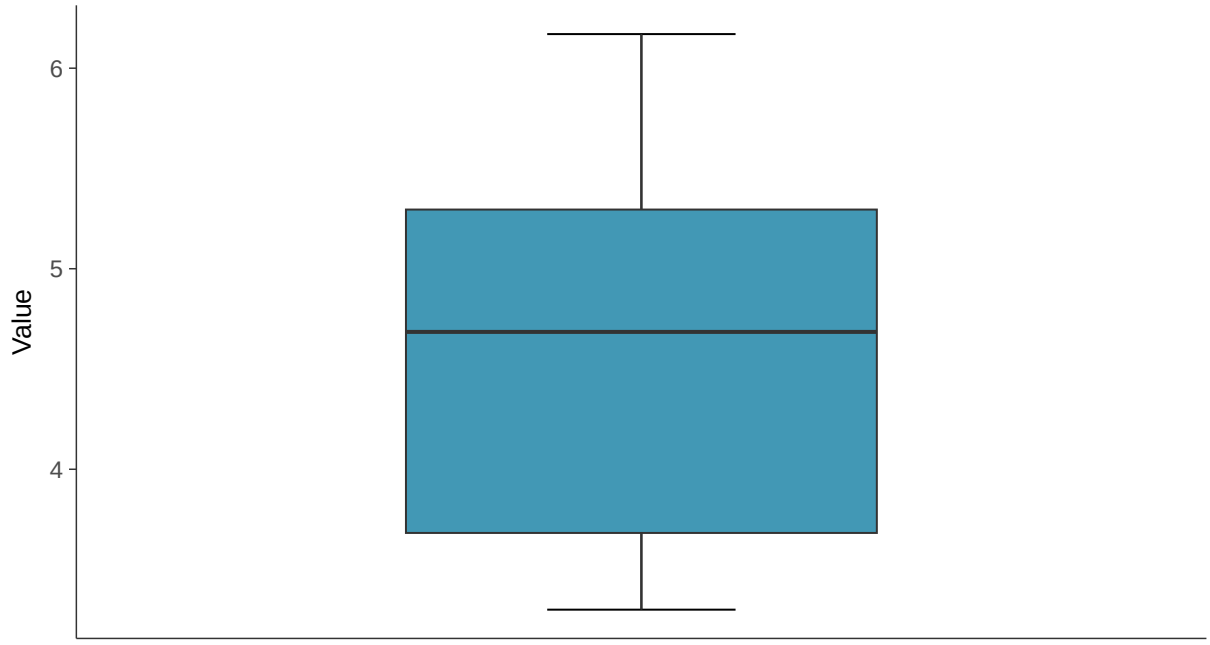
ID: 13_2_105





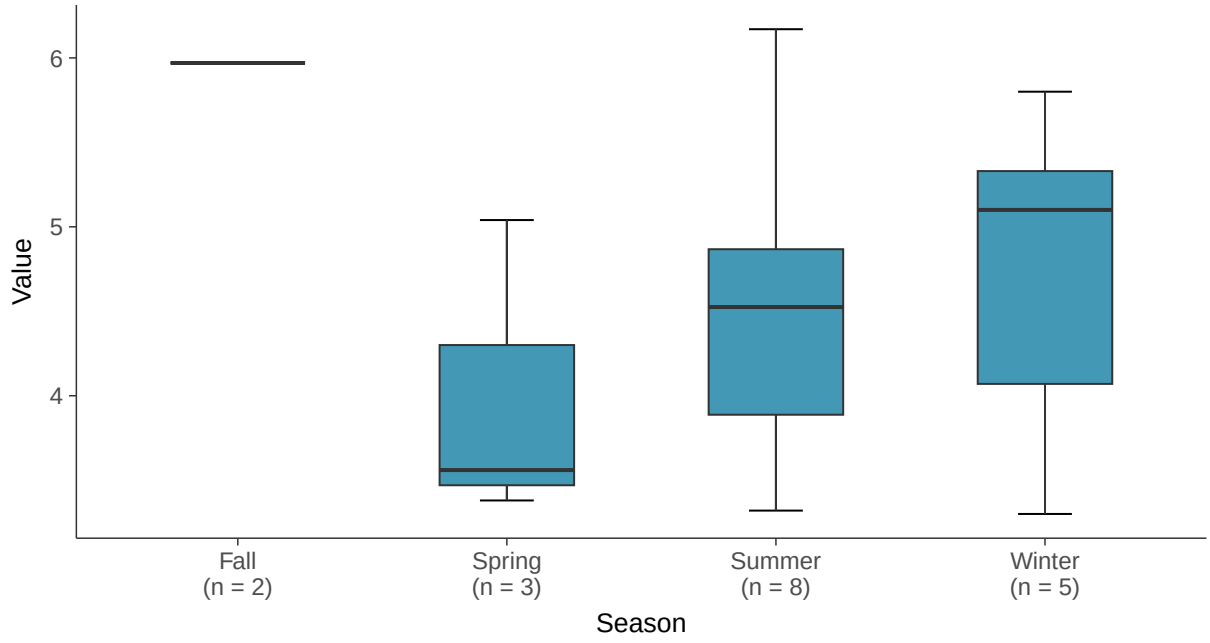
Boxplot

Boron, MW-2 (mg/l)



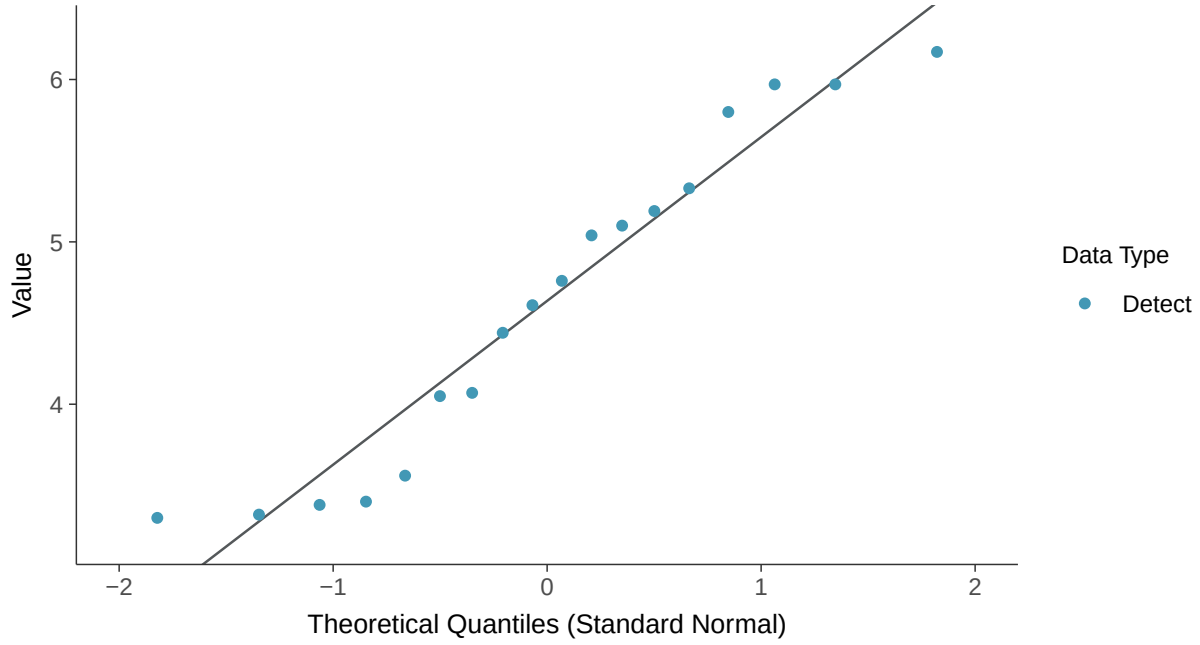
Boxplot by Season

Boron, MW-2 (mg/l)



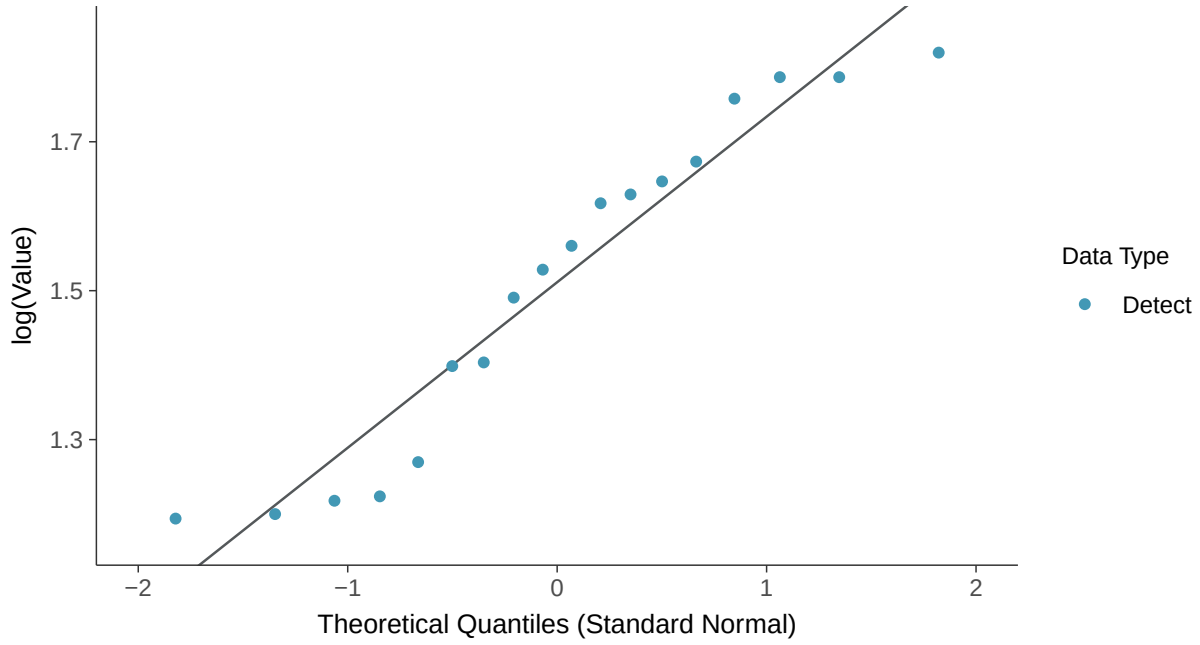
Normal Q-Q plot

Boron, MW-2 (mg/l)



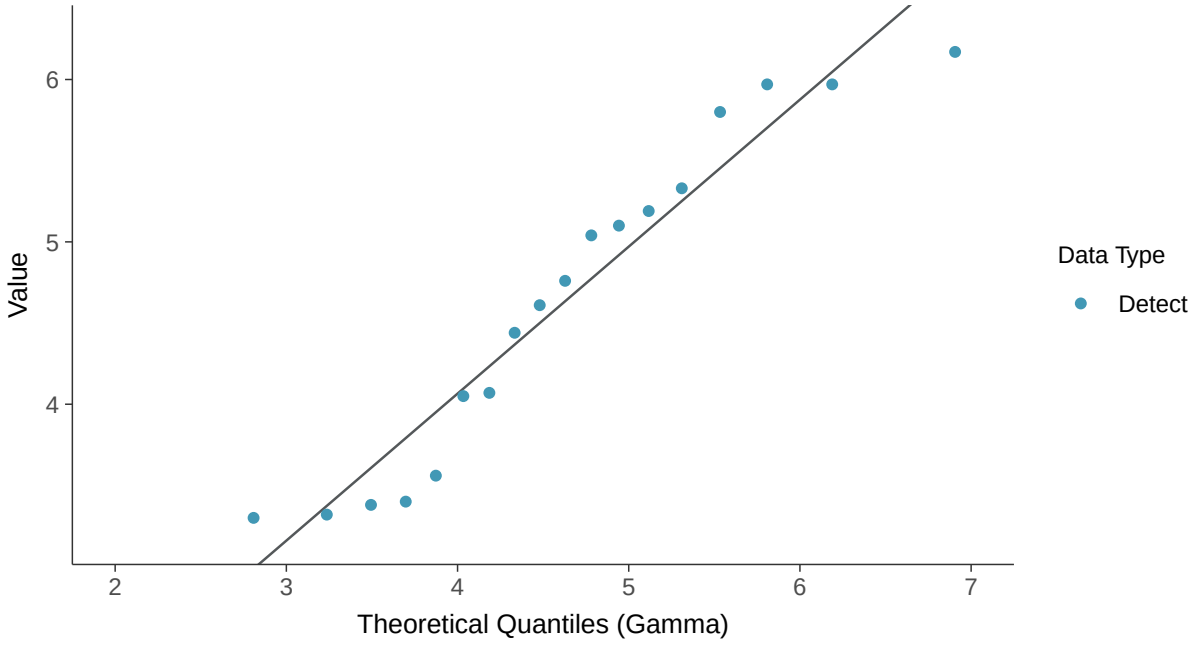
Lognormal Q-Q plot

Boron, MW-2 (mg/l)



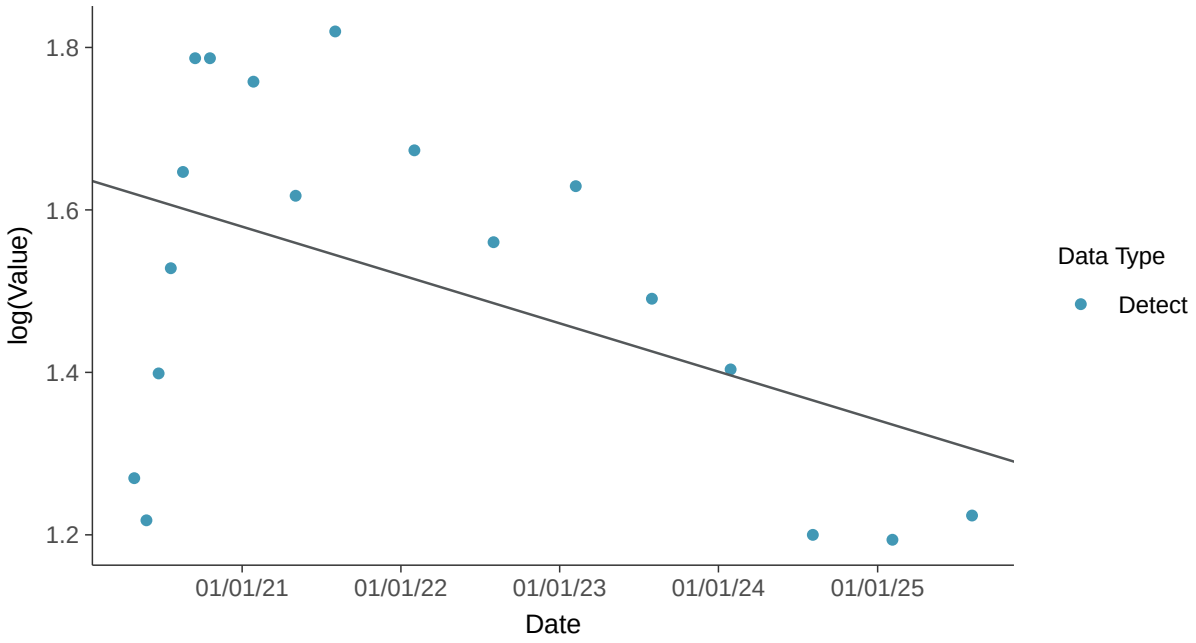
Gamma Q-Q plot

Boron, MW-2 (mg/l)



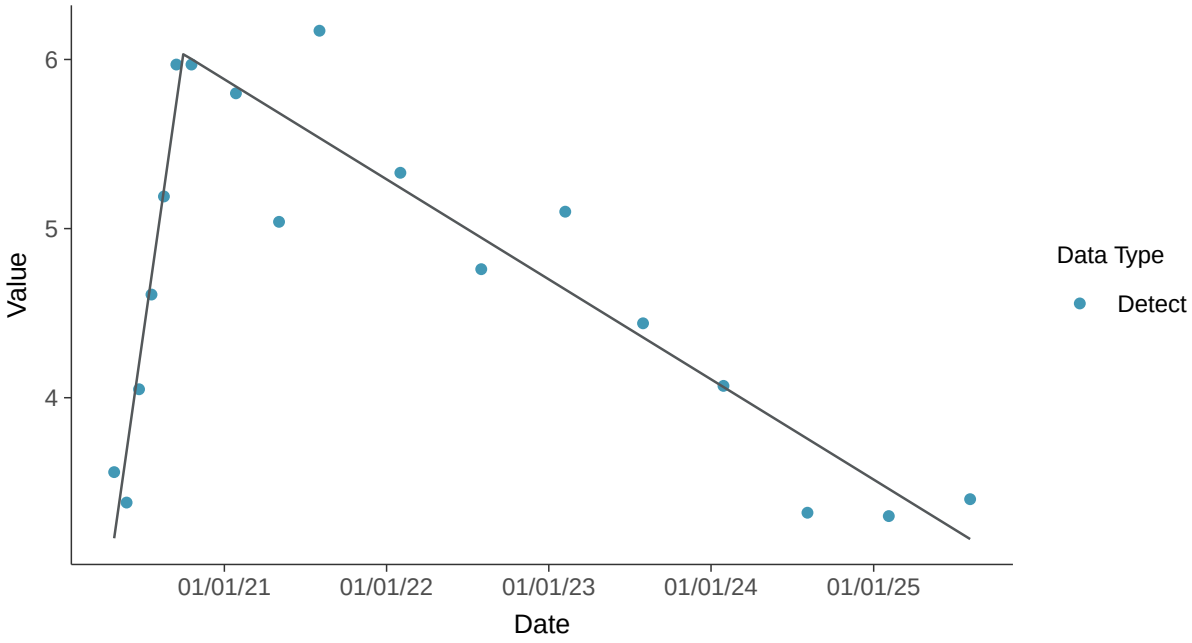
Trend Regression: Lognormal MLE

Boron, MW-2 (mg/l)



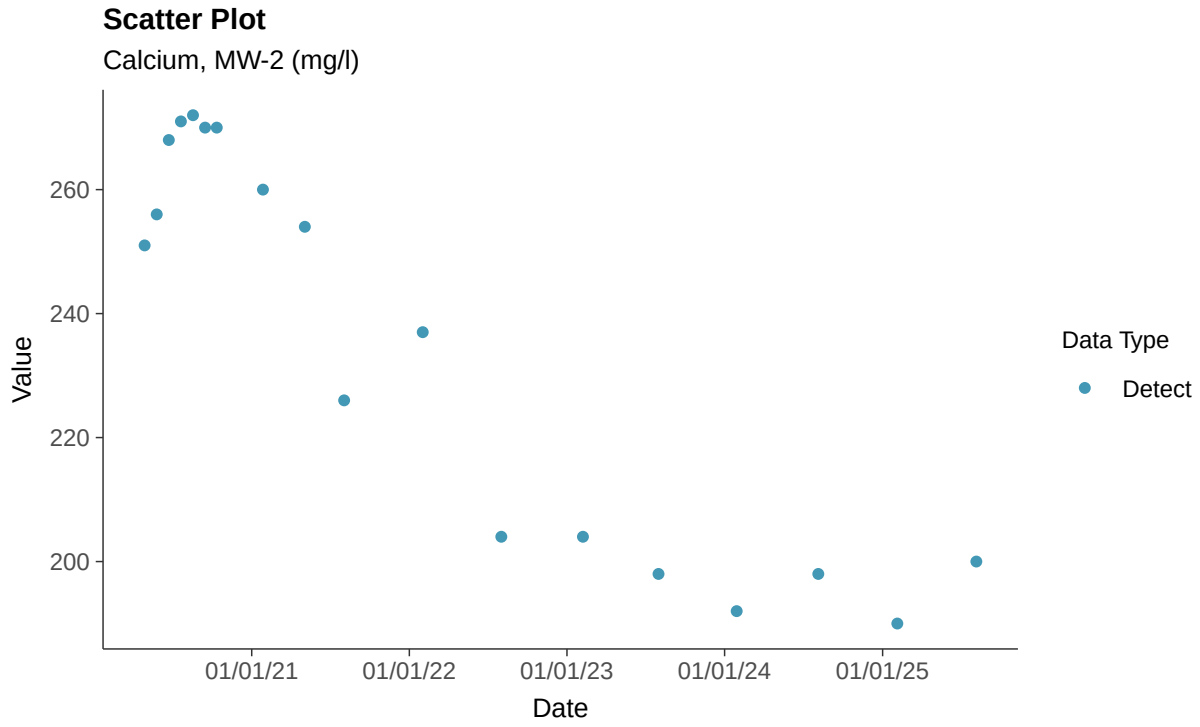
Trend Regression: Piecewise Linear-Linear

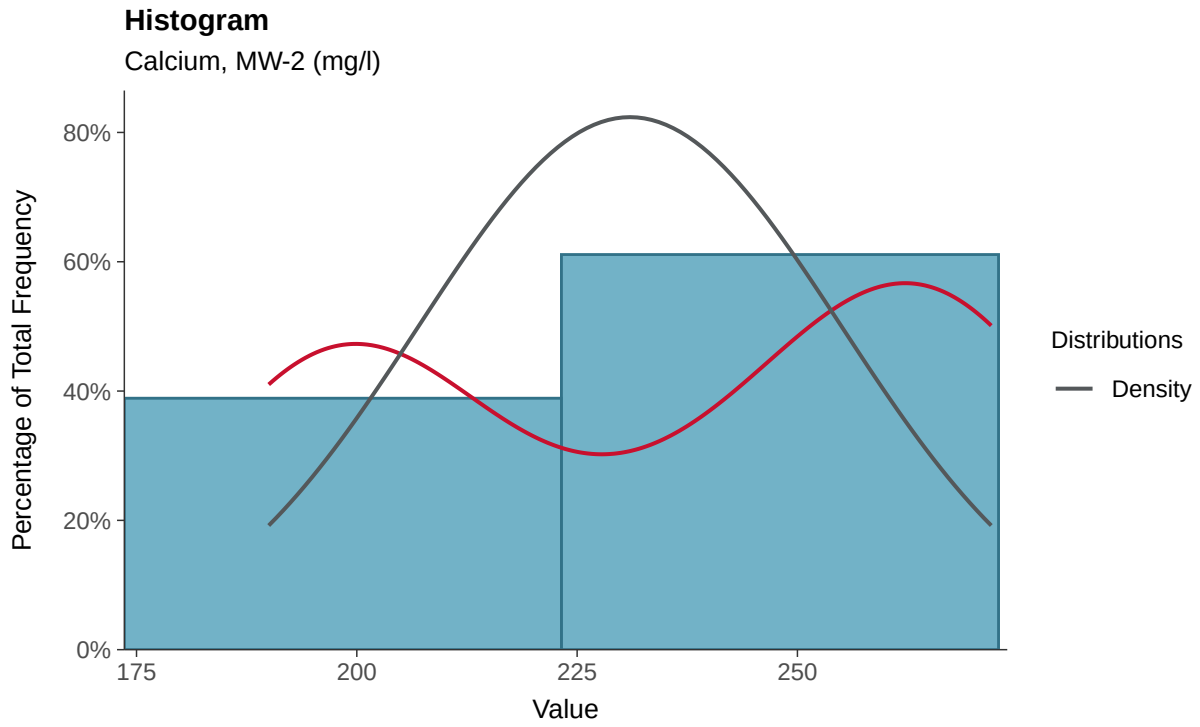
Boron, MW-2 (mg/l)



Appendix III: Calcium, MW-2

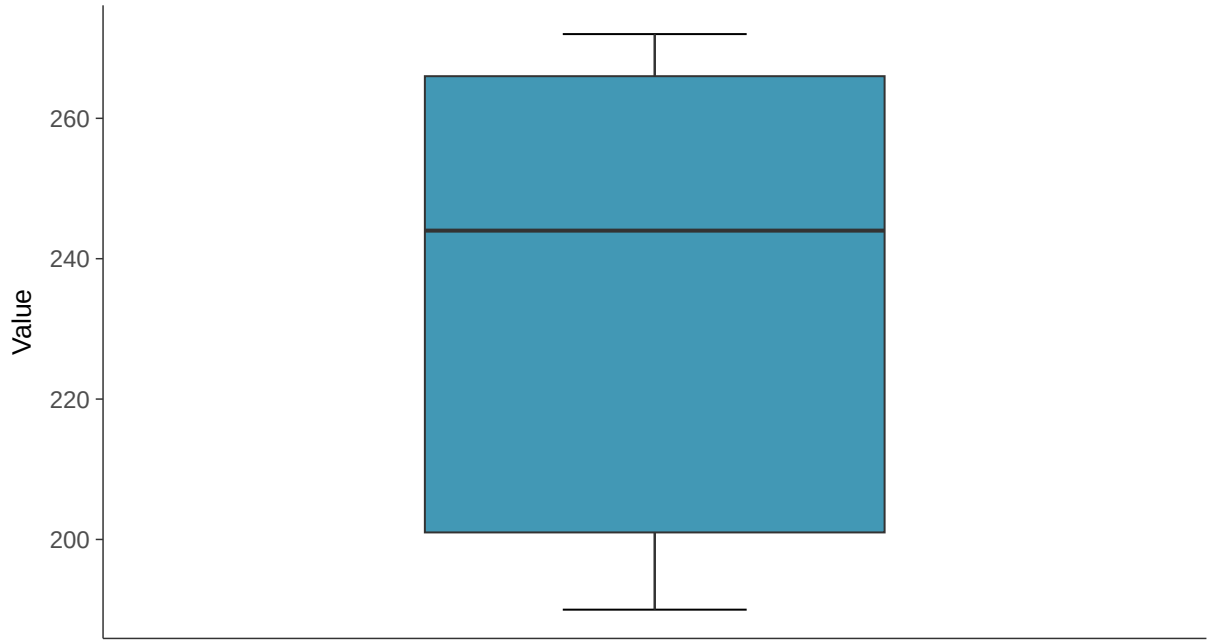
ID: 13_2_107





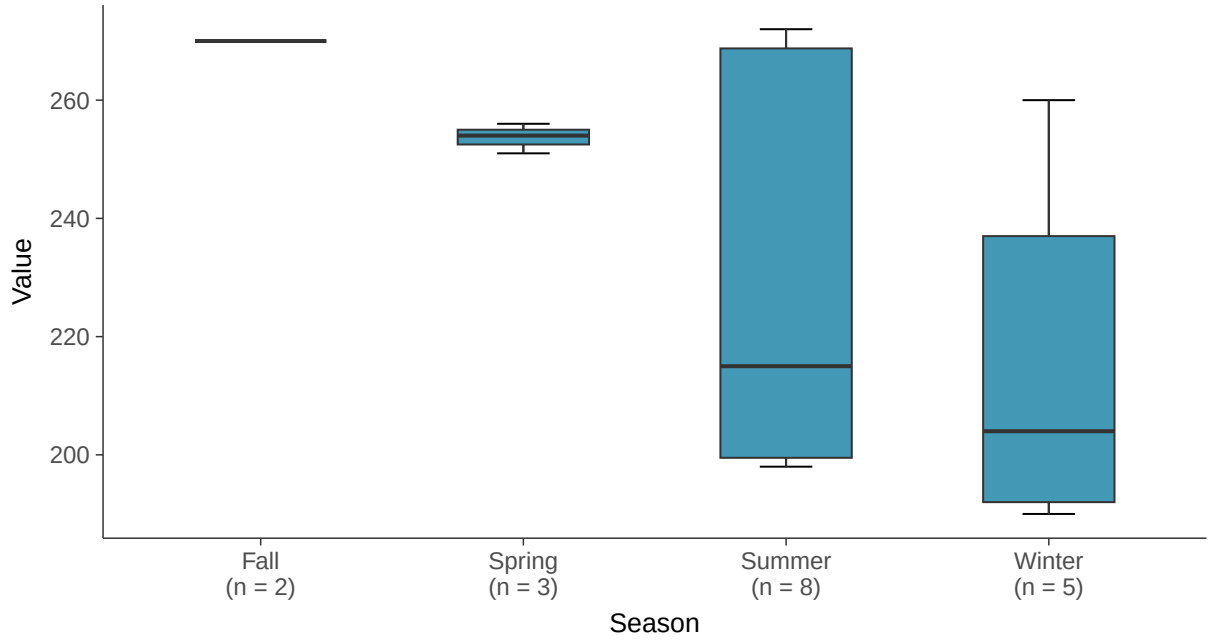
Boxplot

Calcium, MW-2 (mg/l)



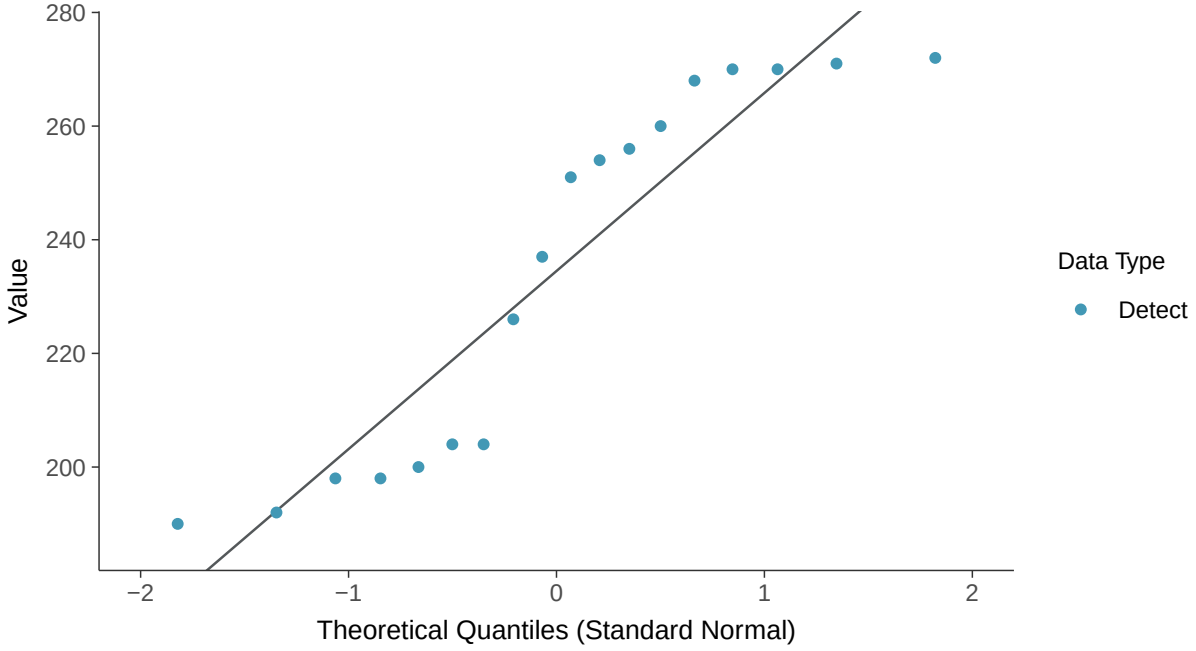
Boxplot by Season

Calcium, MW-2 (mg/l)



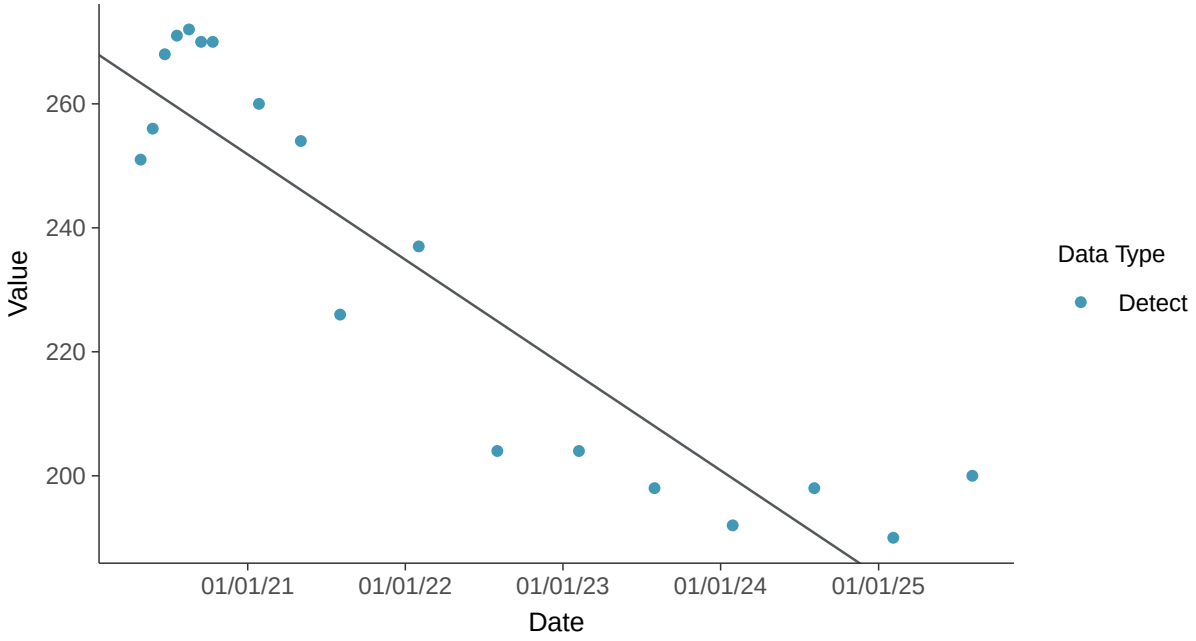
Normal Q-Q plot

Calcium, MW-2 (mg/l)



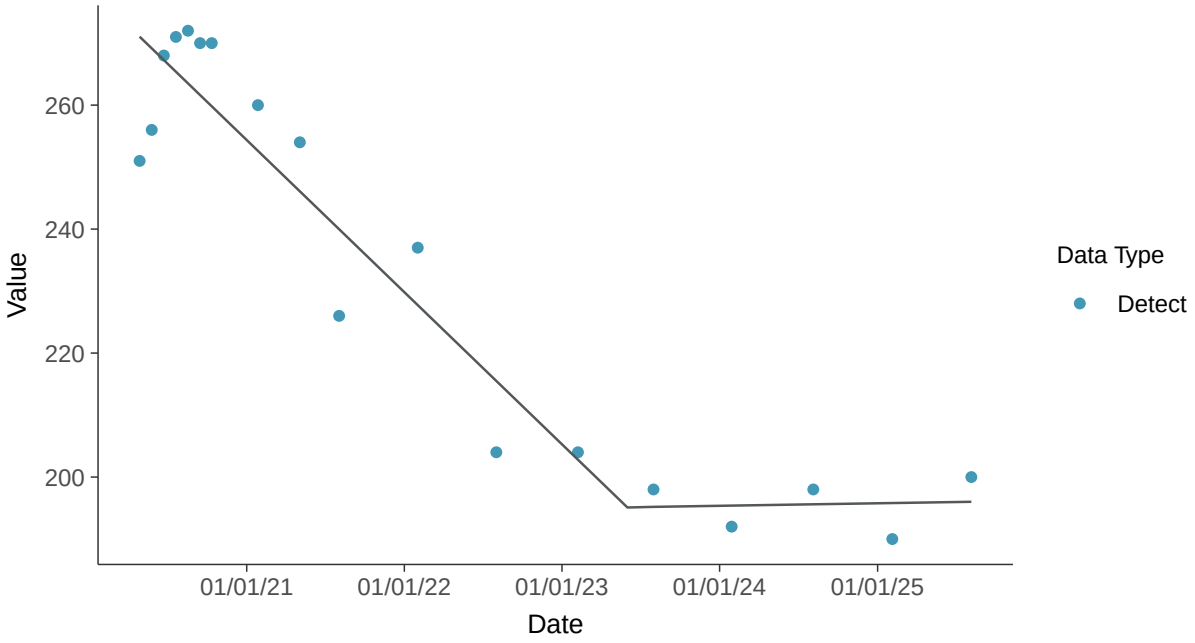
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Calcium, MW-2 (mg/l)



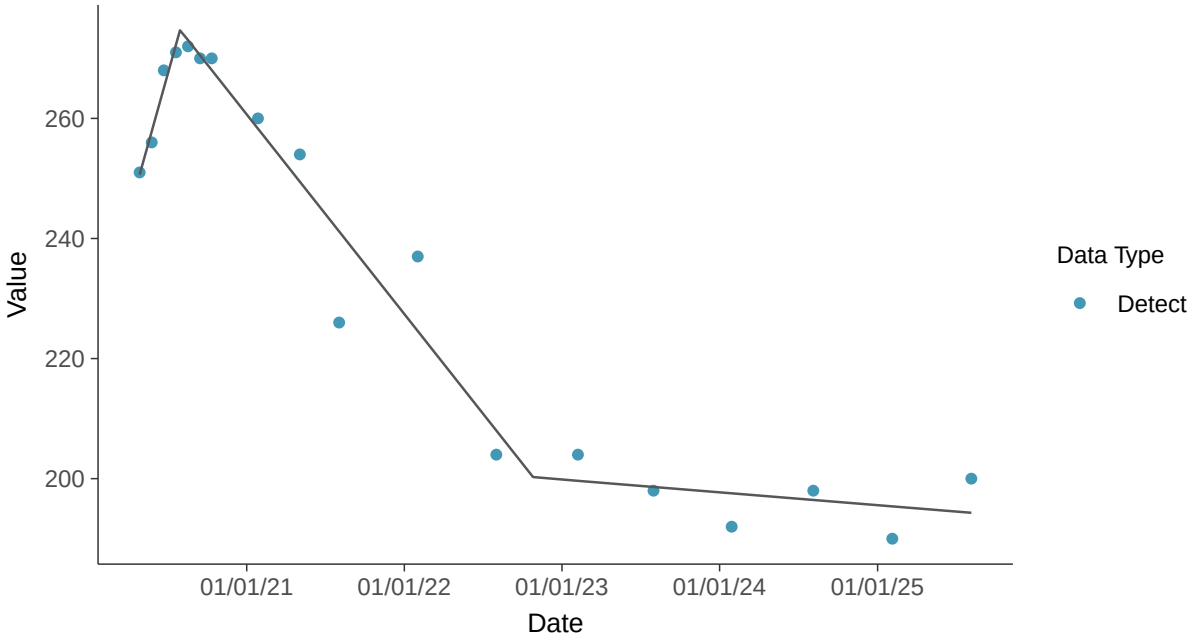
Trend Regression: Piecewise Linear-Linear

Calcium, MW-2 (mg/l)



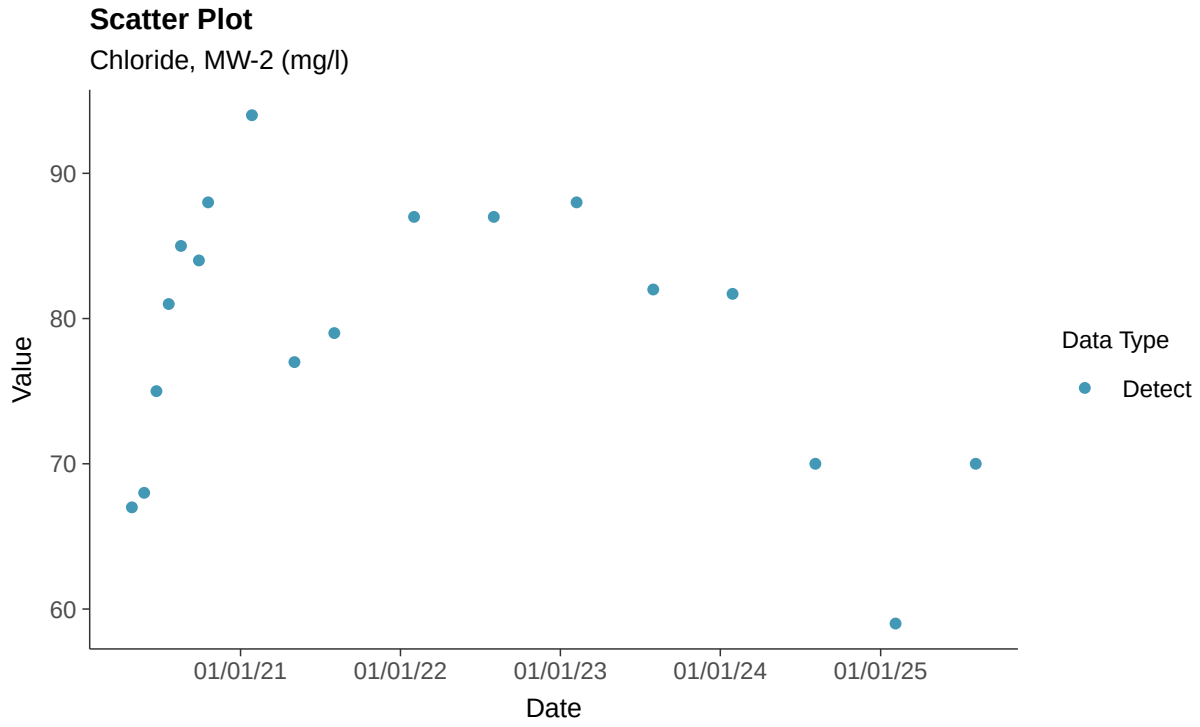
Trend Regression: Piecewise Linear-Linear-Linear

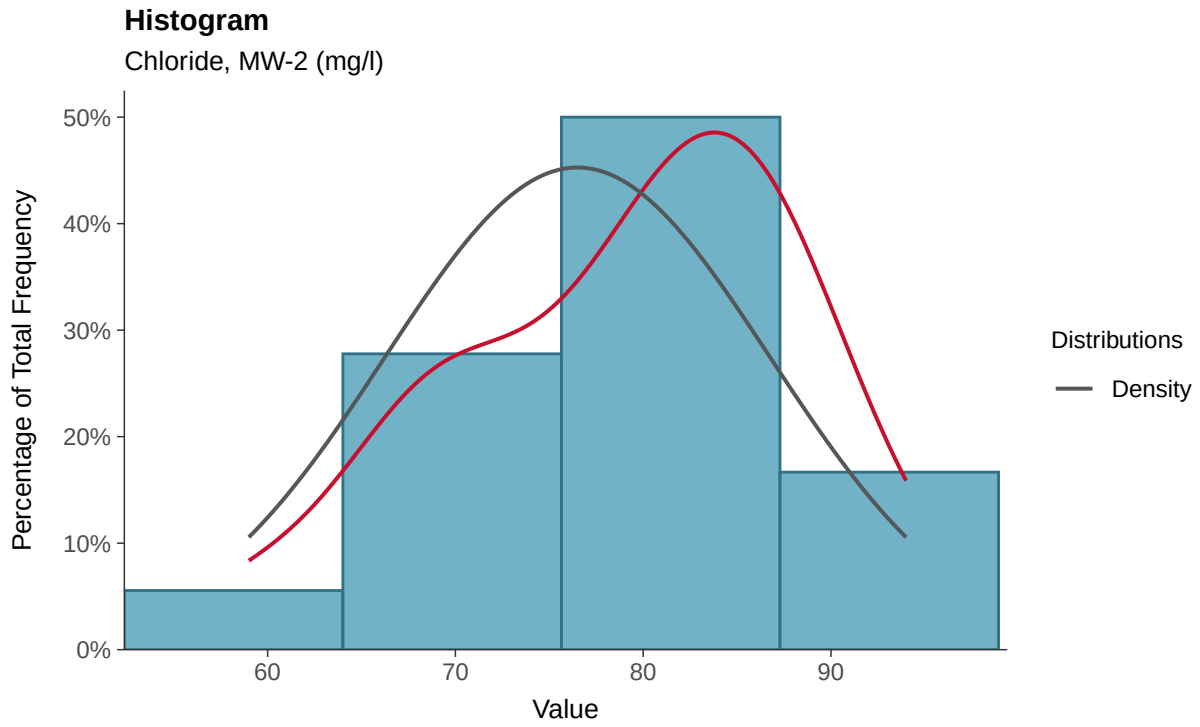
Calcium, MW-2 (mg/l)



Appendix III: Chloride, MW-2

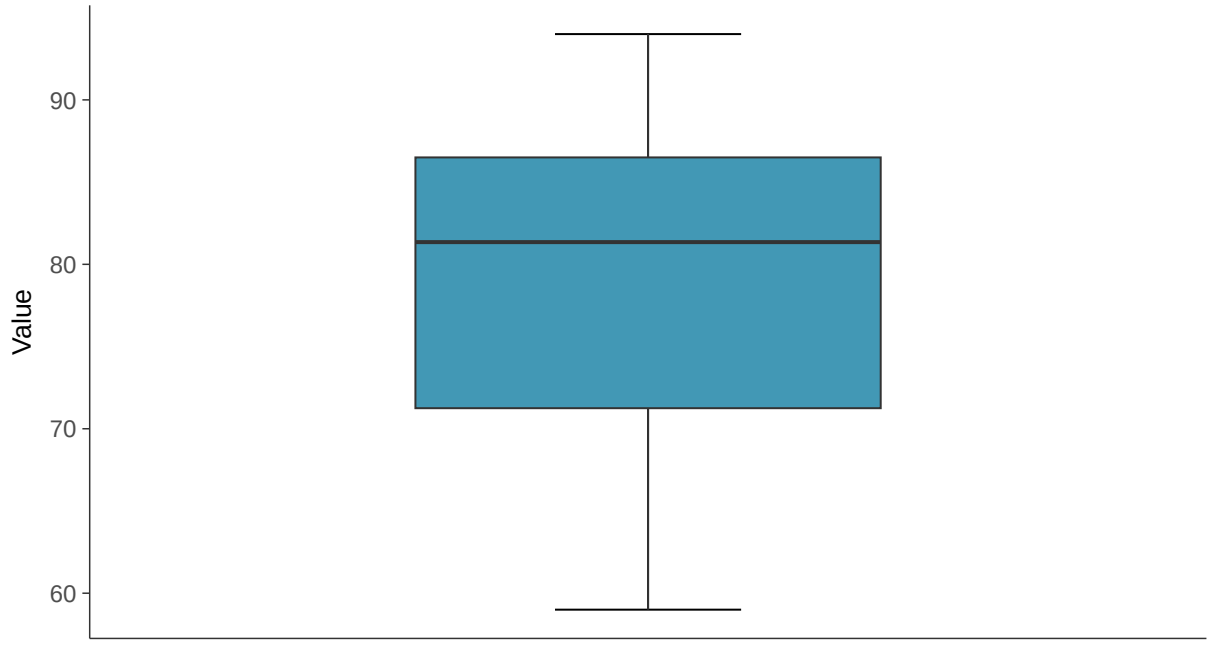
ID: 13_2_108





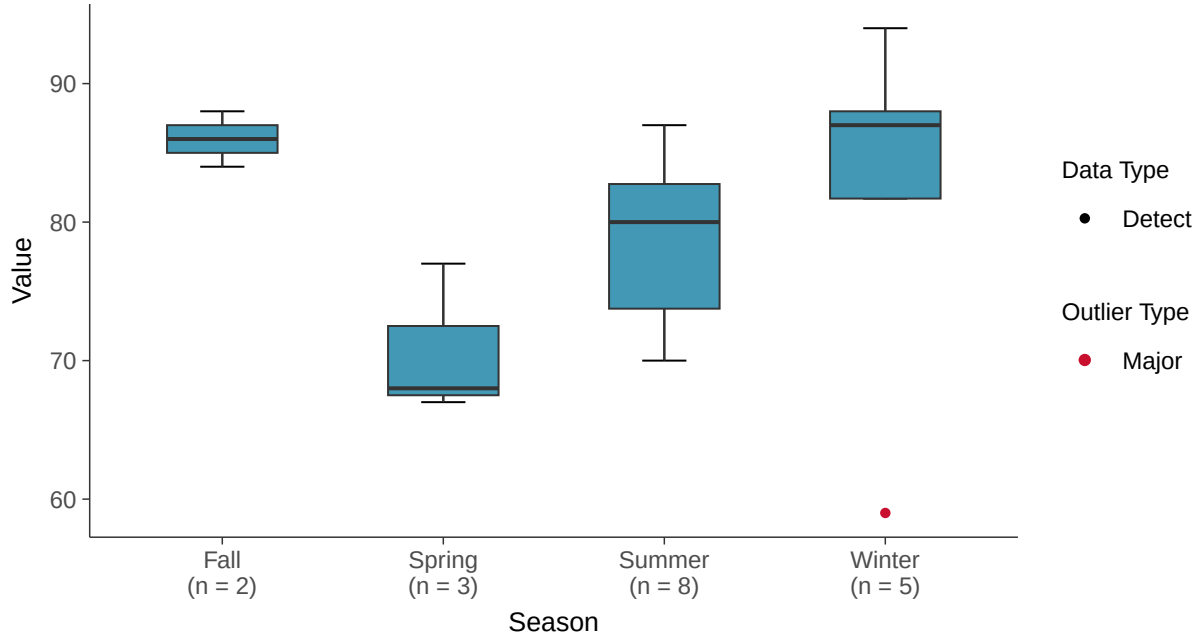
Boxplot

Chloride, MW-2 (mg/l)



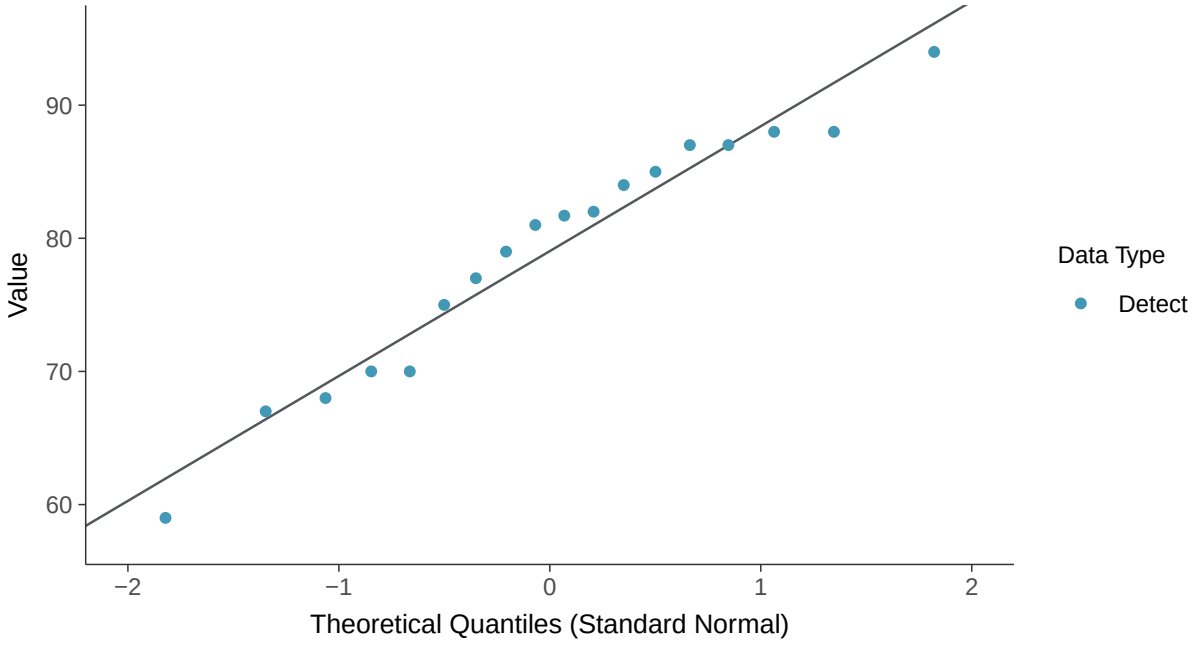
Boxplot by Season

Chloride, MW-2 (mg/l)



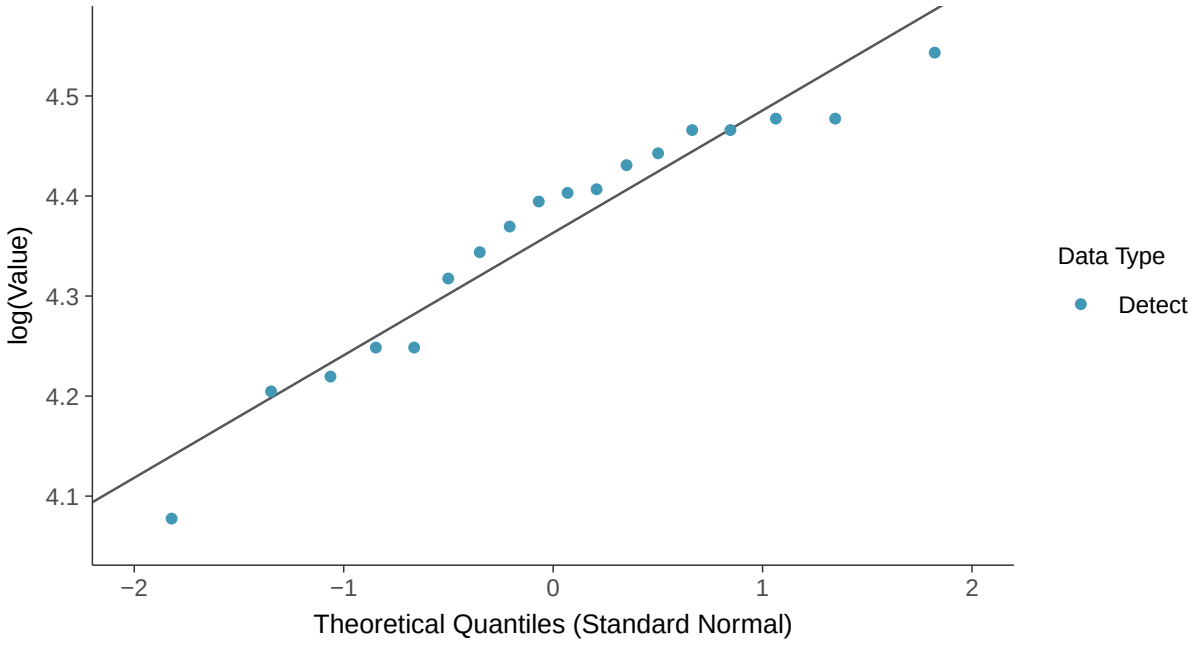
Normal Q-Q plot

Chloride, MW-2 (mg/l)



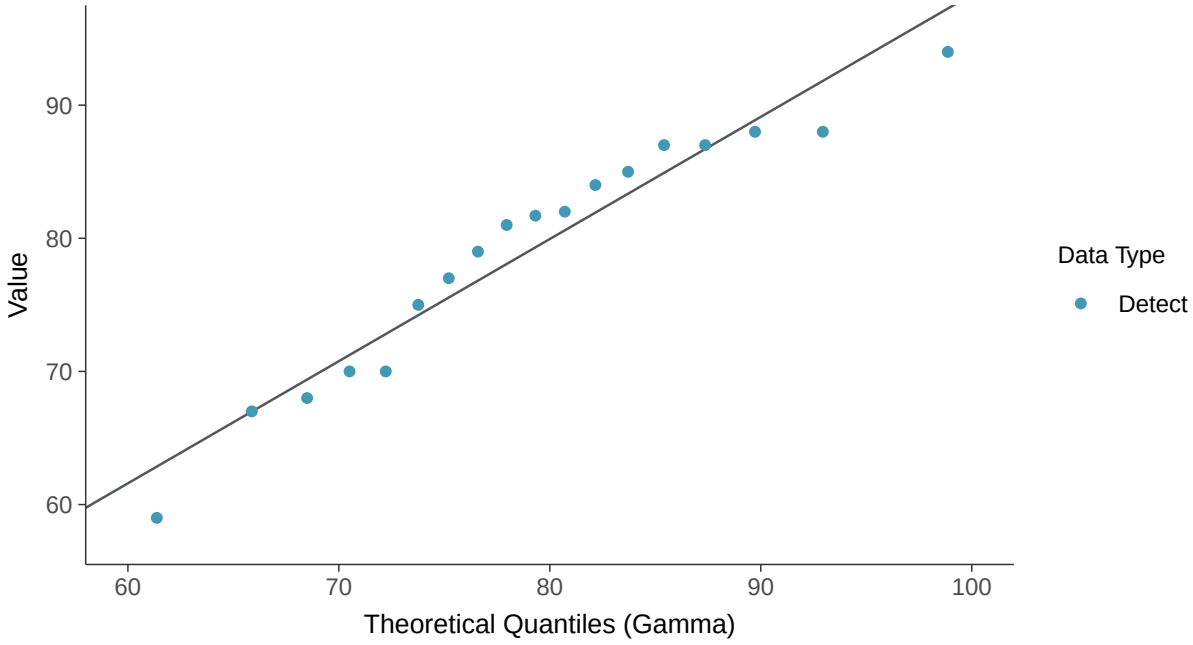
Lognormal Q-Q plot

Chloride, MW-2 (mg/l)



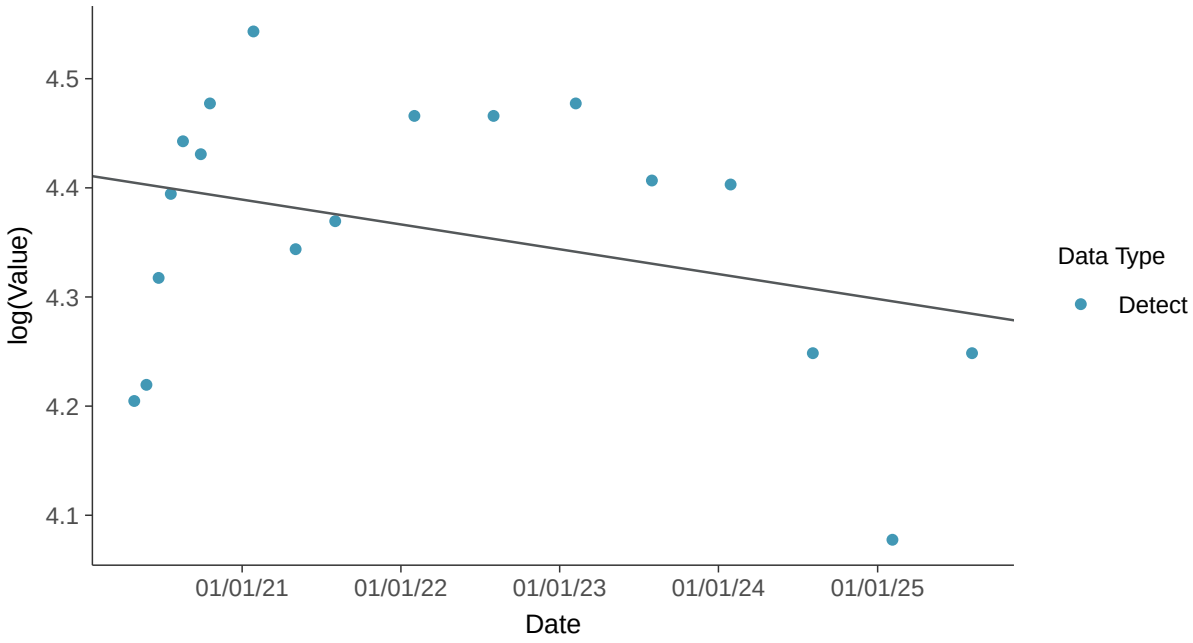
Gamma Q-Q plot

Chloride, MW-2 (mg/l)



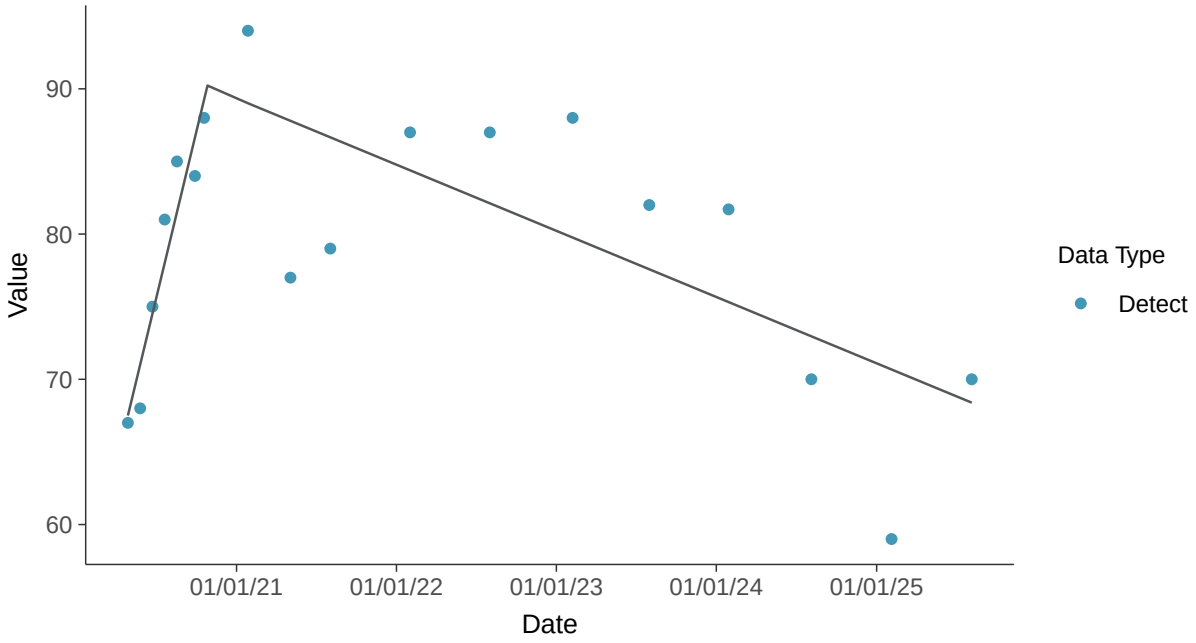
Trend Regression: Lognormal MLE

Chloride, MW-2 (mg/l)



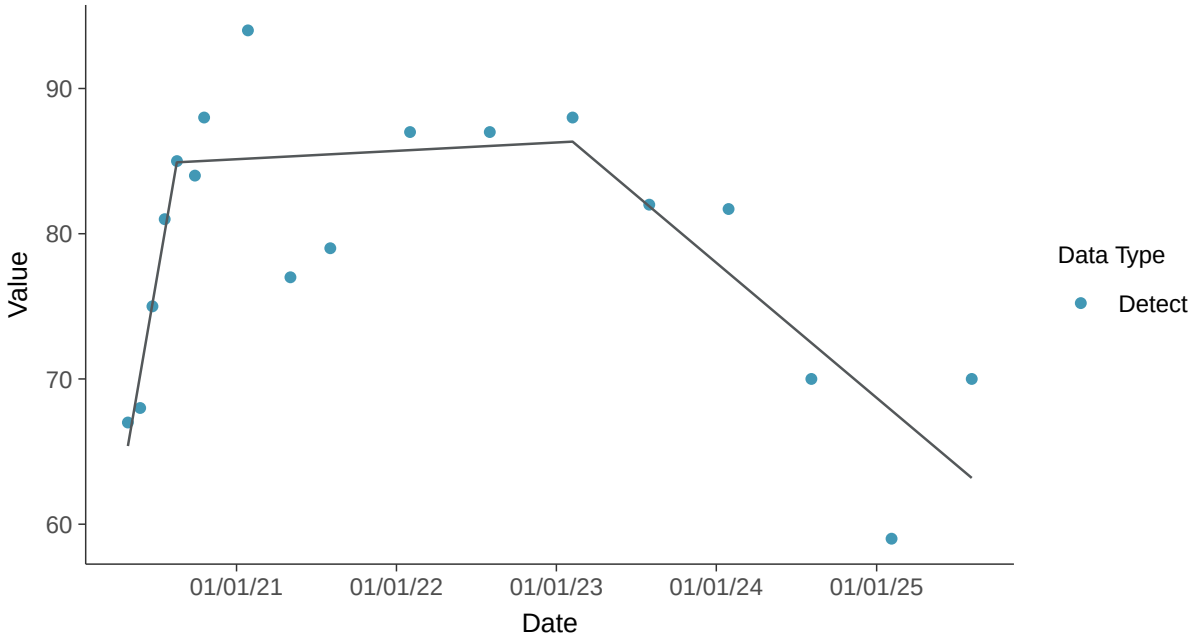
Trend Regression: Piecewise Linear-Linear

Chloride, MW-2 (mg/l)



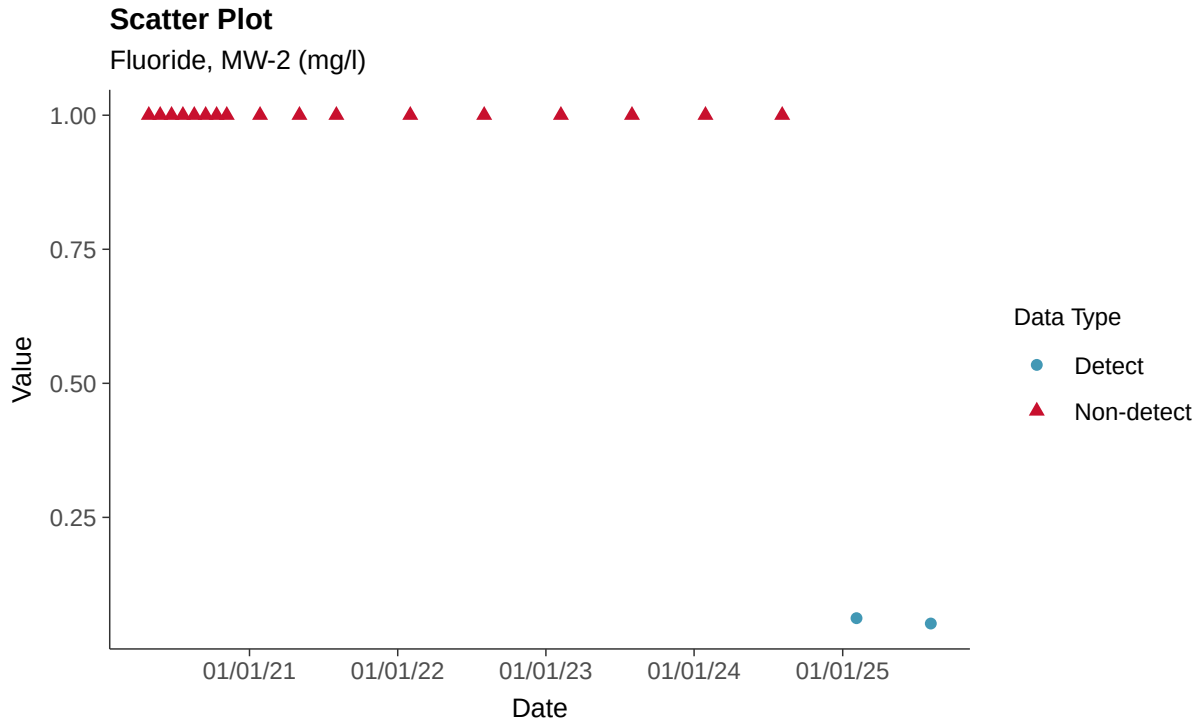
Trend Regression: Piecewise Linear-Linear-Linear

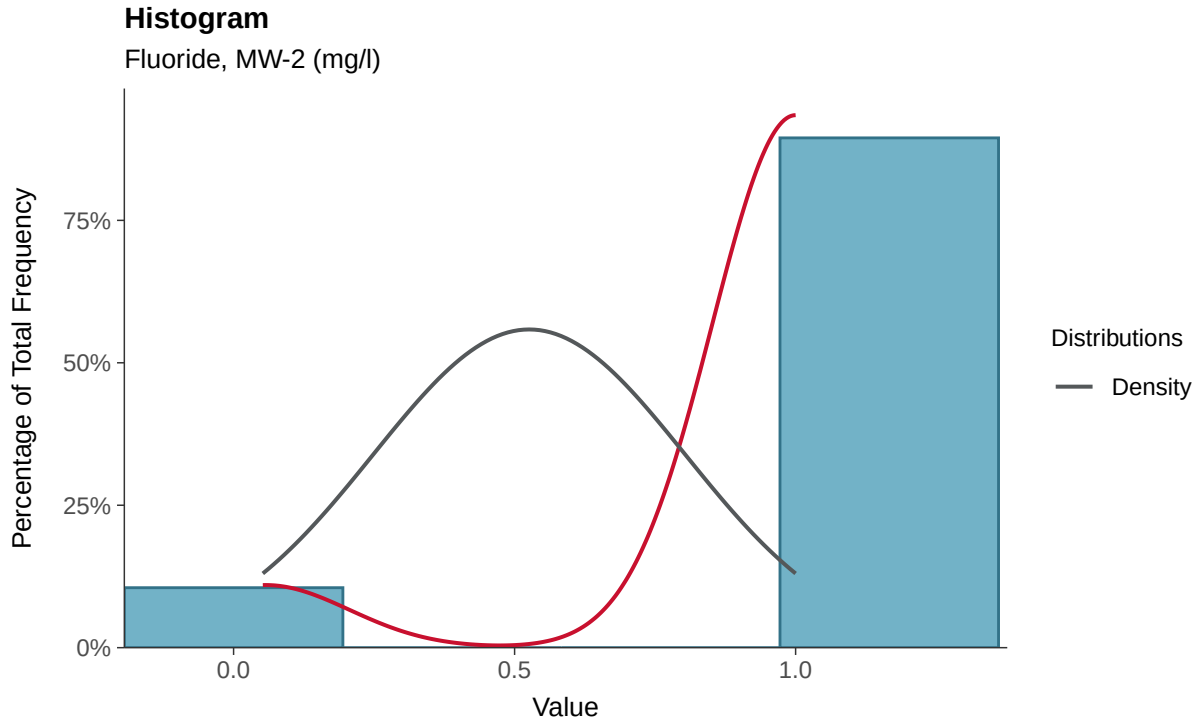
Chloride, MW-2 (mg/l)



Appendix III: Fluoride, MW-2

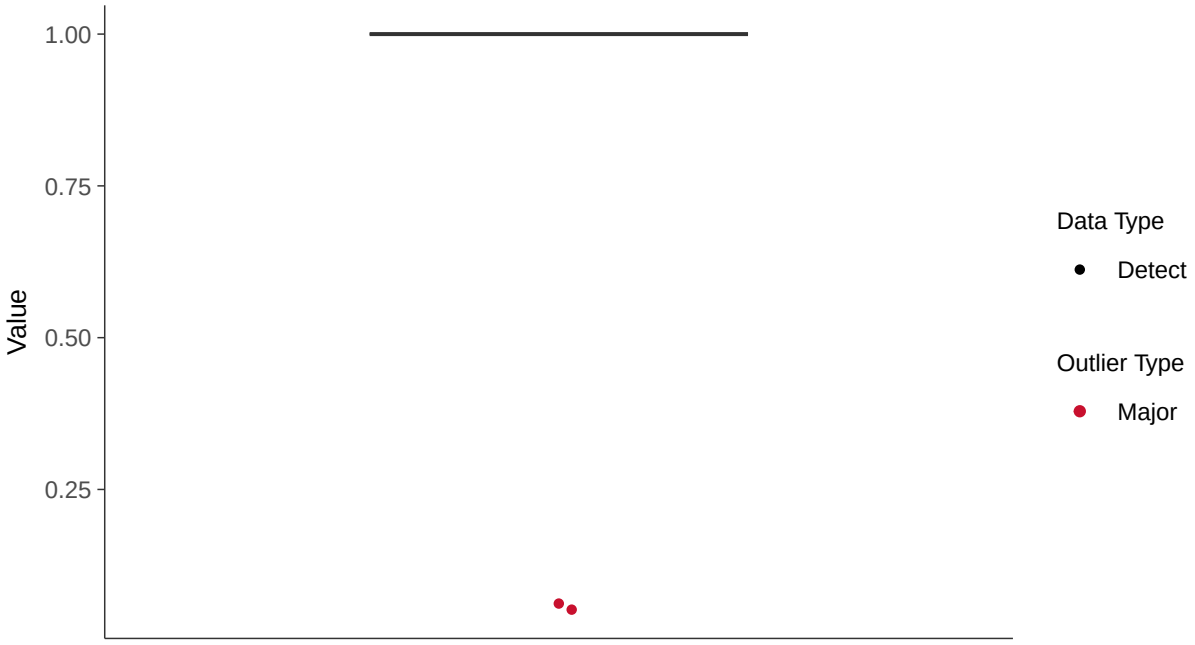
ID: 13_2_112





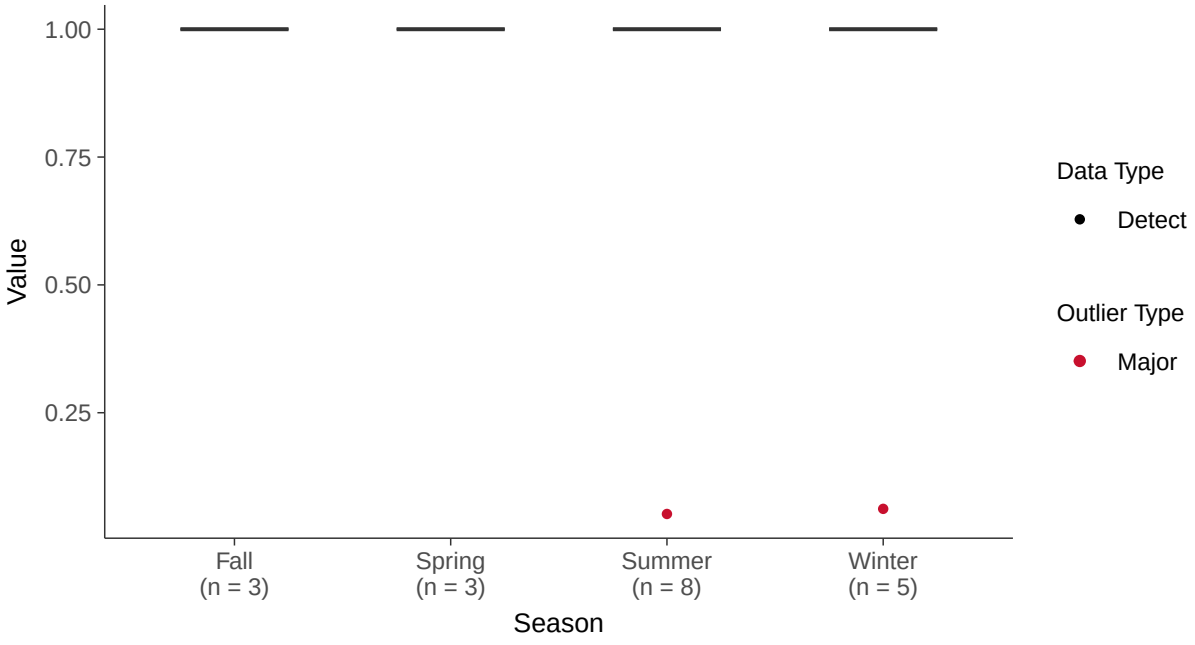
Boxplot

Fluoride, MW-2 (mg/l)



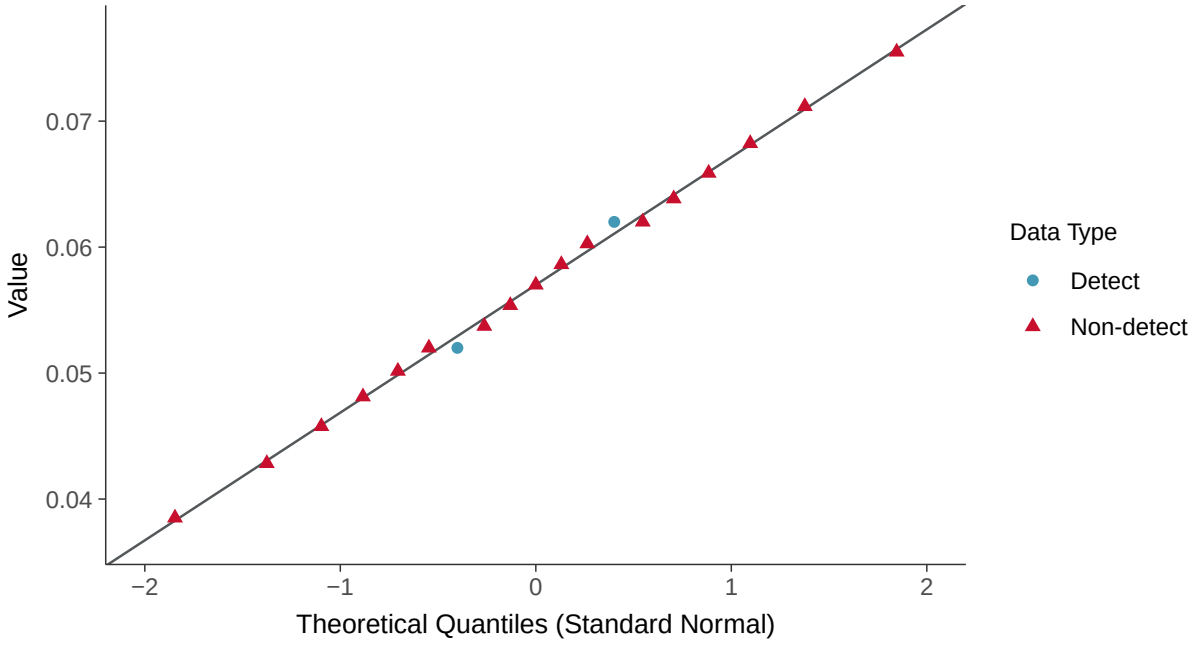
Boxplot by Season

Fluoride, MW-2 (mg/l)



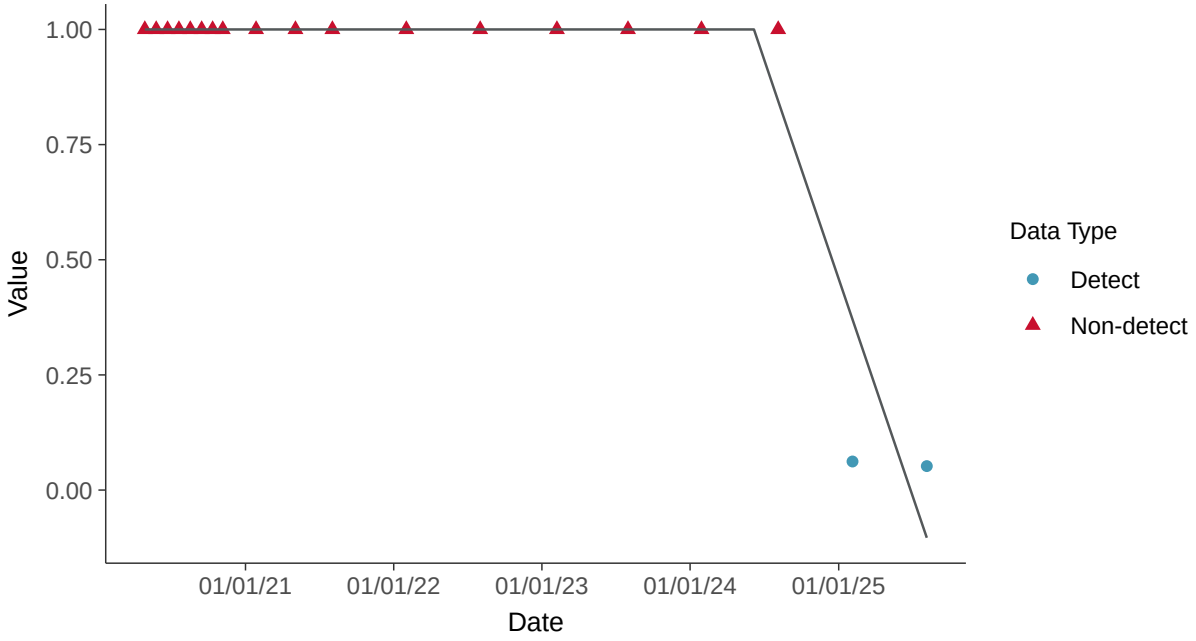
Normal Q-Q plot using ROS Imputed Estimates

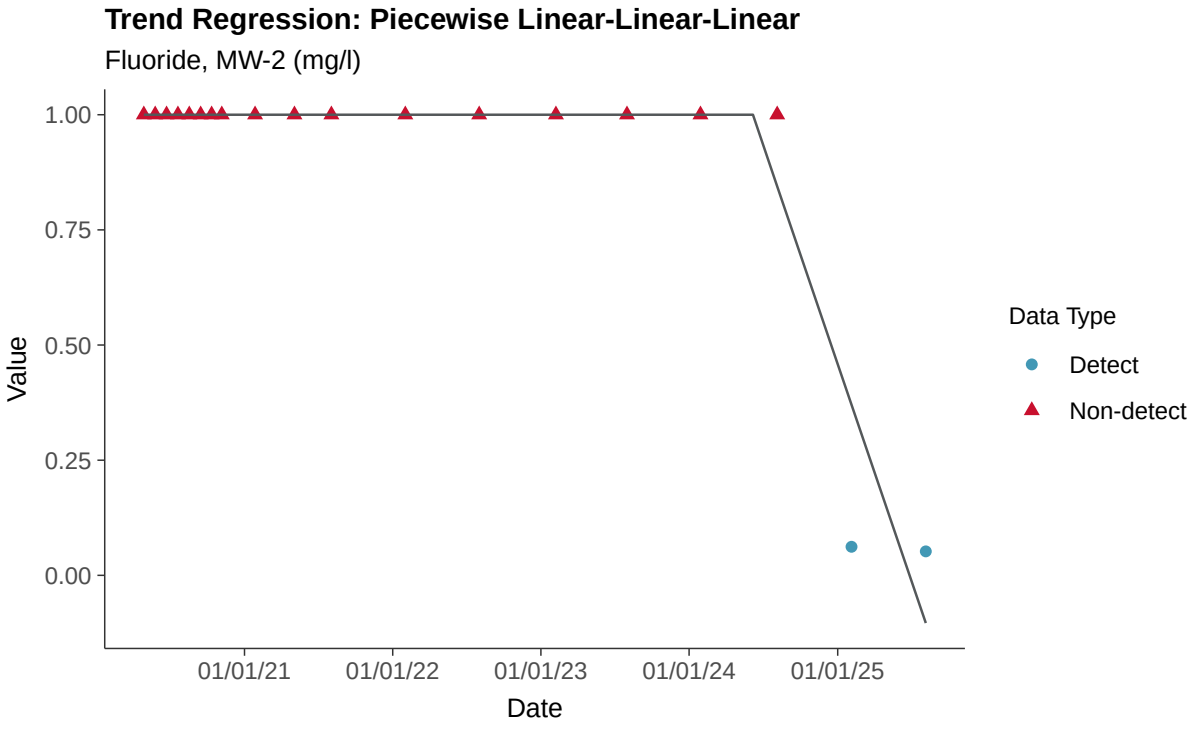
Fluoride, MW-2 (mg/l)



Trend Regression: Piecewise Linear-Linear

Fluoride, MW-2 (mg/l)



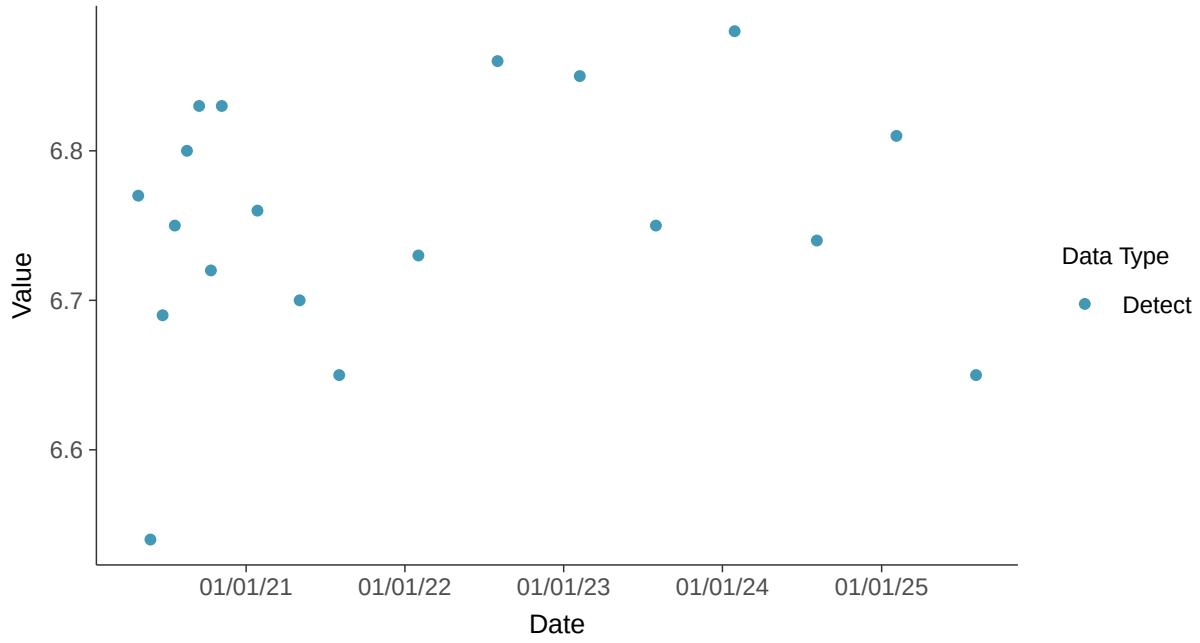

Trend Regression: Piecewise Linear-Linear-Linear
Fluoride, MW-2 (mg/l)
Value
1.00
0.75
0.50
0.25
0.00
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Appendix III: pH, Field, MW-2

ID: 13_2_120

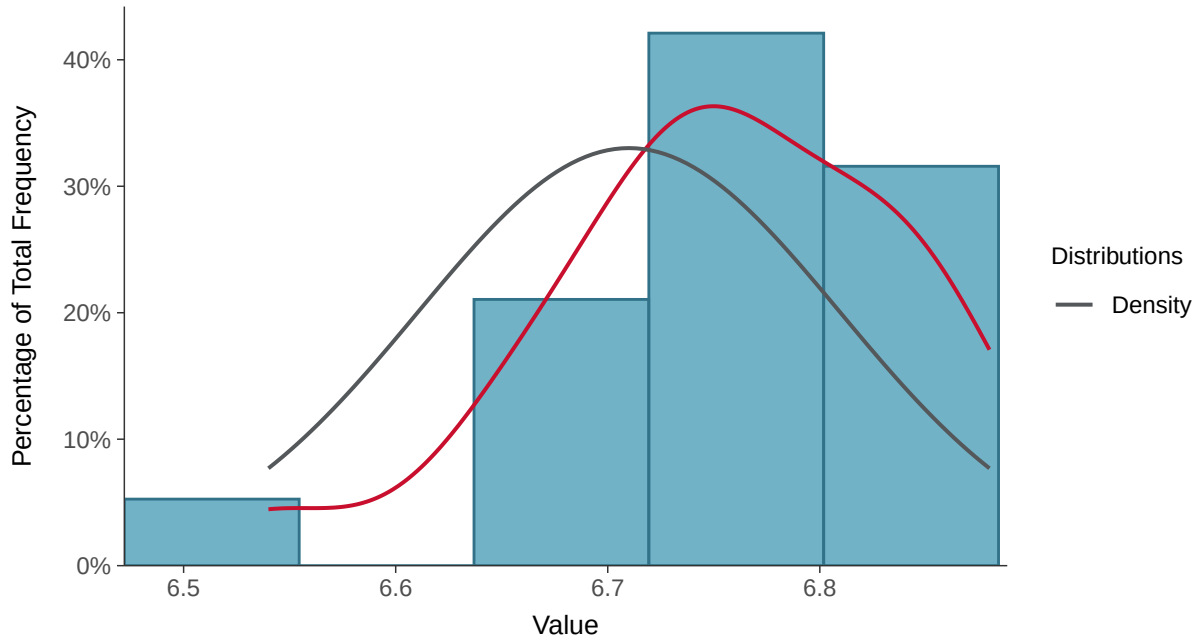
Scatter Plot

pH, Field, MW-2 (su)



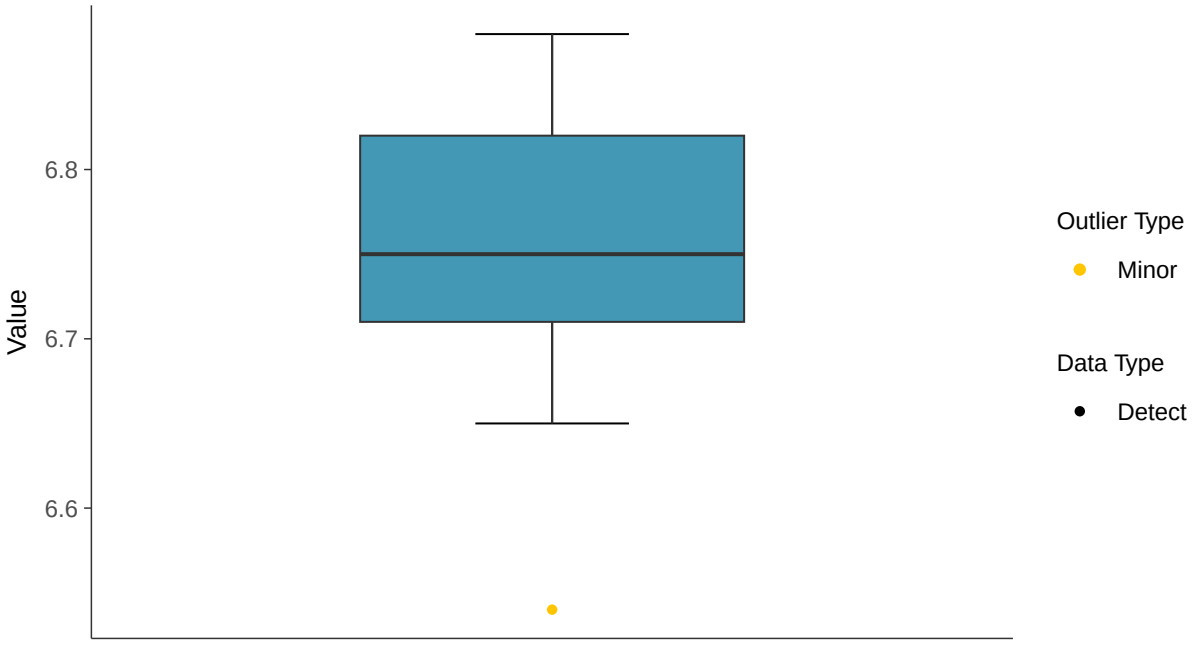
Histogram

pH, Field, MW-2 (su)



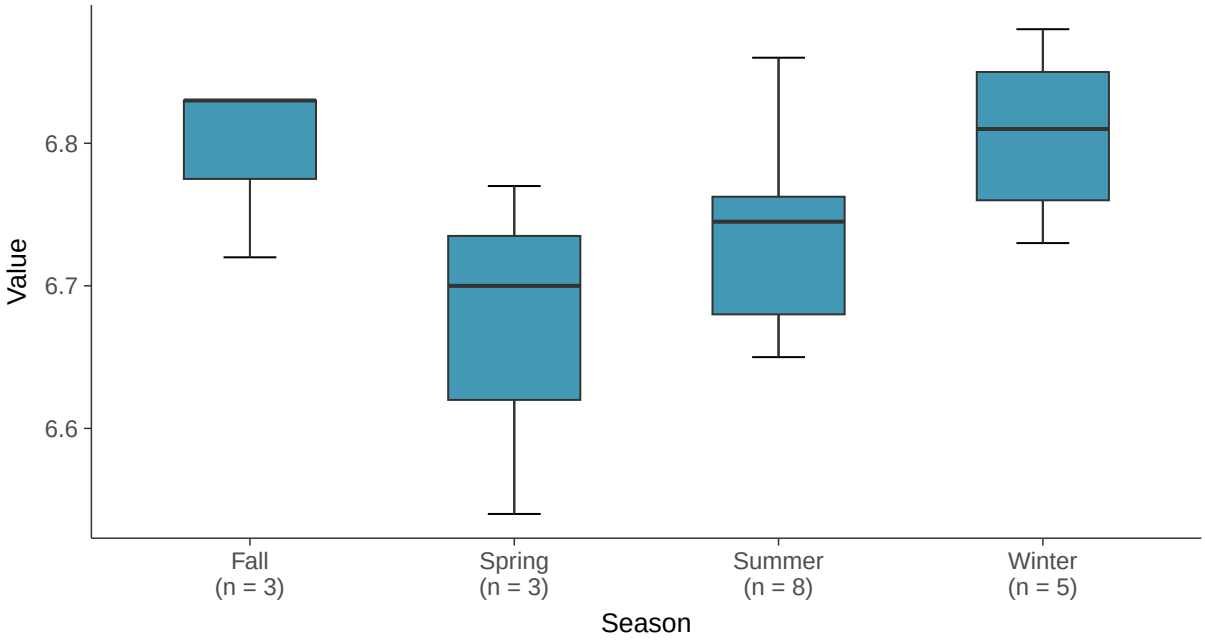
Boxplot

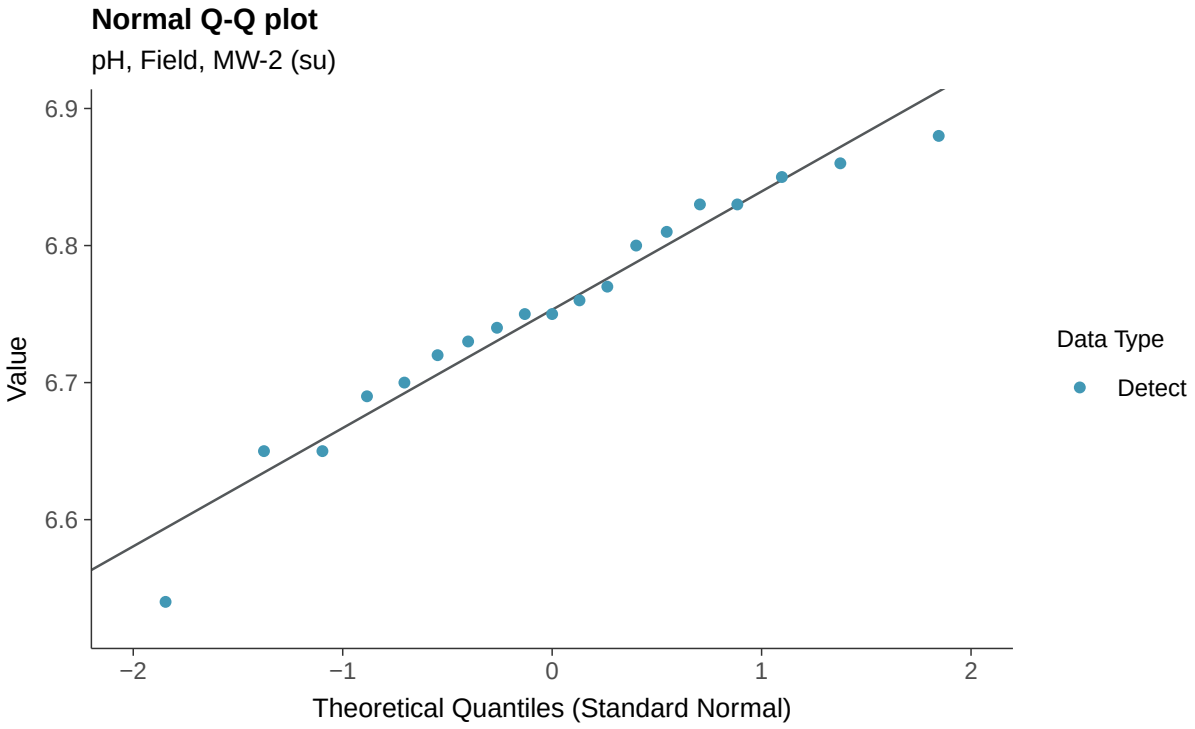
pH, Field, MW-2 (su)

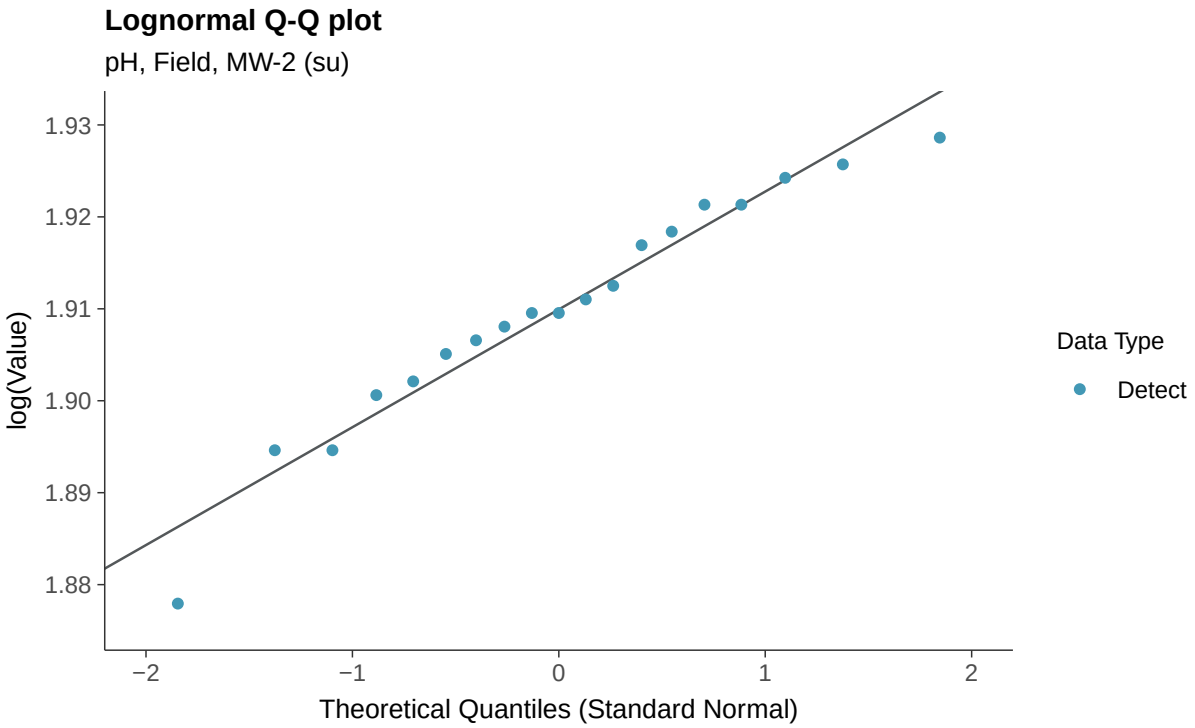


Boxplot by Season

pH, Field, MW-2 (su)

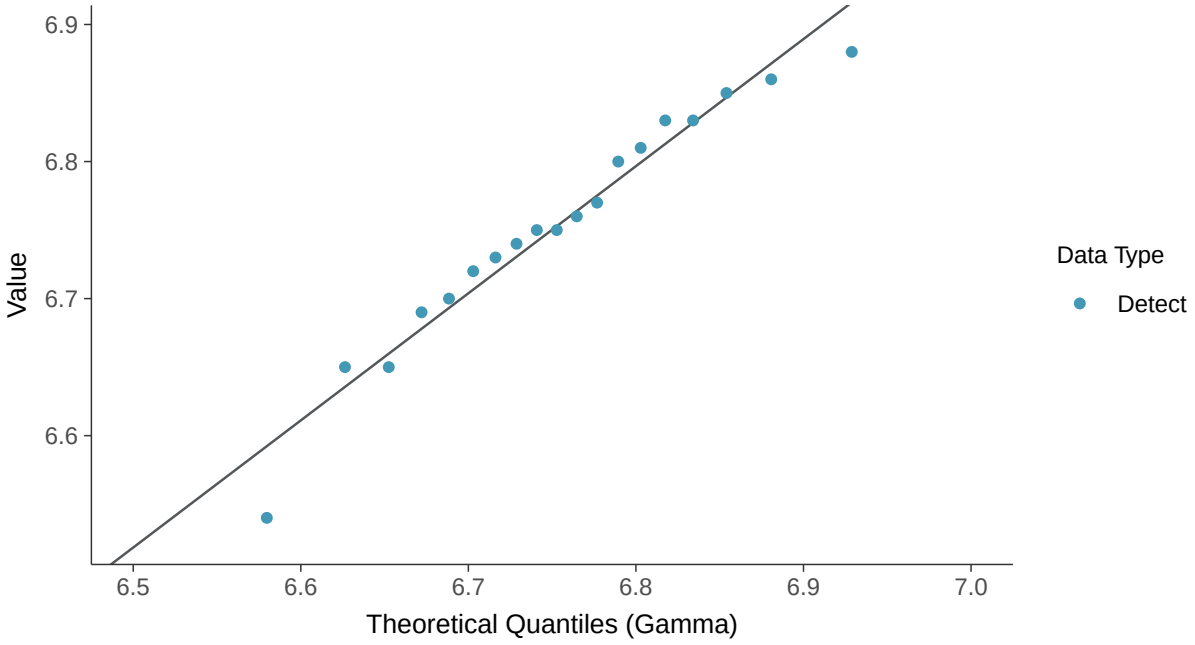



Normal Q-Q plot
pH, Field, MW-2 (su)
Value
6.9
6.8
6.7
6.6
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect


Lognormal Q-Q plot
pH, Field, MW-2 (su)
log(Value)
1.93
1.92
1.91
1.90
1.89
1.88
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect

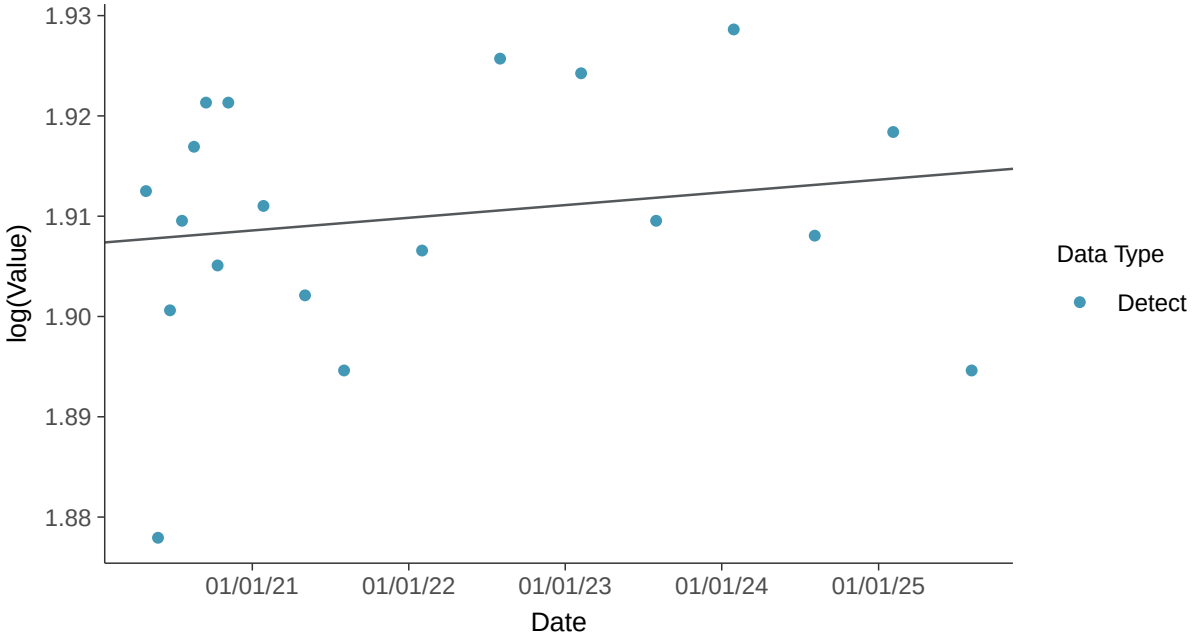
Gamma Q-Q plot

pH, Field, MW-2 (su)



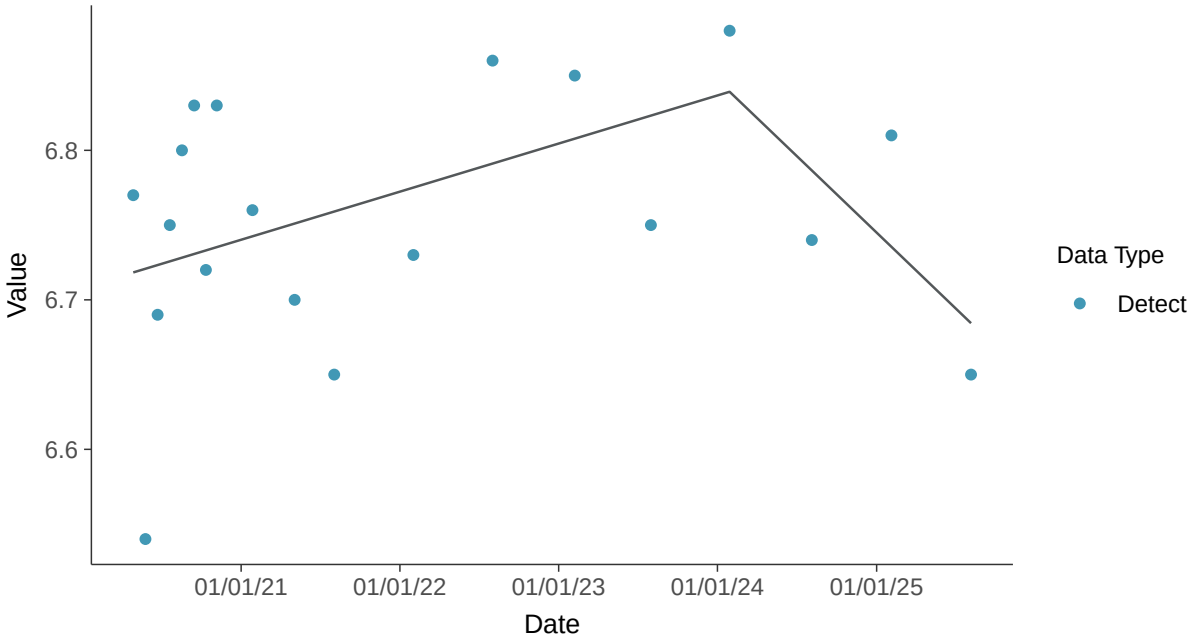
Trend Regression: Lognormal MLE

pH, Field, MW-2 (su)



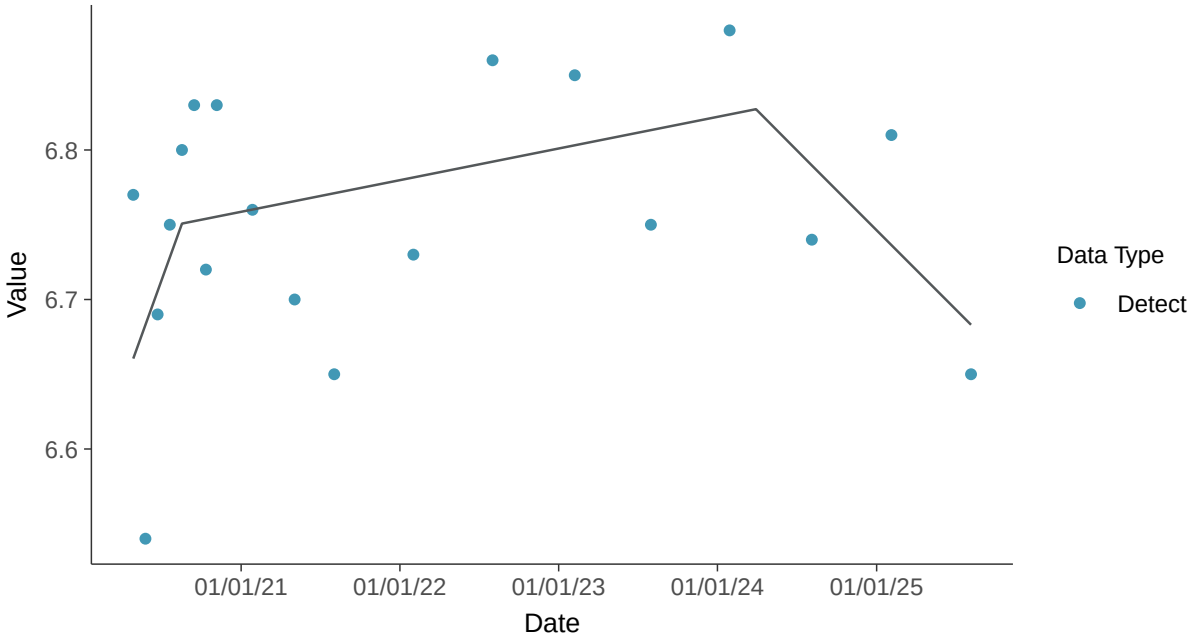
Trend Regression: Piecewise Linear-Linear

pH, Field, MW-2 (su)



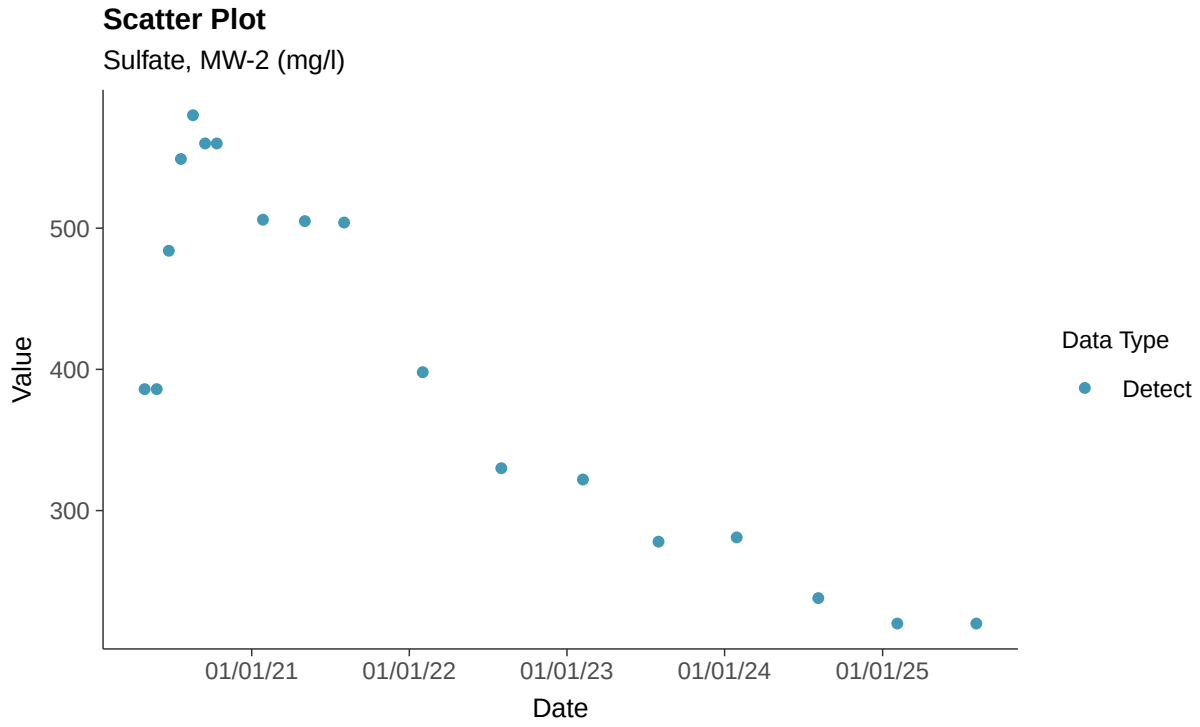
Trend Regression: Piecewise Linear-Linear-Linear

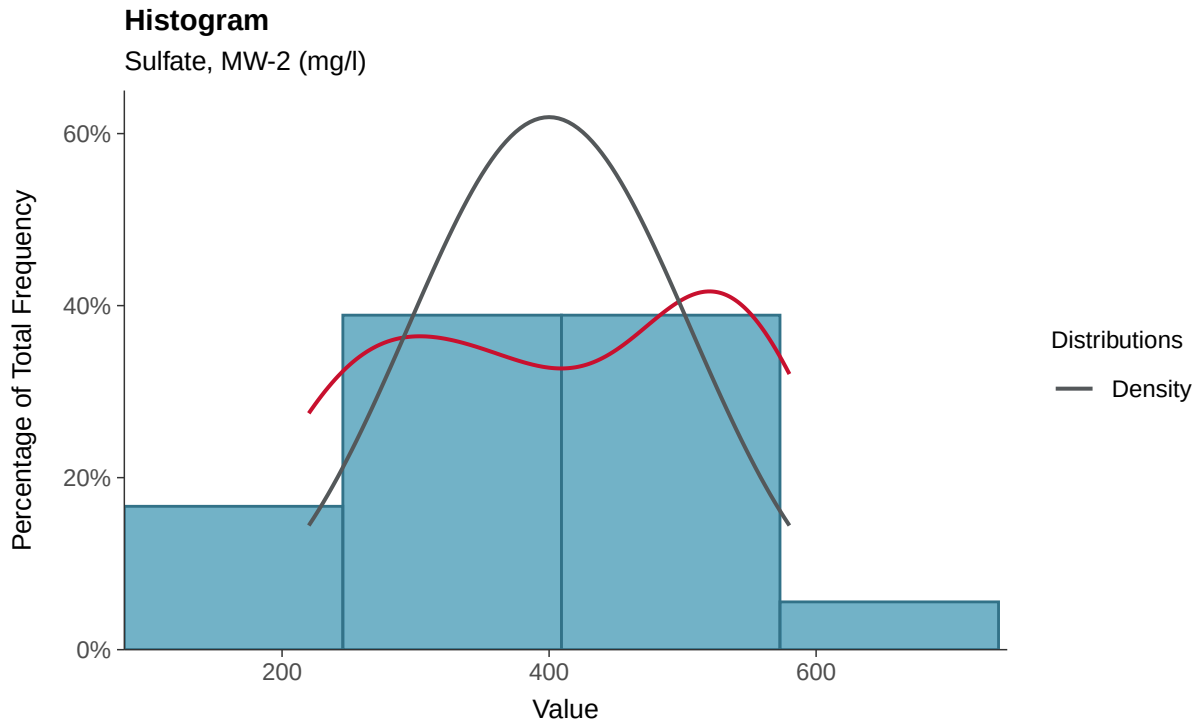
pH, Field, MW-2 (su)



Appendix III: Sulfate, MW-2

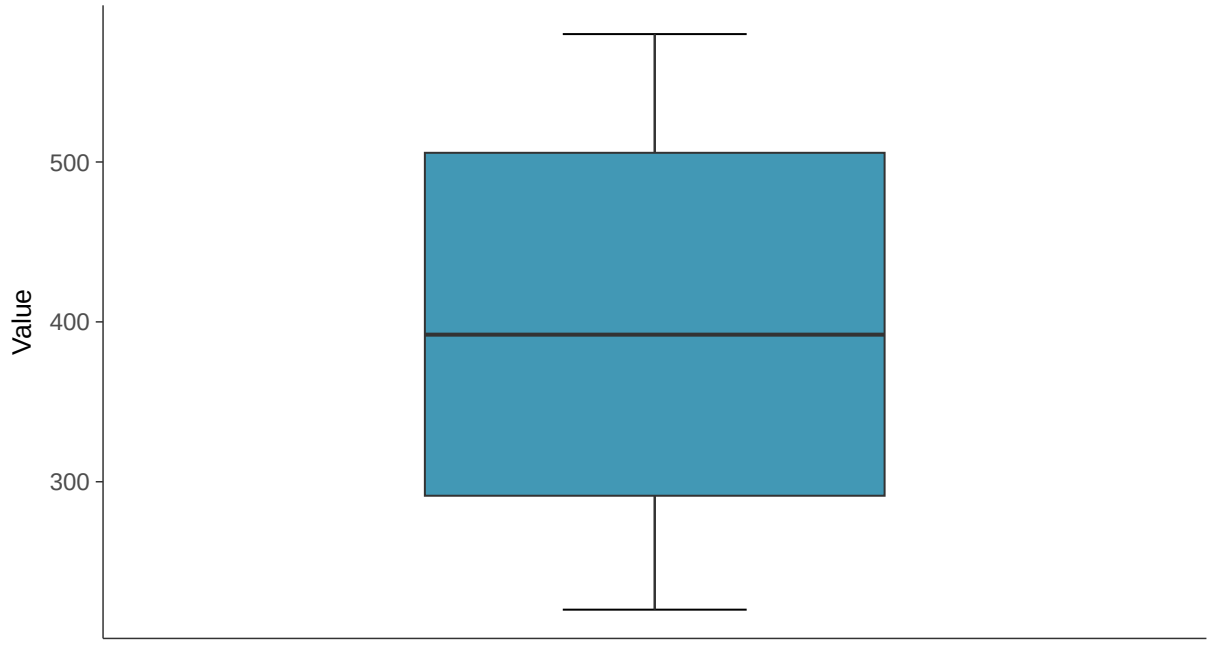
ID: 13_2_124





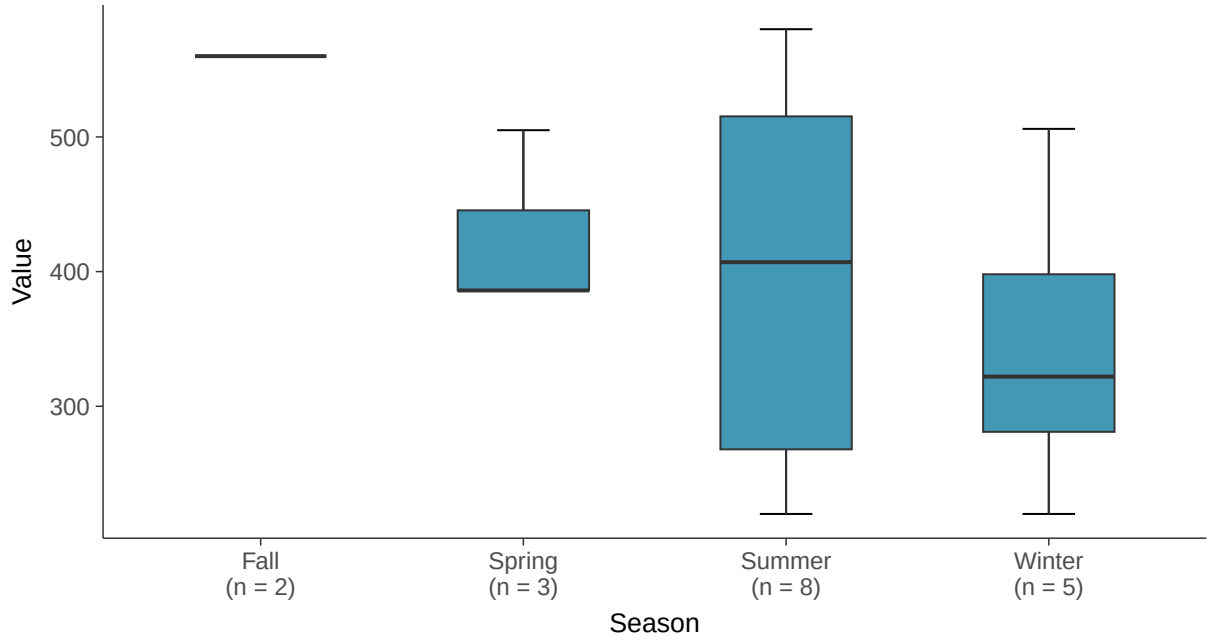
Boxplot

Sulfate, MW-2 (mg/l)



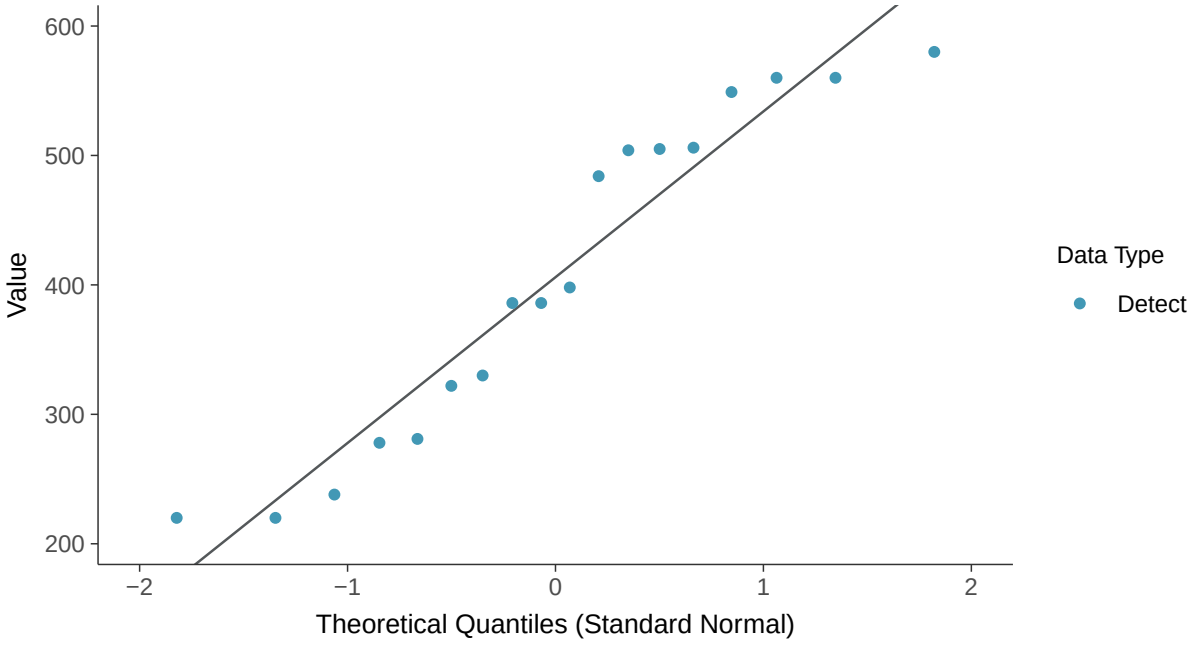
Boxplot by Season

Sulfate, MW-2 (mg/l)



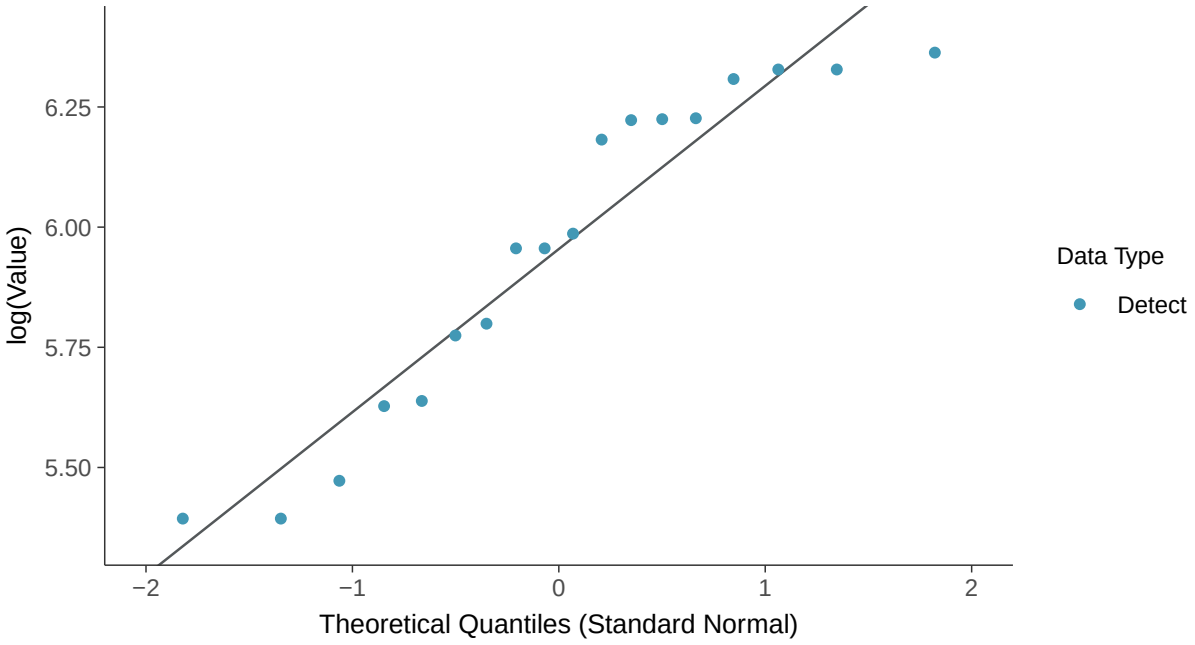
Normal Q-Q plot

Sulfate, MW-2 (mg/l)



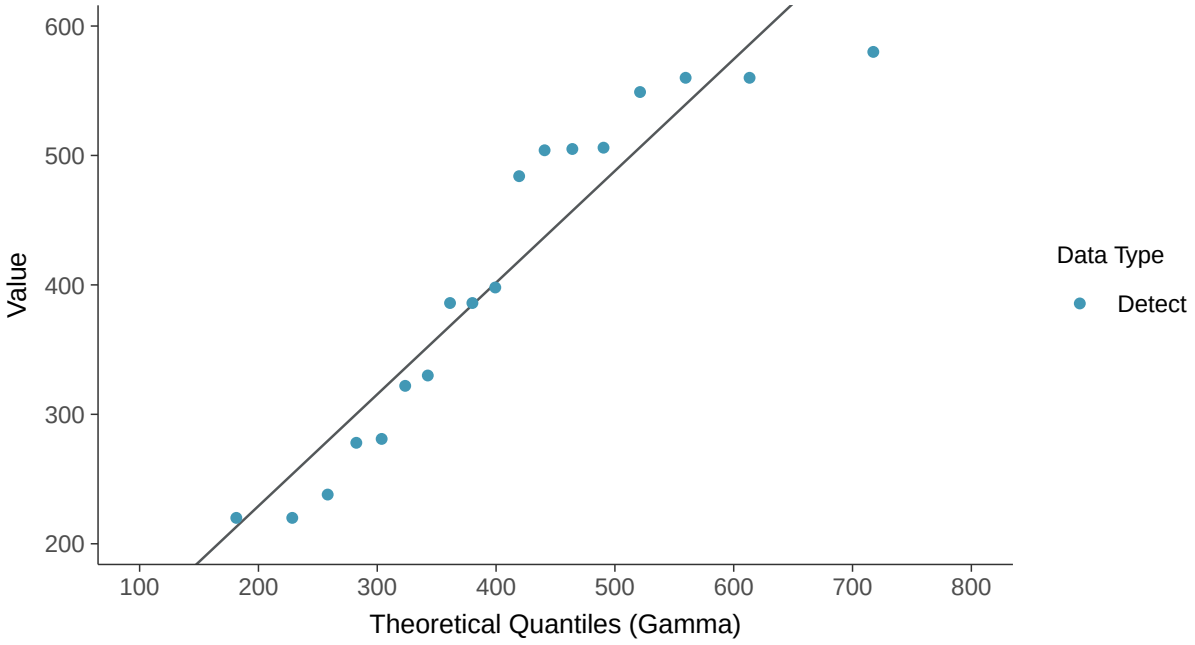
Lognormal Q-Q plot

Sulfate, MW-2 (mg/l)



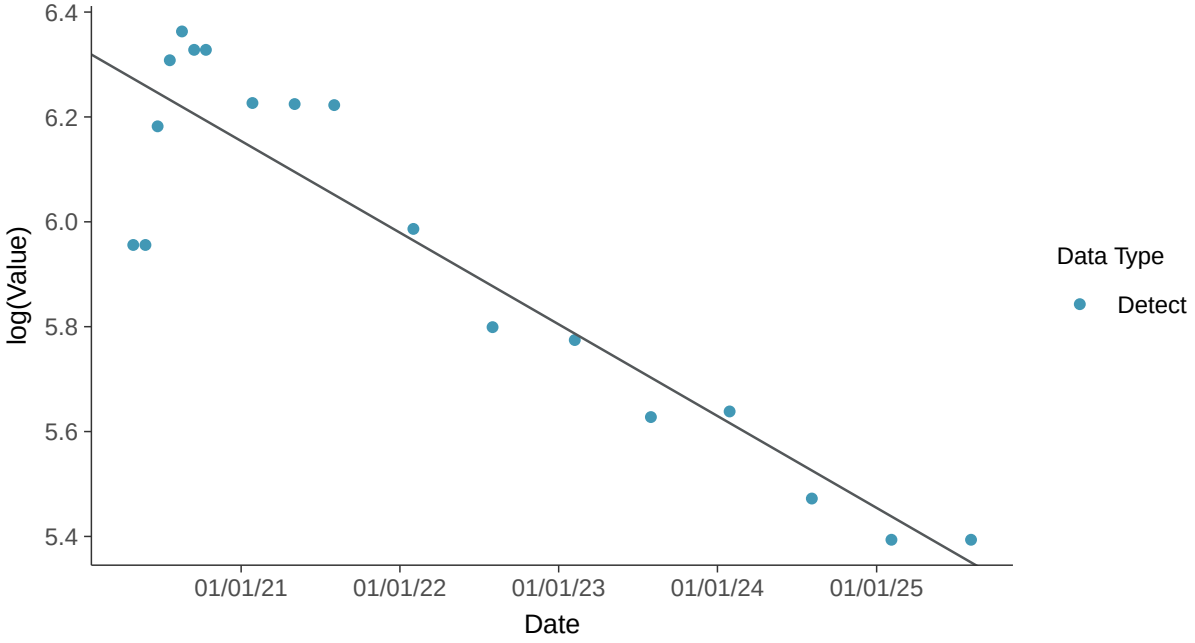
Gamma Q-Q plot

Sulfate, MW-2 (mg/l)



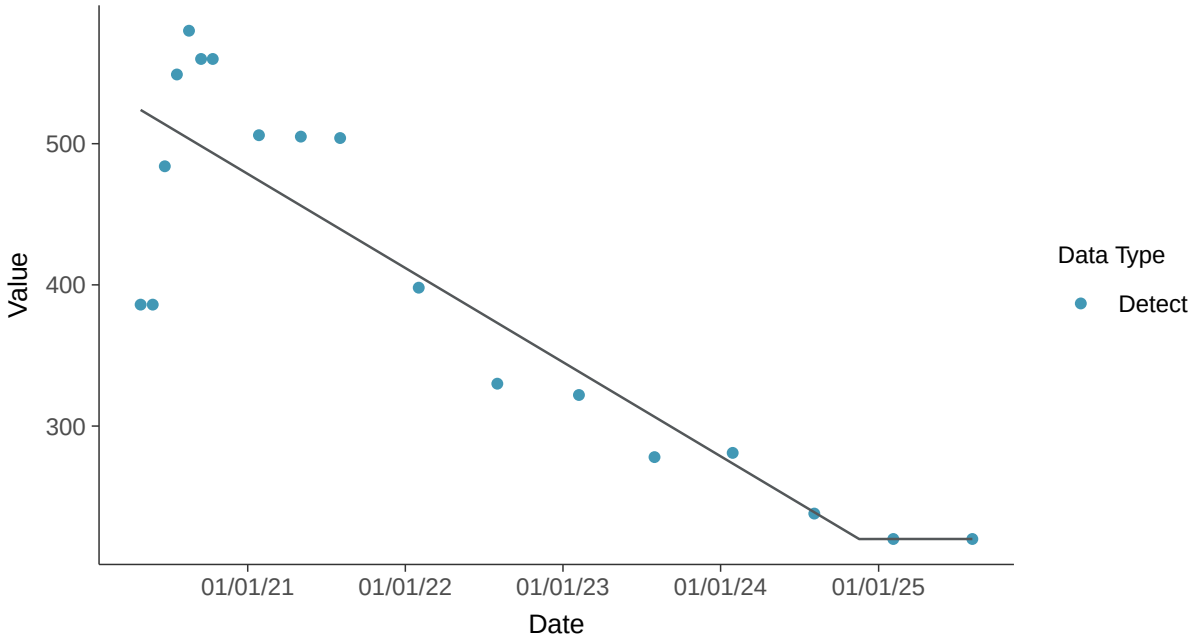
Trend Regression: Lognormal MLE

Sulfate, MW-2 (mg/l)



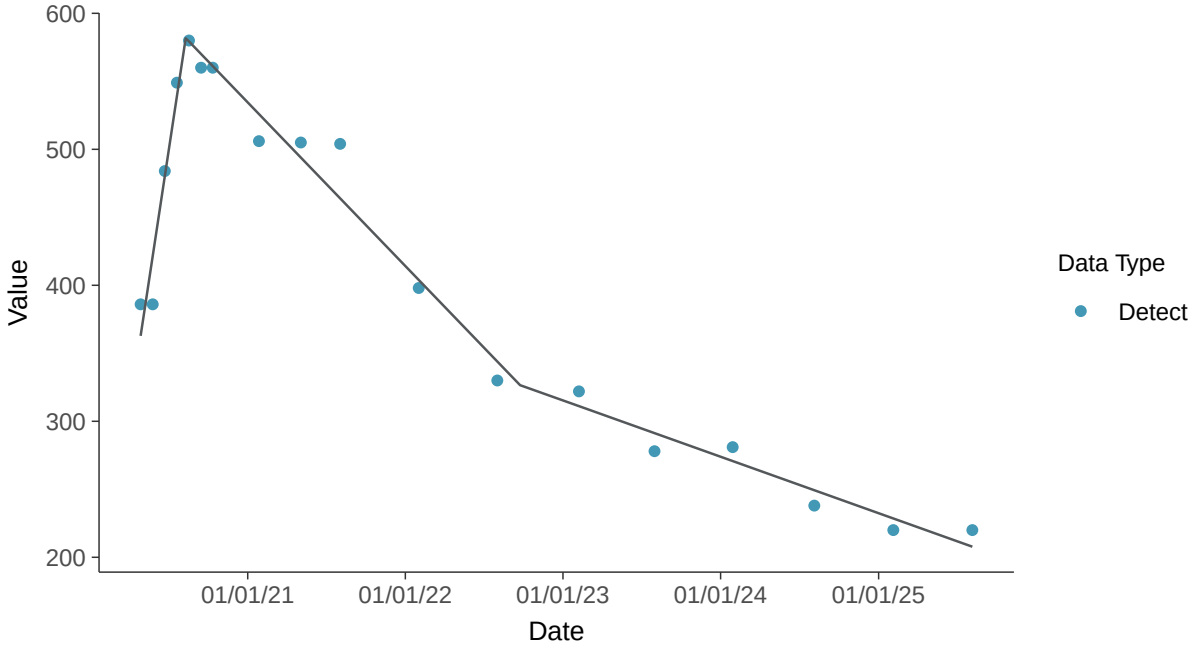
Trend Regression: Piecewise Linear-Linear

Sulfate, MW-2 (mg/l)



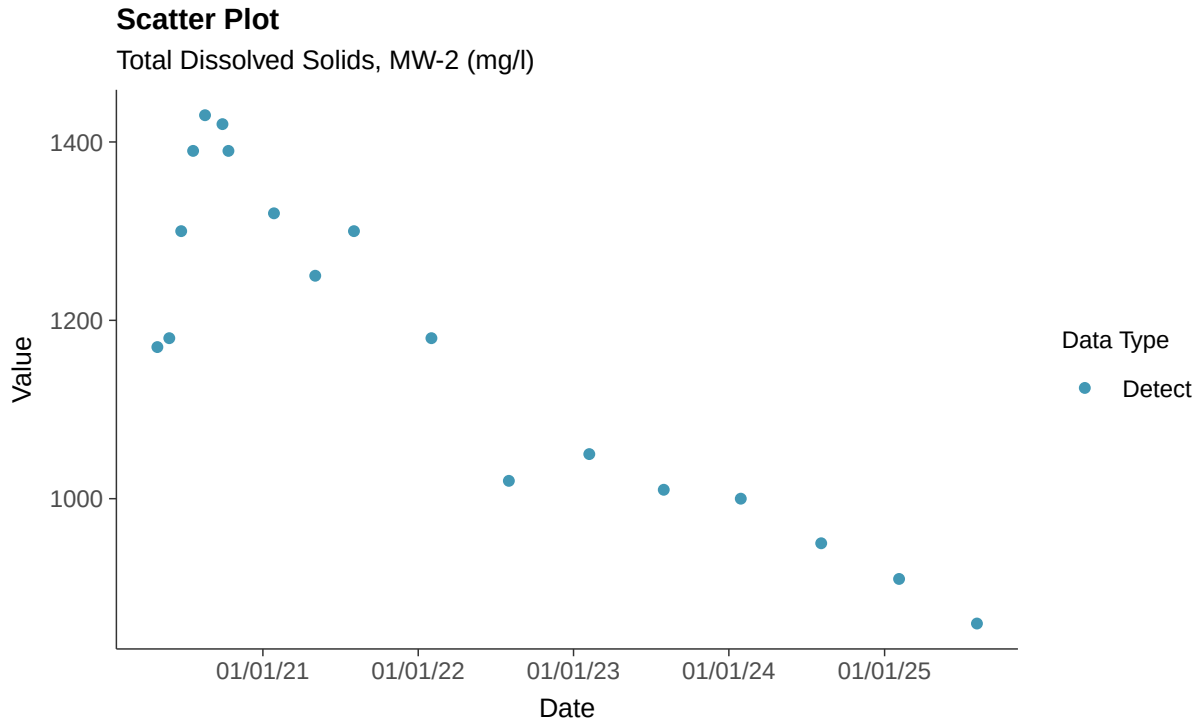
Trend Regression: Piecewise Linear-Linear-Linear

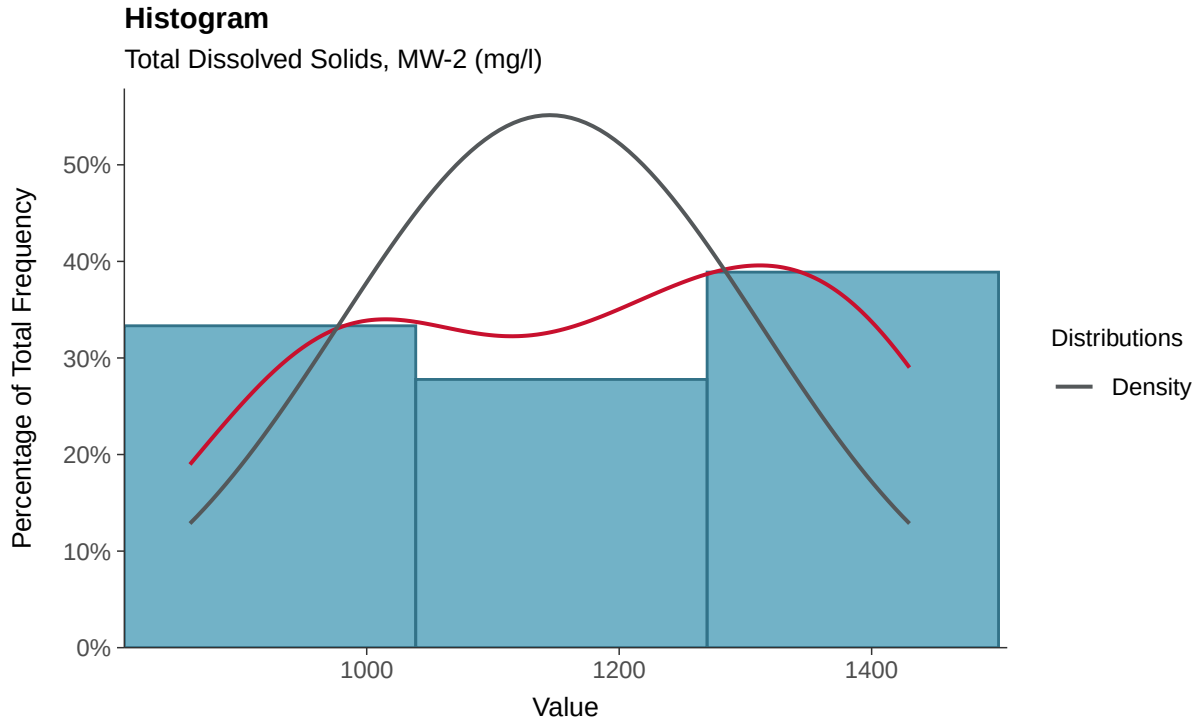
Sulfate, MW-2 (mg/l)



Appendix III: Total Dissolved Solids, MW-2

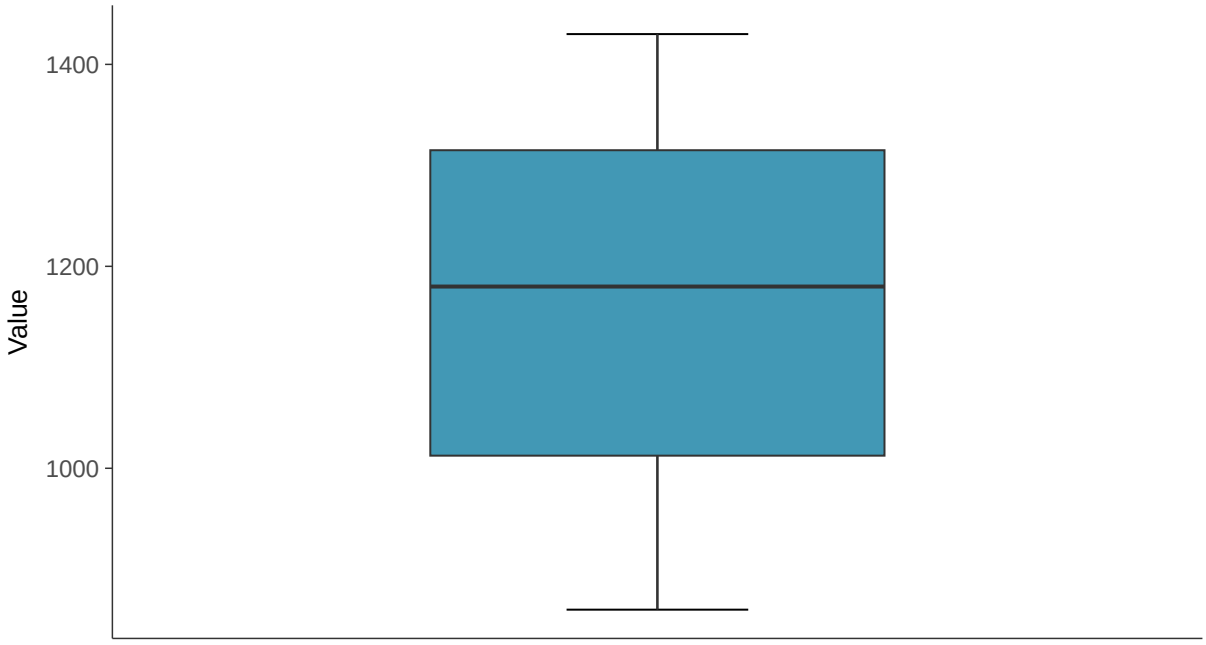
ID: 13_2_126





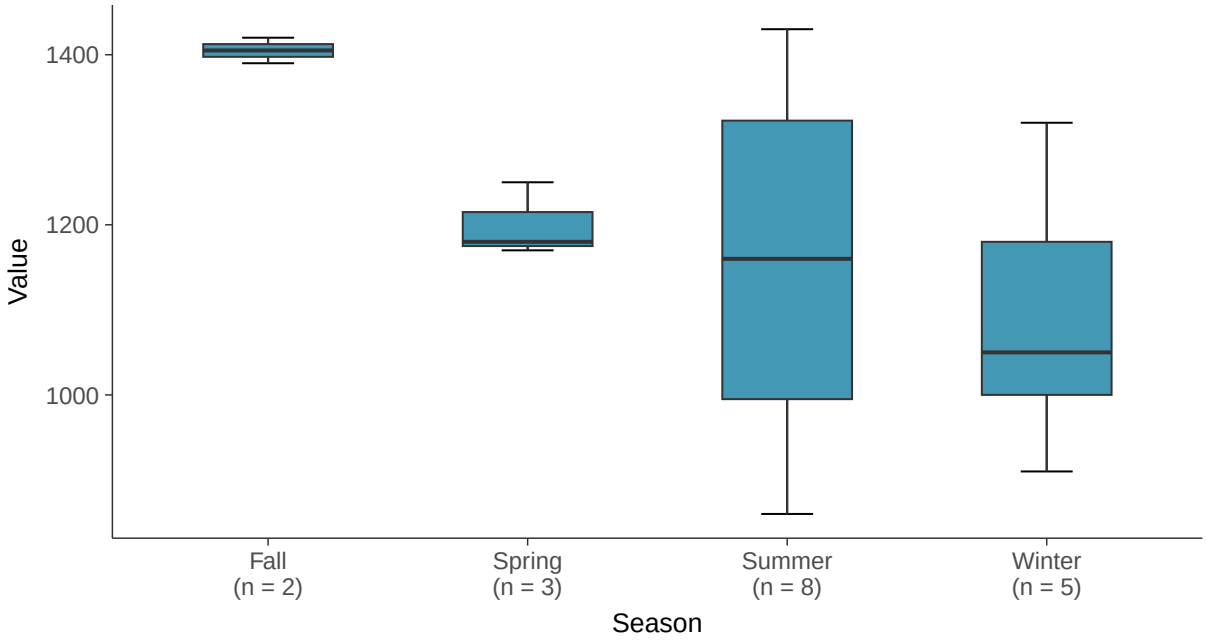
Boxplot

Total Dissolved Solids, MW-2 (mg/l)



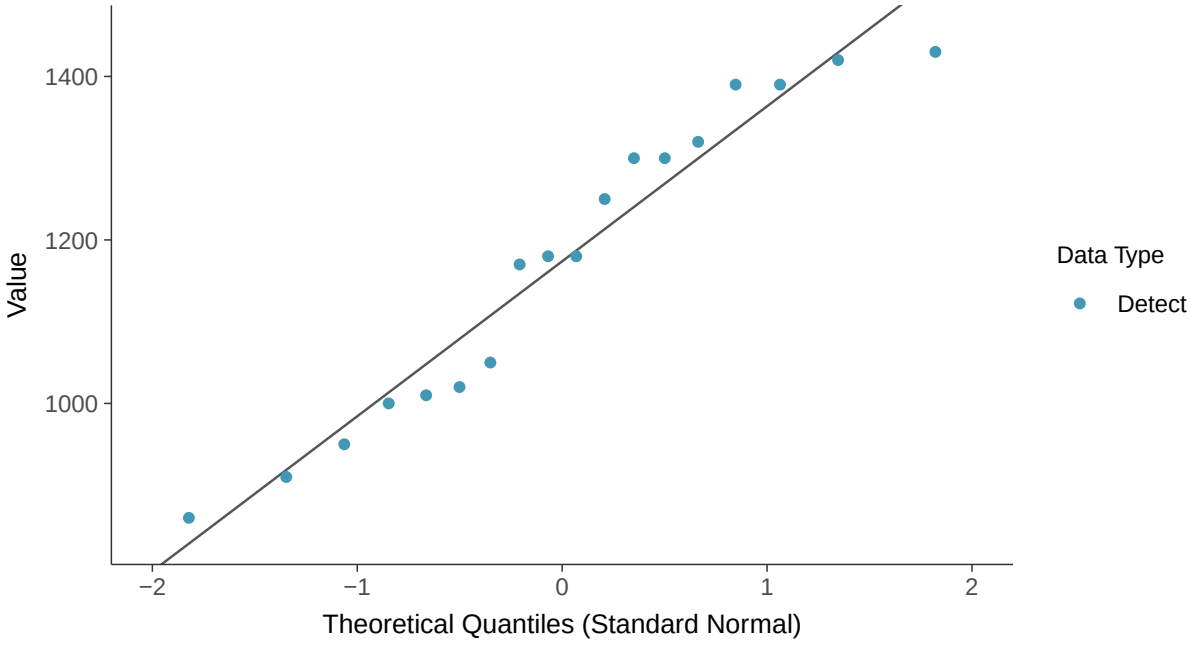
Boxplot by Season

Total Dissolved Solids, MW-2 (mg/l)



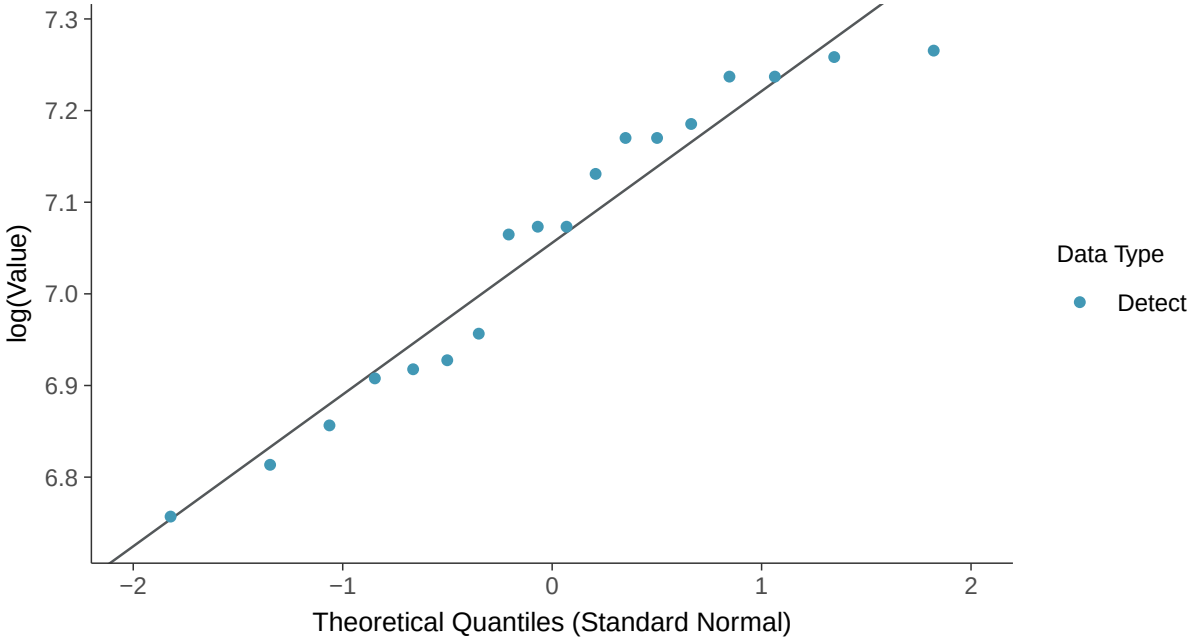
Normal Q-Q plot

Total Dissolved Solids, MW-2 (mg/l)



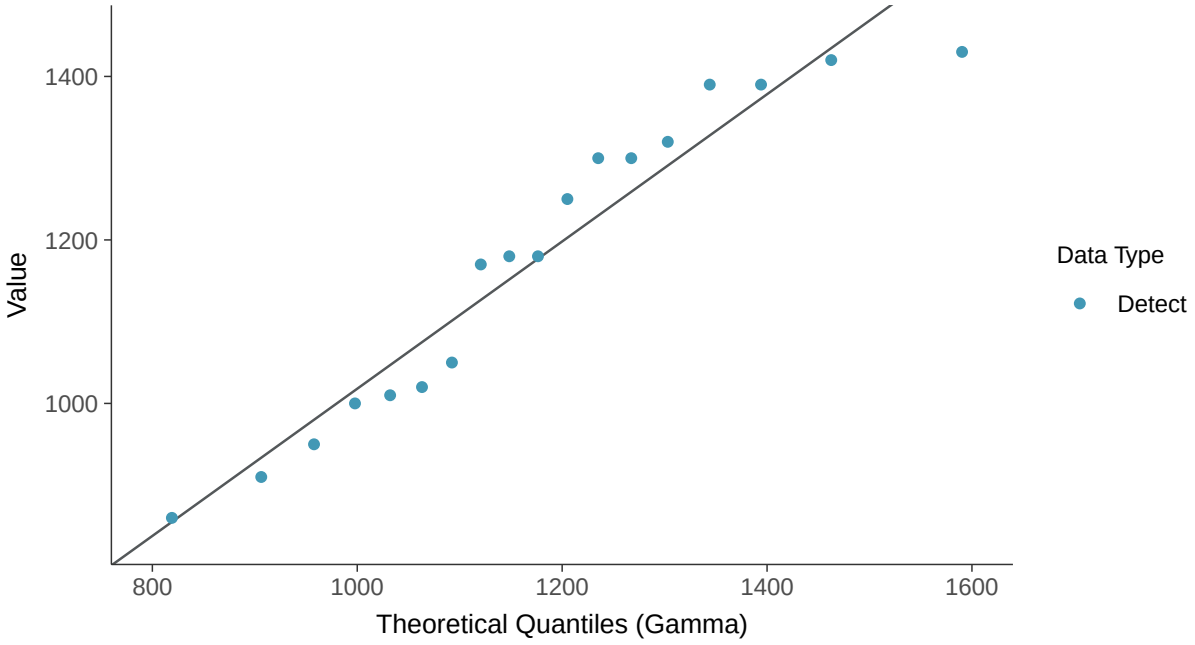
Lognormal Q-Q plot

Total Dissolved Solids, MW-2 (mg/l)



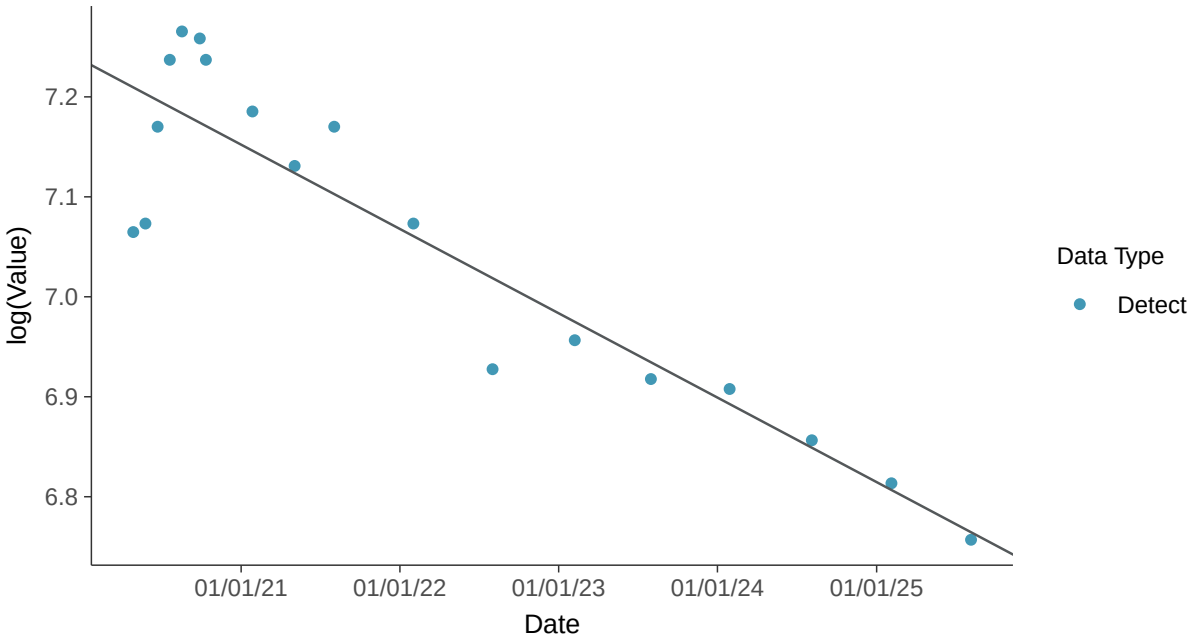
Gamma Q-Q plot

Total Dissolved Solids, MW-2 (mg/l)



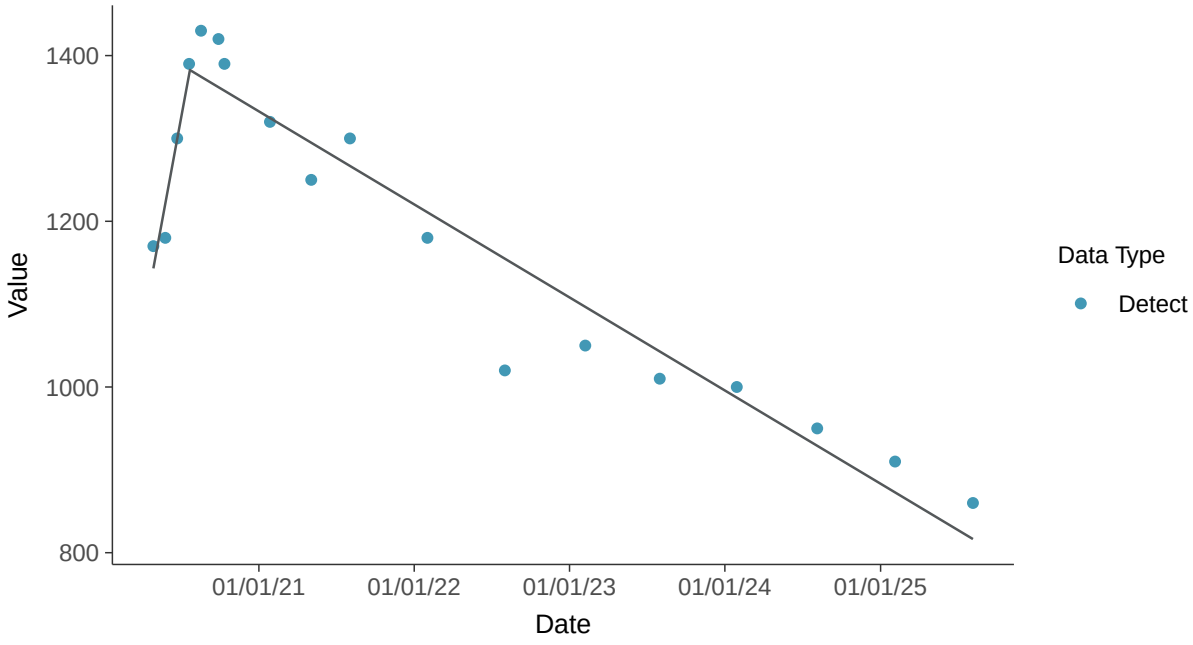
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-2 (mg/l)



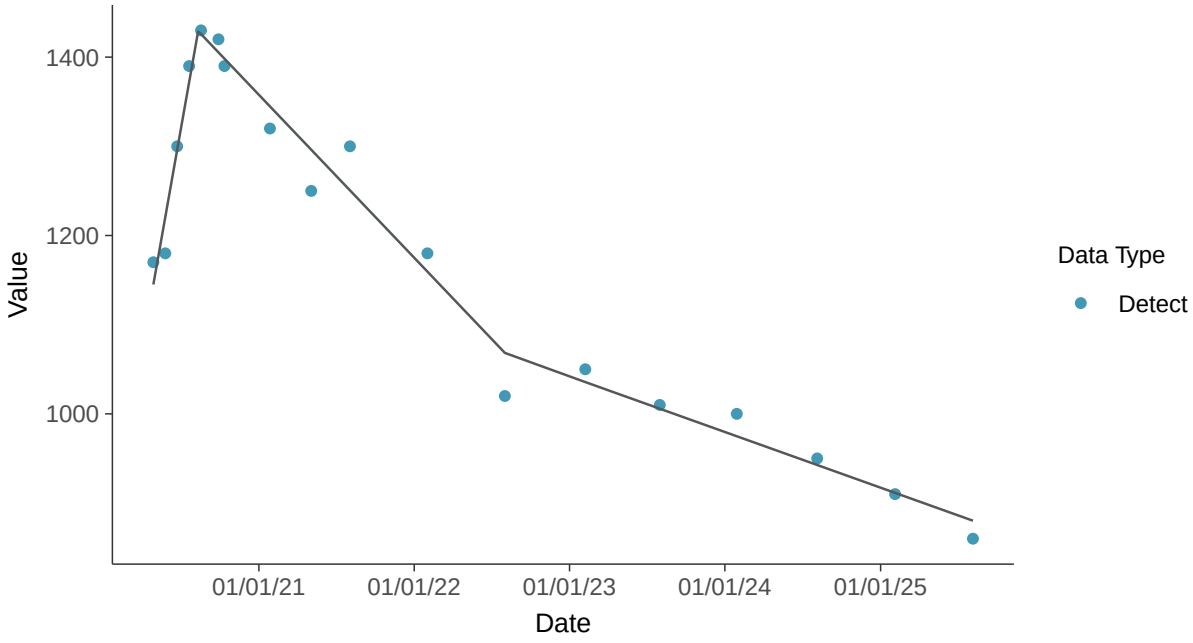
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-2 (mg/l)



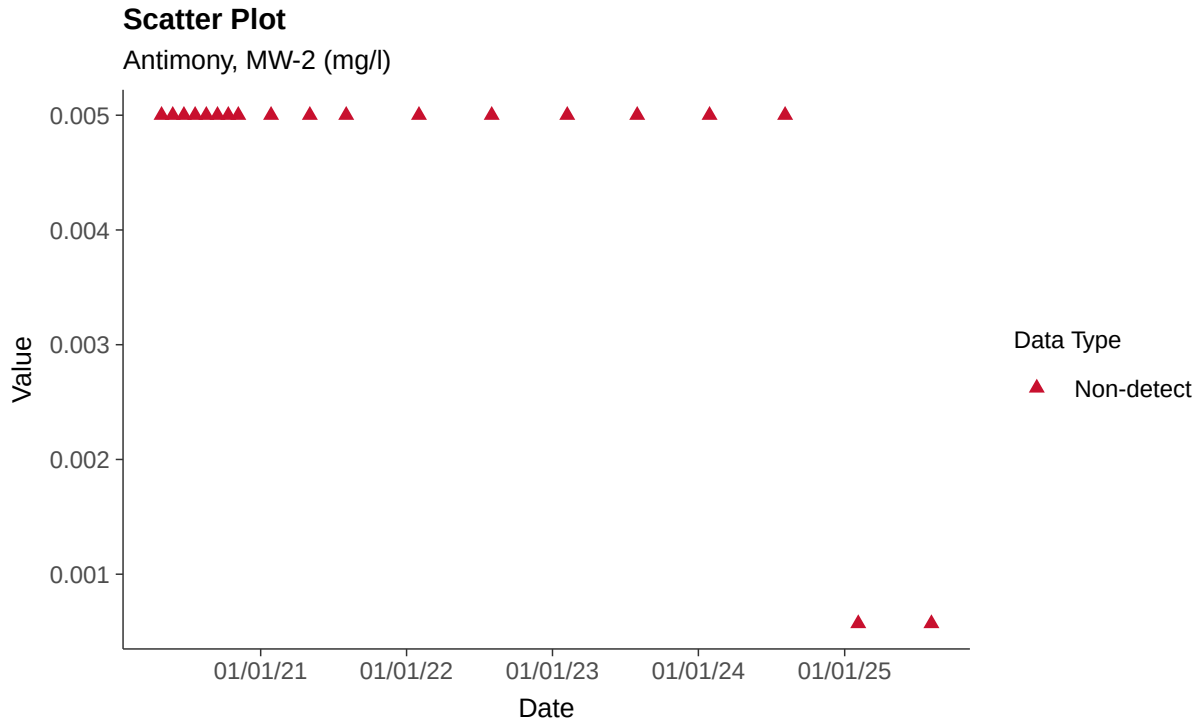
Trend Regression: Piecewise Linear-Linear-Linear

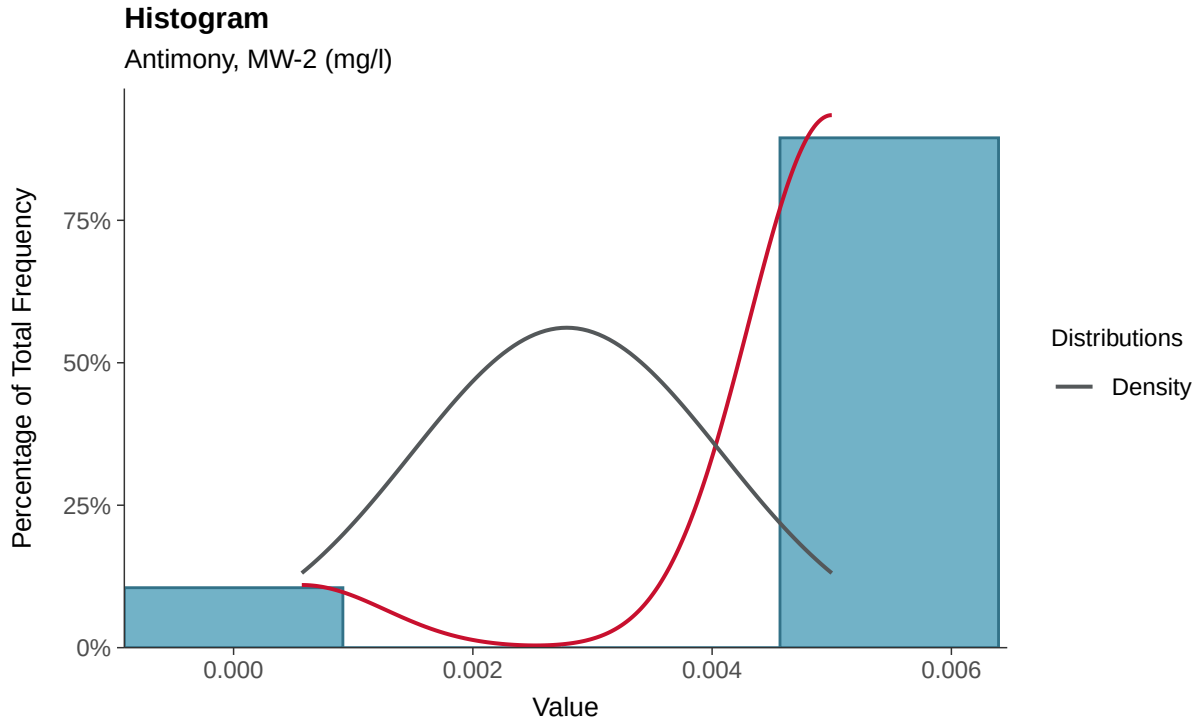
Total Dissolved Solids, MW-2 (mg/l)



Appendix IV: Antimony, MW-2

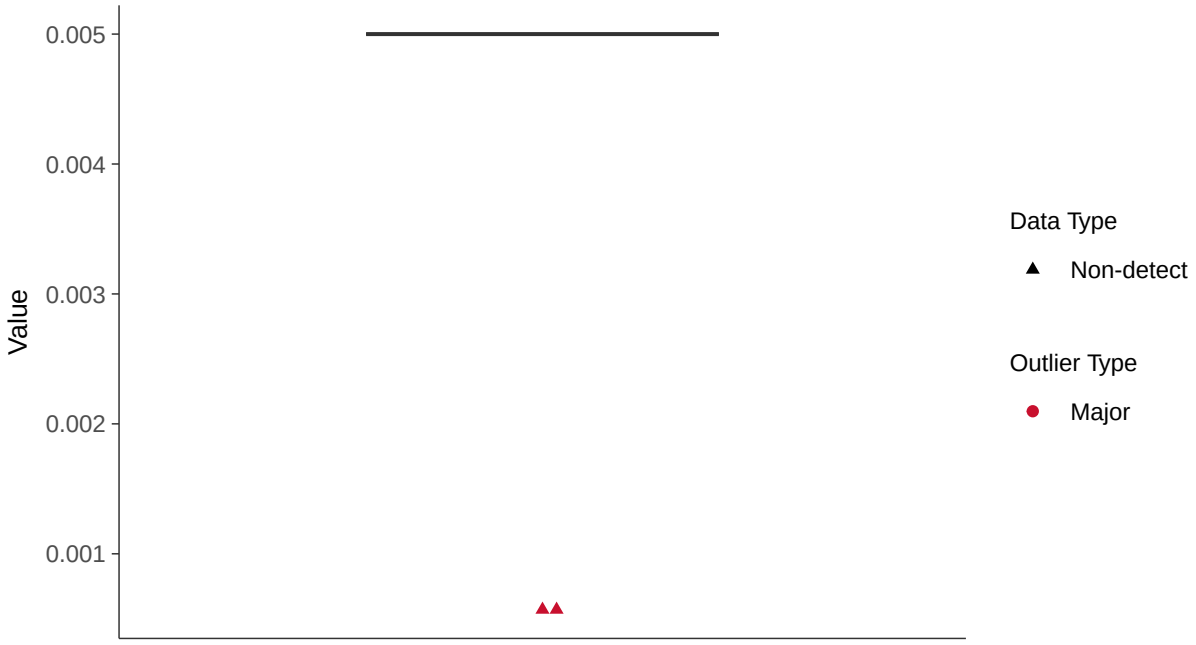
ID: 13_3_101





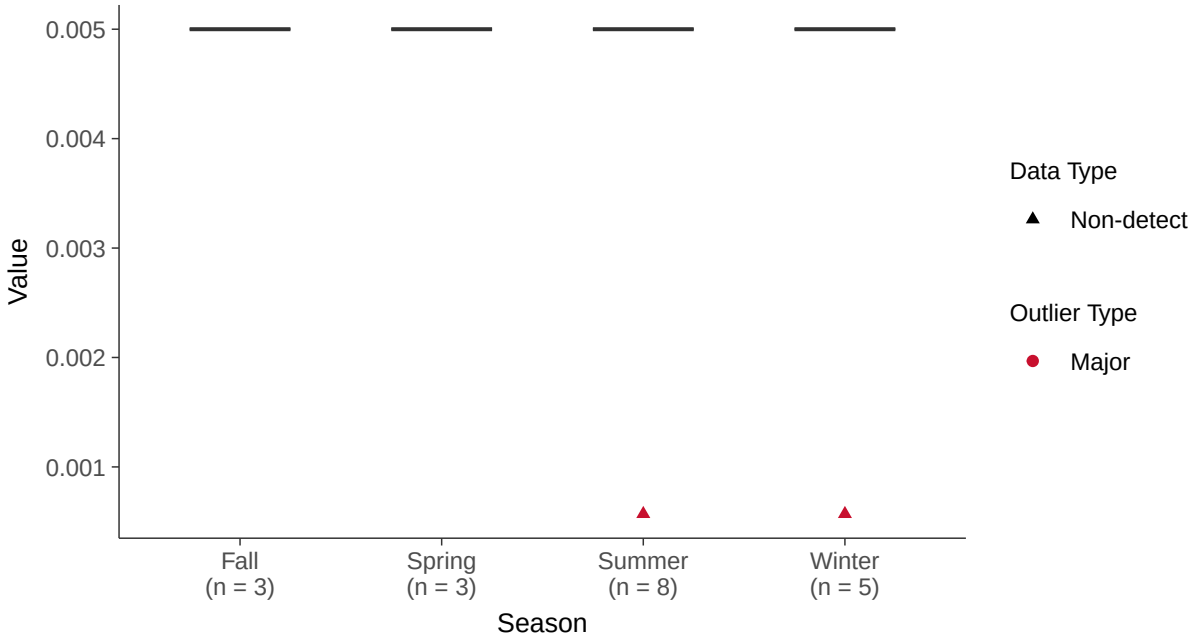
Boxplot

Antimony, MW-2 (mg/l)



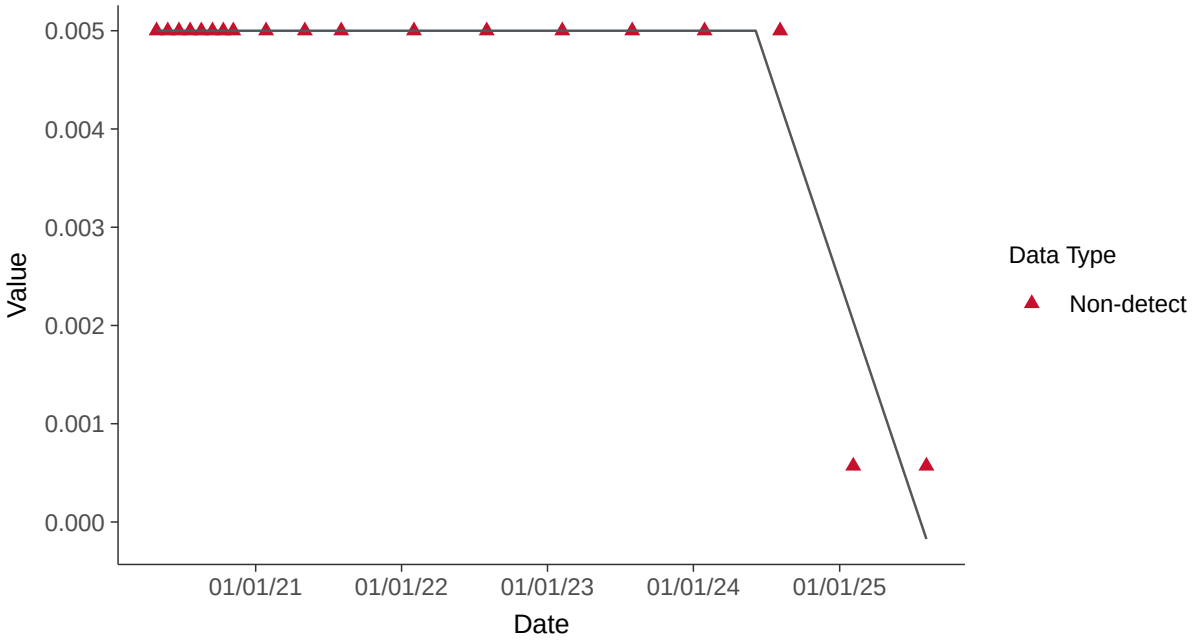
Boxplot by Season

Antimony, MW-2 (mg/l)



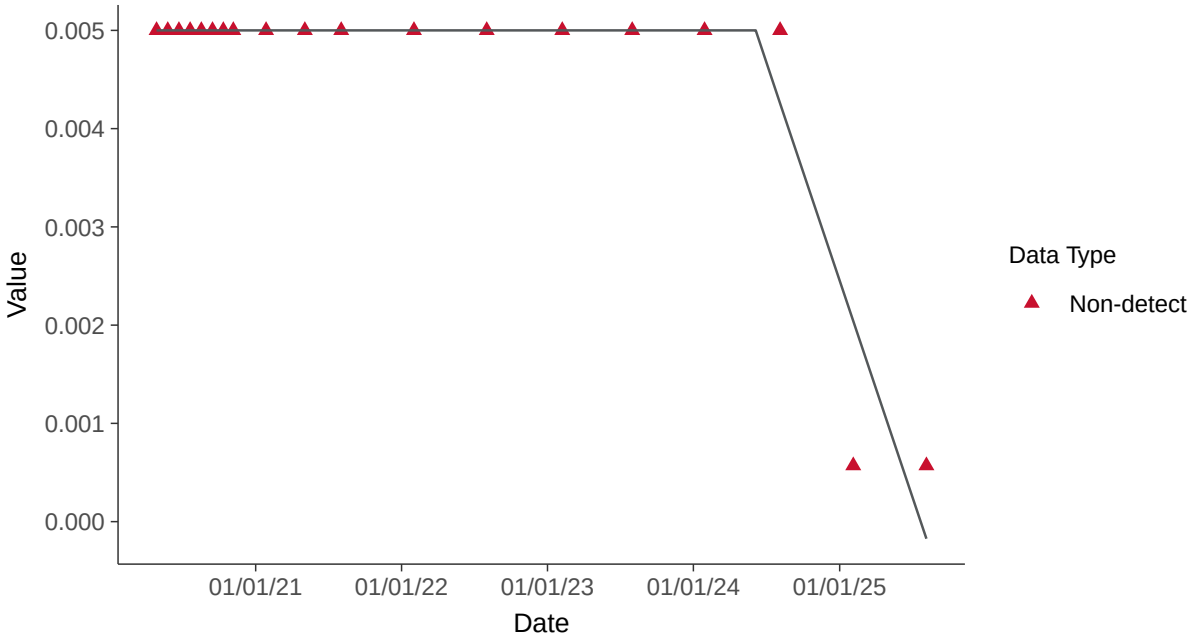
Trend Regression: Piecewise Linear-Linear

Antimony, MW-2 (mg/l)



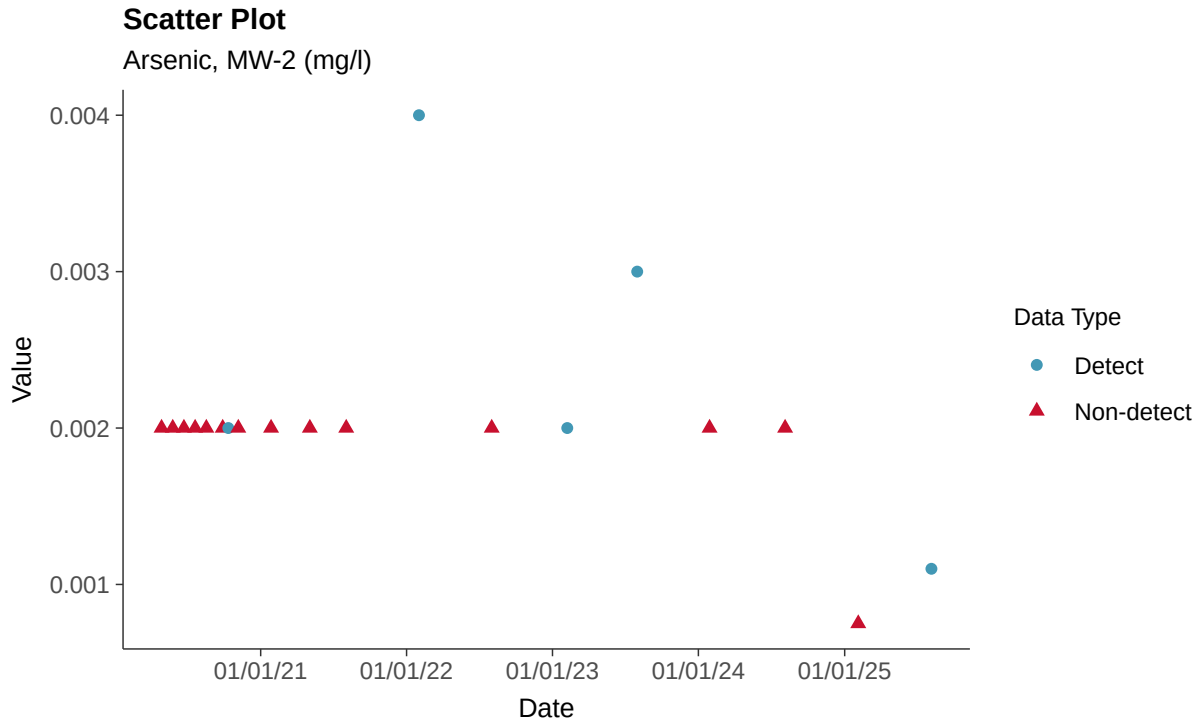
Trend Regression: Piecewise Linear-Linear-Linear

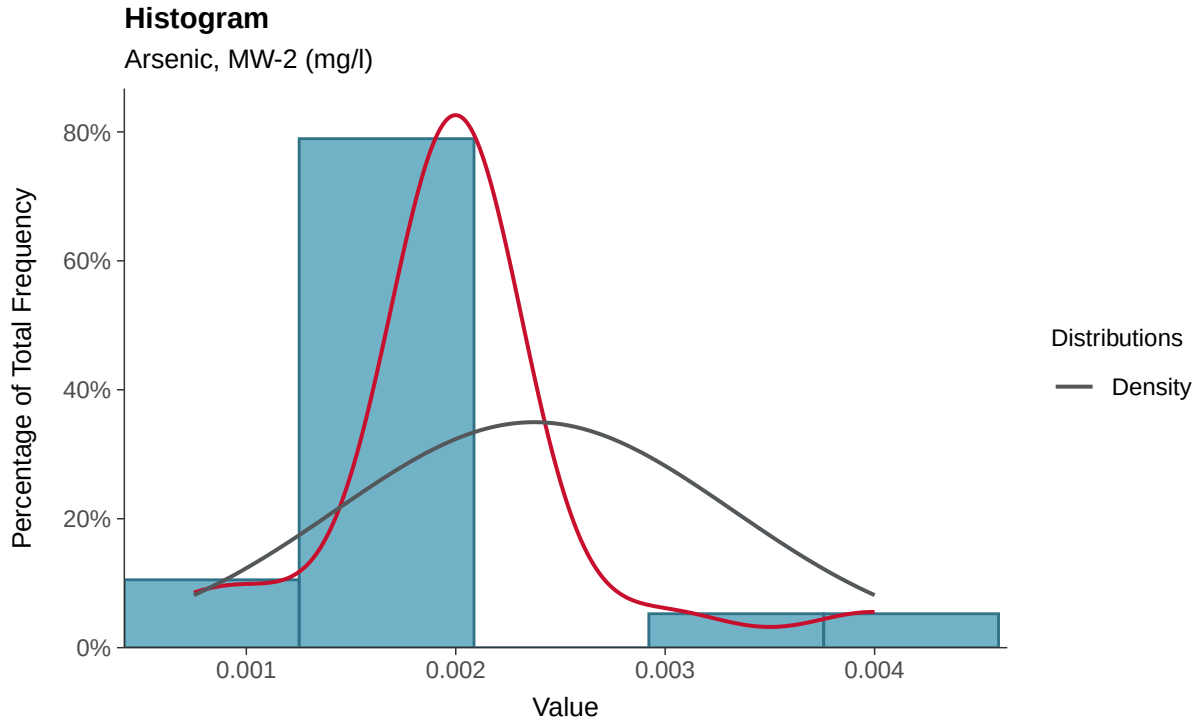
Antimony, MW-2 (mg/l)



Appendix IV: Arsenic, MW-2

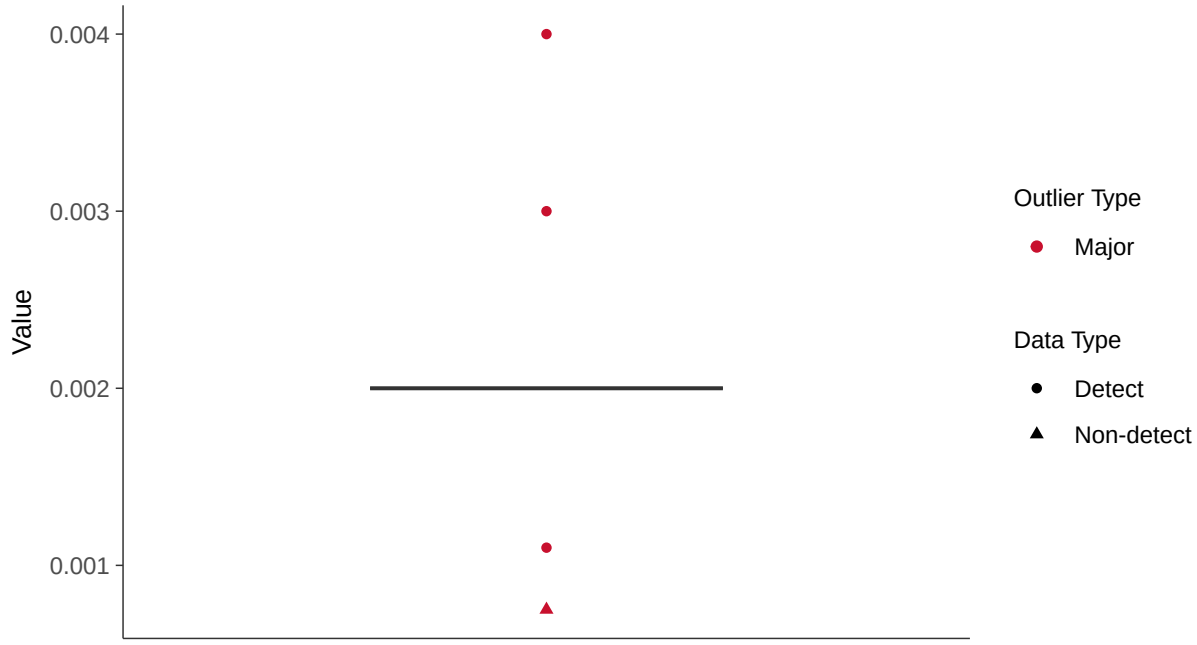
ID: 13_3_102





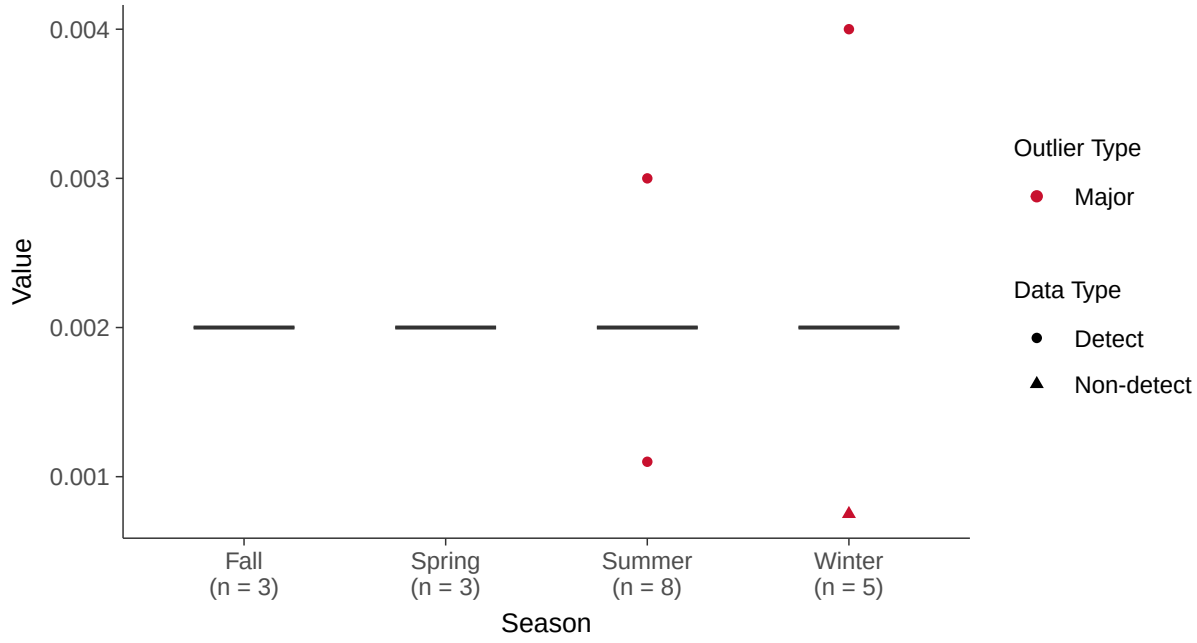
Boxplot

Arsenic, MW-2 (mg/l)



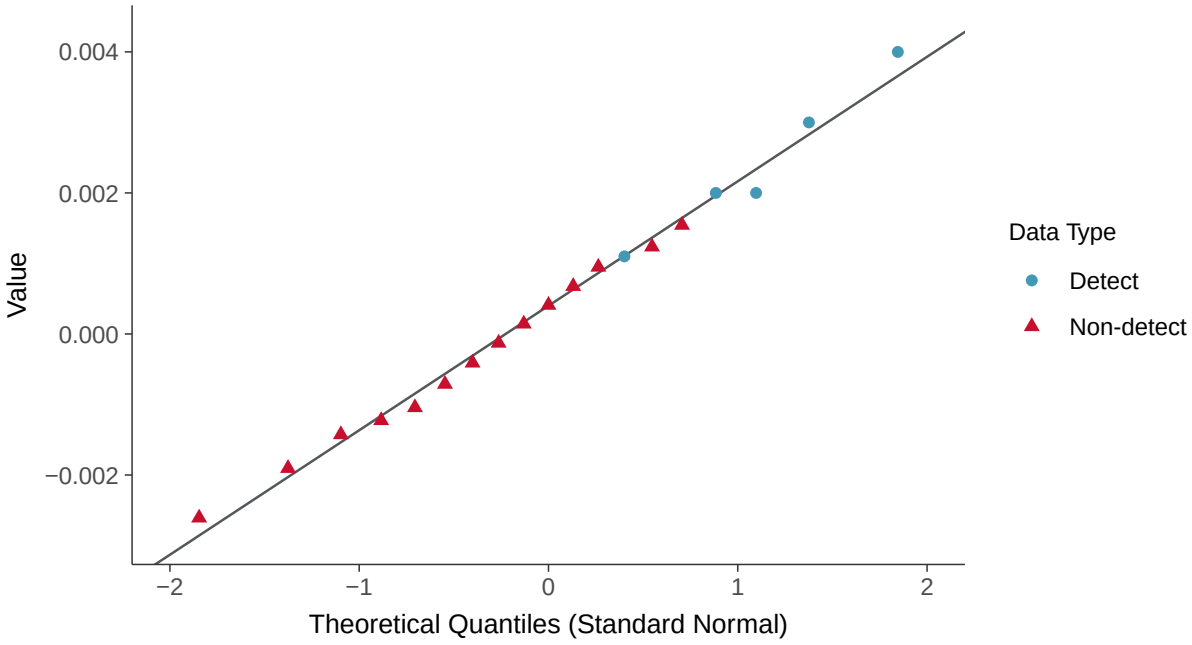
Boxplot by Season

Arsenic, MW-2 (mg/l)



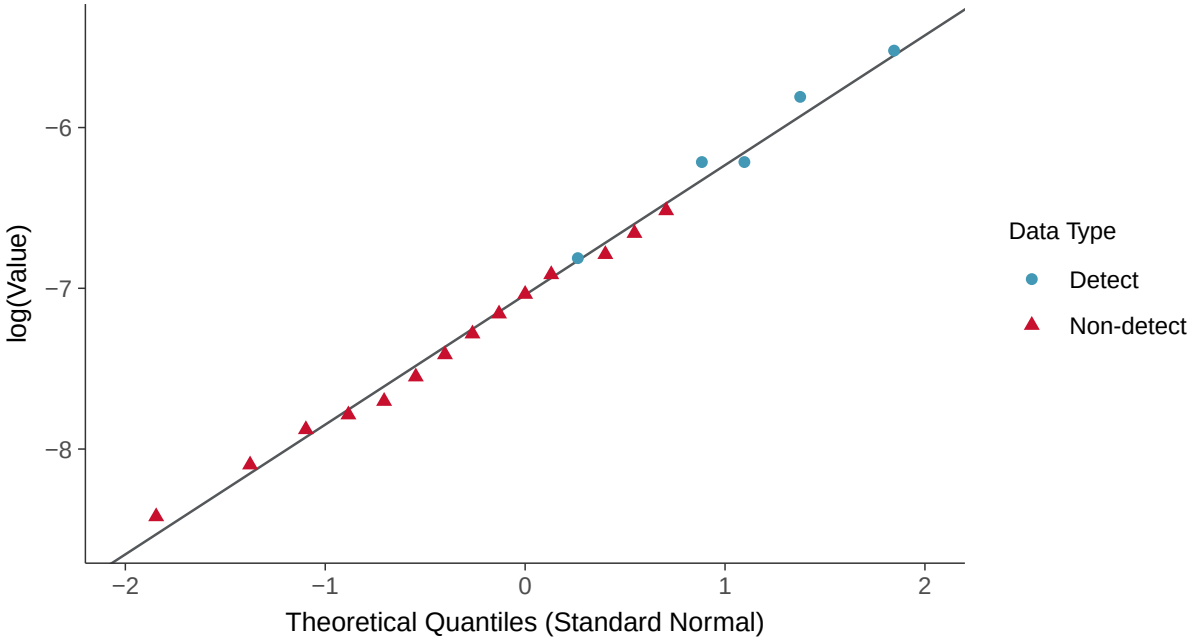
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-2 (mg/l)



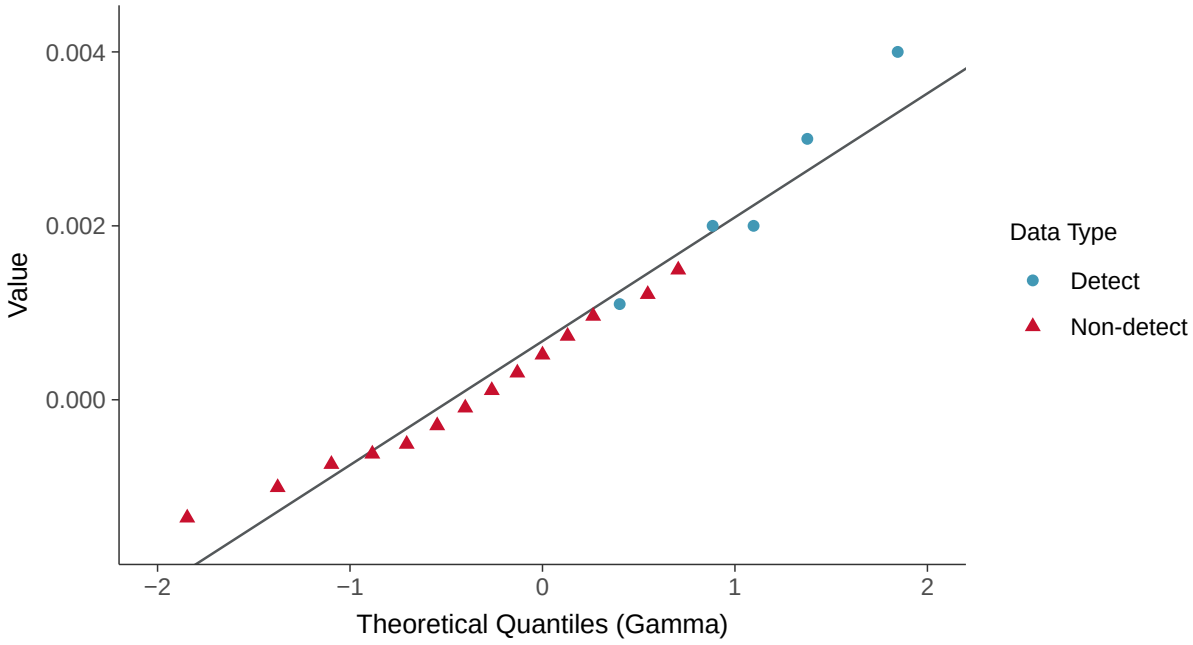
Lognormal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-2 (mg/l)



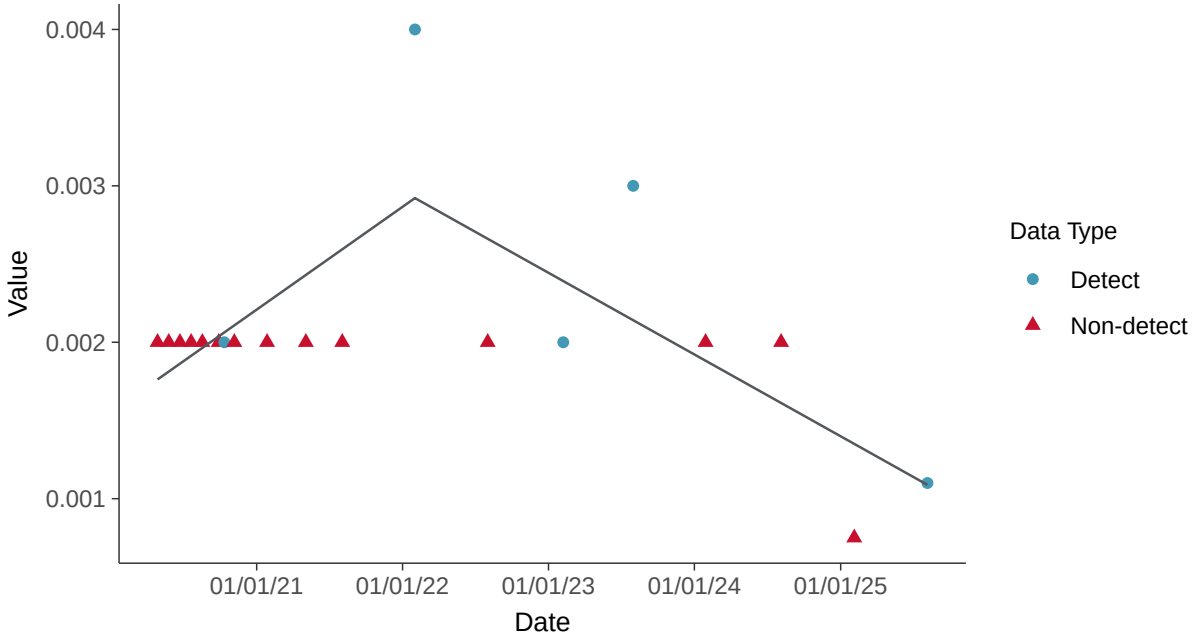
Gamma Q-Q plot using ROS Imputed Estimates

Arsenic, MW-2 (mg/l)



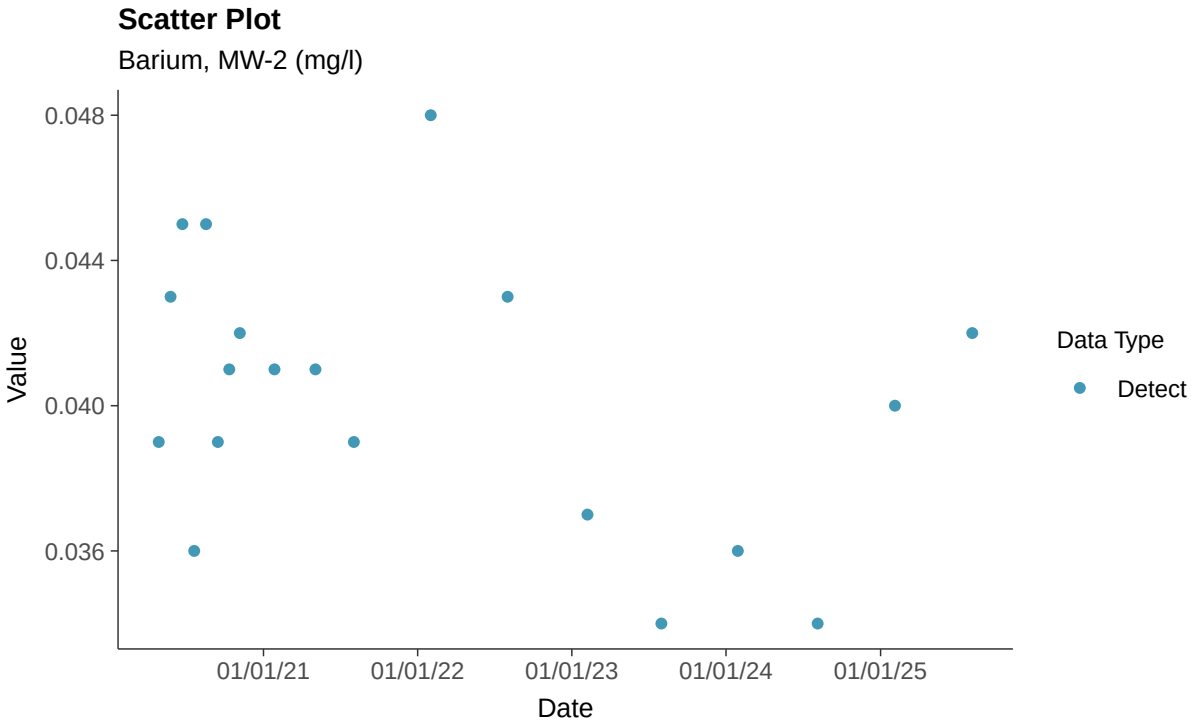
Trend Regression: Piecewise Linear-Linear

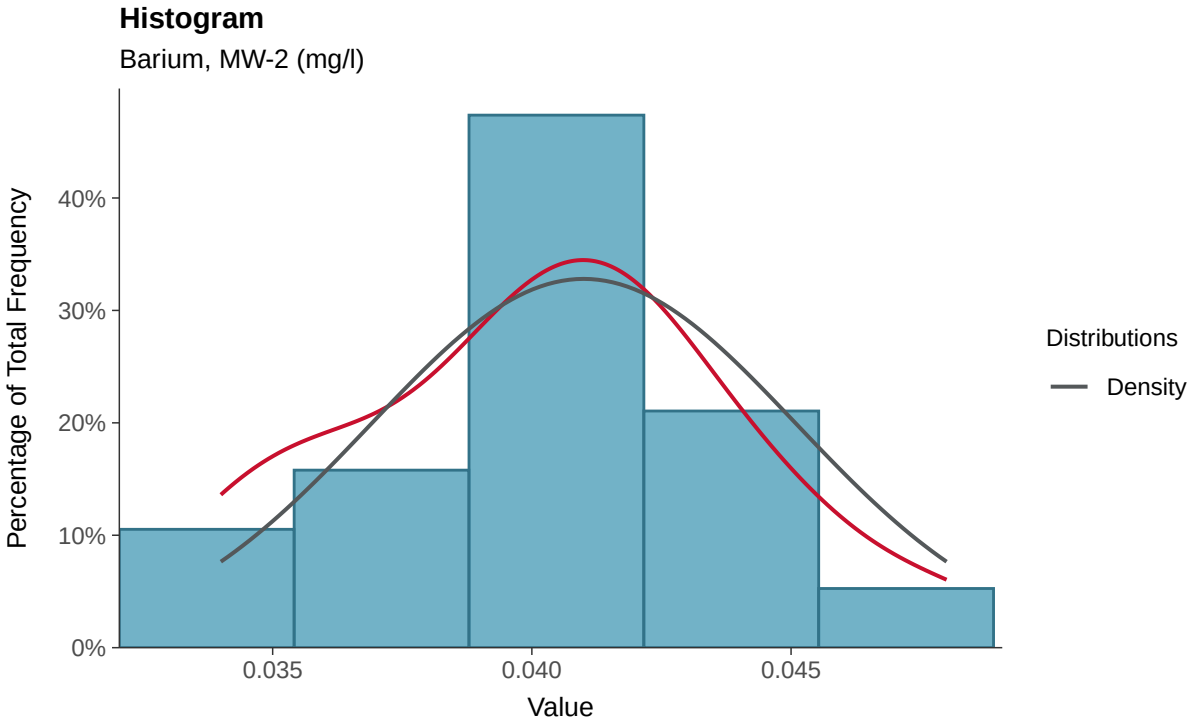
Arsenic, MW-2 (mg/l)



Appendix IV: Barium, MW-2

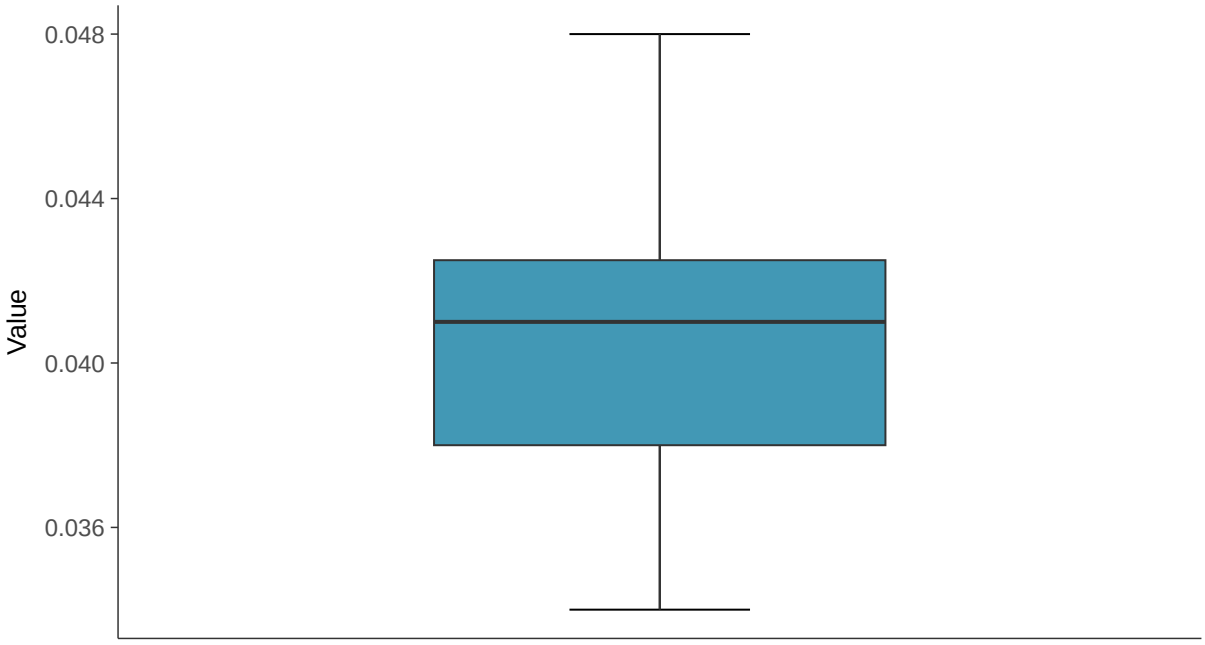
ID: 13_3_103





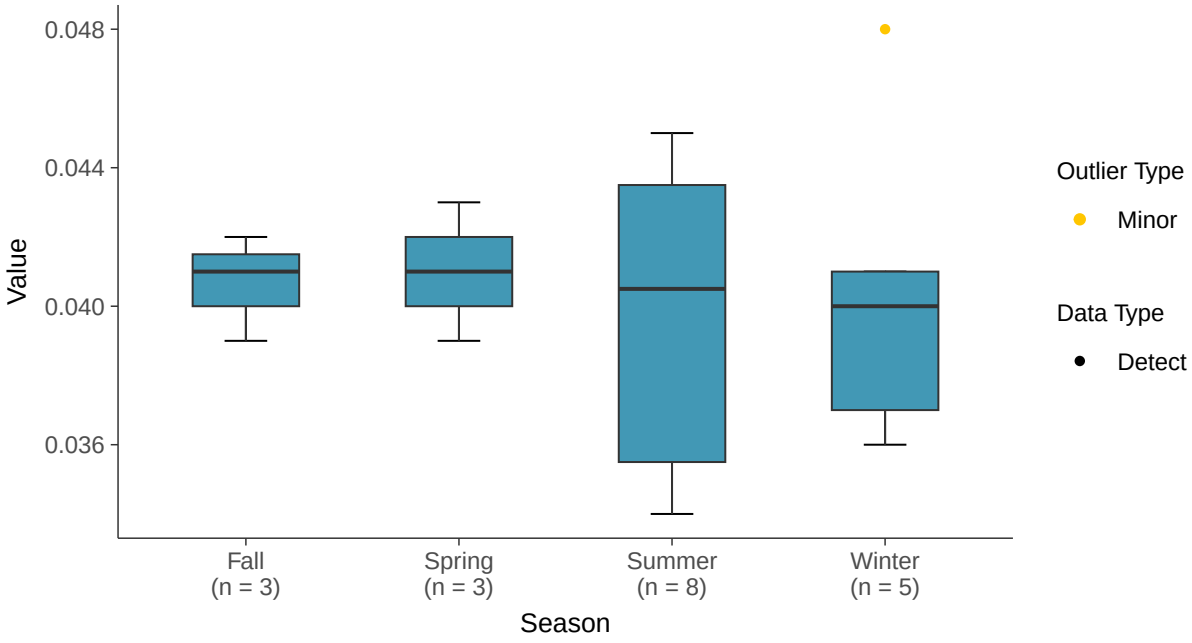
Boxplot

Barium, MW-2 (mg/l)



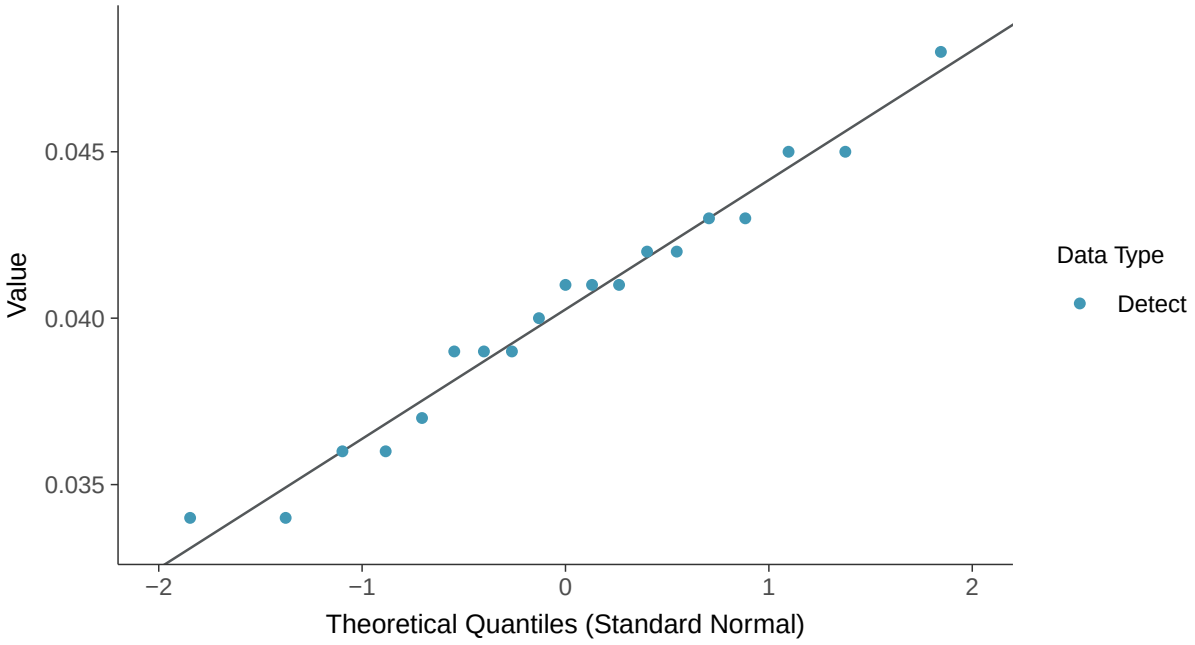
Boxplot by Season

Barium, MW-2 (mg/l)



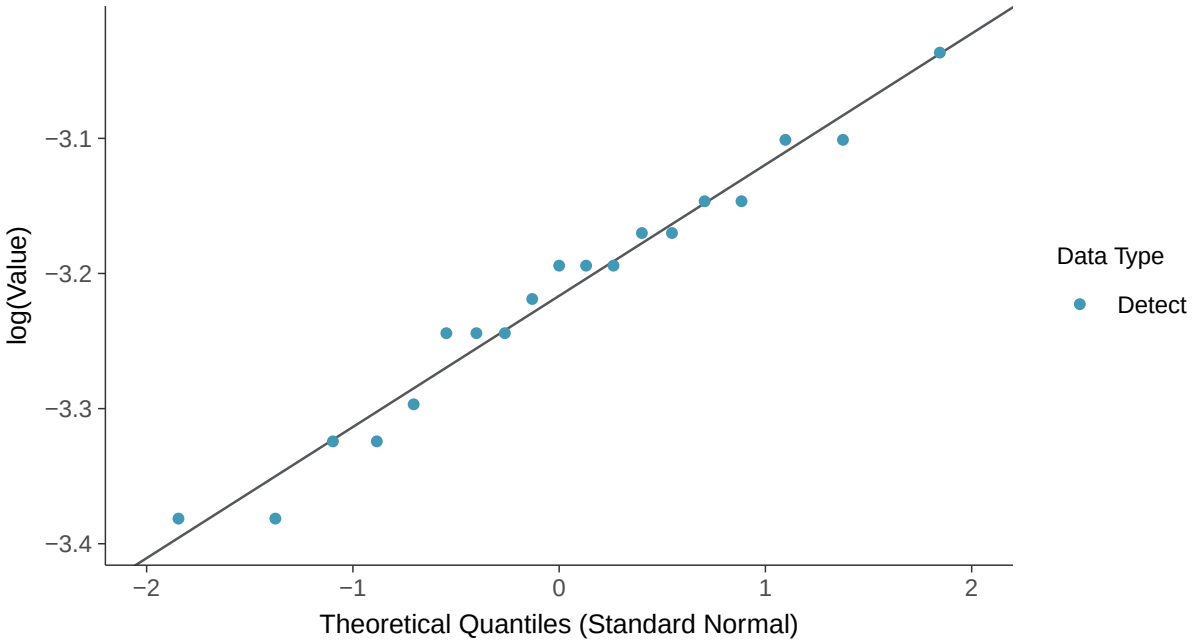
Normal Q-Q plot

Barium, MW-2 (mg/l)



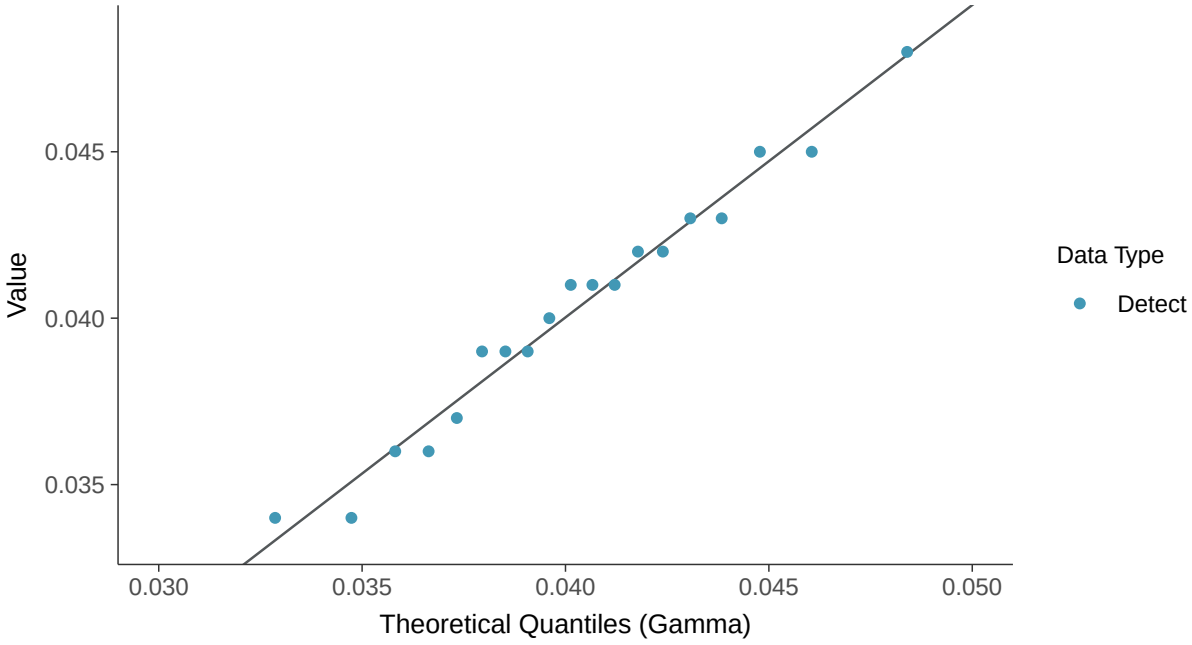
Lognormal Q-Q plot

Barium, MW-2 (mg/l)



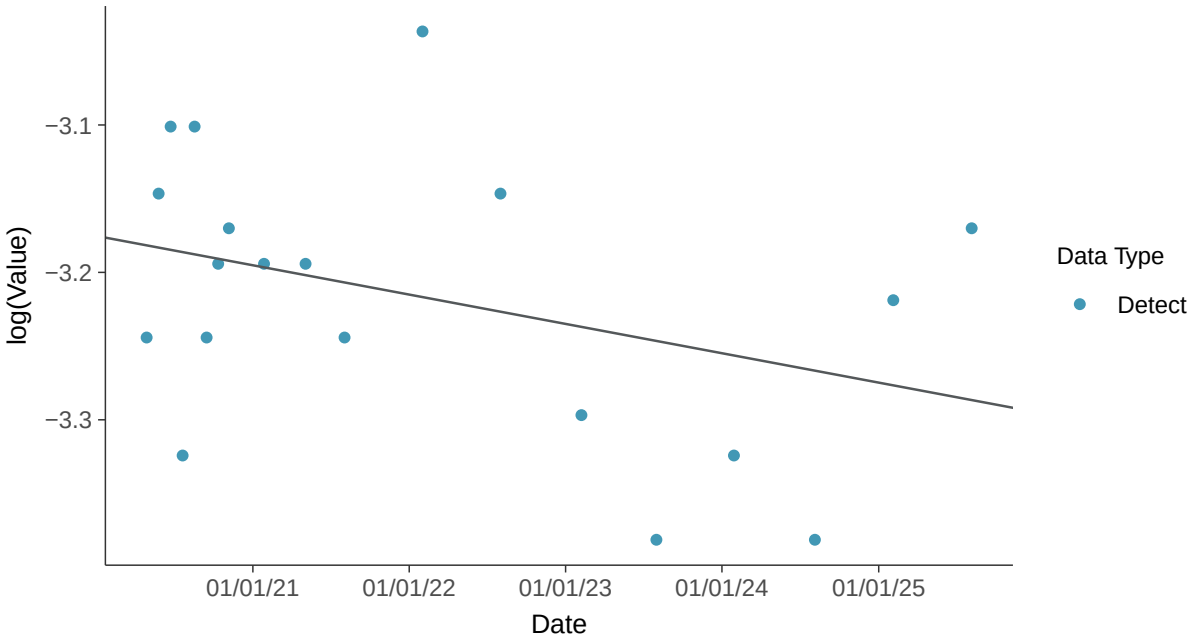
Gamma Q-Q plot

Barium, MW-2 (mg/l)



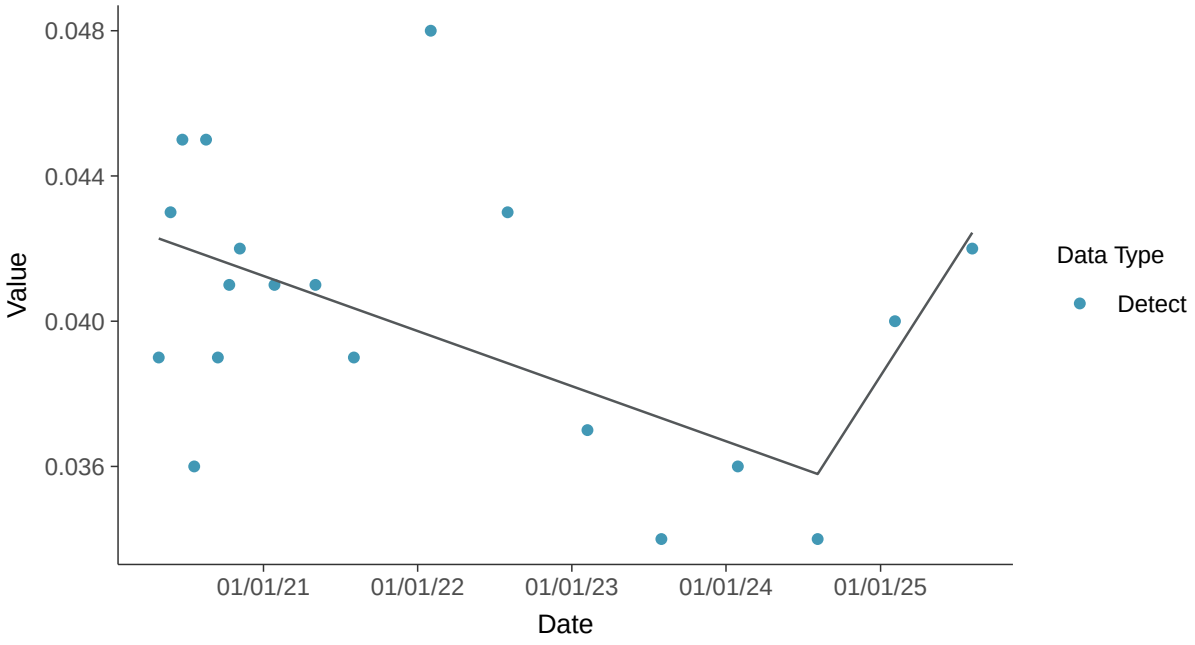
Trend Regression: Lognormal MLE

Barium, MW-2 (mg/l)



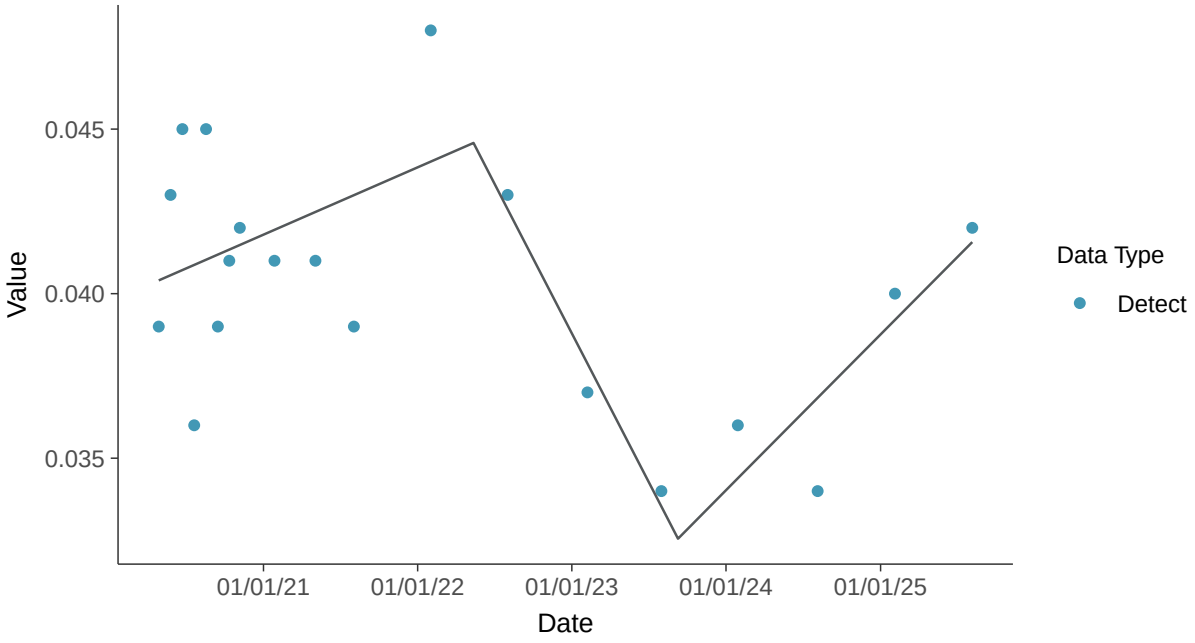
Trend Regression: Piecewise Linear-Linear

Barium, MW-2 (mg/l)



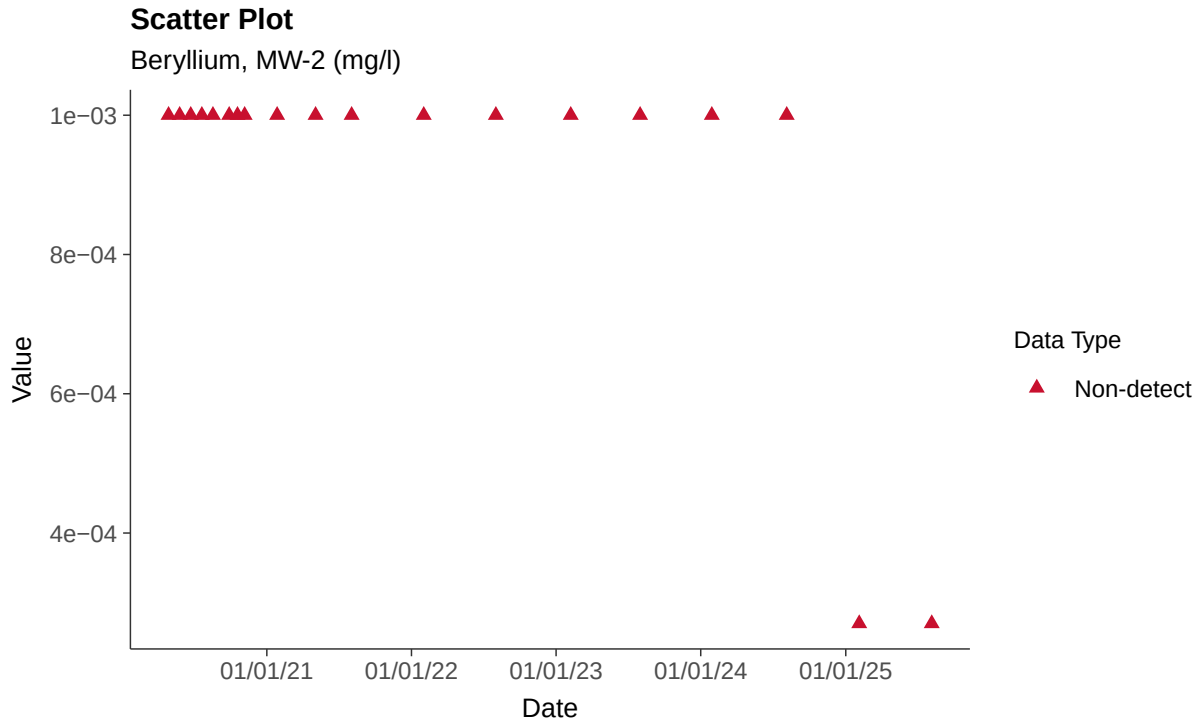
Trend Regression: Piecewise Linear-Linear-Linear

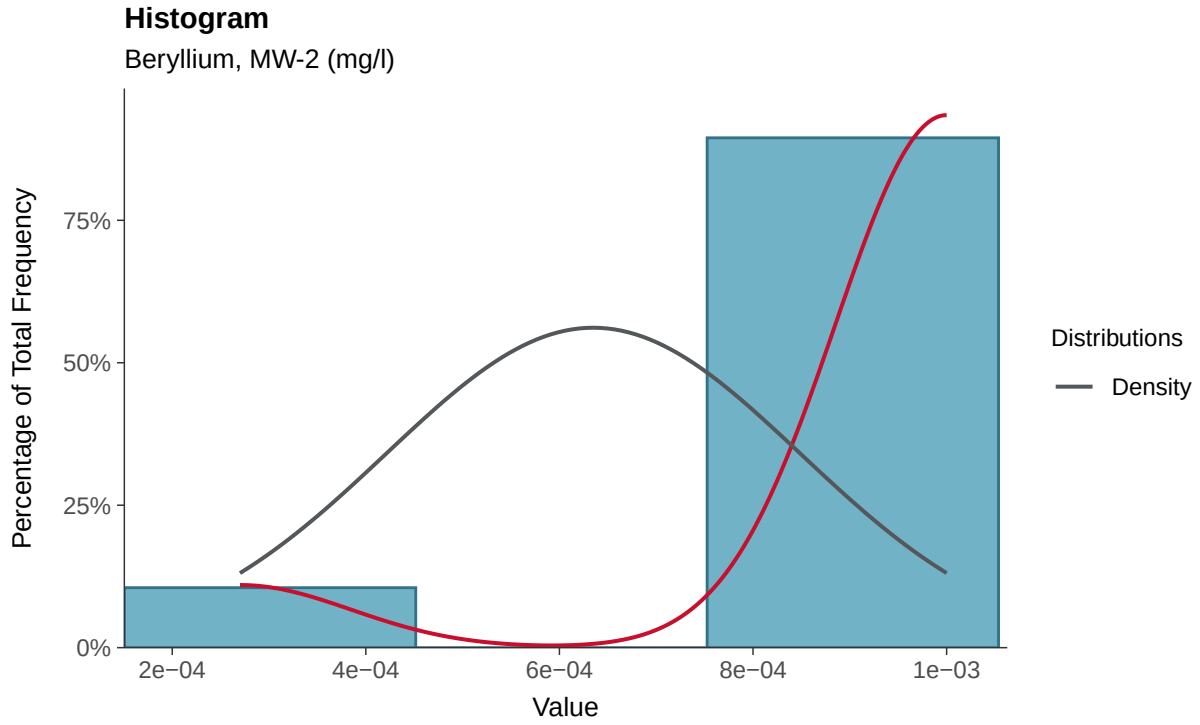
Barium, MW-2 (mg/l)



Appendix IV: Beryllium, MW-2

ID: 13_3_104



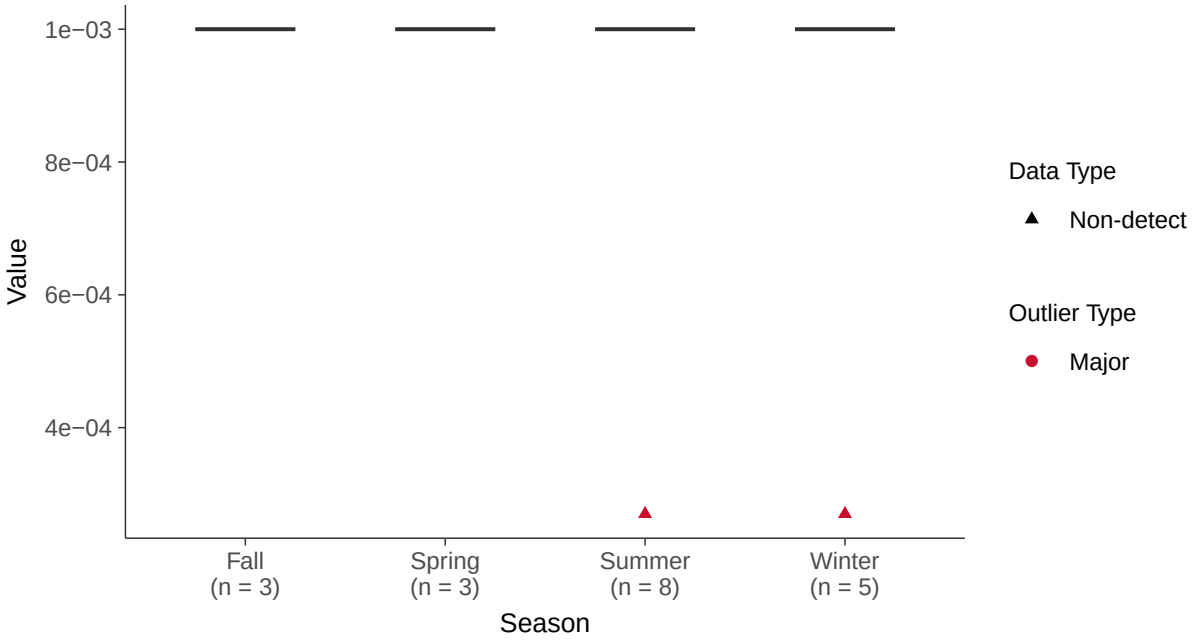


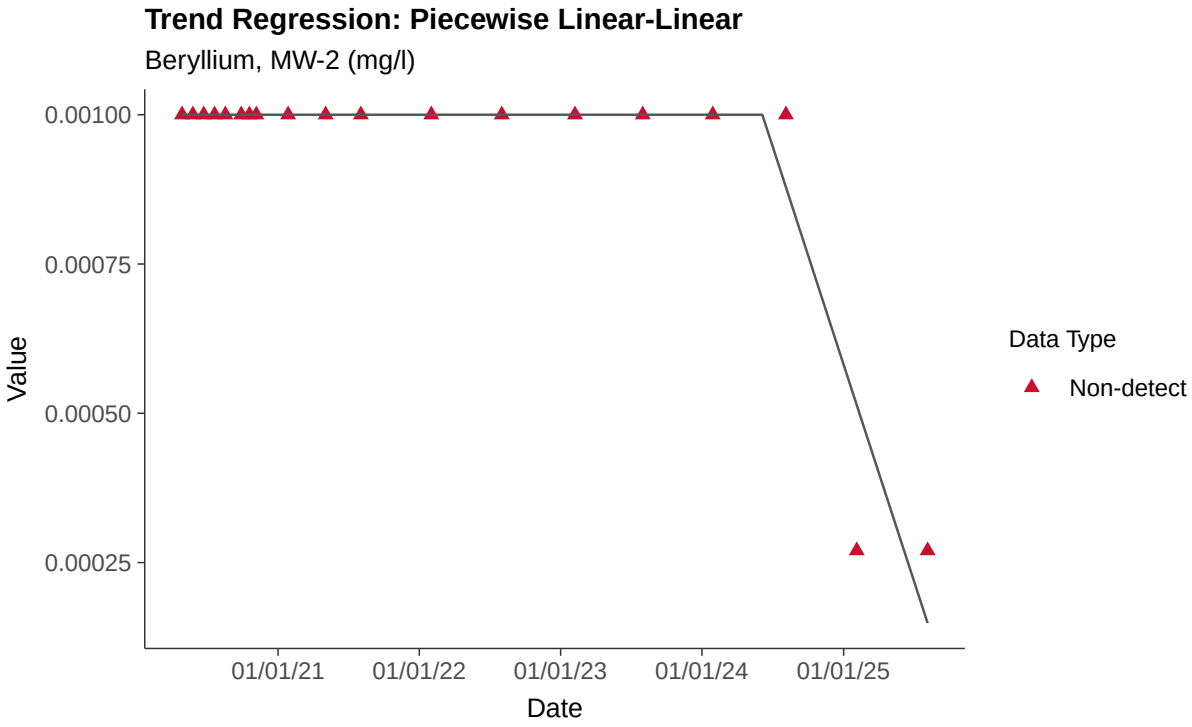
Boxplot

Beryllium, MW-2 (mg/l)

Boxplot by Season

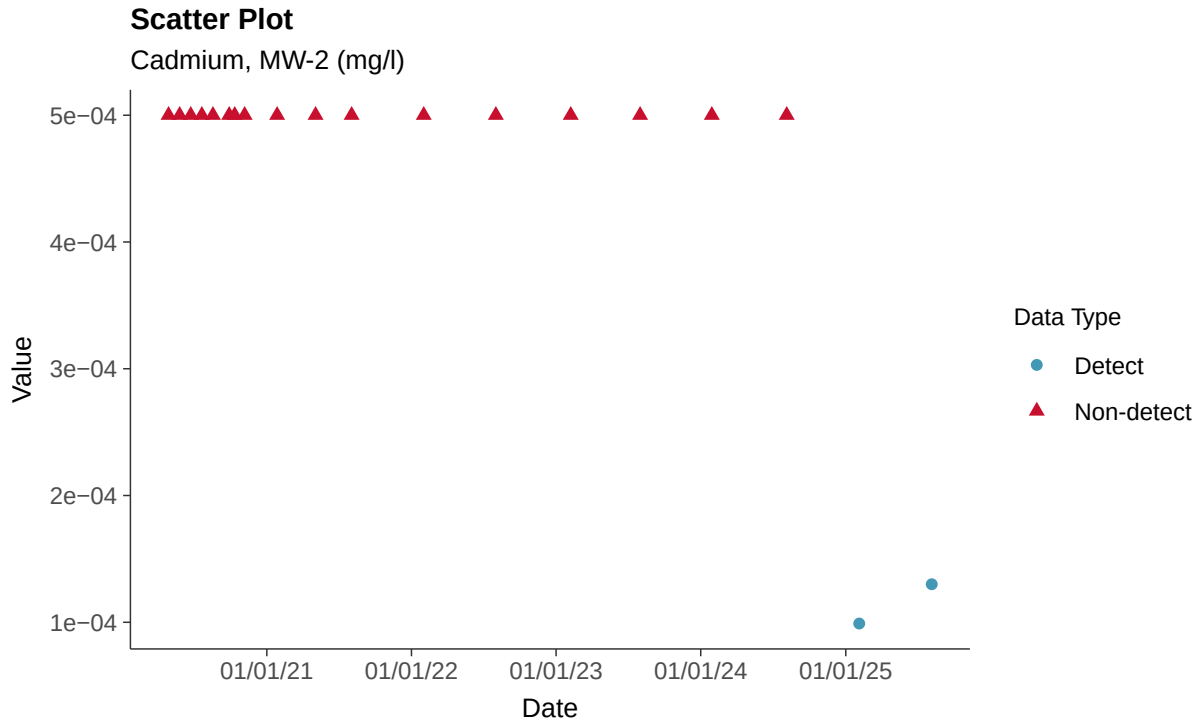
Beryllium, MW-2 (mg/l)

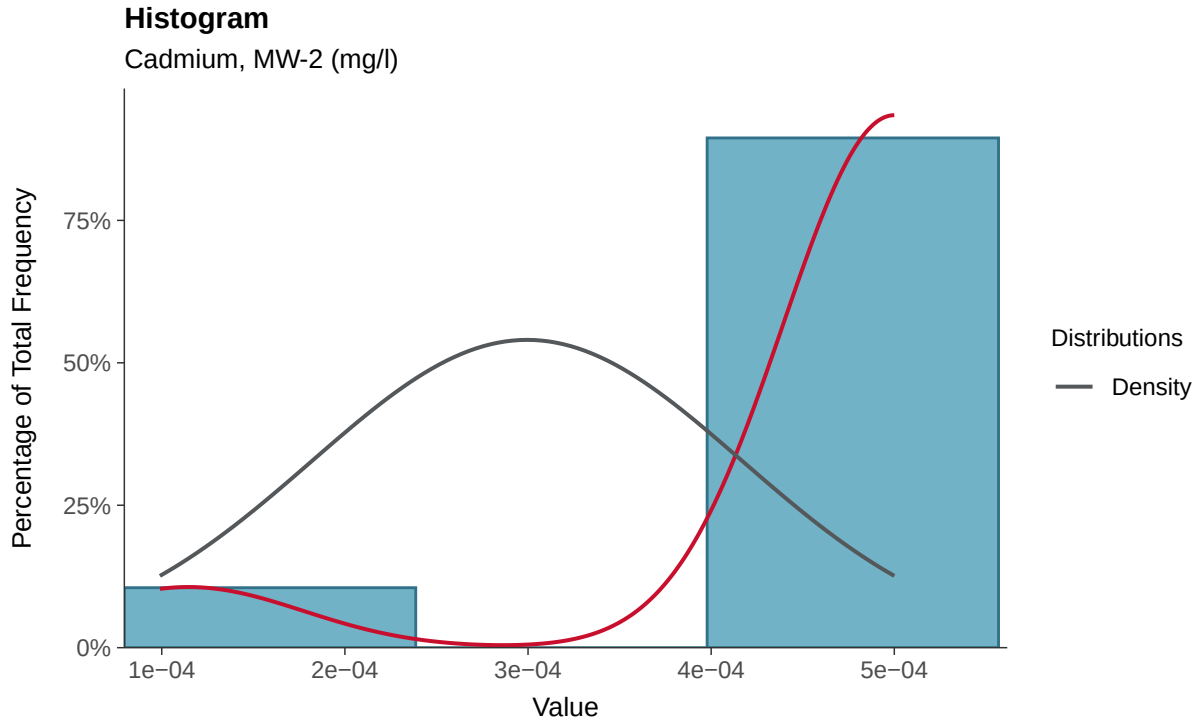



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-2 (mg/l)
0.00100
0.00075
0.00050
0.00025
Value
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Appendix IV: Cadmium, MW-2

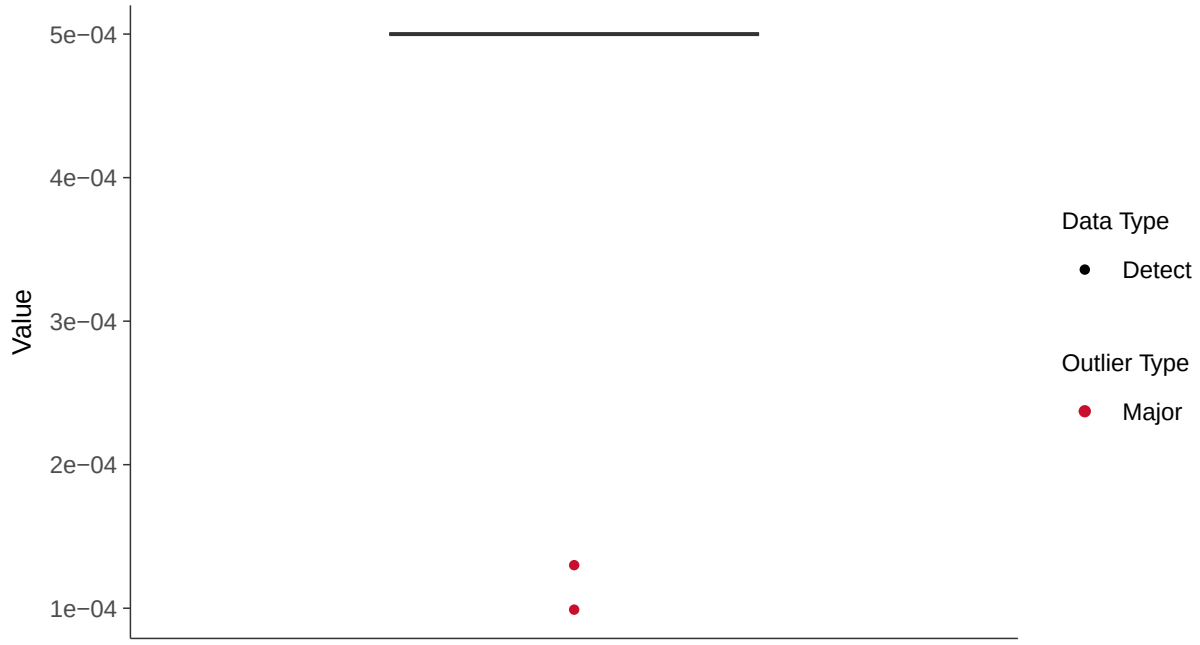
ID: 13_3_106





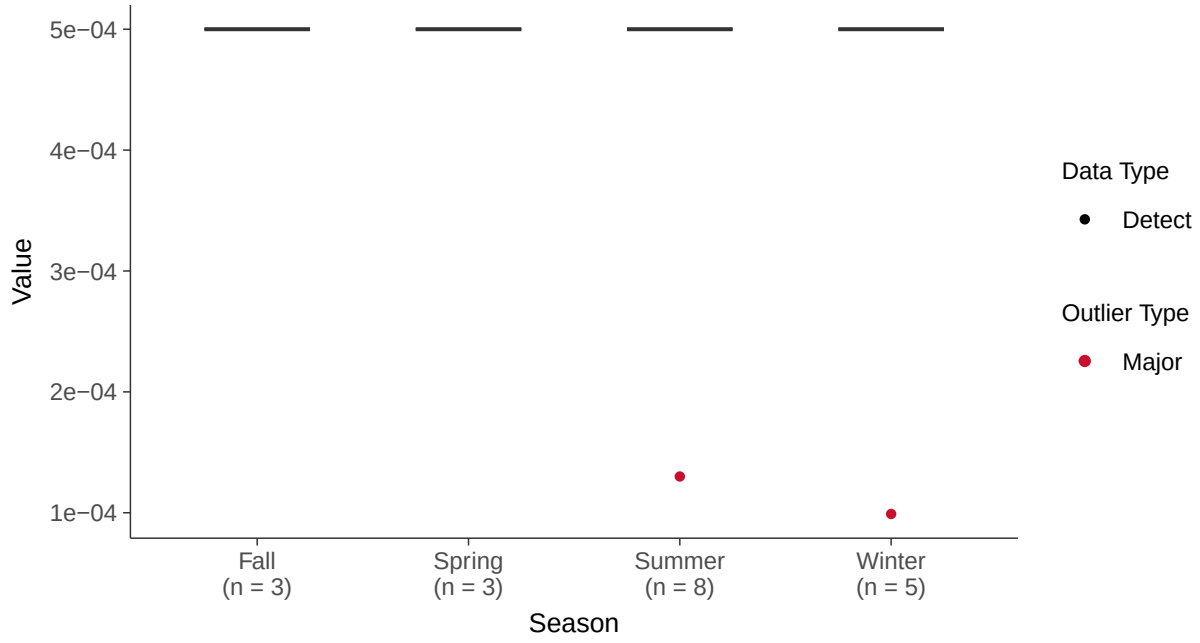
Boxplot

Cadmium, MW-2 (mg/l)



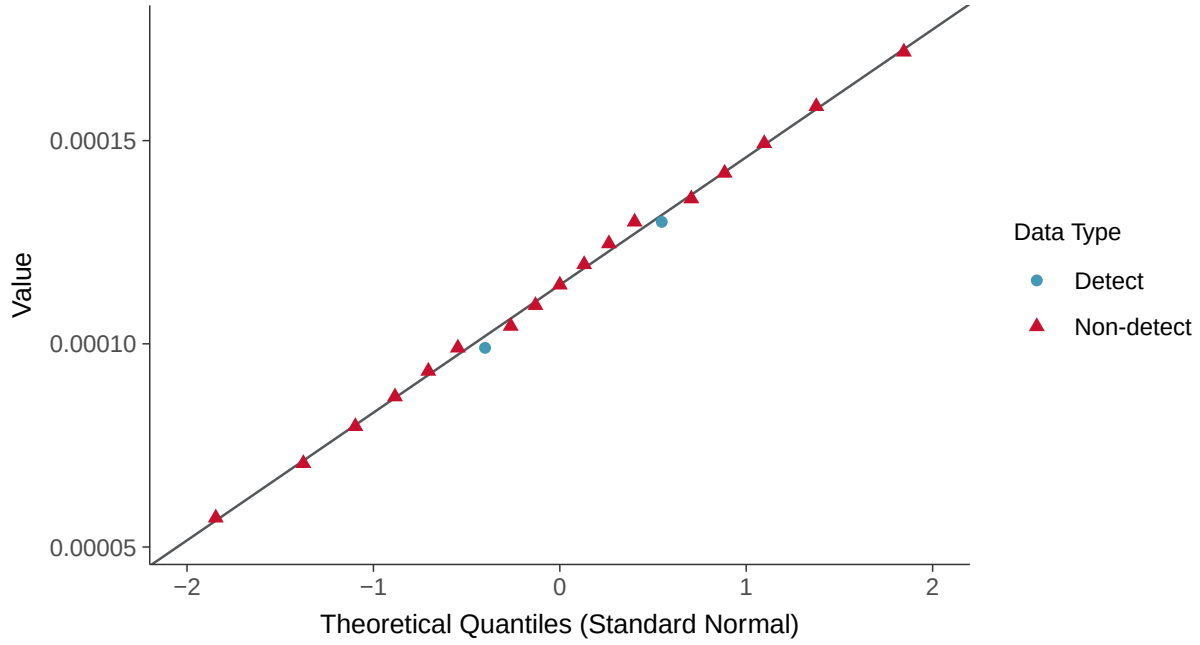
Boxplot by Season

Cadmium, MW-2 (mg/l)



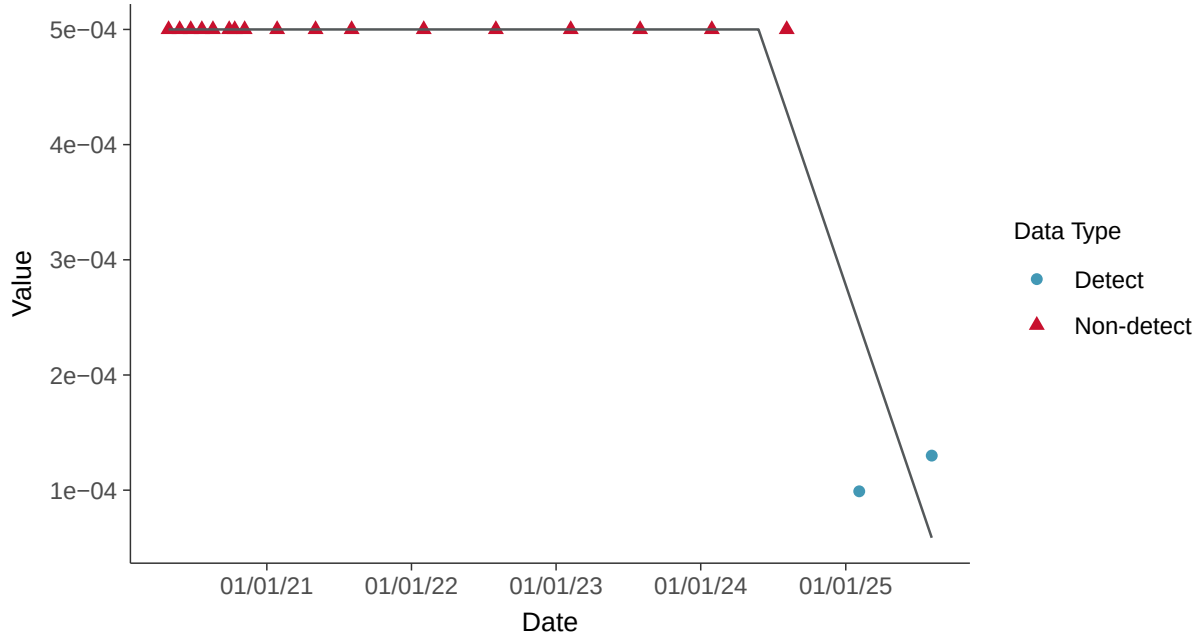
Normal Q-Q plot using ROS Imputed Estimates

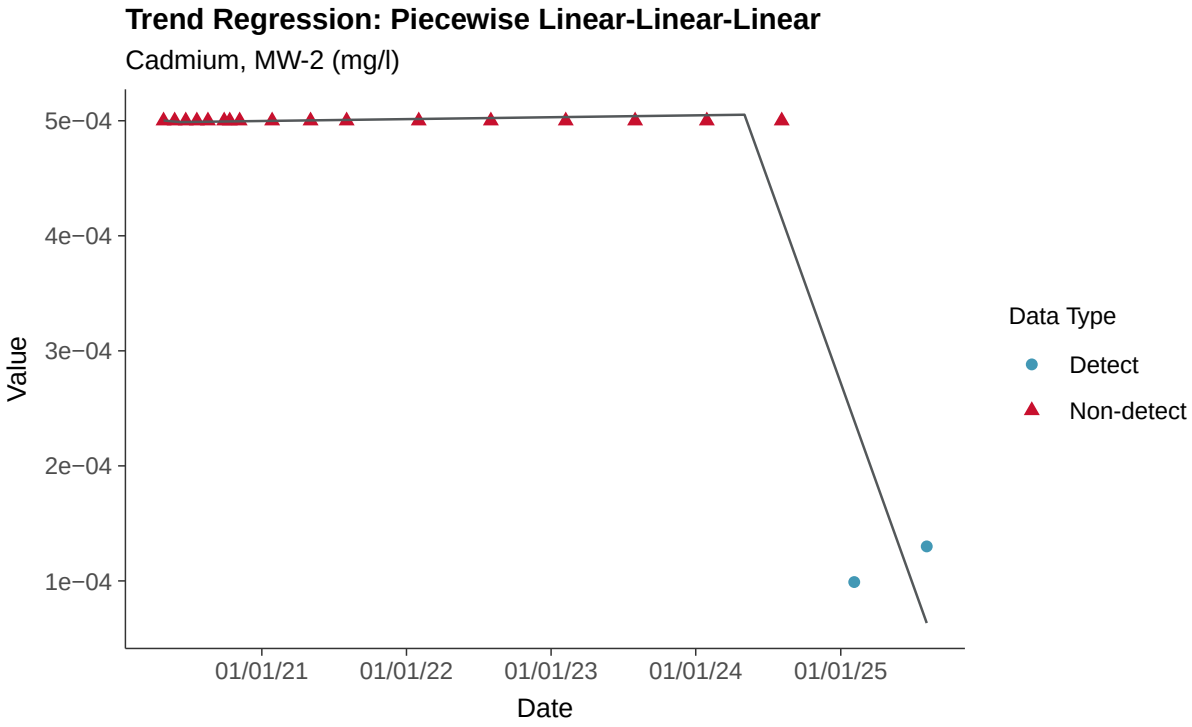
Cadmium, MW-2 (mg/l)



Trend Regression: Piecewise Linear-Linear

Cadmium, MW-2 (mg/l)



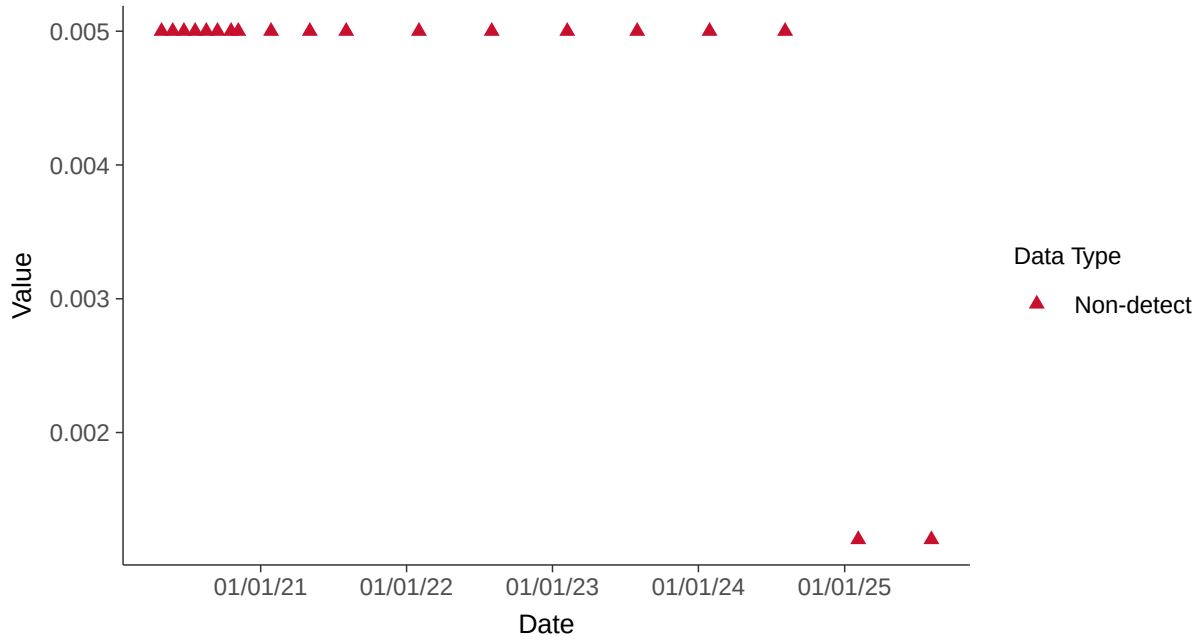

Trend Regression: Piecewise Linear-Linear-Linear
Cadmium, MW-2 (mg/l)
Value
5e−04
4e−04
3e−04
2e−04
1e−04
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Chromium, MW-2

ID: 13_3_109

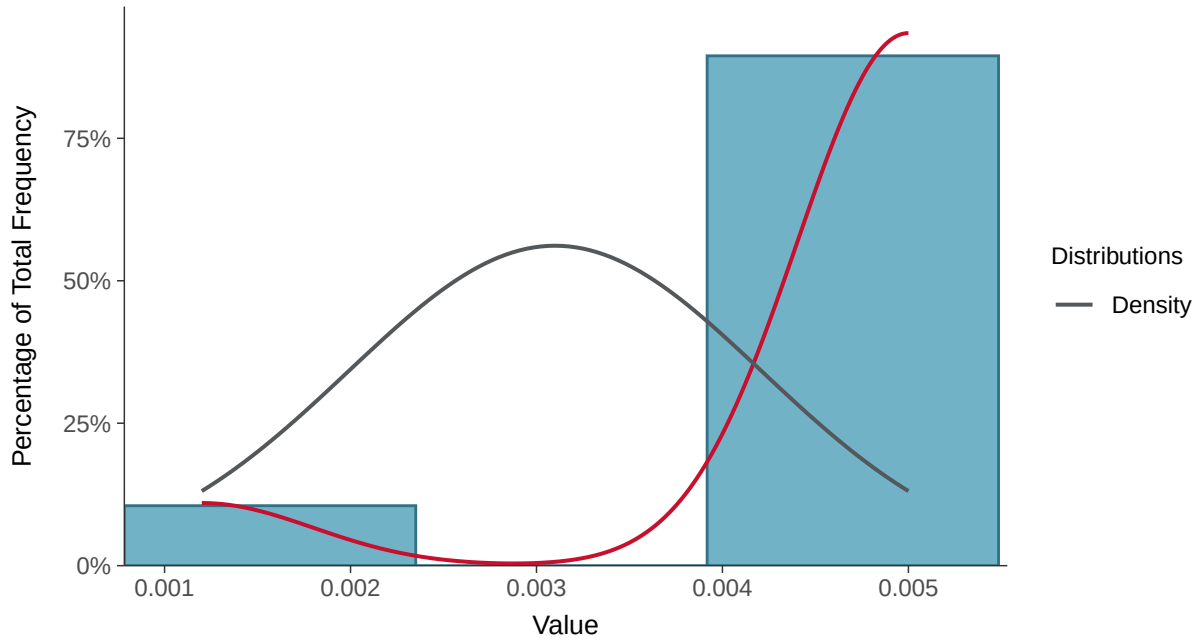
Scatter Plot

Chromium, MW-2 (mg/l)



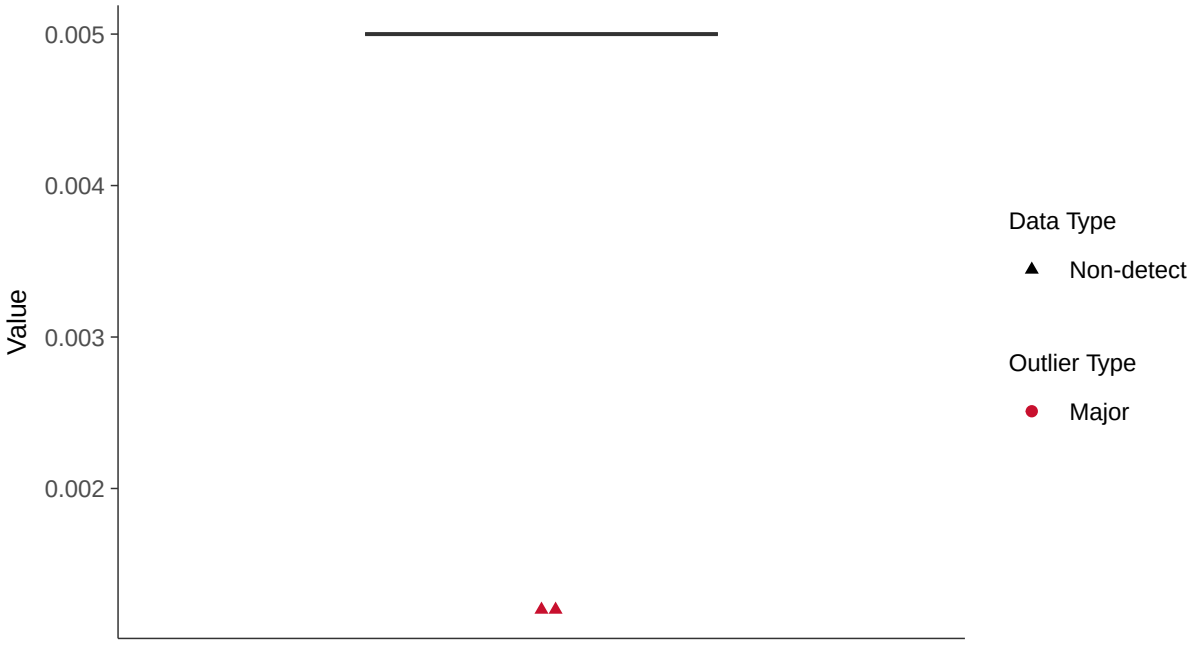
Histogram

Chromium, MW-2 (mg/l)



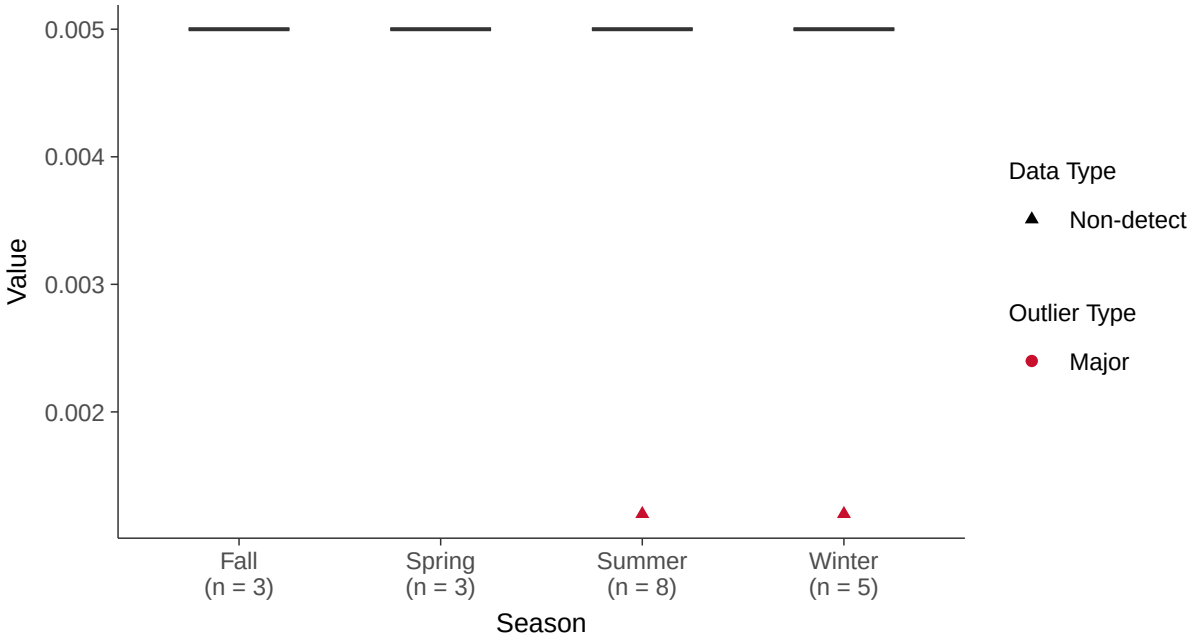
Boxplot

Chromium, MW-2 (mg/l)



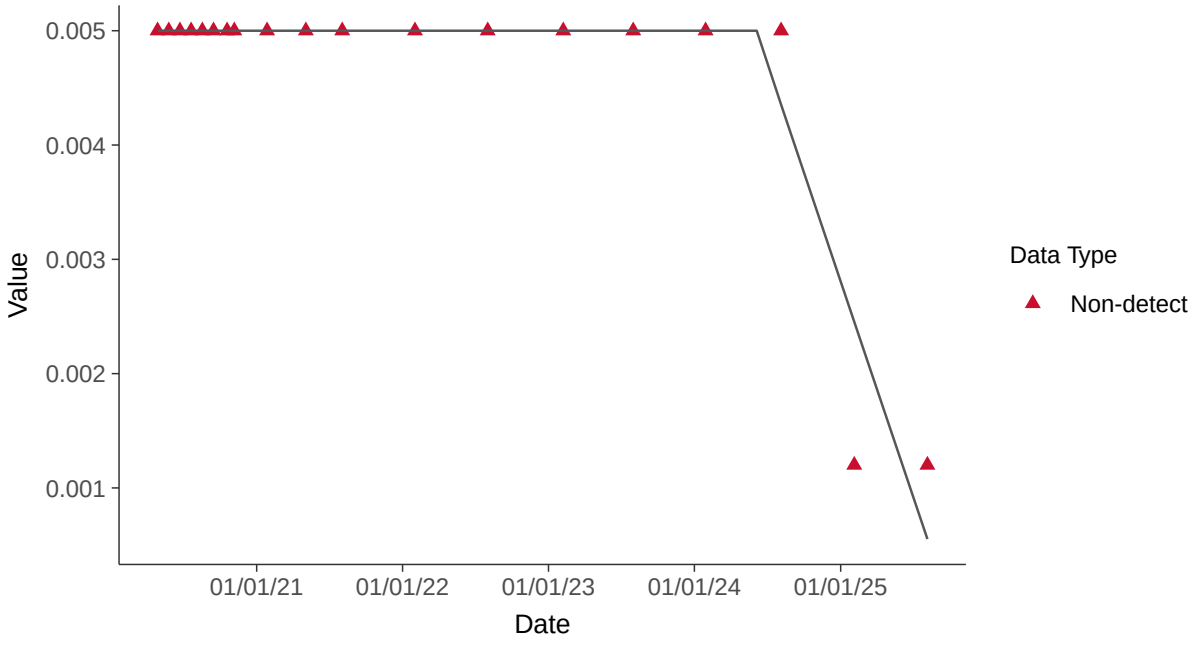
Boxplot by Season

Chromium, MW-2 (mg/l)



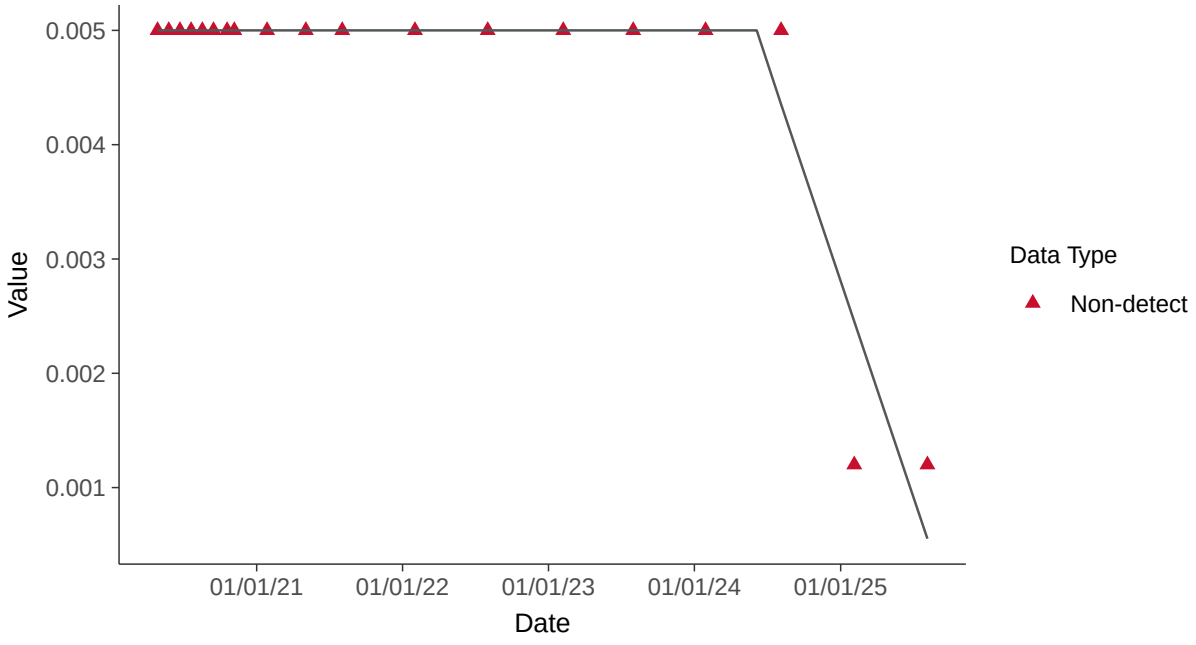
Trend Regression: Piecewise Linear-Linear

Chromium, MW-2 (mg/l)



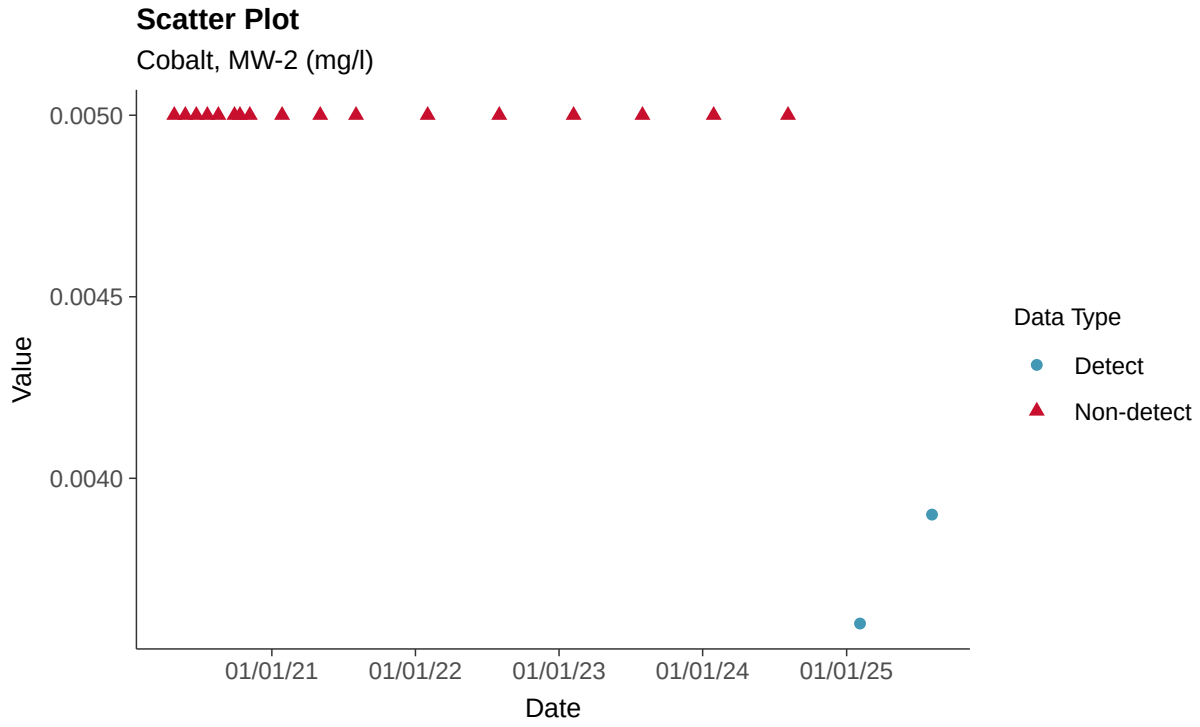
Trend Regression: Piecewise Linear-Linear-Linear

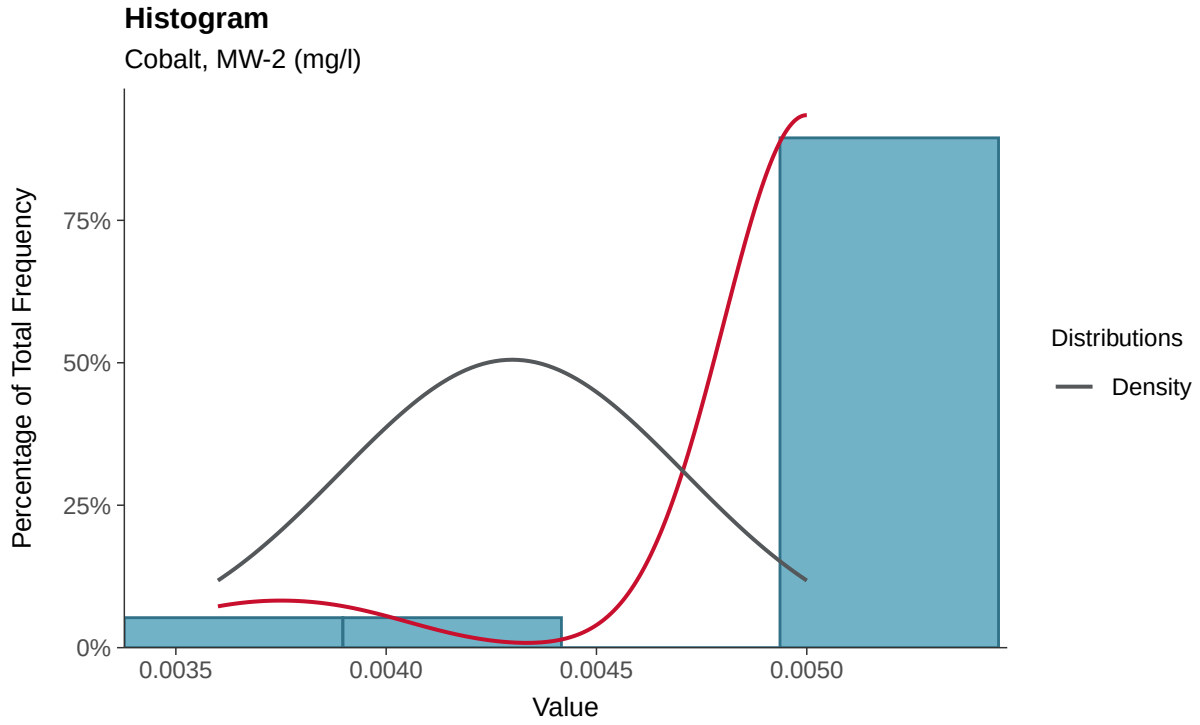
Chromium, MW-2 (mg/l)



Appendix IV: Cobalt, MW-2

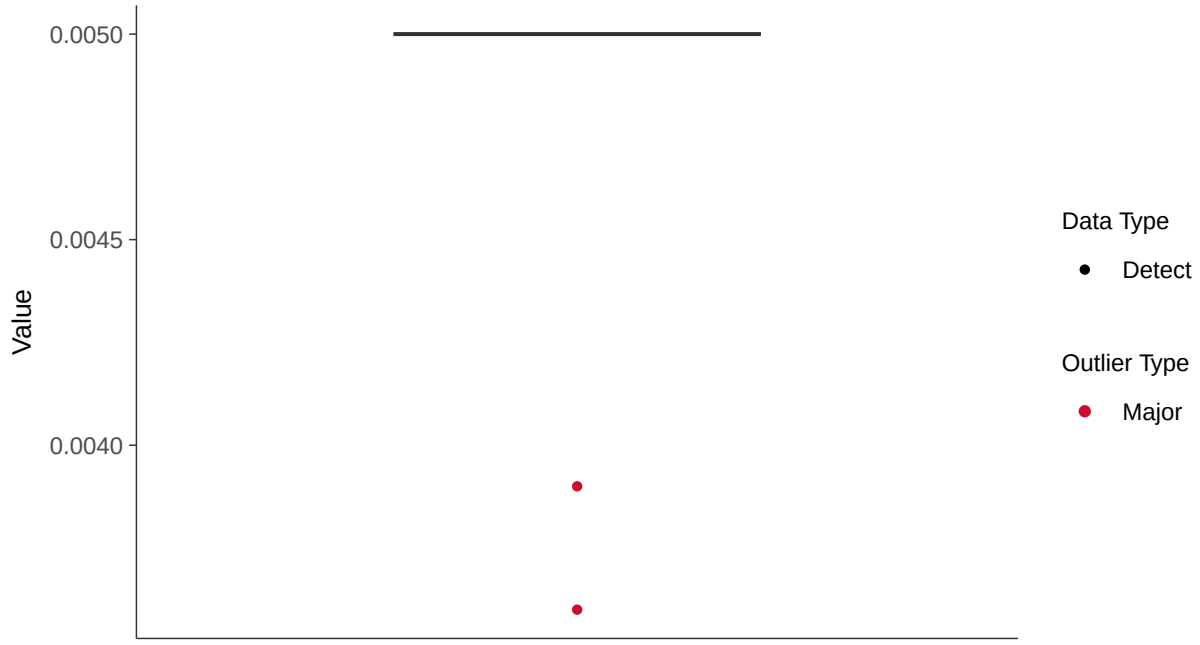
ID: 13_3_110





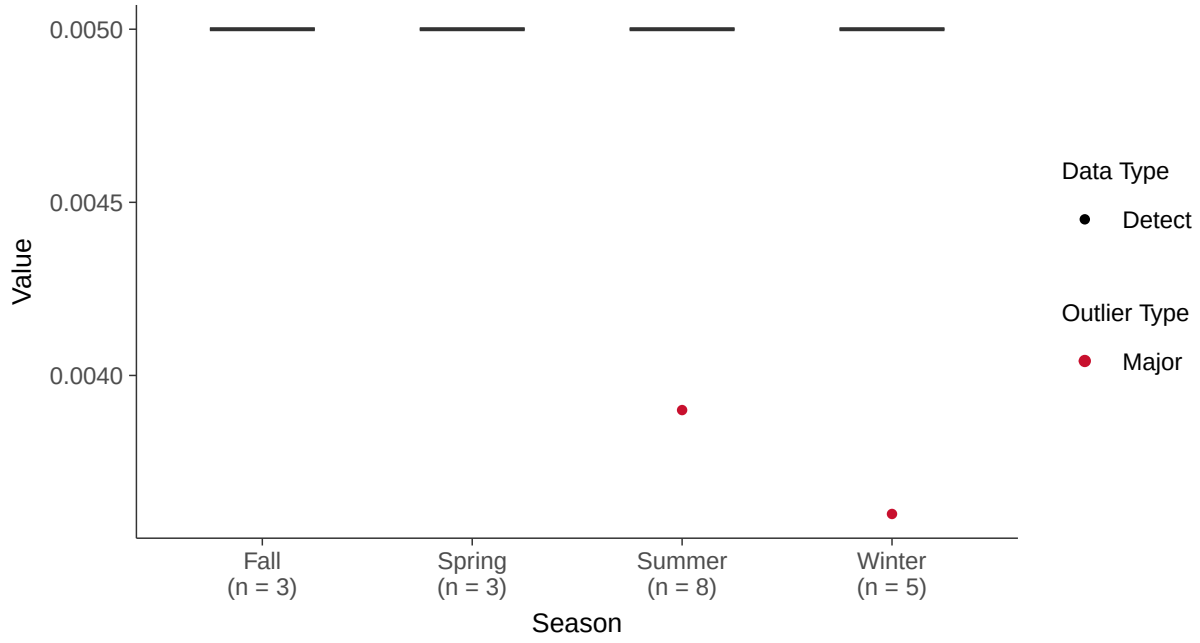
Boxplot

Cobalt, MW-2 (mg/l)



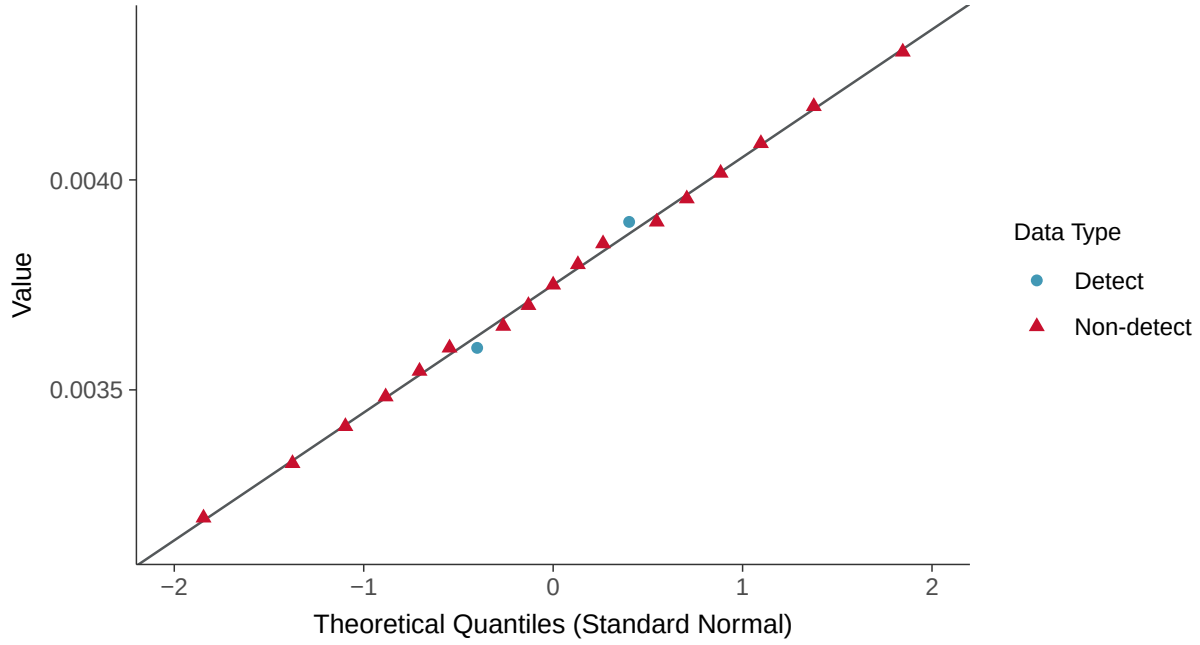
Boxplot by Season

Cobalt, MW-2 (mg/l)



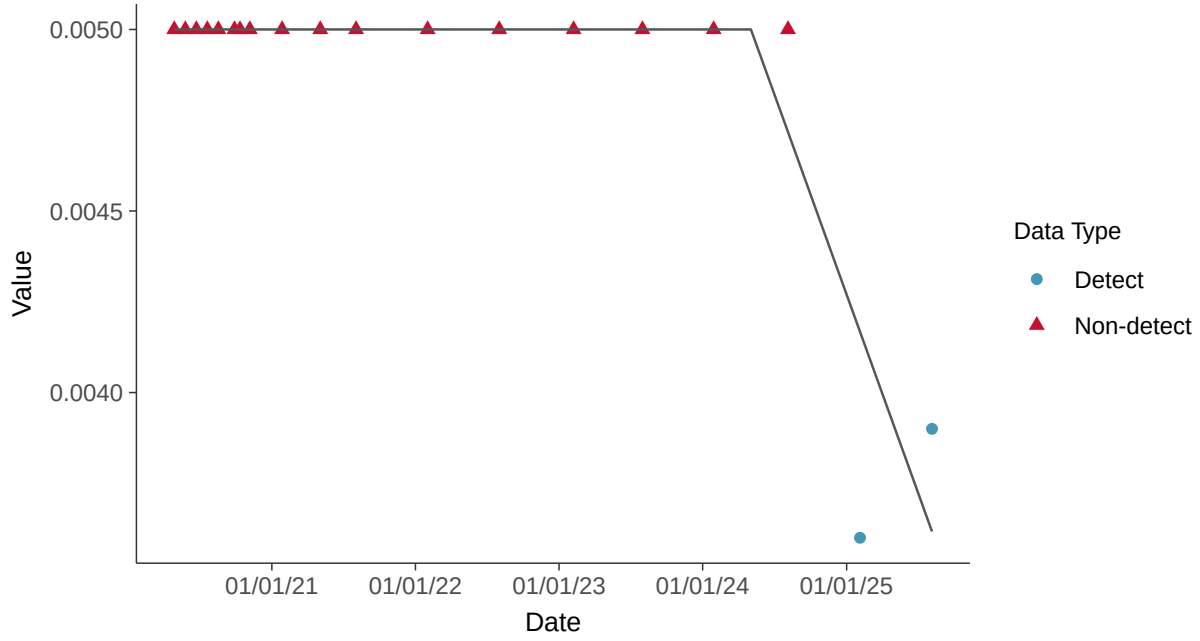
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-2 (mg/l)



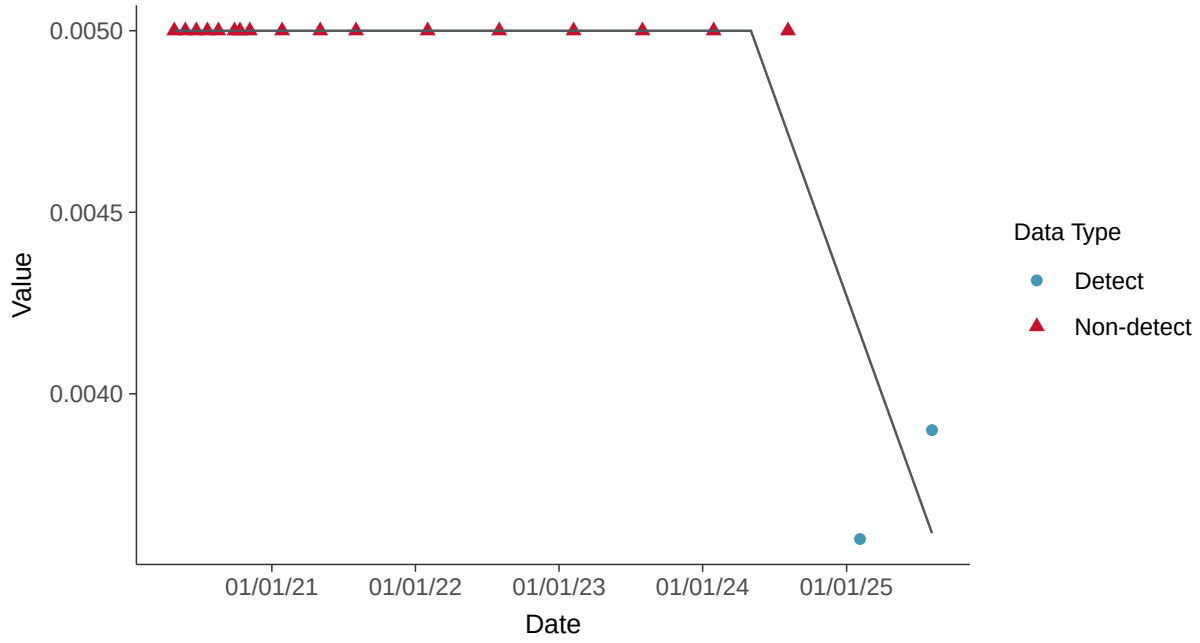
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-2 (mg/l)



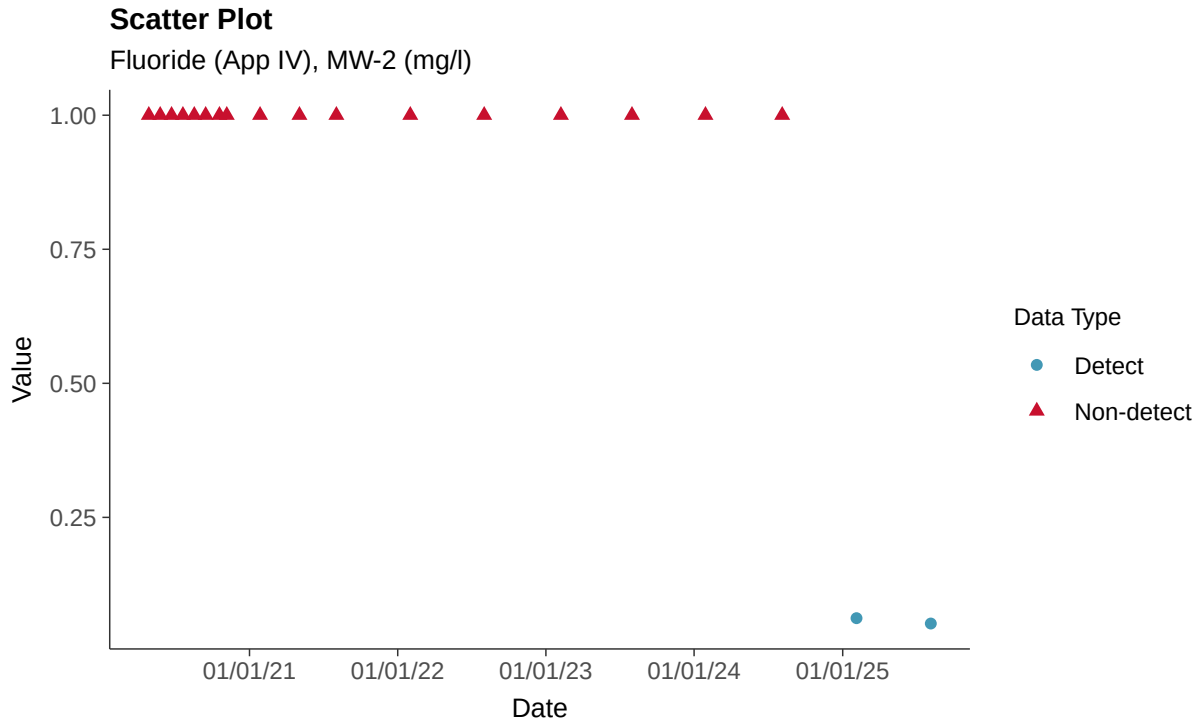
Trend Regression: Piecewise Linear-Linear-Linear

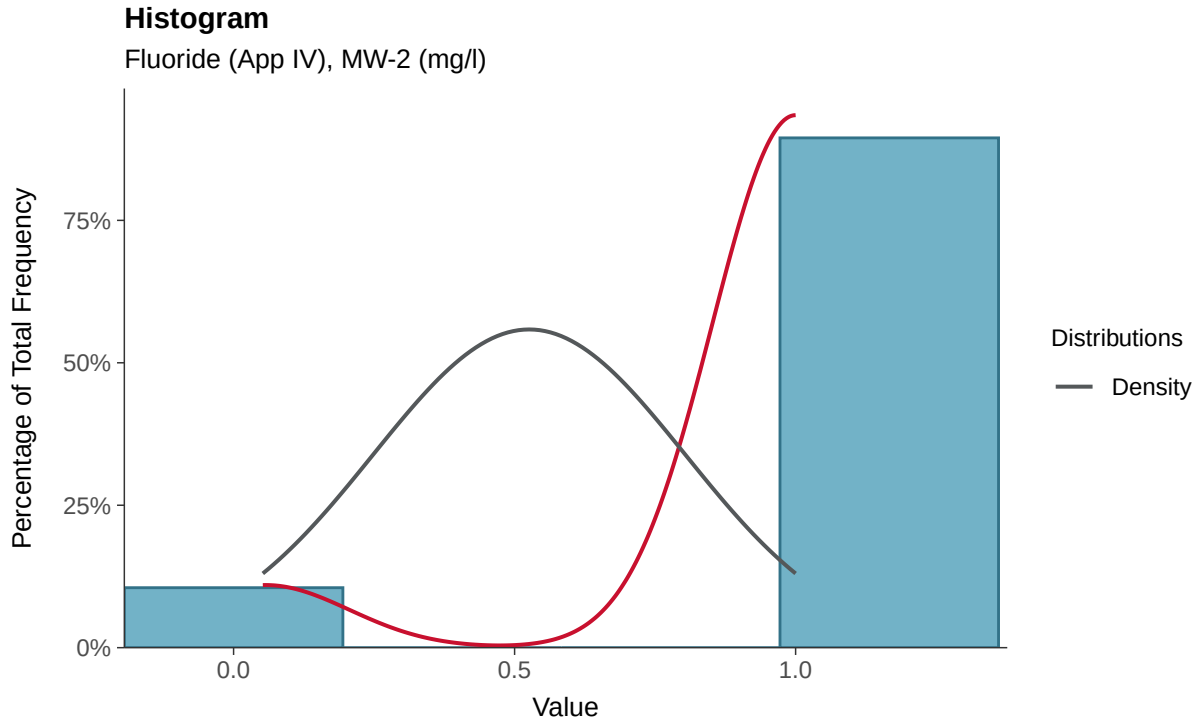
Cobalt, MW-2 (mg/l)



Appendix IV: Fluoride (App IV), MW-2

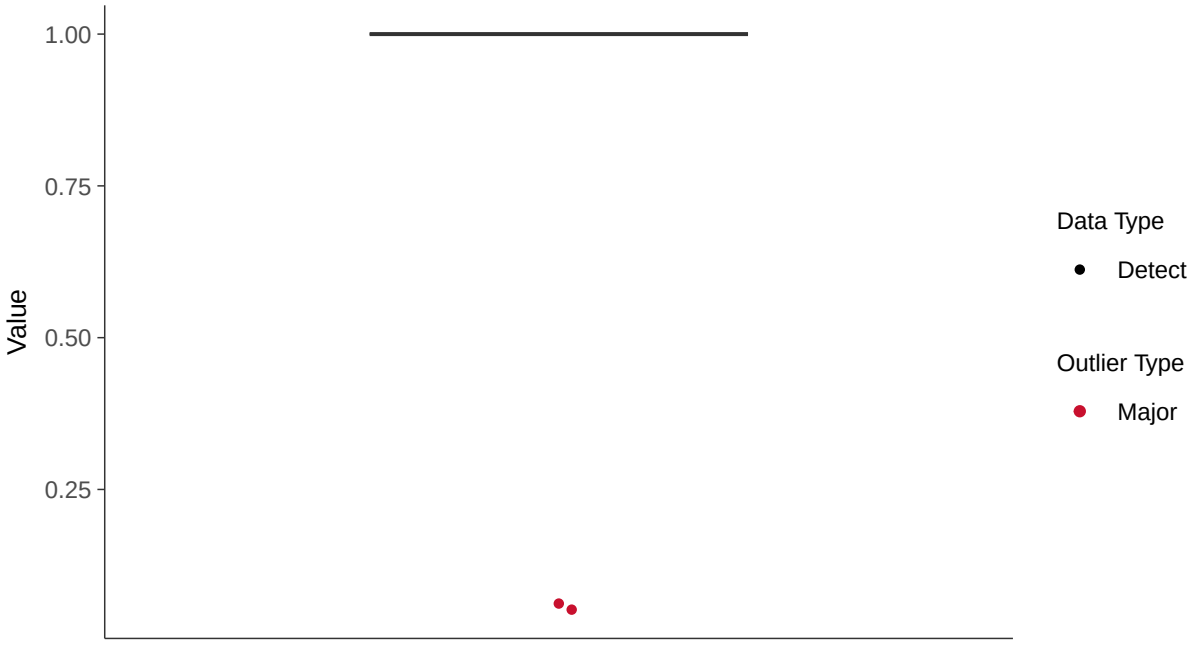
ID: 13_3_113





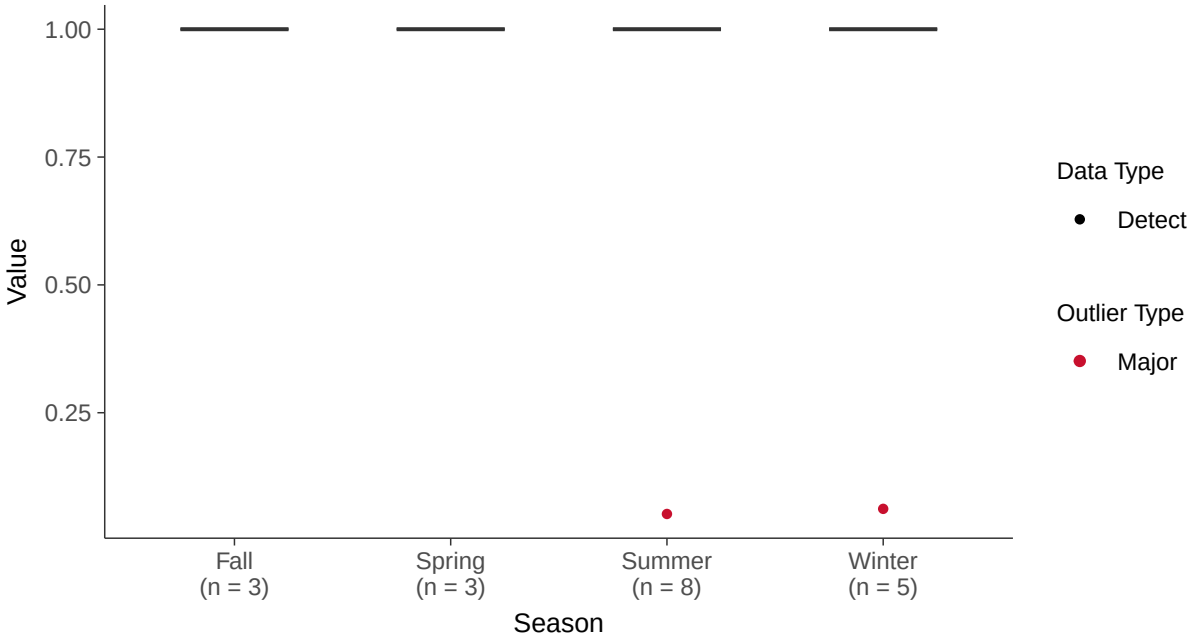
Boxplot

Fluoride (App IV), MW-2 (mg/l)



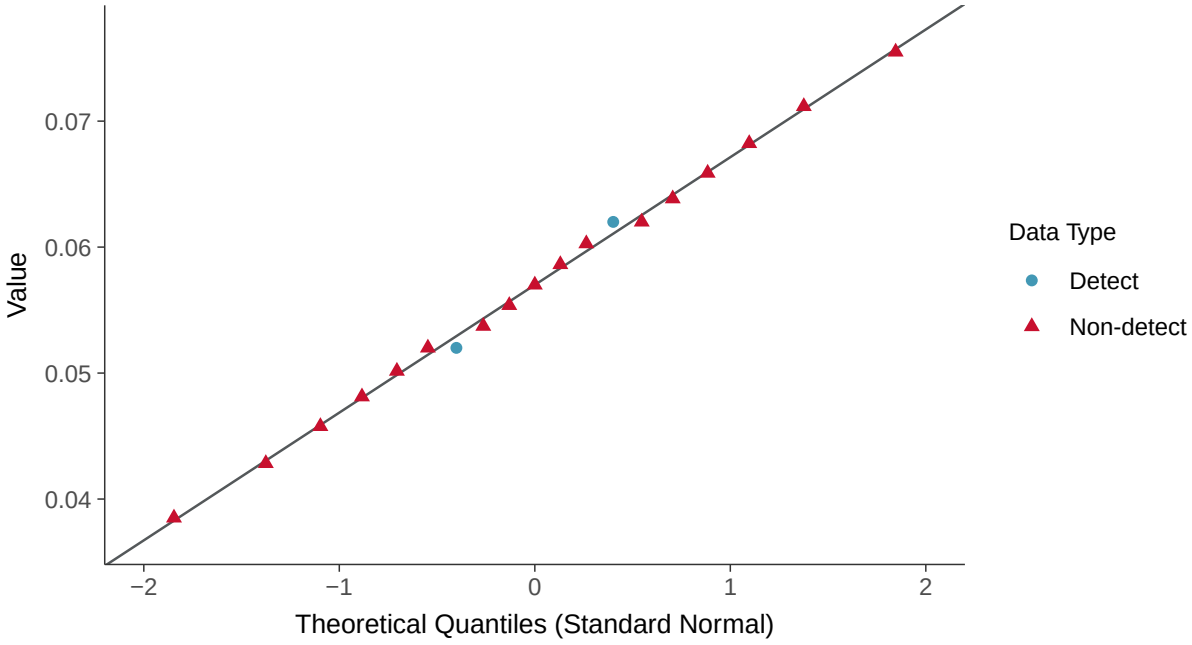
Boxplot by Season

Fluoride (App IV), MW-2 (mg/l)



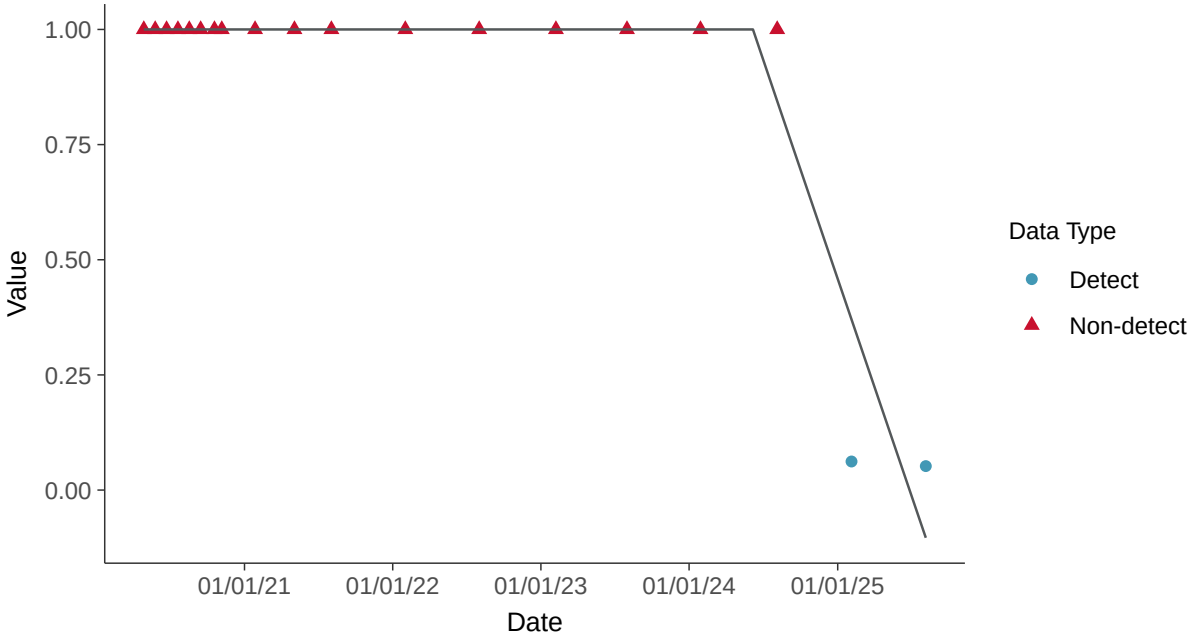
Normal Q-Q plot using ROS Imputed Estimates

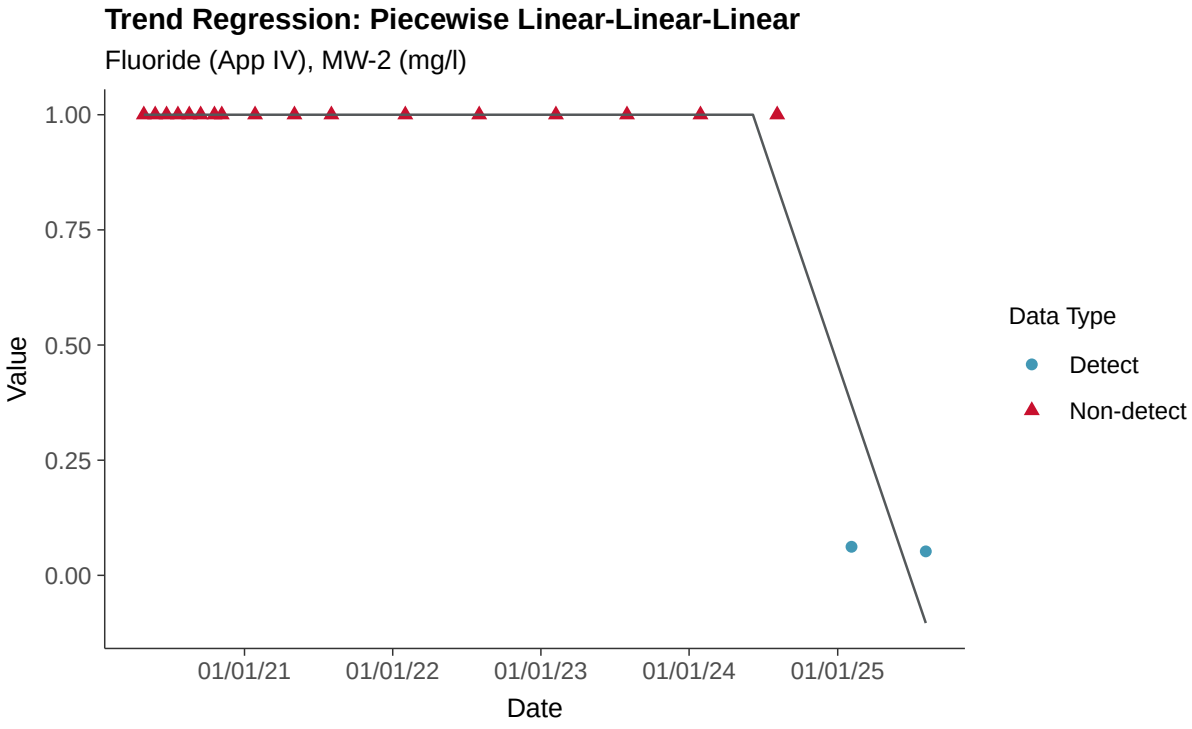
Fluoride (App IV), MW-2 (mg/l)



Trend Regression: Piecewise Linear-Linear

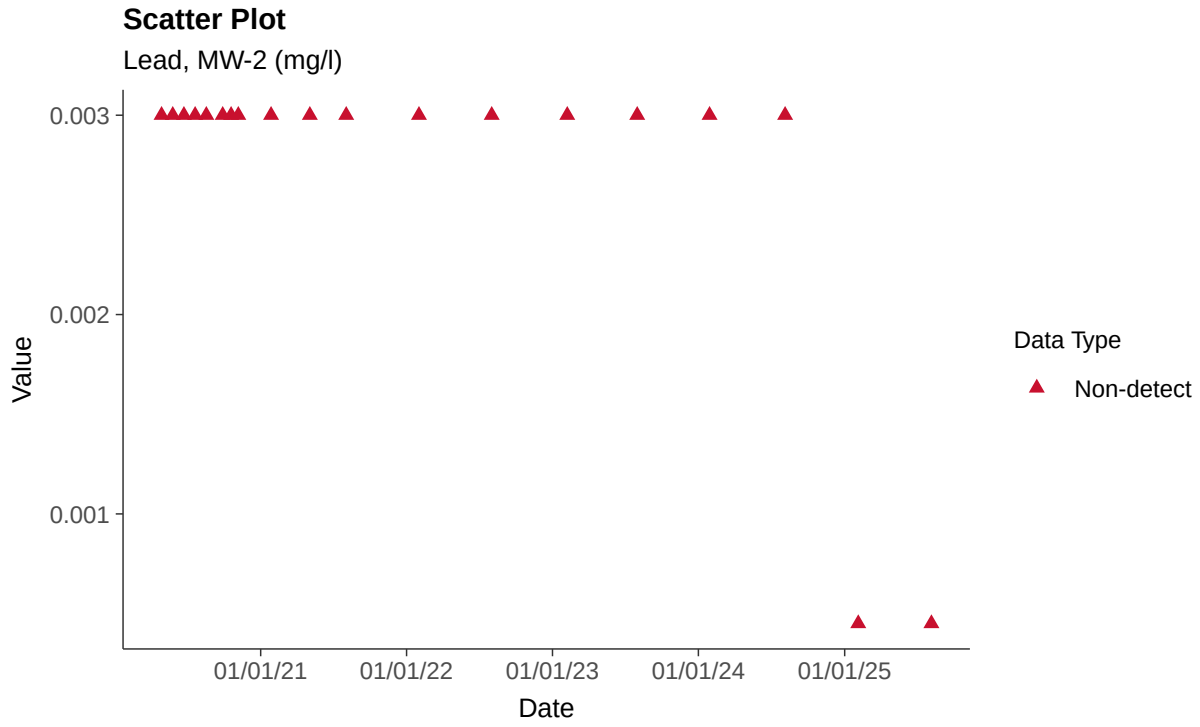
Fluoride (App IV), MW-2 (mg/l)

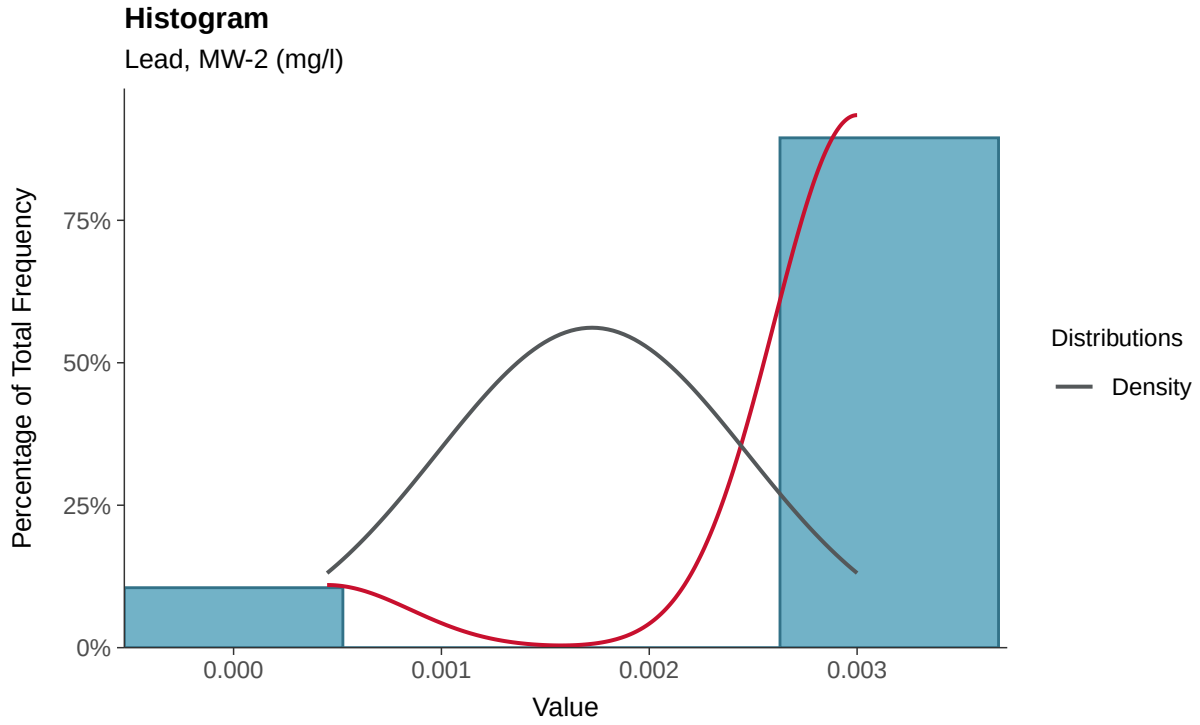



Trend Regression: Piecewise Linear-Linear-Linear
Fluoride (App IV), MW-2 (mg/l)
Value
1.00
0.75
0.50
0.25
0.00
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Lead, MW-2

ID: 13_3_115



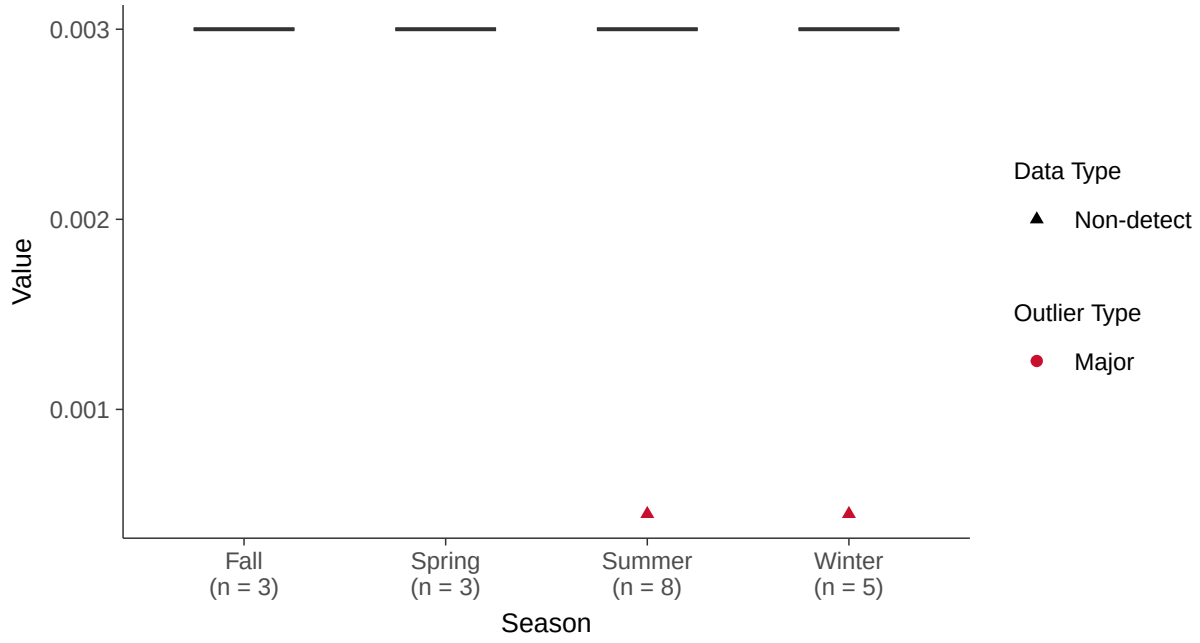


Boxplot

Lead, MW-2 (mg/l)

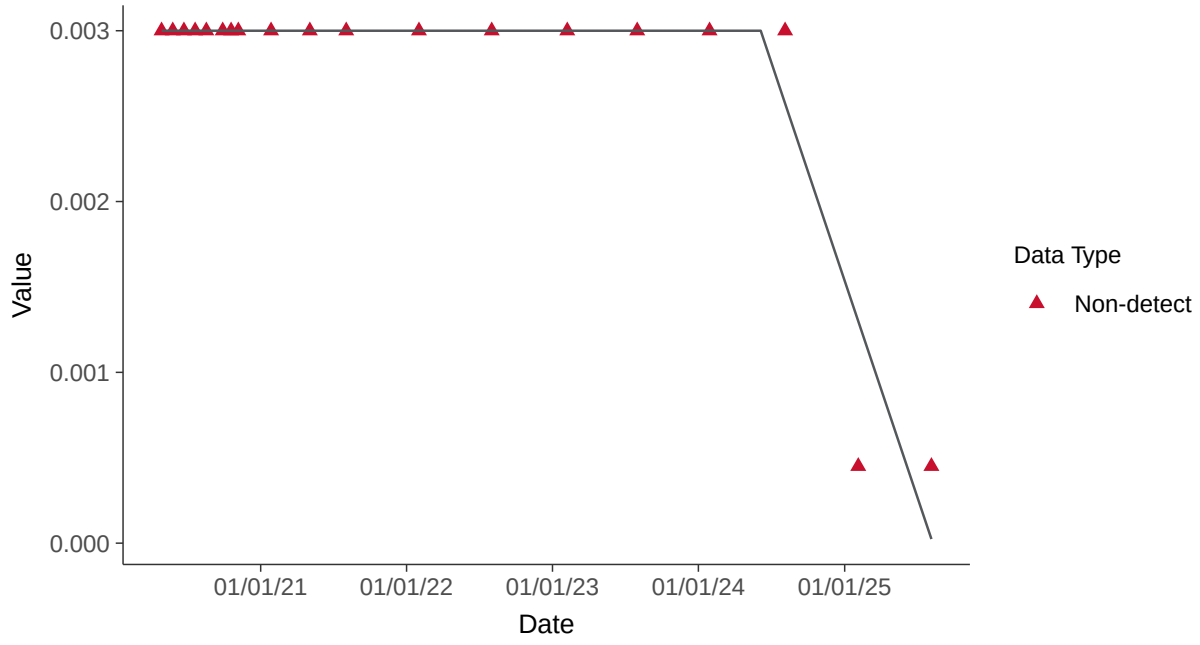
Boxplot by Season

Lead, MW-2 (mg/l)



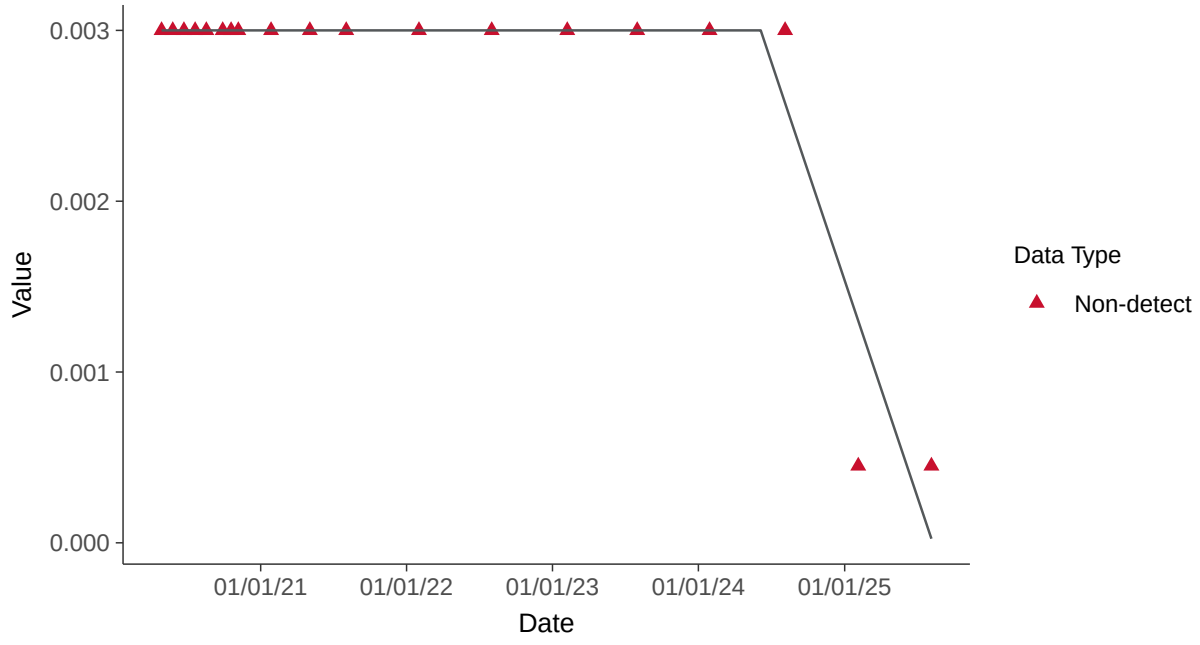
Trend Regression: Piecewise Linear-Linear

Lead, MW-2 (mg/l)



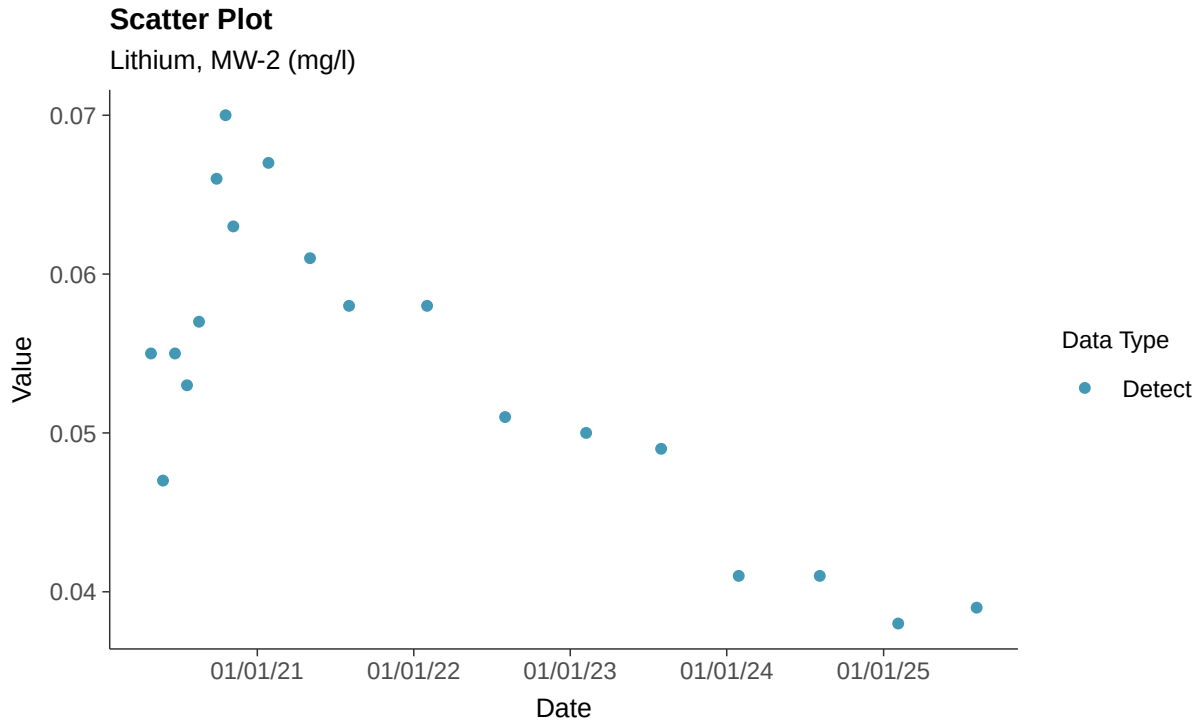
Trend Regression: Piecewise Linear-Linear-Linear

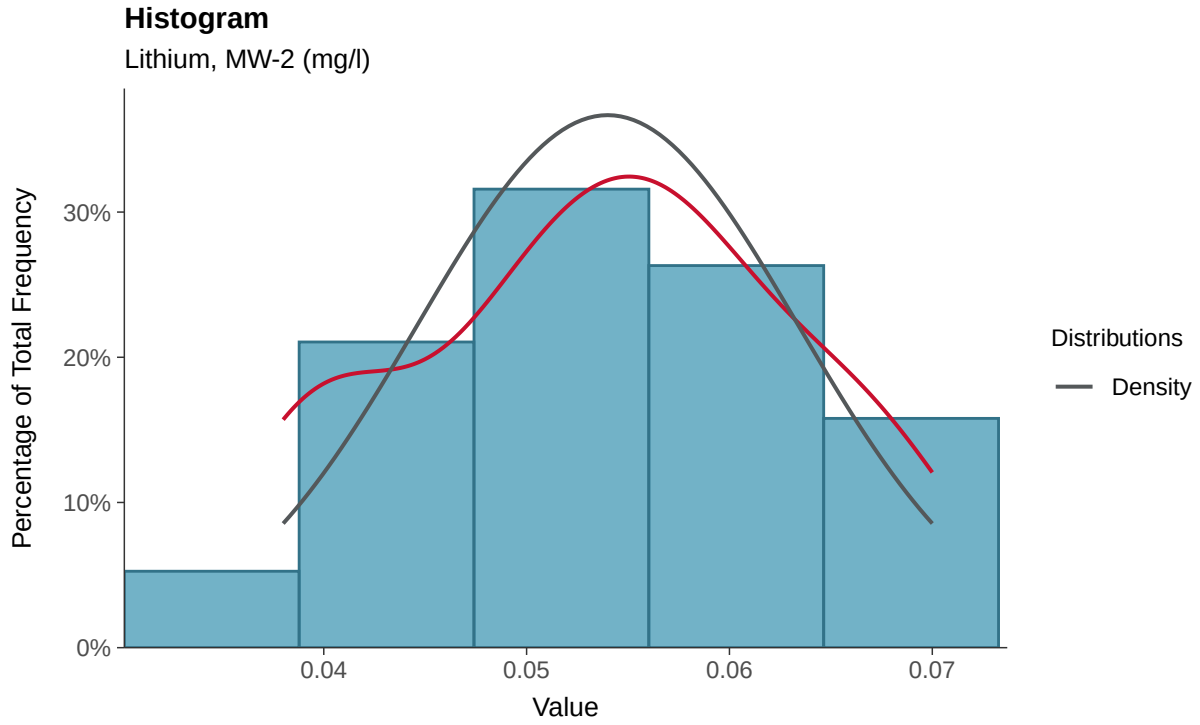
Lead, MW-2 (mg/l)



Appendix IV: Lithium, MW-2

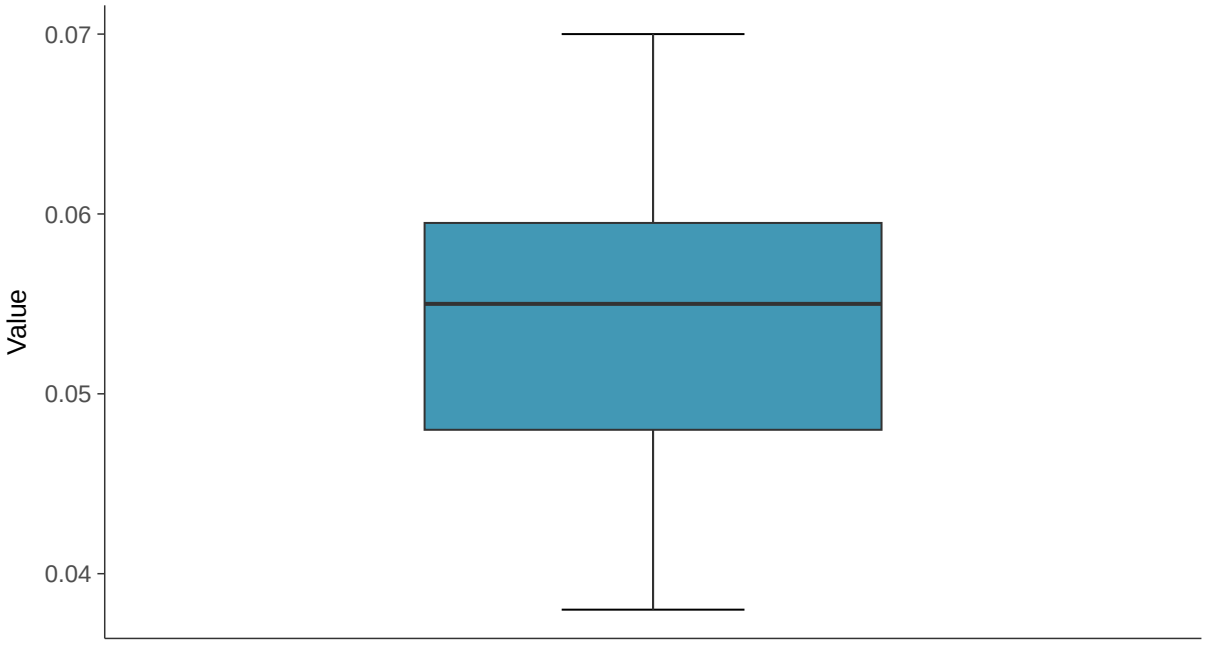
ID: 13_3_116





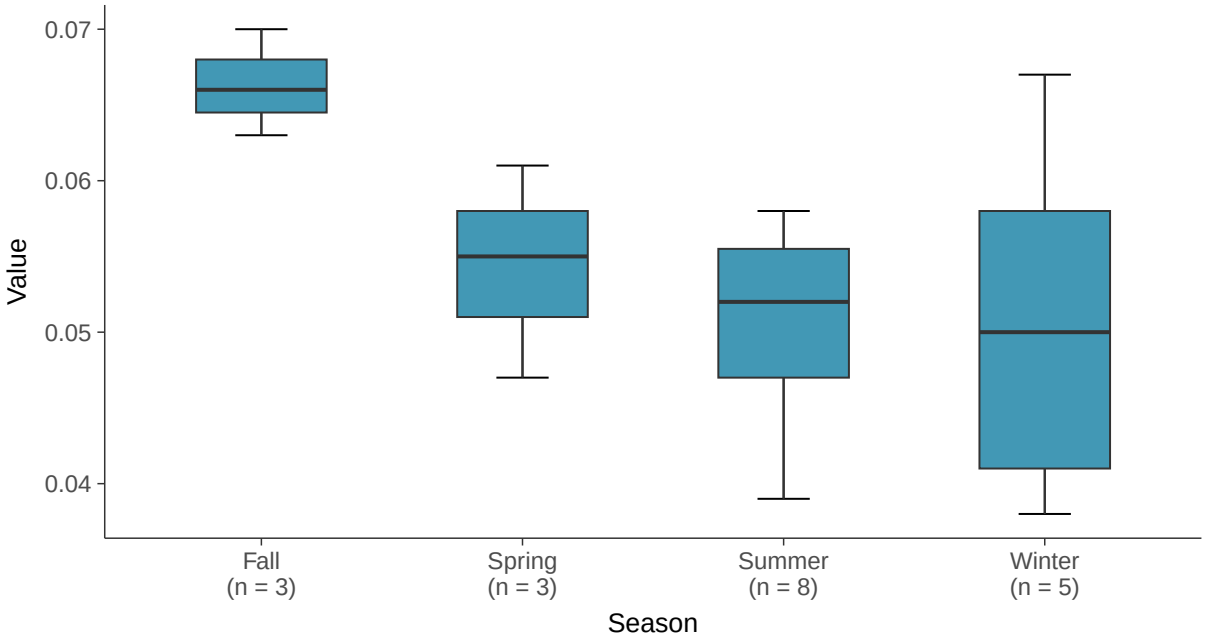
Boxplot

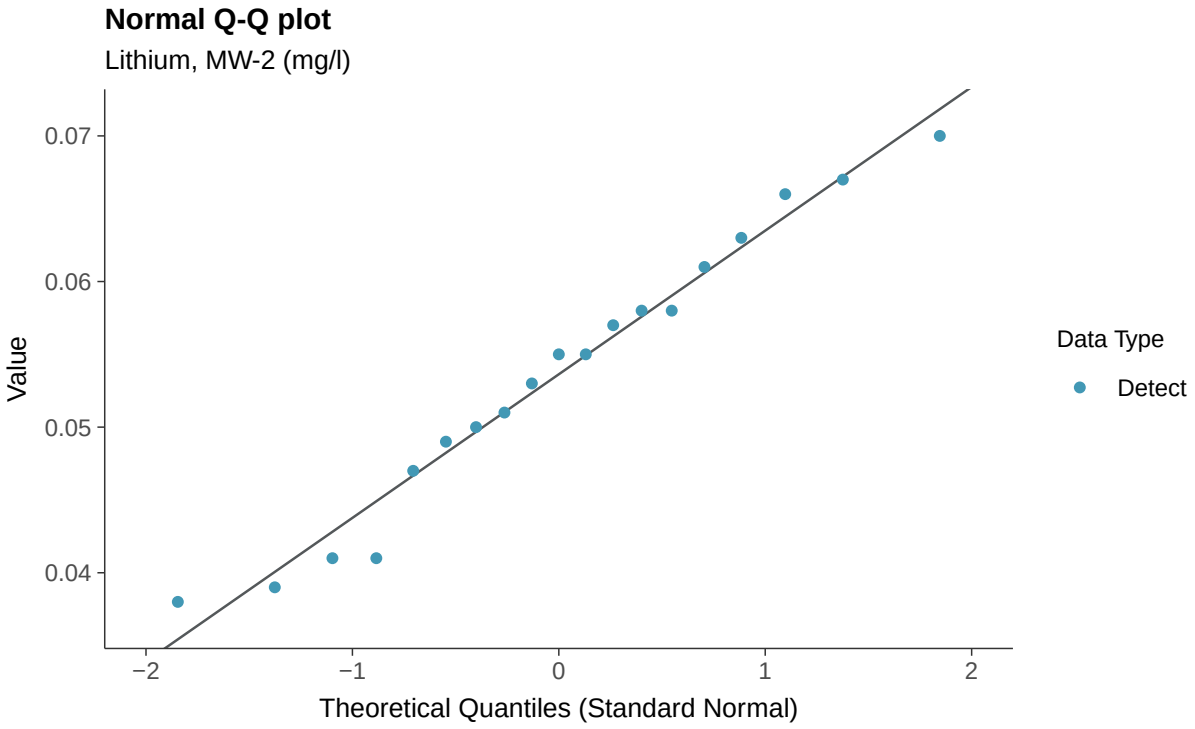
Lithium, MW-2 (mg/l)

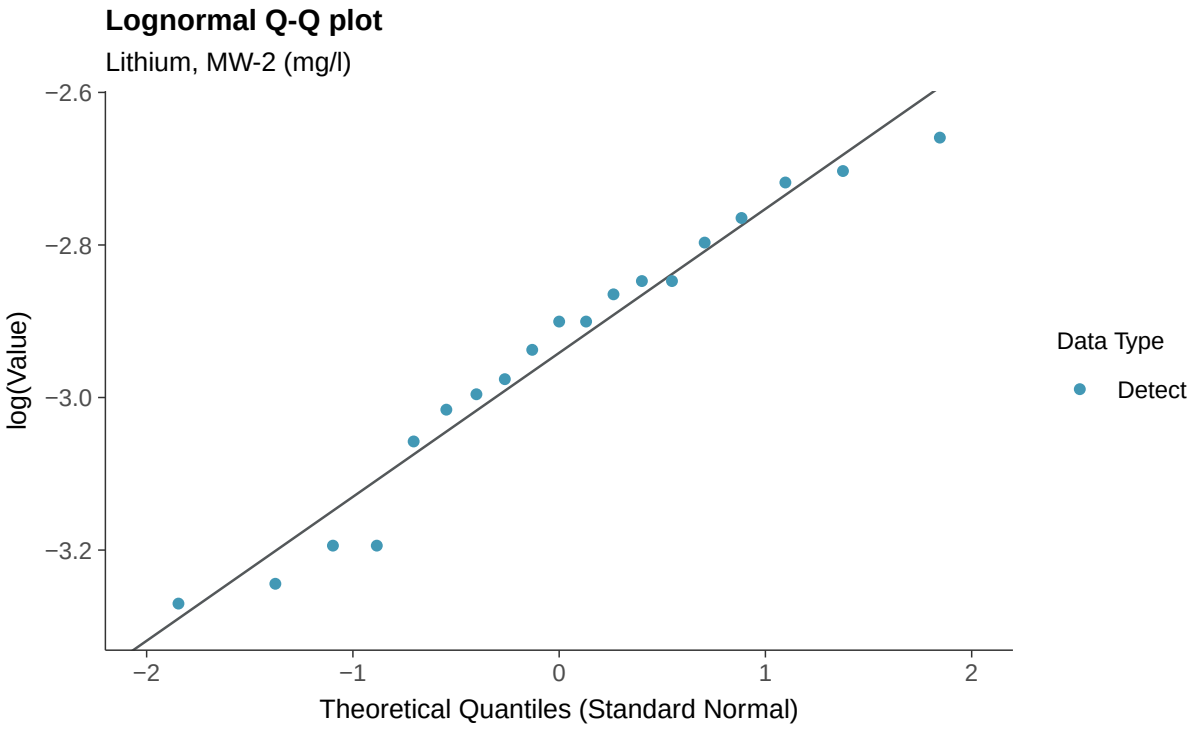


Boxplot by Season

Lithium, MW-2 (mg/l)

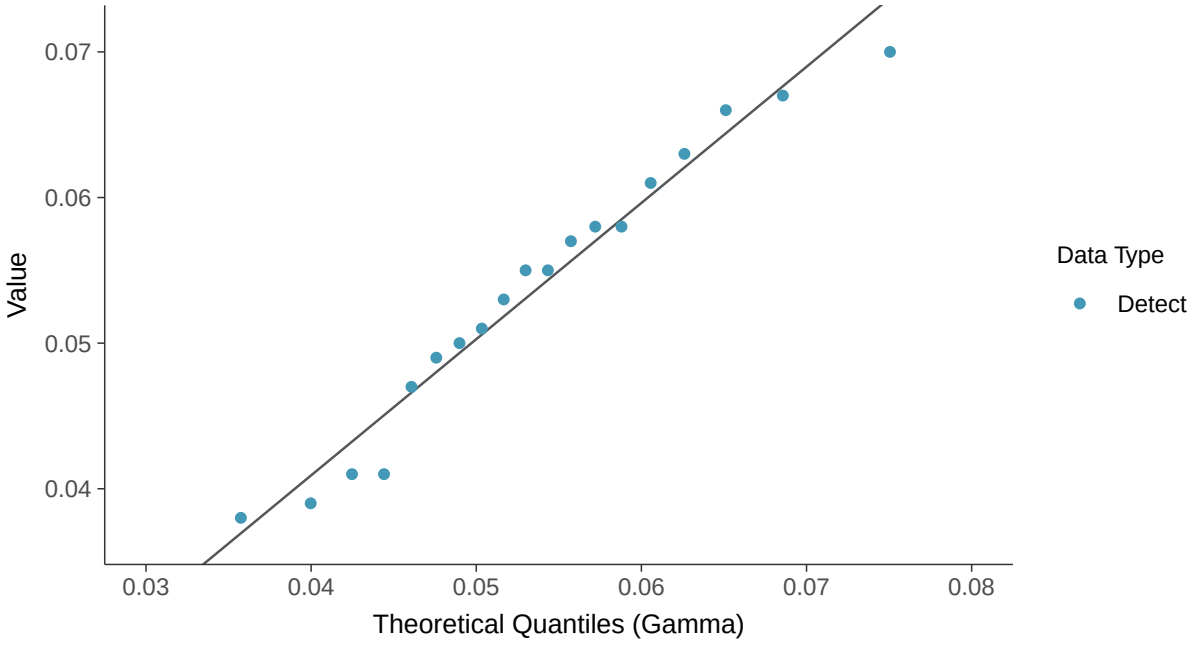



Normal Q-Q plot
Lithium, MW-2 (mg/l)
Value
0.07
0.06
0.05
0.04
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect


Lognormal Q-Q plot
Lithium, MW-2 (mg/l)
log(Value)
−2.6
−2.8
−3.0
−3.2
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect

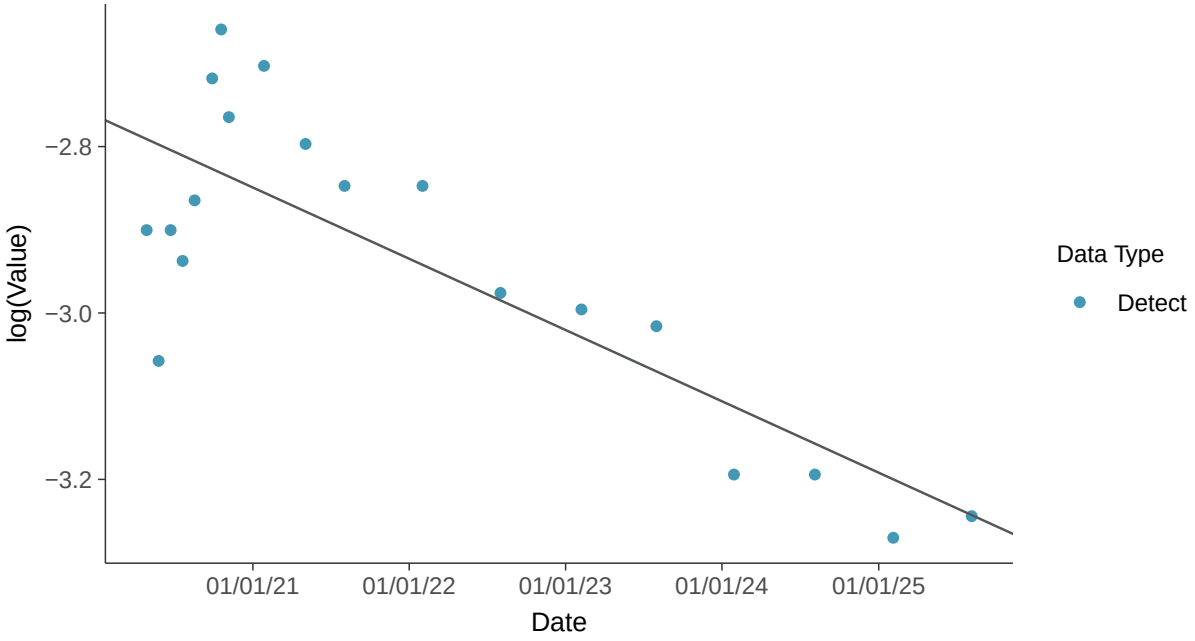
Gamma Q-Q plot

Lithium, MW-2 (mg/l)



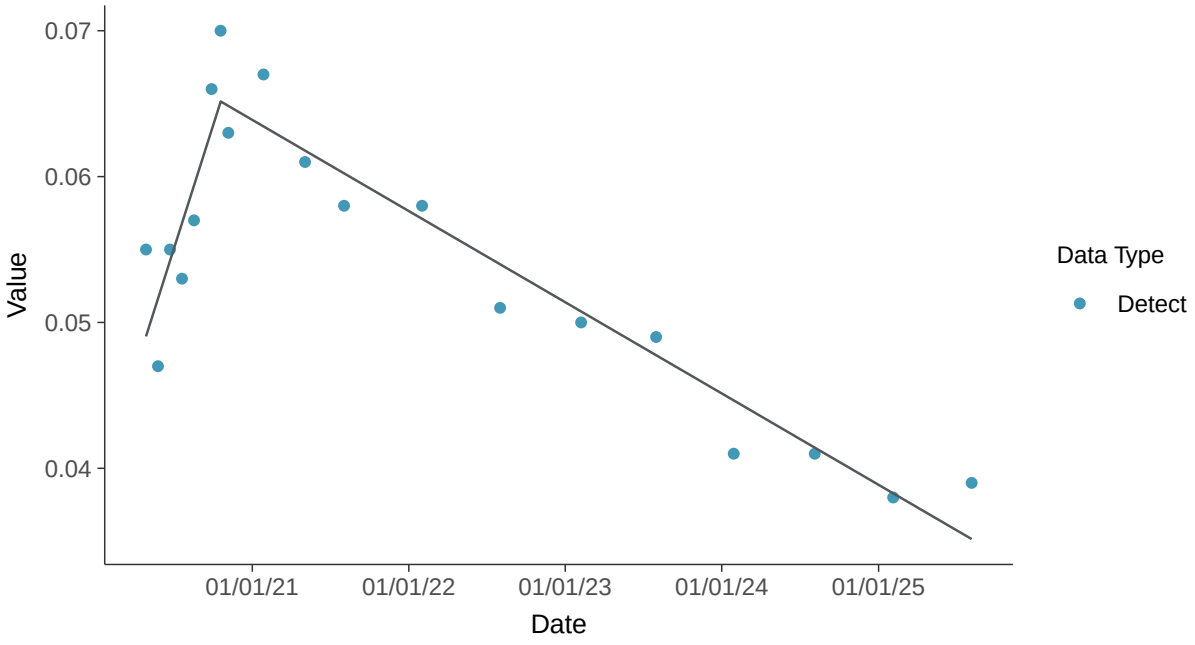
Trend Regression: Lognormal MLE

Lithium, MW-2 (mg/l)



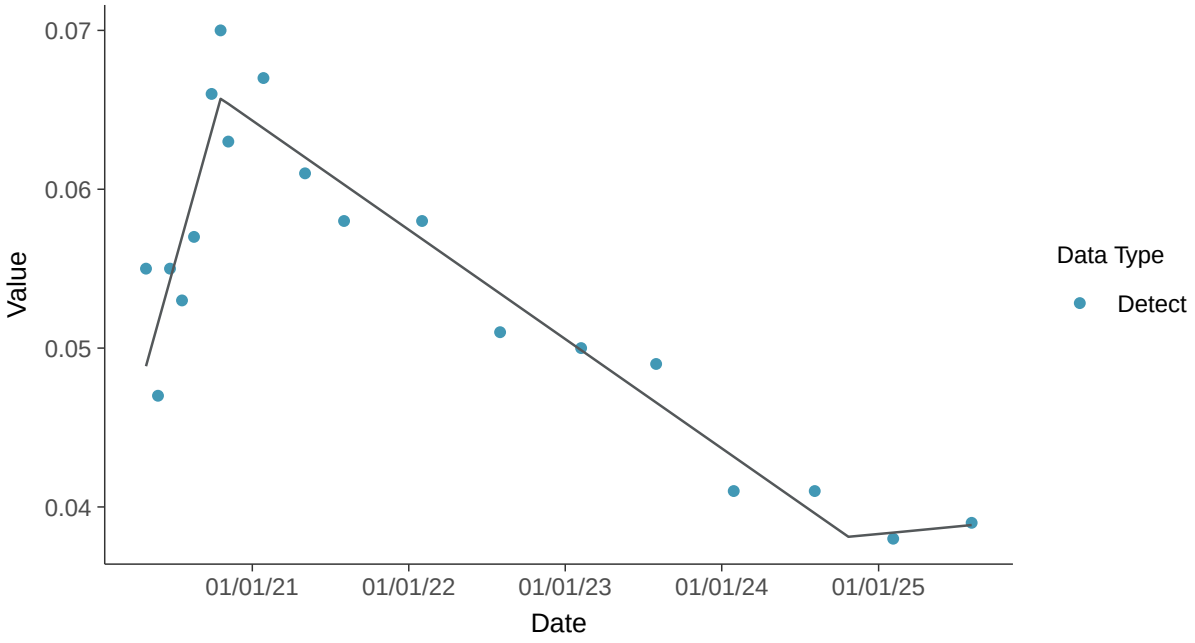
Trend Regression: Piecewise Linear-Linear

Lithium, MW-2 (mg/l)



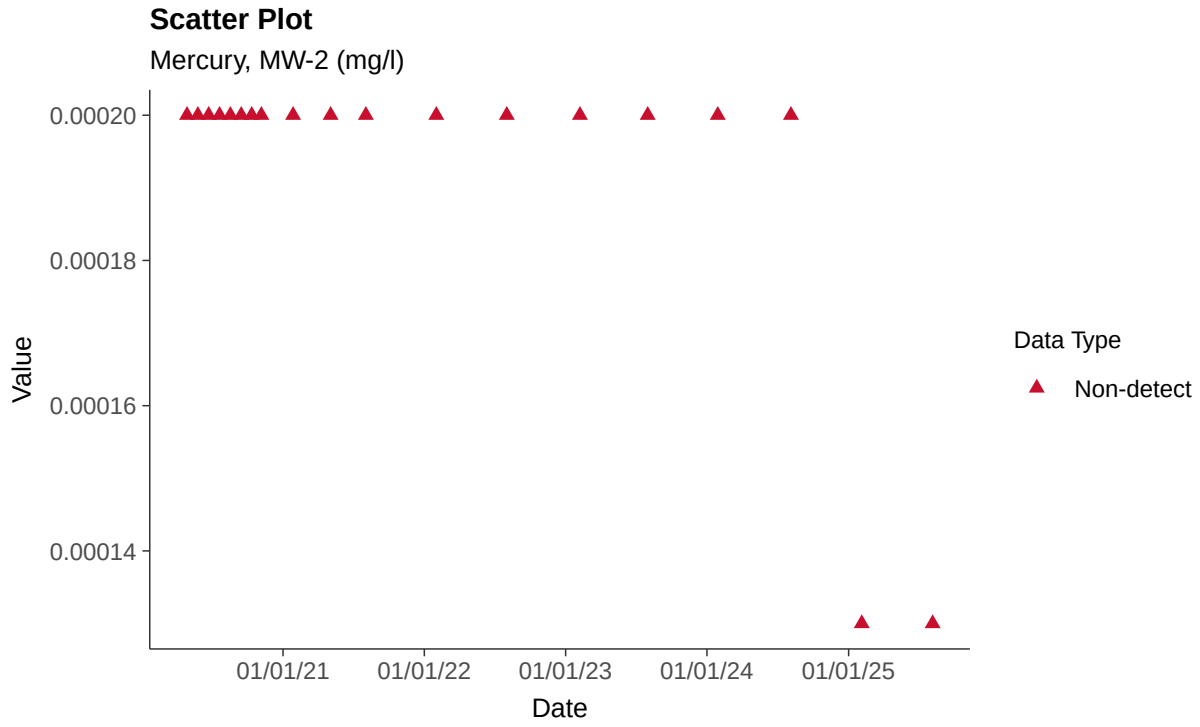
Trend Regression: Piecewise Linear-Linear-Linear

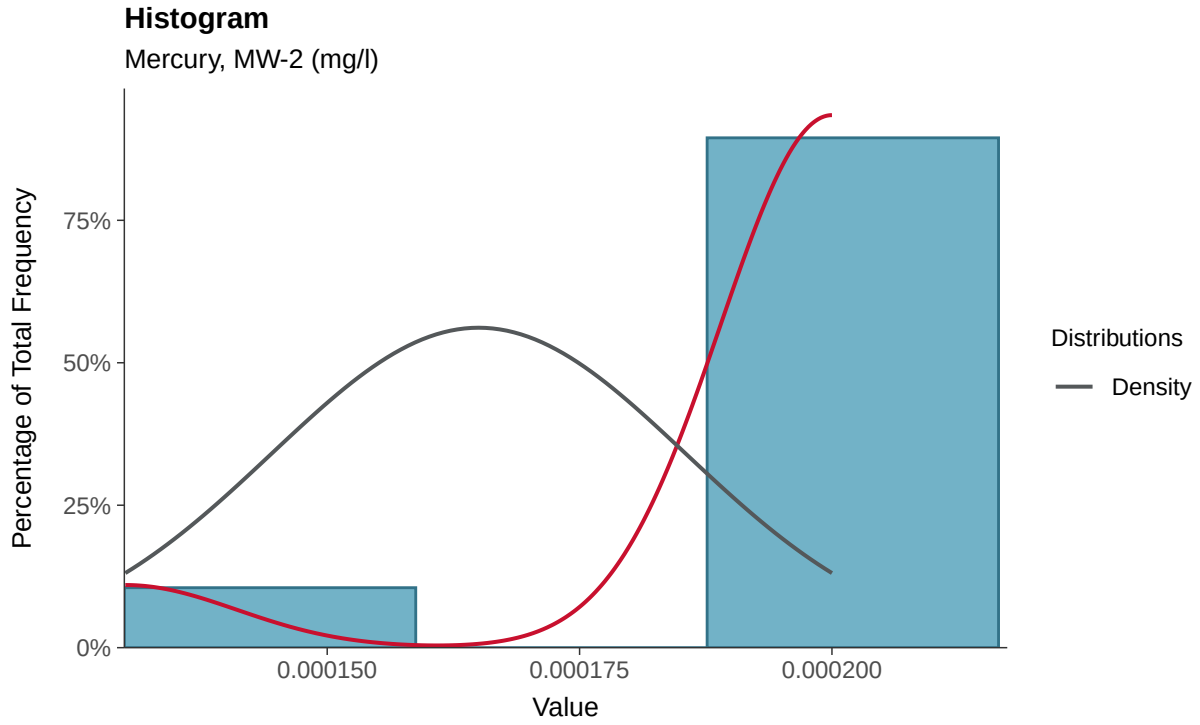
Lithium, MW-2 (mg/l)



Appendix IV: Mercury, MW-2

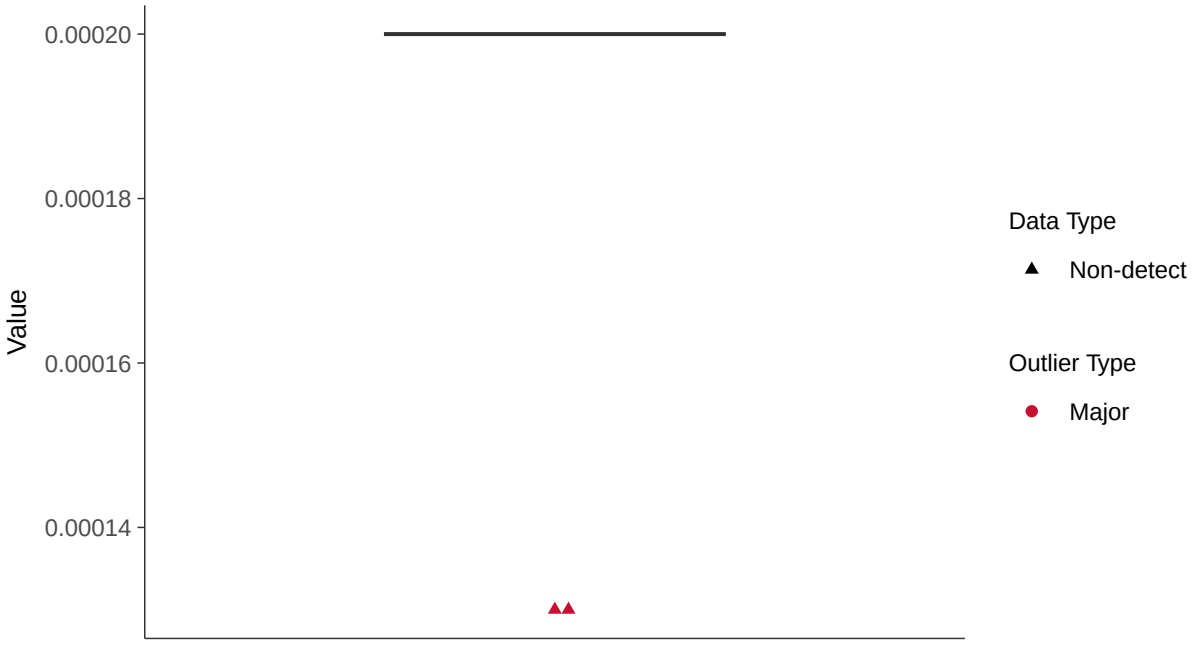
ID: 13_3_117





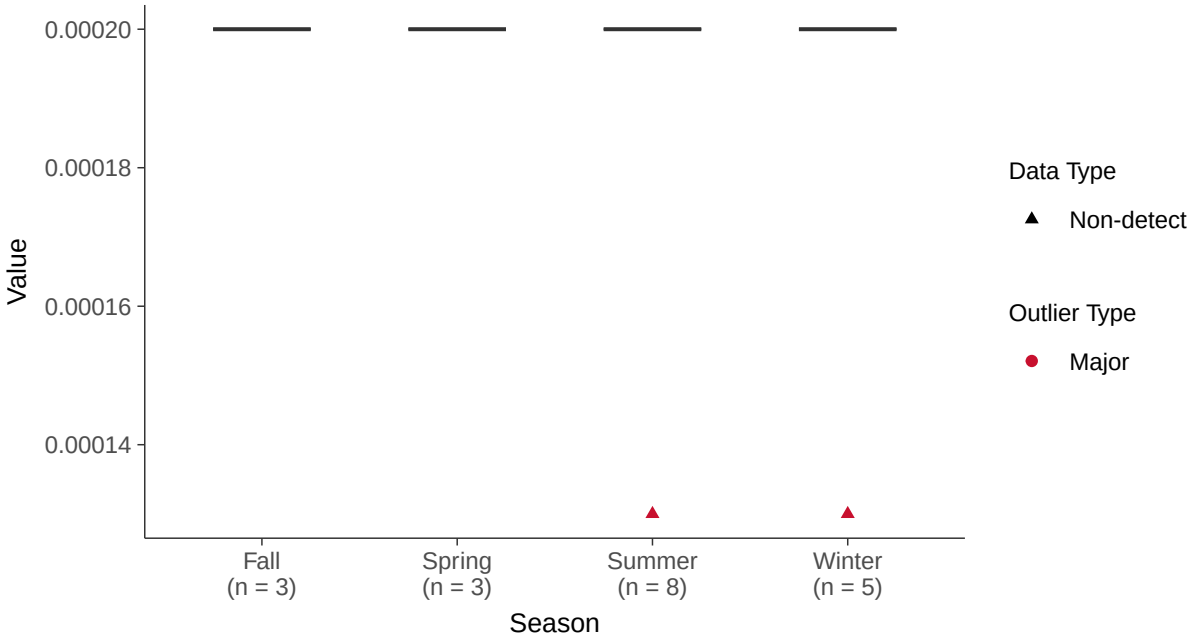
Boxplot

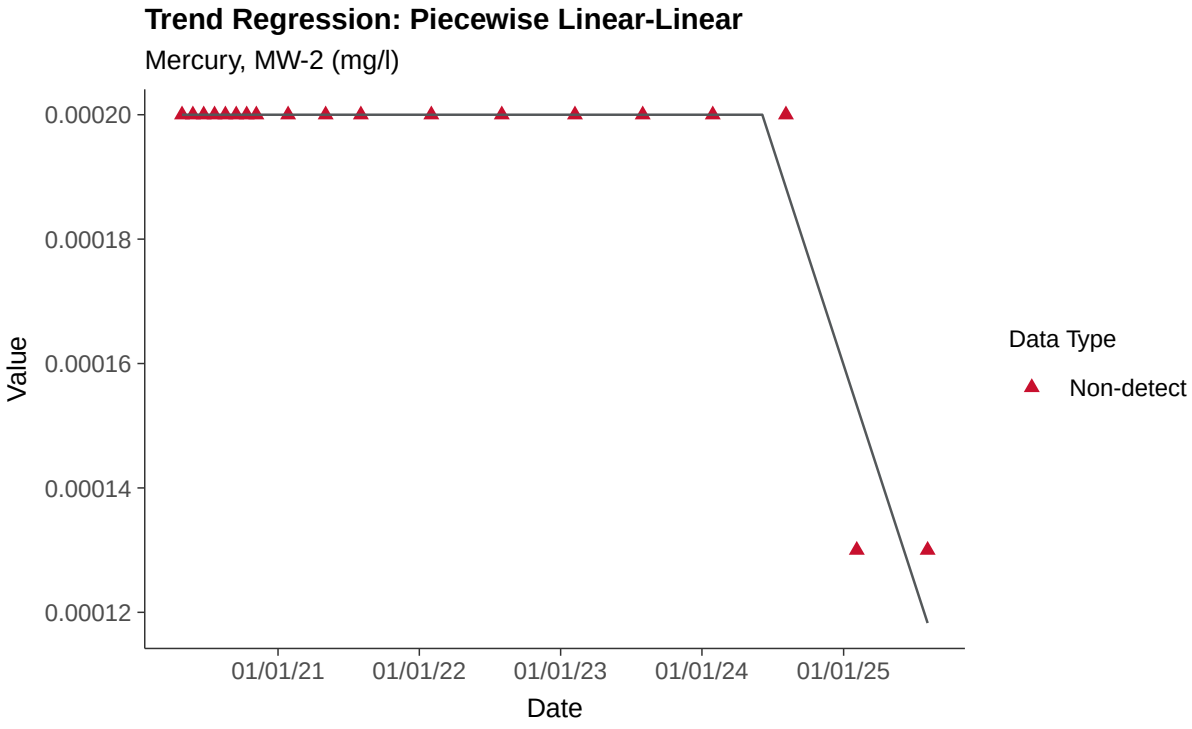
Mercury, MW-2 (mg/l)

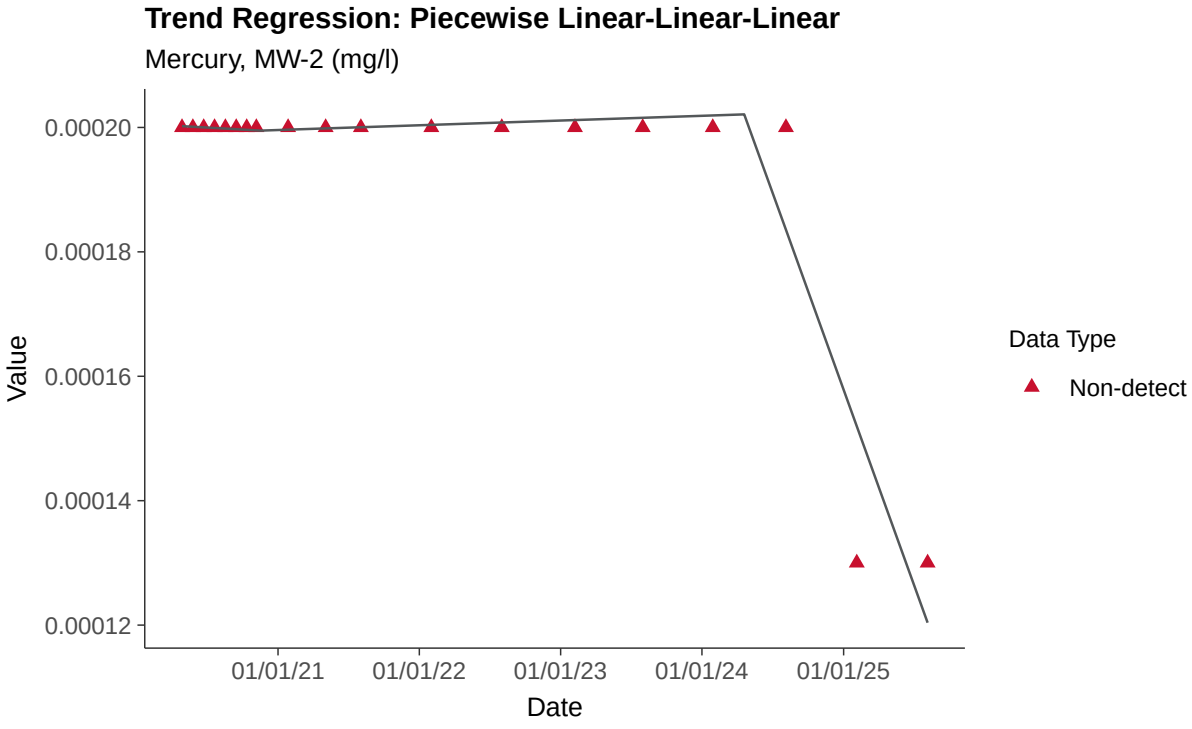


Boxplot by Season

Mercury, MW-2 (mg/l)

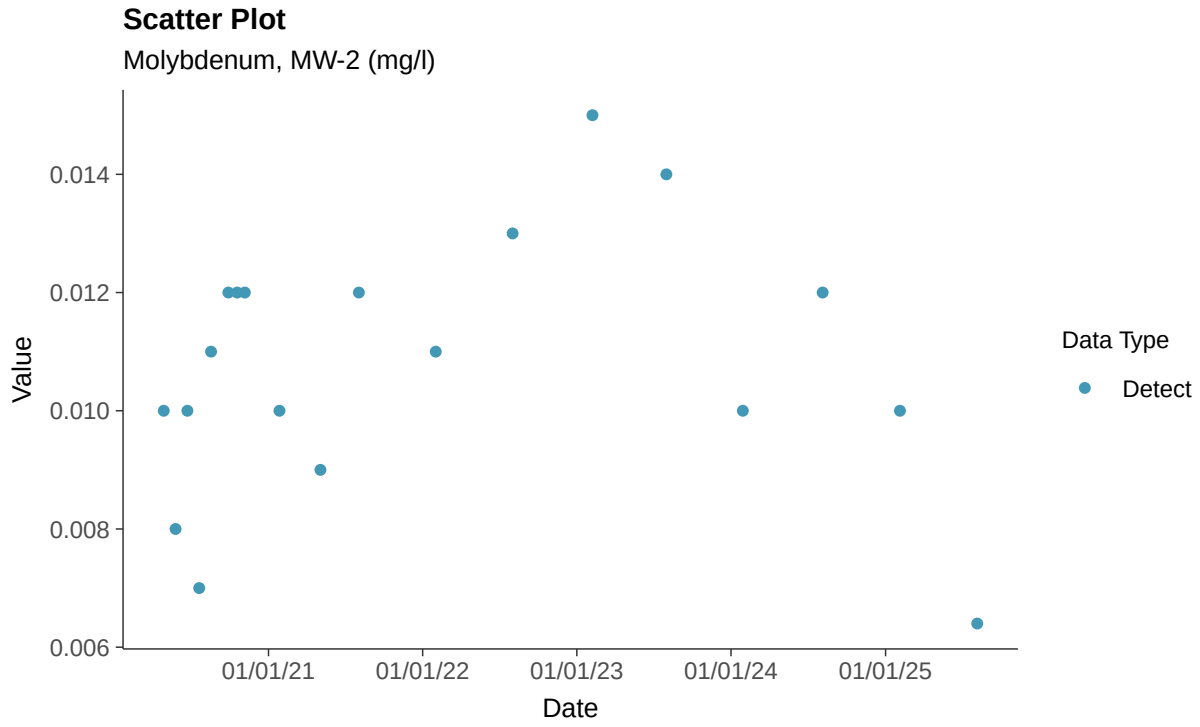


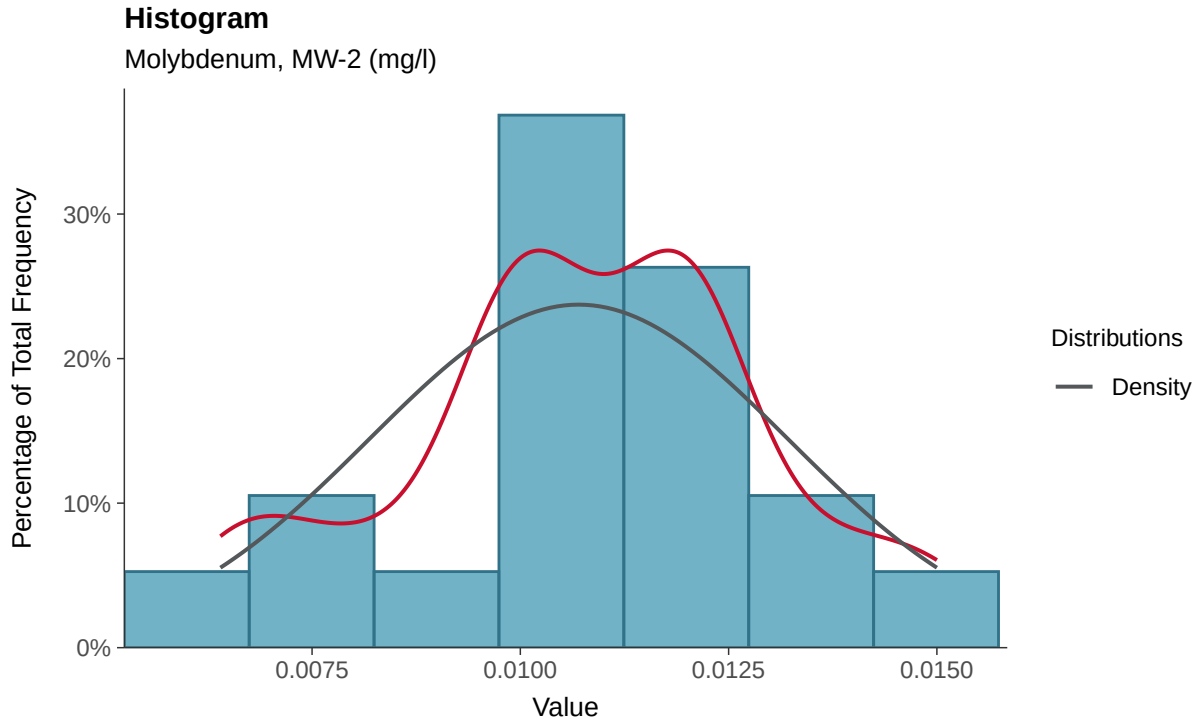

Trend Regression: Piecewise Linear-Linear
Mercury, MW-2 (mg/l)
Value
0.00020
0.00018
0.00016
0.00014
0.00012
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect


Trend Regression: Piecewise Linear-Linear-Linear
Mercury, MW-2 (mg/l)
Value
0.00020
0.00018
0.00016
0.00014
0.00012
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Appendix IV: Molybdenum, MW-2

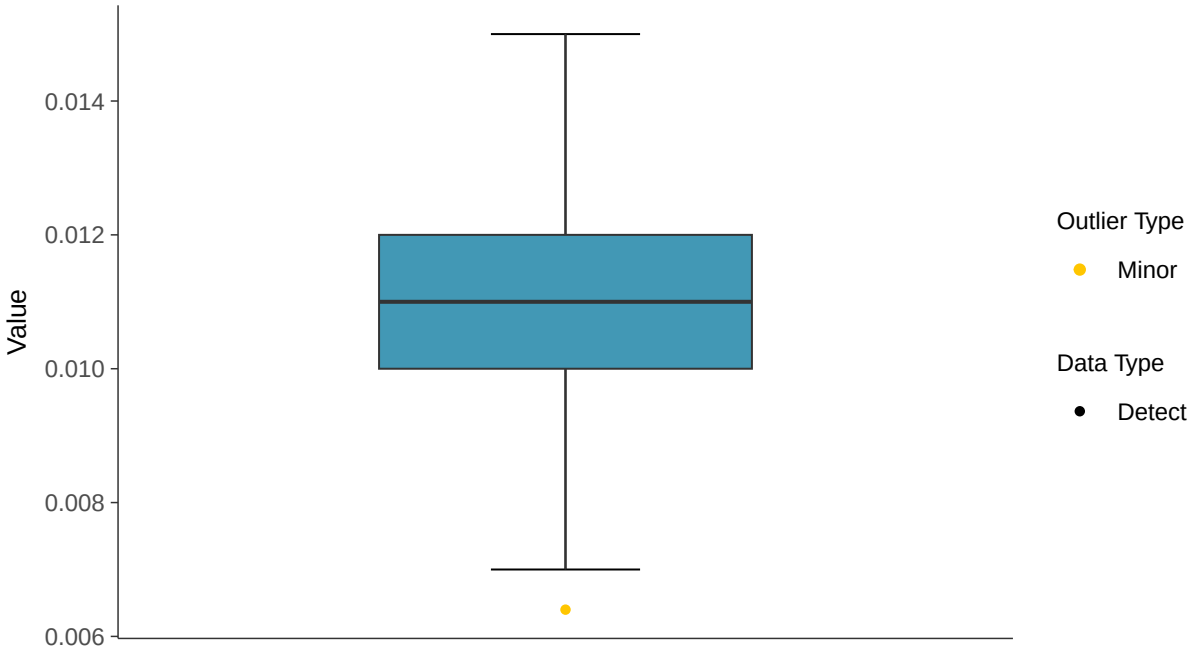
ID: 13_3_118





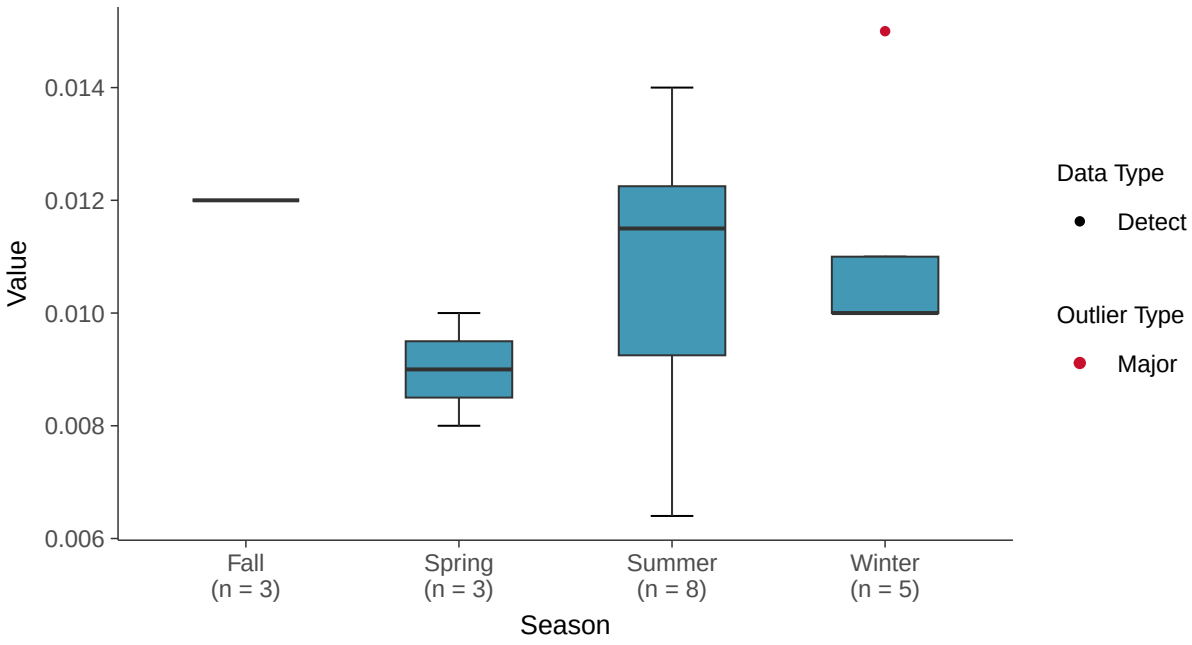
Boxplot

Molybdenum, MW-2 (mg/l)



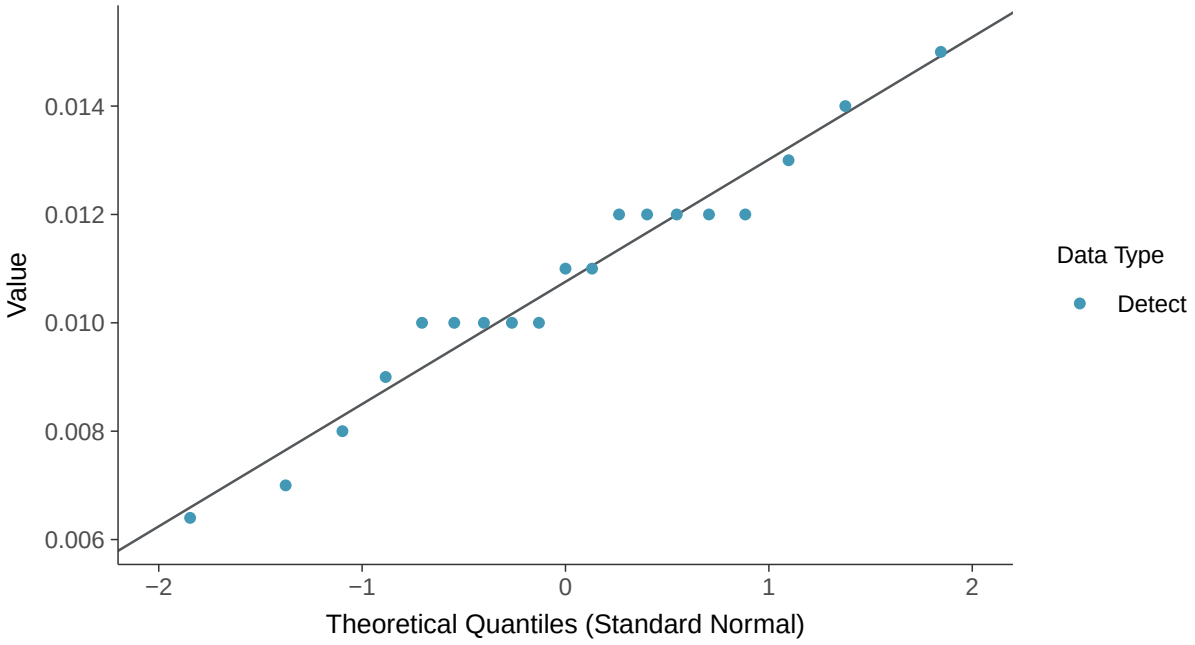
Boxplot by Season

Molybdenum, MW-2 (mg/l)



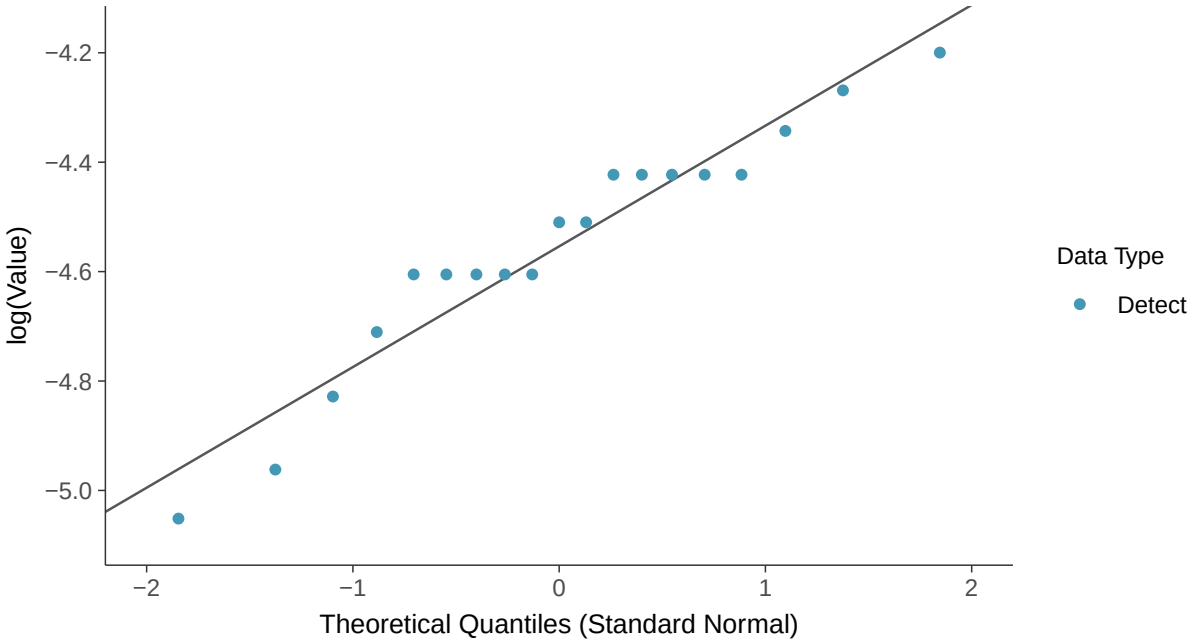
Normal Q-Q plot

Molybdenum, MW-2 (mg/l)



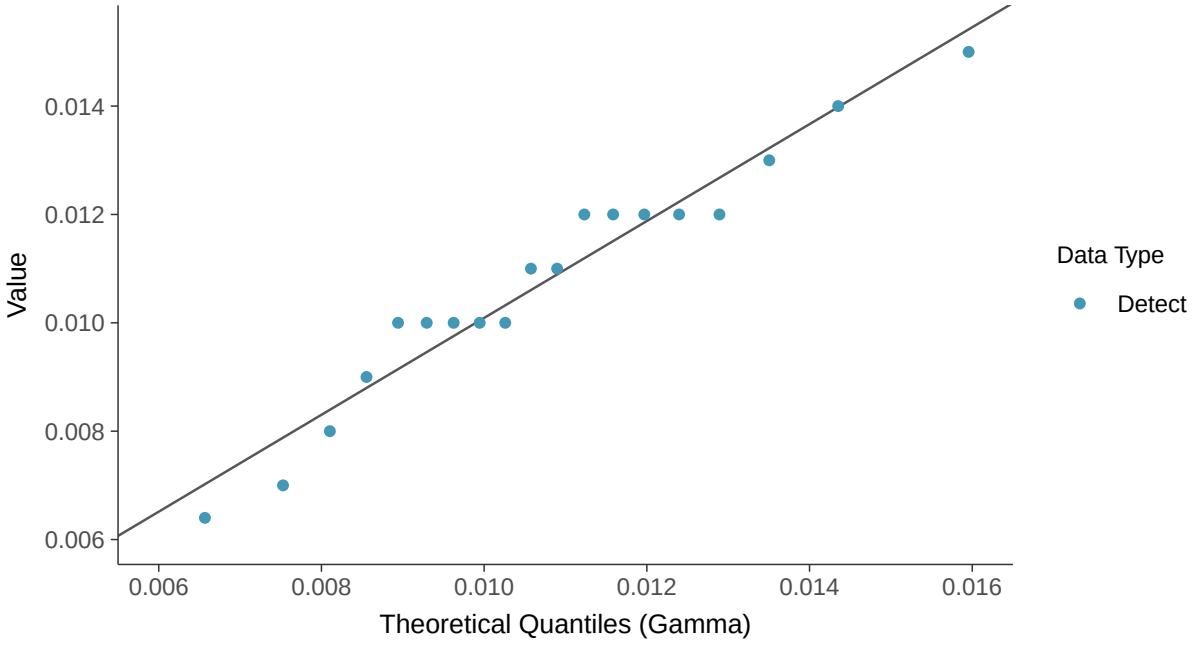
Lognormal Q-Q plot

Molybdenum, MW-2 (mg/l)



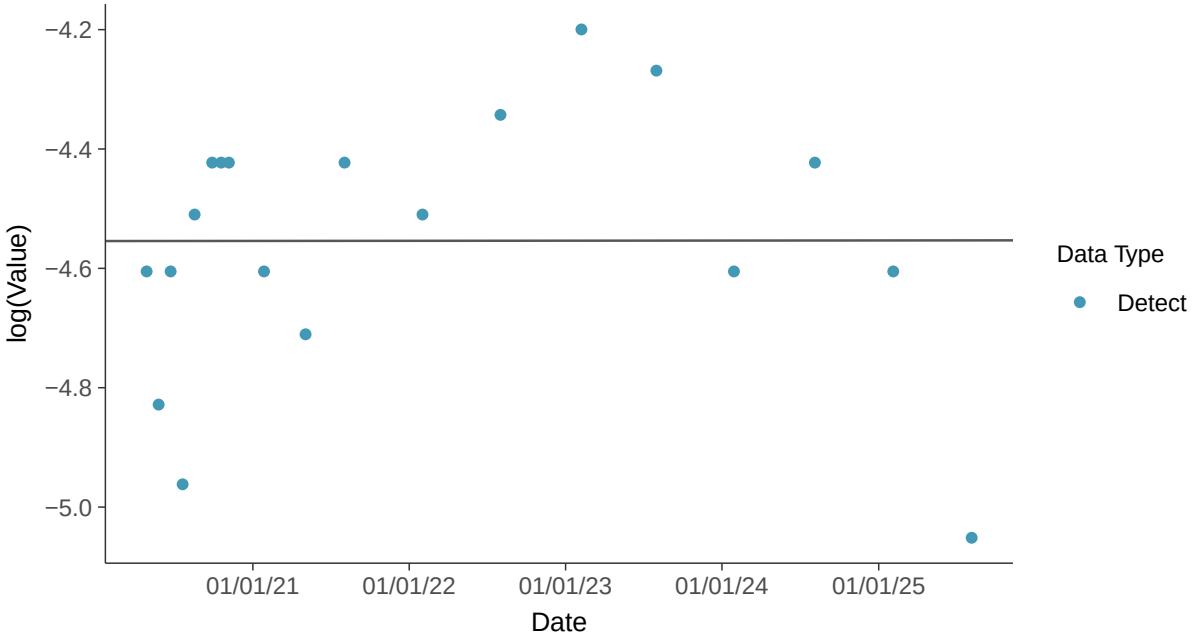
Gamma Q-Q plot

Molybdenum, MW-2 (mg/l)



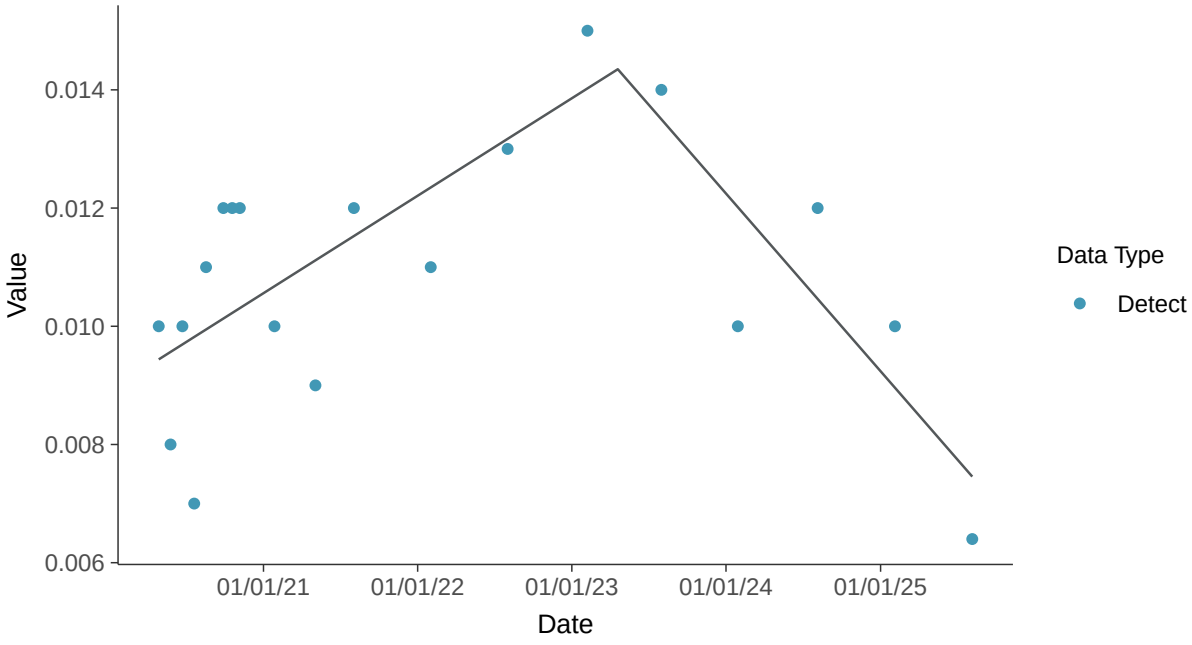
Trend Regression: Lognormal MLE

Molybdenum, MW-2 (mg/l)



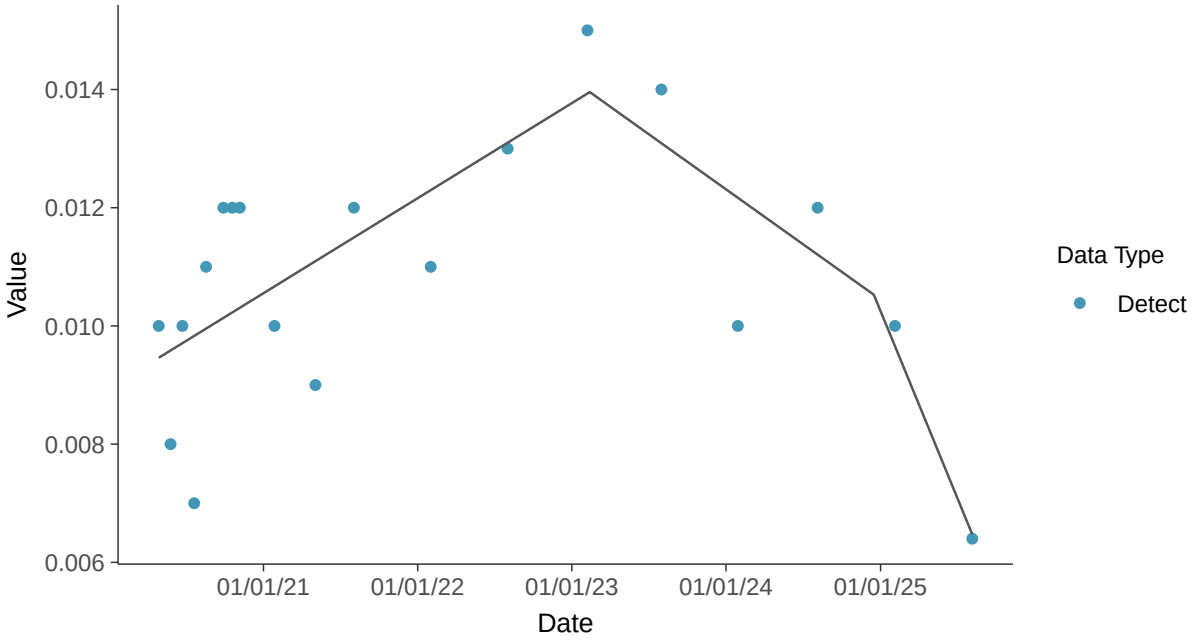
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-2 (mg/l)



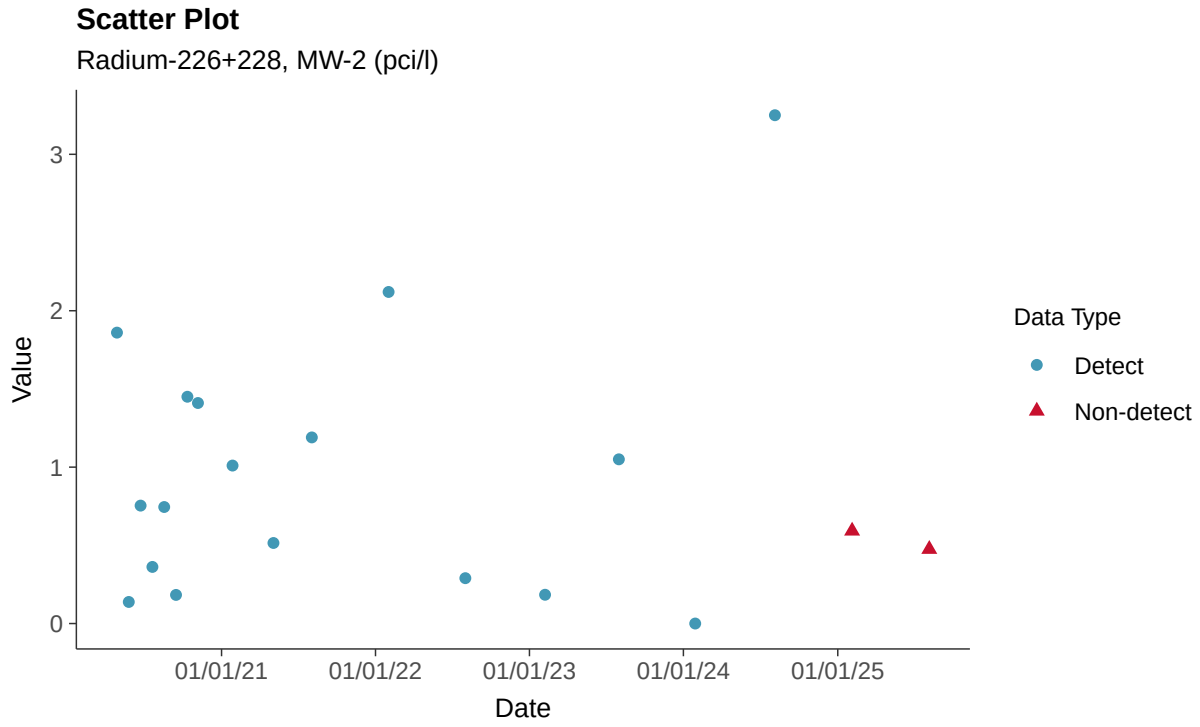
Trend Regression: Piecewise Linear-Linear-Linear

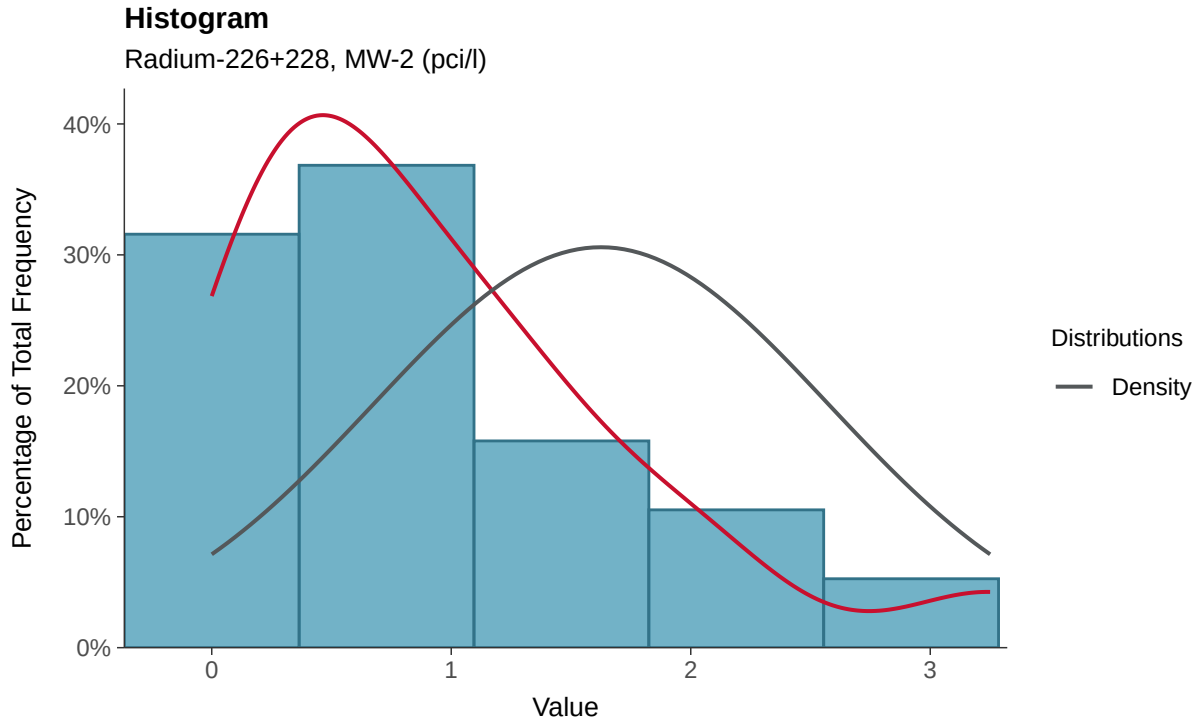
Molybdenum, MW-2 (mg/l)



Appendix IV: Radium-226+228, MW-2

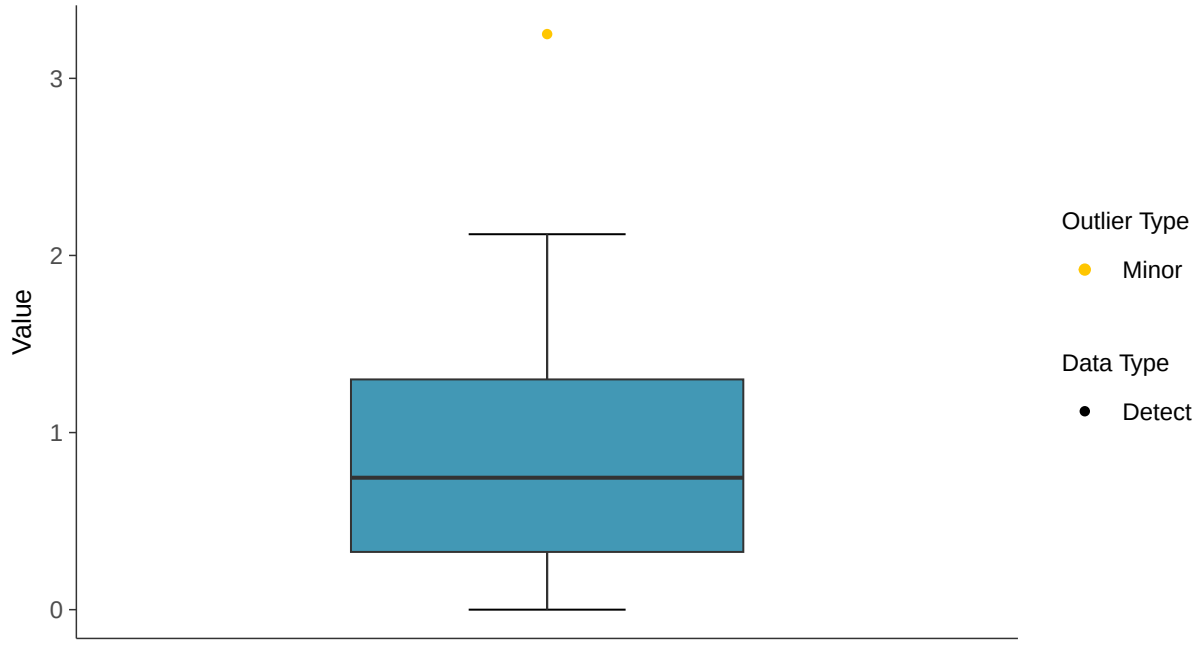
ID: 13_3_121





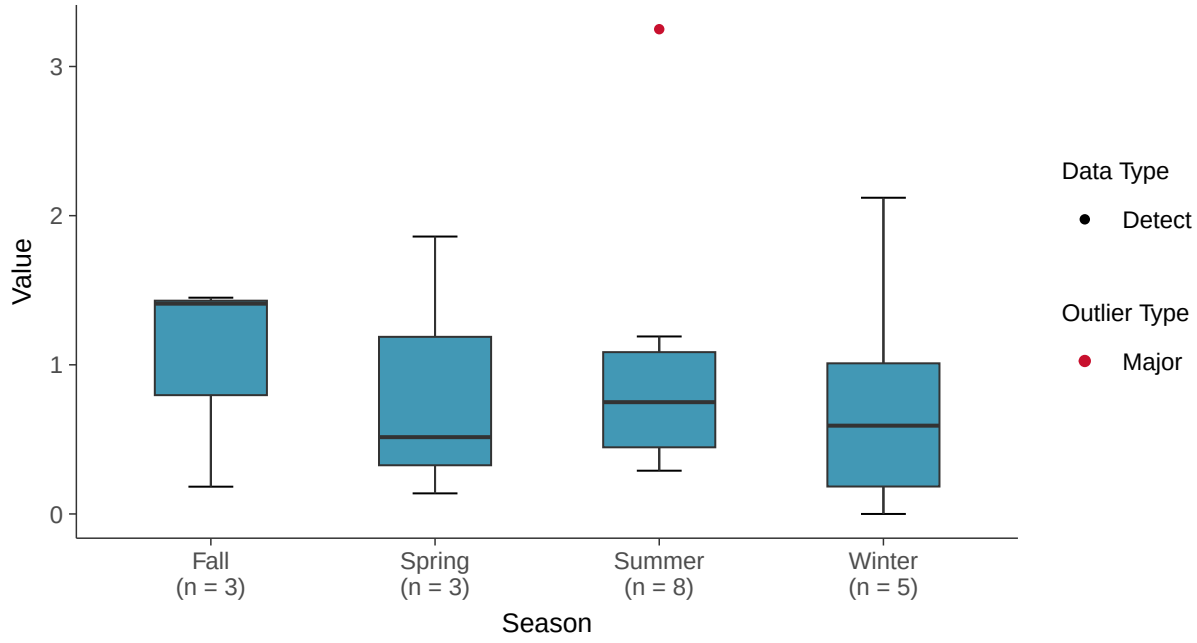
Boxplot

Radium-226+228, MW-2 (pci/l)



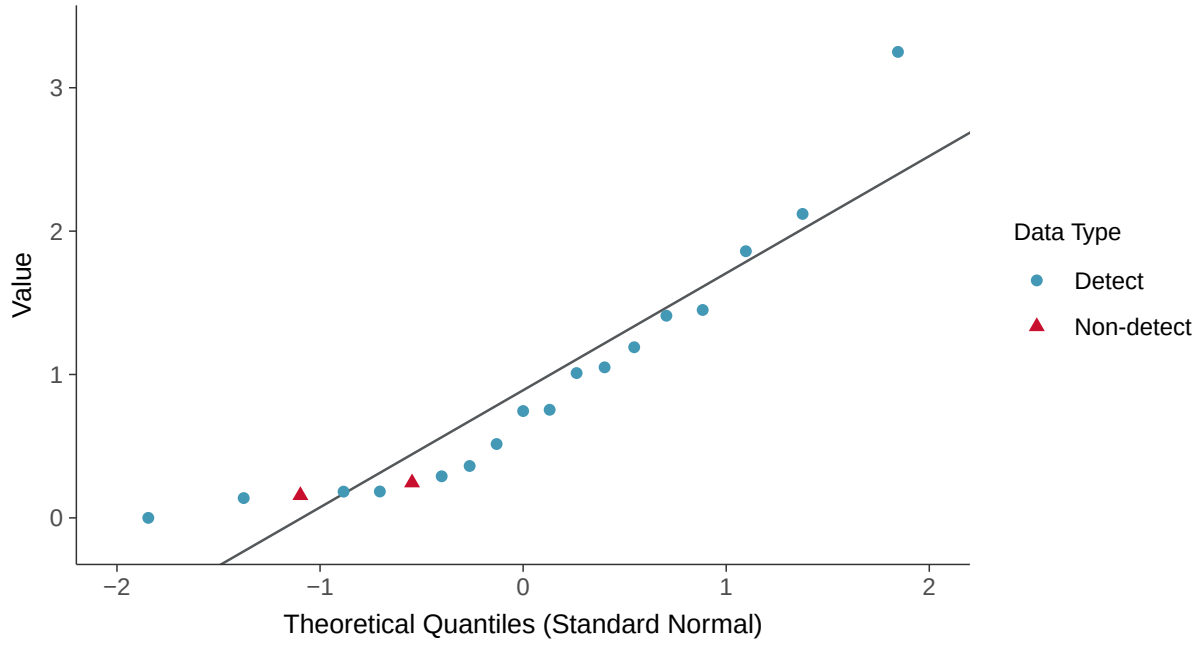
Boxplot by Season

Radium-226+228, MW-2 (pci/l)



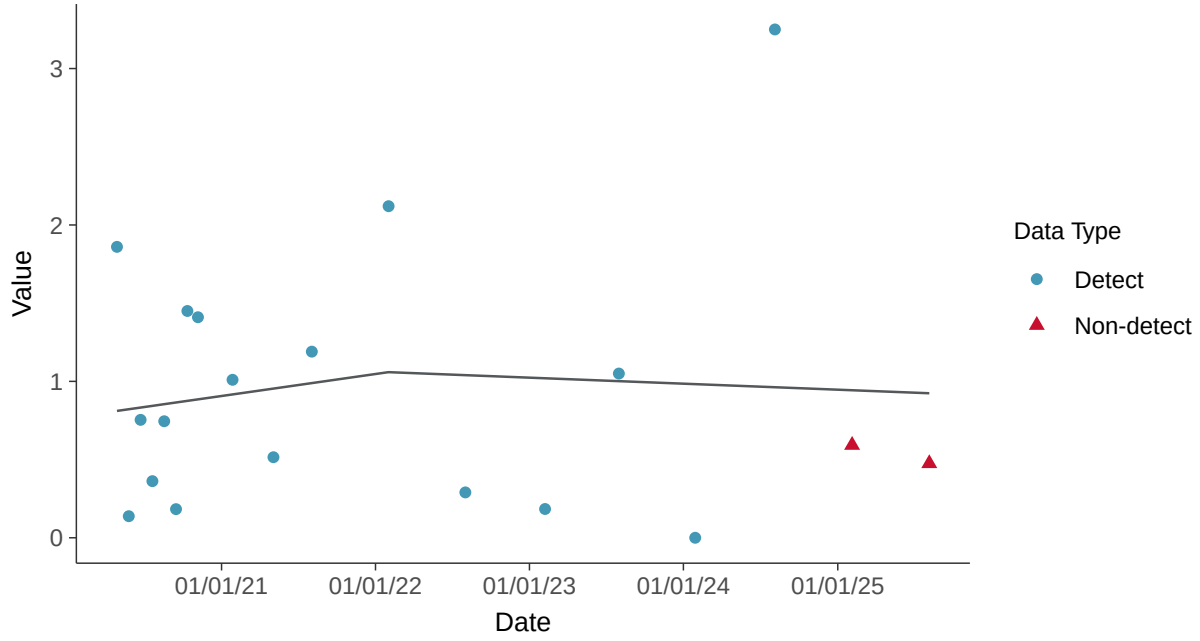
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-2 (pci/l)



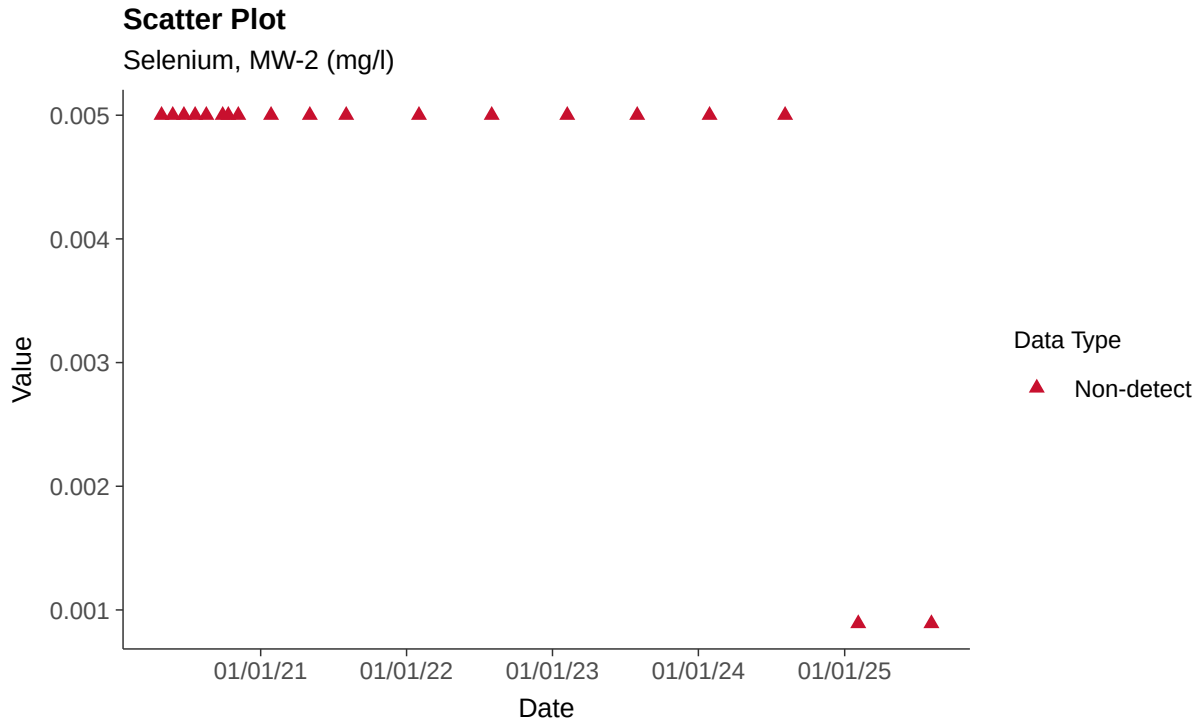
Trend Regression: Piecewise Linear-Linear

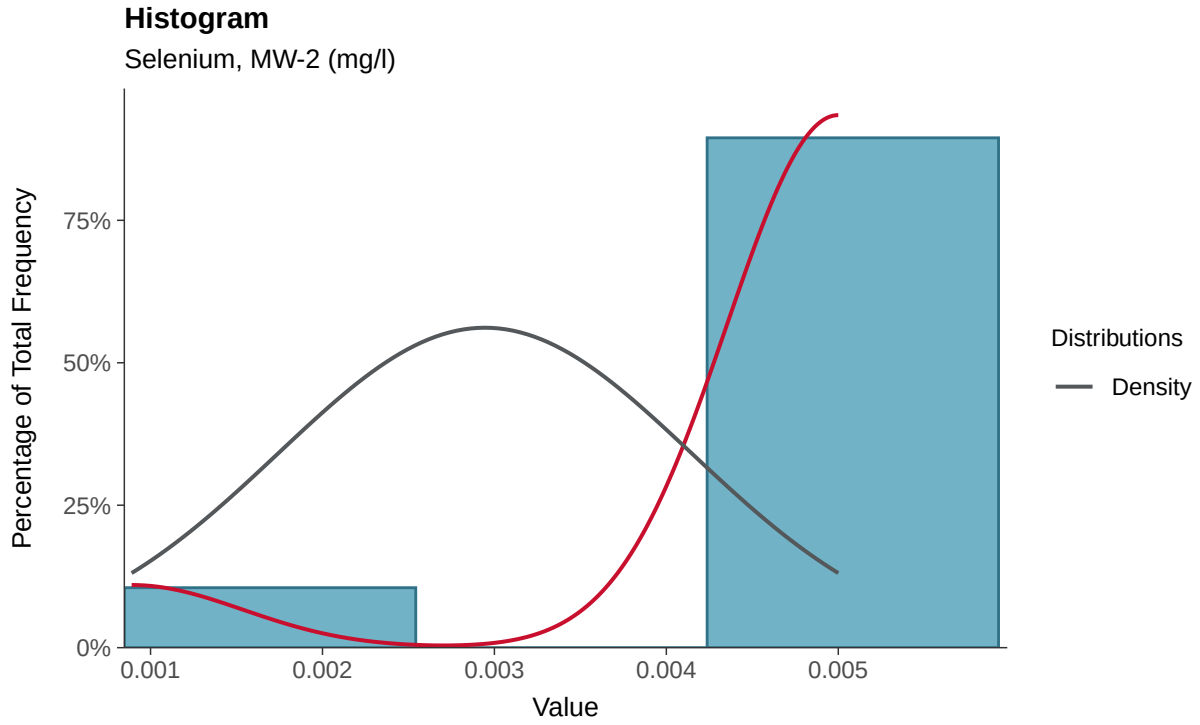
Radium-226+228, MW-2 (pci/l)



Appendix IV: Selenium, MW-2

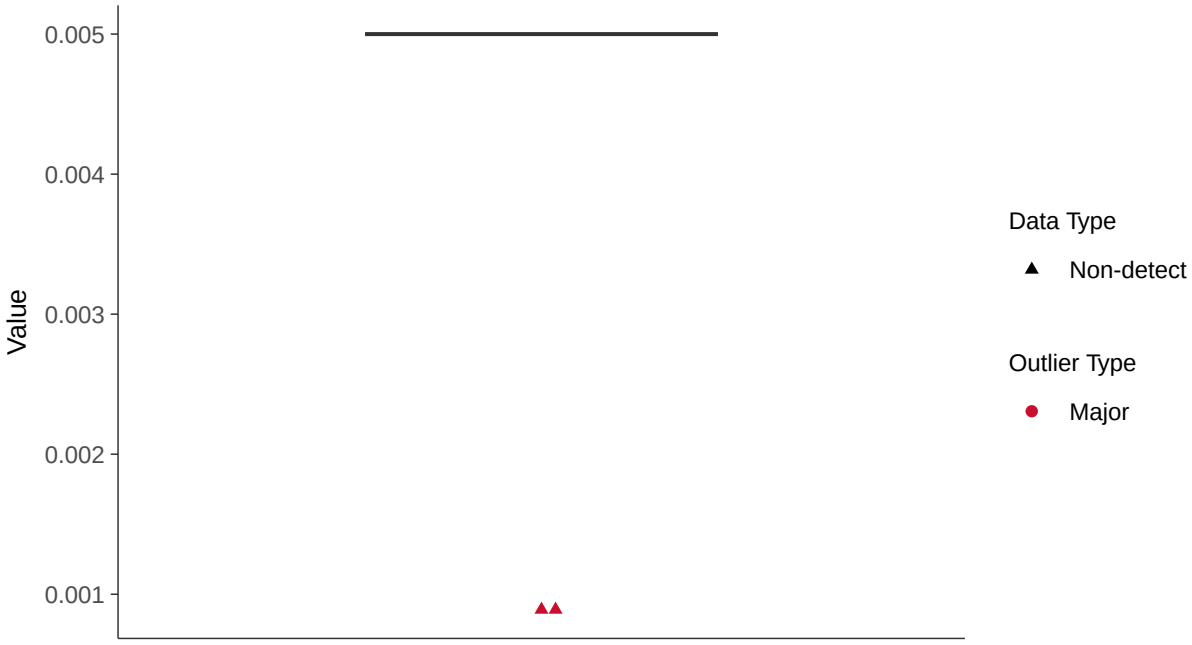
ID: 13_3_122





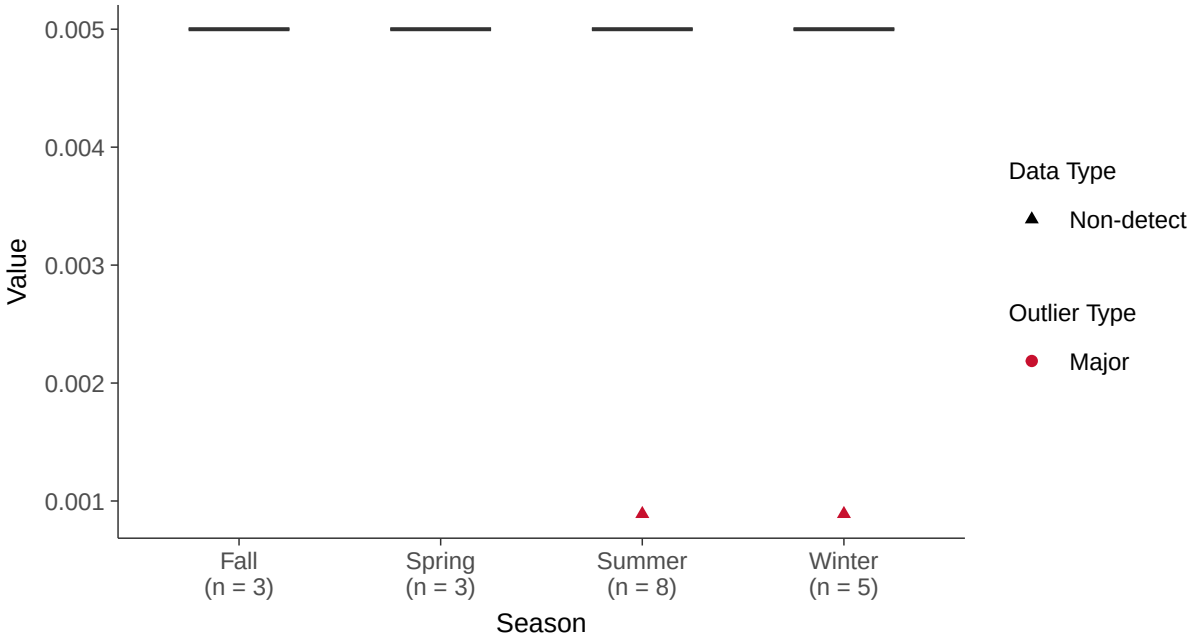
Boxplot

Selenium, MW-2 (mg/l)



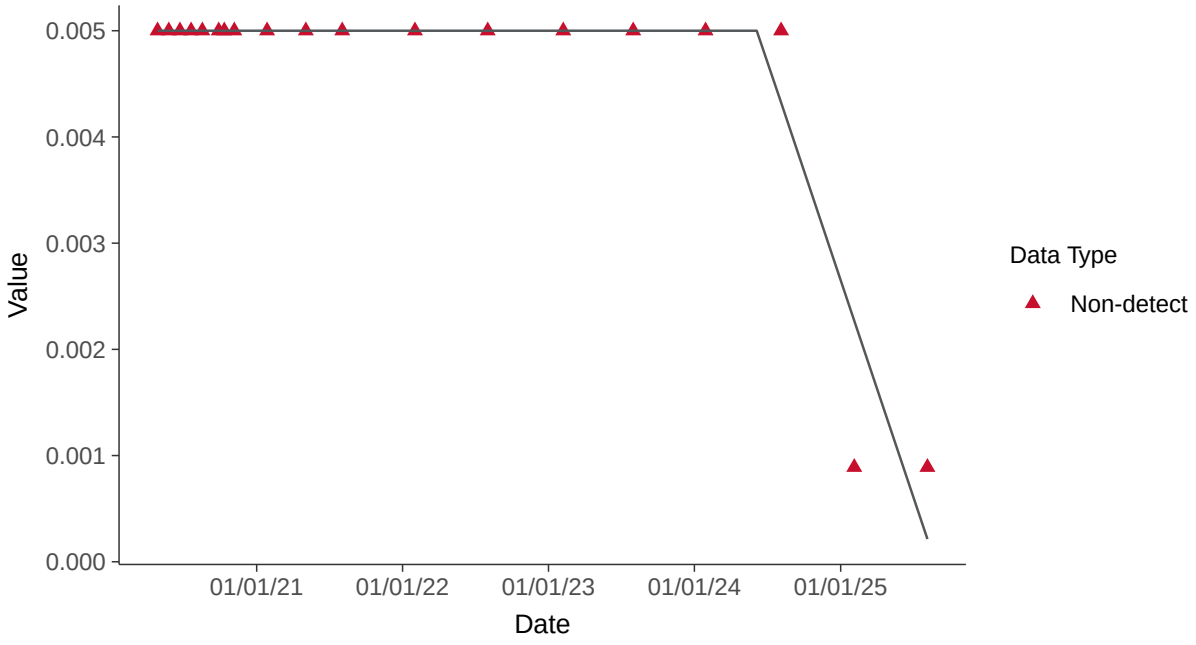
Boxplot by Season

Selenium, MW-2 (mg/l)



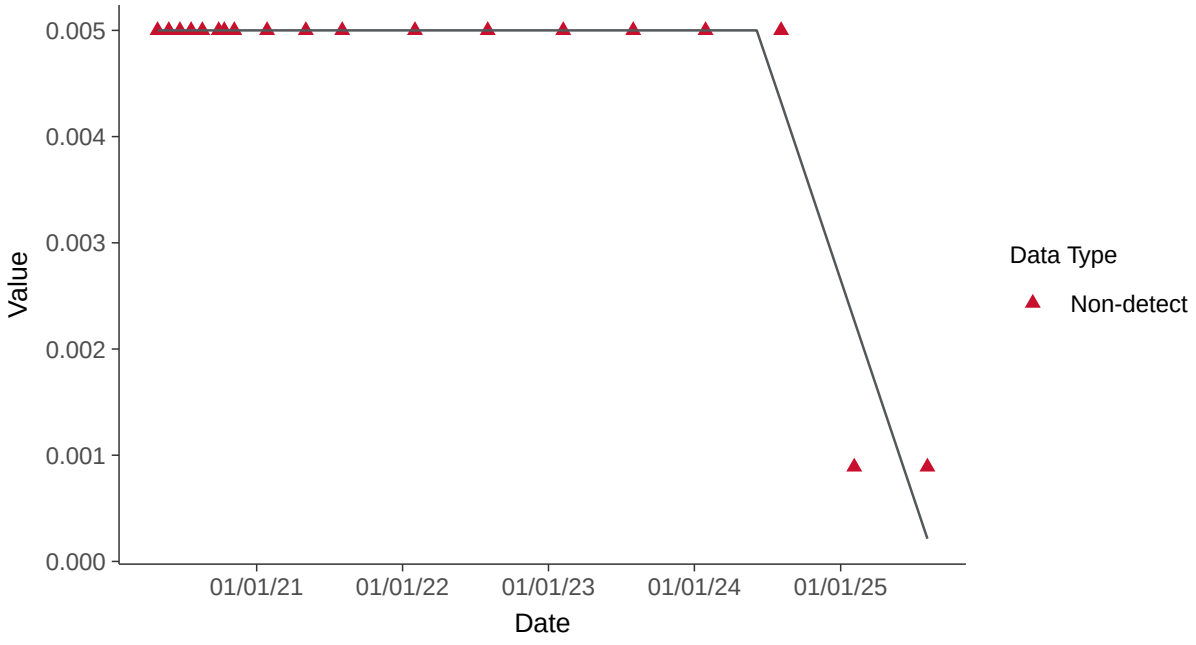
Trend Regression: Piecewise Linear-Linear

Selenium, MW-2 (mg/l)



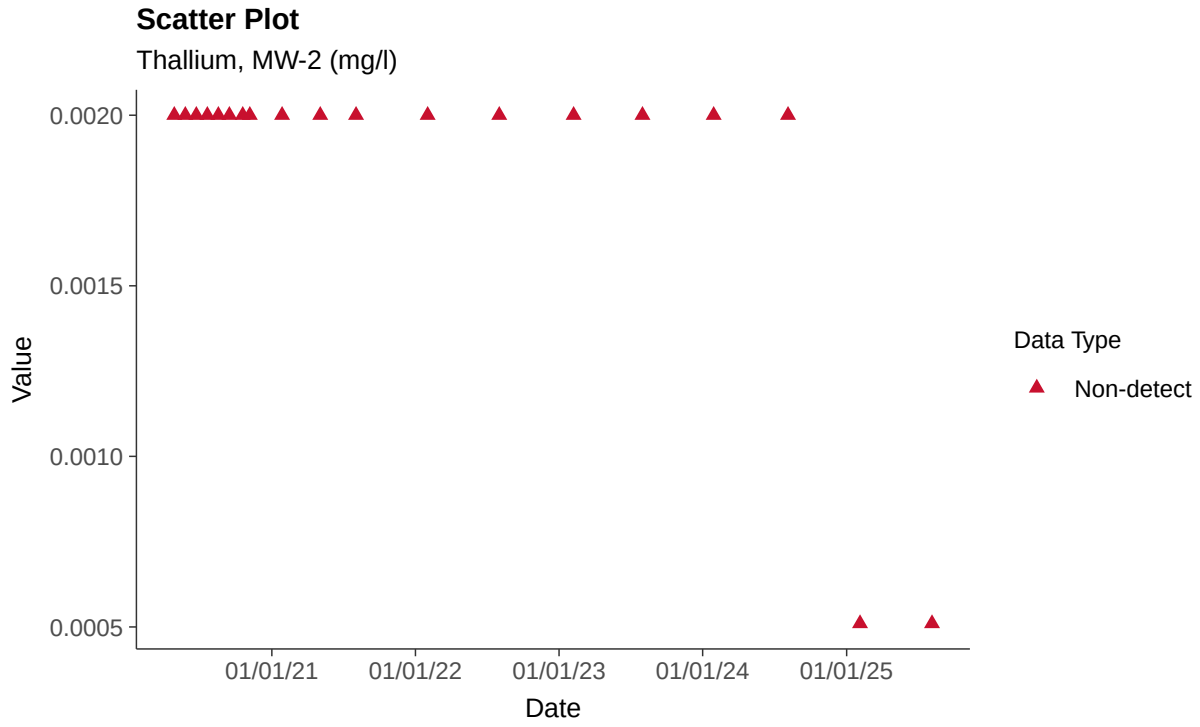
Trend Regression: Piecewise Linear-Linear-Linear

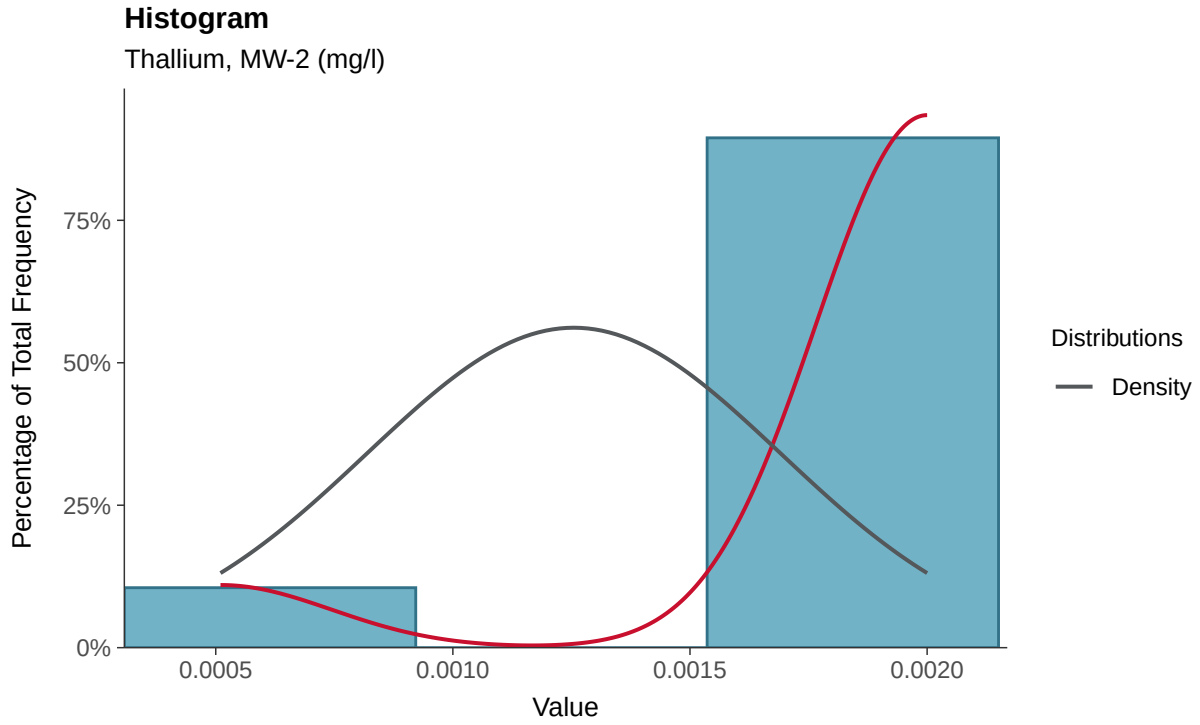
Selenium, MW-2 (mg/l)



Appendix IV: Thallium, MW-2

ID: 13_3_125



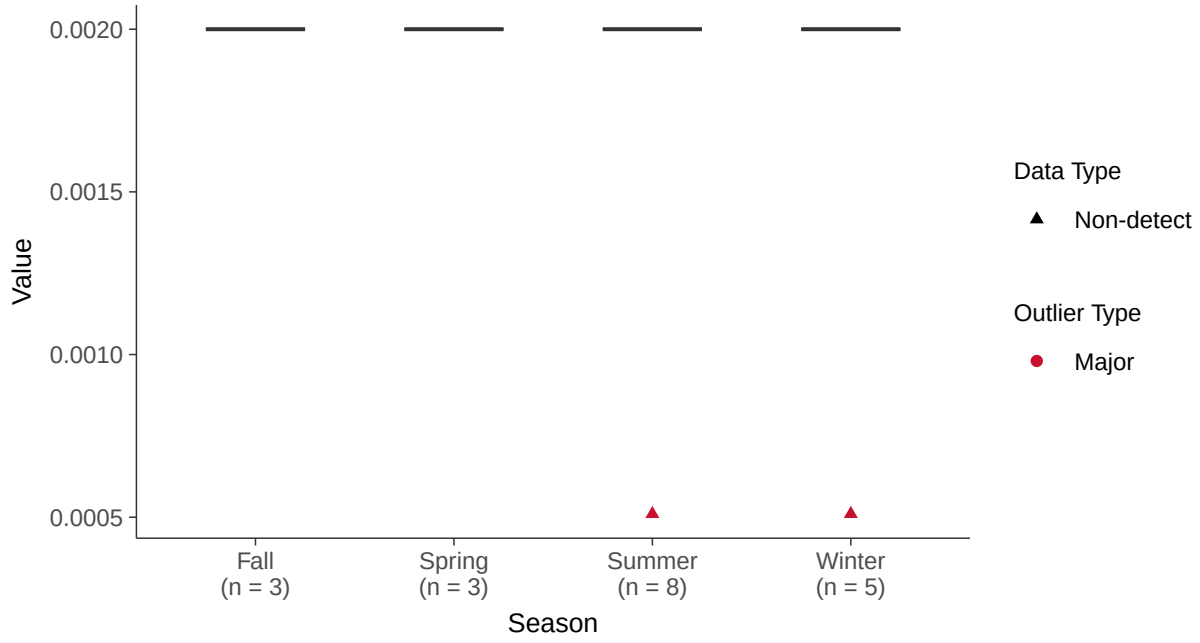


Boxplot

Thallium, MW-2 (mg/l)

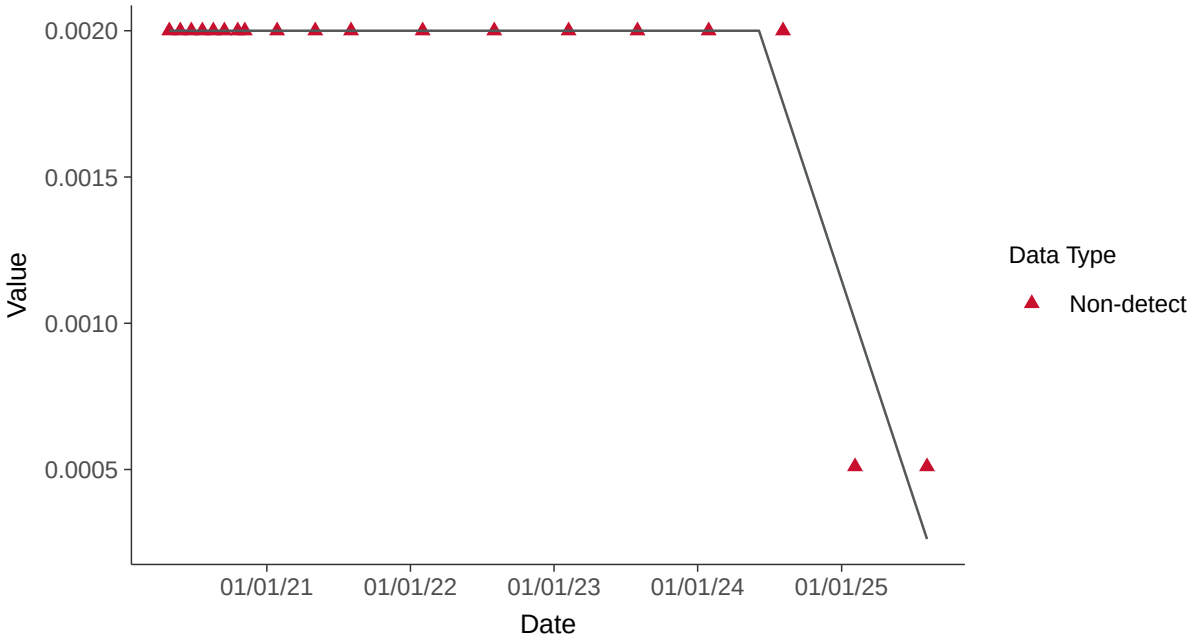
Boxplot by Season

Thallium, MW-2 (mg/l)



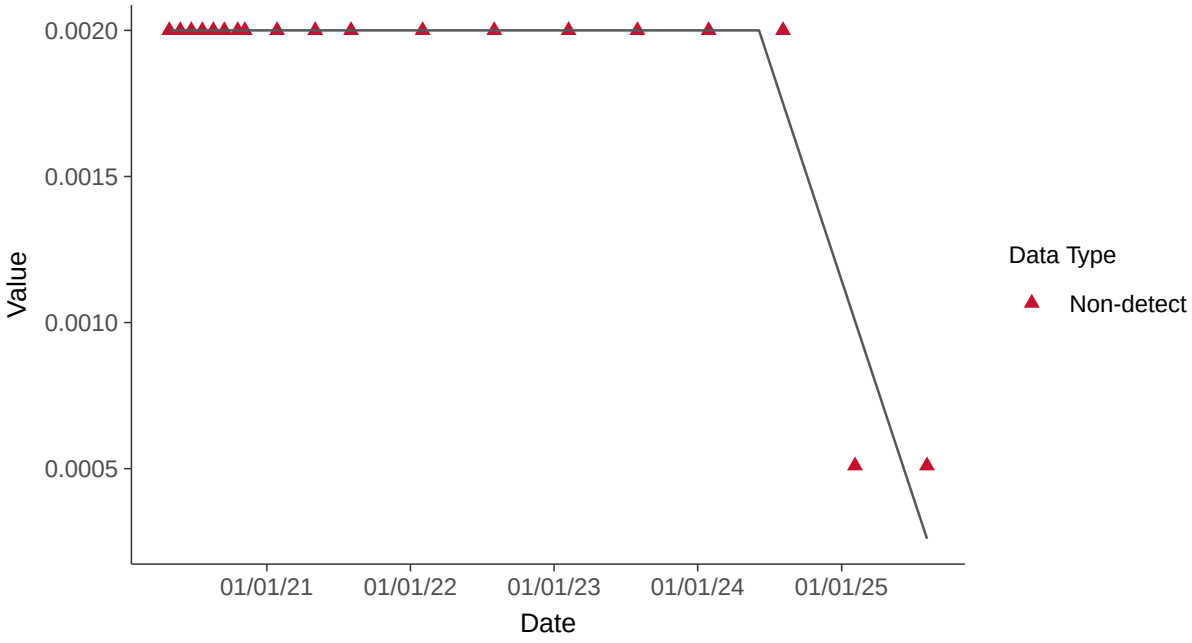
Trend Regression: Piecewise Linear-Linear

Thallium, MW-2 (mg/l)



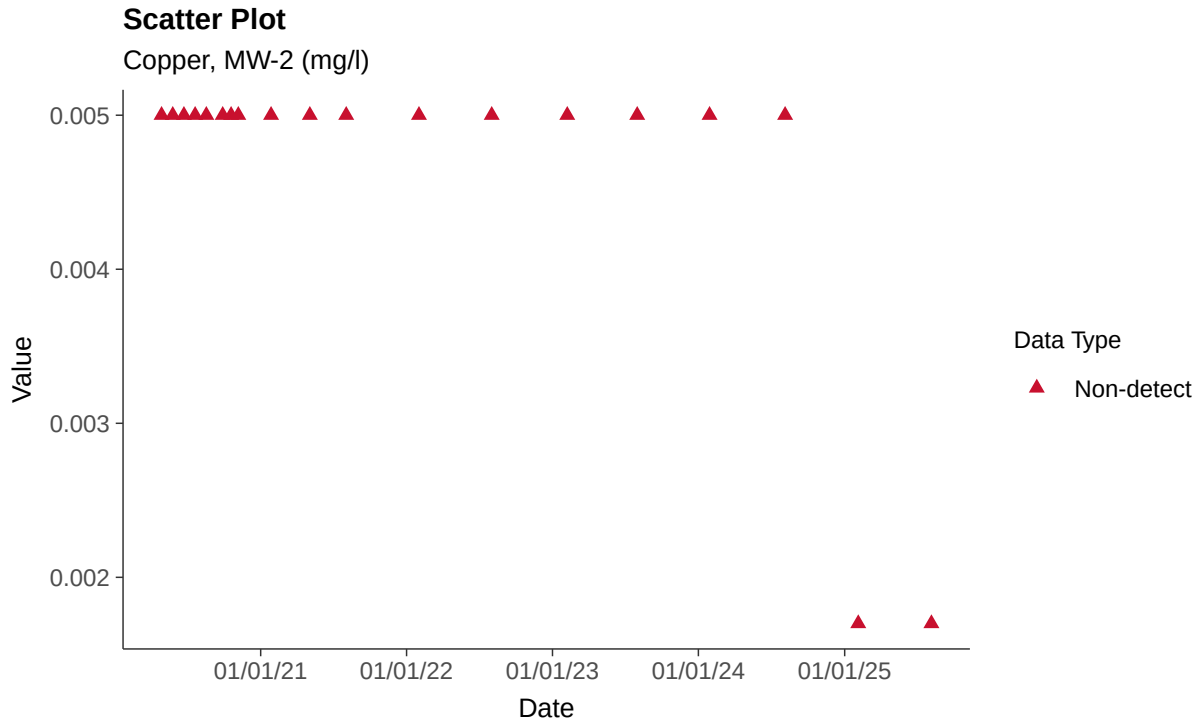
Trend Regression: Piecewise Linear-Linear-Linear

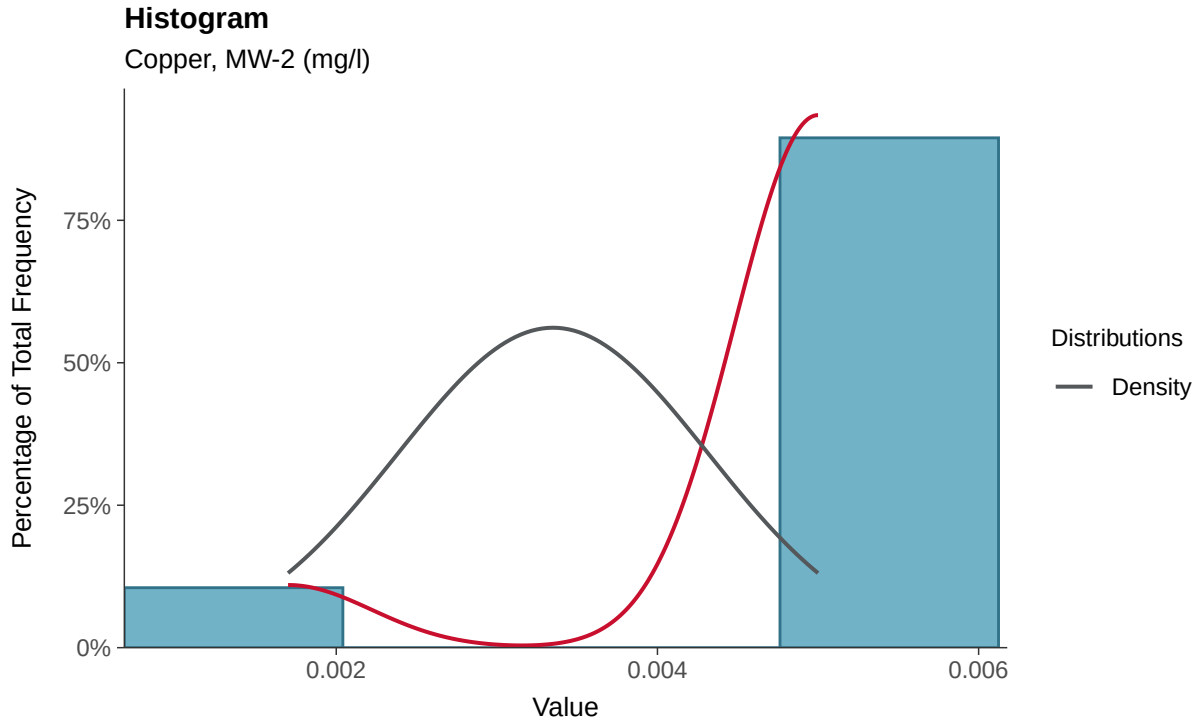
Thallium, MW-2 (mg/l)



Part 115: Copper, MW-2

ID: 13_5_111



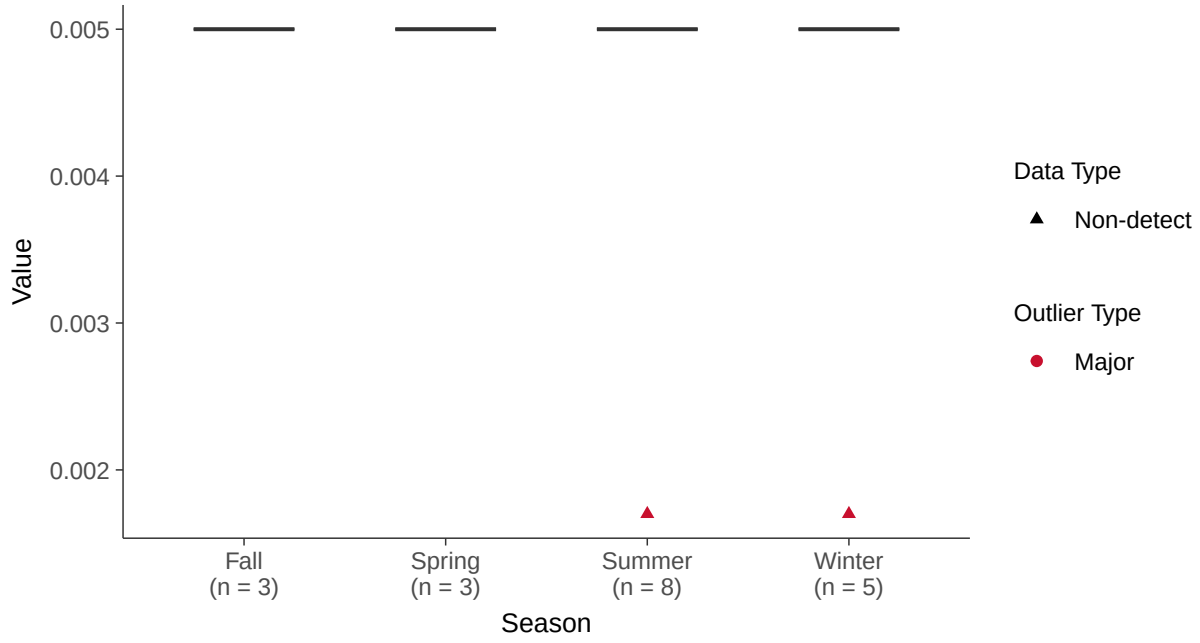


Boxplot

Copper, MW-2 (mg/l)

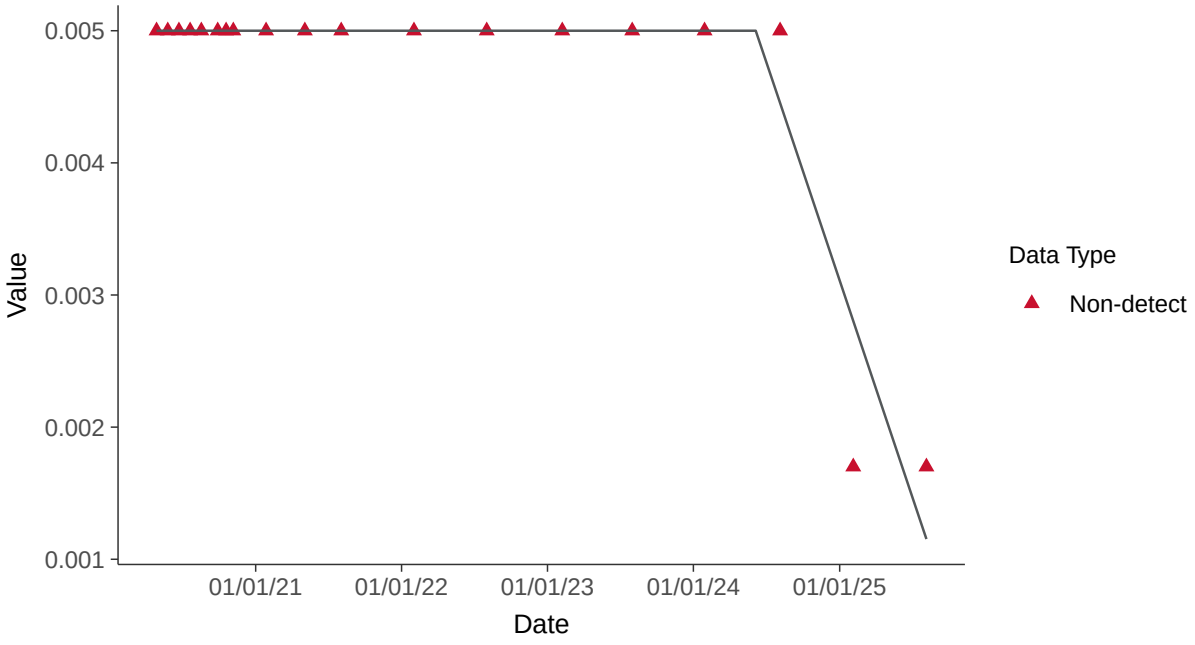
Boxplot by Season

Copper, MW-2 (mg/l)



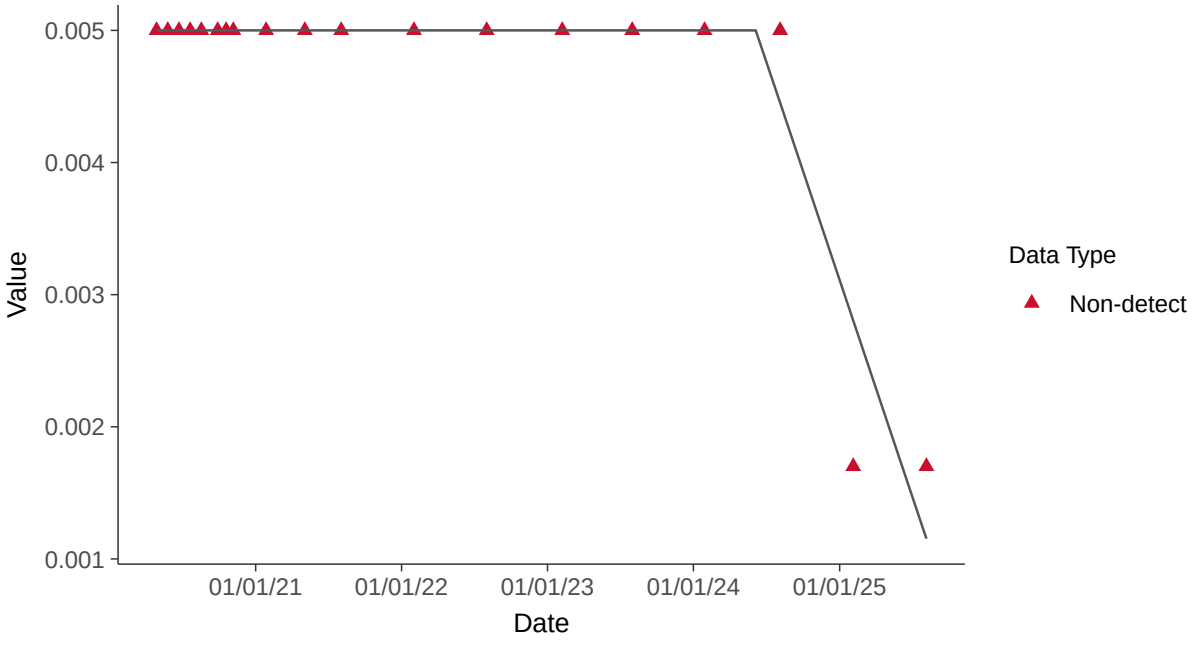
Trend Regression: Piecewise Linear-Linear

Copper, MW-2 (mg/l)



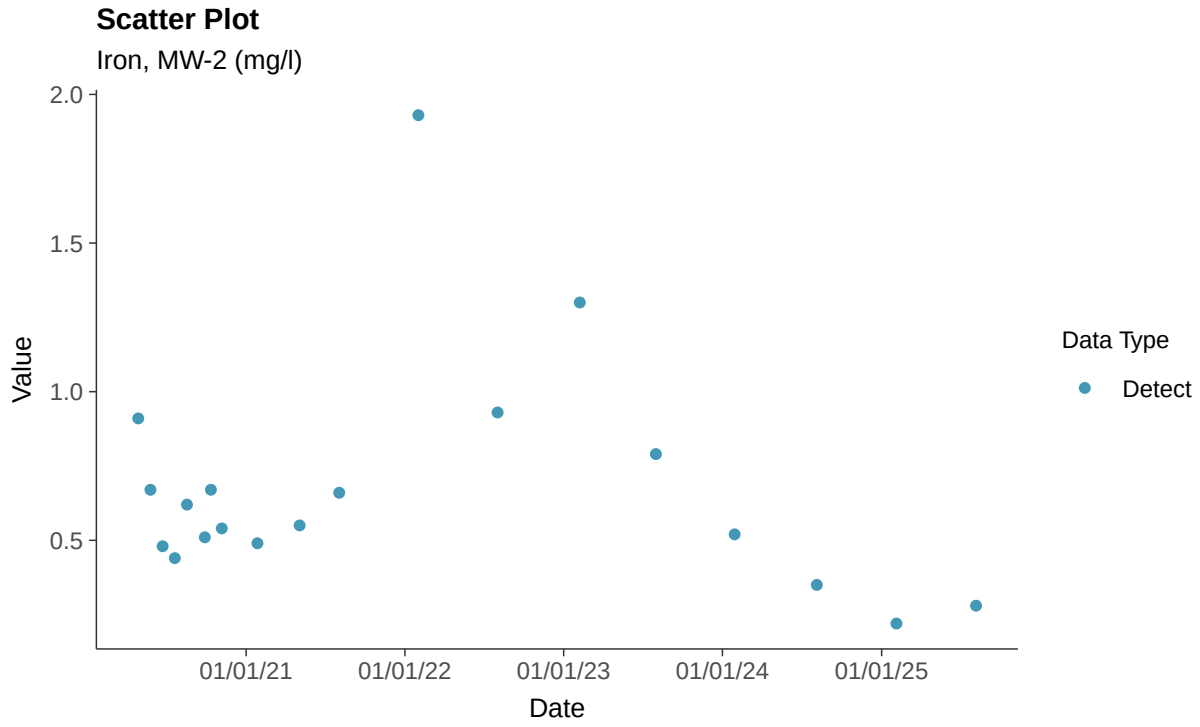
Trend Regression: Piecewise Linear-Linear-Linear

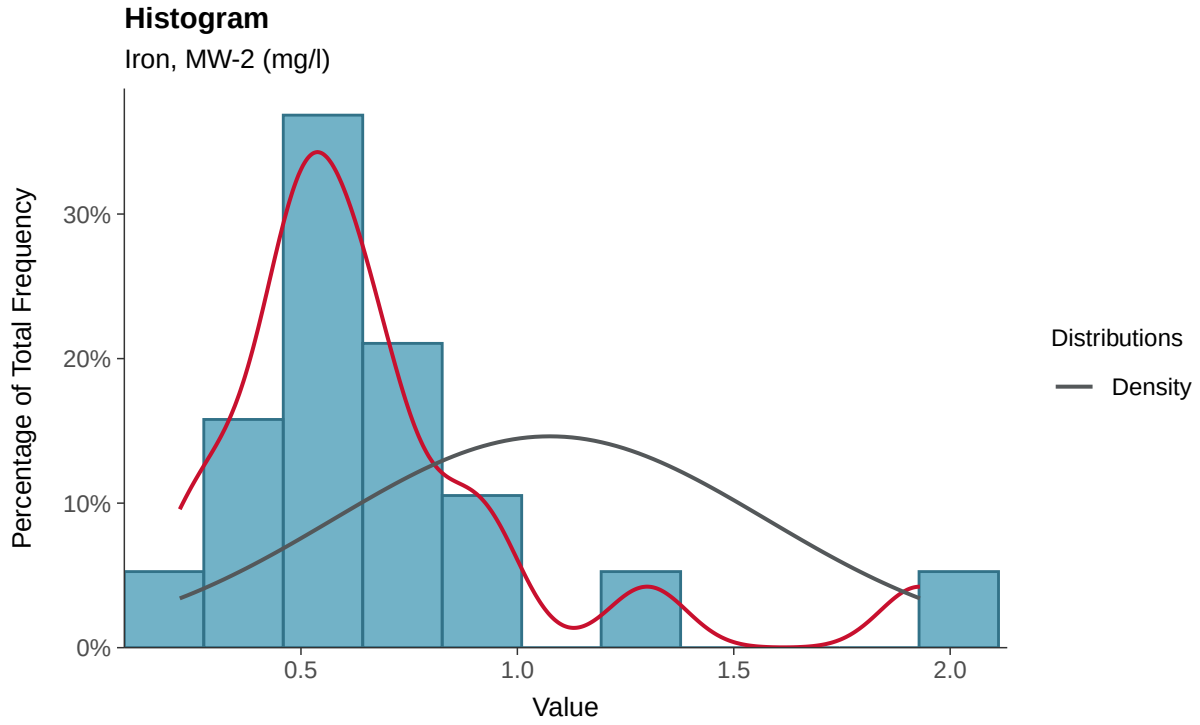
Copper, MW-2 (mg/l)



Part 115: Iron, MW-2

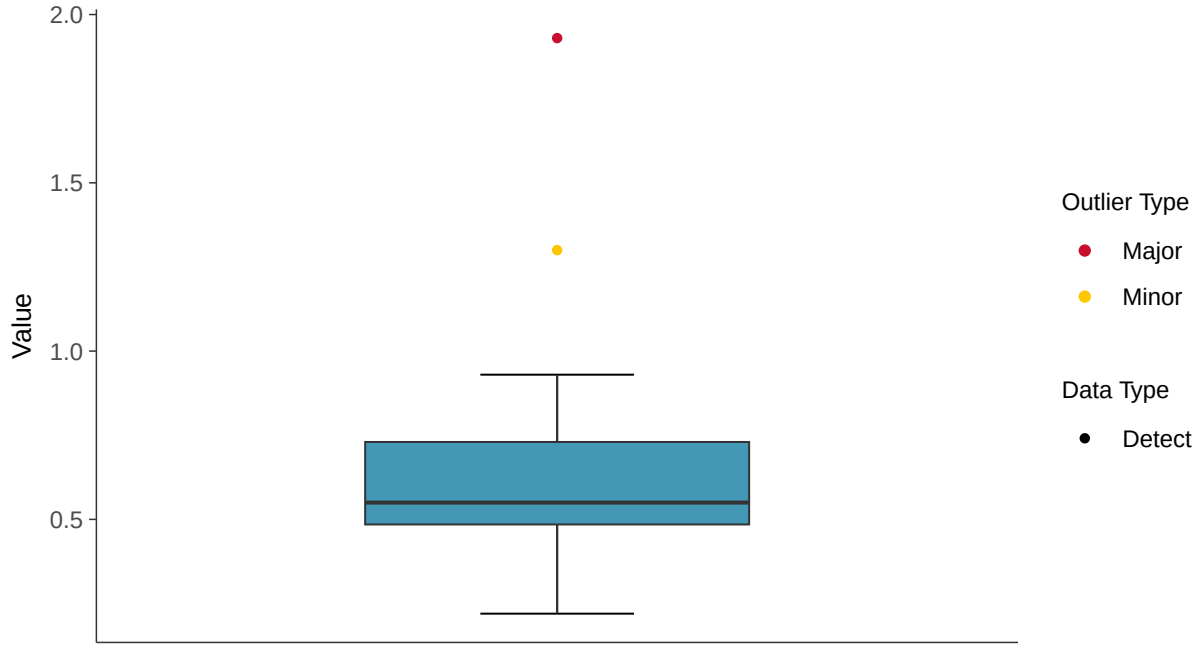
ID: 13_5_114





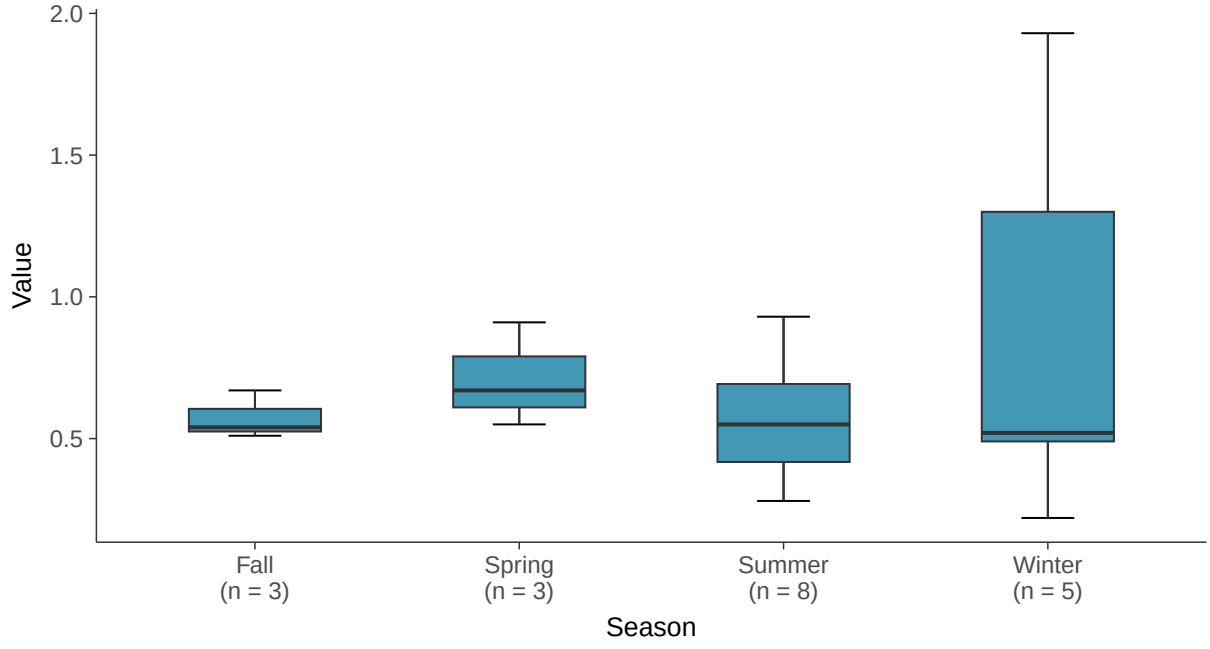
Boxplot

Iron, MW-2 (mg/l)



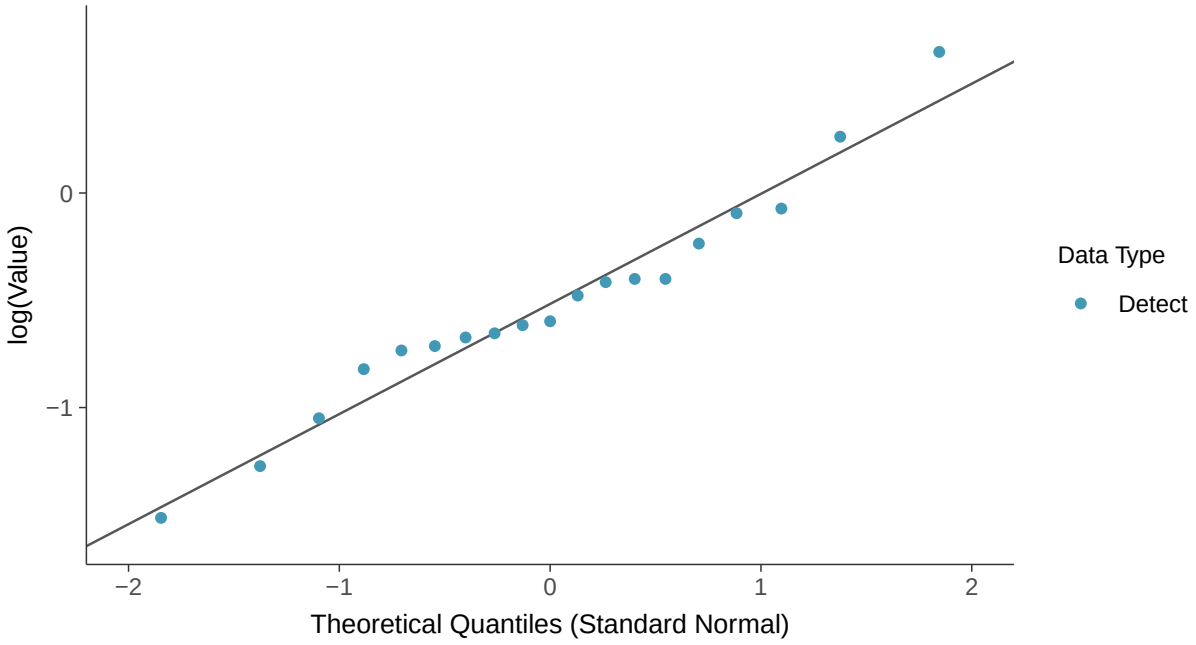
Boxplot by Season

Iron, MW-2 (mg/l)



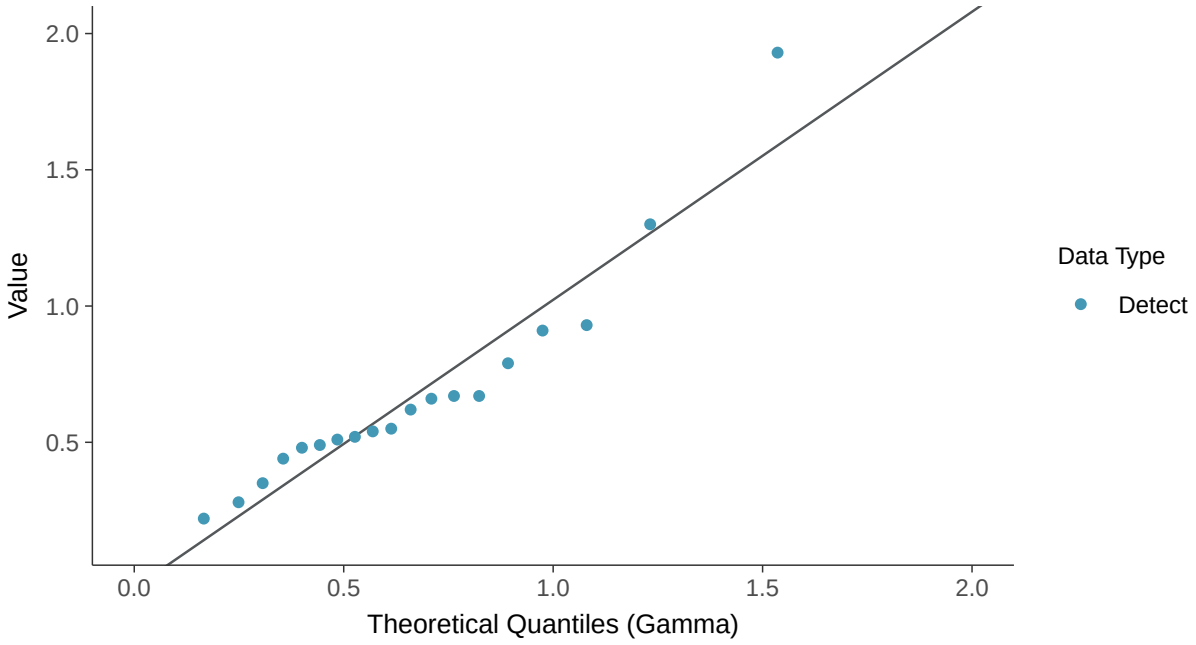
Lognormal Q-Q plot

Iron, MW-2 (mg/l)



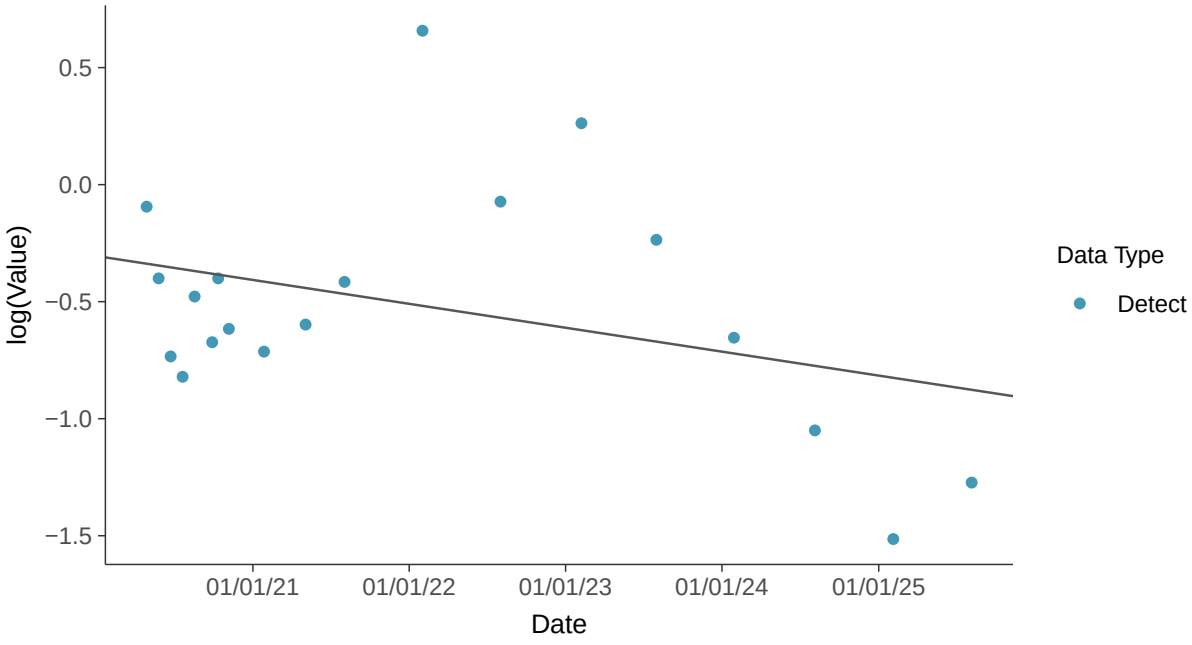
Gamma Q-Q plot

Iron, MW-2 (mg/l)



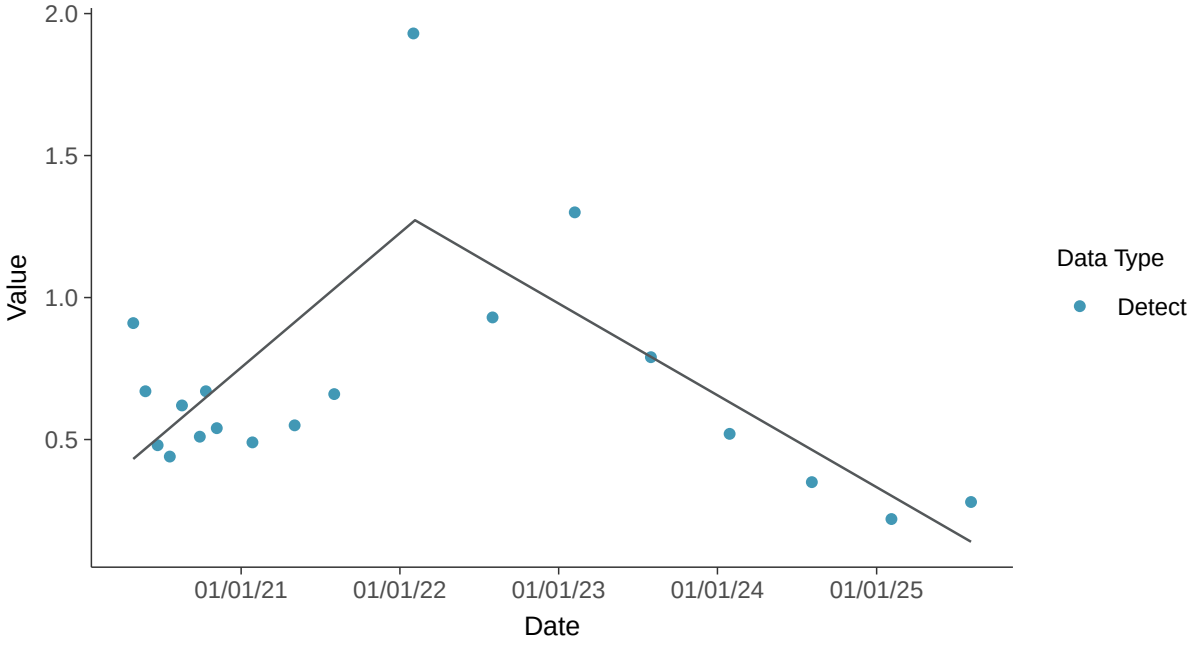
Trend Regression: Lognormal MLE

Iron, MW-2 (mg/l)



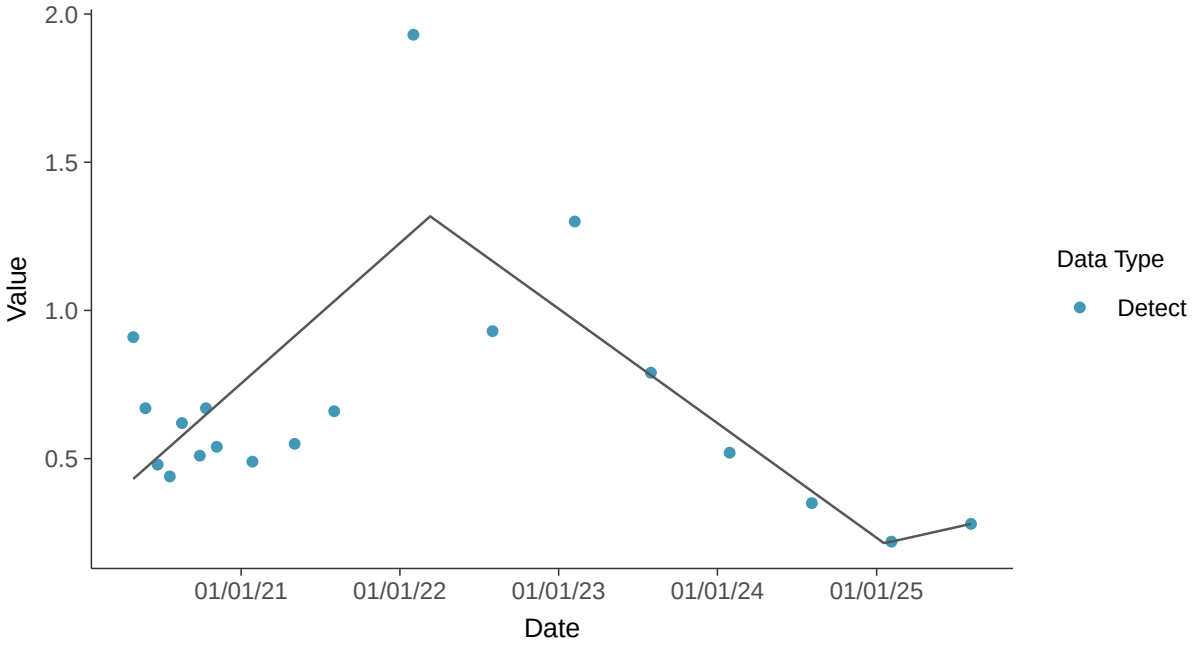
Trend Regression: Piecewise Linear-Linear

Iron, MW-2 (mg/l)



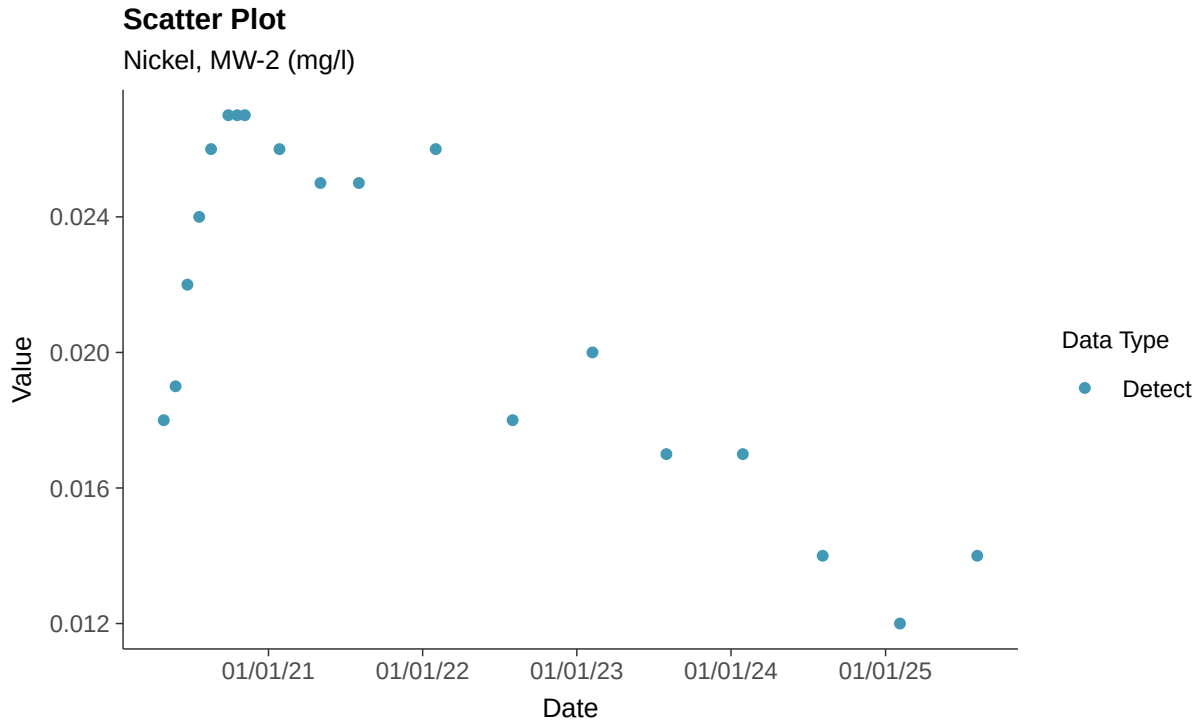
Trend Regression: Piecewise Linear-Linear-Linear

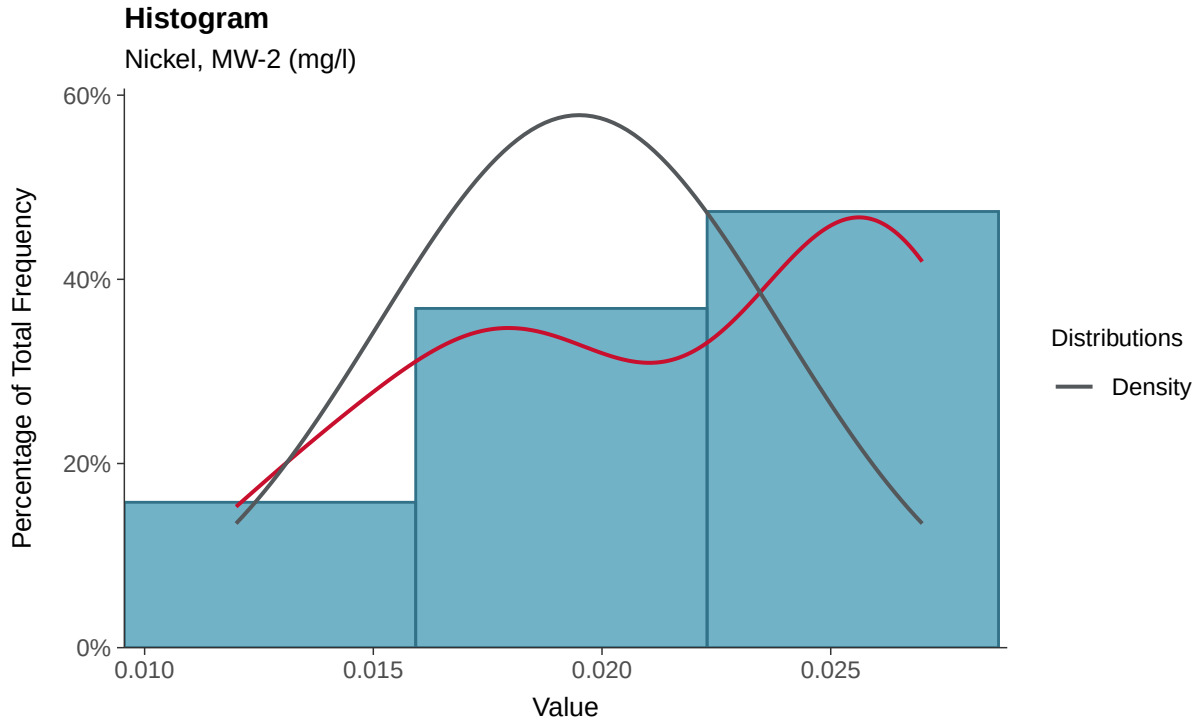
Iron, MW-2 (mg/l)



Part 115: Nickel, MW-2

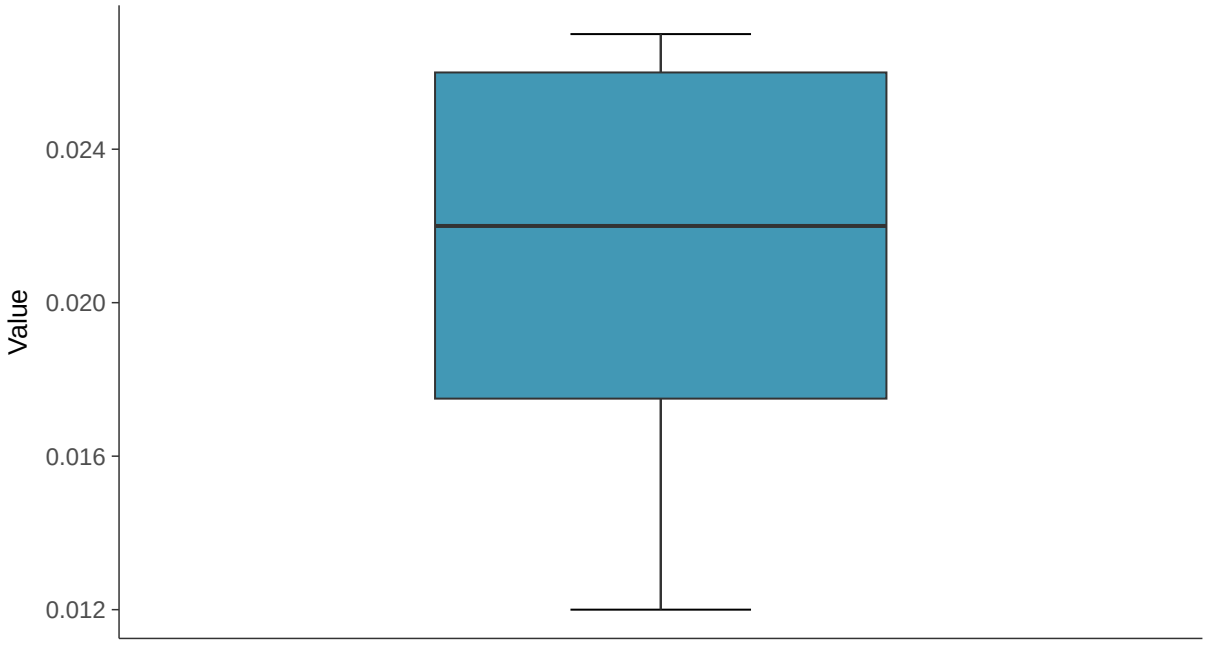
ID: 13_5_119





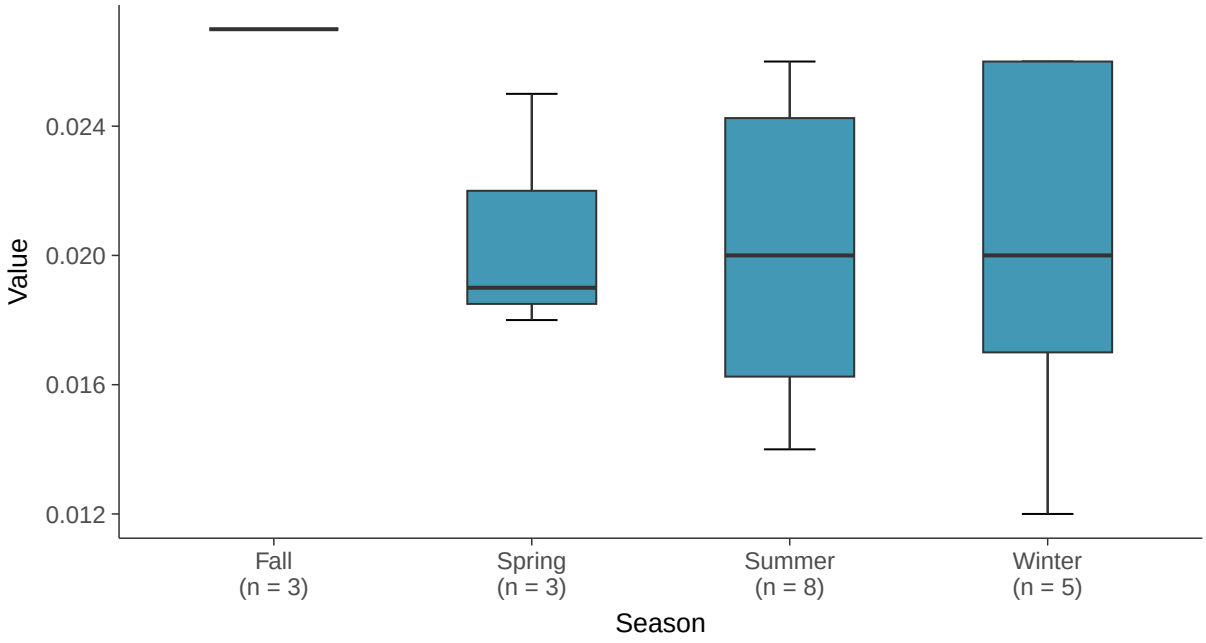
Boxplot

Nickel, MW-2 (mg/l)



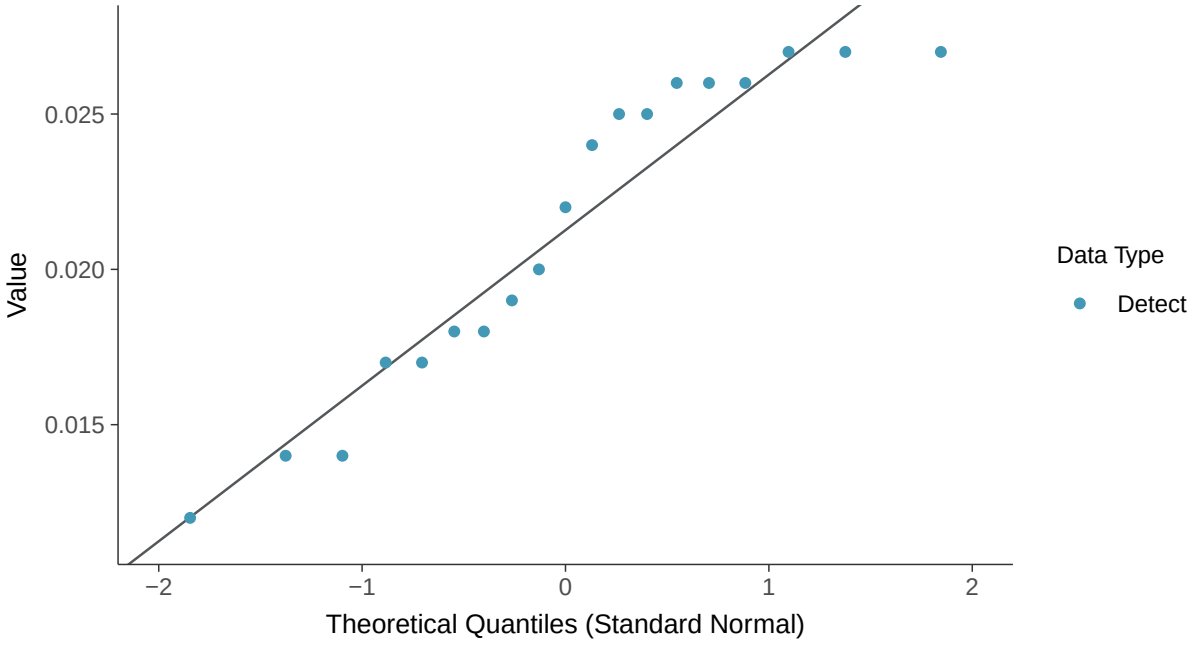
Boxplot by Season

Nickel, MW-2 (mg/l)



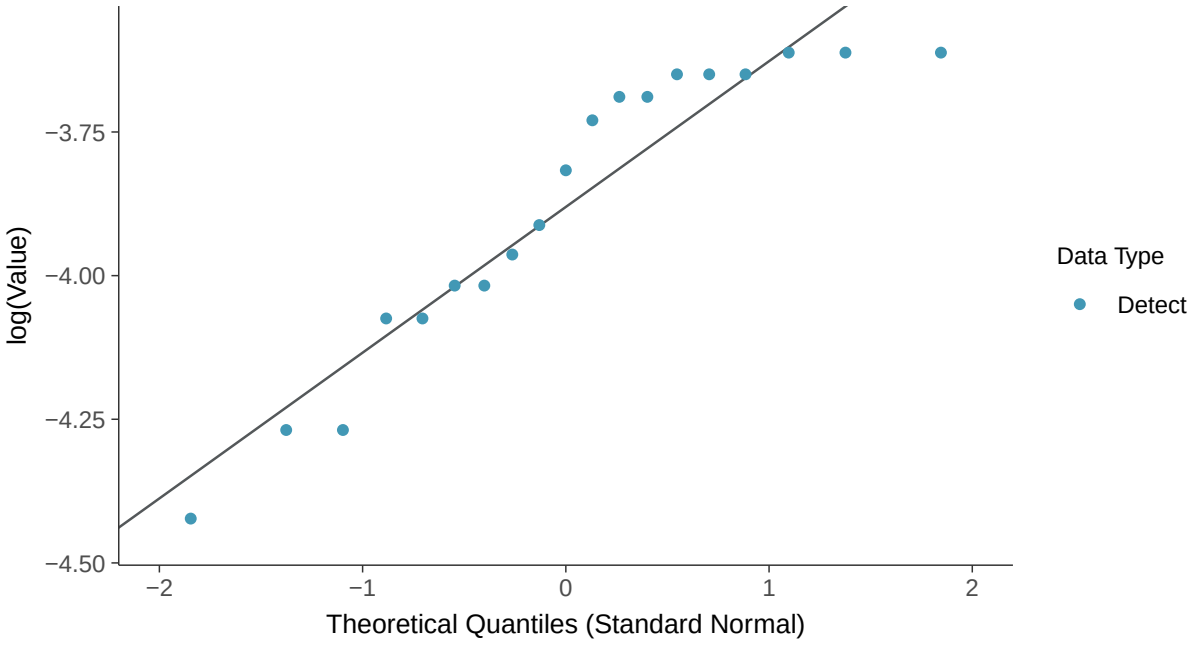
Normal Q-Q plot

Nickel, MW-2 (mg/l)



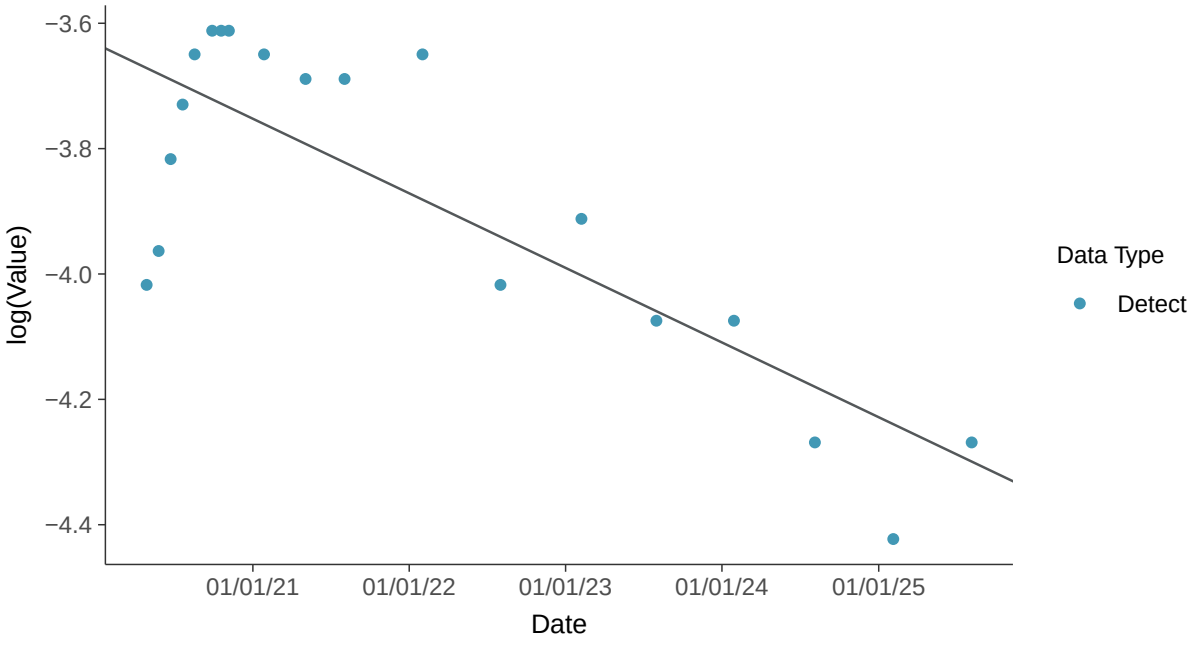
Lognormal Q-Q plot

Nickel, MW-2 (mg/l)



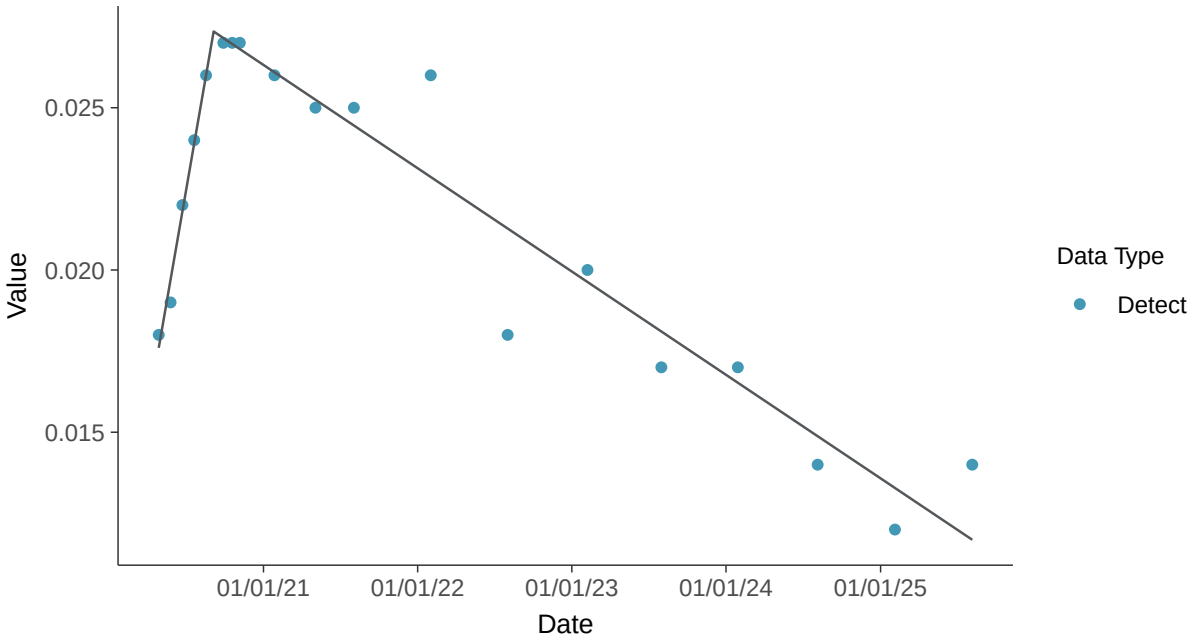
Trend Regression: Lognormal MLE

Nickel, MW-2 (mg/l)



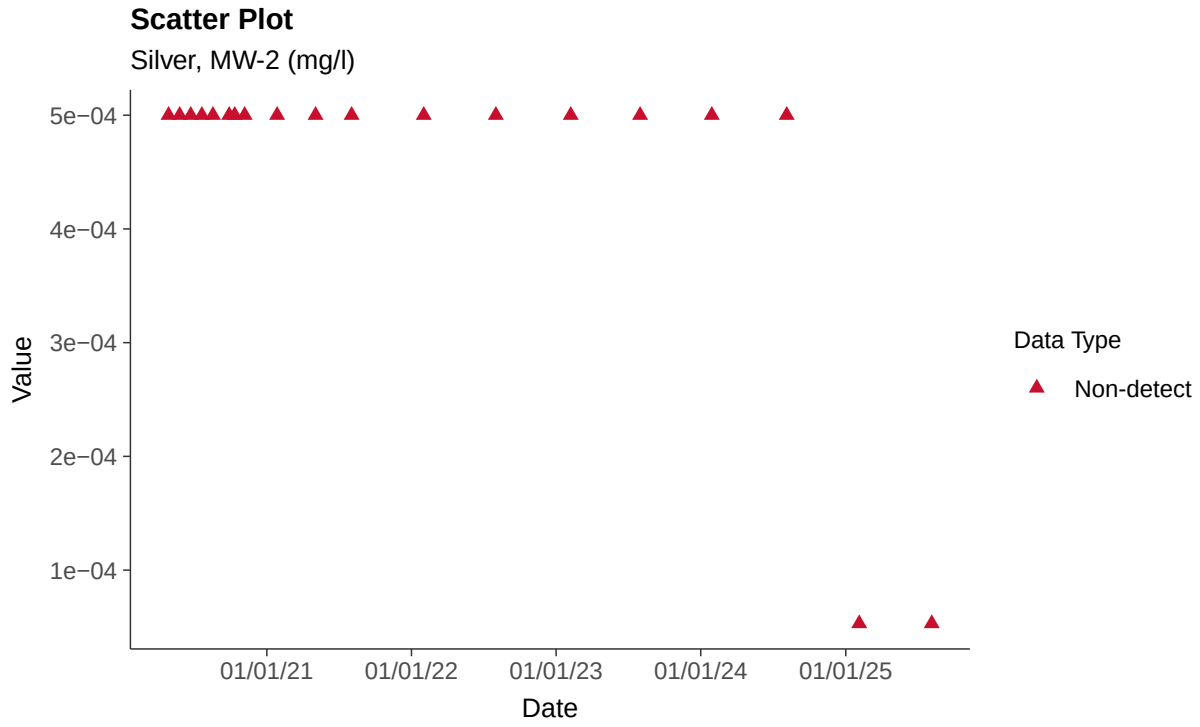
Trend Regression: Piecewise Linear-Linear

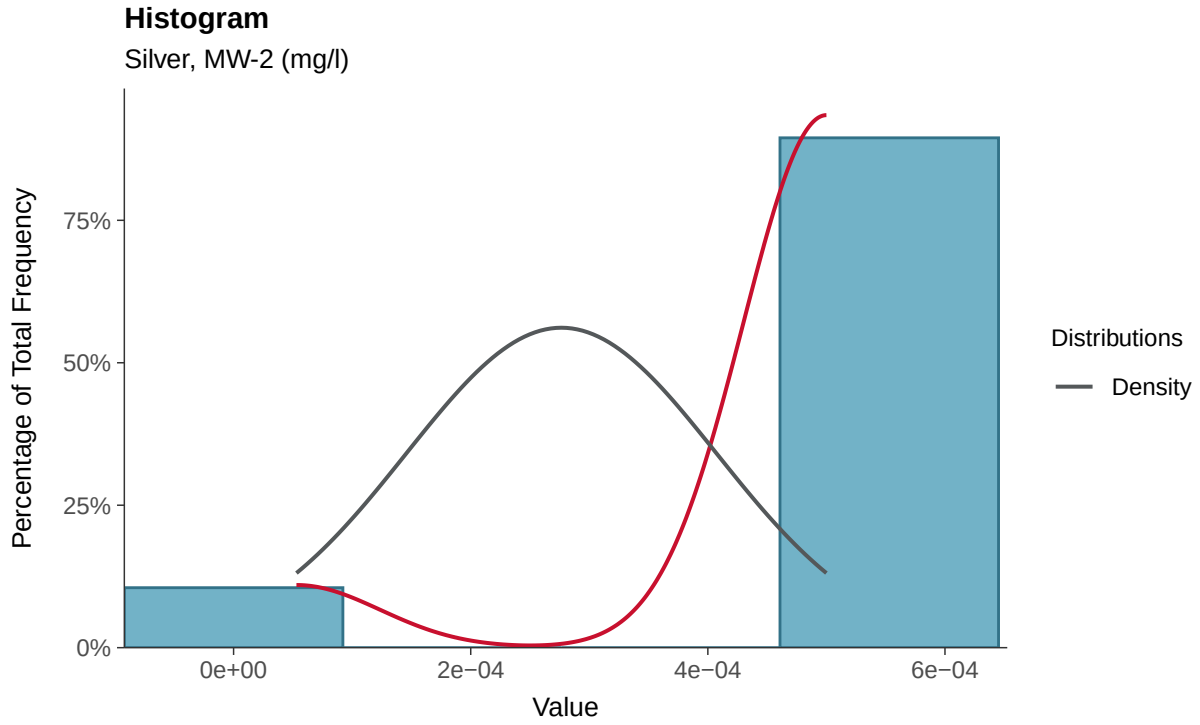
Nickel, MW-2 (mg/l)



Part 115: Silver, MW-2

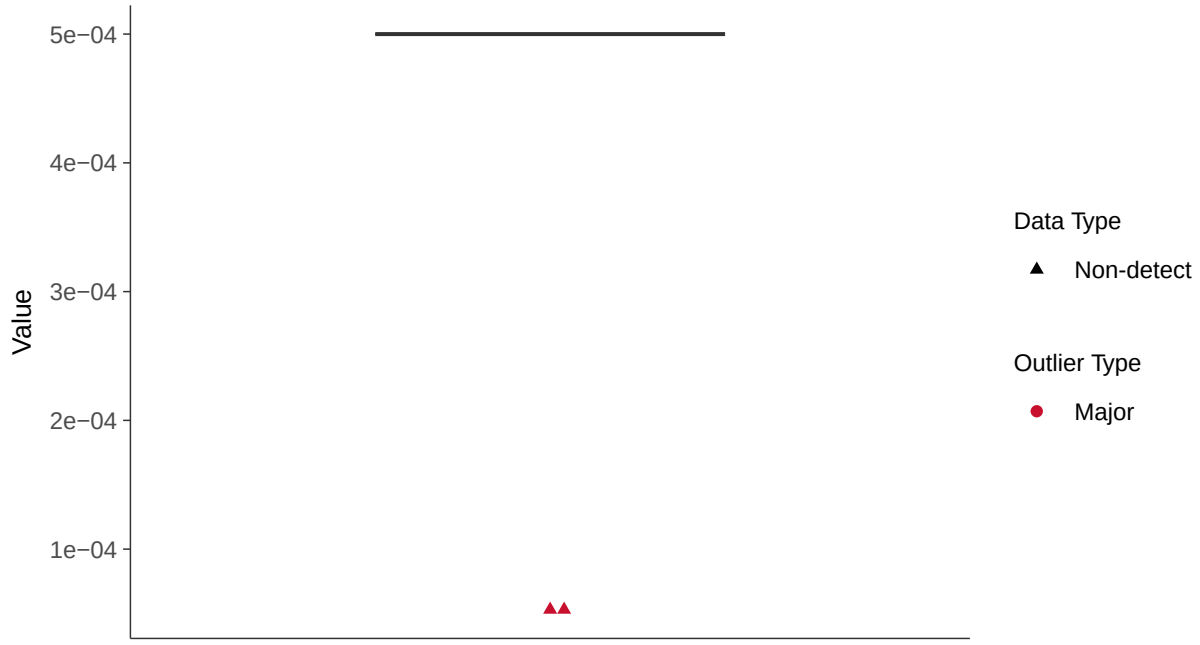
ID: 13_5_123





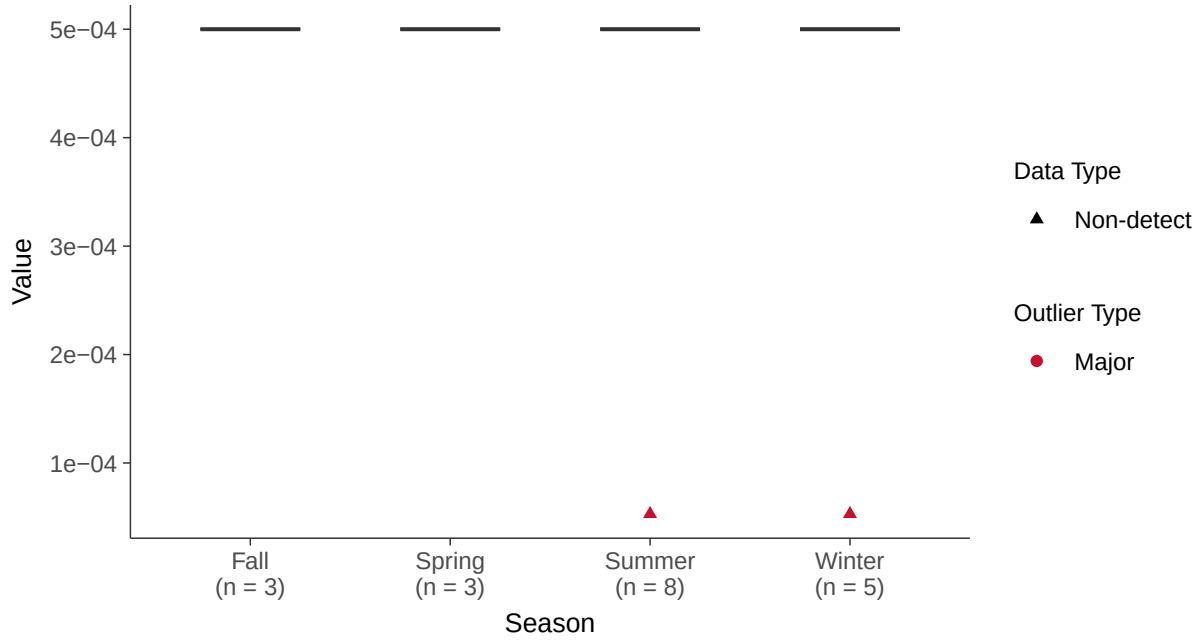
Boxplot

Silver, MW-2 (mg/l)



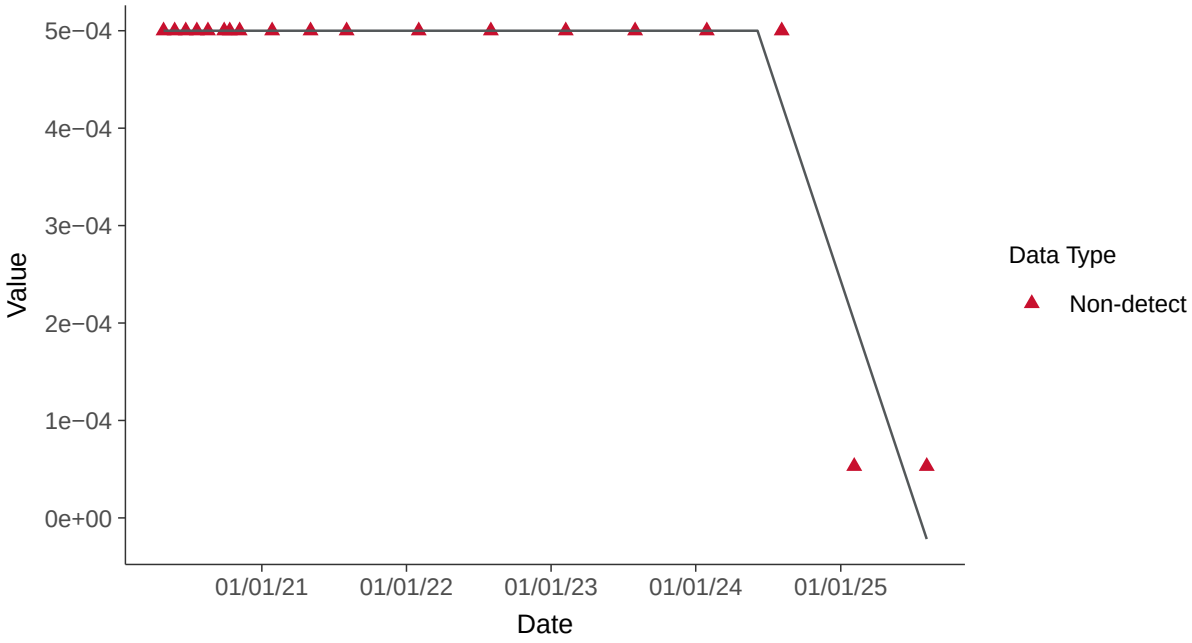
Boxplot by Season

Silver, MW-2 (mg/l)



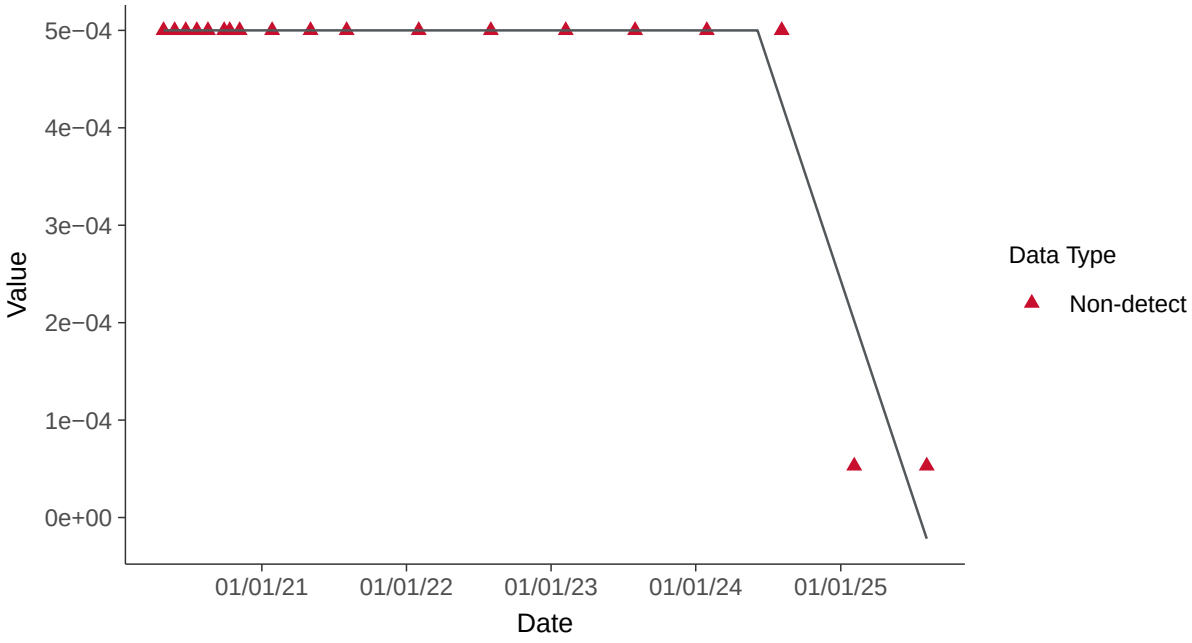
Trend Regression: Piecewise Linear-Linear

Silver, MW-2 (mg/l)



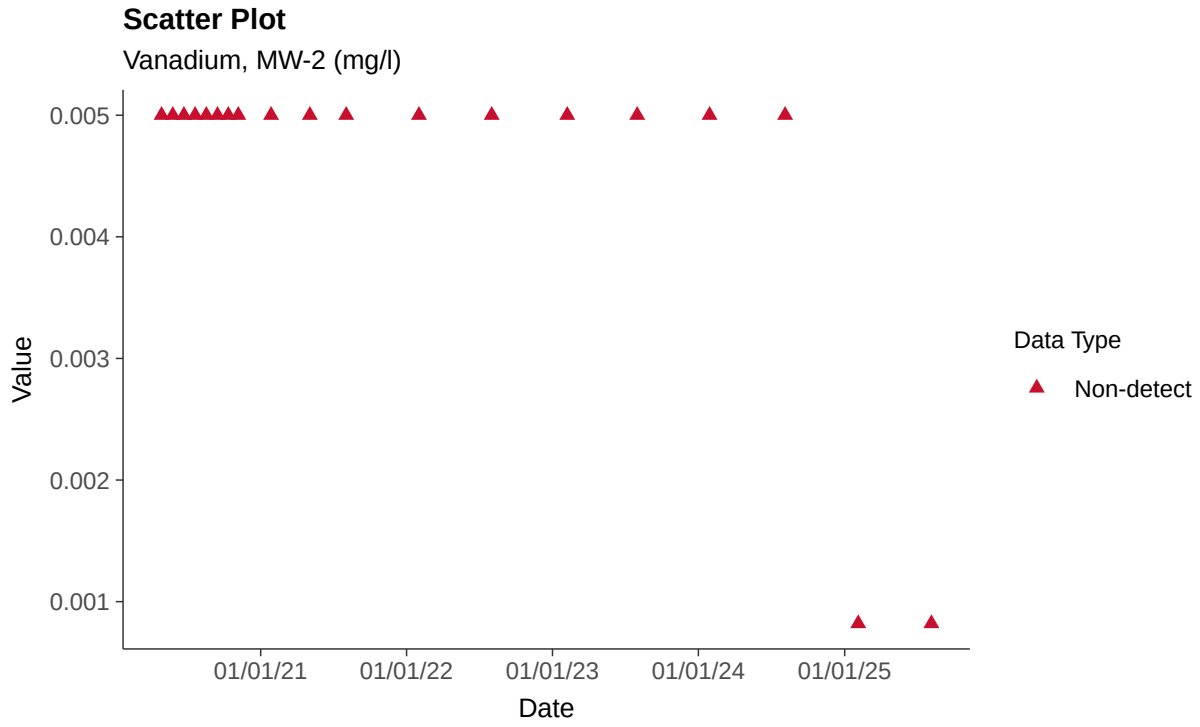
Trend Regression: Piecewise Linear-Linear-Linear

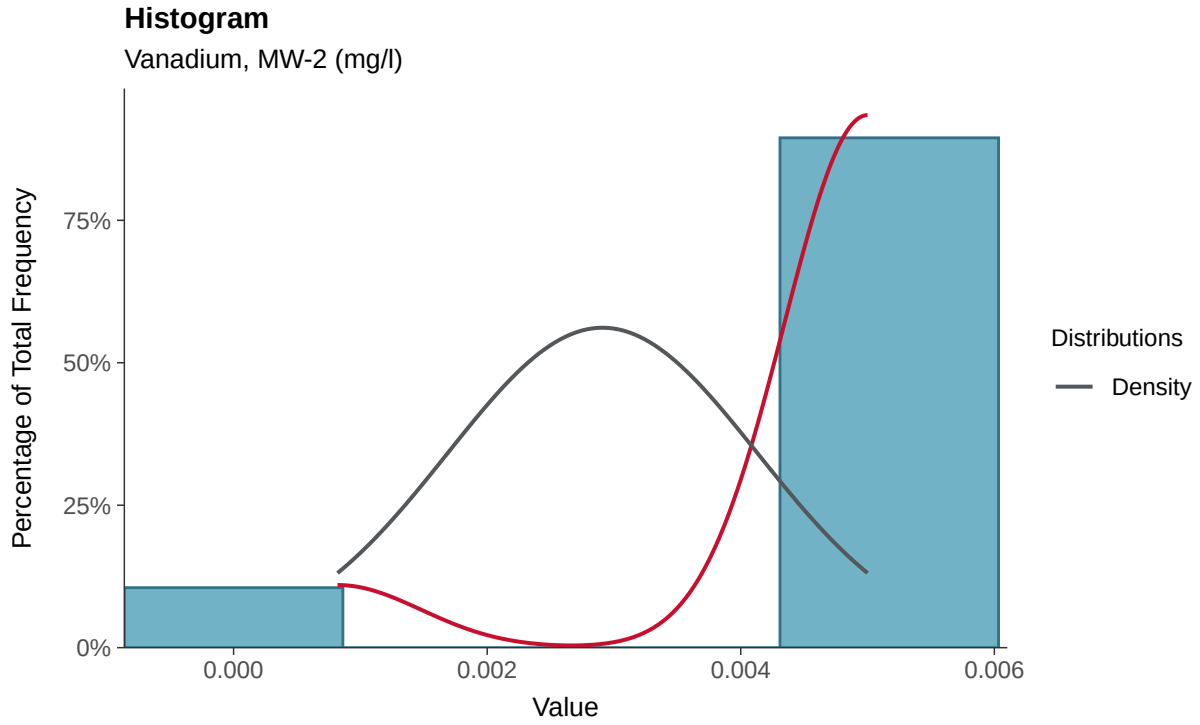
Silver, MW-2 (mg/l)



Part 115: Vanadium, MW-2

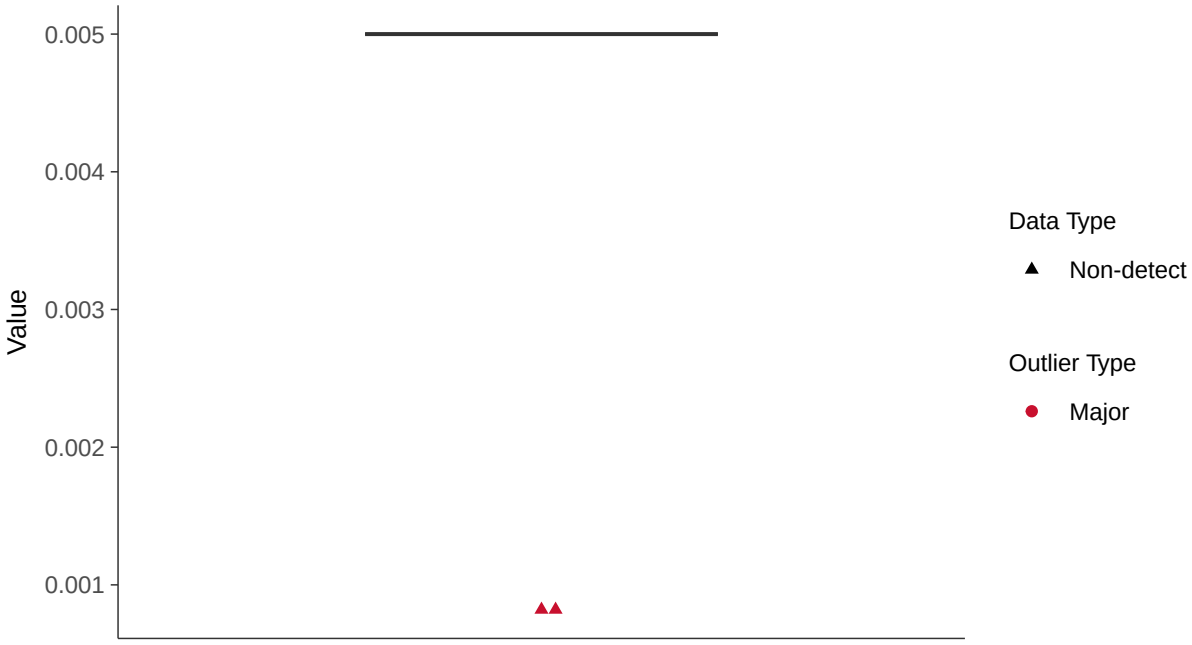
ID: 13_5_128





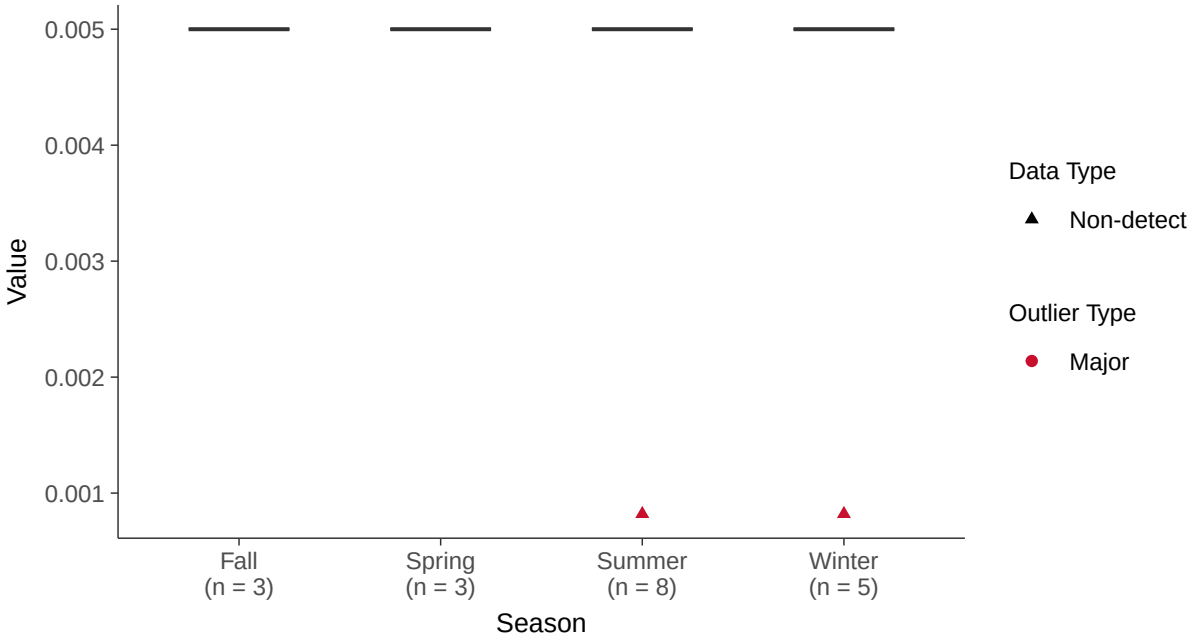
Boxplot

Vanadium, MW-2 (mg/l)



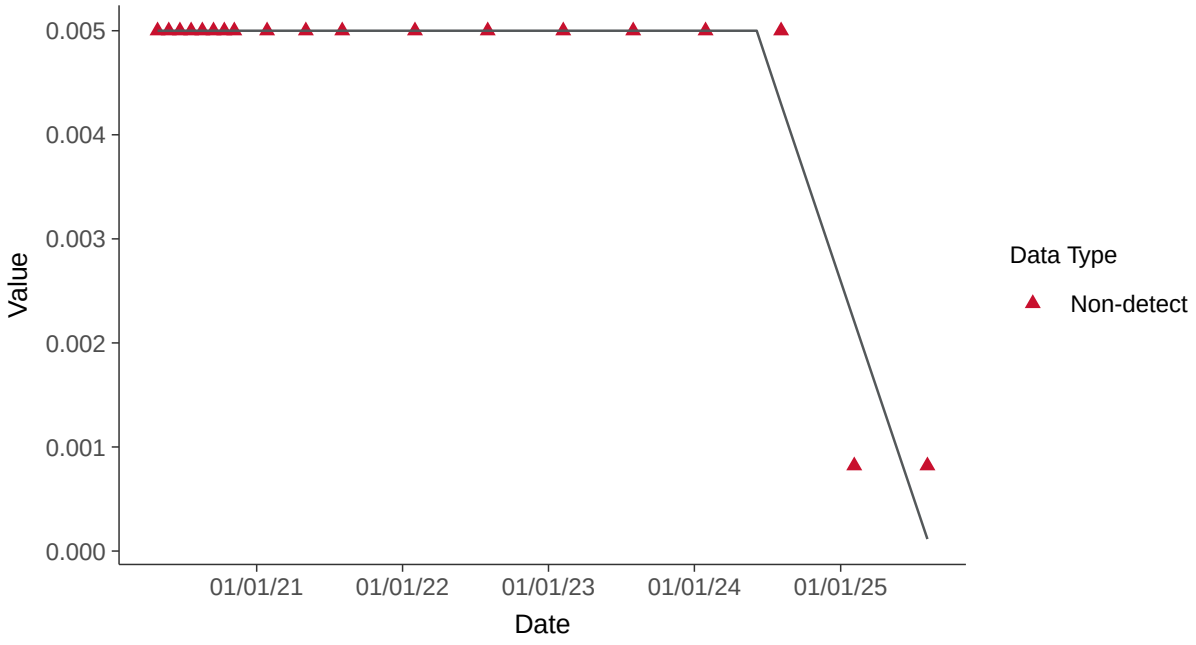
Boxplot by Season

Vanadium, MW-2 (mg/l)



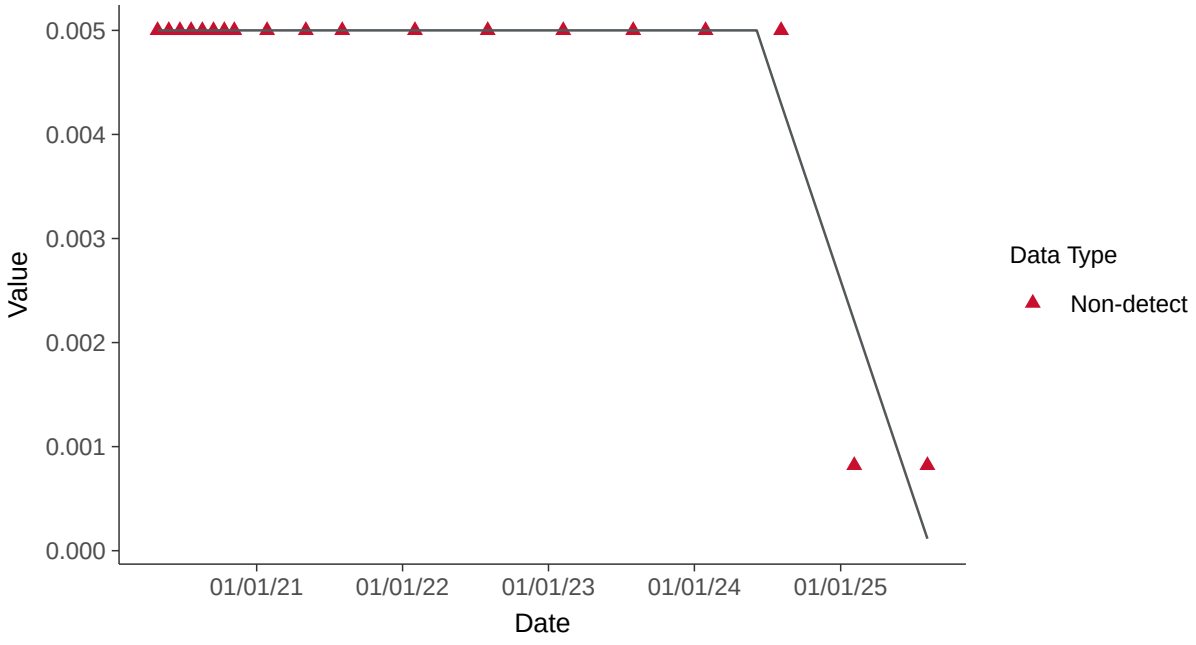
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-2 (mg/l)



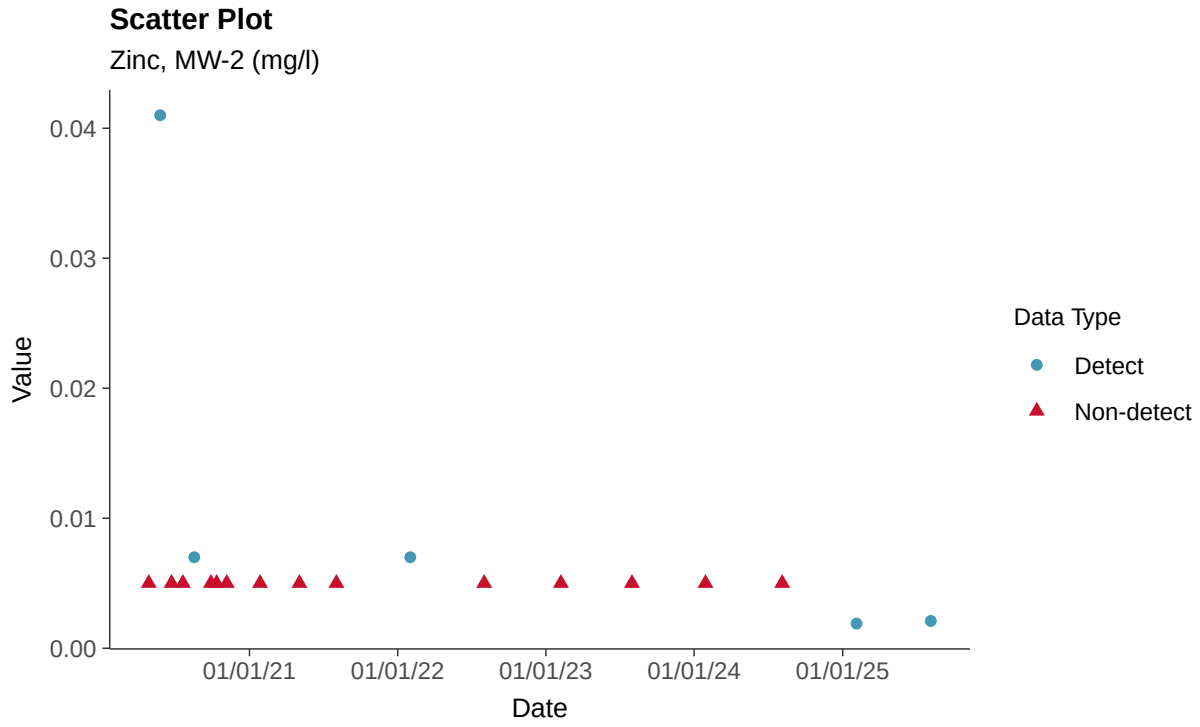
Trend Regression: Piecewise Linear-Linear-Linear

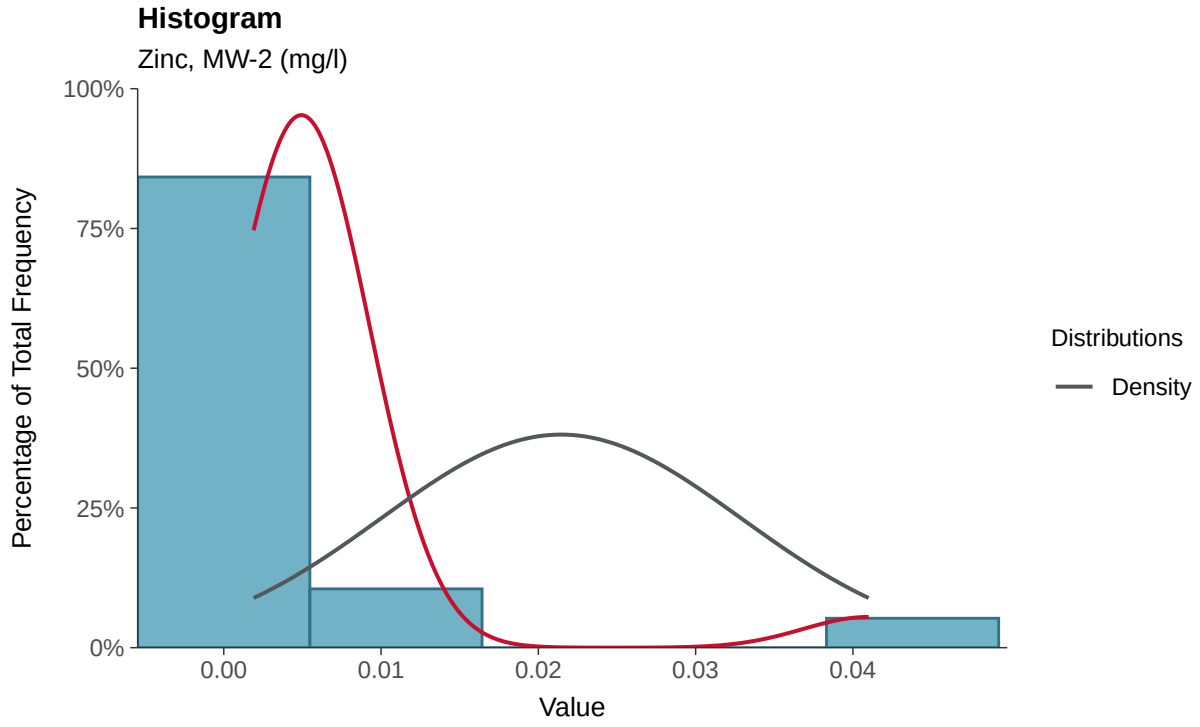
Vanadium, MW-2 (mg/l)



Part 115: Zinc, MW-2

ID: 13_5_129



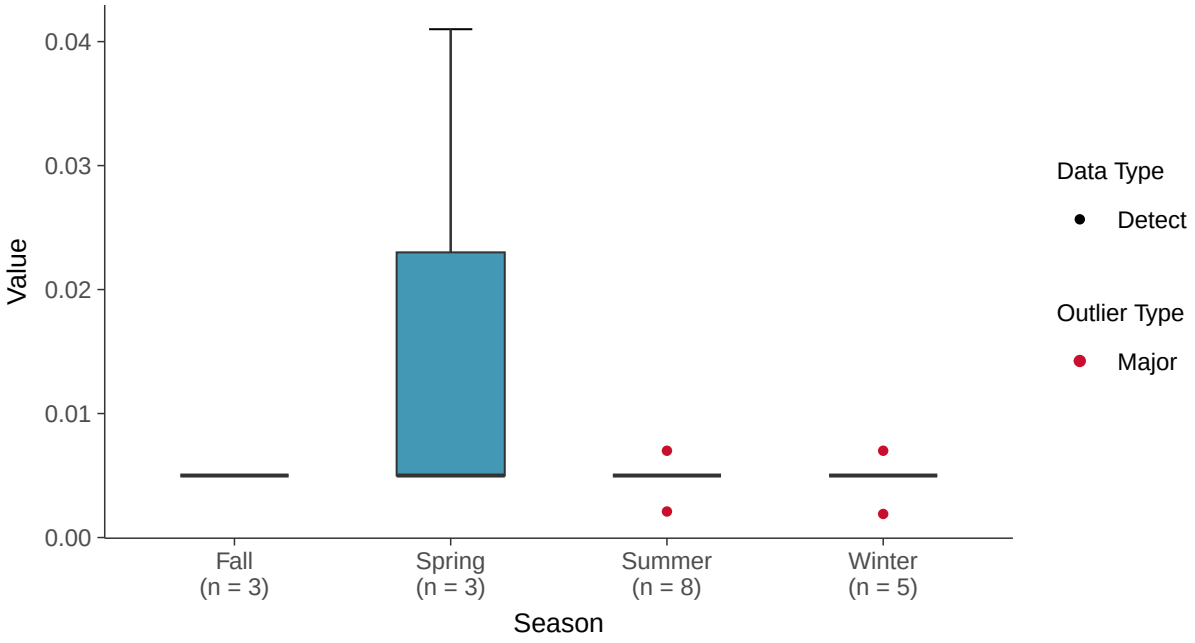


Boxplot

Zinc, MW-2 (mg/l)

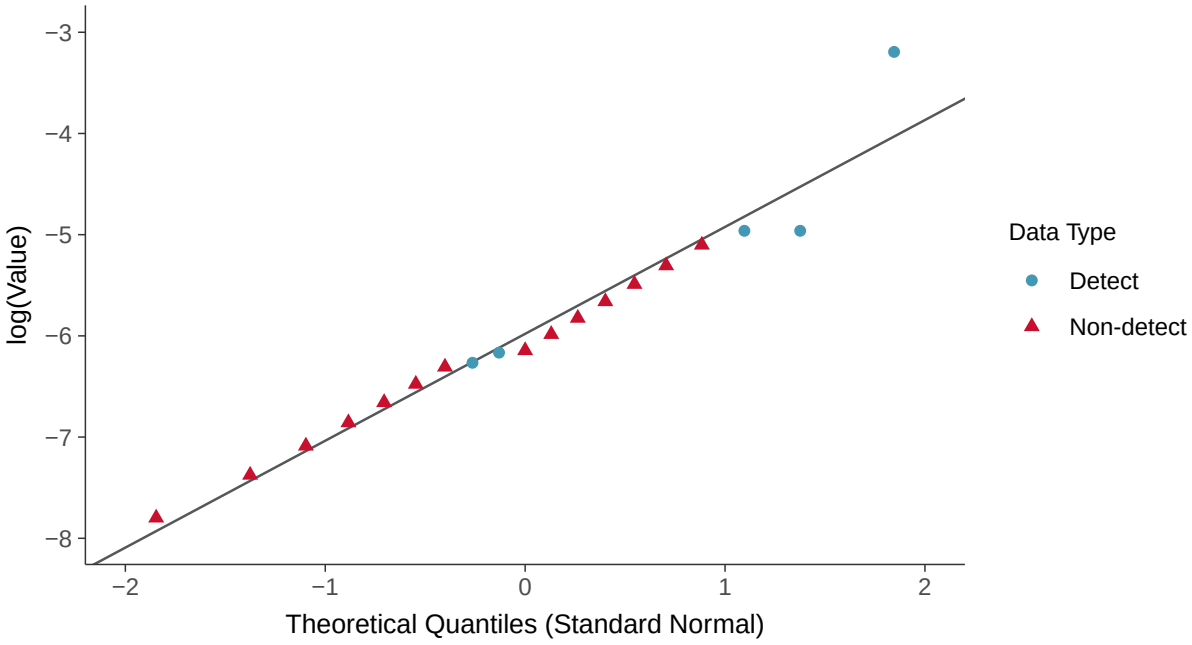
Boxplot by Season

Zinc, MW-2 (mg/l)



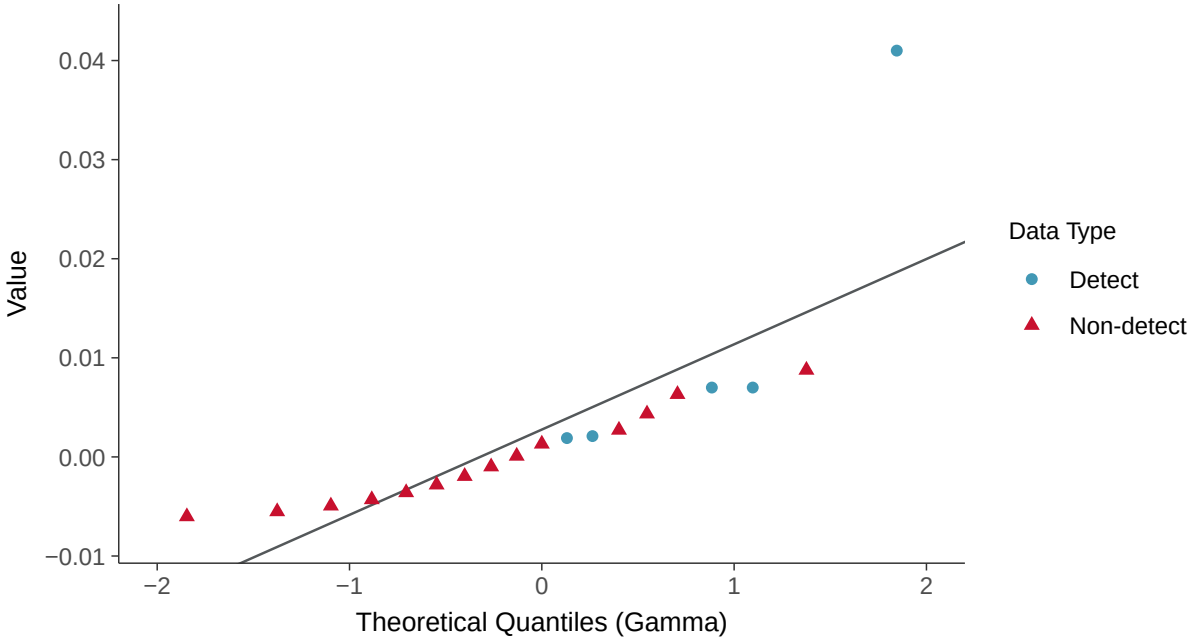
Lognormal Q-Q plot using ROS Imputed Estimates

Zinc, MW-2 (mg/l)



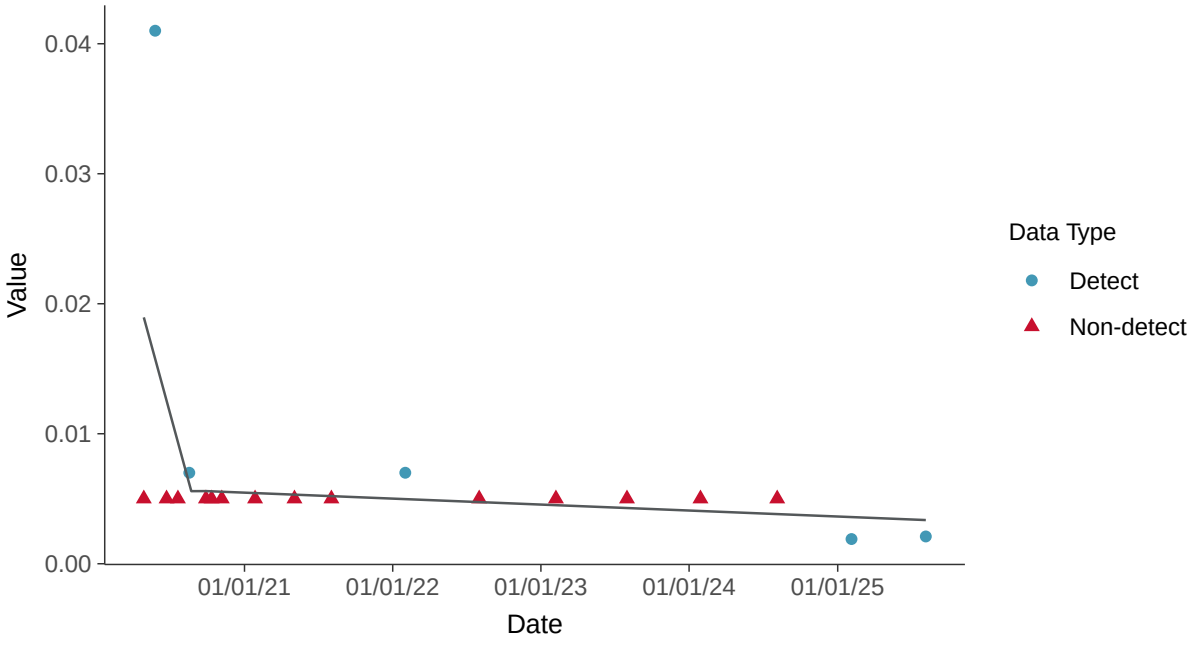
Gamma Q-Q plot using ROS Imputed Estimates

Zinc, MW-2 (mg/l)



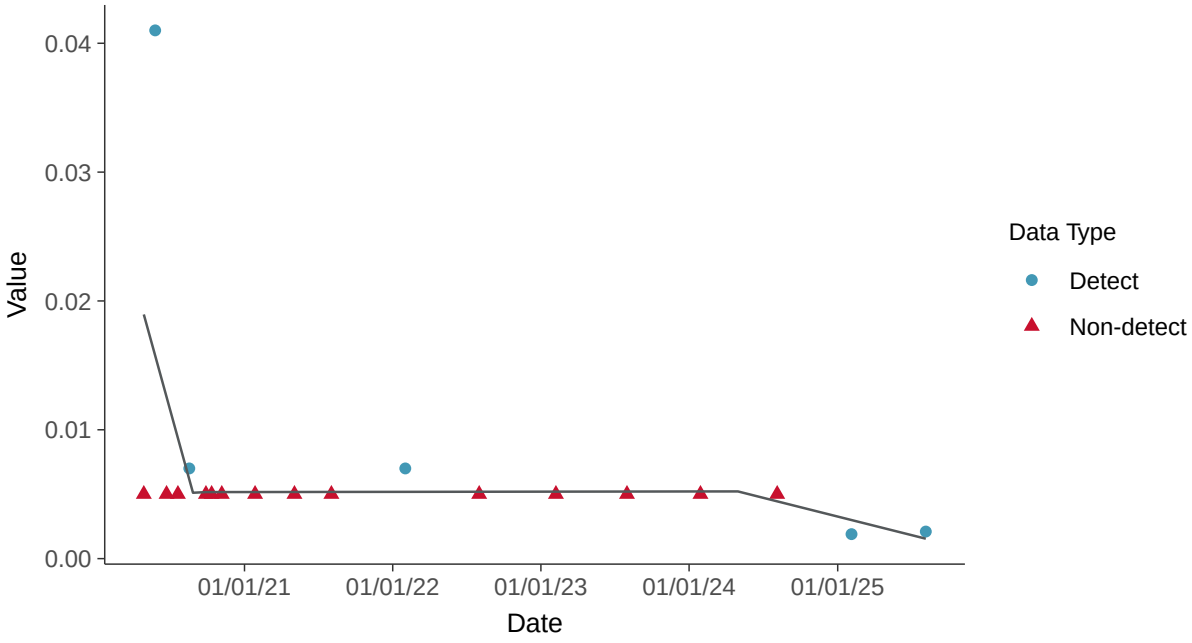
Trend Regression: Piecewise Linear-Linear

Zinc, MW-2 (mg/l)



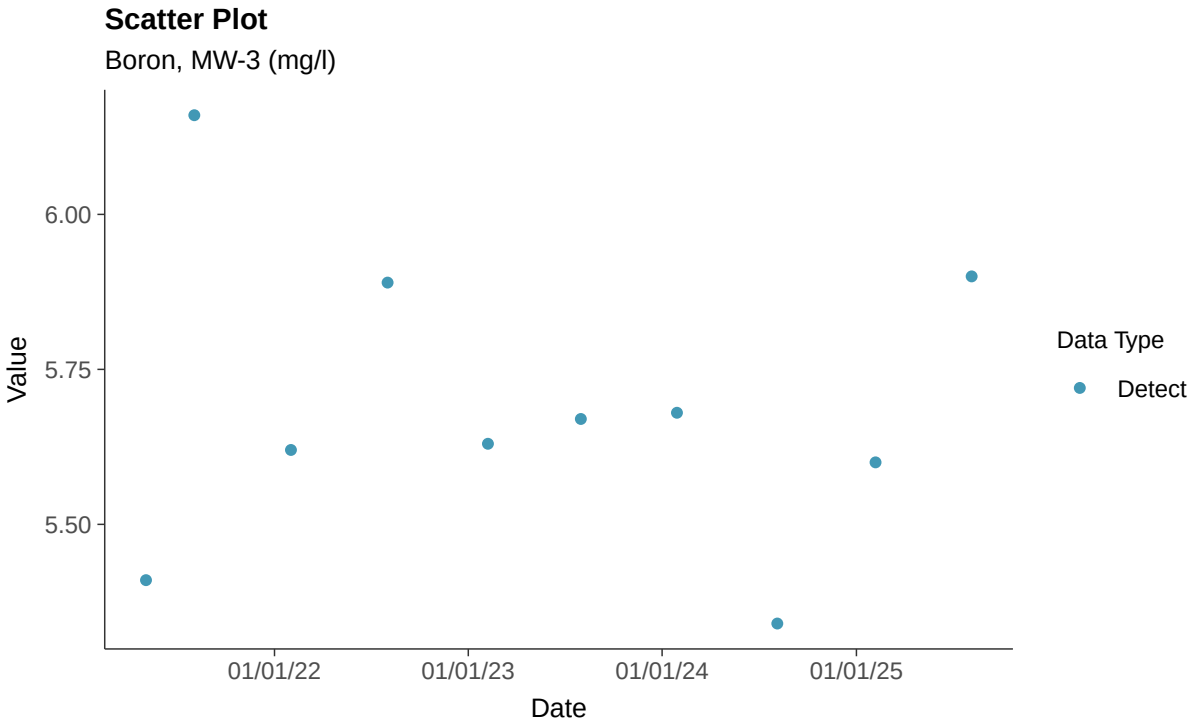
Trend Regression: Piecewise Linear-Linear-Linear

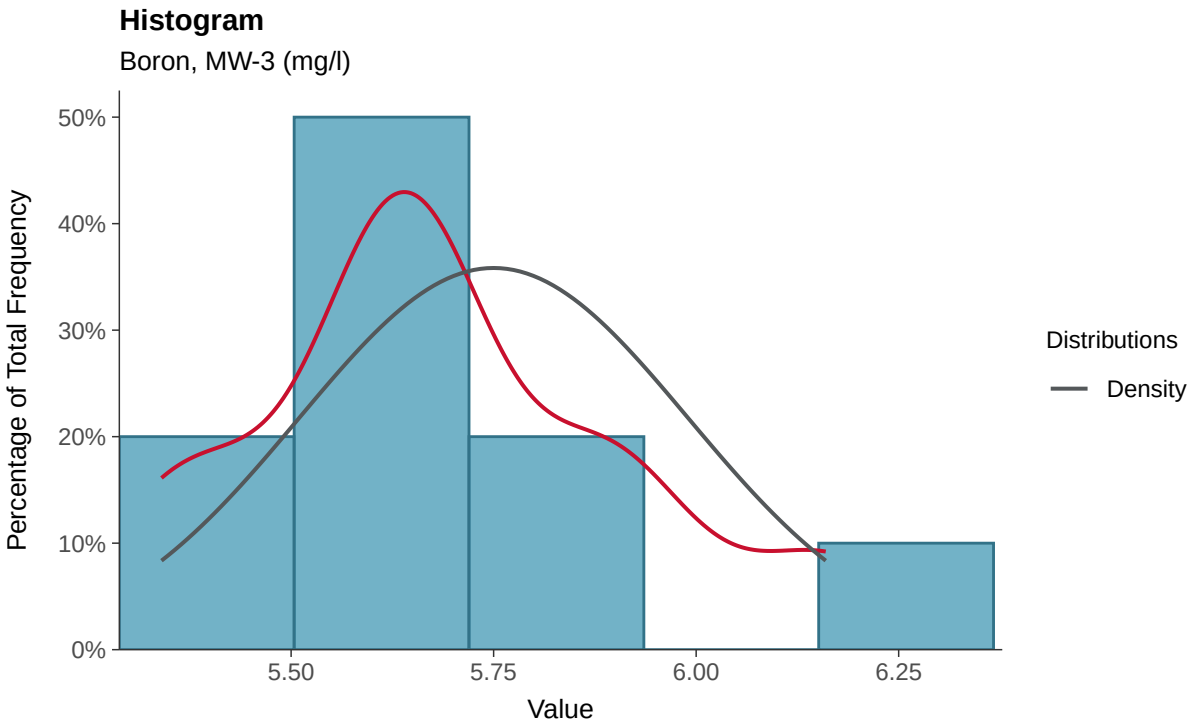
Zinc, MW-2 (mg/l)



Appendix III: Boron, MW-3

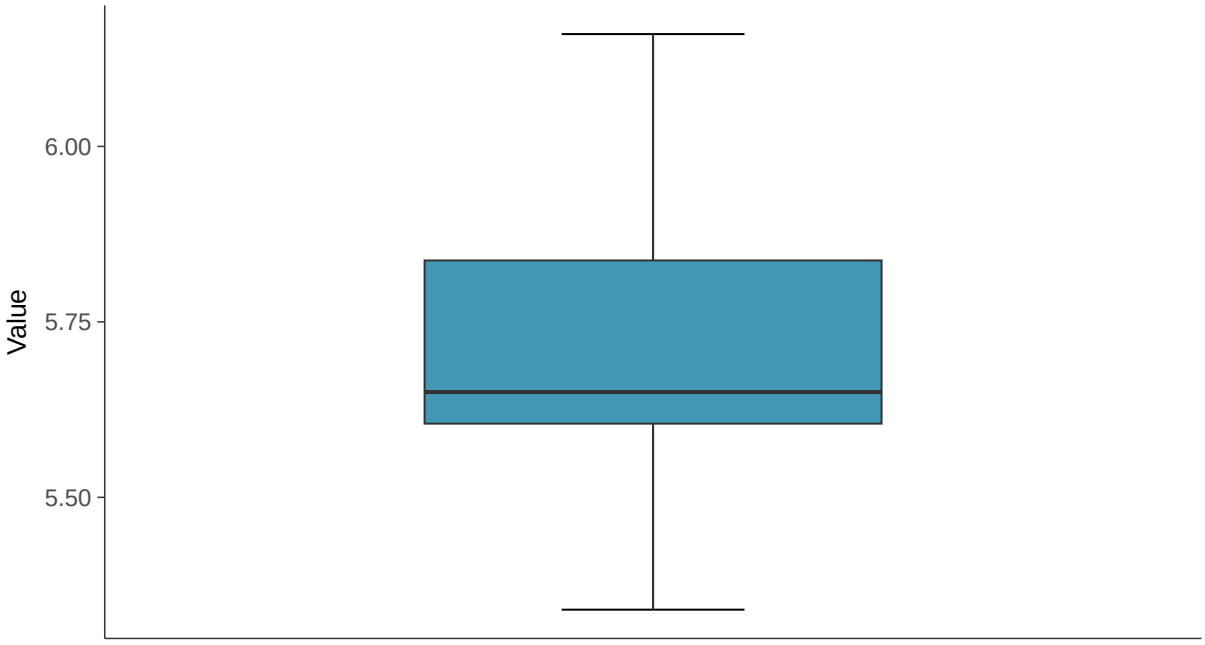
ID: 14_2_105





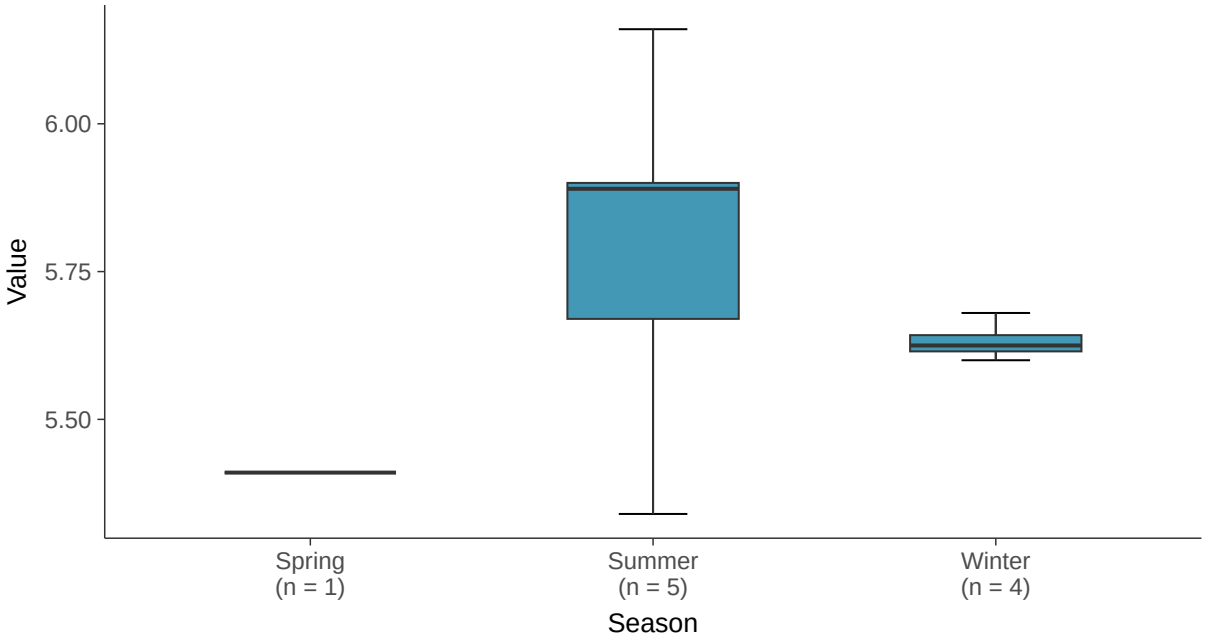
Boxplot

Boron, MW-3 (mg/l)



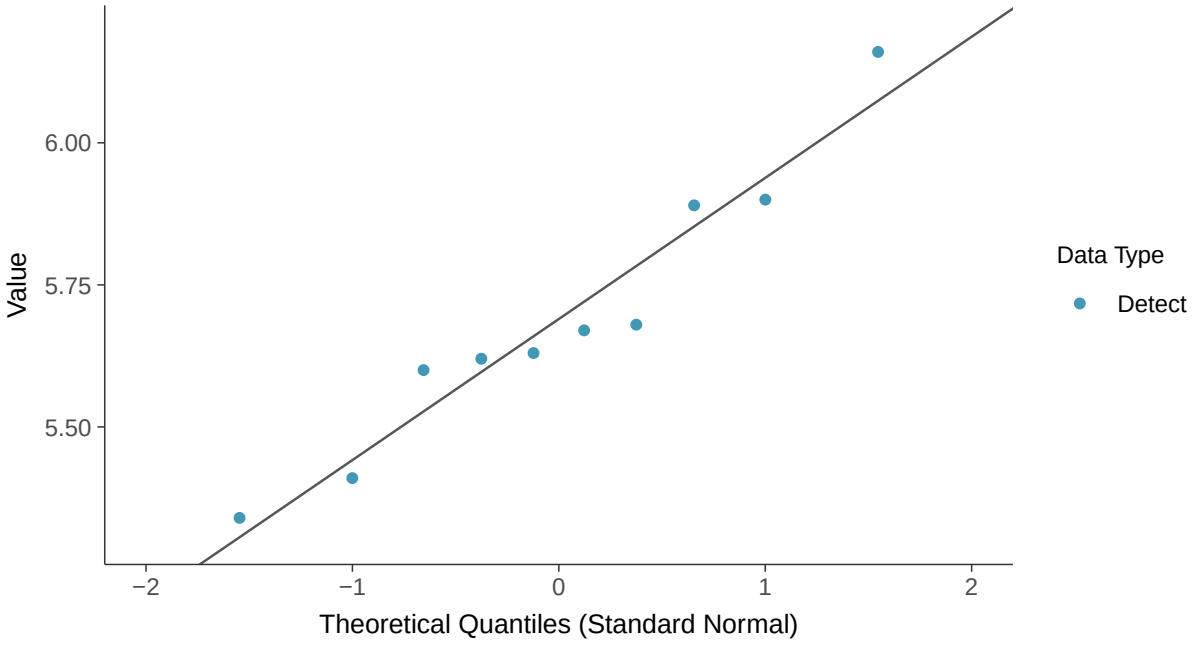
Boxplot by Season

Boron, MW-3 (mg/l)



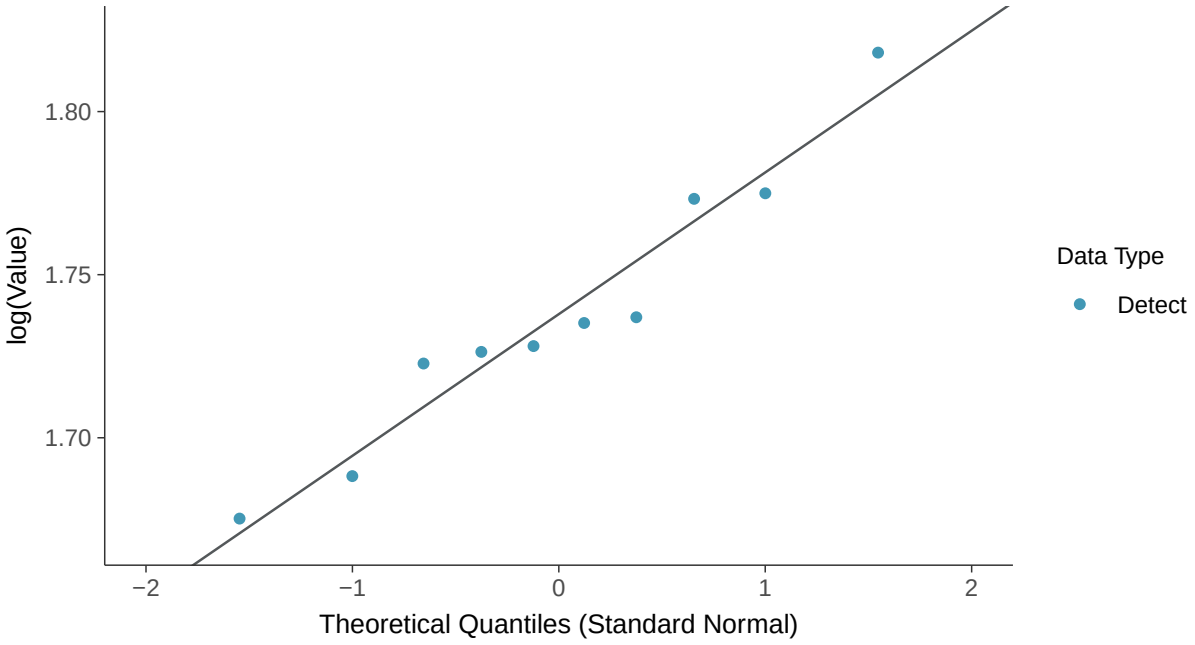
Normal Q-Q plot

Boron, MW-3 (mg/l)



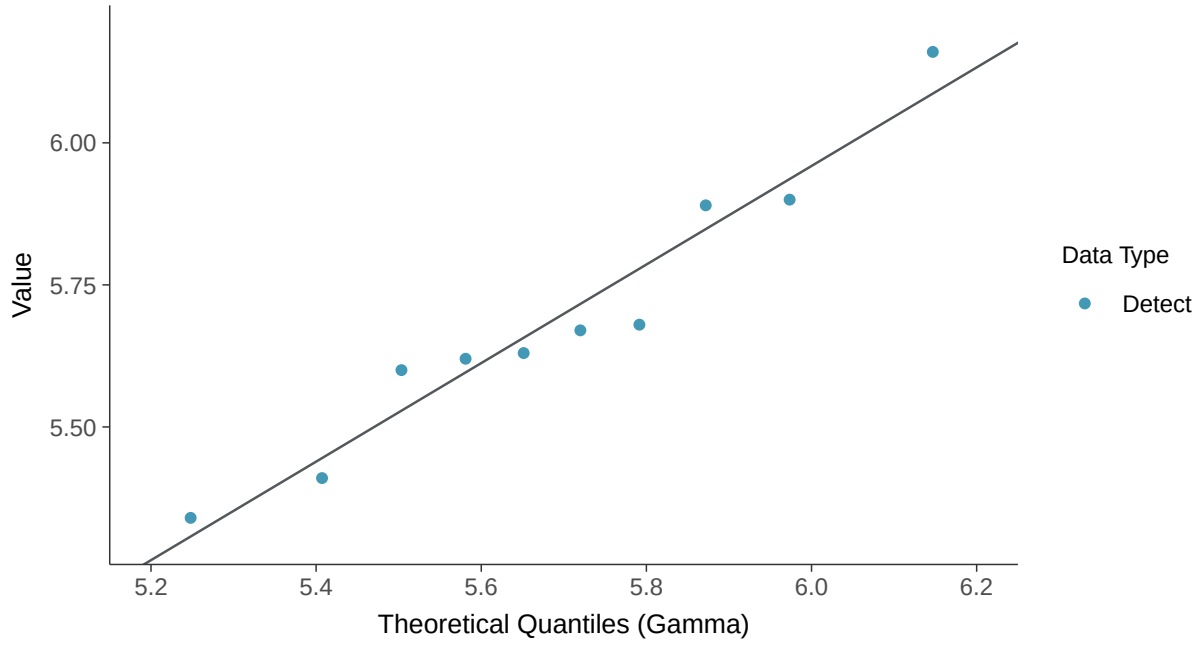
Lognormal Q-Q plot

Boron, MW-3 (mg/l)



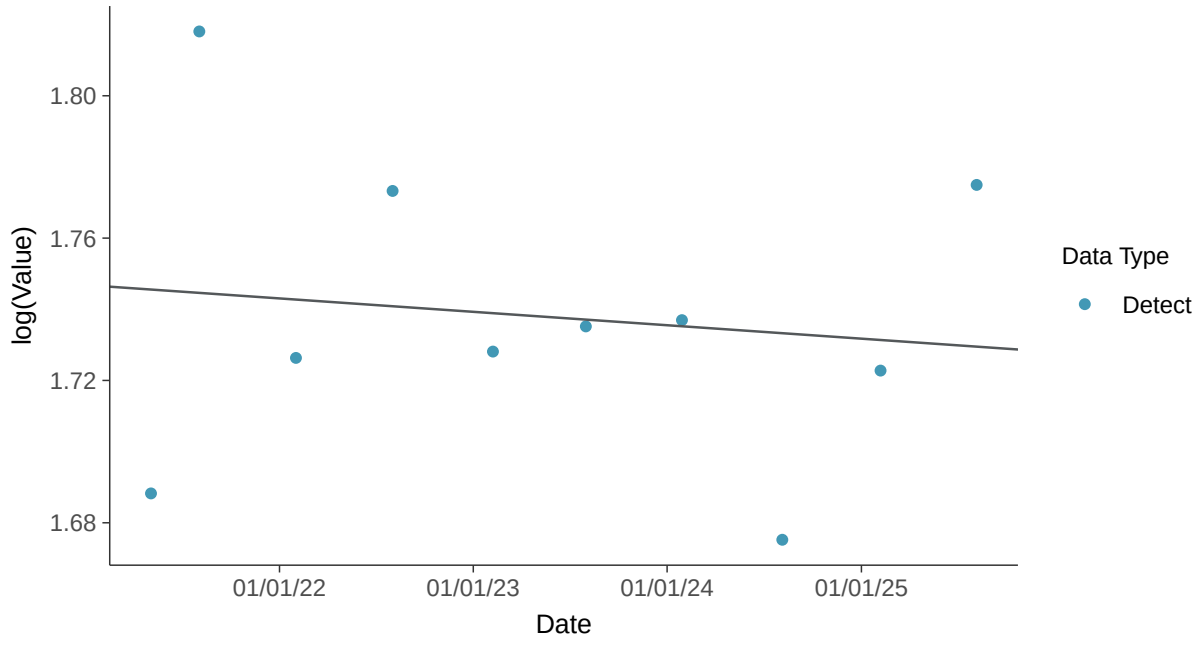
Gamma Q-Q plot

Boron, MW-3 (mg/l)



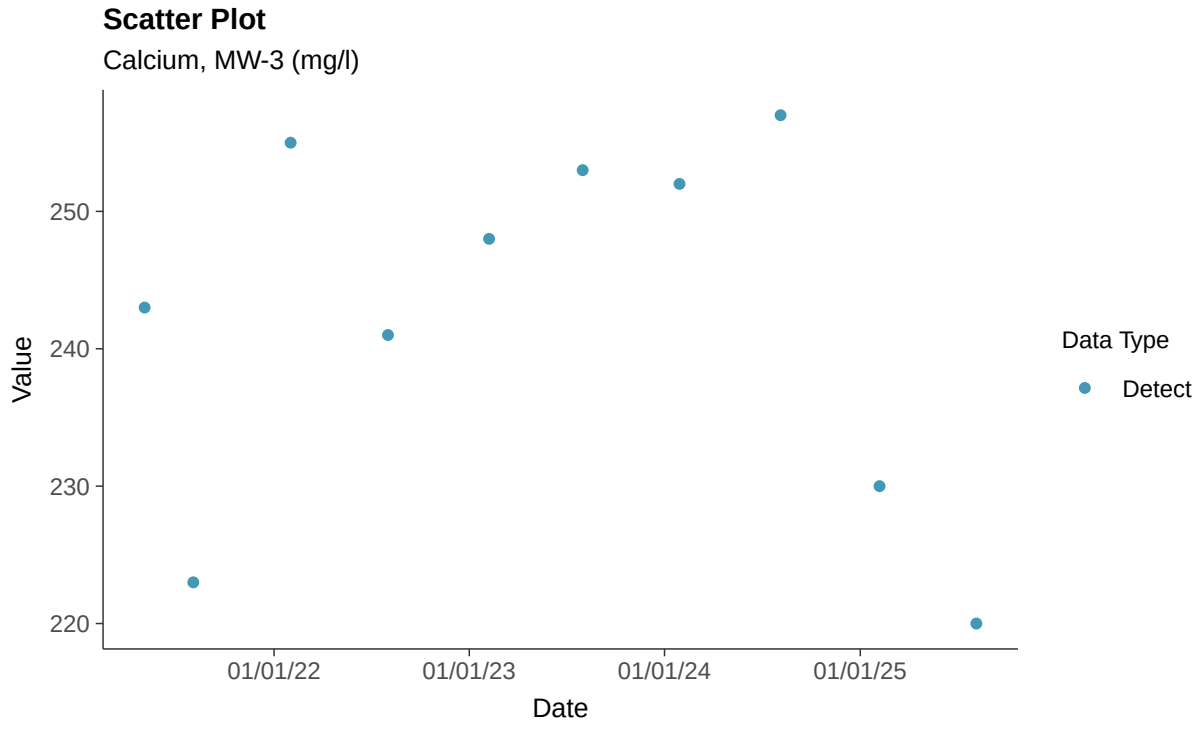
Trend Regression: Lognormal MLE

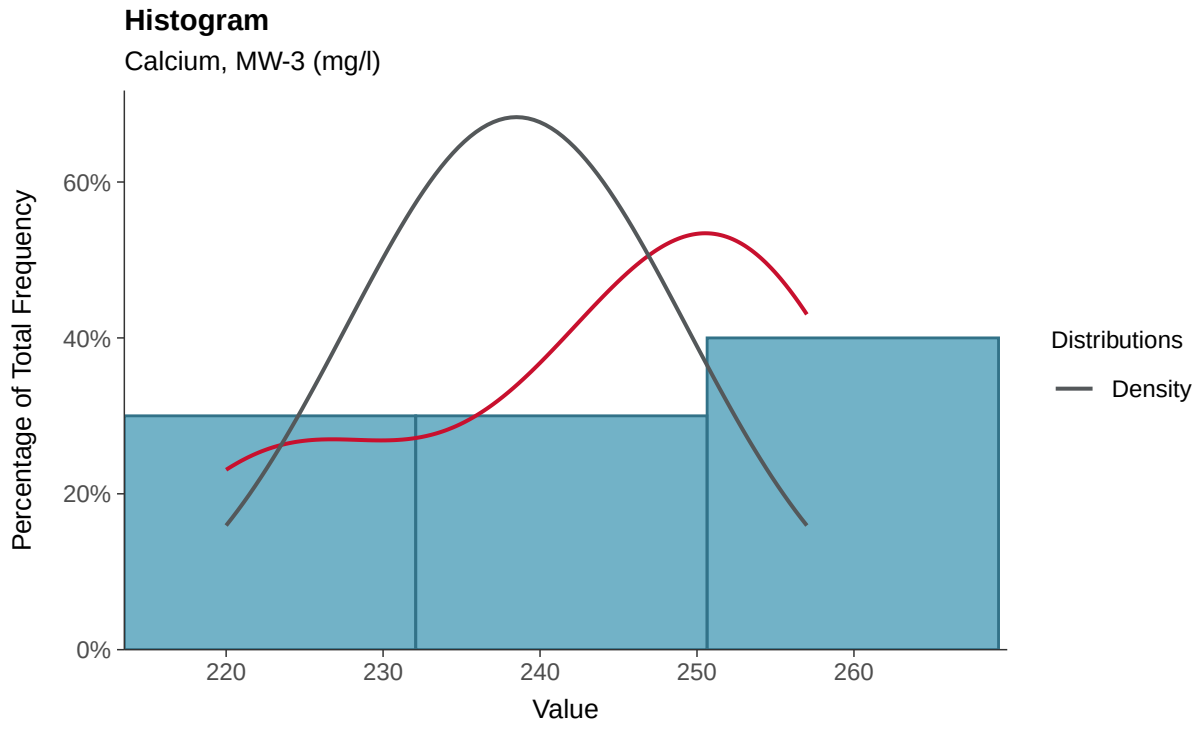
Boron, MW-3 (mg/l)



Appendix III: Calcium, MW-3

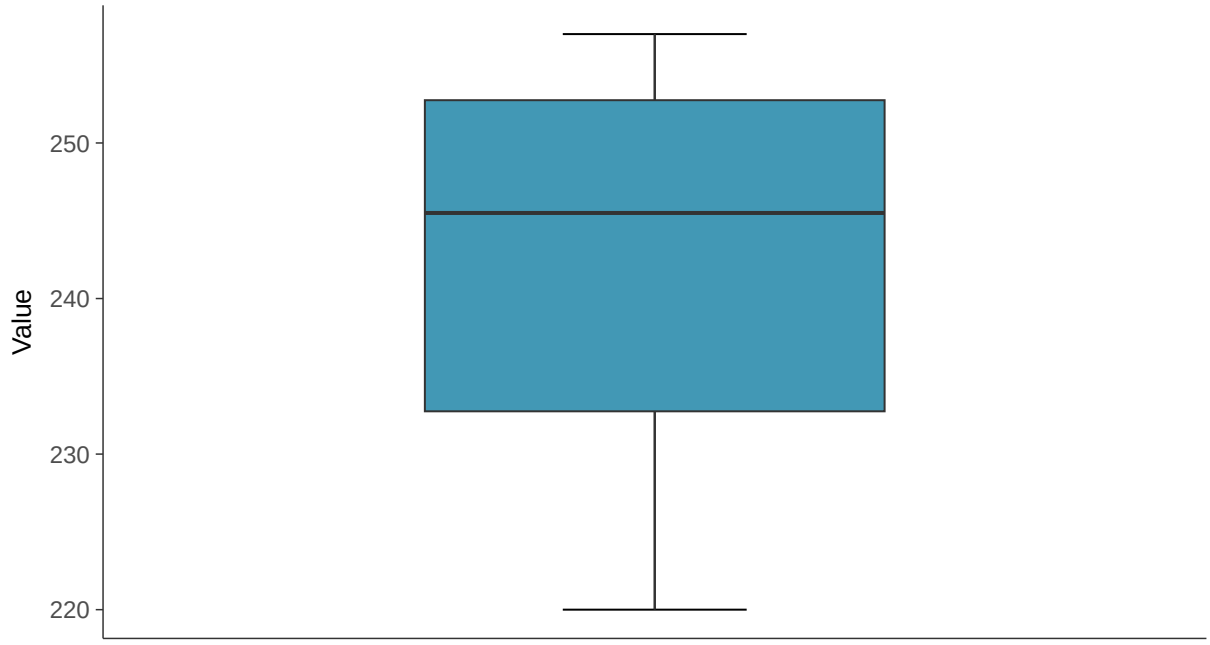
ID: 14_2_107





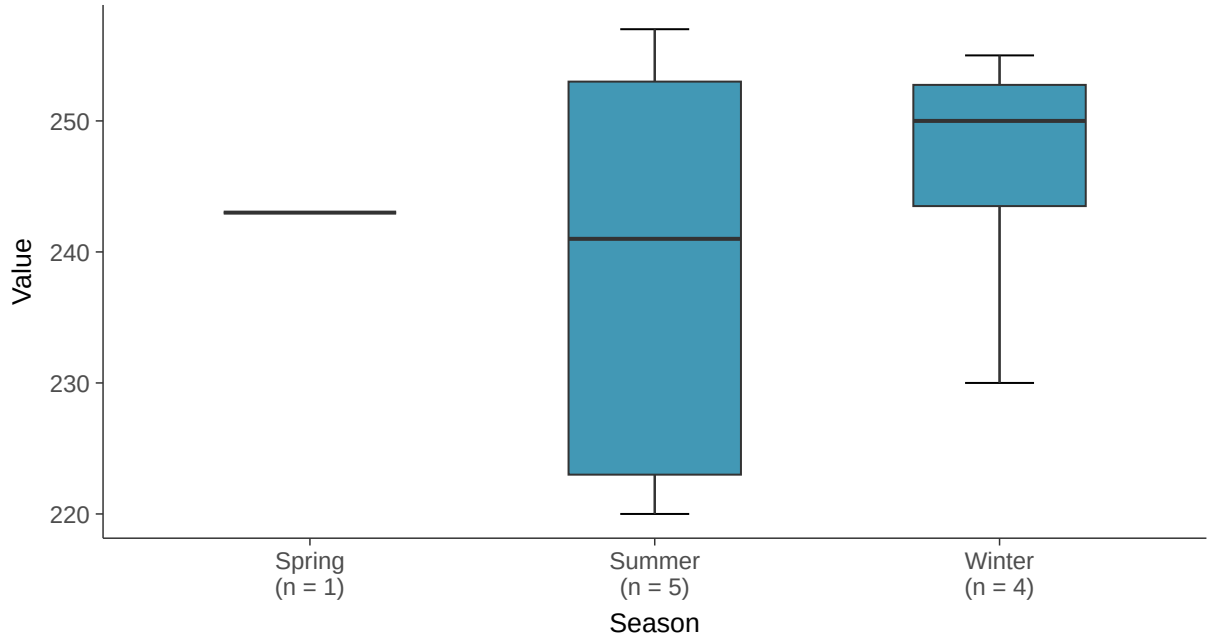
Boxplot

Calcium, MW-3 (mg/l)



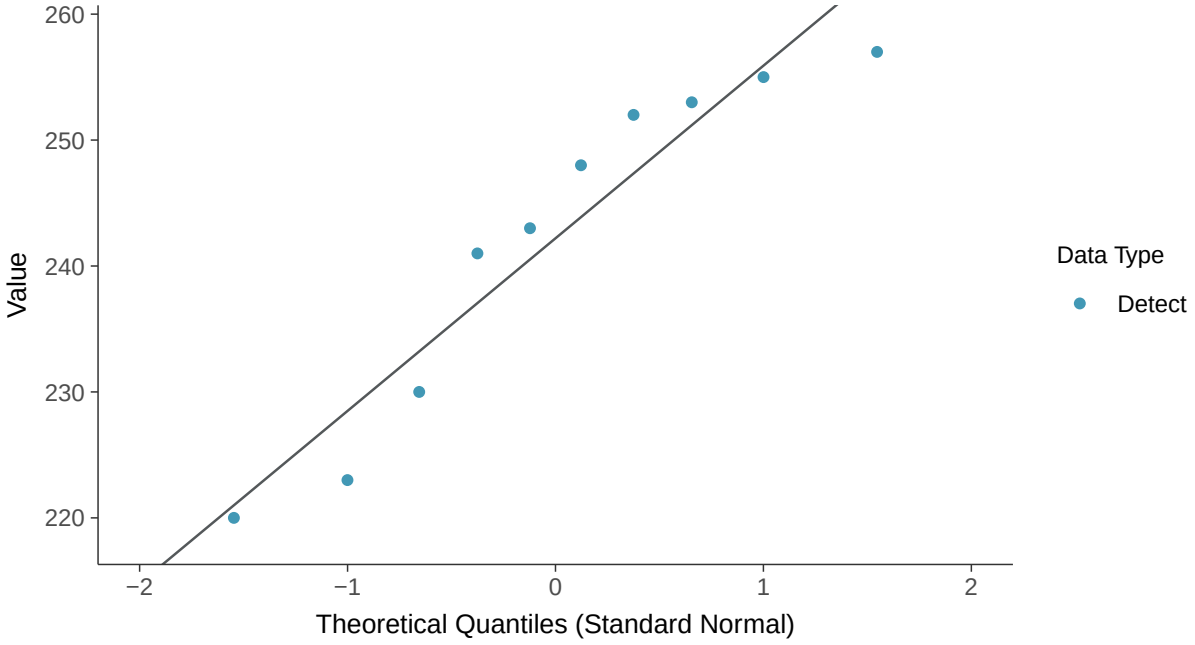
Boxplot by Season

Calcium, MW-3 (mg/l)



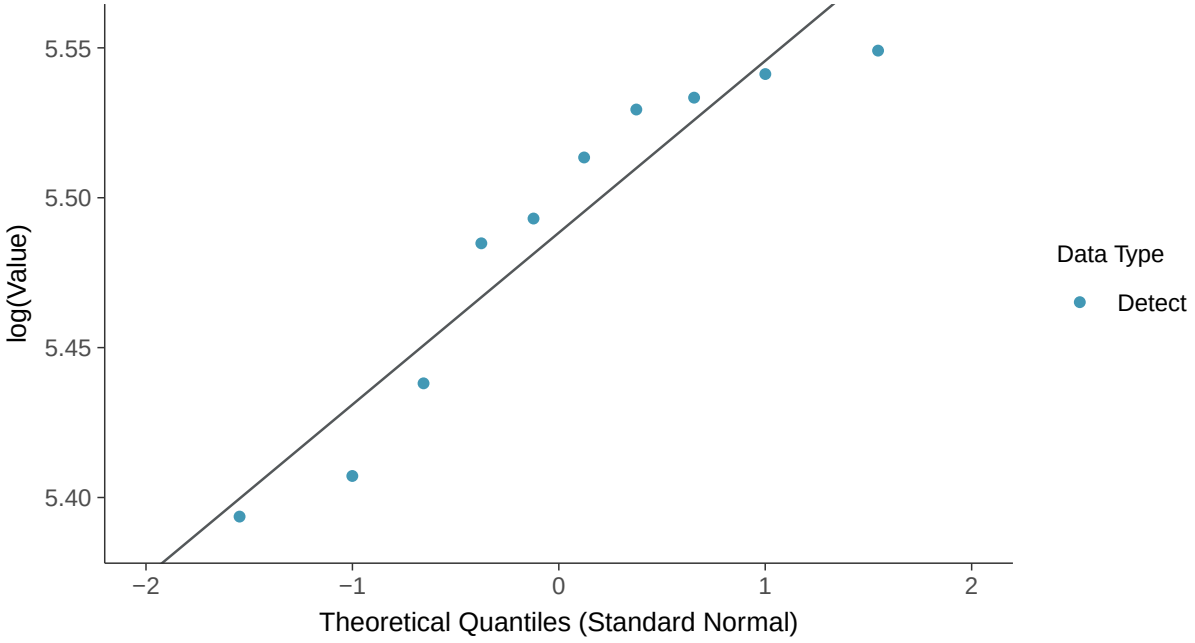
Normal Q-Q plot

Calcium, MW-3 (mg/l)



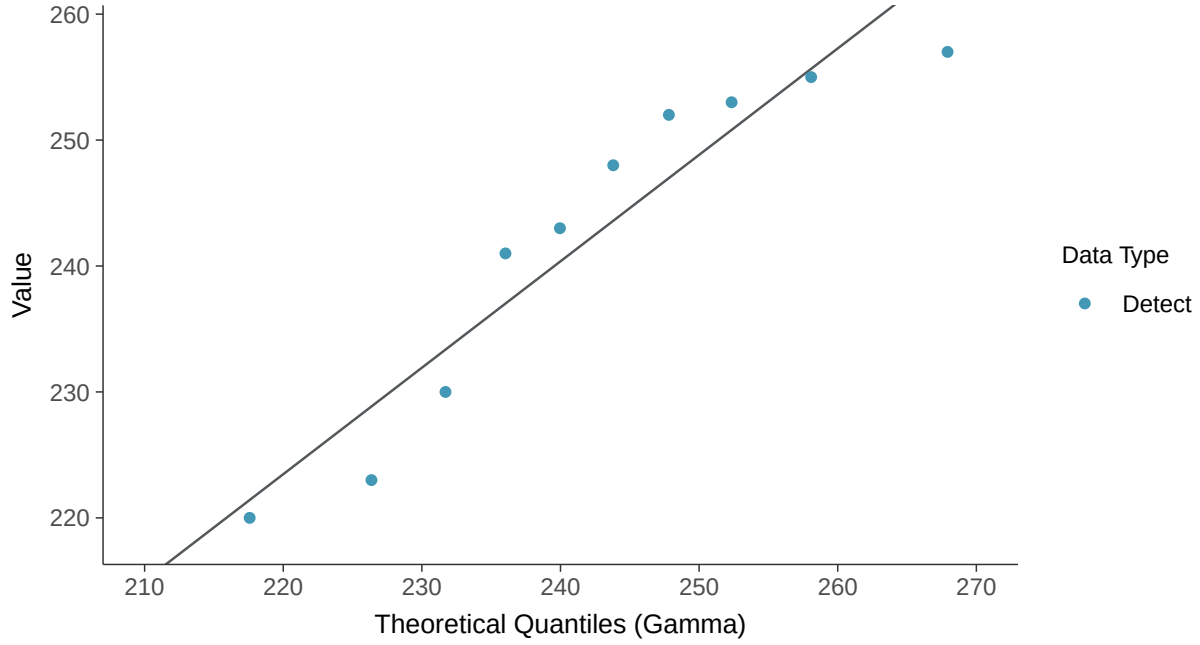
Lognormal Q-Q plot

Calcium, MW-3 (mg/l)



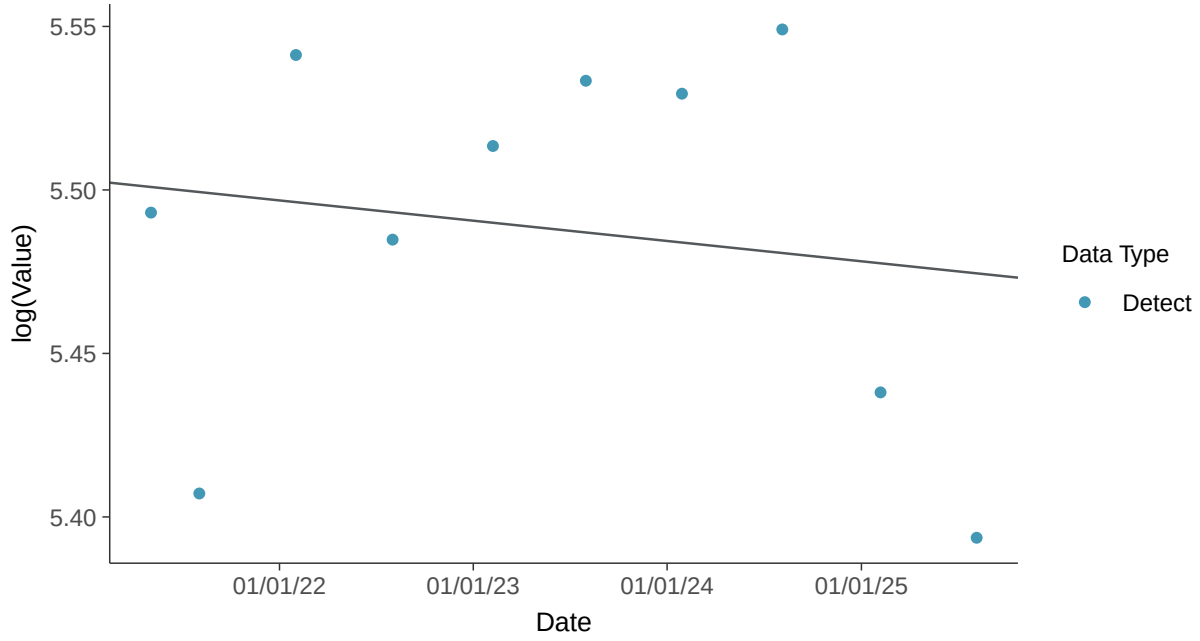
Gamma Q-Q plot

Calcium, MW-3 (mg/l)



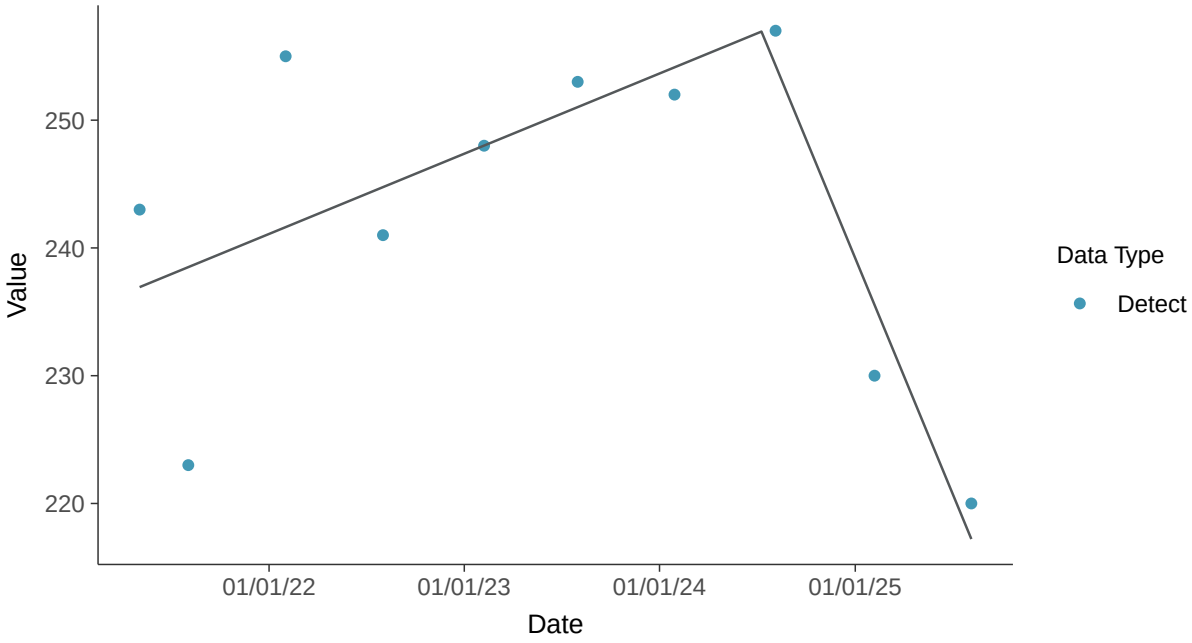
Trend Regression: Lognormal MLE

Calcium, MW-3 (mg/l)



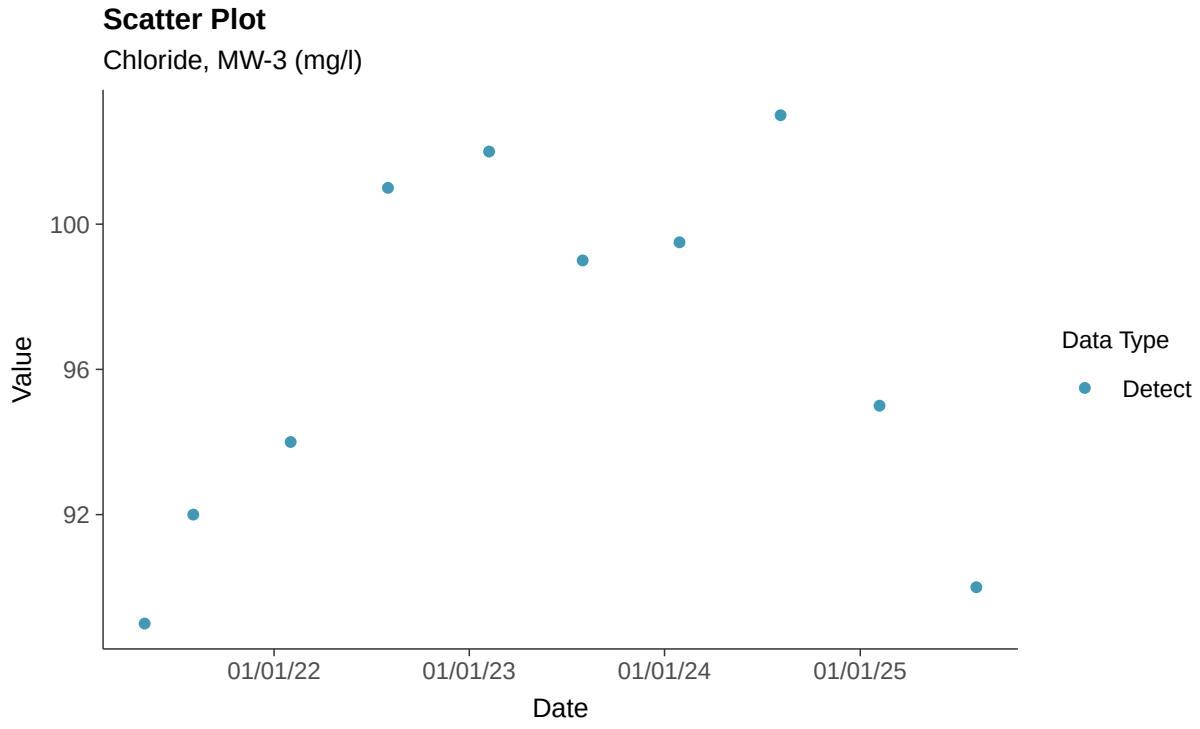
Trend Regression: Piecewise Linear-Linear

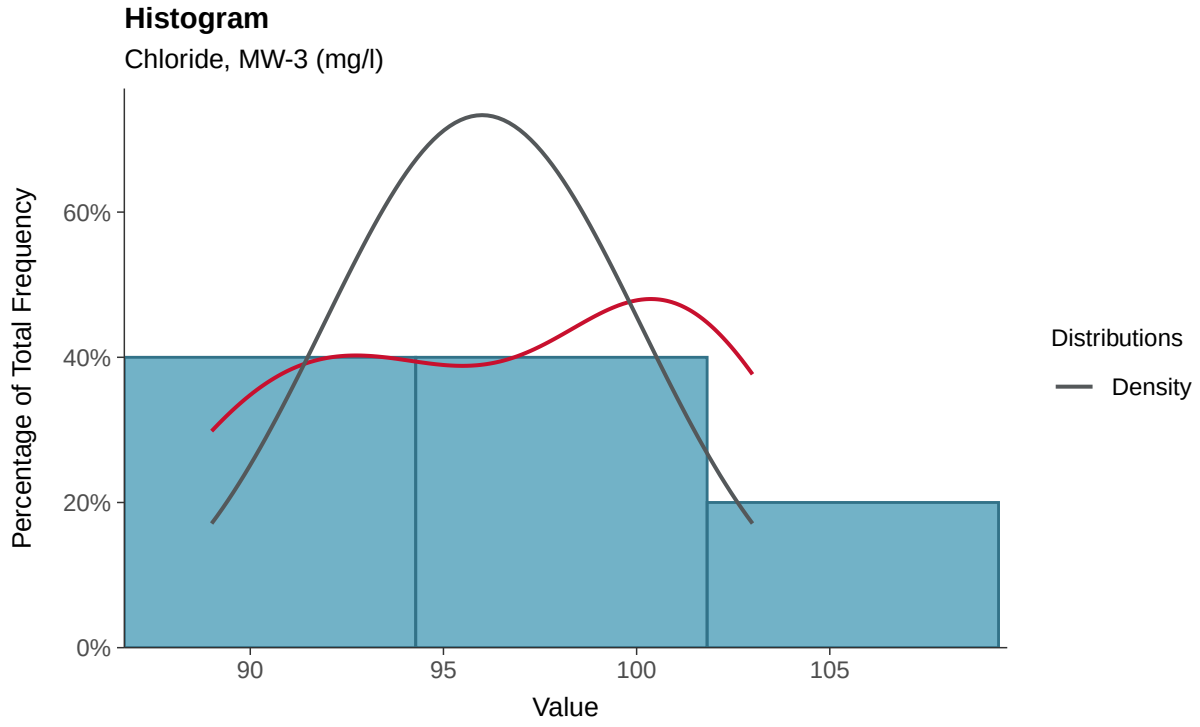
Calcium, MW-3 (mg/l)



Appendix III: Chloride, MW-3

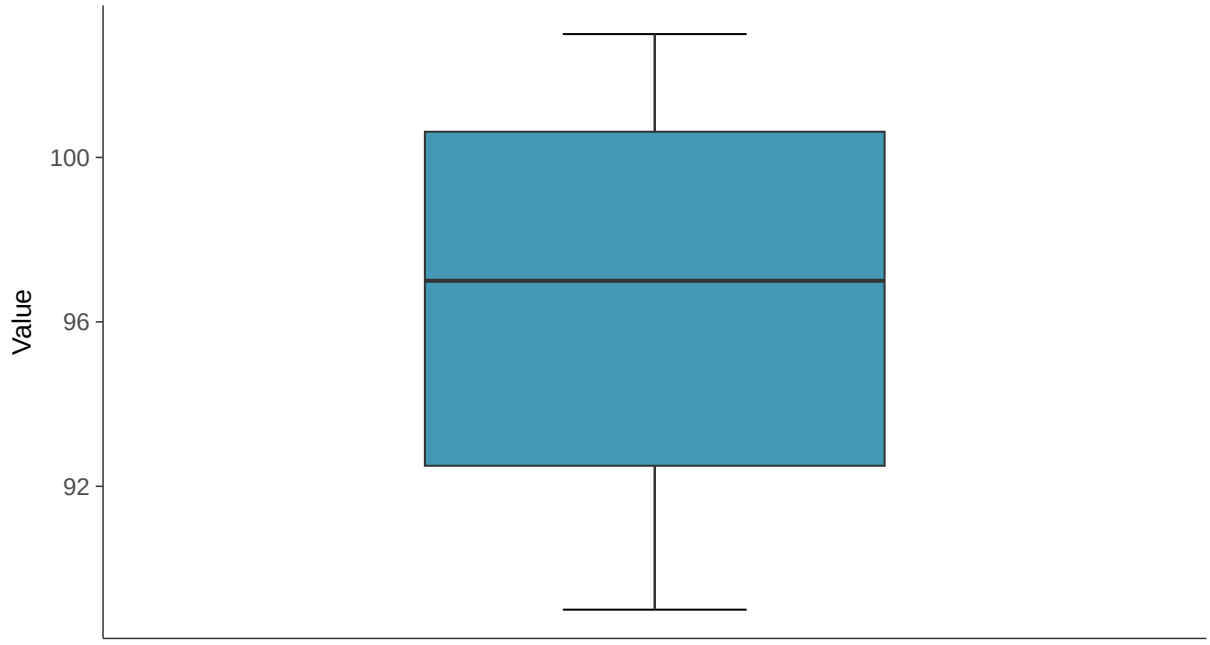
ID: 14_2_108





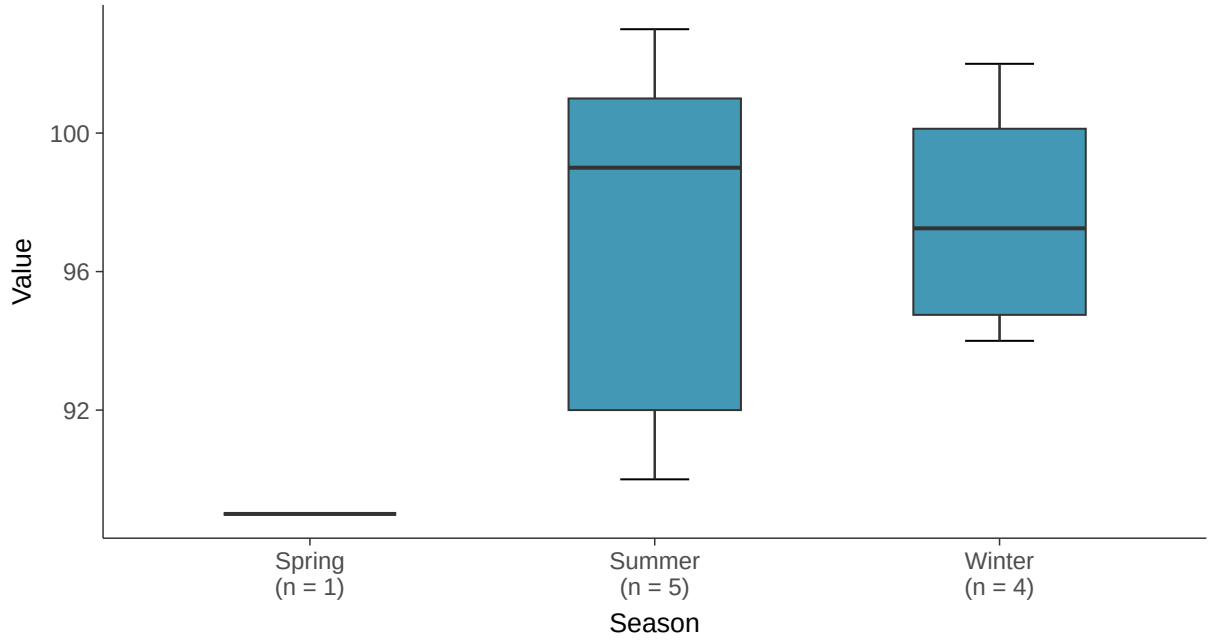
Boxplot

Chloride, MW-3 (mg/l)



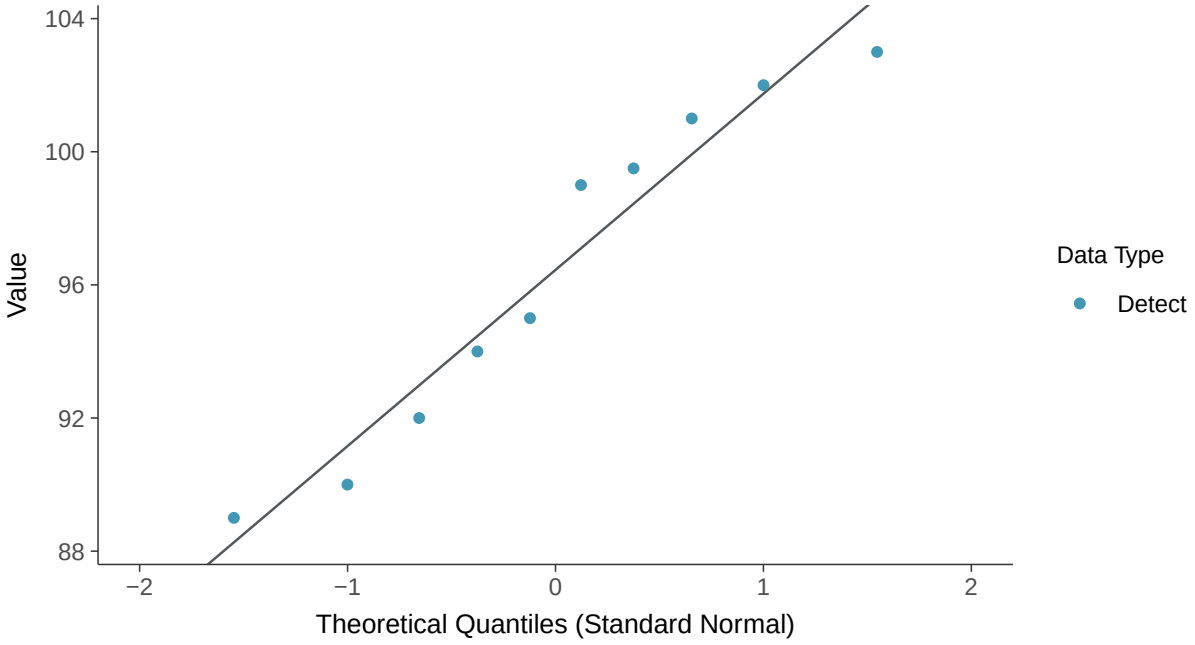
Boxplot by Season

Chloride, MW-3 (mg/l)



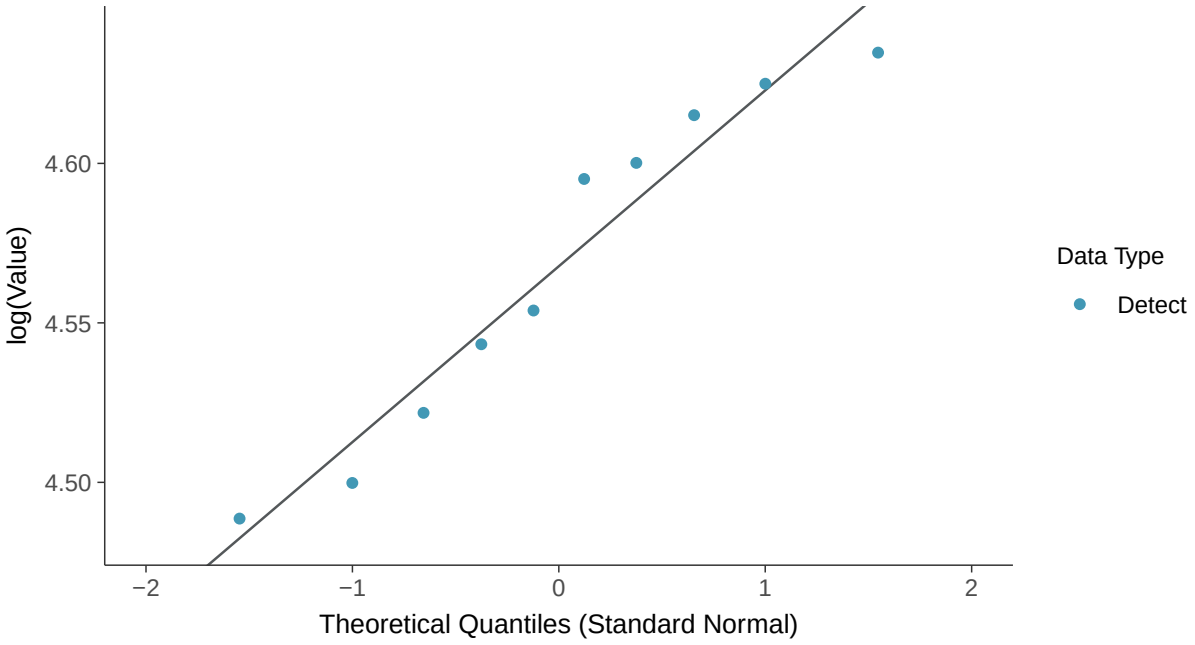
Normal Q-Q plot

Chloride, MW-3 (mg/l)



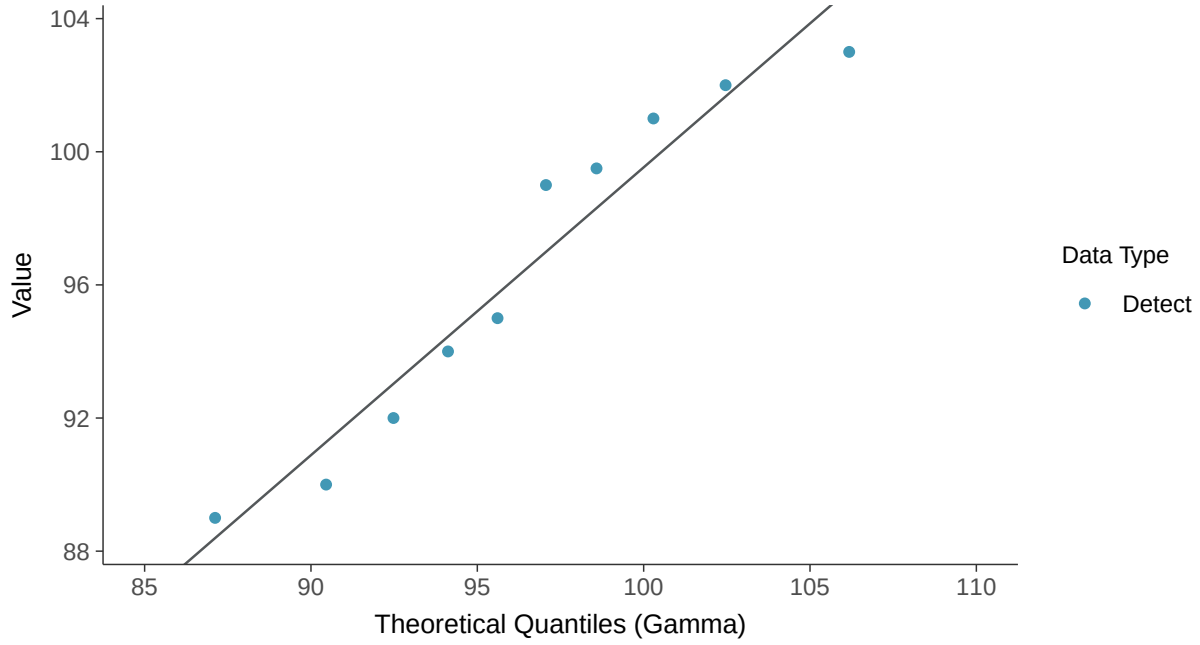
Lognormal Q-Q plot

Chloride, MW-3 (mg/l)



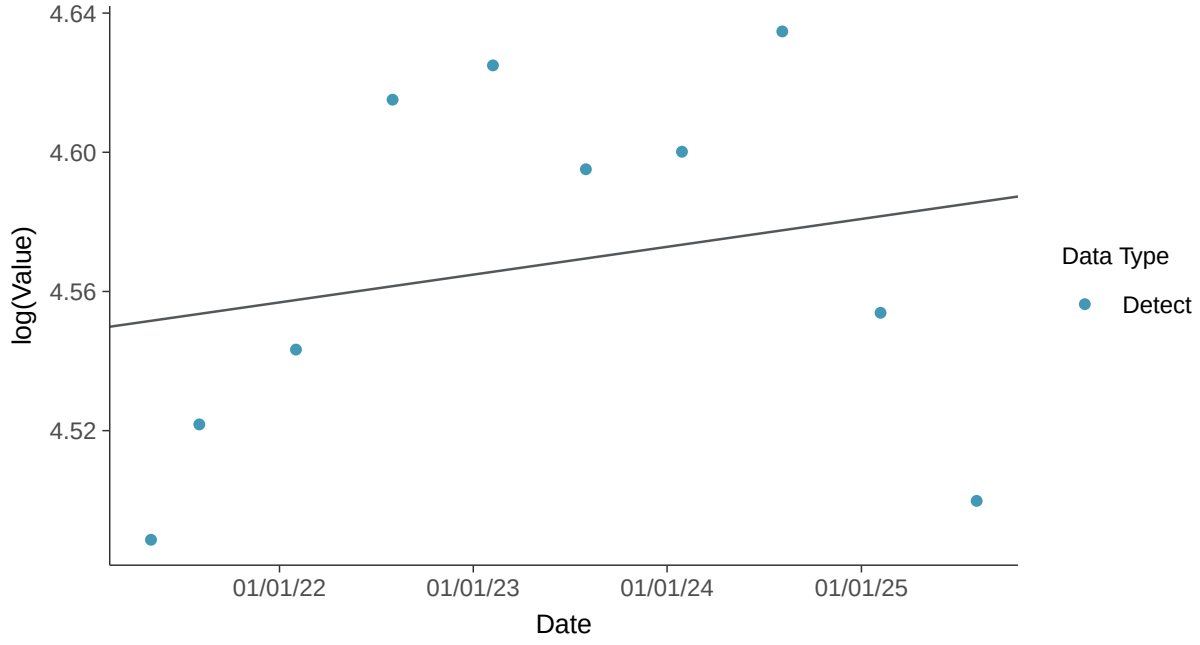
Gamma Q-Q plot

Chloride, MW-3 (mg/l)



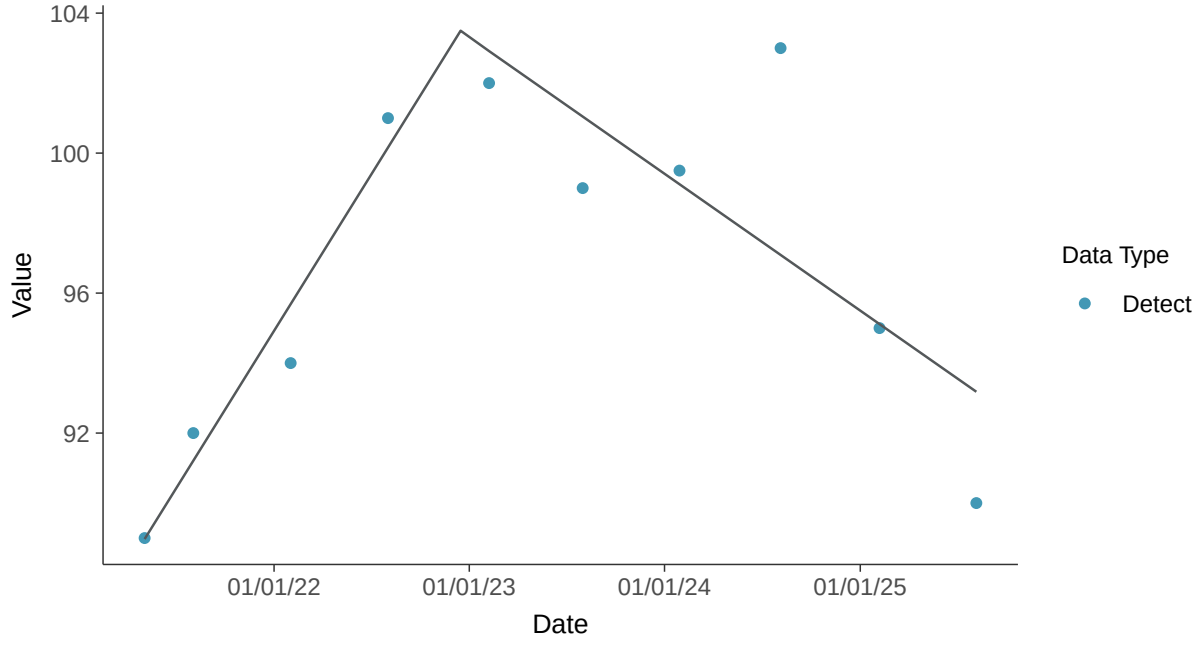
Trend Regression: Lognormal MLE

Chloride, MW-3 (mg/l)



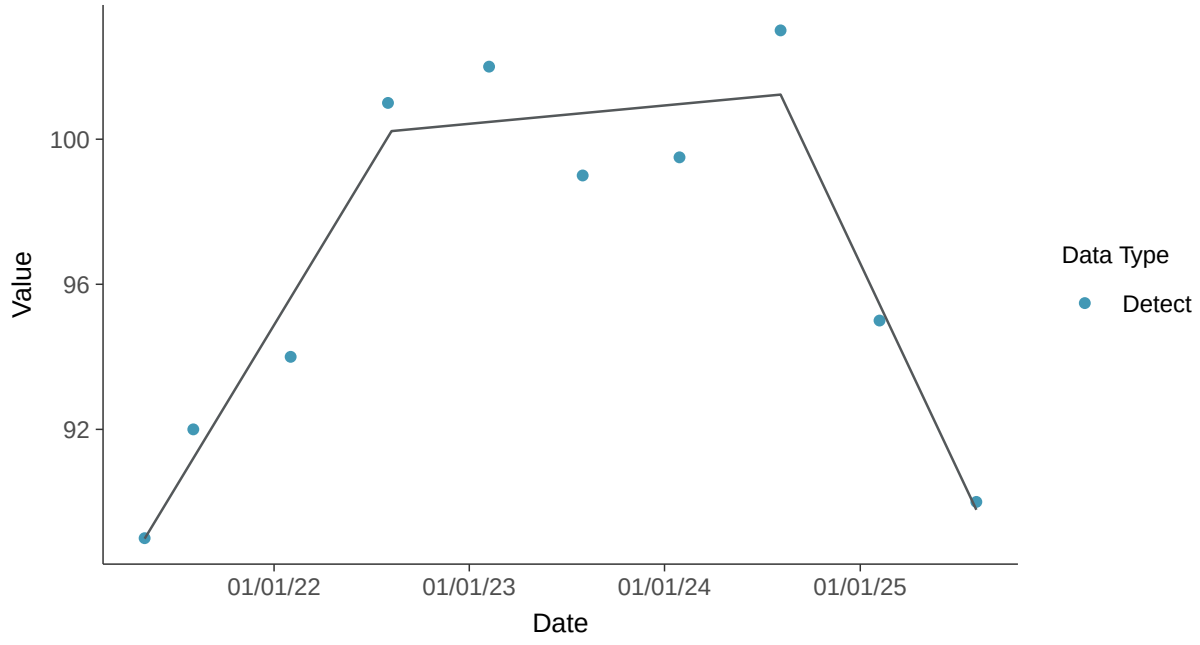
Trend Regression: Piecewise Linear-Linear

Chloride, MW-3 (mg/l)



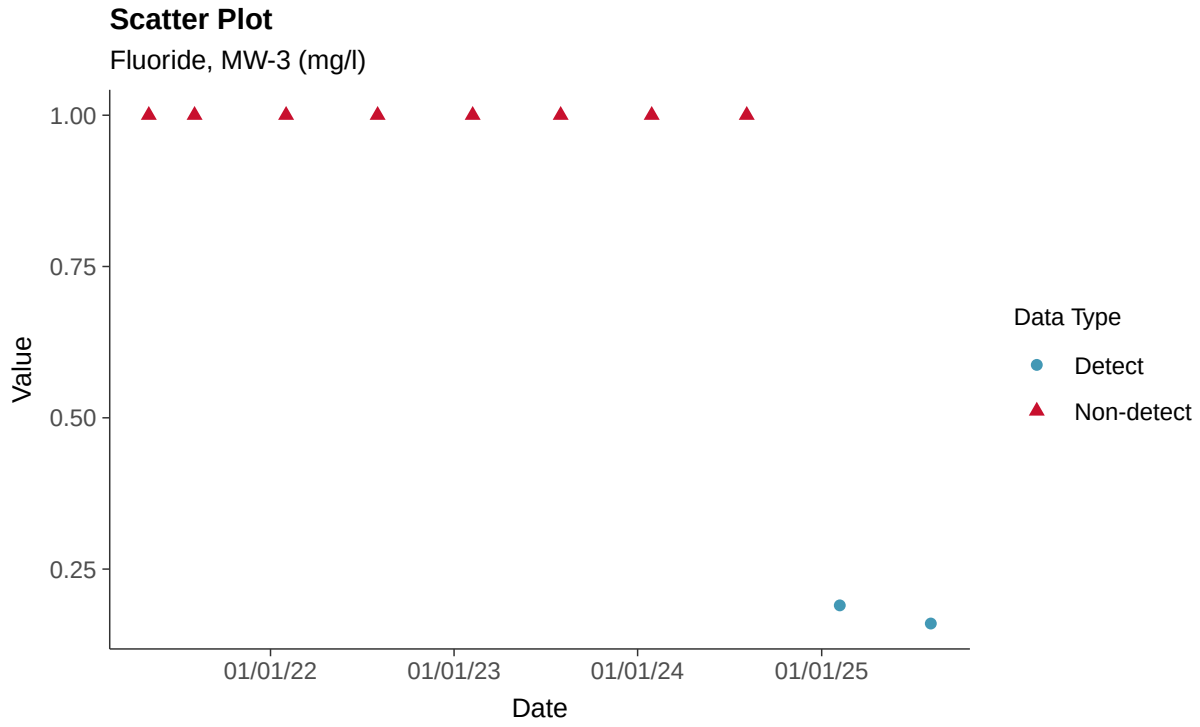
Trend Regression: Piecewise Linear-Linear-Linear

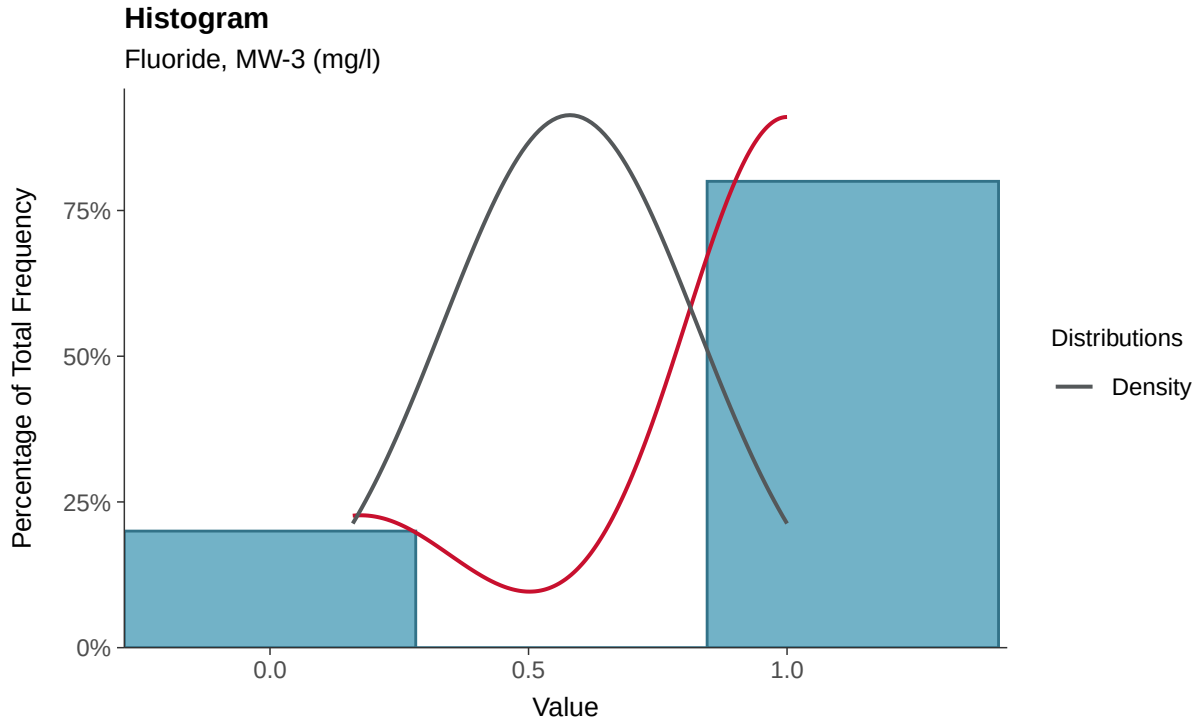
Chloride, MW-3 (mg/l)



Appendix III: Fluoride, MW-3

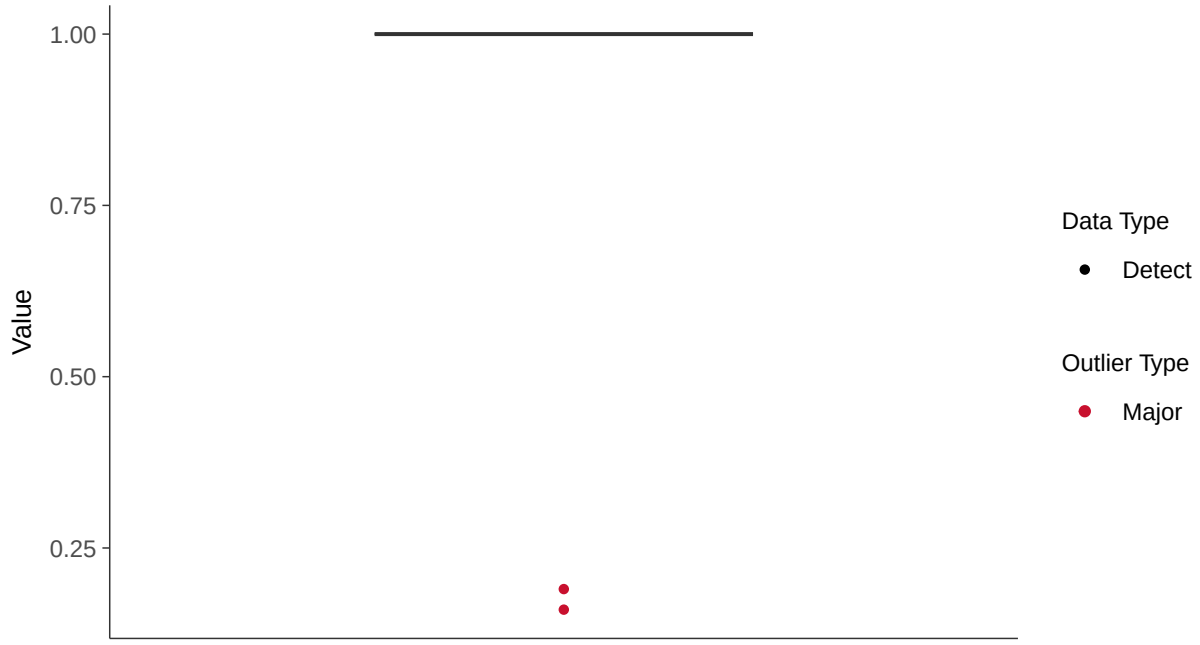
ID: 14_2_112





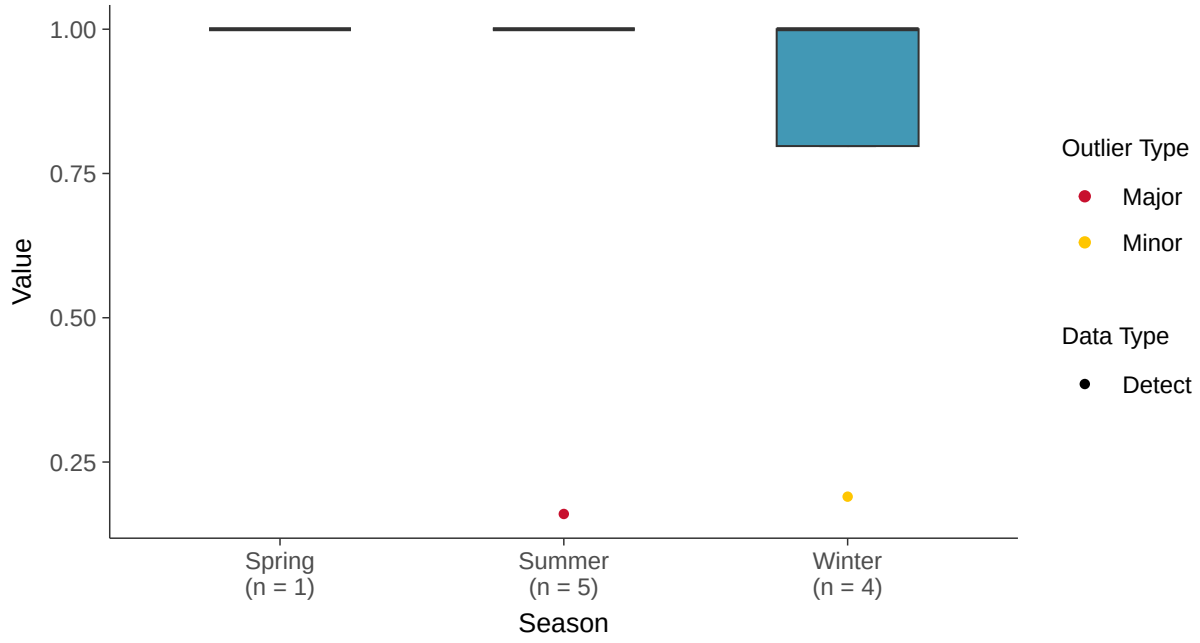
Boxplot

Fluoride, MW-3 (mg/l)



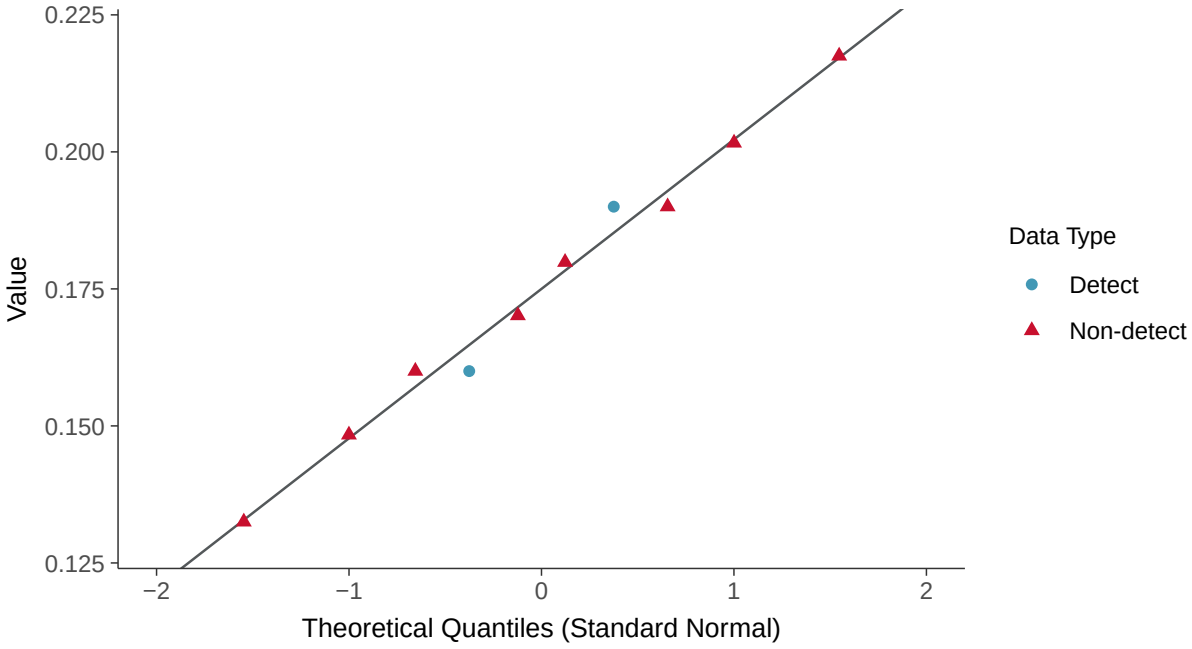
Boxplot by Season

Fluoride, MW-3 (mg/l)



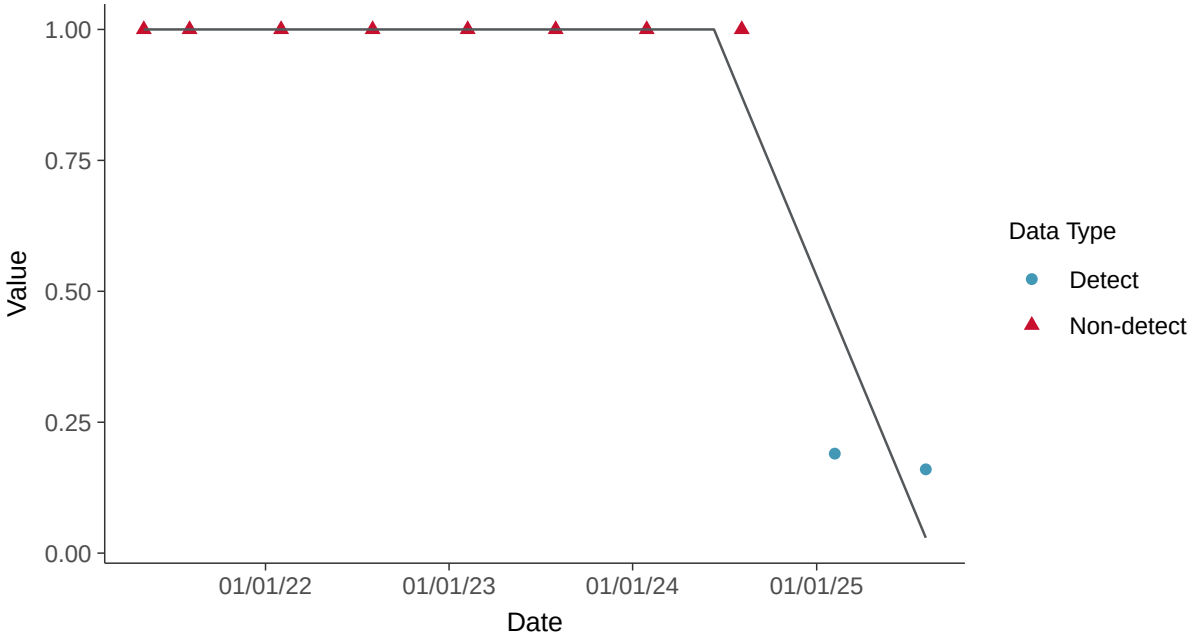
Normal Q-Q plot using ROS Imputed Estimates

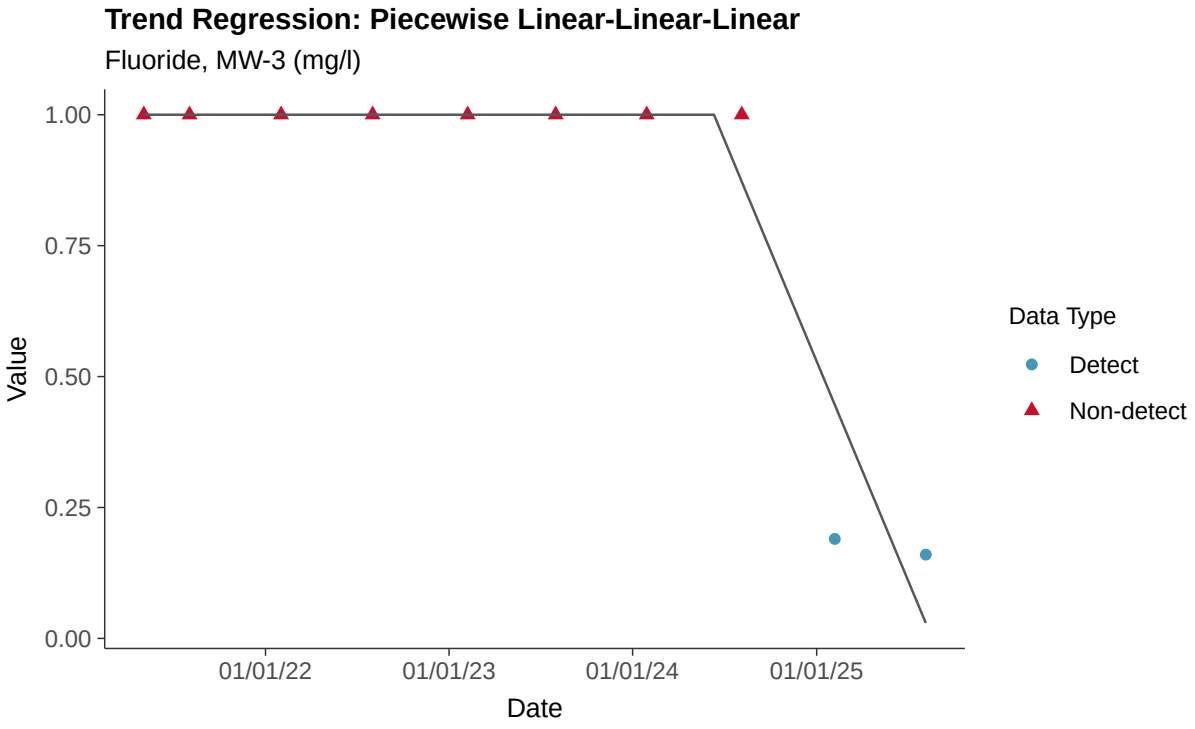
Fluoride, MW-3 (mg/l)



Trend Regression: Piecewise Linear-Linear

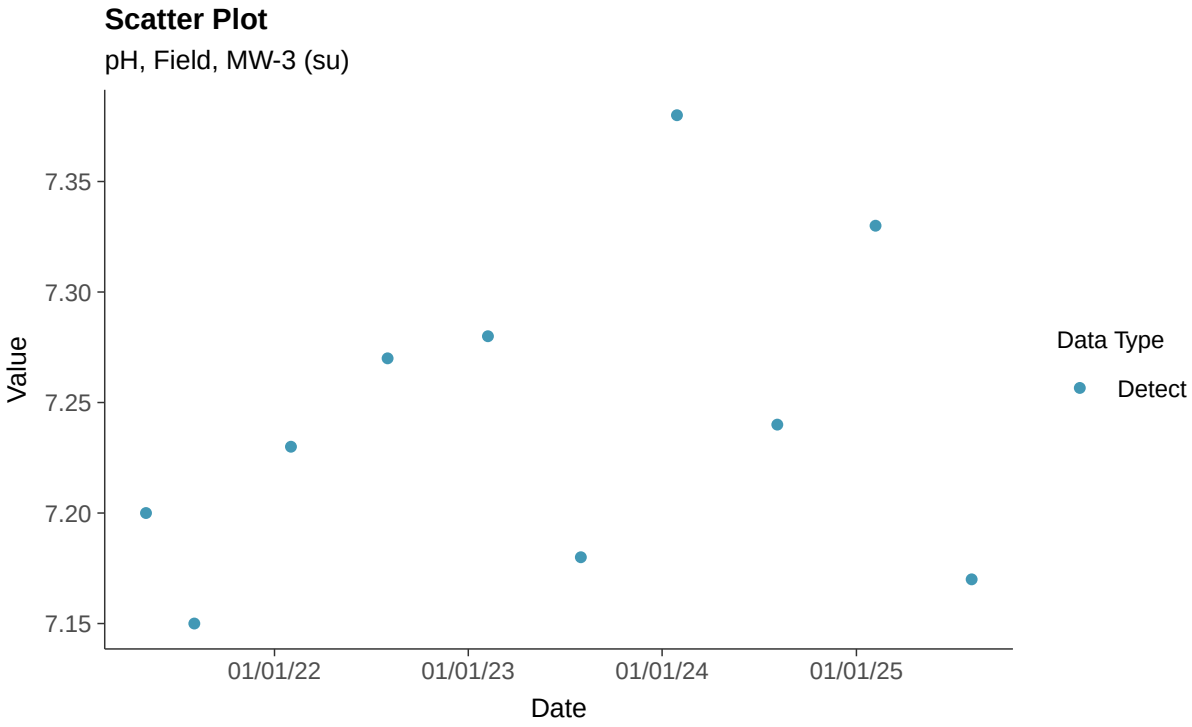
Fluoride, MW-3 (mg/l)

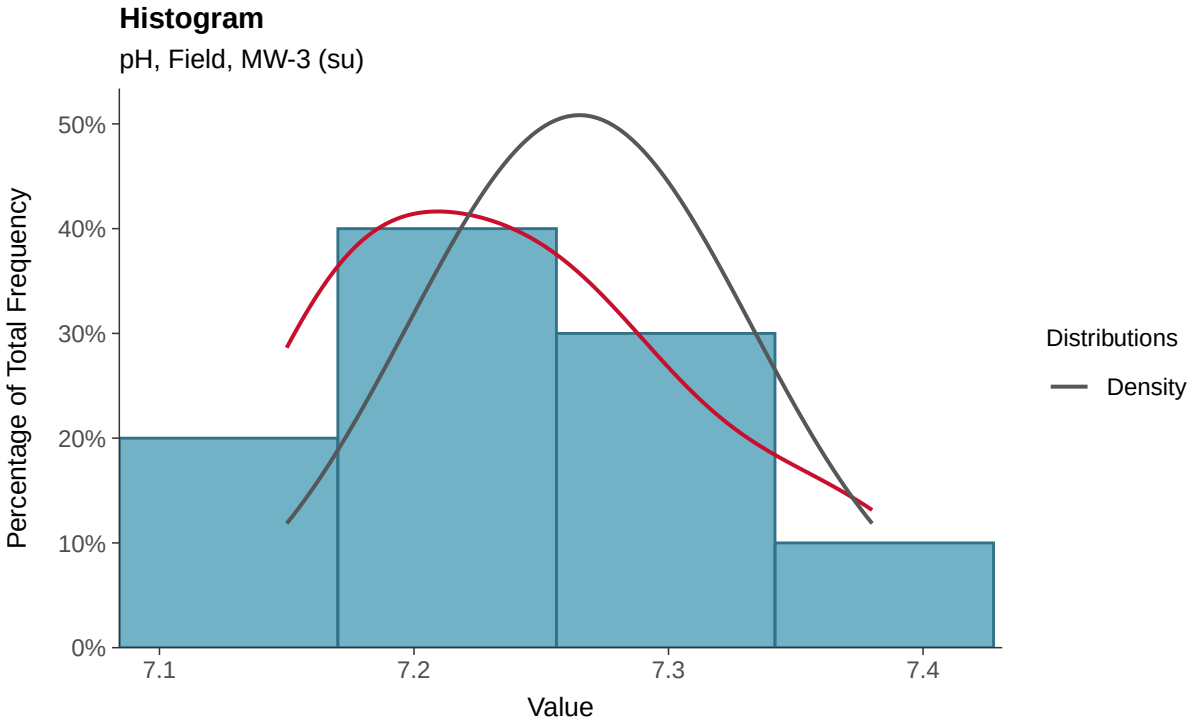



Trend Regression: Piecewise Linear-Linear-Linear
Fluoride, MW-3 (mg/l)
Value
1.00
0.75
0.50
0.25
0.00
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Appendix III: pH, Field, MW-3

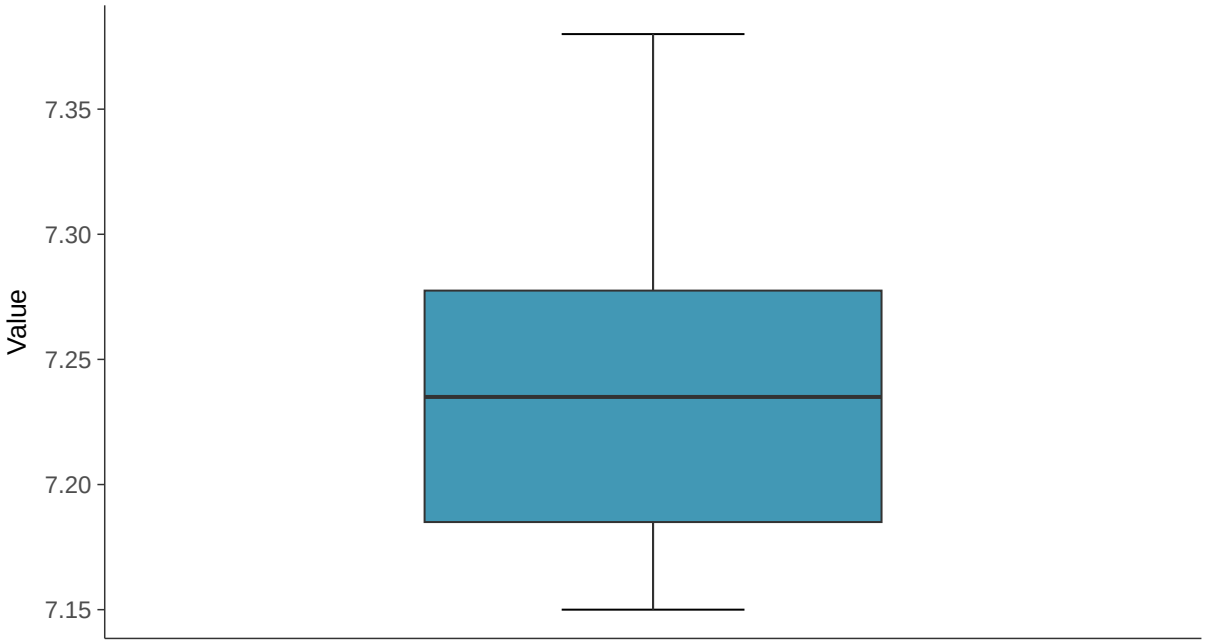
ID: 14_2_120





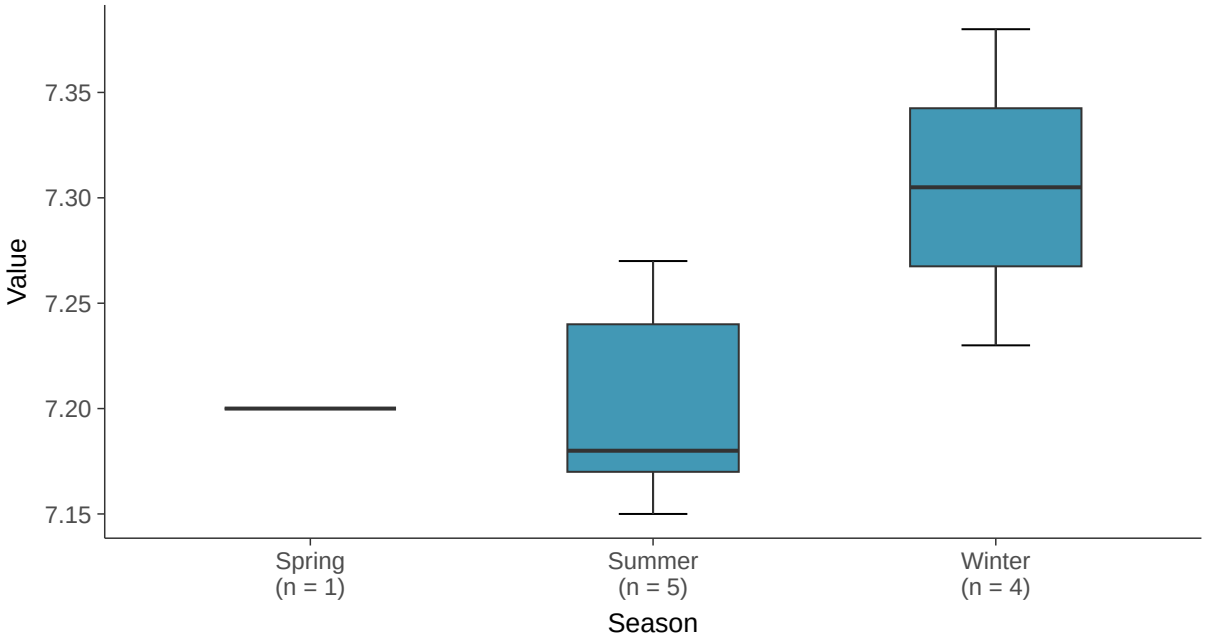
Boxplot

pH, Field, MW-3 (su)



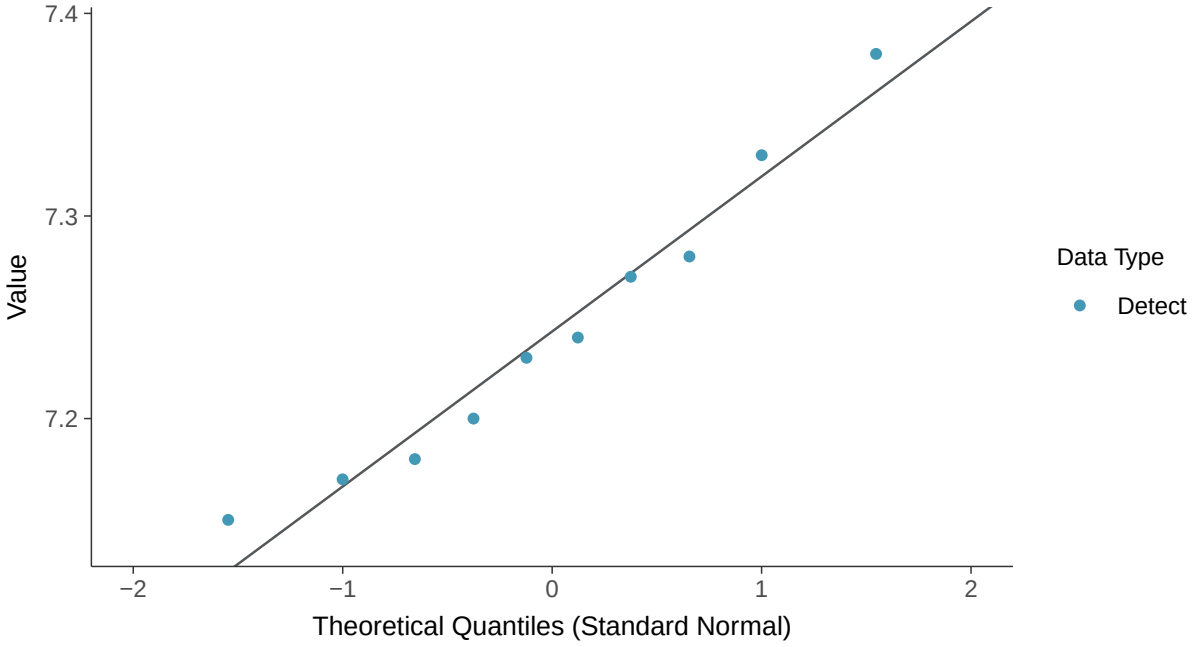
Boxplot by Season

pH, Field, MW-3 (su)



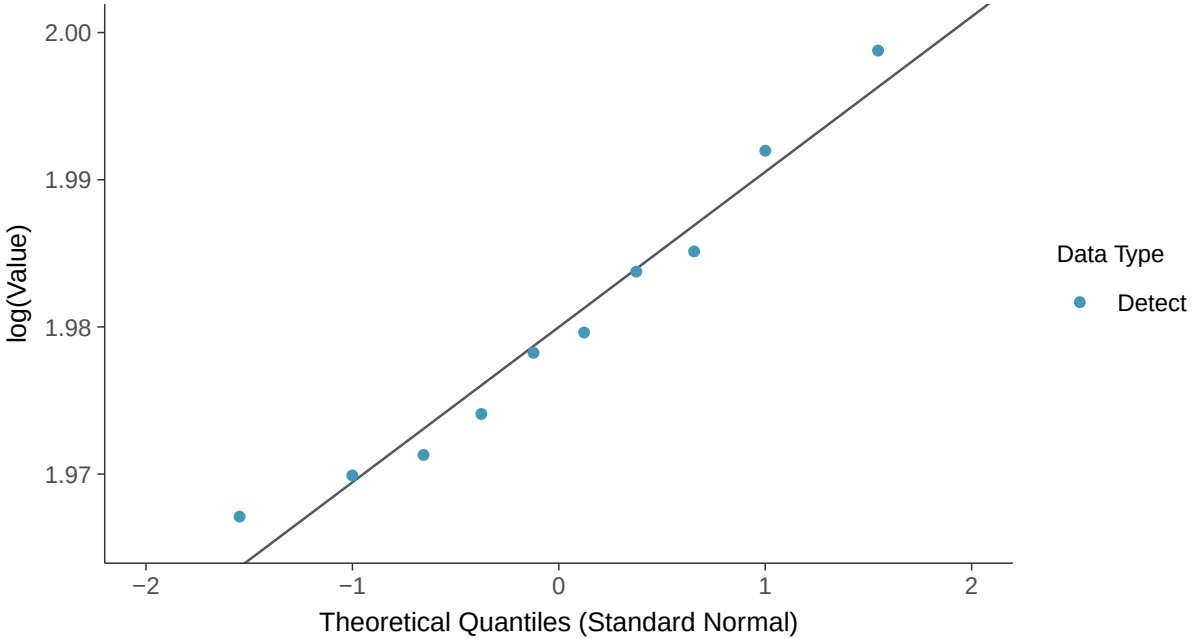
Normal Q-Q plot

pH, Field, MW-3 (su)



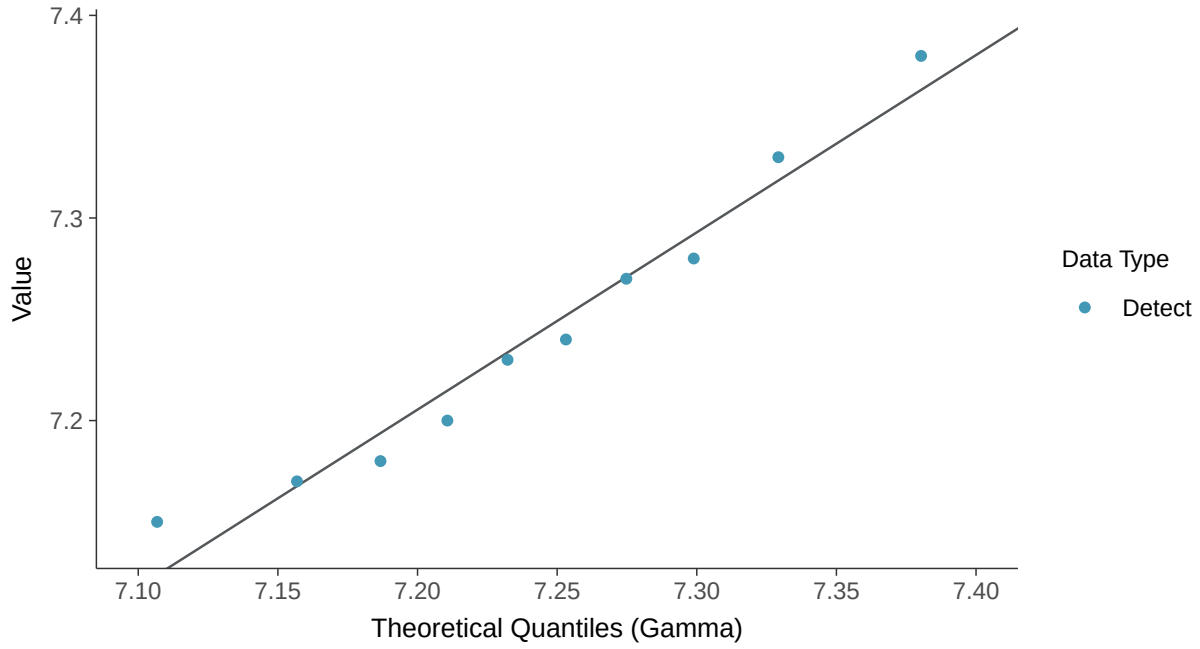
Lognormal Q-Q plot

pH, Field, MW-3 (su)



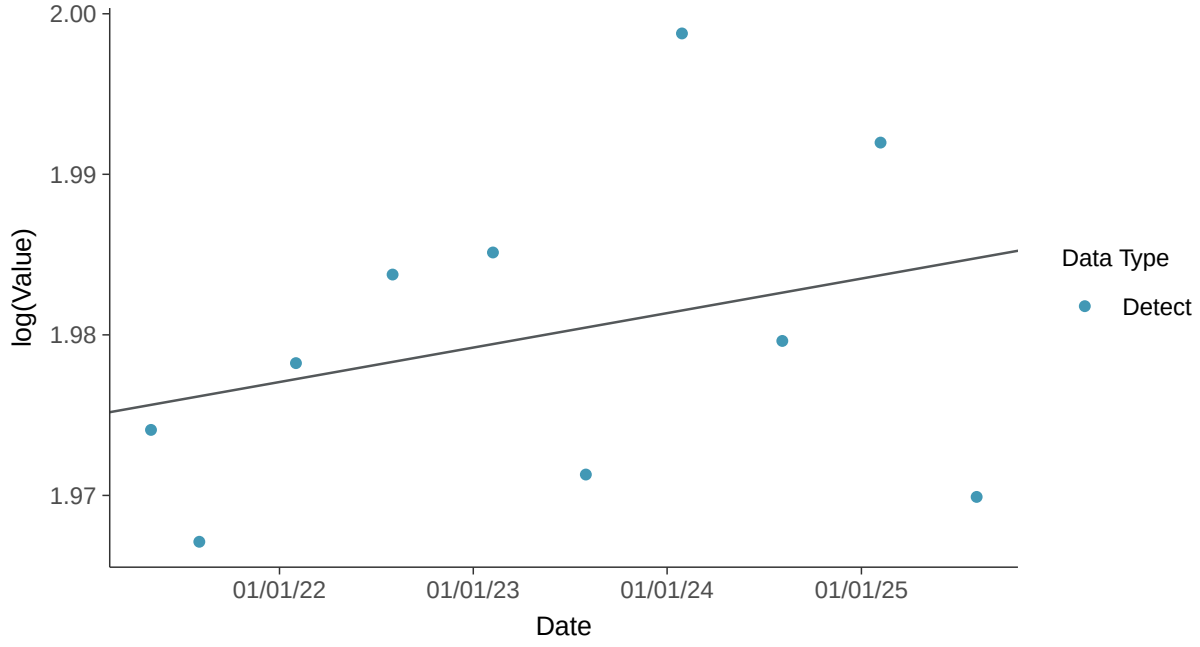
Gamma Q-Q plot

pH, Field, MW-3 (su)



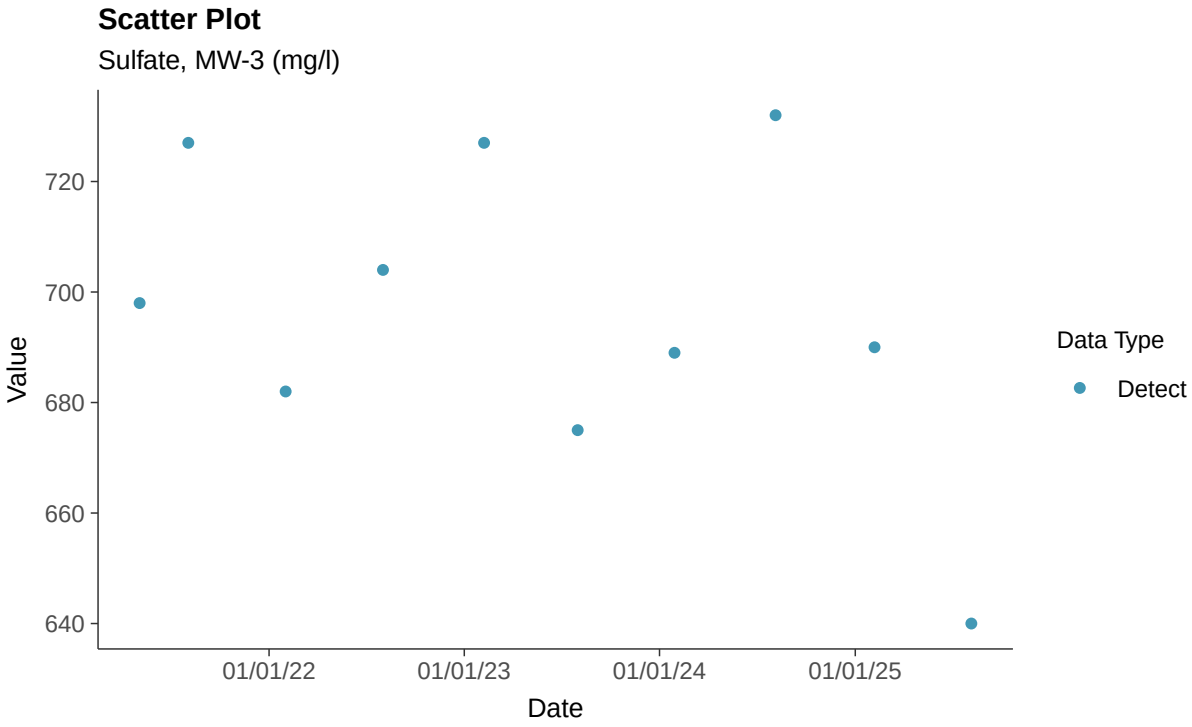
Trend Regression: Lognormal MLE

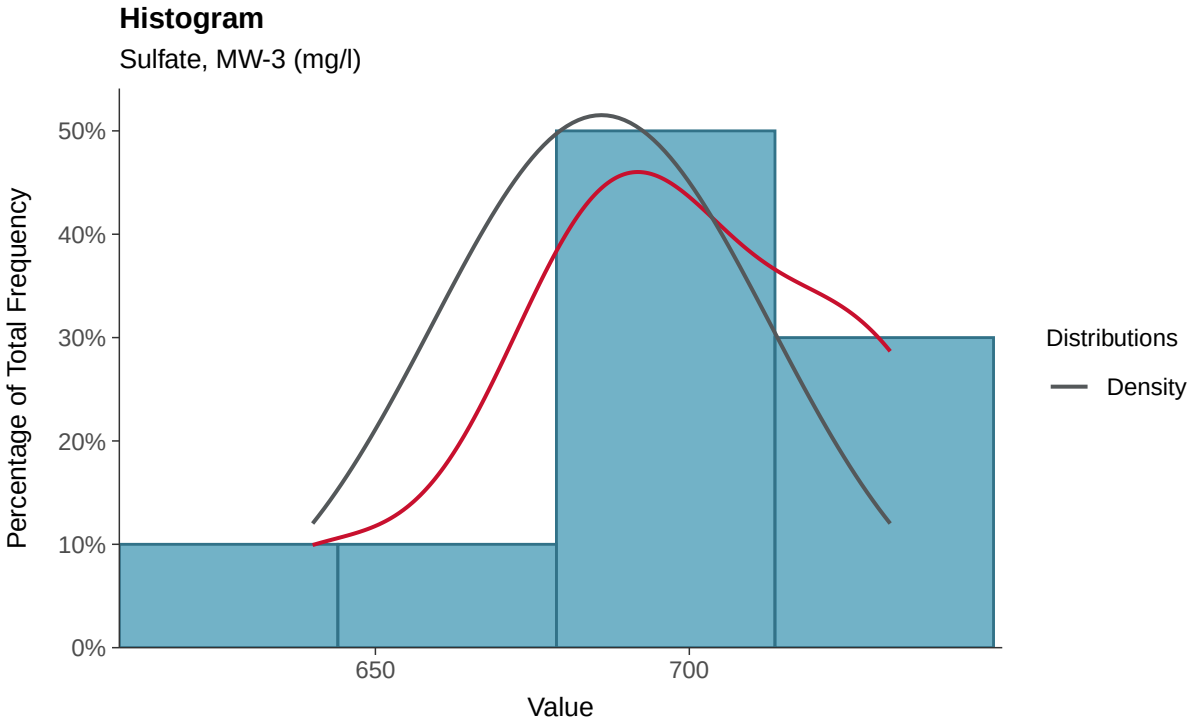
pH, Field, MW-3 (su)



Appendix III: Sulfate, MW-3

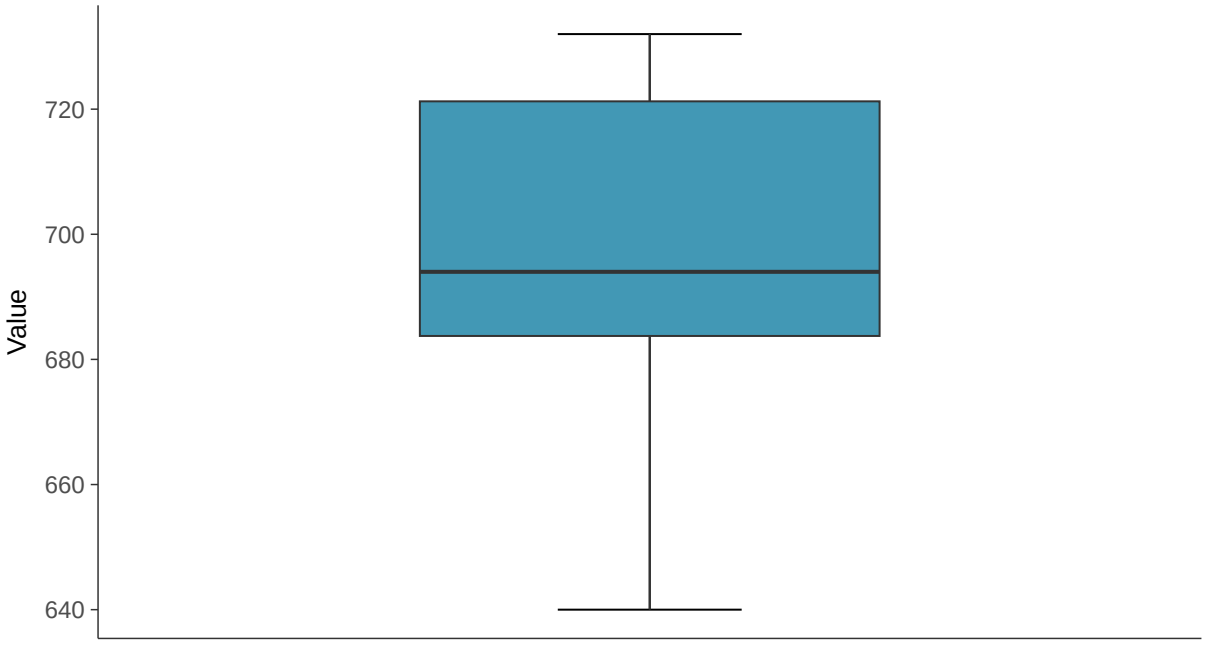
ID: 14_2_124





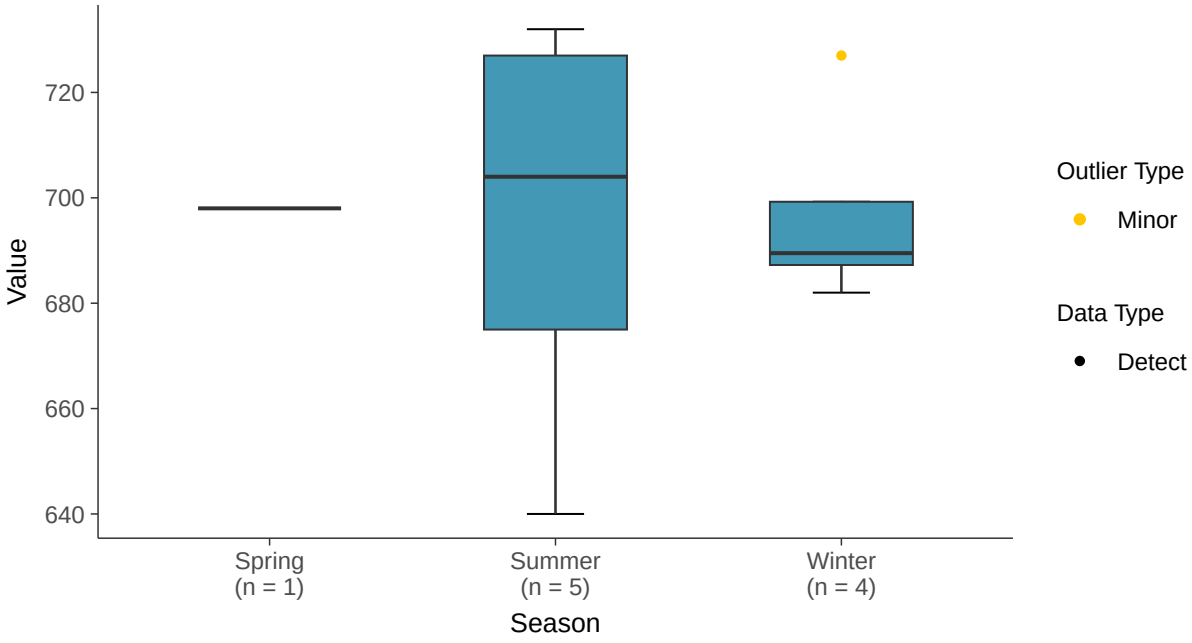
Boxplot

Sulfate, MW-3 (mg/l)



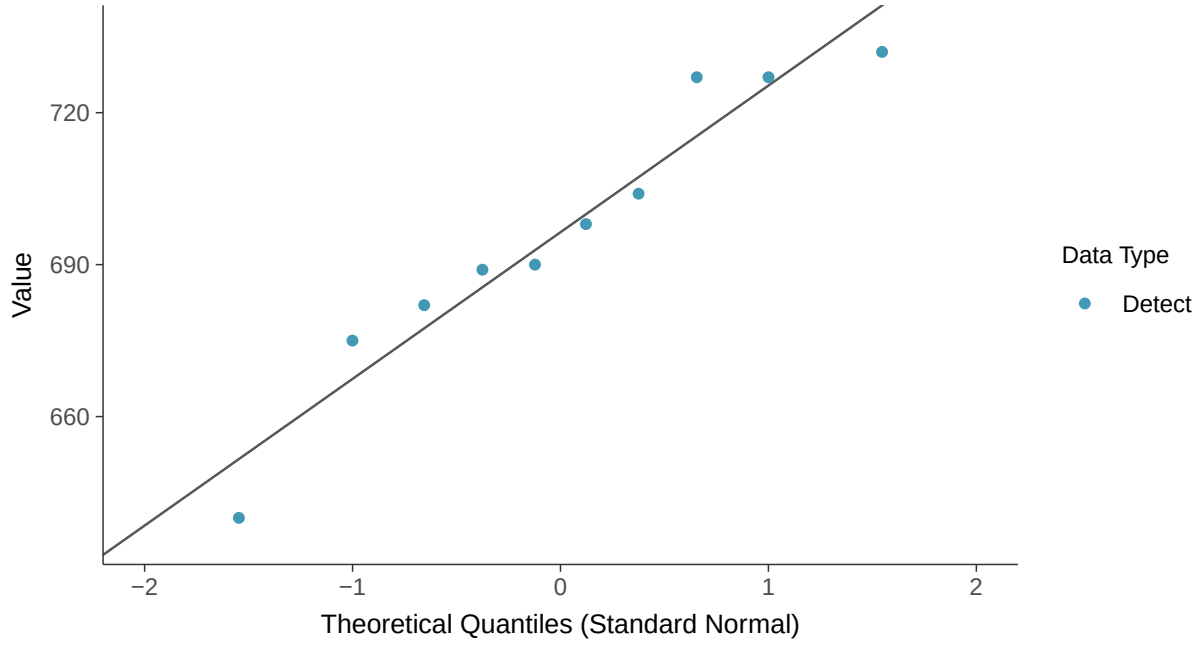
Boxplot by Season

Sulfate, MW-3 (mg/l)



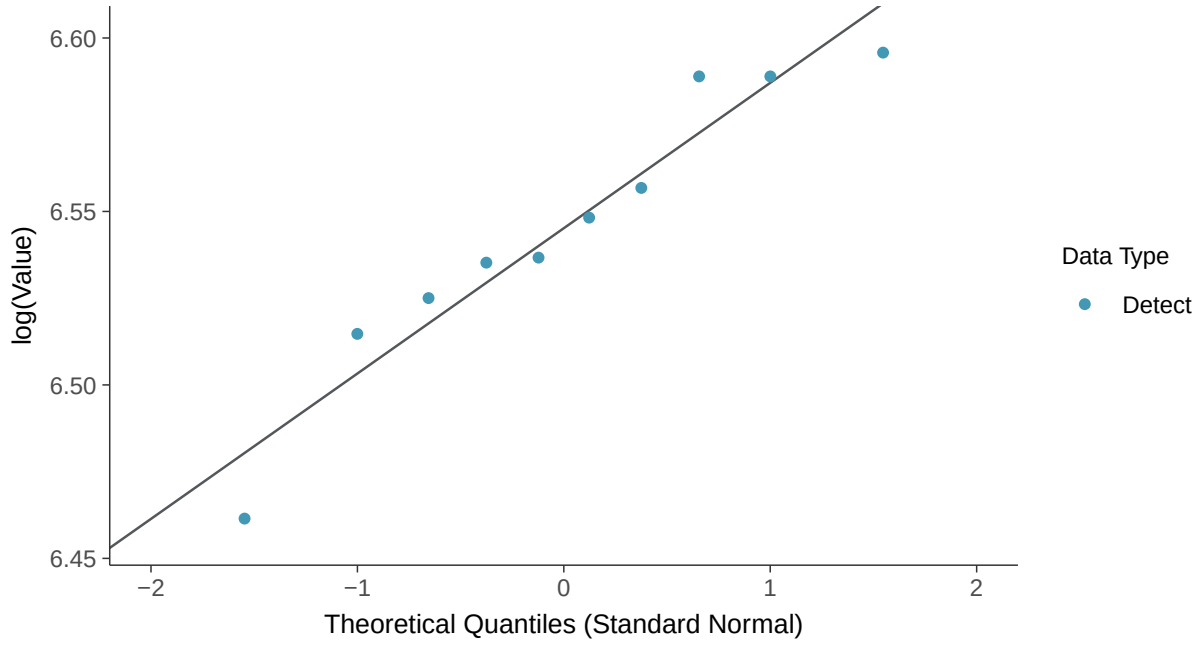
Normal Q-Q plot

Sulfate, MW-3 (mg/l)



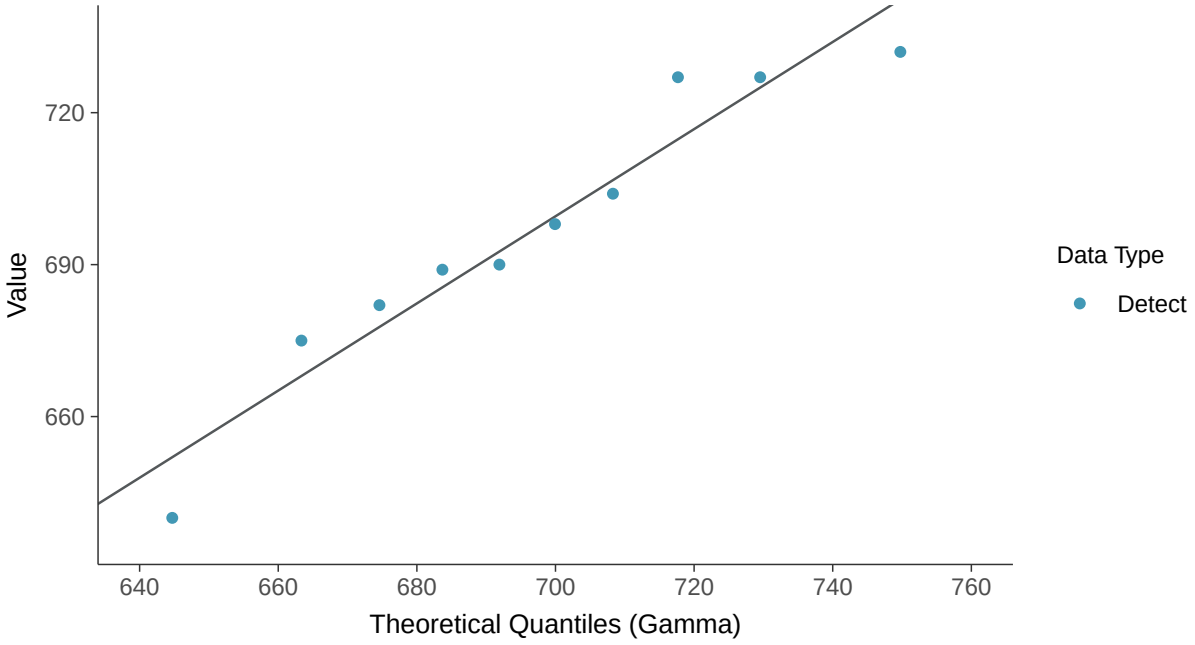
Lognormal Q-Q plot

Sulfate, MW-3 (mg/l)



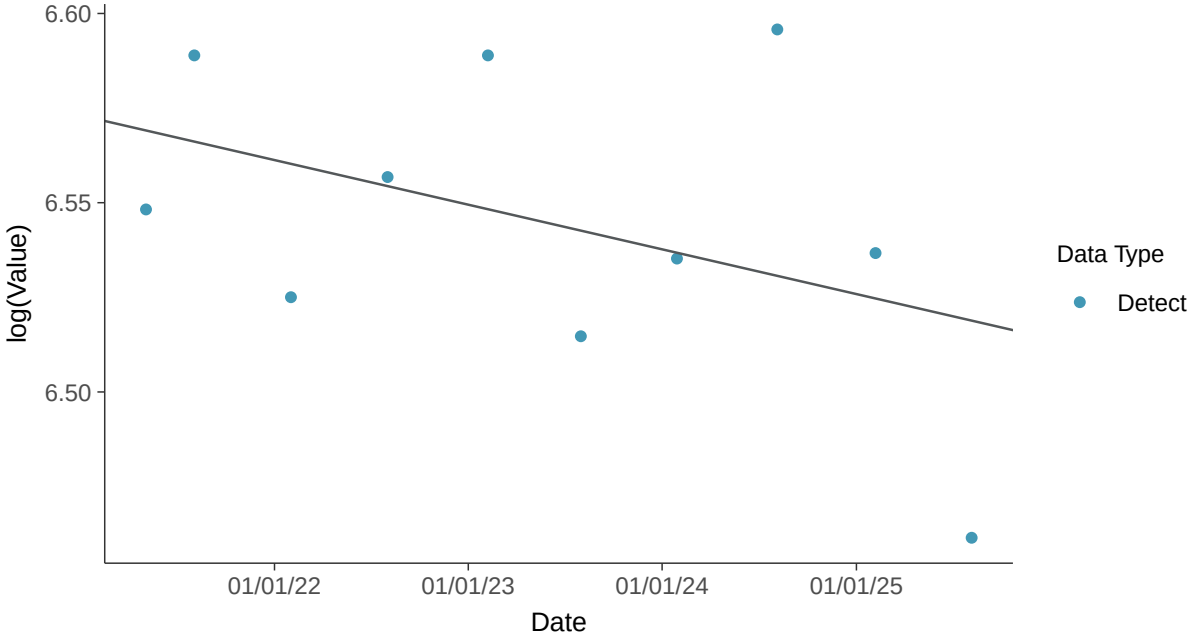
Gamma Q-Q plot

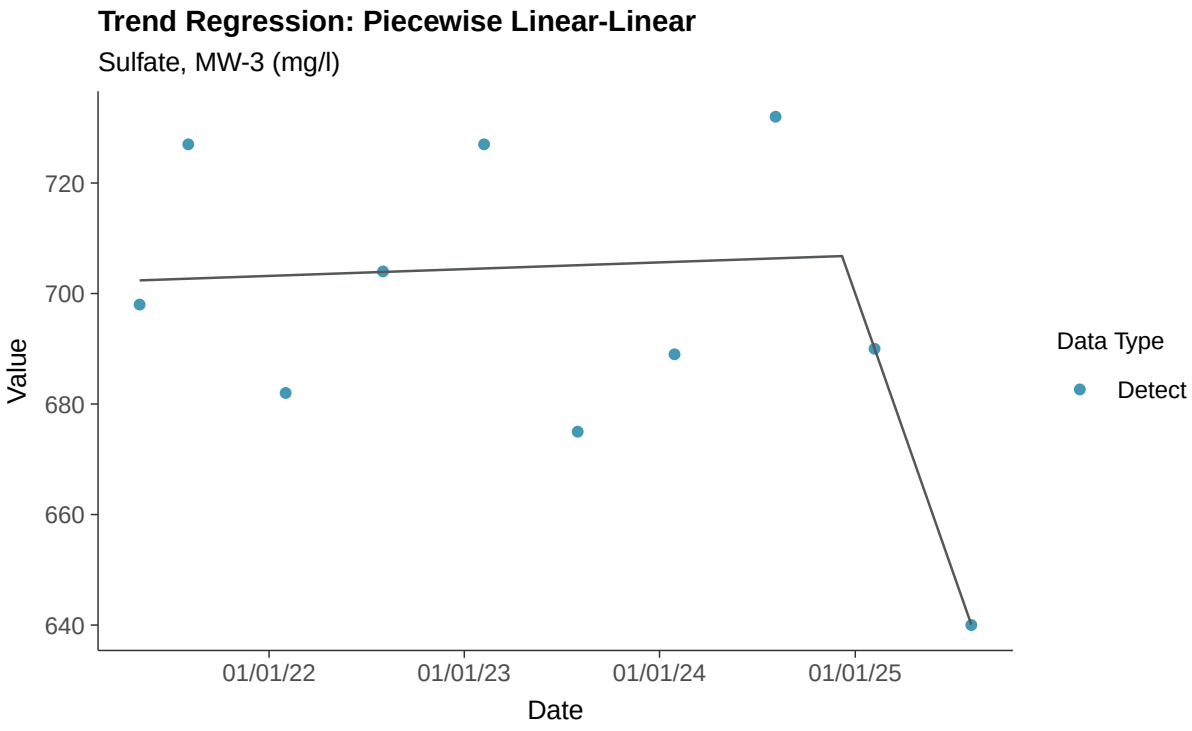
Sulfate, MW-3 (mg/l)



Trend Regression: Lognormal MLE

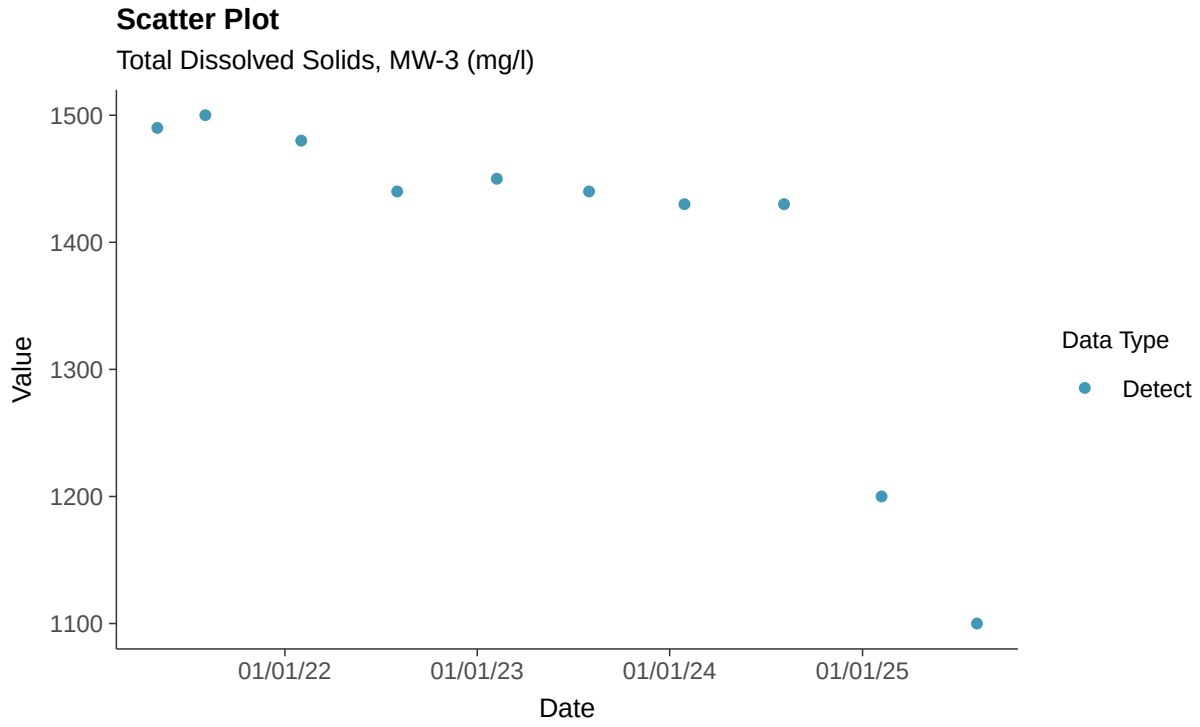
Sulfate, MW-3 (mg/l)

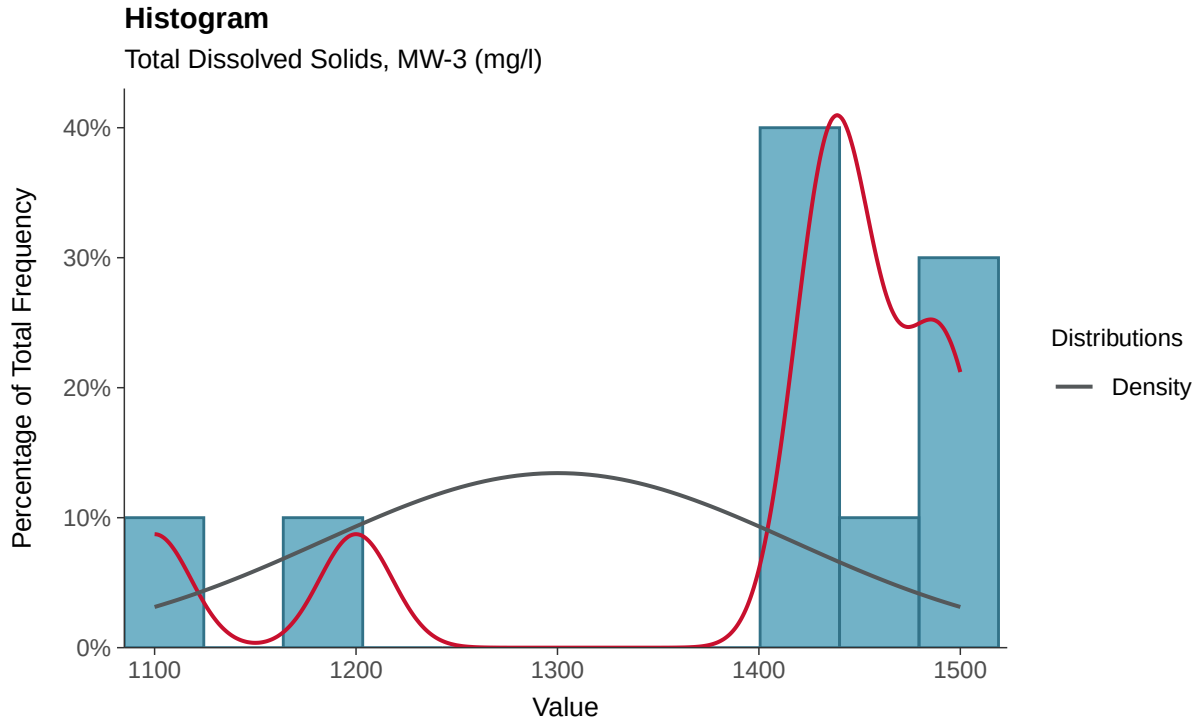



Trend Regression: Piecewise Linear-Linear
Sulfate, MW-3 (mg/l)
720
700
680
660
640
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect

Appendix III: Total Dissolved Solids, MW-3

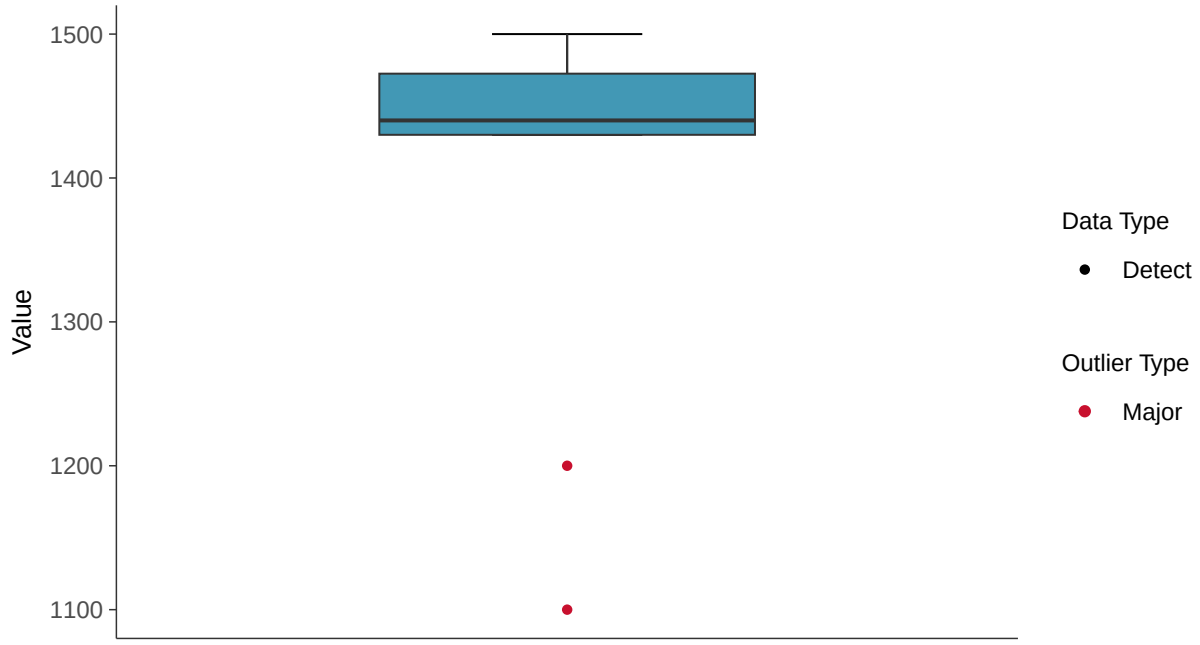
ID: 14_2_126





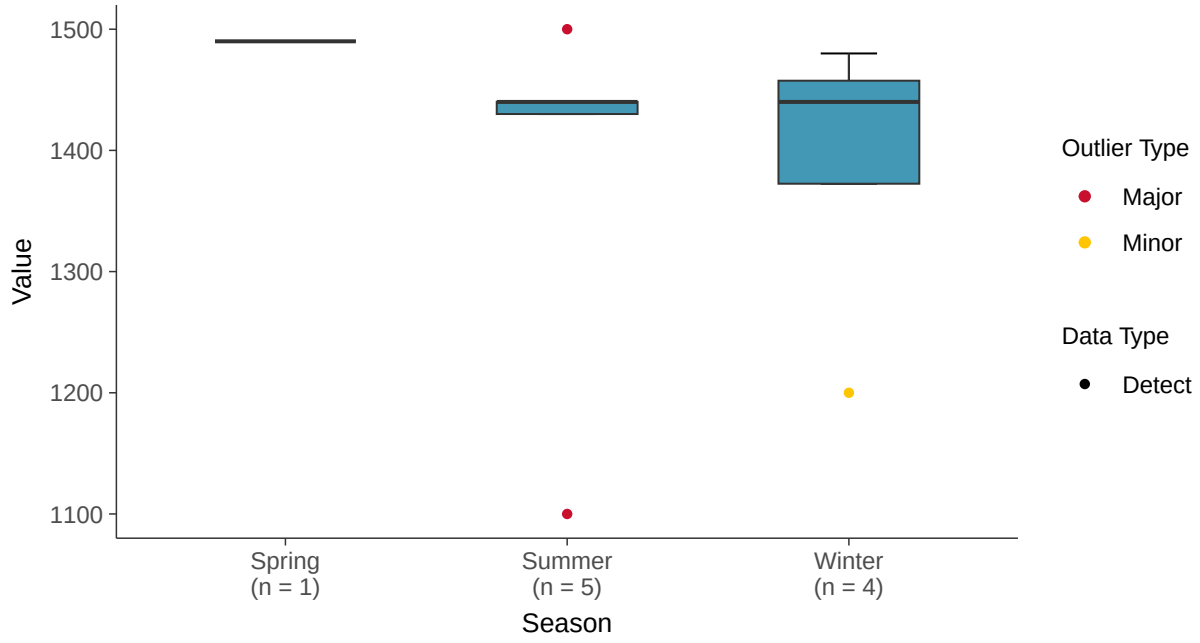
Boxplot

Total Dissolved Solids, MW-3 (mg/l)



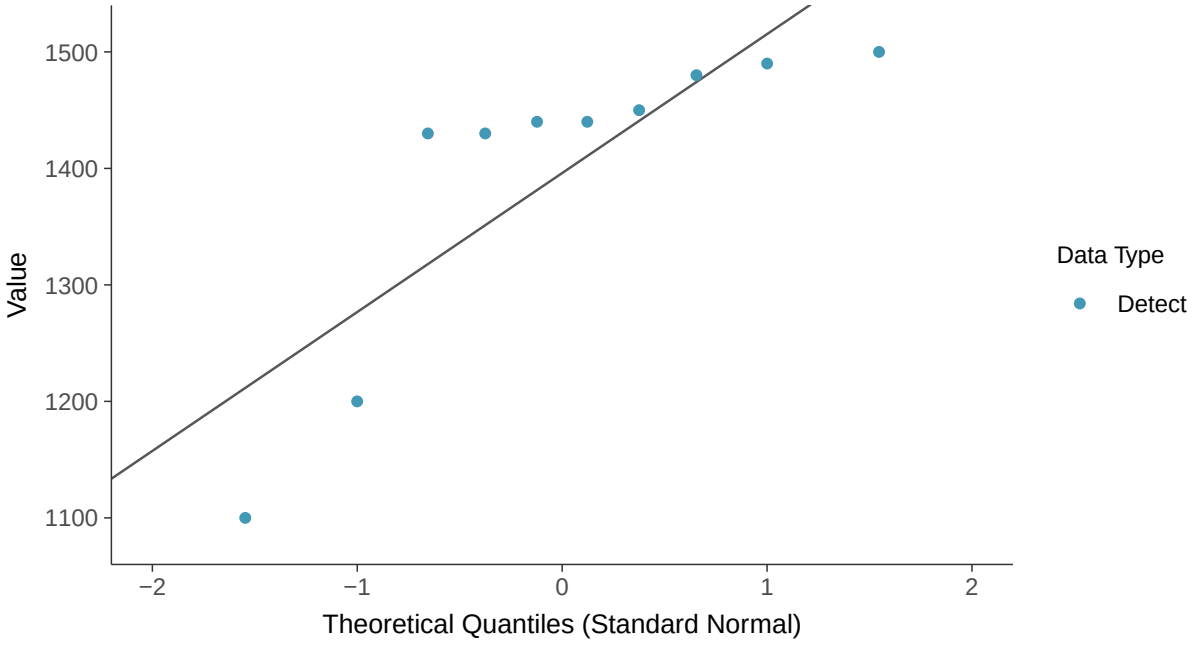
Boxplot by Season

Total Dissolved Solids, MW-3 (mg/l)



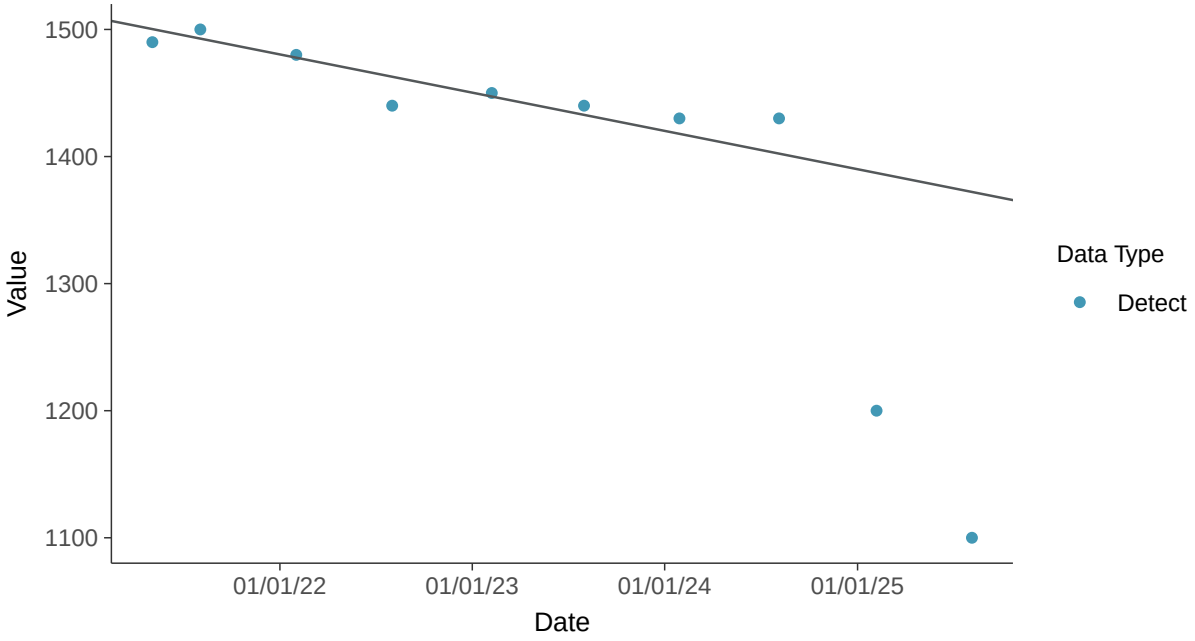
Normal Q-Q plot

Total Dissolved Solids, MW-3 (mg/l)



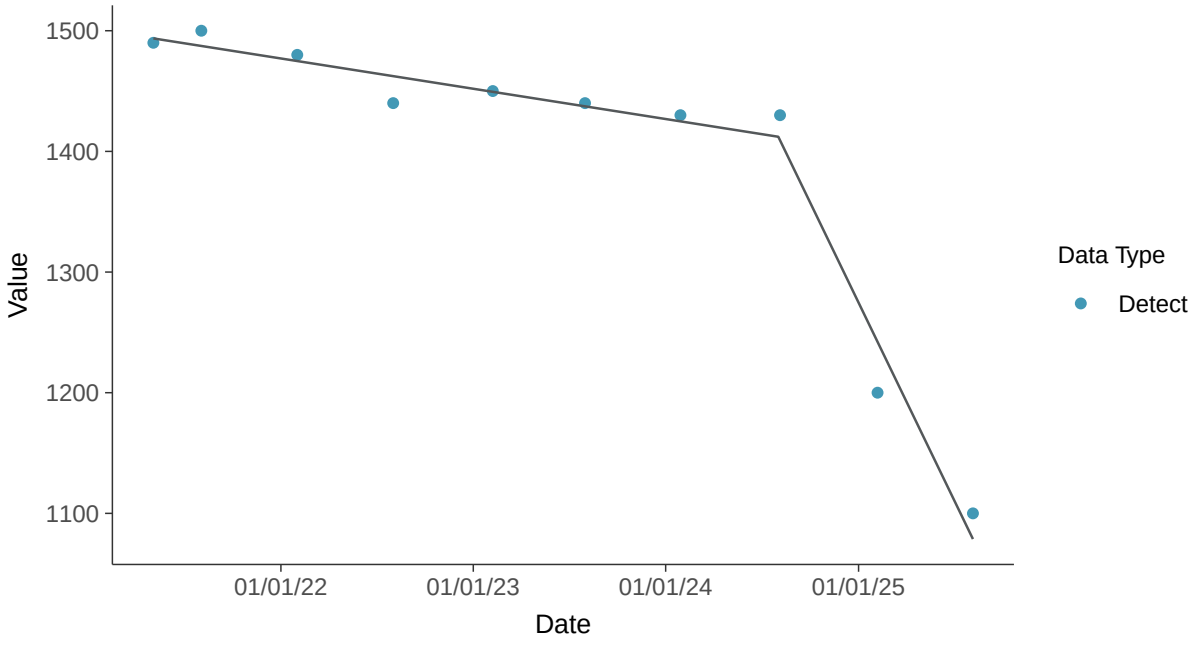
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Total Dissolved Solids, MW-3 (mg/l)



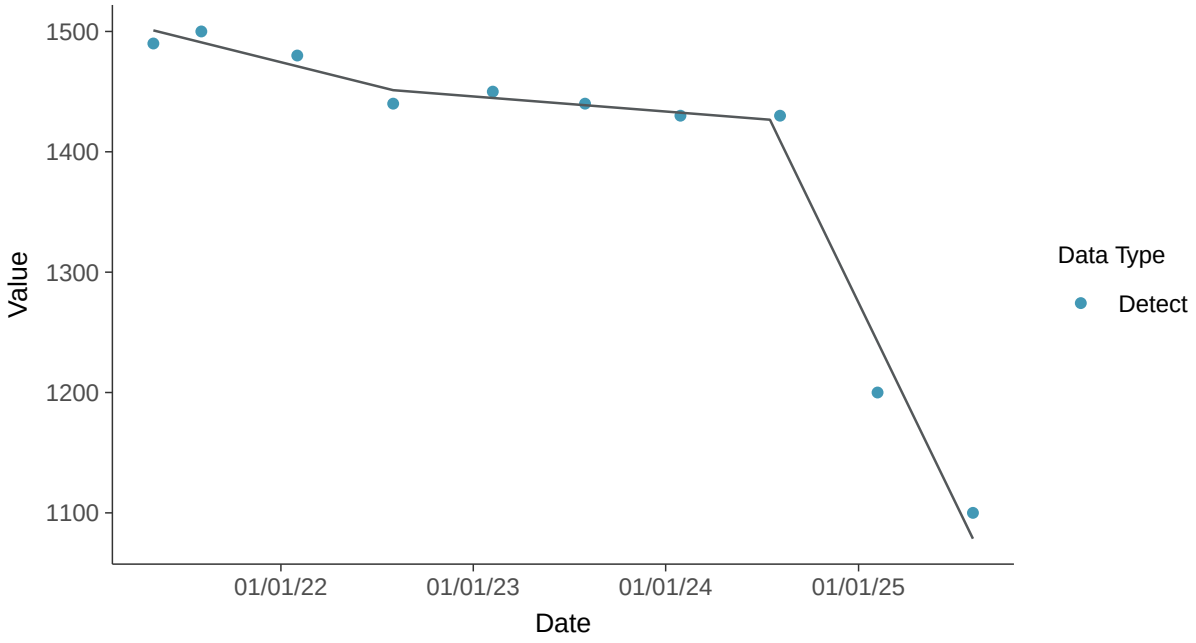
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-3 (mg/l)



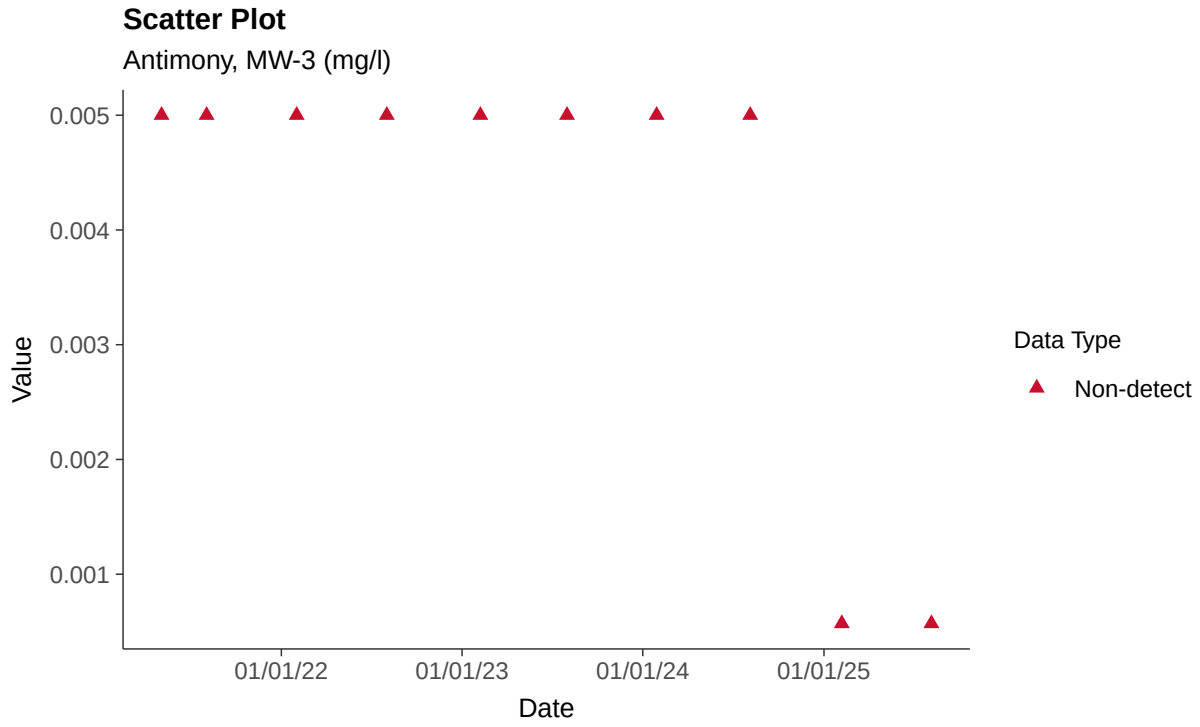
Trend Regression: Piecewise Linear-Linear-Linear

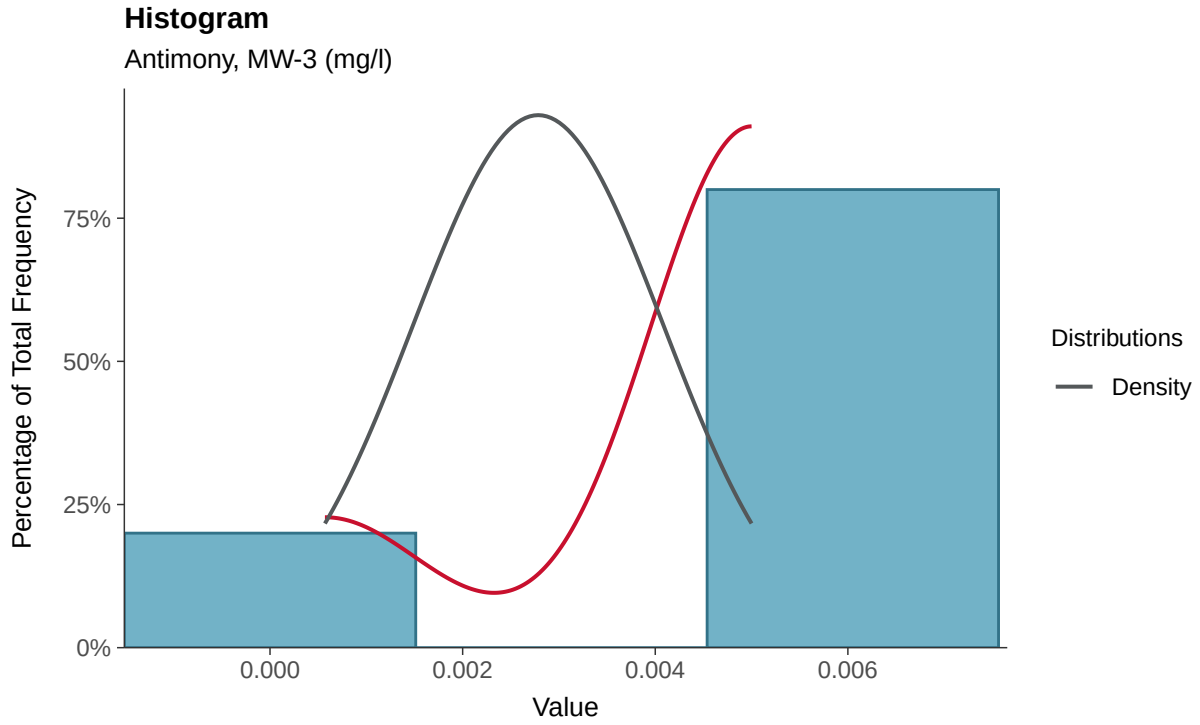
Total Dissolved Solids, MW-3 (mg/l)



Appendix IV: Antimony, MW-3

ID: 14_3_101



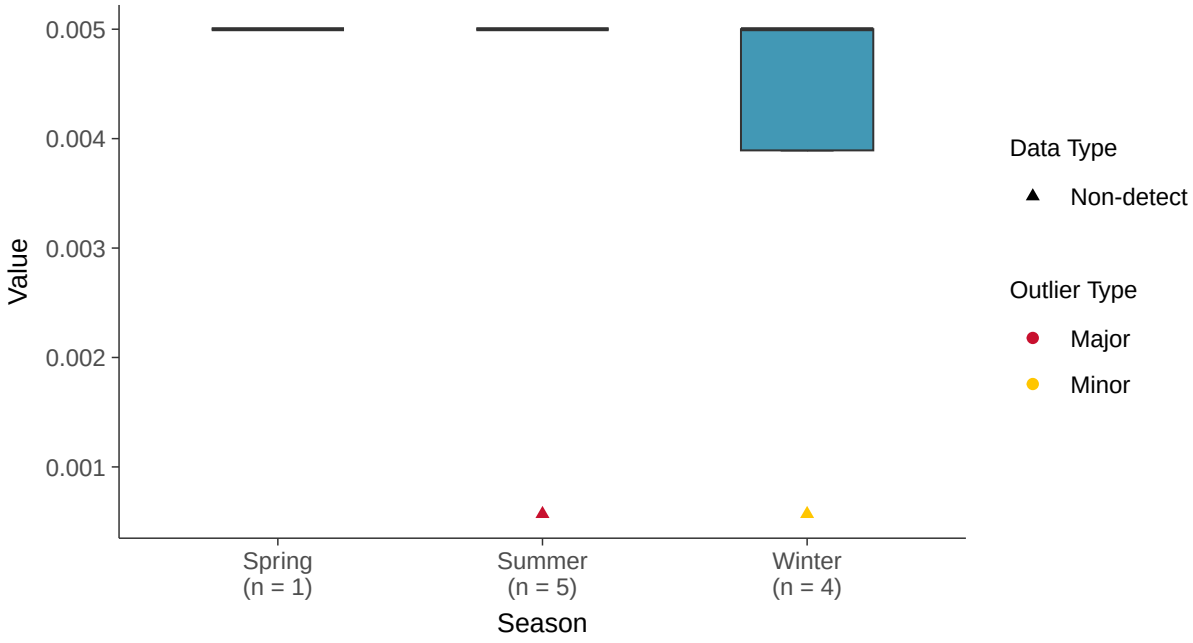


Boxplot

Antimony, MW-3 (mg/l)

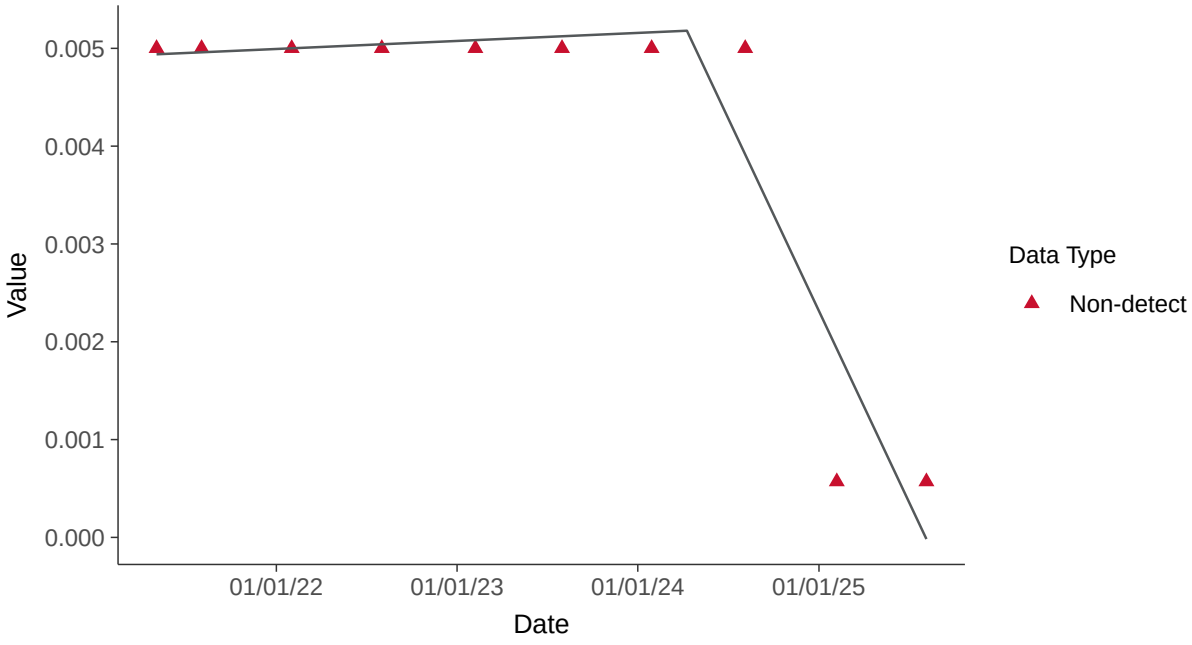
Boxplot by Season

Antimony, MW-3 (mg/l)



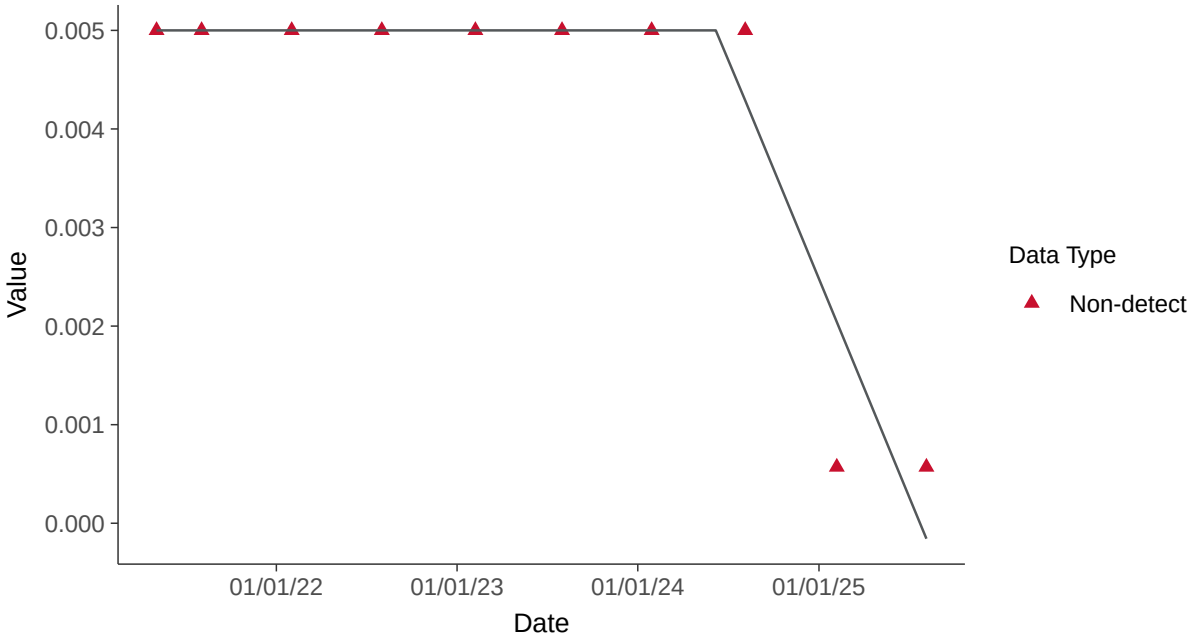
Trend Regression: Piecewise Linear-Linear

Antimony, MW-3 (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Antimony, MW-3 (mg/l)

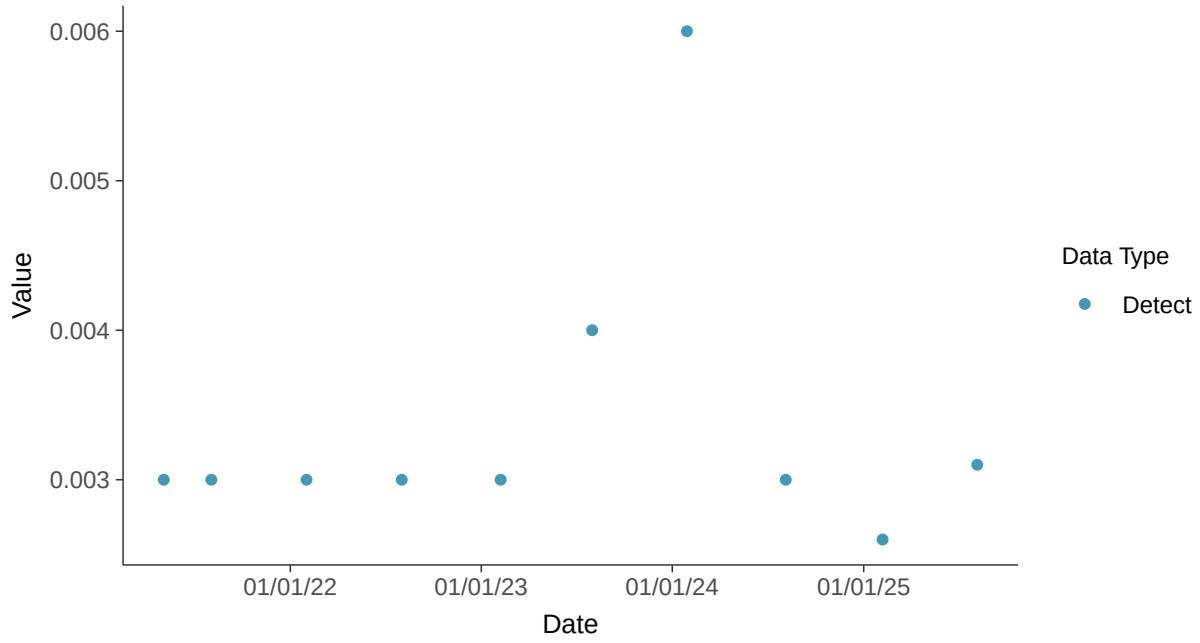


Appendix IV: Arsenic, MW-3

ID: 14_3_102

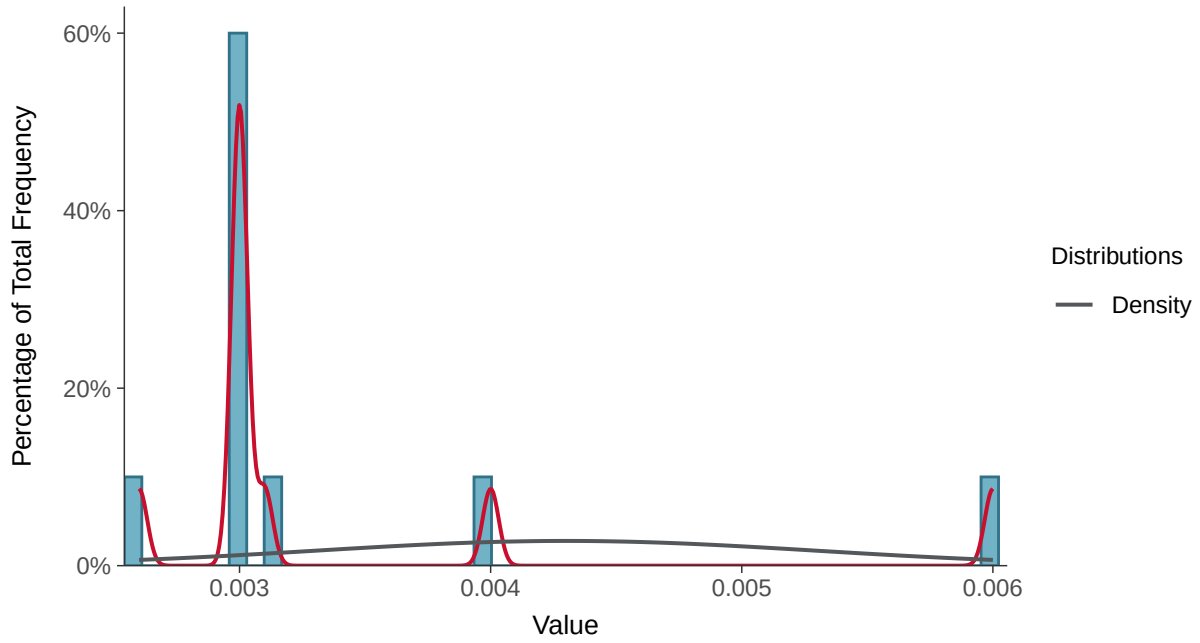
Scatter Plot

Arsenic, MW-3 (mg/l)



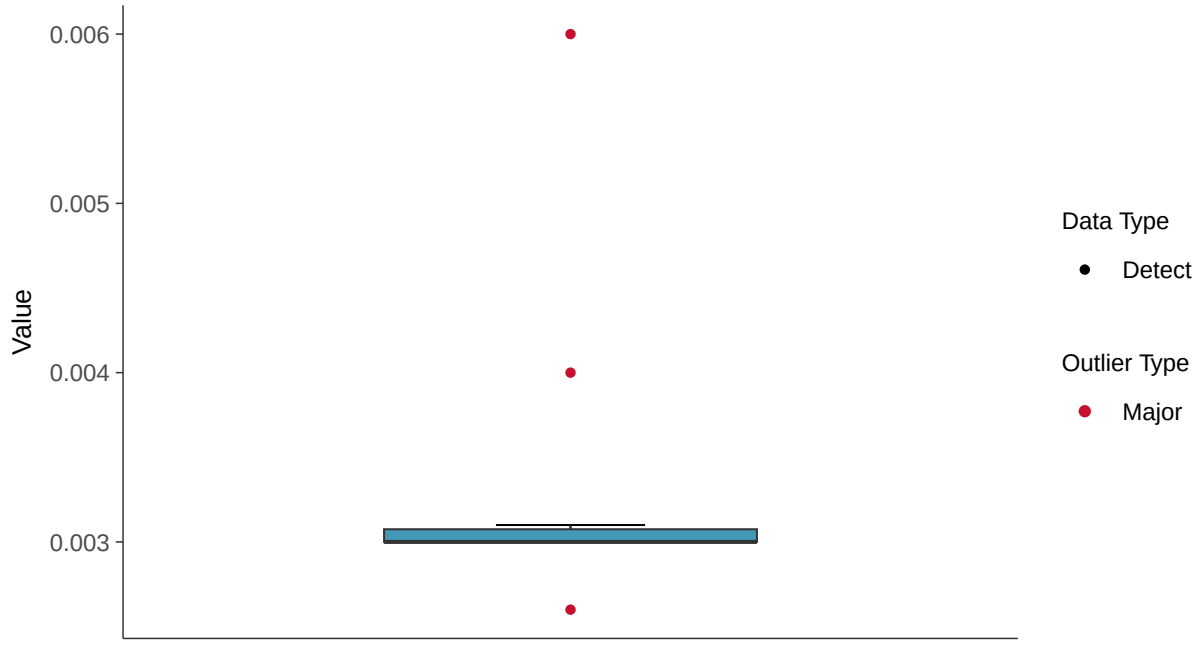
Histogram

Arsenic, MW-3 (mg/l)



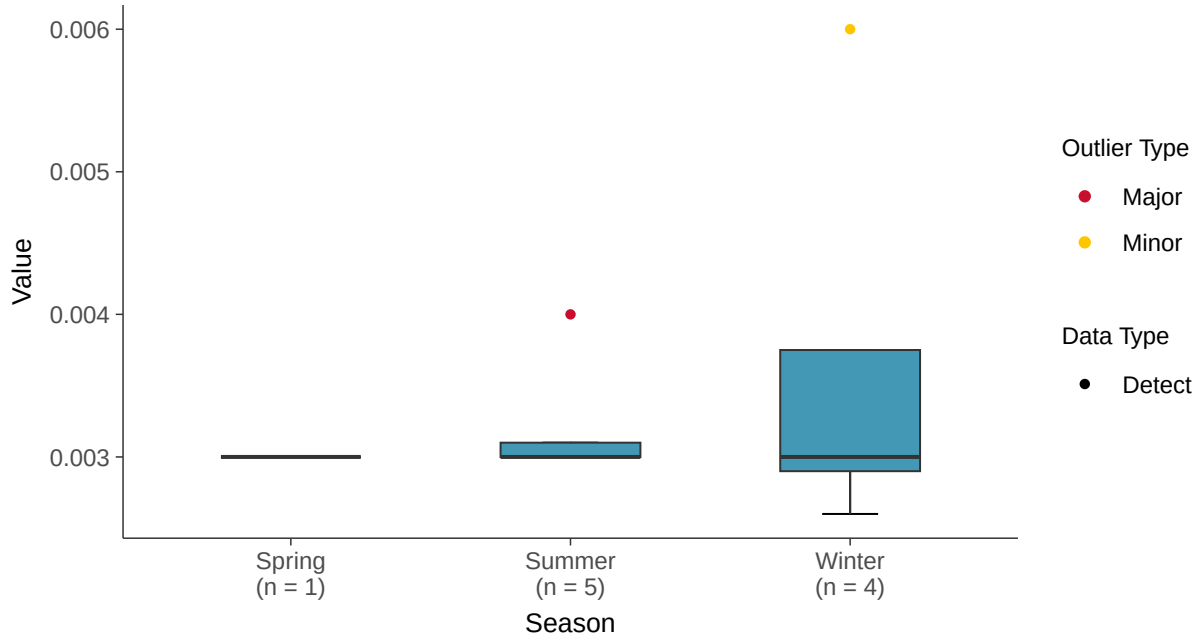
Boxplot

Arsenic, MW-3 (mg/l)



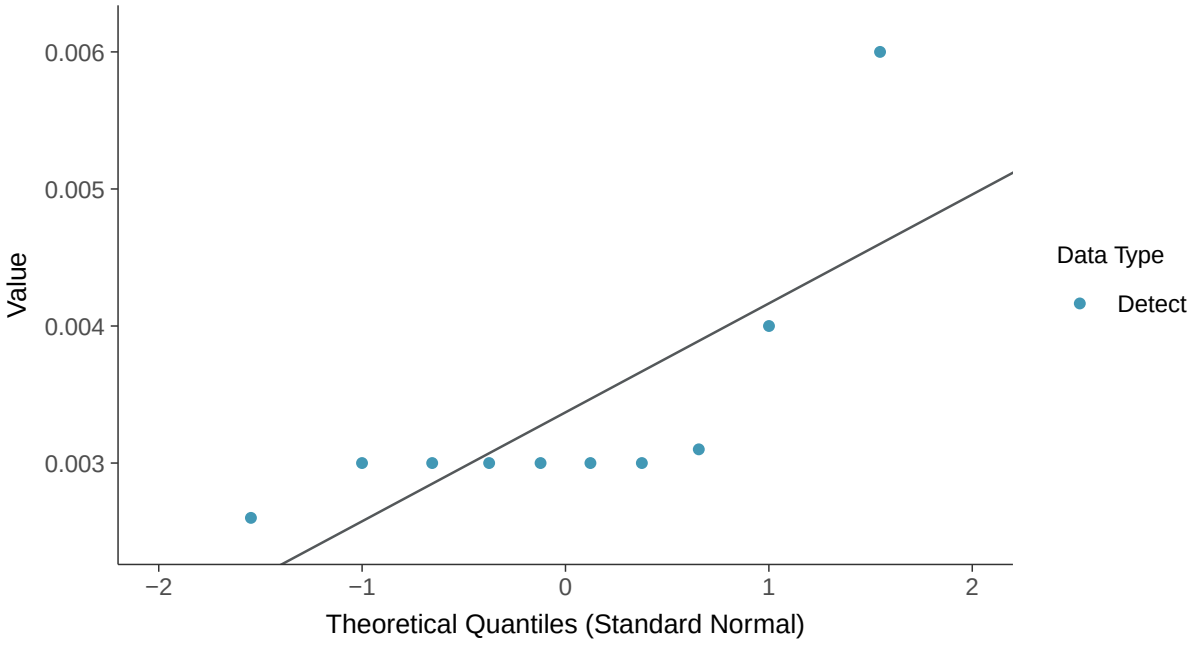
Boxplot by Season

Arsenic, MW-3 (mg/l)



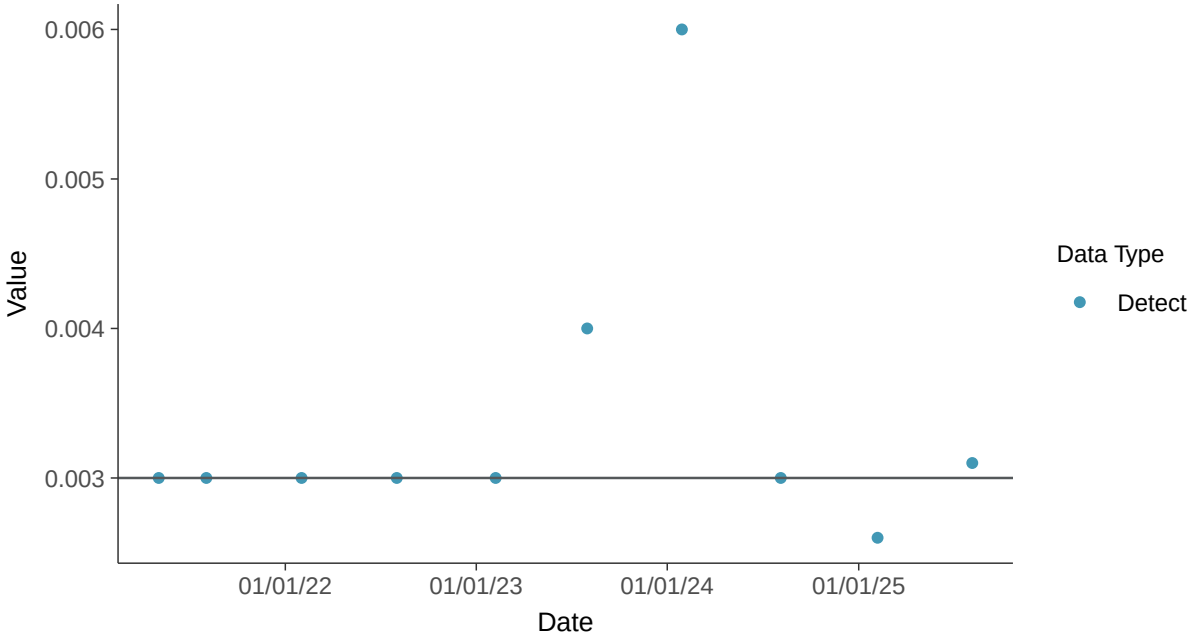
Normal Q-Q plot

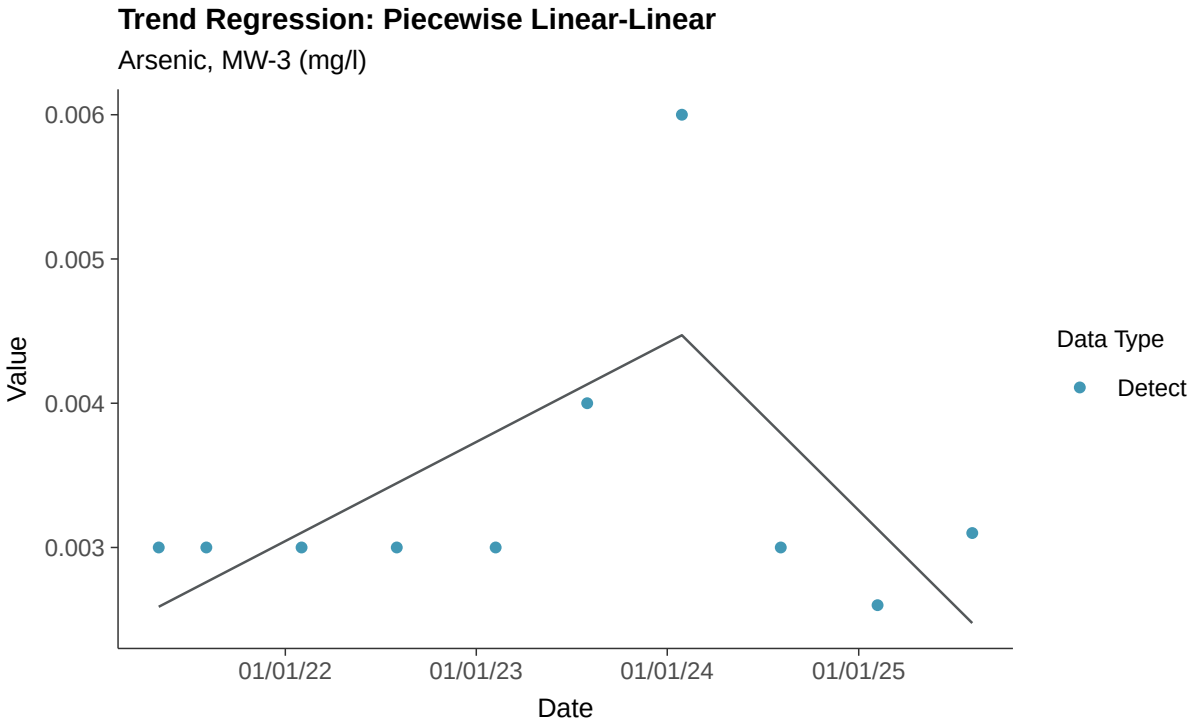
Arsenic, MW-3 (mg/l)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

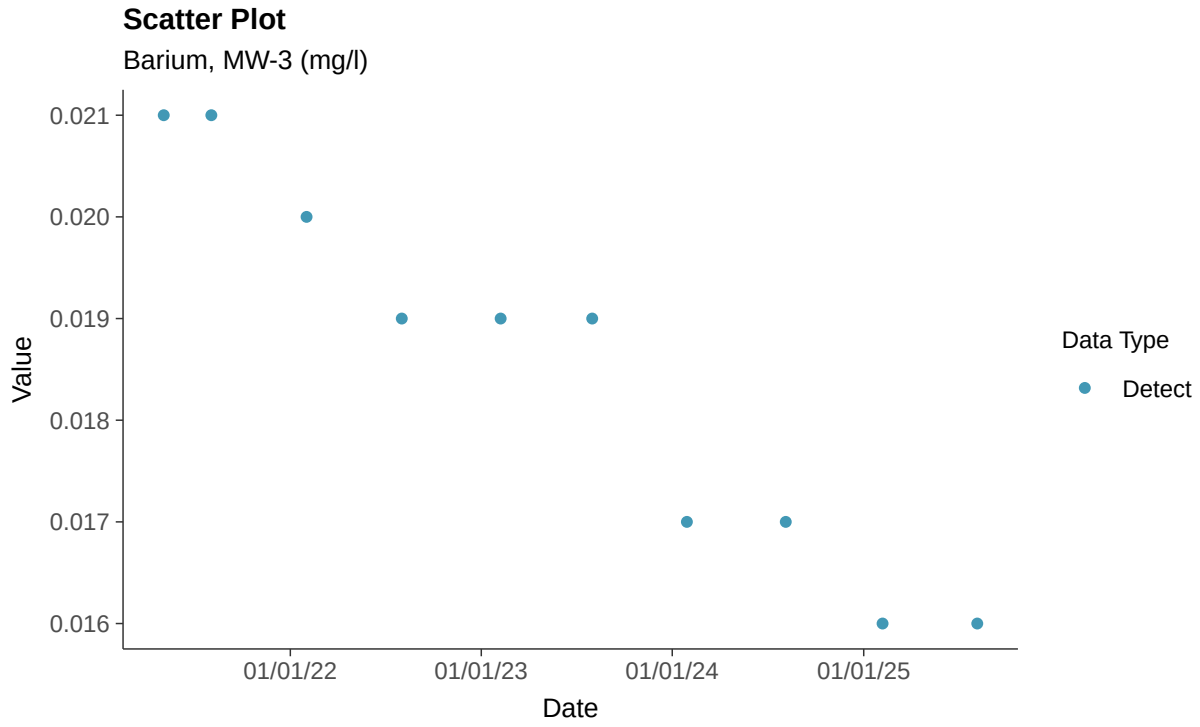
Arsenic, MW-3 (mg/l)

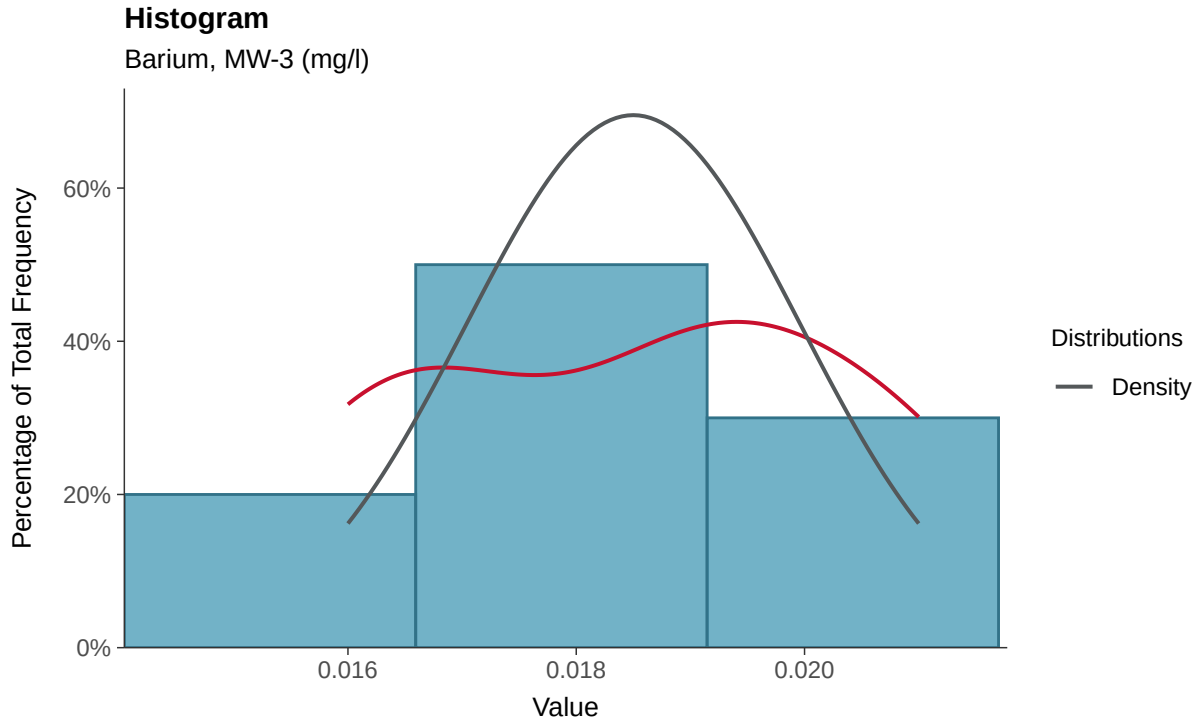



Trend Regression: Piecewise Linear-Linear
Arsenic, MW-3 (mg/l)
0.006
0.005
0.004
0.003
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect

Appendix IV: Barium, MW-3

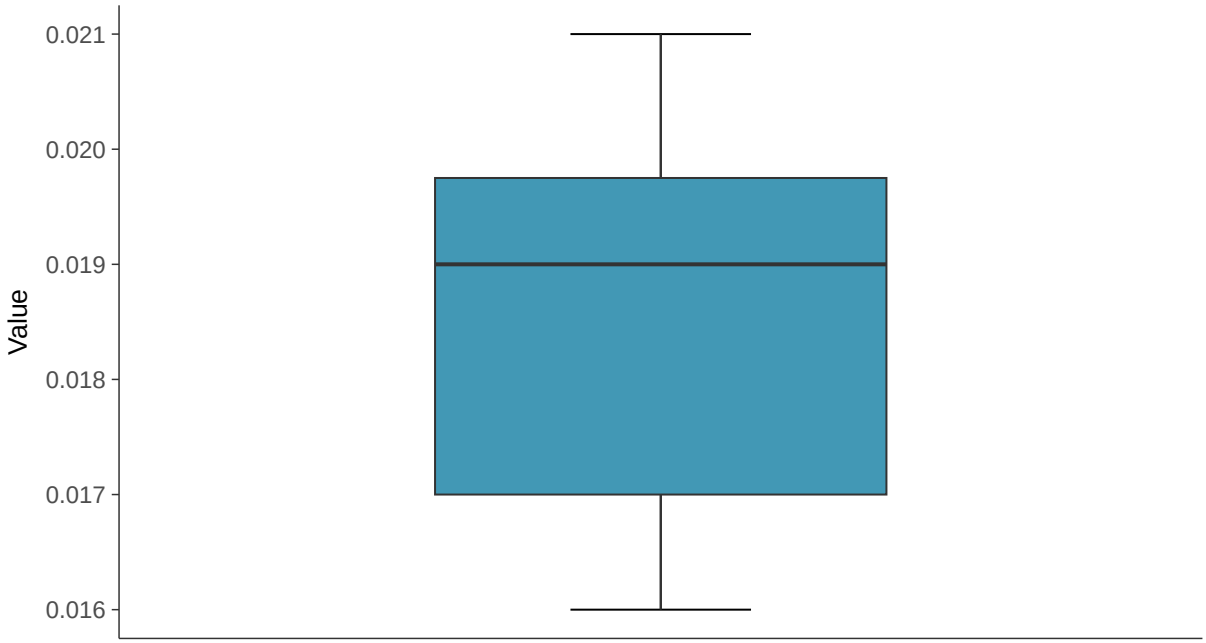
ID: 14_3_103





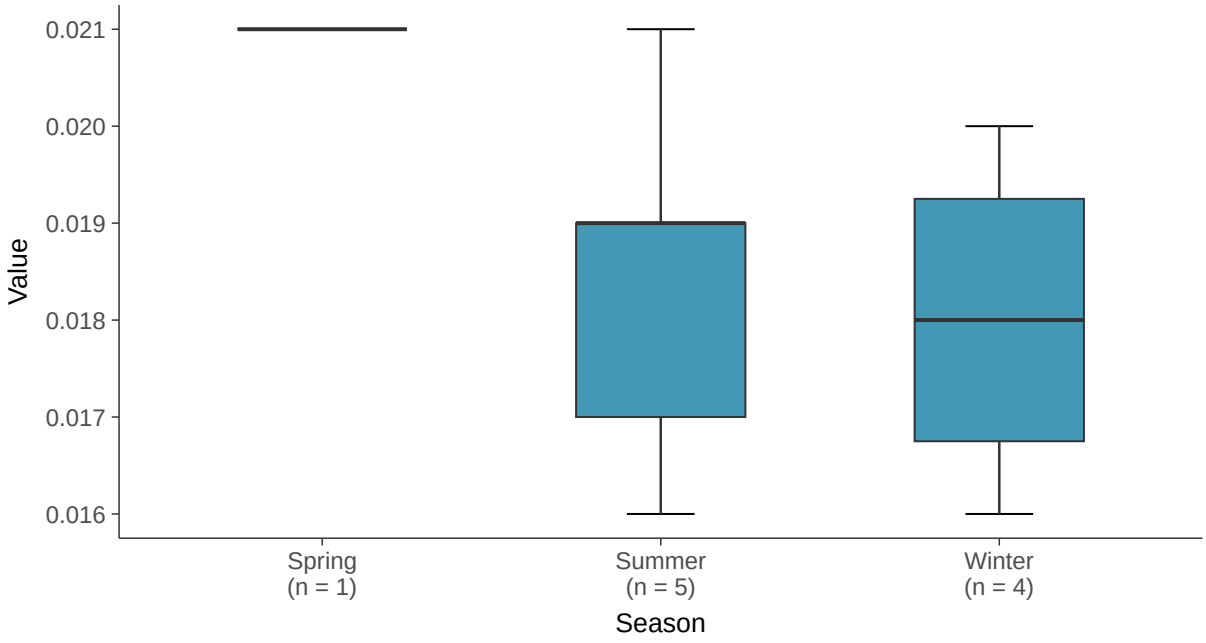
Boxplot

Barium, MW-3 (mg/l)



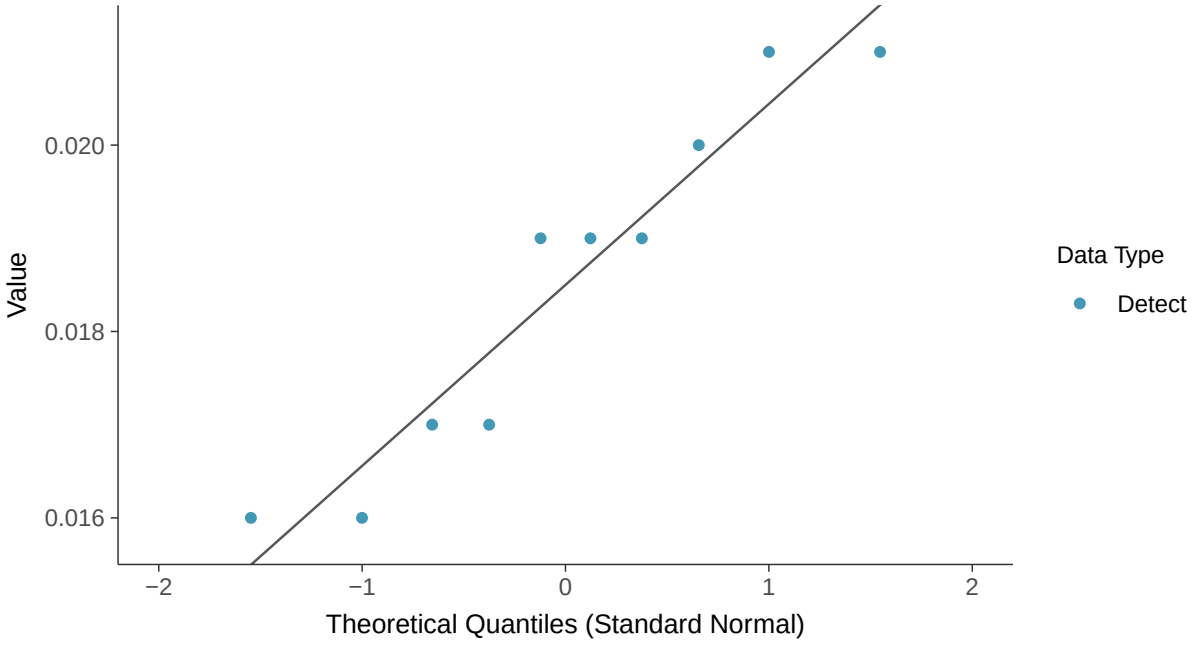
Boxplot by Season

Barium, MW-3 (mg/l)



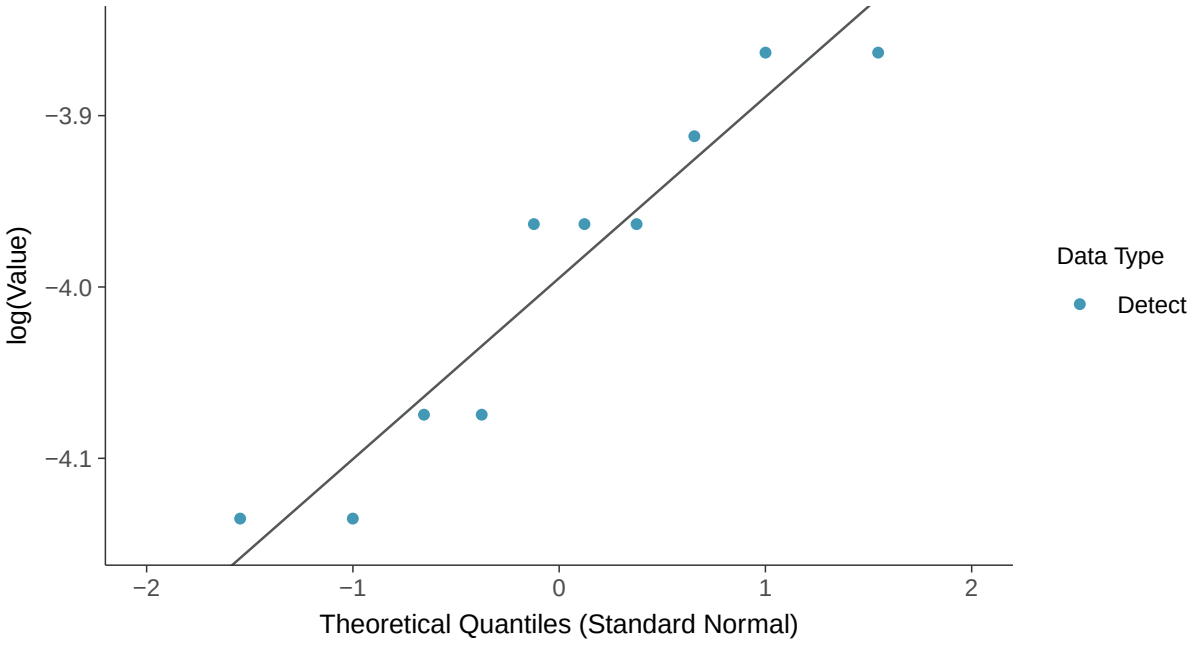
Normal Q-Q plot

Barium, MW-3 (mg/l)



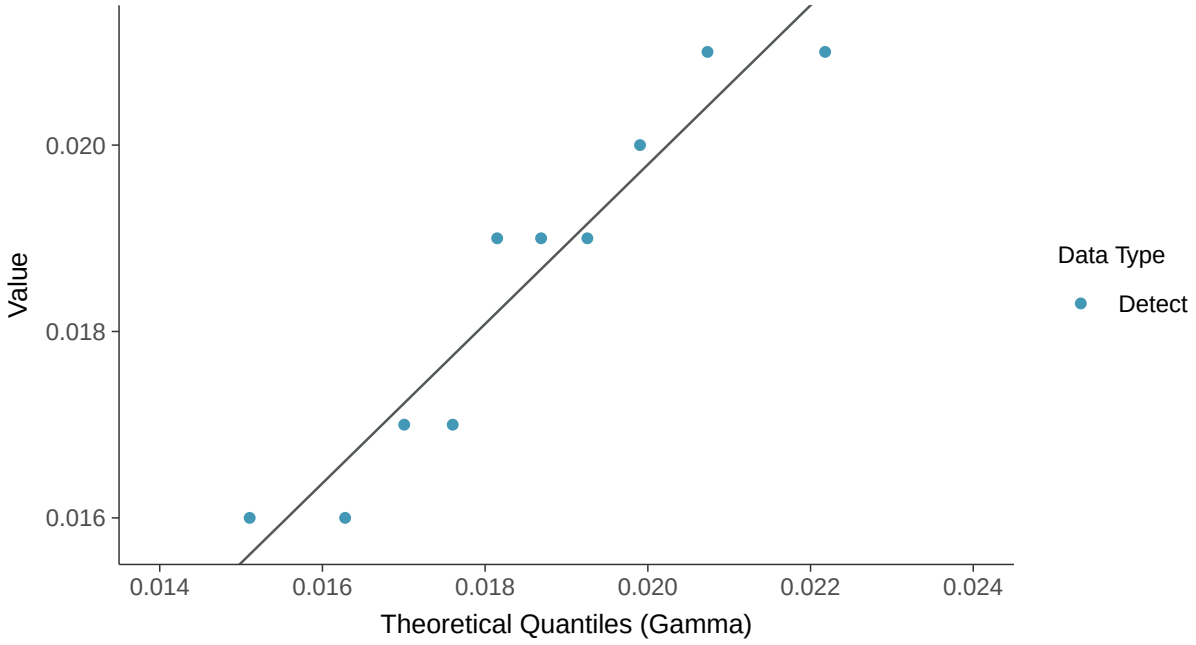
Lognormal Q-Q plot

Barium, MW-3 (mg/l)



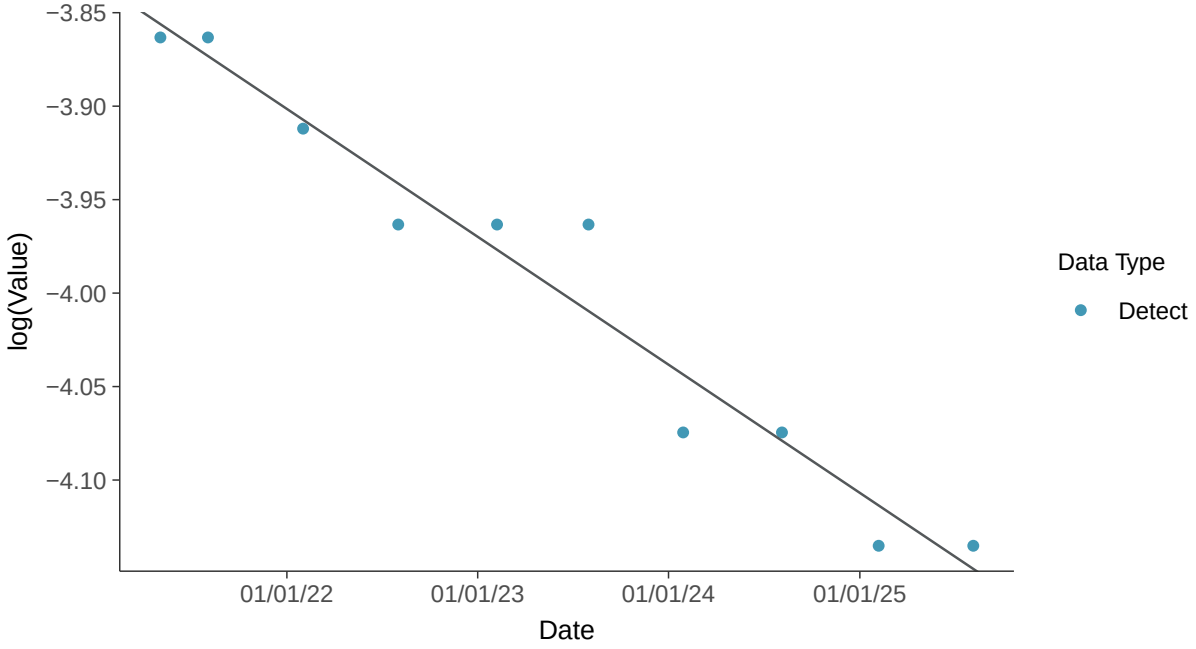
Gamma Q-Q plot

Barium, MW-3 (mg/l)



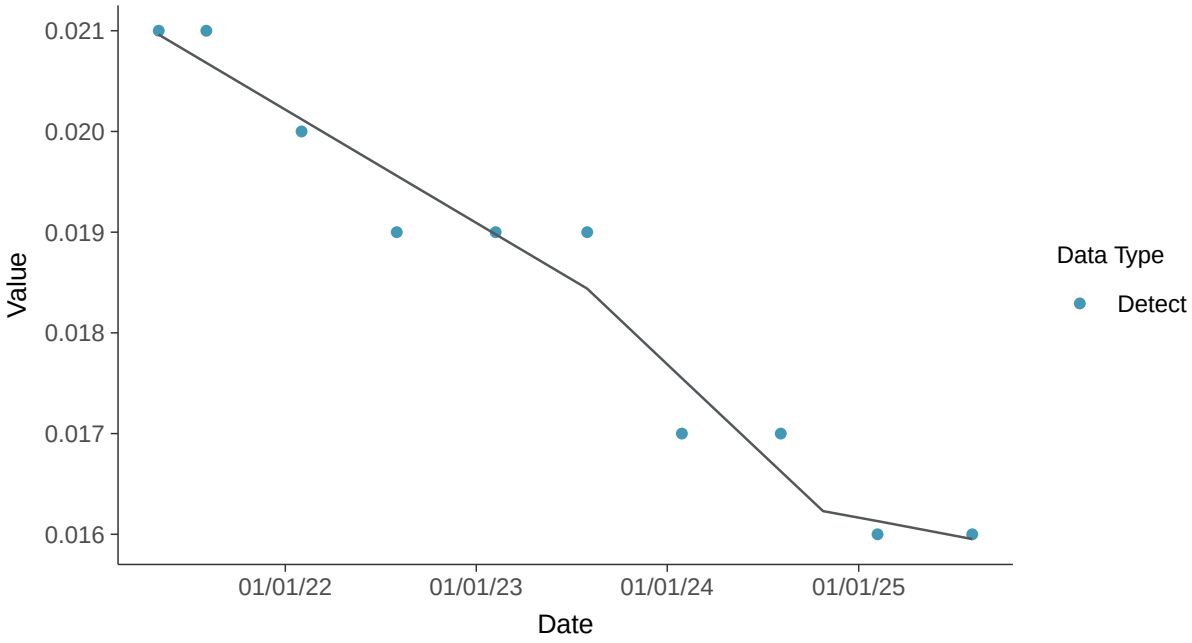
Trend Regression: Lognormal MLE

Barium, MW-3 (mg/l)



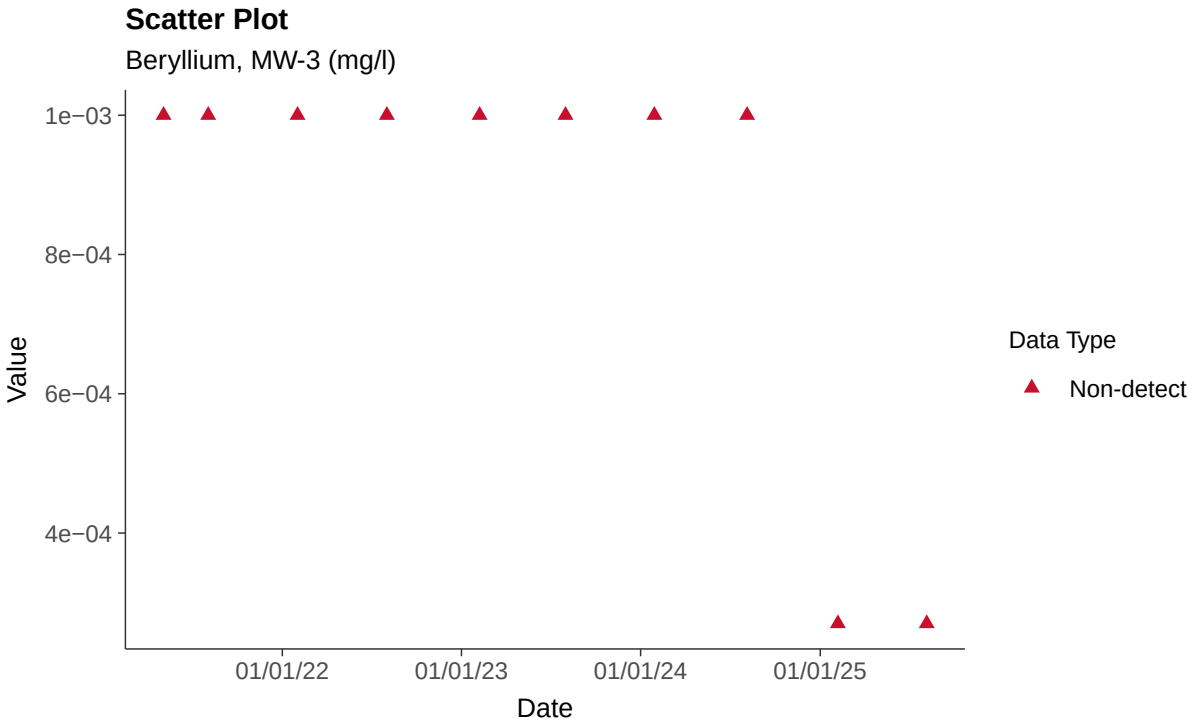
Trend Regression: Piecewise Linear-Linear-Linear

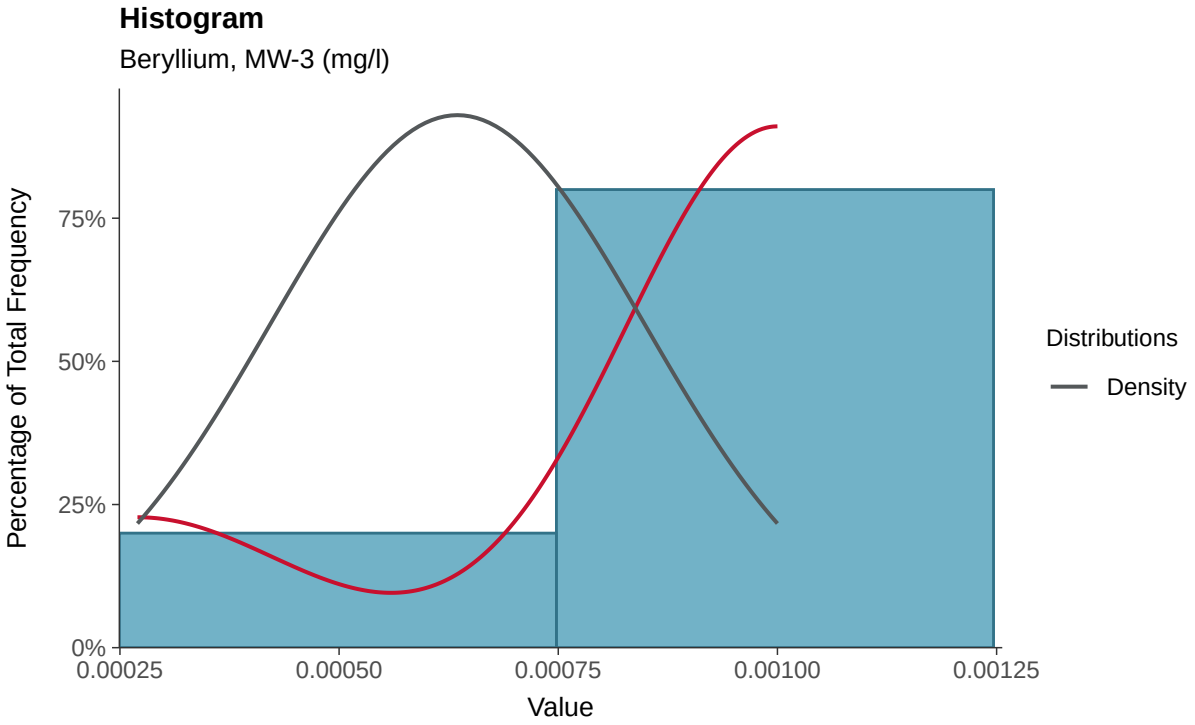
Barium, MW-3 (mg/l)



Appendix IV: Beryllium, MW-3

ID: 14_3_104



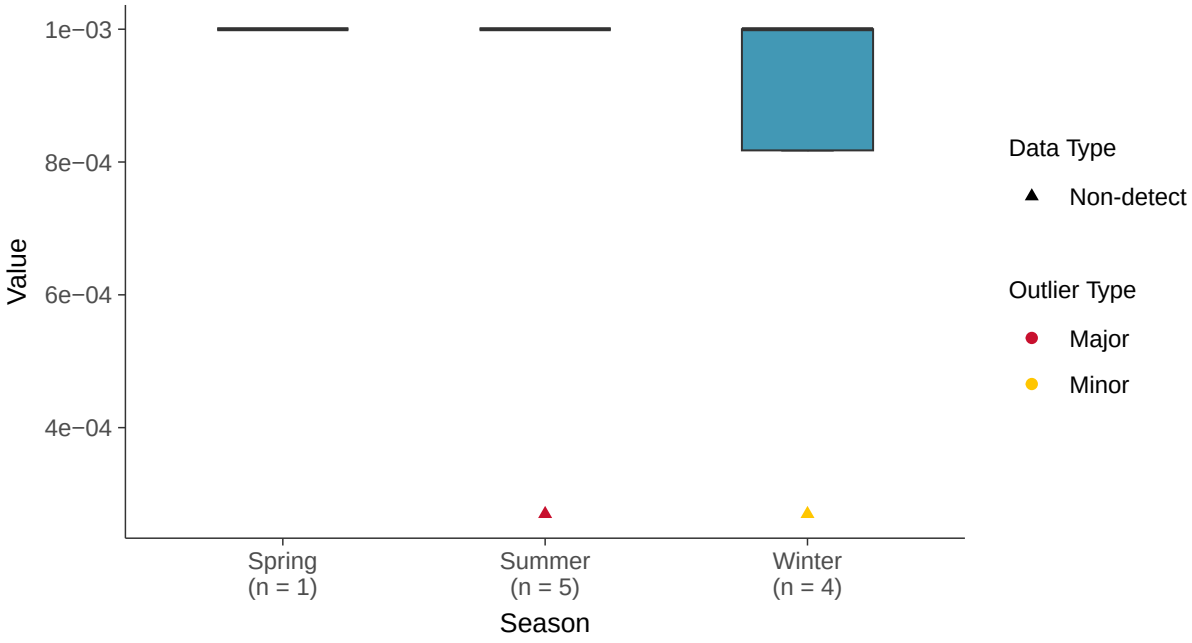


Boxplot

Beryllium, MW-3 (mg/l)

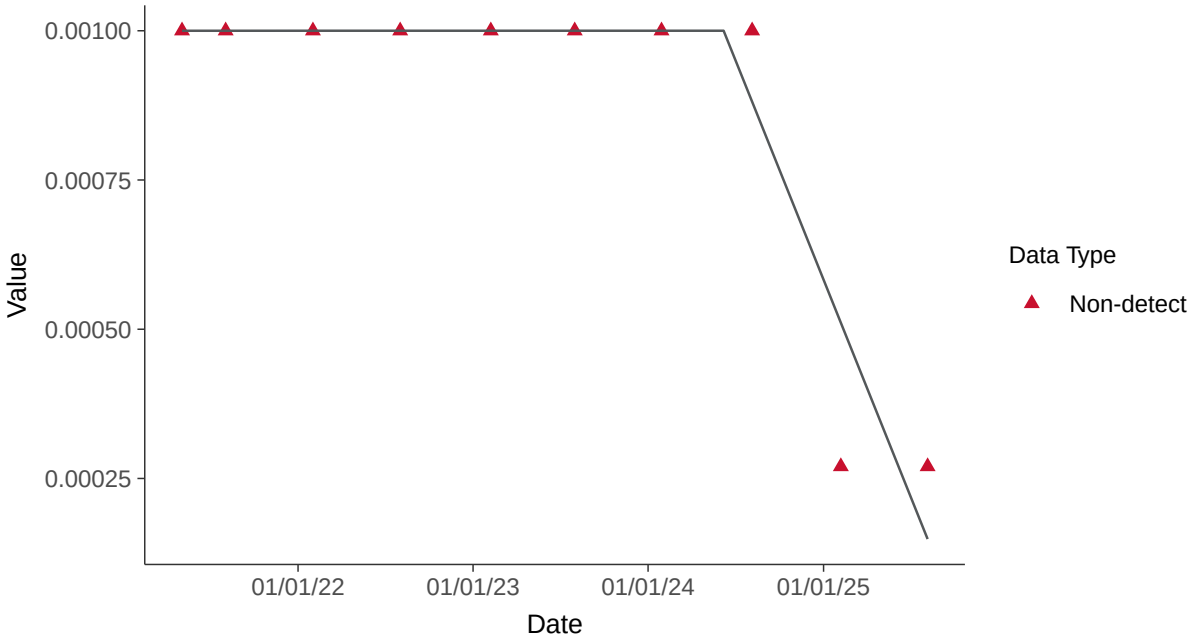
Boxplot by Season

Beryllium, MW-3 (mg/l)



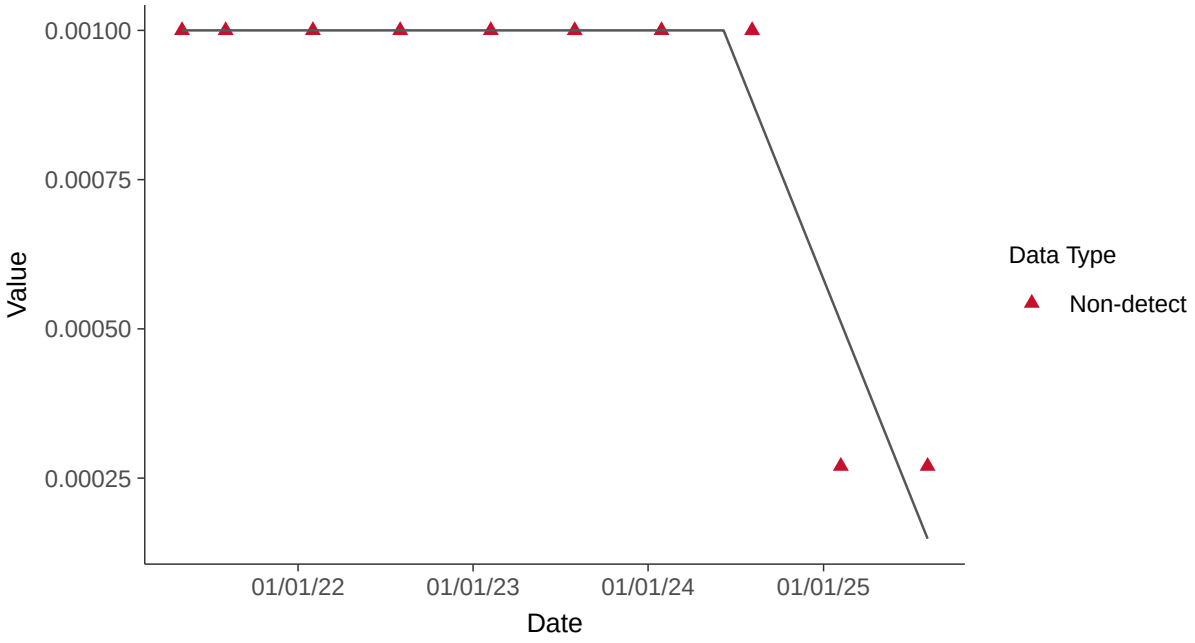
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-3 (mg/l)



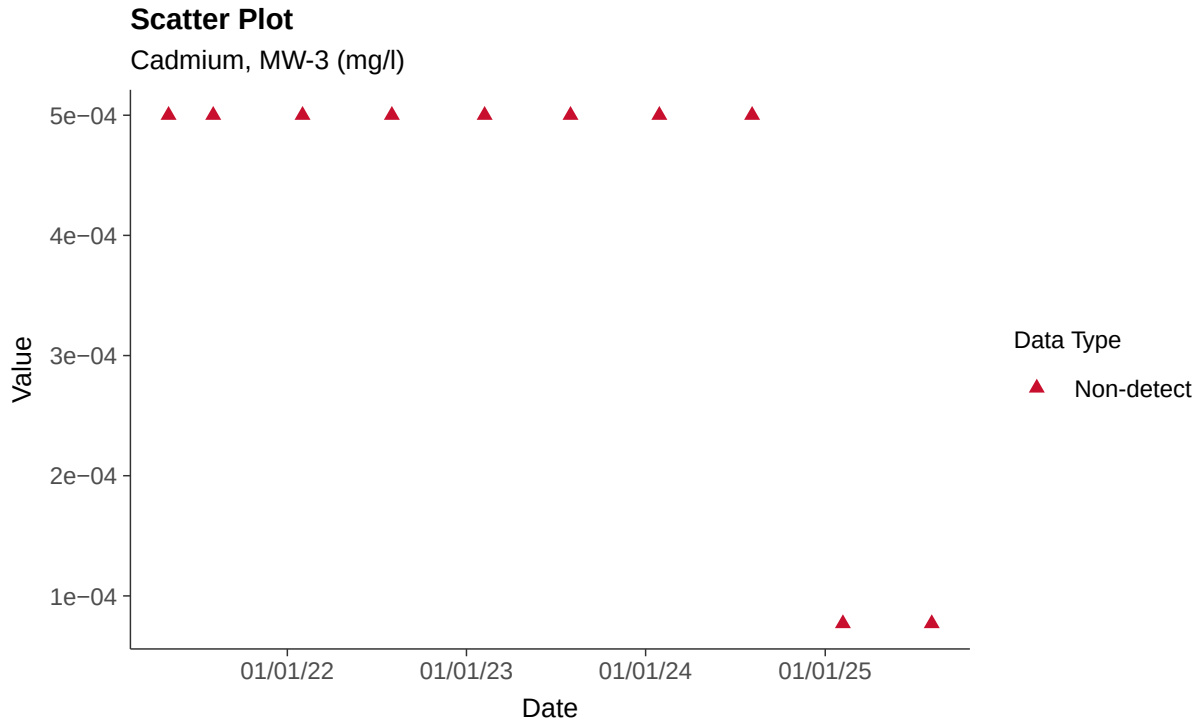
Trend Regression: Piecewise Linear-Linear-Linear

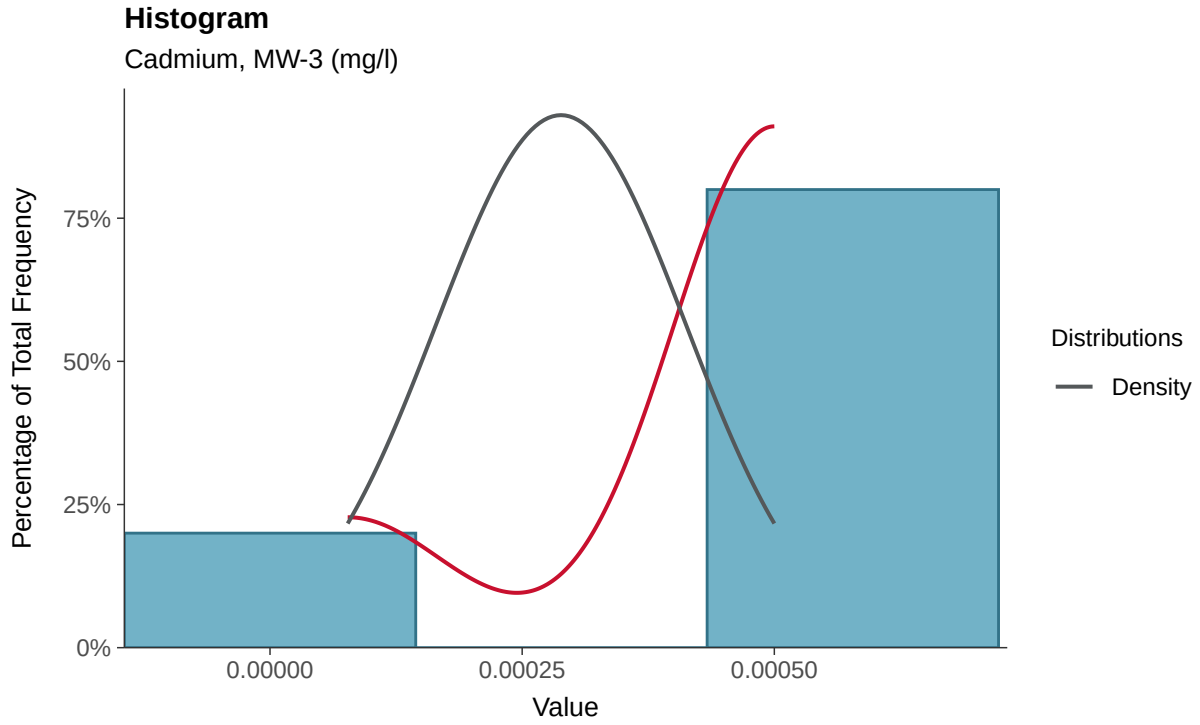
Beryllium, MW-3 (mg/l)



Appendix IV: Cadmium, MW-3

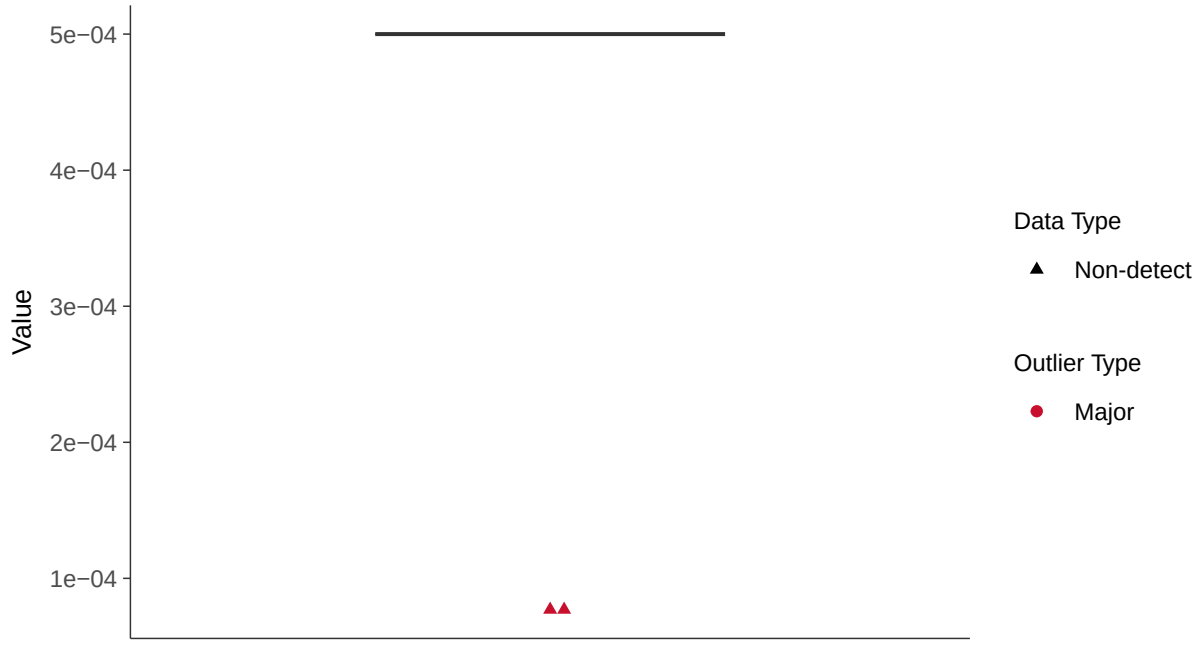
ID: 14_3_106





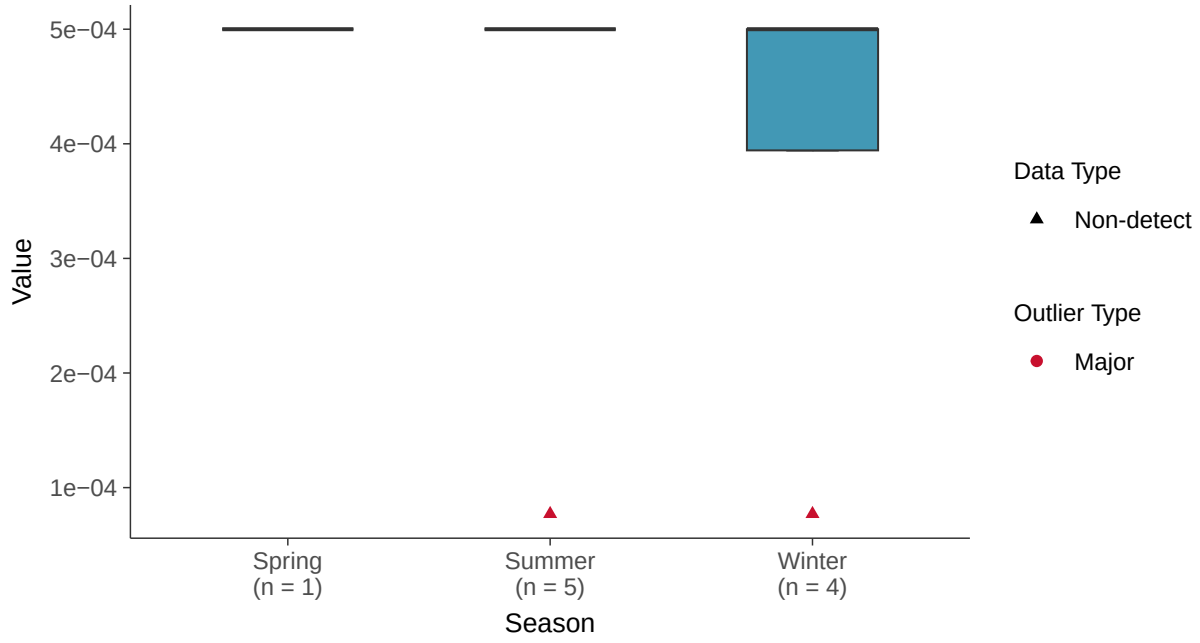
Boxplot

Cadmium, MW-3 (mg/l)



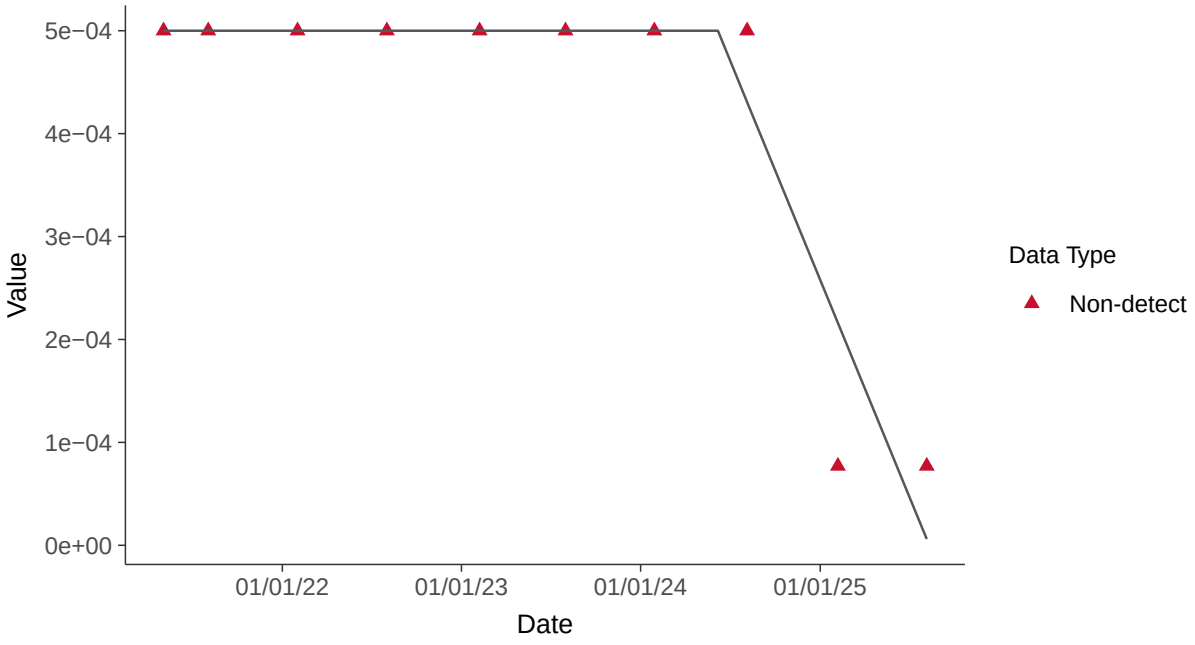
Boxplot by Season

Cadmium, MW-3 (mg/l)



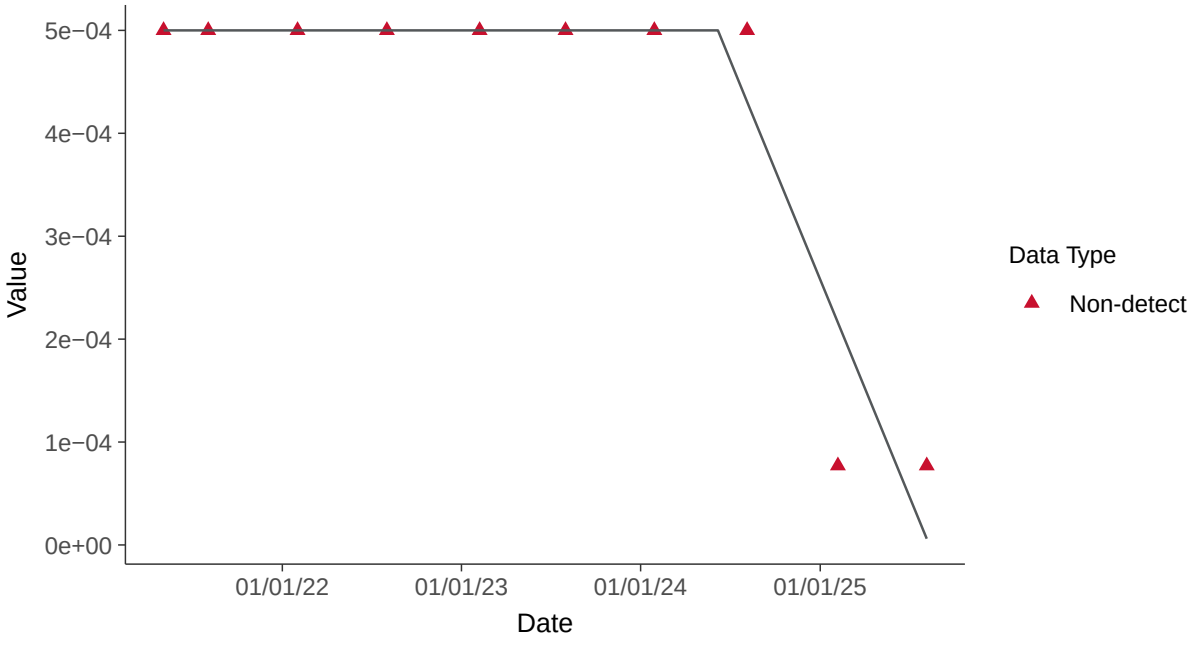
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-3 (mg/l)



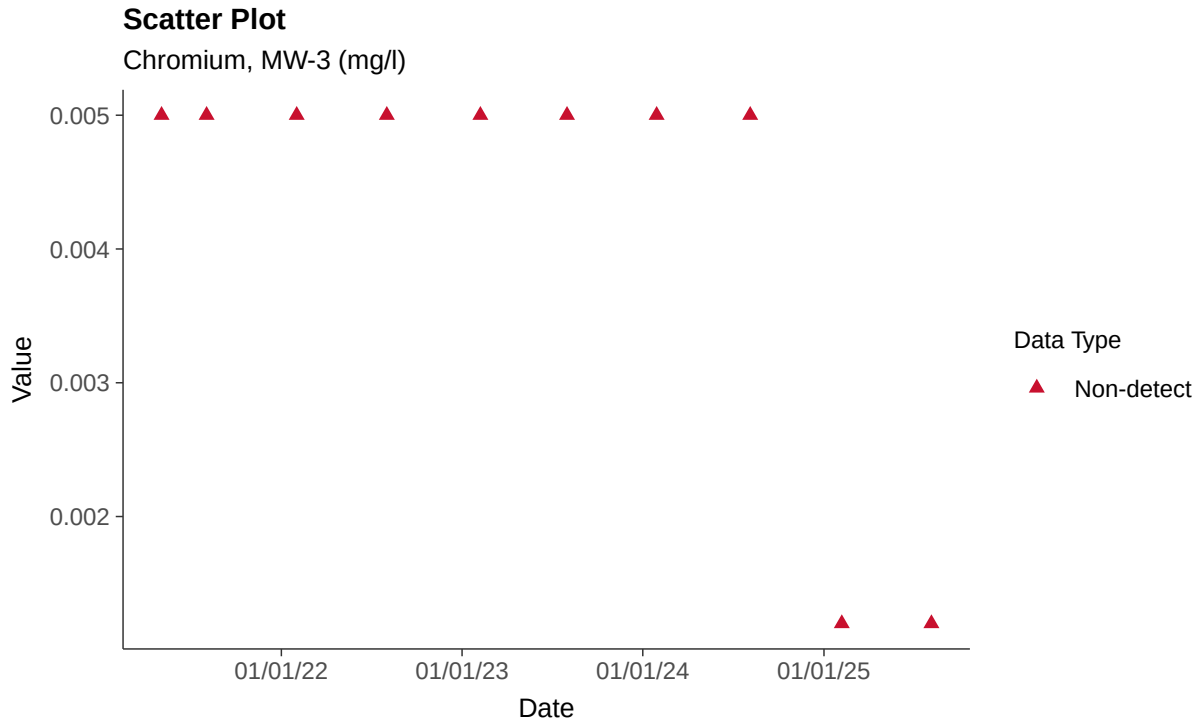
Trend Regression: Piecewise Linear-Linear-Linear

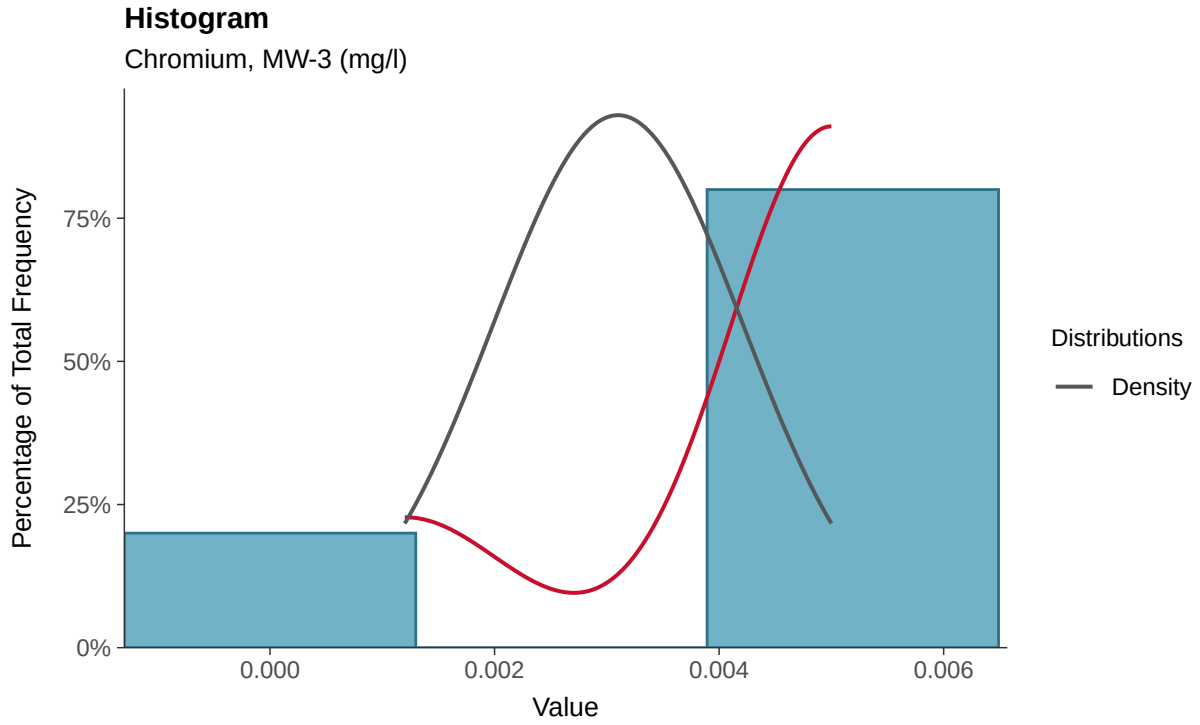
Cadmium, MW-3 (mg/l)



Appendix IV: Chromium, MW-3

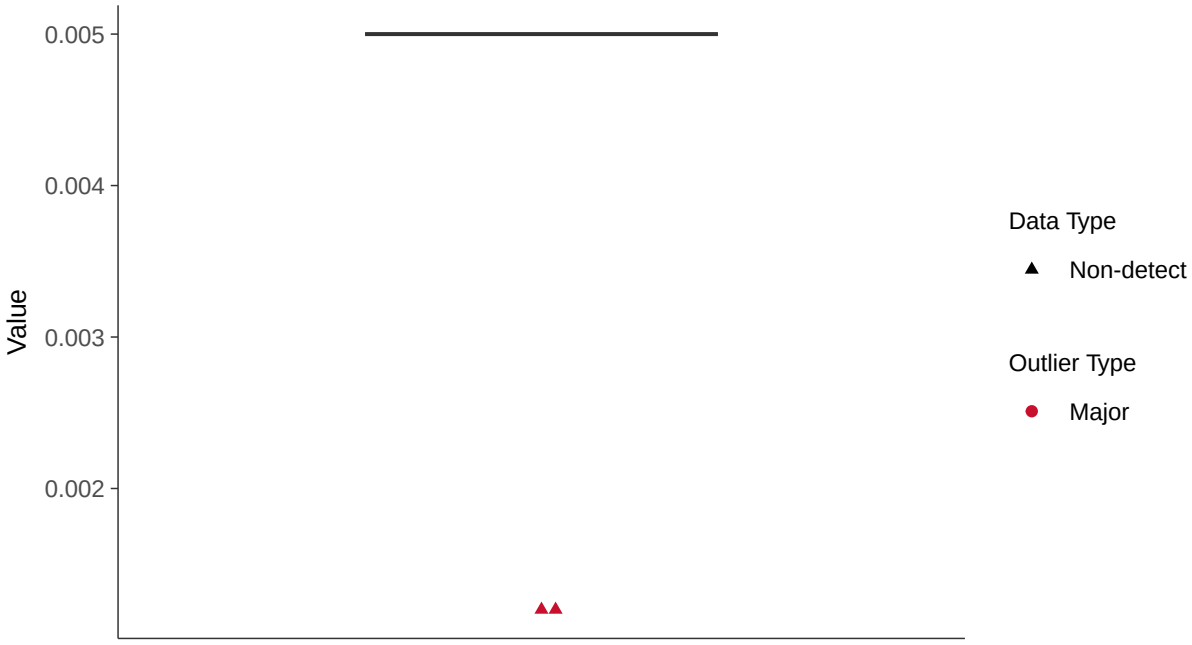
ID: 14_3_109





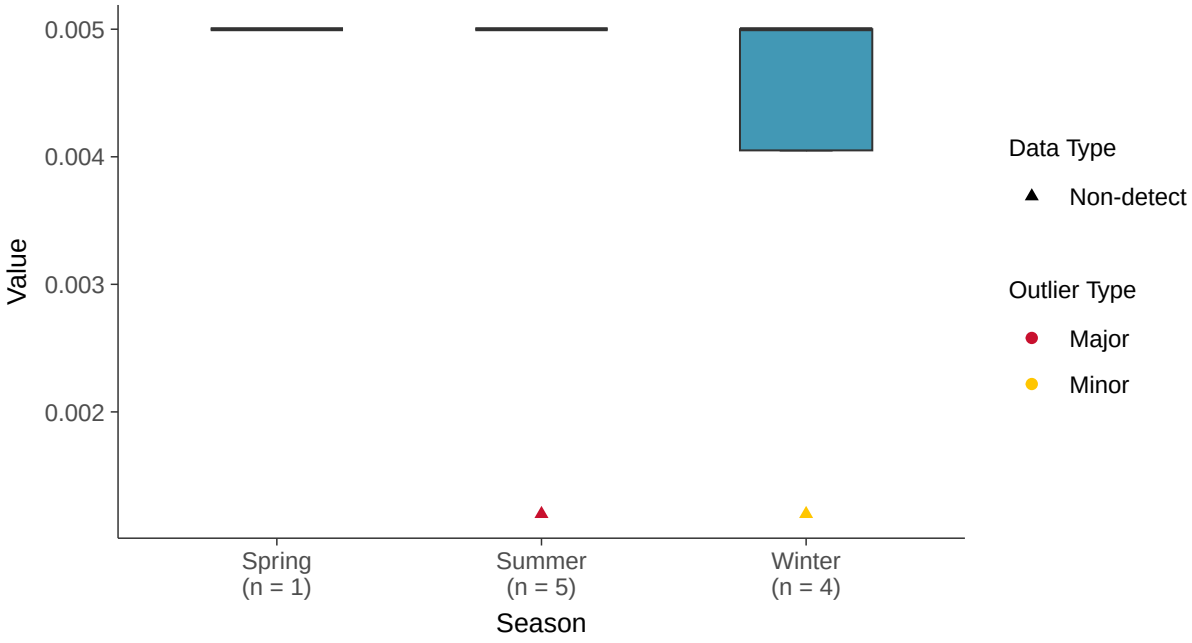
Boxplot

Chromium, MW-3 (mg/l)



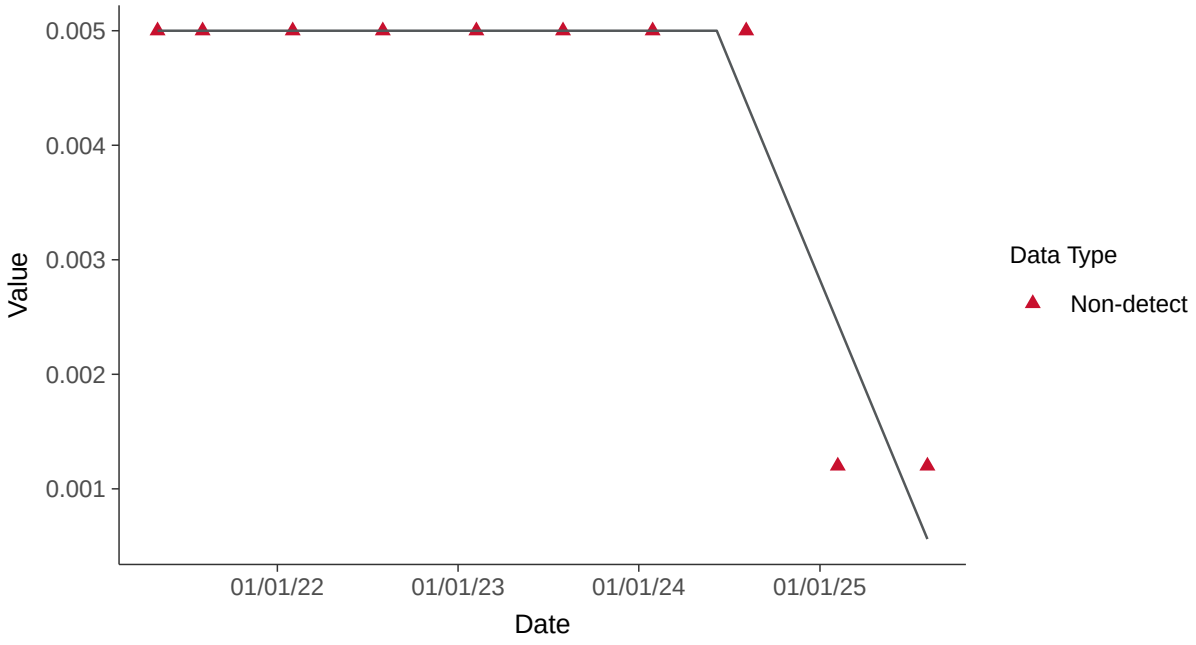
Boxplot by Season

Chromium, MW-3 (mg/l)



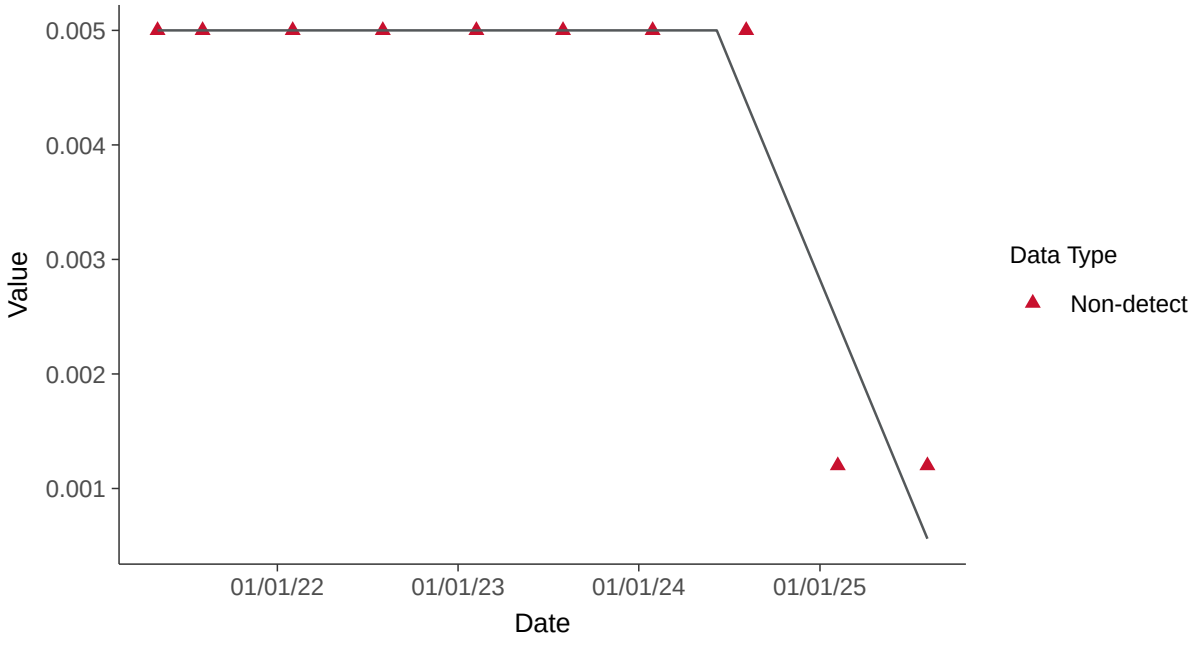
Trend Regression: Piecewise Linear-Linear

Chromium, MW-3 (mg/l)



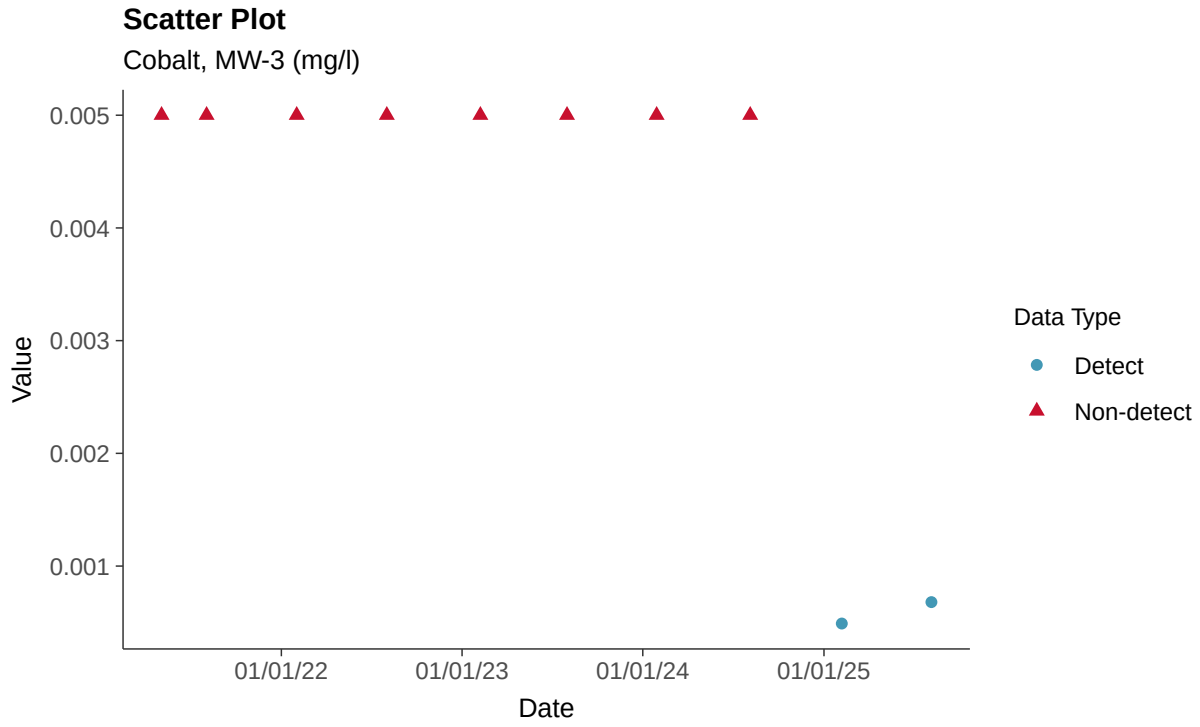
Trend Regression: Piecewise Linear-Linear-Linear

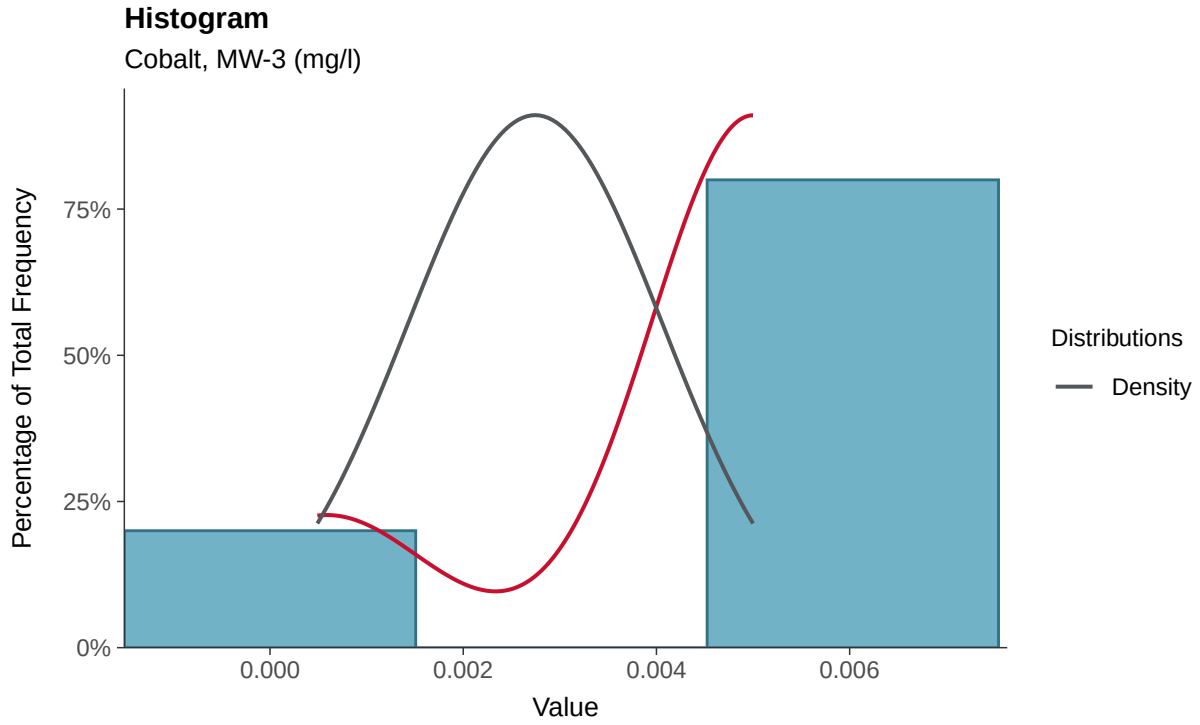
Chromium, MW-3 (mg/l)



Appendix IV: Cobalt, MW-3

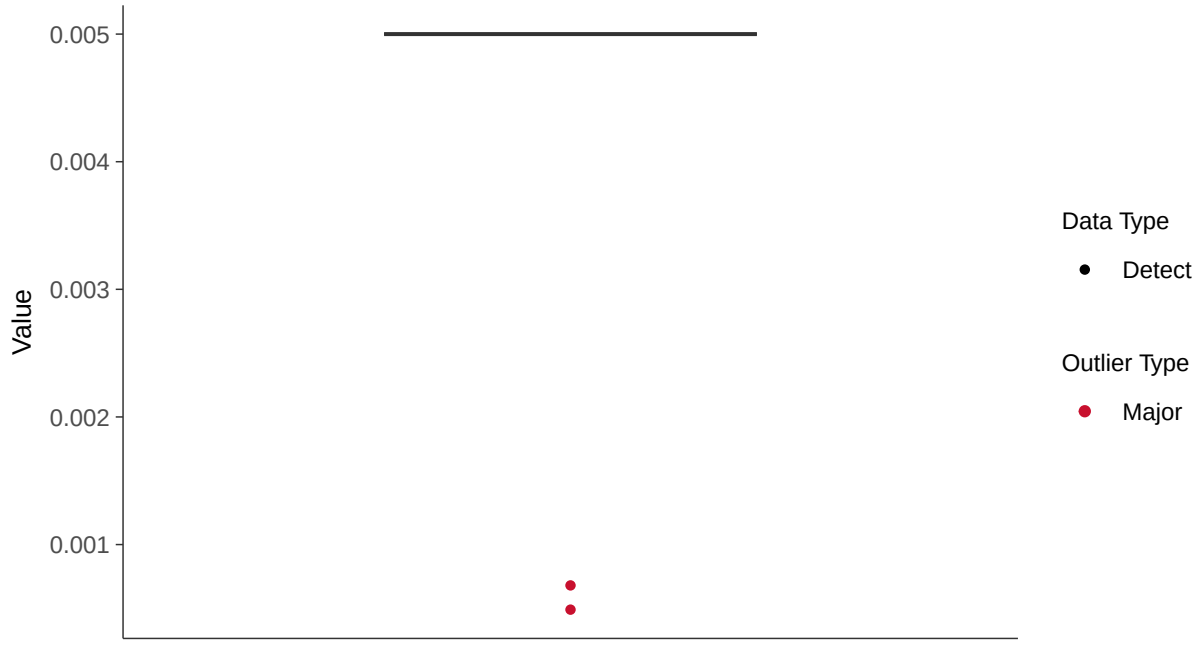
ID: 14_3_110





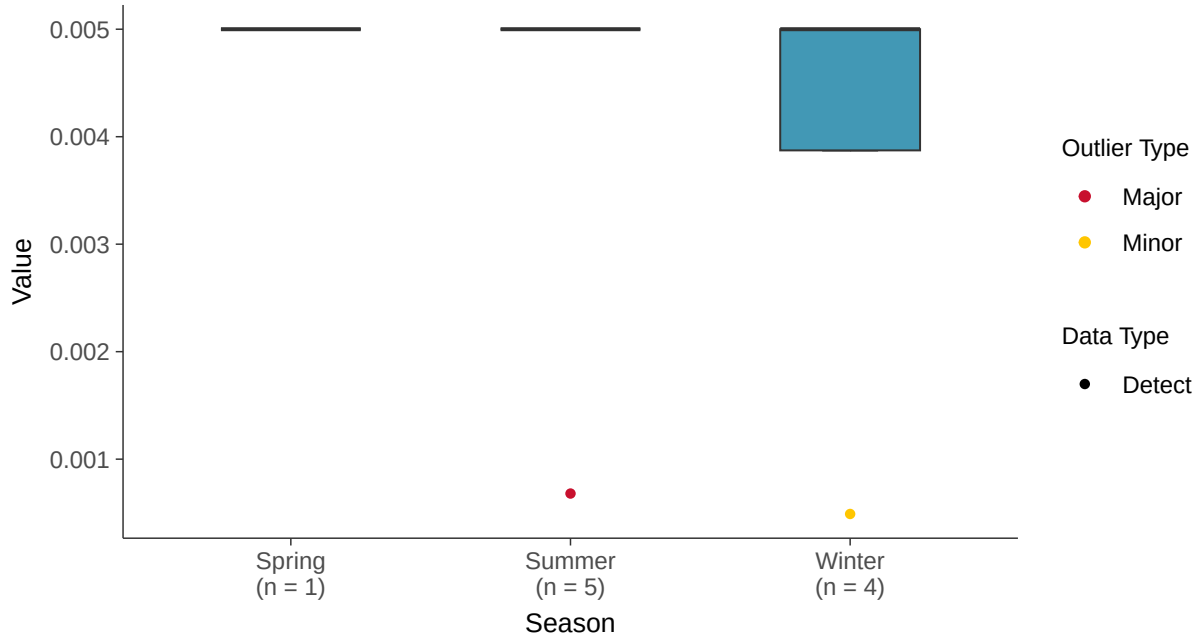
Boxplot

Cobalt, MW-3 (mg/l)



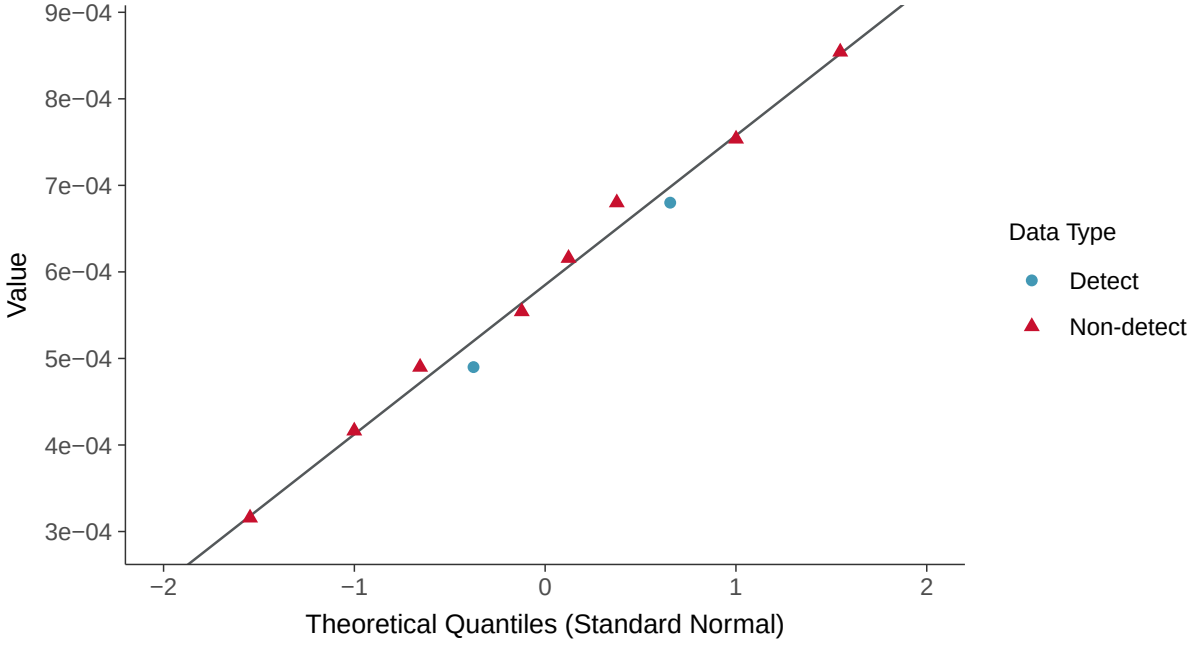
Boxplot by Season

Cobalt, MW-3 (mg/l)



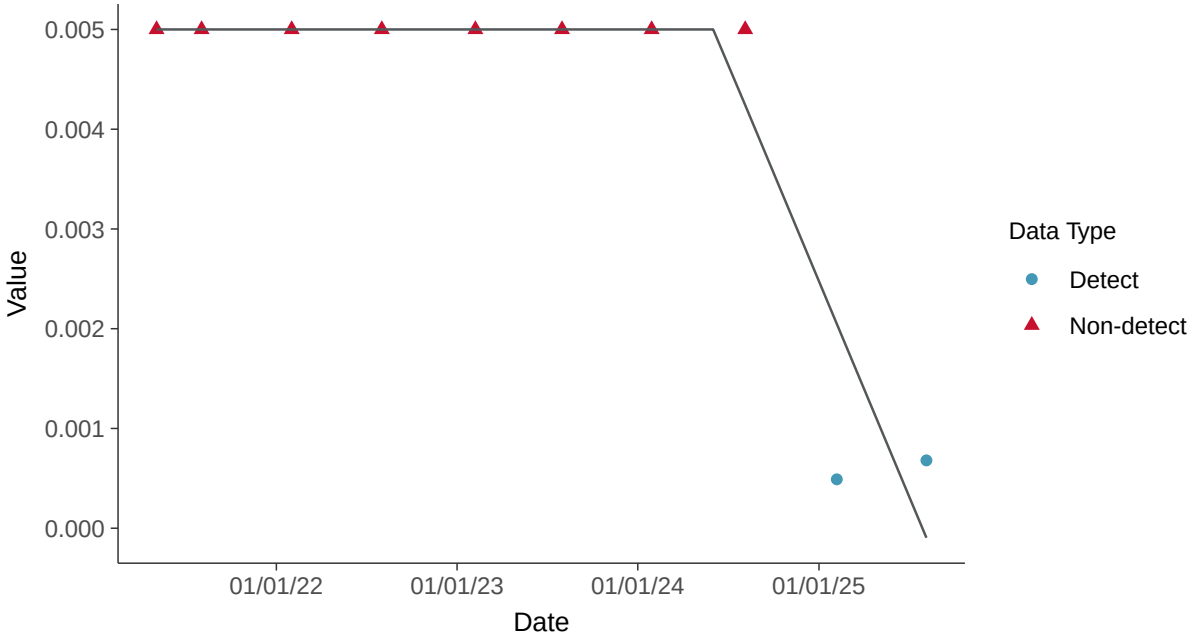
Normal Q-Q plot using ROS Imputed Estimates

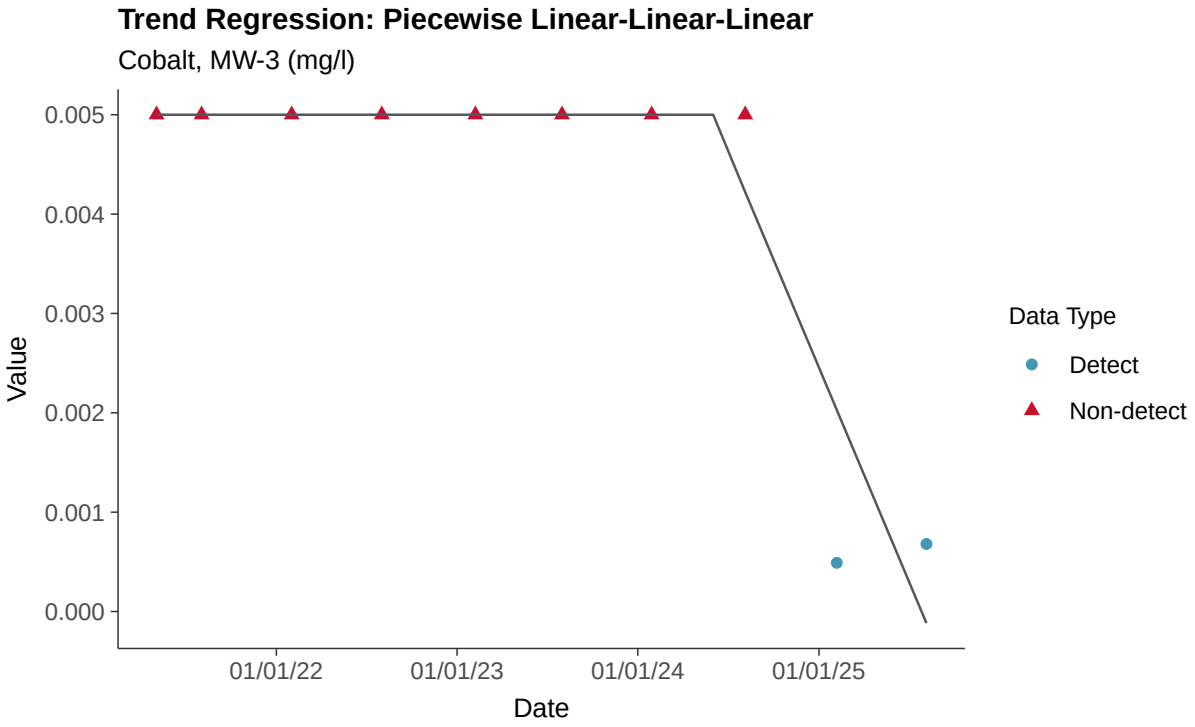
Cobalt, MW-3 (mg/l)



Trend Regression: Piecewise Linear-Linear

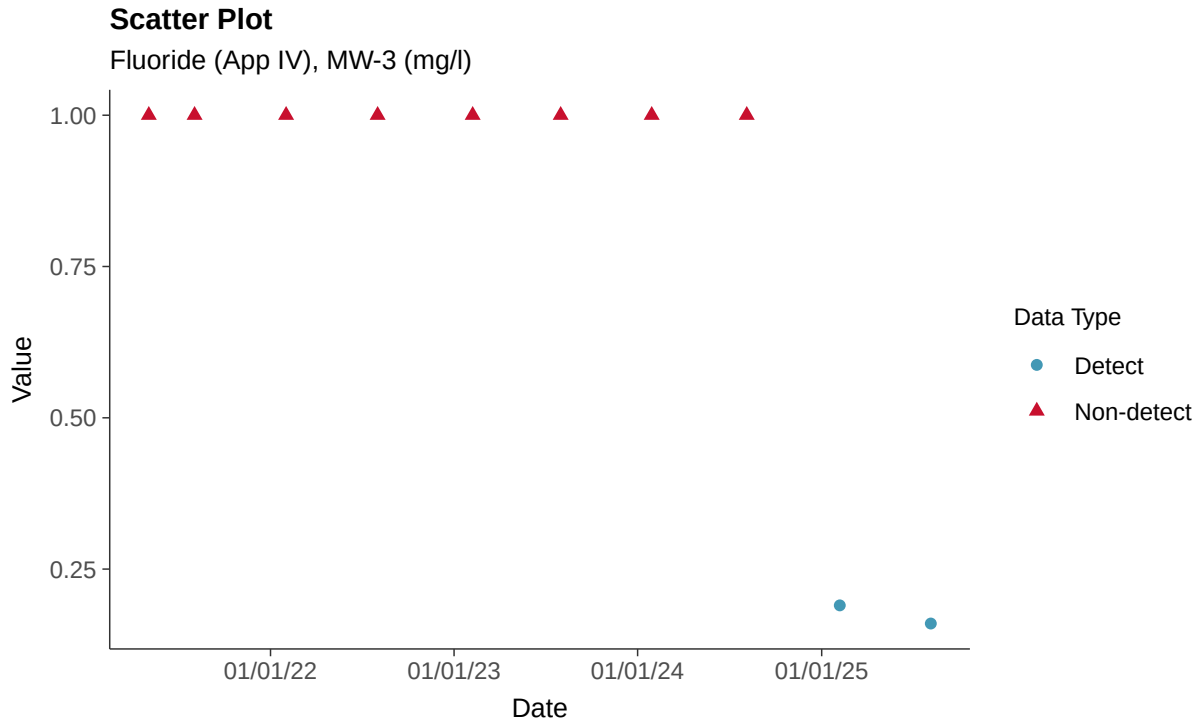
Cobalt, MW-3 (mg/l)

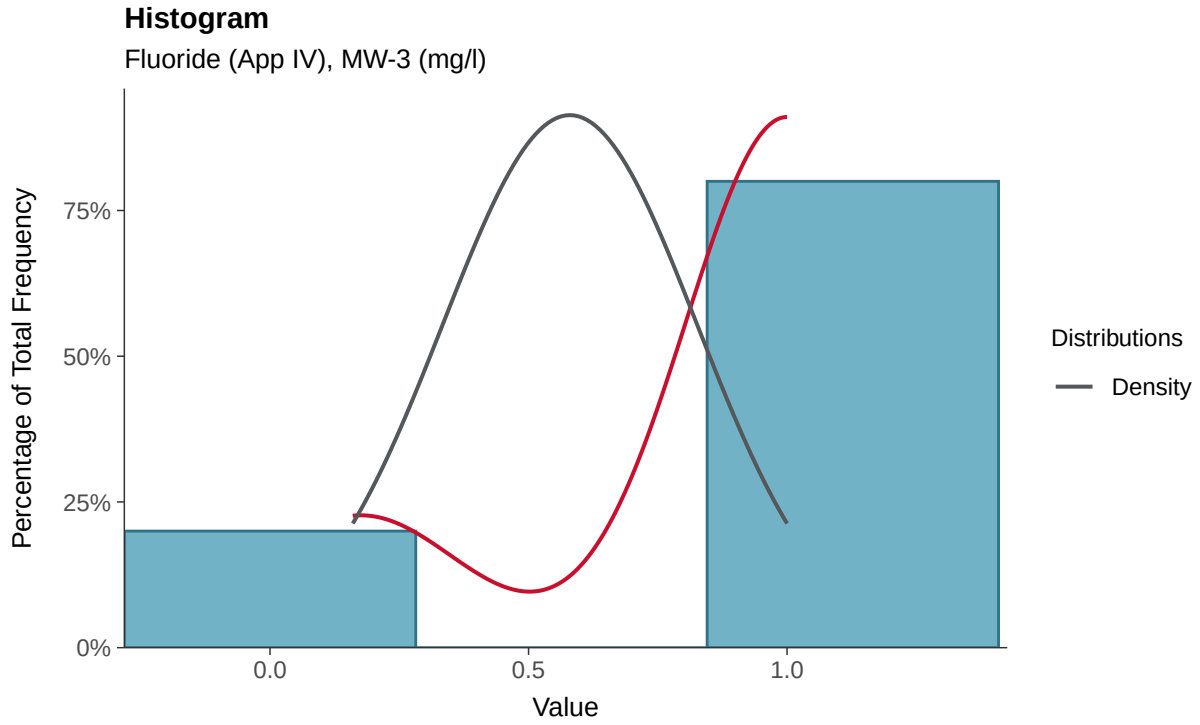



Trend Regression: Piecewise Linear-Linear-Linear
Cobalt, MW-3 (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Fluoride (App IV), MW-3

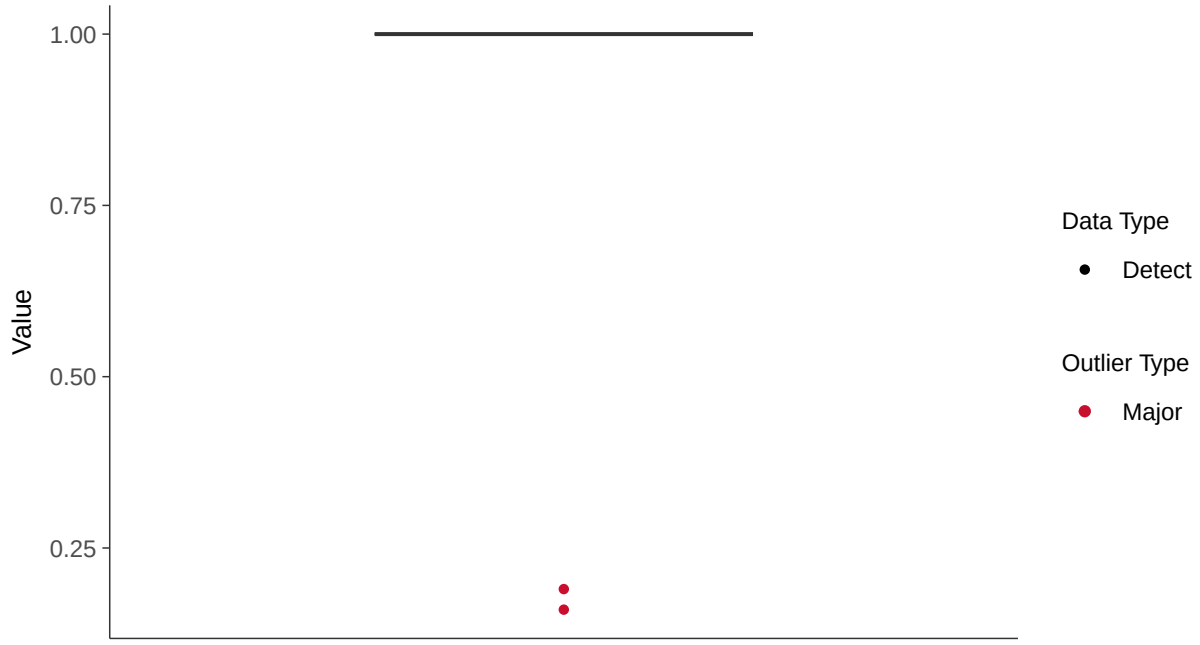
ID: 14_3_113





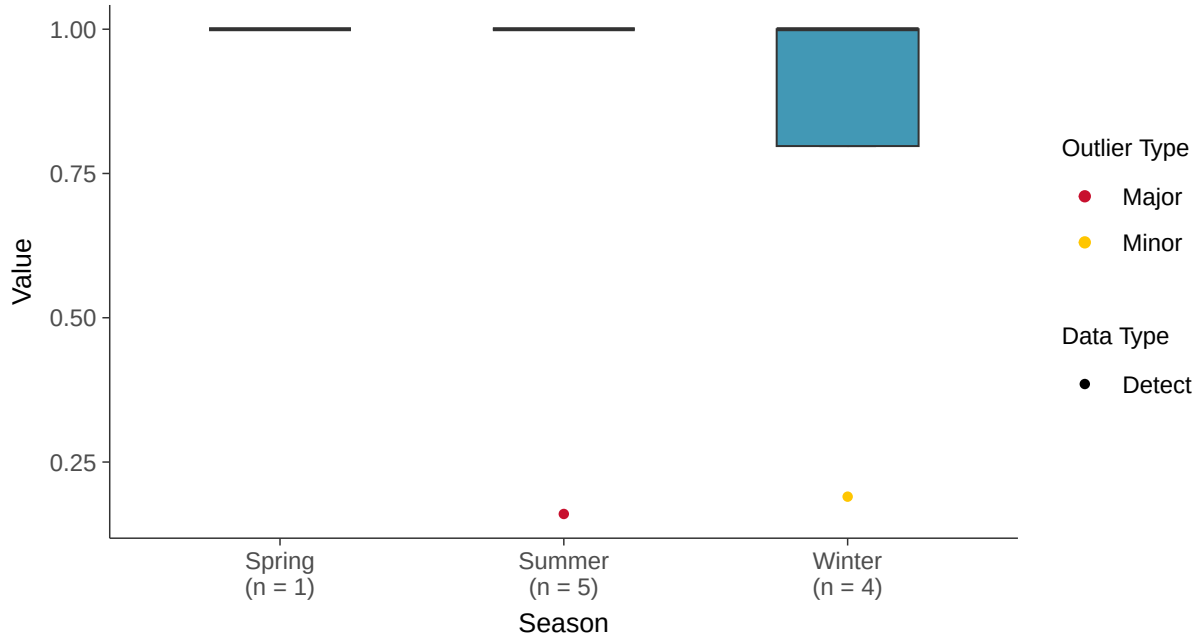
Boxplot

Fluoride (App IV), MW-3 (mg/l)



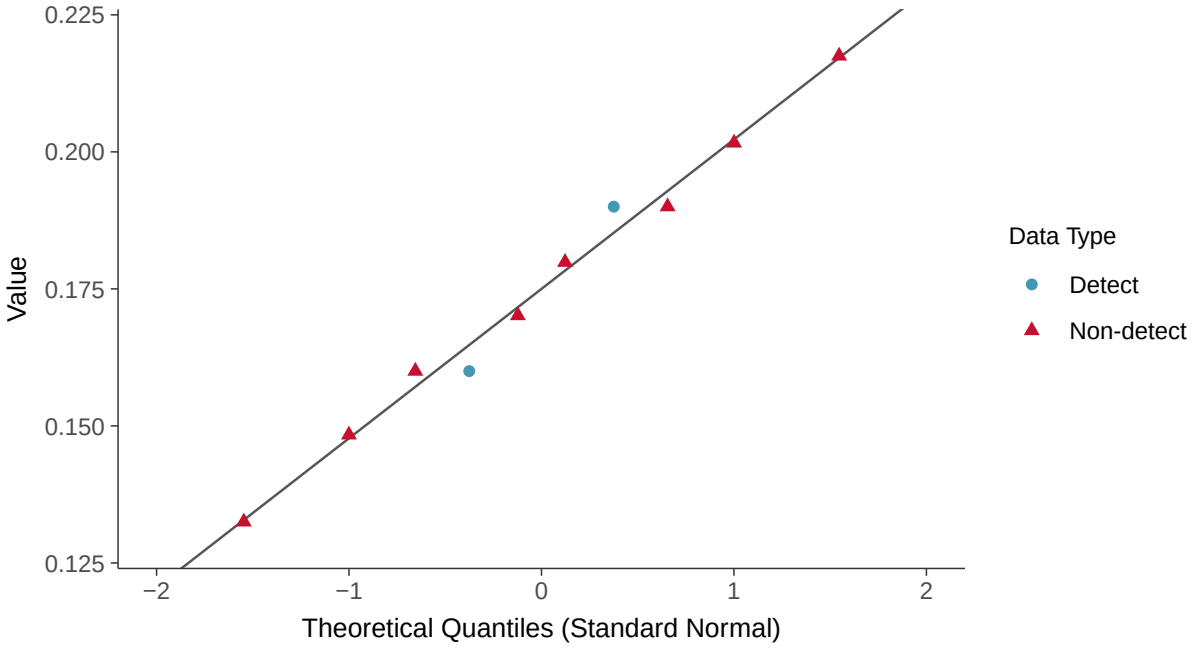
Boxplot by Season

Fluoride (App IV), MW-3 (mg/l)



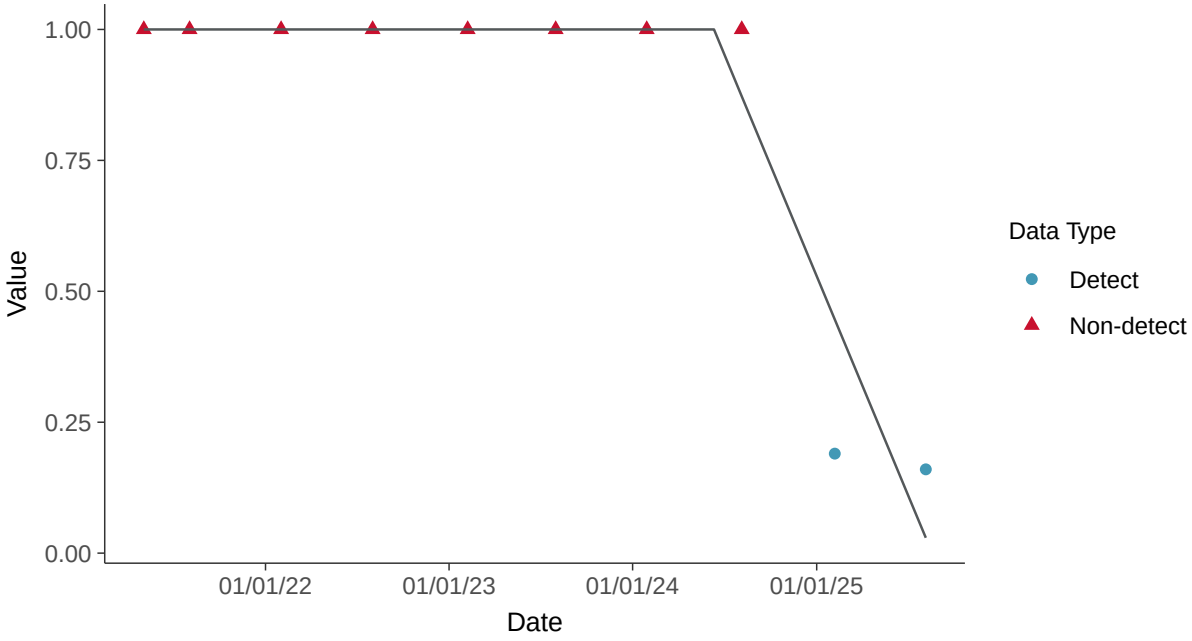
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-3 (mg/l)



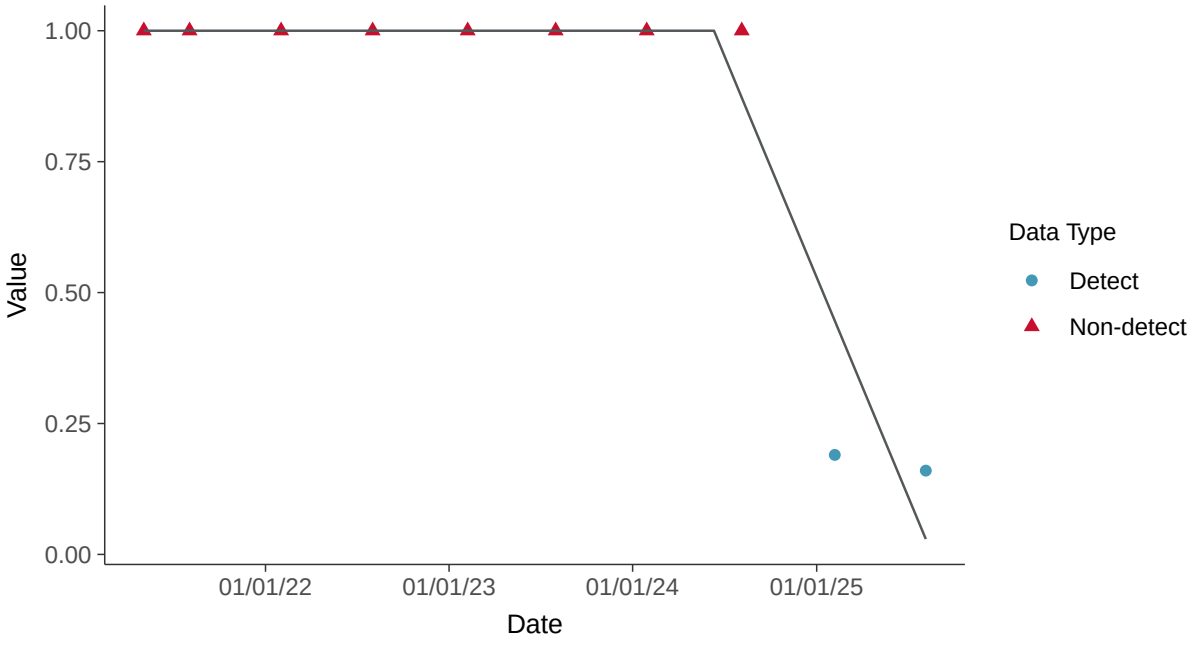
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-3 (mg/l)



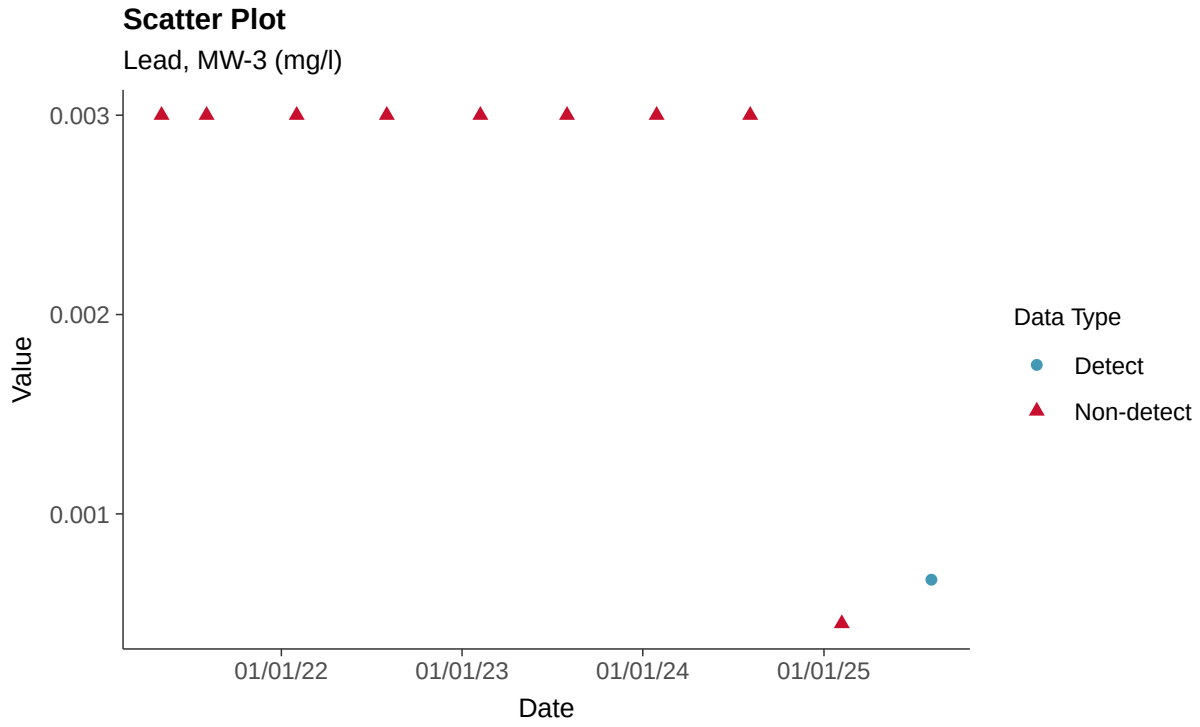
Trend Regression: Piecewise Linear-Linear-Linear

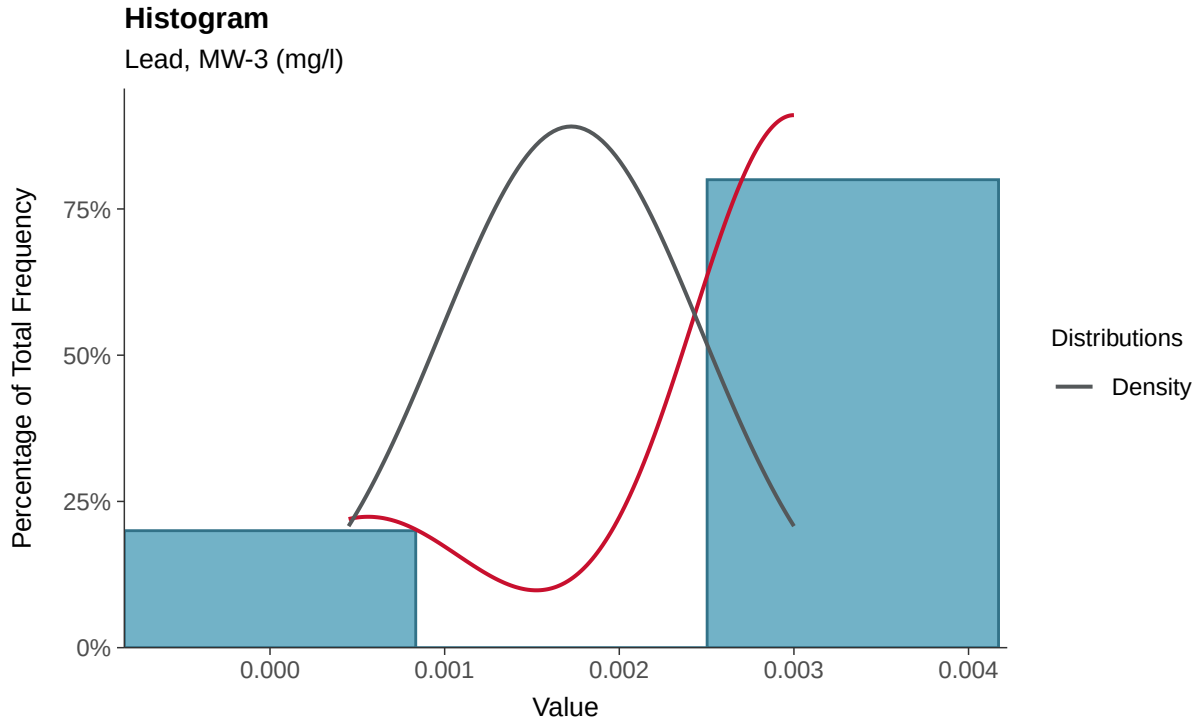
Fluoride (App IV), MW-3 (mg/l)



Appendix IV: Lead, MW-3

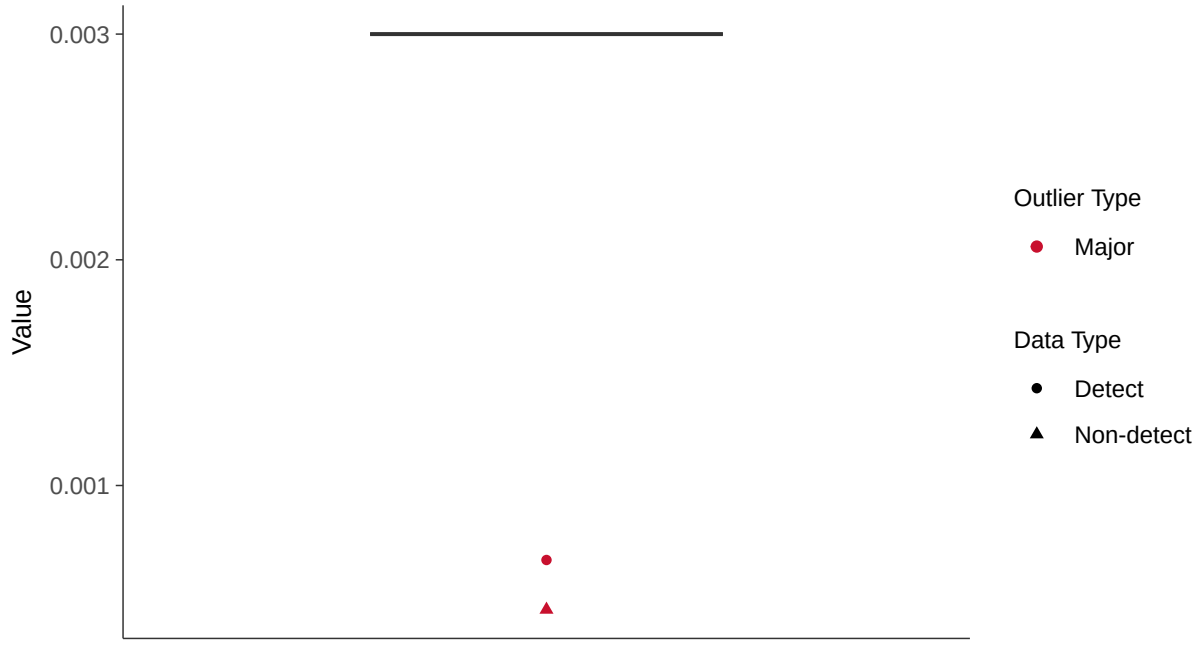
ID: 14_3_115





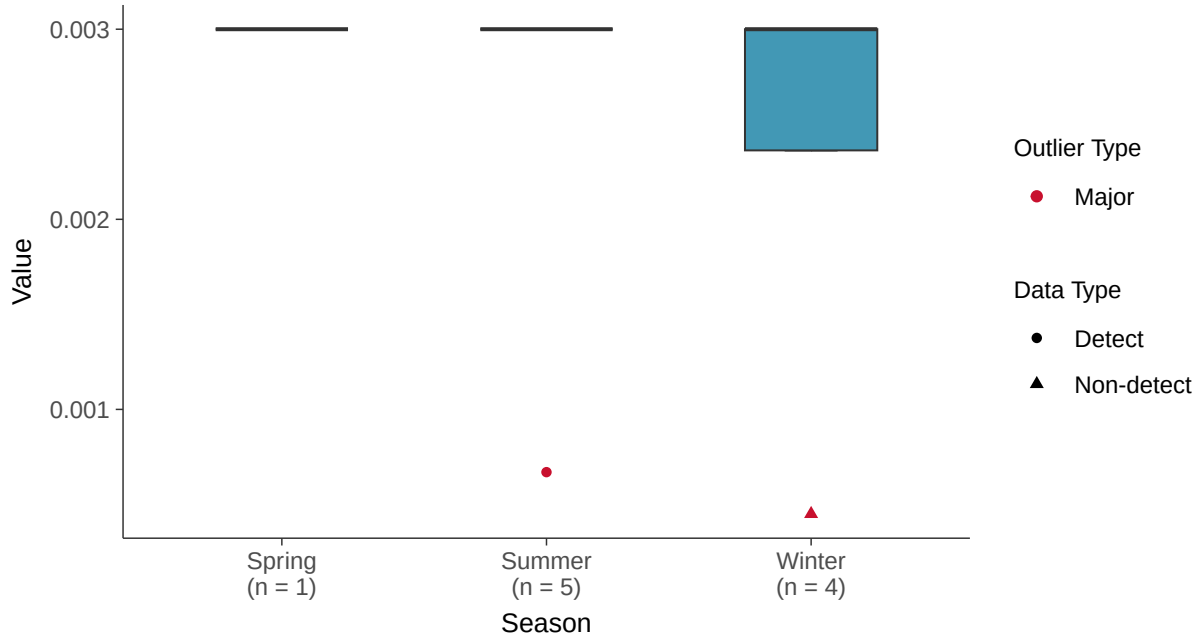
Boxplot

Lead, MW-3 (mg/l)



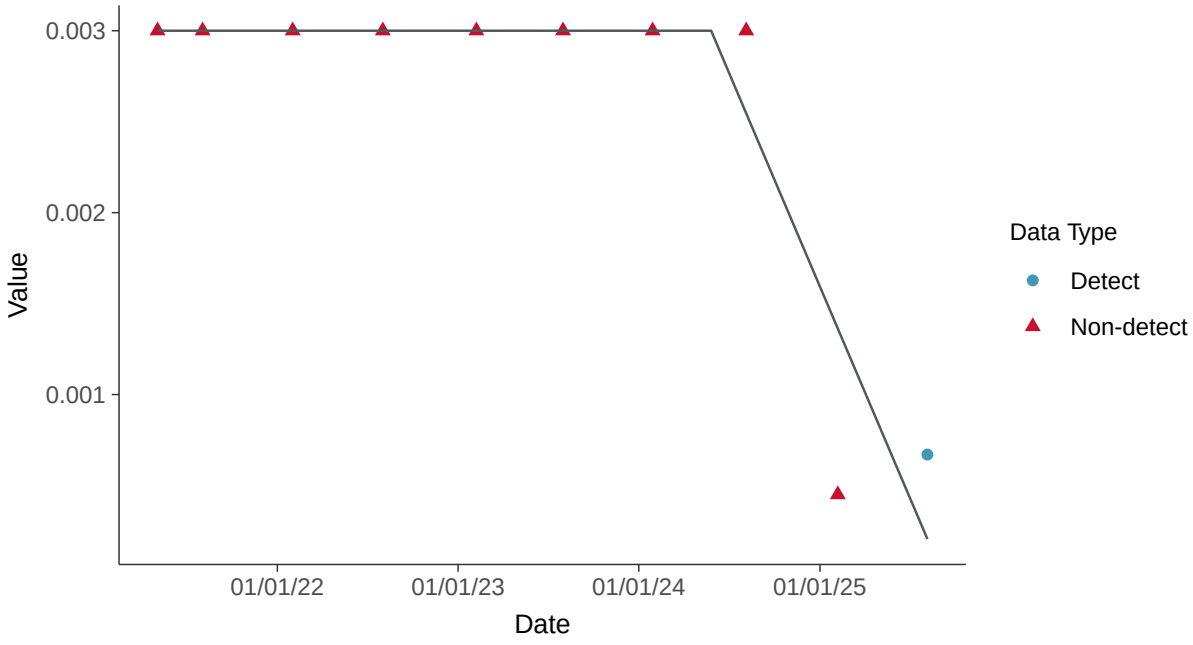
Boxplot by Season

Lead, MW-3 (mg/l)



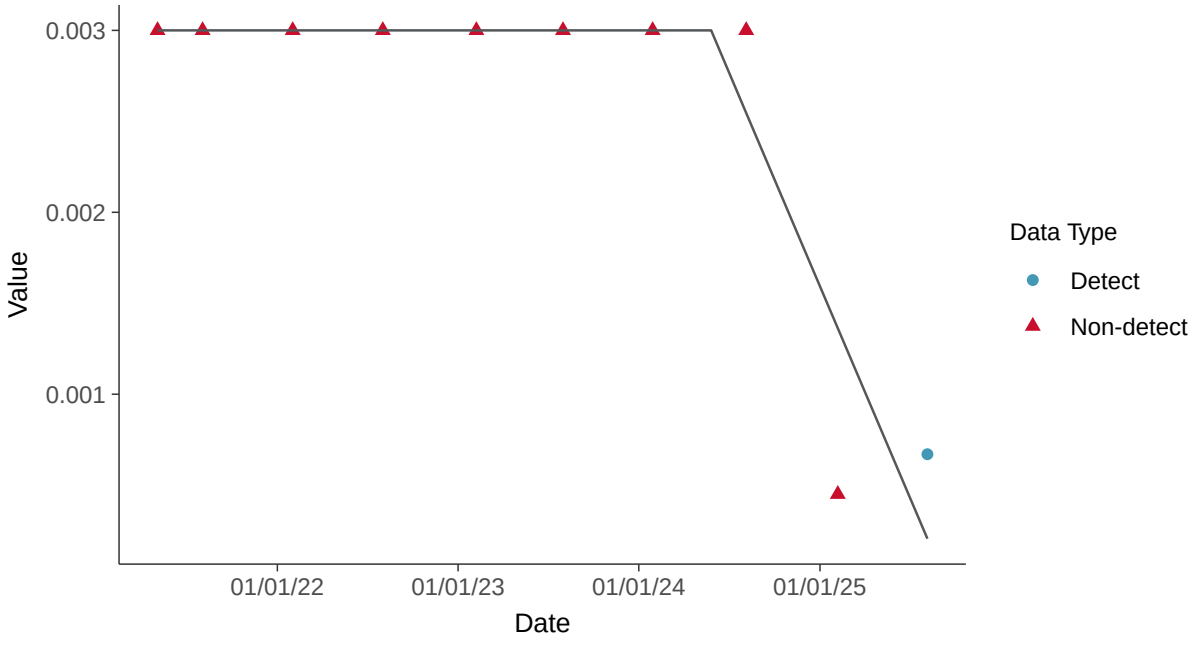
Trend Regression: Piecewise Linear-Linear

Lead, MW-3 (mg/l)



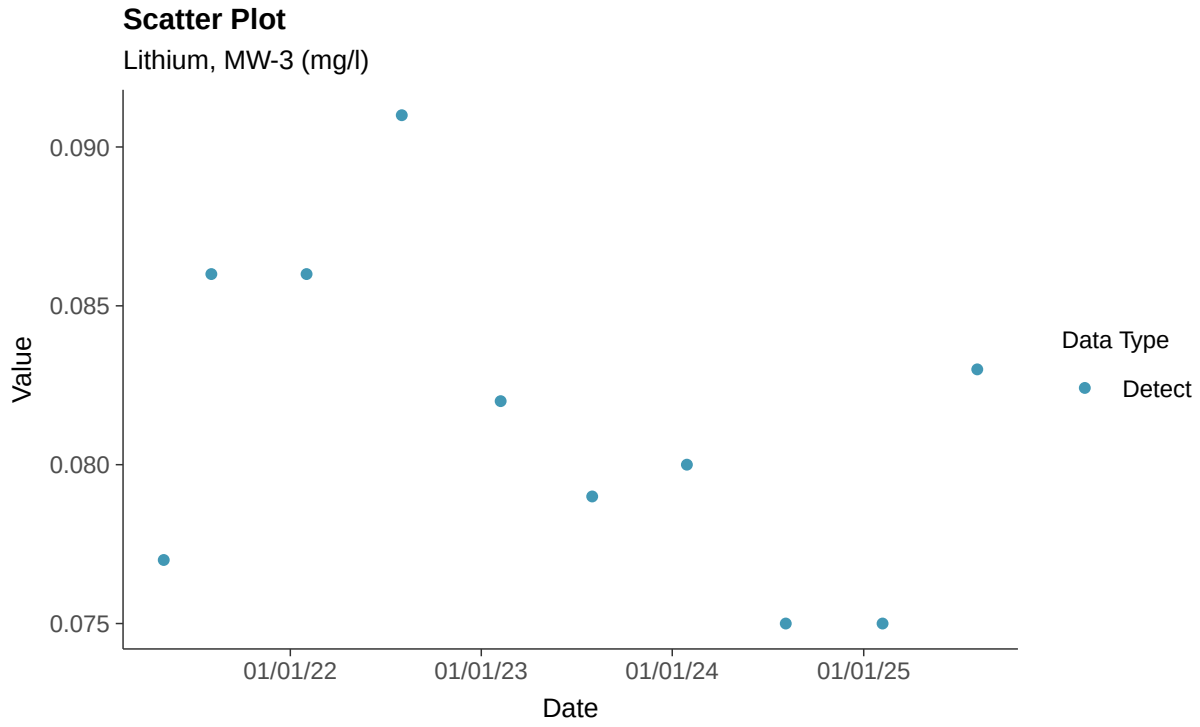
Trend Regression: Piecewise Linear-Linear-Linear

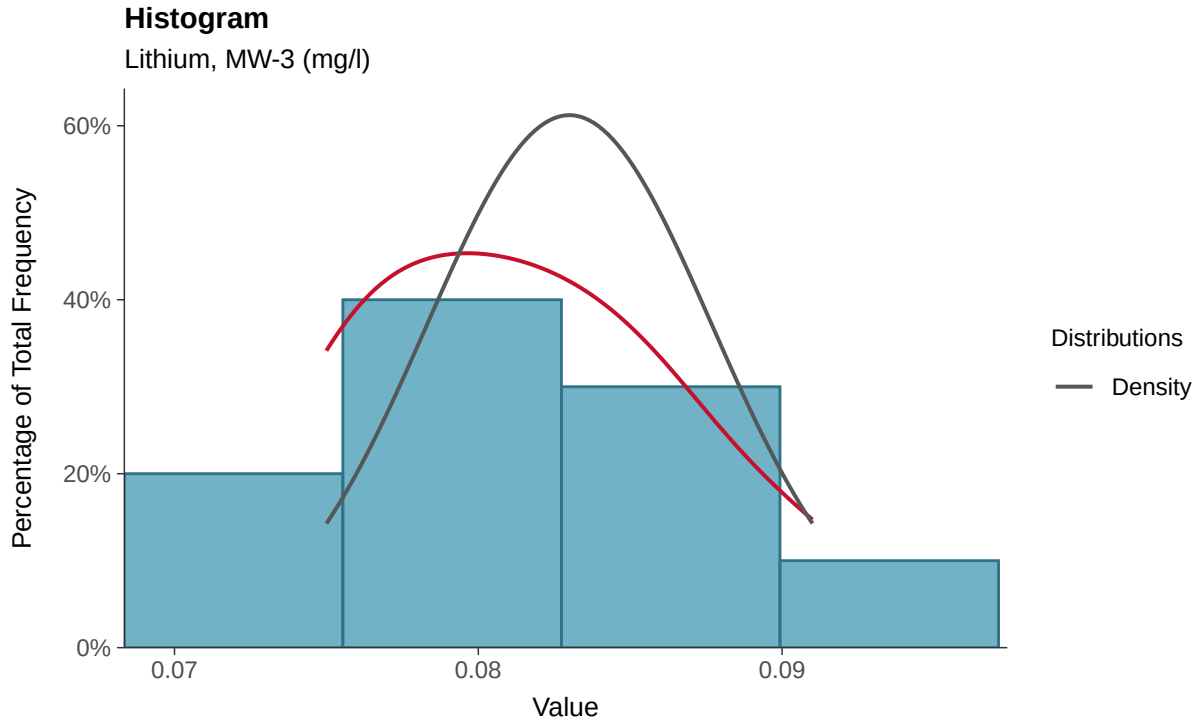
Lead, MW-3 (mg/l)



Appendix IV: Lithium, MW-3

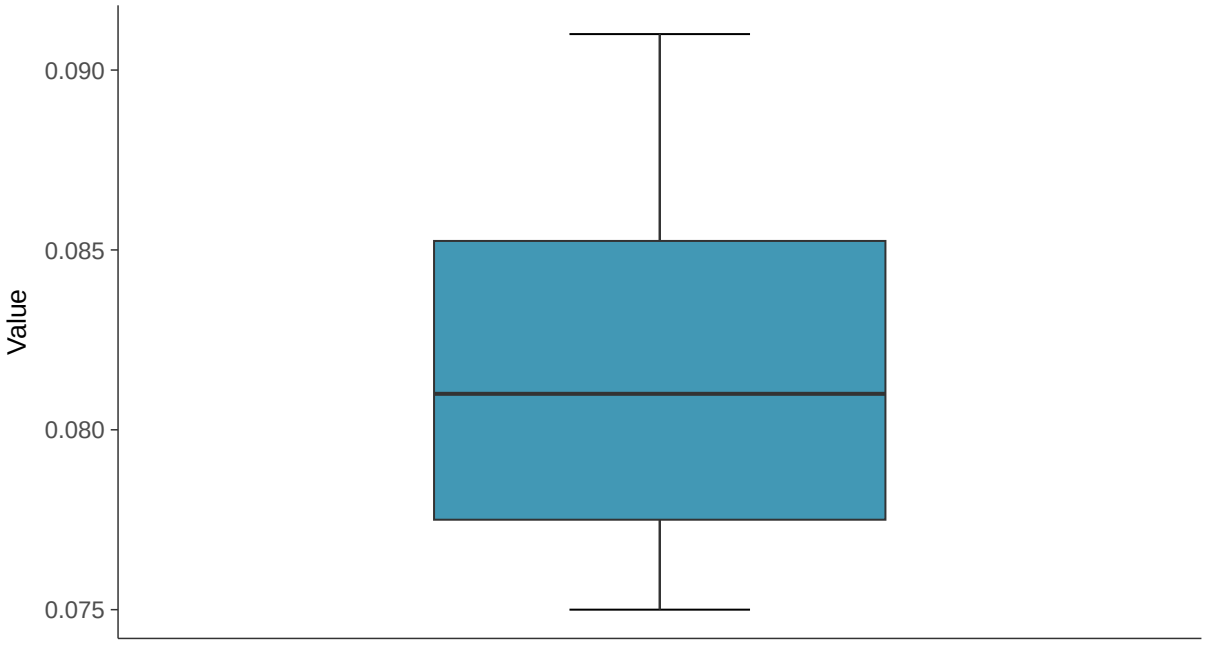
ID: 14_3_116





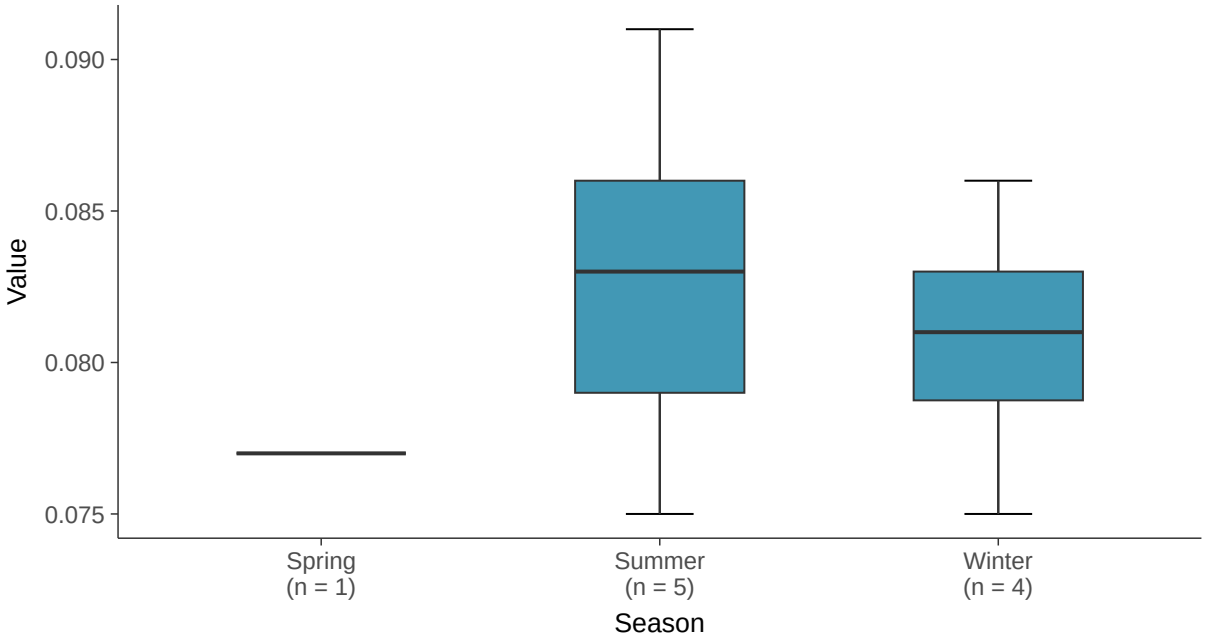
Boxplot

Lithium, MW-3 (mg/l)



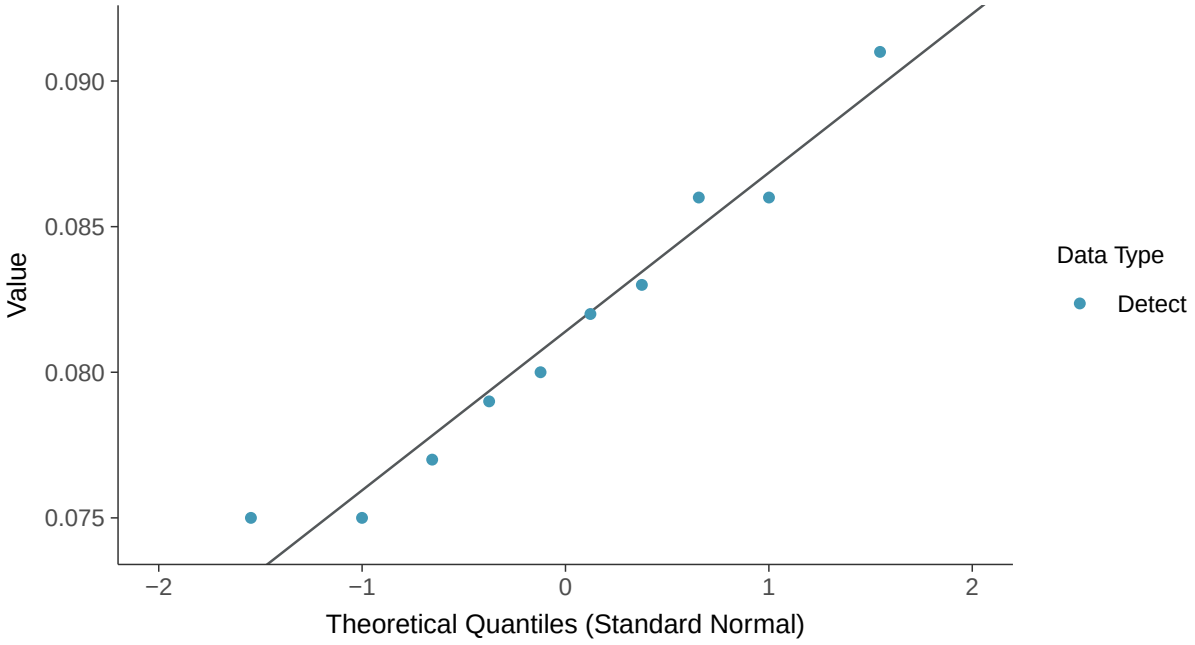
Boxplot by Season

Lithium, MW-3 (mg/l)



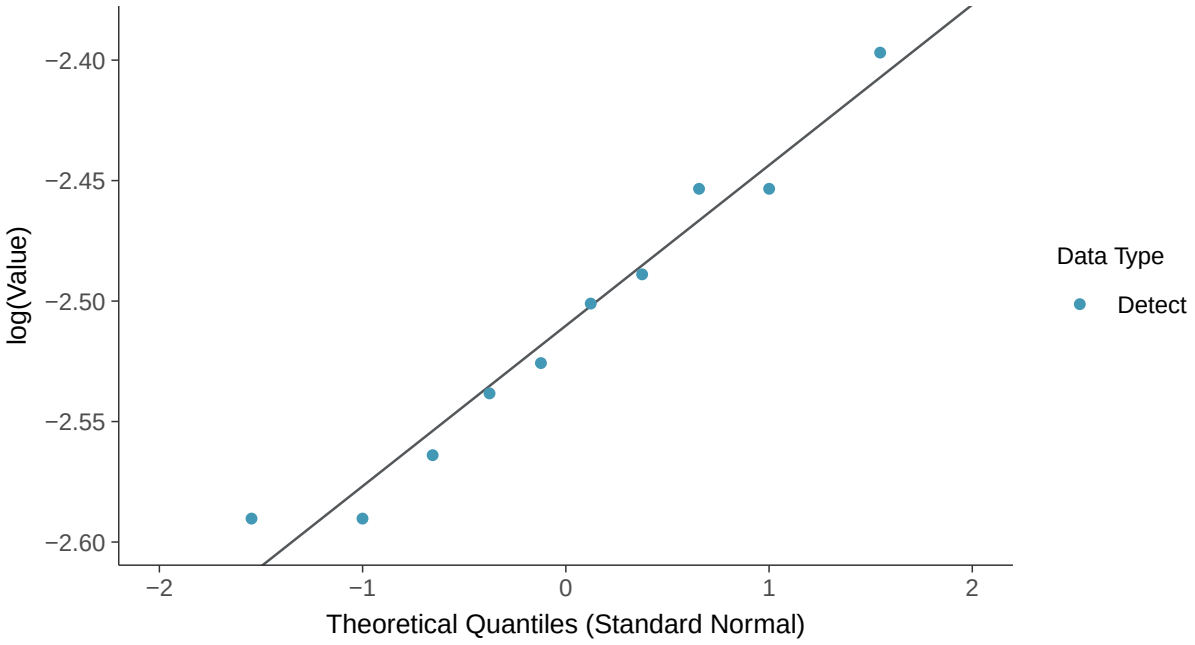
Normal Q-Q plot

Lithium, MW-3 (mg/l)



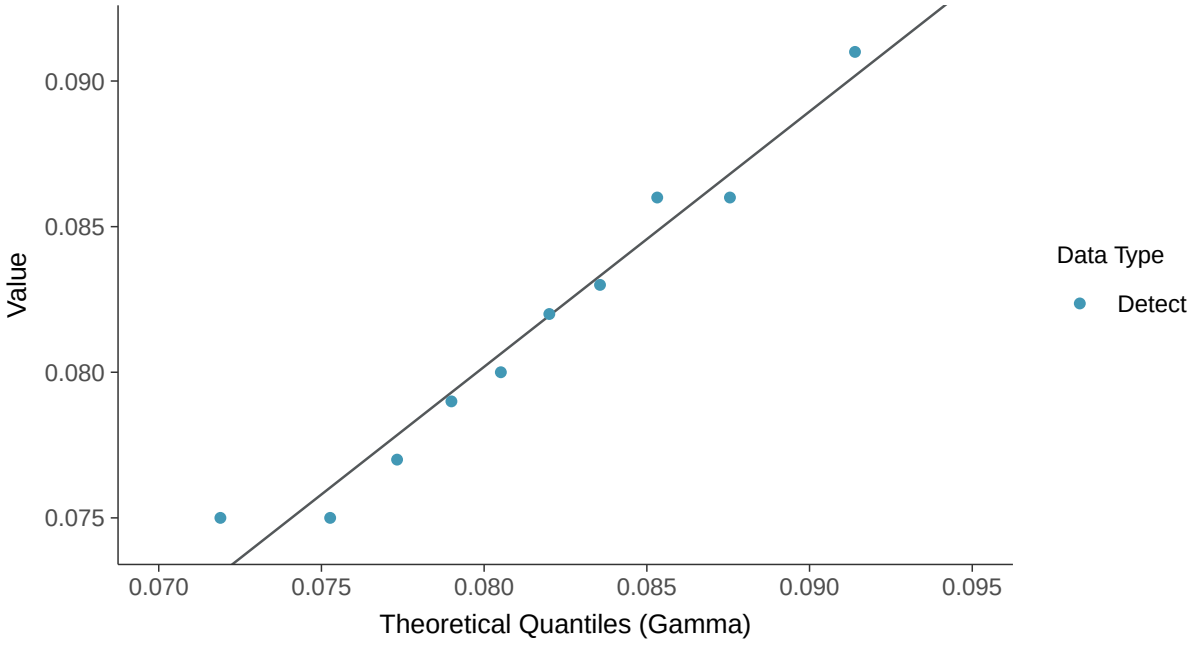
Lognormal Q-Q plot

Lithium, MW-3 (mg/l)



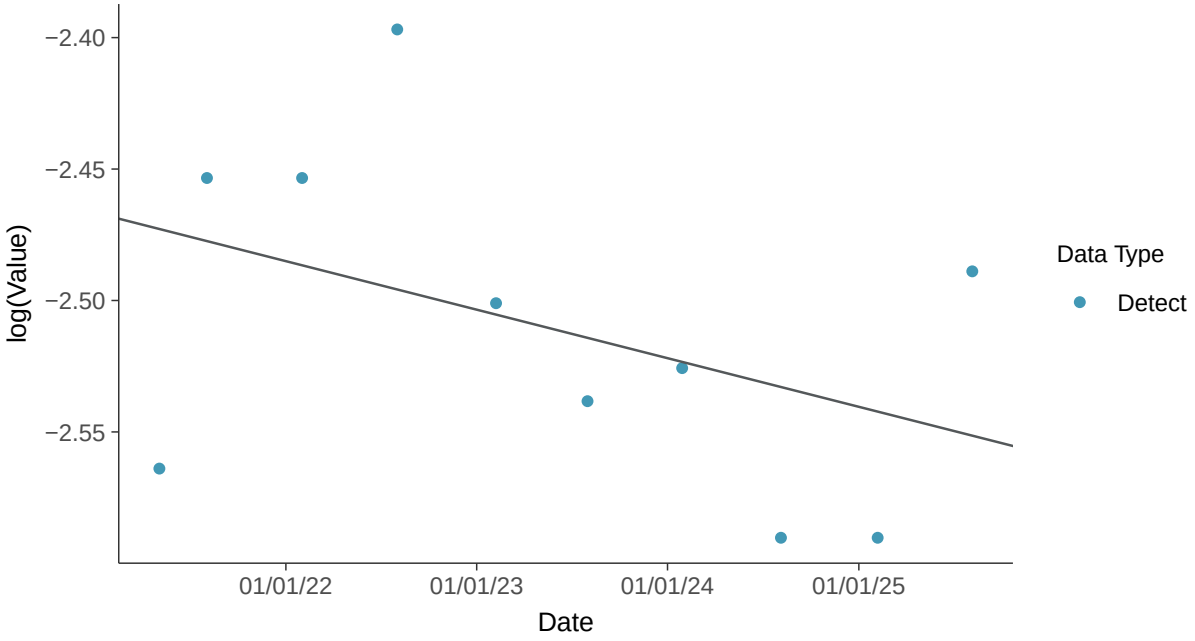
Gamma Q-Q plot

Lithium, MW-3 (mg/l)



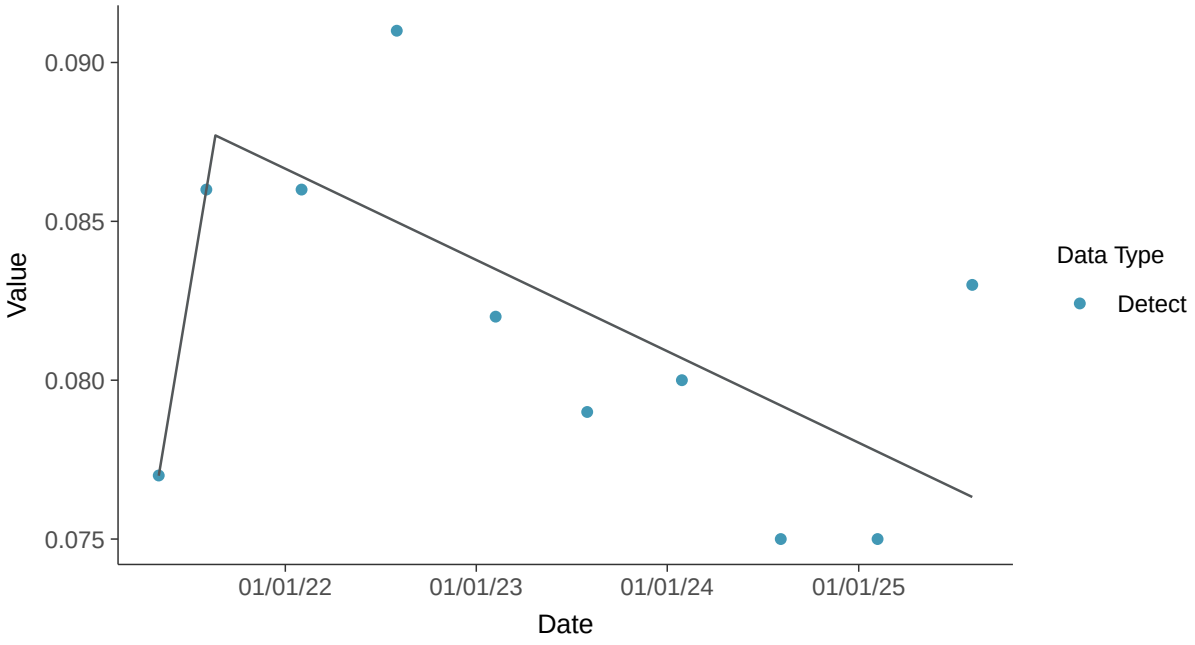
Trend Regression: Lognormal MLE

Lithium, MW-3 (mg/l)



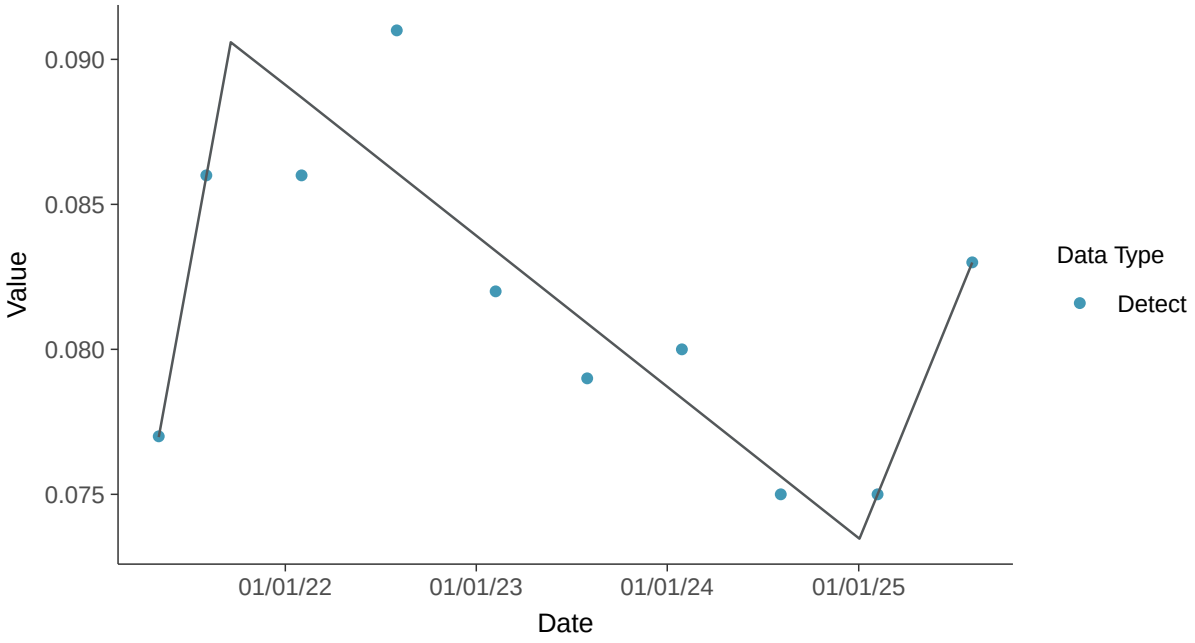
Trend Regression: Piecewise Linear-Linear

Lithium, MW-3 (mg/l)



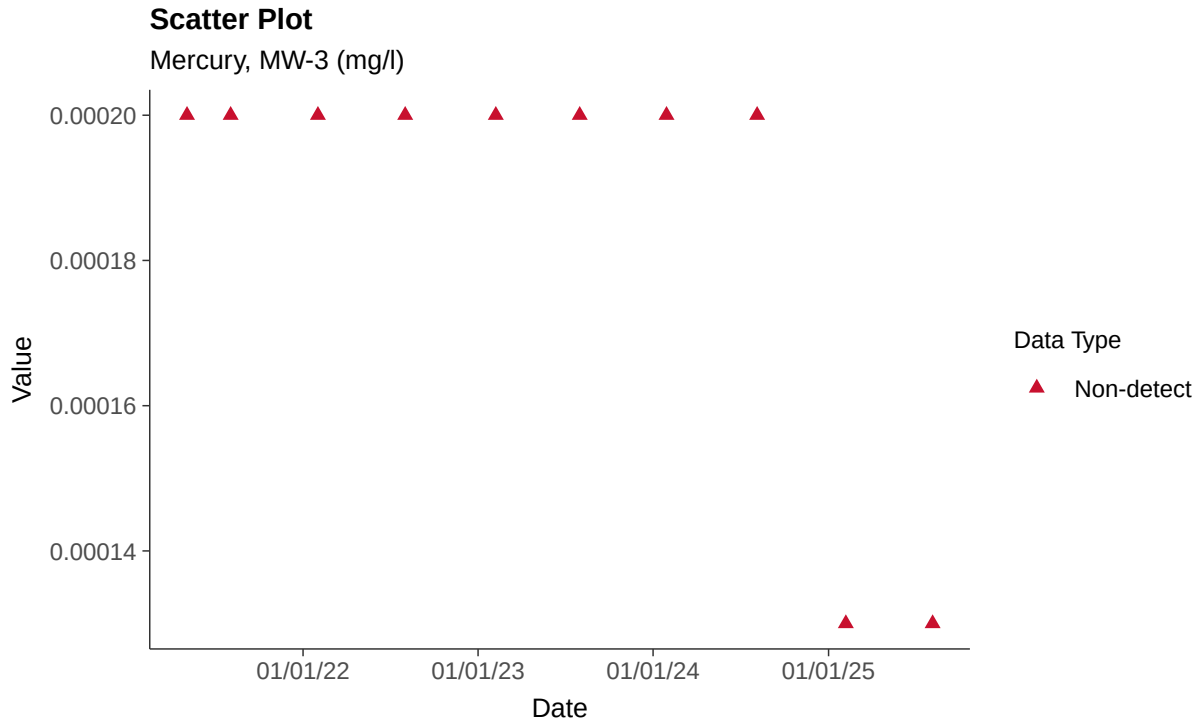
Trend Regression: Piecewise Linear-Linear-Linear

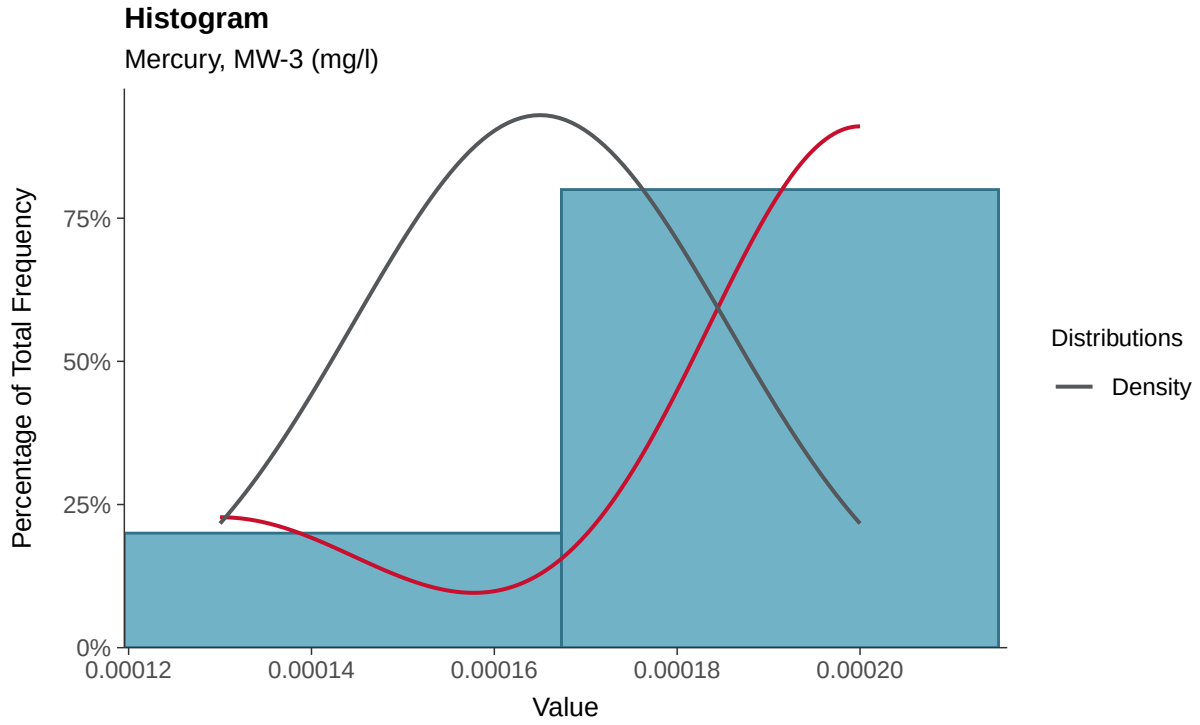
Lithium, MW-3 (mg/l)



Appendix IV: Mercury, MW-3

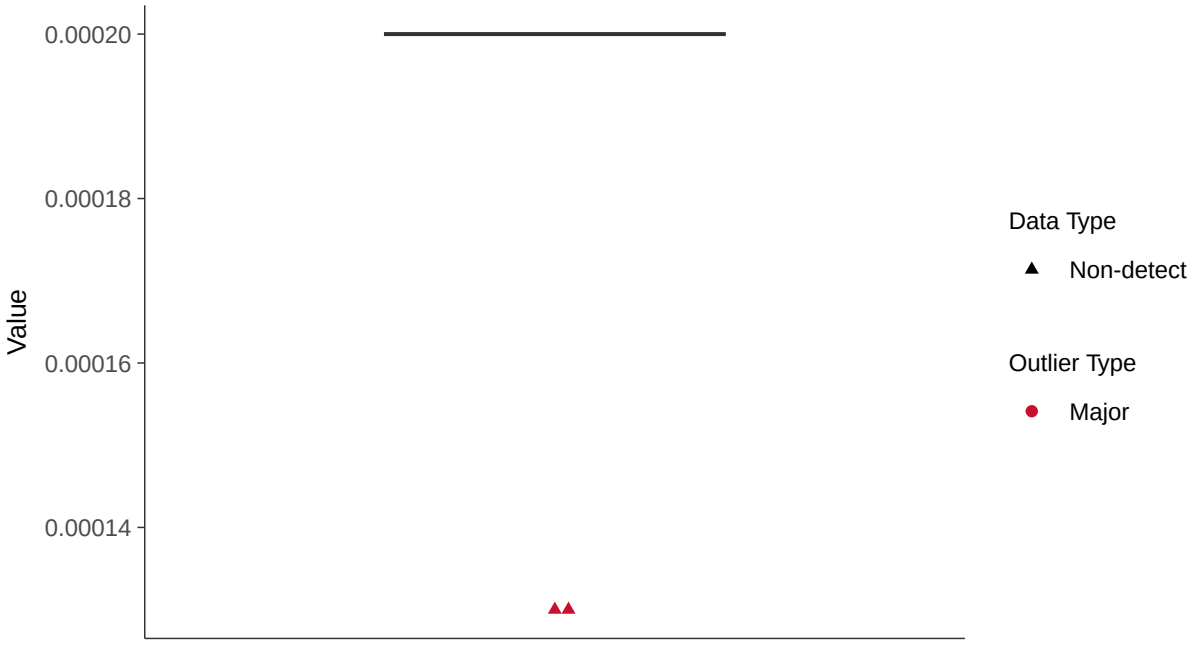
ID: 14_3_117





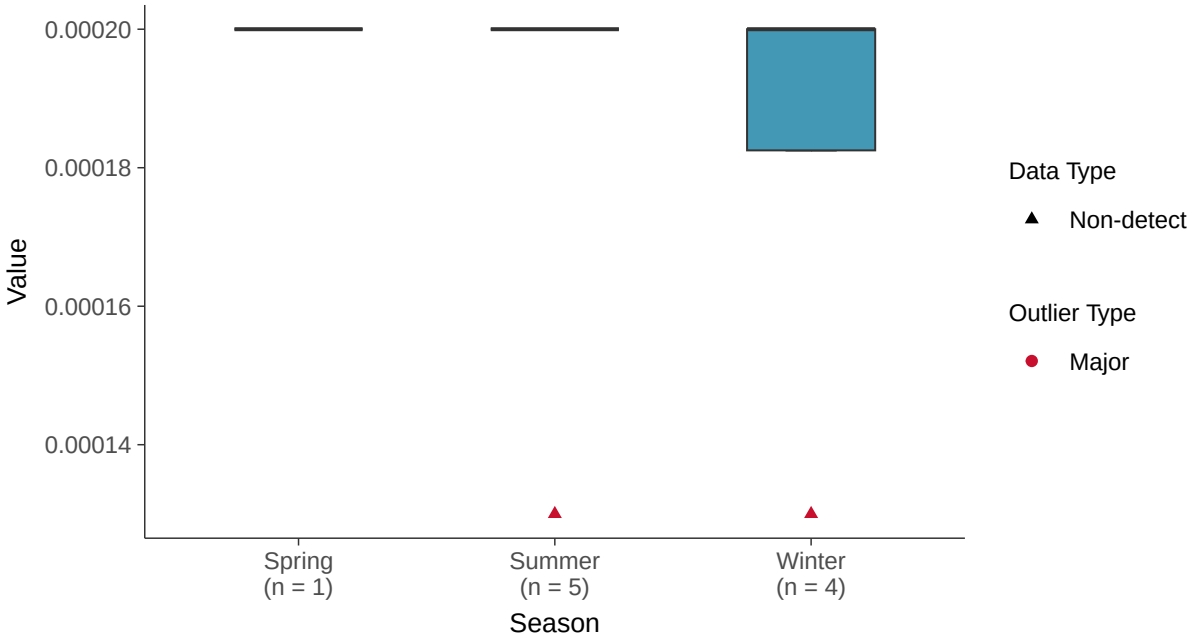
Boxplot

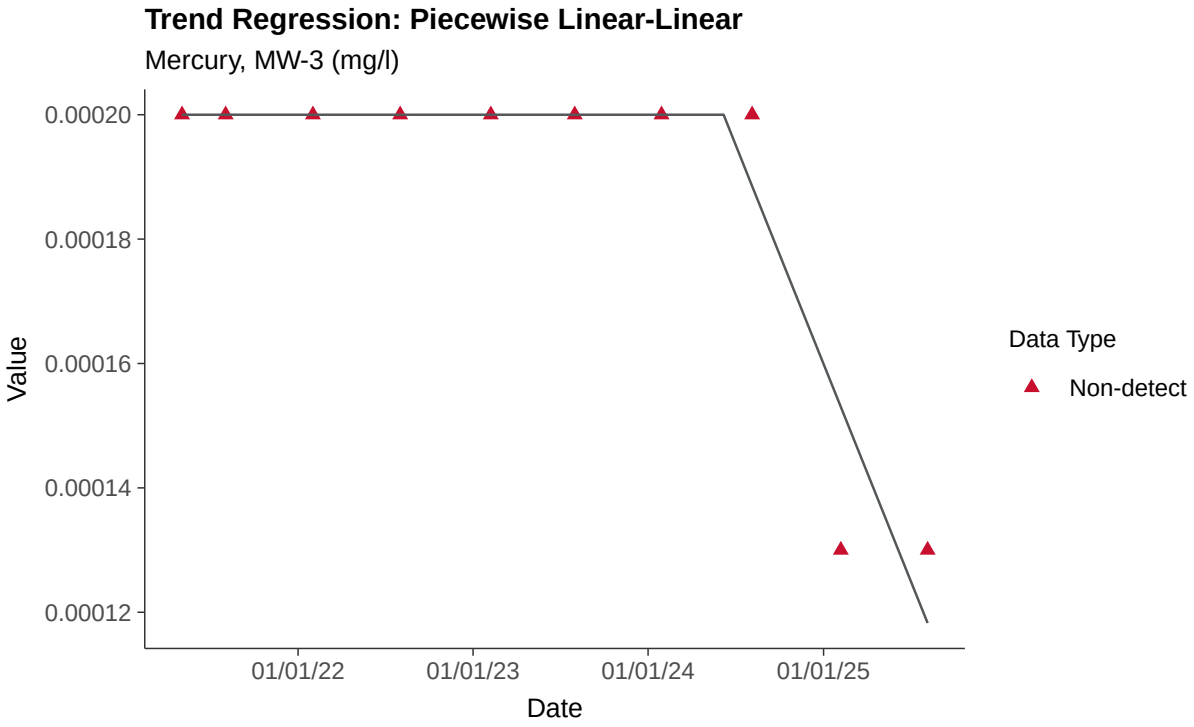
Mercury, MW-3 (mg/l)



Boxplot by Season

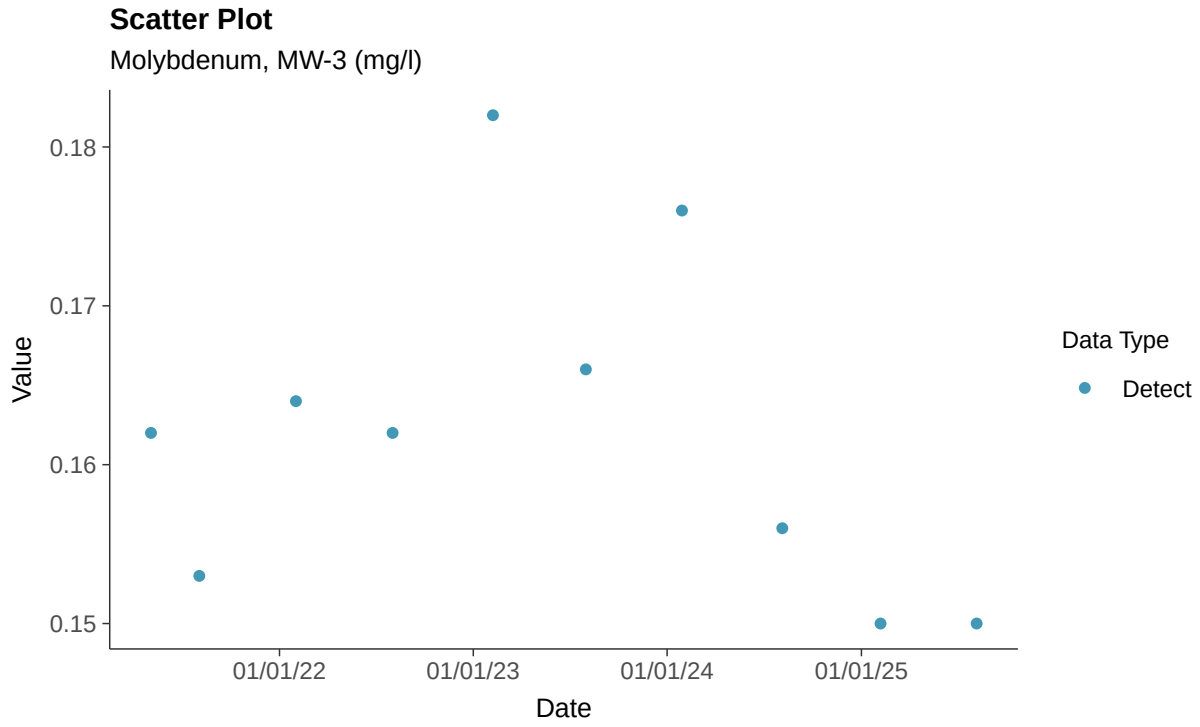
Mercury, MW-3 (mg/l)

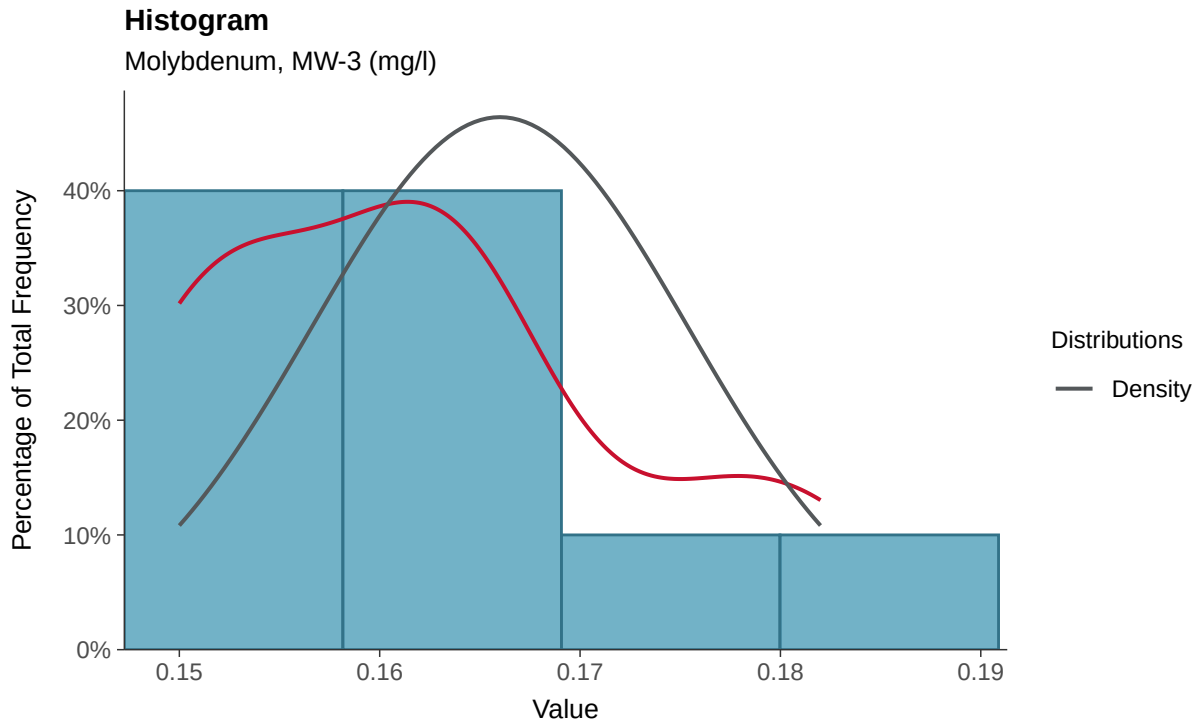



Trend Regression: Piecewise Linear-Linear
Mercury, MW-3 (mg/l)
0.00020
0.00018
0.00016
0.00014
0.00012
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Appendix IV: Molybdenum, MW-3

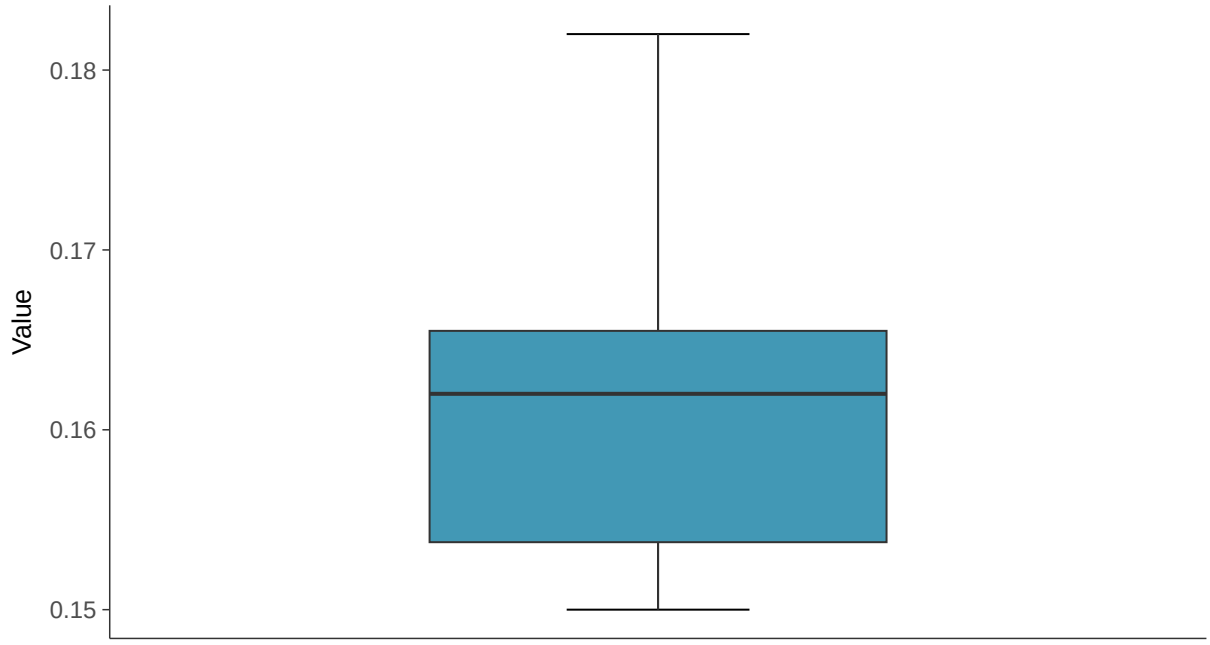
ID: 14_3_118





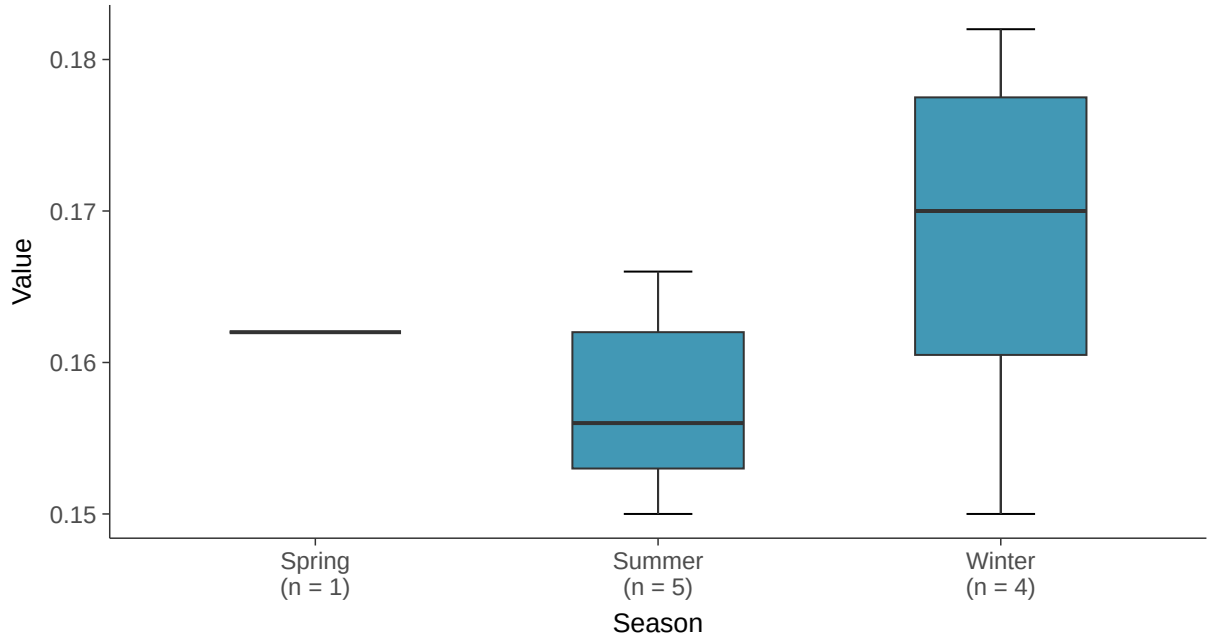
Boxplot

Molybdenum, MW-3 (mg/l)



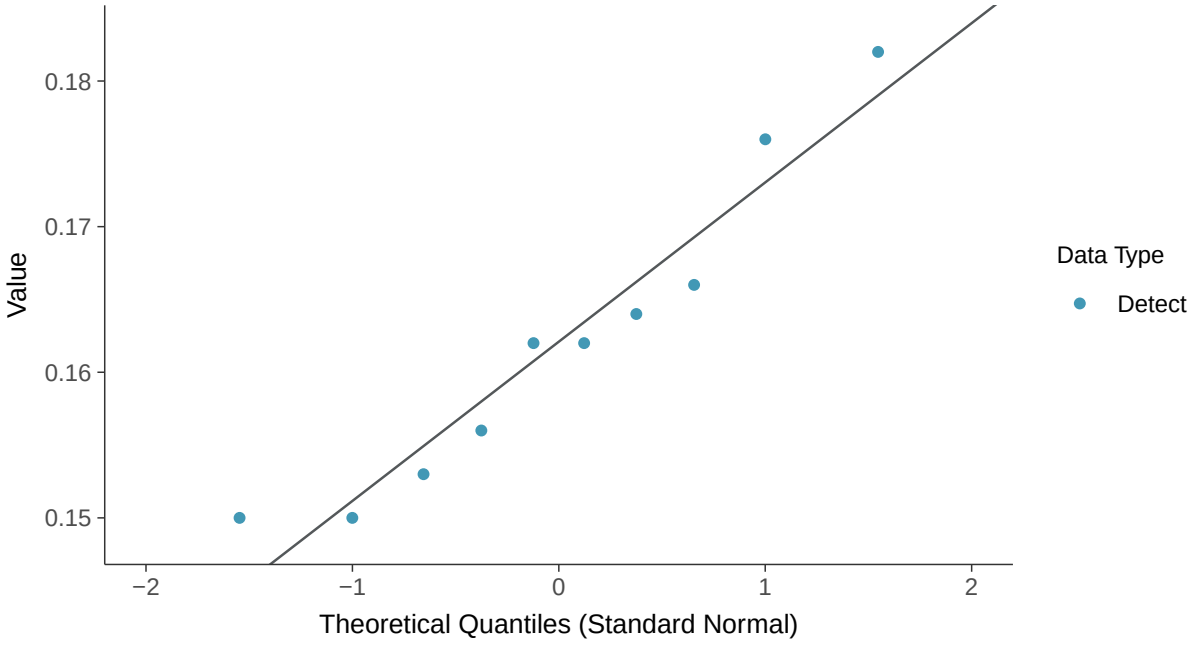
Boxplot by Season

Molybdenum, MW-3 (mg/l)



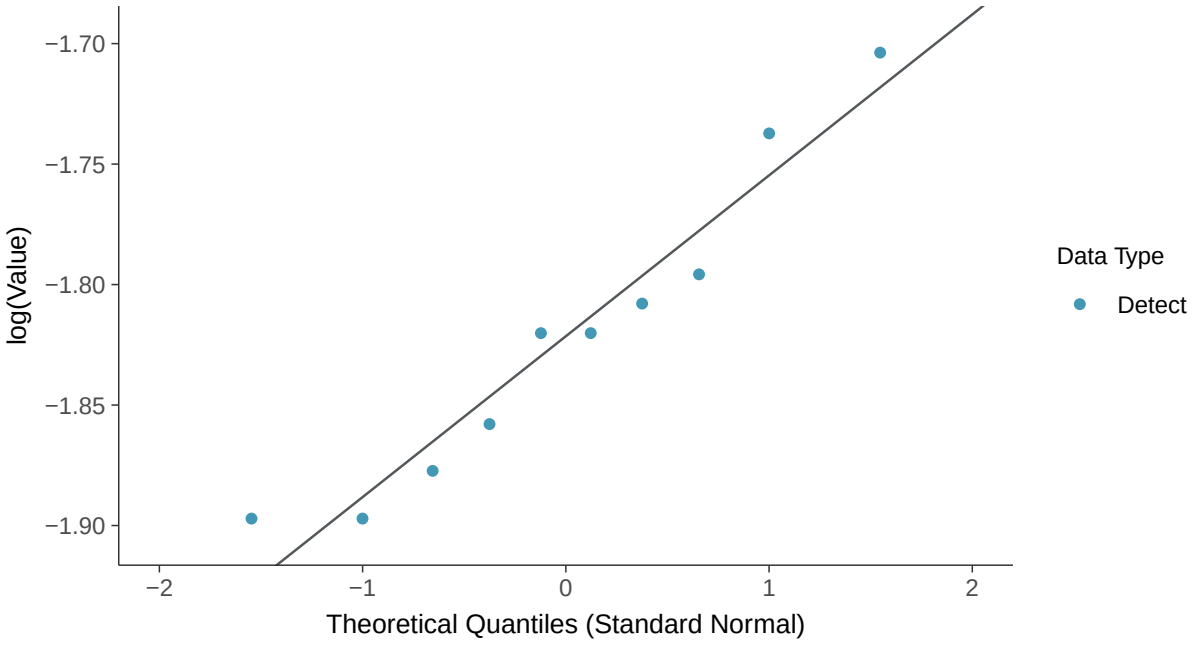
Normal Q-Q plot

Molybdenum, MW-3 (mg/l)



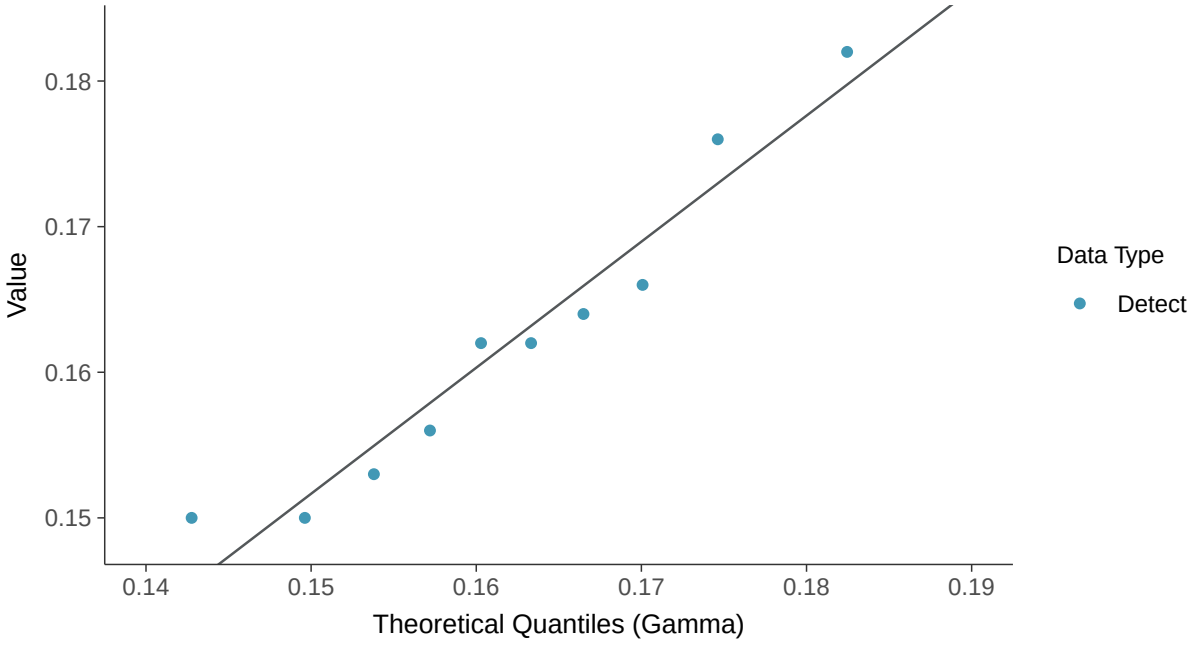
Lognormal Q-Q plot

Molybdenum, MW-3 (mg/l)



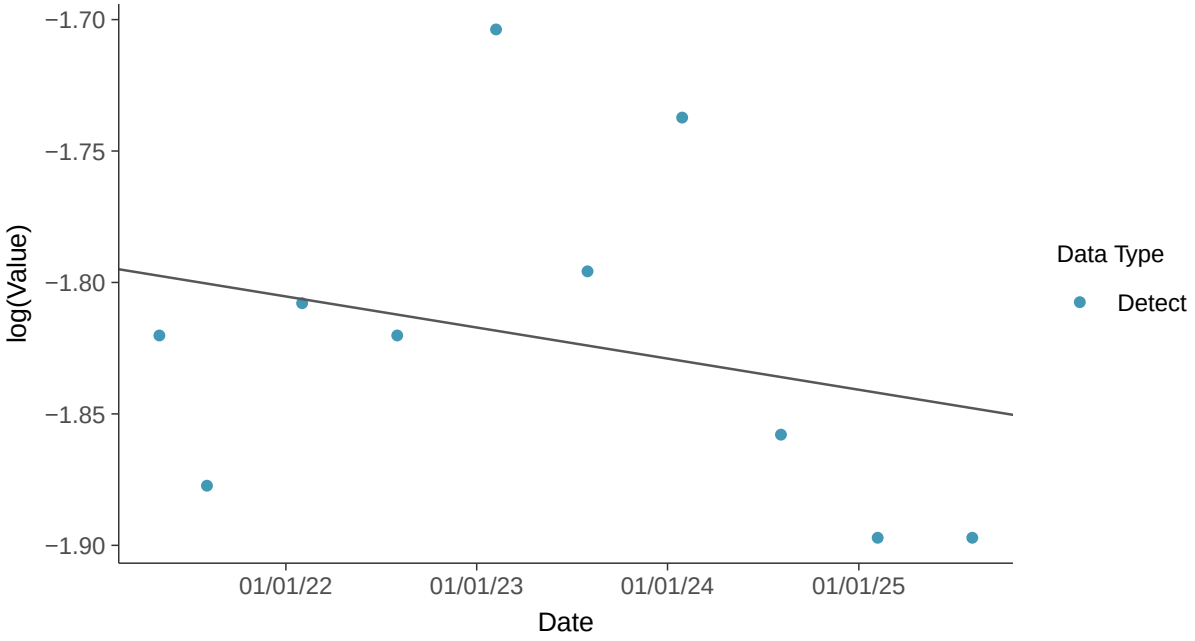
Gamma Q-Q plot

Molybdenum, MW-3 (mg/l)



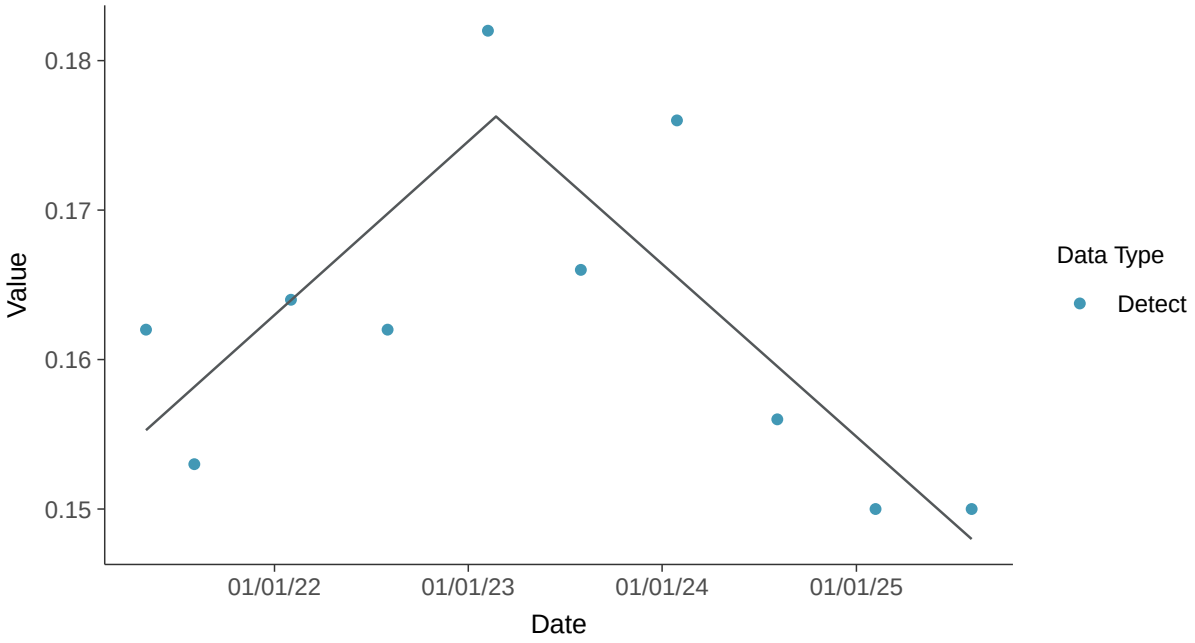
Trend Regression: Lognormal MLE

Molybdenum, MW-3 (mg/l)



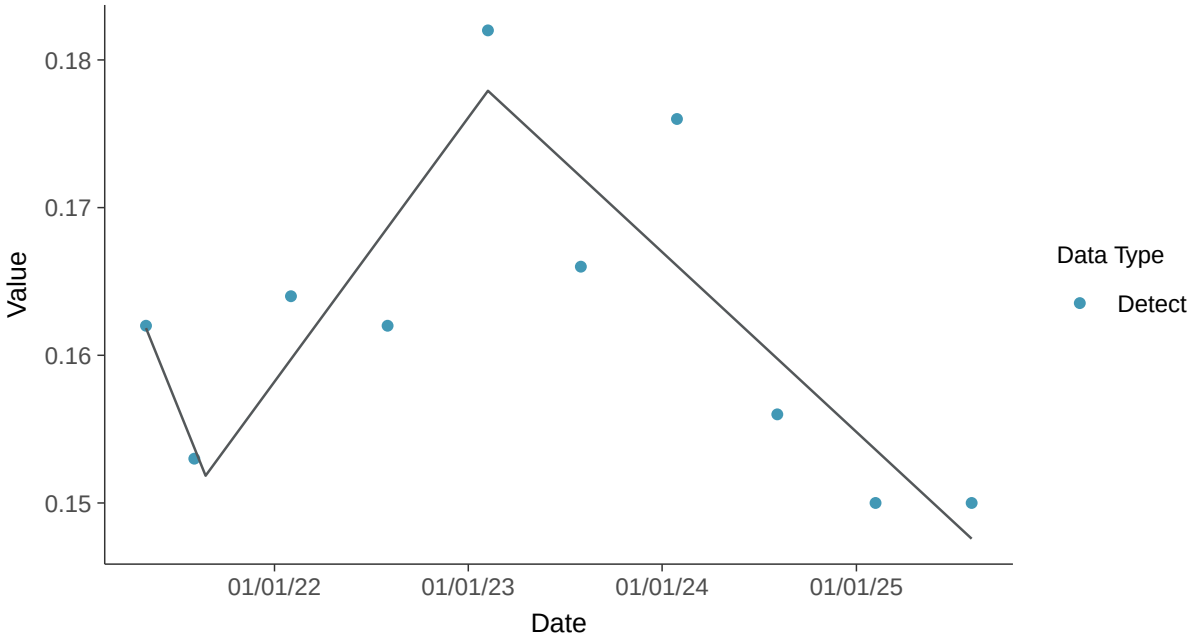
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-3 (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-3 (mg/l)

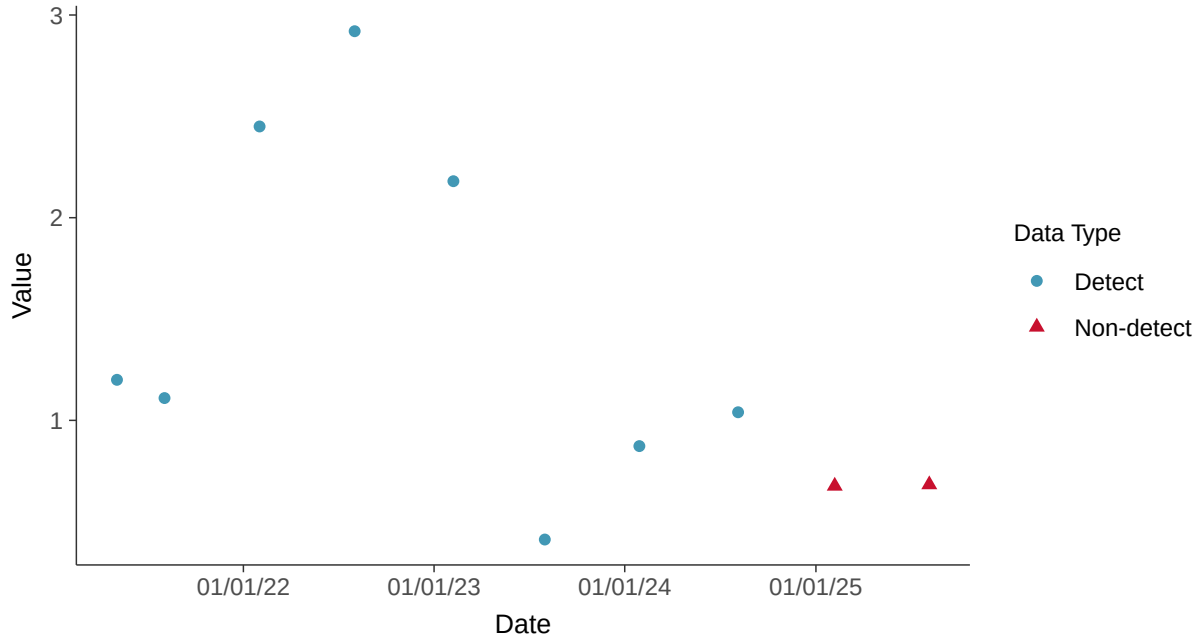


Appendix IV: Radium-226+228, MW-3

ID: 14_3_121

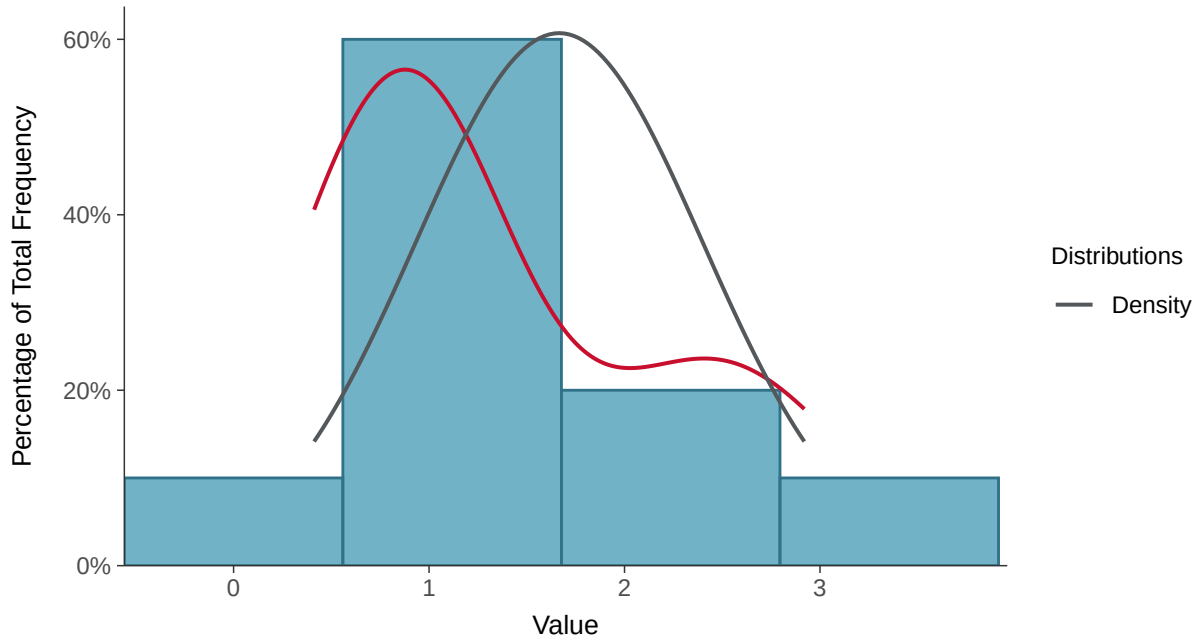
Scatter Plot

Radium-226+228, MW-3 (pci/l)



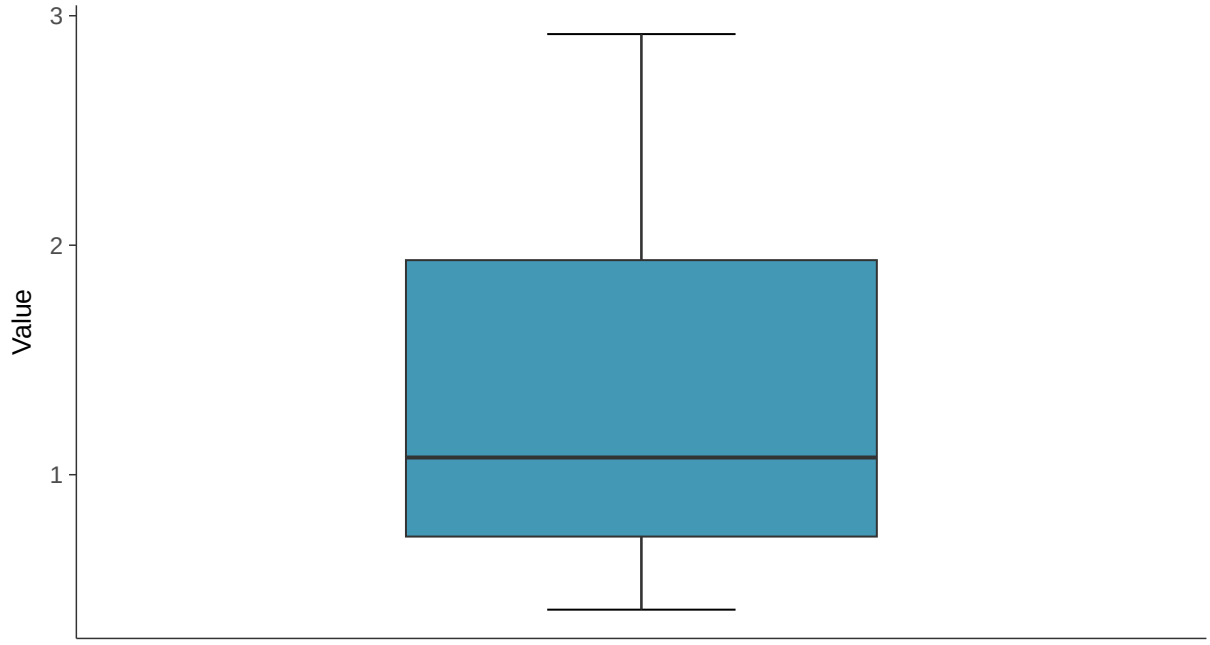
Histogram

Radium-226+228, MW-3 (pci/l)



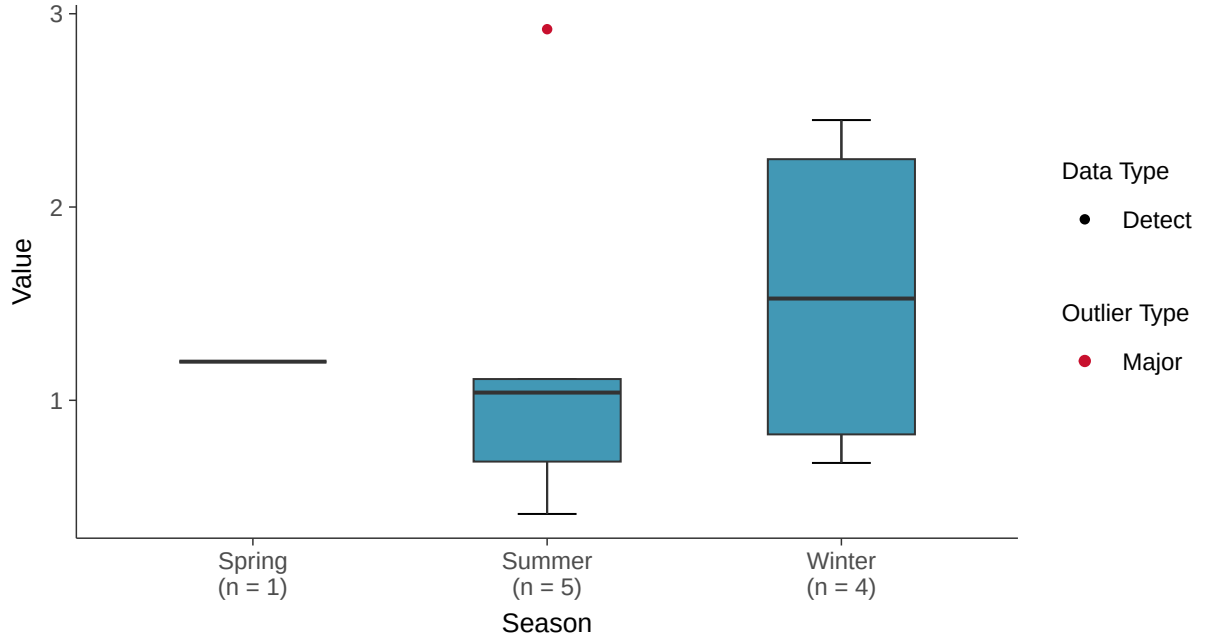
Boxplot

Radium-226+228, MW-3 (pci/l)



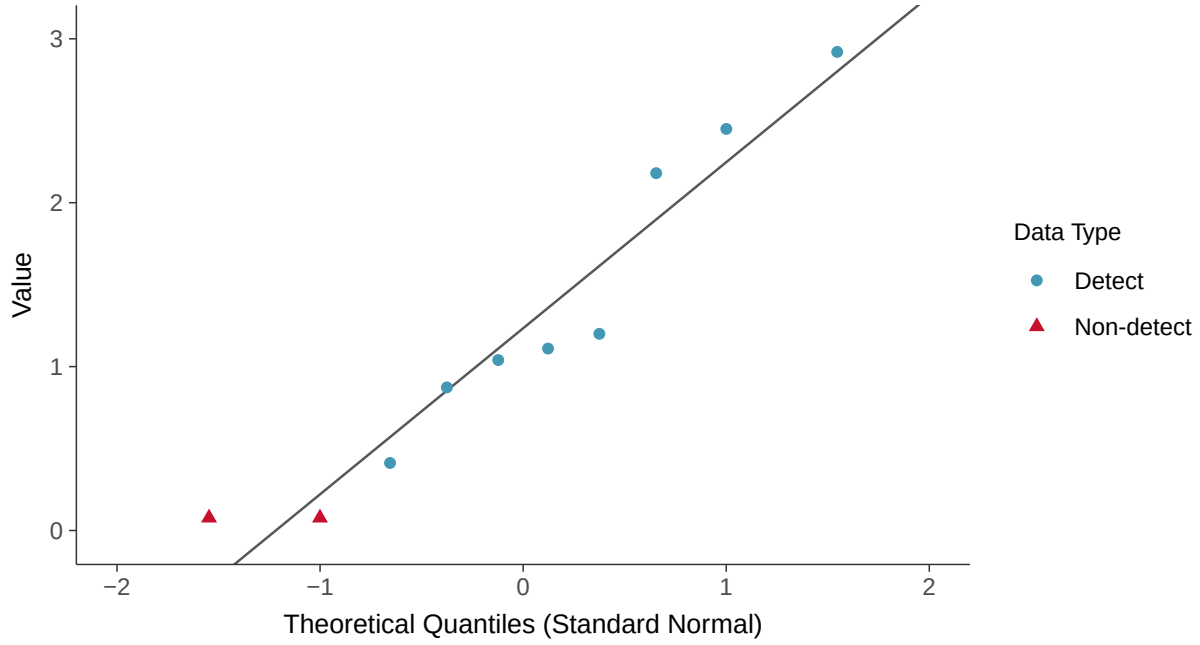
Boxplot by Season

Radium-226+228, MW-3 (pci/l)



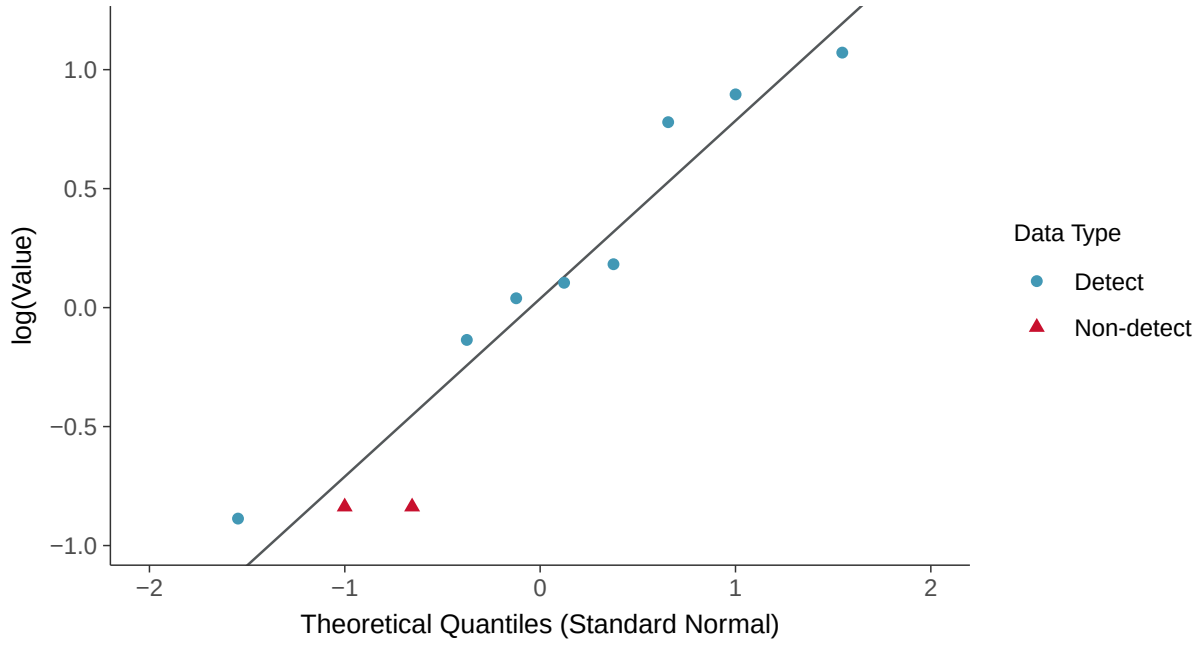
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-3 (pci/l)



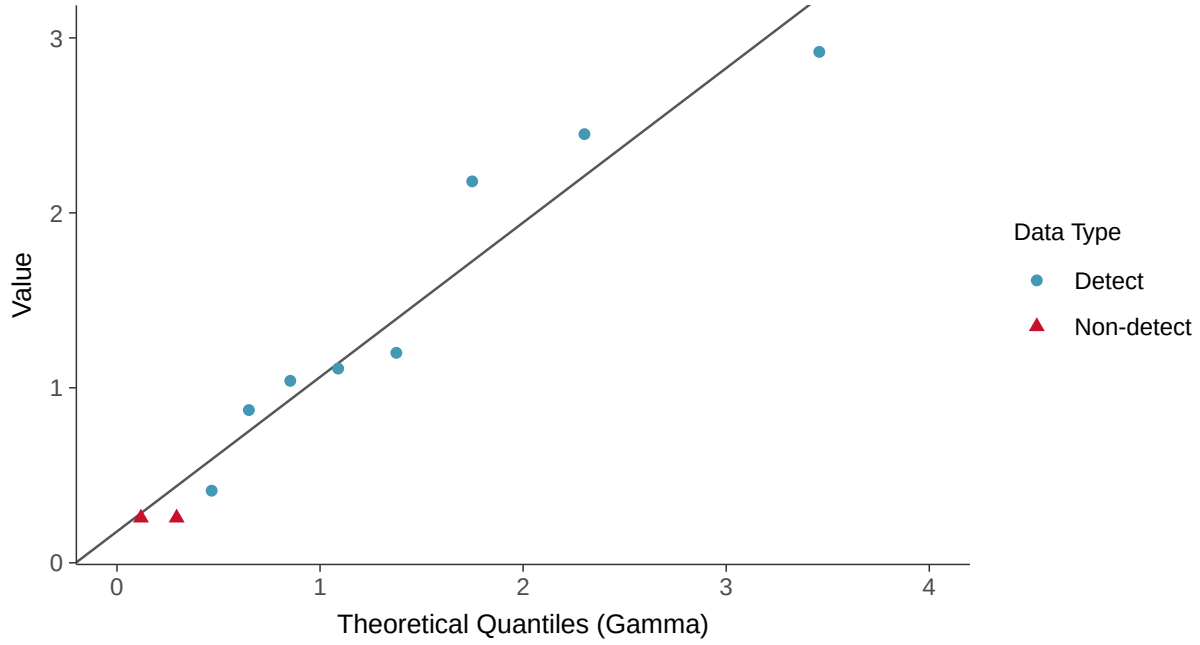
Lognormal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-3 (pci/l)



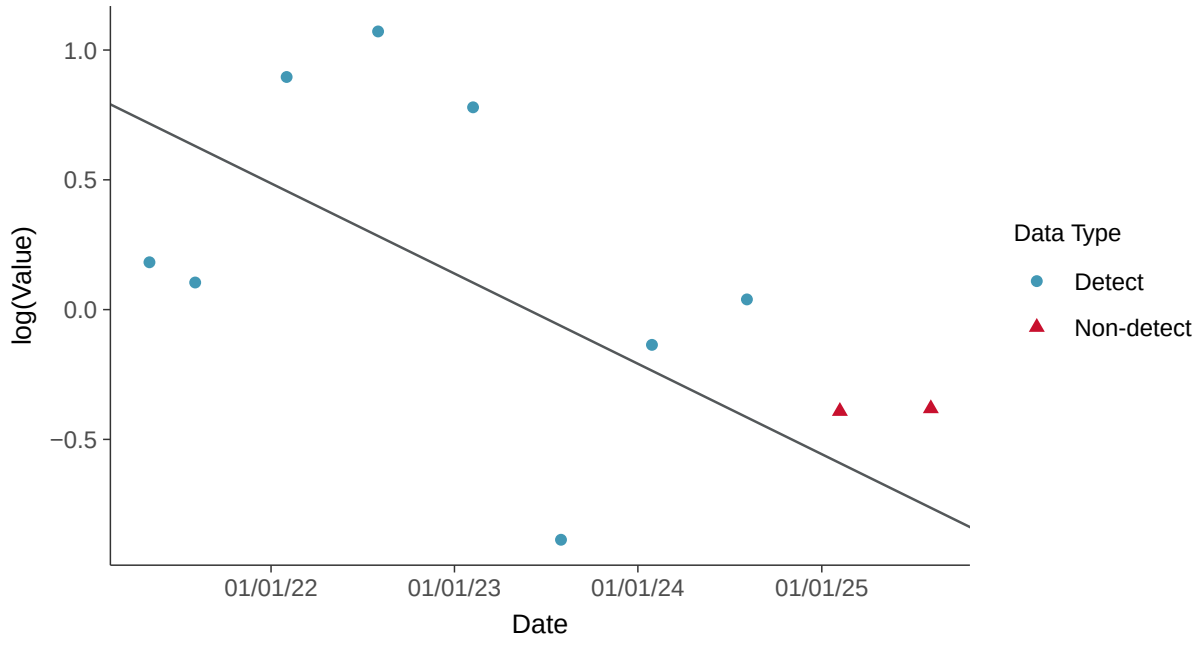
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-3 (pci/l)



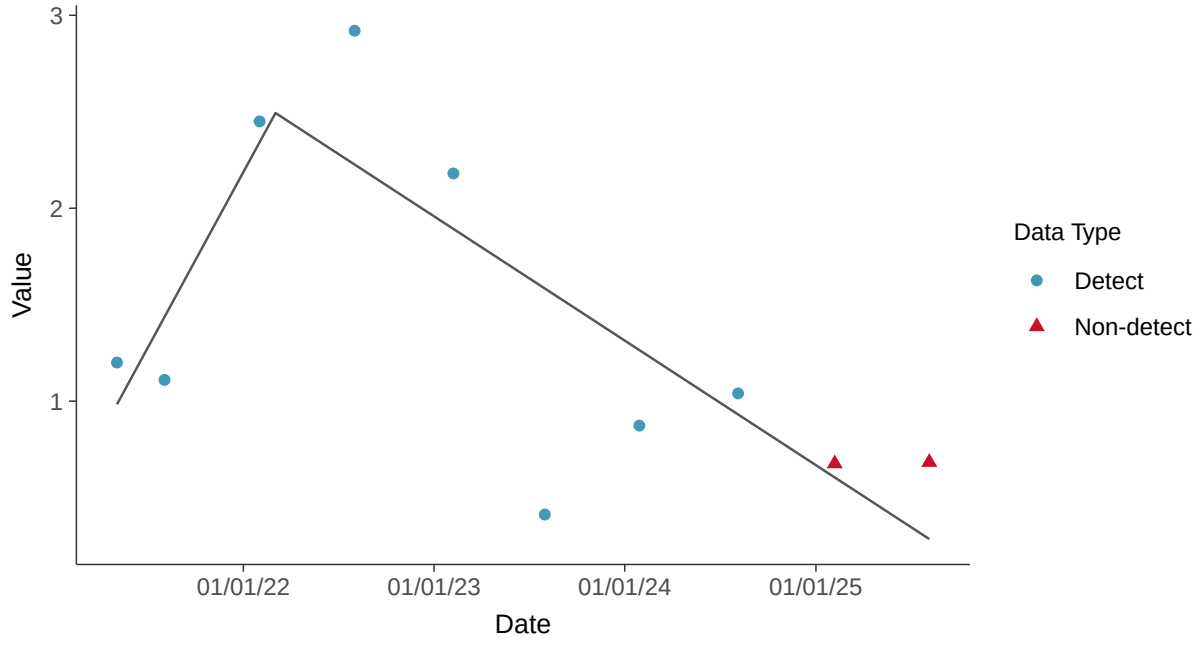
Trend Regression: Lognormal MLE

Radium-226+228, MW-3 (pci/l)



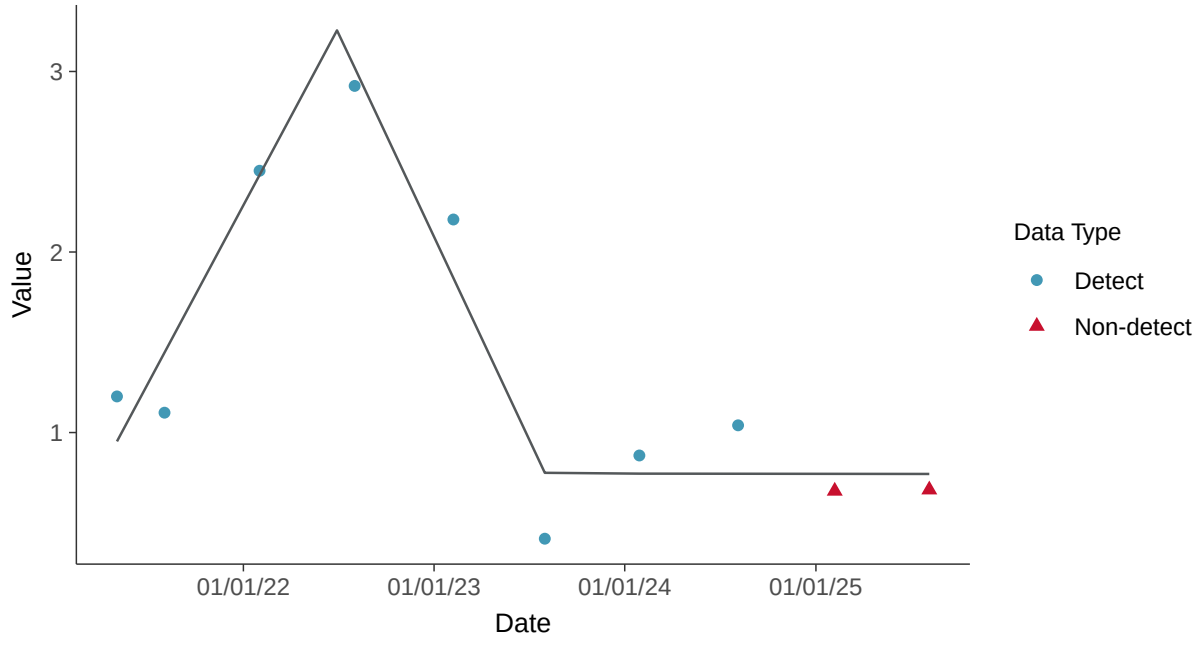
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-3 (pci/l)



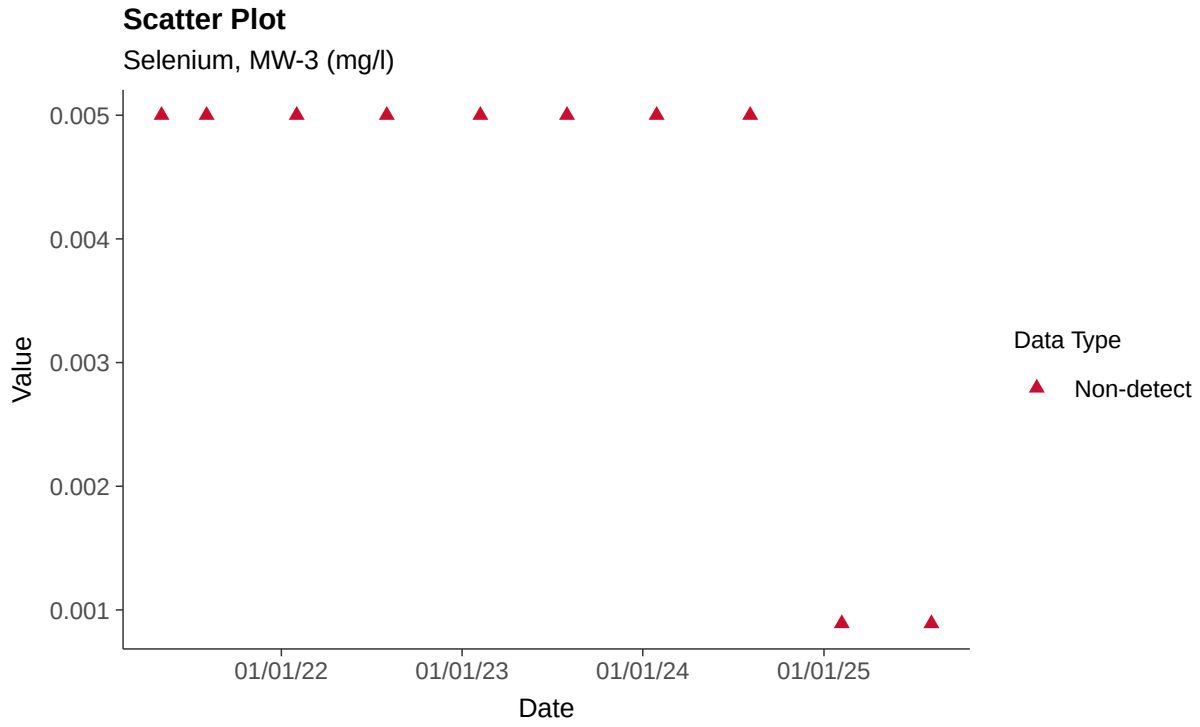
Trend Regression: Piecewise Linear-Linear-Linear

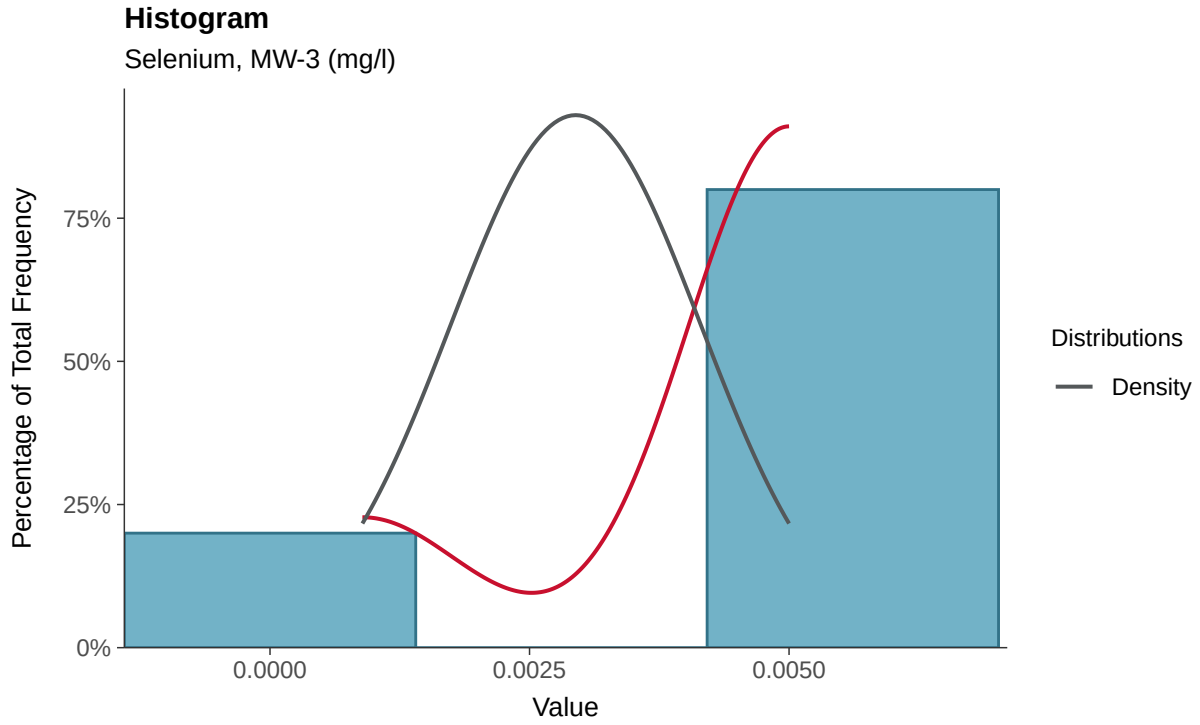
Radium-226+228, MW-3 (pci/l)



Appendix IV: Selenium, MW-3

ID: 14_3_122



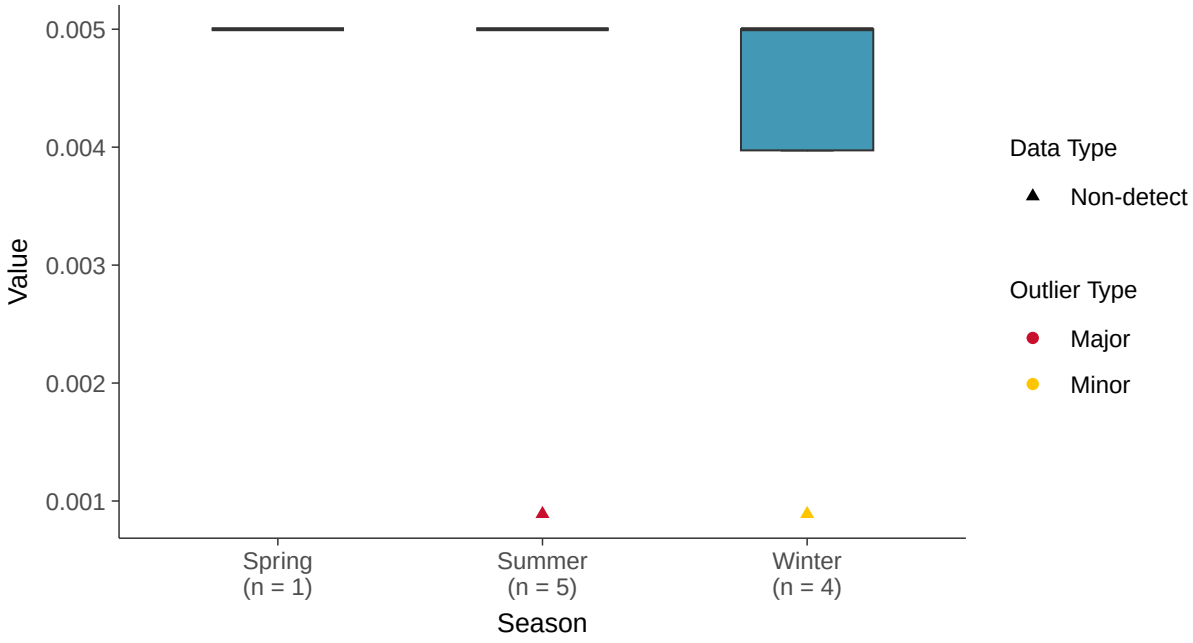


Boxplot

Selenium, MW-3 (mg/l)

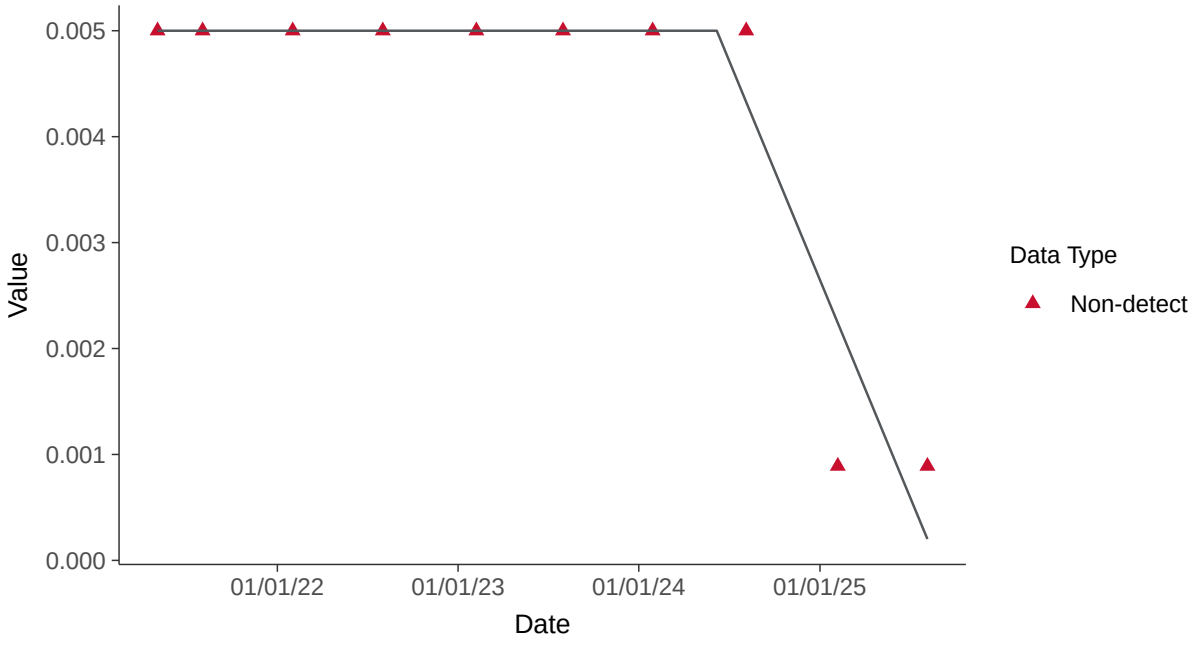
Boxplot by Season

Selenium, MW-3 (mg/l)



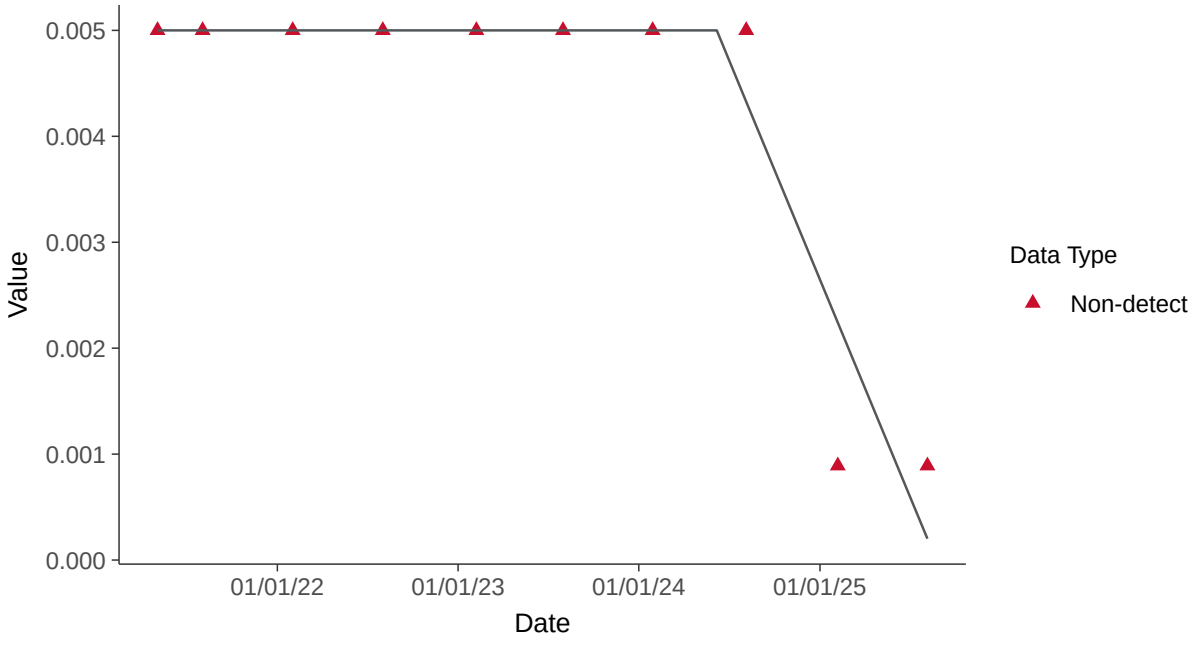
Trend Regression: Piecewise Linear-Linear

Selenium, MW-3 (mg/l)



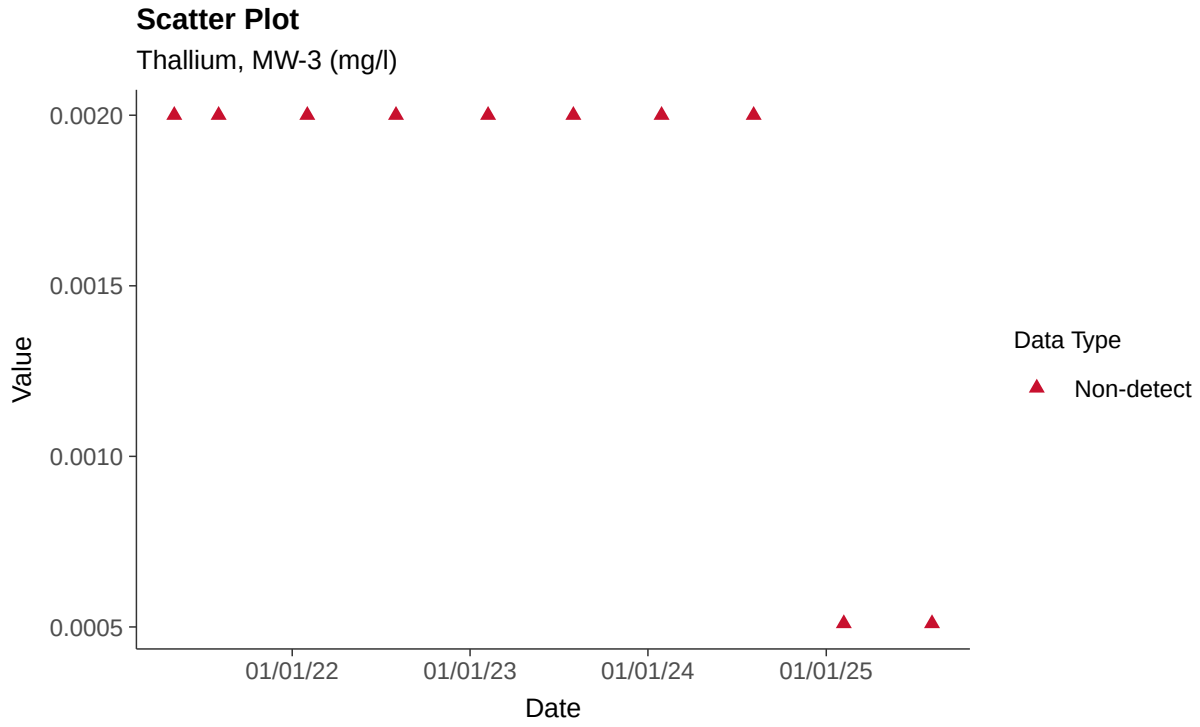
Trend Regression: Piecewise Linear-Linear-Linear

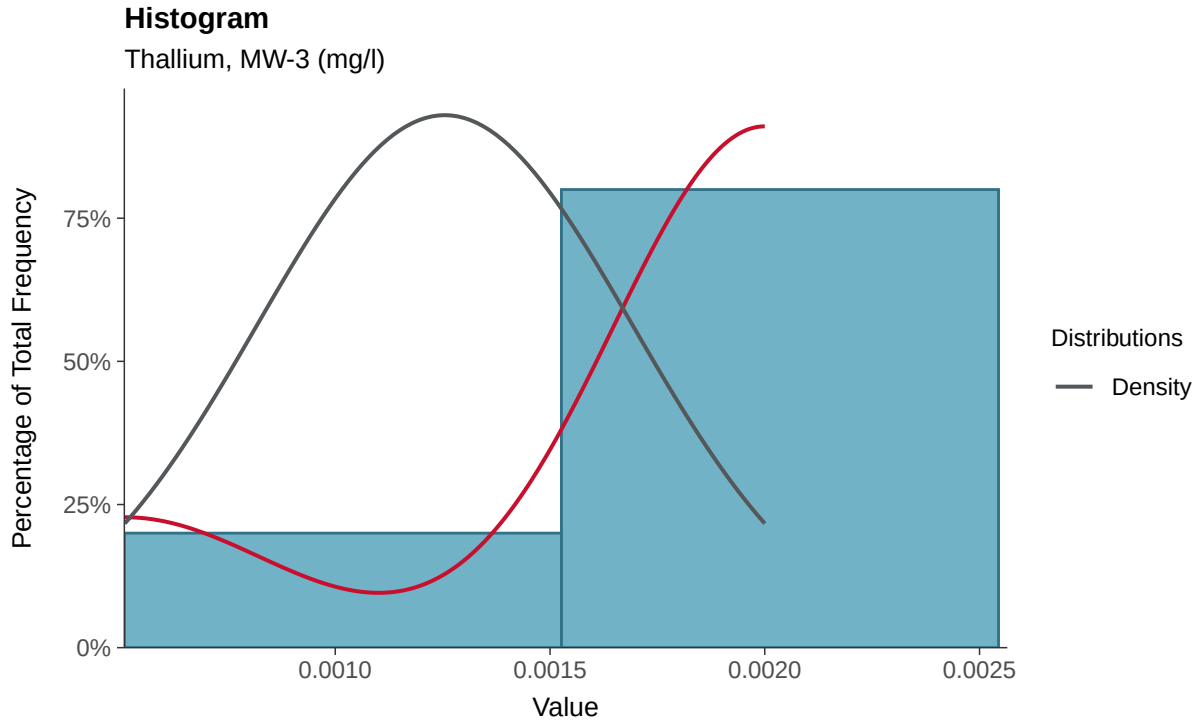
Selenium, MW-3 (mg/l)



Appendix IV: Thallium, MW-3

ID: 14_3_125



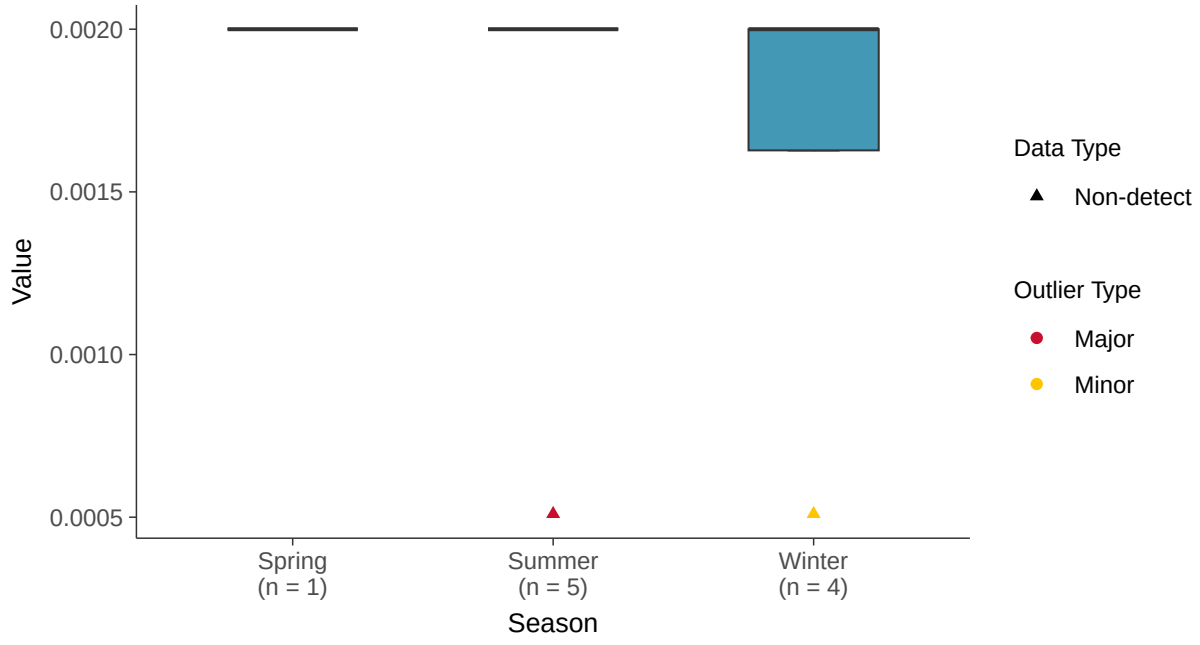


Boxplot

Thallium, MW-3 (mg/l)

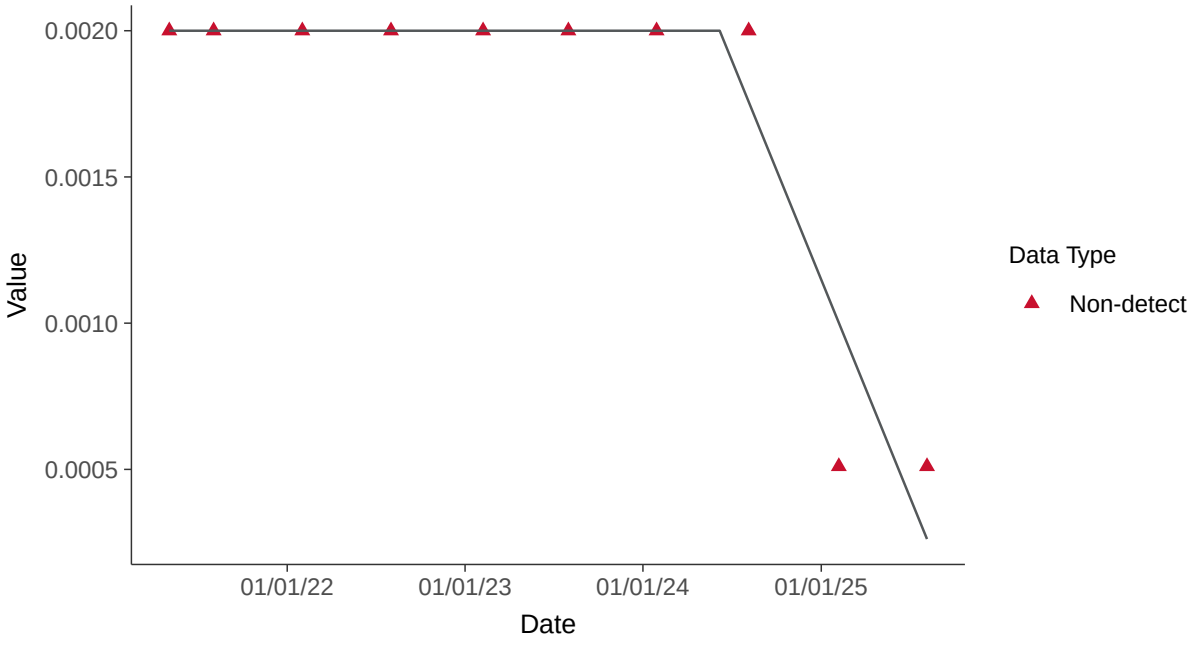
Boxplot by Season

Thallium, MW-3 (mg/l)



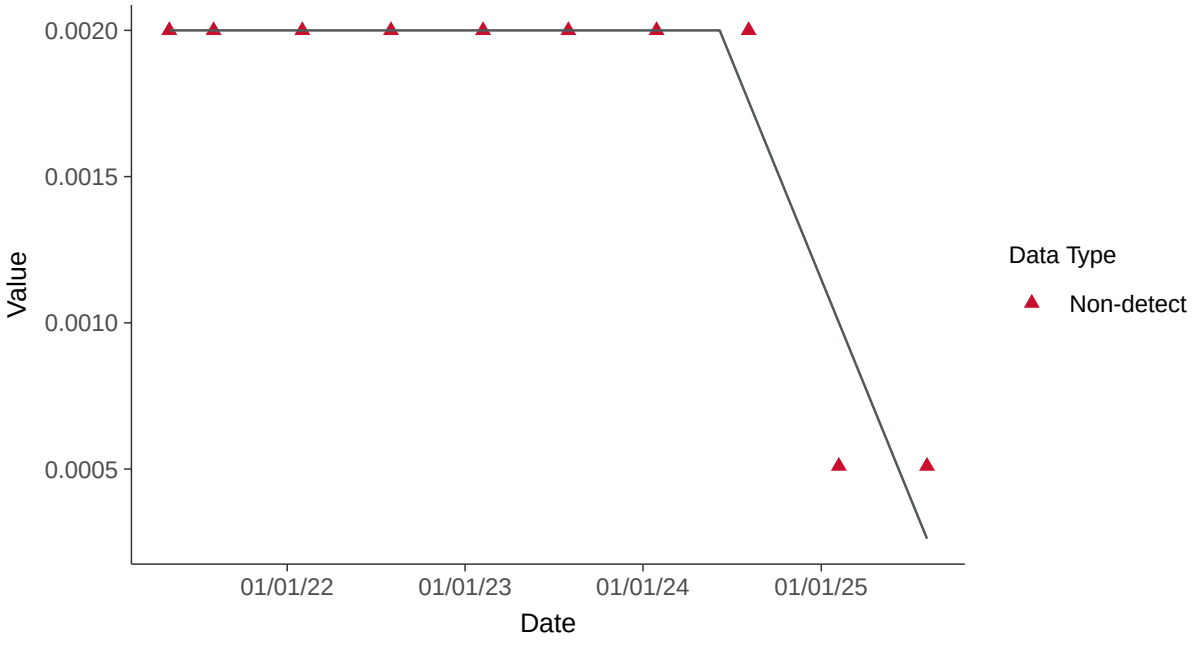
Trend Regression: Piecewise Linear-Linear

Thallium, MW-3 (mg/l)



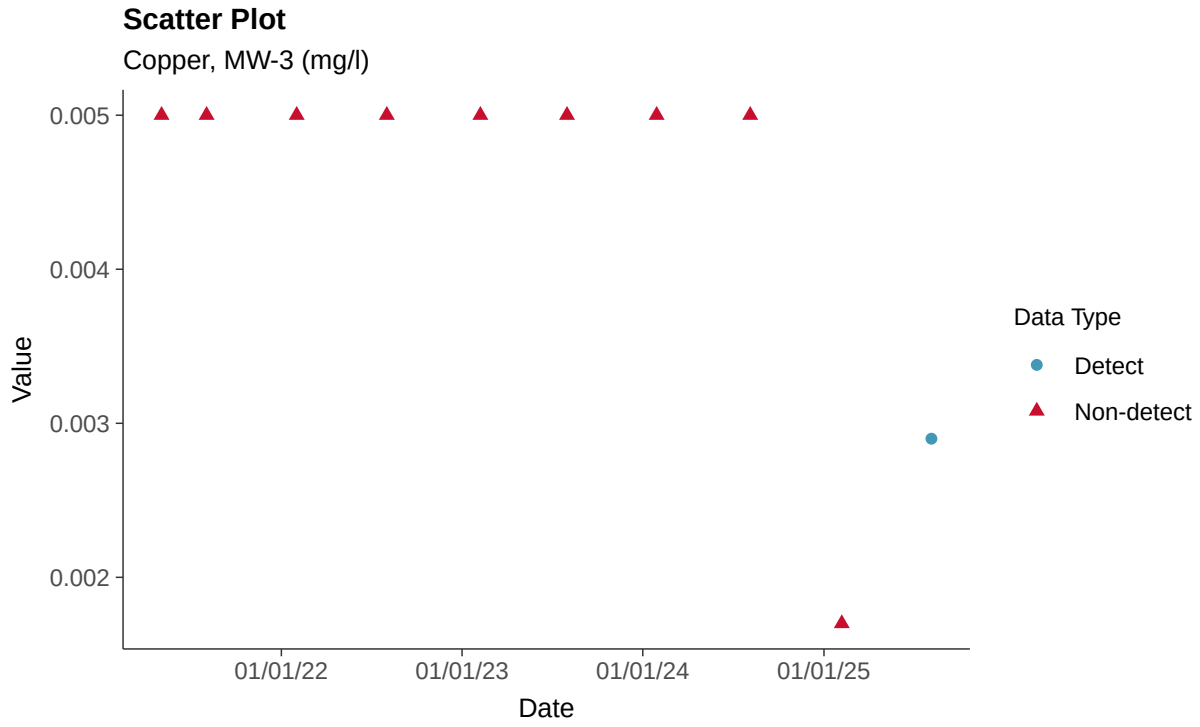
Trend Regression: Piecewise Linear-Linear-Linear

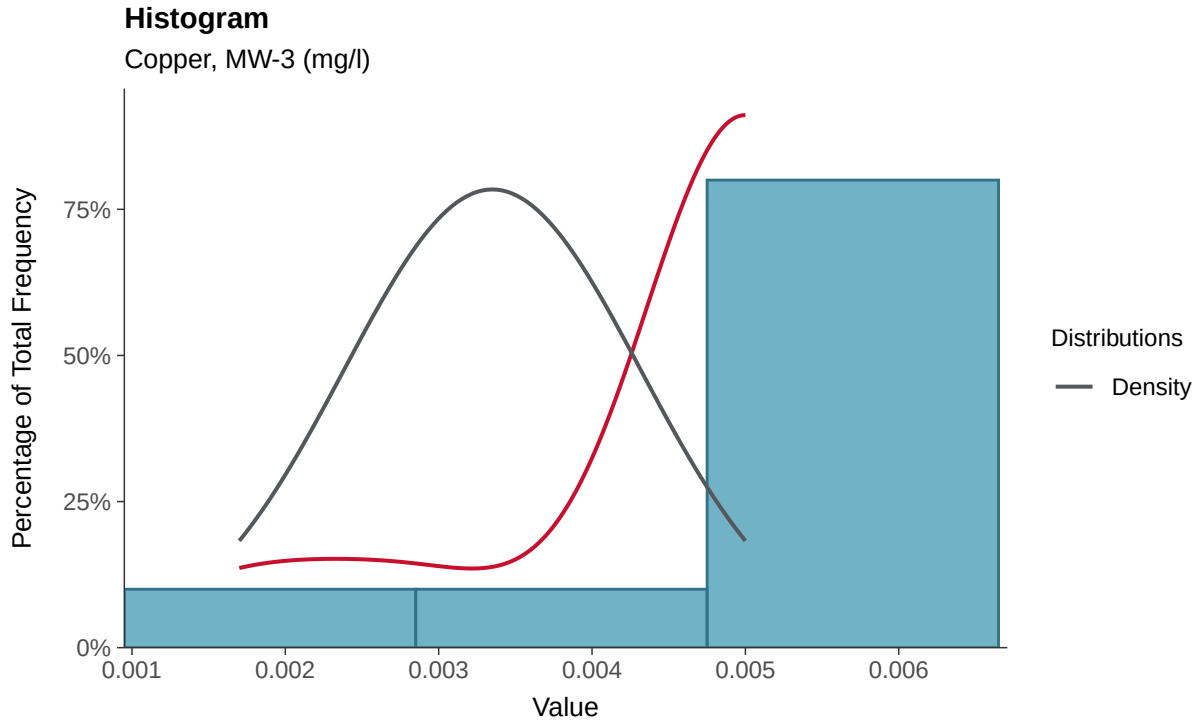
Thallium, MW-3 (mg/l)



Part 115: Copper, MW-3

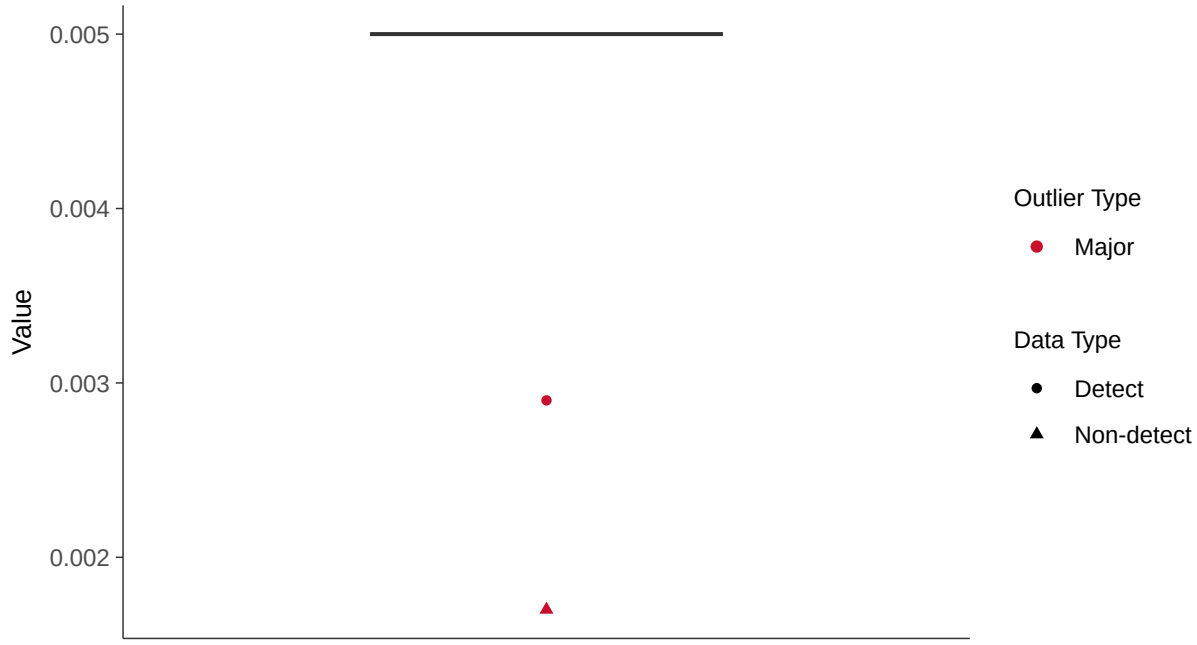
ID: 14_5_111





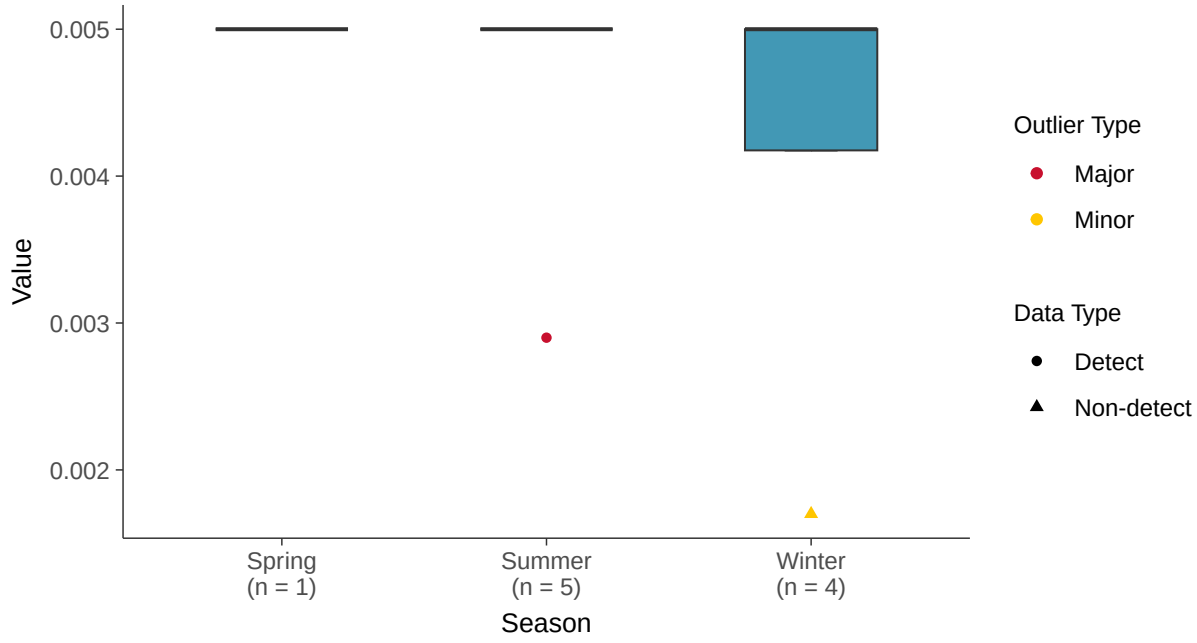
Boxplot

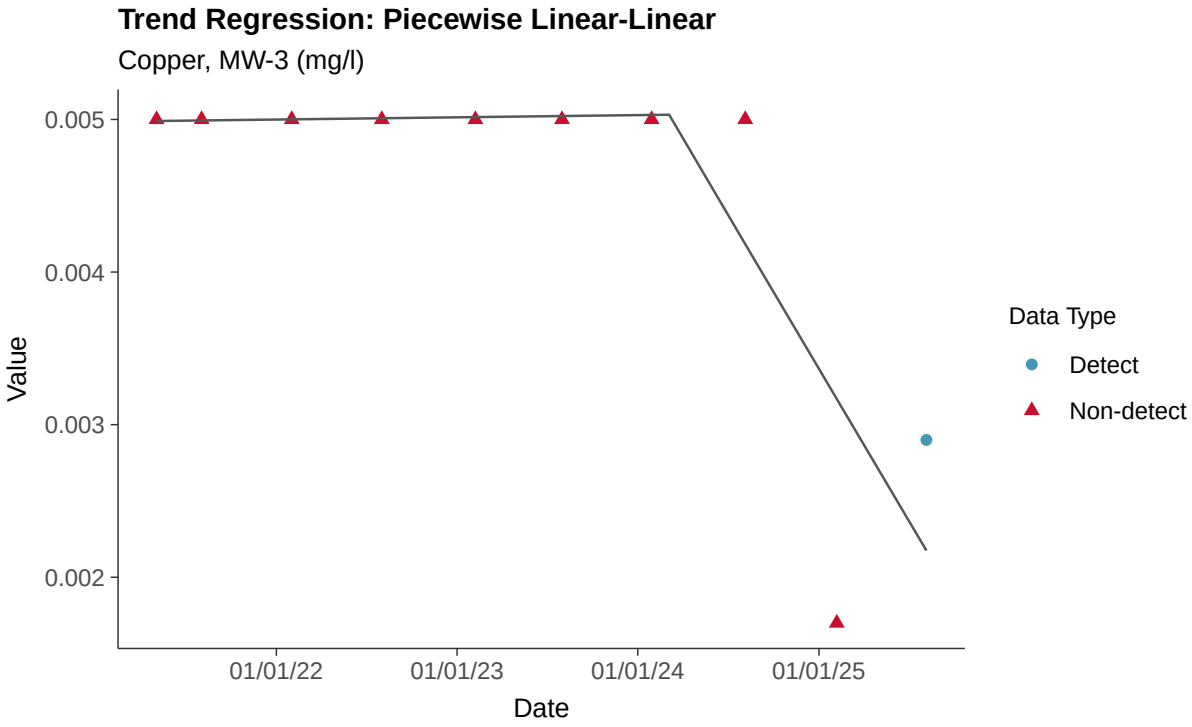
Copper, MW-3 (mg/l)



Boxplot by Season

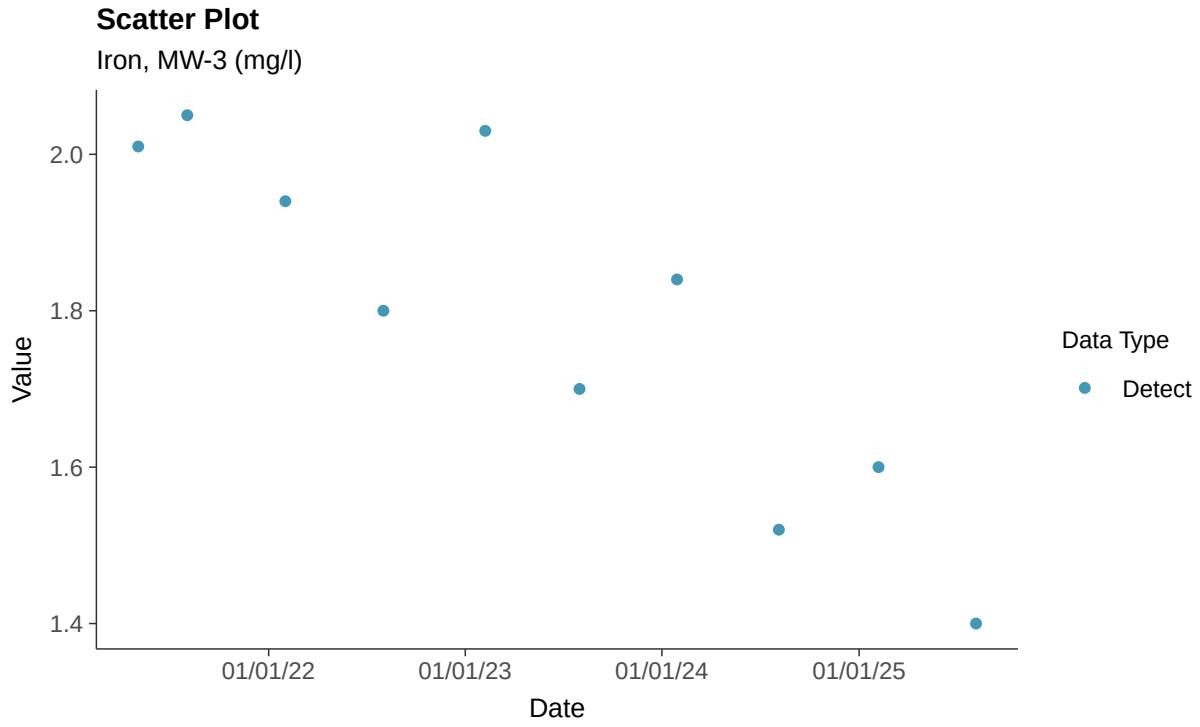
Copper, MW-3 (mg/l)

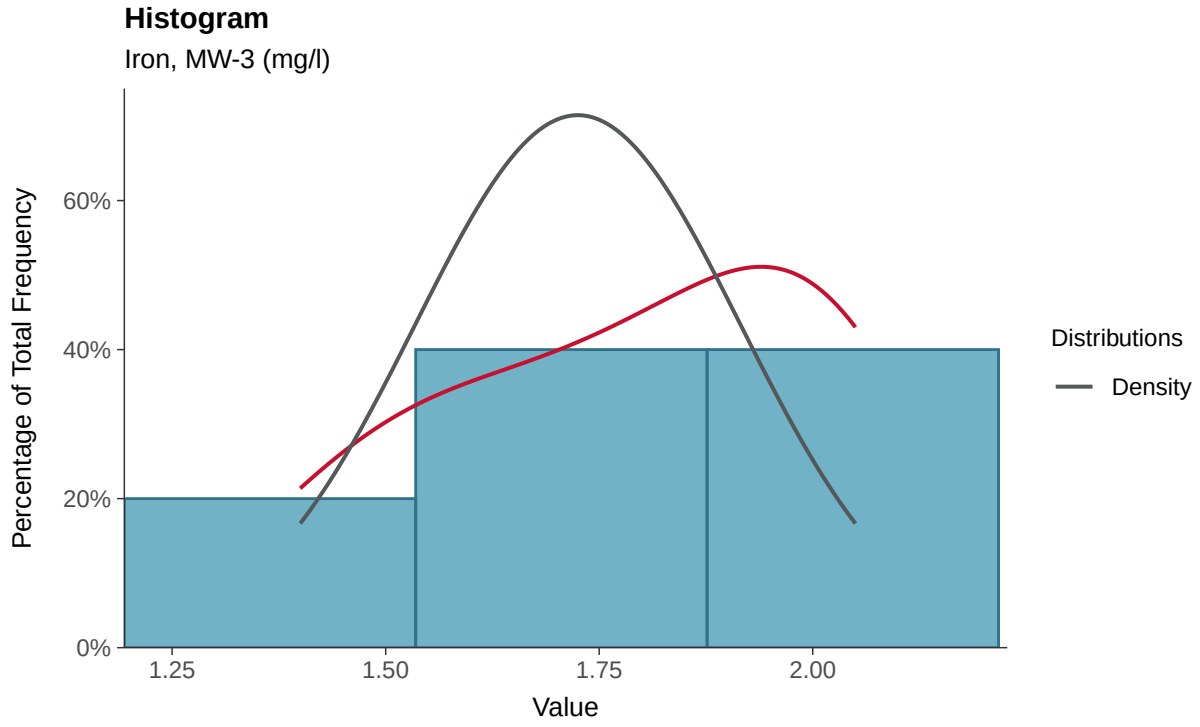



Trend Regression: Piecewise Linear-Linear
Copper, MW-3 (mg/l)
0.005
0.004
0.003
0.002
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Part 115: Iron, MW-3

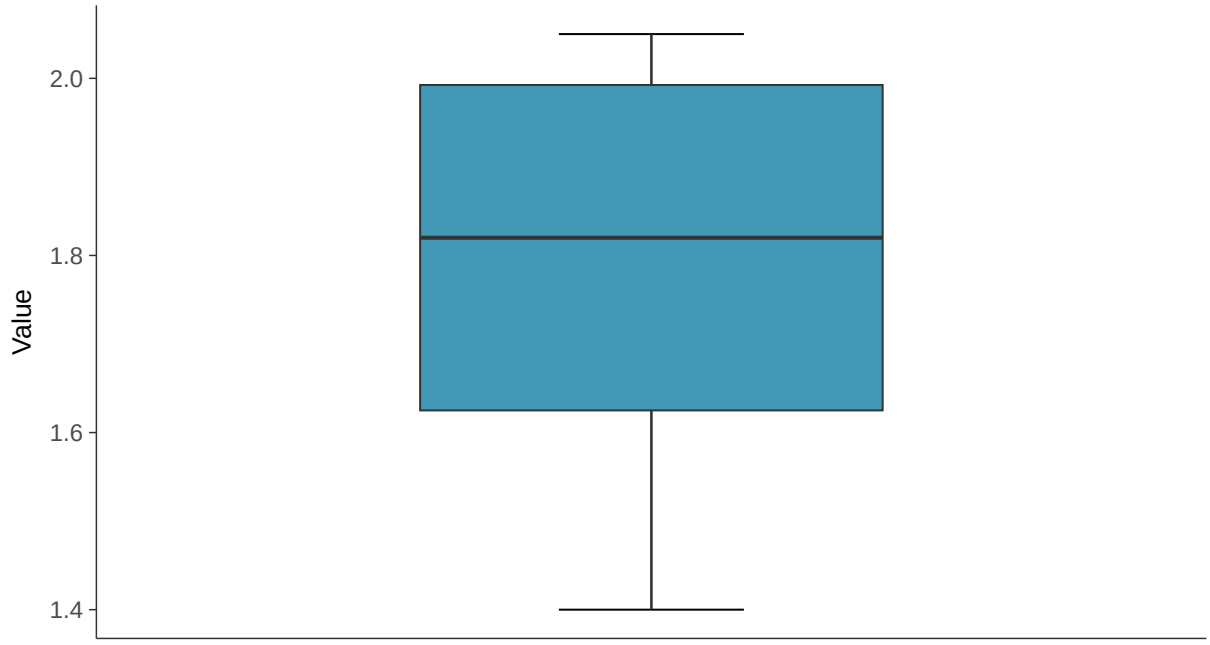
ID: 14_5_114





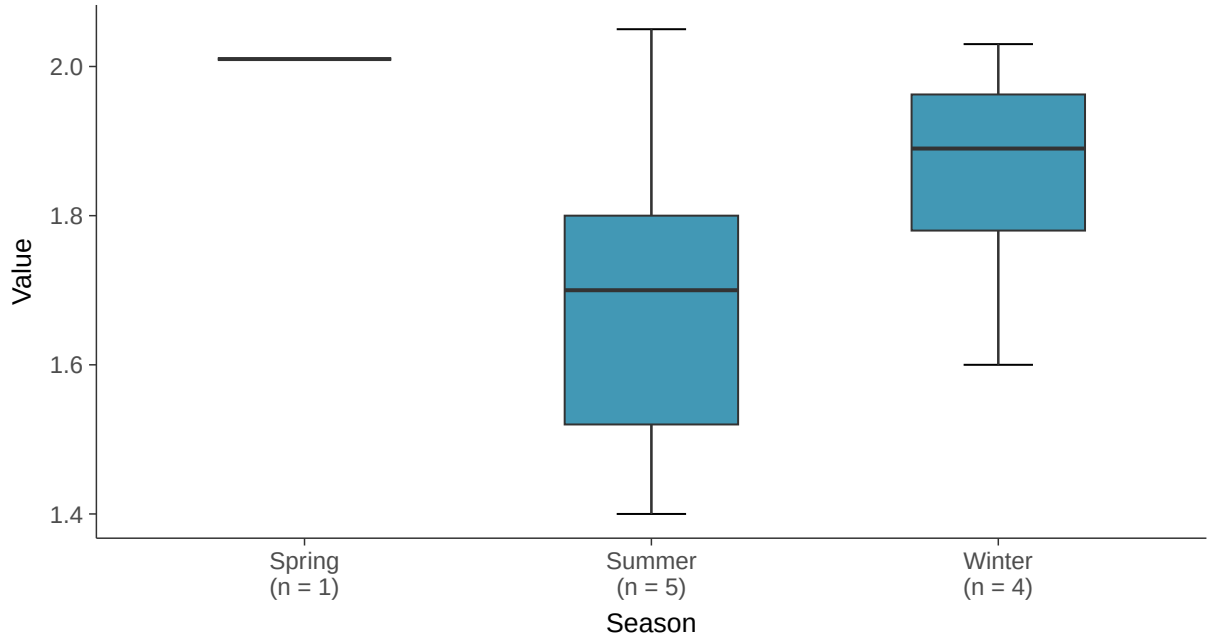
Boxplot

Iron, MW-3 (mg/l)



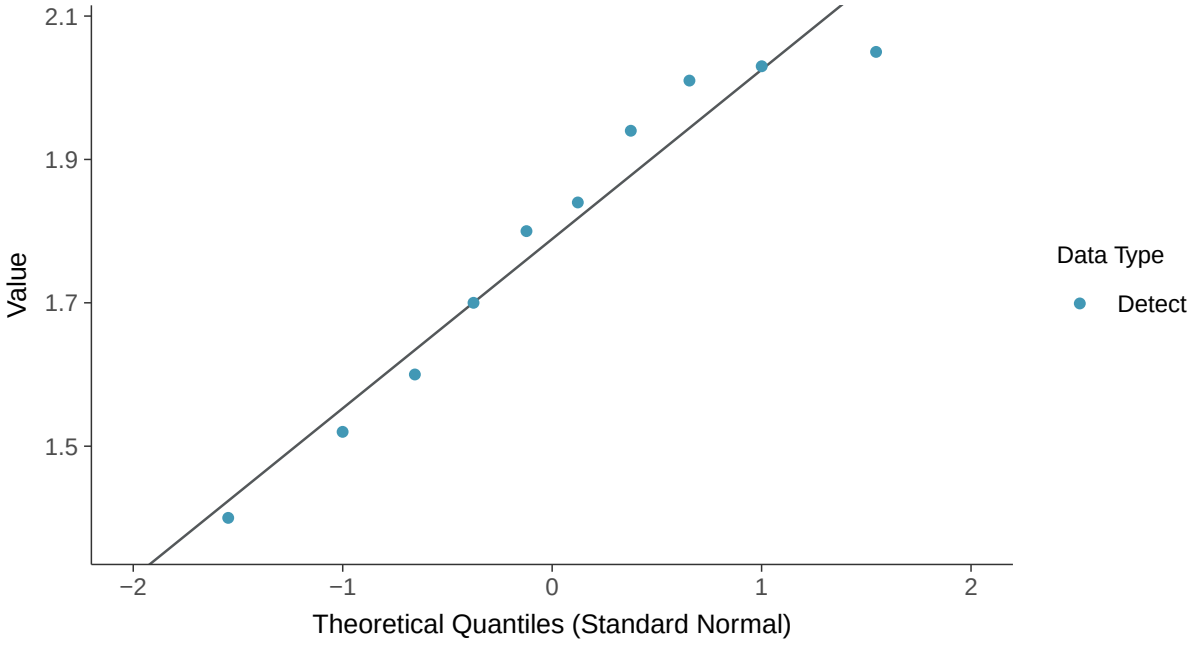
Boxplot by Season

Iron, MW-3 (mg/l)



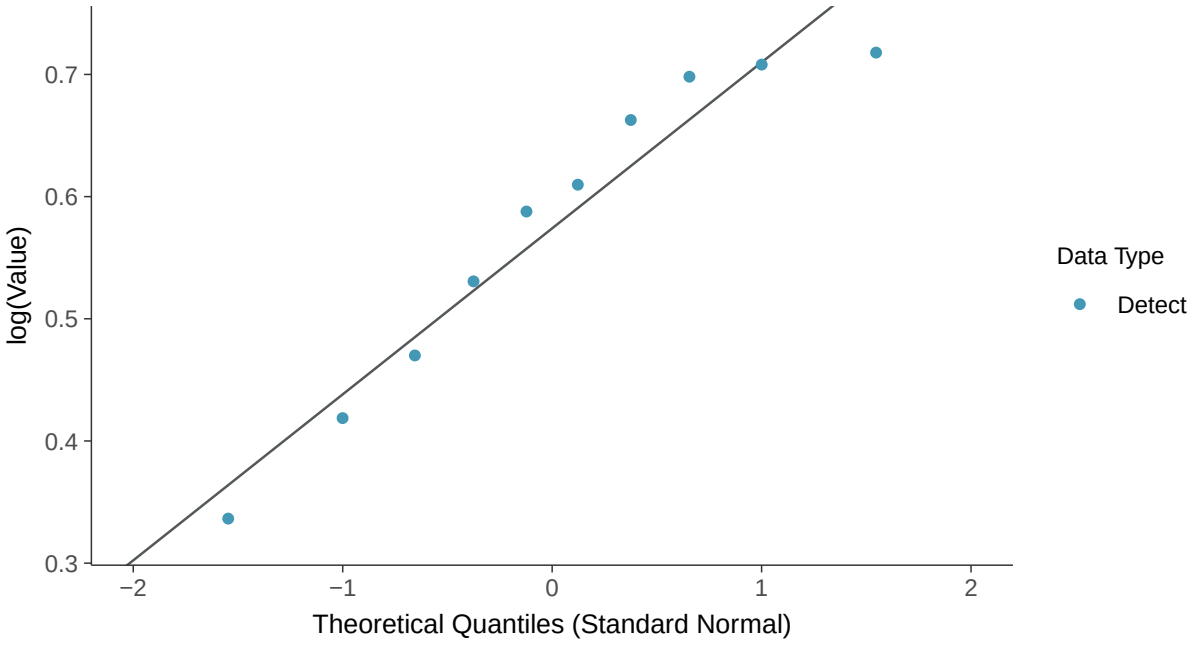
Normal Q-Q plot

Iron, MW-3 (mg/l)



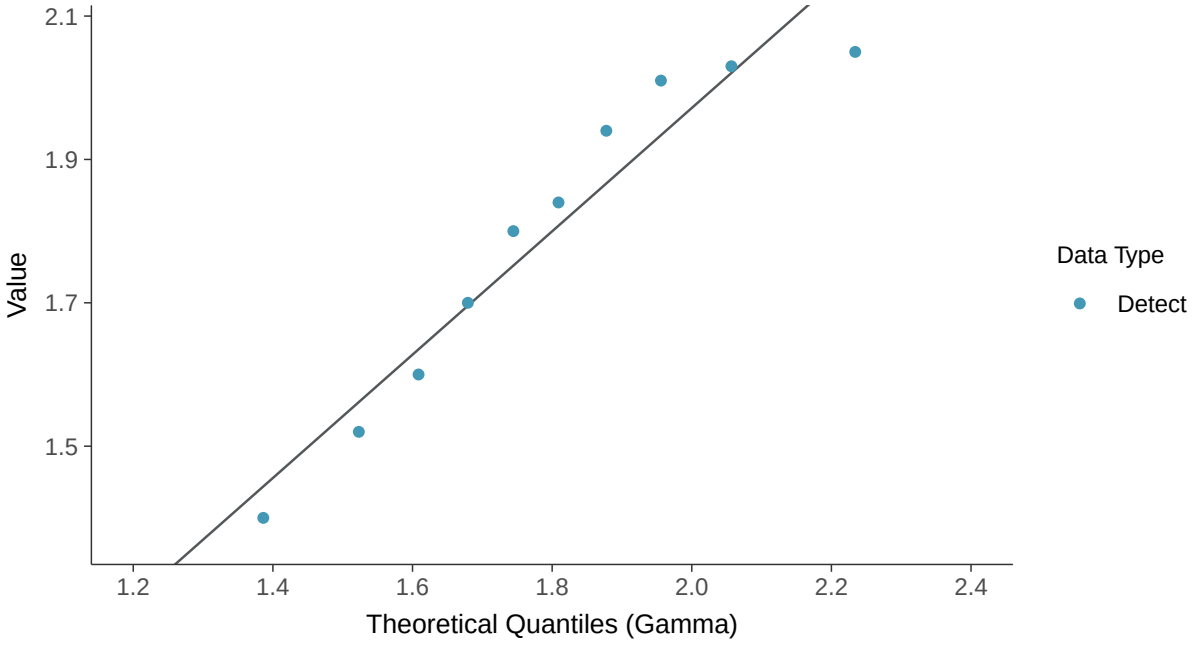
Lognormal Q-Q plot

Iron, MW-3 (mg/l)



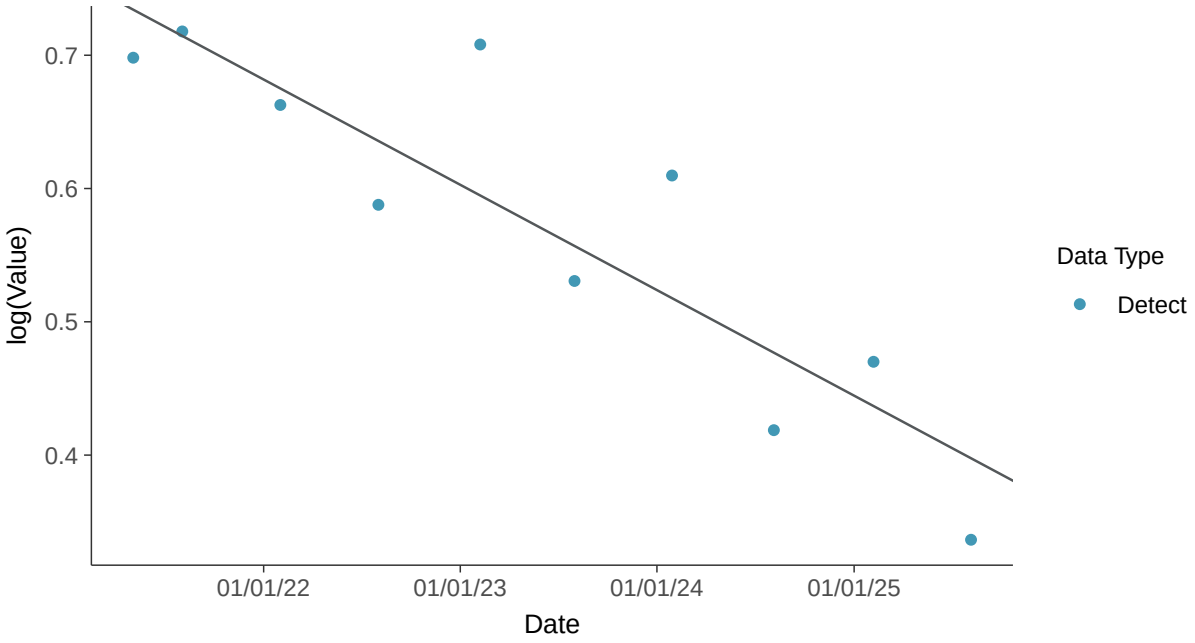
Gamma Q-Q plot

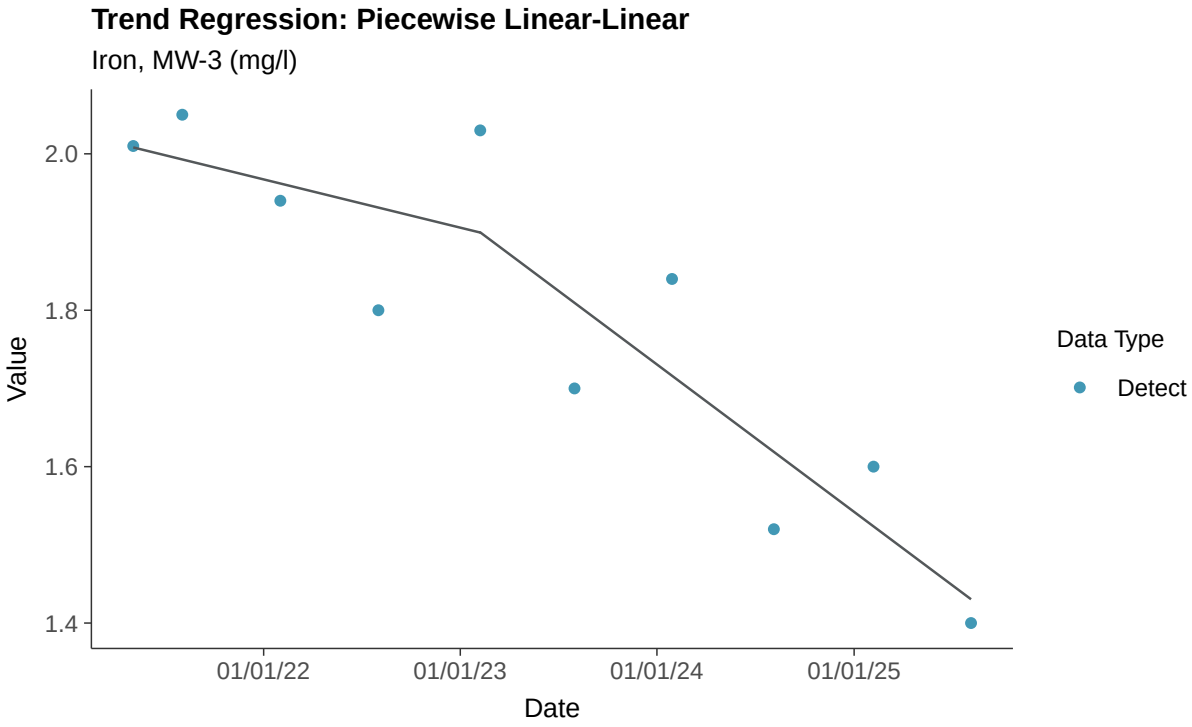
Iron, MW-3 (mg/l)



Trend Regression: Lognormal MLE

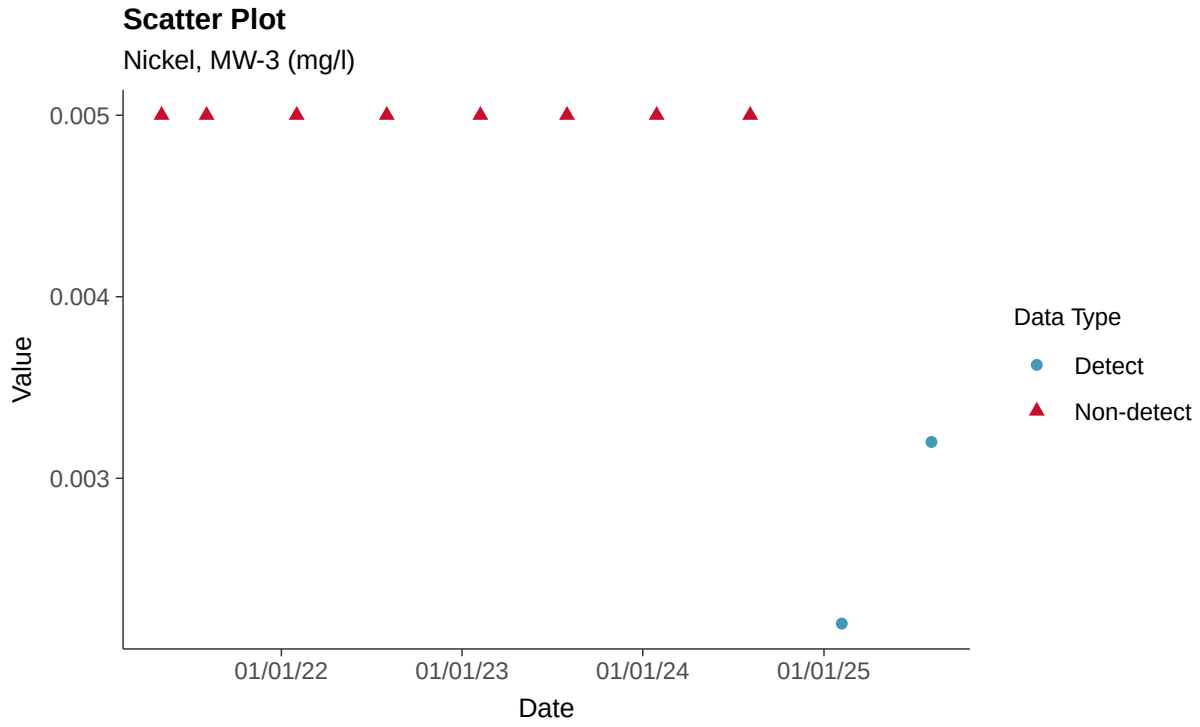
Iron, MW-3 (mg/l)

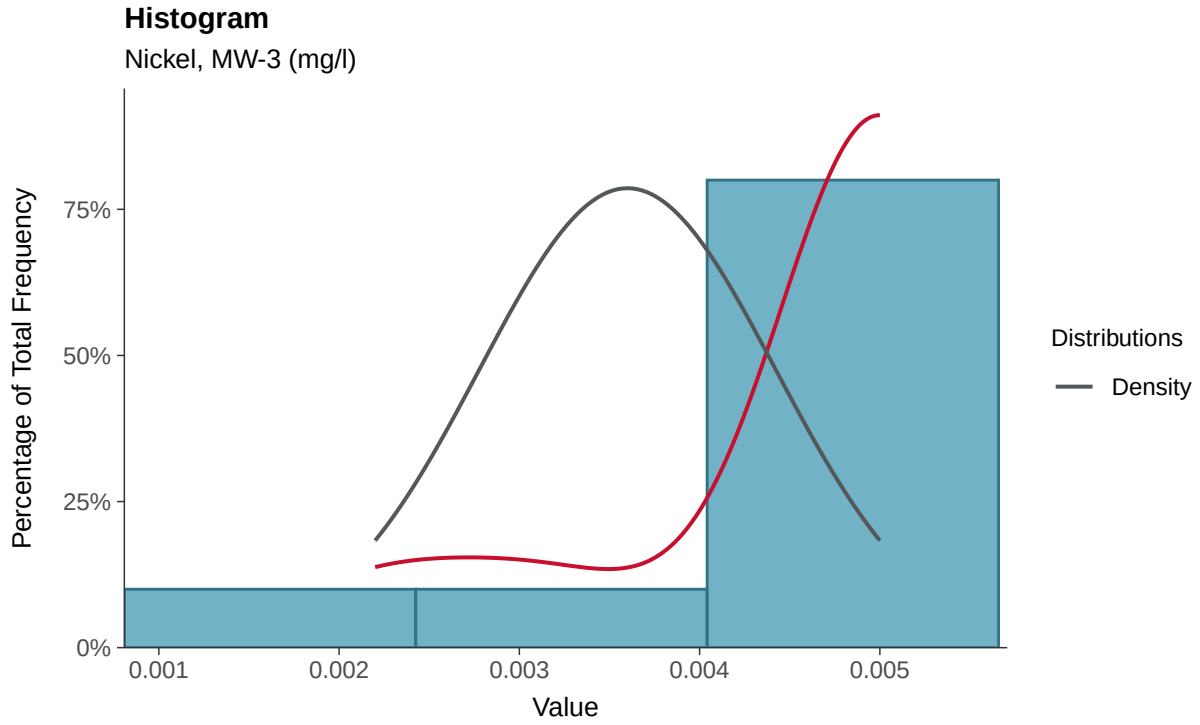



Trend Regression: Piecewise Linear-Linear
Iron, MW-3 (mg/l)
Value
2.0
1.8
1.6
1.4
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect

Part 115: Nickel, MW-3

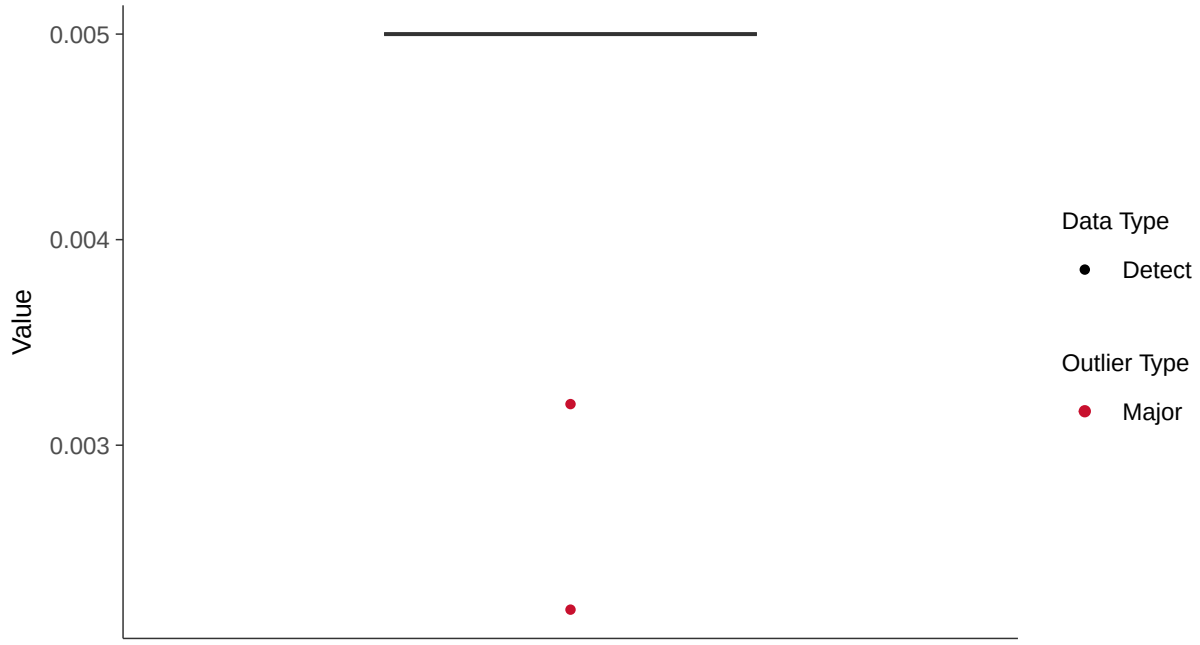
ID: 14_5_119





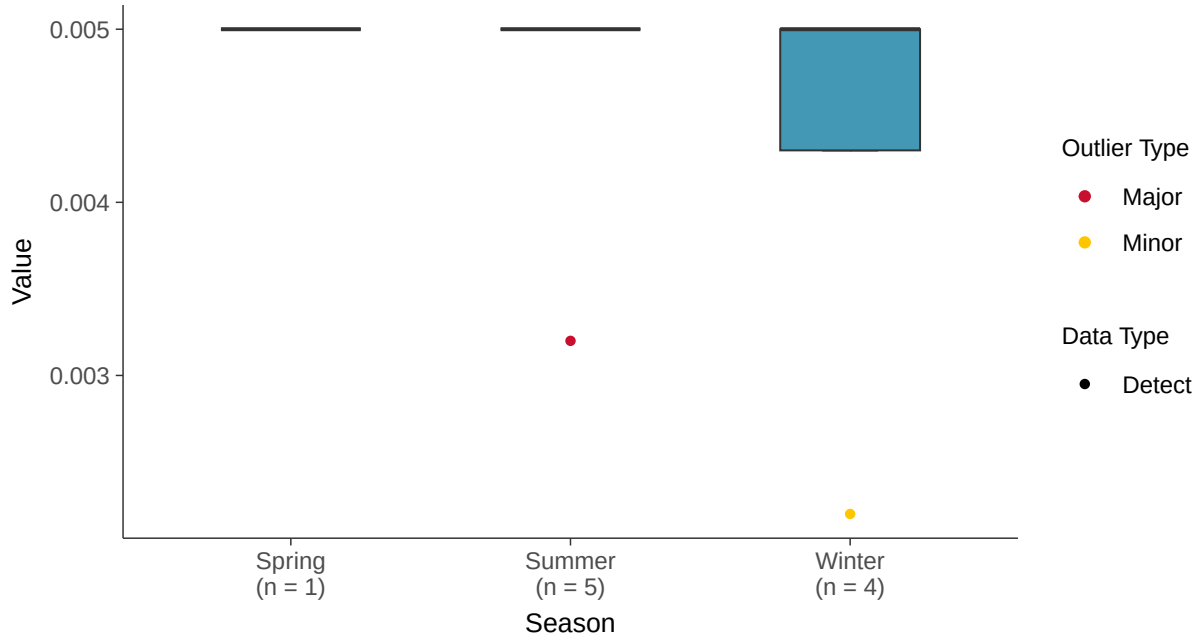
Boxplot

Nickel, MW-3 (mg/l)



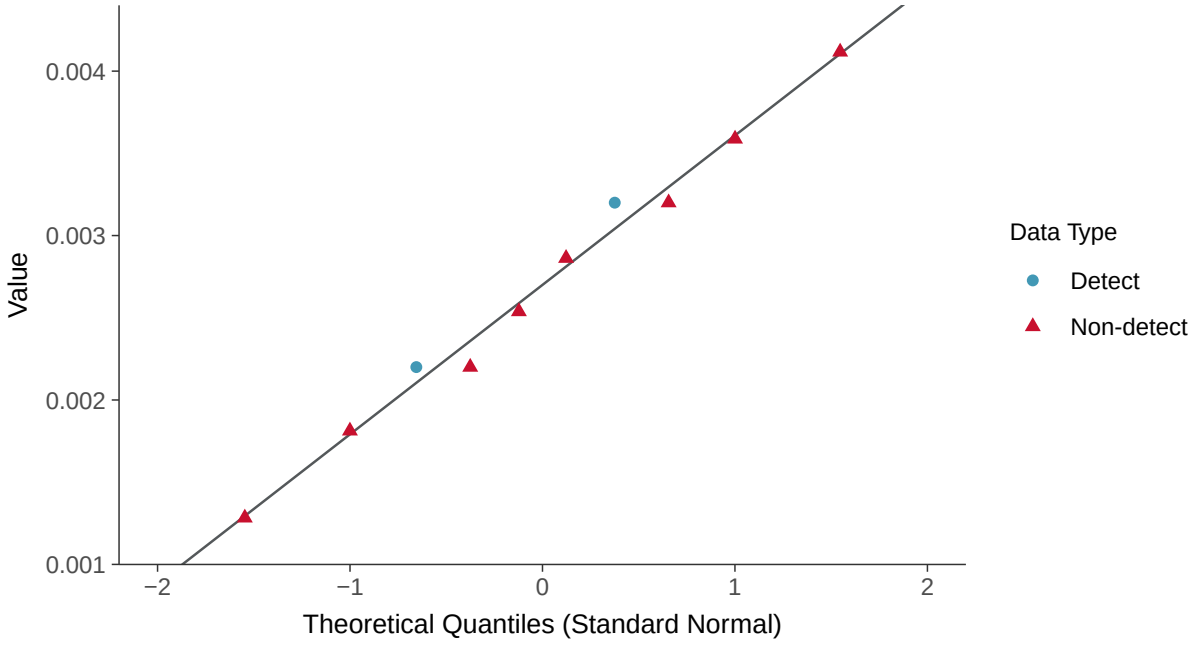
Boxplot by Season

Nickel, MW-3 (mg/l)



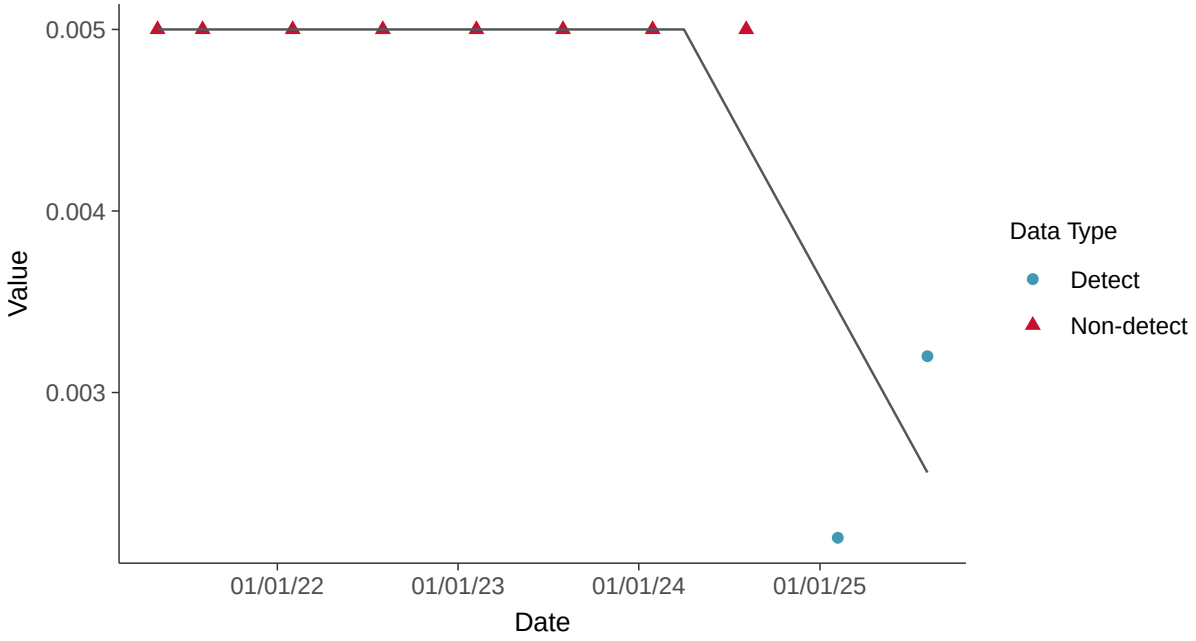
Normal Q-Q plot using ROS Imputed Estimates

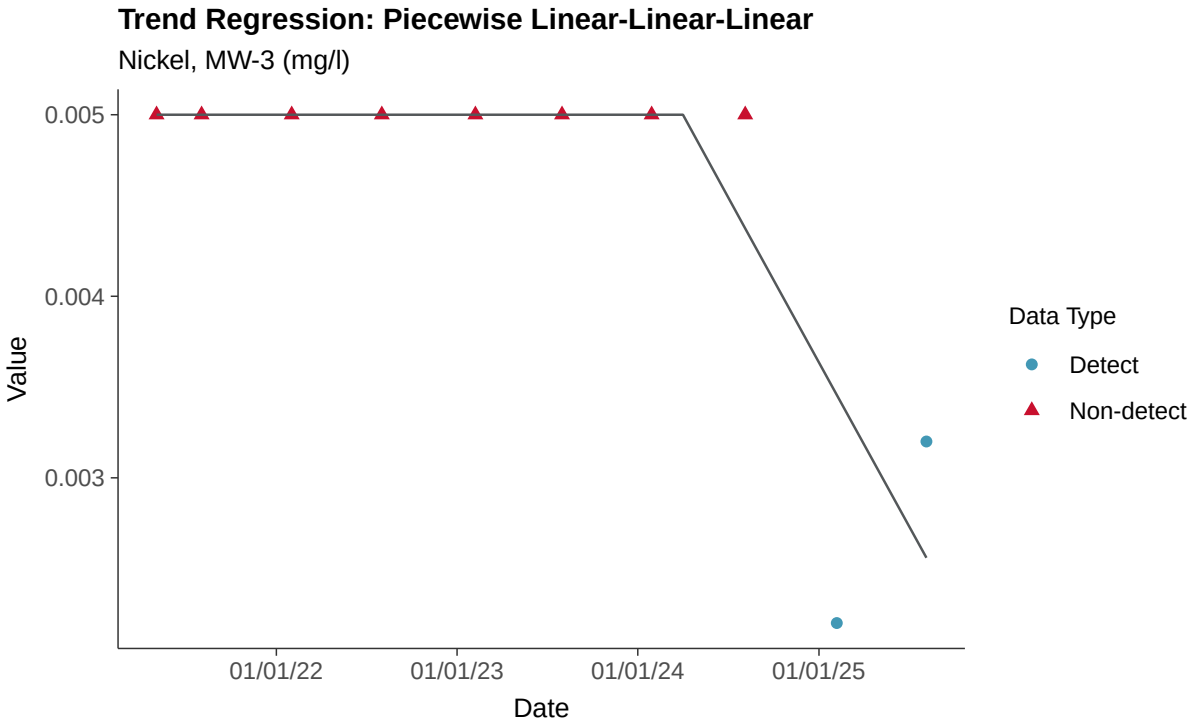
Nickel, MW-3 (mg/l)



Trend Regression: Piecewise Linear-Linear

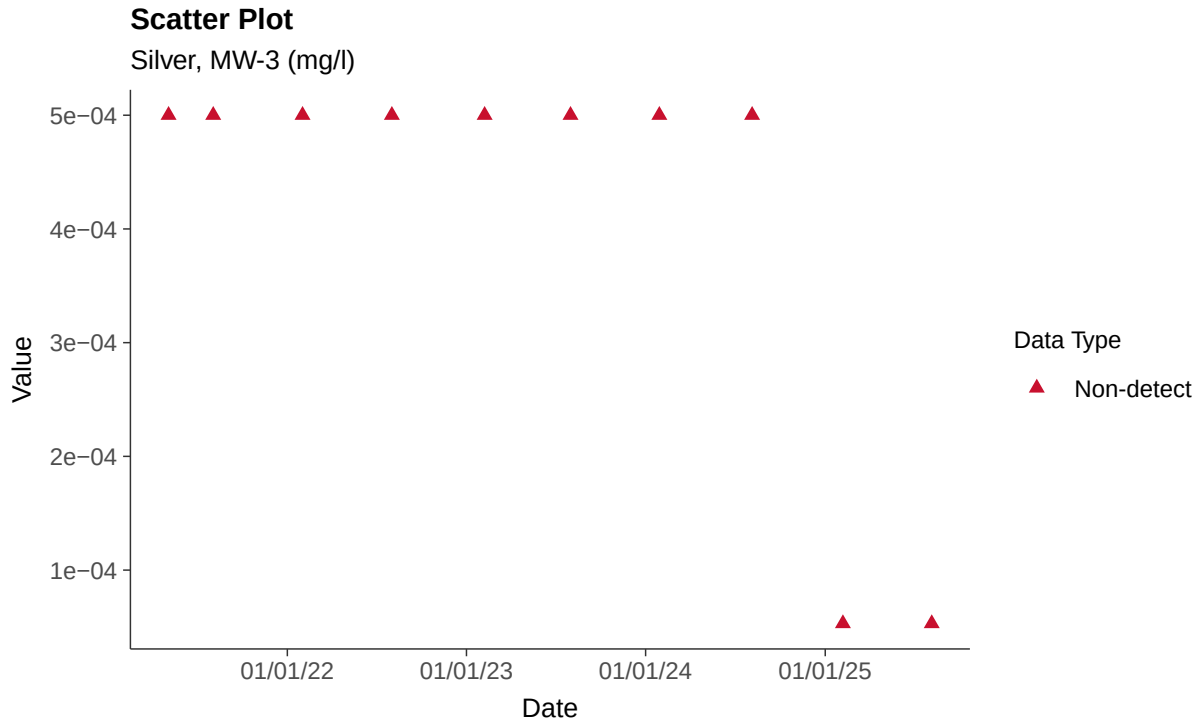
Nickel, MW-3 (mg/l)

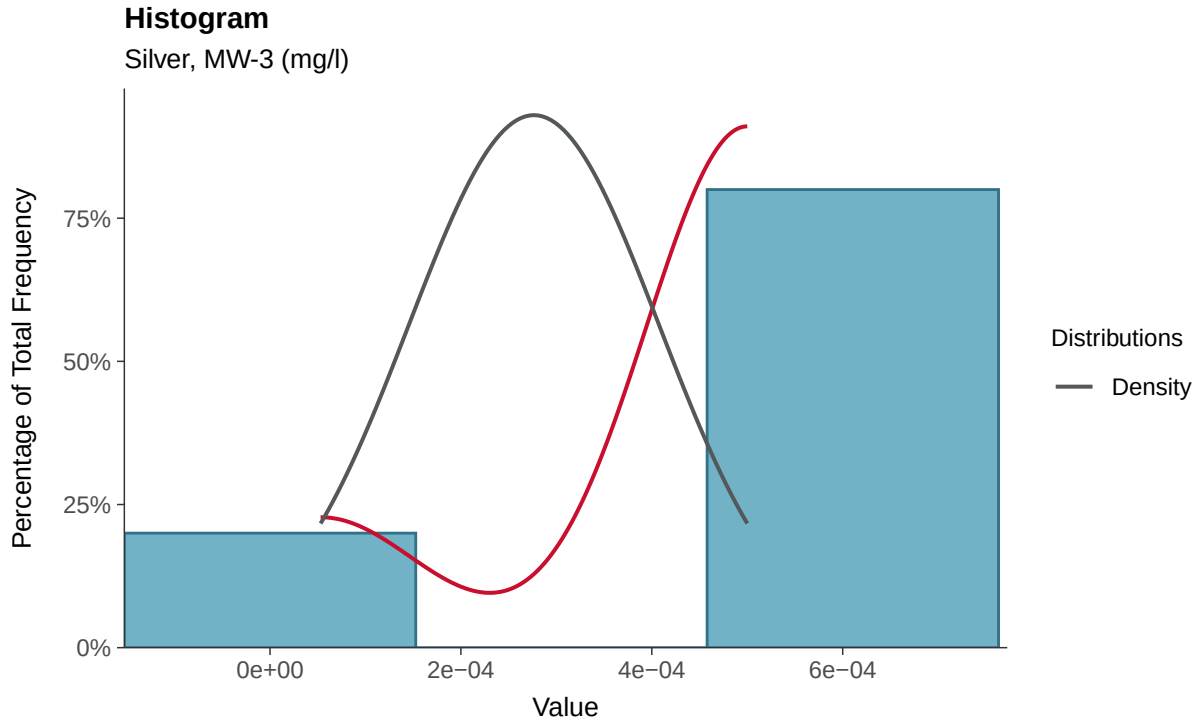



Trend Regression: Piecewise Linear-Linear-Linear
Nickel, MW-3 (mg/l)
0.005
0.004
0.003
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Part 115: Silver, MW-3

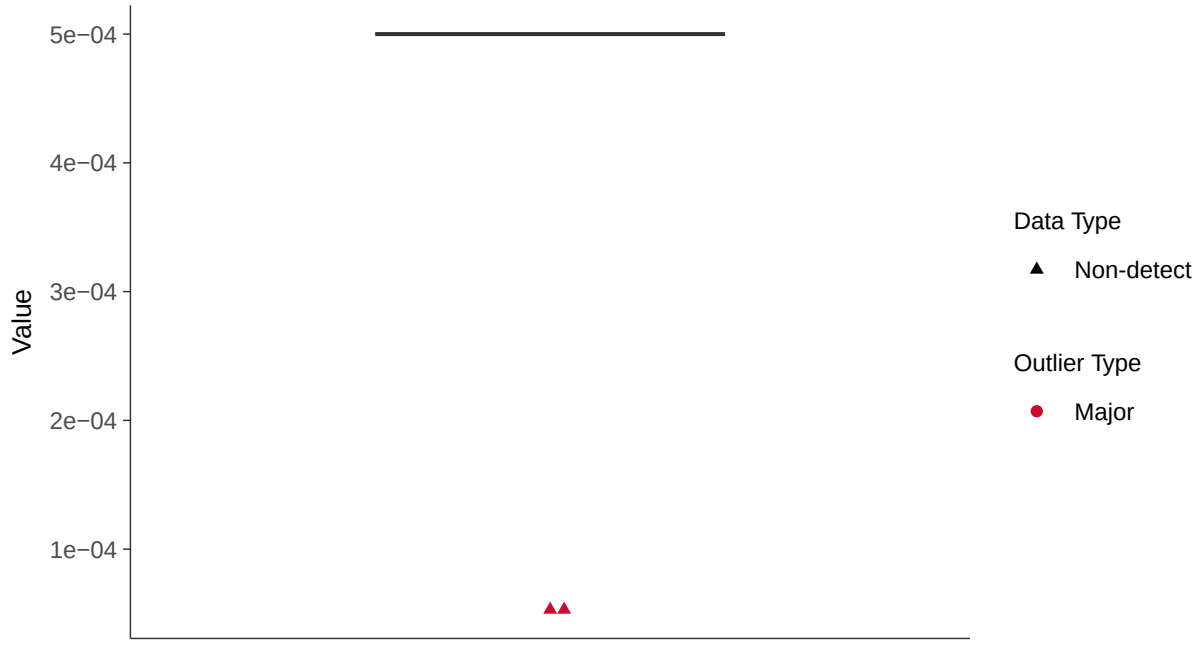
ID: 14_5_123





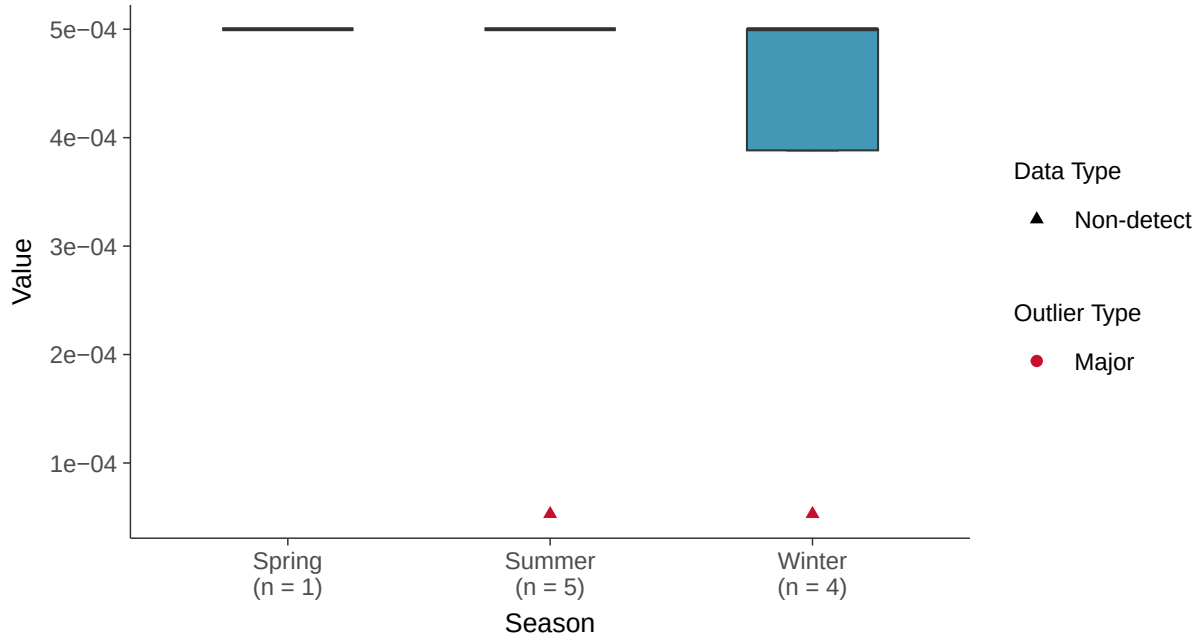
Boxplot

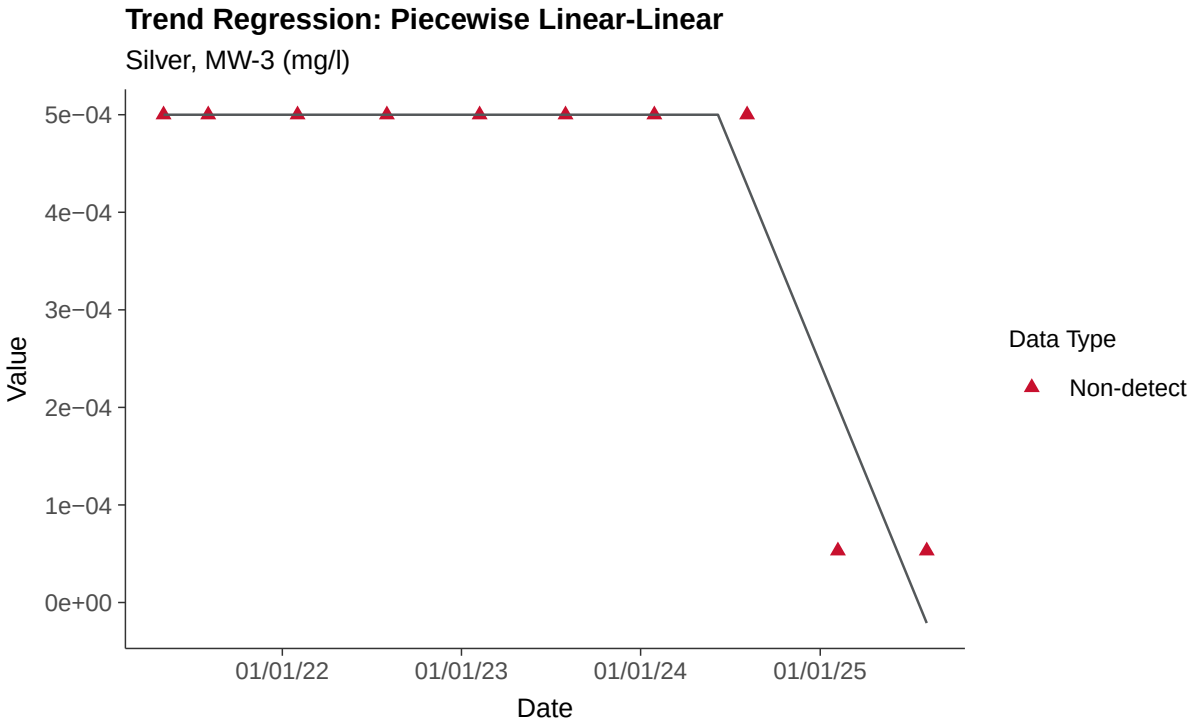
Silver, MW-3 (mg/l)



Boxplot by Season

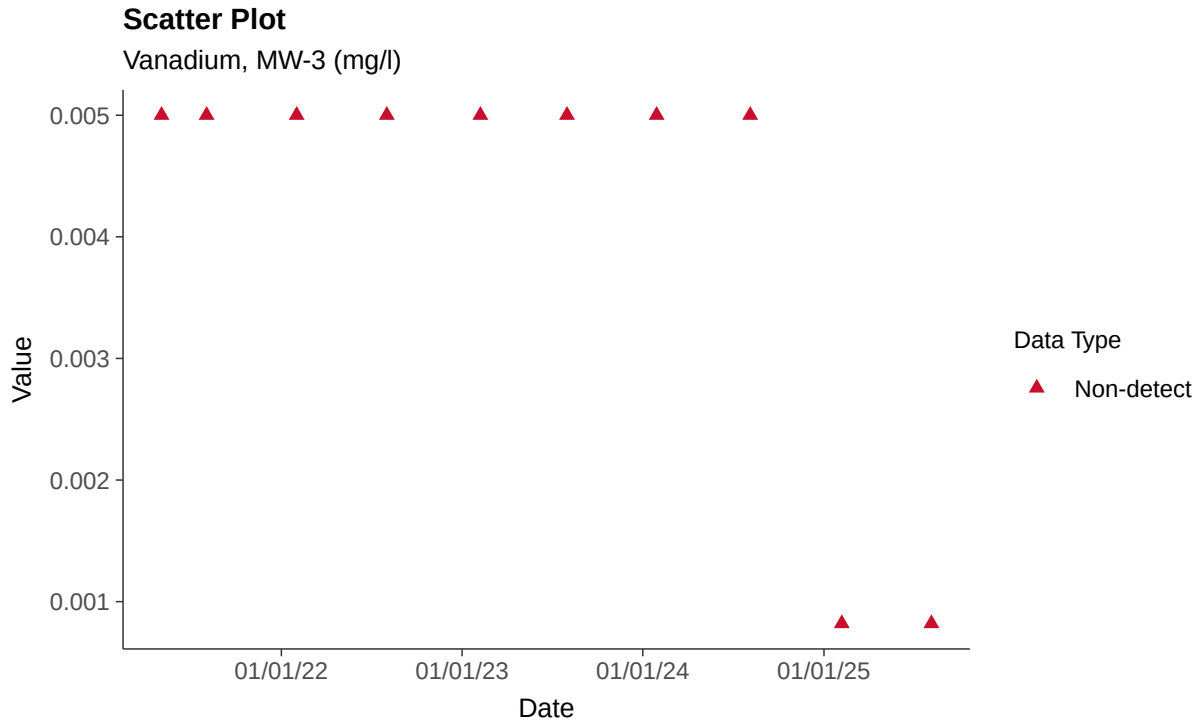
Silver, MW-3 (mg/l)

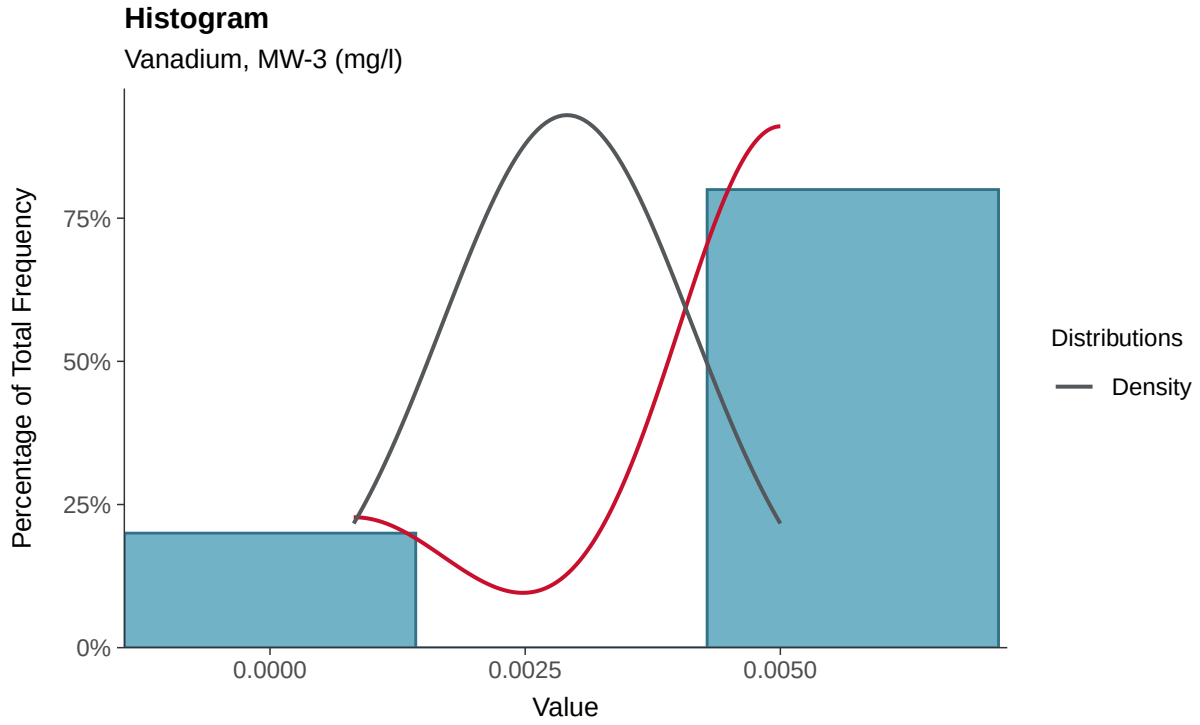



Trend Regression: Piecewise Linear-Linear
Silver, MW-3 (mg/l)
5e−04
4e−04
3e−04
2e−04
1e−04
0e+00
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Part 115: Vanadium, MW-3

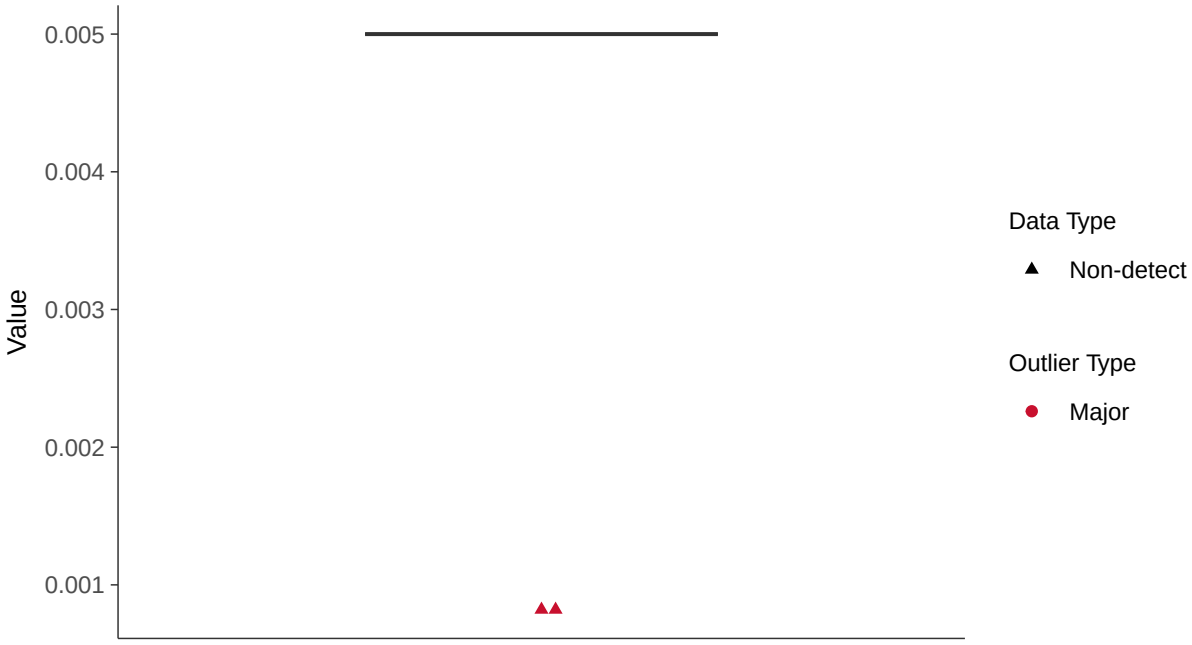
ID: 14_5_128





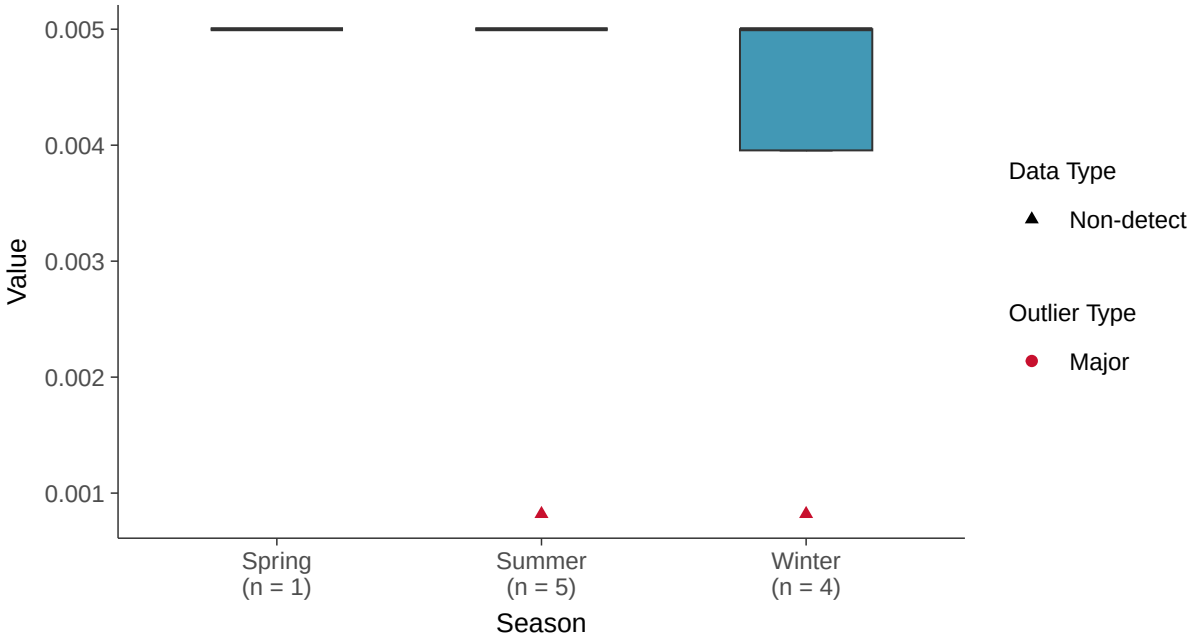
Boxplot

Vanadium, MW-3 (mg/l)



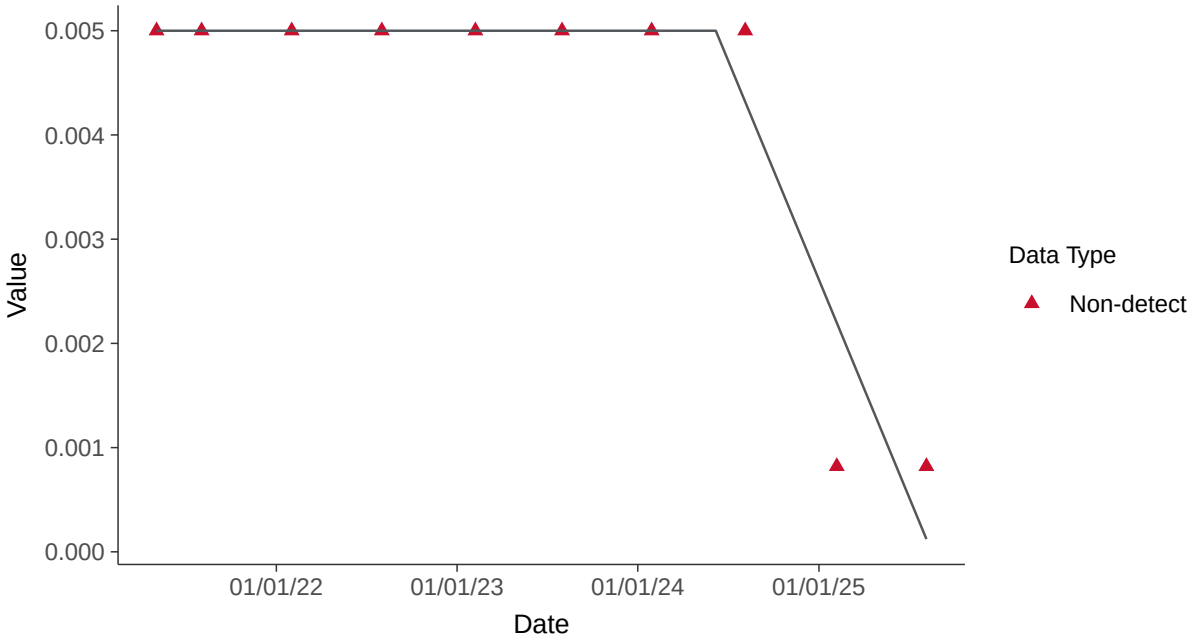
Boxplot by Season

Vanadium, MW-3 (mg/l)



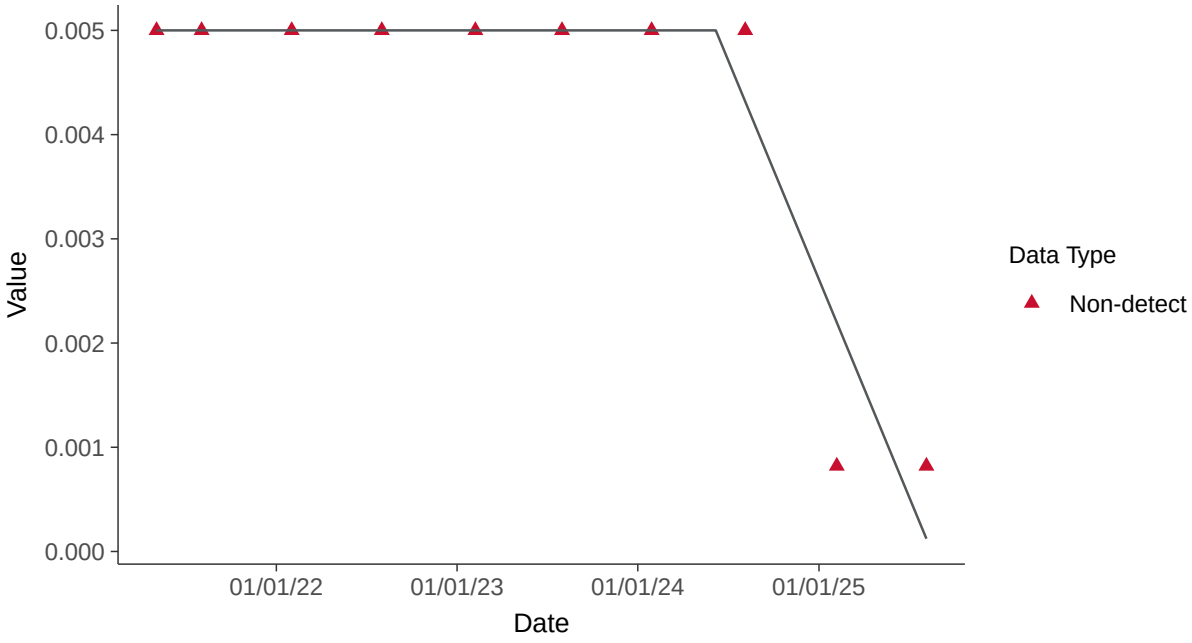
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-3 (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Vanadium, MW-3 (mg/l)

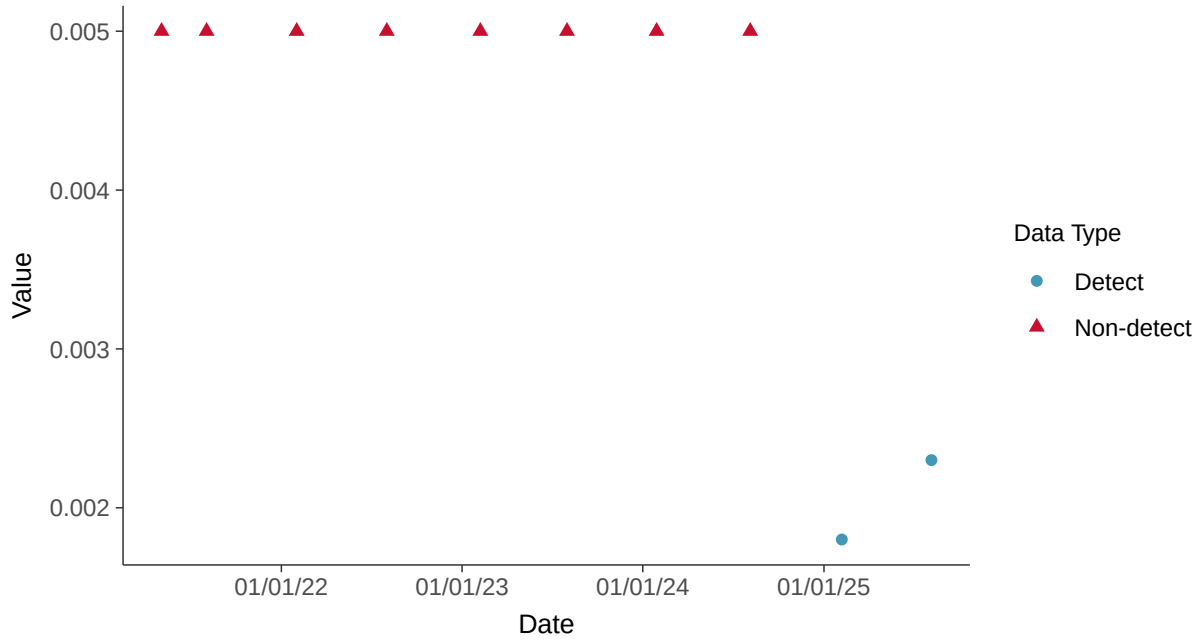


Part 115: Zinc, MW-3

ID: 14_5_129

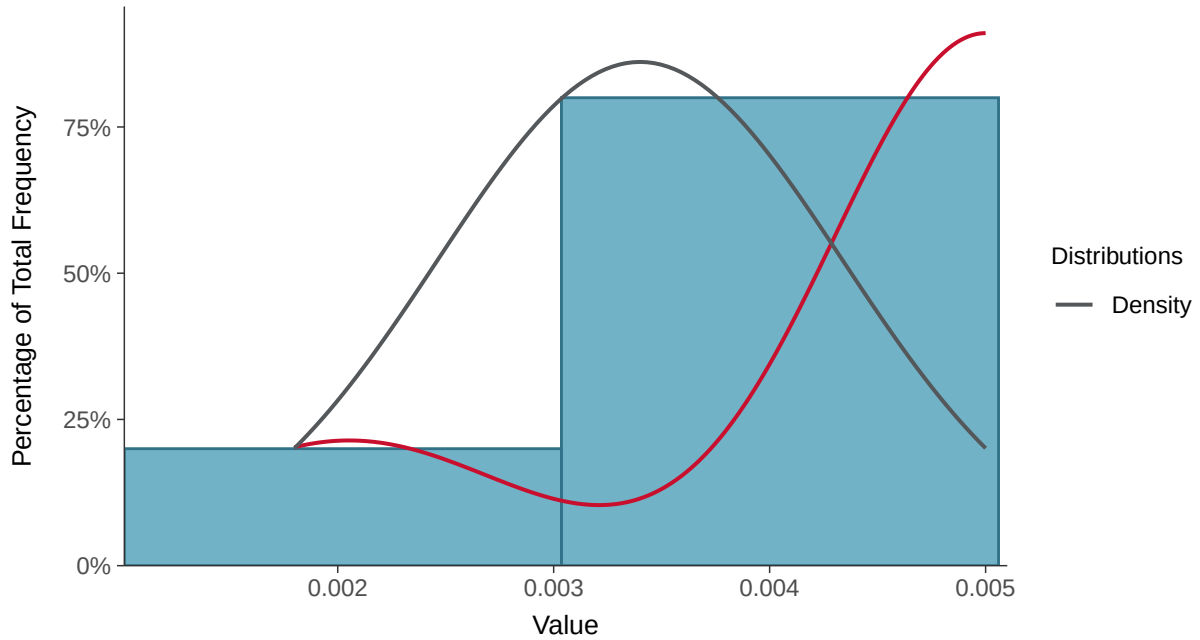
Scatter Plot

Zinc, MW-3 (mg/l)



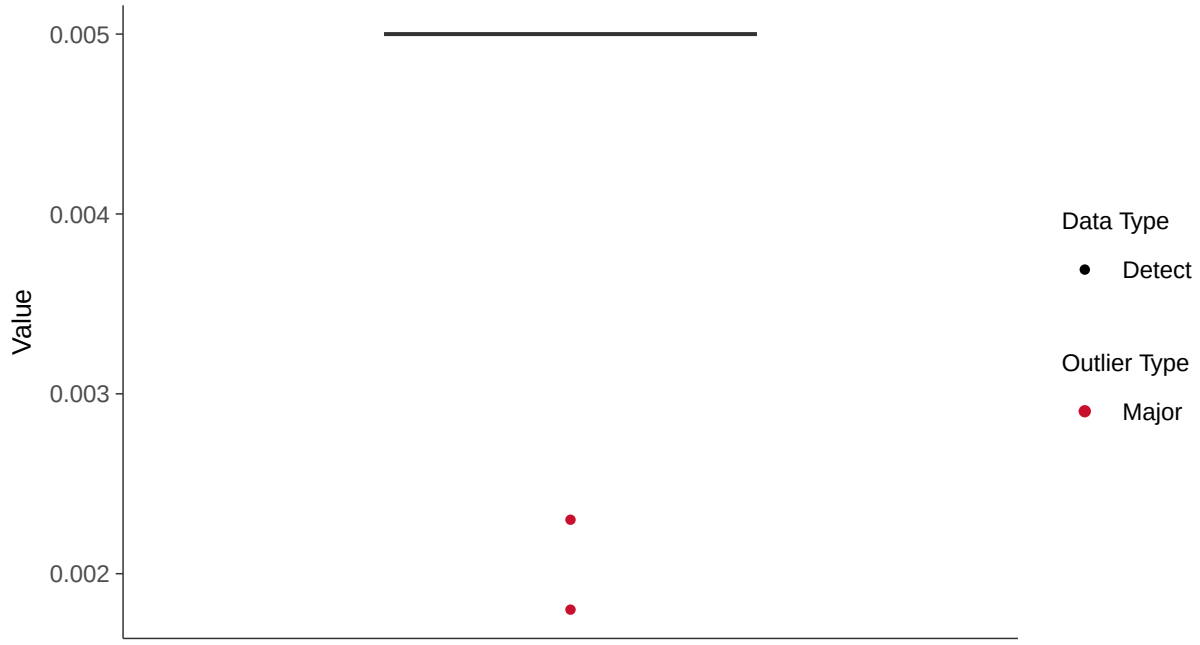
Histogram

Zinc, MW-3 (mg/l)



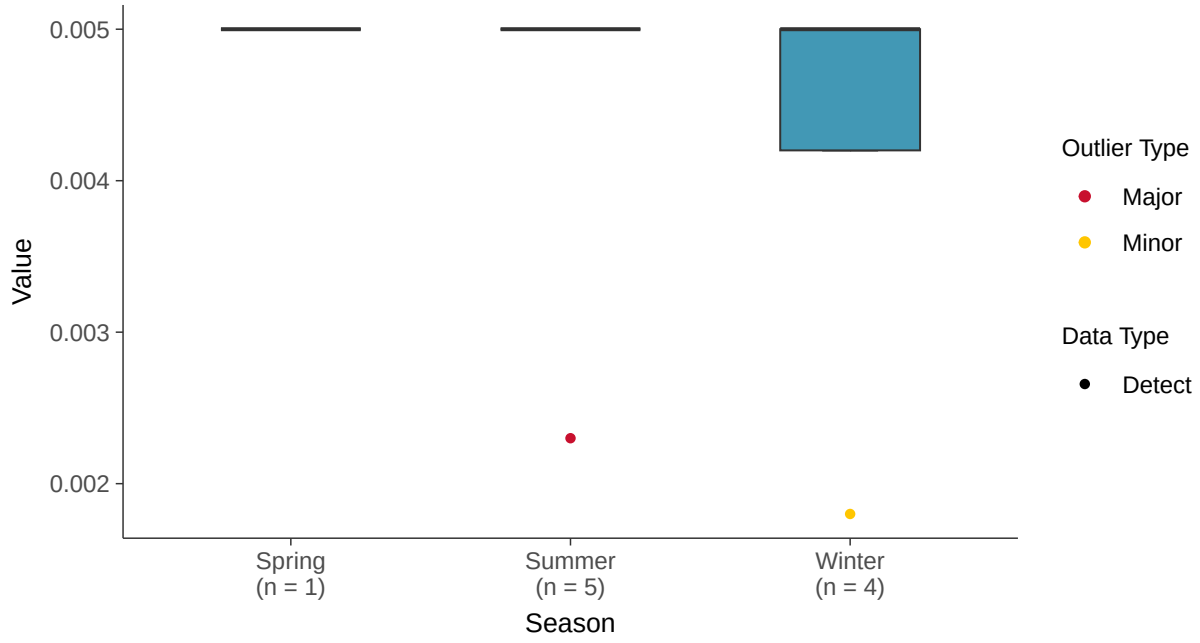
Boxplot

Zinc, MW-3 (mg/l)



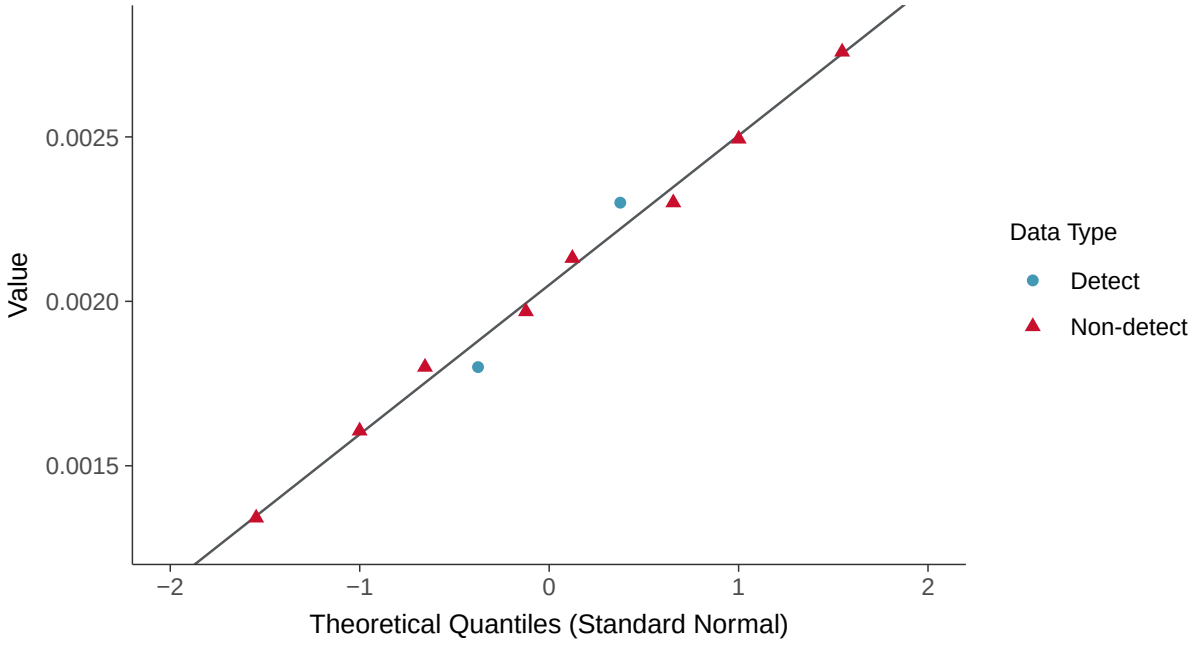
Boxplot by Season

Zinc, MW-3 (mg/l)



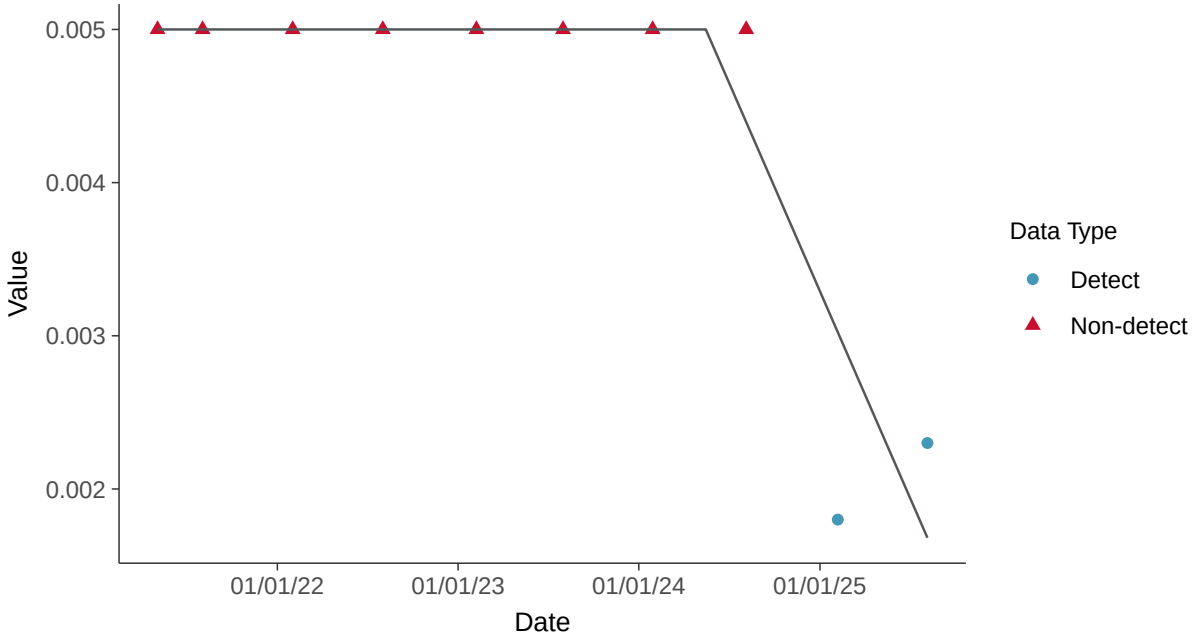
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-3 (mg/l)



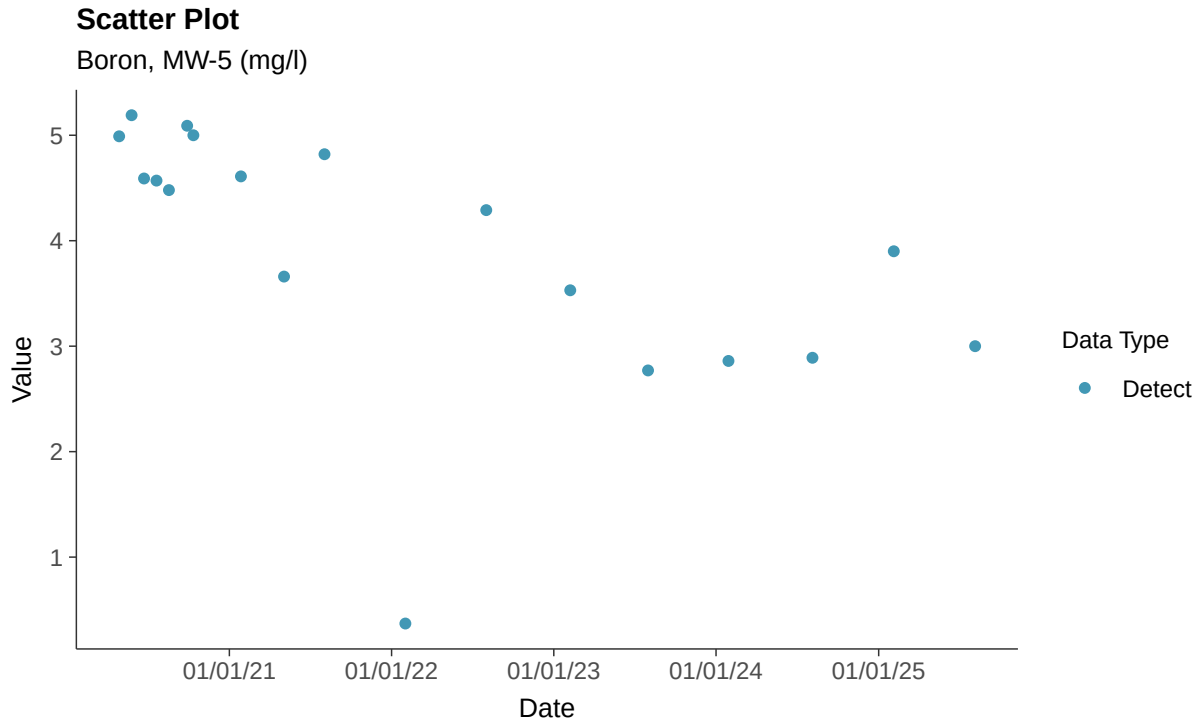
Trend Regression: Piecewise Linear-Linear

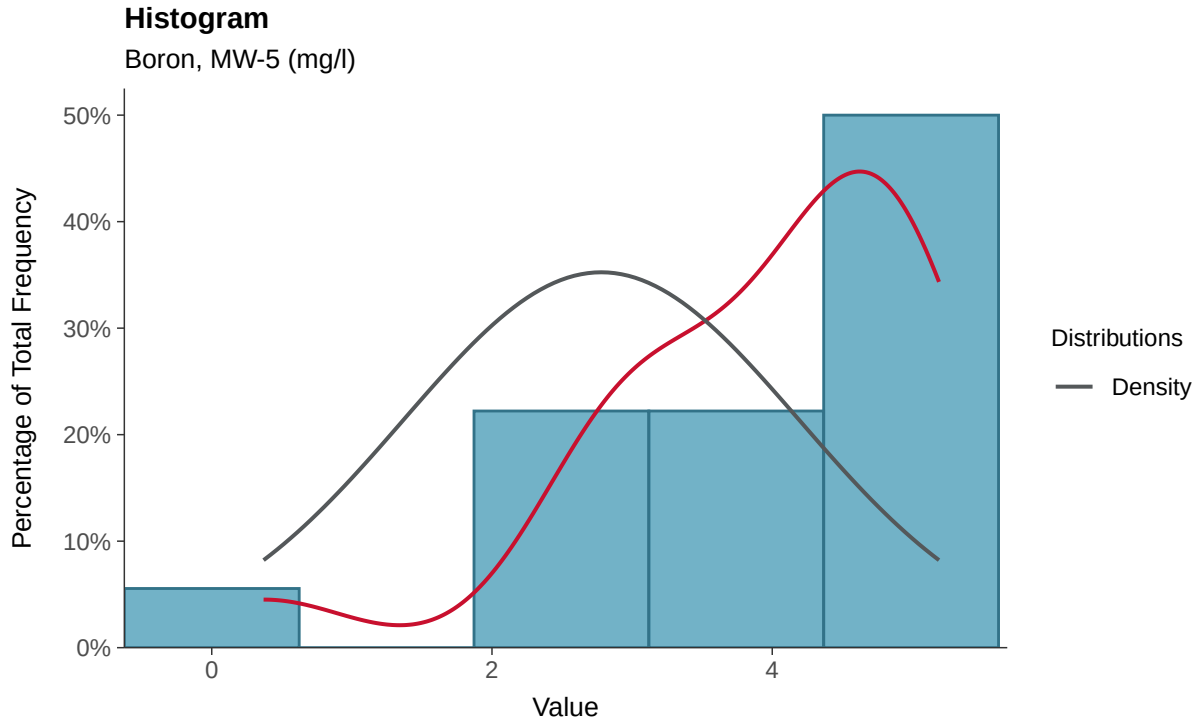
Zinc, MW-3 (mg/l)



Appendix III: Boron, MW-5

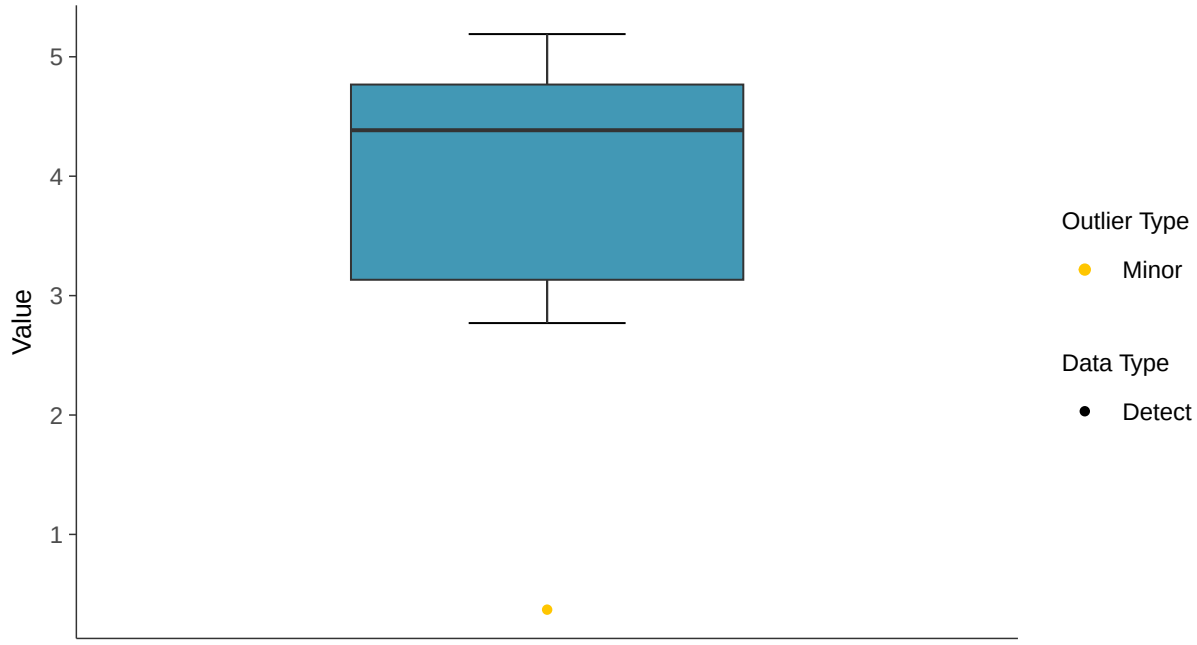
ID: 15_2_105





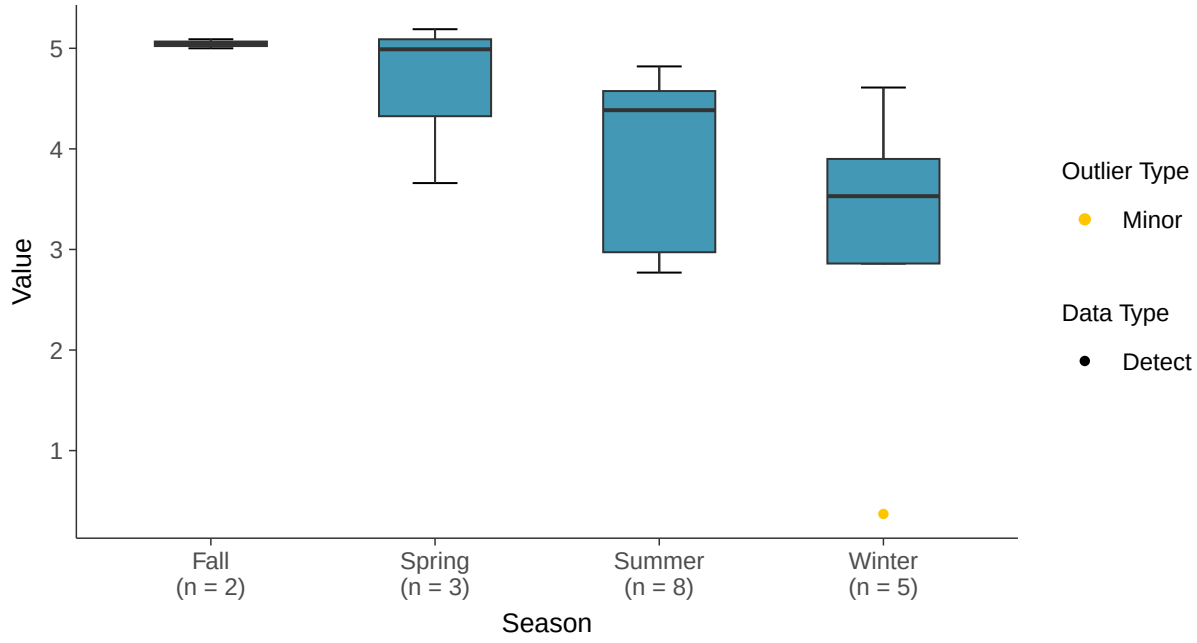
Boxplot

Boron, MW-5 (mg/l)



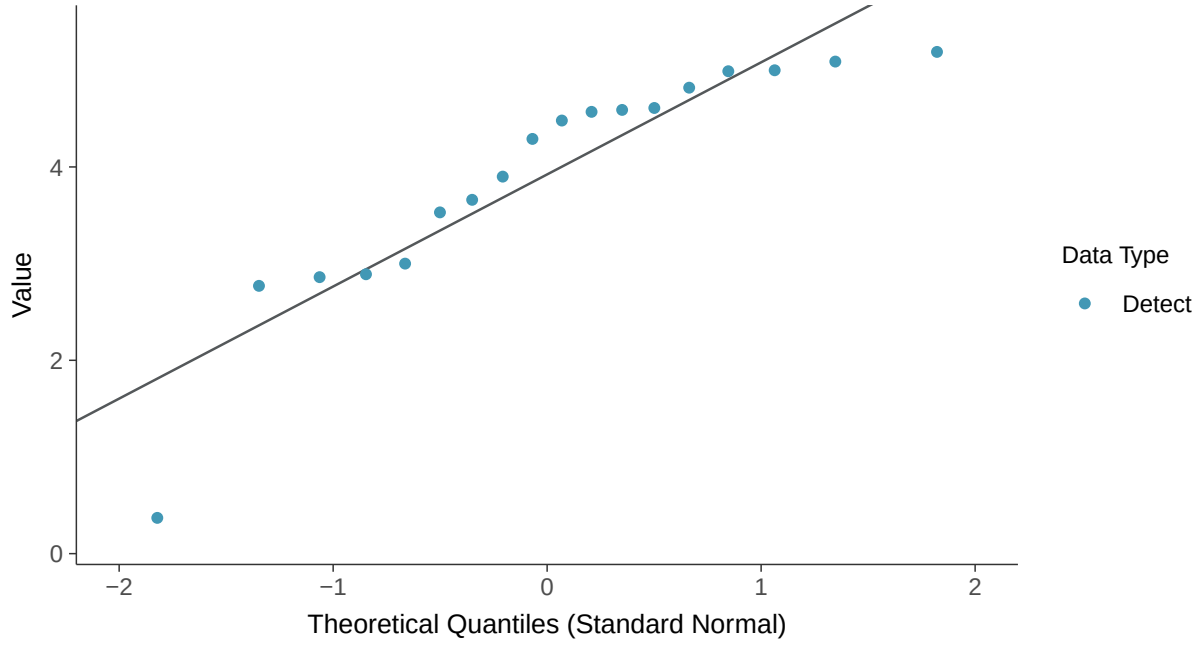
Boxplot by Season

Boron, MW-5 (mg/l)



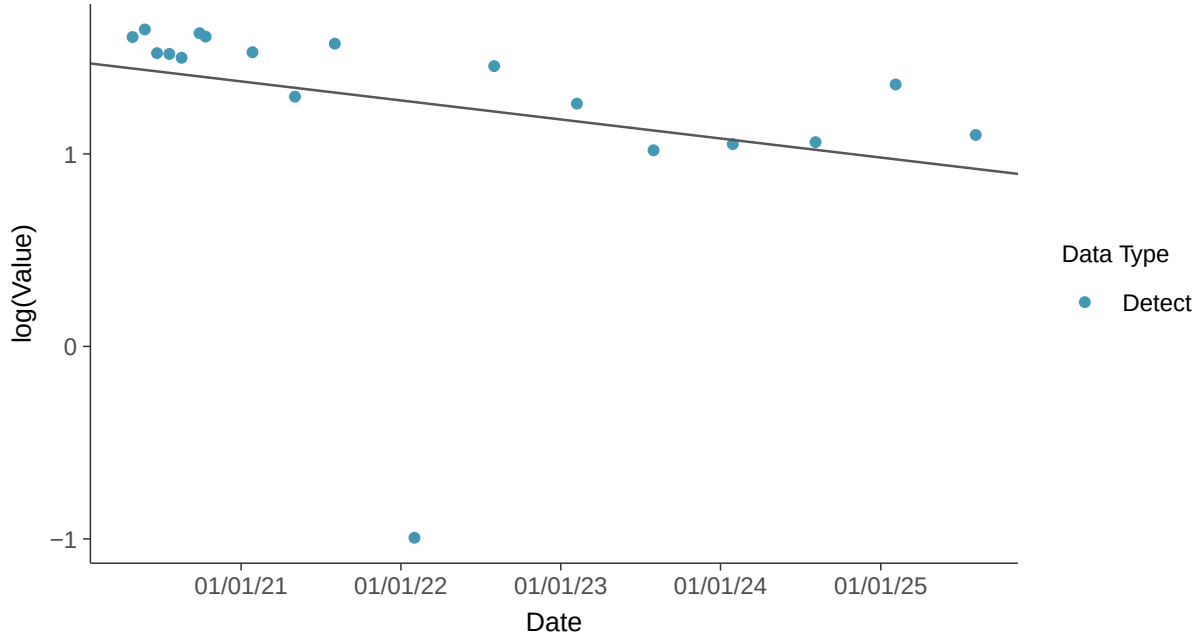
Normal Q-Q plot

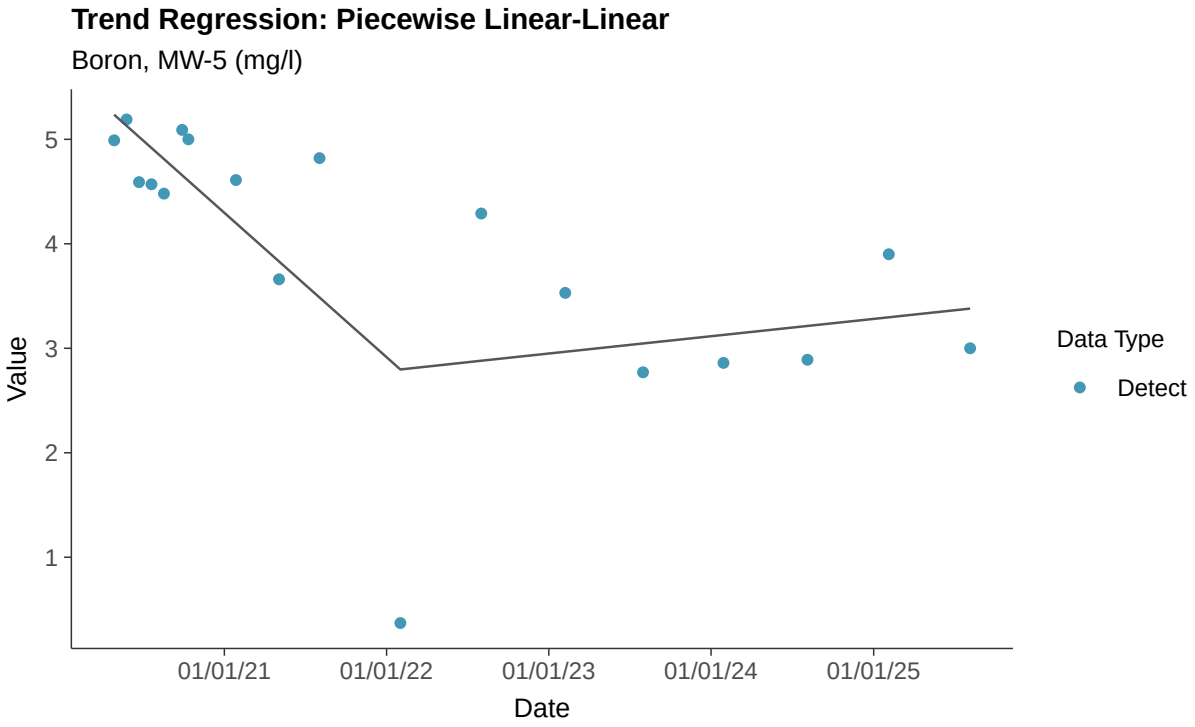
Boron, MW-5 (mg/l)



Trend Regression: Lognormal MLE

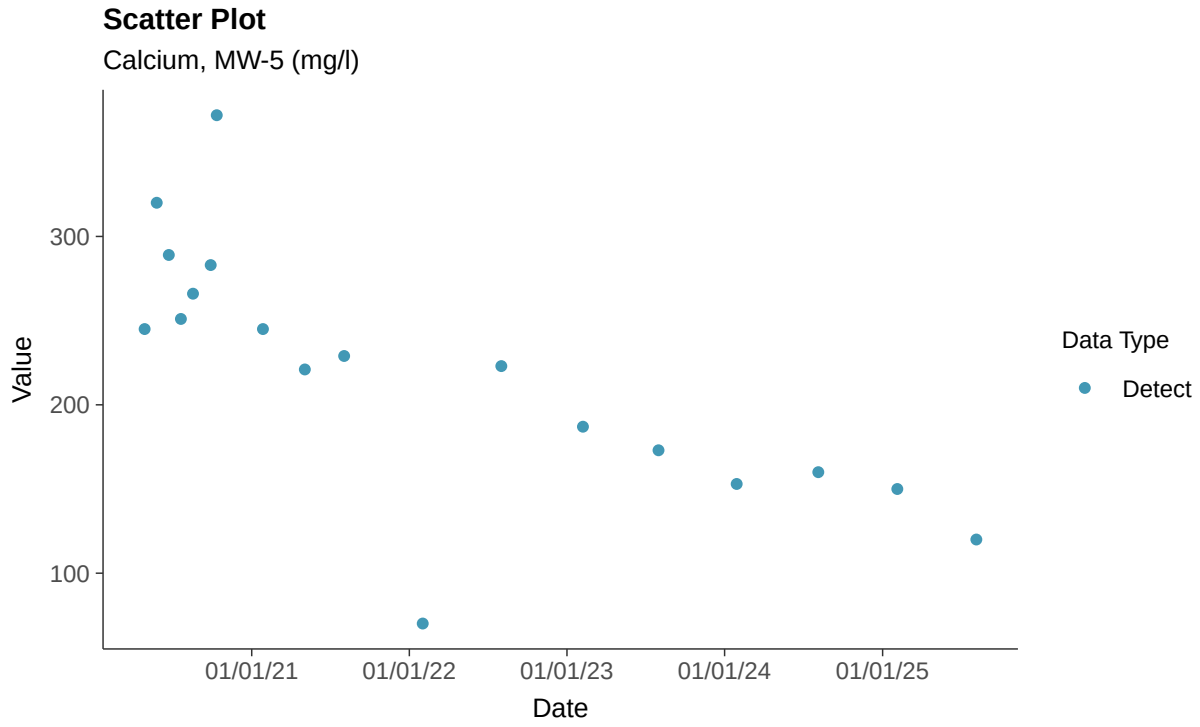
Boron, MW-5 (mg/l)

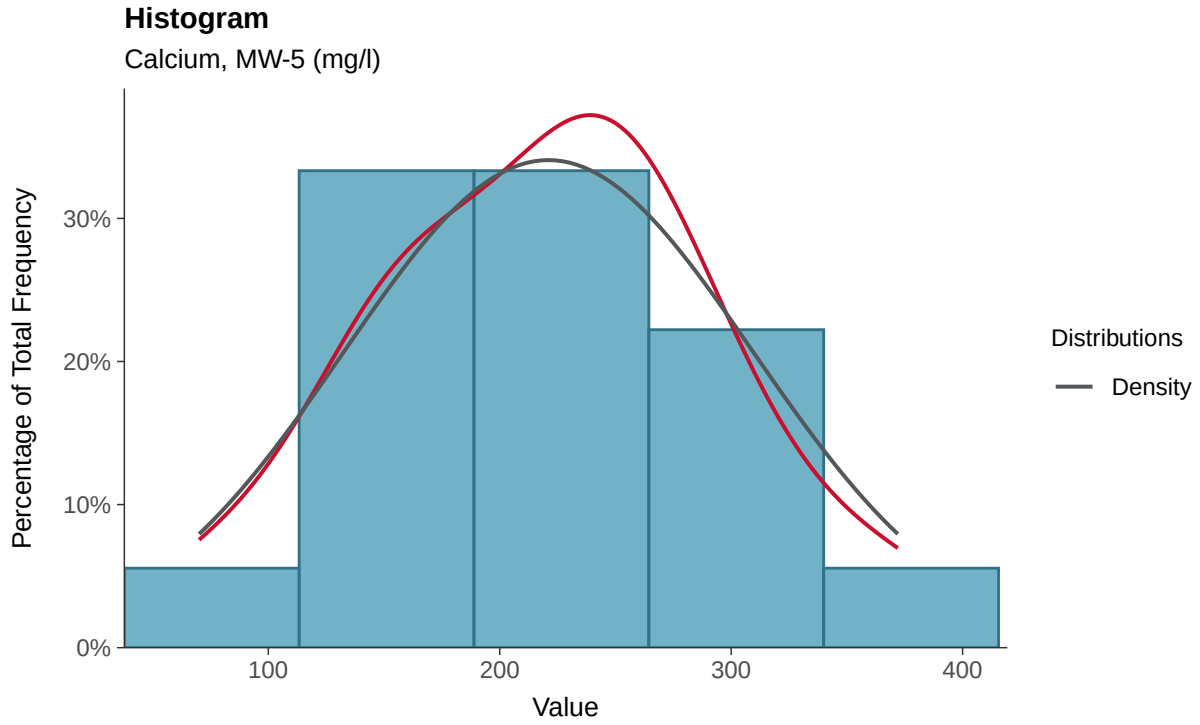



Trend Regression: Piecewise Linear-Linear
Boron, MW-5 (mg/l)
Value
5
4
3
2
1
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect

Appendix III: Calcium, MW-5

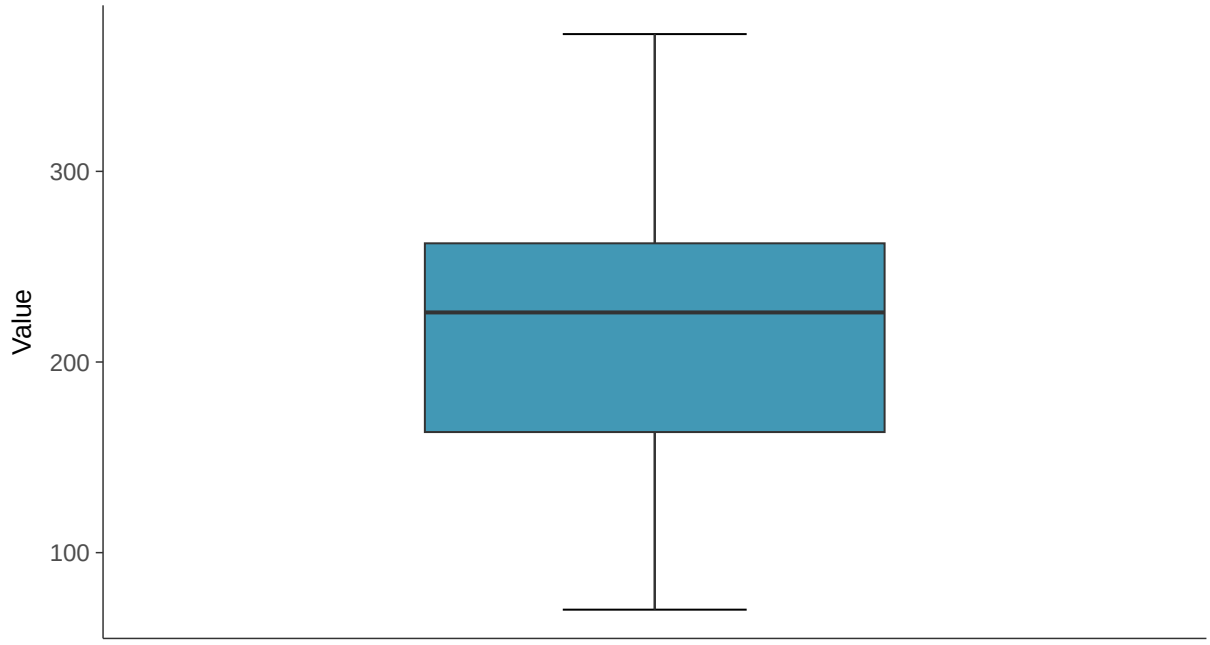
ID: 15_2_107





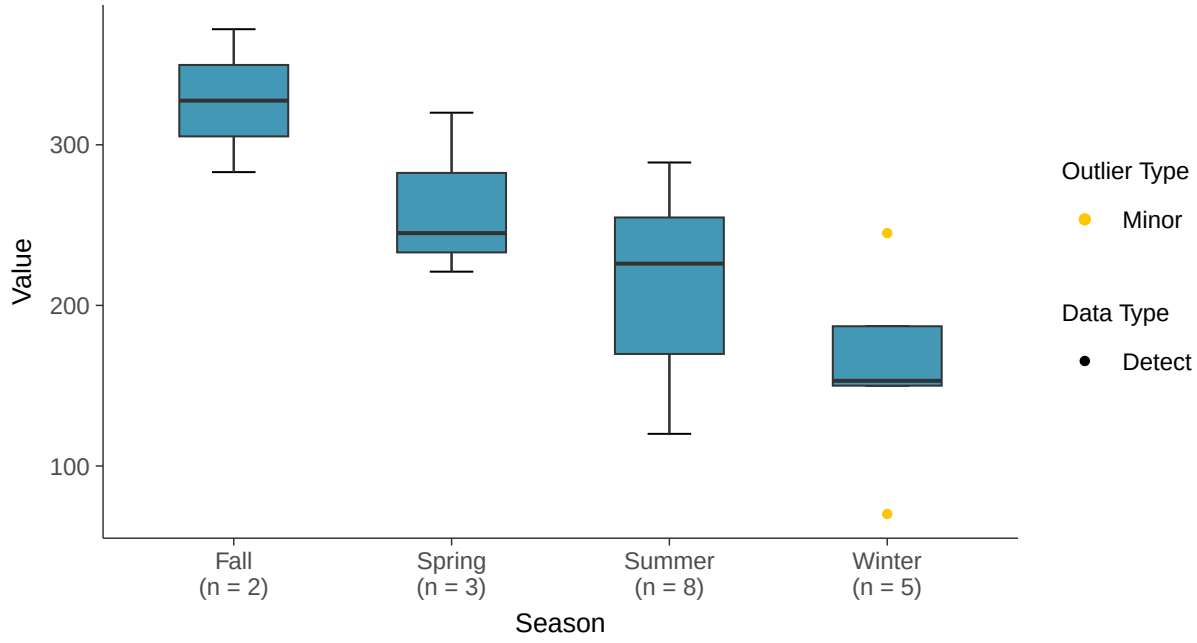
Boxplot

Calcium, MW-5 (mg/l)



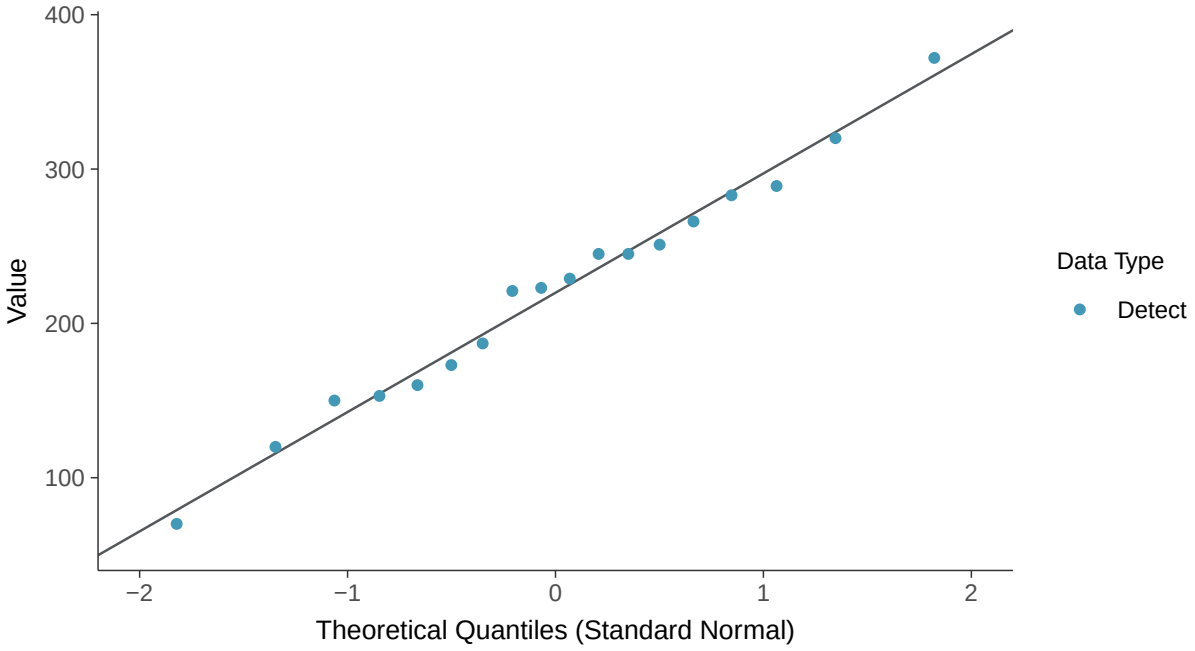
Boxplot by Season

Calcium, MW-5 (mg/l)



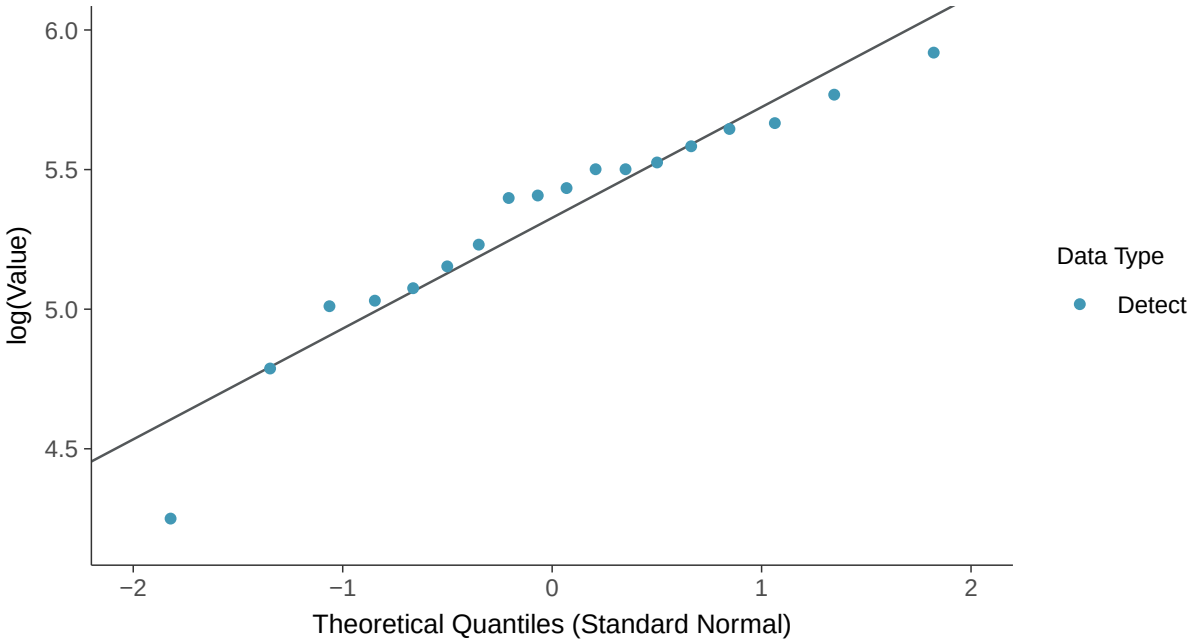
Normal Q-Q plot

Calcium, MW-5 (mg/l)



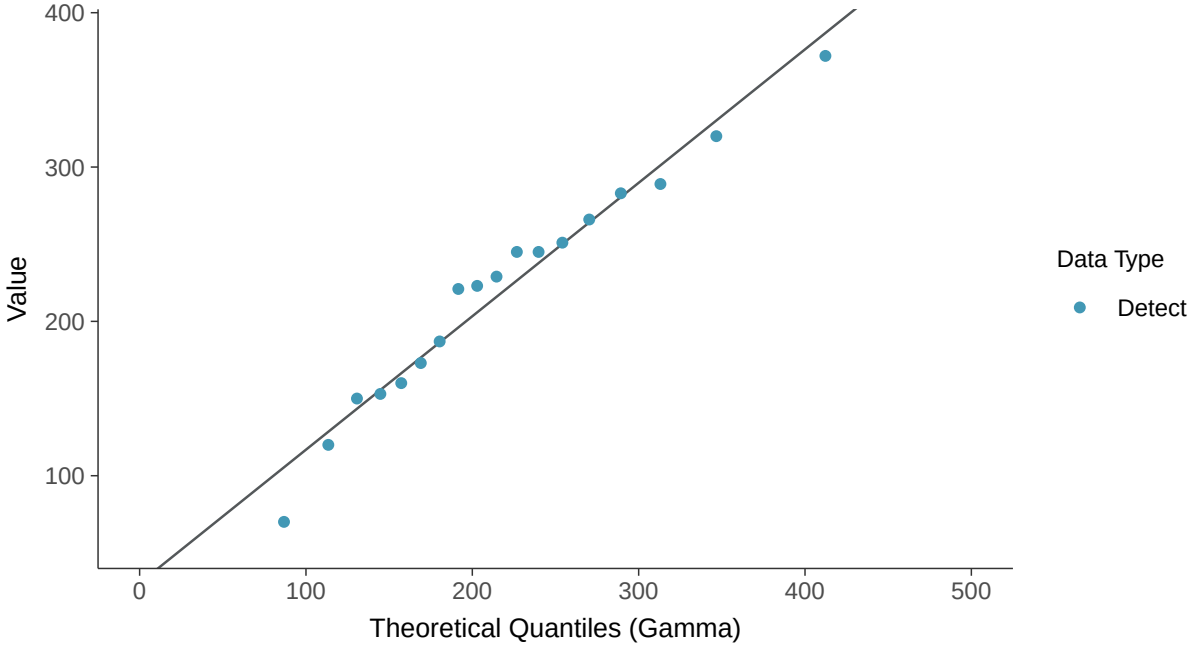
Lognormal Q-Q plot

Calcium, MW-5 (mg/l)



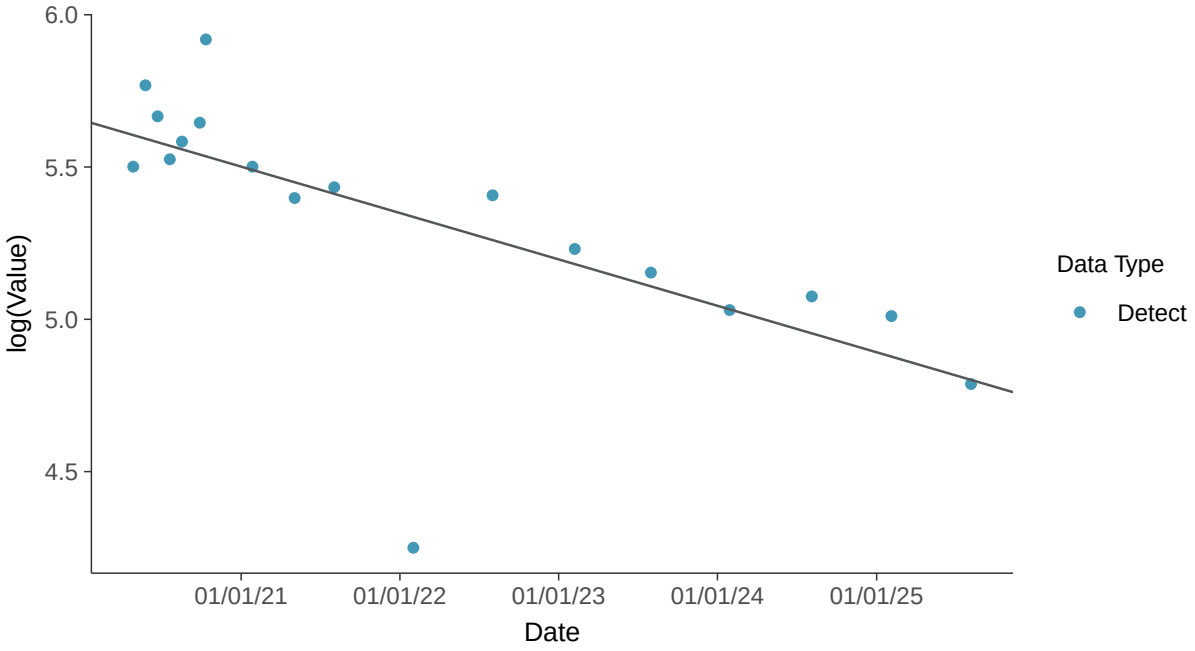
Gamma Q-Q plot

Calcium, MW-5 (mg/l)



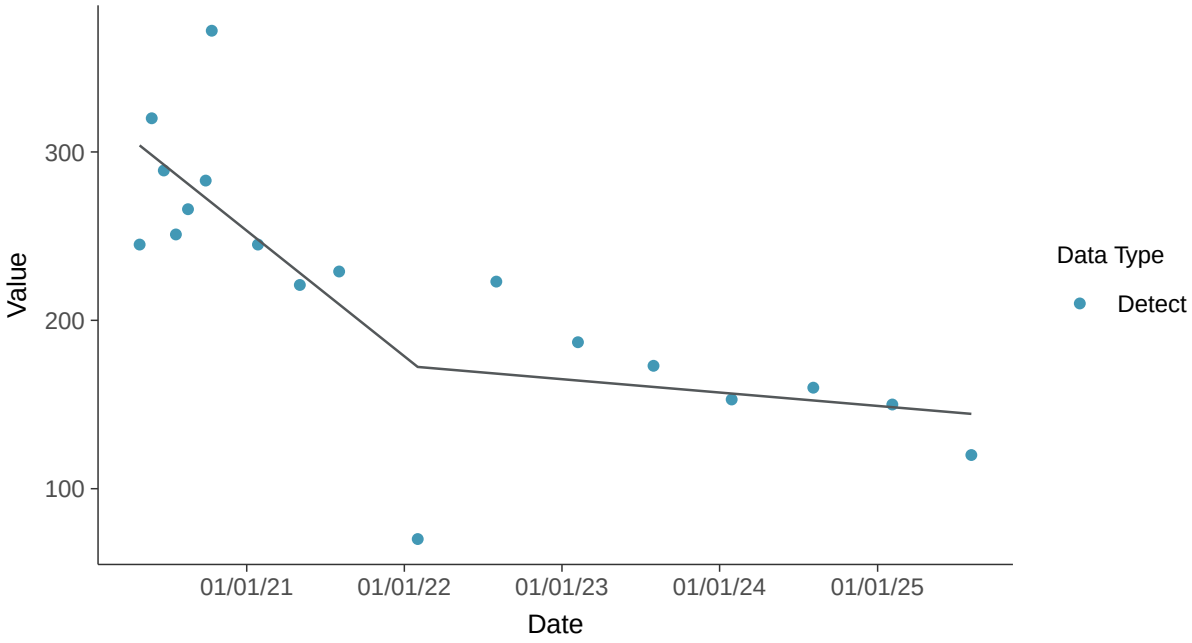
Trend Regression: Lognormal MLE

Calcium, MW-5 (mg/l)



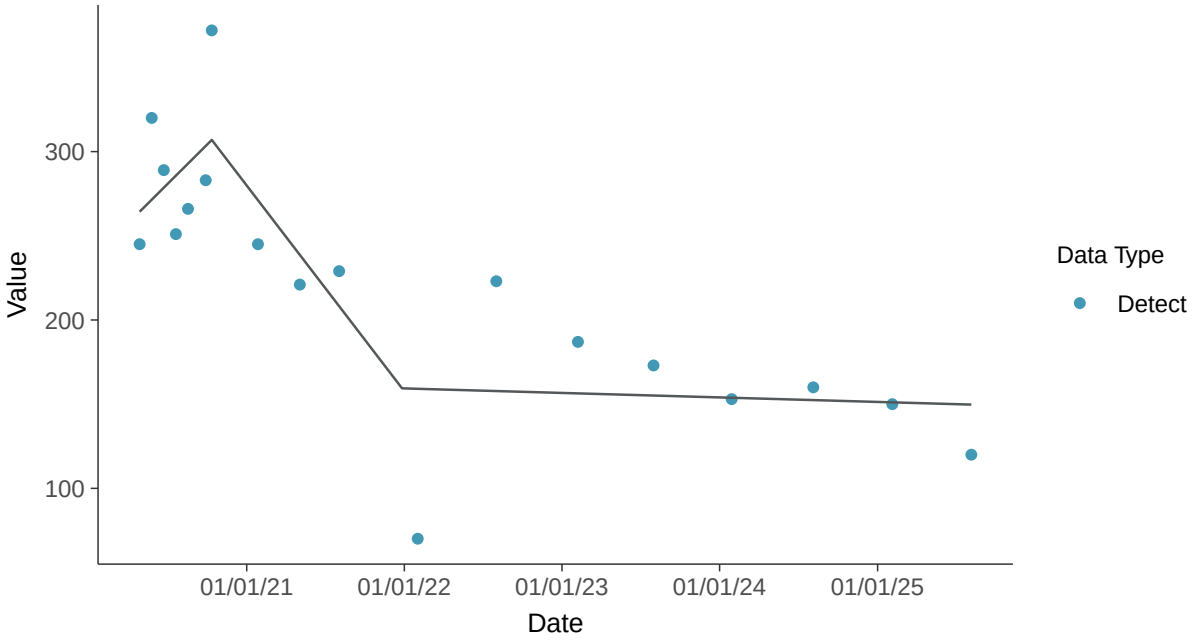
Trend Regression: Piecewise Linear-Linear

Calcium, MW-5 (mg/l)



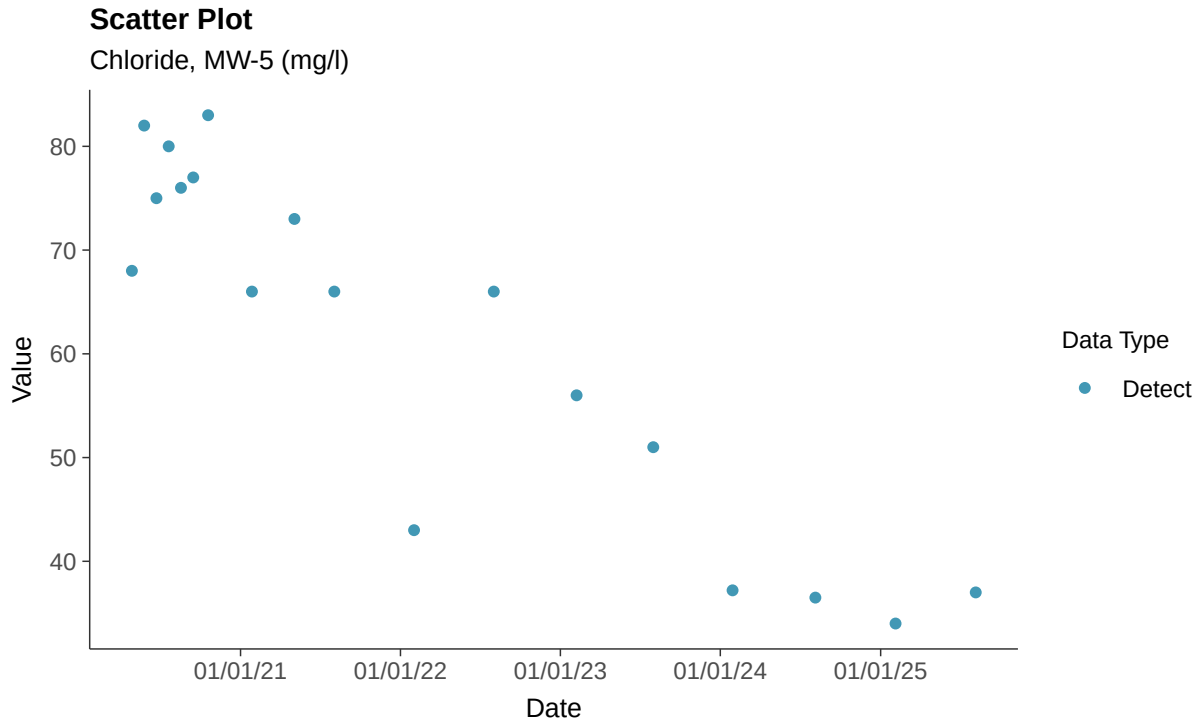
Trend Regression: Piecewise Linear-Linear-Linear

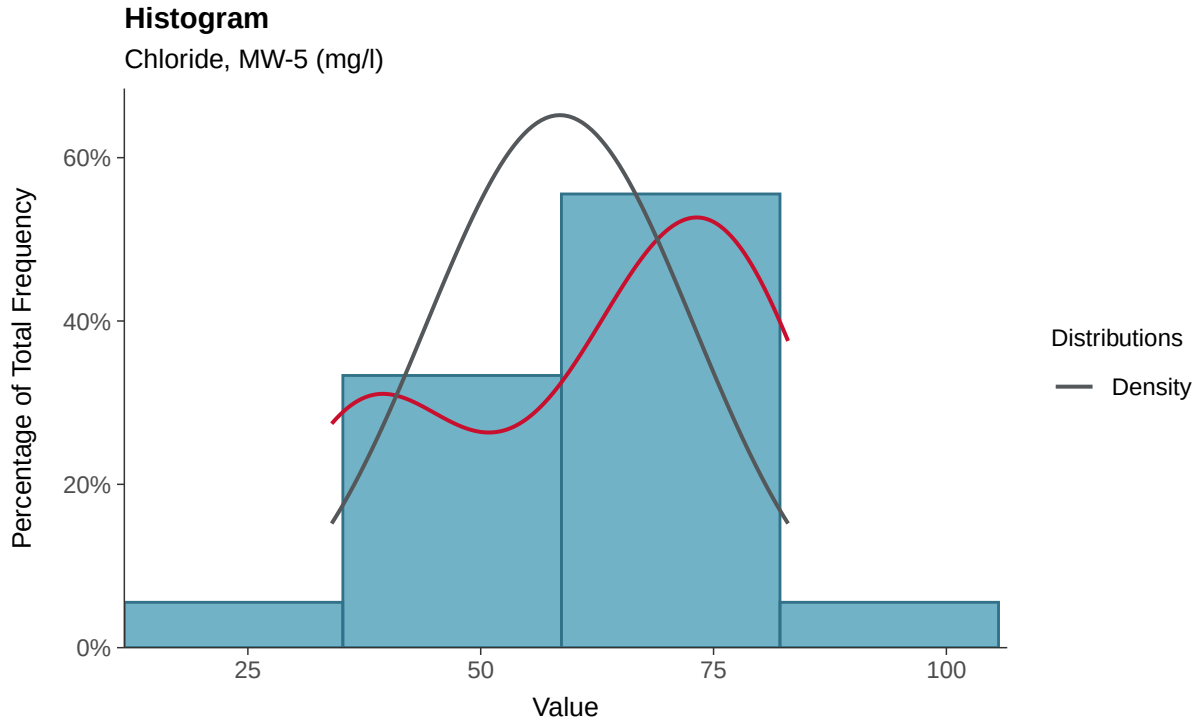
Calcium, MW-5 (mg/l)



Appendix III: Chloride, MW-5

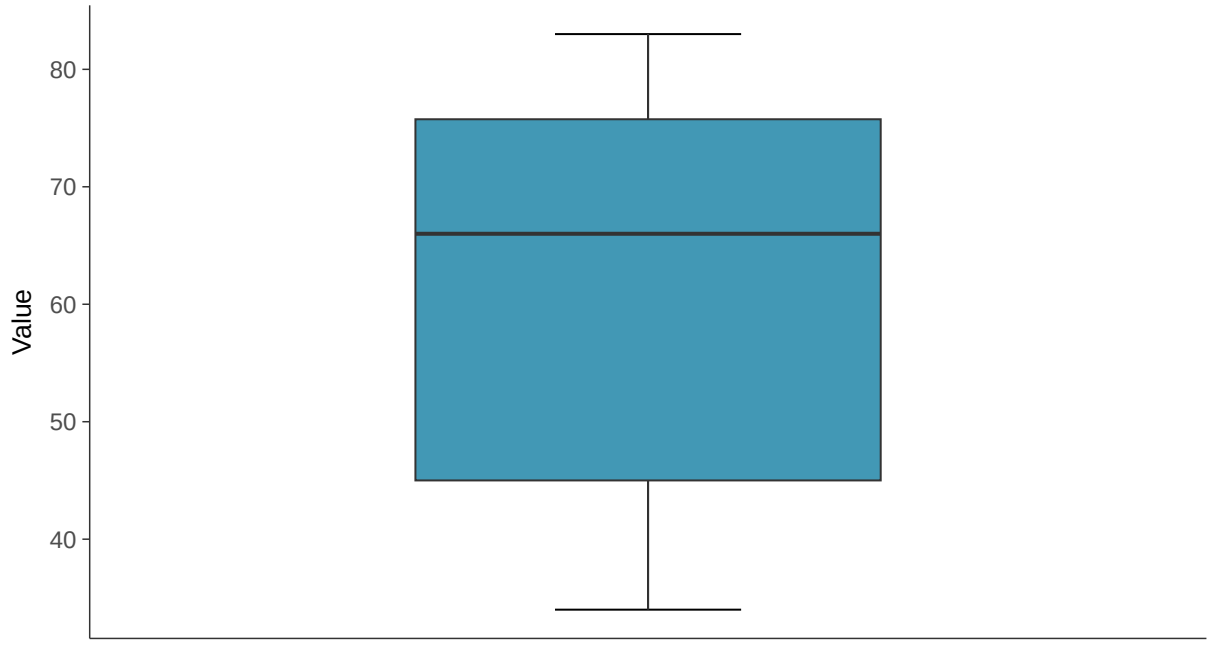
ID: 15_2_108





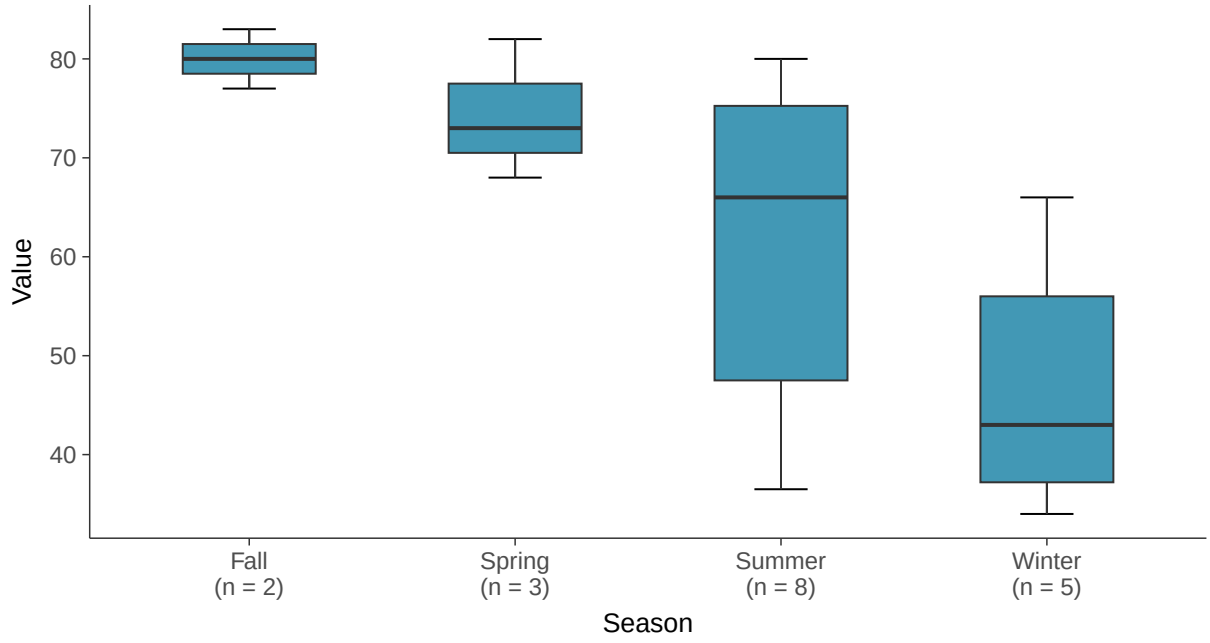
Boxplot

Chloride, MW-5 (mg/l)



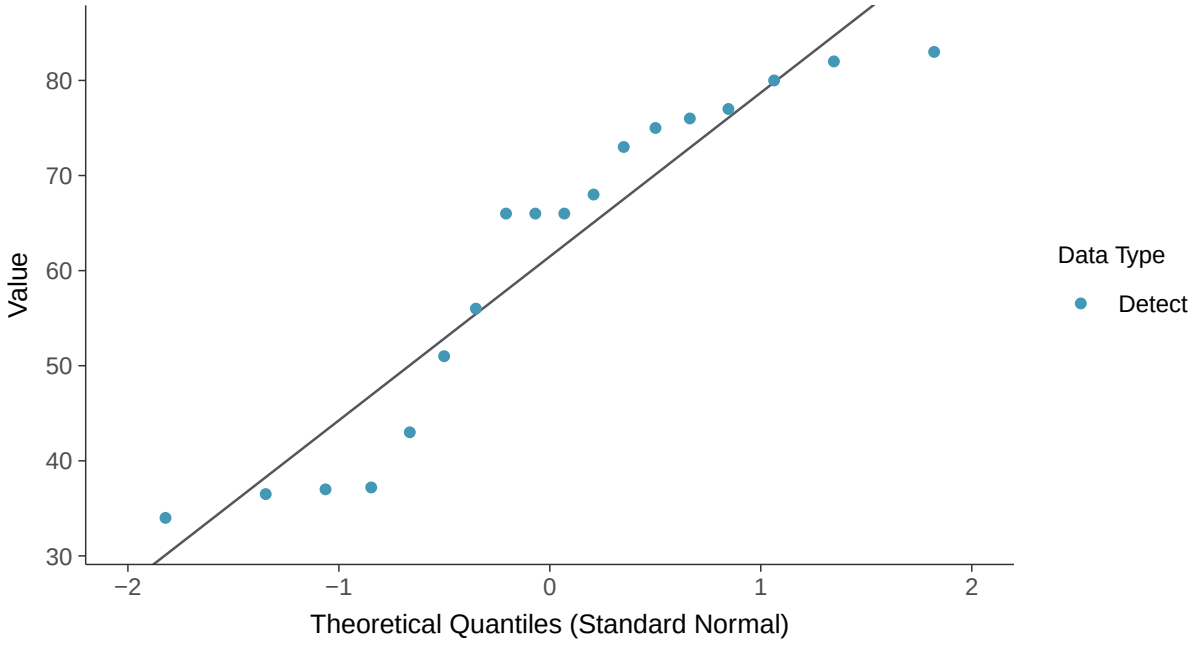
Boxplot by Season

Chloride, MW-5 (mg/l)



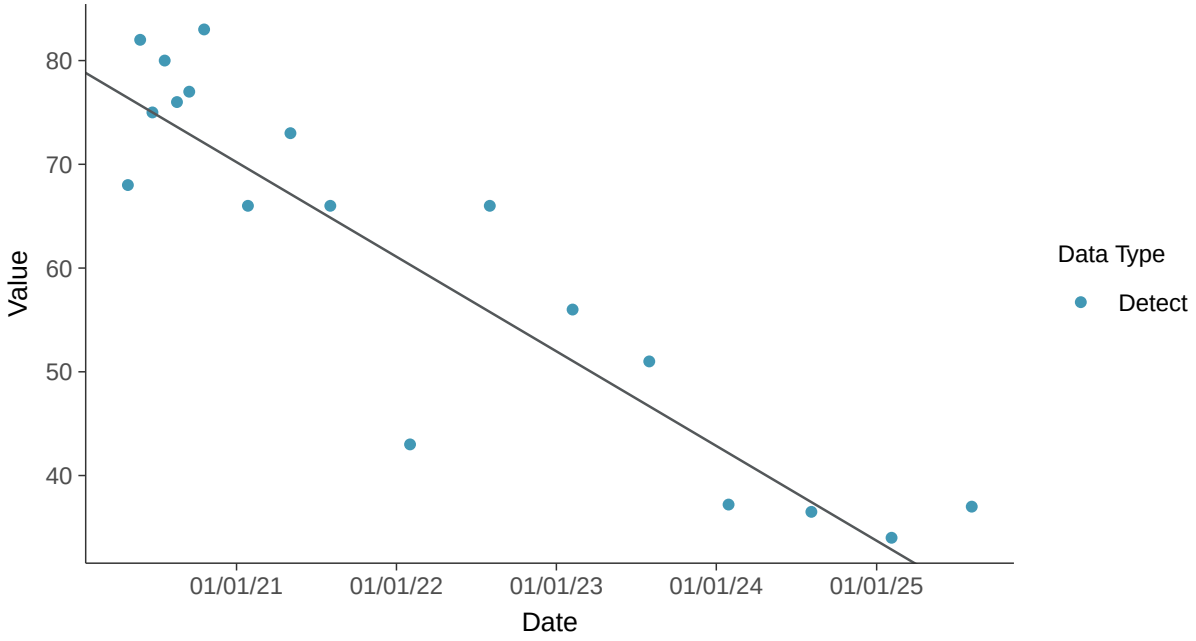
Normal Q-Q plot

Chloride, MW-5 (mg/l)



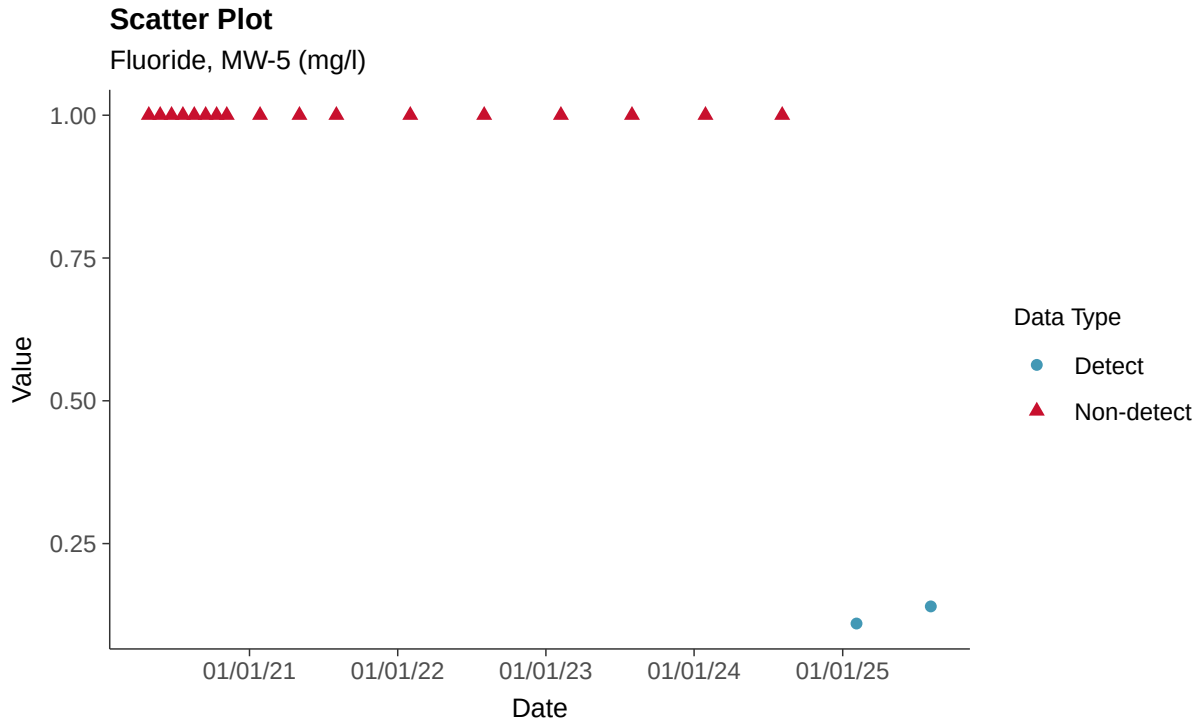
Trend Regression: Mann-Kendall/Theil-Sen Estimate

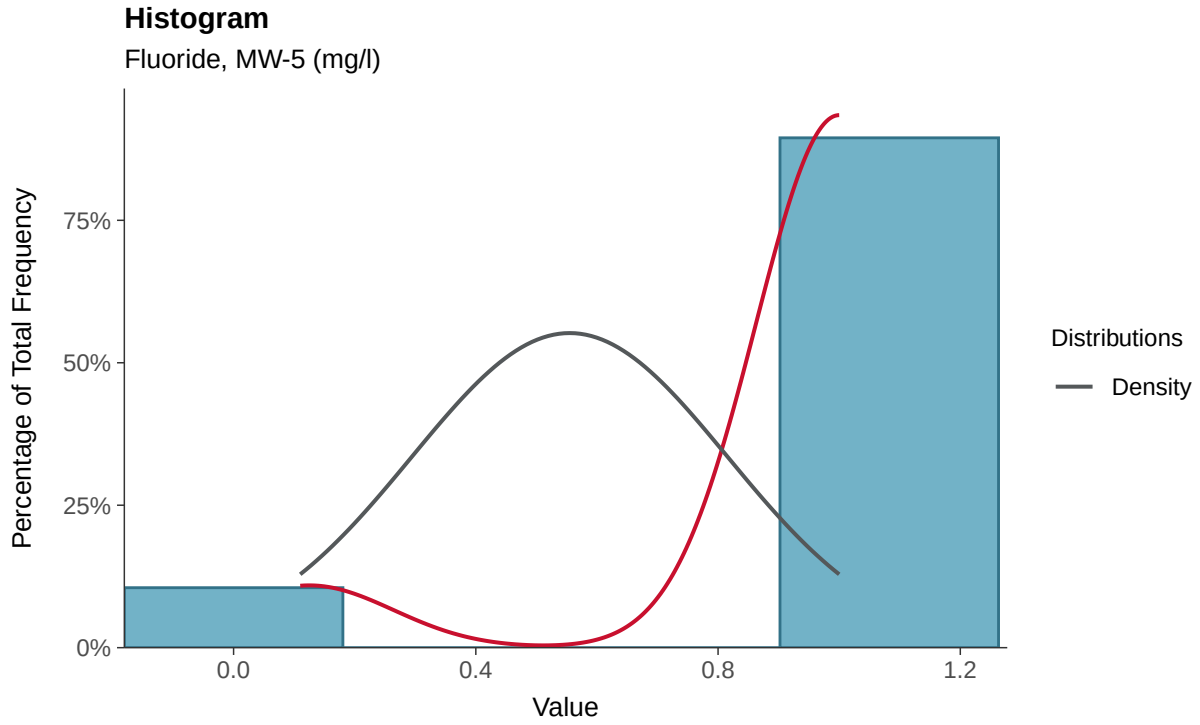
Chloride, MW-5 (mg/l)



Appendix III: Fluoride, MW-5

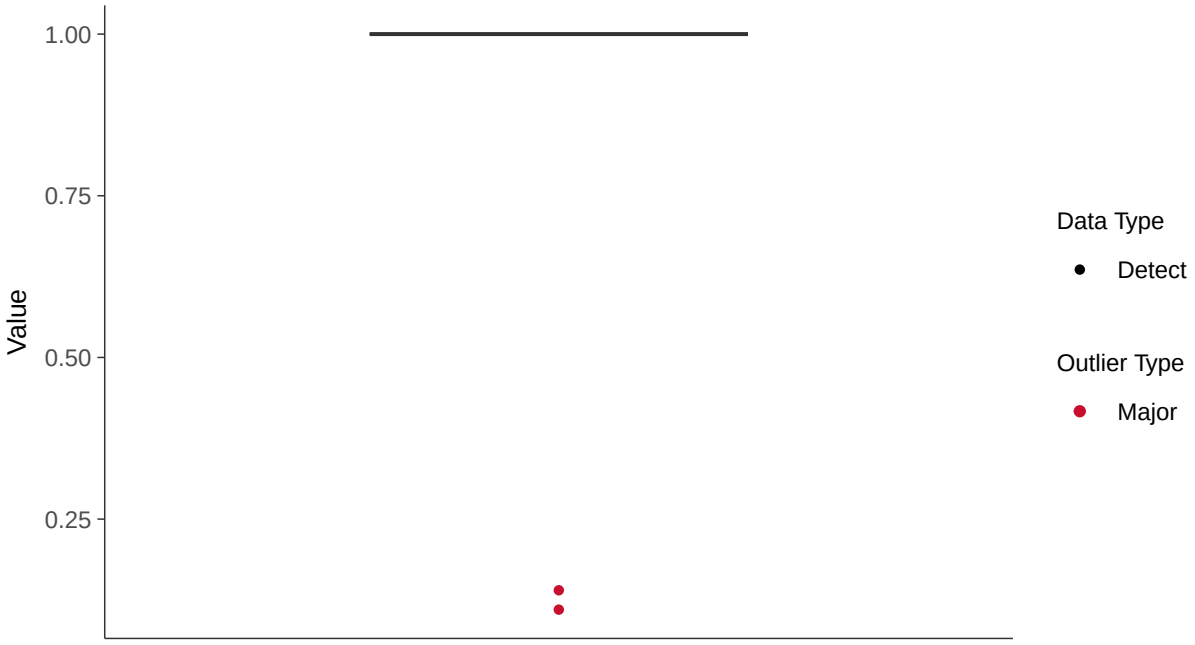
ID: 15_2_112





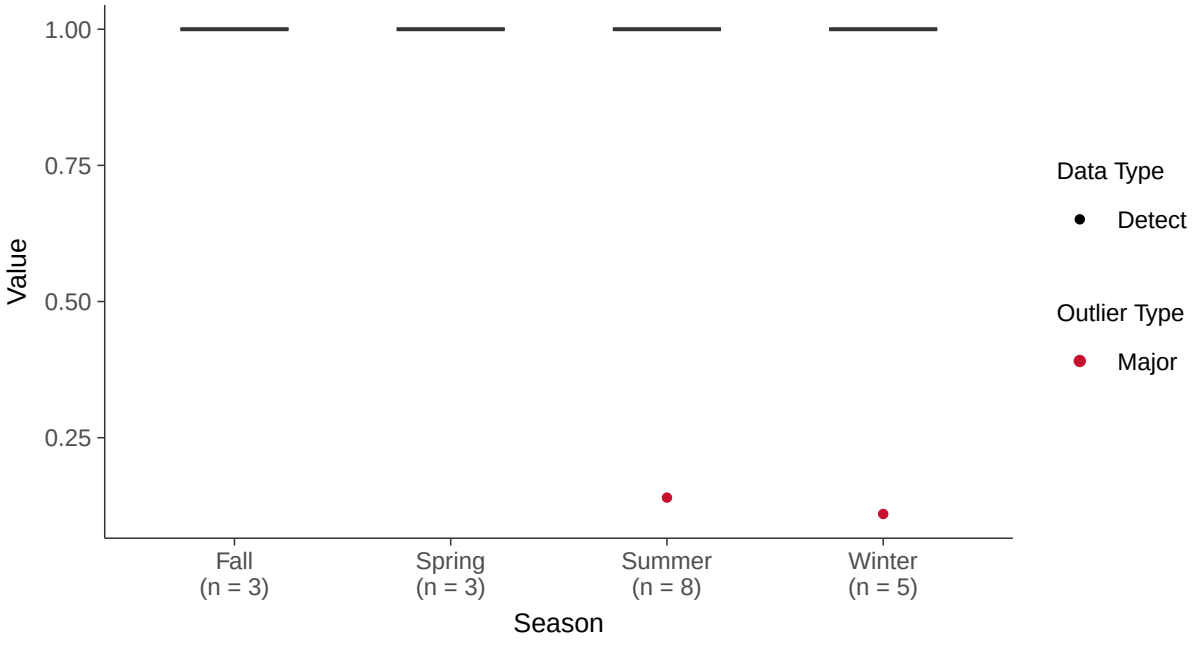
Boxplot

Fluoride, MW-5 (mg/l)



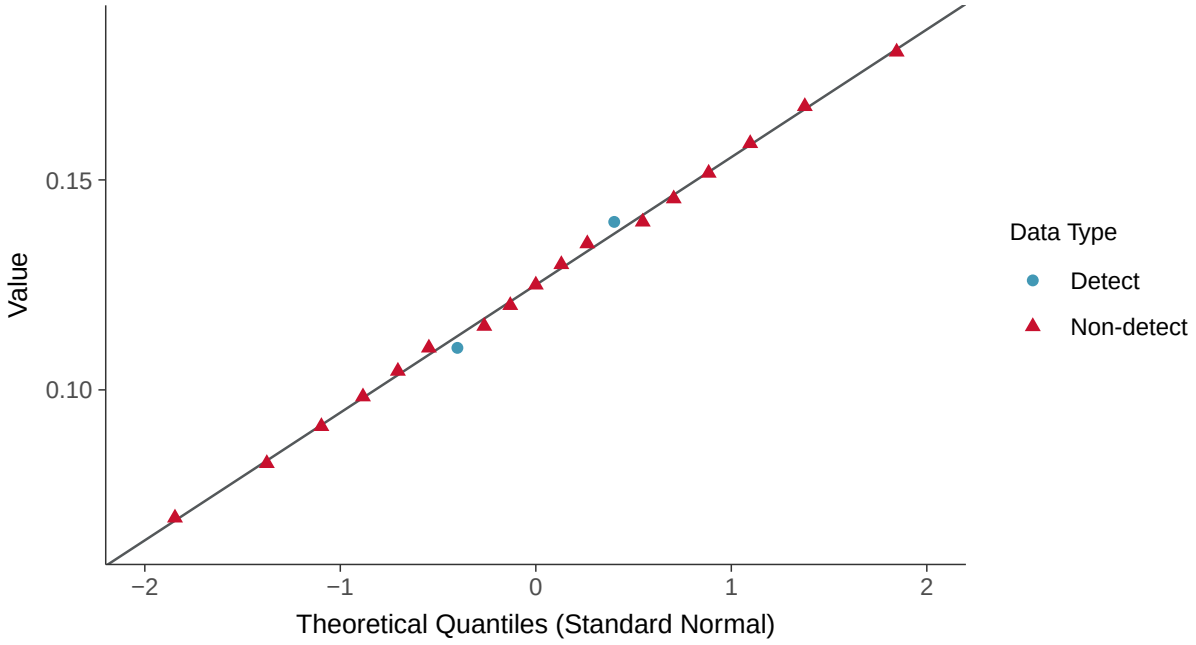
Boxplot by Season

Fluoride, MW-5 (mg/l)



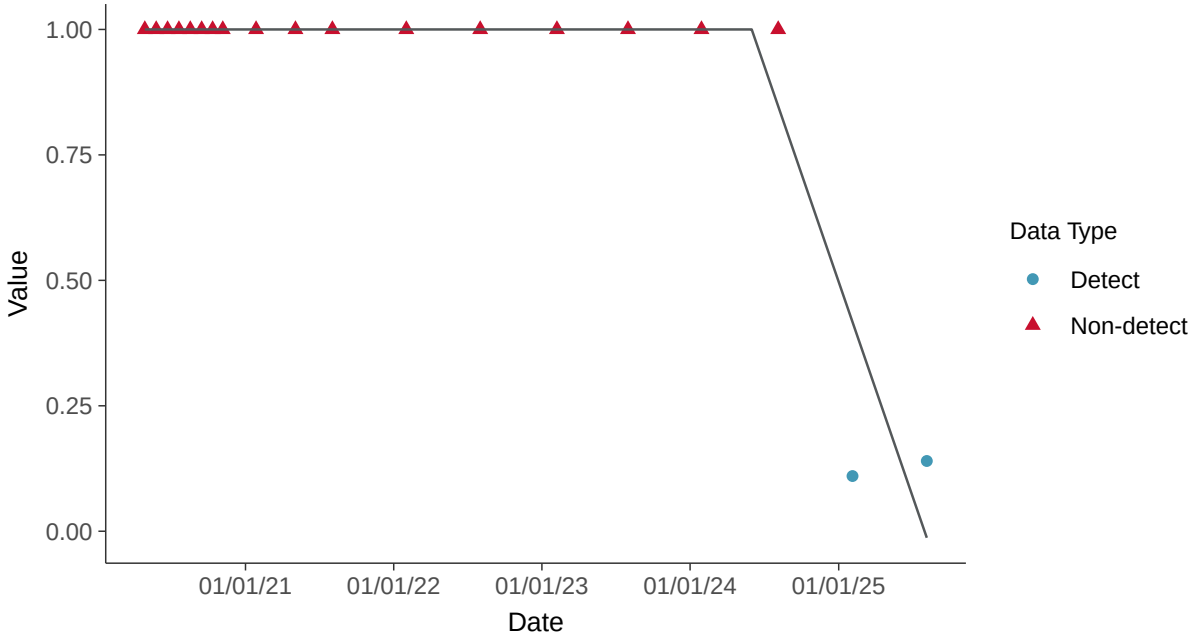
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-5 (mg/l)



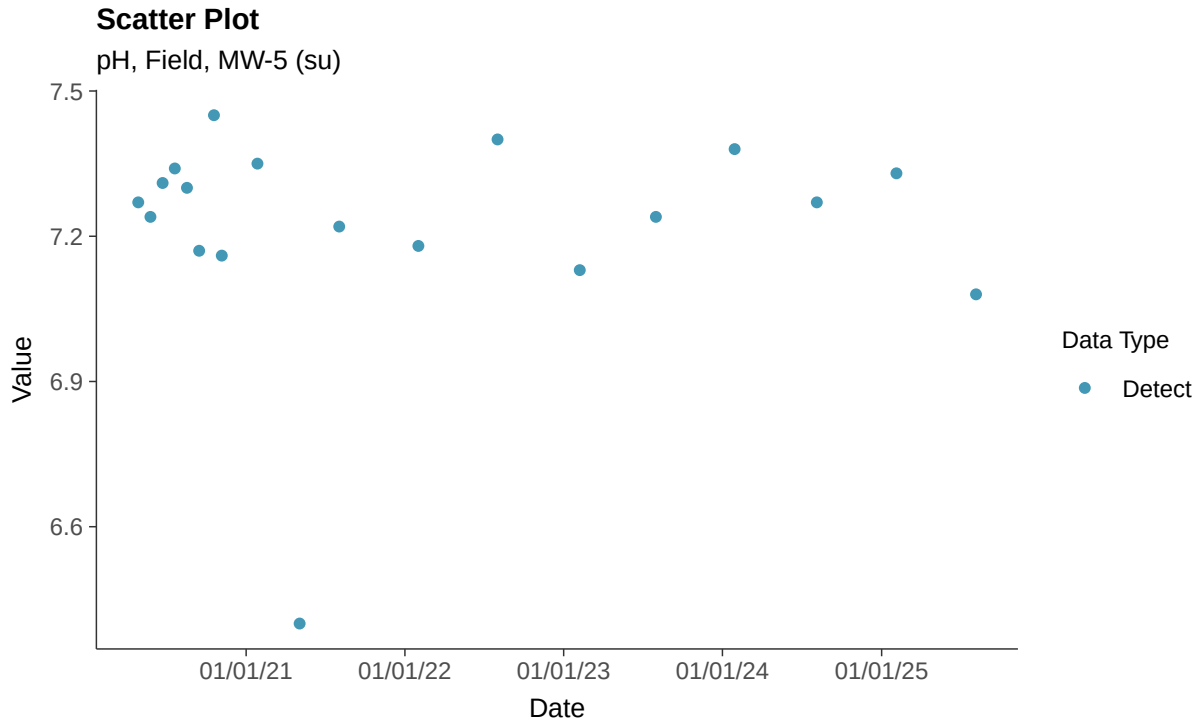
Trend Regression: Piecewise Linear-Linear

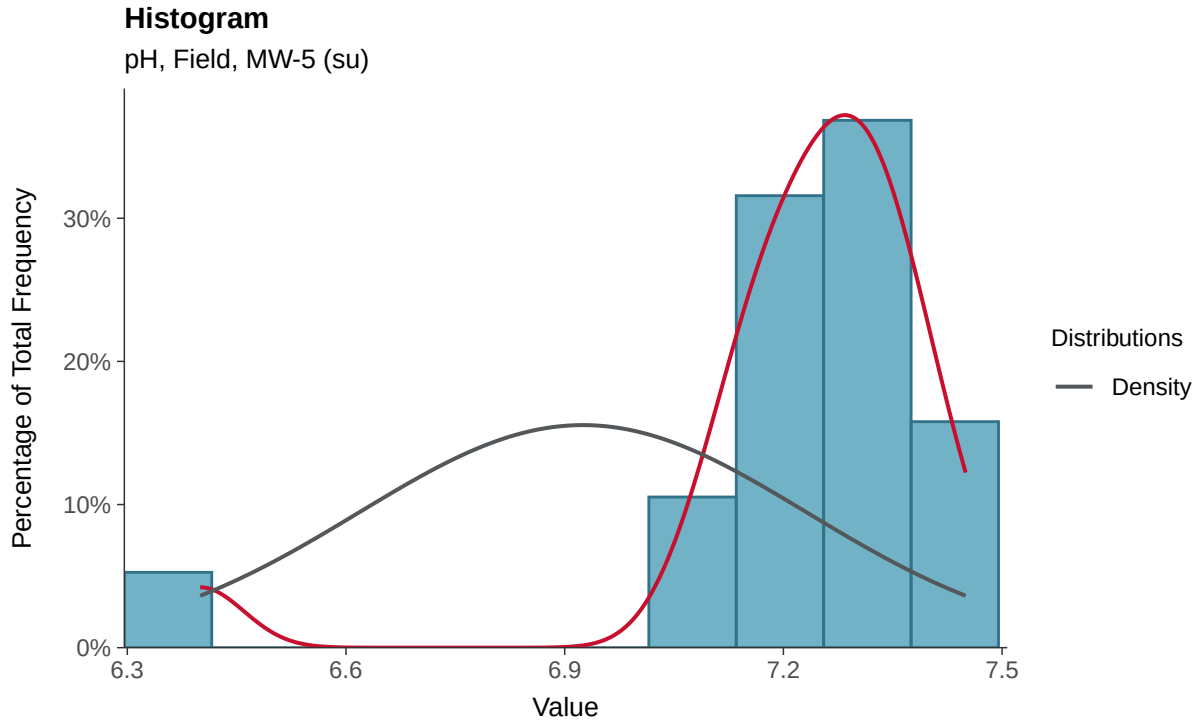
Fluoride, MW-5 (mg/l)



Appendix III: pH, Field, MW-5

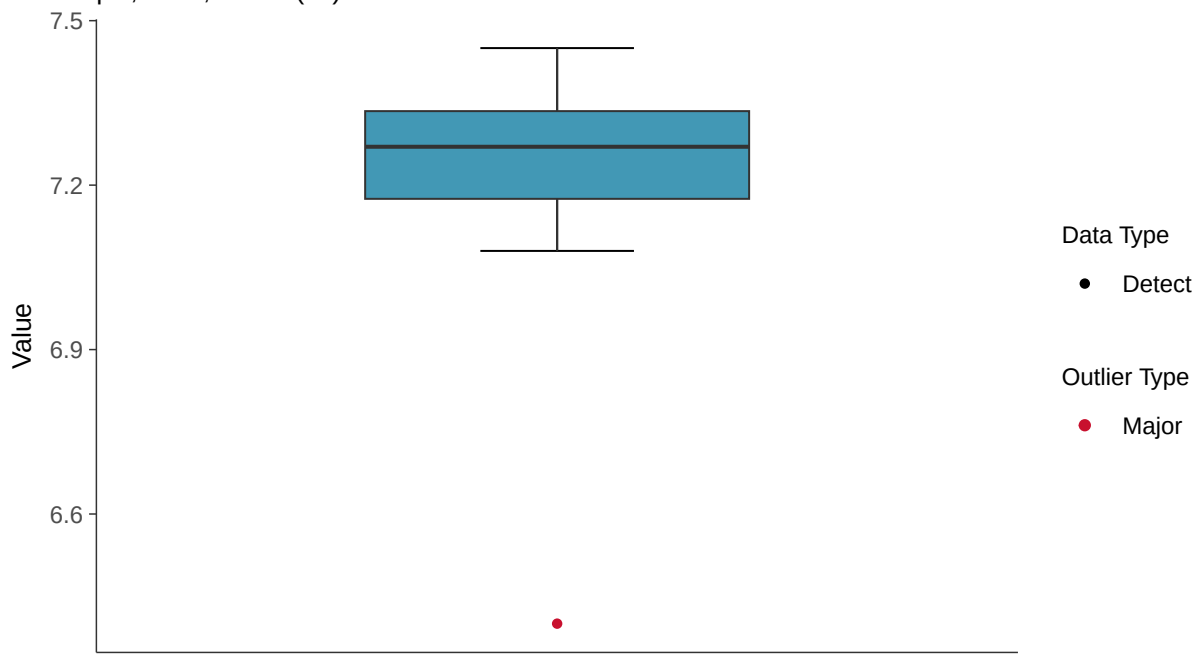
ID: 15_2_120





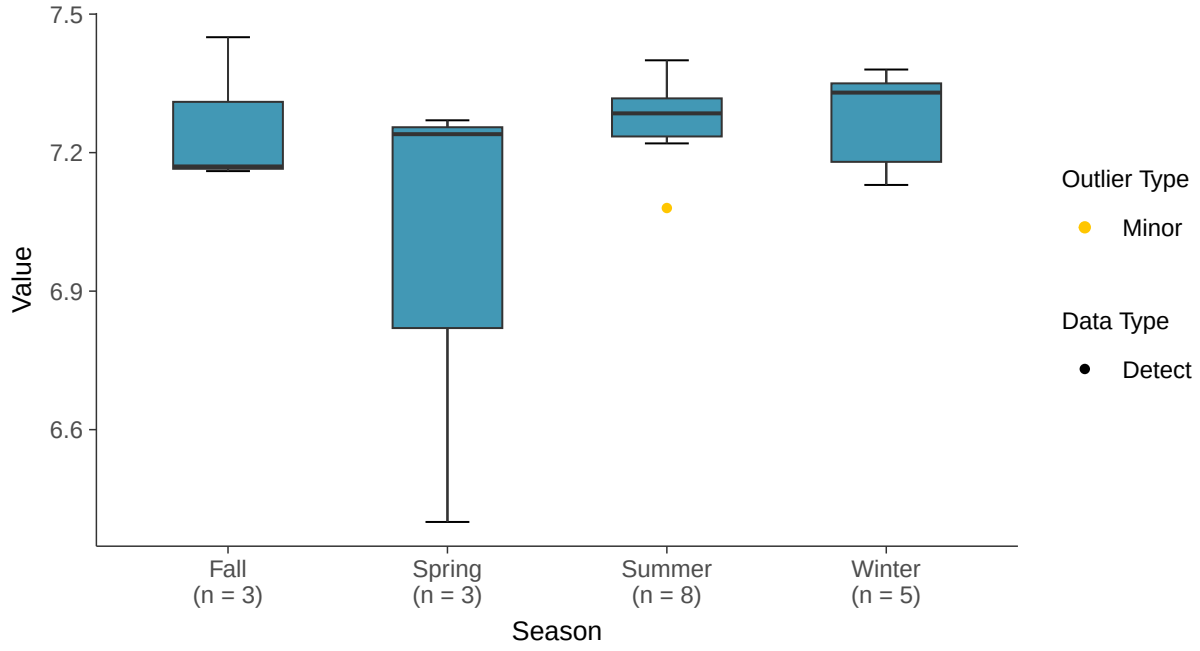
Boxplot

pH, Field, MW-5 (su)



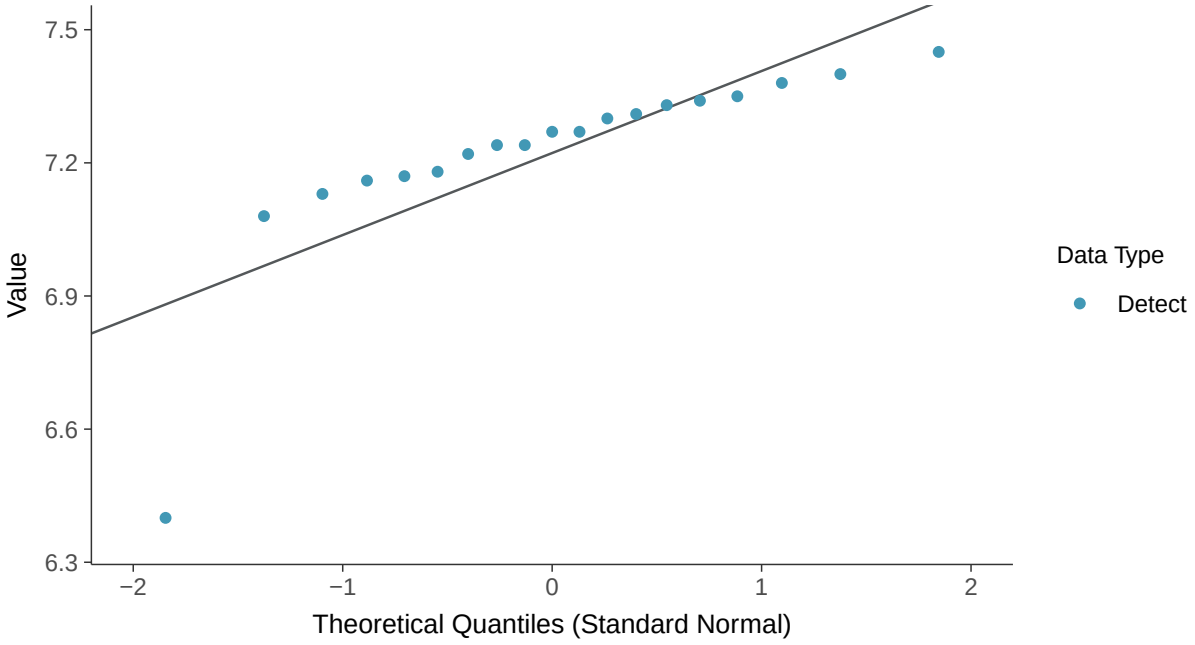
Boxplot by Season

pH, Field, MW-5 (su)



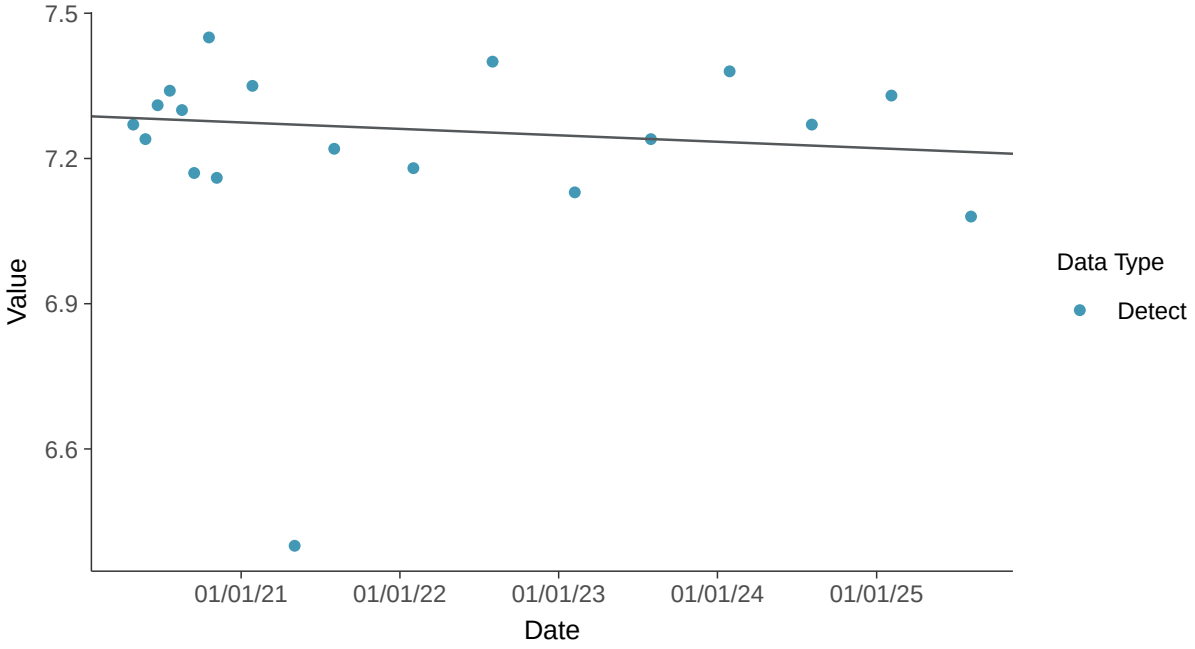
Normal Q-Q plot

pH, Field, MW-5 (su)



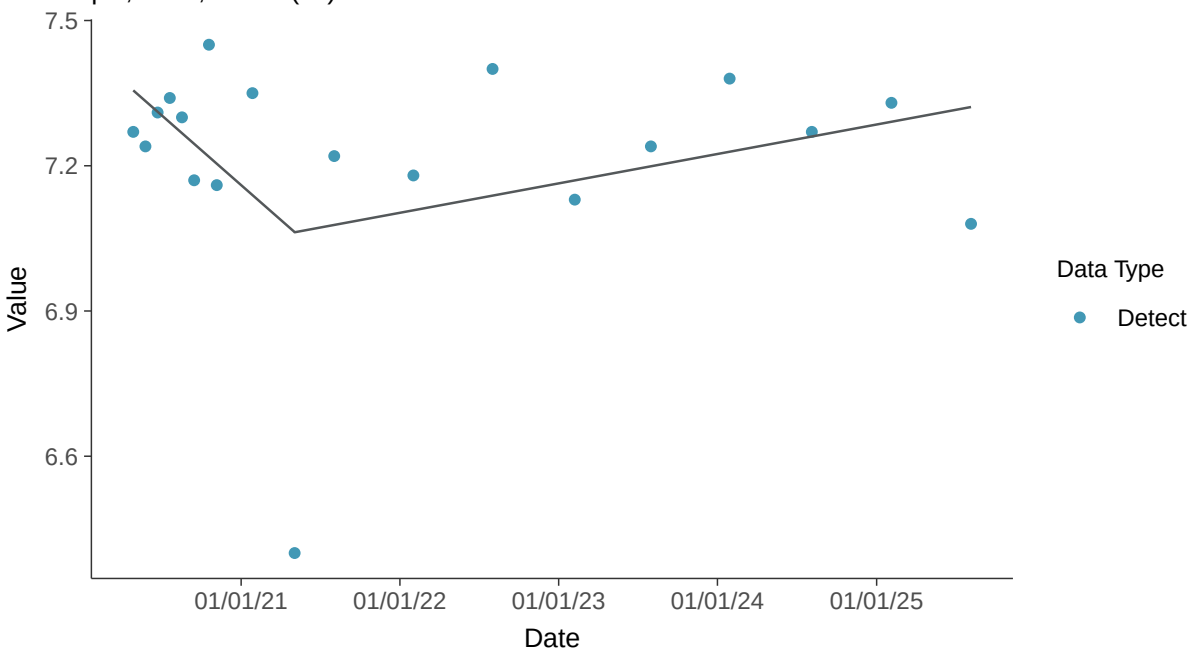
Trend Regression: Mann-Kendall/Theil-Sen Estimate

pH, Field, MW-5 (su)



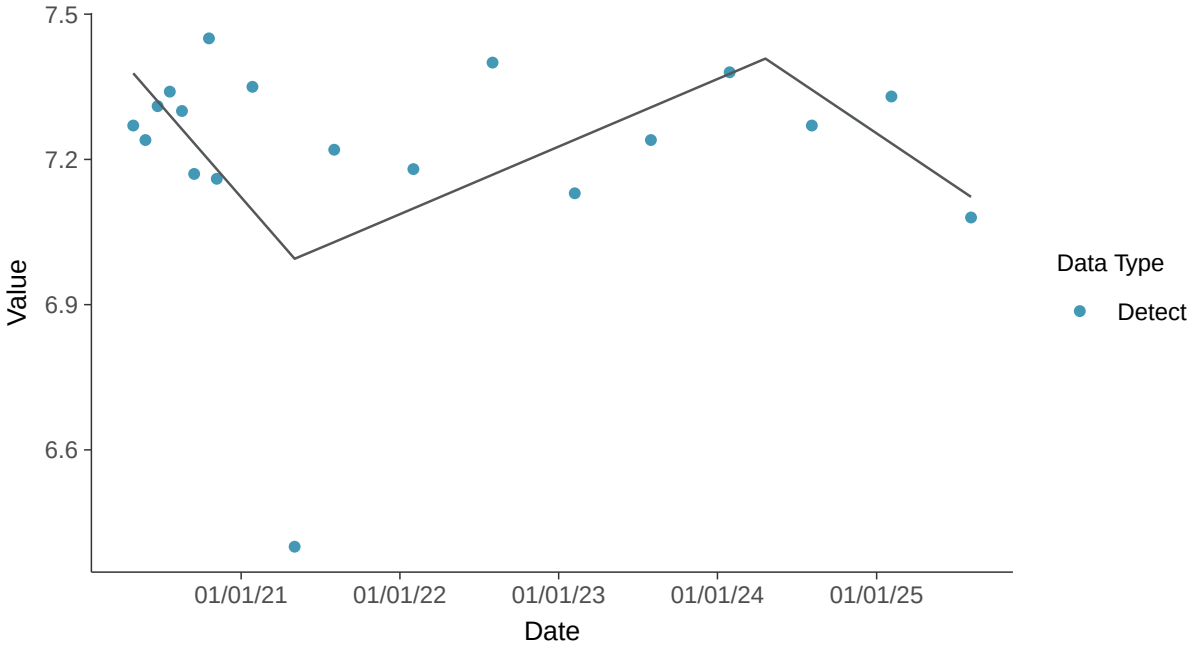
Trend Regression: Piecewise Linear-Linear

pH, Field, MW-5 (su)



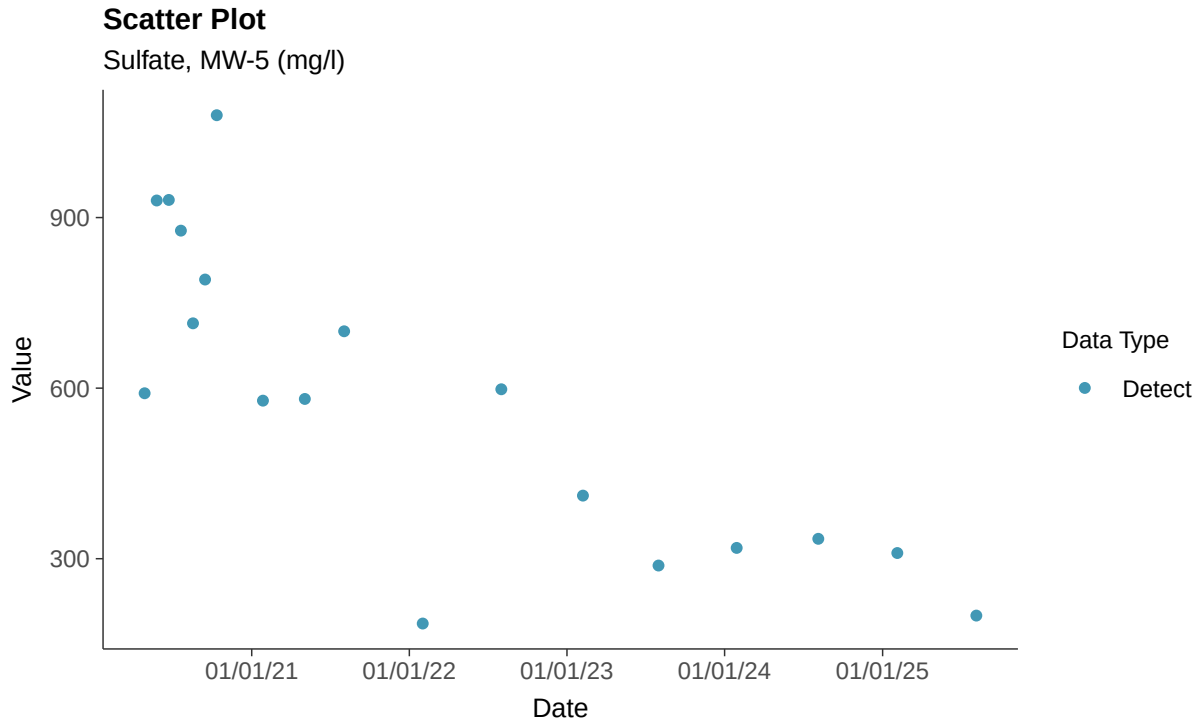
Trend Regression: Piecewise Linear-Linear-Linear

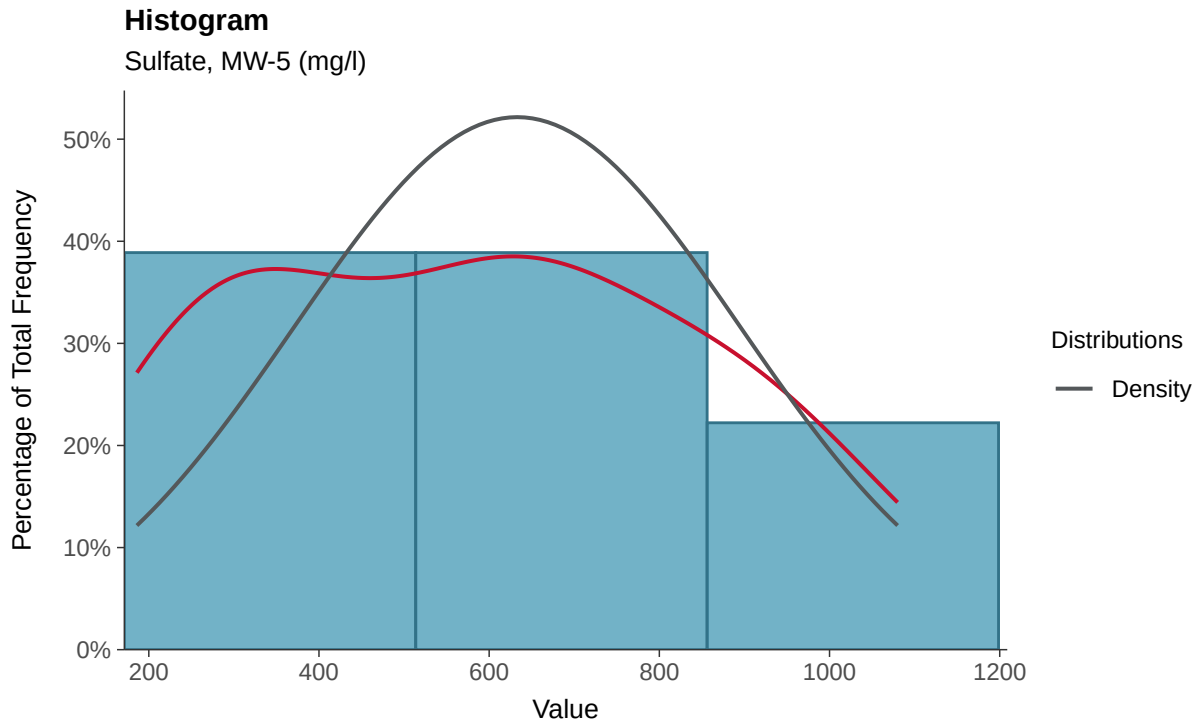
pH, Field, MW-5 (su)



Appendix III: Sulfate, MW-5

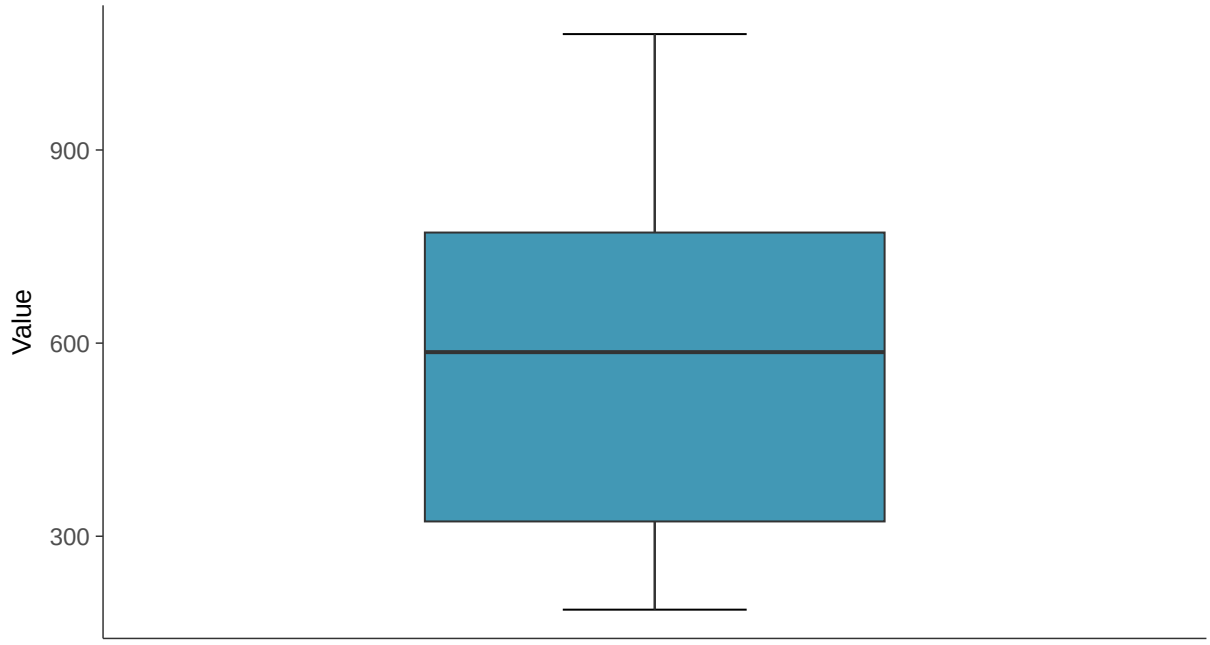
ID: 15_2_124





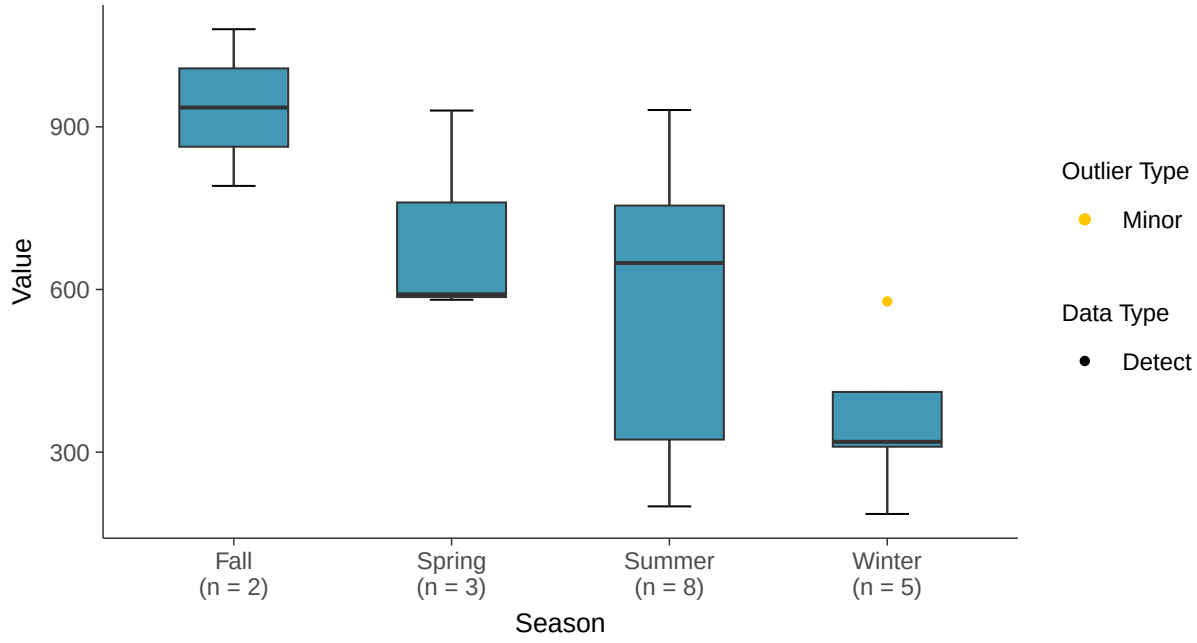
Boxplot

Sulfate, MW-5 (mg/l)



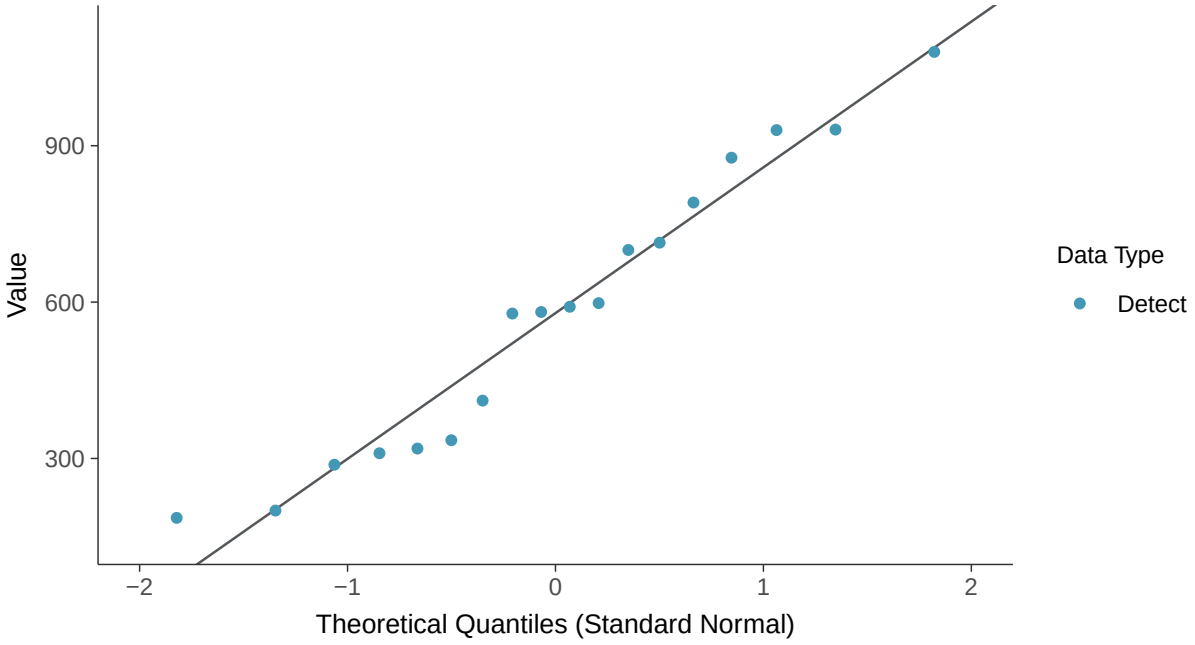
Boxplot by Season

Sulfate, MW-5 (mg/l)



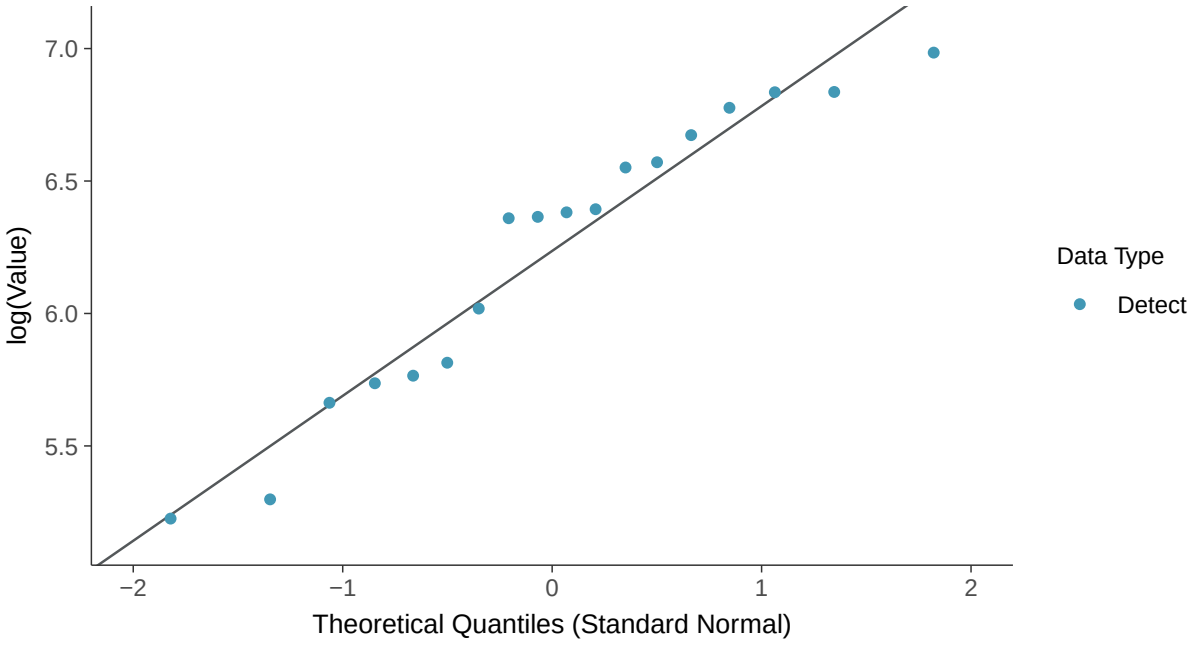
Normal Q-Q plot

Sulfate, MW-5 (mg/l)



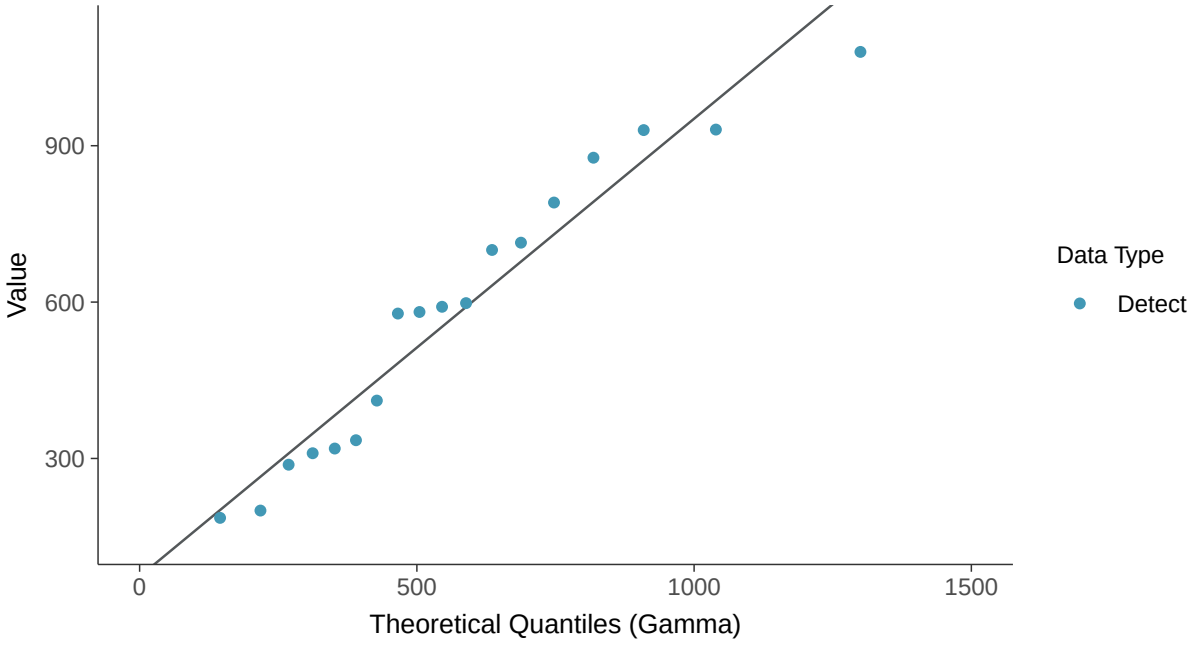
Lognormal Q-Q plot

Sulfate, MW-5 (mg/l)



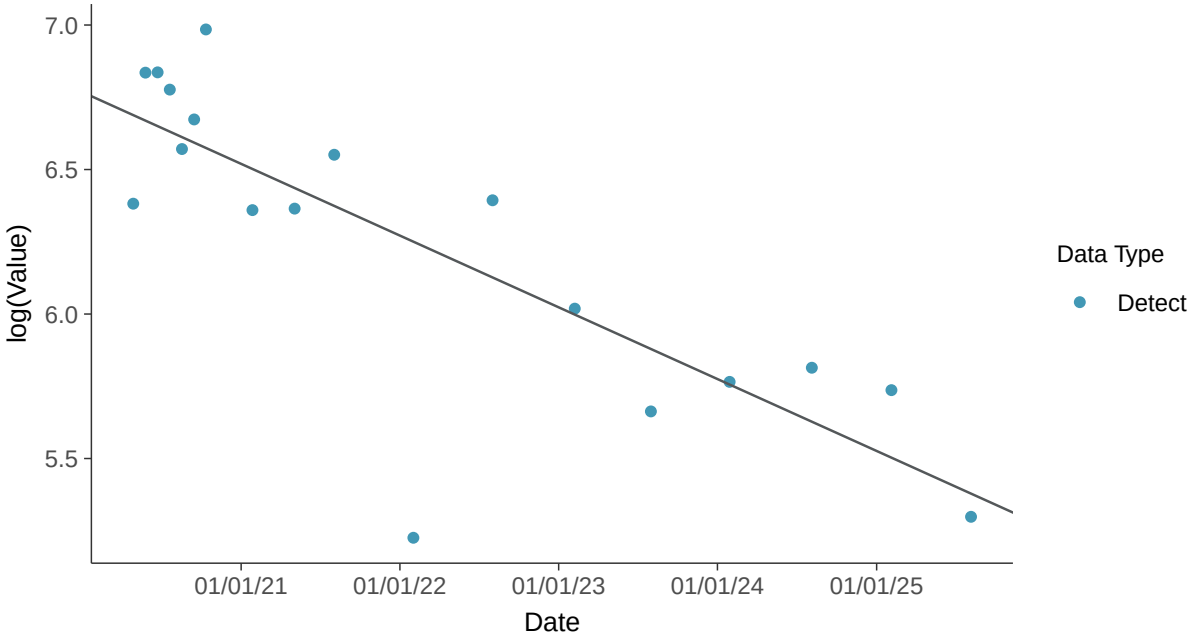
Gamma Q-Q plot

Sulfate, MW-5 (mg/l)



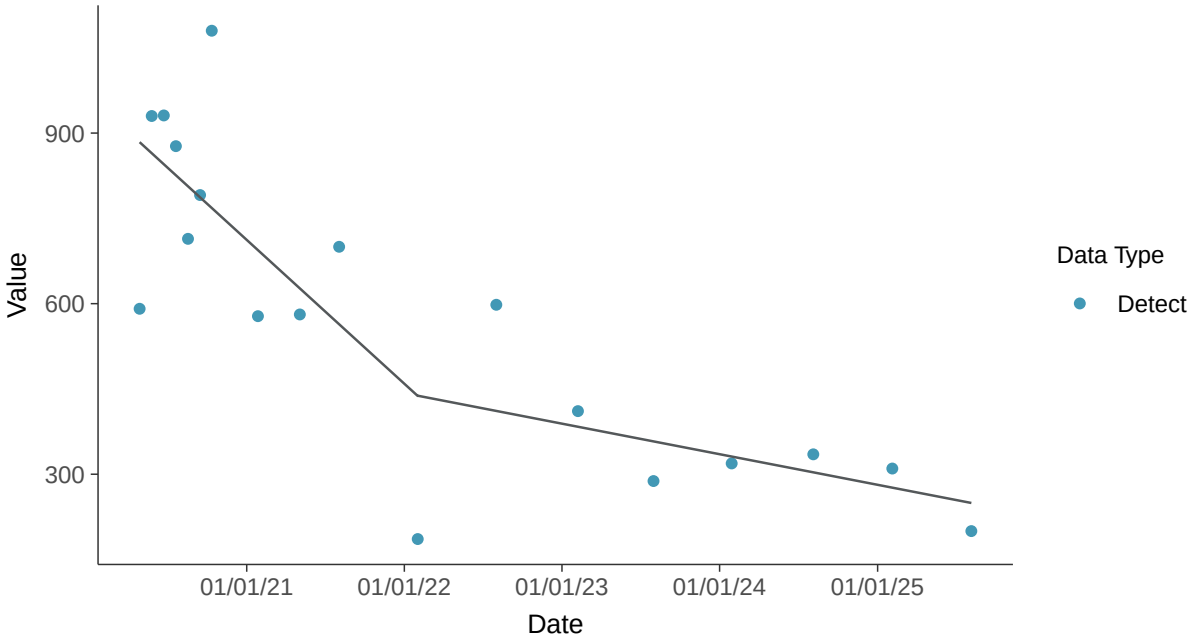
Trend Regression: Lognormal MLE

Sulfate, MW-5 (mg/l)



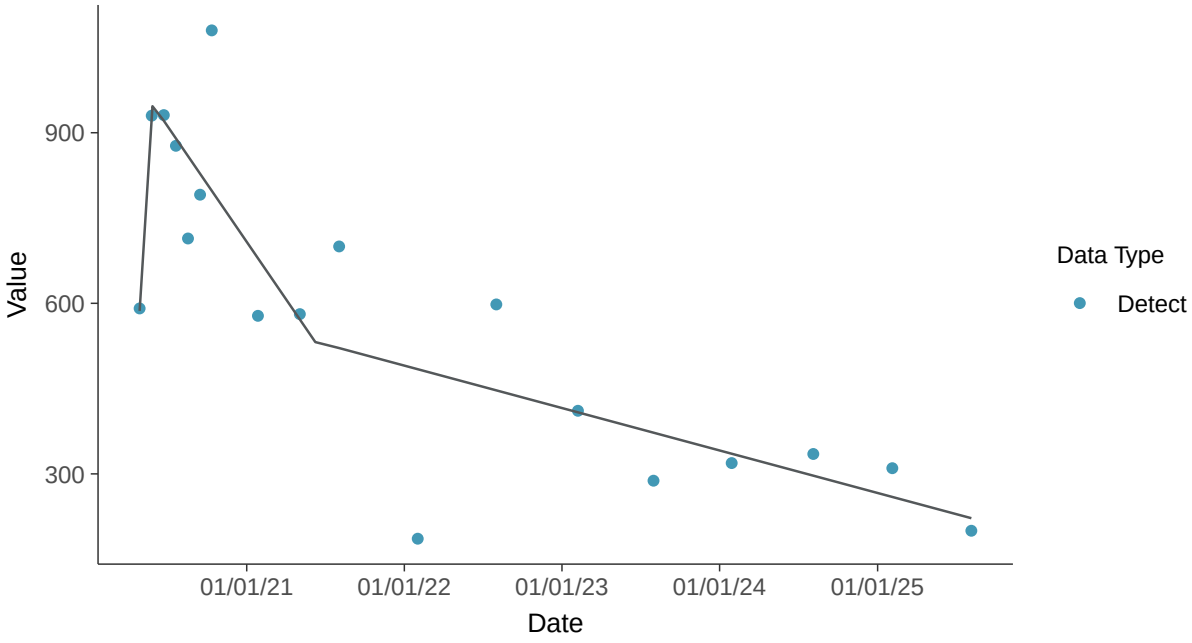
Trend Regression: Piecewise Linear-Linear

Sulfate, MW-5 (mg/l)



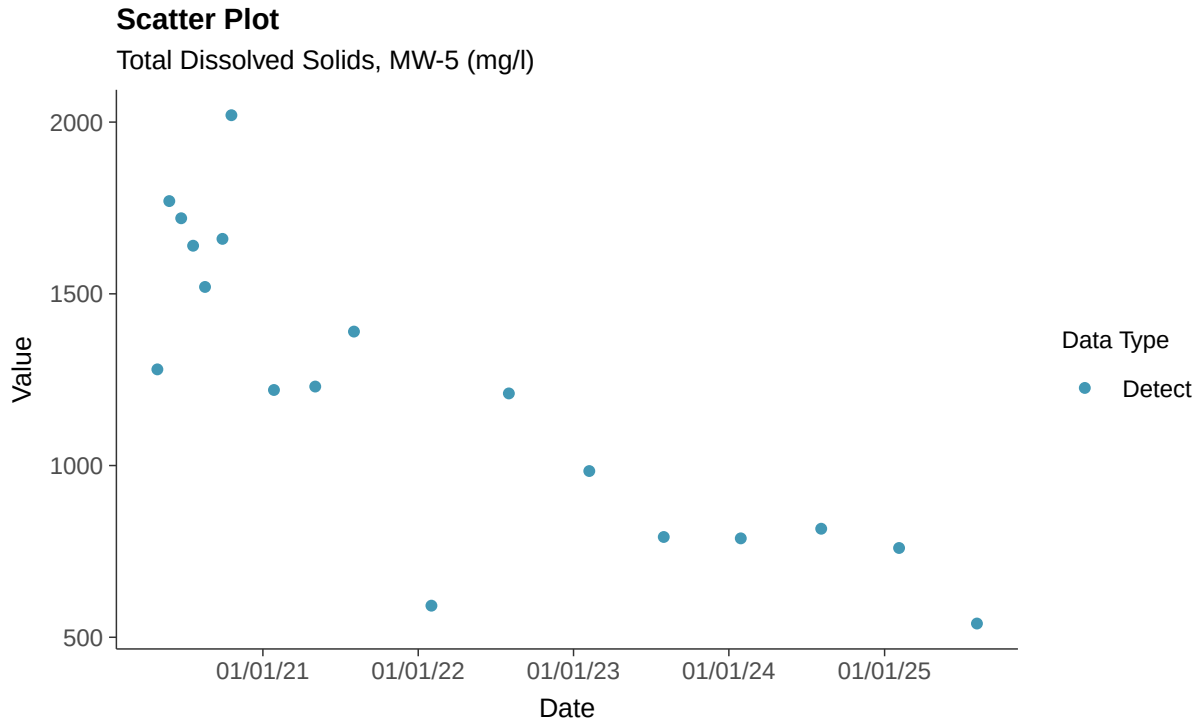
Trend Regression: Piecewise Linear-Linear-Linear

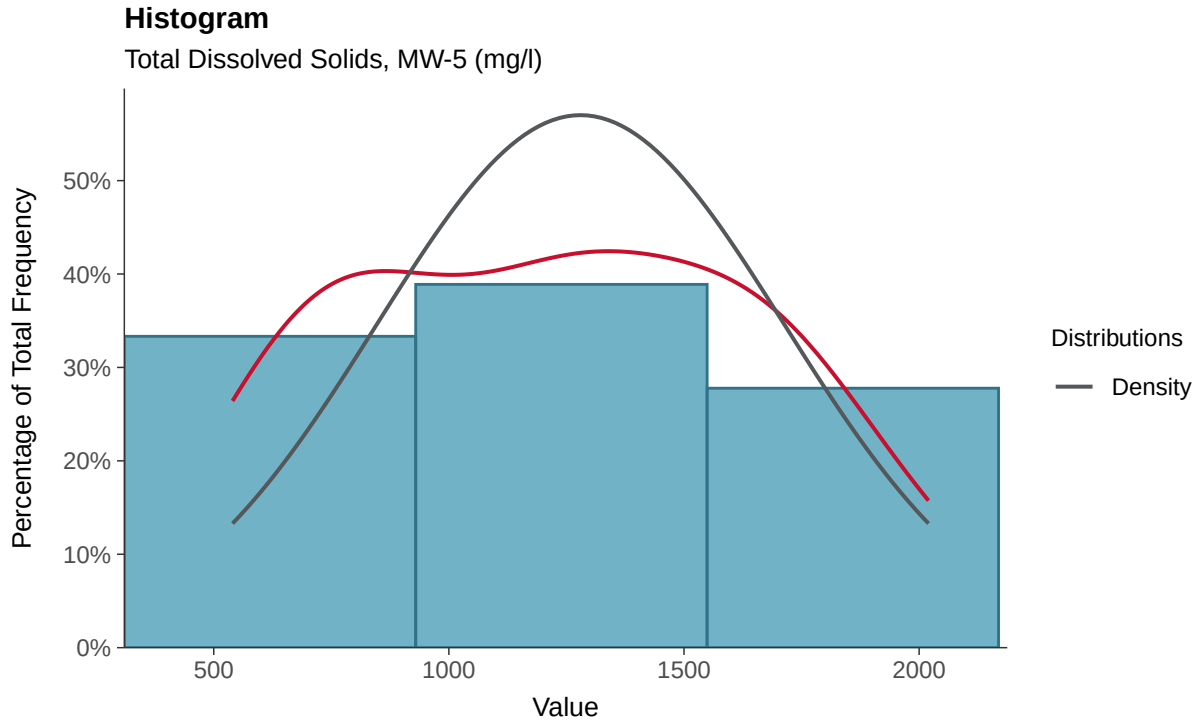
Sulfate, MW-5 (mg/l)



Appendix III: Total Dissolved Solids, MW-5

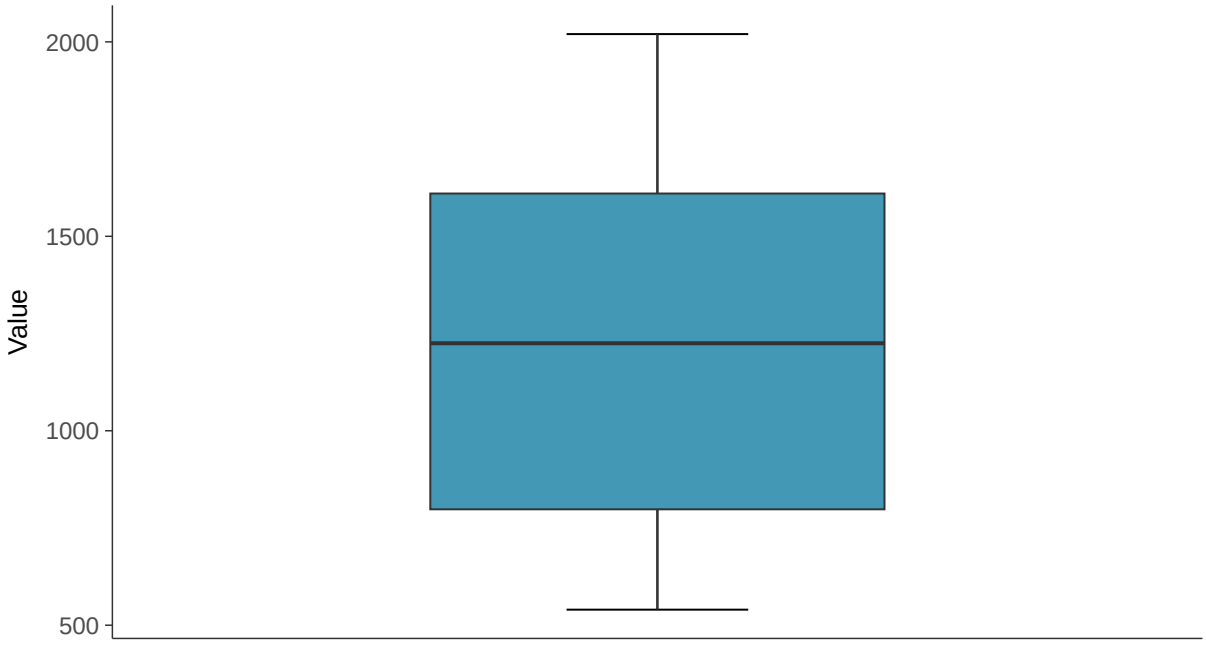
ID: 15_2_126





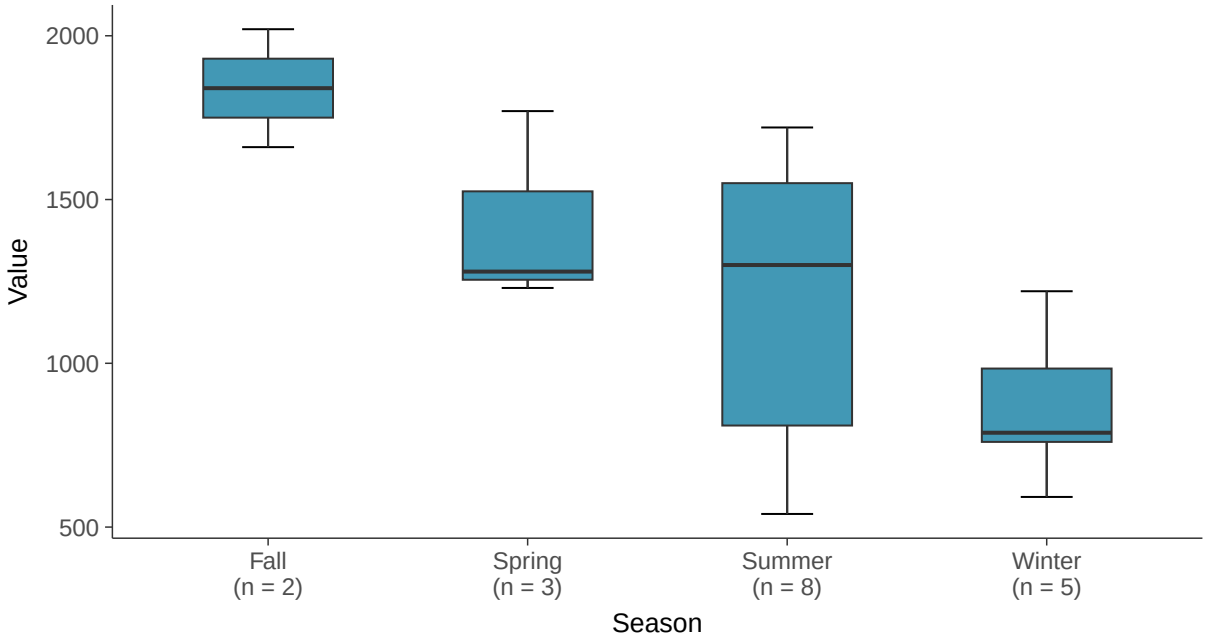
Boxplot

Total Dissolved Solids, MW-5 (mg/l)



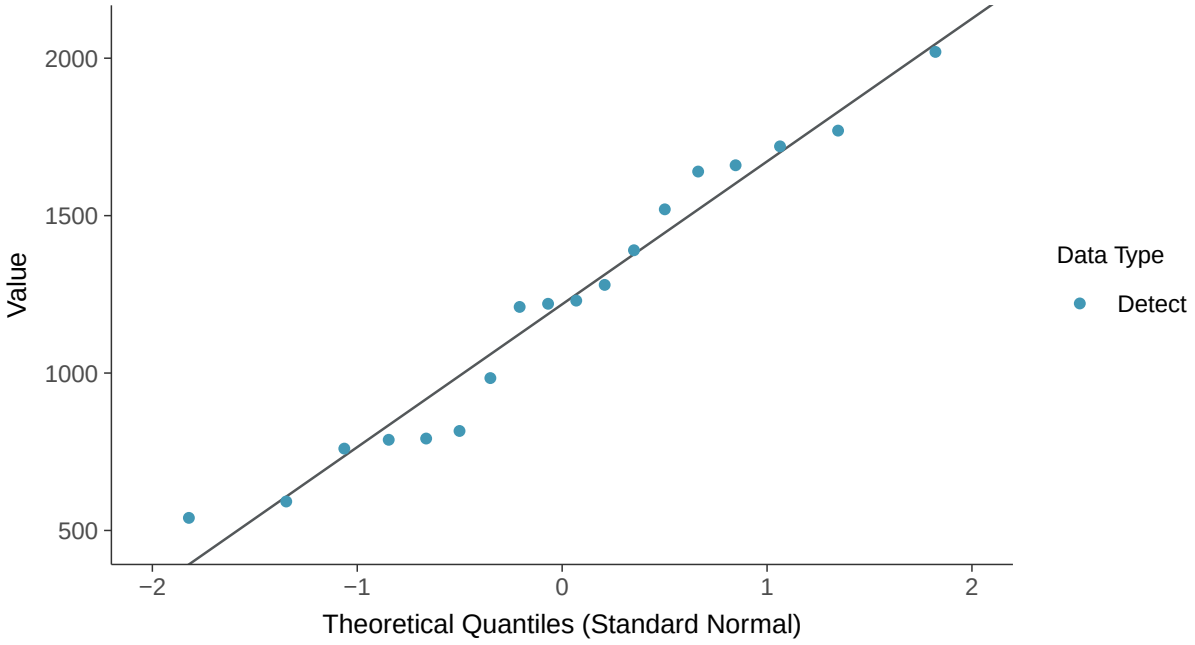
Boxplot by Season

Total Dissolved Solids, MW-5 (mg/l)



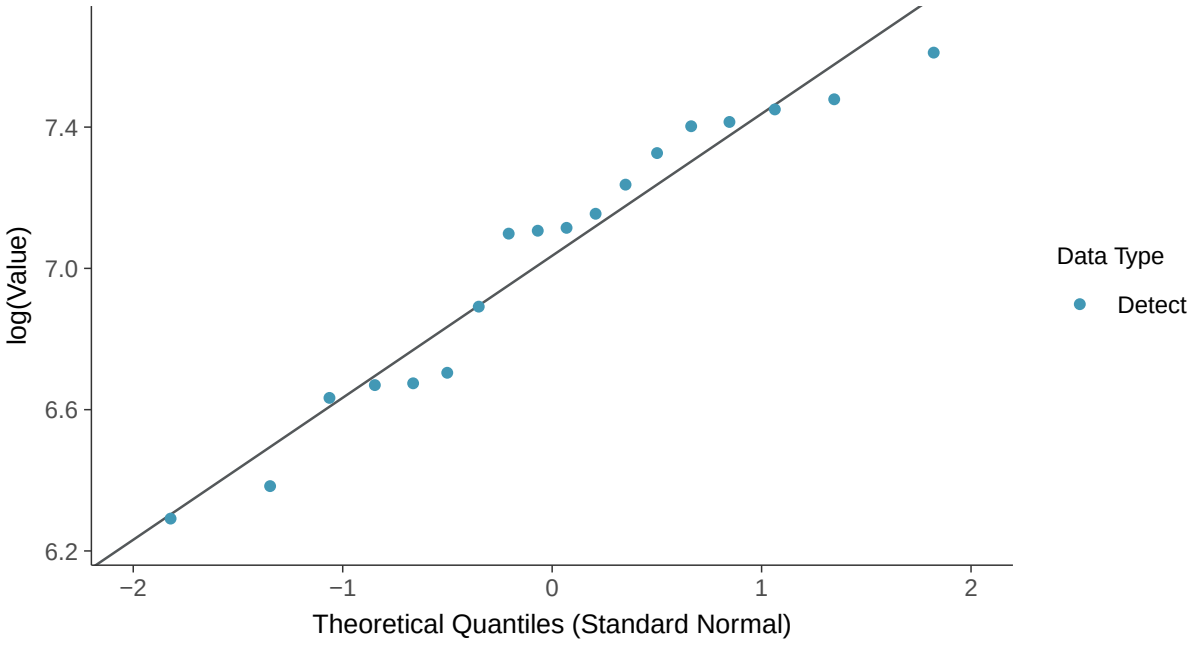
Normal Q-Q plot

Total Dissolved Solids, MW-5 (mg/l)



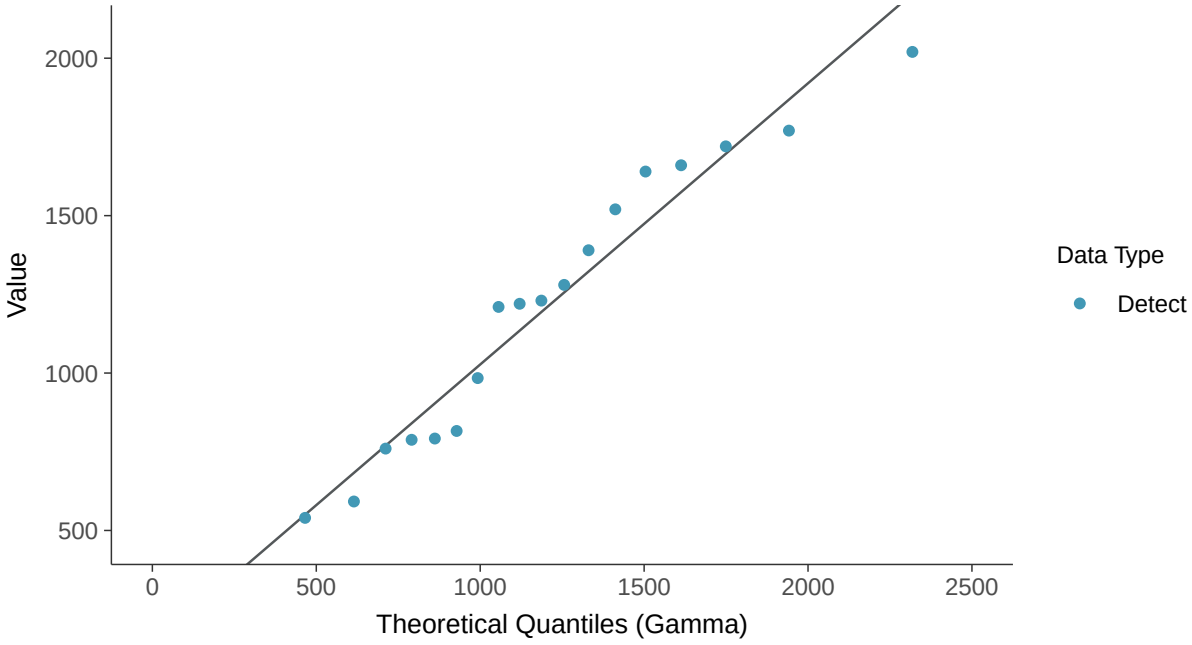
Lognormal Q-Q plot

Total Dissolved Solids, MW-5 (mg/l)



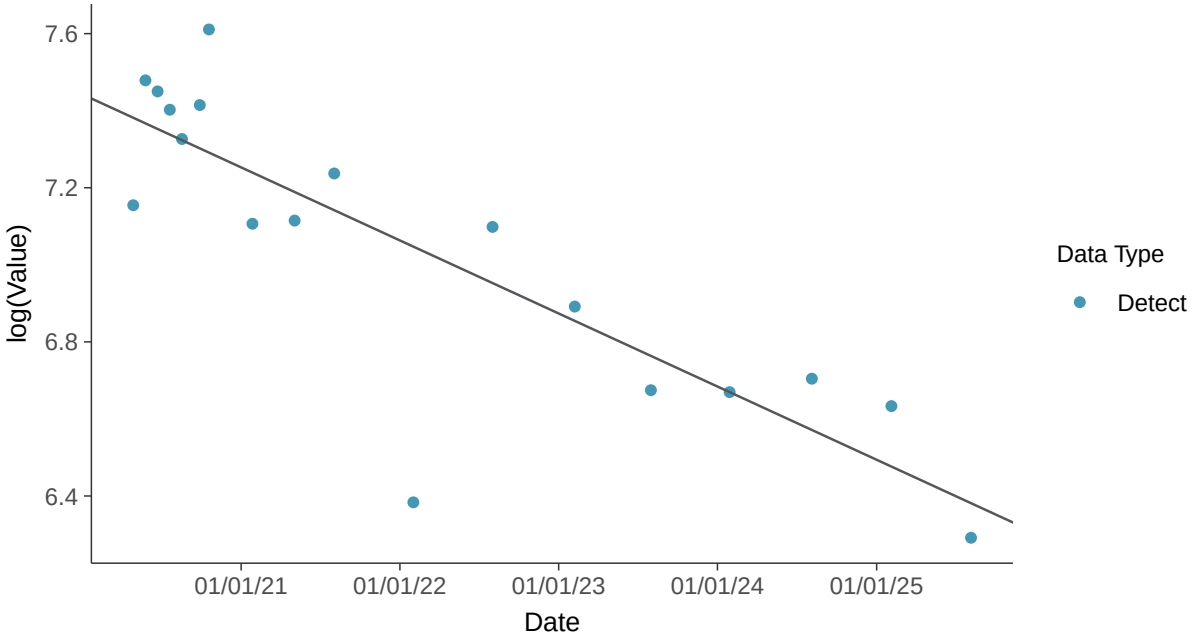
Gamma Q-Q plot

Total Dissolved Solids, MW-5 (mg/l)



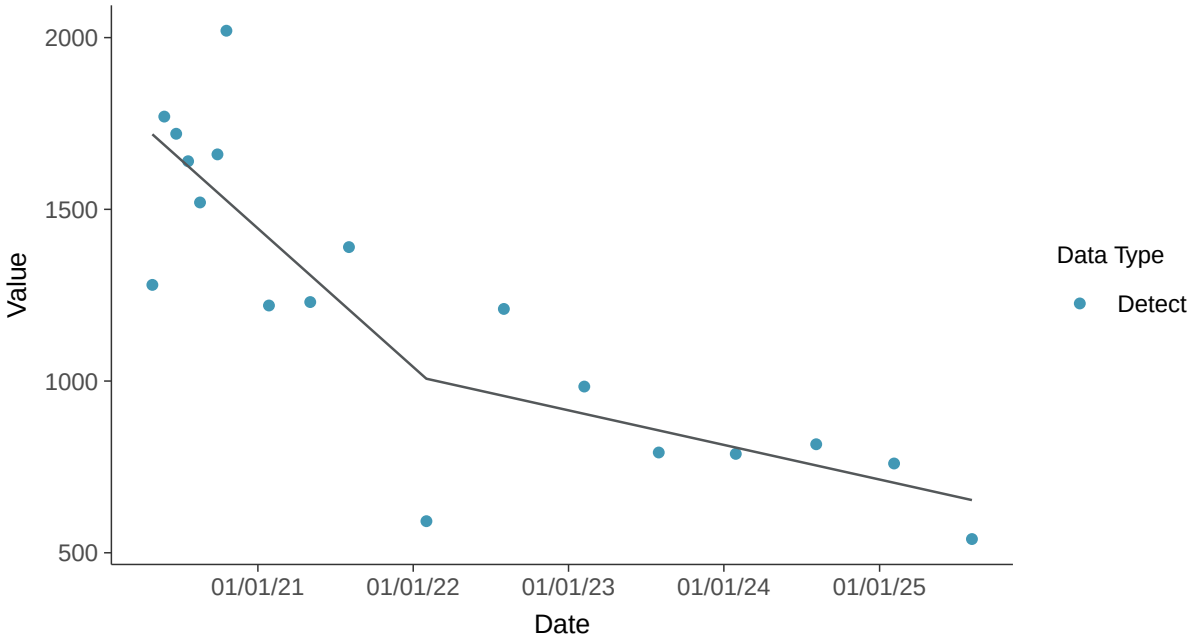
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-5 (mg/l)



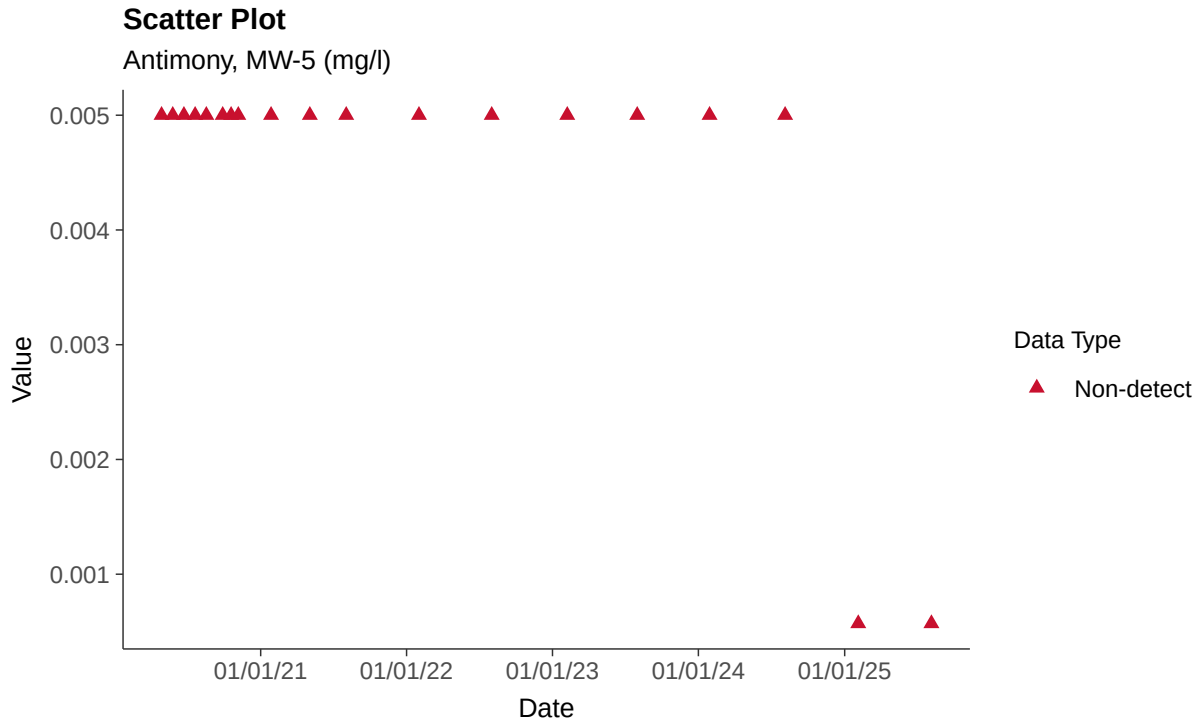
Trend Regression: Piecewise Linear-Linear

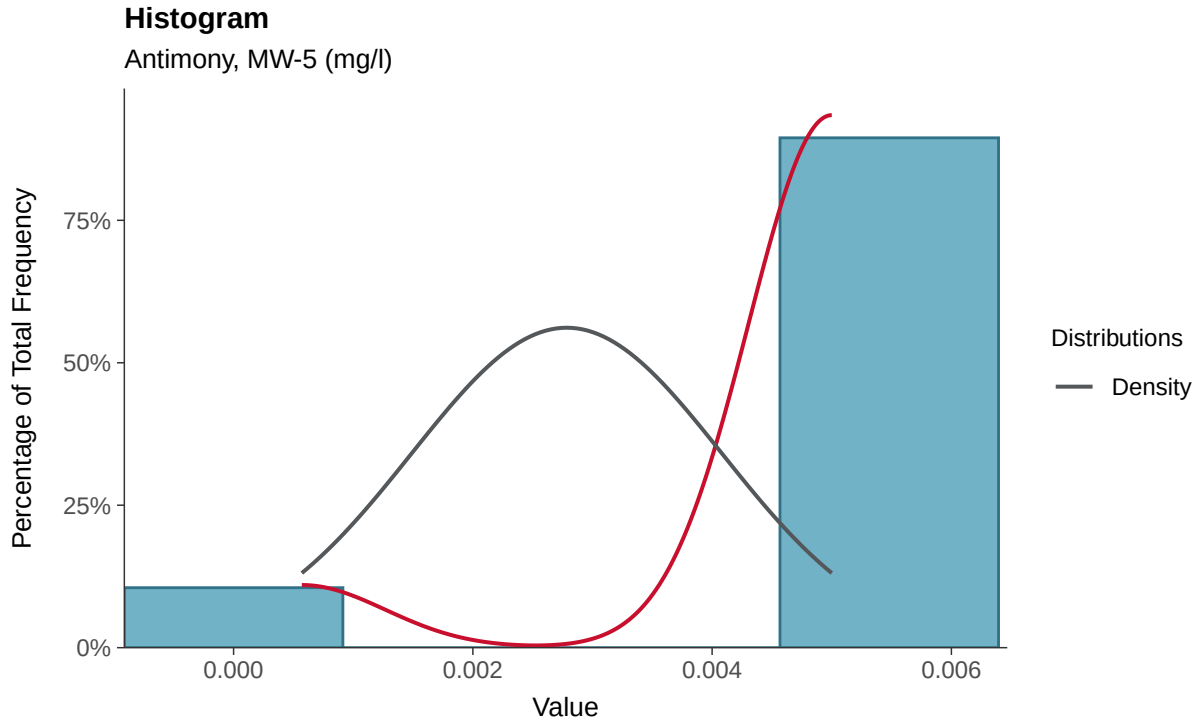
Total Dissolved Solids, MW-5 (mg/l)



Appendix IV: Antimony, MW-5

ID: 15_3_101



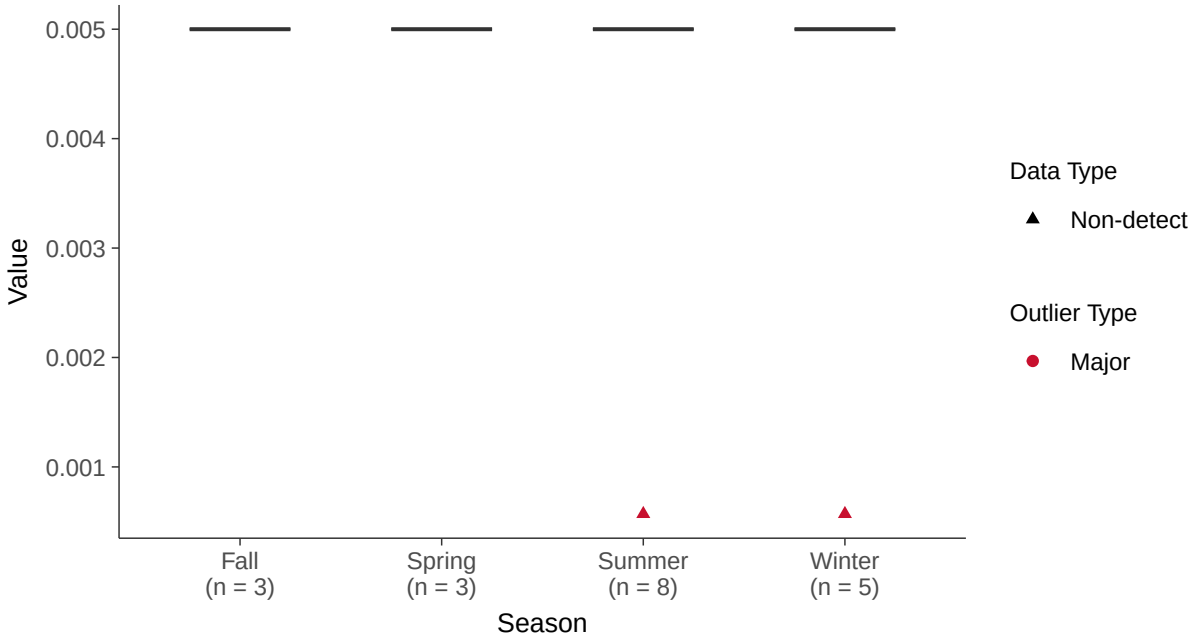


Boxplot

Antimony, MW-5 (mg/l)

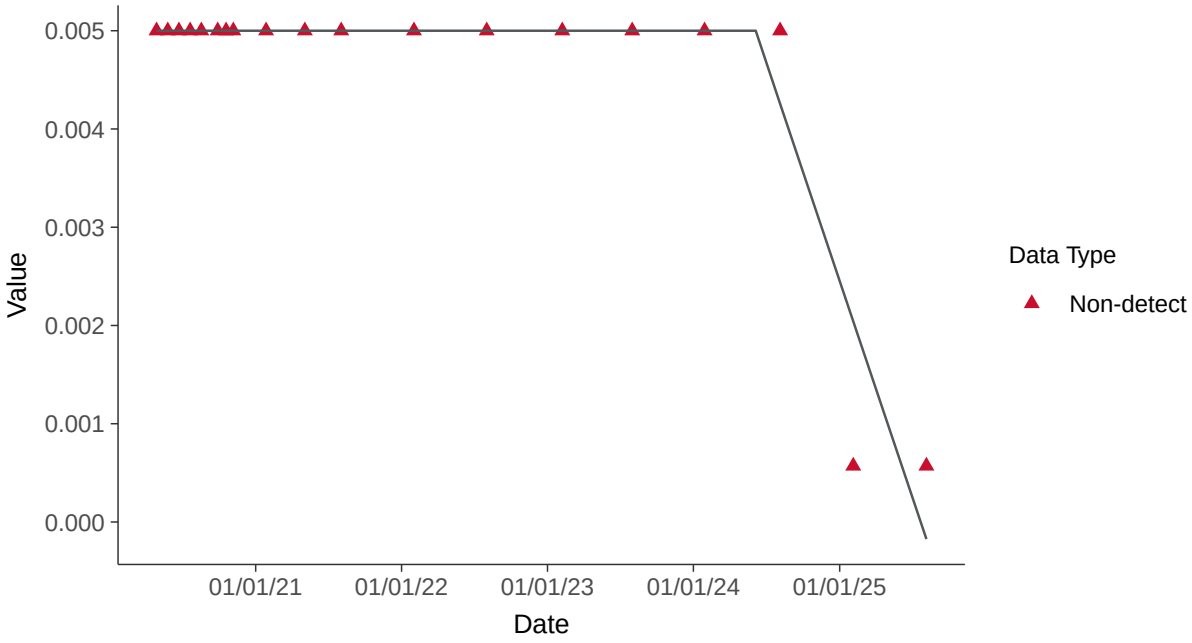
Boxplot by Season

Antimony, MW-5 (mg/l)



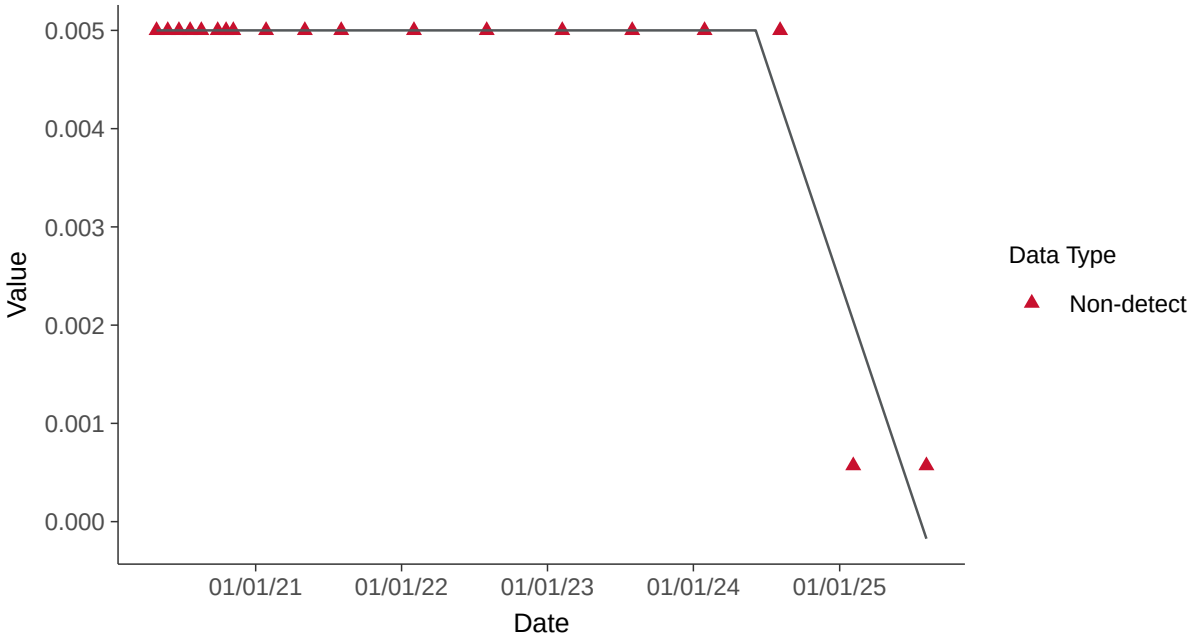
Trend Regression: Piecewise Linear-Linear

Antimony, MW-5 (mg/l)



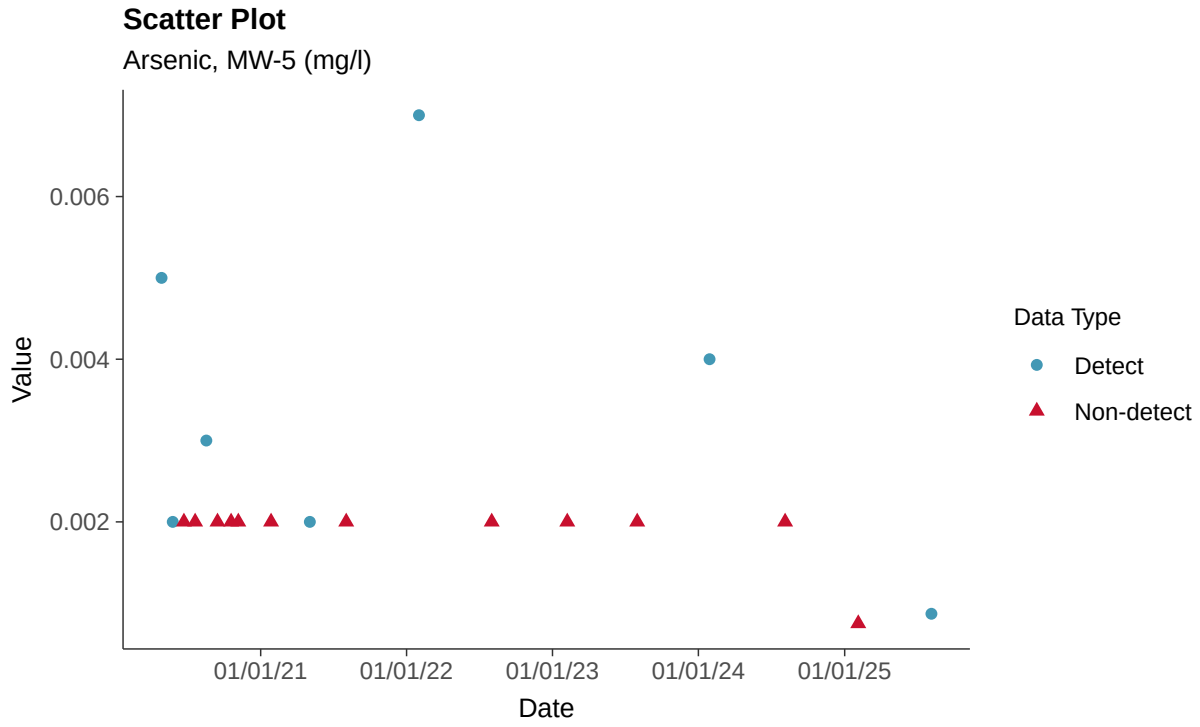
Trend Regression: Piecewise Linear-Linear-Linear

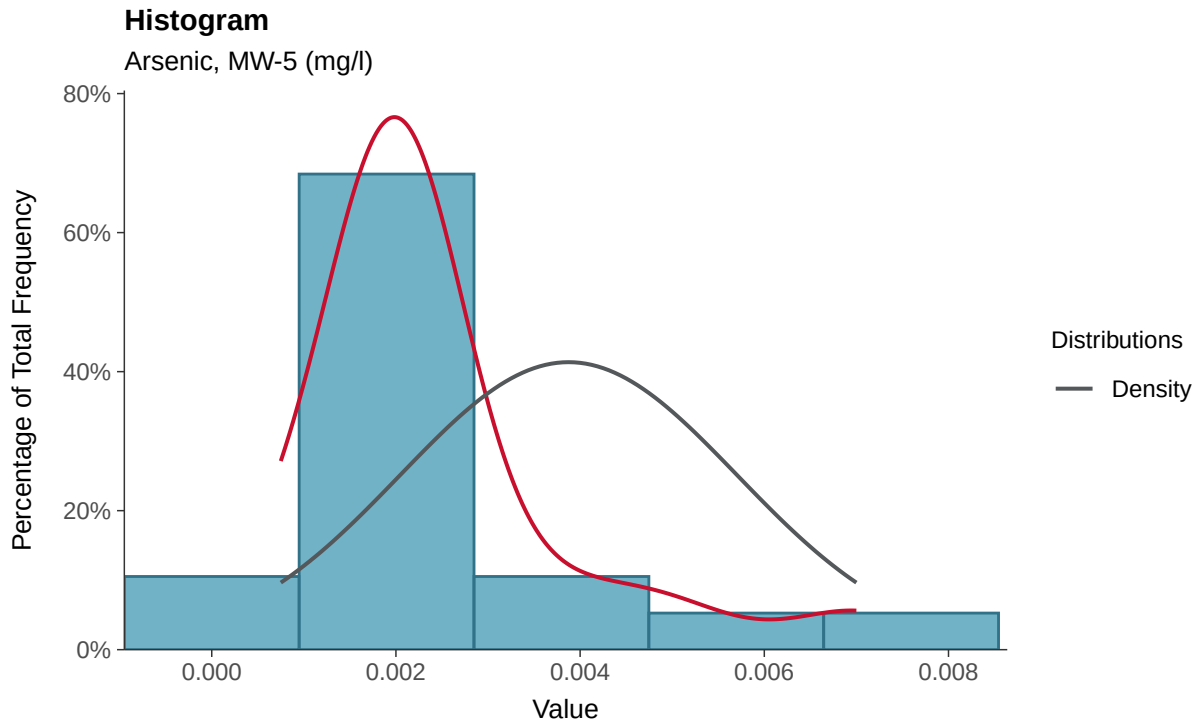
Antimony, MW-5 (mg/l)



Appendix IV: Arsenic, MW-5

ID: 15_3_102



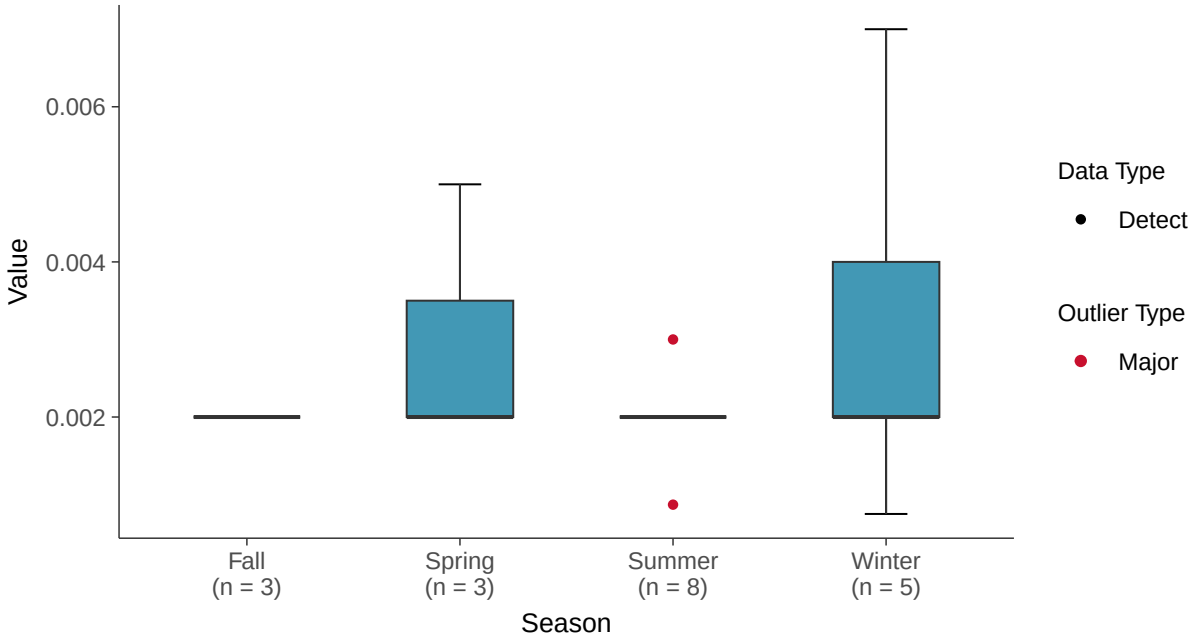


Boxplot

Arsenic, MW-5 (mg/l)

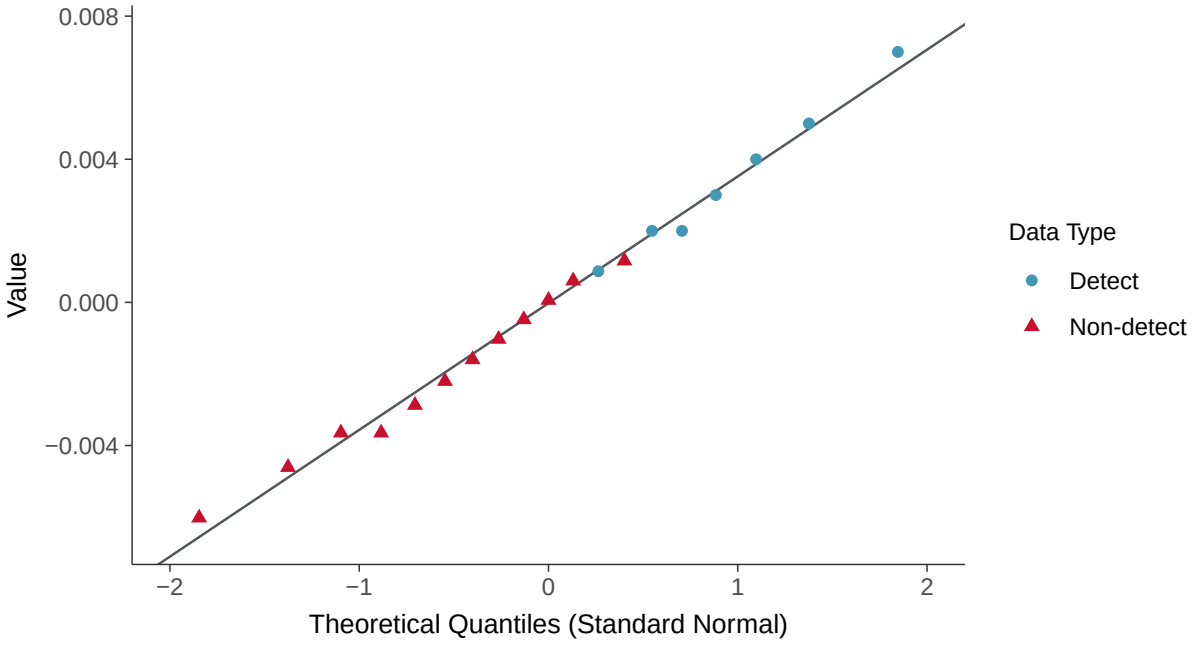
Boxplot by Season

Arsenic, MW-5 (mg/l)



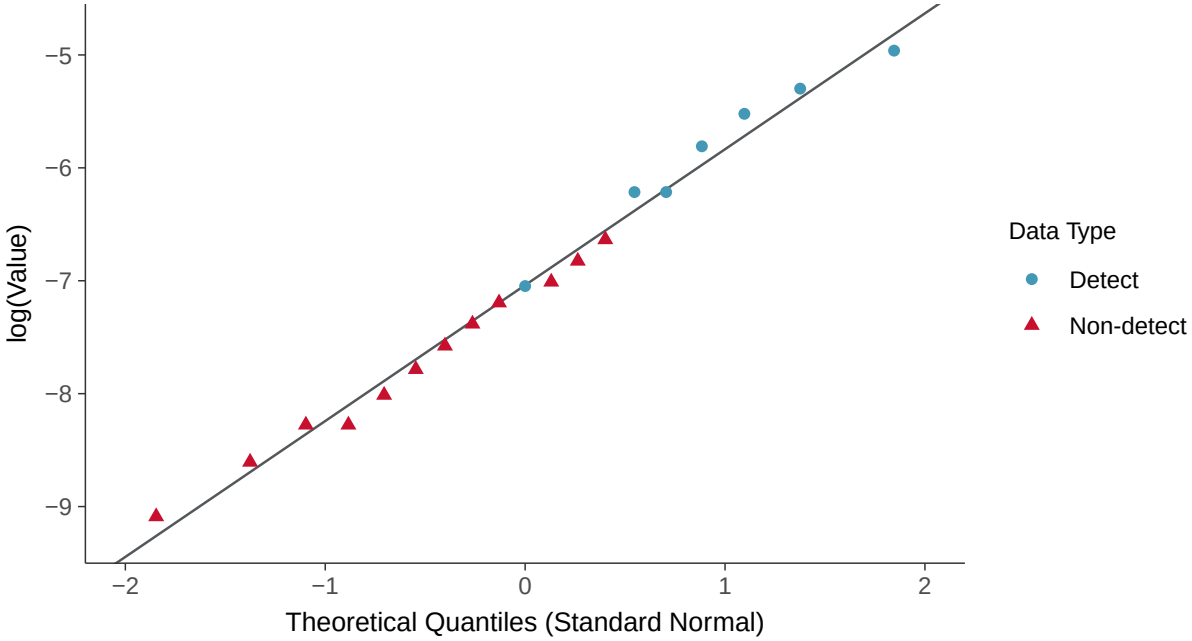
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-5 (mg/l)



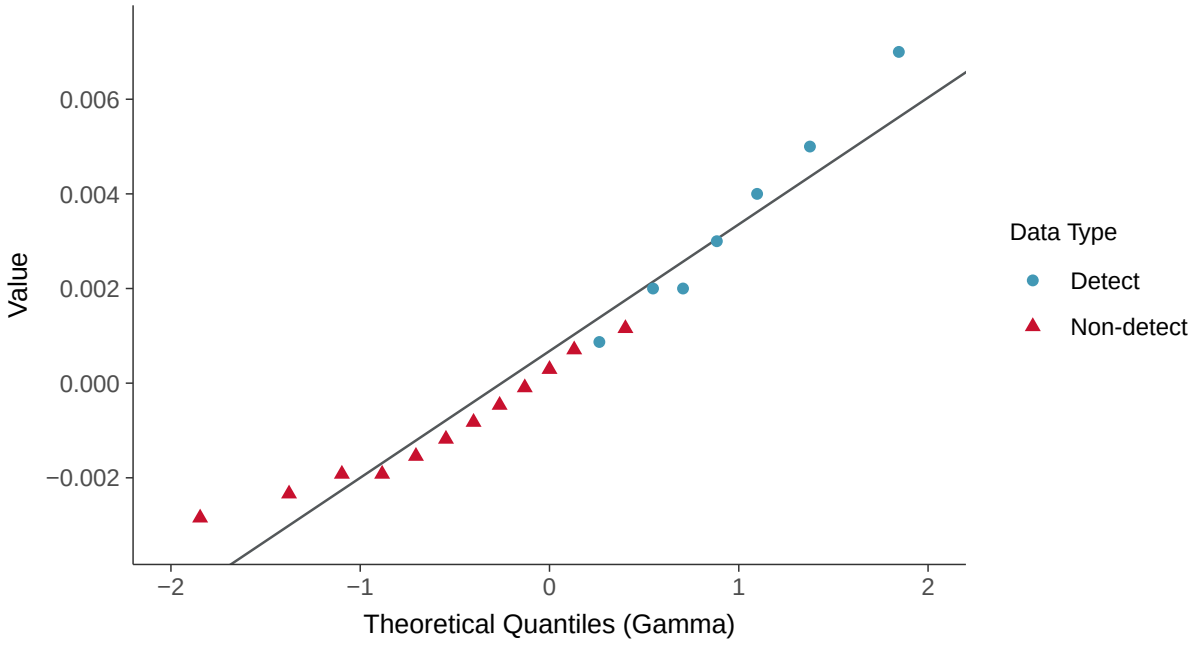
Lognormal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-5 (mg/l)



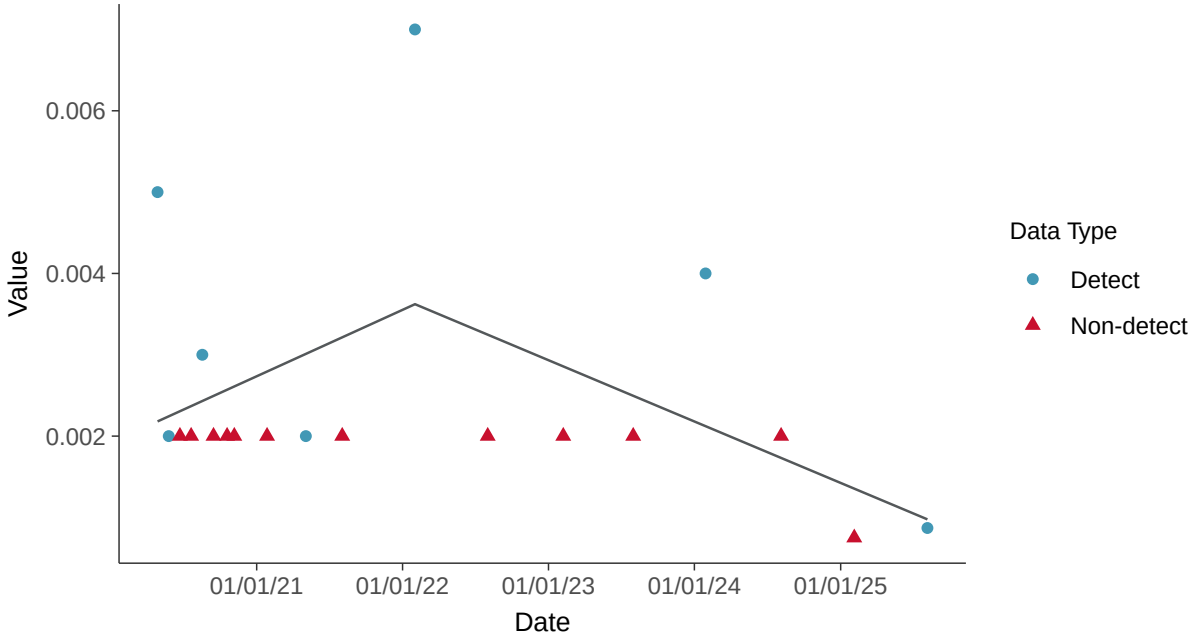
Gamma Q-Q plot using ROS Imputed Estimates

Arsenic, MW-5 (mg/l)



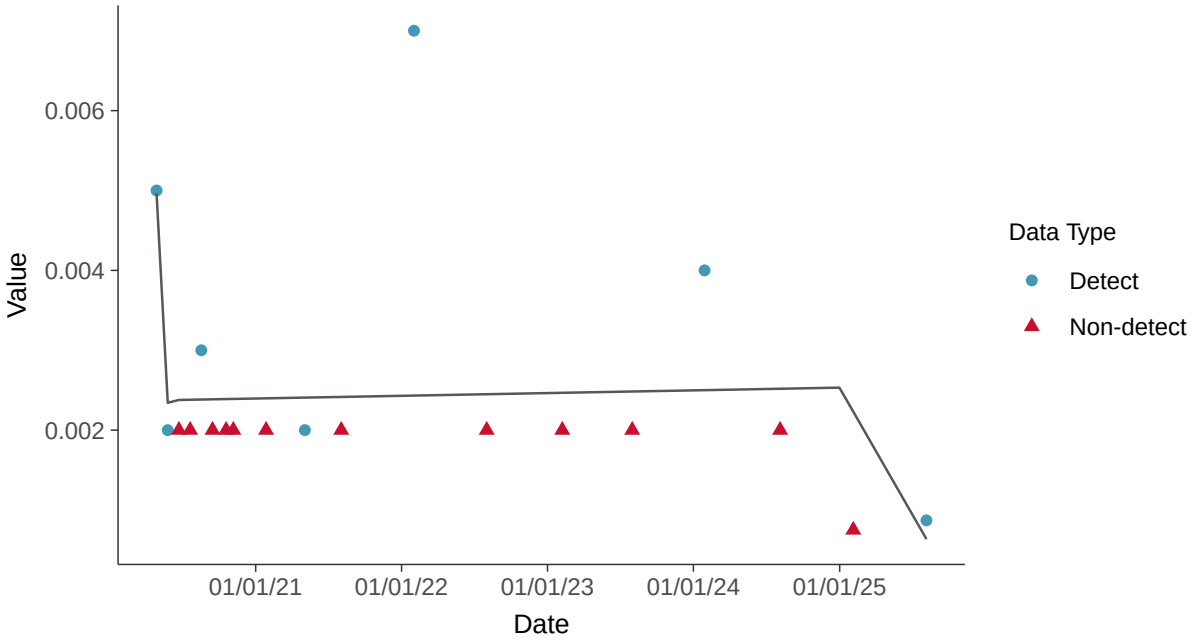
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-5 (mg/l)



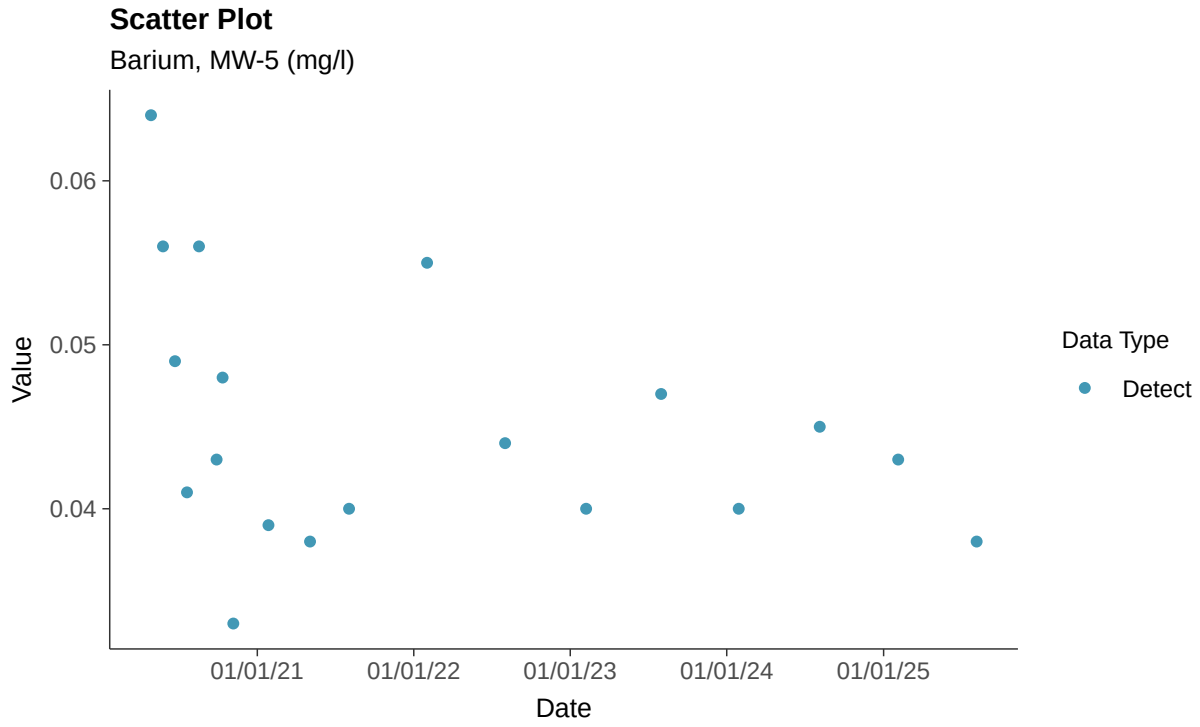
Trend Regression: Piecewise Linear-Linear-Linear

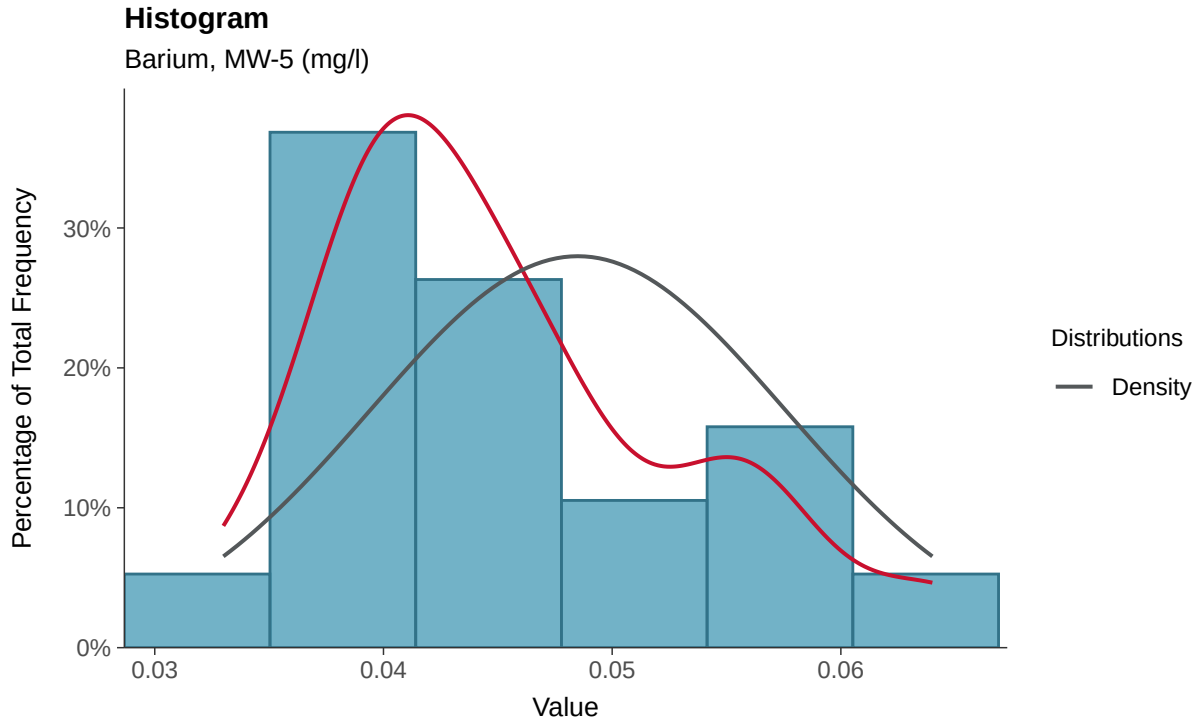
Arsenic, MW-5 (mg/l)



Appendix IV: Barium, MW-5

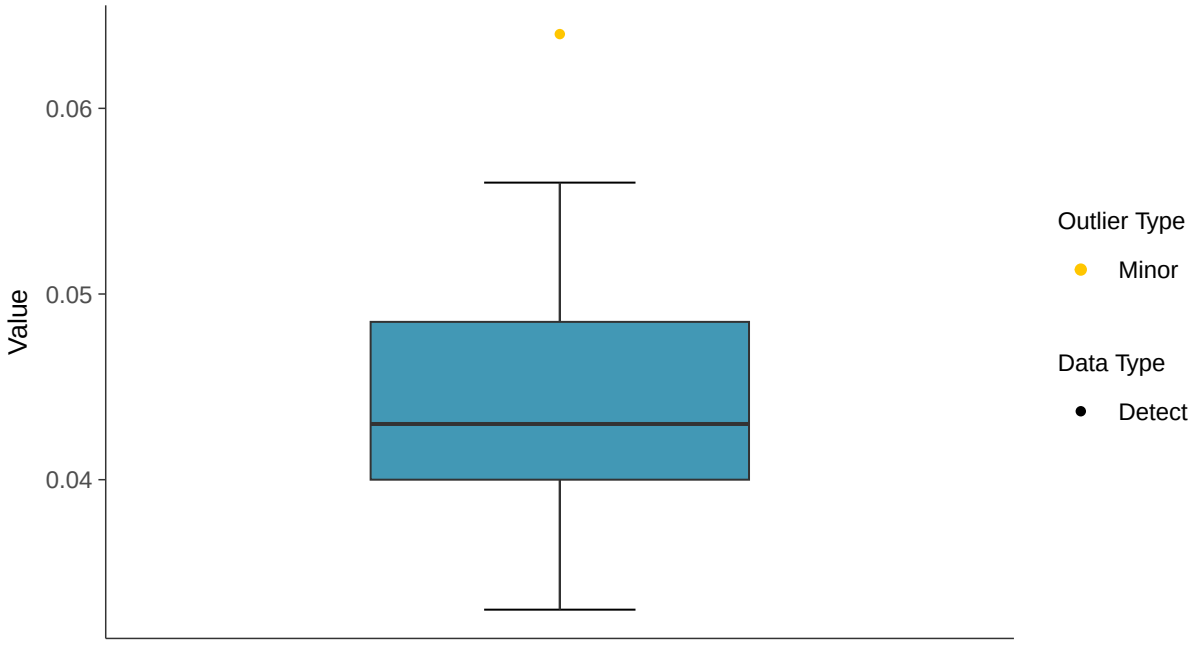
ID: 15_3_103





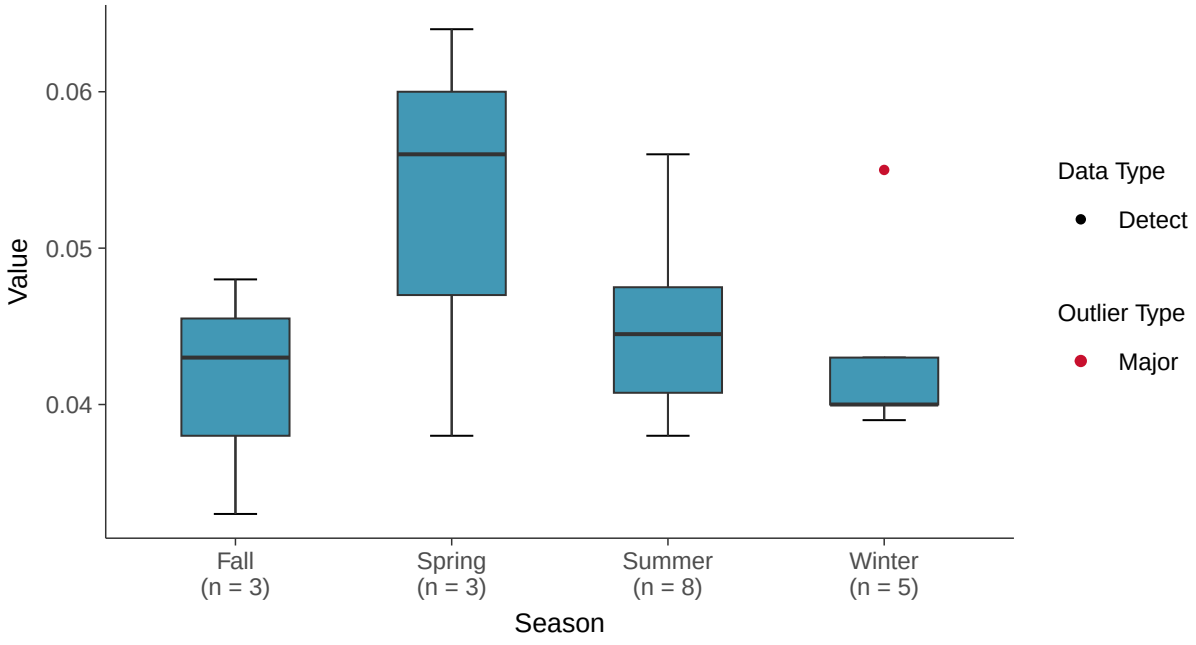
Boxplot

Barium, MW-5 (mg/l)



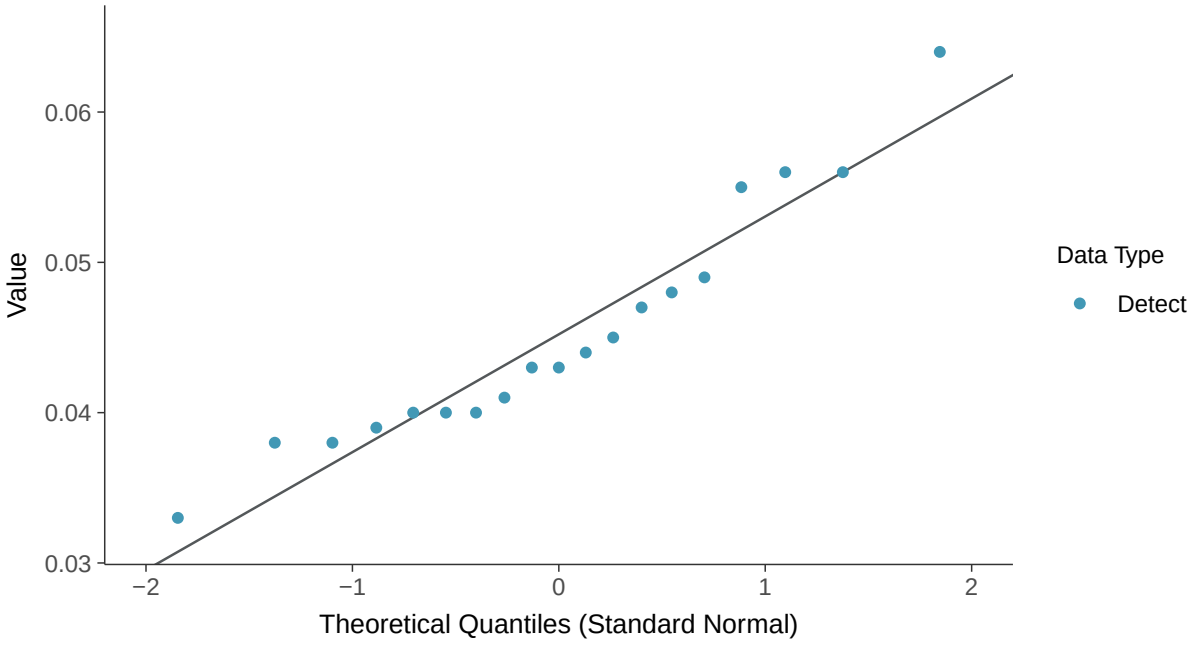
Boxplot by Season

Barium, MW-5 (mg/l)



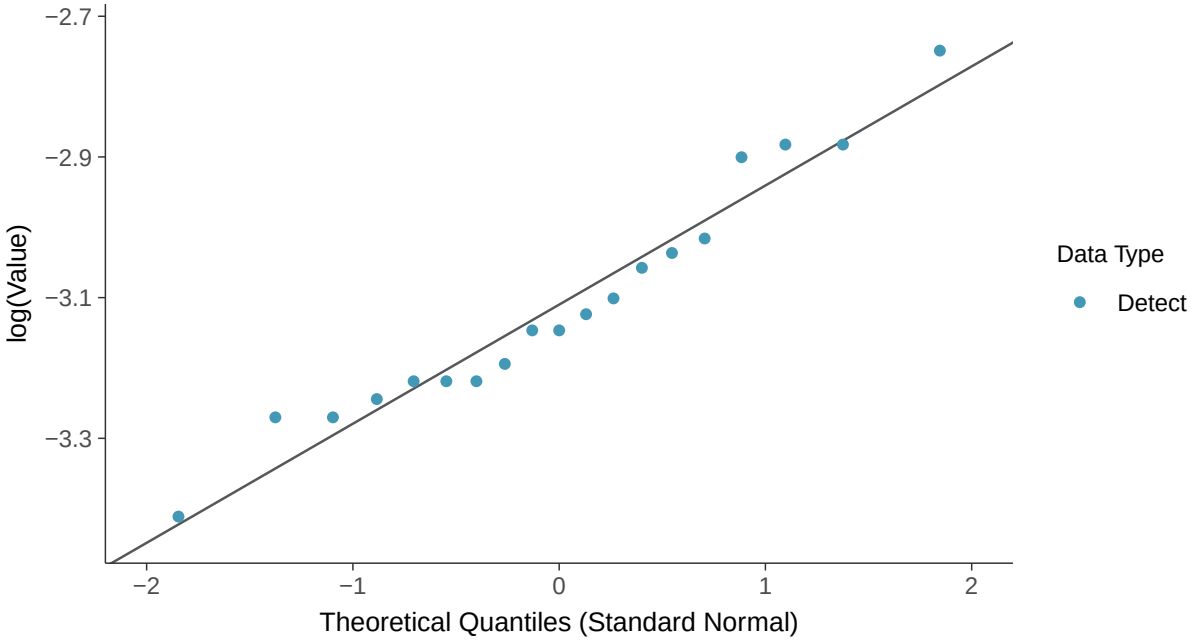
Normal Q-Q plot

Barium, MW-5 (mg/l)



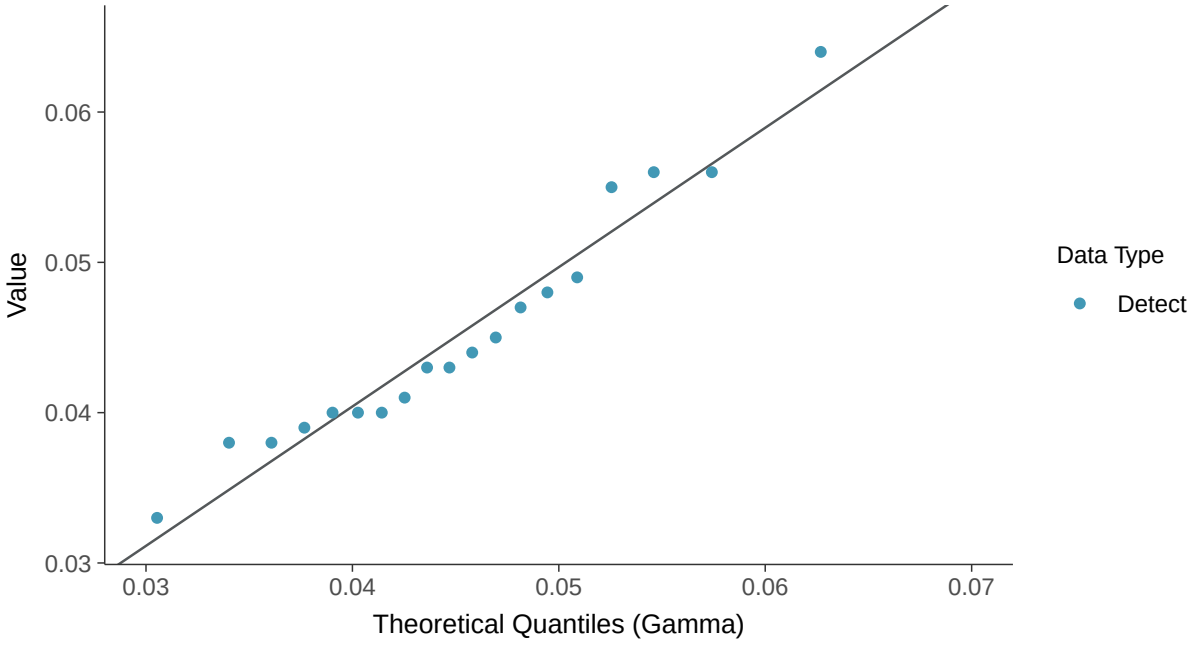
Lognormal Q-Q plot

Barium, MW-5 (mg/l)



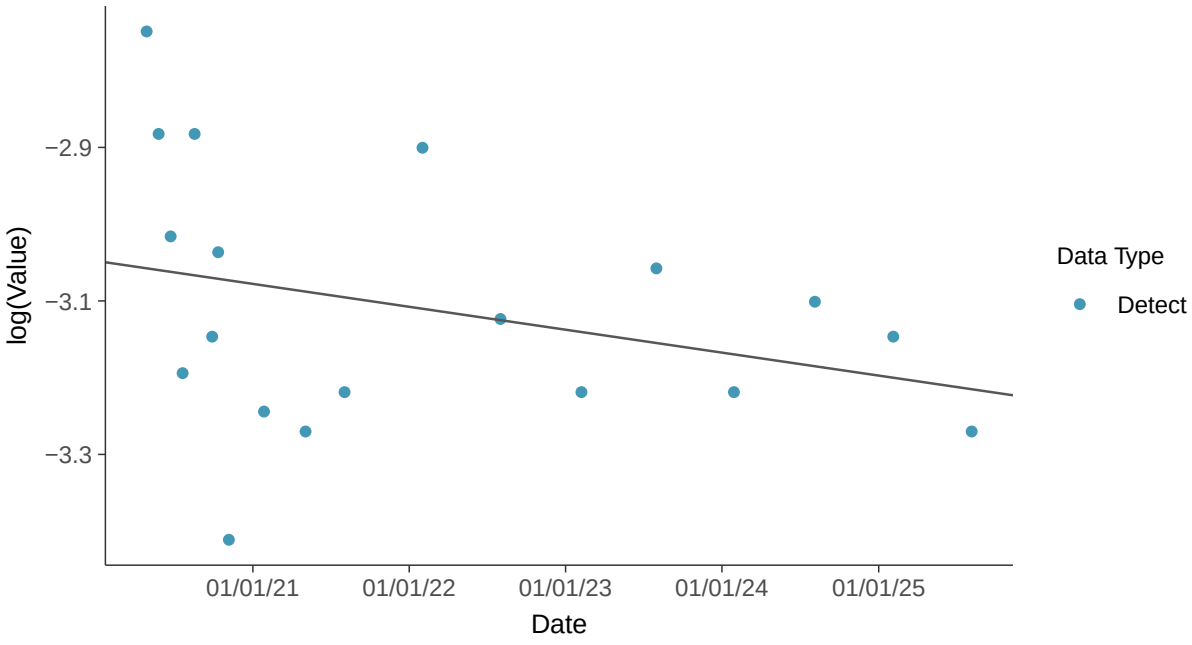
Gamma Q-Q plot

Barium, MW-5 (mg/l)



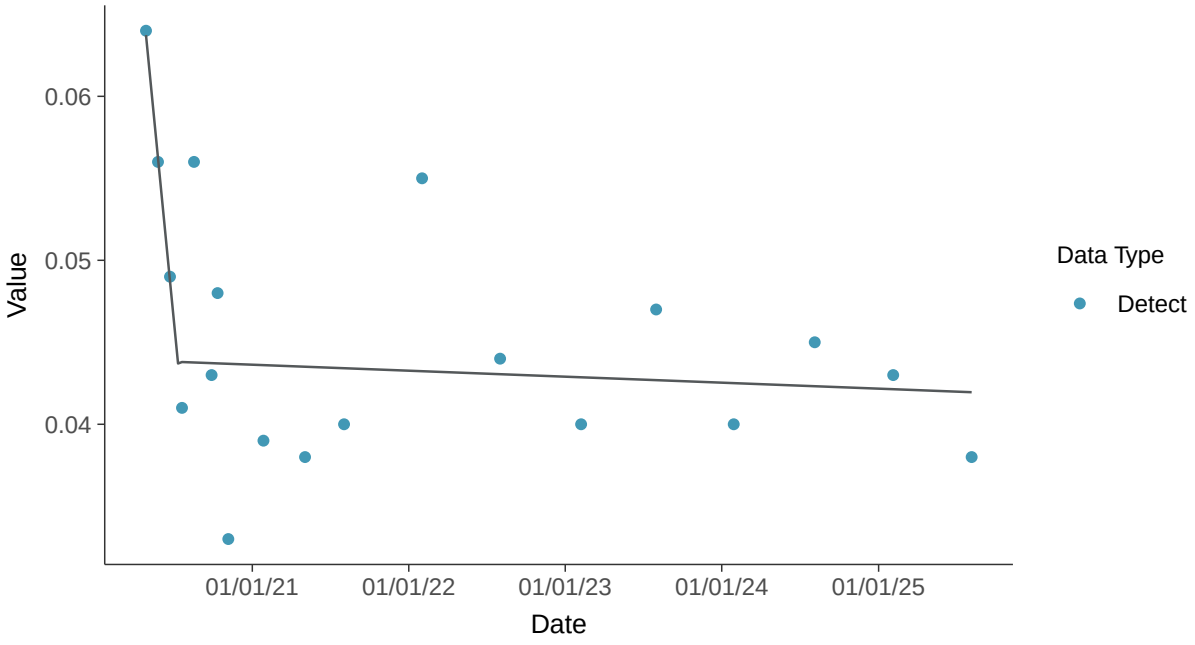
Trend Regression: Lognormal MLE

Barium, MW-5 (mg/l)



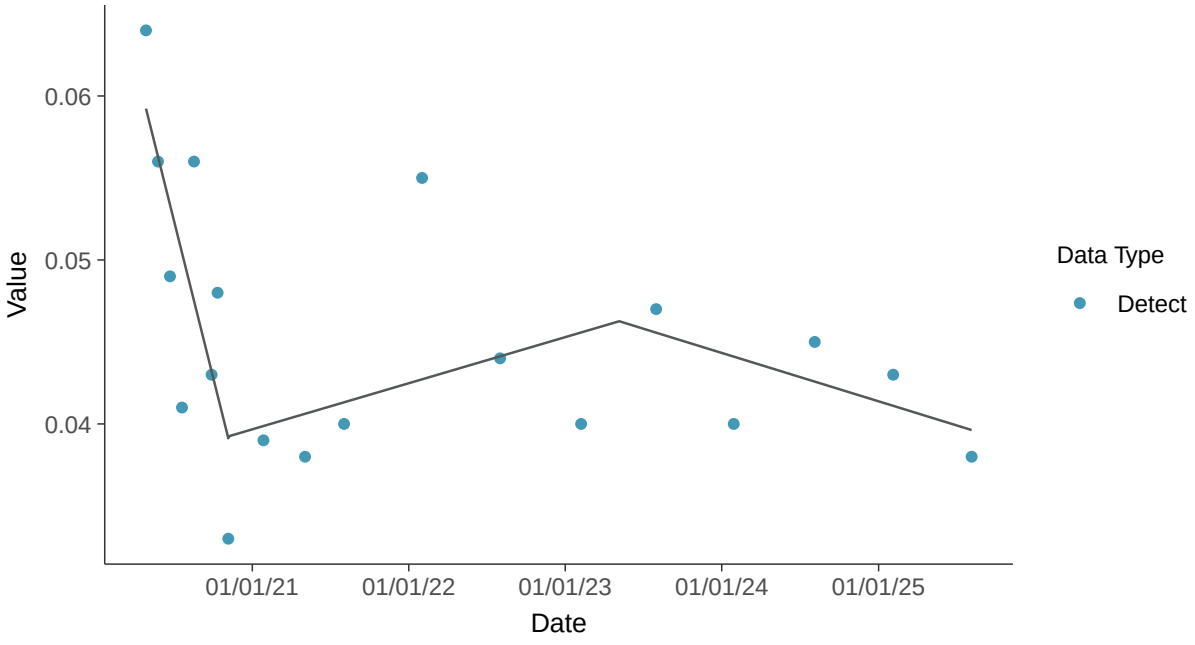
Trend Regression: Piecewise Linear-Linear

Barium, MW-5 (mg/l)



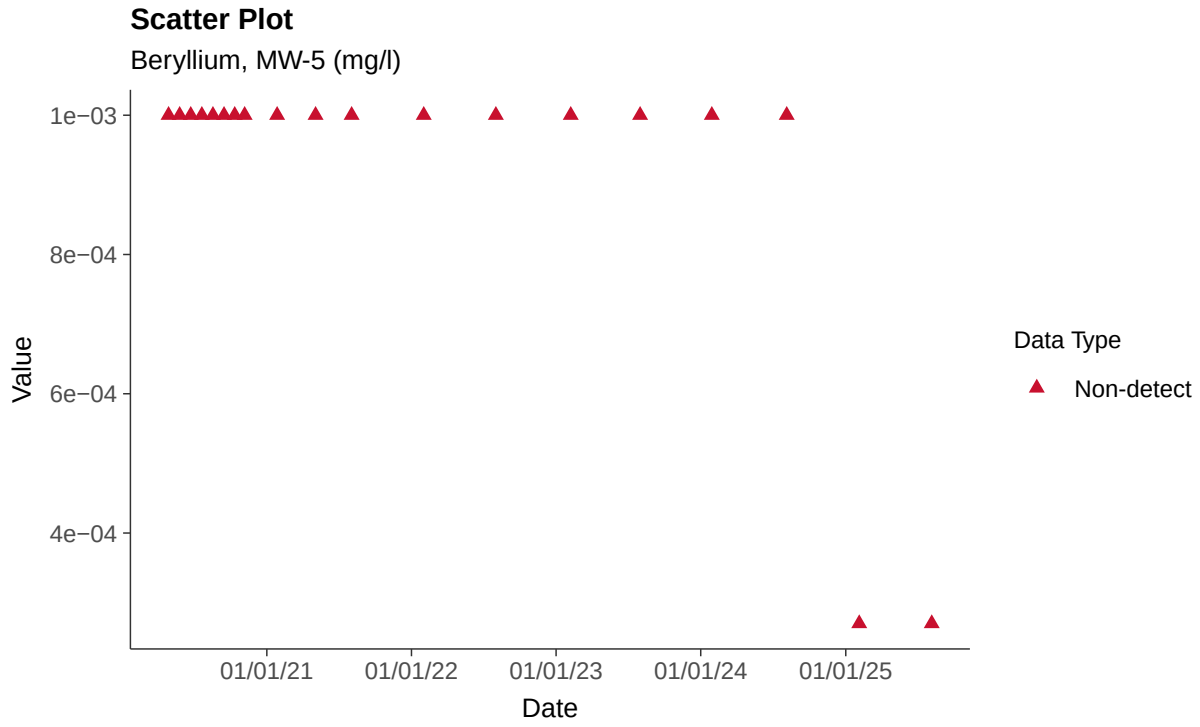
Trend Regression: Piecewise Linear-Linear-Linear

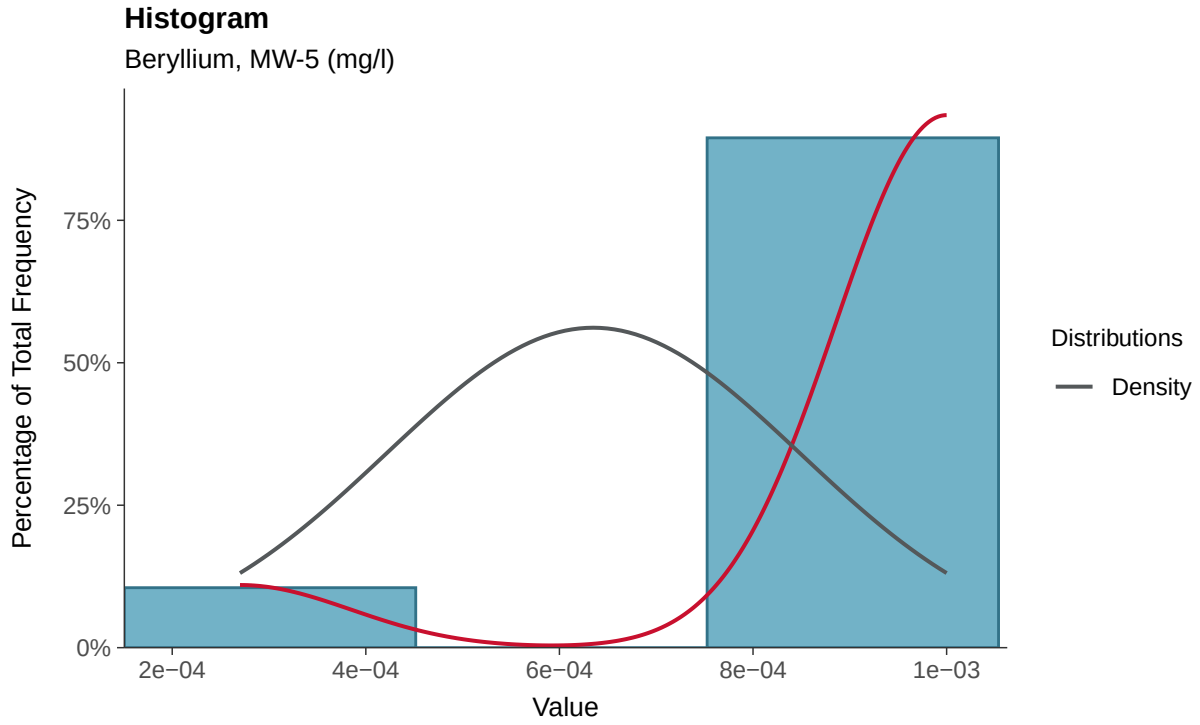
Barium, MW-5 (mg/l)



Appendix IV: Beryllium, MW-5

ID: 15_3_104



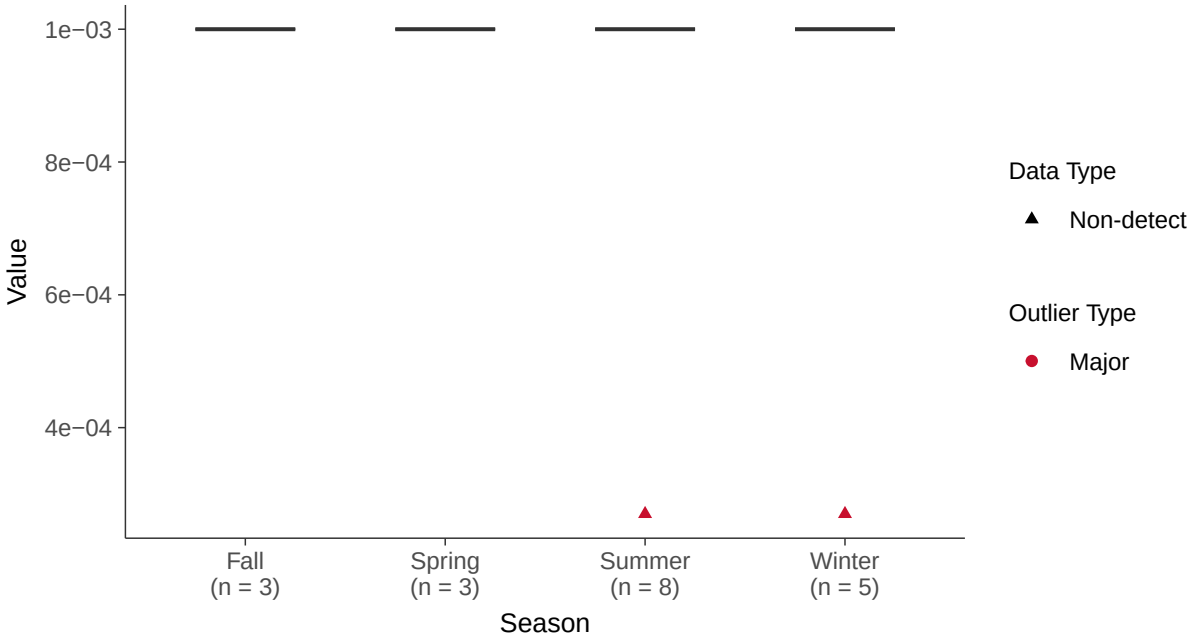


Boxplot

Beryllium, MW-5 (mg/l)

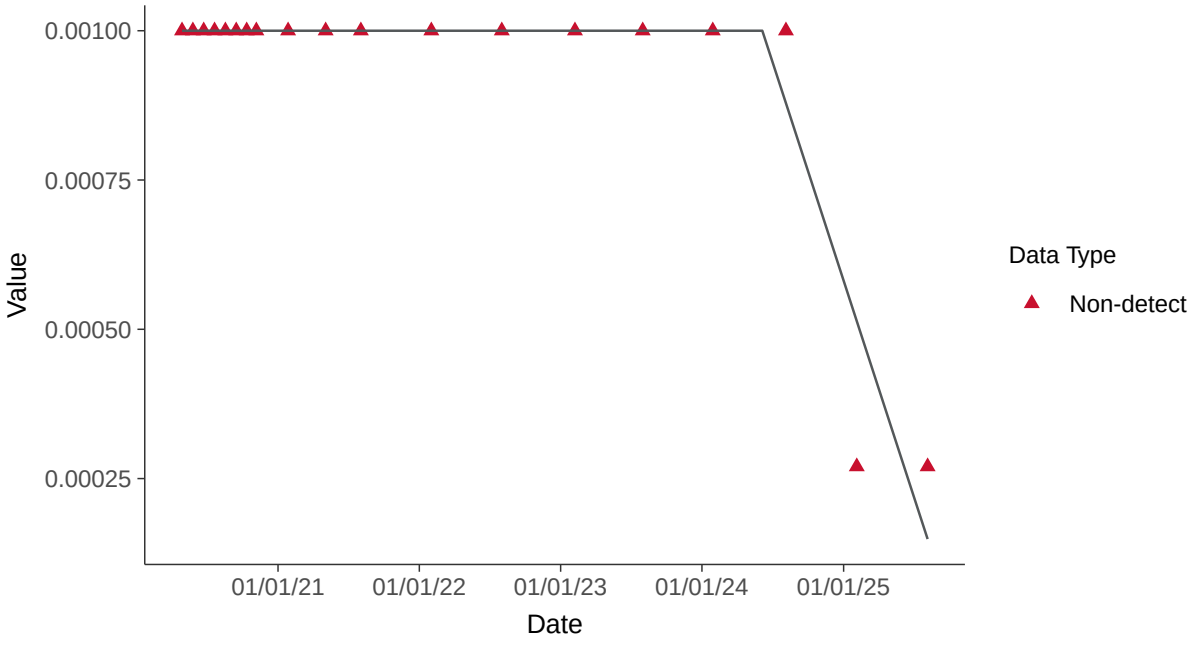
Boxplot by Season

Beryllium, MW-5 (mg/l)



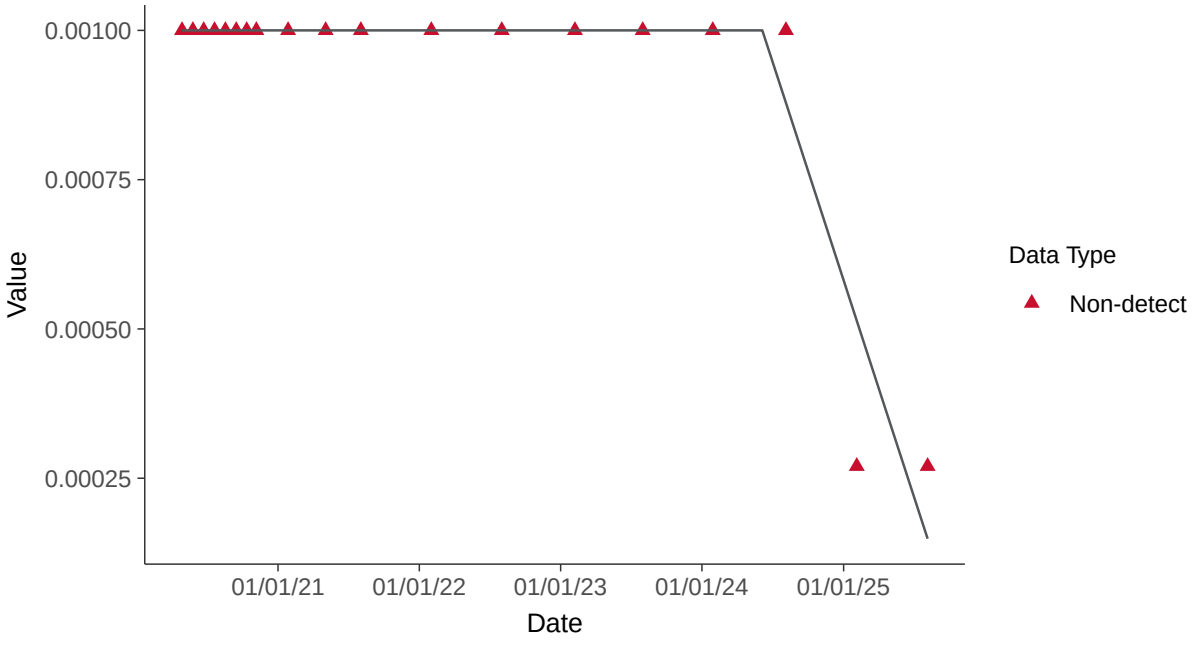
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-5 (mg/l)



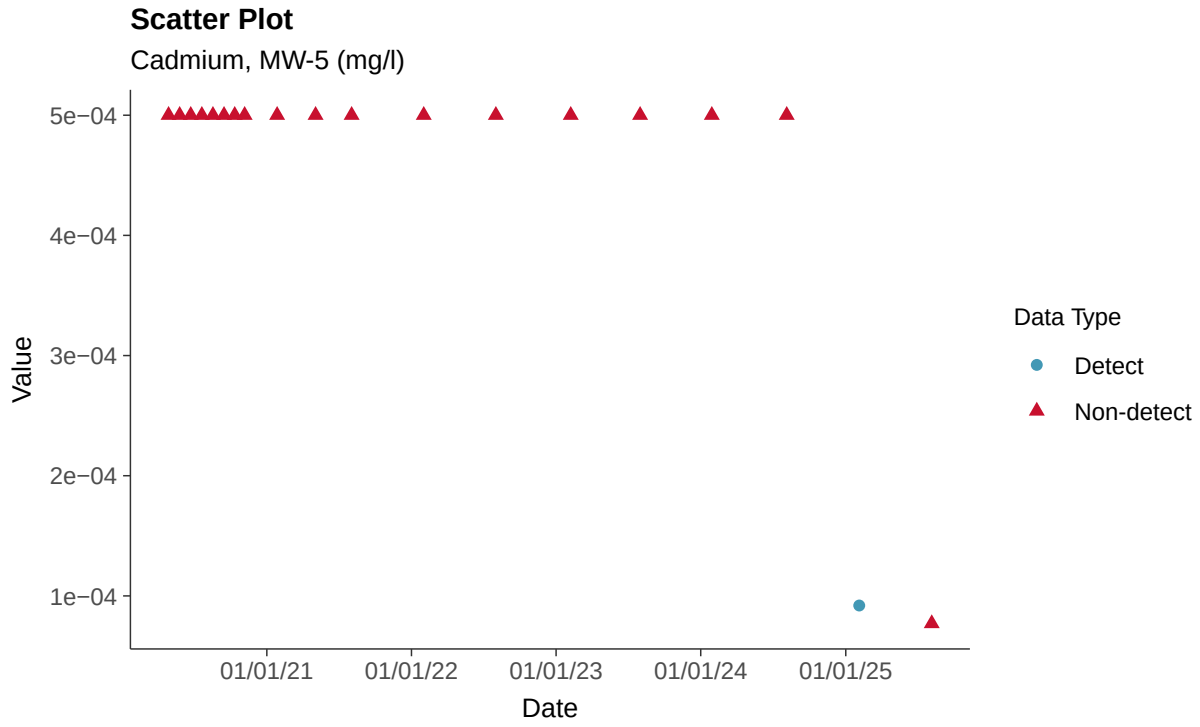
Trend Regression: Piecewise Linear-Linear-Linear

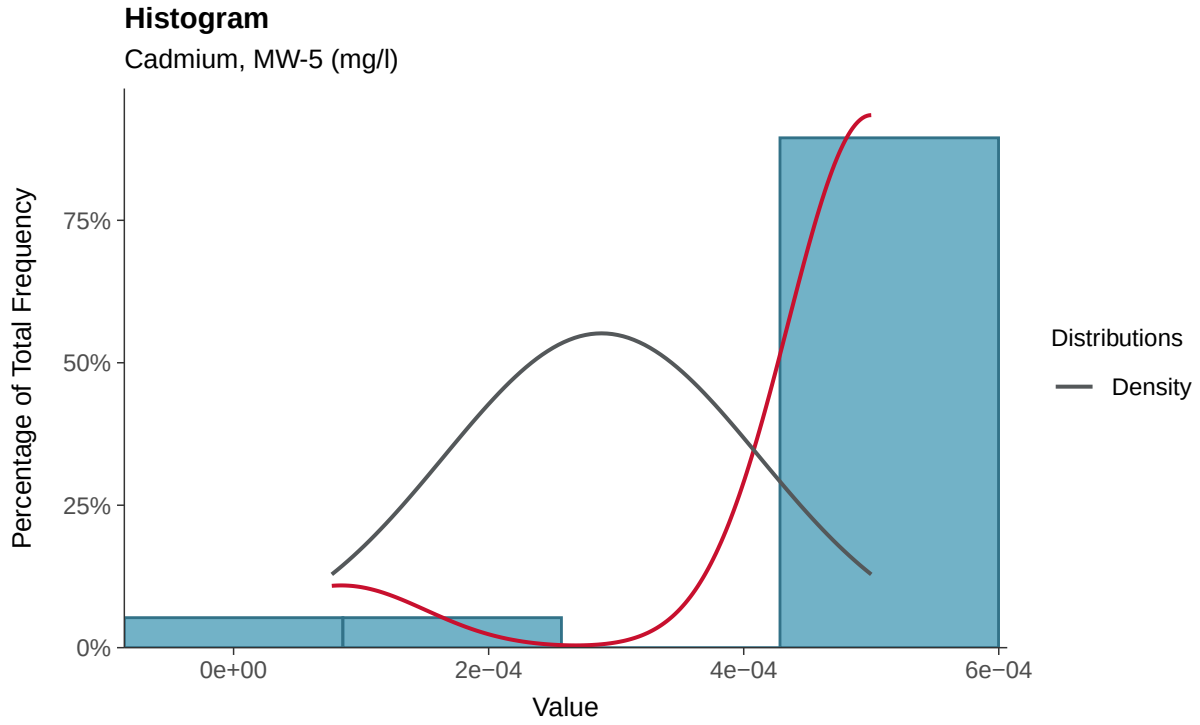
Beryllium, MW-5 (mg/l)



Appendix IV: Cadmium, MW-5

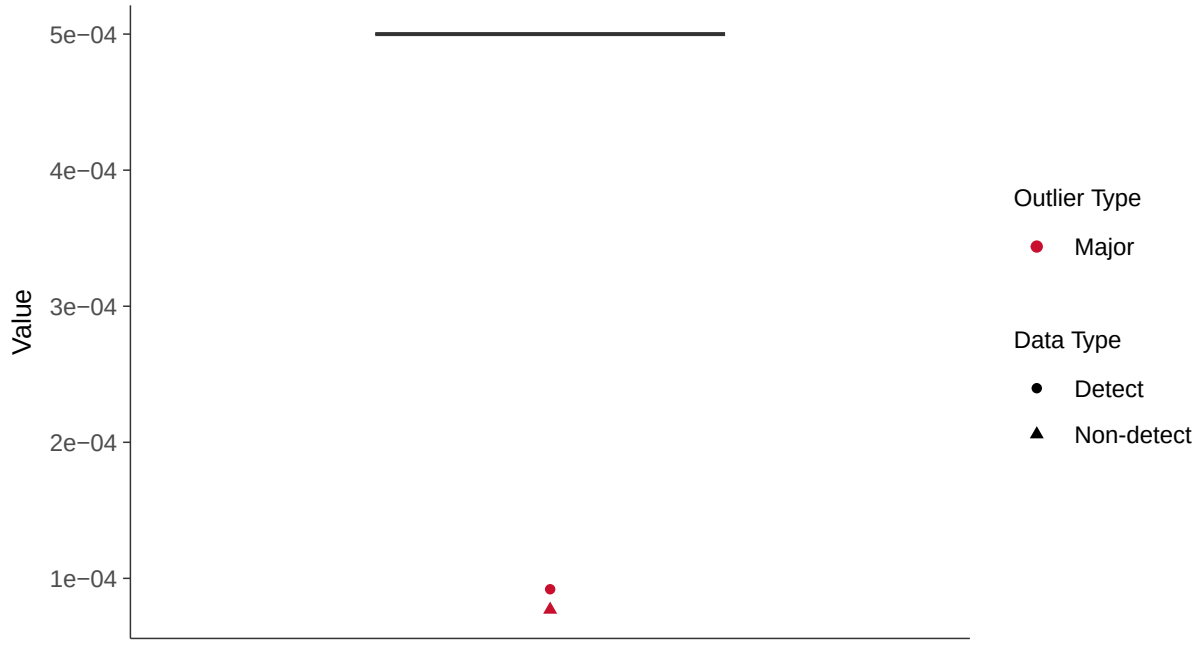
ID: 15_3_106





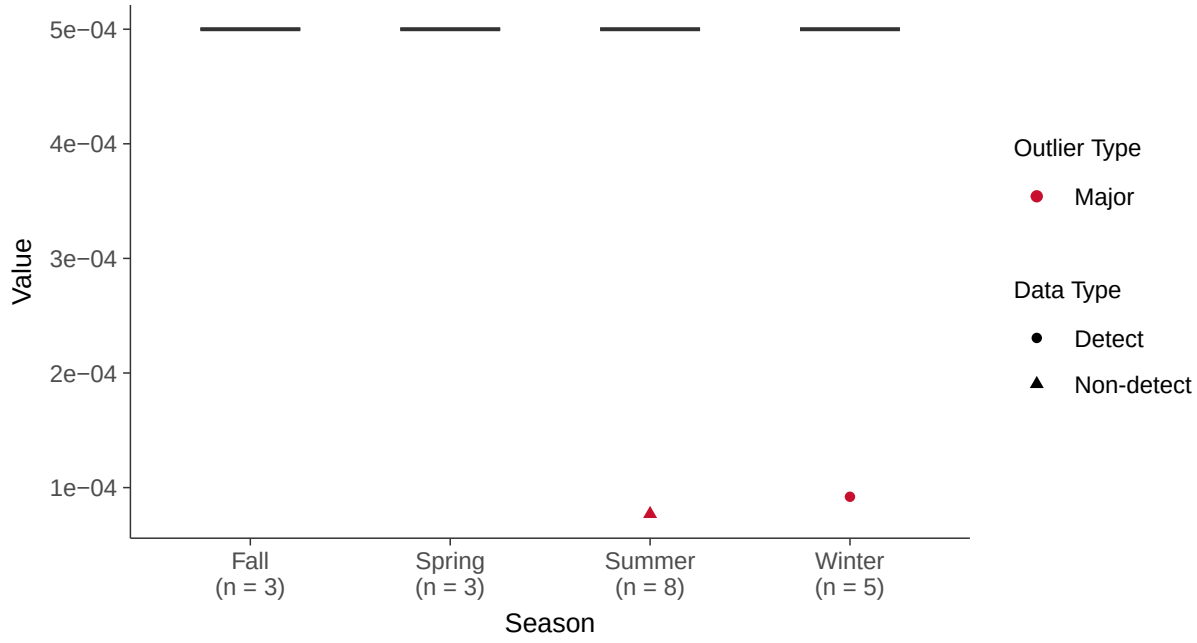
Boxplot

Cadmium, MW-5 (mg/l)



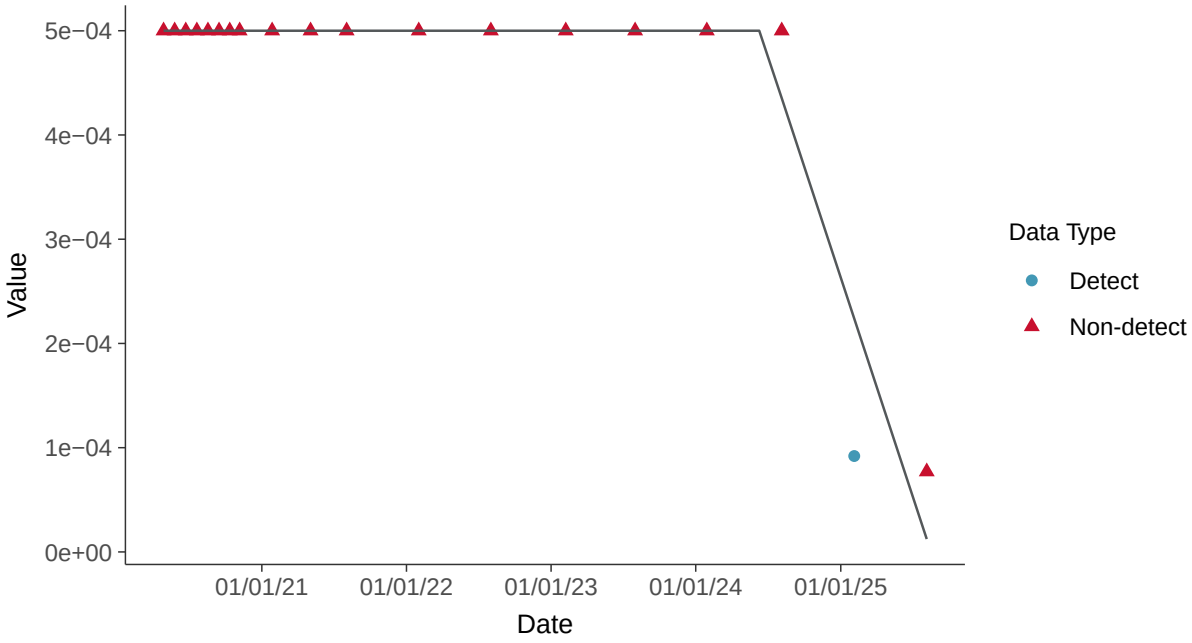
Boxplot by Season

Cadmium, MW-5 (mg/l)



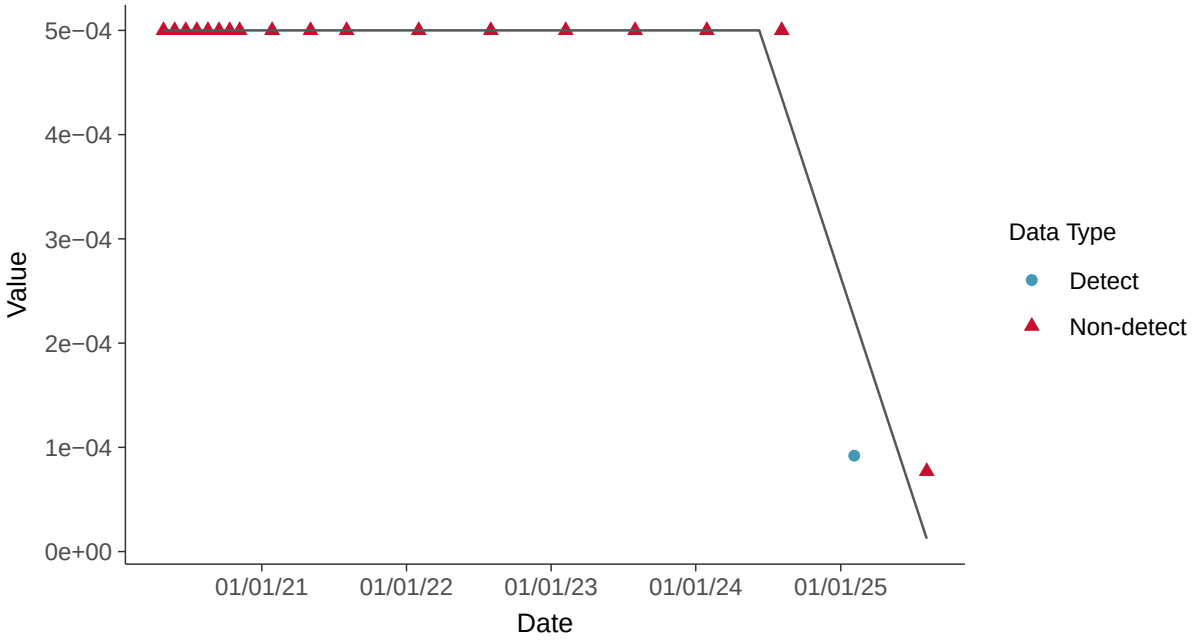
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-5 (mg/l)



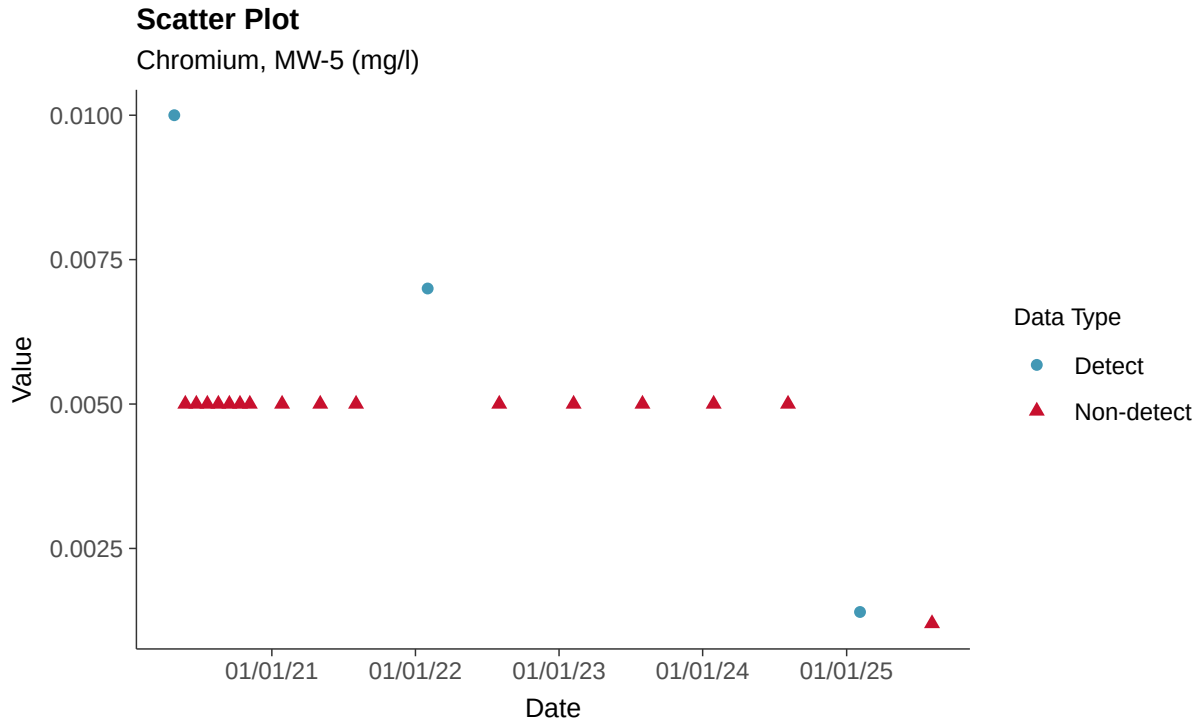
Trend Regression: Piecewise Linear-Linear-Linear

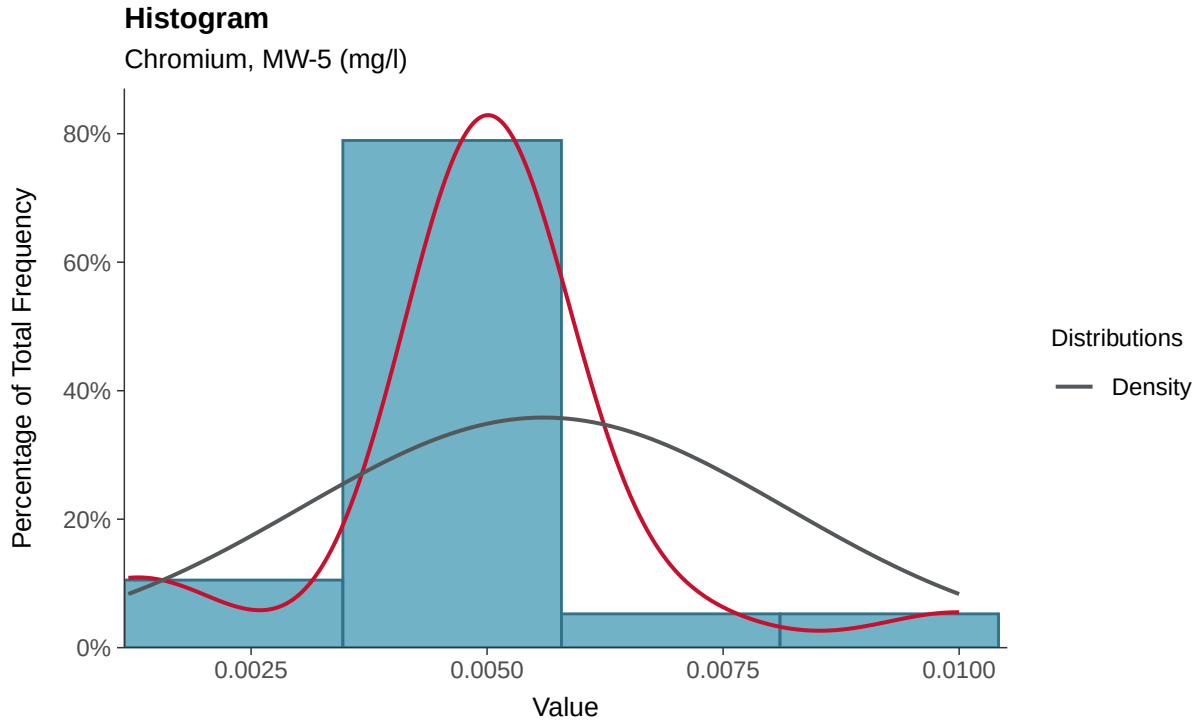
Cadmium, MW-5 (mg/l)



Appendix IV: Chromium, MW-5

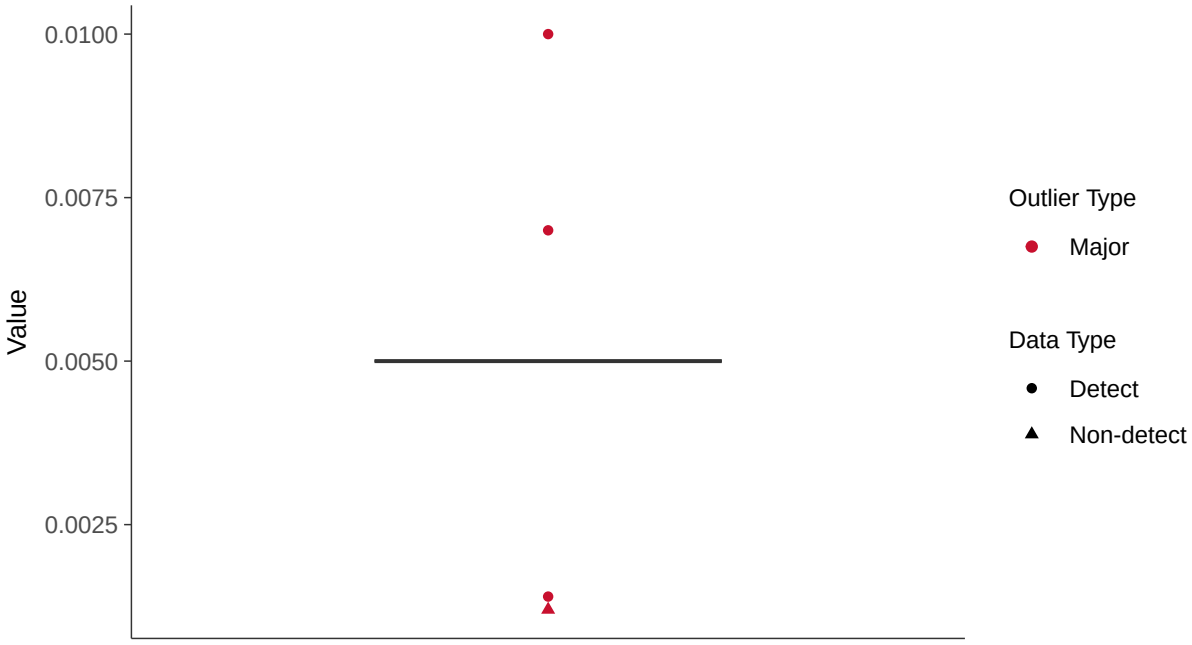
ID: 15_3_109





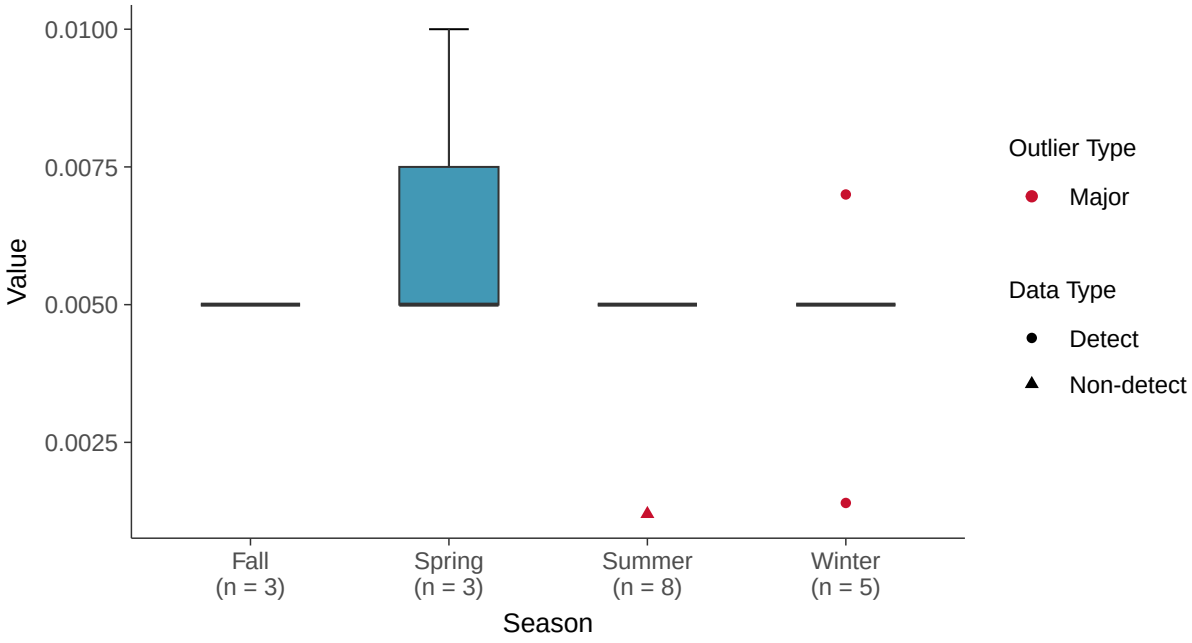
Boxplot

Chromium, MW-5 (mg/l)



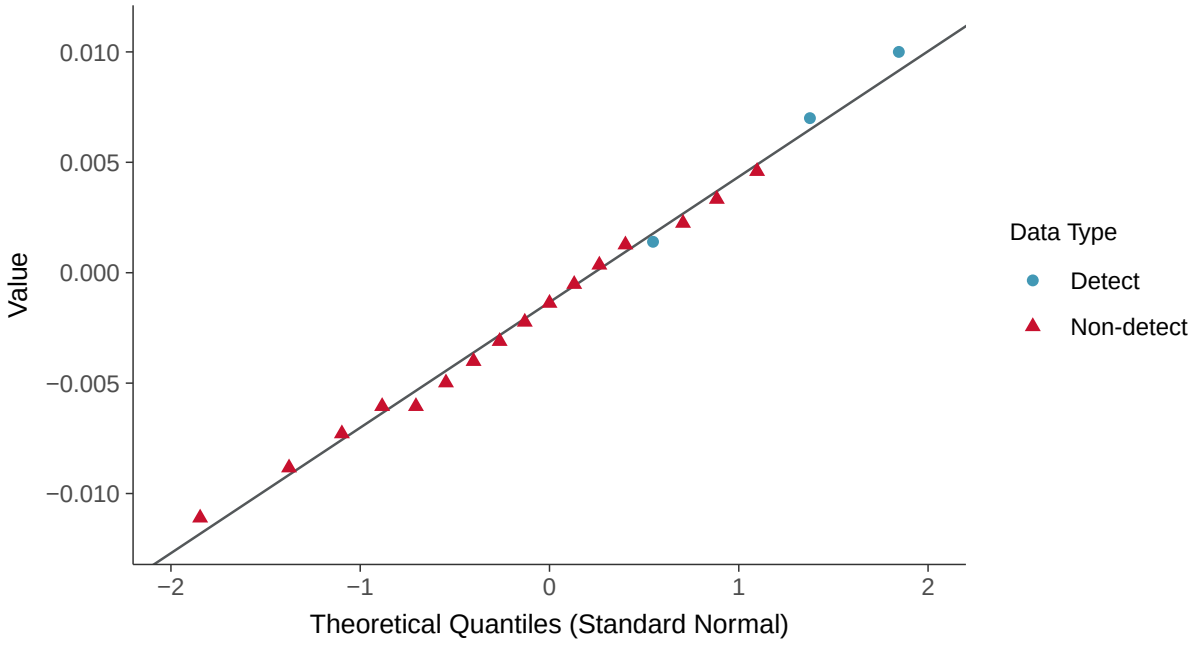
Boxplot by Season

Chromium, MW-5 (mg/l)



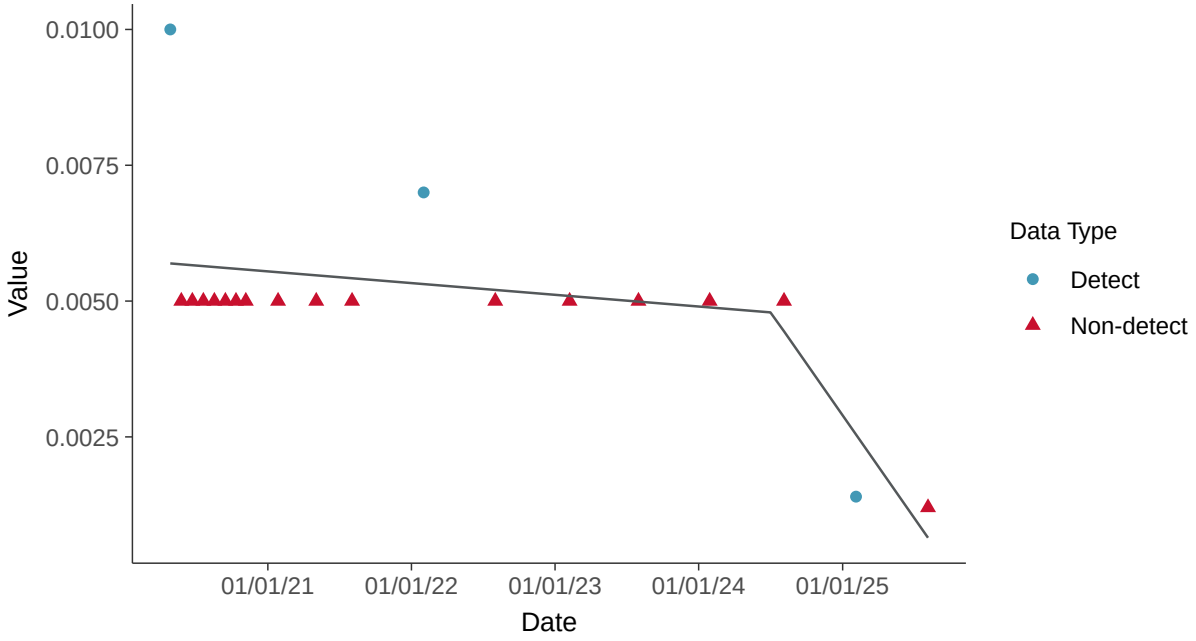
Normal Q-Q plot using ROS Imputed Estimates

Chromium, MW-5 (mg/l)



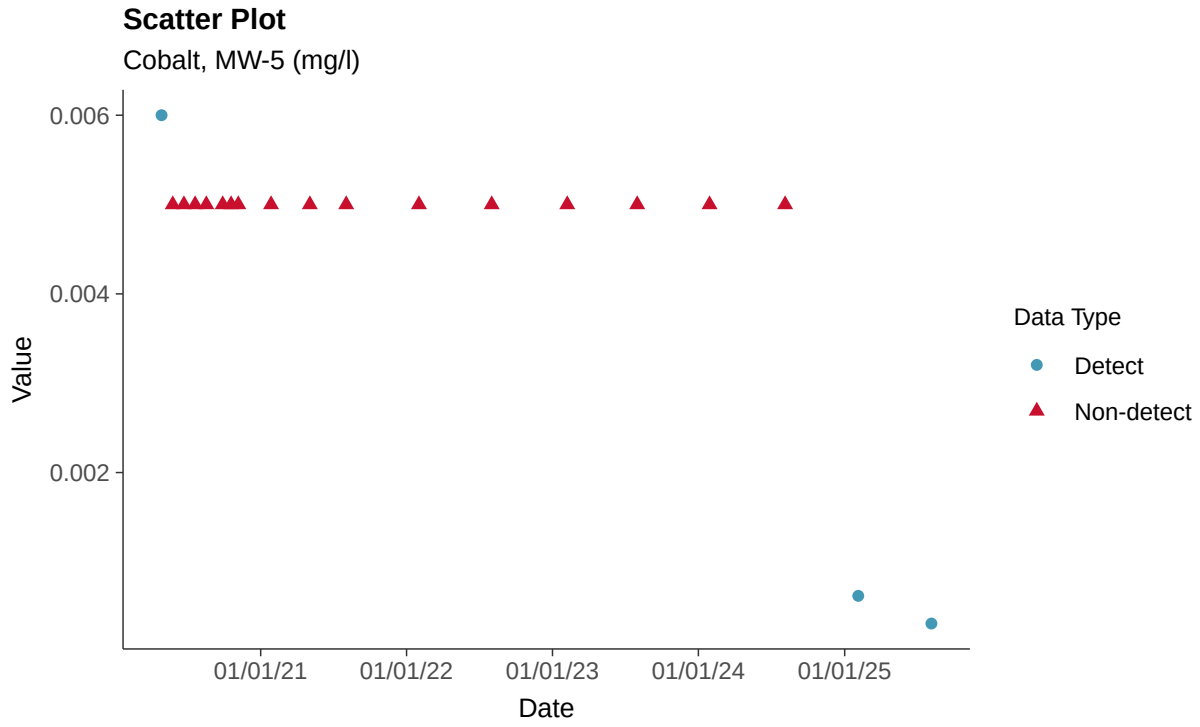
Trend Regression: Piecewise Linear-Linear

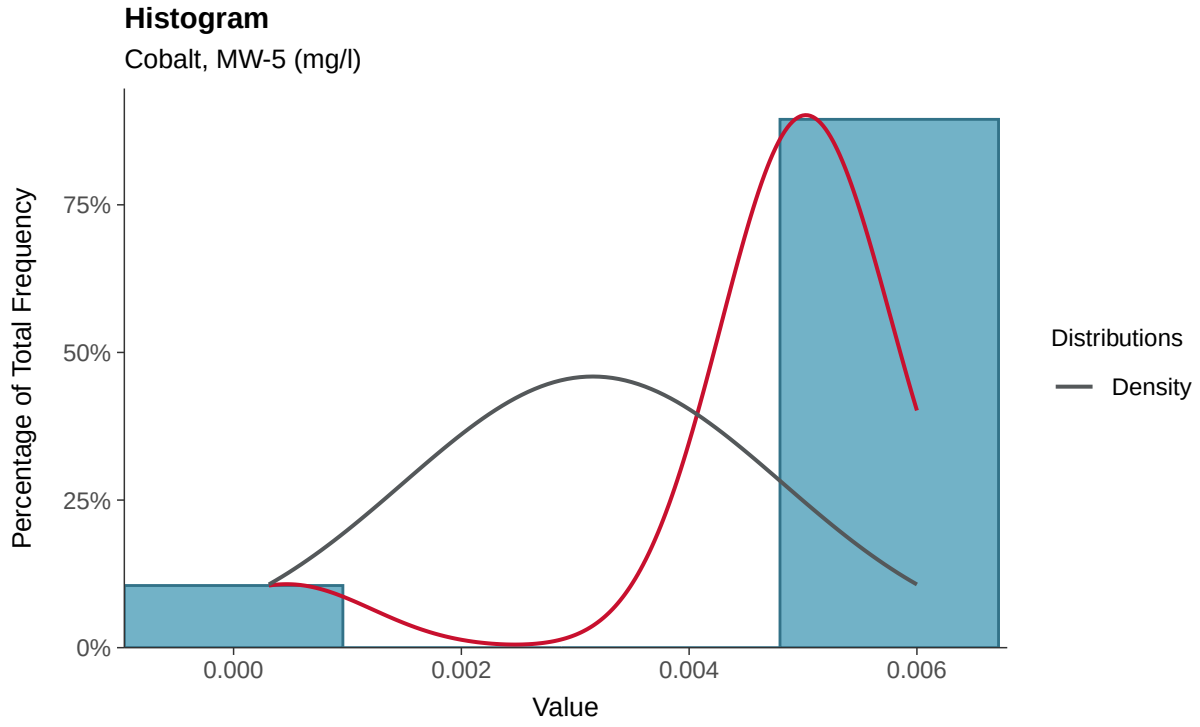
Chromium, MW-5 (mg/l)



Appendix IV: Cobalt, MW-5

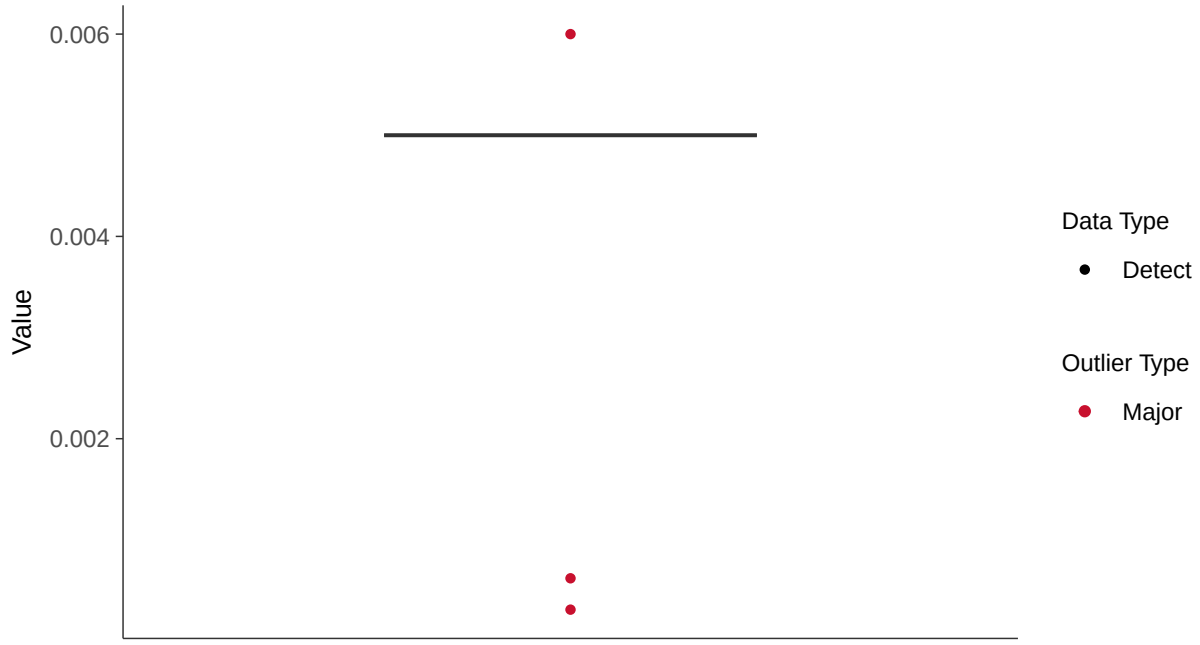
ID: 15_3_110





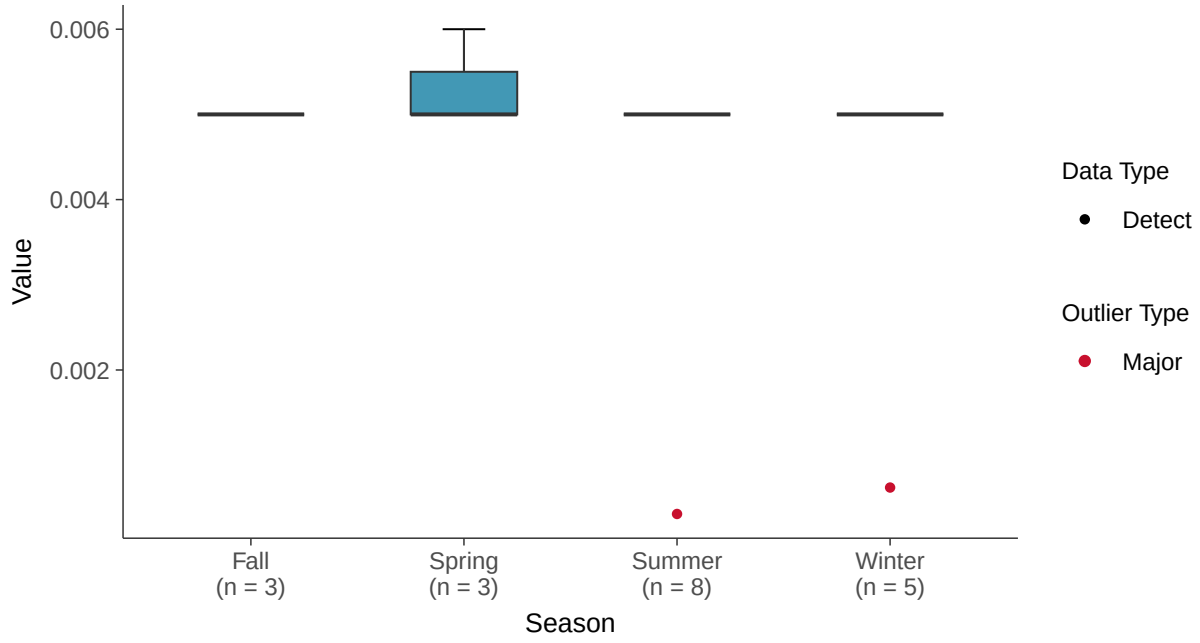
Boxplot

Cobalt, MW-5 (mg/l)



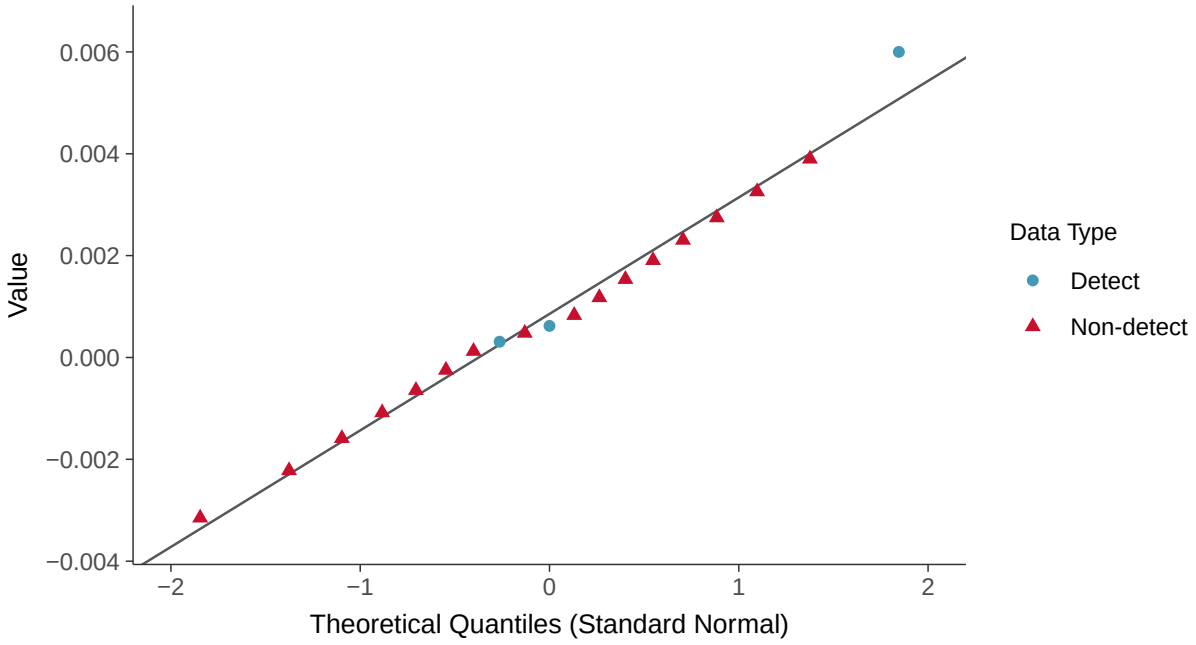
Boxplot by Season

Cobalt, MW-5 (mg/l)



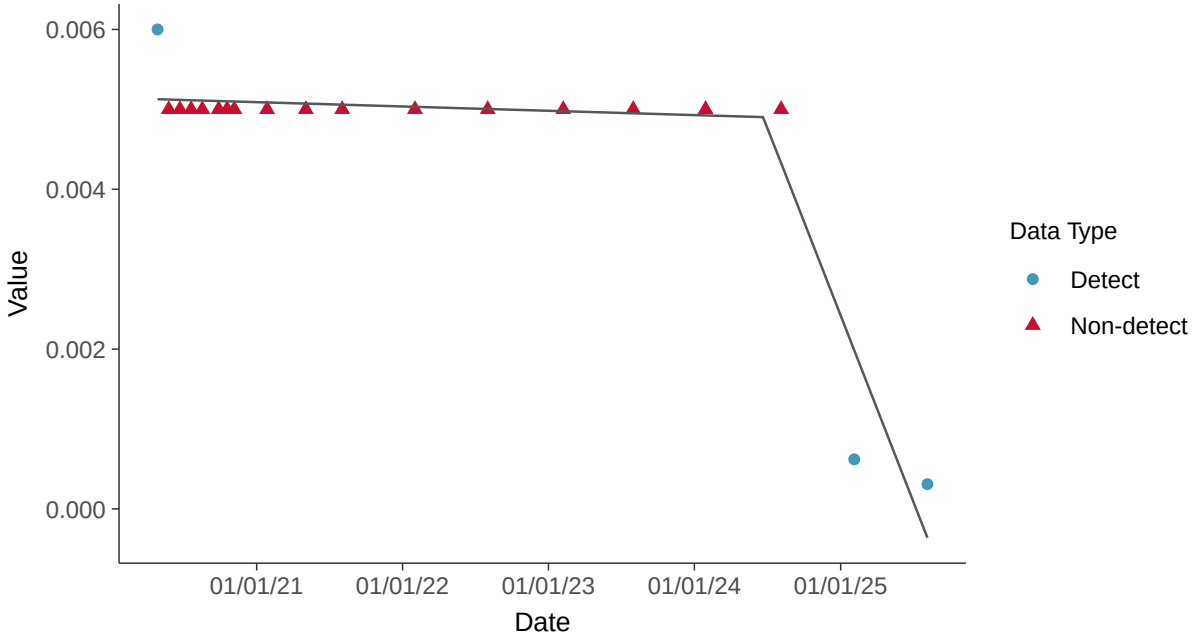
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-5 (mg/l)



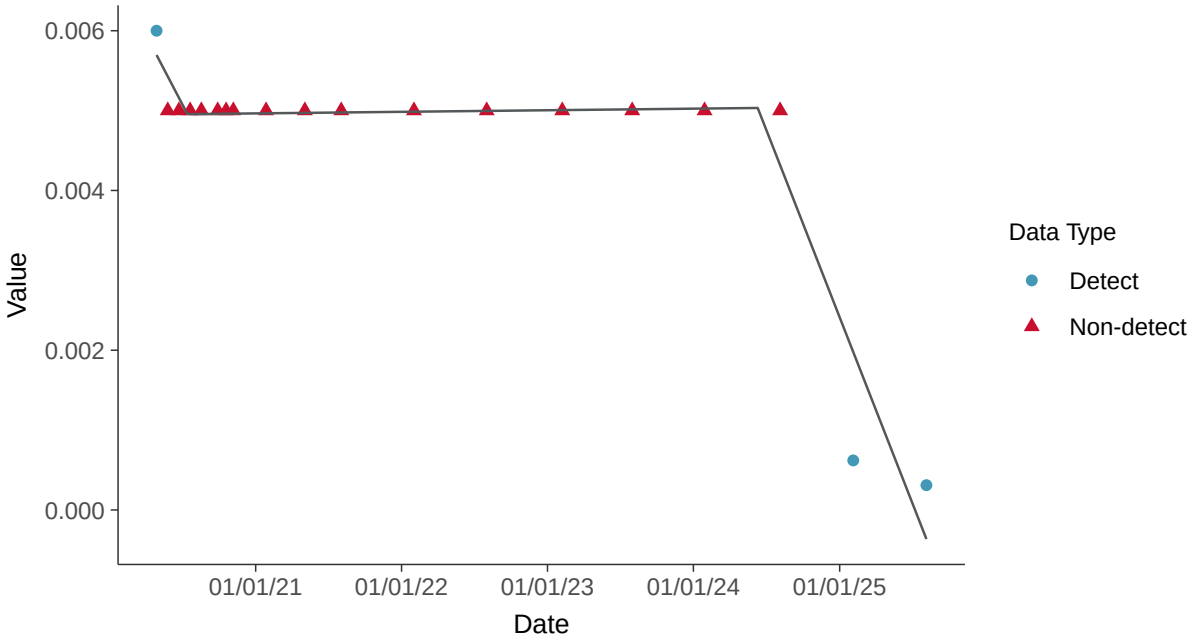
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-5 (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Cobalt, MW-5 (mg/l)

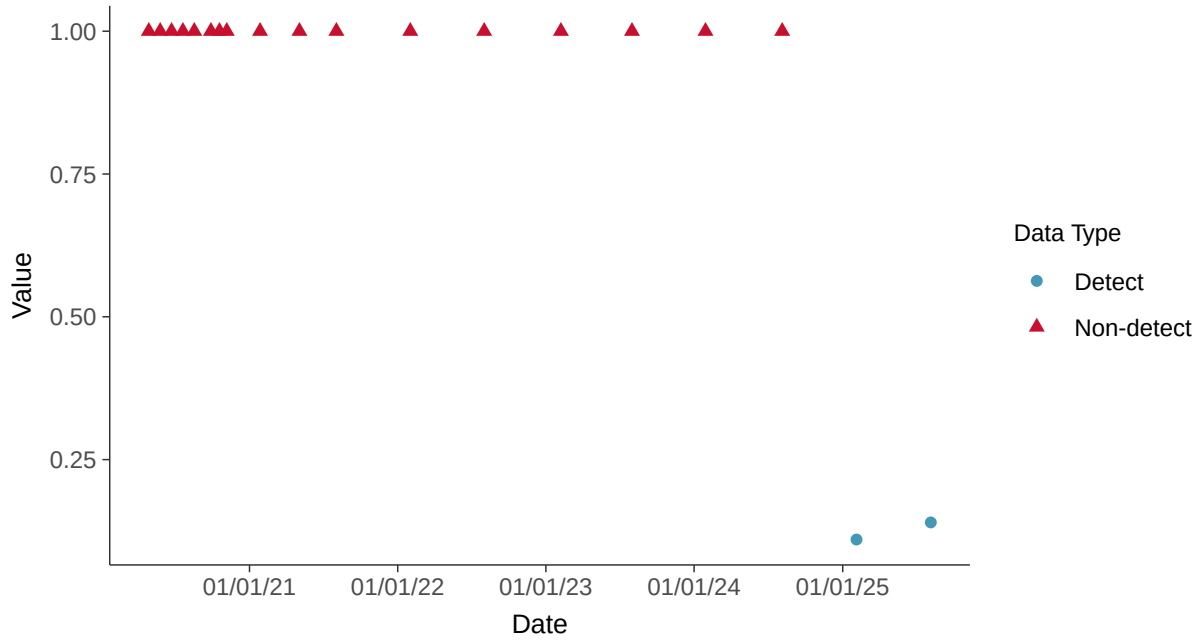


Appendix IV: Fluoride (App IV), MW-5

ID: 15_3_113

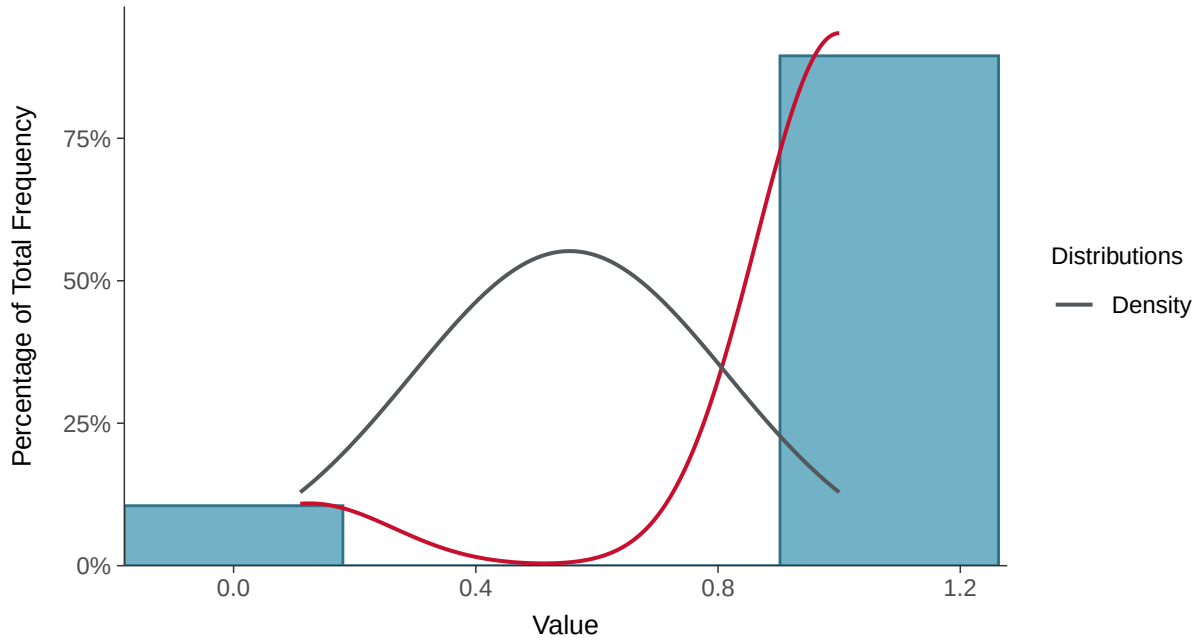
Scatter Plot

Fluoride (App IV), MW-5 (mg/l)



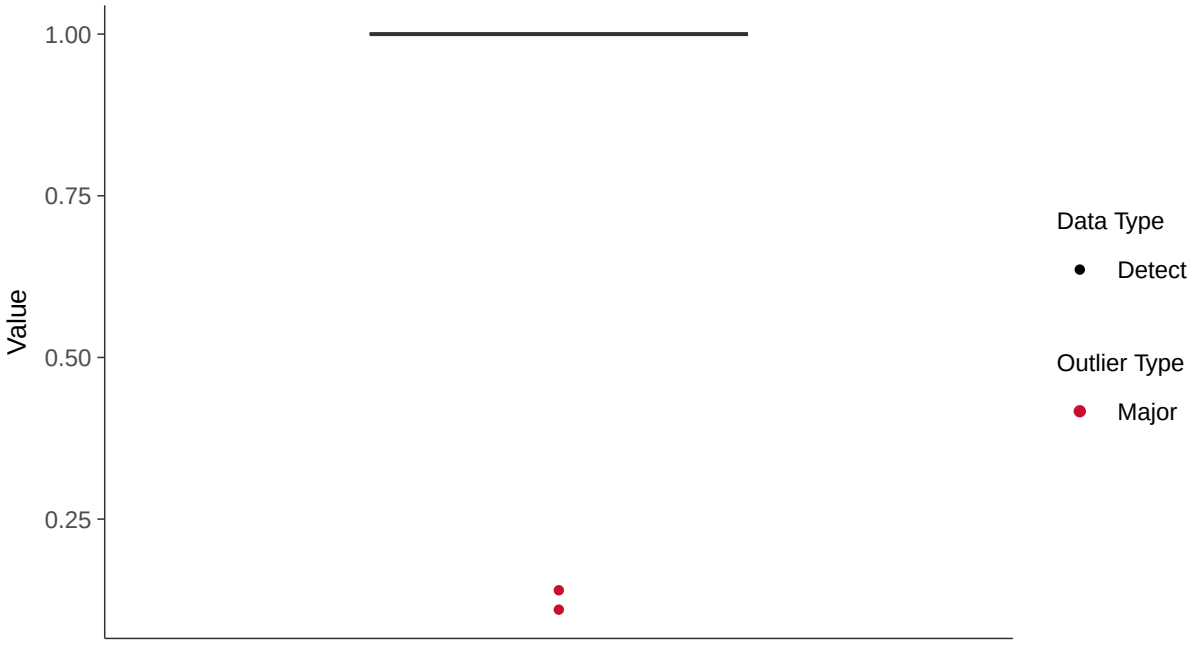
Histogram

Fluoride (App IV), MW-5 (mg/l)



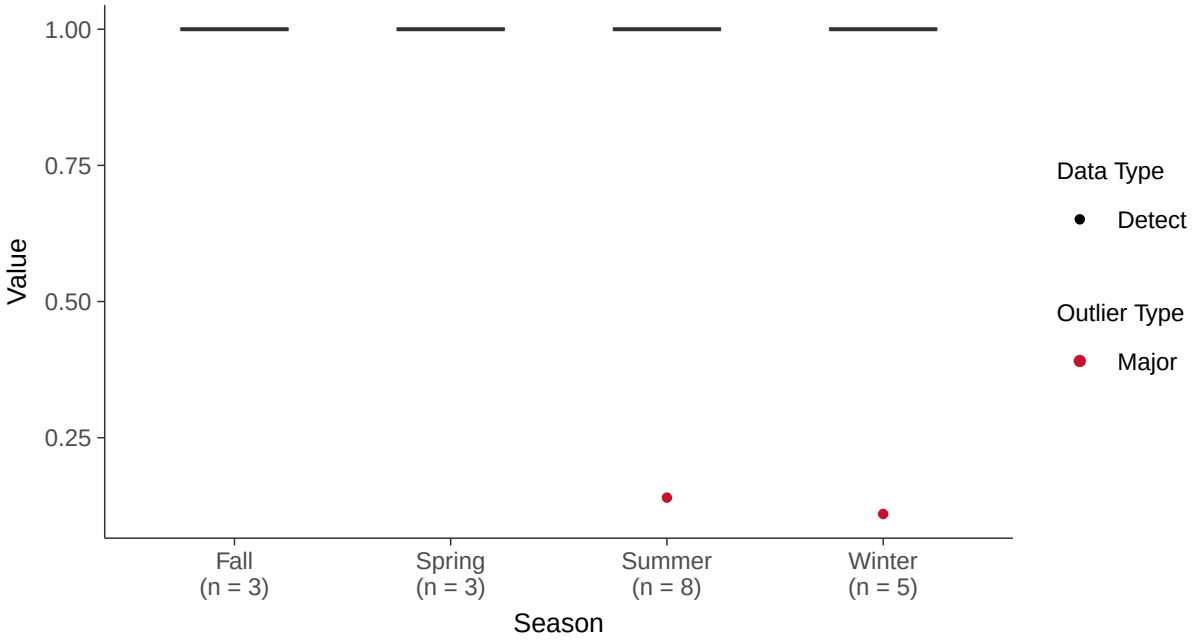
Boxplot

Fluoride (App IV), MW-5 (mg/l)



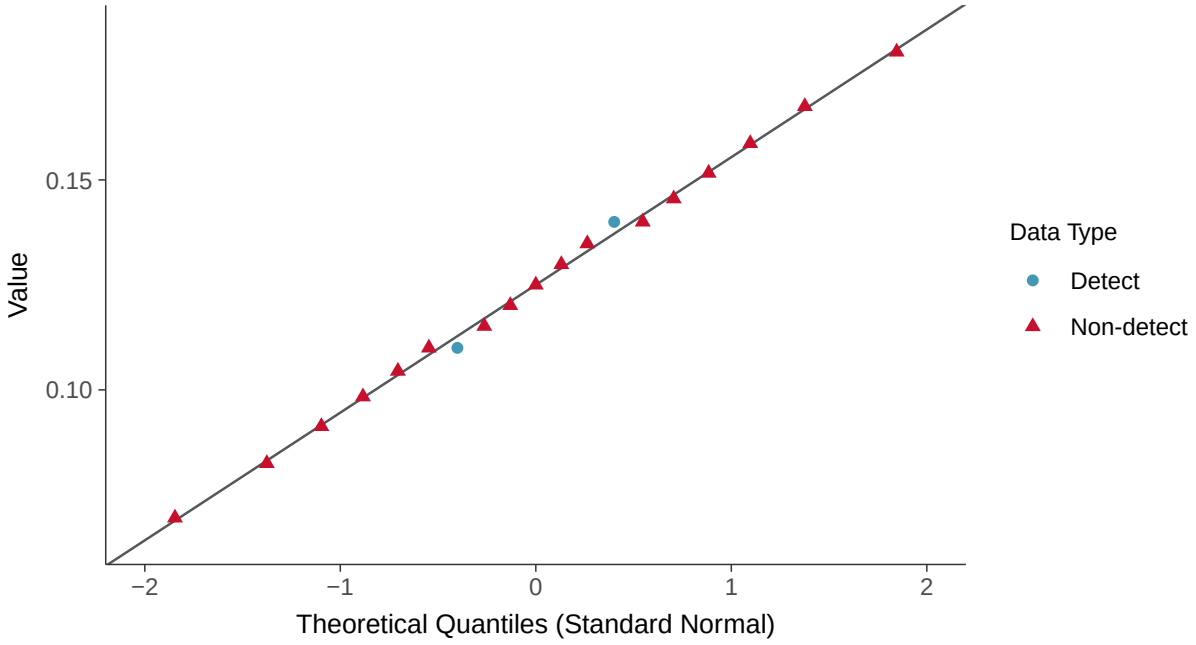
Boxplot by Season

Fluoride (App IV), MW-5 (mg/l)



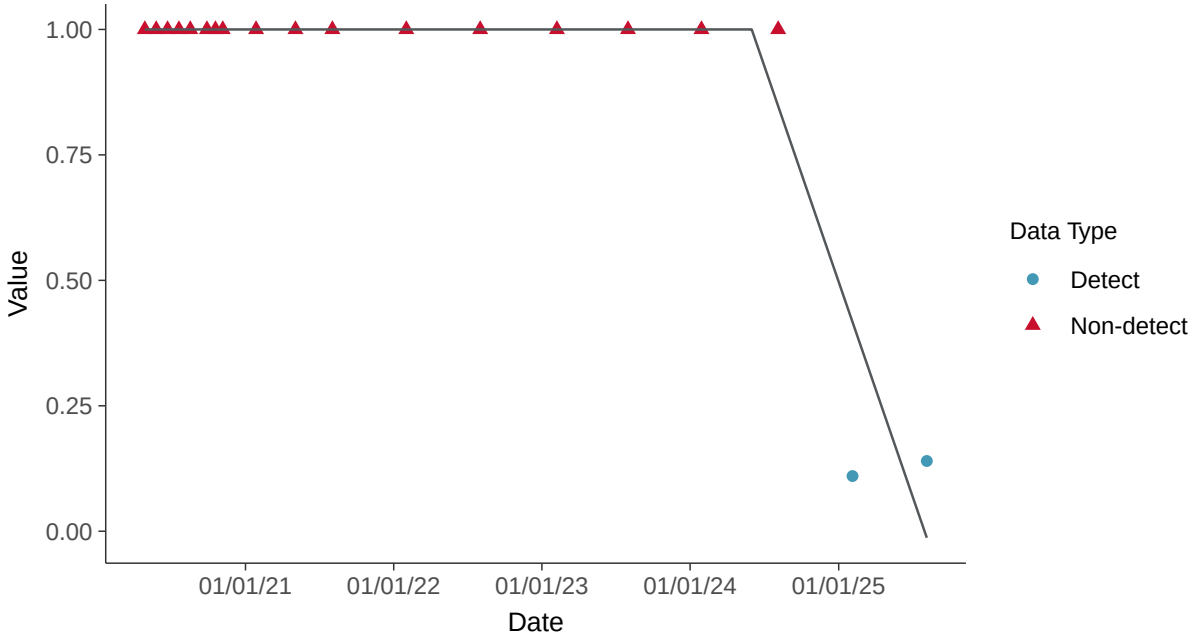
Normal Q-Q plot using ROS Imputed Estimates

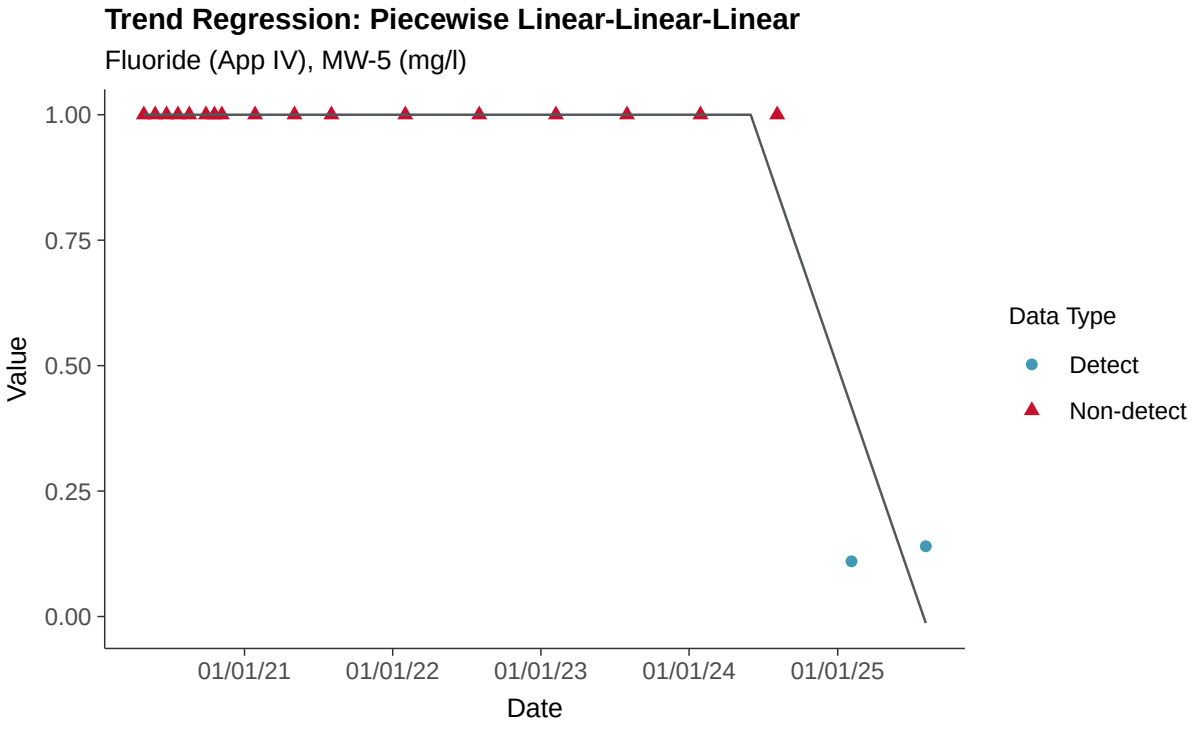
Fluoride (App IV), MW-5 (mg/l)



Trend Regression: Piecewise Linear-Linear

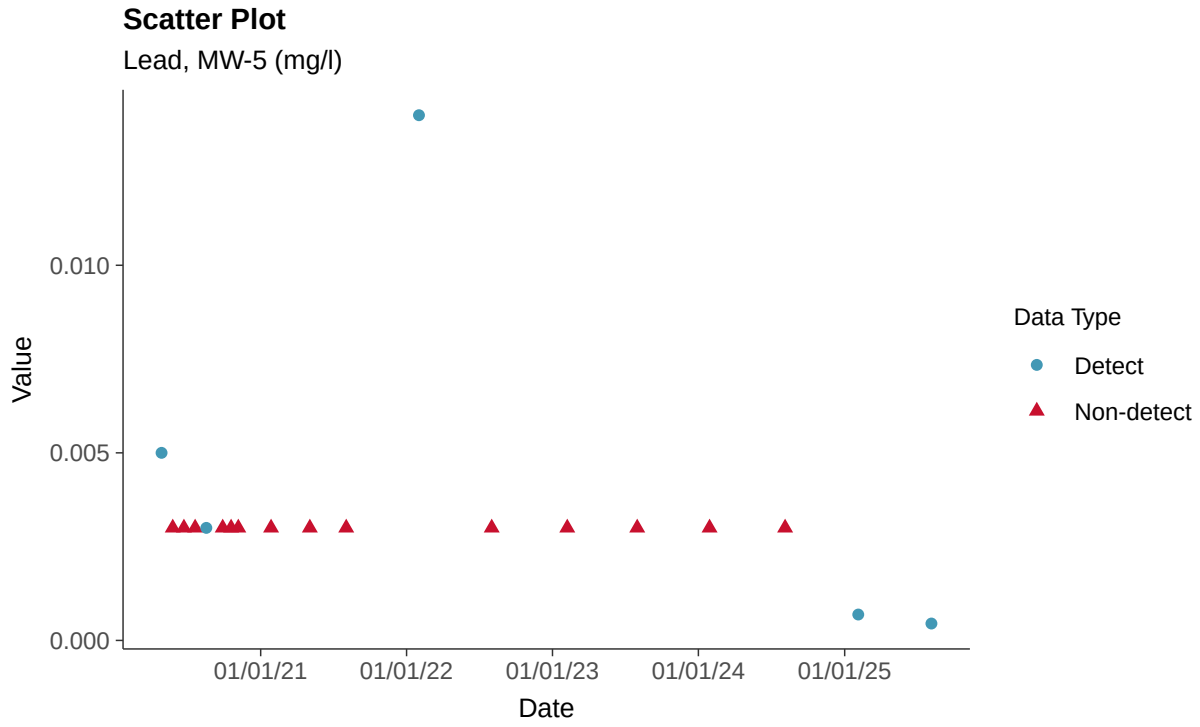
Fluoride (App IV), MW-5 (mg/l)

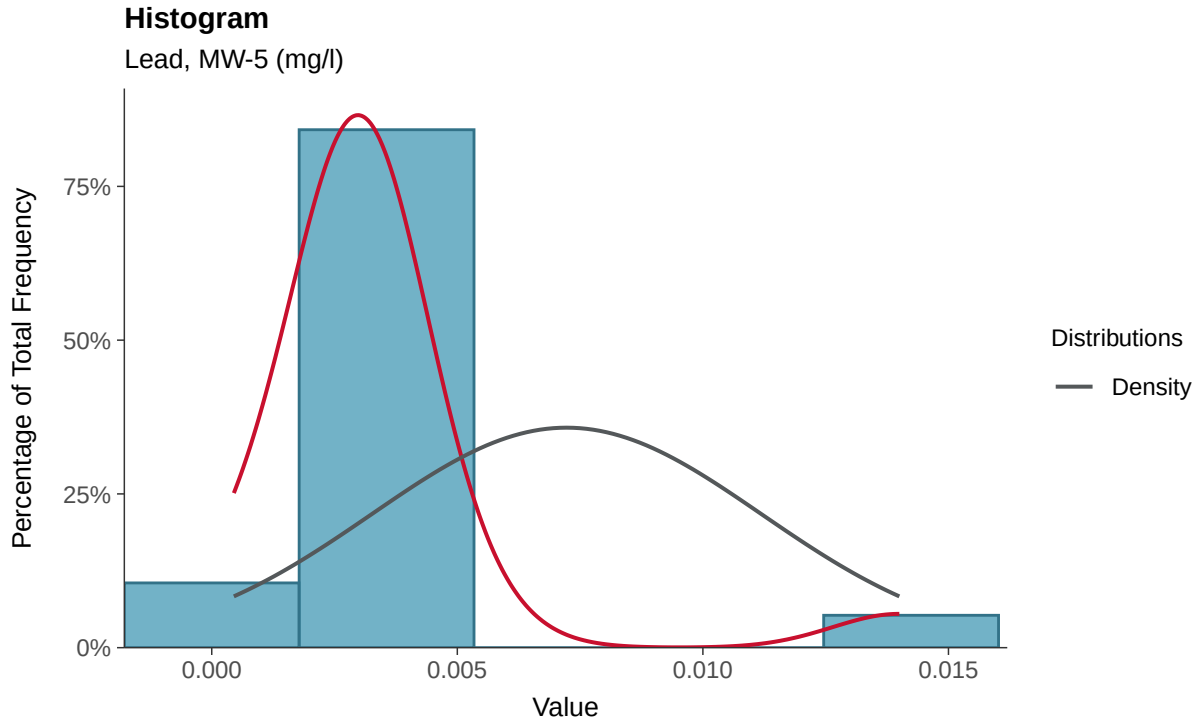



Trend Regression: Piecewise Linear-Linear-Linear
Fluoride (App IV), MW-5 (mg/l)
Value
1.00
0.75
0.50
0.25
0.00
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Lead, MW-5

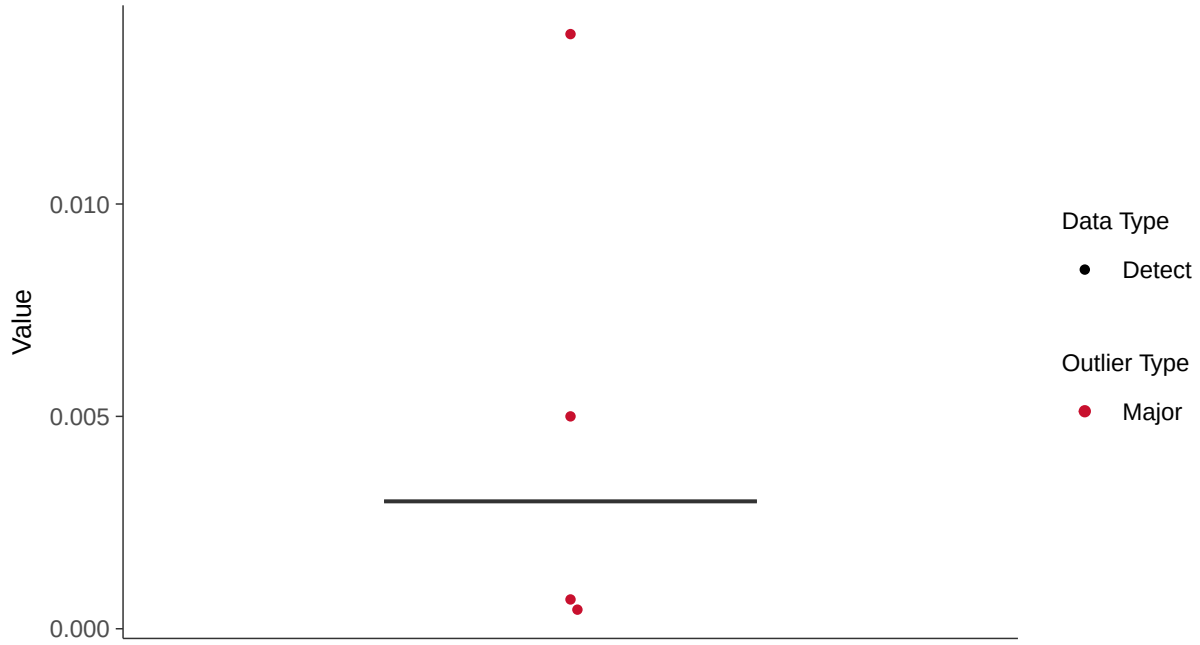
ID: 15_3_115





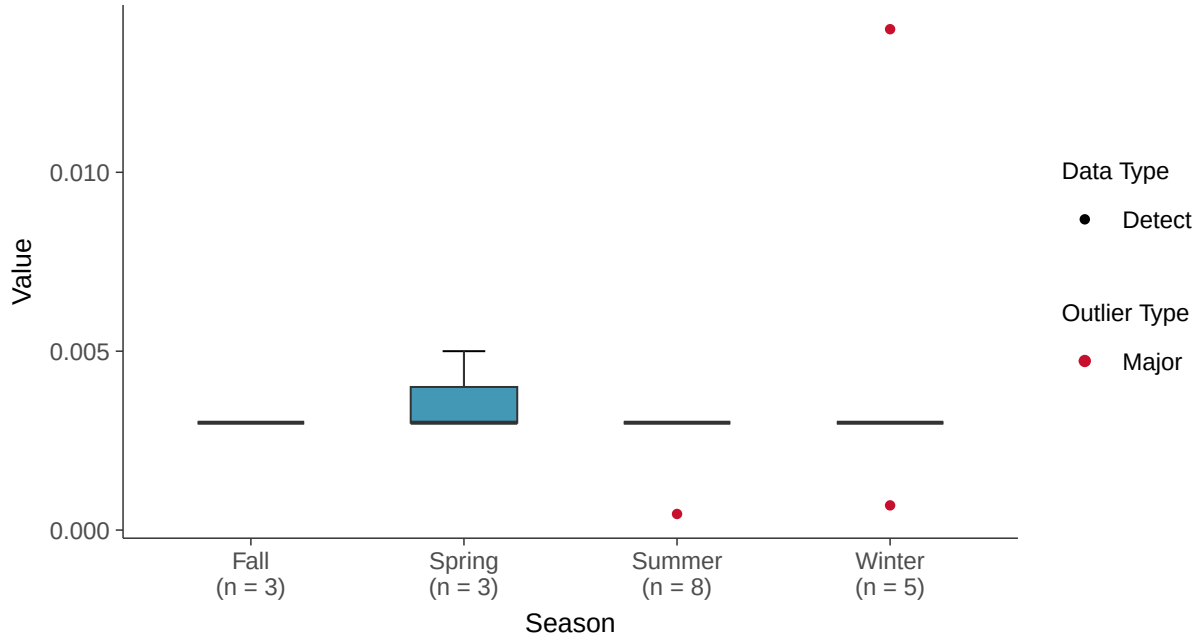
Boxplot

Lead, MW-5 (mg/l)



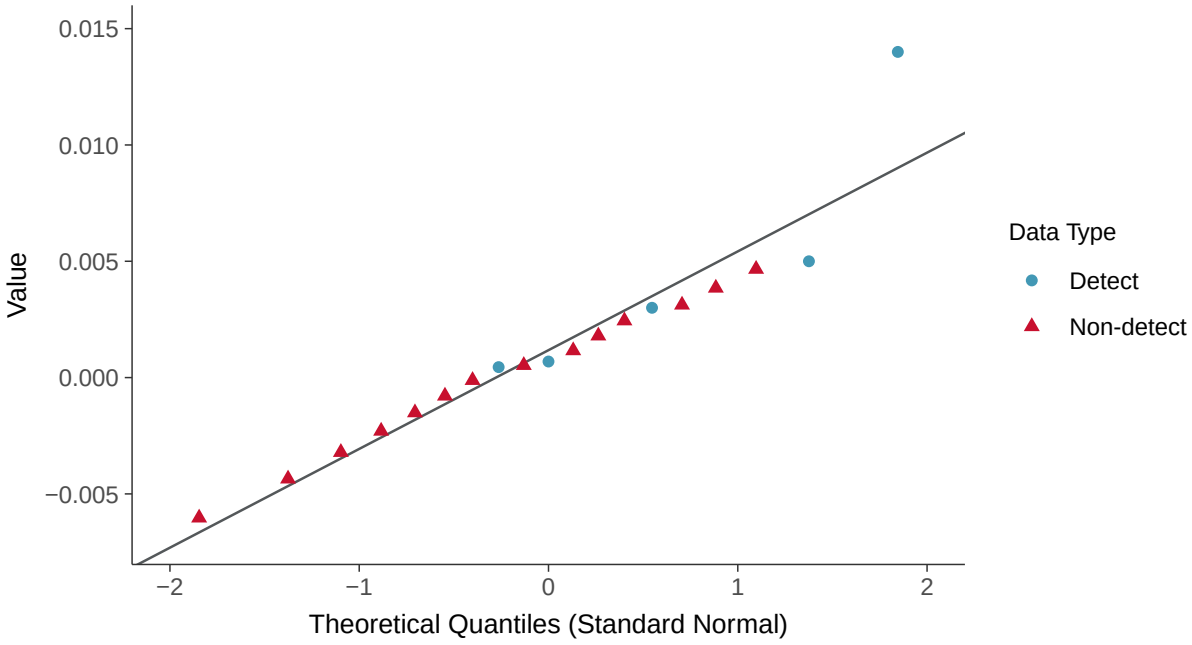
Boxplot by Season

Lead, MW-5 (mg/l)



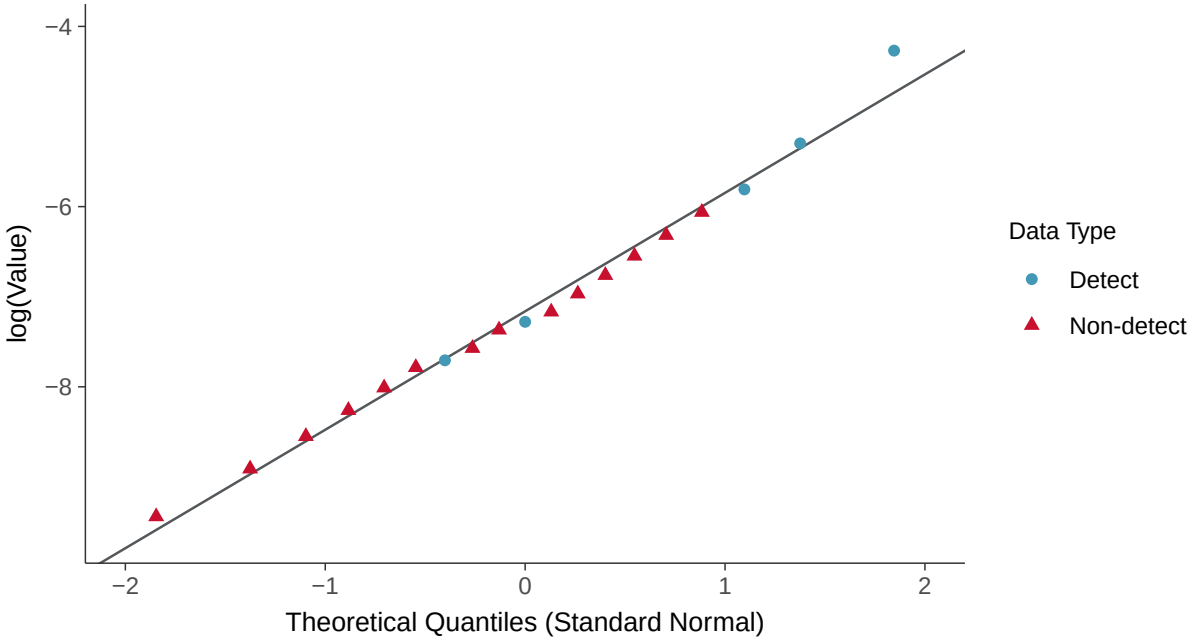
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-5 (mg/l)



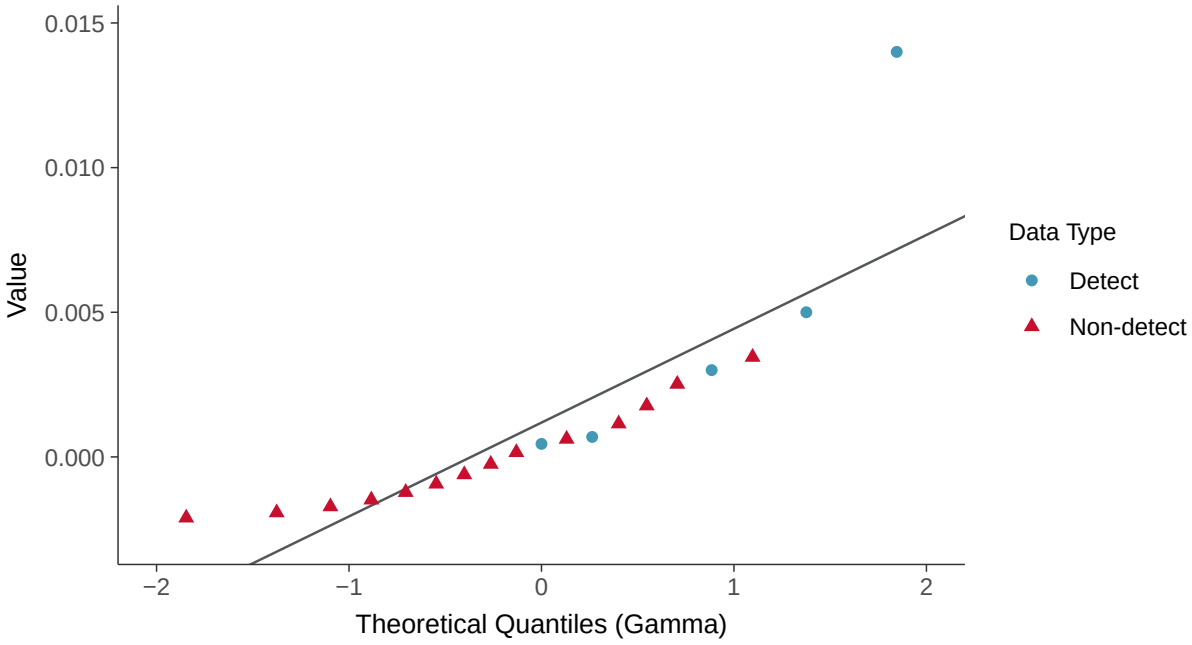
Lognormal Q-Q plot using ROS Imputed Estimates

Lead, MW-5 (mg/l)



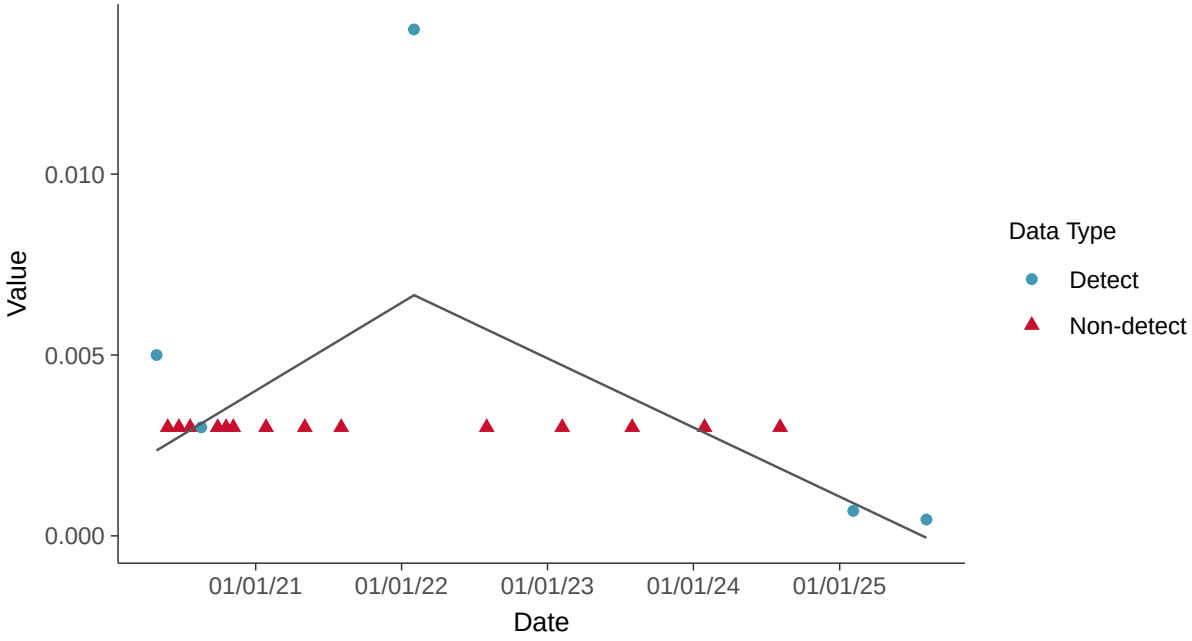
Gamma Q-Q plot using ROS Imputed Estimates

Lead, MW-5 (mg/l)



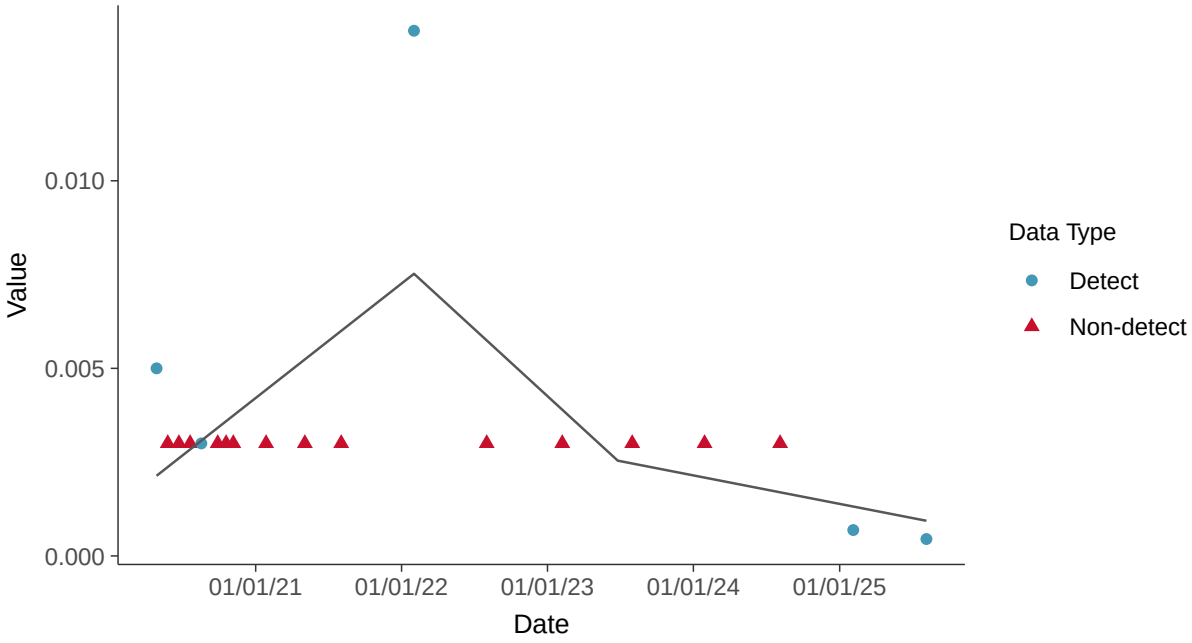
Trend Regression: Piecewise Linear-Linear

Lead, MW-5 (mg/l)



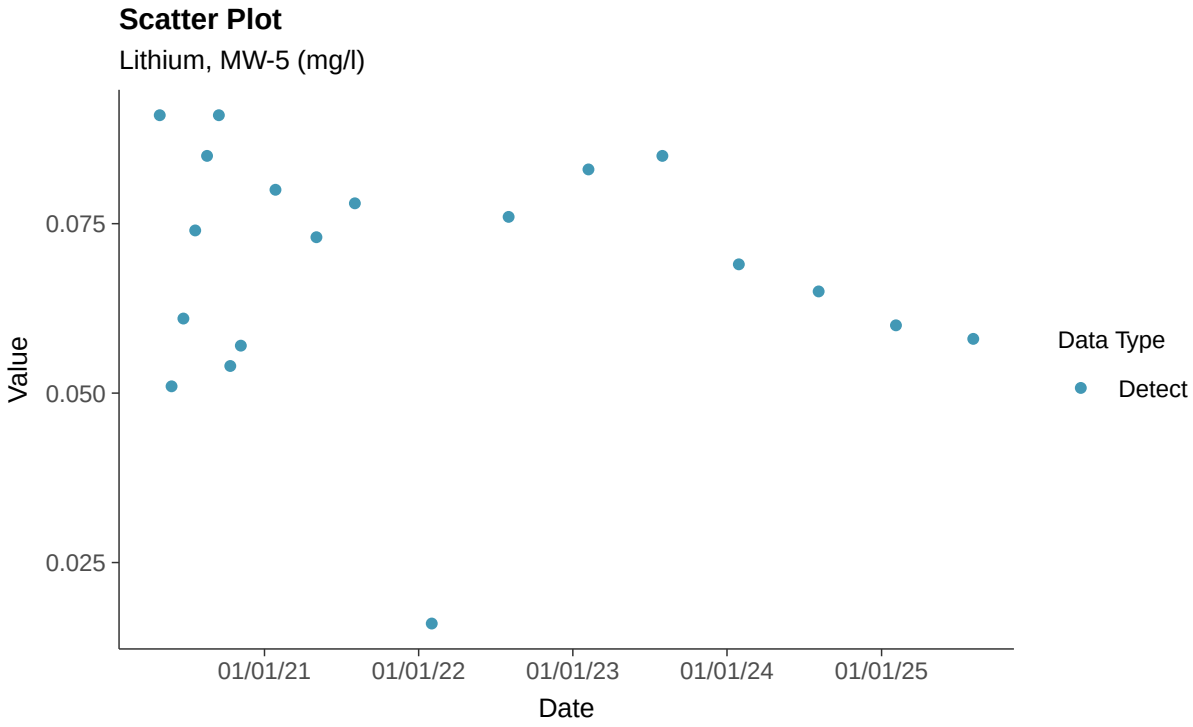
Trend Regression: Piecewise Linear-Linear-Linear

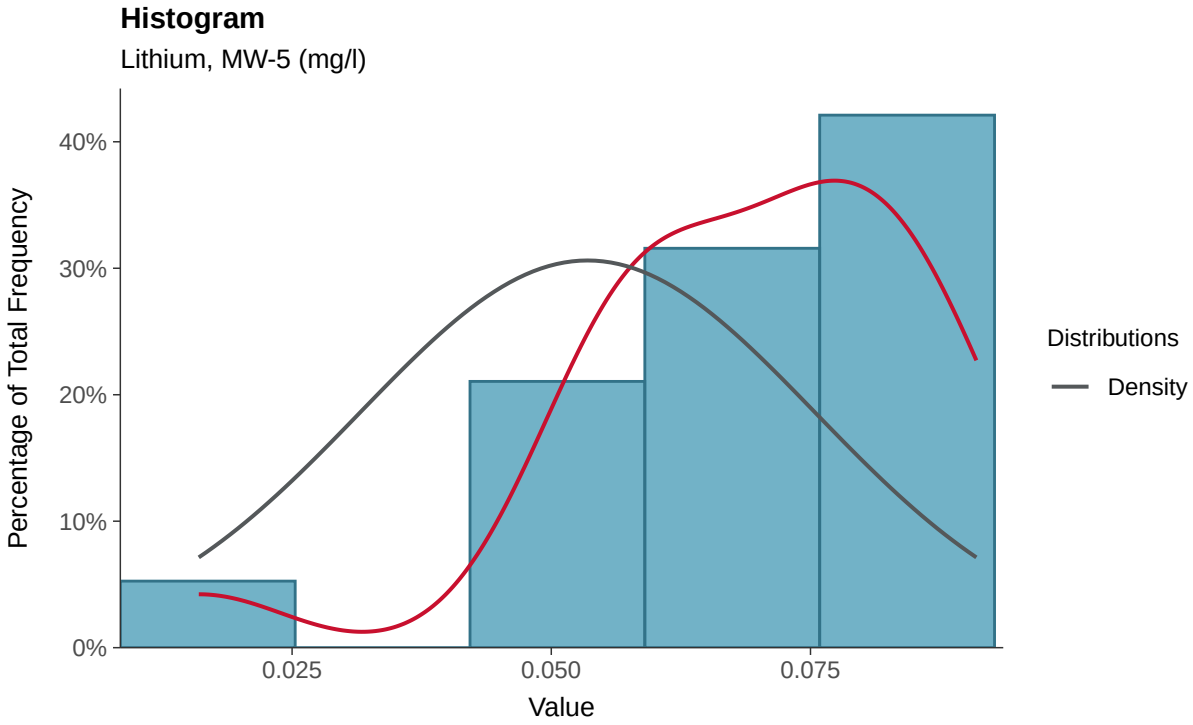
Lead, MW-5 (mg/l)



Appendix IV: Lithium, MW-5

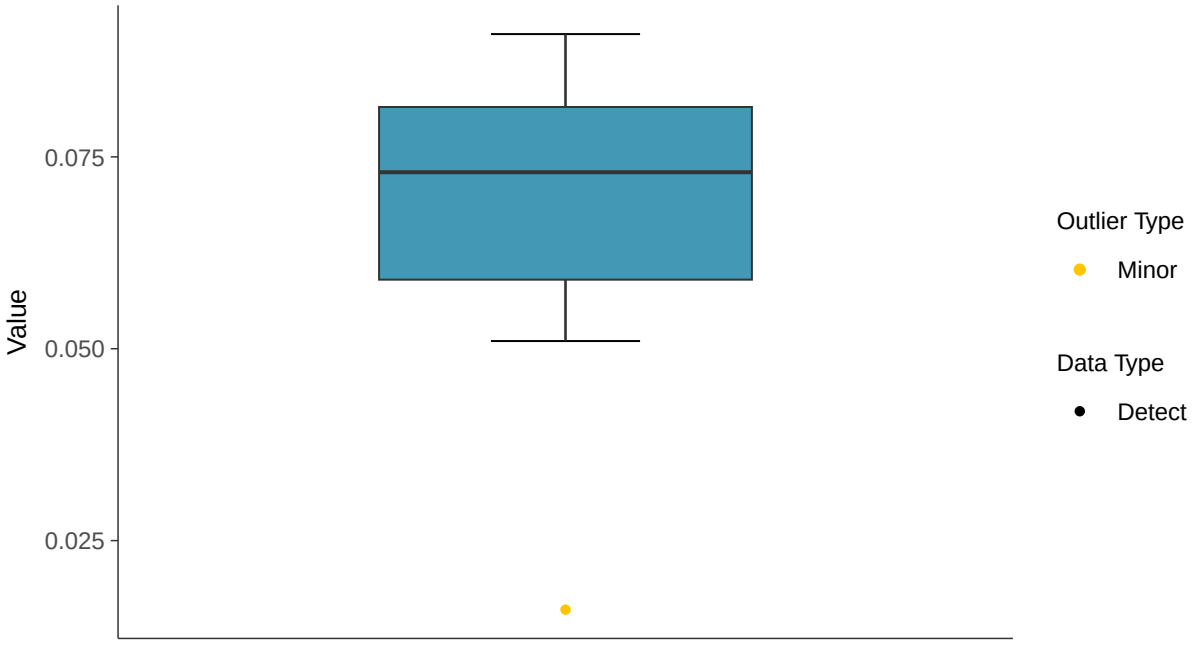
ID: 15_3_116





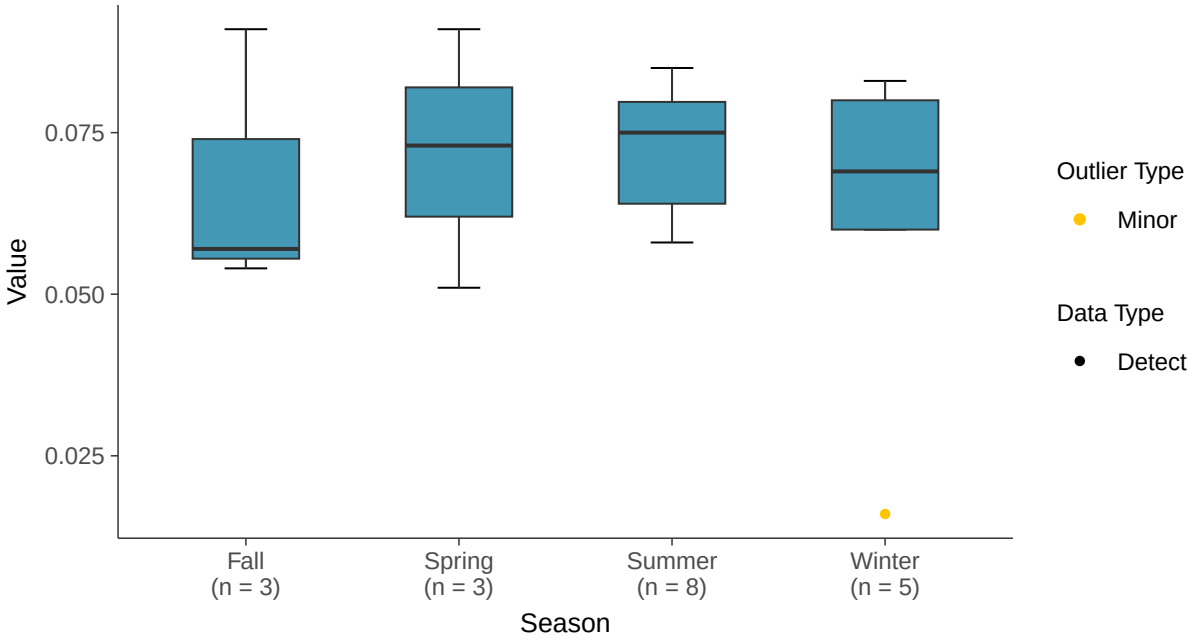
Boxplot

Lithium, MW-5 (mg/l)



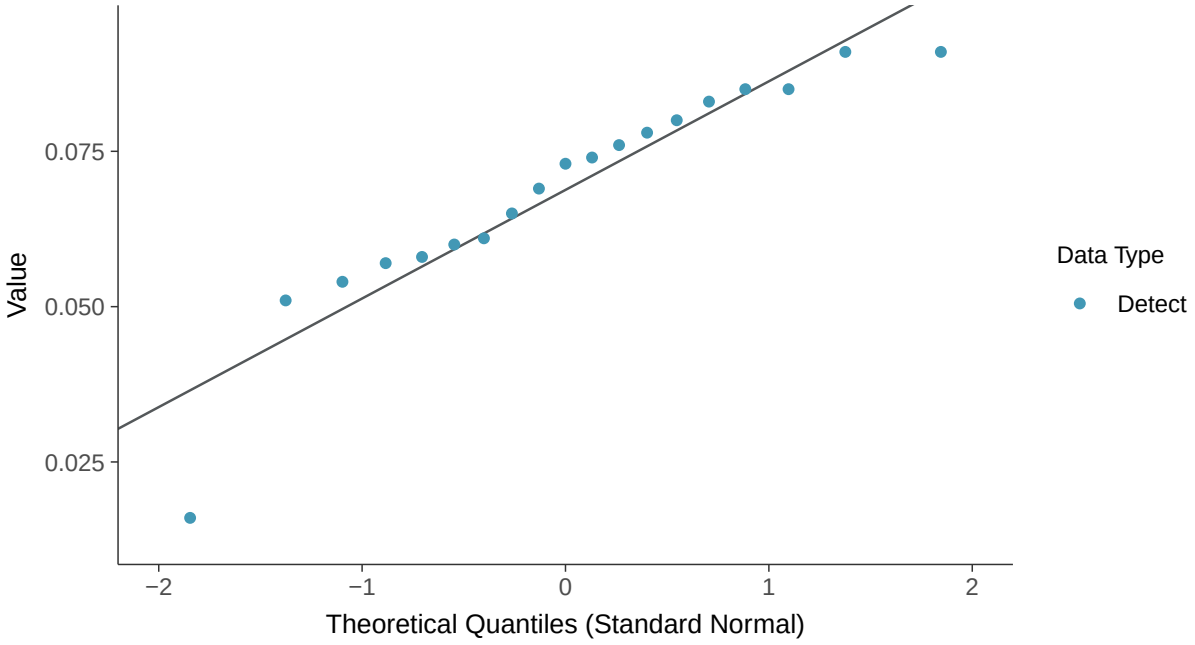
Boxplot by Season

Lithium, MW-5 (mg/l)



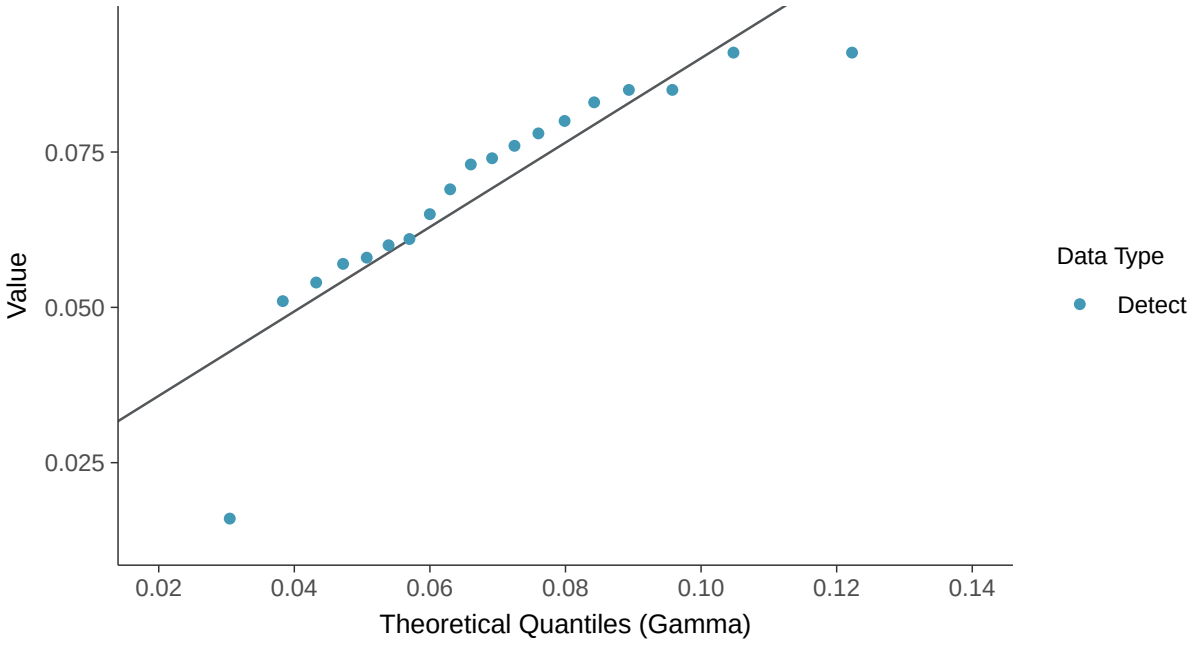
Normal Q-Q plot

Lithium, MW-5 (mg/l)



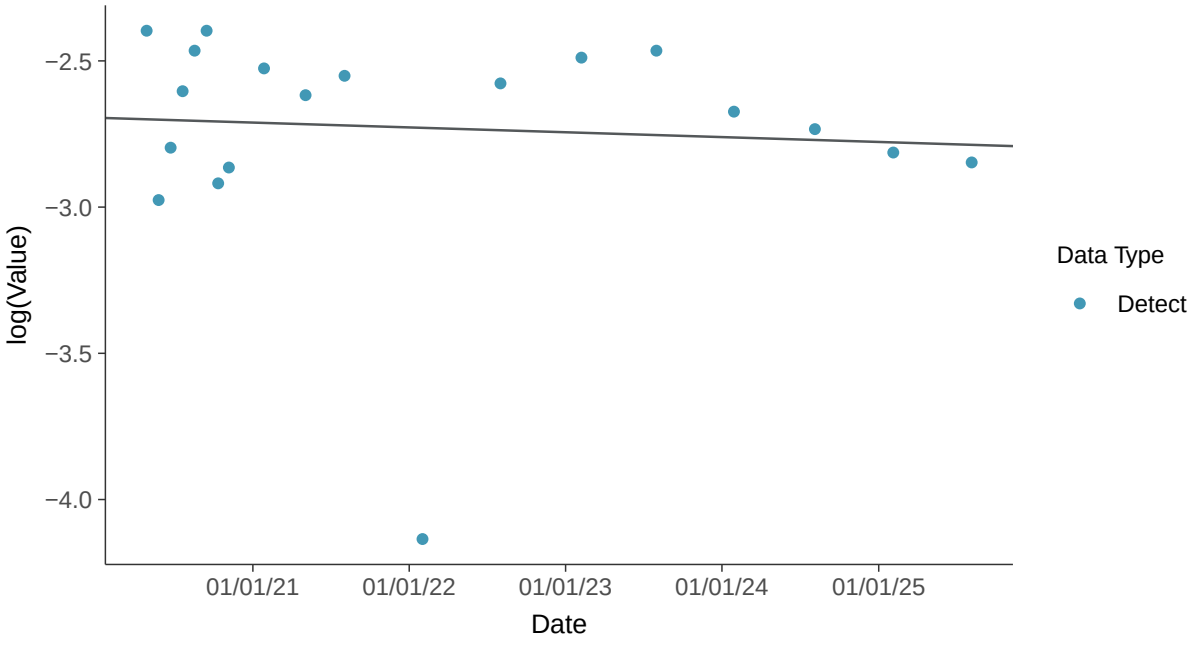
Gamma Q-Q plot

Lithium, MW-5 (mg/l)



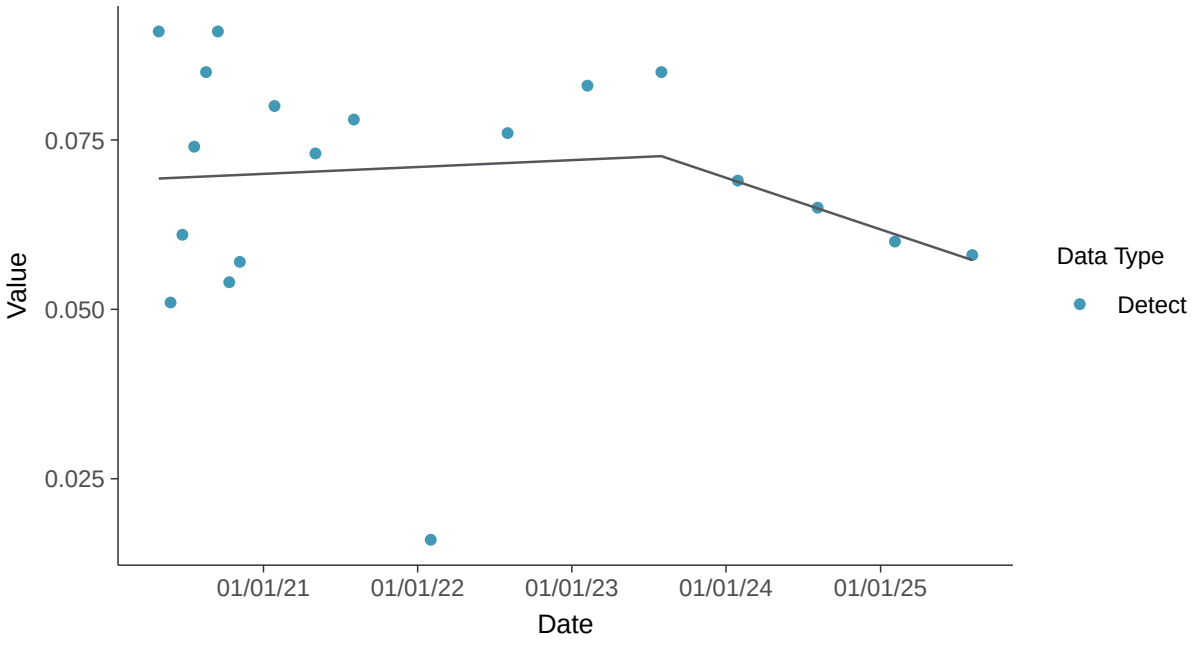
Trend Regression: Lognormal MLE

Lithium, MW-5 (mg/l)



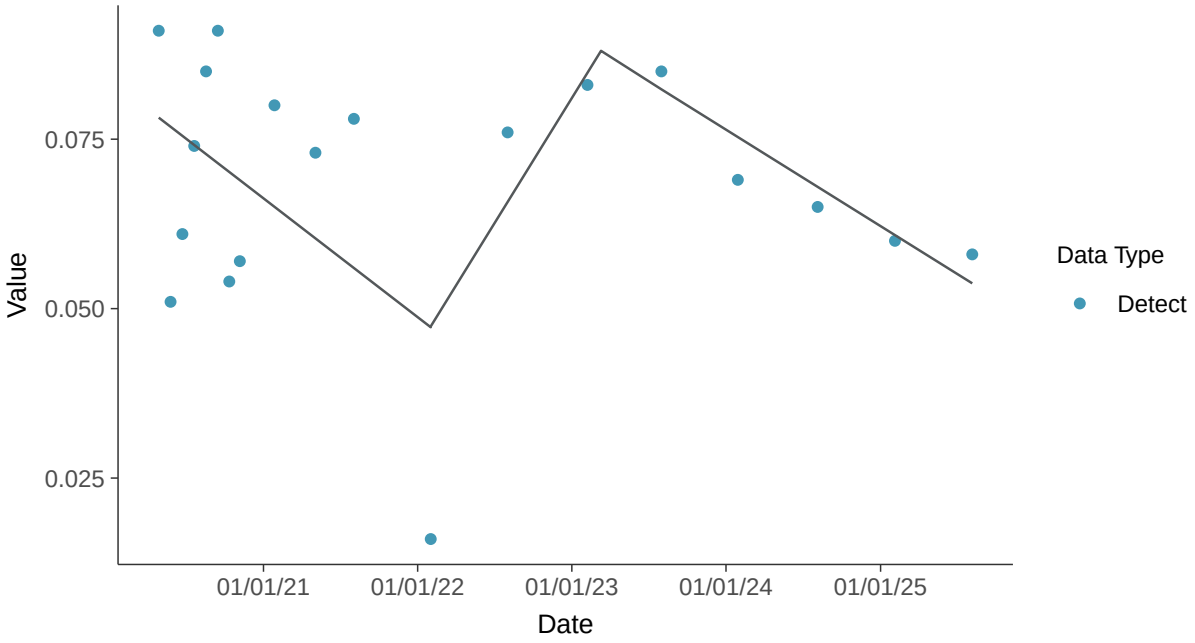
Trend Regression: Piecewise Linear-Linear

Lithium, MW-5 (mg/l)



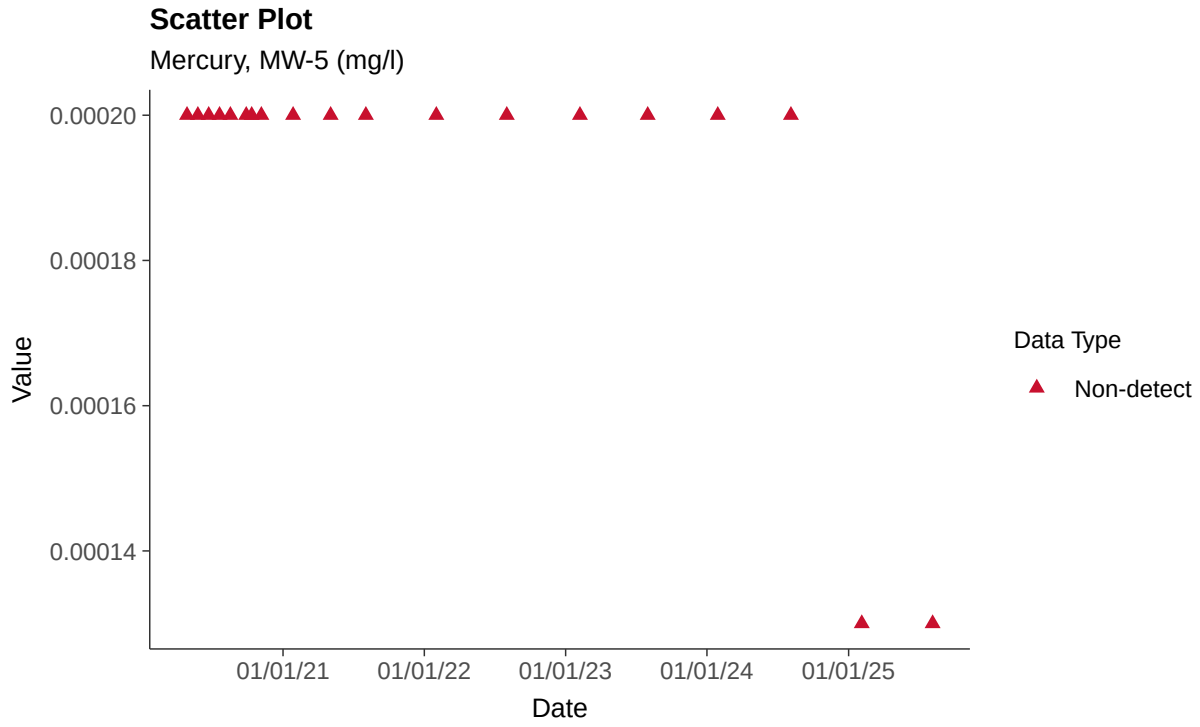
Trend Regression: Piecewise Linear-Linear-Linear

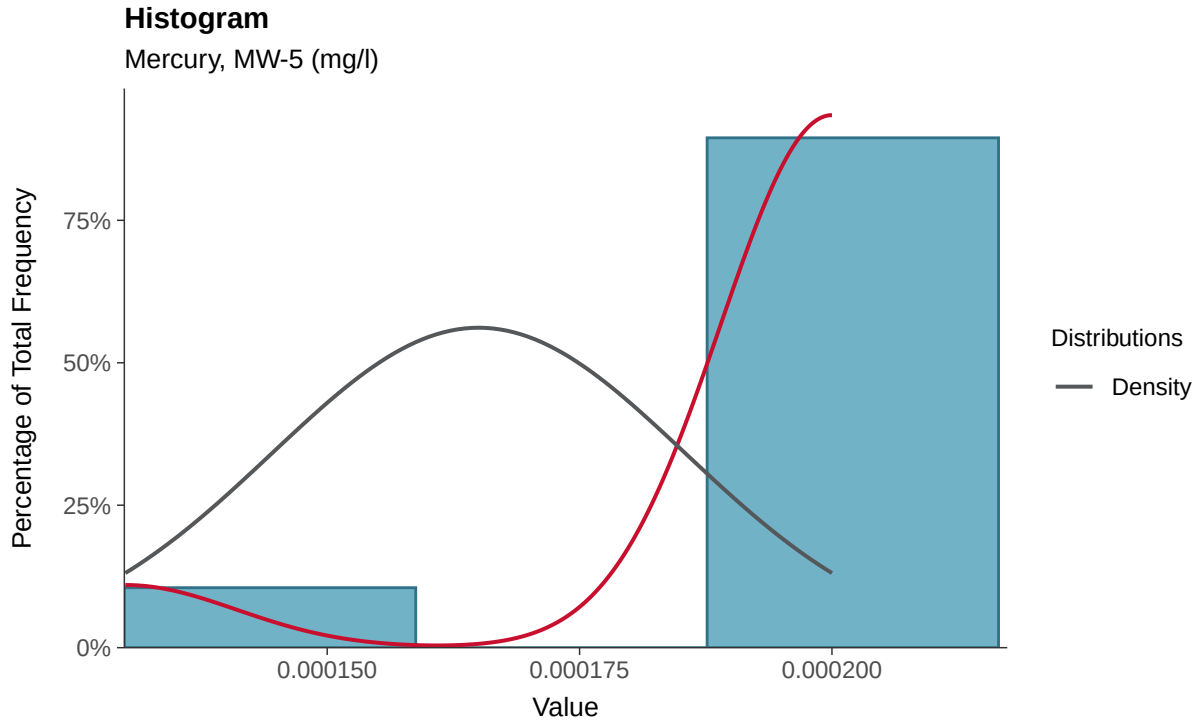
Lithium, MW-5 (mg/l)



Appendix IV: Mercury, MW-5

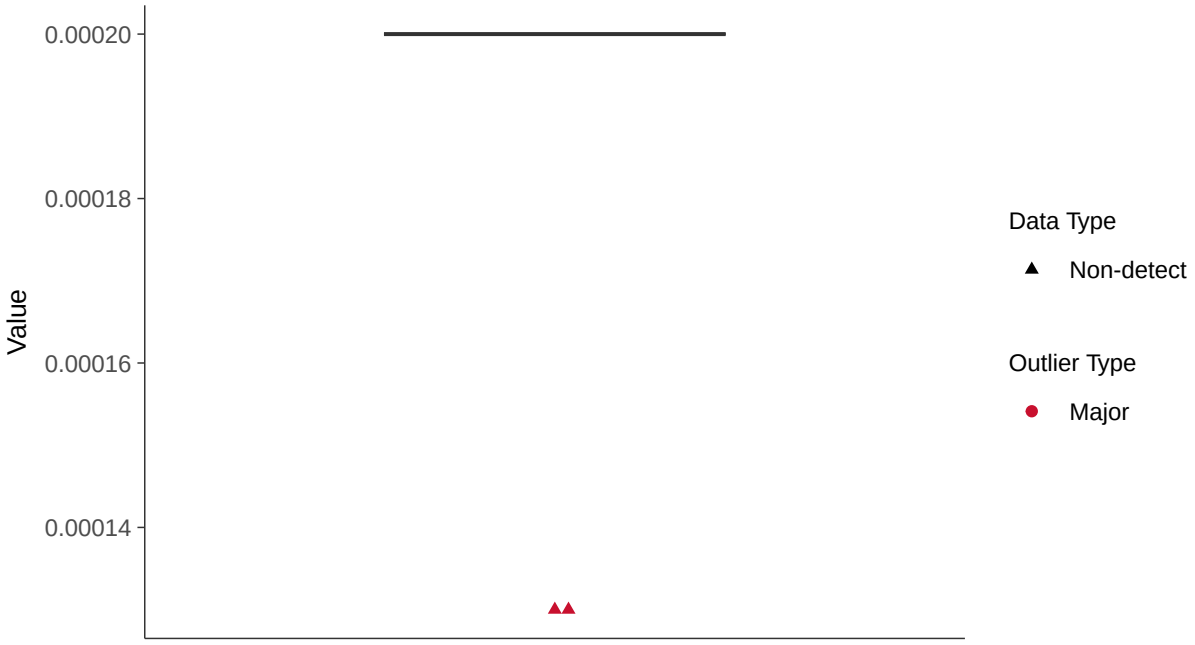
ID: 15_3_117





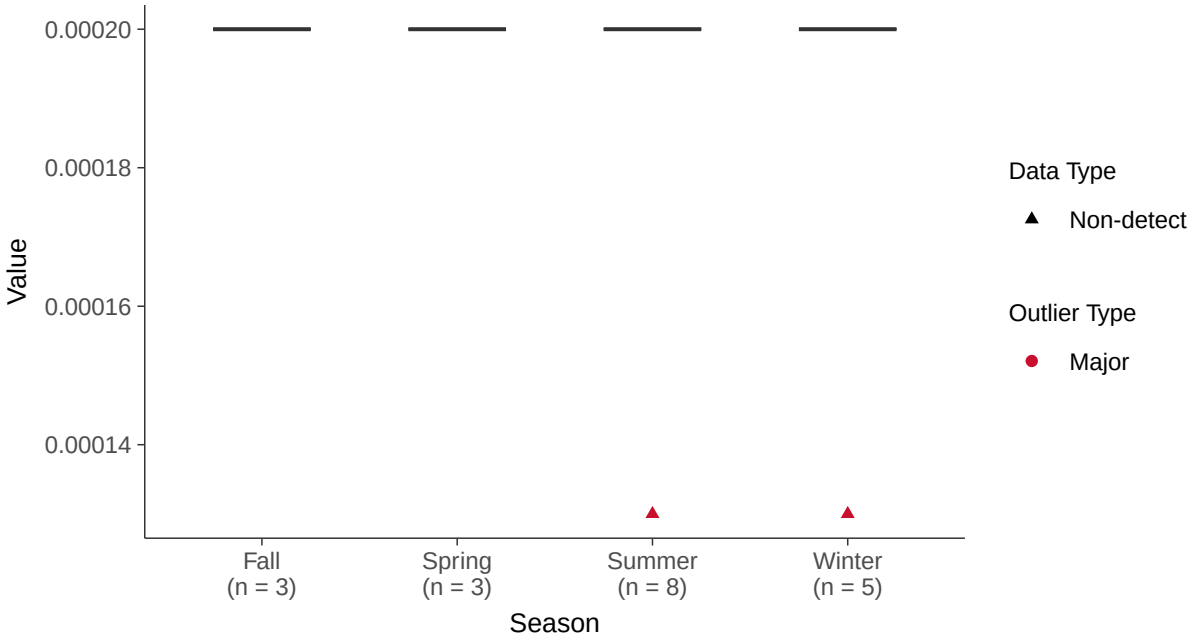
Boxplot

Mercury, MW-5 (mg/l)



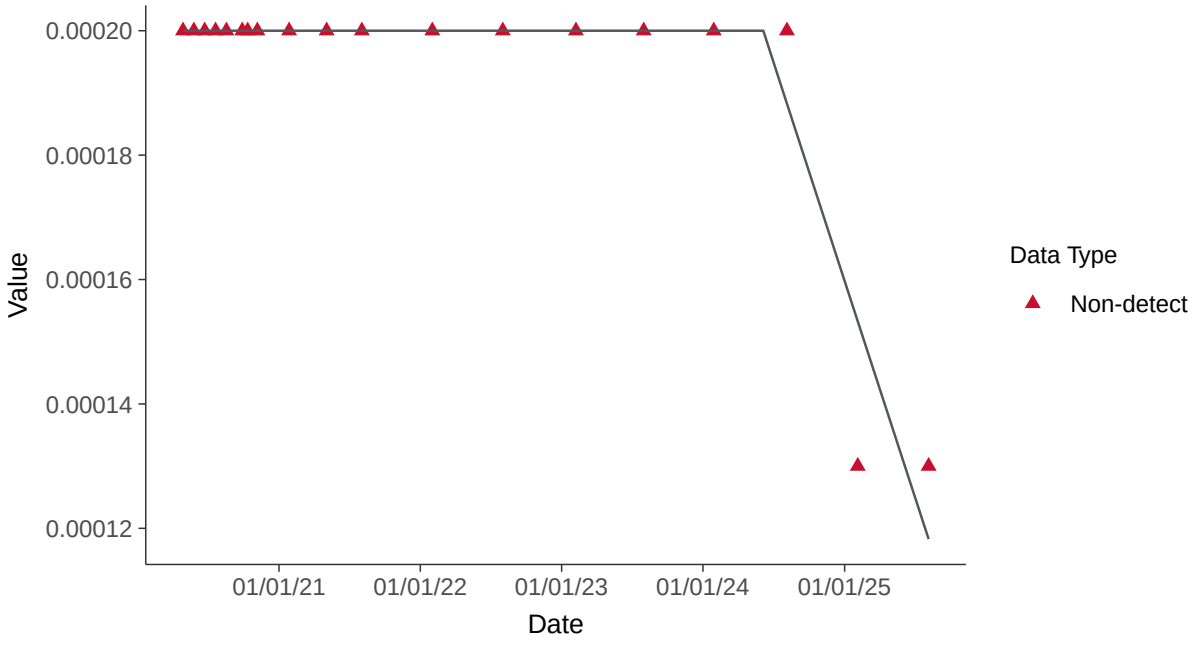
Boxplot by Season

Mercury, MW-5 (mg/l)



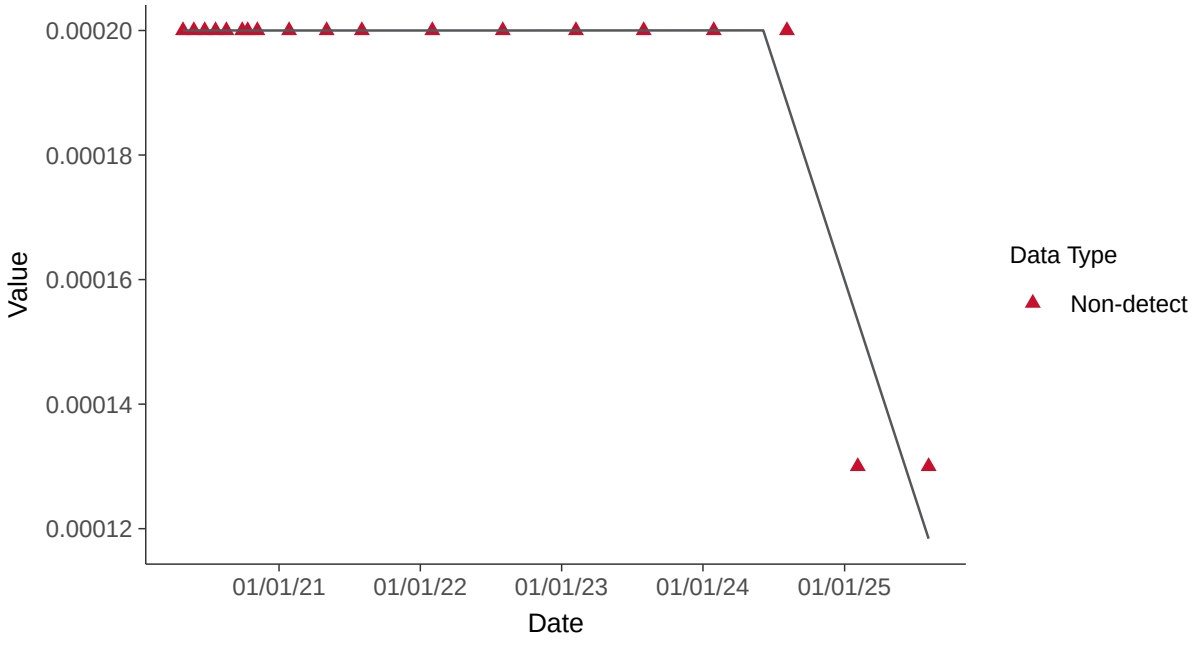
Trend Regression: Piecewise Linear-Linear

Mercury, MW-5 (mg/l)



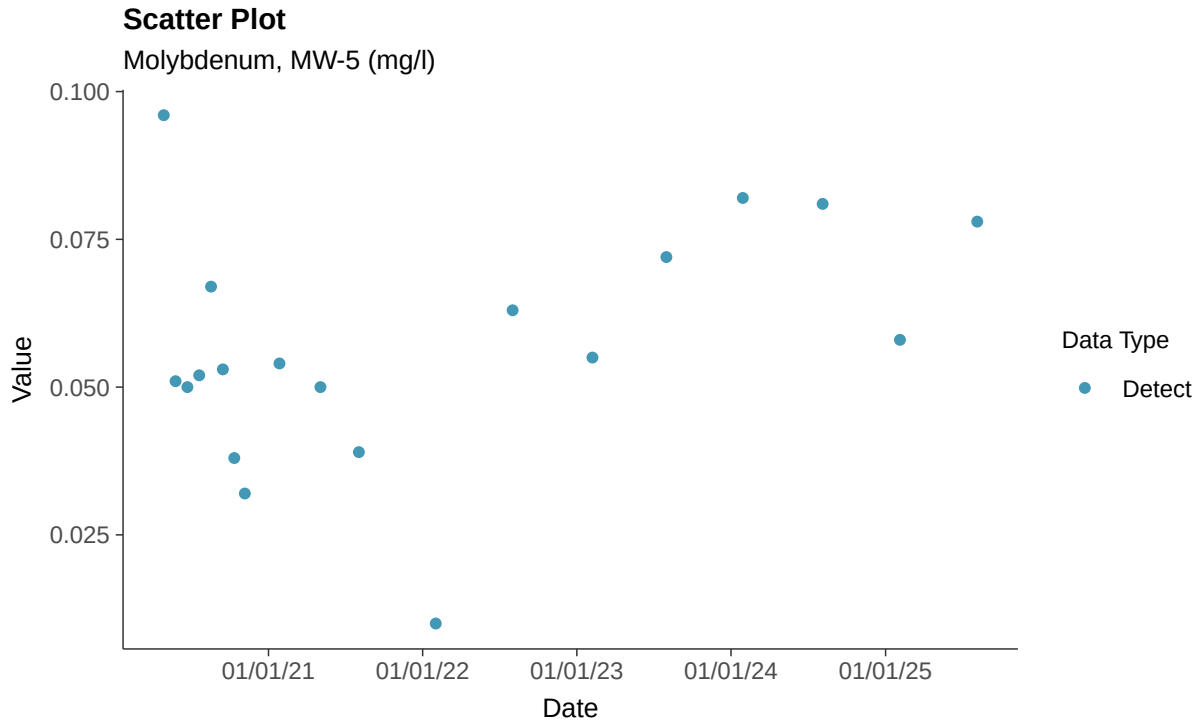
Trend Regression: Piecewise Linear-Linear-Linear

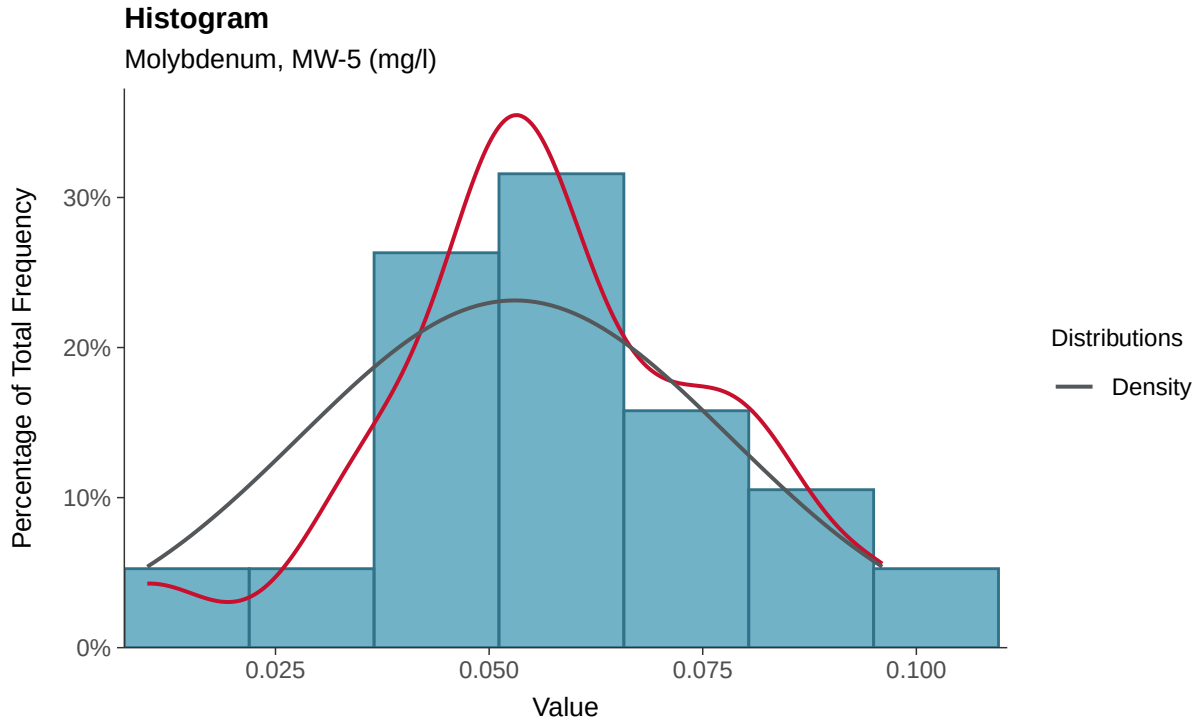
Mercury, MW-5 (mg/l)



Appendix IV: Molybdenum, MW-5

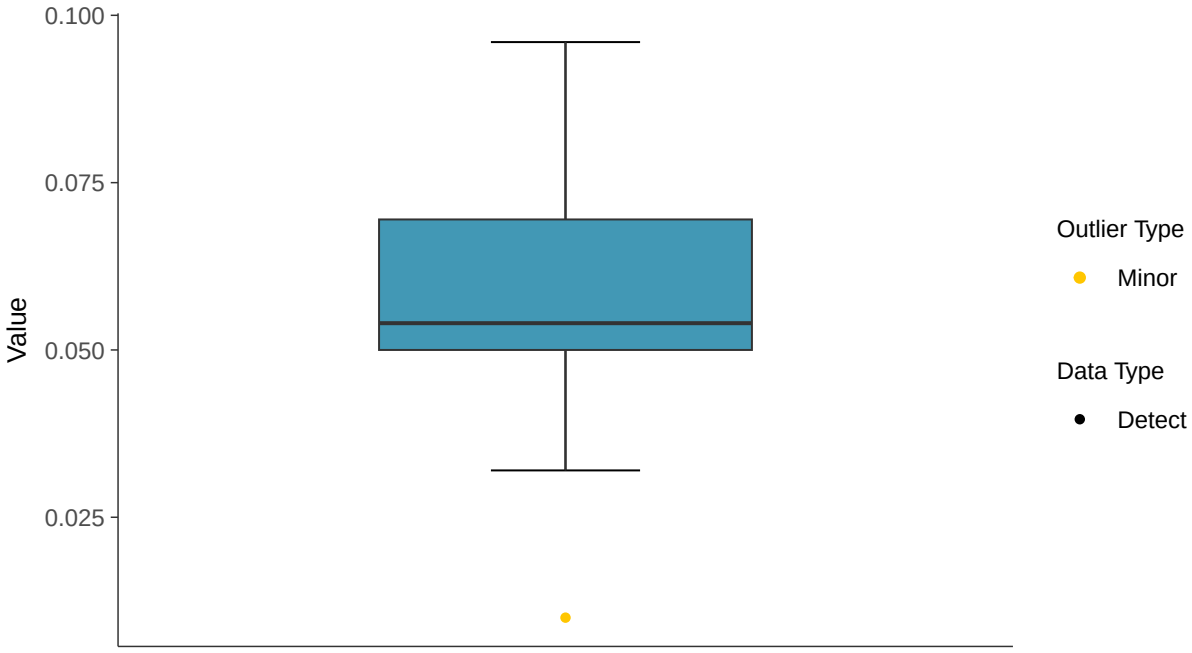
ID: 15_3_118





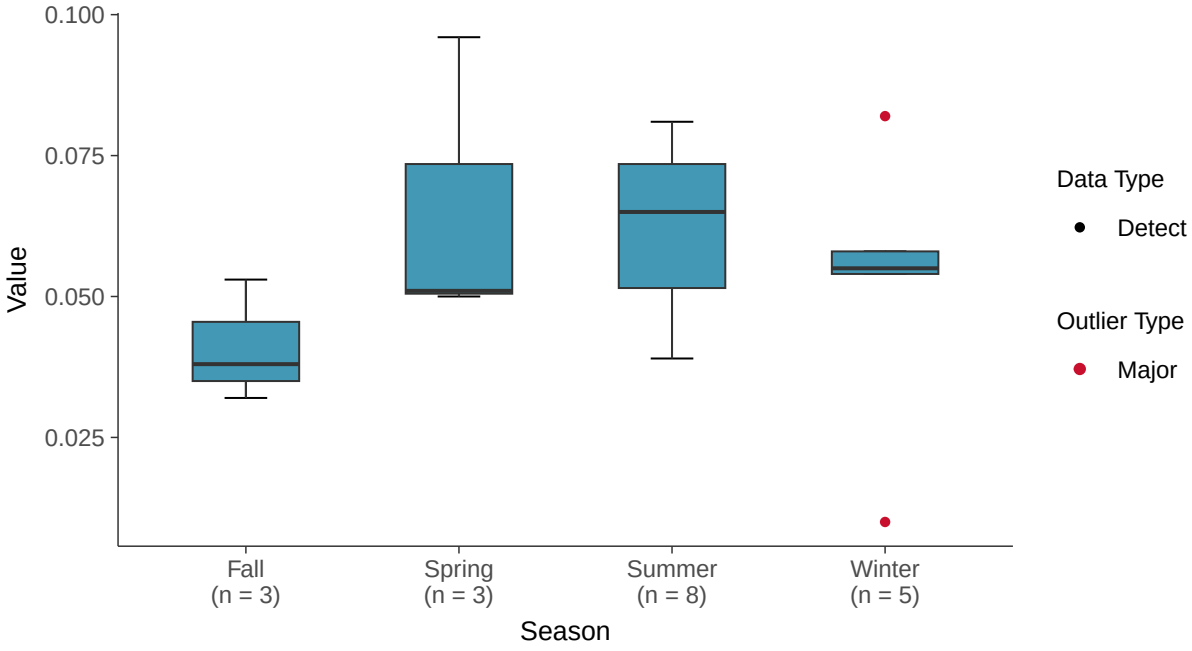
Boxplot

Molybdenum, MW-5 (mg/l)



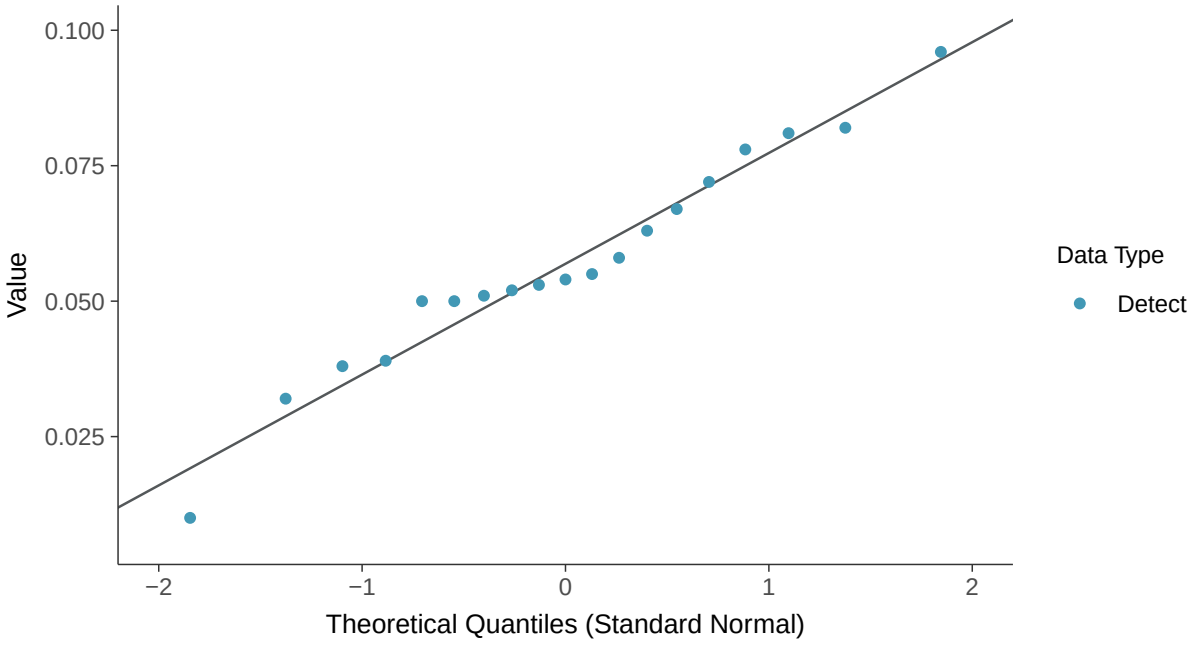
Boxplot by Season

Molybdenum, MW-5 (mg/l)



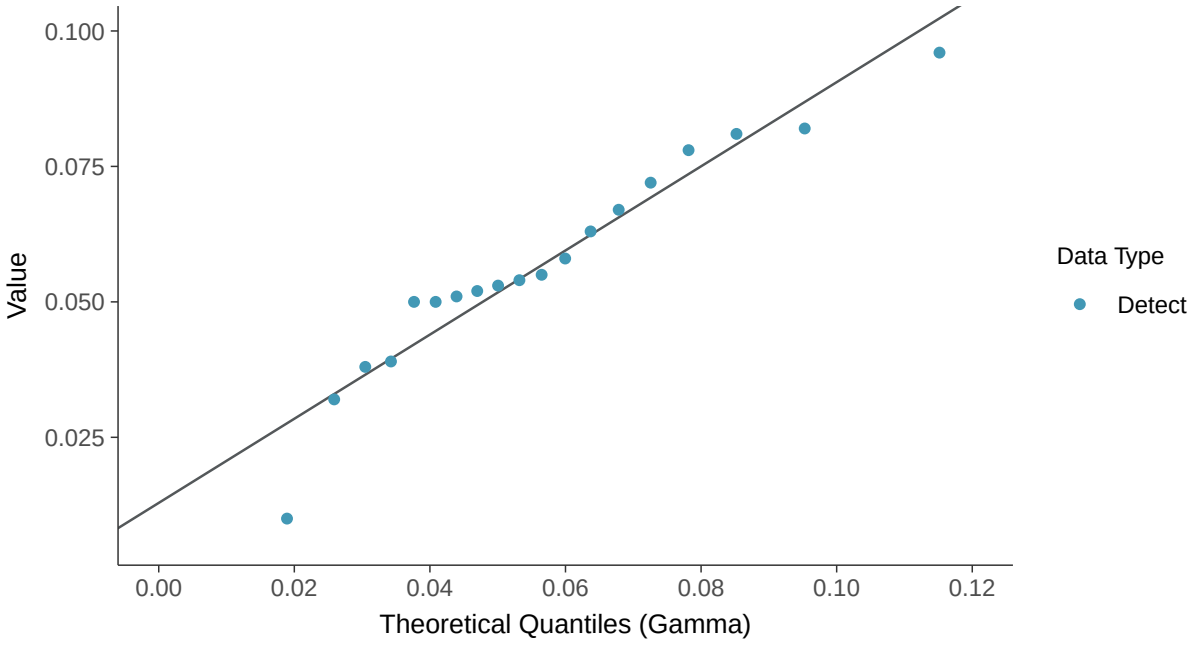
Normal Q-Q plot

Molybdenum, MW-5 (mg/l)



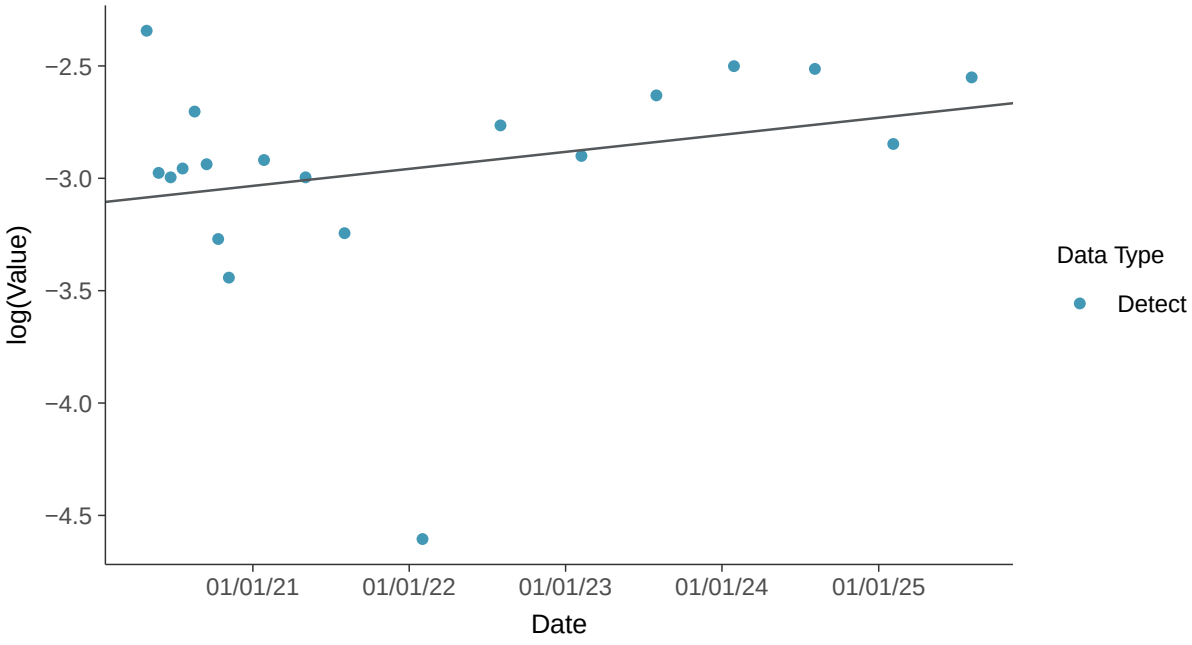
Gamma Q-Q plot

Molybdenum, MW-5 (mg/l)



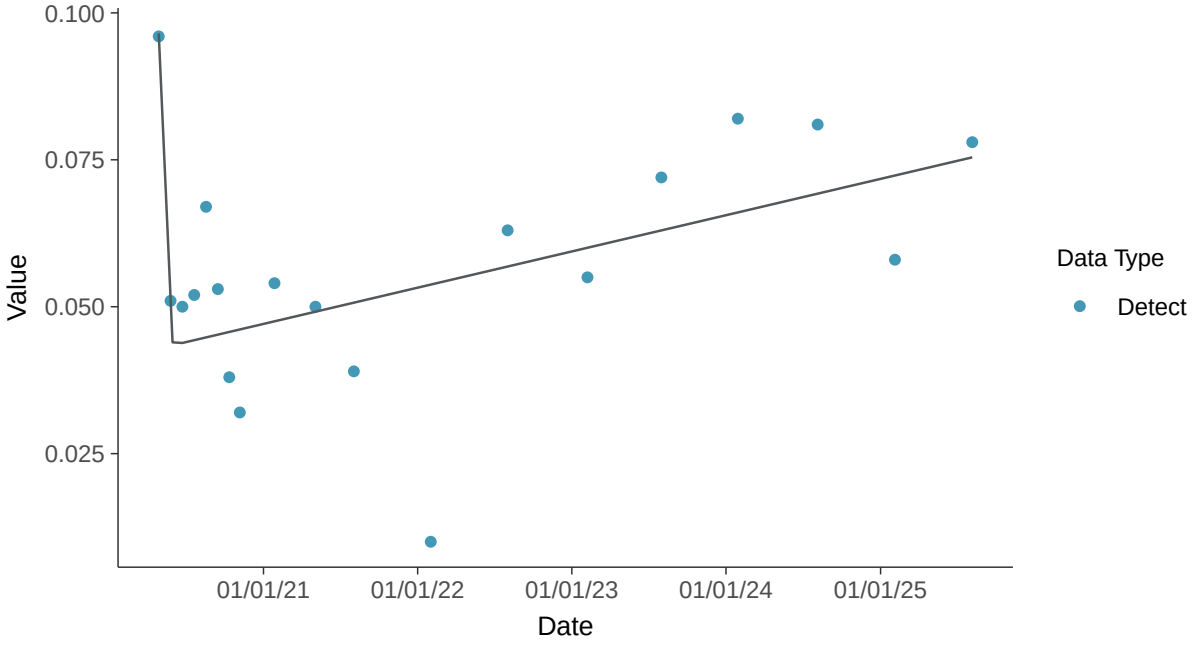
Trend Regression: Lognormal MLE

Molybdenum, MW-5 (mg/l)



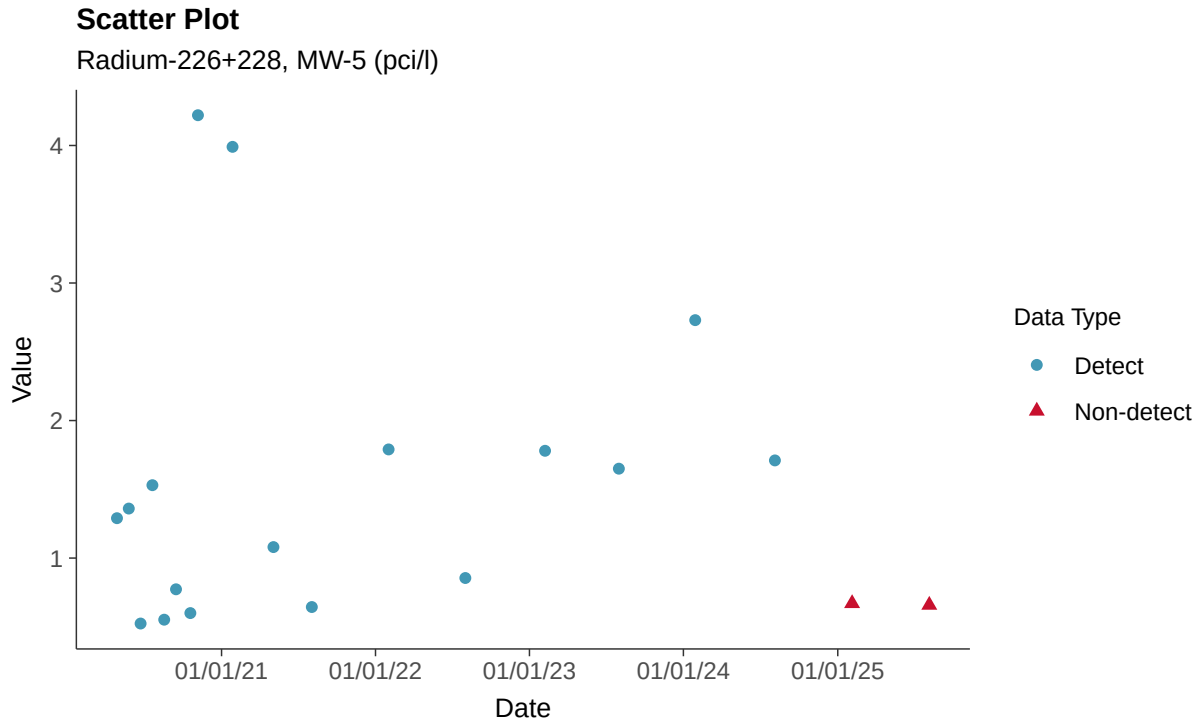
Trend Regression: Piecewise Linear-Linear

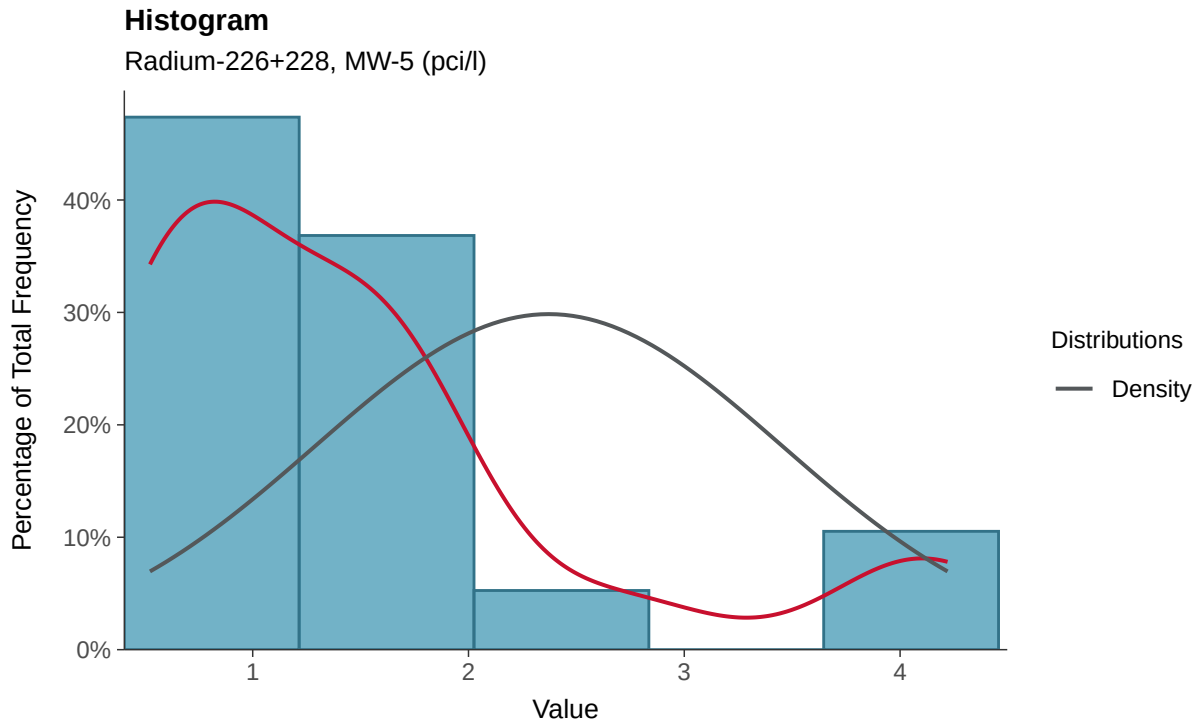
Molybdenum, MW-5 (mg/l)



Appendix IV: Radium-226+228, MW-5

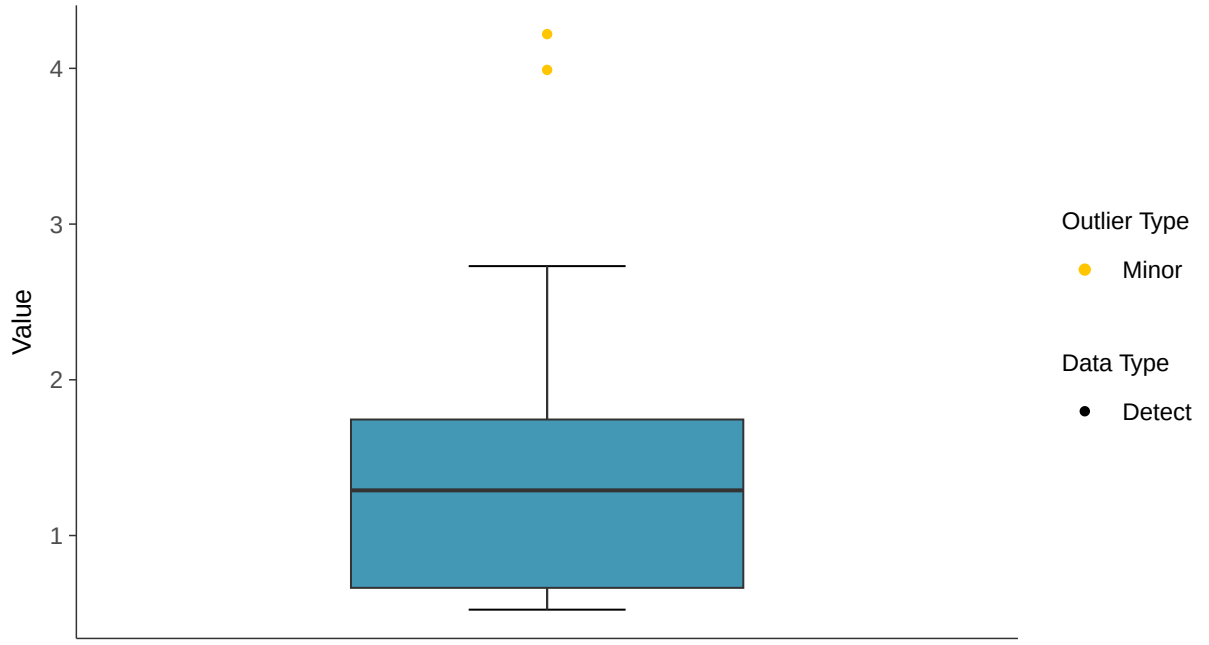
ID: 15_3_121





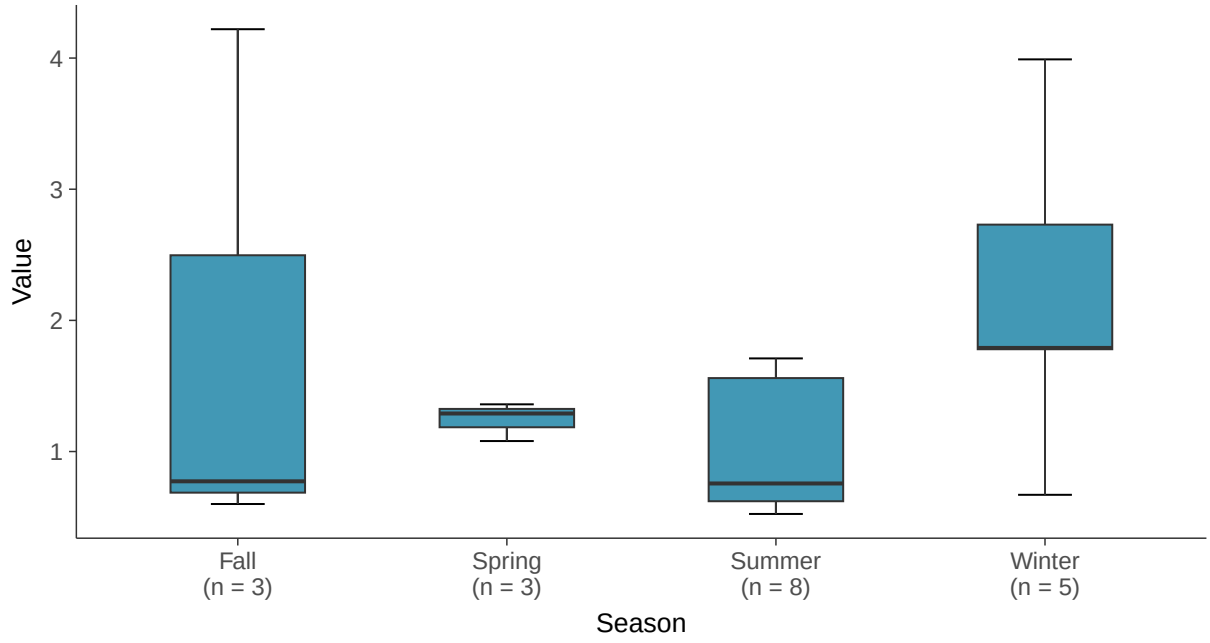
Boxplot

Radium-226+228, MW-5 (pci/l)



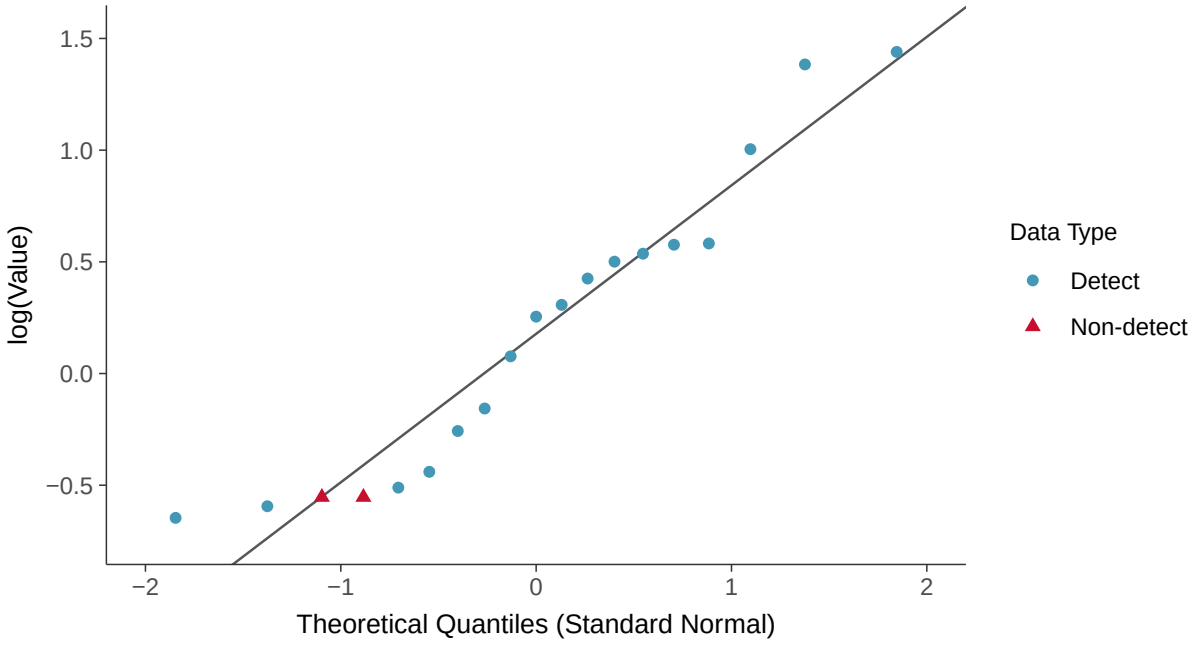
Boxplot by Season

Radium-226+228, MW-5 (pci/l)



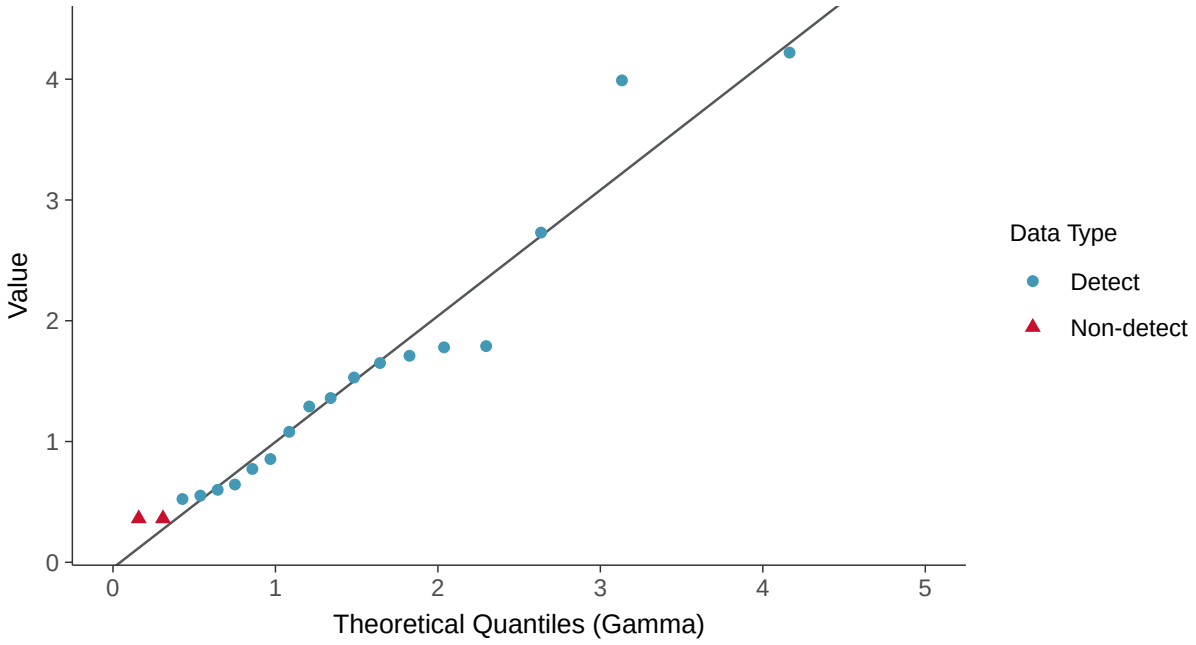
Lognormal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-5 (pci/l)



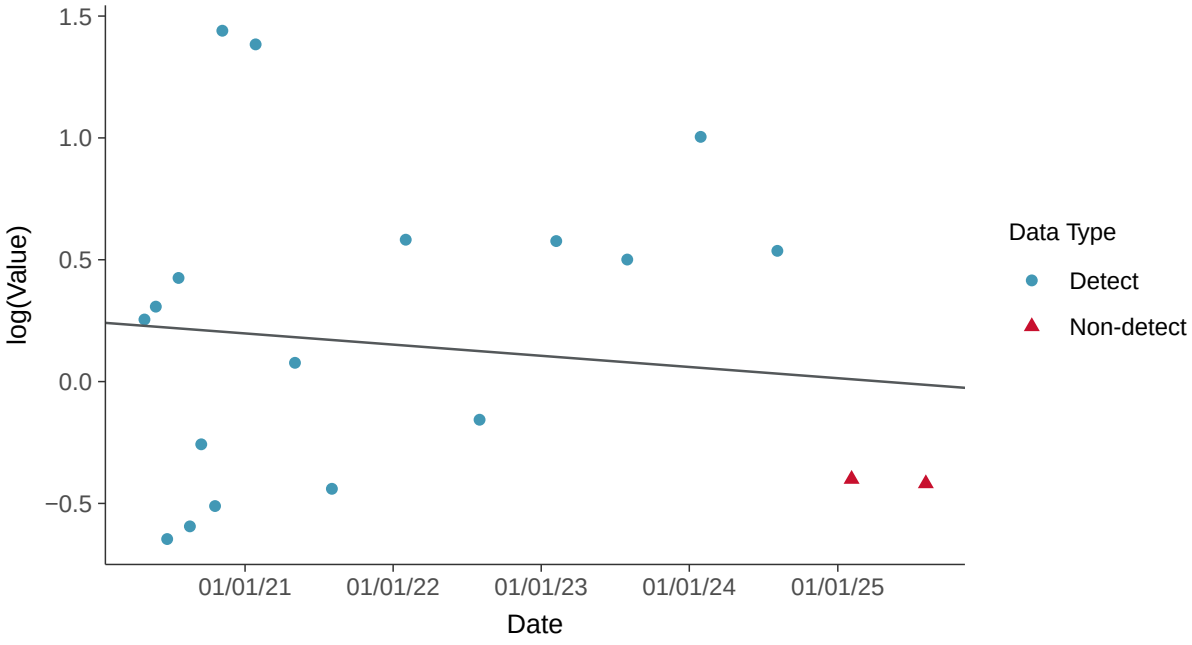
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-5 (pci/l)



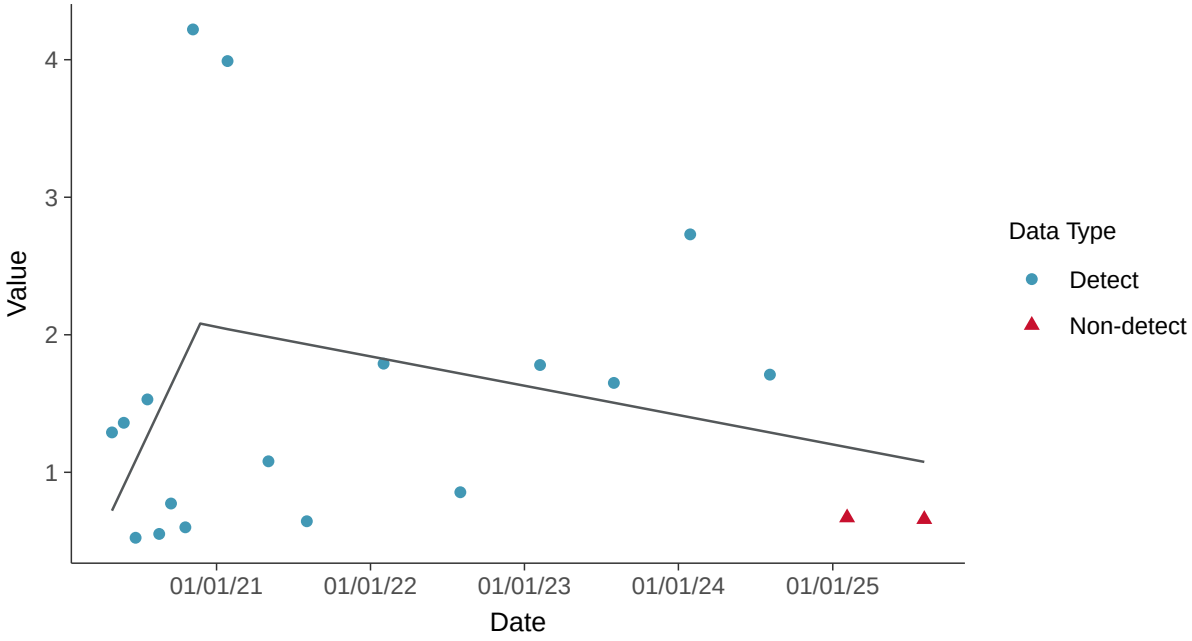
Trend Regression: Lognormal MLE

Radium-226+228, MW-5 (pci/l)



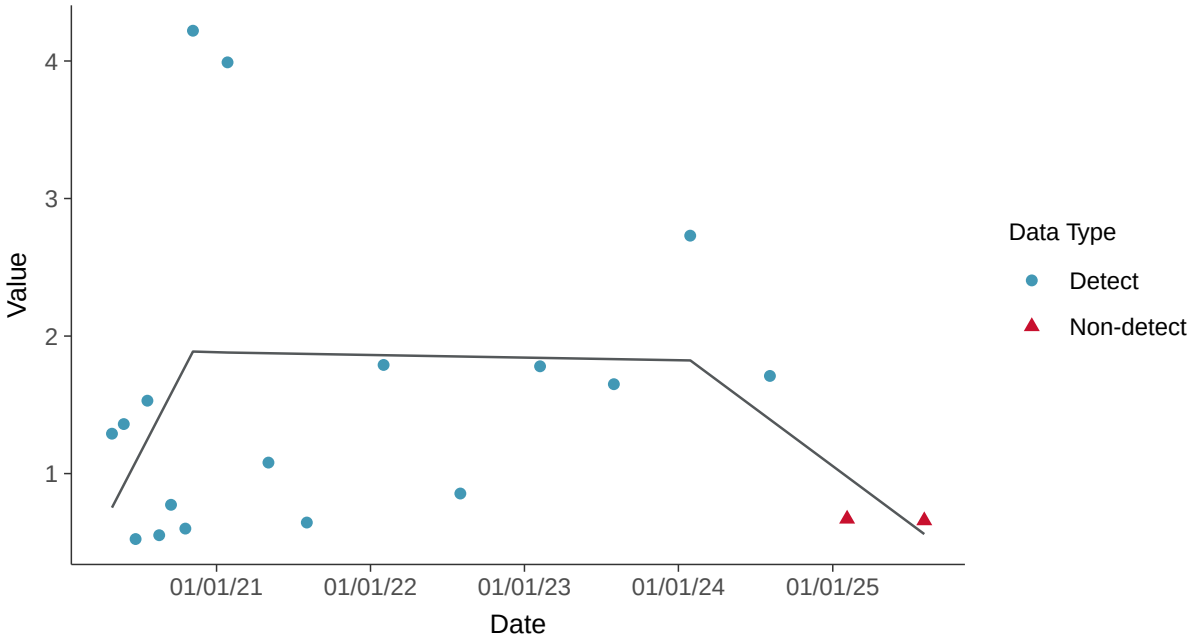
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-5 (pci/l)



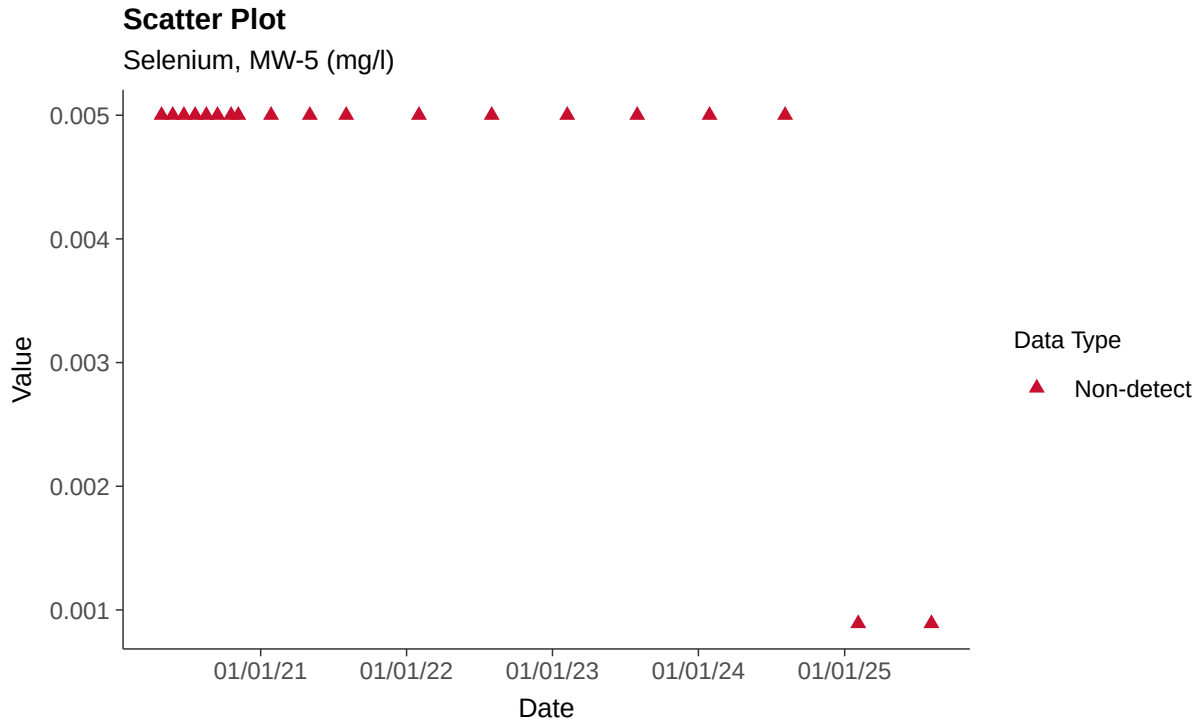
Trend Regression: Piecewise Linear-Linear-Linear

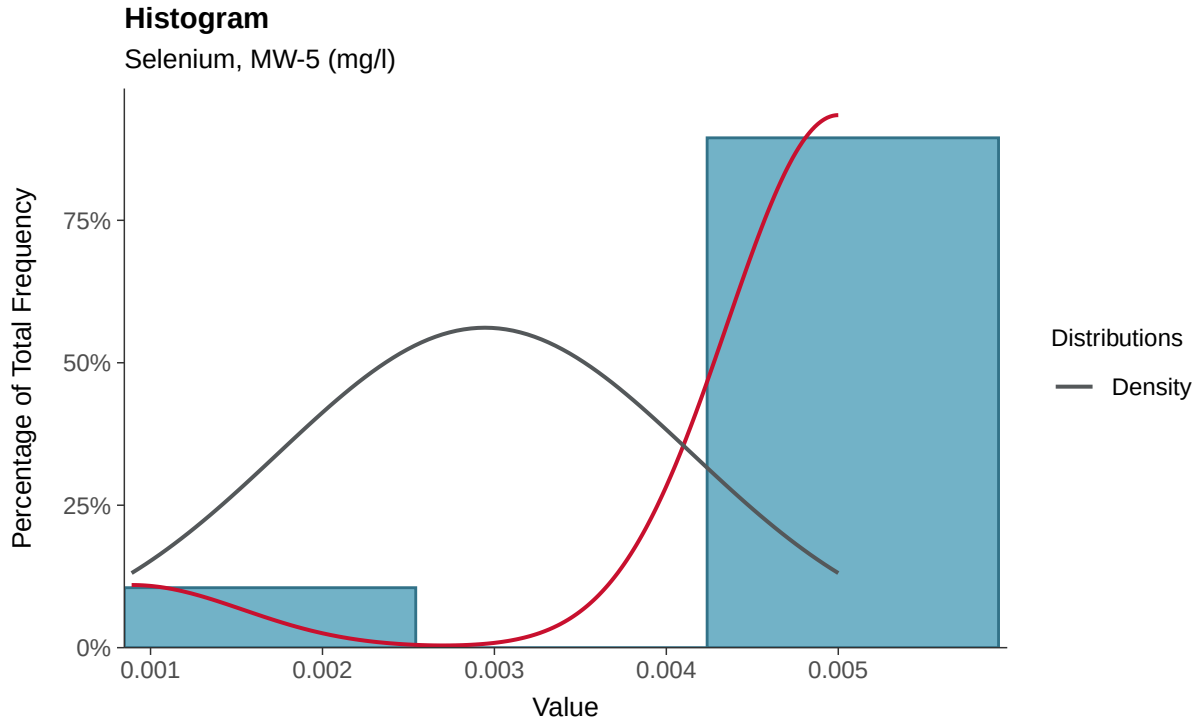
Radium-226+228, MW-5 (pci/l)



Appendix IV: Selenium, MW-5

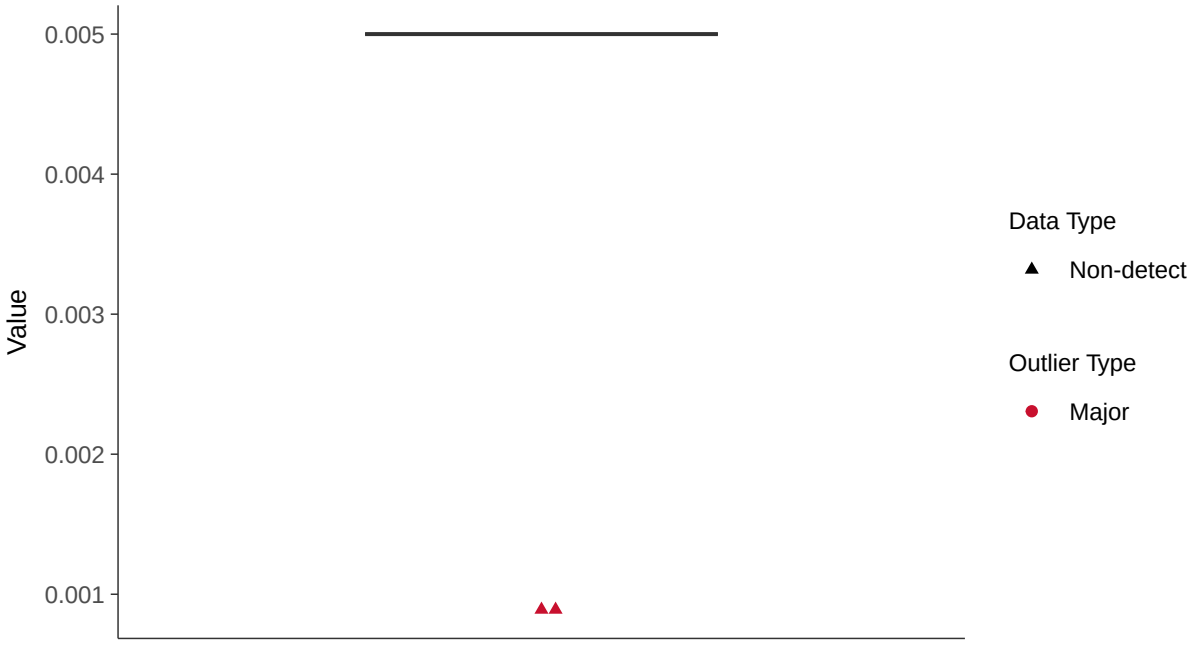
ID: 15_3_122





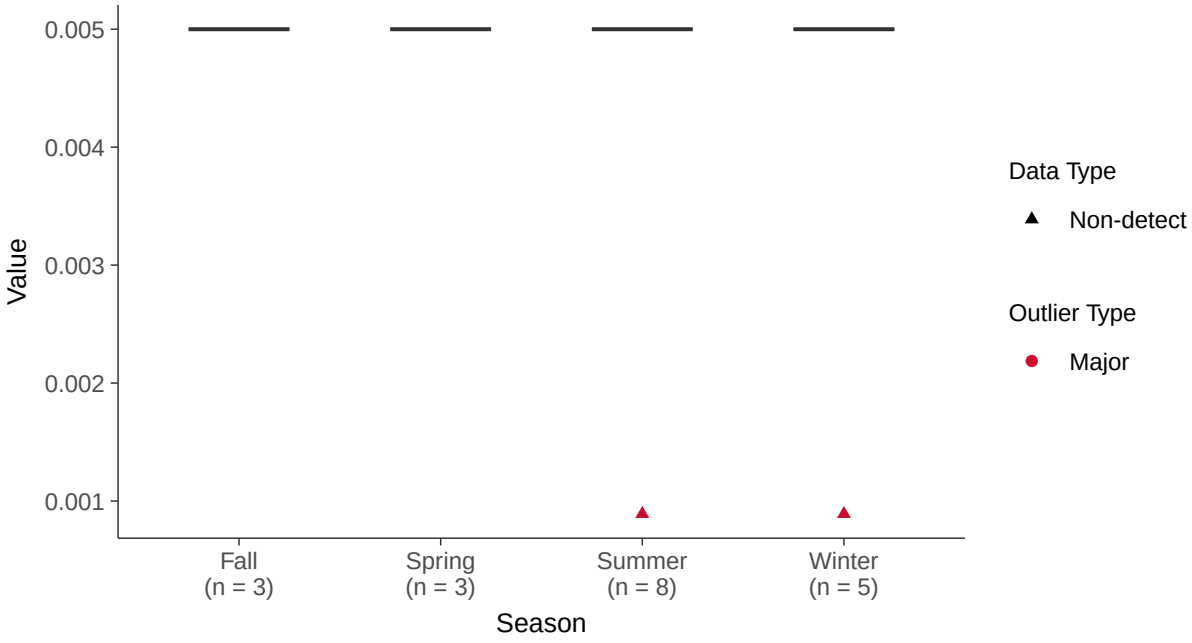
Boxplot

Selenium, MW-5 (mg/l)



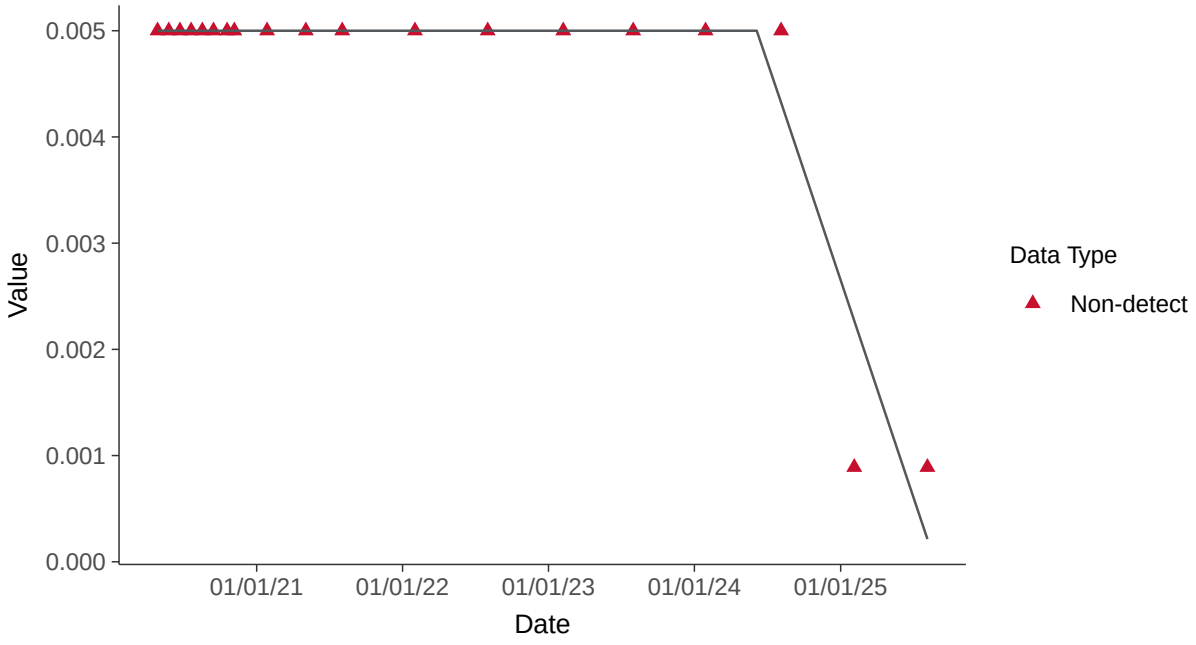
Boxplot by Season

Selenium, MW-5 (mg/l)



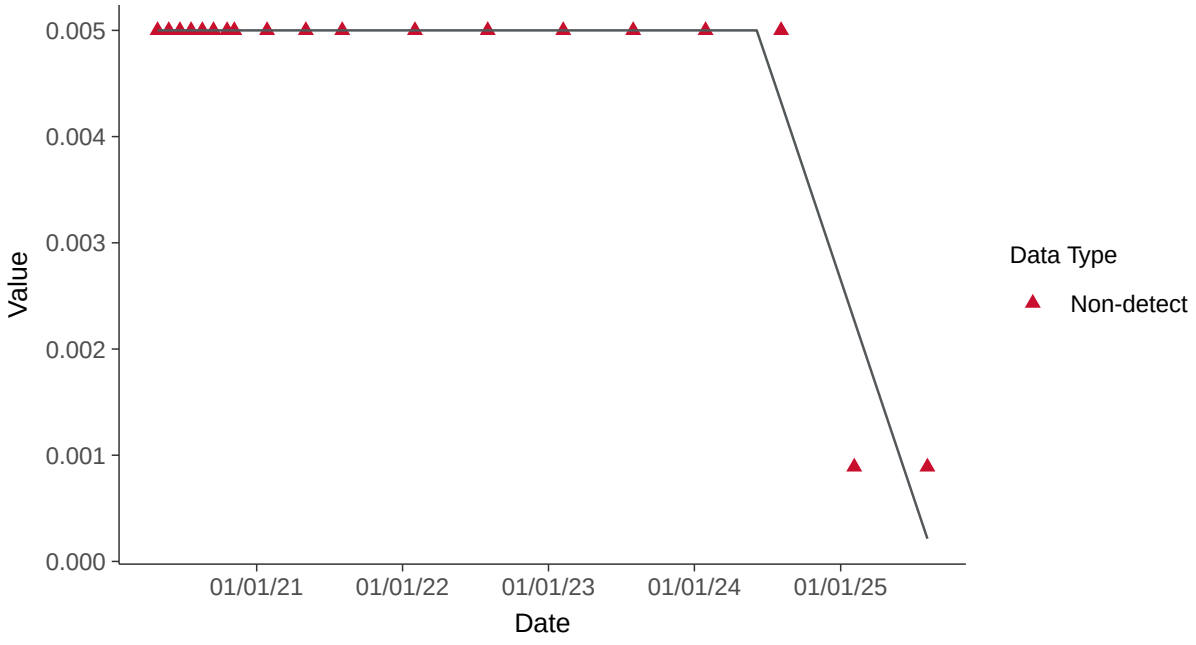
Trend Regression: Piecewise Linear-Linear

Selenium, MW-5 (mg/l)



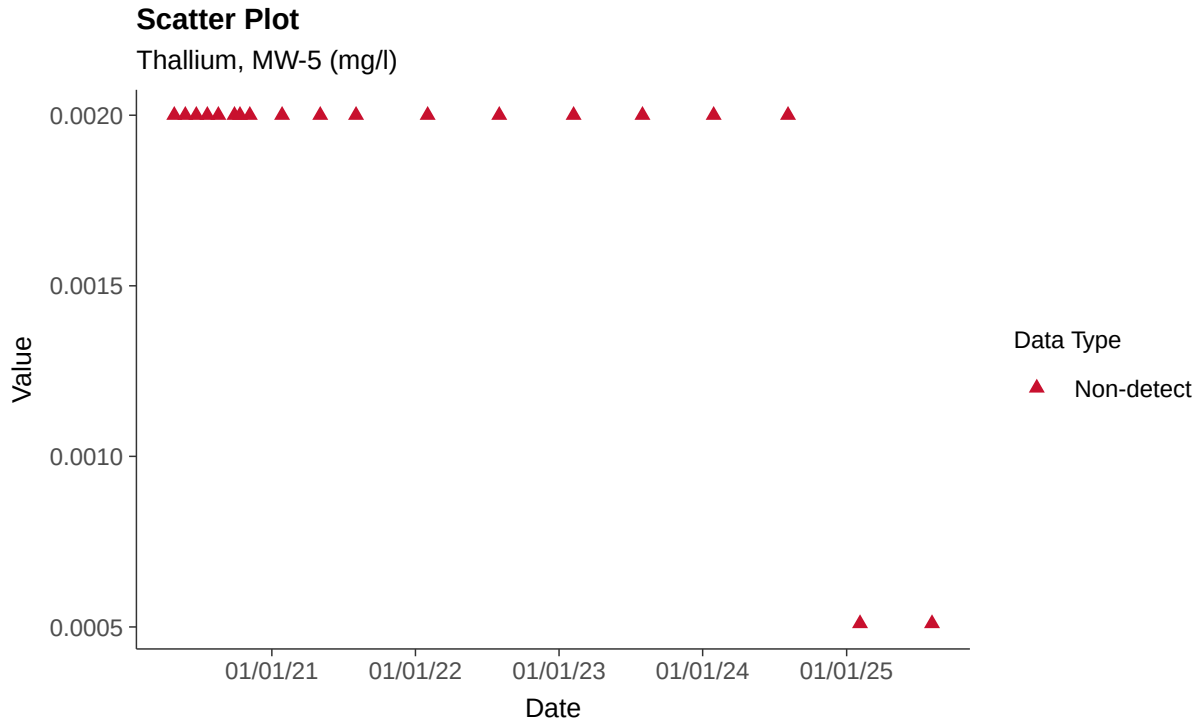
Trend Regression: Piecewise Linear-Linear-Linear

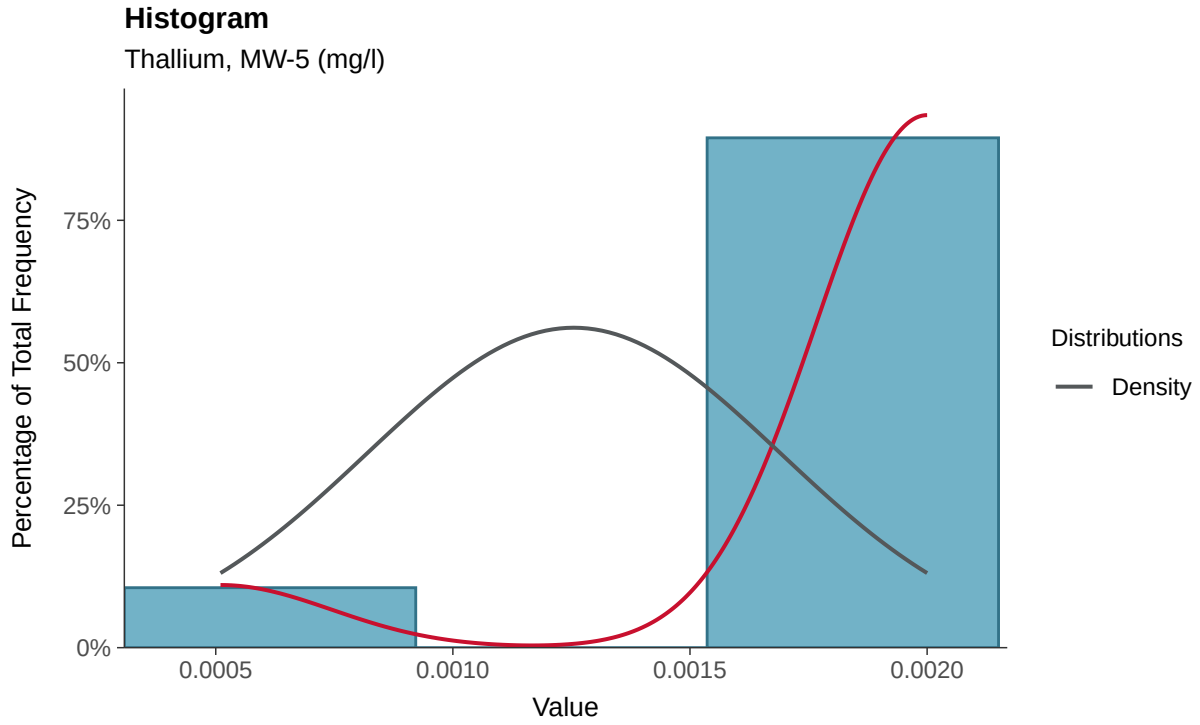
Selenium, MW-5 (mg/l)



Appendix IV: Thallium, MW-5

ID: 15_3_125



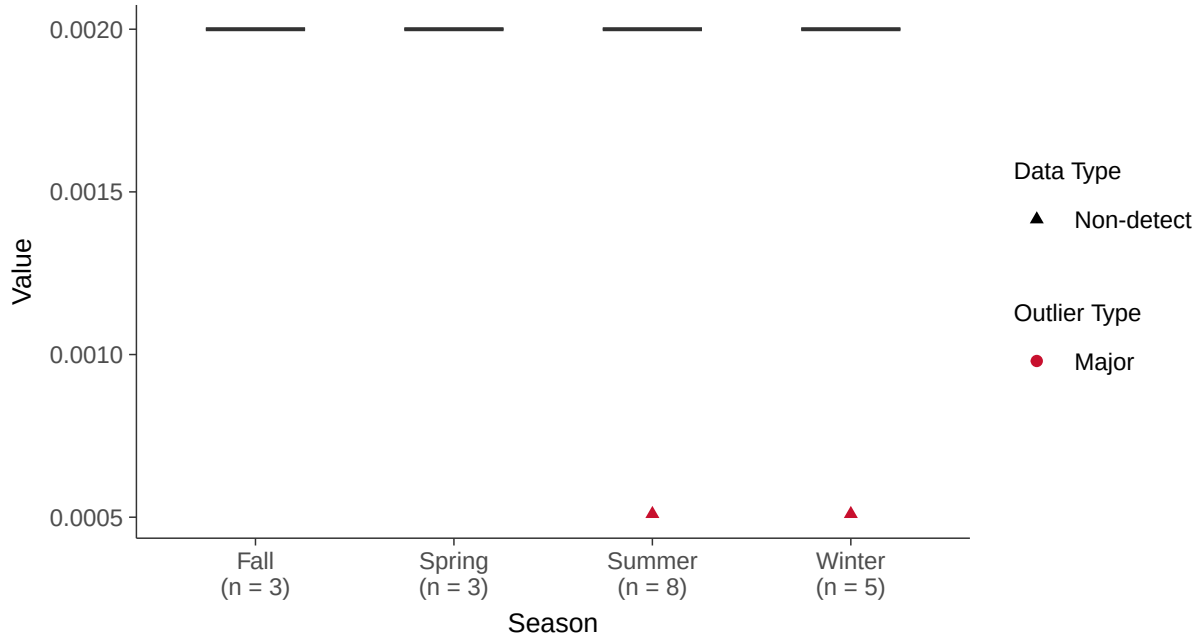


Boxplot

Thallium, MW-5 (mg/l)

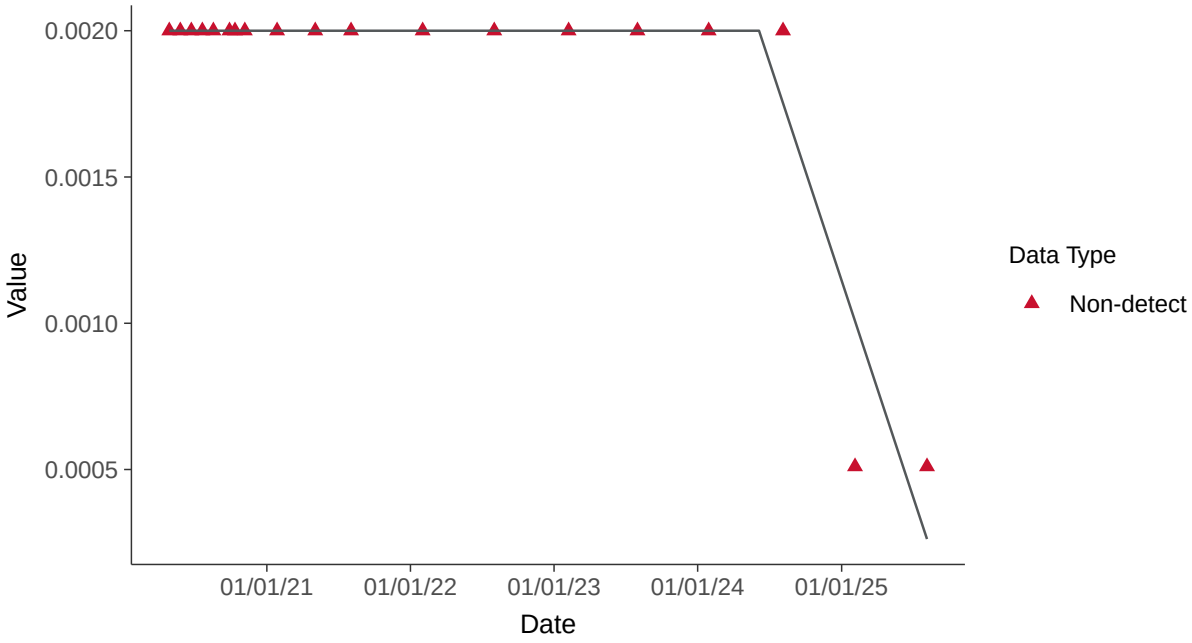
Boxplot by Season

Thallium, MW-5 (mg/l)



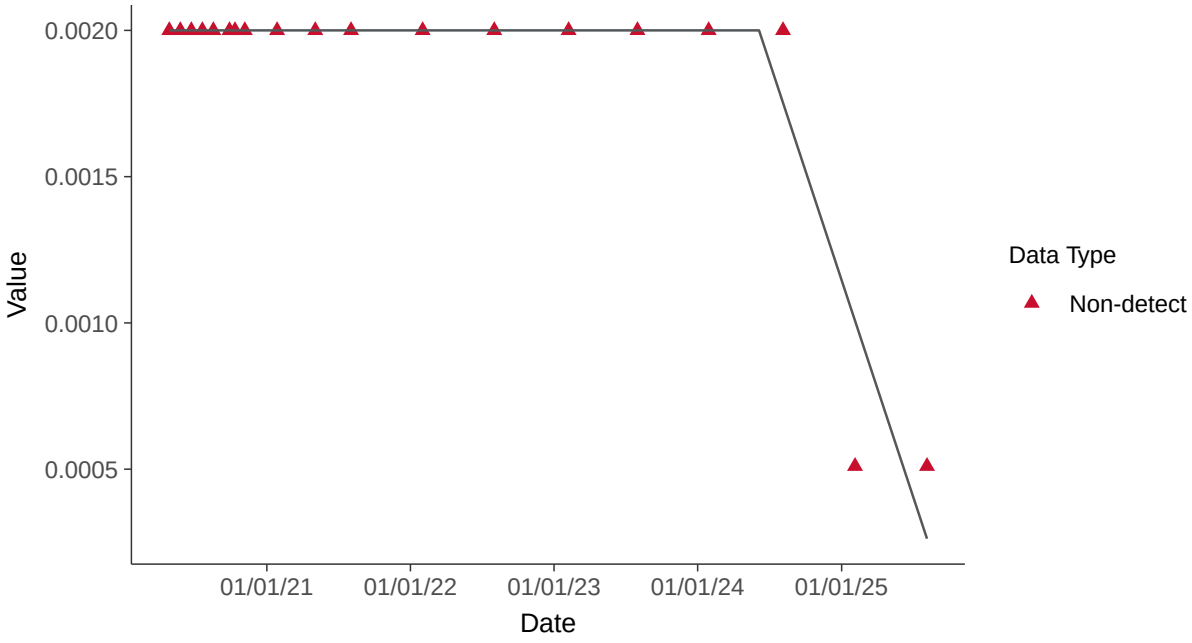
Trend Regression: Piecewise Linear-Linear

Thallium, MW-5 (mg/l)



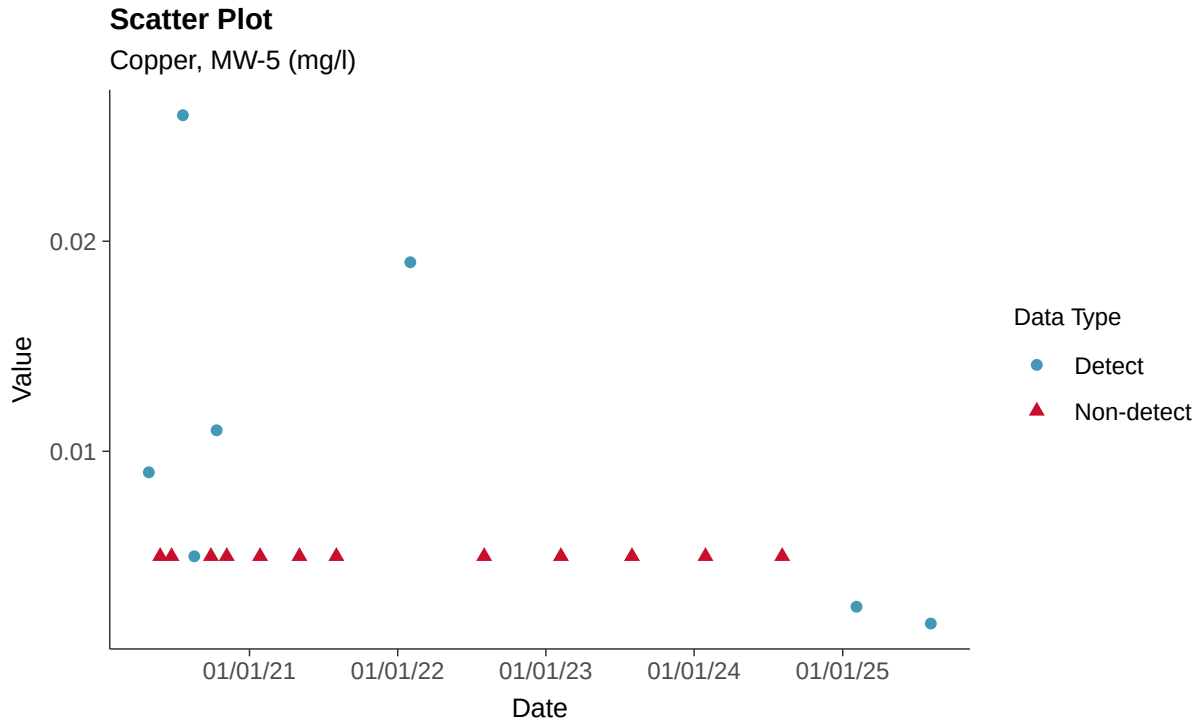
Trend Regression: Piecewise Linear-Linear-Linear

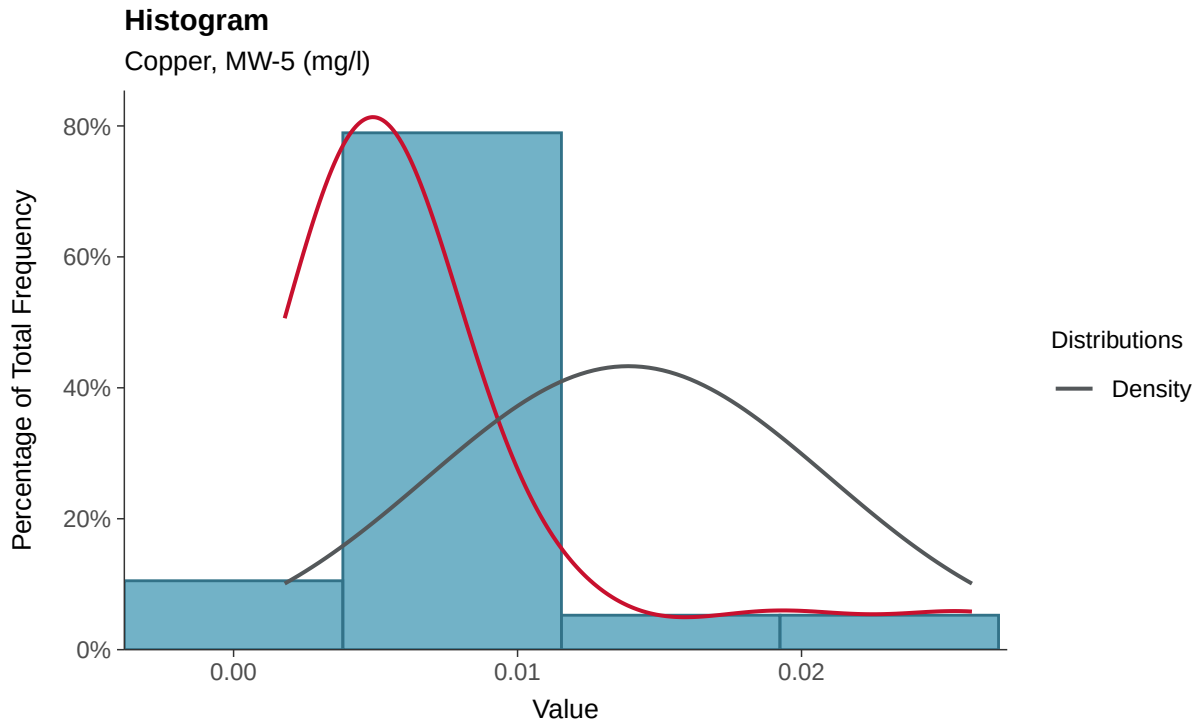
Thallium, MW-5 (mg/l)



Part 115: Copper, MW-5

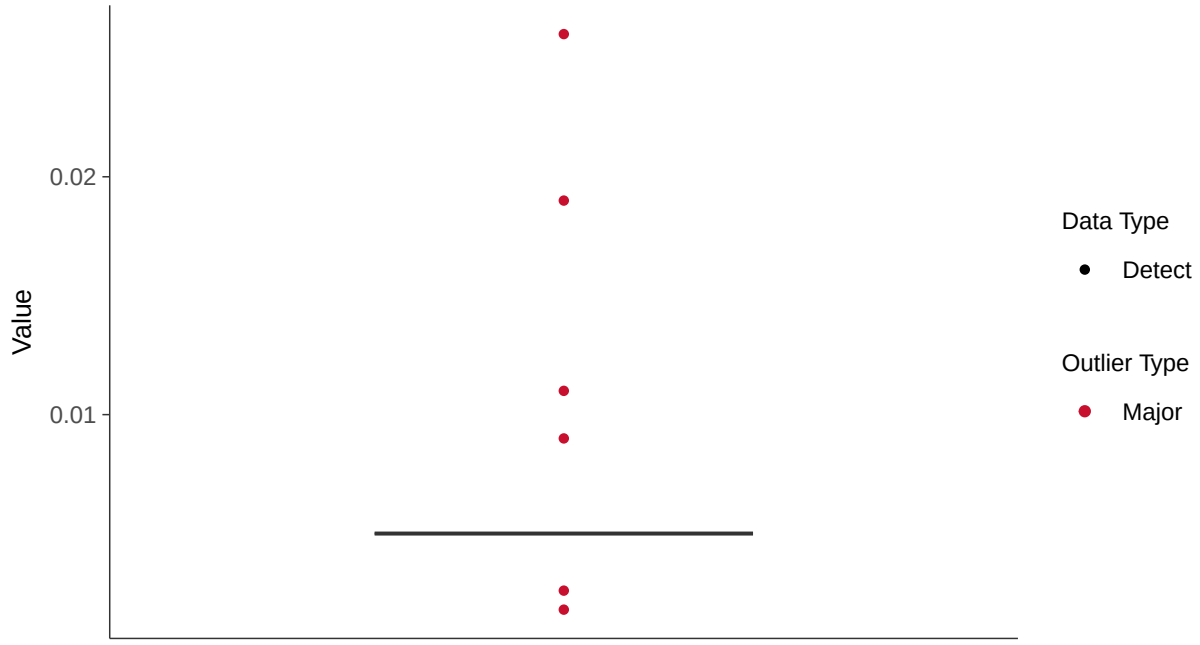
ID: 15_5_111





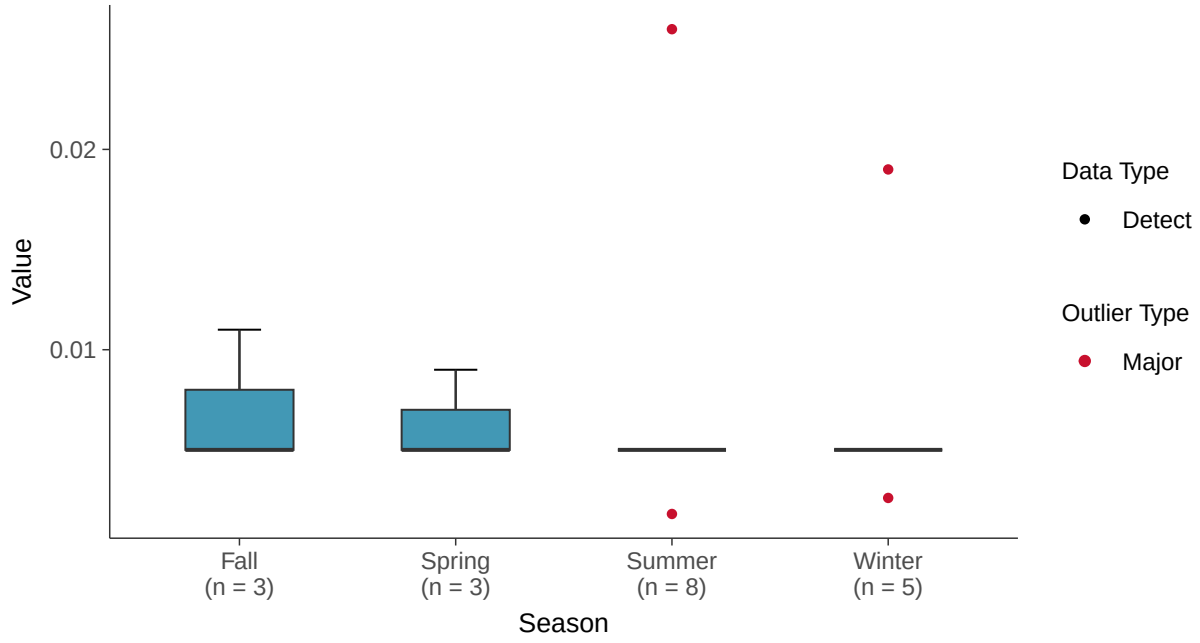
Boxplot

Copper, MW-5 (mg/l)



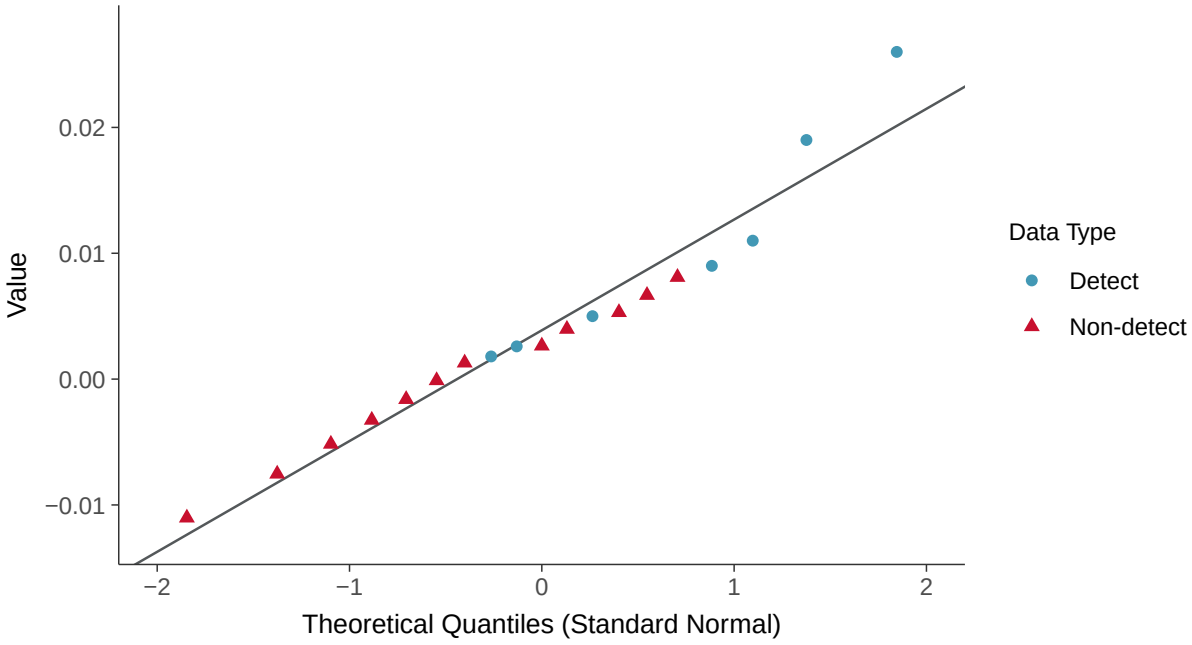
Boxplot by Season

Copper, MW-5 (mg/l)



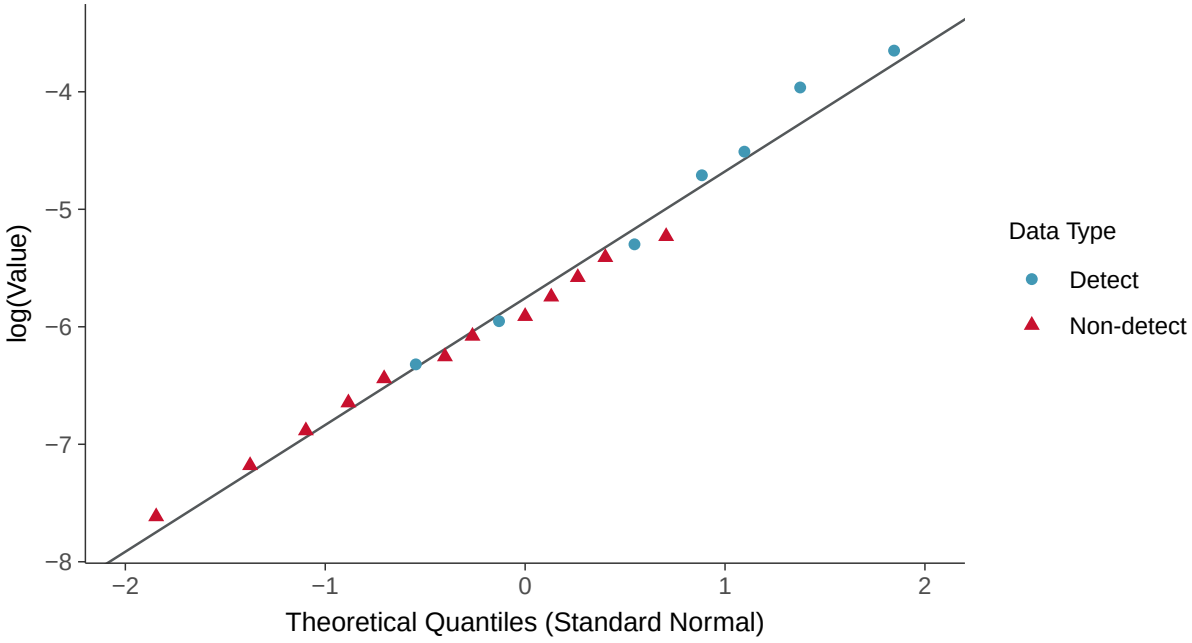
Normal Q-Q plot using ROS Imputed Estimates

Copper, MW-5 (mg/l)



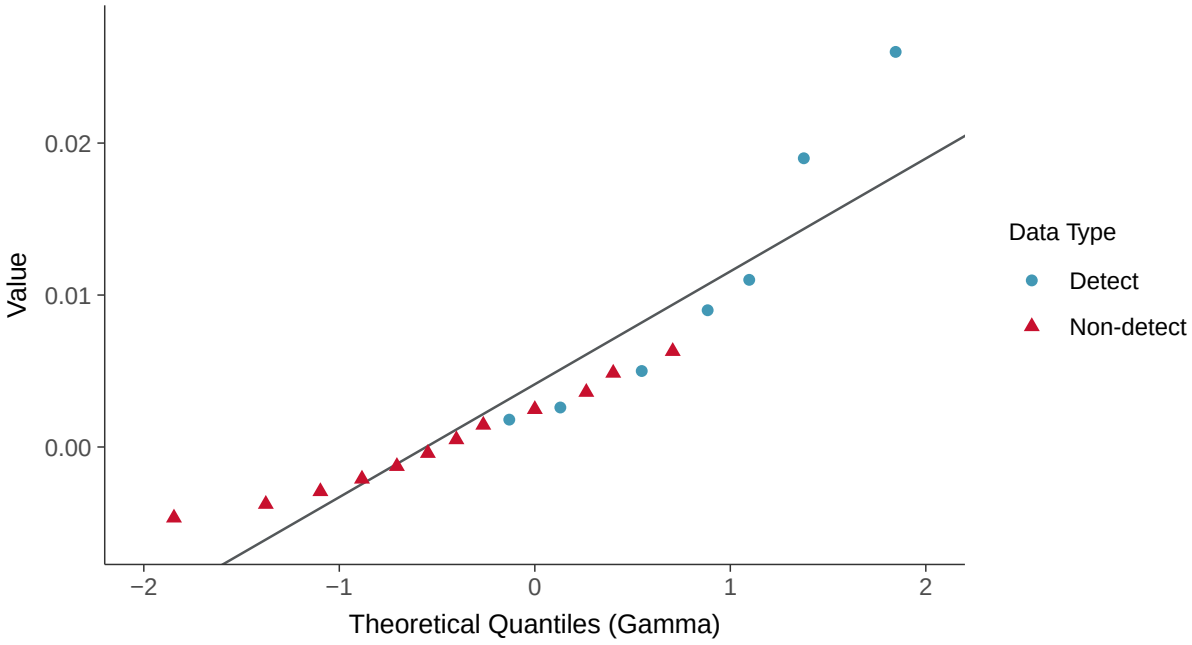
Lognormal Q-Q plot using ROS Imputed Estimates

Copper, MW-5 (mg/l)



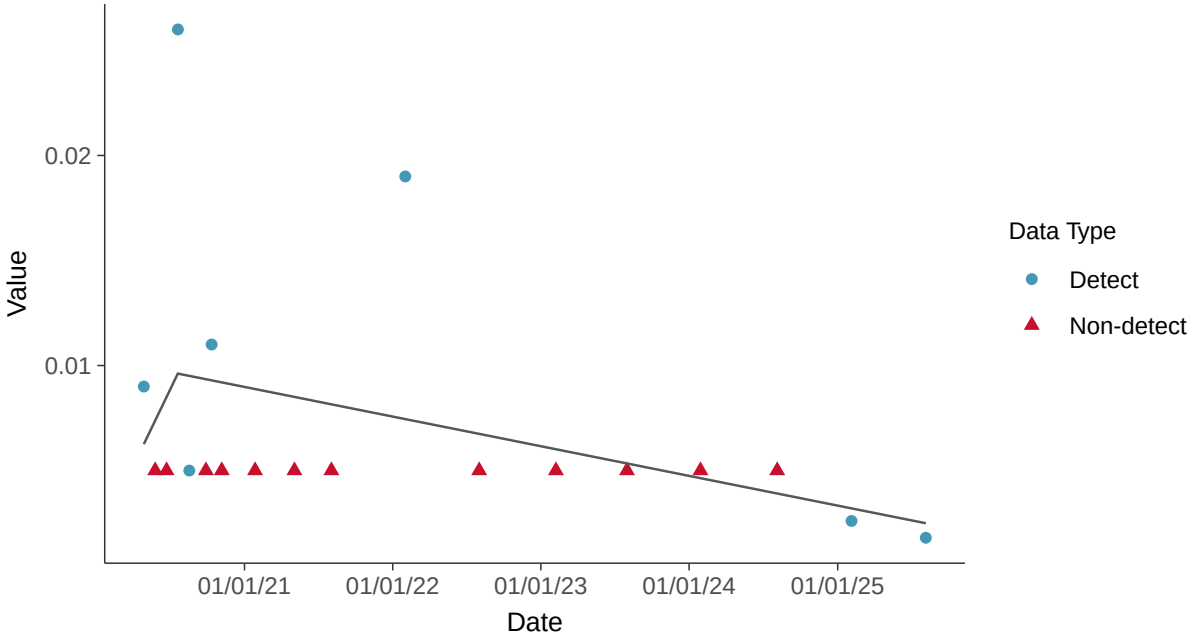
Gamma Q-Q plot using ROS Imputed Estimates

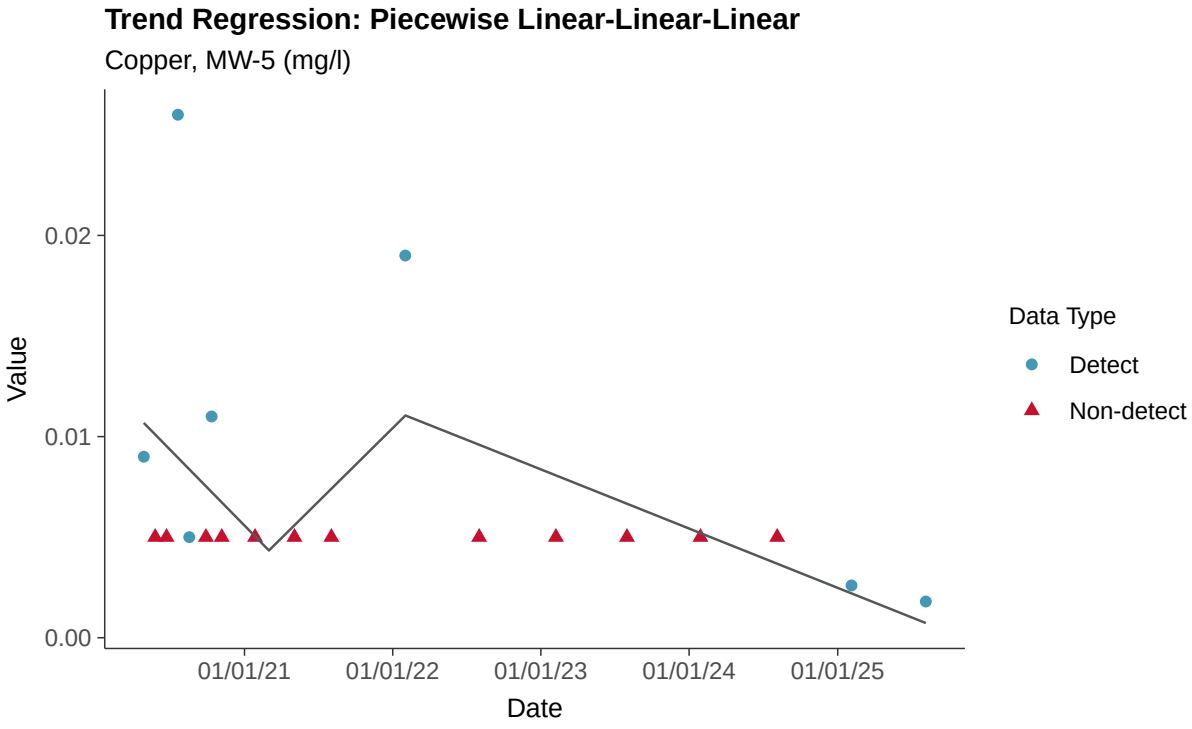
Copper, MW-5 (mg/l)



Trend Regression: Piecewise Linear-Linear

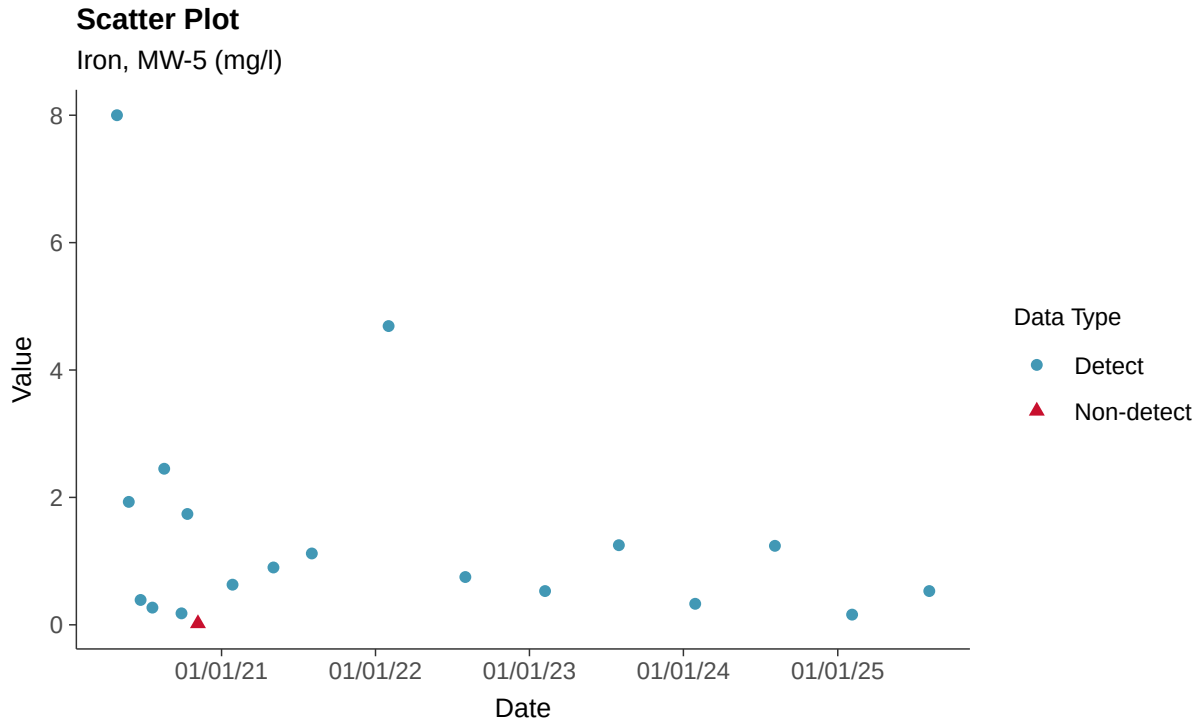
Copper, MW-5 (mg/l)

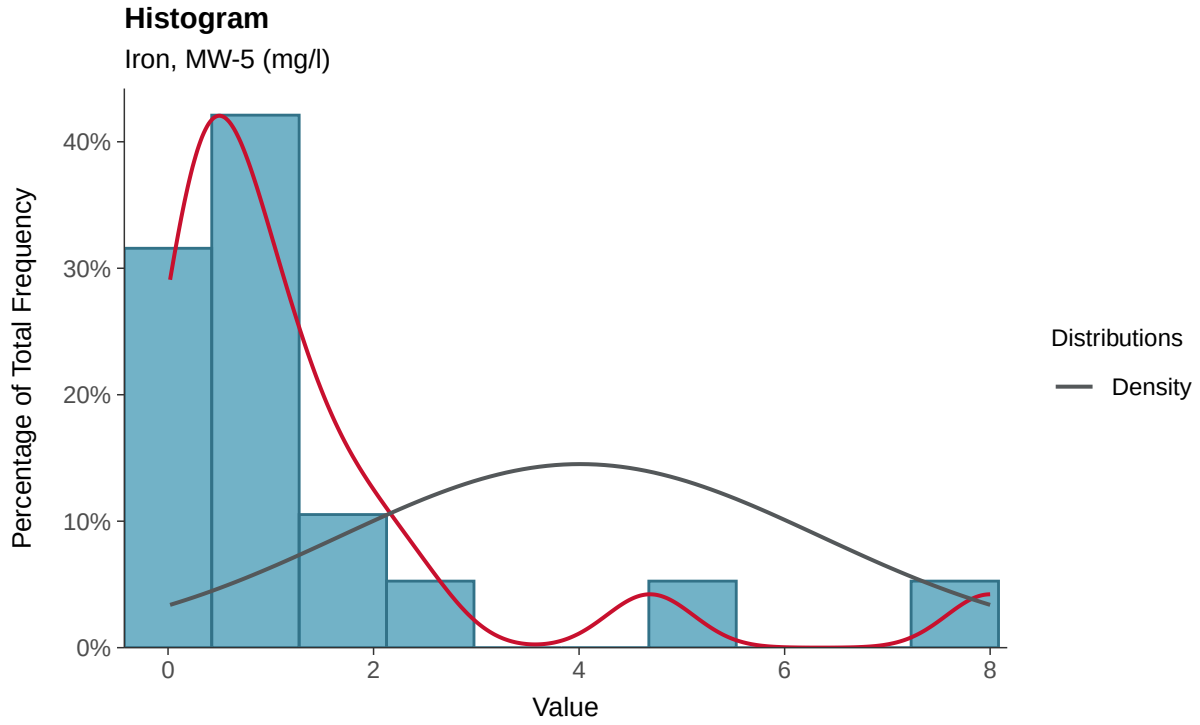



Trend Regression: Piecewise Linear-Linear-Linear
Copper, MW-5 (mg/l)
Value
0.02
0.01
0.00
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Part 115: Iron, MW-5

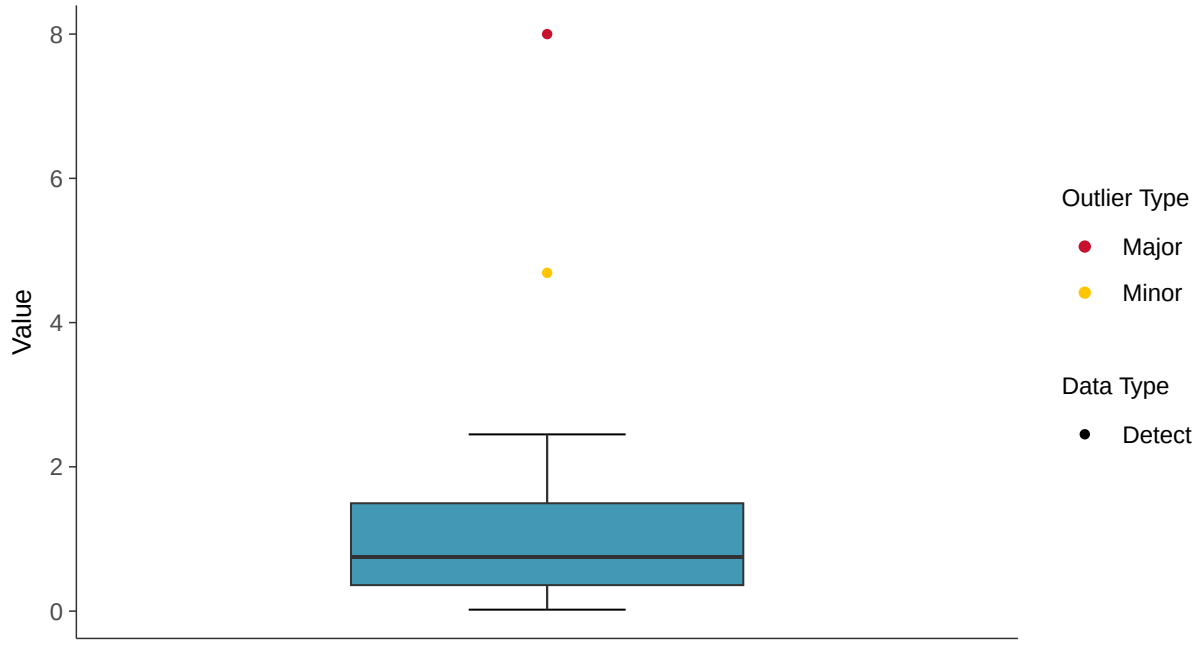
ID: 15_5_114





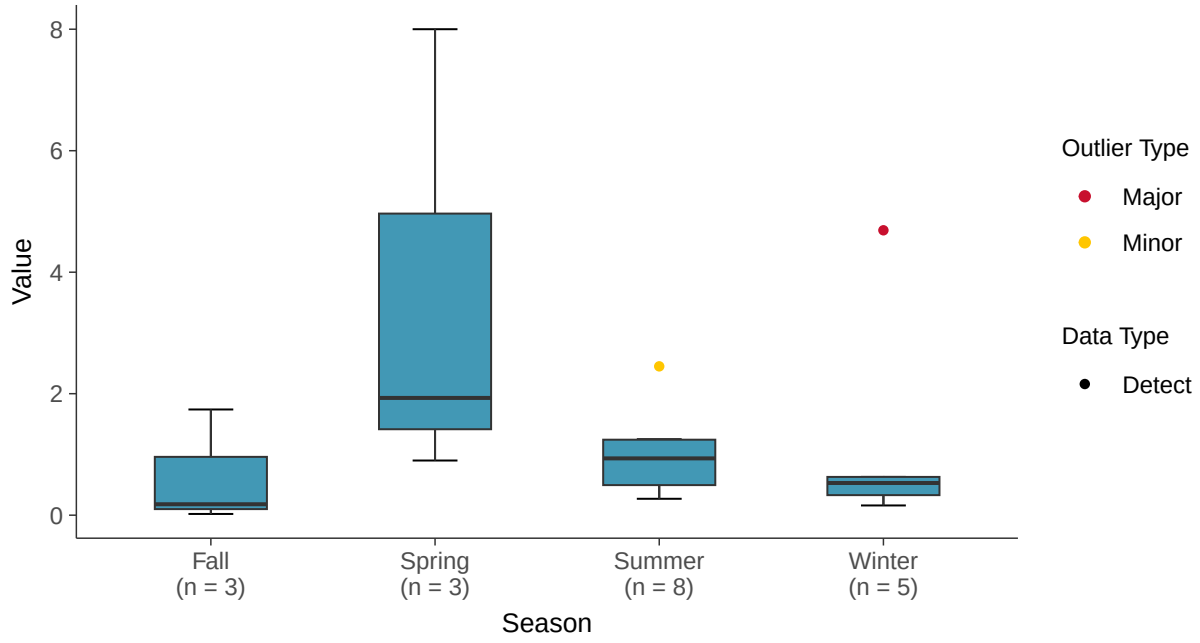
Boxplot

Iron, MW-5 (mg/l)



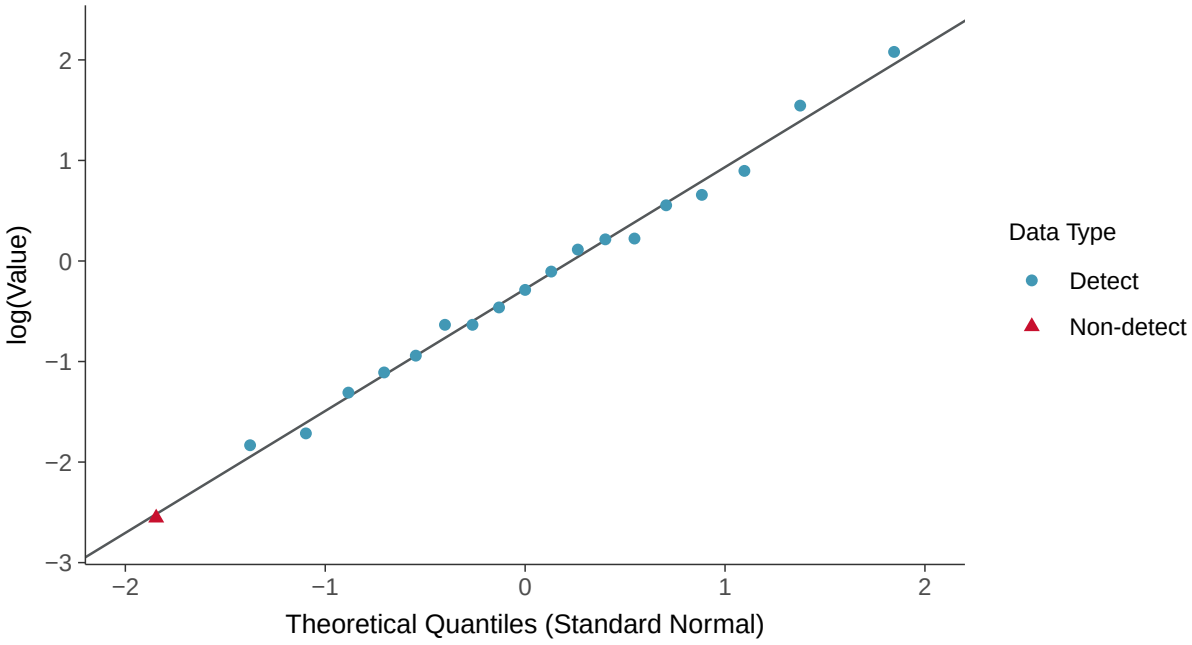
Boxplot by Season

Iron, MW-5 (mg/l)



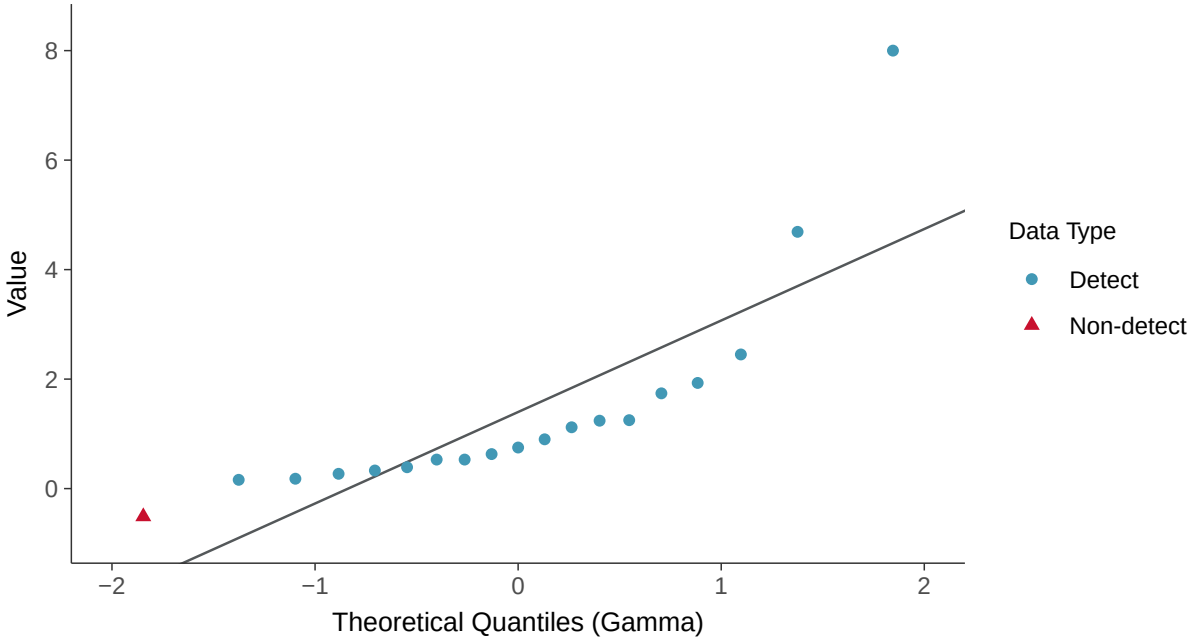
Lognormal Q-Q plot using ROS Imputed Estimates

Iron, MW-5 (mg/l)



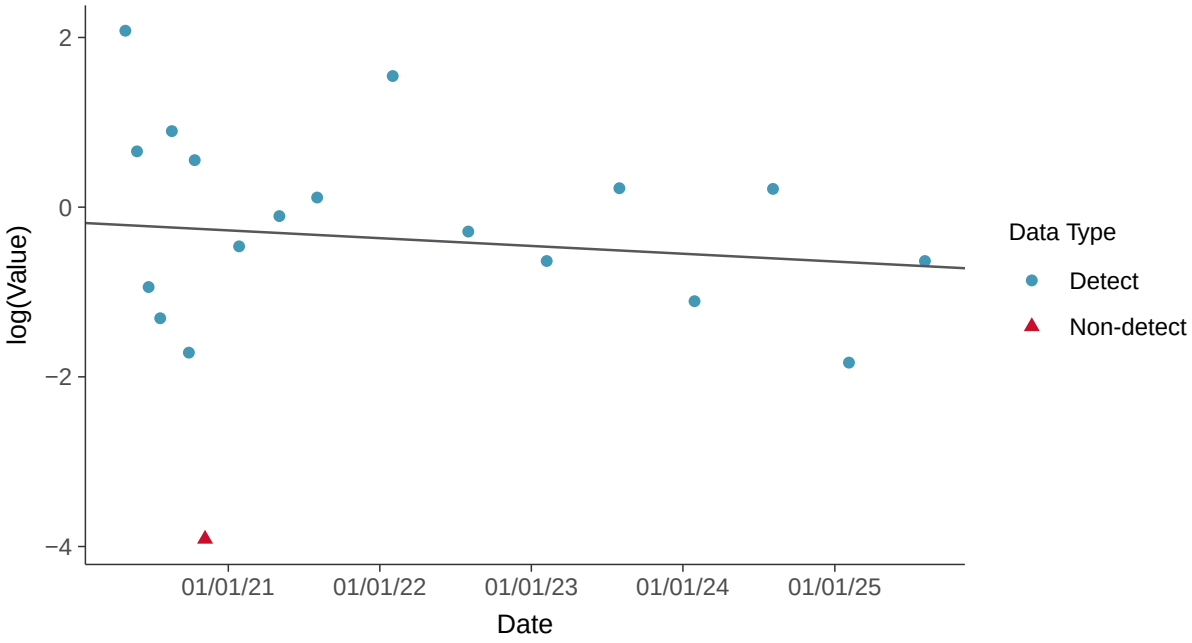
Gamma Q-Q plot using ROS Imputed Estimates

Iron, MW-5 (mg/l)



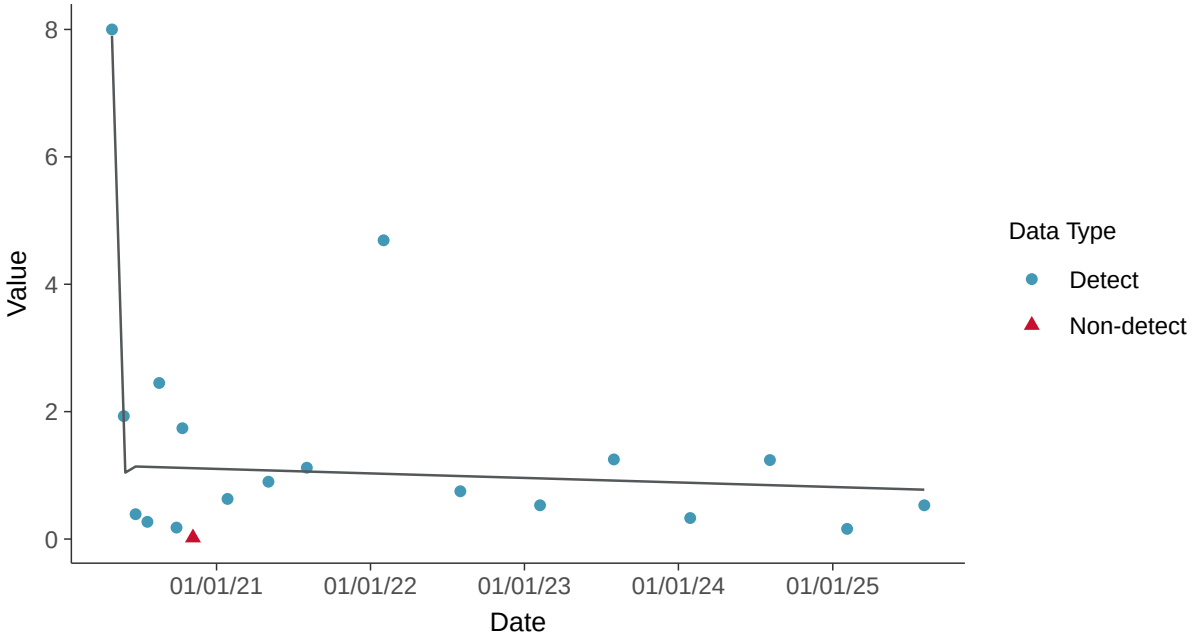
Trend Regression: Lognormal MLE

Iron, MW-5 (mg/l)



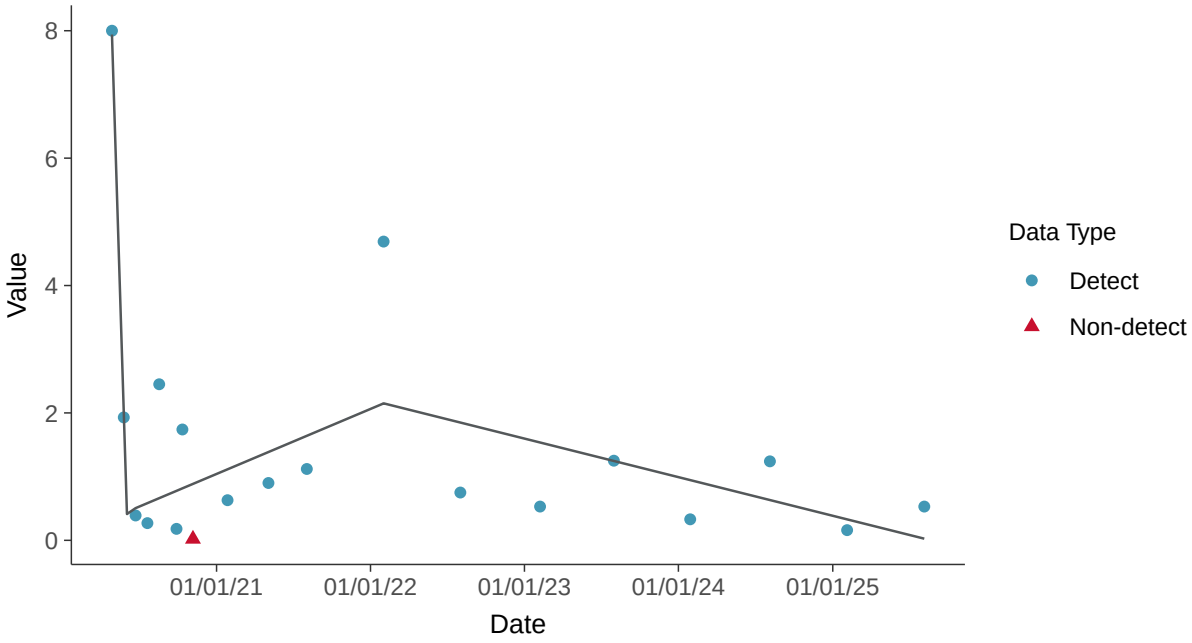
Trend Regression: Piecewise Linear-Linear

Iron, MW-5 (mg/l)



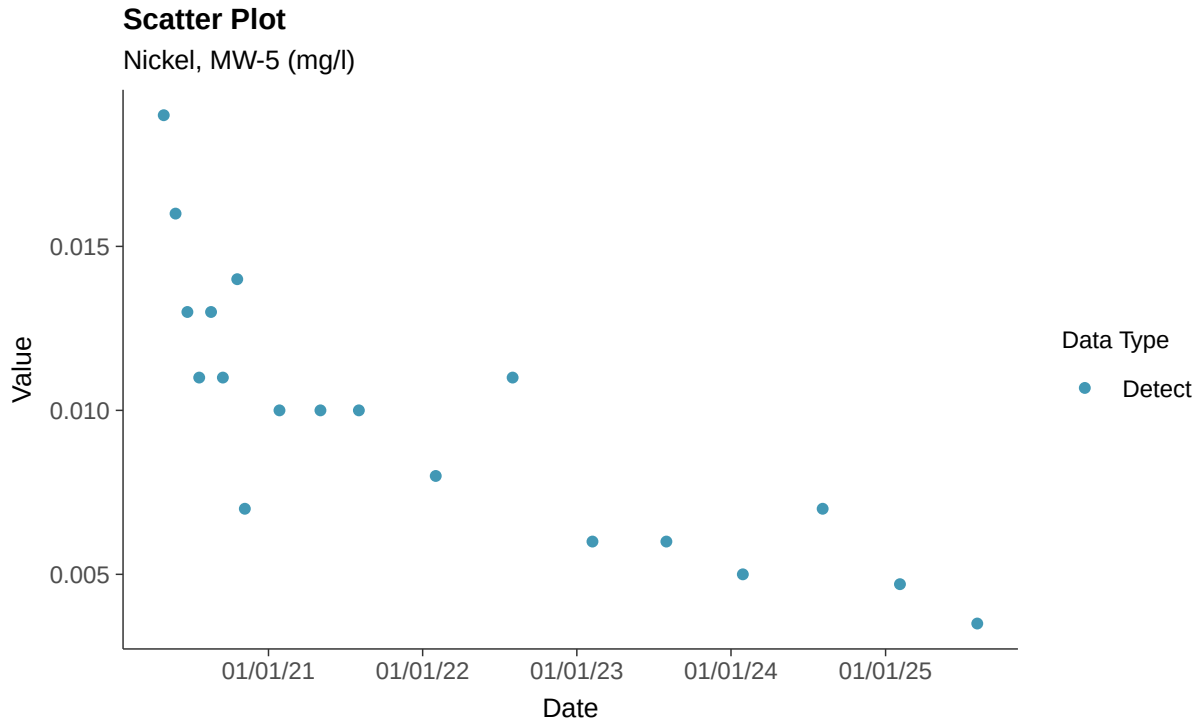
Trend Regression: Piecewise Linear-Linear-Linear

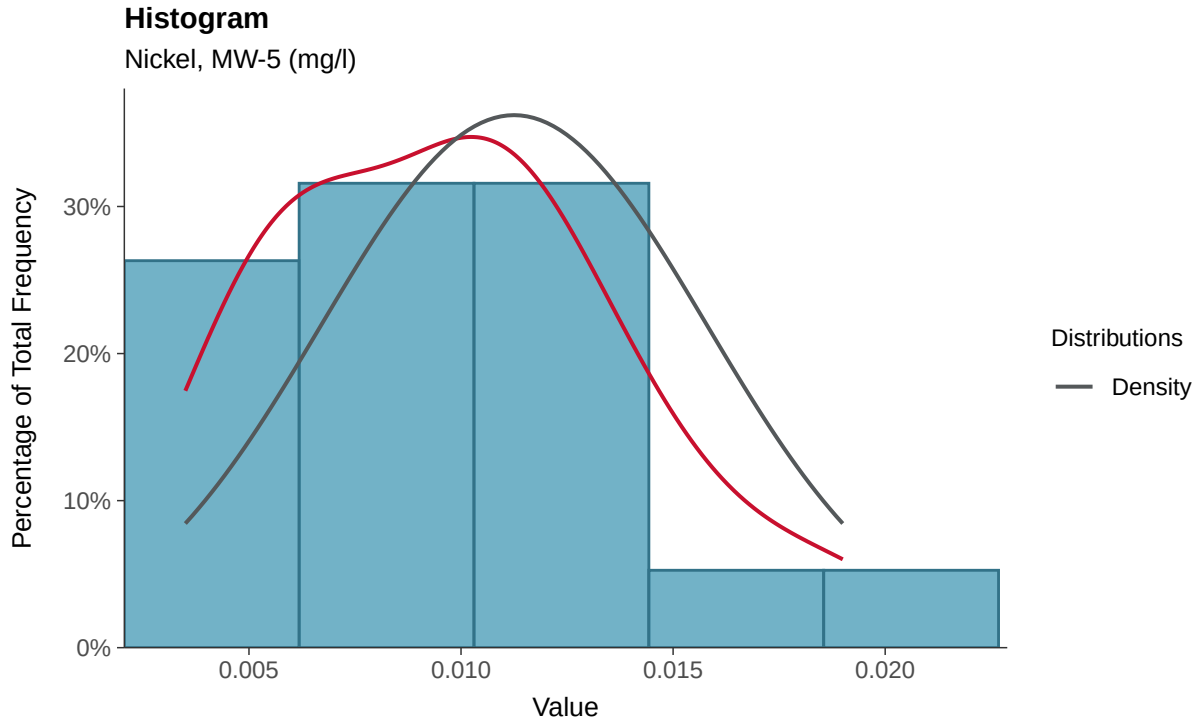
Iron, MW-5 (mg/l)



Part 115: Nickel, MW-5

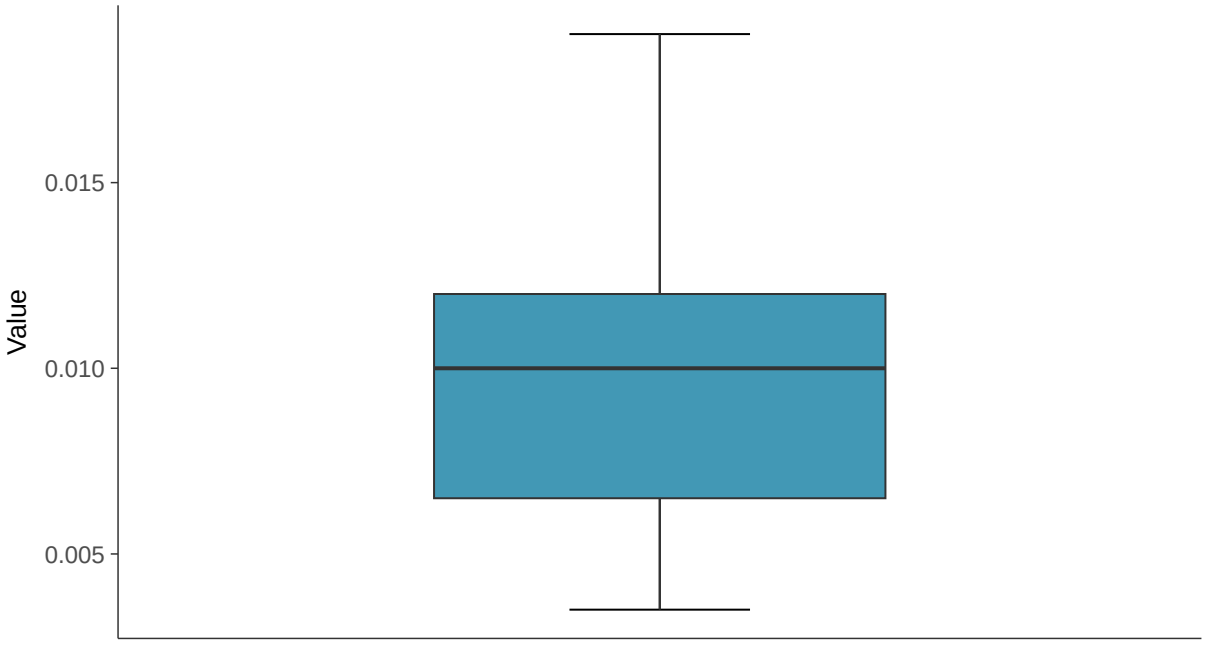
ID: 15_5_119





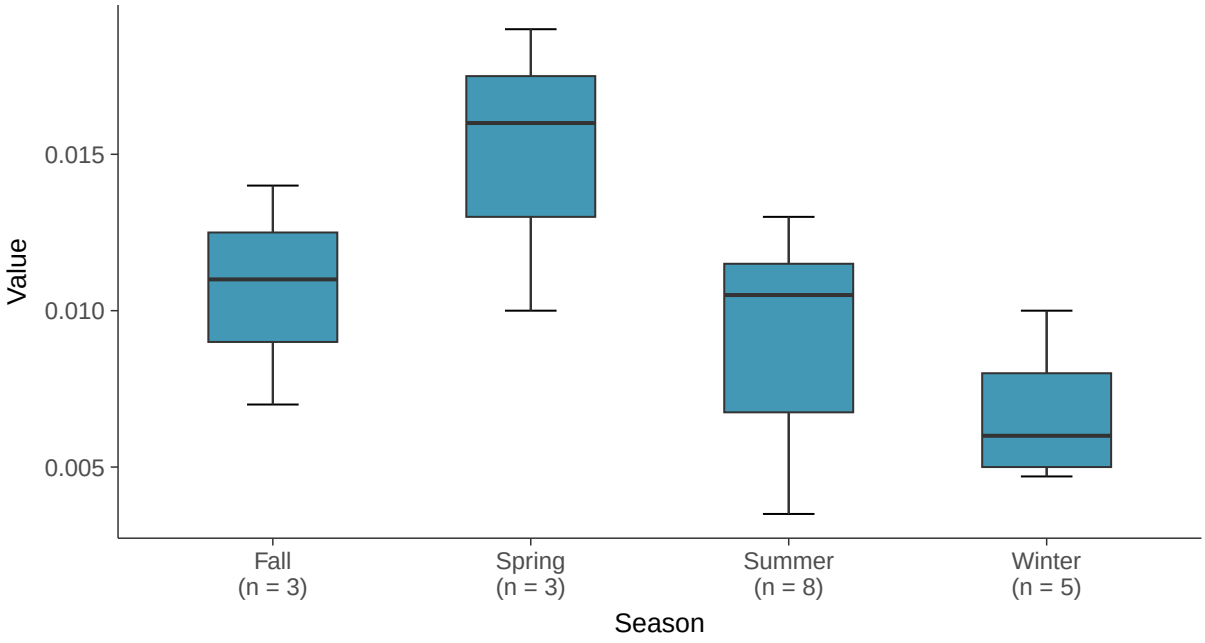
Boxplot

Nickel, MW-5 (mg/l)



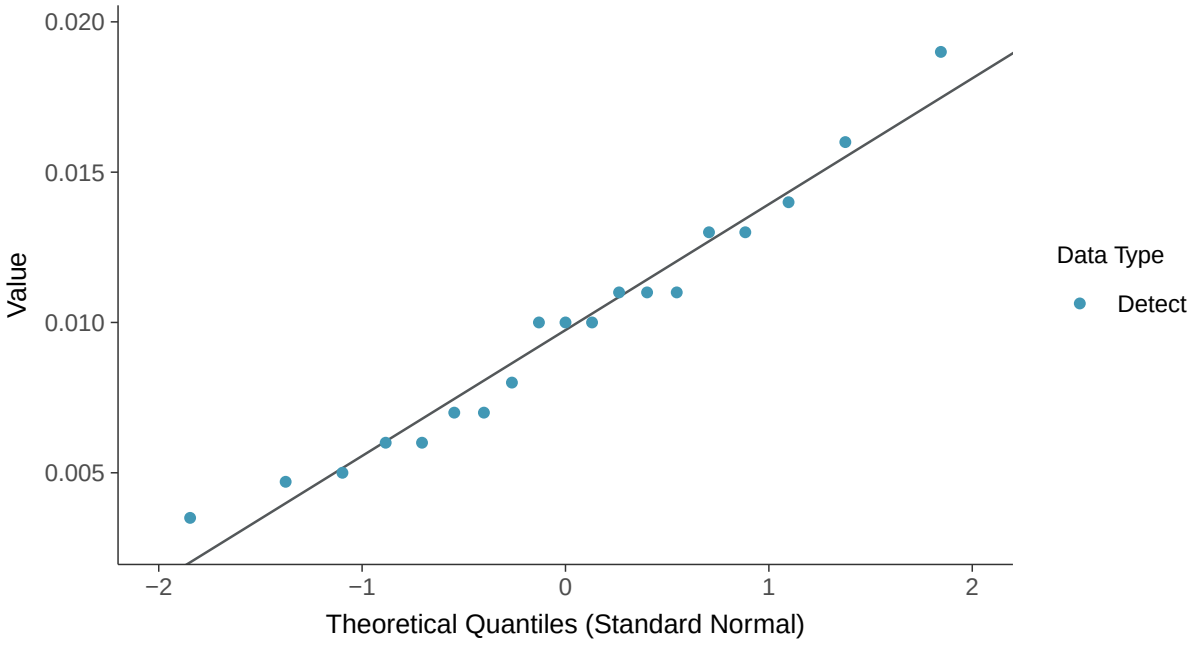
Boxplot by Season

Nickel, MW-5 (mg/l)



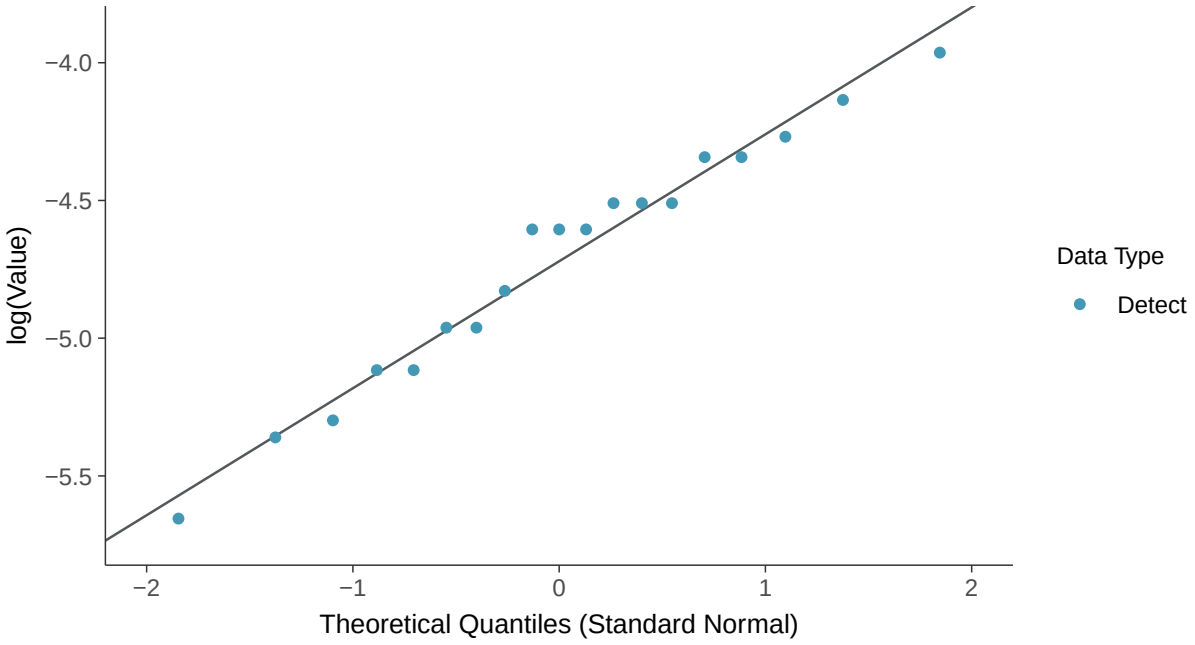
Normal Q-Q plot

Nickel, MW-5 (mg/l)



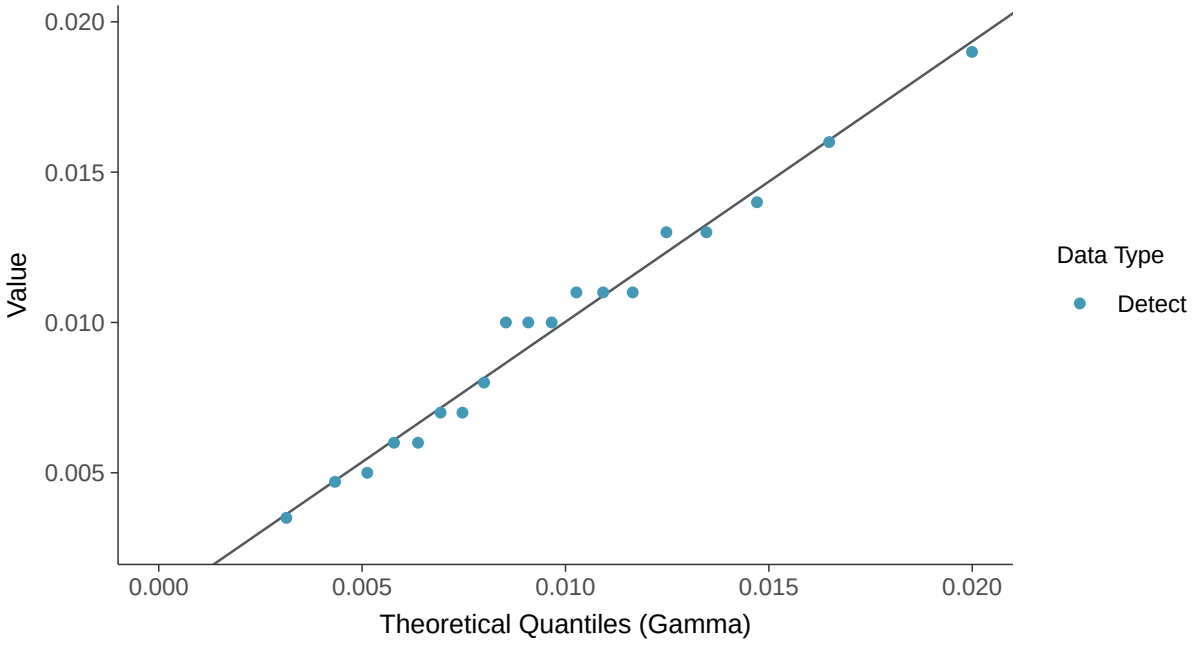
Lognormal Q-Q plot

Nickel, MW-5 (mg/l)



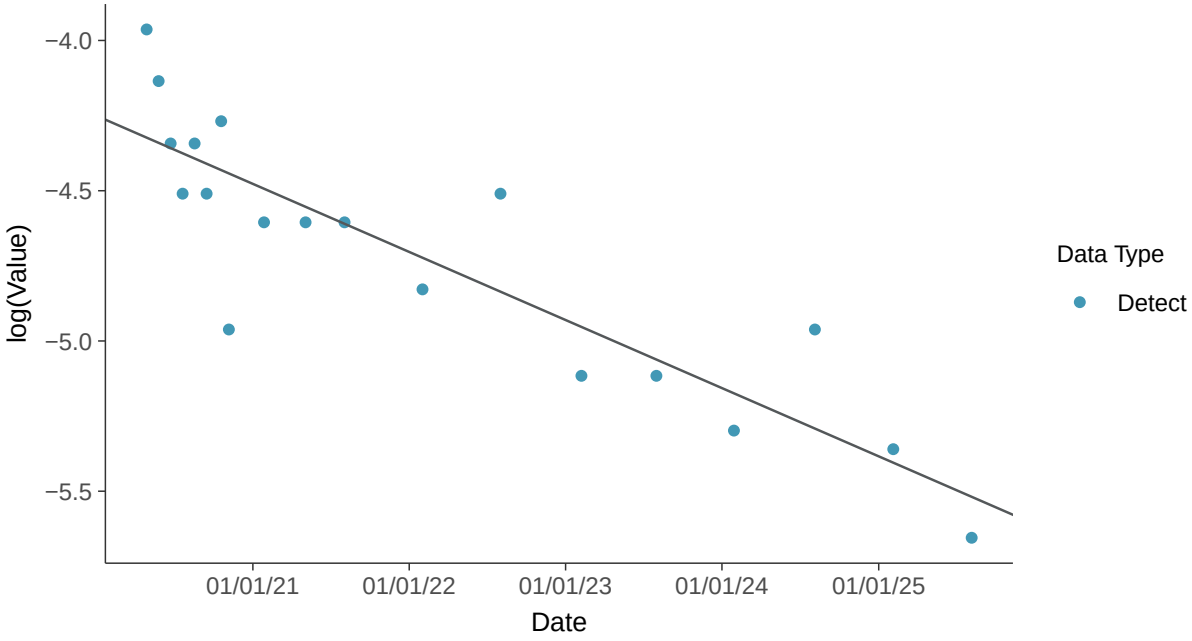
Gamma Q-Q plot

Nickel, MW-5 (mg/l)



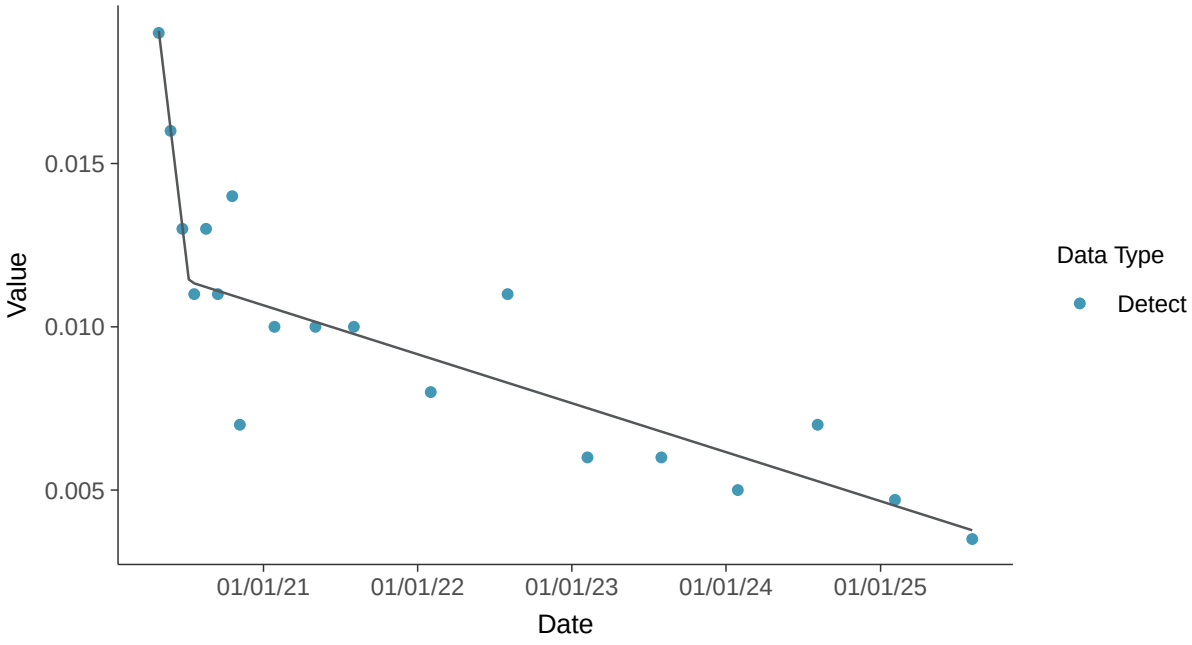
Trend Regression: Lognormal MLE

Nickel, MW-5 (mg/l)



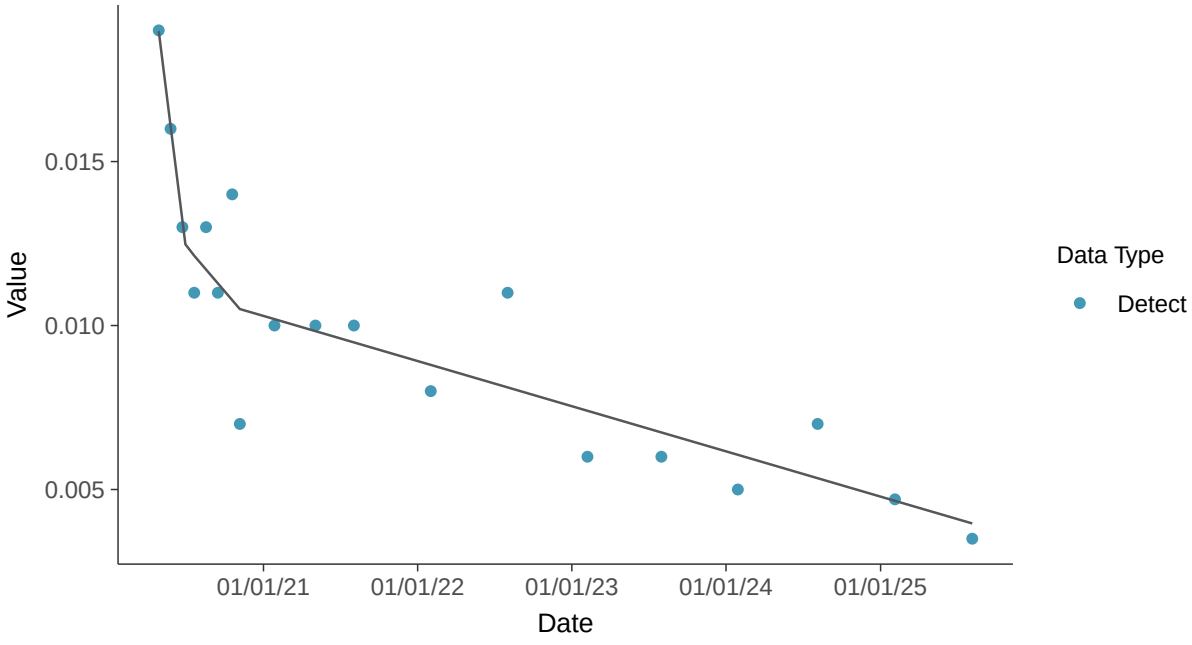
Trend Regression: Piecewise Linear-Linear

Nickel, MW-5 (mg/l)



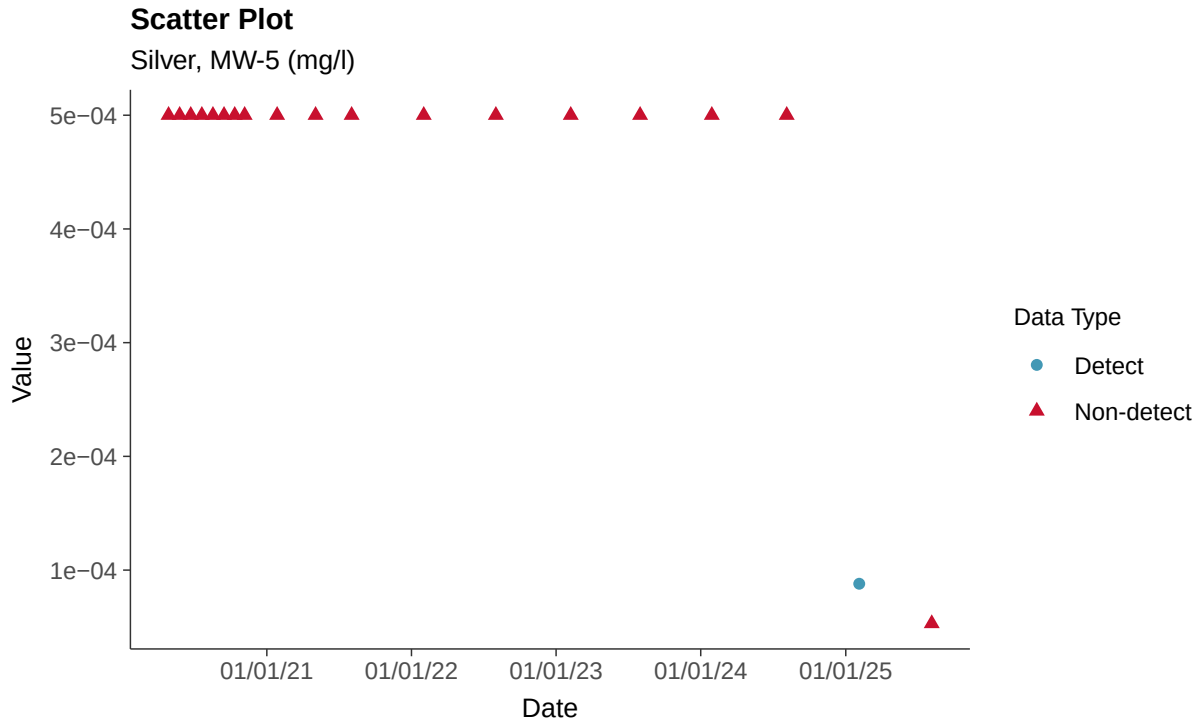
Trend Regression: Piecewise Linear-Linear-Linear

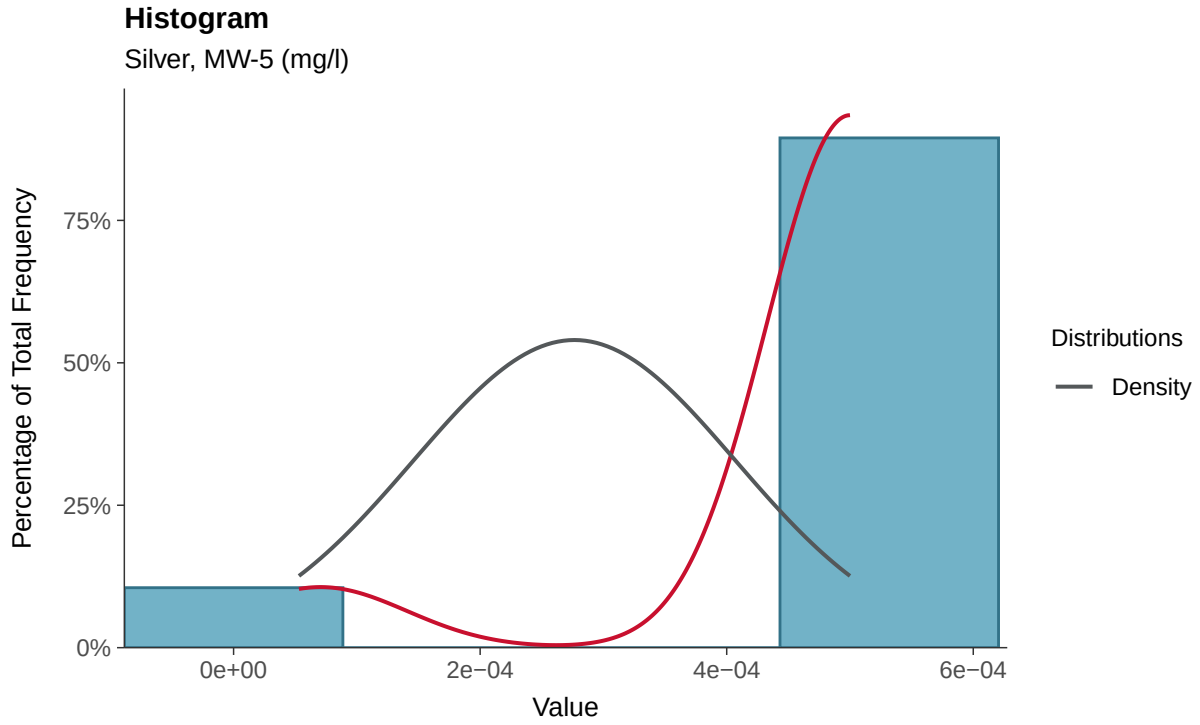
Nickel, MW-5 (mg/l)



Part 115: Silver, MW-5

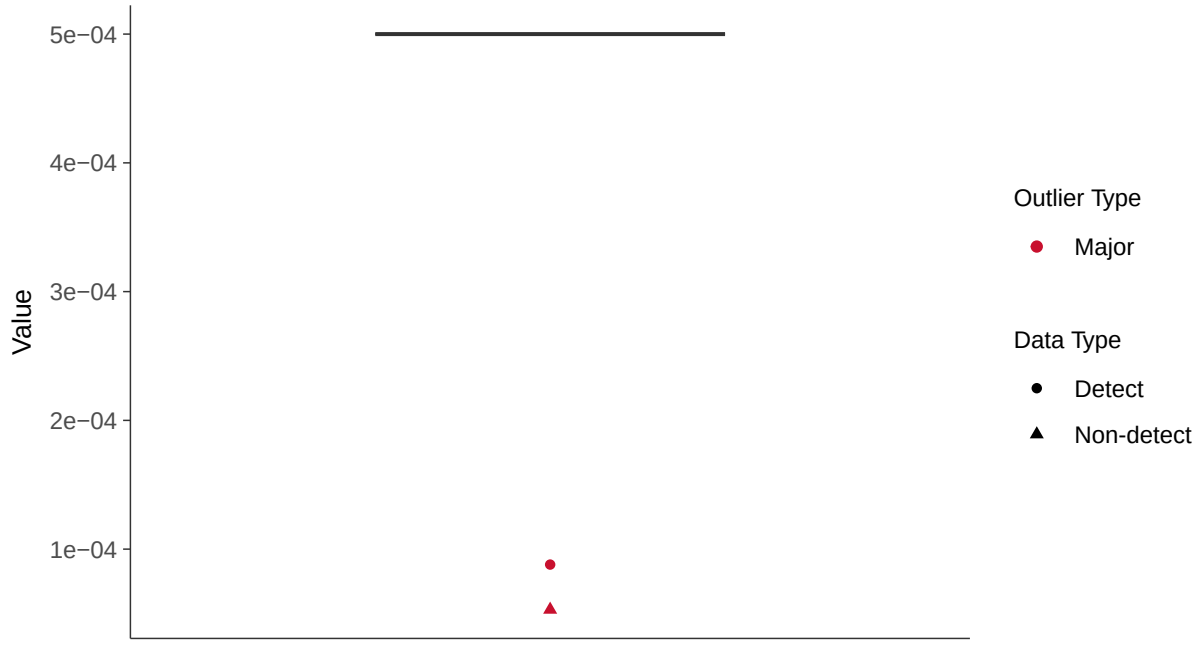
ID: 15_5_123





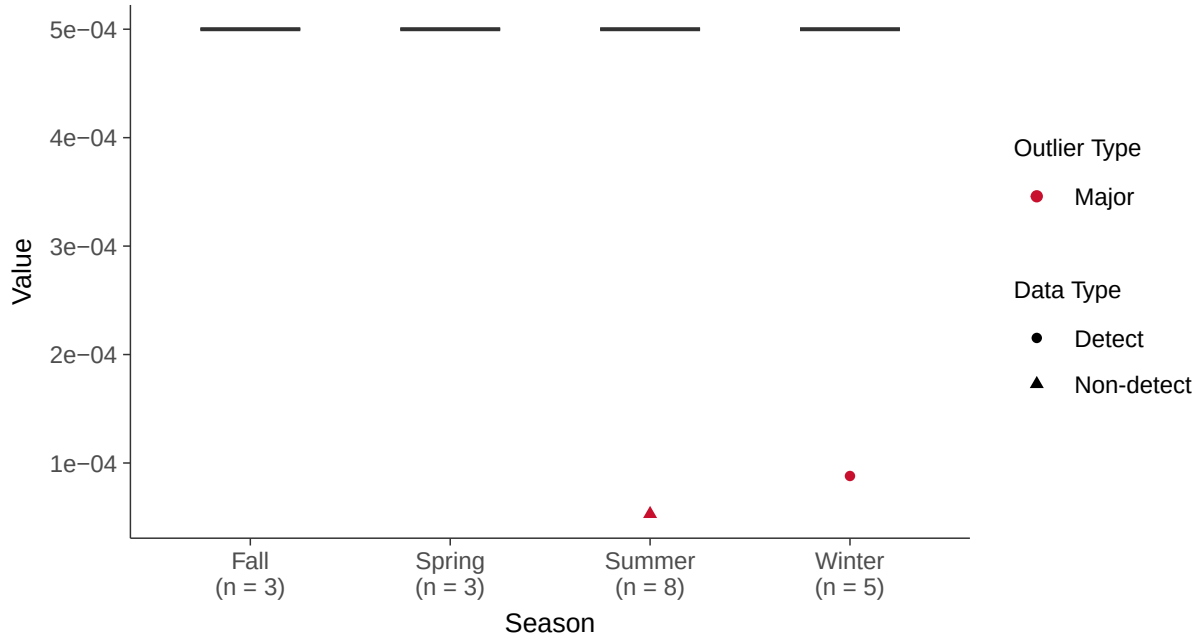
Boxplot

Silver, MW-5 (mg/l)



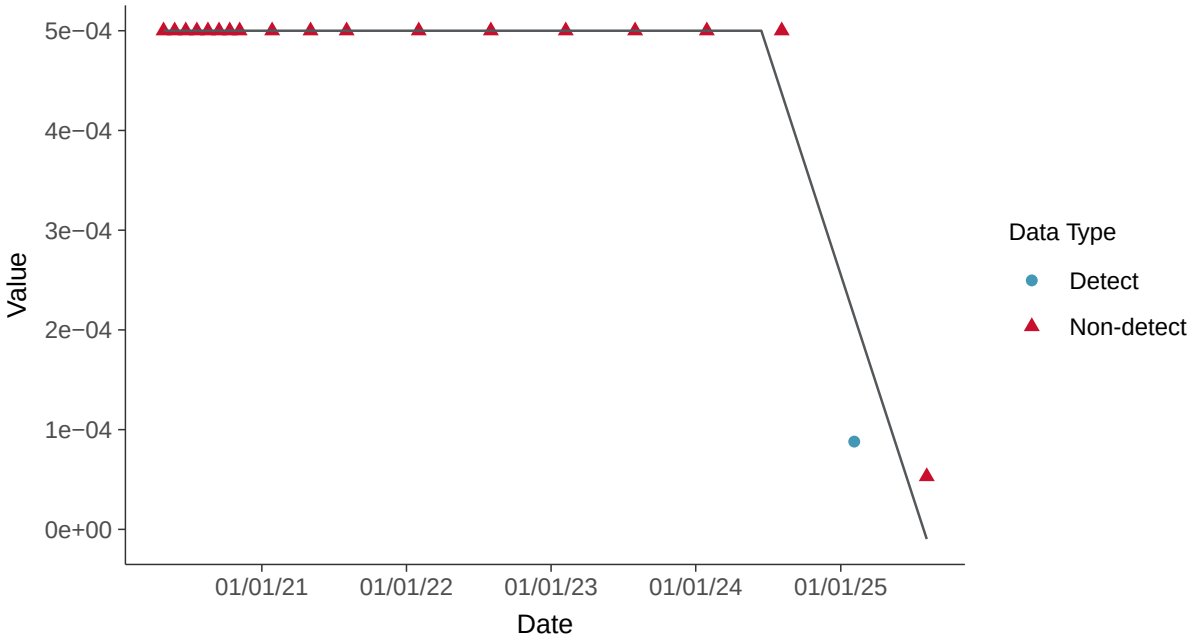
Boxplot by Season

Silver, MW-5 (mg/l)



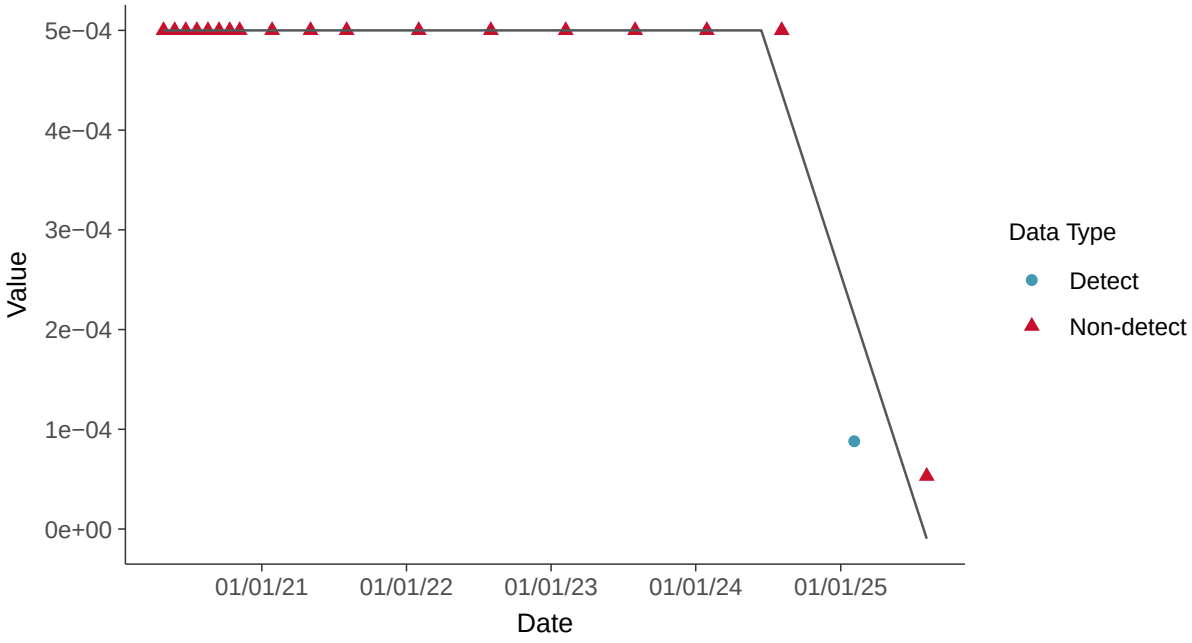
Trend Regression: Piecewise Linear-Linear

Silver, MW-5 (mg/l)



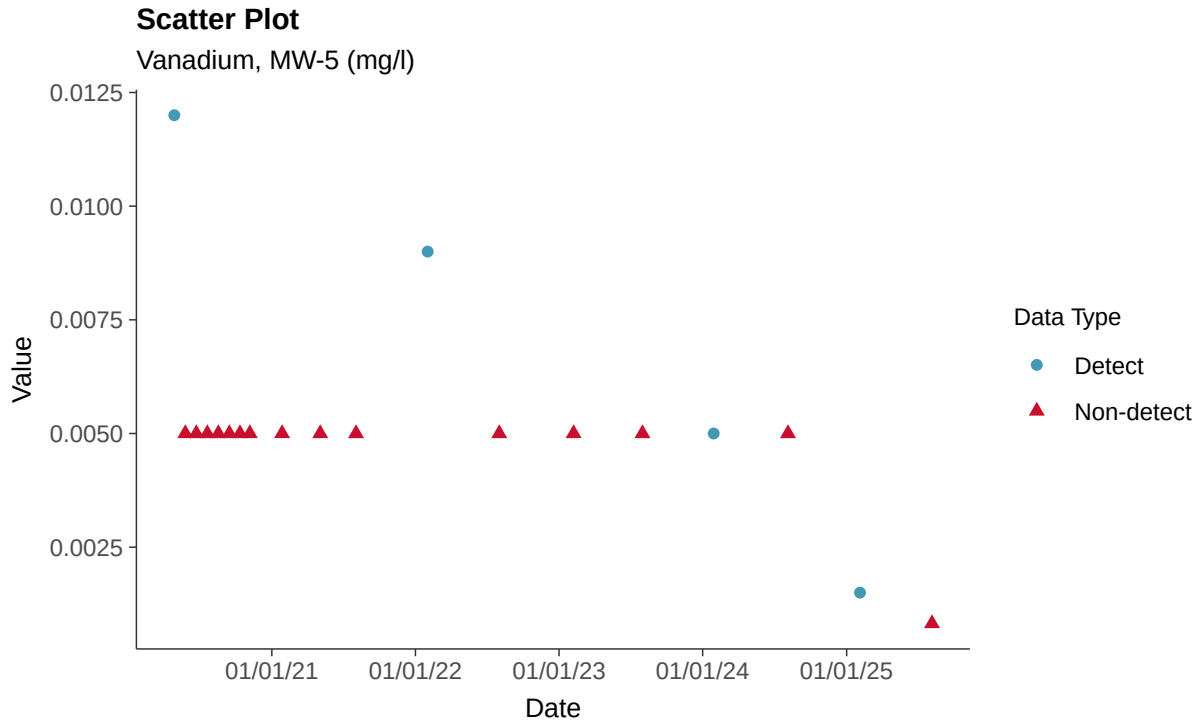
Trend Regression: Piecewise Linear-Linear-Linear

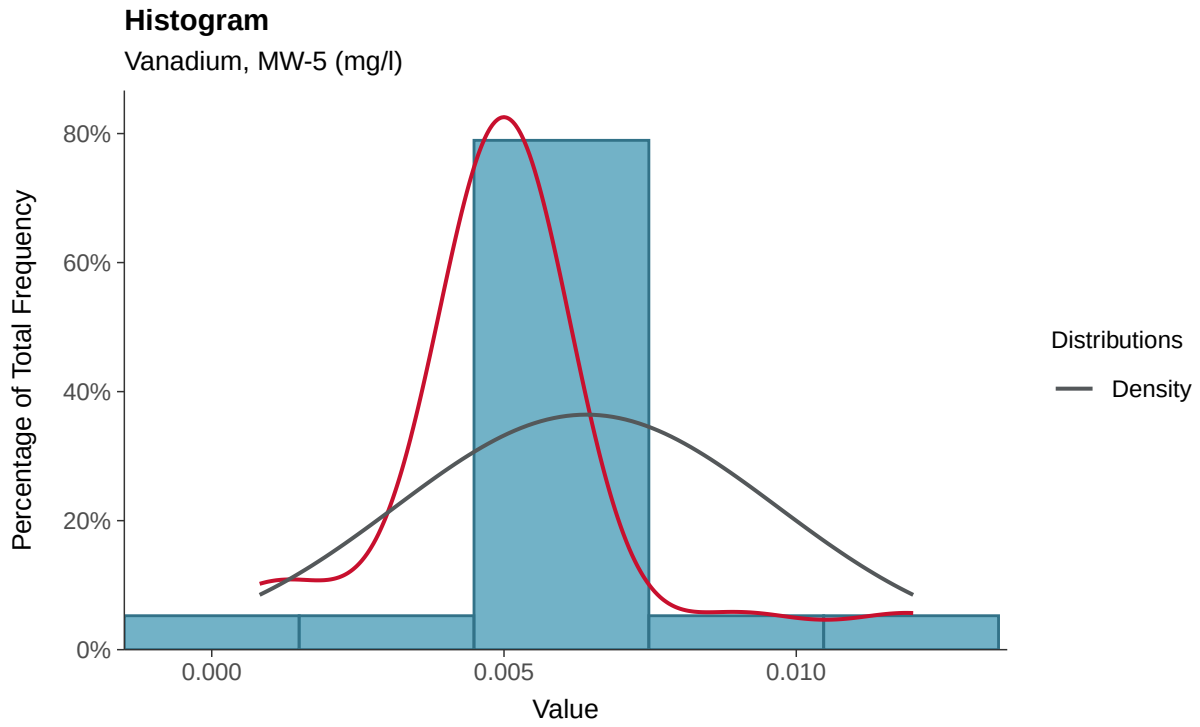
Silver, MW-5 (mg/l)



Part 115: Vanadium, MW-5

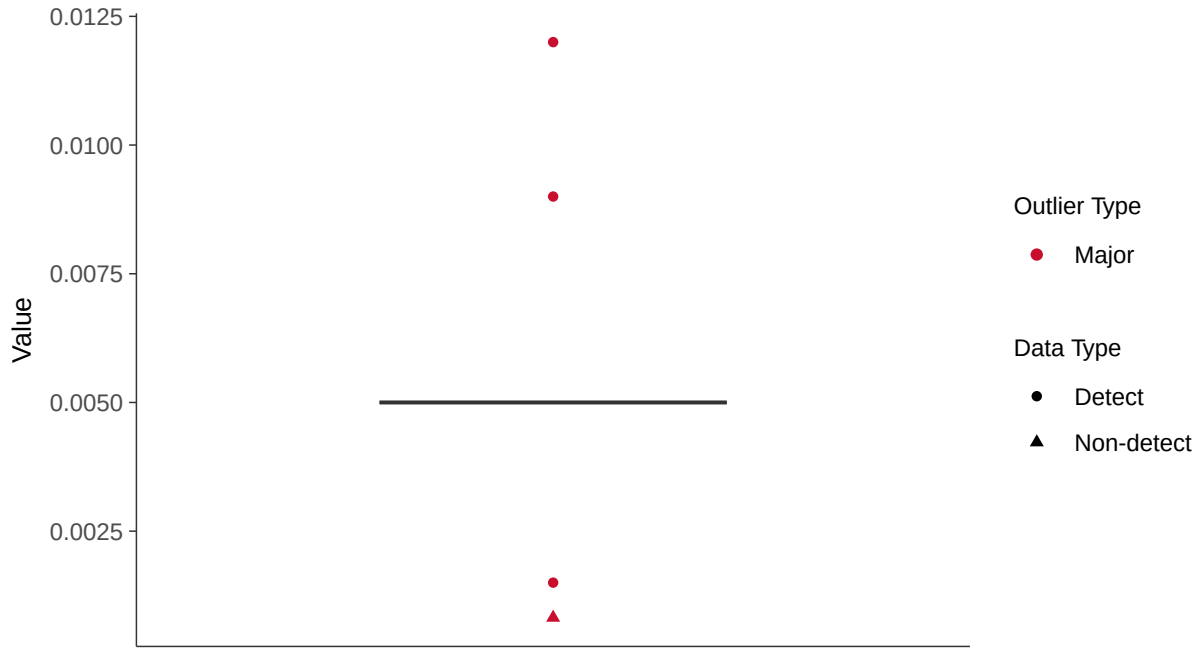
ID: 15_5_128





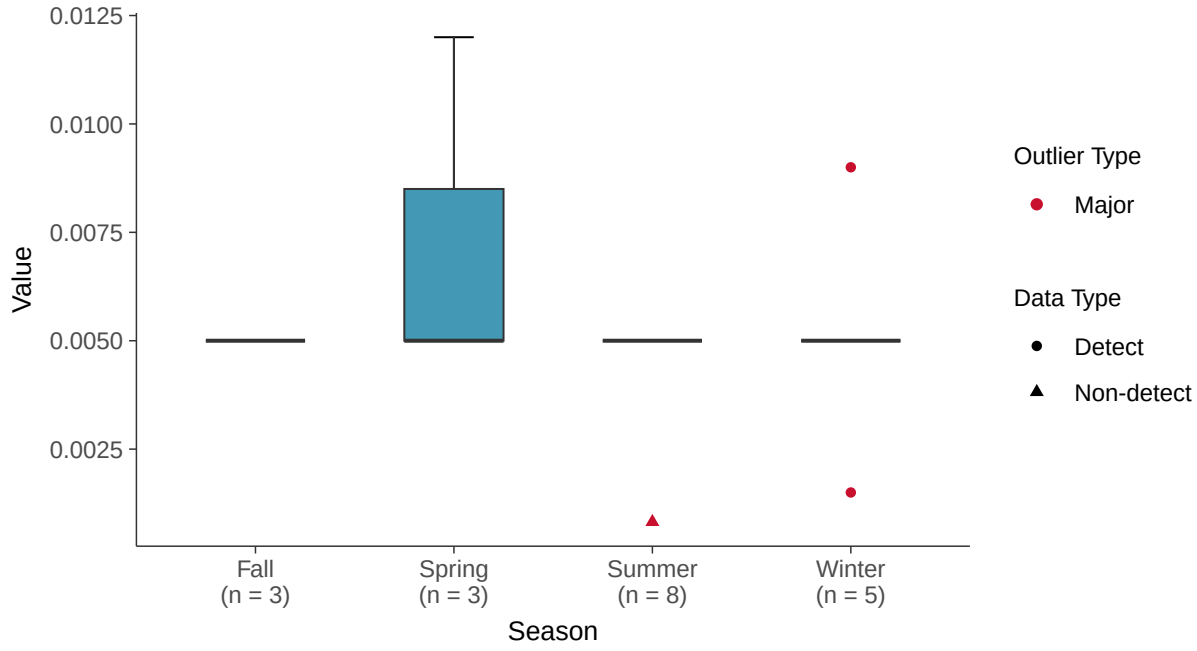
Boxplot

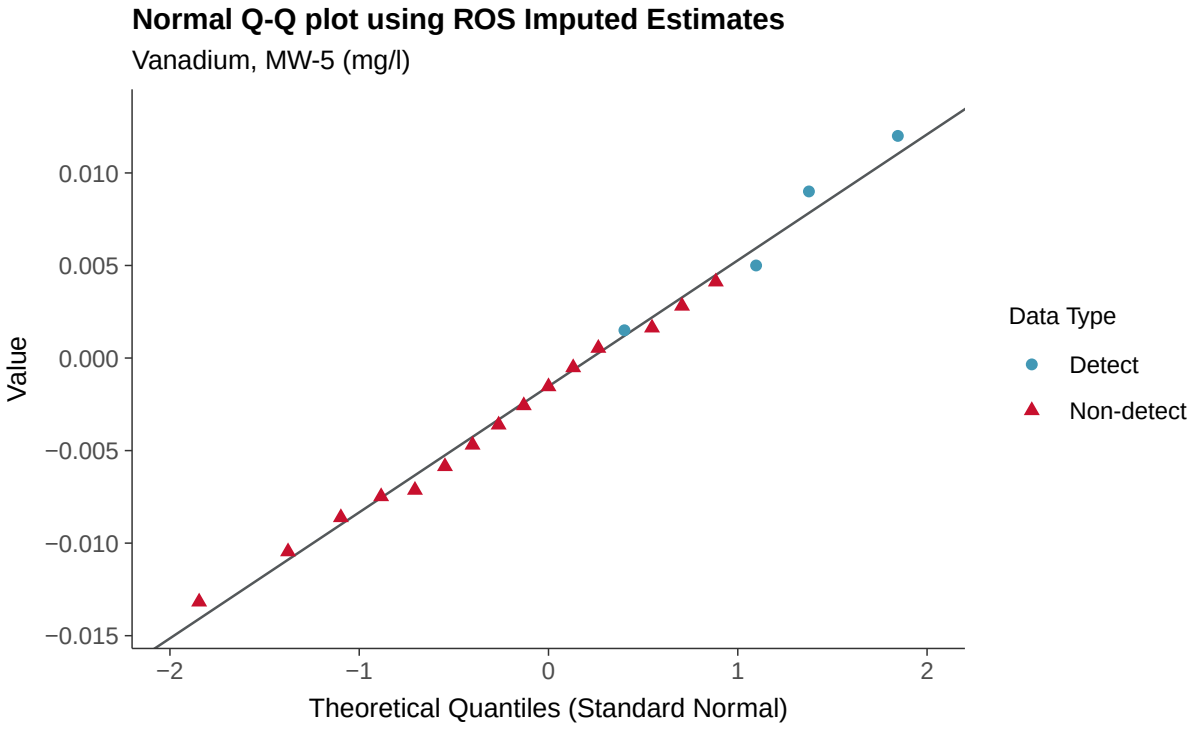
Vanadium, MW-5 (mg/l)



Boxplot by Season

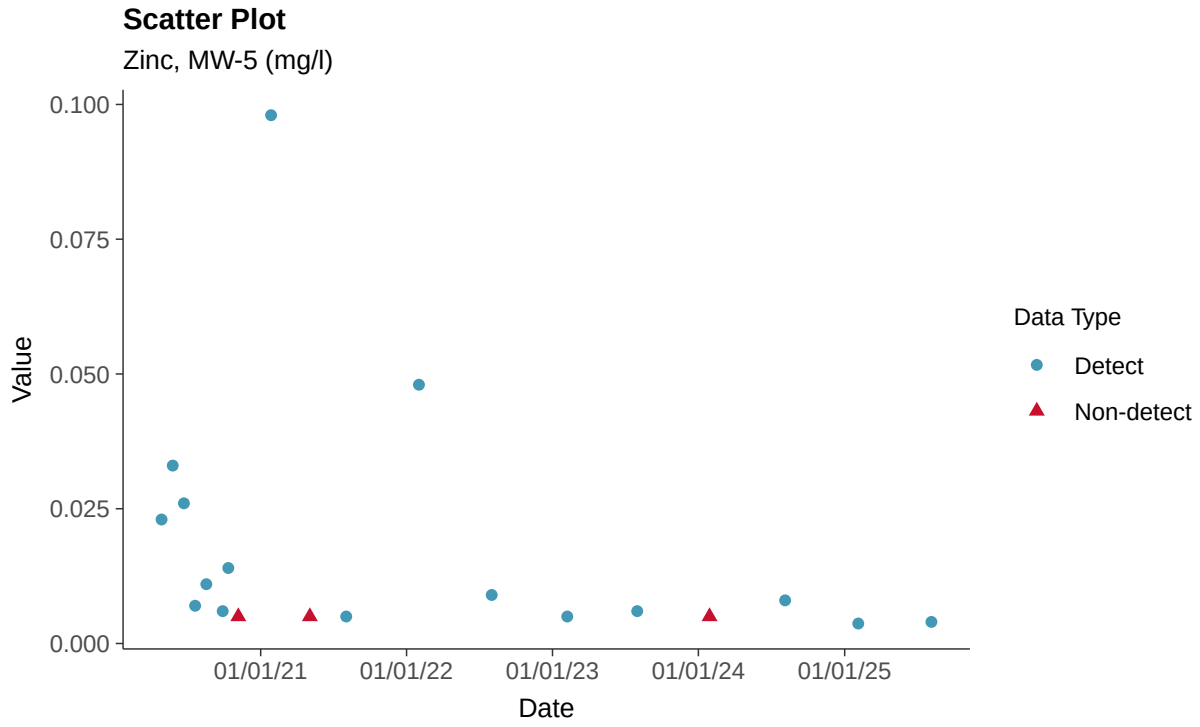
Vanadium, MW-5 (mg/l)

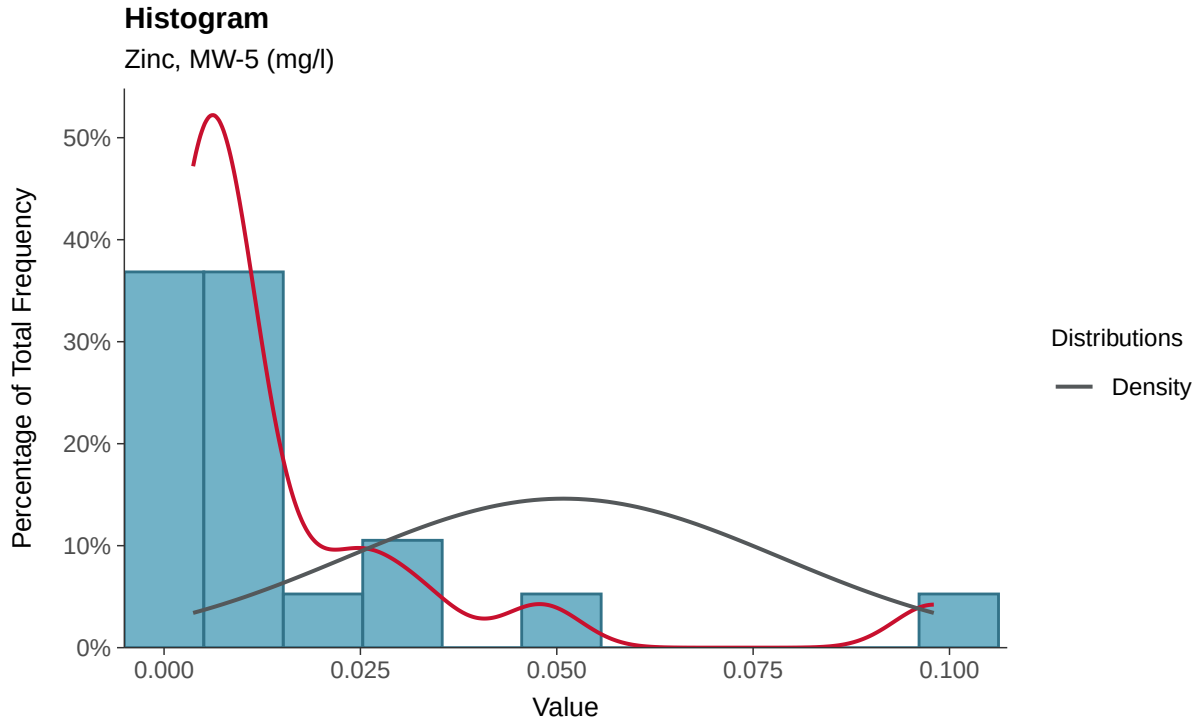



Normal Q-Q plot using ROS Imputed Estimates
Vanadium, MW-5 (mg/l)
Value
0.010
0.005
0.000
−0.005
−0.010
−0.015
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect
Non-detect

Part 115: Zinc, MW-5

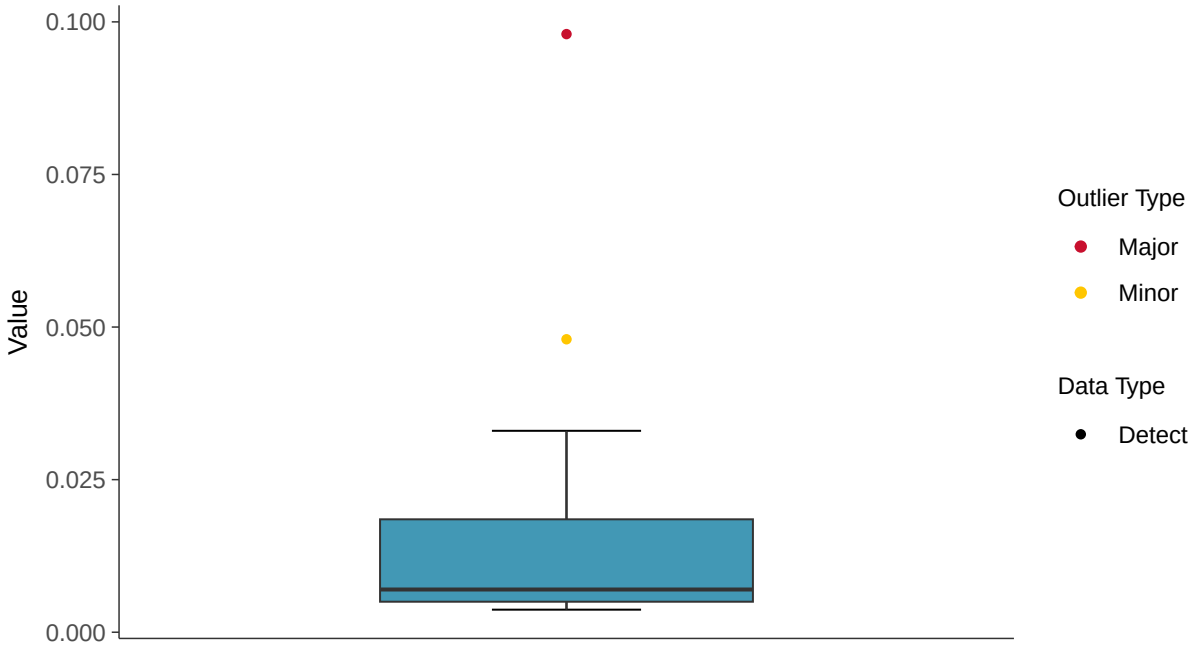
ID: 15_5_129





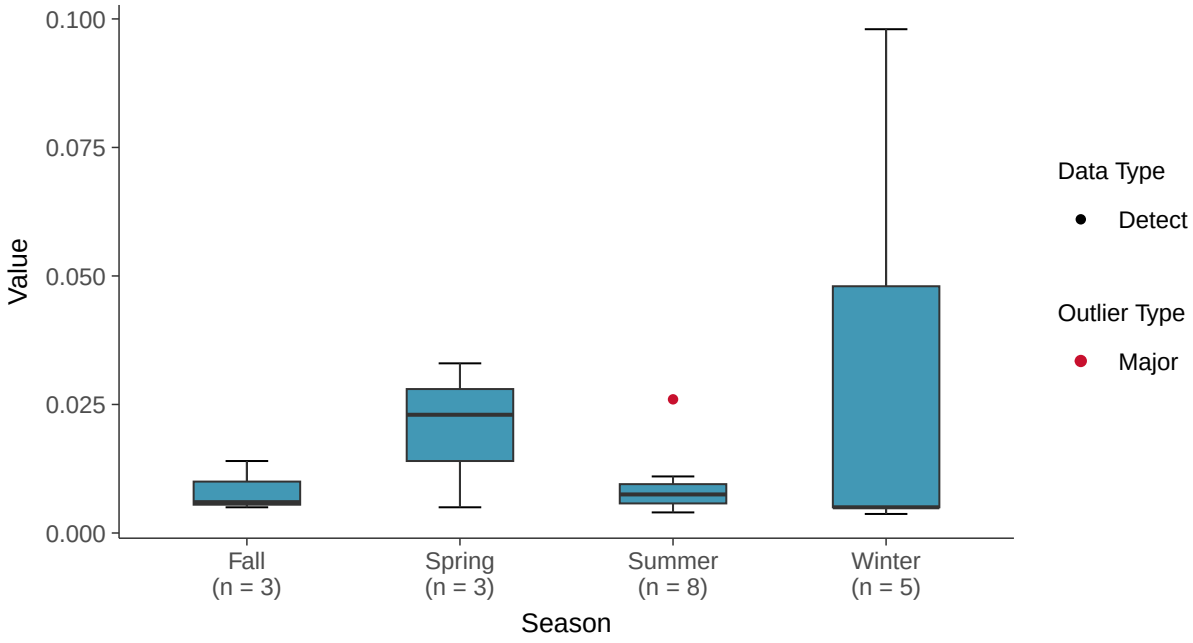
Boxplot

Zinc, MW-5 (mg/l)



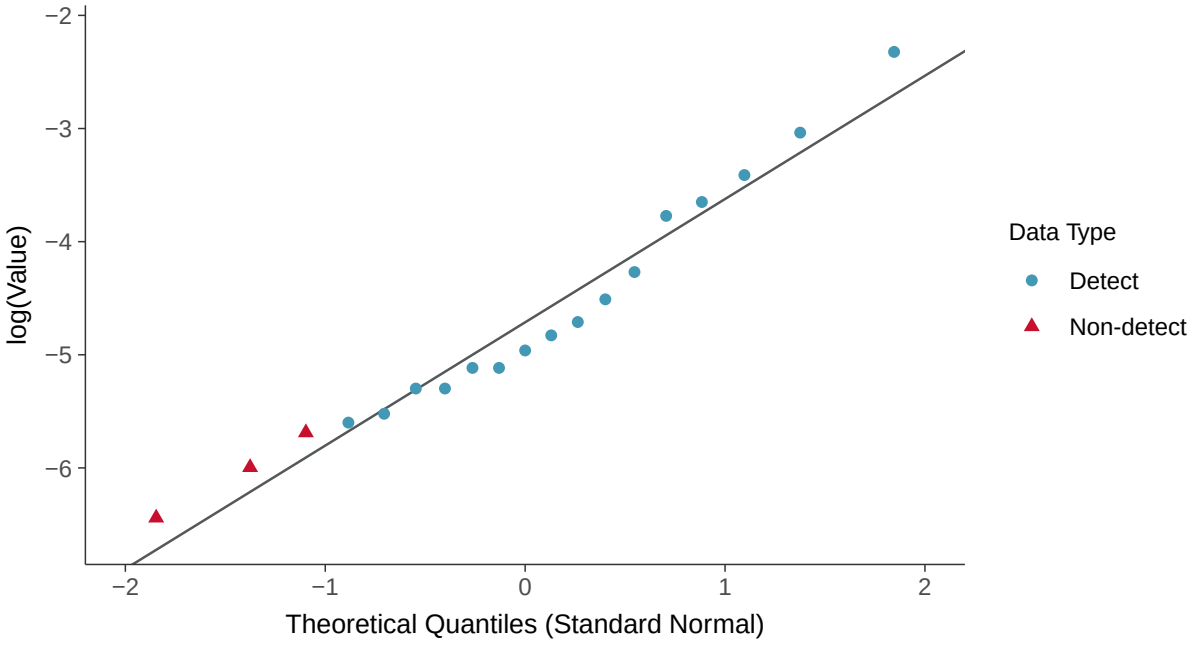
Boxplot by Season

Zinc, MW-5 (mg/l)



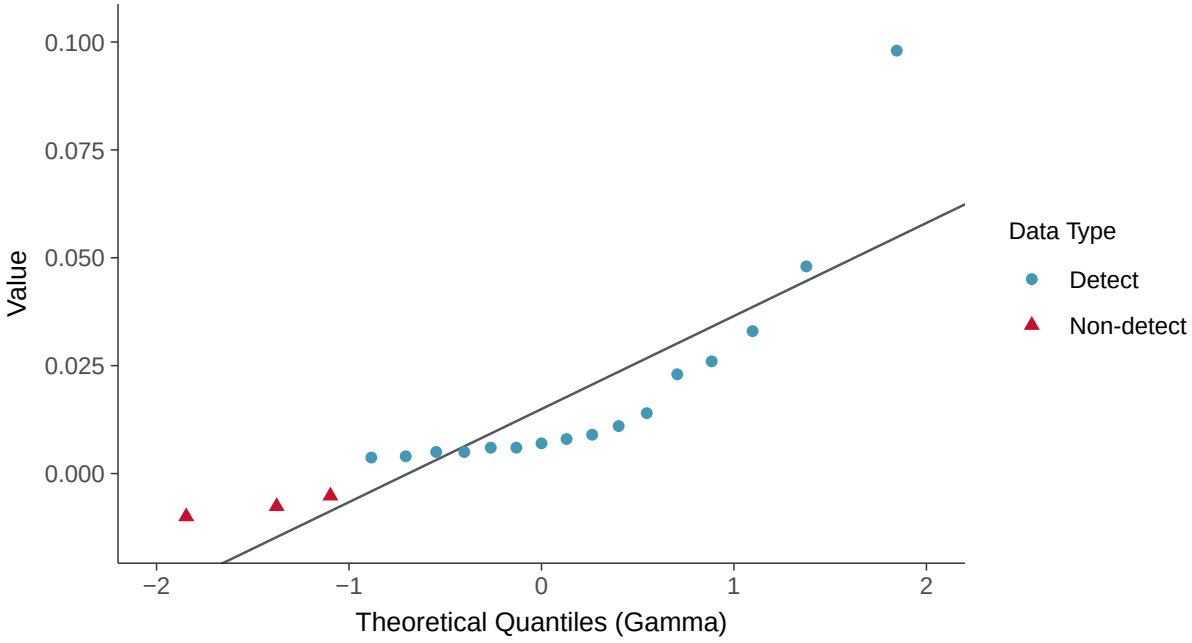
Lognormal Q-Q plot using ROS Imputed Estimates

Zinc, MW-5 (mg/l)



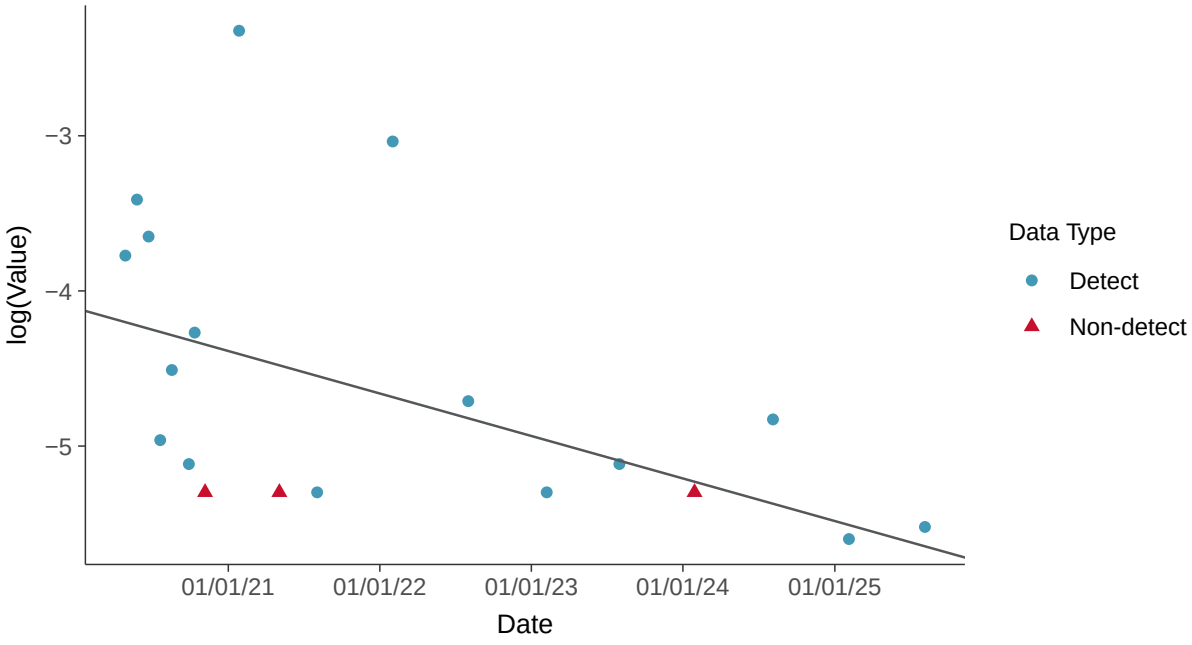
Gamma Q-Q plot using ROS Imputed Estimates

Zinc, MW-5 (mg/l)



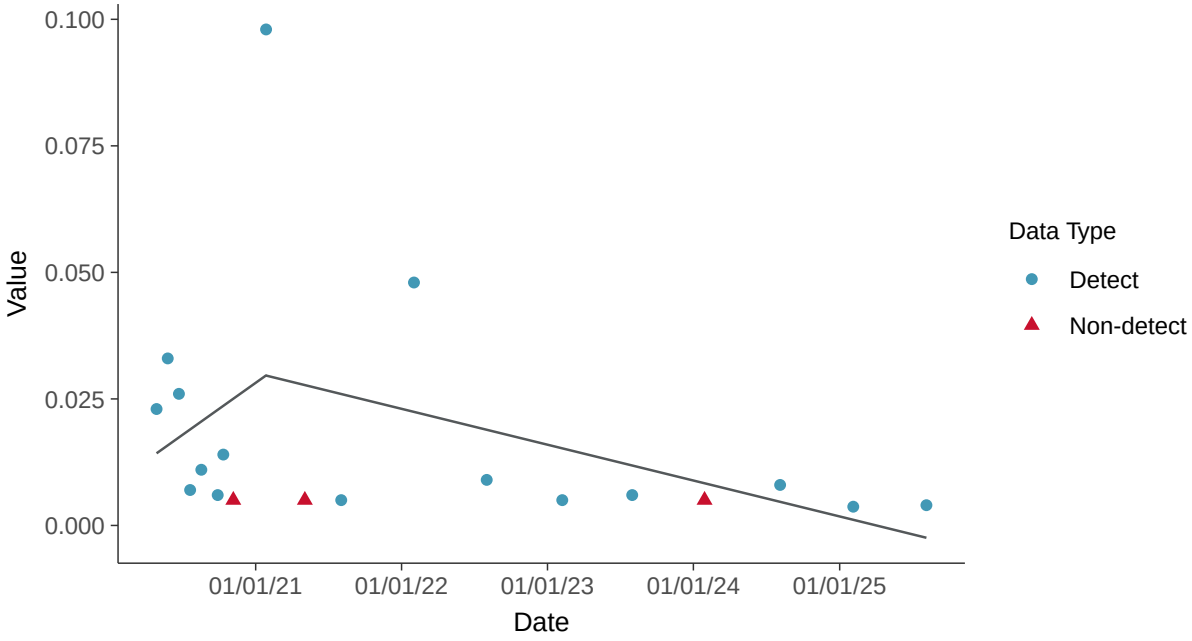
Trend Regression: Lognormal MLE

Zinc, MW-5 (mg/l)



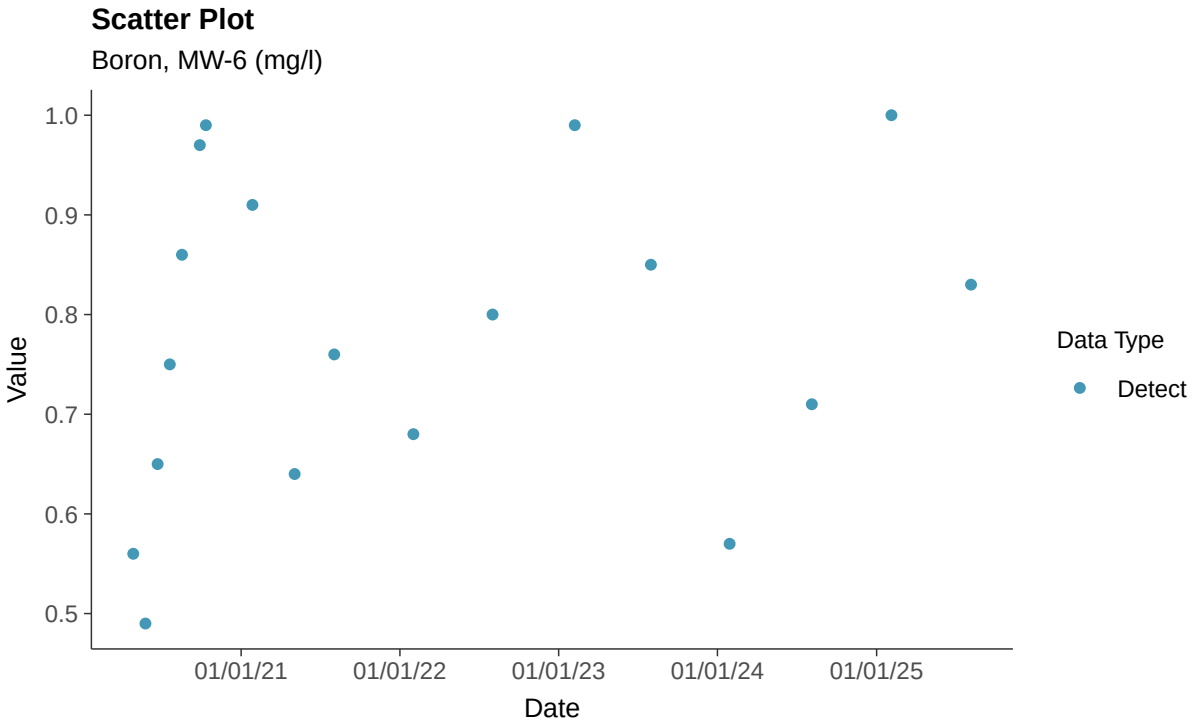
Trend Regression: Piecewise Linear-Linear

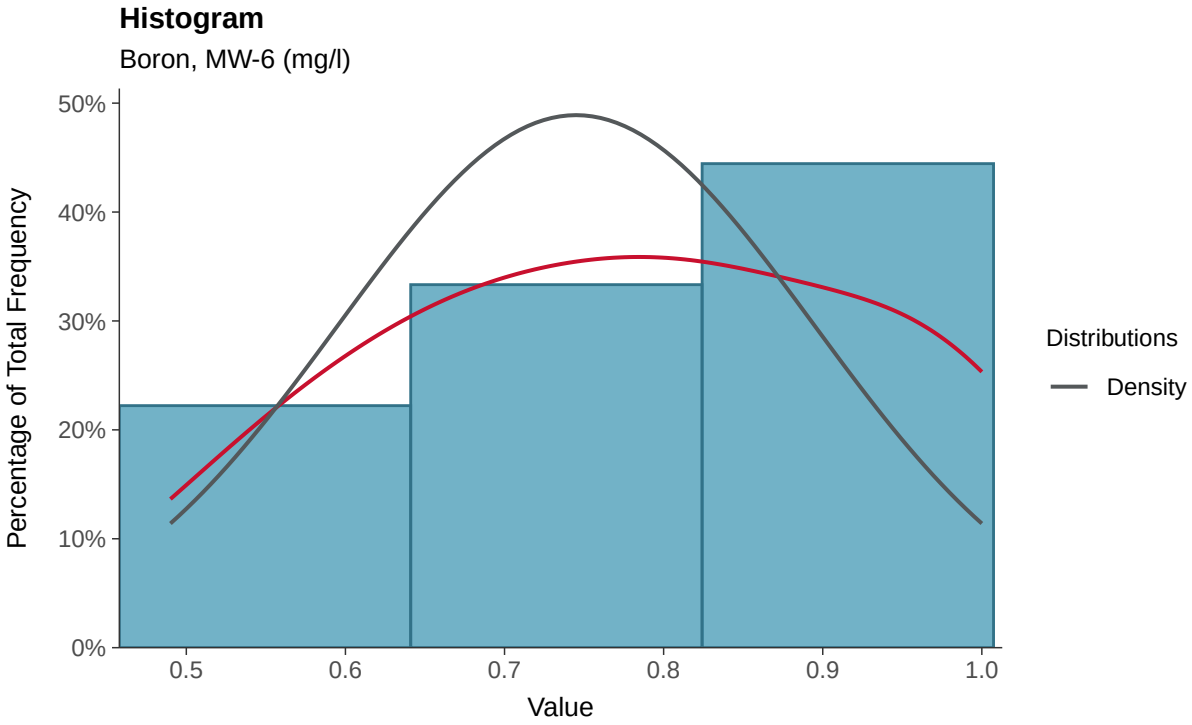
Zinc, MW-5 (mg/l)



Appendix III: Boron, MW-6

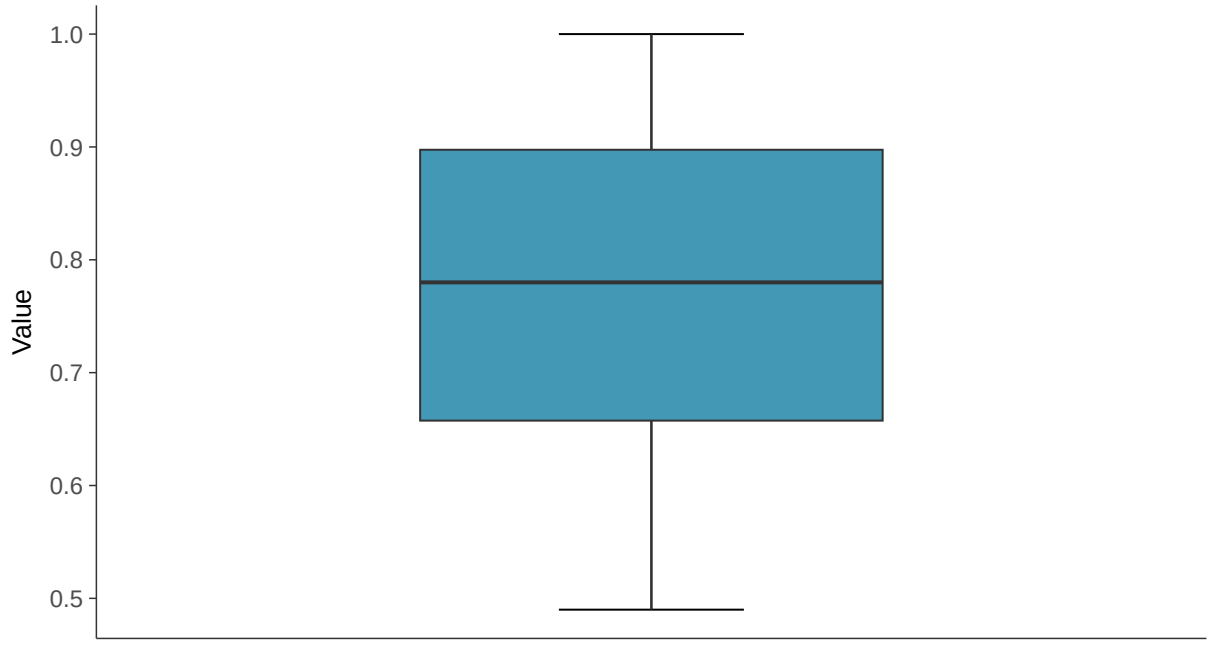
ID: 16_2_105





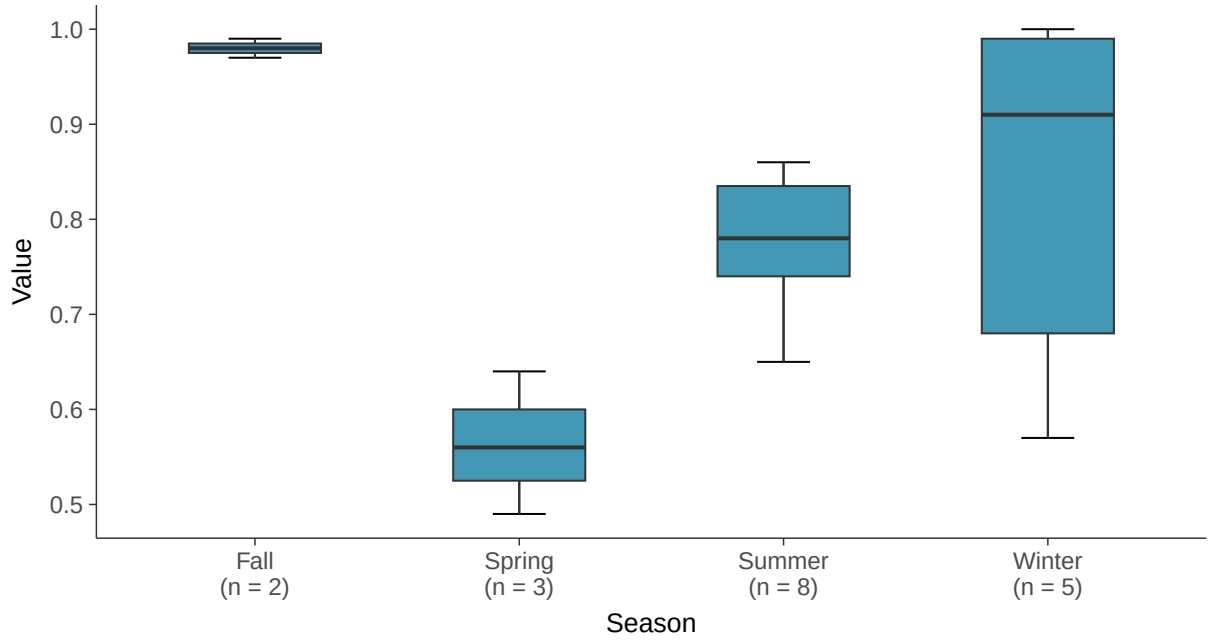
Boxplot

Boron, MW-6 (mg/l)



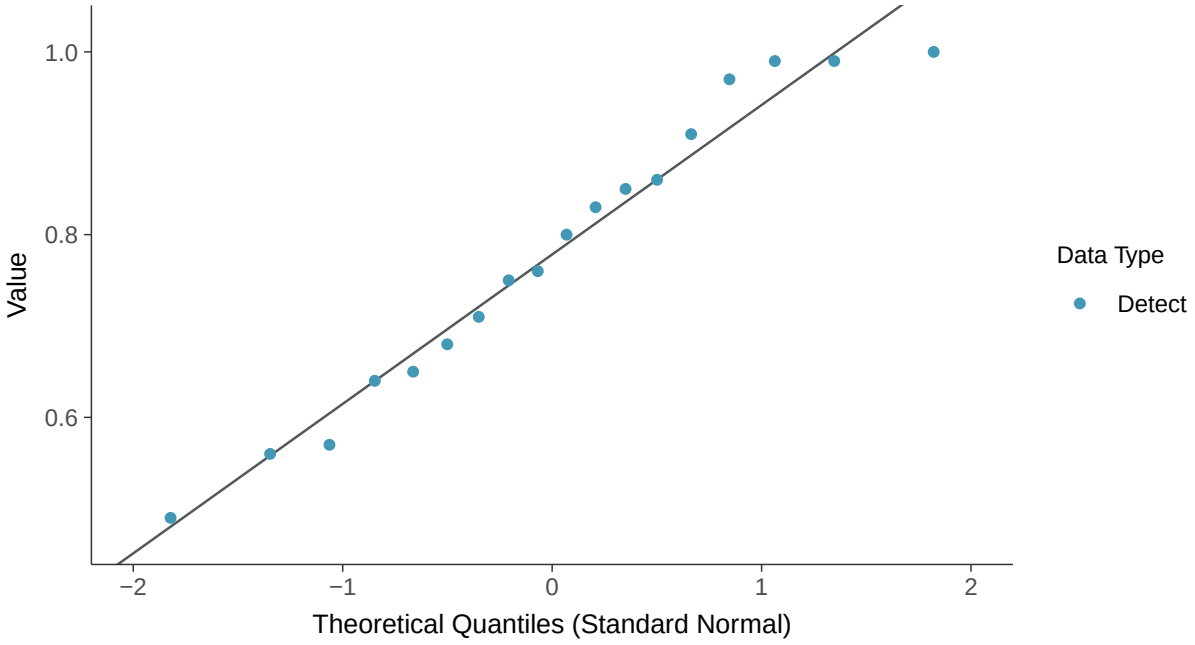
Boxplot by Season

Boron, MW-6 (mg/l)



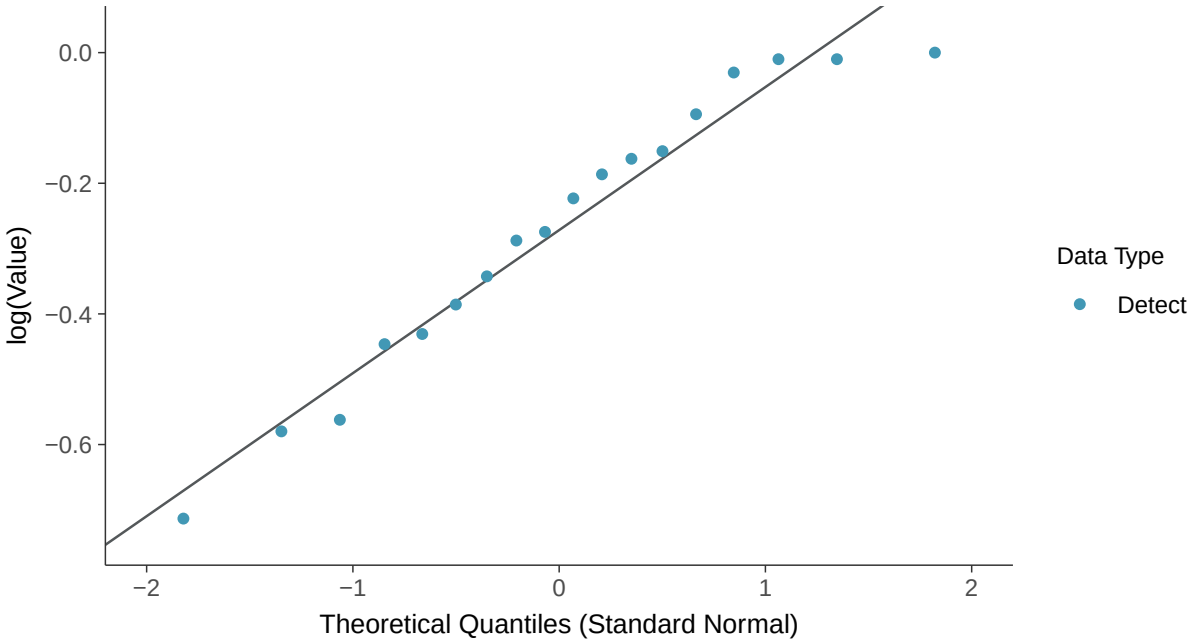
Normal Q-Q plot

Boron, MW-6 (mg/l)



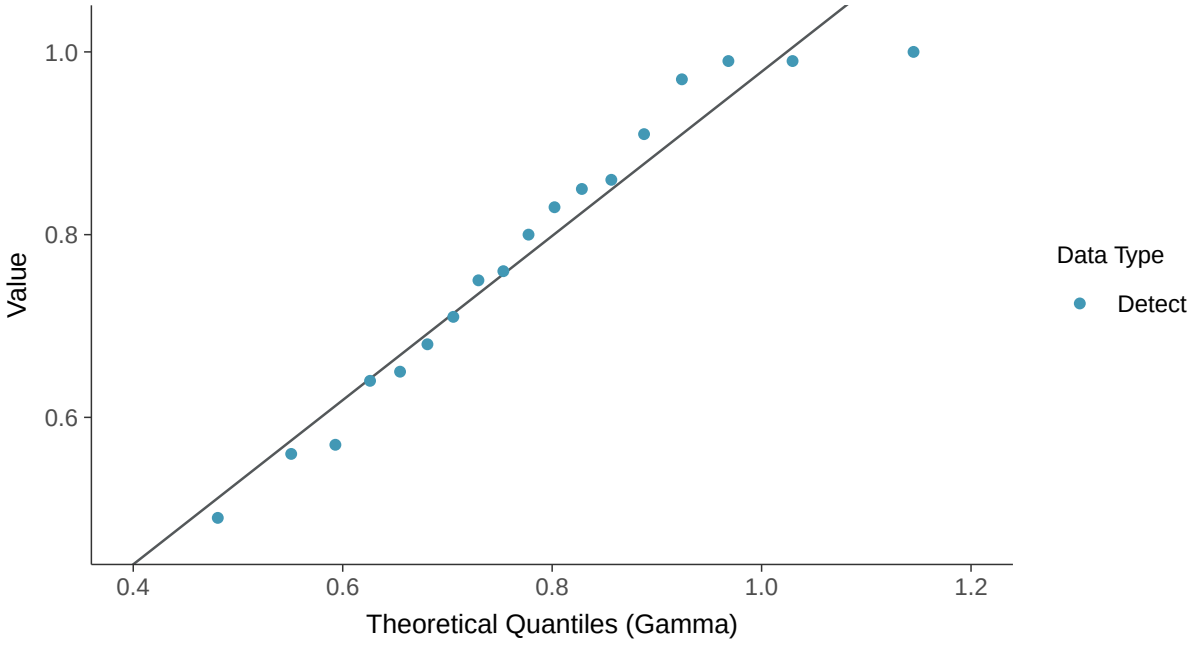
Lognormal Q-Q plot

Boron, MW-6 (mg/l)



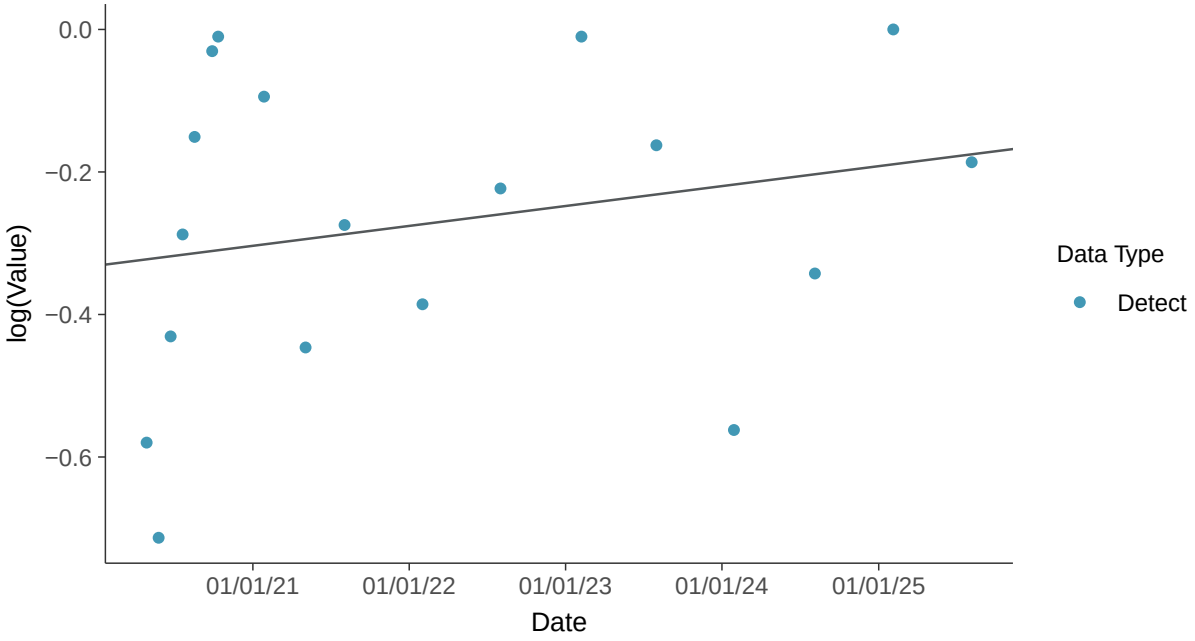
Gamma Q-Q plot

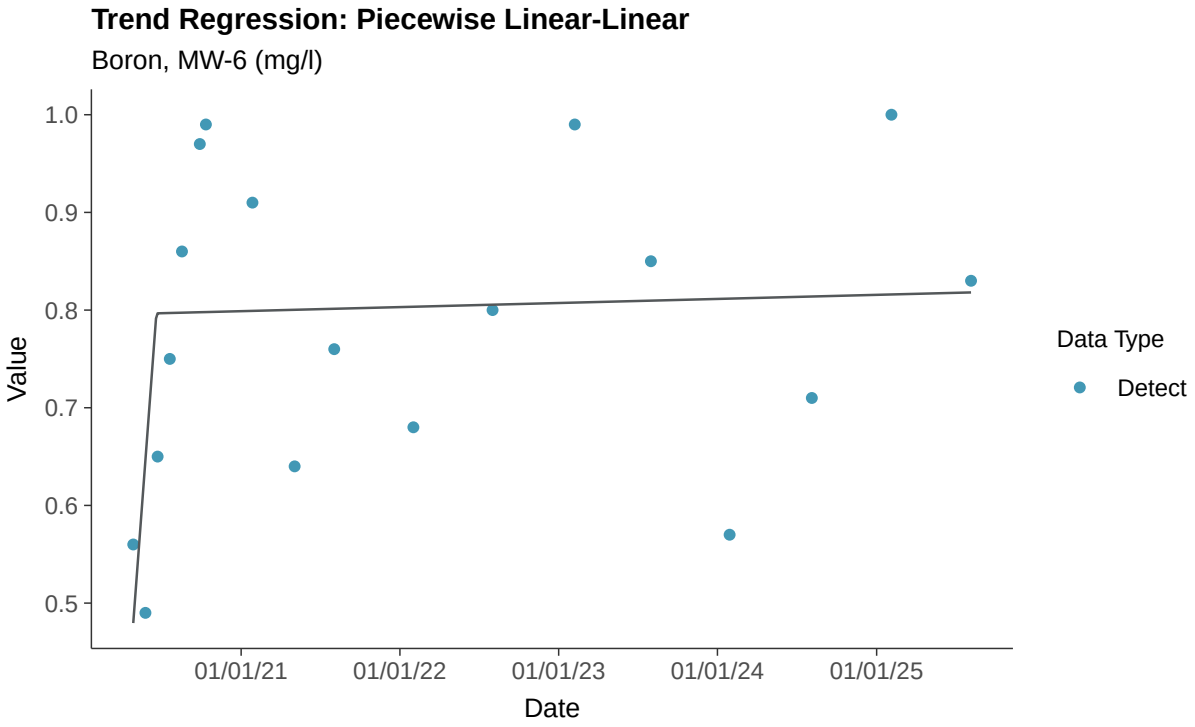
Boron, MW-6 (mg/l)



Trend Regression: Lognormal MLE

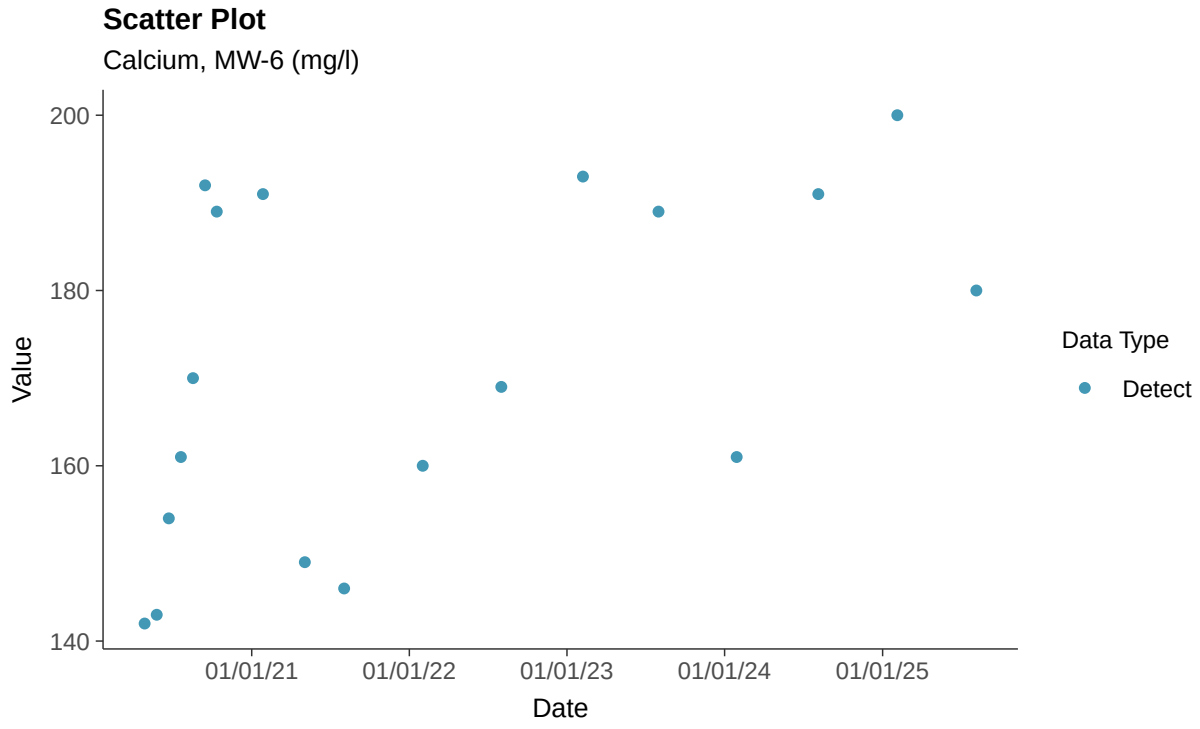
Boron, MW-6 (mg/l)

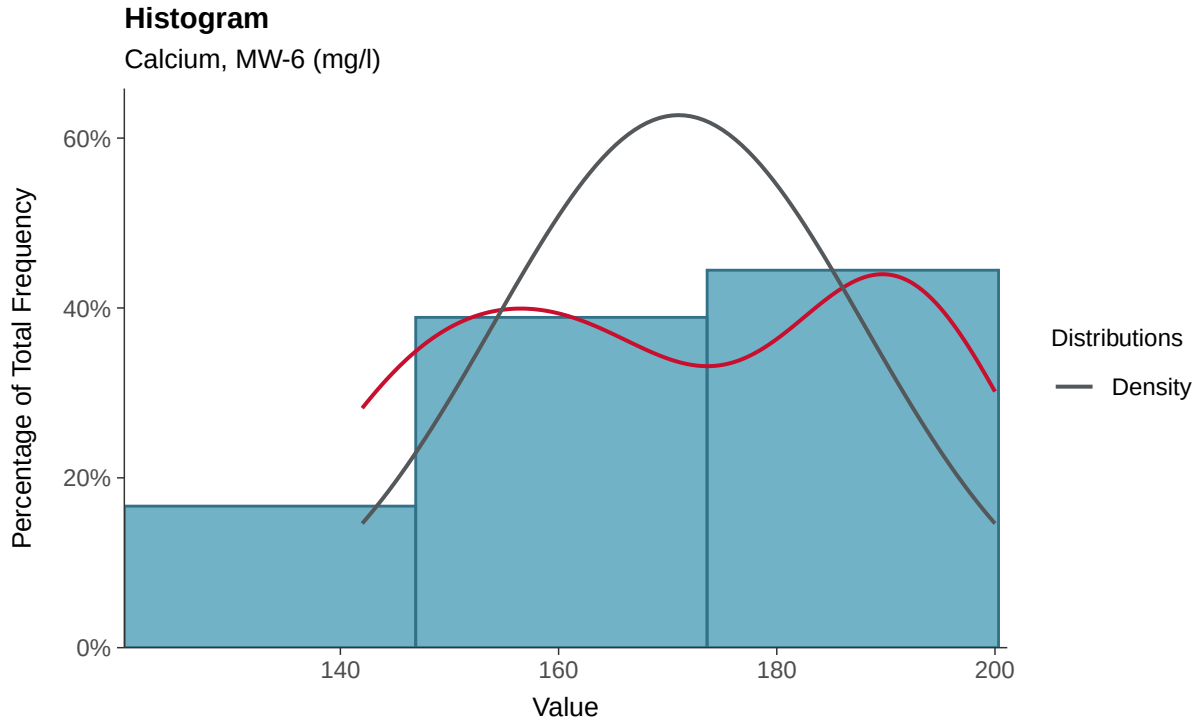



Trend Regression: Piecewise Linear-Linear
Boron, MW-6 (mg/l)
Value
1.0
0.9
0.8
0.7
0.6
0.5
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect

Appendix III: Calcium, MW-6

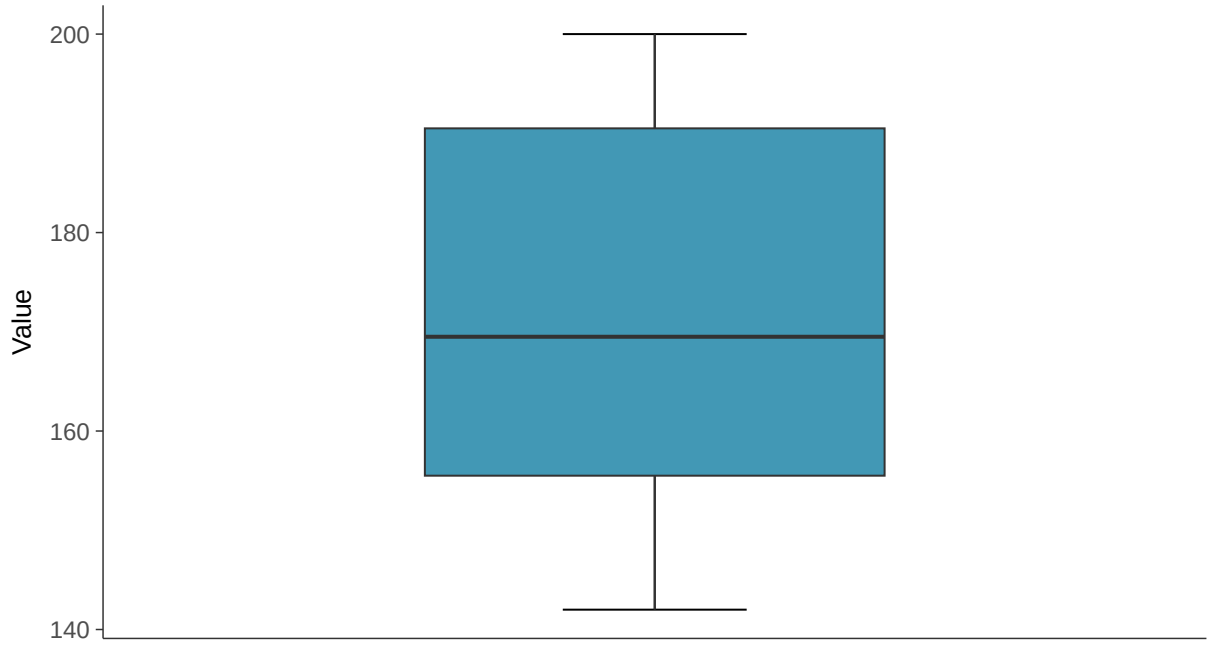
ID: 16_2_107





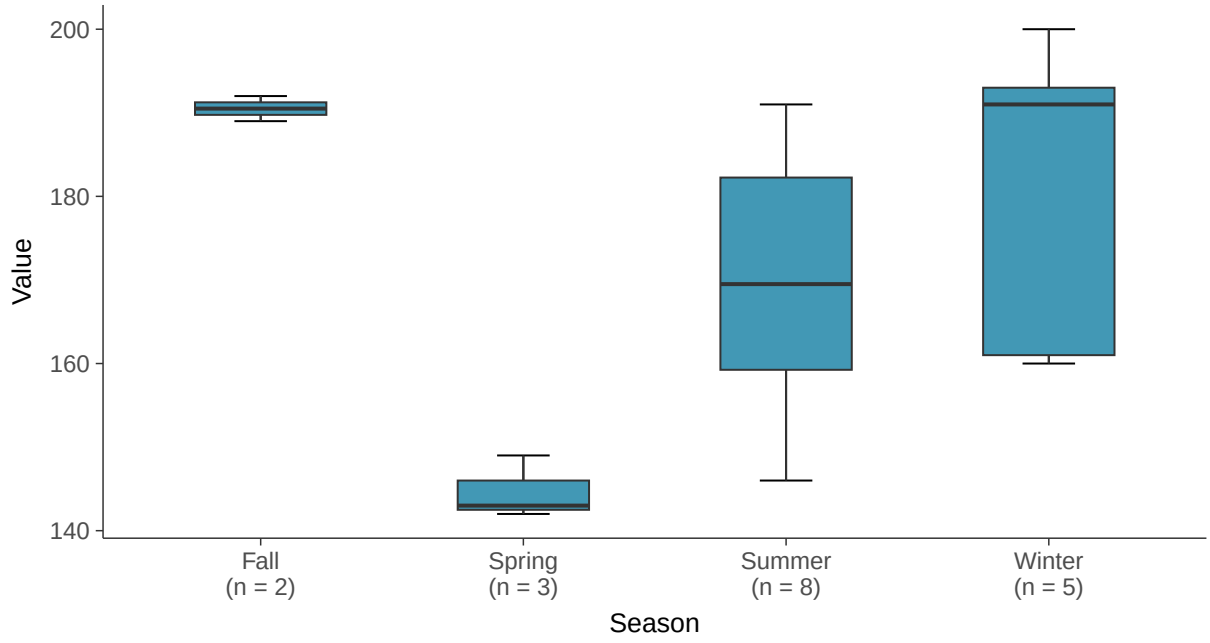
Boxplot

Calcium, MW-6 (mg/l)



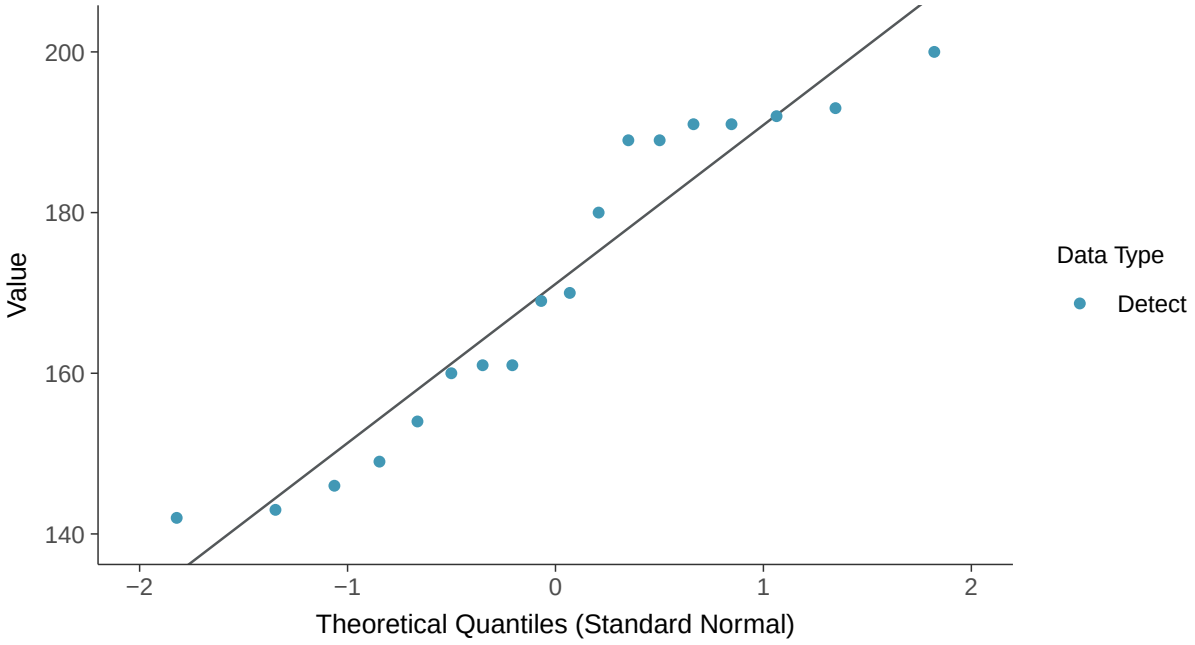
Boxplot by Season

Calcium, MW-6 (mg/l)



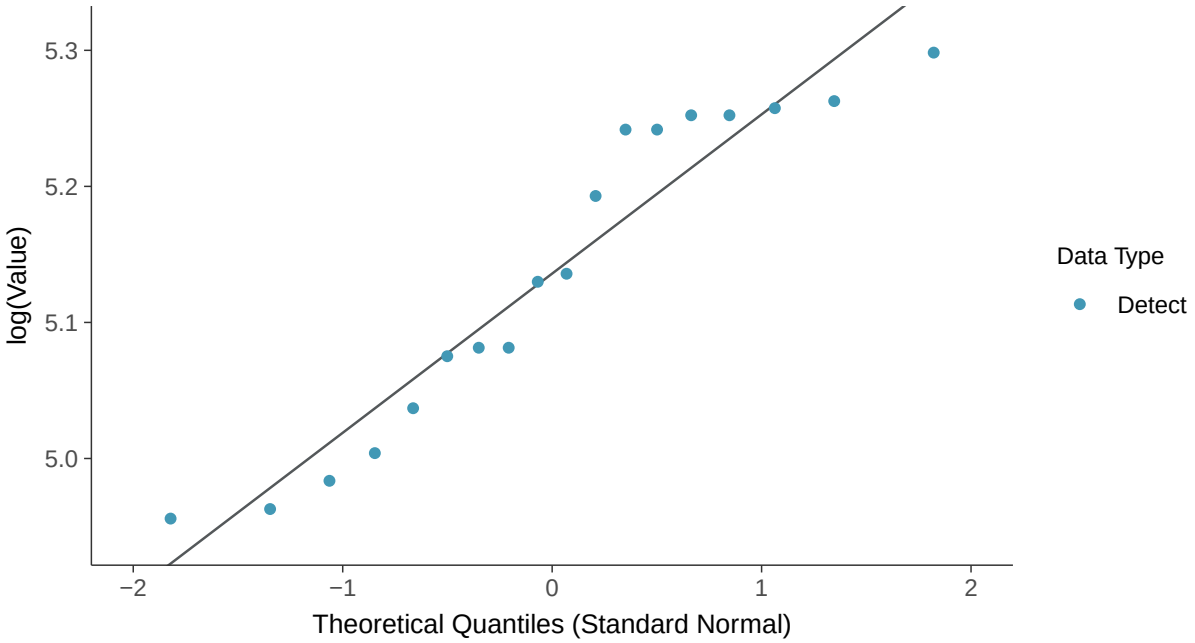
Normal Q-Q plot

Calcium, MW-6 (mg/l)



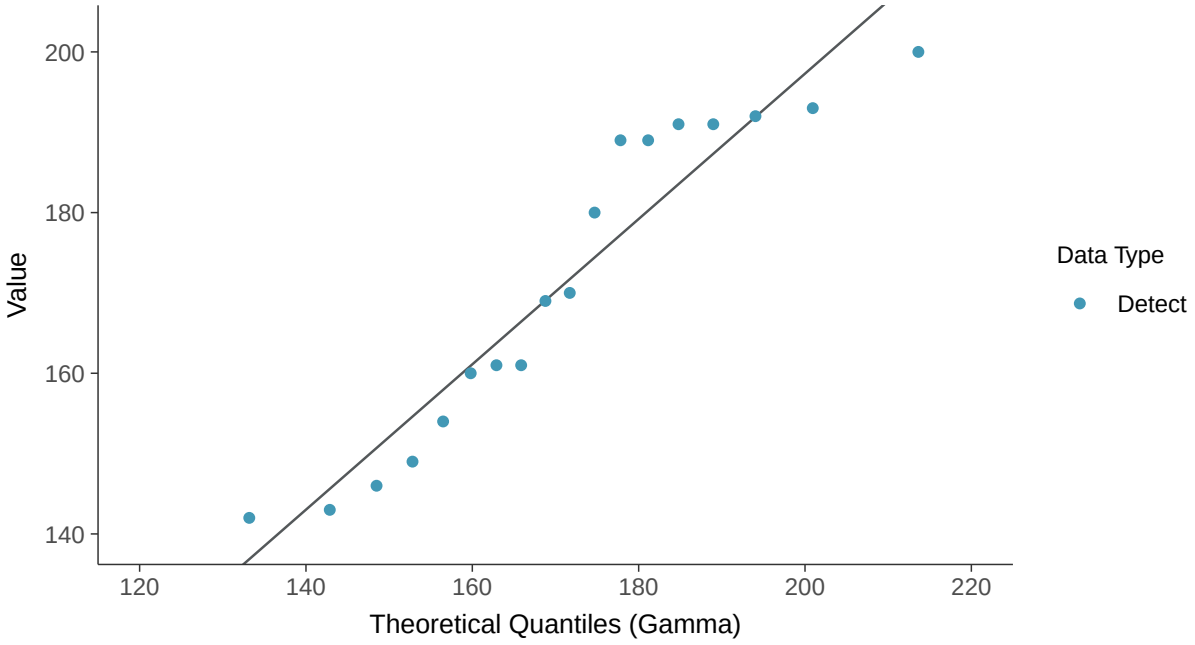
Lognormal Q-Q plot

Calcium, MW-6 (mg/l)



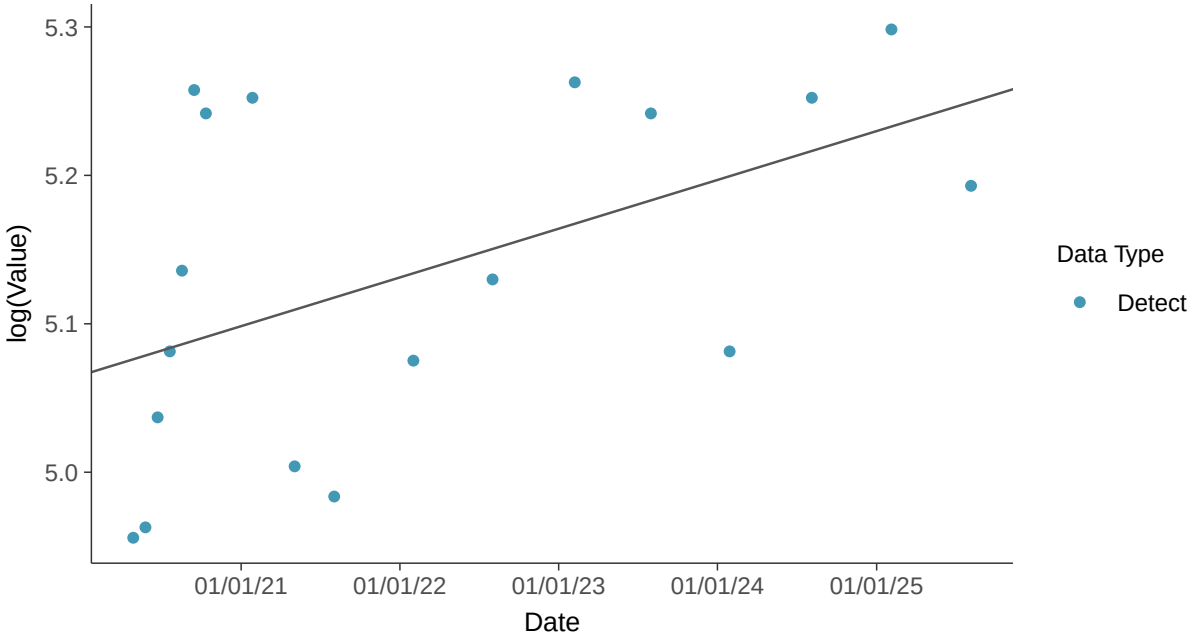
Gamma Q-Q plot

Calcium, MW-6 (mg/l)



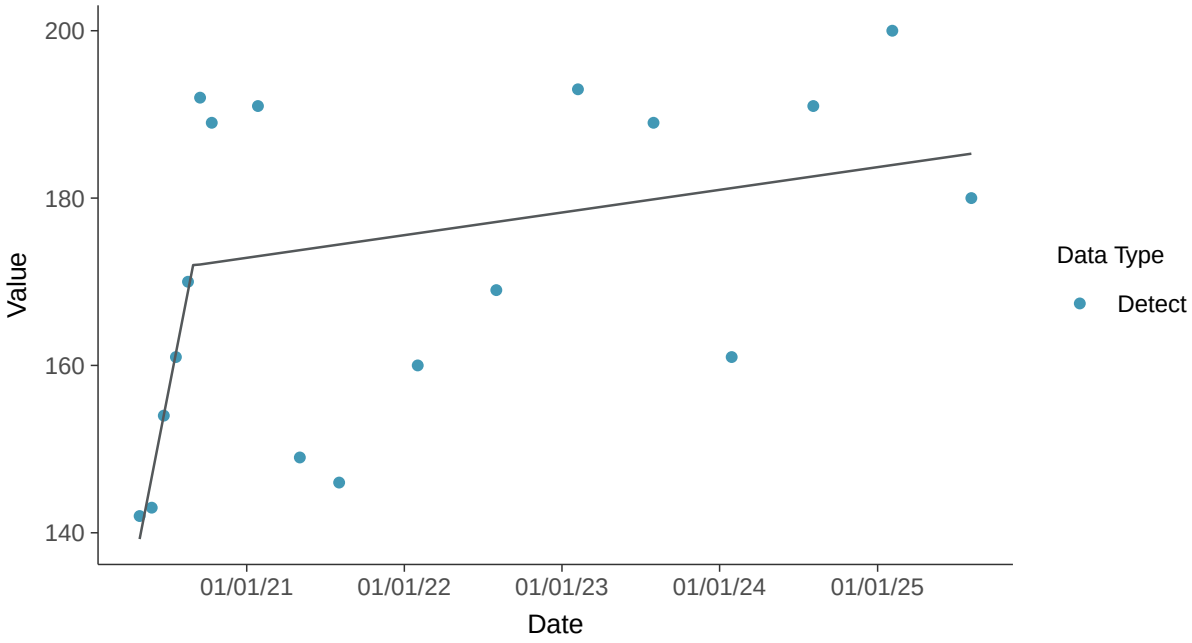
Trend Regression: Lognormal MLE

Calcium, MW-6 (mg/l)



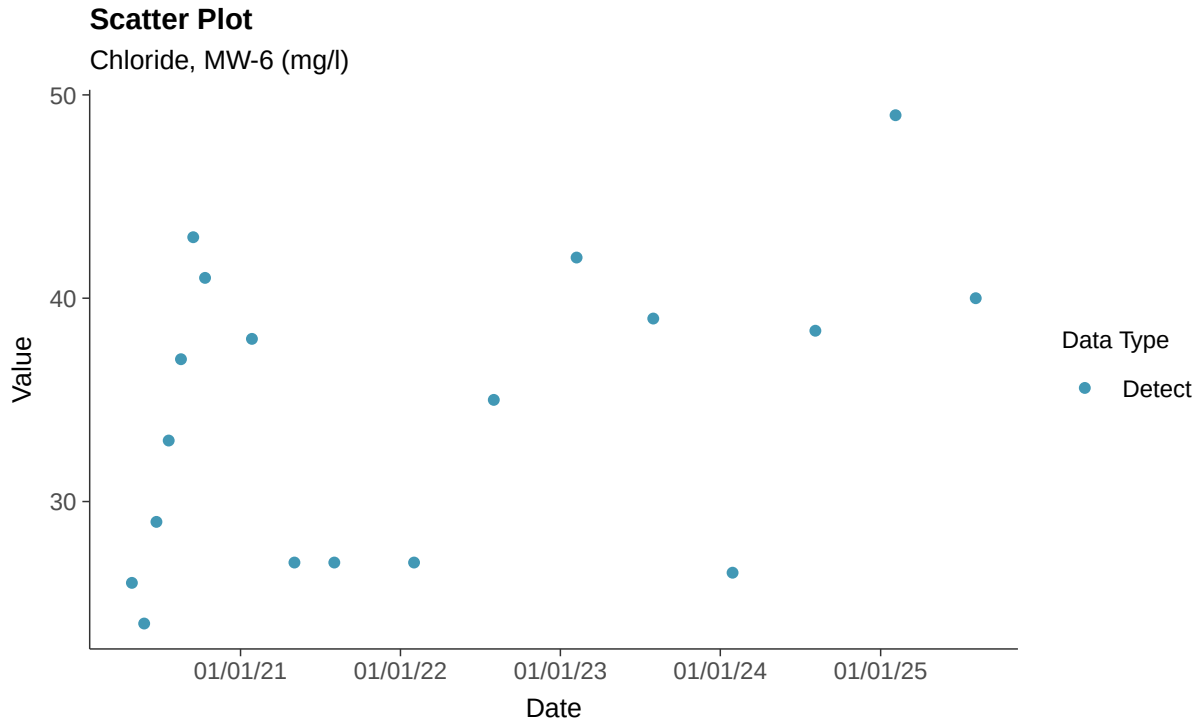
Trend Regression: Piecewise Linear-Linear

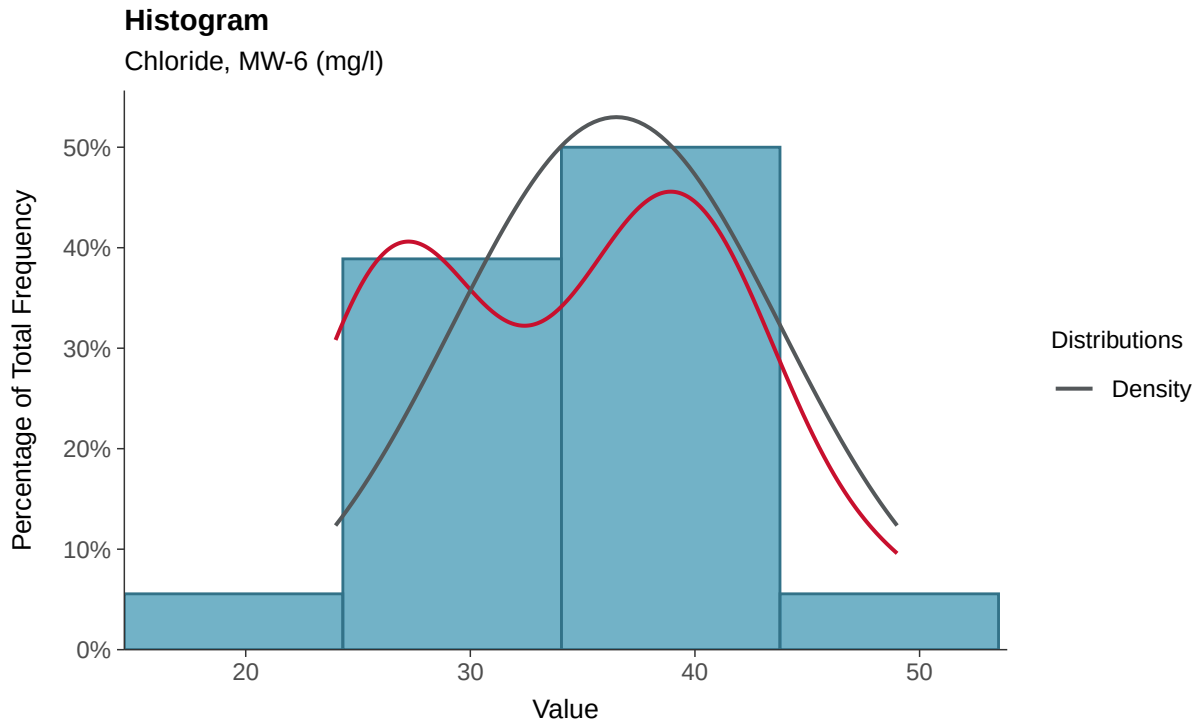
Calcium, MW-6 (mg/l)



Appendix III: Chloride, MW-6

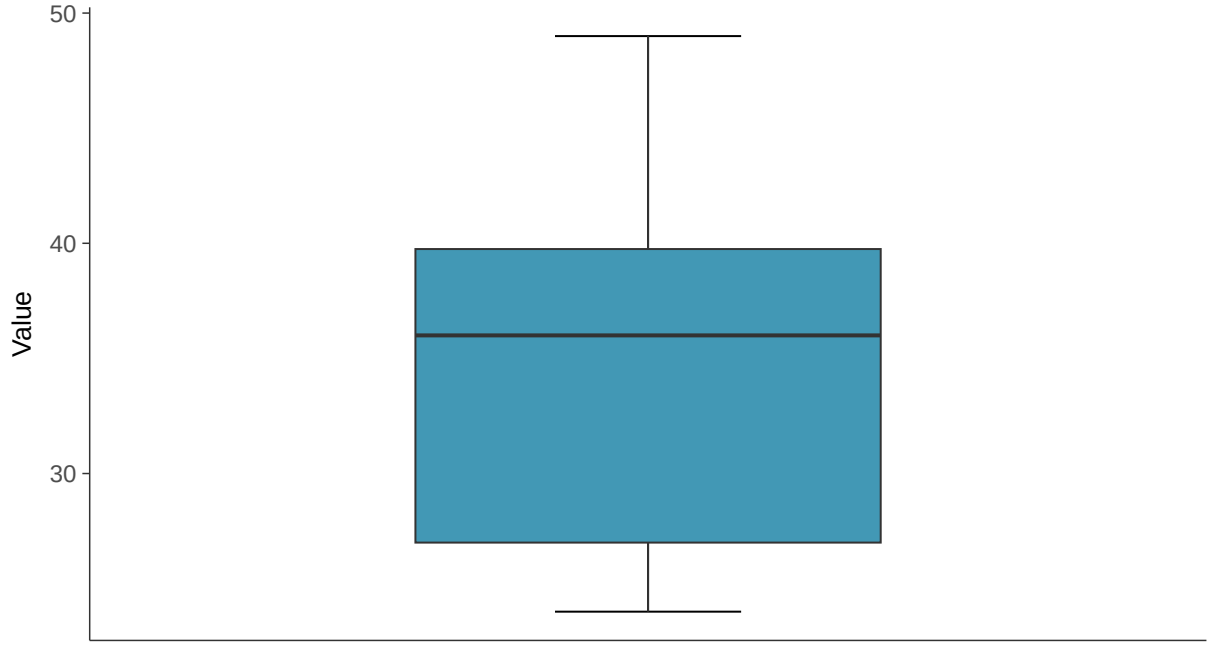
ID: 16_2_108





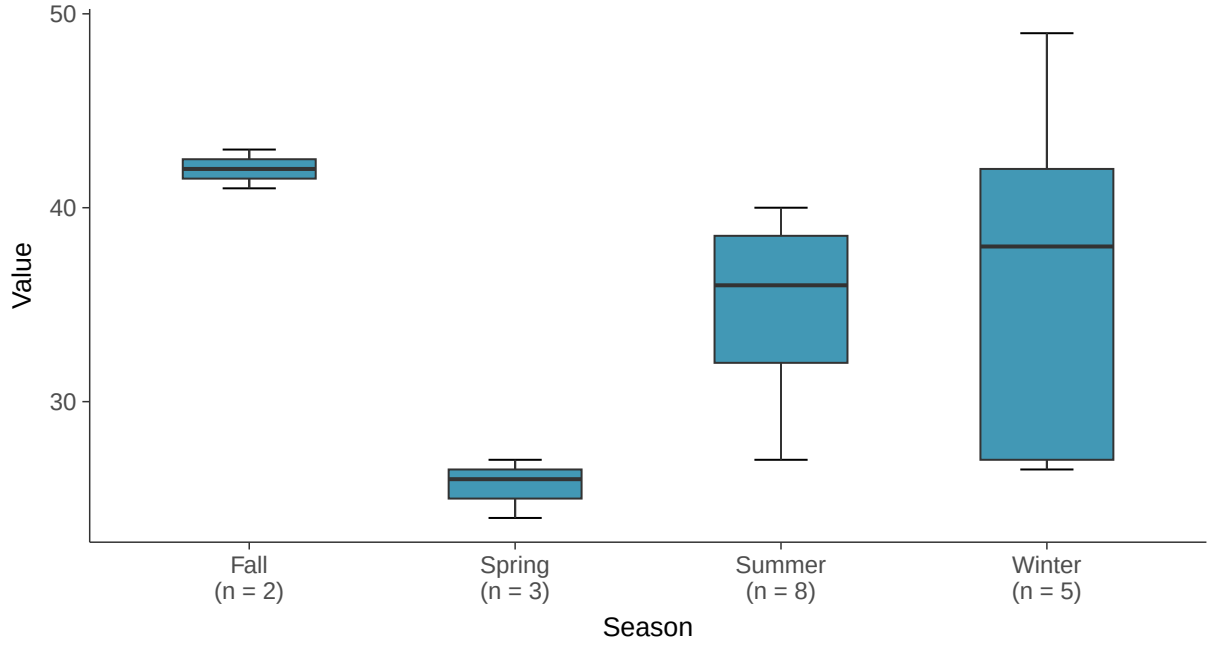
Boxplot

Chloride, MW-6 (mg/l)



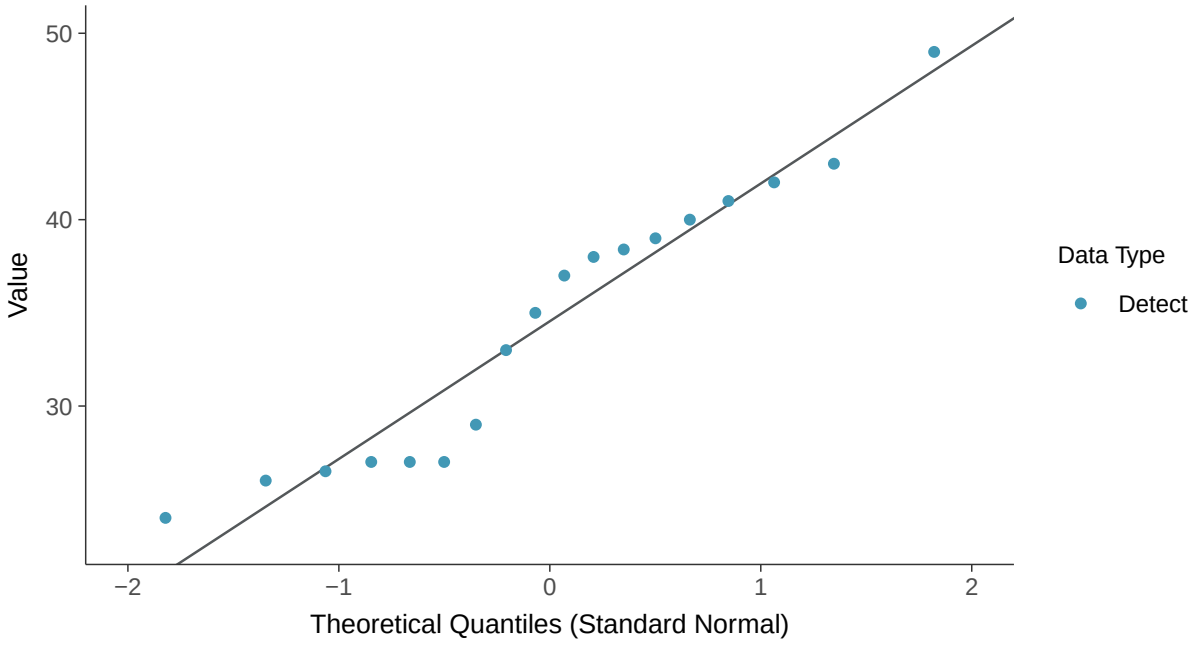
Boxplot by Season

Chloride, MW-6 (mg/l)



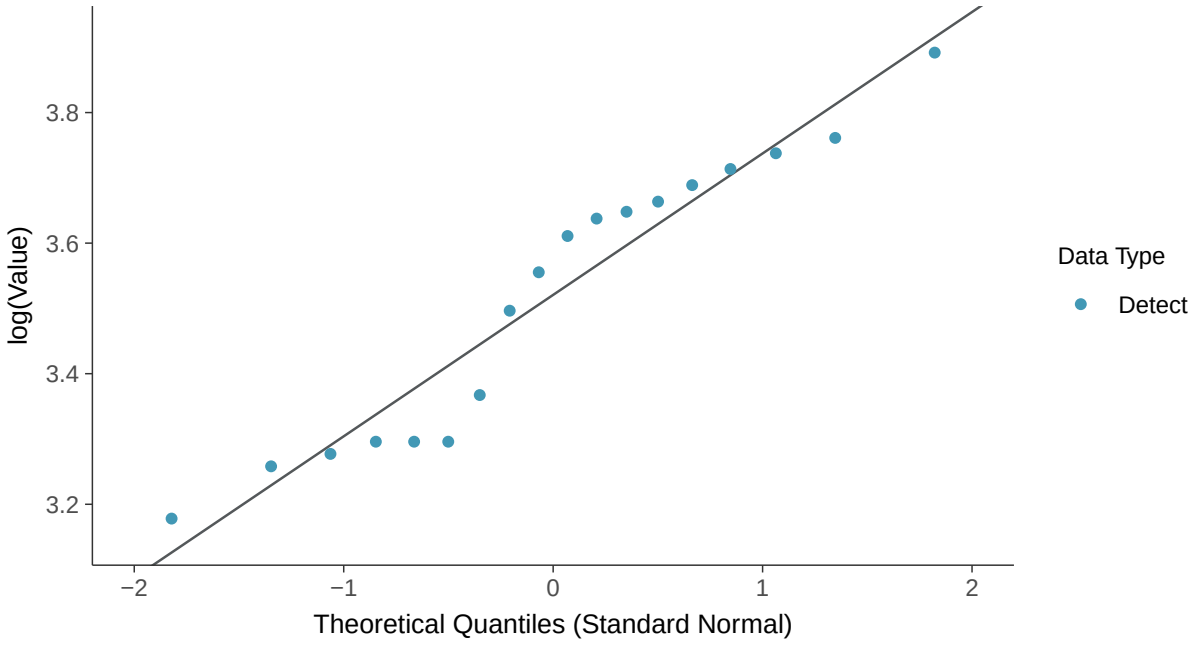
Normal Q-Q plot

Chloride, MW-6 (mg/l)



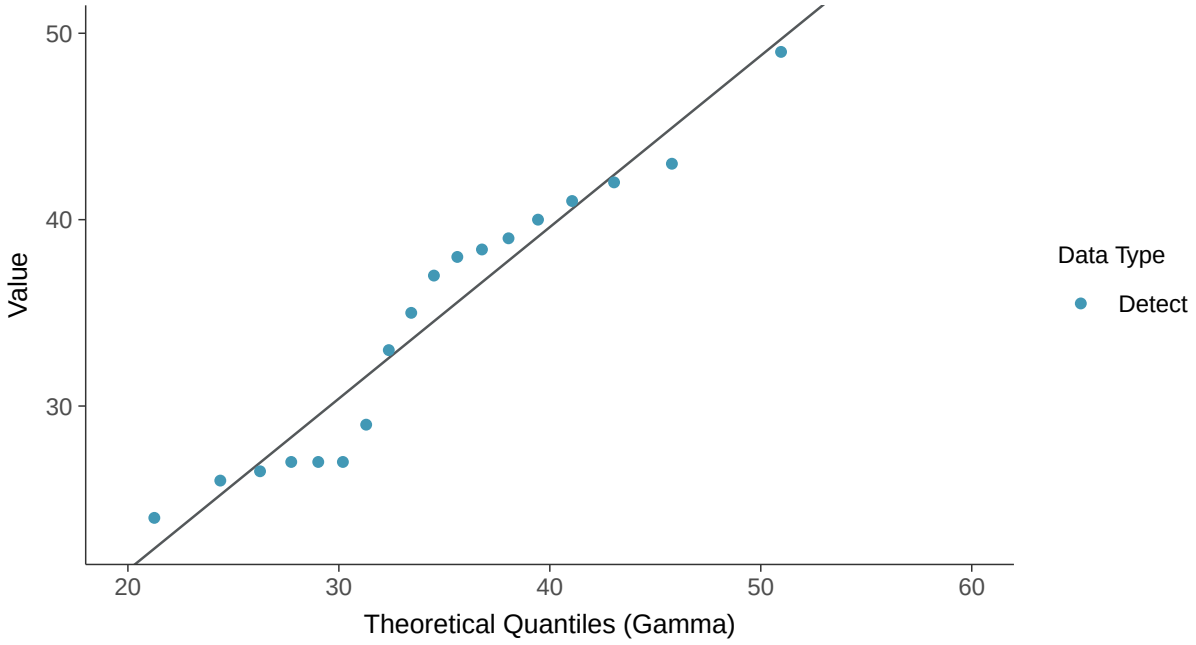
Lognormal Q-Q plot

Chloride, MW-6 (mg/l)



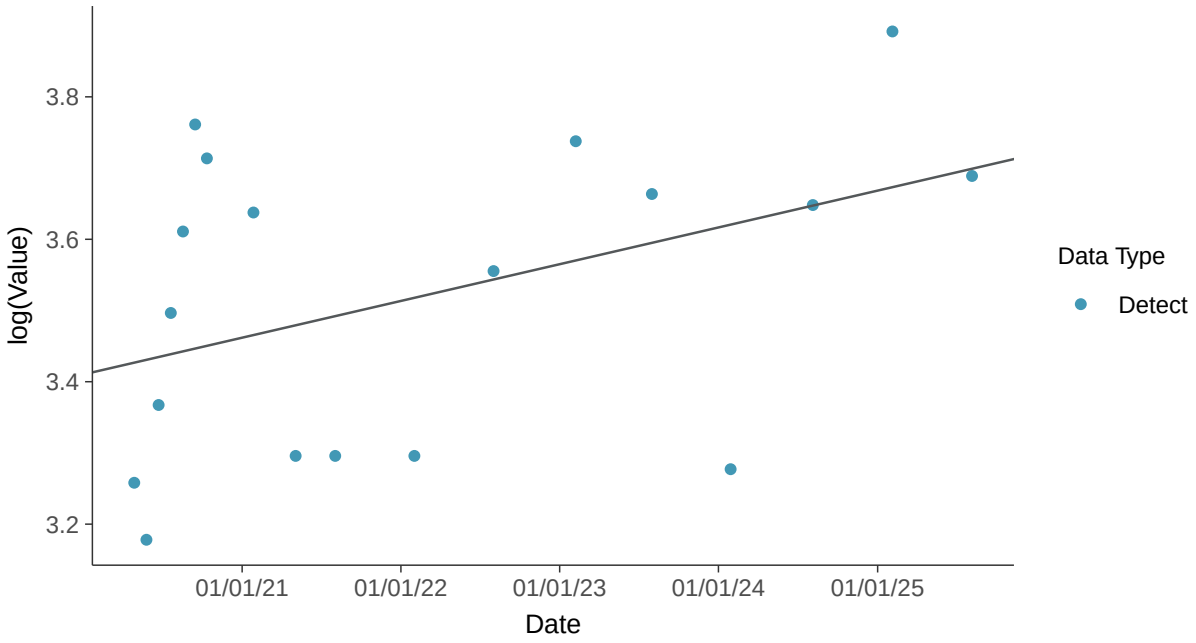
Gamma Q-Q plot

Chloride, MW-6 (mg/l)



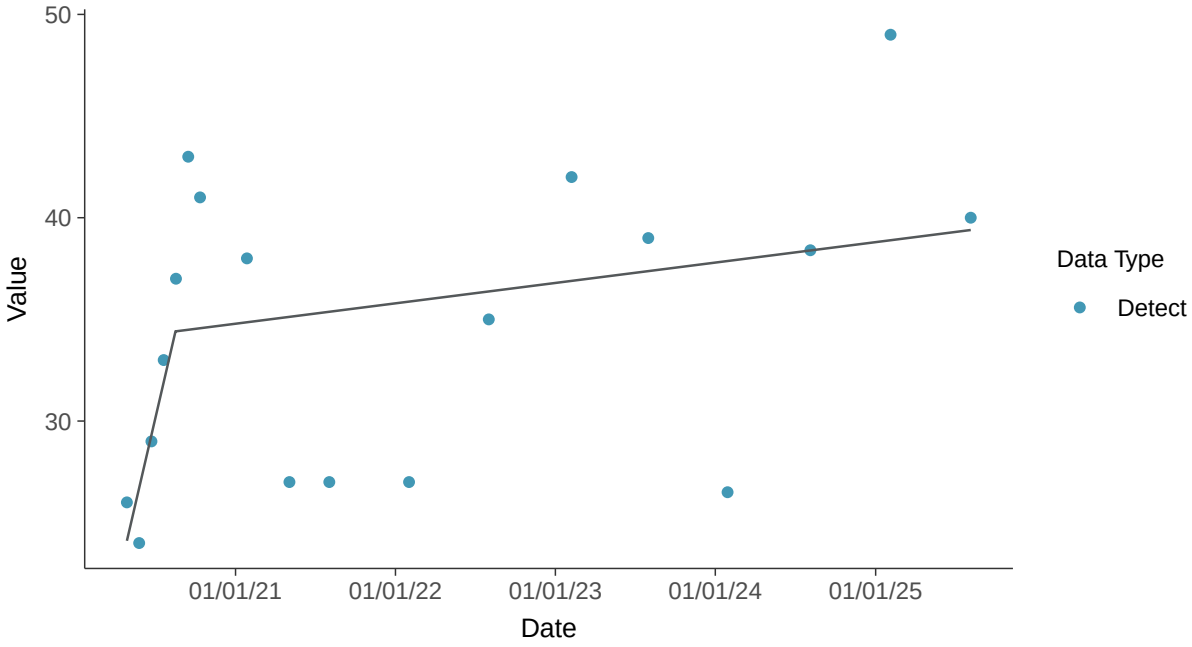
Trend Regression: Lognormal MLE

Chloride, MW-6 (mg/l)



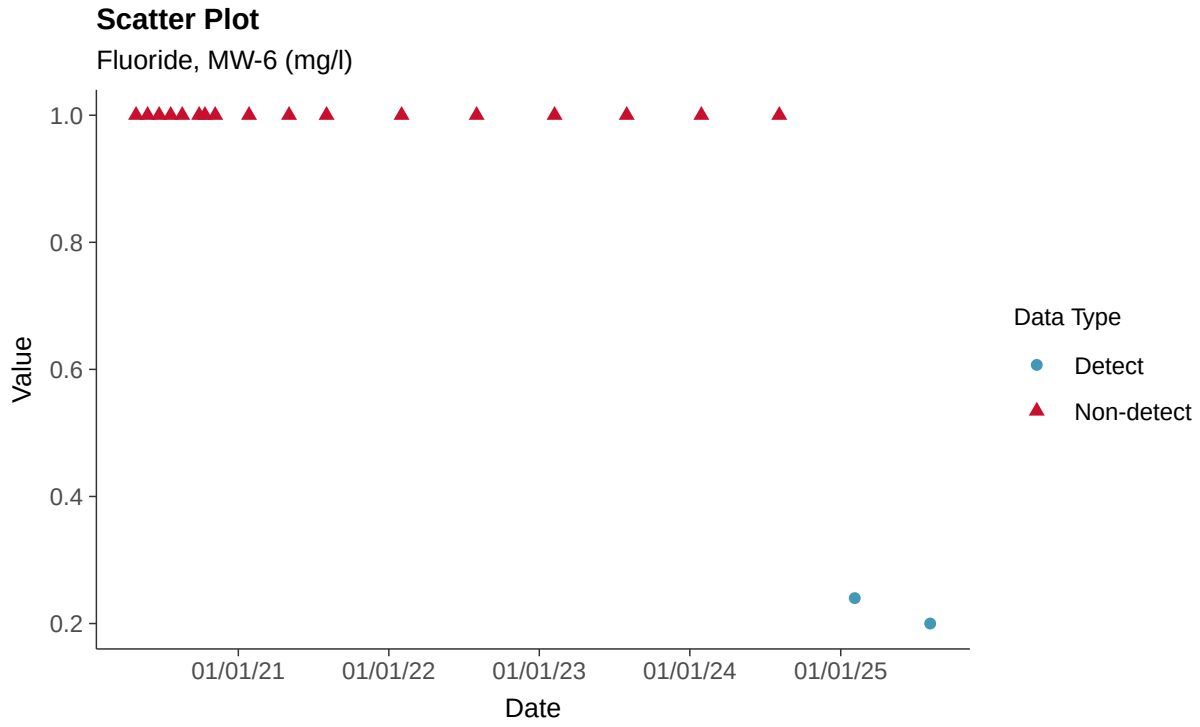
Trend Regression: Piecewise Linear-Linear

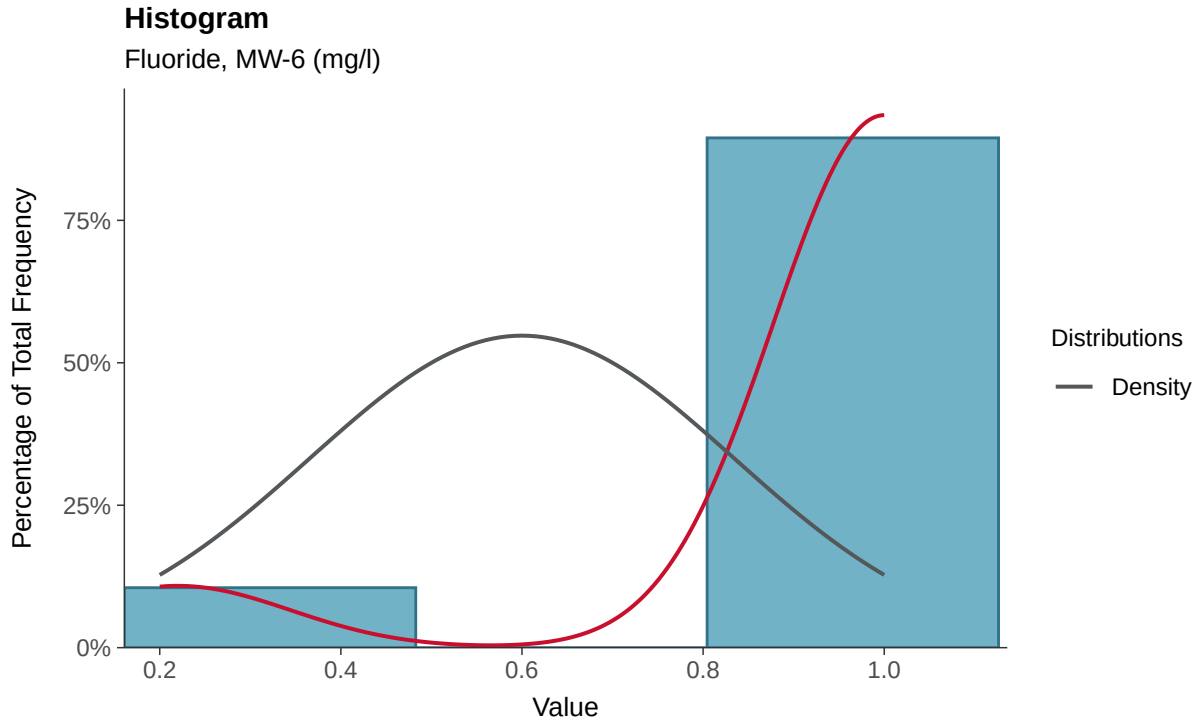
Chloride, MW-6 (mg/l)



Appendix III: Fluoride, MW-6

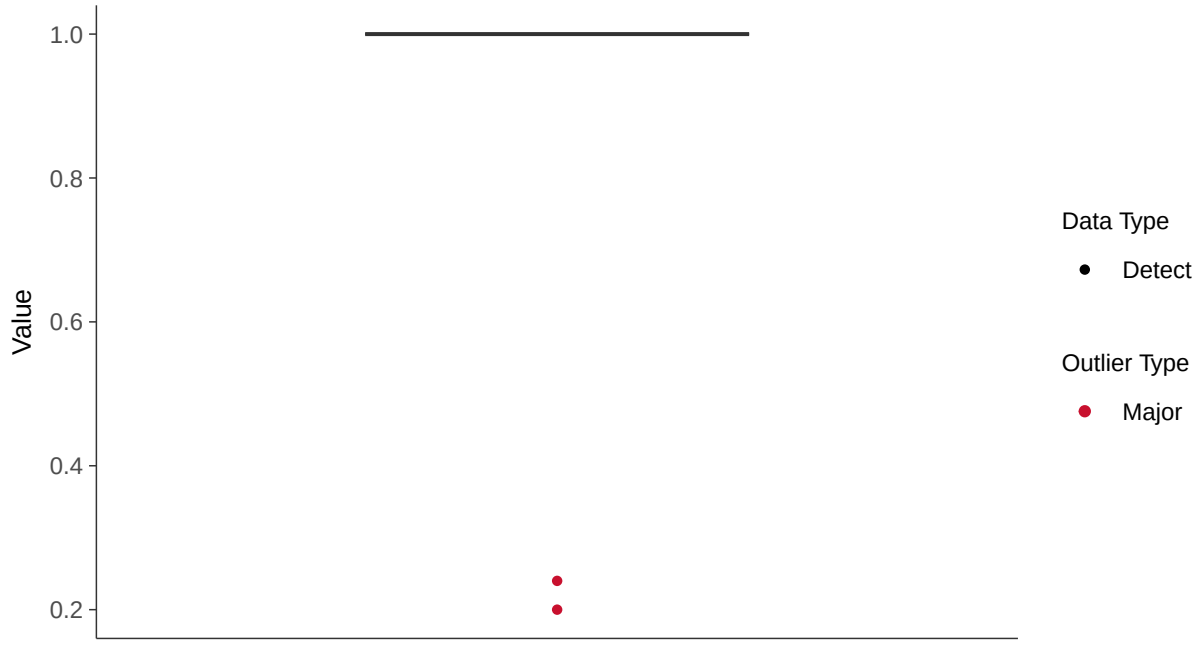
ID: 16_2_112





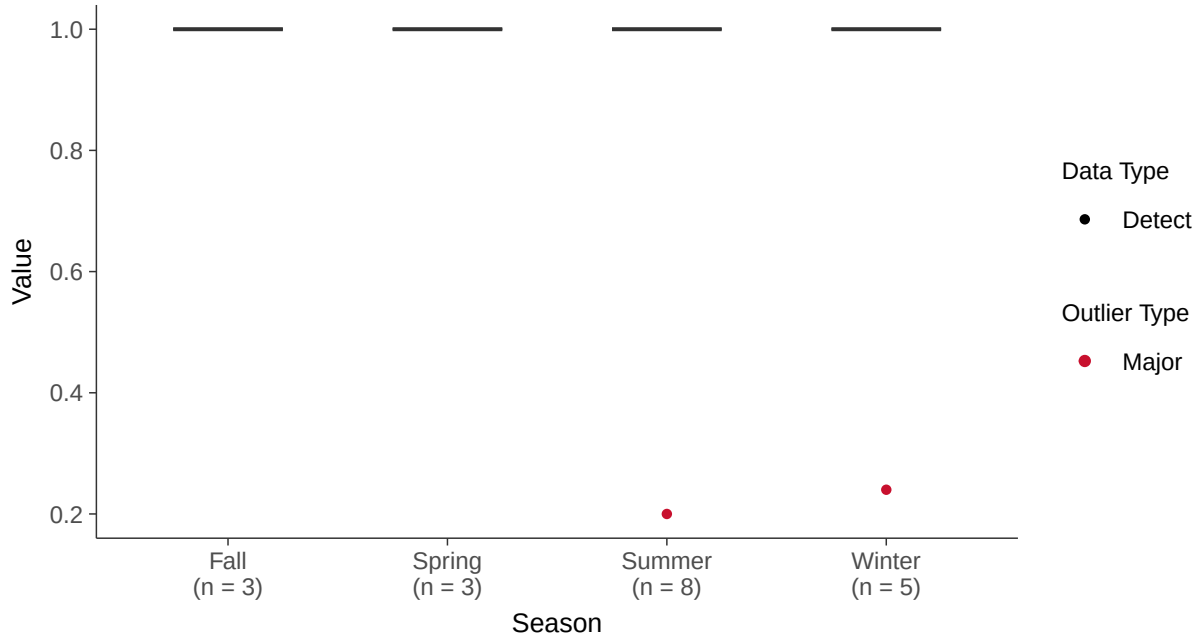
Boxplot

Fluoride, MW-6 (mg/l)



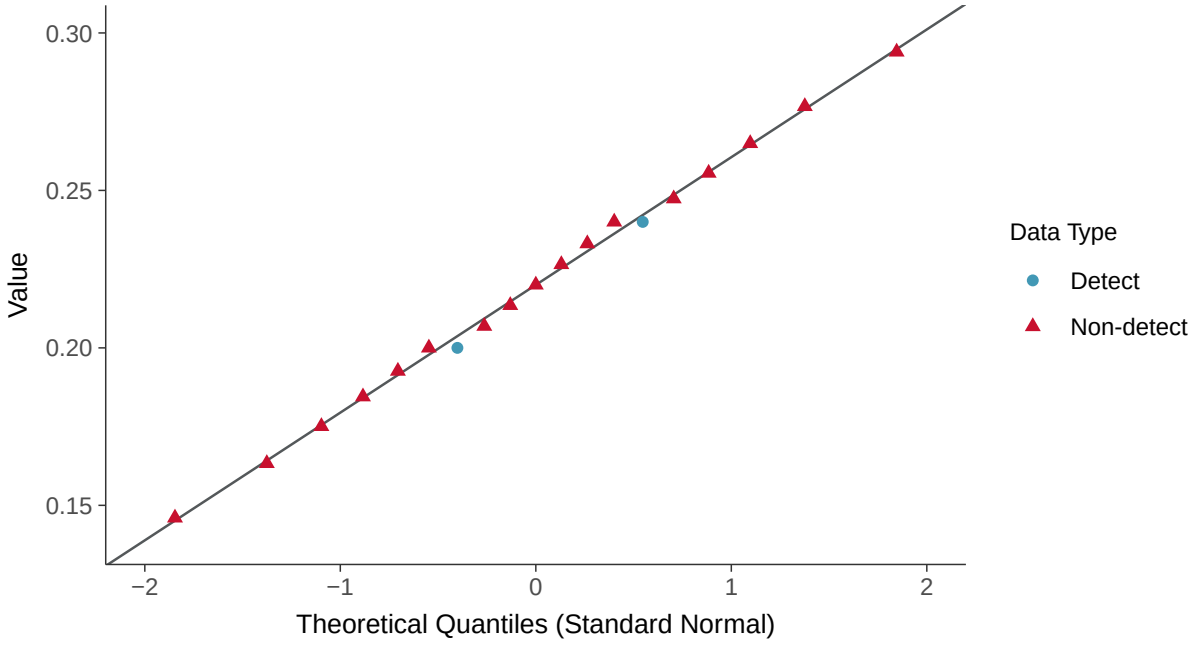
Boxplot by Season

Fluoride, MW-6 (mg/l)



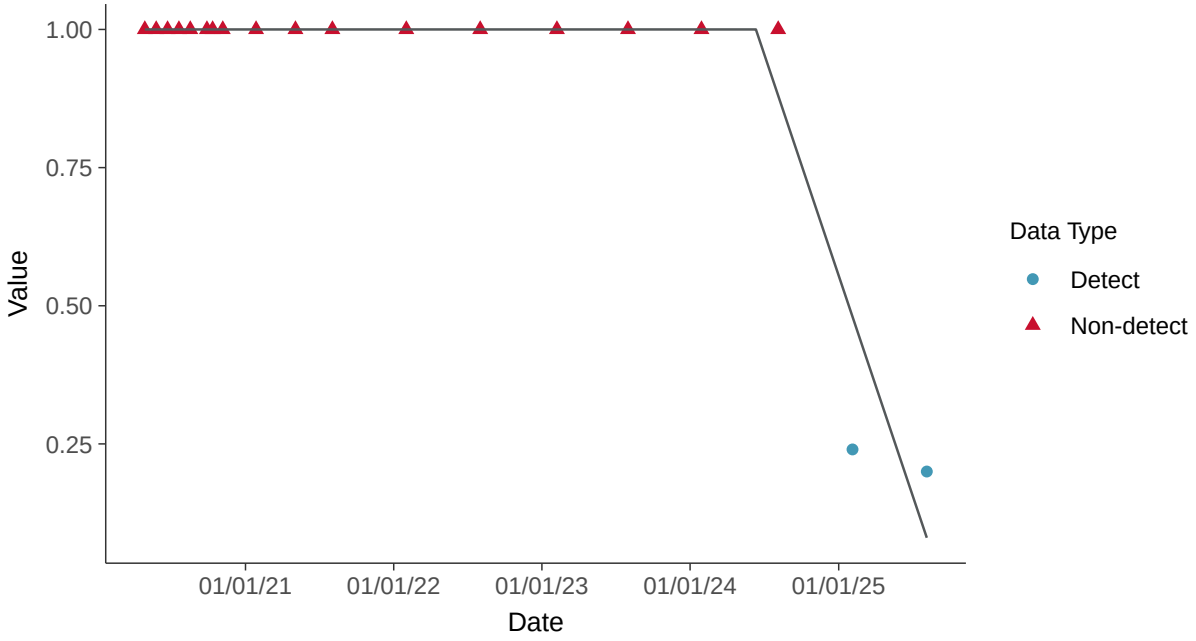
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-6 (mg/l)



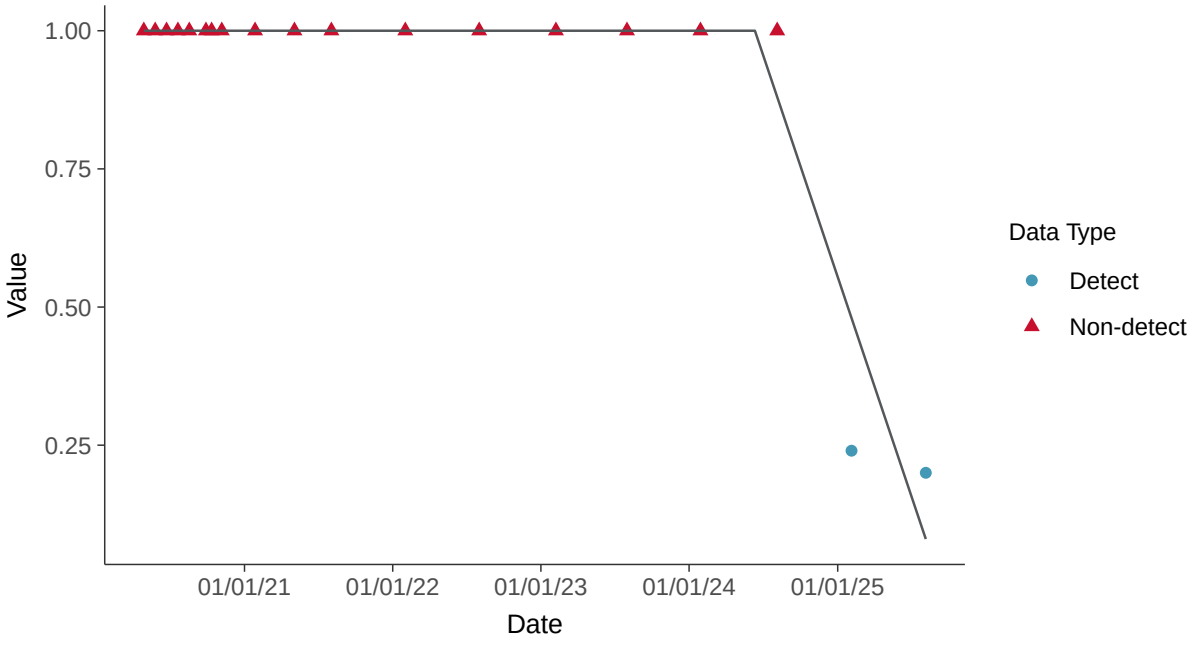
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-6 (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-6 (mg/l)

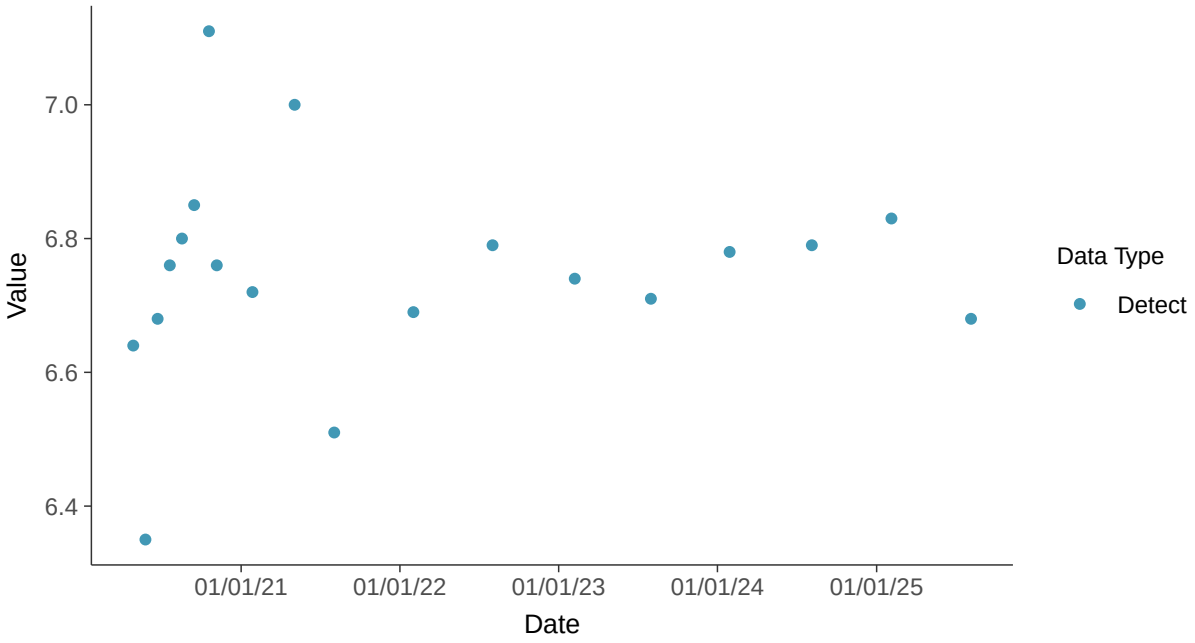


Appendix III: pH, Field, MW-6

ID: 16_2_120

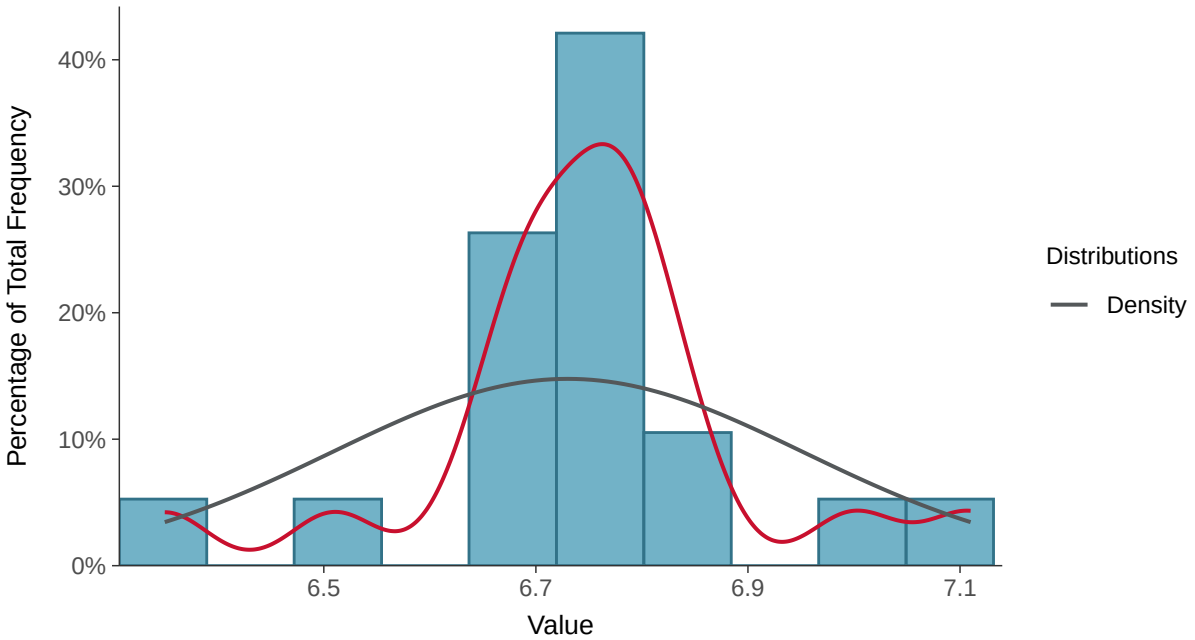
Scatter Plot

pH, Field, MW-6 (su)



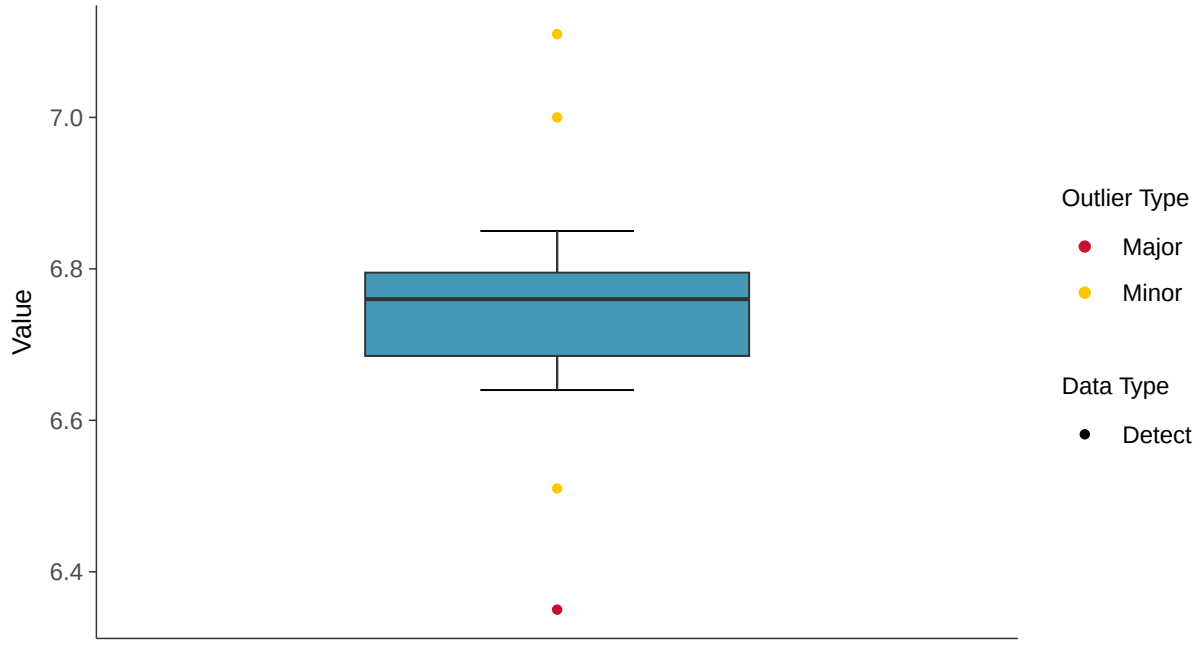
Histogram

pH, Field, MW-6 (su)



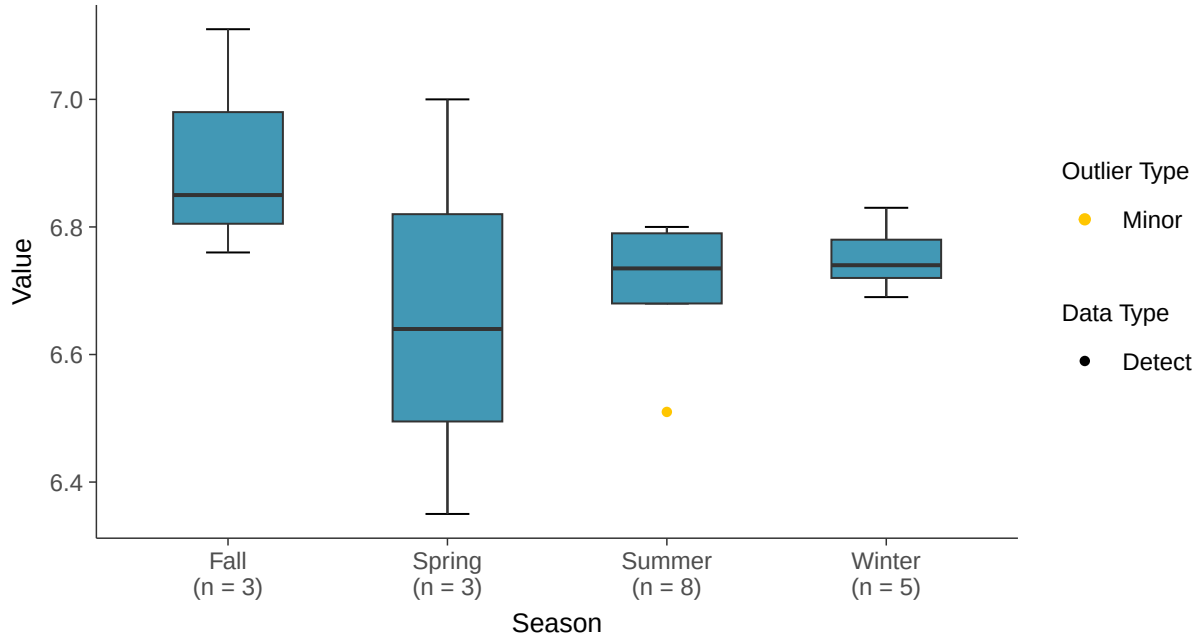
Boxplot

pH, Field, MW-6 (su)



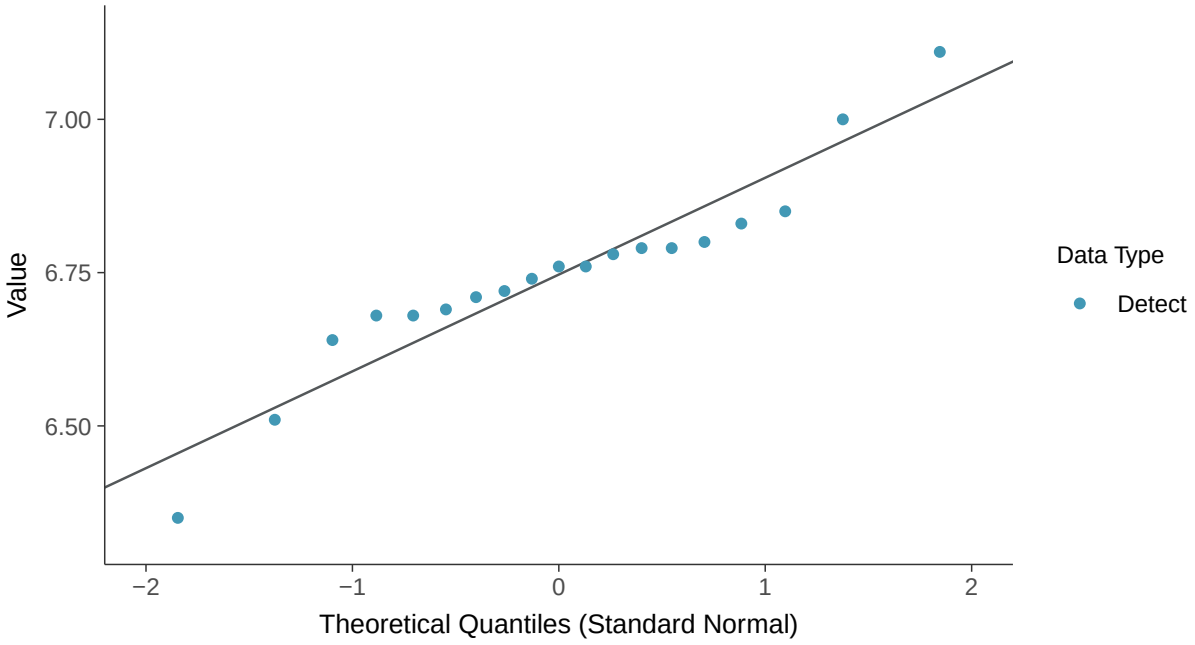
Boxplot by Season

pH, Field, MW-6 (su)



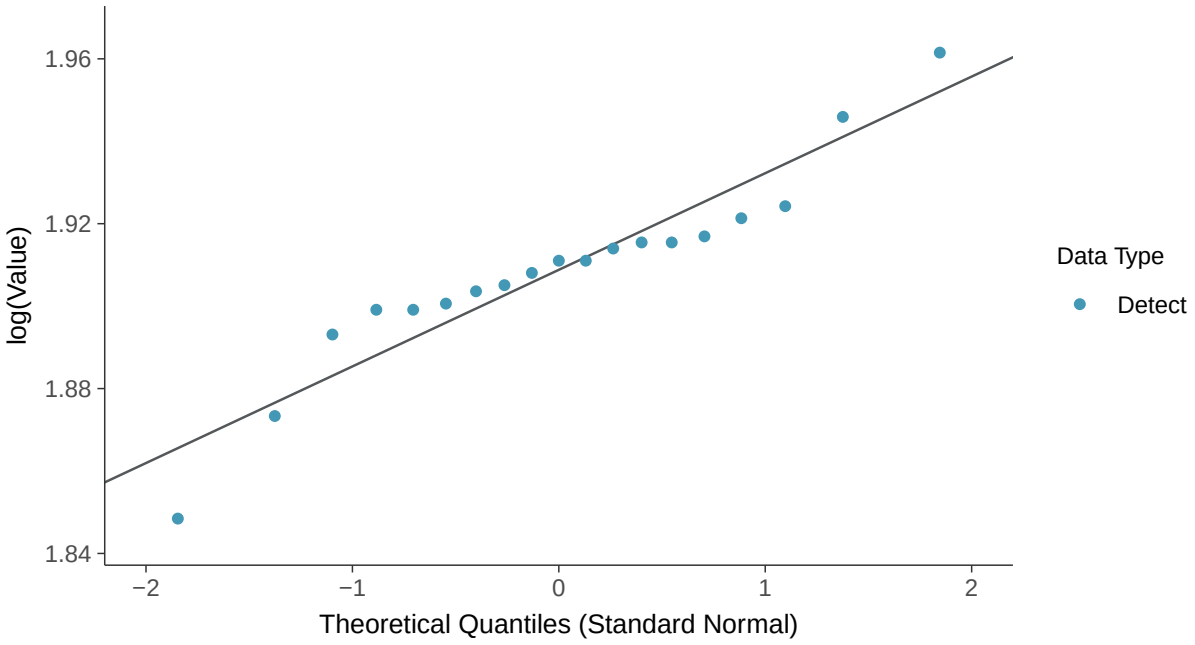
Normal Q-Q plot

pH, Field, MW-6 (su)



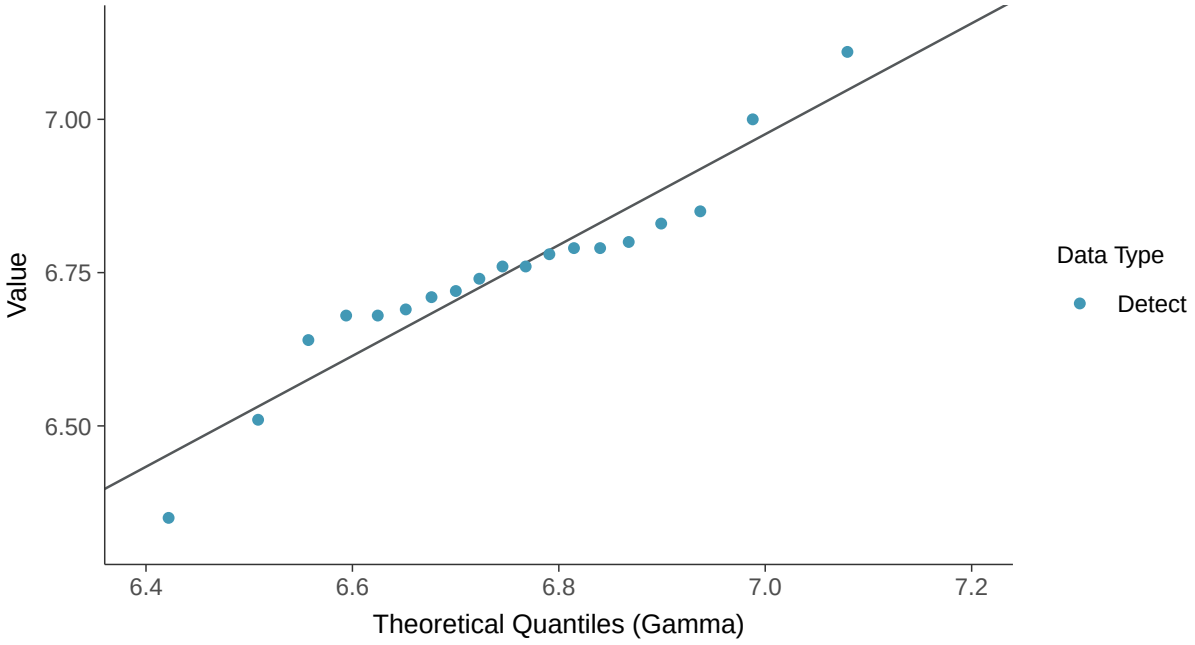
Lognormal Q-Q plot

pH, Field, MW-6 (su)



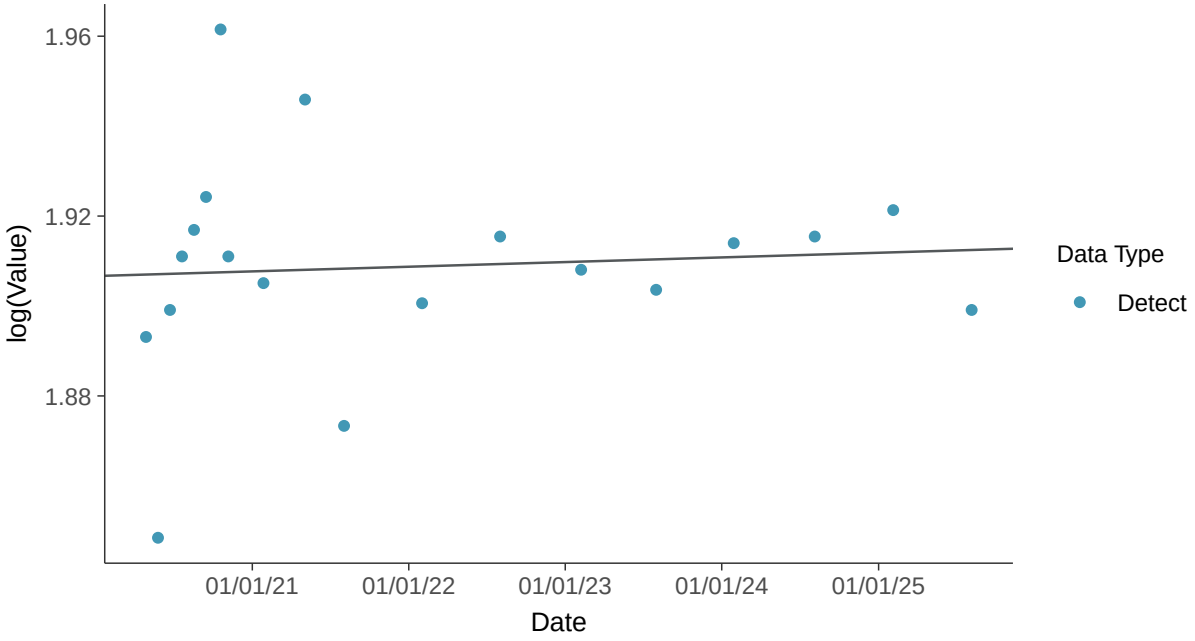
Gamma Q-Q plot

pH, Field, MW-6 (su)



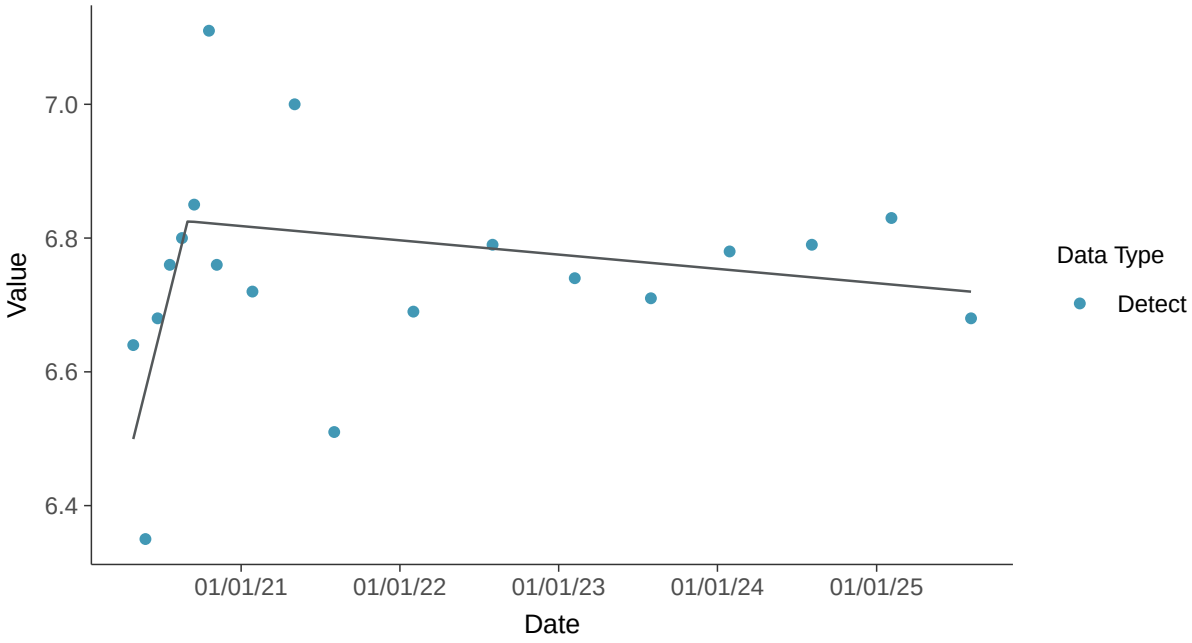
Trend Regression: Lognormal MLE

pH, Field, MW-6 (su)



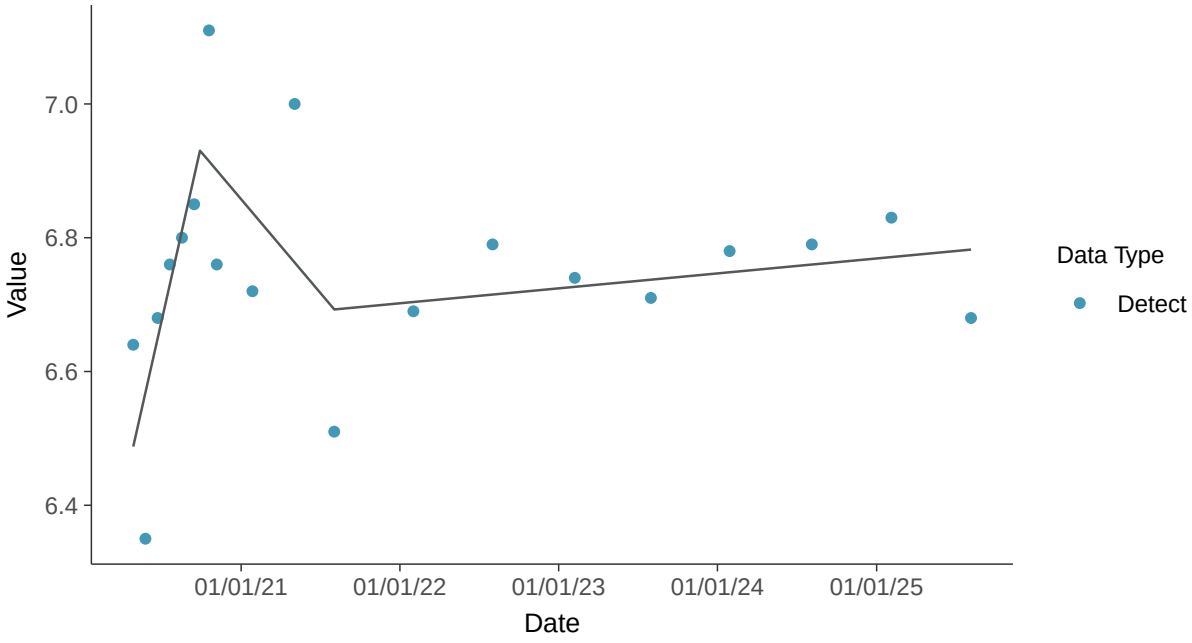
Trend Regression: Piecewise Linear-Linear

pH, Field, MW-6 (su)



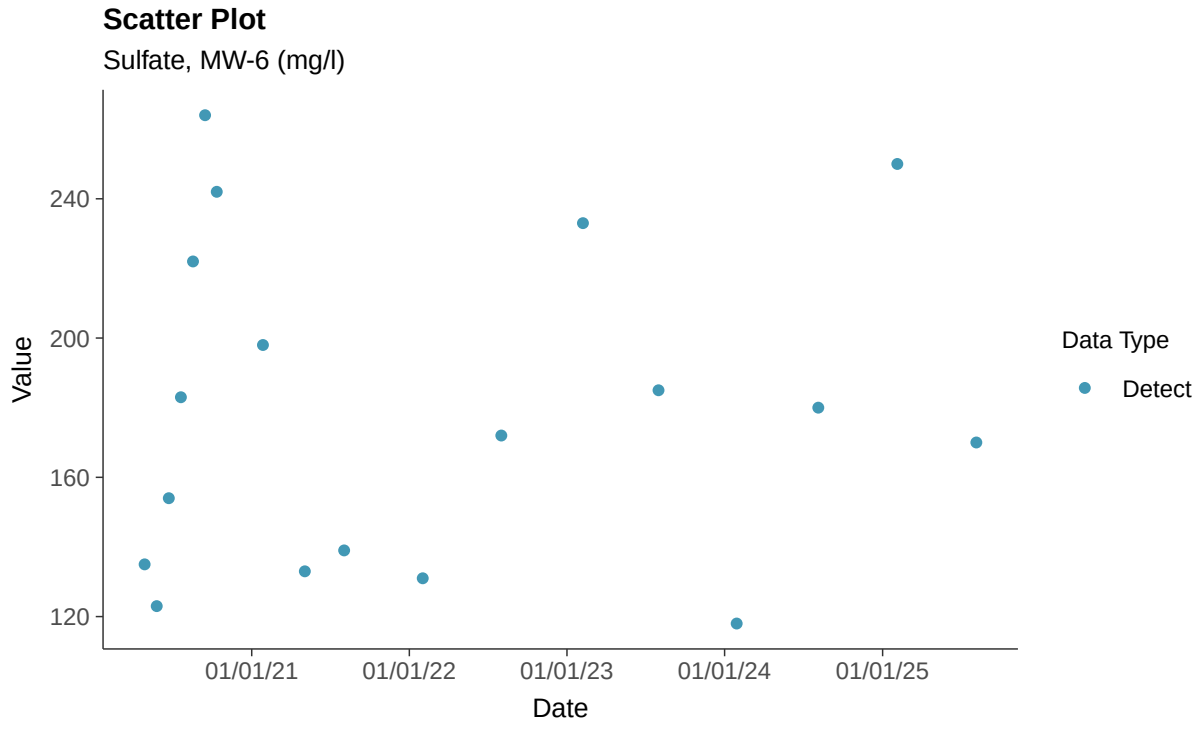
Trend Regression: Piecewise Linear-Linear-Linear

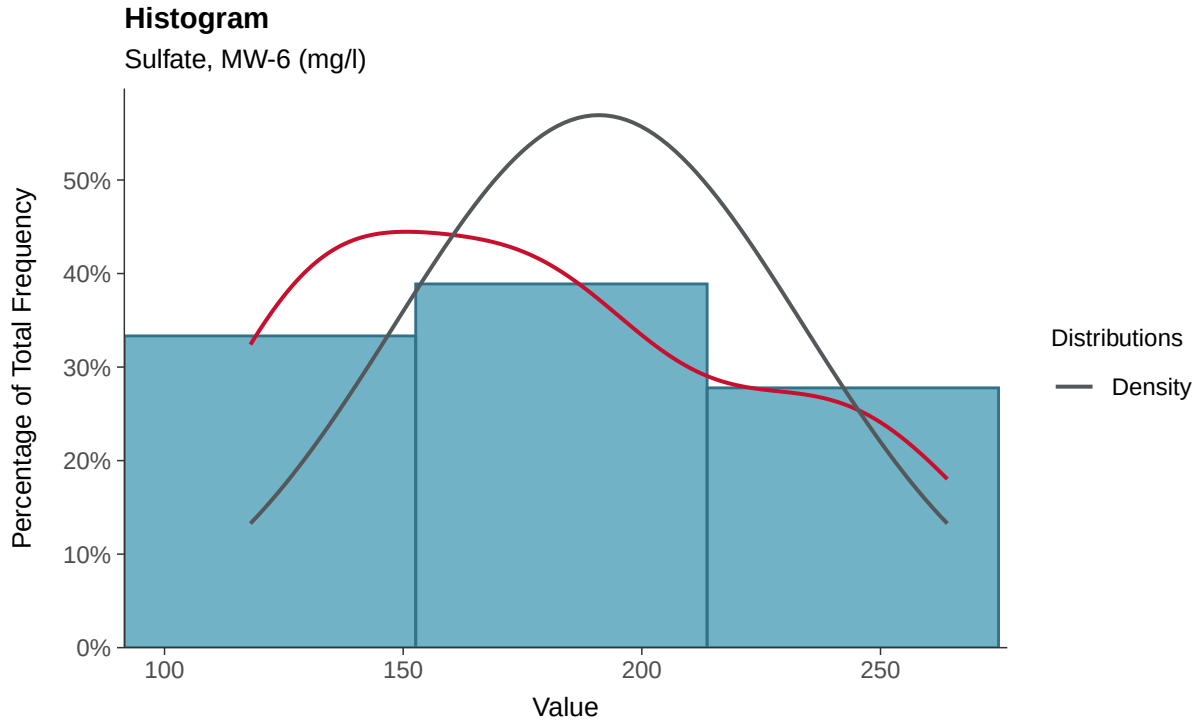
pH, Field, MW-6 (su)



Appendix III: Sulfate, MW-6

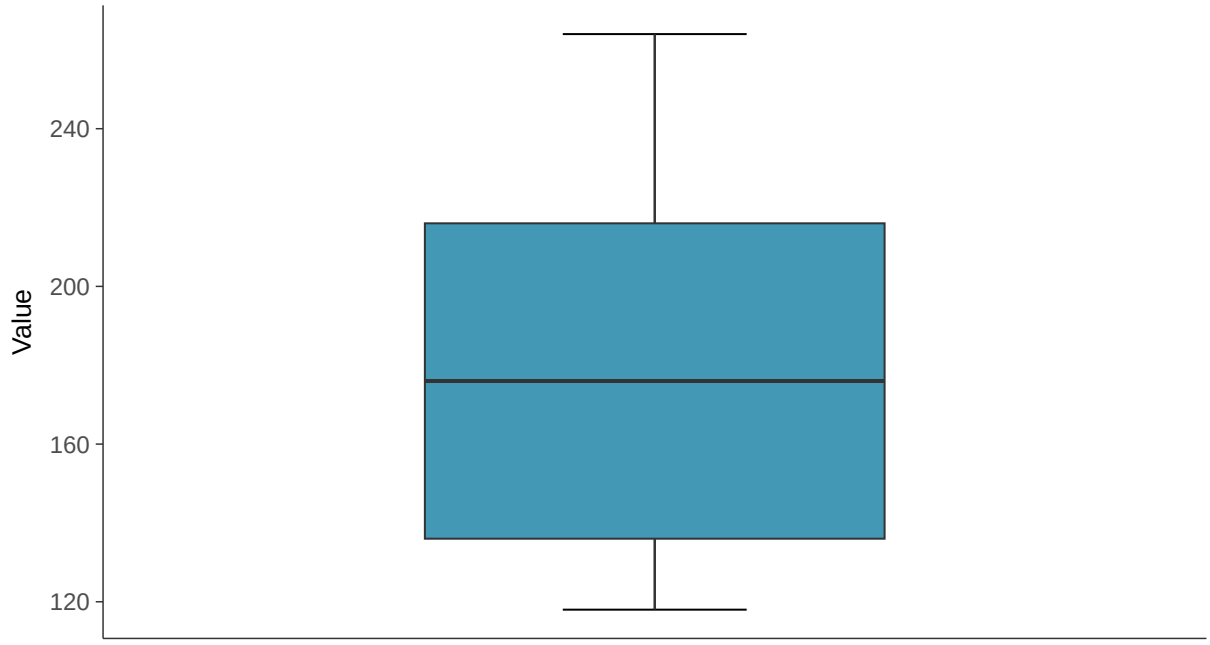
ID: 16_2_124





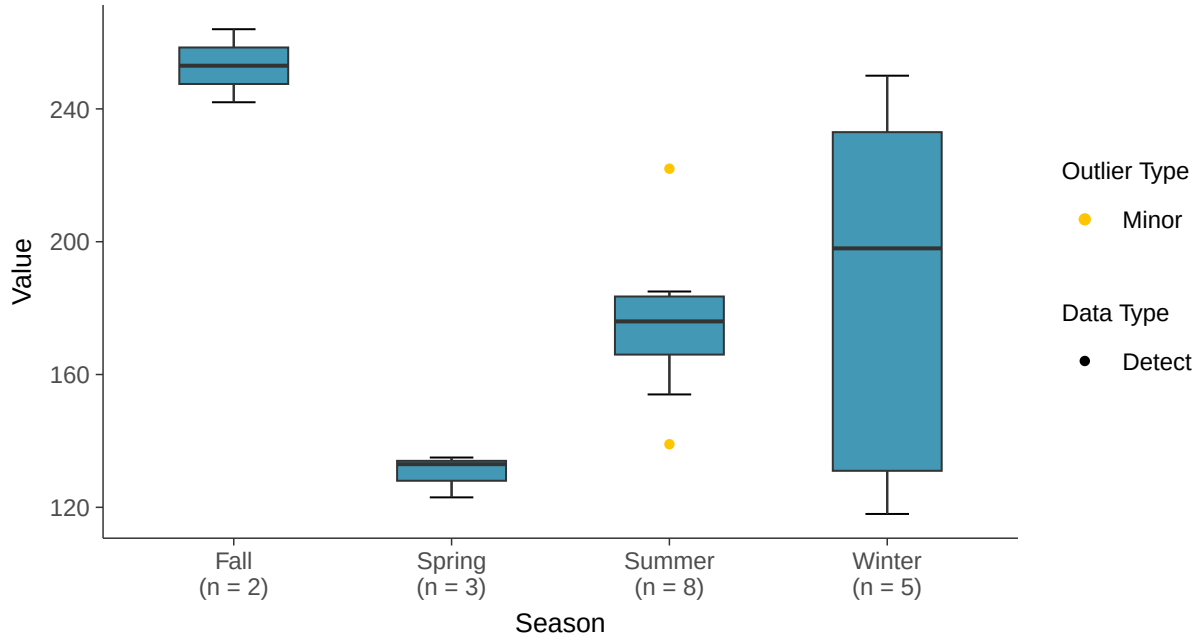
Boxplot

Sulfate, MW-6 (mg/l)



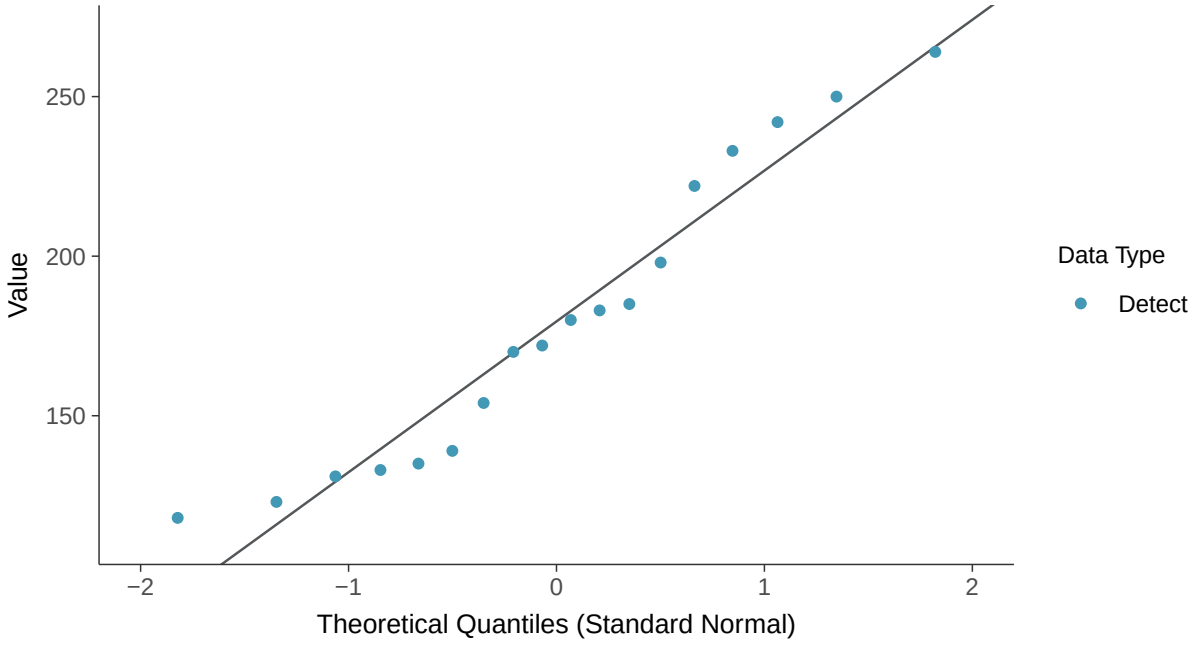
Boxplot by Season

Sulfate, MW-6 (mg/l)



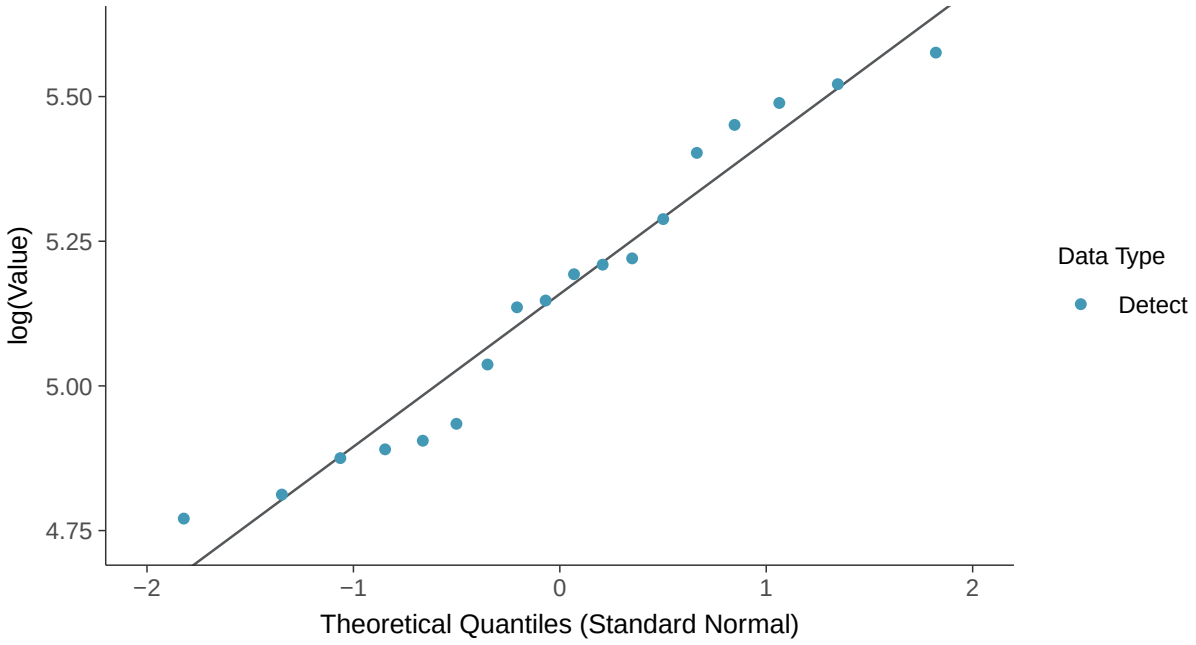
Normal Q-Q plot

Sulfate, MW-6 (mg/l)



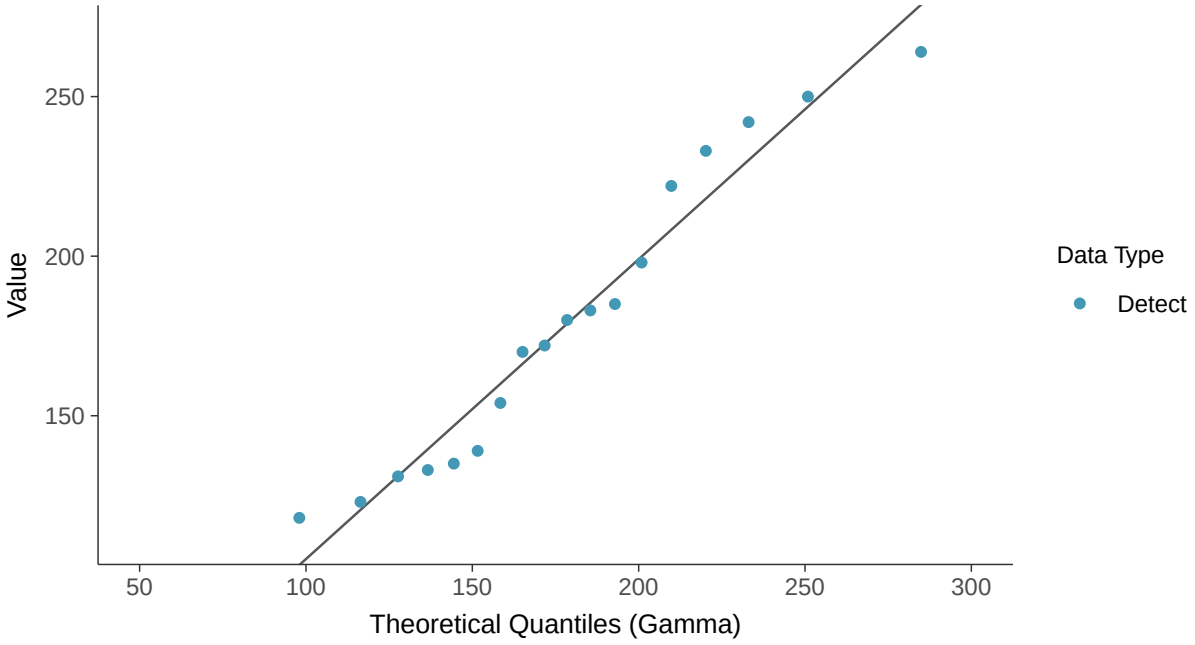
Lognormal Q-Q plot

Sulfate, MW-6 (mg/l)



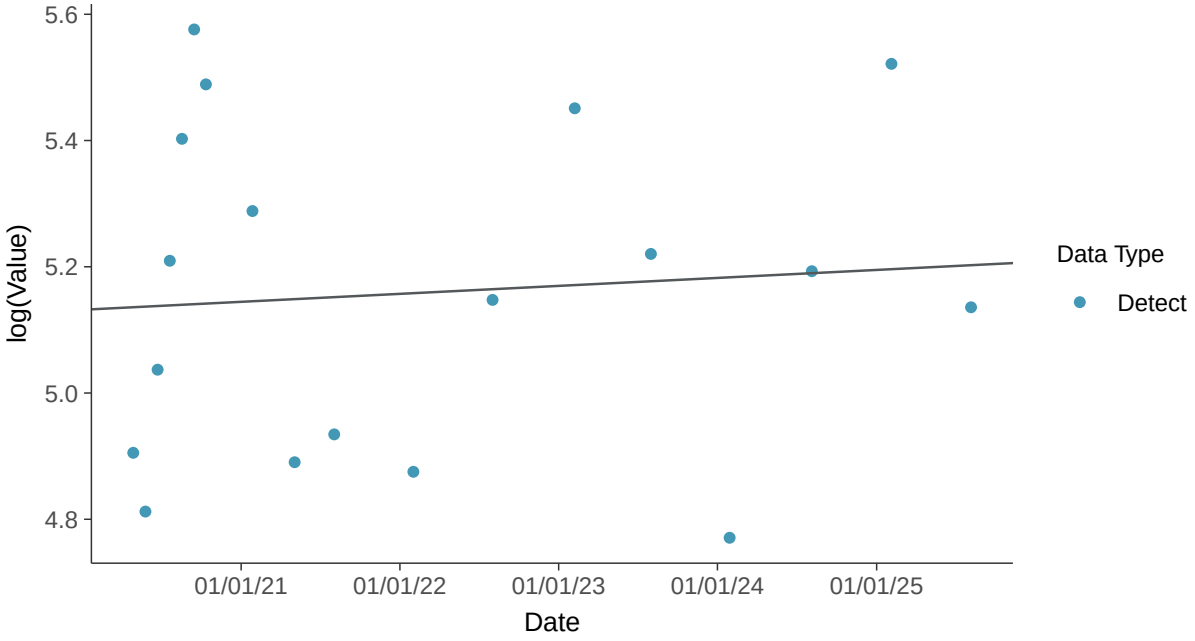
Gamma Q-Q plot

Sulfate, MW-6 (mg/l)



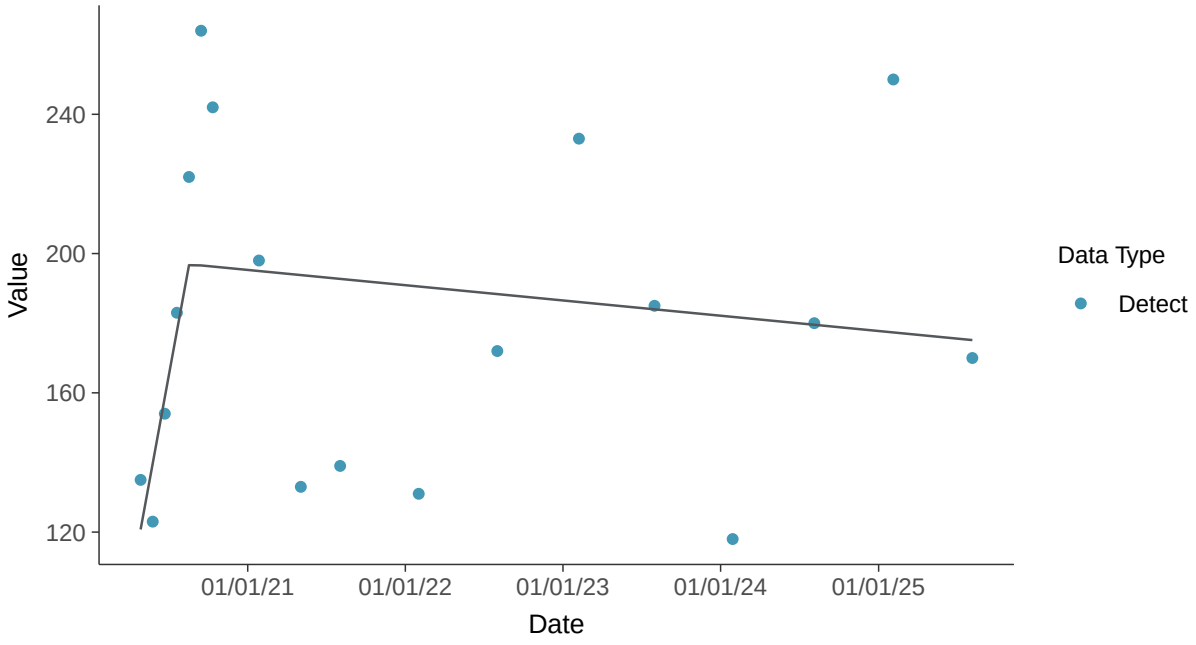
Trend Regression: Lognormal MLE

Sulfate, MW-6 (mg/l)



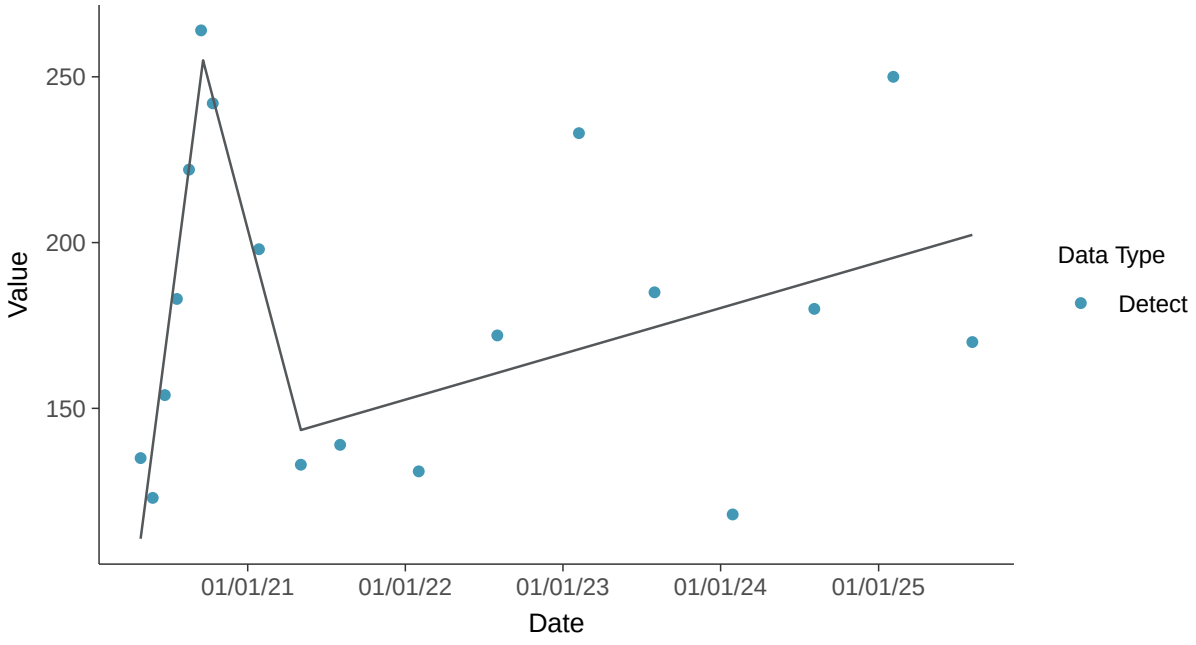
Trend Regression: Piecewise Linear-Linear

Sulfate, MW-6 (mg/l)



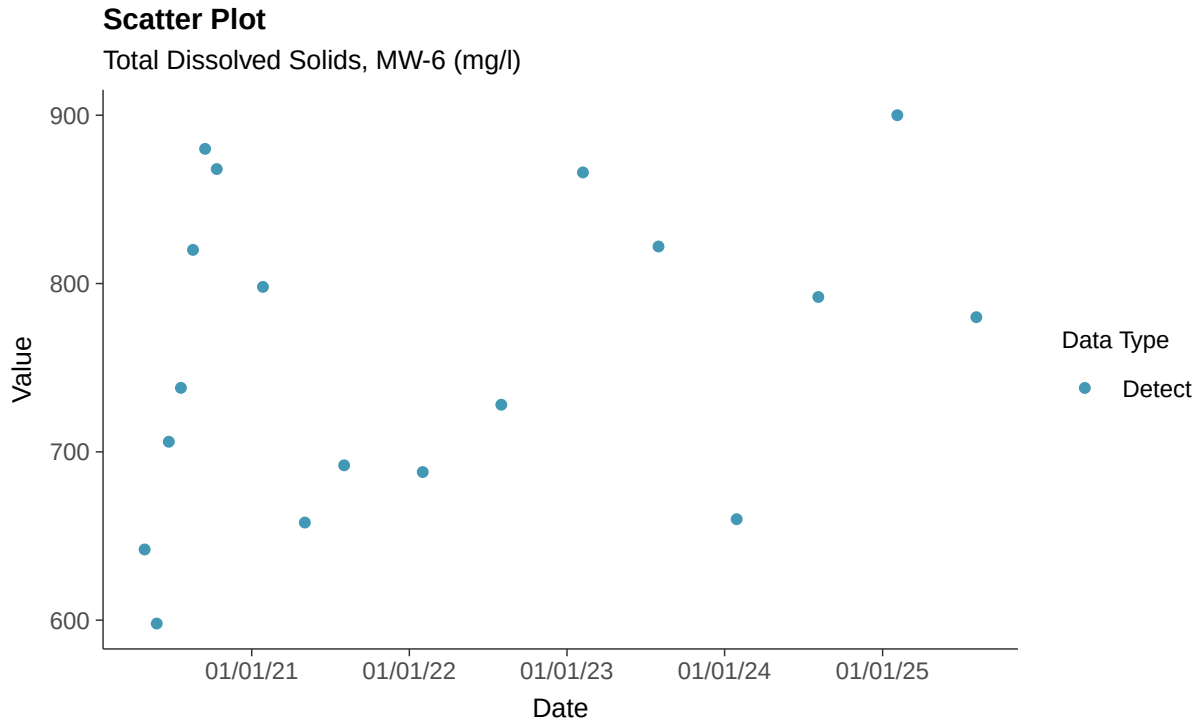
Trend Regression: Piecewise Linear-Linear-Linear

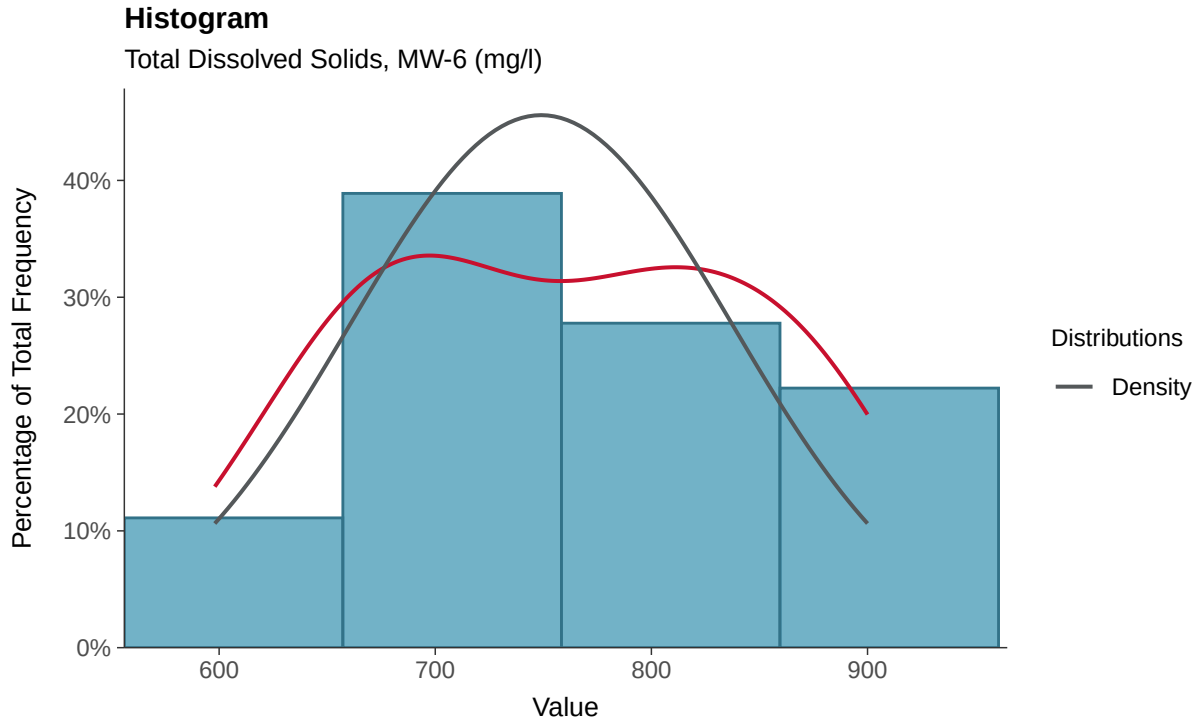
Sulfate, MW-6 (mg/l)



Appendix III: Total Dissolved Solids, MW-6

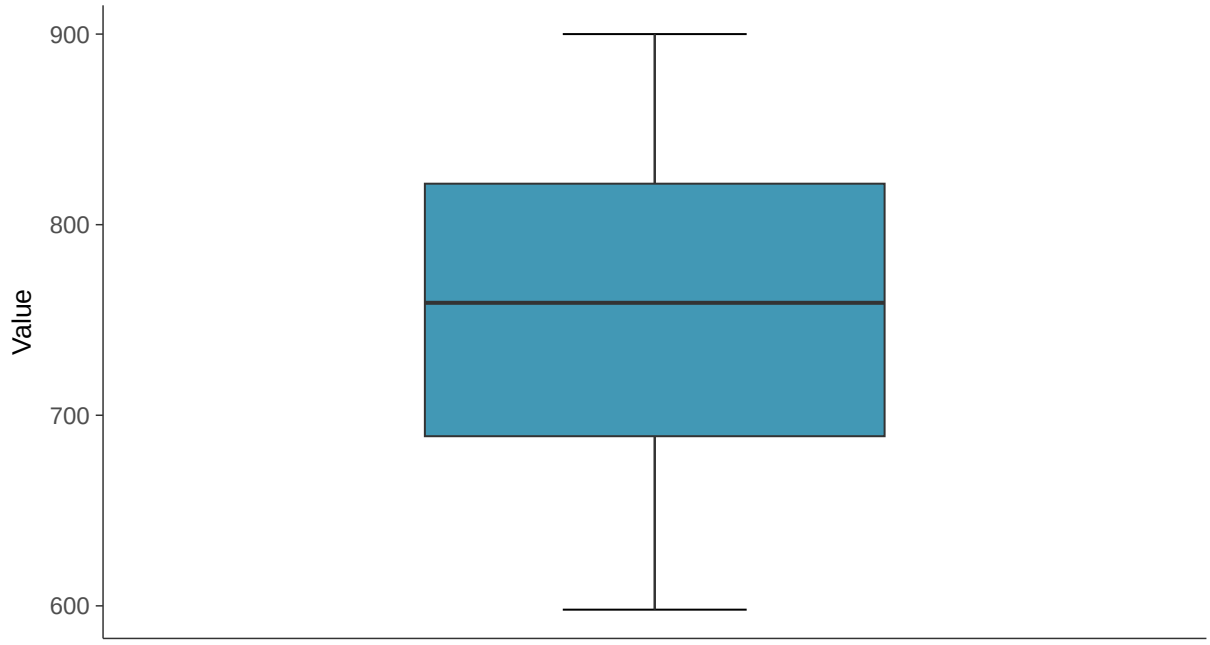
ID: 16_2_126





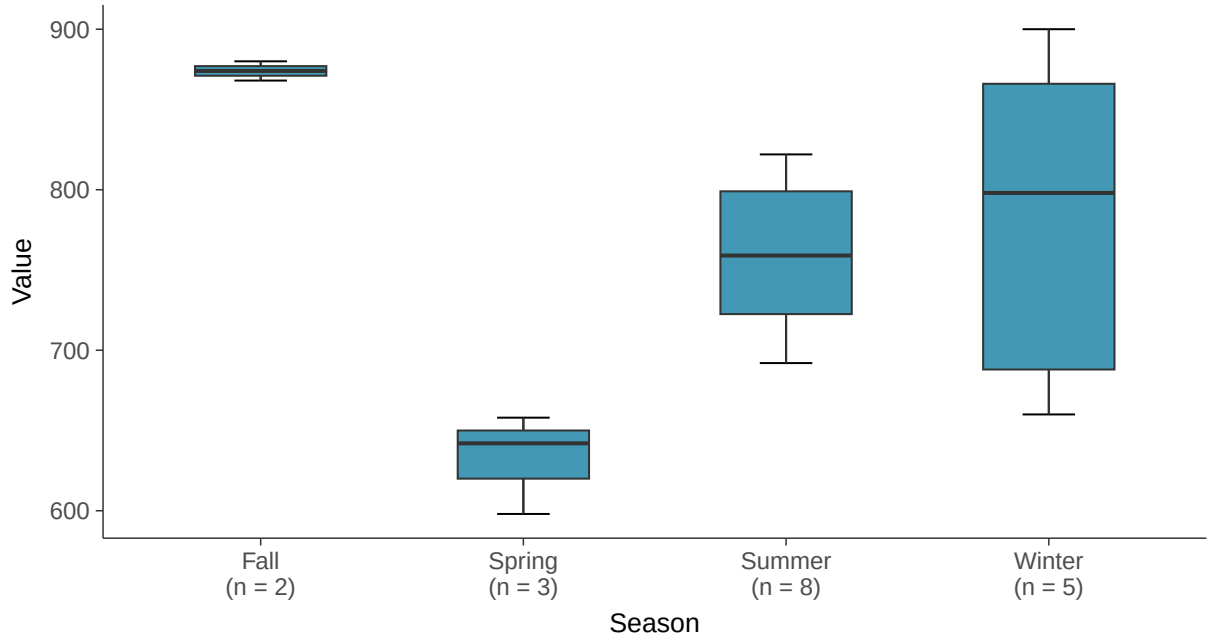
Boxplot

Total Dissolved Solids, MW-6 (mg/l)



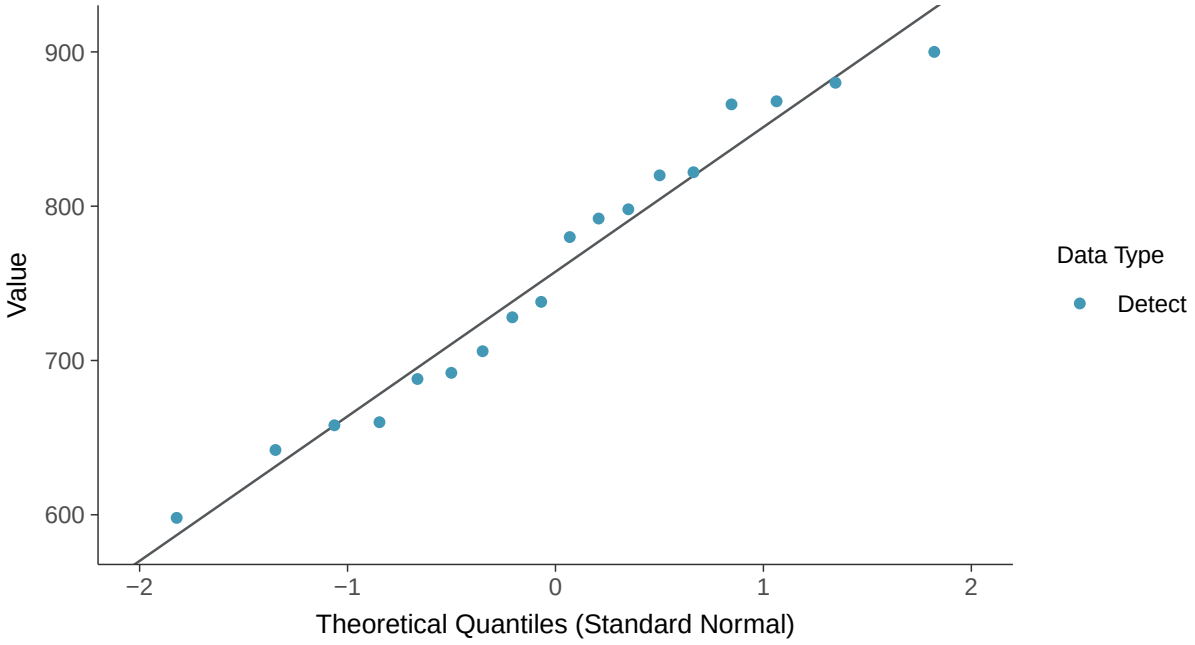
Boxplot by Season

Total Dissolved Solids, MW-6 (mg/l)



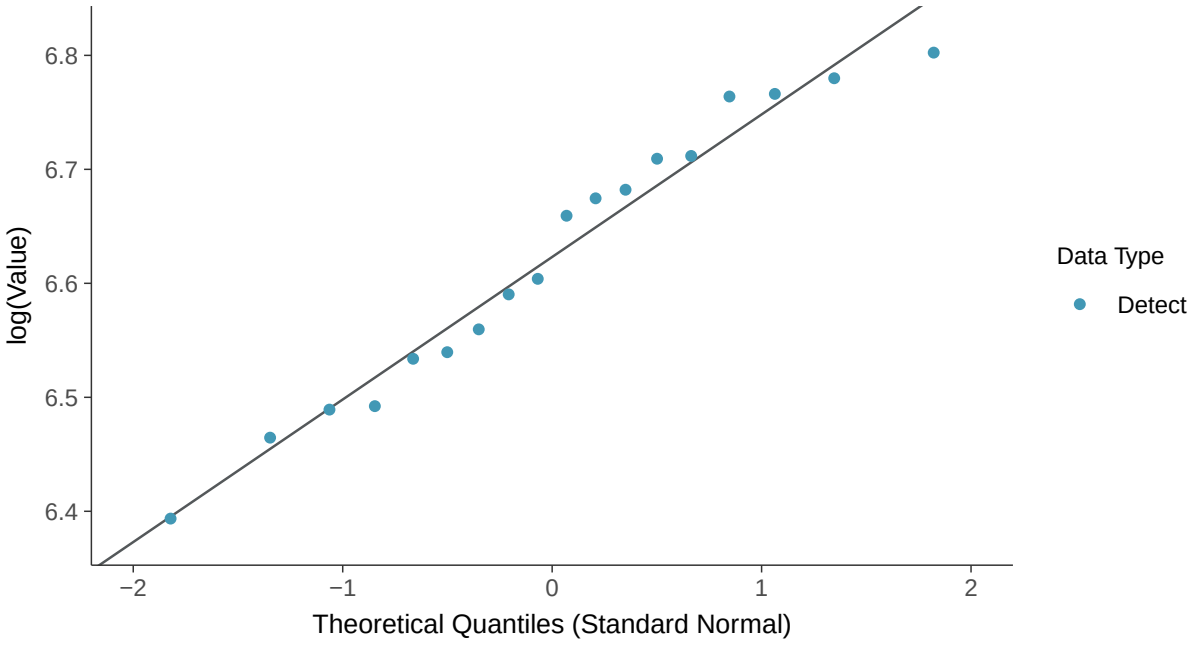
Normal Q-Q plot

Total Dissolved Solids, MW-6 (mg/l)



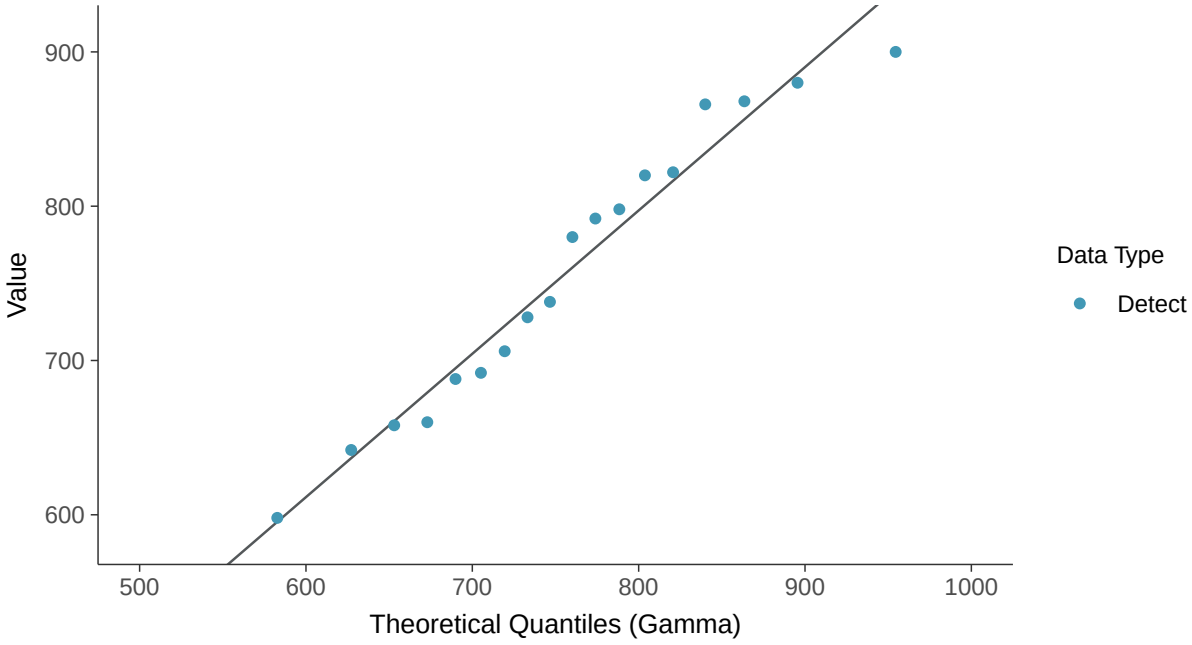
Lognormal Q-Q plot

Total Dissolved Solids, MW-6 (mg/l)



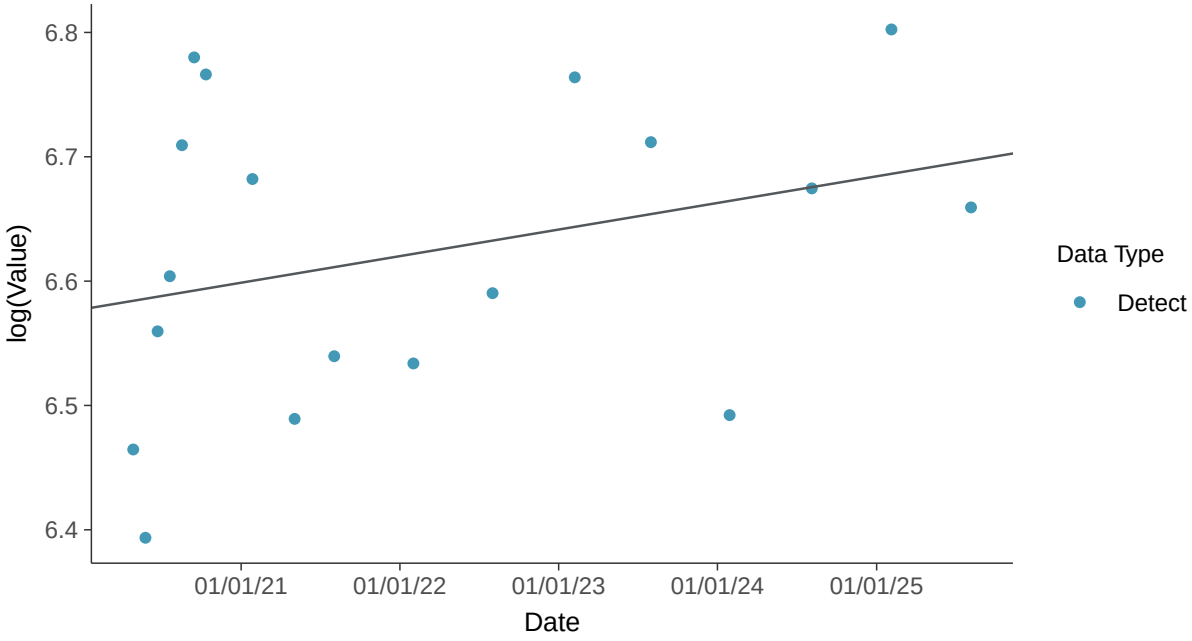
Gamma Q-Q plot

Total Dissolved Solids, MW-6 (mg/l)



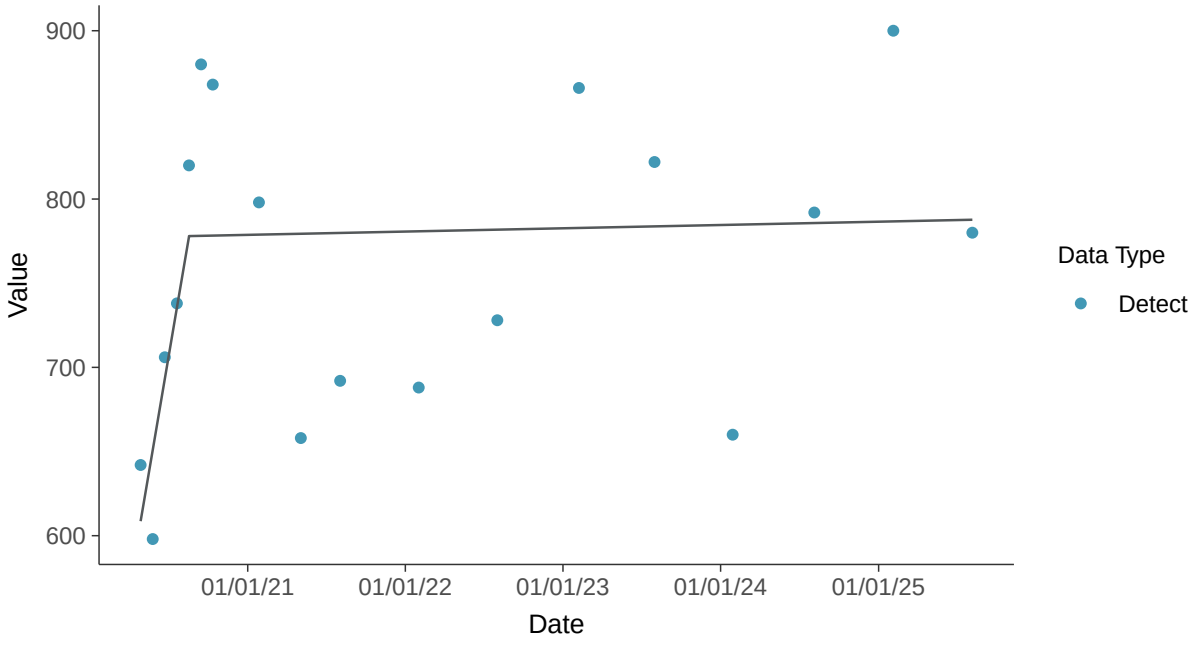
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-6 (mg/l)



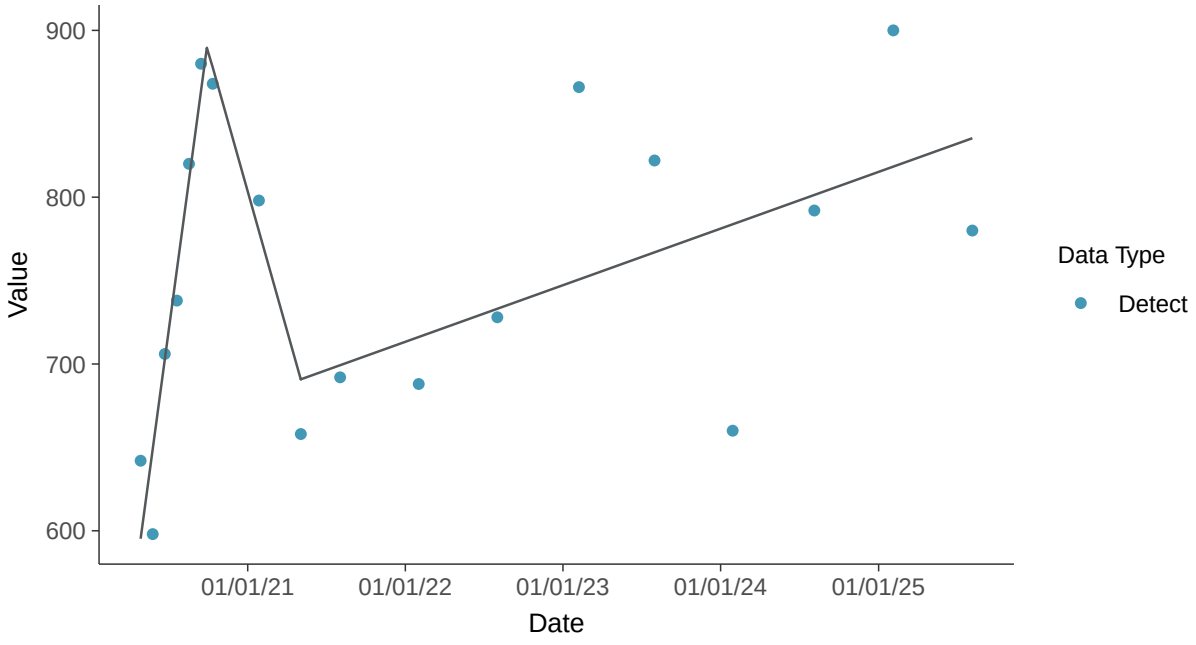
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-6 (mg/l)



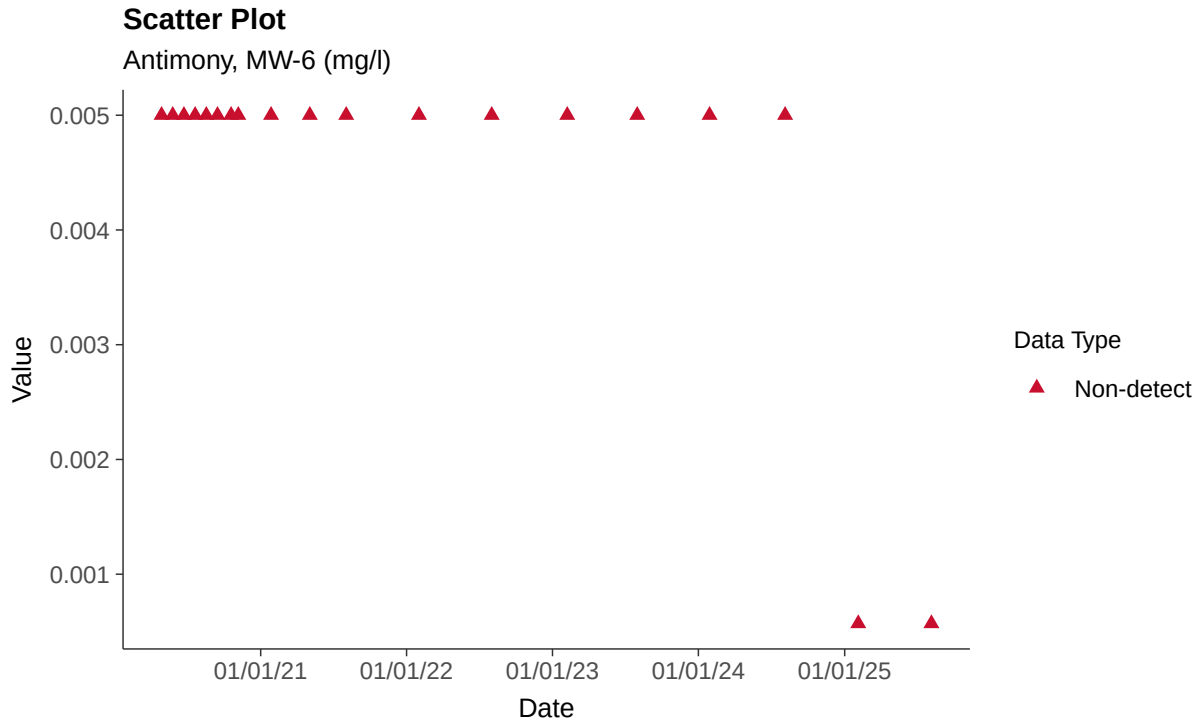
Trend Regression: Piecewise Linear-Linear-Linear

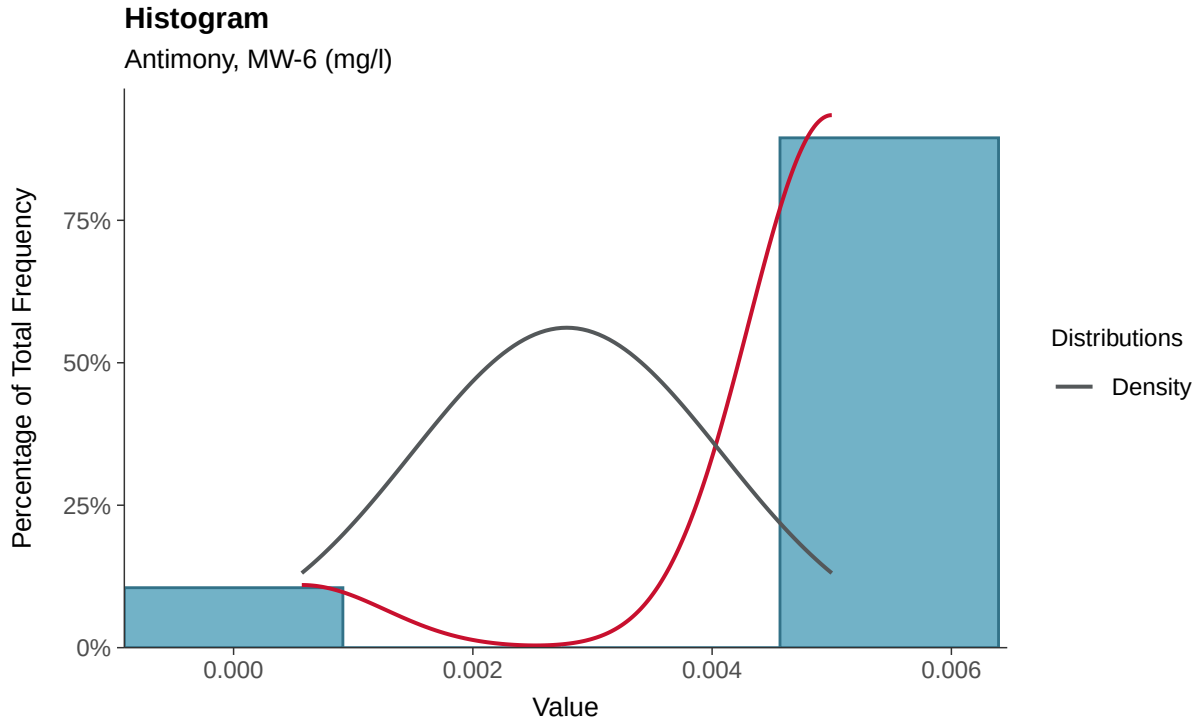
Total Dissolved Solids, MW-6 (mg/l)



Appendix IV: Antimony, MW-6

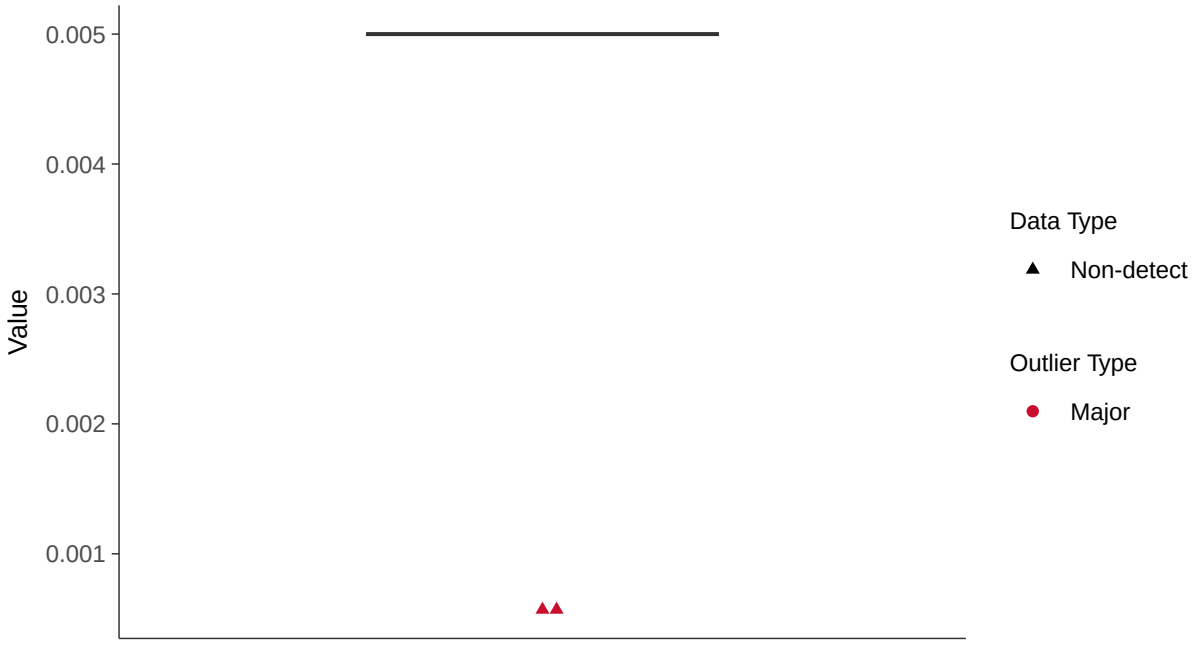
ID: 16_3_101





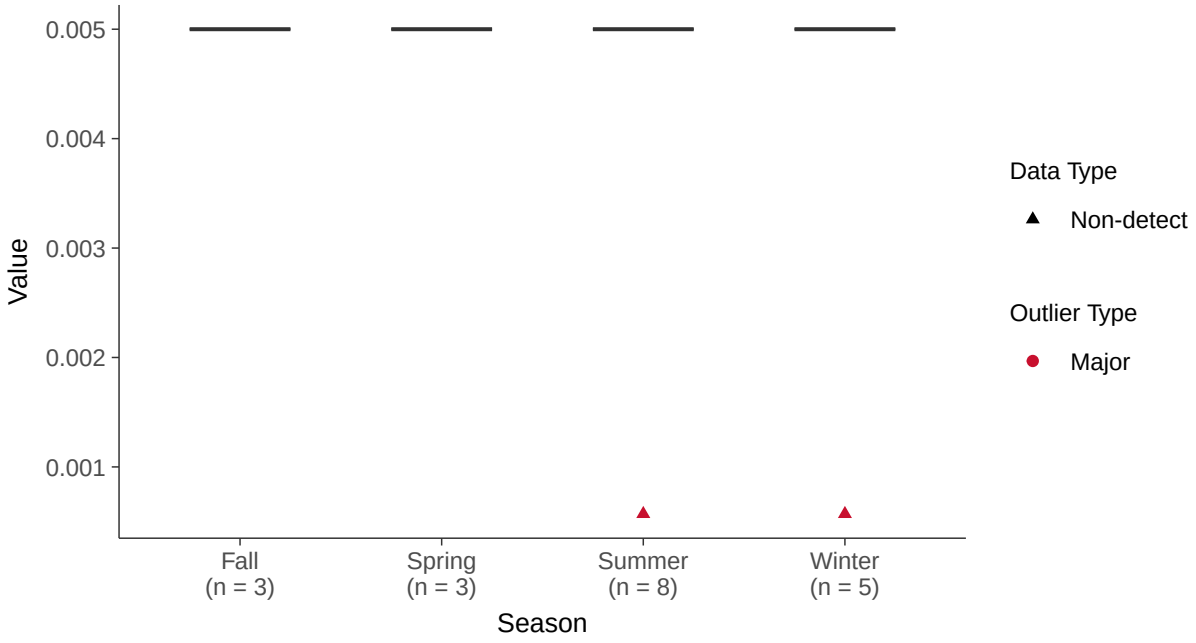
Boxplot

Antimony, MW-6 (mg/l)



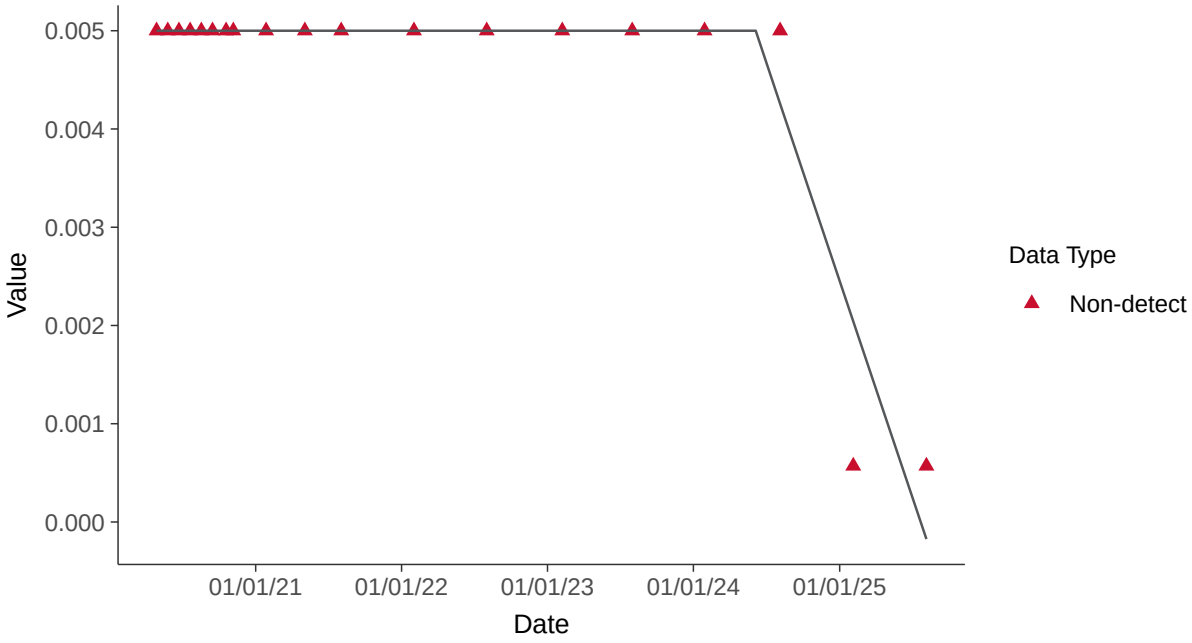
Boxplot by Season

Antimony, MW-6 (mg/l)



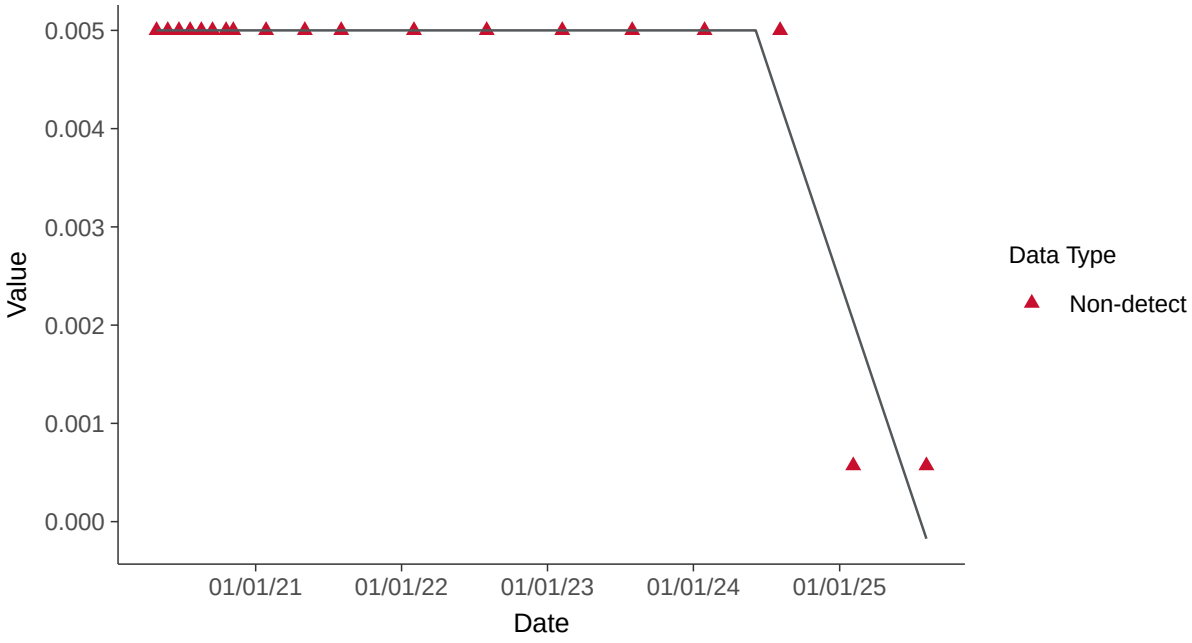
Trend Regression: Piecewise Linear-Linear

Antimony, MW-6 (mg/l)



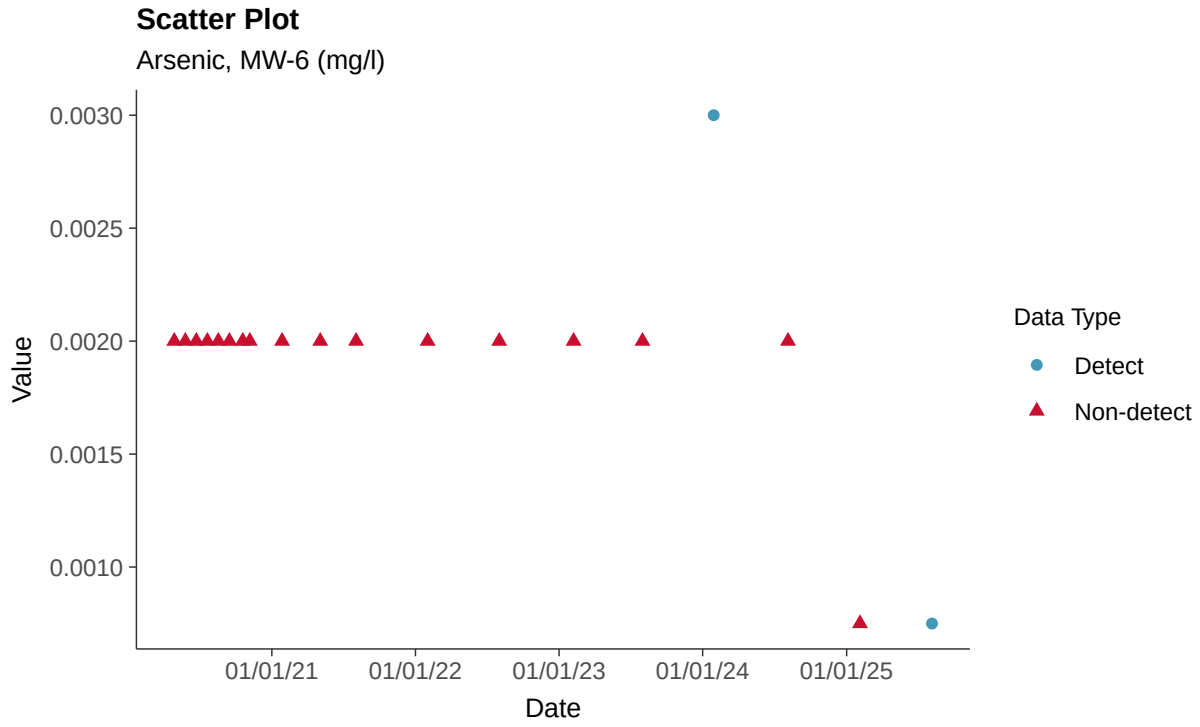
Trend Regression: Piecewise Linear-Linear-Linear

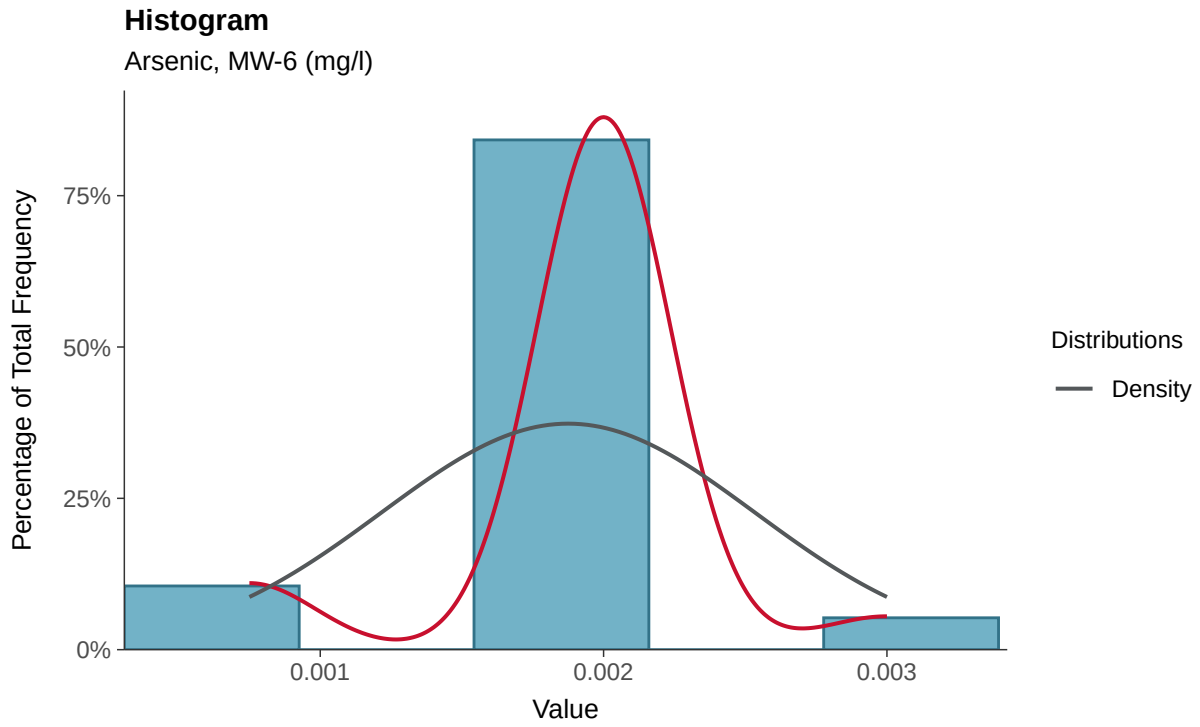
Antimony, MW-6 (mg/l)



Appendix IV: Arsenic, MW-6

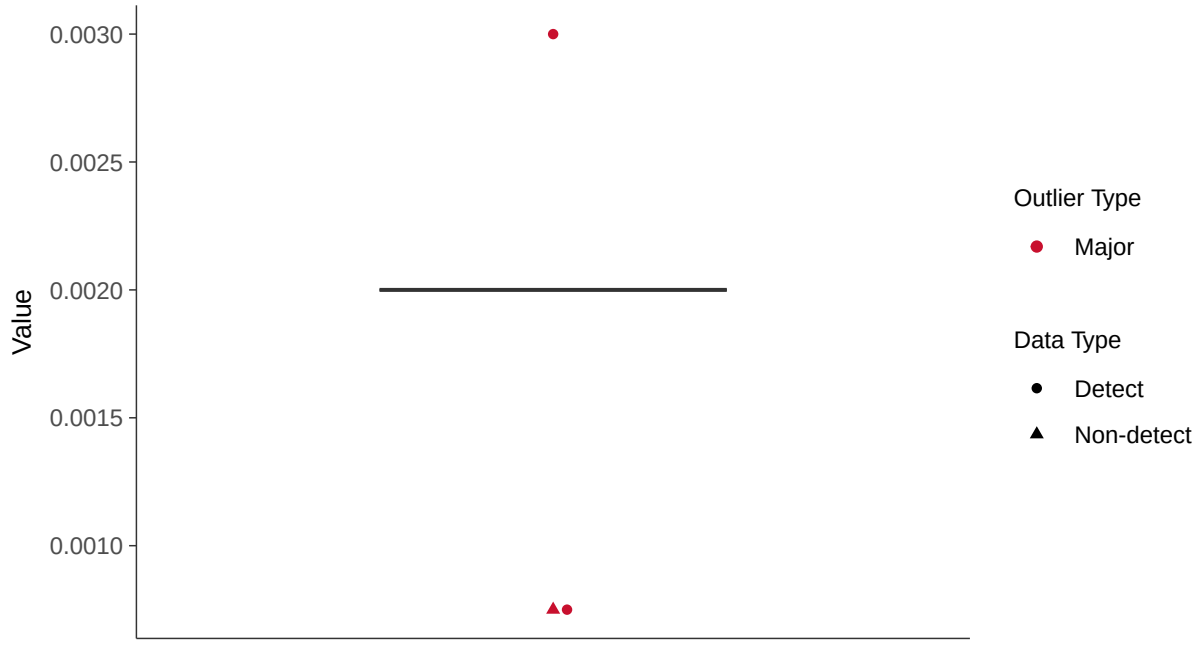
ID: 16_3_102





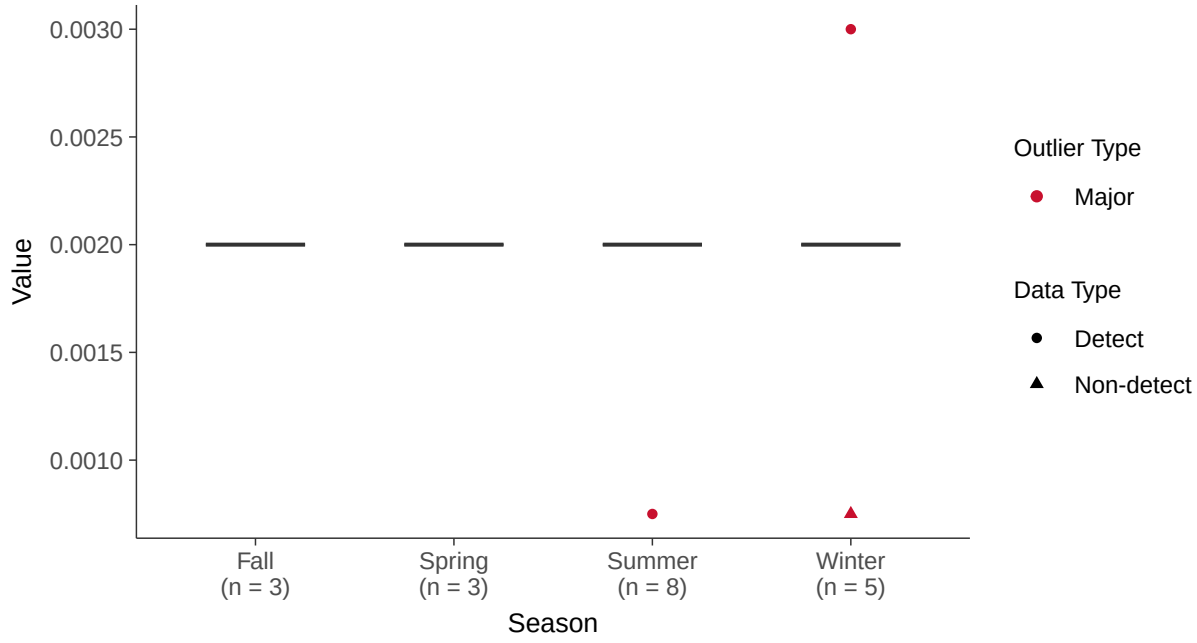
Boxplot

Arsenic, MW-6 (mg/l)



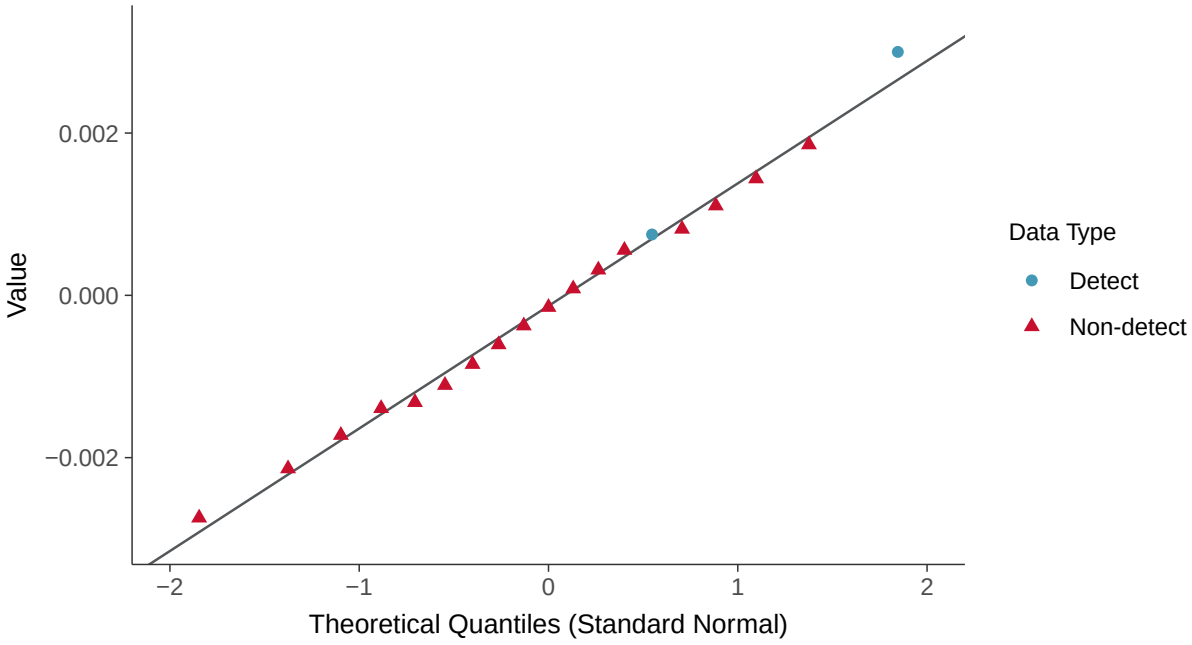
Boxplot by Season

Arsenic, MW-6 (mg/l)



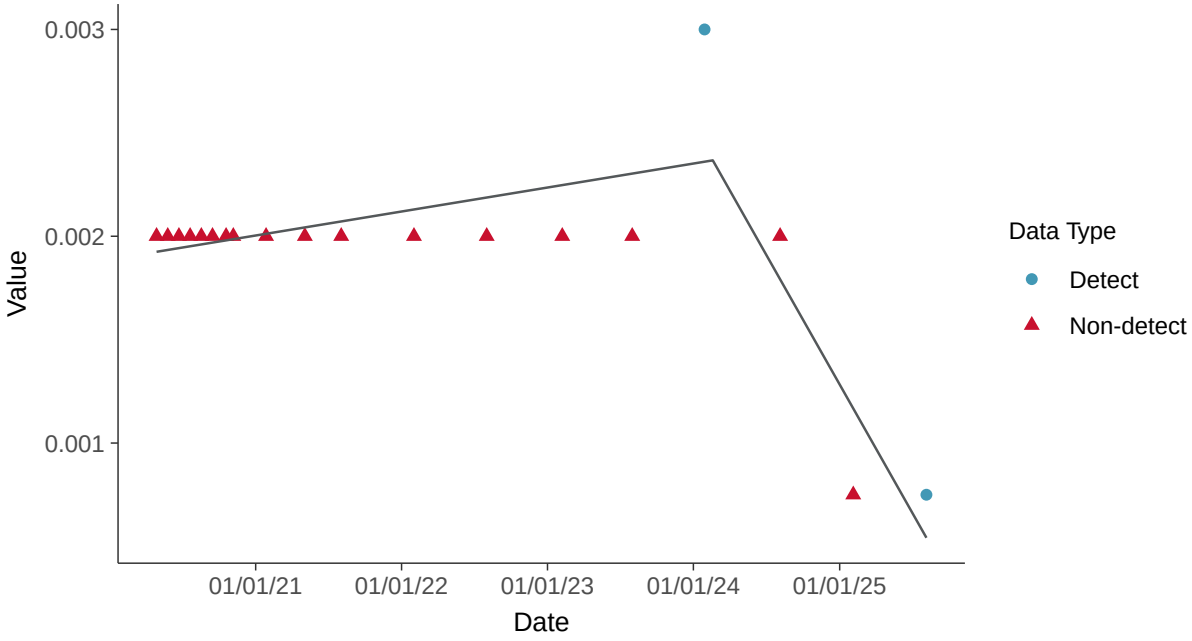
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-6 (mg/l)



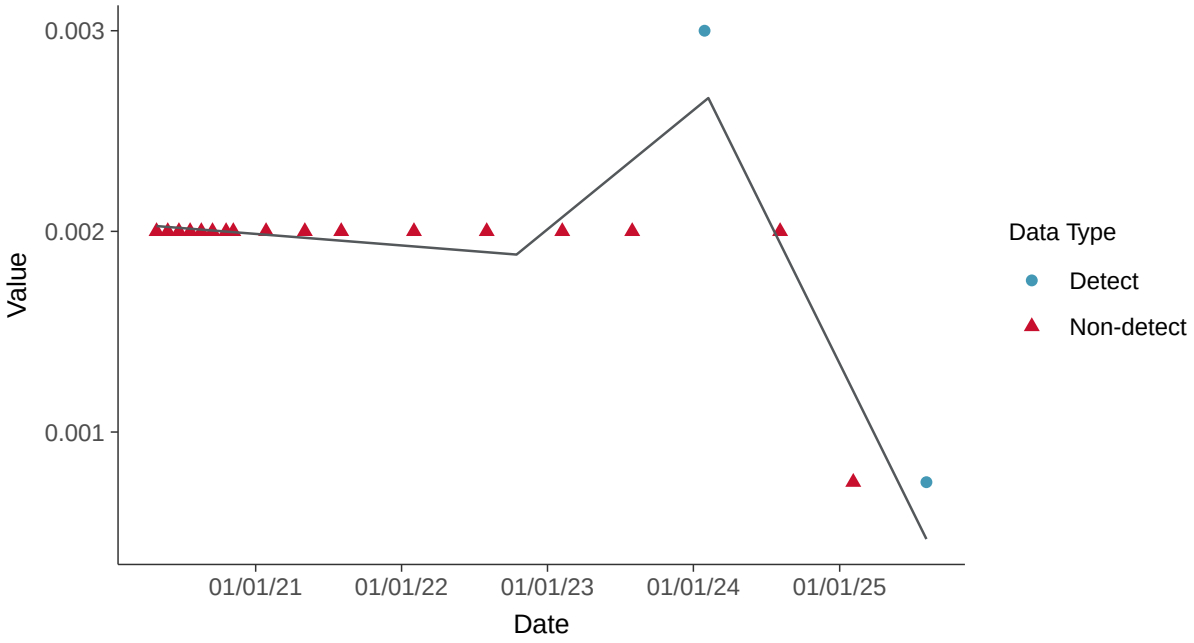
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-6 (mg/l)



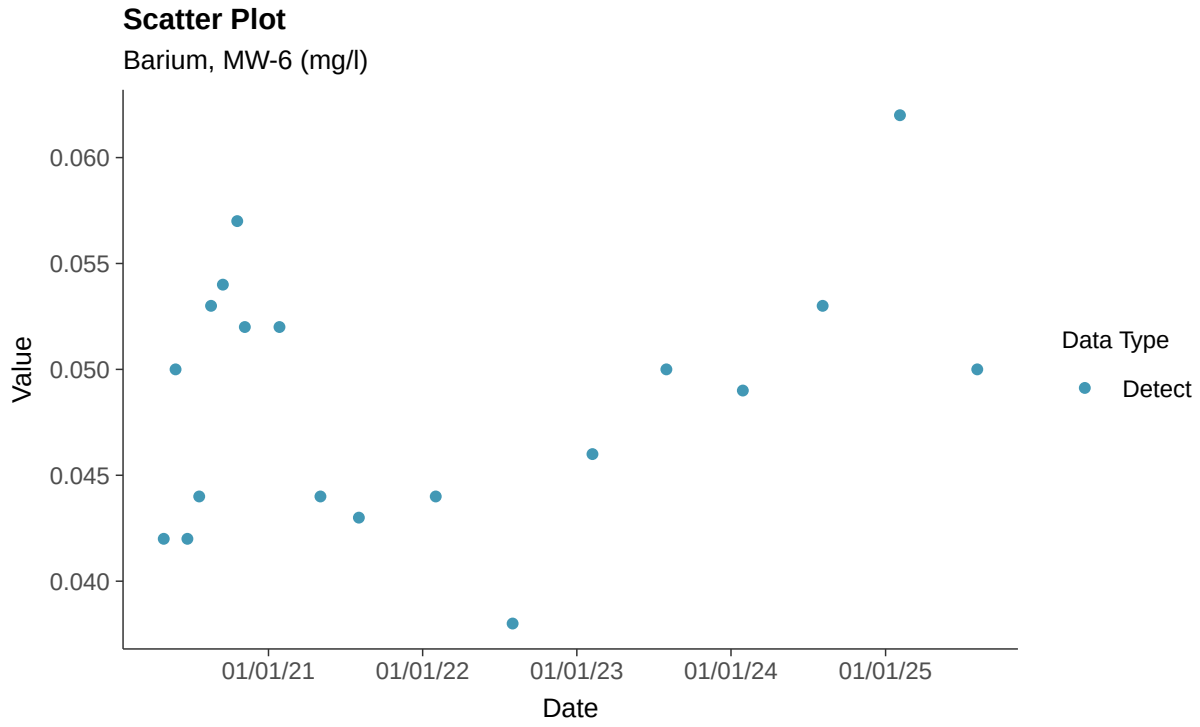
Trend Regression: Piecewise Linear-Linear-Linear

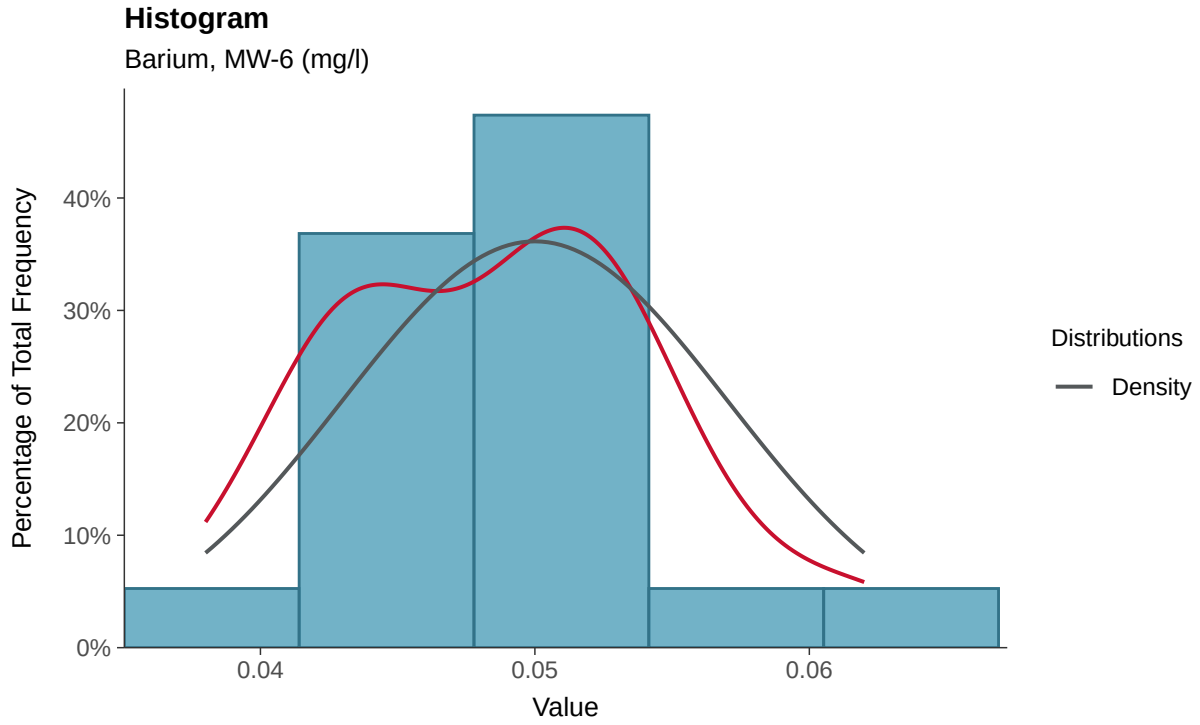
Arsenic, MW-6 (mg/l)



Appendix IV: Barium, MW-6

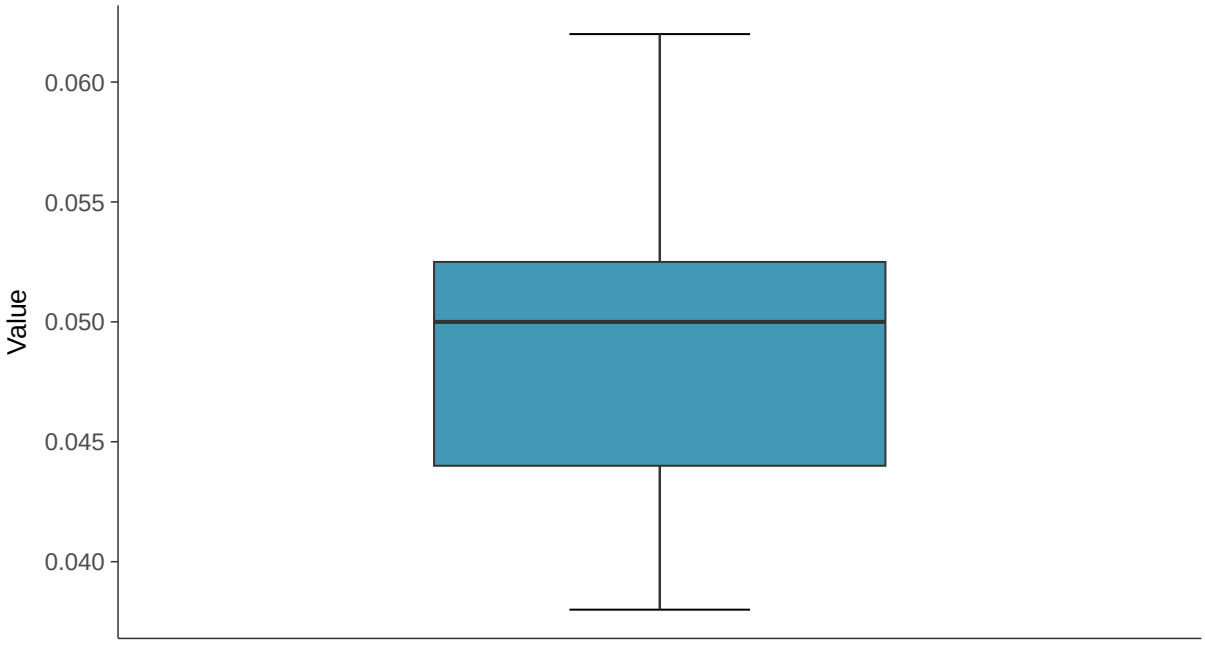
ID: 16_3_103





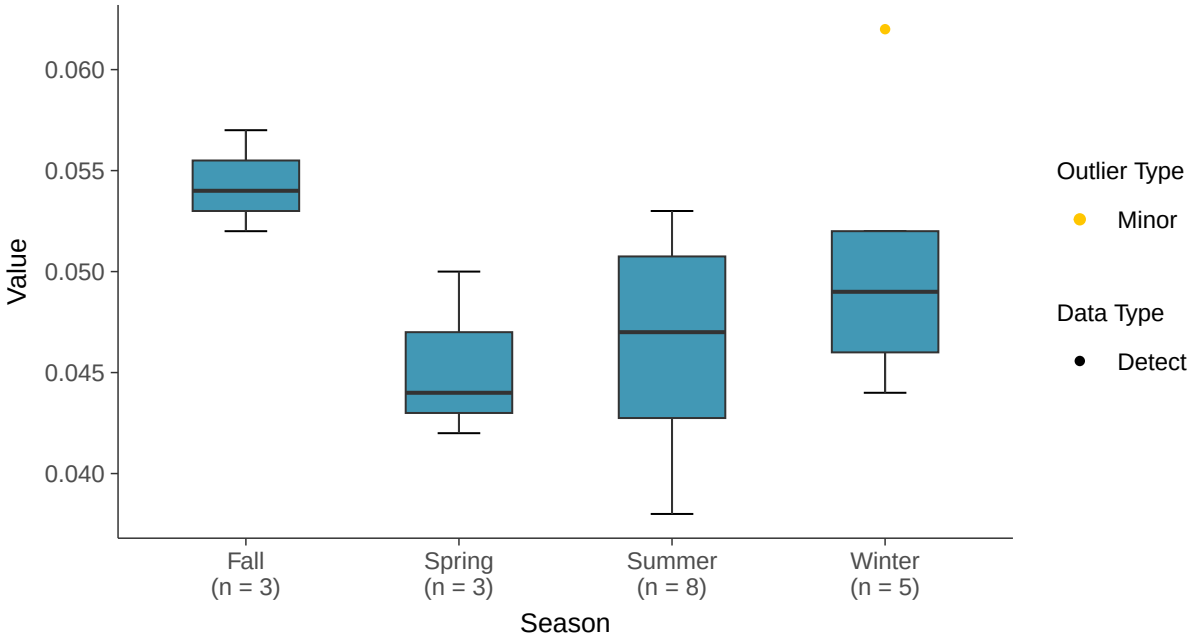
Boxplot

Barium, MW-6 (mg/l)



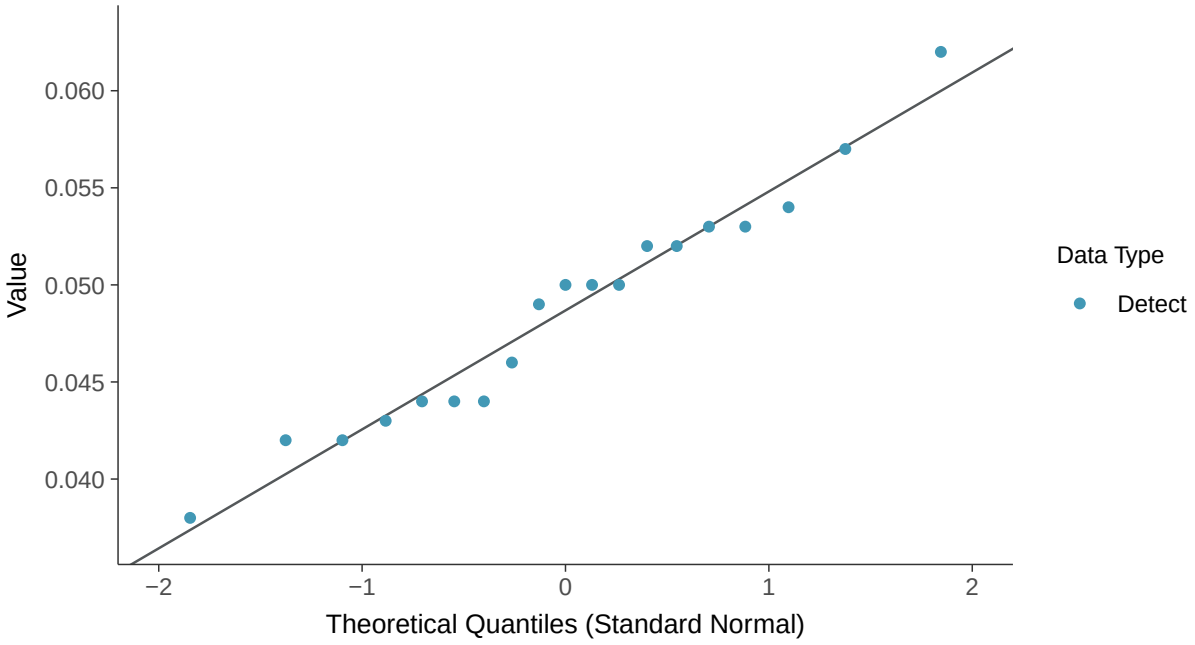
Boxplot by Season

Barium, MW-6 (mg/l)



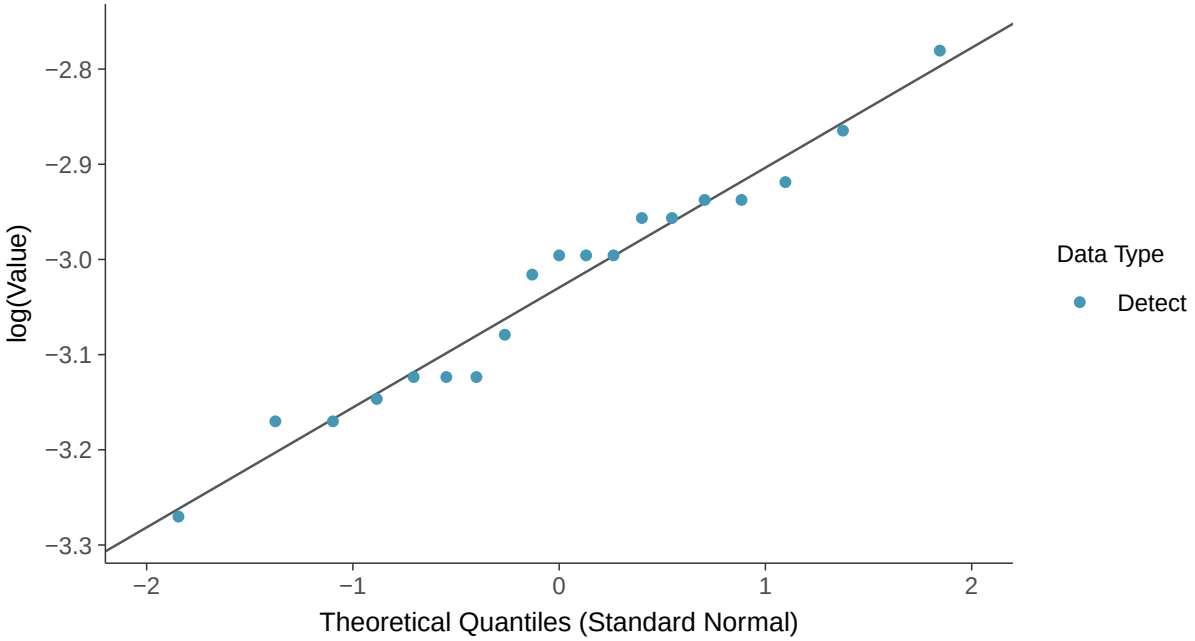
Normal Q-Q plot

Barium, MW-6 (mg/l)



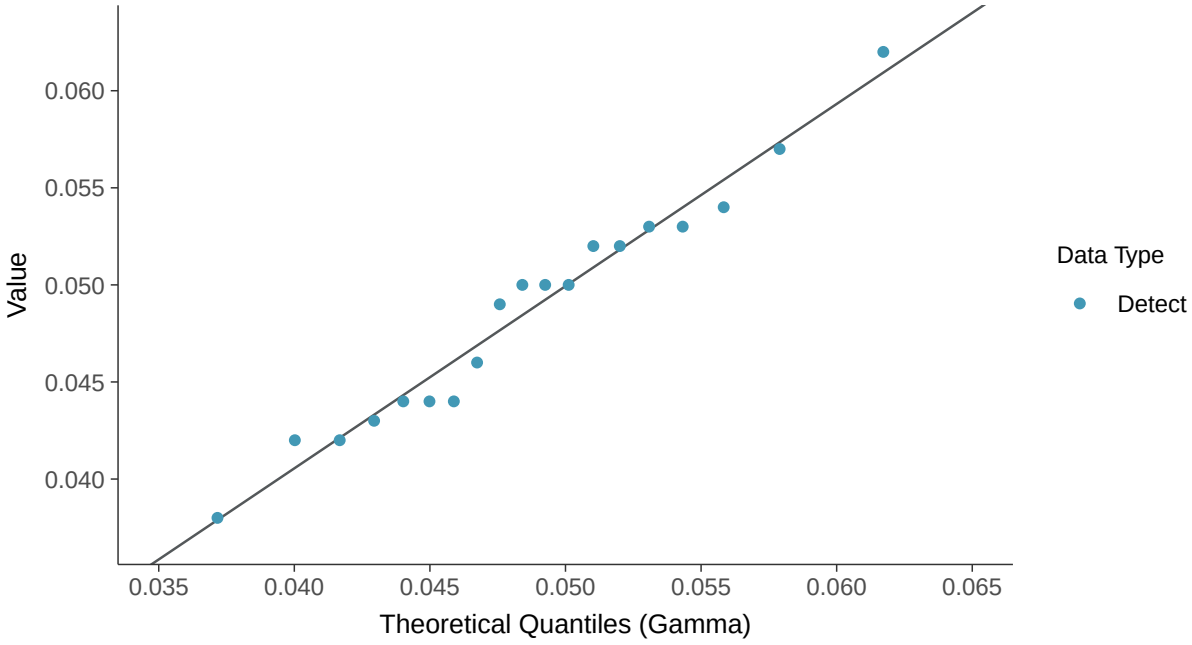
Lognormal Q-Q plot

Barium, MW-6 (mg/l)



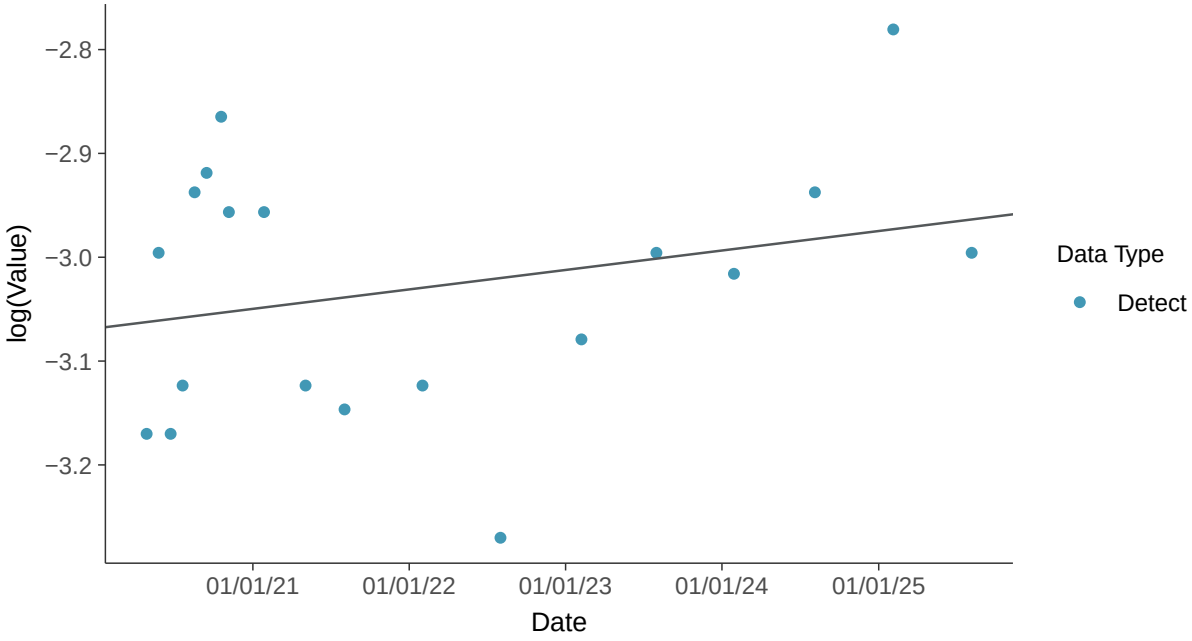
Gamma Q-Q plot

Barium, MW-6 (mg/l)



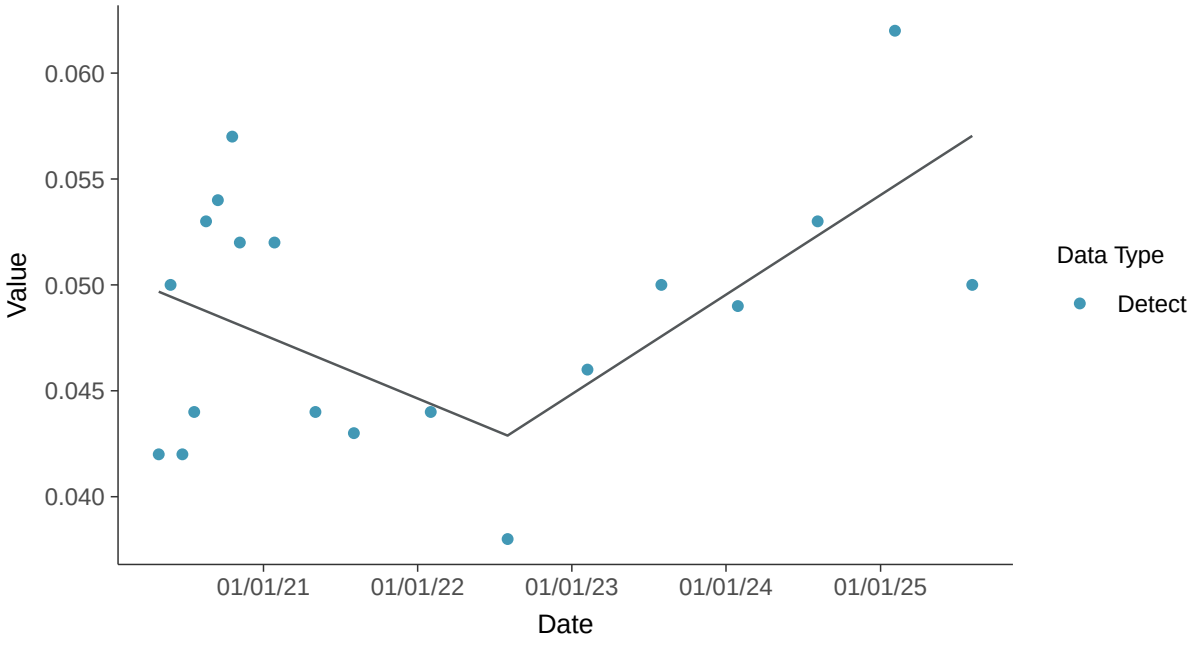
Trend Regression: Lognormal MLE

Barium, MW-6 (mg/l)



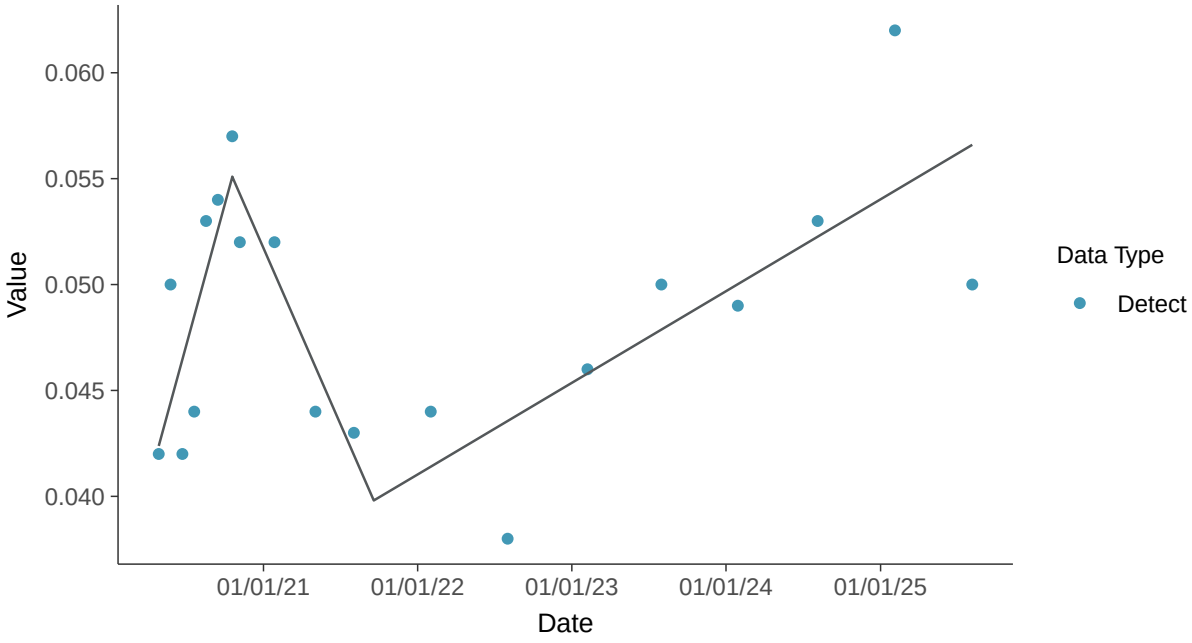
Trend Regression: Piecewise Linear-Linear

Barium, MW-6 (mg/l)



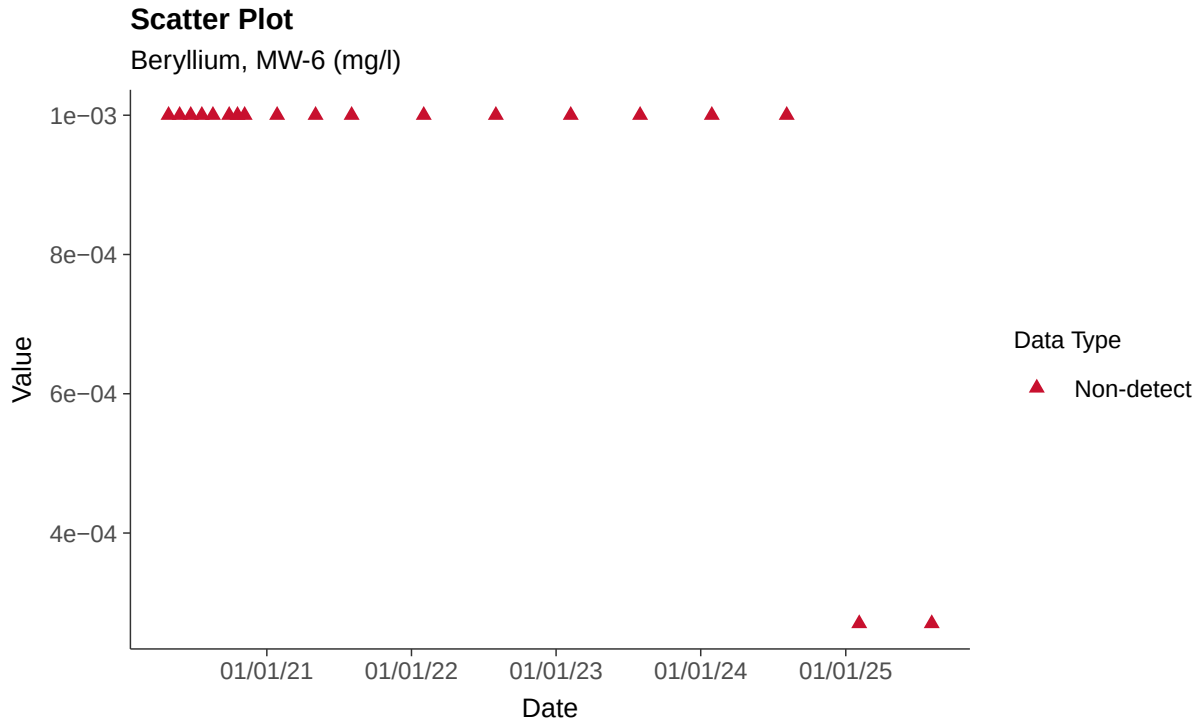
Trend Regression: Piecewise Linear-Linear-Linear

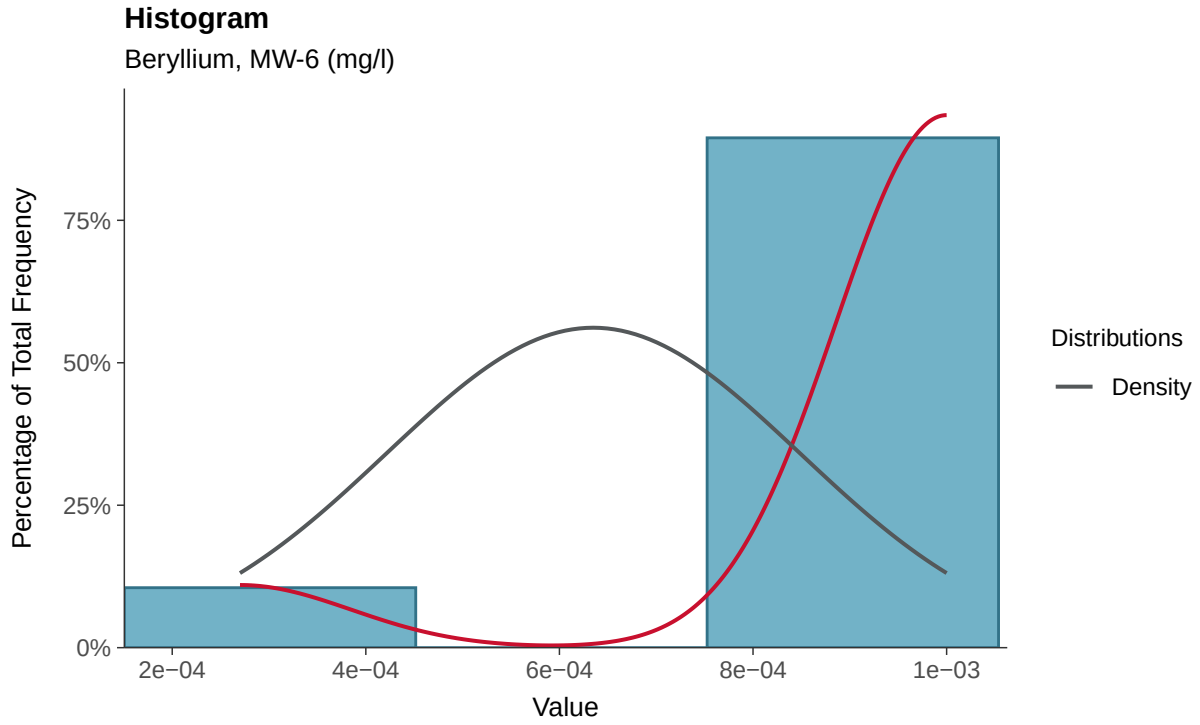
Barium, MW-6 (mg/l)



Appendix IV: Beryllium, MW-6

ID: 16_3_104



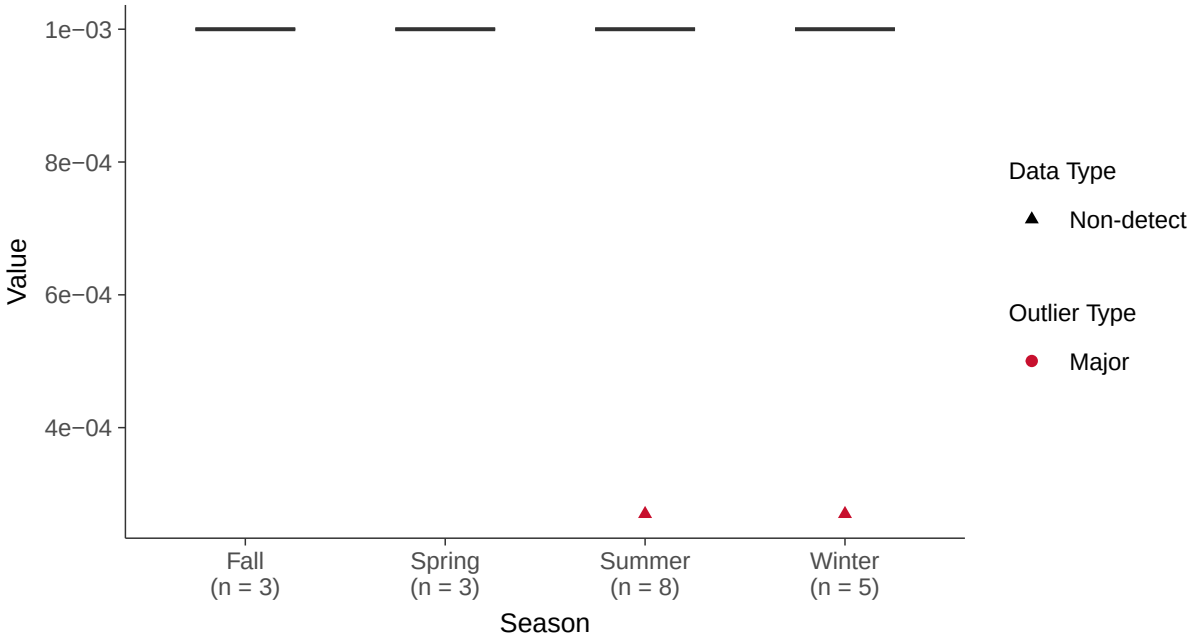


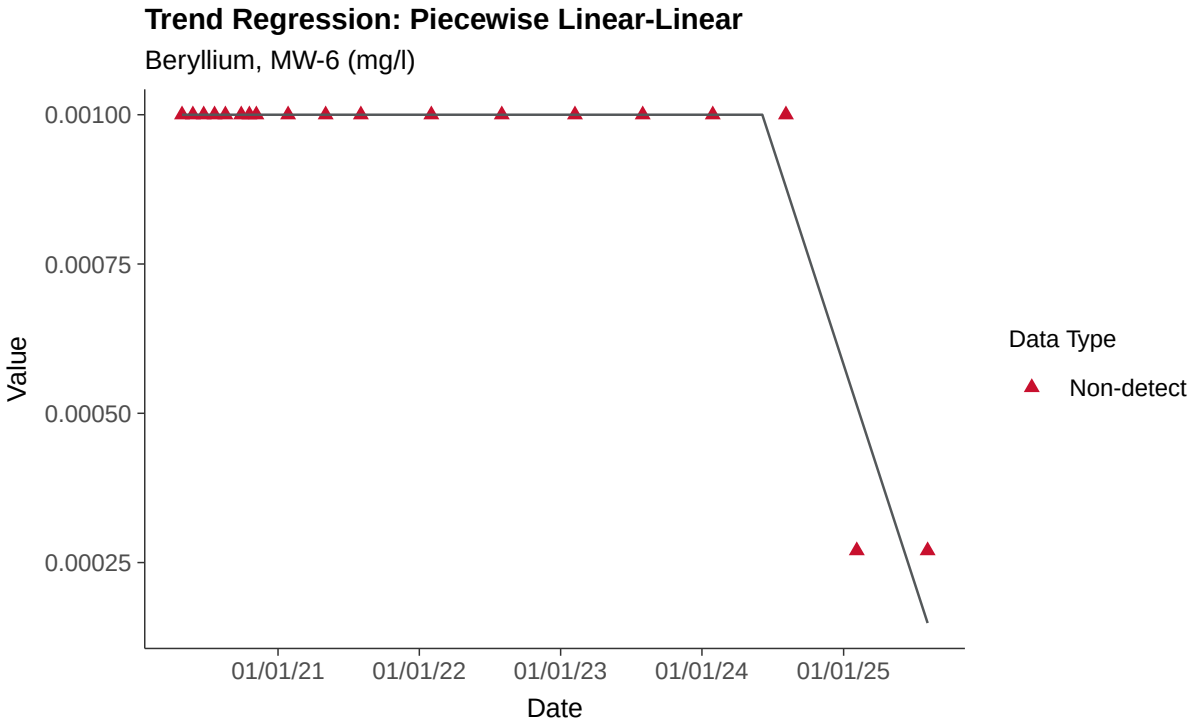
Boxplot

Beryllium, MW-6 (mg/l)

Boxplot by Season

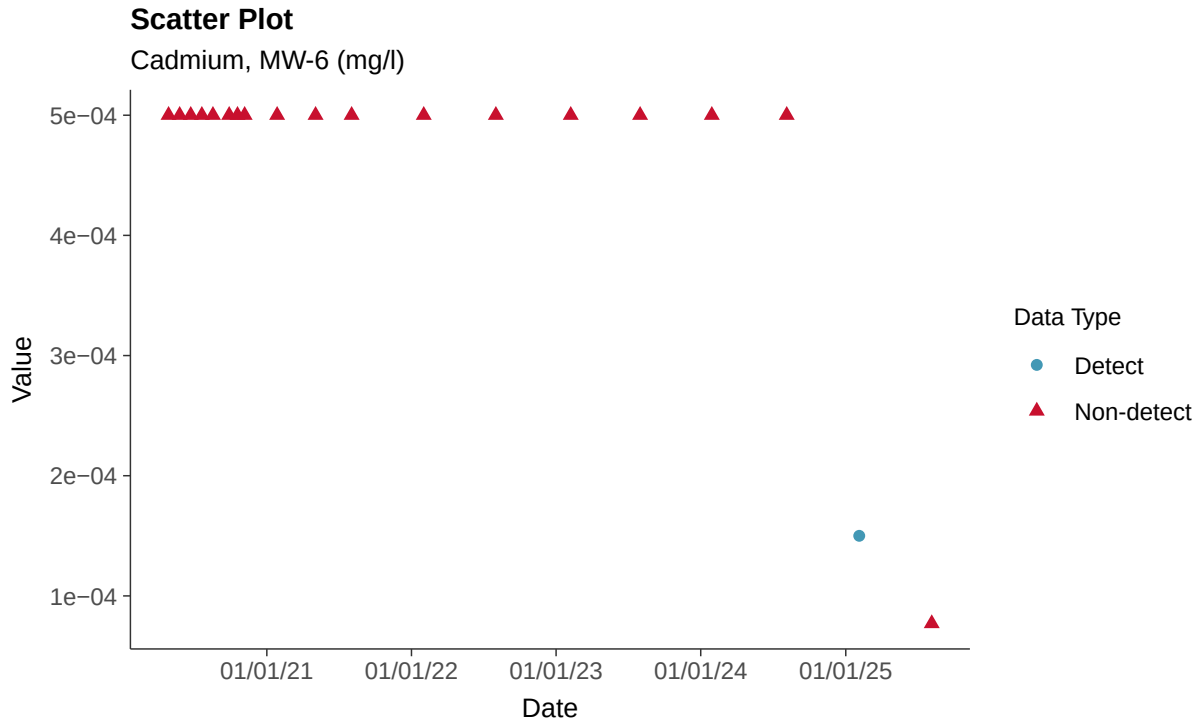
Beryllium, MW-6 (mg/l)

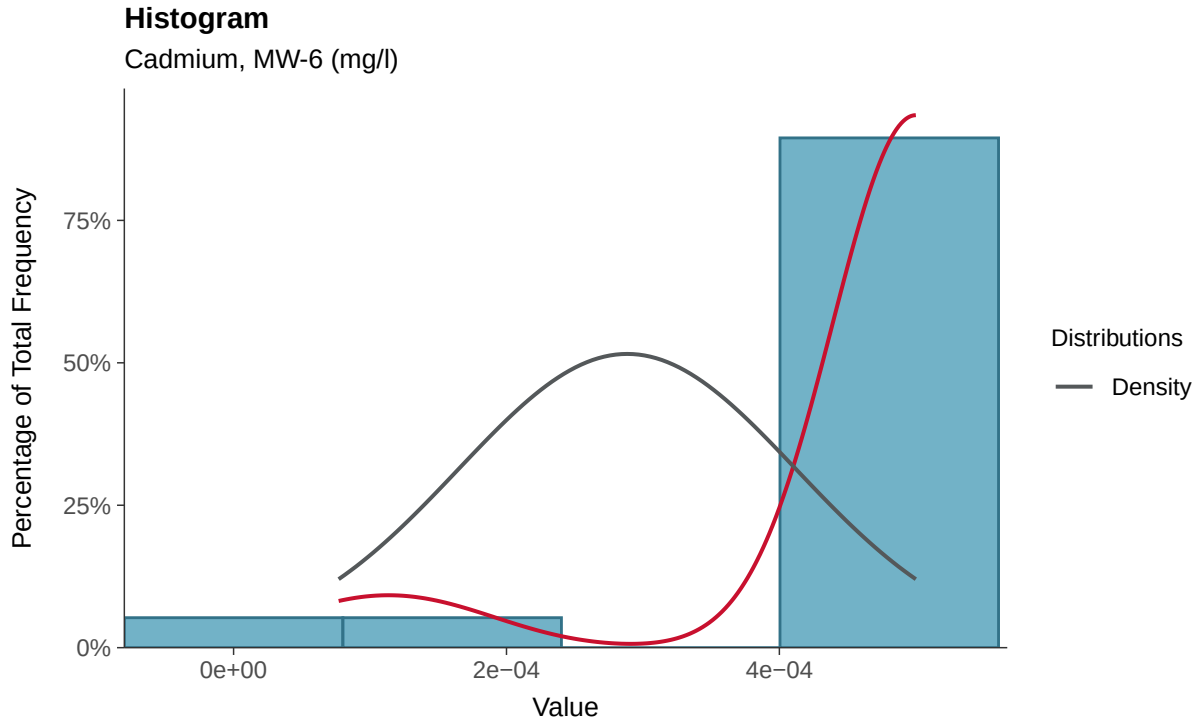



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-6 (mg/l)
0.00100
0.00075
0.00050
0.00025
Value
01/01/21
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Appendix IV: Cadmium, MW-6

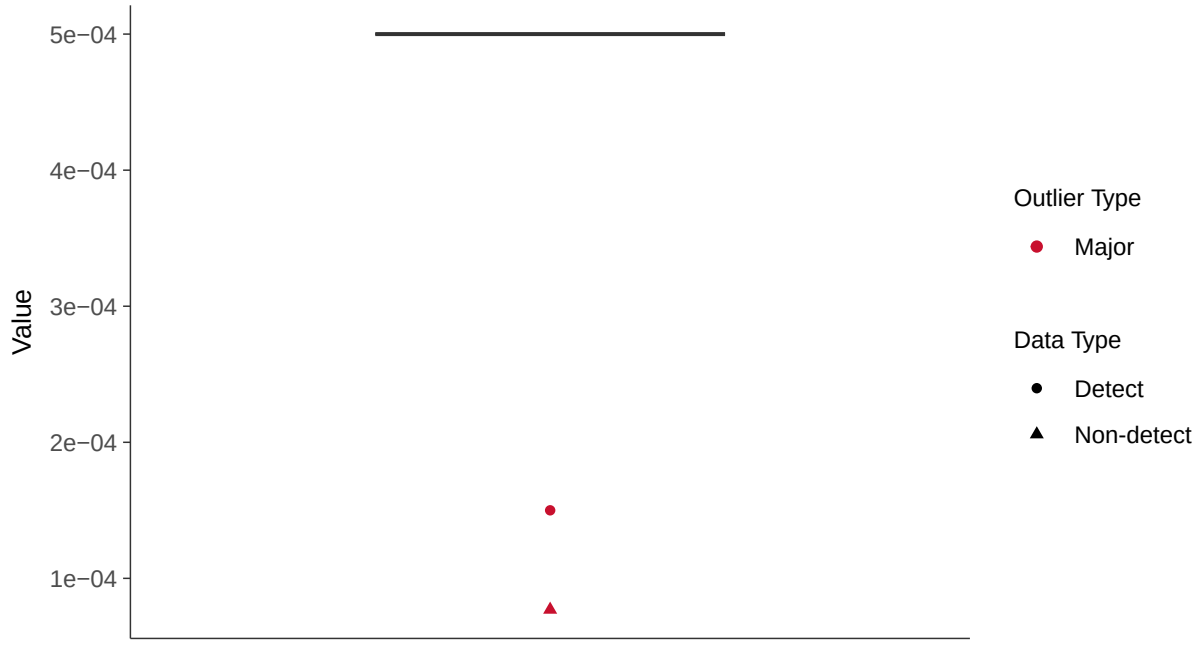
ID: 16_3_106





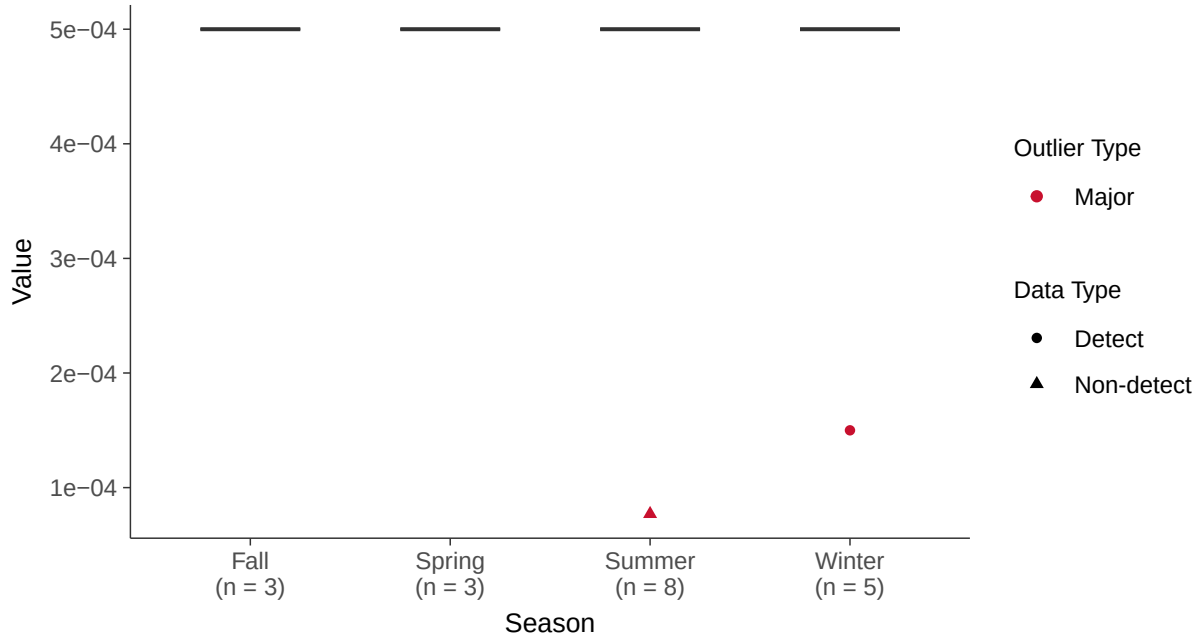
Boxplot

Cadmium, MW-6 (mg/l)



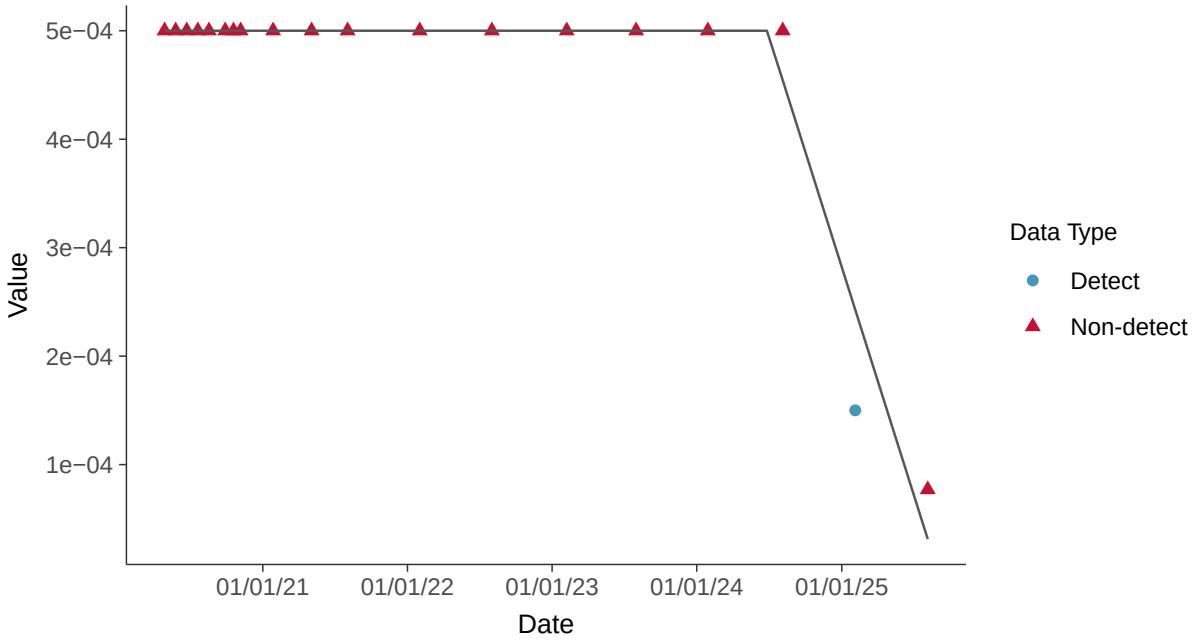
Boxplot by Season

Cadmium, MW-6 (mg/l)



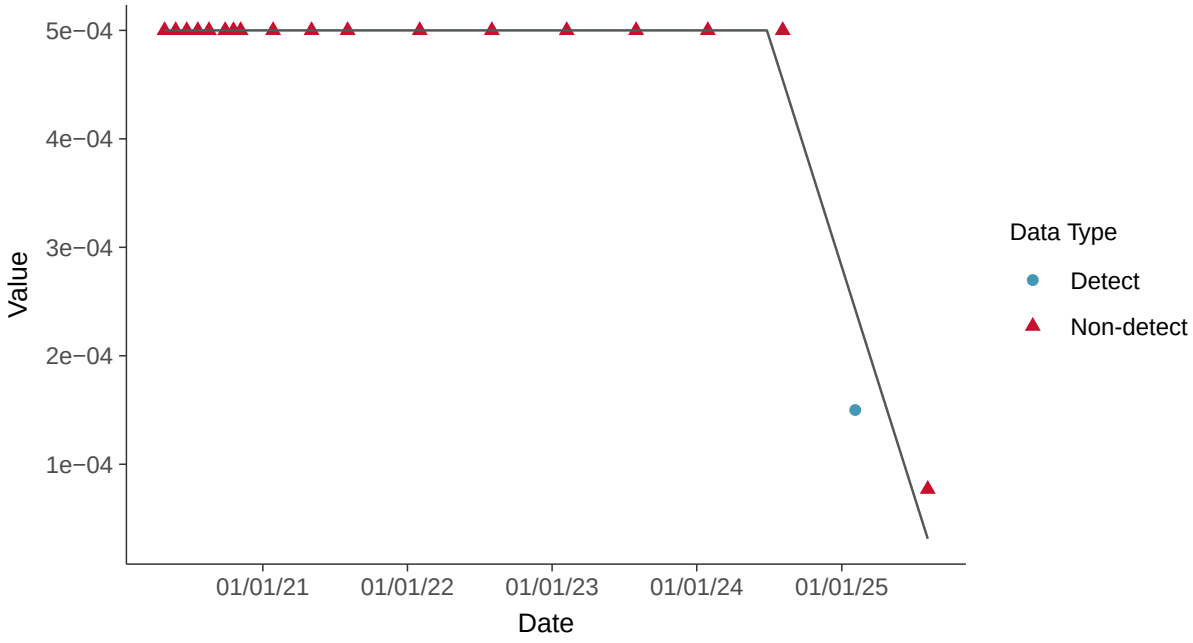
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-6 (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-6 (mg/l)

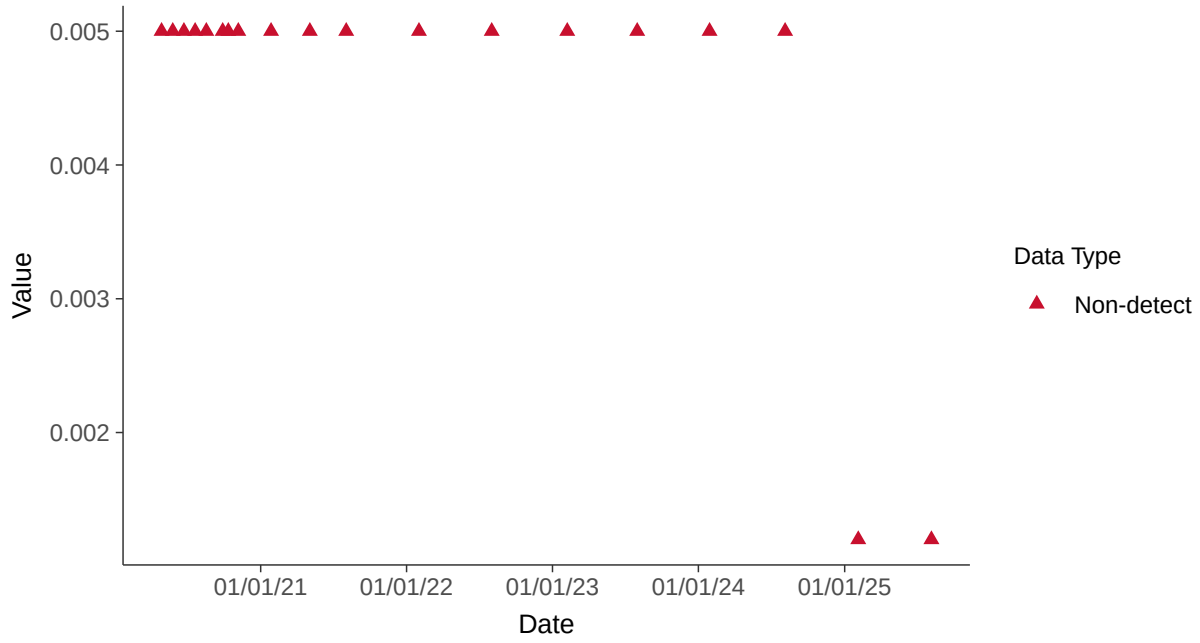


Appendix IV: Chromium, MW-6

ID: 16_3_109

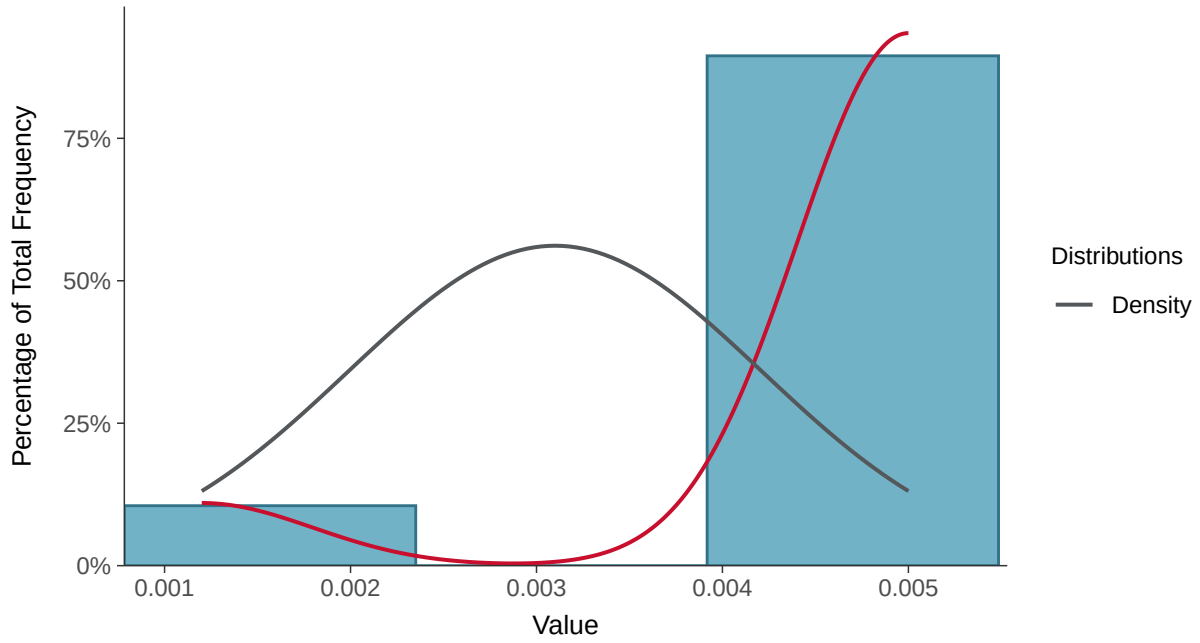
Scatter Plot

Chromium, MW-6 (mg/l)



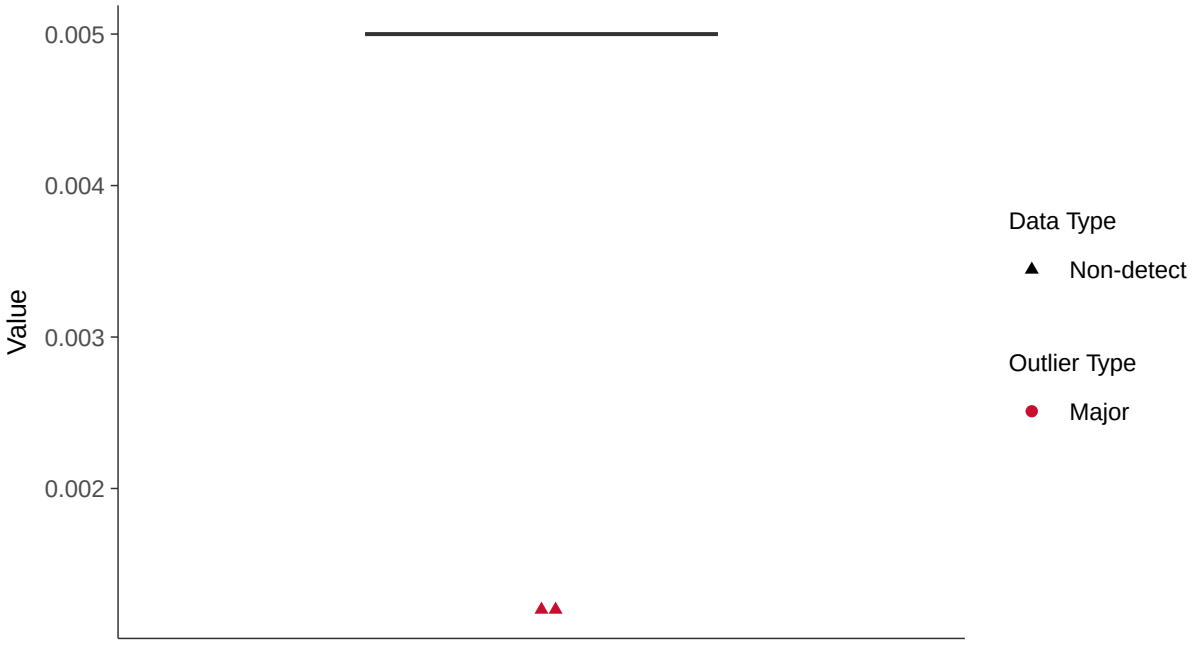
Histogram

Chromium, MW-6 (mg/l)



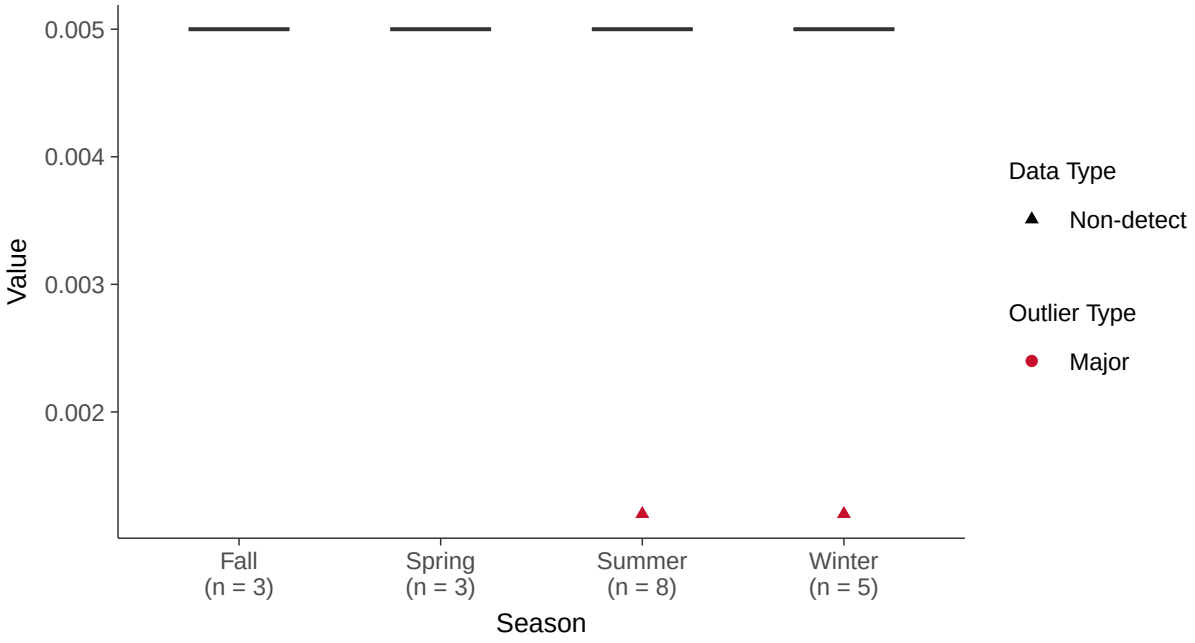
Boxplot

Chromium, MW-6 (mg/l)



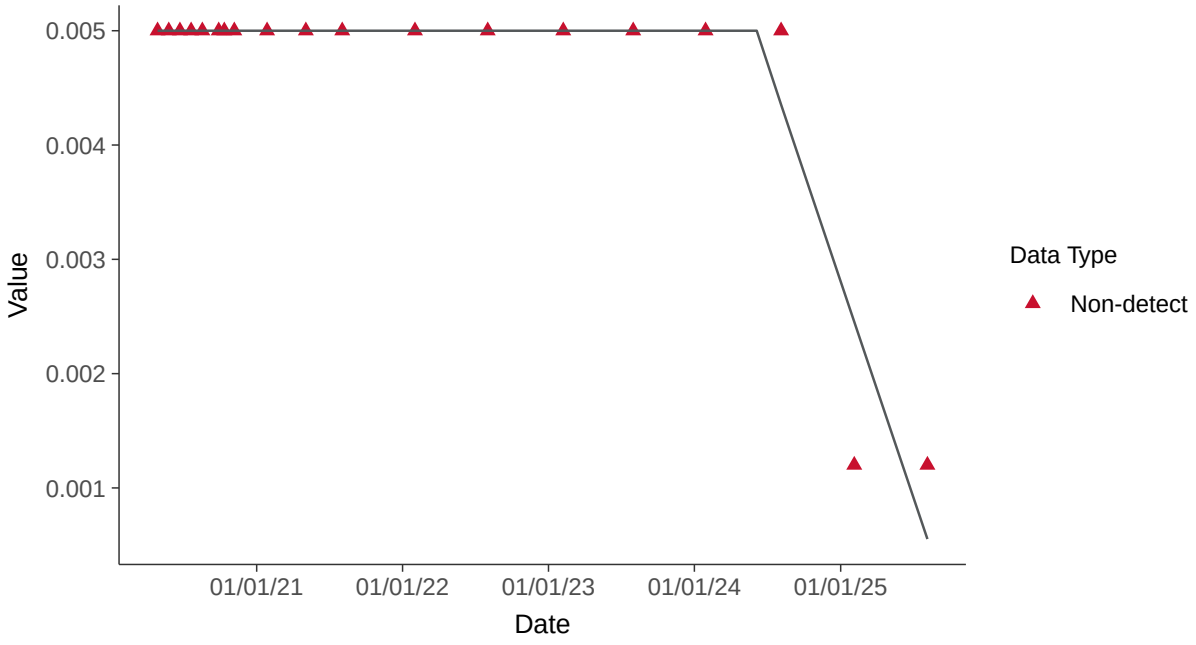
Boxplot by Season

Chromium, MW-6 (mg/l)



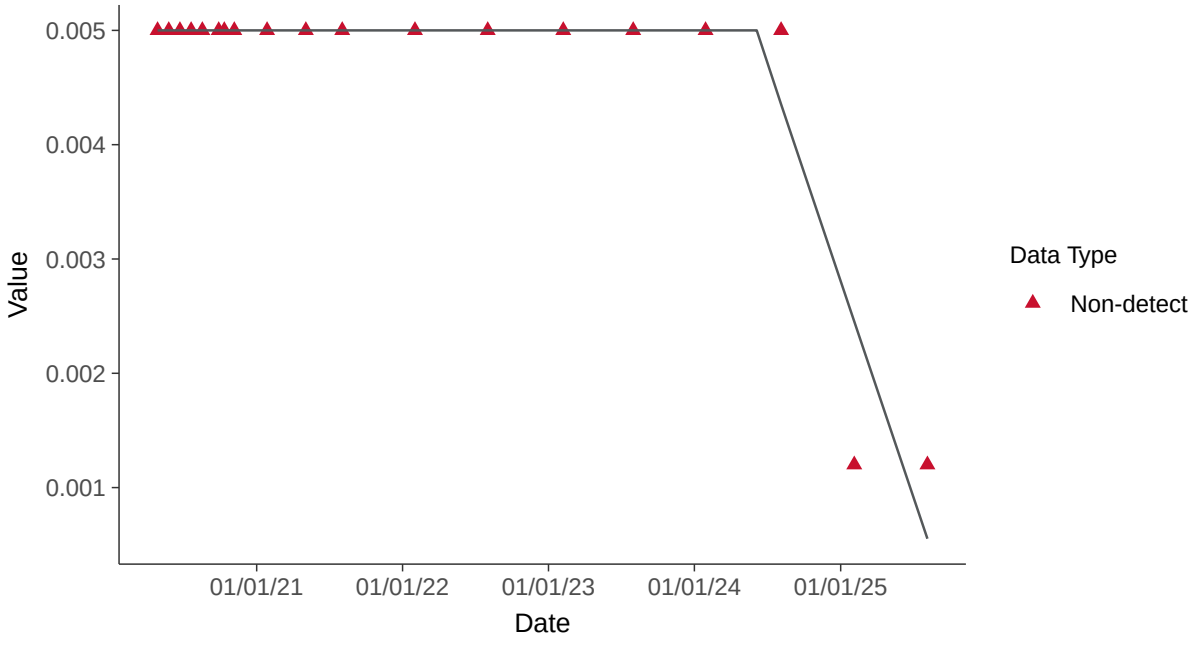
Trend Regression: Piecewise Linear-Linear

Chromium, MW-6 (mg/l)



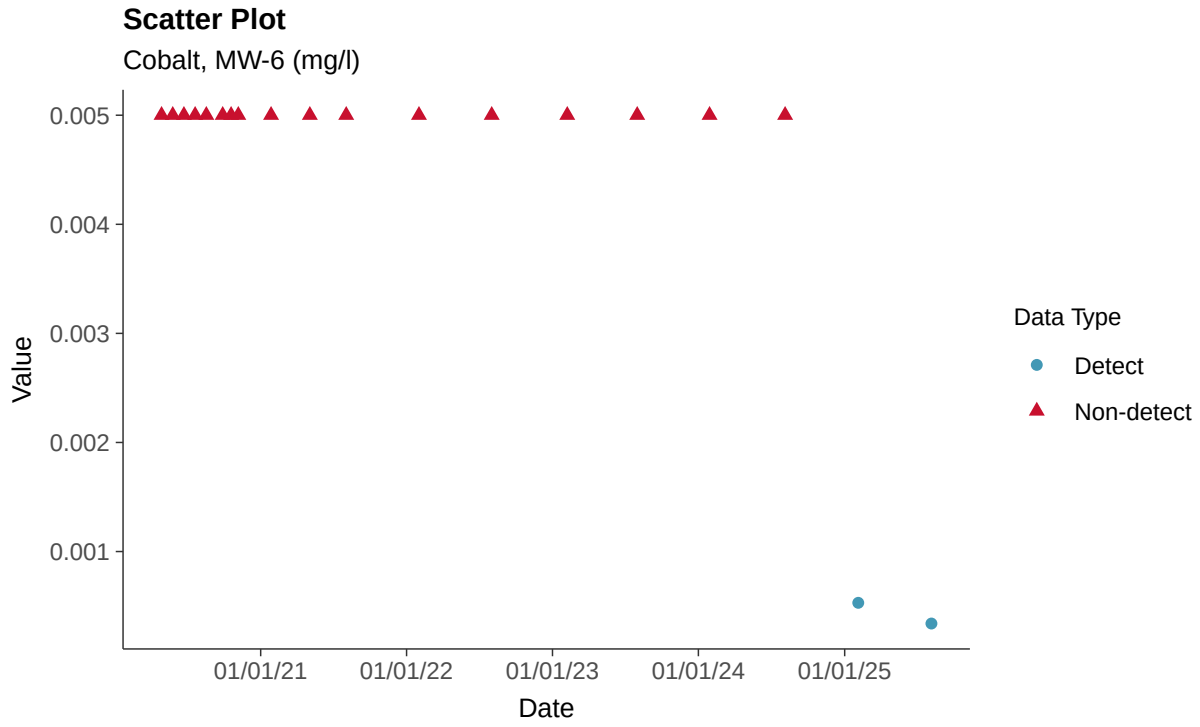
Trend Regression: Piecewise Linear-Linear-Linear

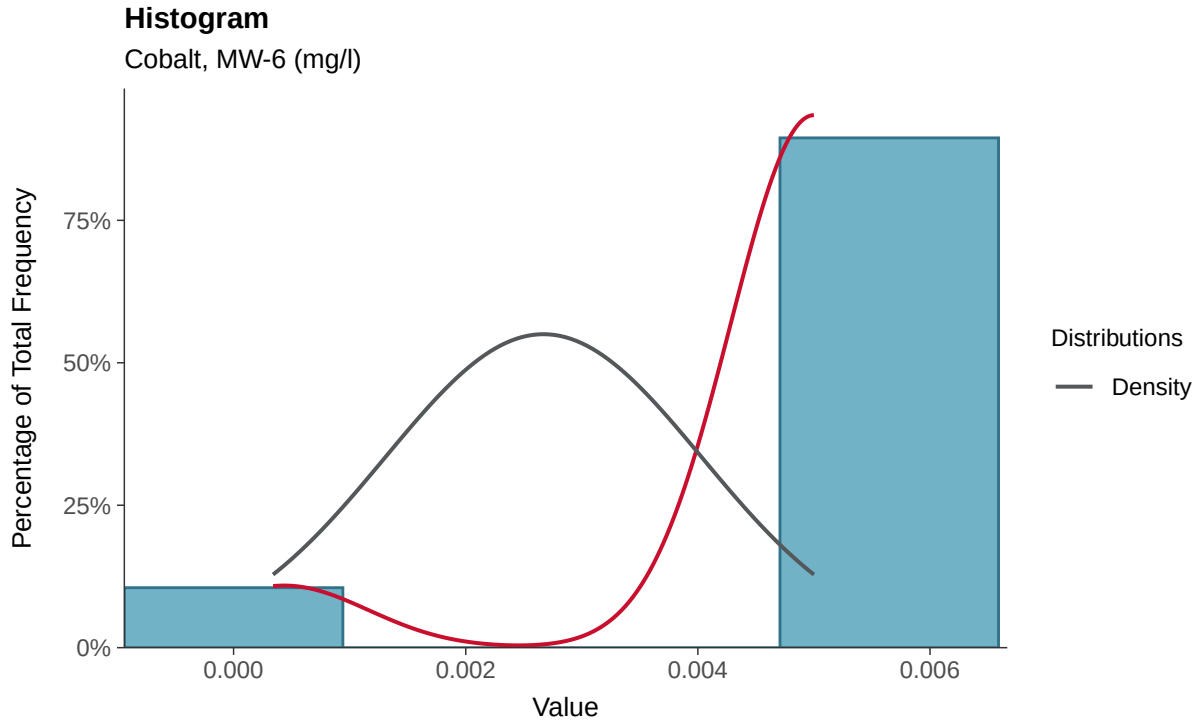
Chromium, MW-6 (mg/l)



Appendix IV: Cobalt, MW-6

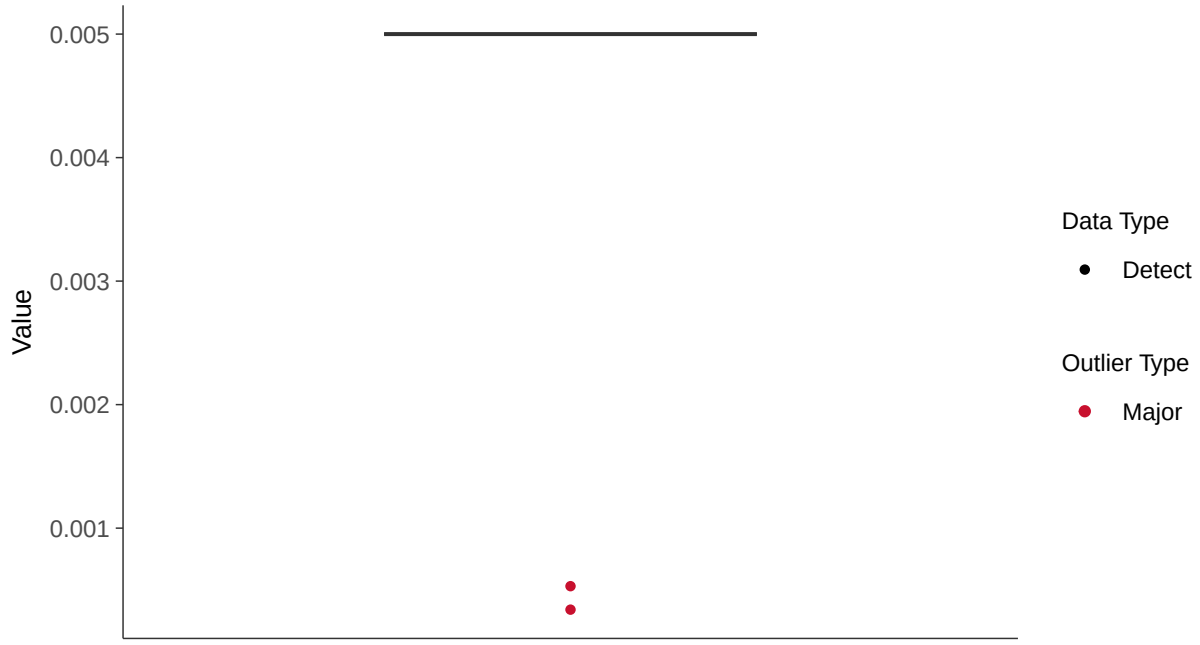
ID: 16_3_110





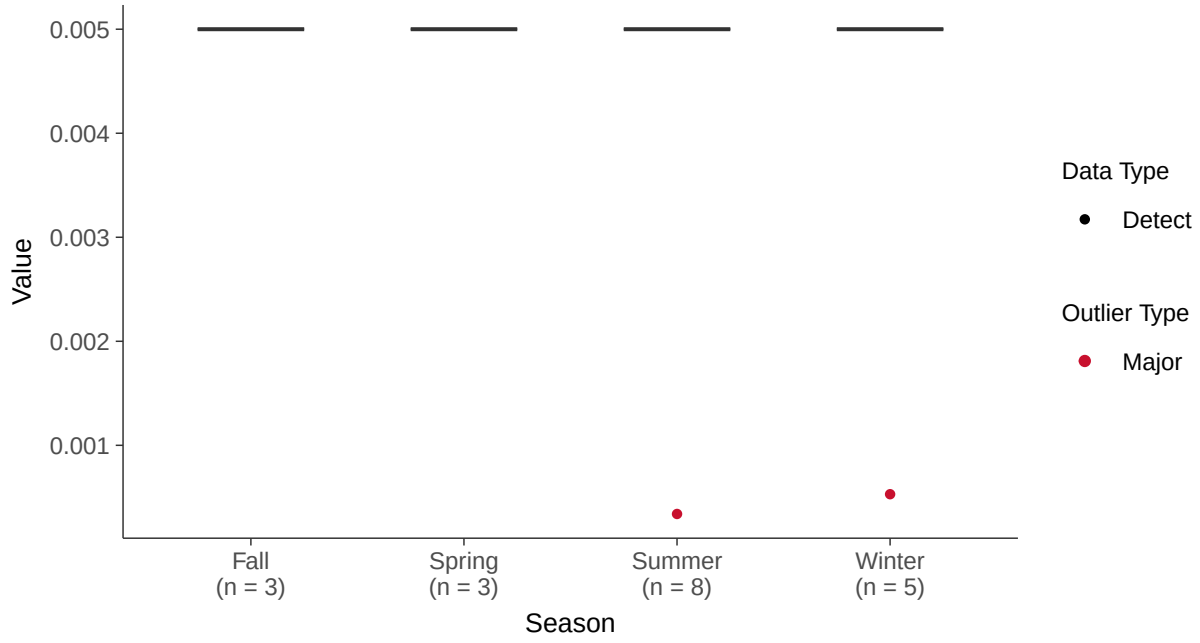
Boxplot

Cobalt, MW-6 (mg/l)



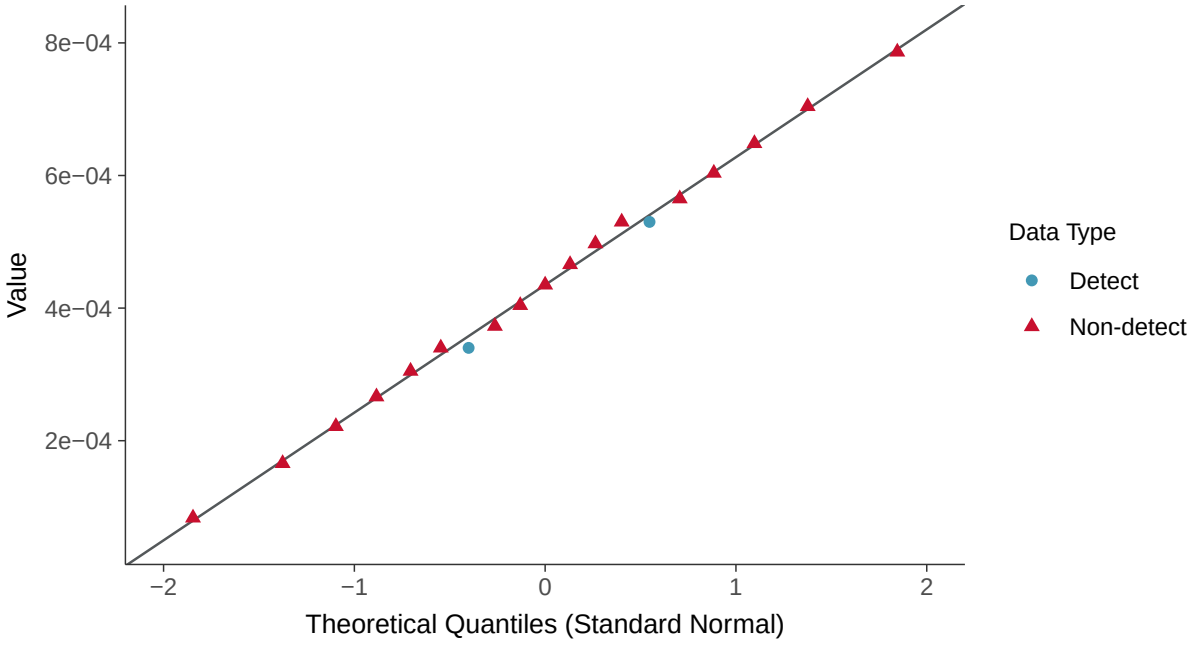
Boxplot by Season

Cobalt, MW-6 (mg/l)



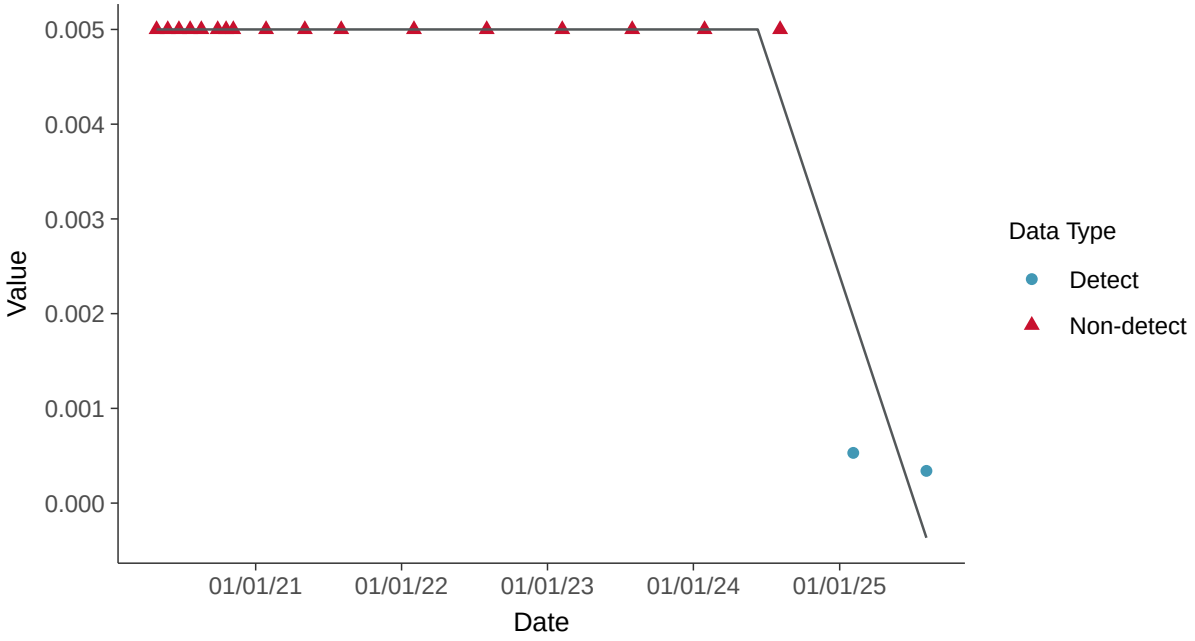
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-6 (mg/l)



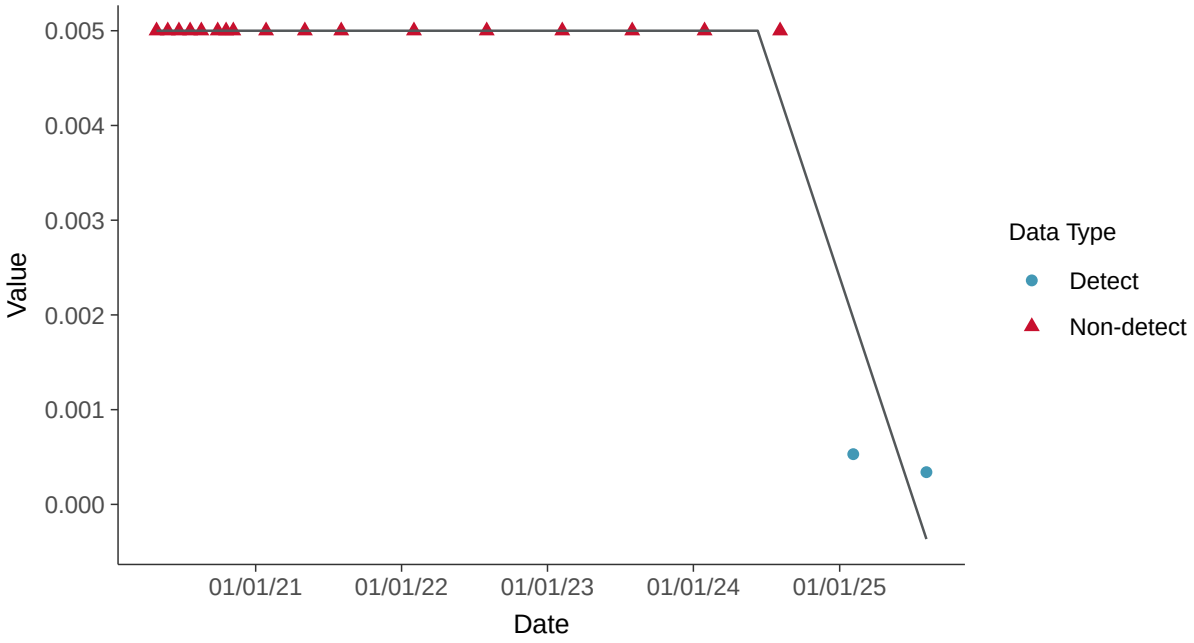
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-6 (mg/l)



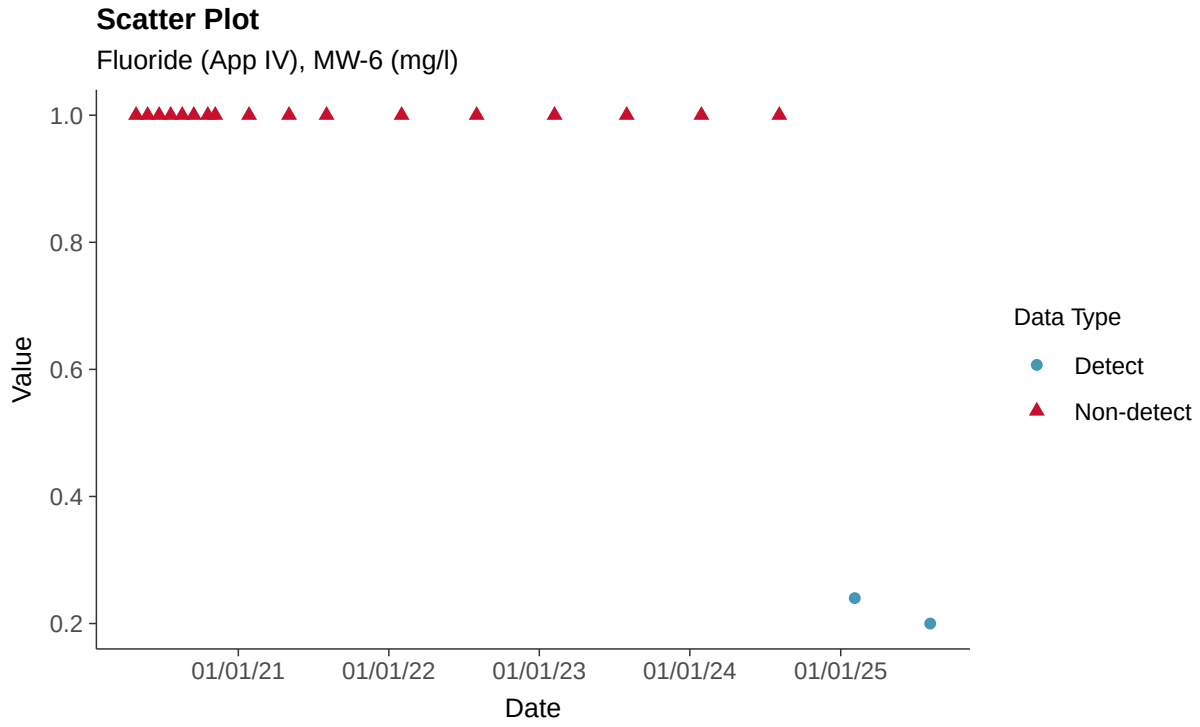
Trend Regression: Piecewise Linear-Linear-Linear

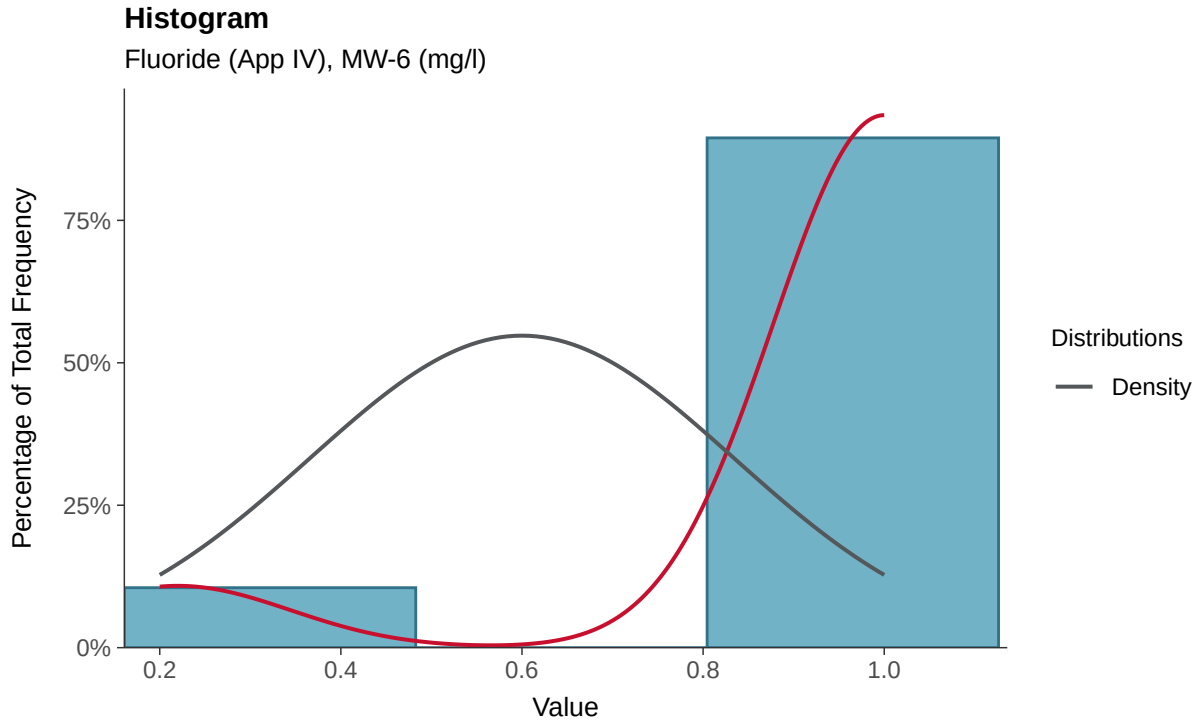
Cobalt, MW-6 (mg/l)



Appendix IV: Fluoride (App IV), MW-6

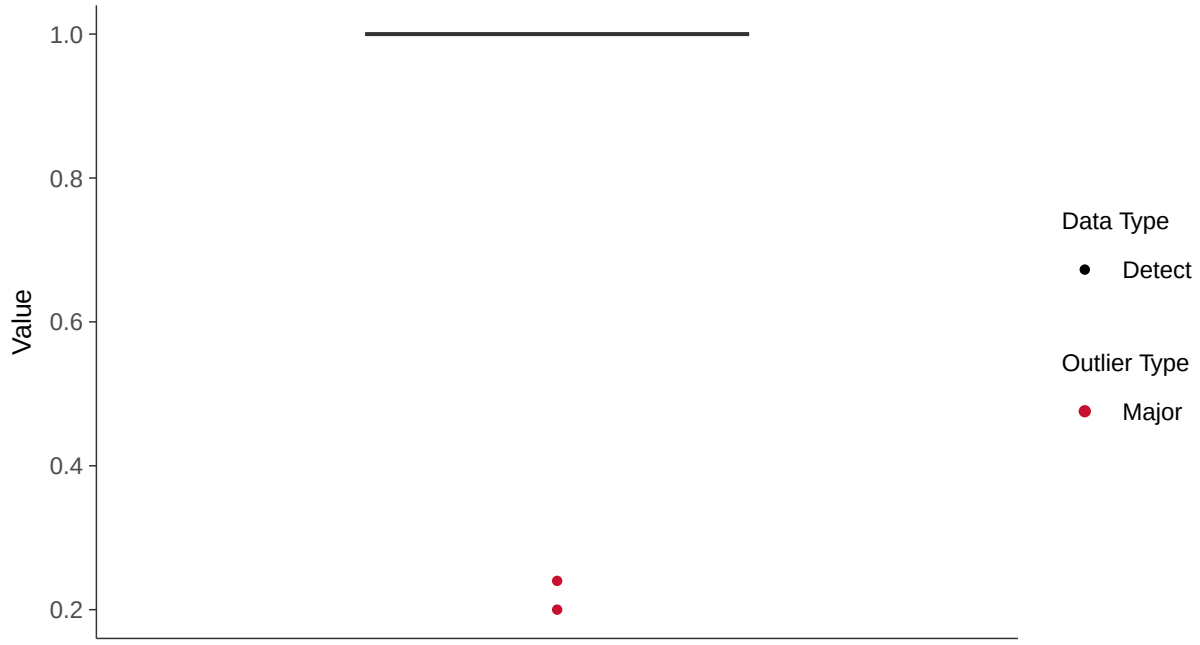
ID: 16_3_113





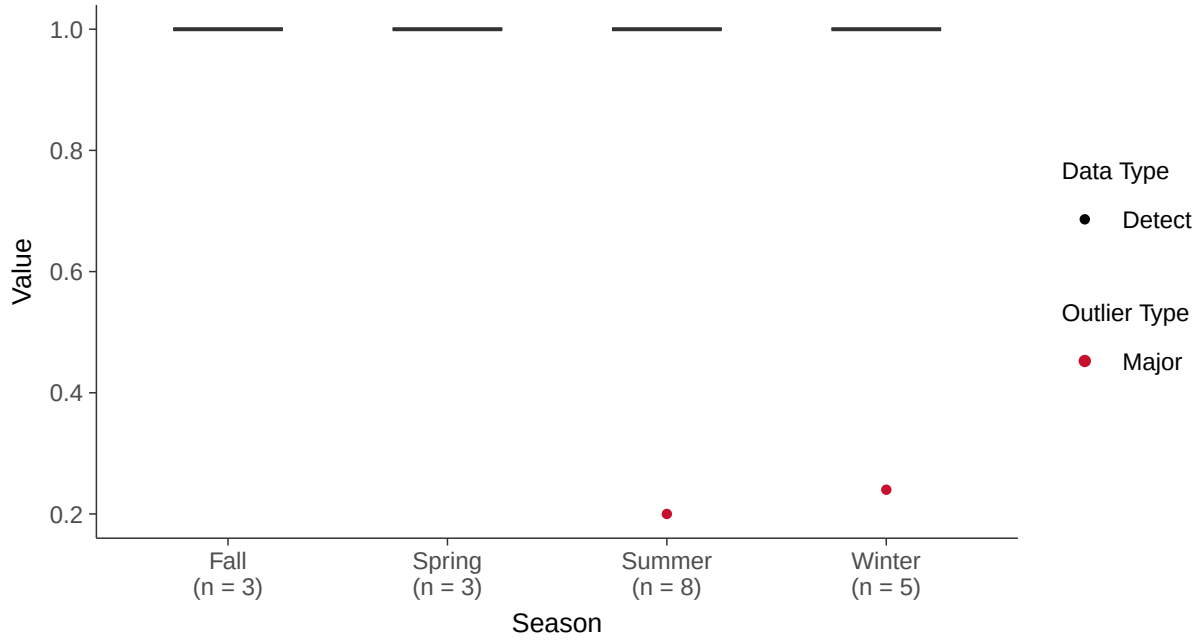
Boxplot

Fluoride (App IV), MW-6 (mg/l)



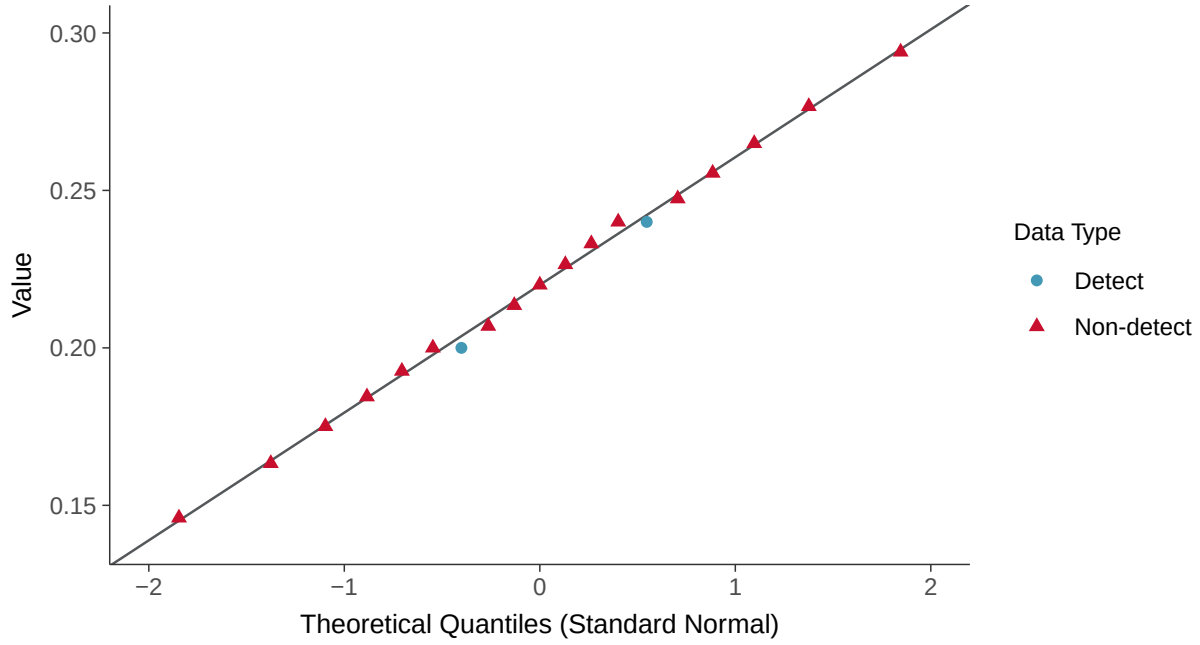
Boxplot by Season

Fluoride (App IV), MW-6 (mg/l)



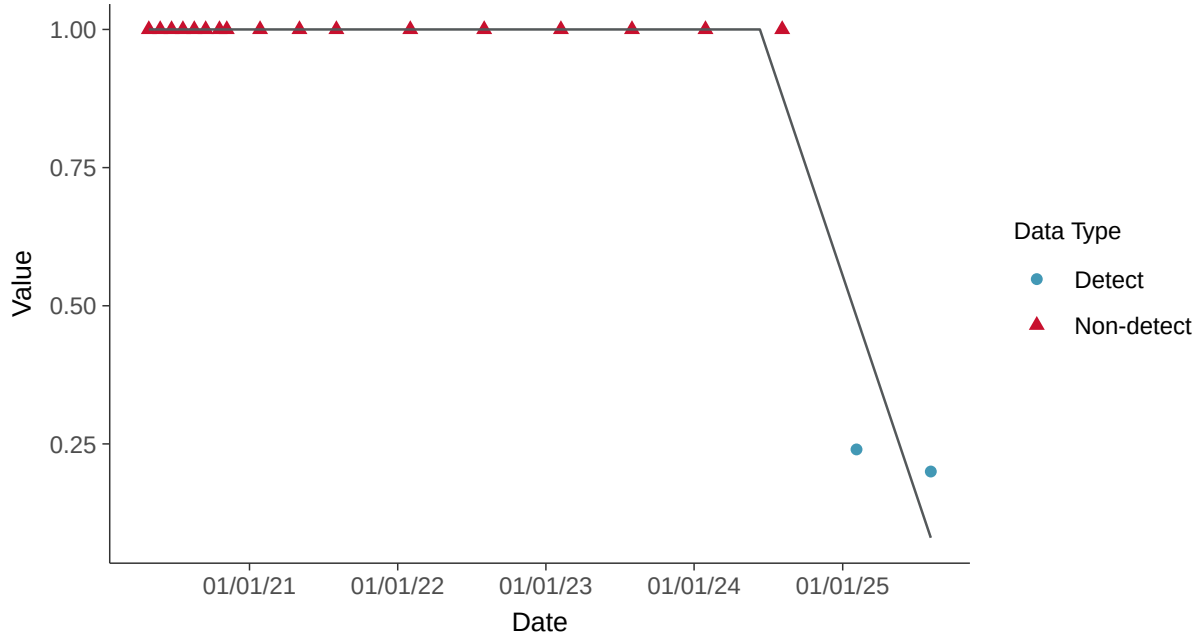
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-6 (mg/l)



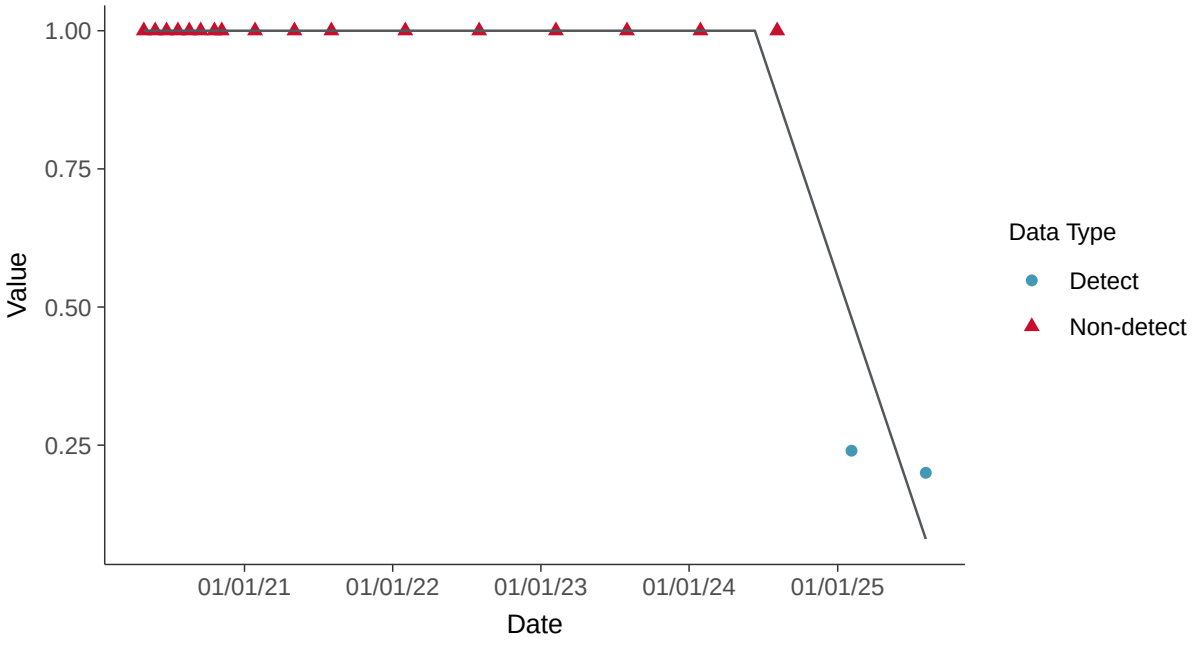
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-6 (mg/l)



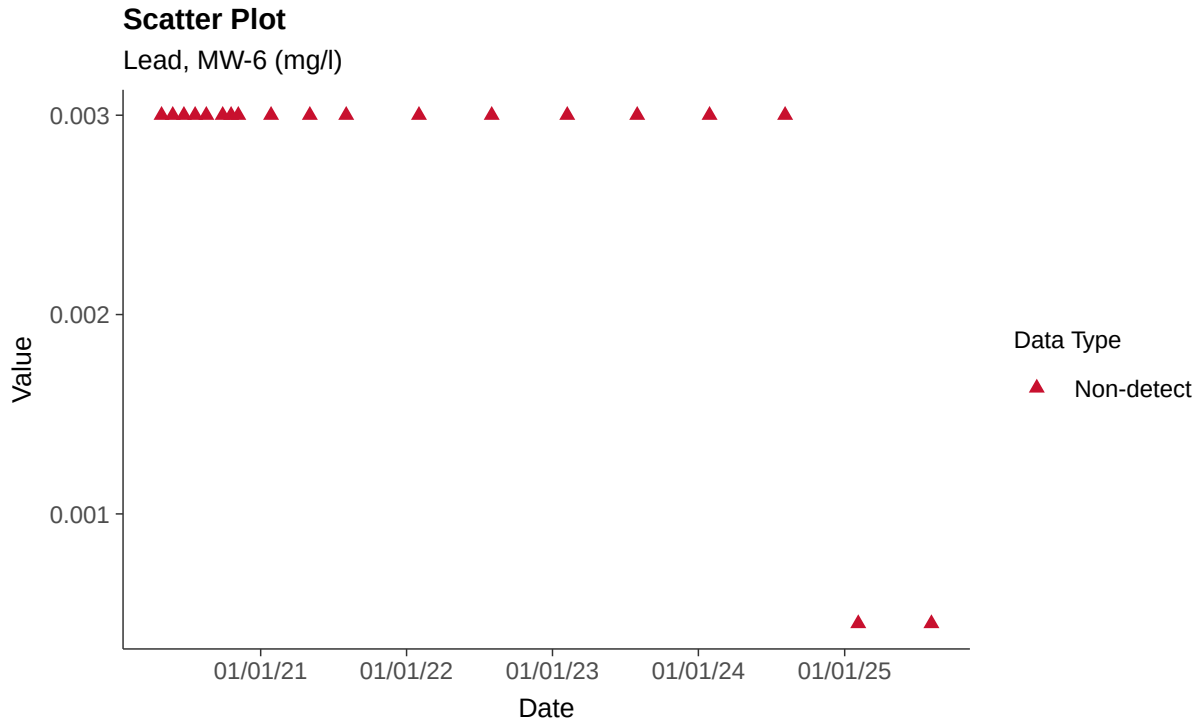
Trend Regression: Piecewise Linear-Linear-Linear

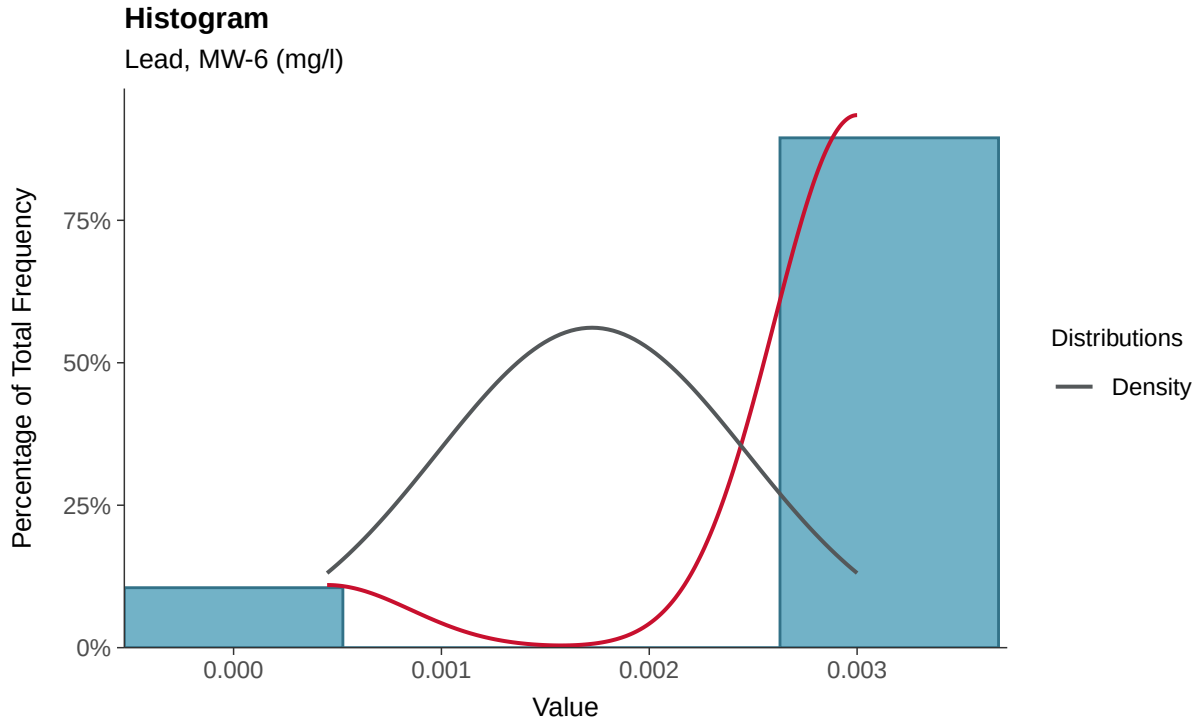
Fluoride (App IV), MW-6 (mg/l)



Appendix IV: Lead, MW-6

ID: 16_3_115



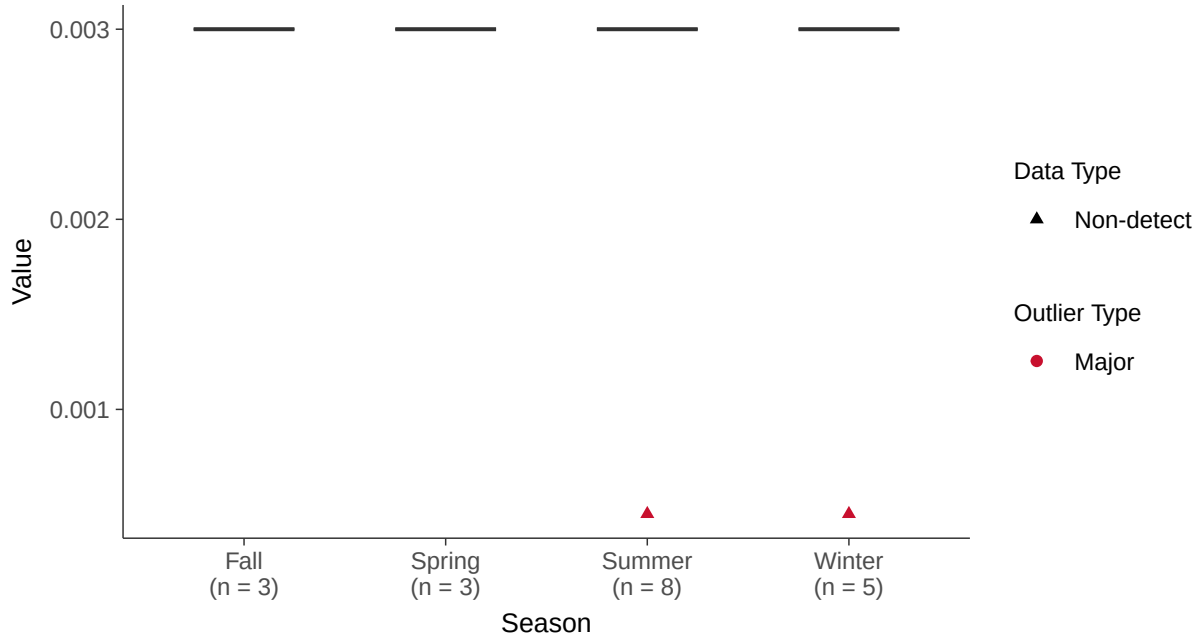


Boxplot

Lead, MW-6 (mg/l)

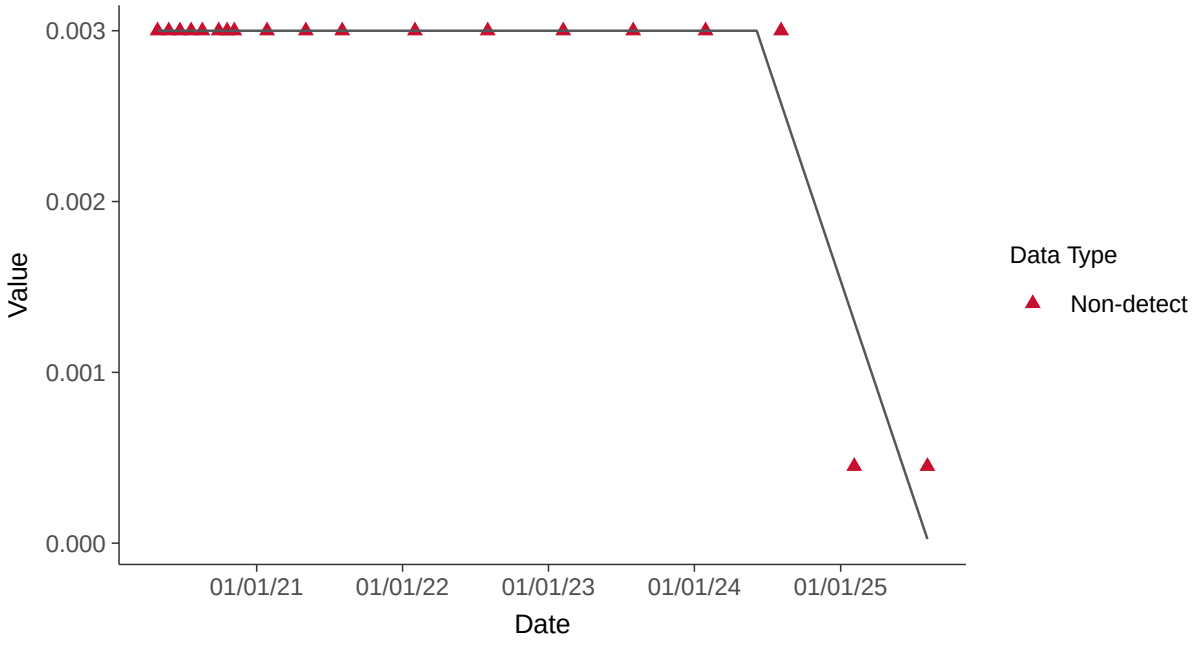
Boxplot by Season

Lead, MW-6 (mg/l)



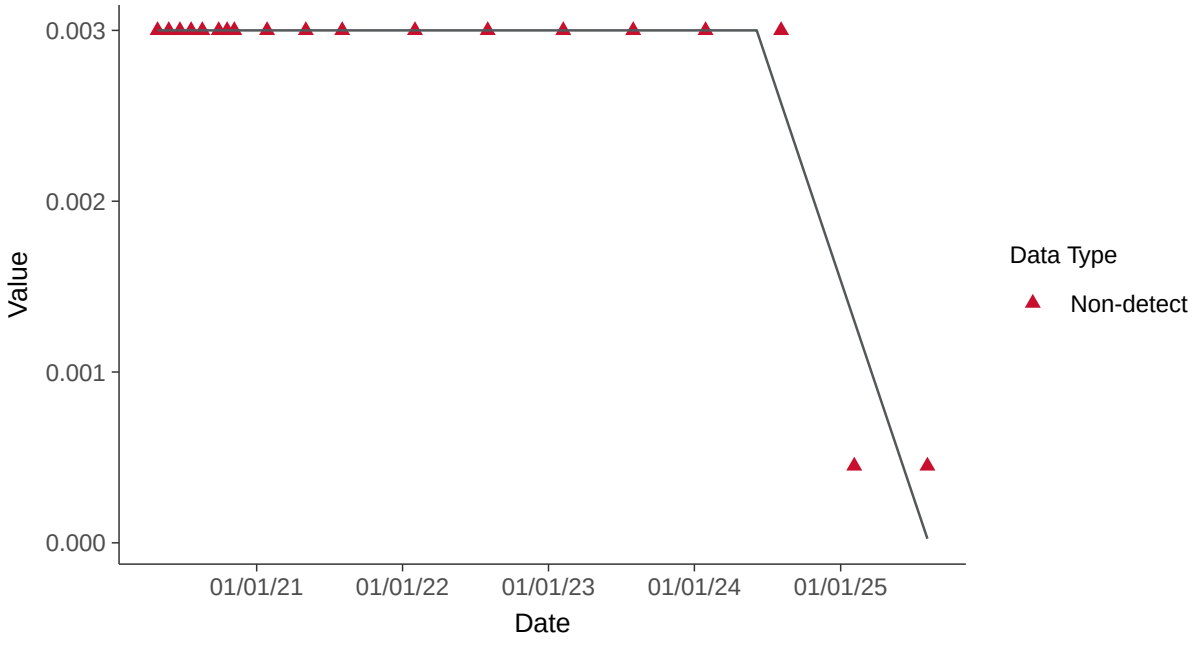
Trend Regression: Piecewise Linear-Linear

Lead, MW-6 (mg/l)



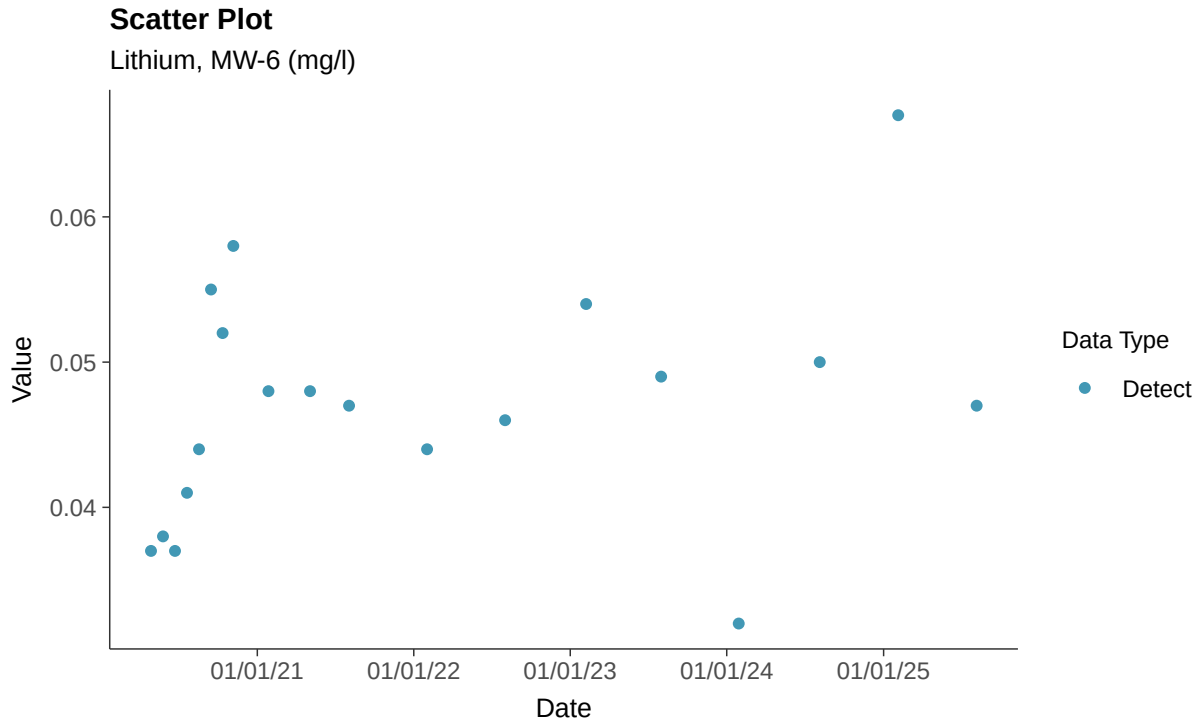
Trend Regression: Piecewise Linear-Linear-Linear

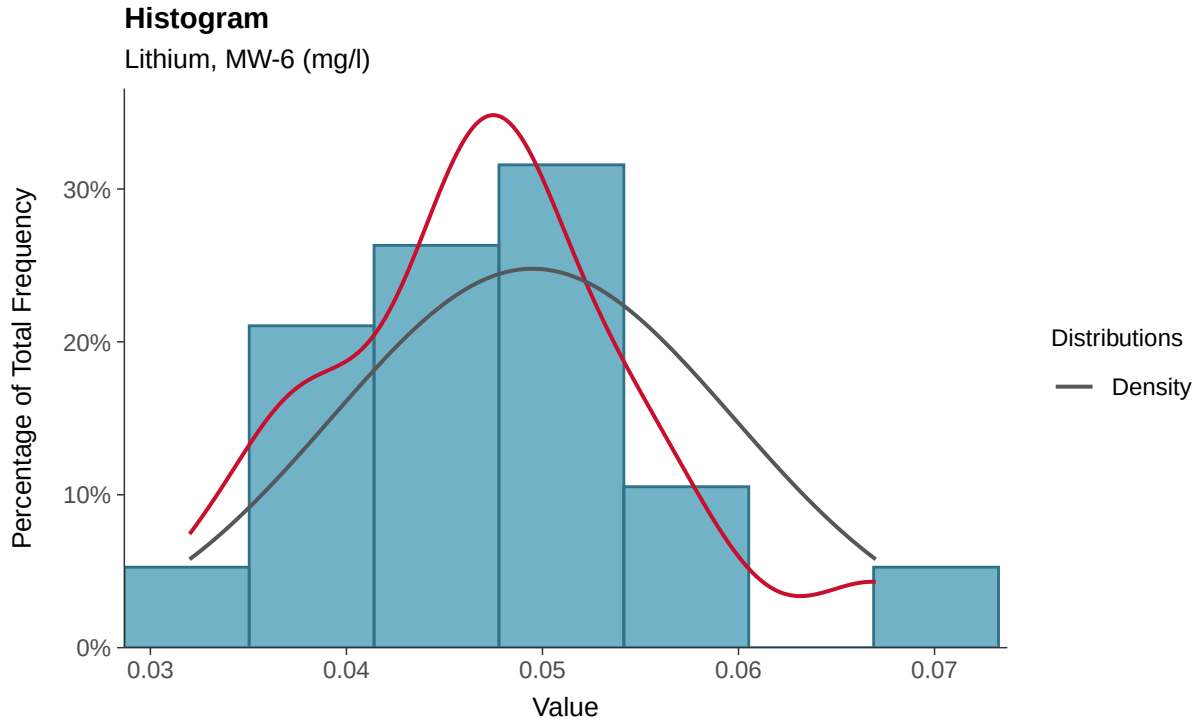
Lead, MW-6 (mg/l)



Appendix IV: Lithium, MW-6

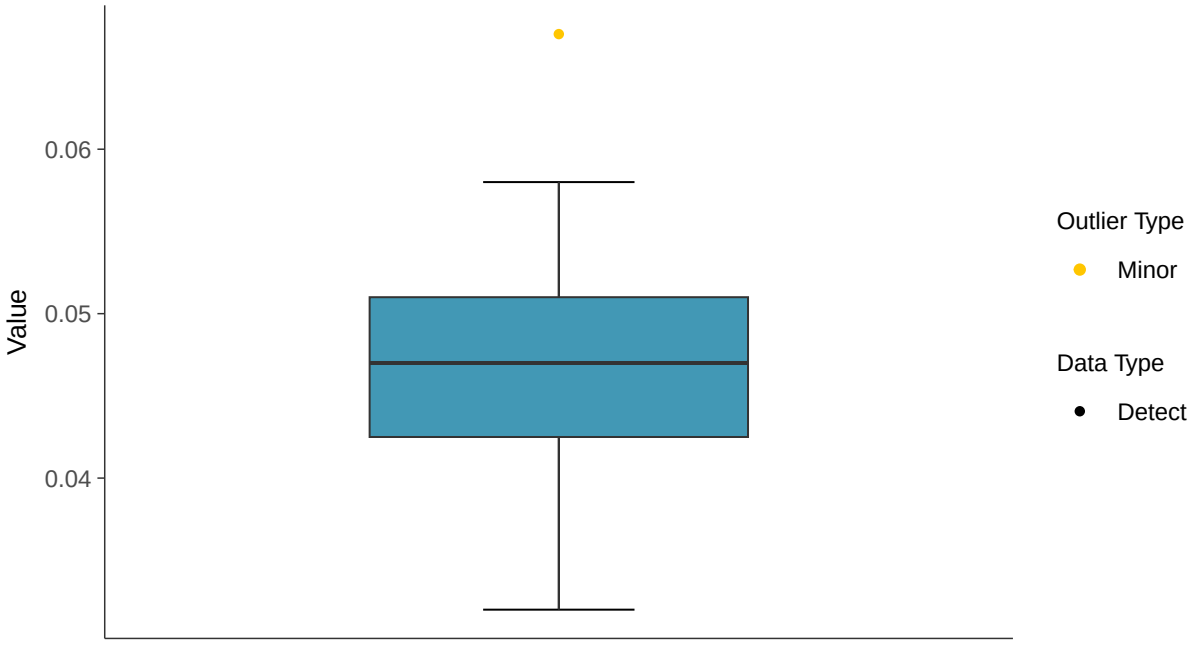
ID: 16_3_116





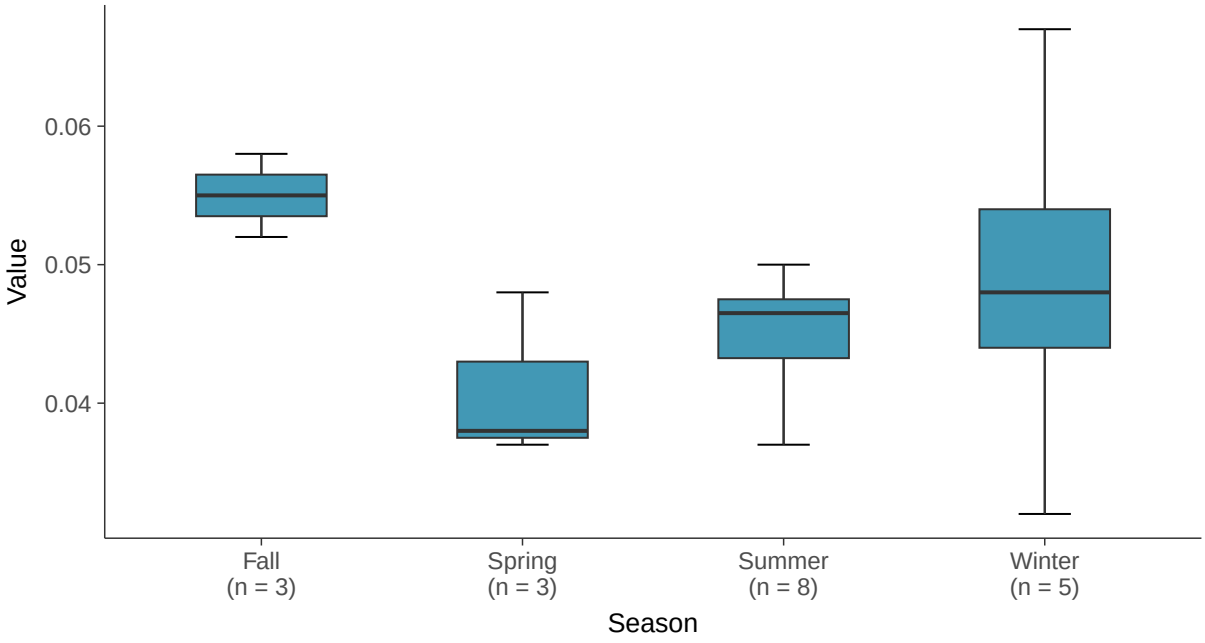
Boxplot

Lithium, MW-6 (mg/l)



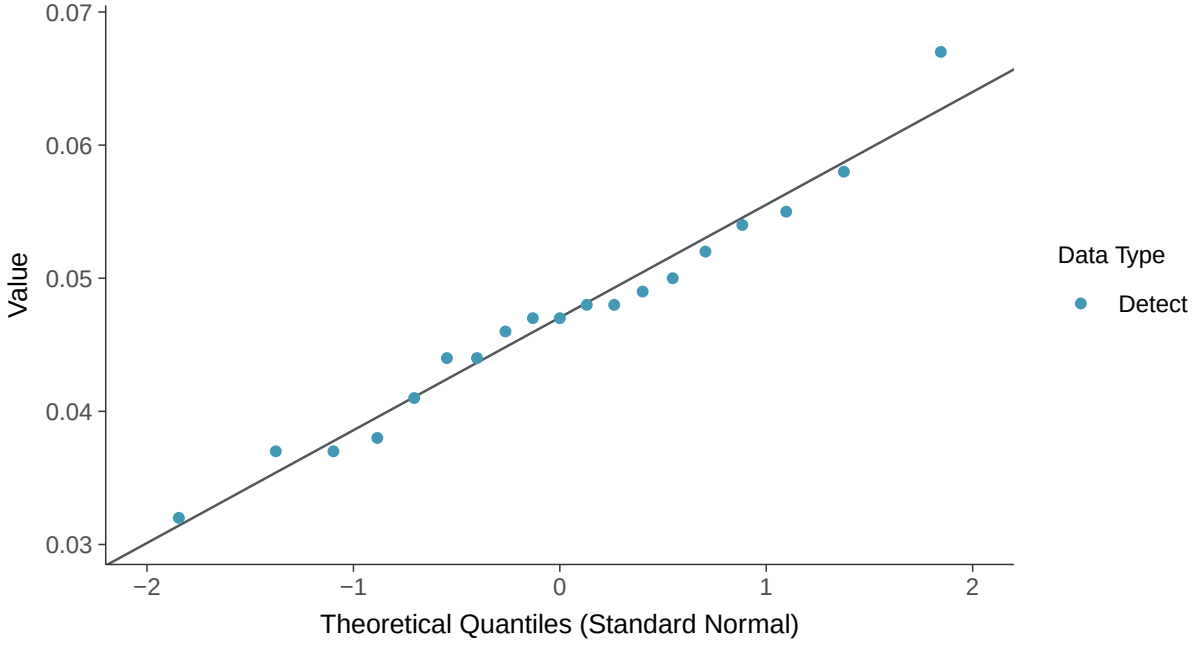
Boxplot by Season

Lithium, MW-6 (mg/l)



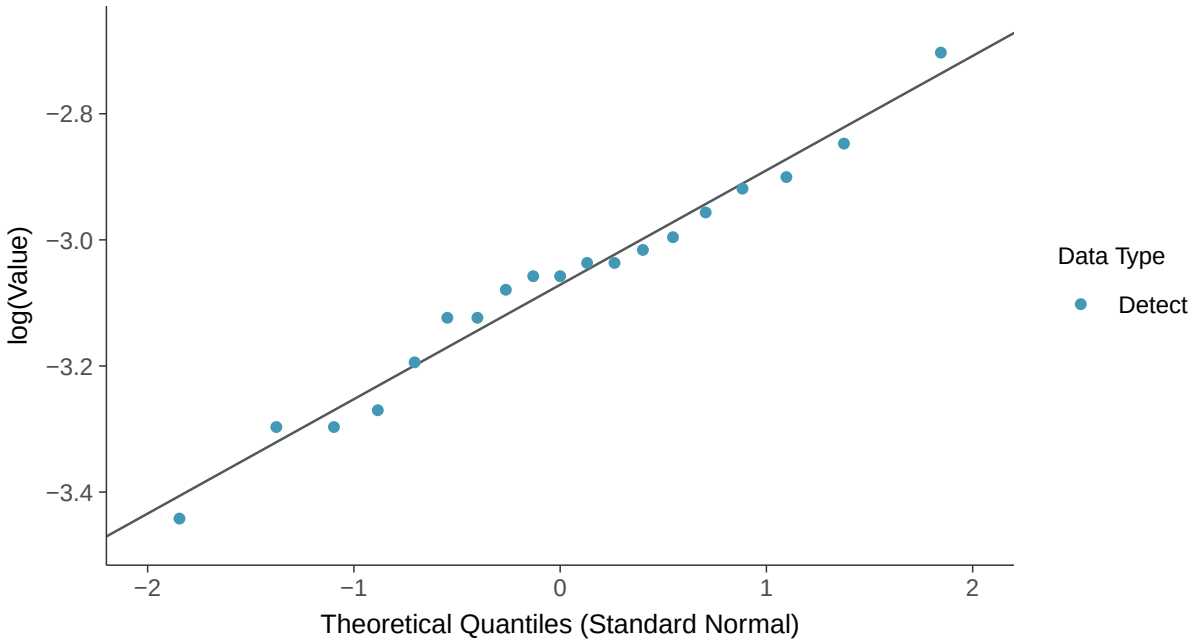
Normal Q-Q plot

Lithium, MW-6 (mg/l)



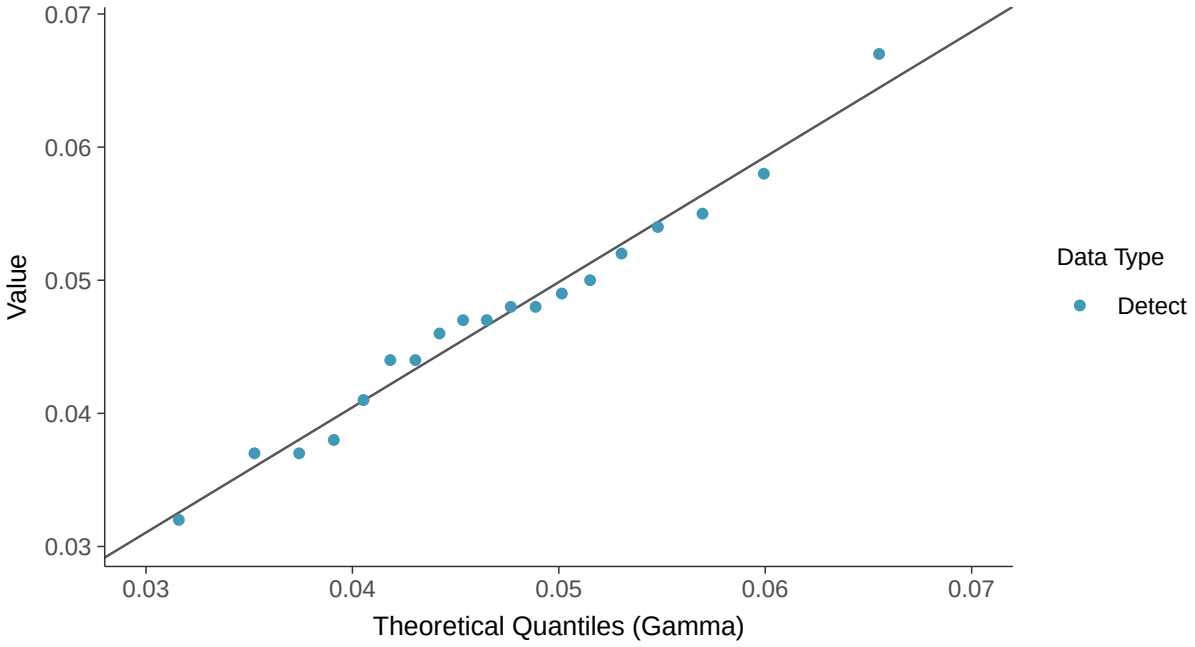
Lognormal Q-Q plot

Lithium, MW-6 (mg/l)



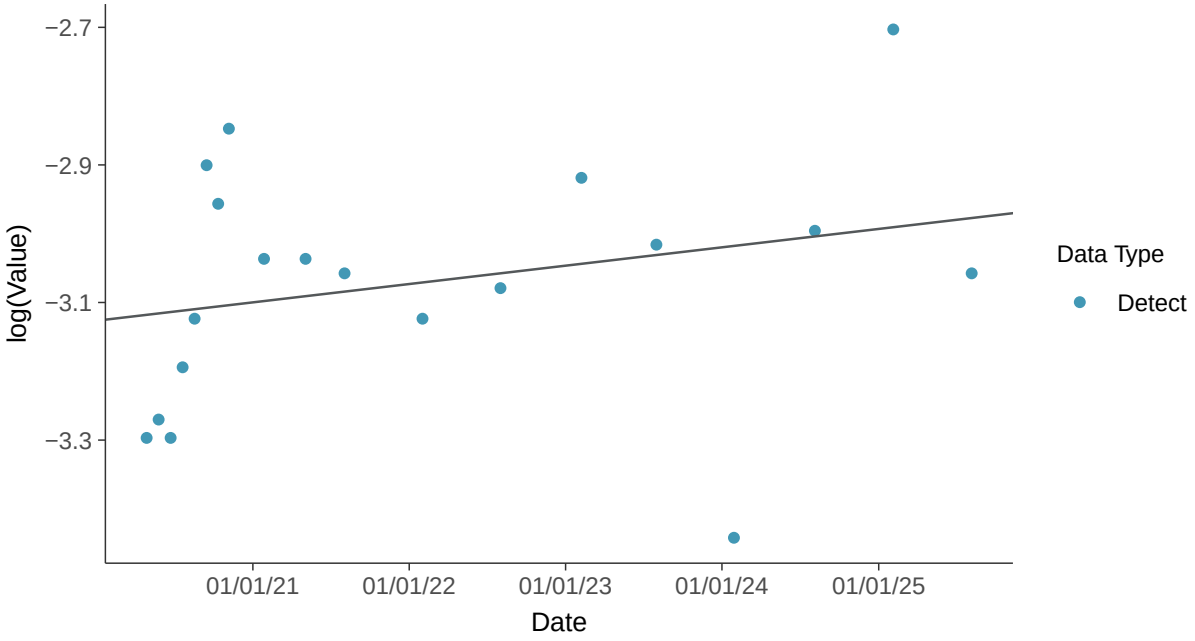
Gamma Q-Q plot

Lithium, MW-6 (mg/l)



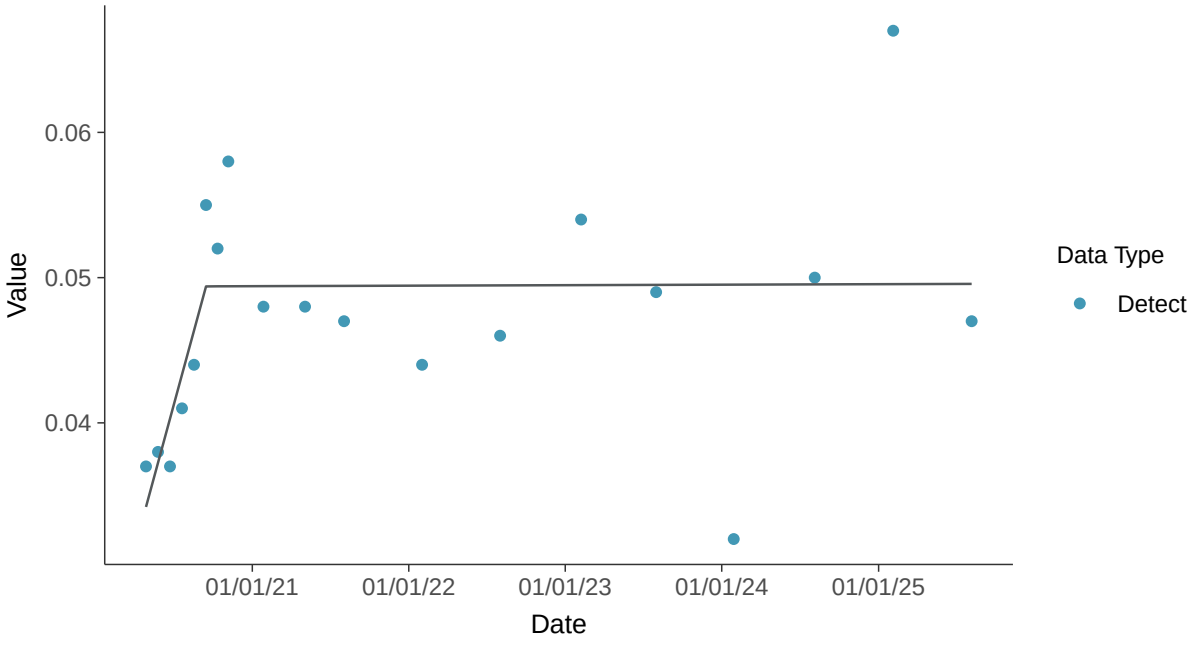
Trend Regression: Lognormal MLE

Lithium, MW-6 (mg/l)



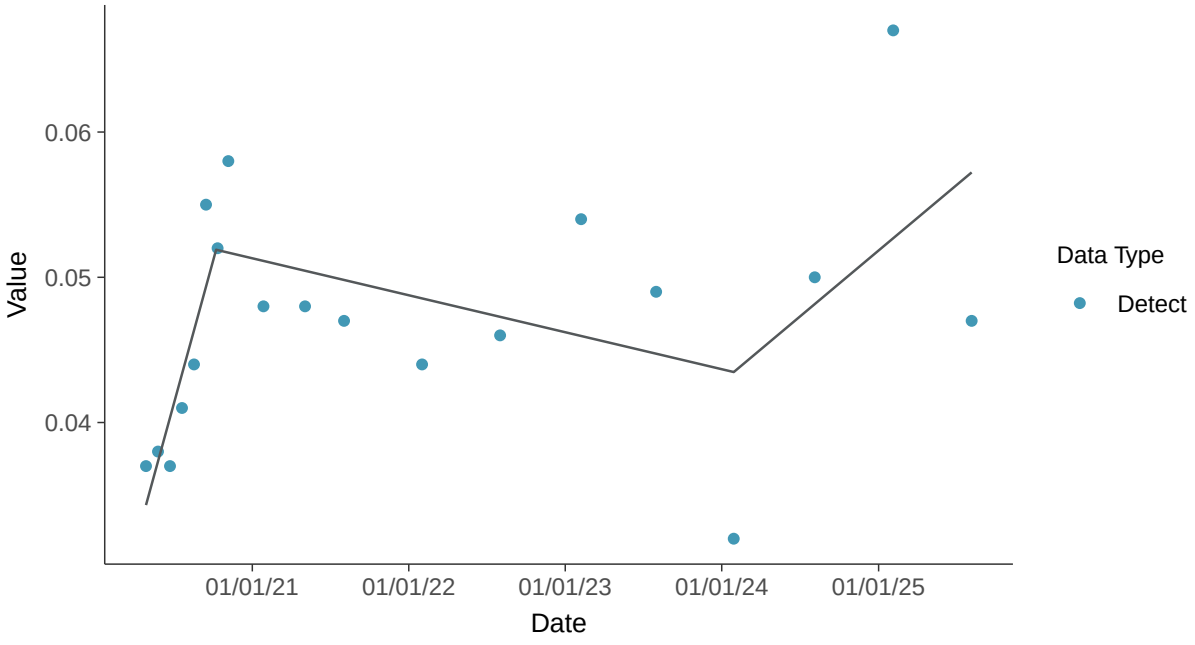
Trend Regression: Piecewise Linear-Linear

Lithium, MW-6 (mg/l)



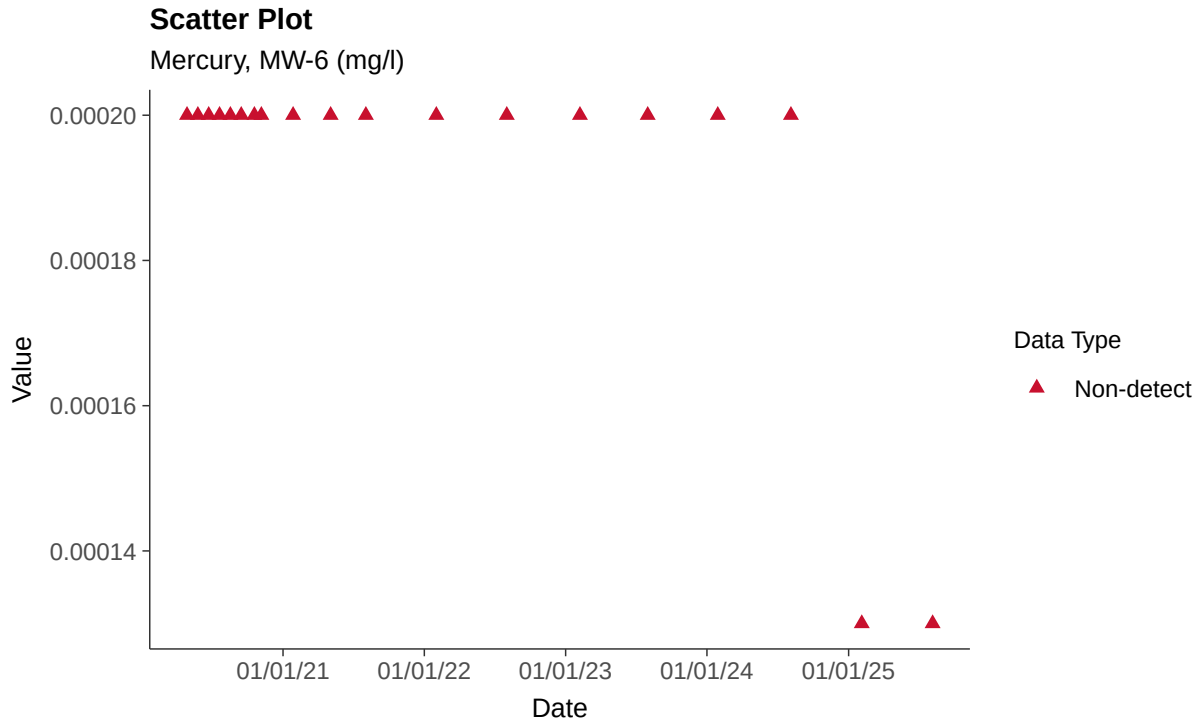
Trend Regression: Piecewise Linear-Linear-Linear

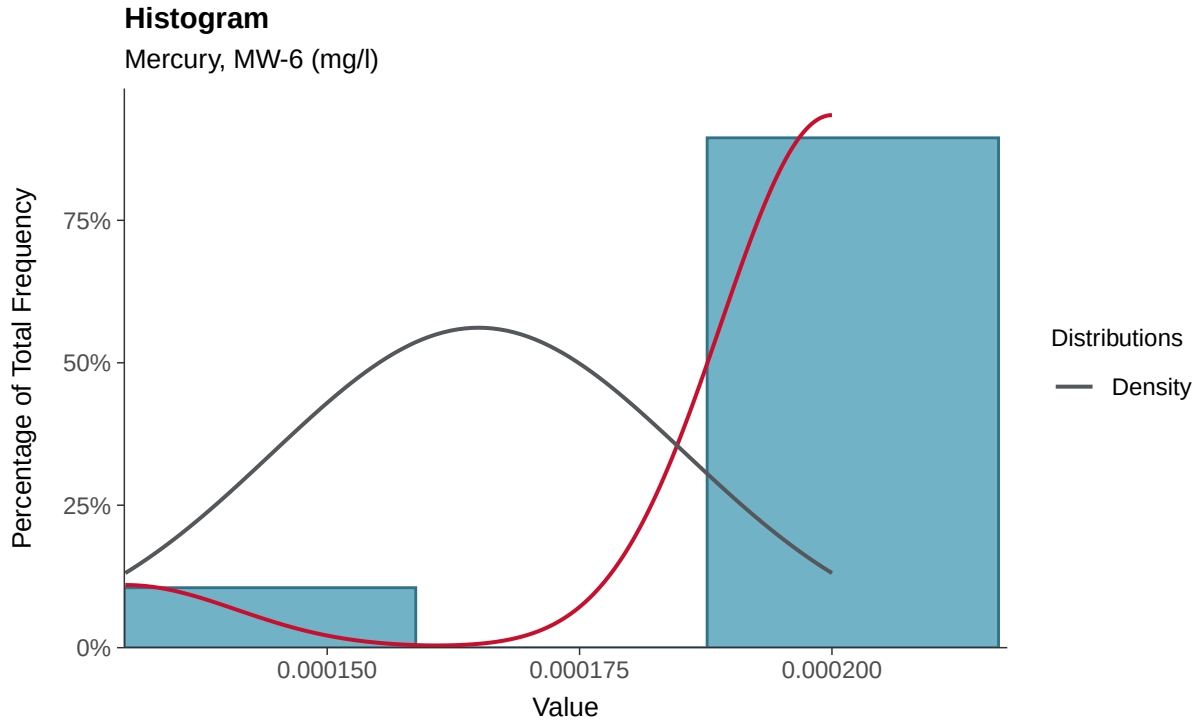
Lithium, MW-6 (mg/l)



Appendix IV: Mercury, MW-6

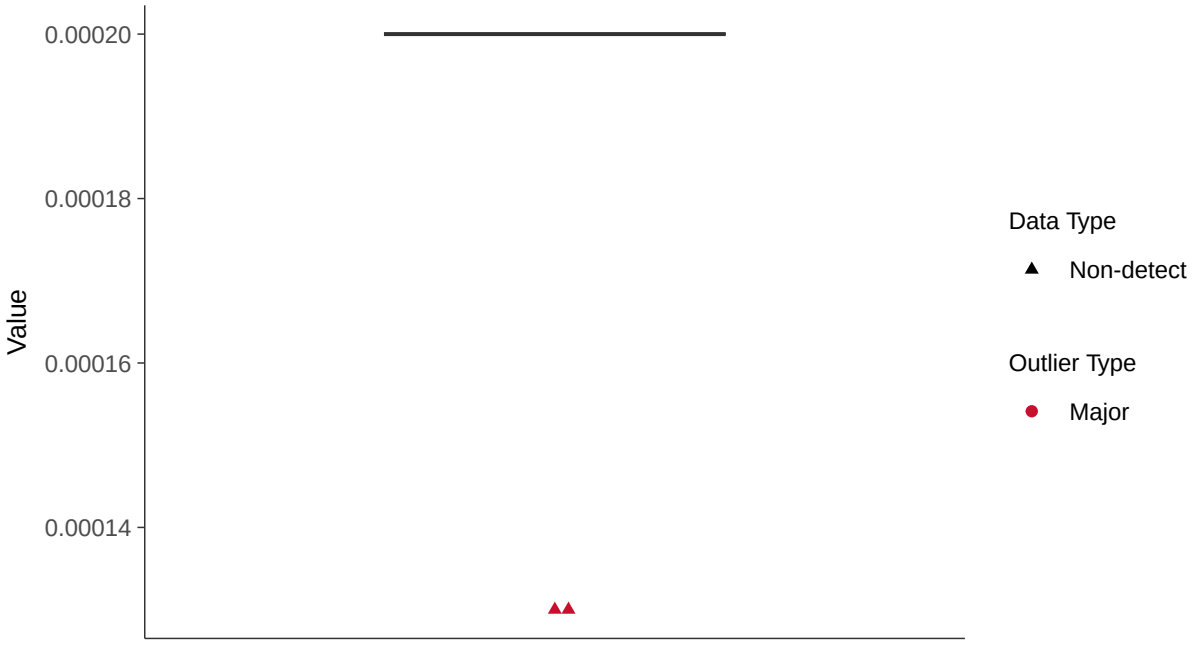
ID: 16_3_117





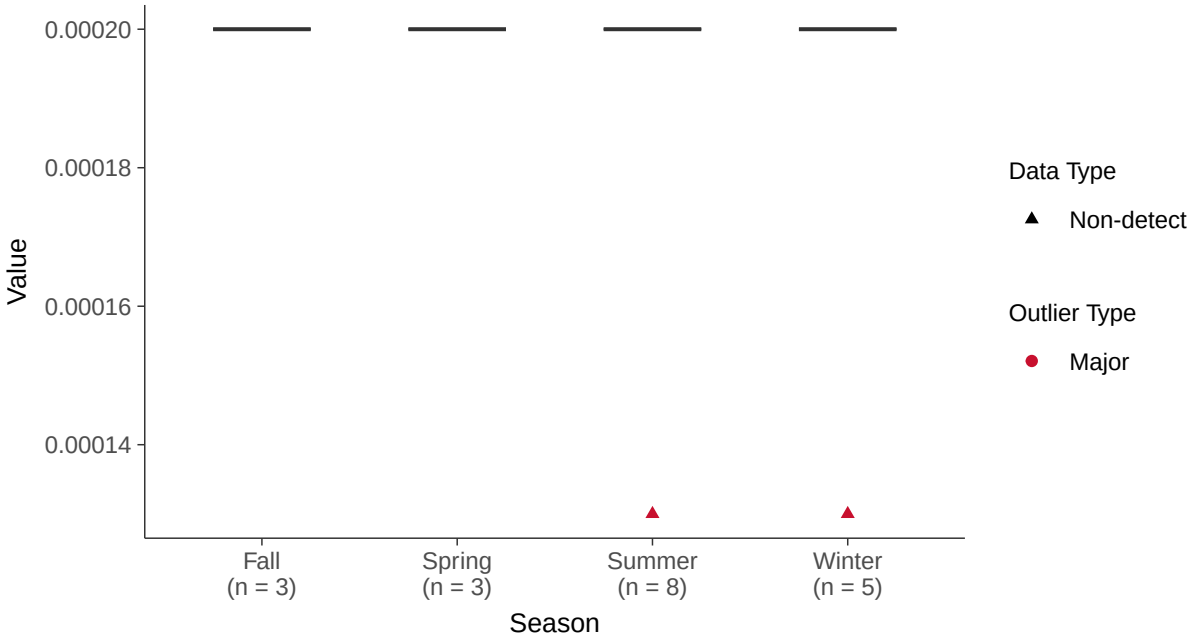
Boxplot

Mercury, MW-6 (mg/l)



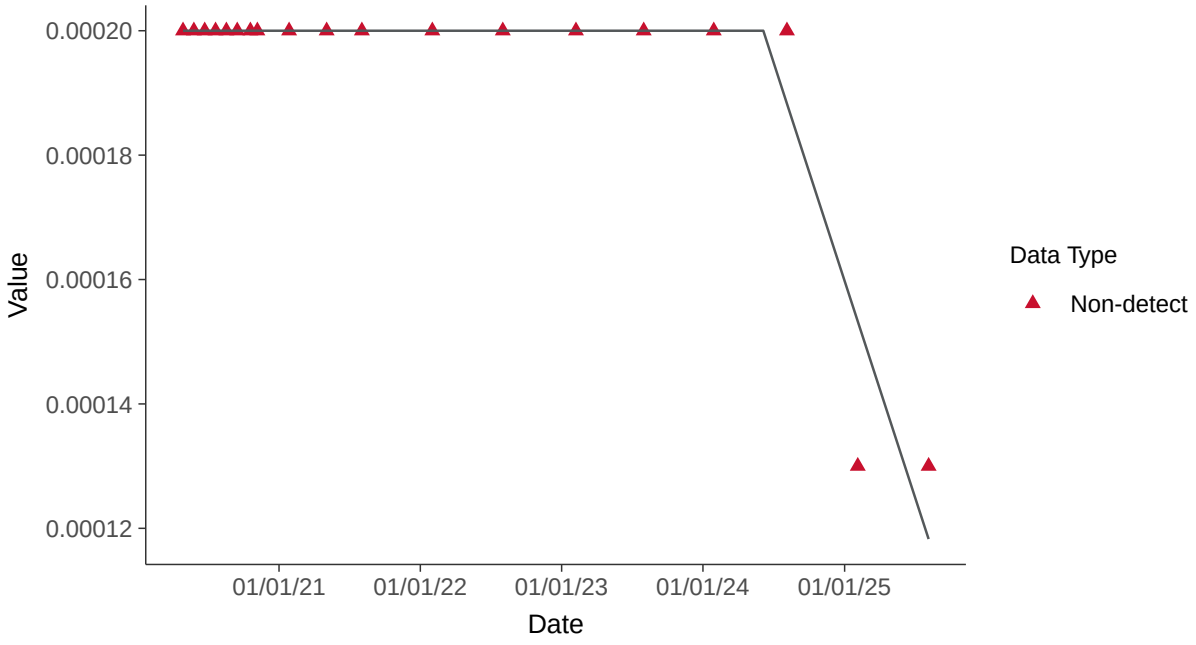
Boxplot by Season

Mercury, MW-6 (mg/l)



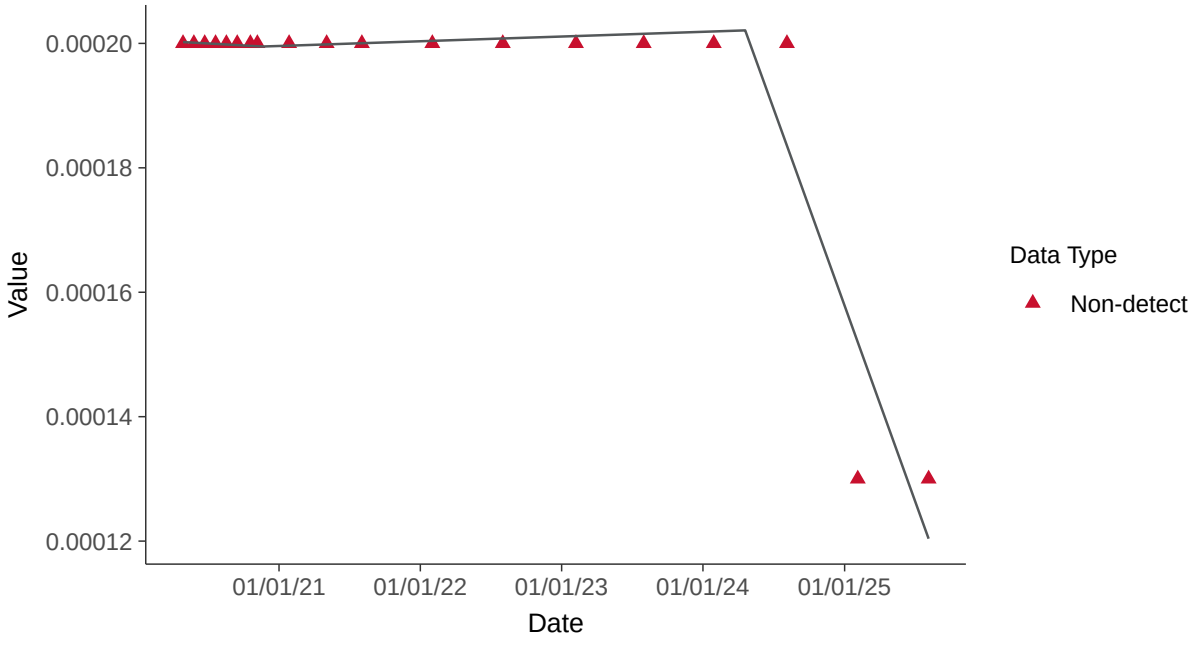
Trend Regression: Piecewise Linear-Linear

Mercury, MW-6 (mg/l)



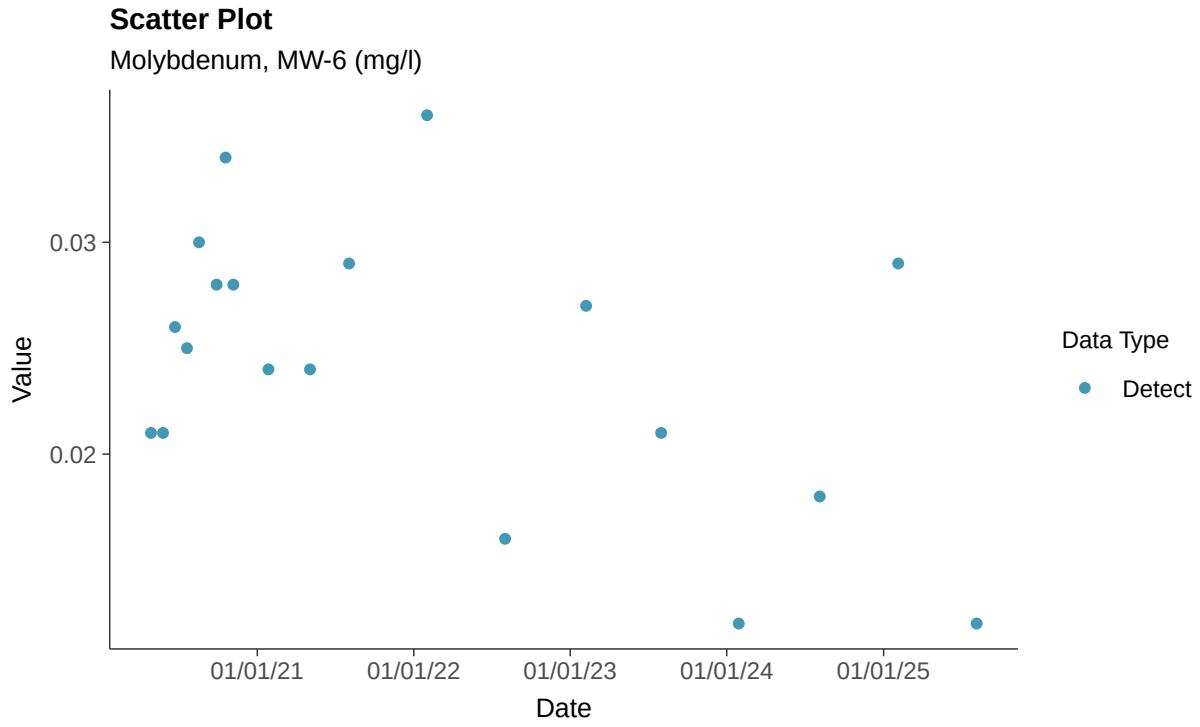
Trend Regression: Piecewise Linear-Linear-Linear

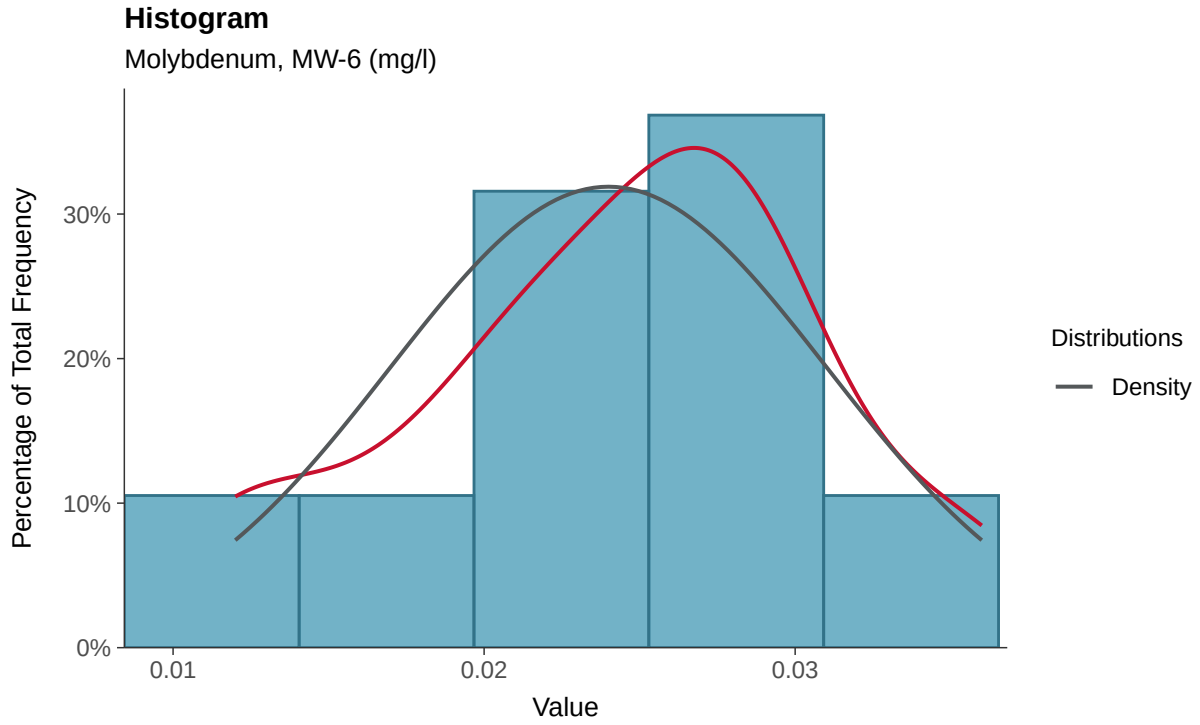
Mercury, MW-6 (mg/l)



Appendix IV: Molybdenum, MW-6

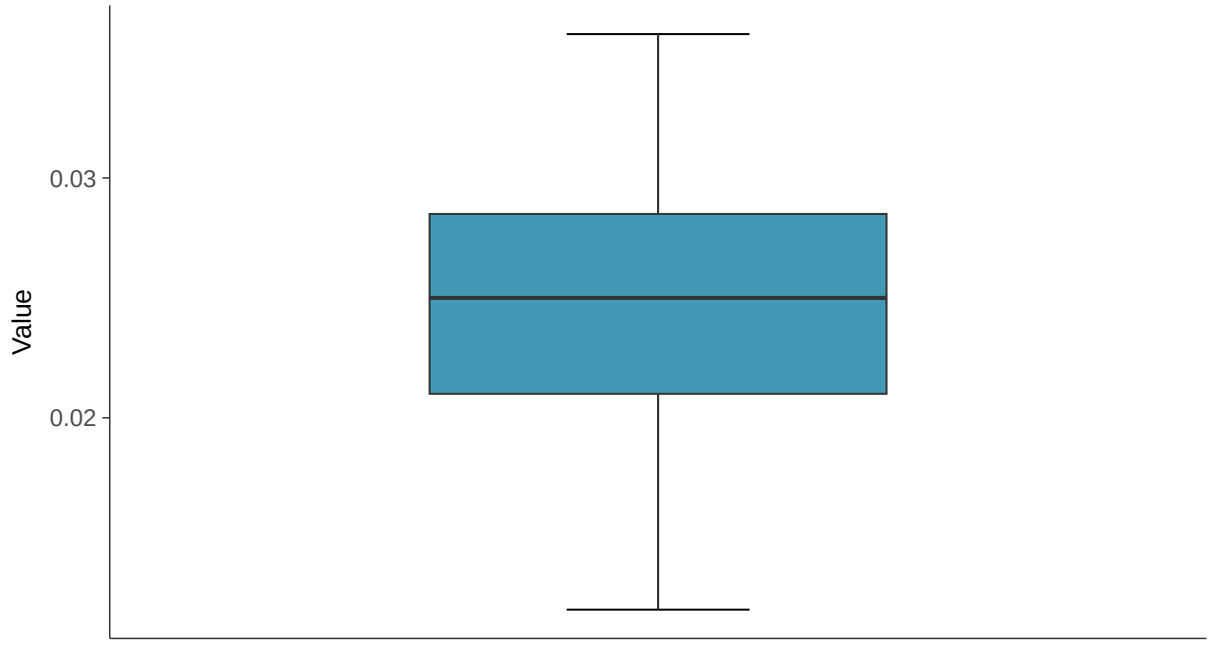
ID: 16_3_118





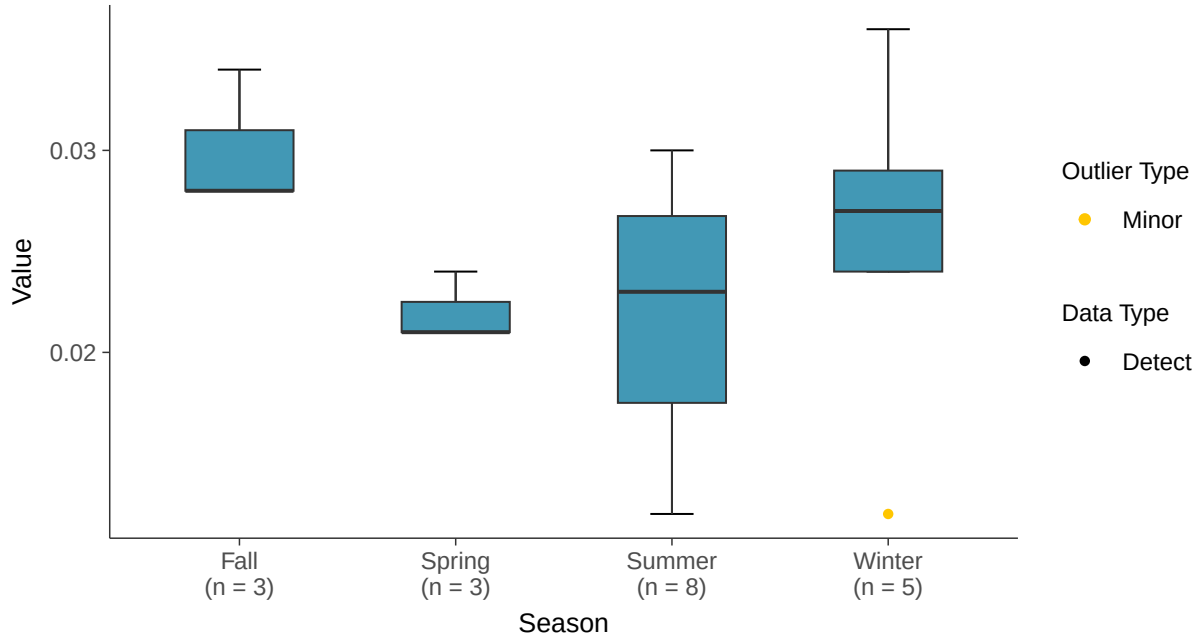
Boxplot

Molybdenum, MW-6 (mg/l)



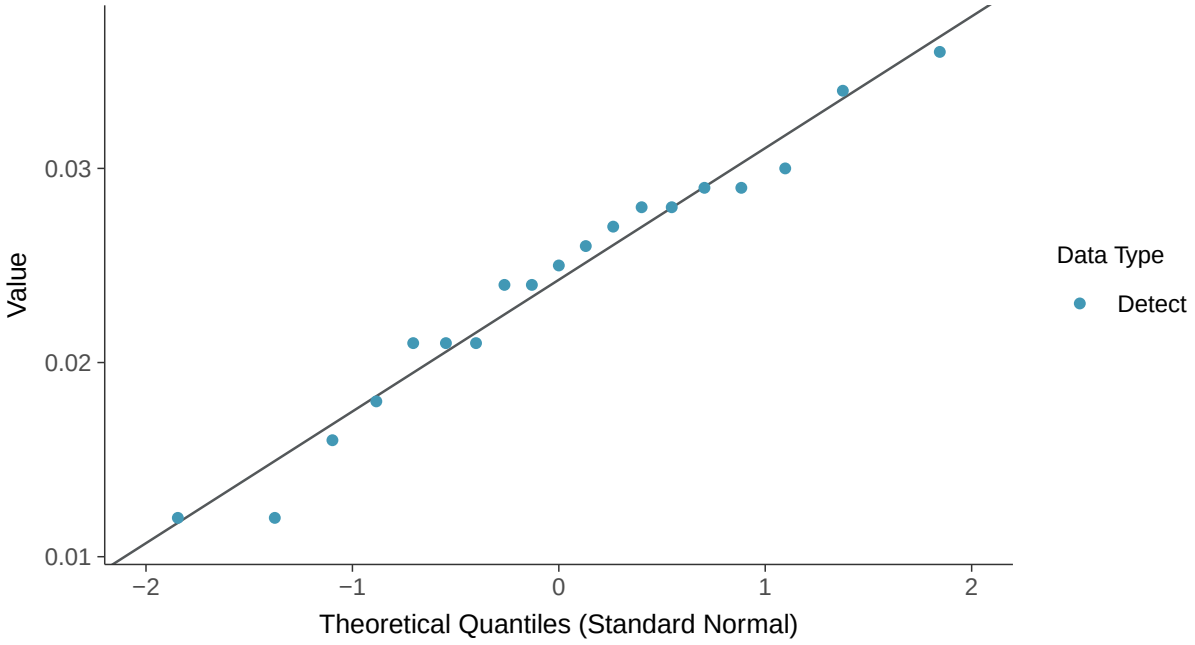
Boxplot by Season

Molybdenum, MW-6 (mg/l)



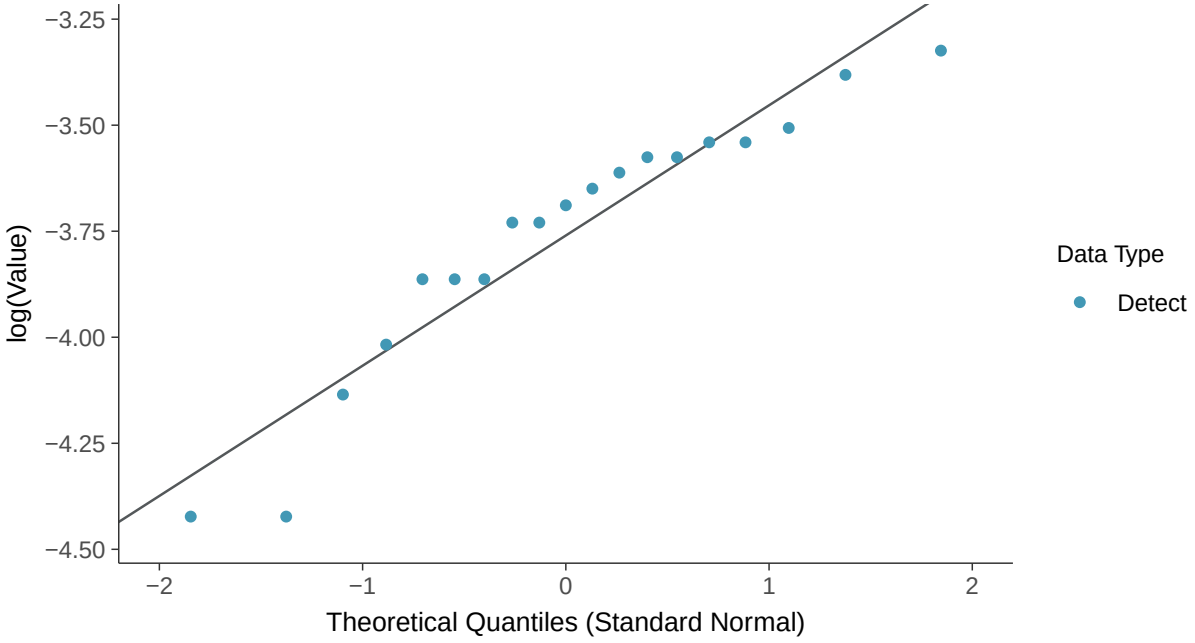
Normal Q-Q plot

Molybdenum, MW-6 (mg/l)



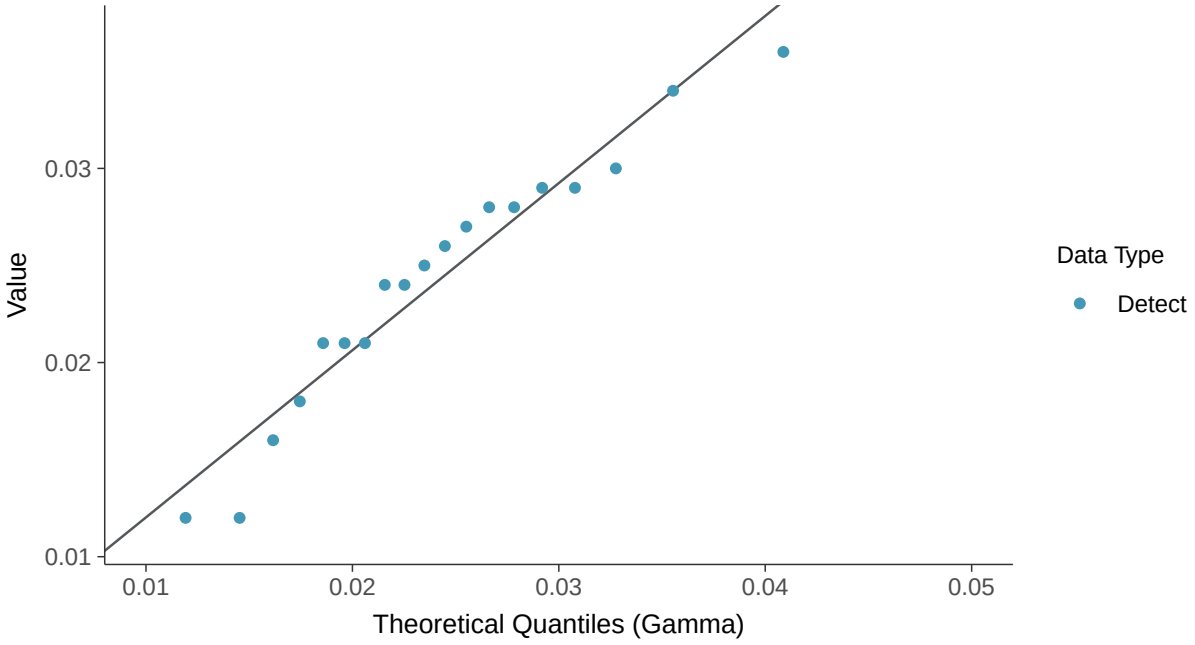
Lognormal Q-Q plot

Molybdenum, MW-6 (mg/l)



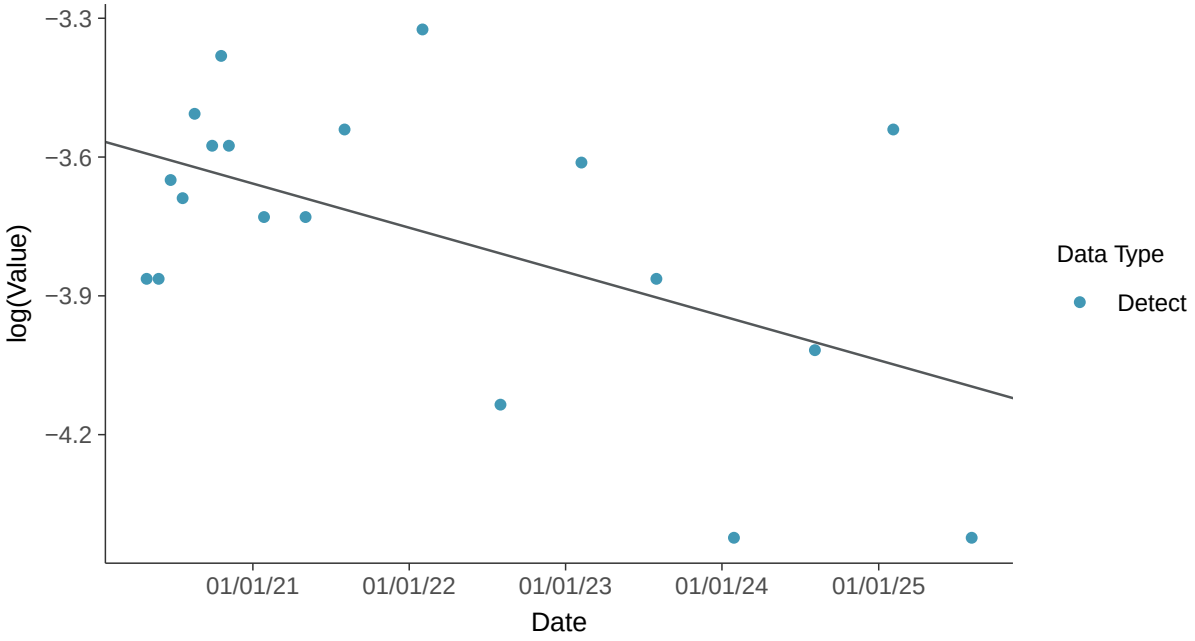
Gamma Q-Q plot

Molybdenum, MW-6 (mg/l)



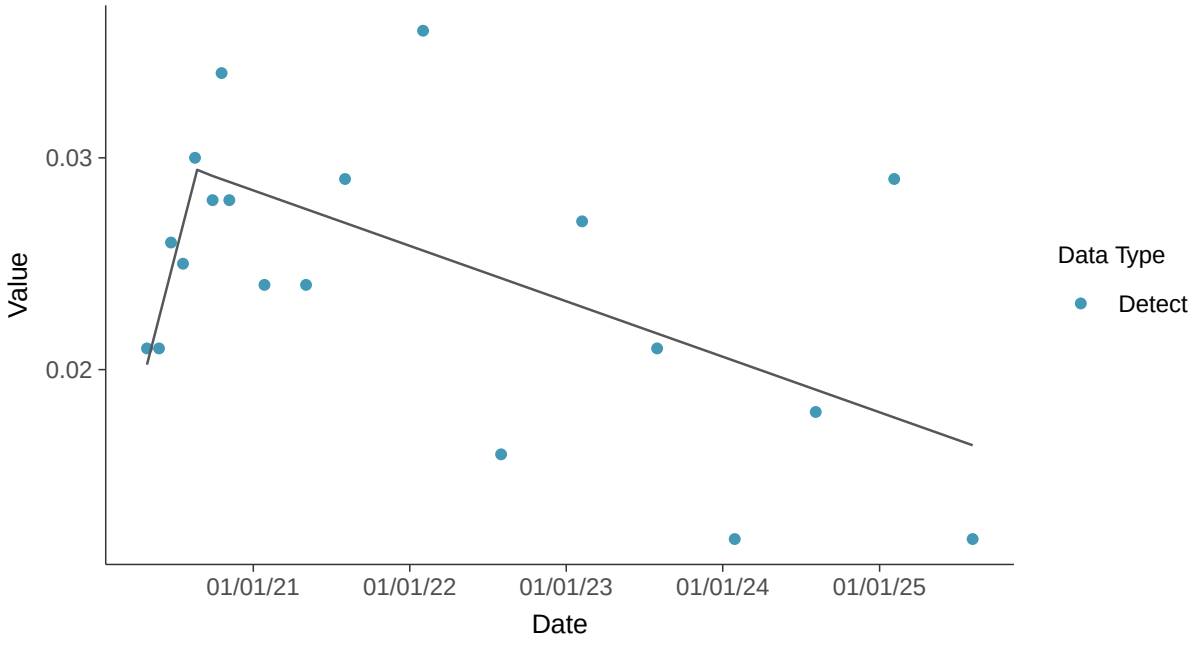
Trend Regression: Lognormal MLE

Molybdenum, MW-6 (mg/l)



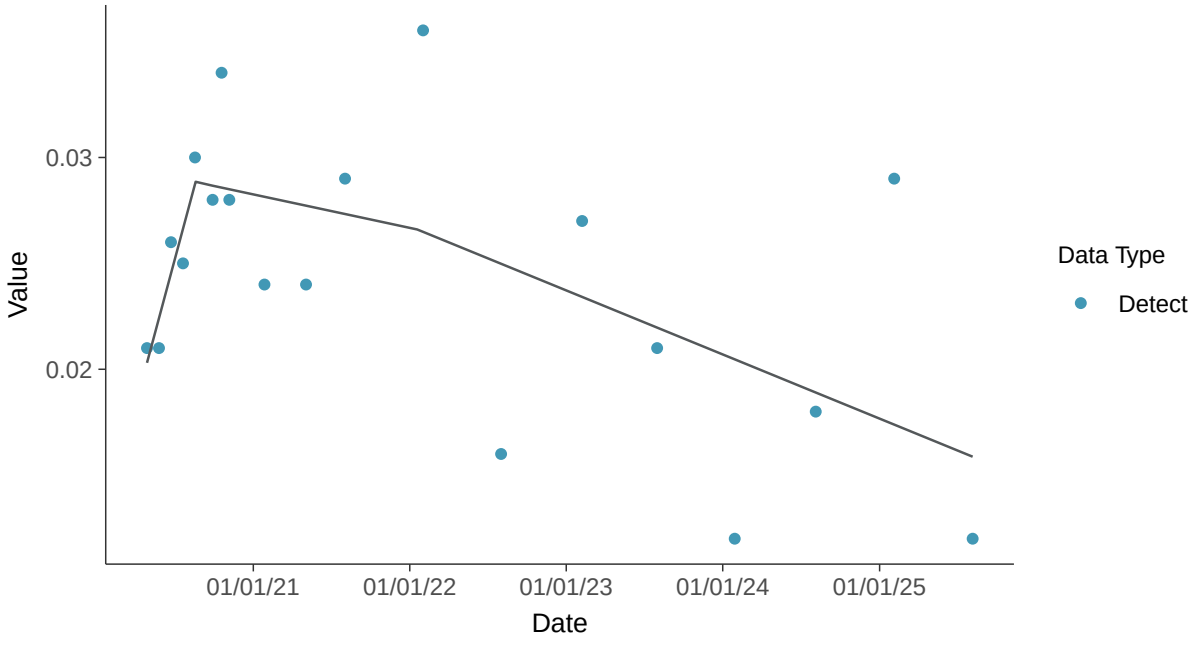
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-6 (mg/l)



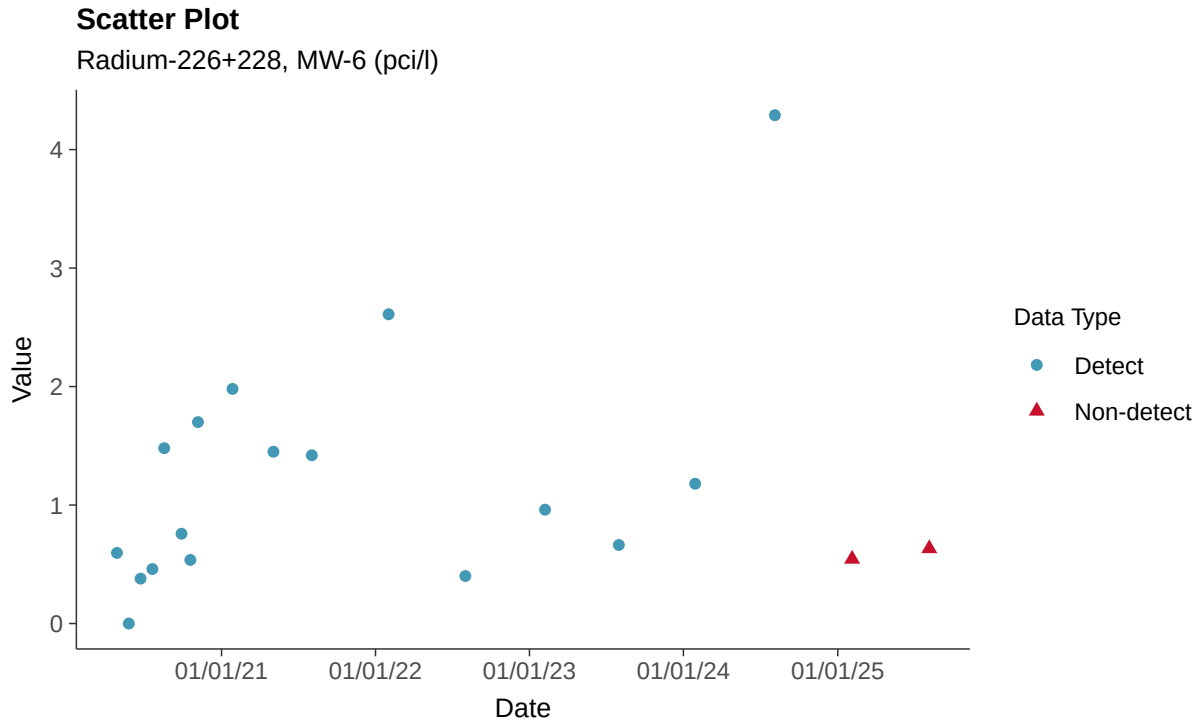
Trend Regression: Piecewise Linear-Linear-Linear

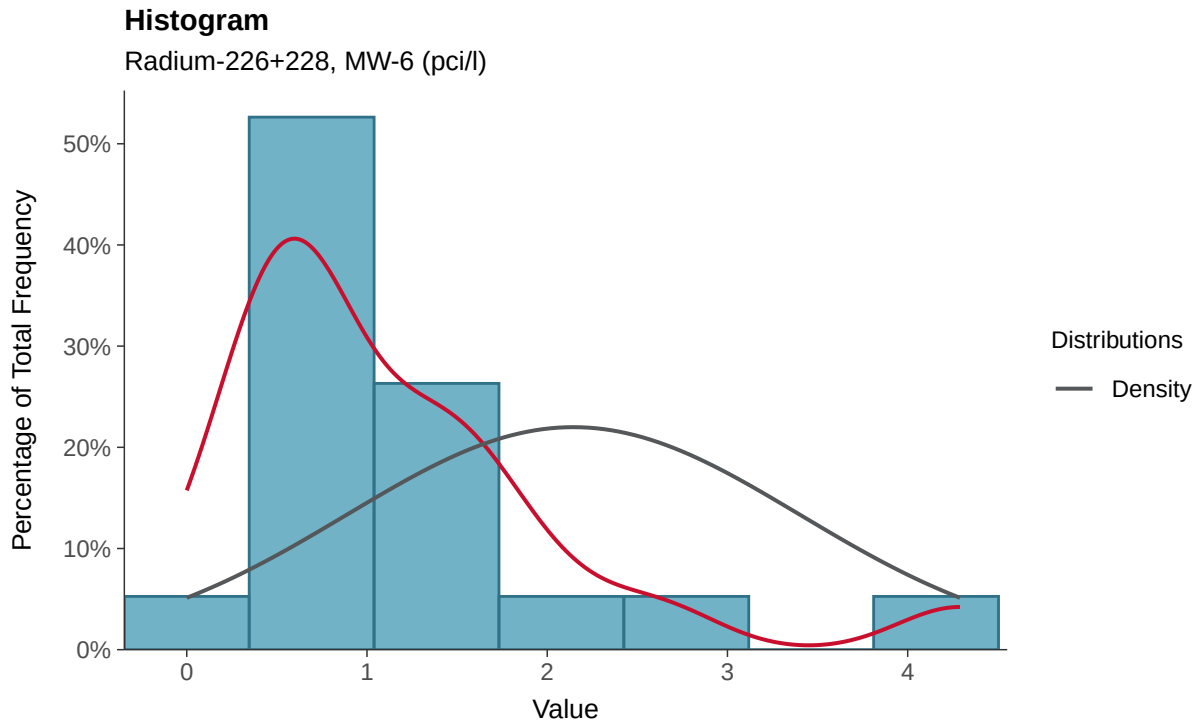
Molybdenum, MW-6 (mg/l)



Appendix IV: Radium-226+228, MW-6

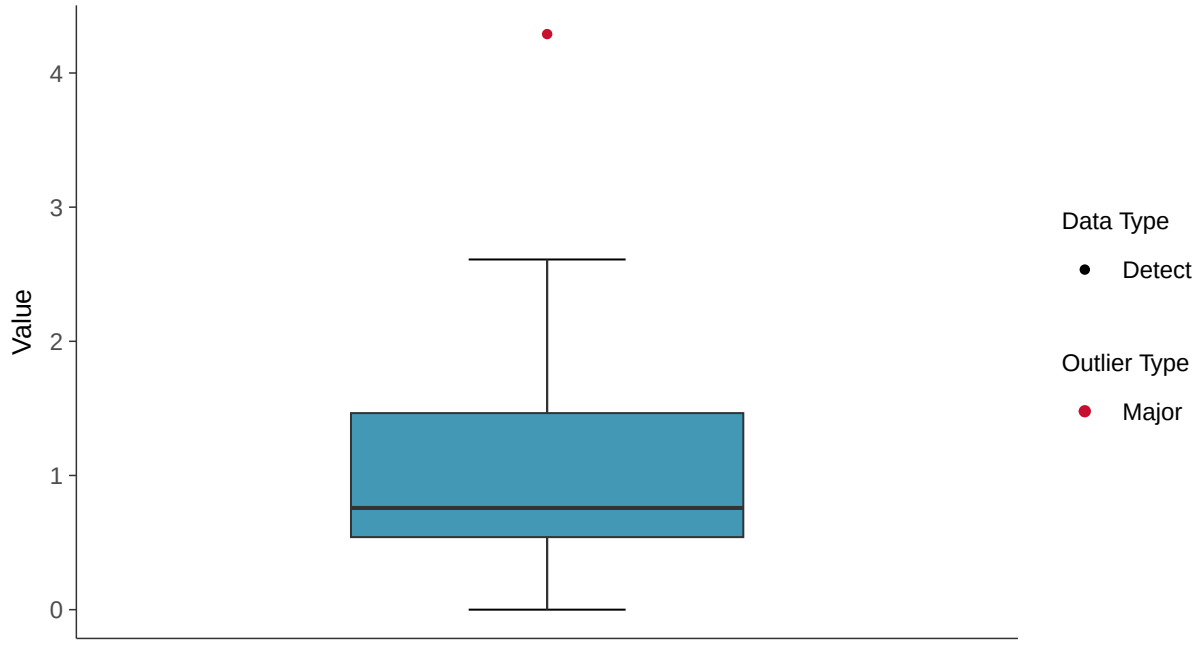
ID: 16_3_121





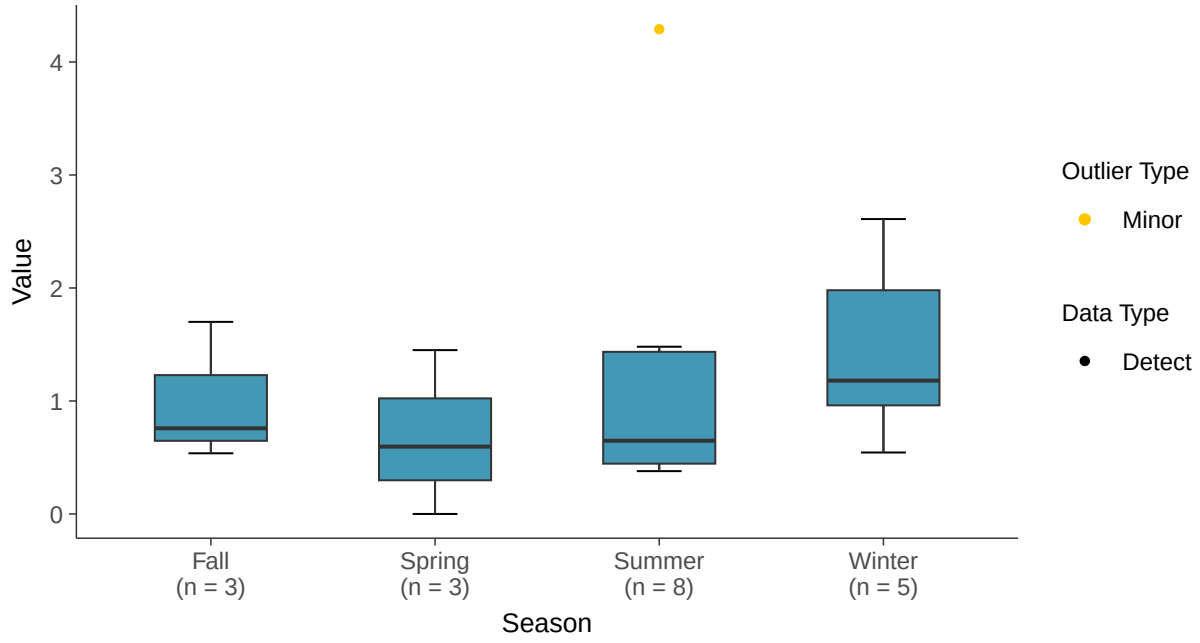
Boxplot

Radium-226+228, MW-6 (pci/l)



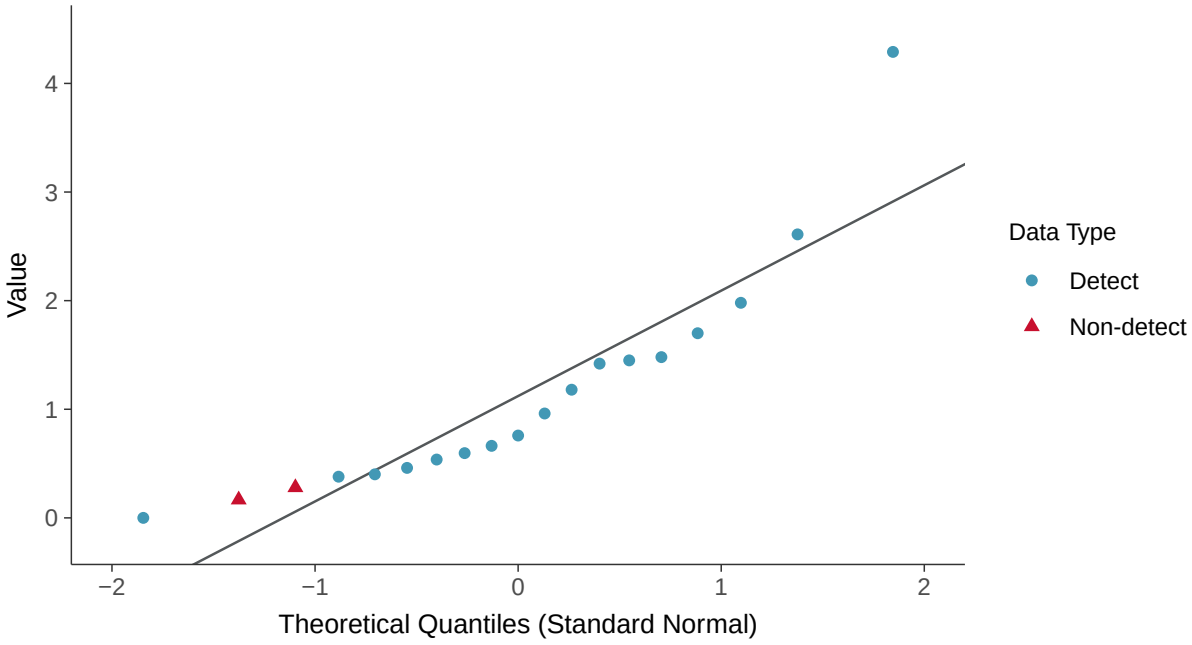
Boxplot by Season

Radium-226+228, MW-6 (pci/l)



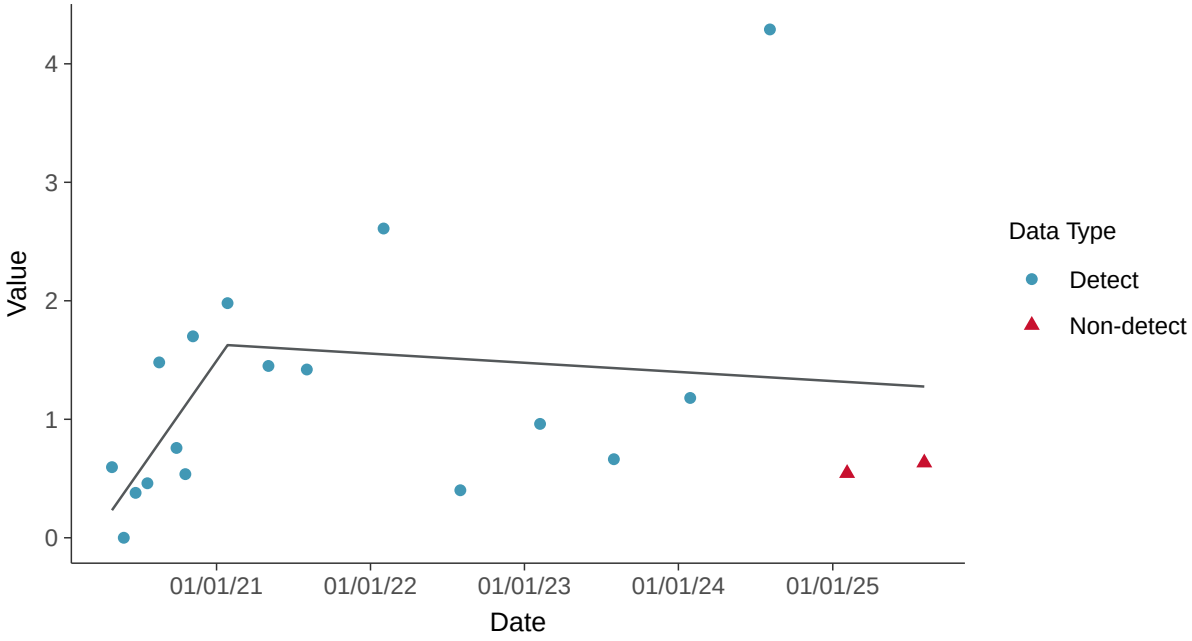
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-6 (pci/l)



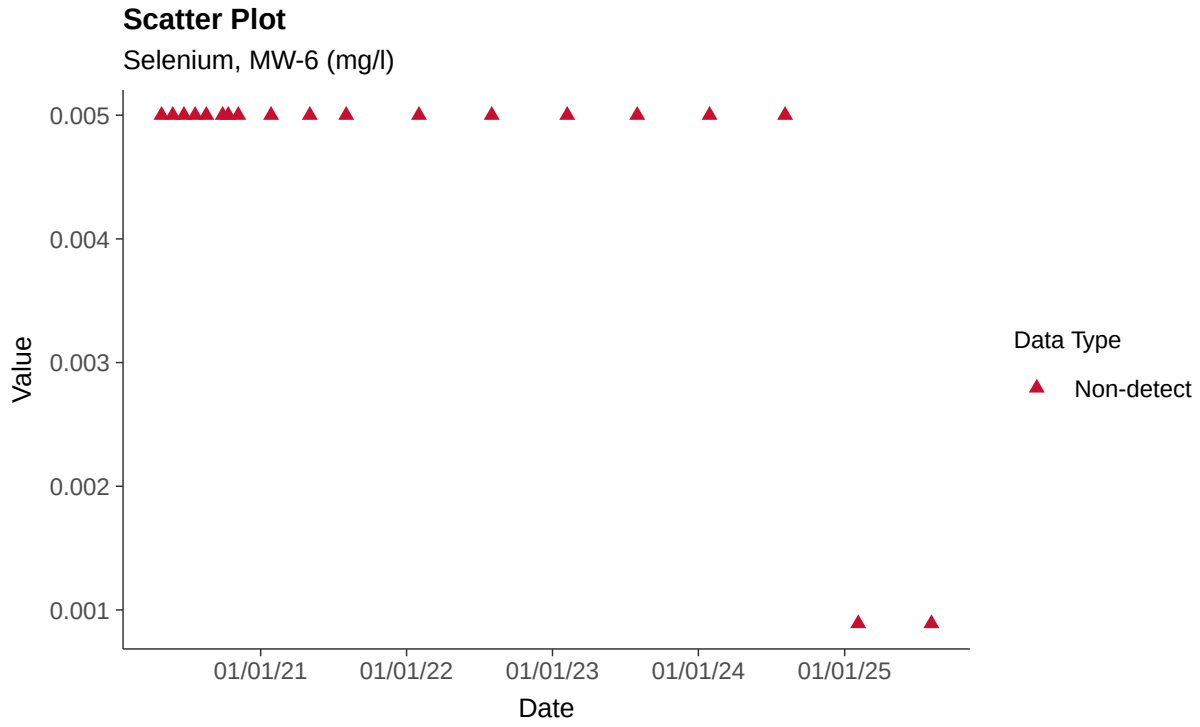
Trend Regression: Piecewise Linear-Linear

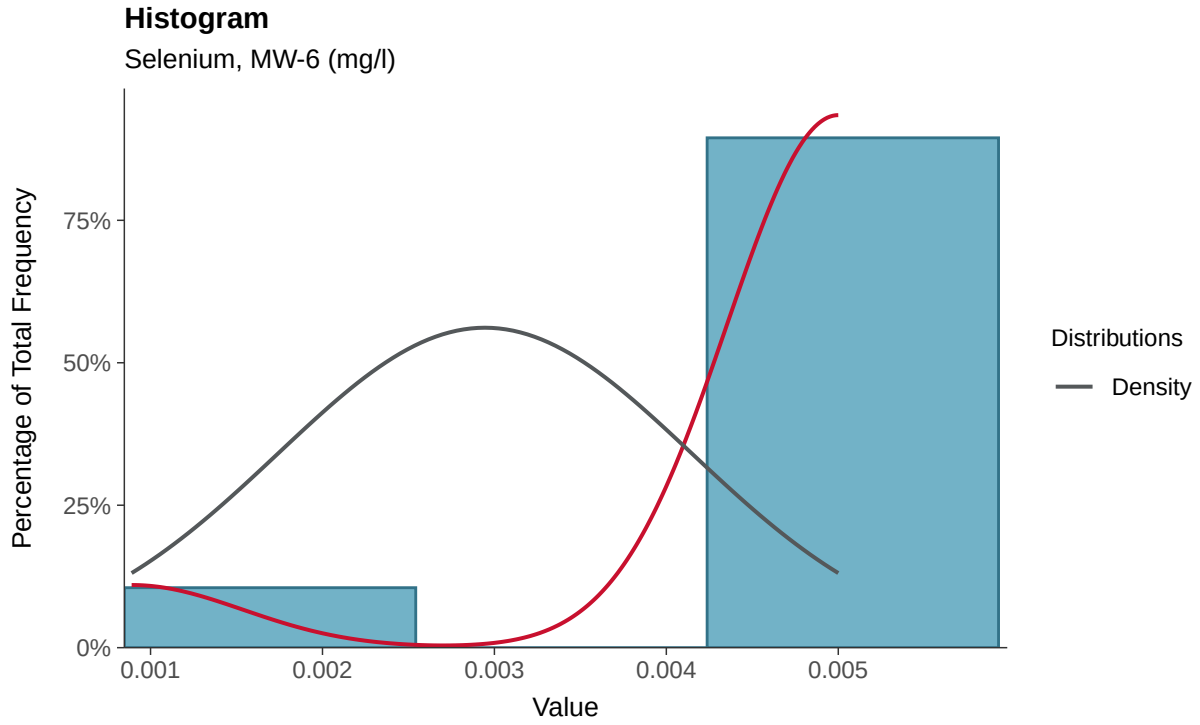
Radium-226+228, MW-6 (pci/l)



Appendix IV: Selenium, MW-6

ID: 16_3_122



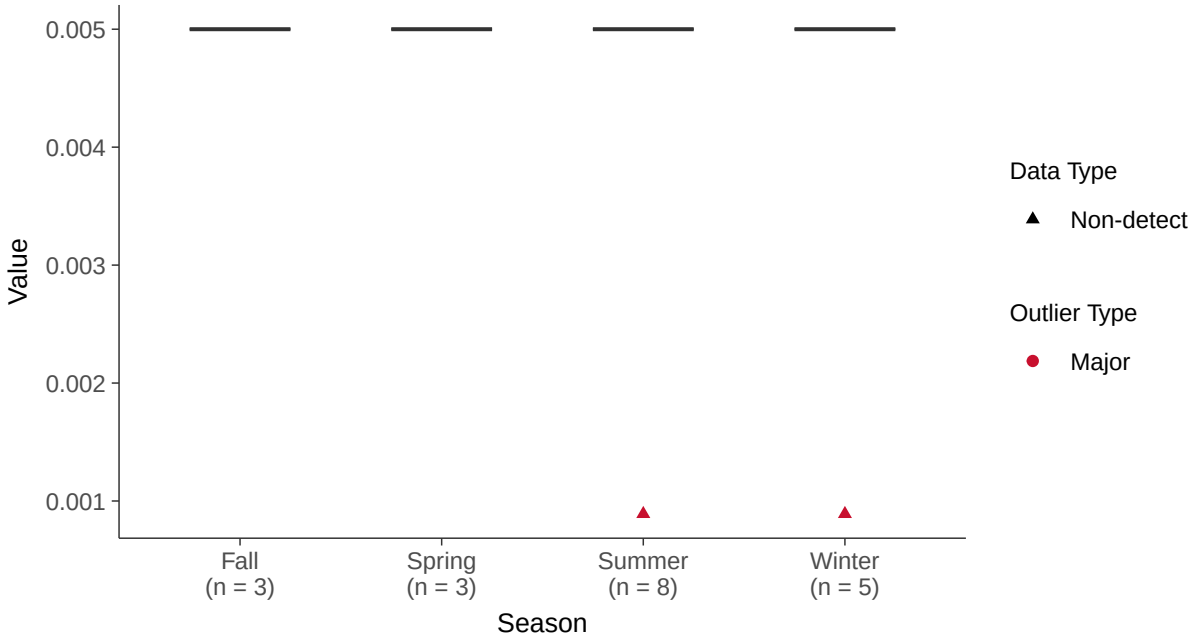


Boxplot

Selenium, MW-6 (mg/l)

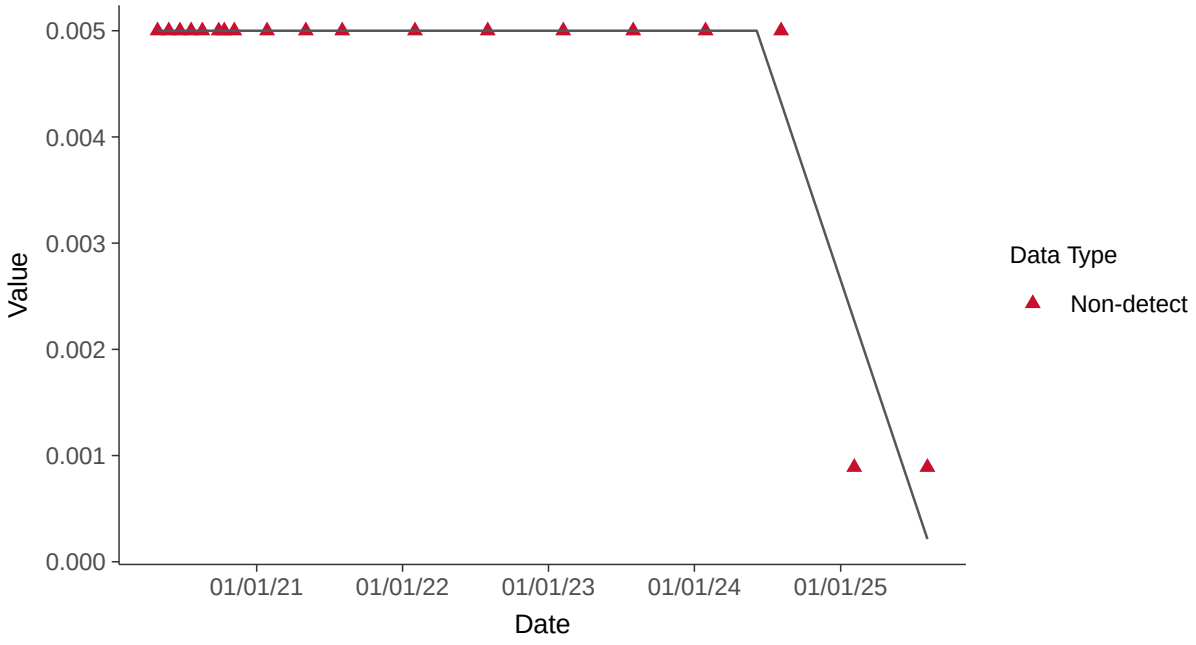
Boxplot by Season

Selenium, MW-6 (mg/l)



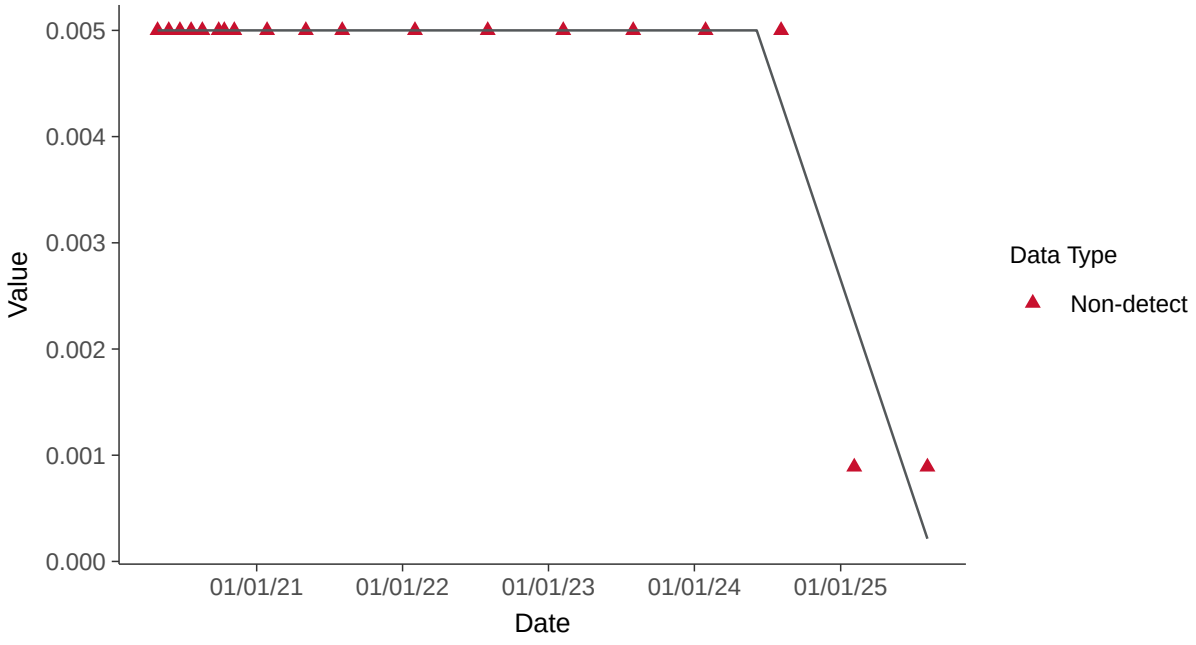
Trend Regression: Piecewise Linear-Linear

Selenium, MW-6 (mg/l)



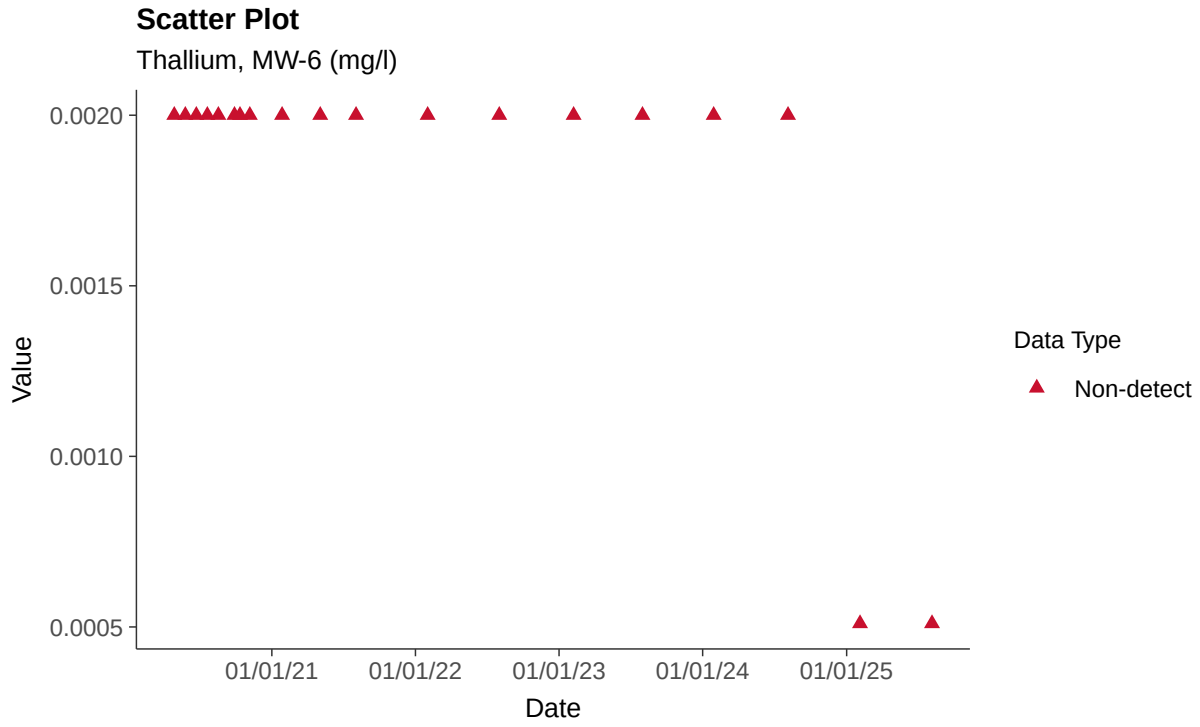
Trend Regression: Piecewise Linear-Linear-Linear

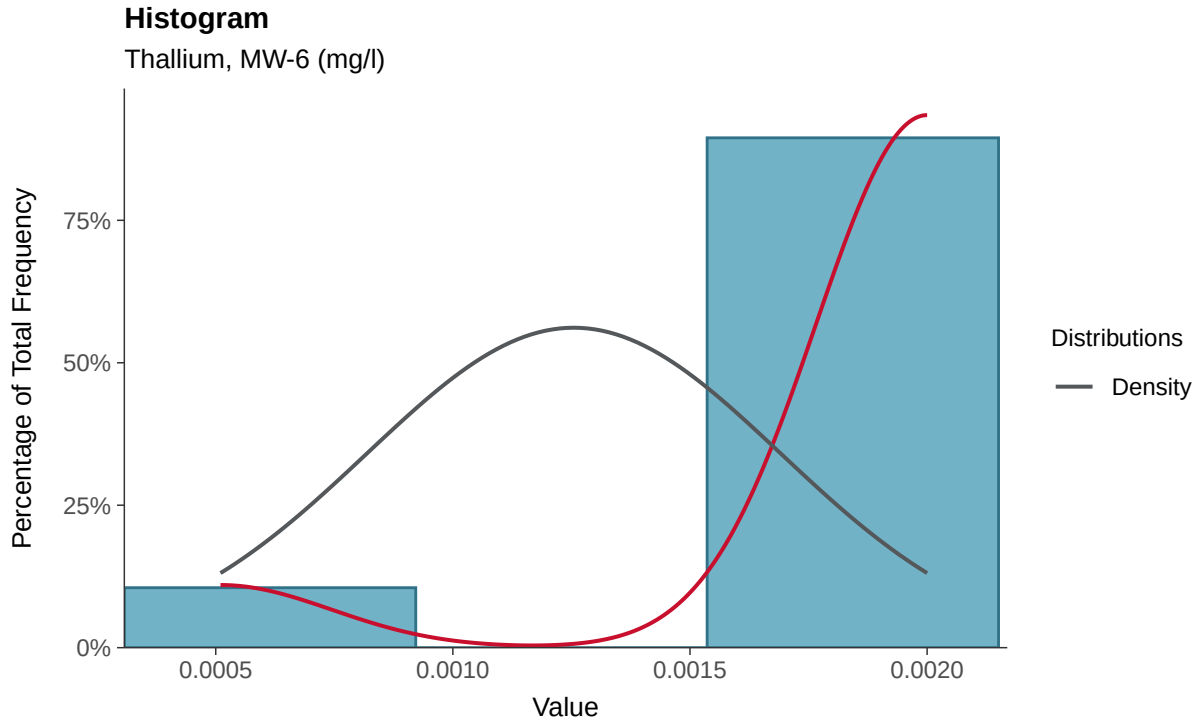
Selenium, MW-6 (mg/l)



Appendix IV: Thallium, MW-6

ID: 16_3_125



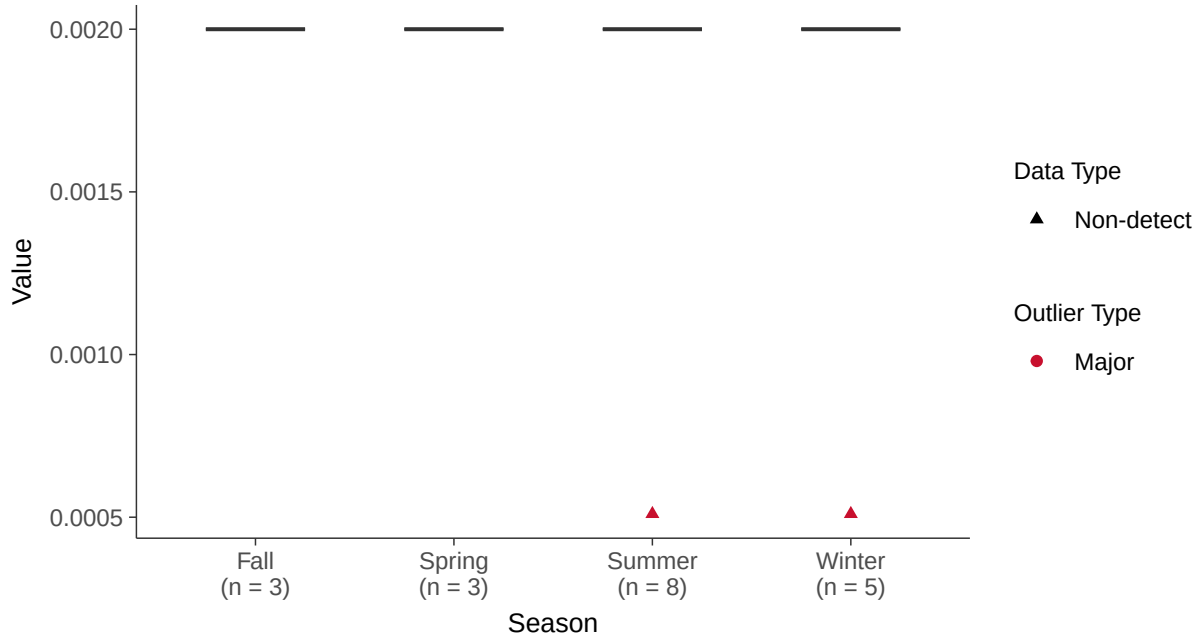


Boxplot

Thallium, MW-6 (mg/l)

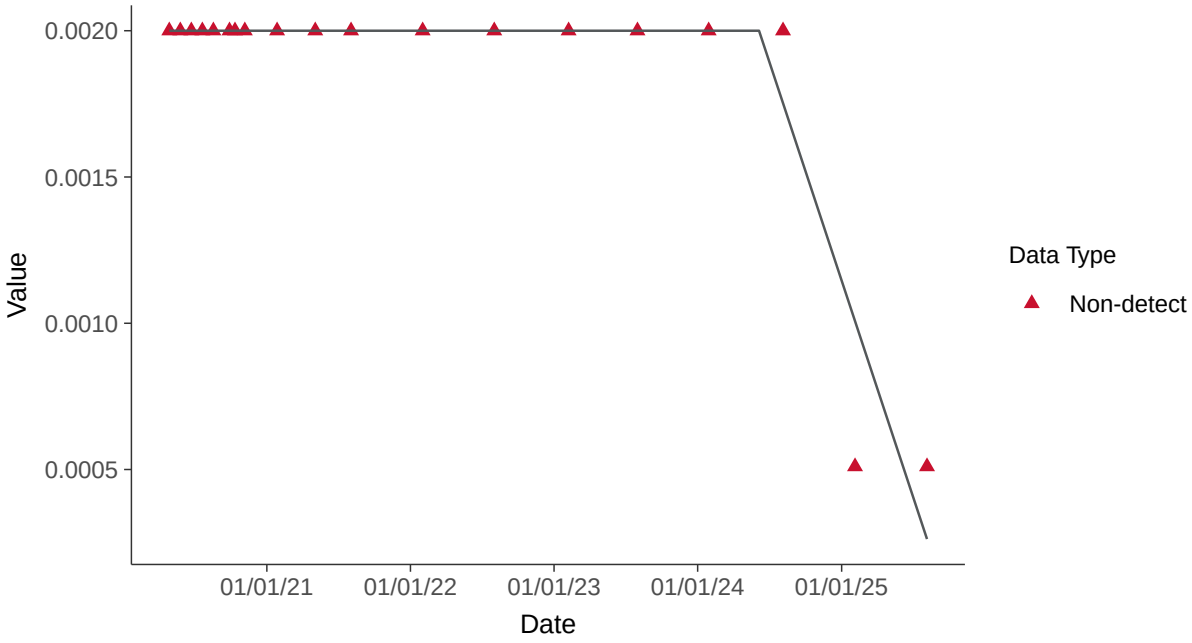
Boxplot by Season

Thallium, MW-6 (mg/l)



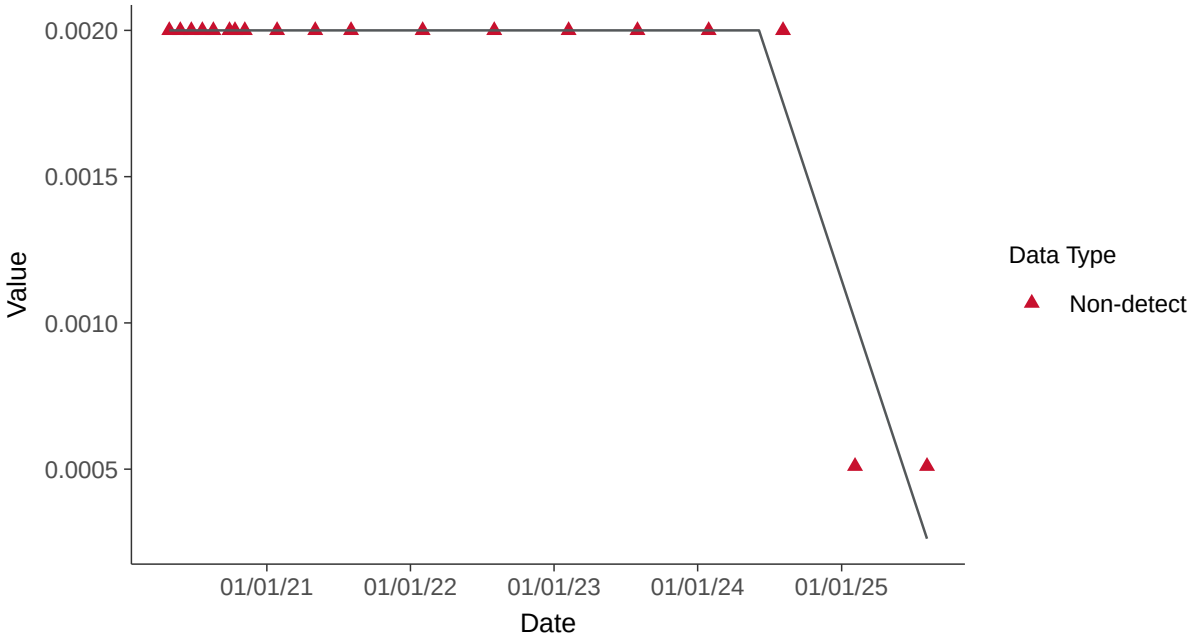
Trend Regression: Piecewise Linear-Linear

Thallium, MW-6 (mg/l)



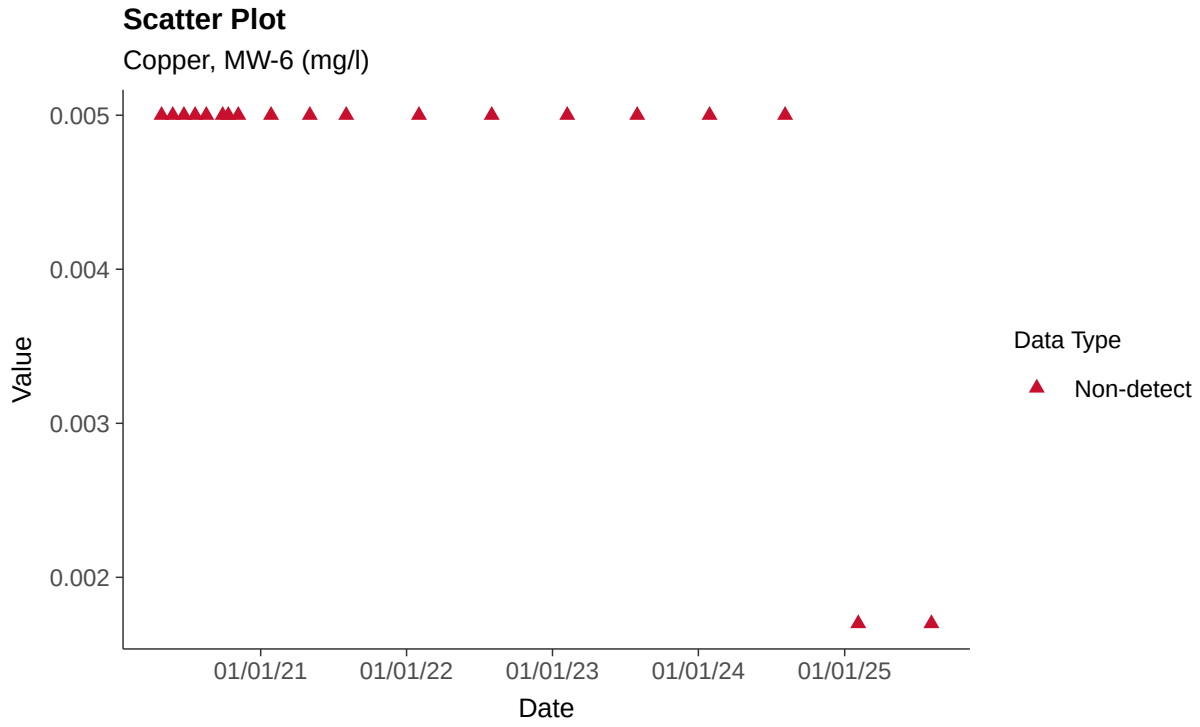
Trend Regression: Piecewise Linear-Linear-Linear

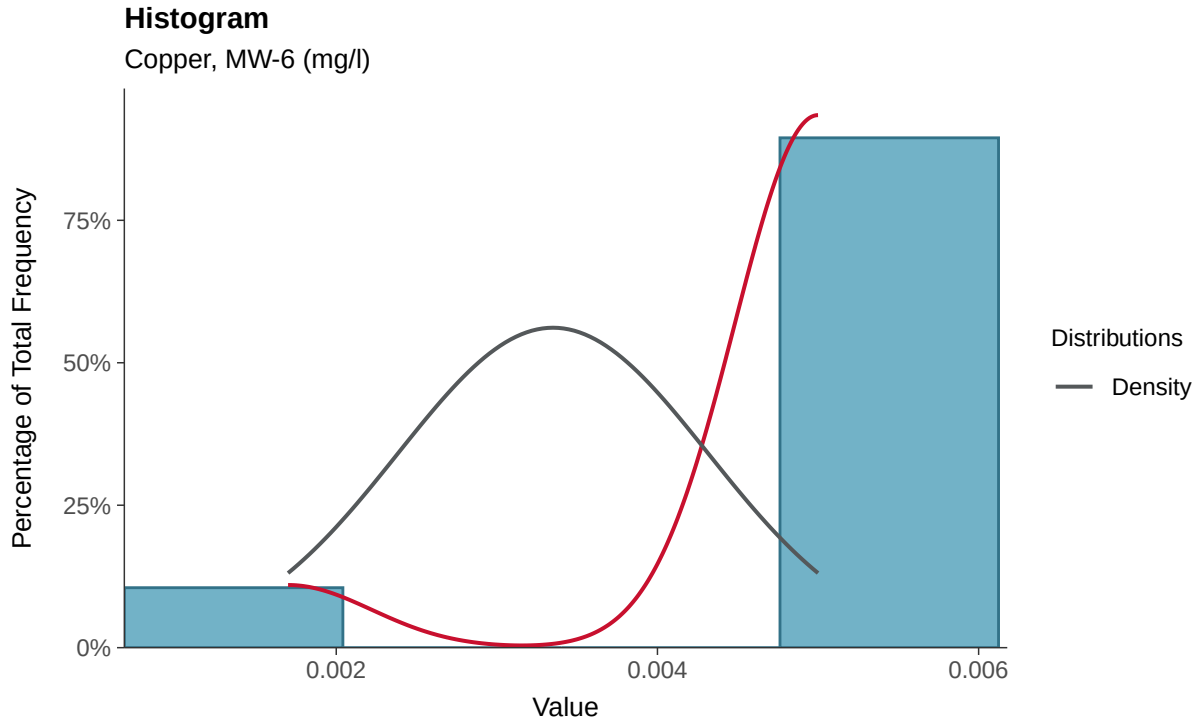
Thallium, MW-6 (mg/l)



Part 115: Copper, MW-6

ID: 16_5_111



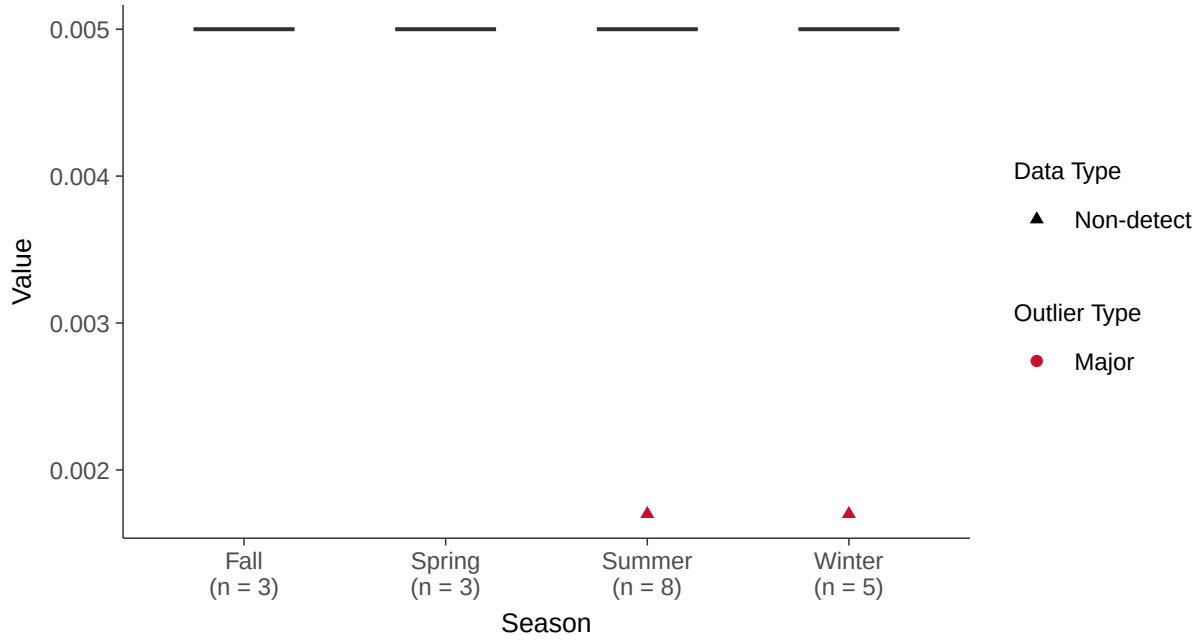


Boxplot

Copper, MW-6 (mg/l)

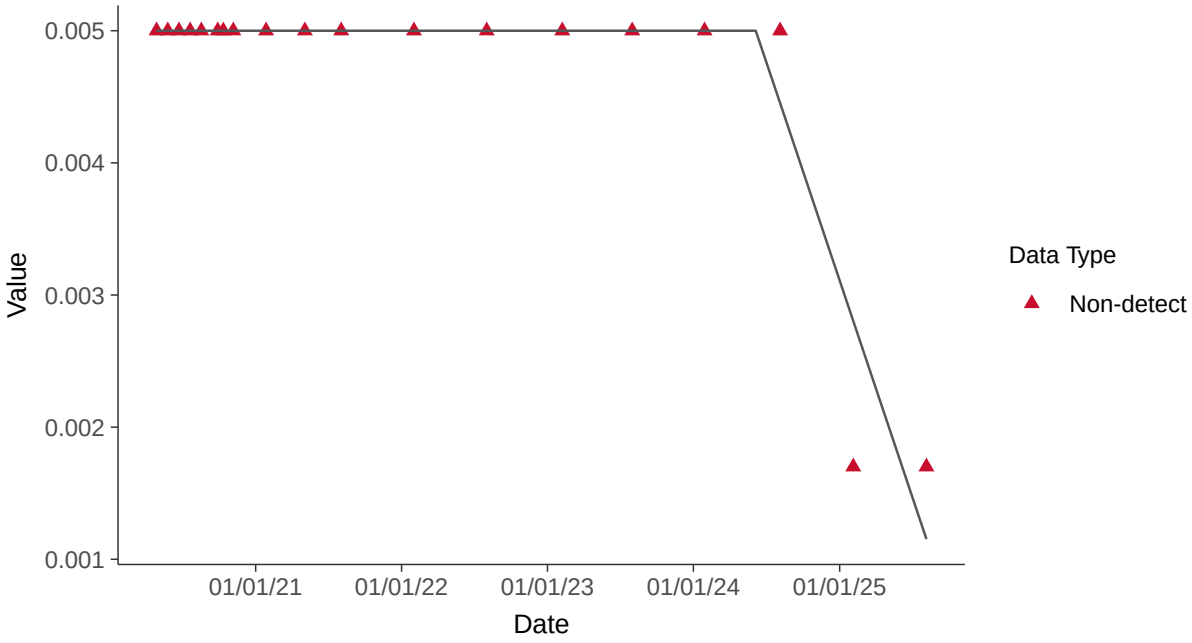
Boxplot by Season

Copper, MW-6 (mg/l)



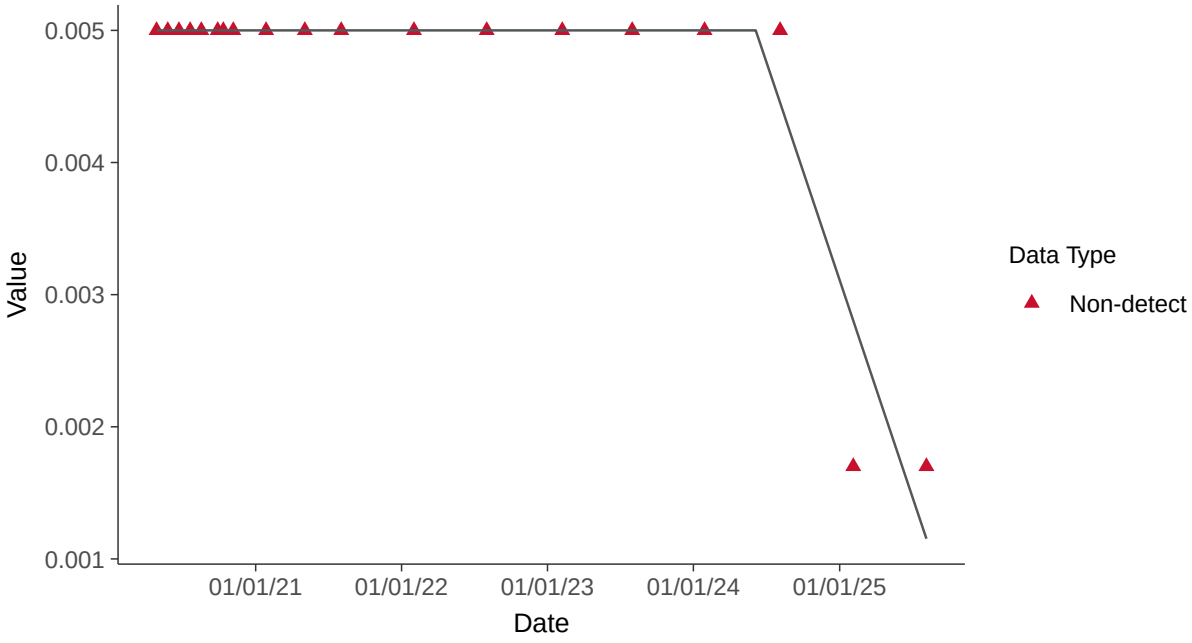
Trend Regression: Piecewise Linear-Linear

Copper, MW-6 (mg/l)



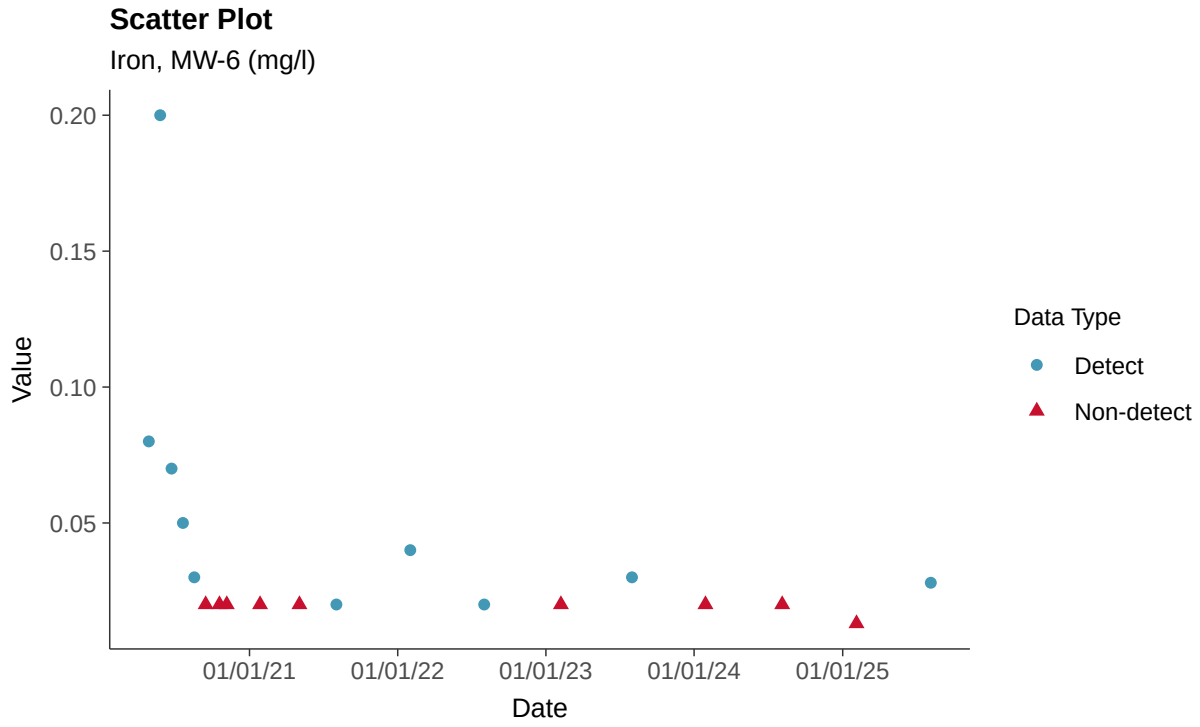
Trend Regression: Piecewise Linear-Linear-Linear

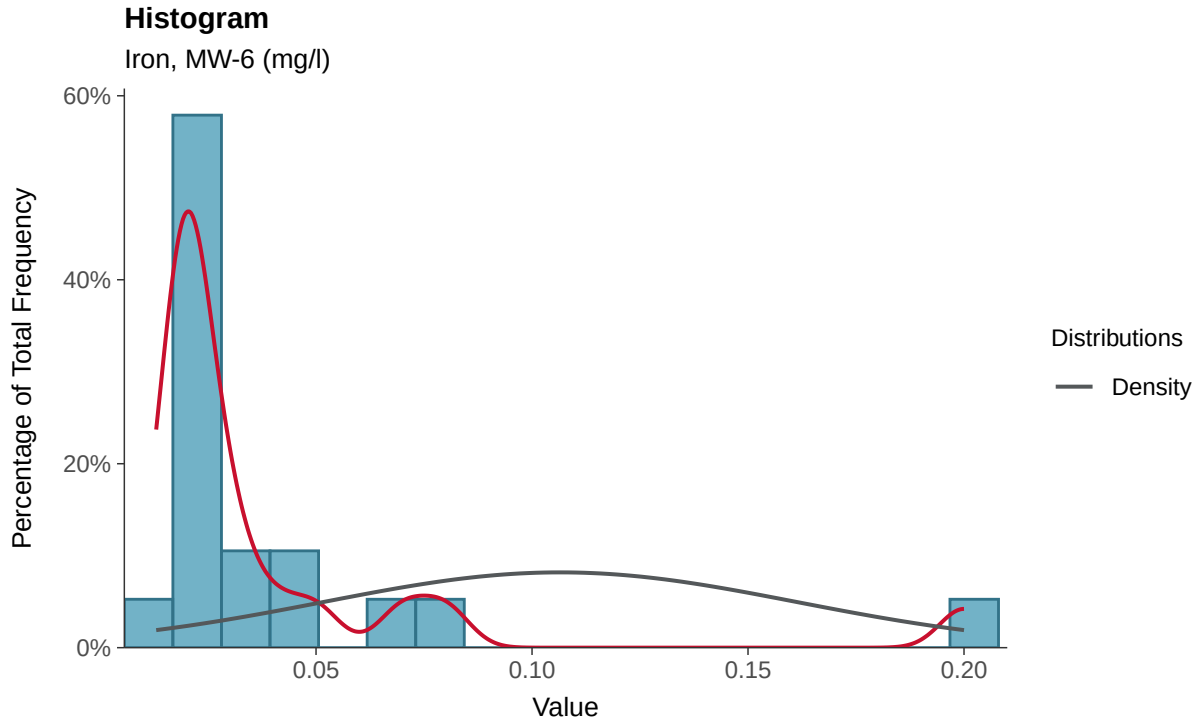
Copper, MW-6 (mg/l)



Part 115: Iron, MW-6

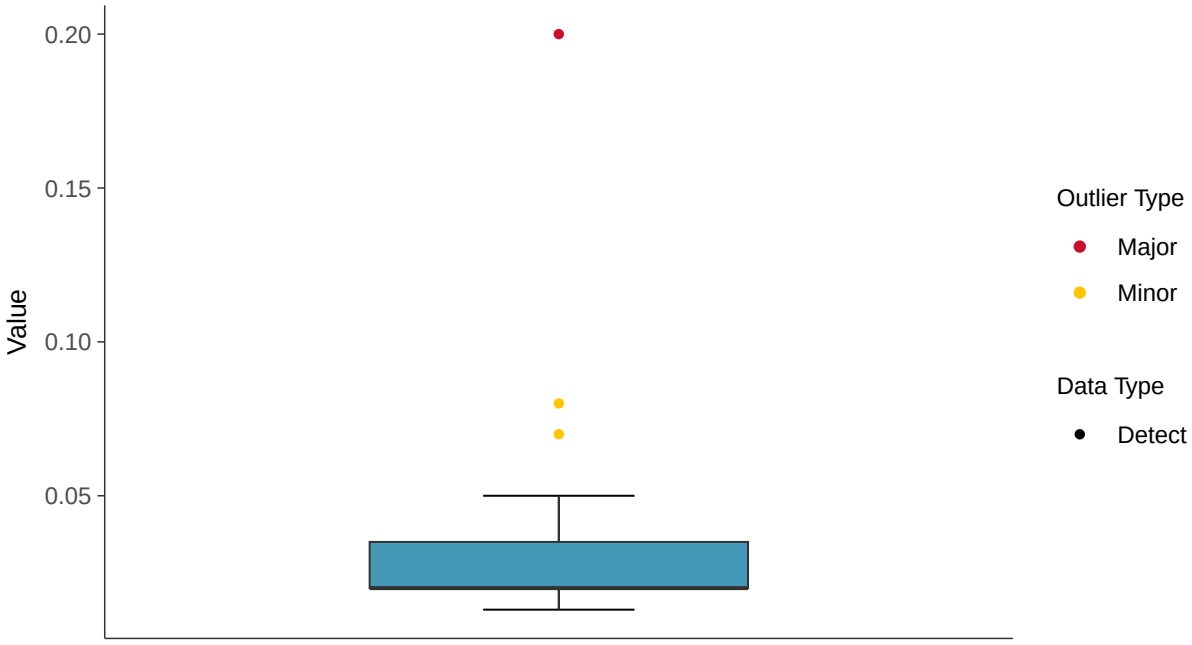
ID: 16_5_114





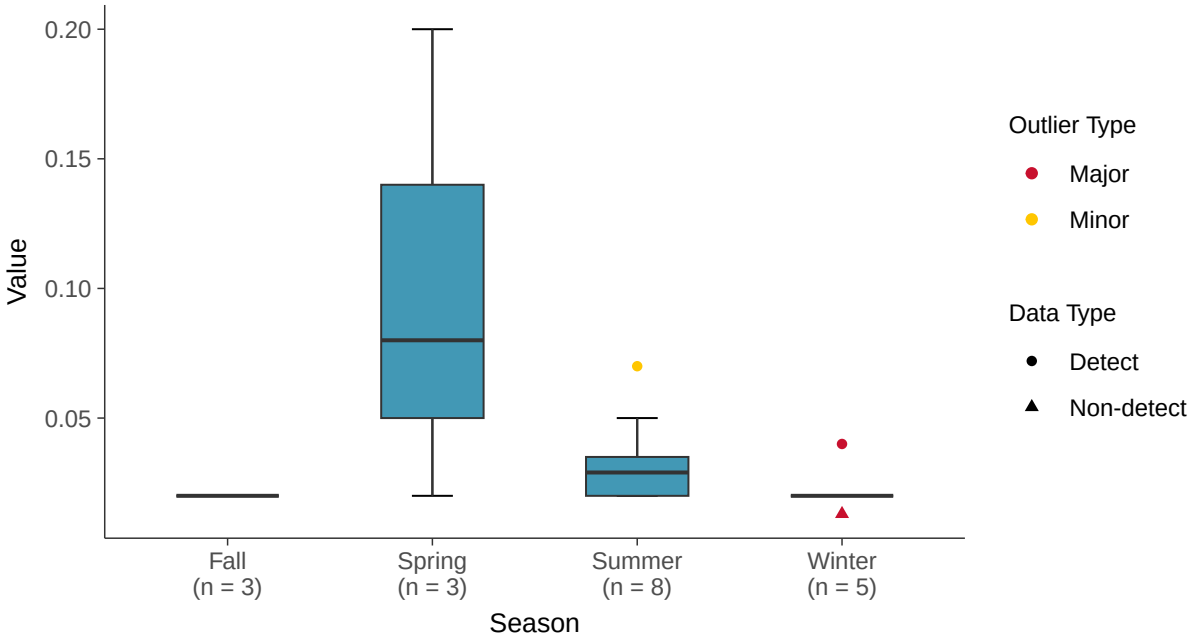
Boxplot

Iron, MW-6 (mg/l)



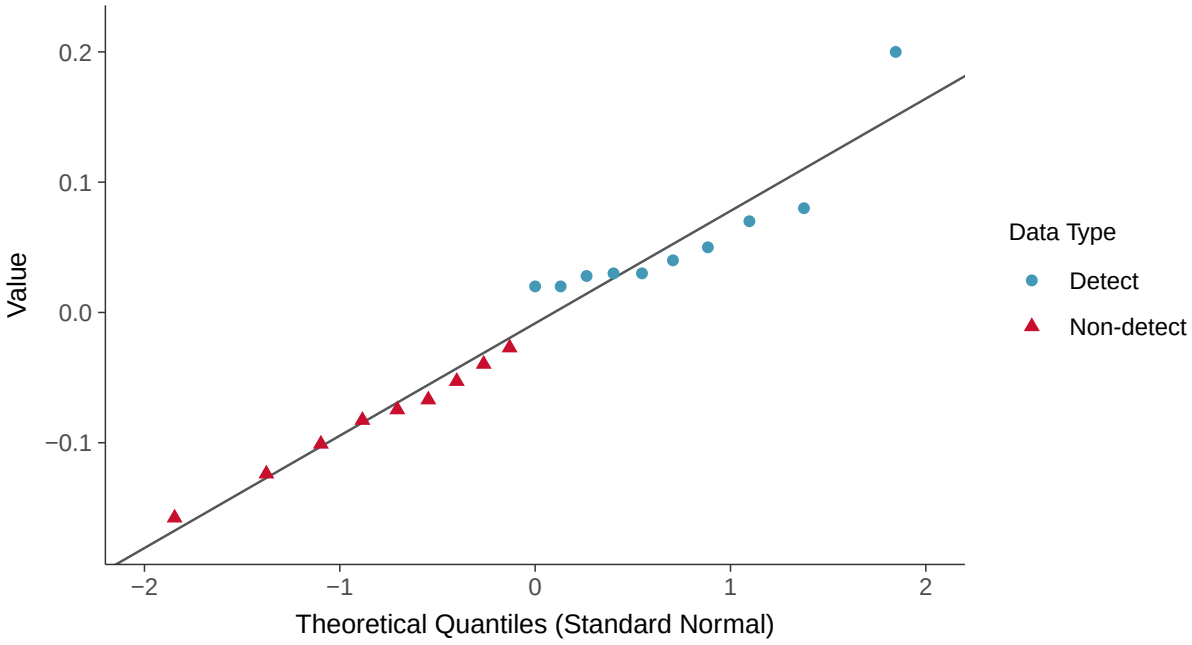
Boxplot by Season

Iron, MW-6 (mg/l)



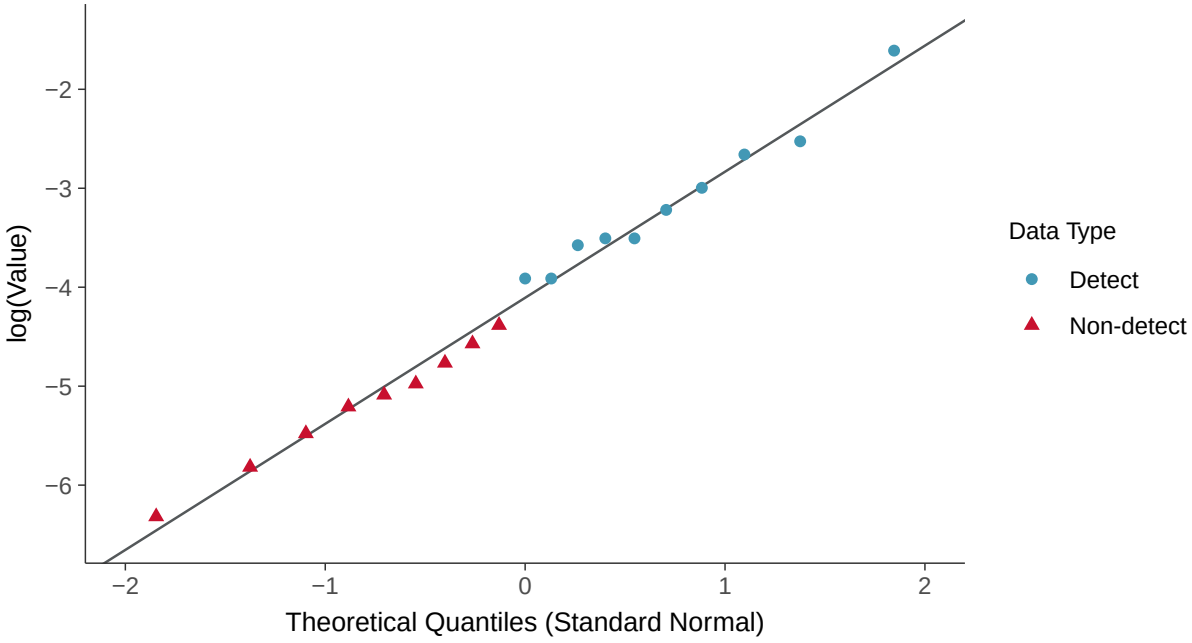
Normal Q-Q plot using ROS Imputed Estimates

Iron, MW-6 (mg/l)



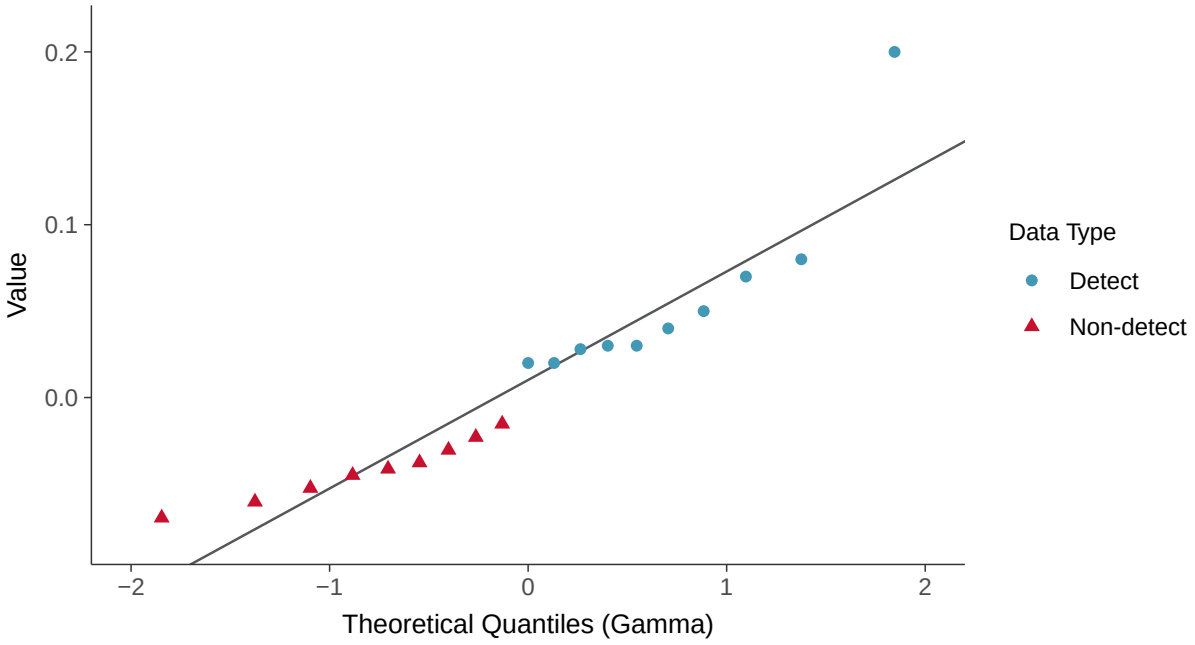
Lognormal Q-Q plot using ROS Imputed Estimates

Iron, MW-6 (mg/l)



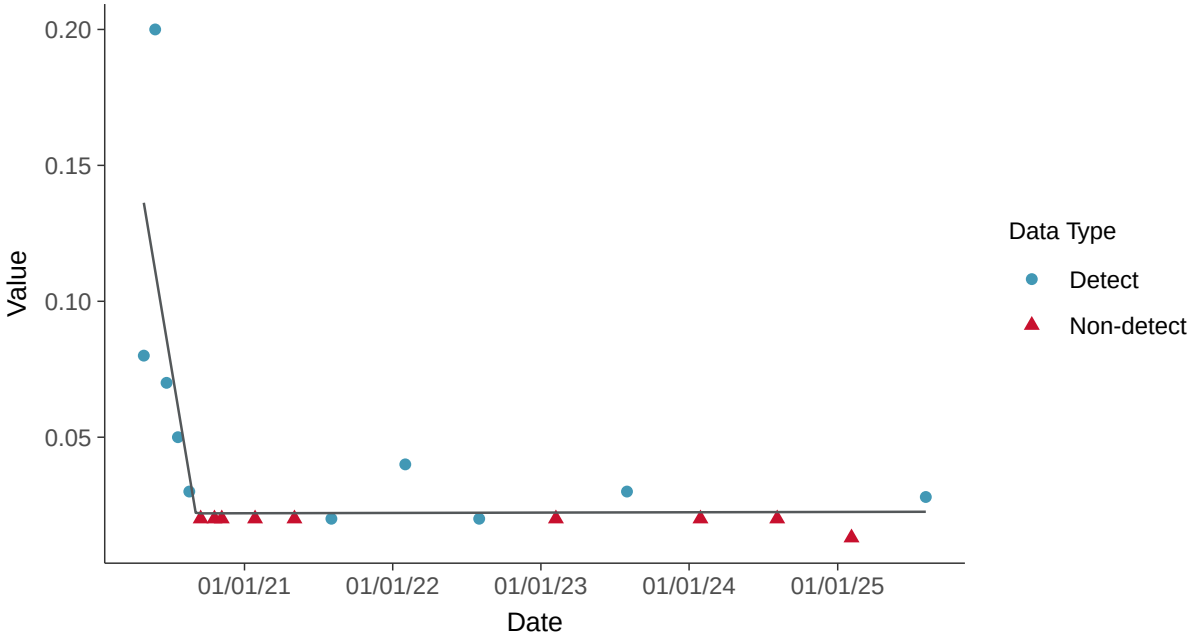
Gamma Q-Q plot using ROS Imputed Estimates

Iron, MW-6 (mg/l)



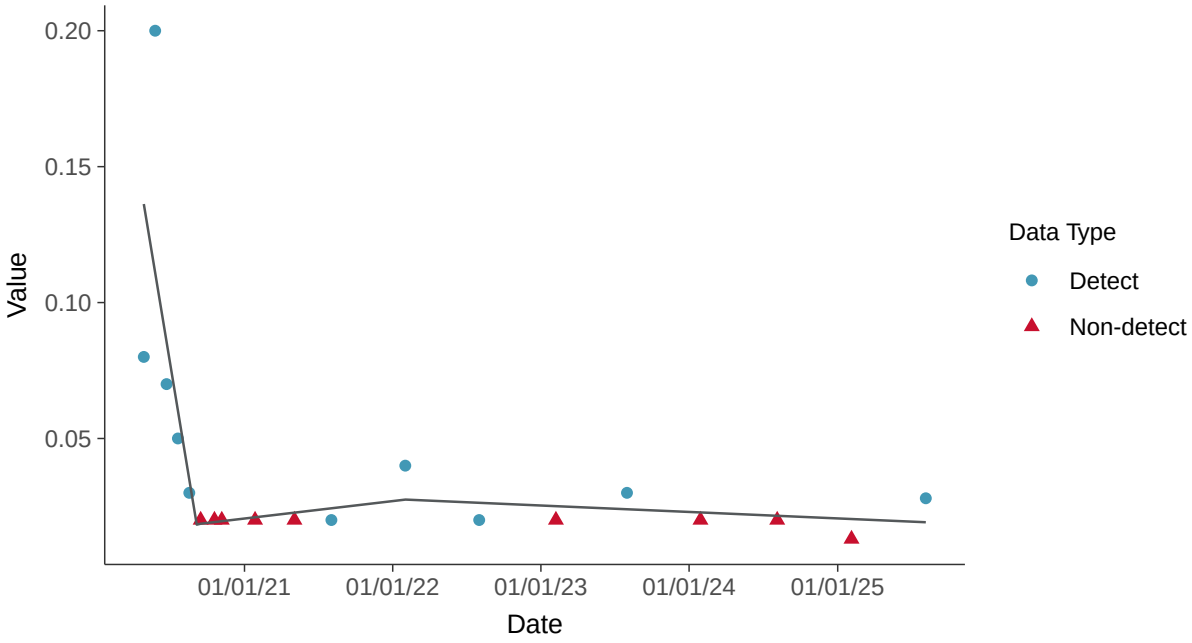
Trend Regression: Piecewise Linear-Linear

Iron, MW-6 (mg/l)



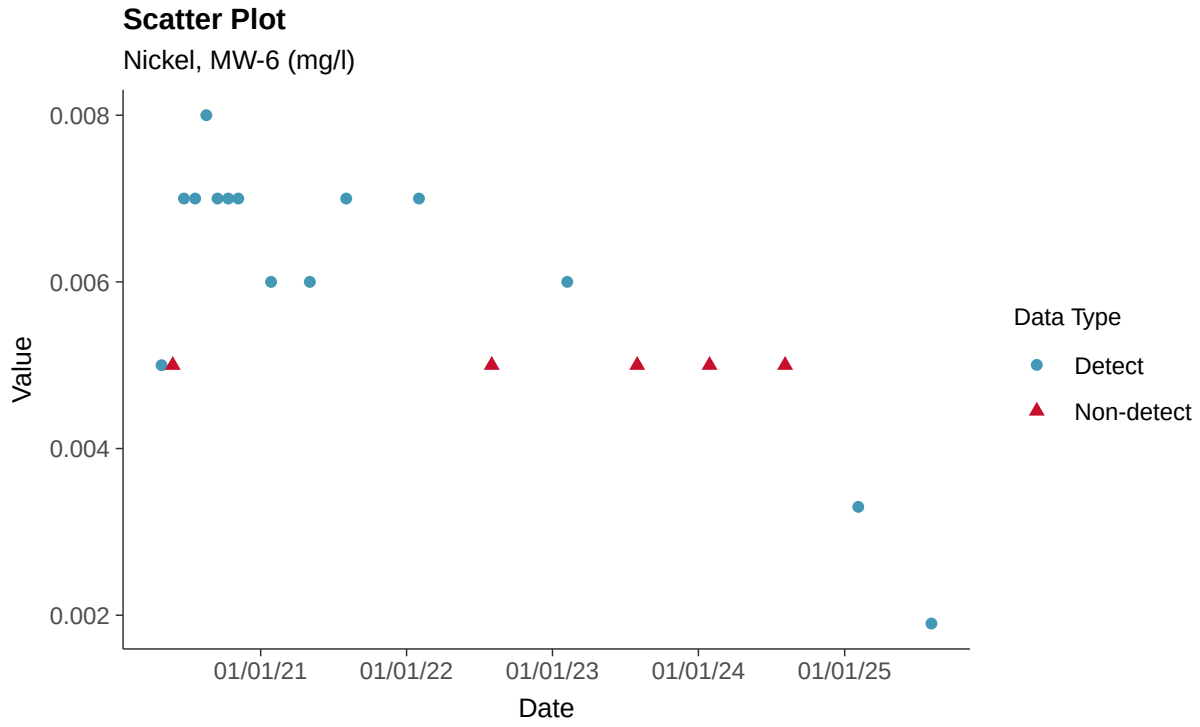
Trend Regression: Piecewise Linear-Linear-Linear

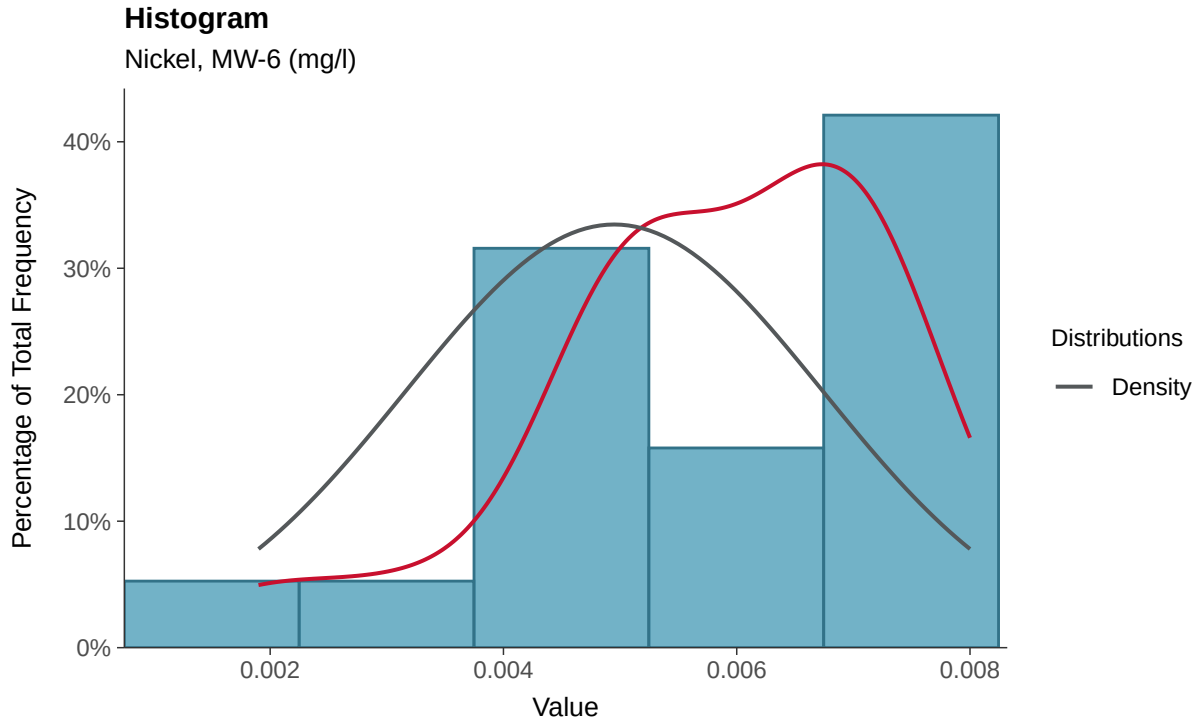
Iron, MW-6 (mg/l)



Part 115: Nickel, MW-6

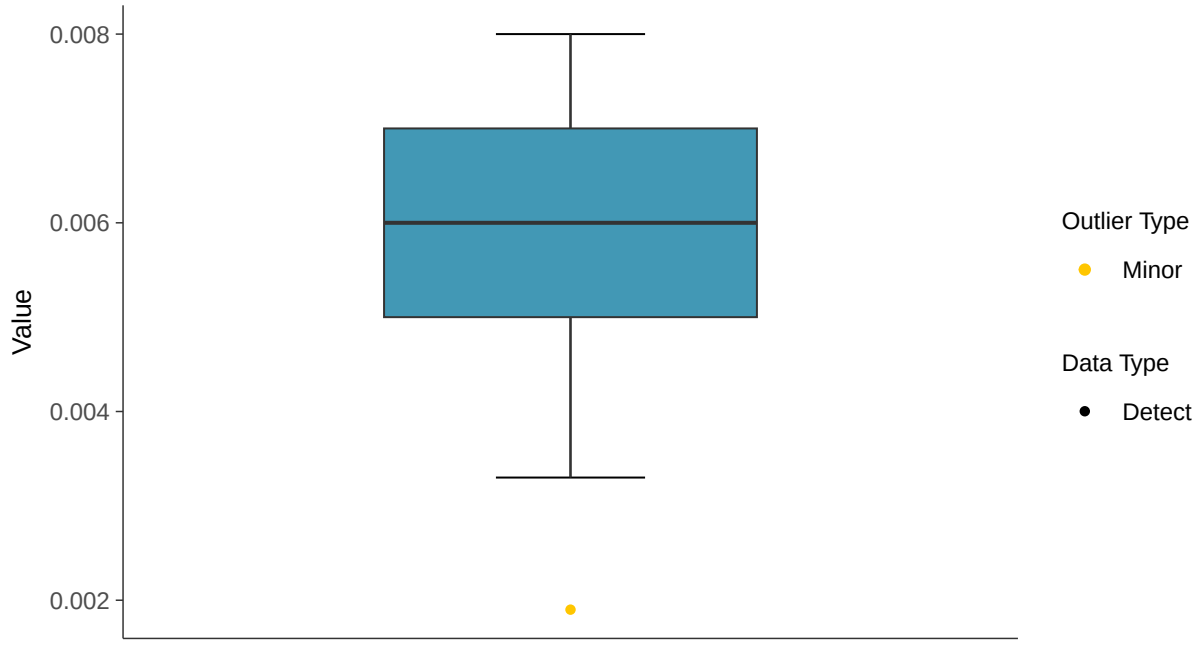
ID: 16_5_119





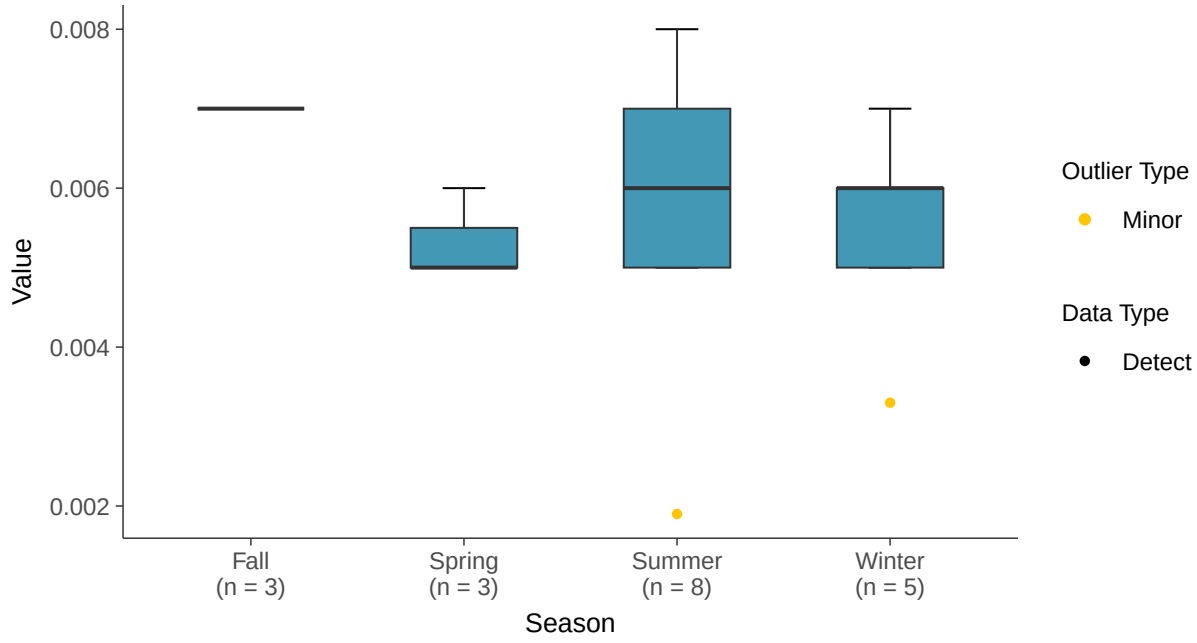
Boxplot

Nickel, MW-6 (mg/l)



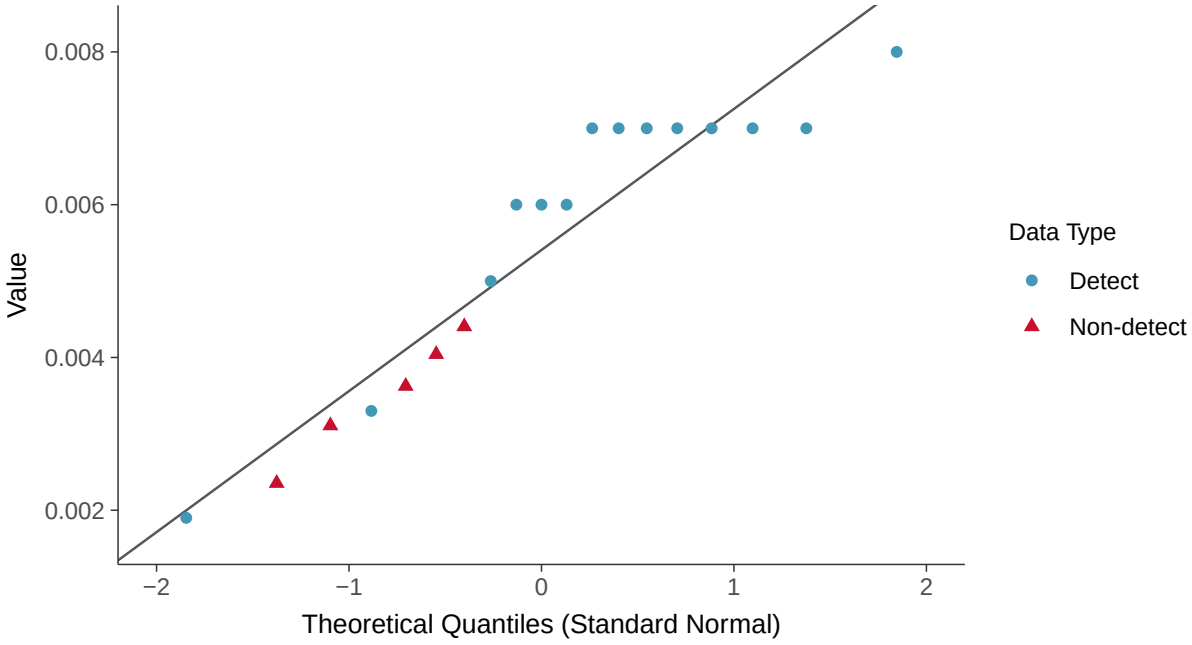
Boxplot by Season

Nickel, MW-6 (mg/l)



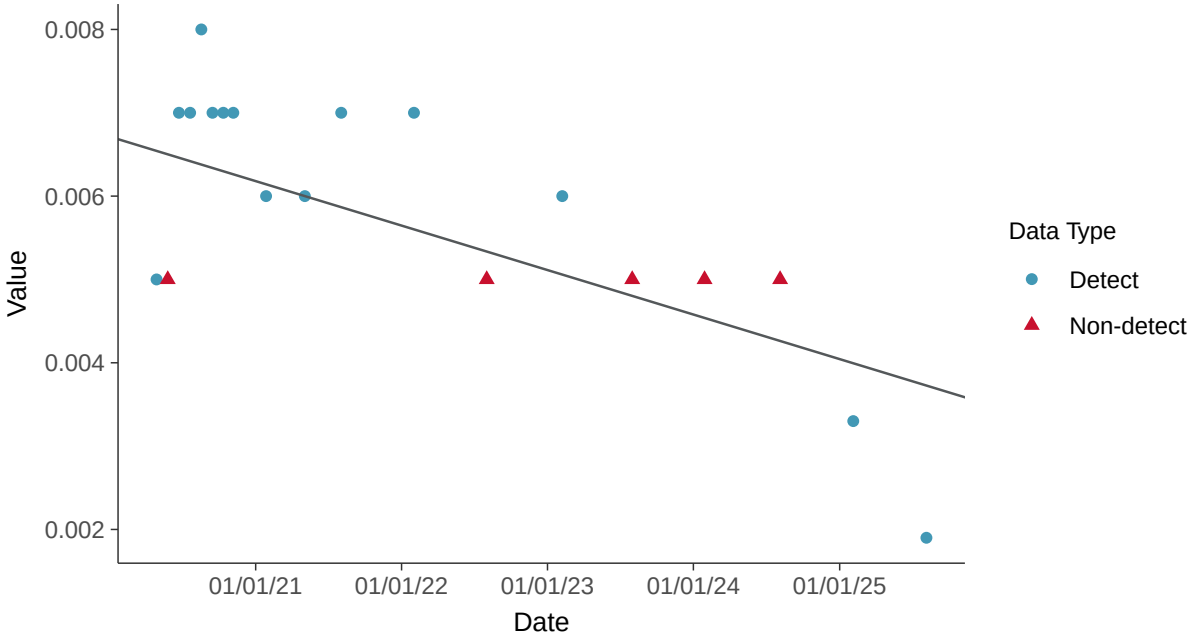
Normal Q-Q plot using ROS Imputed Estimates

Nickel, MW-6 (mg/l)



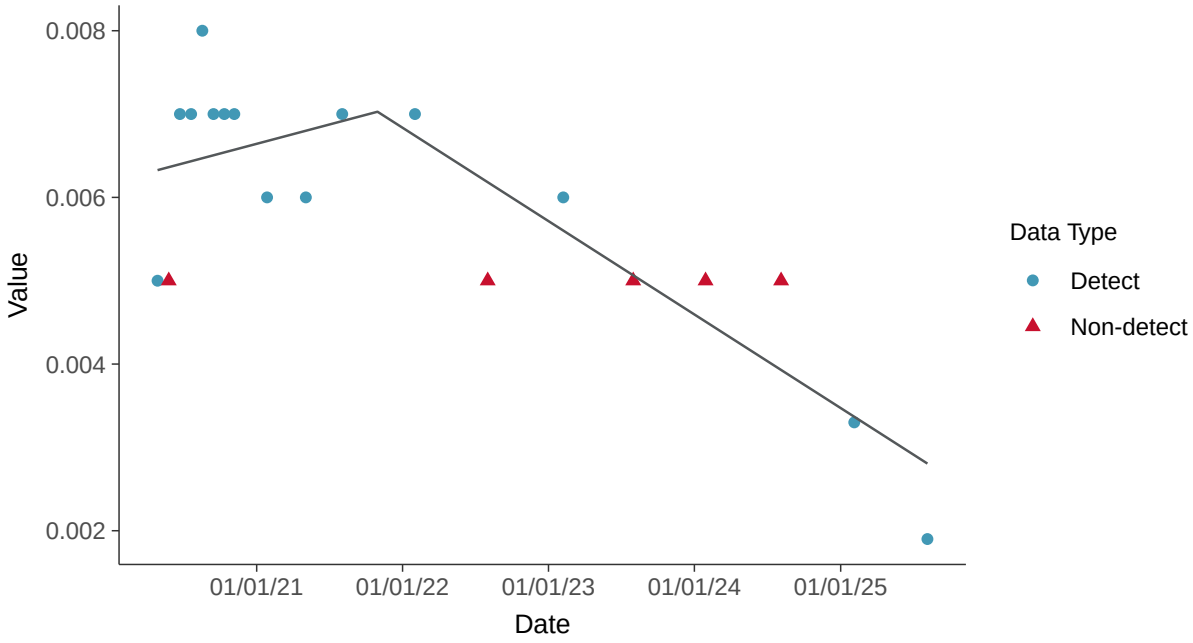
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Nickel, MW-6 (mg/l)



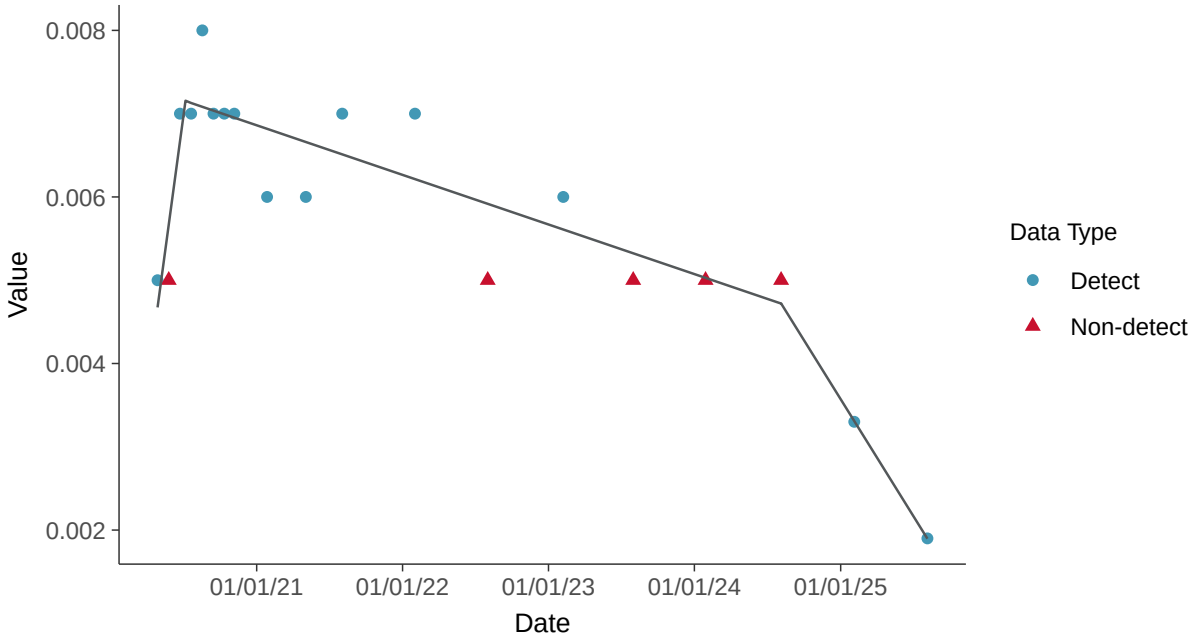
Trend Regression: Piecewise Linear-Linear

Nickel, MW-6 (mg/l)



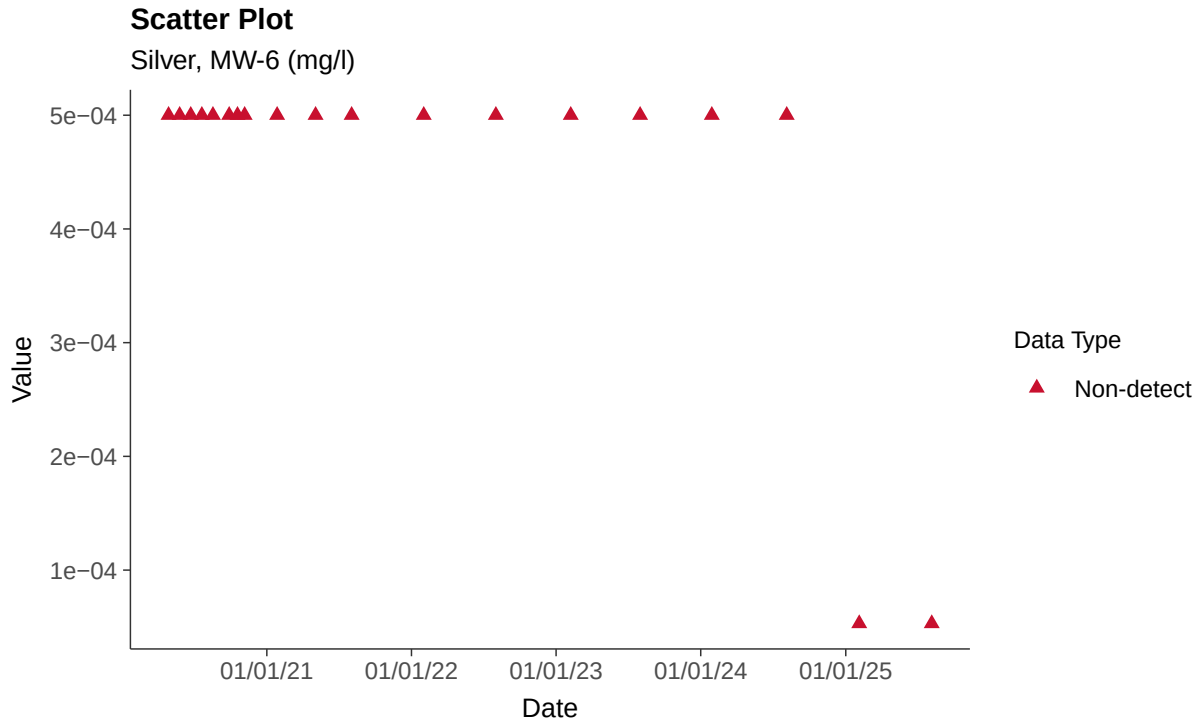
Trend Regression: Piecewise Linear-Linear-Linear

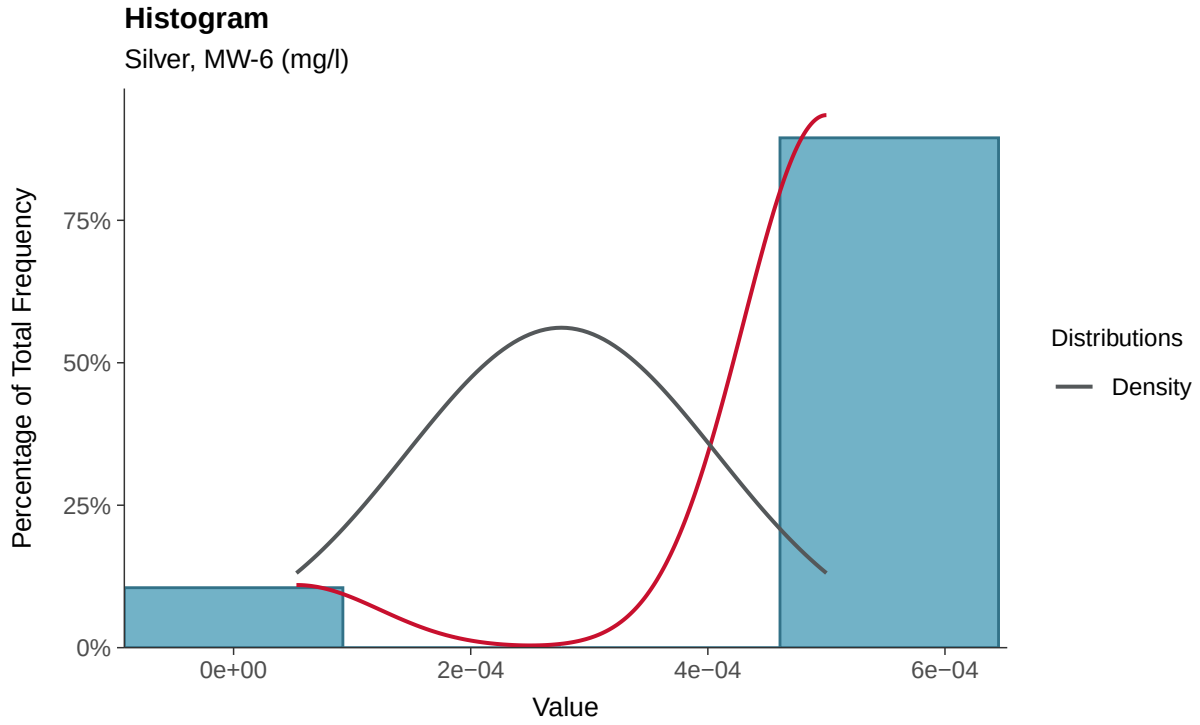
Nickel, MW-6 (mg/l)



Part 115: Silver, MW-6

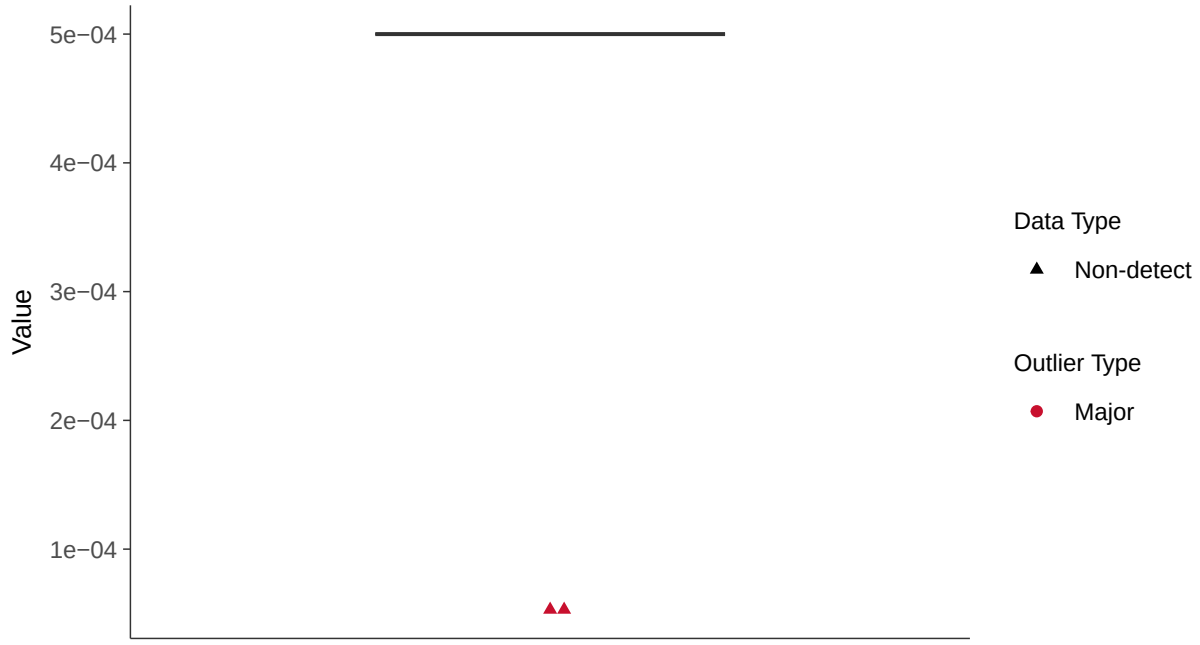
ID: 16_5_123





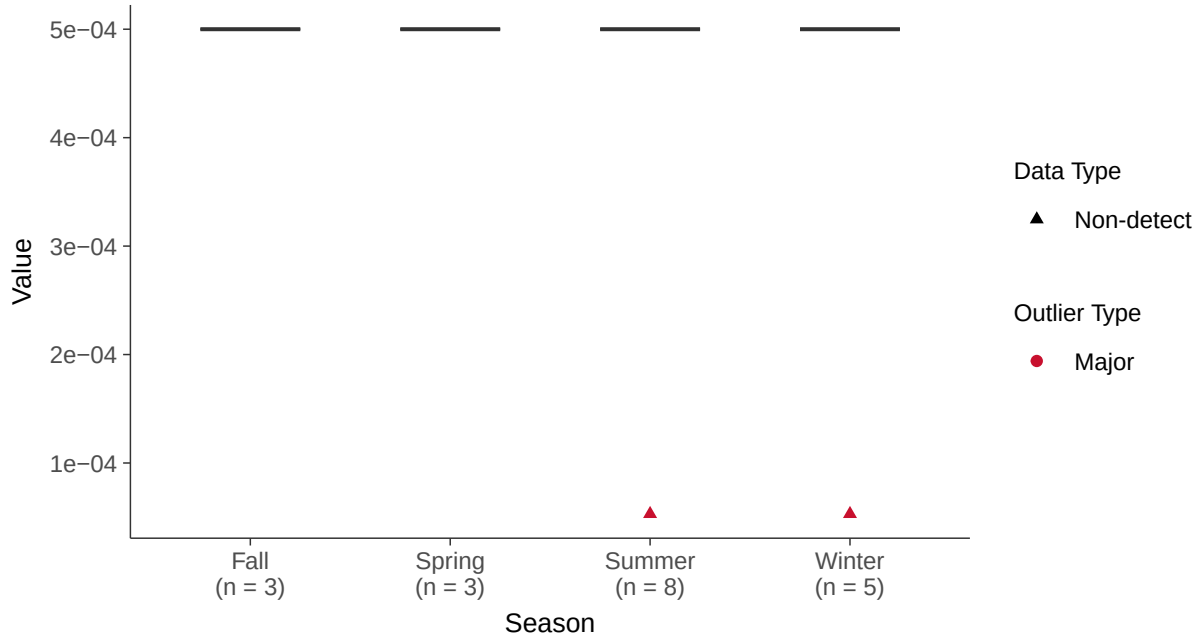
Boxplot

Silver, MW-6 (mg/l)



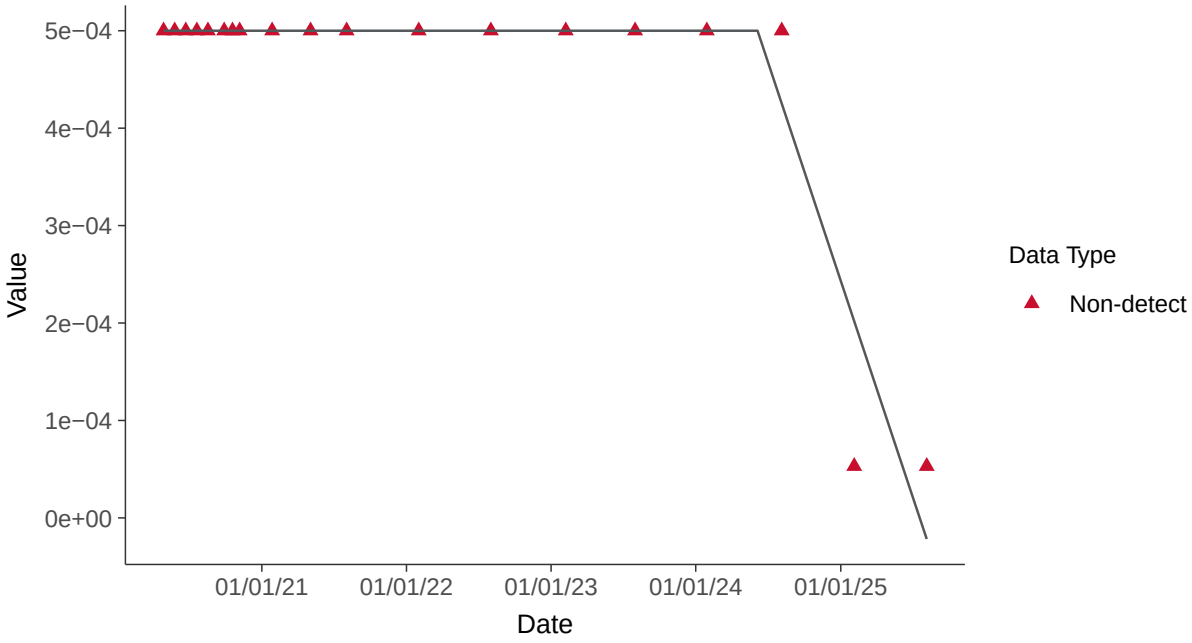
Boxplot by Season

Silver, MW-6 (mg/l)



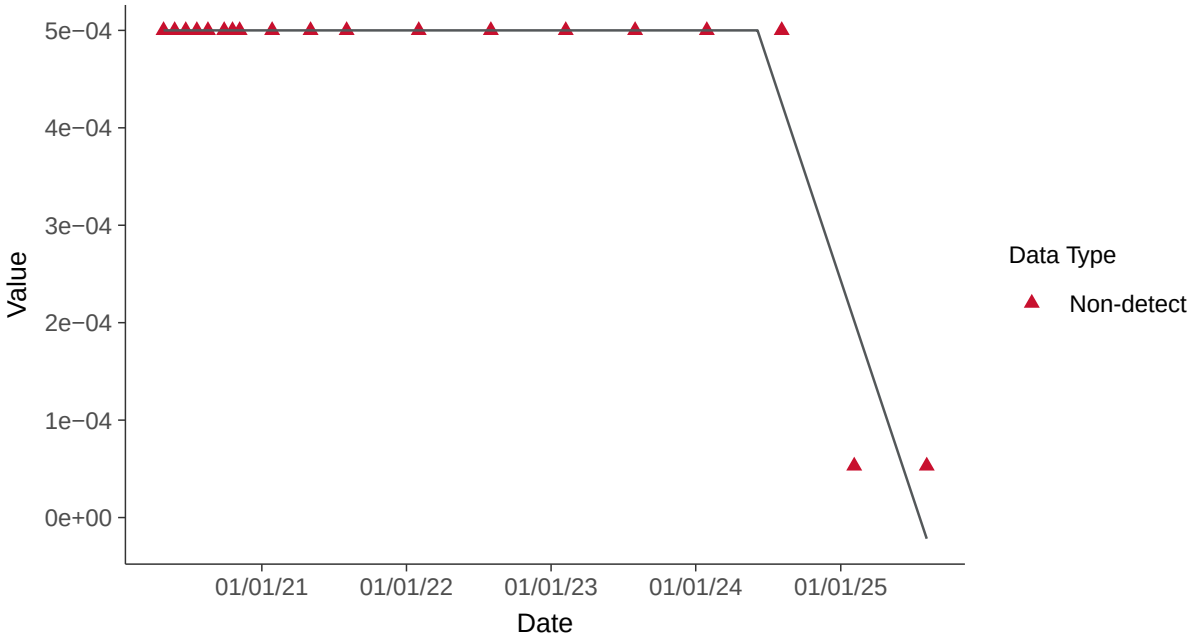
Trend Regression: Piecewise Linear-Linear

Silver, MW-6 (mg/l)



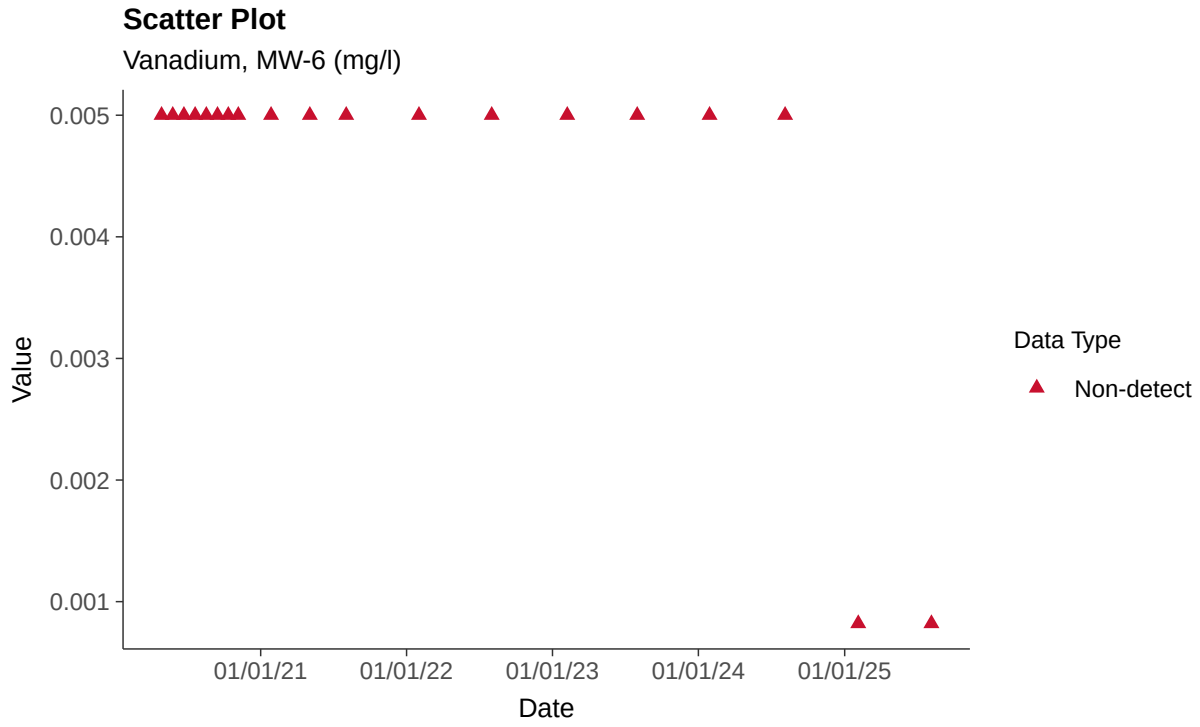
Trend Regression: Piecewise Linear-Linear-Linear

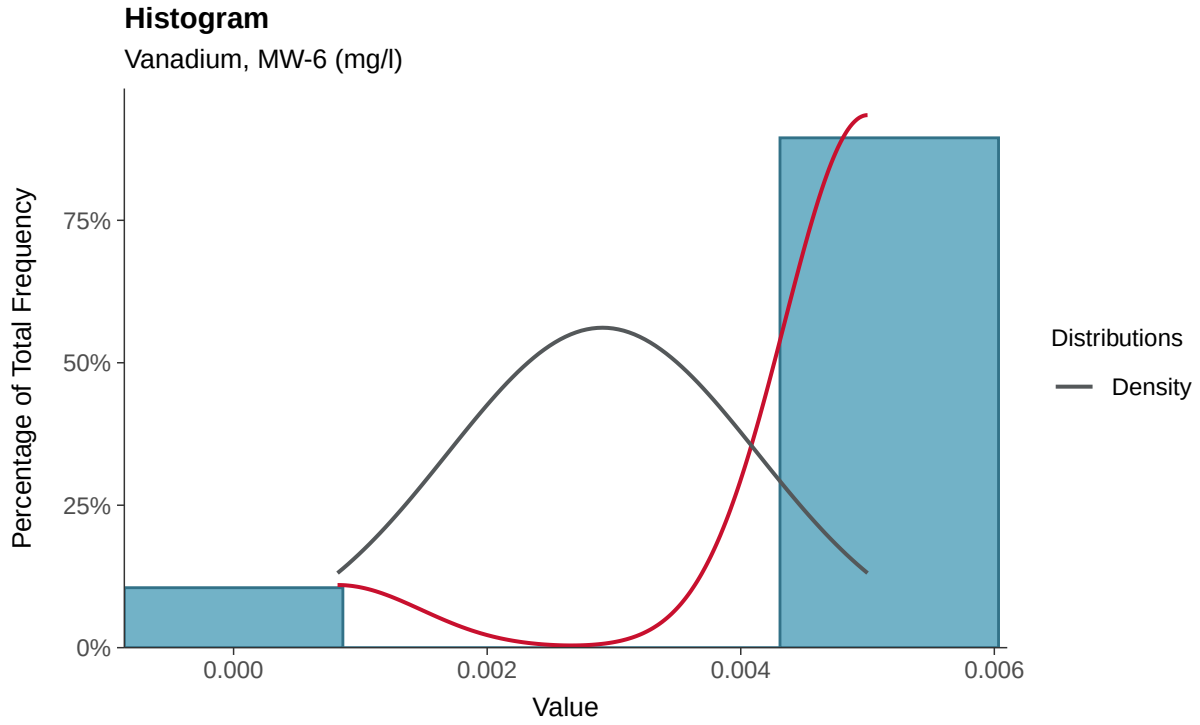
Silver, MW-6 (mg/l)



Part 115: Vanadium, MW-6

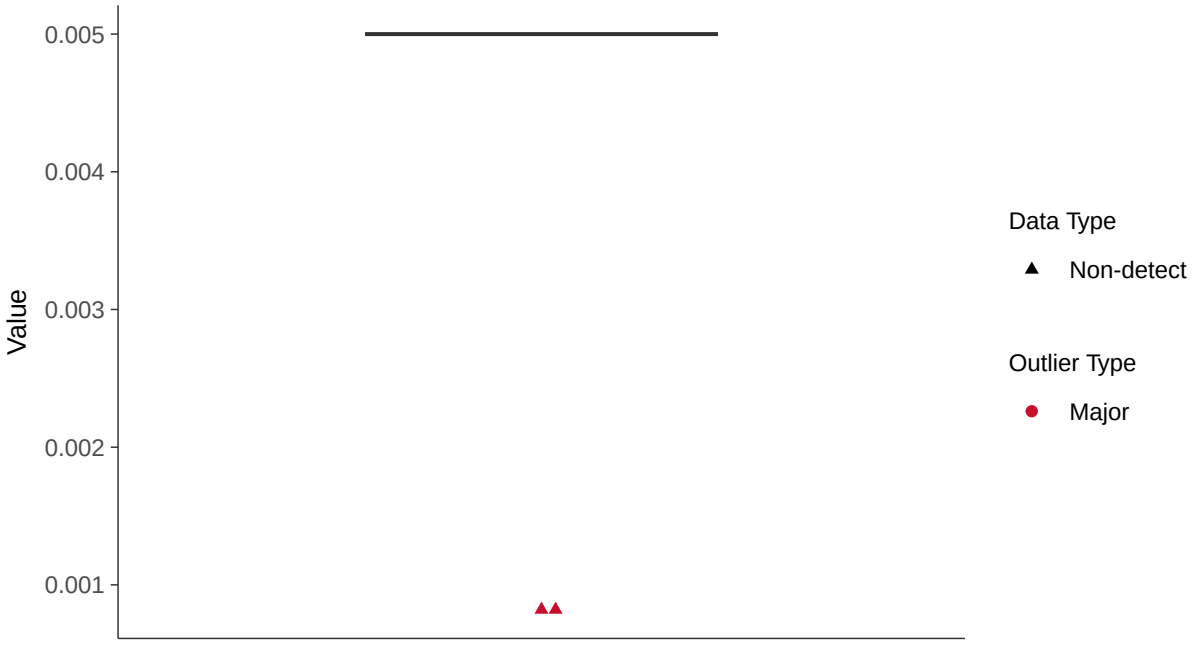
ID: 16_5_128





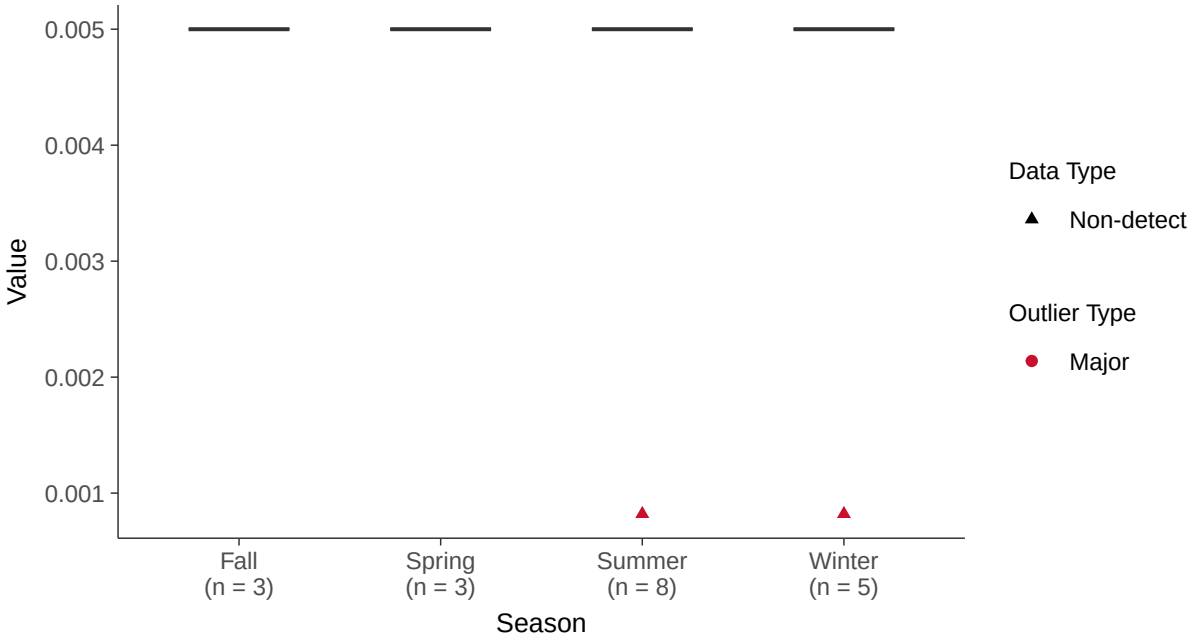
Boxplot

Vanadium, MW-6 (mg/l)



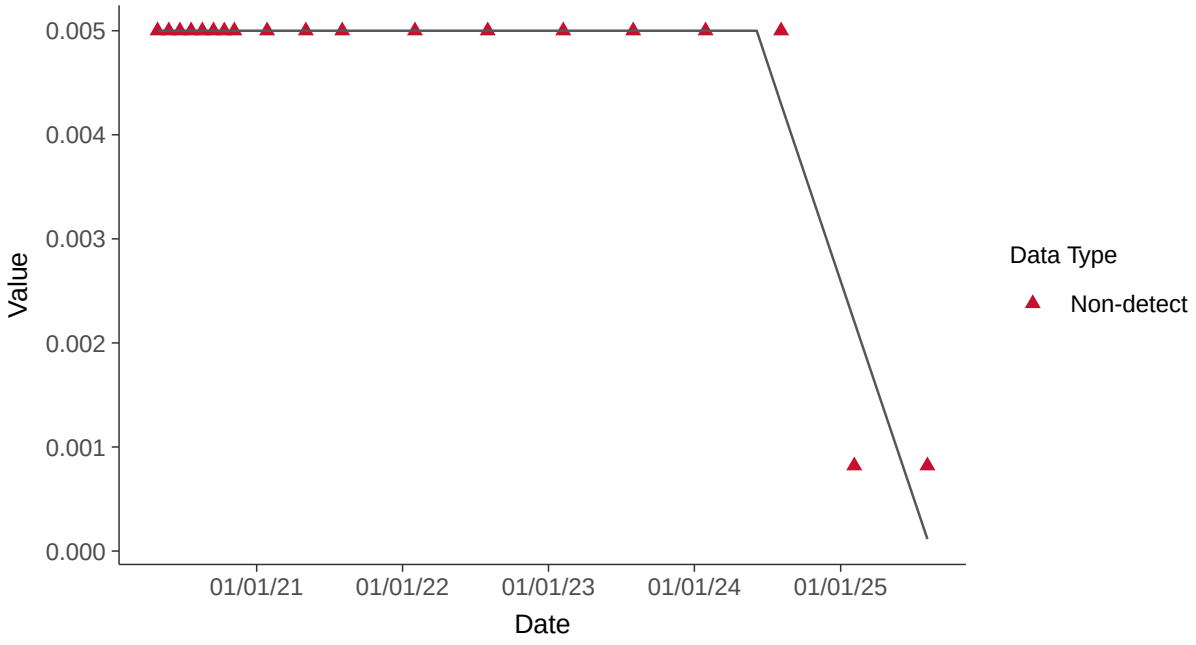
Boxplot by Season

Vanadium, MW-6 (mg/l)



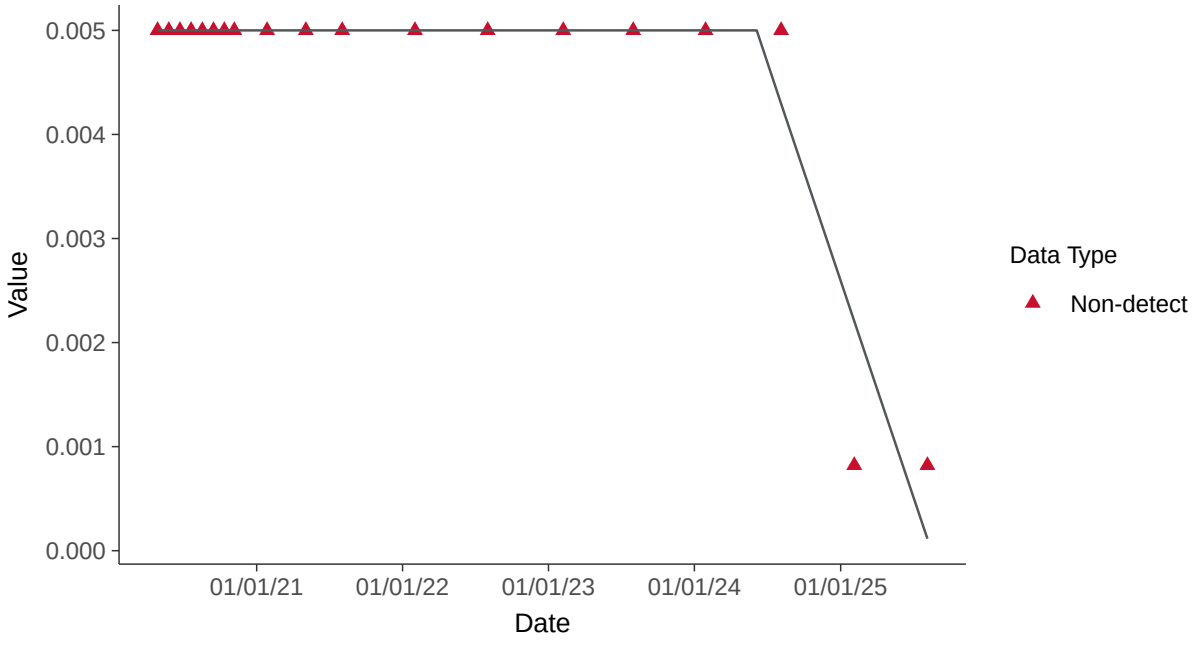
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-6 (mg/l)



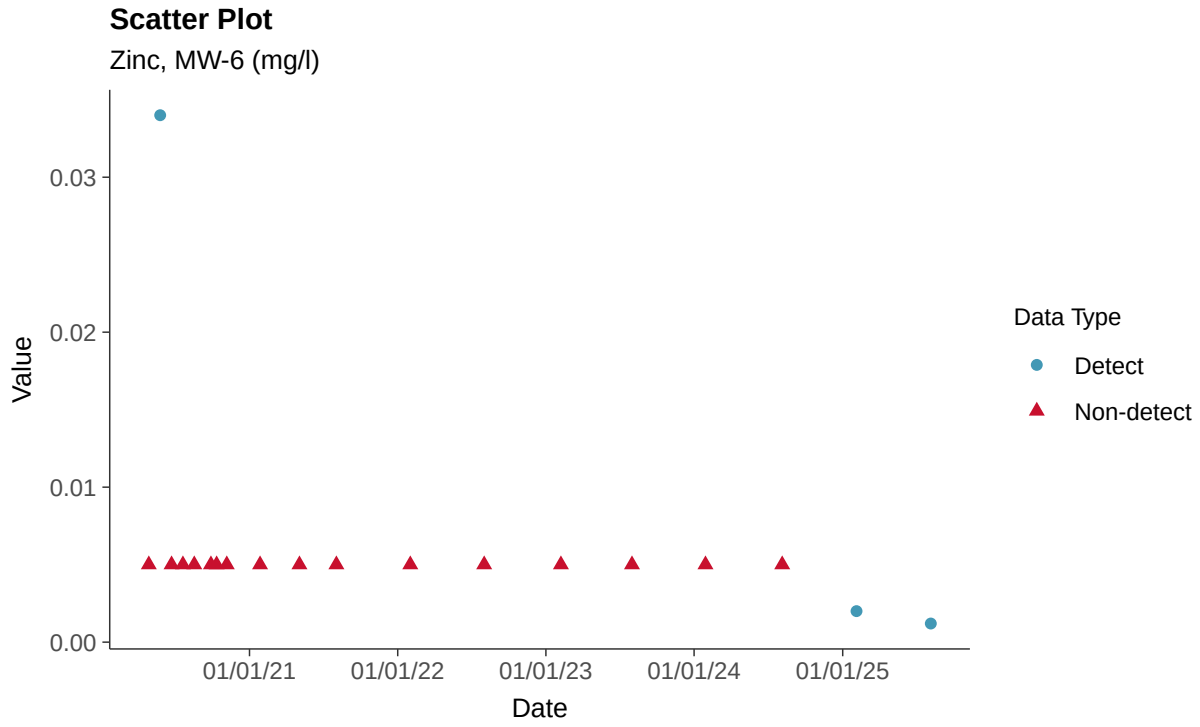
Trend Regression: Piecewise Linear-Linear-Linear

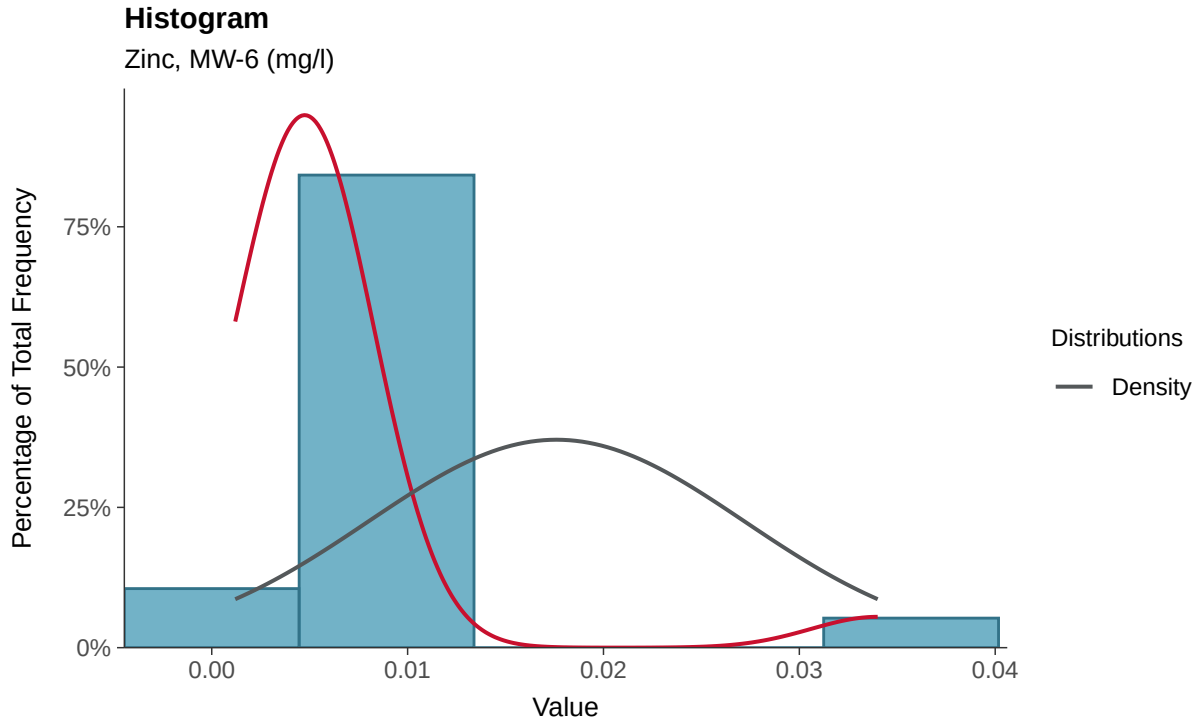
Vanadium, MW-6 (mg/l)



Part 115: Zinc, MW-6

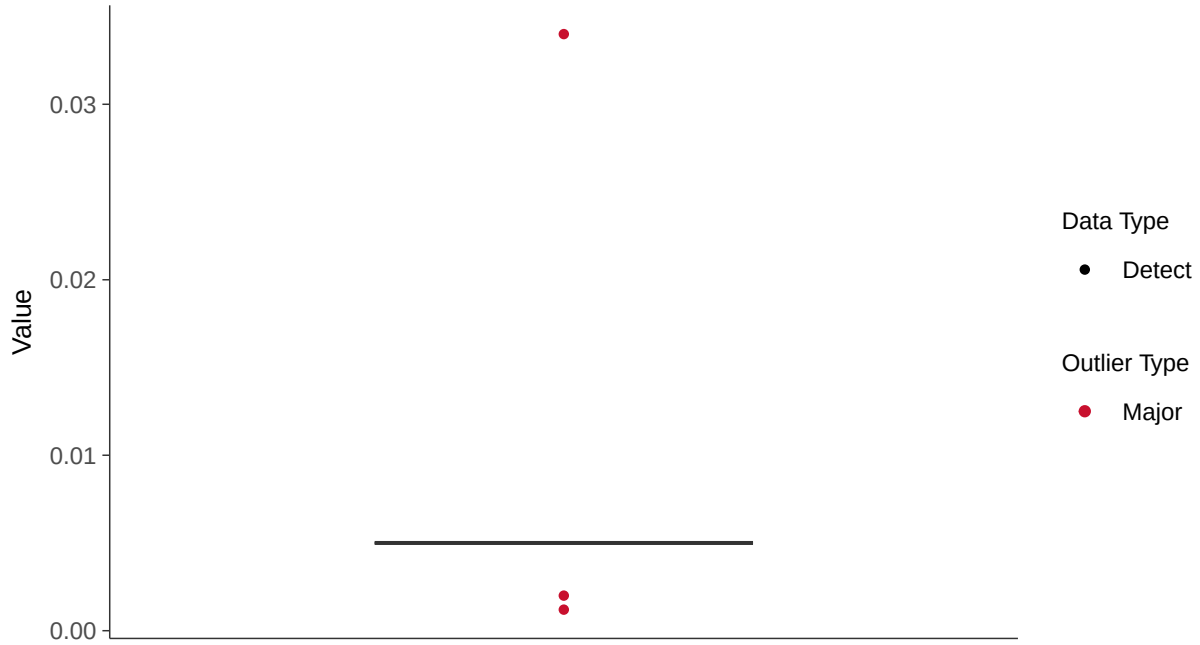
ID: 16_5_129





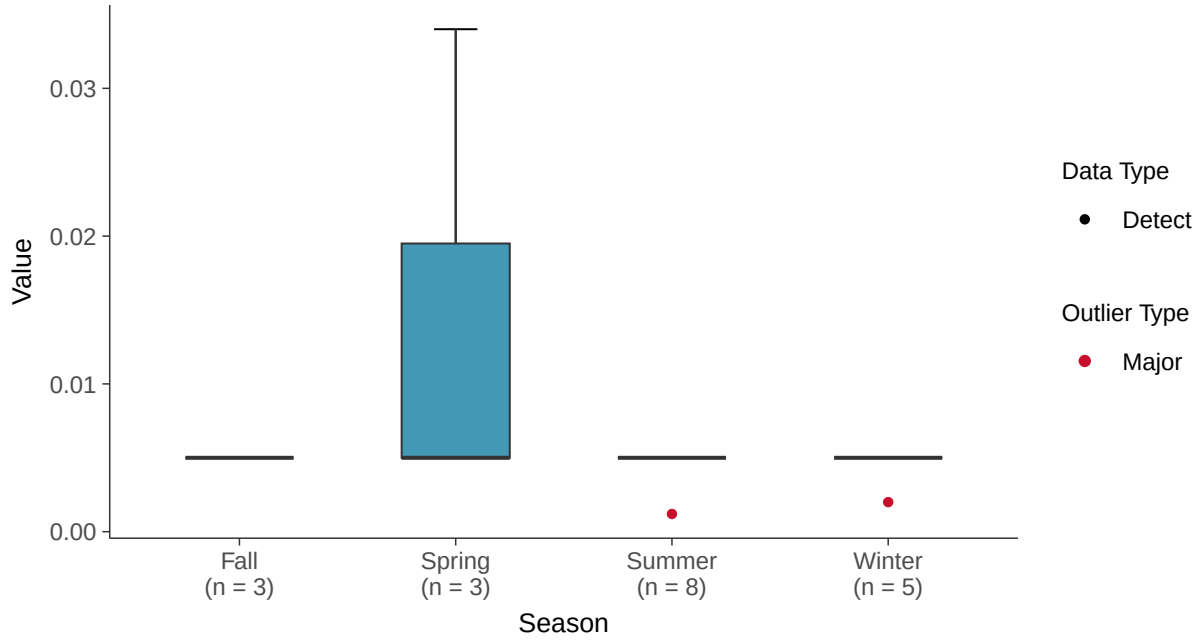
Boxplot

Zinc, MW-6 (mg/l)



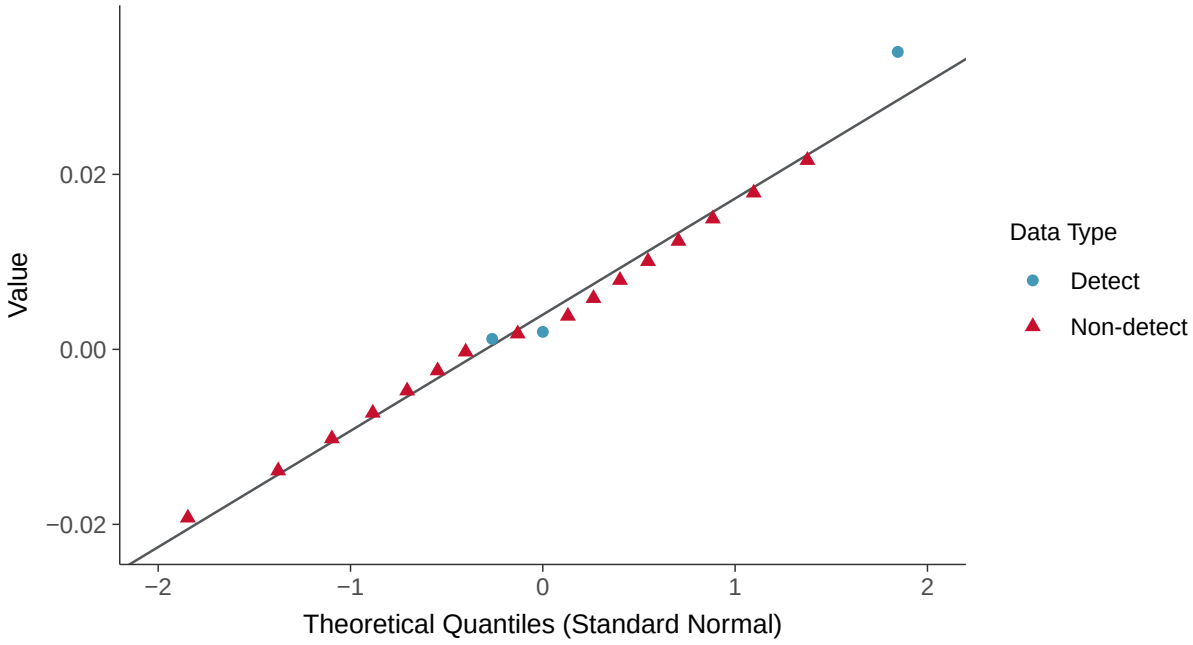
Boxplot by Season

Zinc, MW-6 (mg/l)



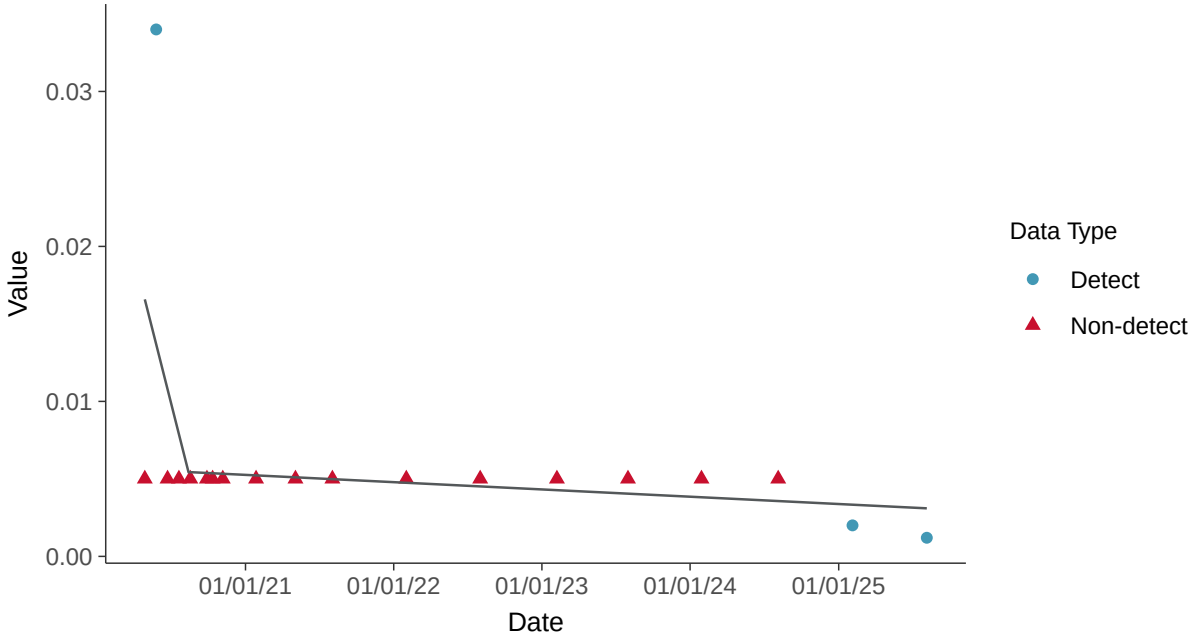
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-6 (mg/l)



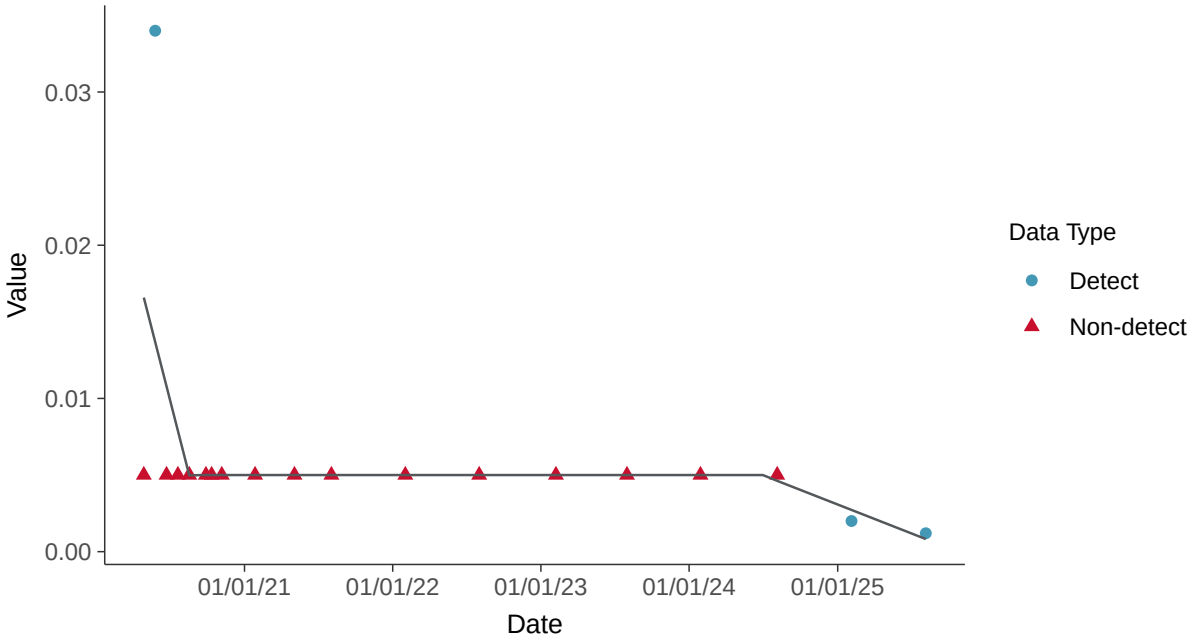
Trend Regression: Piecewise Linear-Linear

Zinc, MW-6 (mg/l)



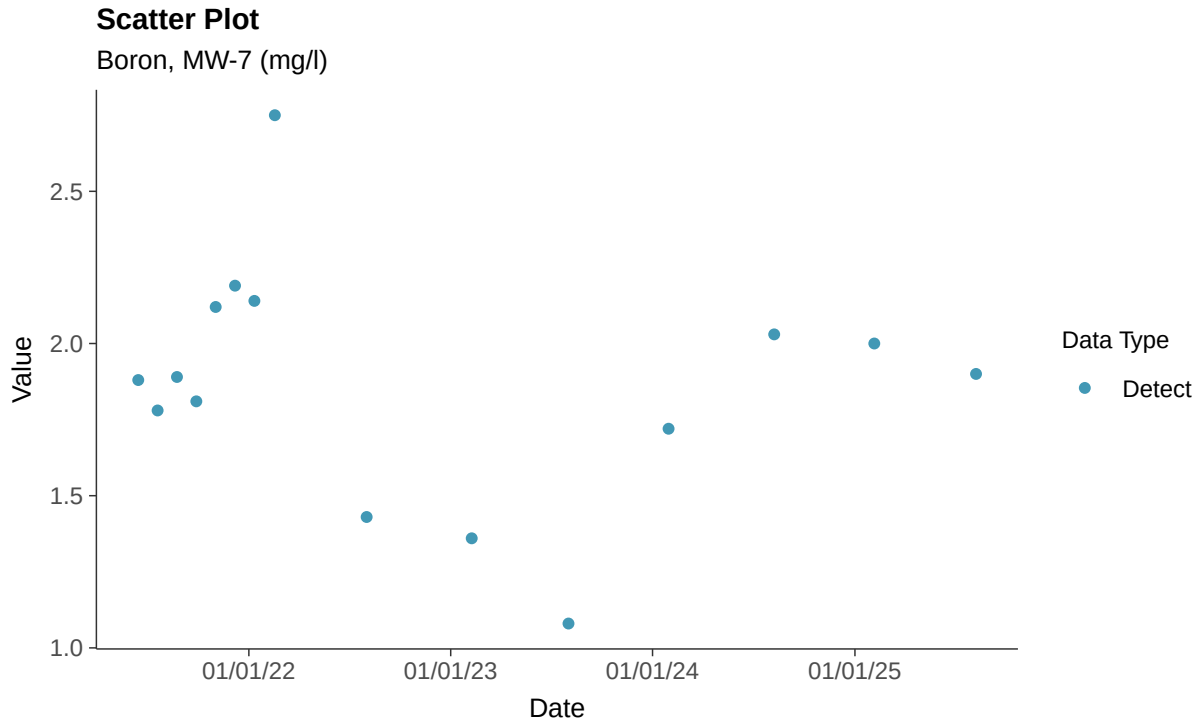
Trend Regression: Piecewise Linear-Linear-Linear

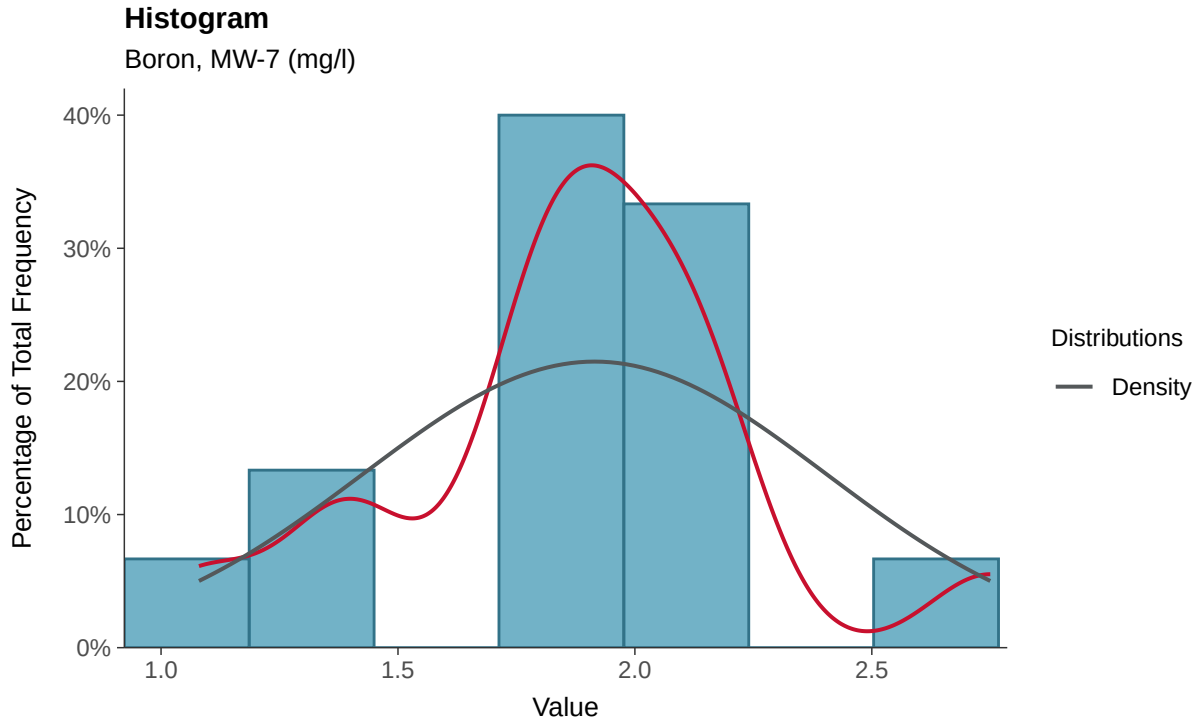
Zinc, MW-6 (mg/l)



Appendix III: Boron, MW-7

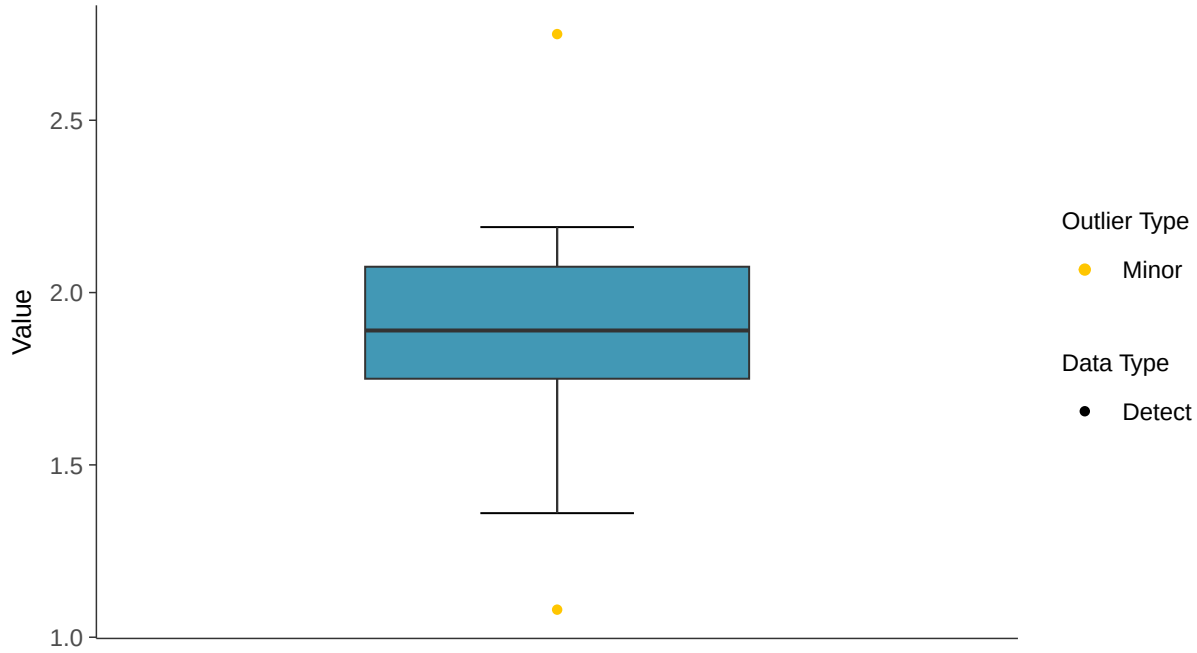
ID: 17_2_105





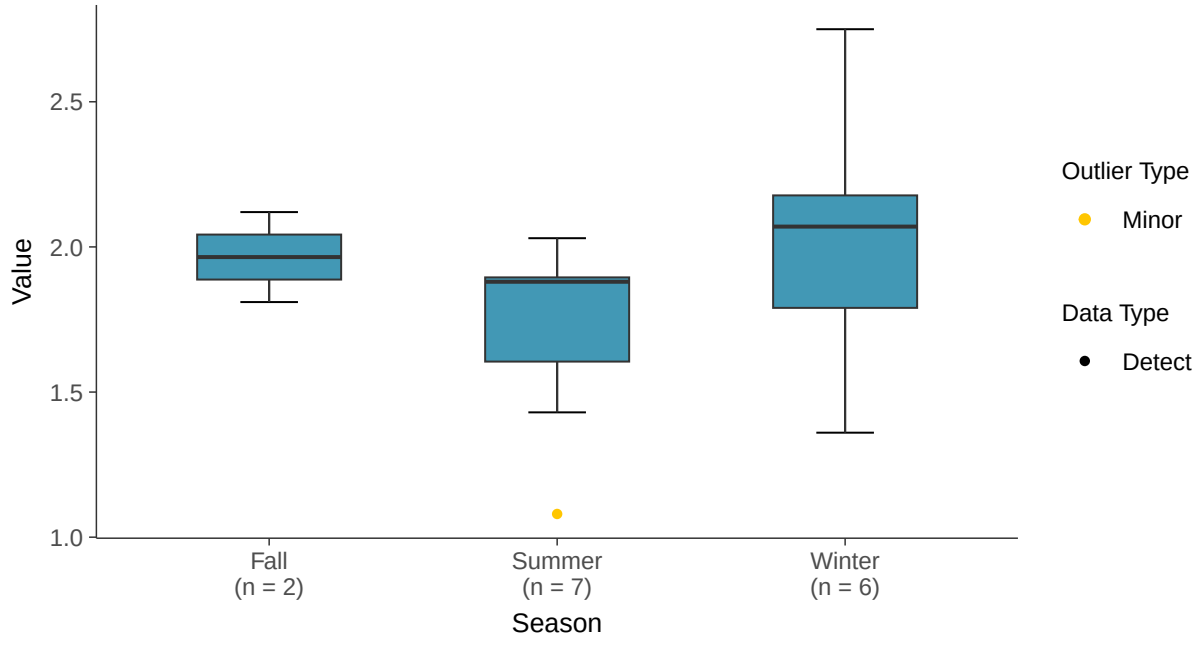
Boxplot

Boron, MW-7 (mg/l)



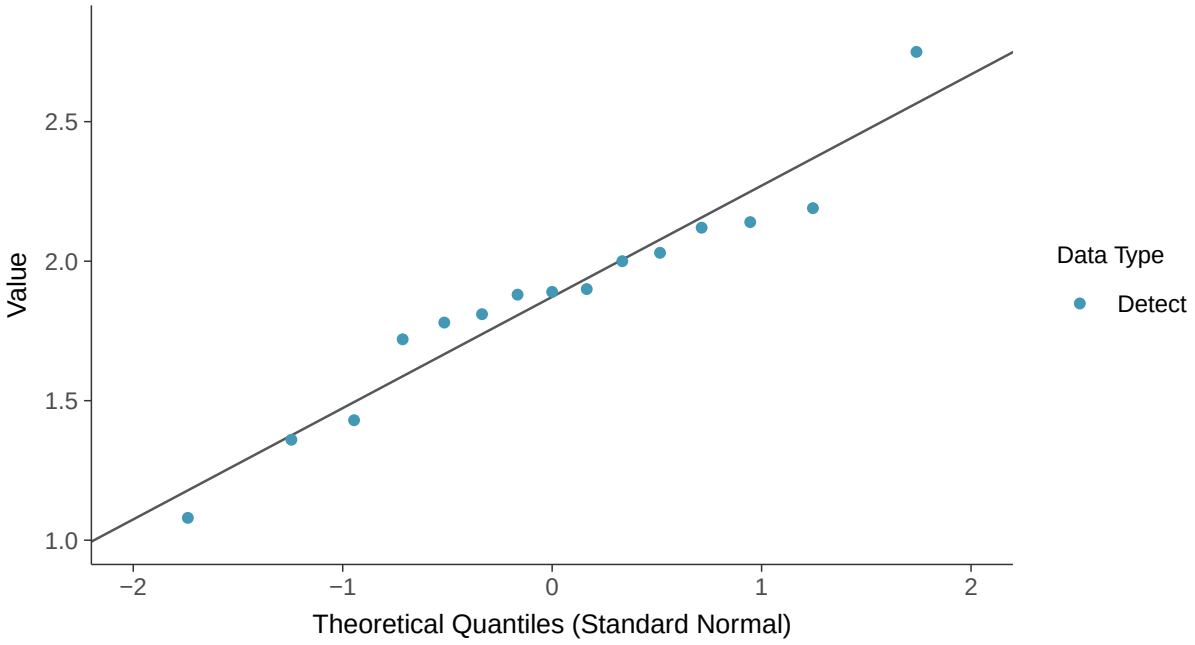
Boxplot by Season

Boron, MW-7 (mg/l)



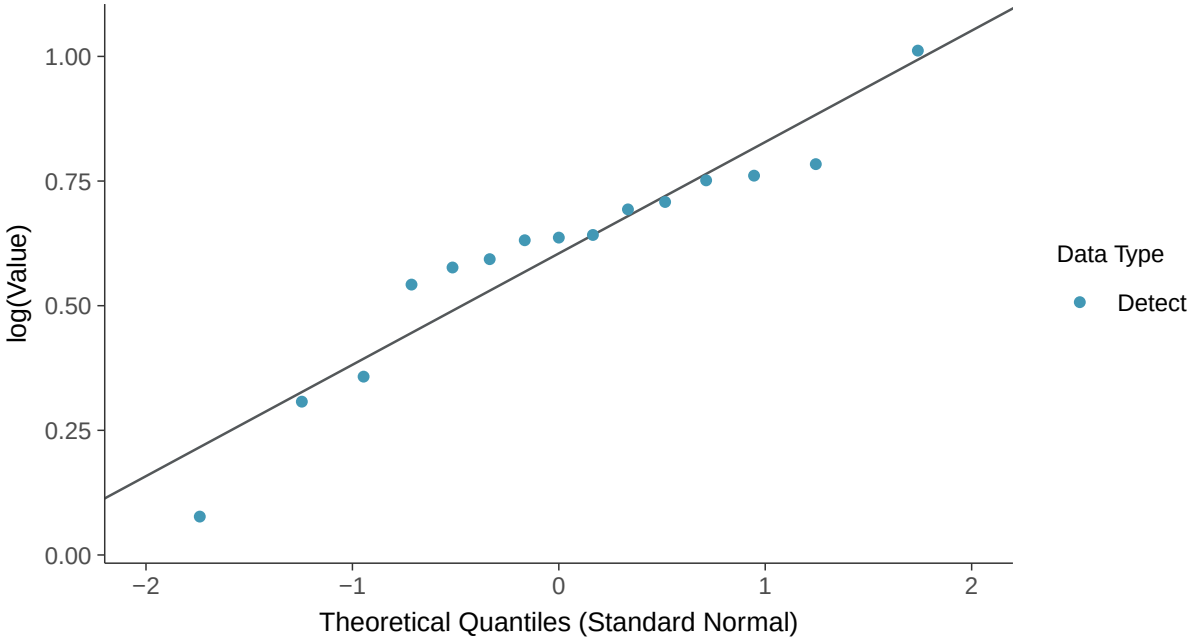
Normal Q-Q plot

Boron, MW-7 (mg/l)



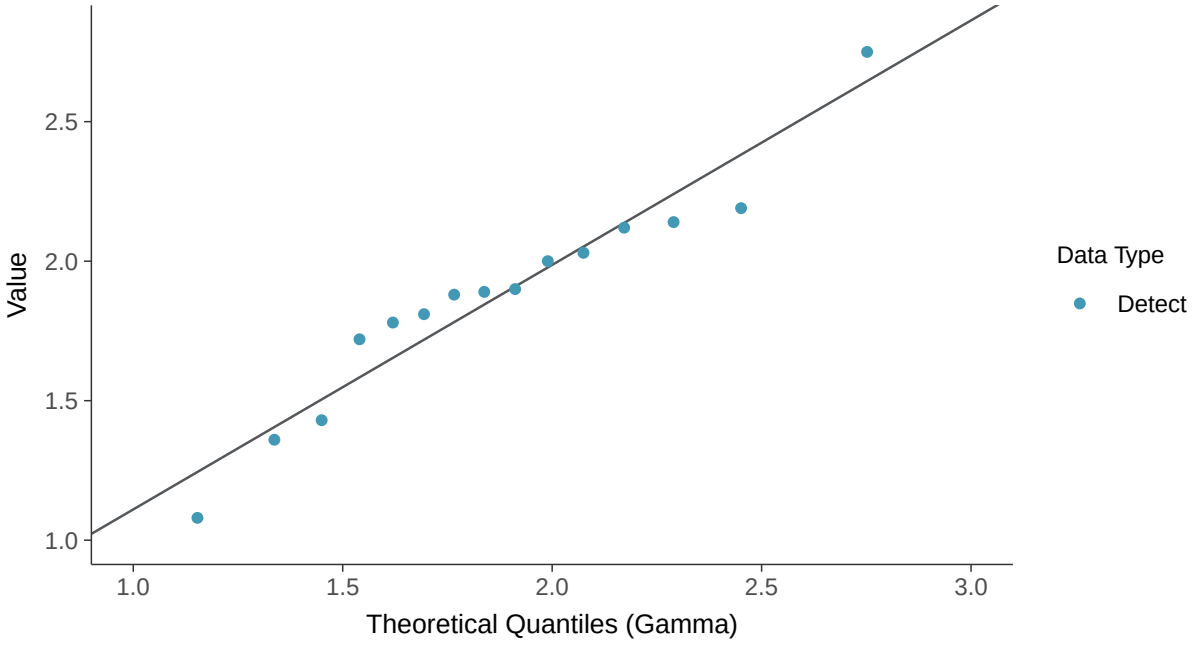
Lognormal Q-Q plot

Boron, MW-7 (mg/l)



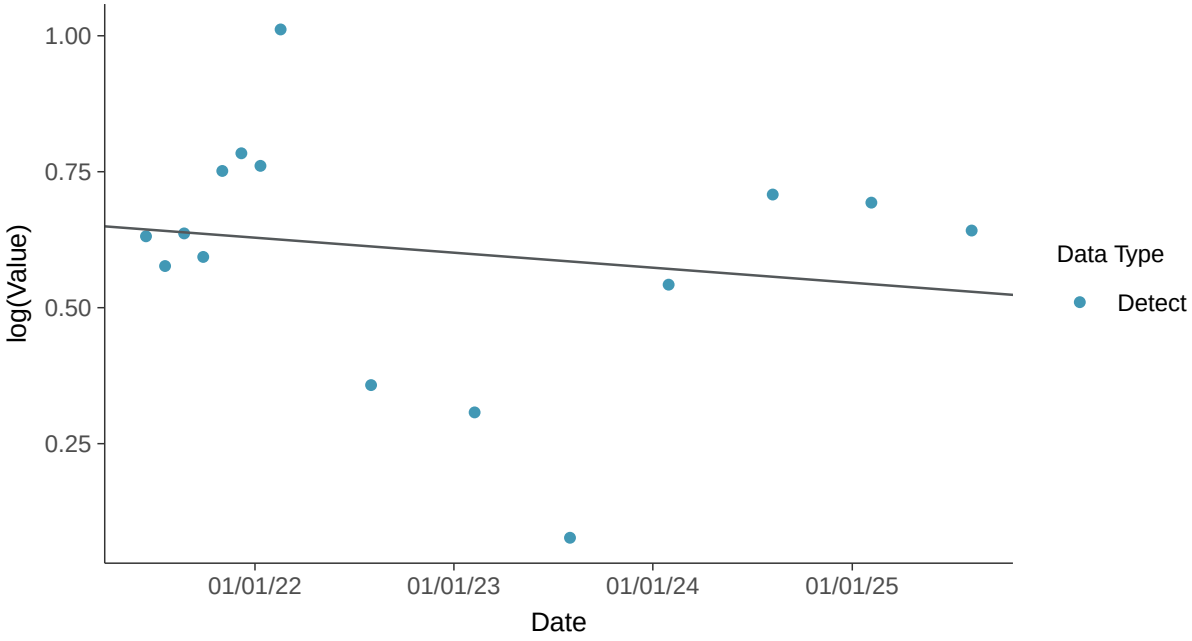
Gamma Q-Q plot

Boron, MW-7 (mg/l)



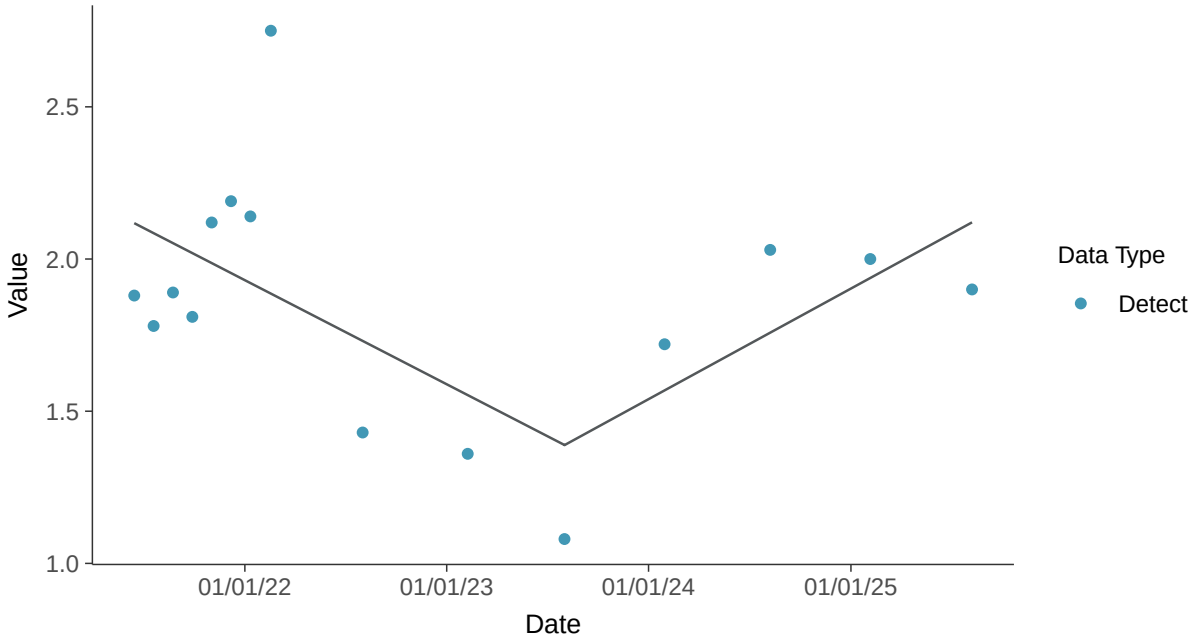
Trend Regression: Lognormal MLE

Boron, MW-7 (mg/l)



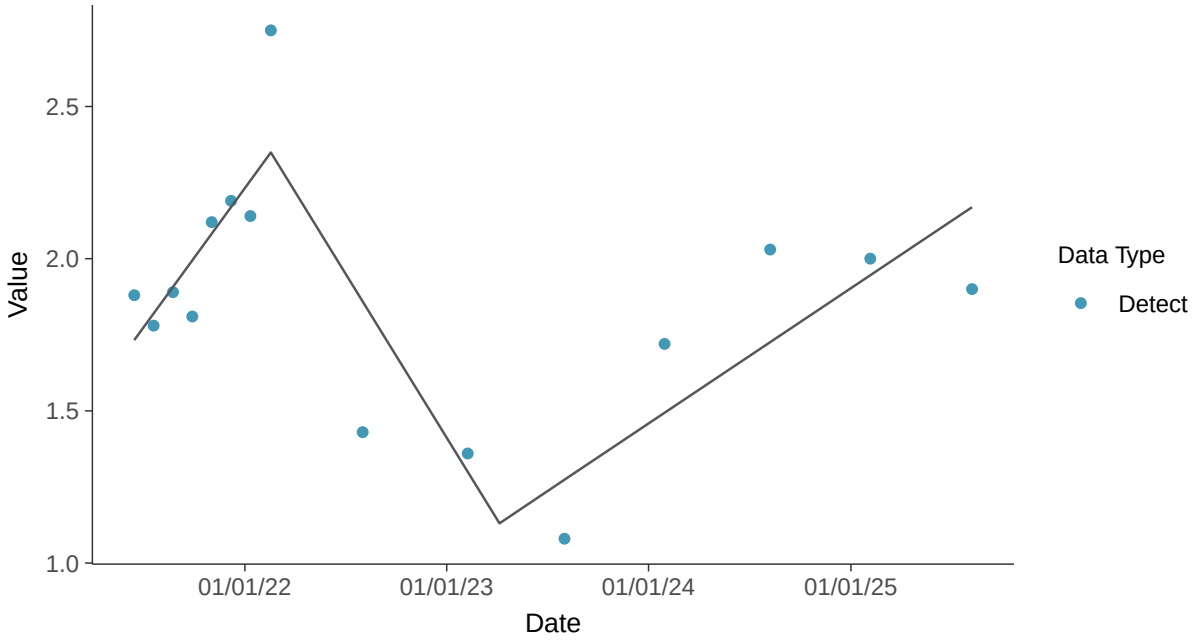
Trend Regression: Piecewise Linear-Linear

Boron, MW-7 (mg/l)



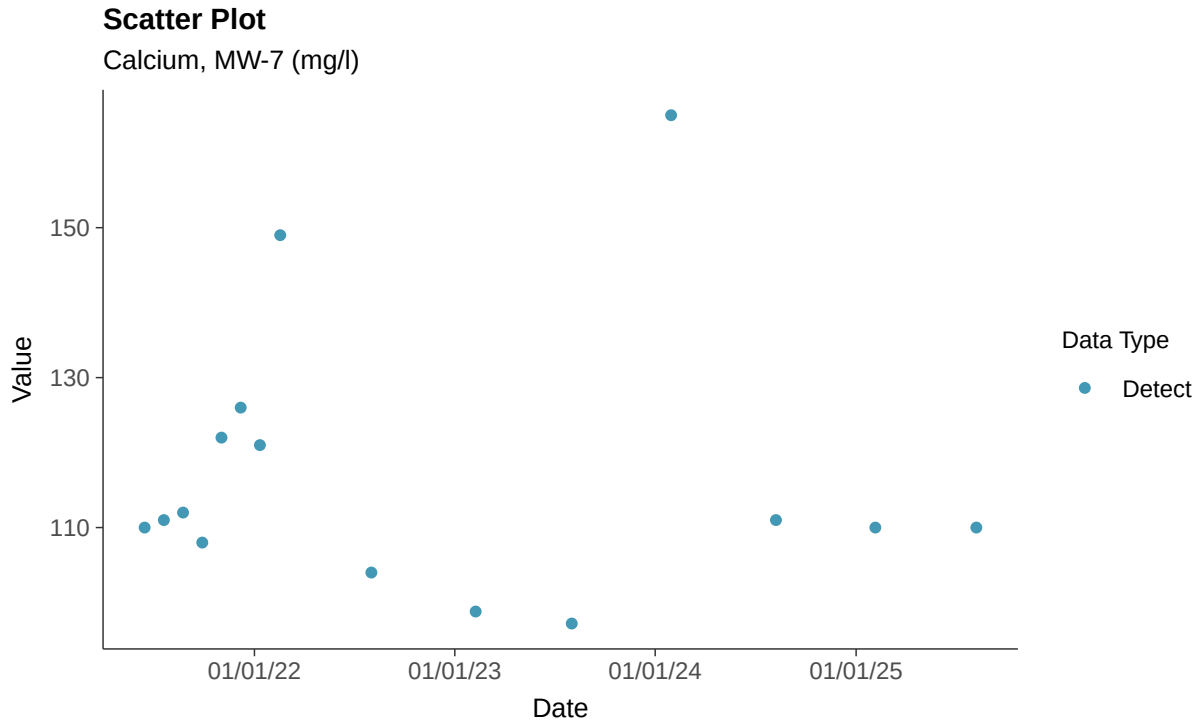
Trend Regression: Piecewise Linear-Linear-Linear

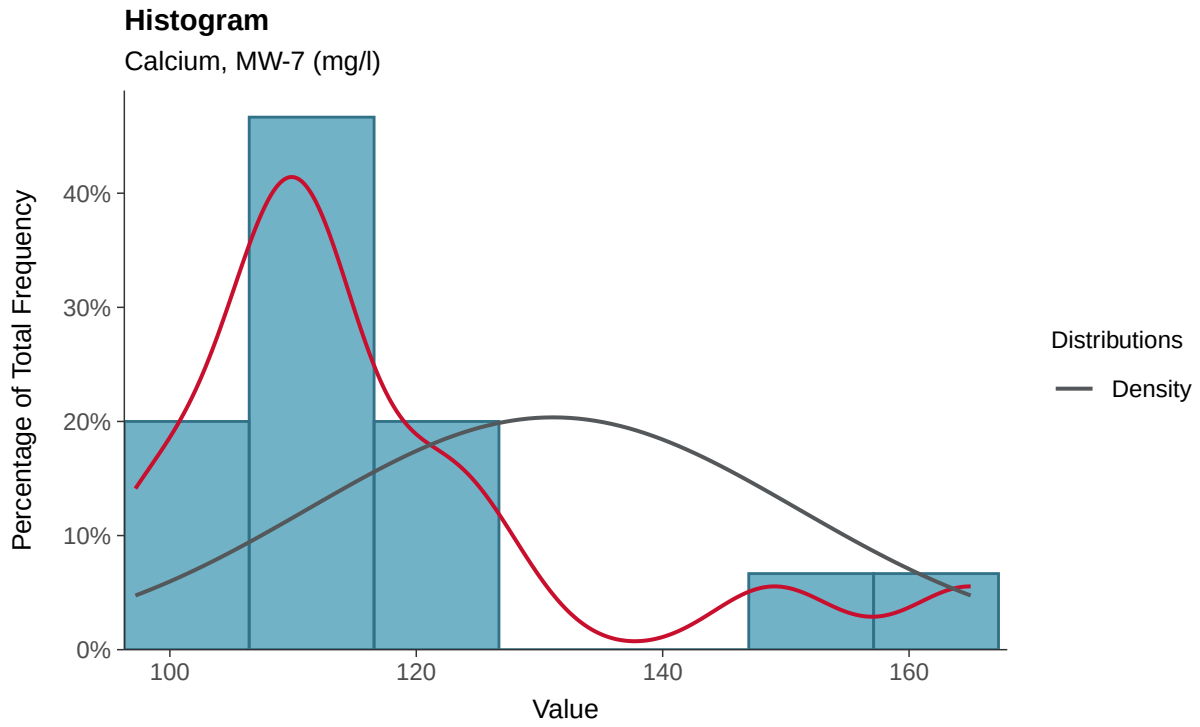
Boron, MW-7 (mg/l)



Appendix III: Calcium, MW-7

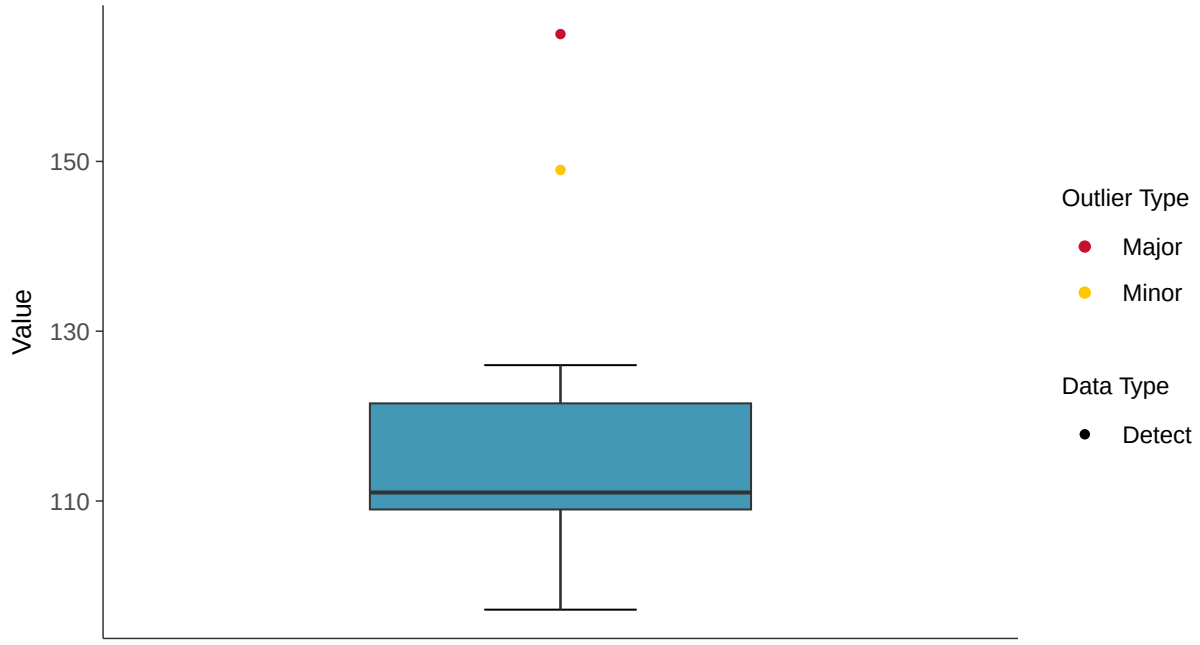
ID: 17_2_107





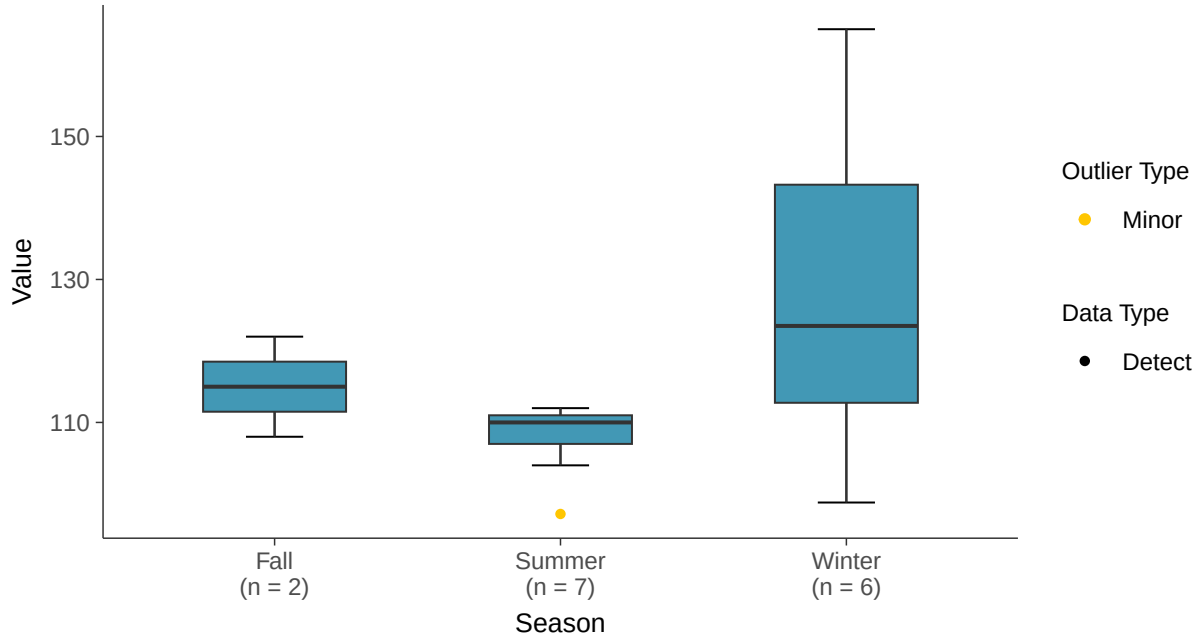
Boxplot

Calcium, MW-7 (mg/l)



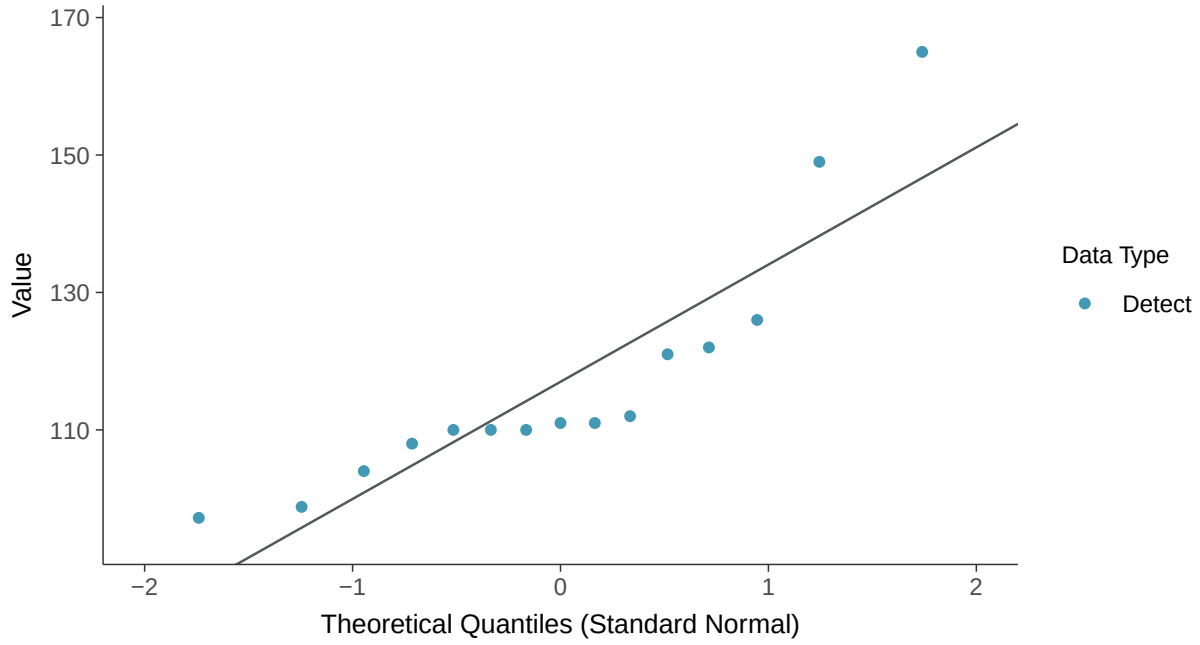
Boxplot by Season

Calcium, MW-7 (mg/l)



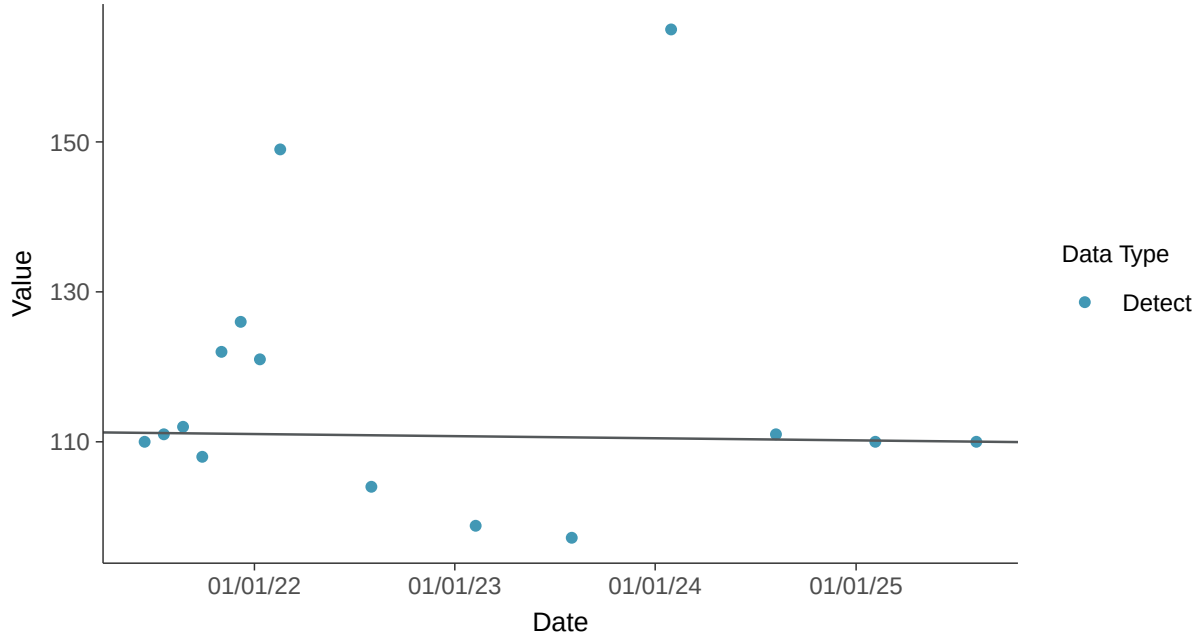
Normal Q-Q plot

Calcium, MW-7 (mg/l)



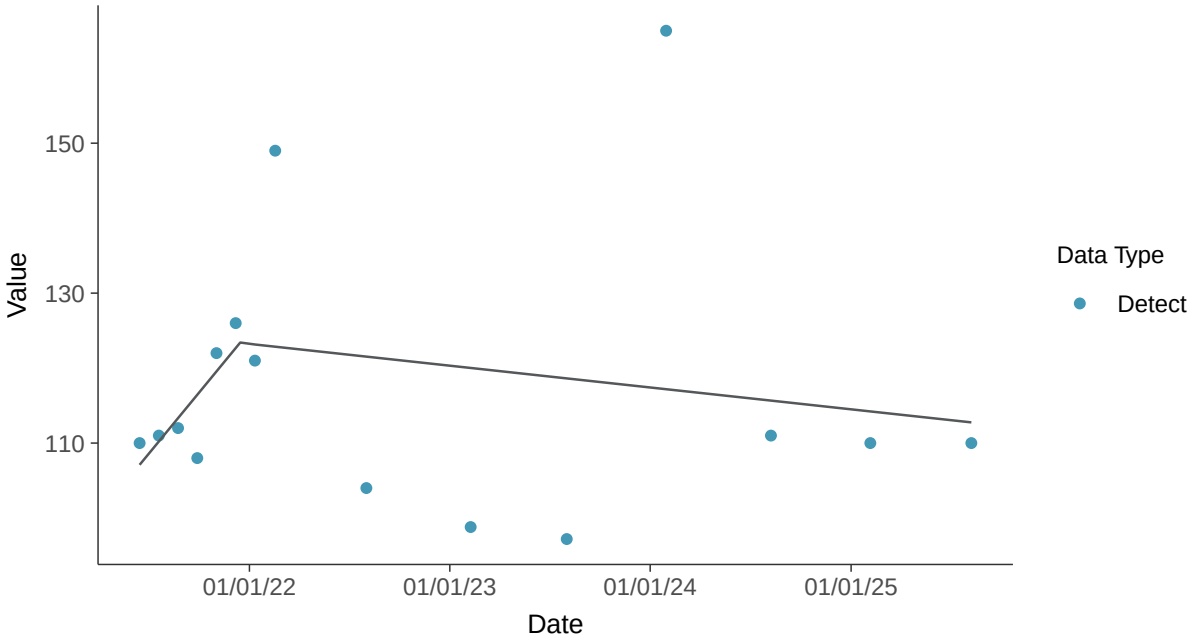
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Calcium, MW-7 (mg/l)



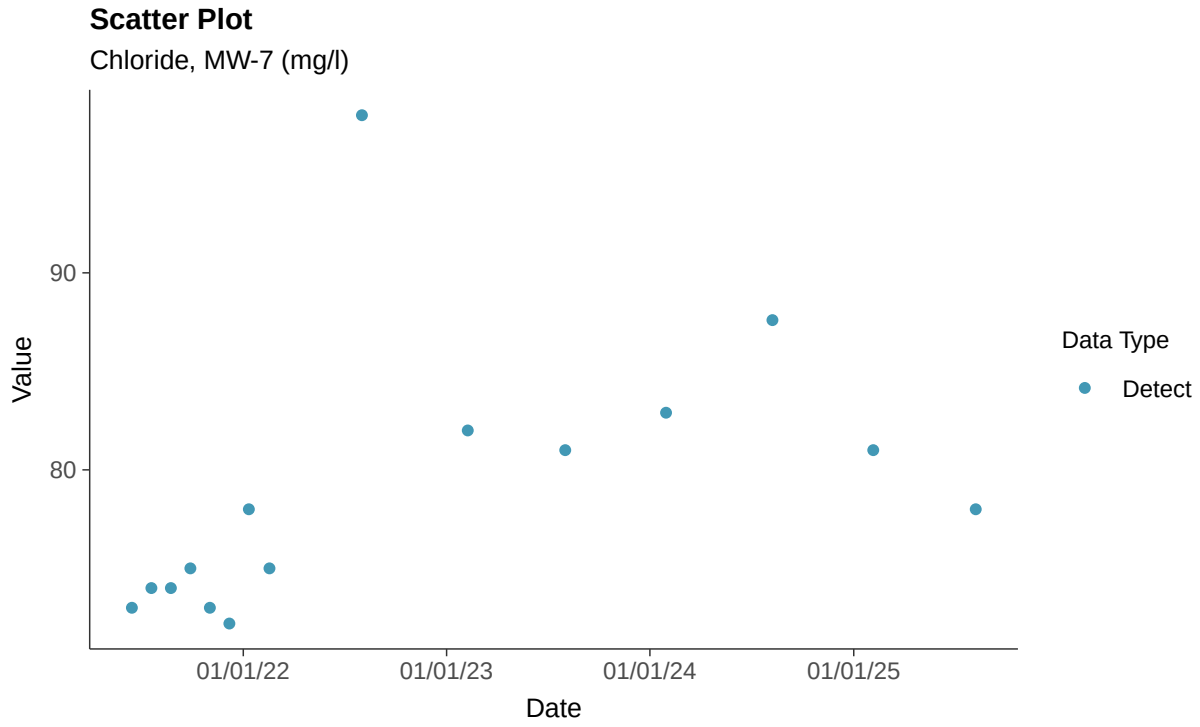
Trend Regression: Piecewise Linear-Linear

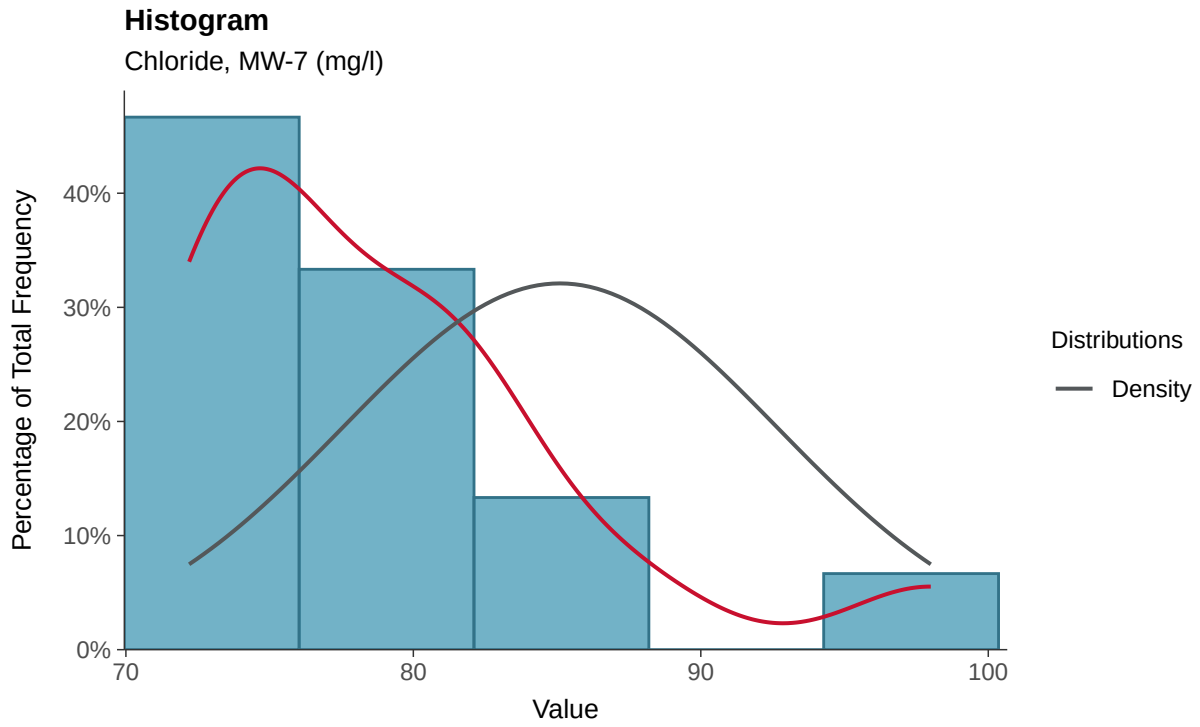
Calcium, MW-7 (mg/l)



Appendix III: Chloride, MW-7

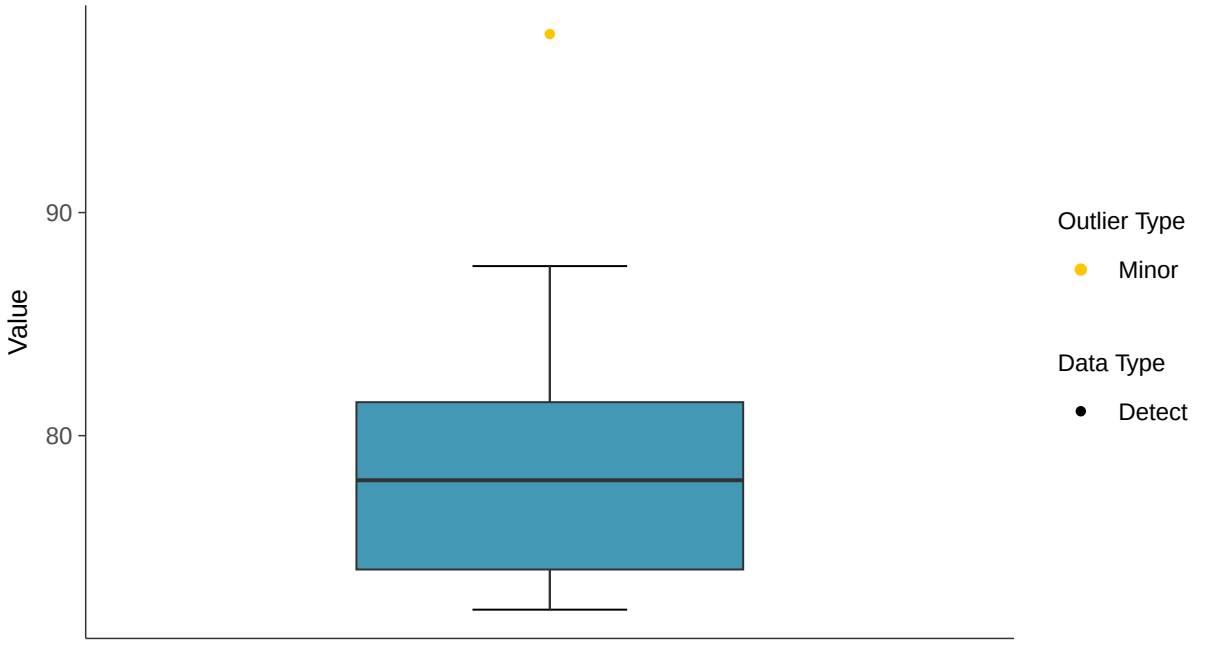
ID: 17_2_108





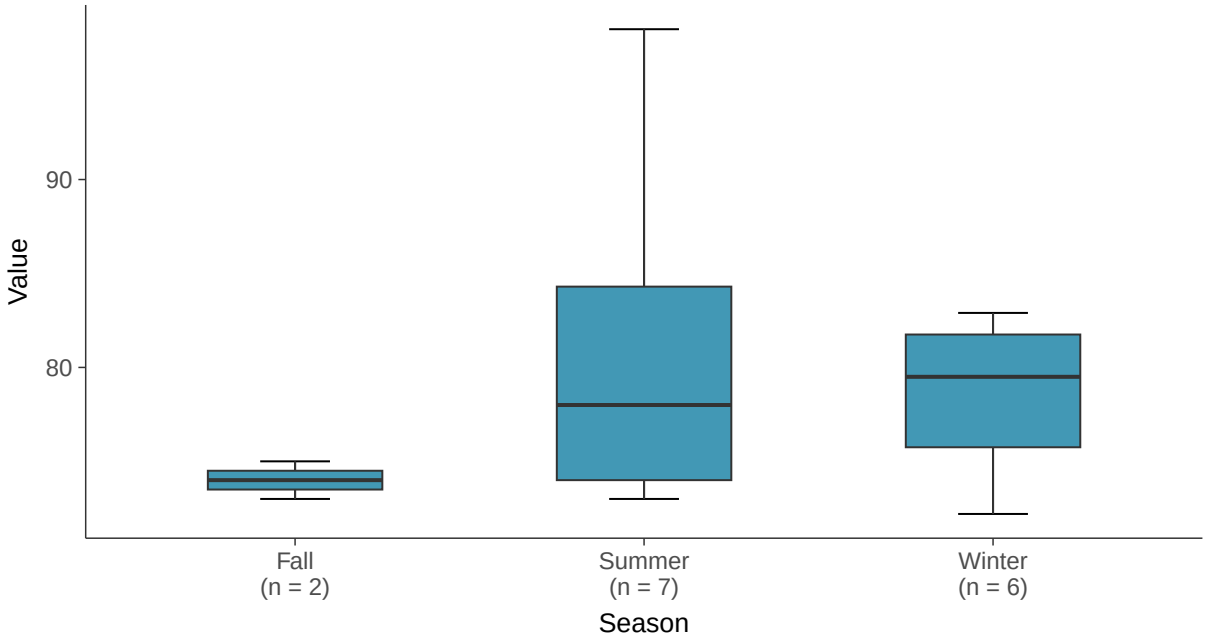
Boxplot

Chloride, MW-7 (mg/l)



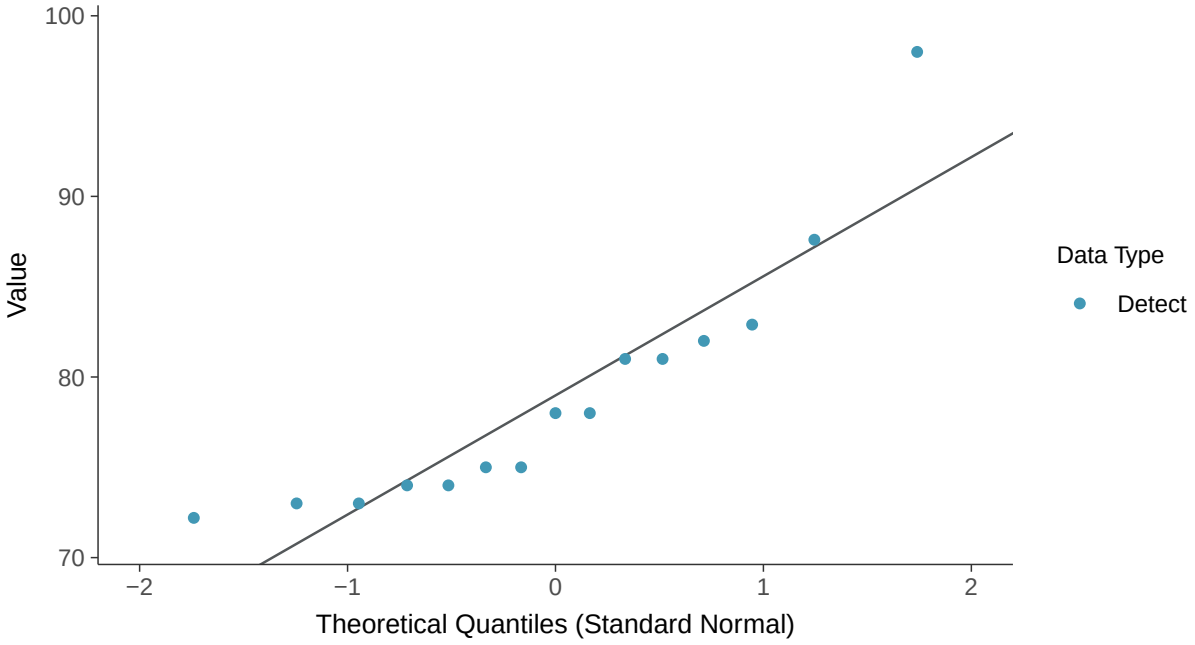
Boxplot by Season

Chloride, MW-7 (mg/l)



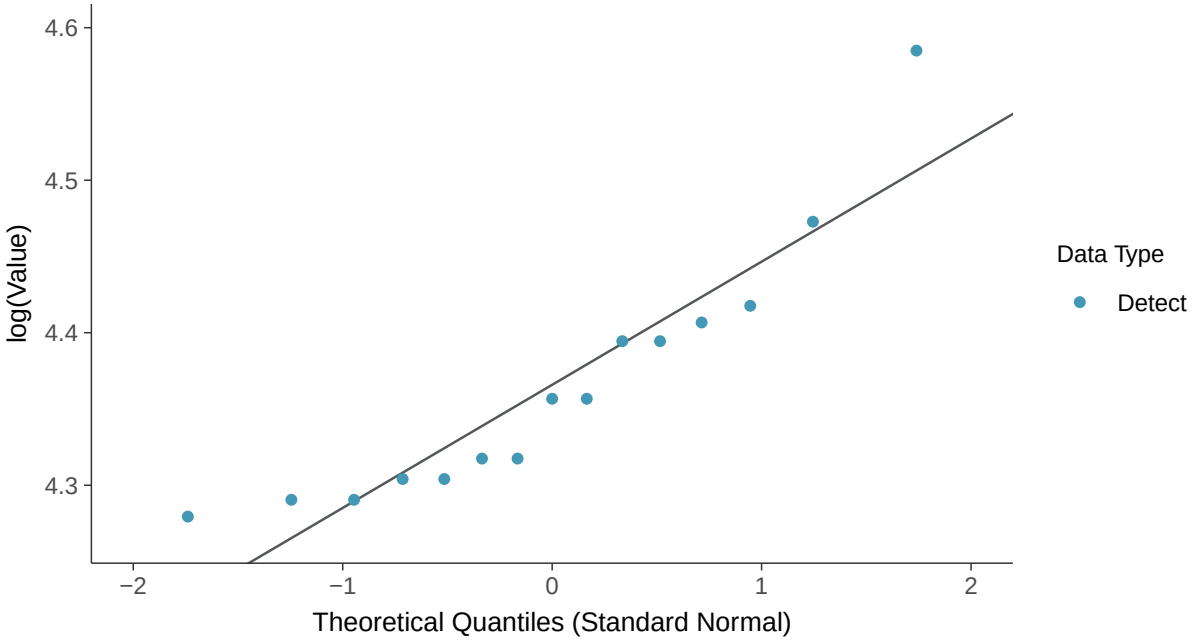
Normal Q-Q plot

Chloride, MW-7 (mg/l)



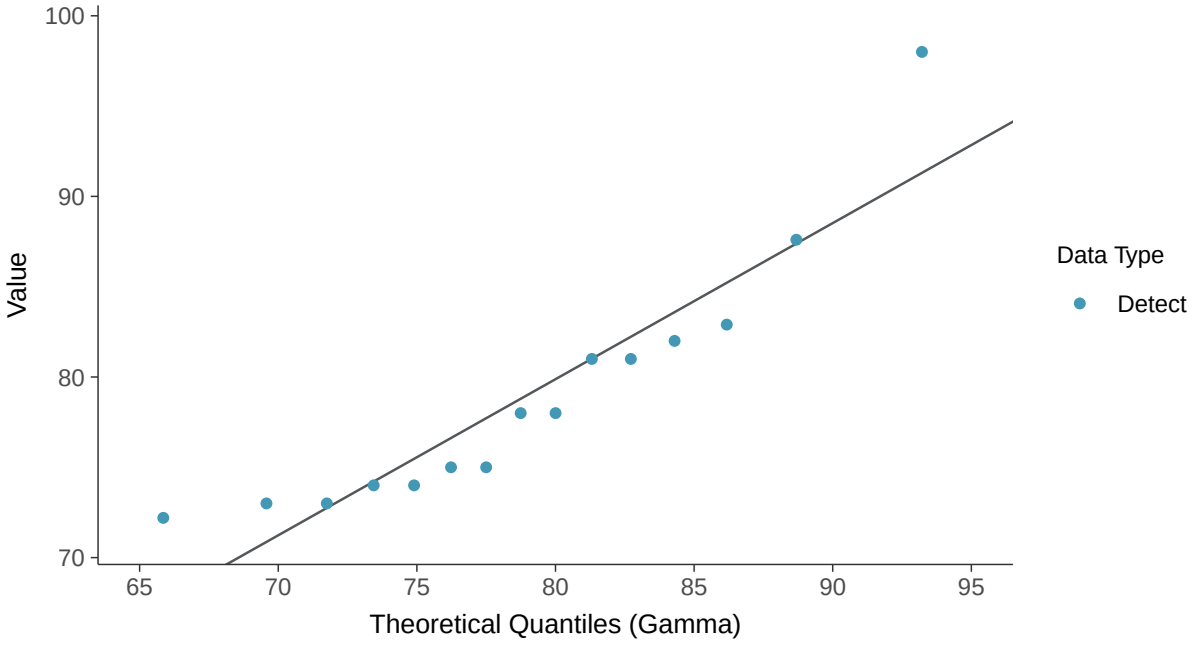
Lognormal Q-Q plot

Chloride, MW-7 (mg/l)



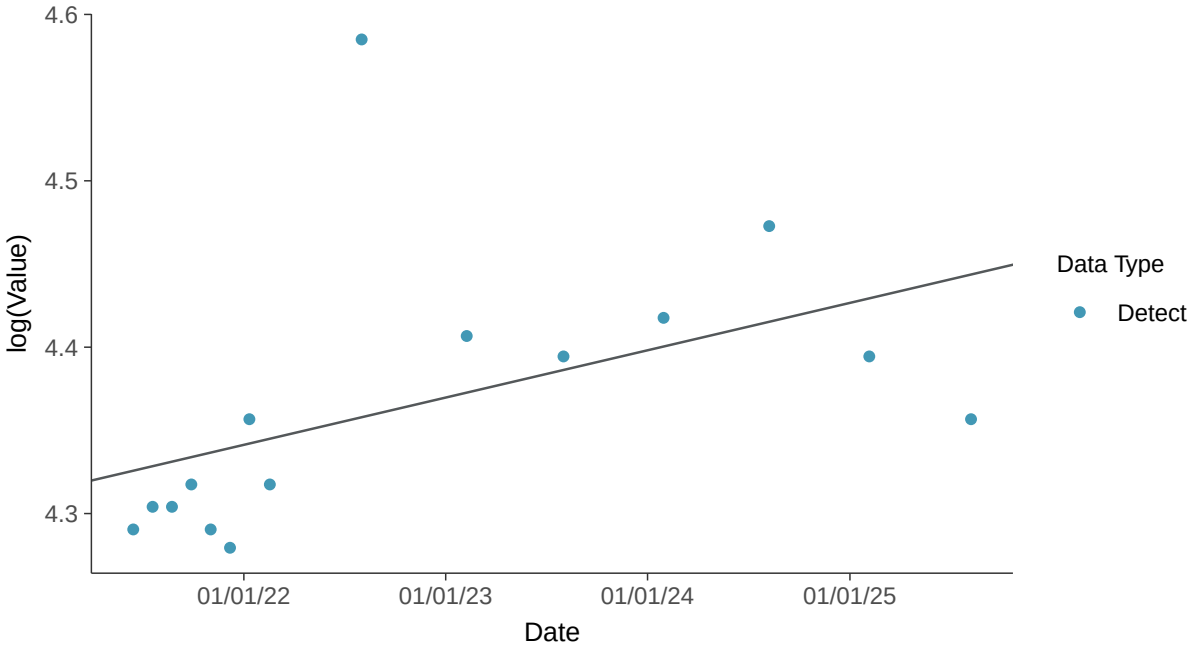
Gamma Q-Q plot

Chloride, MW-7 (mg/l)



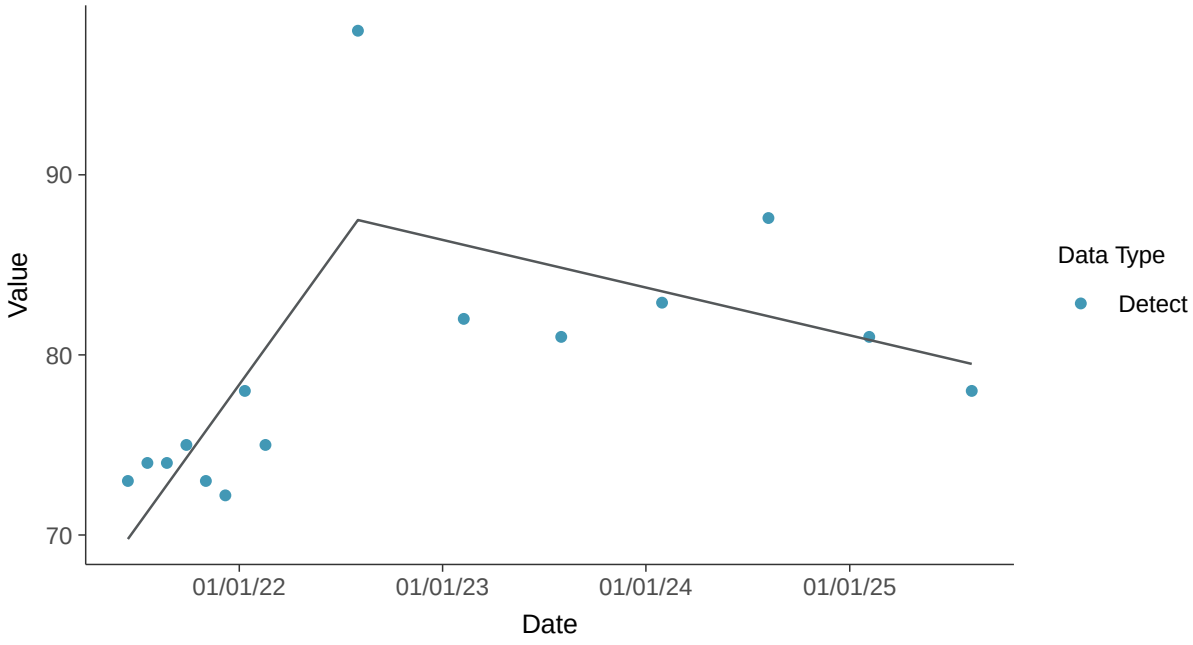
Trend Regression: Lognormal MLE

Chloride, MW-7 (mg/l)



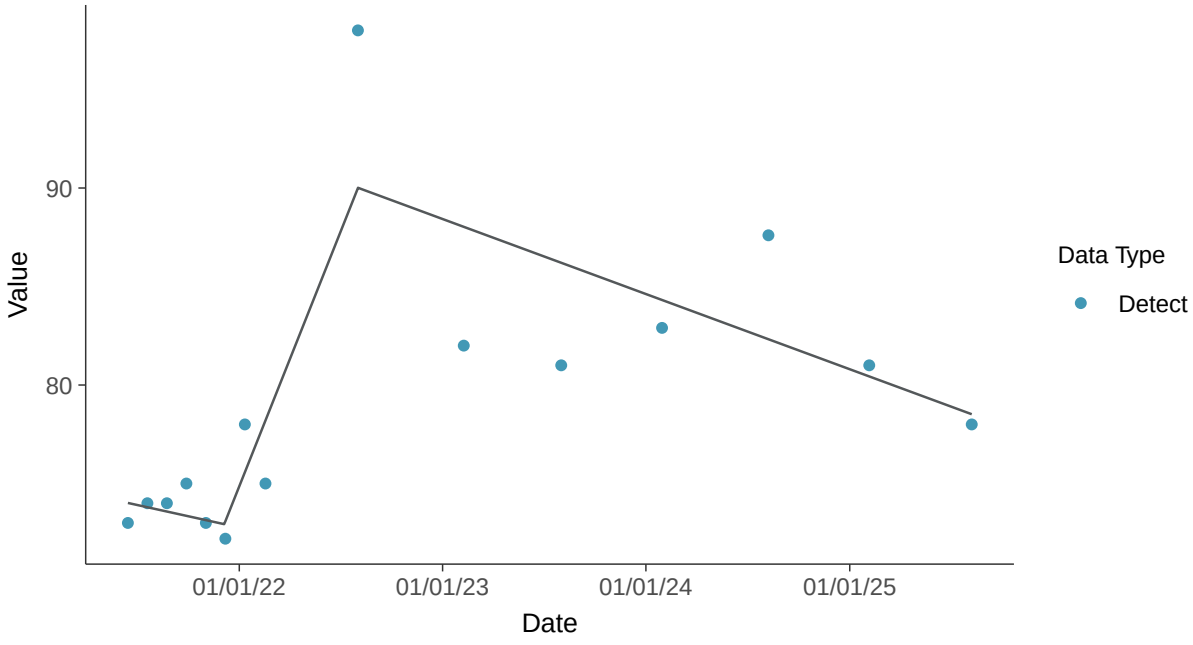
Trend Regression: Piecewise Linear-Linear

Chloride, MW-7 (mg/l)



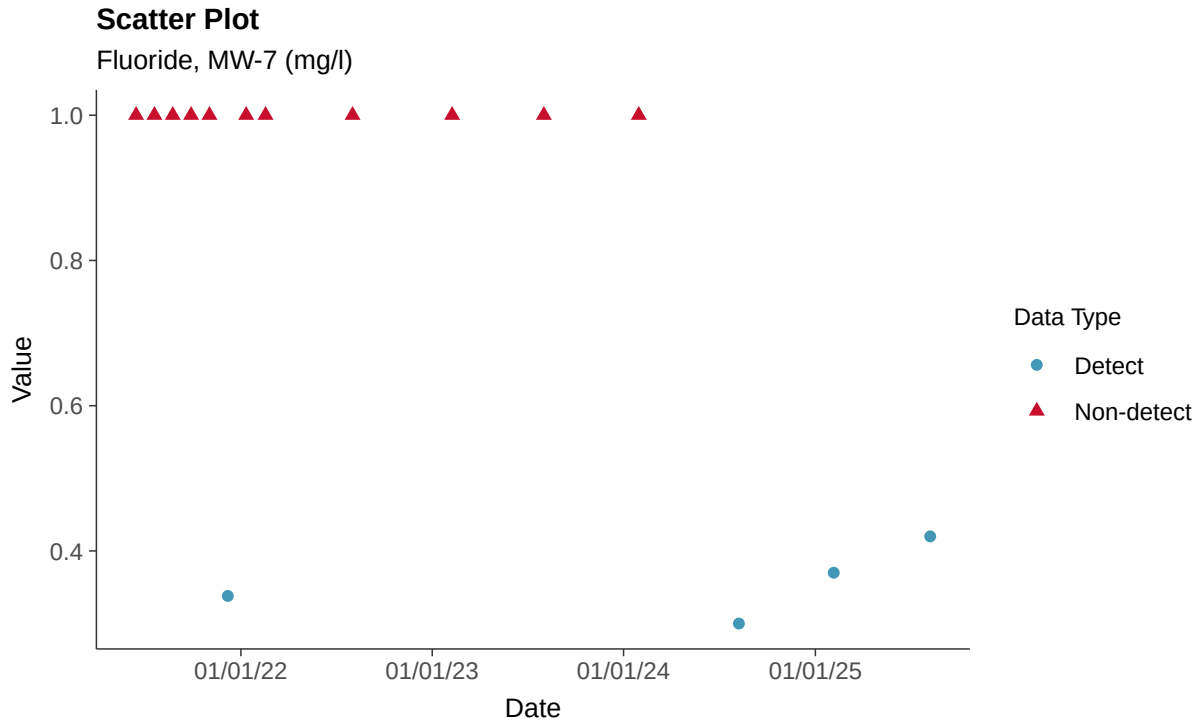
Trend Regression: Piecewise Linear-Linear-Linear

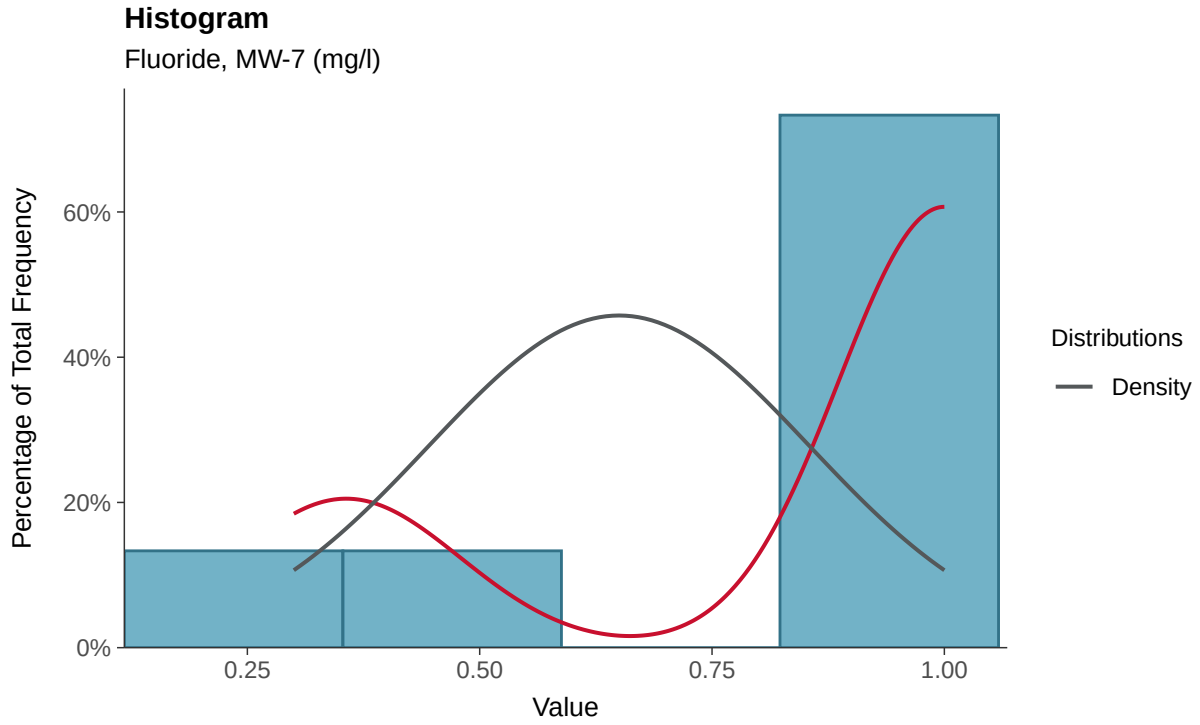
Chloride, MW-7 (mg/l)



Appendix III: Fluoride, MW-7

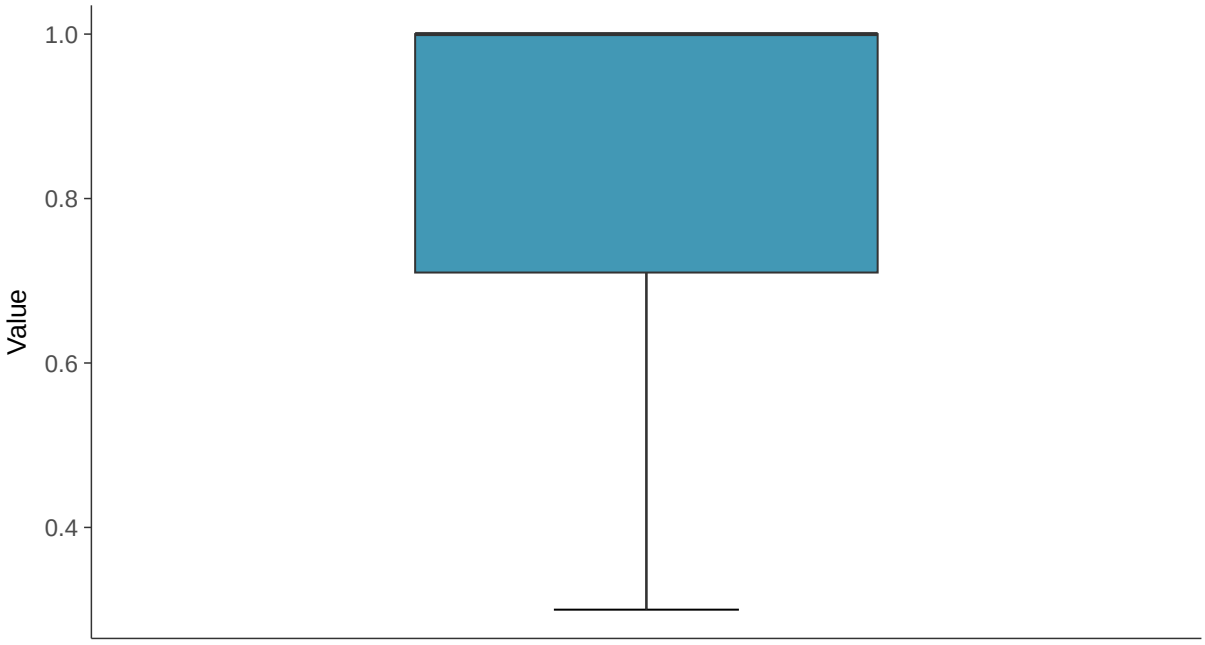
ID: 17_2_112





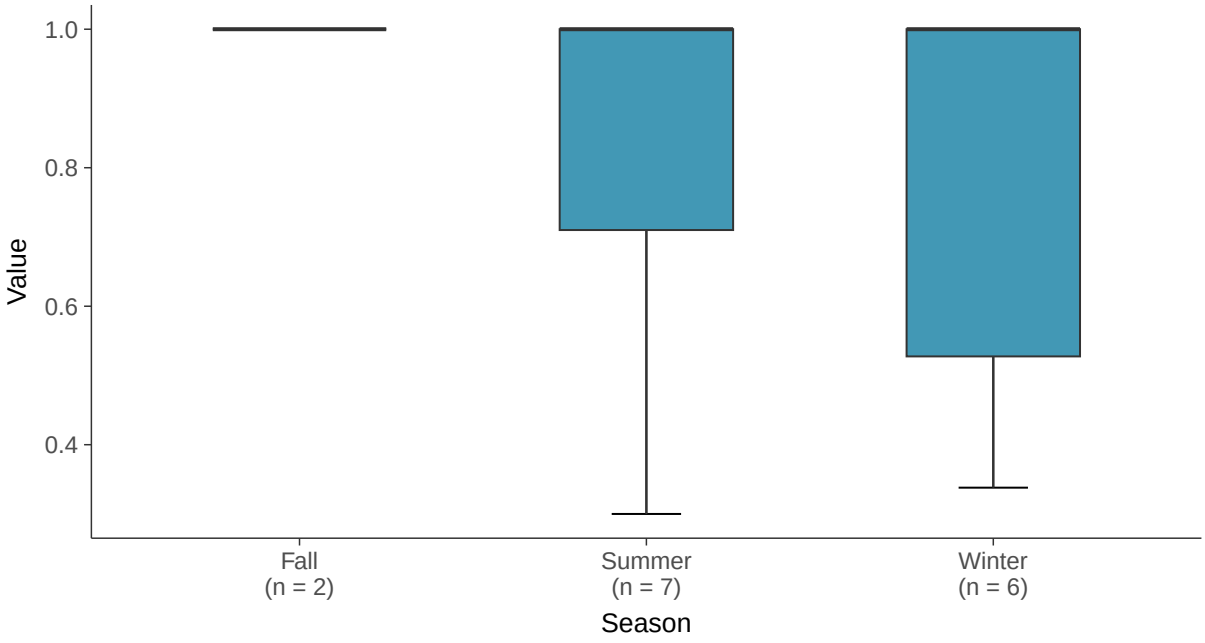
Boxplot

Fluoride, MW-7 (mg/l)



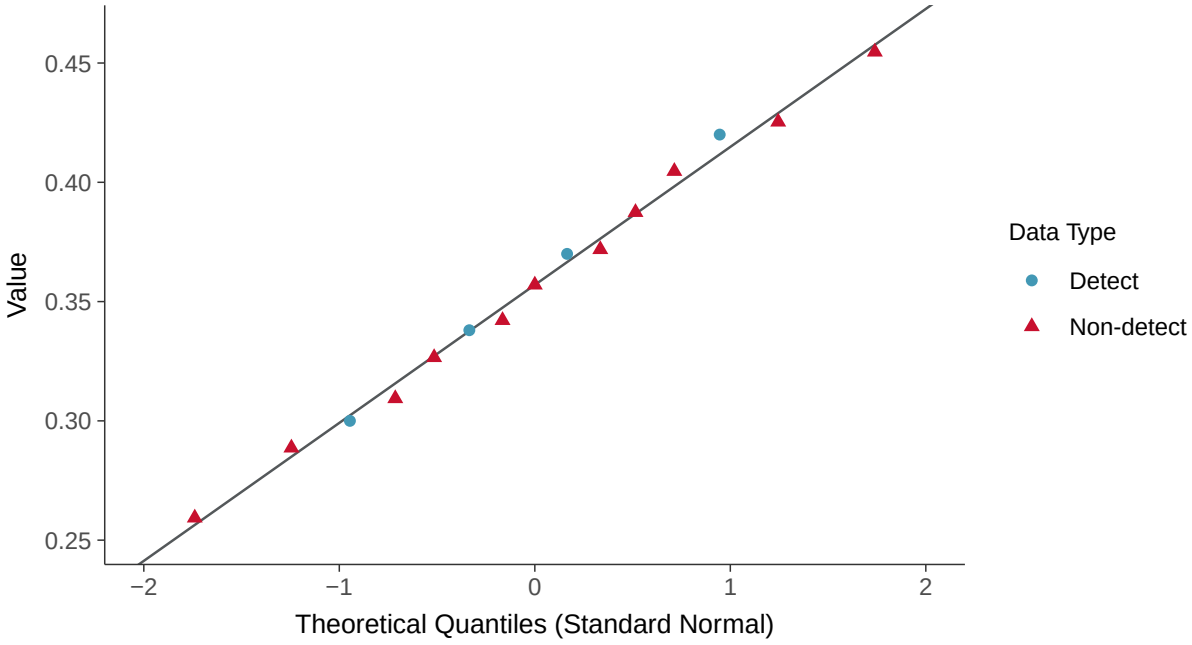
Boxplot by Season

Fluoride, MW-7 (mg/l)



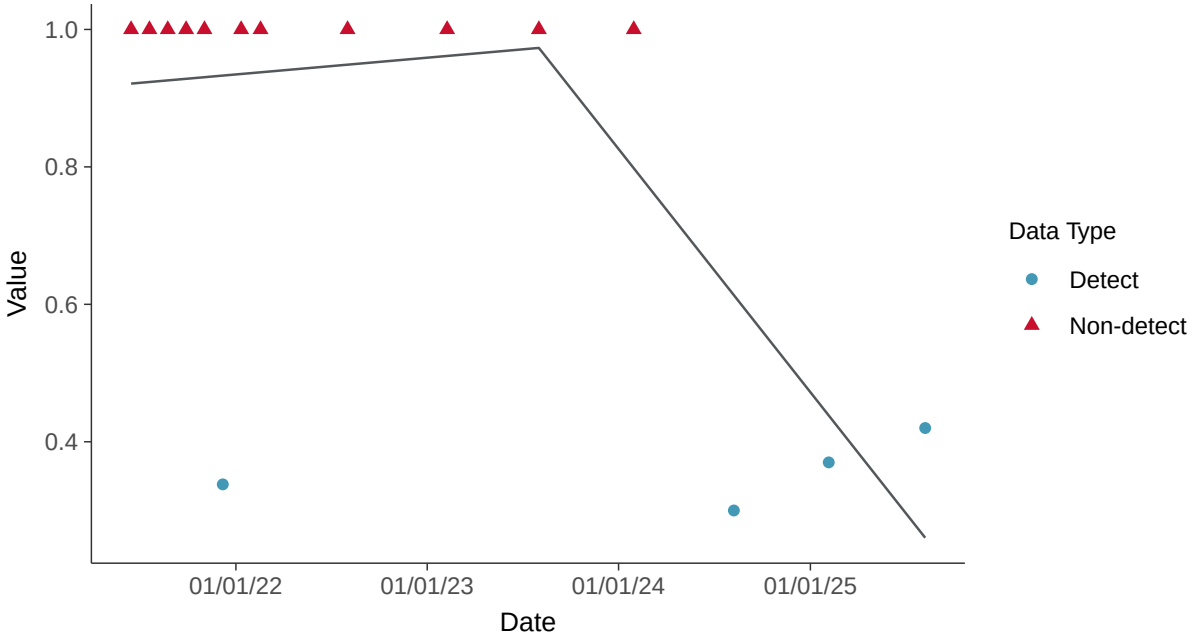
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-7 (mg/l)



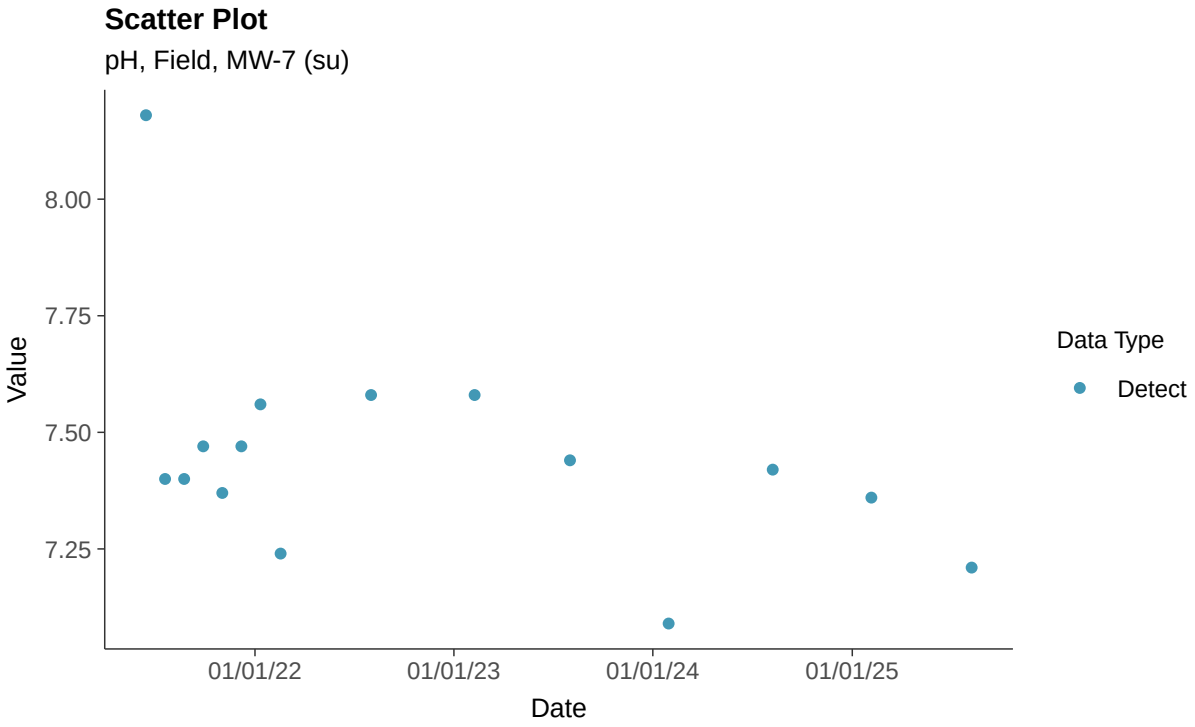
Trend Regression: Piecewise Linear-Linear

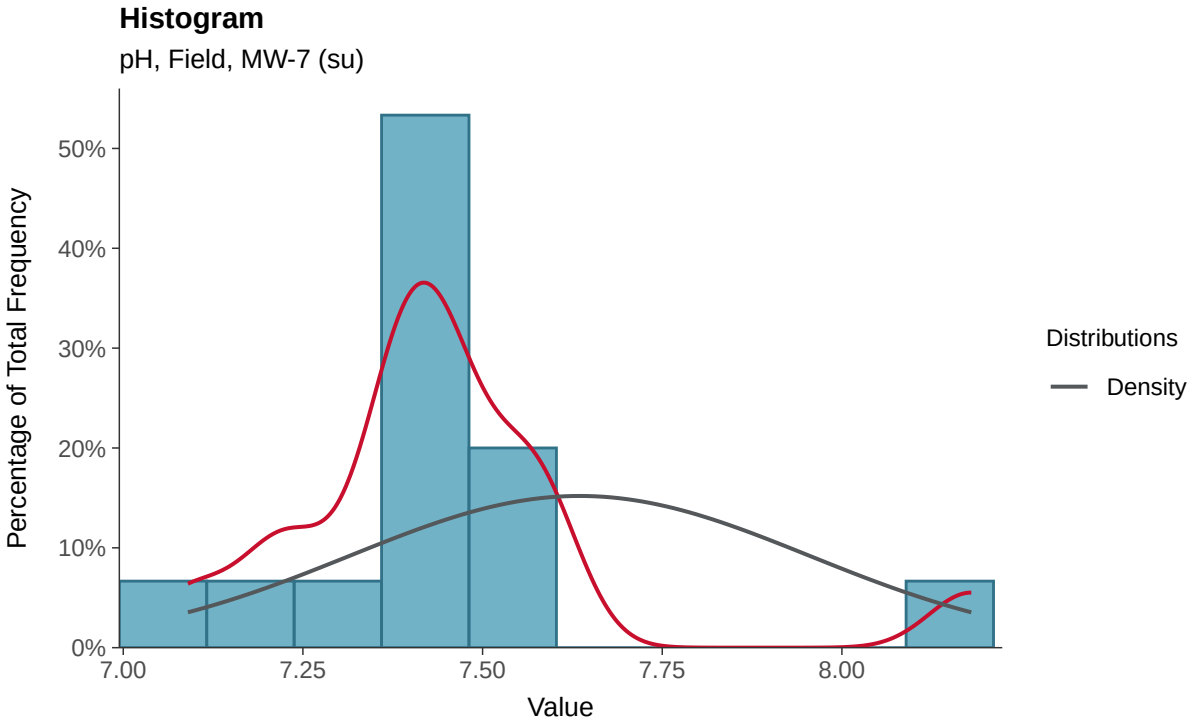
Fluoride, MW-7 (mg/l)



Appendix III: pH, Field, MW-7

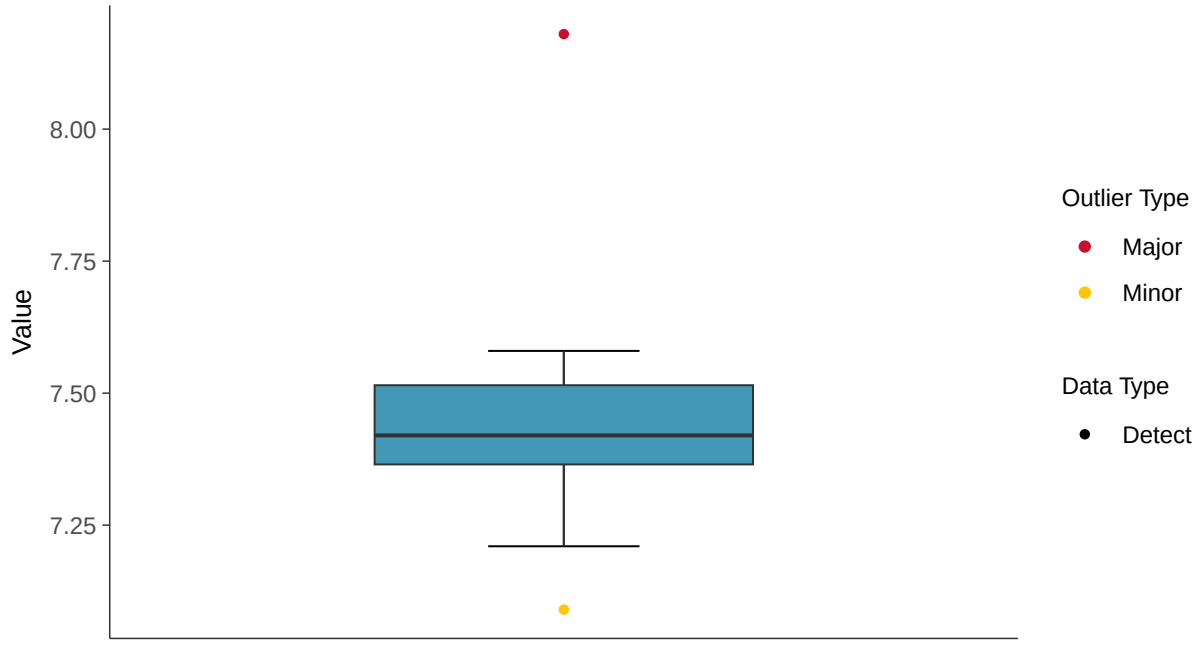
ID: 17_2_120





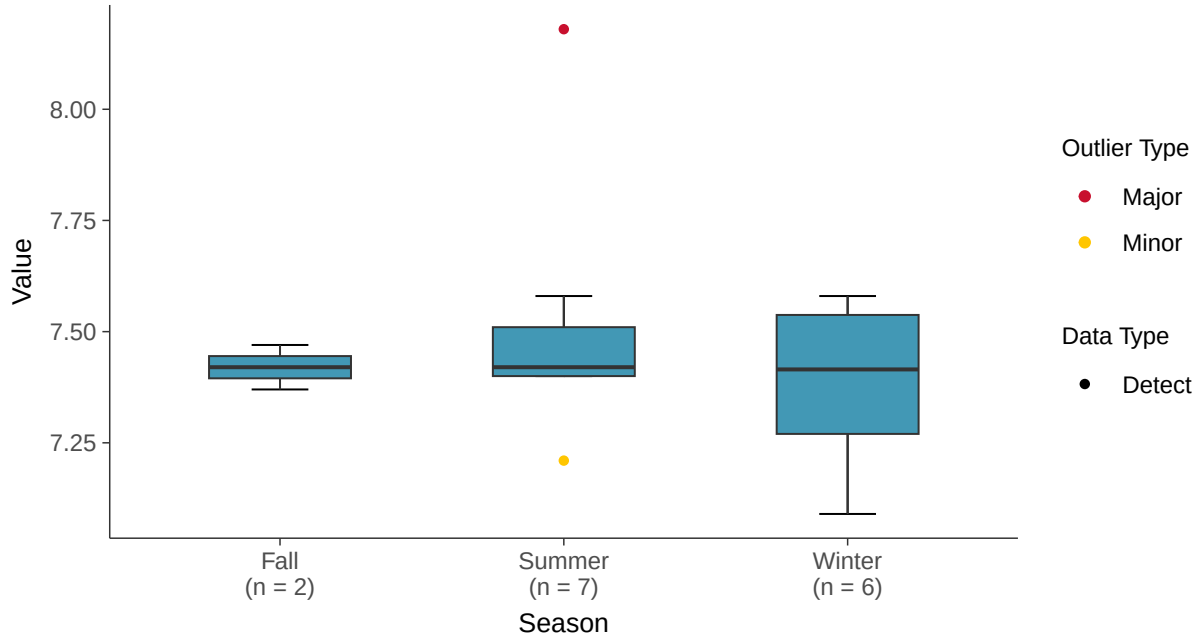
Boxplot

pH, Field, MW-7 (su)



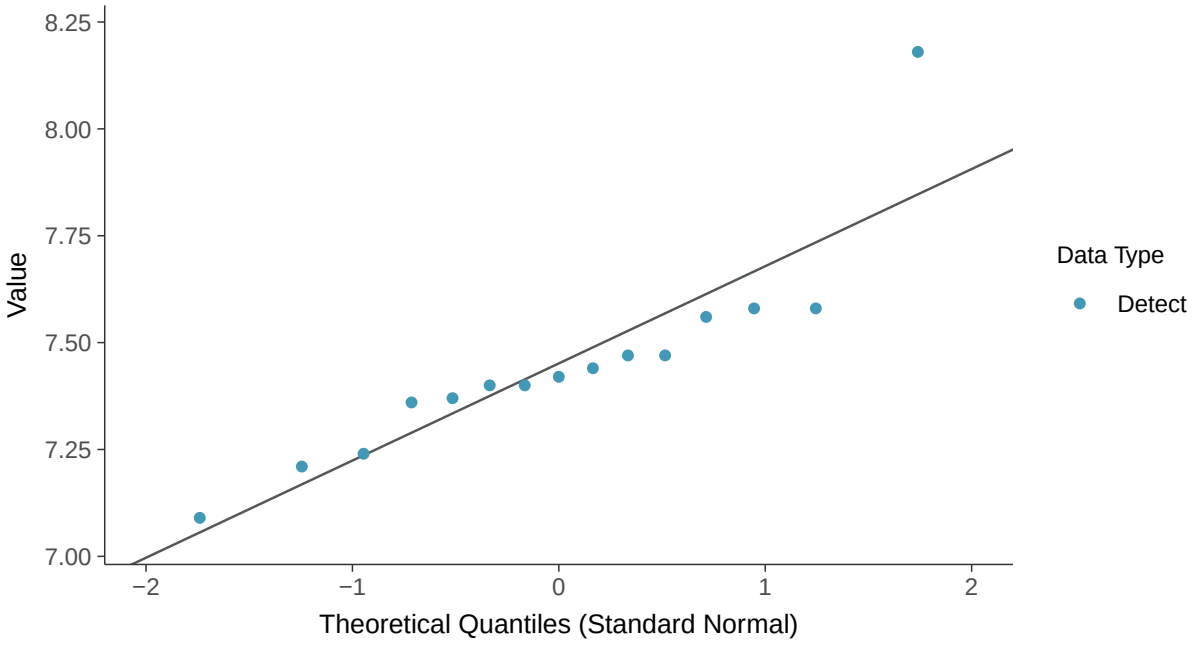
Boxplot by Season

pH, Field, MW-7 (su)



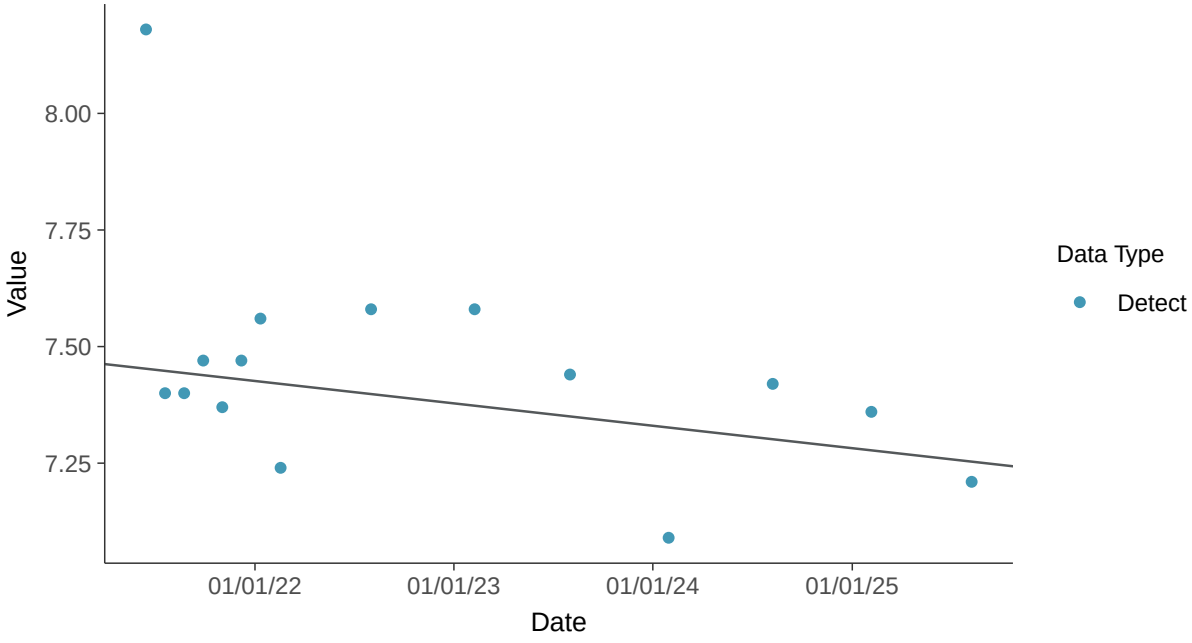
Normal Q-Q plot

pH, Field, MW-7 (su)



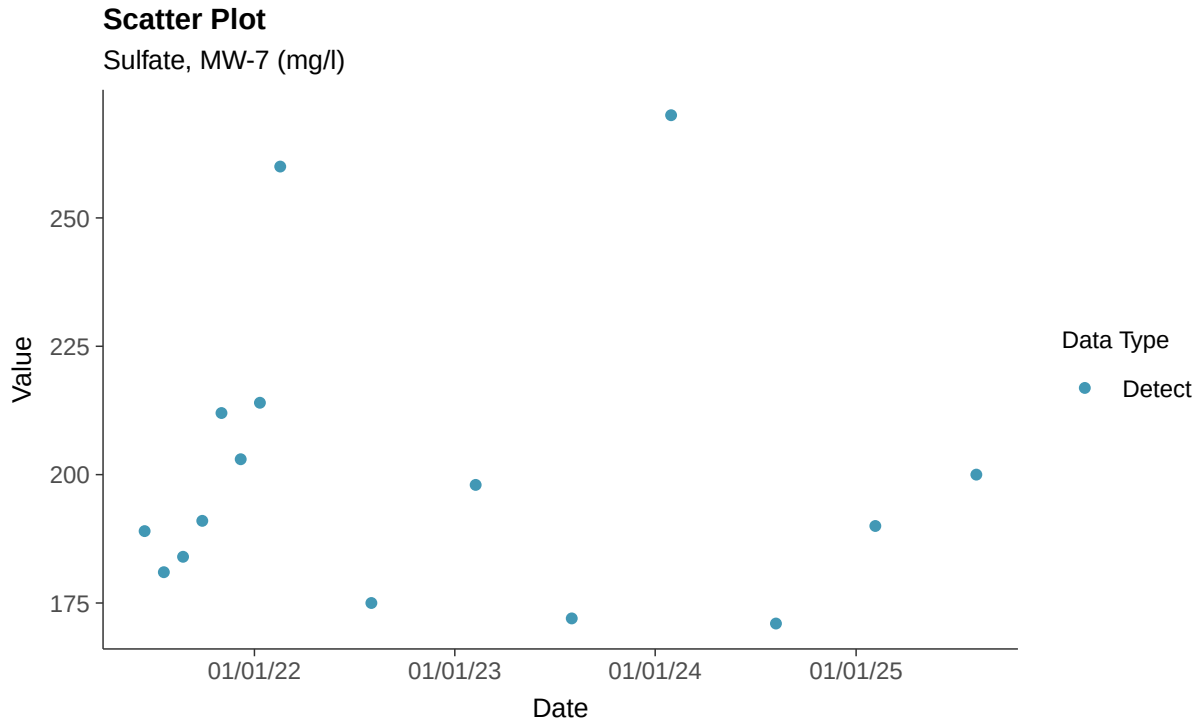
Trend Regression: Mann-Kendall/Theil-Sen Estimate

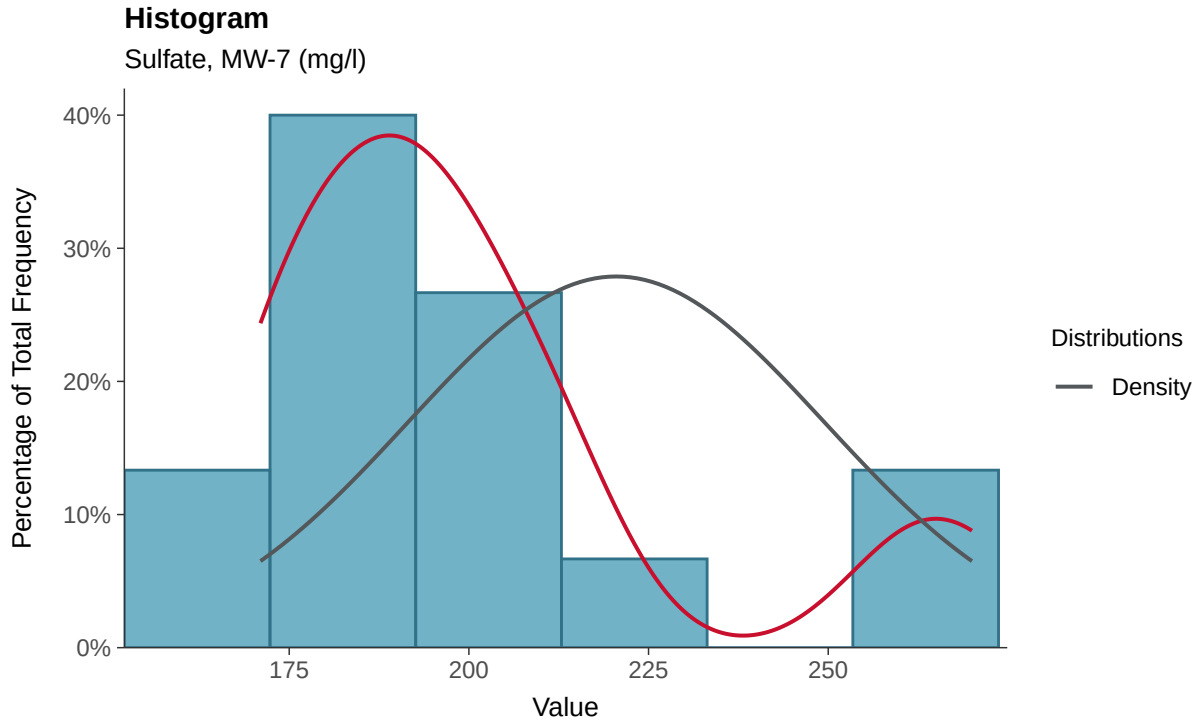
pH, Field, MW-7 (su)



Appendix III: Sulfate, MW-7

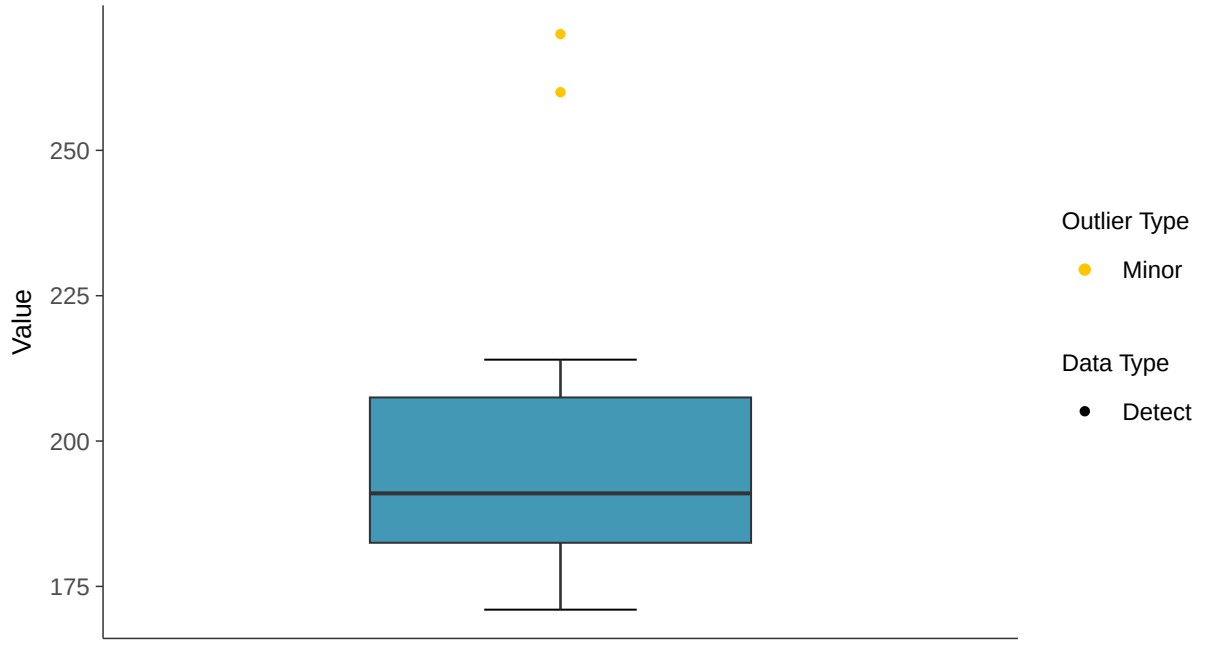
ID: 17_2_124





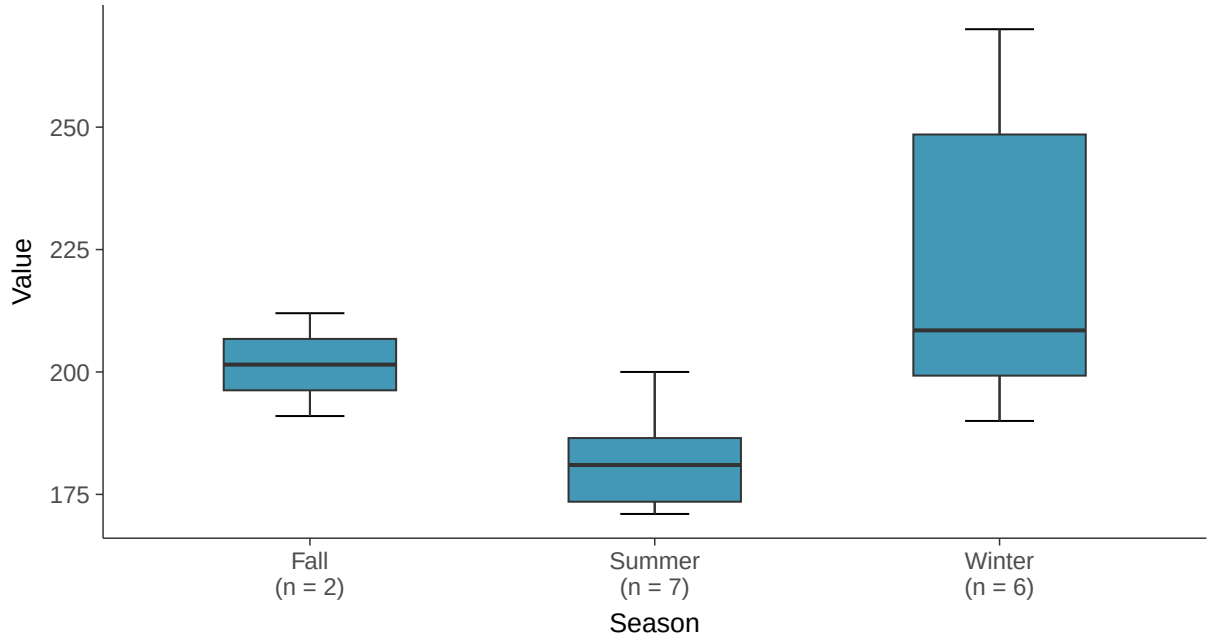
Boxplot

Sulfate, MW-7 (mg/l)



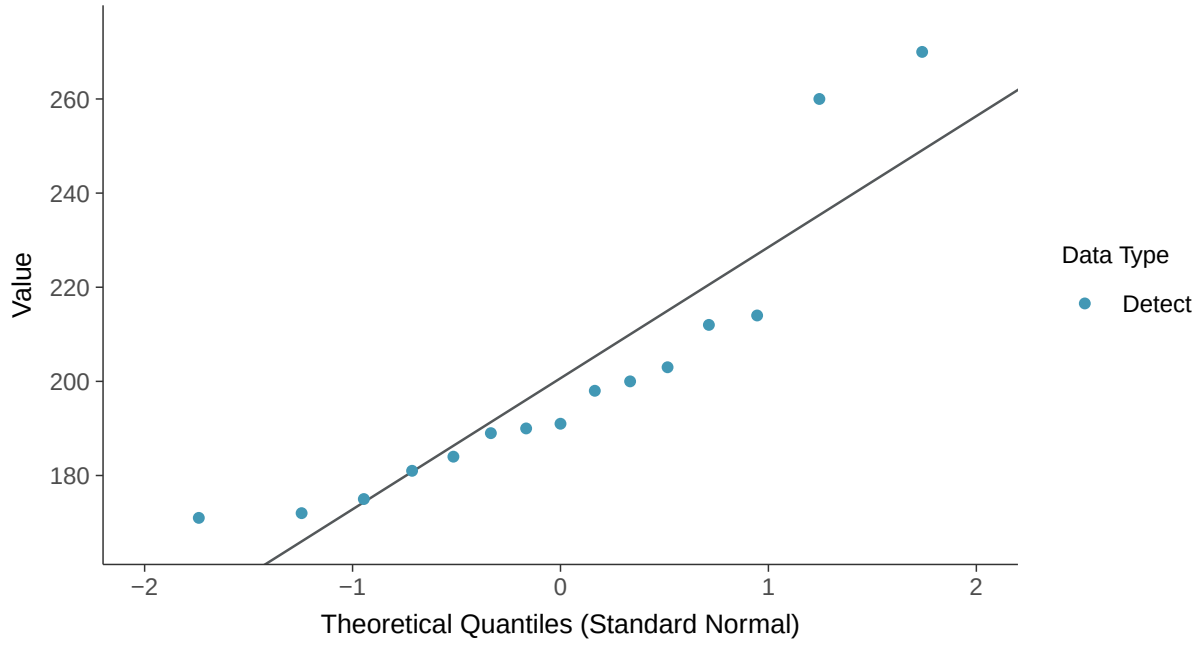
Boxplot by Season

Sulfate, MW-7 (mg/l)



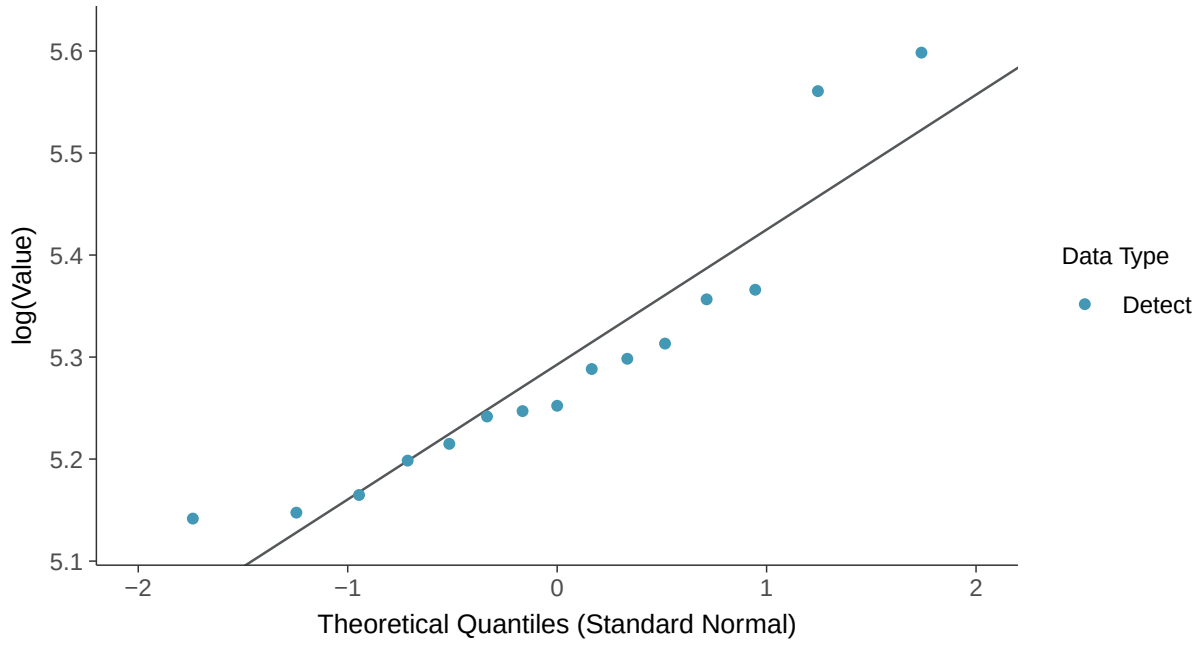
Normal Q-Q plot

Sulfate, MW-7 (mg/l)



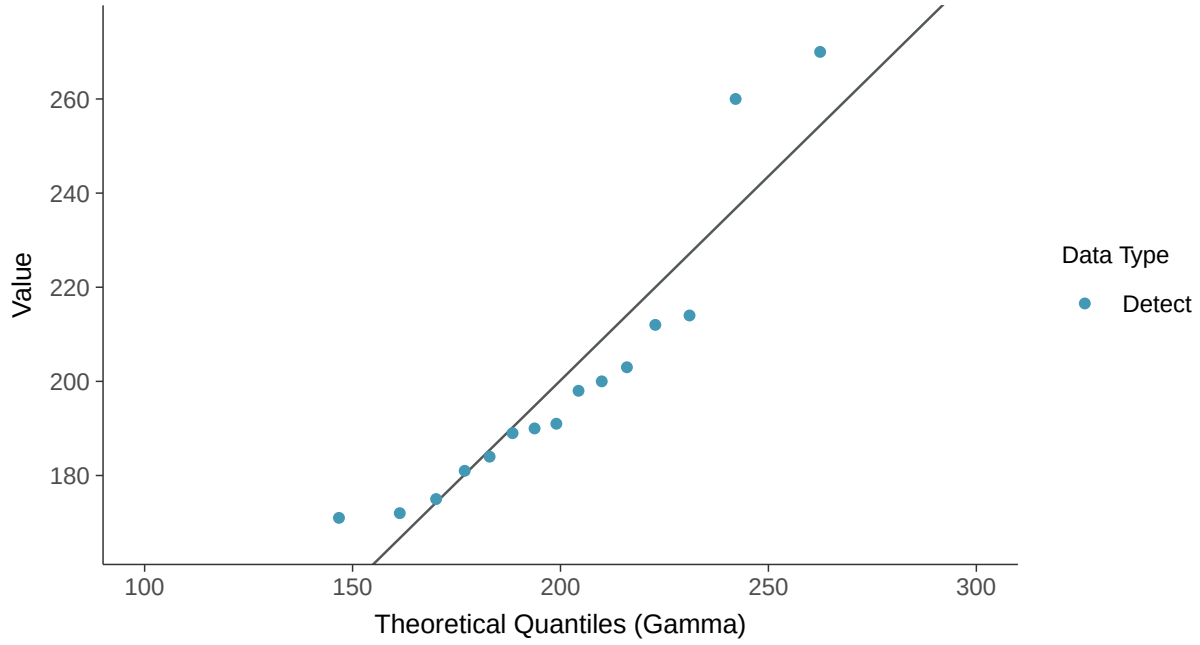
Lognormal Q-Q plot

Sulfate, MW-7 (mg/l)



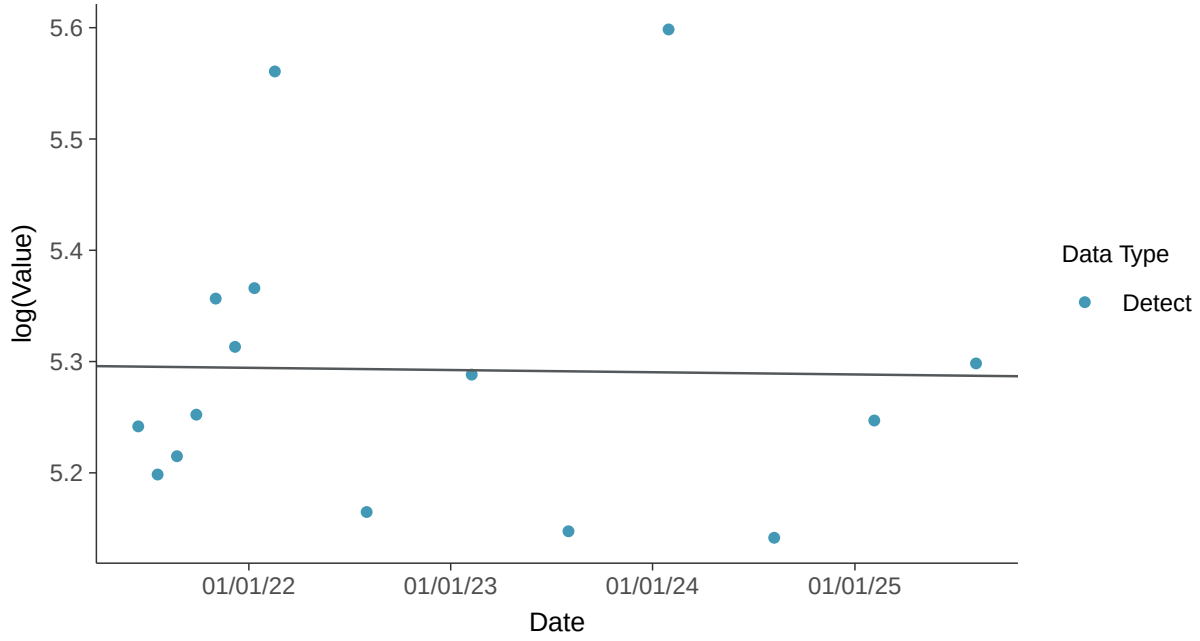
Gamma Q-Q plot

Sulfate, MW-7 (mg/l)



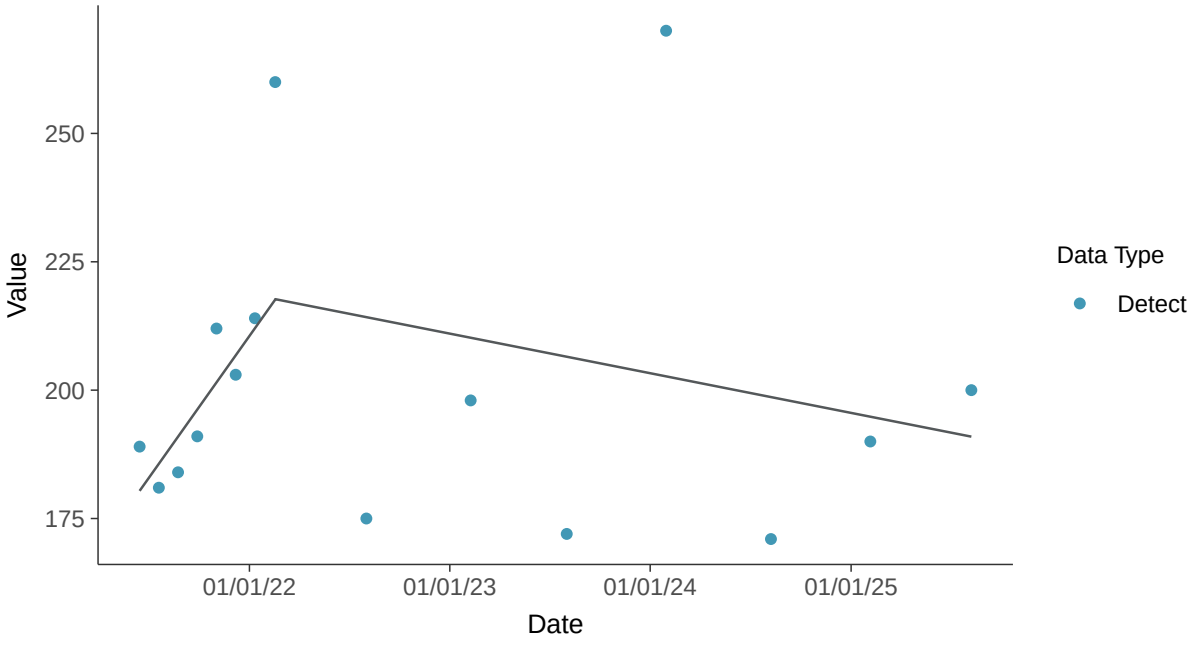
Trend Regression: Lognormal MLE

Sulfate, MW-7 (mg/l)



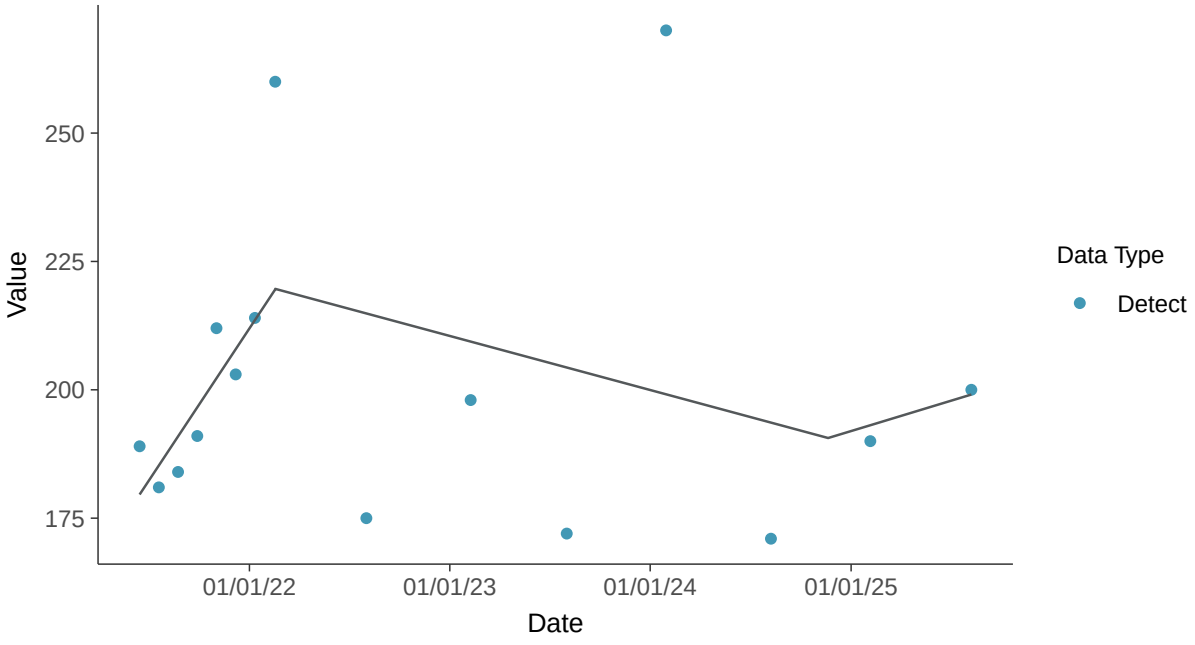
Trend Regression: Piecewise Linear-Linear

Sulfate, MW-7 (mg/l)



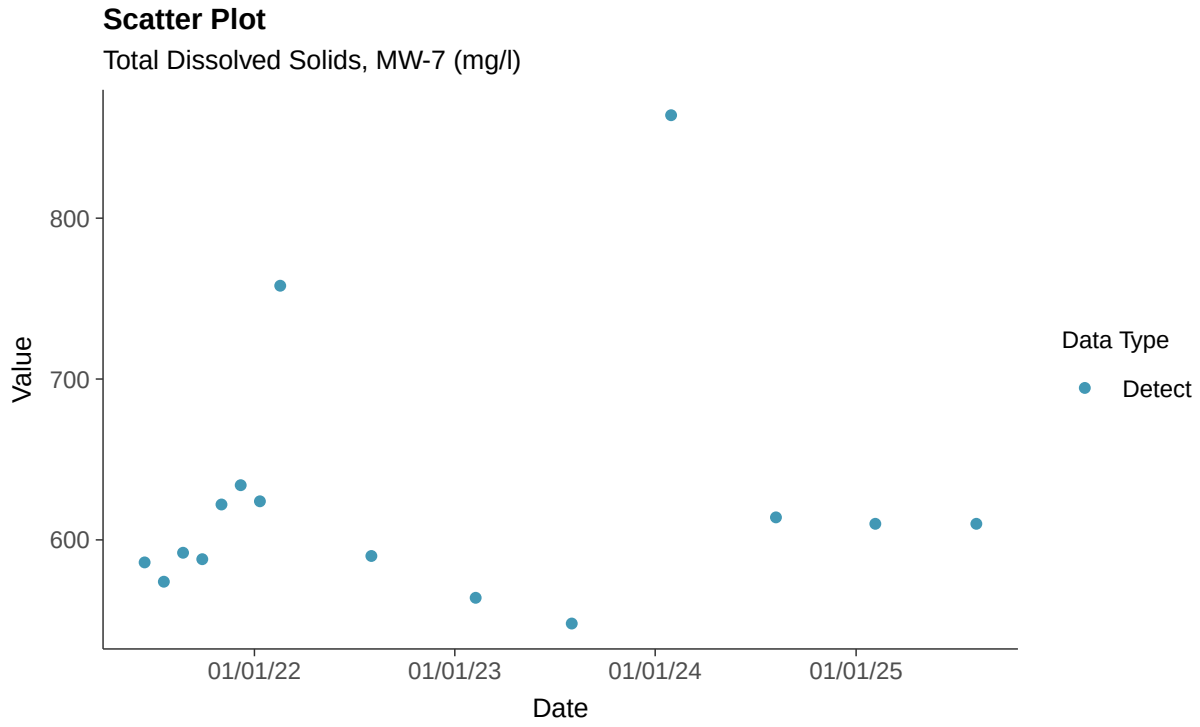
Trend Regression: Piecewise Linear-Linear-Linear

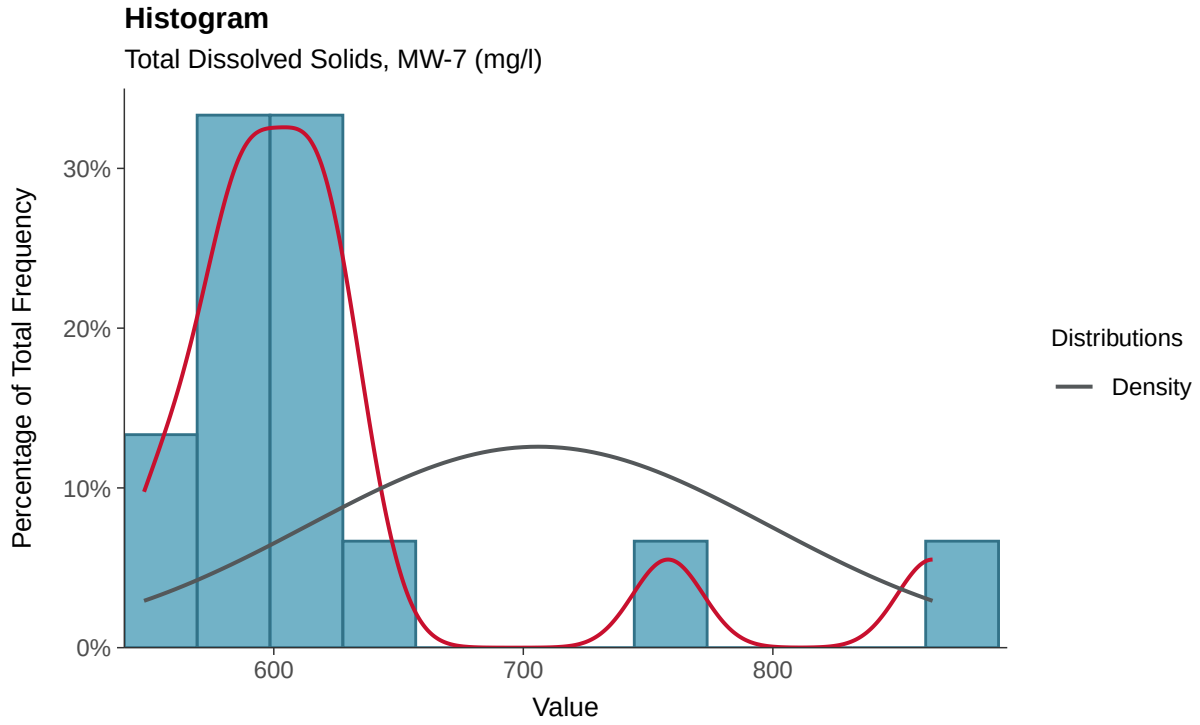
Sulfate, MW-7 (mg/l)



Appendix III: Total Dissolved Solids, MW-7

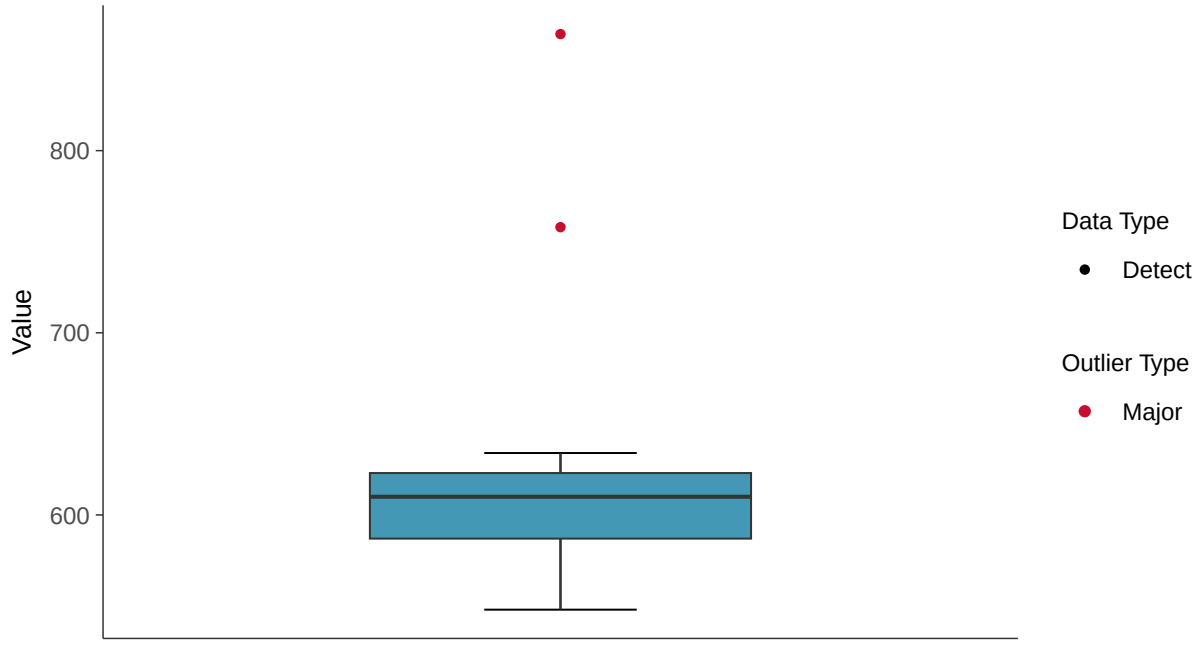
ID: 17_2_126





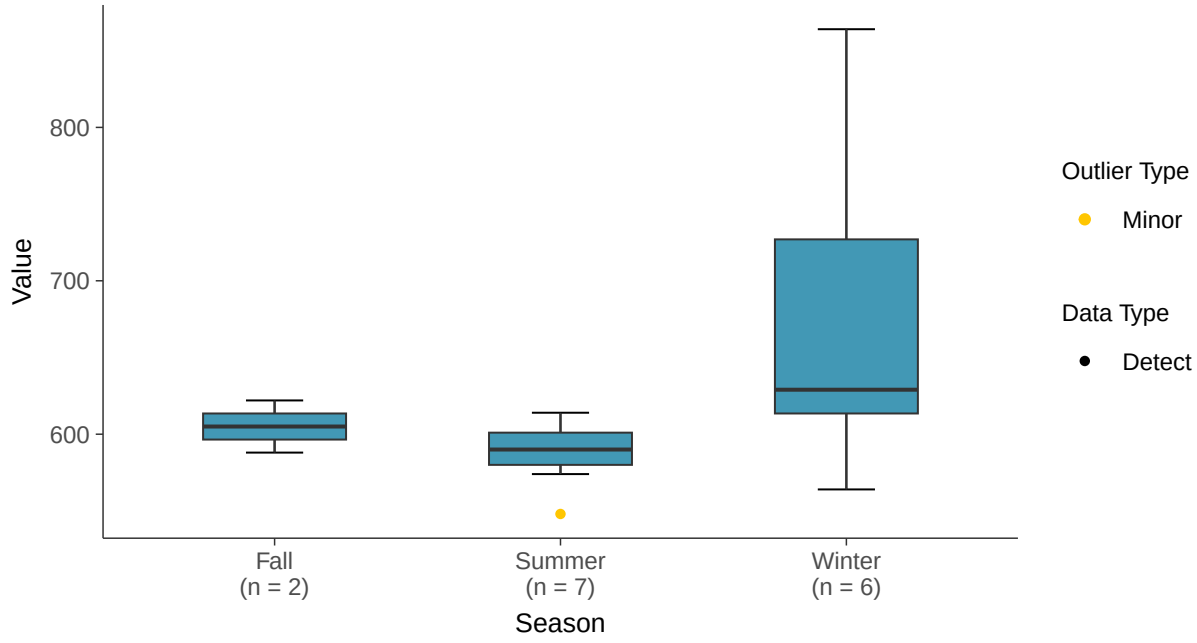
Boxplot

Total Dissolved Solids, MW-7 (mg/l)



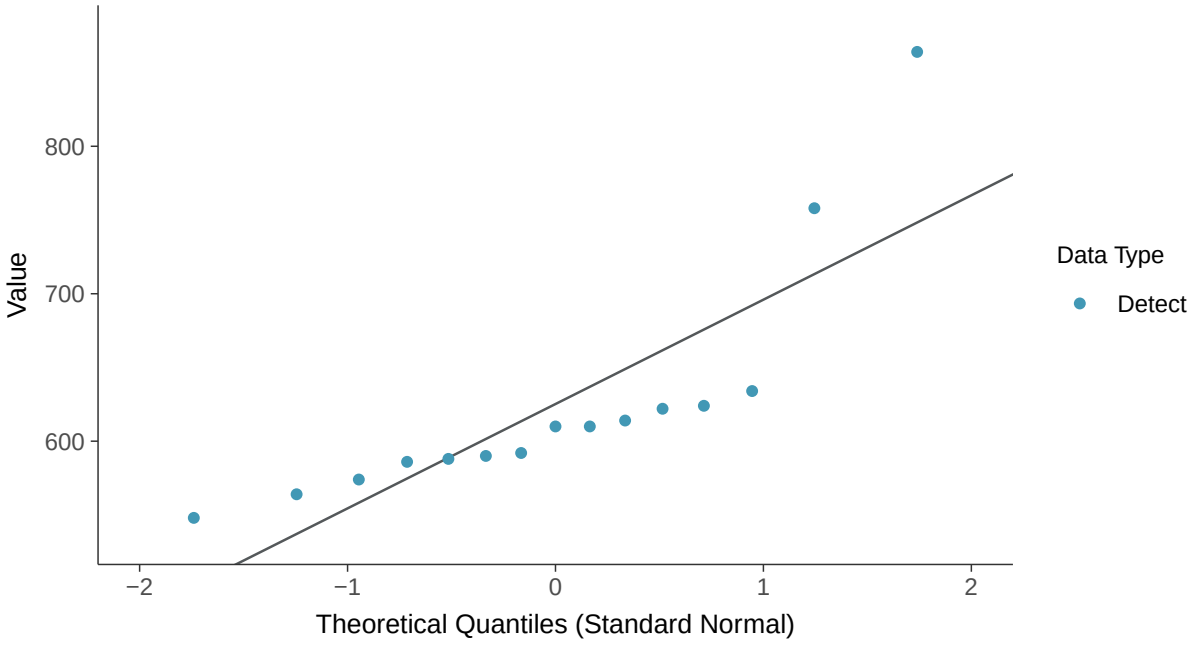
Boxplot by Season

Total Dissolved Solids, MW-7 (mg/l)



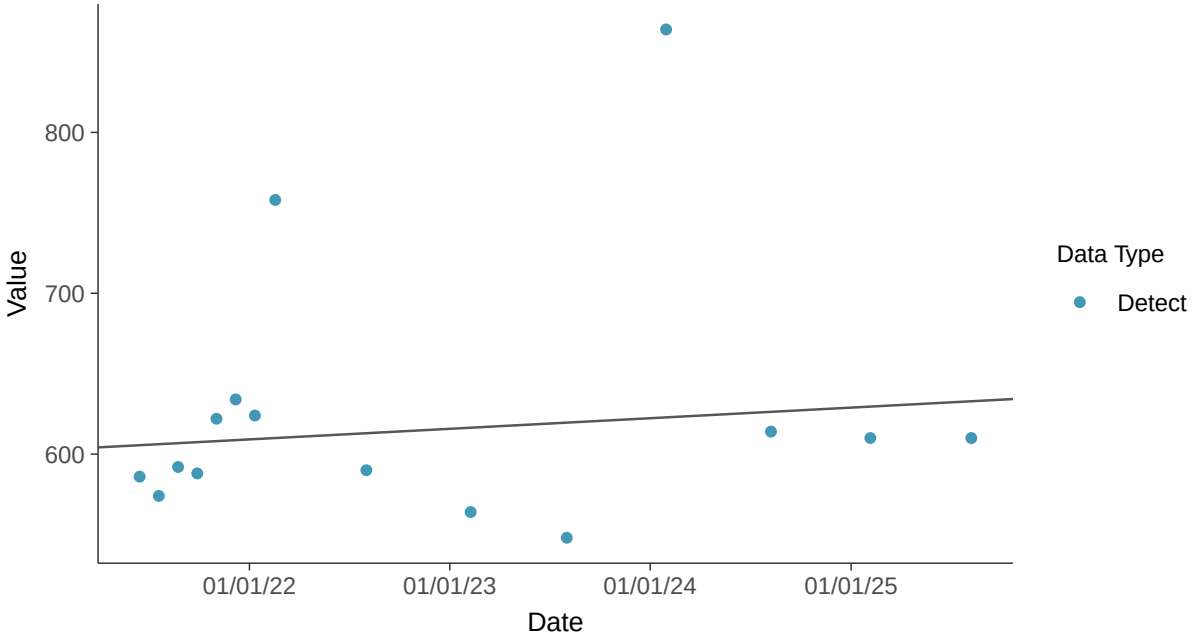
Normal Q-Q plot

Total Dissolved Solids, MW-7 (mg/l)



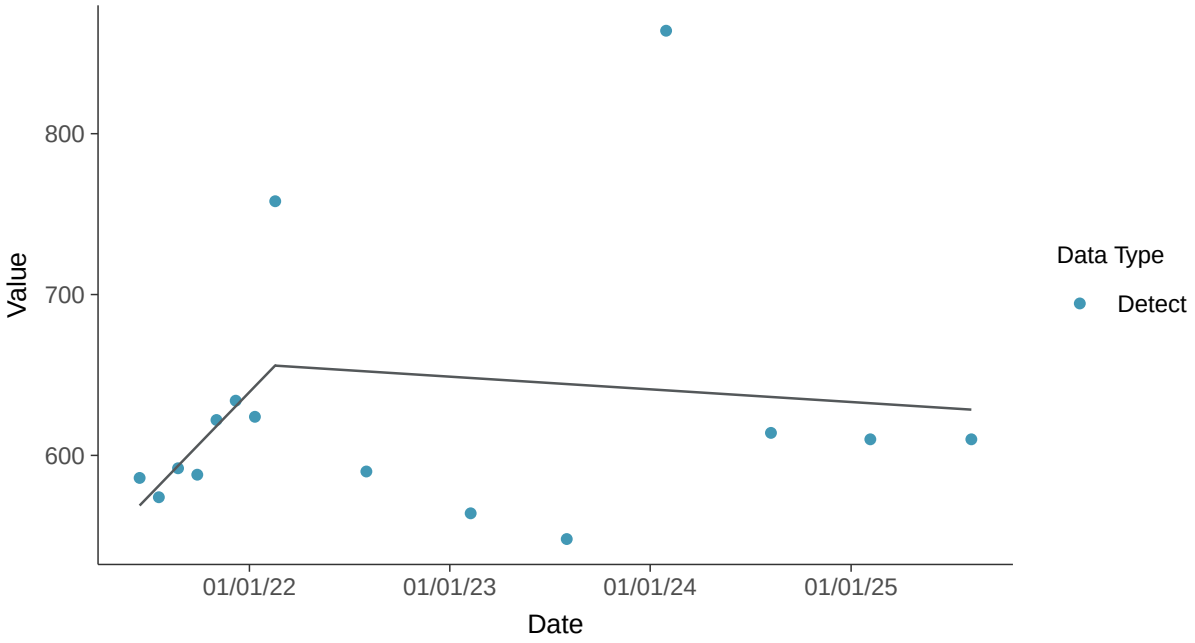
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Total Dissolved Solids, MW-7 (mg/l)



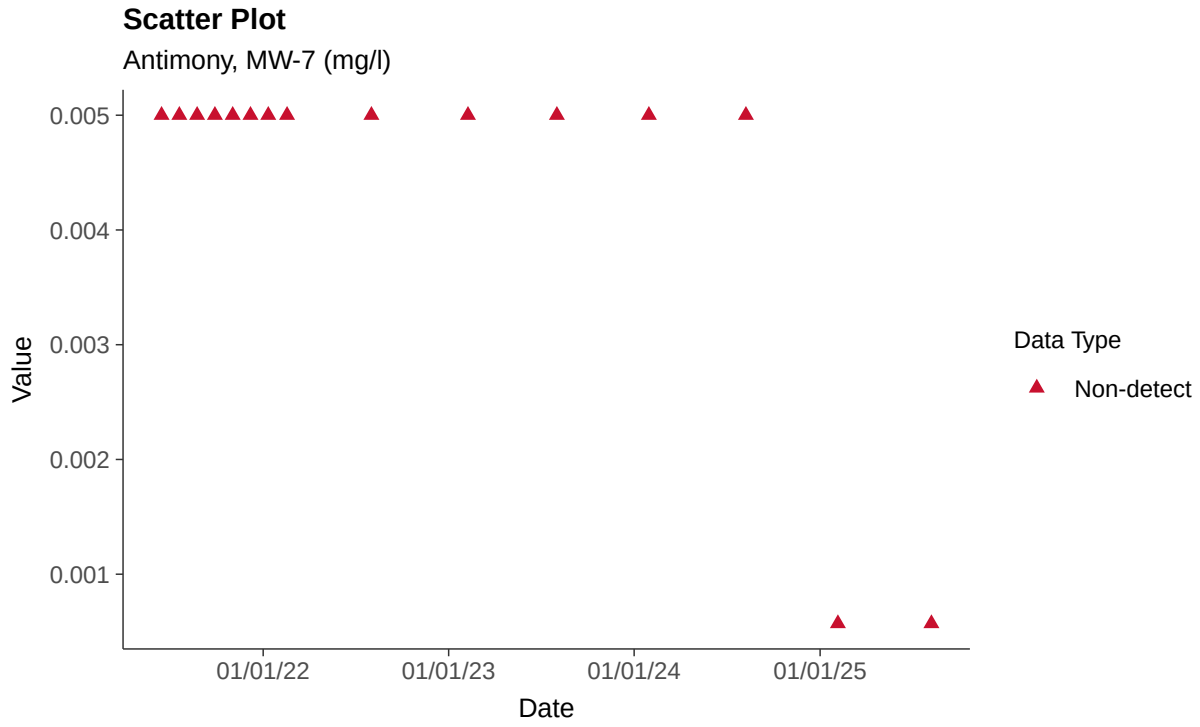
Trend Regression: Piecewise Linear-Linear

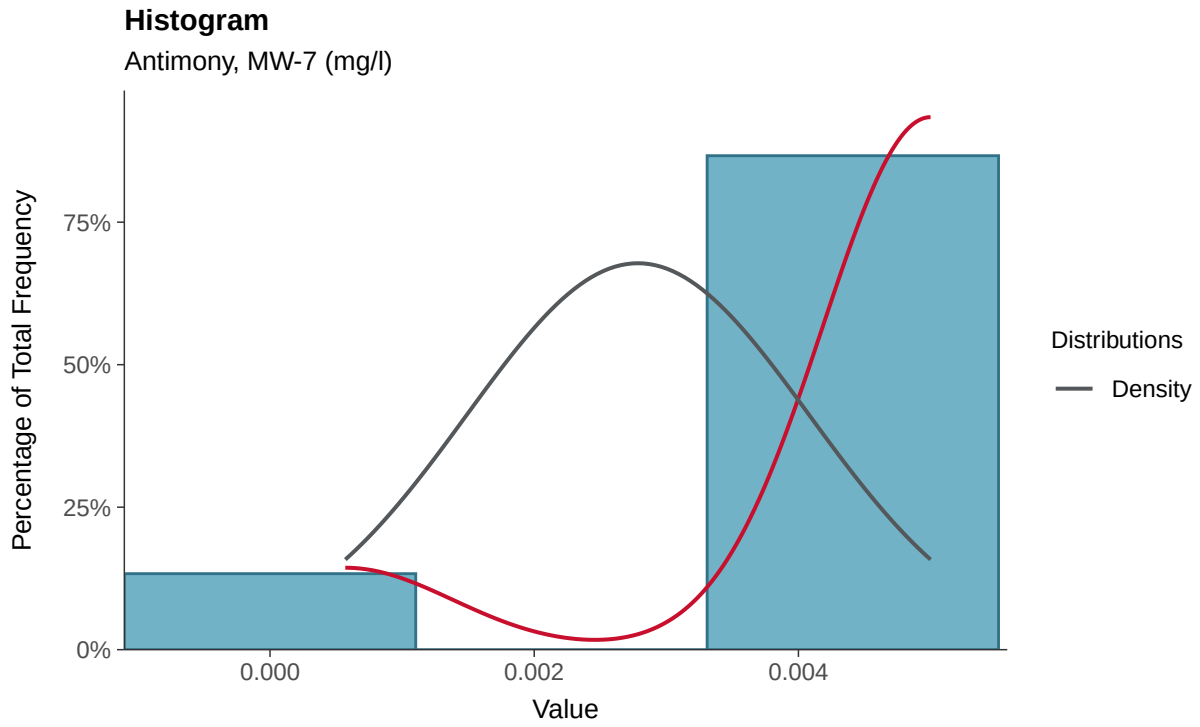
Total Dissolved Solids, MW-7 (mg/l)



Appendix IV: Antimony, MW-7

ID: 17_3_101



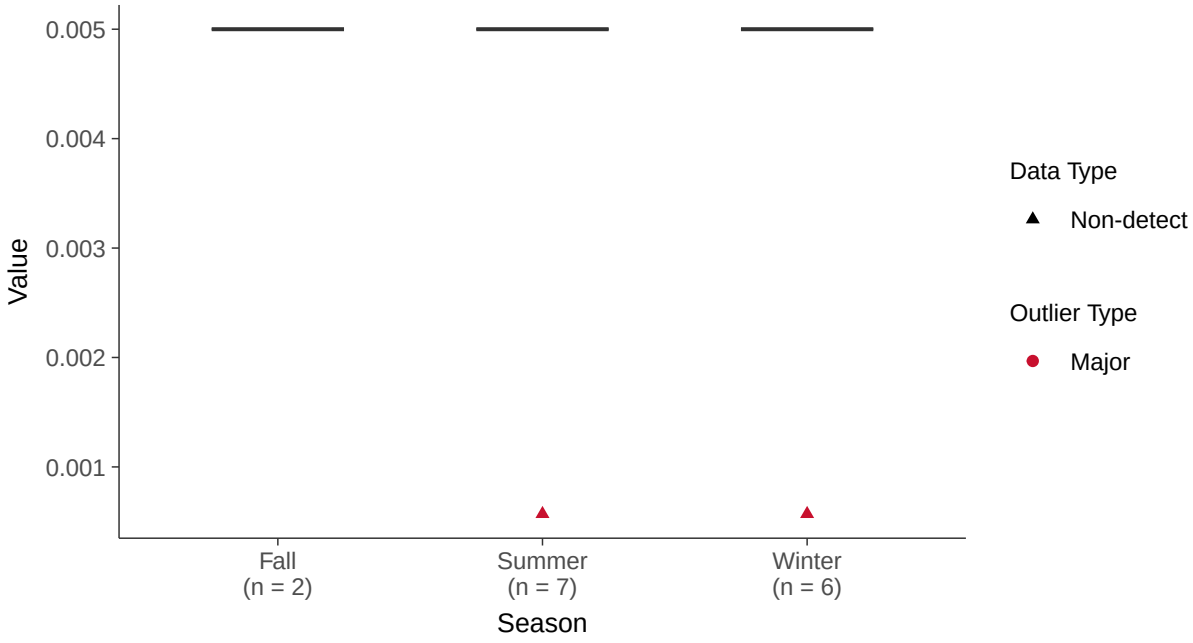


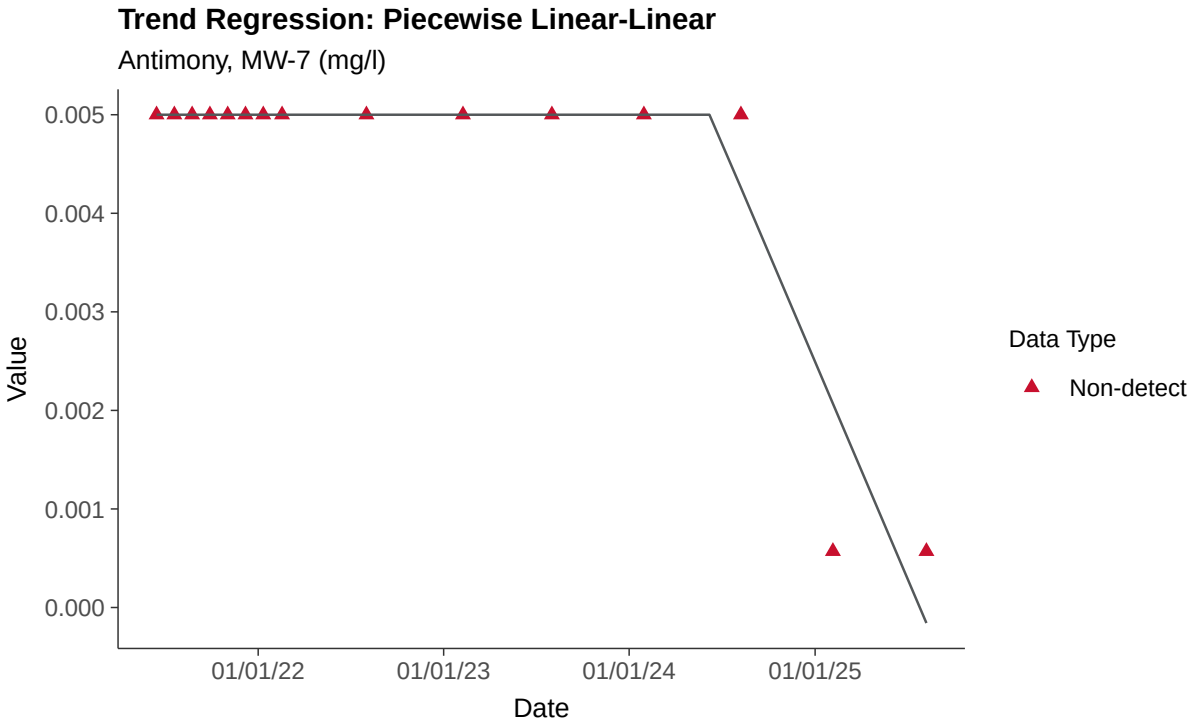
Boxplot

Antimony, MW-7 (mg/l)

Boxplot by Season

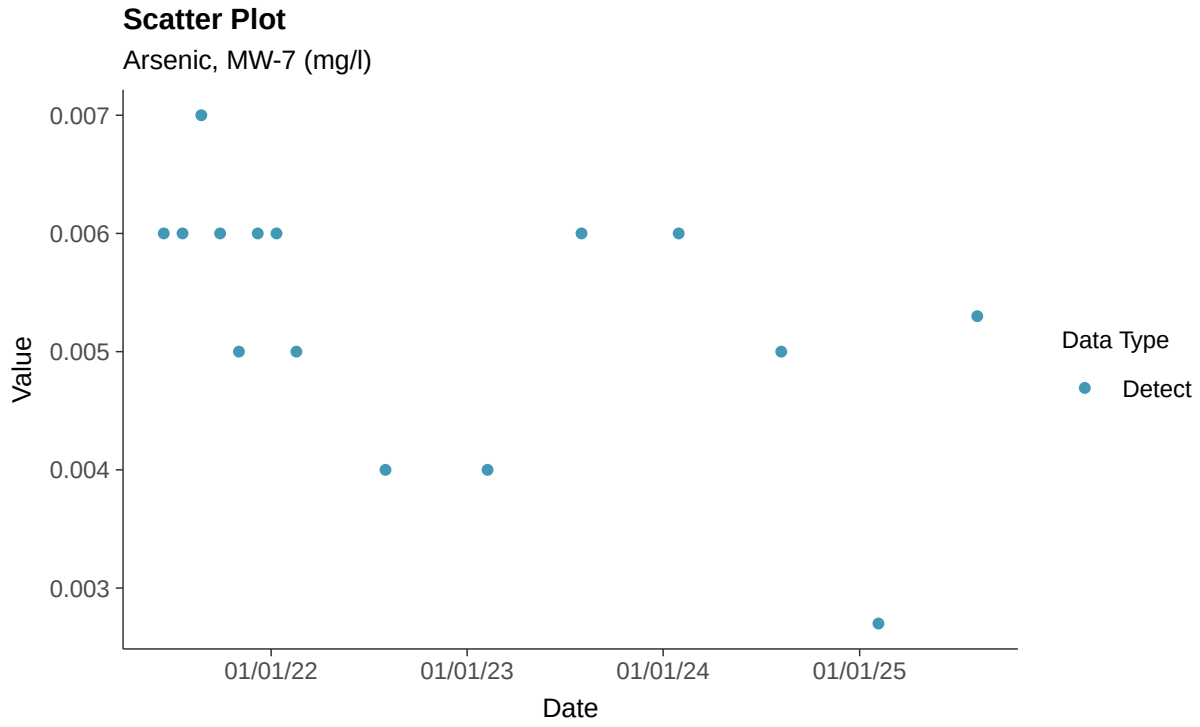
Antimony, MW-7 (mg/l)

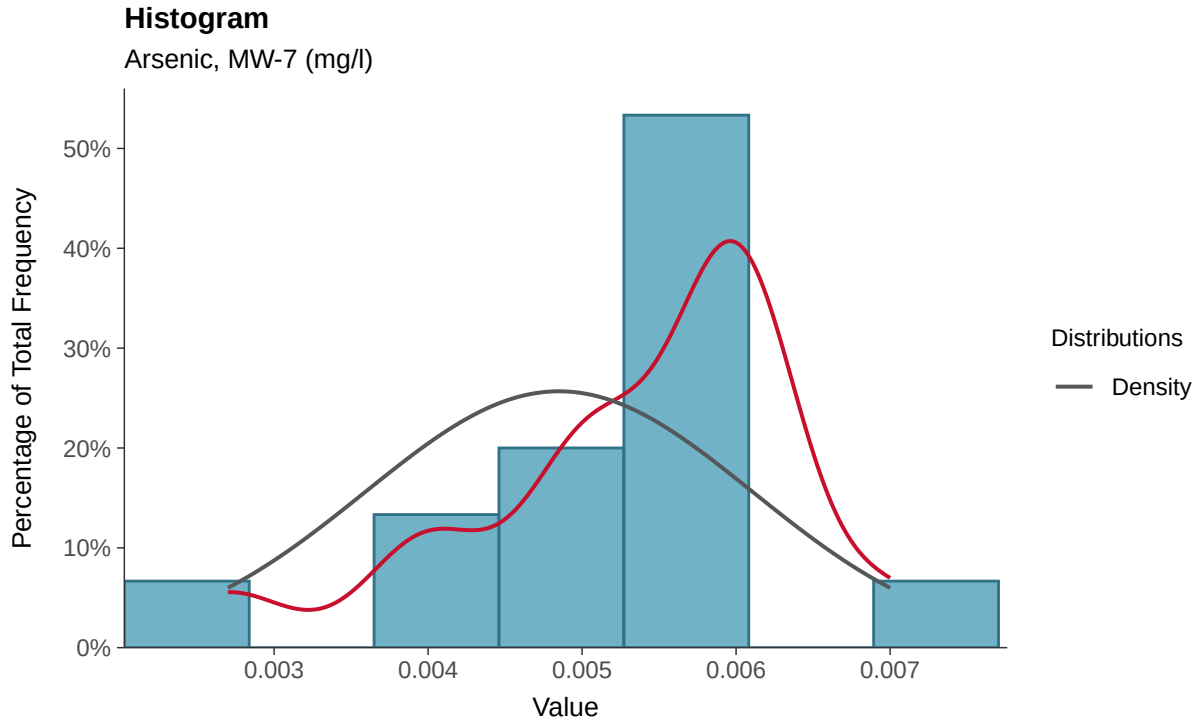



Trend Regression: Piecewise Linear-Linear
Antimony, MW-7 (mg/l)
0.005
0.004
0.003
0.002
0.001
0.000
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Appendix IV: Arsenic, MW-7

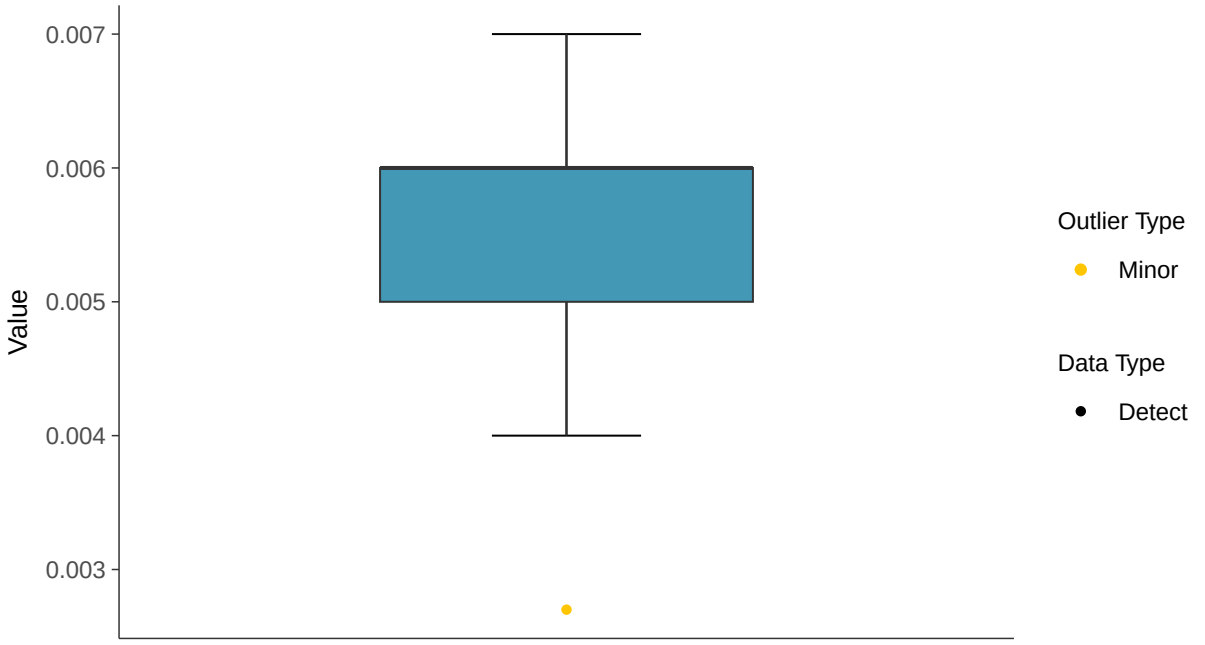
ID: 17_3_102





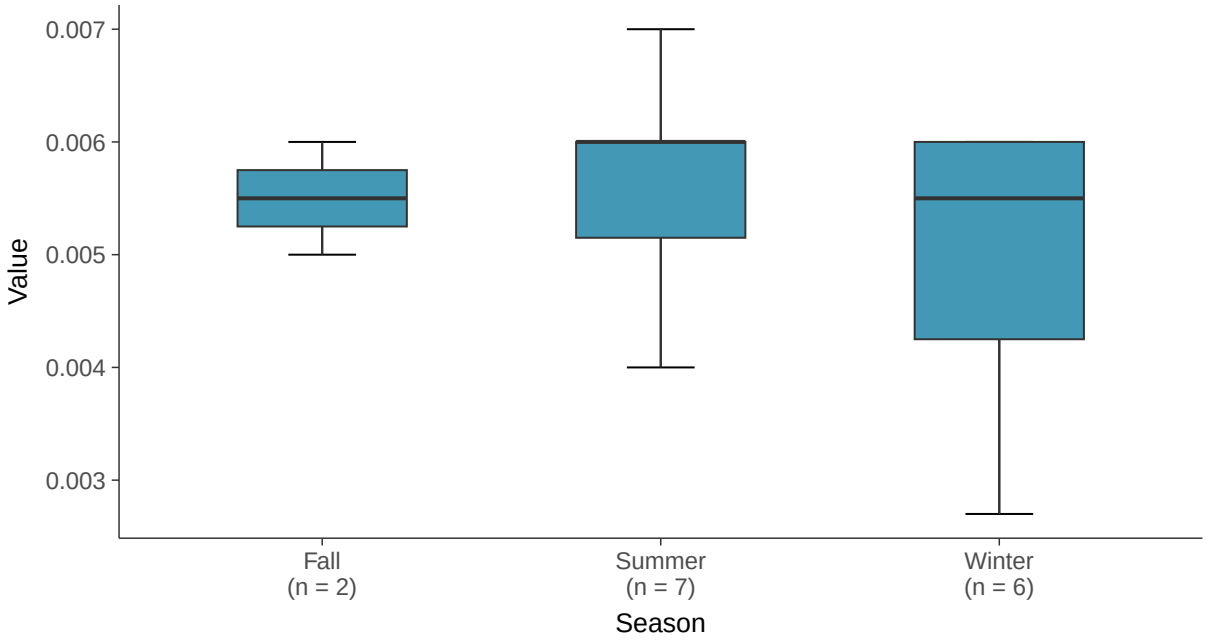
Boxplot

Arsenic, MW-7 (mg/l)



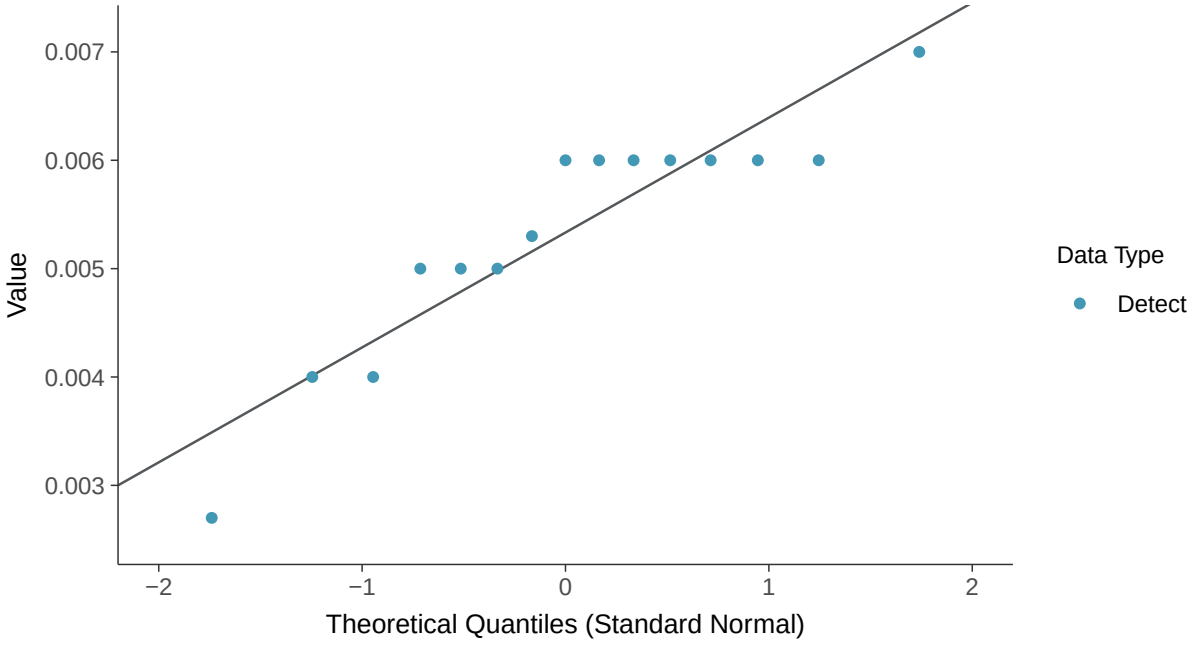
Boxplot by Season

Arsenic, MW-7 (mg/l)



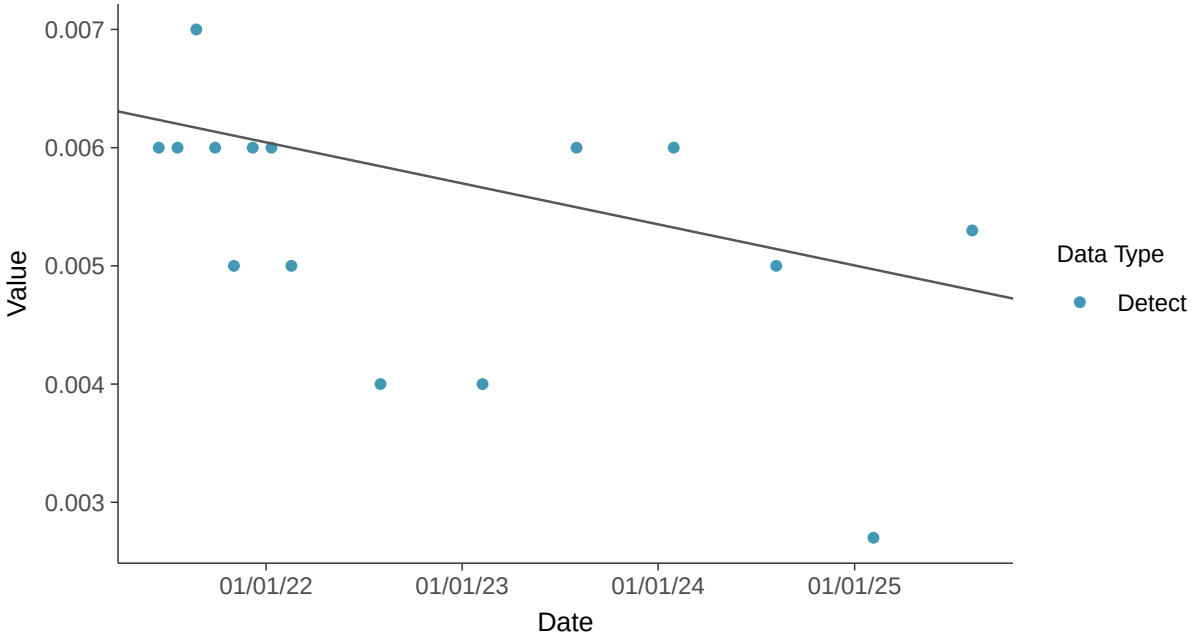
Normal Q-Q plot

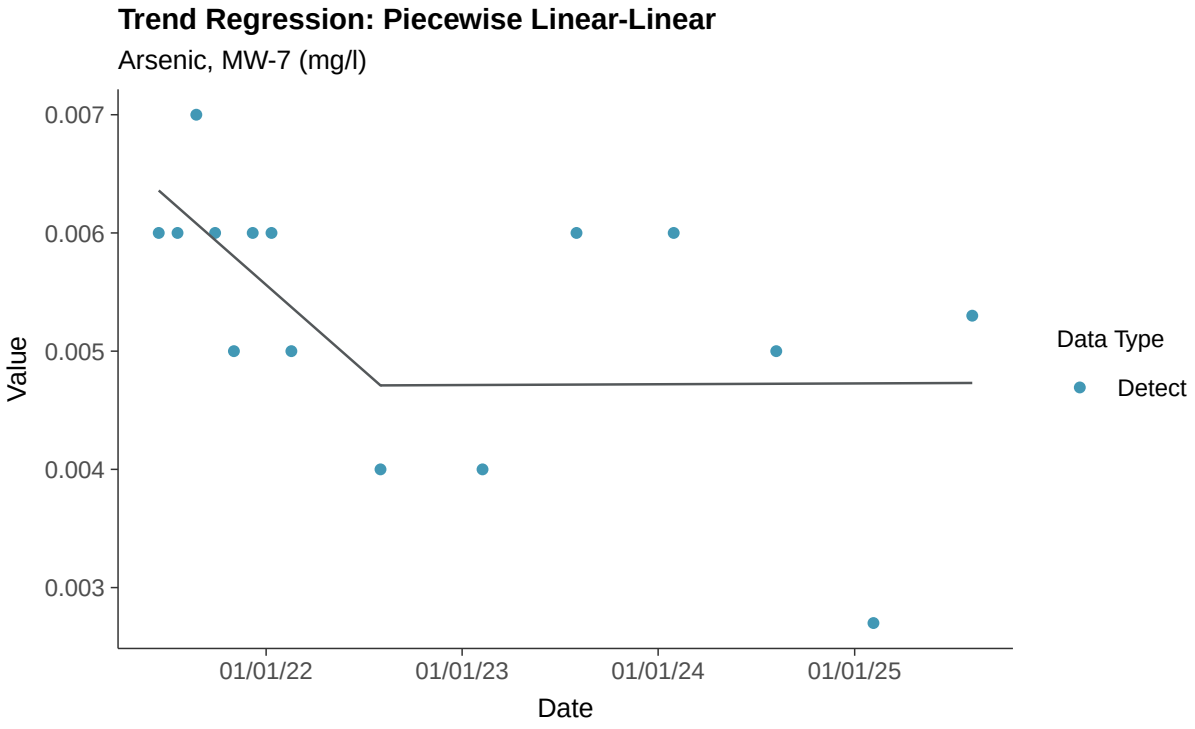
Arsenic, MW-7 (mg/l)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

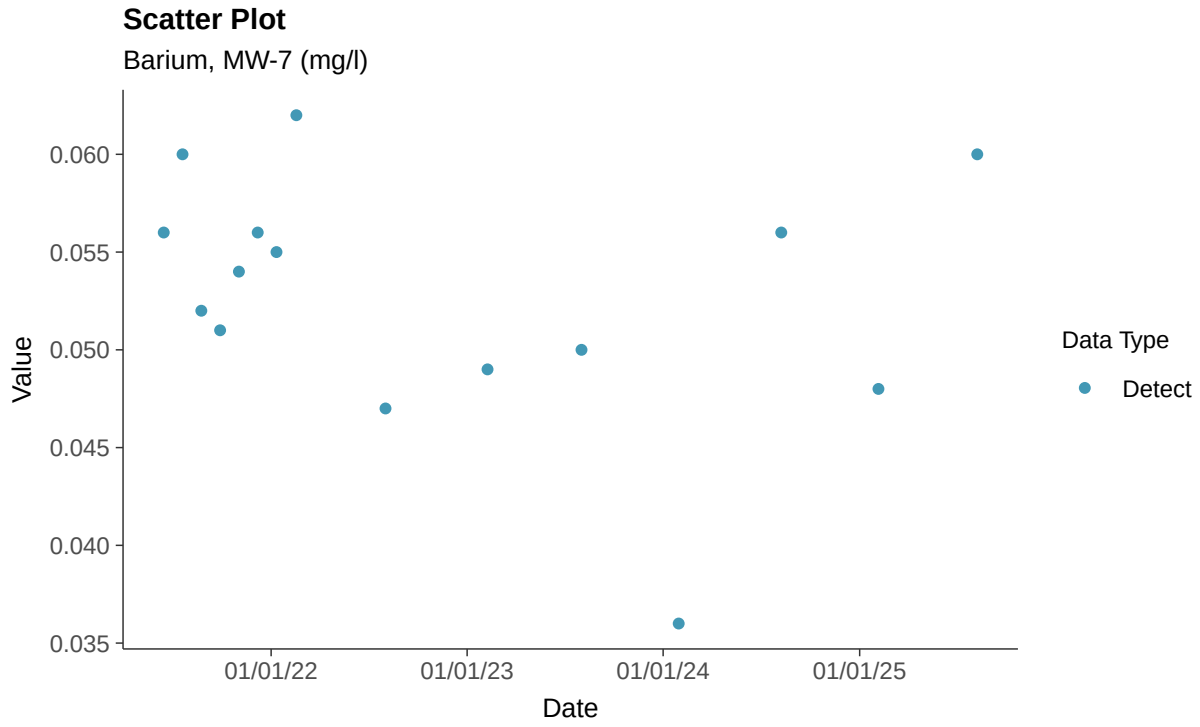
Arsenic, MW-7 (mg/l)

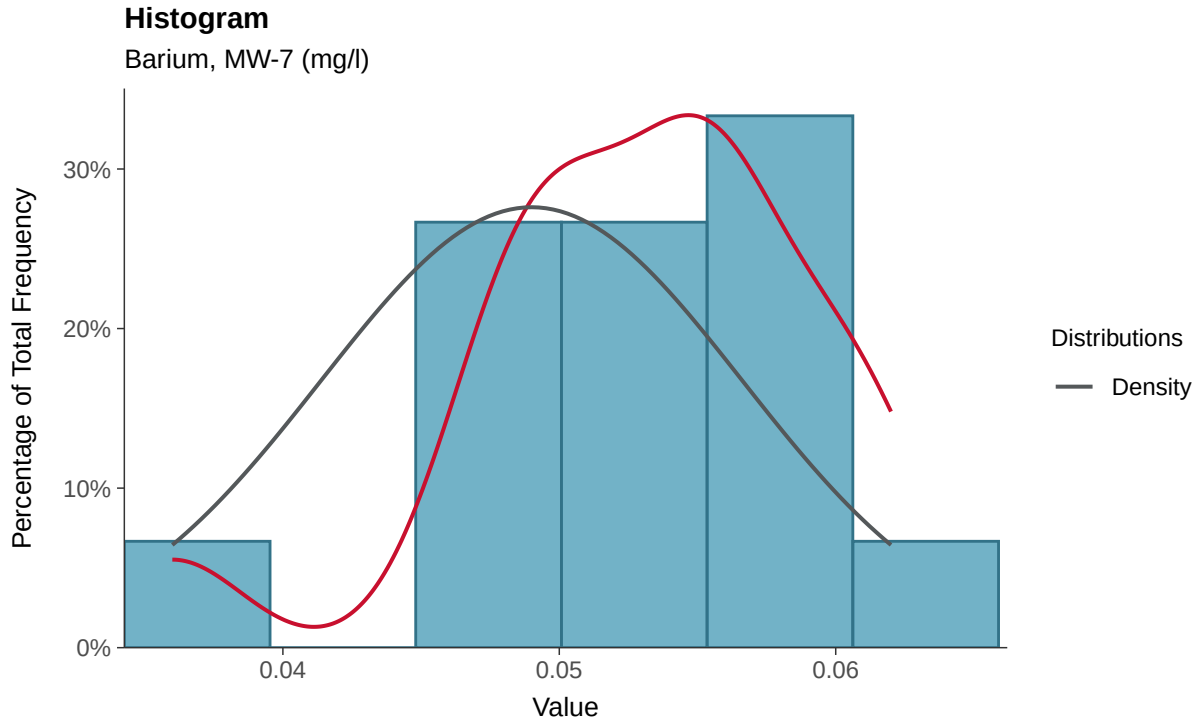



Trend Regression: Piecewise Linear-Linear
Arsenic, MW-7 (mg/l)
0.007
0.006
0.005
0.004
0.003
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect

Appendix IV: Barium, MW-7

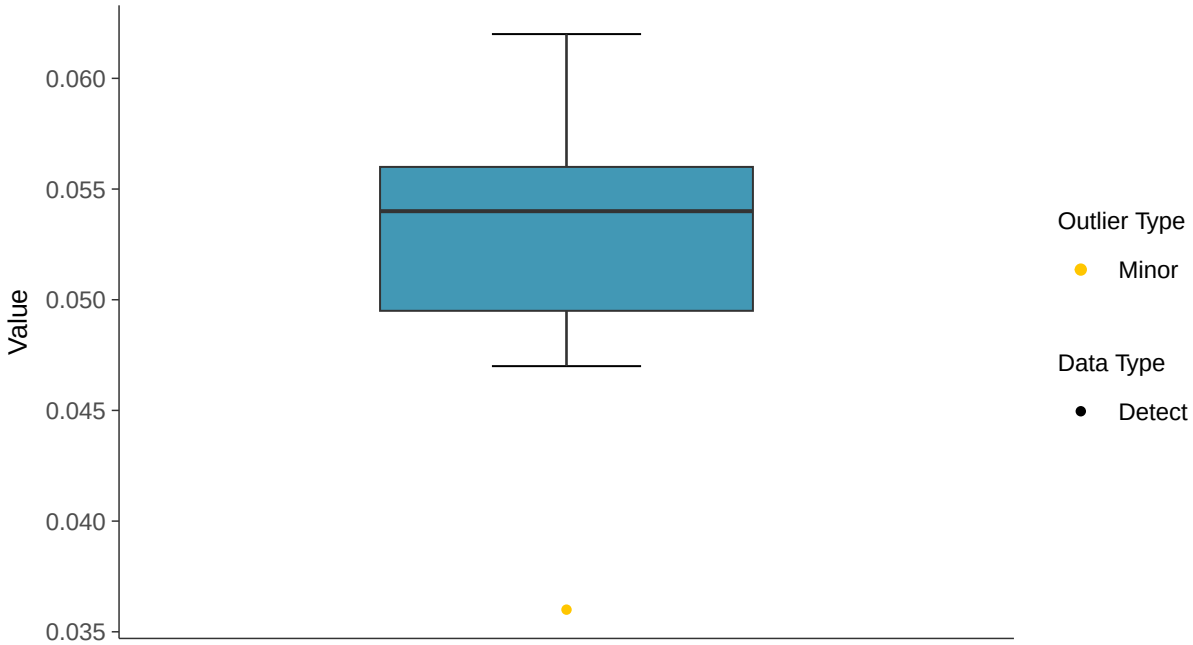
ID: 17_3_103





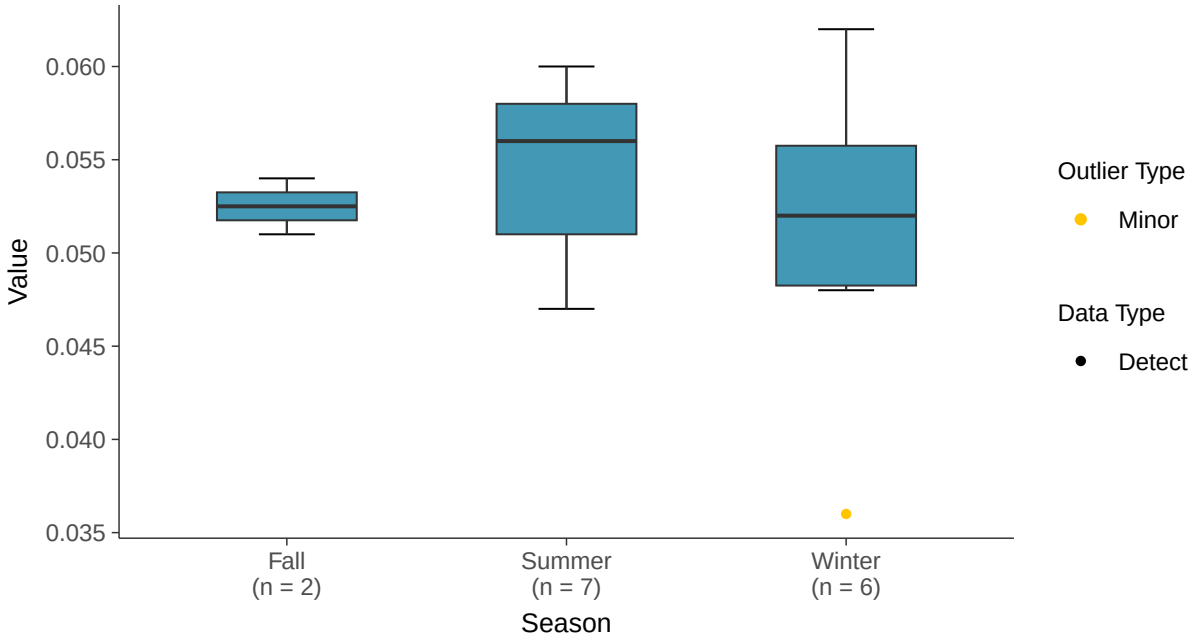
Boxplot

Barium, MW-7 (mg/l)



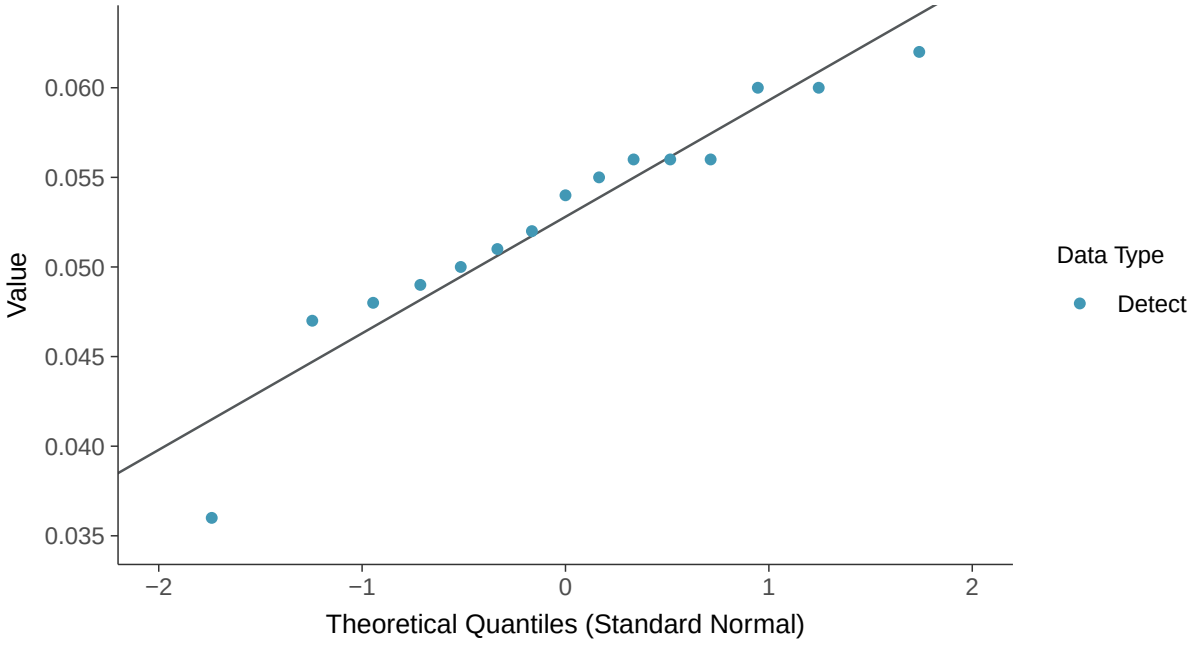
Boxplot by Season

Barium, MW-7 (mg/l)



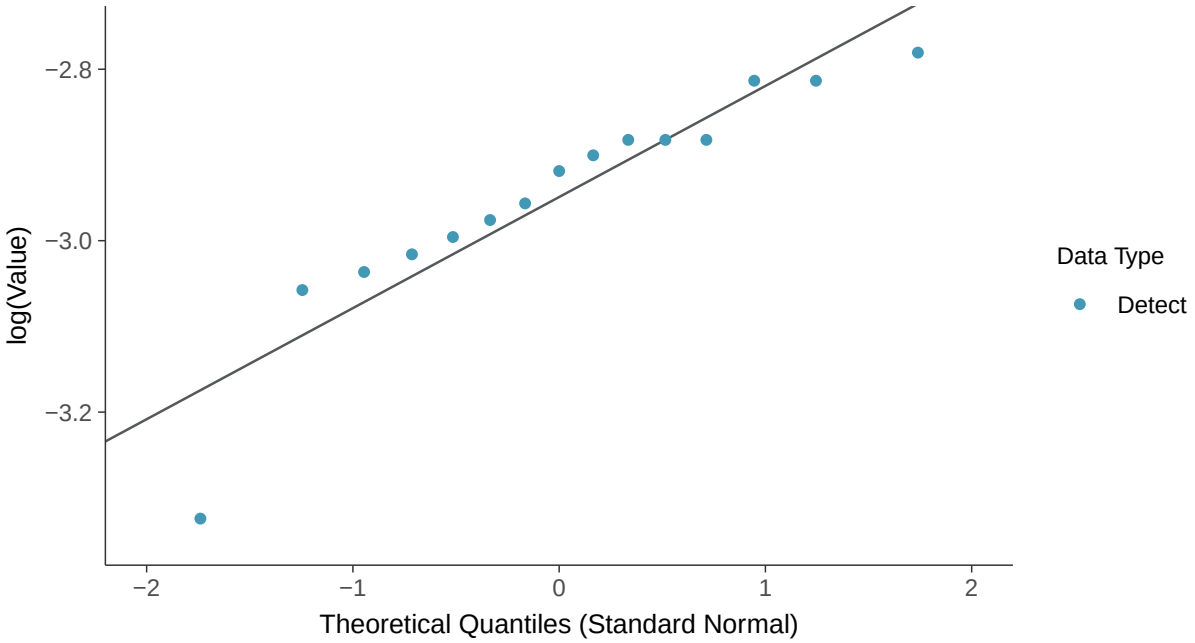
Normal Q-Q plot

Barium, MW-7 (mg/l)



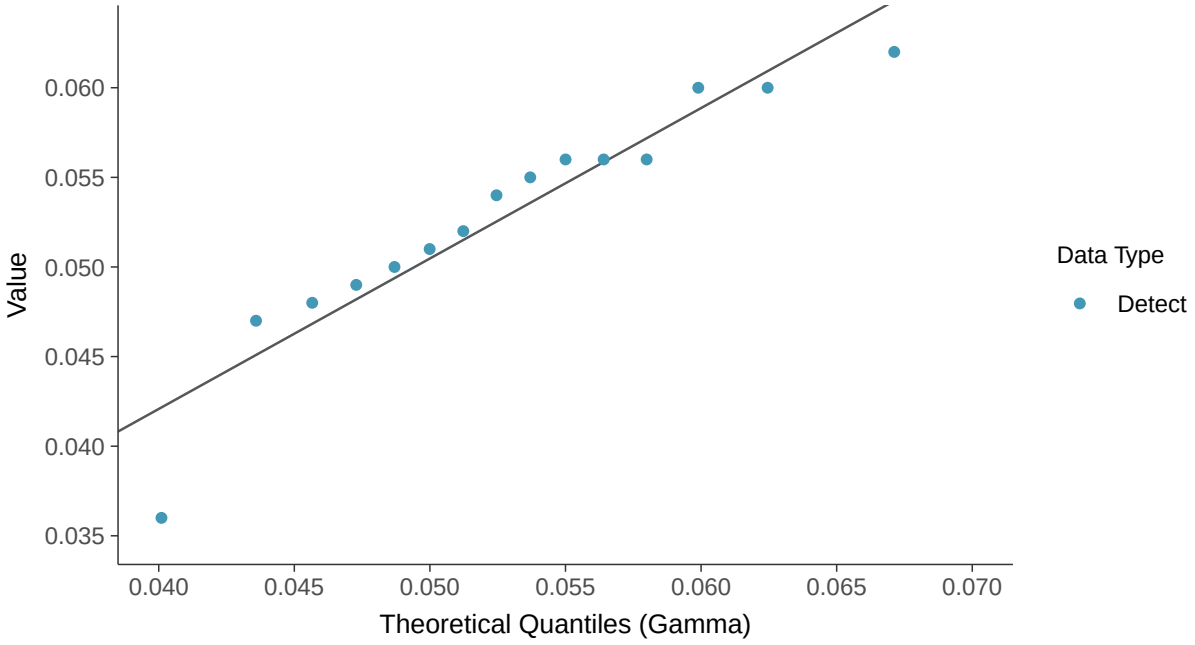
Lognormal Q-Q plot

Barium, MW-7 (mg/l)



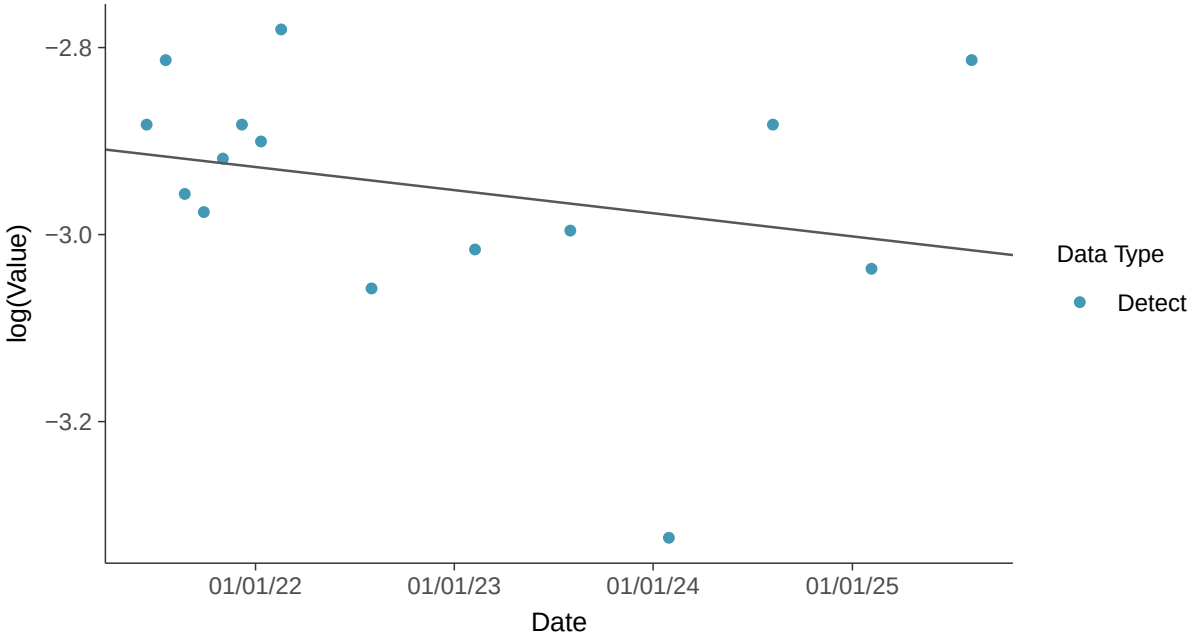
Gamma Q-Q plot

Barium, MW-7 (mg/l)



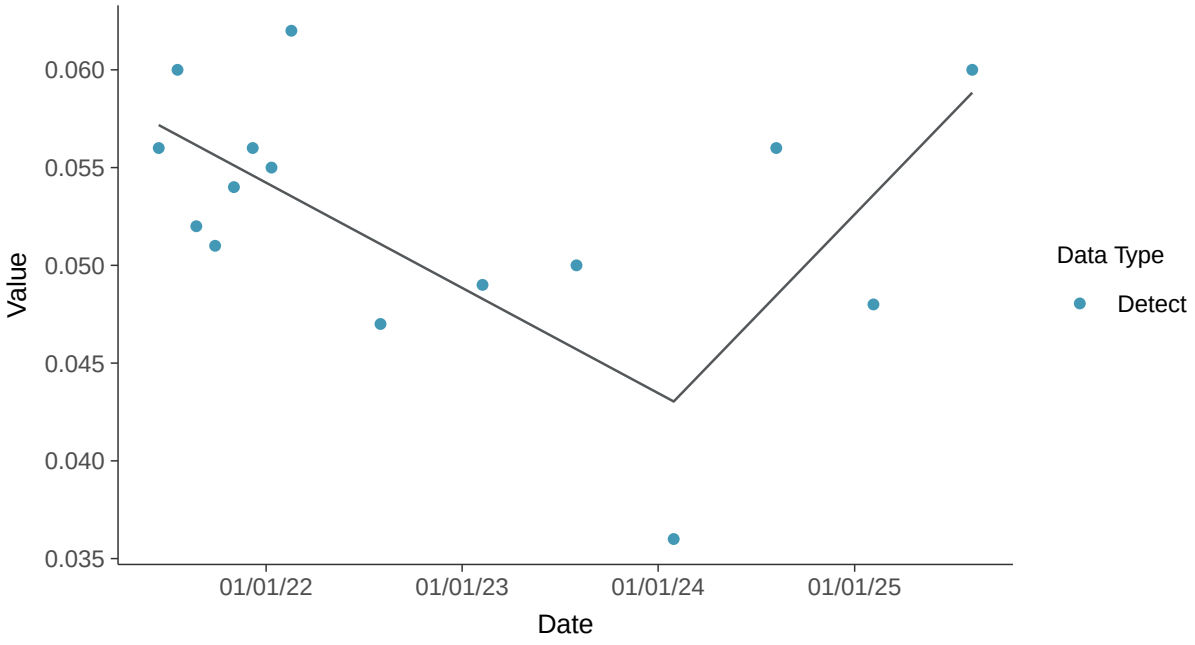
Trend Regression: Lognormal MLE

Barium, MW-7 (mg/l)



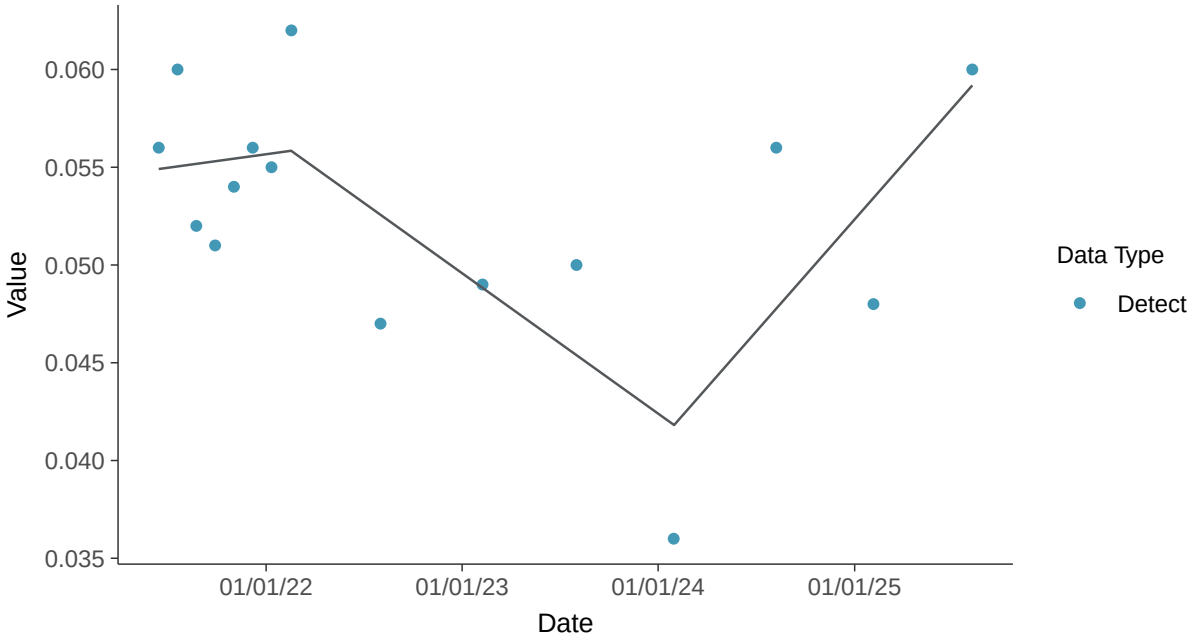
Trend Regression: Piecewise Linear-Linear

Barium, MW-7 (mg/l)



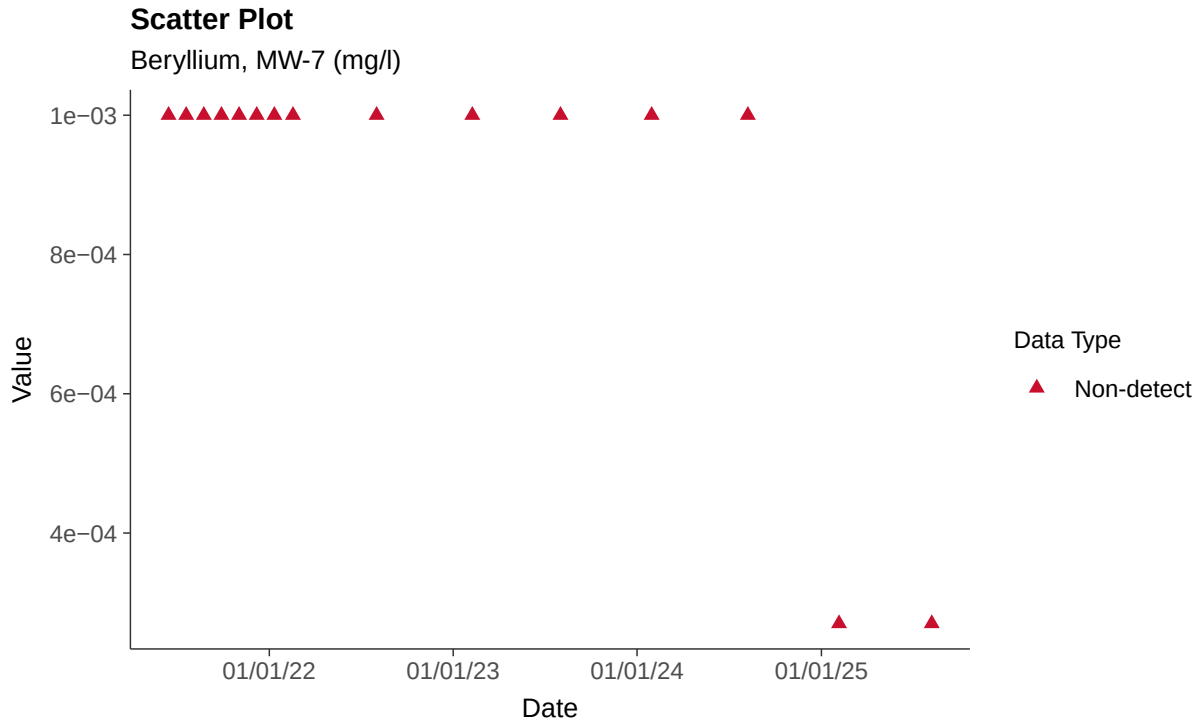
Trend Regression: Piecewise Linear-Linear-Linear

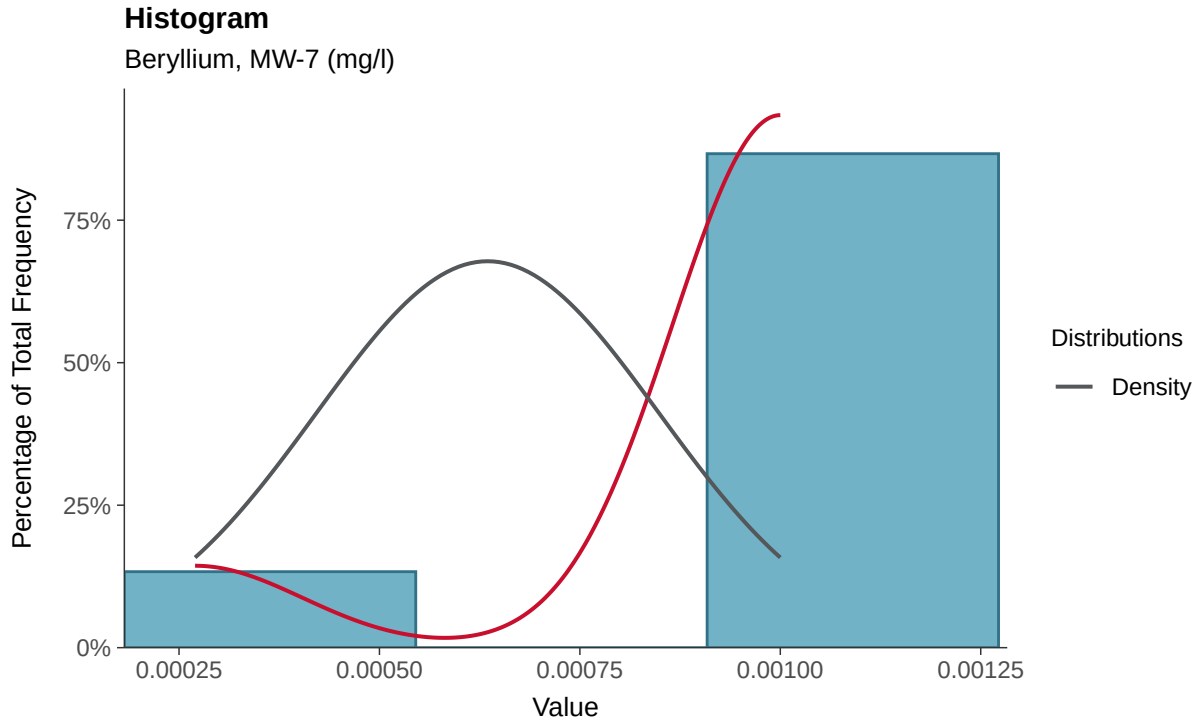
Barium, MW-7 (mg/l)



Appendix IV: Beryllium, MW-7

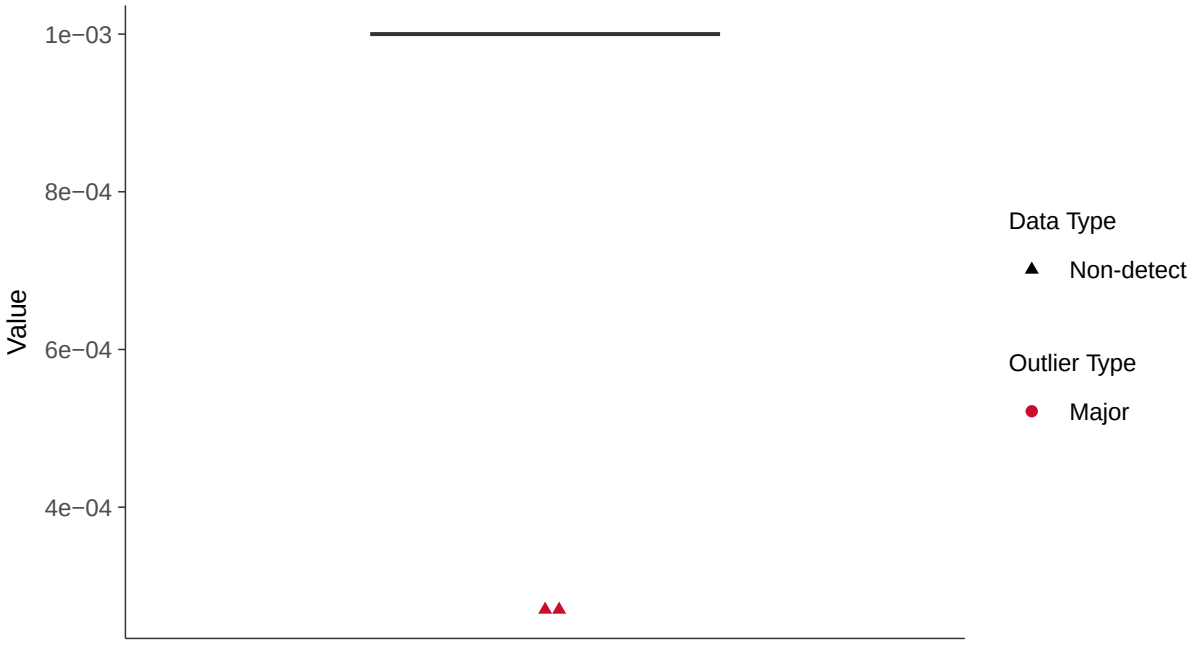
ID: 17_3_104





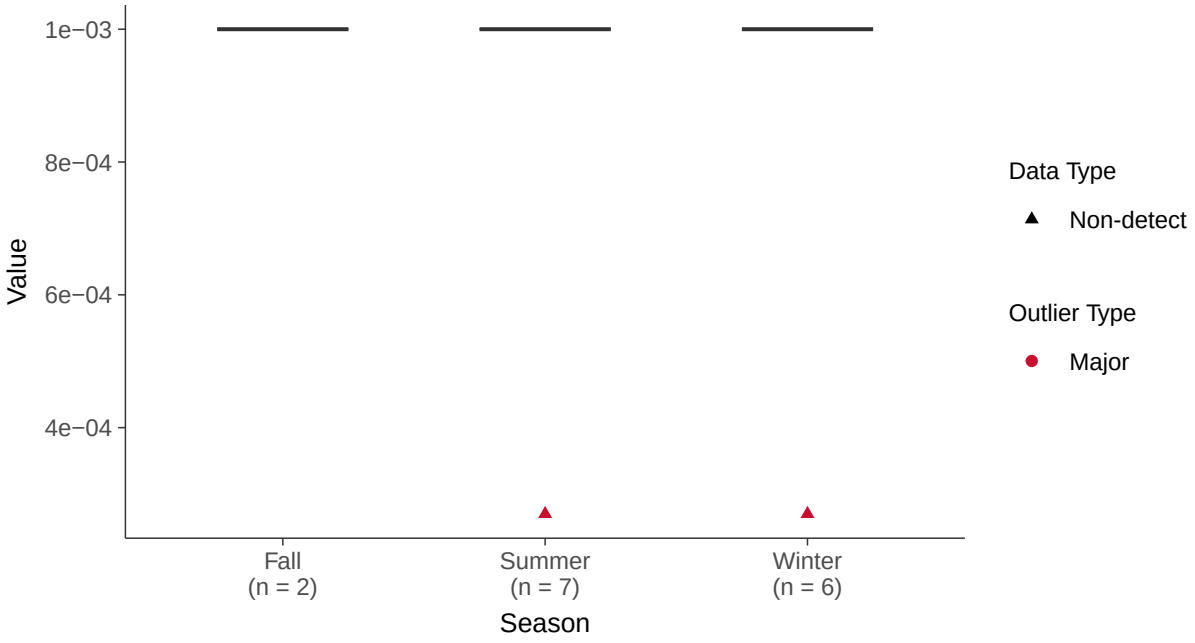
Boxplot

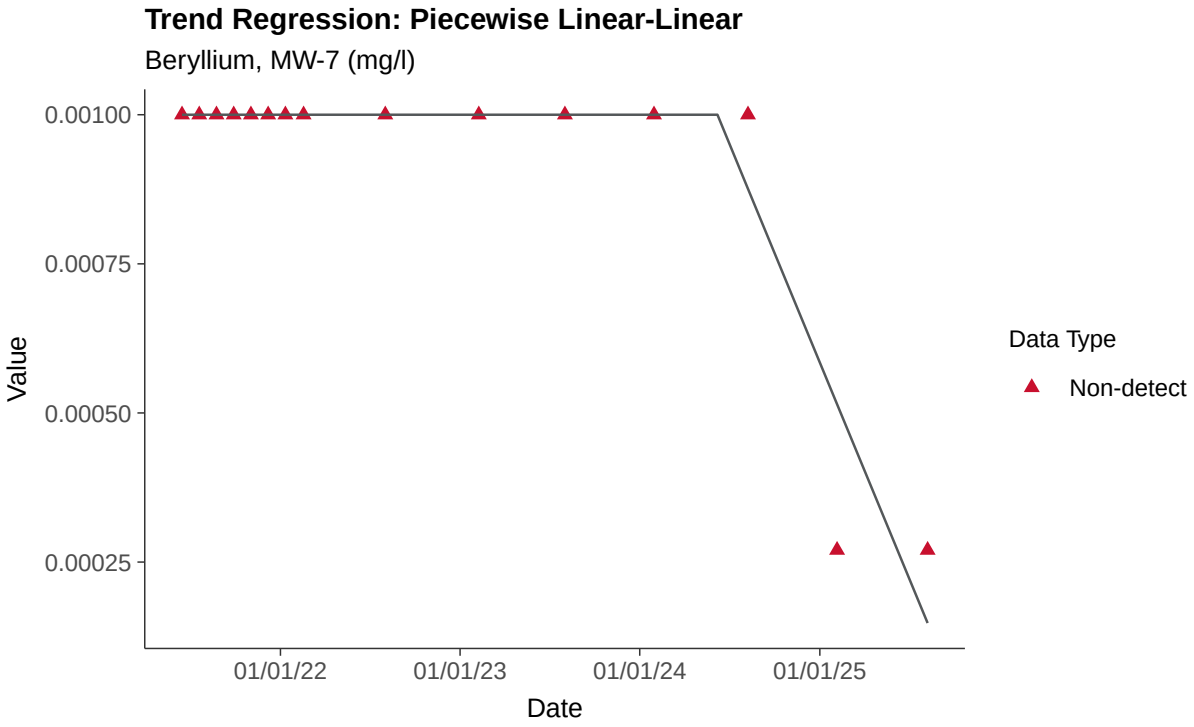
Beryllium, MW-7 (mg/l)



Boxplot by Season

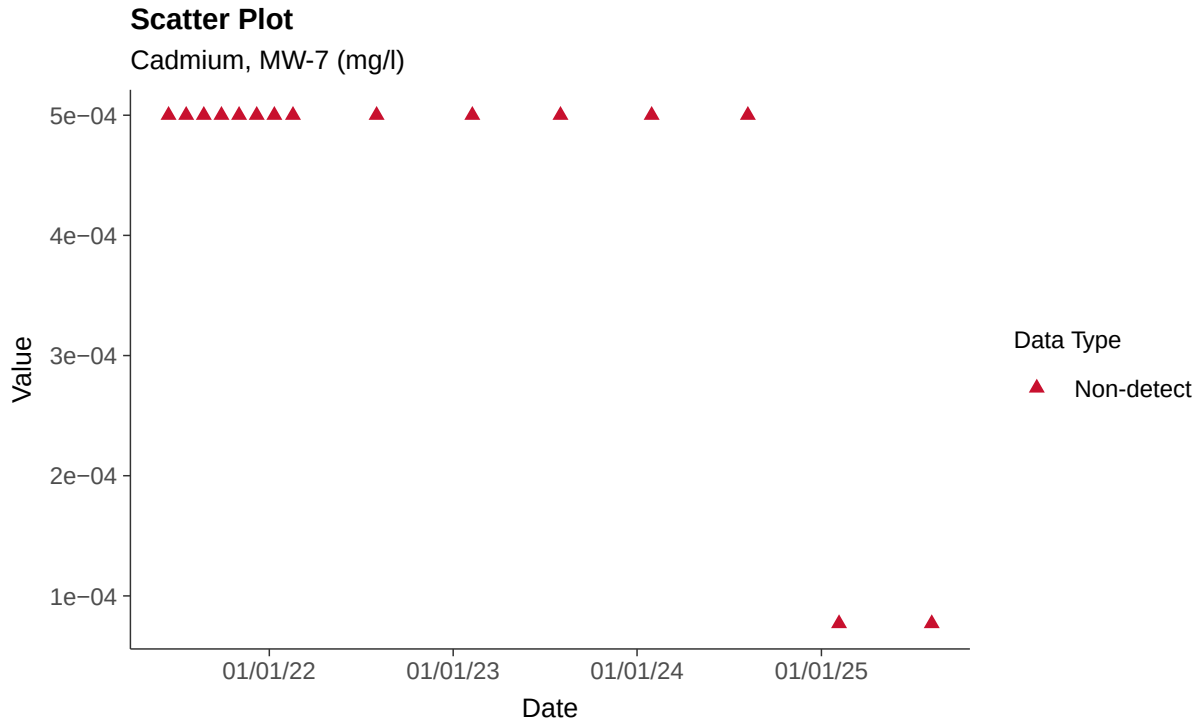
Beryllium, MW-7 (mg/l)

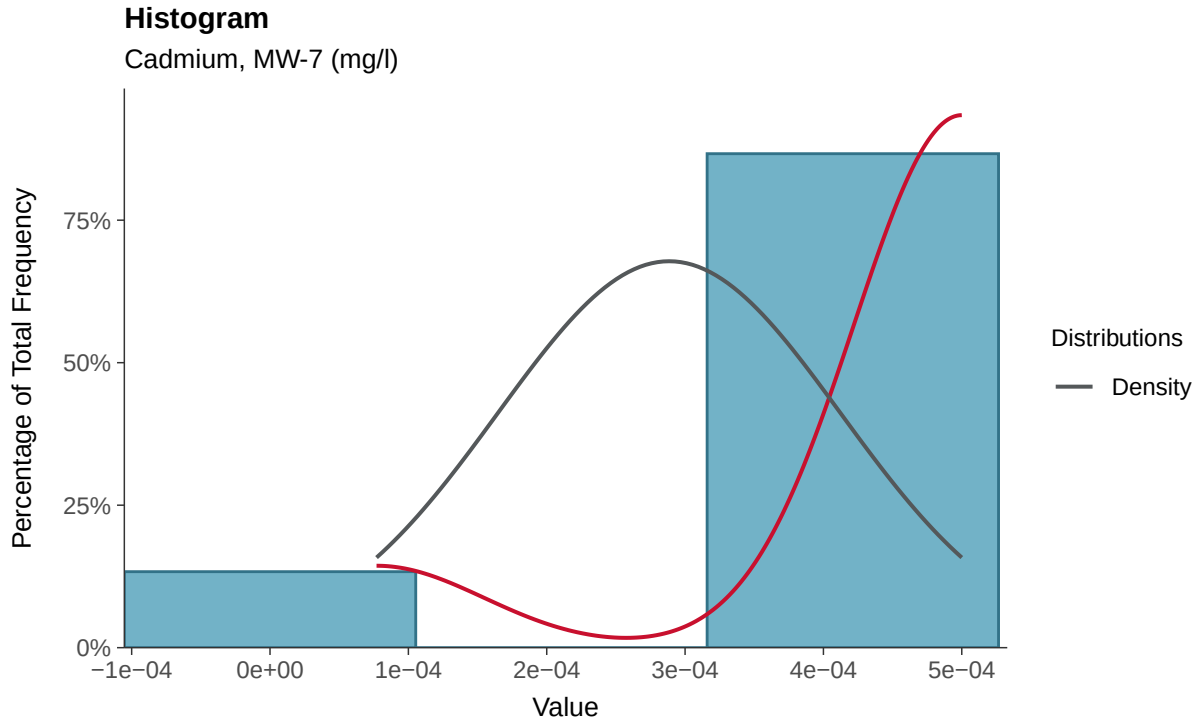



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-7 (mg/l)
0.00100
0.00075
0.00050
0.00025
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Appendix IV: Cadmium, MW-7

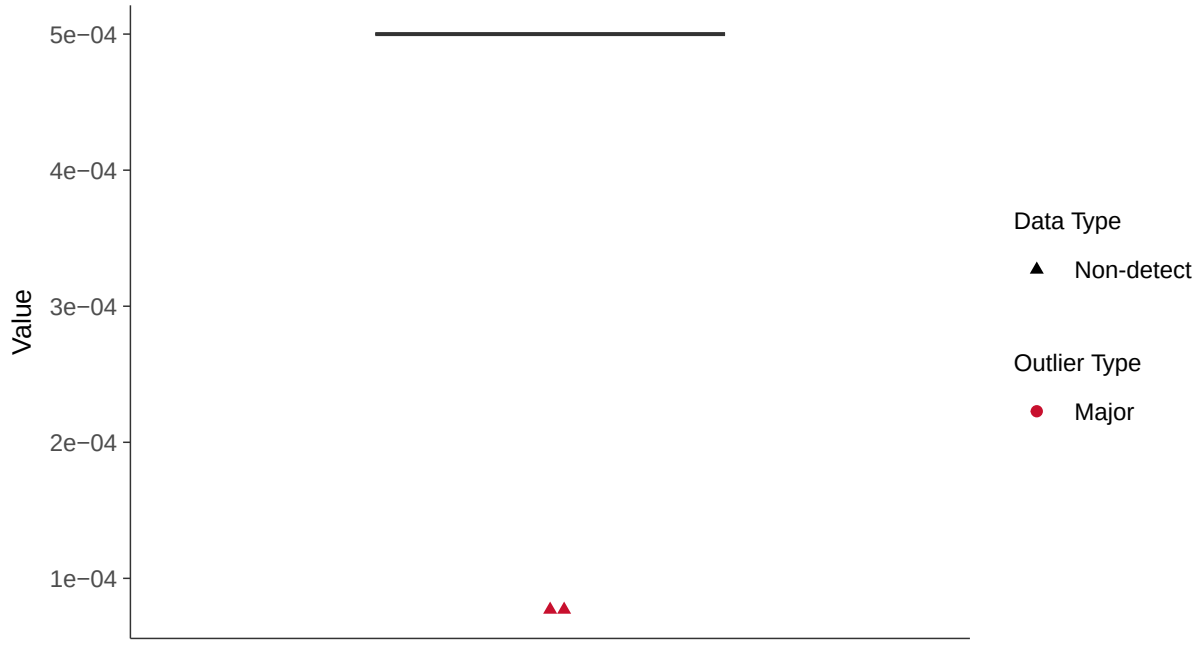
ID: 17_3_106





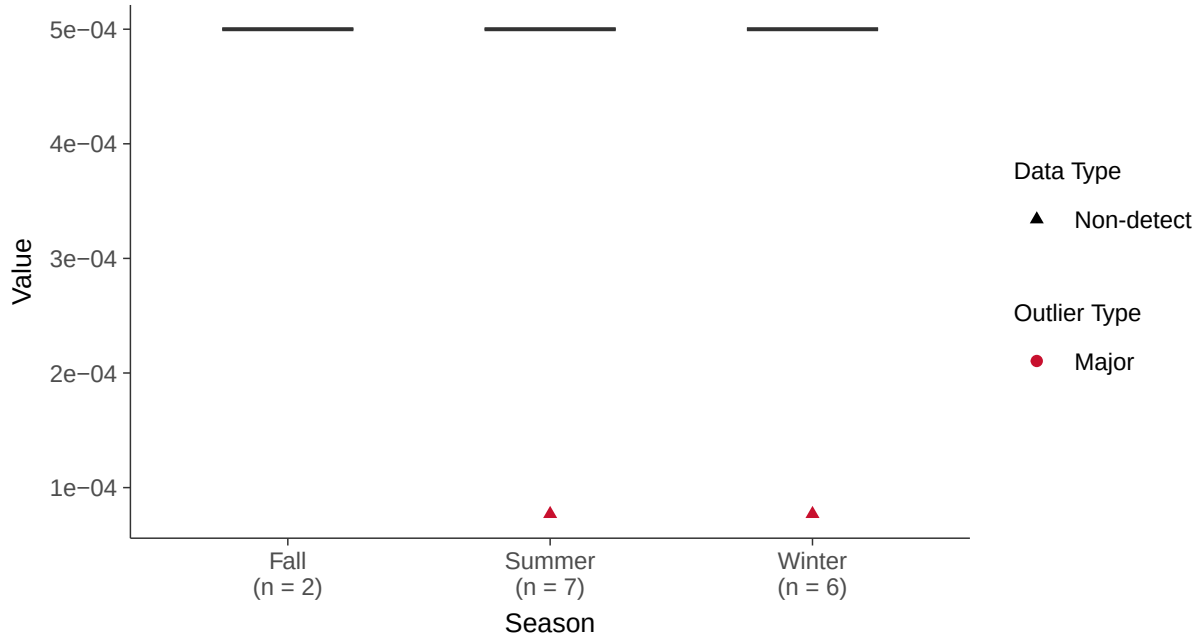
Boxplot

Cadmium, MW-7 (mg/l)



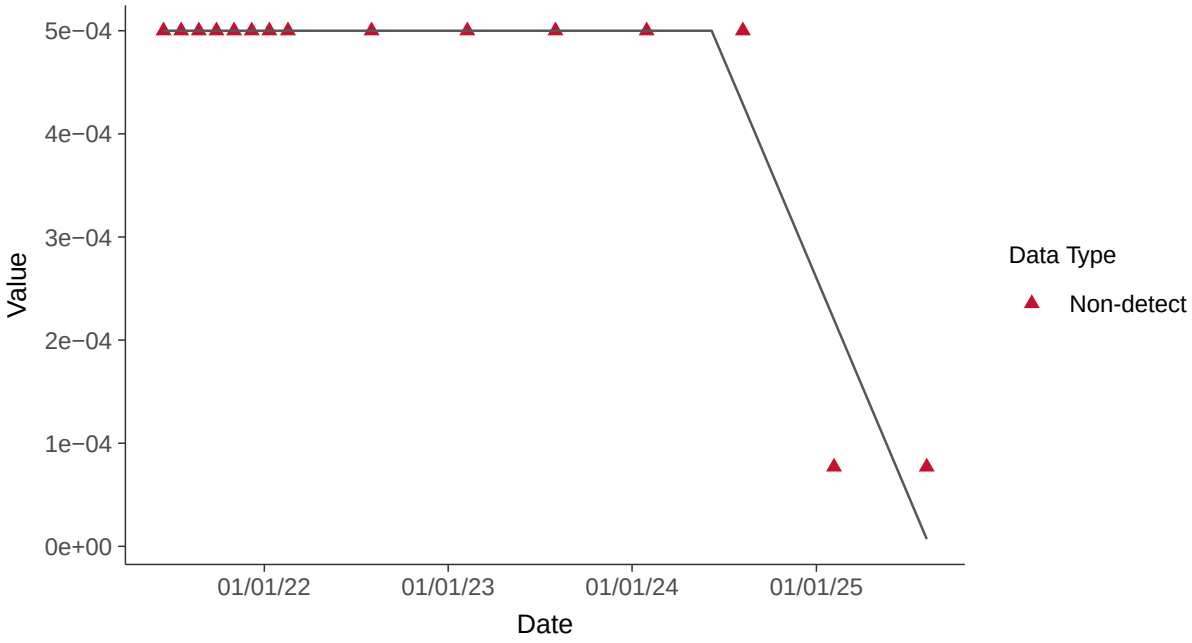
Boxplot by Season

Cadmium, MW-7 (mg/l)



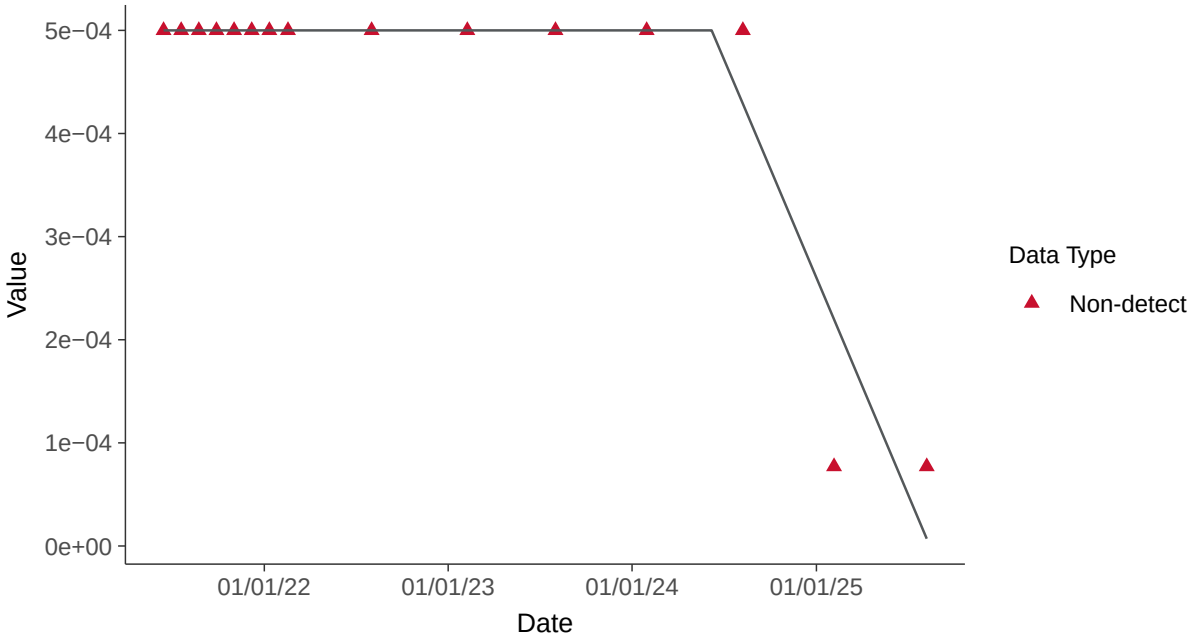
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-7 (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-7 (mg/l)

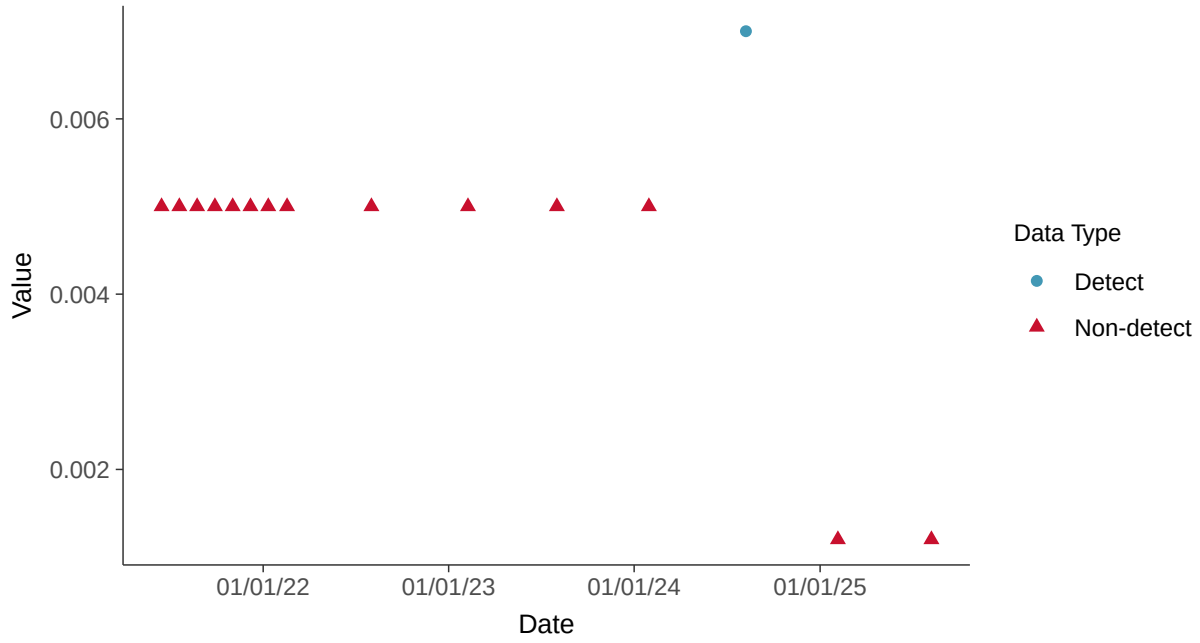


Appendix IV: Chromium, MW-7

ID: 17_3_109

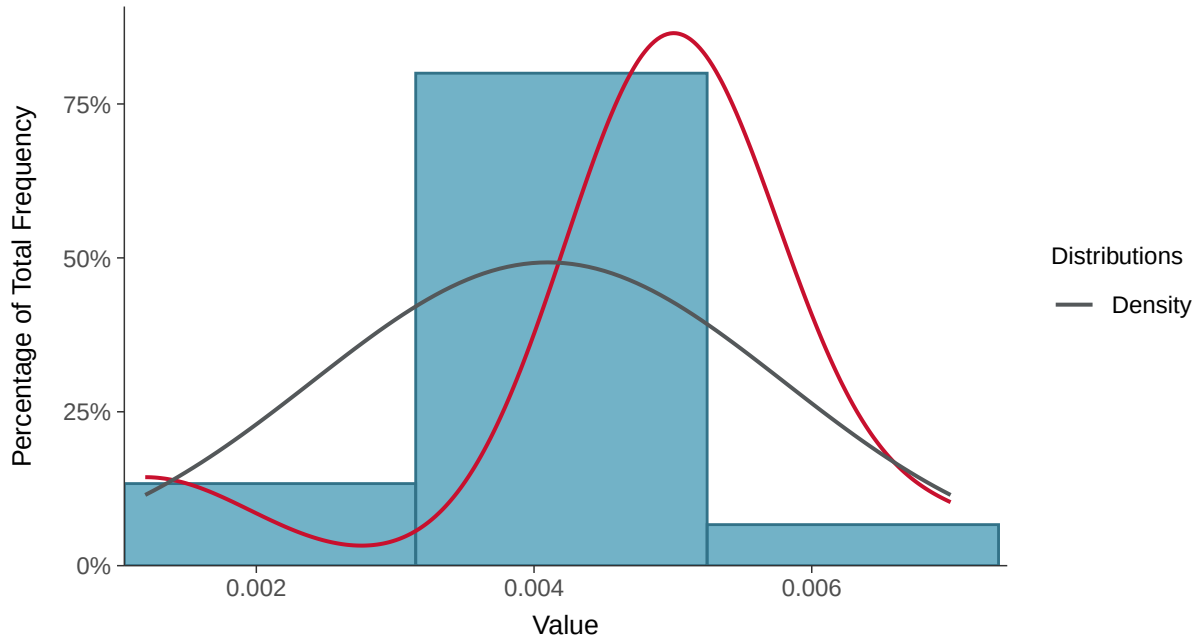
Scatter Plot

Chromium, MW-7 (mg/l)



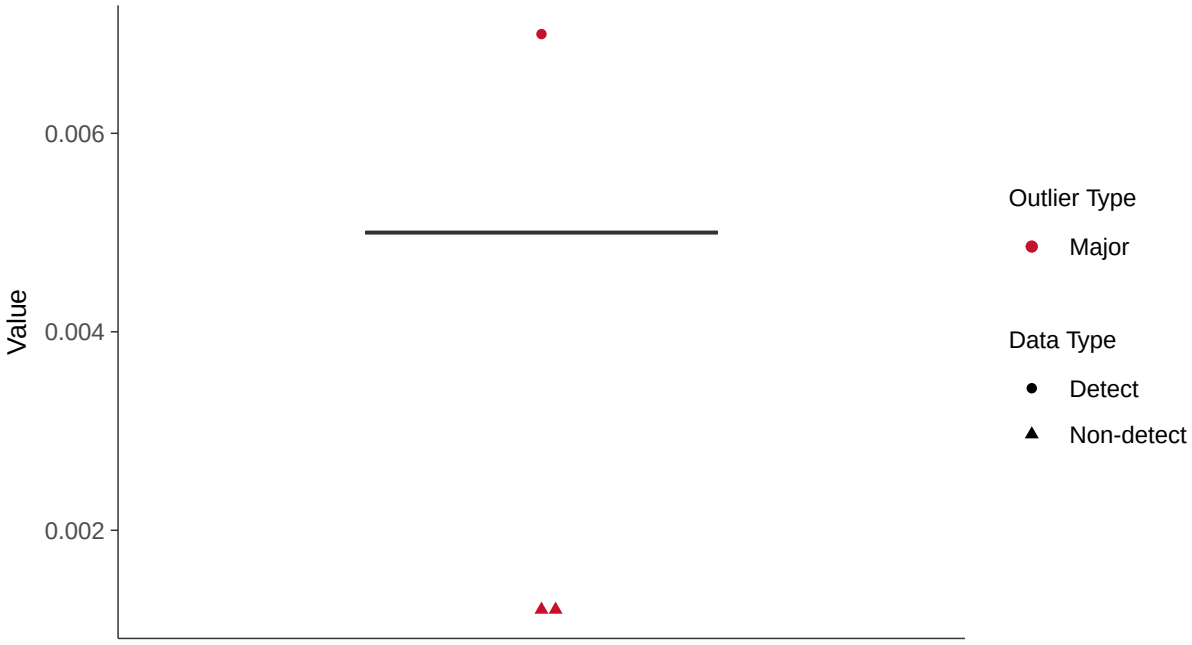
Histogram

Chromium, MW-7 (mg/l)



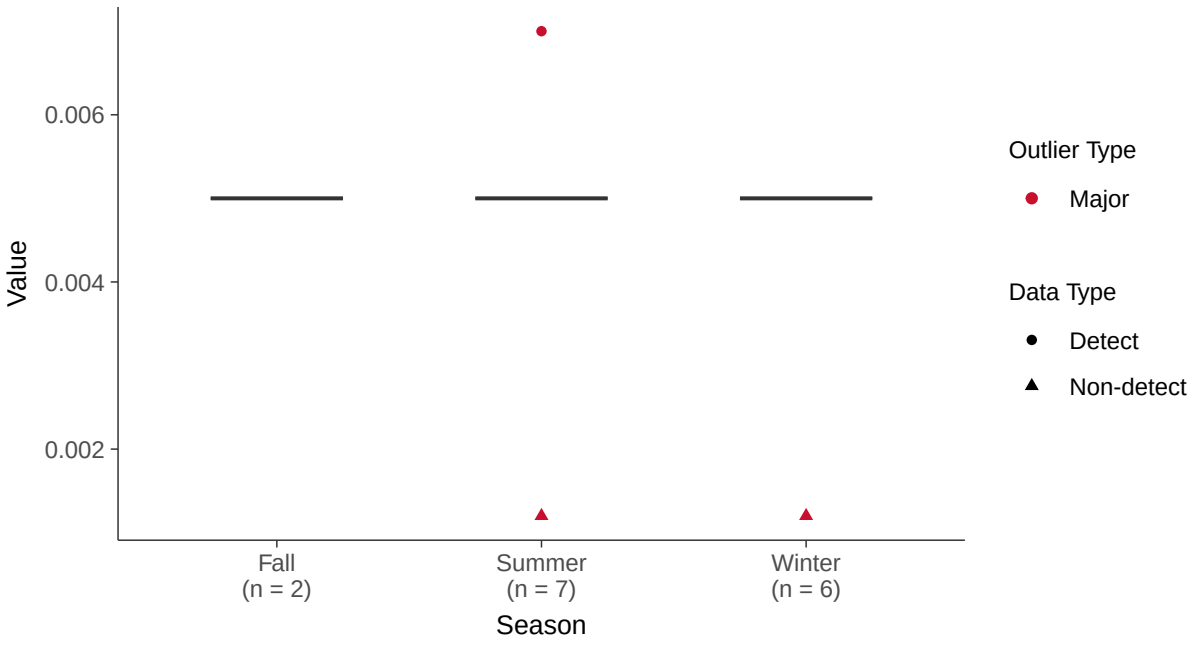
Boxplot

Chromium, MW-7 (mg/l)



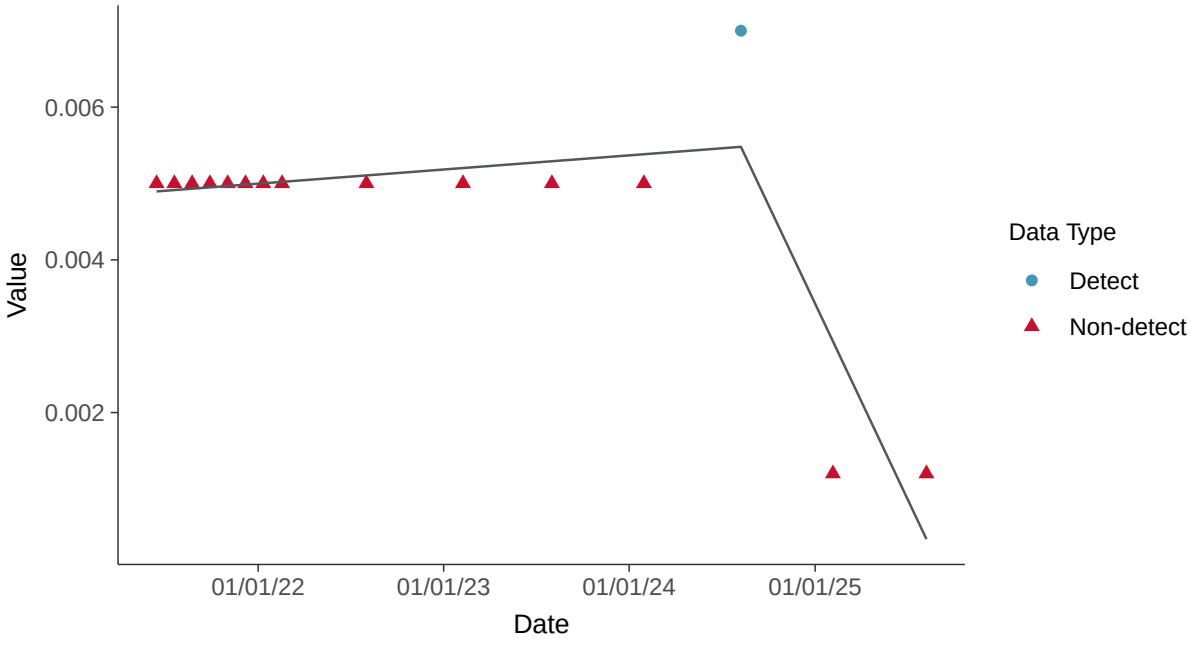
Boxplot by Season

Chromium, MW-7 (mg/l)



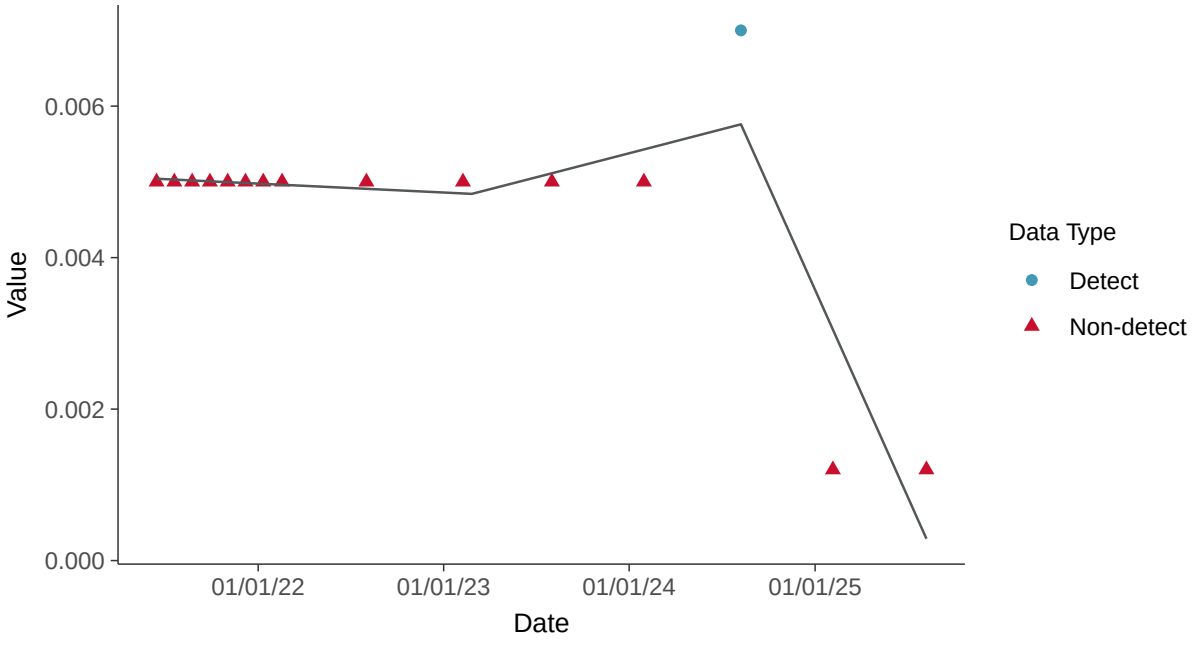
Trend Regression: Piecewise Linear-Linear

Chromium, MW-7 (mg/l)



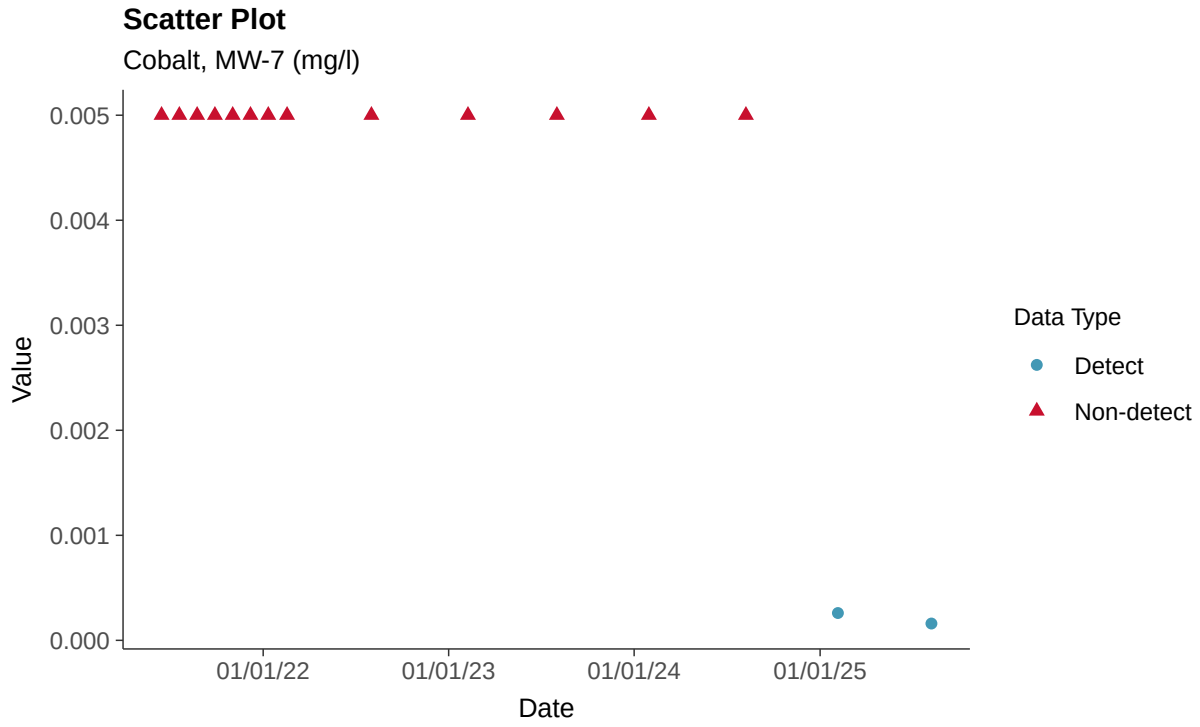
Trend Regression: Piecewise Linear-Linear-Linear

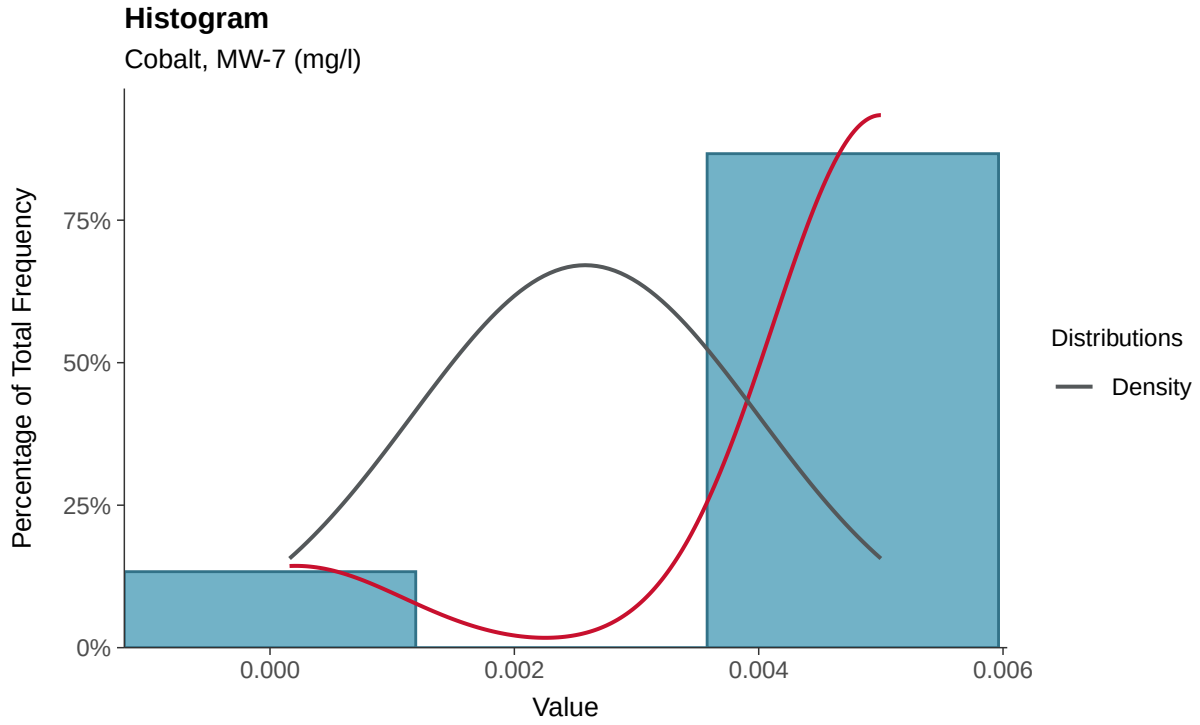
Chromium, MW-7 (mg/l)



Appendix IV: Cobalt, MW-7

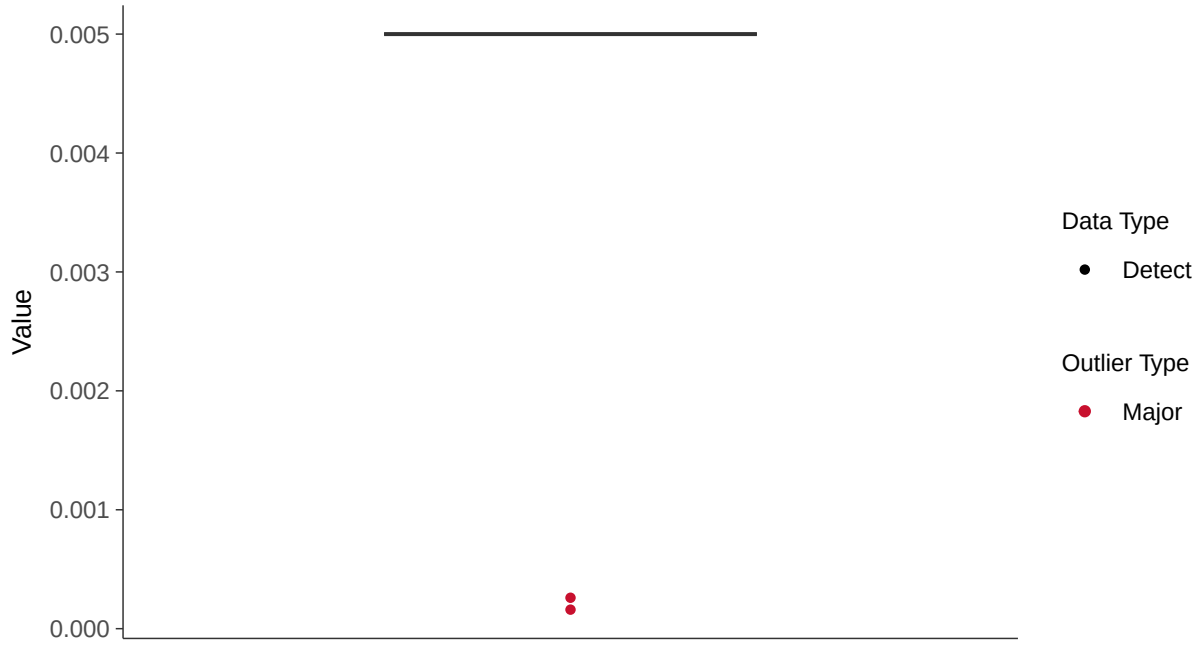
ID: 17_3_110





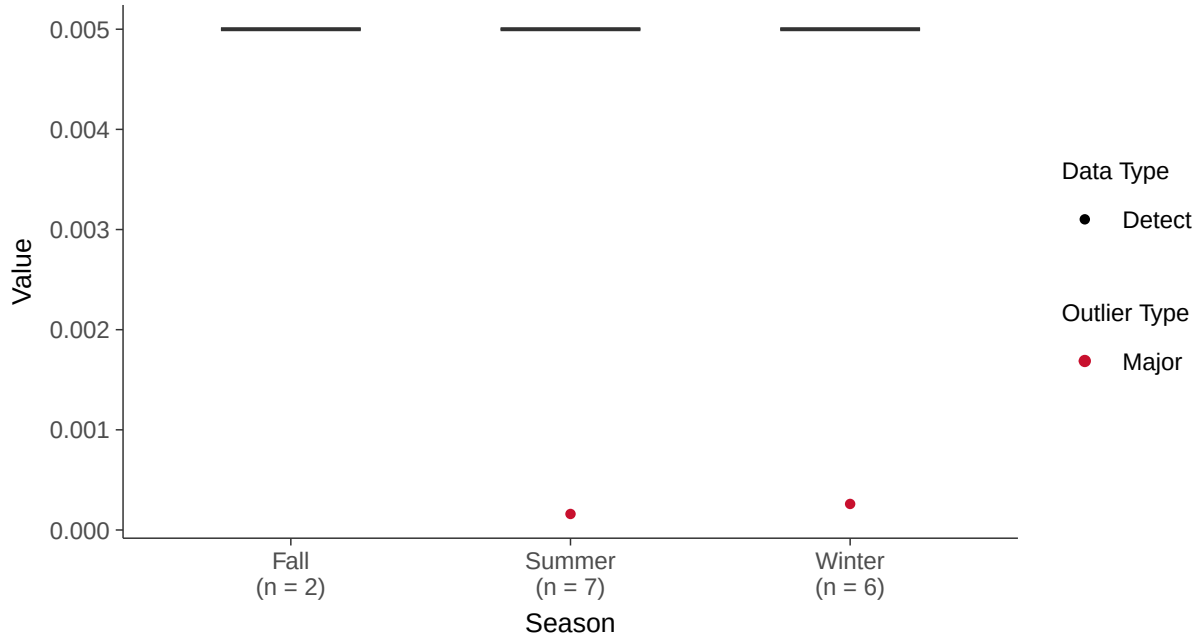
Boxplot

Cobalt, MW-7 (mg/l)



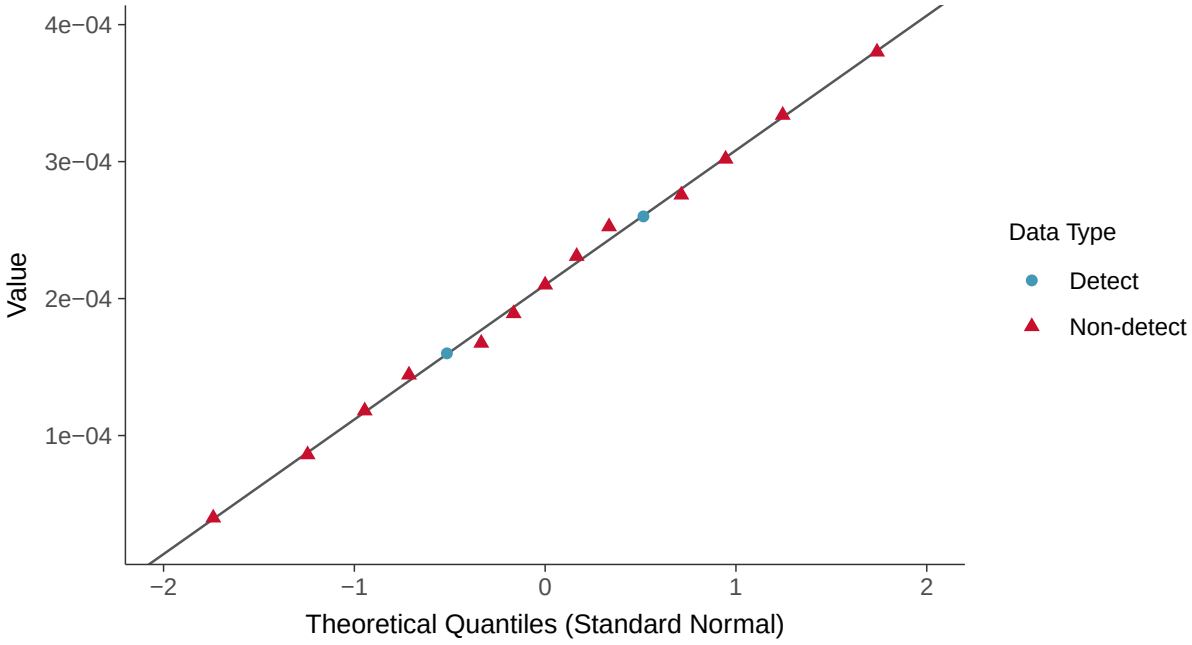
Boxplot by Season

Cobalt, MW-7 (mg/l)



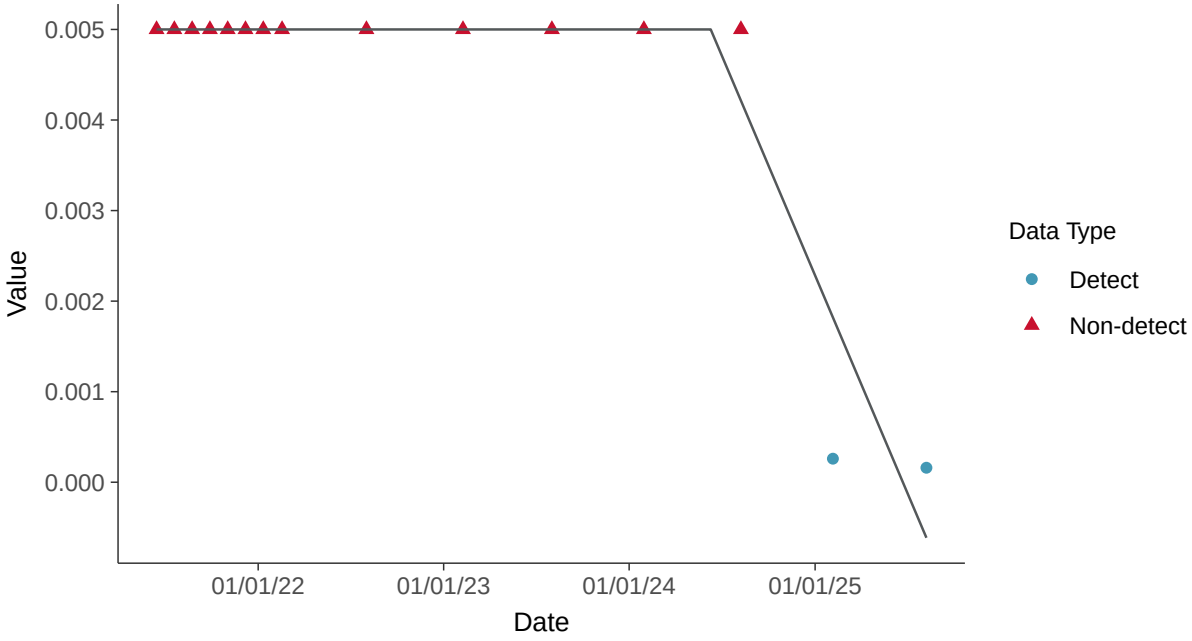
Normal Q-Q plot using ROS Imputed Estimates

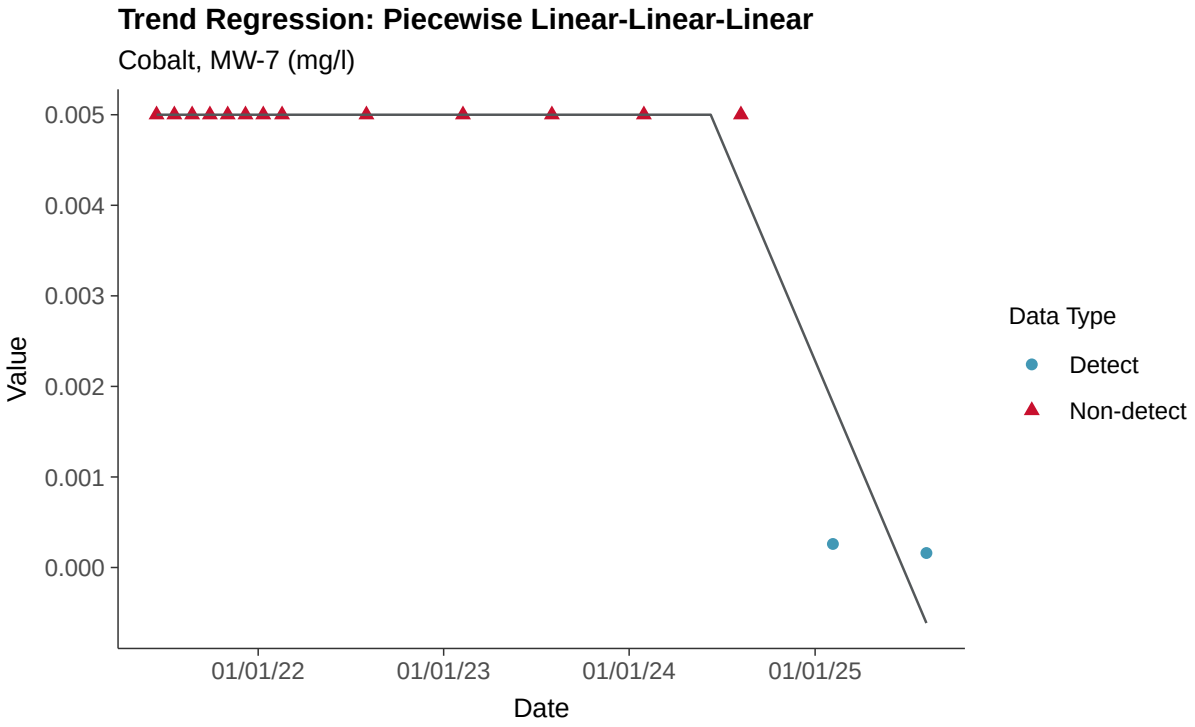
Cobalt, MW-7 (mg/l)



Trend Regression: Piecewise Linear-Linear

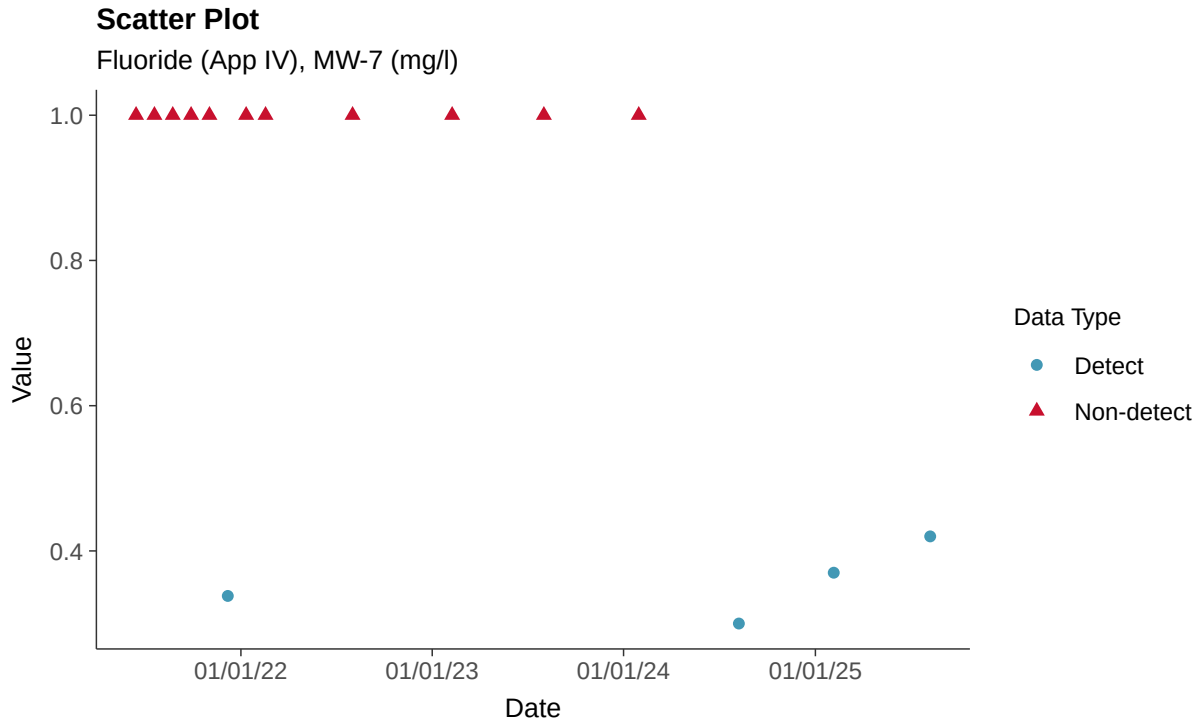
Cobalt, MW-7 (mg/l)

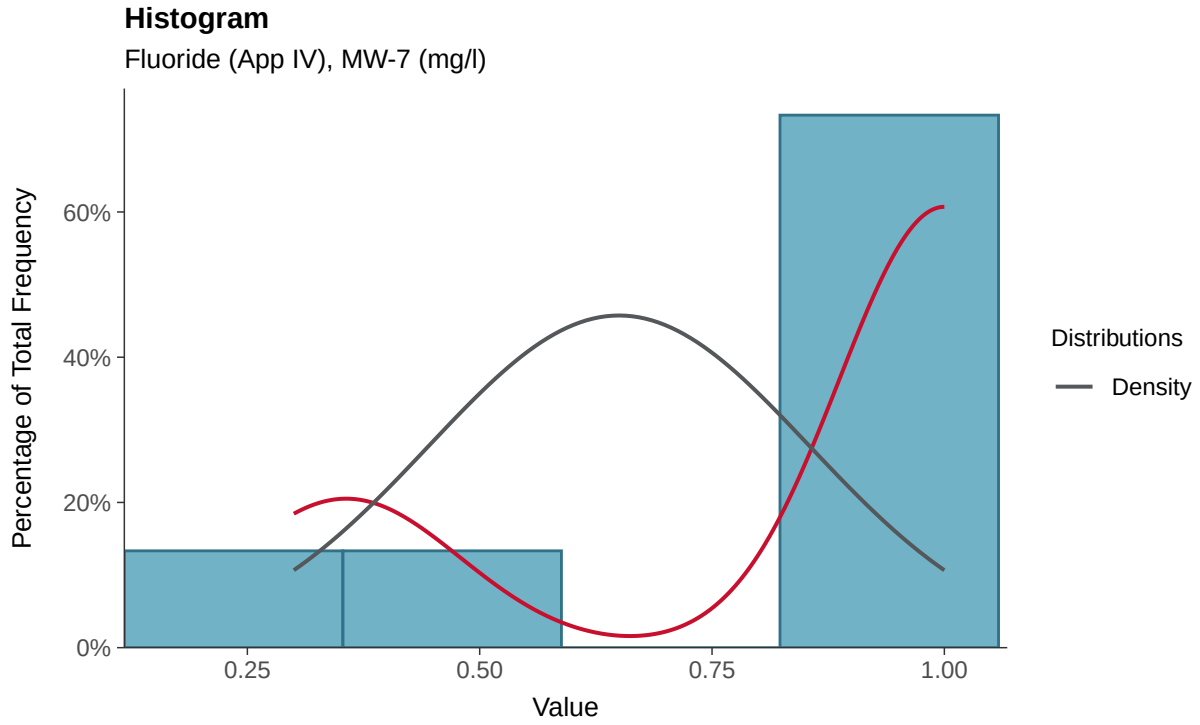



Trend Regression: Piecewise Linear-Linear-Linear
Cobalt, MW-7 (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Fluoride (App IV), MW-7

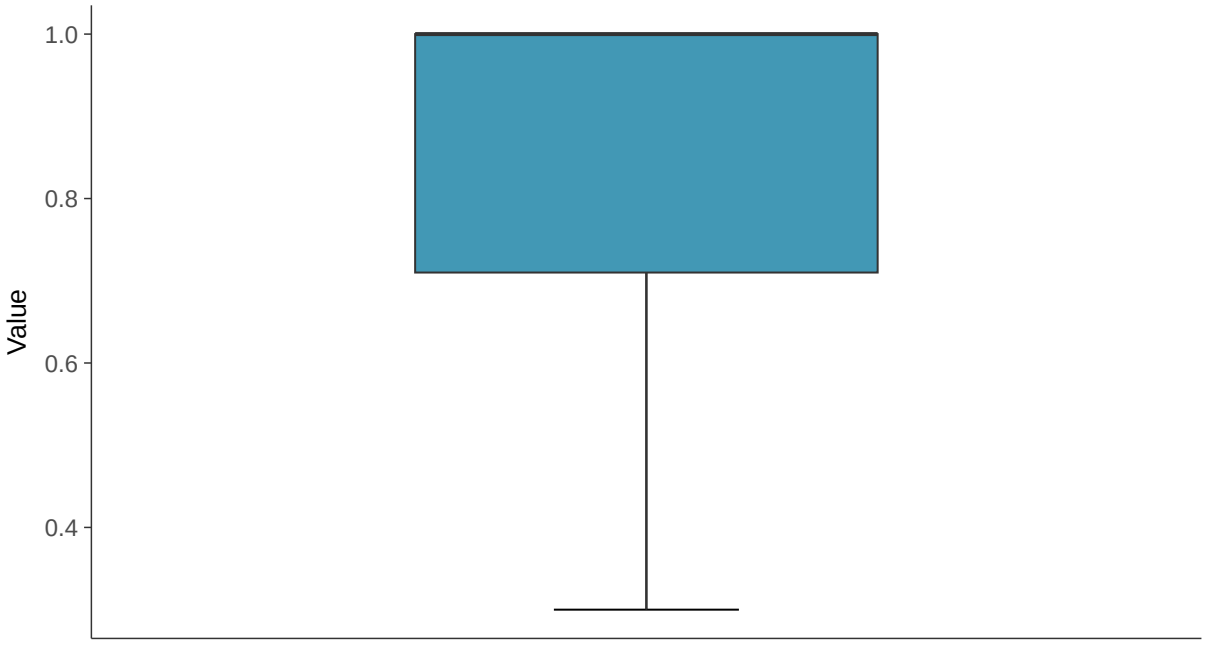
ID: 17_3_113





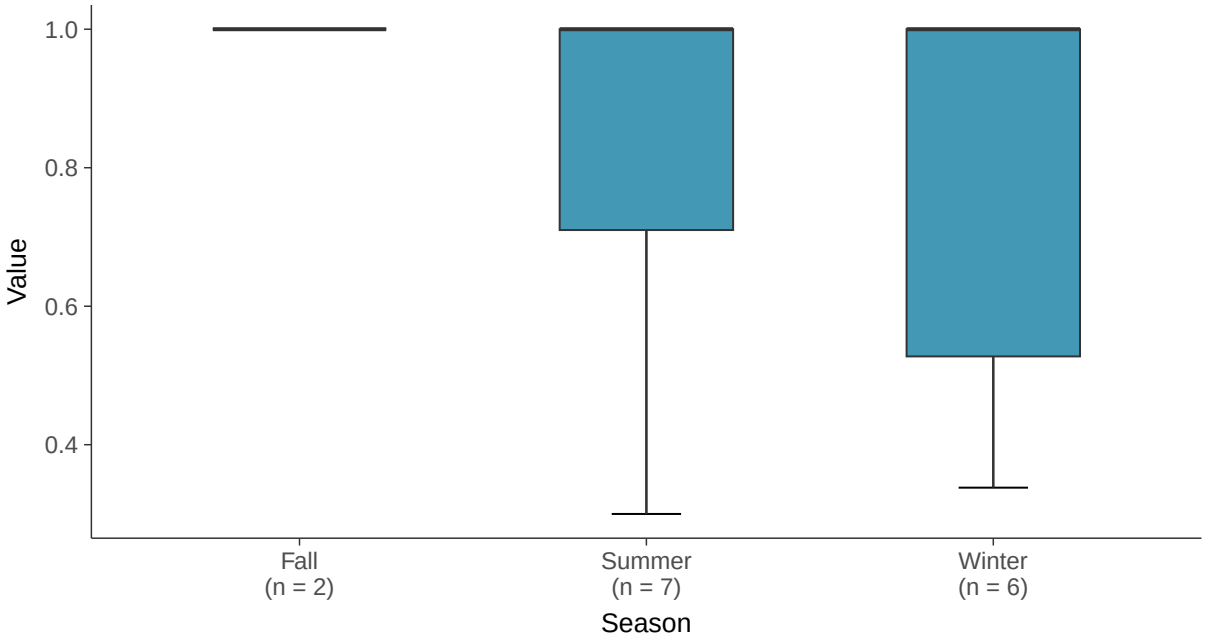
Boxplot

Fluoride (App IV), MW-7 (mg/l)



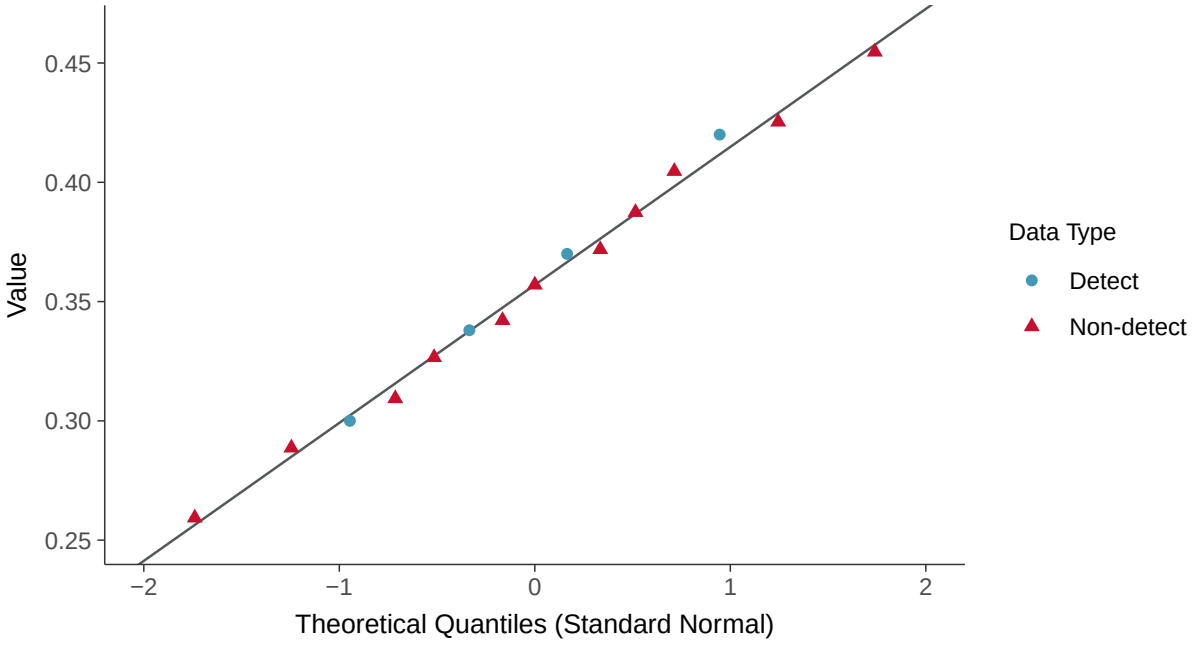
Boxplot by Season

Fluoride (App IV), MW-7 (mg/l)



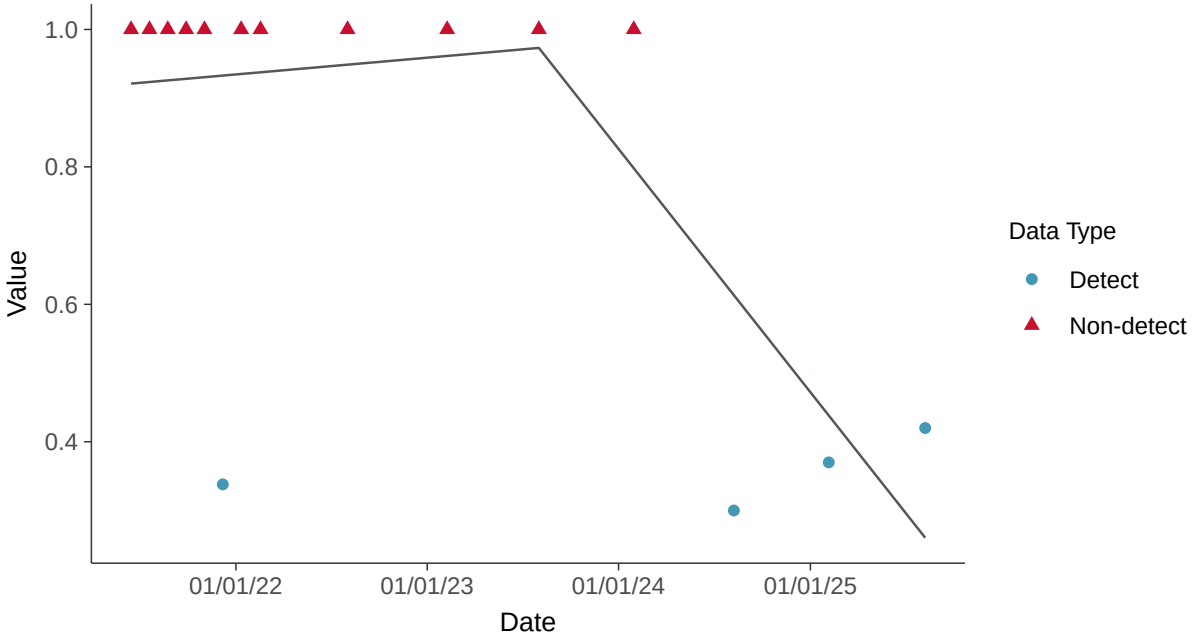
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-7 (mg/l)



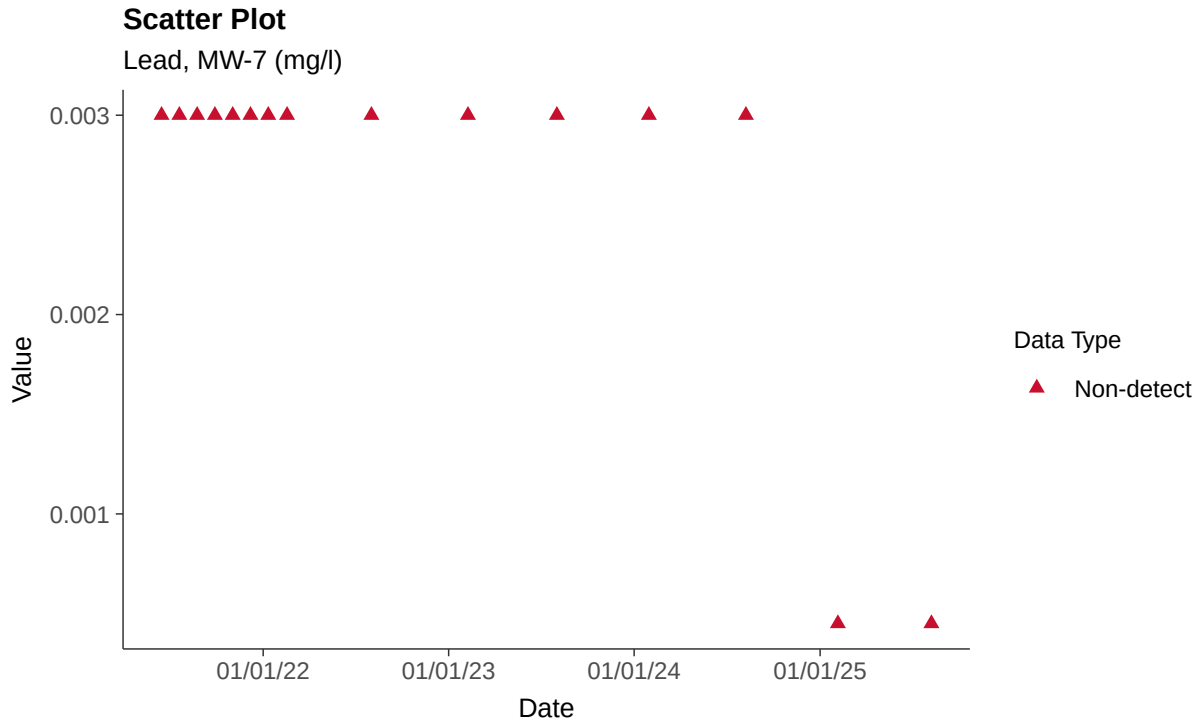
Trend Regression: Piecewise Linear-Linear

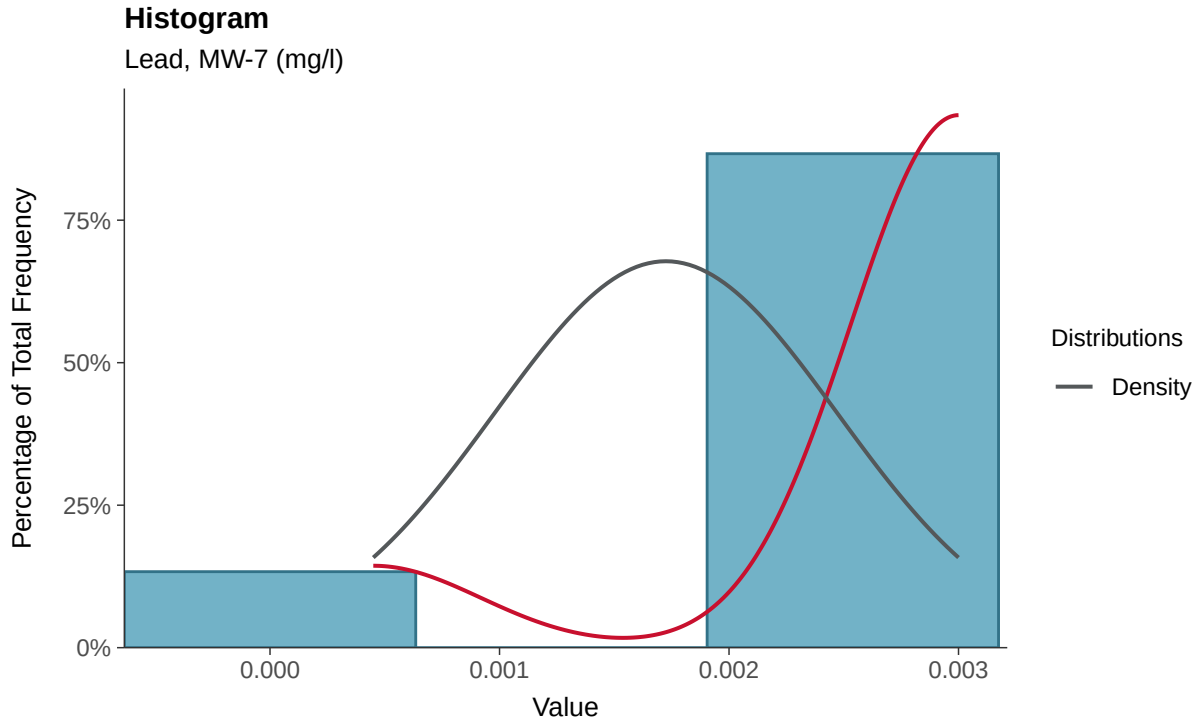
Fluoride (App IV), MW-7 (mg/l)



Appendix IV: Lead, MW-7

ID: 17_3_115



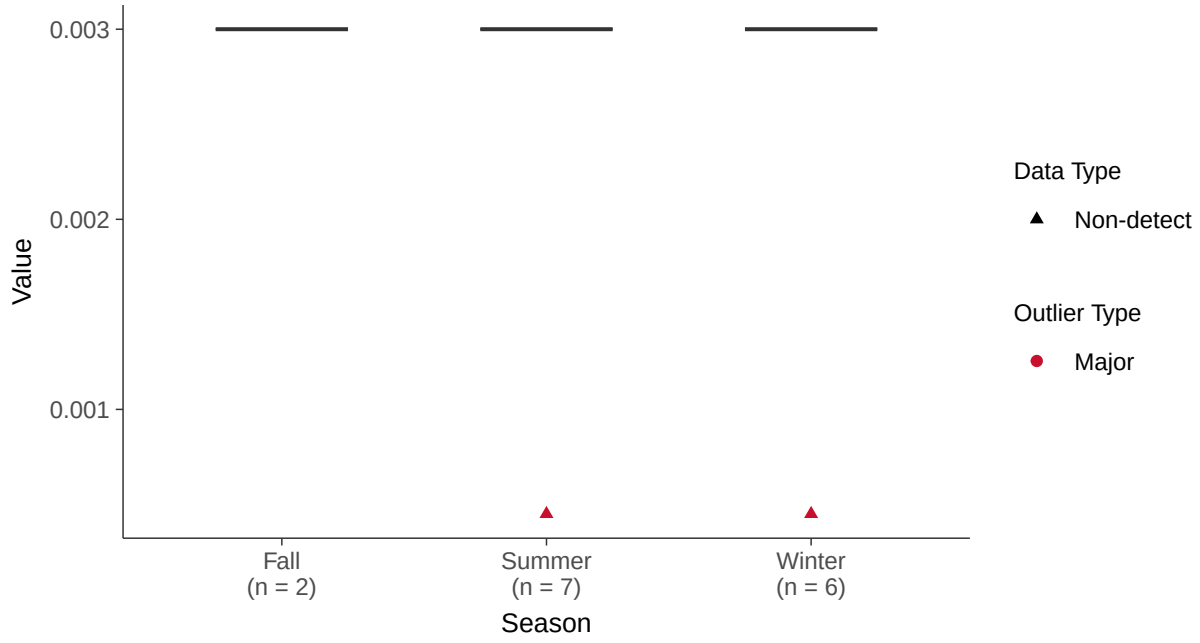


Boxplot

Lead, MW-7 (mg/l)

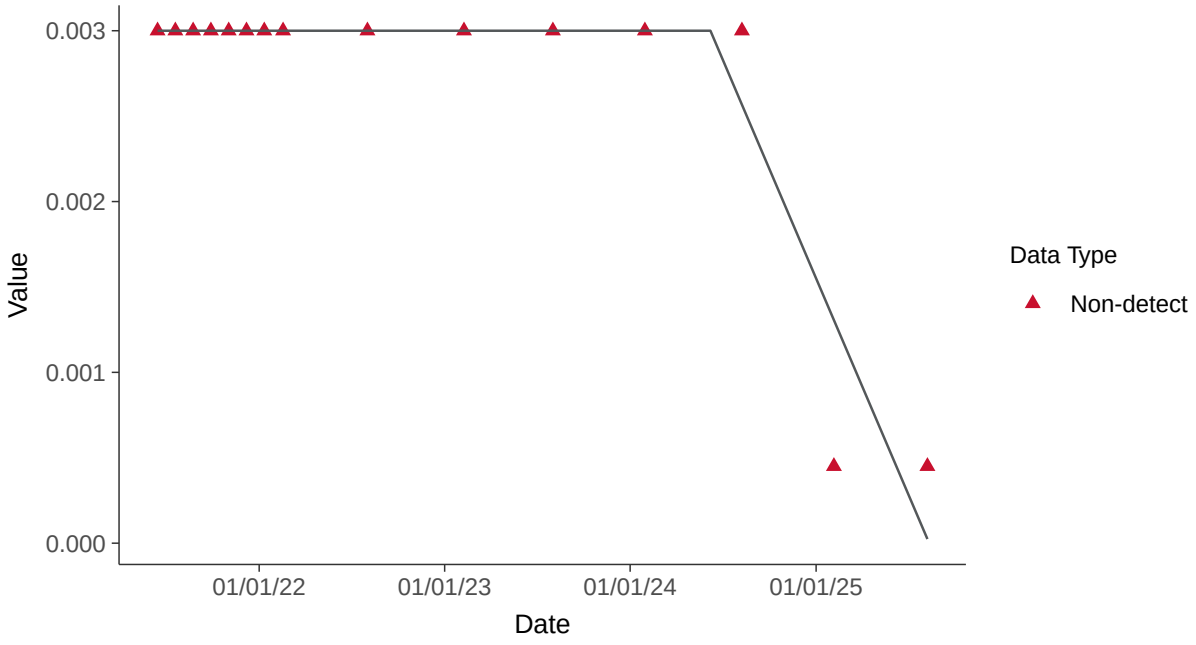
Boxplot by Season

Lead, MW-7 (mg/l)



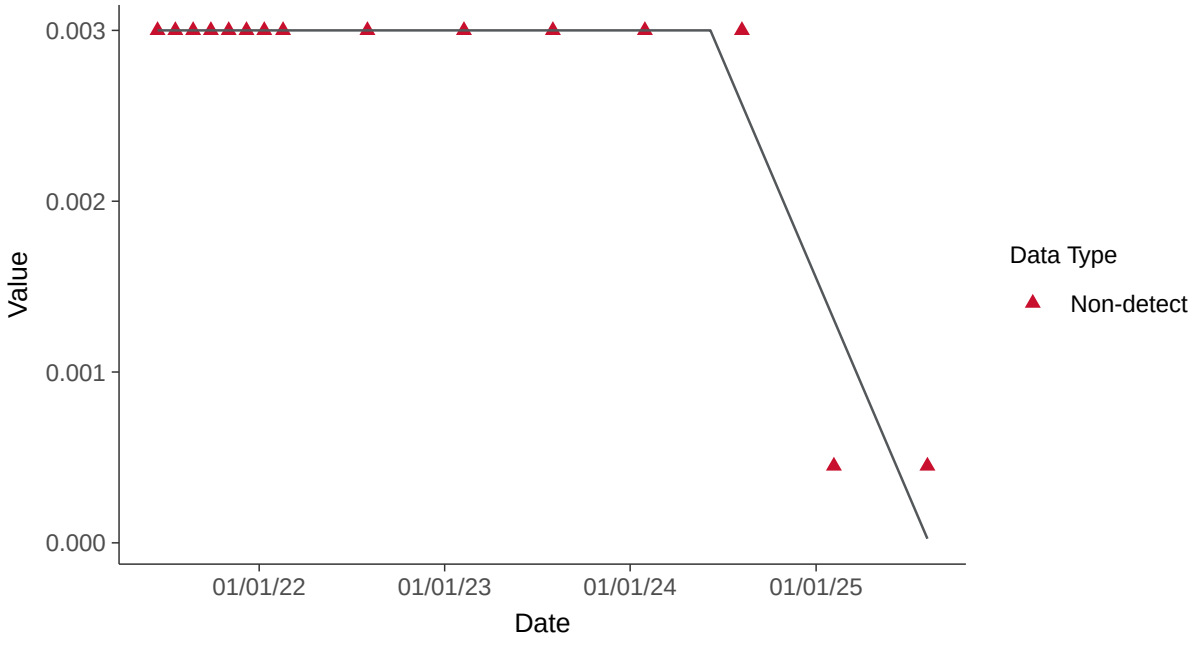
Trend Regression: Piecewise Linear-Linear

Lead, MW-7 (mg/l)



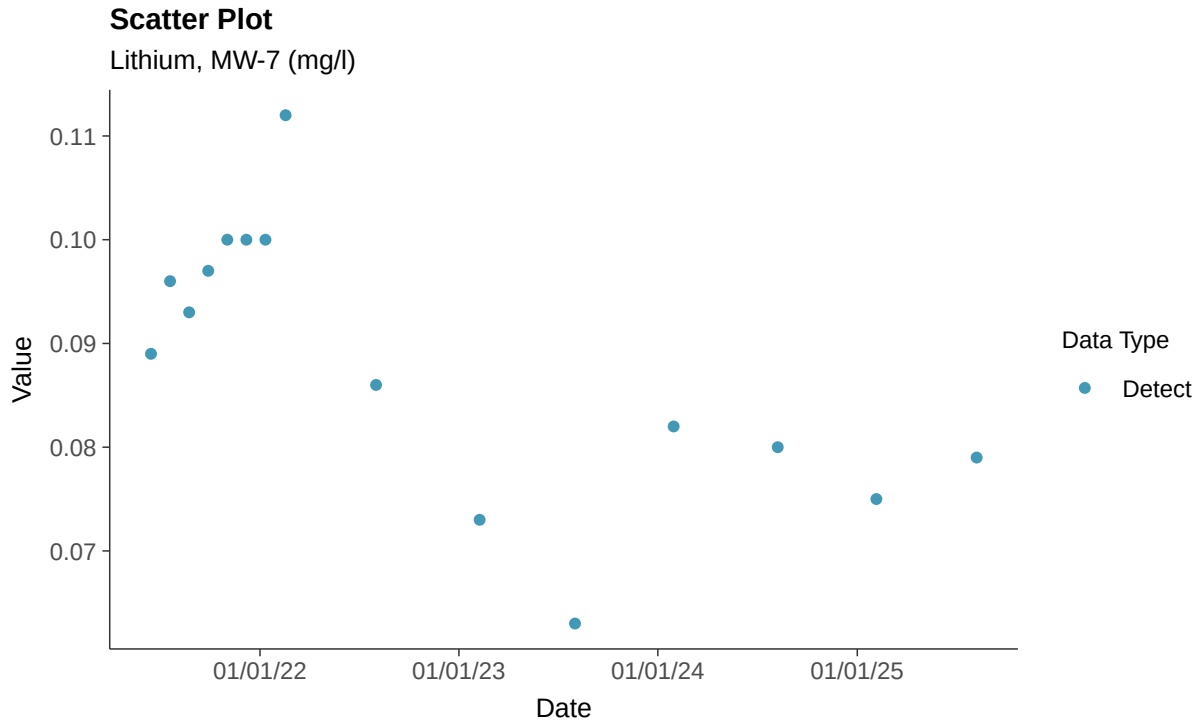
Trend Regression: Piecewise Linear-Linear-Linear

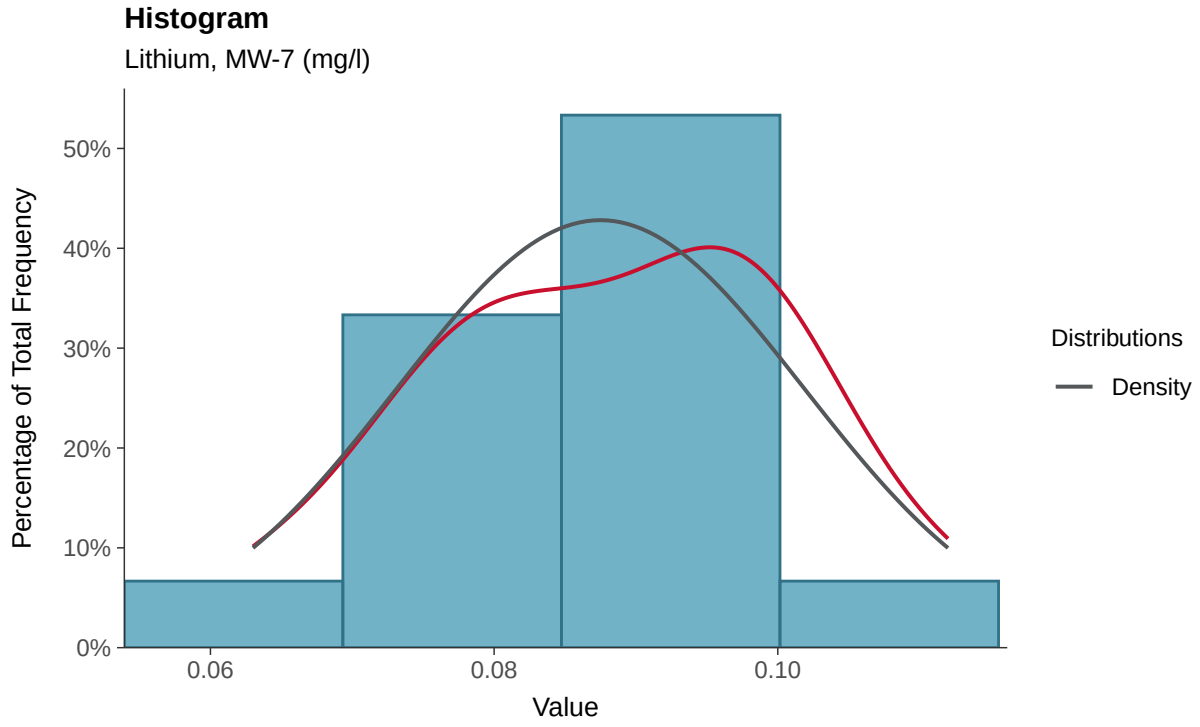
Lead, MW-7 (mg/l)



Appendix IV: Lithium, MW-7

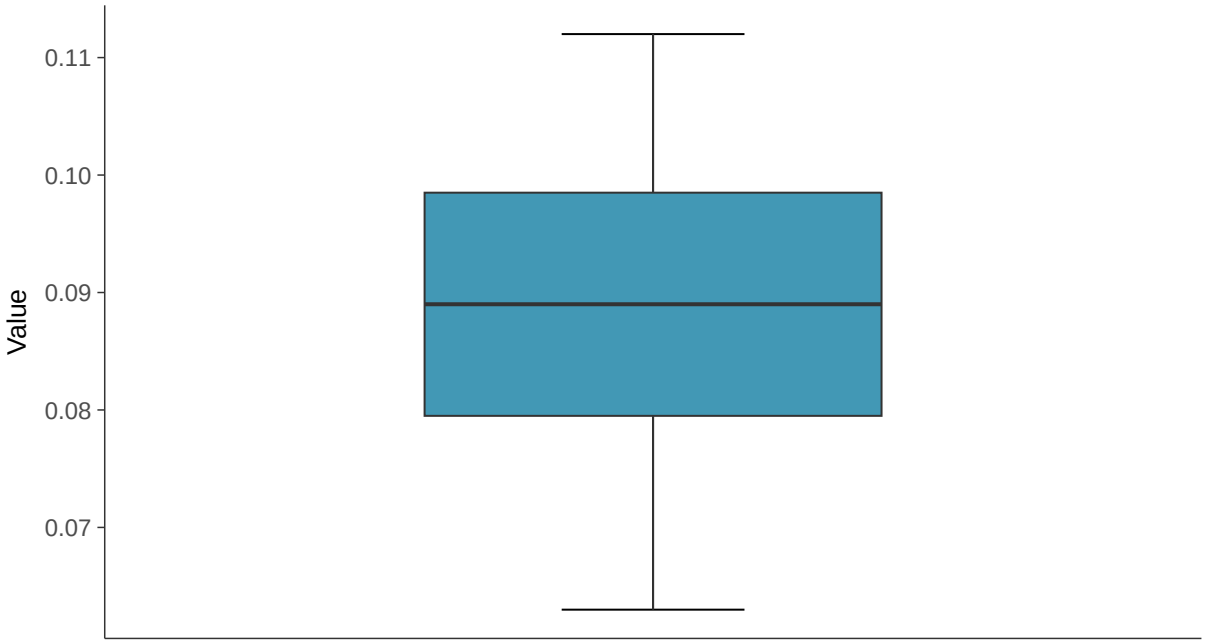
ID: 17_3_116





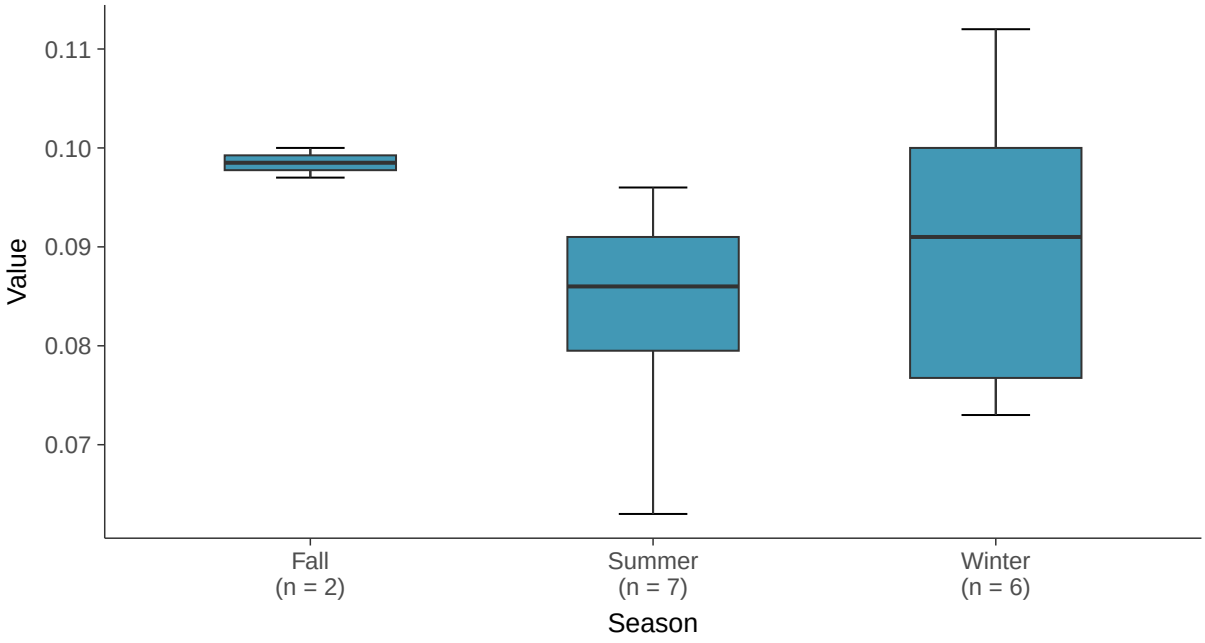
Boxplot

Lithium, MW-7 (mg/l)



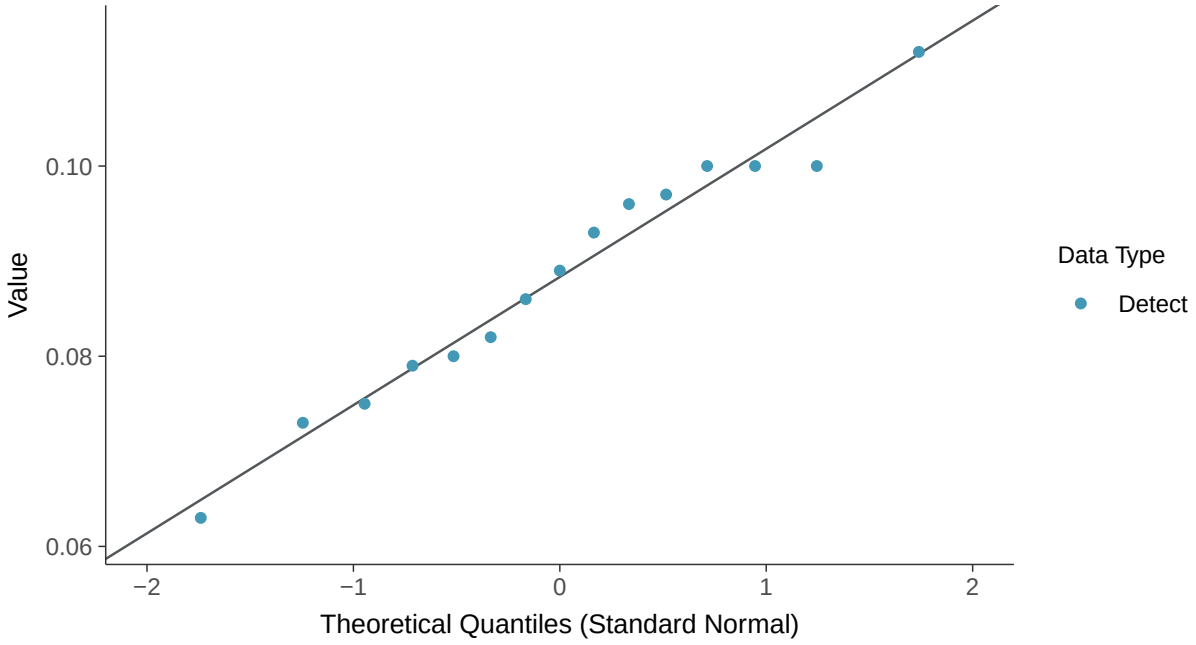
Boxplot by Season

Lithium, MW-7 (mg/l)



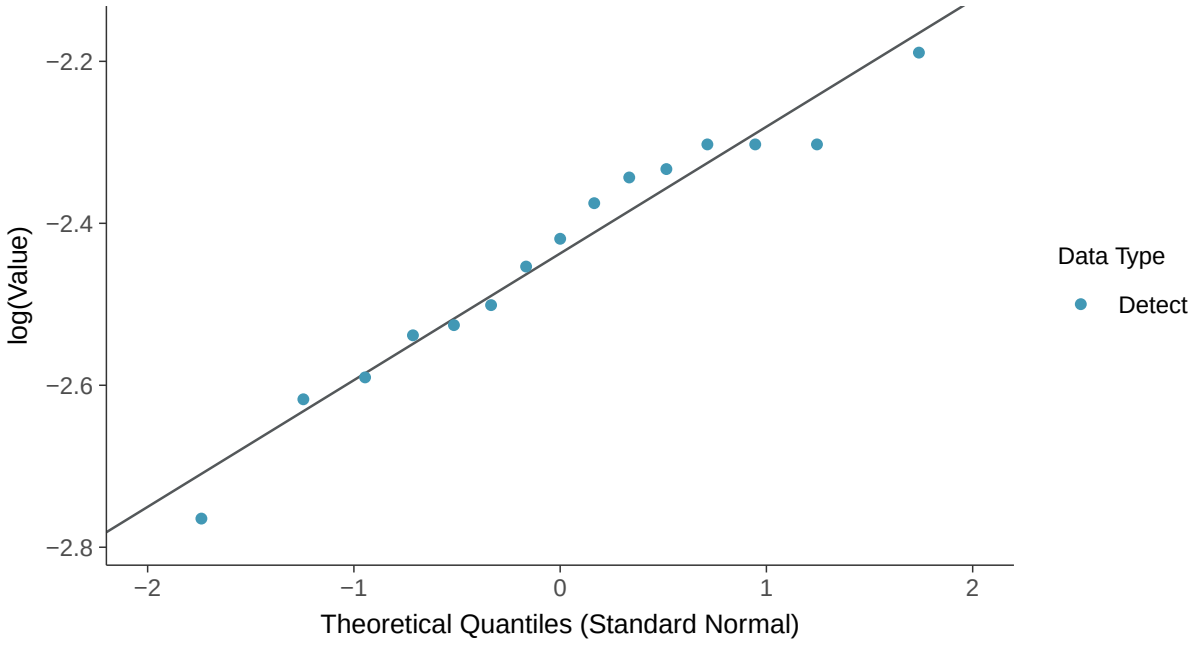
Normal Q-Q plot

Lithium, MW-7 (mg/l)



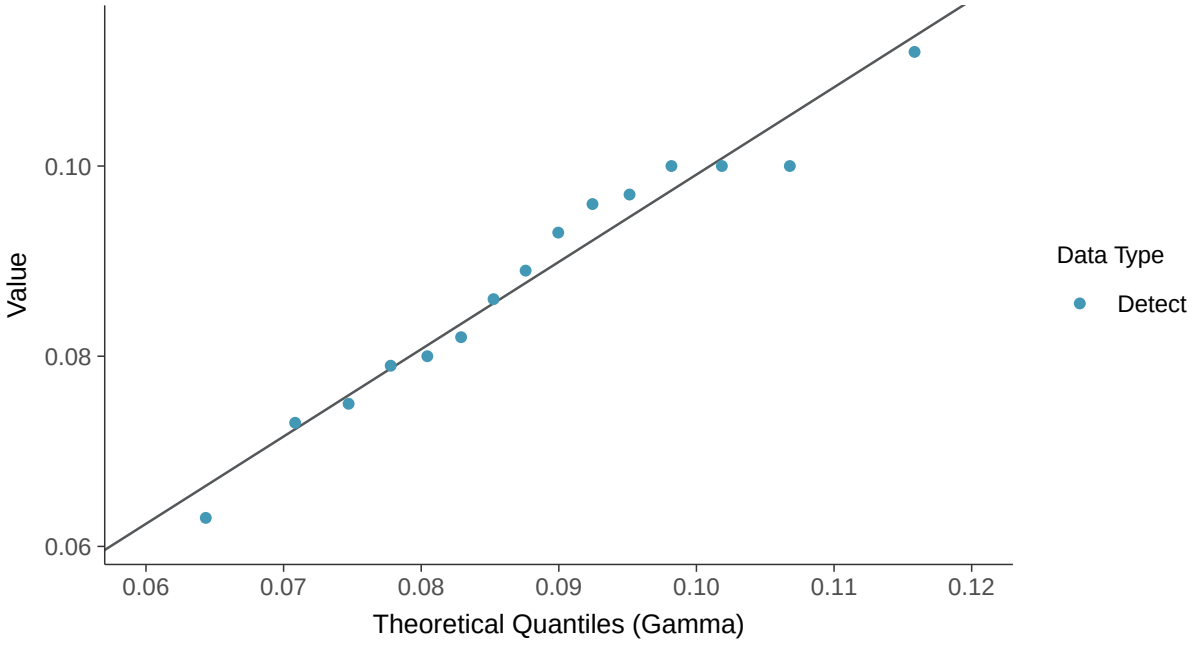
Lognormal Q-Q plot

Lithium, MW-7 (mg/l)



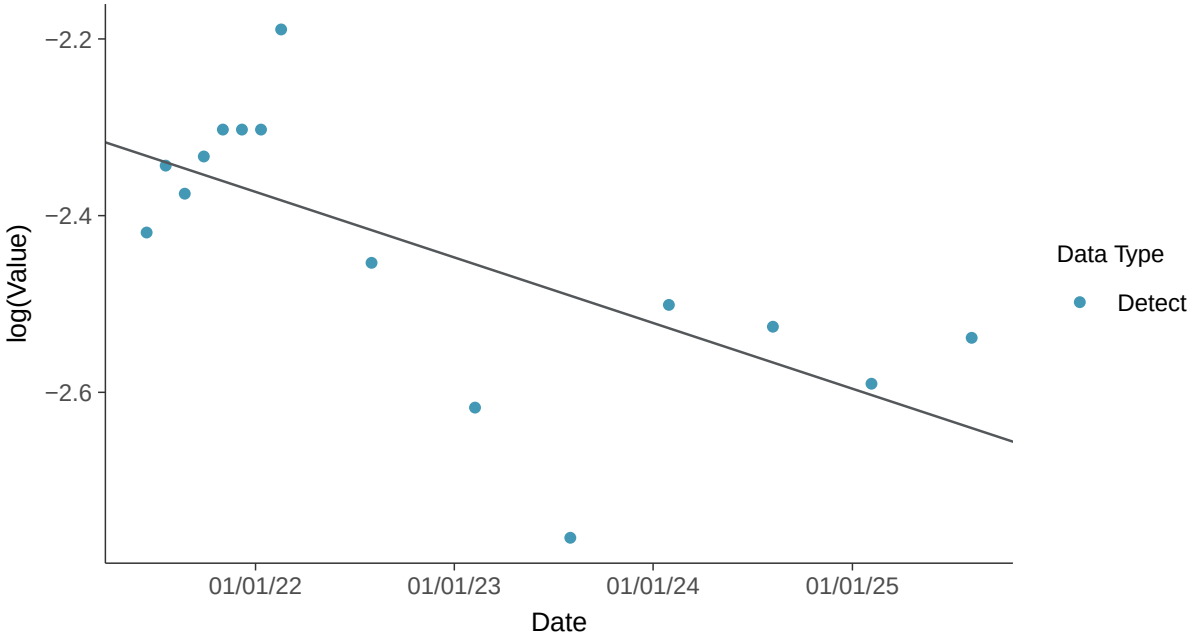
Gamma Q-Q plot

Lithium, MW-7 (mg/l)



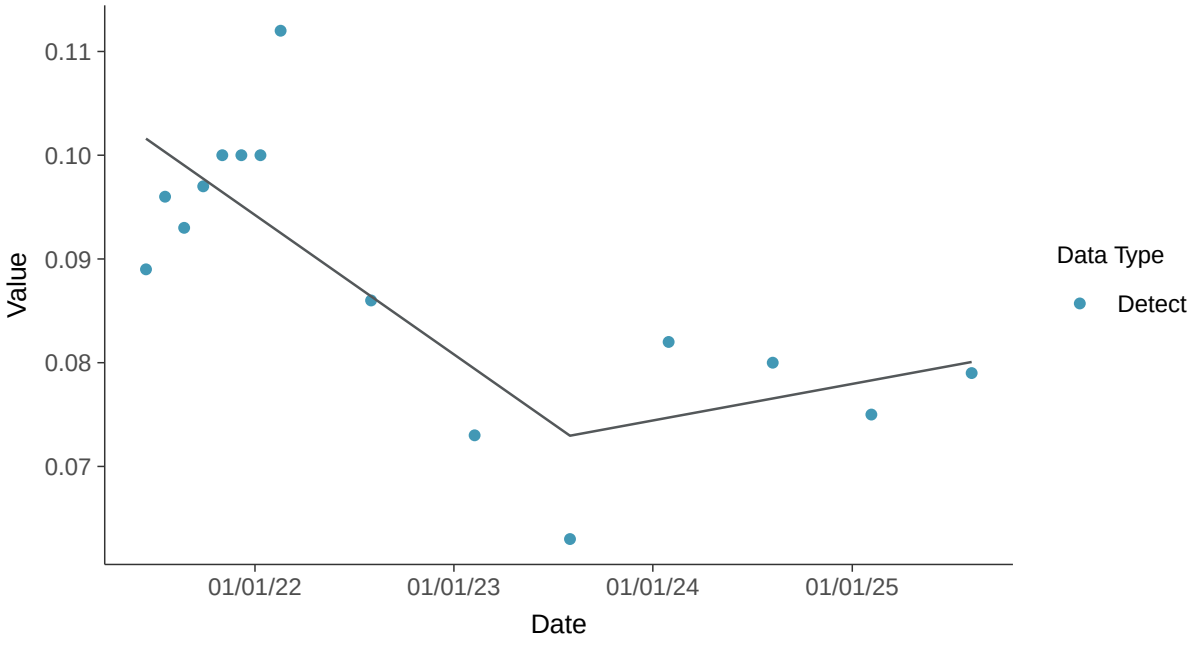
Trend Regression: Lognormal MLE

Lithium, MW-7 (mg/l)



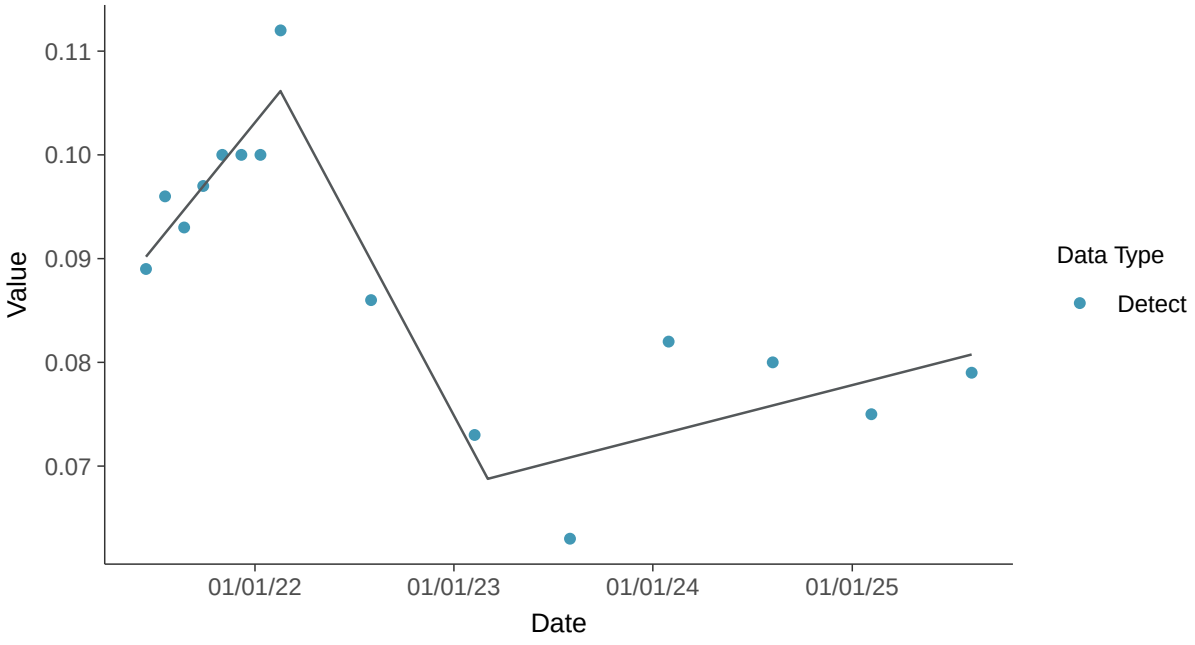
Trend Regression: Piecewise Linear-Linear

Lithium, MW-7 (mg/l)



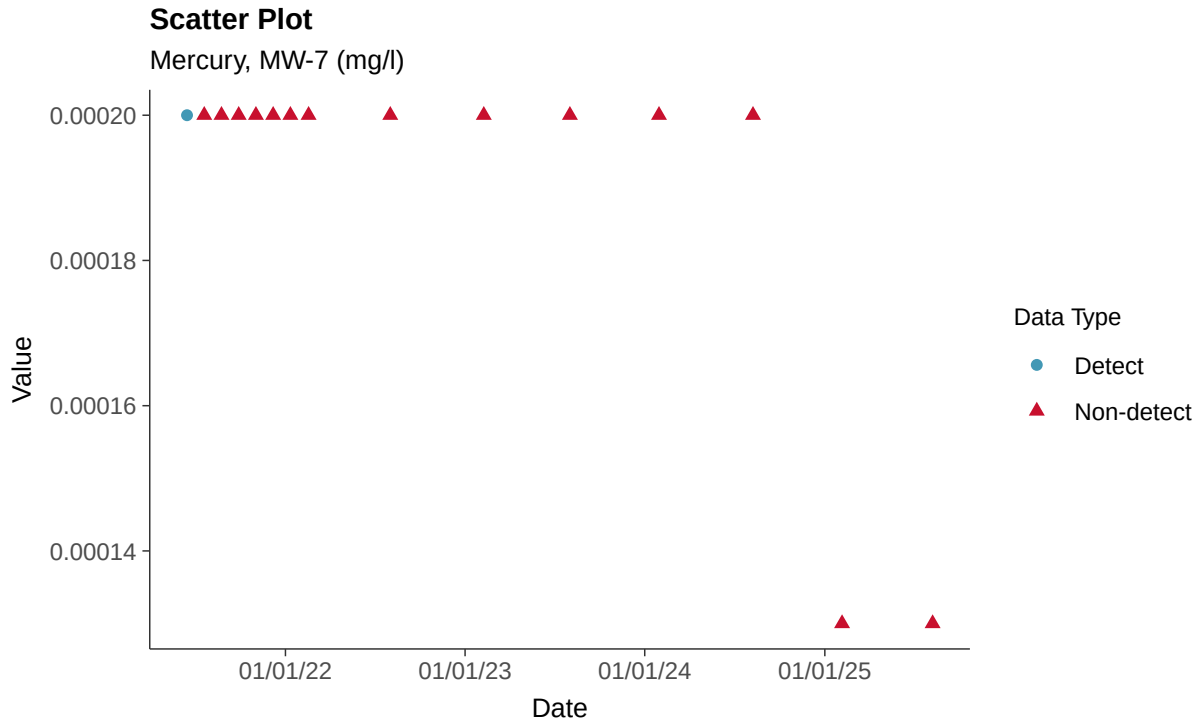
Trend Regression: Piecewise Linear-Linear-Linear

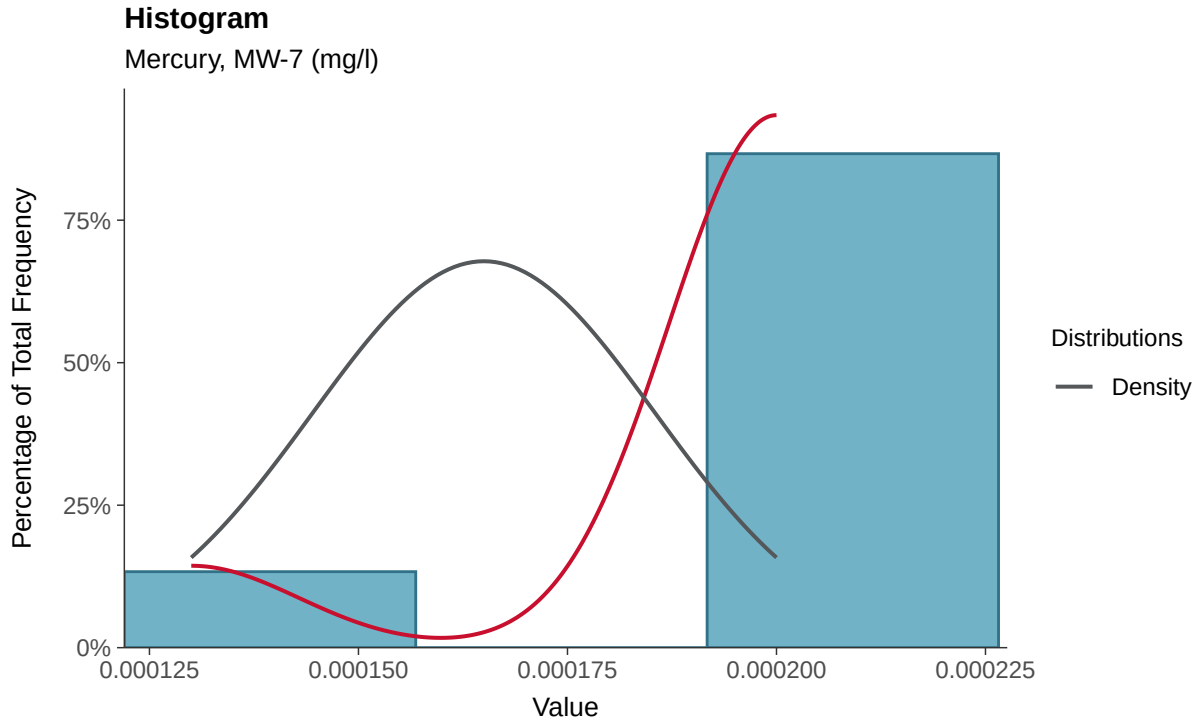
Lithium, MW-7 (mg/l)



Appendix IV: Mercury, MW-7

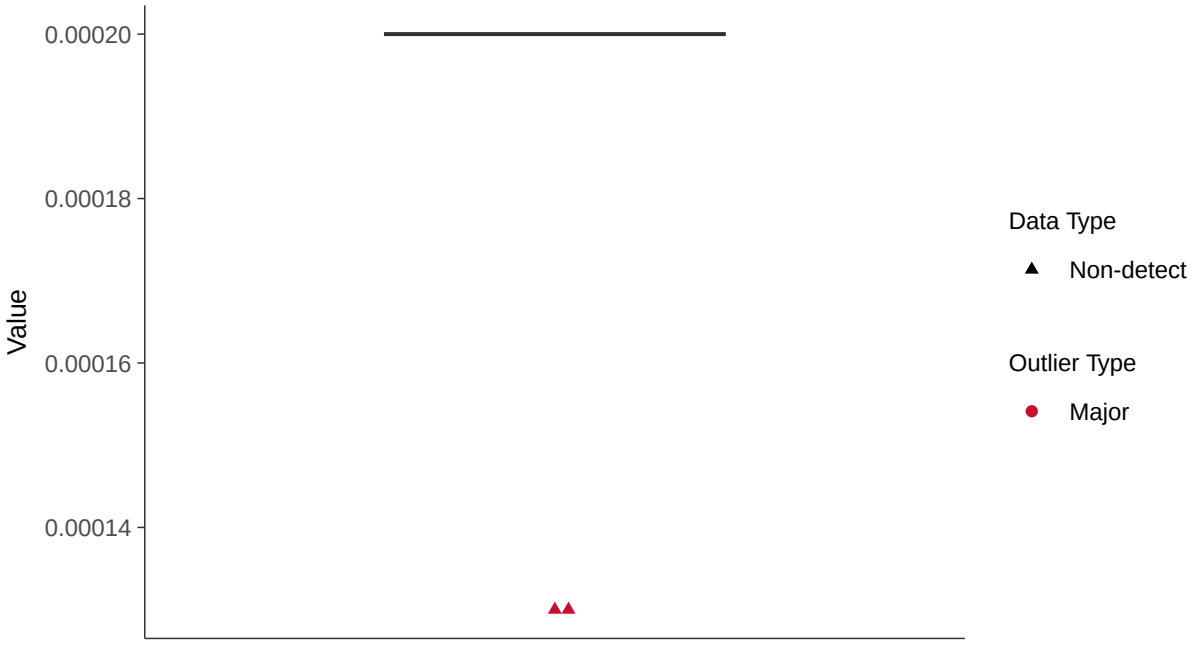
ID: 17_3_117





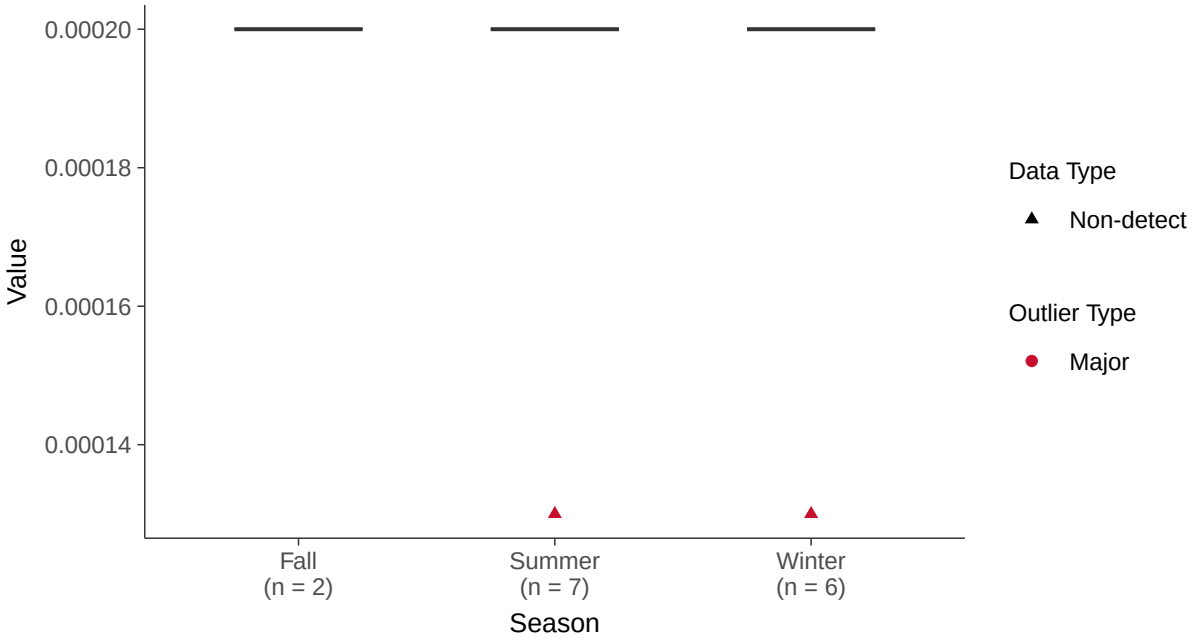
Boxplot

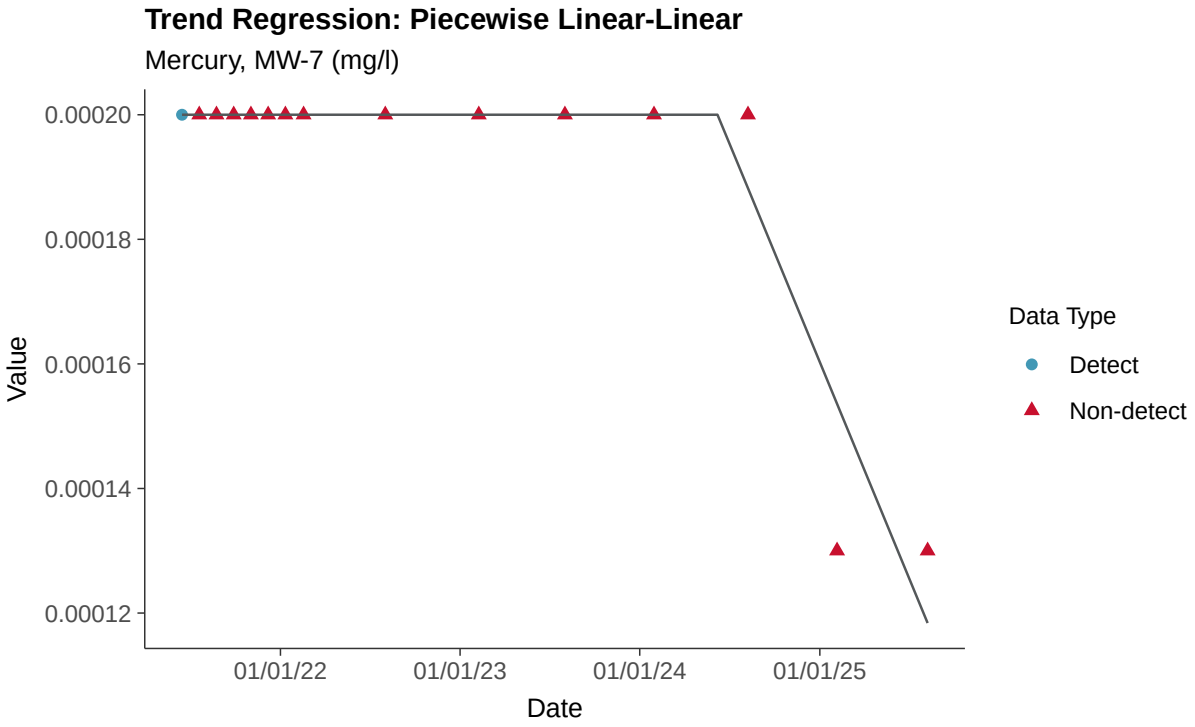
Mercury, MW-7 (mg/l)



Boxplot by Season

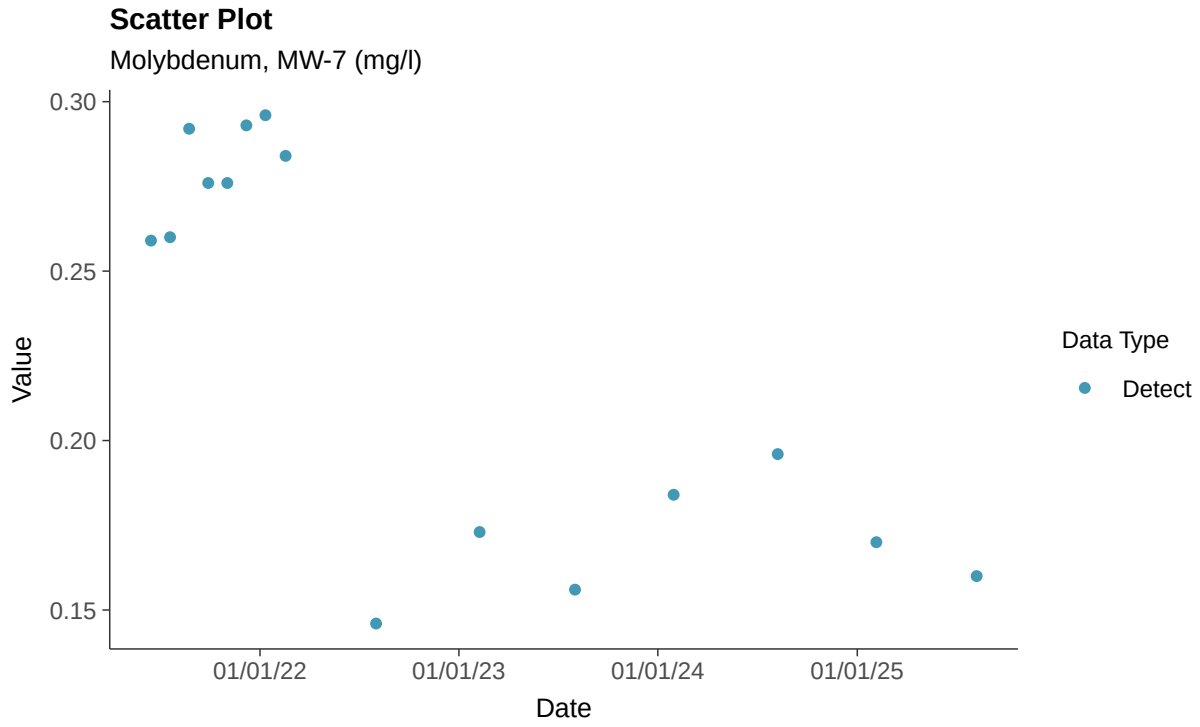
Mercury, MW-7 (mg/l)

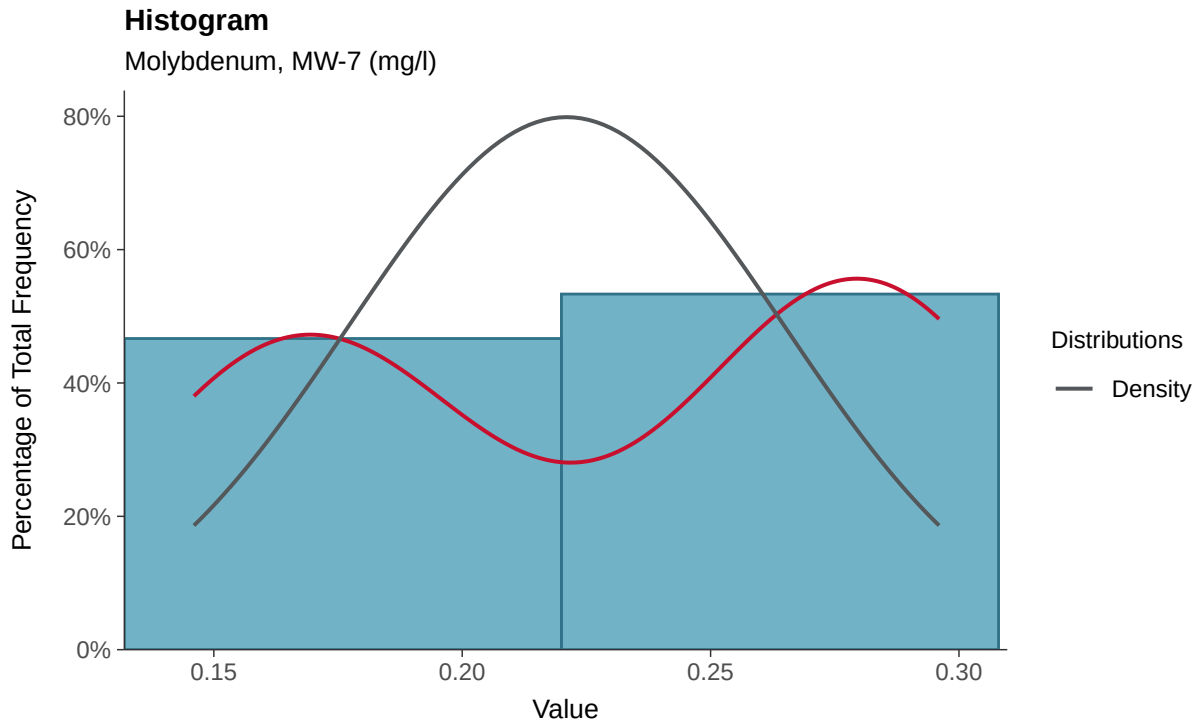



Trend Regression: Piecewise Linear-Linear
Mercury, MW-7 (mg/l)
Value
0.00020
0.00018
0.00016
0.00014
0.00012
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Molybdenum, MW-7

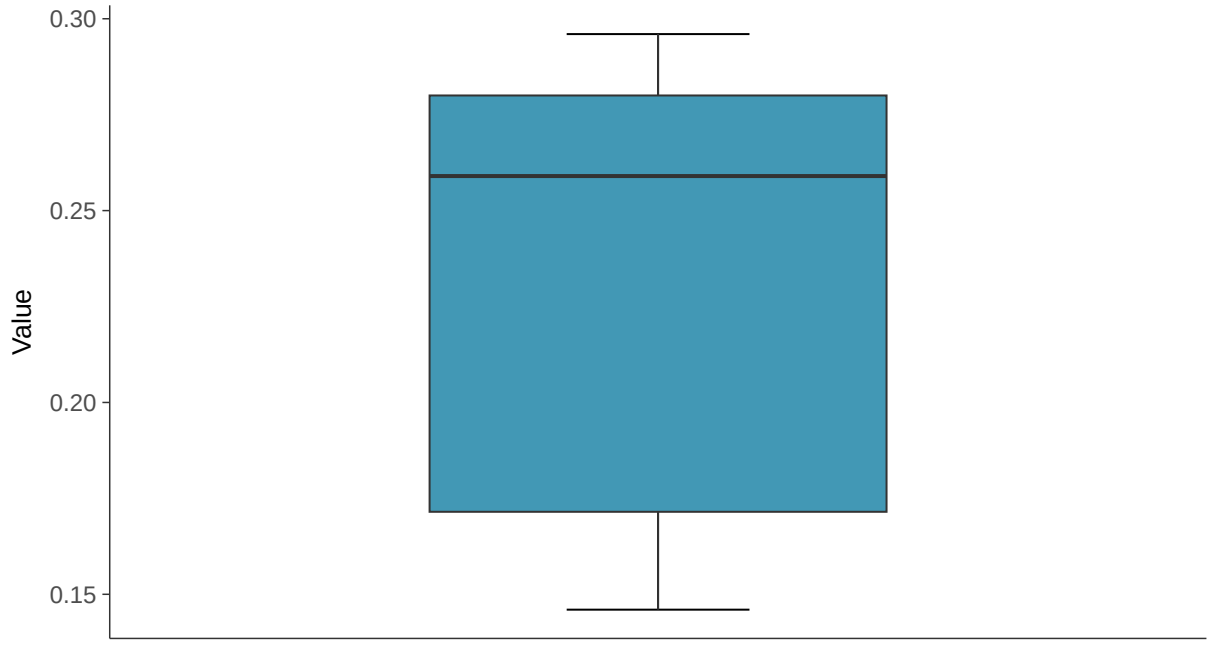
ID: 17_3_118





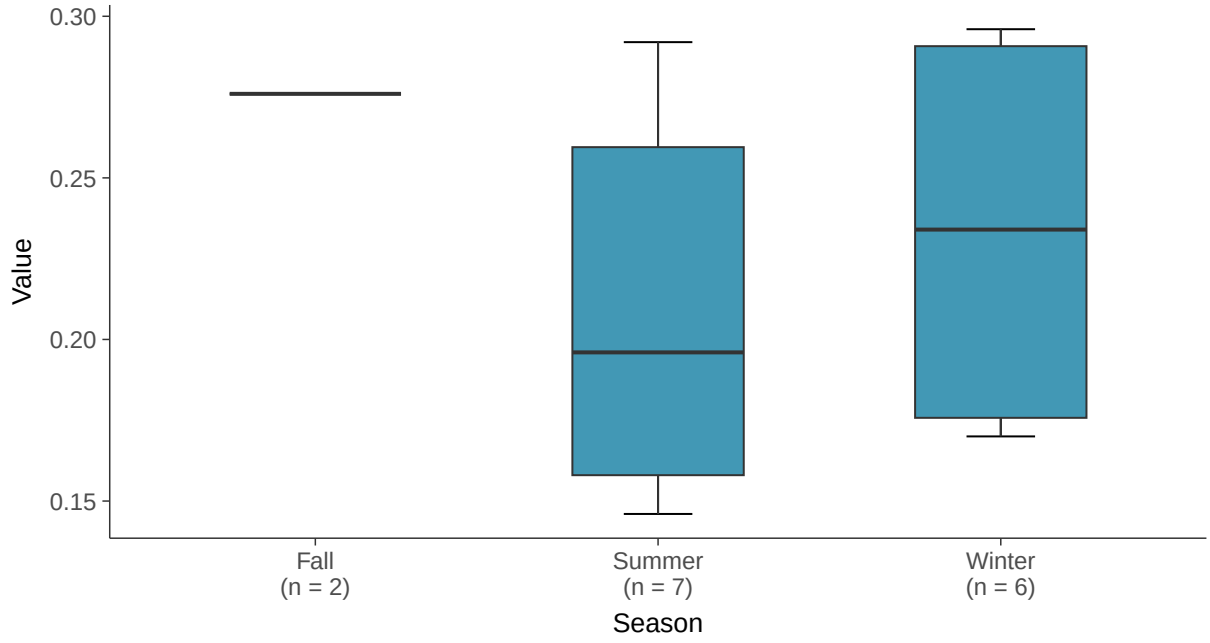
Boxplot

Molybdenum, MW-7 (mg/l)



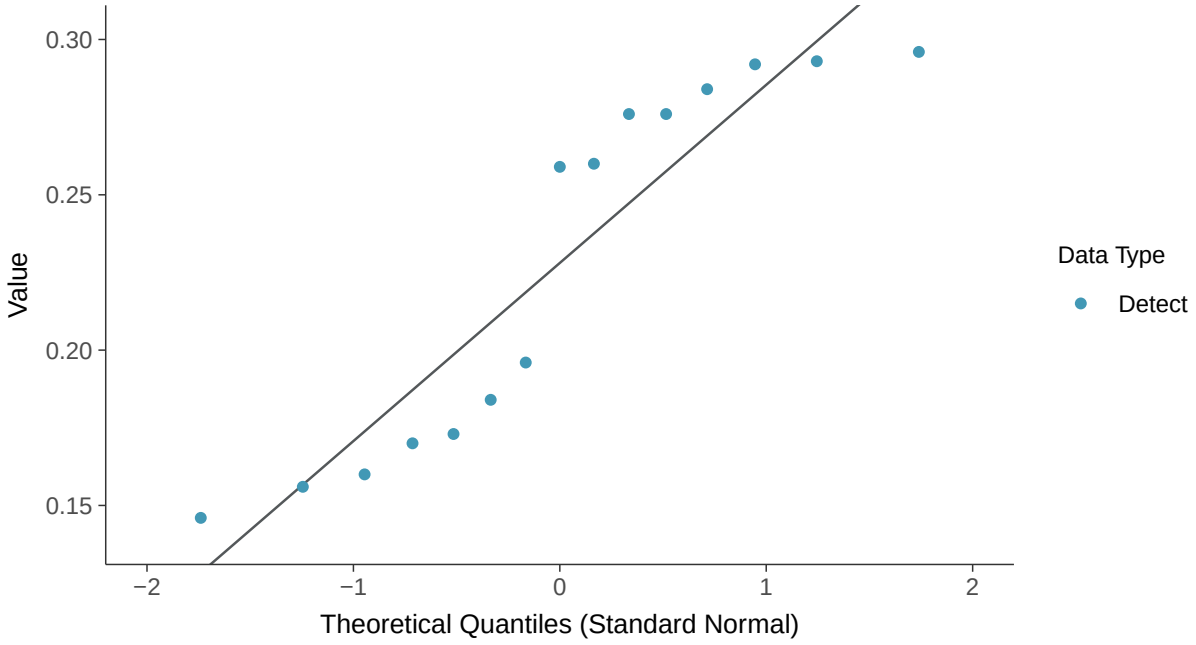
Boxplot by Season

Molybdenum, MW-7 (mg/l)



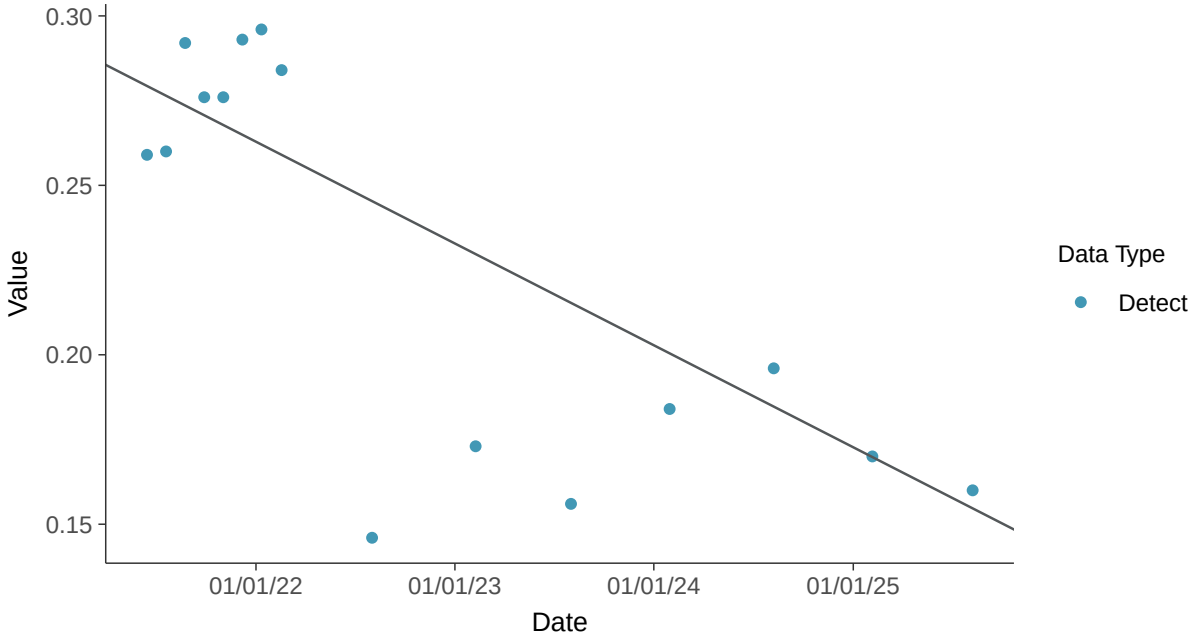
Normal Q-Q plot

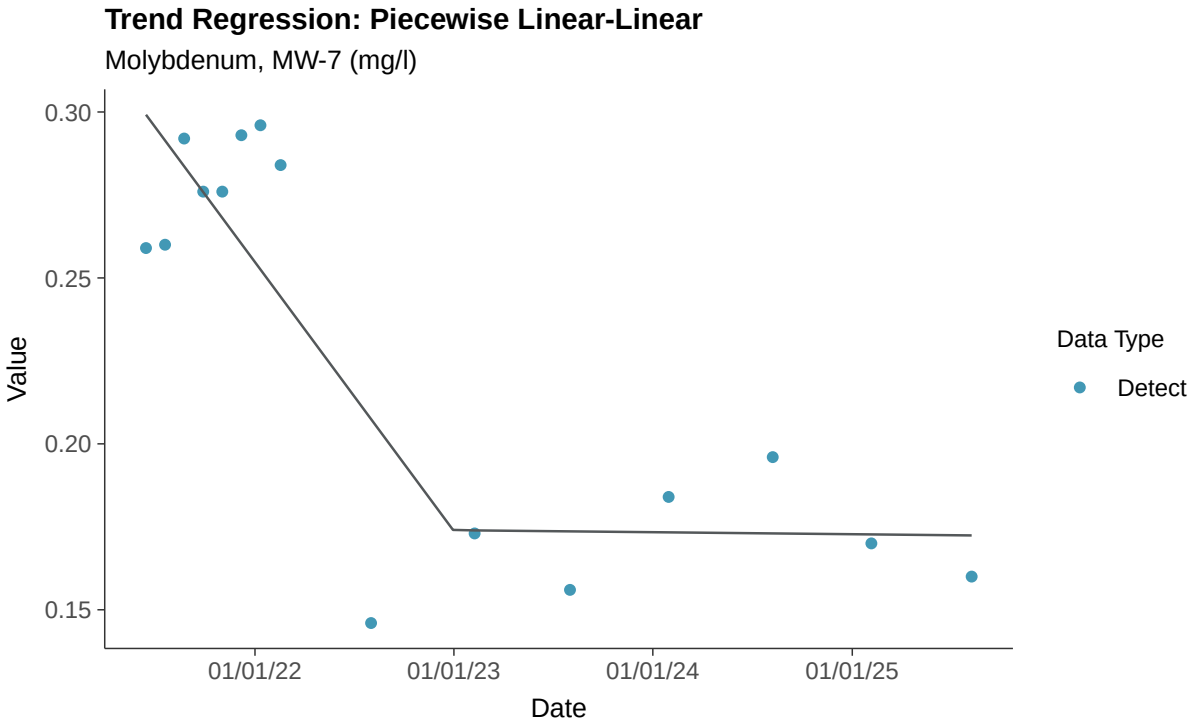
Molybdenum, MW-7 (mg/l)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

Molybdenum, MW-7 (mg/l)



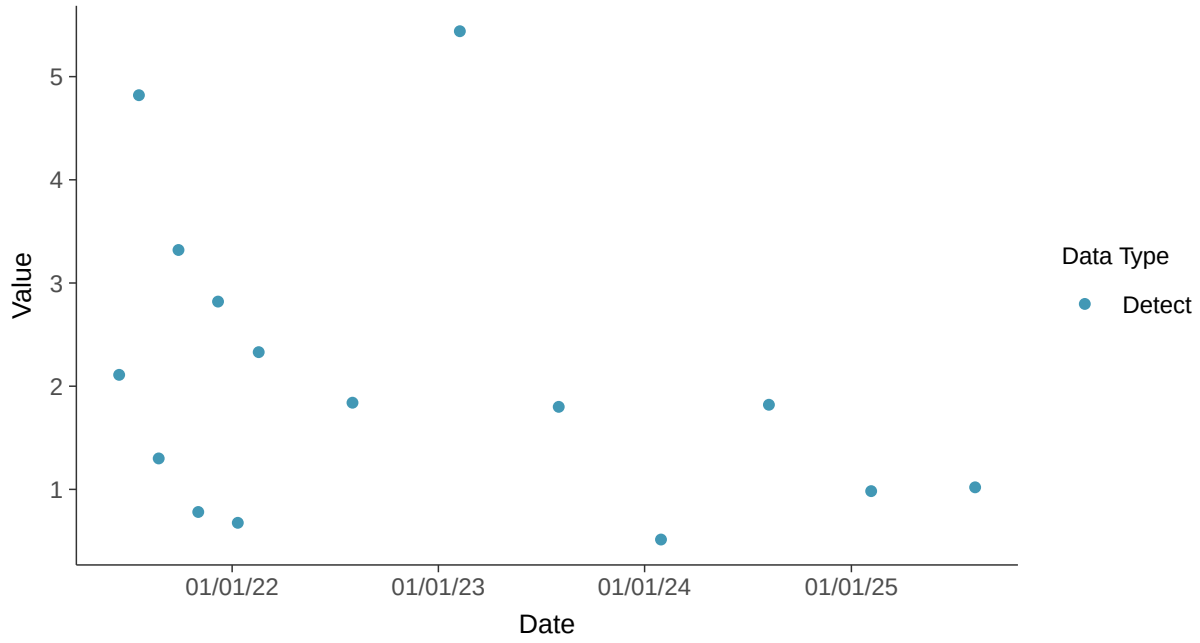

Trend Regression: Piecewise Linear-Linear
Molybdenum, MW-7 (mg/l)
0.30
0.25
0.20
0.15
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect

Appendix IV: Radium-226+228, MW-7

ID: 17_3_121

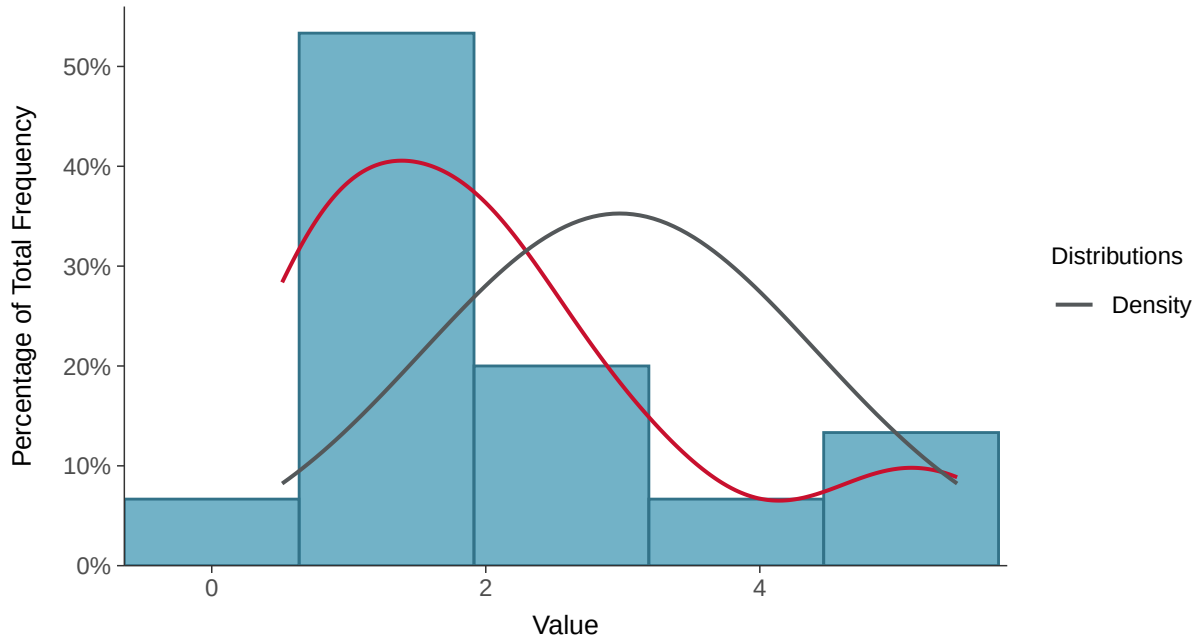
Scatter Plot

Radium-226+228, MW-7 (pci/l)



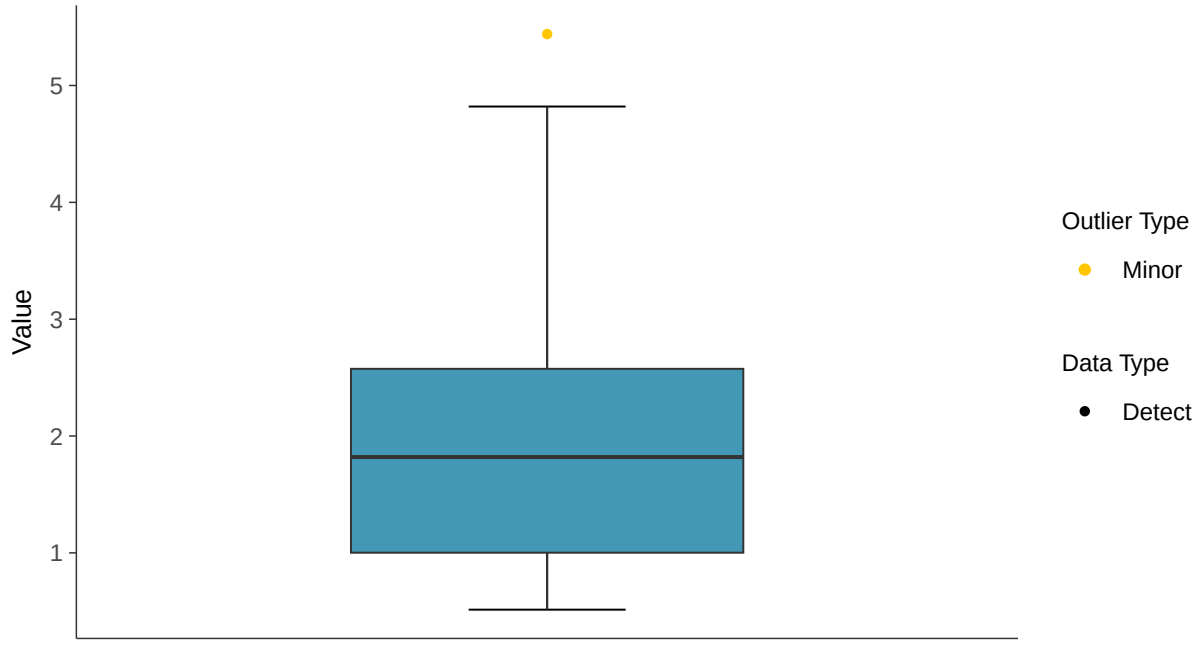
Histogram

Radium-226+228, MW-7 (pci/l)



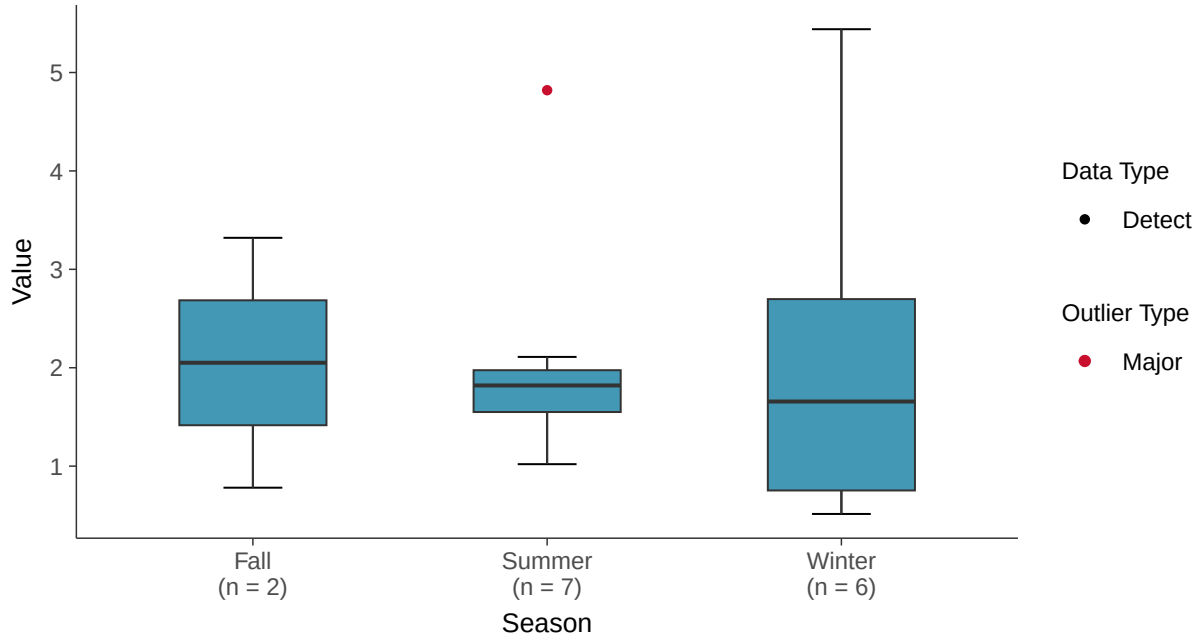
Boxplot

Radium-226+228, MW-7 (pci/l)



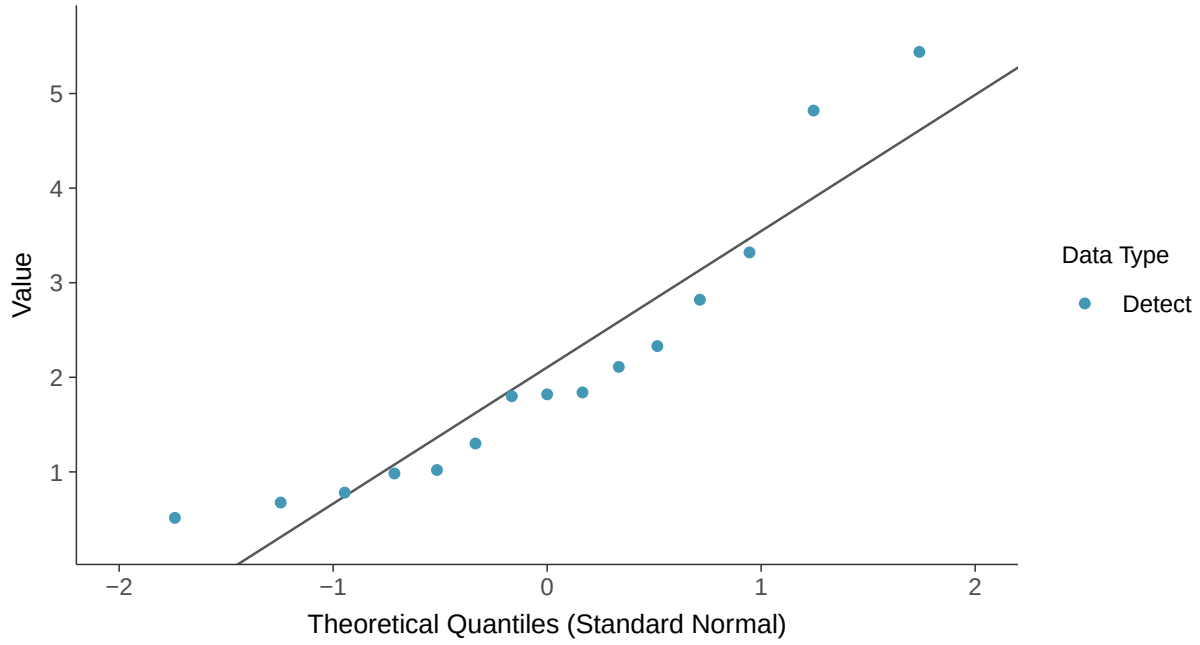
Boxplot by Season

Radium-226+228, MW-7 (pci/l)



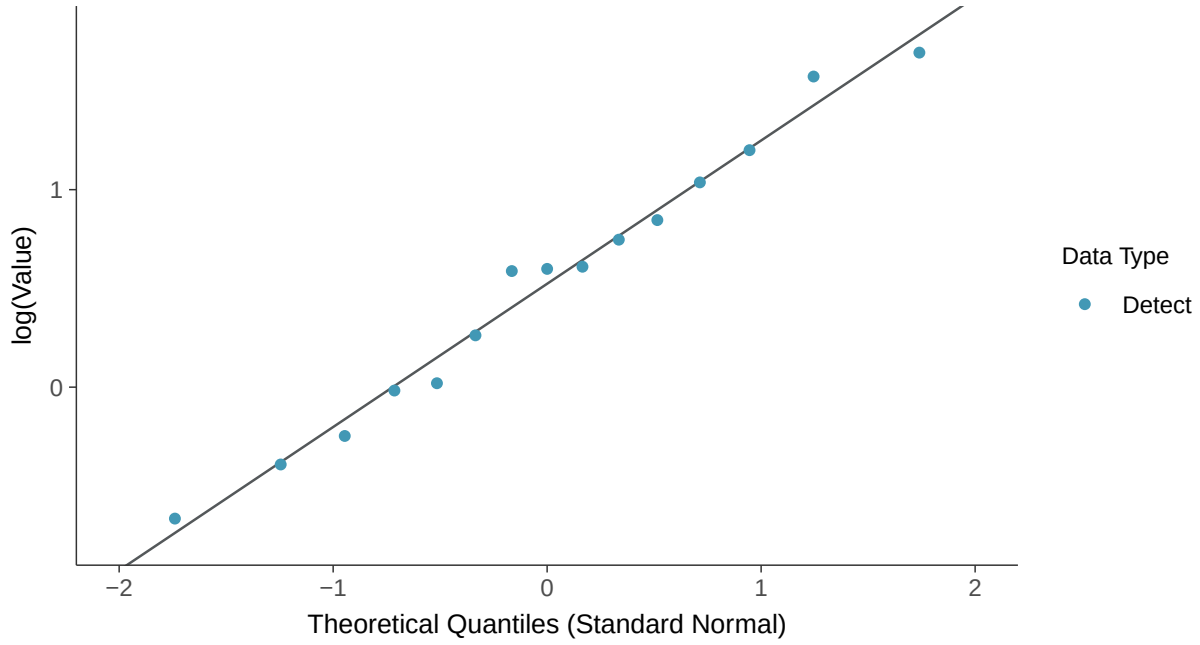
Normal Q-Q plot

Radium-226+228, MW-7 (pci/l)



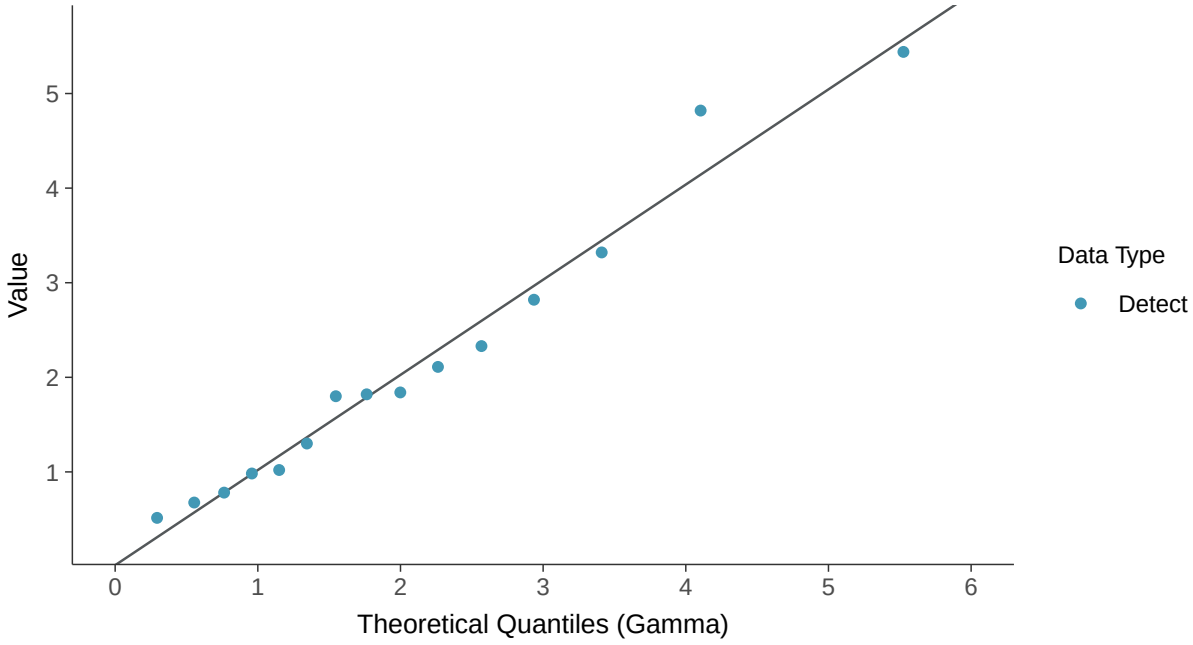
Lognormal Q-Q plot

Radium-226+228, MW-7 (pci/l)



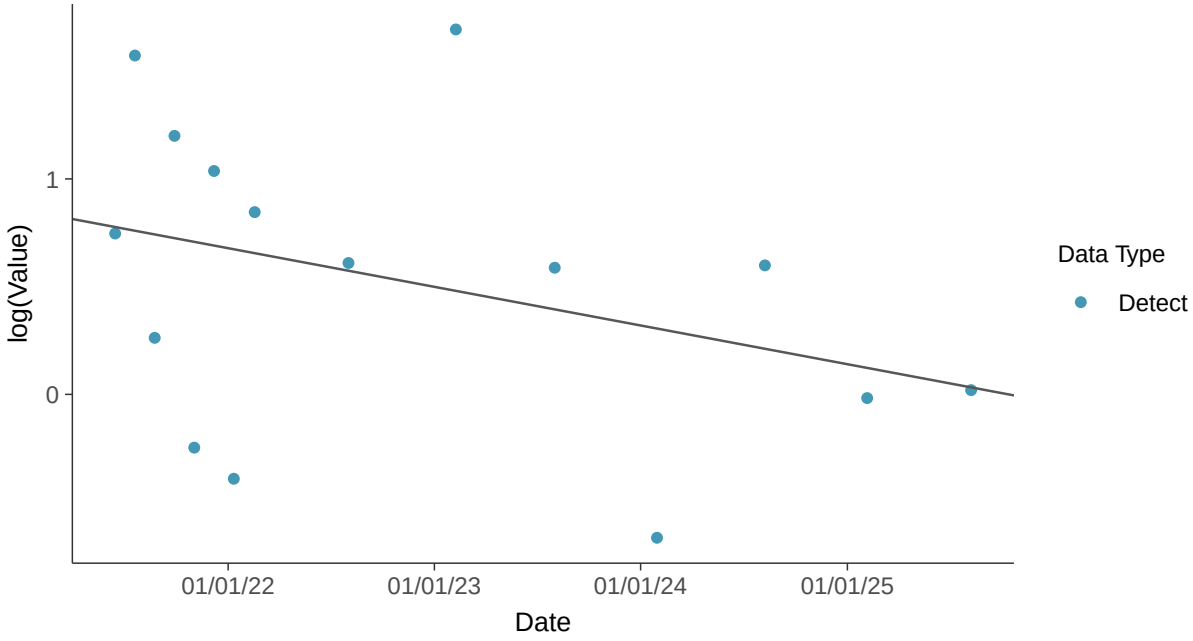
Gamma Q-Q plot

Radium-226+228, MW-7 (pci/l)



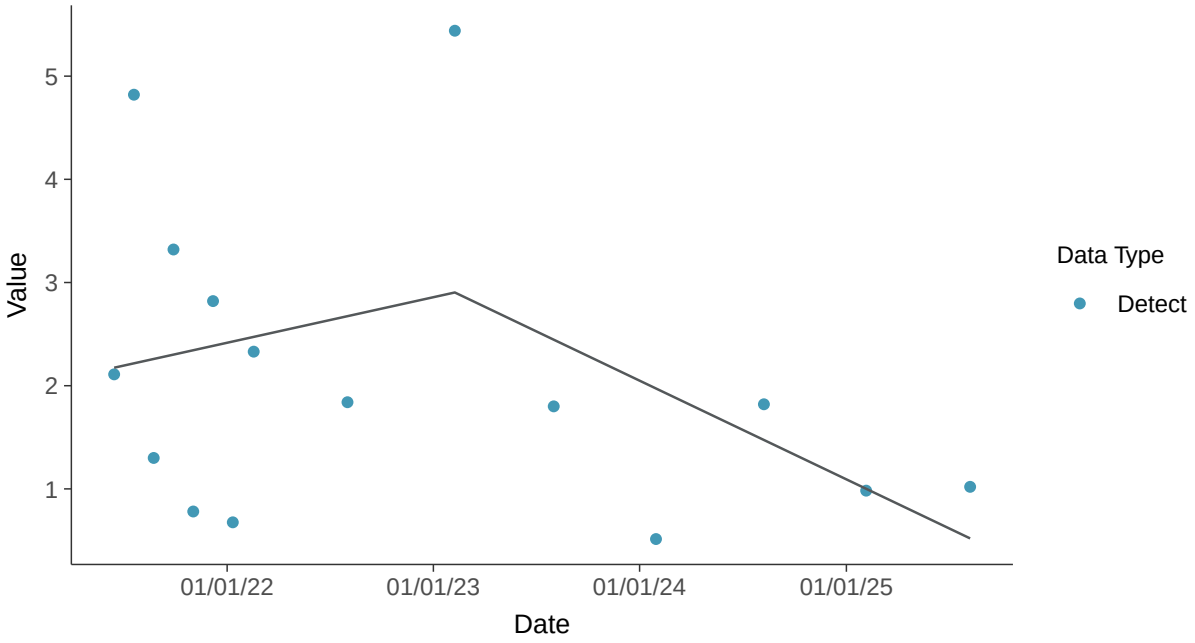
Trend Regression: Lognormal MLE

Radium-226+228, MW-7 (pci/l)



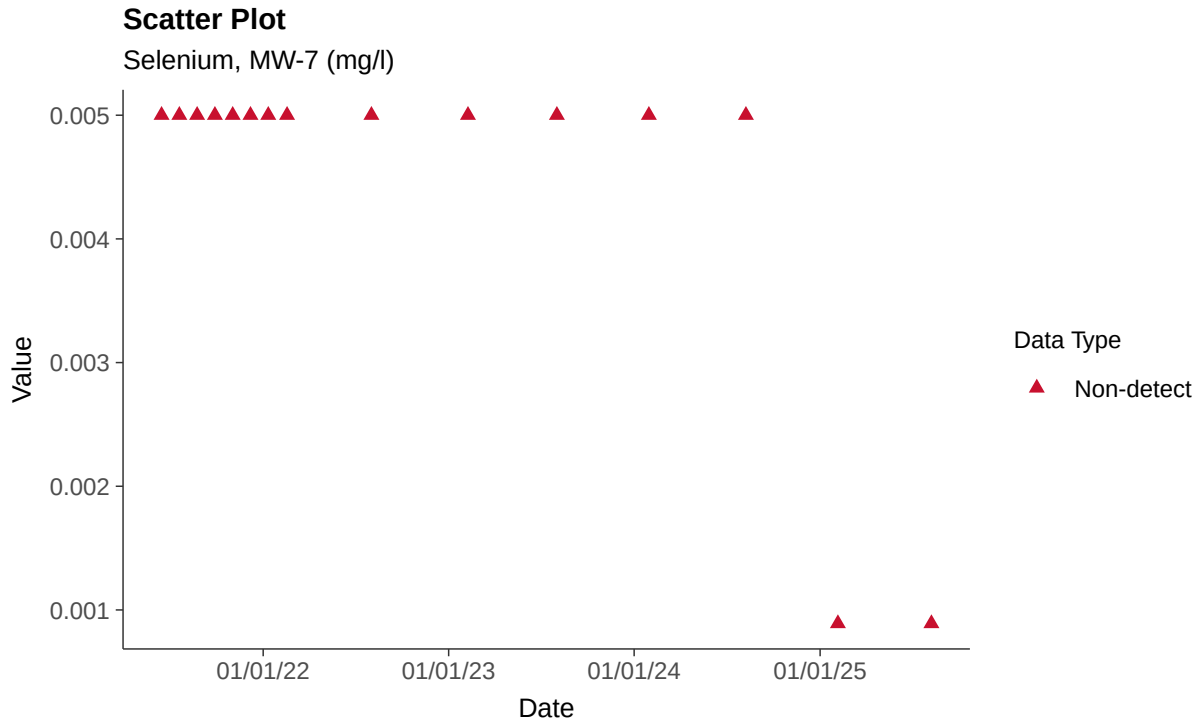
Trend Regression: Piecewise Linear-Linear

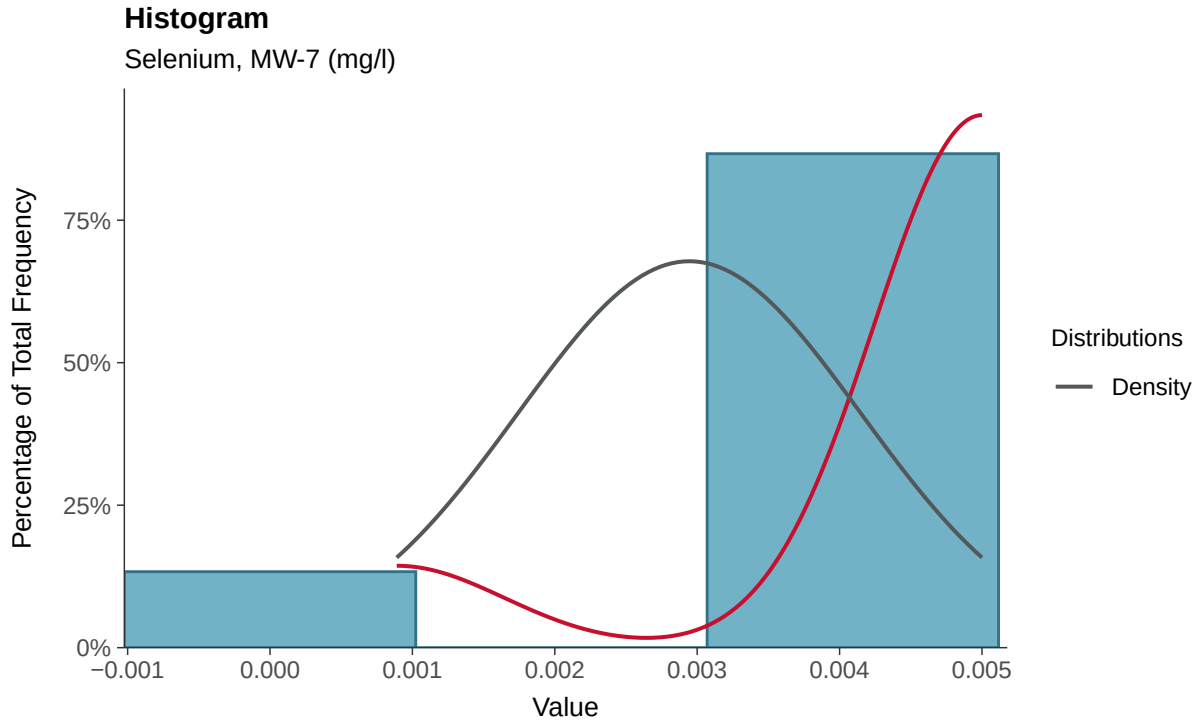
Radium-226+228, MW-7 (pci/l)



Appendix IV: Selenium, MW-7

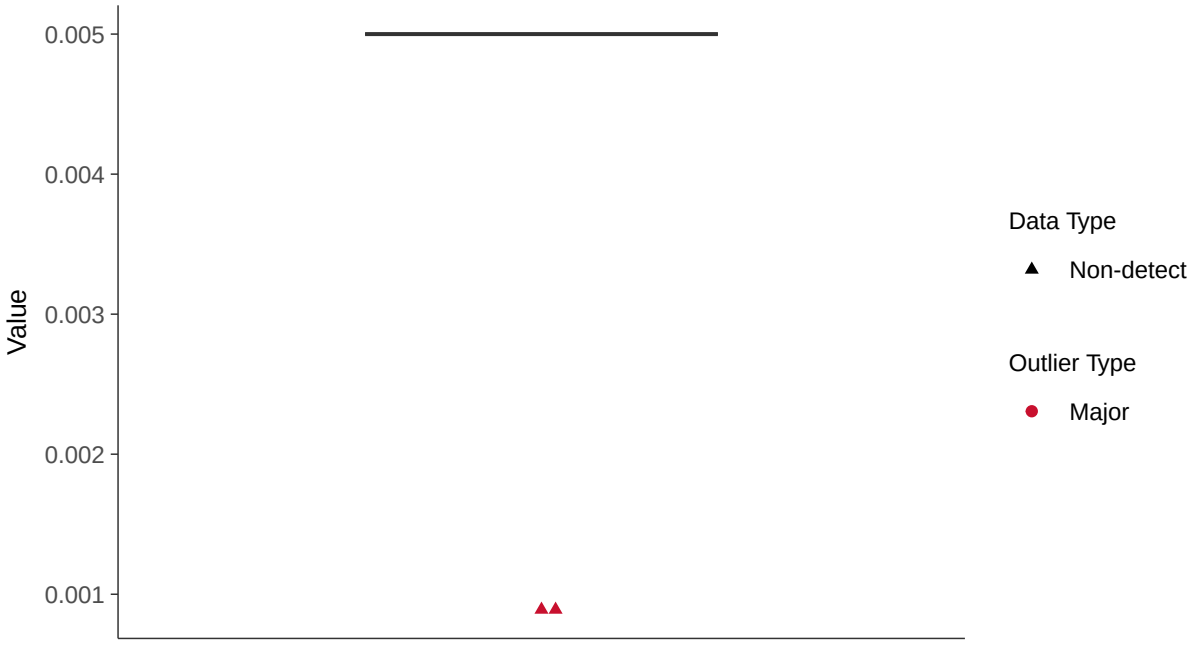
ID: 17_3_122





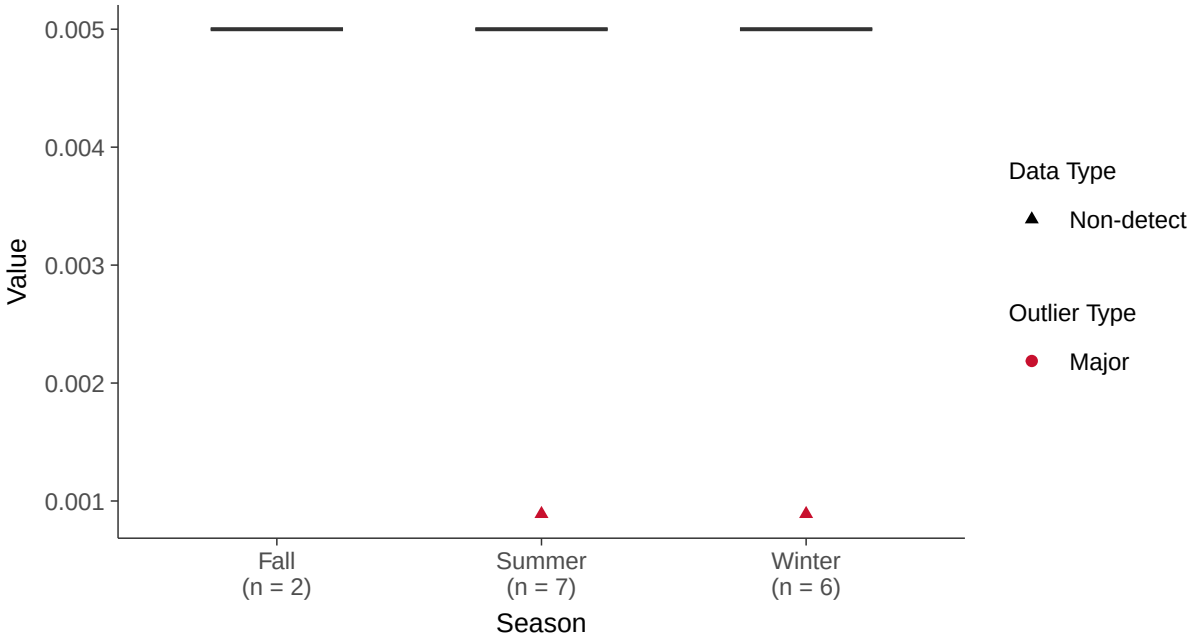
Boxplot

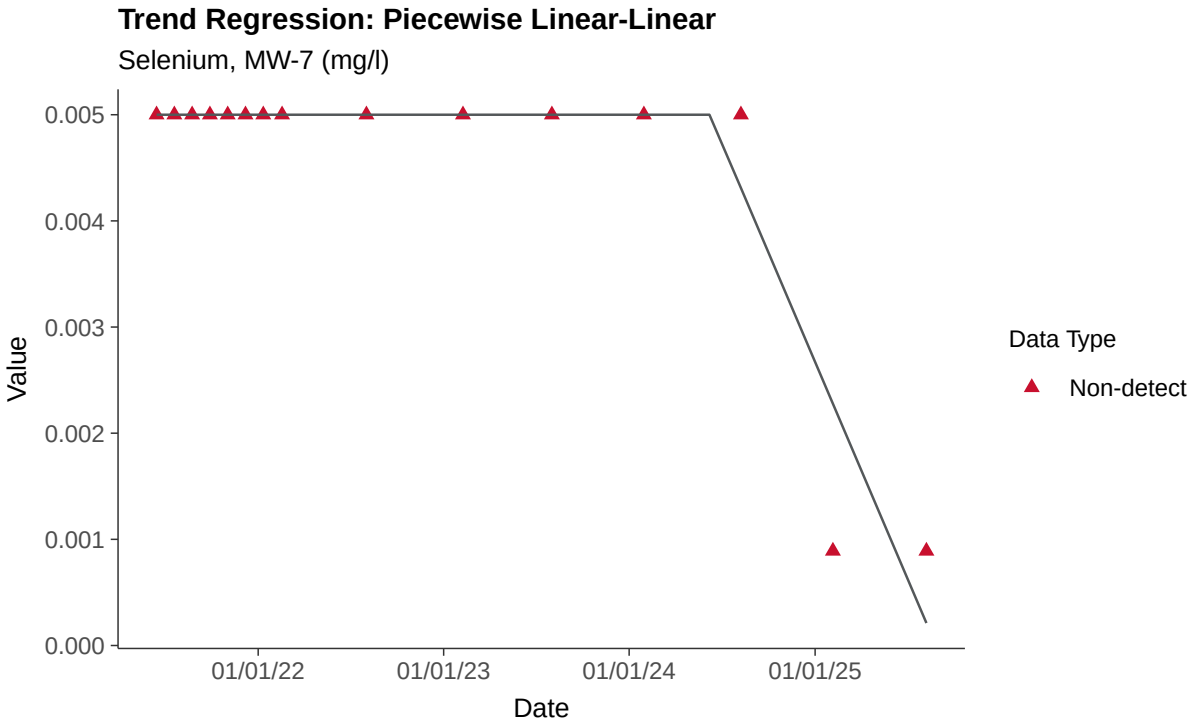
Selenium, MW-7 (mg/l)



Boxplot by Season

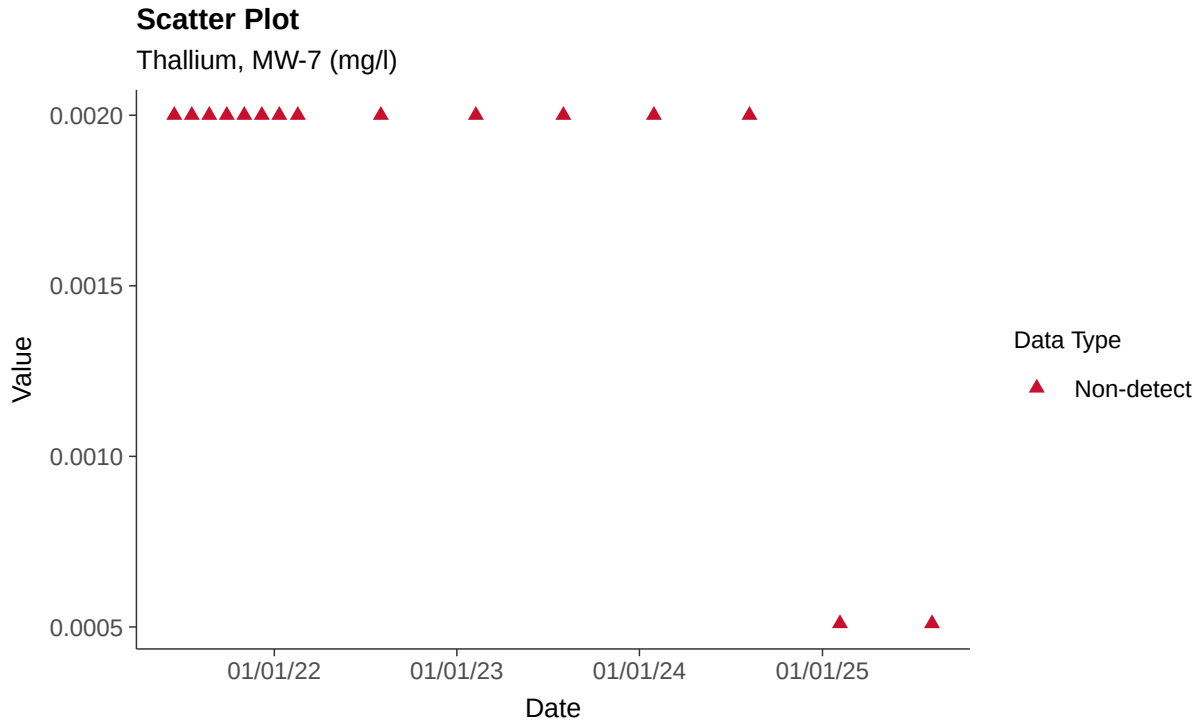
Selenium, MW-7 (mg/l)

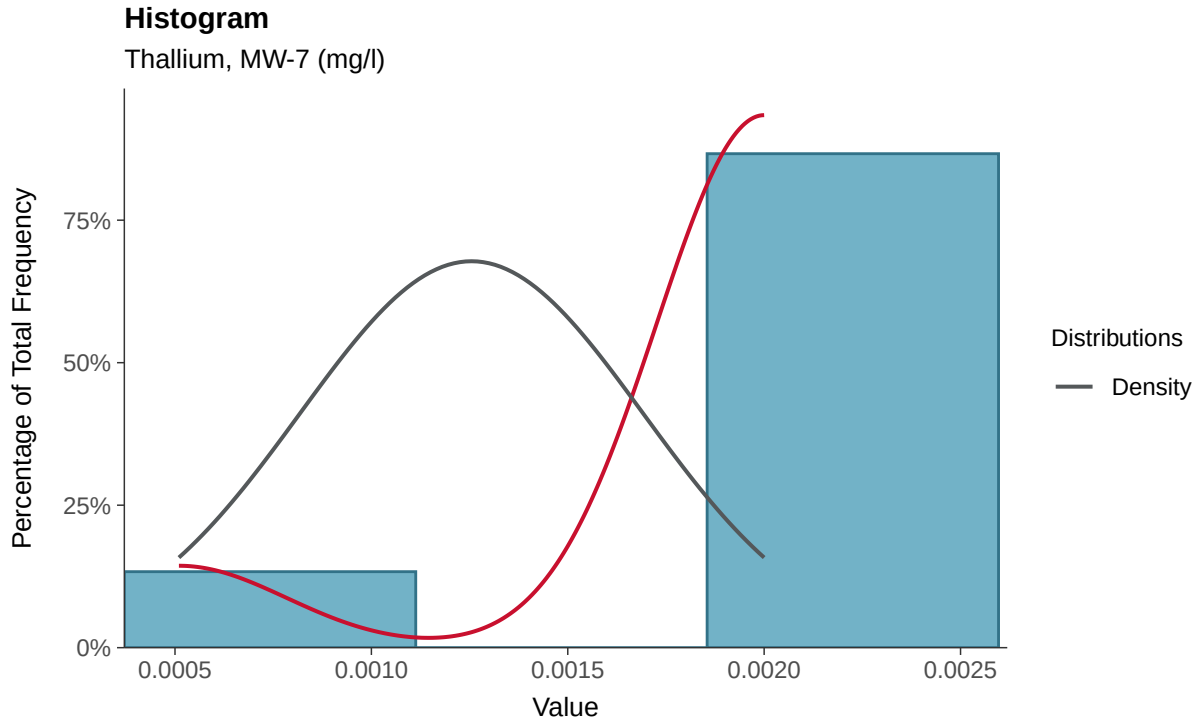



Trend Regression: Piecewise Linear-Linear
Selenium, MW-7 (mg/l)
0.005
0.004
0.003
0.002
0.001
0.000
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Appendix IV: Thallium, MW-7

ID: 17_3_125



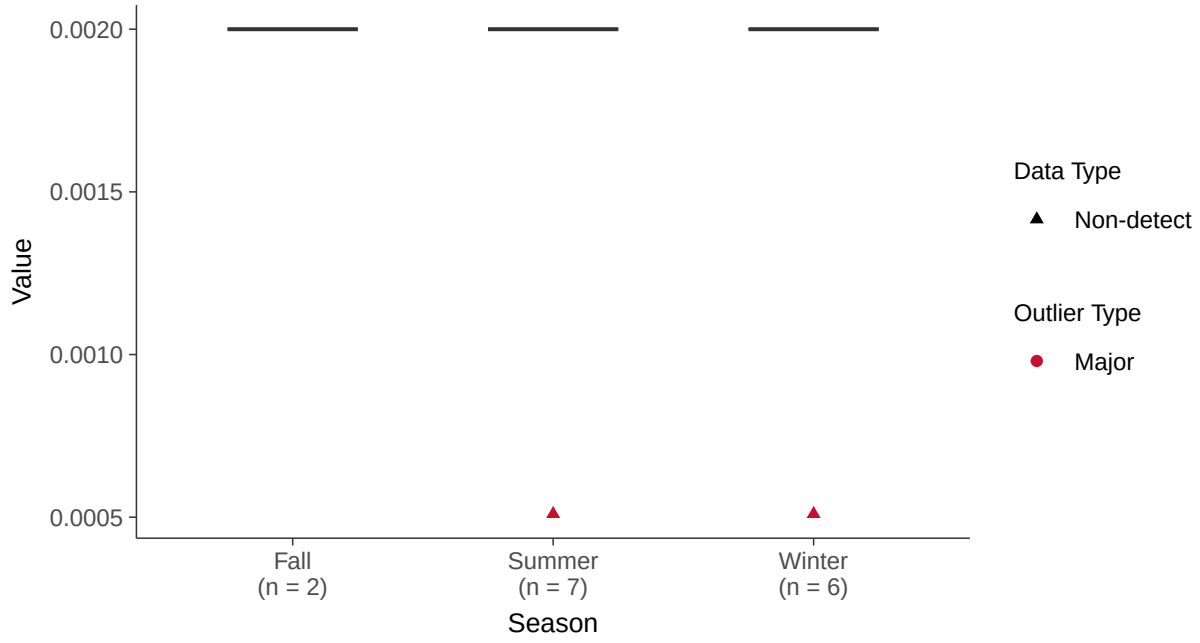


Boxplot

Thallium, MW-7 (mg/l)

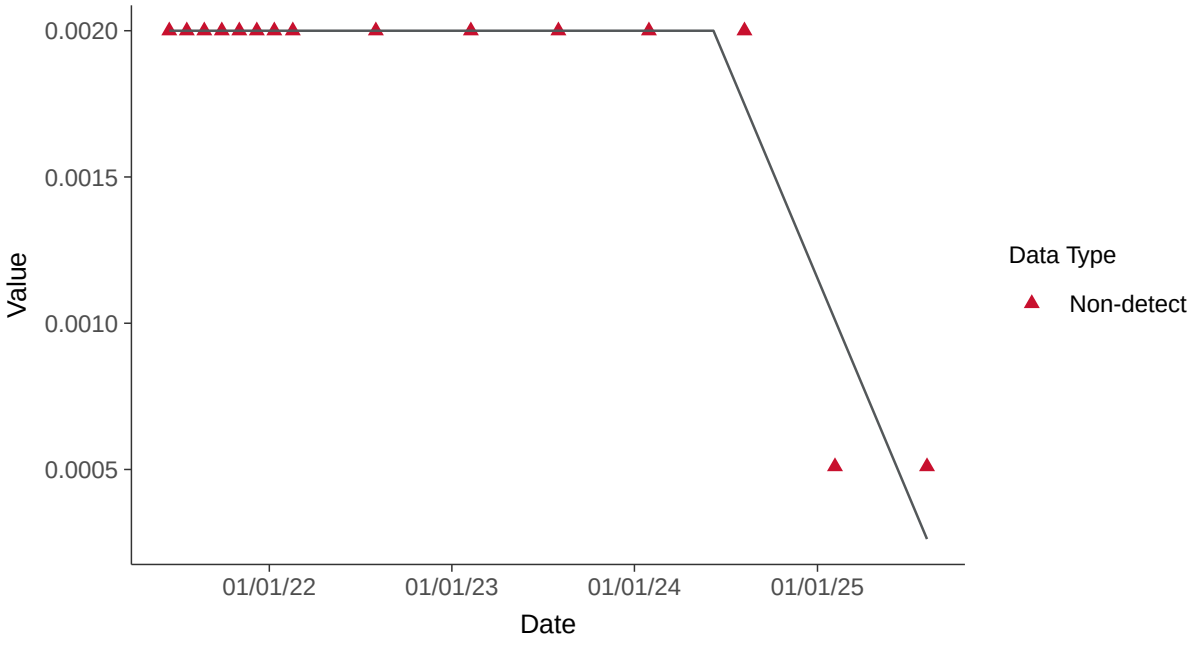
Boxplot by Season

Thallium, MW-7 (mg/l)



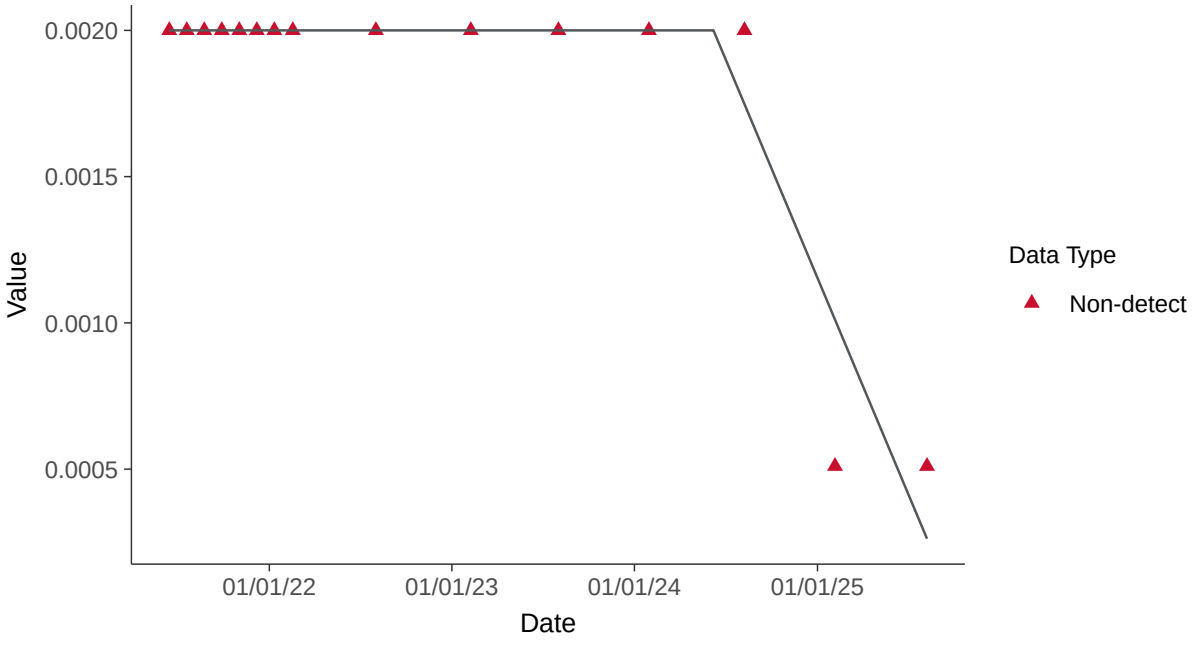
Trend Regression: Piecewise Linear-Linear

Thallium, MW-7 (mg/l)



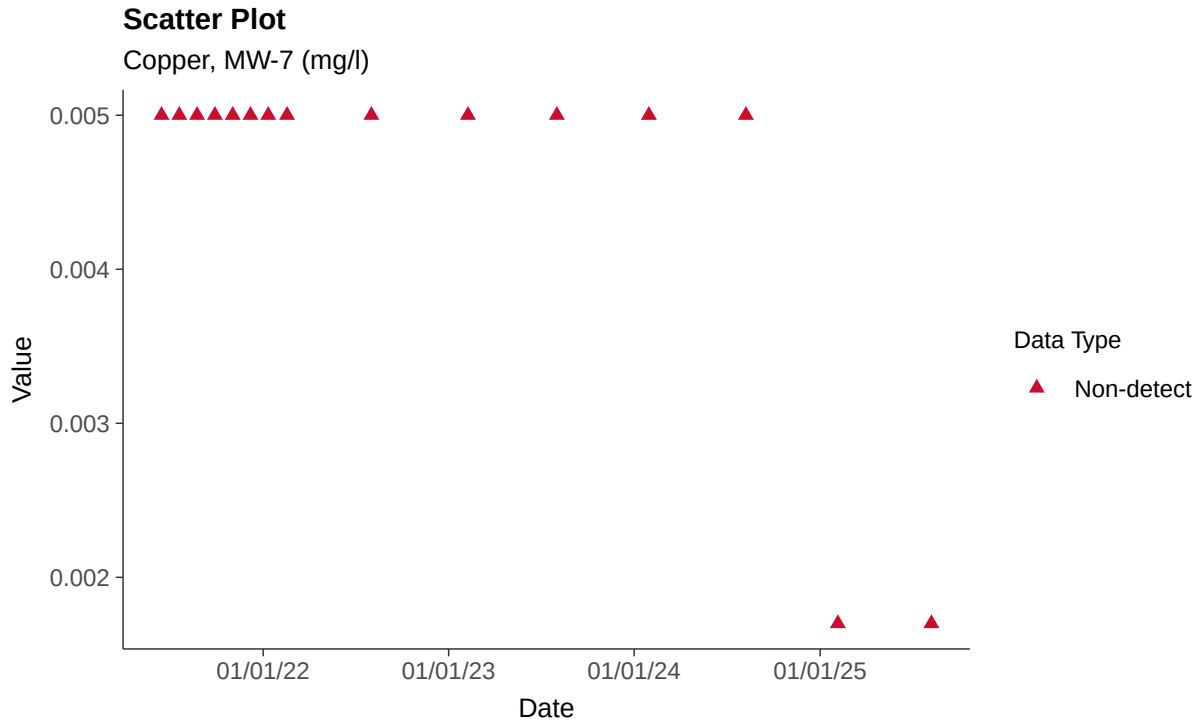
Trend Regression: Piecewise Linear-Linear-Linear

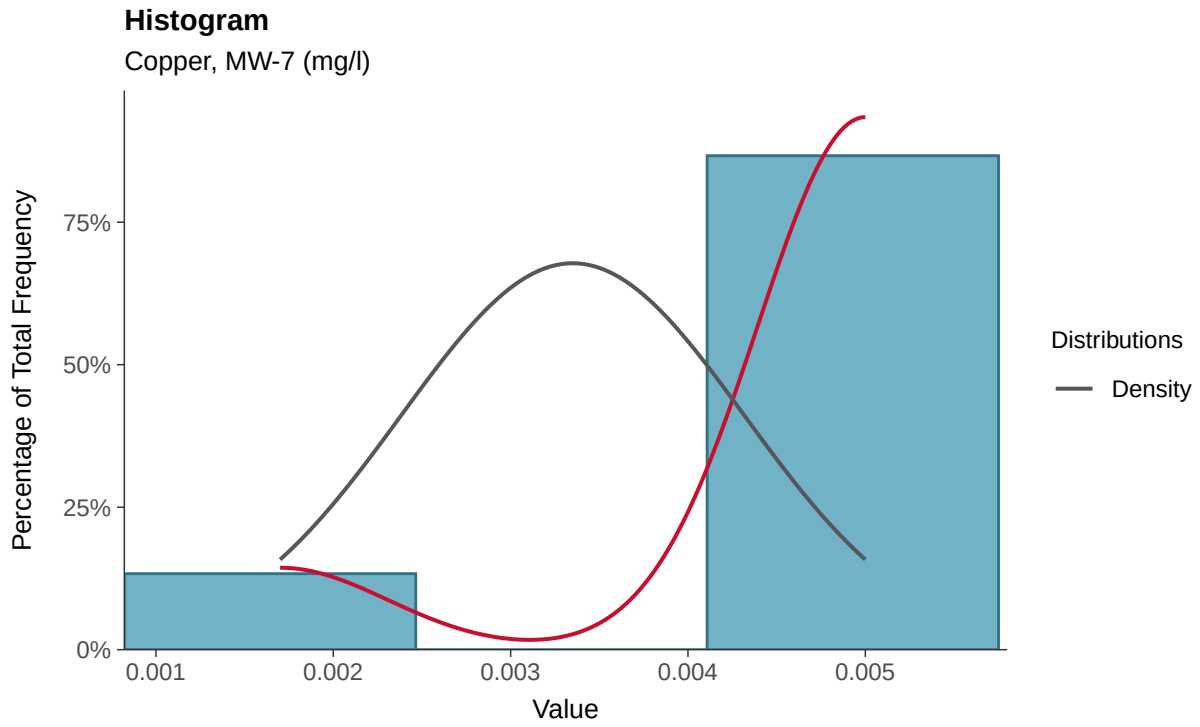
Thallium, MW-7 (mg/l)



Part 115: Copper, MW-7

ID: 17_5_111



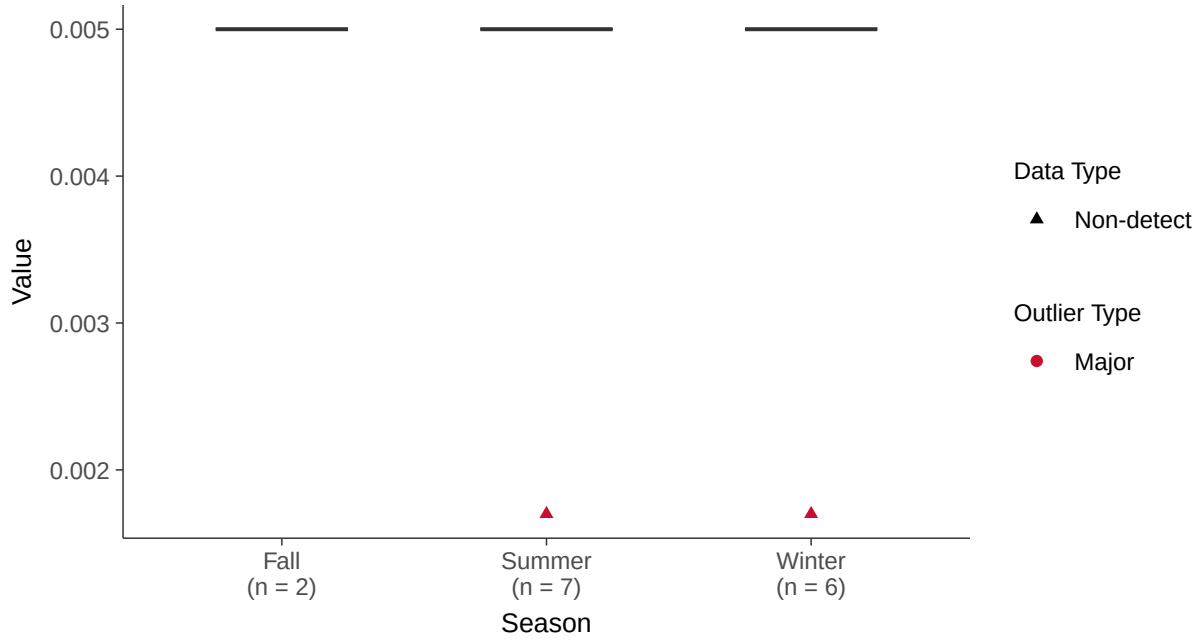


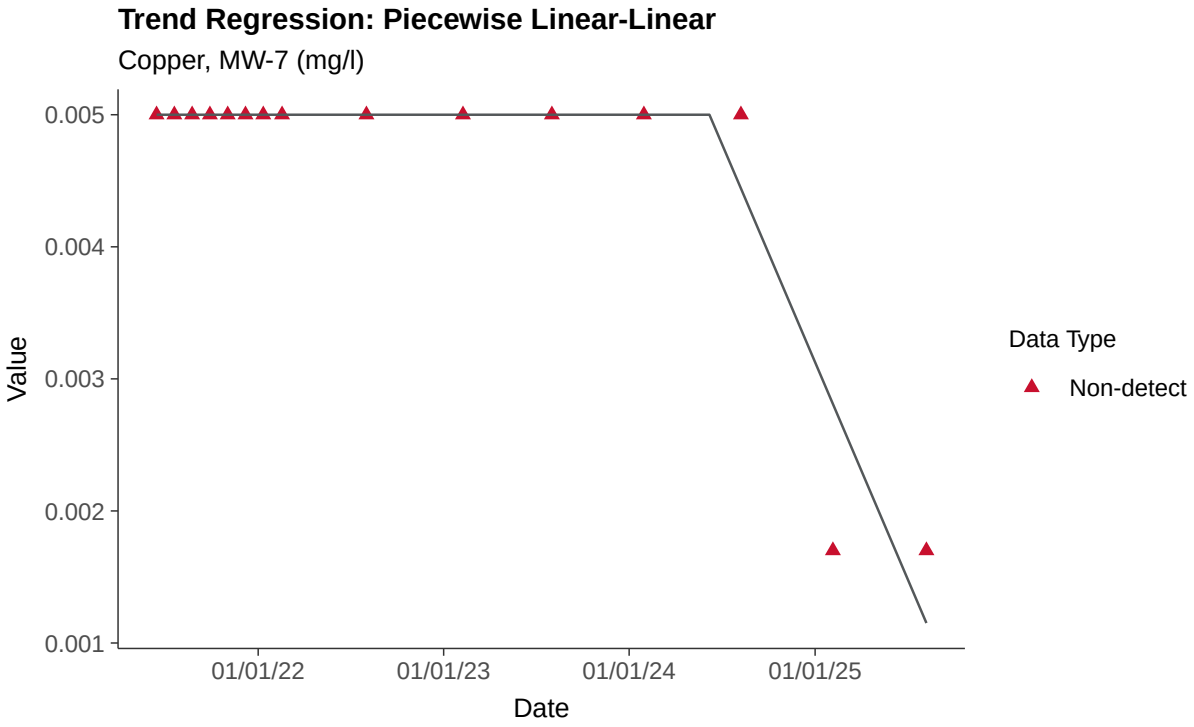
Boxplot

Copper, MW-7 (mg/l)

Boxplot by Season

Copper, MW-7 (mg/l)



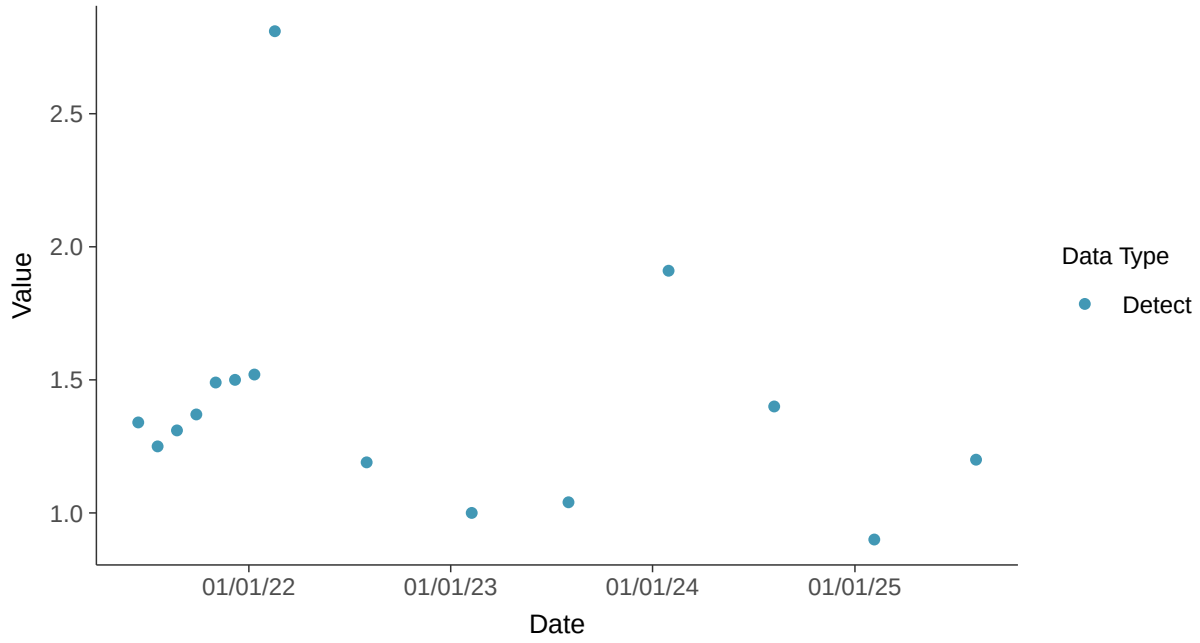

Trend Regression: Piecewise Linear-Linear
Copper, MW-7 (mg/l)
0.005
0.004
0.003
0.002
0.001
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Part 115: Iron, MW-7

ID: 17_5_114

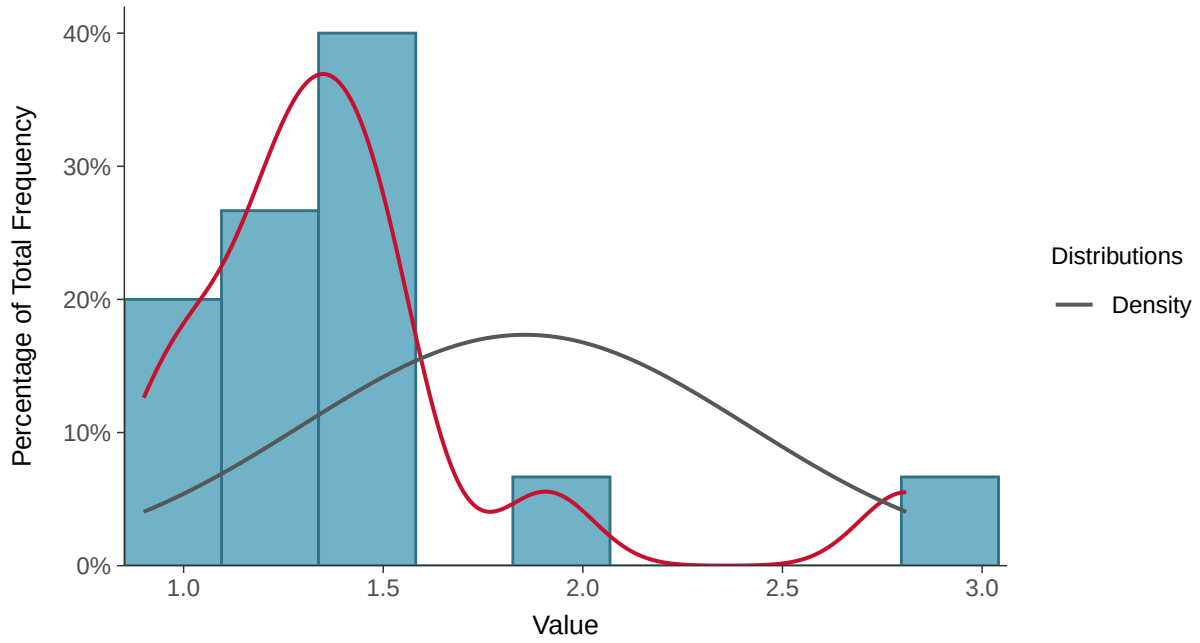
Scatter Plot

Iron, MW-7 (mg/l)



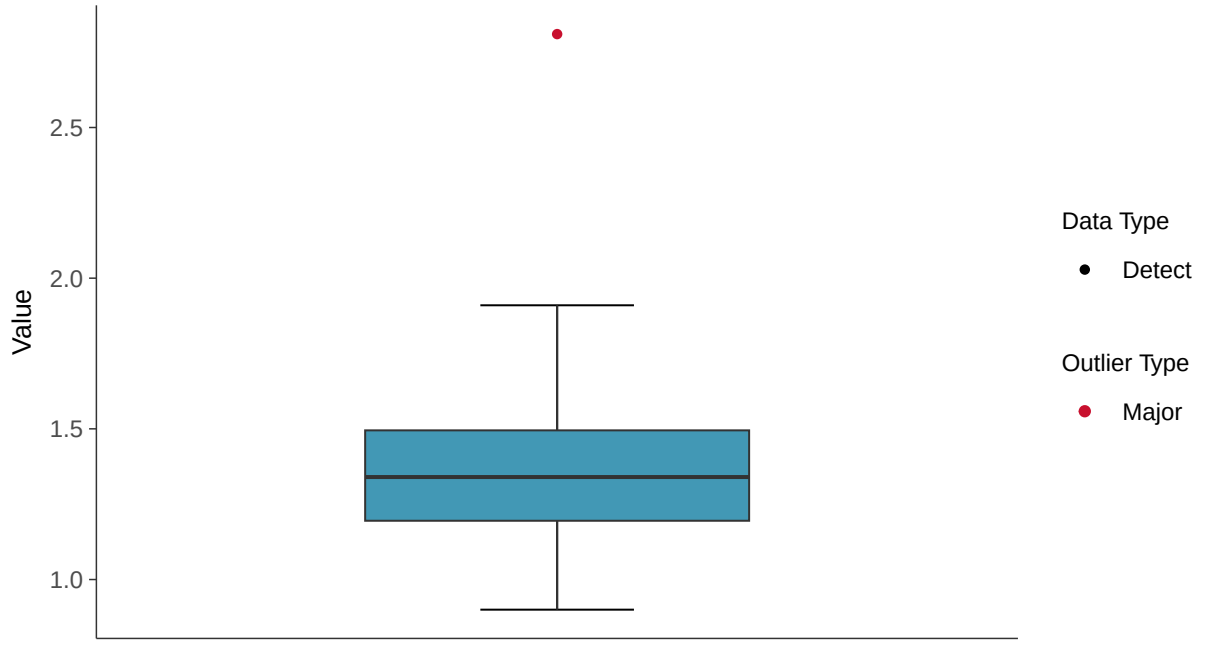
Histogram

Iron, MW-7 (mg/l)



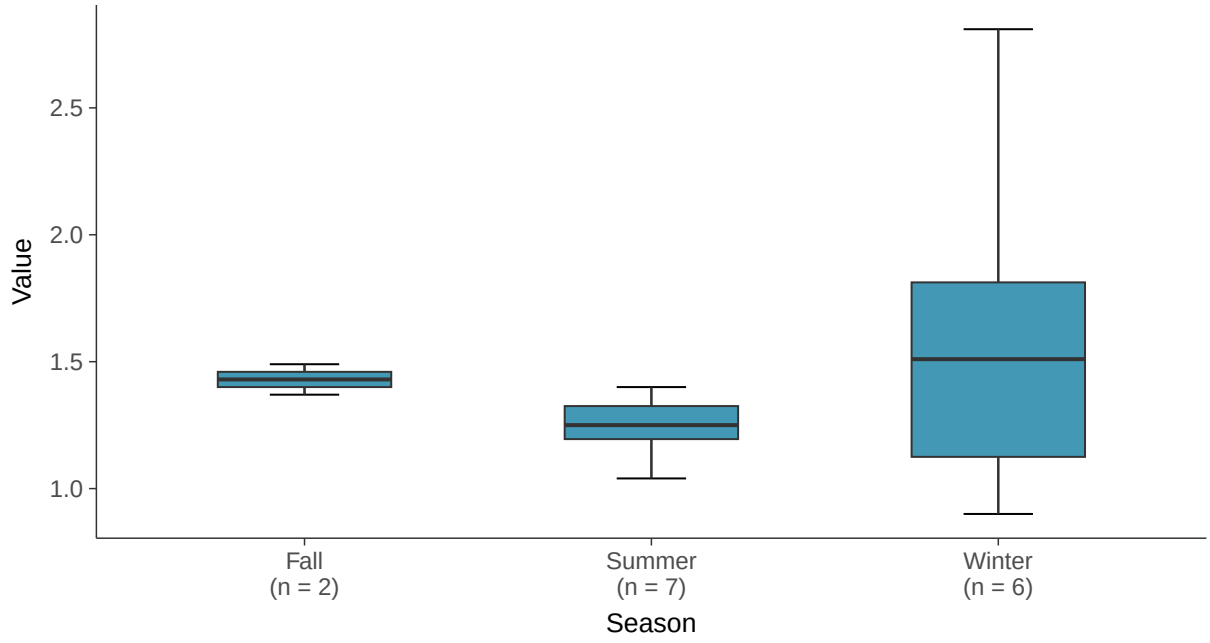
Boxplot

Iron, MW-7 (mg/l)



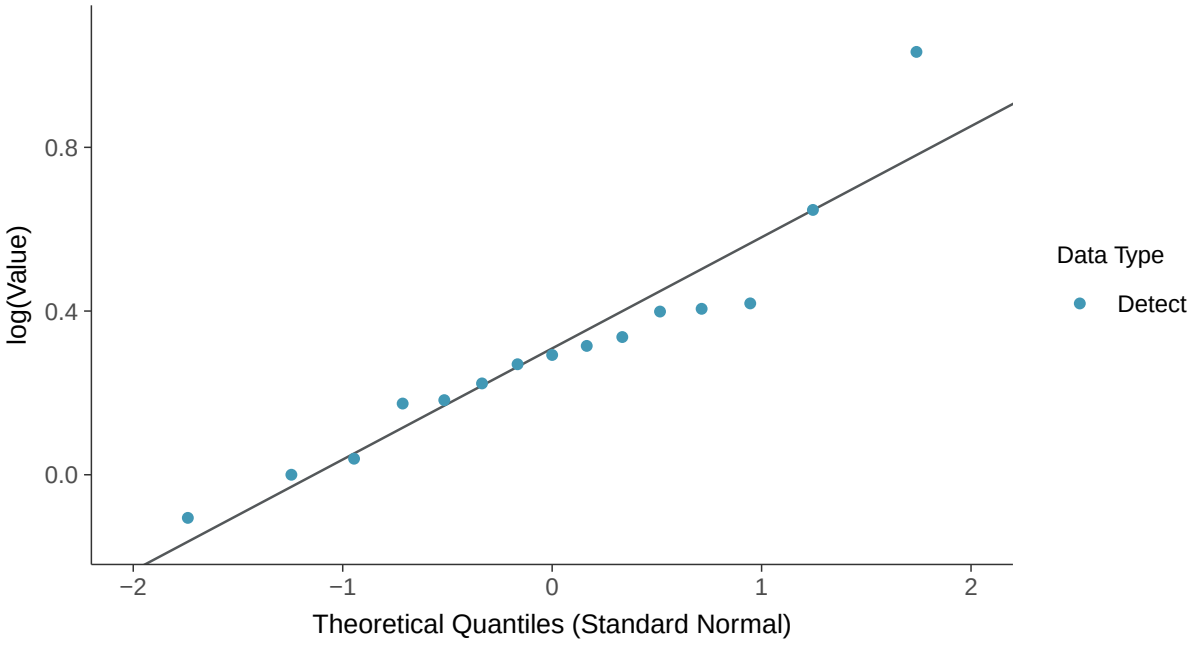
Boxplot by Season

Iron, MW-7 (mg/l)



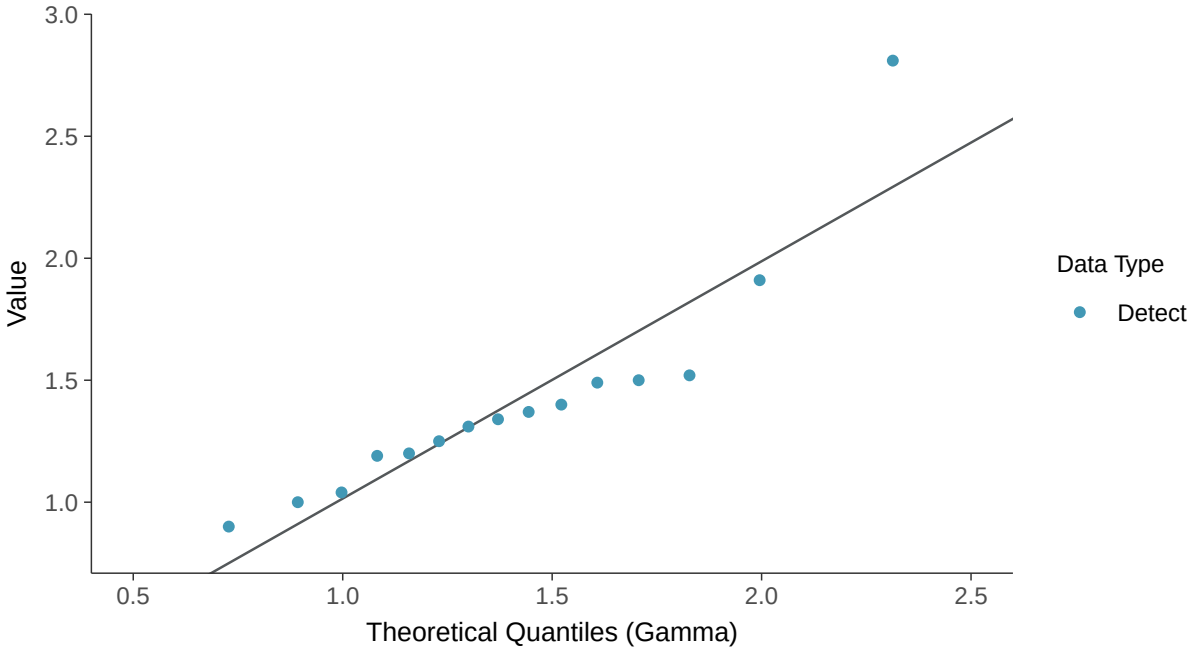
Lognormal Q-Q plot

Iron, MW-7 (mg/l)



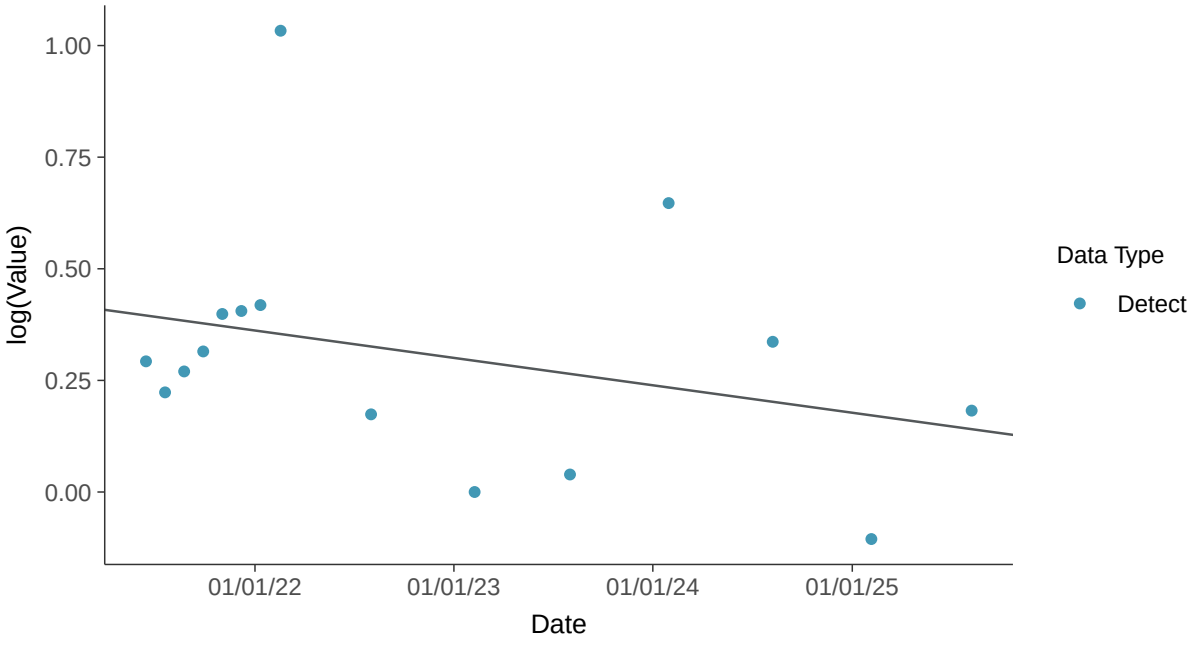
Gamma Q-Q plot

Iron, MW-7 (mg/l)



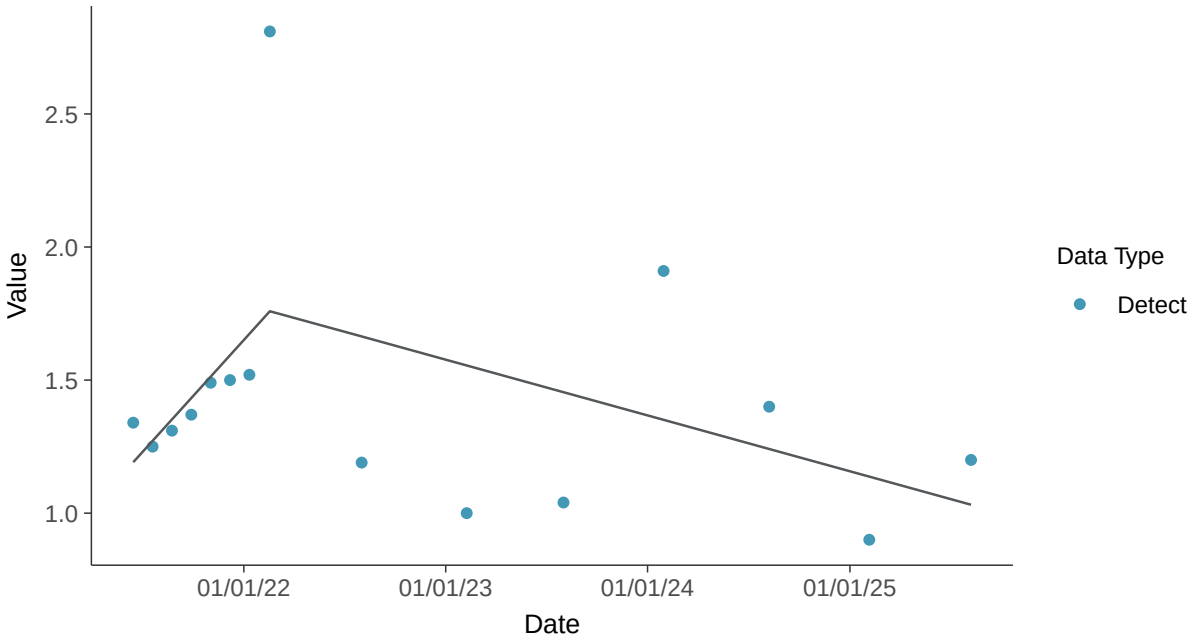
Trend Regression: Lognormal MLE

Iron, MW-7 (mg/l)



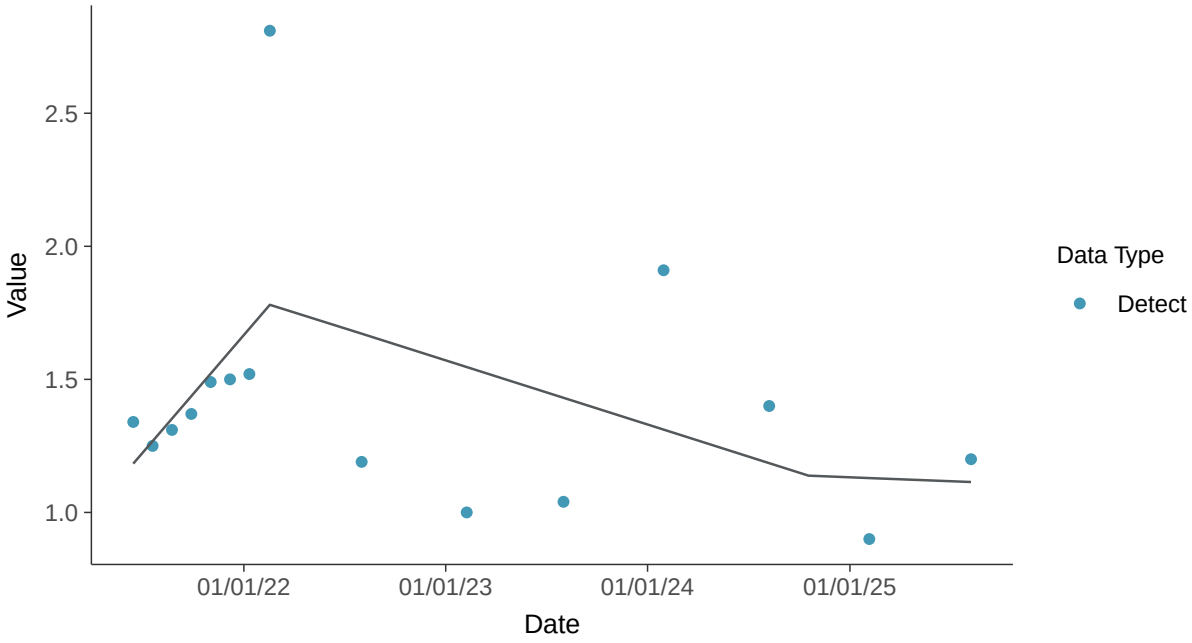
Trend Regression: Piecewise Linear-Linear

Iron, MW-7 (mg/l)



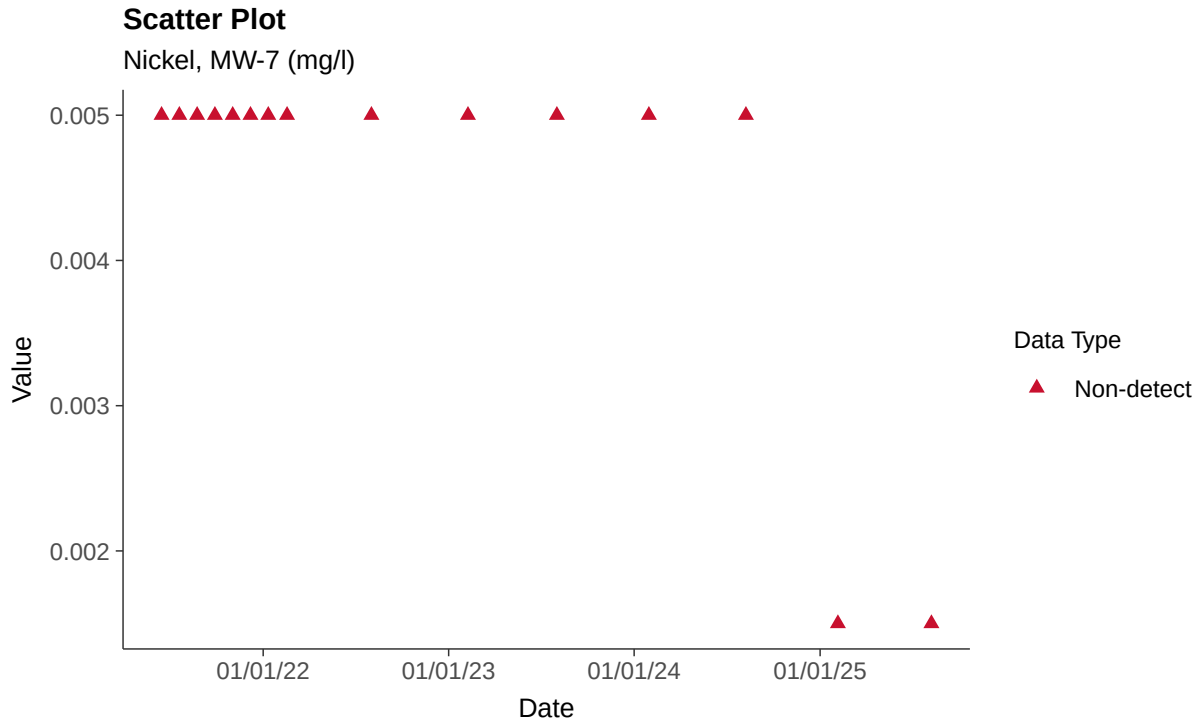
Trend Regression: Piecewise Linear-Linear-Linear

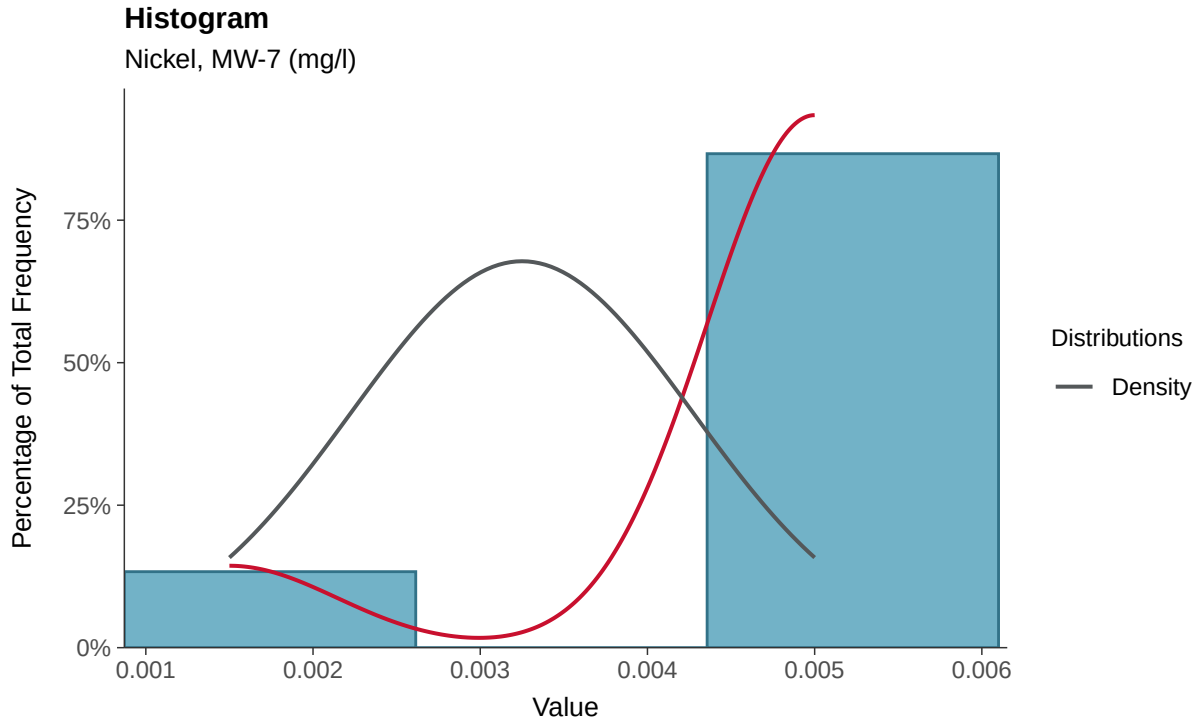
Iron, MW-7 (mg/l)



Part 115: Nickel, MW-7

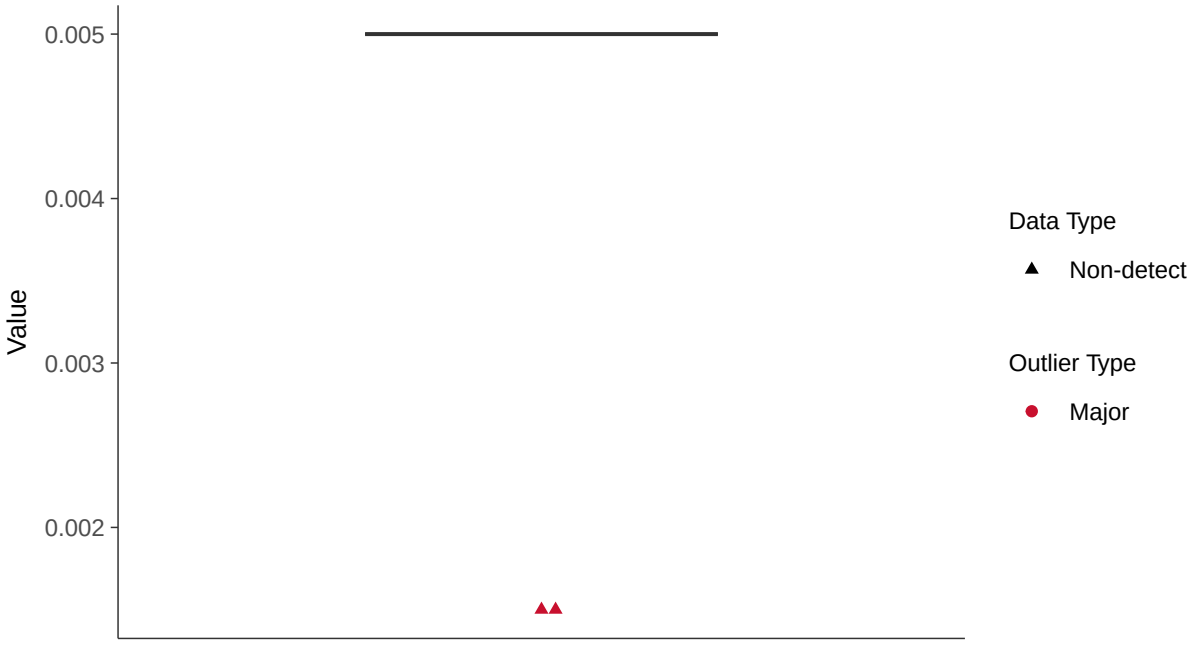
ID: 17_5_119





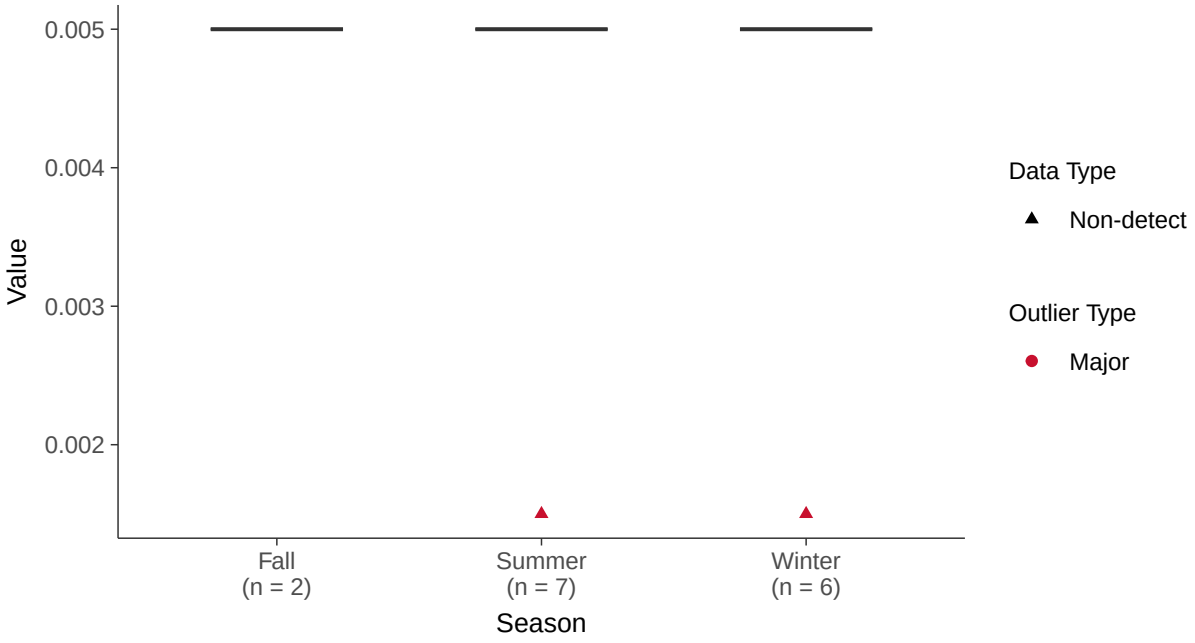
Boxplot

Nickel, MW-7 (mg/l)



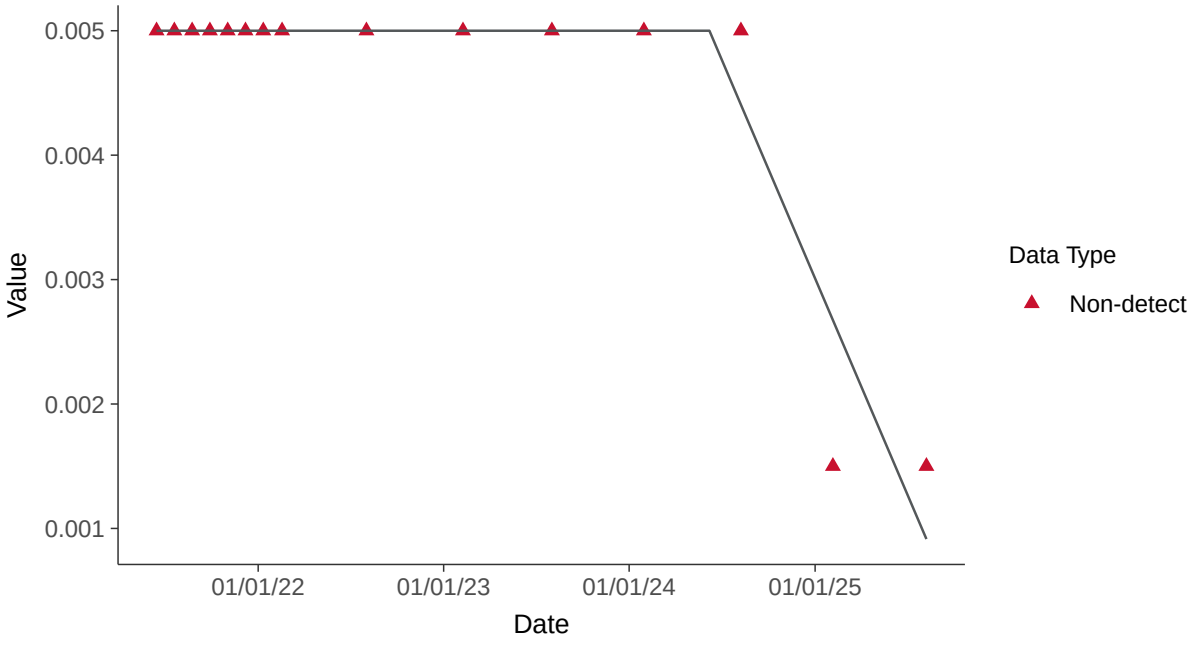
Boxplot by Season

Nickel, MW-7 (mg/l)



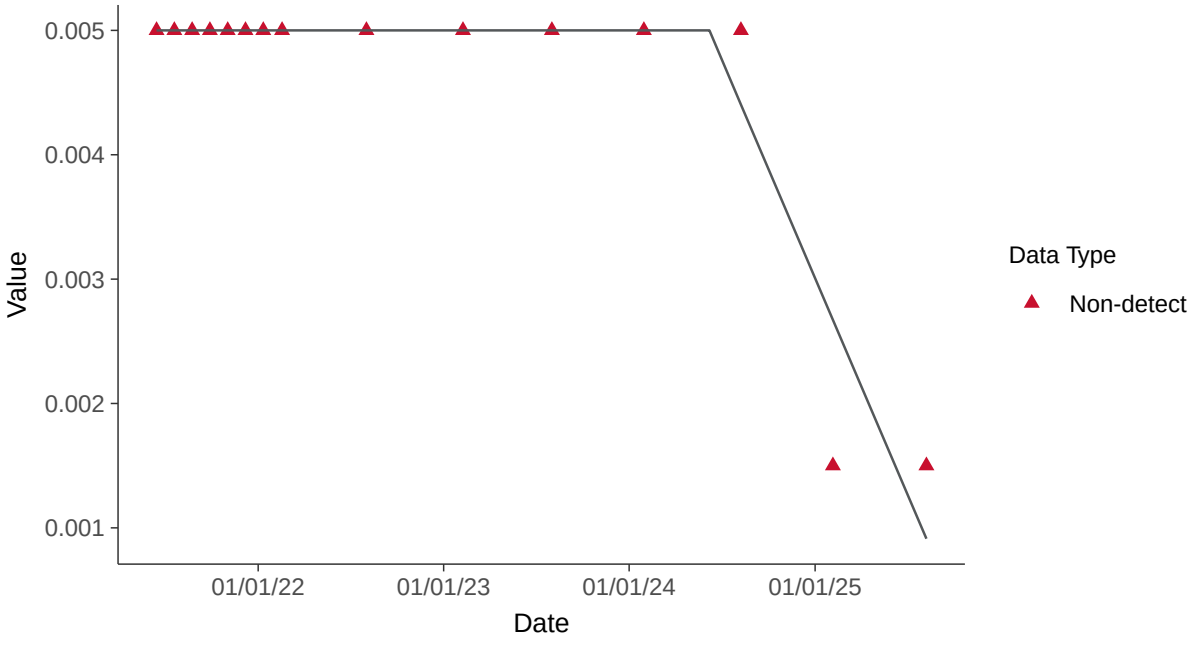
Trend Regression: Piecewise Linear-Linear

Nickel, MW-7 (mg/l)



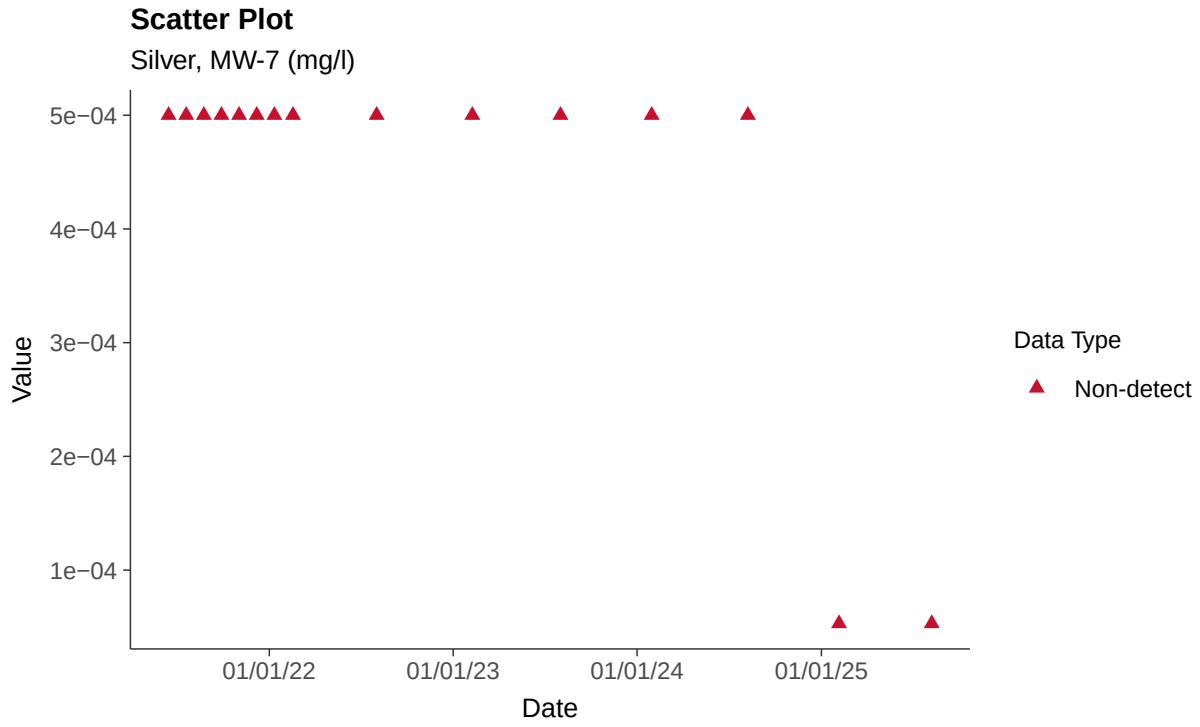
Trend Regression: Piecewise Linear-Linear-Linear

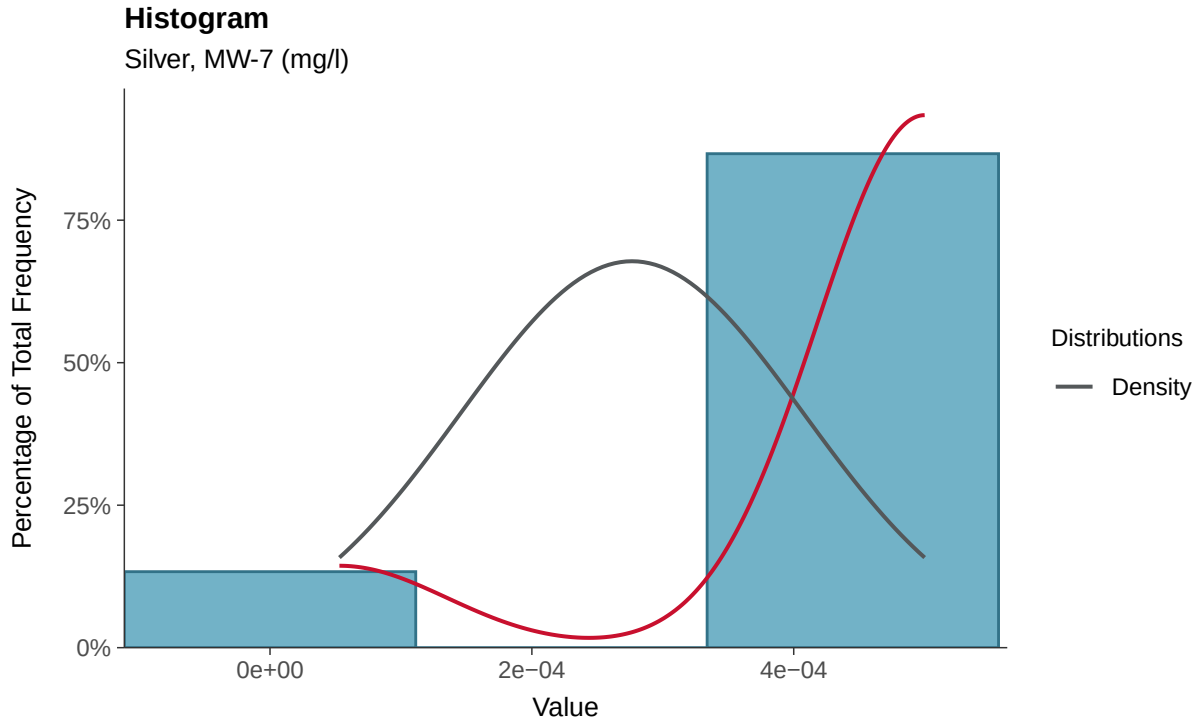
Nickel, MW-7 (mg/l)



Part 115: Silver, MW-7

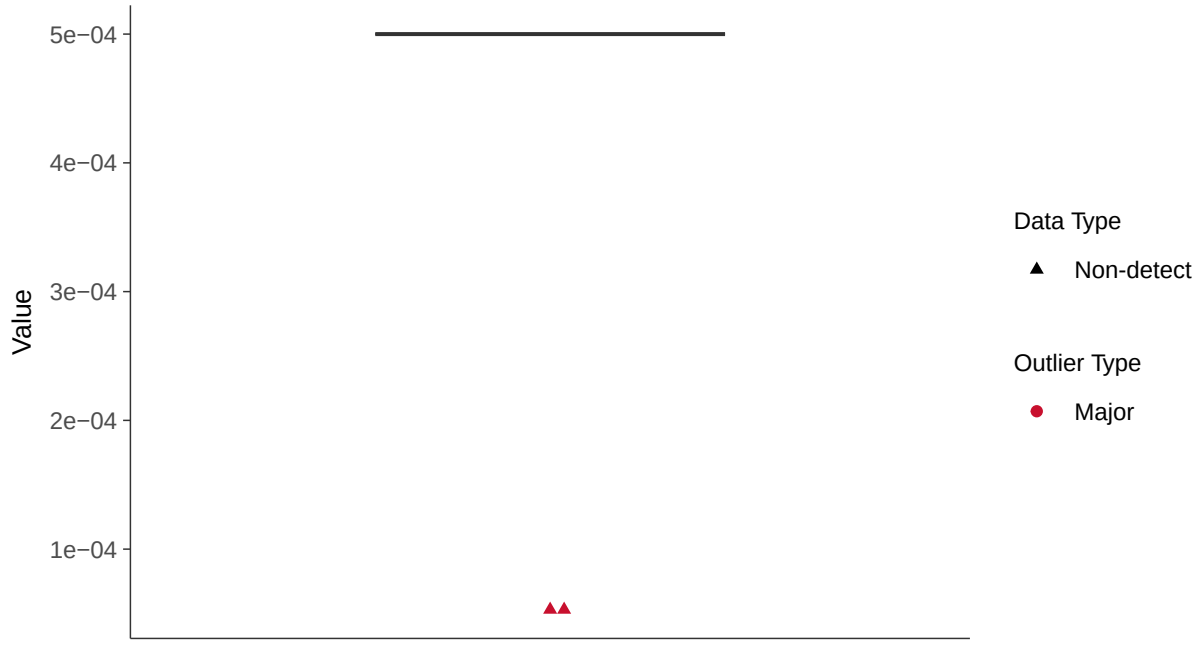
ID: 17_5_123





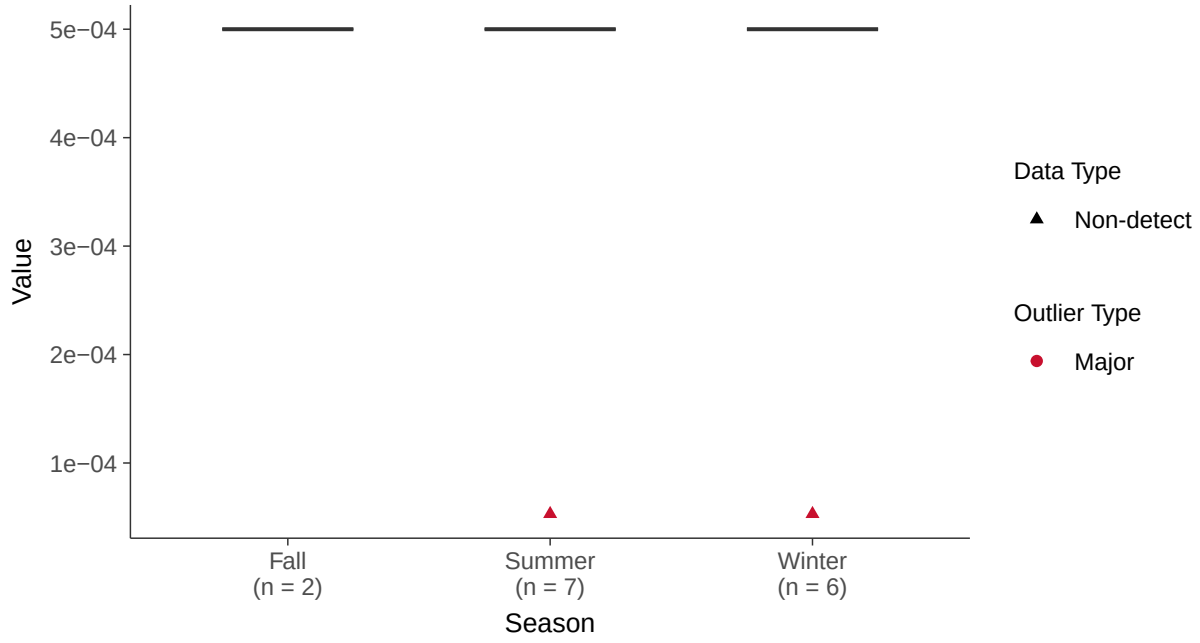
Boxplot

Silver, MW-7 (mg/l)



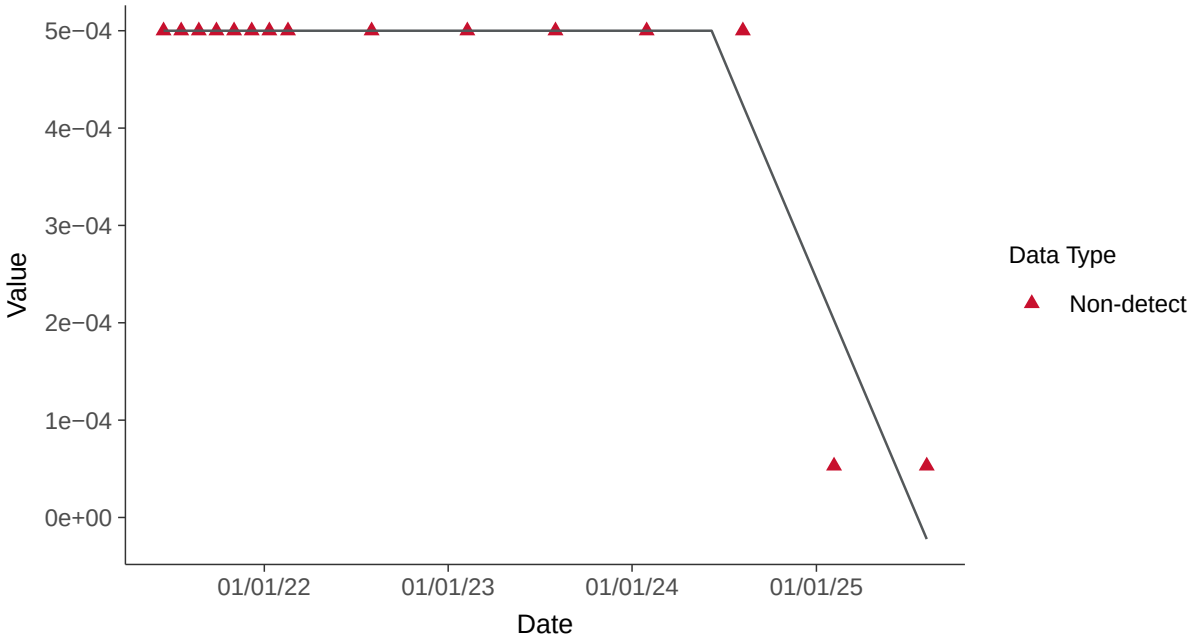
Boxplot by Season

Silver, MW-7 (mg/l)



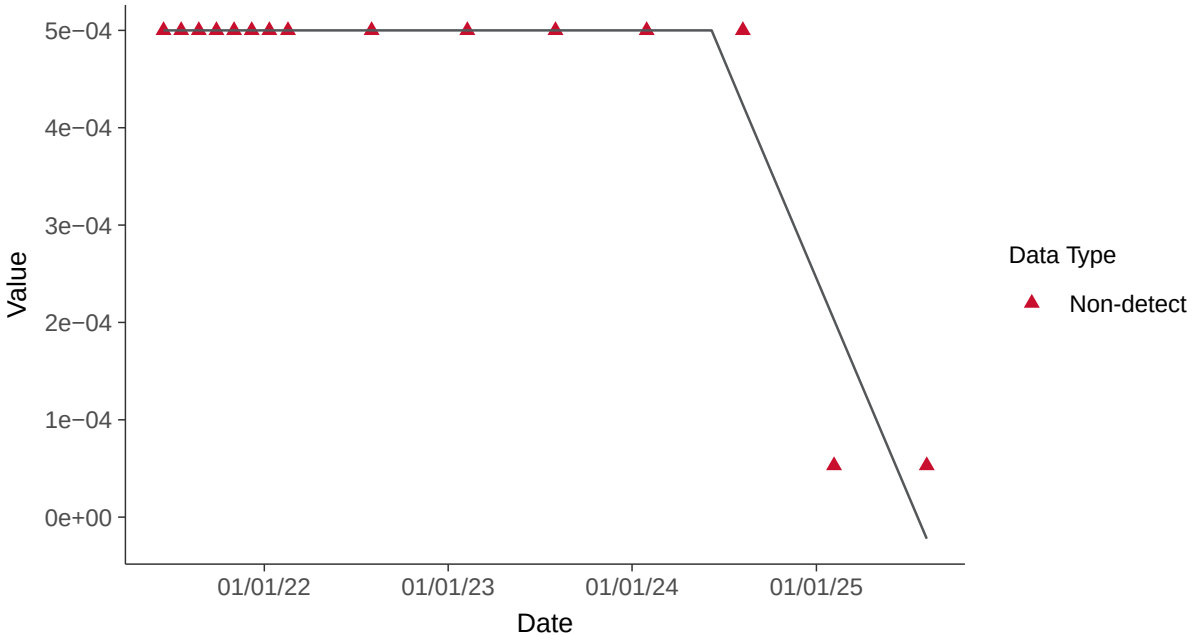
Trend Regression: Piecewise Linear-Linear

Silver, MW-7 (mg/l)



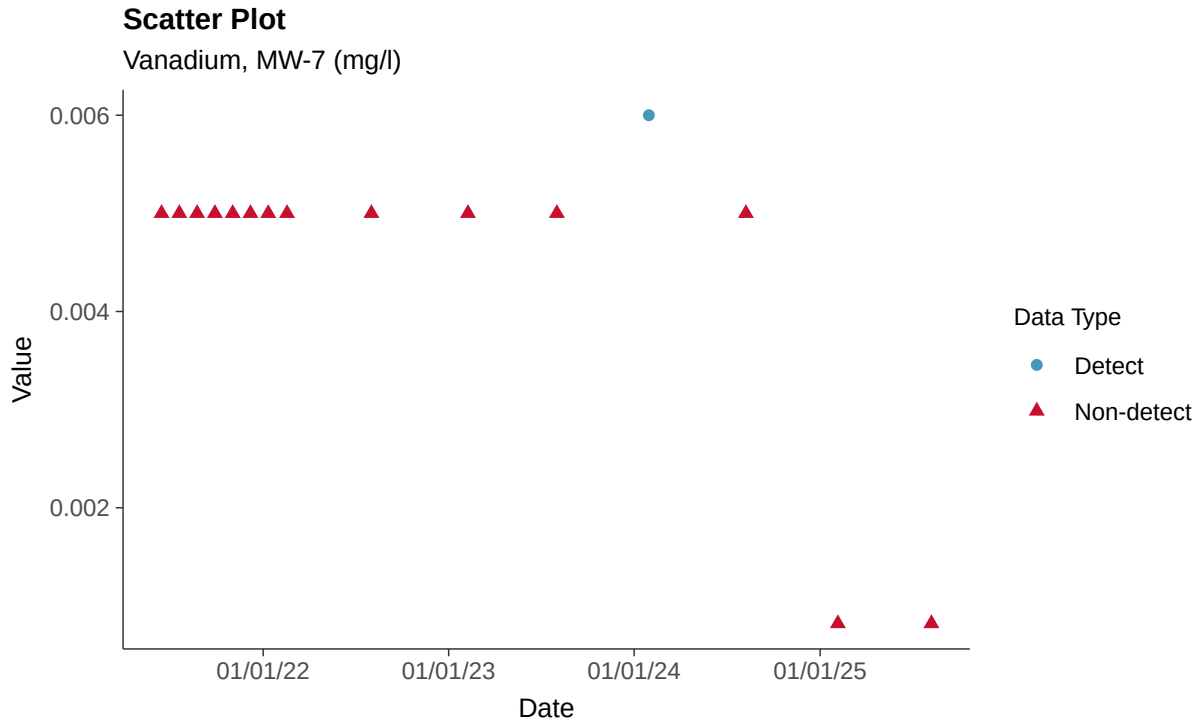
Trend Regression: Piecewise Linear-Linear-Linear

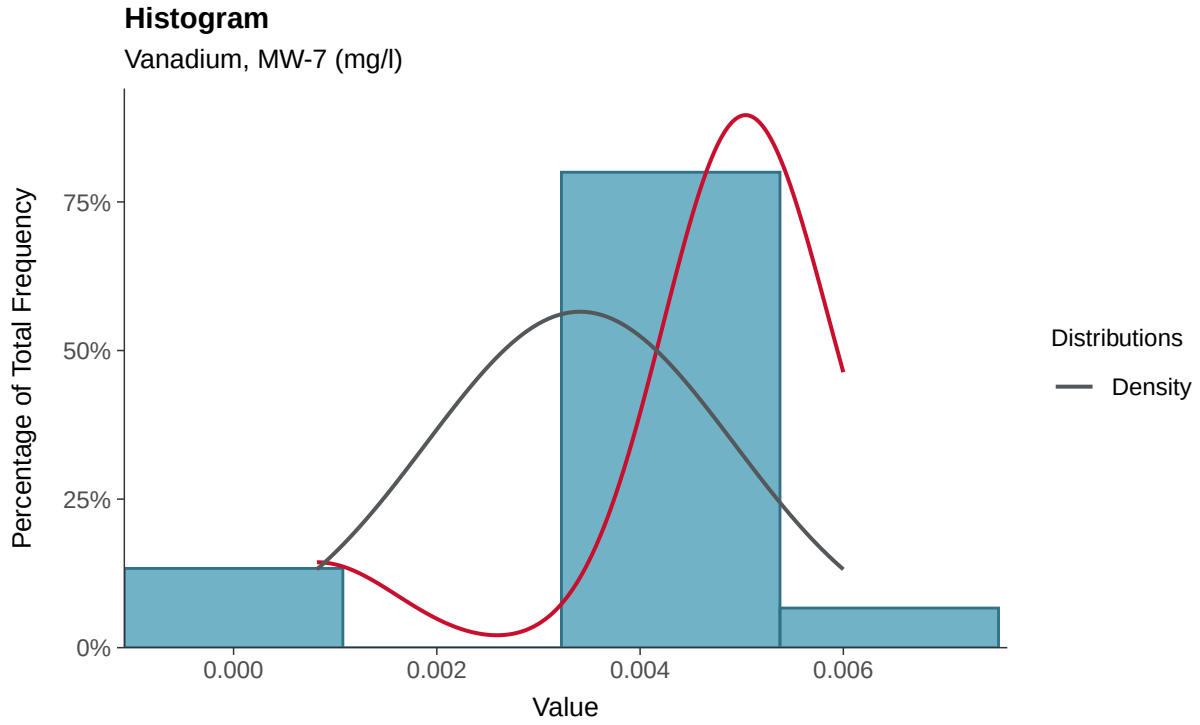
Silver, MW-7 (mg/l)



Part 115: Vanadium, MW-7

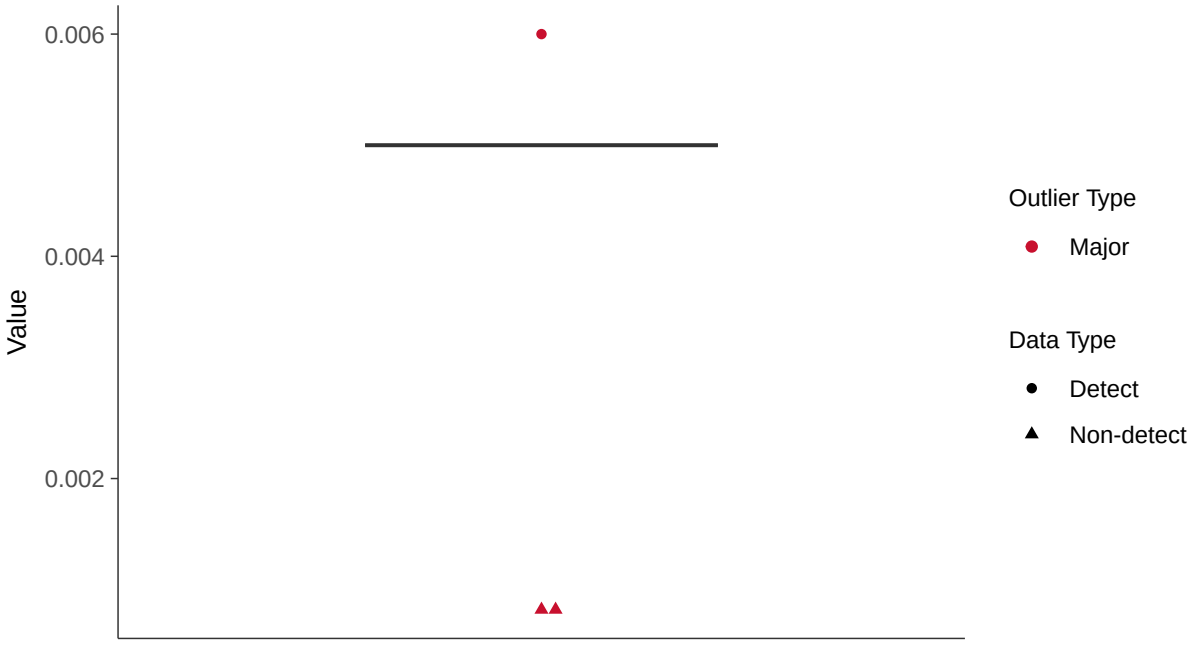
ID: 17_5_128





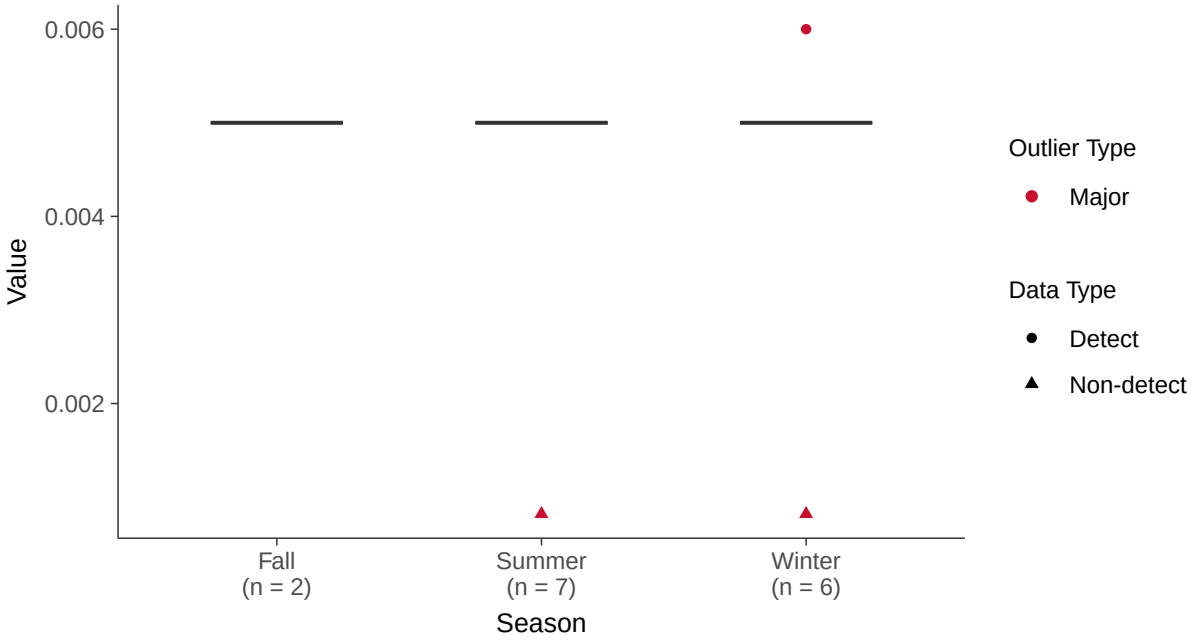
Boxplot

Vanadium, MW-7 (mg/l)



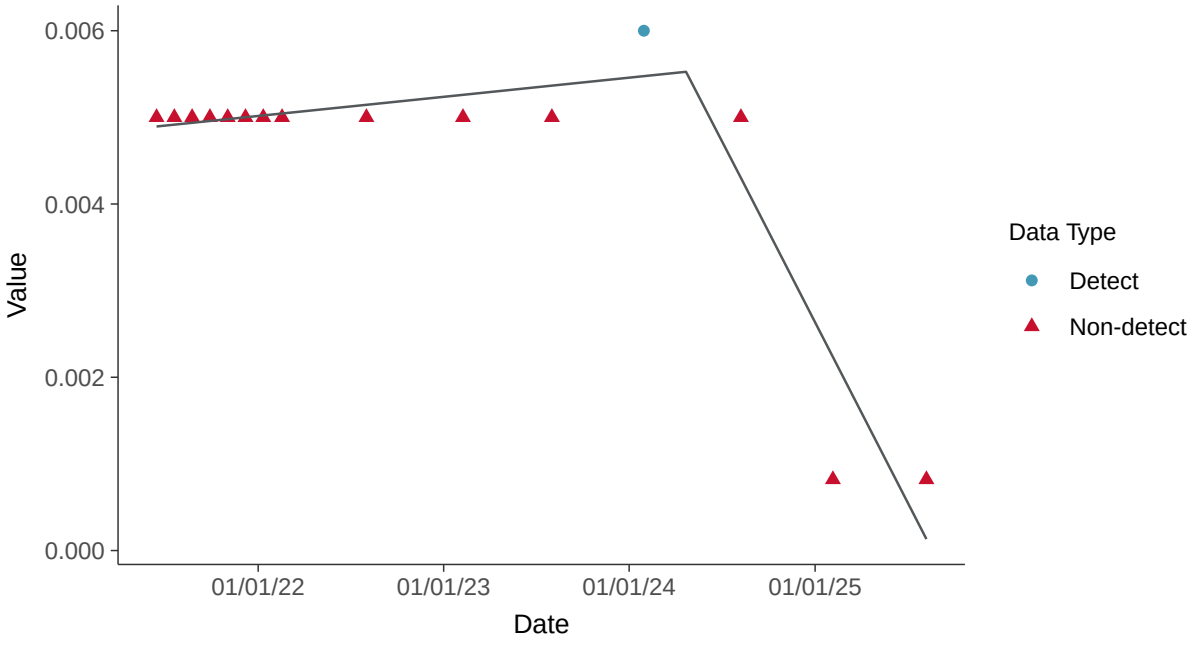
Boxplot by Season

Vanadium, MW-7 (mg/l)



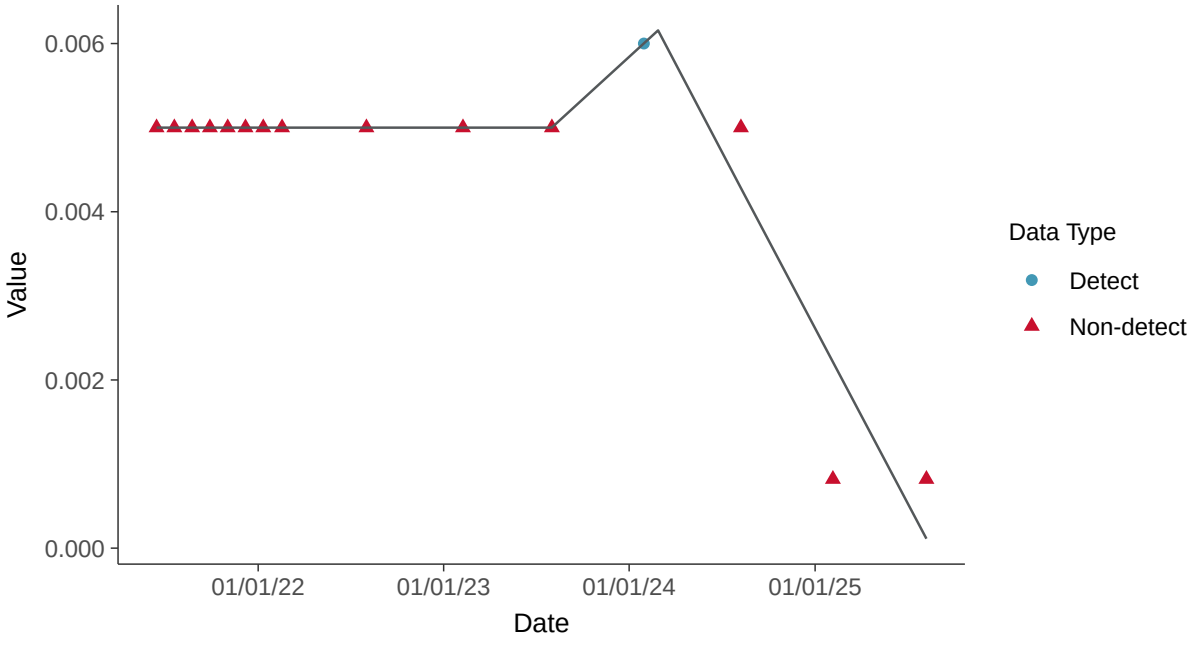
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-7 (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Vanadium, MW-7 (mg/l)

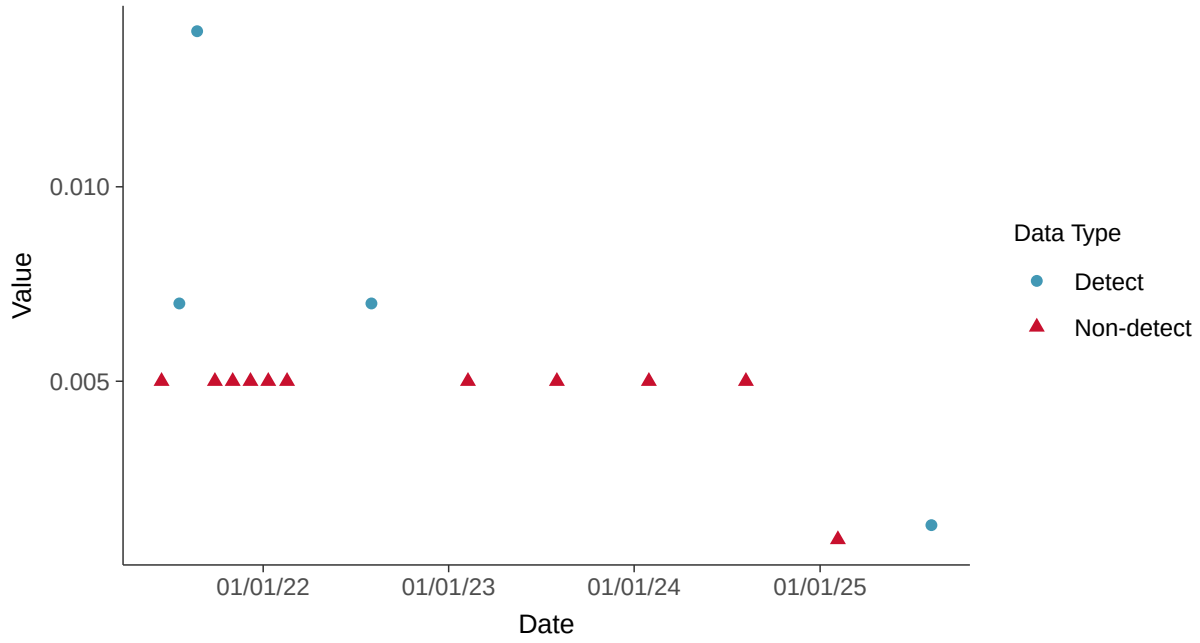


Part 115: Zinc, MW-7

ID: 17_5_129

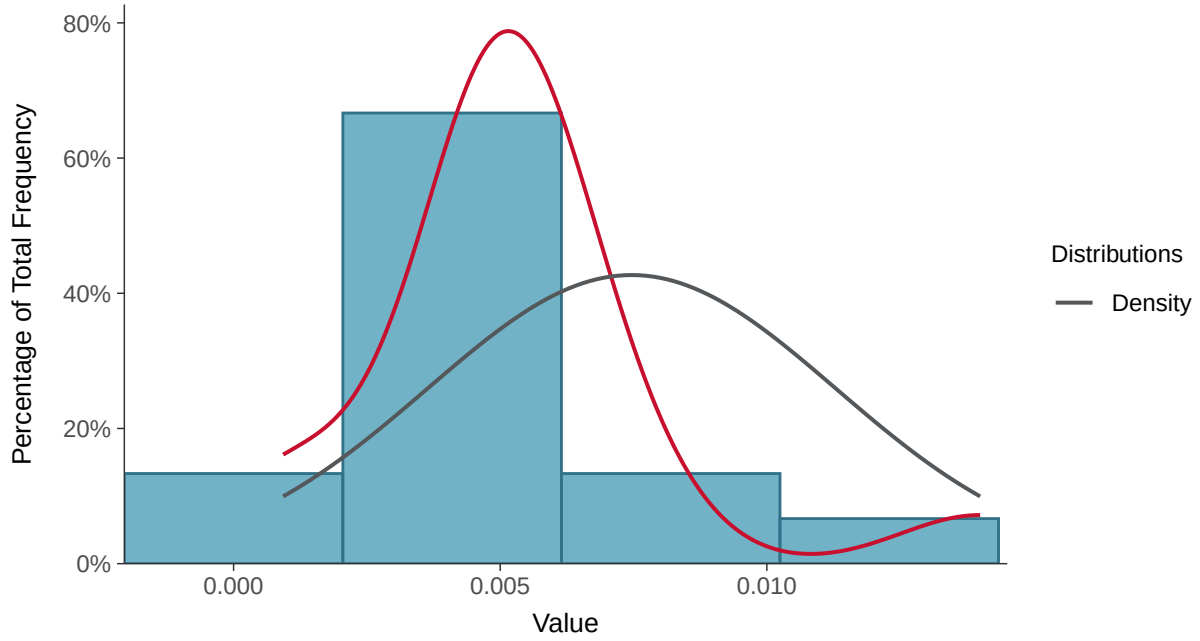
Scatter Plot

Zinc, MW-7 (mg/l)



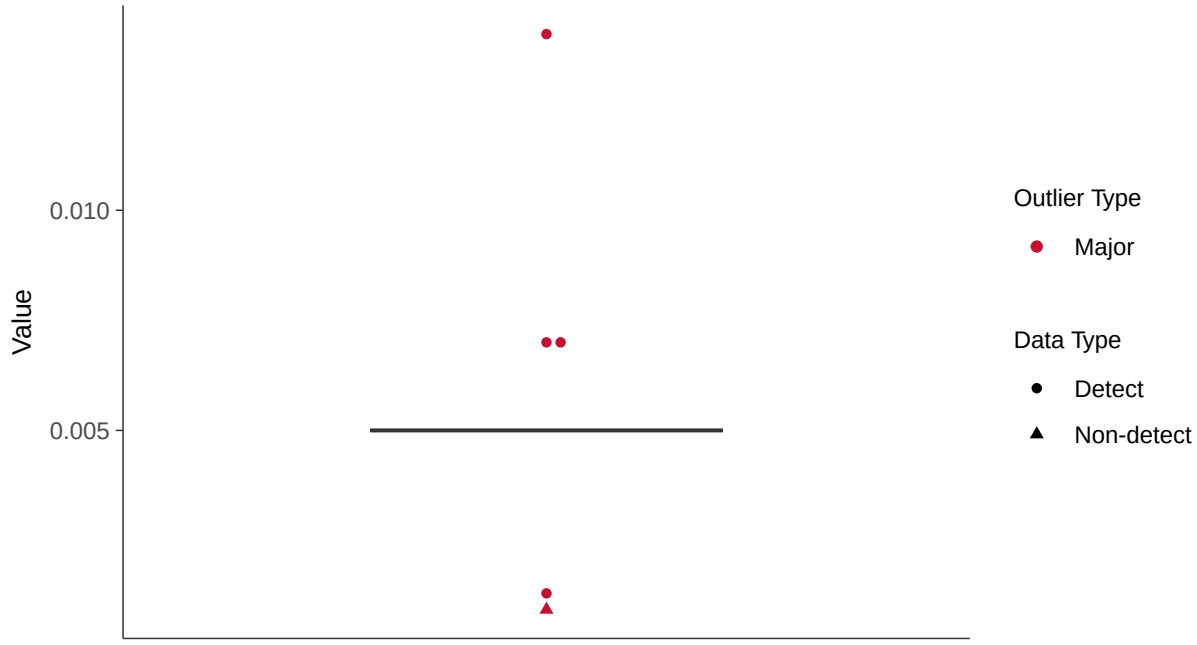
Histogram

Zinc, MW-7 (mg/l)



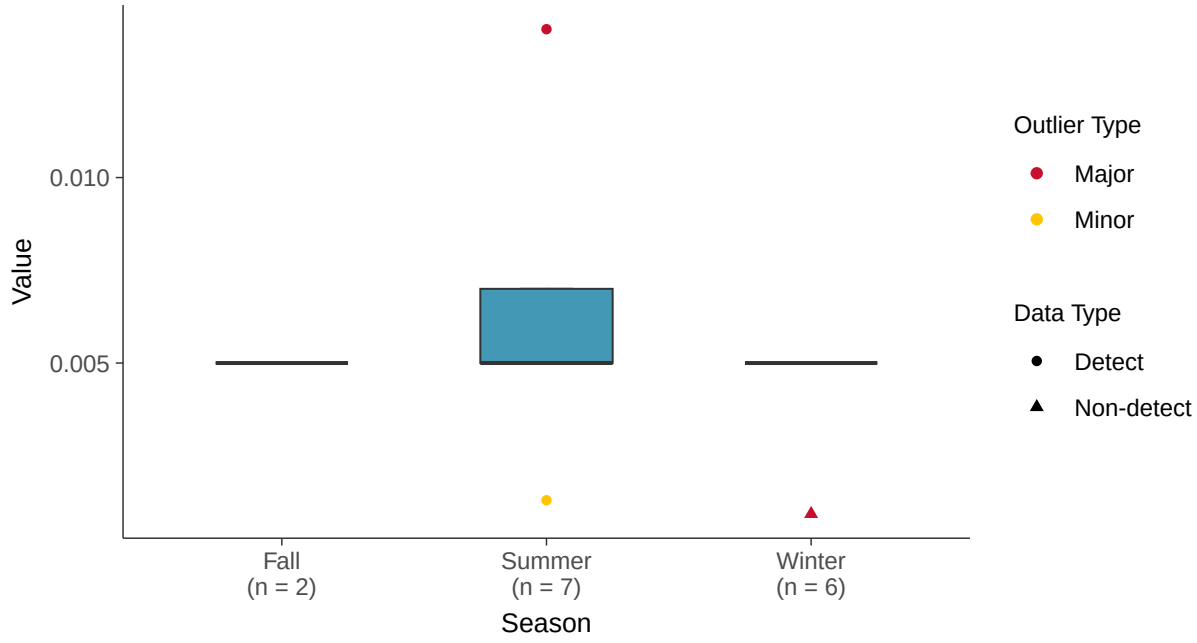
Boxplot

Zinc, MW-7 (mg/l)



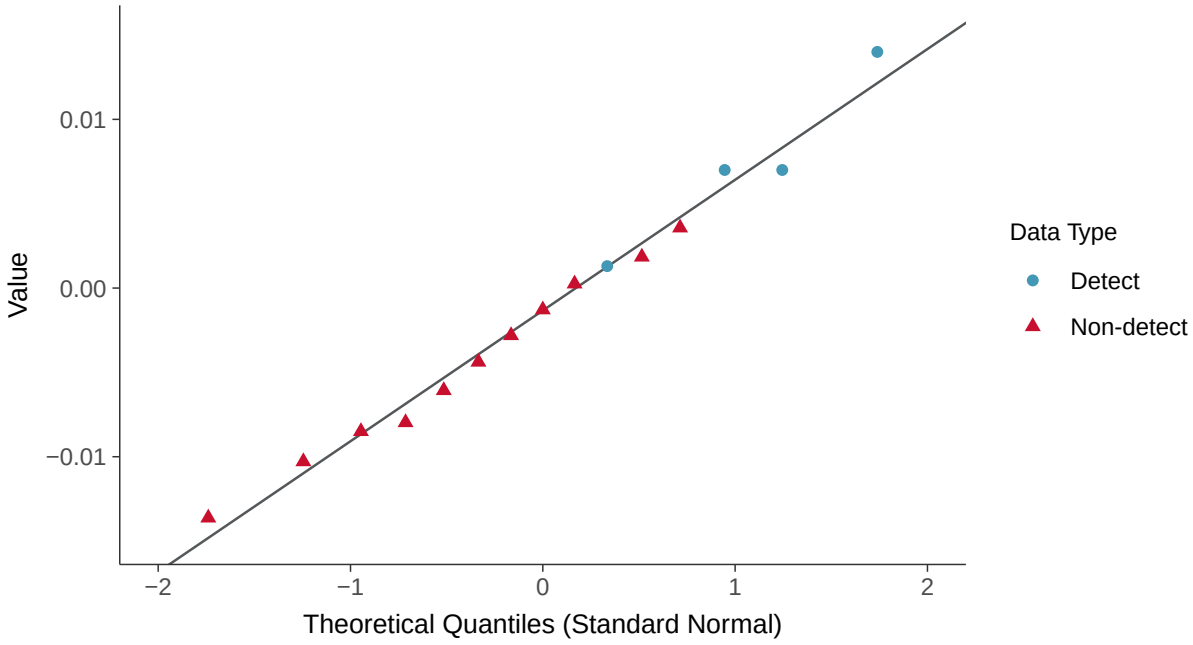
Boxplot by Season

Zinc, MW-7 (mg/l)



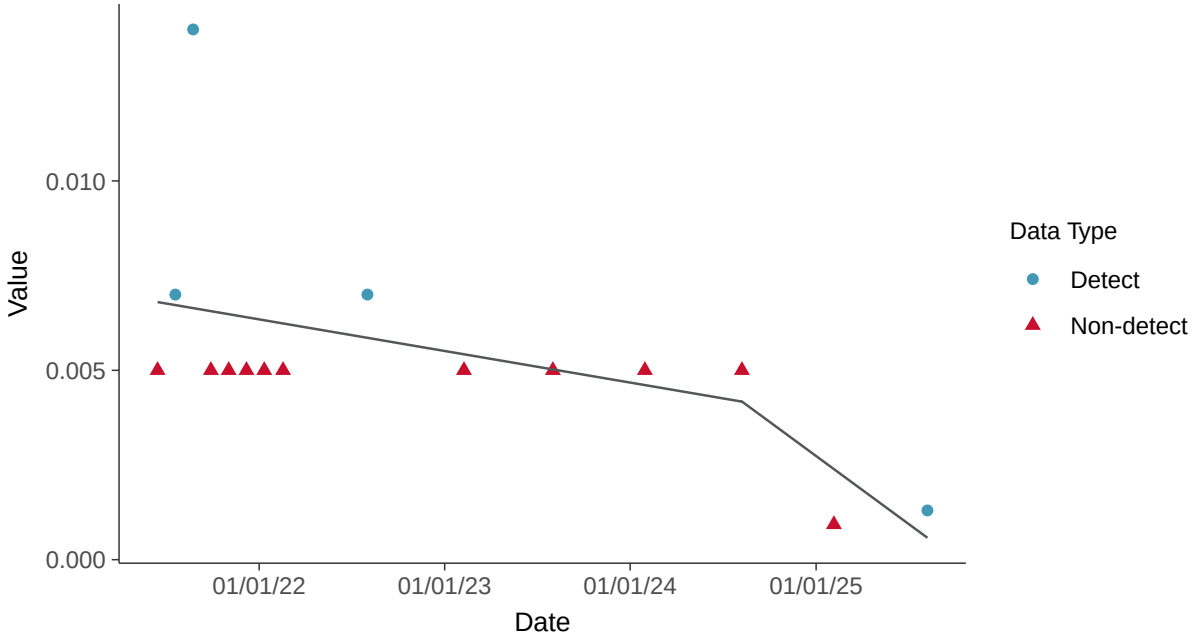
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-7 (mg/l)



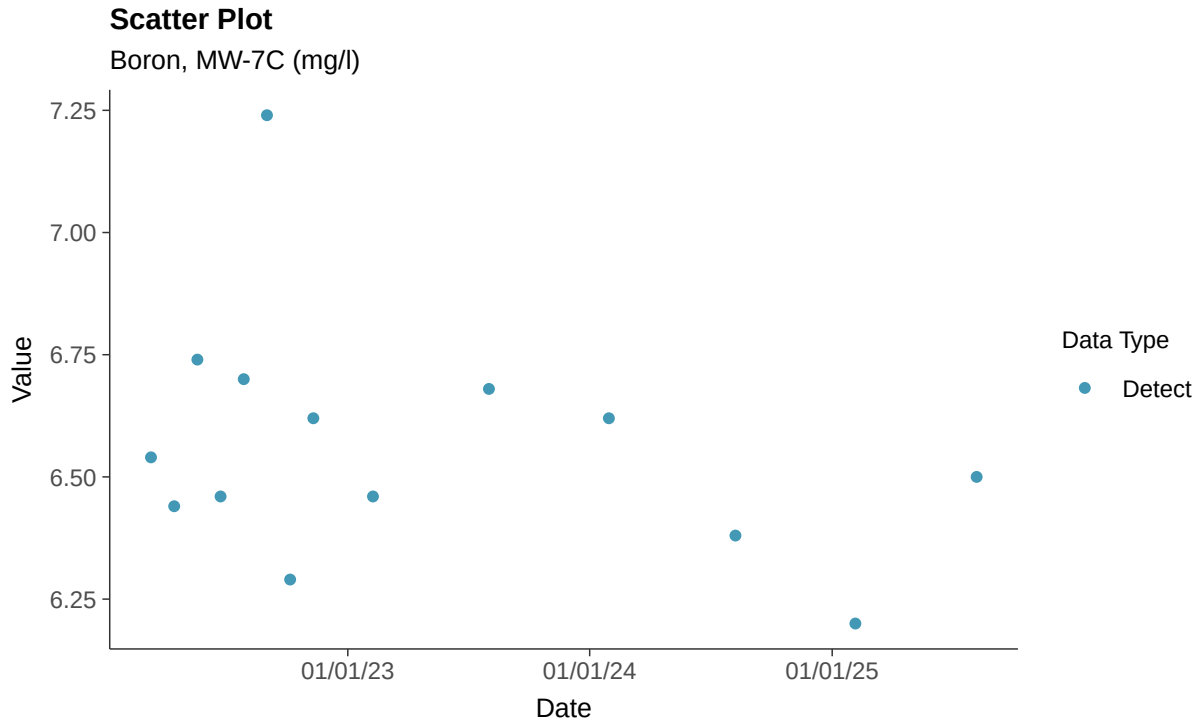
Trend Regression: Piecewise Linear-Linear

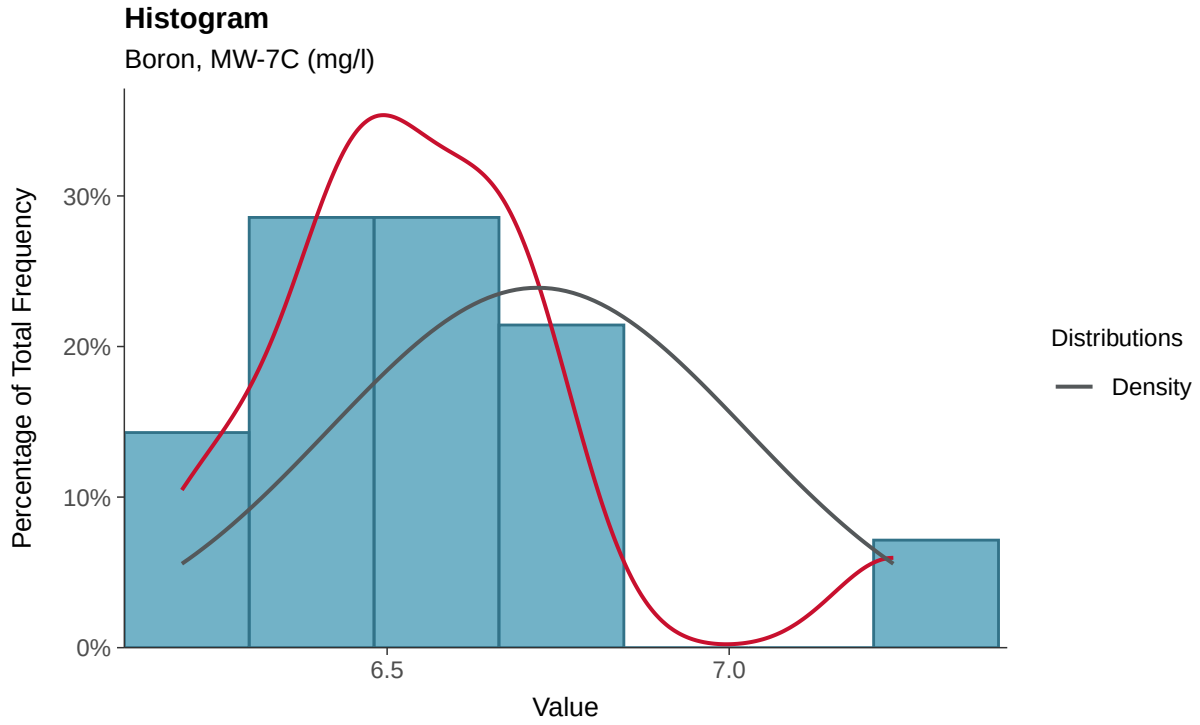
Zinc, MW-7 (mg/l)



Appendix III: Boron, MW-7C

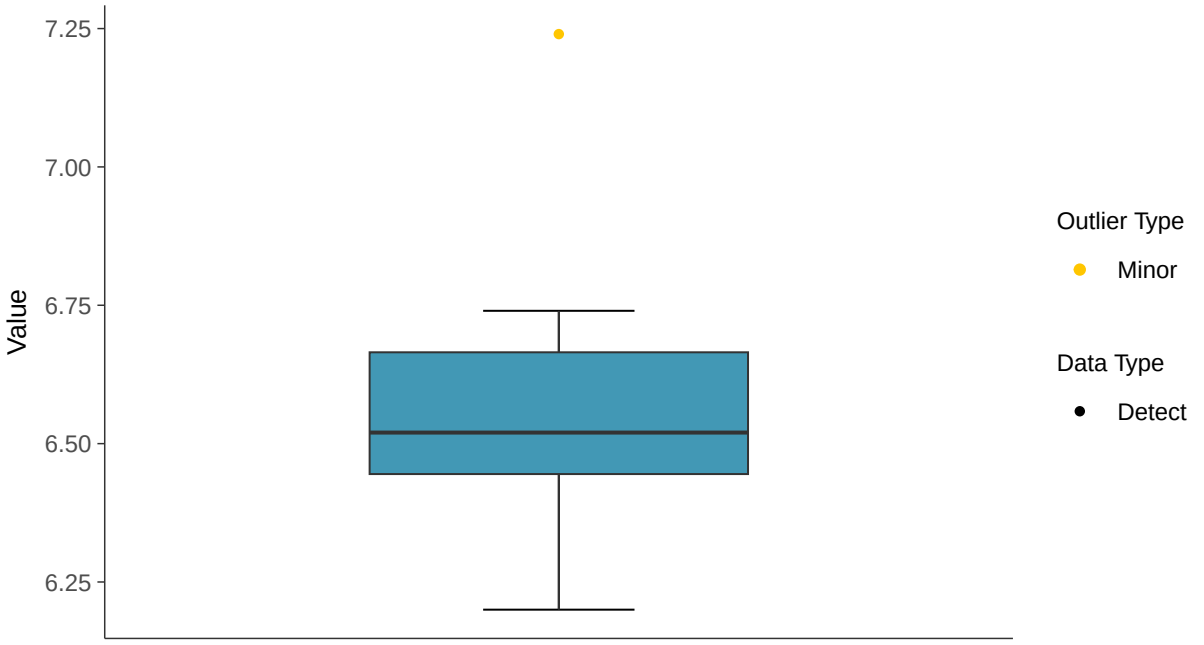
ID: 18_2_105





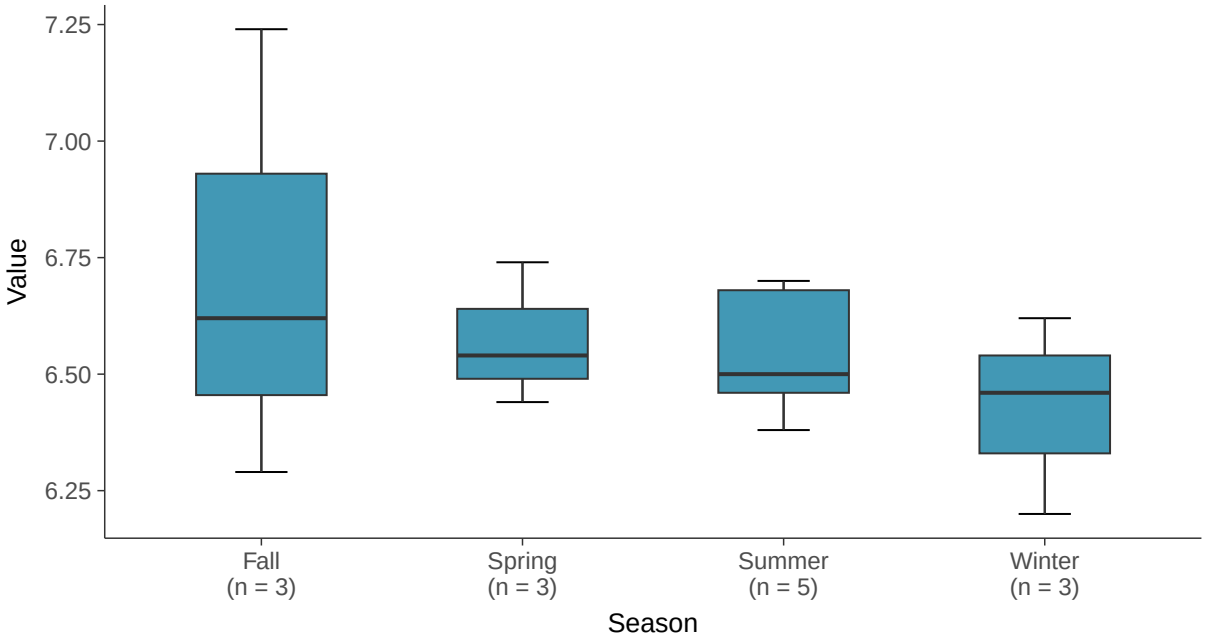
Boxplot

Boron, MW-7C (mg/l)



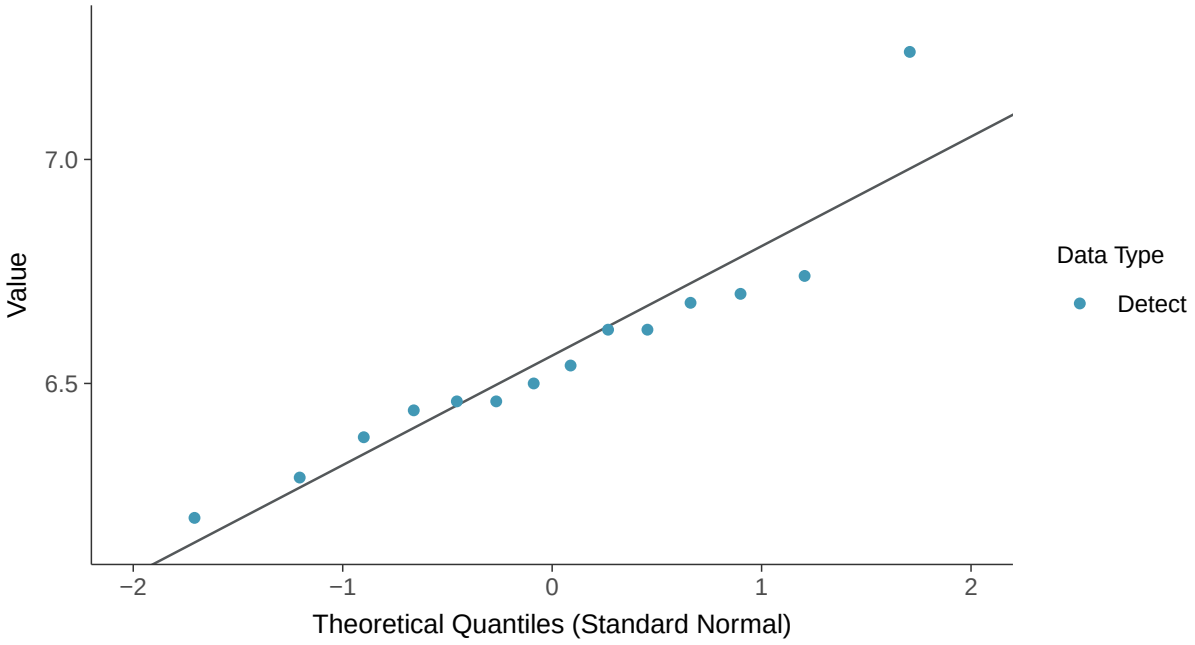
Boxplot by Season

Boron, MW-7C (mg/l)



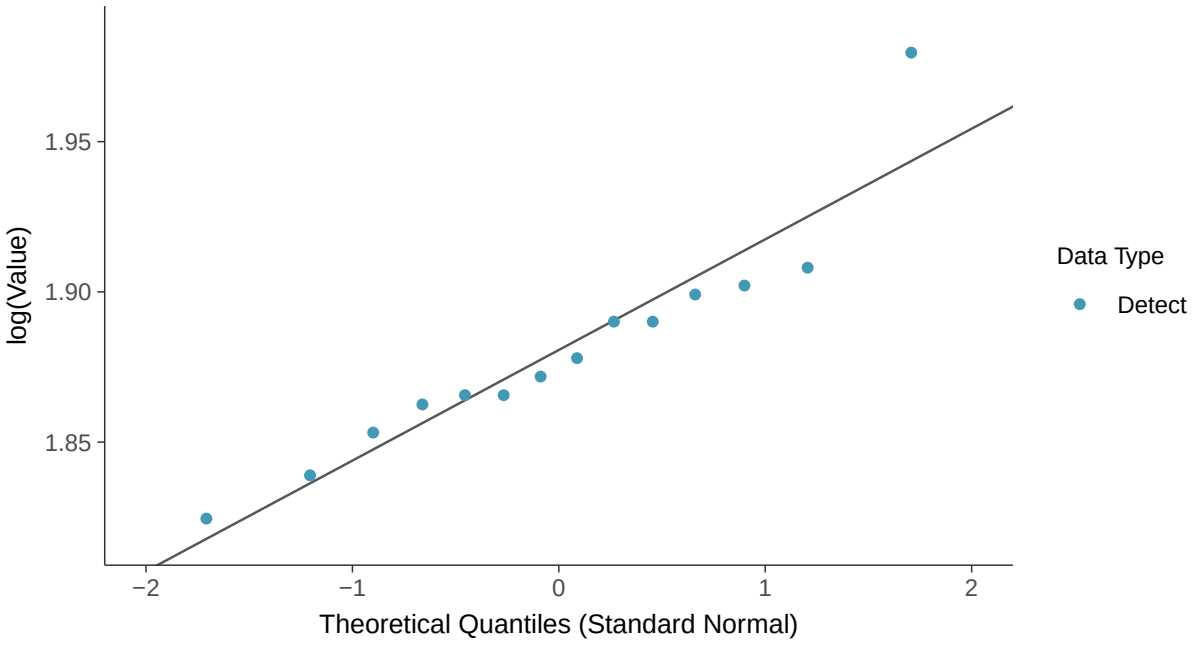
Normal Q-Q plot

Boron, MW-7C (mg/l)



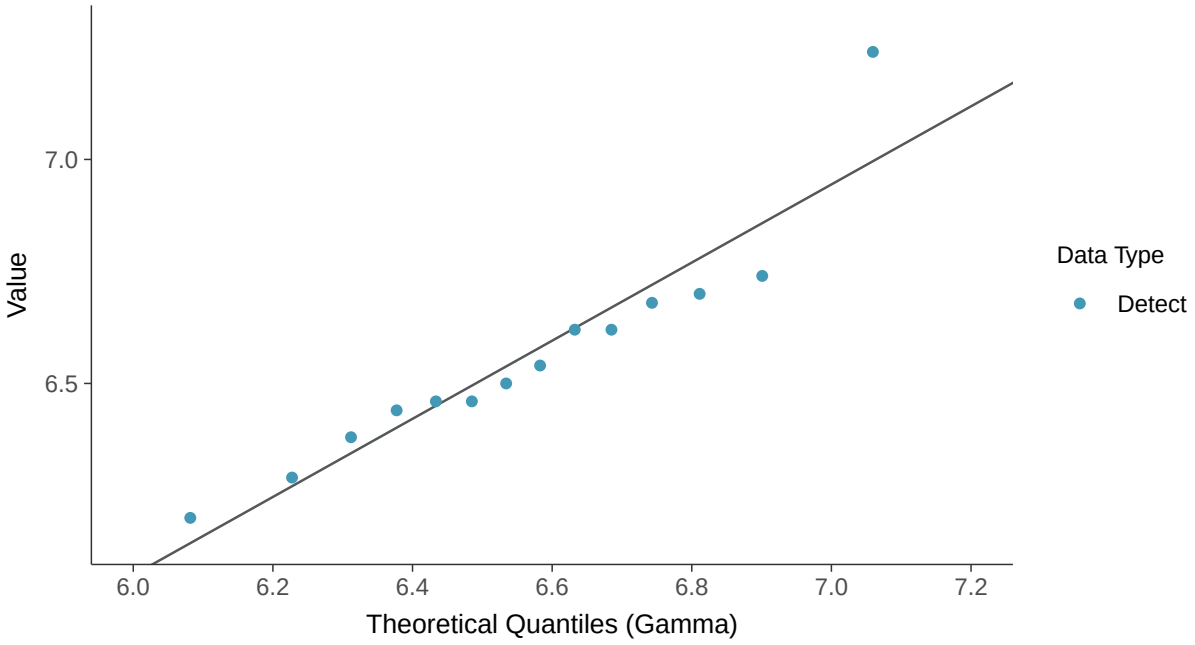
Lognormal Q-Q plot

Boron, MW-7C (mg/l)



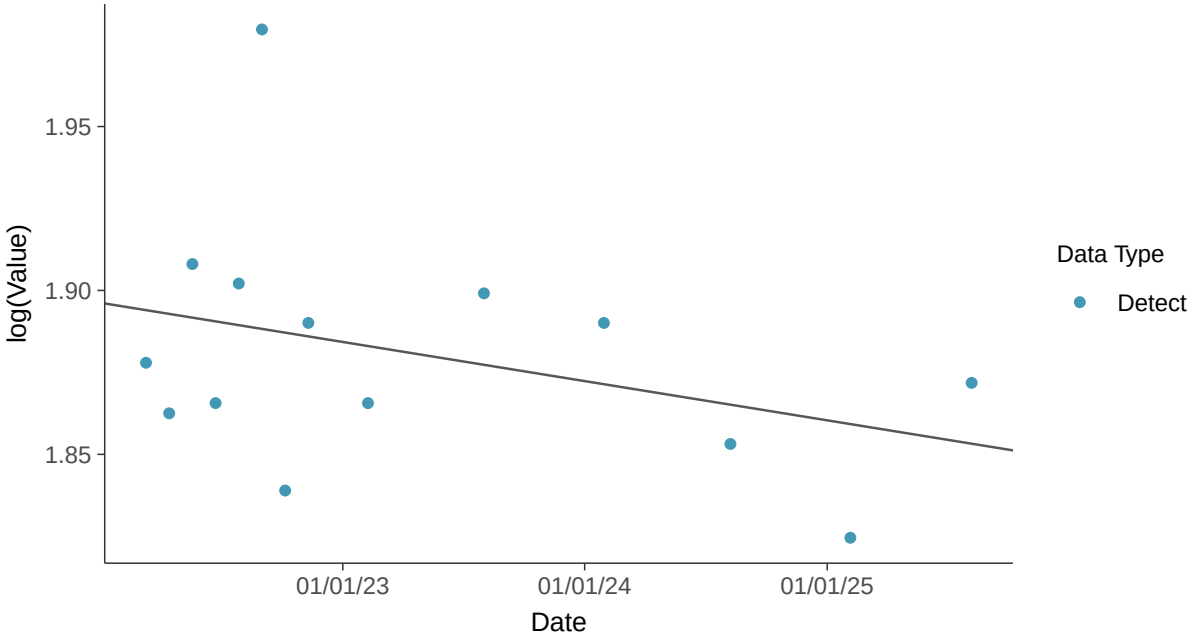
Gamma Q-Q plot

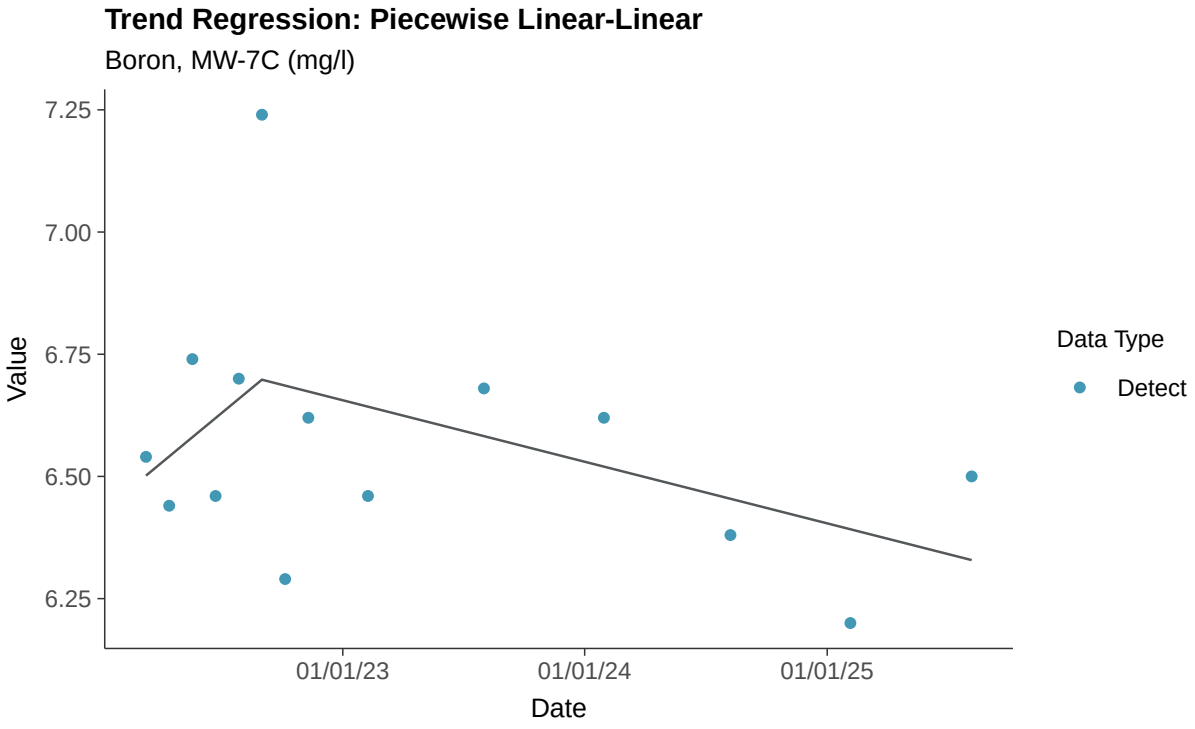
Boron, MW-7C (mg/l)



Trend Regression: Lognormal MLE

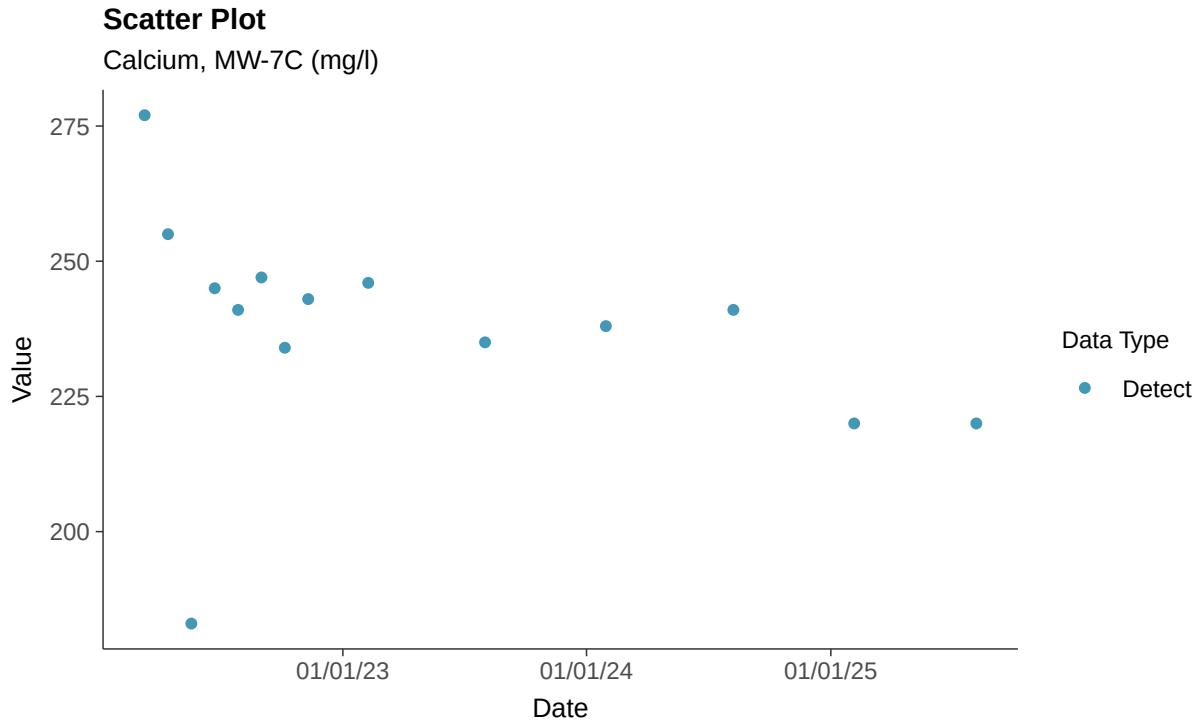
Boron, MW-7C (mg/l)

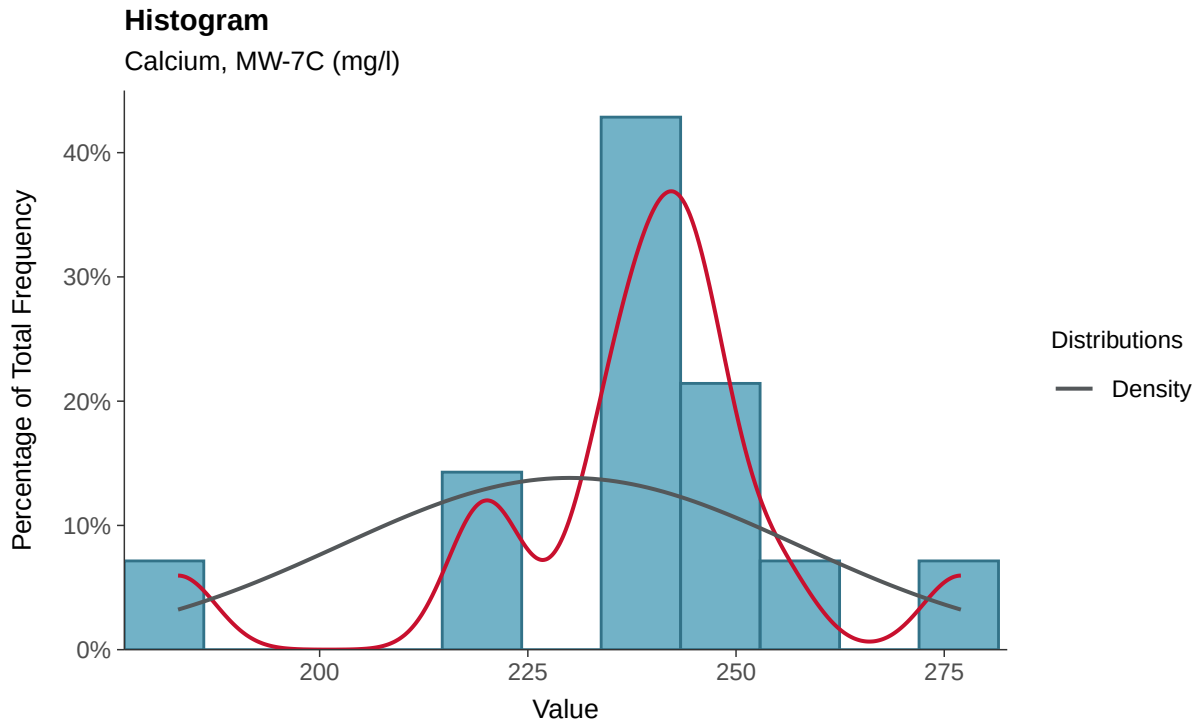



Trend Regression: Piecewise Linear-Linear
Boron, MW-7C (mg/l)
7.25
7.00
6.75
6.50
6.25
Value
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect

Appendix III: Calcium, MW-7C

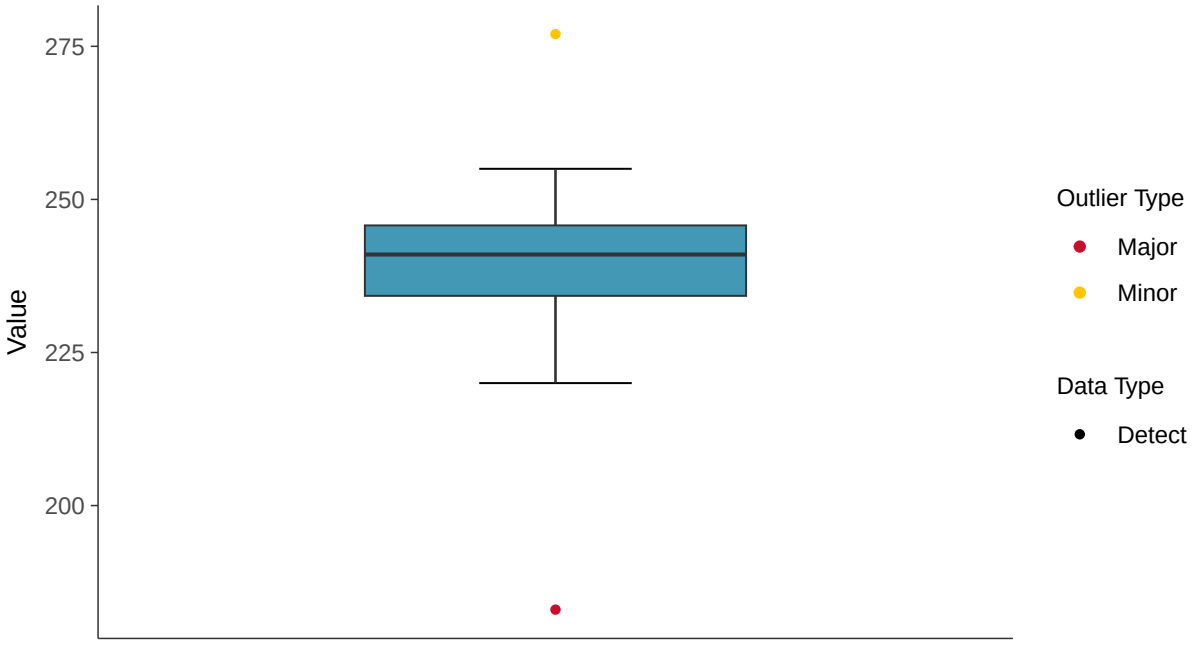
ID: 18_2_107





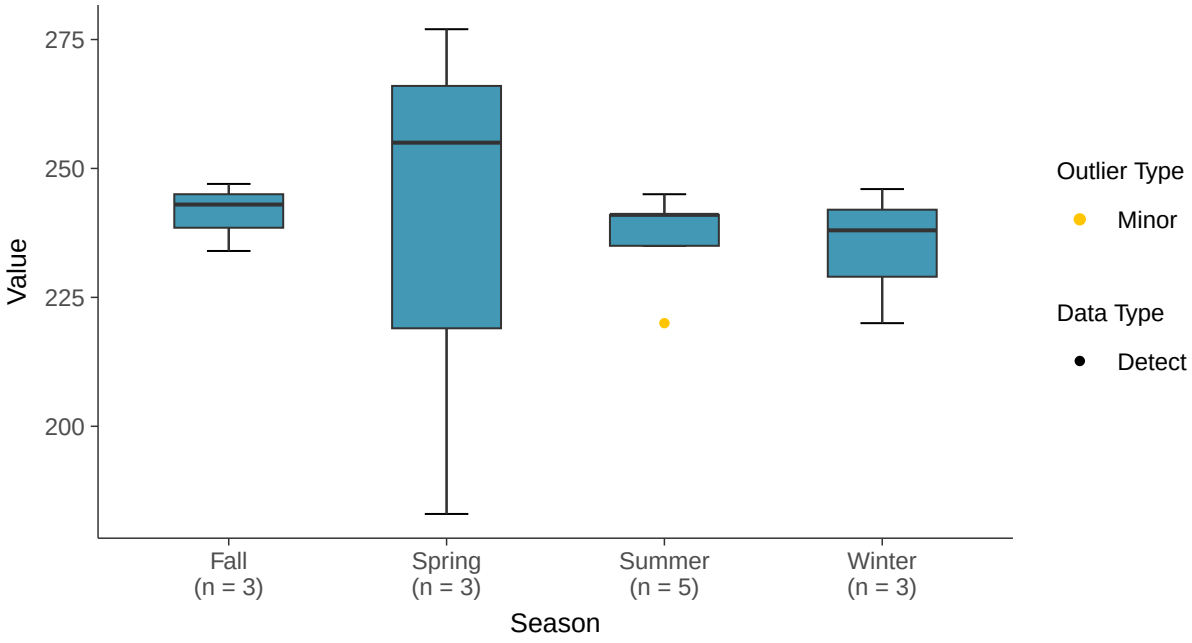
Boxplot

Calcium, MW-7C (mg/l)



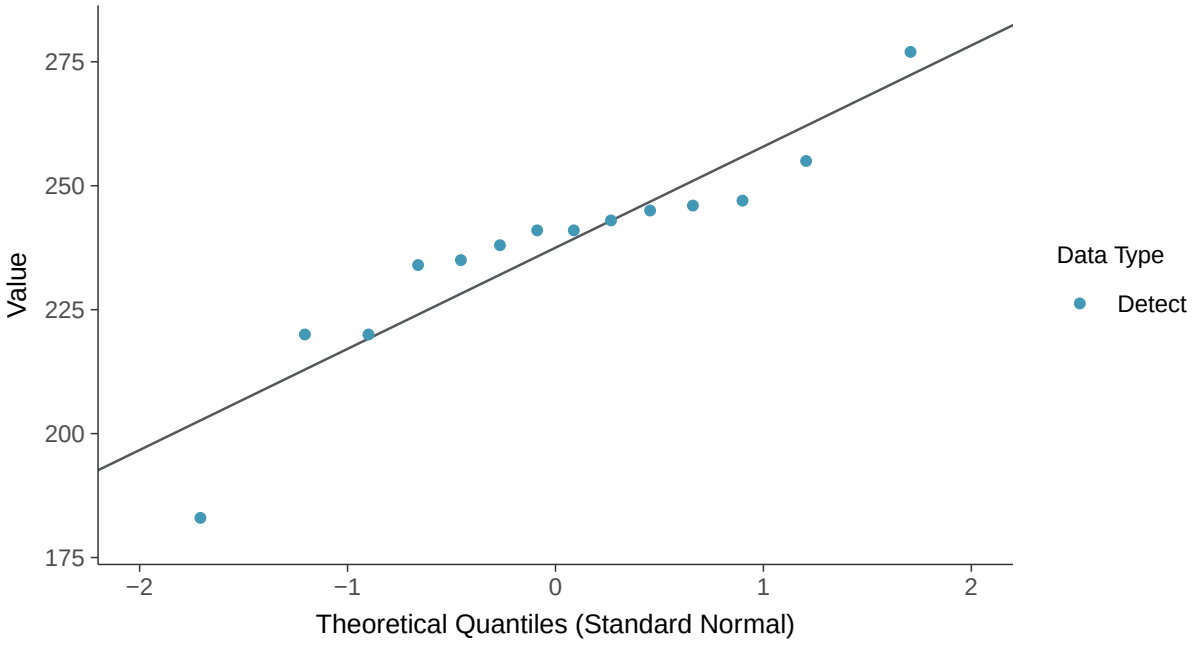
Boxplot by Season

Calcium, MW-7C (mg/l)



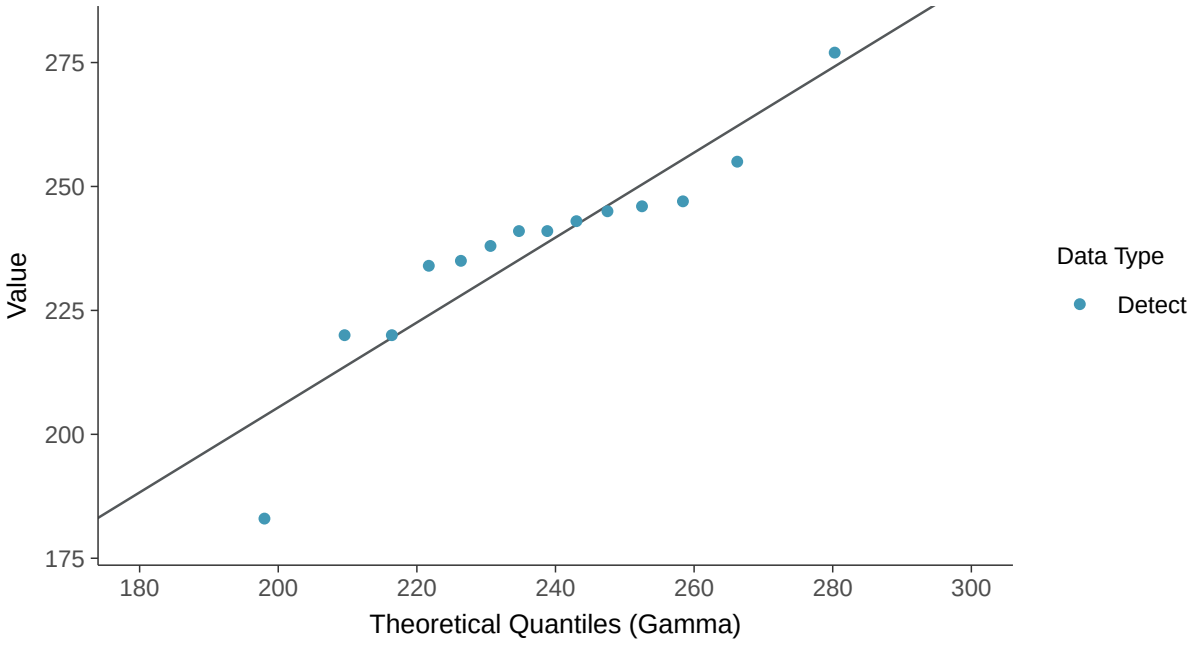
Normal Q-Q plot

Calcium, MW-7C (mg/l)



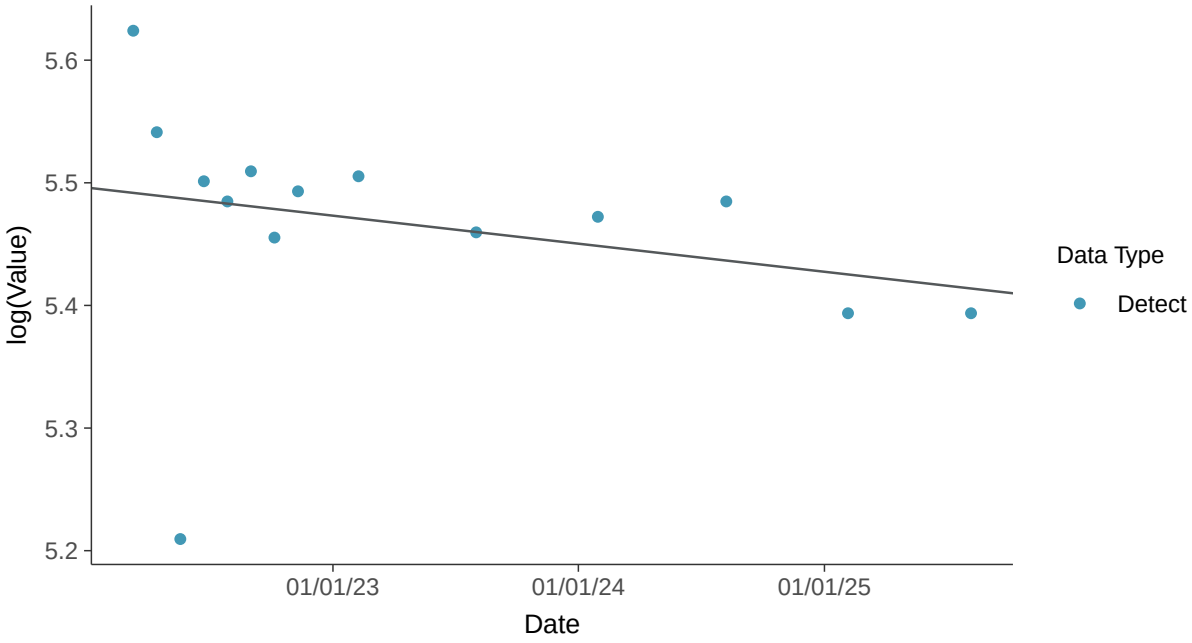
Gamma Q-Q plot

Calcium, MW-7C (mg/l)



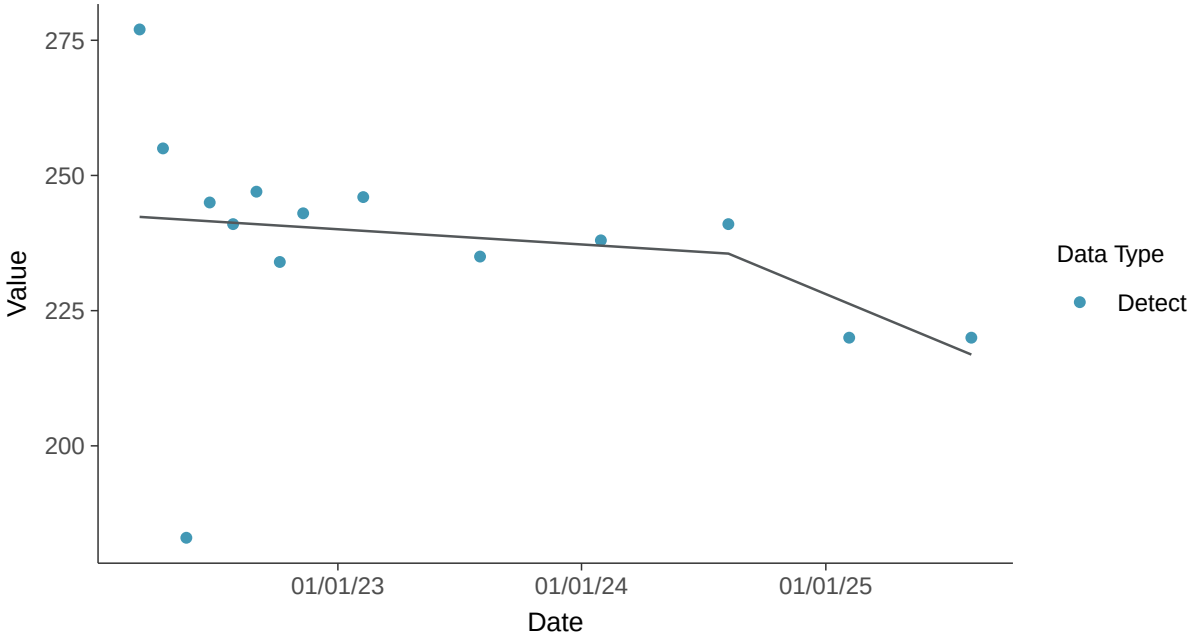
Trend Regression: Lognormal MLE

Calcium, MW-7C (mg/l)



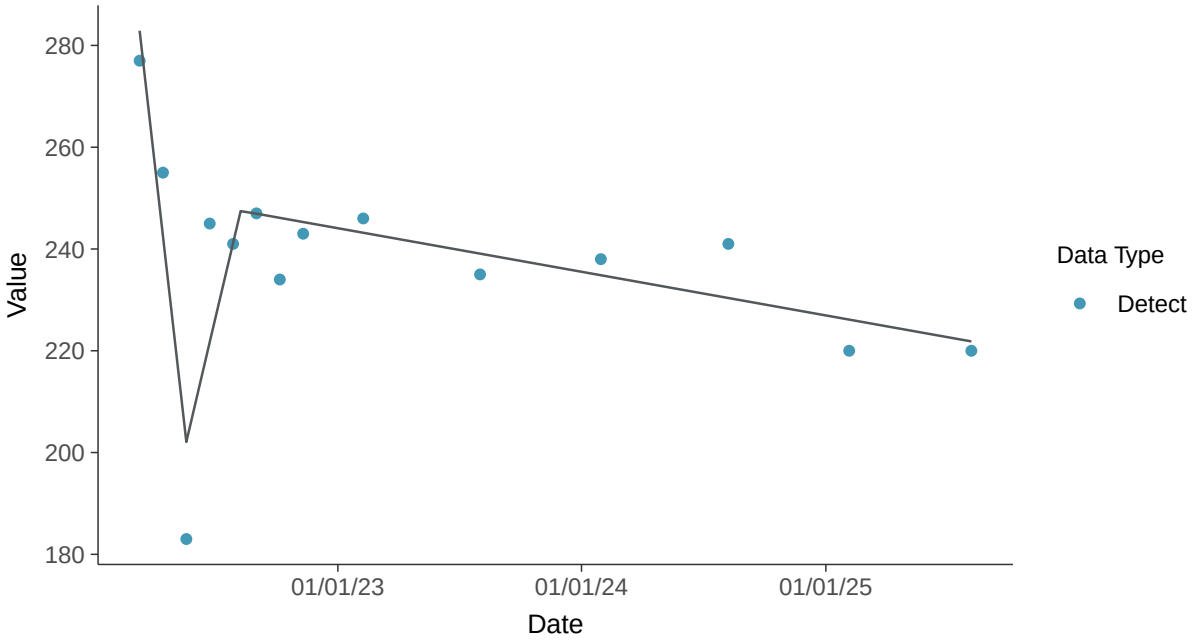
Trend Regression: Piecewise Linear-Linear

Calcium, MW-7C (mg/l)



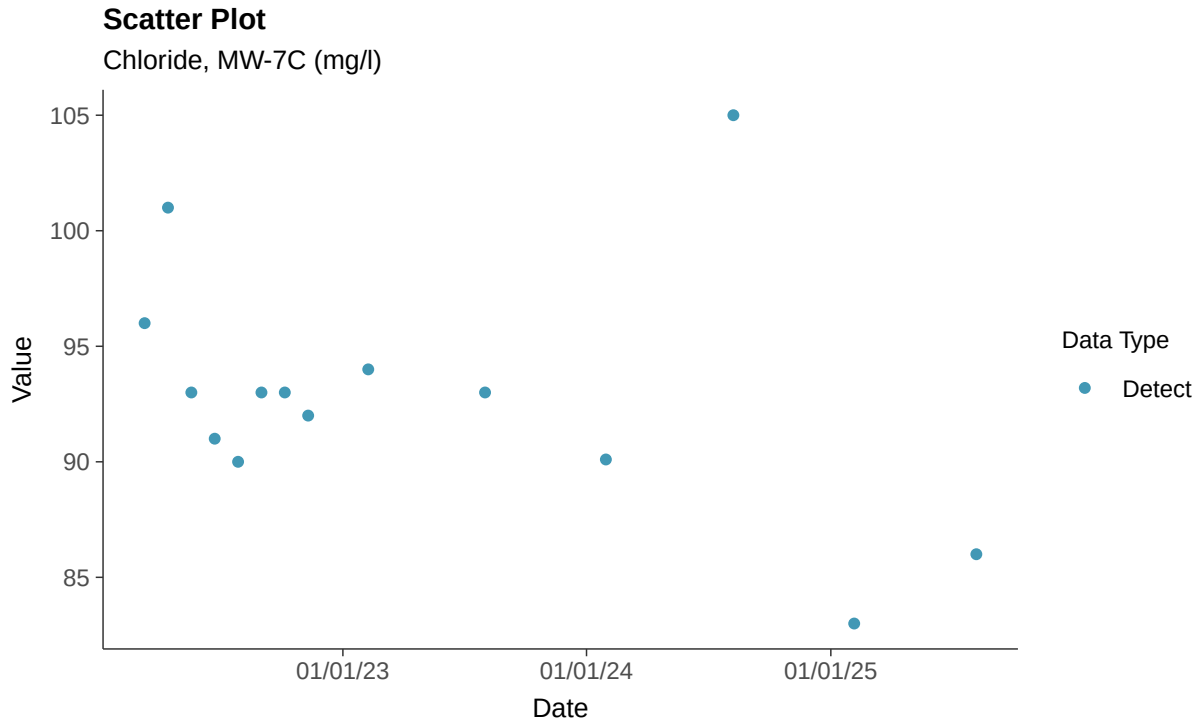
Trend Regression: Piecewise Linear-Linear-Linear

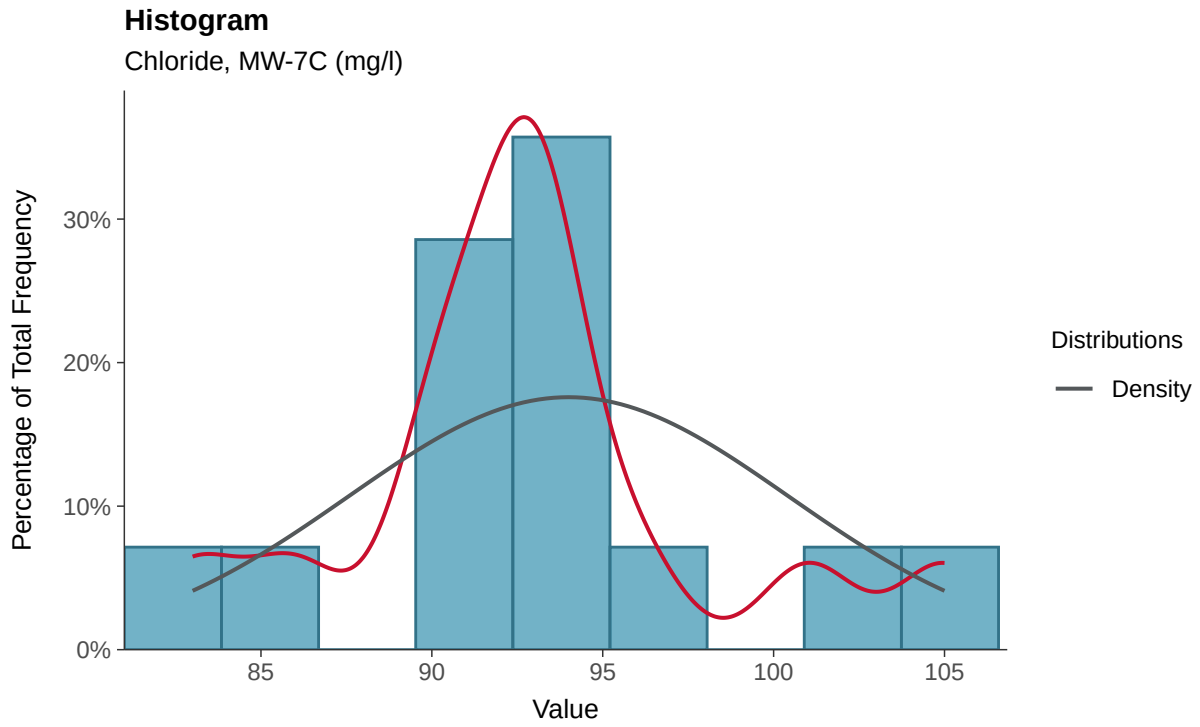
Calcium, MW-7C (mg/l)



Appendix III: Chloride, MW-7C

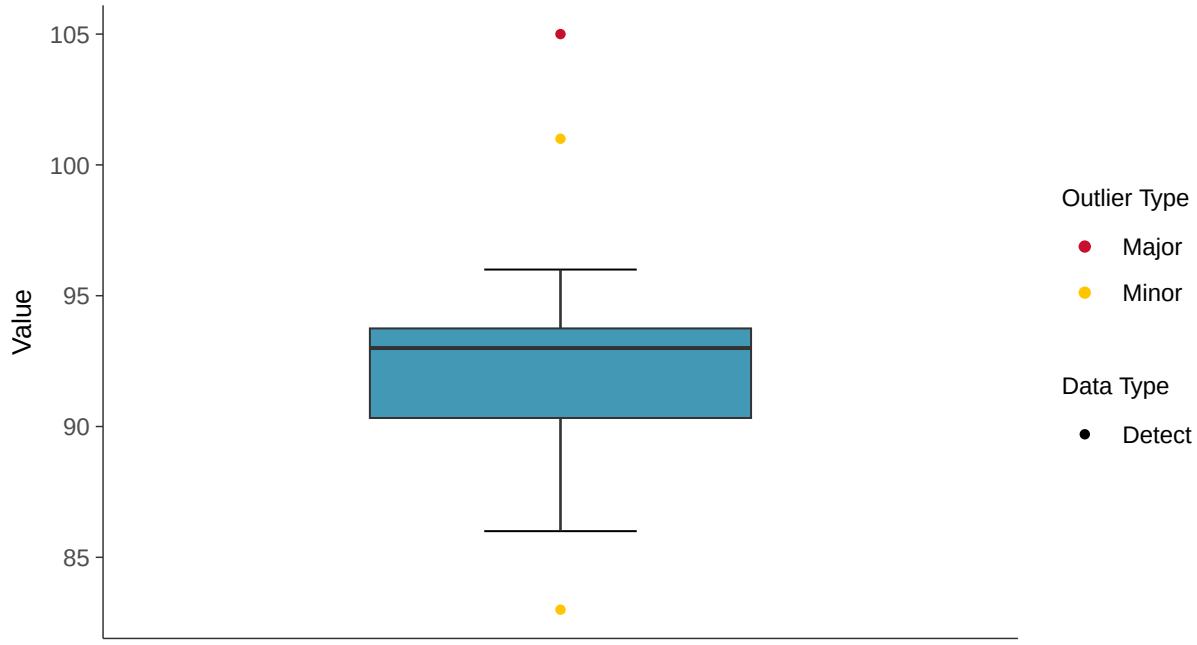
ID: 18_2_108





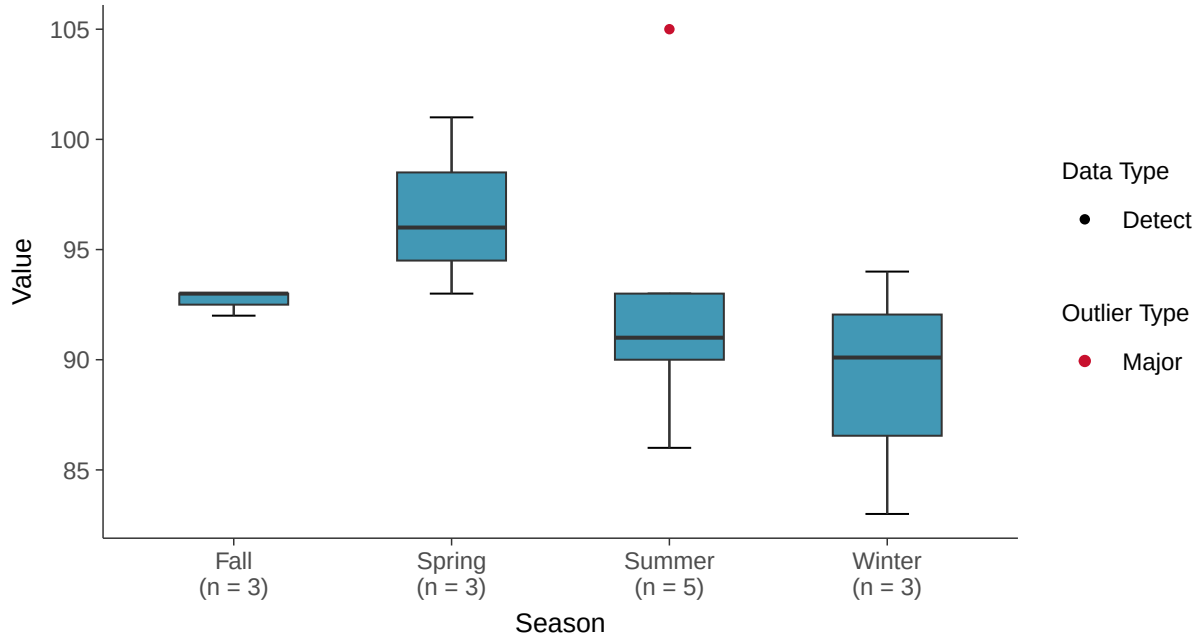
Boxplot

Chloride, MW-7C (mg/l)



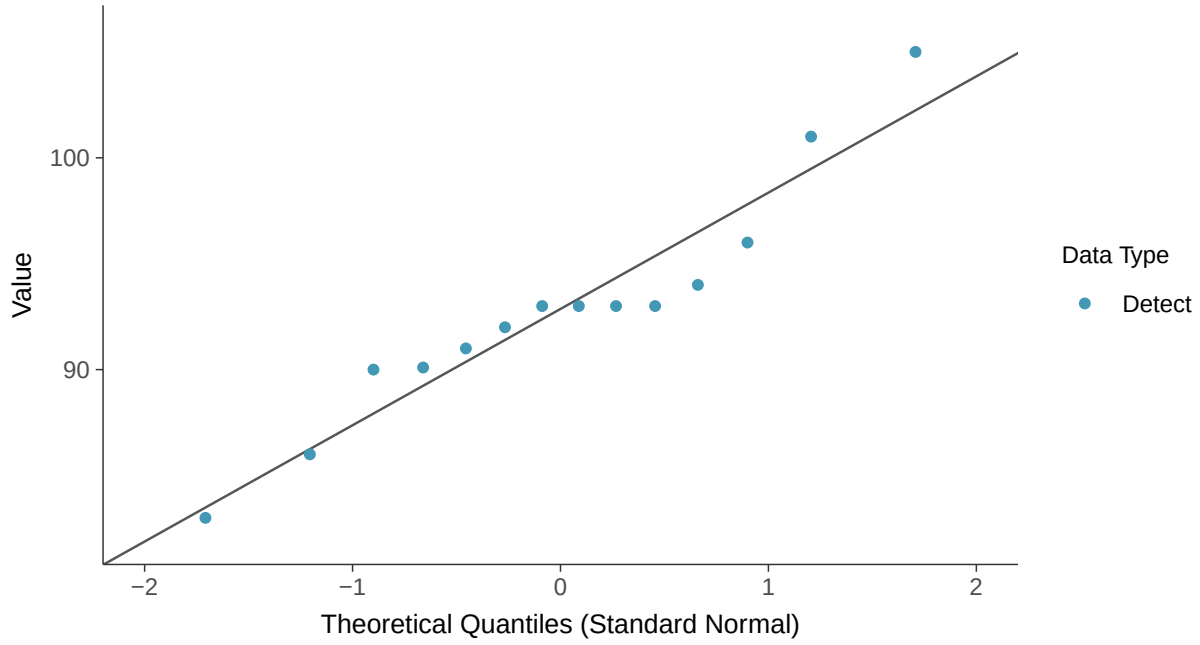
Boxplot by Season

Chloride, MW-7C (mg/l)



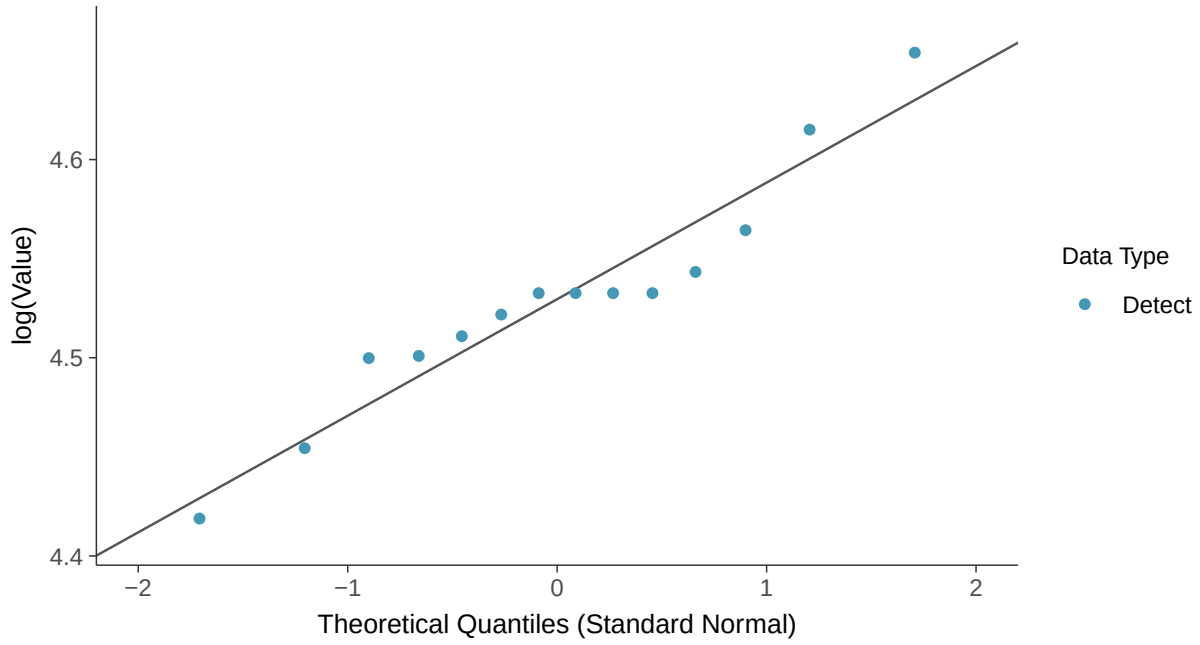
Normal Q-Q plot

Chloride, MW-7C (mg/l)



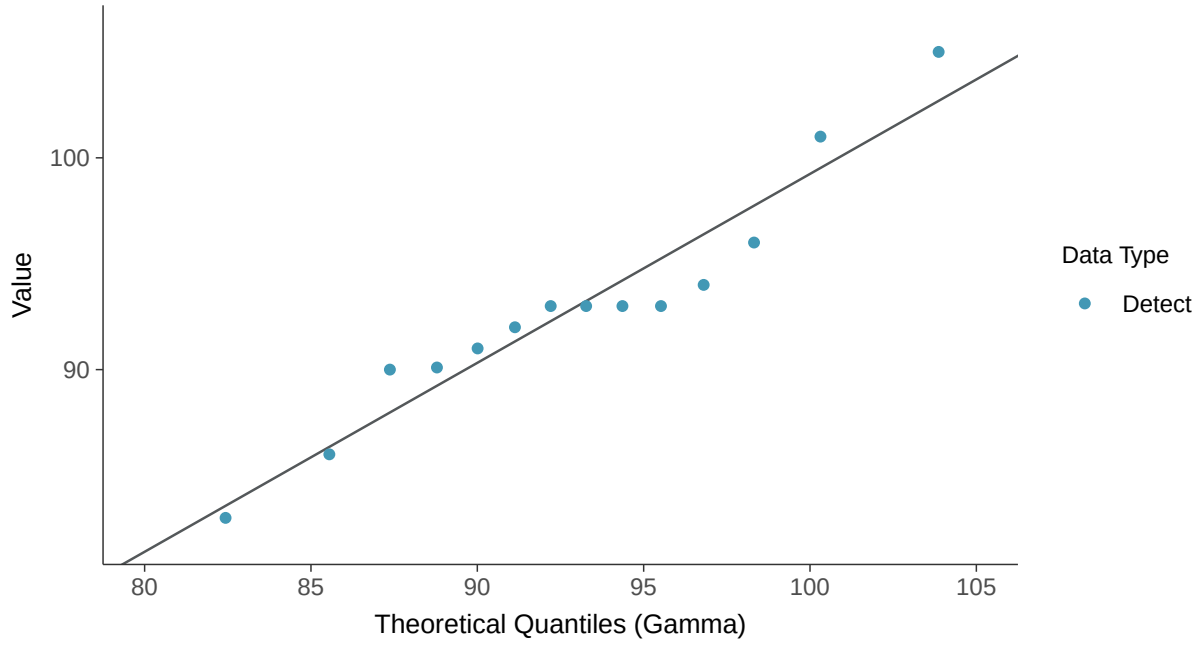
Lognormal Q-Q plot

Chloride, MW-7C (mg/l)



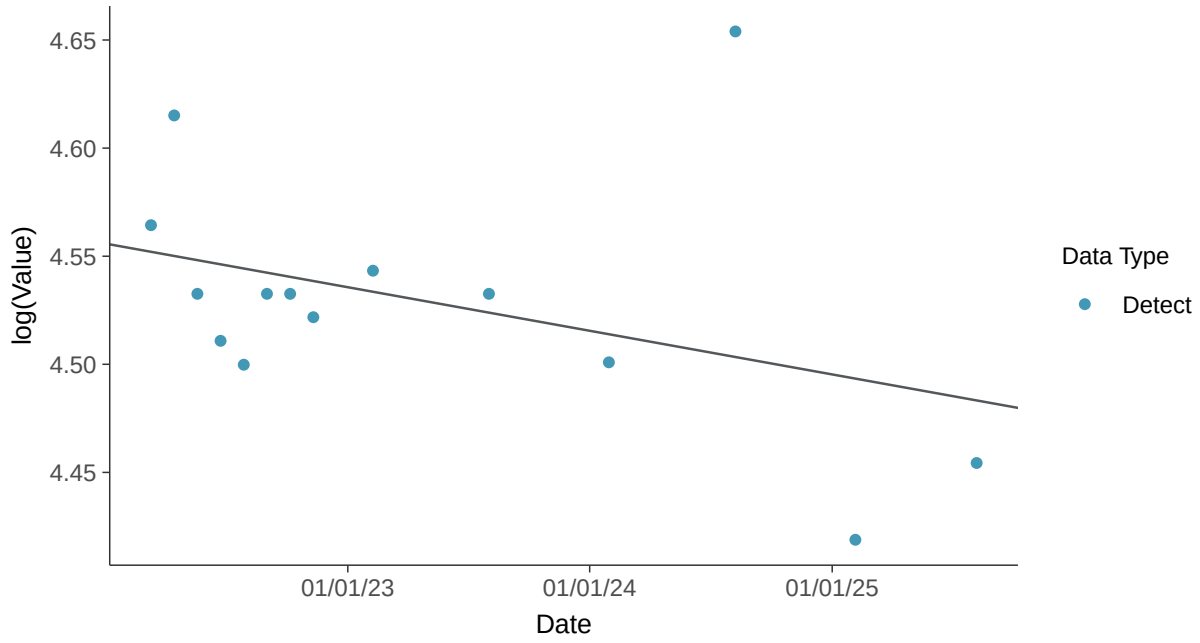
Gamma Q-Q plot

Chloride, MW-7C (mg/l)



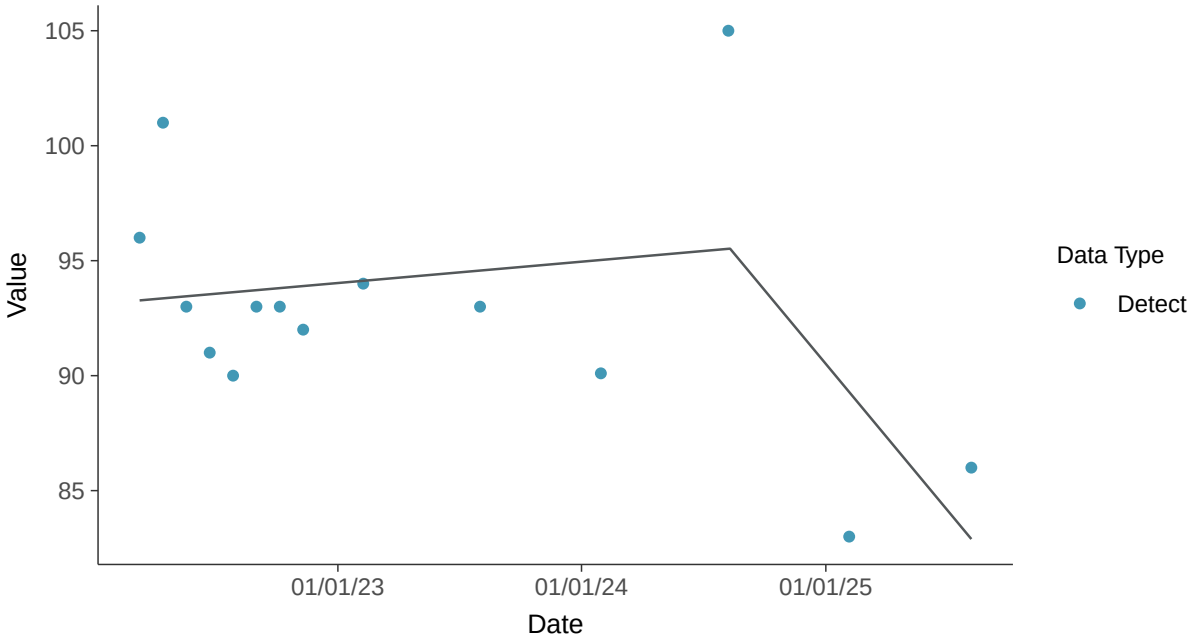
Trend Regression: Lognormal MLE

Chloride, MW-7C (mg/l)



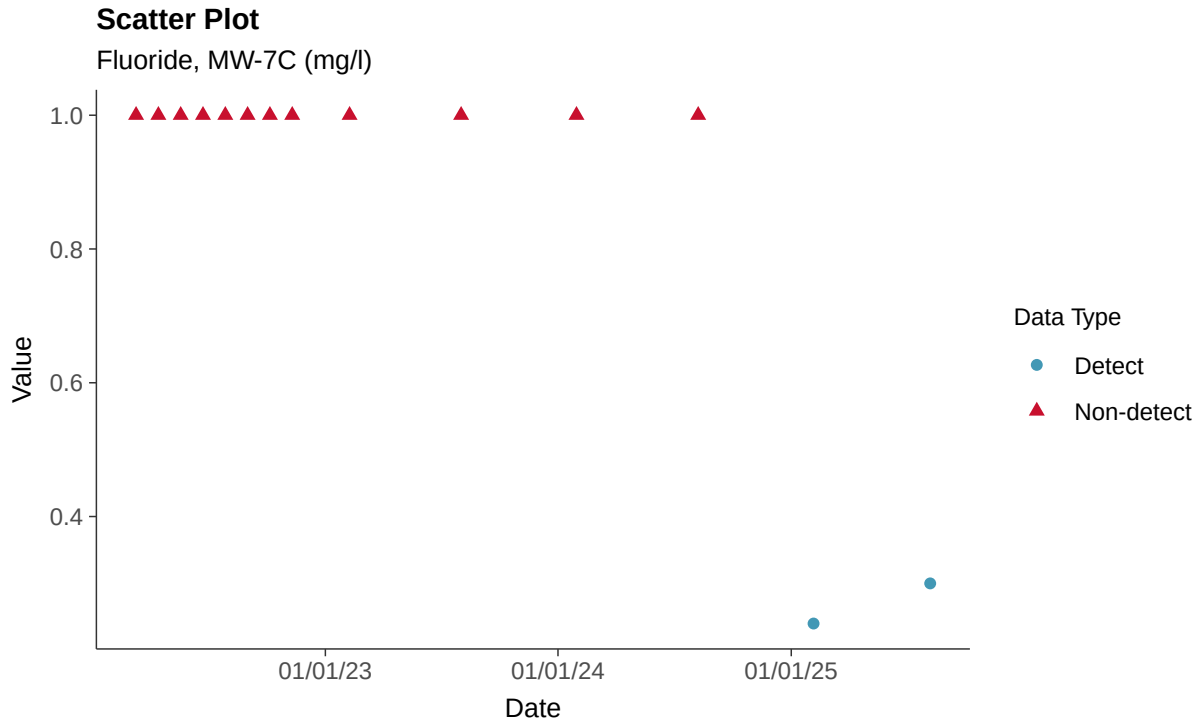
Trend Regression: Piecewise Linear-Linear

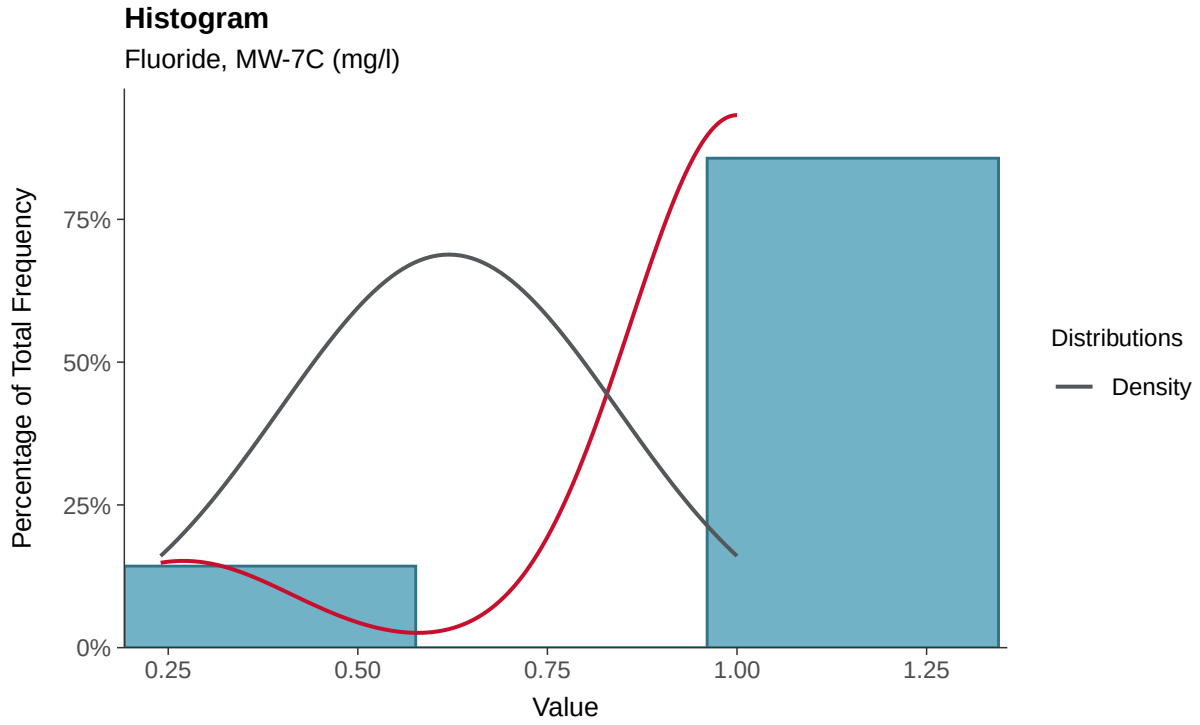
Chloride, MW-7C (mg/l)



Appendix III: Fluoride, MW-7C

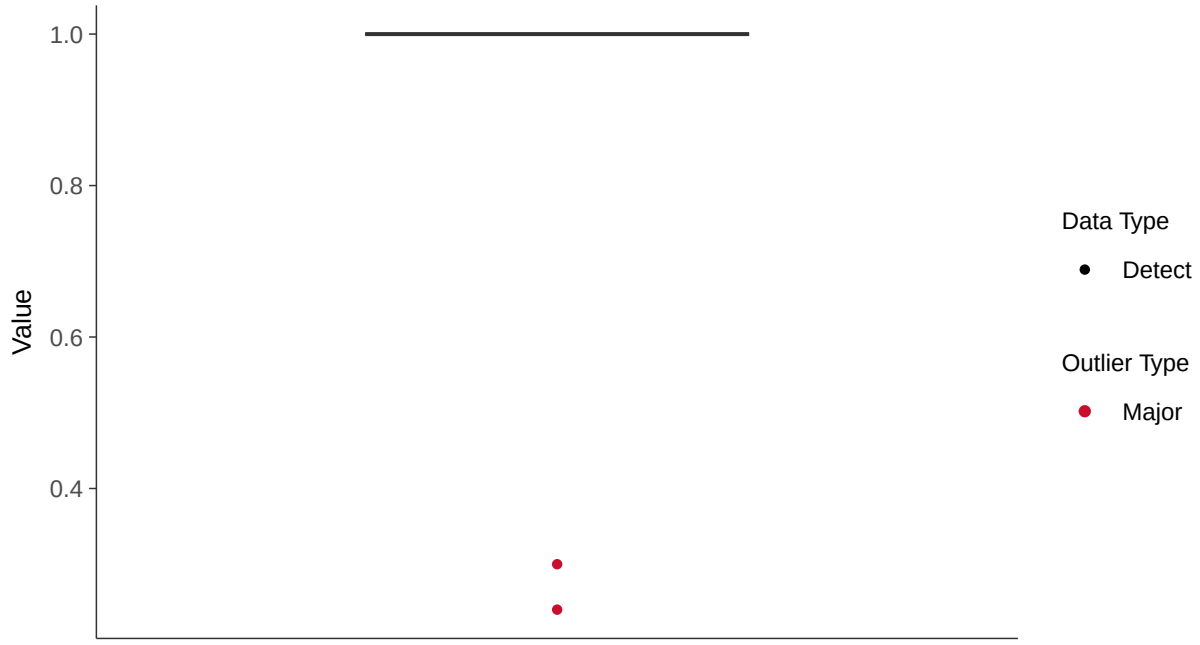
ID: 18_2_112





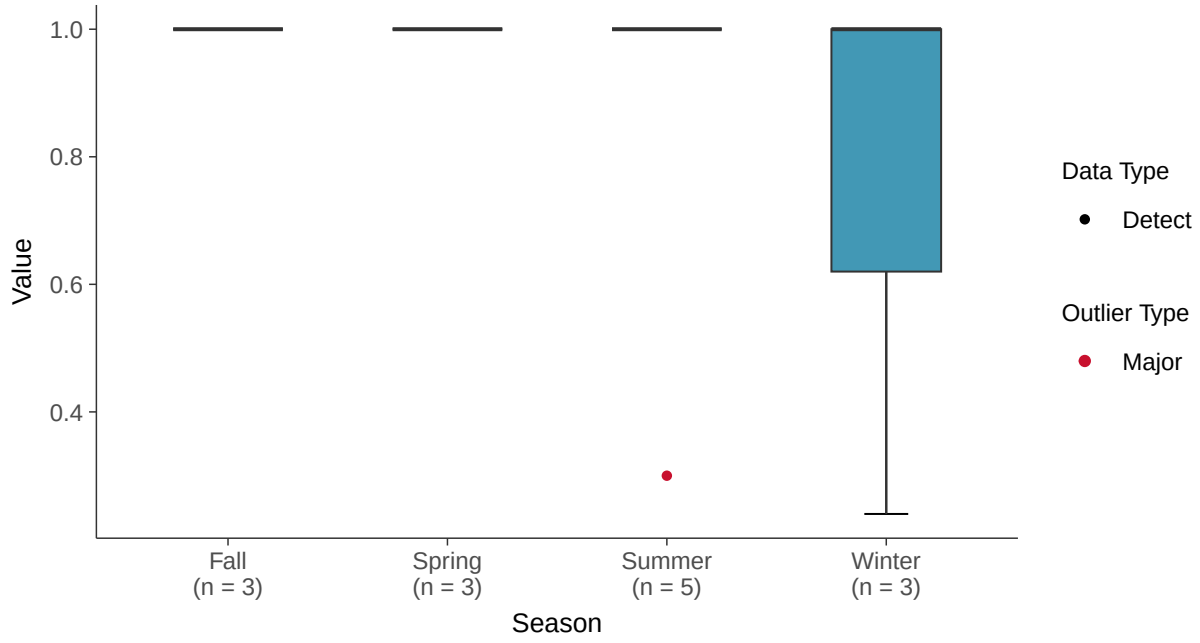
Boxplot

Fluoride, MW-7C (mg/l)



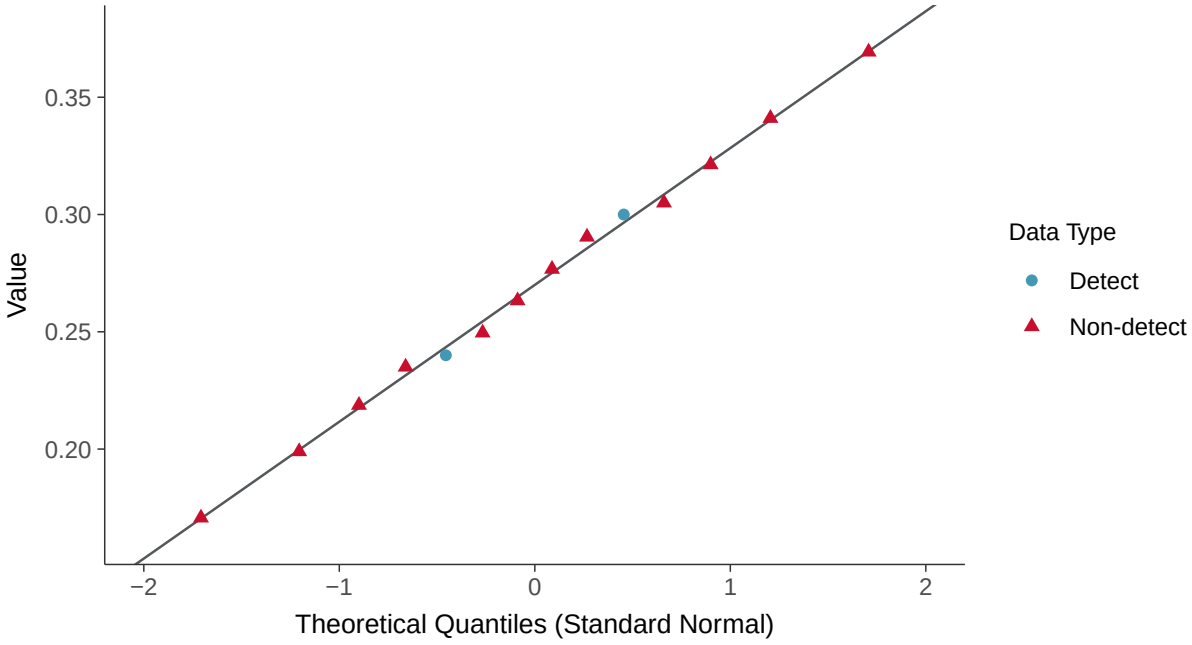
Boxplot by Season

Fluoride, MW-7C (mg/l)



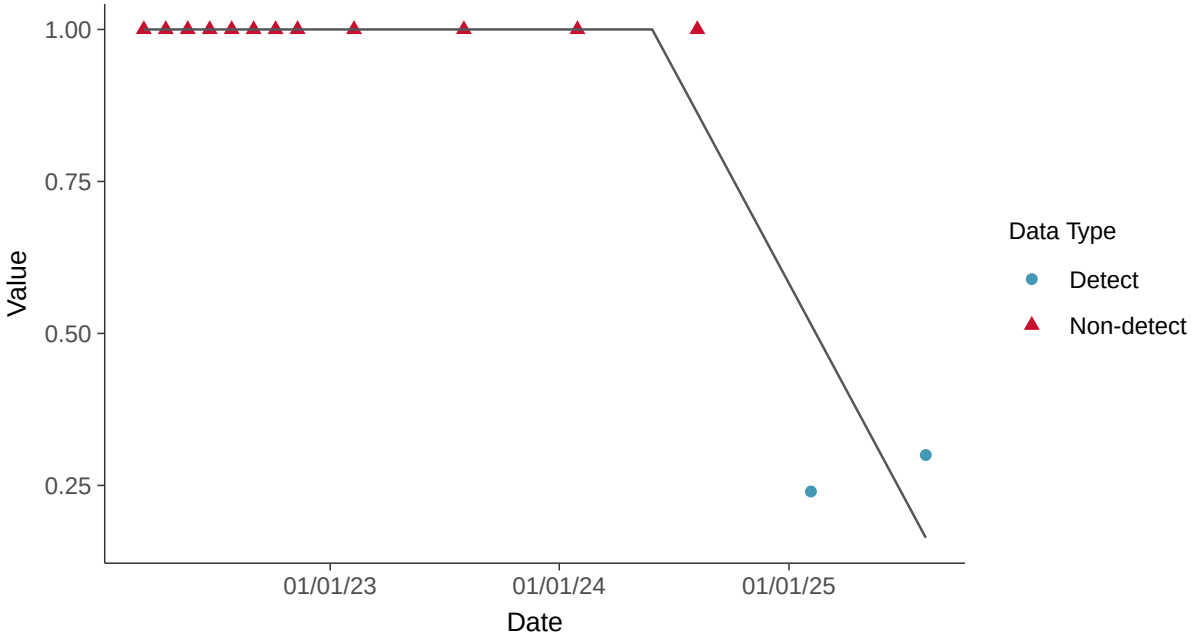
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-7C (mg/l)



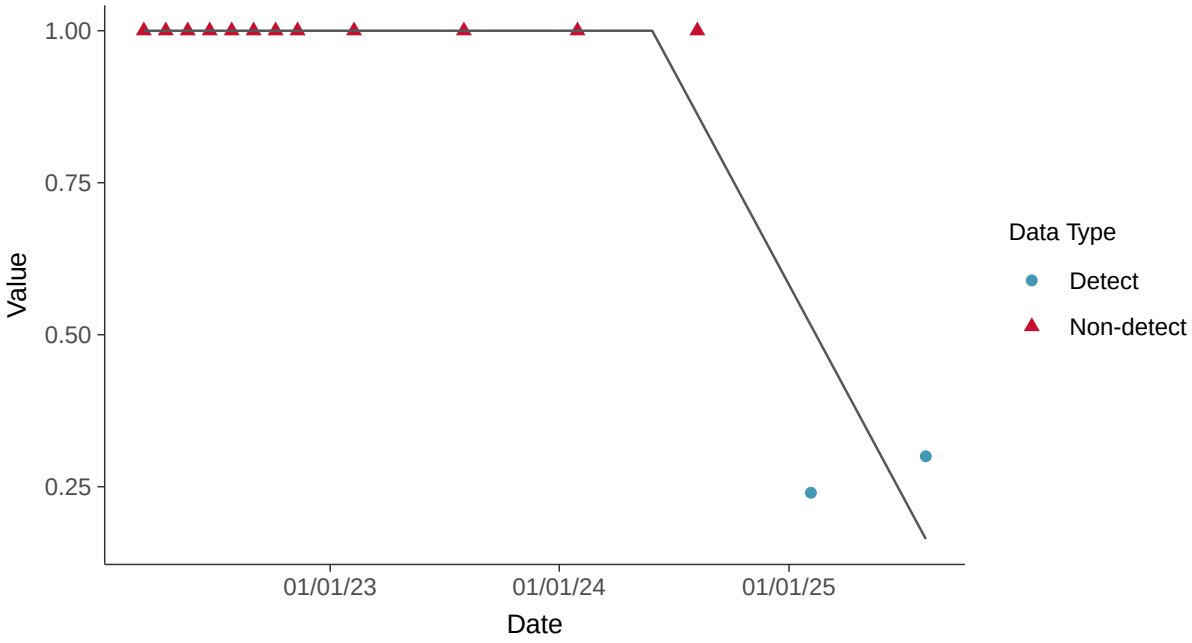
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-7C (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-7C (mg/l)

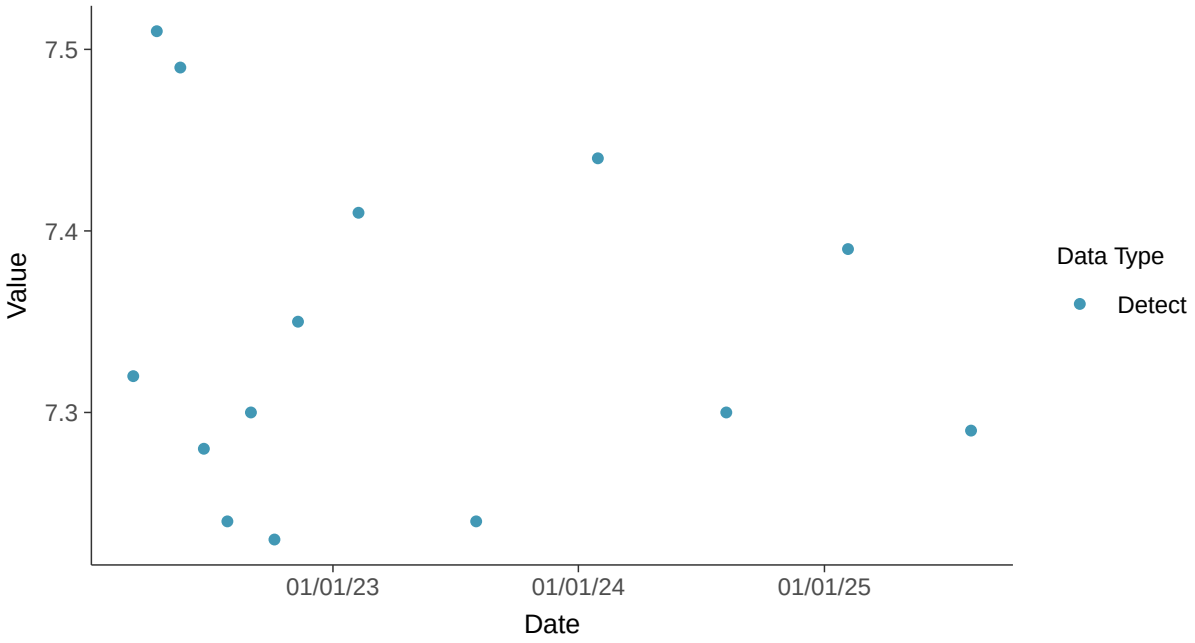


Appendix III: pH, Field, MW-7C

ID: 18_2_120

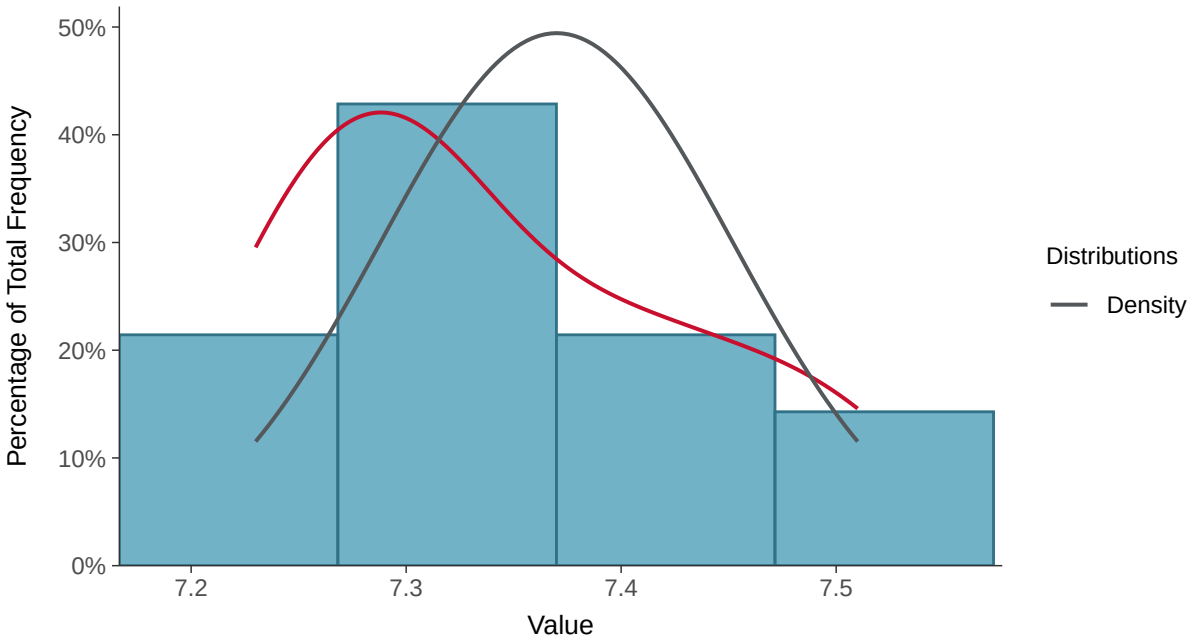
Scatter Plot

pH, Field, MW-7C (su)



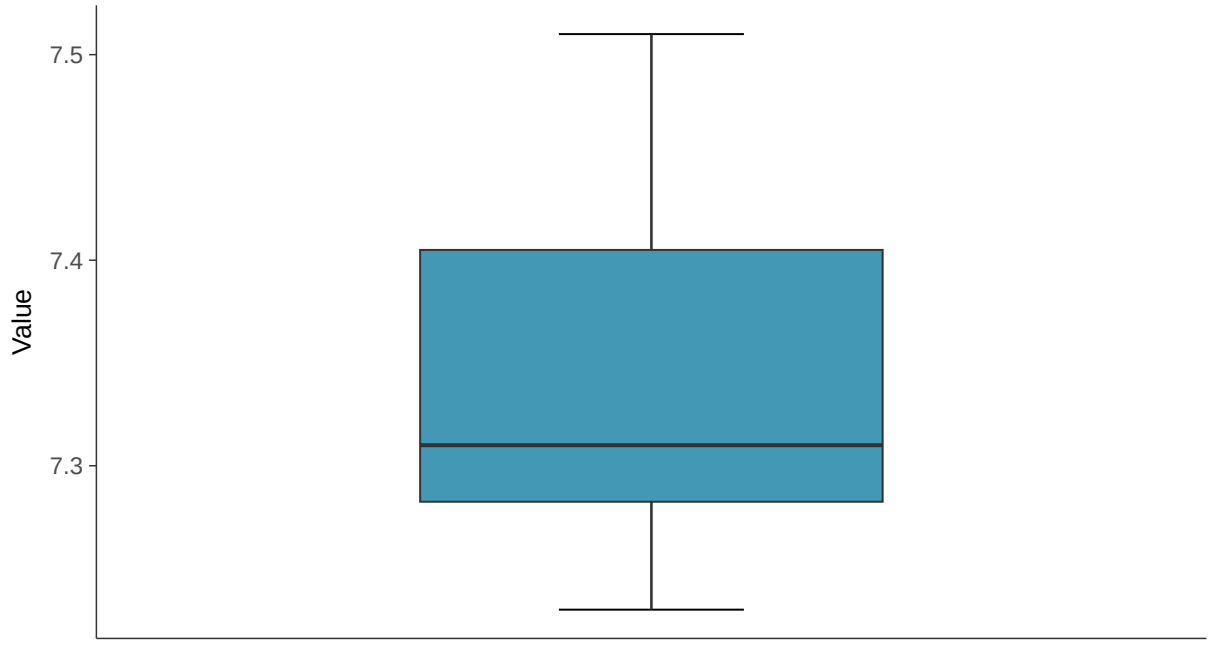
Histogram

pH, Field, MW-7C (su)



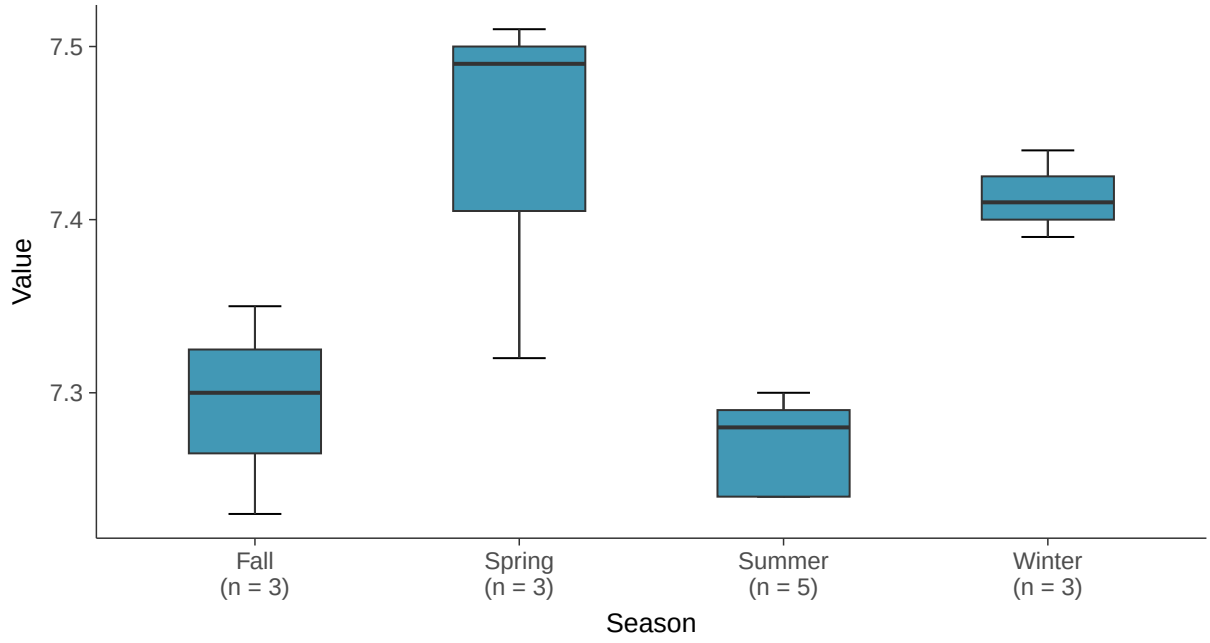
Boxplot

pH, Field, MW-7C (su)



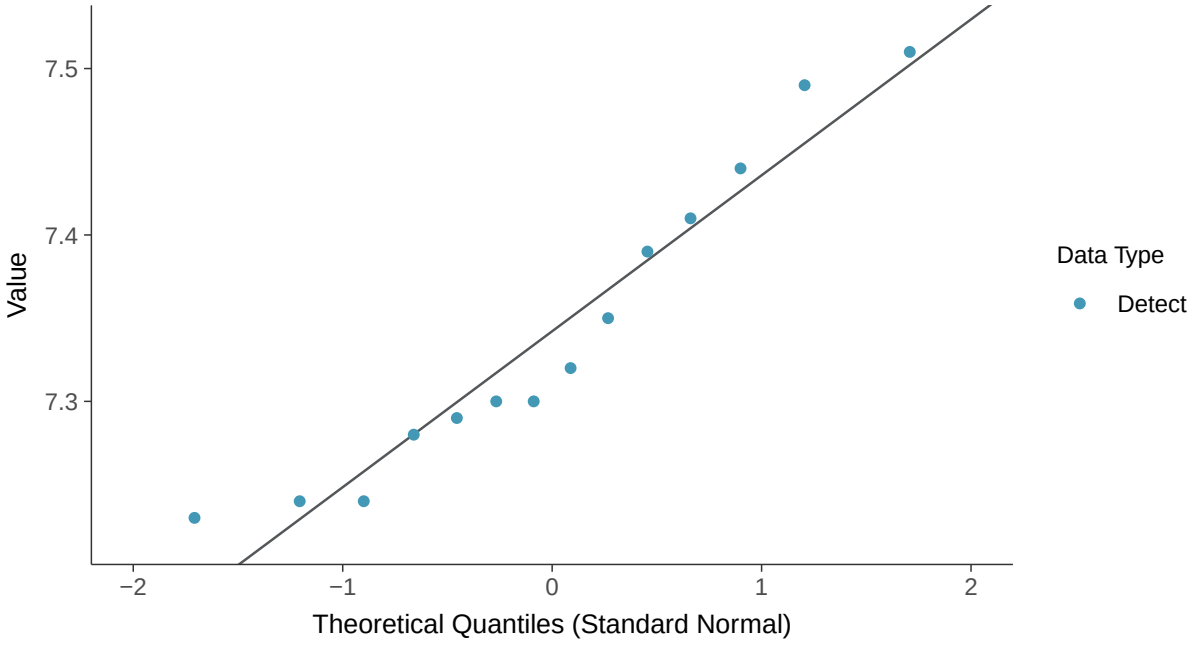
Boxplot by Season

pH, Field, MW-7C (su)



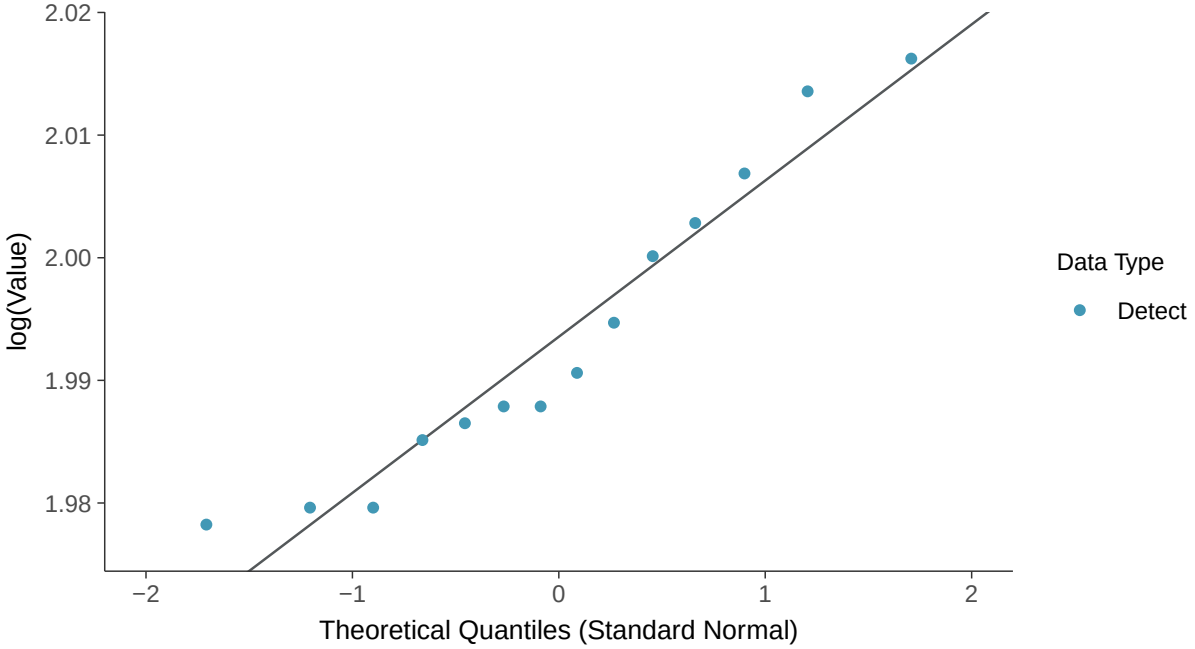
Normal Q-Q plot

pH, Field, MW-7C (su)



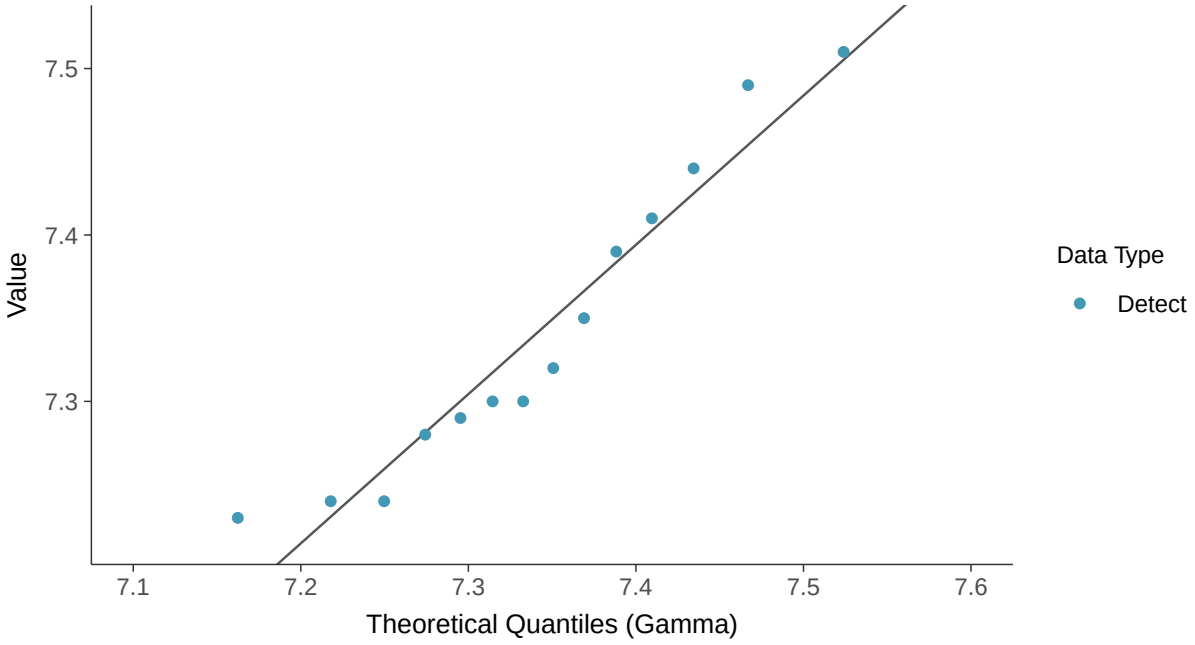
Lognormal Q-Q plot

pH, Field, MW-7C (su)



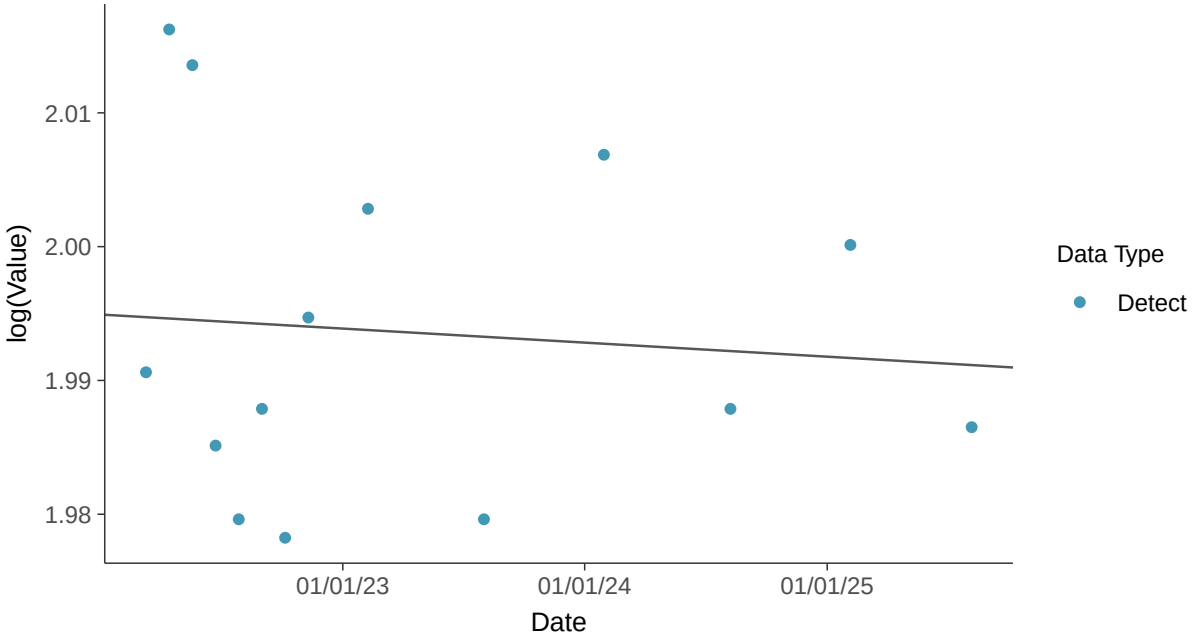
Gamma Q-Q plot

pH, Field, MW-7C (su)



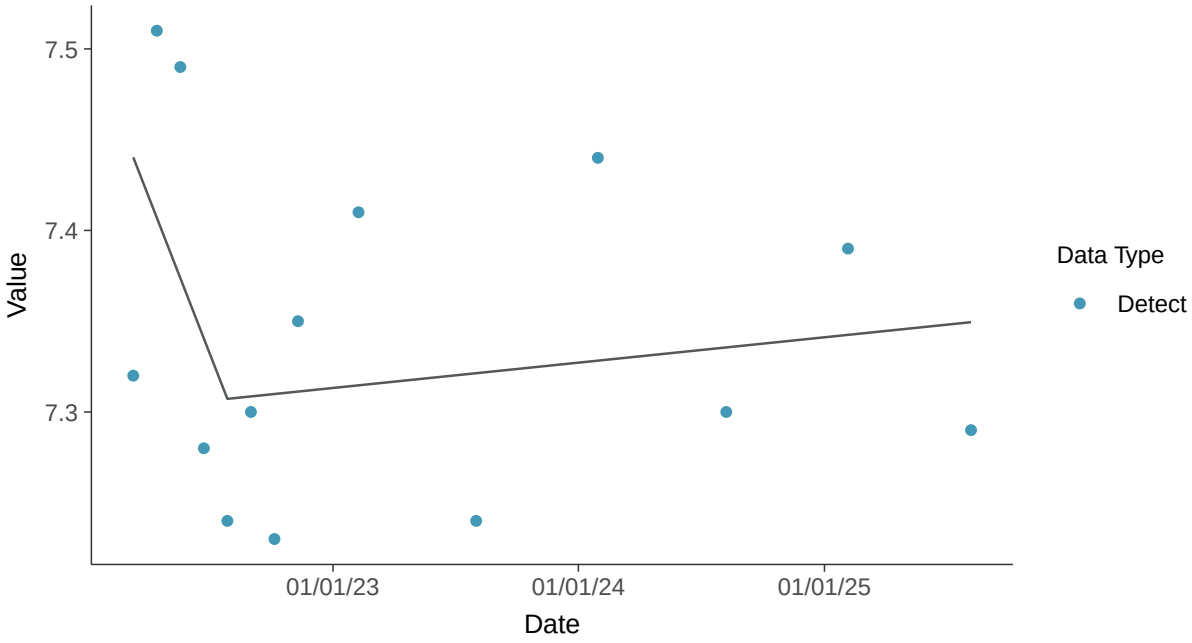
Trend Regression: Lognormal MLE

pH, Field, MW-7C (su)



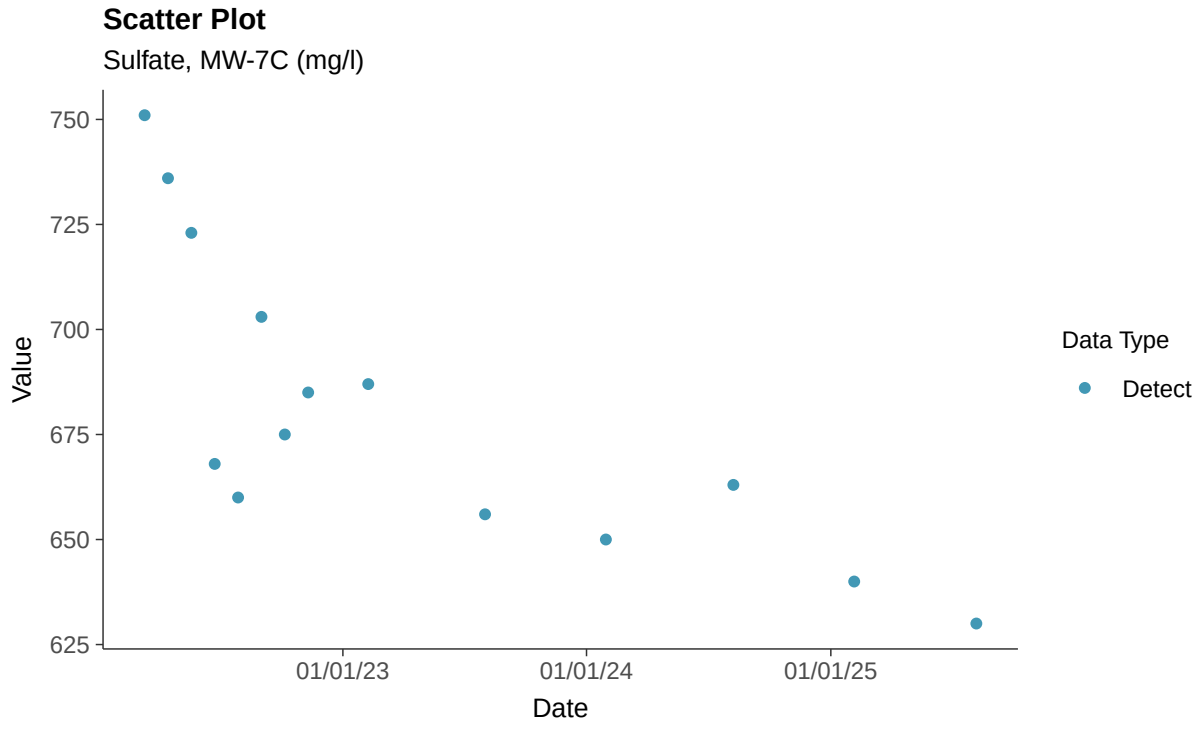
Trend Regression: Piecewise Linear-Linear

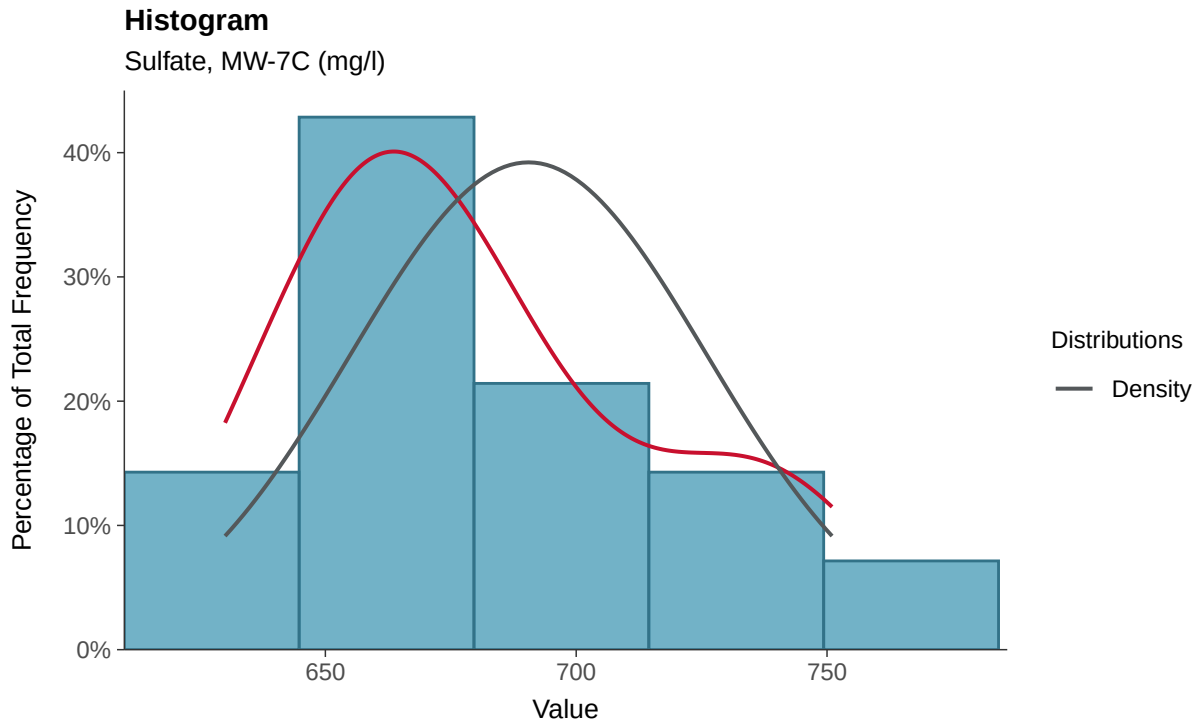
pH, Field, MW-7C (su)



Appendix III: Sulfate, MW-7C

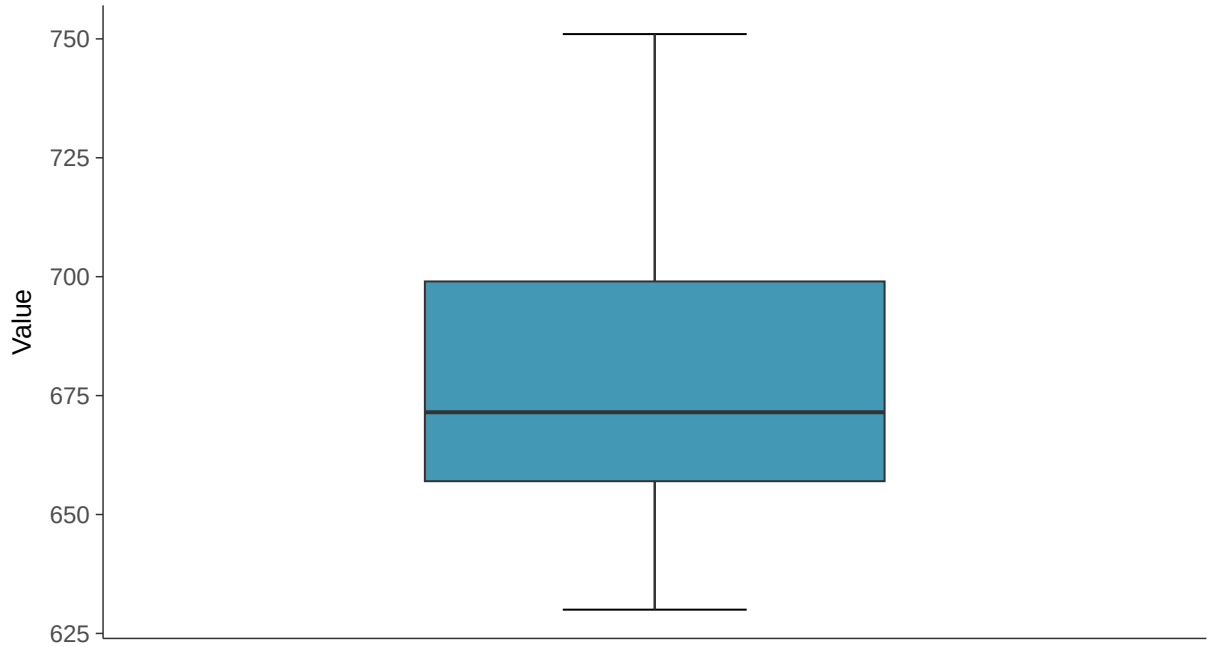
ID: 18_2_124





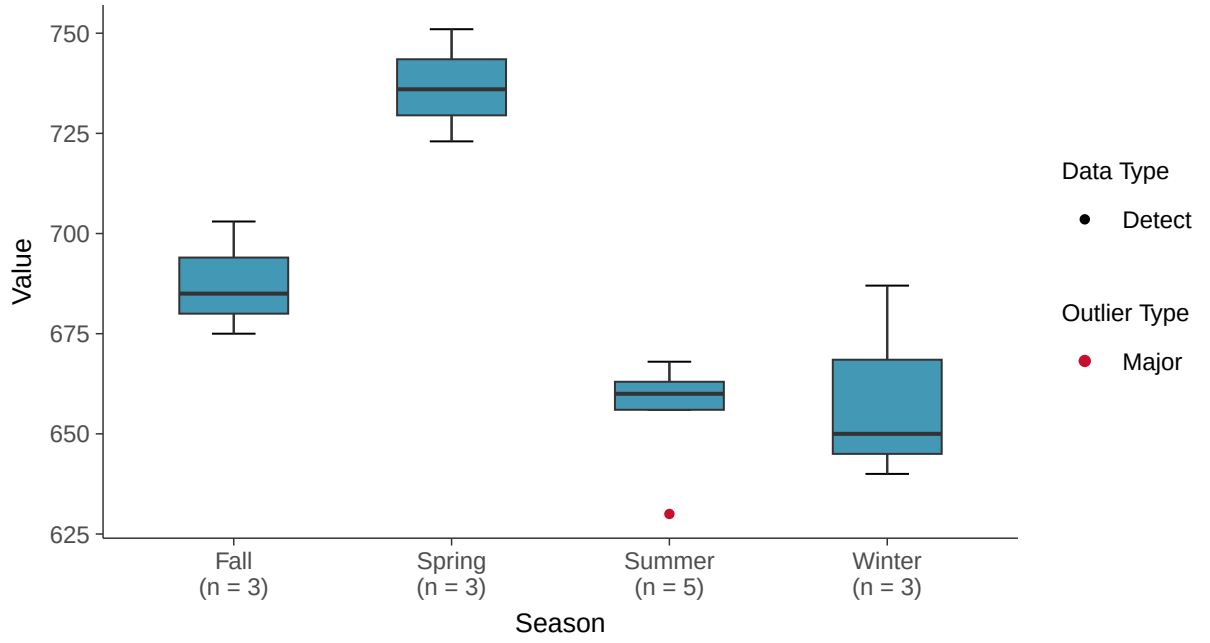
Boxplot

Sulfate, MW-7C (mg/l)



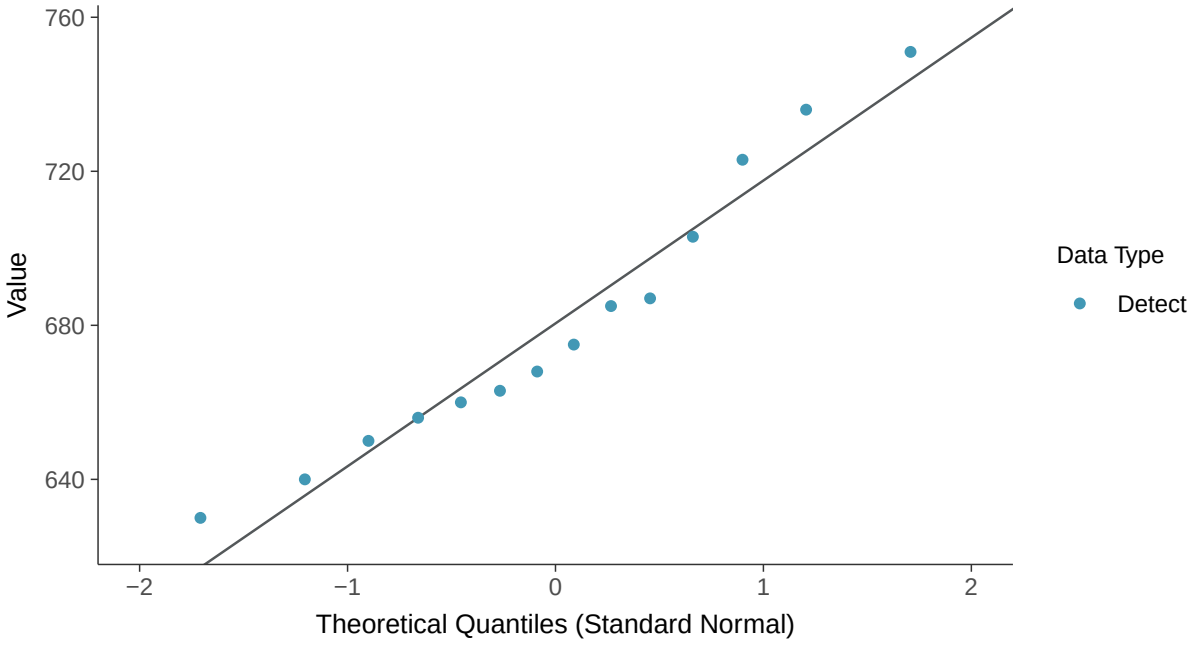
Boxplot by Season

Sulfate, MW-7C (mg/l)



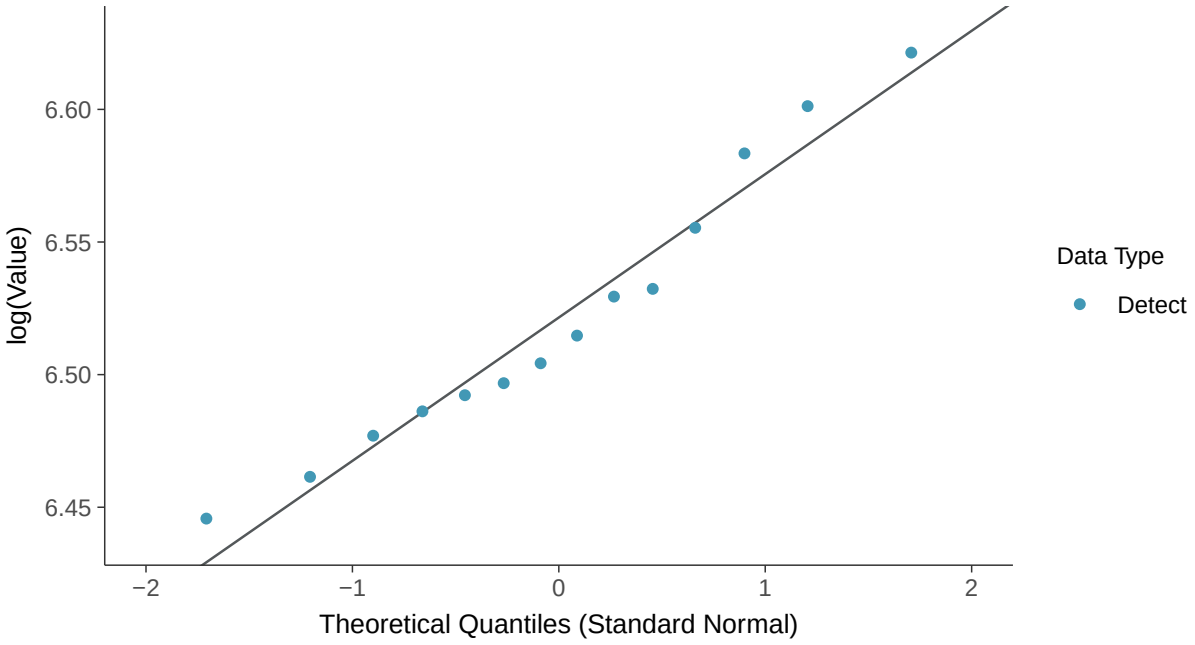
Normal Q-Q plot

Sulfate, MW-7C (mg/l)



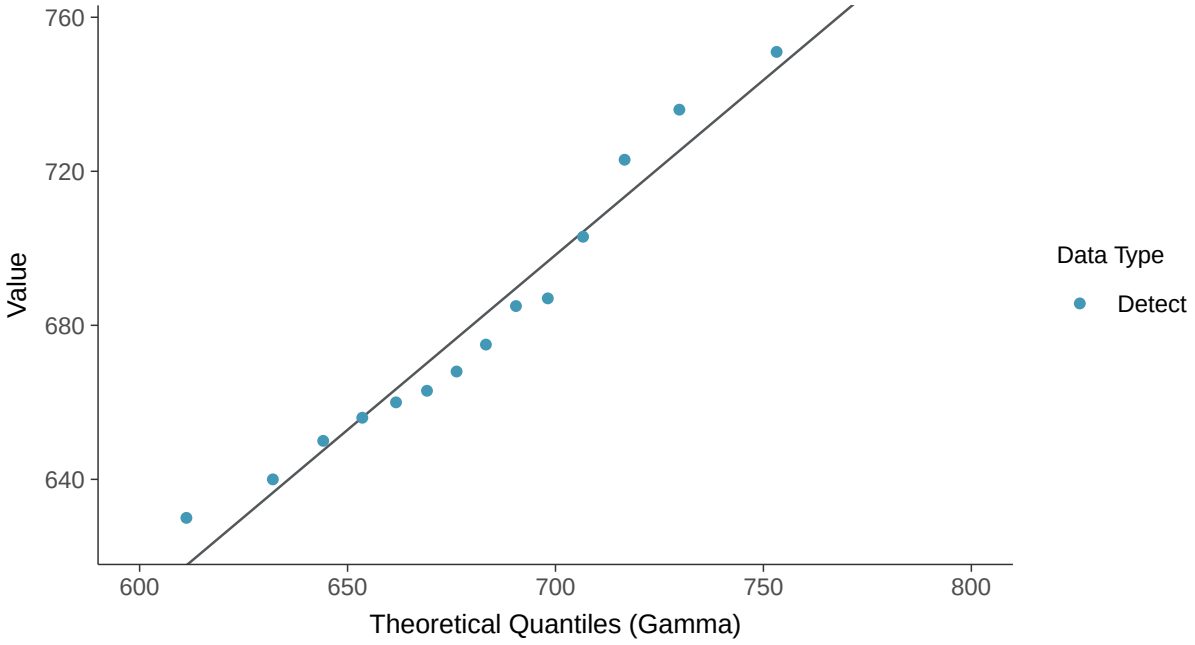
Lognormal Q-Q plot

Sulfate, MW-7C (mg/l)



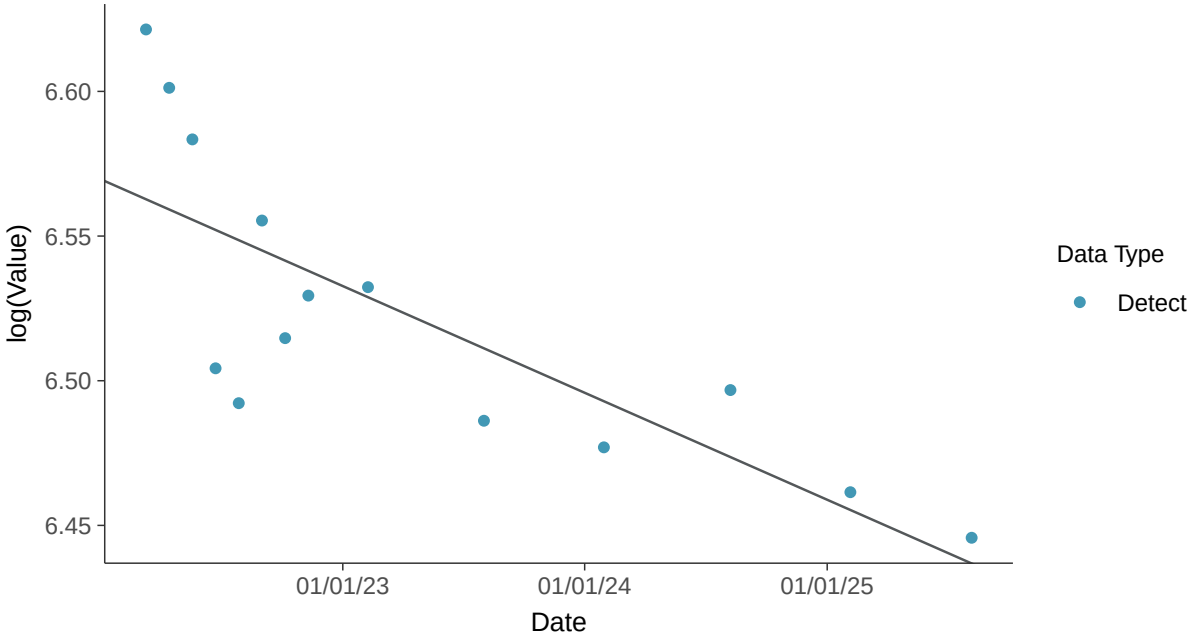
Gamma Q-Q plot

Sulfate, MW-7C (mg/l)



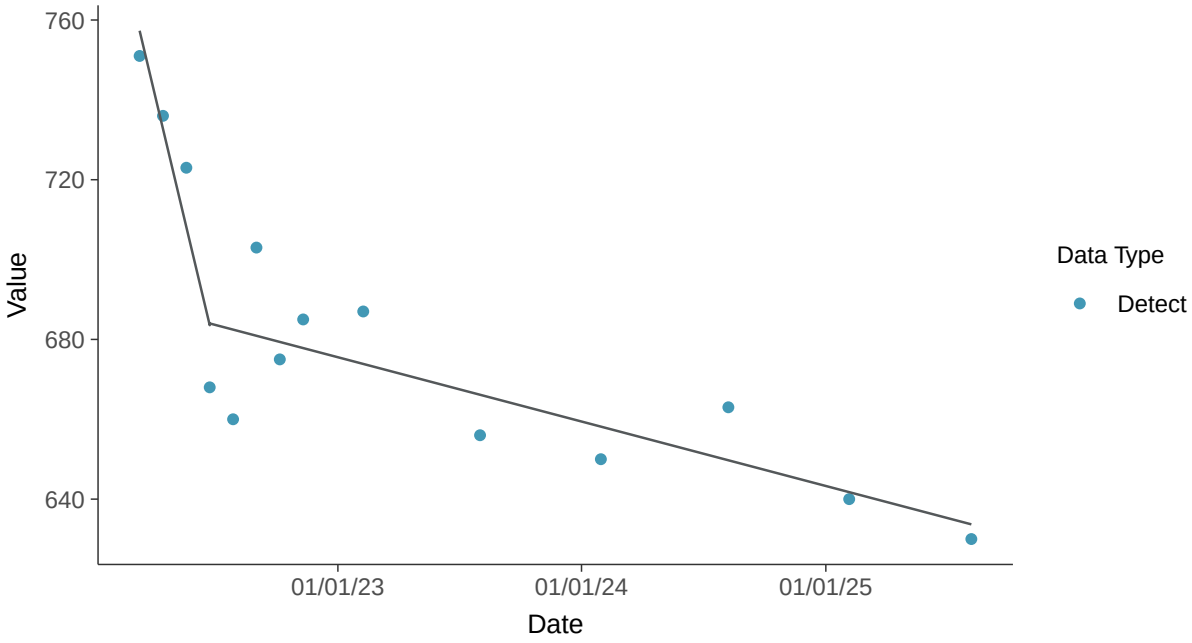
Trend Regression: Lognormal MLE

Sulfate, MW-7C (mg/l)



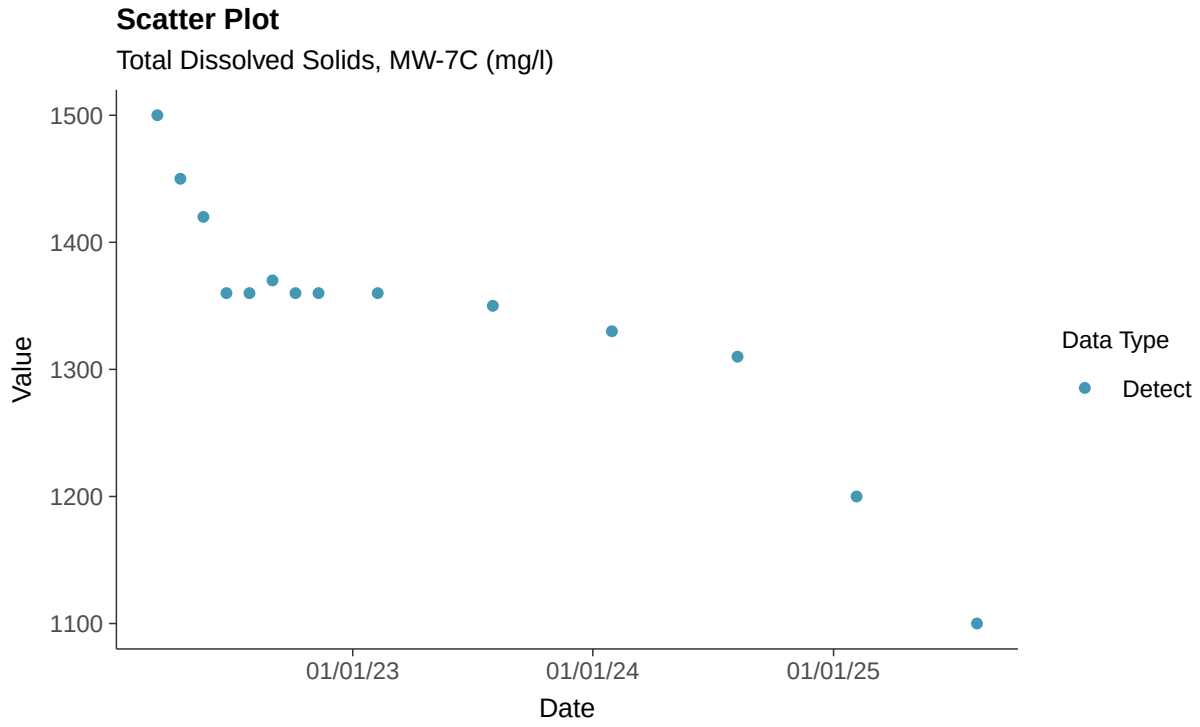
Trend Regression: Piecewise Linear-Linear

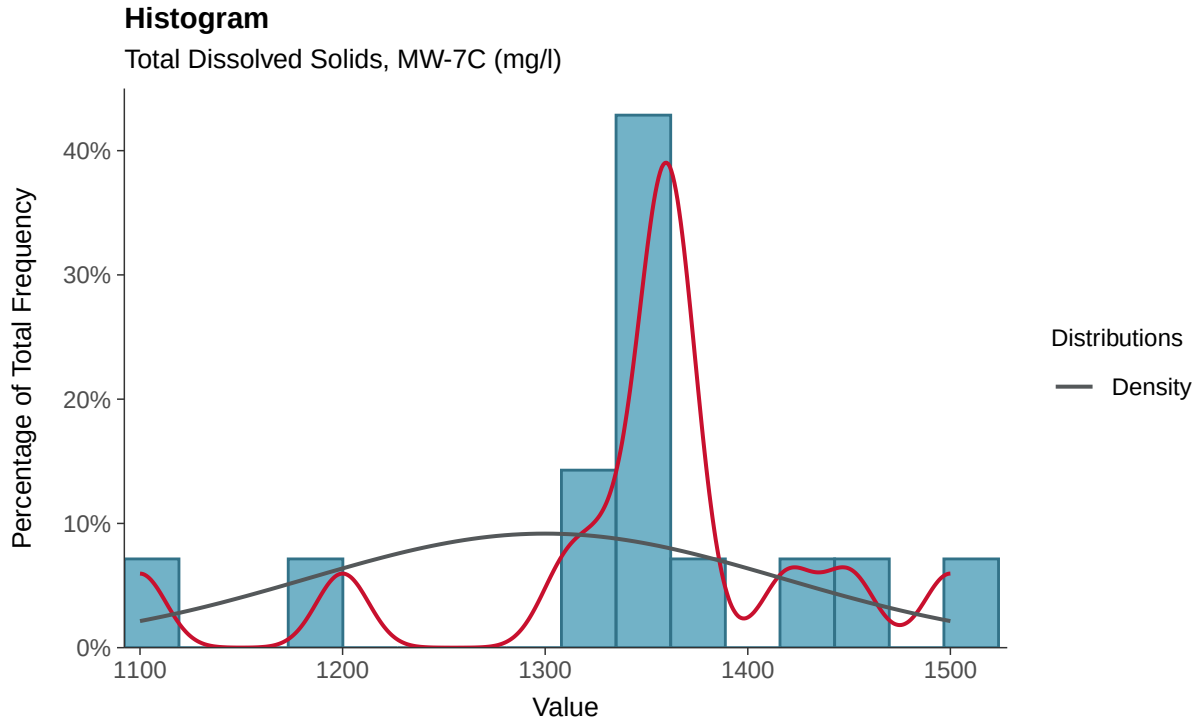
Sulfate, MW-7C (mg/l)



Appendix III: Total Dissolved Solids, MW-7C

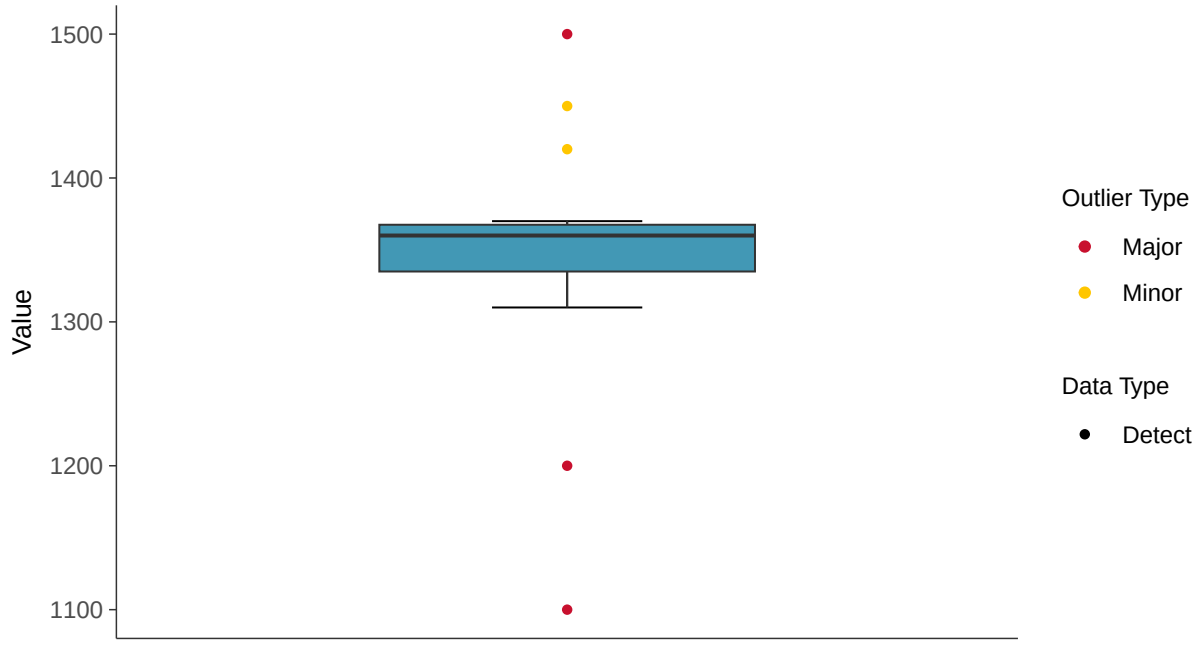
ID: 18_2_126





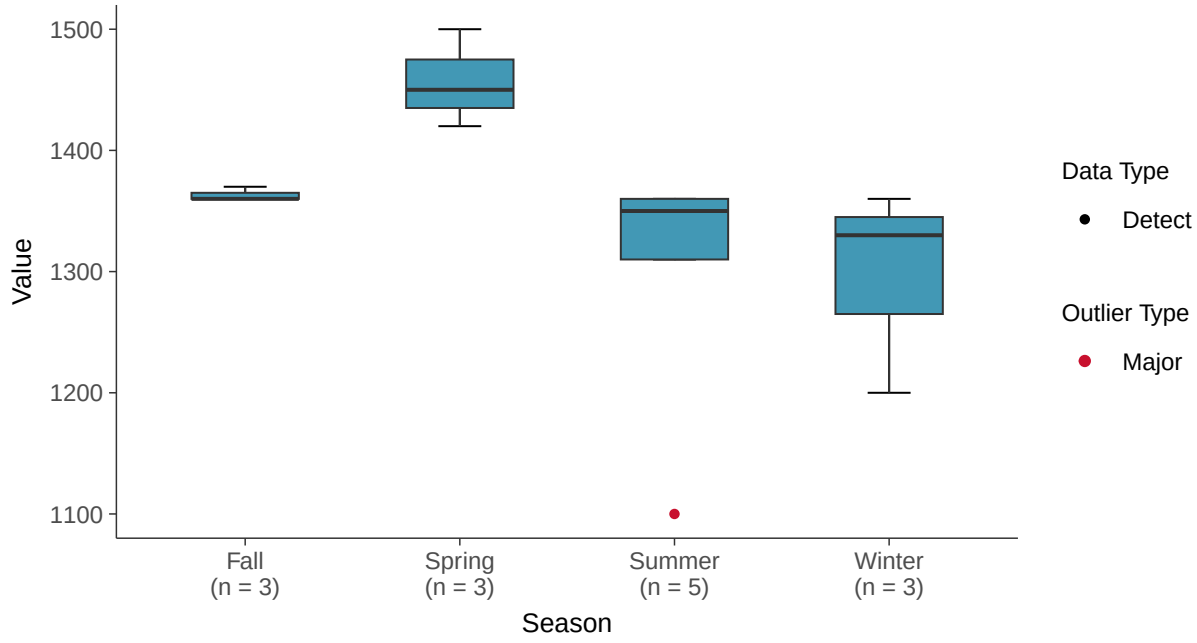
Boxplot

Total Dissolved Solids, MW-7C (mg/l)



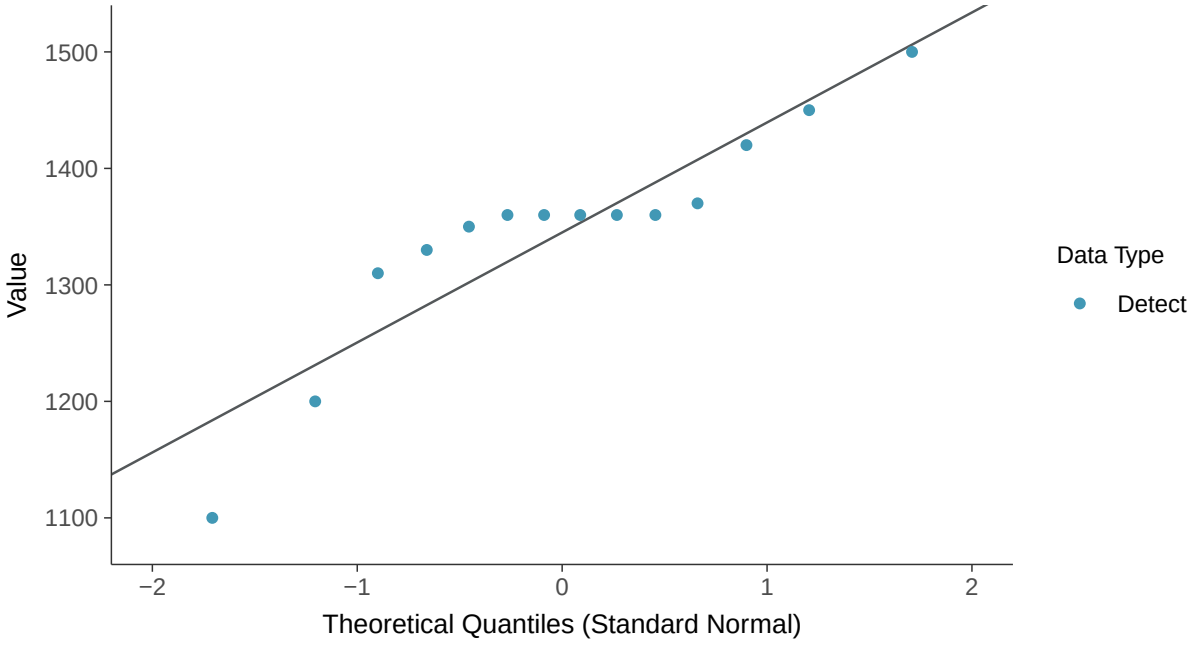
Boxplot by Season

Total Dissolved Solids, MW-7C (mg/l)



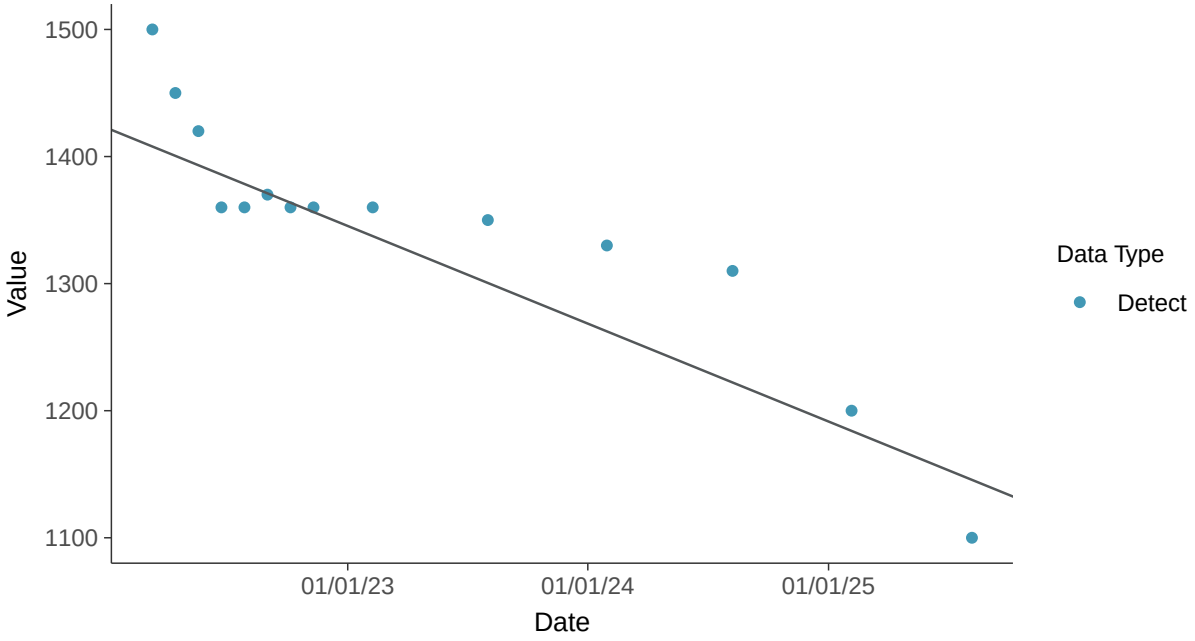
Normal Q-Q plot

Total Dissolved Solids, MW-7C (mg/l)



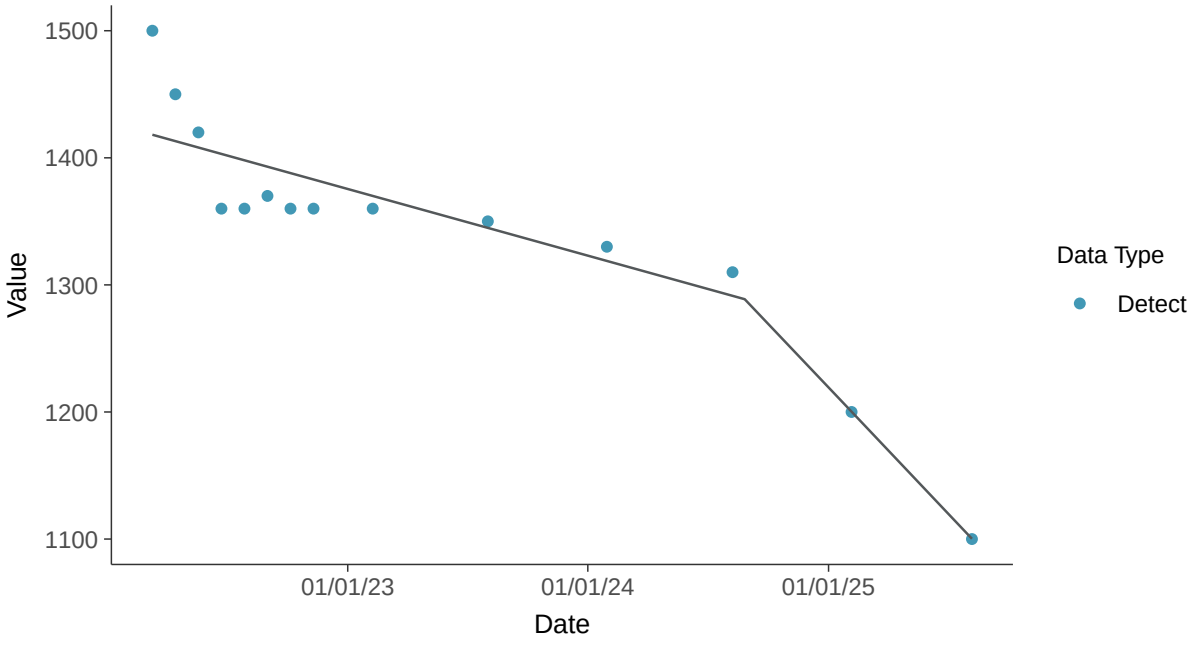
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Total Dissolved Solids, MW-7C (mg/l)



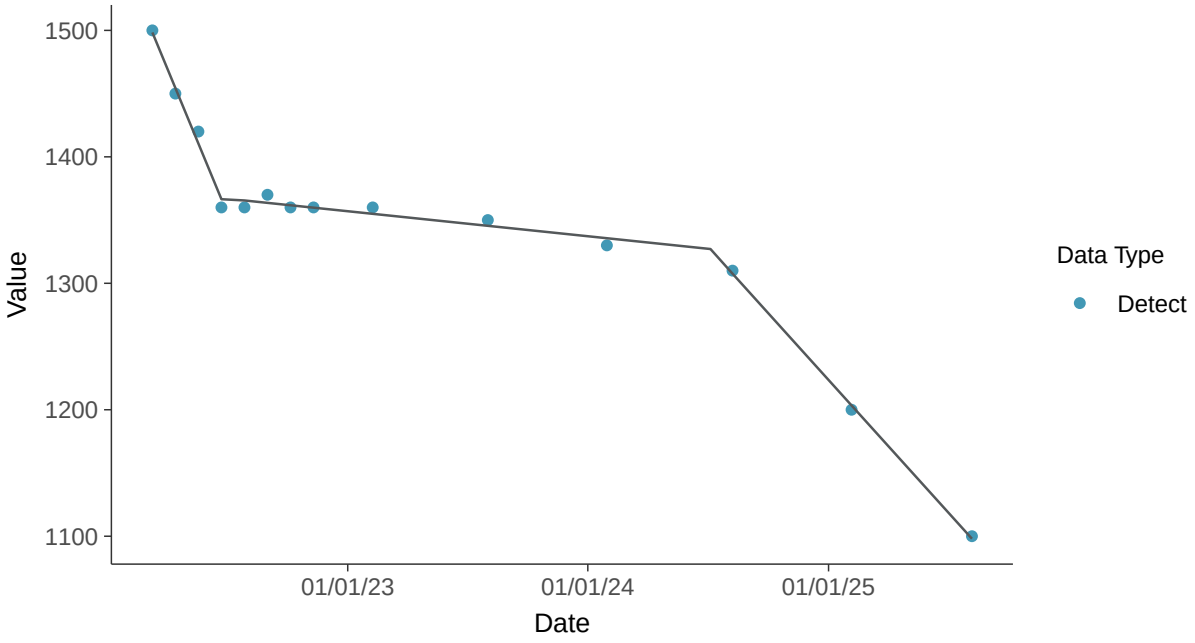
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-7C (mg/l)



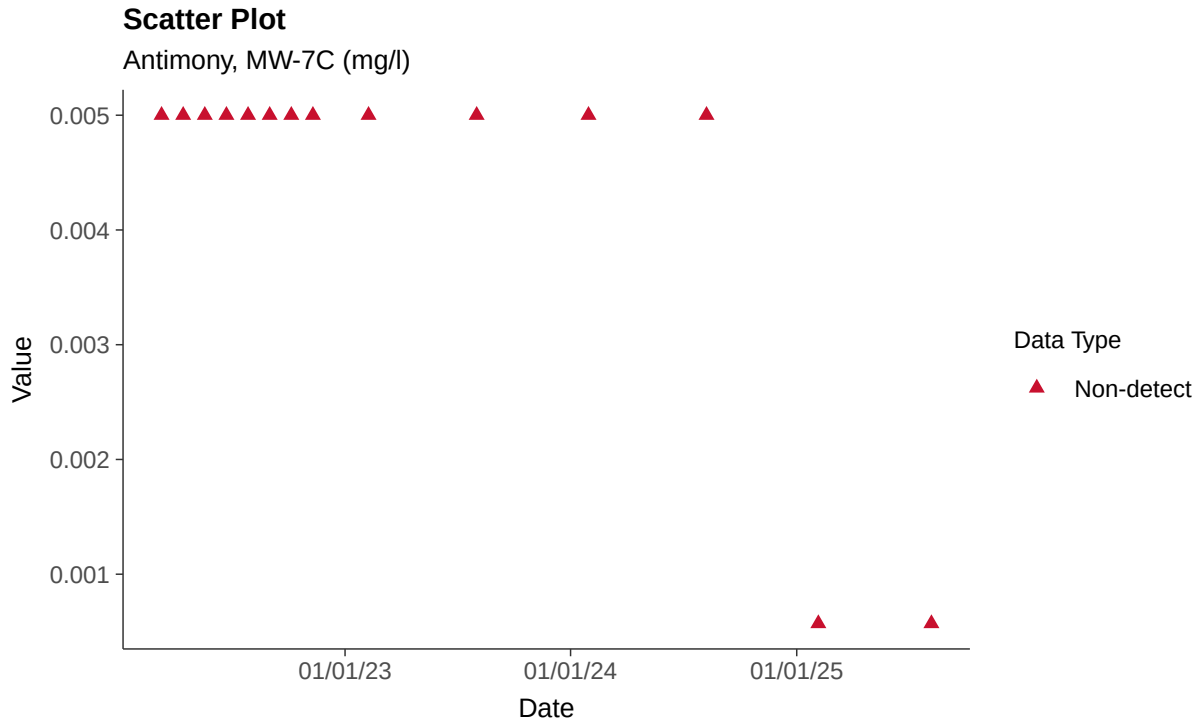
Trend Regression: Piecewise Linear-Linear-Linear

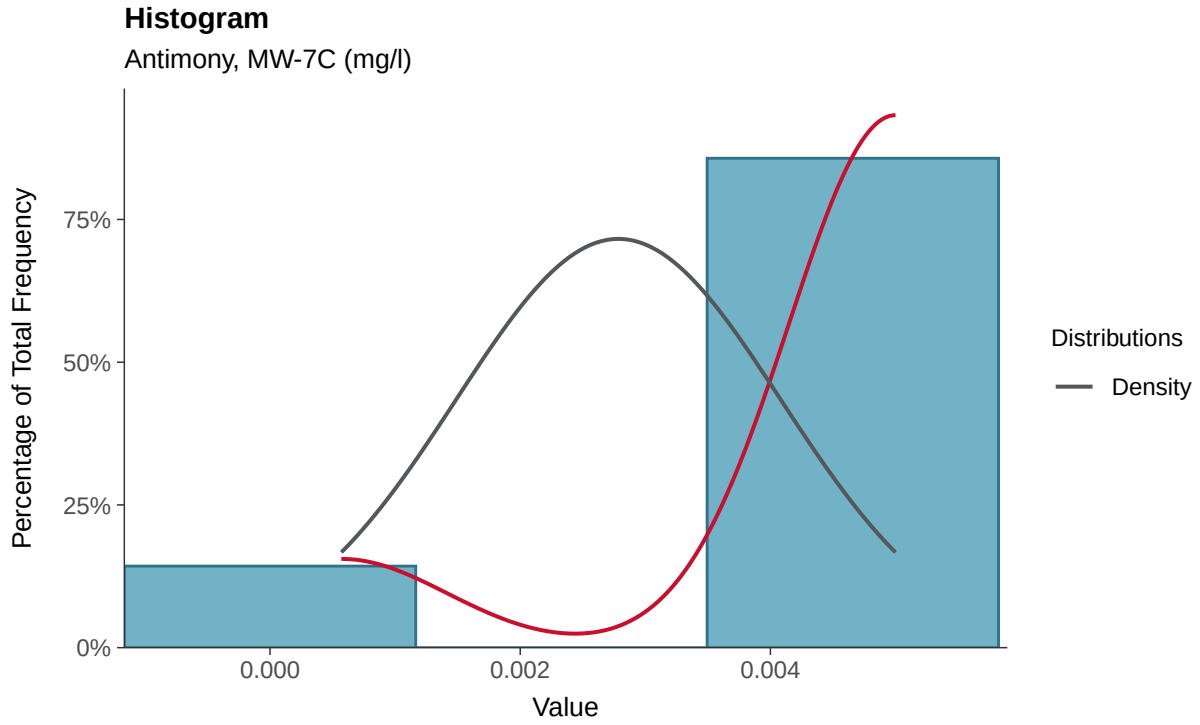
Total Dissolved Solids, MW-7C (mg/l)



Appendix IV: Antimony, MW-7C

ID: 18_3_101



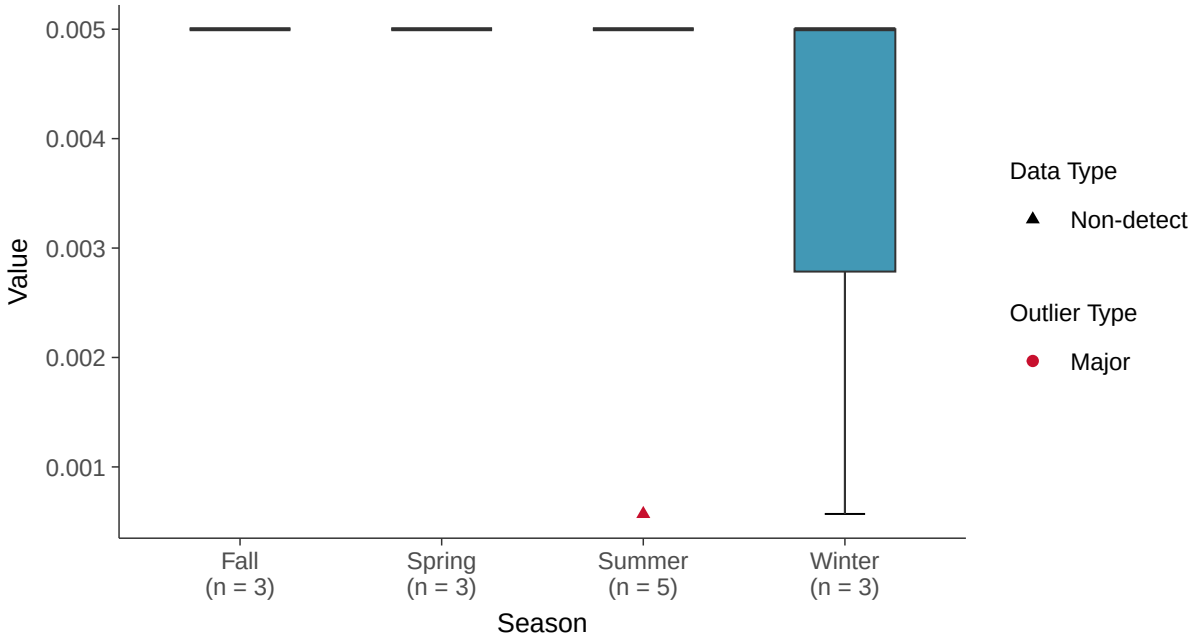


Boxplot

Antimony, MW-7C (mg/l)

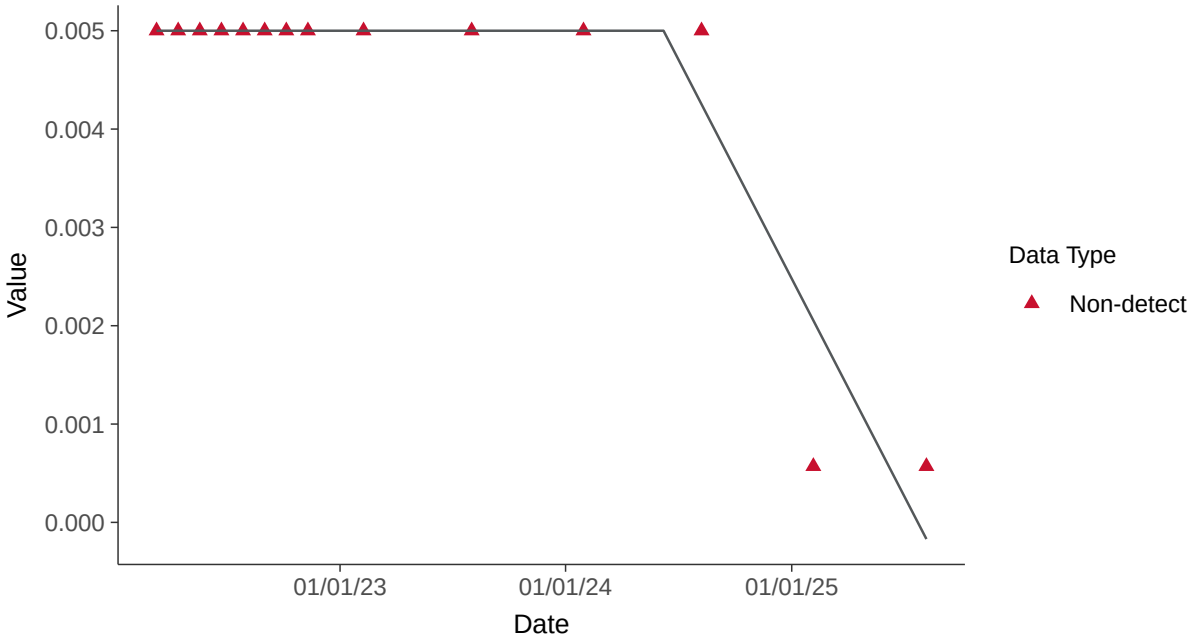
Boxplot by Season

Antimony, MW-7C (mg/l)



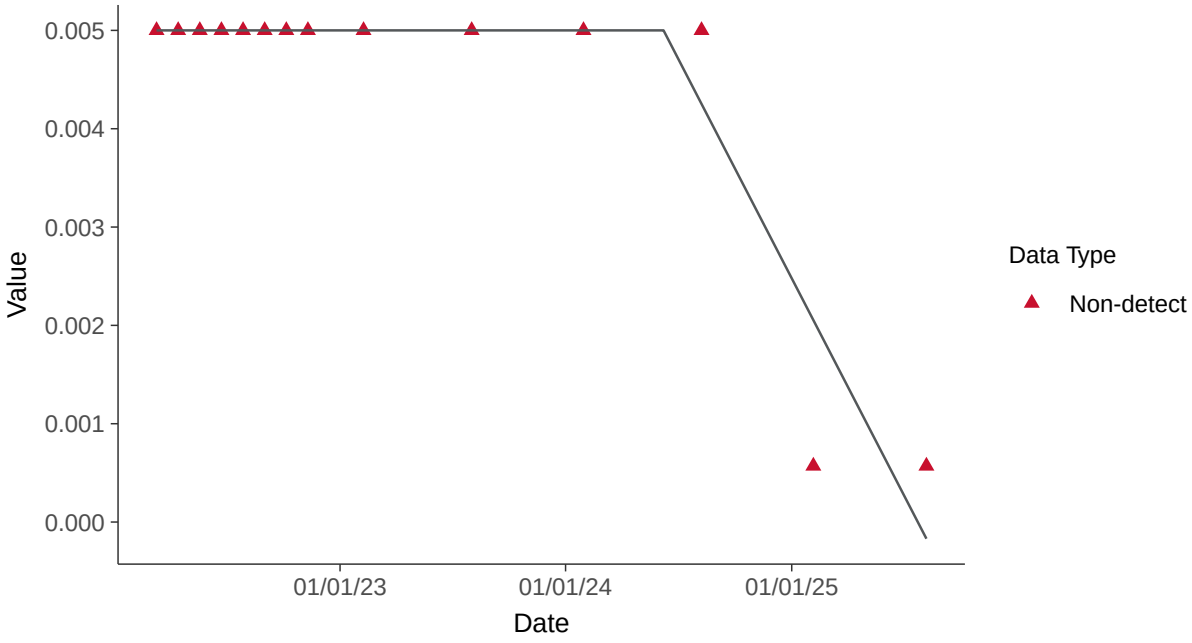
Trend Regression: Piecewise Linear-Linear

Antimony, MW-7C (mg/l)



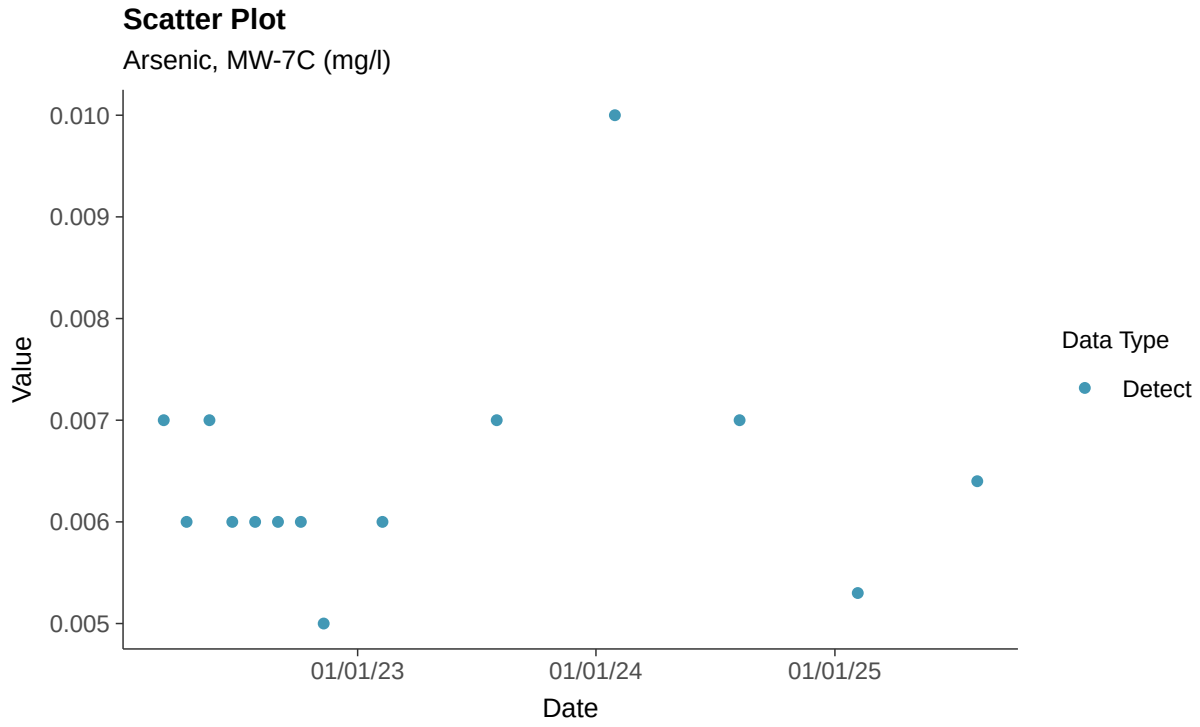
Trend Regression: Piecewise Linear-Linear-Linear

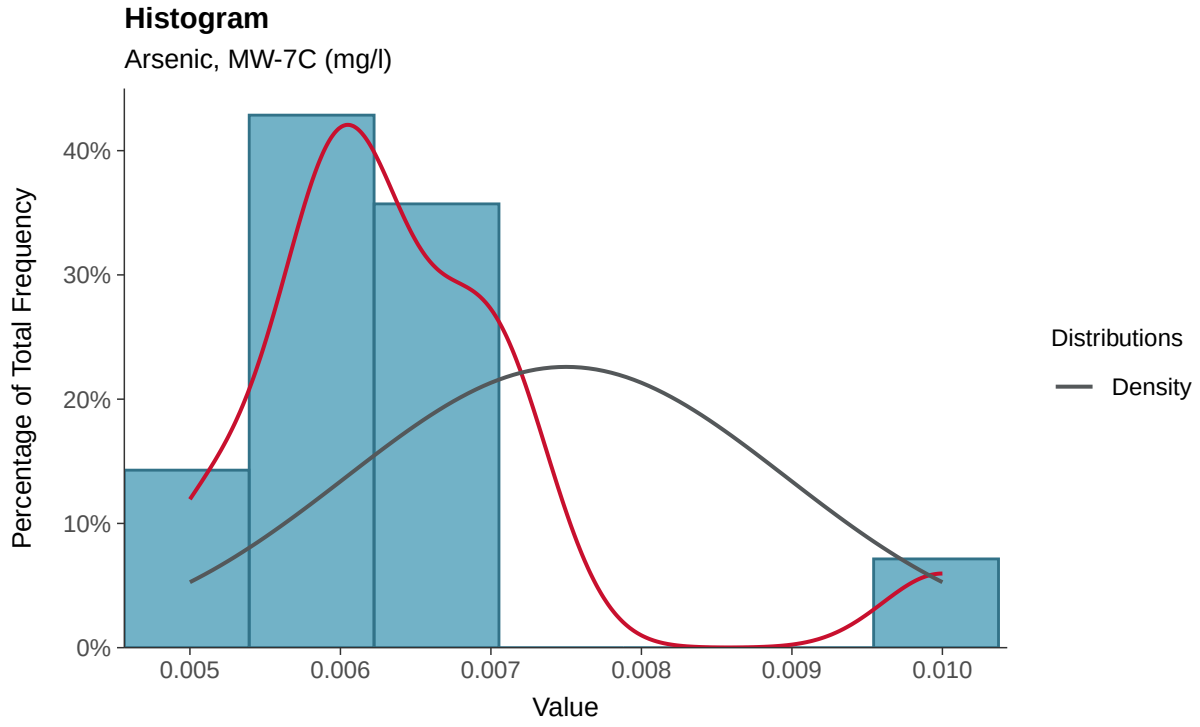
Antimony, MW-7C (mg/l)



Appendix IV: Arsenic, MW-7C

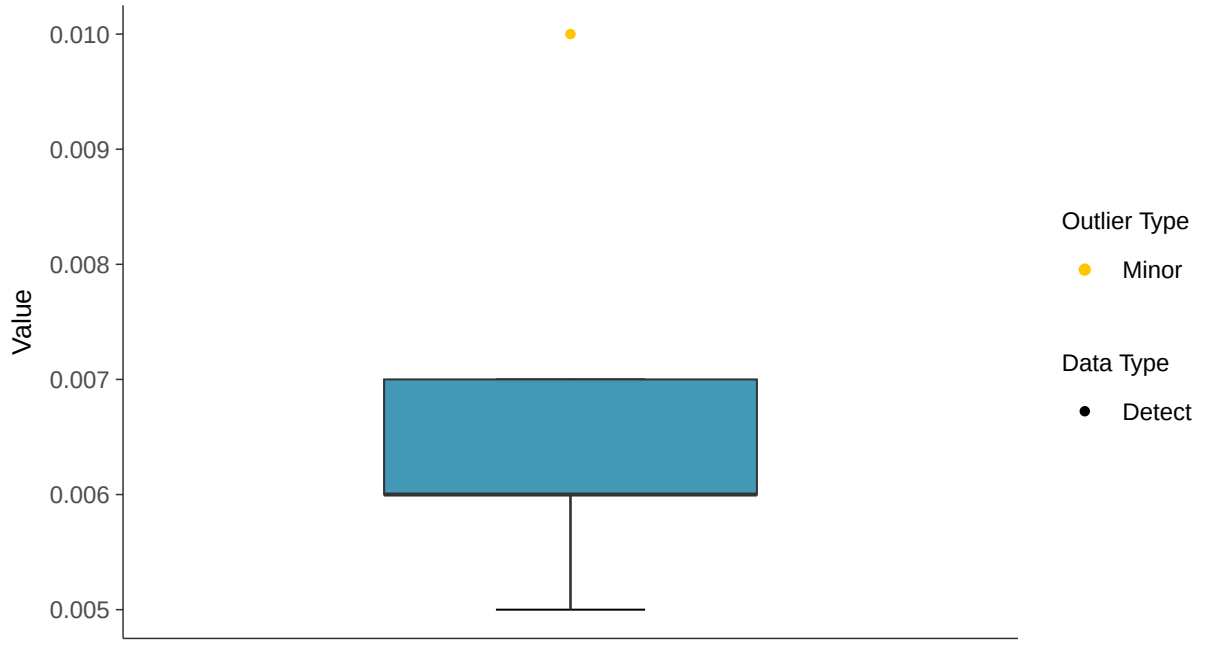
ID: 18_3_102





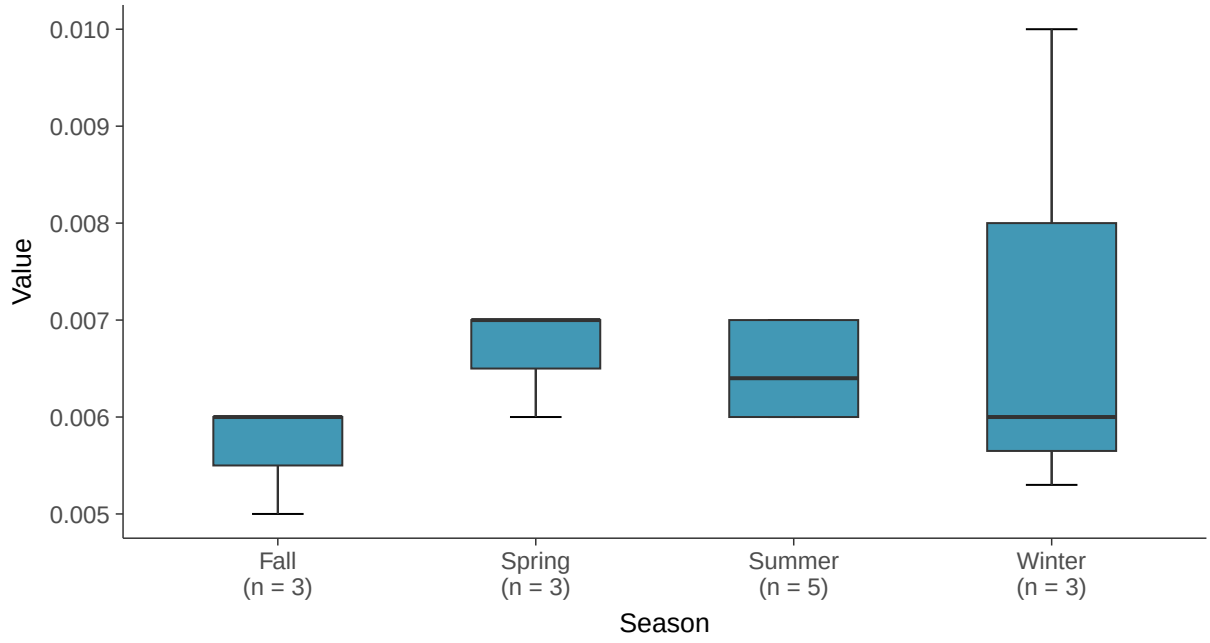
Boxplot

Arsenic, MW-7C (mg/l)



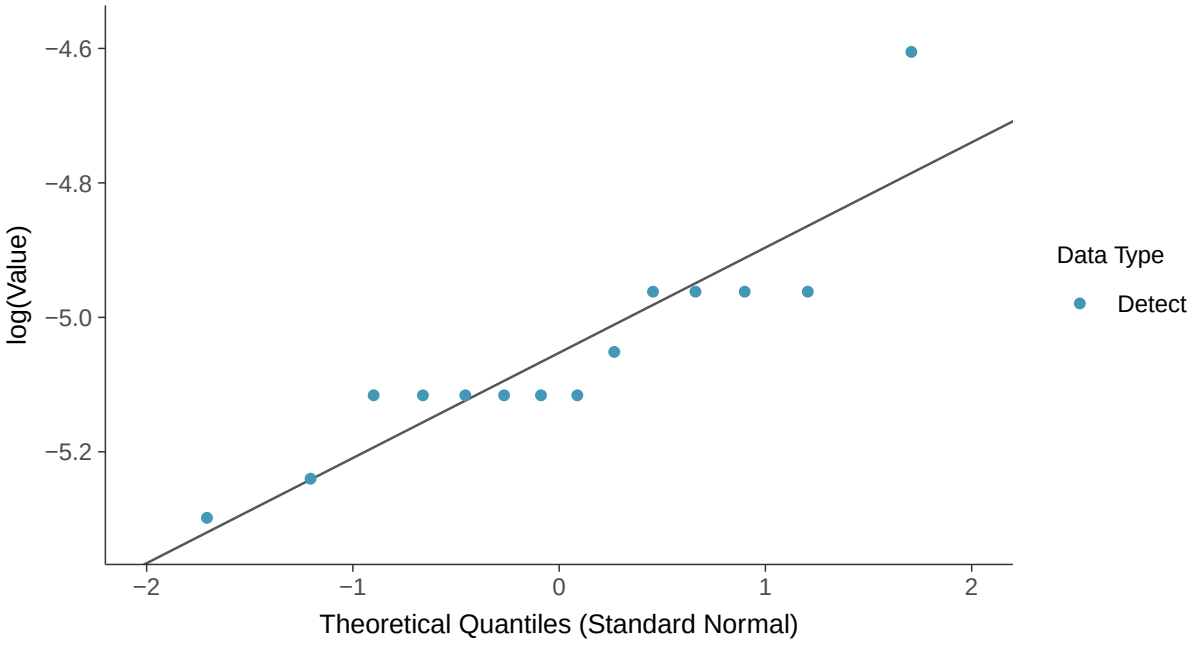
Boxplot by Season

Arsenic, MW-7C (mg/l)



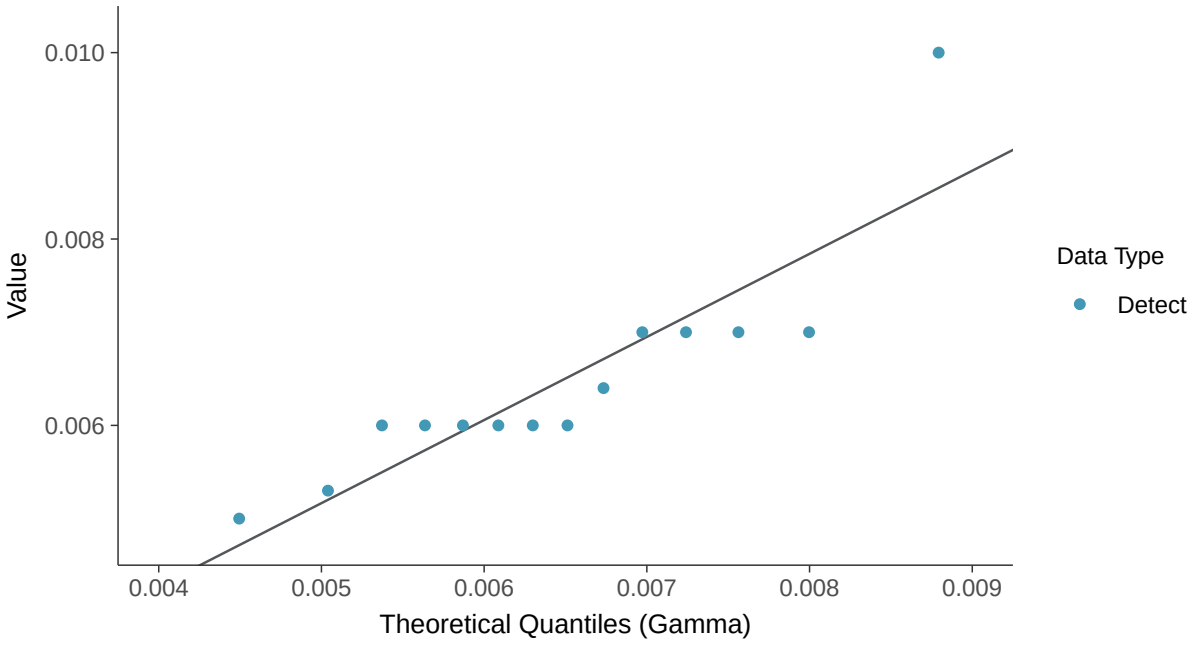
Lognormal Q-Q plot

Arsenic, MW-7C (mg/l)



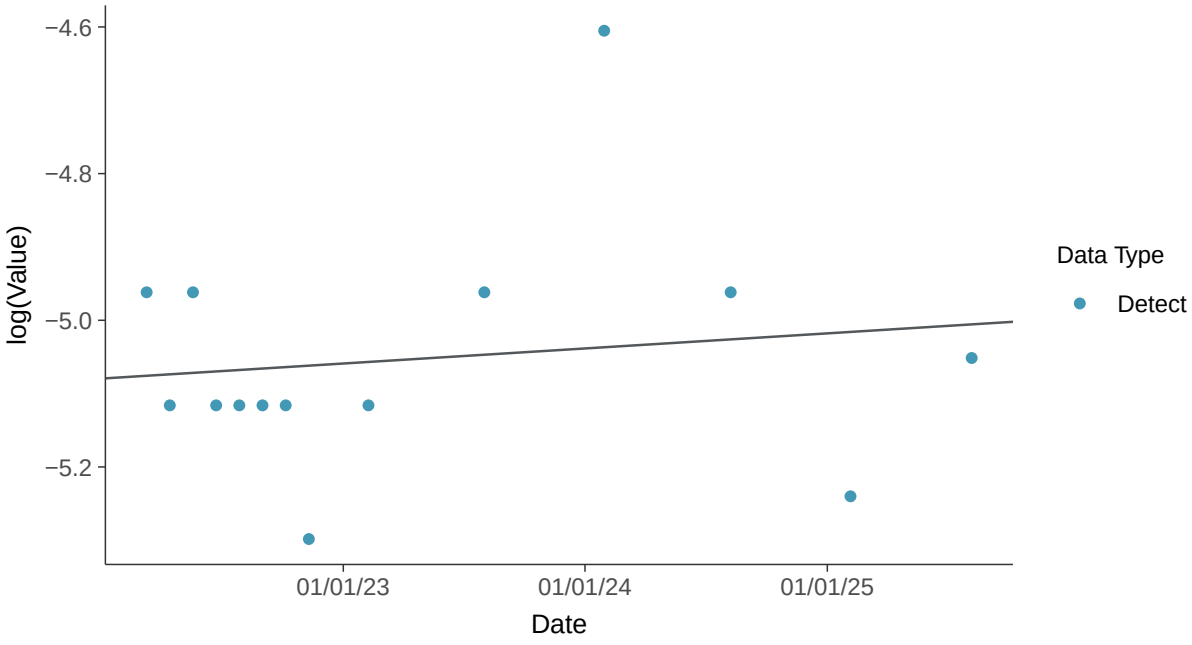
Gamma Q-Q plot

Arsenic, MW-7C (mg/l)



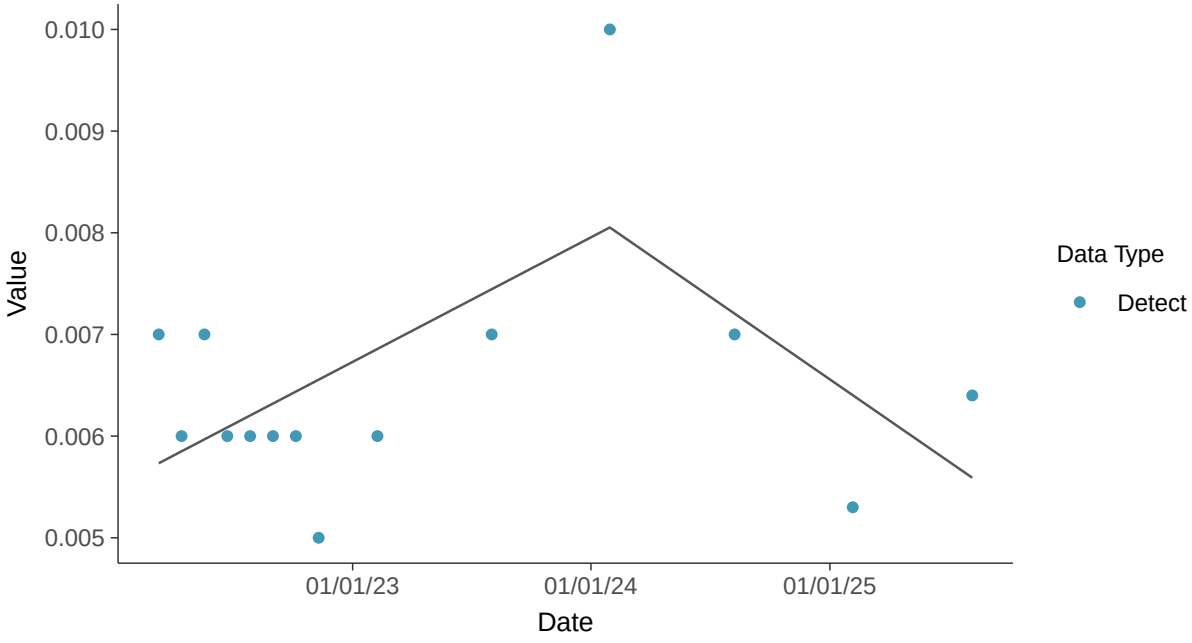
Trend Regression: Lognormal MLE

Arsenic, MW-7C (mg/l)



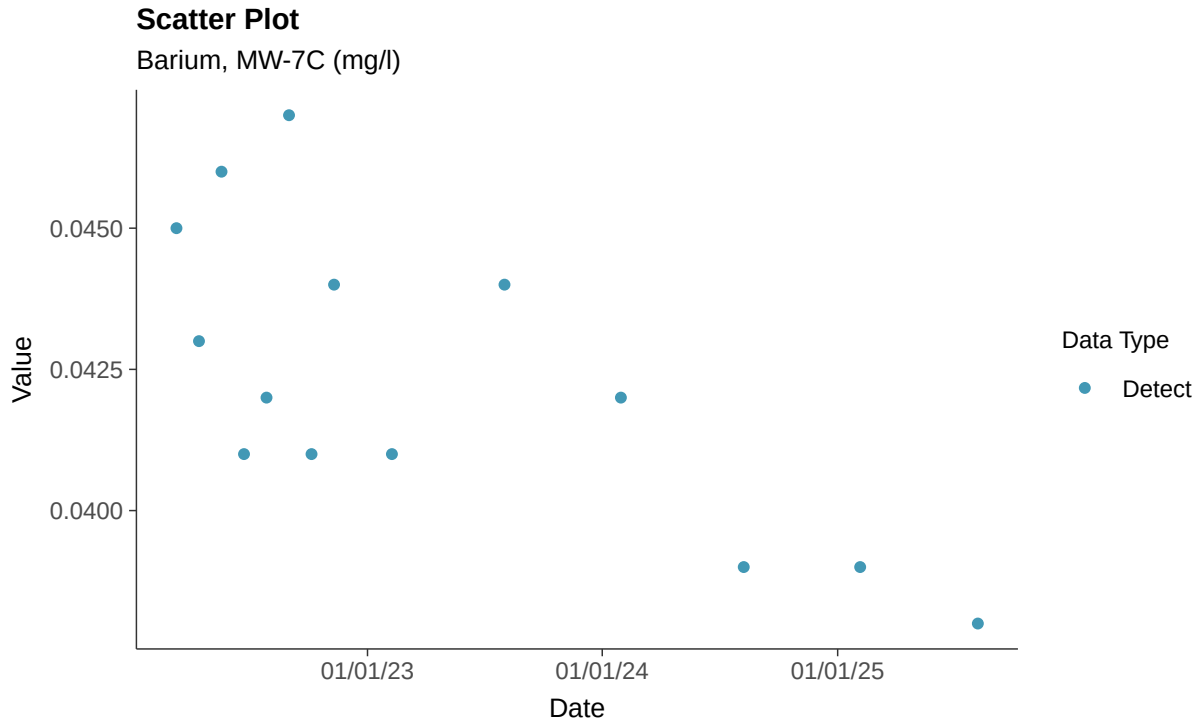
Trend Regression: Piecewise Linear-Linear

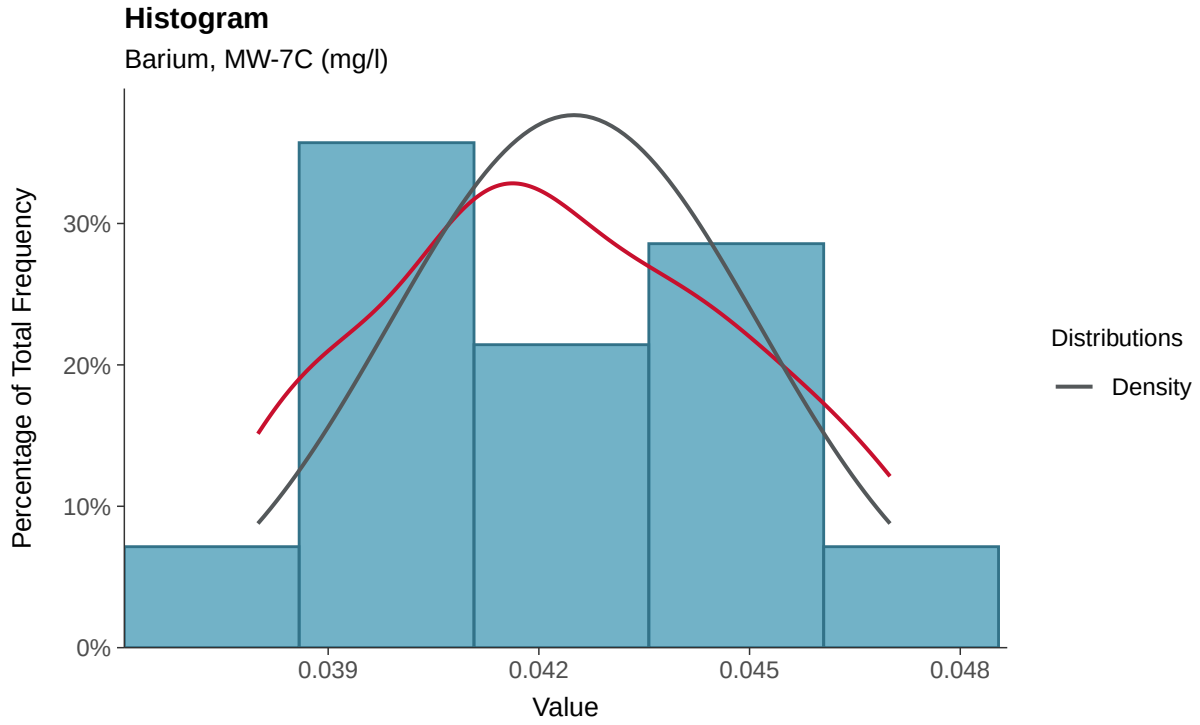
Arsenic, MW-7C (mg/l)



Appendix IV: Barium, MW-7C

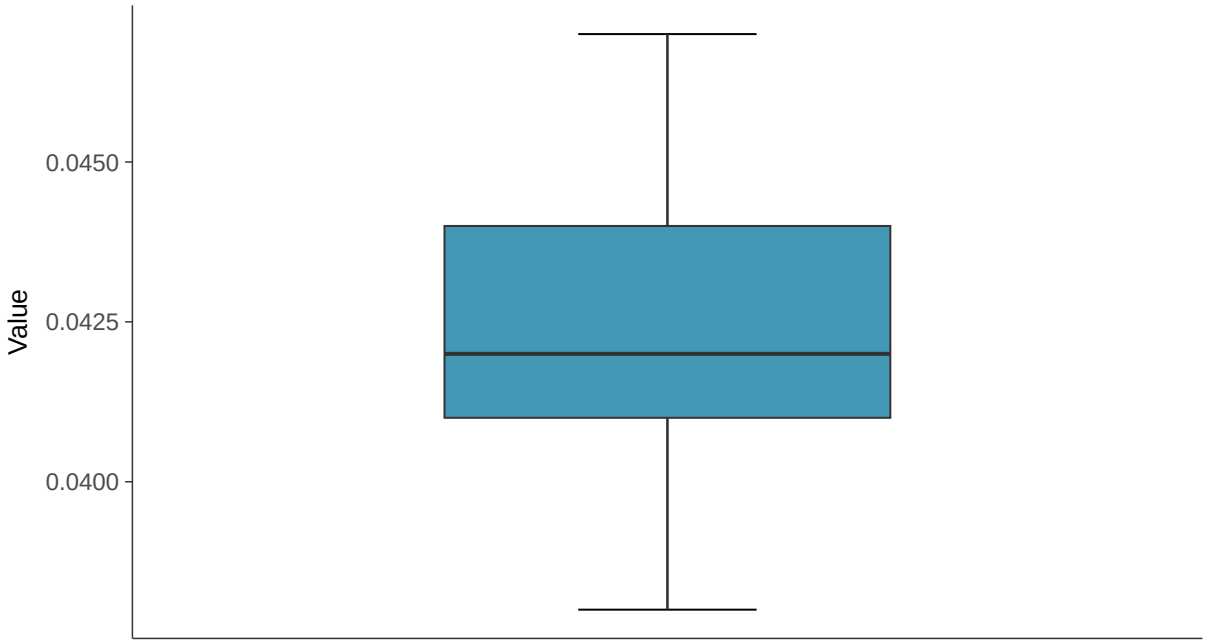
ID: 18_3_103





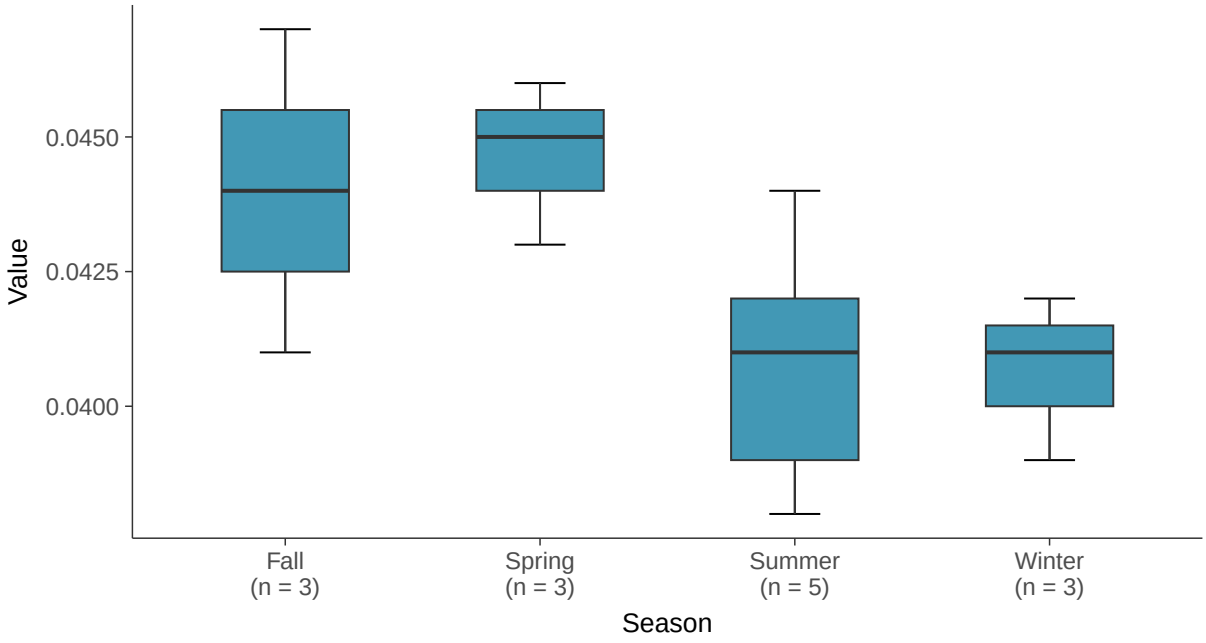
Boxplot

Barium, MW-7C (mg/l)



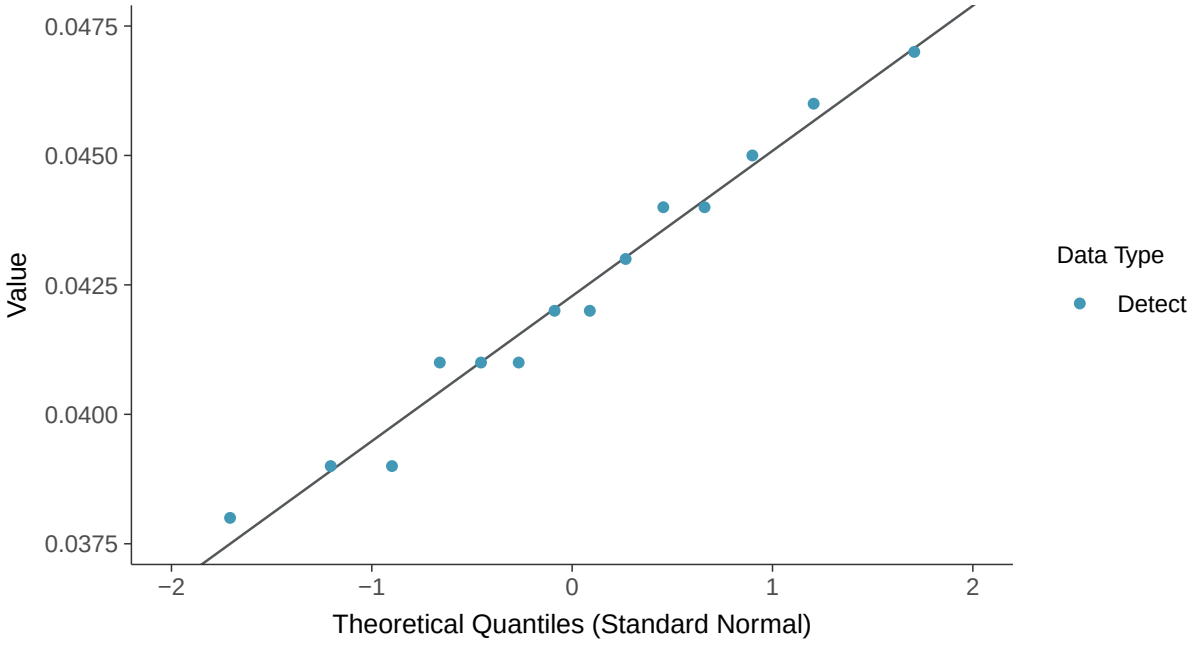
Boxplot by Season

Barium, MW-7C (mg/l)



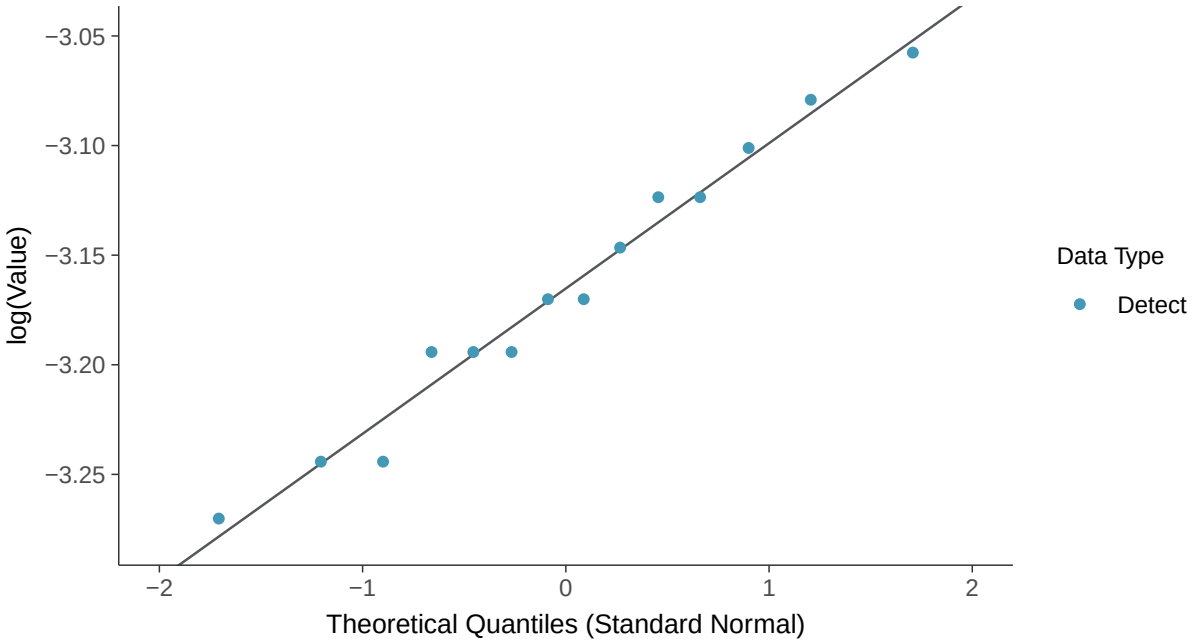
Normal Q-Q plot

Barium, MW-7C (mg/l)



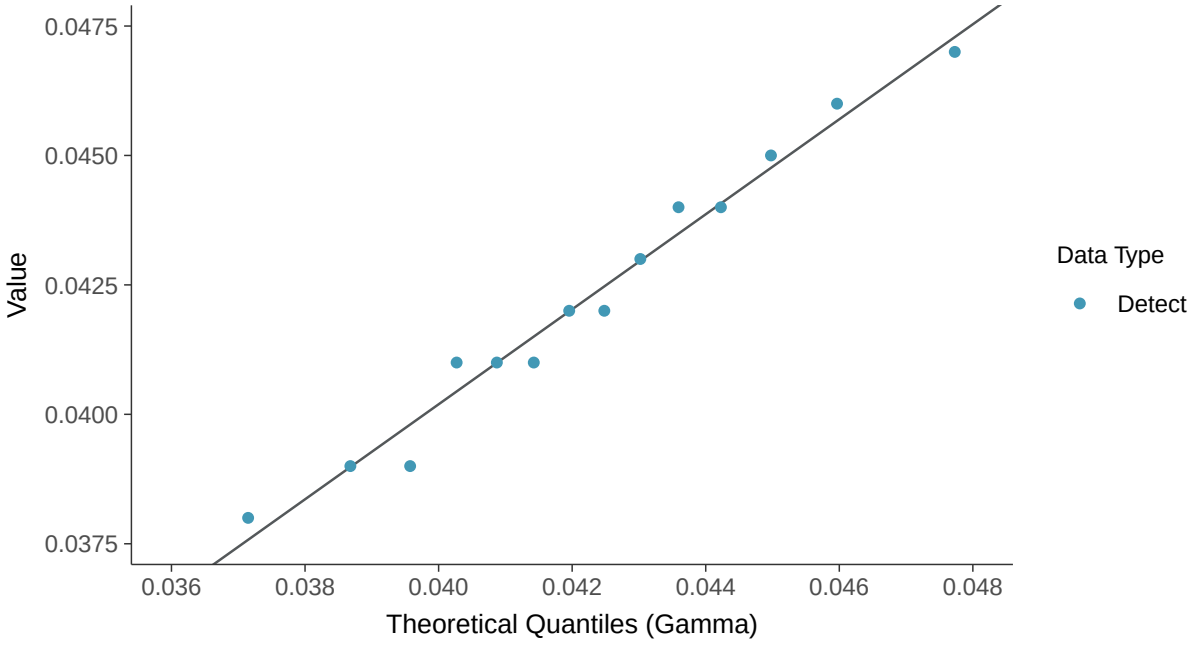
Lognormal Q-Q plot

Barium, MW-7C (mg/l)



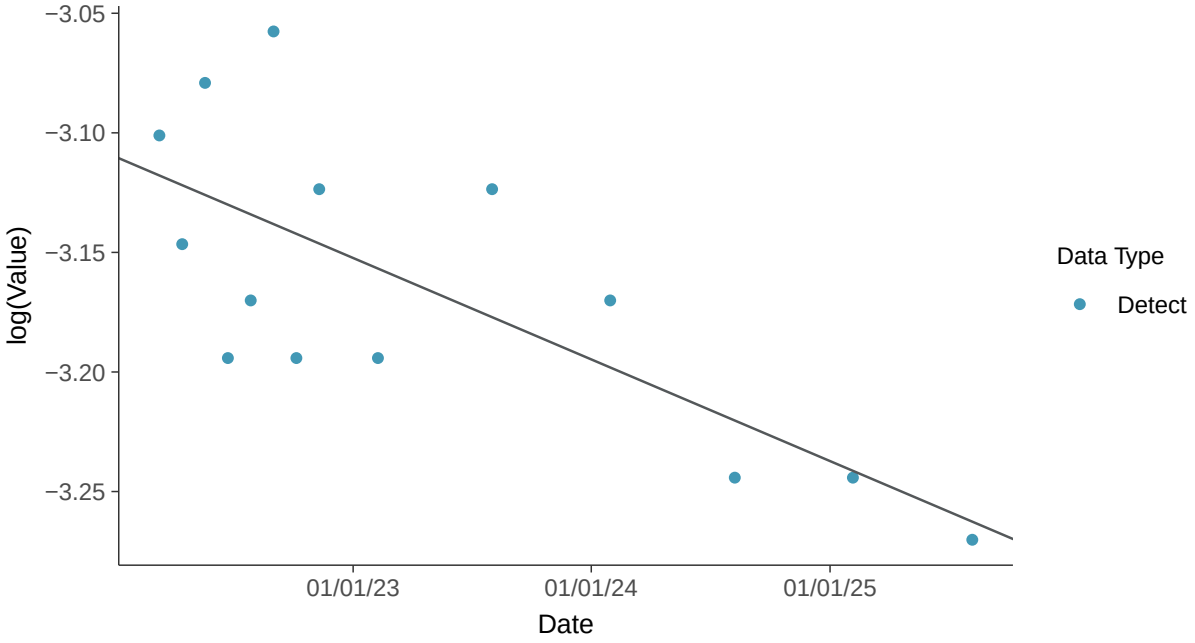
Gamma Q-Q plot

Barium, MW-7C (mg/l)



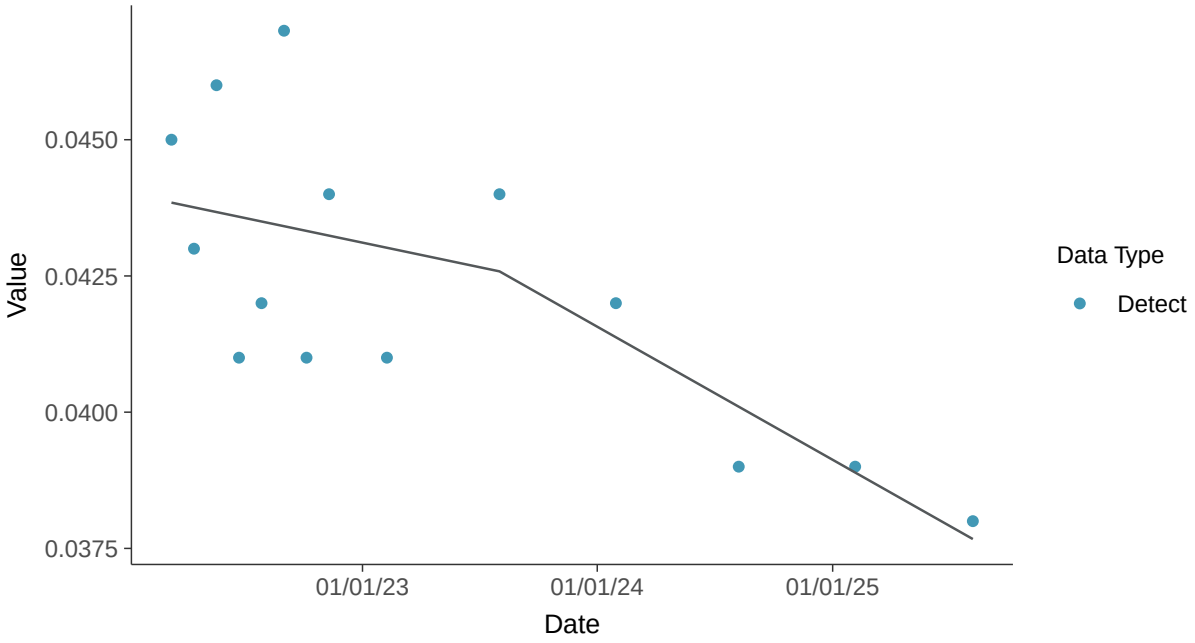
Trend Regression: Lognormal MLE

Barium, MW-7C (mg/l)



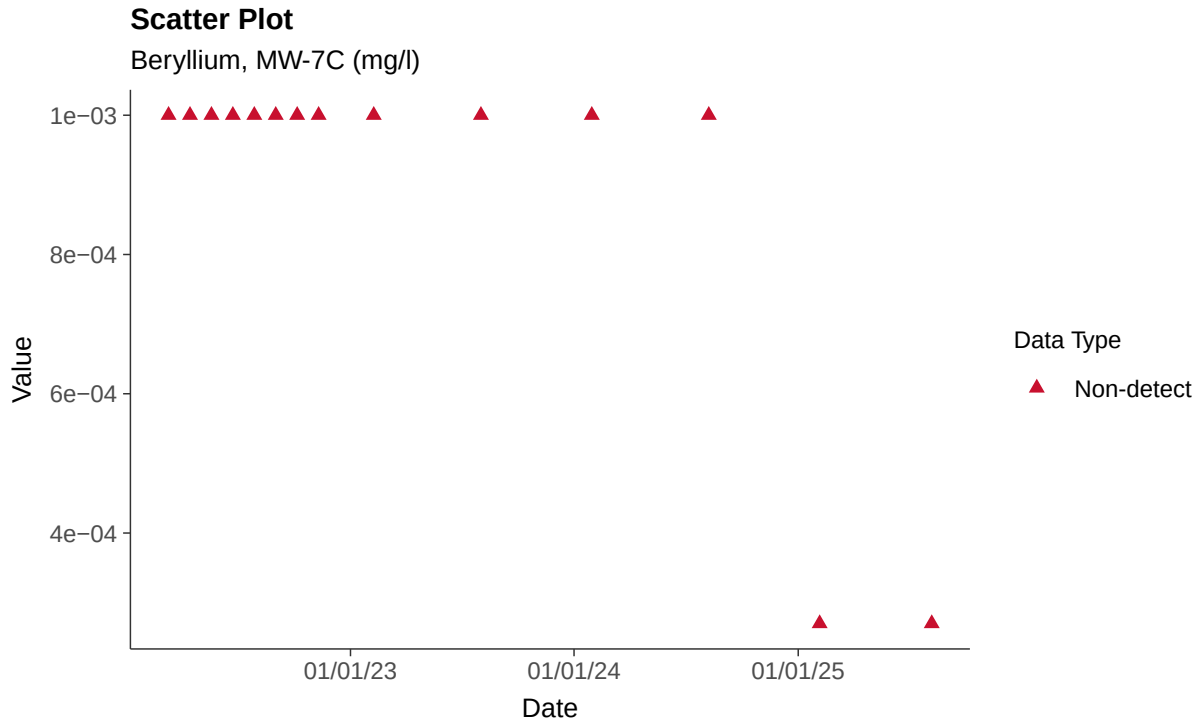
Trend Regression: Piecewise Linear-Linear

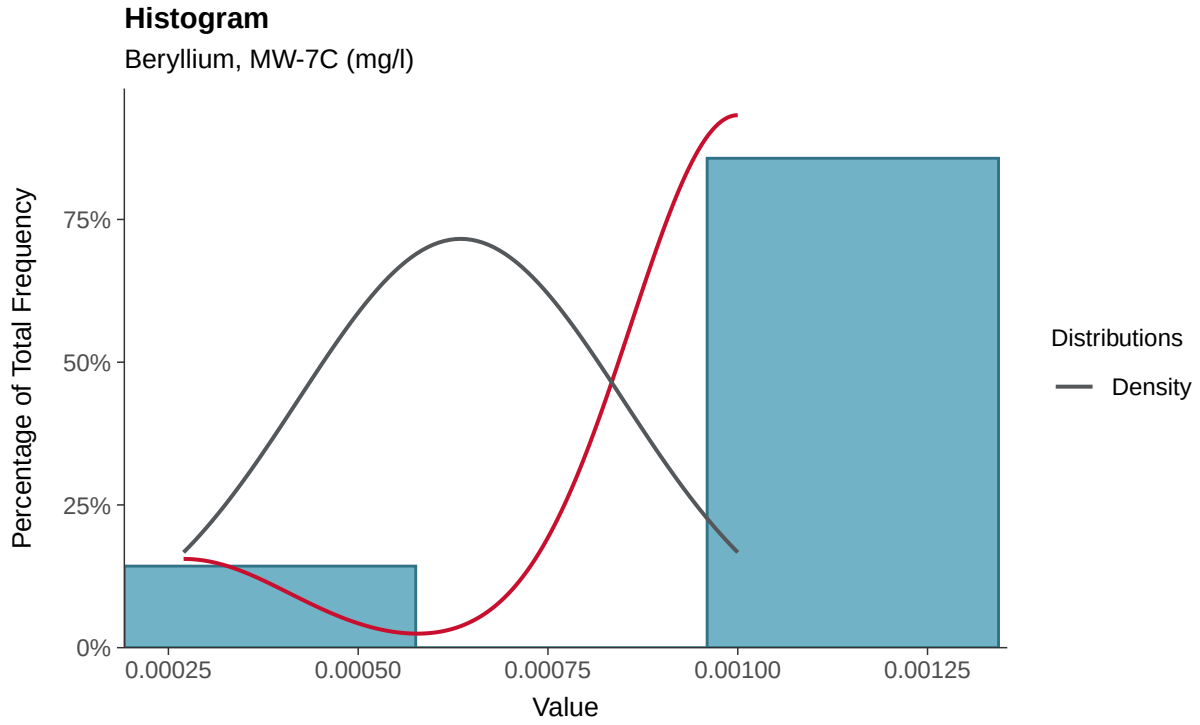
Barium, MW-7C (mg/l)



Appendix IV: Beryllium, MW-7C

ID: 18_3_104



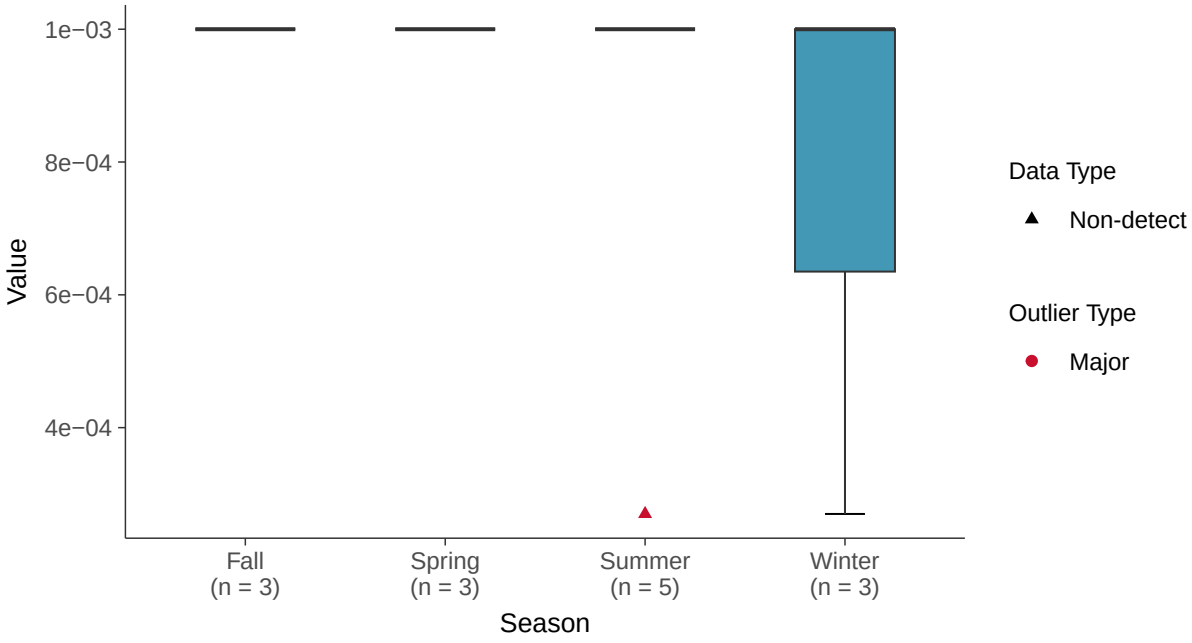


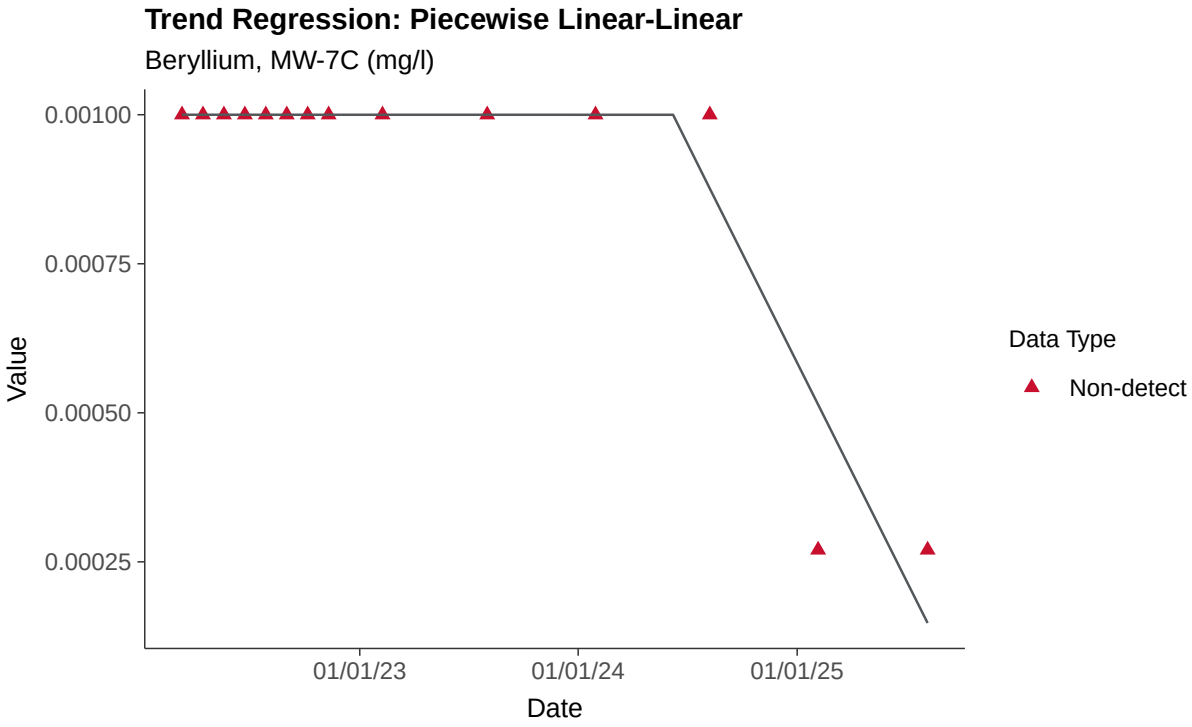
Boxplot

Beryllium, MW-7C (mg/l)

Boxplot by Season

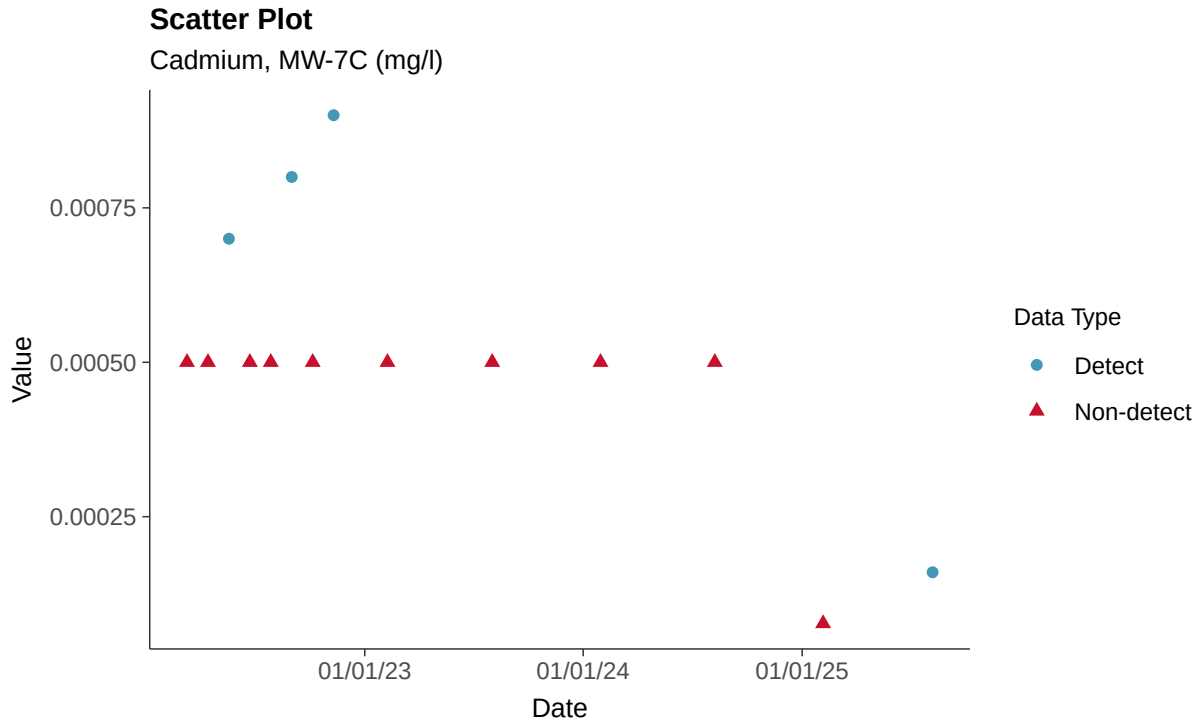
Beryllium, MW-7C (mg/l)

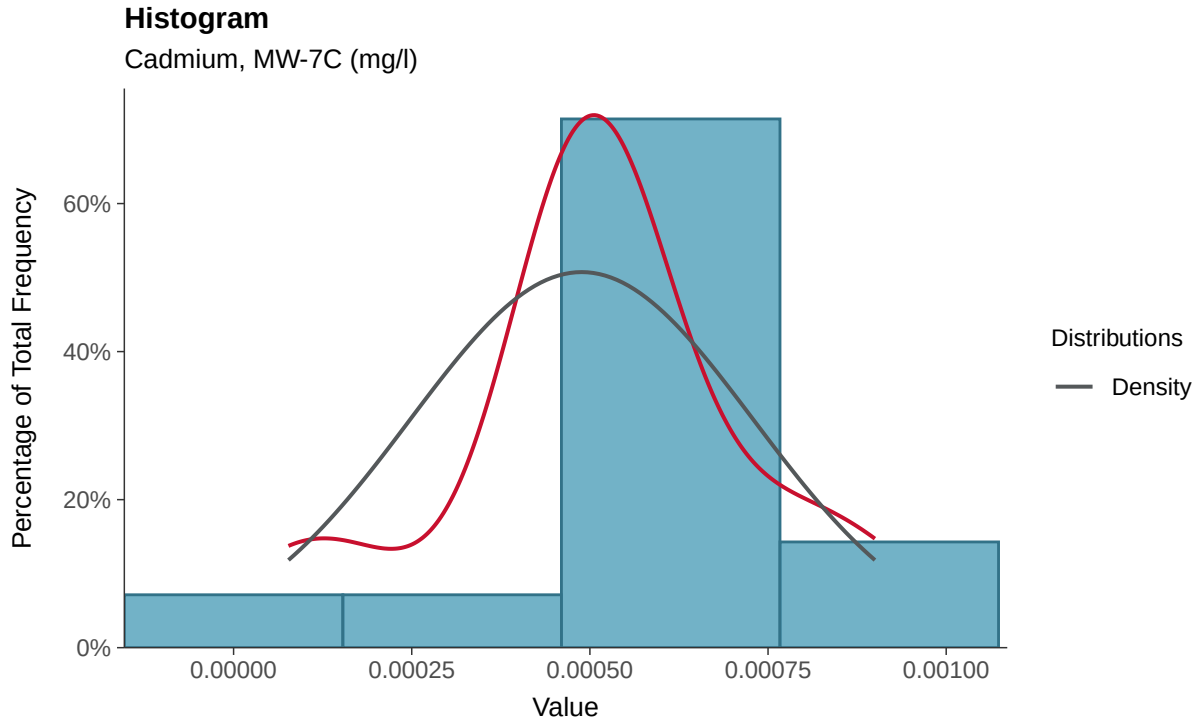



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-7C (mg/l)
0.00100
0.00075
0.00050
0.00025
Value
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Appendix IV: Cadmium, MW-7C

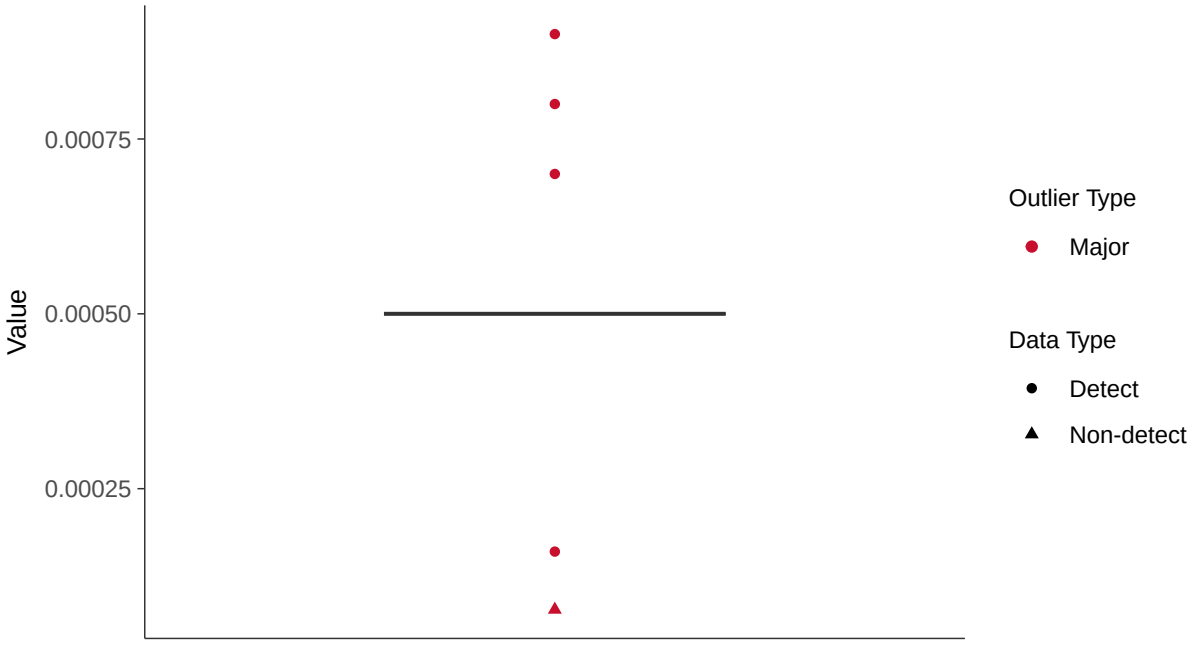
ID: 18_3_106





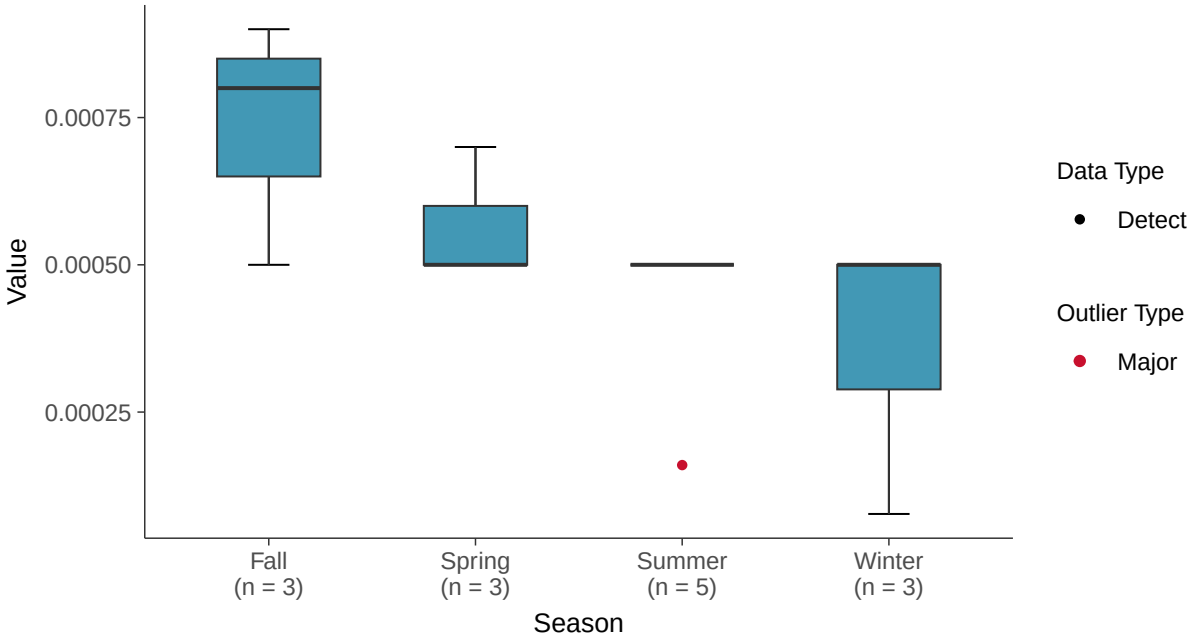
Boxplot

Cadmium, MW-7C (mg/l)



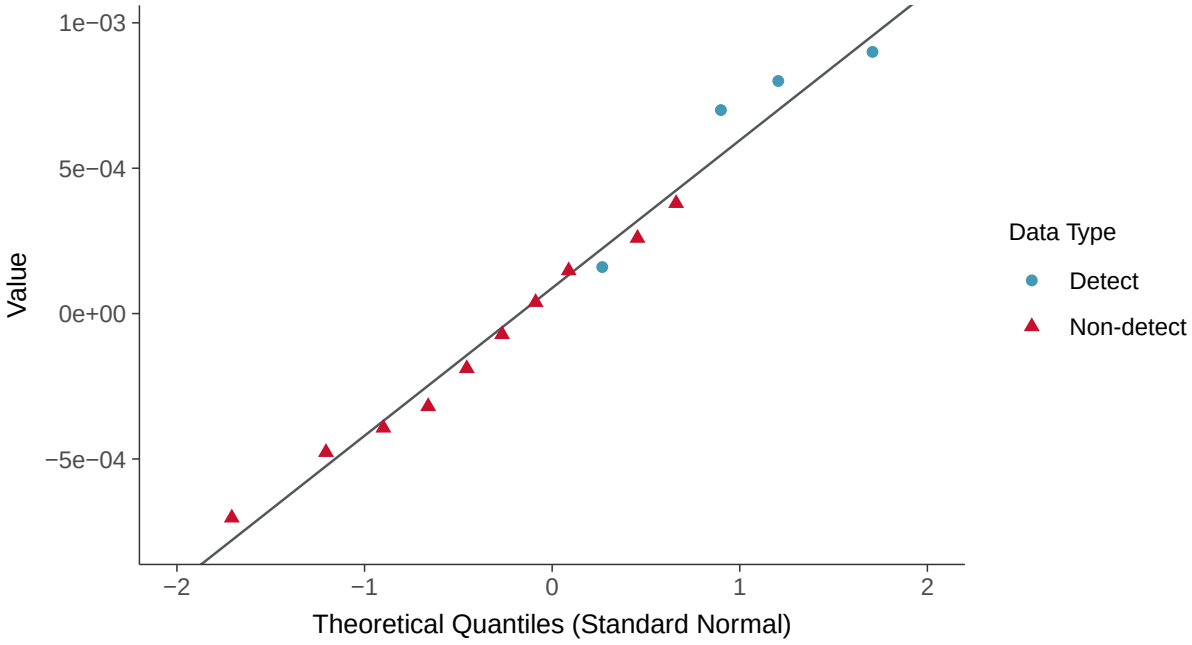
Boxplot by Season

Cadmium, MW-7C (mg/l)



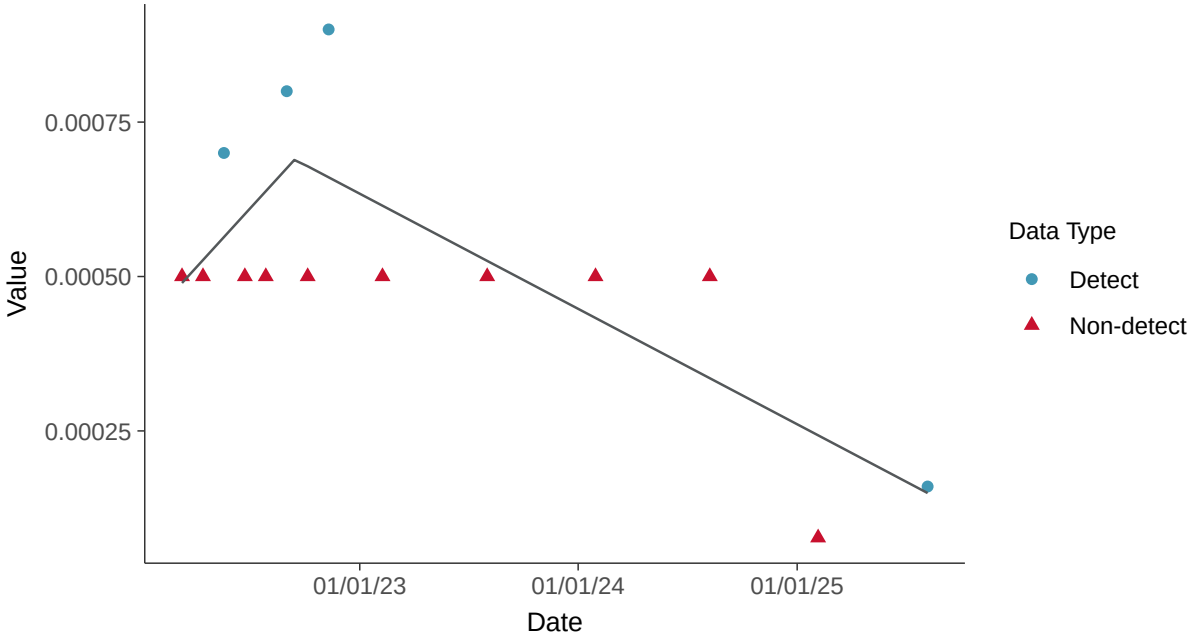
Normal Q-Q plot using ROS Imputed Estimates

Cadmium, MW-7C (mg/l)



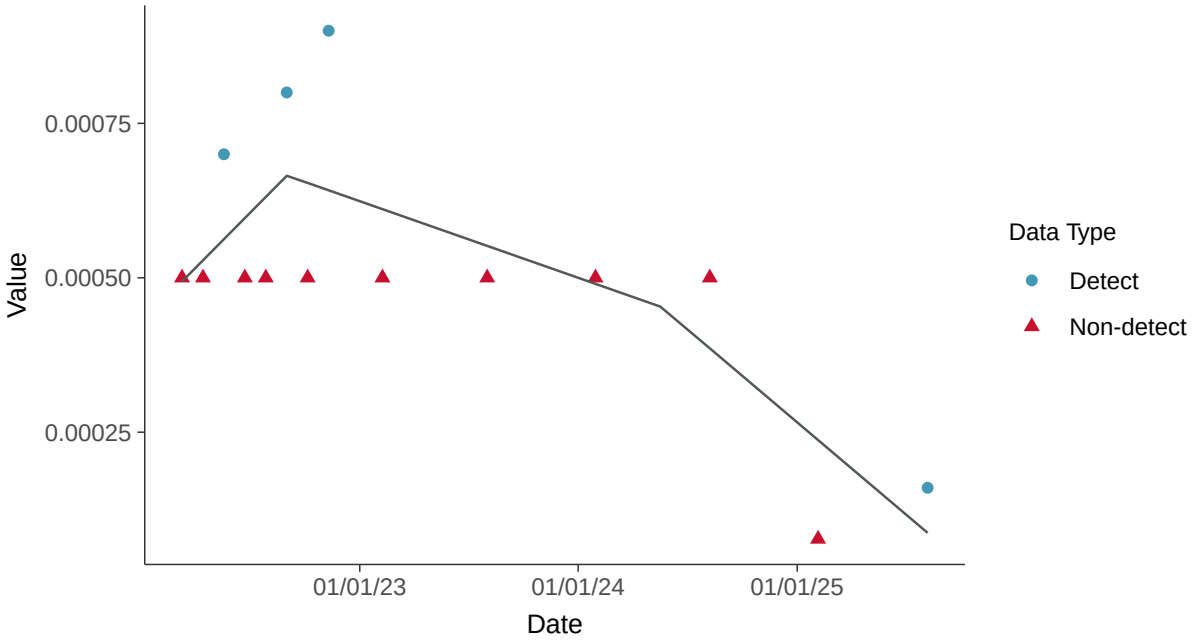
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-7C (mg/l)



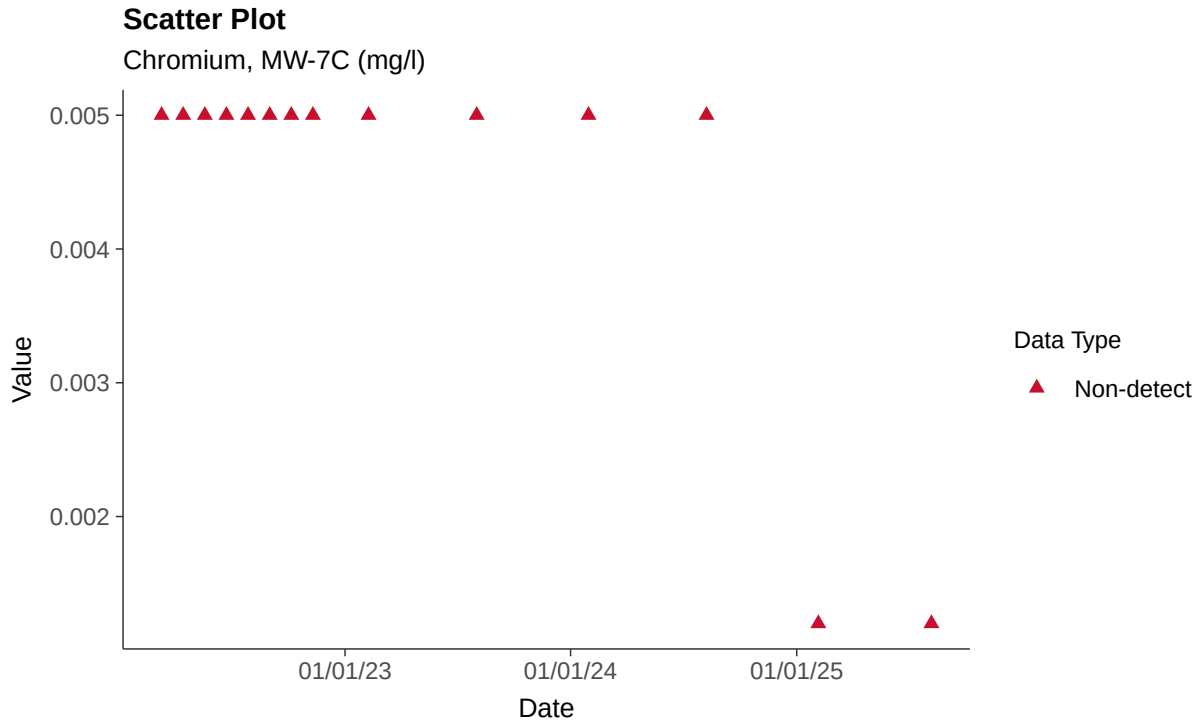
Trend Regression: Piecewise Linear-Linear-Linear

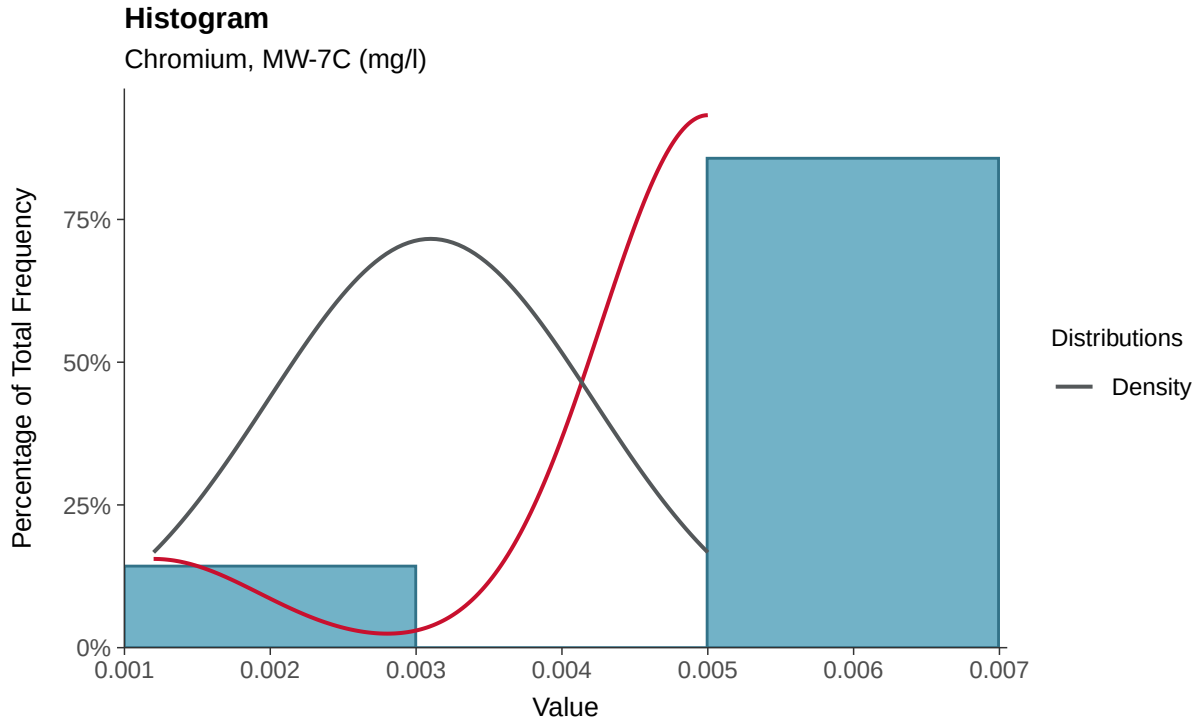
Cadmium, MW-7C (mg/l)



Appendix IV: Chromium, MW-7C

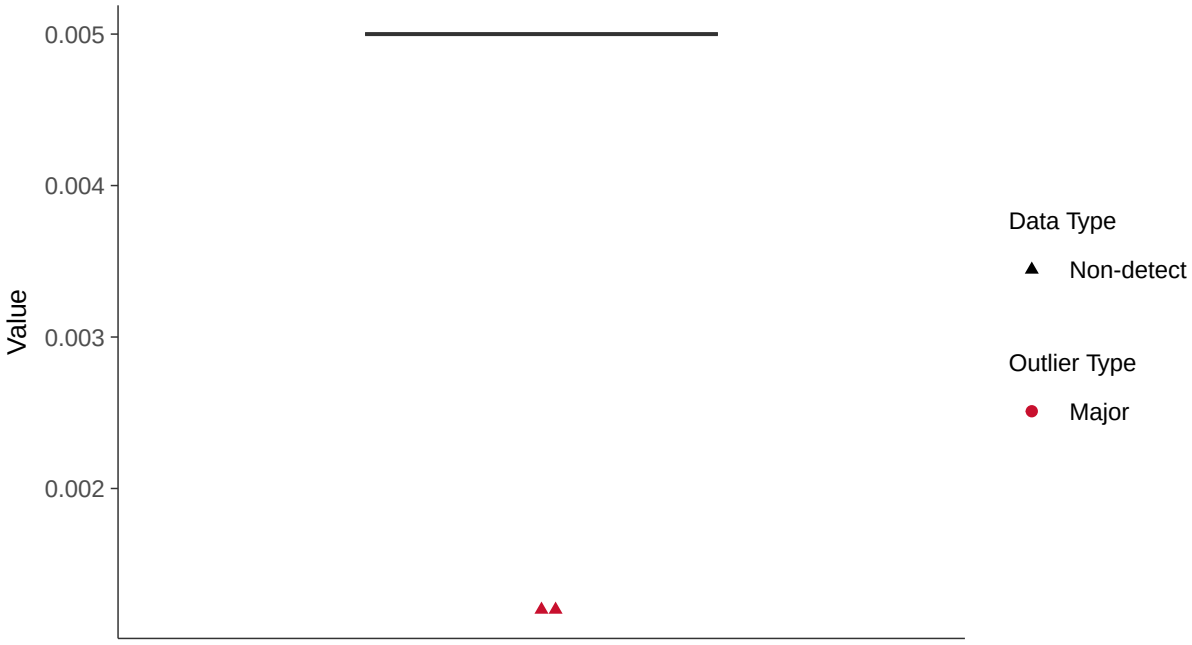
ID: 18_3_109





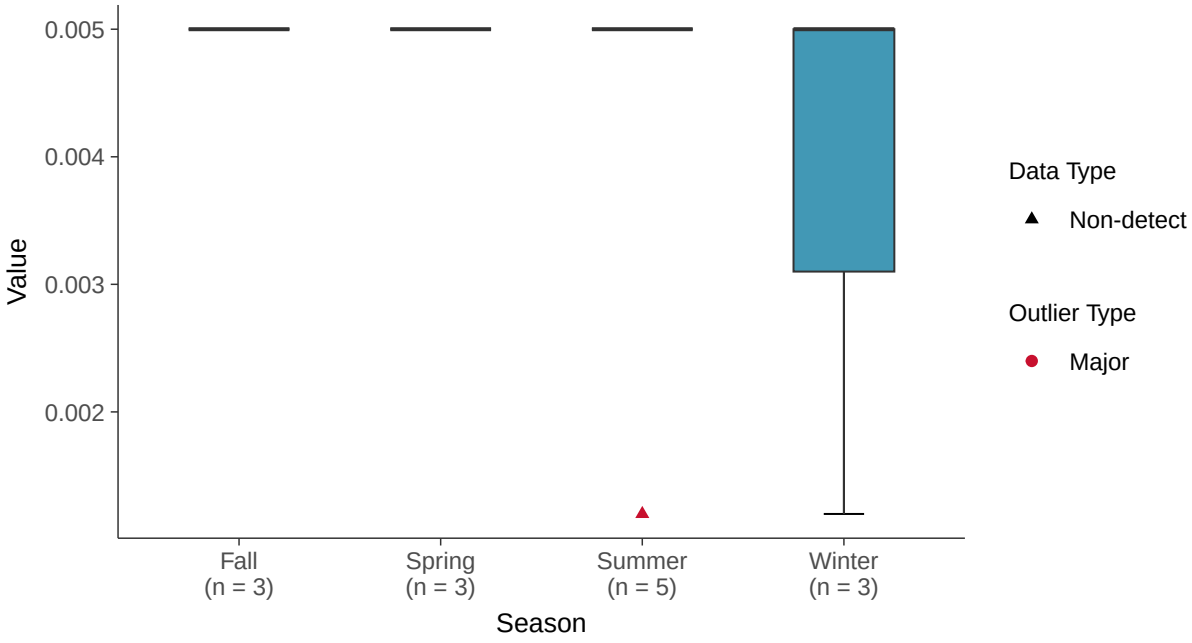
Boxplot

Chromium, MW-7C (mg/l)



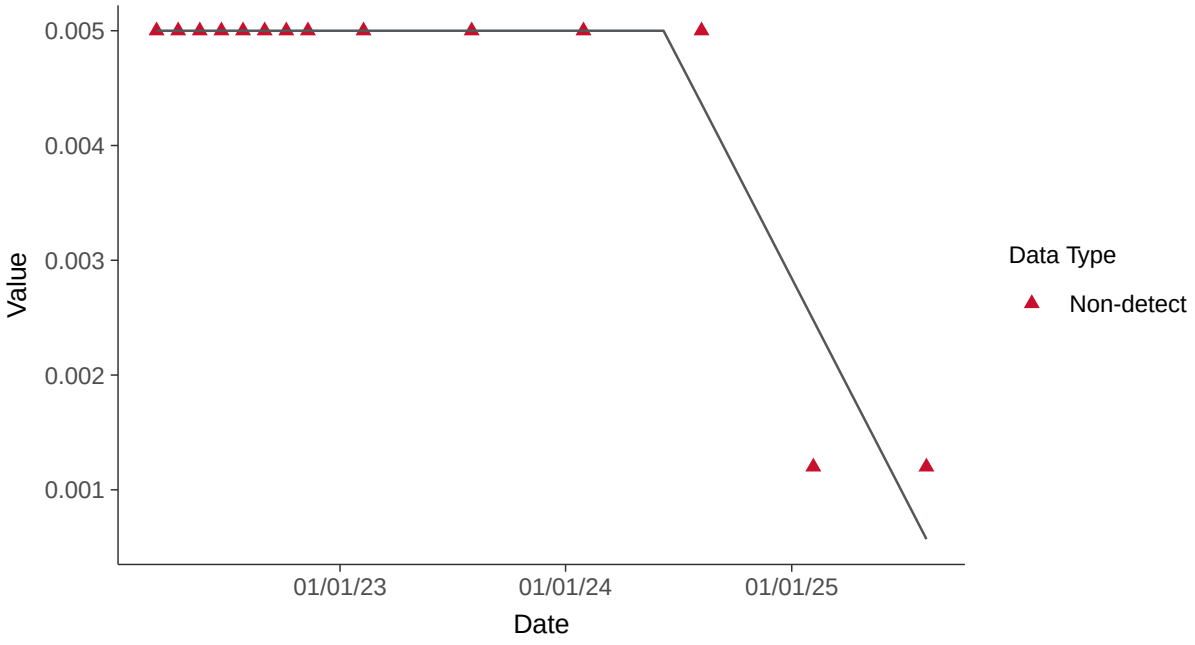
Boxplot by Season

Chromium, MW-7C (mg/l)



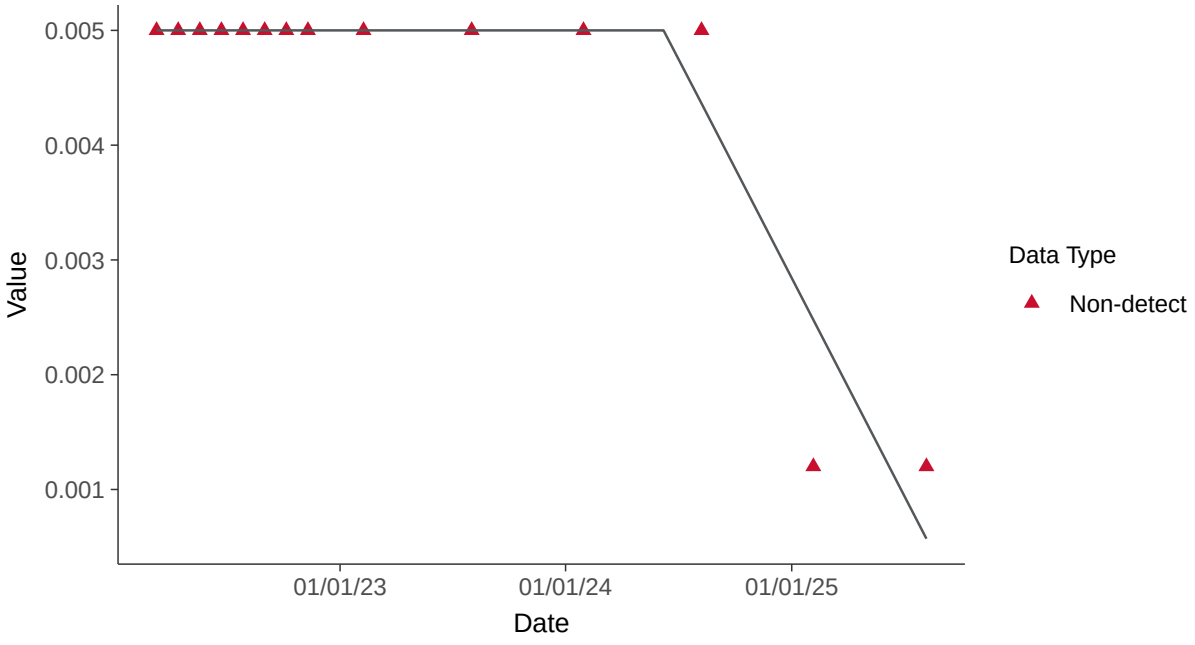
Trend Regression: Piecewise Linear-Linear

Chromium, MW-7C (mg/l)



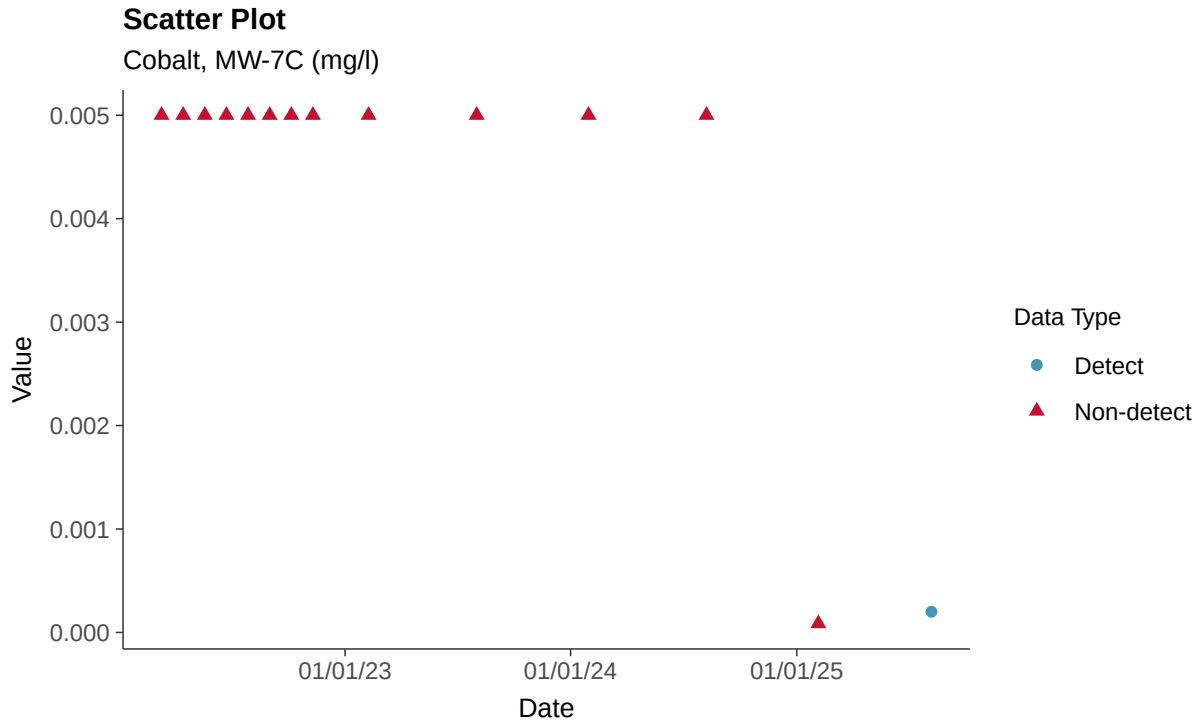
Trend Regression: Piecewise Linear-Linear-Linear

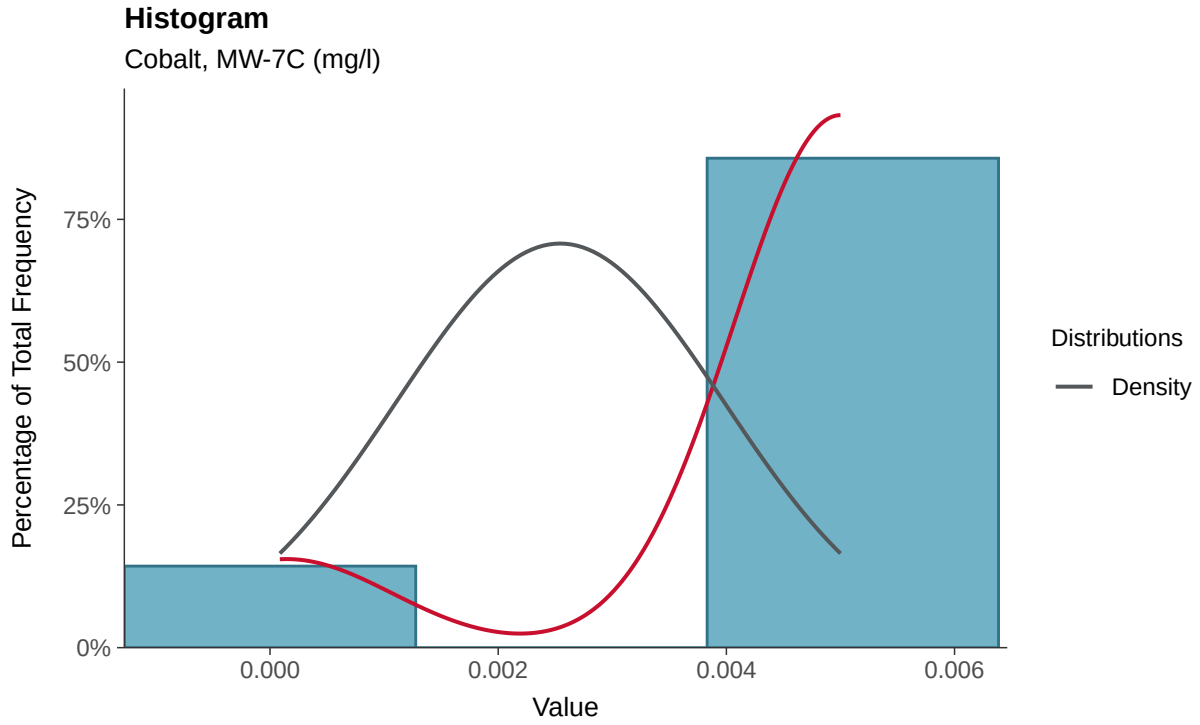
Chromium, MW-7C (mg/l)



Appendix IV: Cobalt, MW-7C

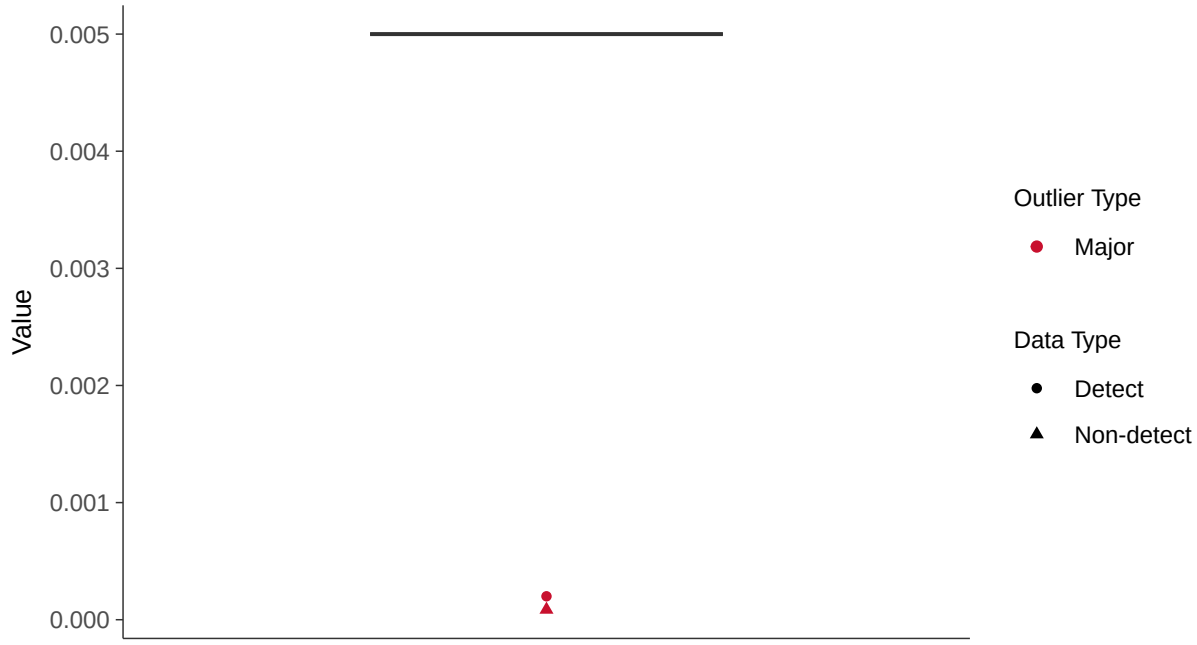
ID: 18_3_110





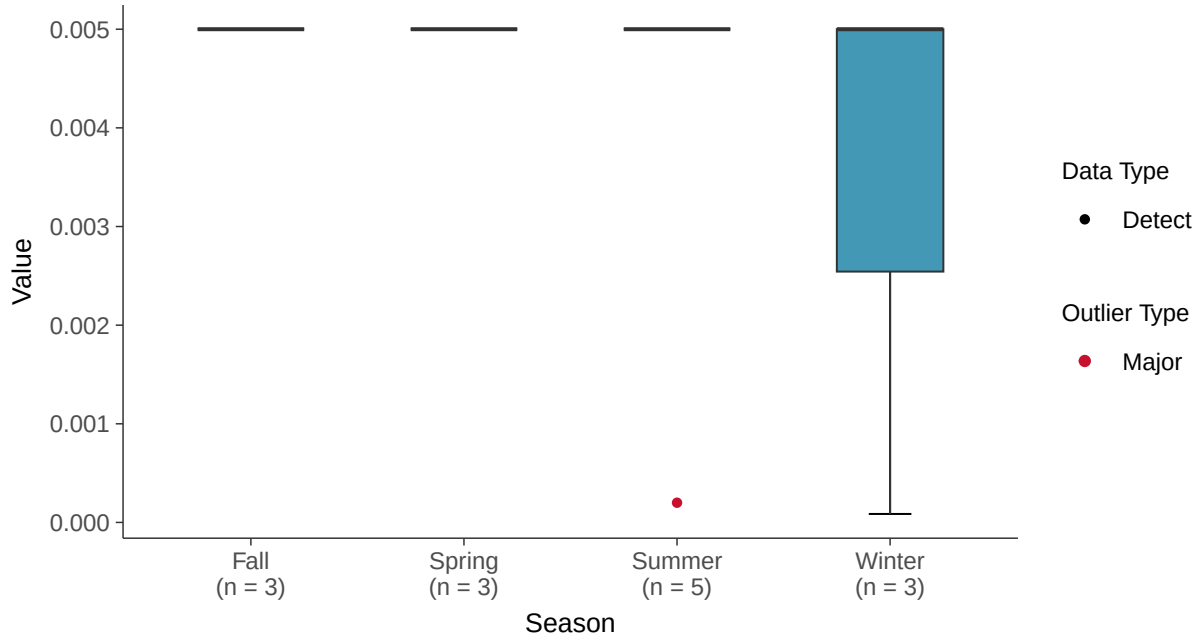
Boxplot

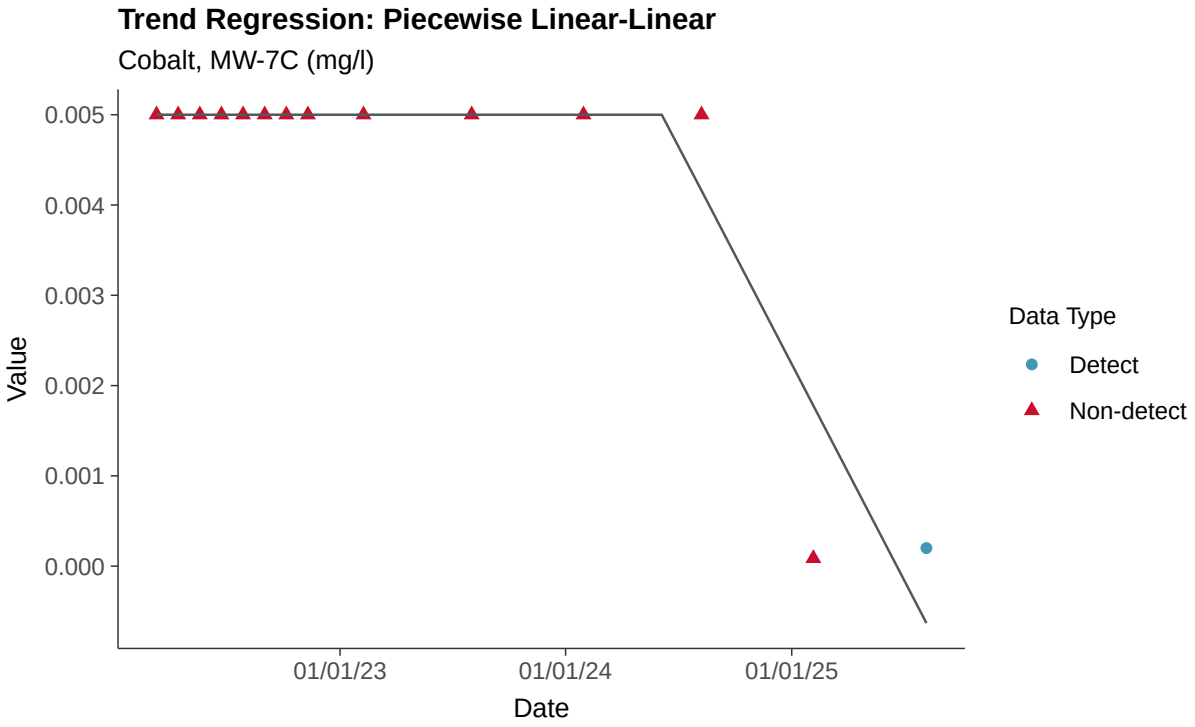
Cobalt, MW-7C (mg/l)



Boxplot by Season

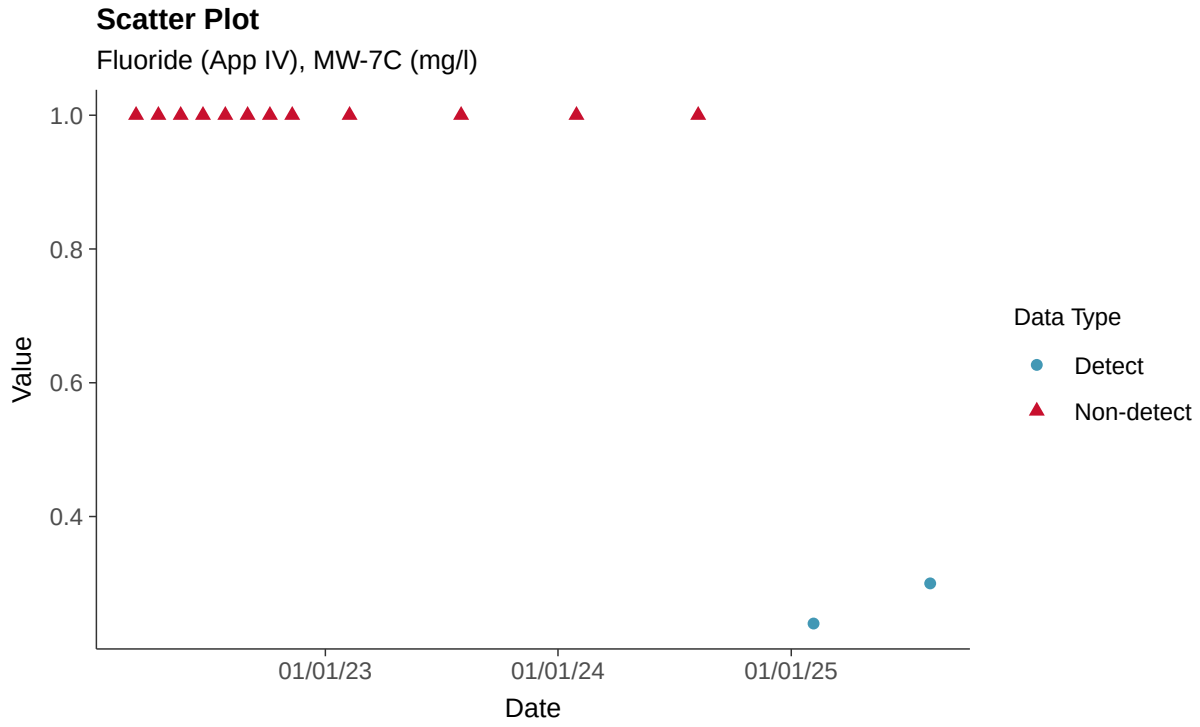
Cobalt, MW-7C (mg/l)

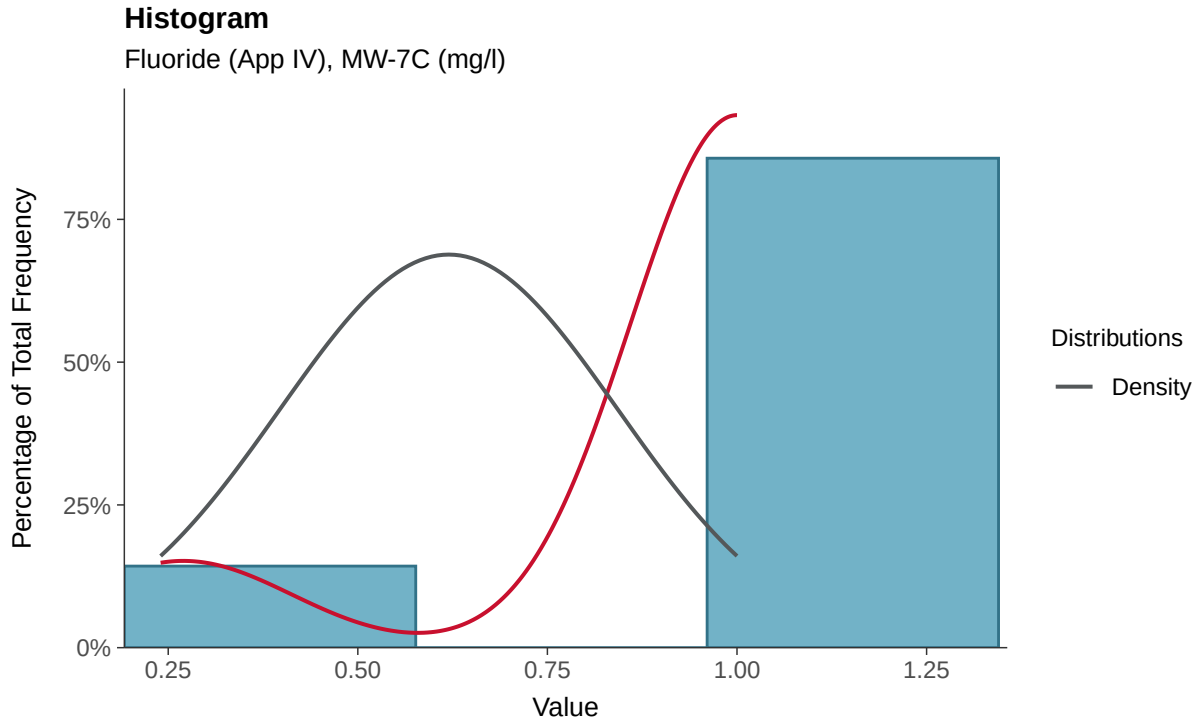



Trend Regression: Piecewise Linear-Linear
Cobalt, MW-7C (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Fluoride (App IV), MW-7C

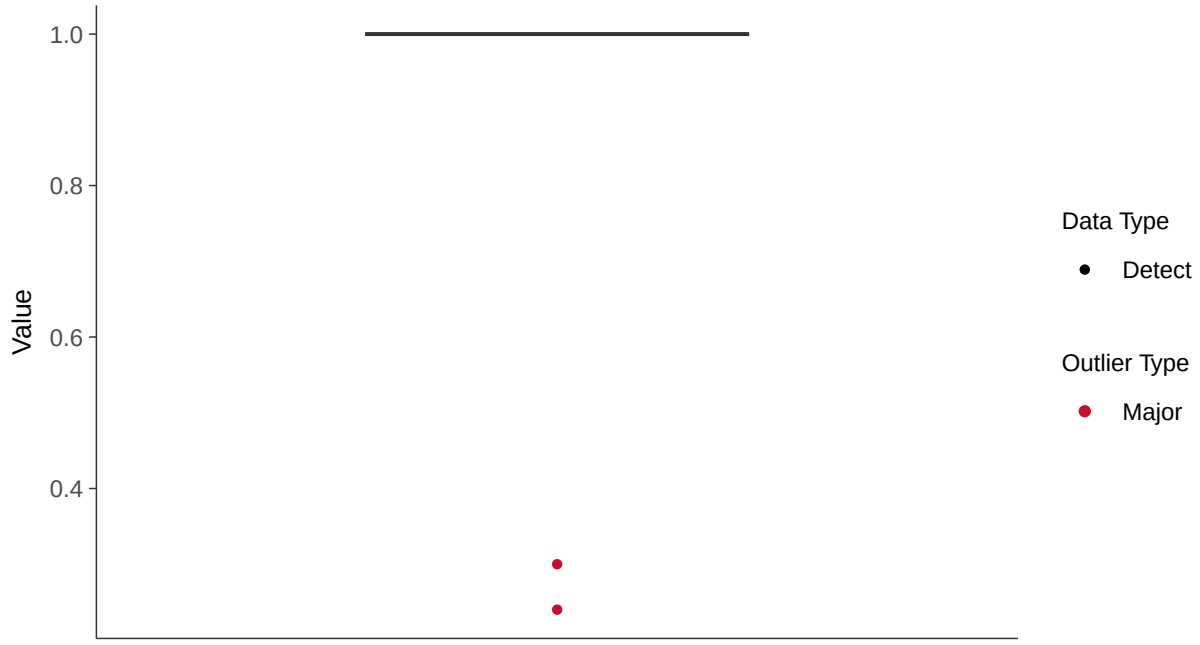
ID: 18_3_113





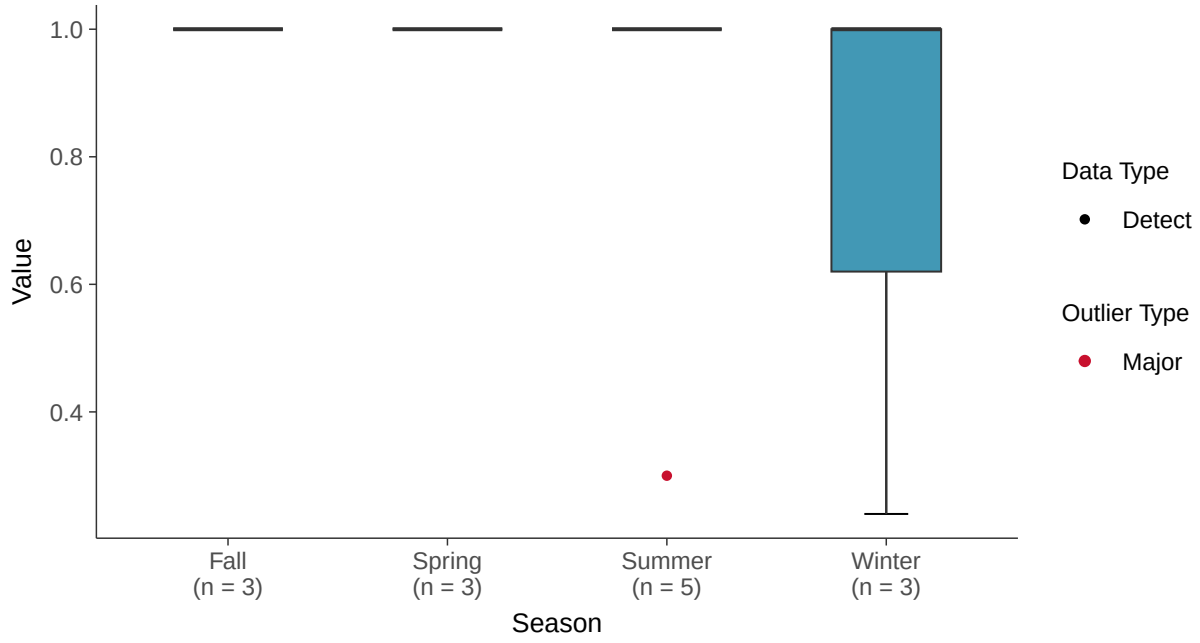
Boxplot

Fluoride (App IV), MW-7C (mg/l)



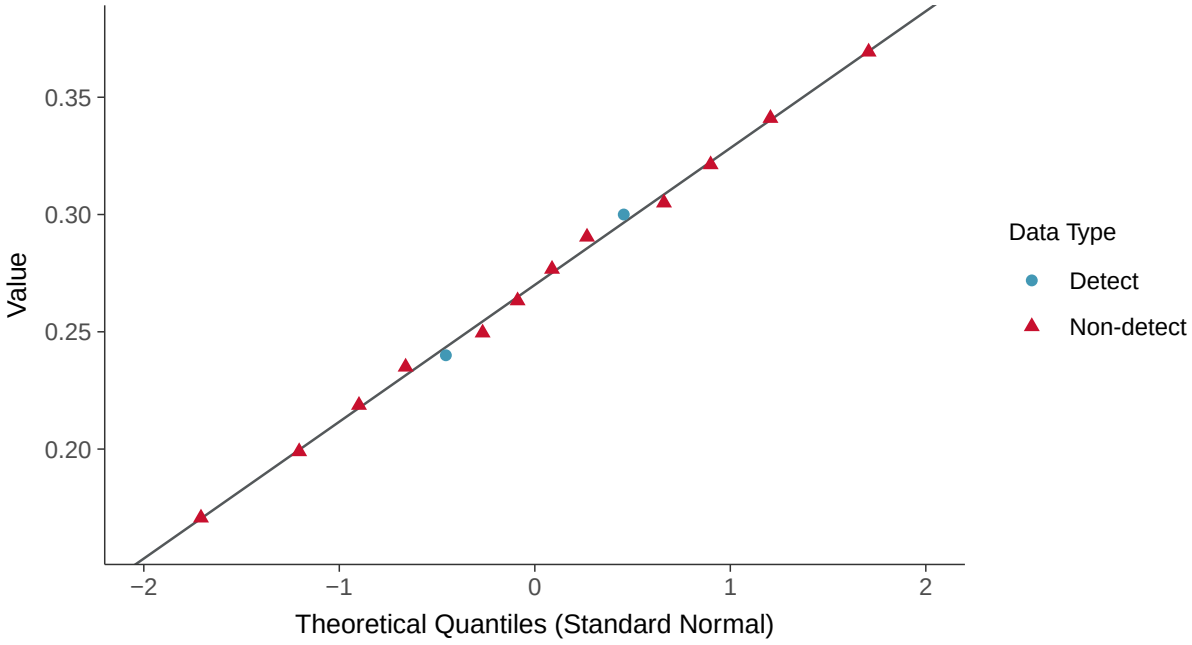
Boxplot by Season

Fluoride (App IV), MW-7C (mg/l)



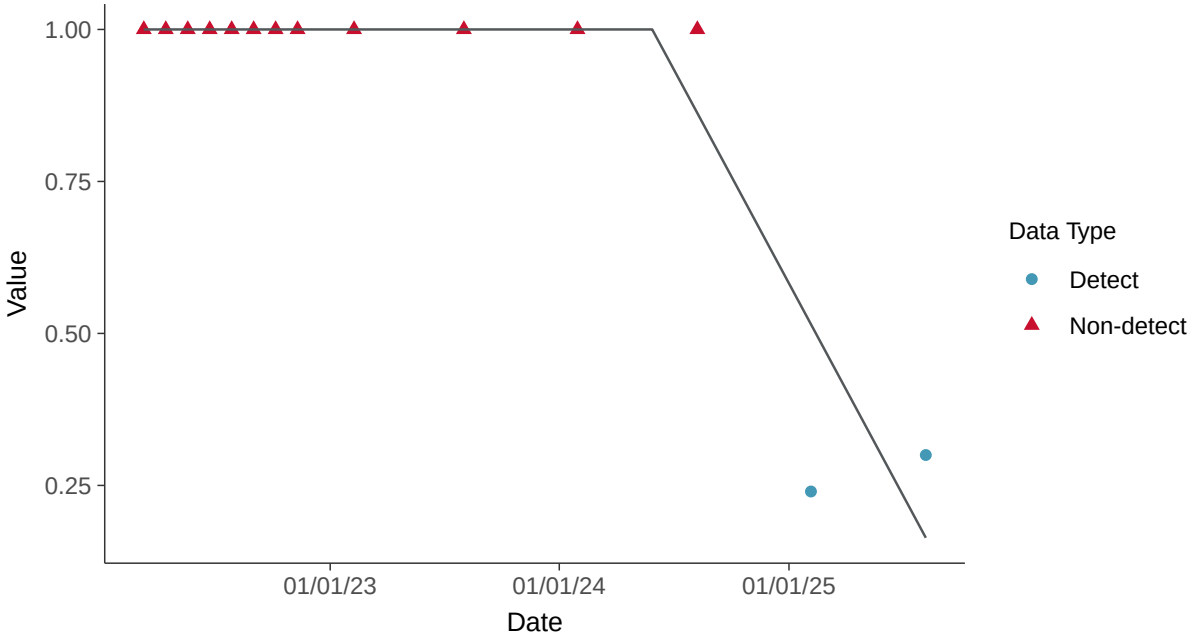
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-7C (mg/l)



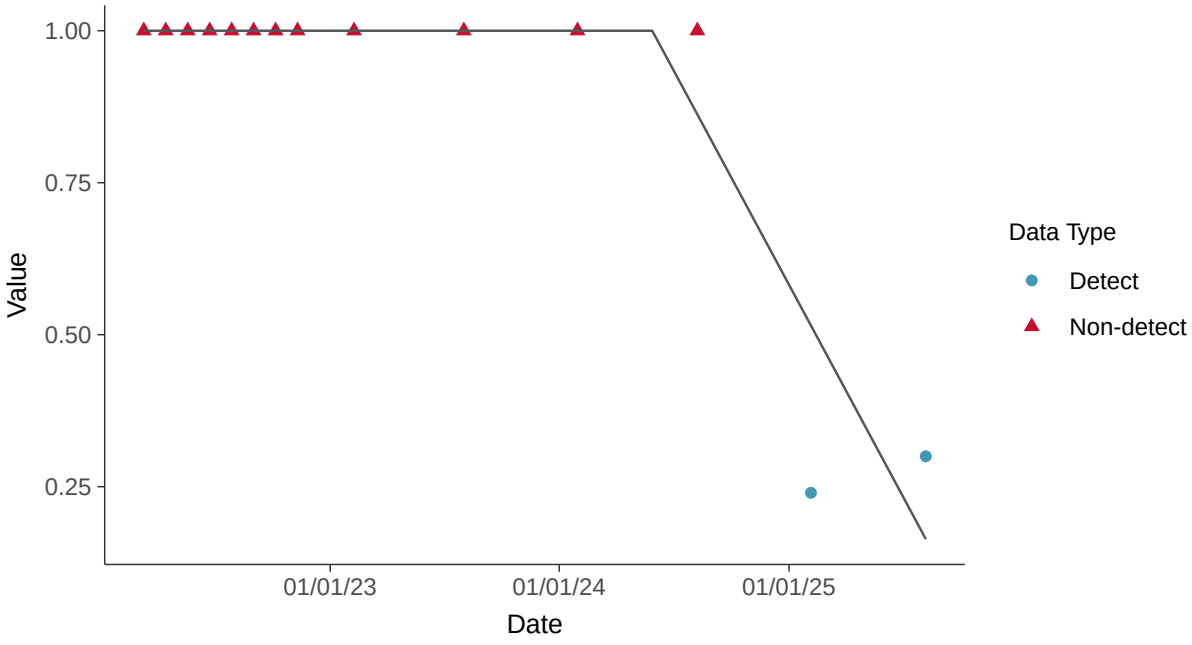
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-7C (mg/l)



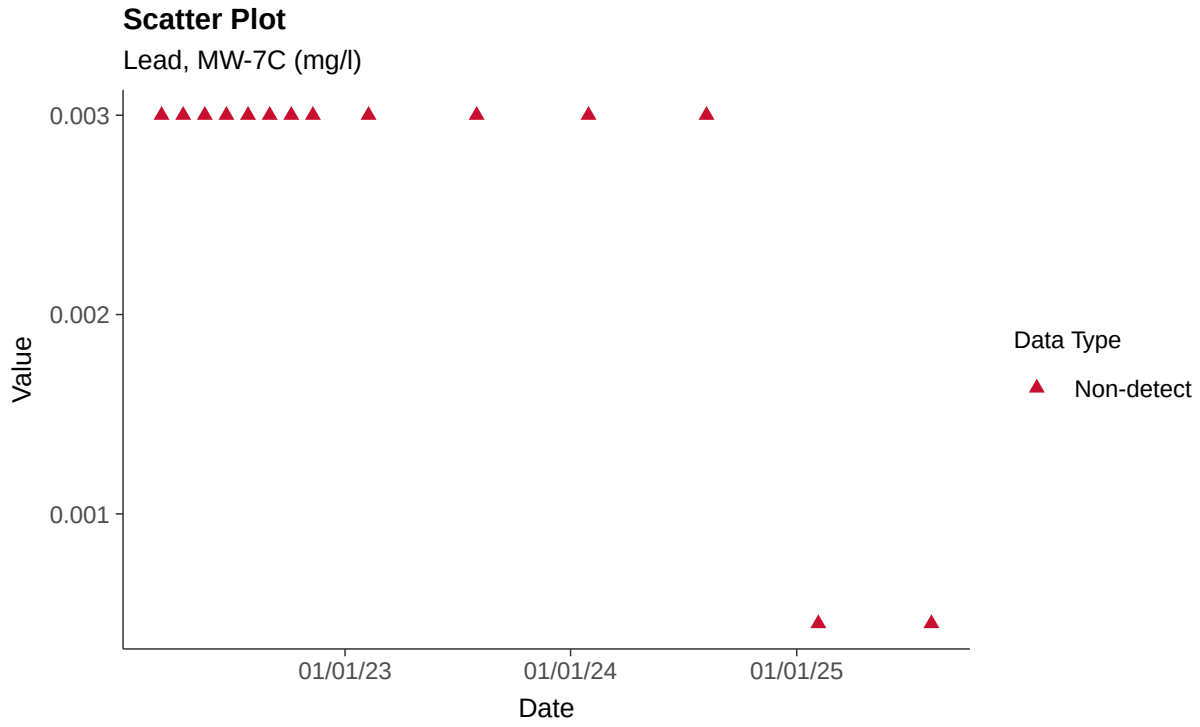
Trend Regression: Piecewise Linear-Linear-Linear

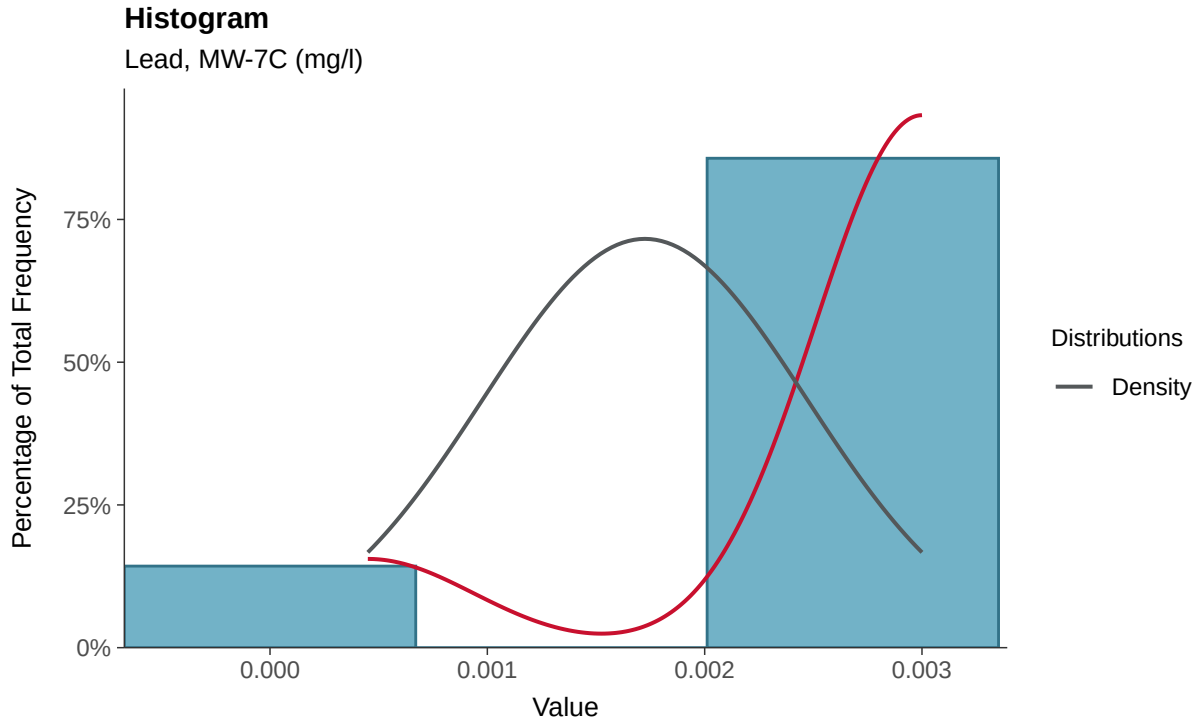
Fluoride (App IV), MW-7C (mg/l)



Appendix IV: Lead, MW-7C

ID: 18_3_115



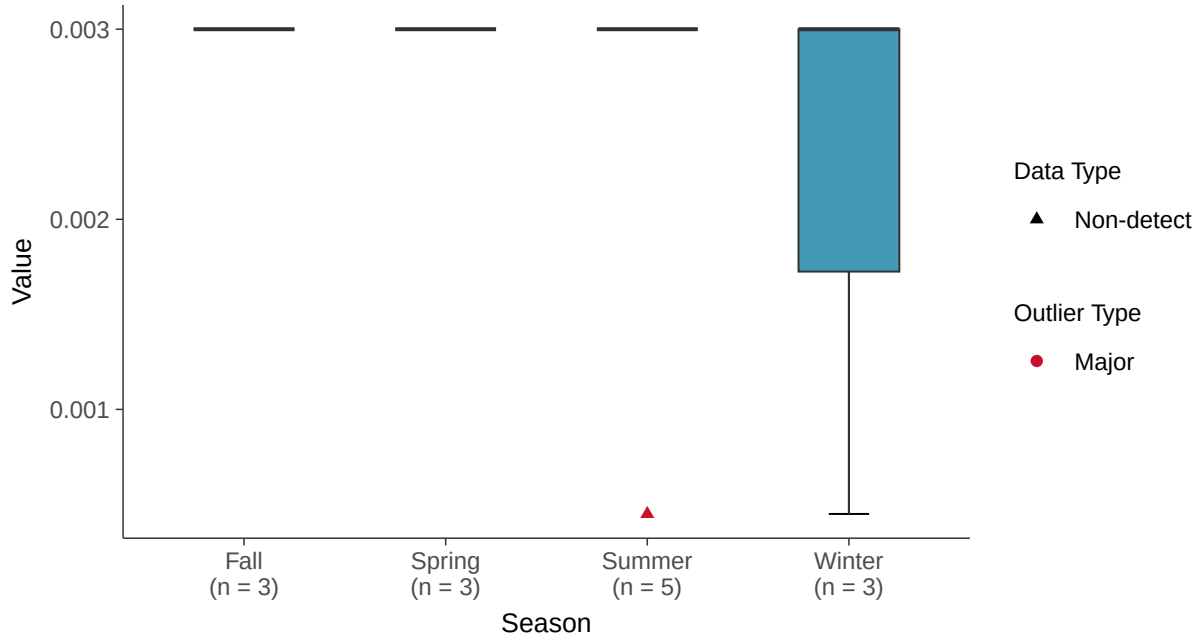


Boxplot

Lead, MW-7C (mg/l)

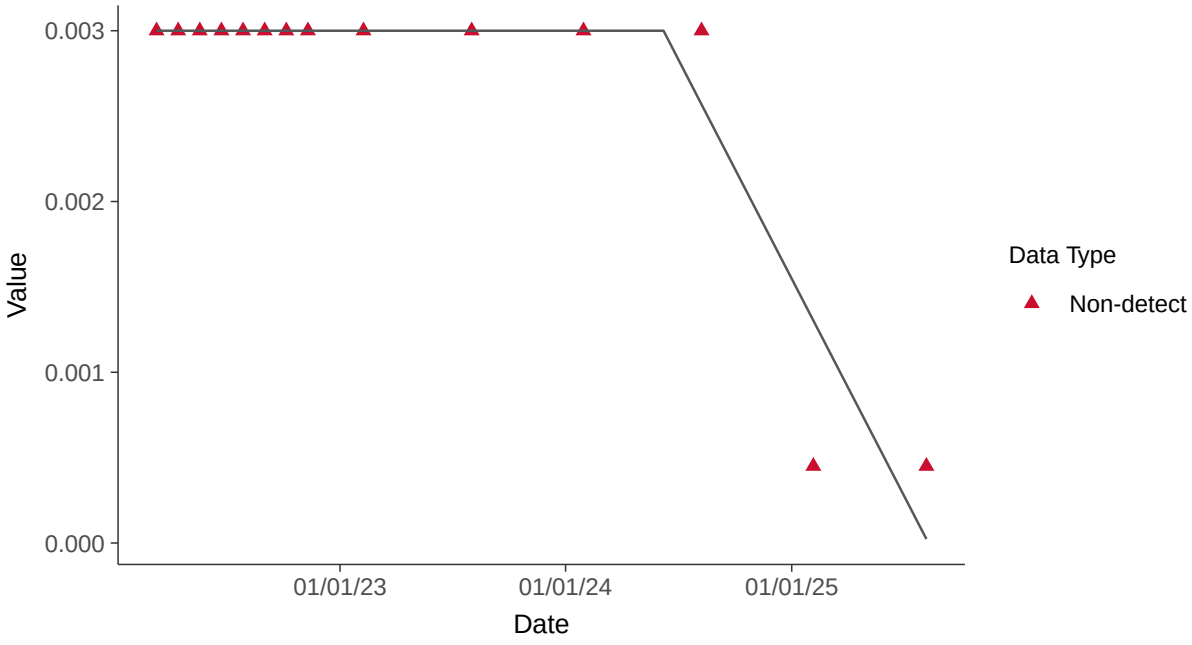
Boxplot by Season

Lead, MW-7C (mg/l)



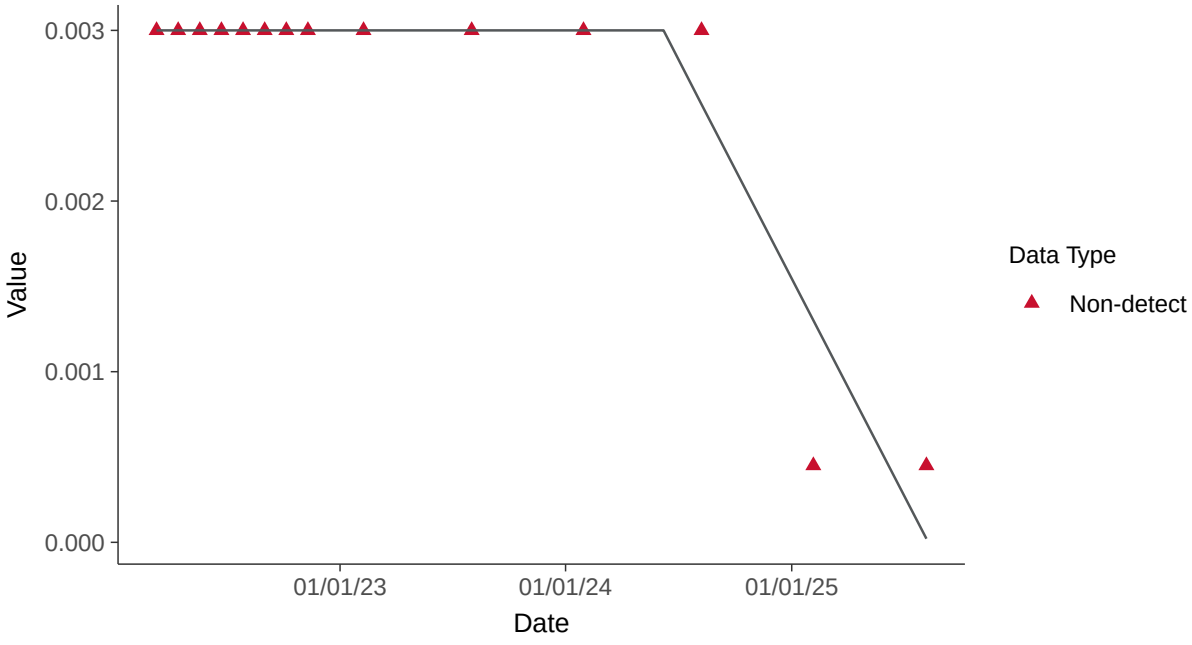
Trend Regression: Piecewise Linear-Linear

Lead, MW-7C (mg/l)



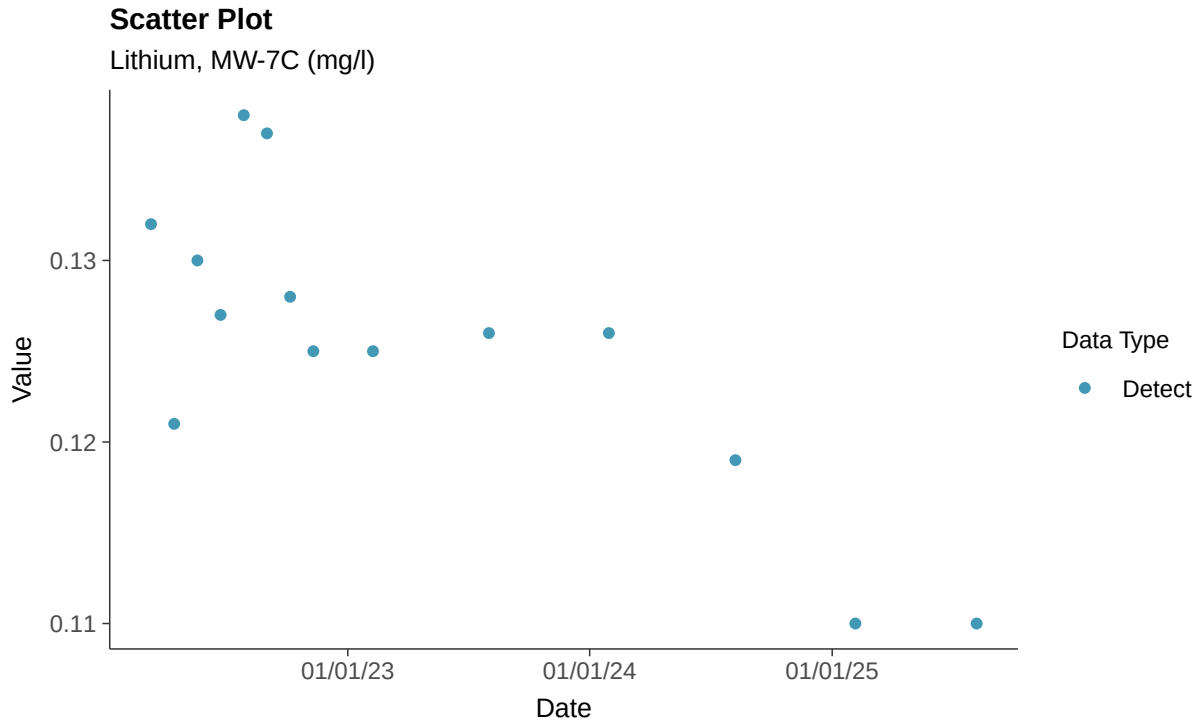
Trend Regression: Piecewise Linear-Linear-Linear

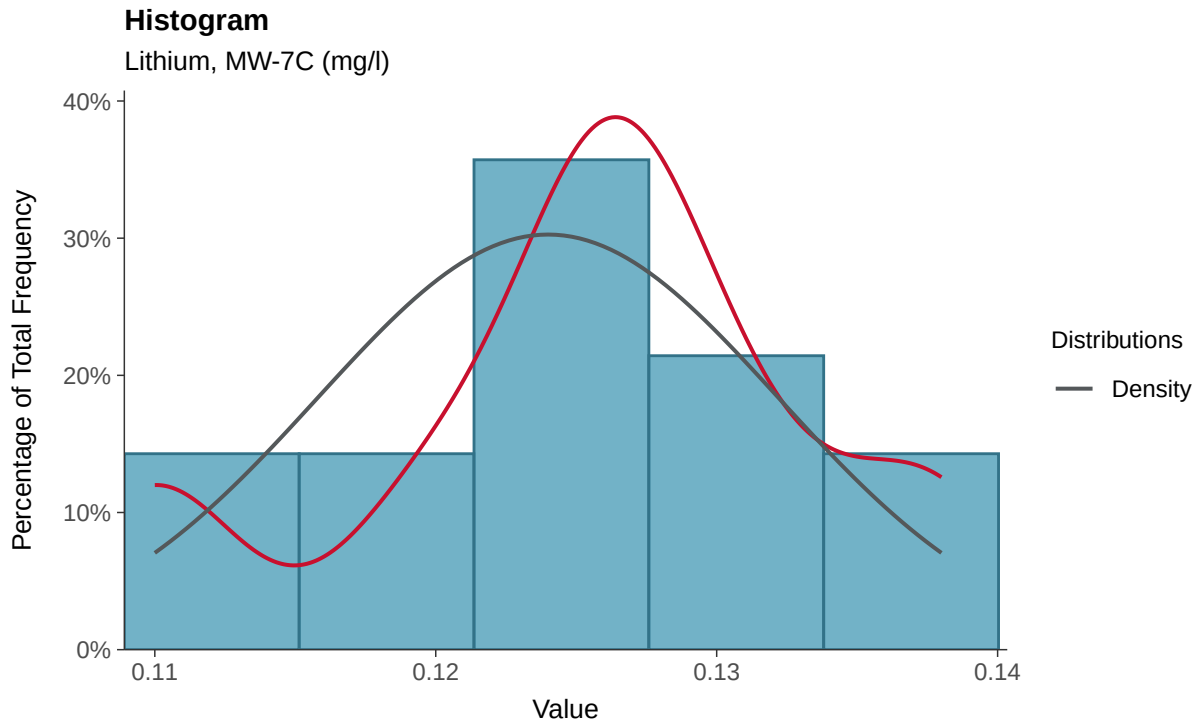
Lead, MW-7C (mg/l)



Appendix IV: Lithium, MW-7C

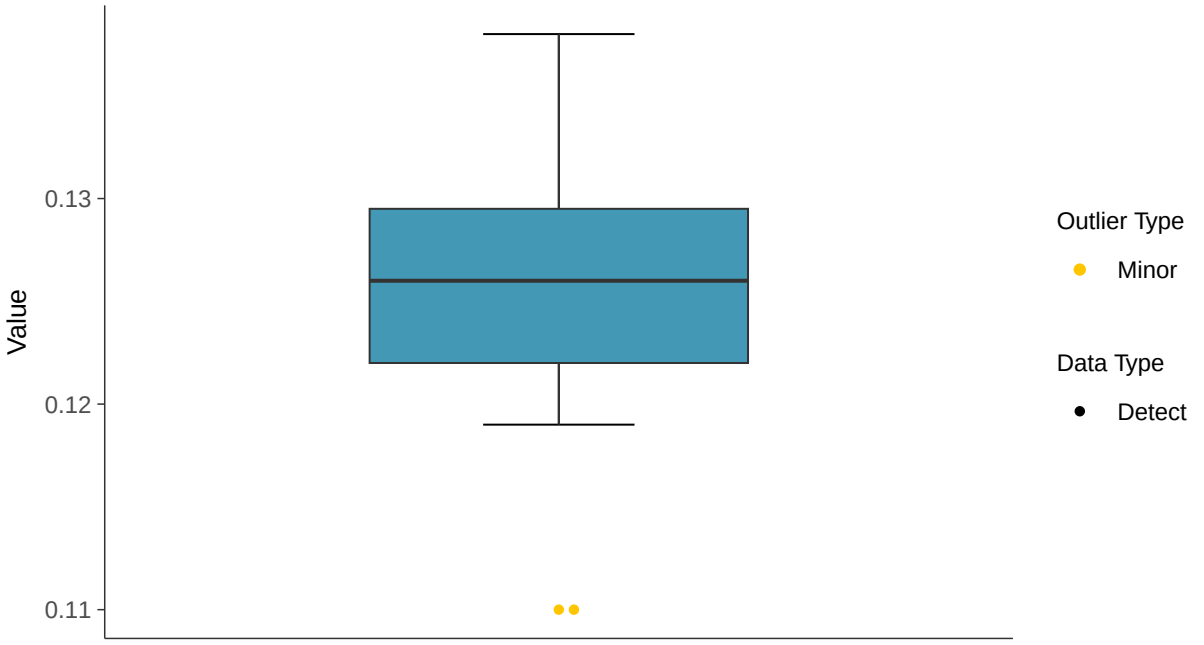
ID: 18_3_116





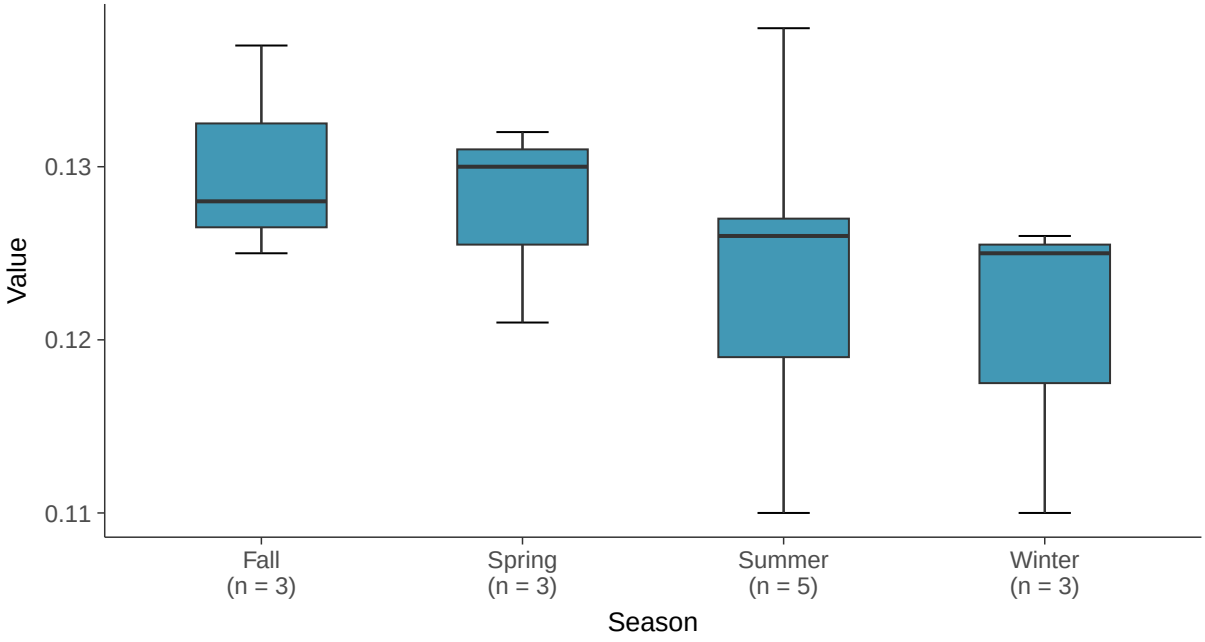
Boxplot

Lithium, MW-7C (mg/l)



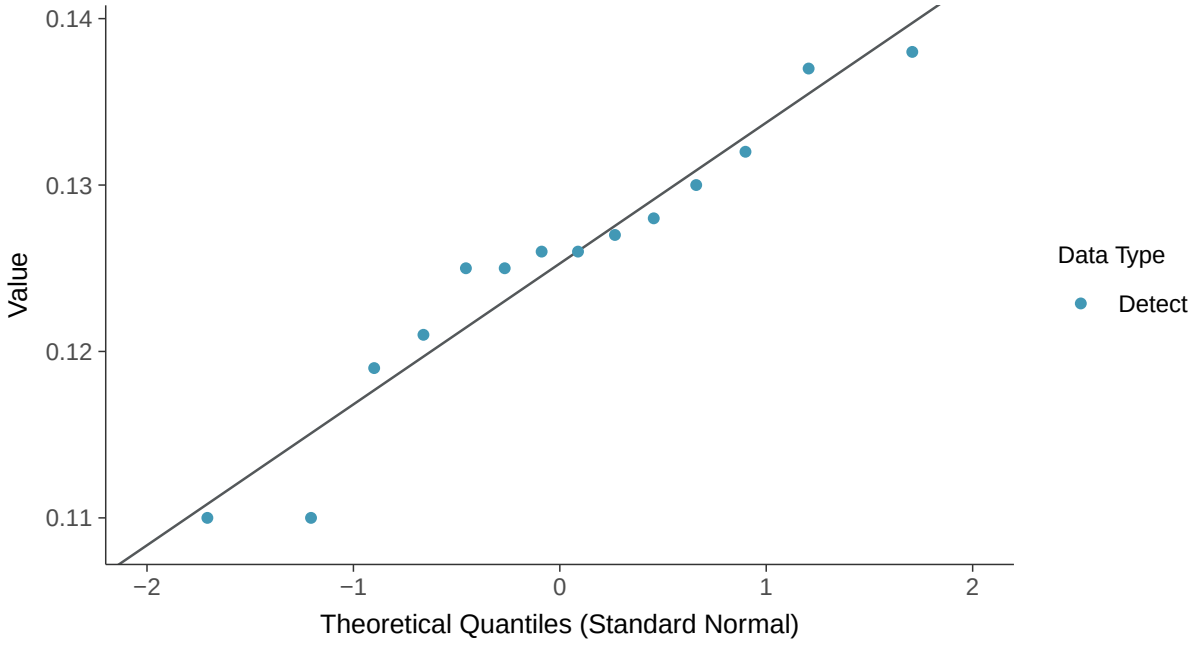
Boxplot by Season

Lithium, MW-7C (mg/l)



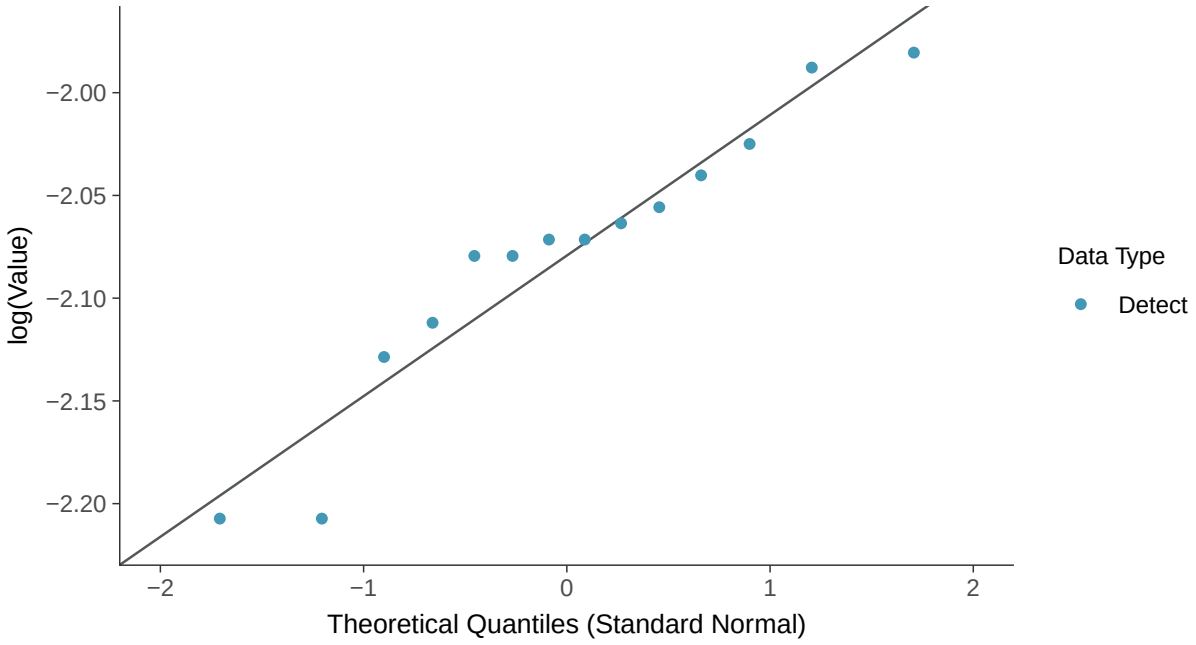
Normal Q-Q plot

Lithium, MW-7C (mg/l)



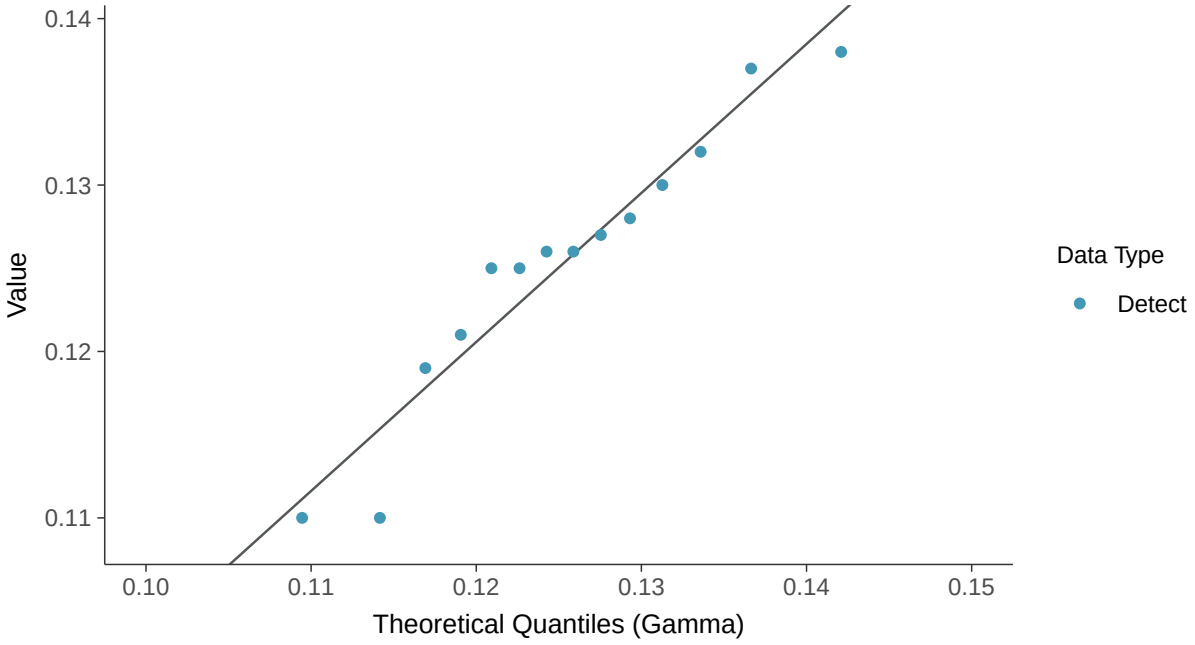
Lognormal Q-Q plot

Lithium, MW-7C (mg/l)



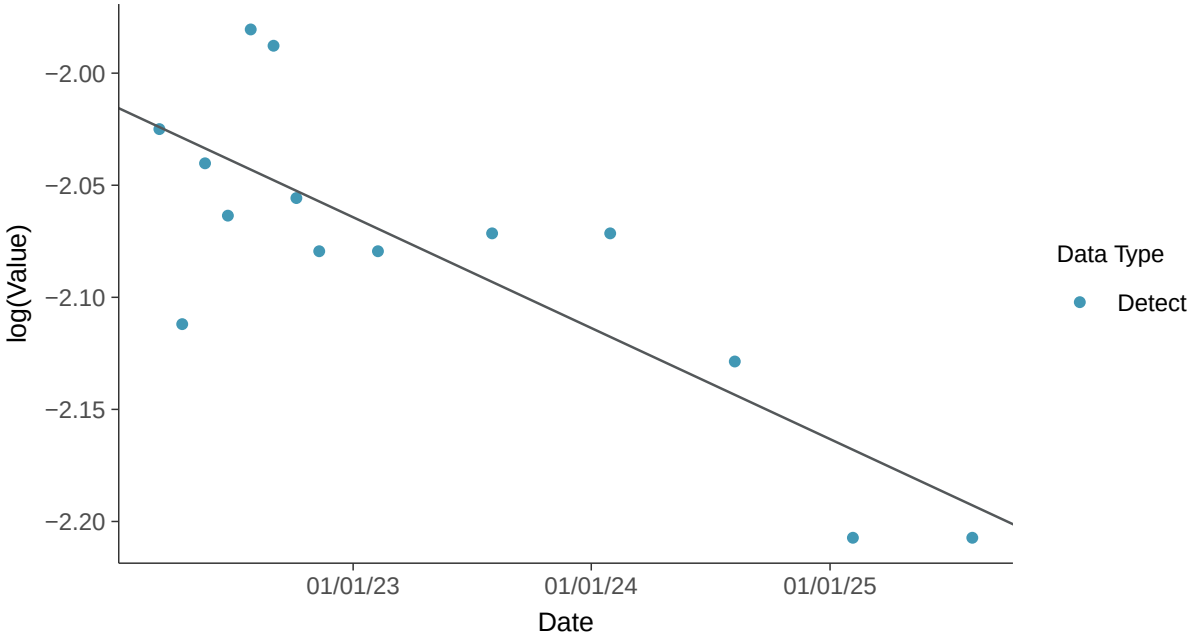
Gamma Q-Q plot

Lithium, MW-7C (mg/l)



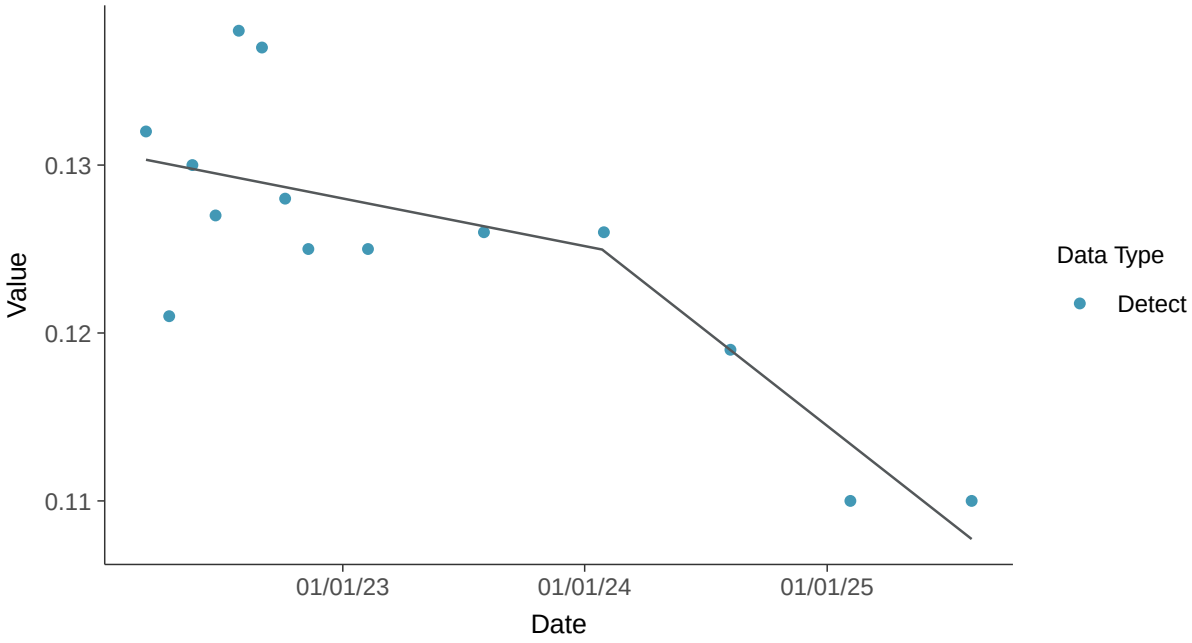
Trend Regression: Lognormal MLE

Lithium, MW-7C (mg/l)



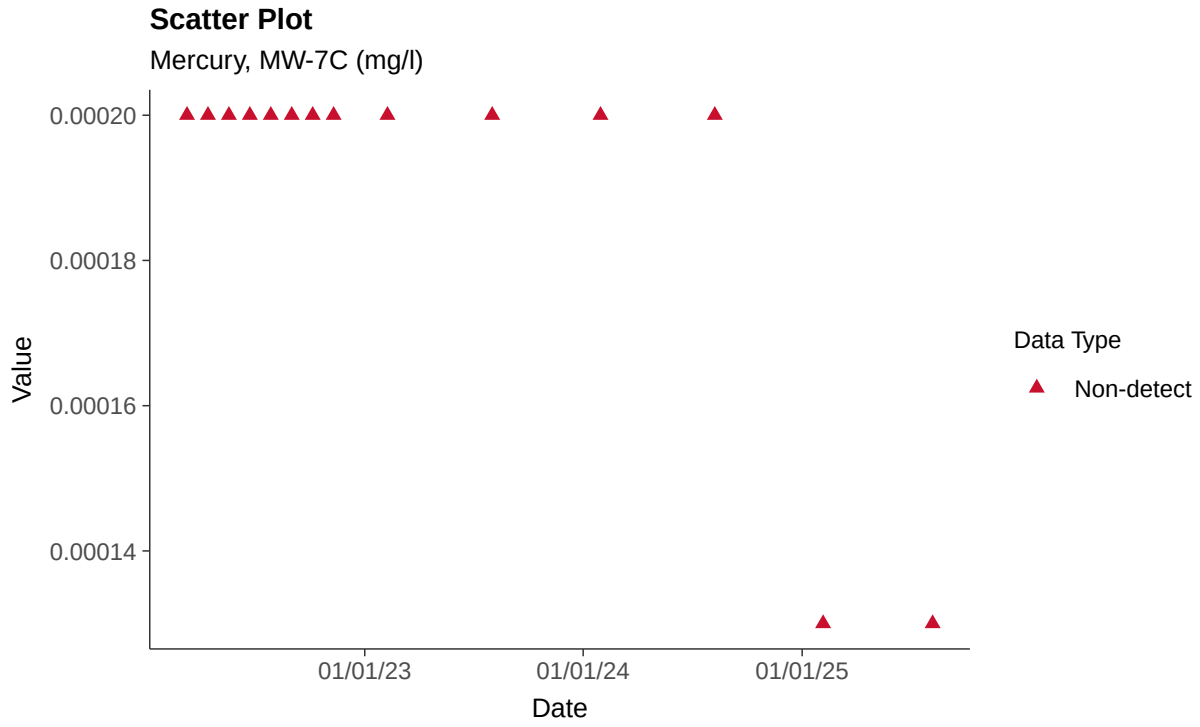
Trend Regression: Piecewise Linear-Linear

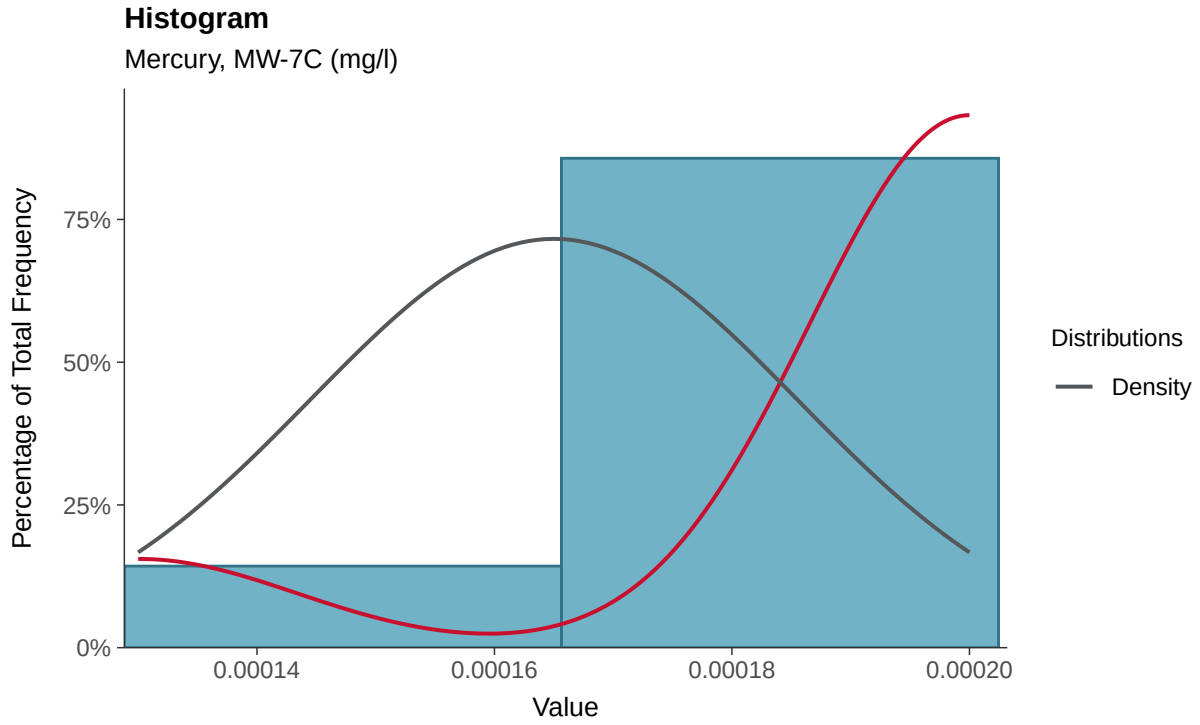
Lithium, MW-7C (mg/l)



Appendix IV: Mercury, MW-7C

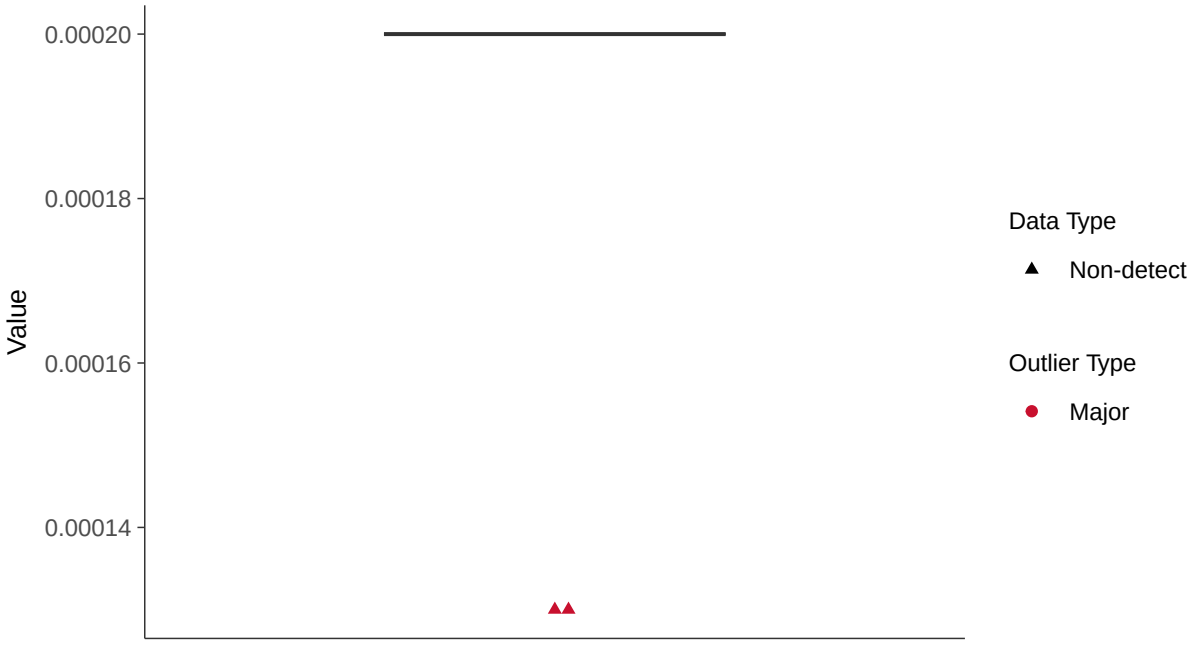
ID: 18_3_117





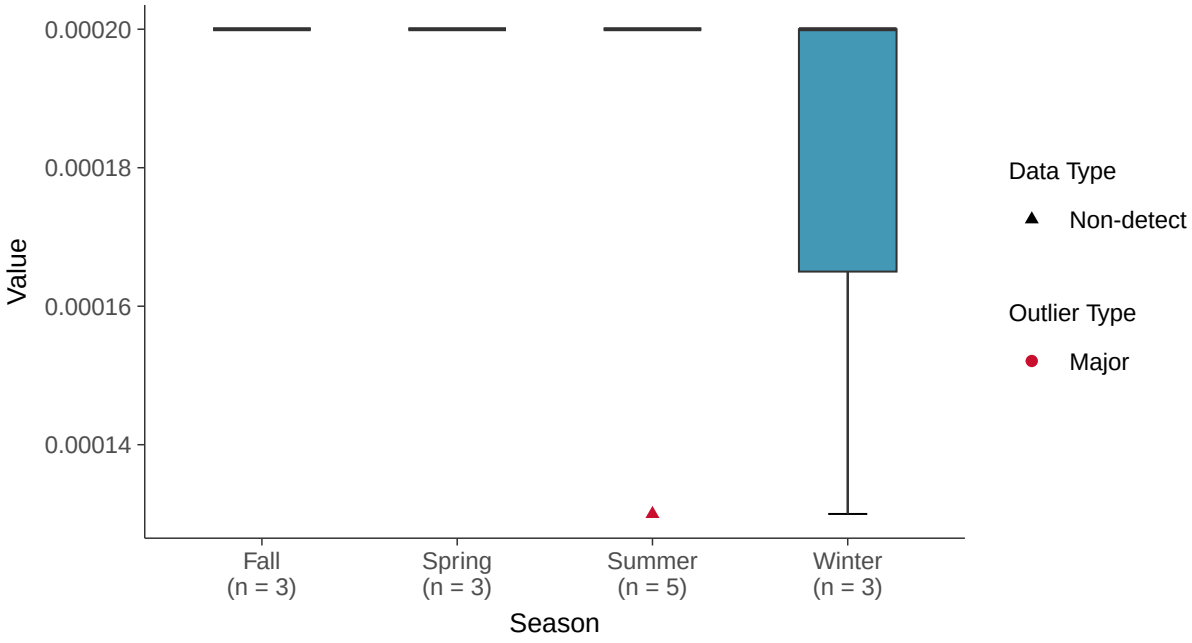
Boxplot

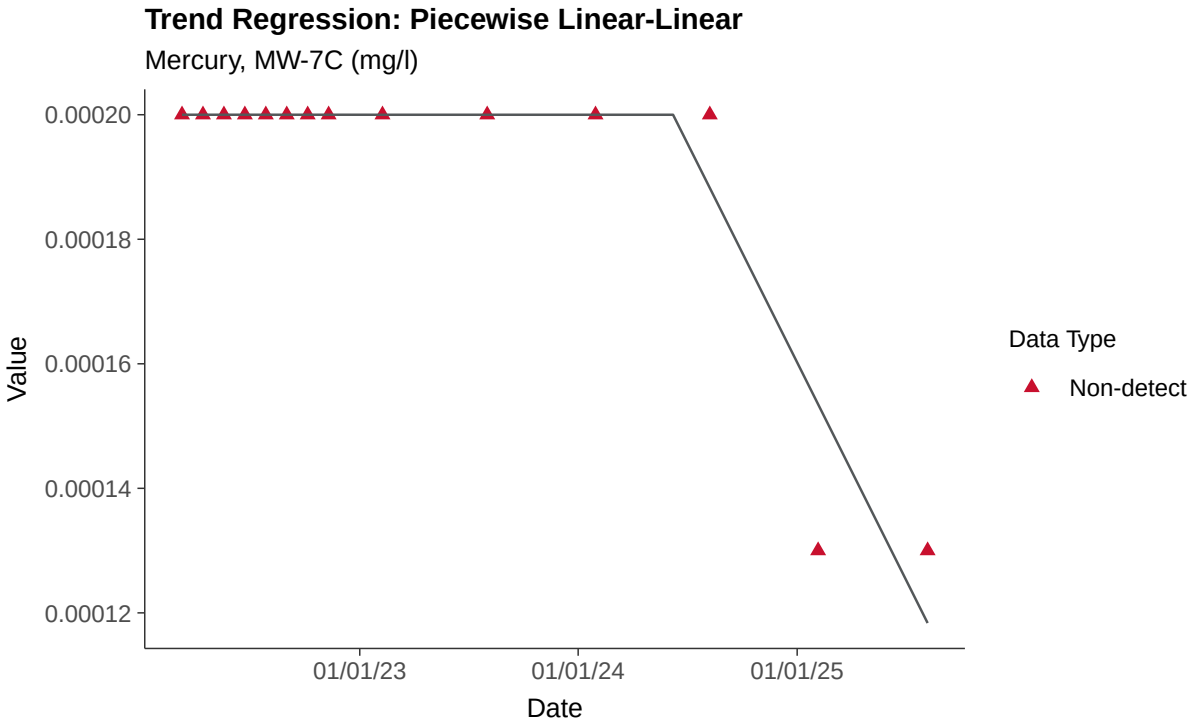
Mercury, MW-7C (mg/l)



Boxplot by Season

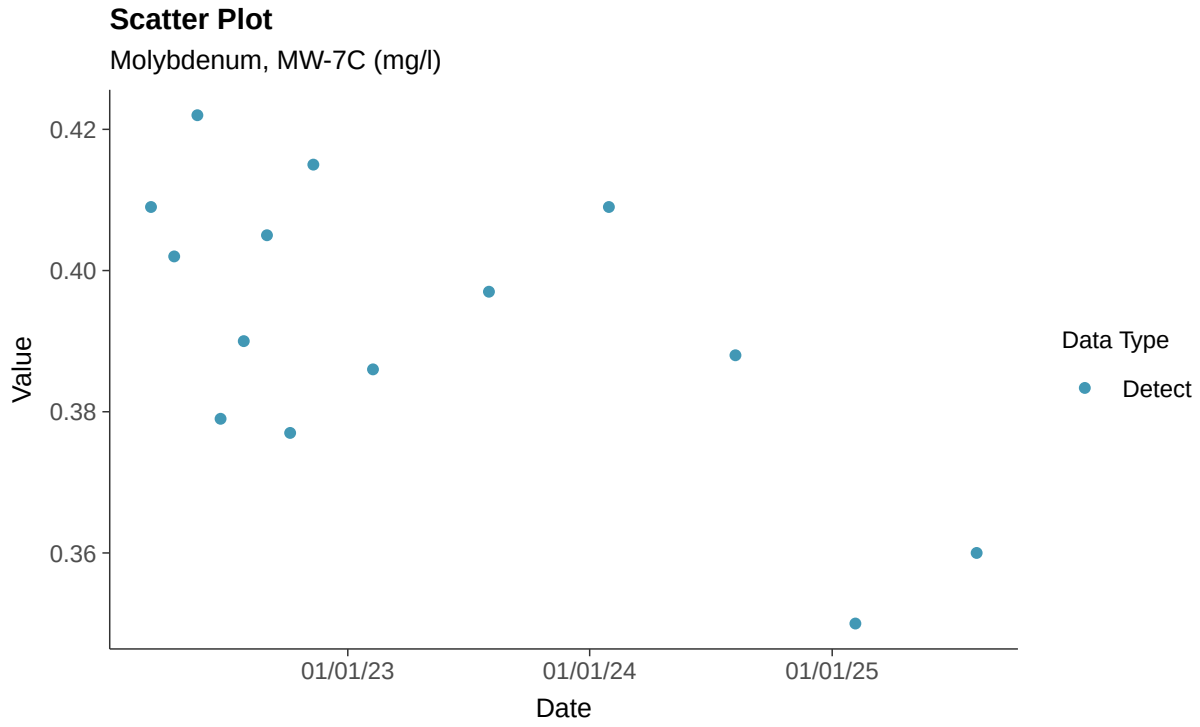
Mercury, MW-7C (mg/l)

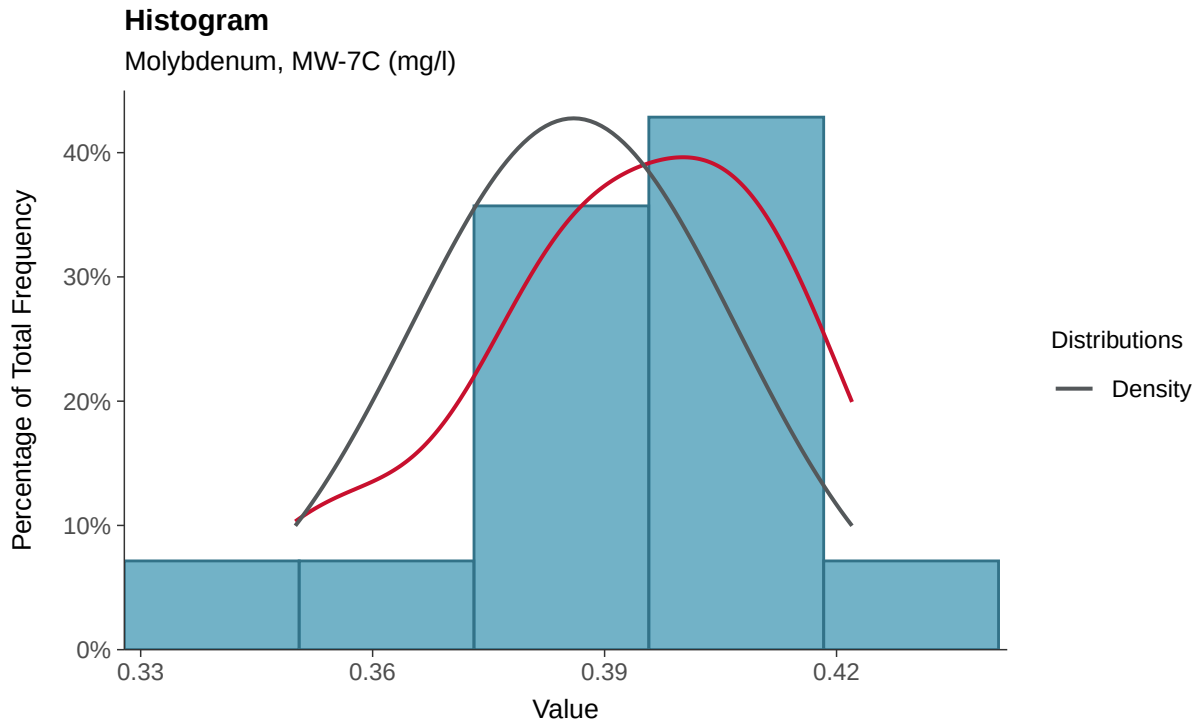



Trend Regression: Piecewise Linear-Linear
Mercury, MW-7C (mg/l)
0.00020
0.00018
0.00016
0.00014
0.00012
Value
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Appendix IV: Molybdenum, MW-7C

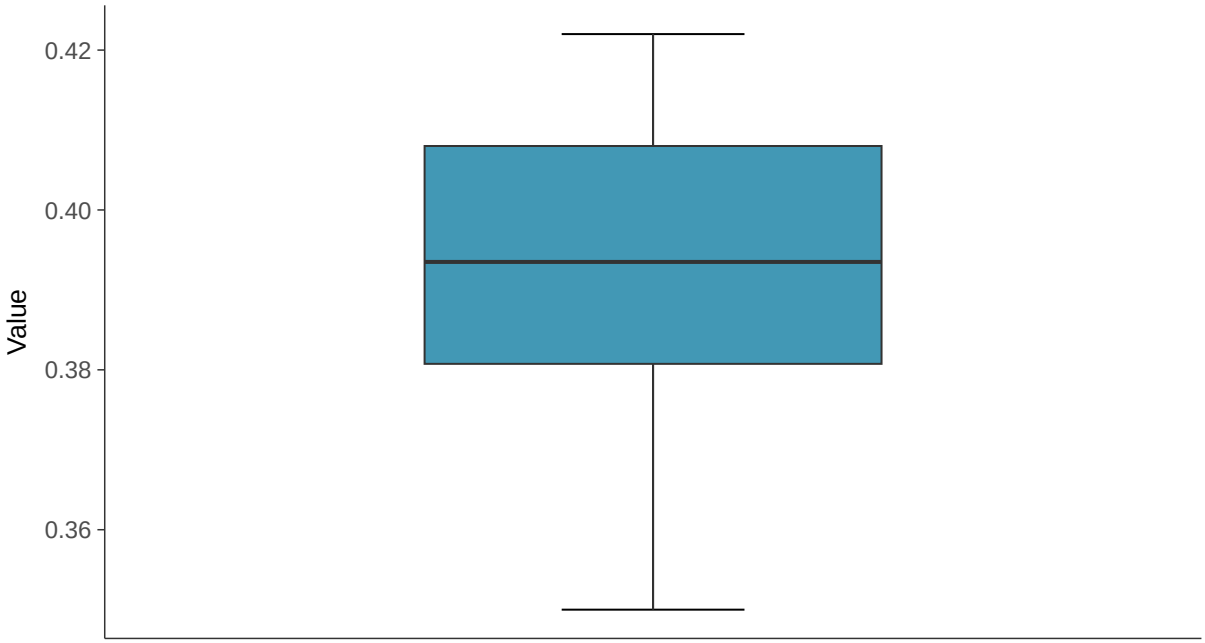
ID: 18_3_118





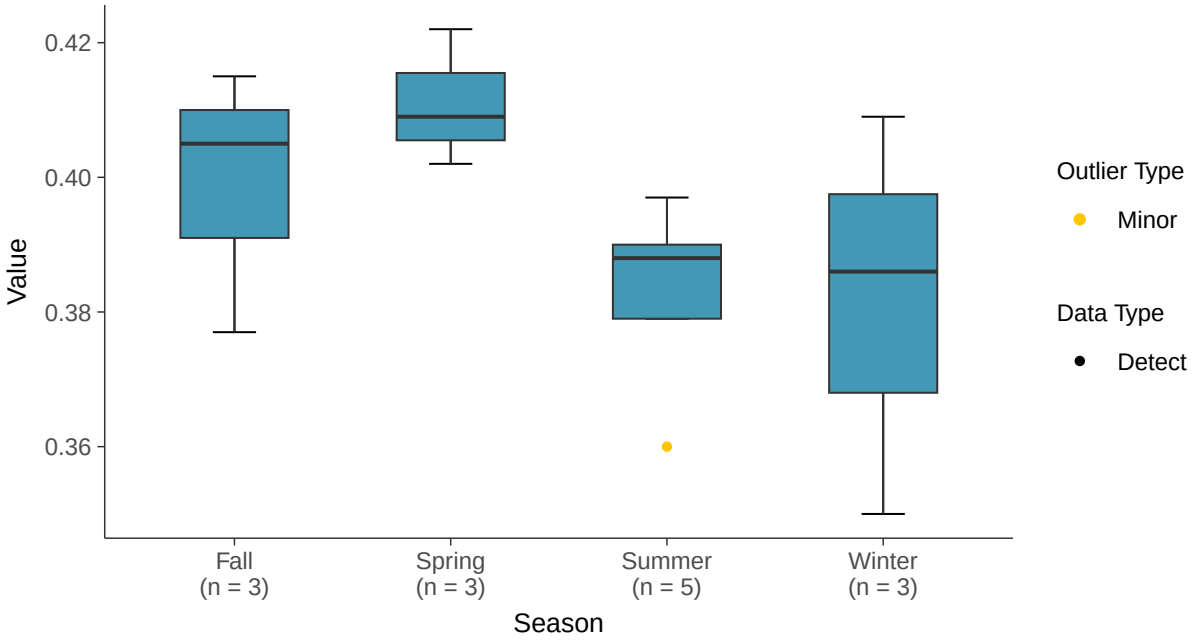
Boxplot

Molybdenum, MW-7C (mg/l)



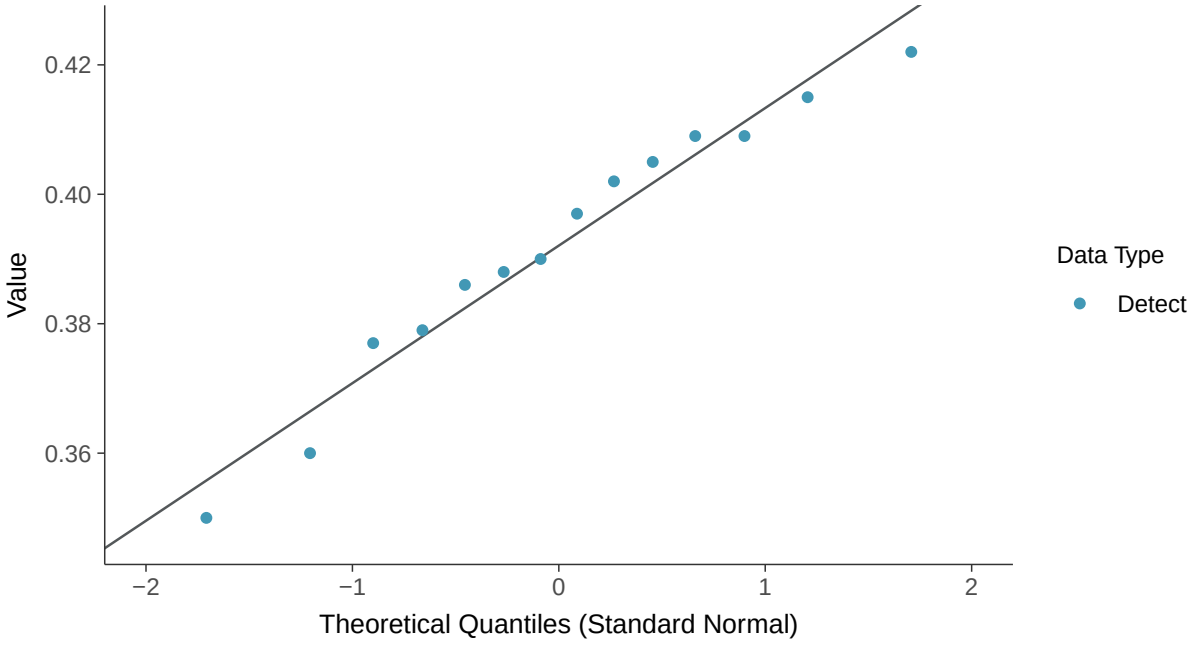
Boxplot by Season

Molybdenum, MW-7C (mg/l)



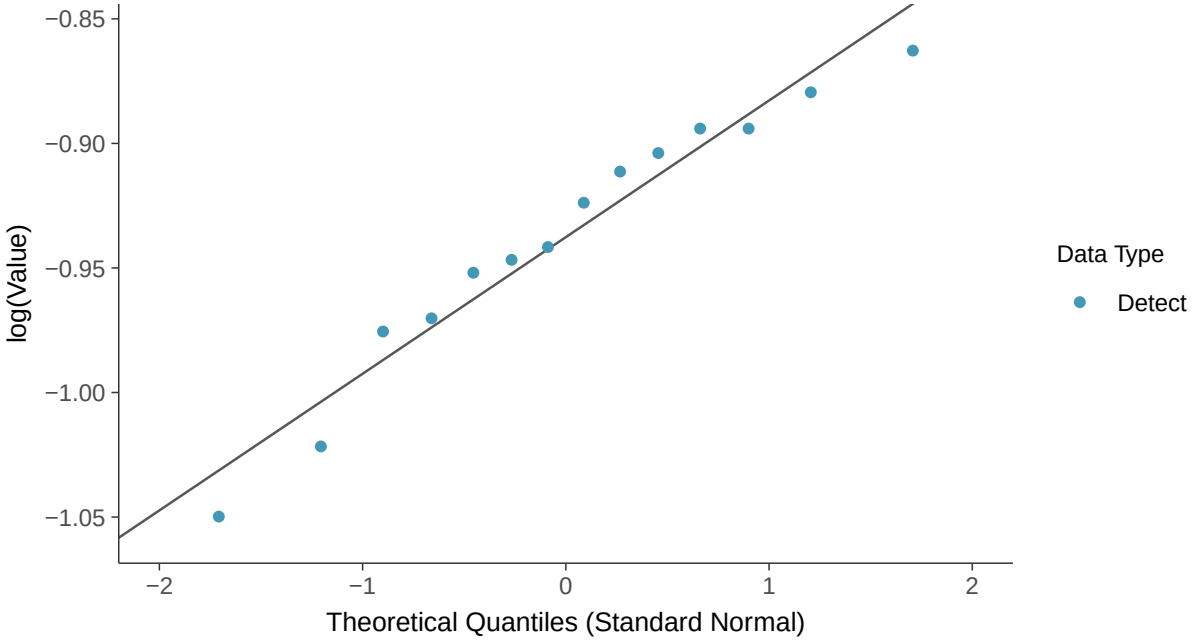
Normal Q-Q plot

Molybdenum, MW-7C (mg/l)



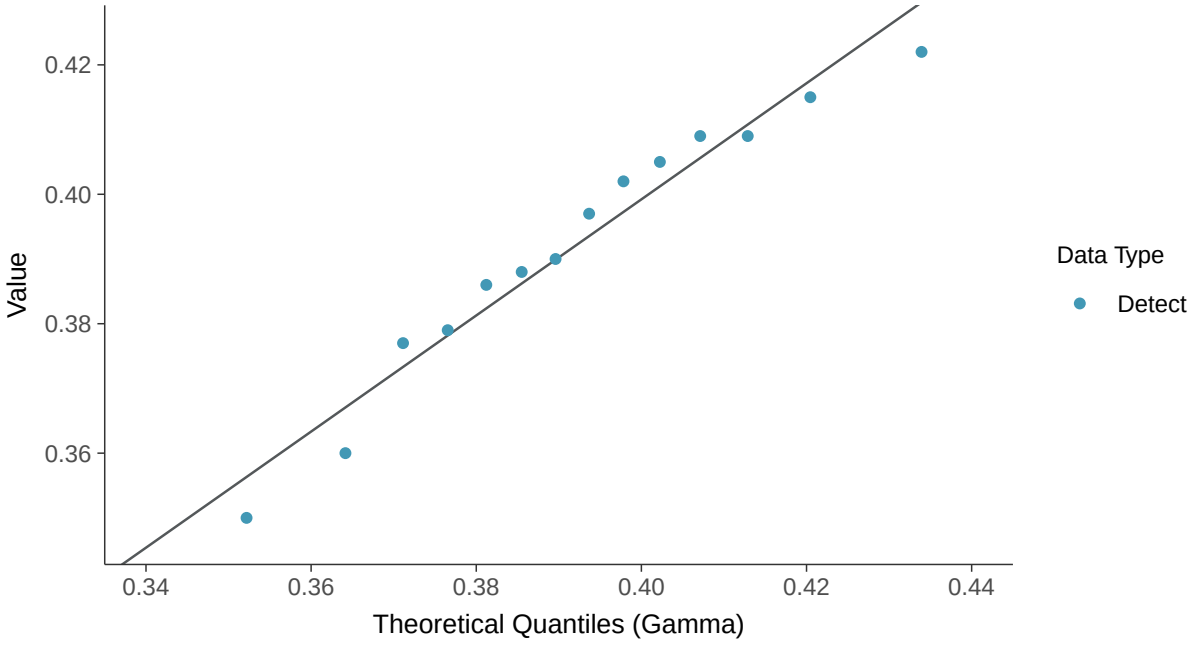
Lognormal Q-Q plot

Molybdenum, MW-7C (mg/l)



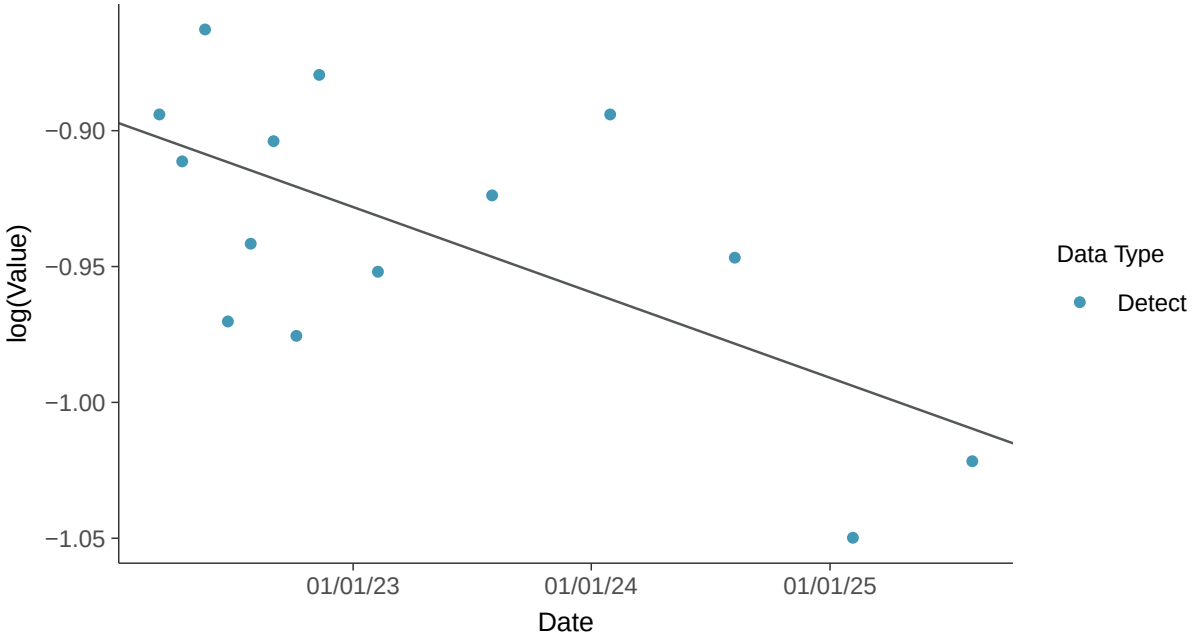
Gamma Q-Q plot

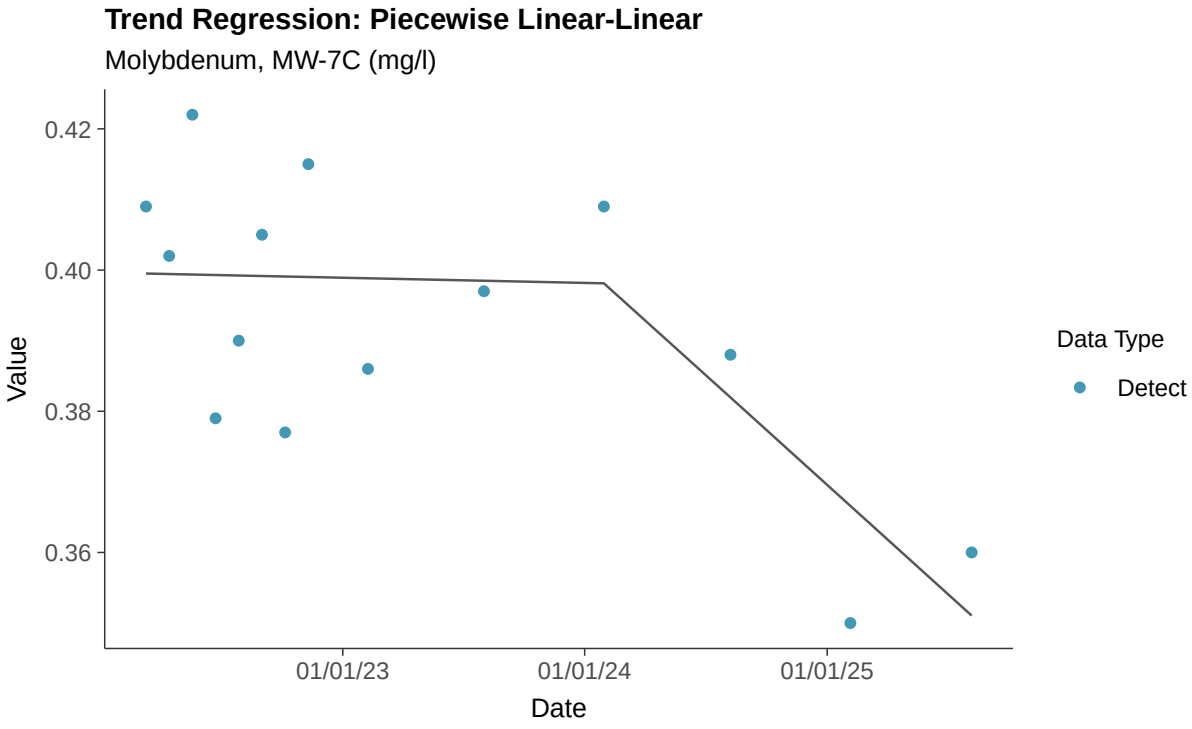
Molybdenum, MW-7C (mg/l)



Trend Regression: Lognormal MLE

Molybdenum, MW-7C (mg/l)



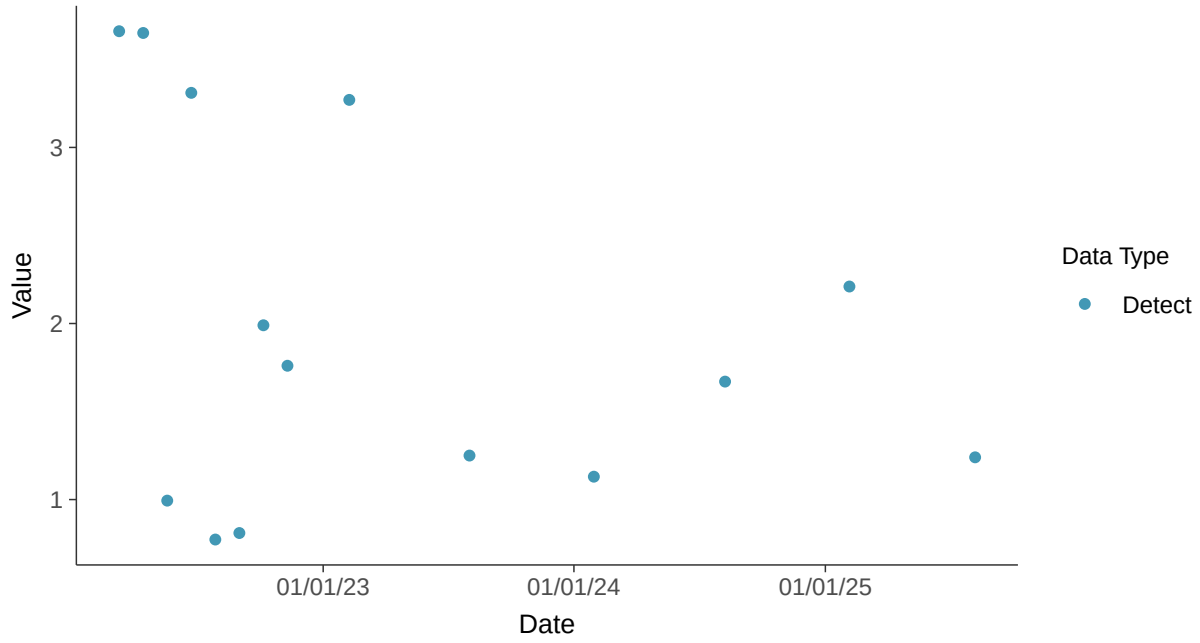

Trend Regression: Piecewise Linear-Linear
Molybdenum, MW-7C (mg/l)
Value
0.42
0.40
0.38
0.36
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect

Appendix IV: Radium-226+228, MW-7C

ID: 18_3_121

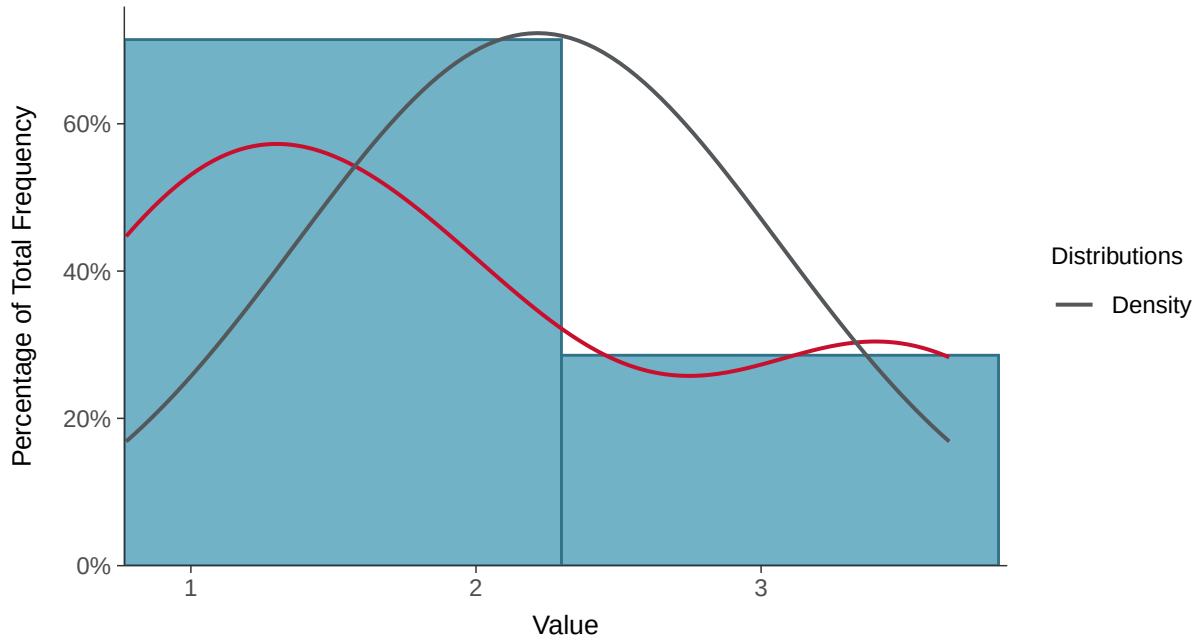
Scatter Plot

Radium-226+228, MW-7C (pci/l)



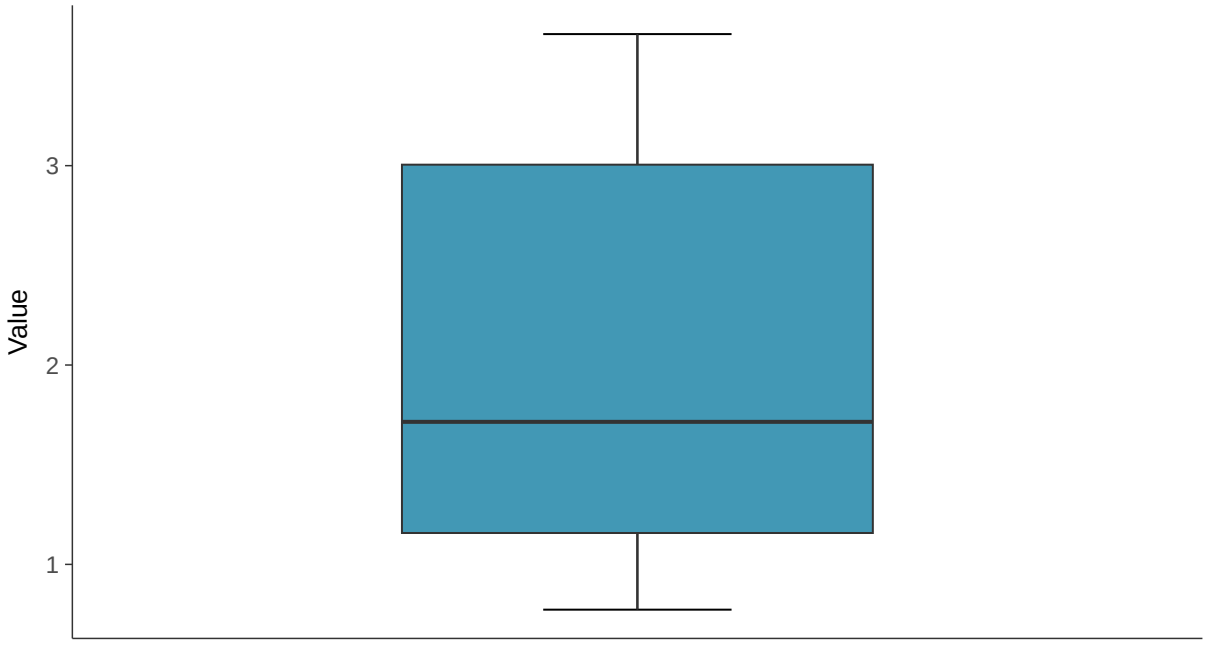
Histogram

Radium-226+228, MW-7C (pci/l)



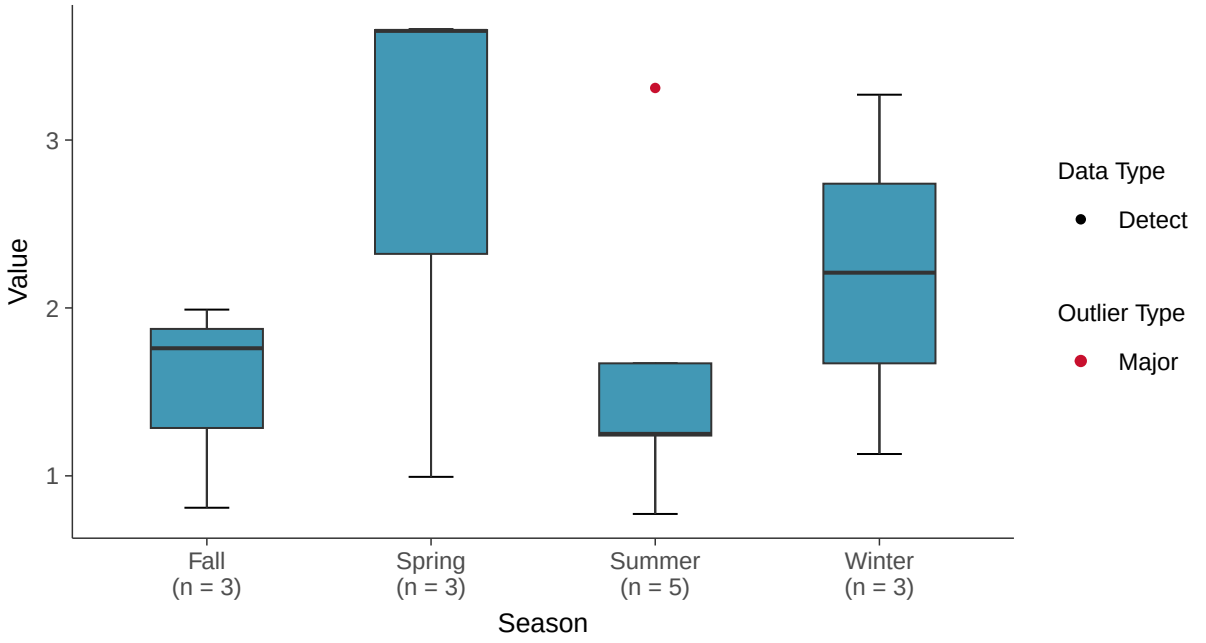
Boxplot

Radium-226+228, MW-7C (pci/l)



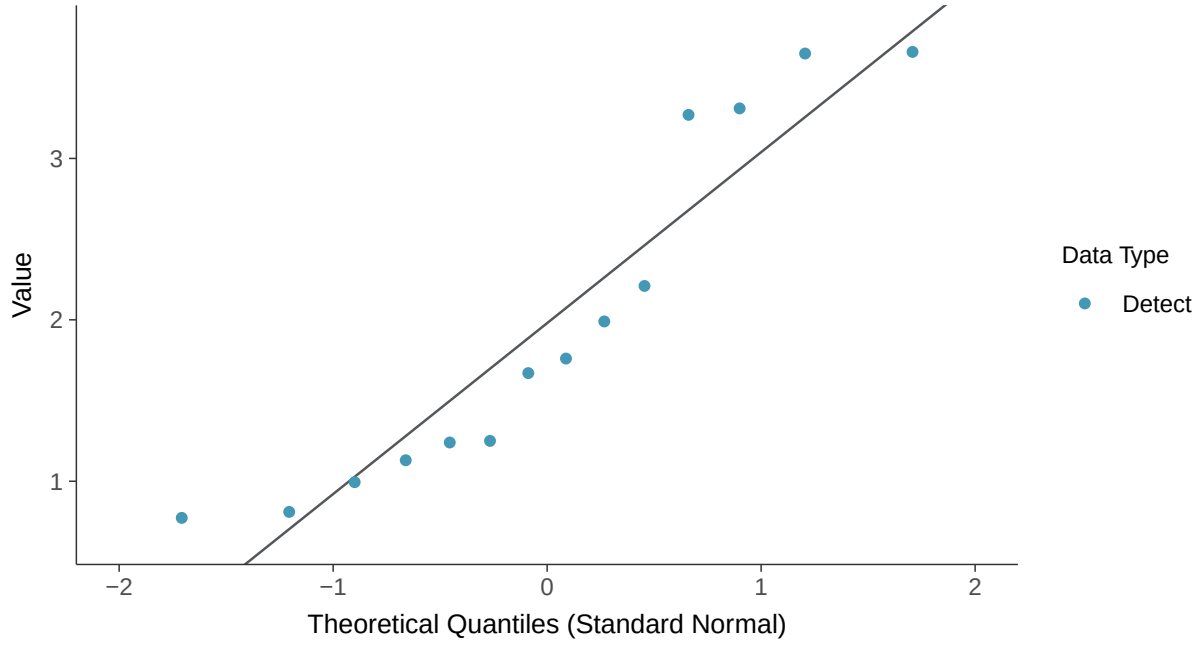
Boxplot by Season

Radium-226+228, MW-7C (pci/l)



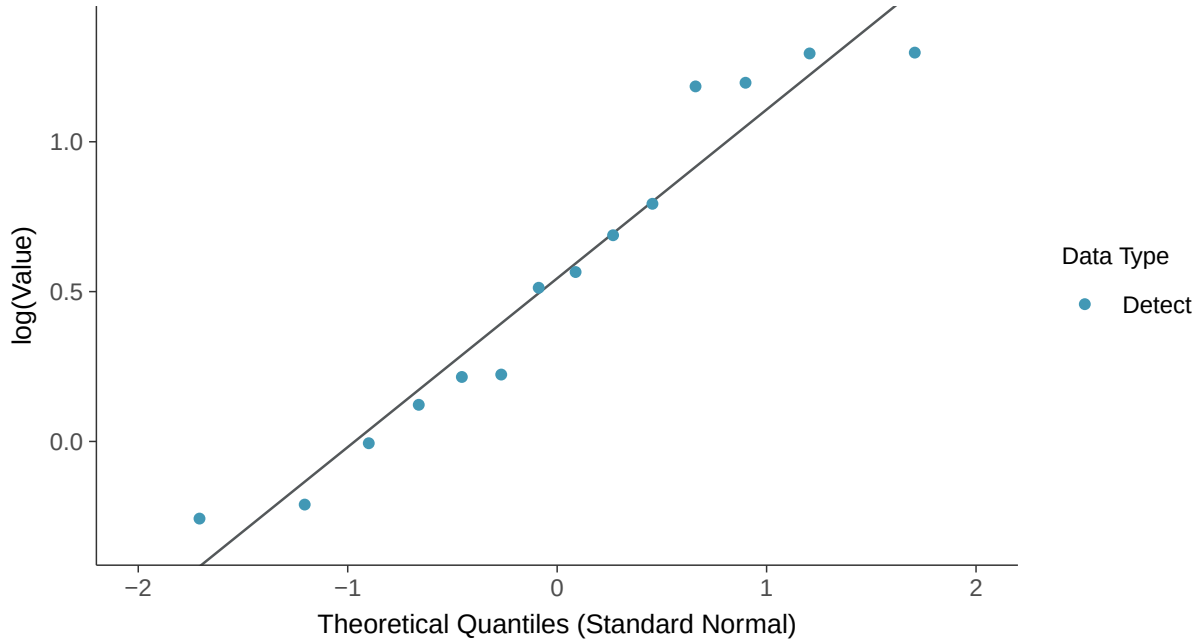
Normal Q-Q plot

Radium-226+228, MW-7C (pci/l)



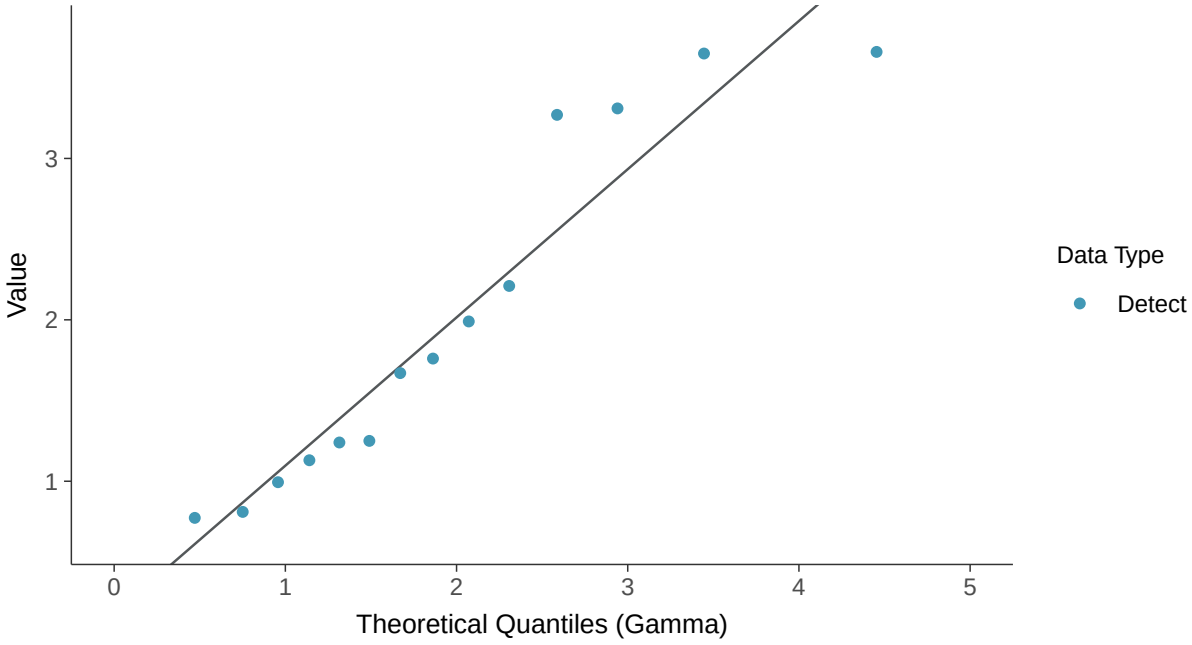
Lognormal Q-Q plot

Radium-226+228, MW-7C (pci/l)



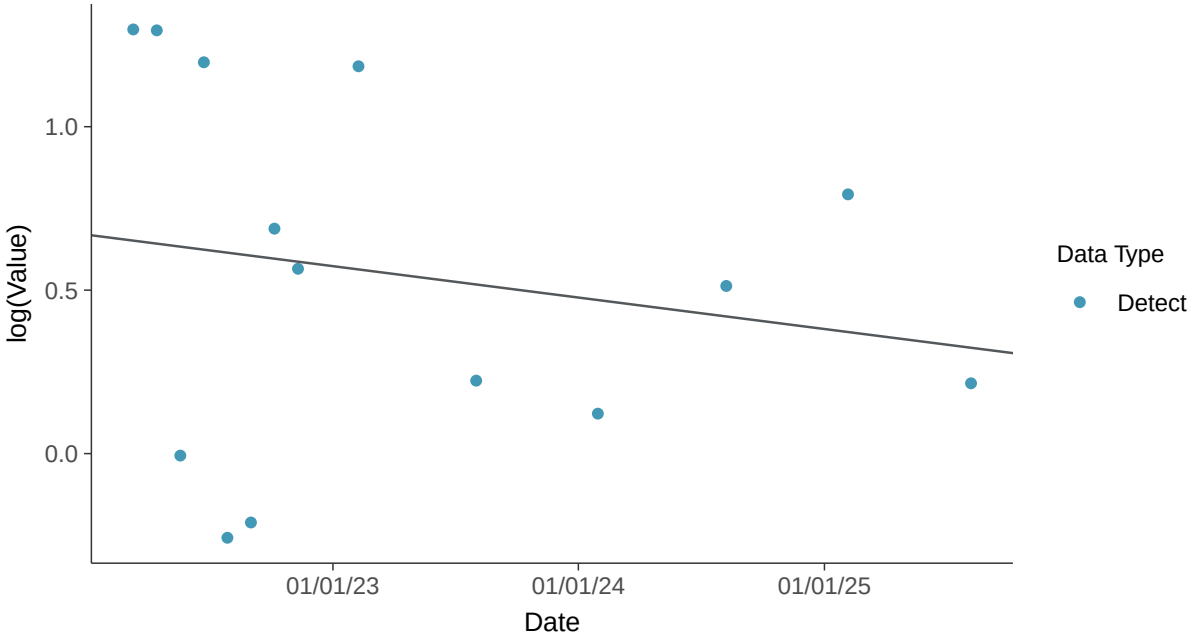
Gamma Q-Q plot

Radium-226+228, MW-7C (pci/l)



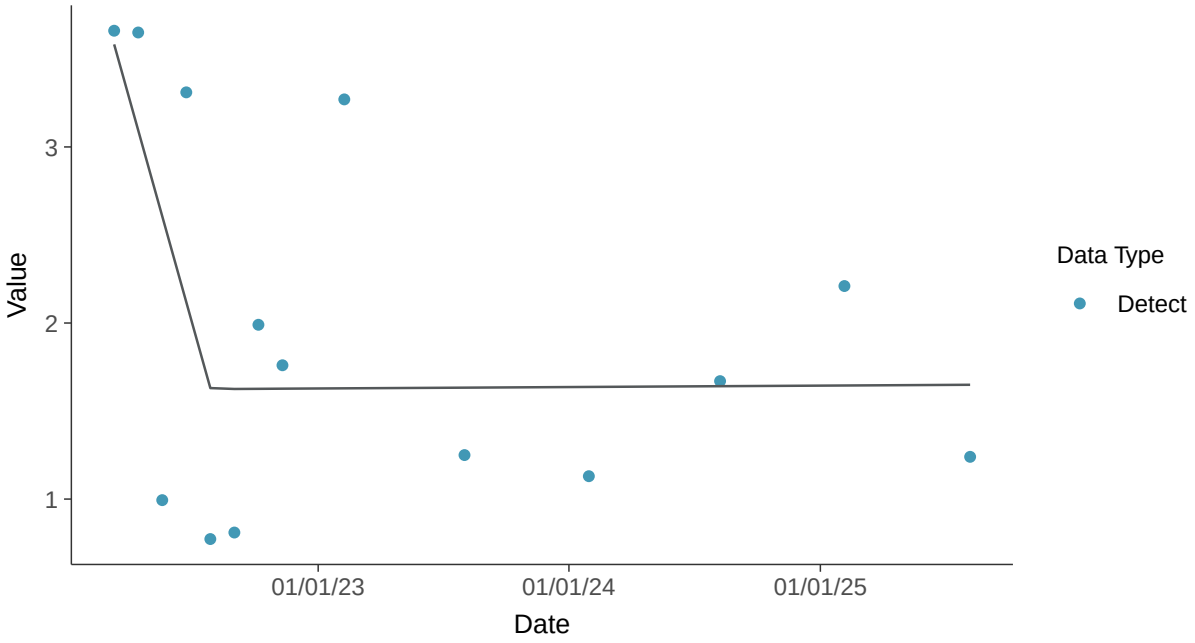
Trend Regression: Lognormal MLE

Radium-226+228, MW-7C (pci/l)



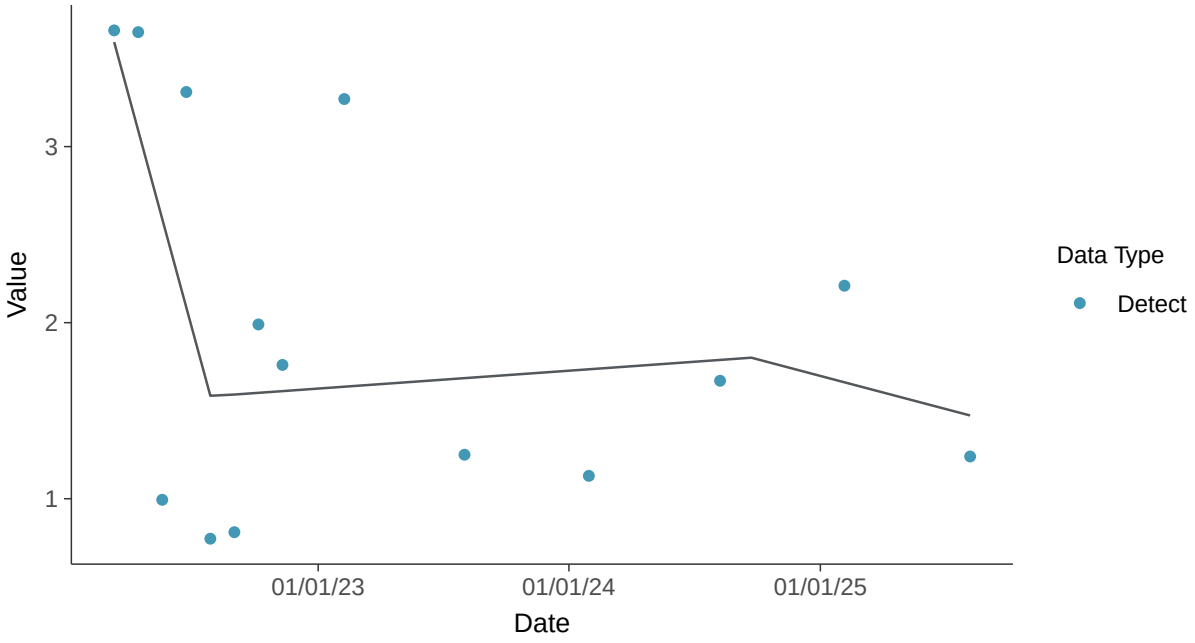
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-7C (pci/l)



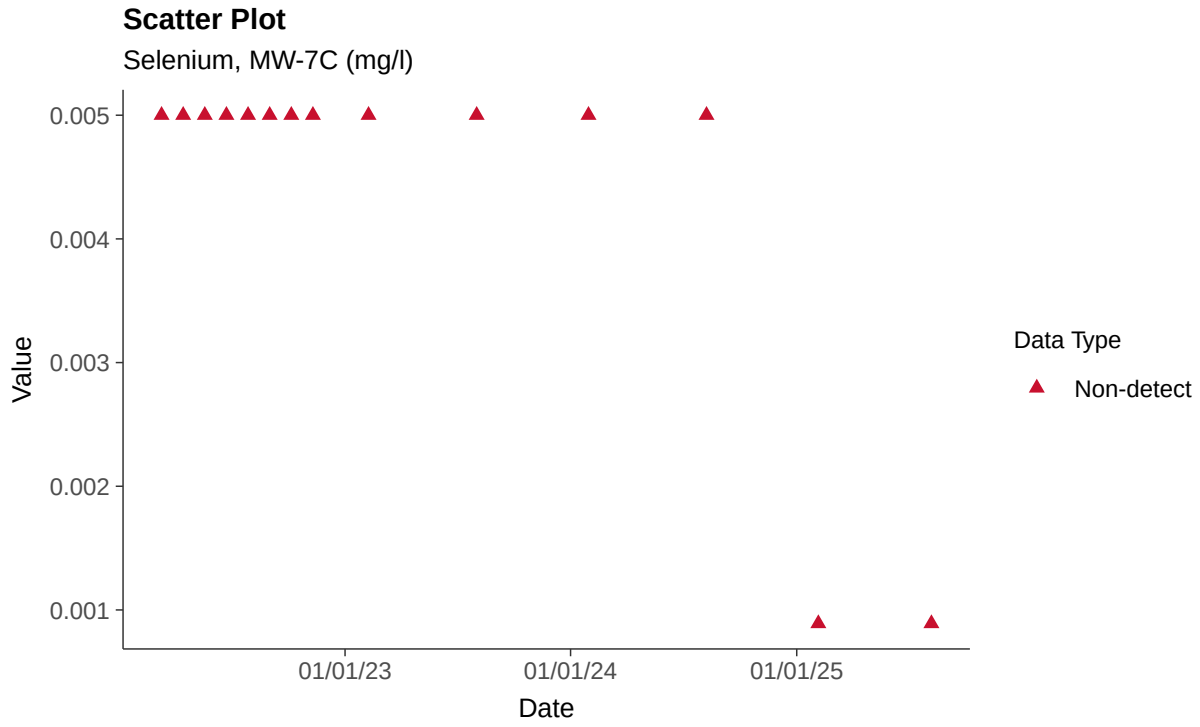
Trend Regression: Piecewise Linear-Linear-Linear

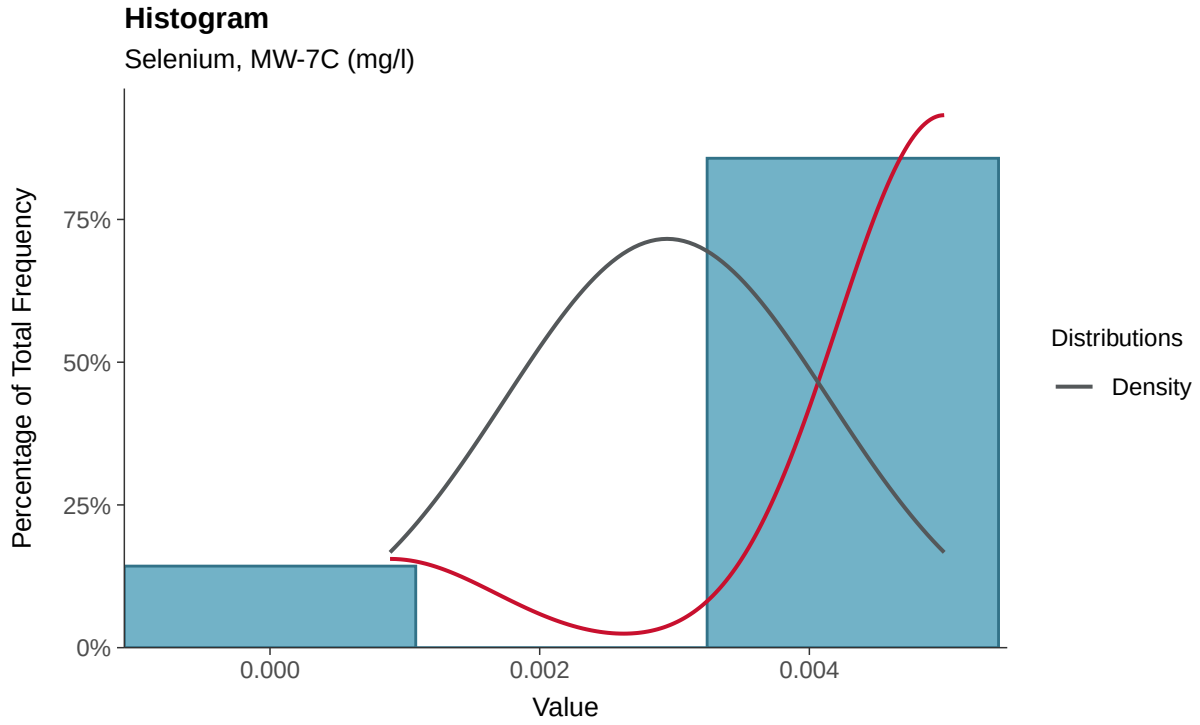
Radium-226+228, MW-7C (pci/l)



Appendix IV: Selenium, MW-7C

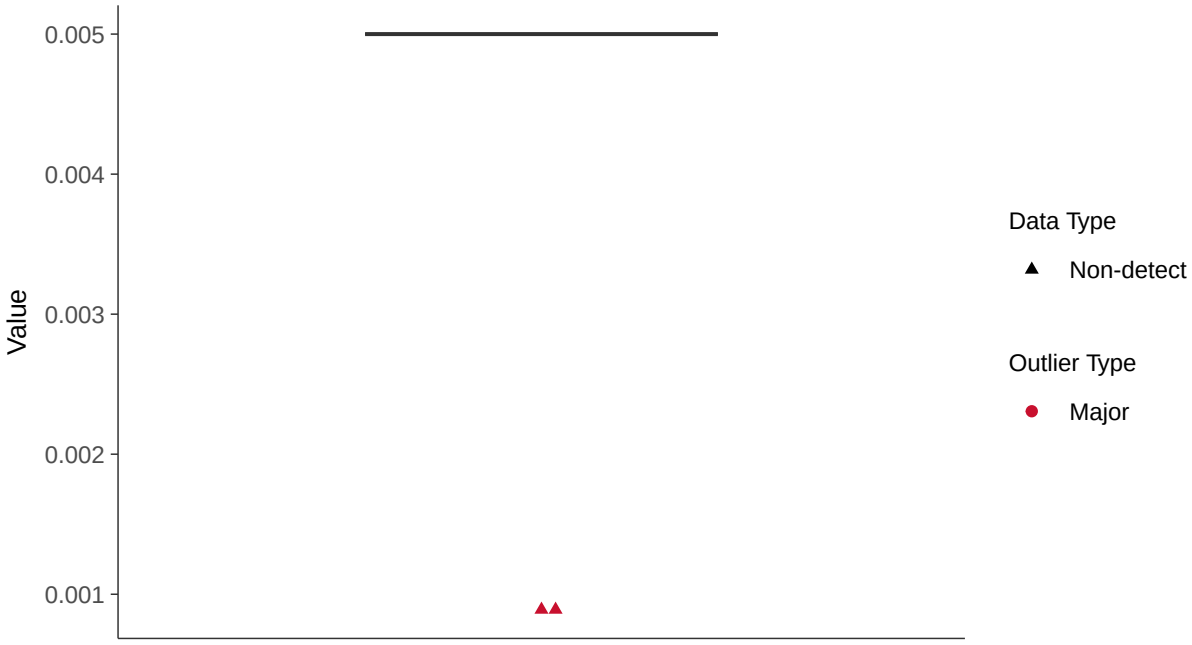
ID: 18_3_122





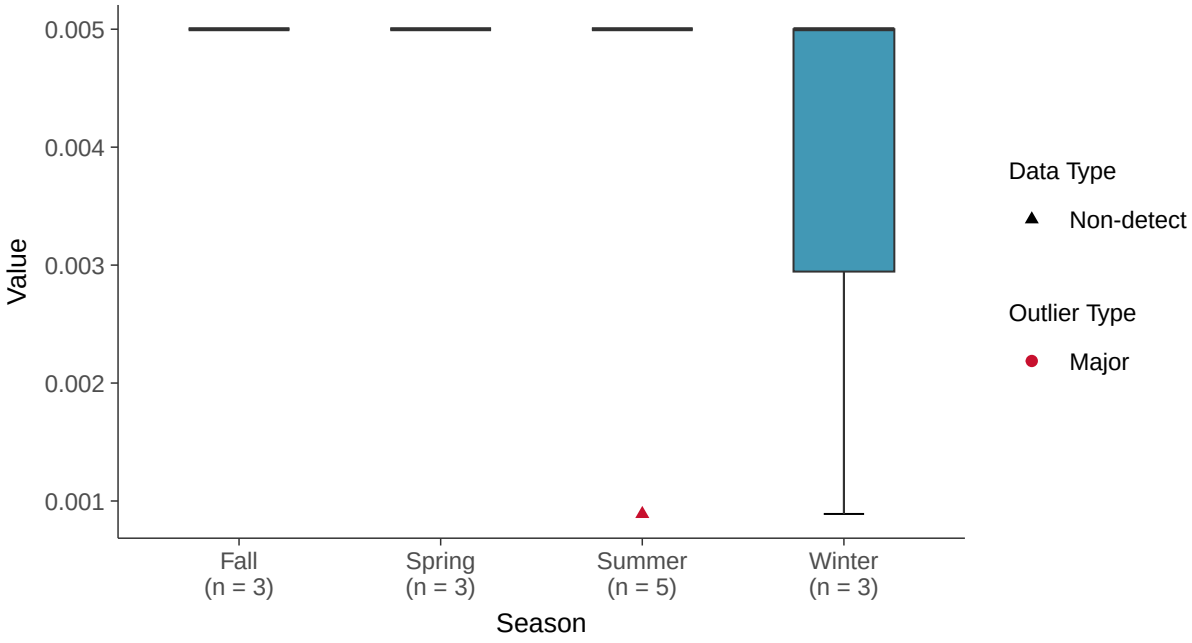
Boxplot

Selenium, MW-7C (mg/l)



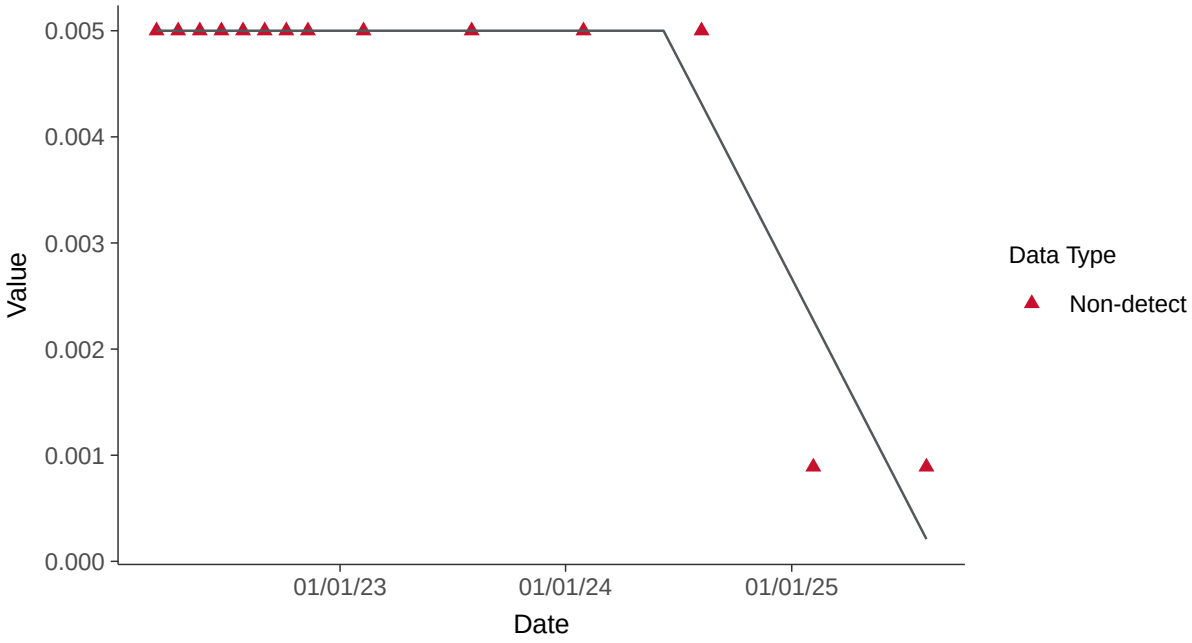
Boxplot by Season

Selenium, MW-7C (mg/l)



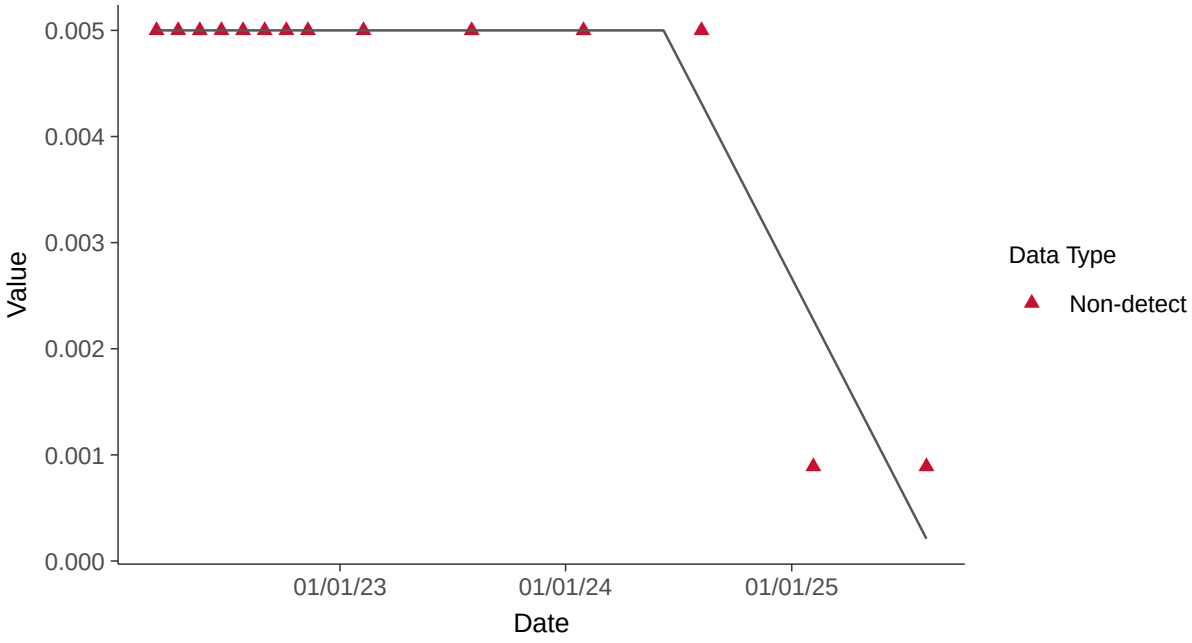
Trend Regression: Piecewise Linear-Linear

Selenium, MW-7C (mg/l)



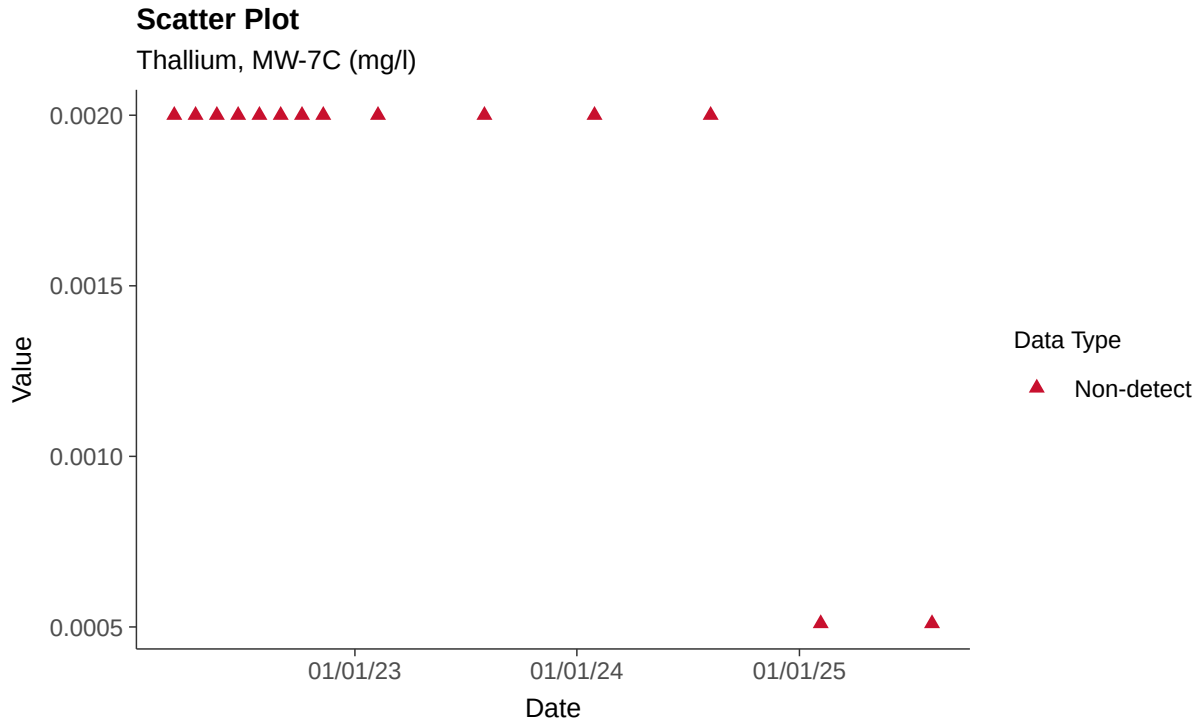
Trend Regression: Piecewise Linear-Linear-Linear

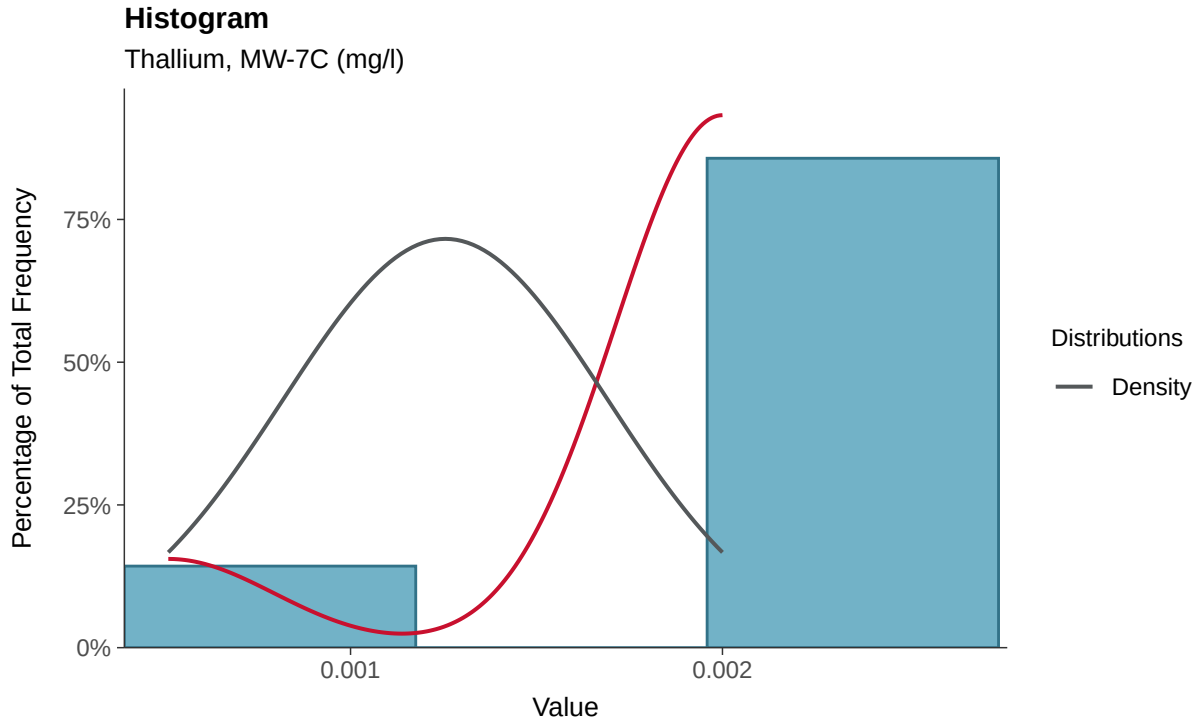
Selenium, MW-7C (mg/l)



Appendix IV: Thallium, MW-7C

ID: 18_3_125



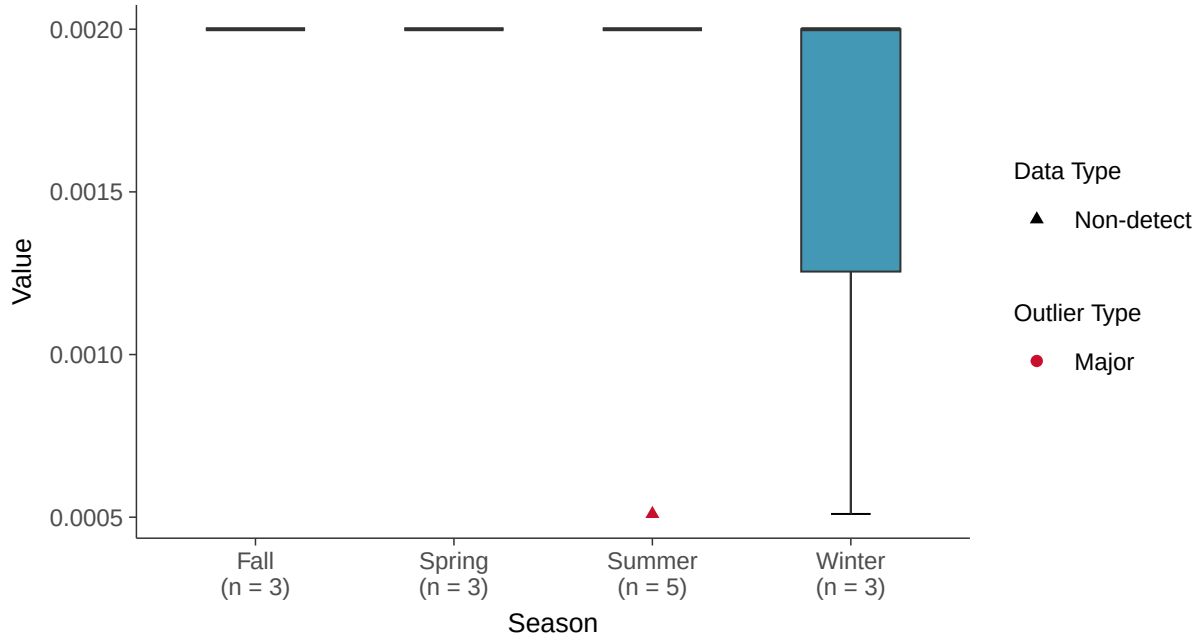


Boxplot

Thallium, MW-7C (mg/l)

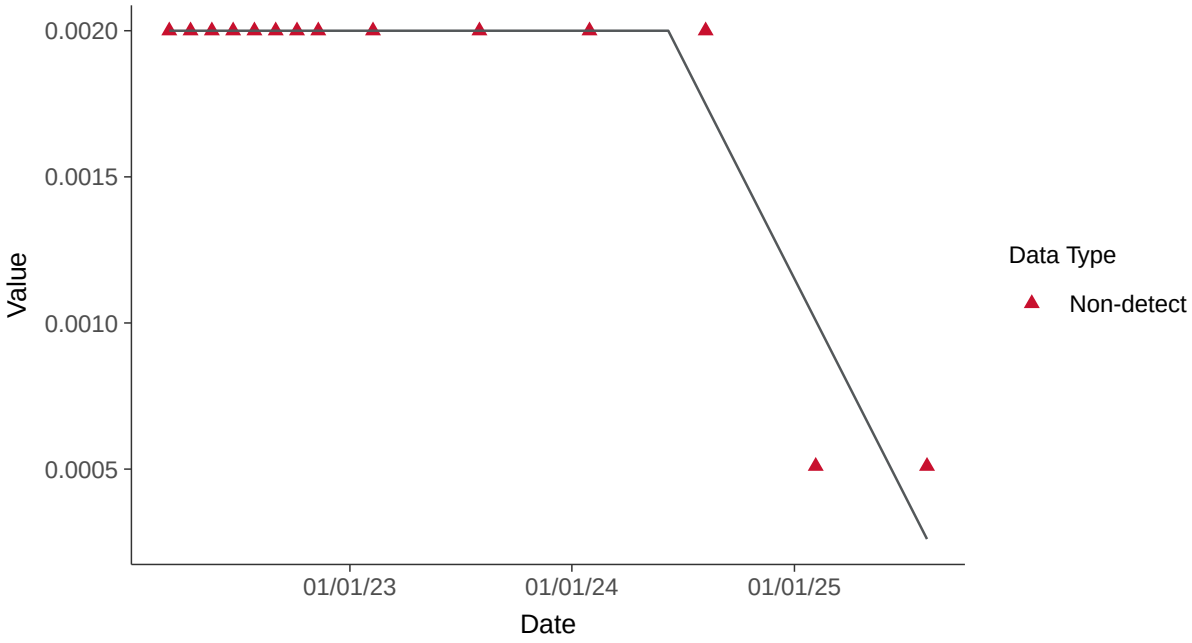
Boxplot by Season

Thallium, MW-7C (mg/l)



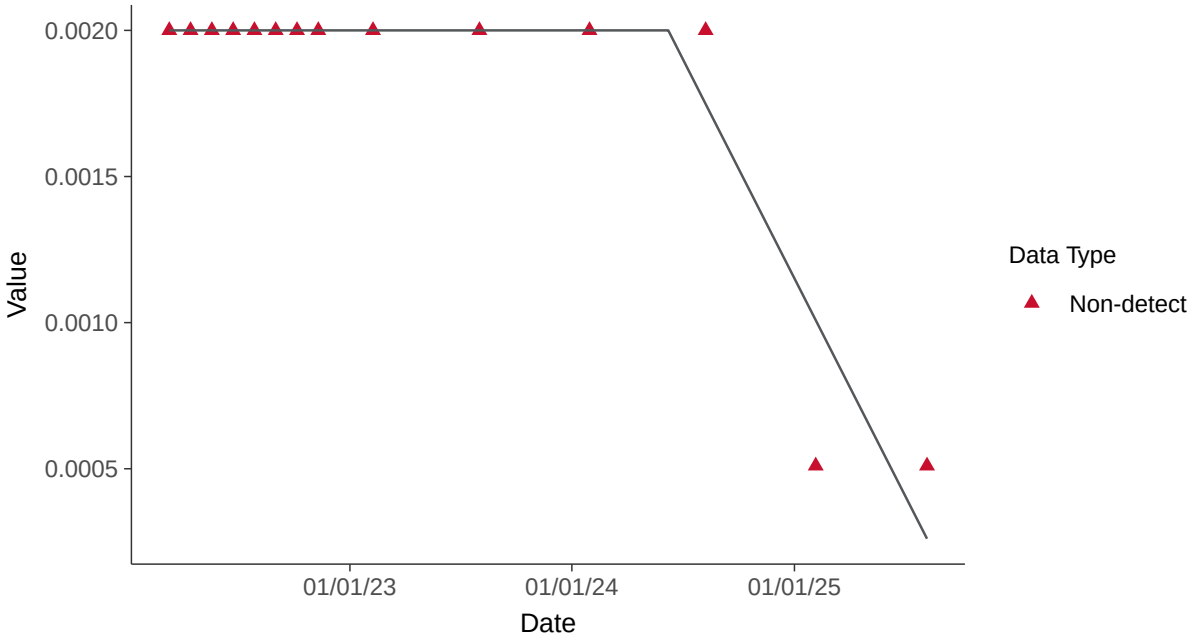
Trend Regression: Piecewise Linear-Linear

Thallium, MW-7C (mg/l)



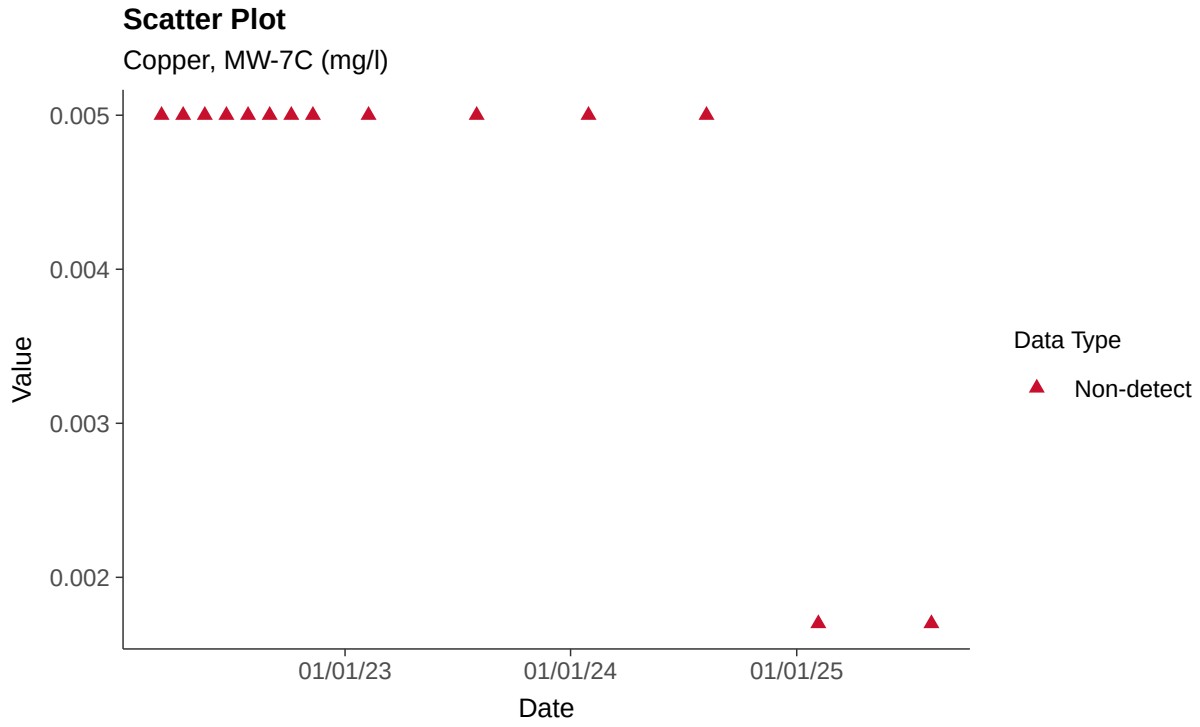
Trend Regression: Piecewise Linear-Linear-Linear

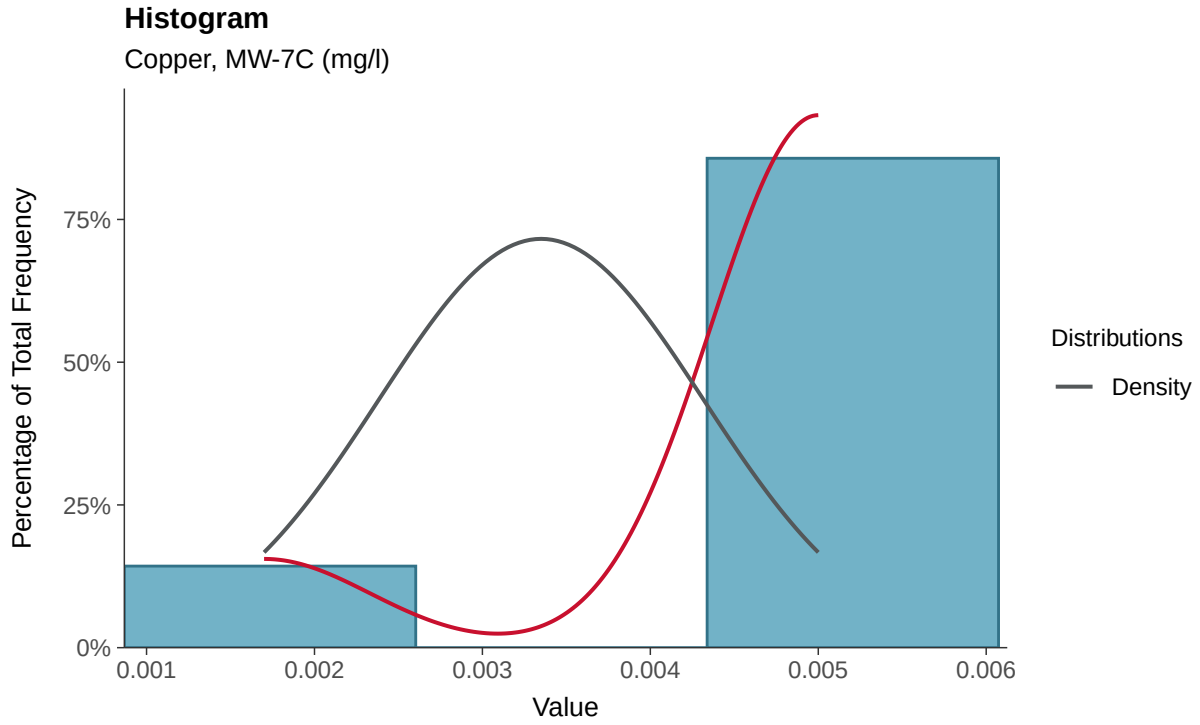
Thallium, MW-7C (mg/l)



Part 115: Copper, MW-7C

ID: 18_5_111



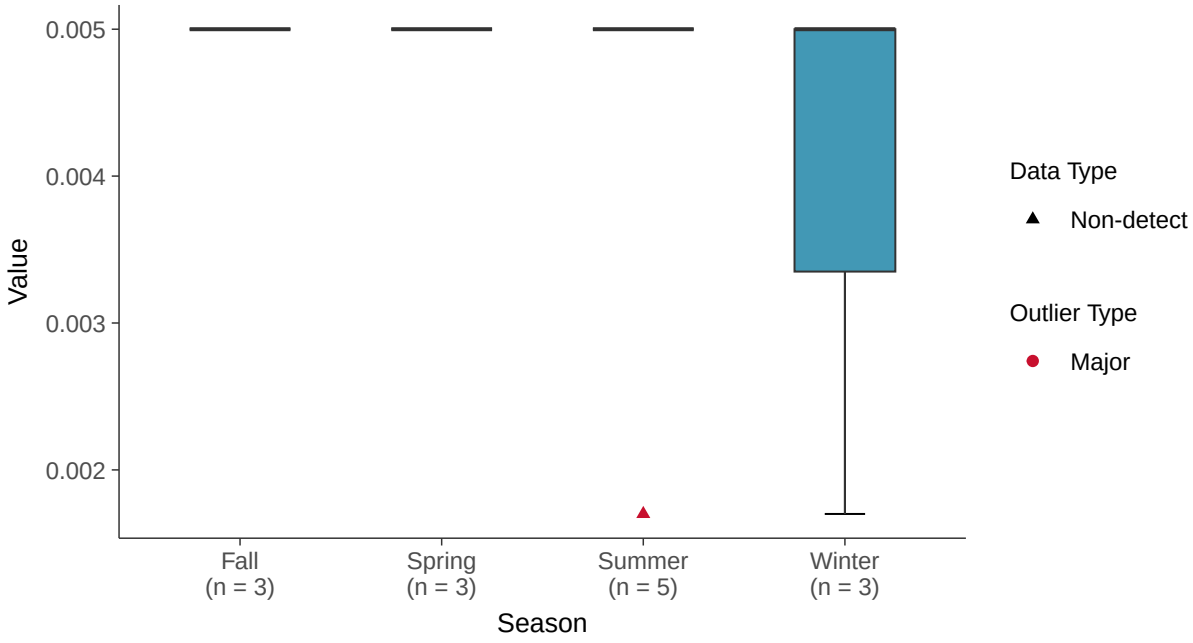


Boxplot

Copper, MW-7C (mg/l)

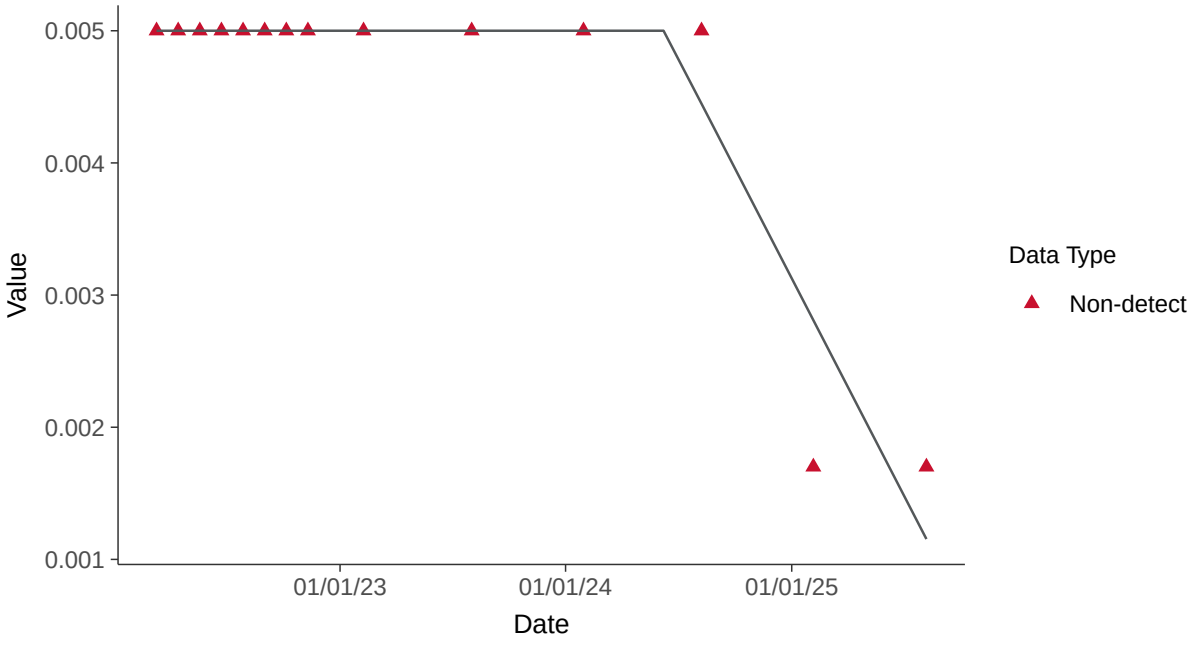
Boxplot by Season

Copper, MW-7C (mg/l)



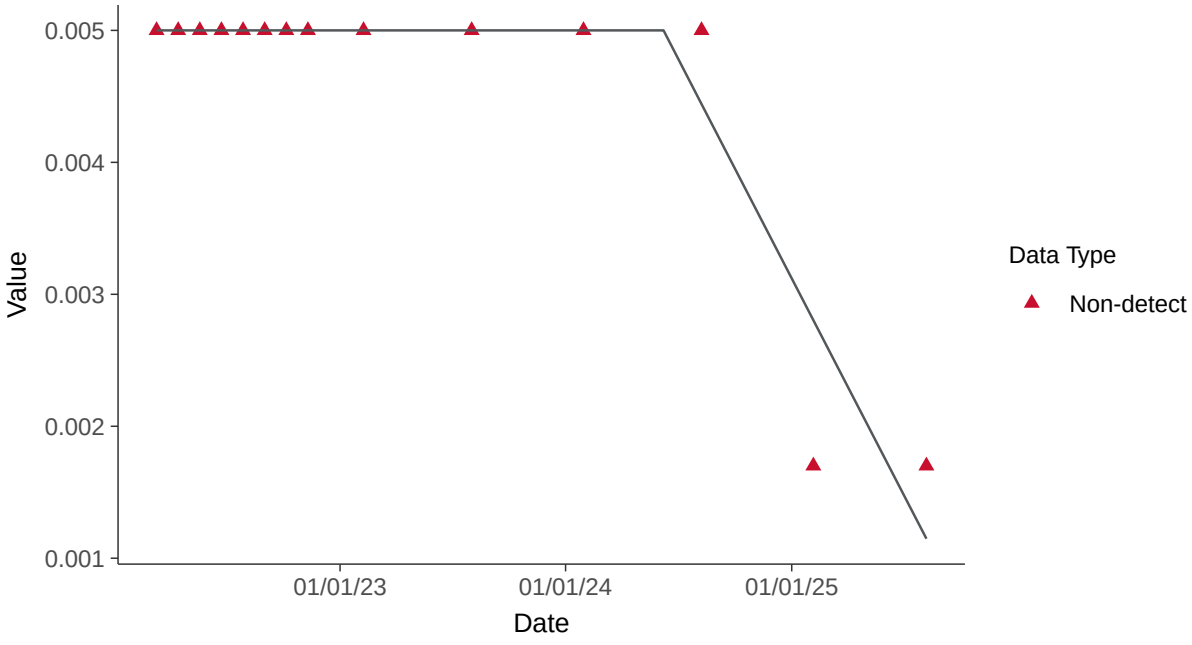
Trend Regression: Piecewise Linear-Linear

Copper, MW-7C (mg/l)



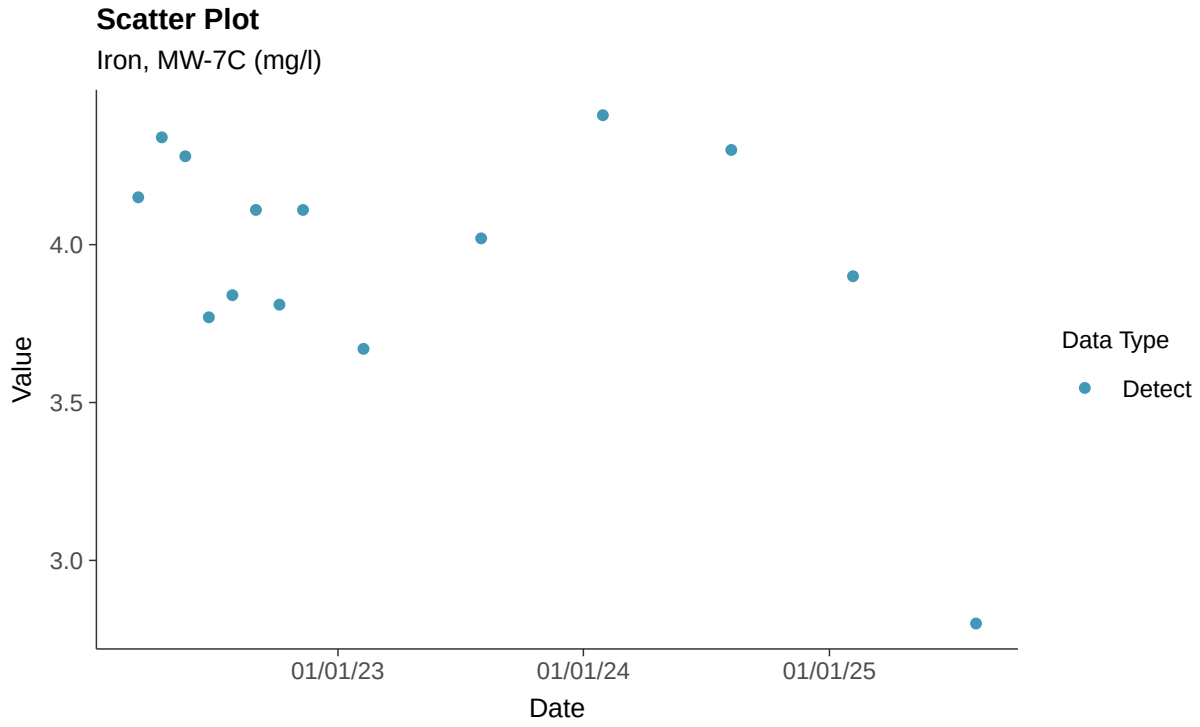
Trend Regression: Piecewise Linear-Linear-Linear

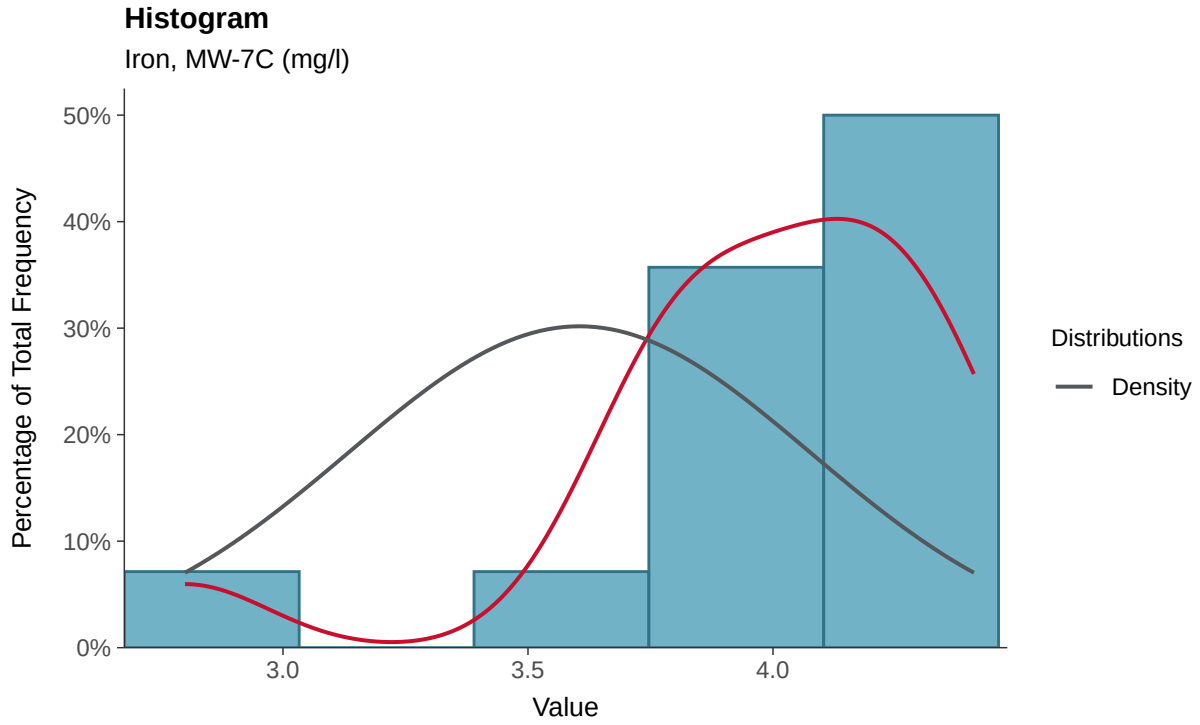
Copper, MW-7C (mg/l)



Part 115: Iron, MW-7C

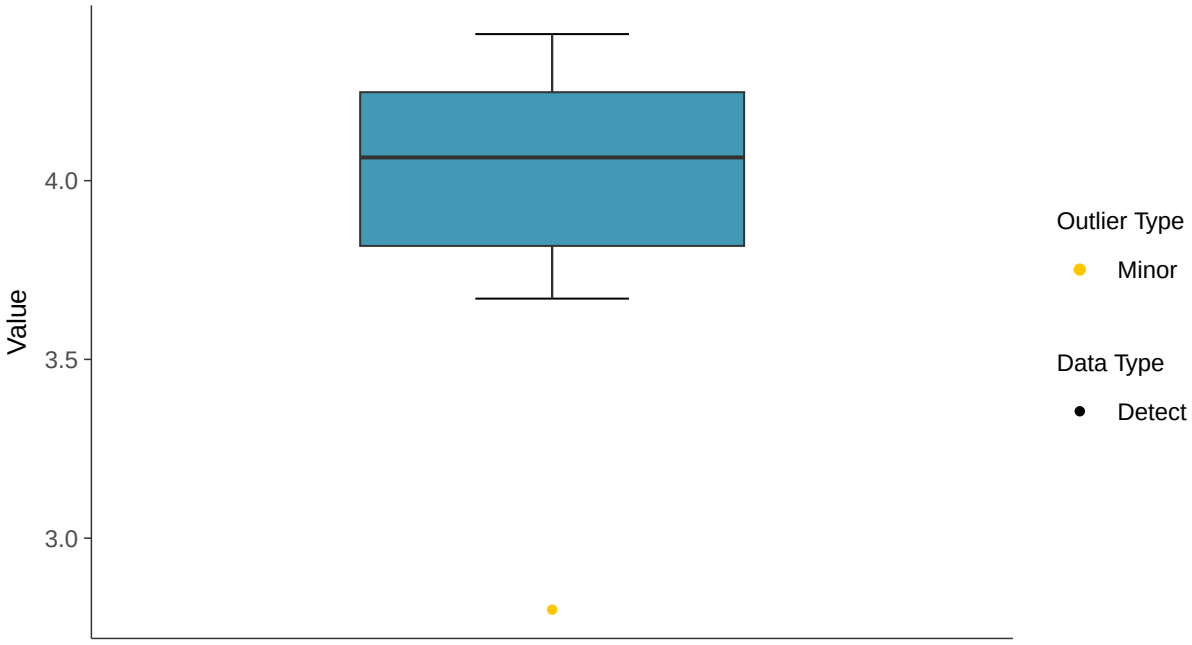
ID: 18_5_114





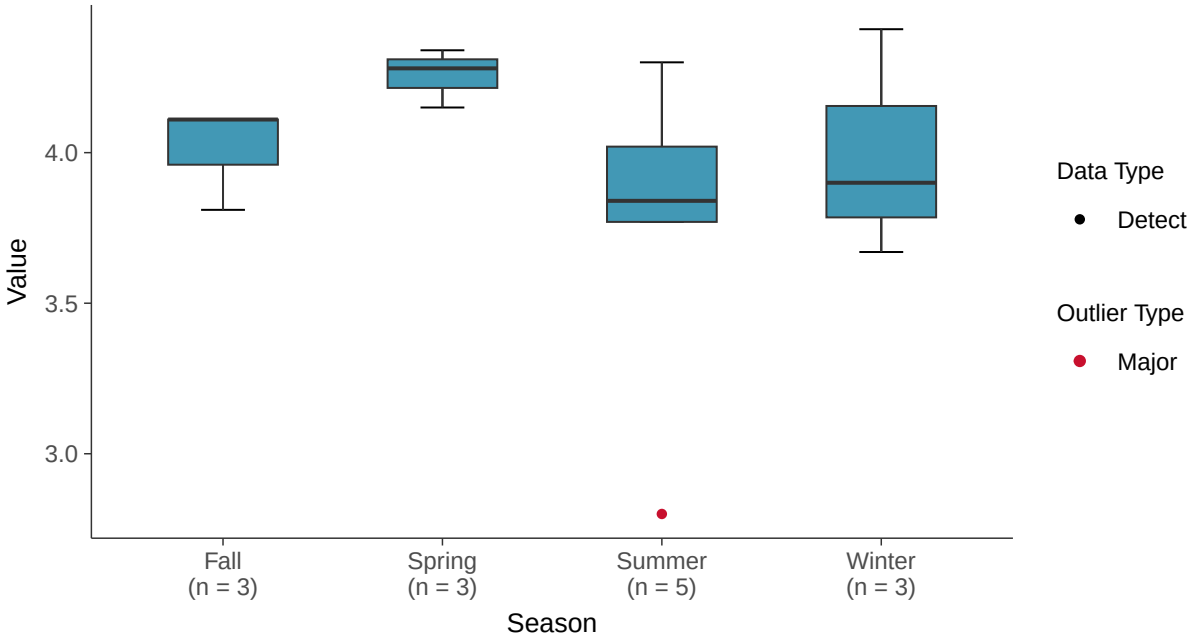
Boxplot

Iron, MW-7C (mg/l)



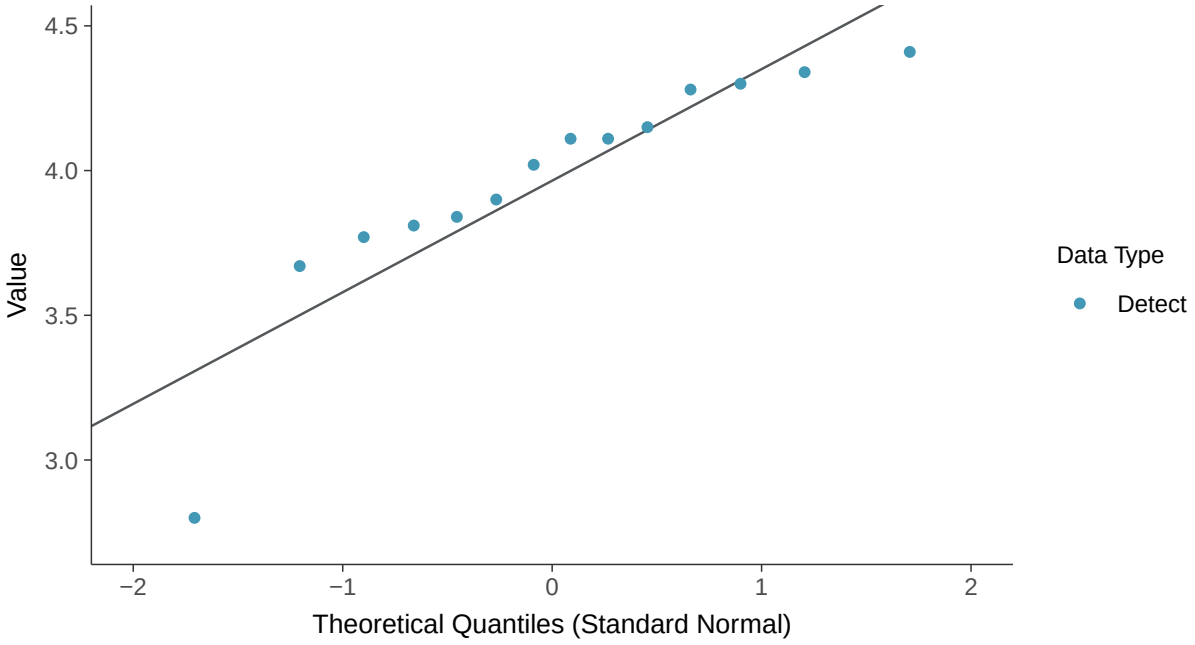
Boxplot by Season

Iron, MW-7C (mg/l)



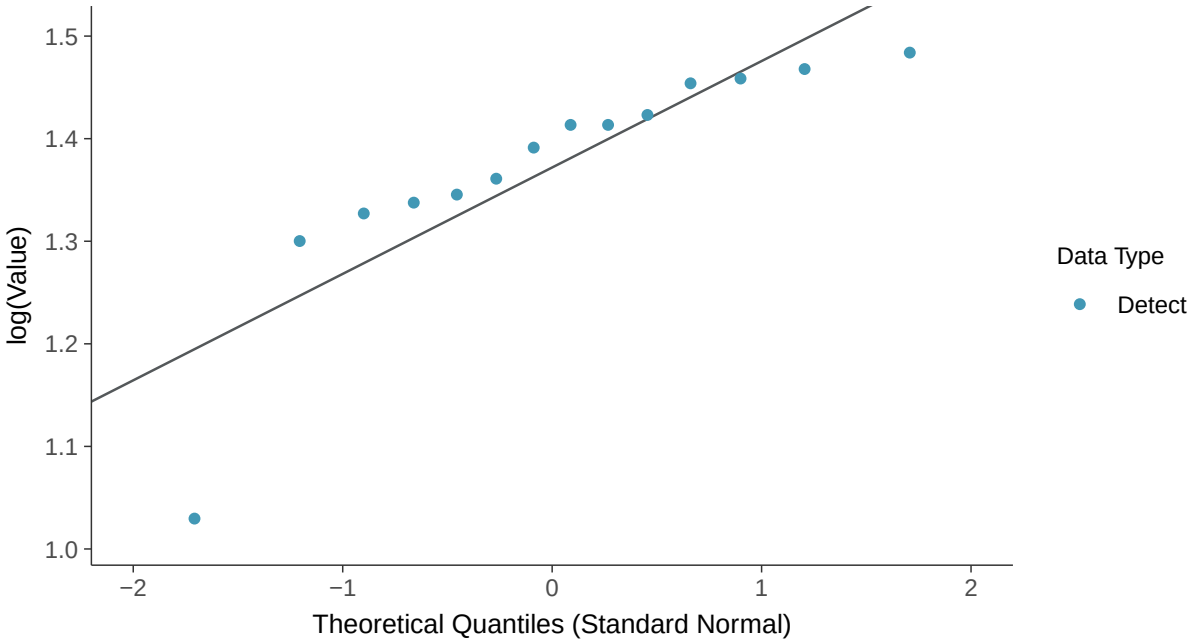
Normal Q-Q plot

Iron, MW-7C (mg/l)



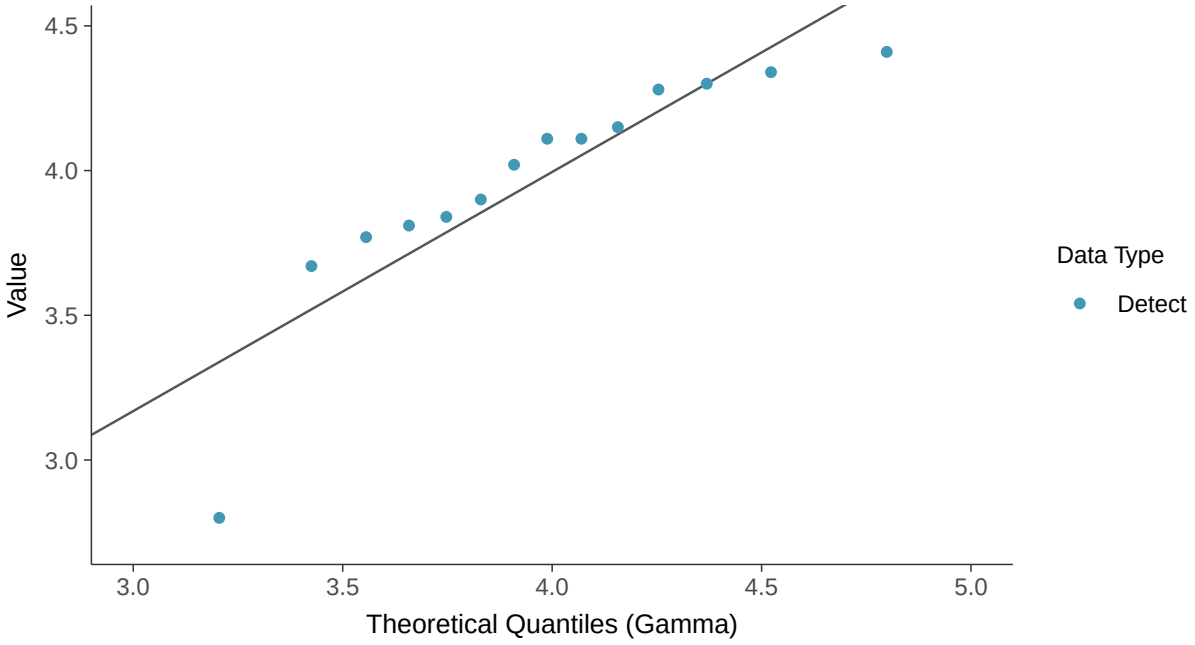
Lognormal Q-Q plot

Iron, MW-7C (mg/l)



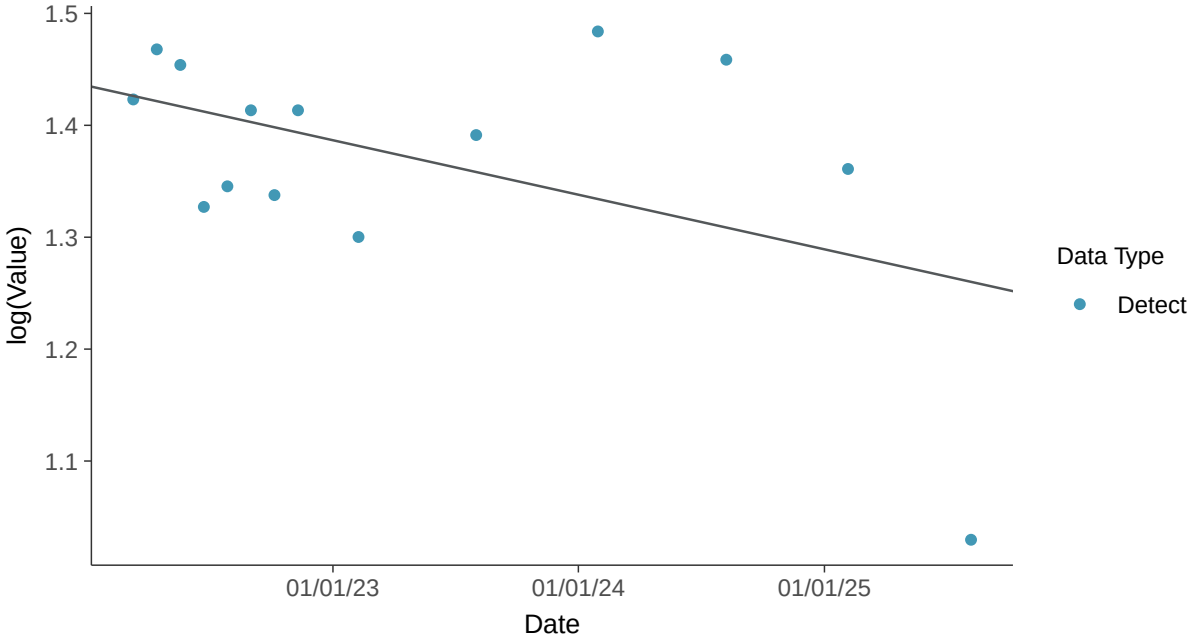
Gamma Q-Q plot

Iron, MW-7C (mg/l)



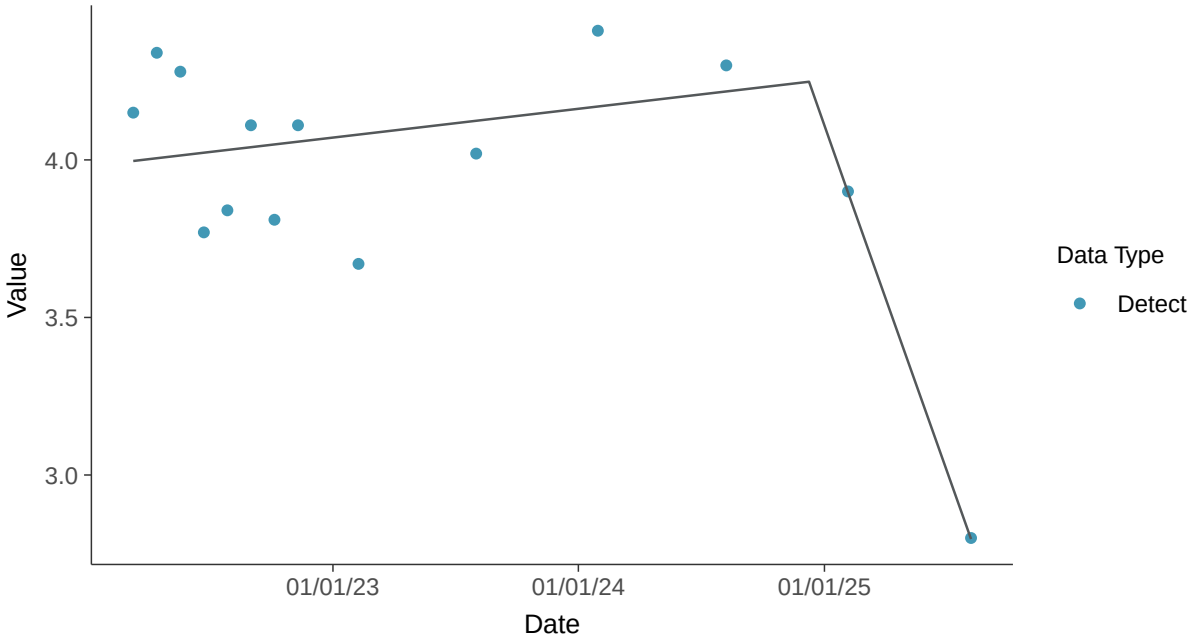
Trend Regression: Lognormal MLE

Iron, MW-7C (mg/l)



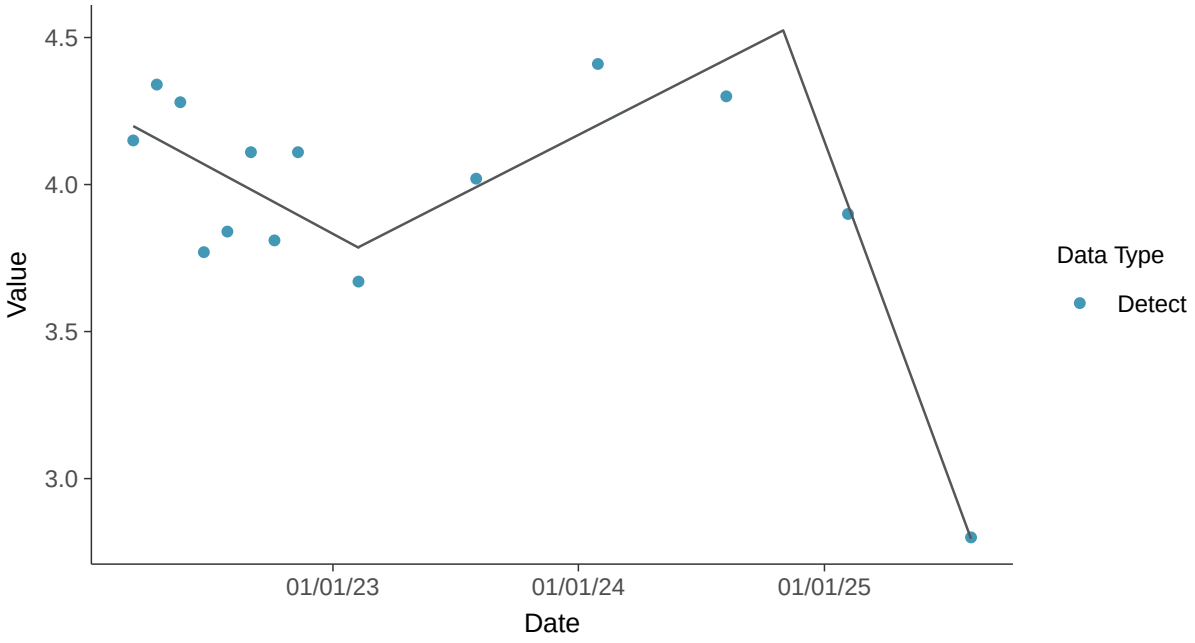
Trend Regression: Piecewise Linear-Linear

Iron, MW-7C (mg/l)



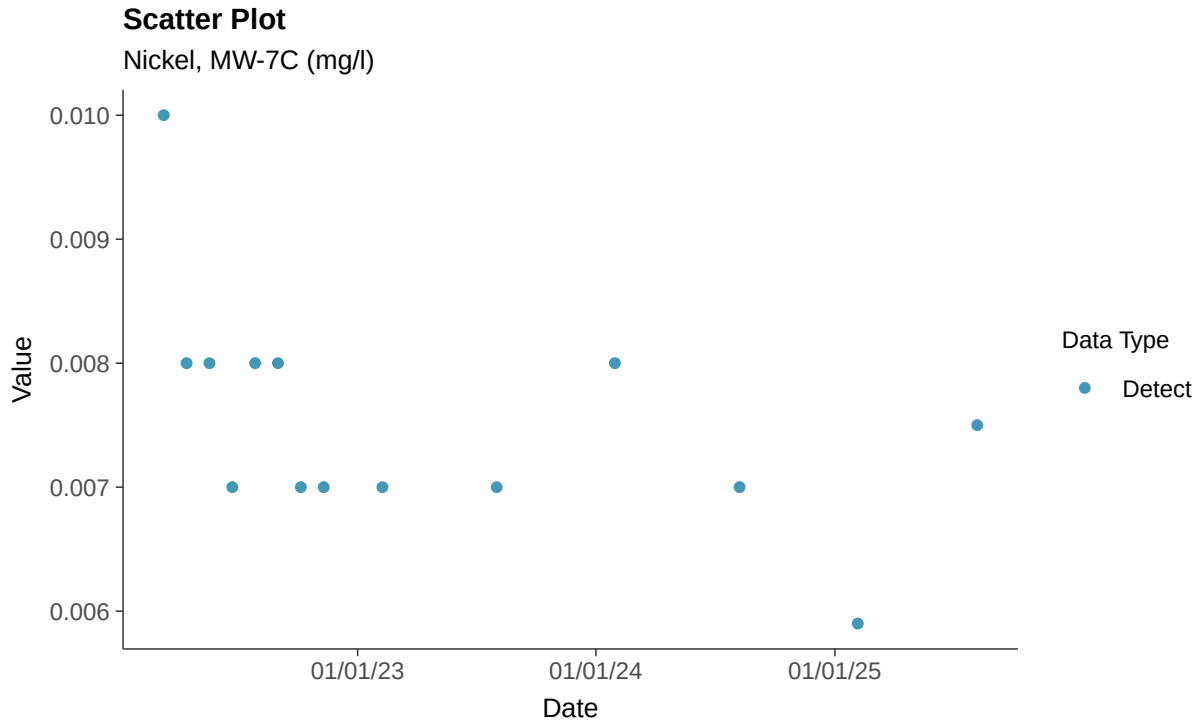
Trend Regression: Piecewise Linear-Linear-Linear

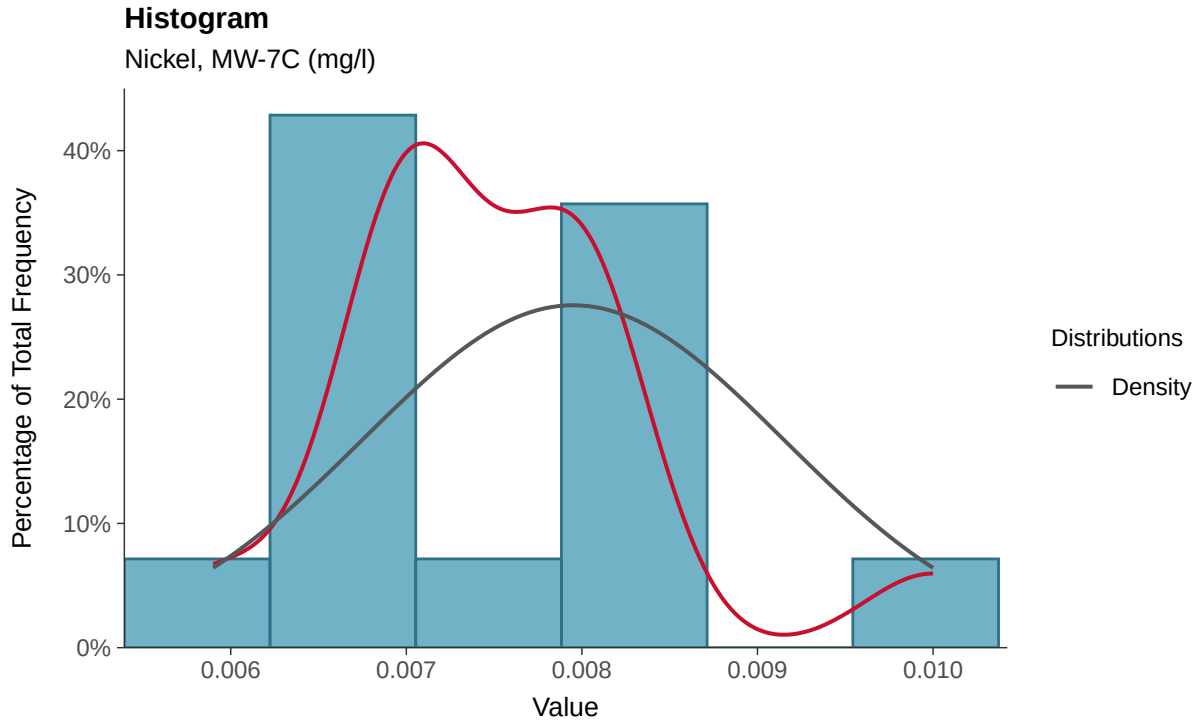
Iron, MW-7C (mg/l)



Part 115: Nickel, MW-7C

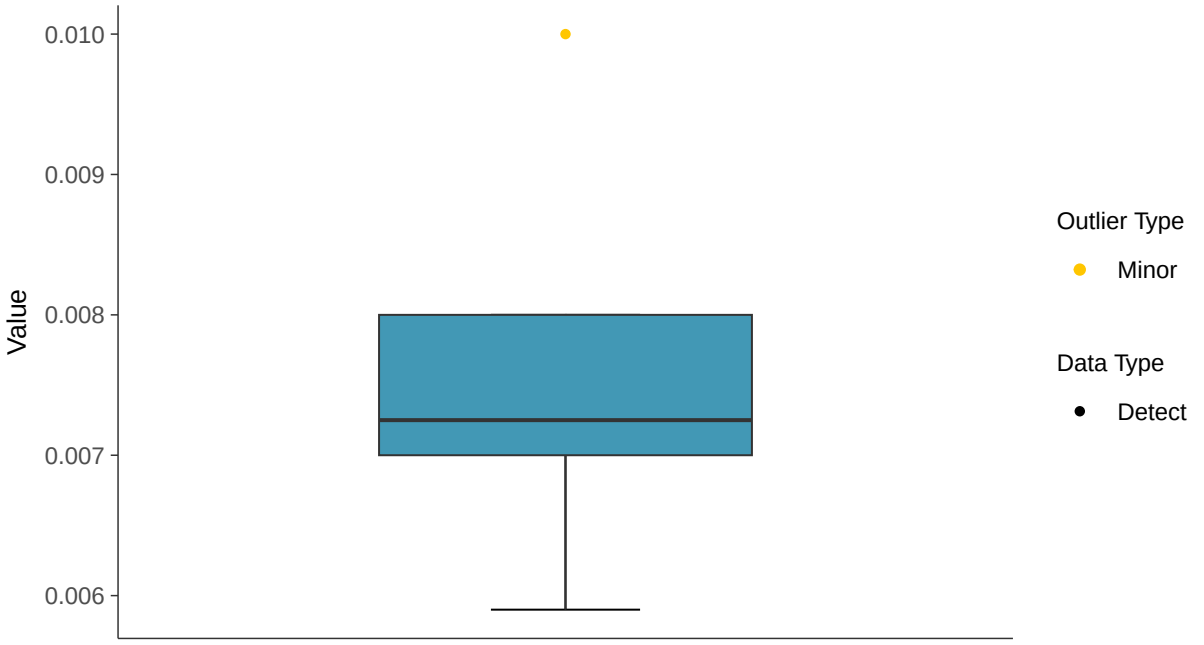
ID: 18_5_119





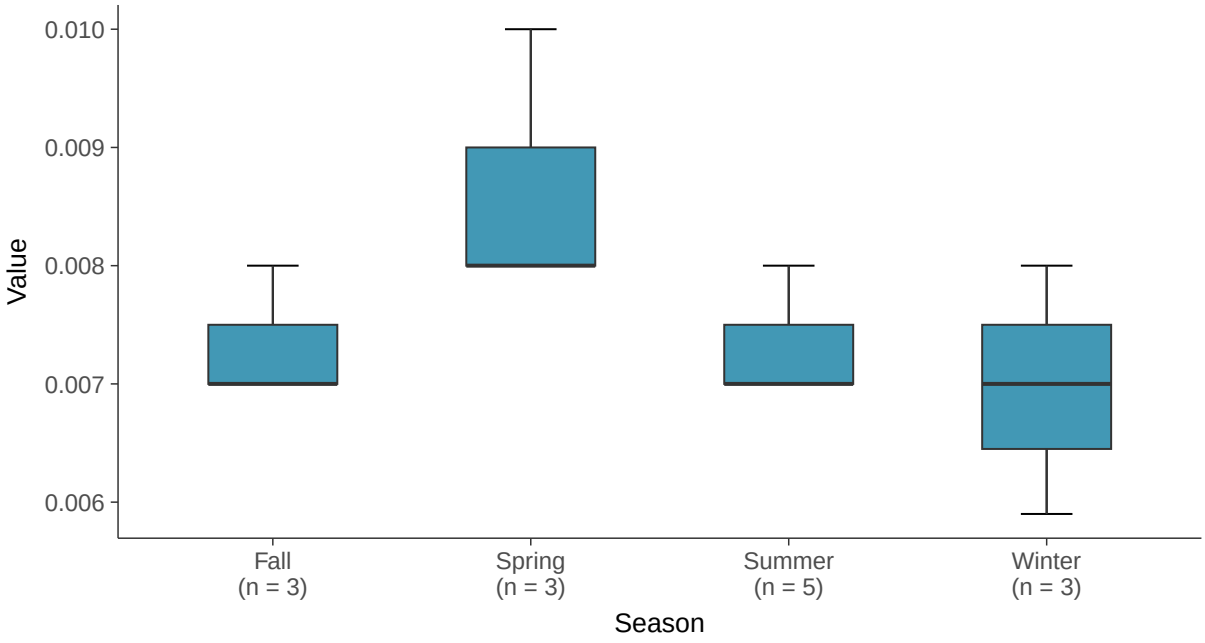
Boxplot

Nickel, MW-7C (mg/l)



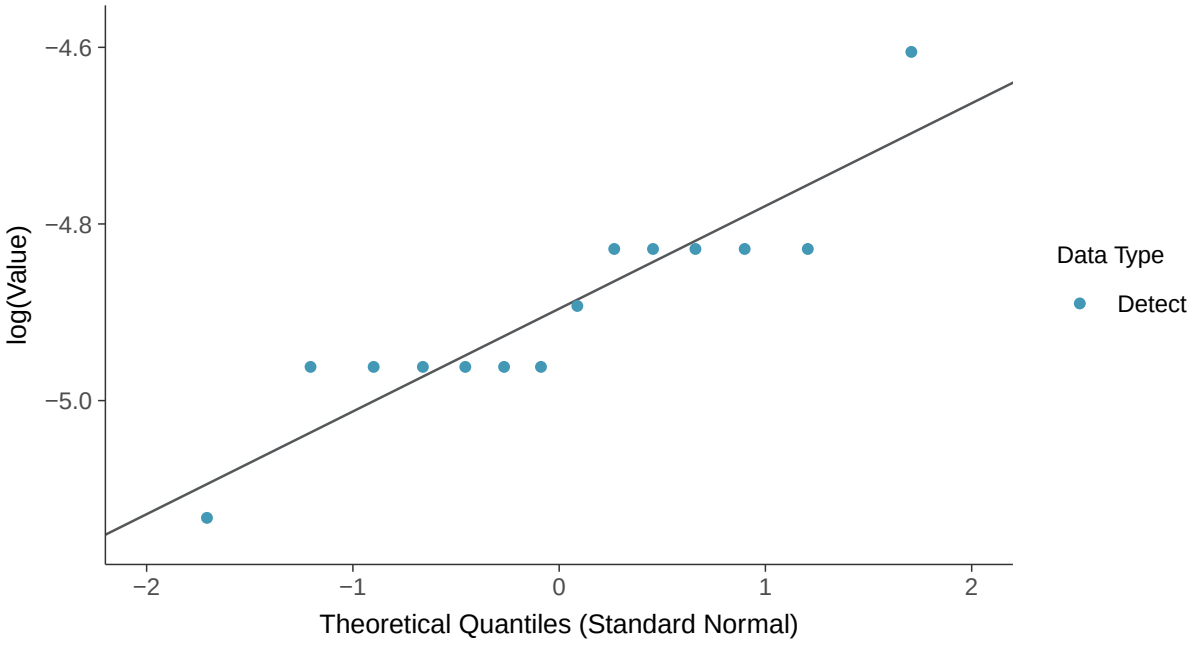
Boxplot by Season

Nickel, MW-7C (mg/l)



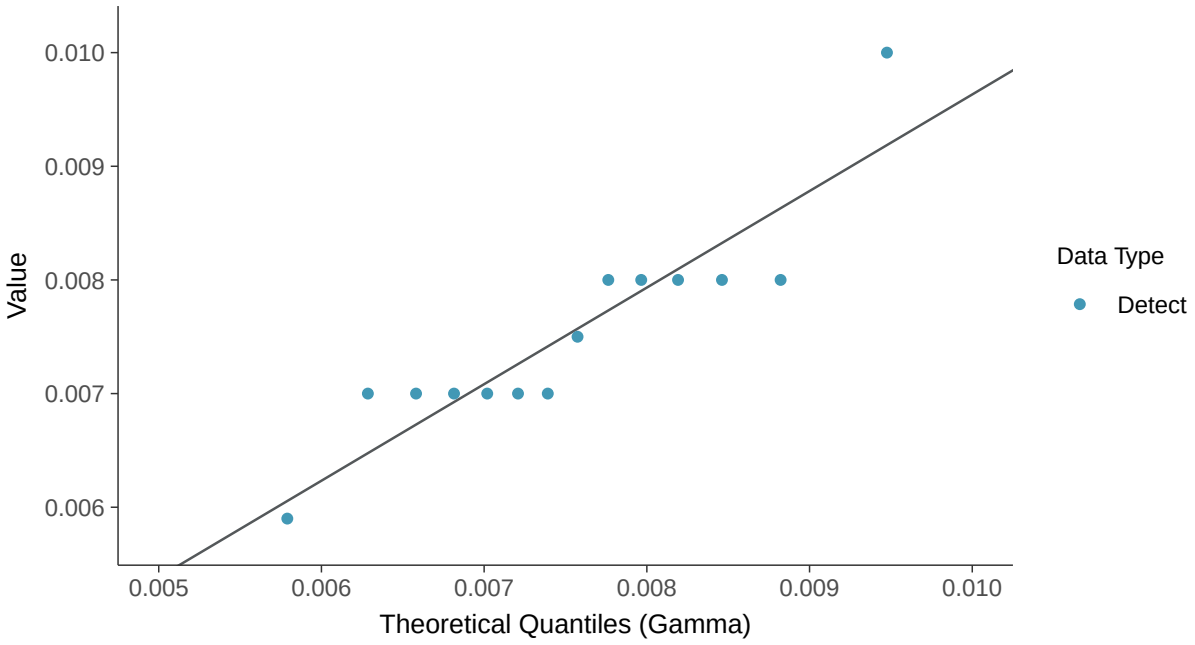
Lognormal Q-Q plot

Nickel, MW-7C (mg/l)



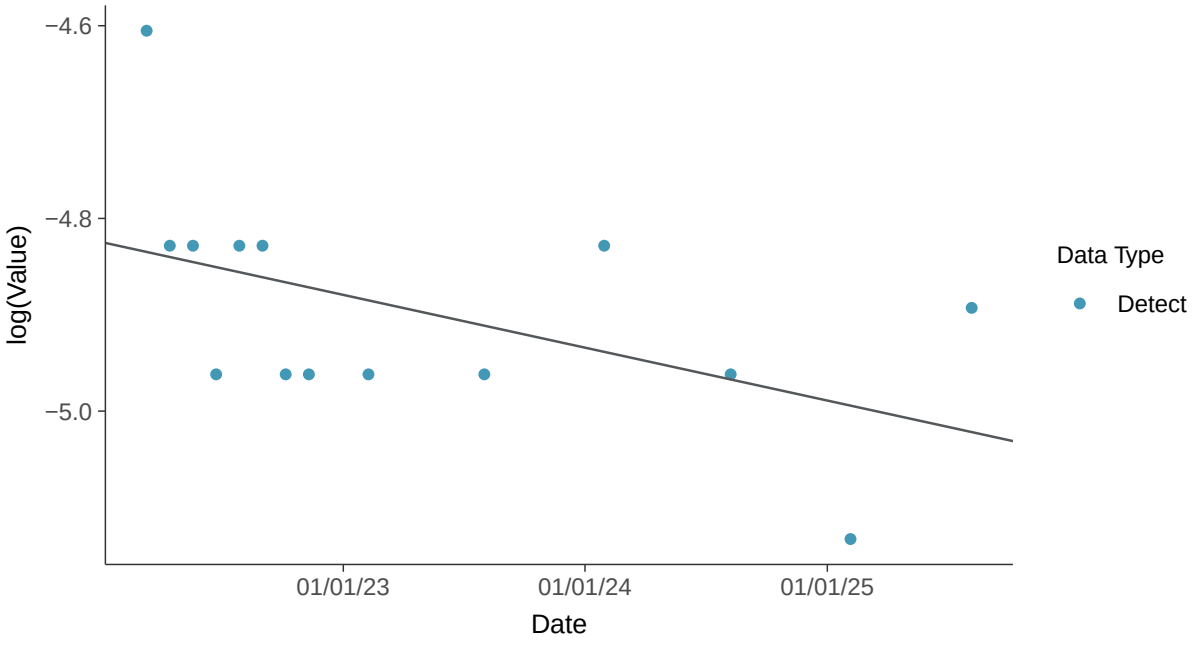
Gamma Q-Q plot

Nickel, MW-7C (mg/l)



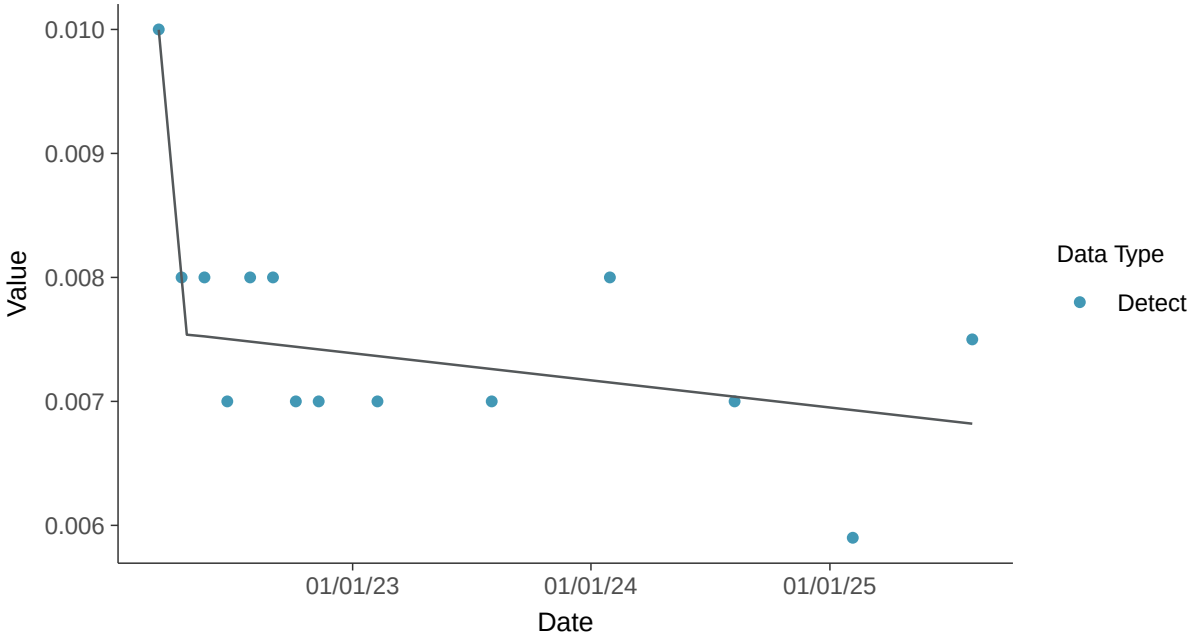
Trend Regression: Lognormal MLE

Nickel, MW-7C (mg/l)



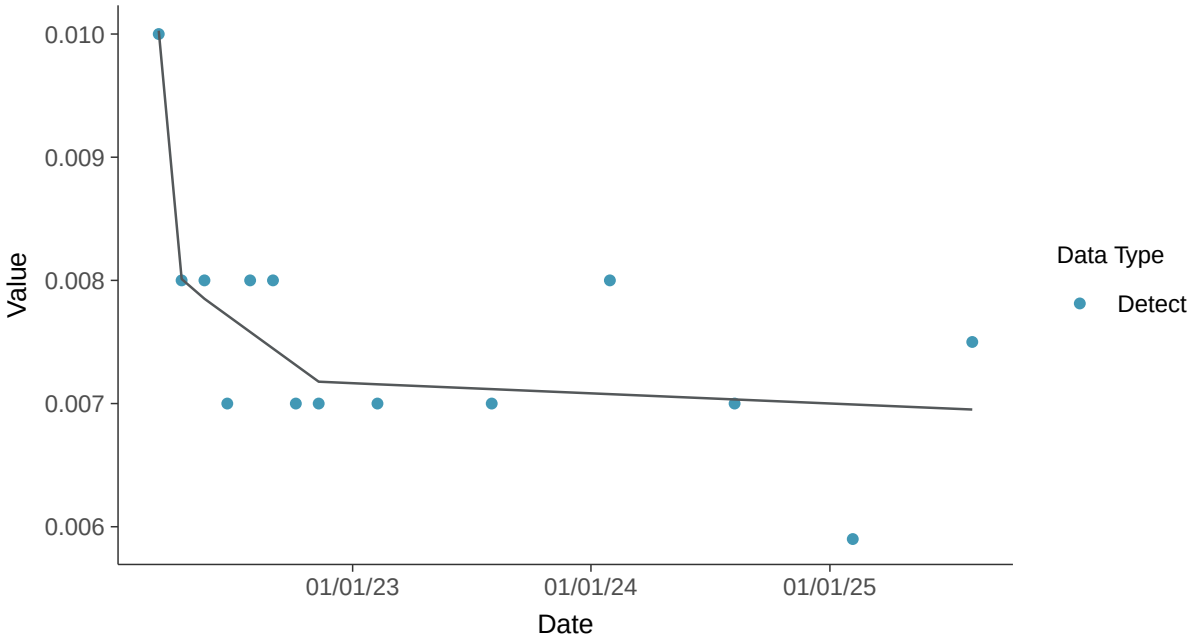
Trend Regression: Piecewise Linear-Linear

Nickel, MW-7C (mg/l)



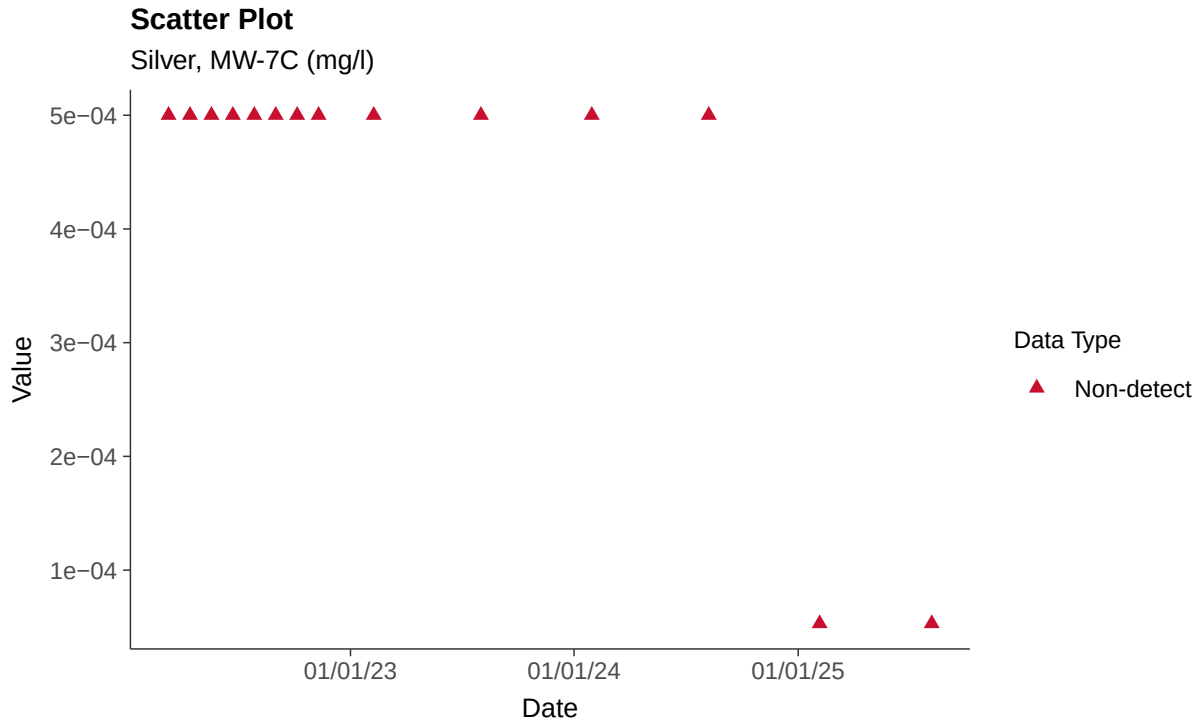
Trend Regression: Piecewise Linear-Linear-Linear

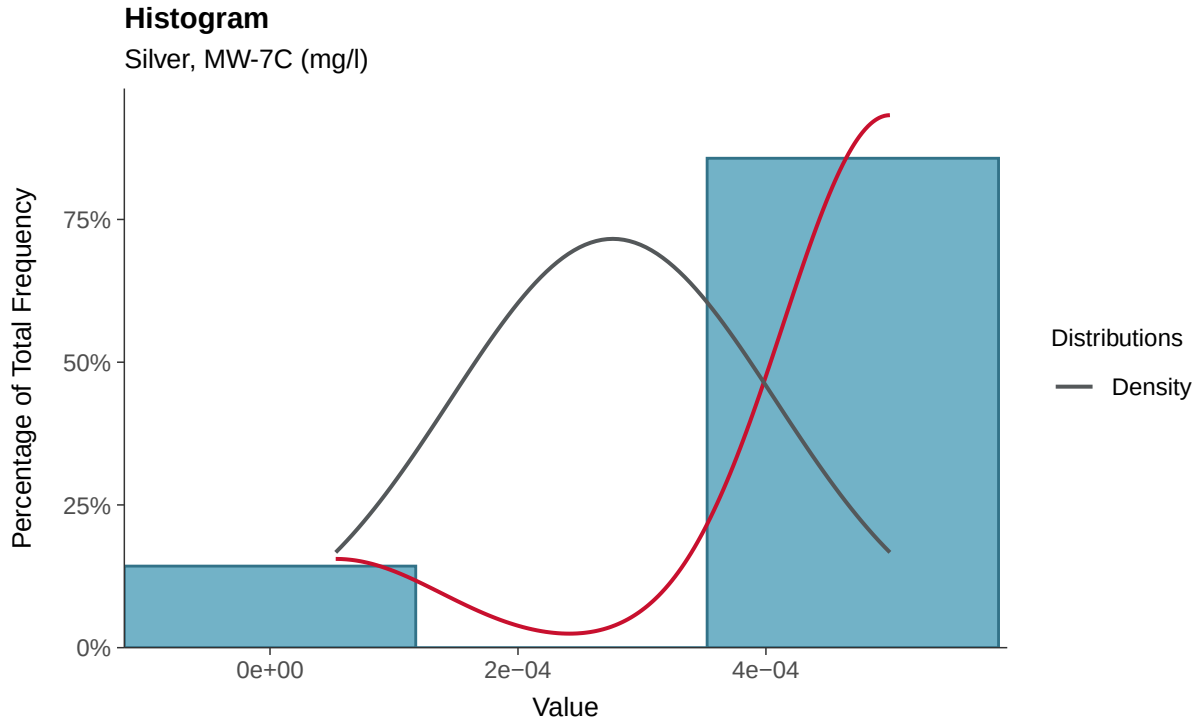
Nickel, MW-7C (mg/l)



Part 115: Silver, MW-7C

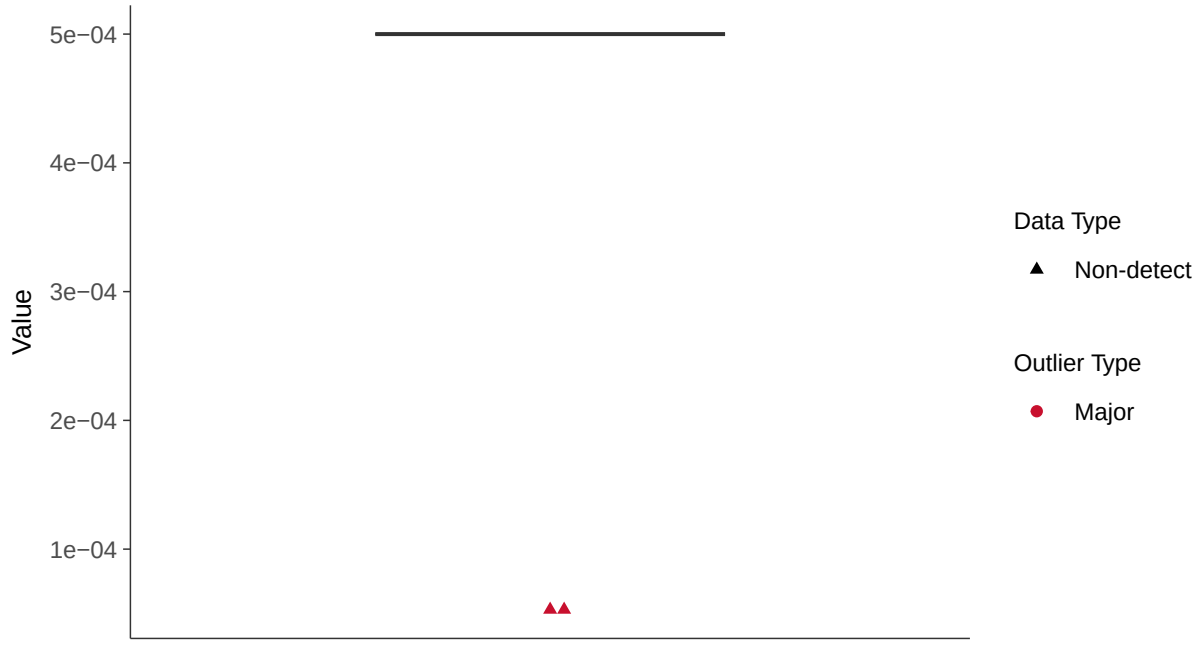
ID: 18_5_123





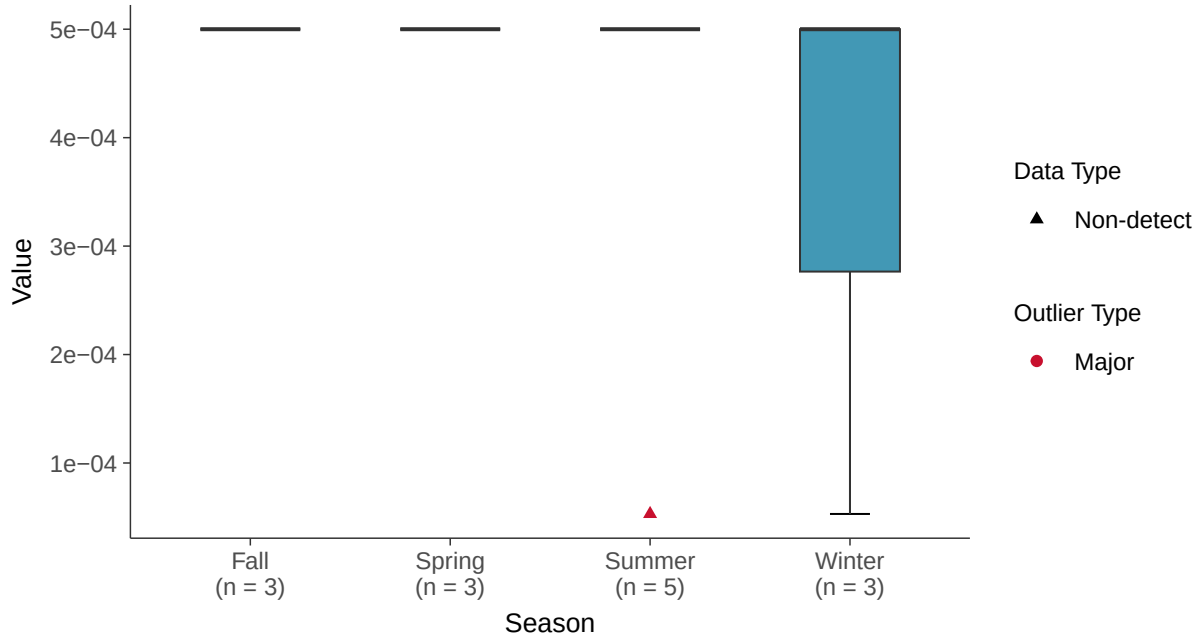
Boxplot

Silver, MW-7C (mg/l)



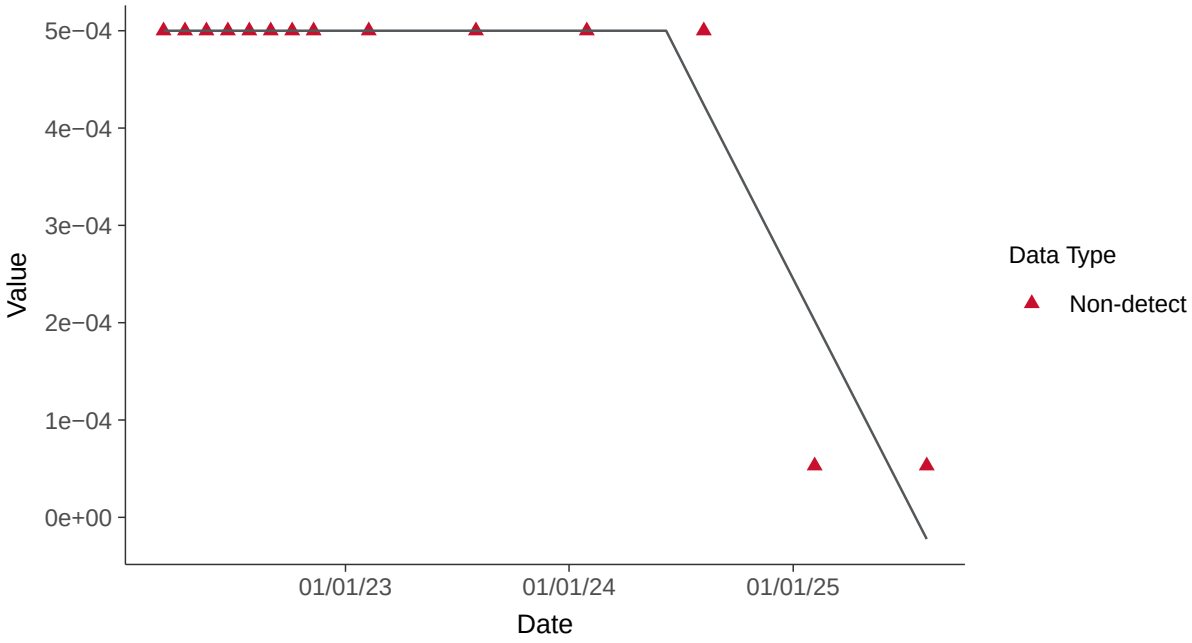
Boxplot by Season

Silver, MW-7C (mg/l)



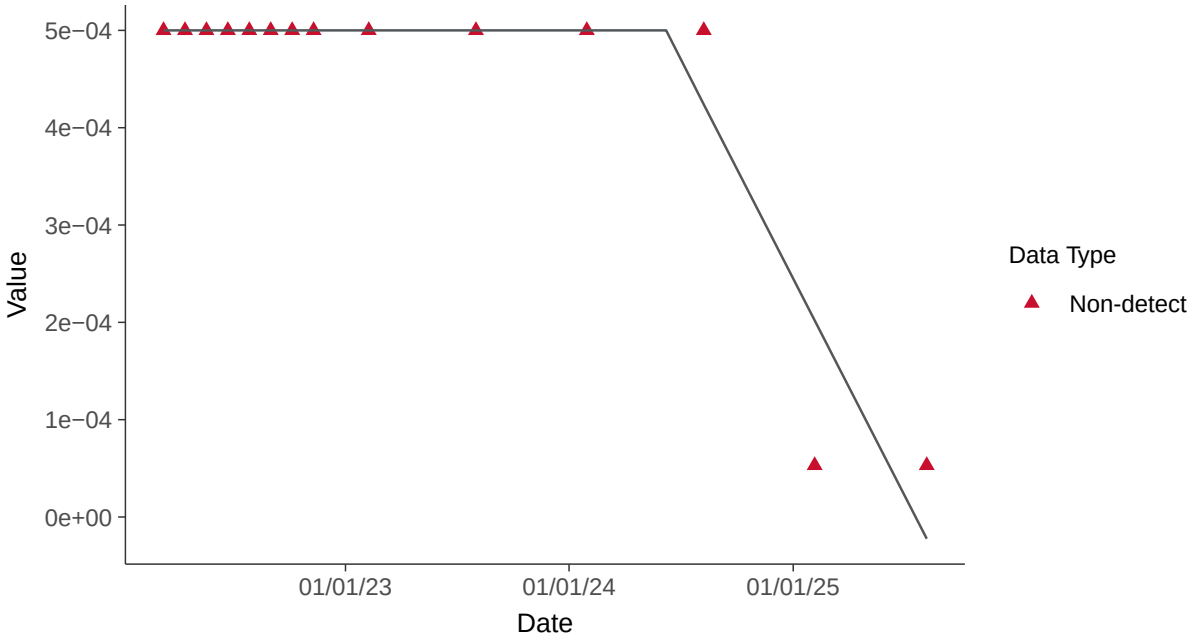
Trend Regression: Piecewise Linear-Linear

Silver, MW-7C (mg/l)



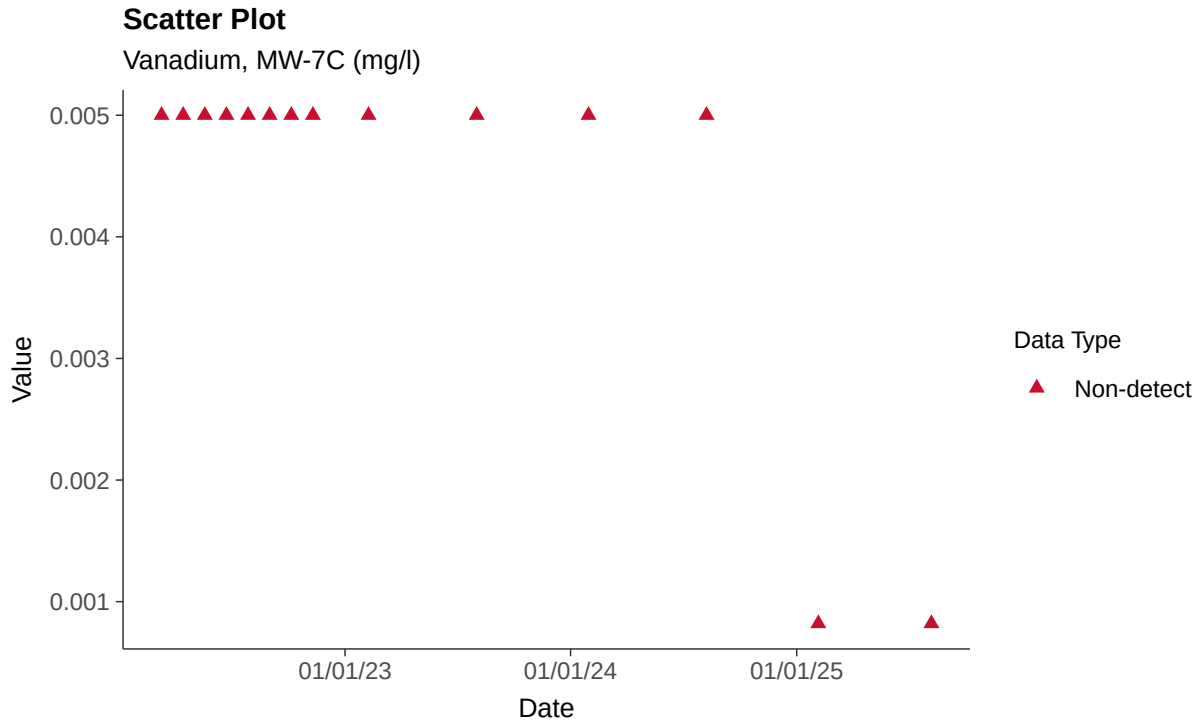
Trend Regression: Piecewise Linear-Linear-Linear

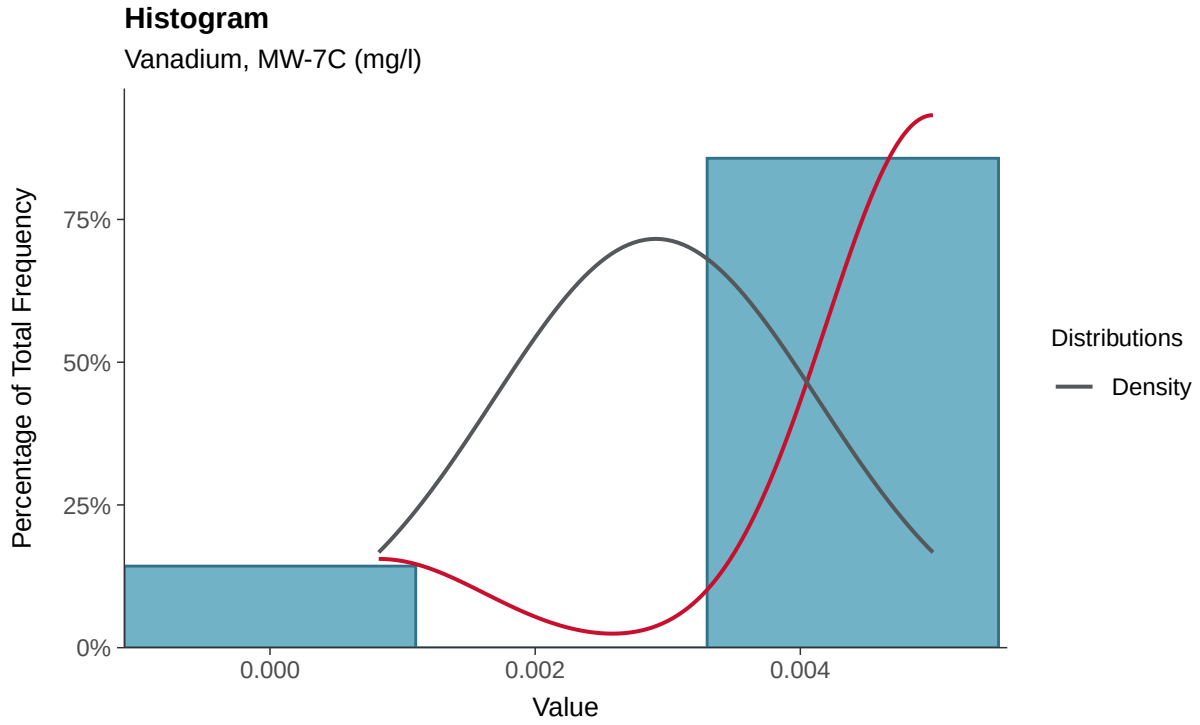
Silver, MW-7C (mg/l)



Part 115: Vanadium, MW-7C

ID: 18_5_128



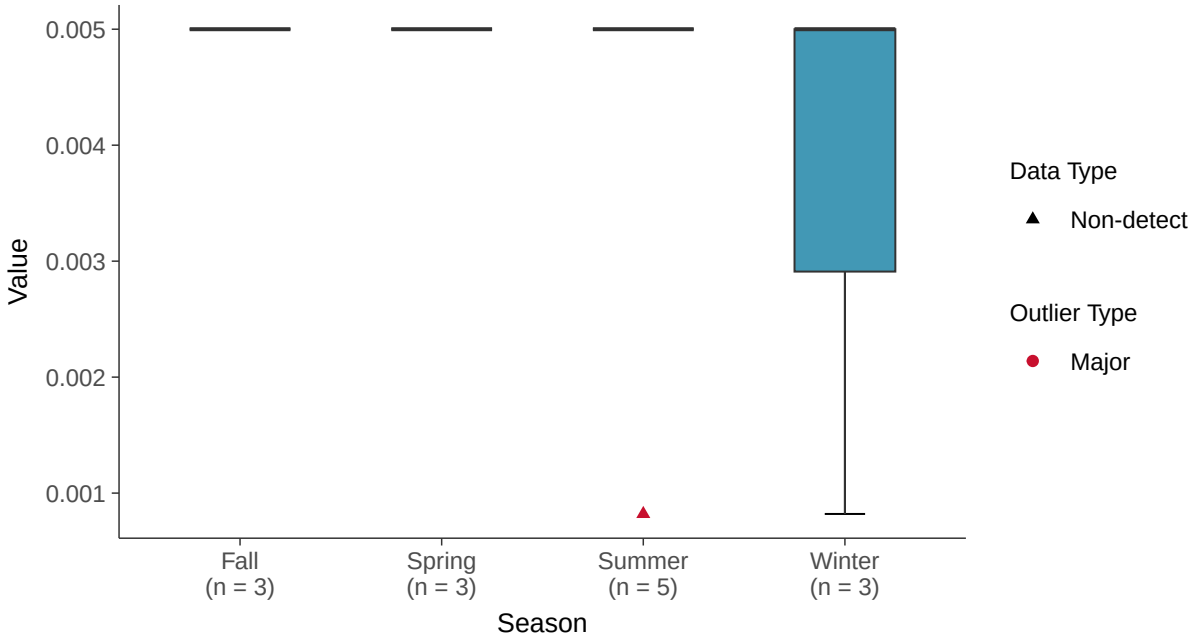


Boxplot

Vanadium, MW-7C (mg/l)

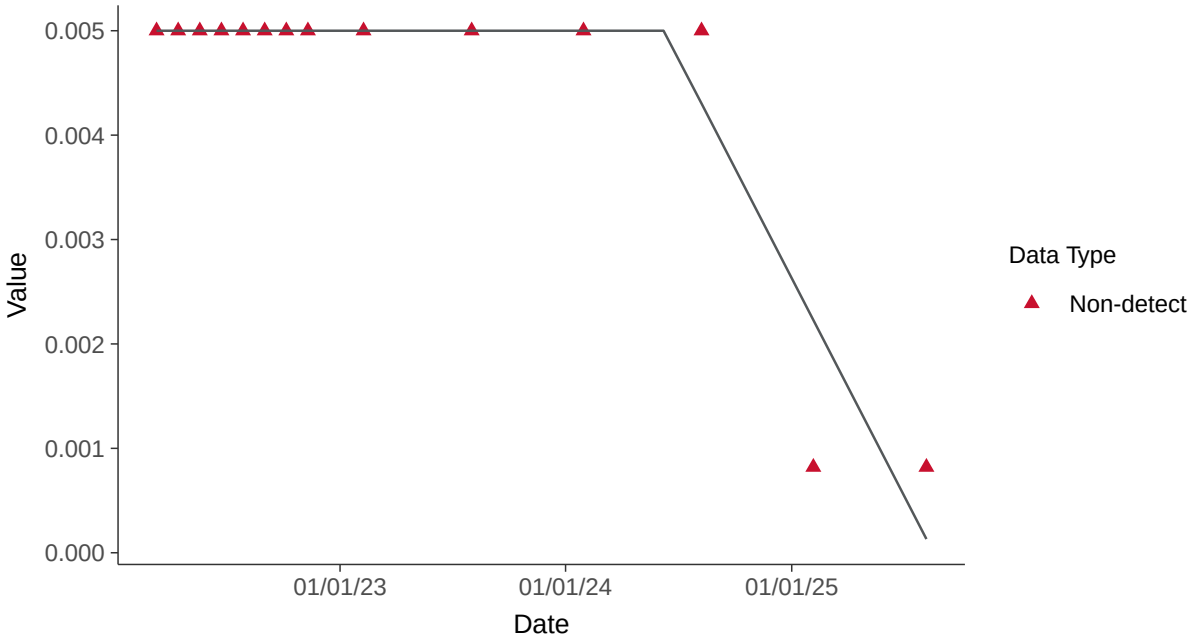
Boxplot by Season

Vanadium, MW-7C (mg/l)



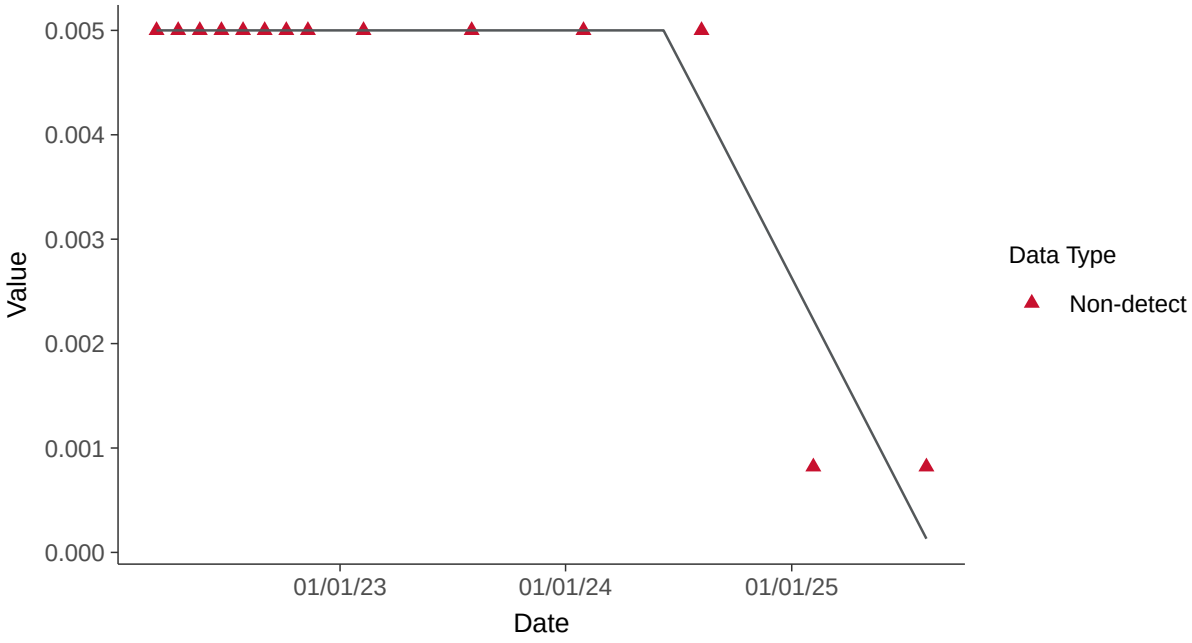
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-7C (mg/l)



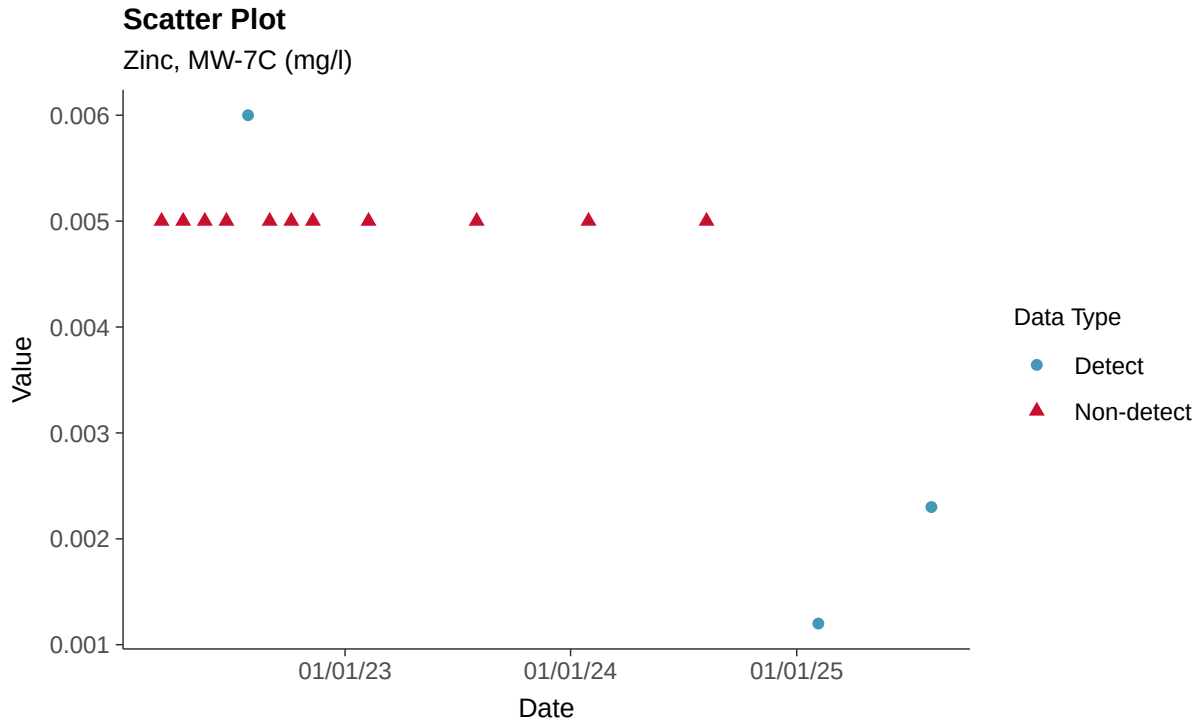
Trend Regression: Piecewise Linear-Linear-Linear

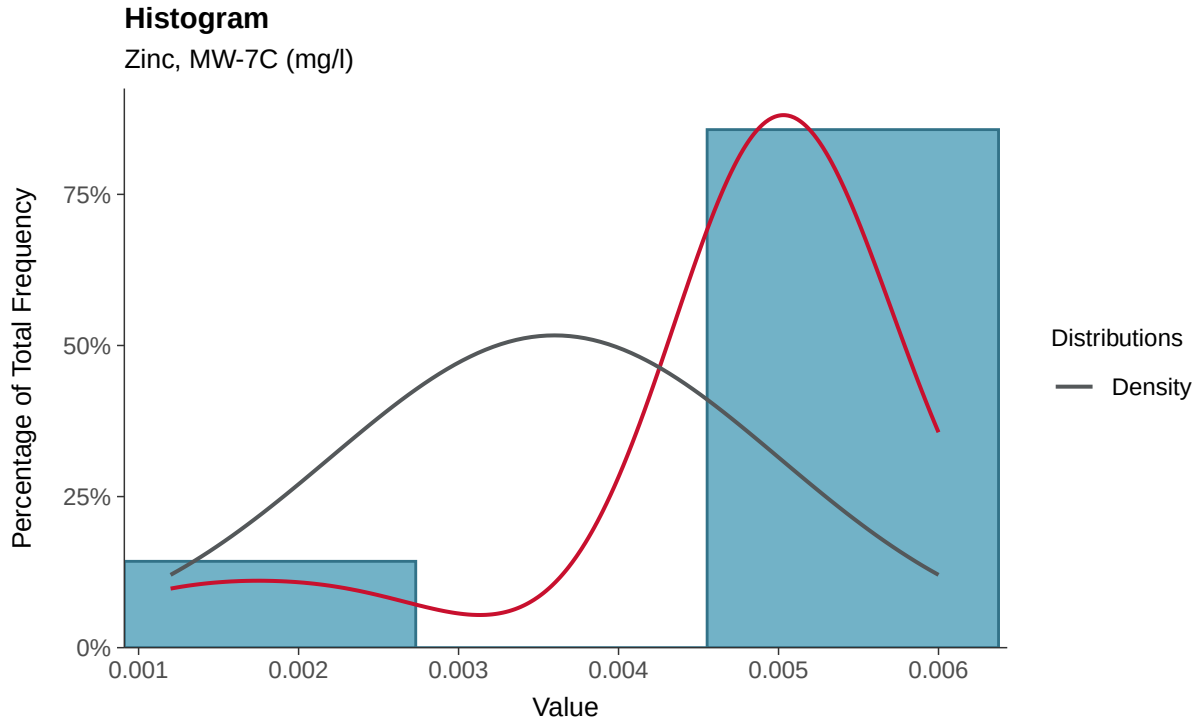
Vanadium, MW-7C (mg/l)



Part 115: Zinc, MW-7C

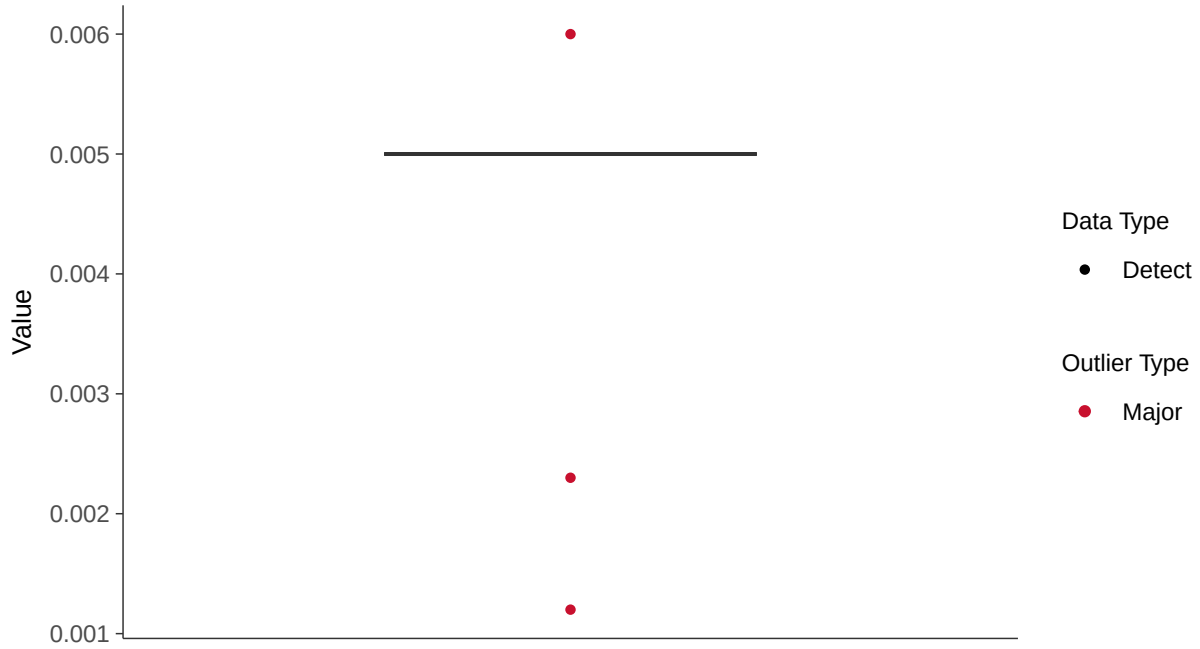
ID: 18_5_129





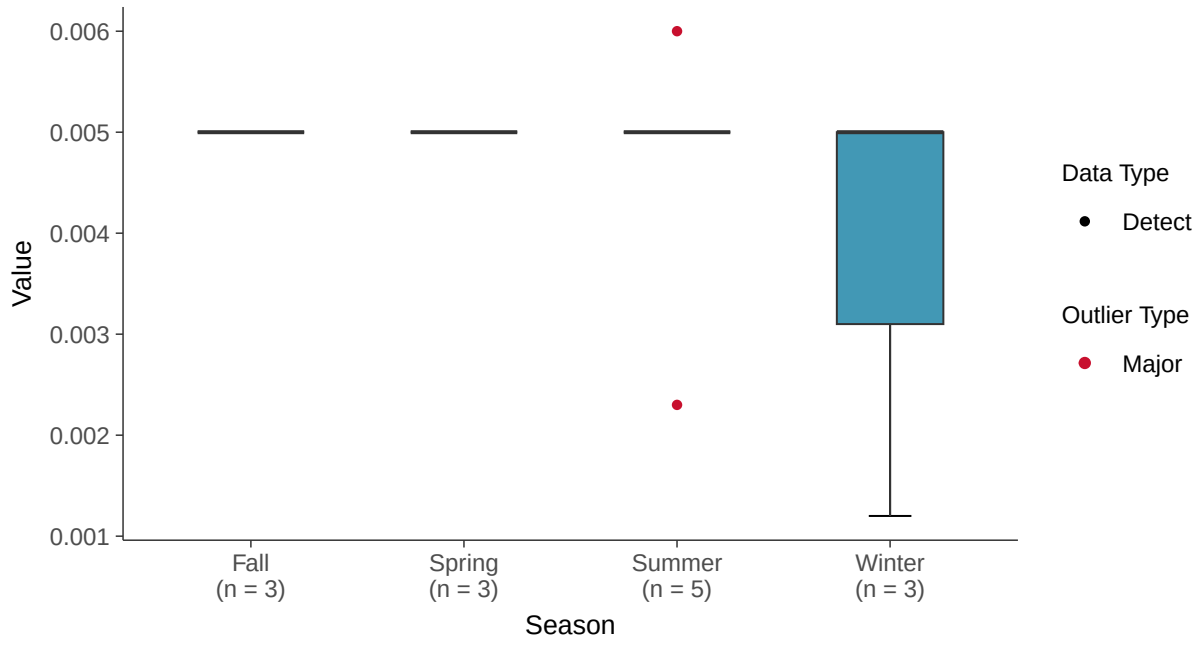
Boxplot

Zinc, MW-7C (mg/l)



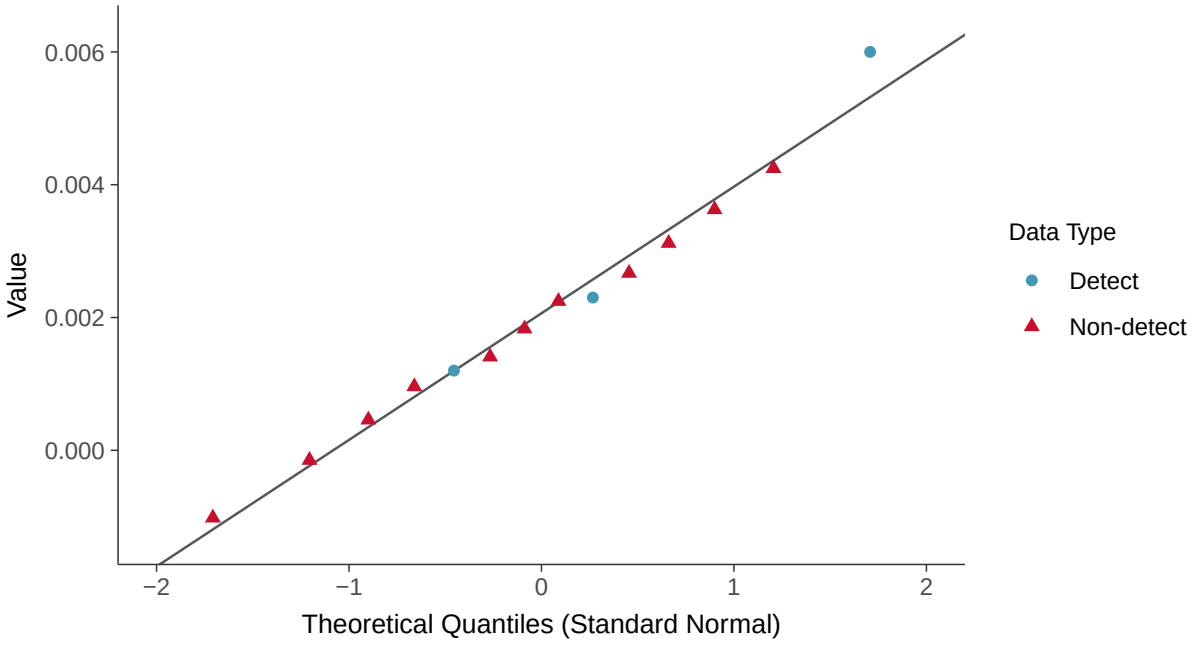
Boxplot by Season

Zinc, MW-7C (mg/l)



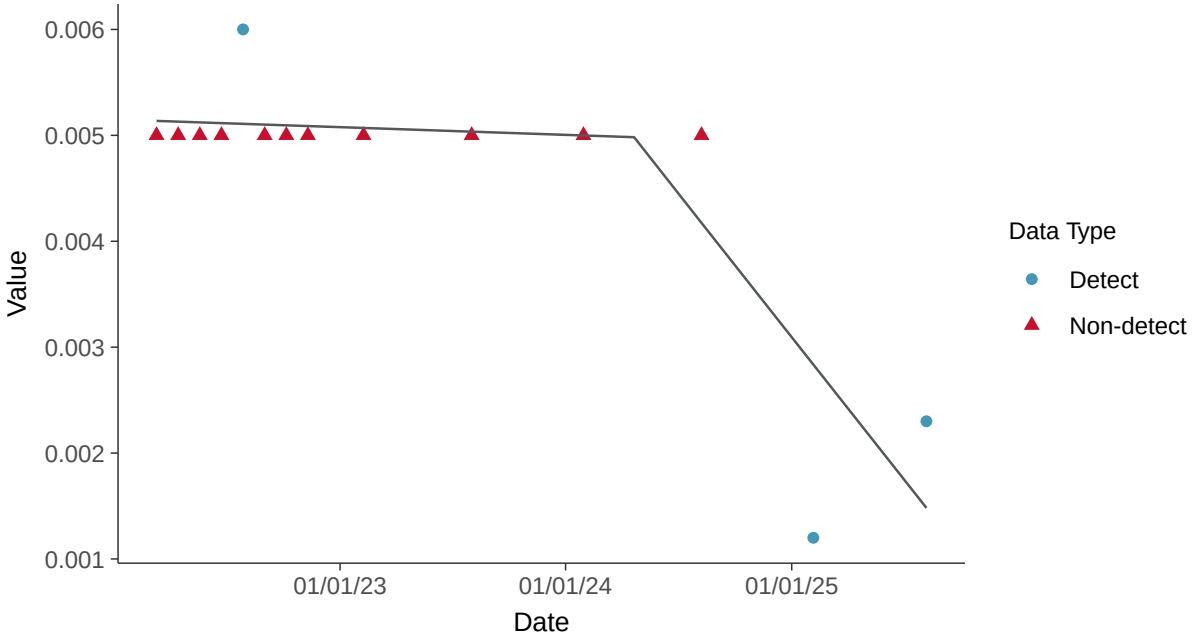
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-7C (mg/l)



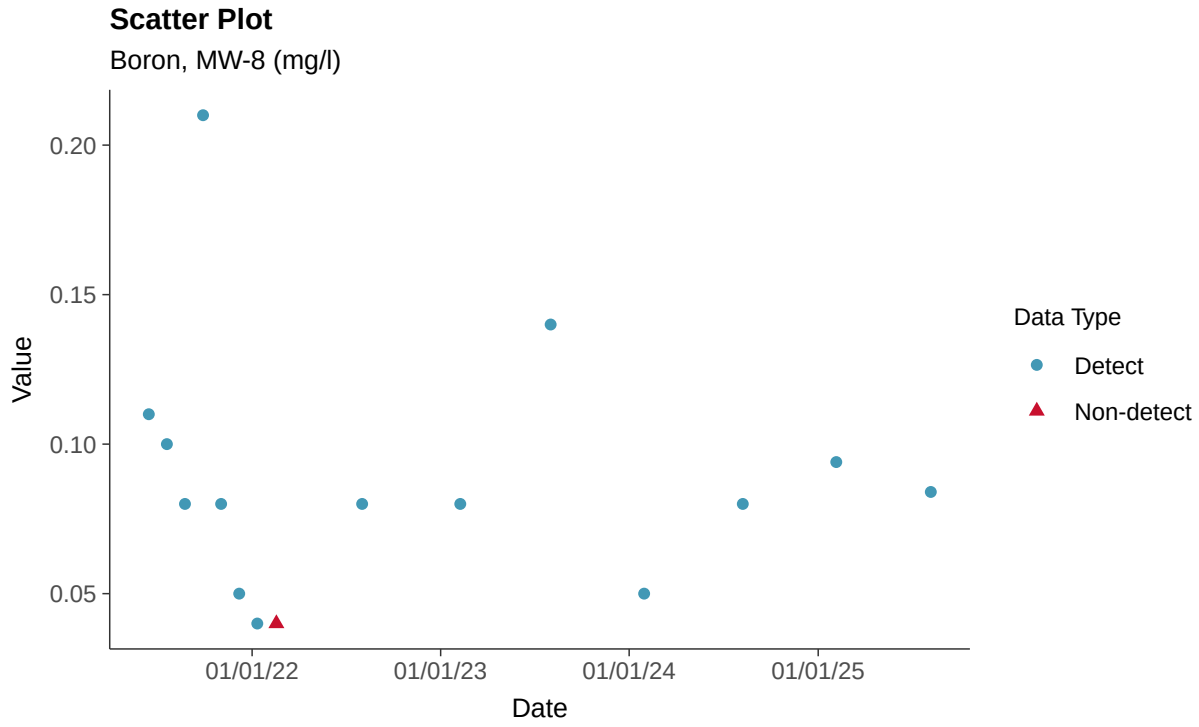
Trend Regression: Piecewise Linear-Linear

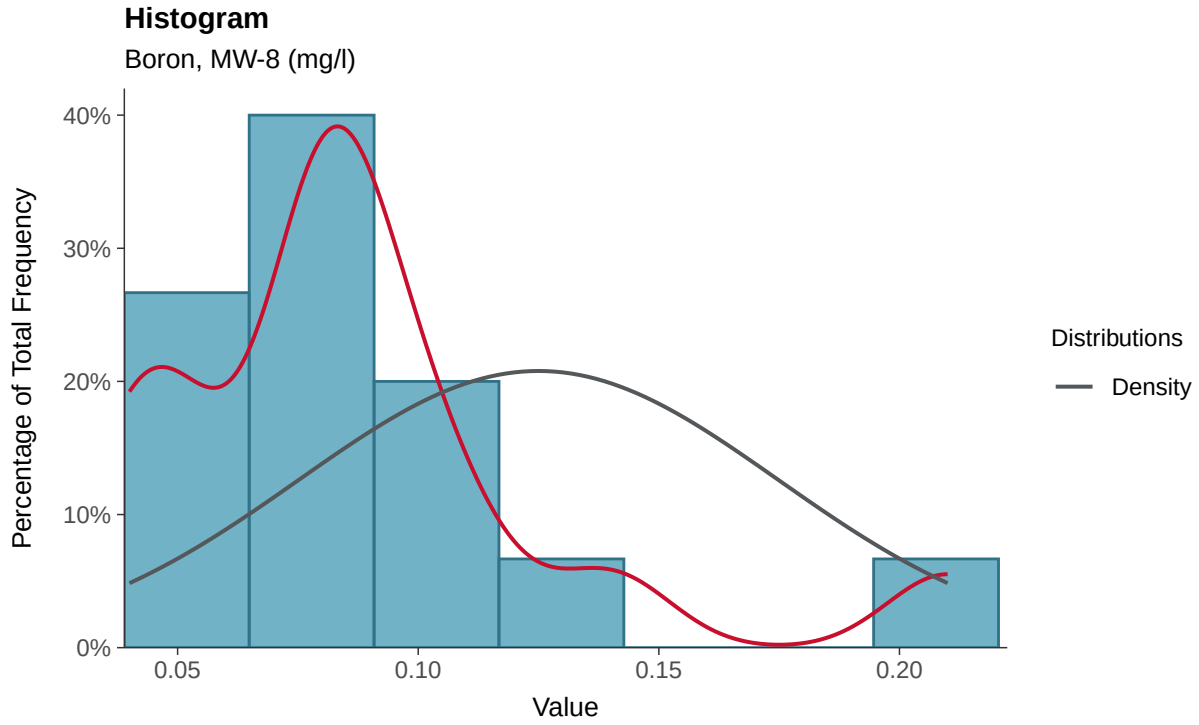
Zinc, MW-7C (mg/l)



Appendix III: Boron, MW-8

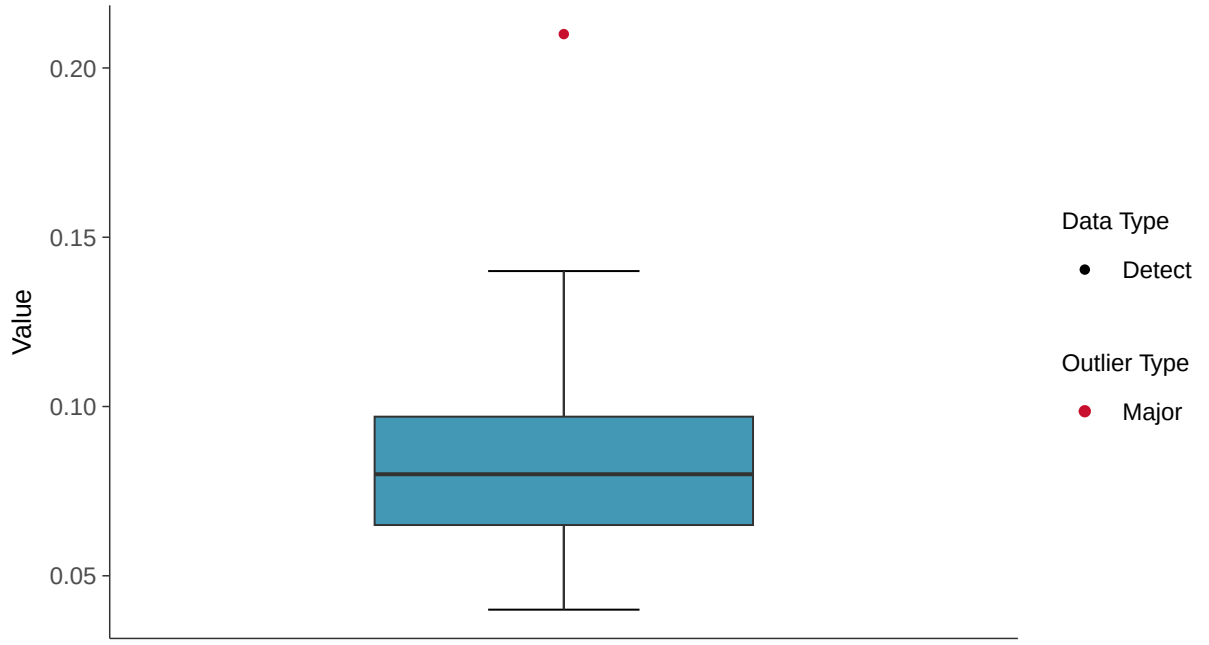
ID: 19_2_105





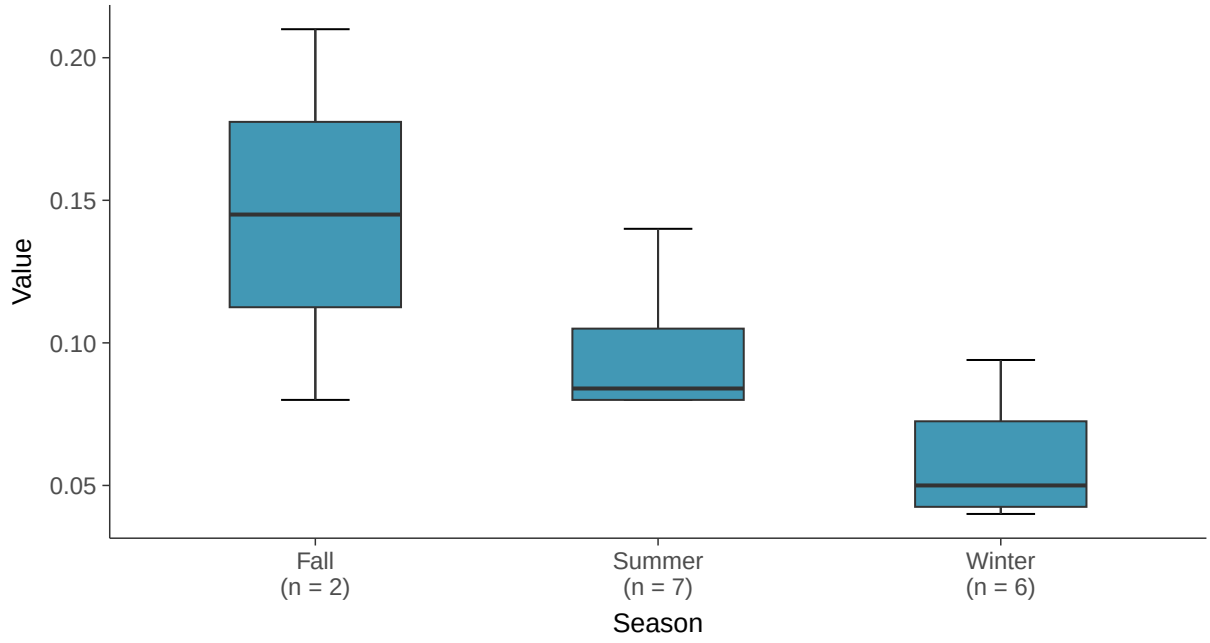
Boxplot

Boron, MW-8 (mg/l)



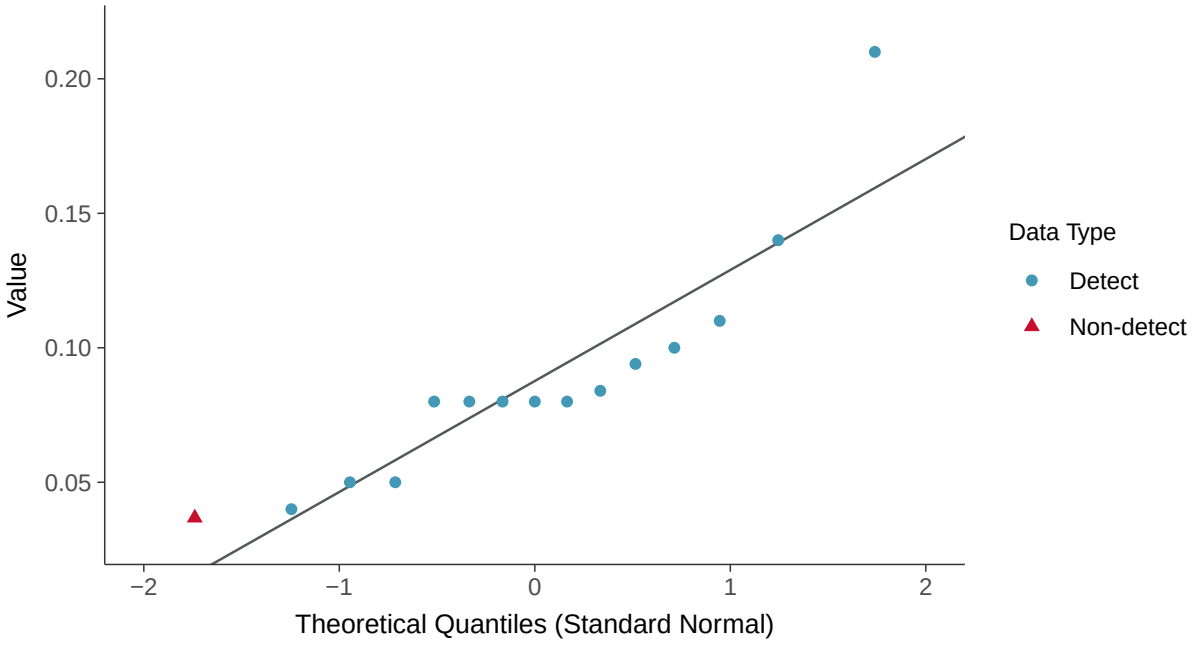
Boxplot by Season

Boron, MW-8 (mg/l)



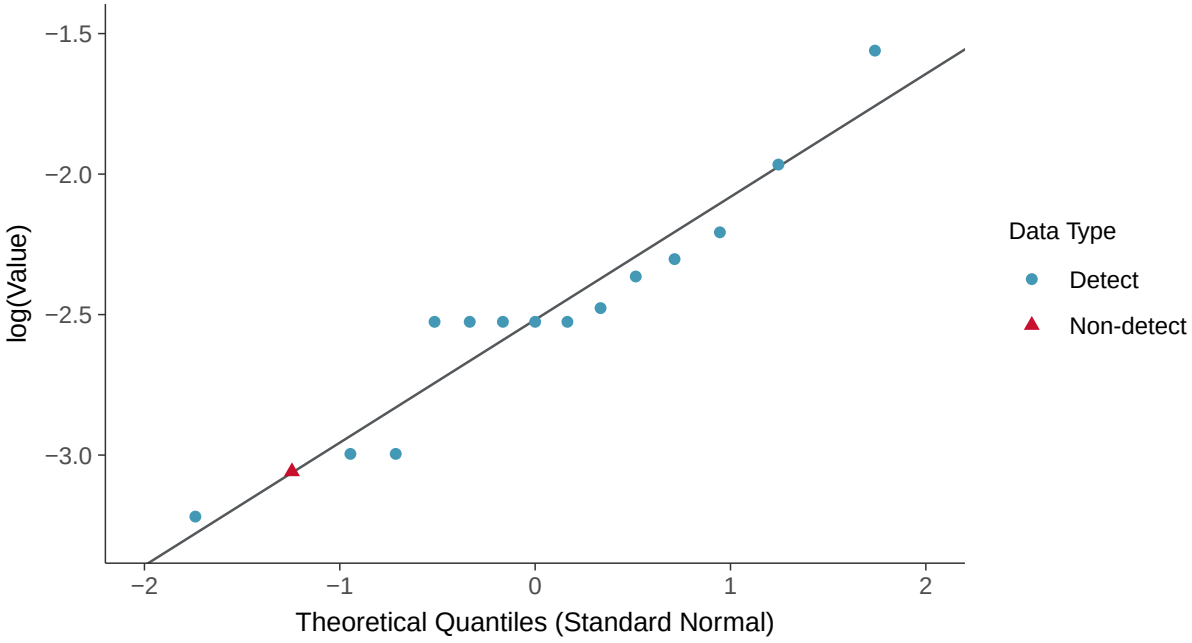
Normal Q-Q plot using ROS Imputed Estimates

Boron, MW-8 (mg/l)



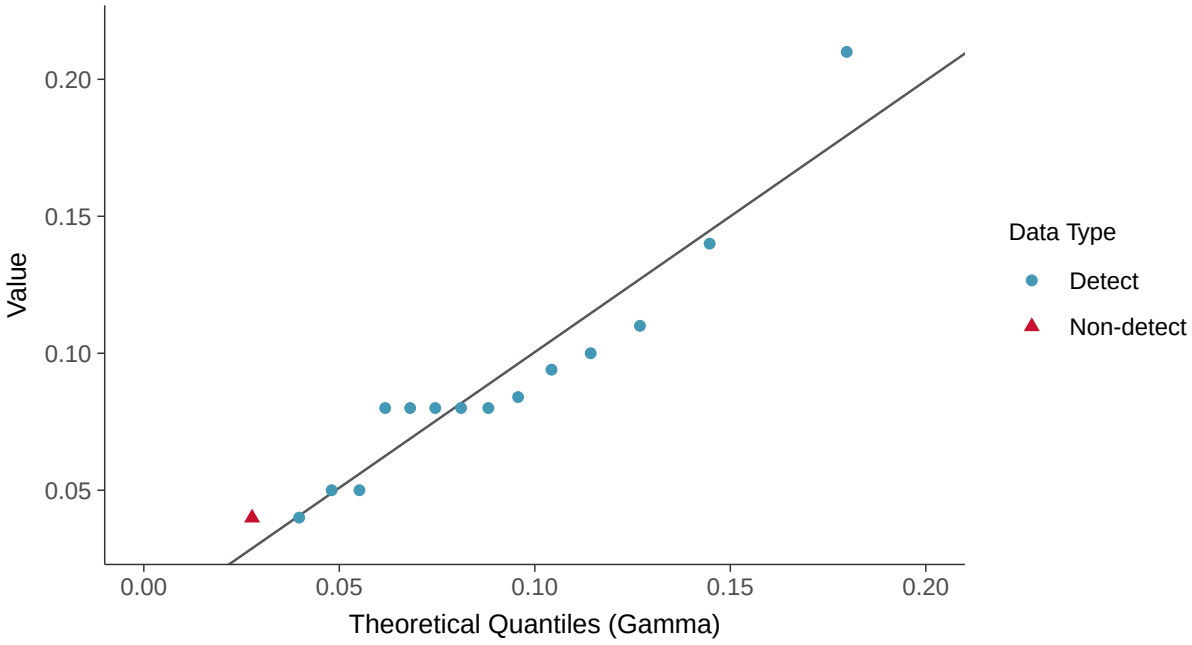
Lognormal Q-Q plot using ROS Imputed Estimates

Boron, MW-8 (mg/l)



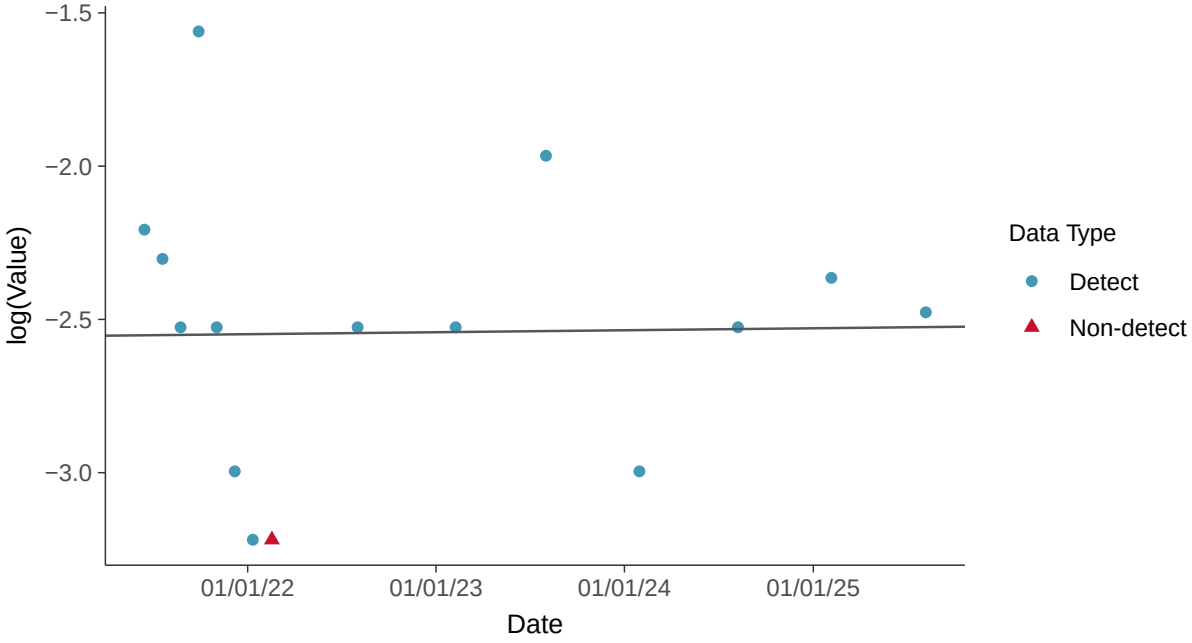
Gamma Q-Q plot using ROS Imputed Estimates

Boron, MW-8 (mg/l)



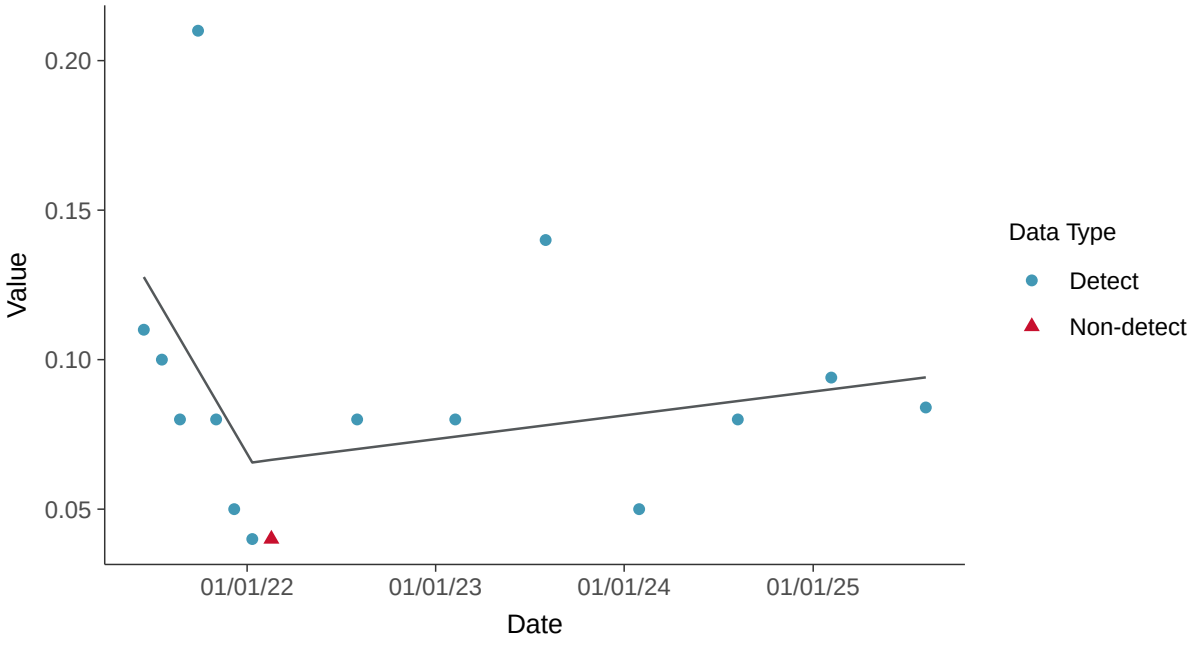
Trend Regression: Lognormal MLE

Boron, MW-8 (mg/l)



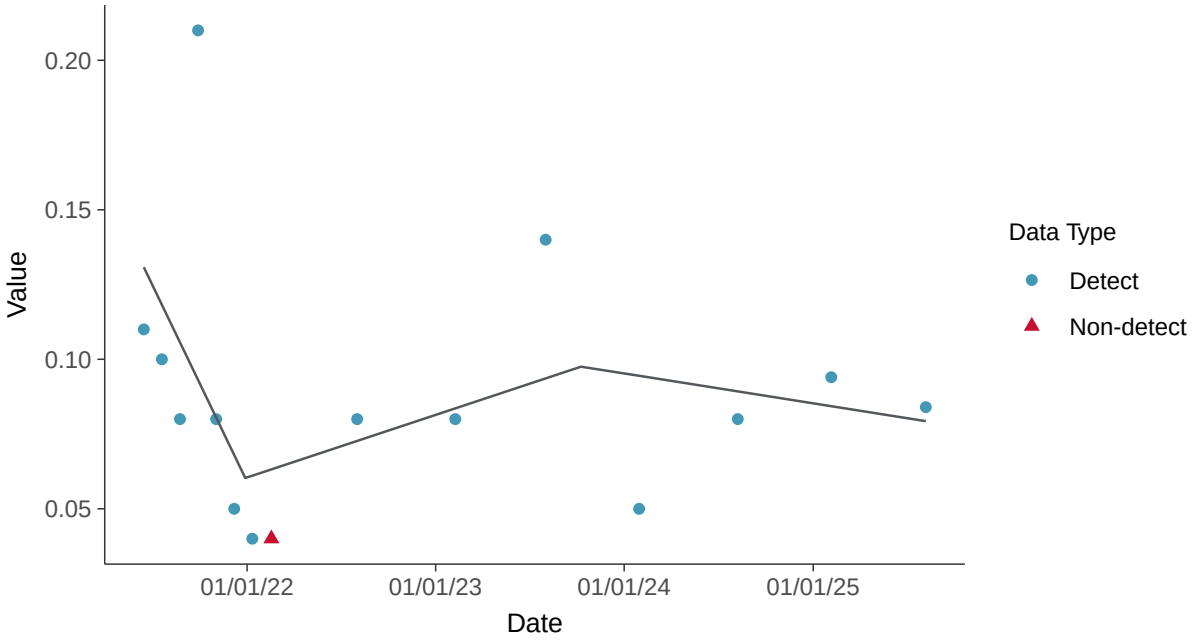
Trend Regression: Piecewise Linear-Linear

Boron, MW-8 (mg/l)



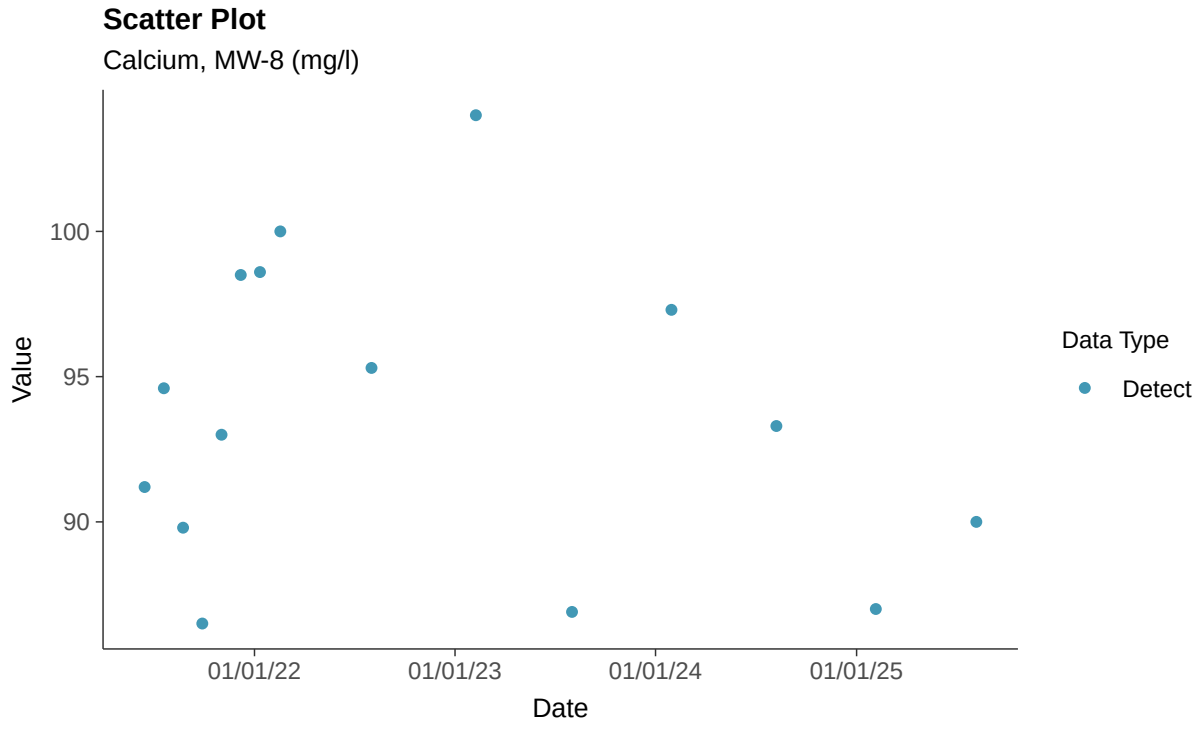
Trend Regression: Piecewise Linear-Linear-Linear

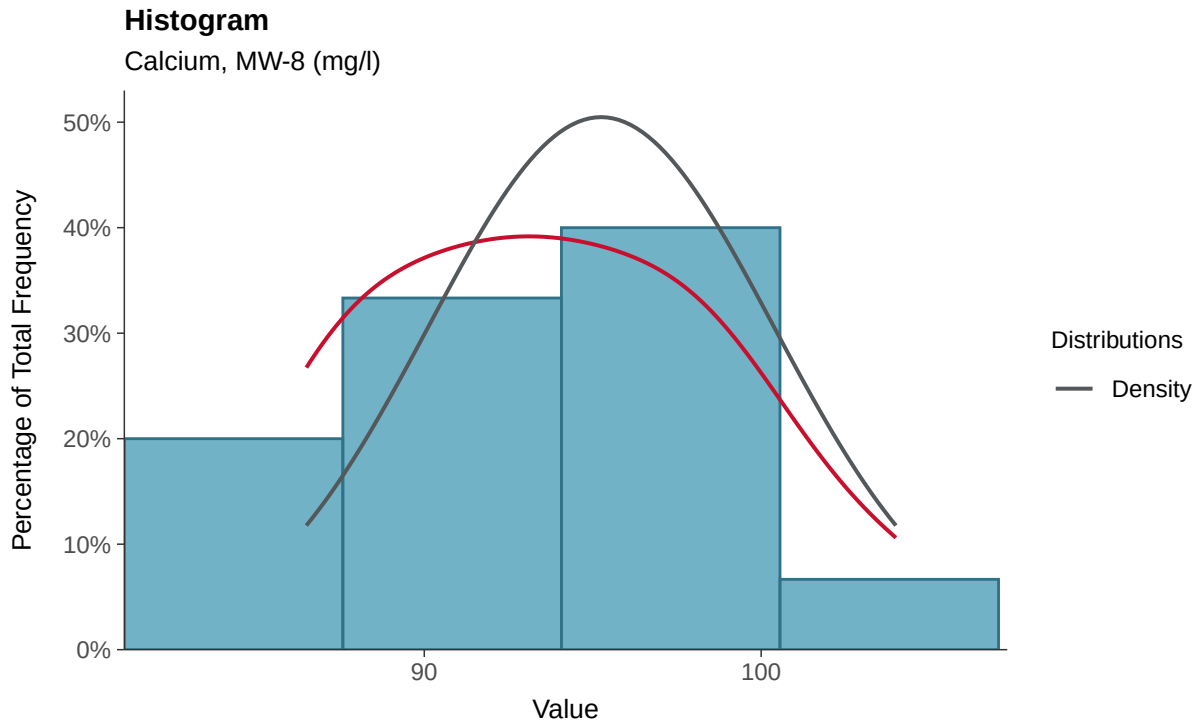
Boron, MW-8 (mg/l)



Appendix III: Calcium, MW-8

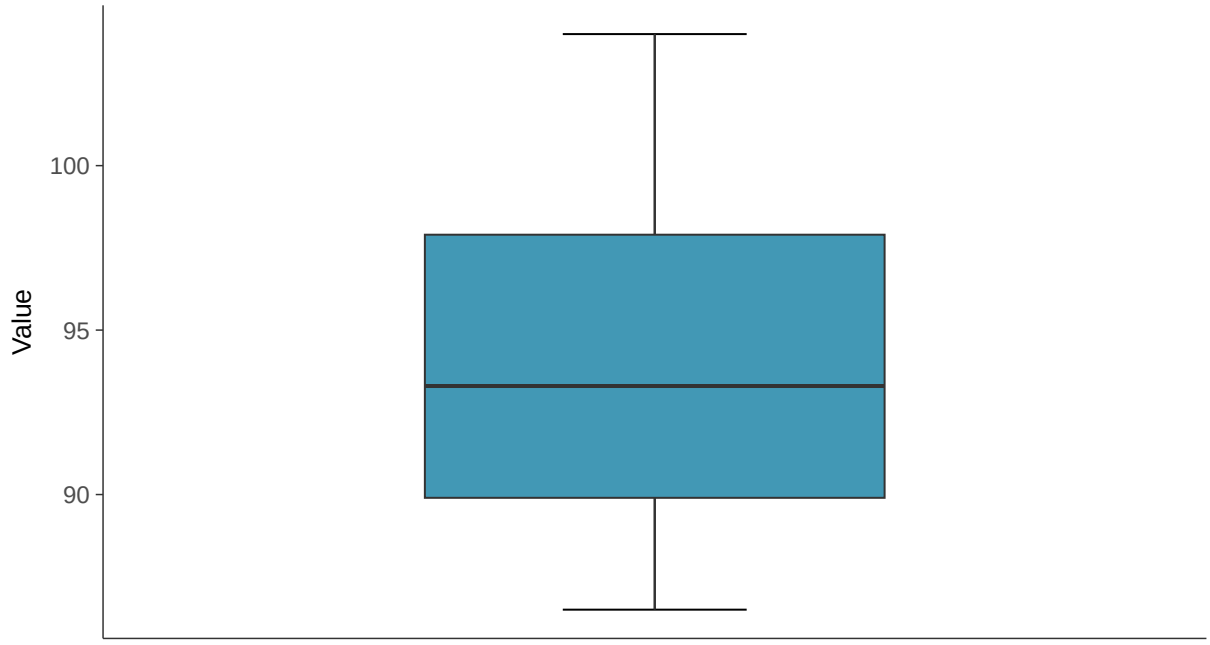
ID: 19_2_107





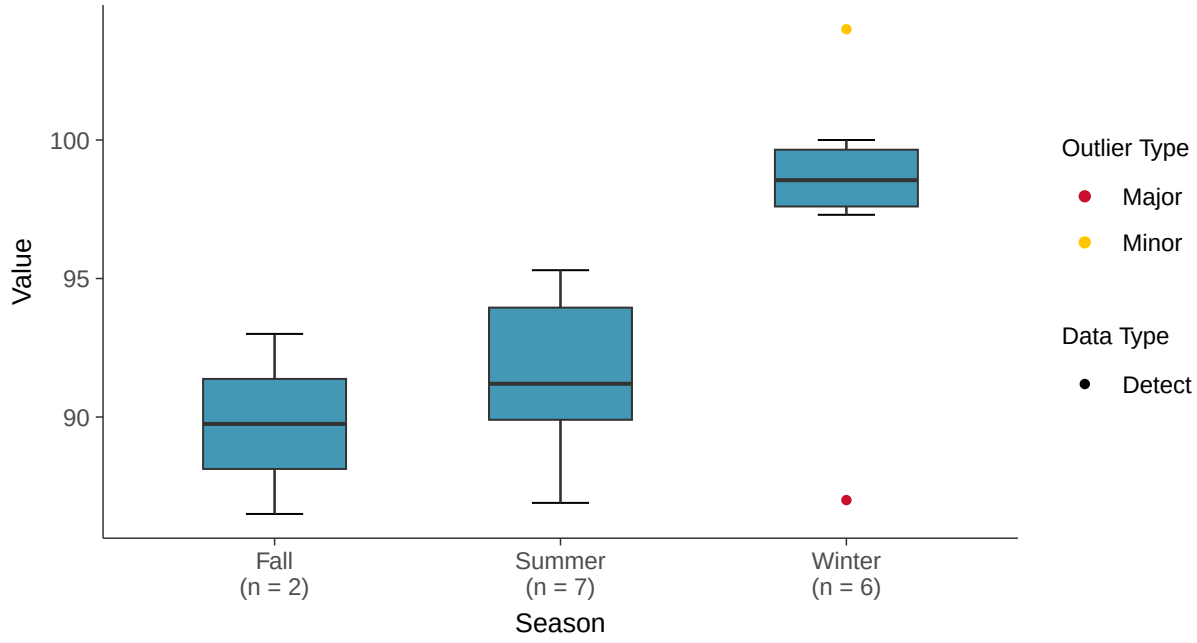
Boxplot

Calcium, MW-8 (mg/l)



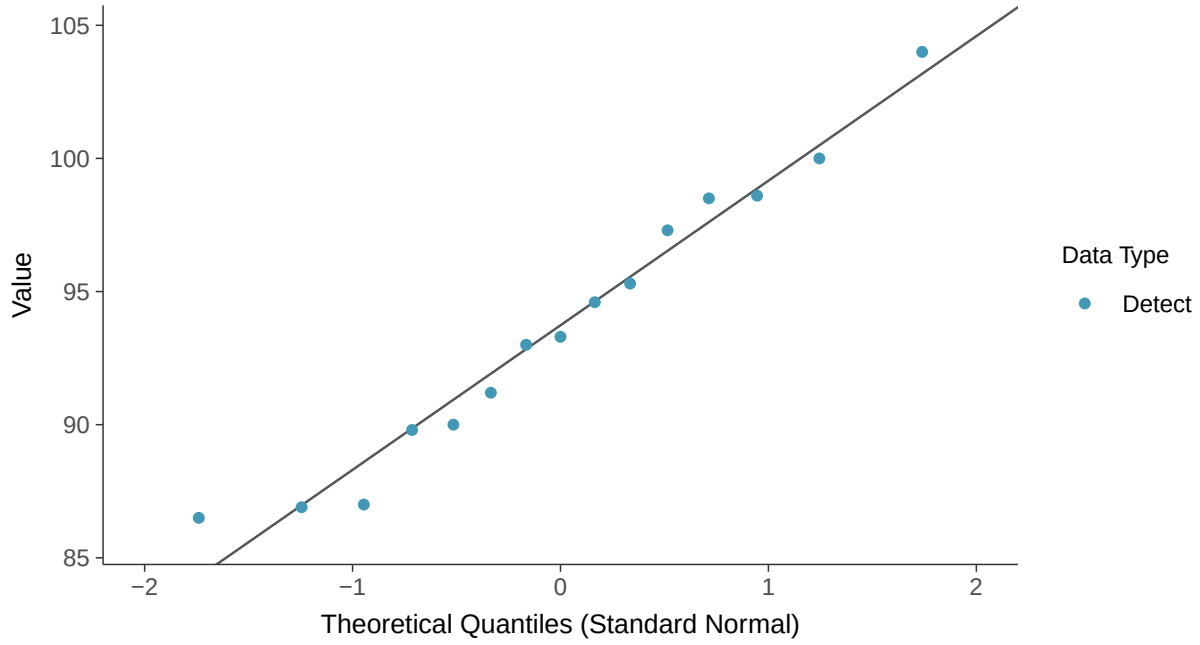
Boxplot by Season

Calcium, MW-8 (mg/l)



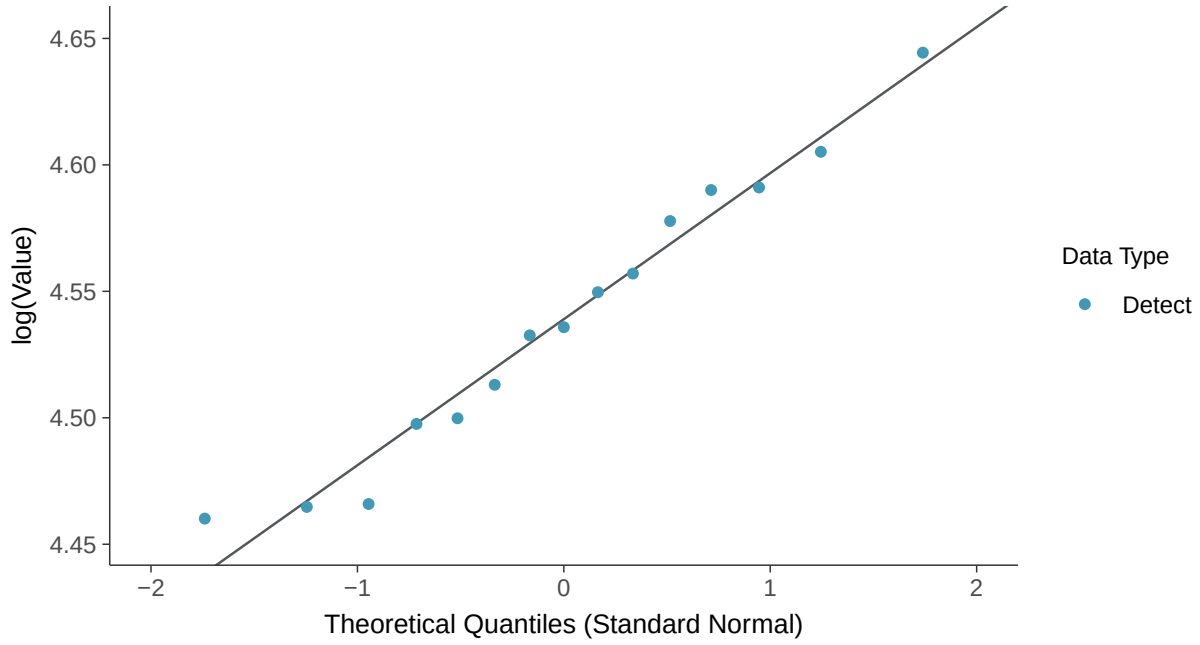
Normal Q-Q plot

Calcium, MW-8 (mg/l)



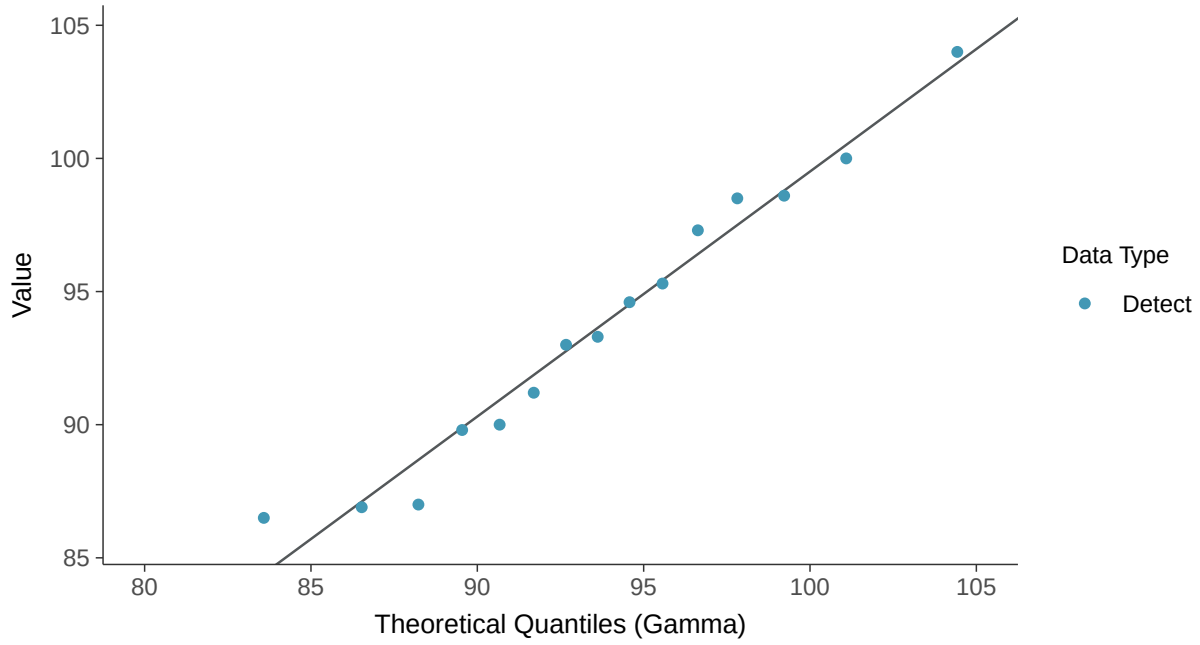
Lognormal Q-Q plot

Calcium, MW-8 (mg/l)



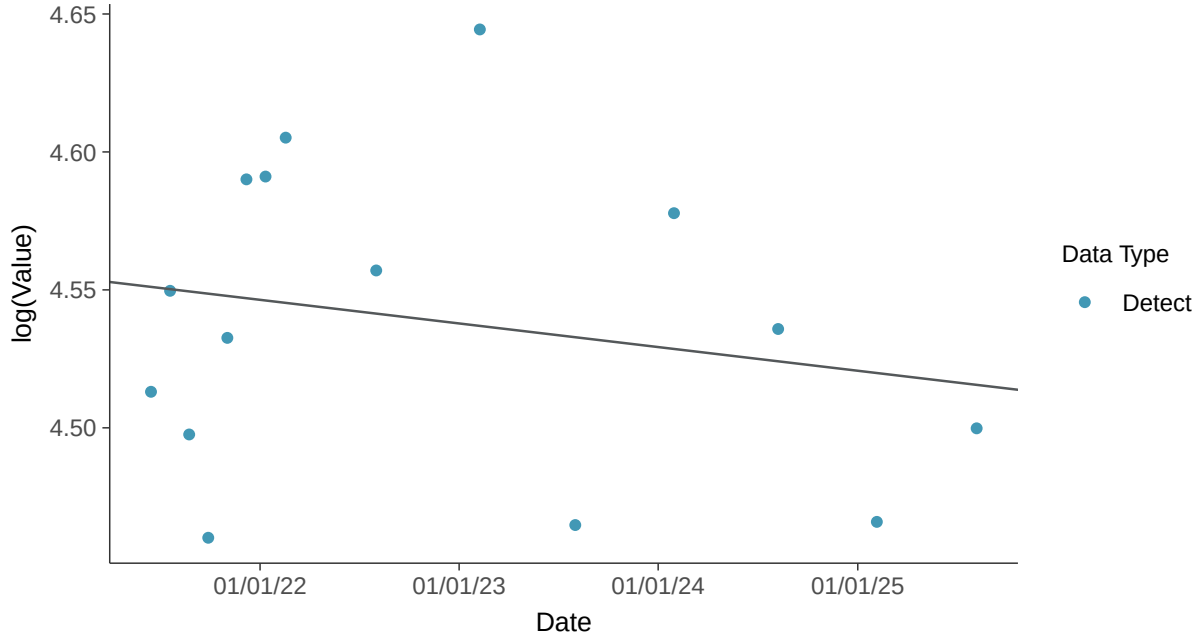
Gamma Q-Q plot

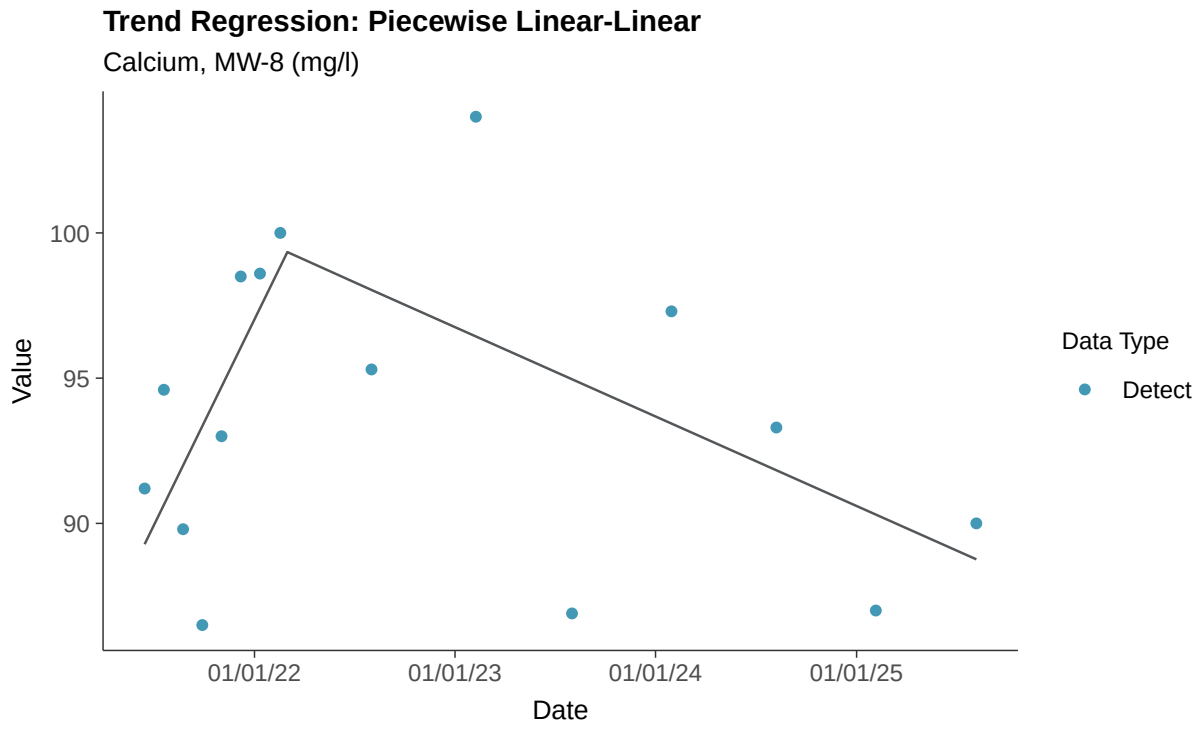
Calcium, MW-8 (mg/l)



Trend Regression: Lognormal MLE

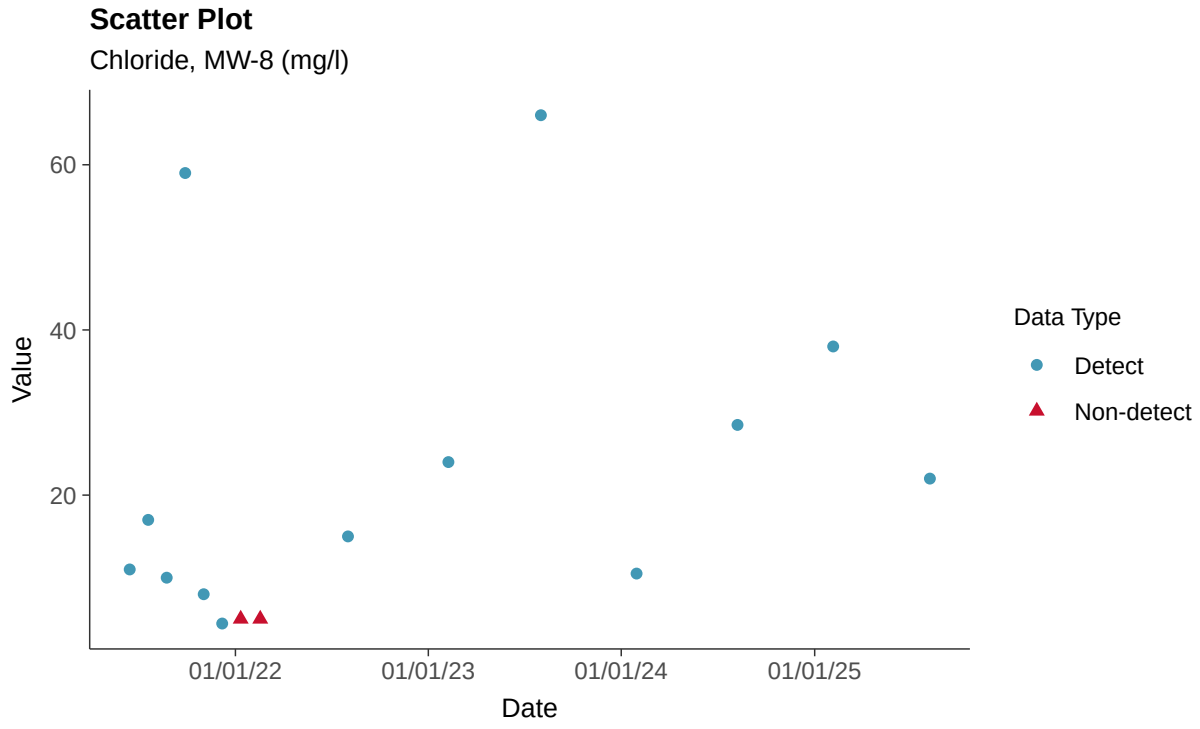
Calcium, MW-8 (mg/l)

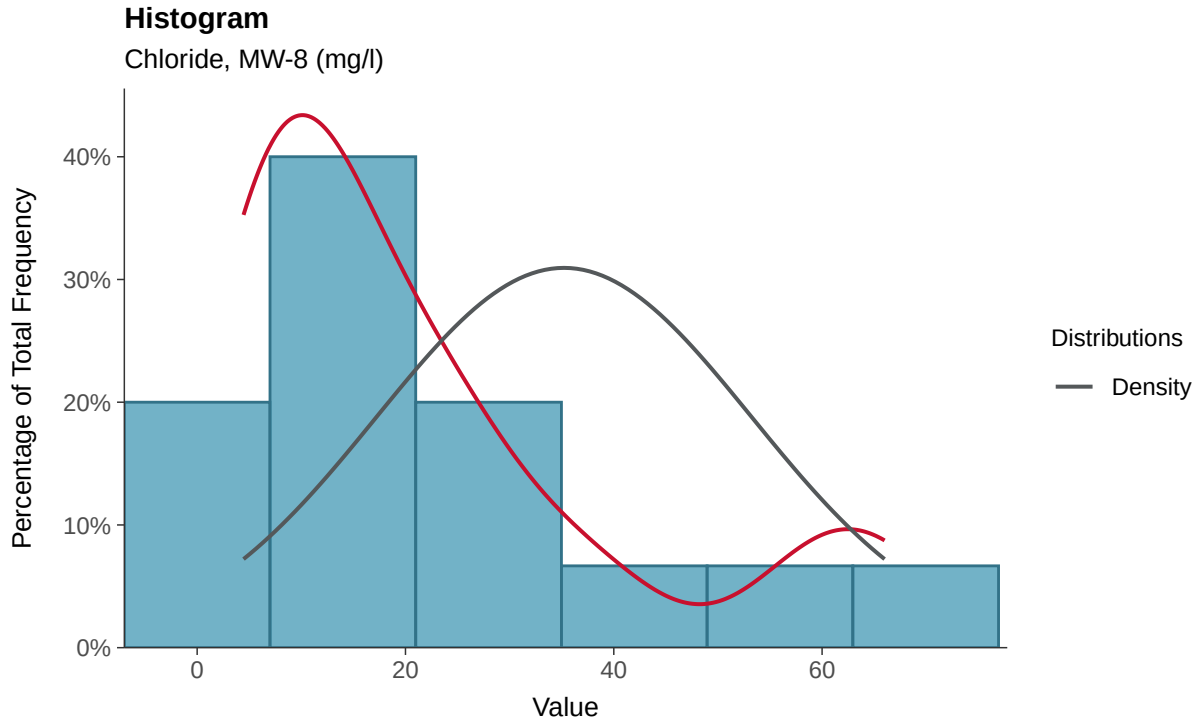



Trend Regression: Piecewise Linear-Linear
Calcium, MW-8 (mg/l)
Value
100
95
90
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect

Appendix III: Chloride, MW-8

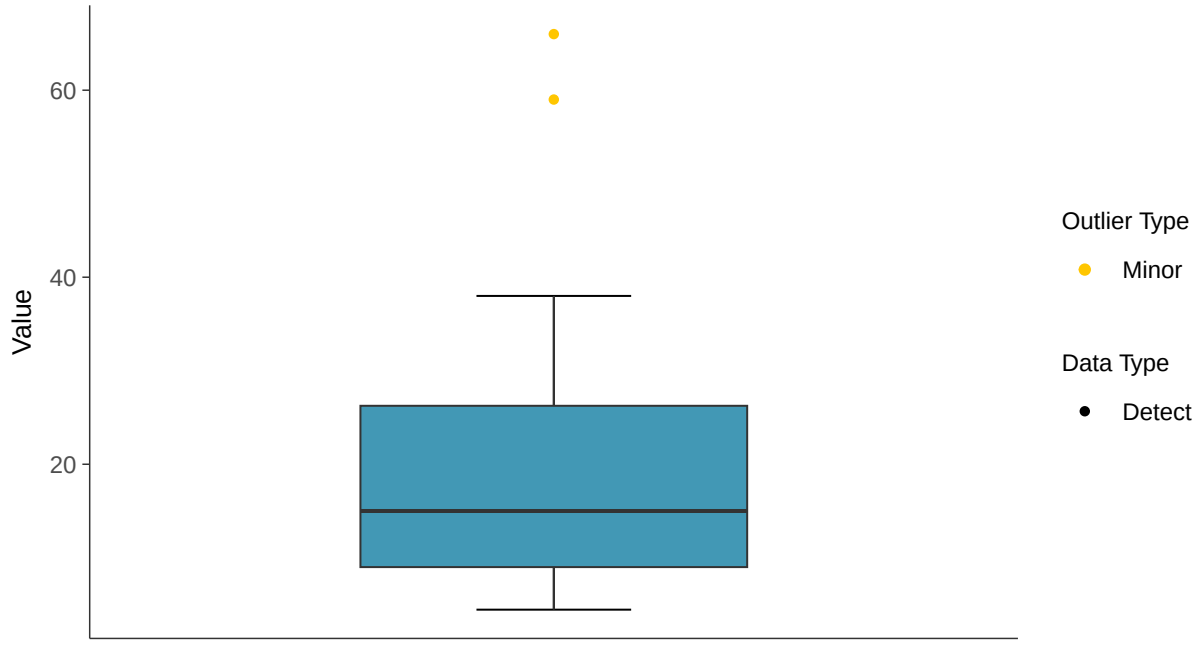
ID: 19_2_108





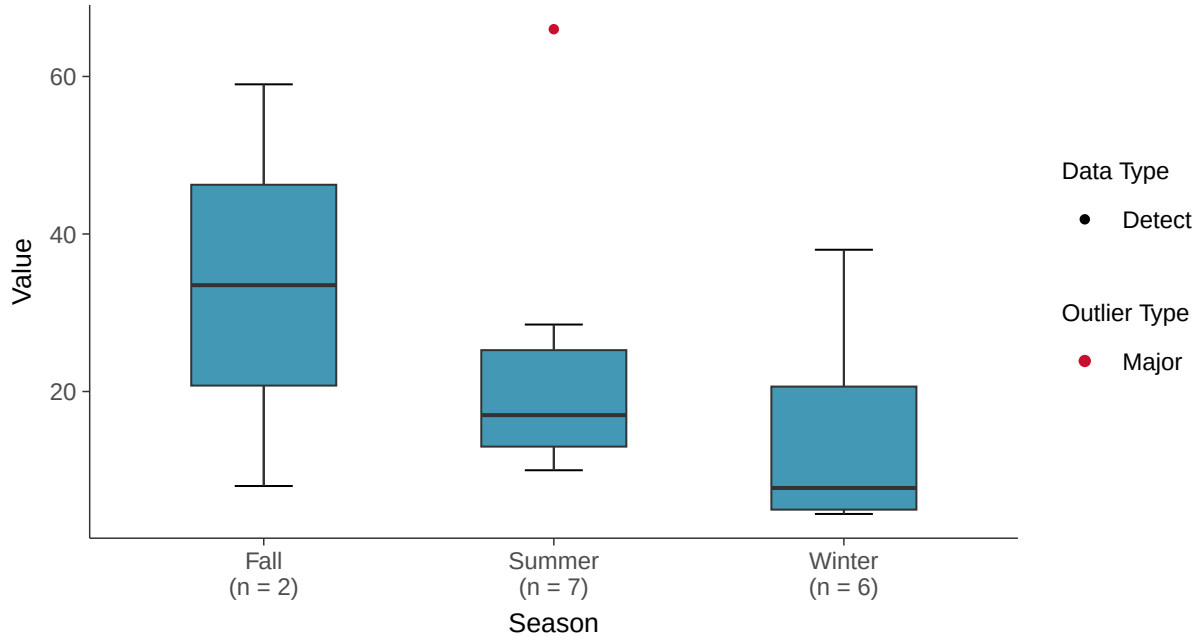
Boxplot

Chloride, MW-8 (mg/l)



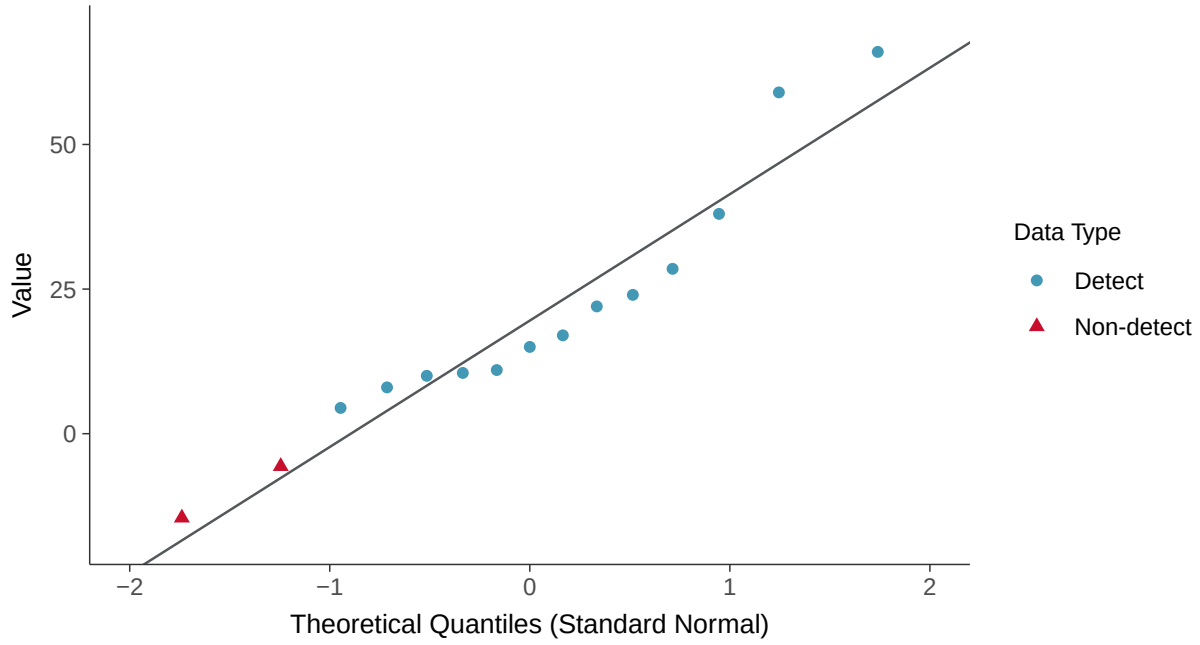
Boxplot by Season

Chloride, MW-8 (mg/l)



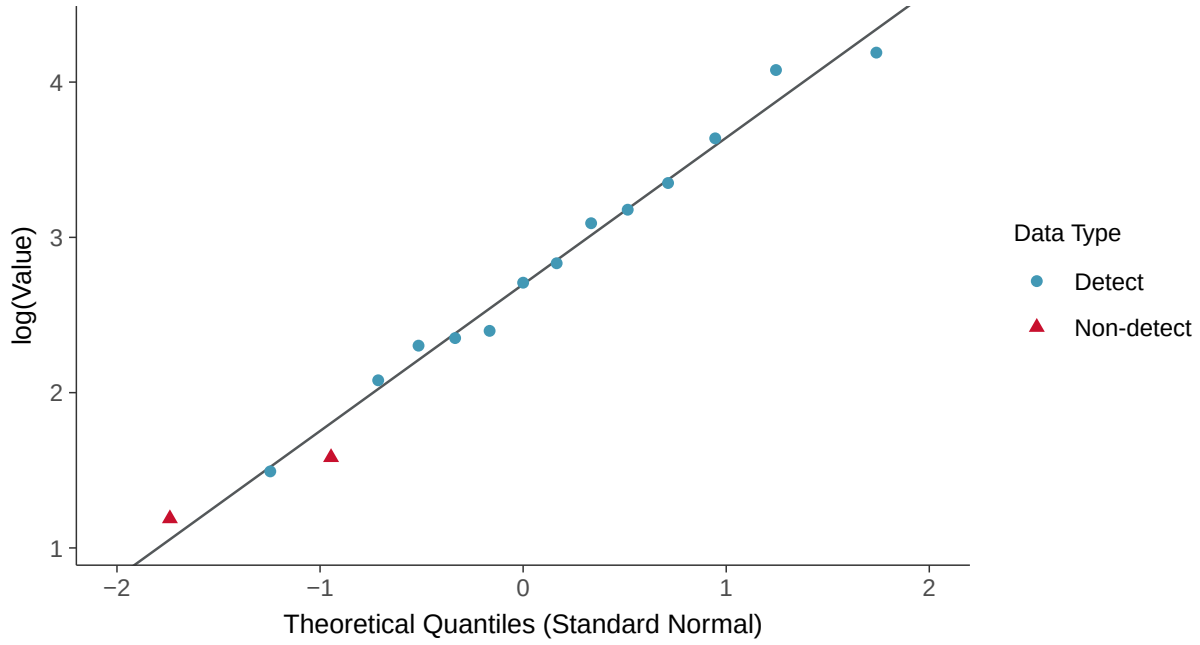
Normal Q-Q plot using ROS Imputed Estimates

Chloride, MW-8 (mg/l)



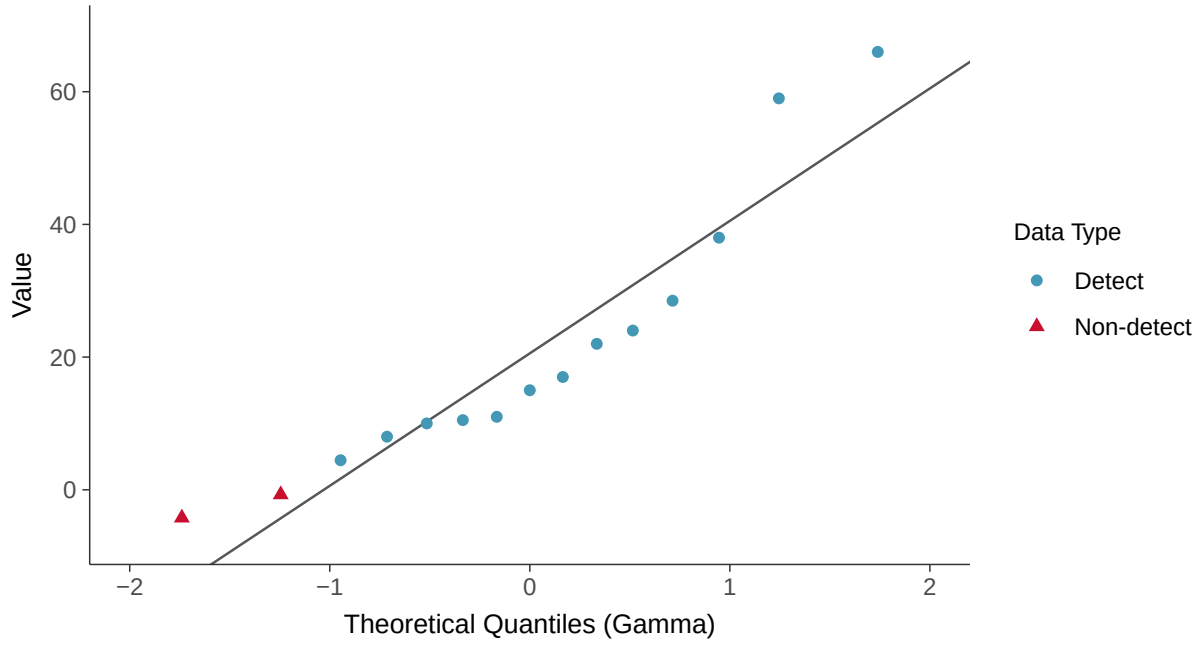
Lognormal Q-Q plot using ROS Imputed Estimates

Chloride, MW-8 (mg/l)



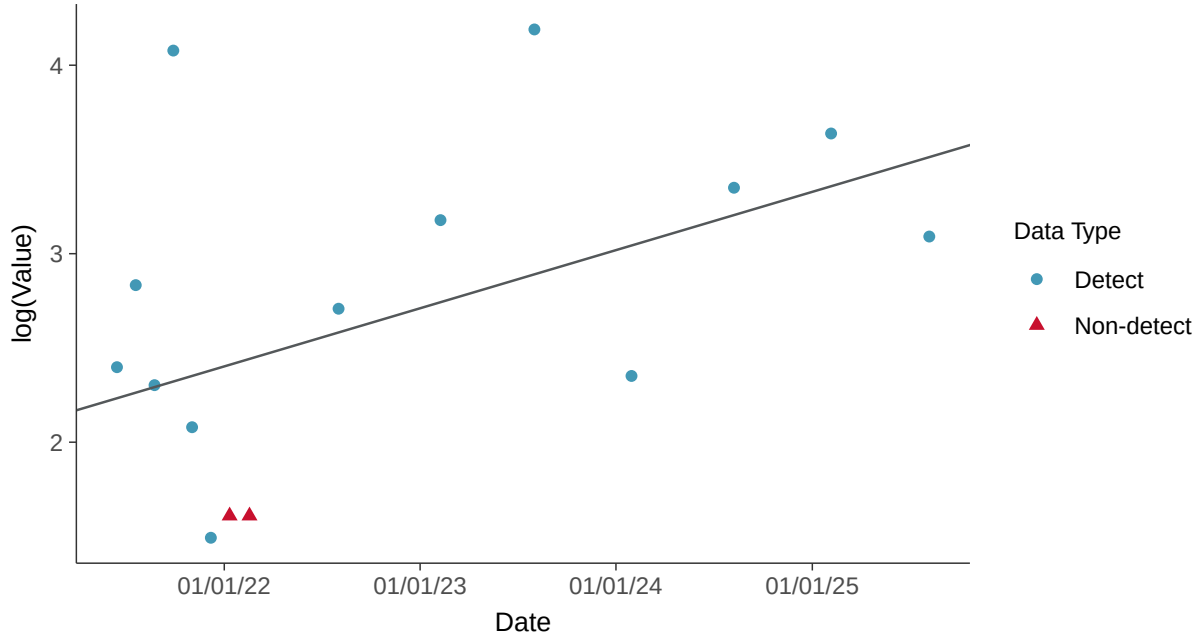
Gamma Q-Q plot using ROS Imputed Estimates

Chloride, MW-8 (mg/l)



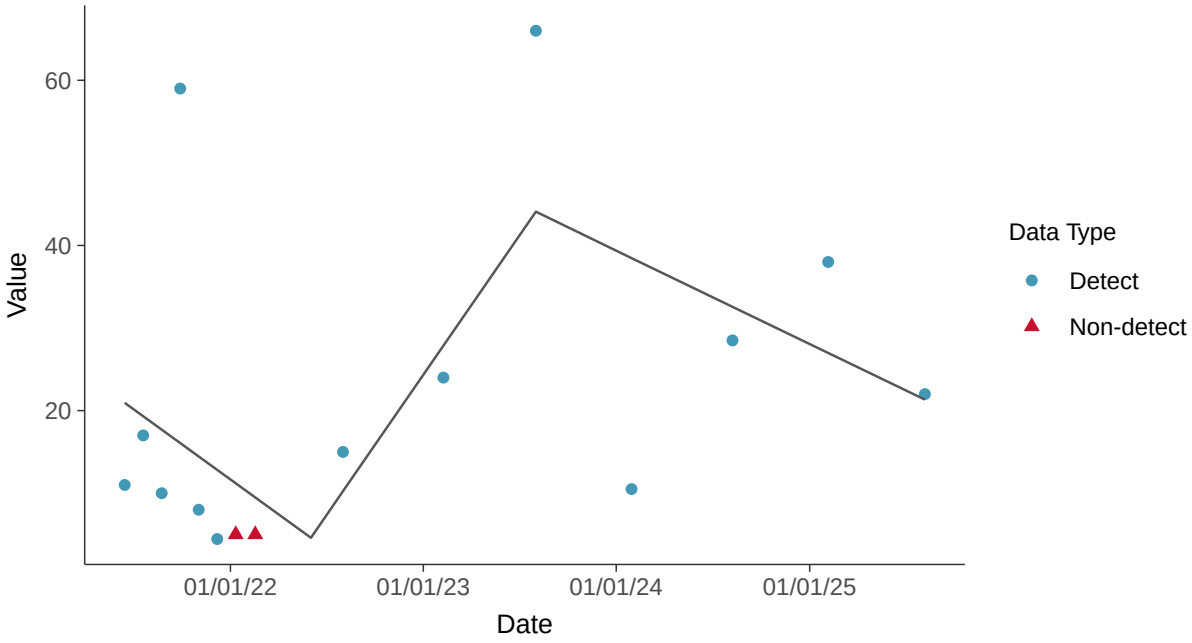
Trend Regression: Lognormal MLE

Chloride, MW-8 (mg/l)



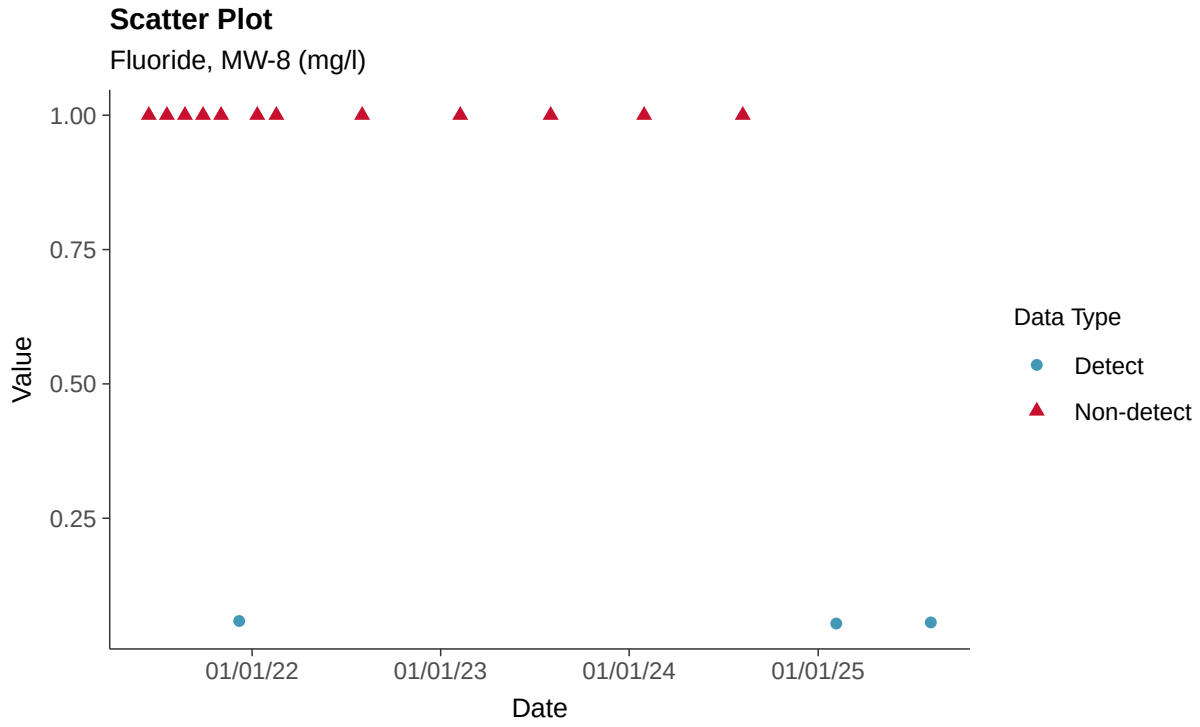
Trend Regression: Piecewise Linear-Linear-Linear

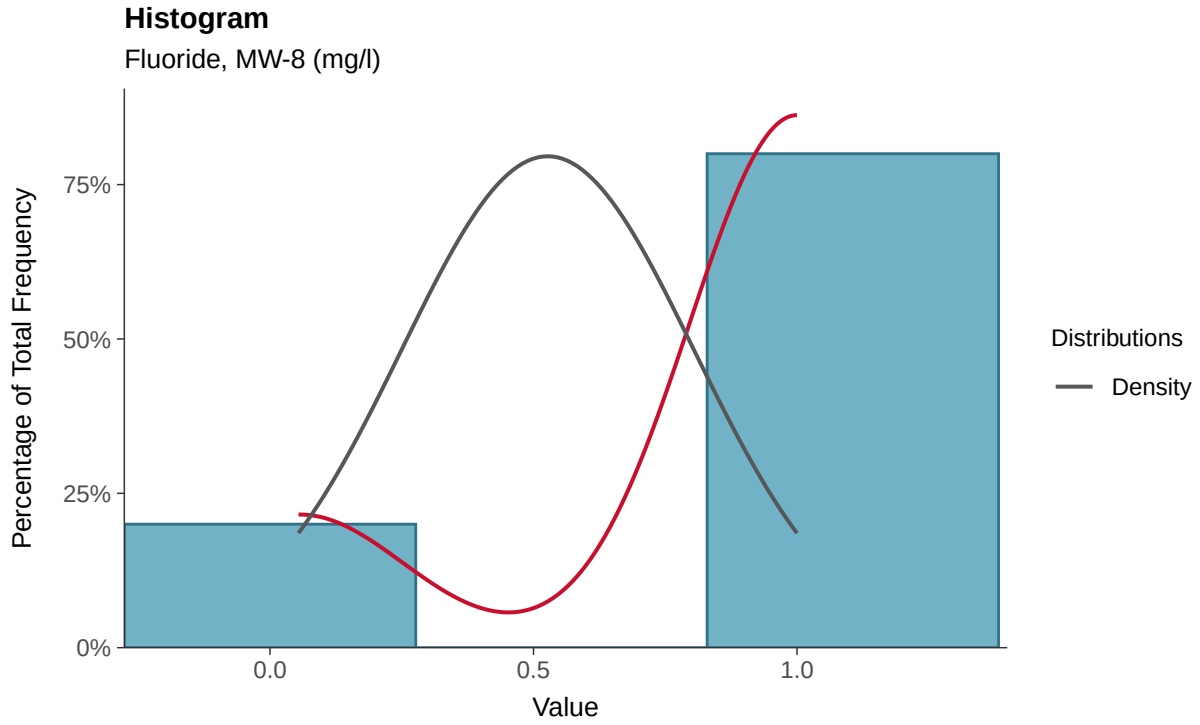
Chloride, MW-8 (mg/l)



Appendix III: Fluoride, MW-8

ID: 19_2_112



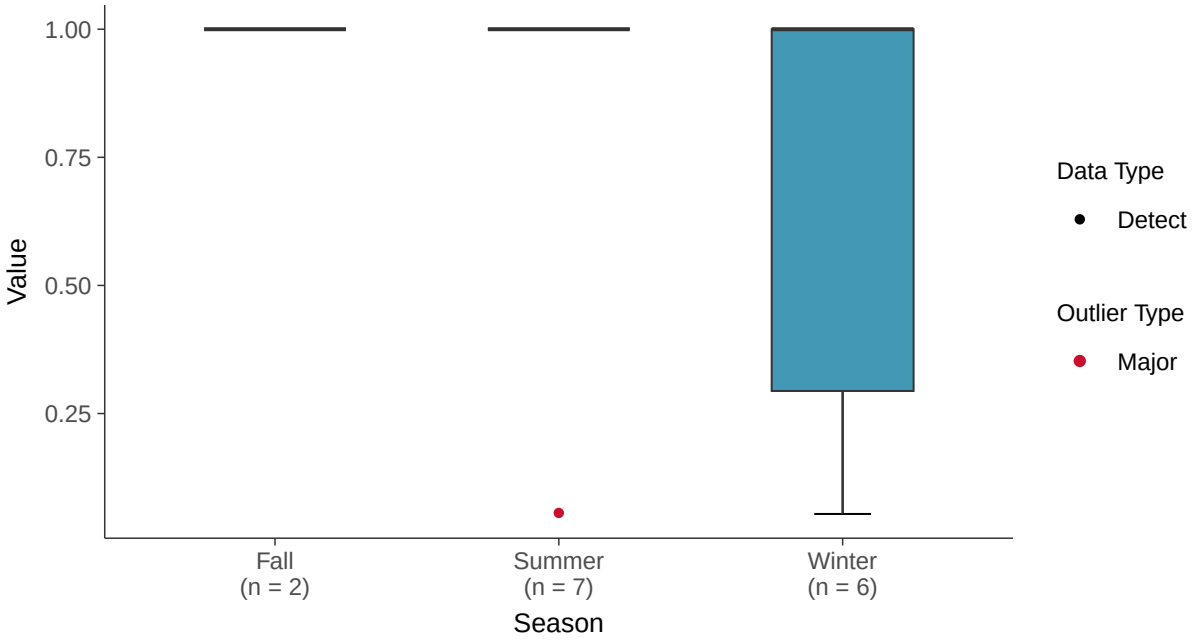


Boxplot

Fluoride, MW-8 (mg/l)

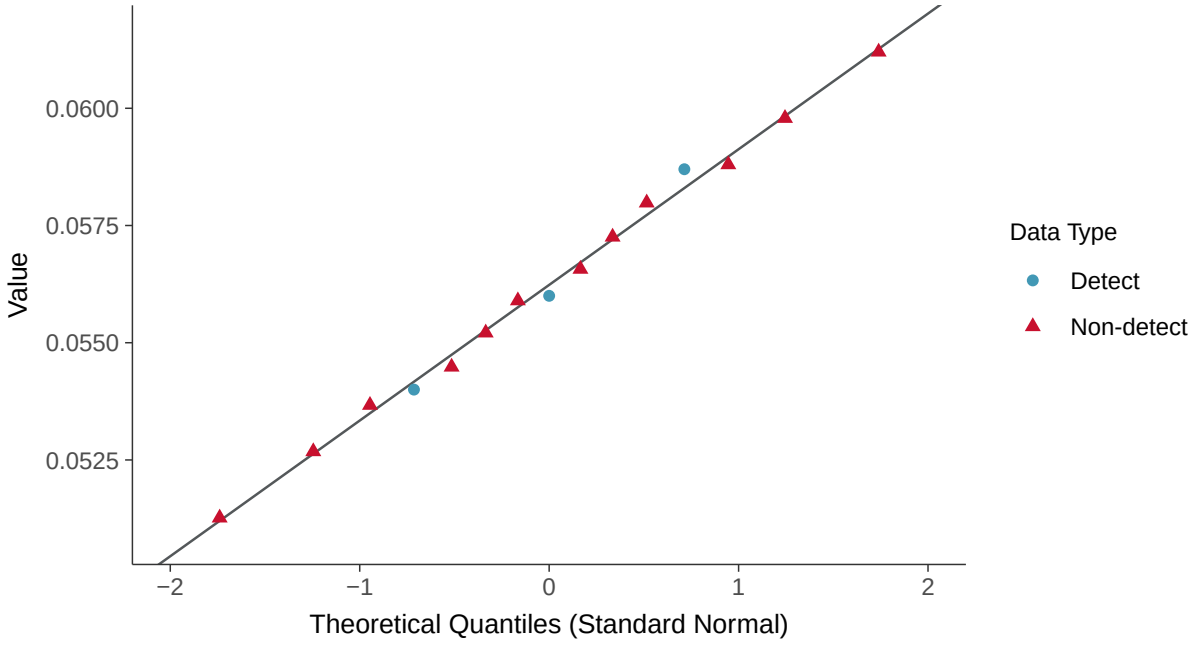
Boxplot by Season

Fluoride, MW-8 (mg/l)



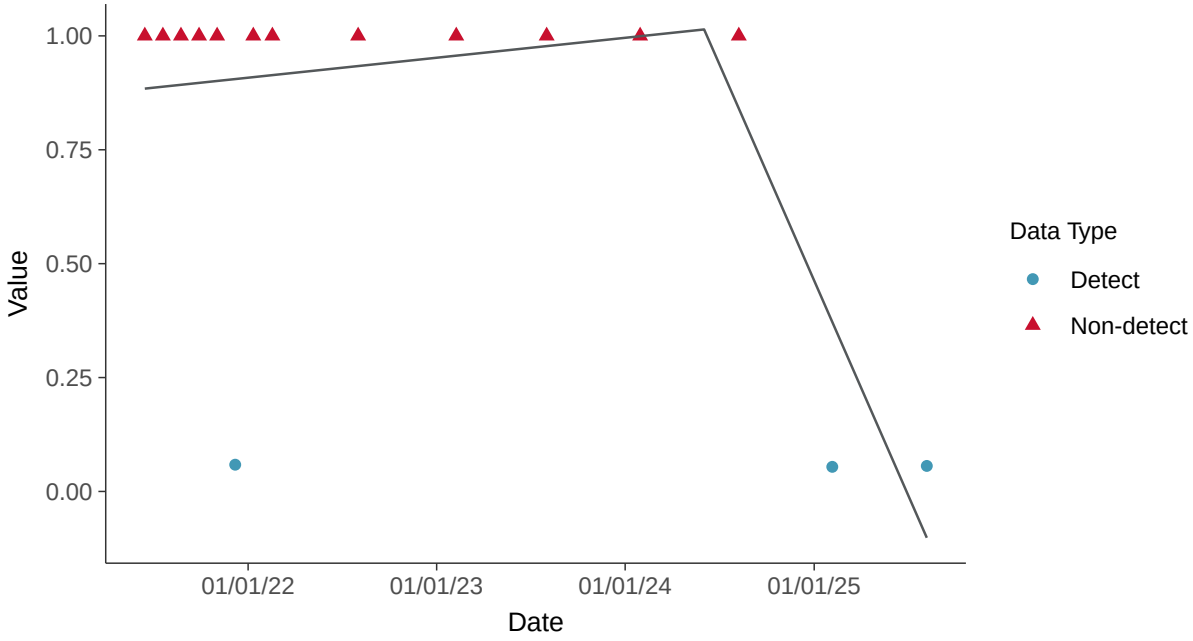
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-8 (mg/l)



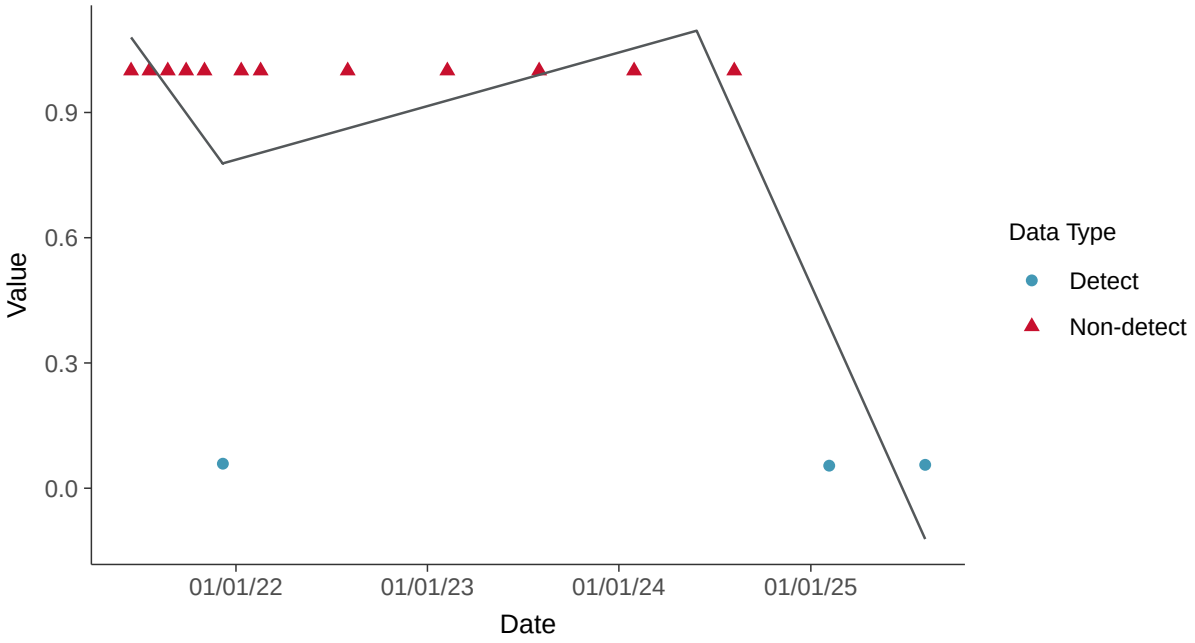
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-8 (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-8 (mg/l)

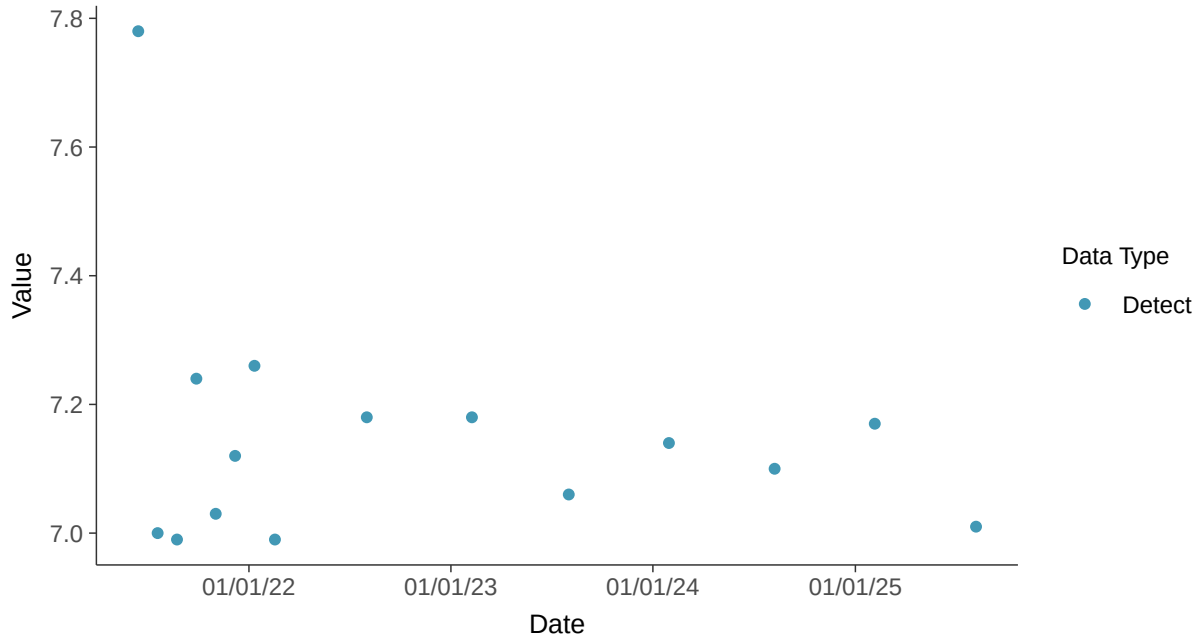


Appendix III: pH, Field, MW-8

ID: 19_2_120

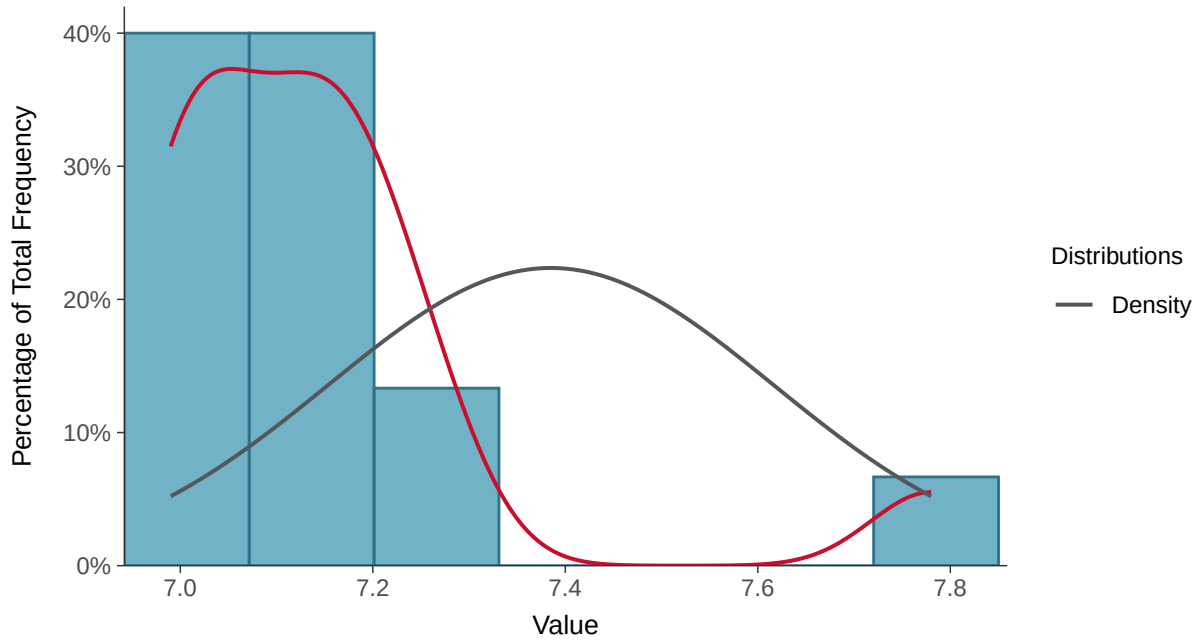
Scatter Plot

pH, Field, MW-8 (su)



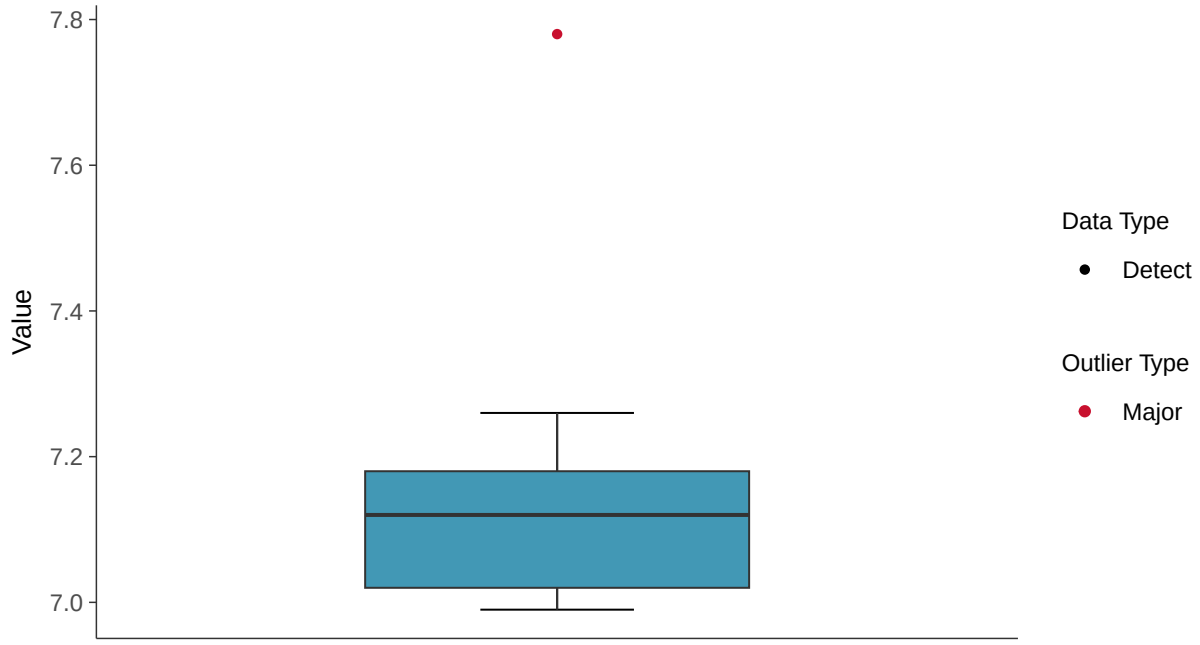
Histogram

pH, Field, MW-8 (su)



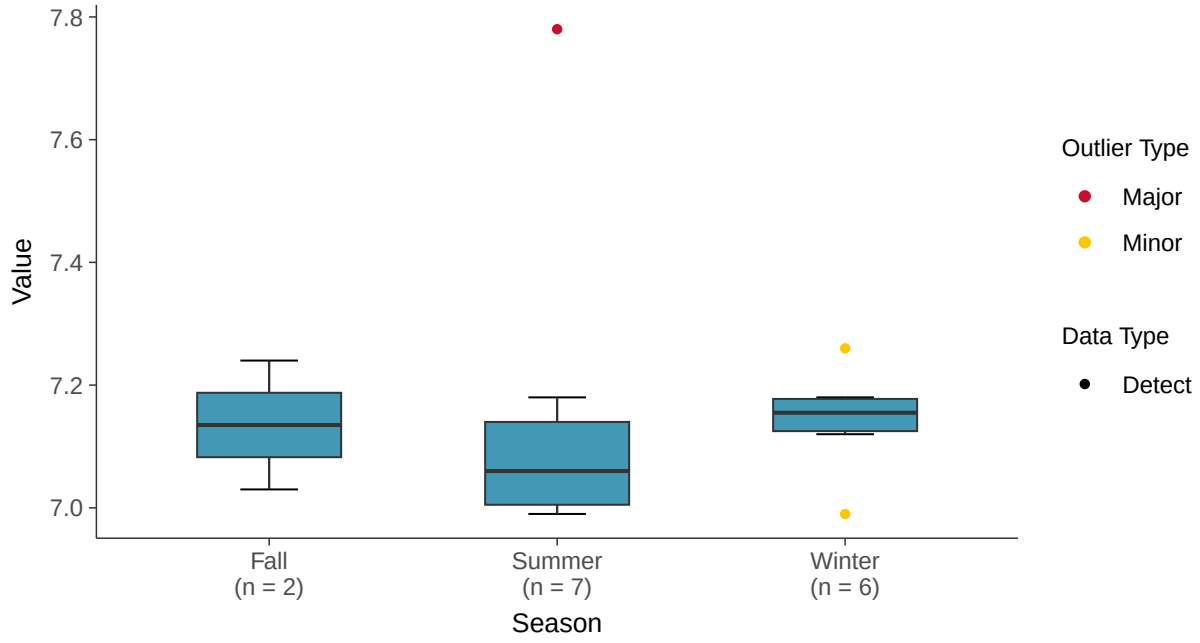
Boxplot

pH, Field, MW-8 (su)



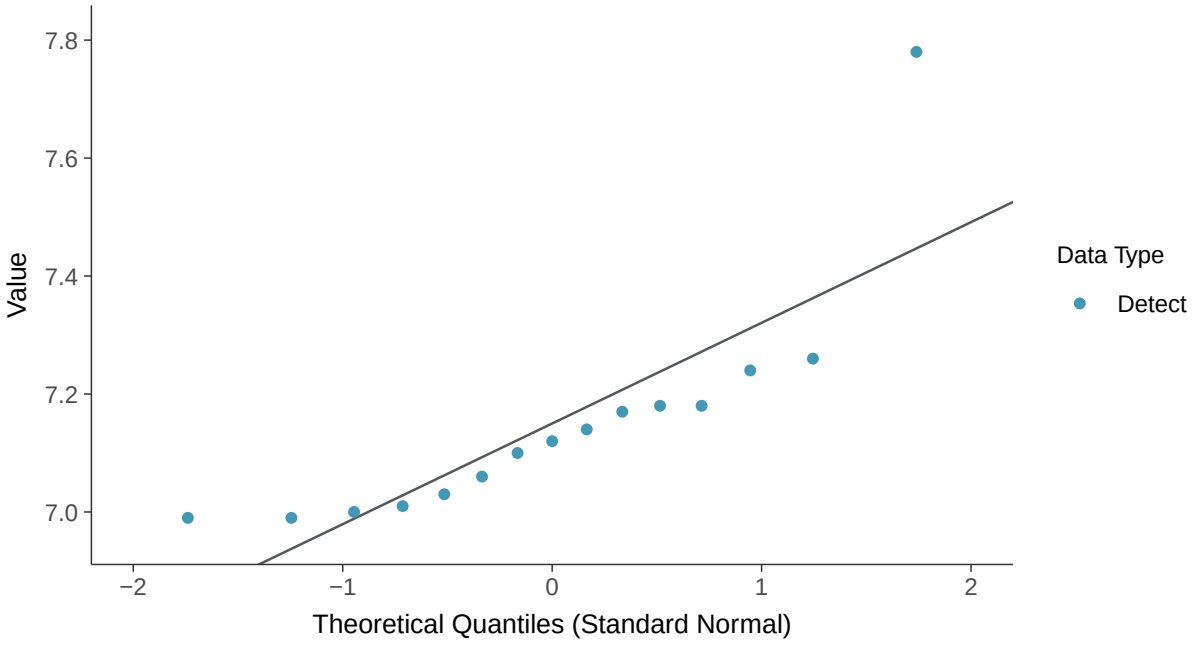
Boxplot by Season

pH, Field, MW-8 (su)



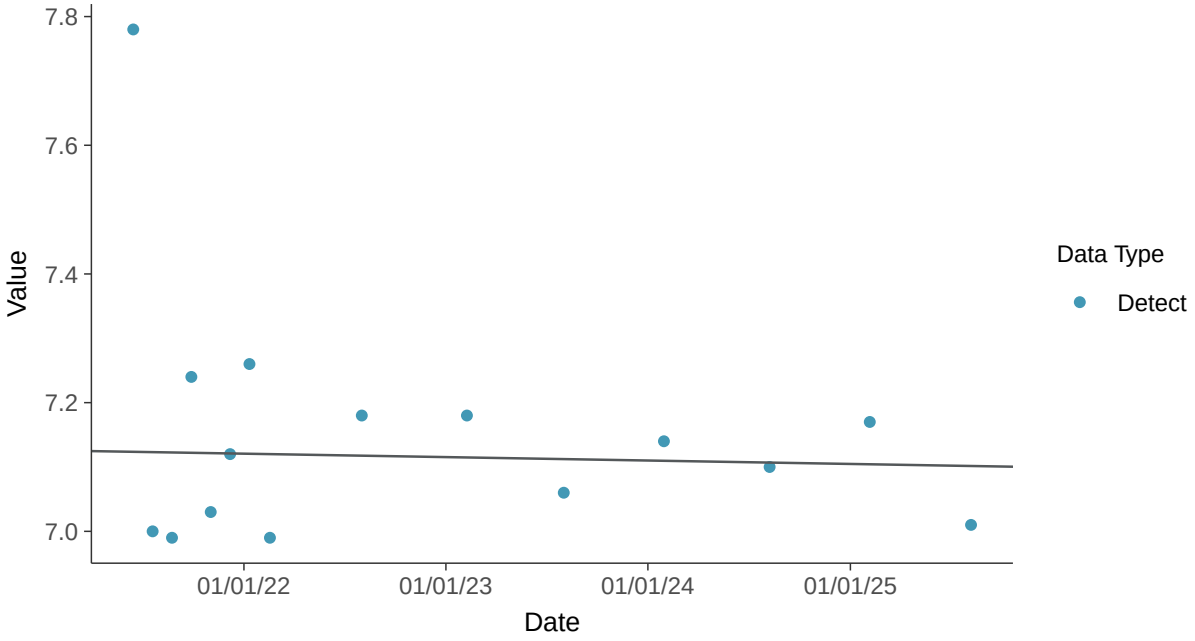
Normal Q-Q plot

pH, Field, MW-8 (su)



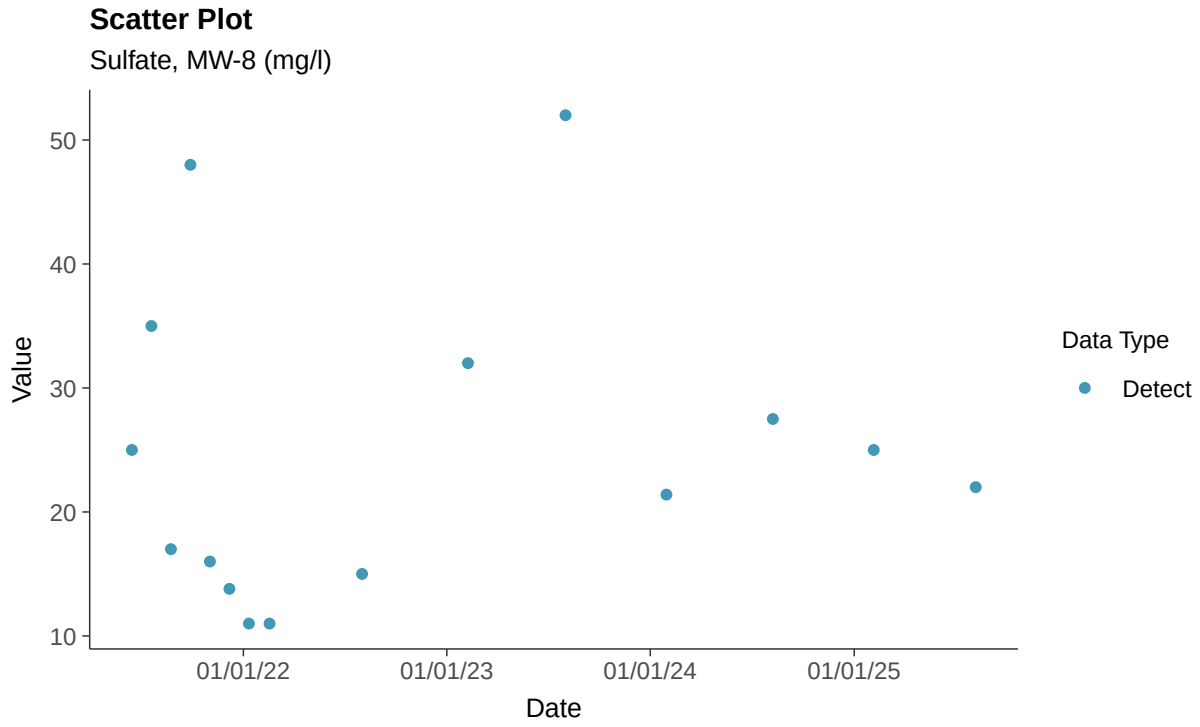
Trend Regression: Mann-Kendall/Theil-Sen Estimate

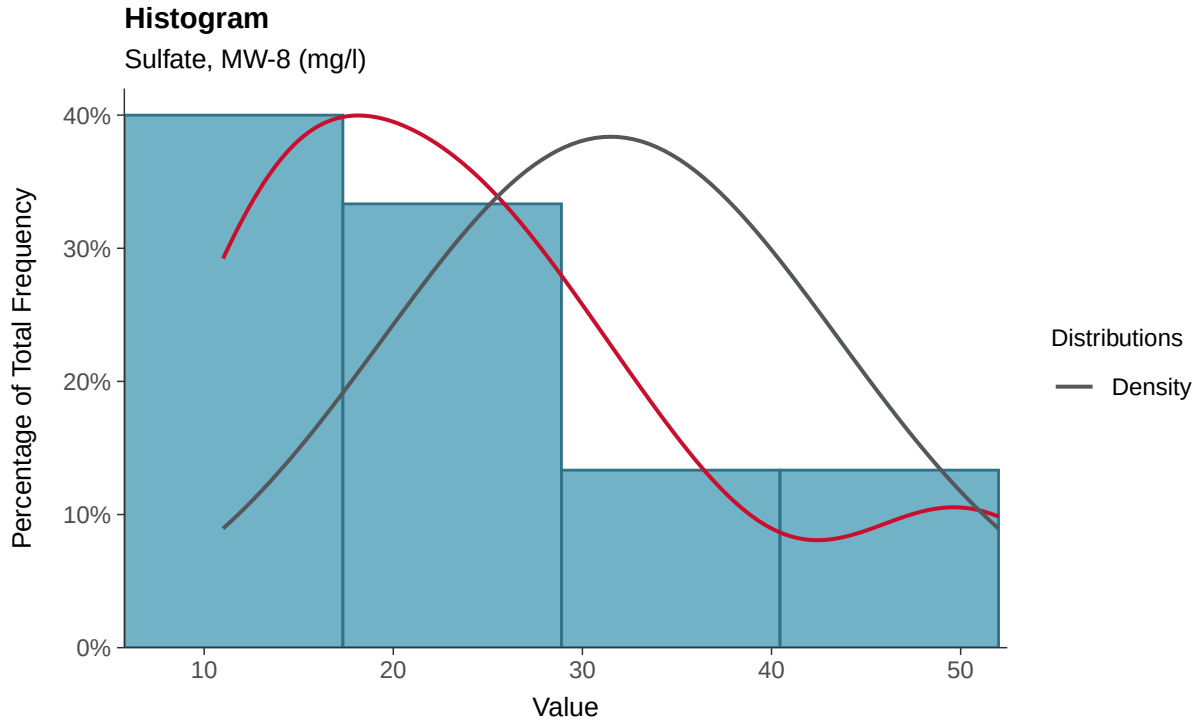
pH, Field, MW-8 (su)



Appendix III: Sulfate, MW-8

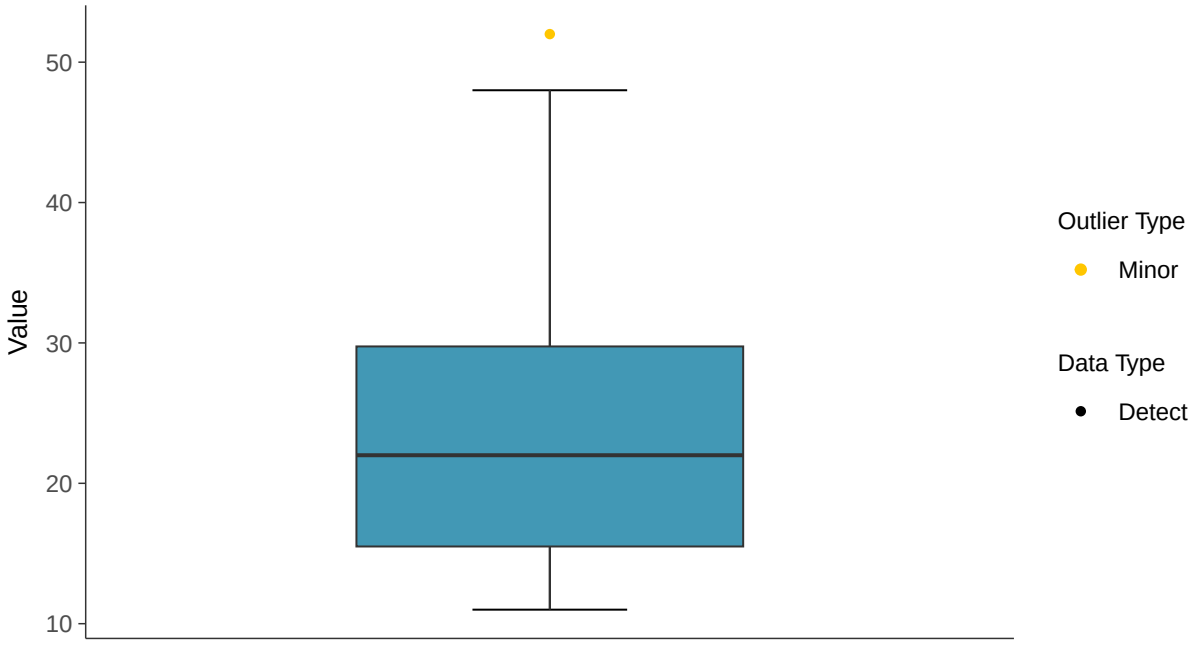
ID: 19_2_124





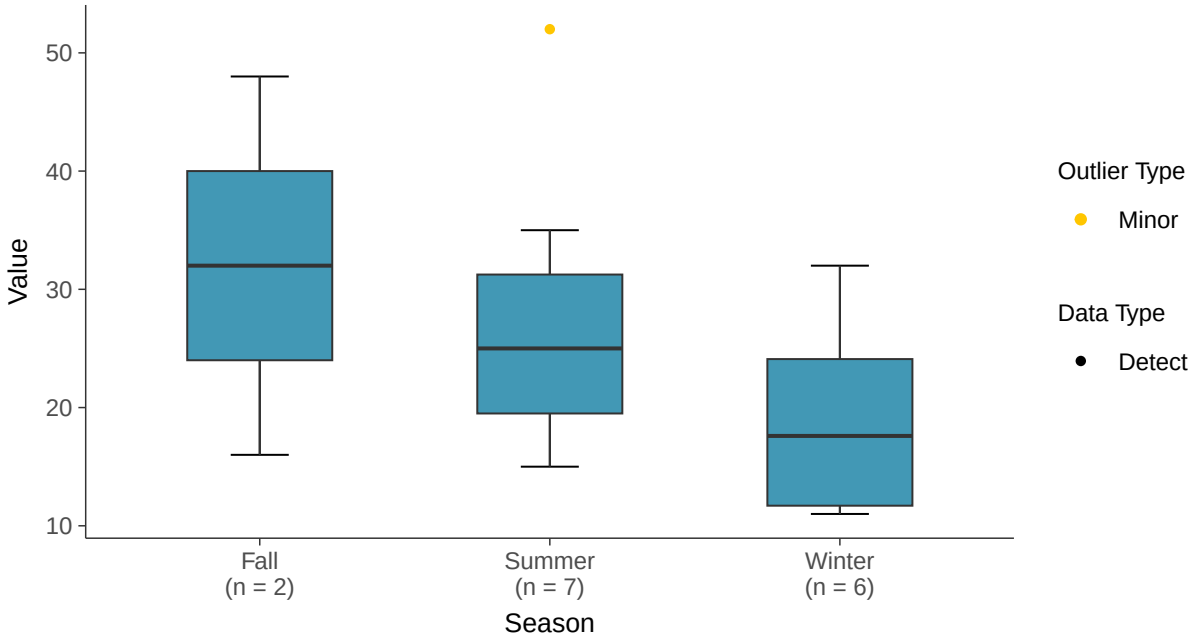
Boxplot

Sulfate, MW-8 (mg/l)



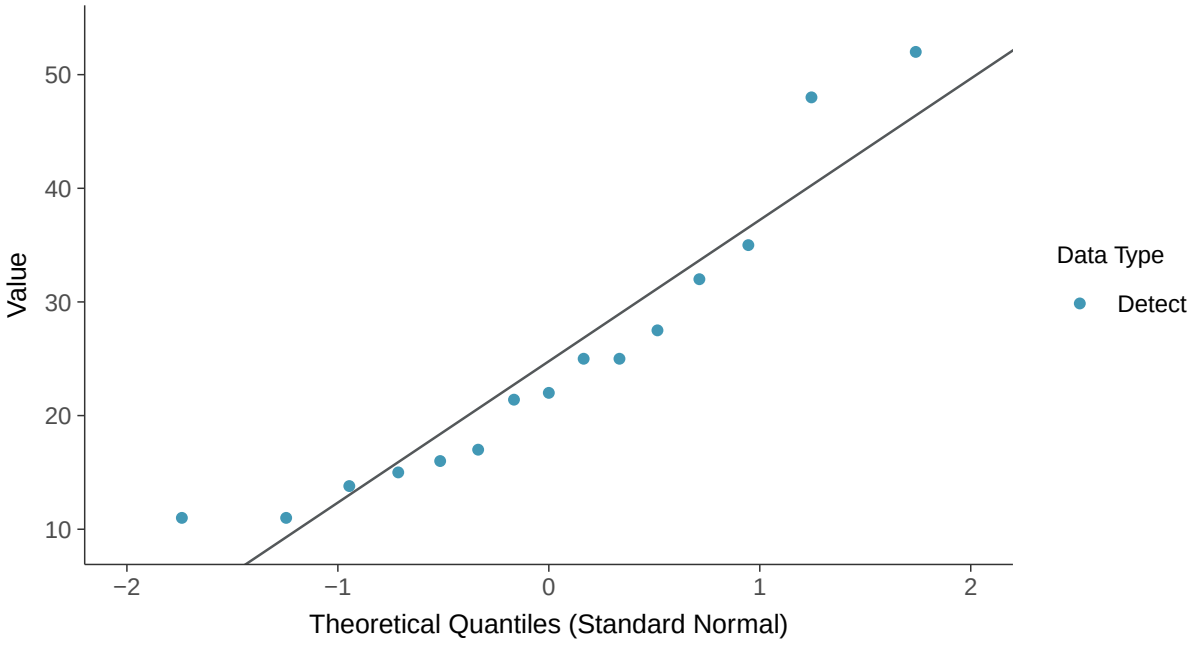
Boxplot by Season

Sulfate, MW-8 (mg/l)



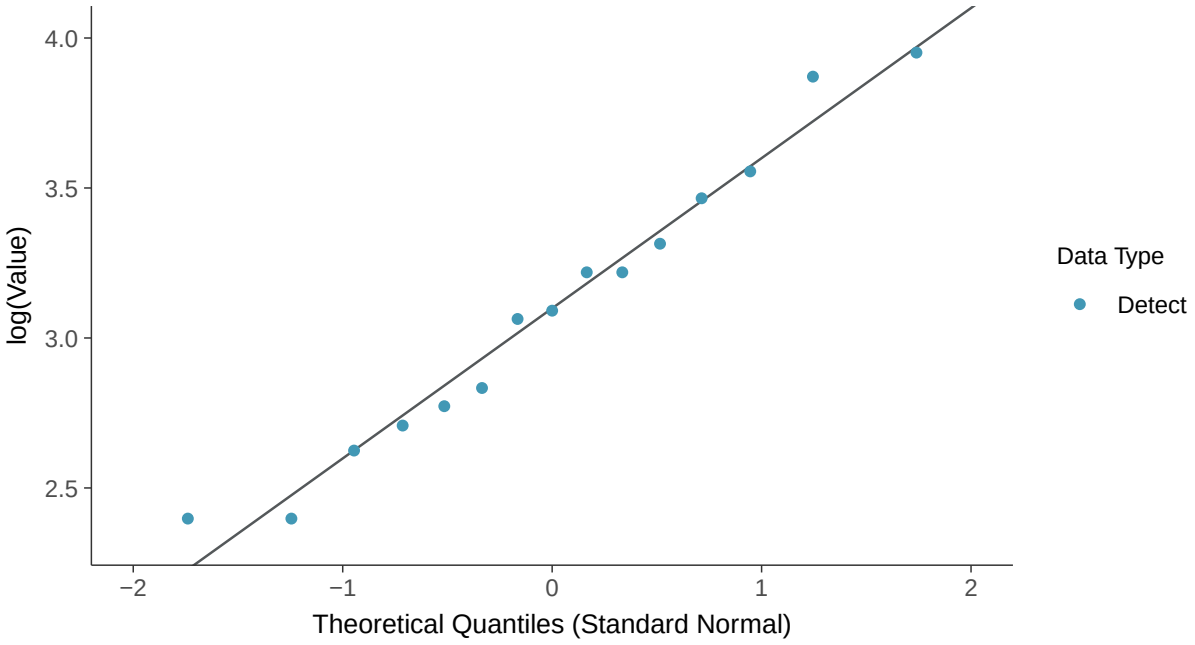
Normal Q-Q plot

Sulfate, MW-8 (mg/l)



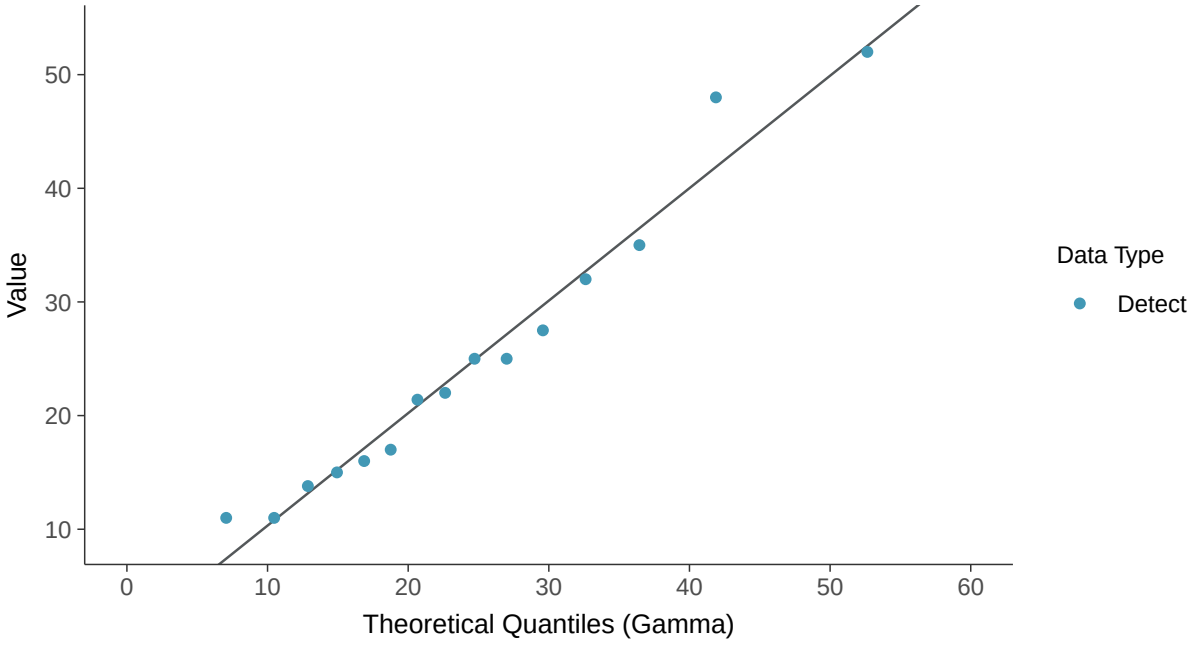
Lognormal Q-Q plot

Sulfate, MW-8 (mg/l)



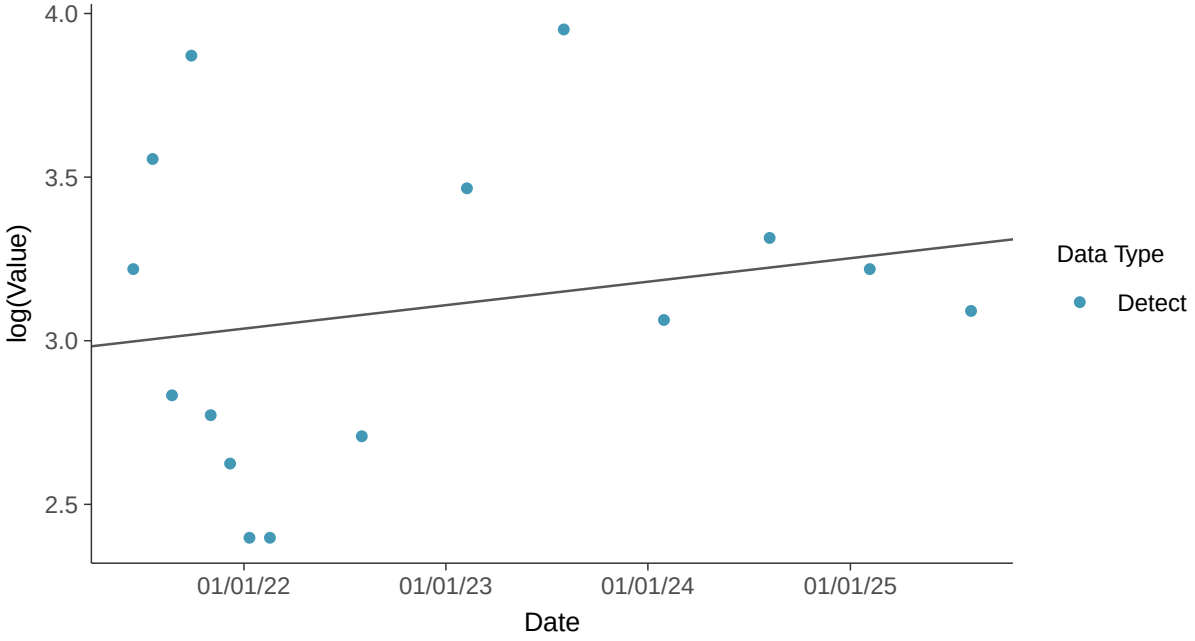
Gamma Q-Q plot

Sulfate, MW-8 (mg/l)



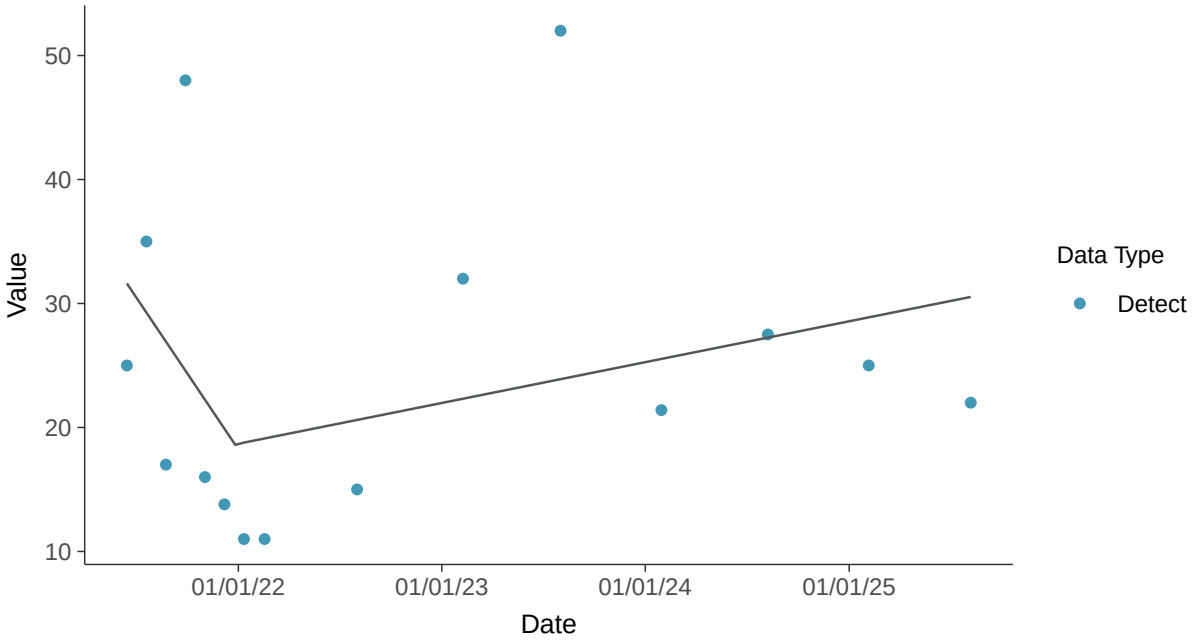
Trend Regression: Lognormal MLE

Sulfate, MW-8 (mg/l)



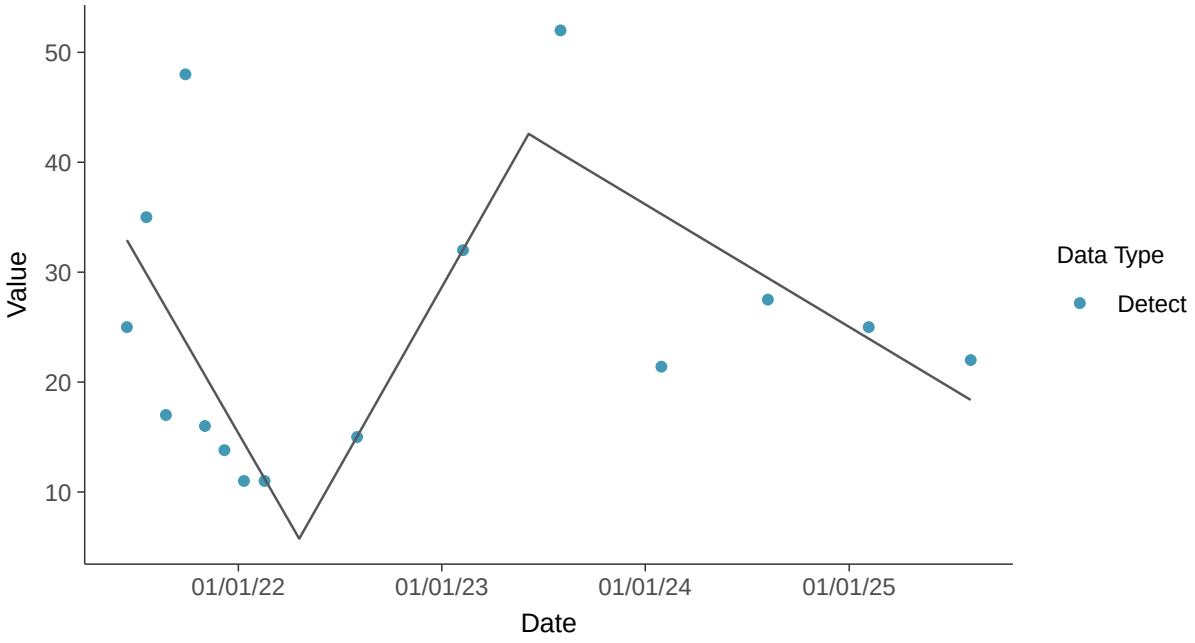
Trend Regression: Piecewise Linear-Linear

Sulfate, MW-8 (mg/l)



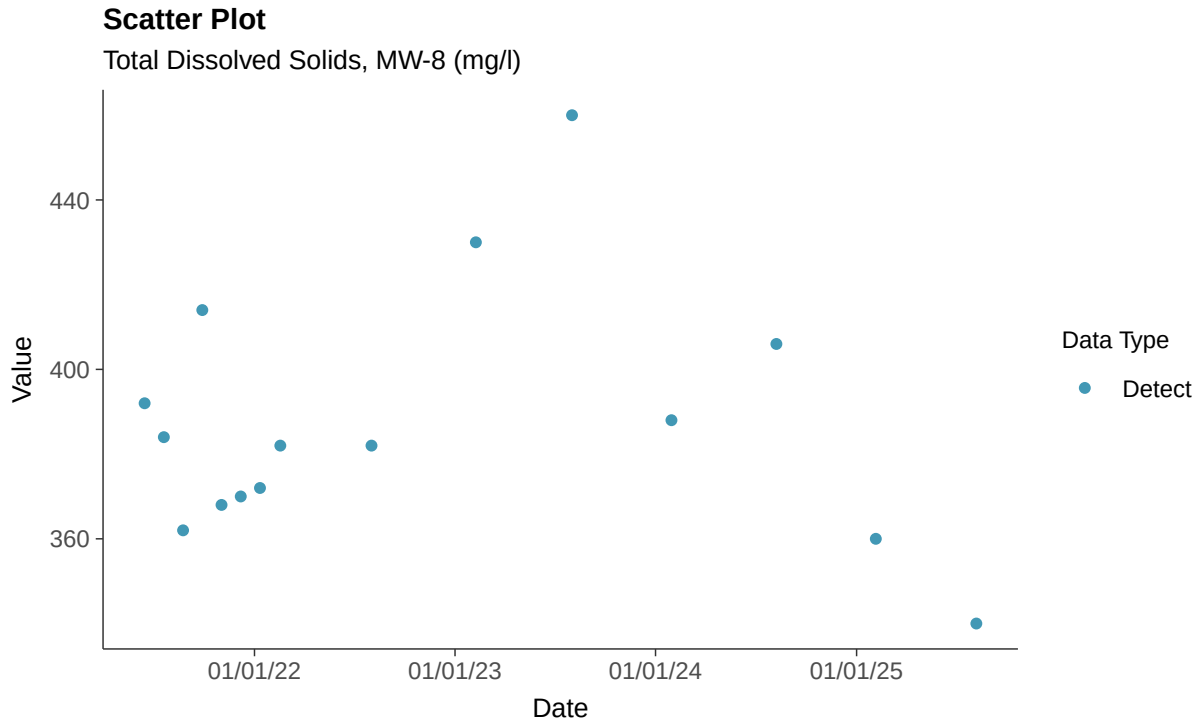
Trend Regression: Piecewise Linear-Linear-Linear

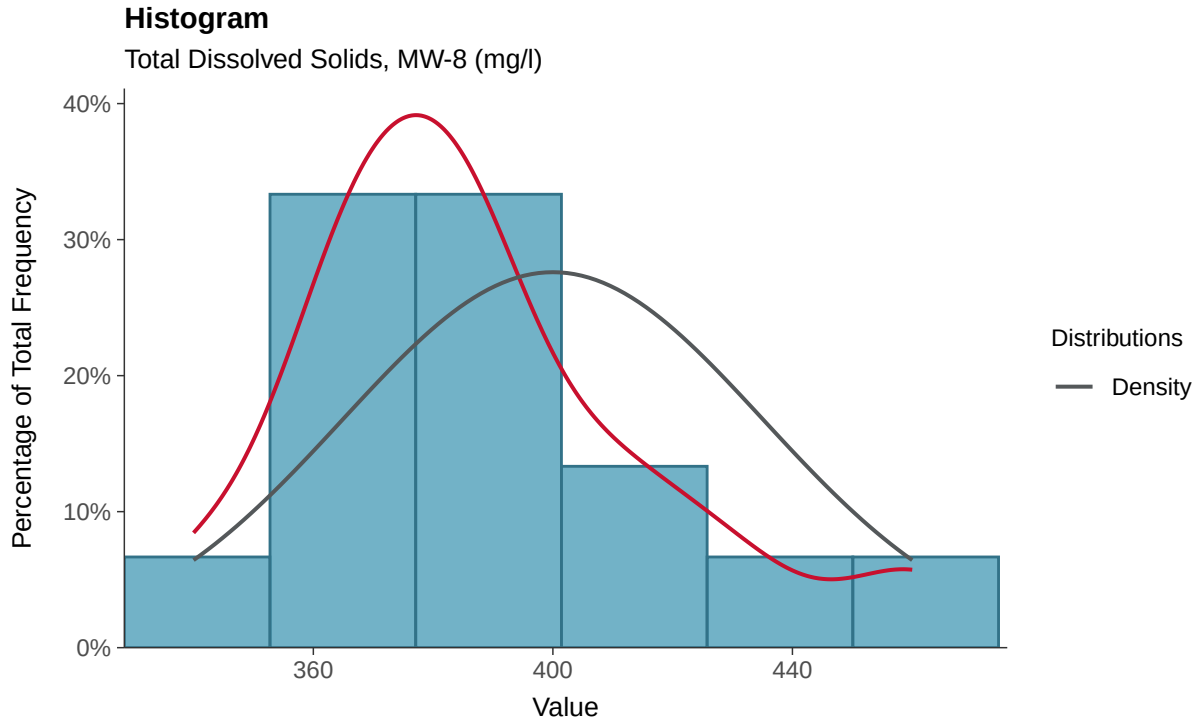
Sulfate, MW-8 (mg/l)



Appendix III: Total Dissolved Solids, MW-8

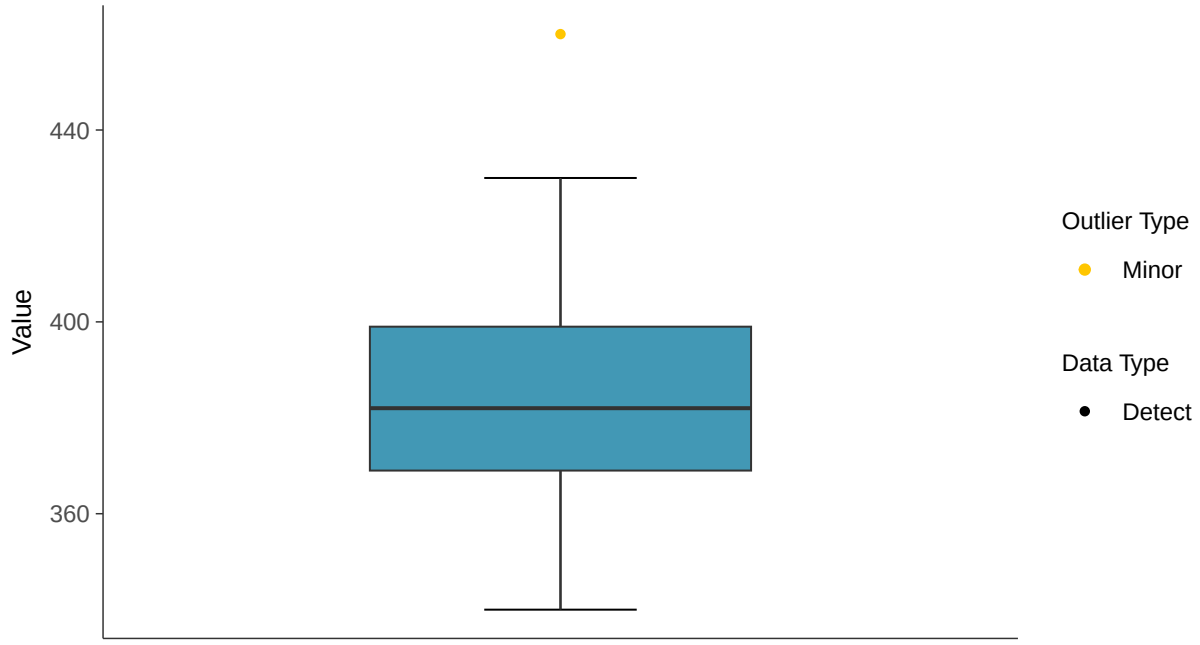
ID: 19_2_126





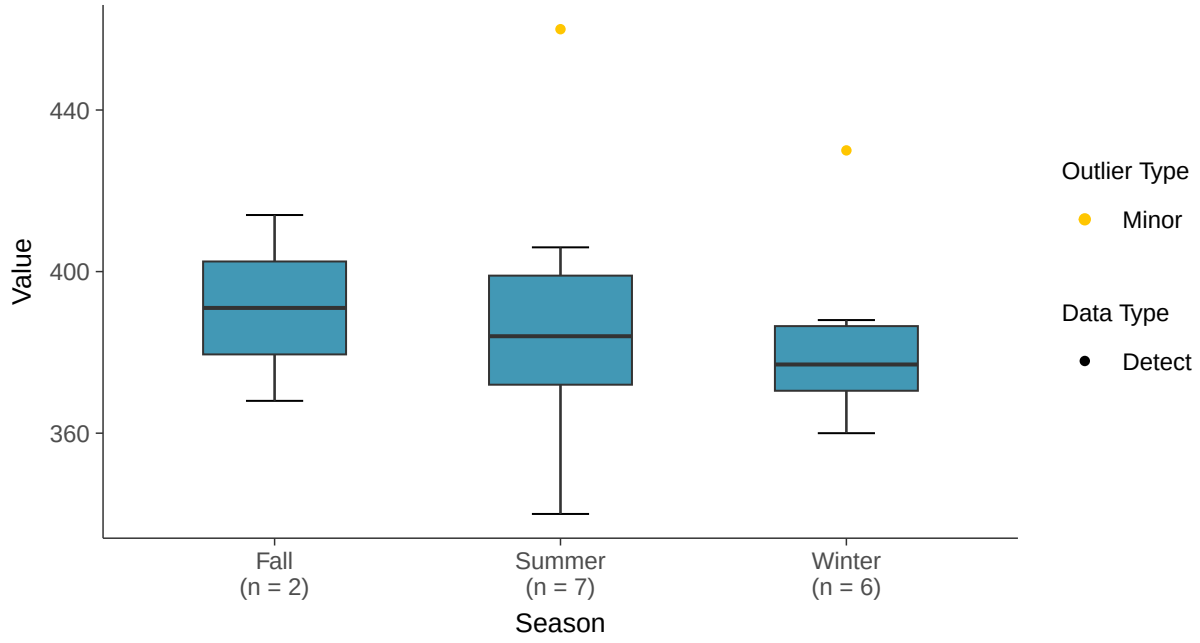
Boxplot

Total Dissolved Solids, MW-8 (mg/l)



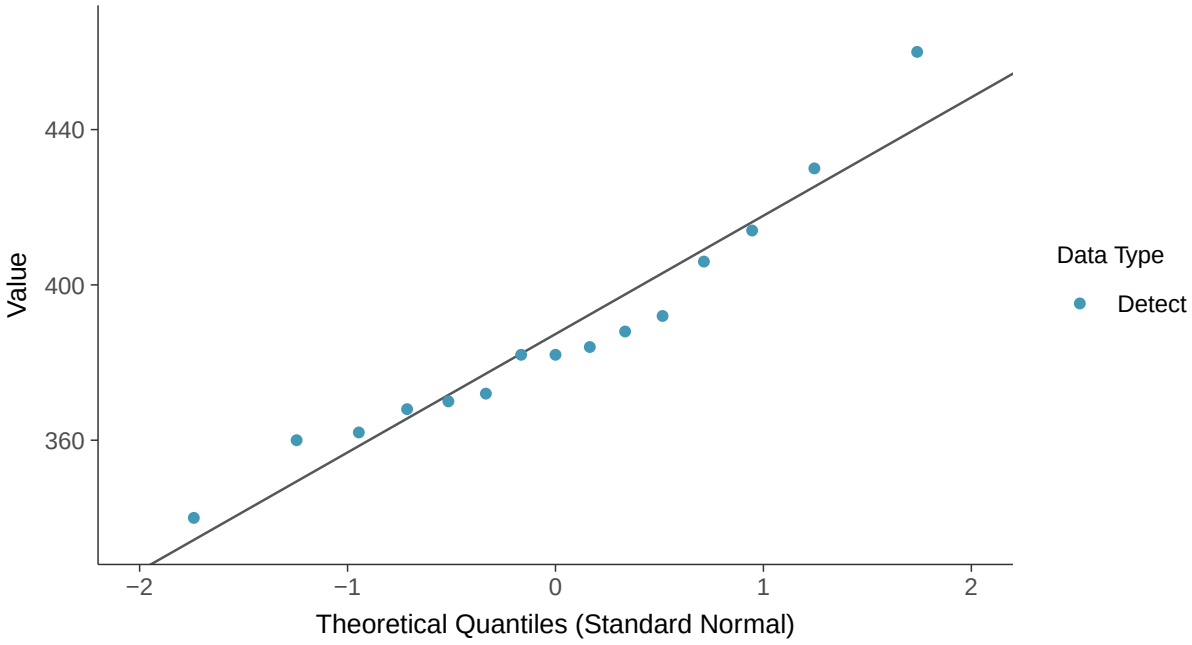
Boxplot by Season

Total Dissolved Solids, MW-8 (mg/l)



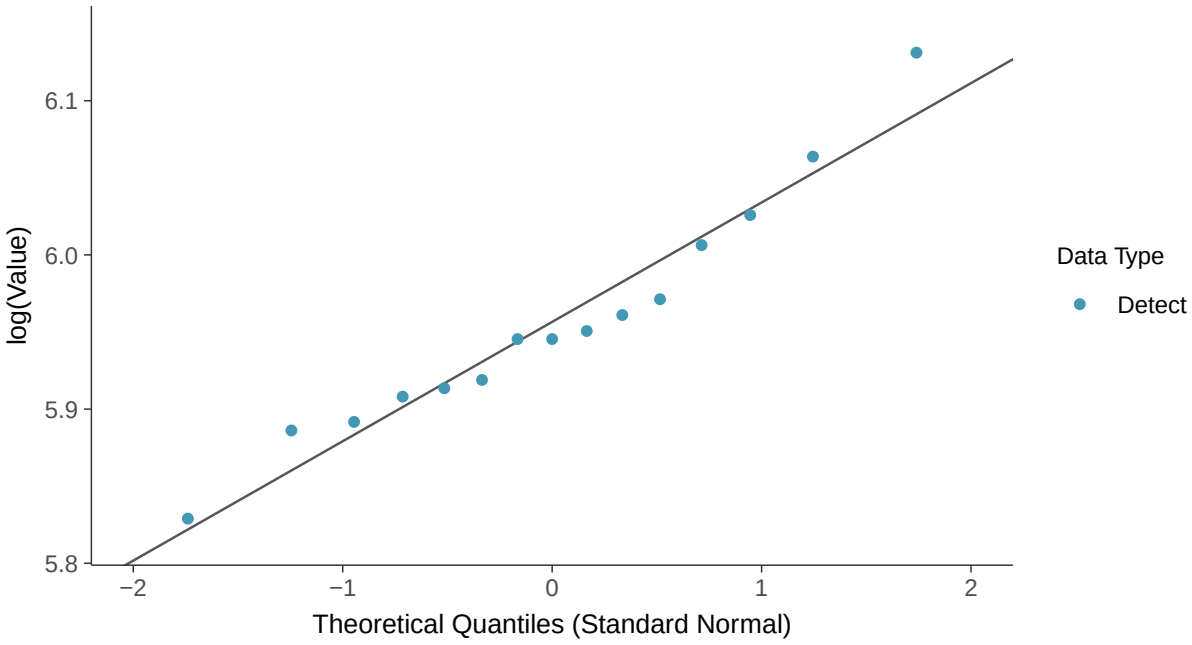
Normal Q-Q plot

Total Dissolved Solids, MW-8 (mg/l)



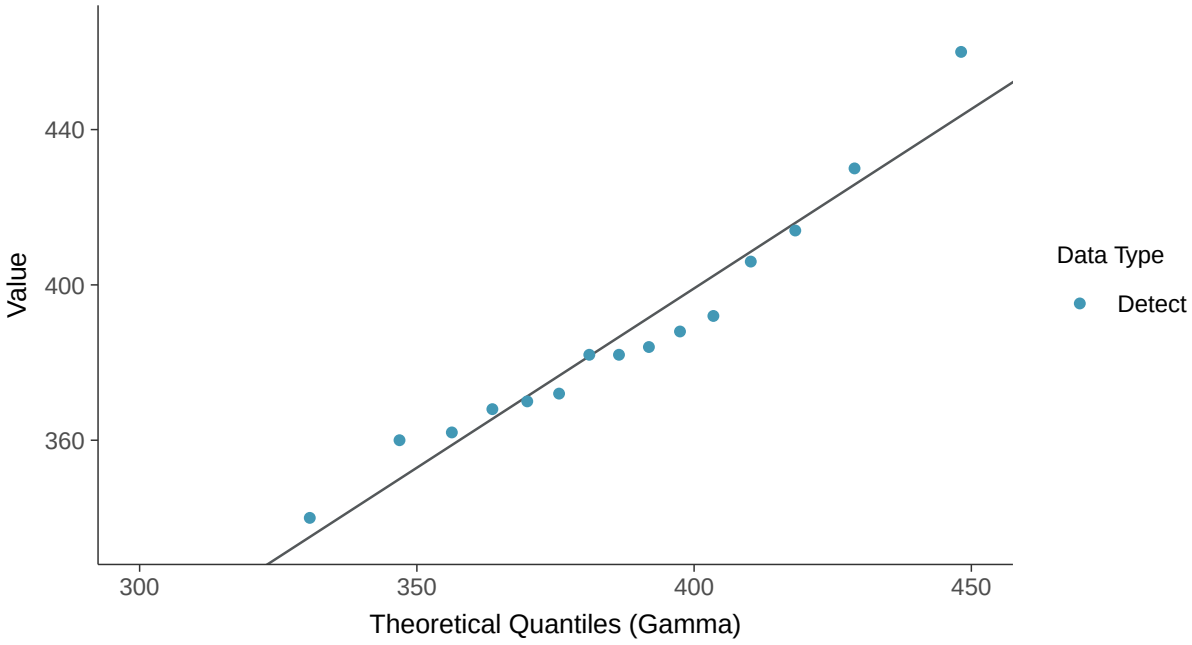
Lognormal Q-Q plot

Total Dissolved Solids, MW-8 (mg/l)



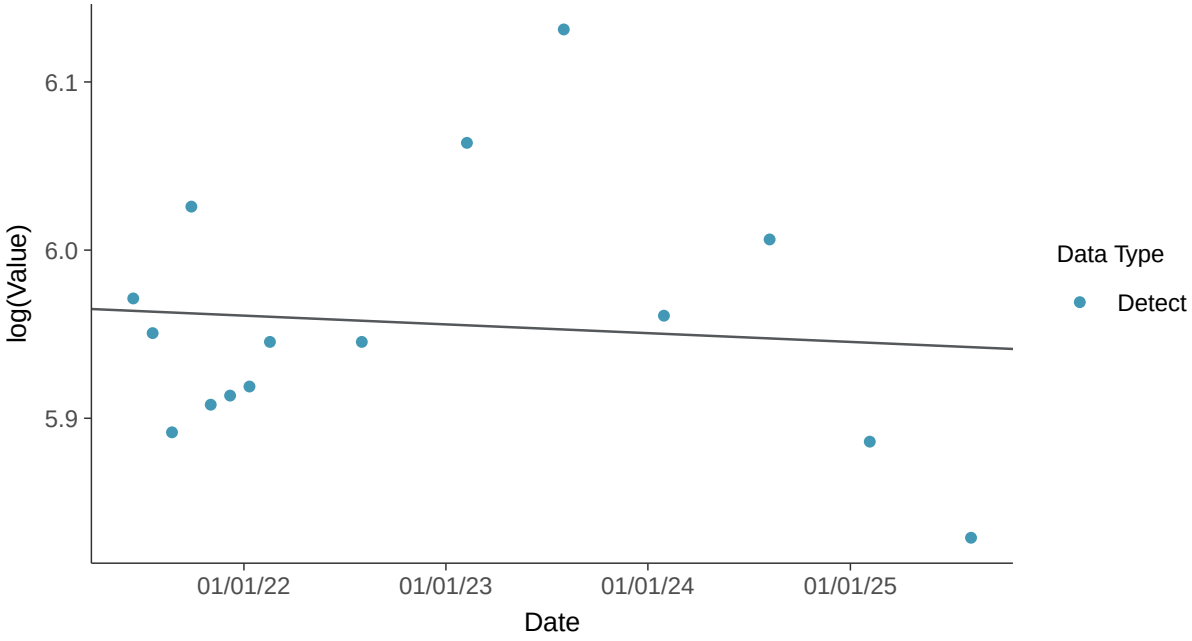
Gamma Q-Q plot

Total Dissolved Solids, MW-8 (mg/l)



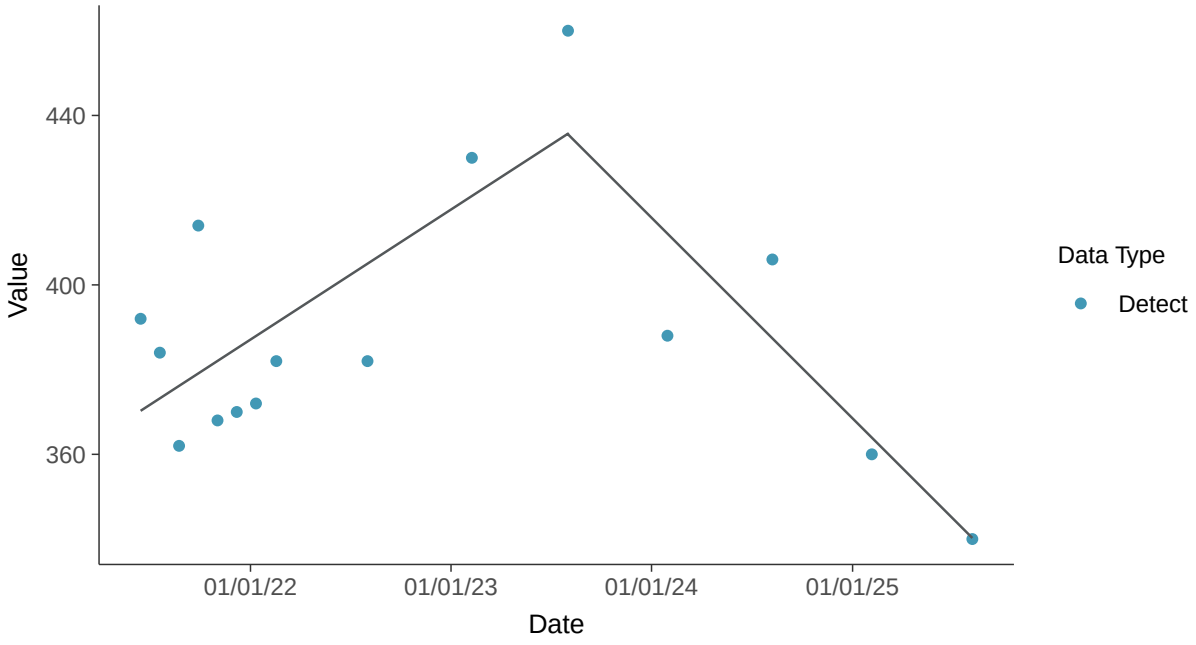
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-8 (mg/l)



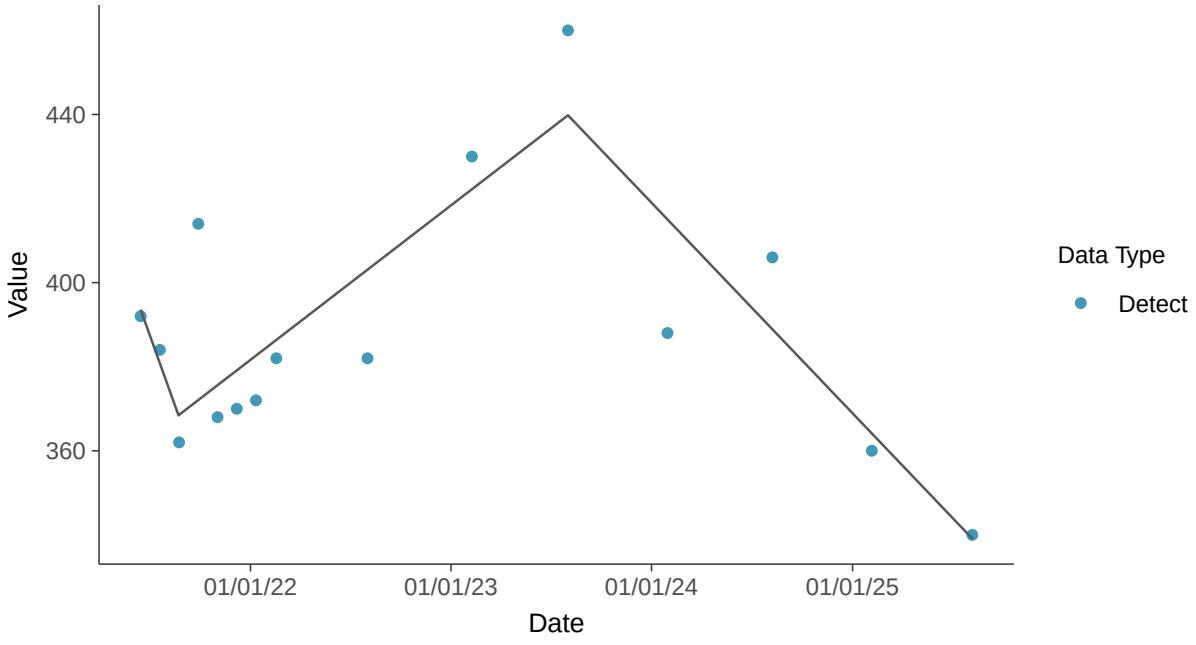
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-8 (mg/l)



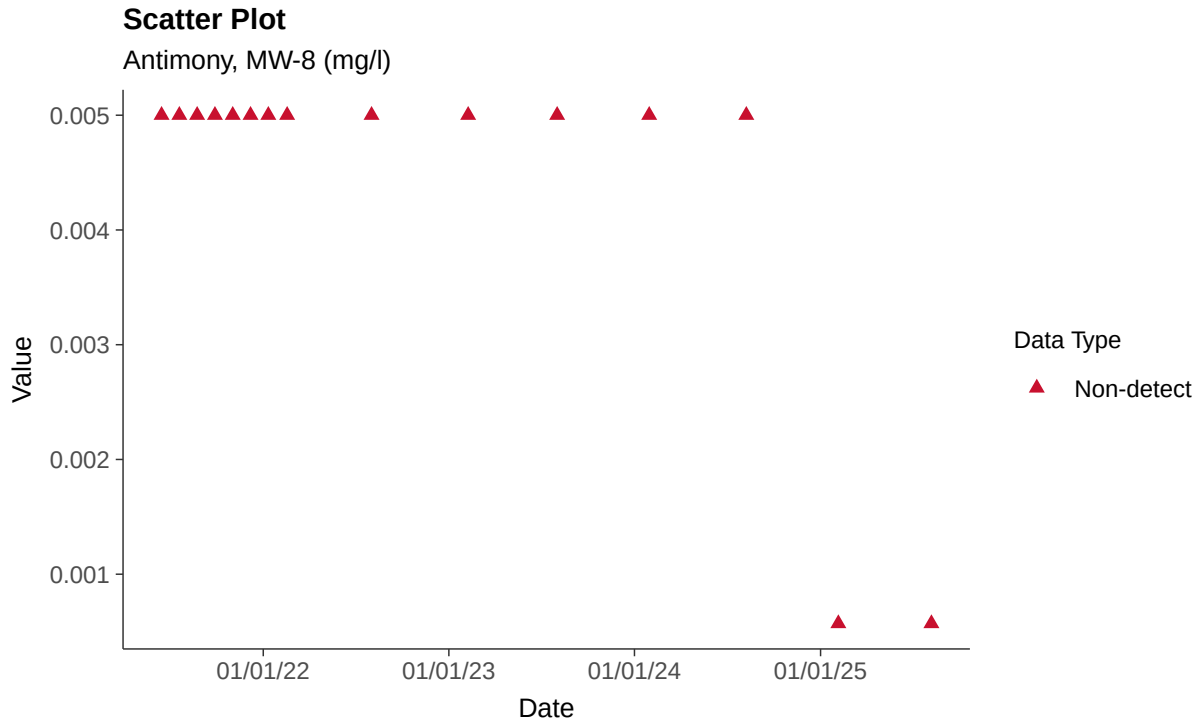
Trend Regression: Piecewise Linear-Linear-Linear

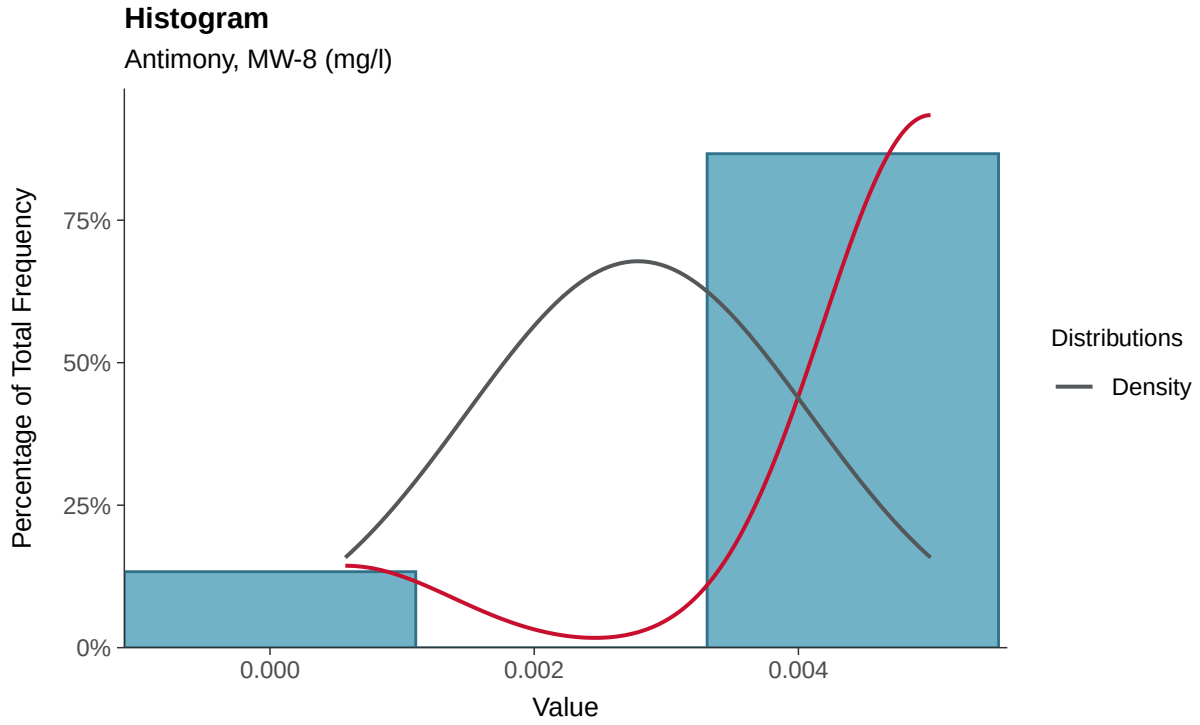
Total Dissolved Solids, MW-8 (mg/l)



Appendix IV: Antimony, MW-8

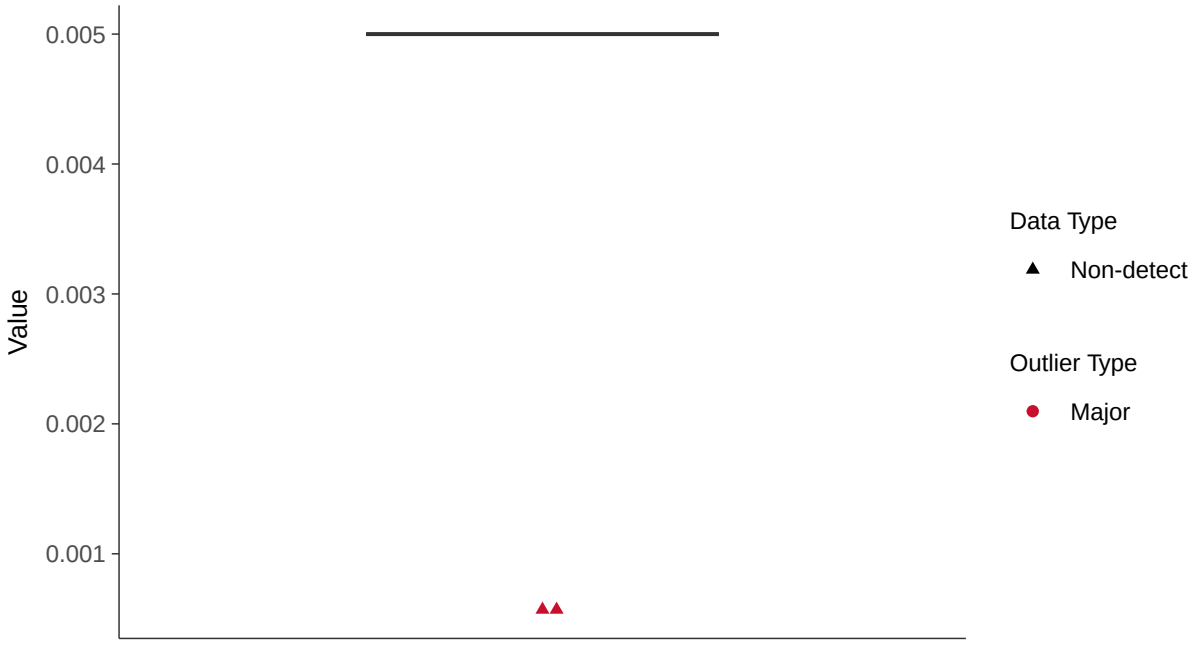
ID: 19_3_101





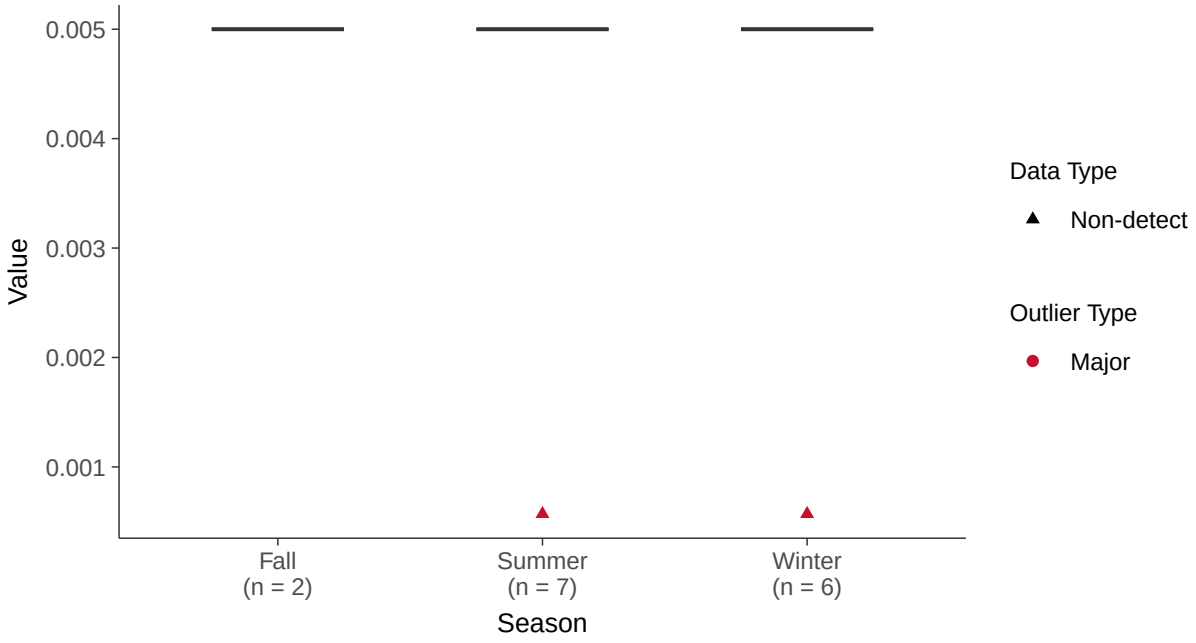
Boxplot

Antimony, MW-8 (mg/l)



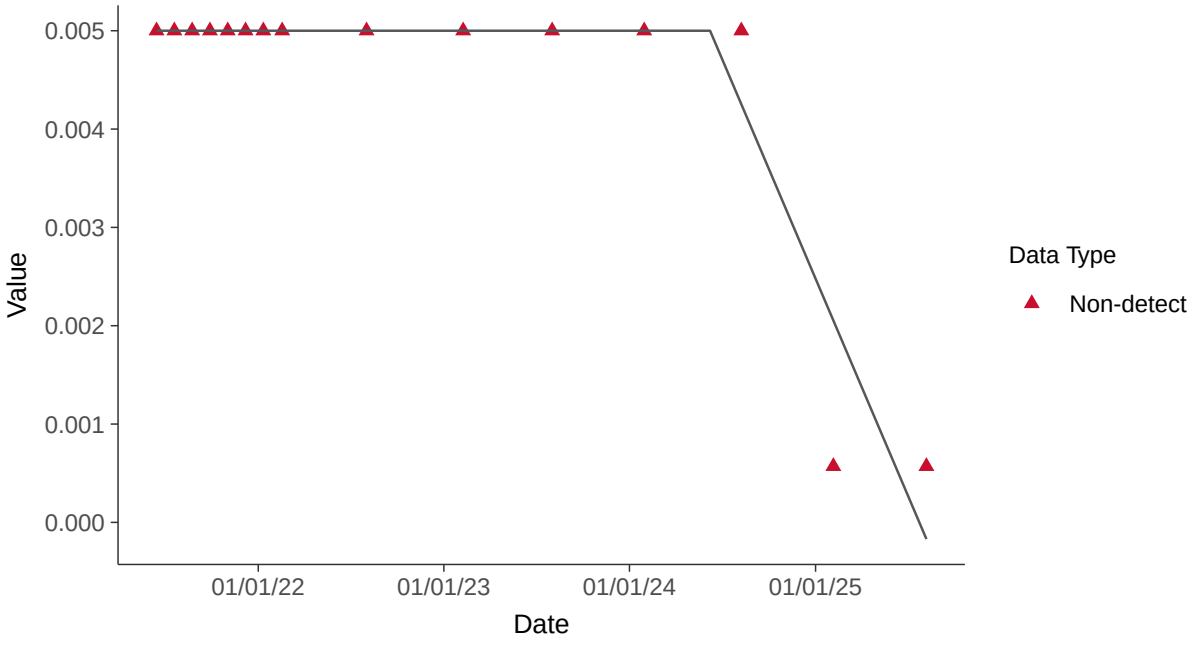
Boxplot by Season

Antimony, MW-8 (mg/l)



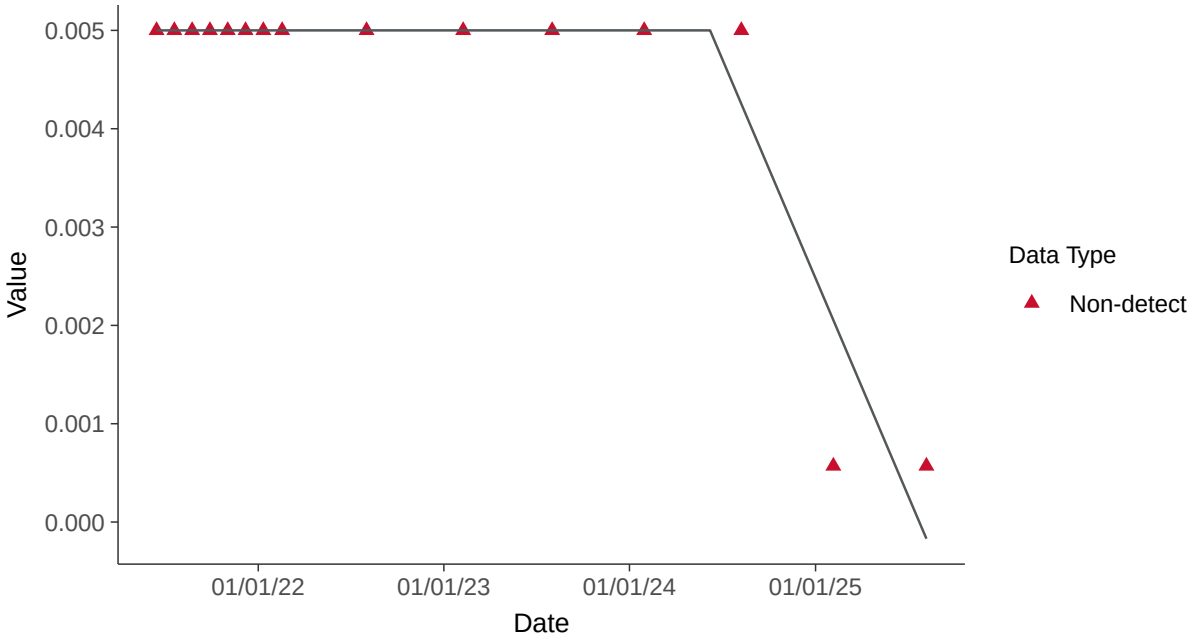
Trend Regression: Piecewise Linear-Linear

Antimony, MW-8 (mg/l)



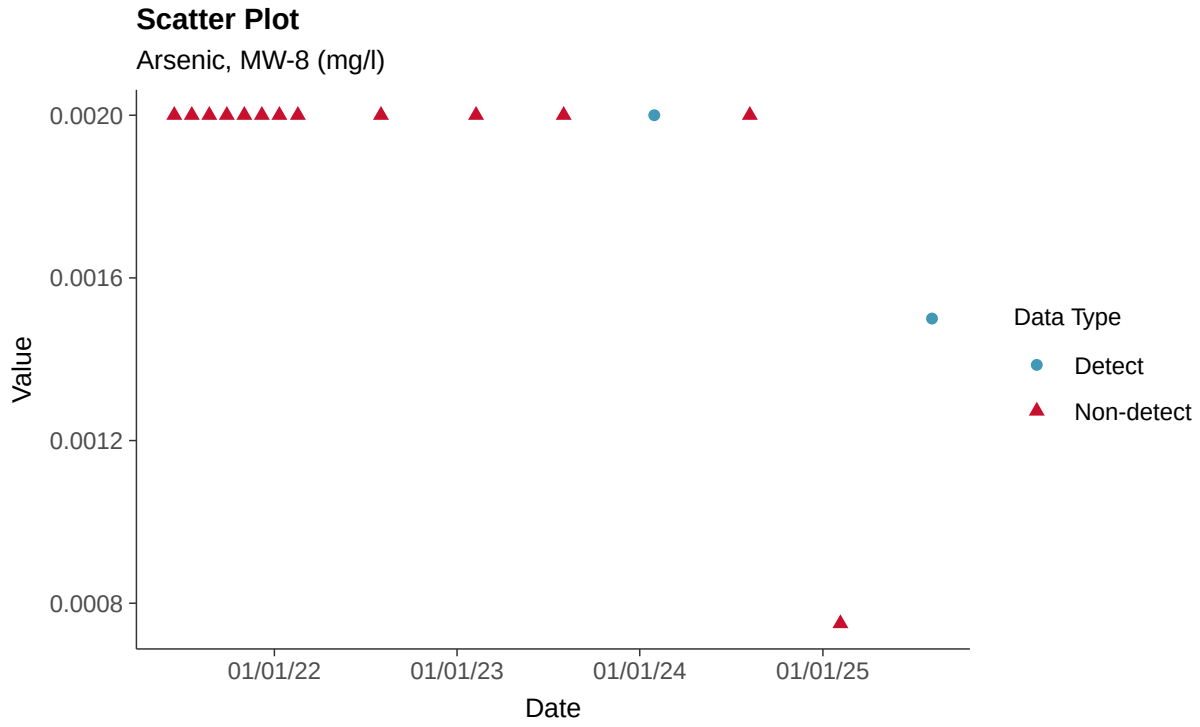
Trend Regression: Piecewise Linear-Linear-Linear

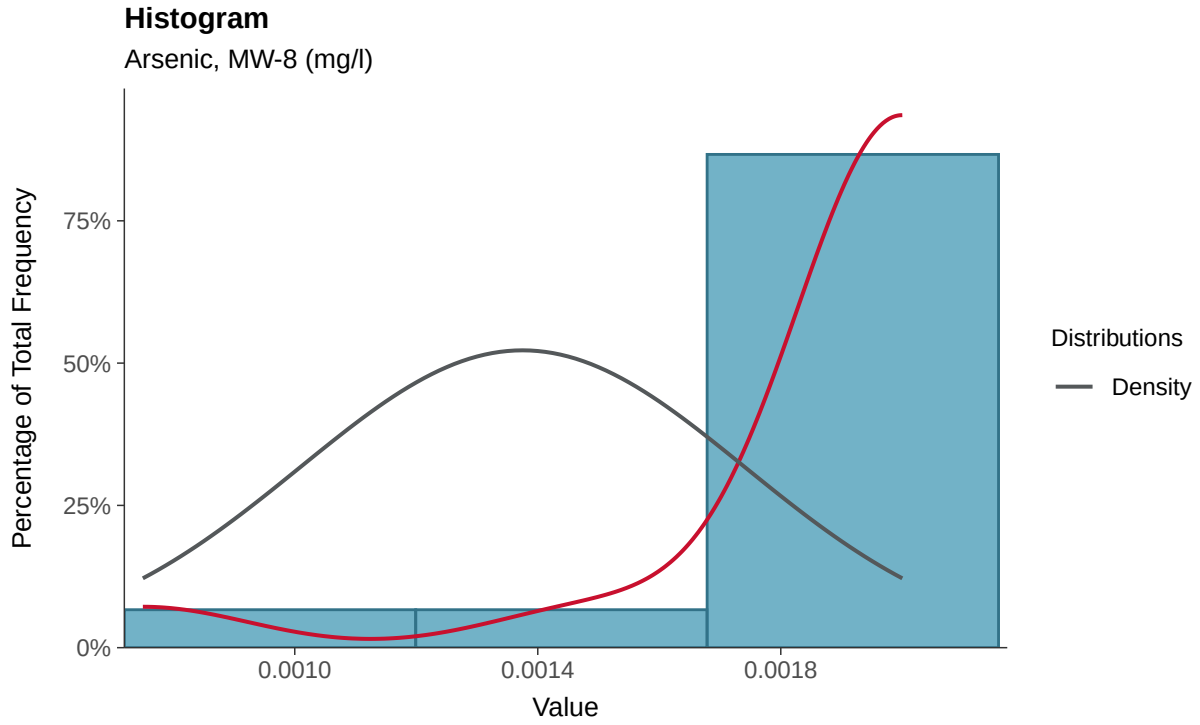
Antimony, MW-8 (mg/l)



Appendix IV: Arsenic, MW-8

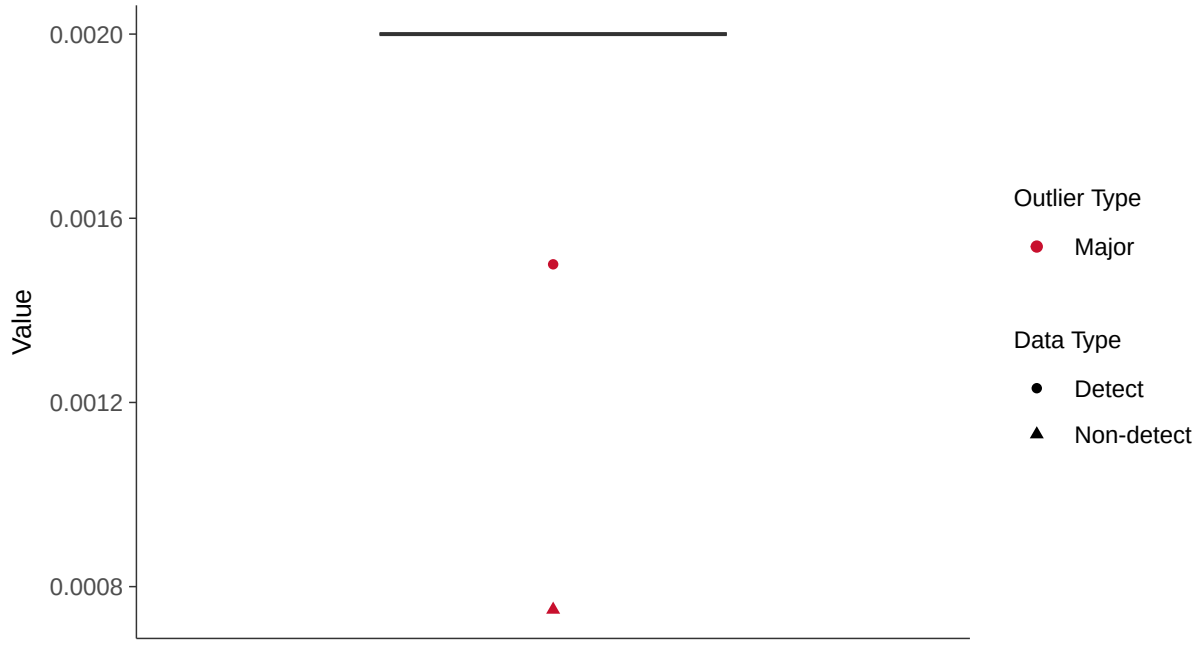
ID: 19_3_102





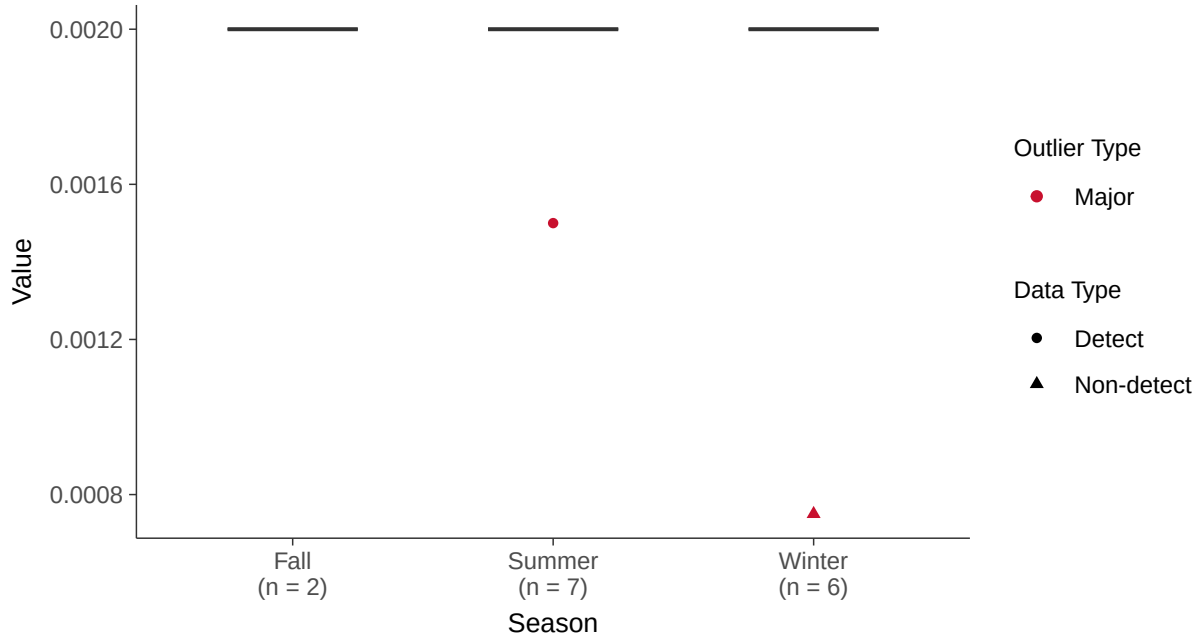
Boxplot

Arsenic, MW-8 (mg/l)



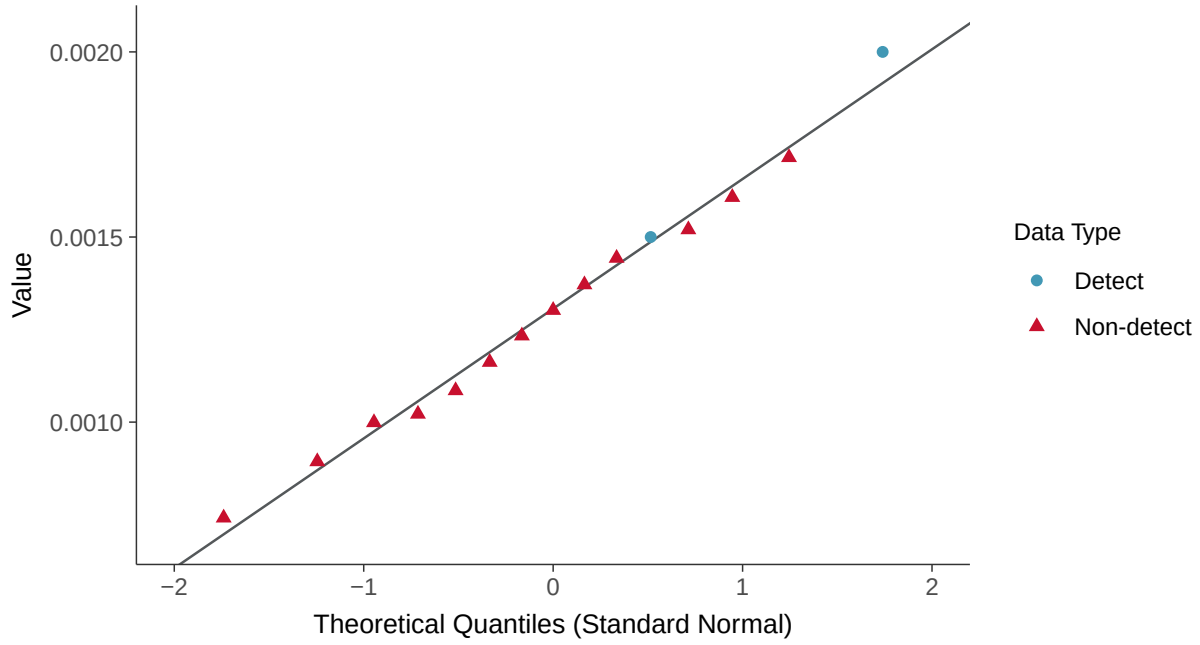
Boxplot by Season

Arsenic, MW-8 (mg/l)



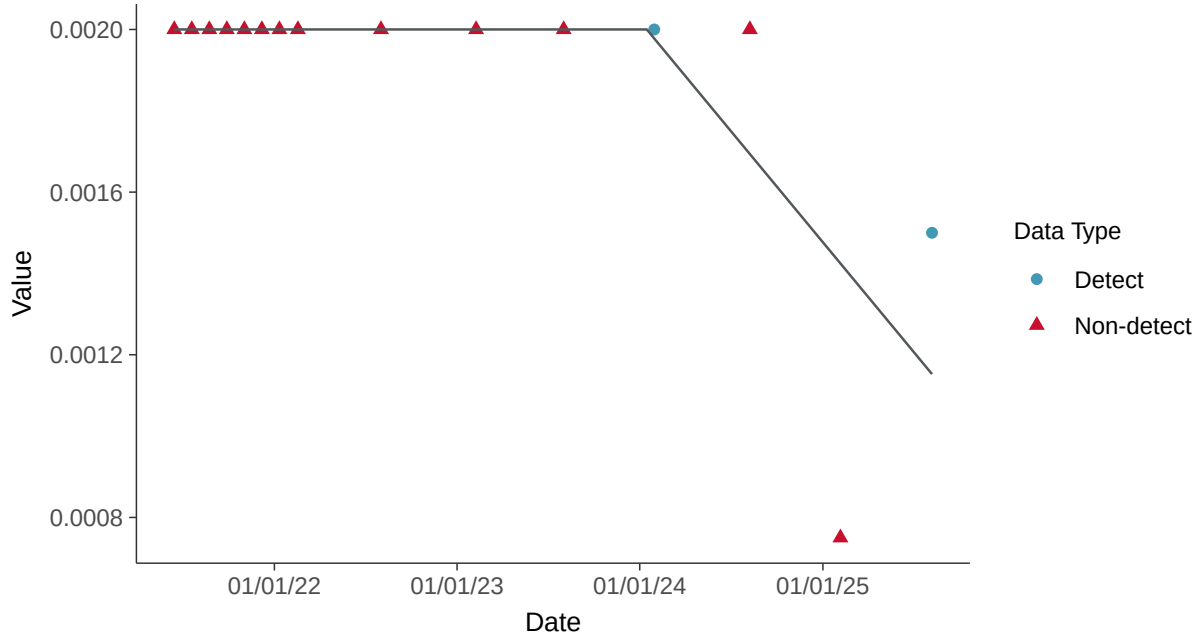
Normal Q-Q plot using ROS Imputed Estimates

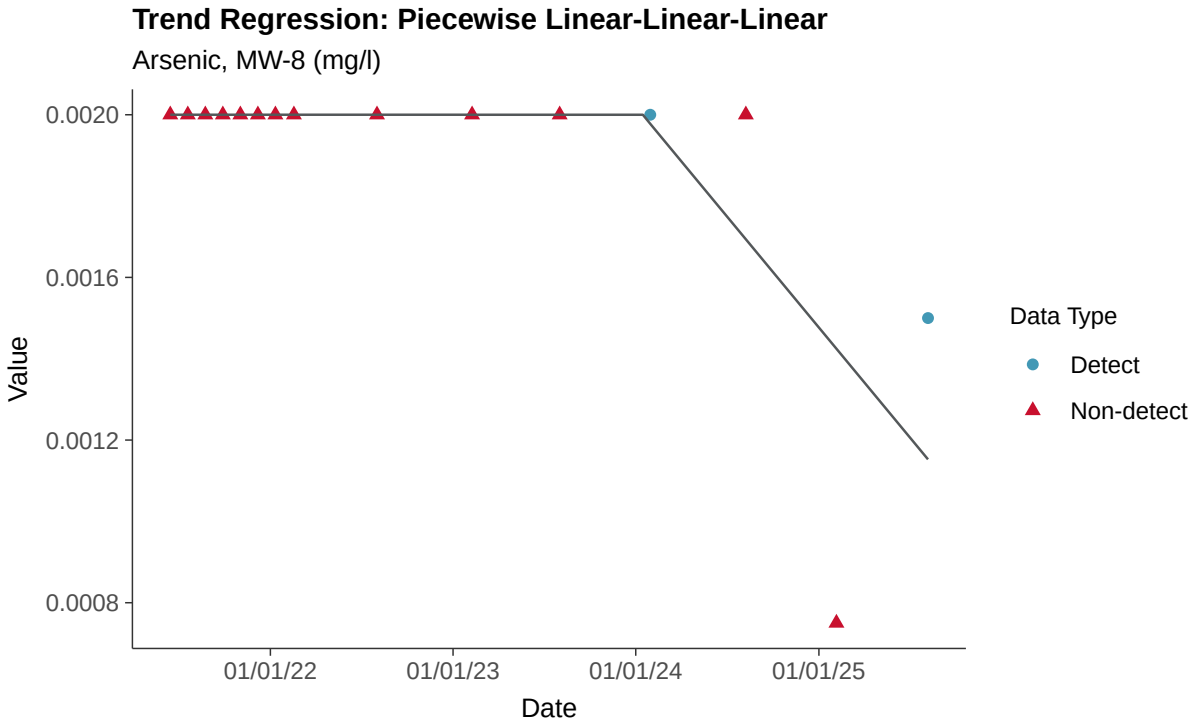
Arsenic, MW-8 (mg/l)



Trend Regression: Piecewise Linear-Linear

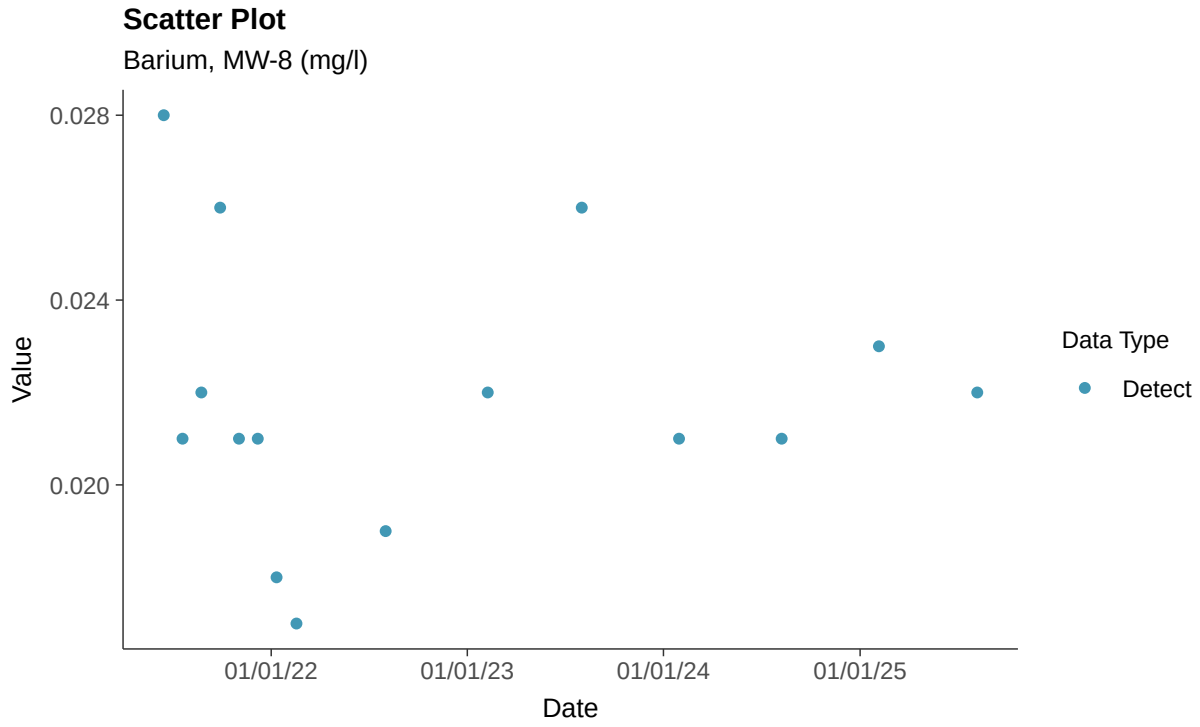
Arsenic, MW-8 (mg/l)

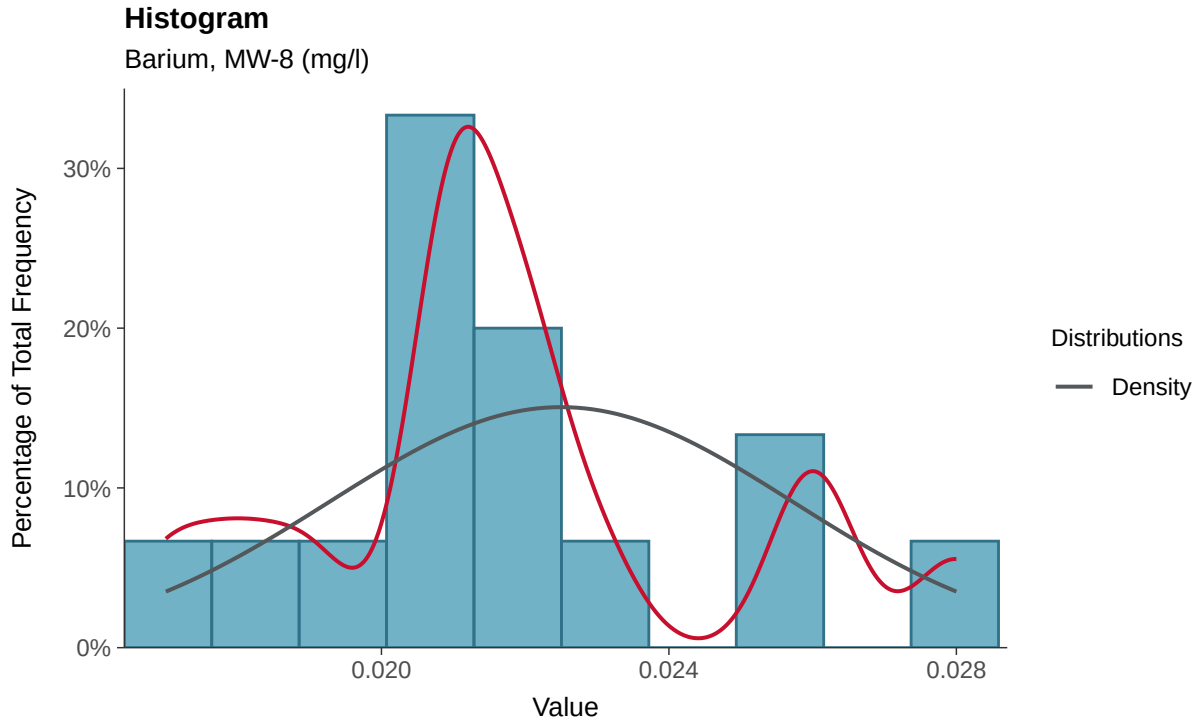



Trend Regression: Piecewise Linear-Linear-Linear
Arsenic, MW-8 (mg/l)
0.0020
0.0016
0.0012
0.0008
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Barium, MW-8

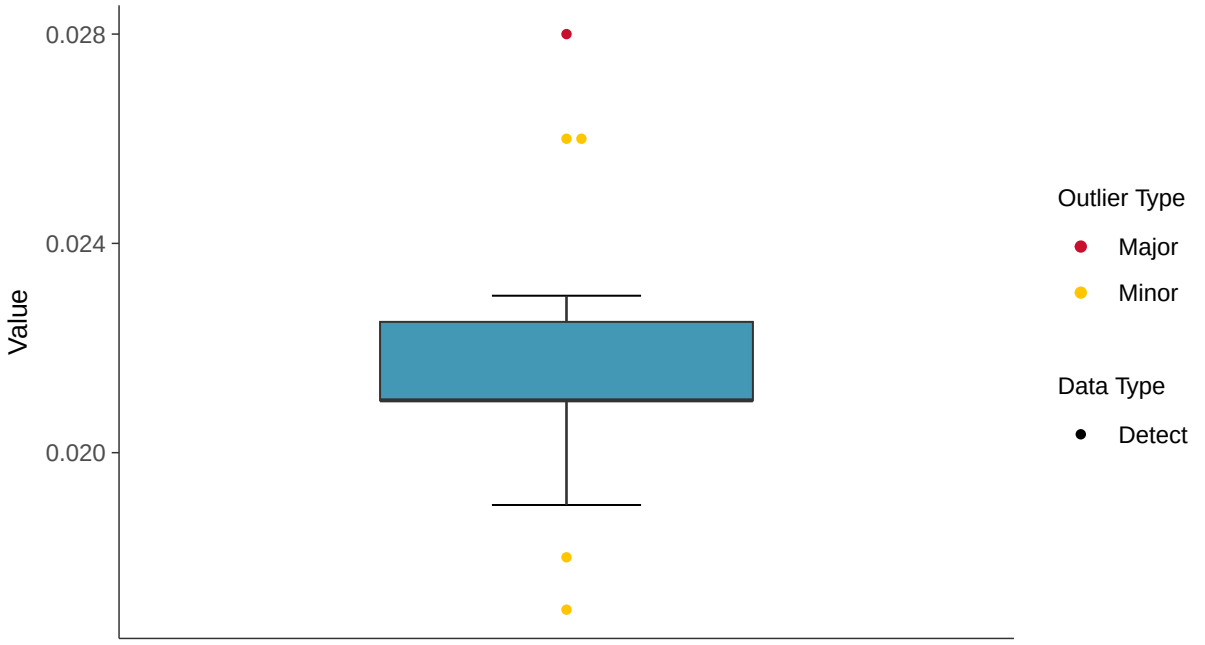
ID: 19_3_103





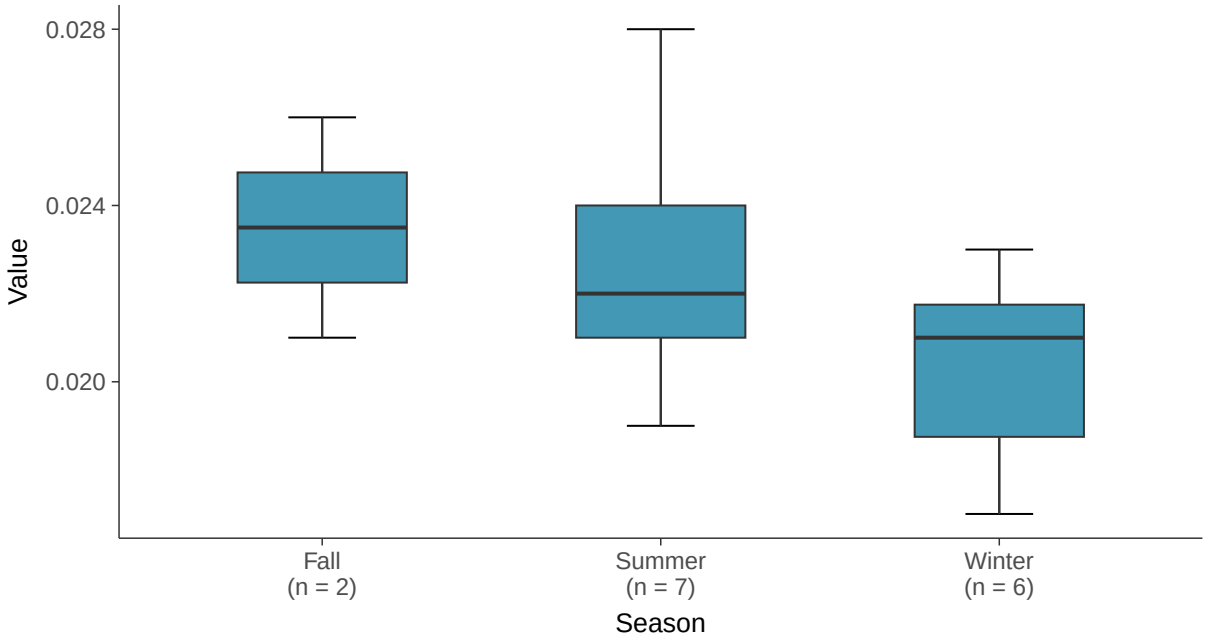
Boxplot

Barium, MW-8 (mg/l)



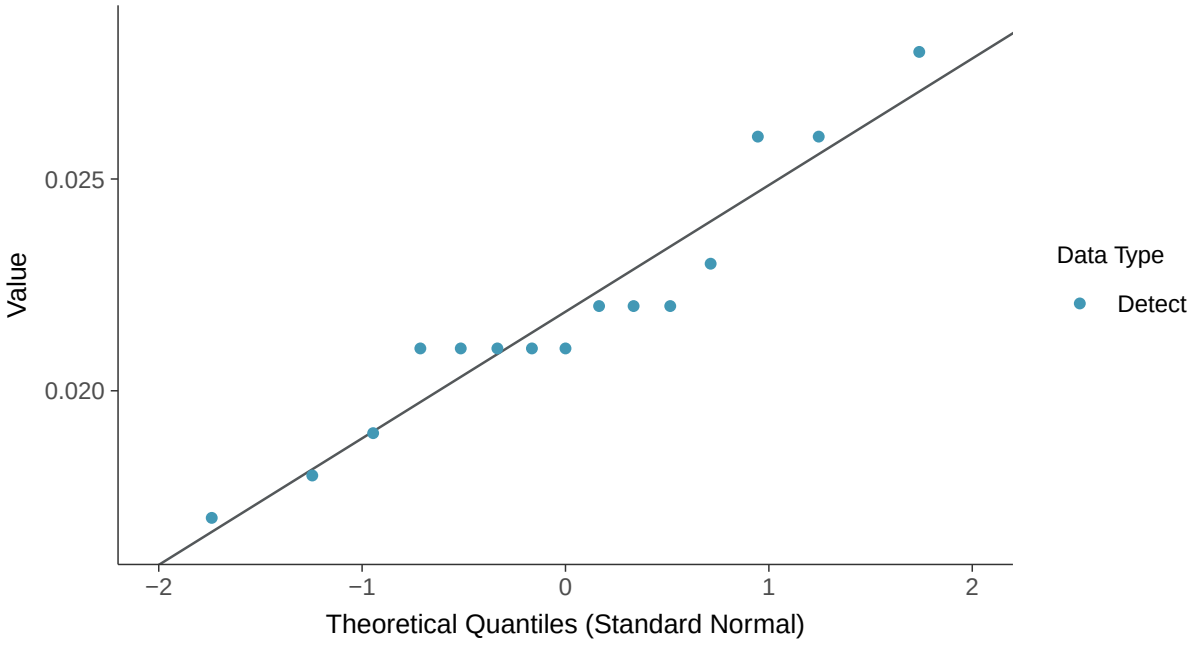
Boxplot by Season

Barium, MW-8 (mg/l)



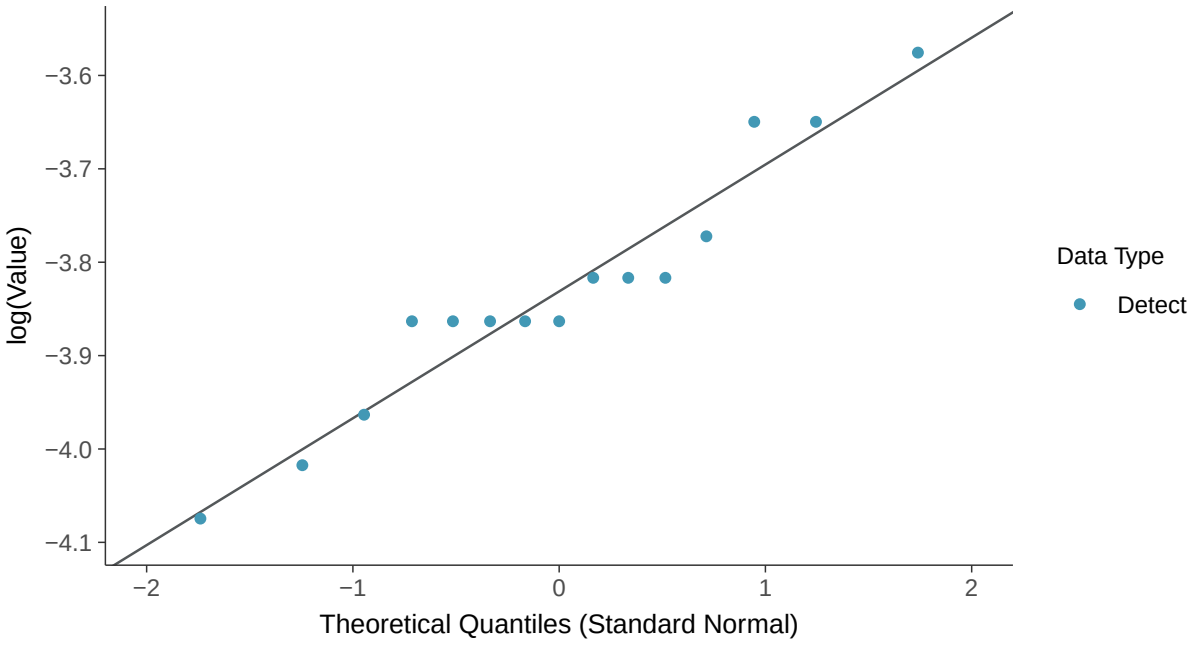
Normal Q-Q plot

Barium, MW-8 (mg/l)



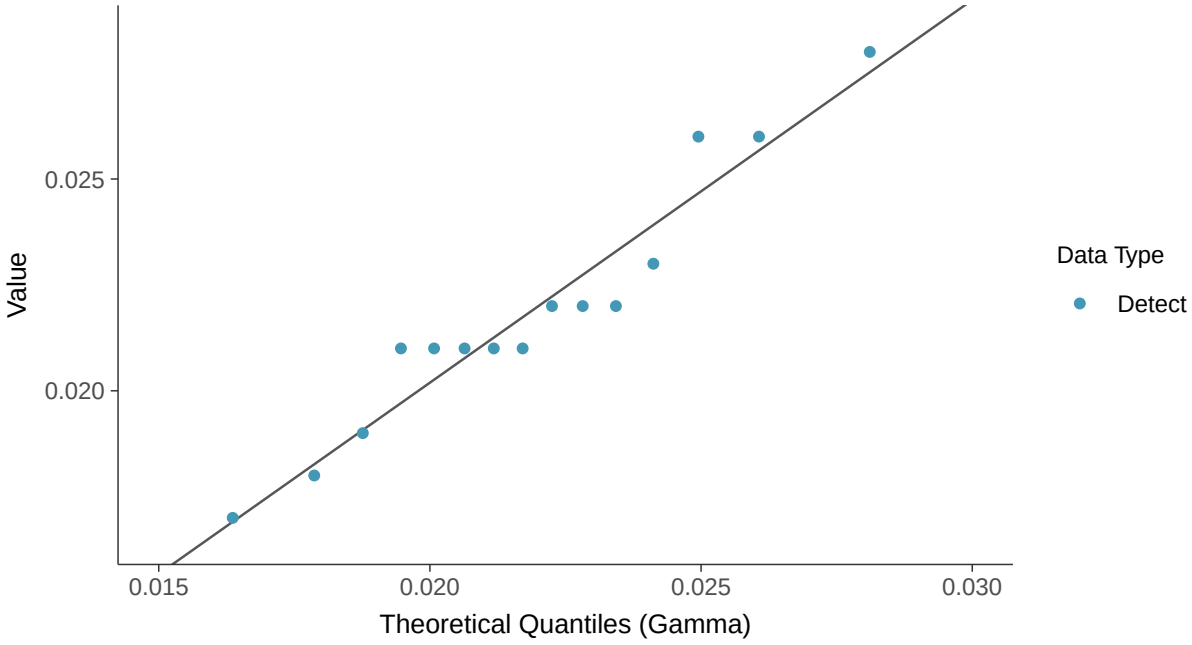
Lognormal Q-Q plot

Barium, MW-8 (mg/l)



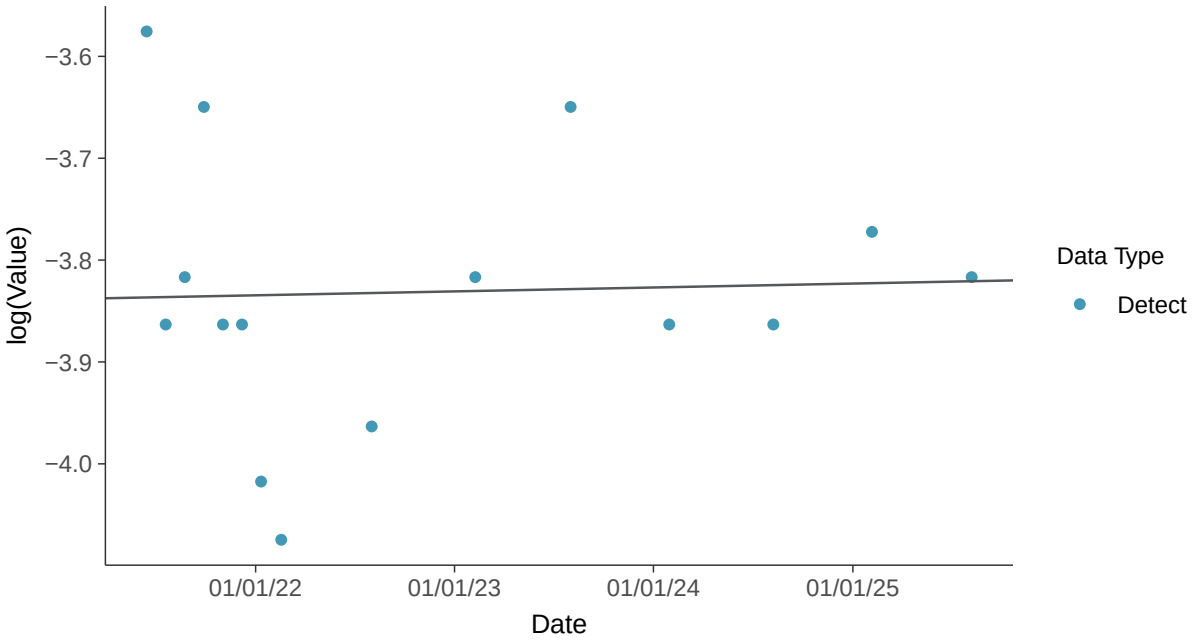
Gamma Q-Q plot

Barium, MW-8 (mg/l)



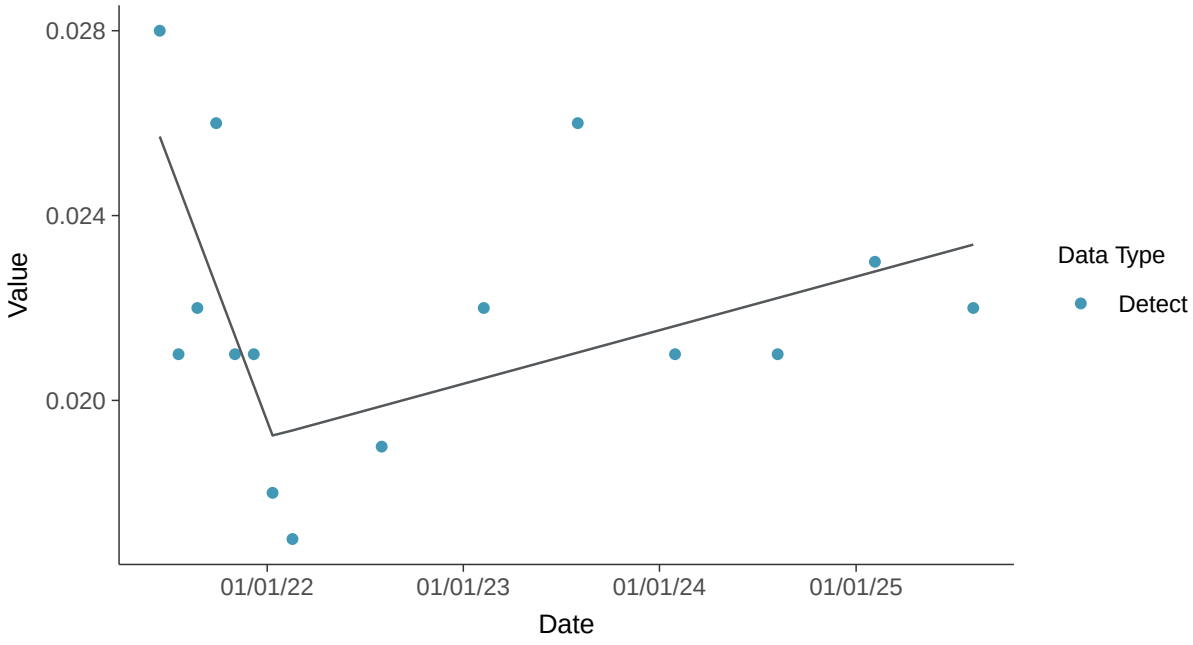
Trend Regression: Lognormal MLE

Barium, MW-8 (mg/l)



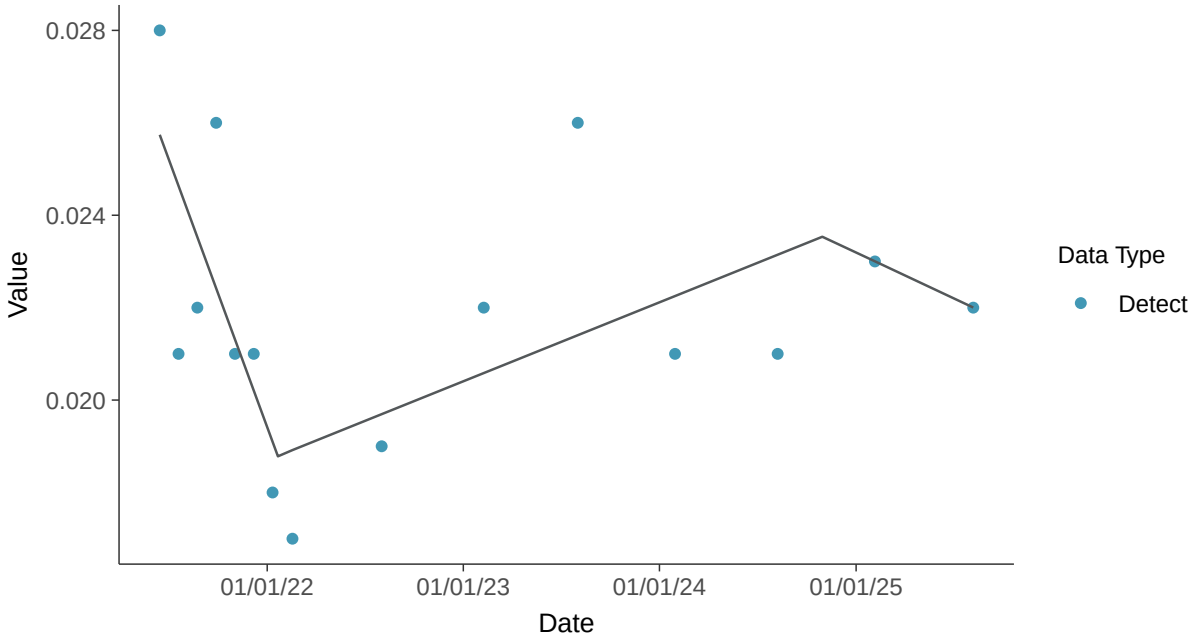
Trend Regression: Piecewise Linear-Linear

Barium, MW-8 (mg/l)



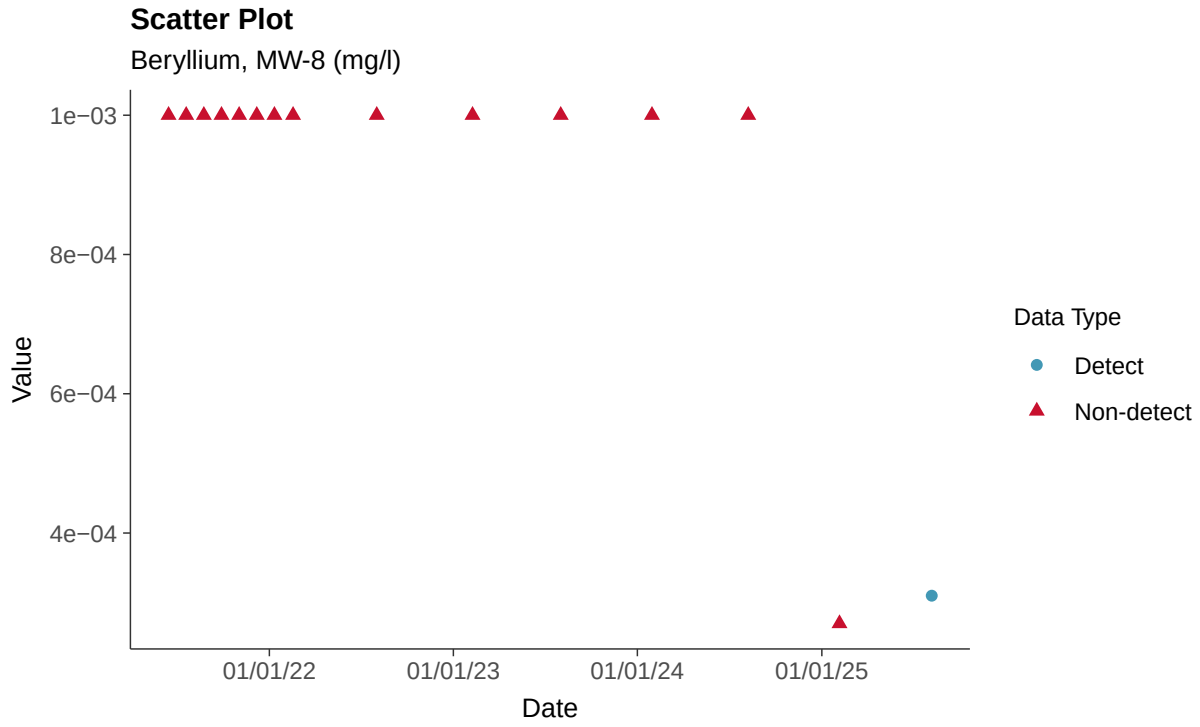
Trend Regression: Piecewise Linear-Linear-Linear

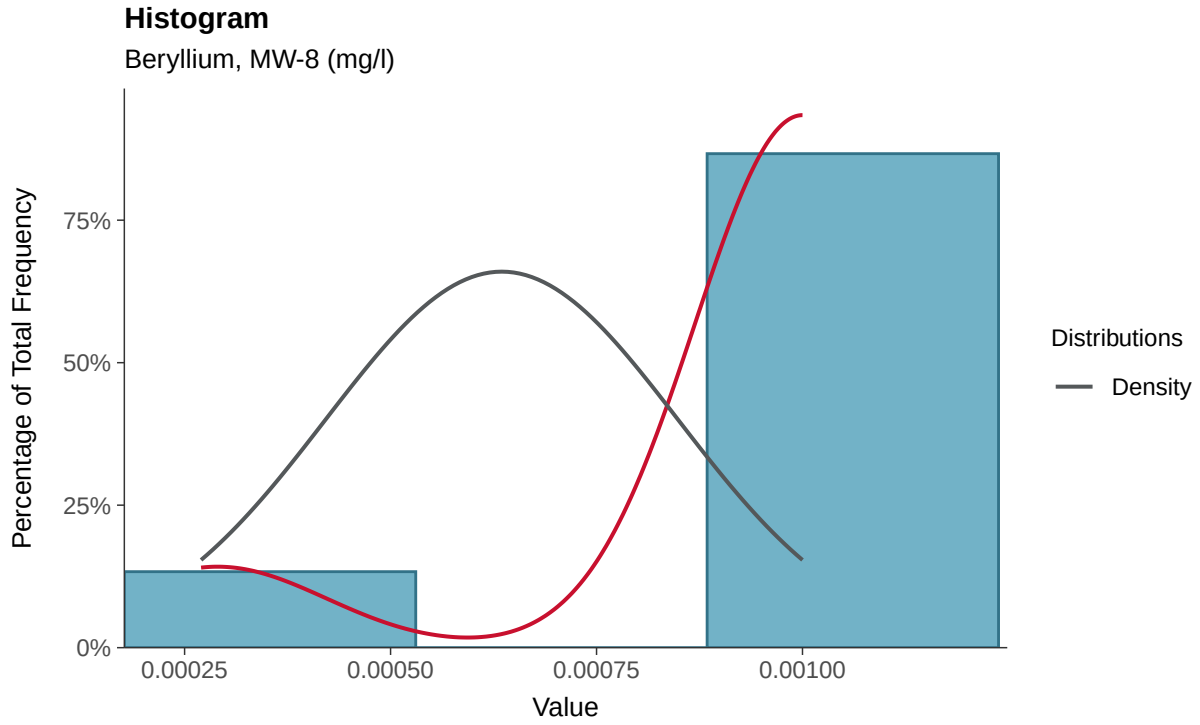
Barium, MW-8 (mg/l)



Appendix IV: Beryllium, MW-8

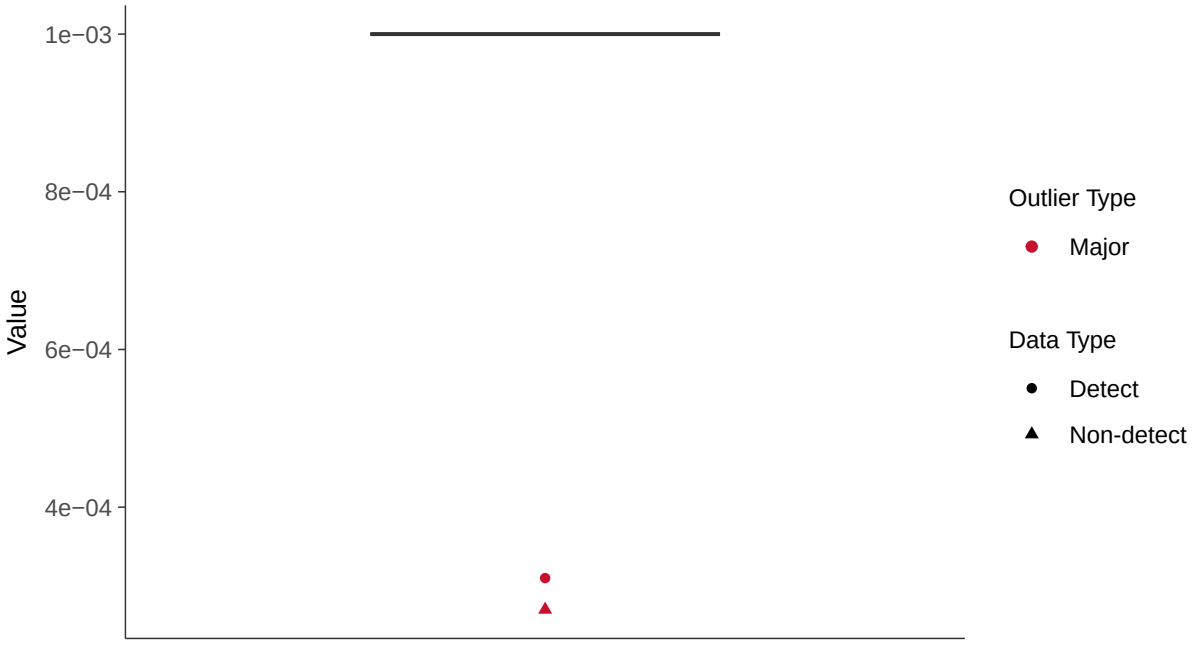
ID: 19_3_104





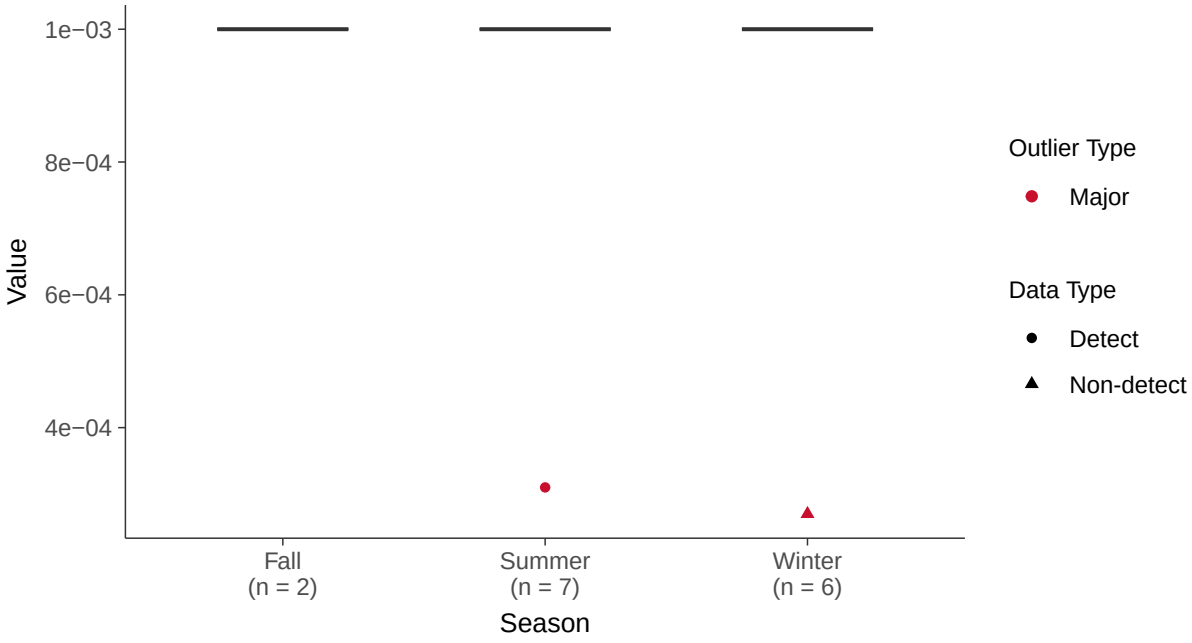
Boxplot

Beryllium, MW-8 (mg/l)



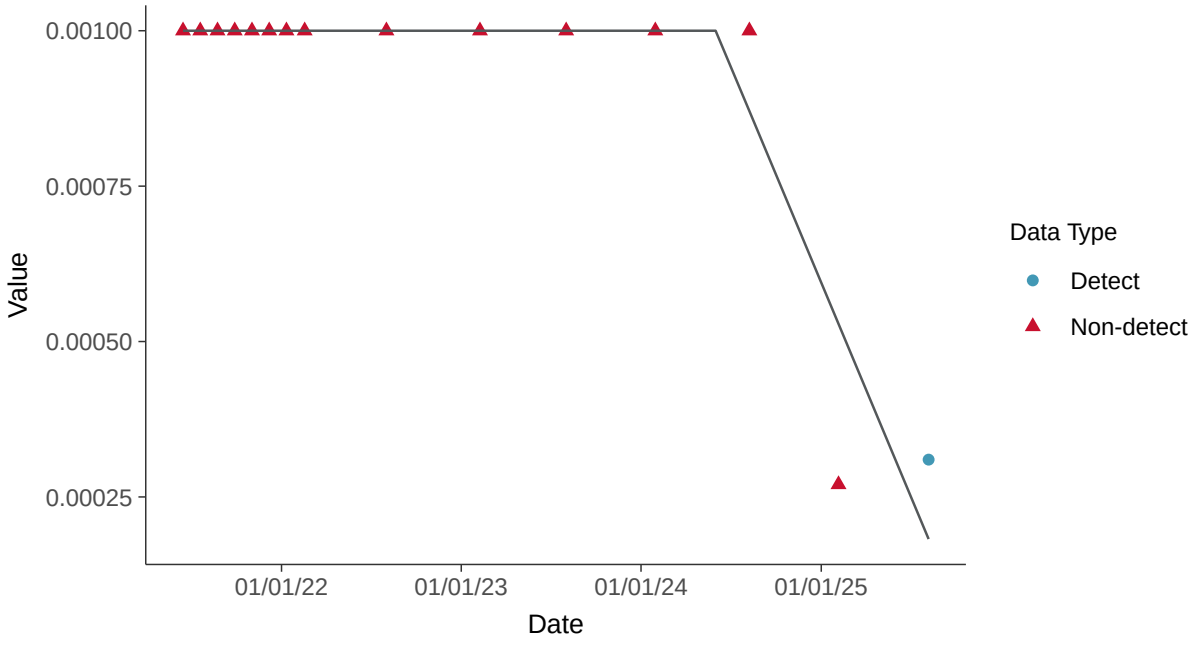
Boxplot by Season

Beryllium, MW-8 (mg/l)



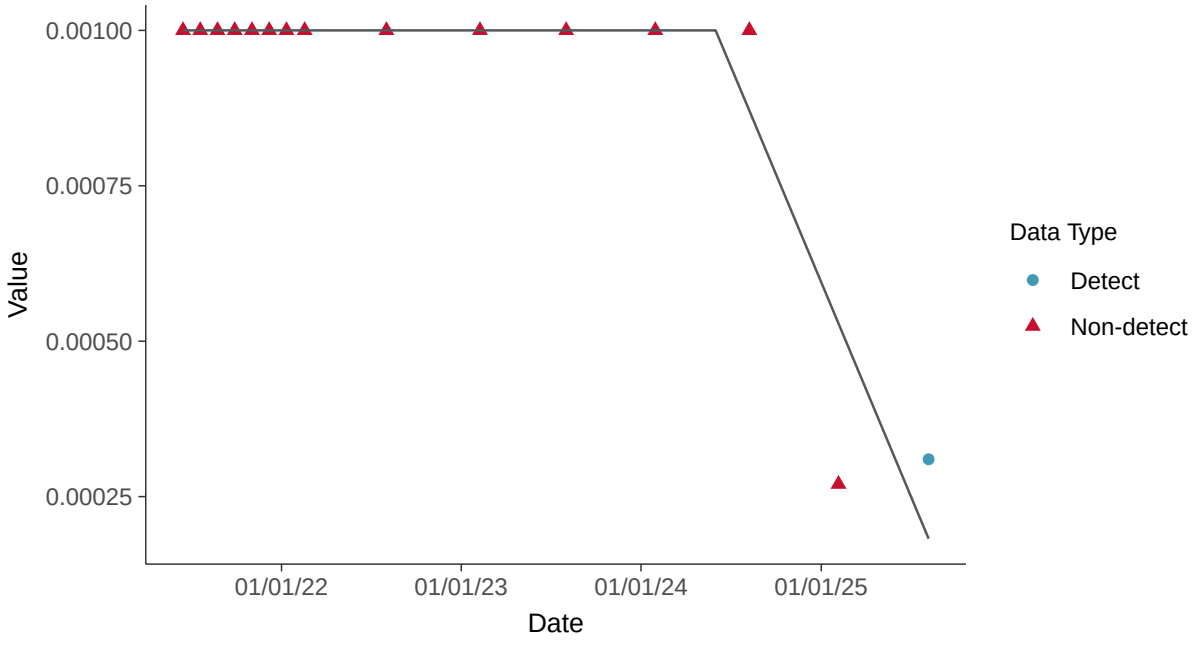
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-8 (mg/l)



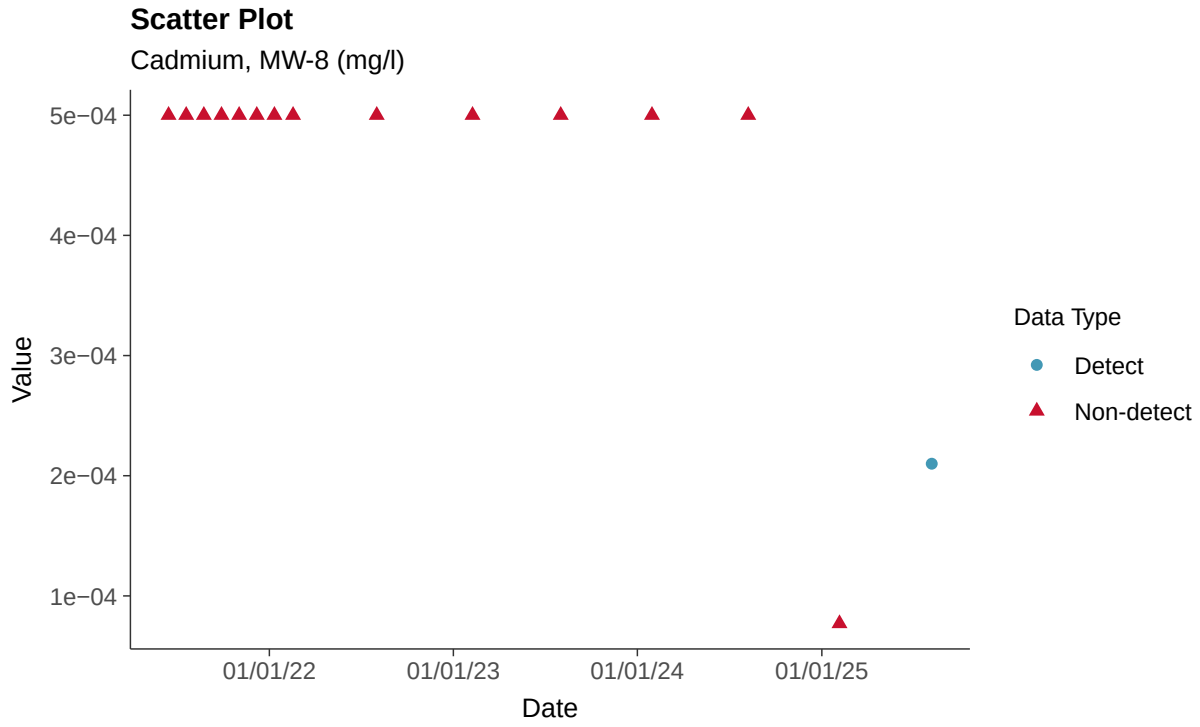
Trend Regression: Piecewise Linear-Linear-Linear

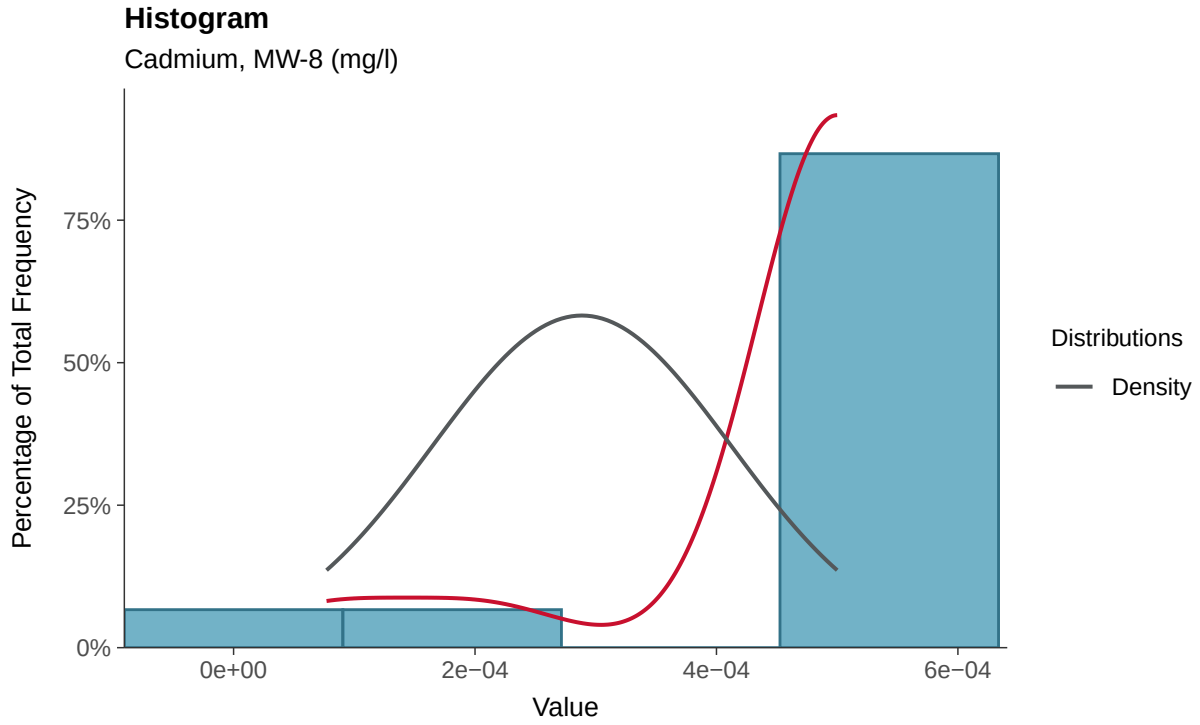
Beryllium, MW-8 (mg/l)



Appendix IV: Cadmium, MW-8

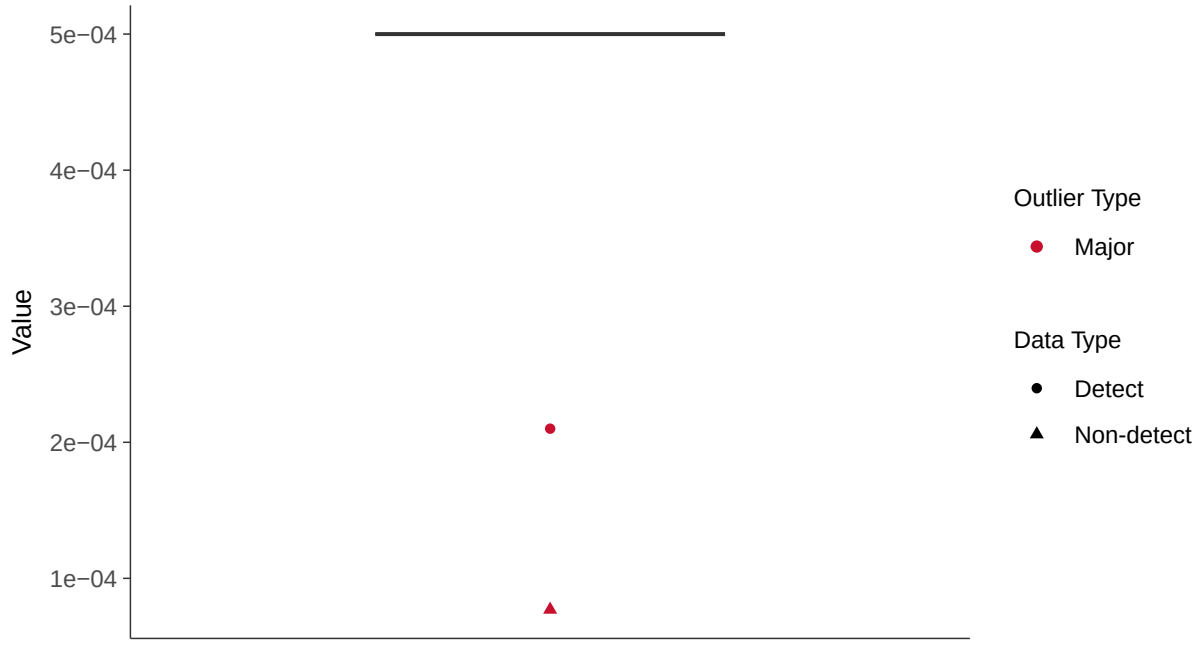
ID: 19_3_106





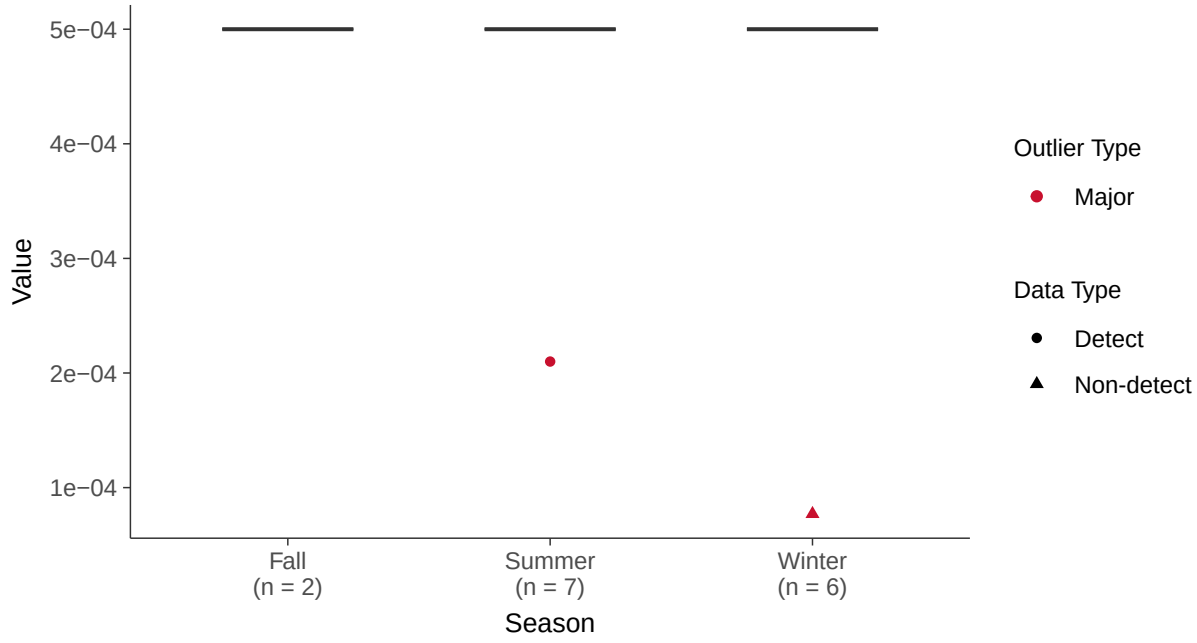
Boxplot

Cadmium, MW-8 (mg/l)



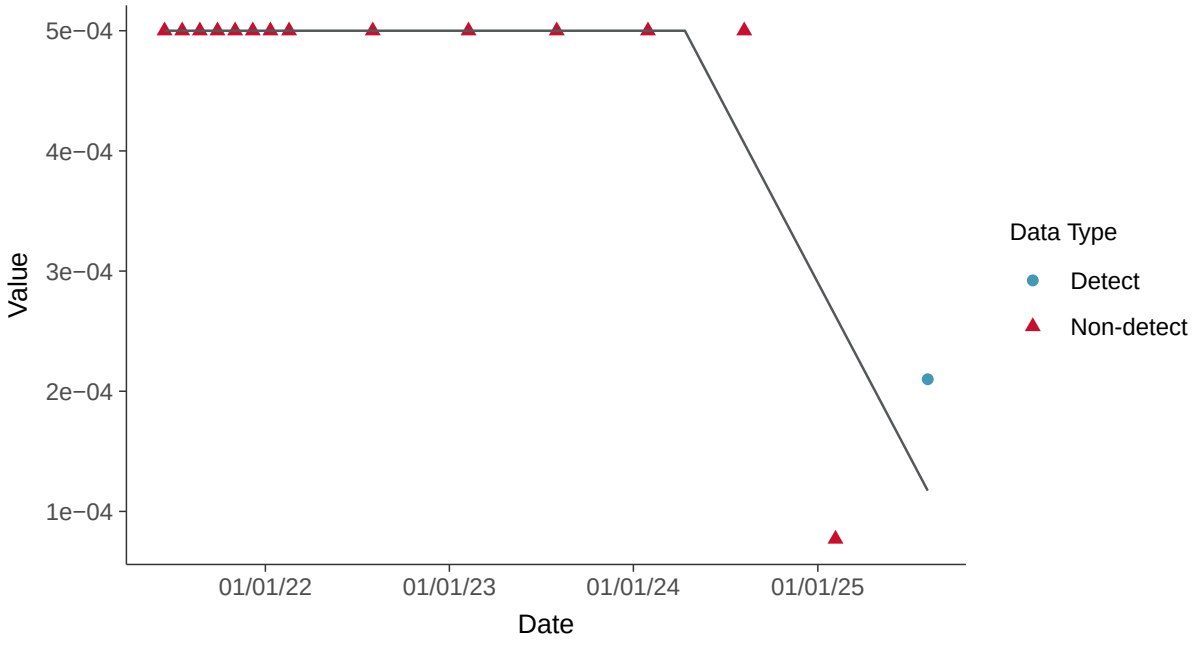
Boxplot by Season

Cadmium, MW-8 (mg/l)



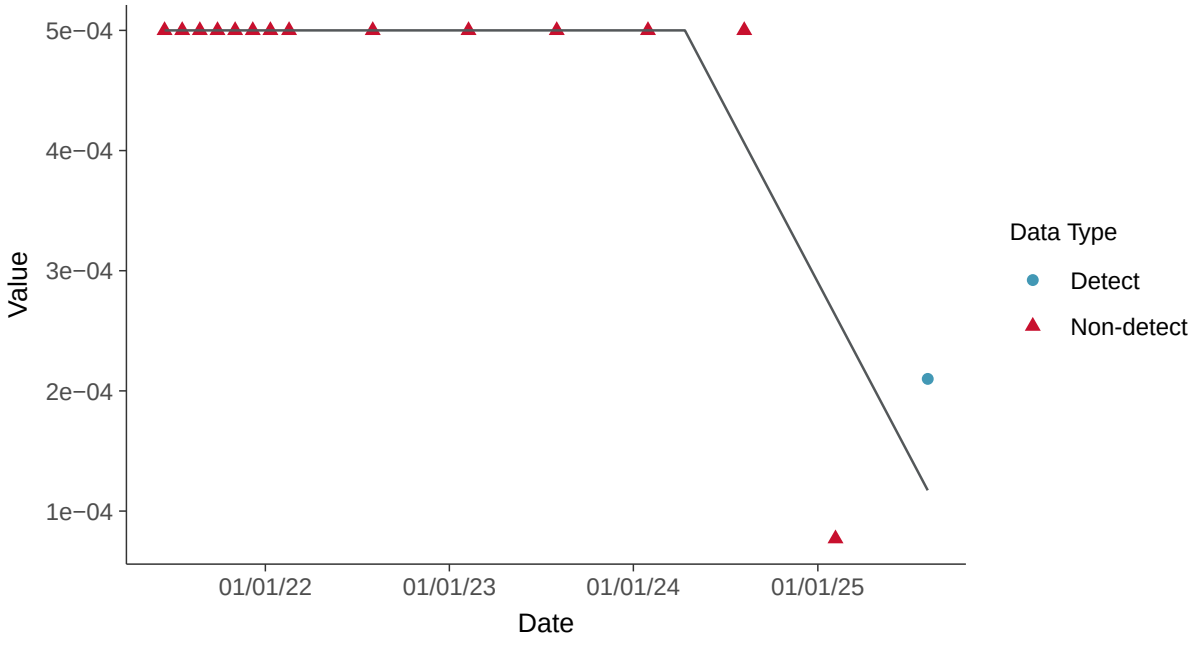
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-8 (mg/l)



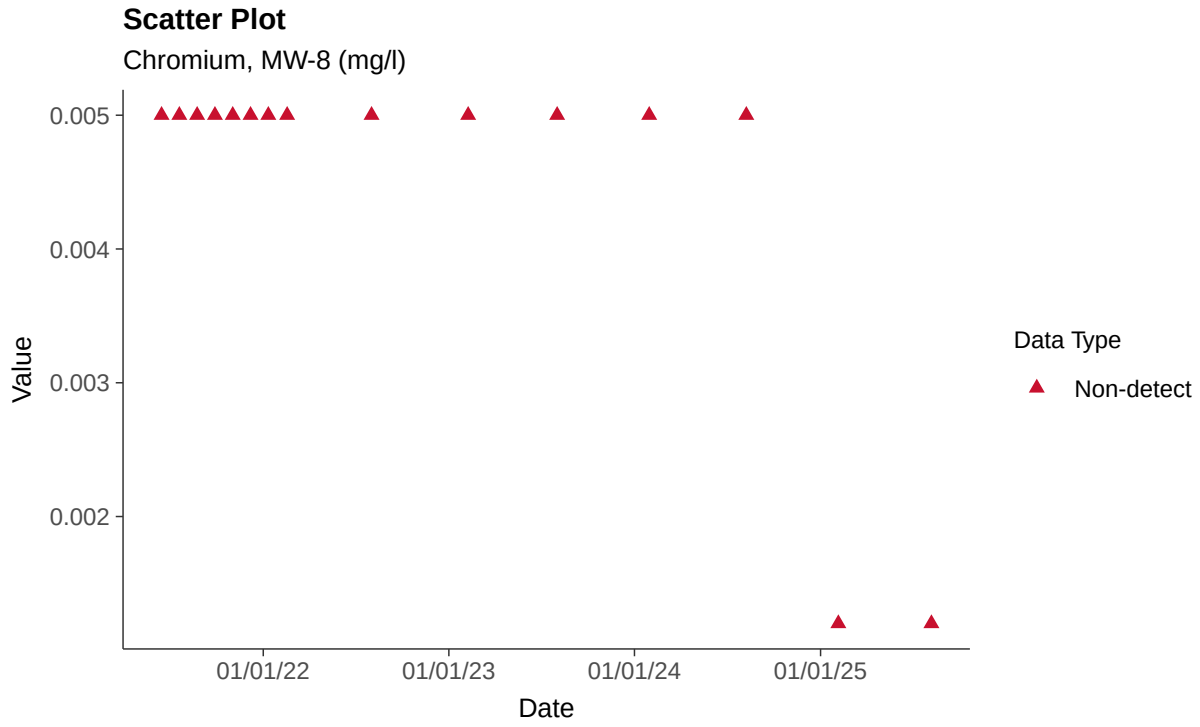
Trend Regression: Piecewise Linear-Linear-Linear

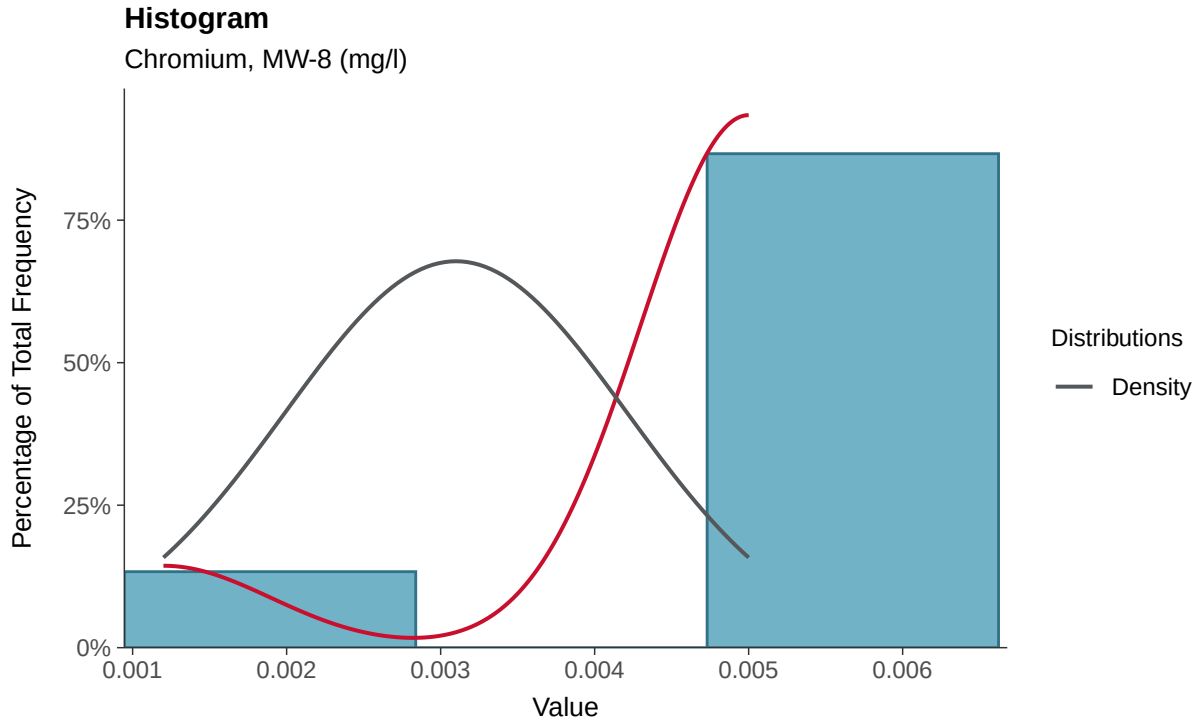
Cadmium, MW-8 (mg/l)



Appendix IV: Chromium, MW-8

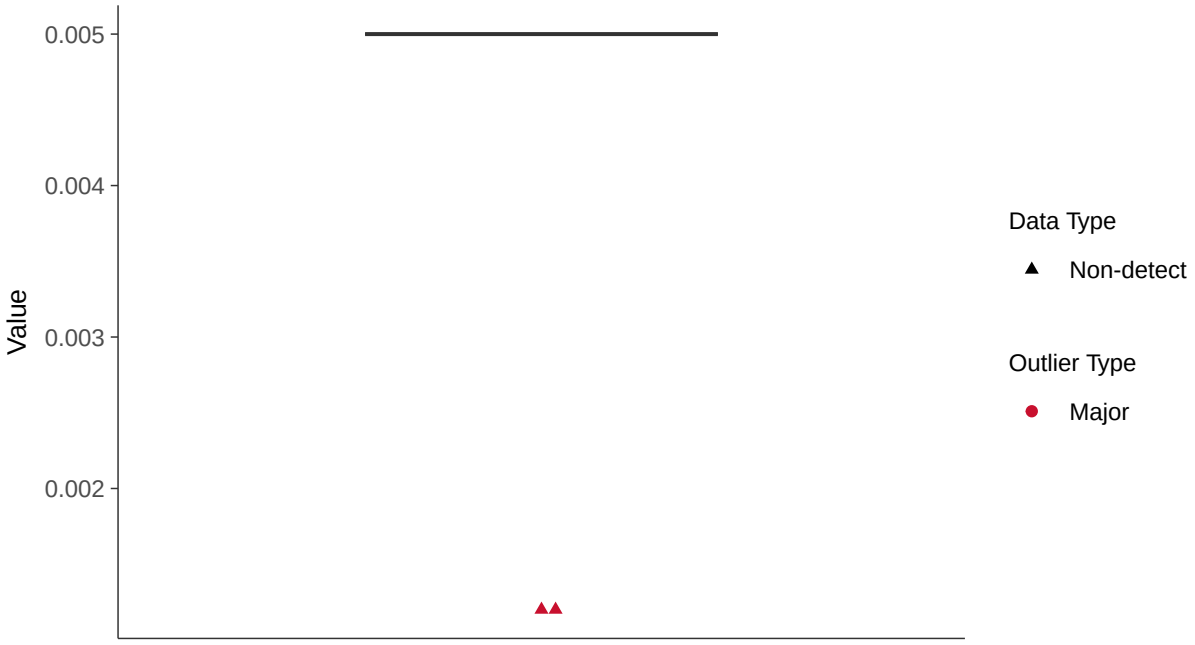
ID: 19_3_109





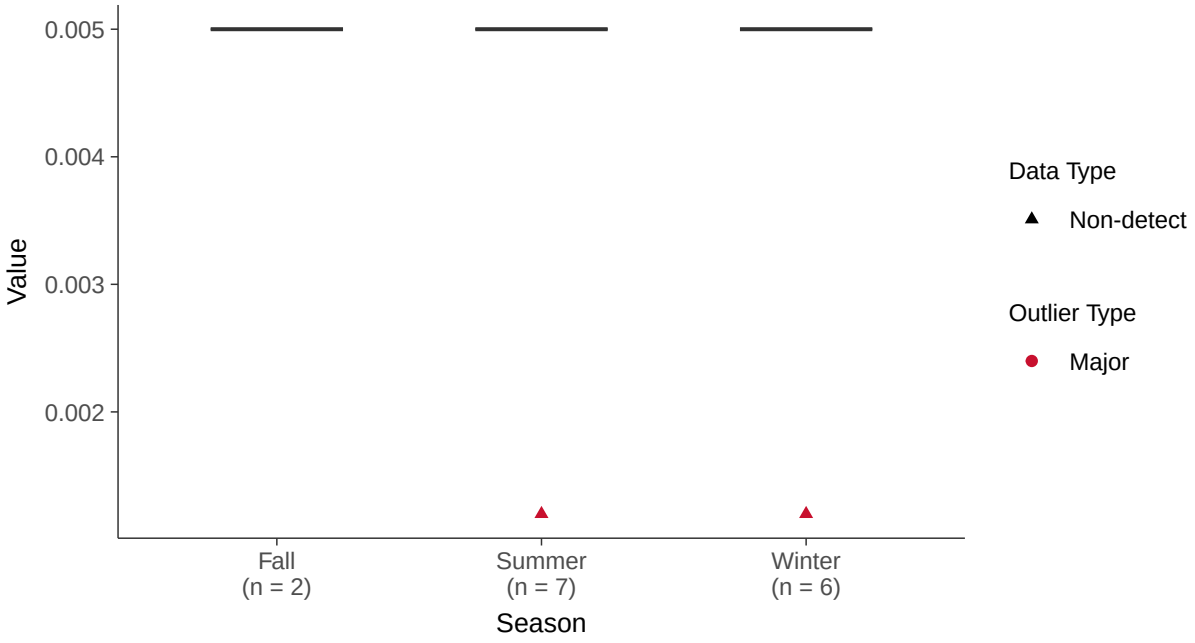
Boxplot

Chromium, MW-8 (mg/l)



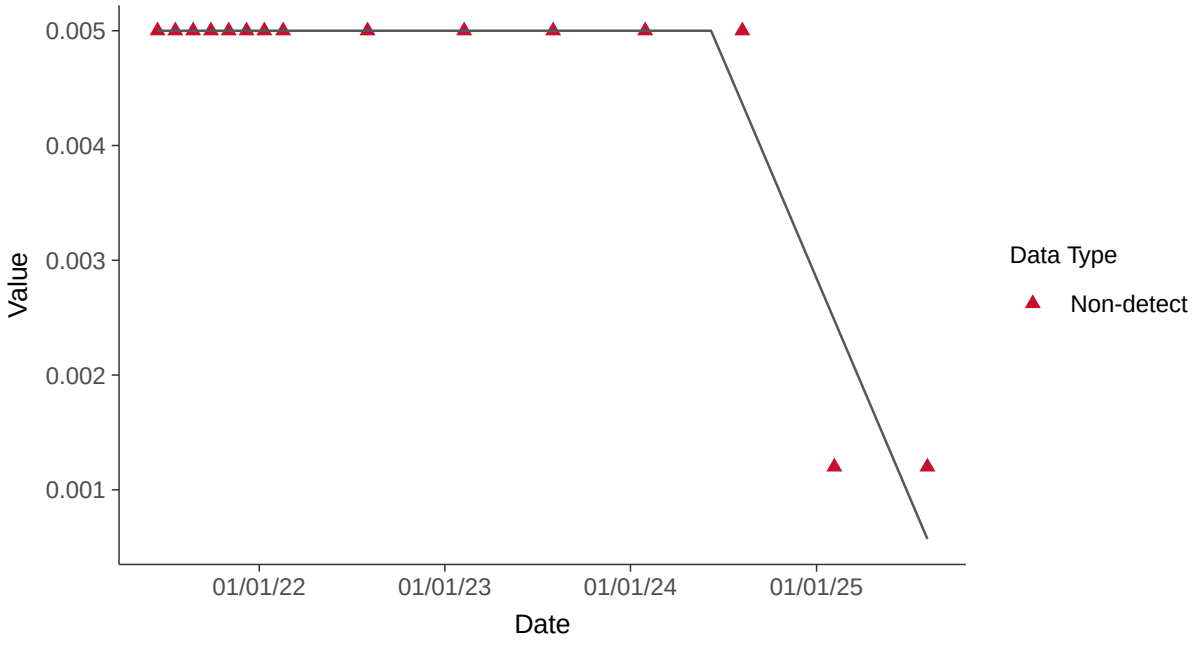
Boxplot by Season

Chromium, MW-8 (mg/l)



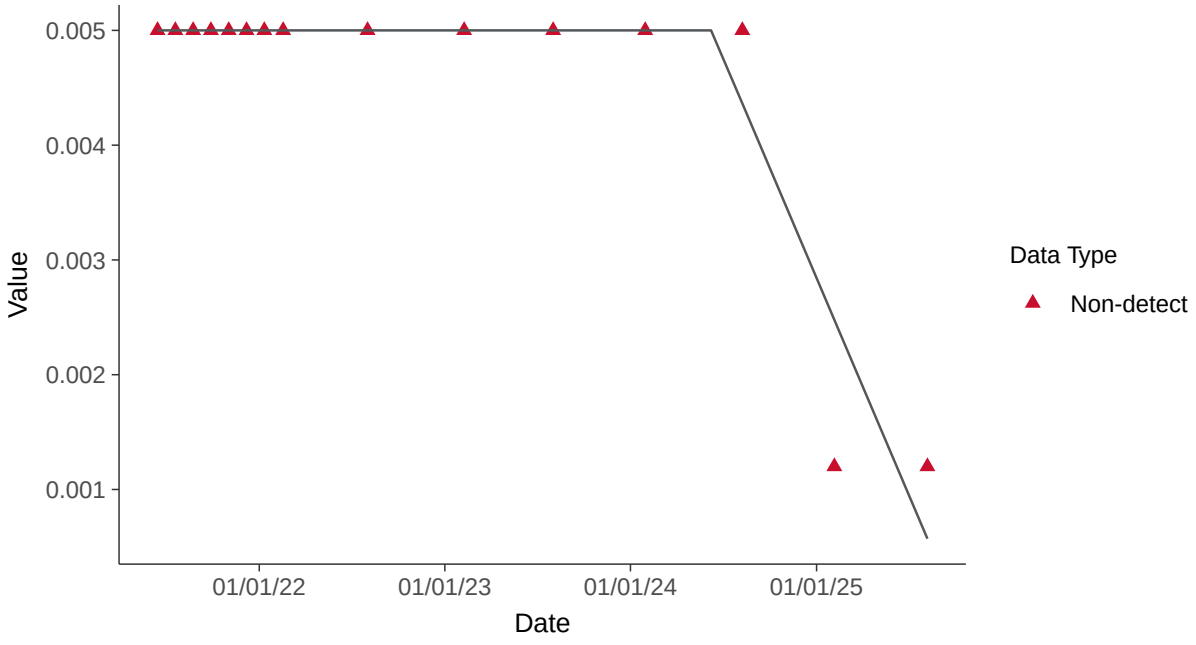
Trend Regression: Piecewise Linear-Linear

Chromium, MW-8 (mg/l)



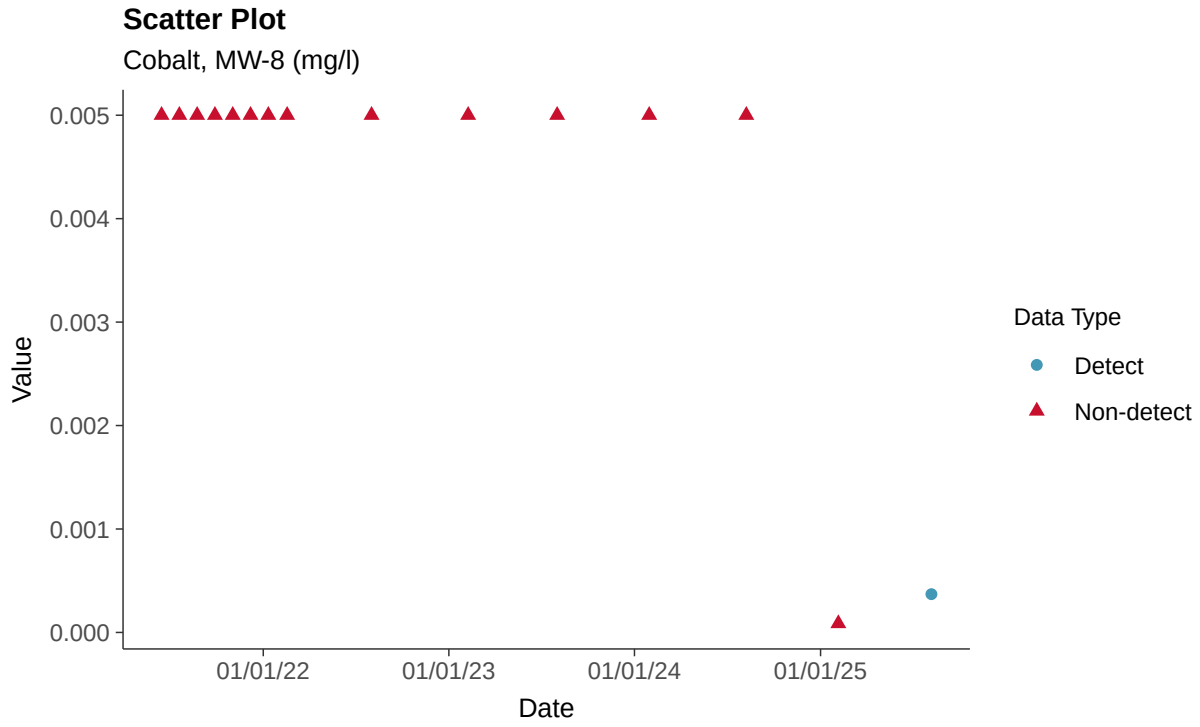
Trend Regression: Piecewise Linear-Linear-Linear

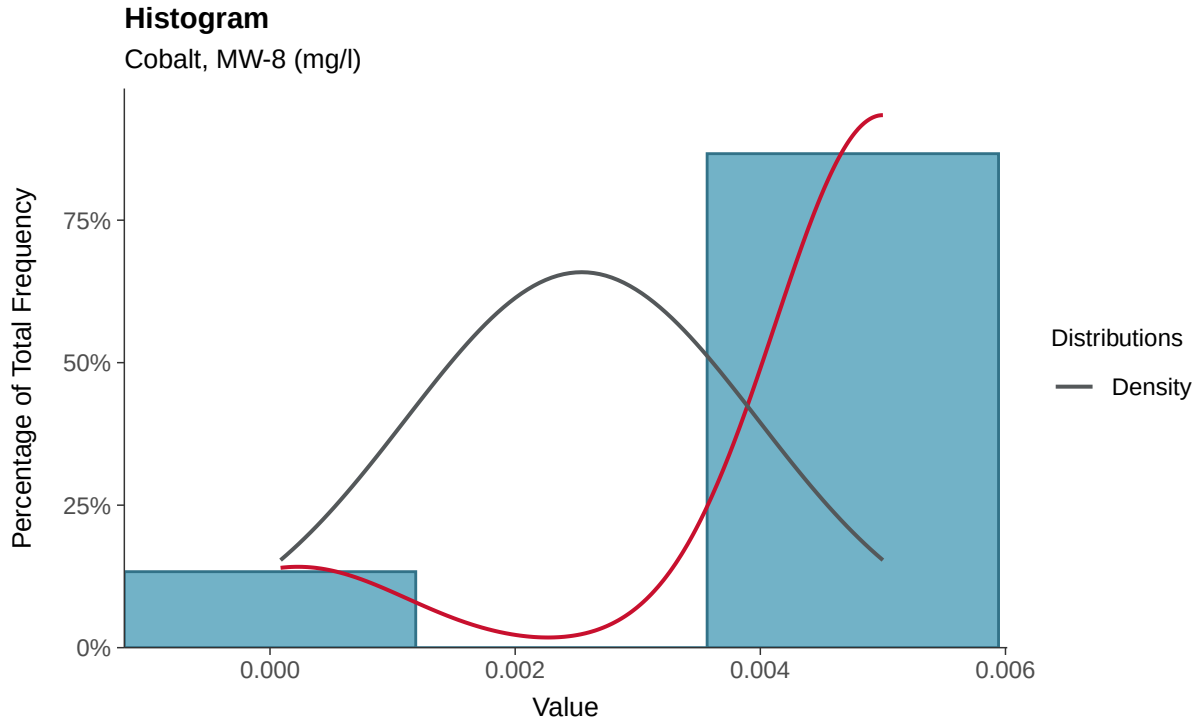
Chromium, MW-8 (mg/l)



Appendix IV: Cobalt, MW-8

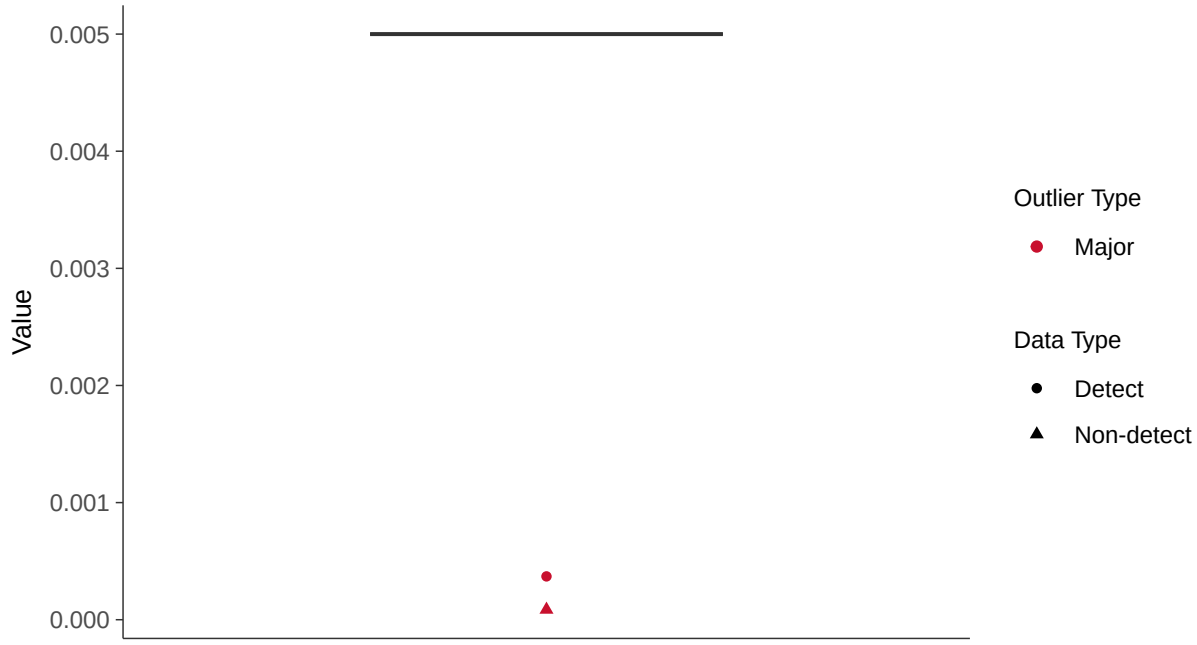
ID: 19_3_110





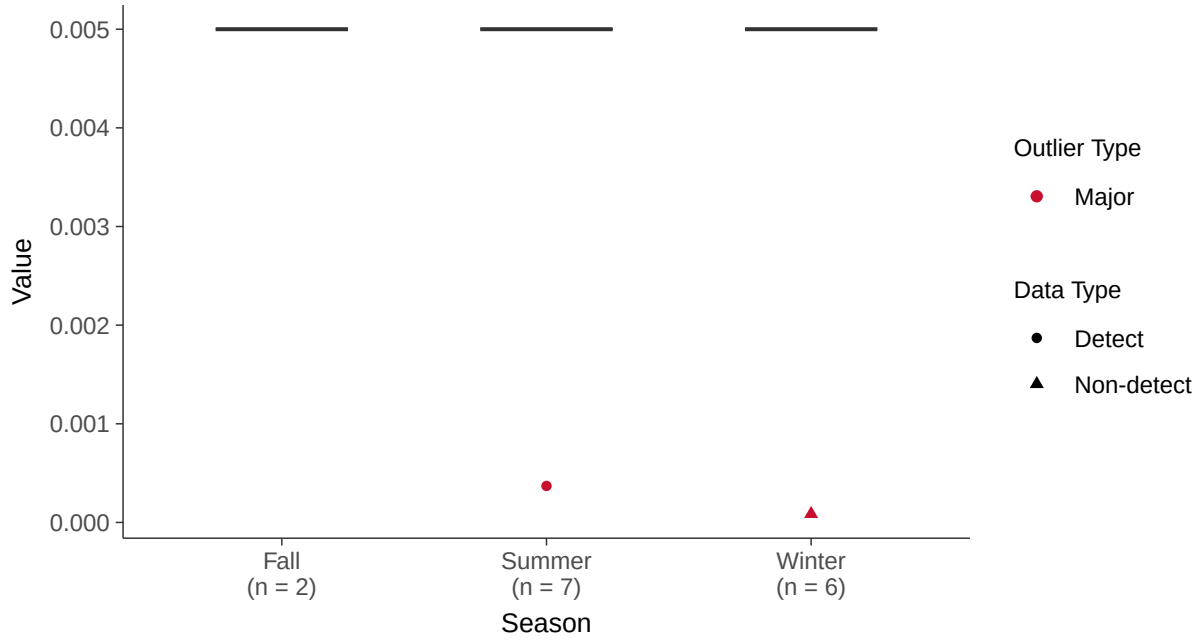
Boxplot

Cobalt, MW-8 (mg/l)



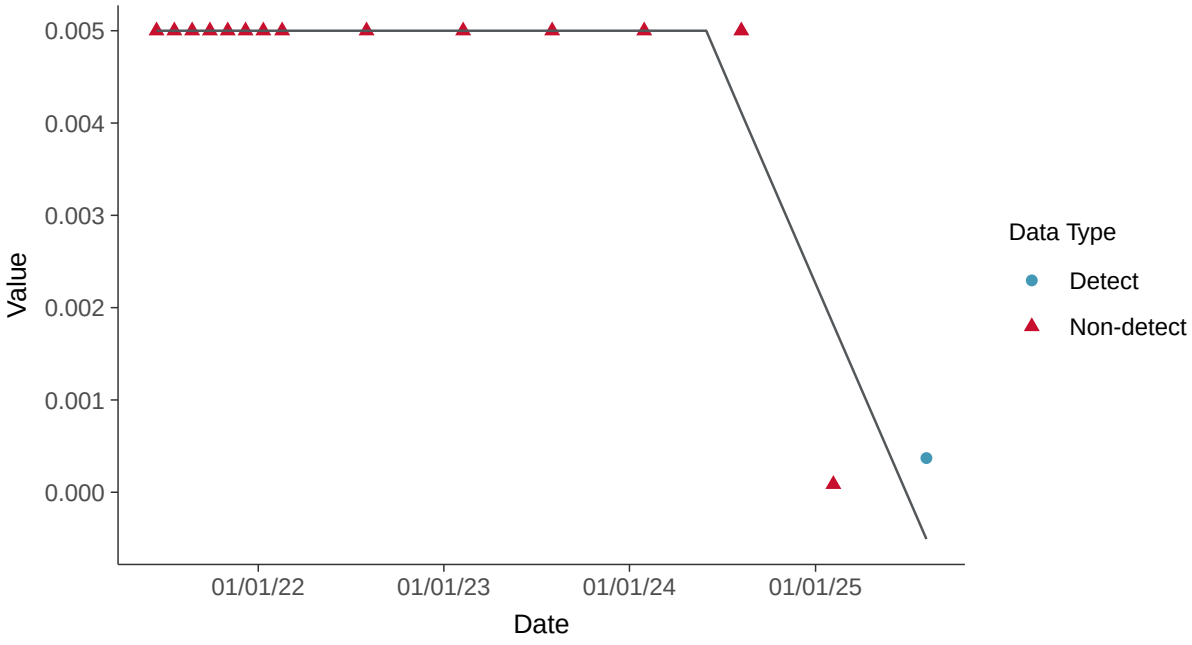
Boxplot by Season

Cobalt, MW-8 (mg/l)



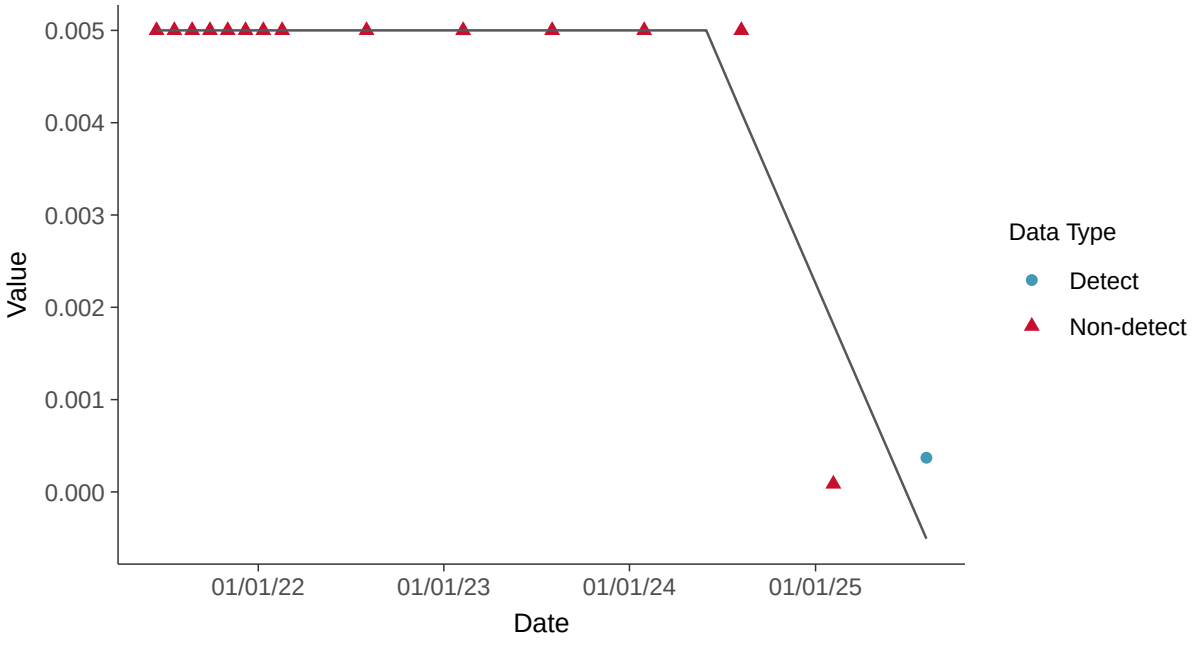
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-8 (mg/l)



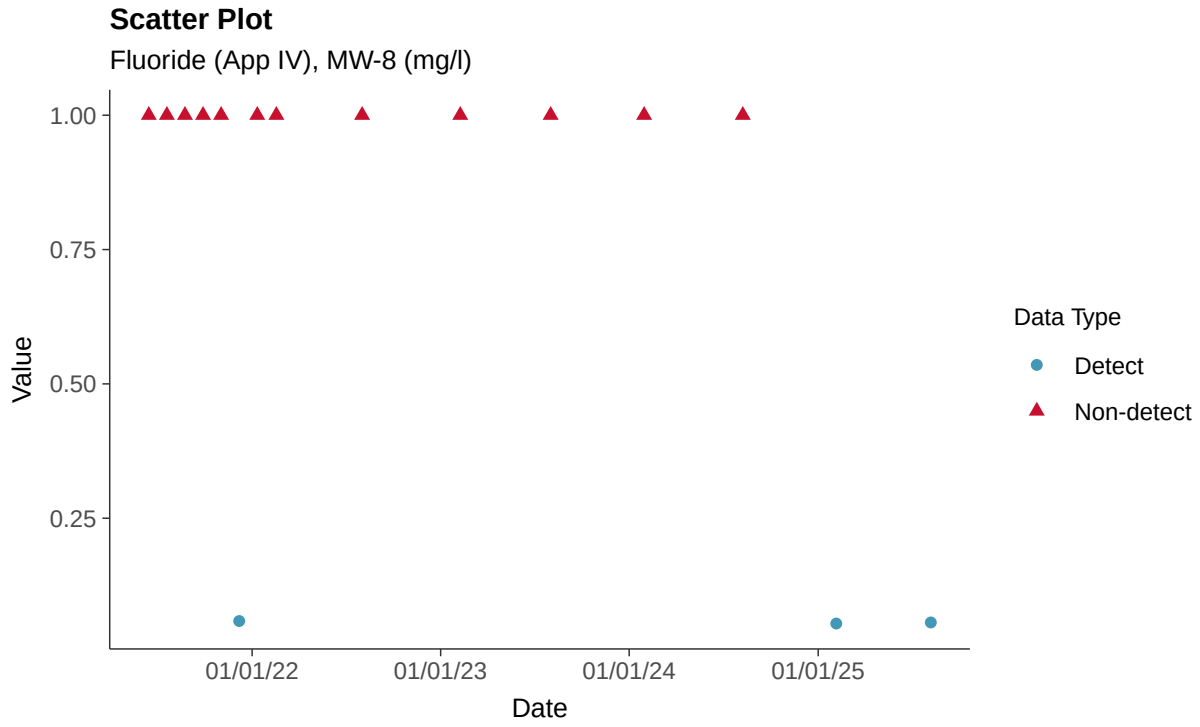
Trend Regression: Piecewise Linear-Linear-Linear

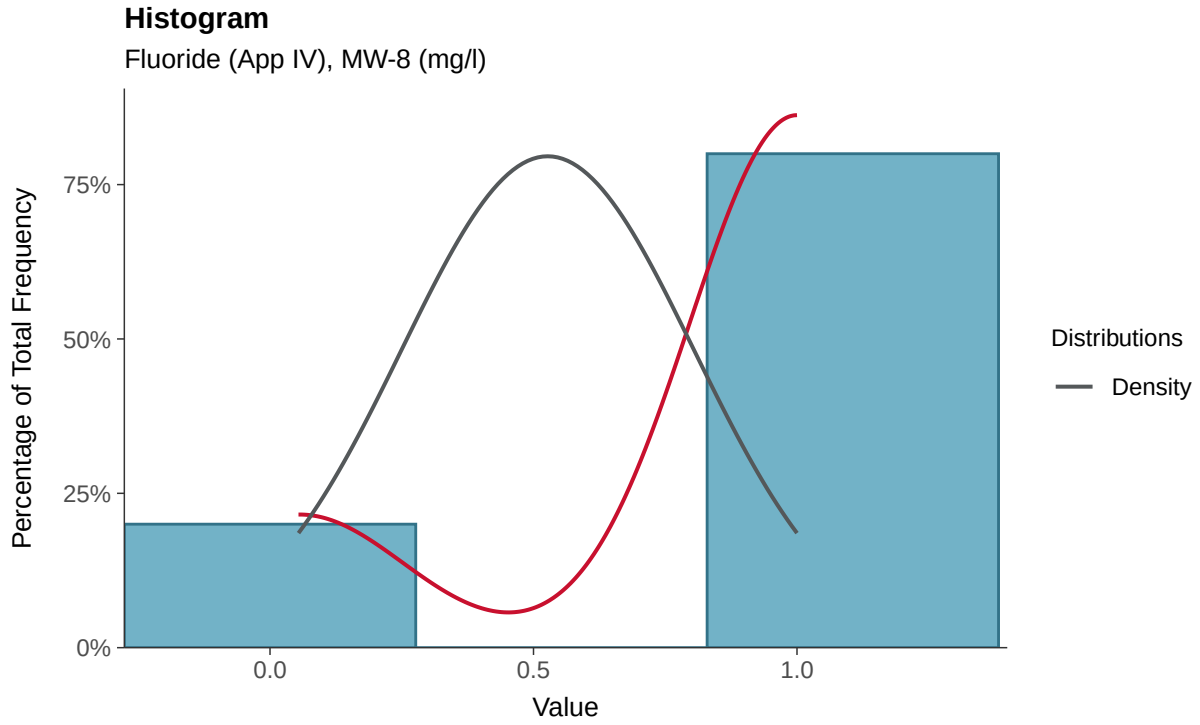
Cobalt, MW-8 (mg/l)



Appendix IV: Fluoride (App IV), MW-8

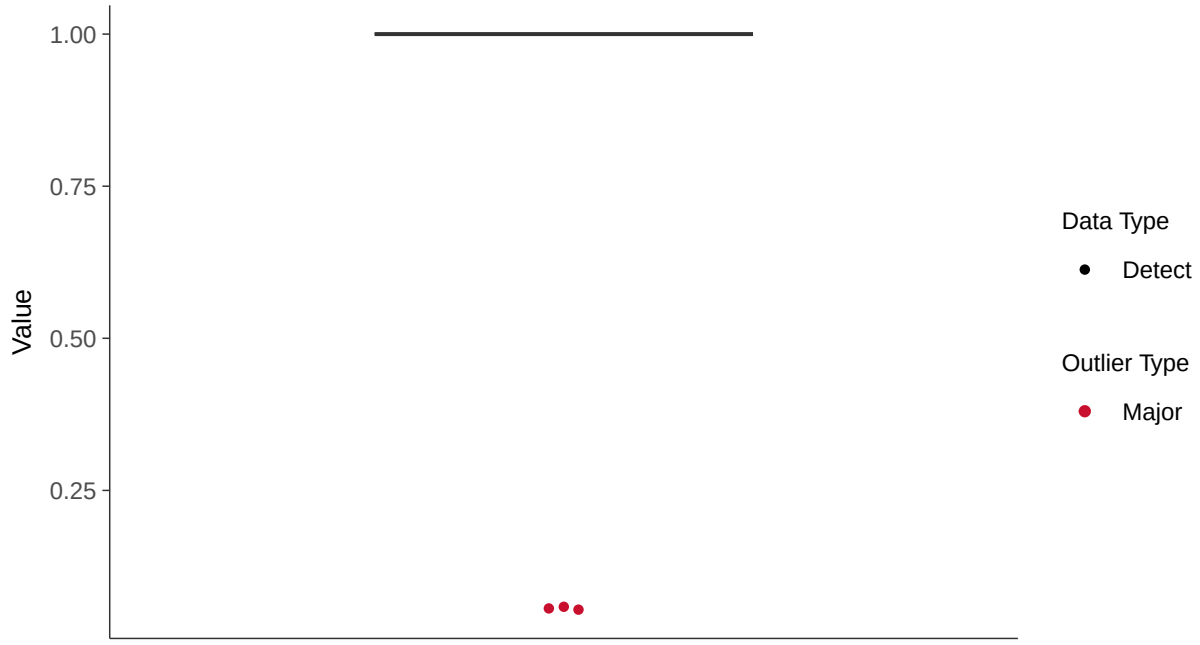
ID: 19_3_113





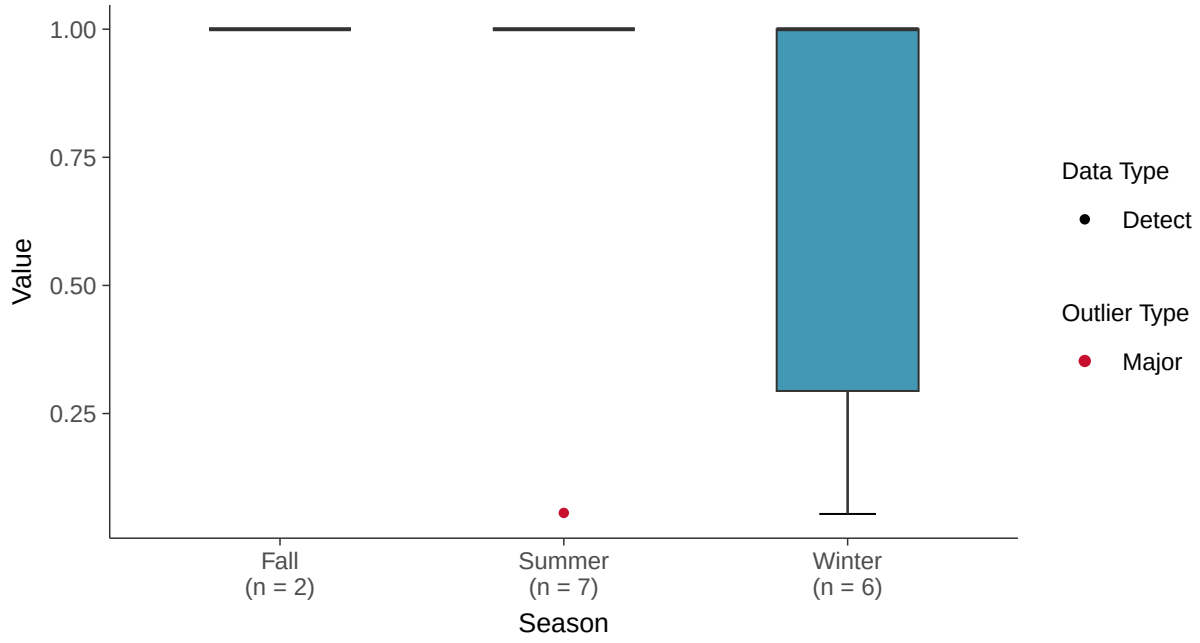
Boxplot

Fluoride (App IV), MW-8 (mg/l)



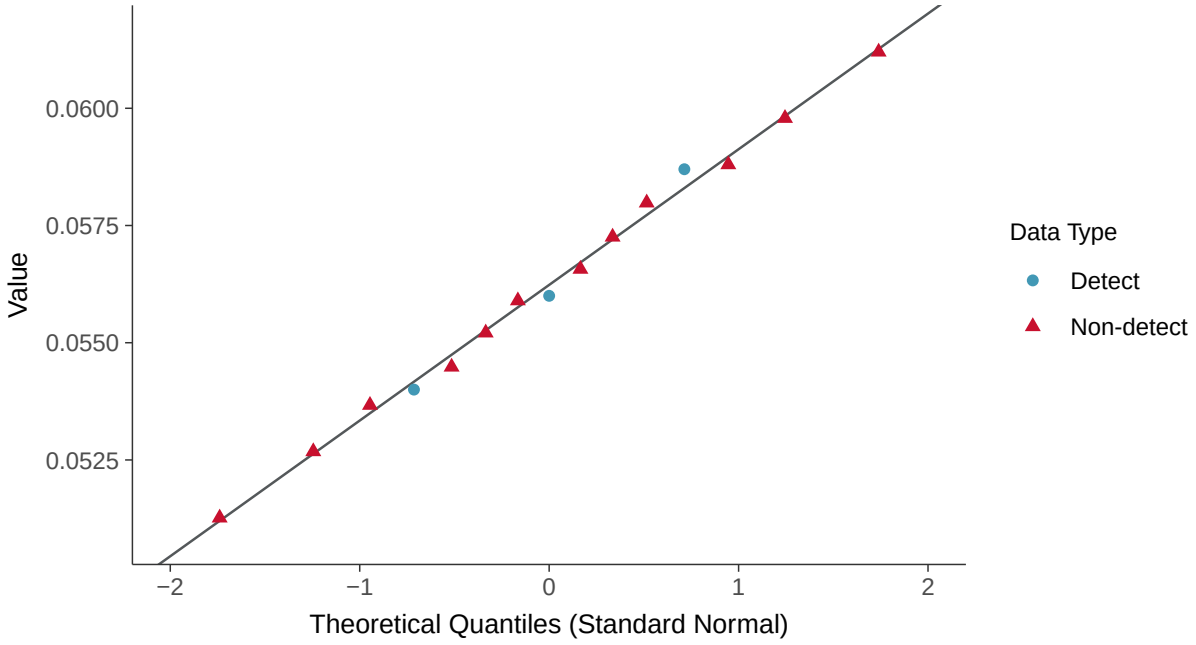
Boxplot by Season

Fluoride (App IV), MW-8 (mg/l)



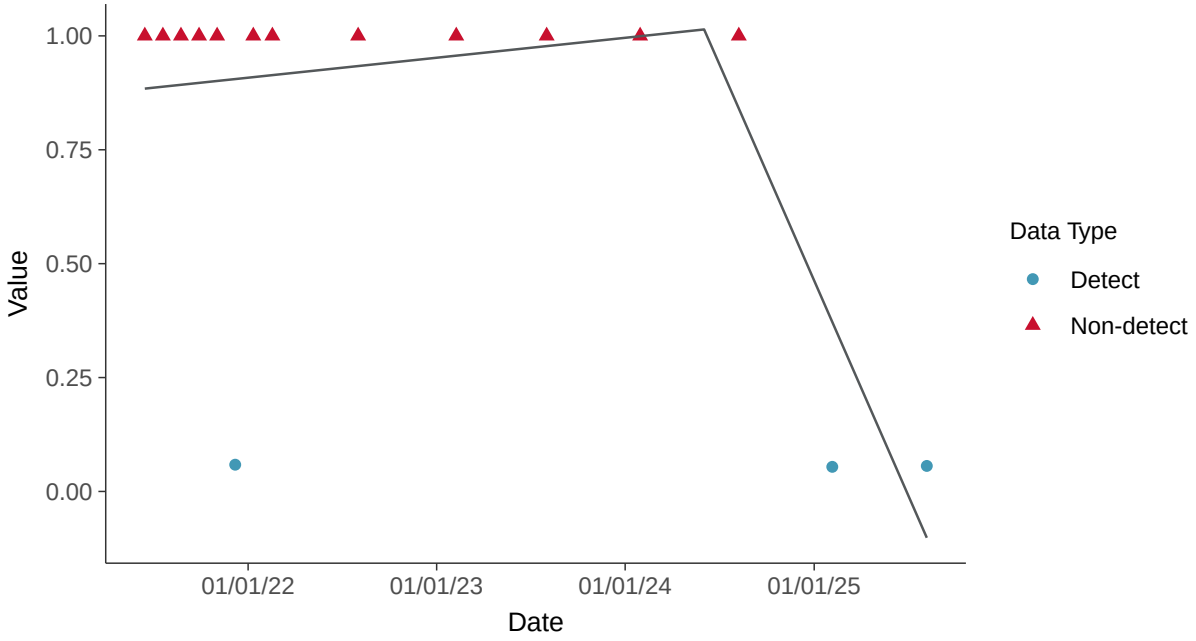
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-8 (mg/l)



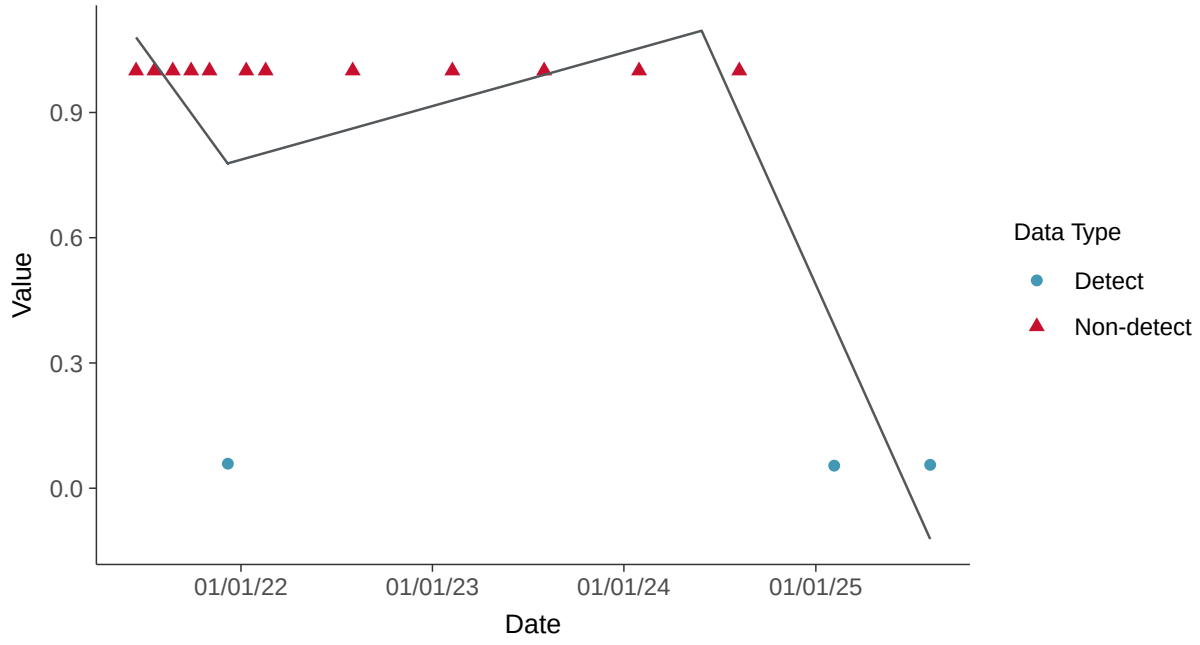
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-8 (mg/l)



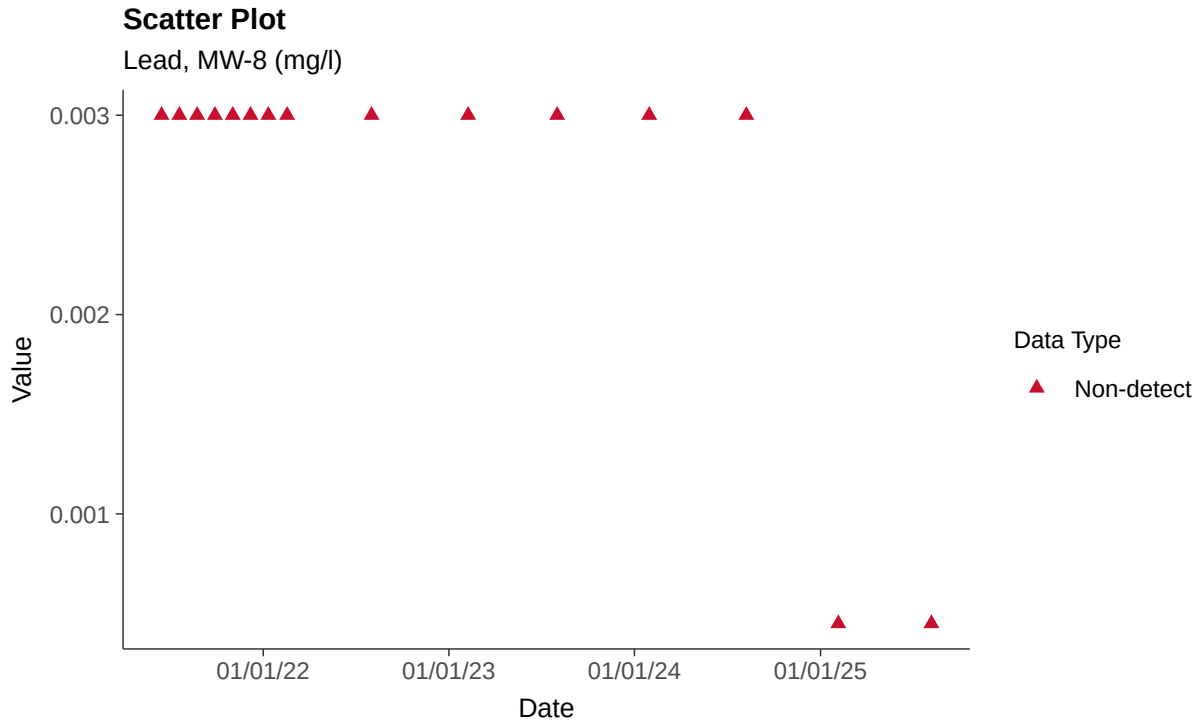
Trend Regression: Piecewise Linear-Linear-Linear

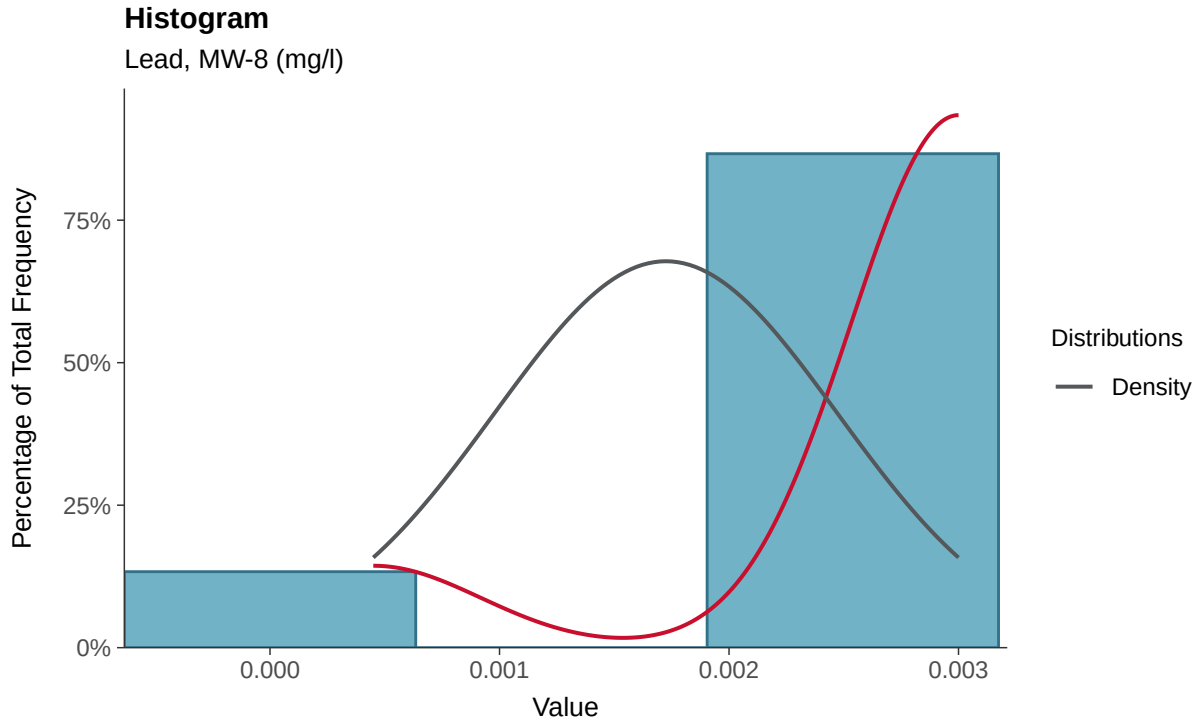
Fluoride (App IV), MW-8 (mg/l)



Appendix IV: Lead, MW-8

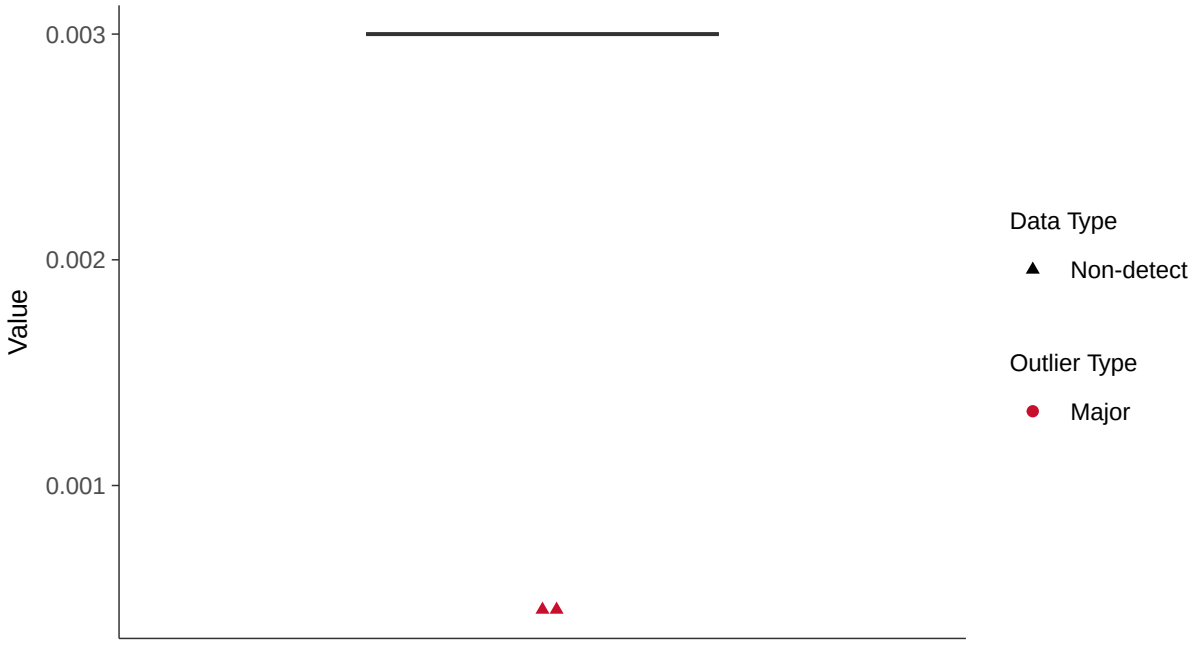
ID: 19_3_115





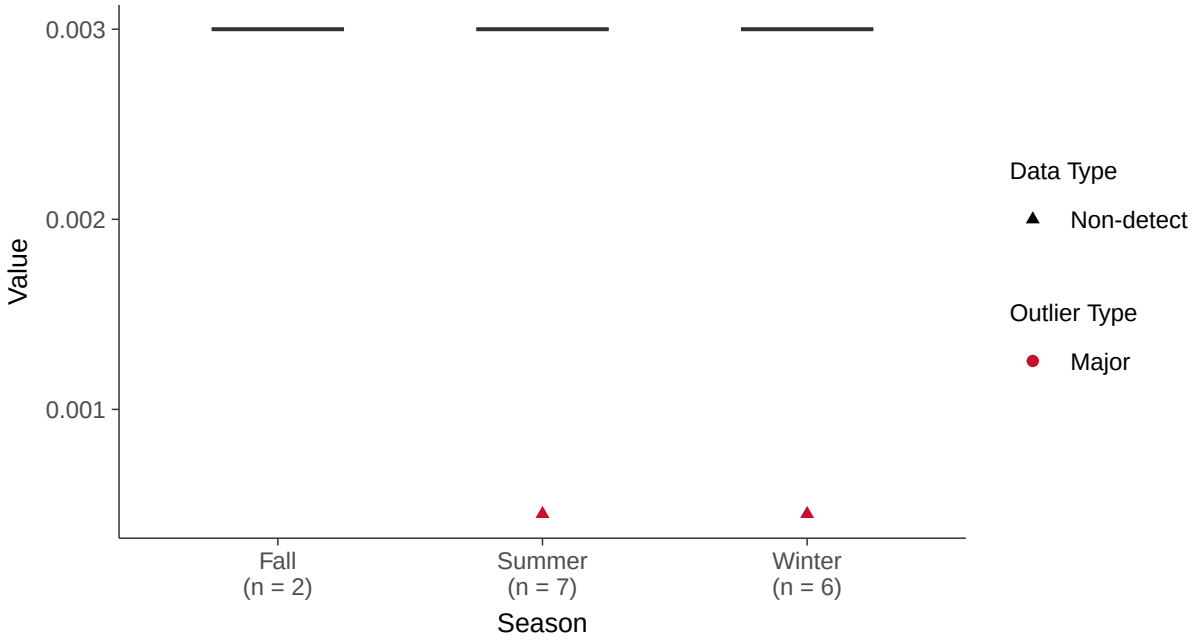
Boxplot

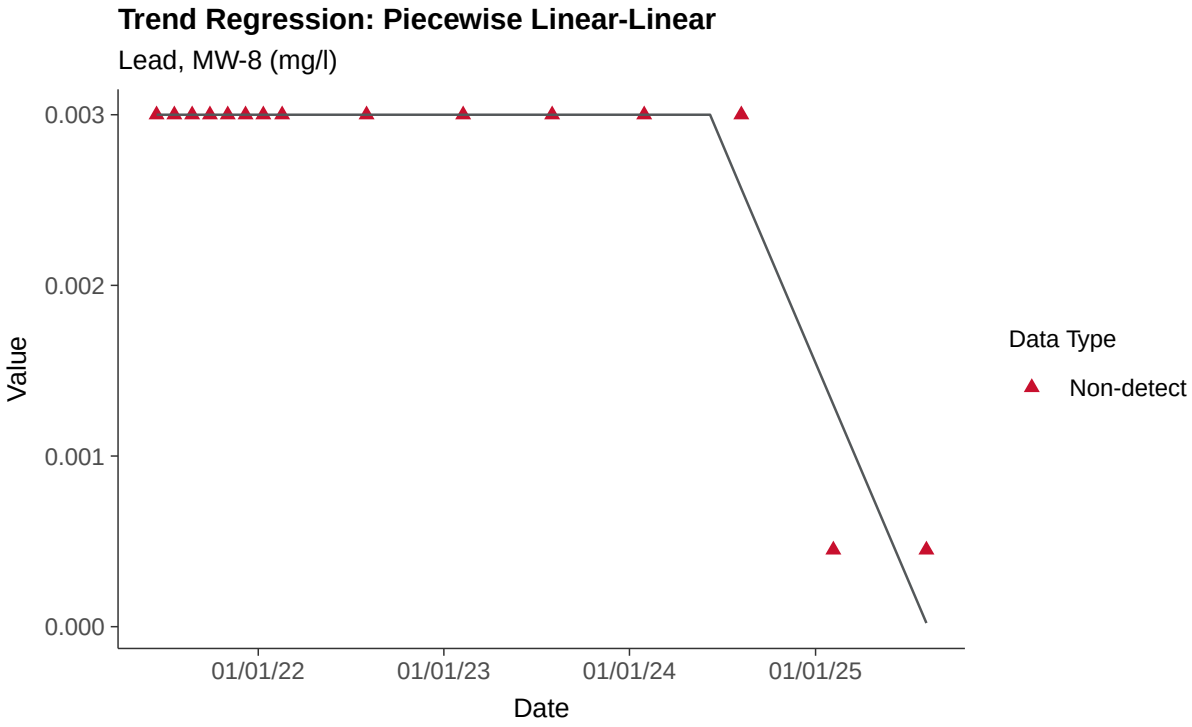
Lead, MW-8 (mg/l)



Boxplot by Season

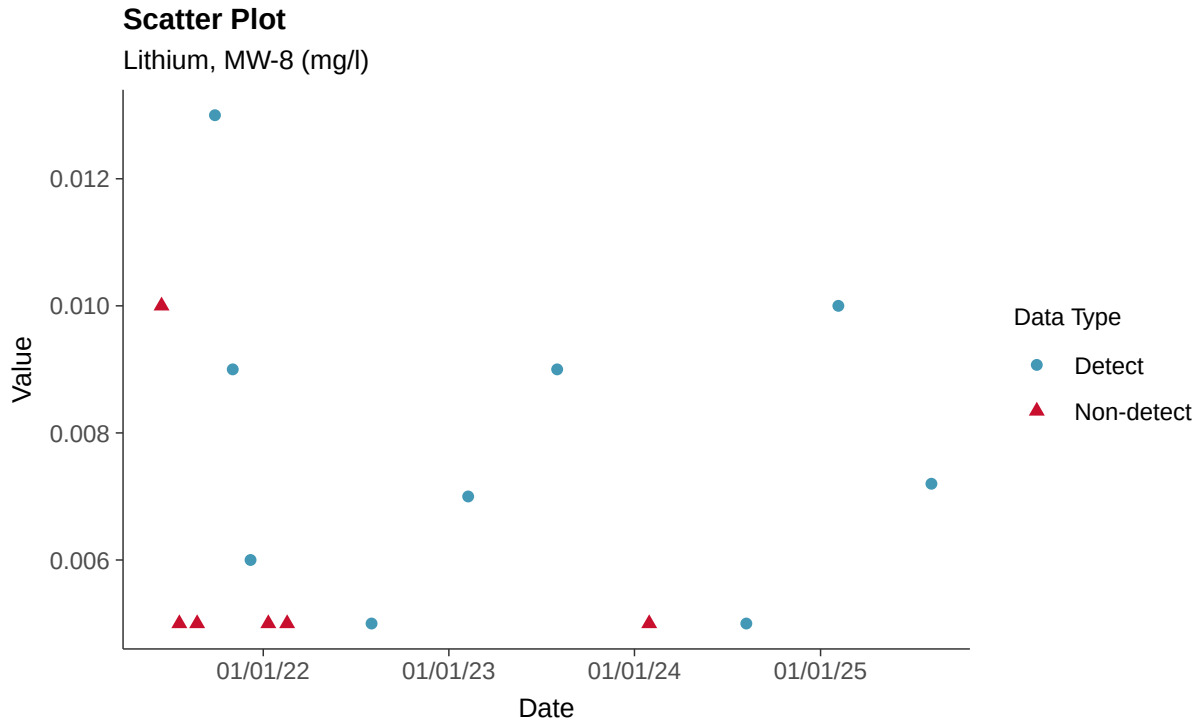
Lead, MW-8 (mg/l)

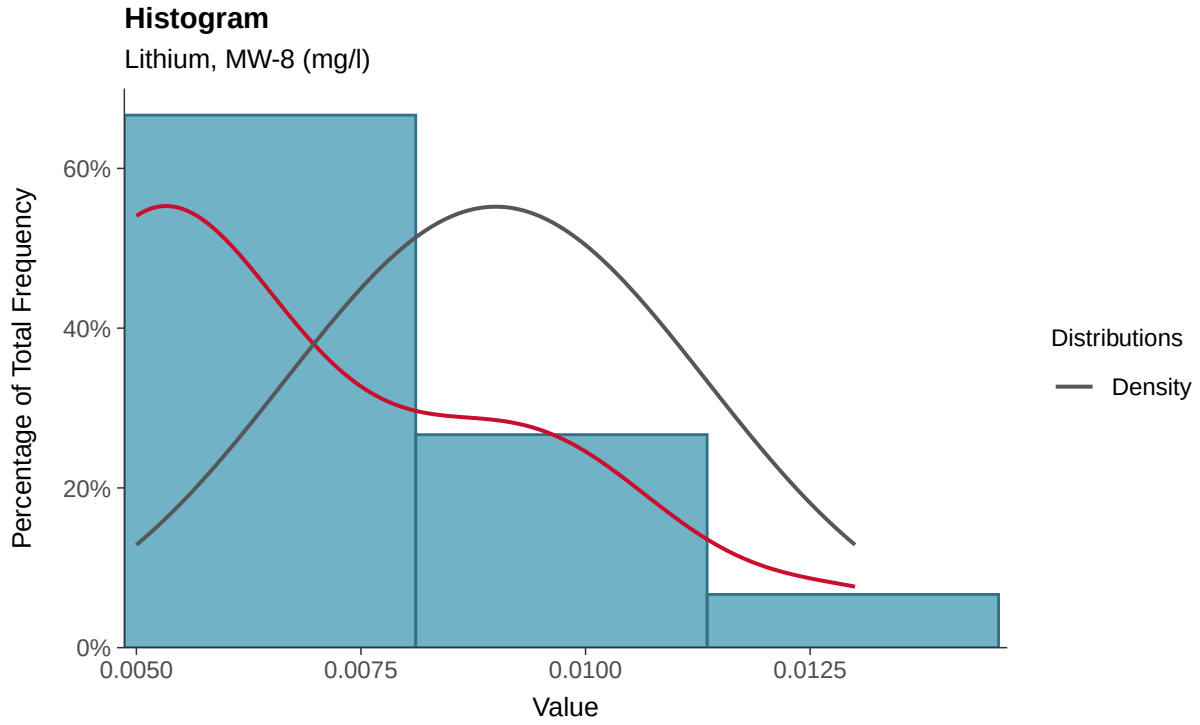



Trend Regression: Piecewise Linear-Linear
Lead, MW-8 (mg/l)
0.003
0.002
0.001
0.000
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Appendix IV: Lithium, MW-8

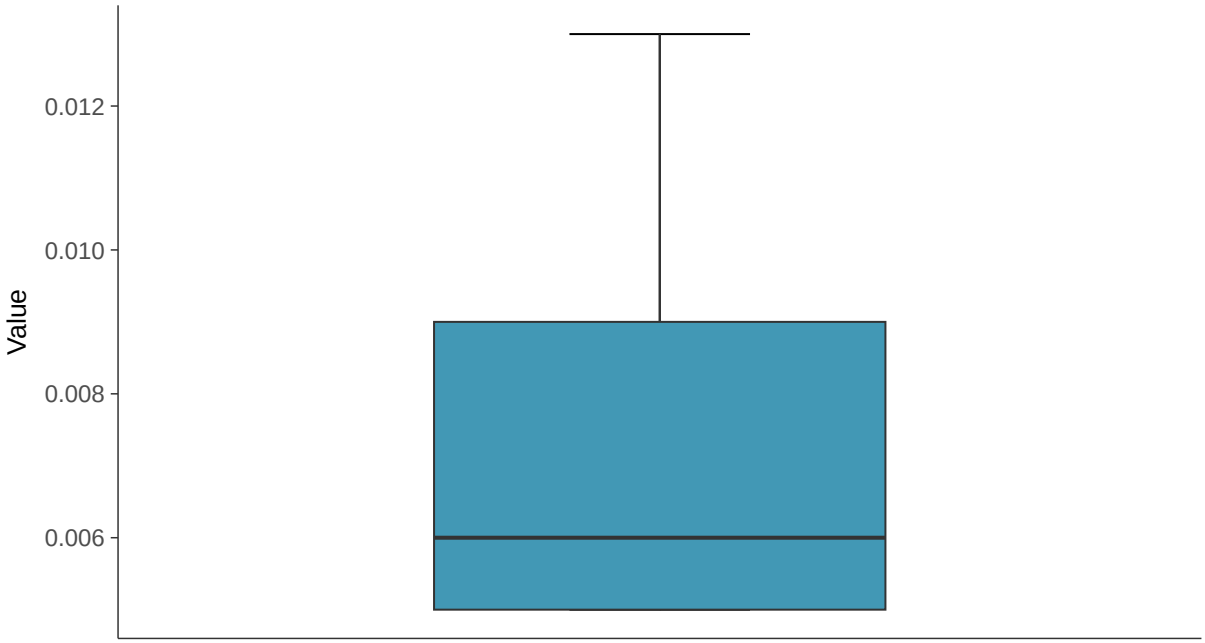
ID: 19_3_116





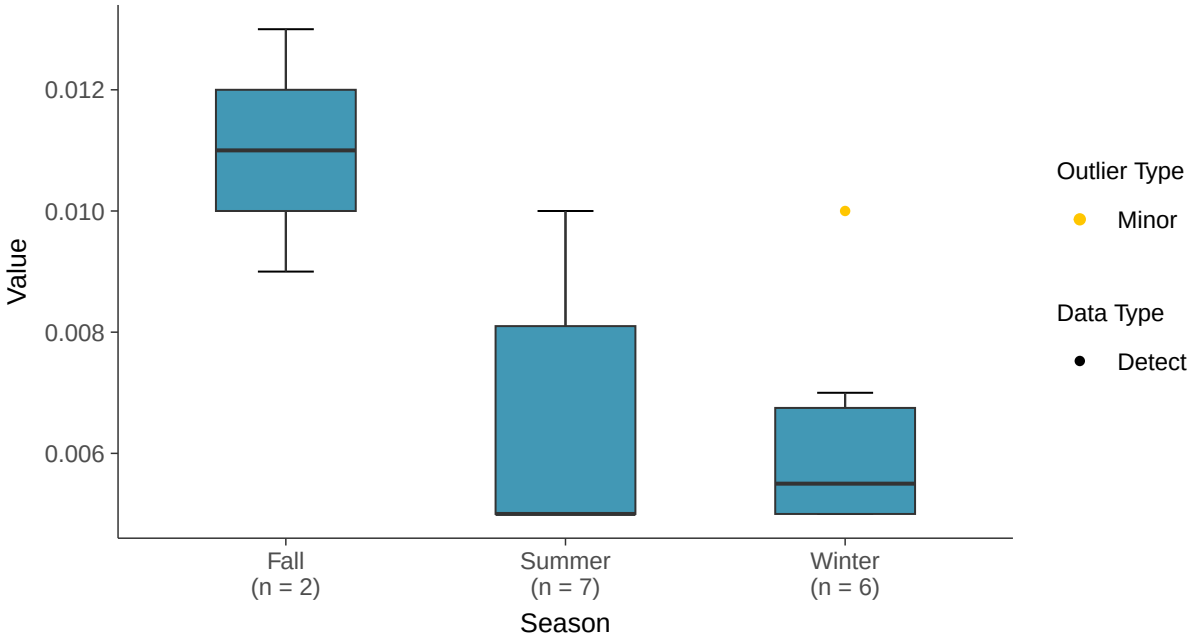
Boxplot

Lithium, MW-8 (mg/l)



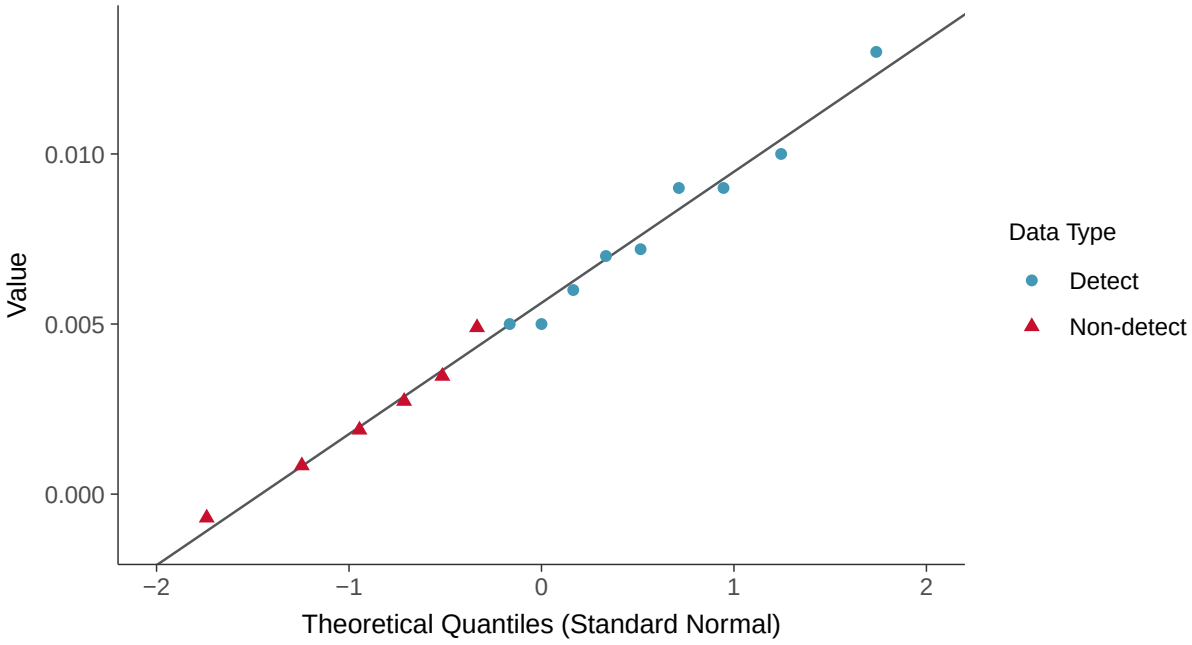
Boxplot by Season

Lithium, MW-8 (mg/l)



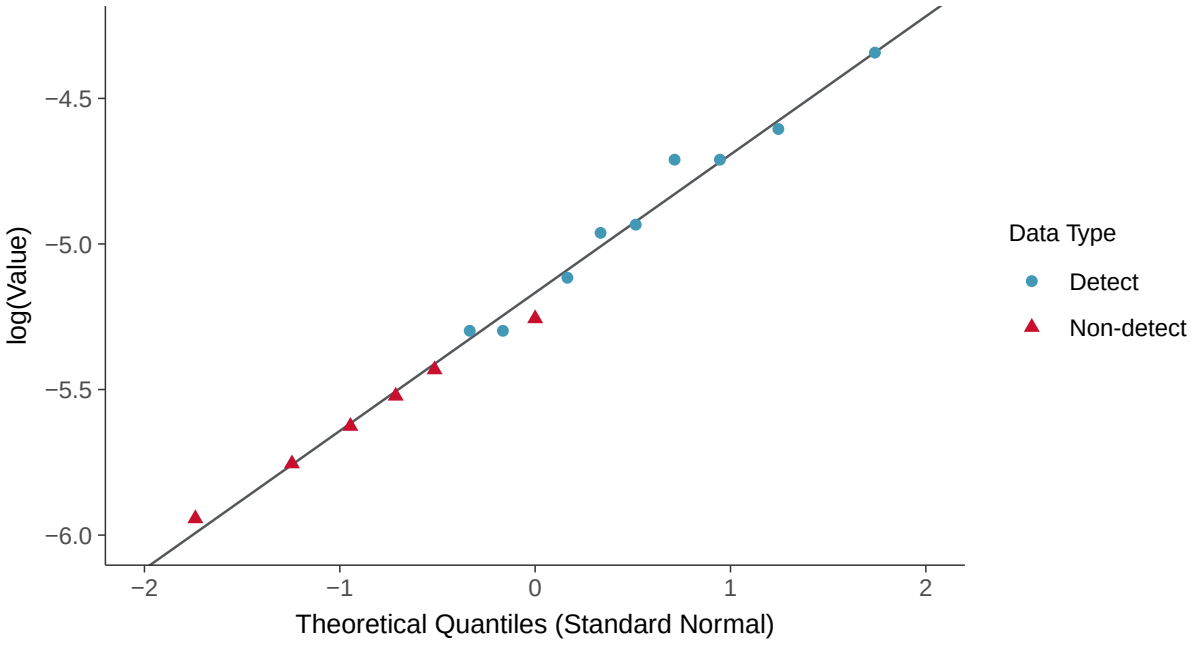
Normal Q-Q plot using ROS Imputed Estimates

Lithium, MW-8 (mg/l)



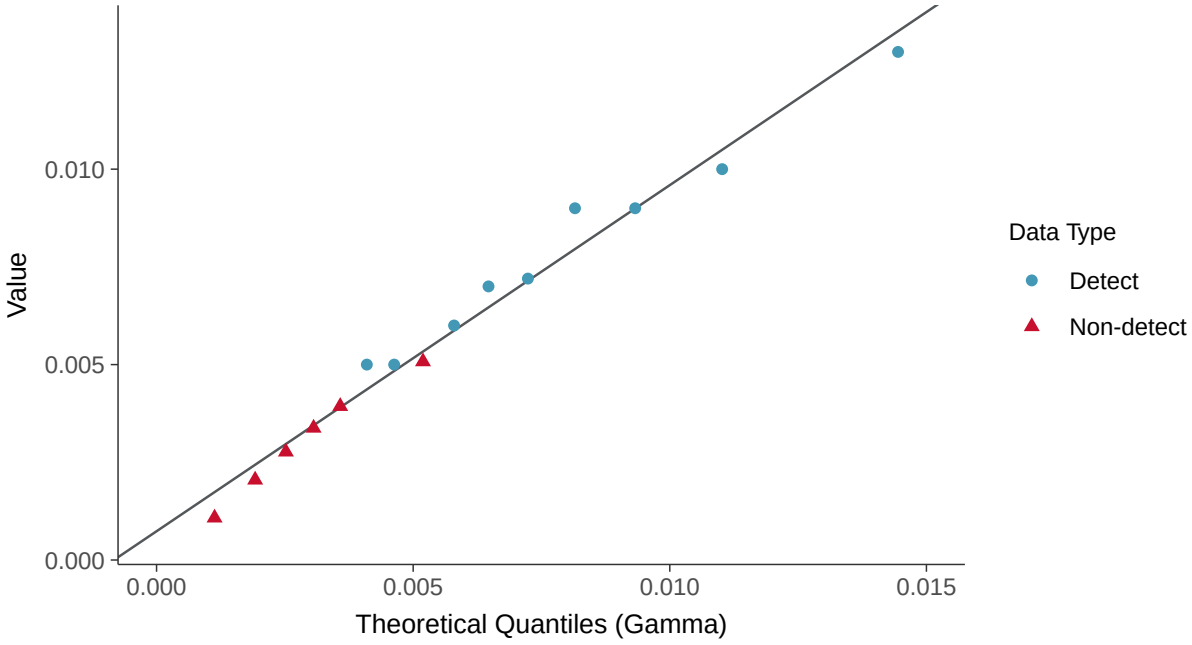
Lognormal Q-Q plot using ROS Imputed Estimates

Lithium, MW-8 (mg/l)



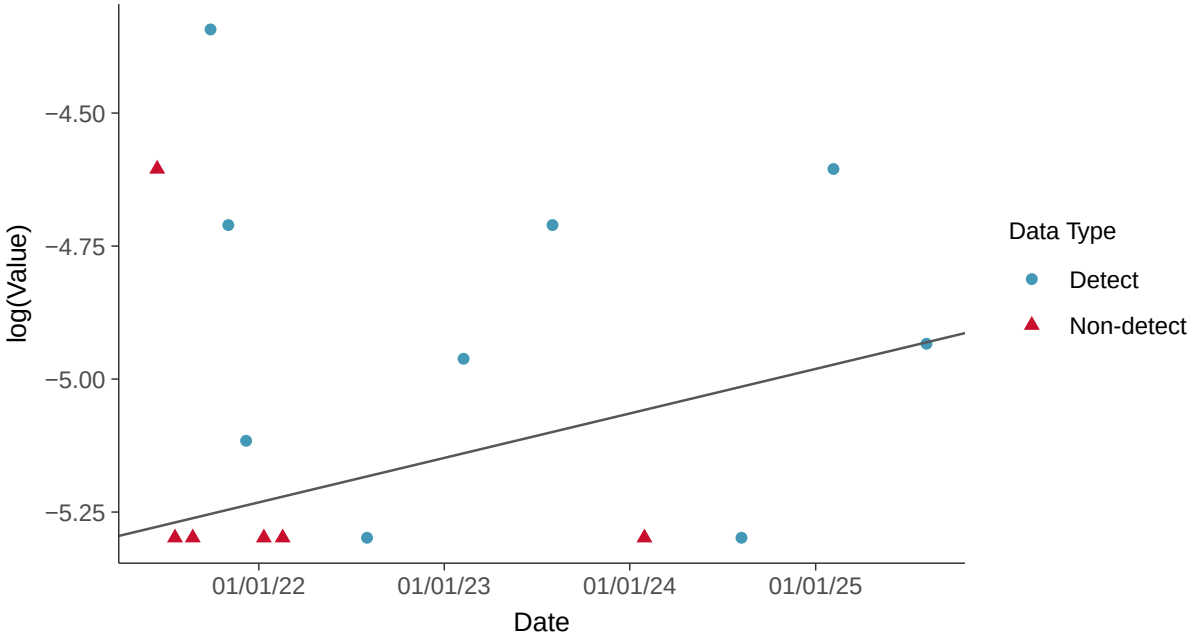
Gamma Q-Q plot using ROS Imputed Estimates

Lithium, MW-8 (mg/l)



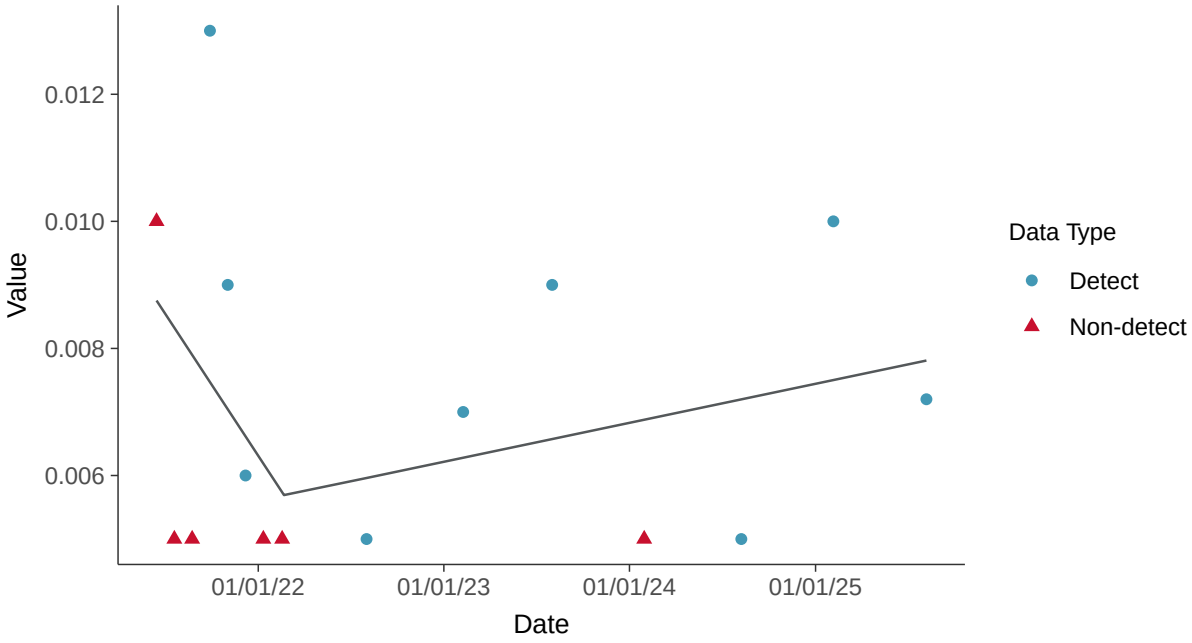
Trend Regression: Lognormal MLE

Lithium, MW-8 (mg/l)



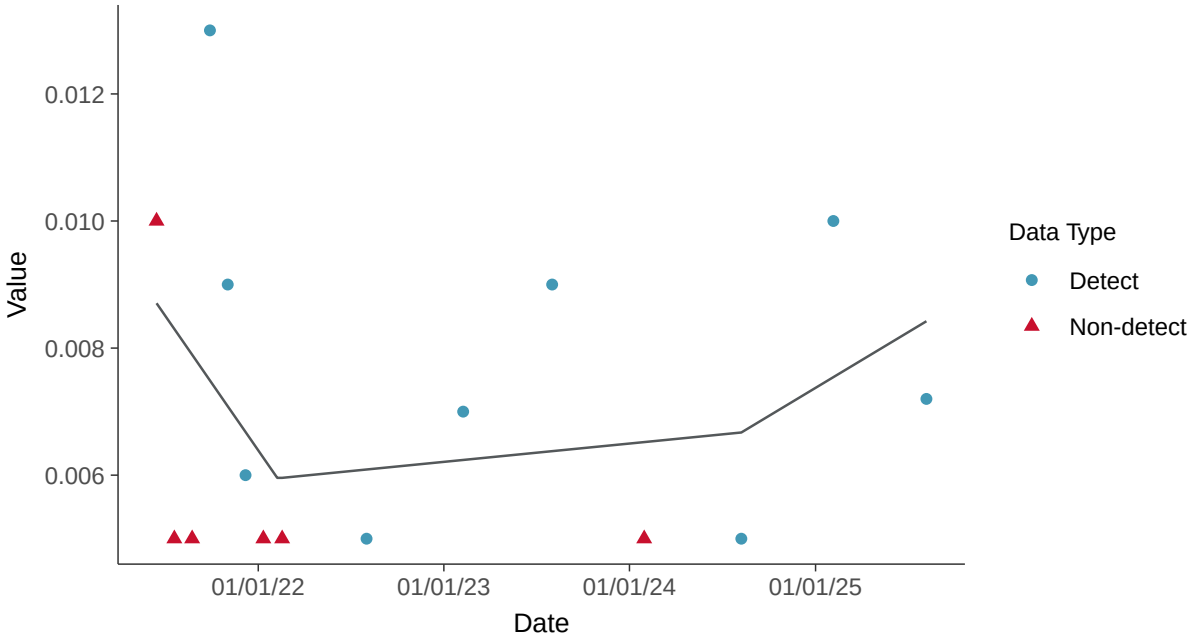
Trend Regression: Piecewise Linear-Linear

Lithium, MW-8 (mg/l)



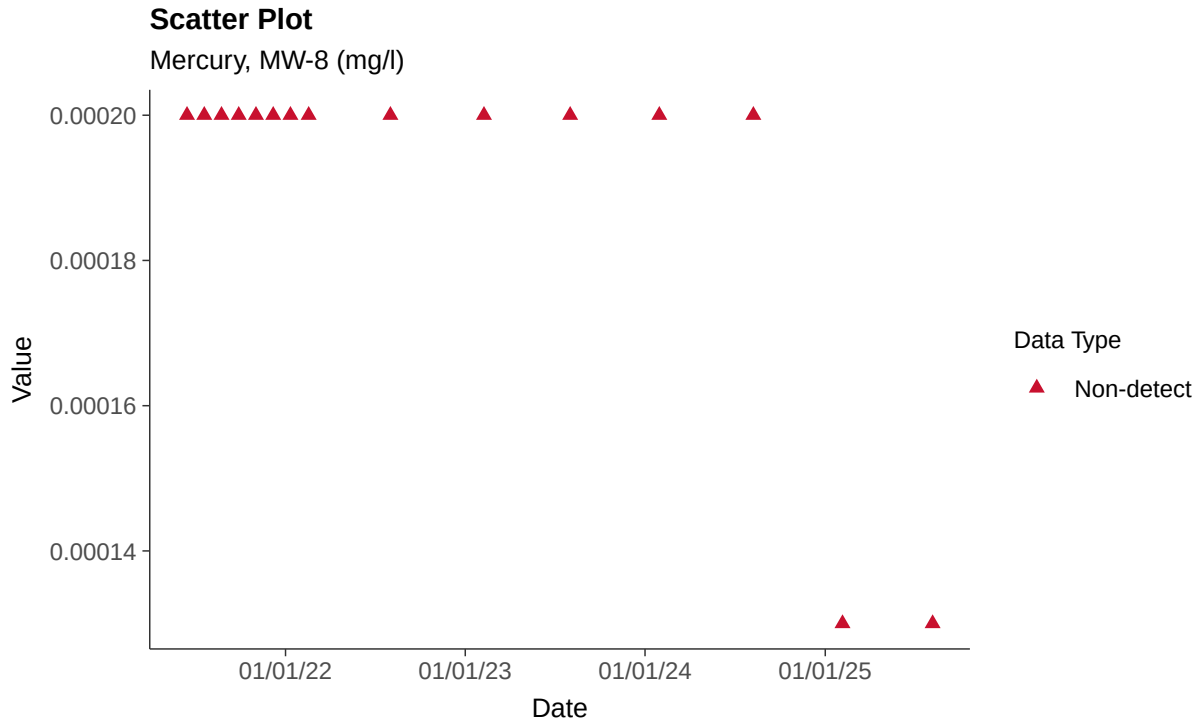
Trend Regression: Piecewise Linear-Linear-Linear

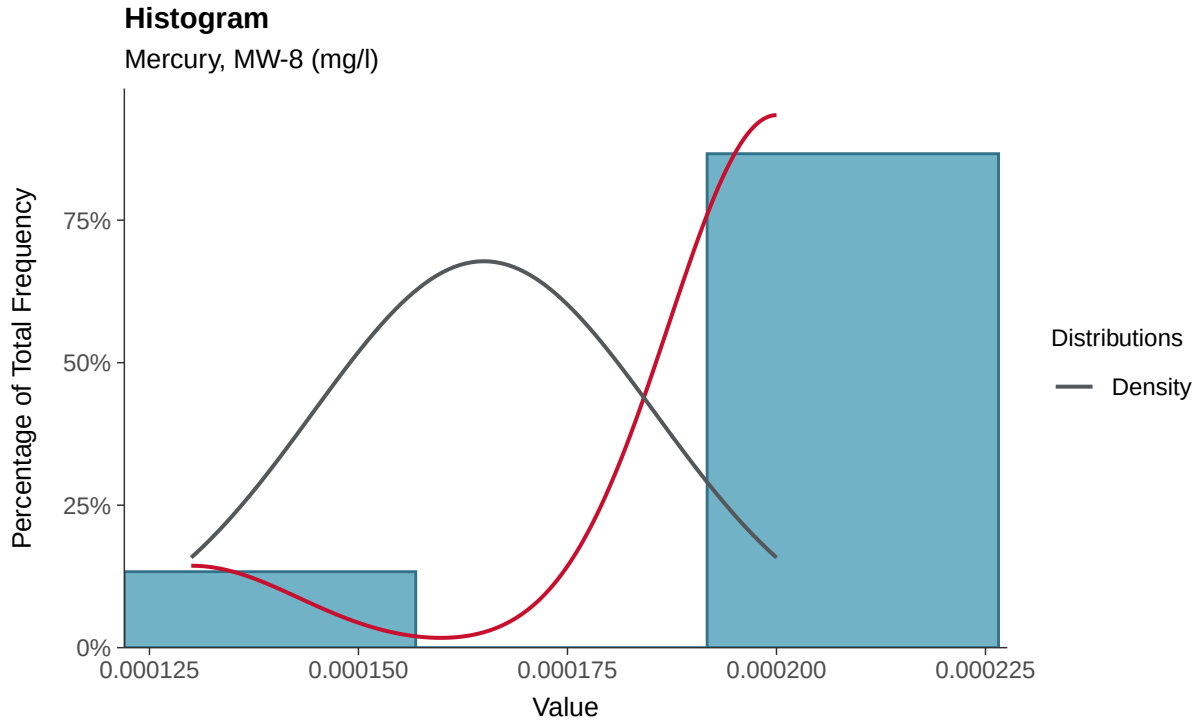
Lithium, MW-8 (mg/l)



Appendix IV: Mercury, MW-8

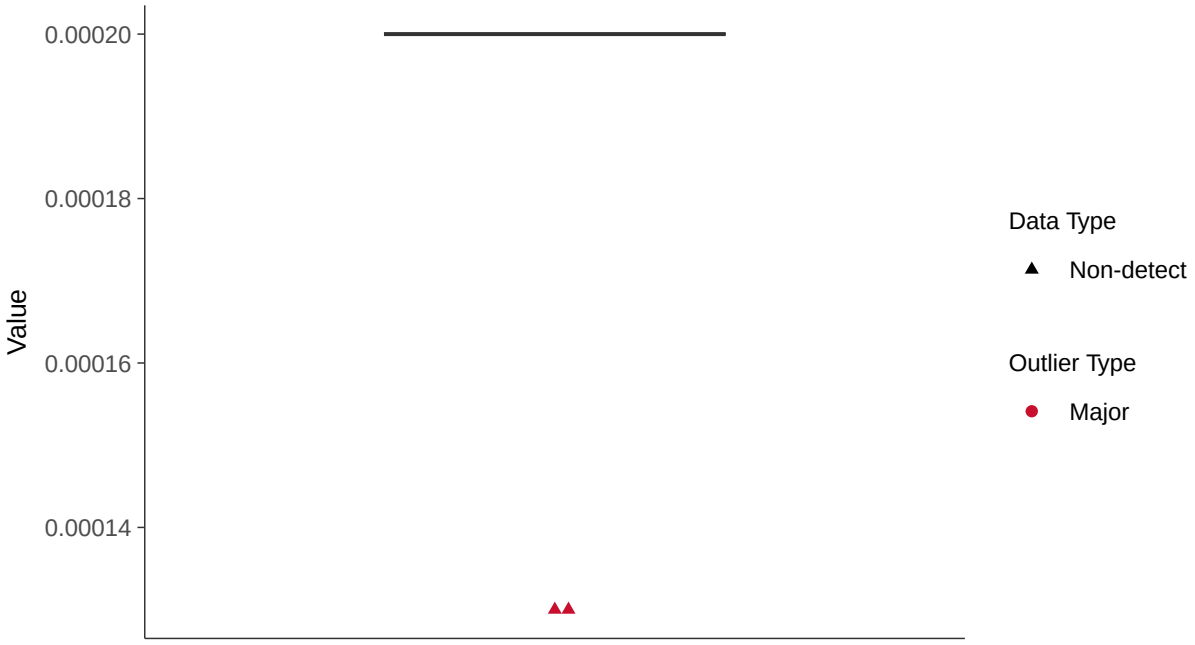
ID: 19_3_117





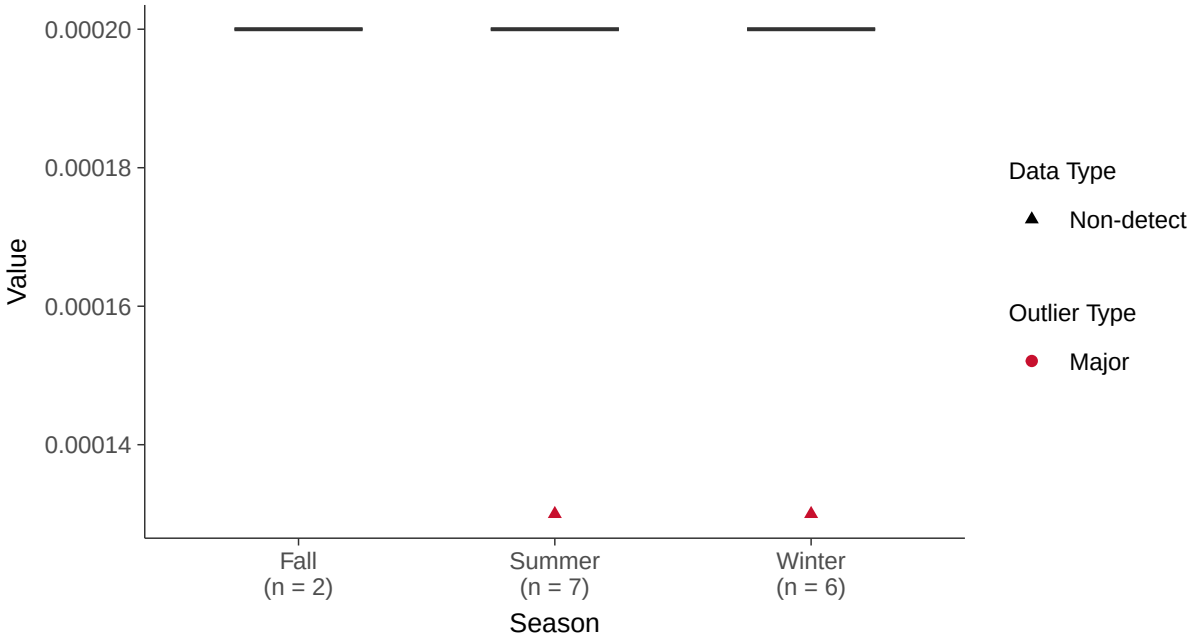
Boxplot

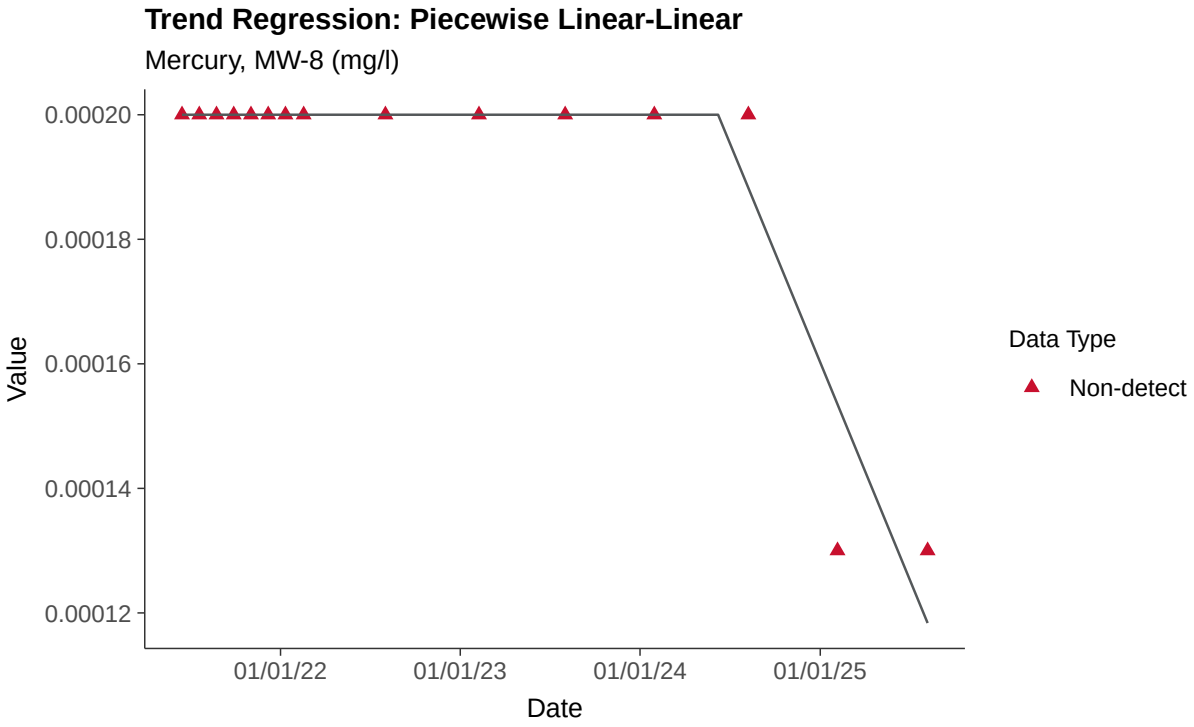
Mercury, MW-8 (mg/l)



Boxplot by Season

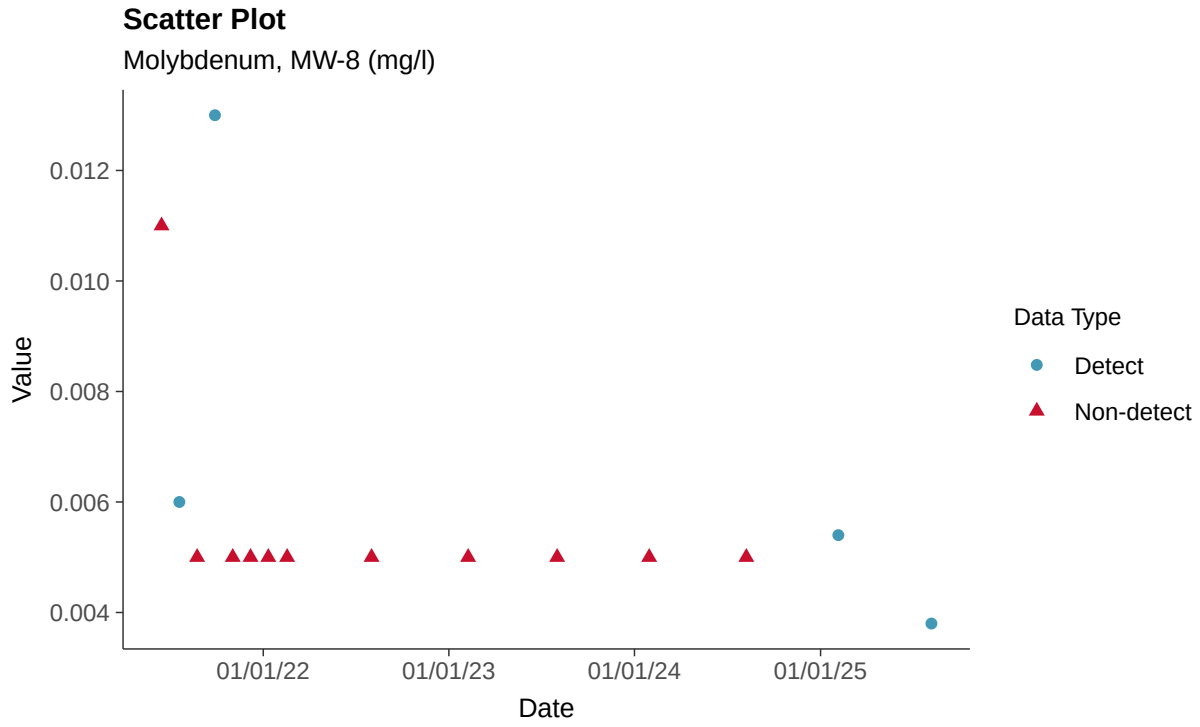
Mercury, MW-8 (mg/l)

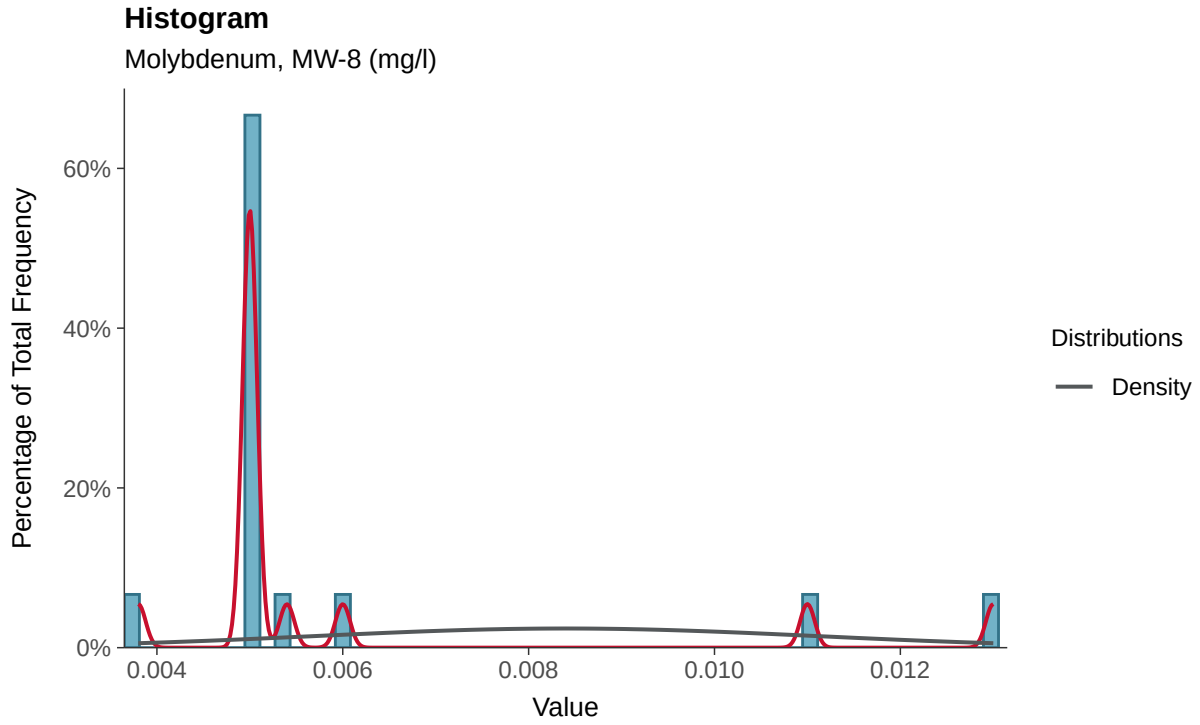



Trend Regression: Piecewise Linear-Linear
Mercury, MW-8 (mg/l)
0.00020
0.00018
0.00016
0.00014
0.00012
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Appendix IV: Molybdenum, MW-8

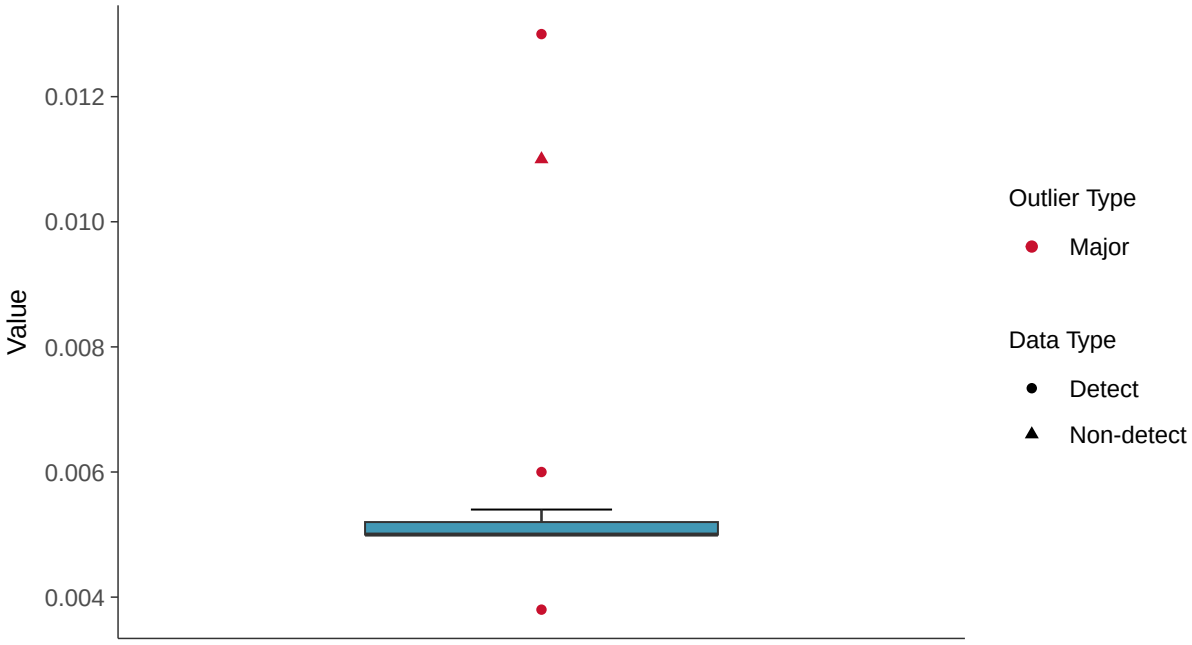
ID: 19_3_118





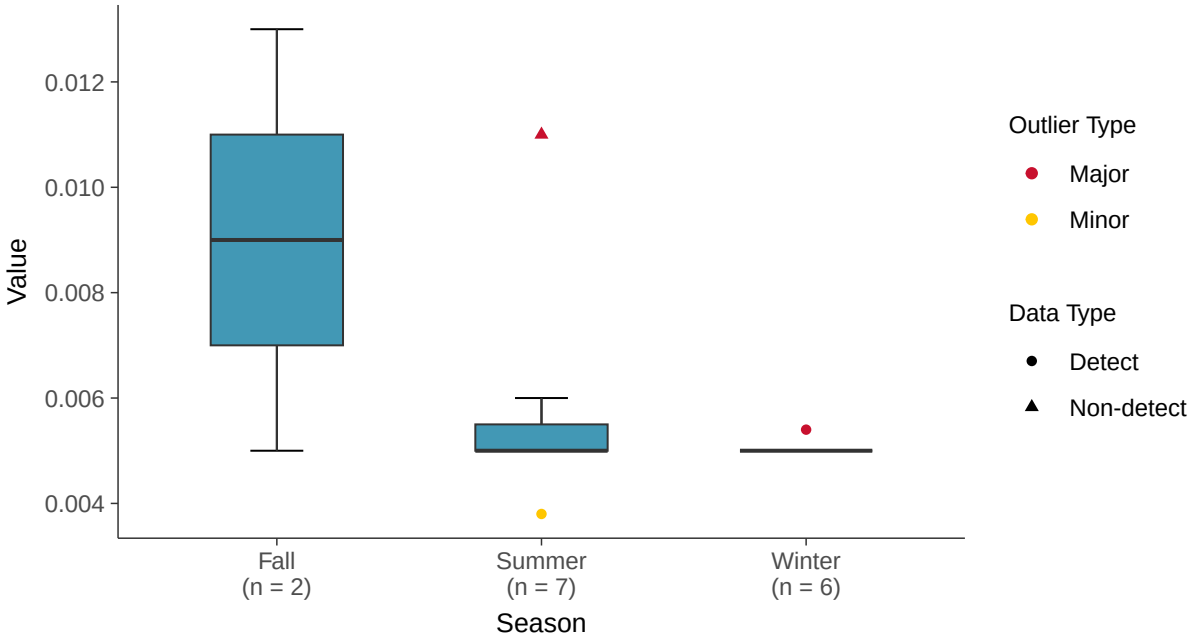
Boxplot

Molybdenum, MW-8 (mg/l)



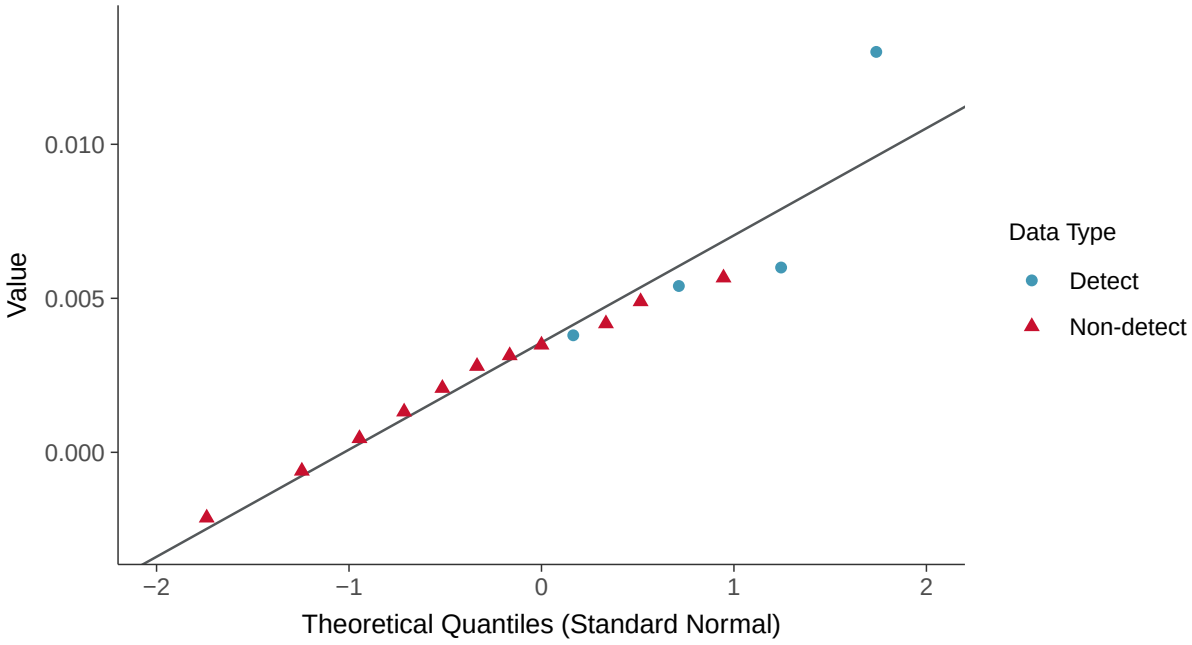
Boxplot by Season

Molybdenum, MW-8 (mg/l)



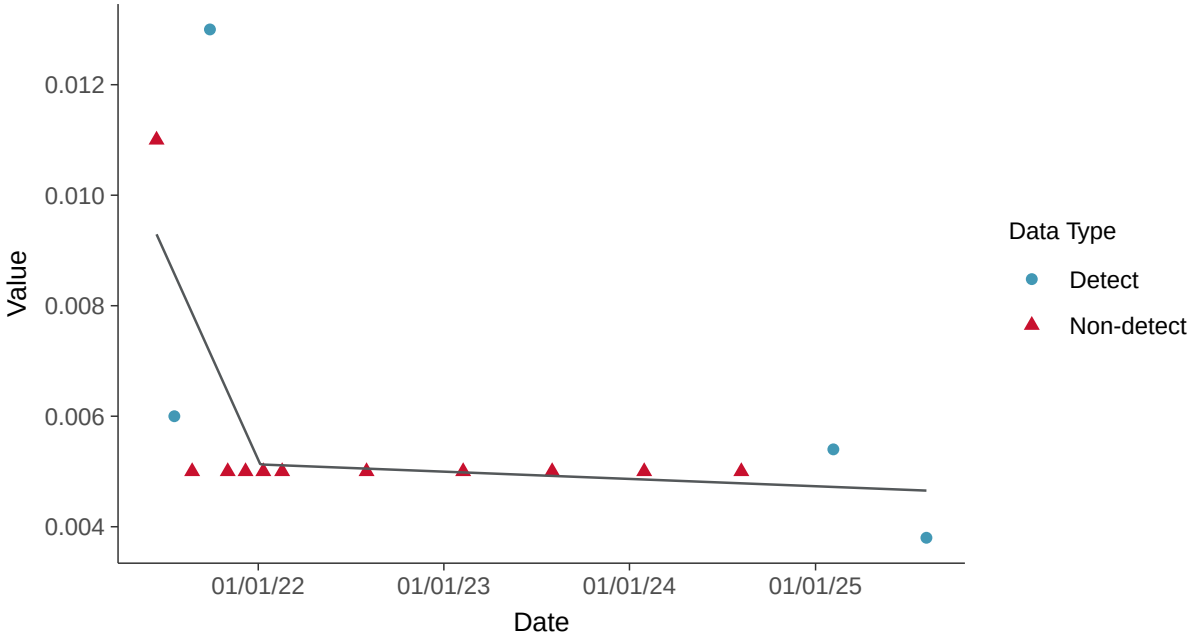
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-8 (mg/l)



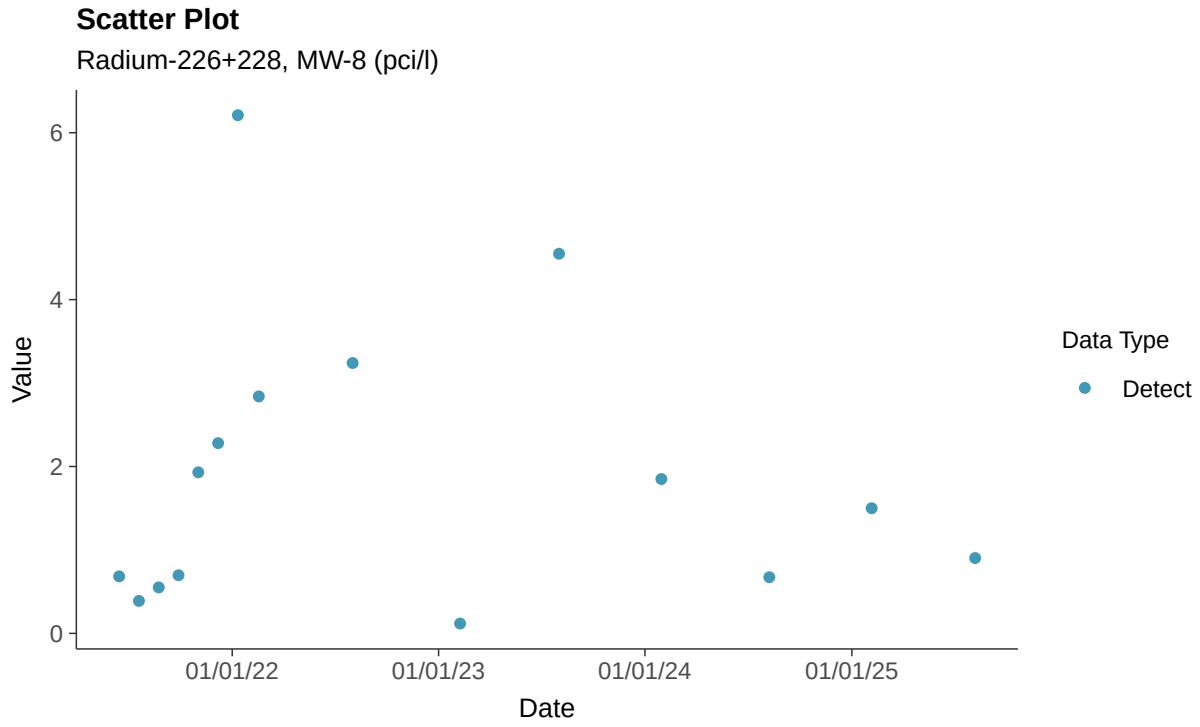
Trend Regression: Piecewise Linear-Linear

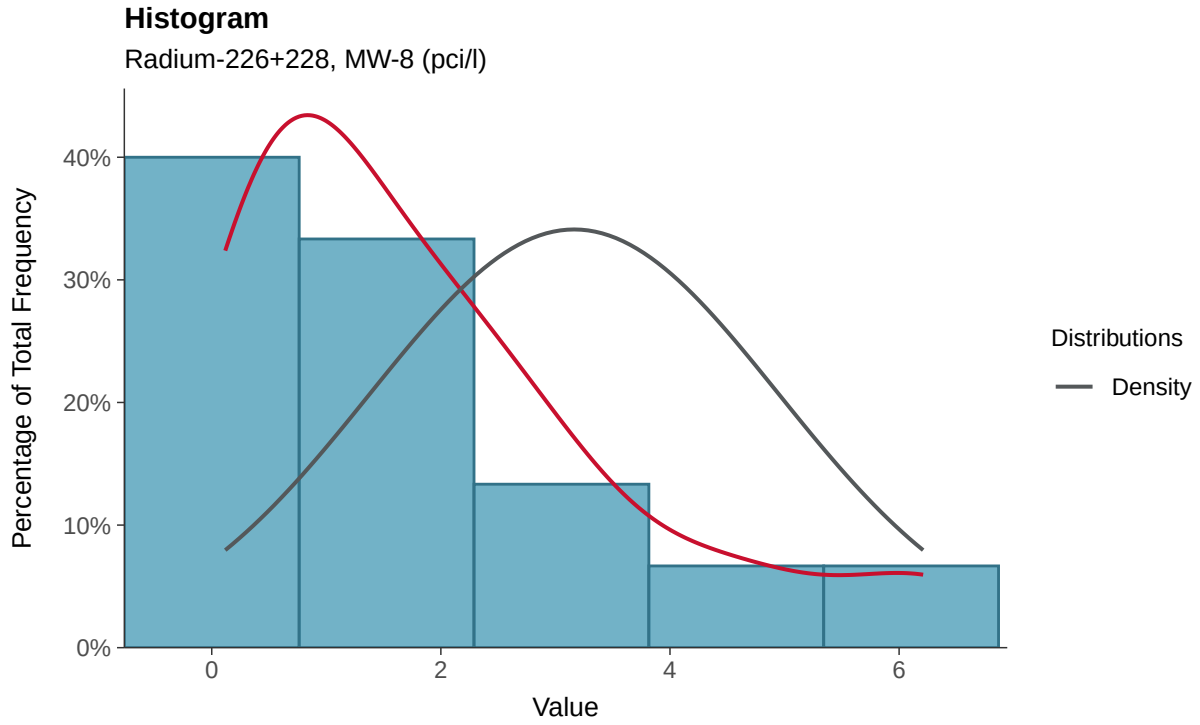
Molybdenum, MW-8 (mg/l)



Appendix IV: Radium-226+228, MW-8

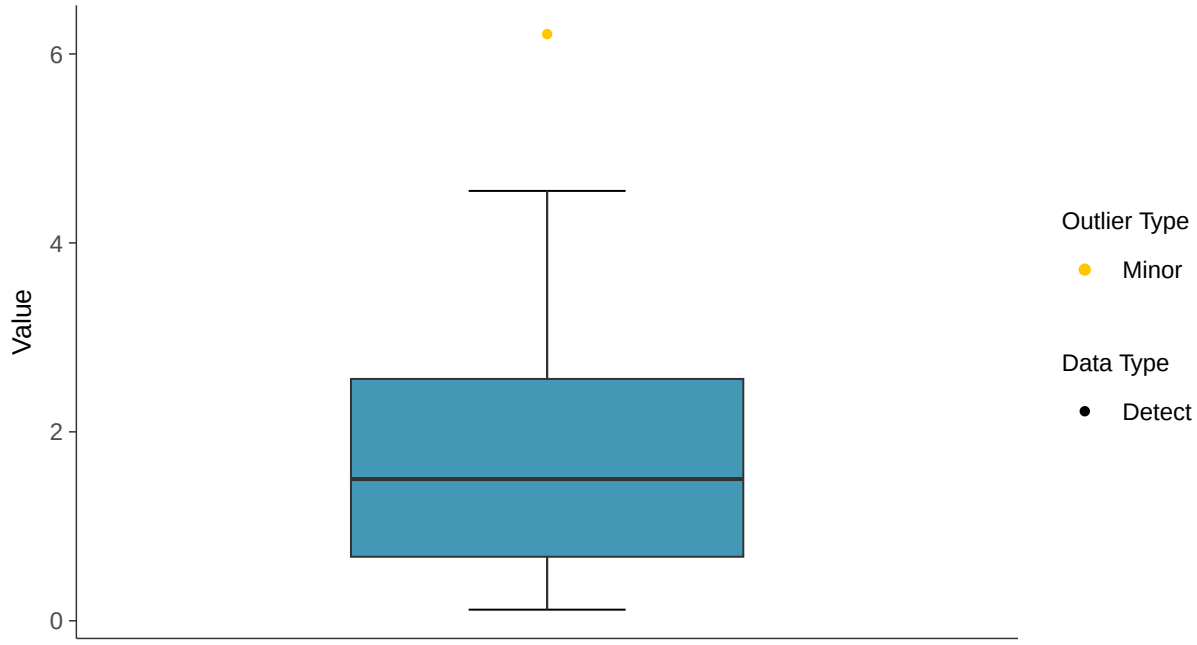
ID: 19_3_121





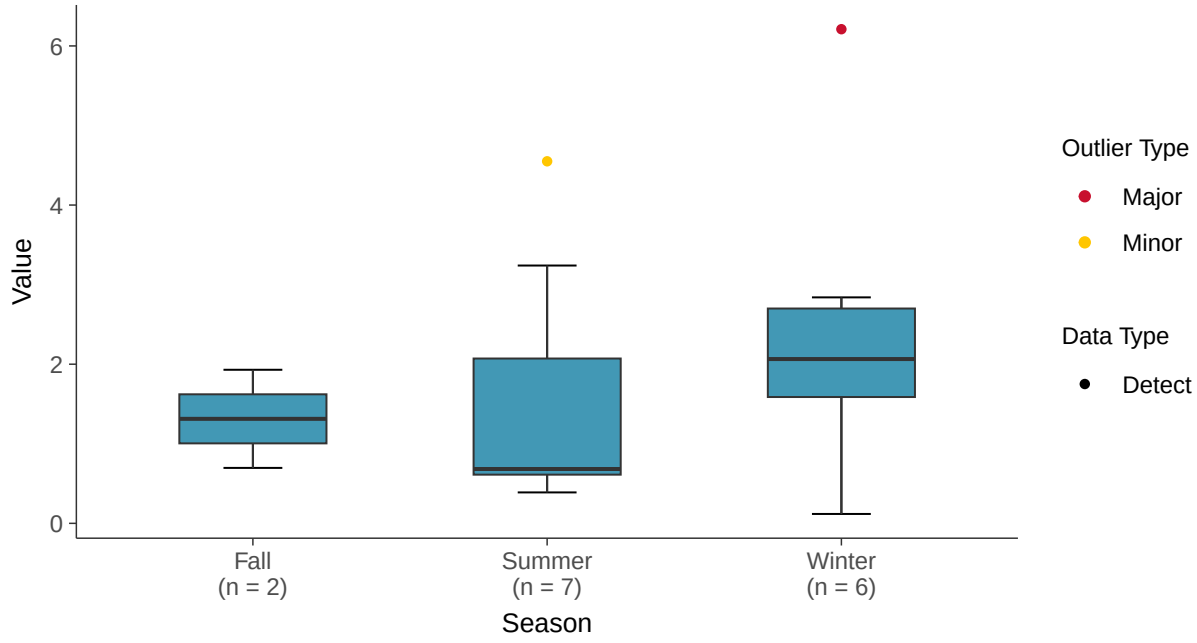
Boxplot

Radium-226+228, MW-8 (pci/l)



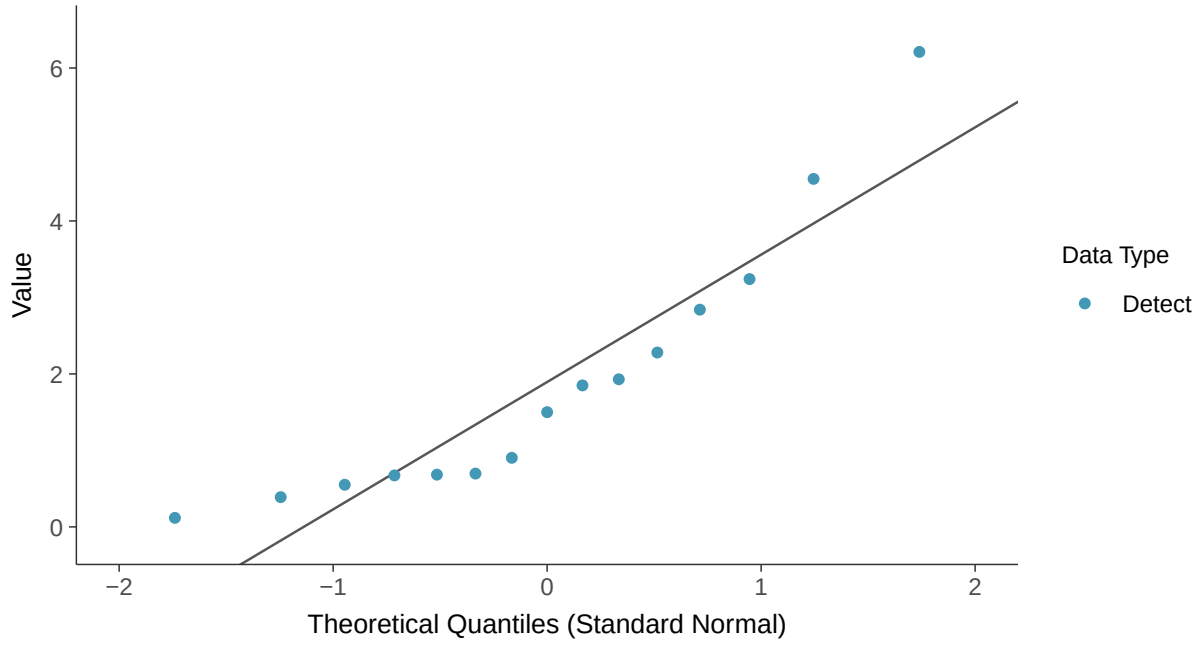
Boxplot by Season

Radium-226+228, MW-8 (pci/l)



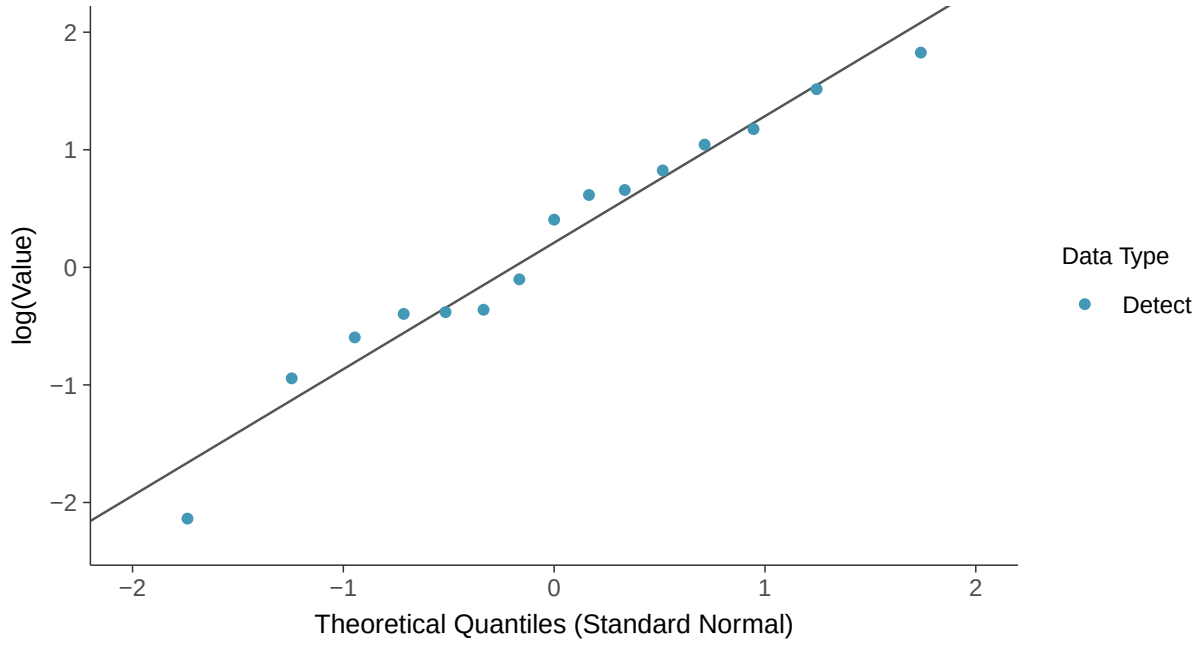
Normal Q-Q plot

Radium-226+228, MW-8 (pci/l)



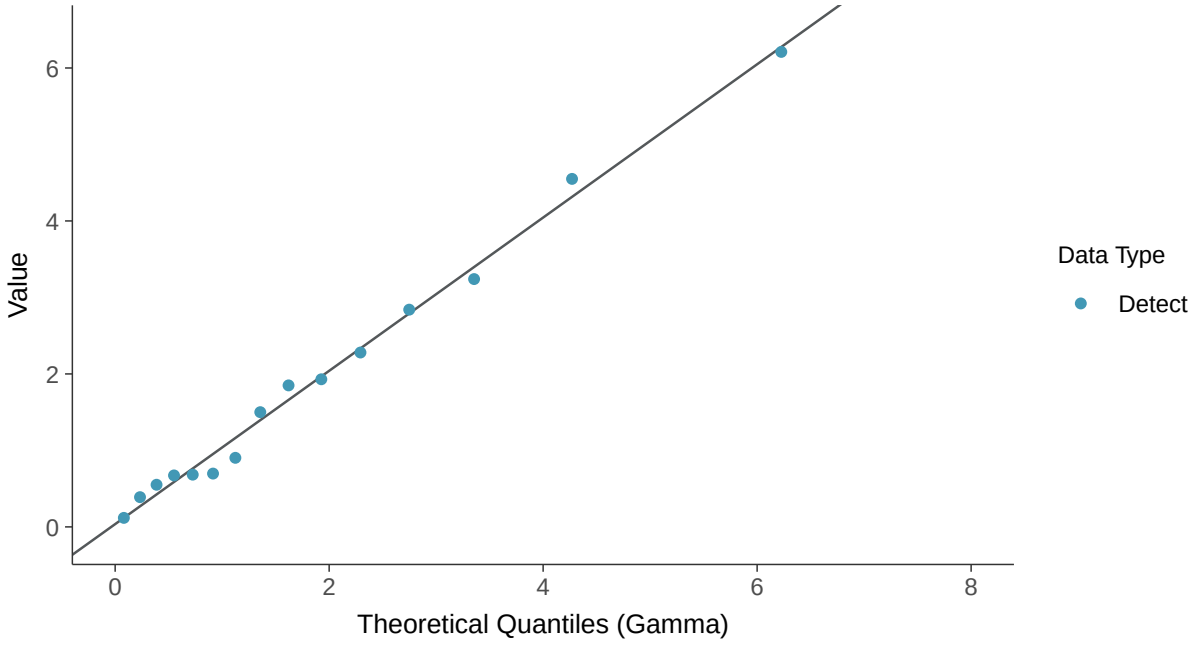
Lognormal Q-Q plot

Radium-226+228, MW-8 (pci/l)



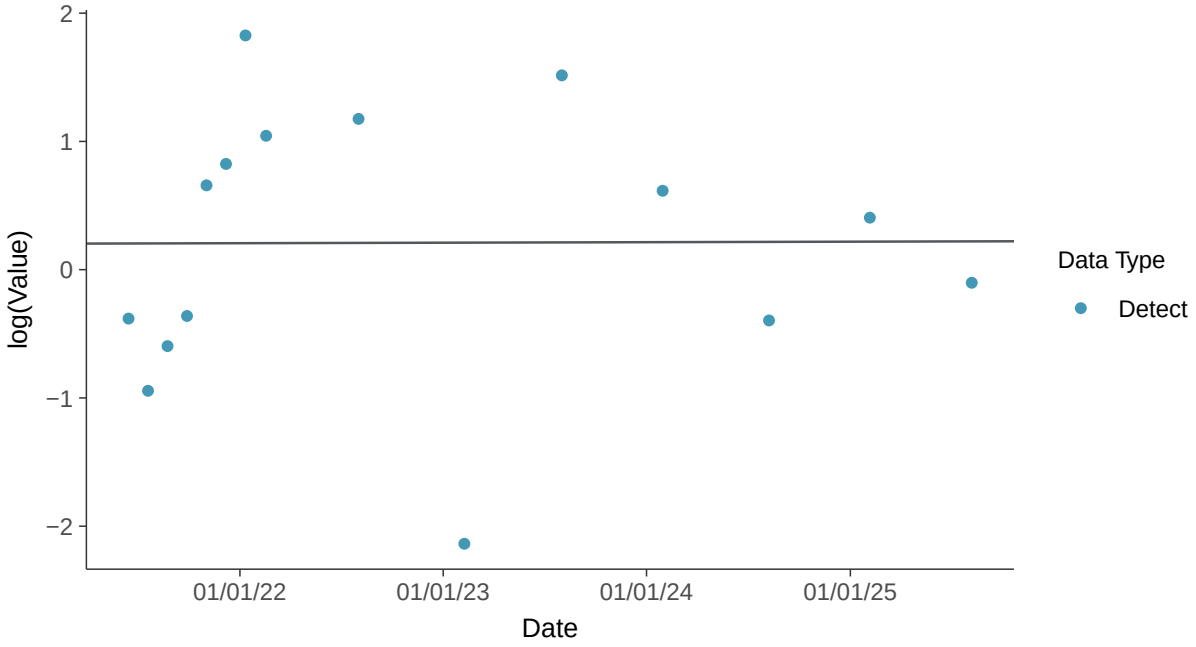
Gamma Q-Q plot

Radium-226+228, MW-8 (pci/l)



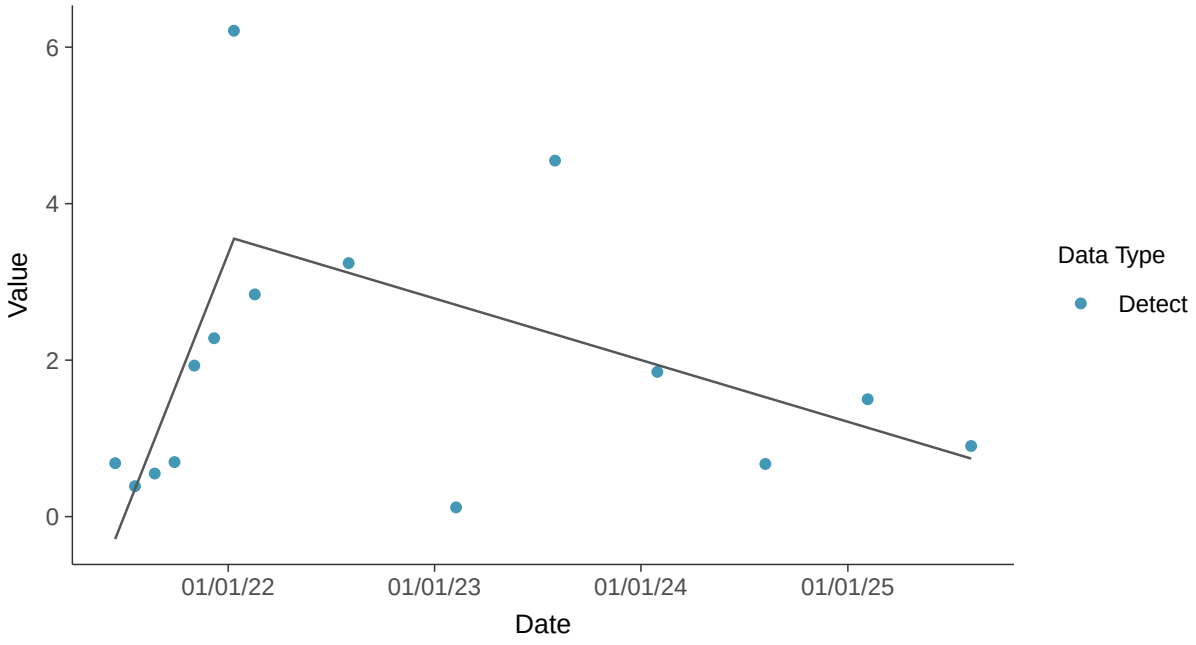
Trend Regression: Lognormal MLE

Radium-226+228, MW-8 (pci/l)



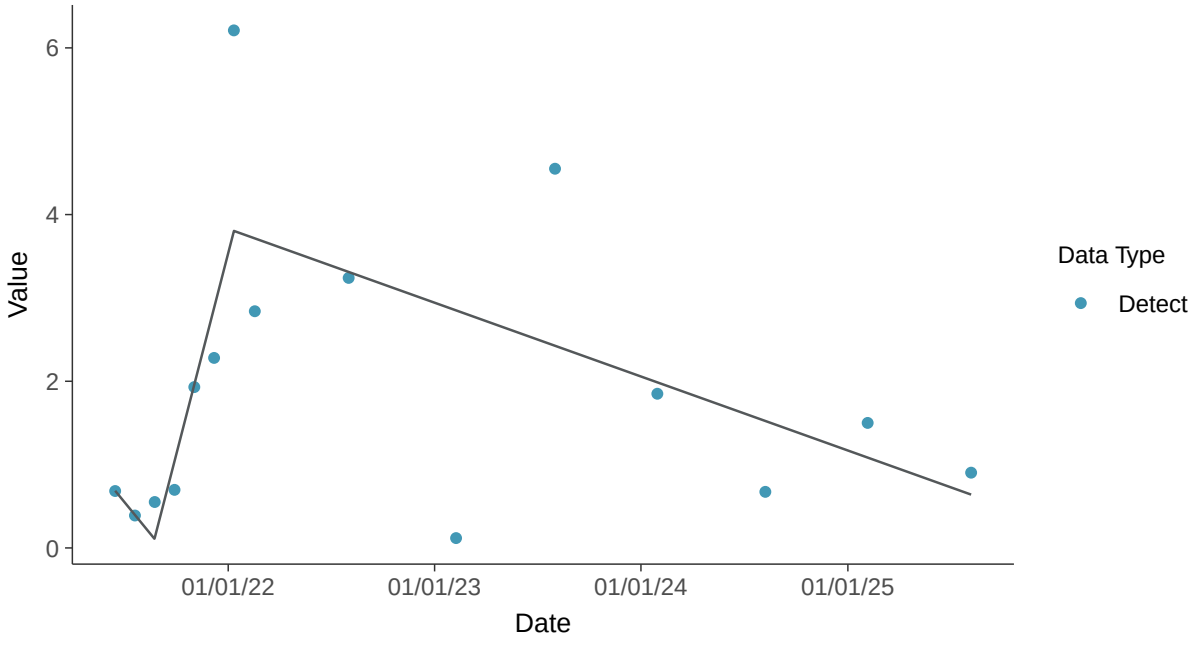
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-8 (pci/l)



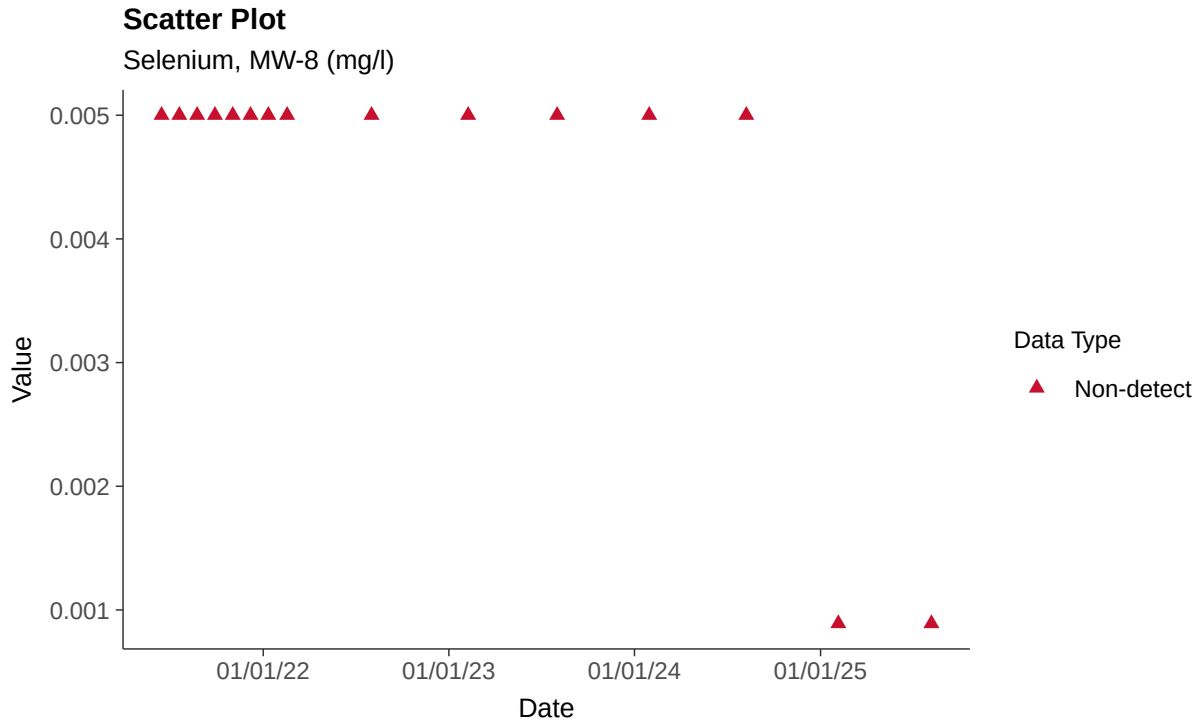
Trend Regression: Piecewise Linear-Linear-Linear

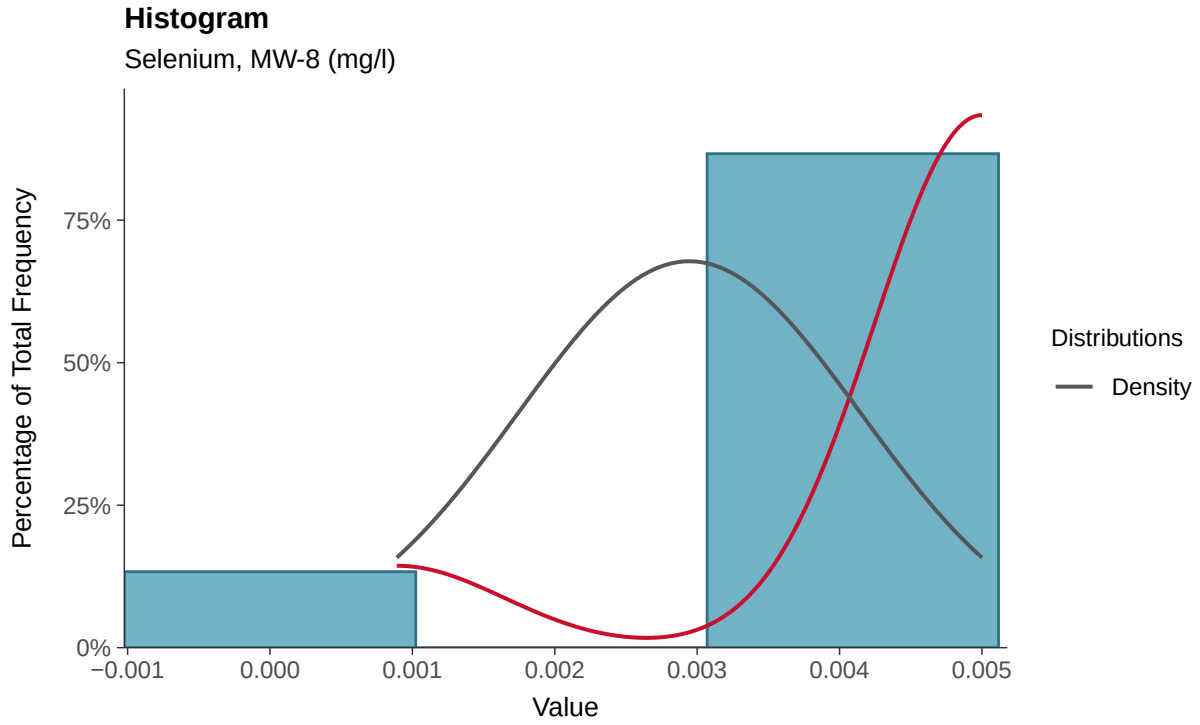
Radium-226+228, MW-8 (pci/l)



Appendix IV: Selenium, MW-8

ID: 19_3_122



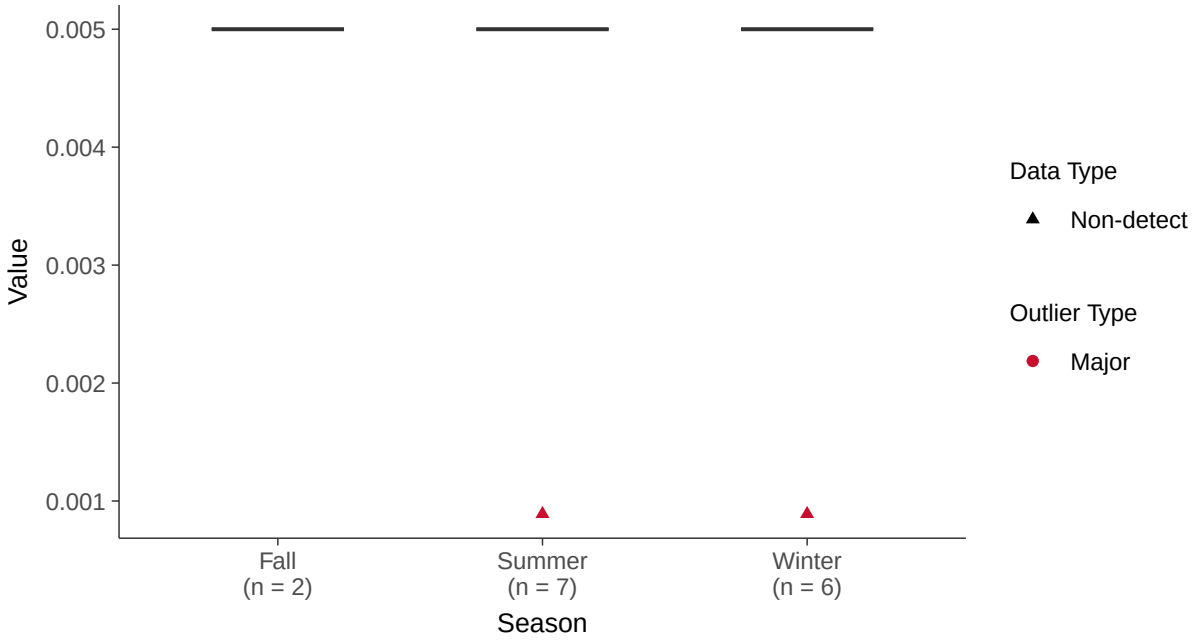


Boxplot

Selenium, MW-8 (mg/l)

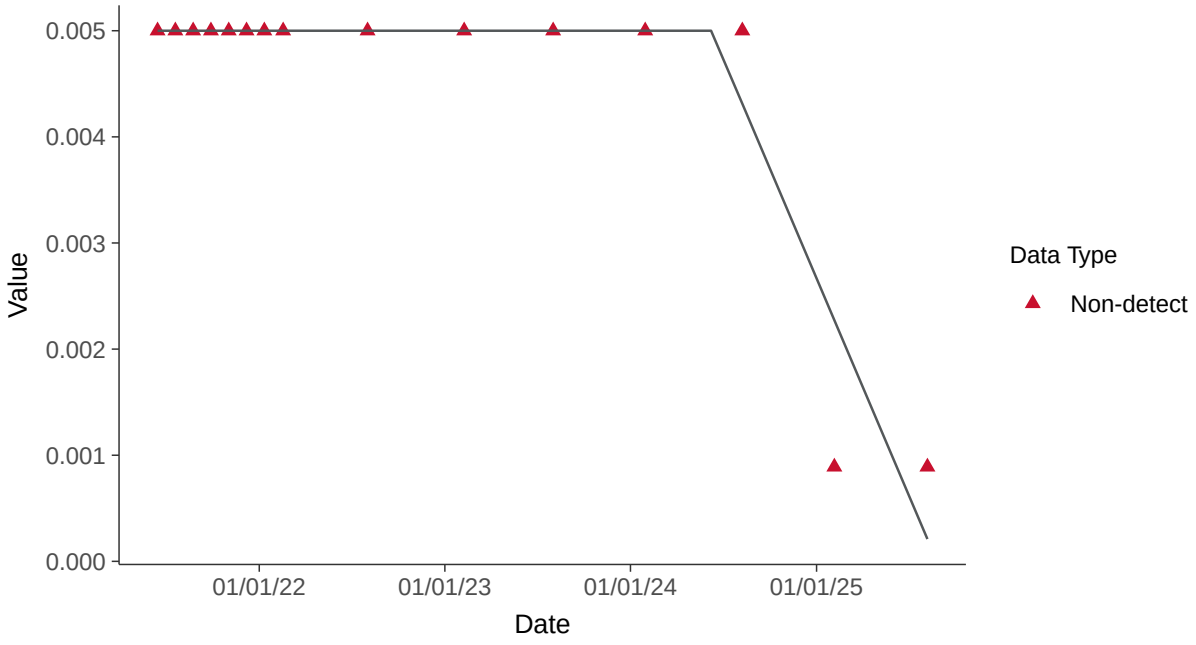
Boxplot by Season

Selenium, MW-8 (mg/l)



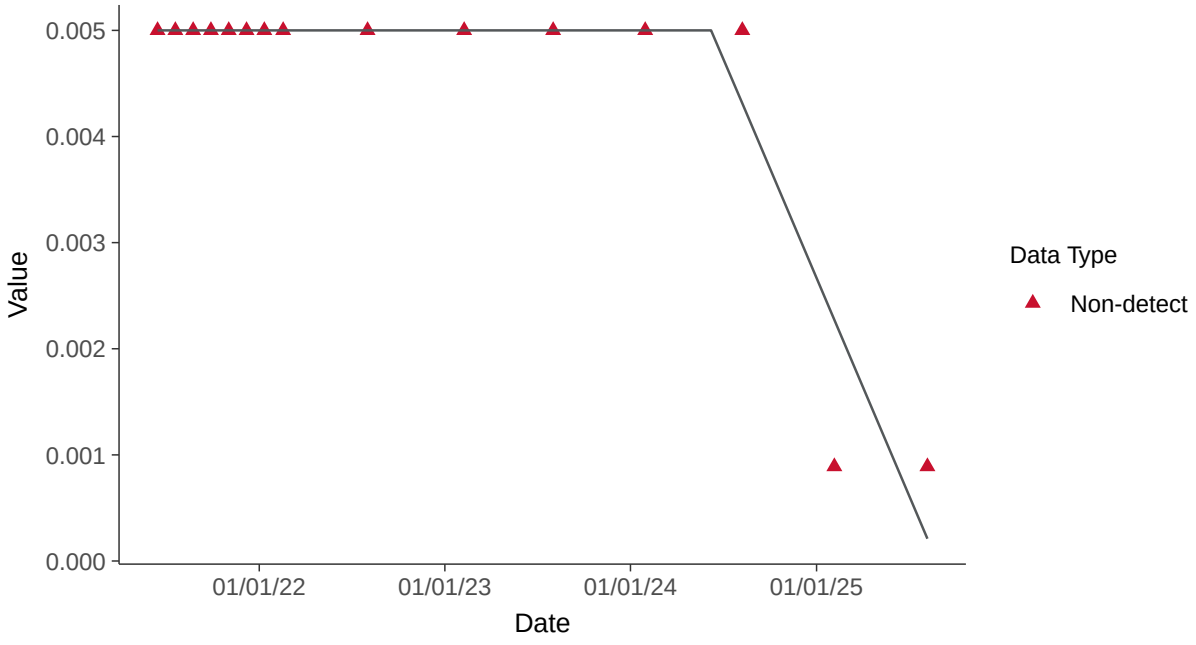
Trend Regression: Piecewise Linear-Linear

Selenium, MW-8 (mg/l)



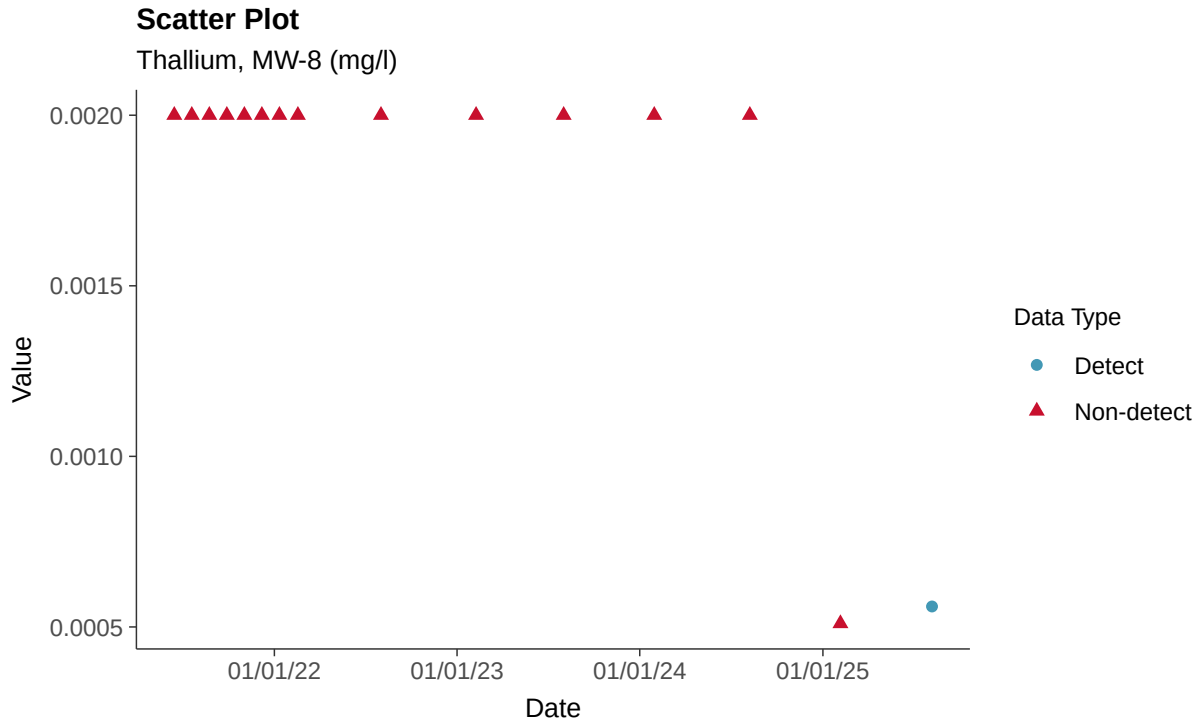
Trend Regression: Piecewise Linear-Linear-Linear

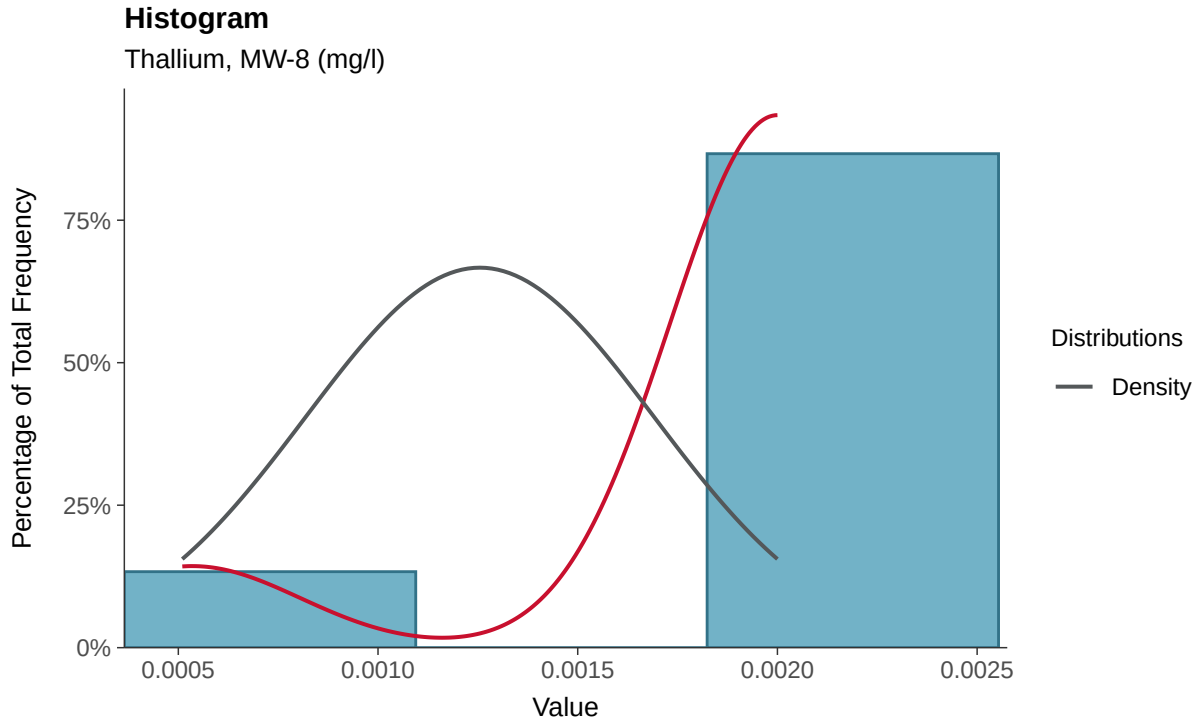
Selenium, MW-8 (mg/l)



Appendix IV: Thallium, MW-8

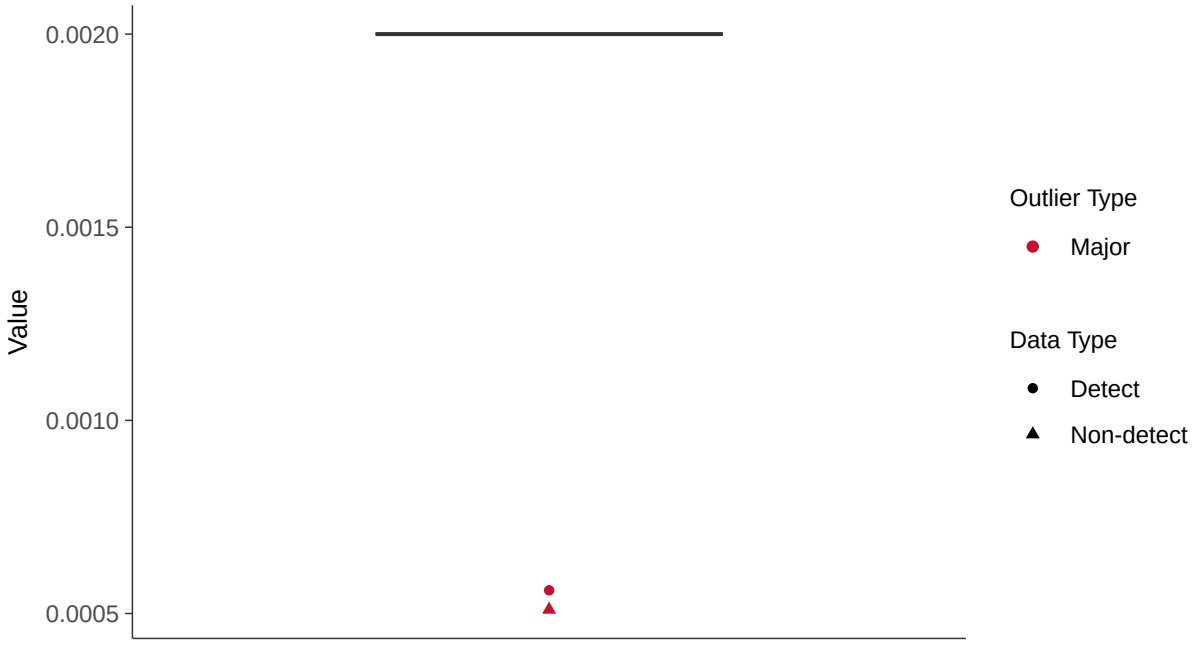
ID: 19_3_125





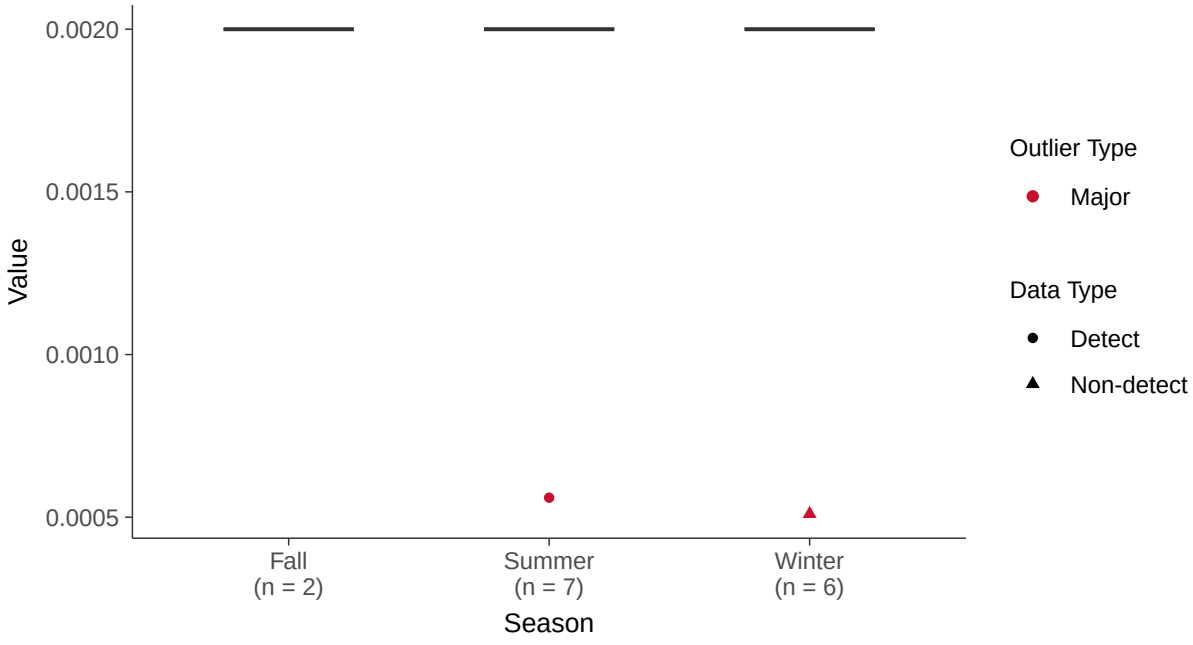
Boxplot

Thallium, MW-8 (mg/l)



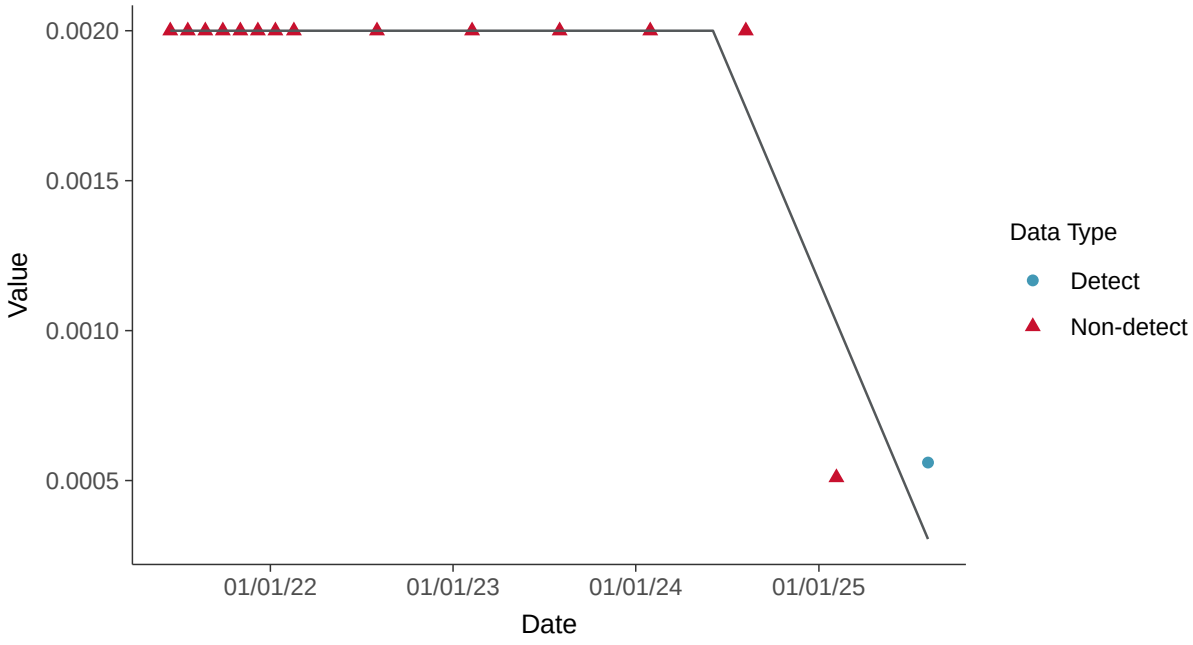
Boxplot by Season

Thallium, MW-8 (mg/l)



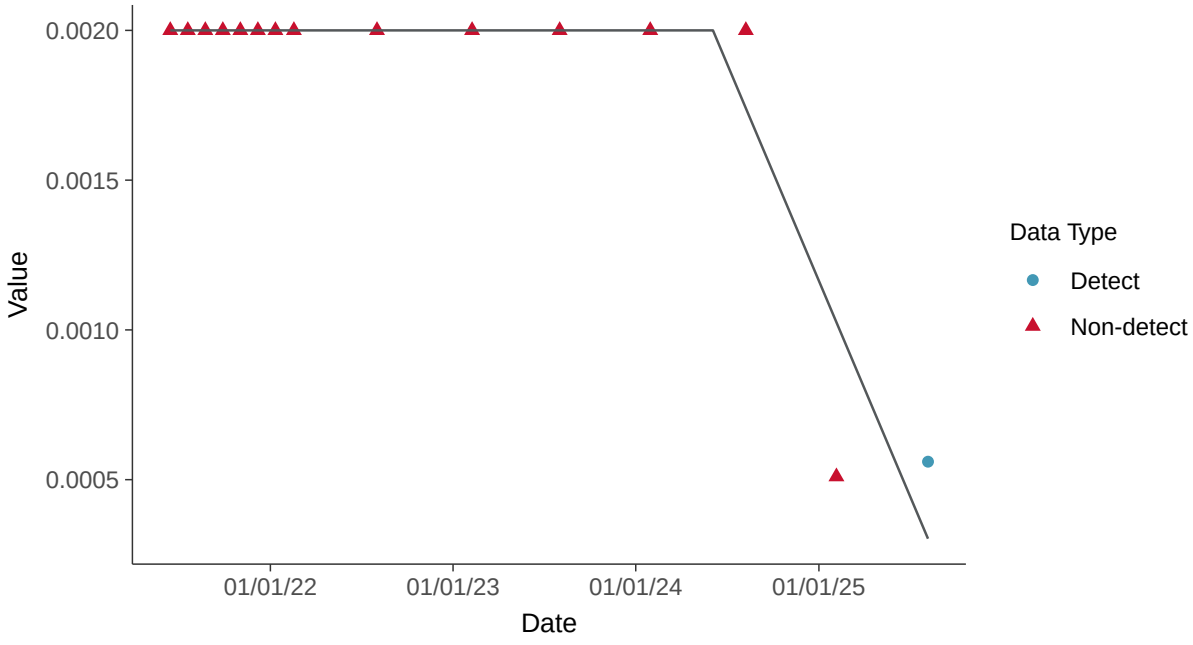
Trend Regression: Piecewise Linear-Linear

Thallium, MW-8 (mg/l)



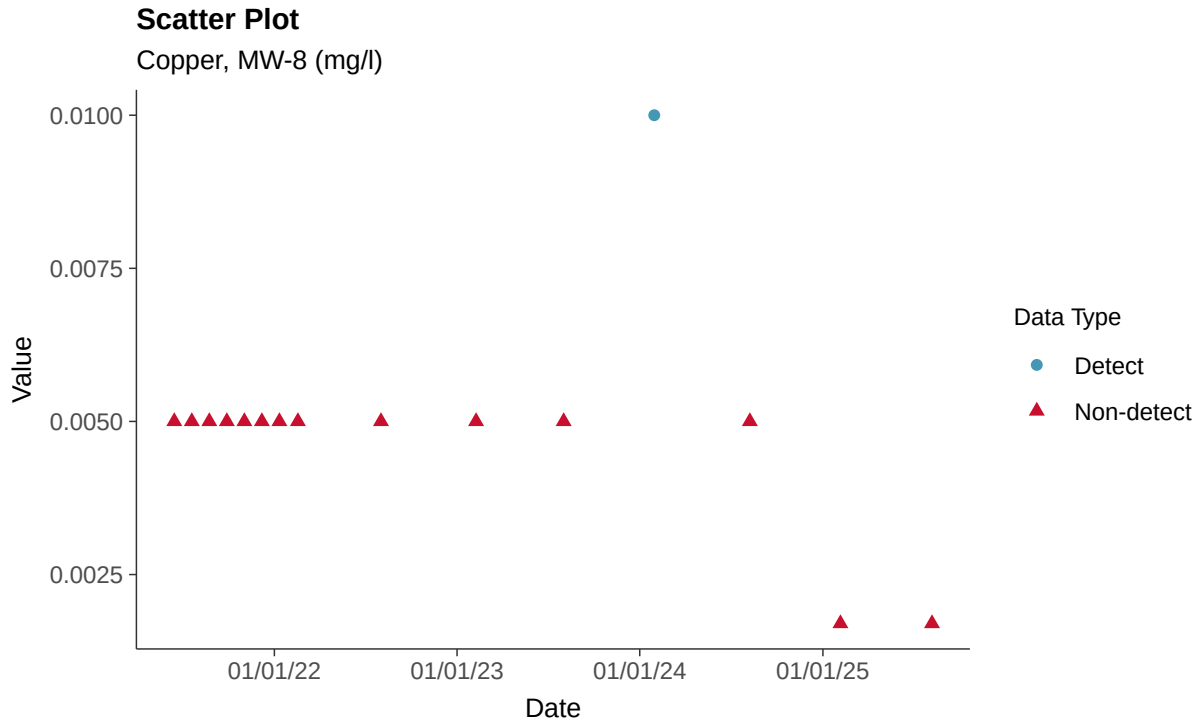
Trend Regression: Piecewise Linear-Linear-Linear

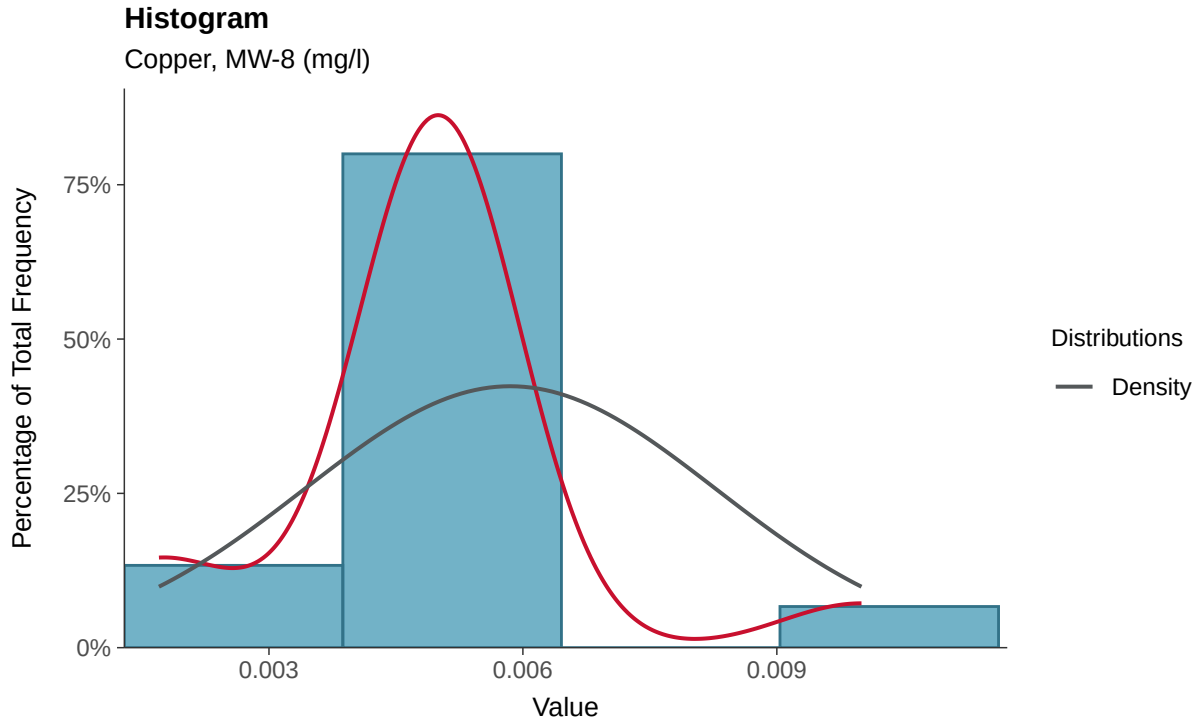
Thallium, MW-8 (mg/l)



Part 115: Copper, MW-8

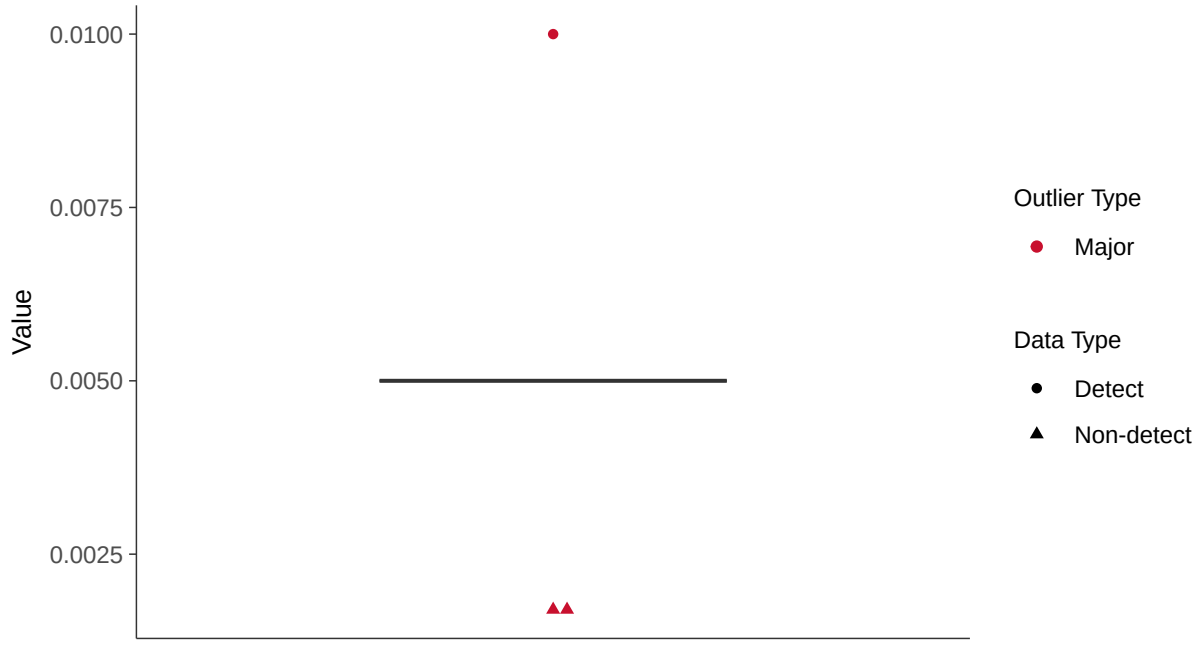
ID: 19_5_111





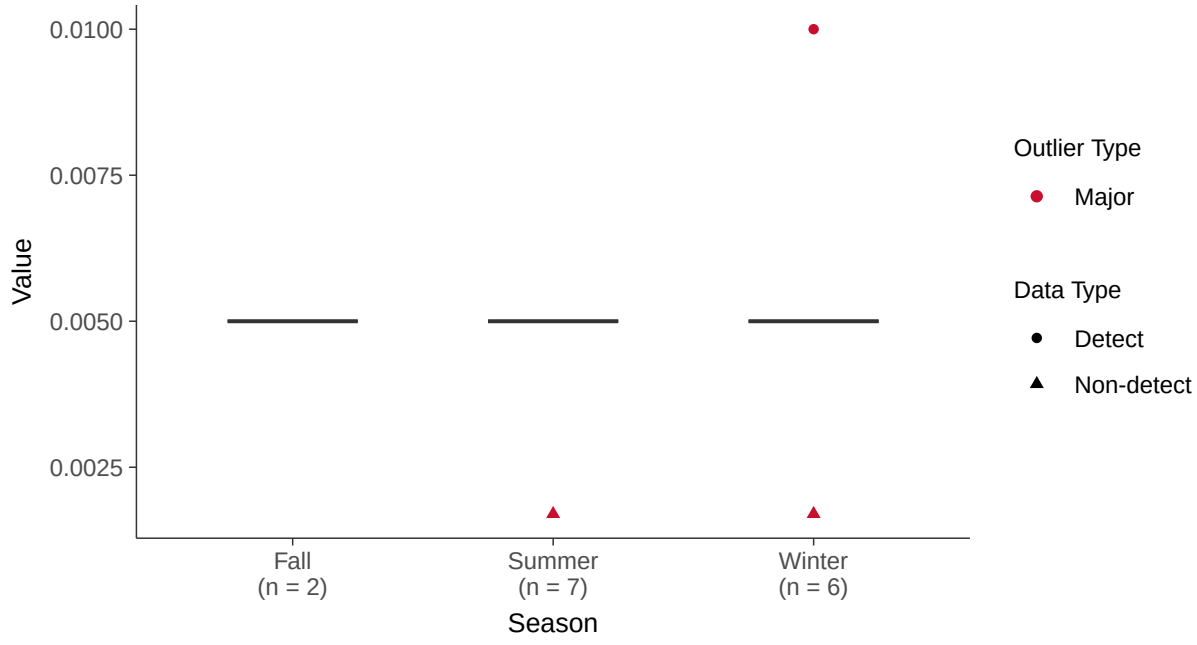
Boxplot

Copper, MW-8 (mg/l)



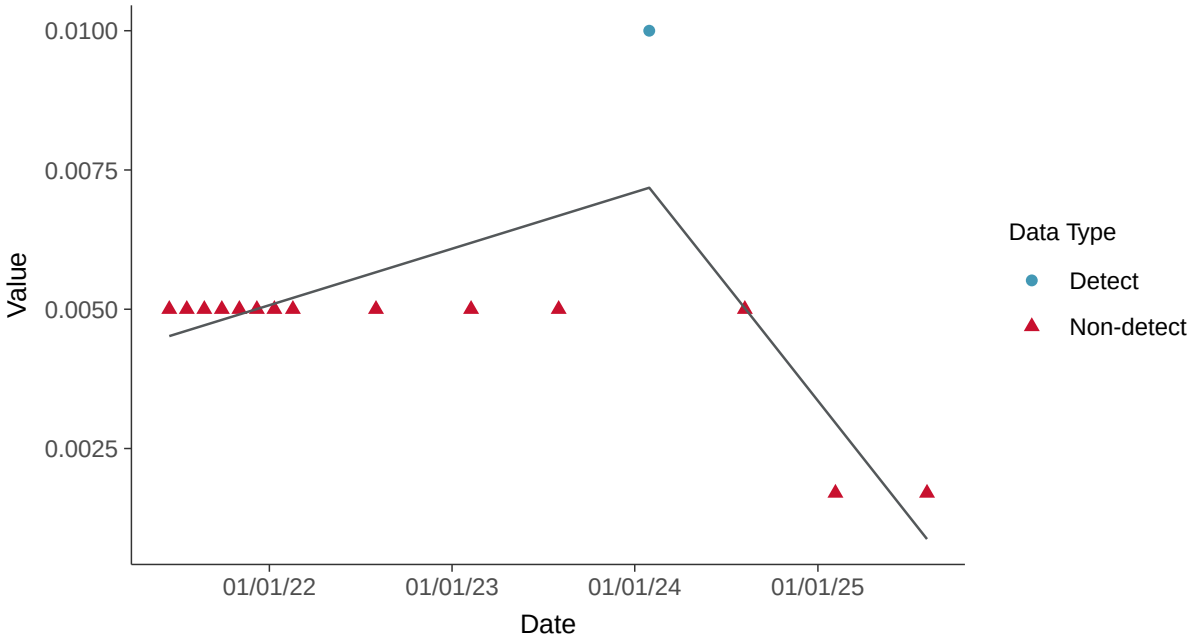
Boxplot by Season

Copper, MW-8 (mg/l)



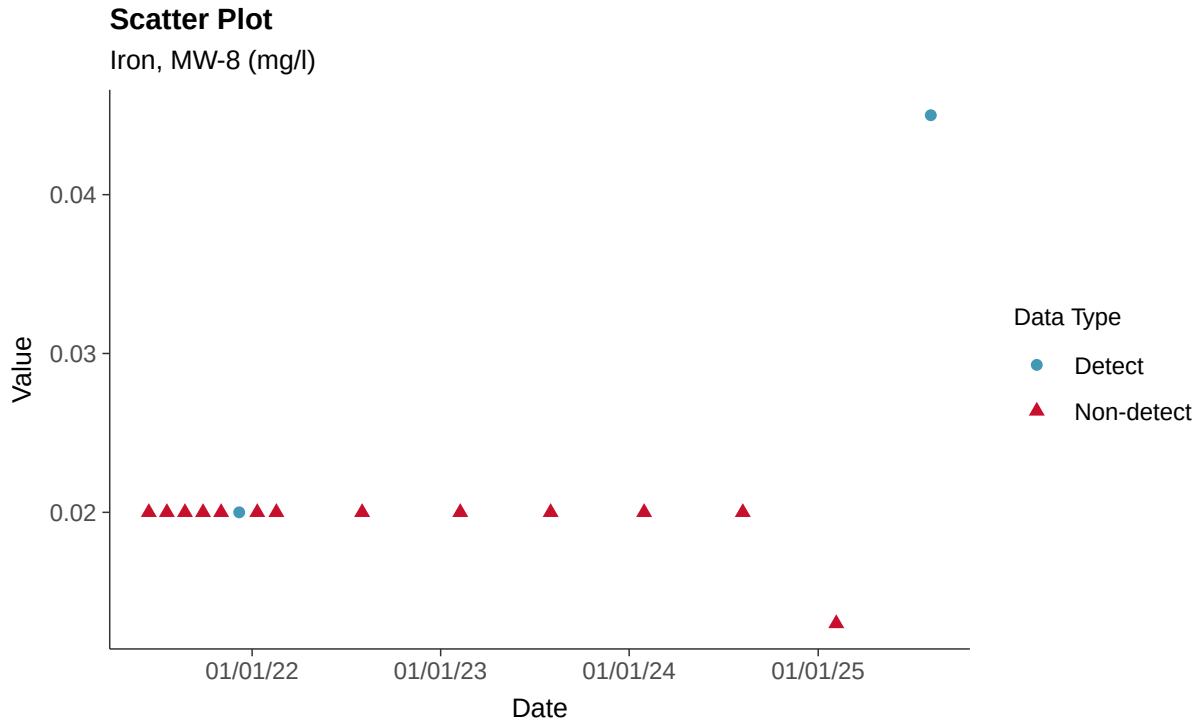
Trend Regression: Piecewise Linear-Linear

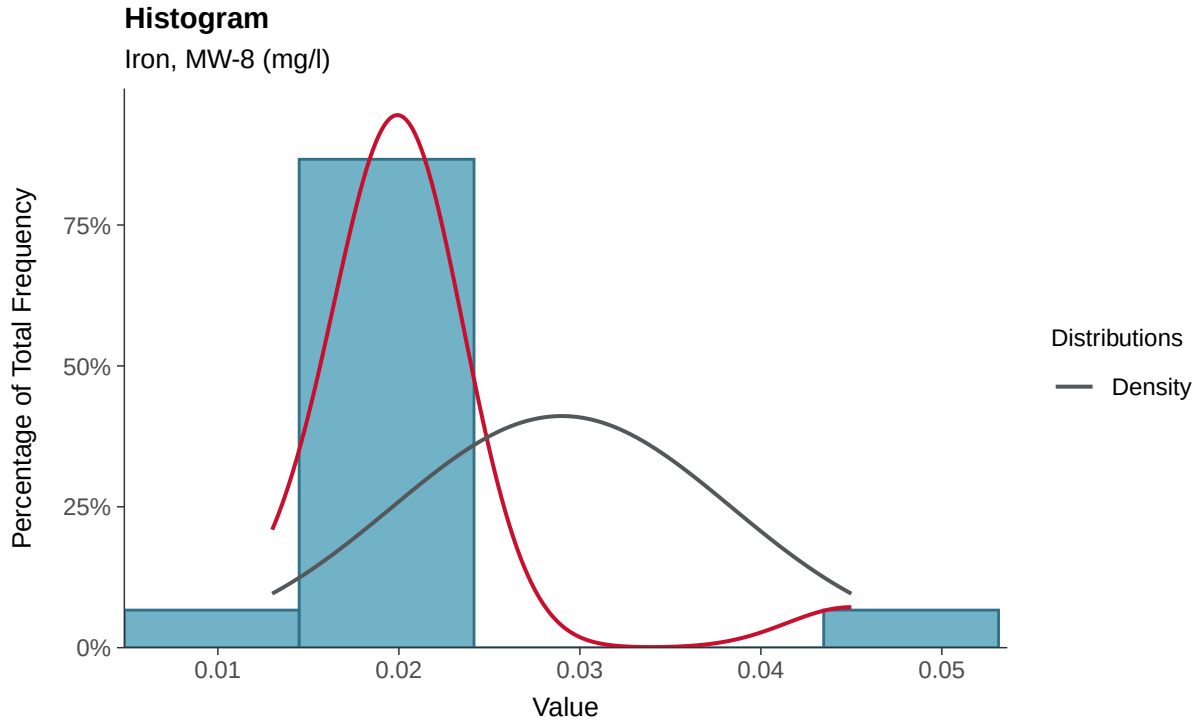
Copper, MW-8 (mg/l)



Part 115: Iron, MW-8

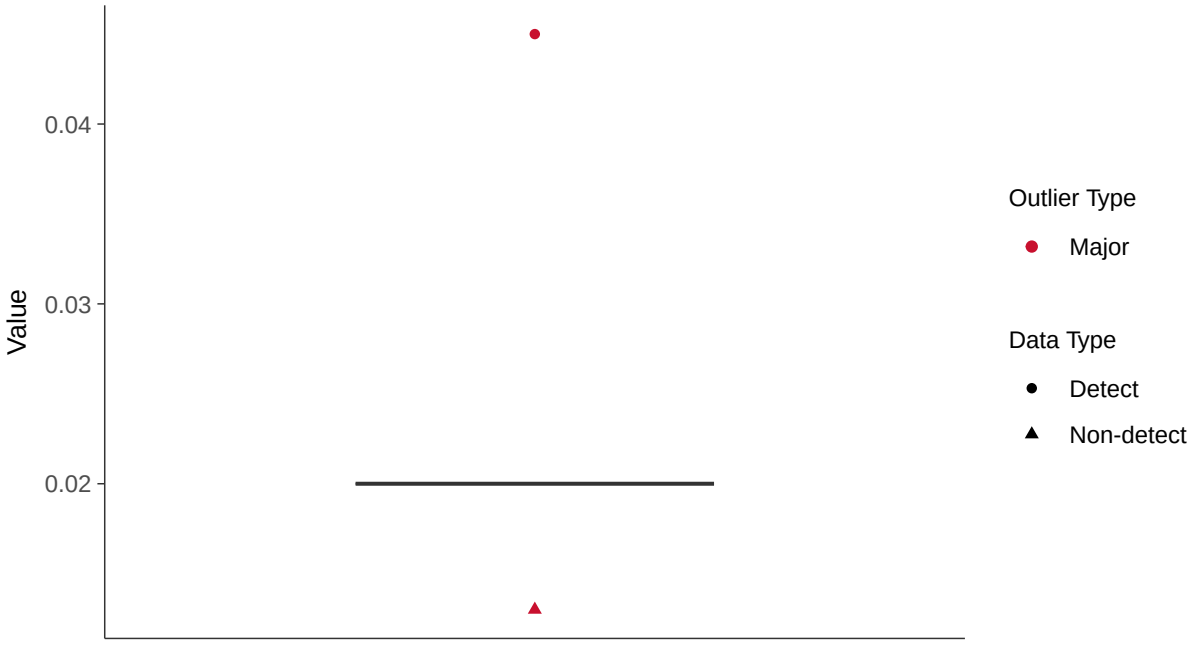
ID: 19_5_114





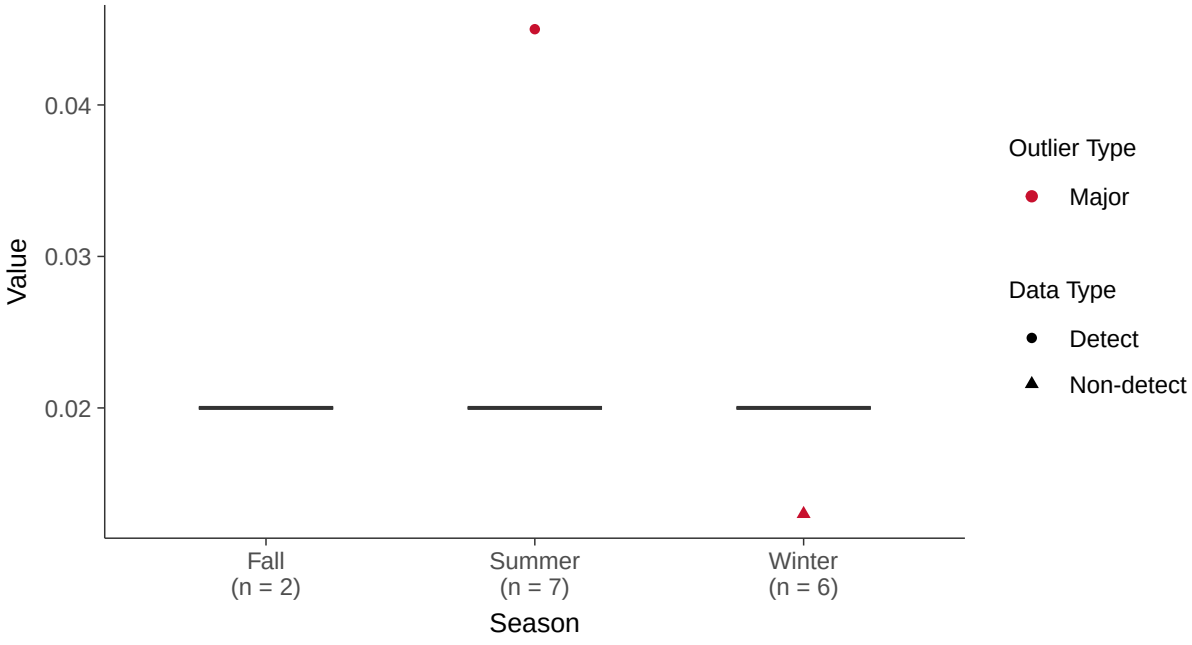
Boxplot

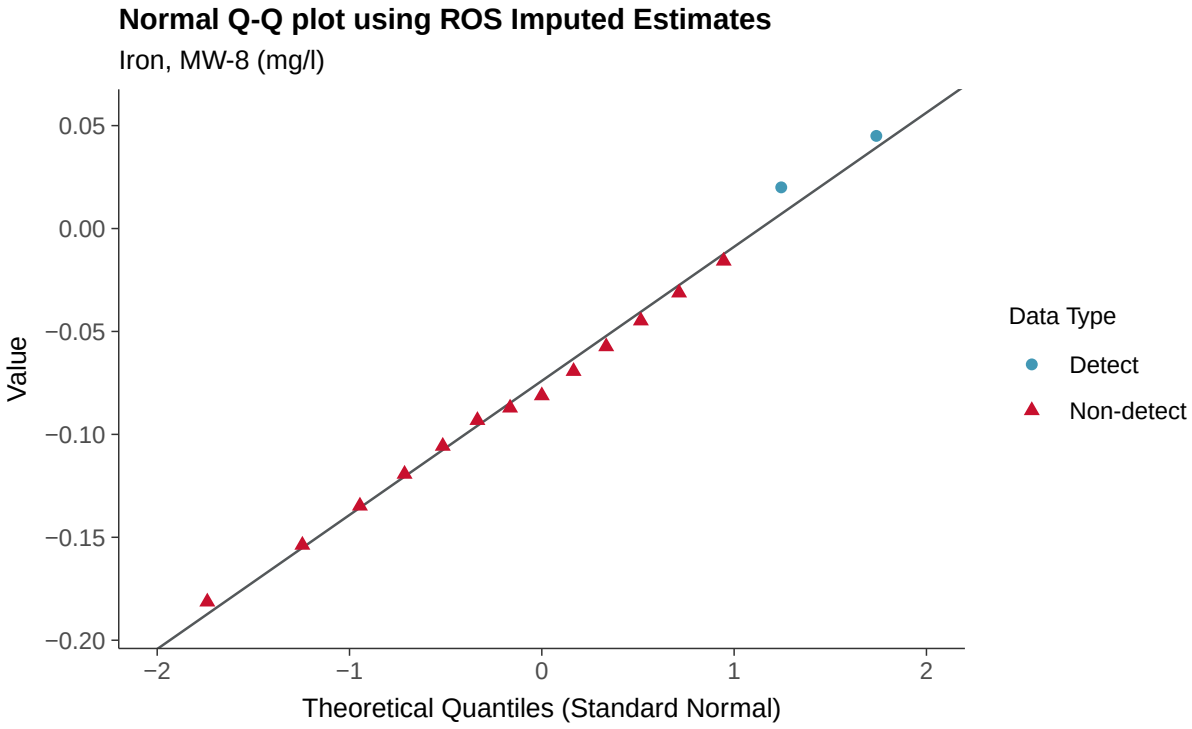
Iron, MW-8 (mg/l)



Boxplot by Season

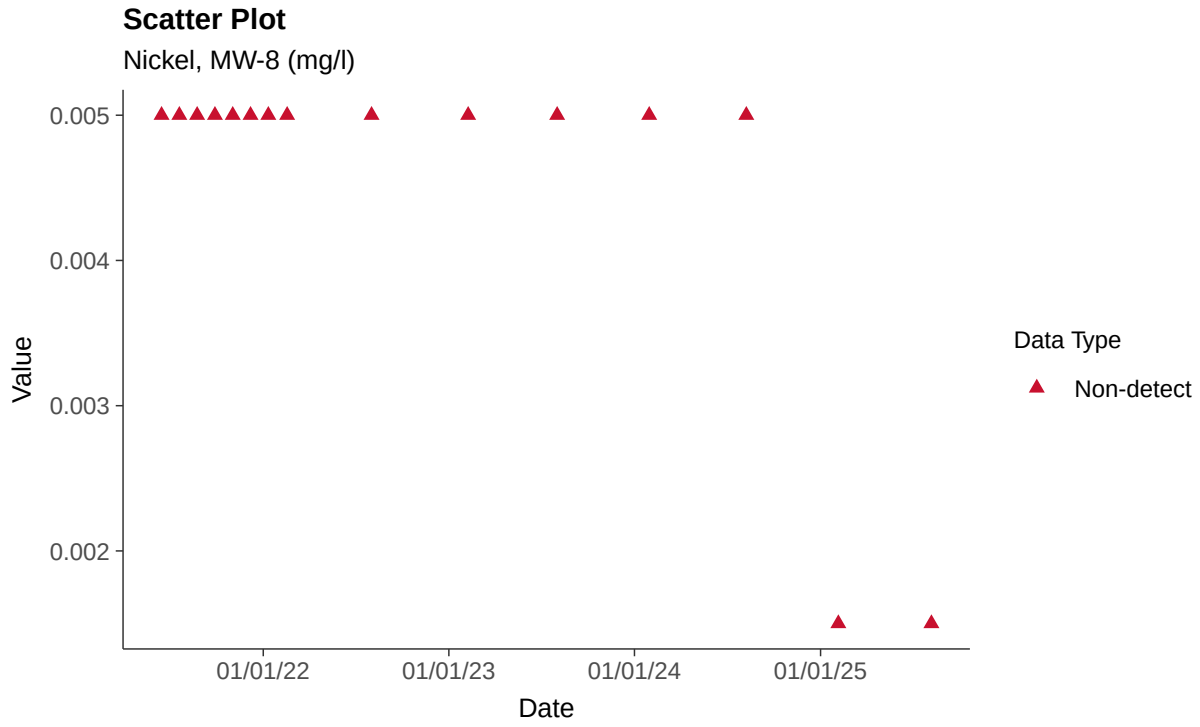
Iron, MW-8 (mg/l)

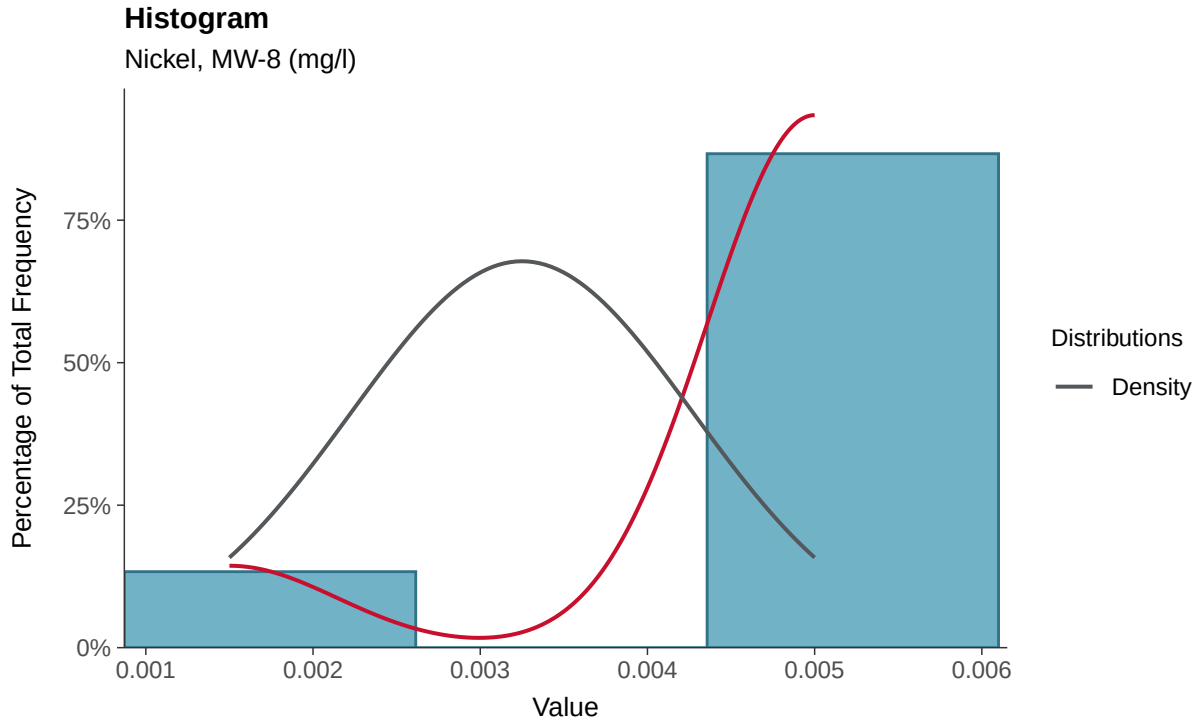



Normal Q-Q plot using ROS Imputed Estimates
Iron, MW-8 (mg/l)
Value
0.05
0.00
−0.05
−0.10
−0.15
−0.20
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect
Non-detect

Part 115: Nickel, MW-8

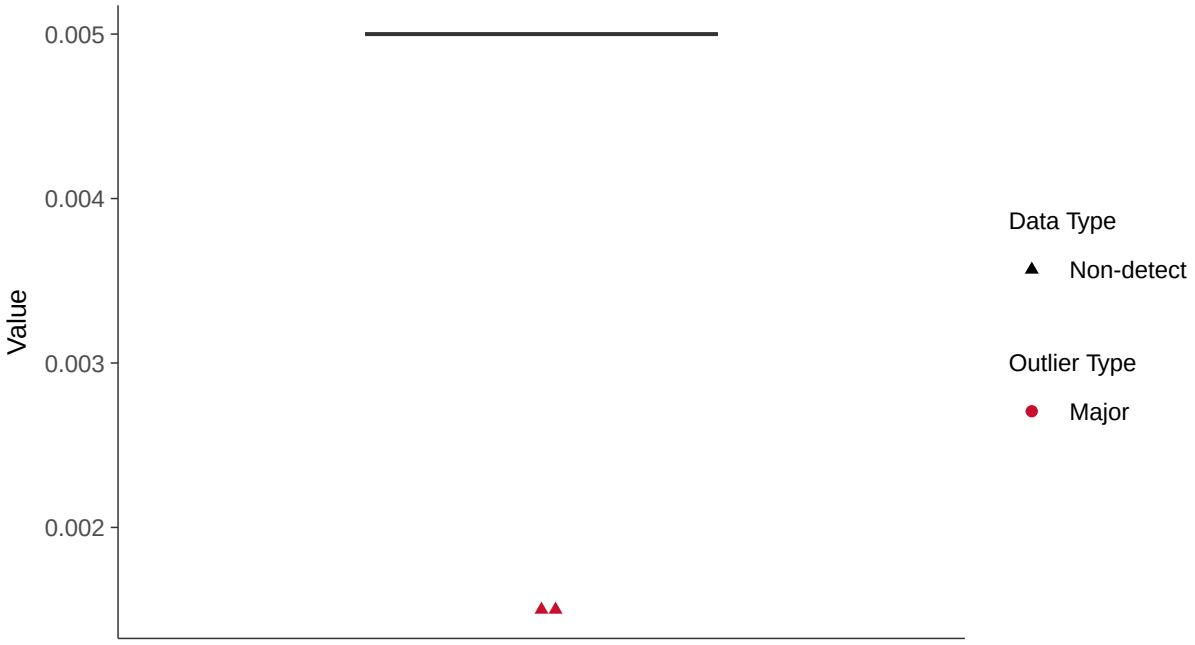
ID: 19_5_119





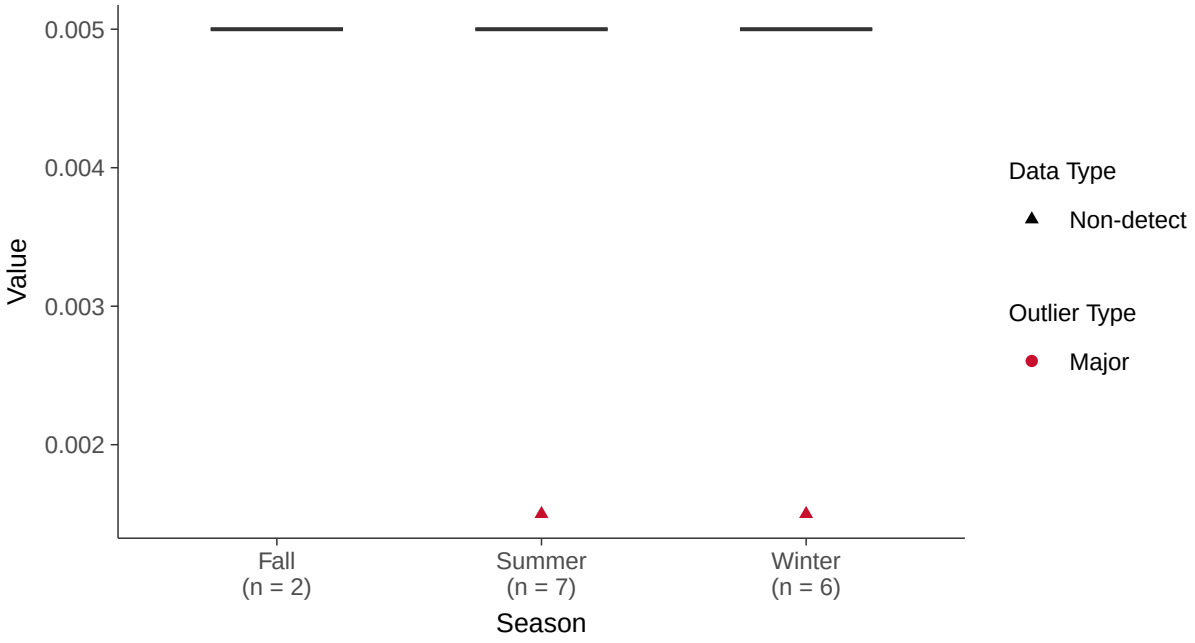
Boxplot

Nickel, MW-8 (mg/l)



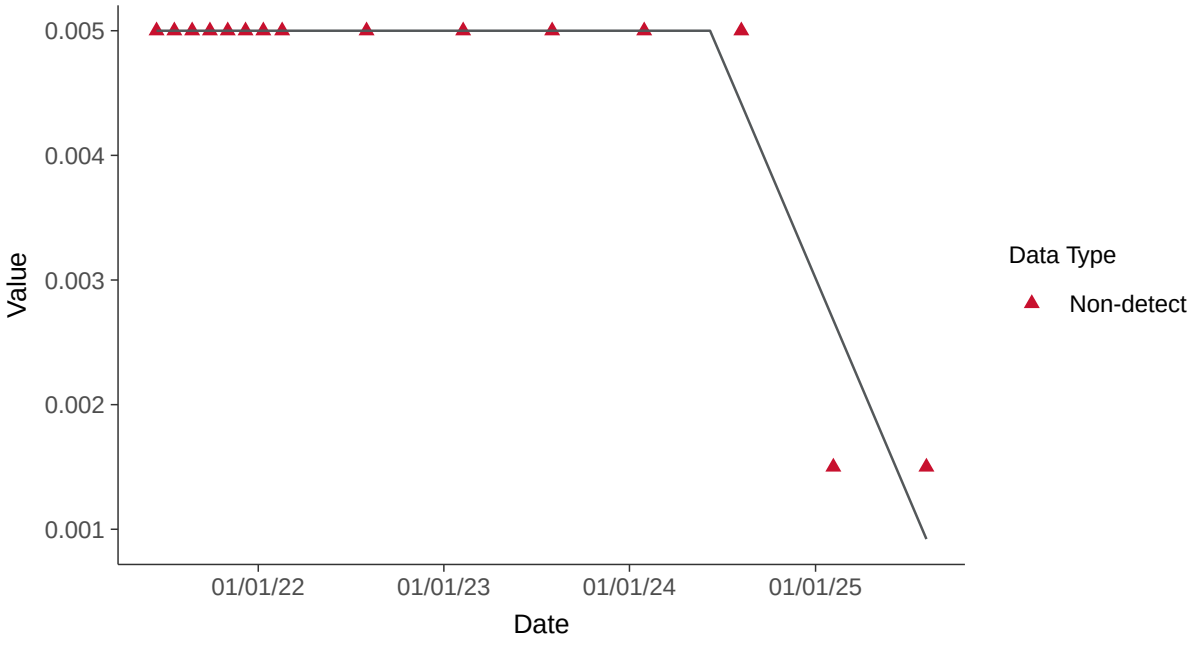
Boxplot by Season

Nickel, MW-8 (mg/l)



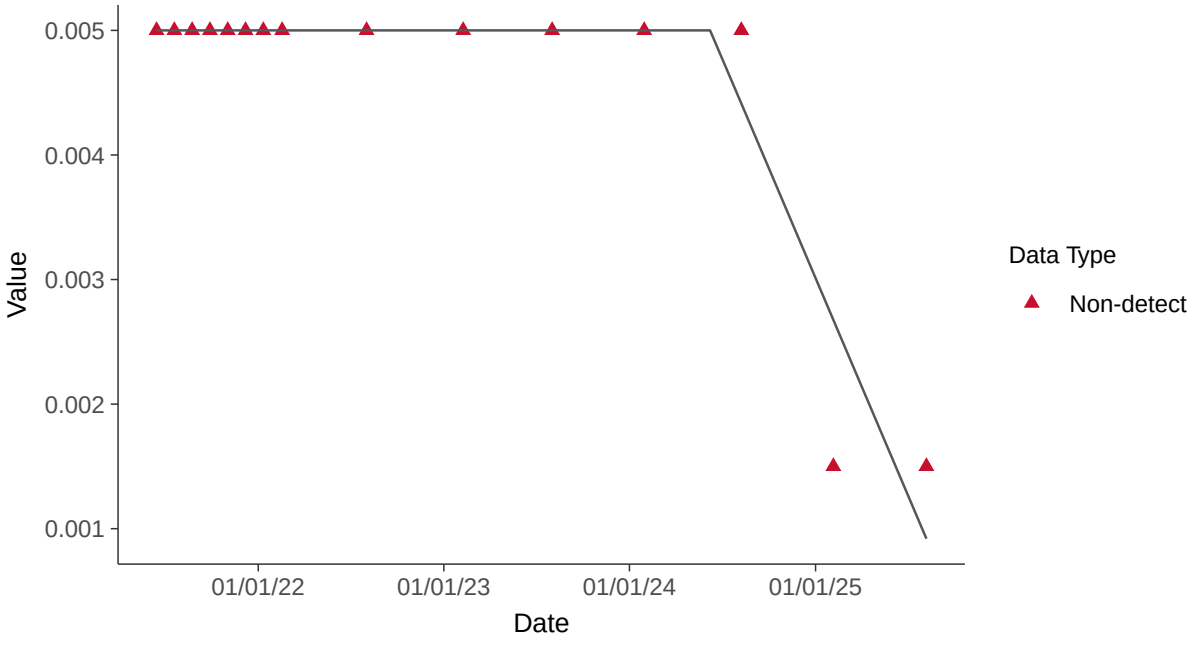
Trend Regression: Piecewise Linear-Linear

Nickel, MW-8 (mg/l)



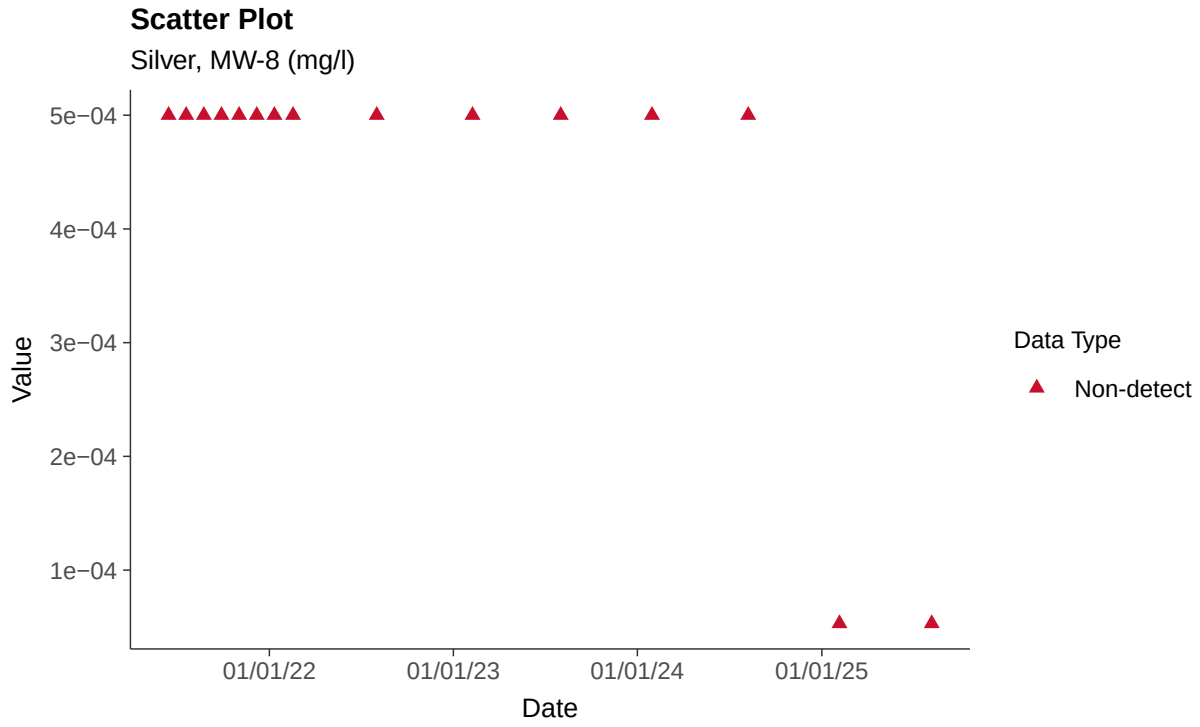
Trend Regression: Piecewise Linear-Linear-Linear

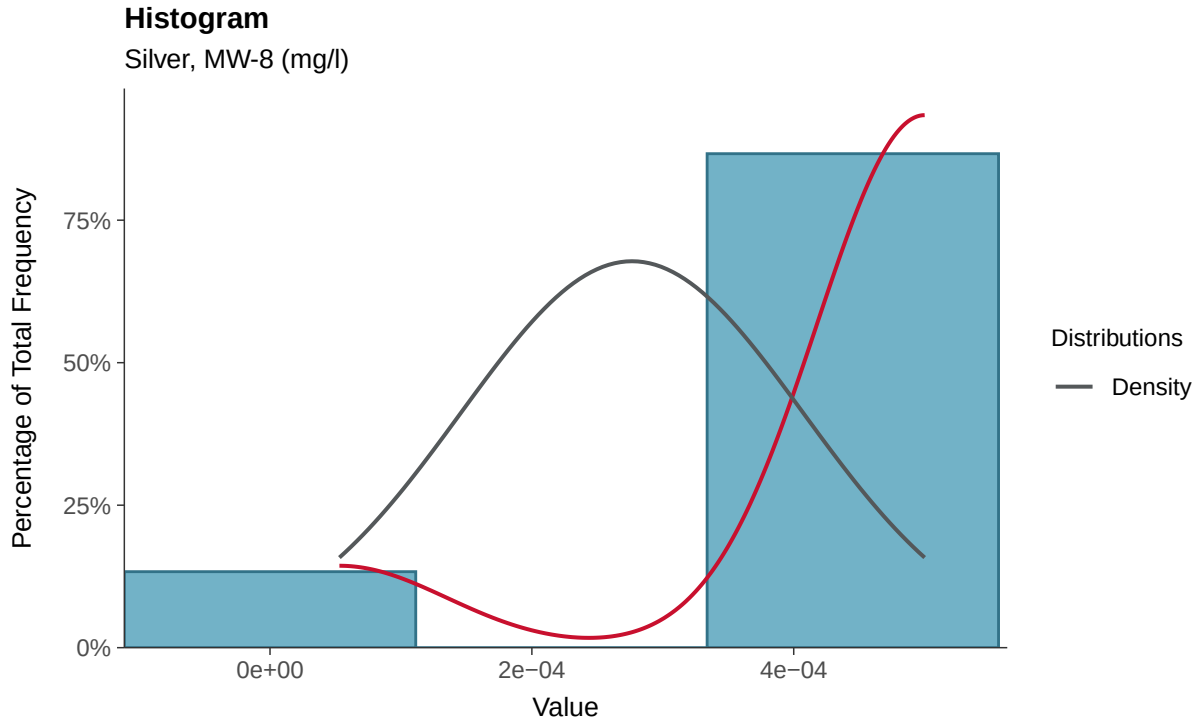
Nickel, MW-8 (mg/l)



Part 115: Silver, MW-8

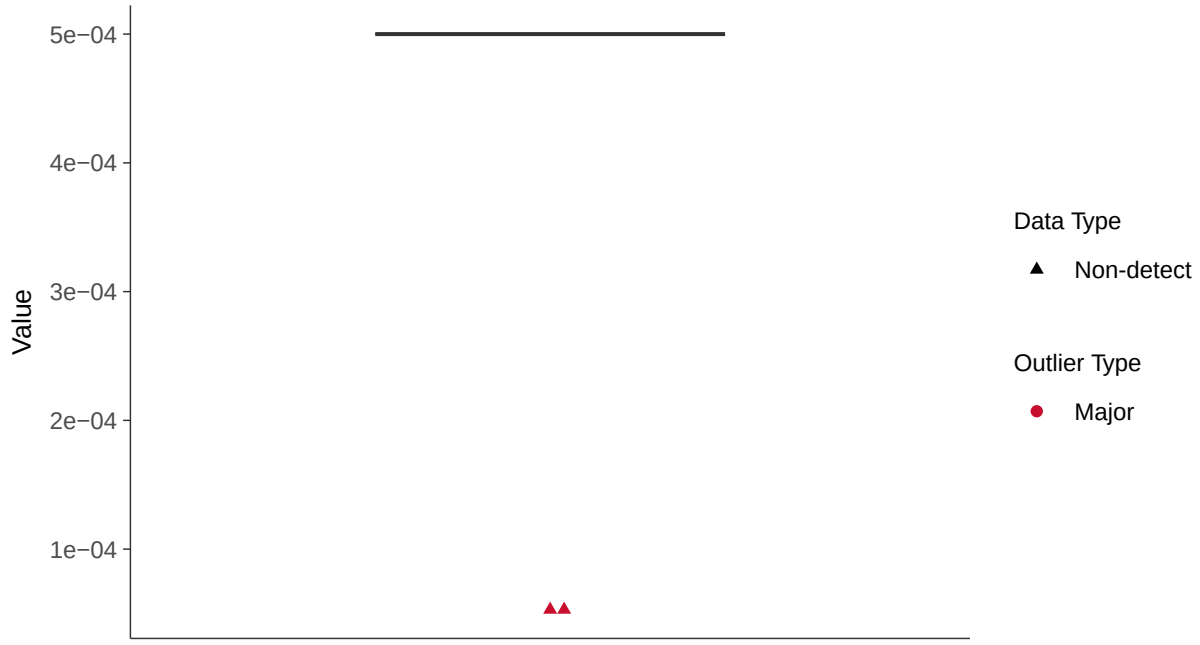
ID: 19_5_123





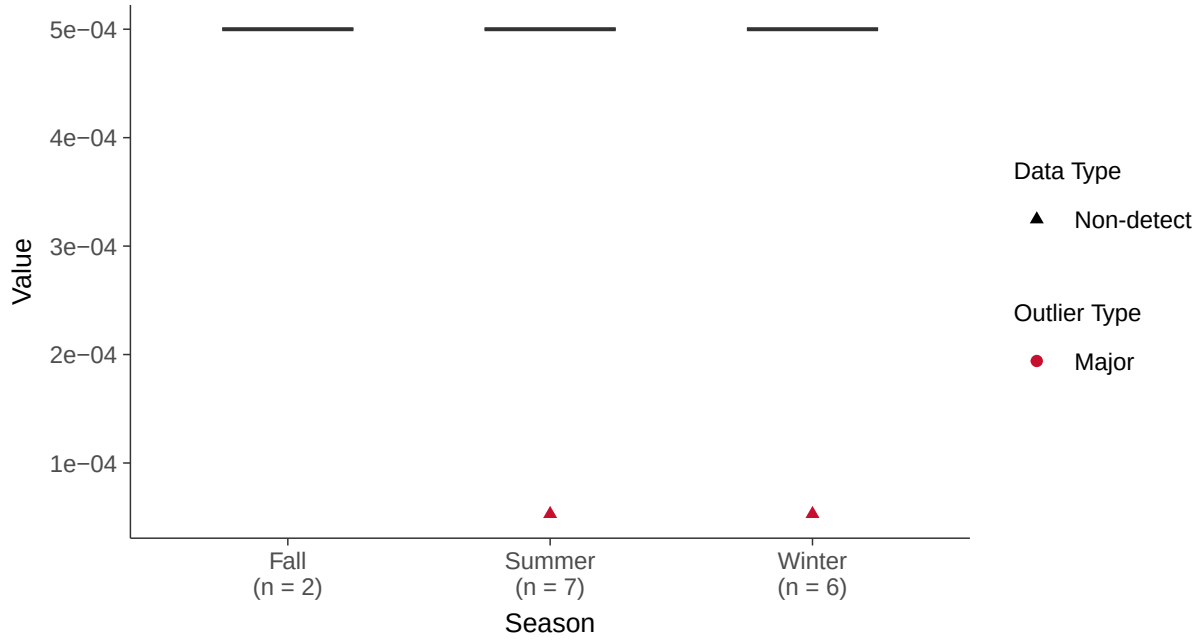
Boxplot

Silver, MW-8 (mg/l)



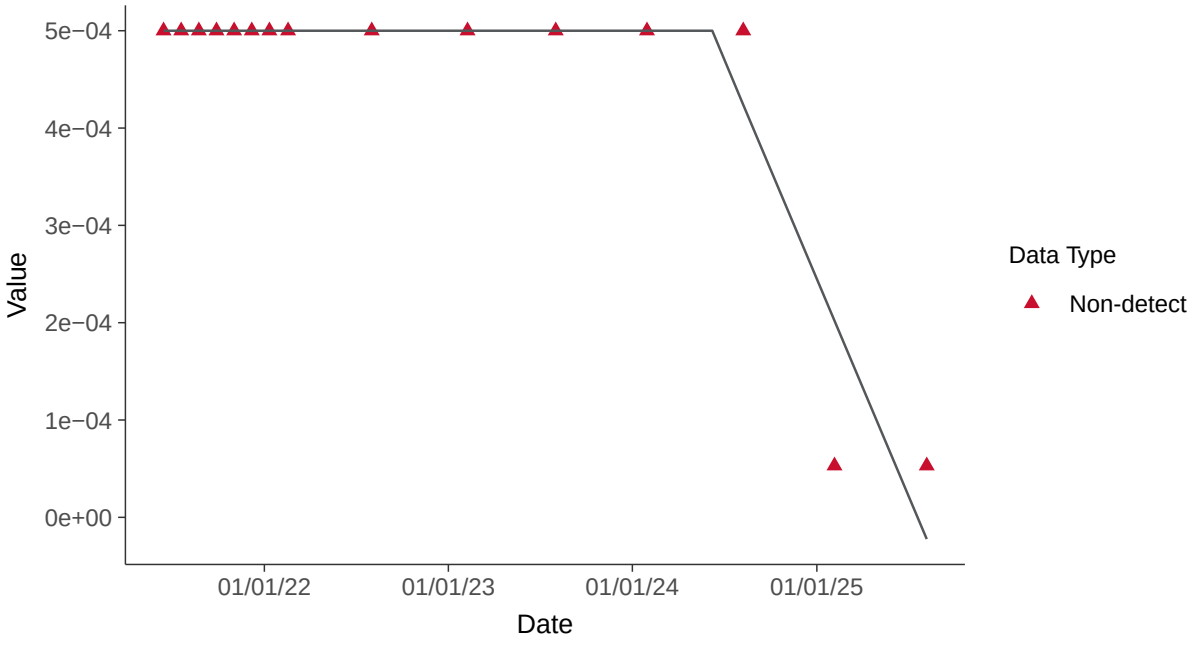
Boxplot by Season

Silver, MW-8 (mg/l)



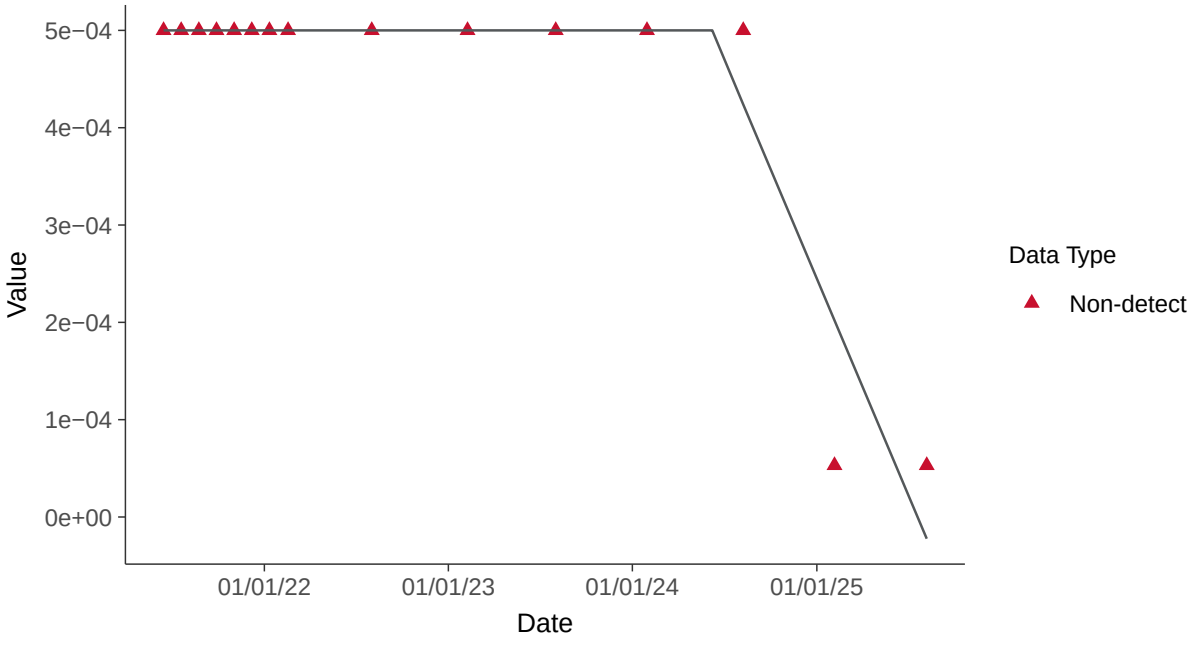
Trend Regression: Piecewise Linear-Linear

Silver, MW-8 (mg/l)



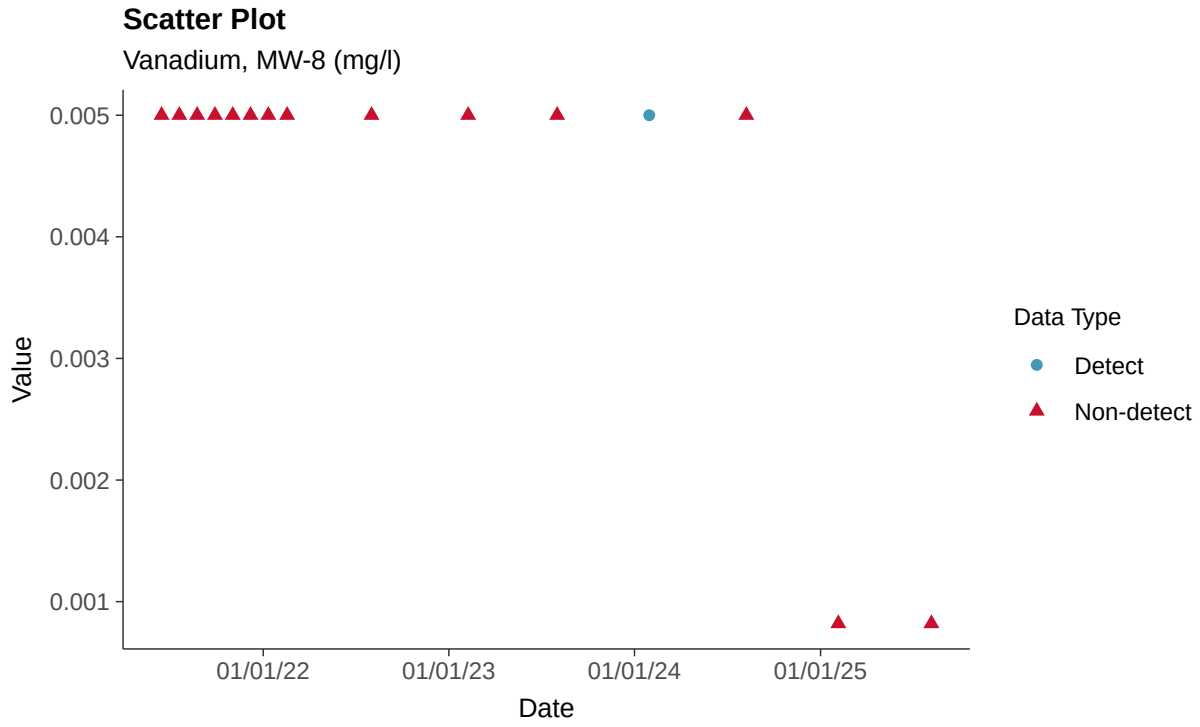
Trend Regression: Piecewise Linear-Linear-Linear

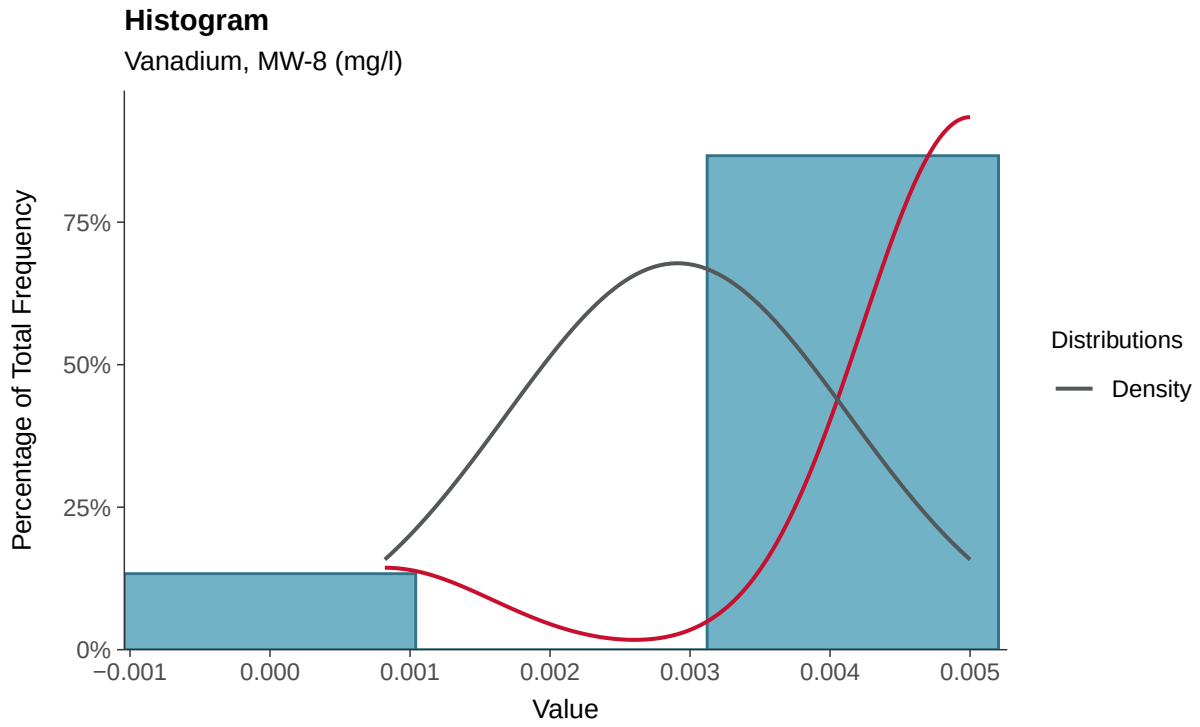
Silver, MW-8 (mg/l)



Part 115: Vanadium, MW-8

ID: 19_5_128



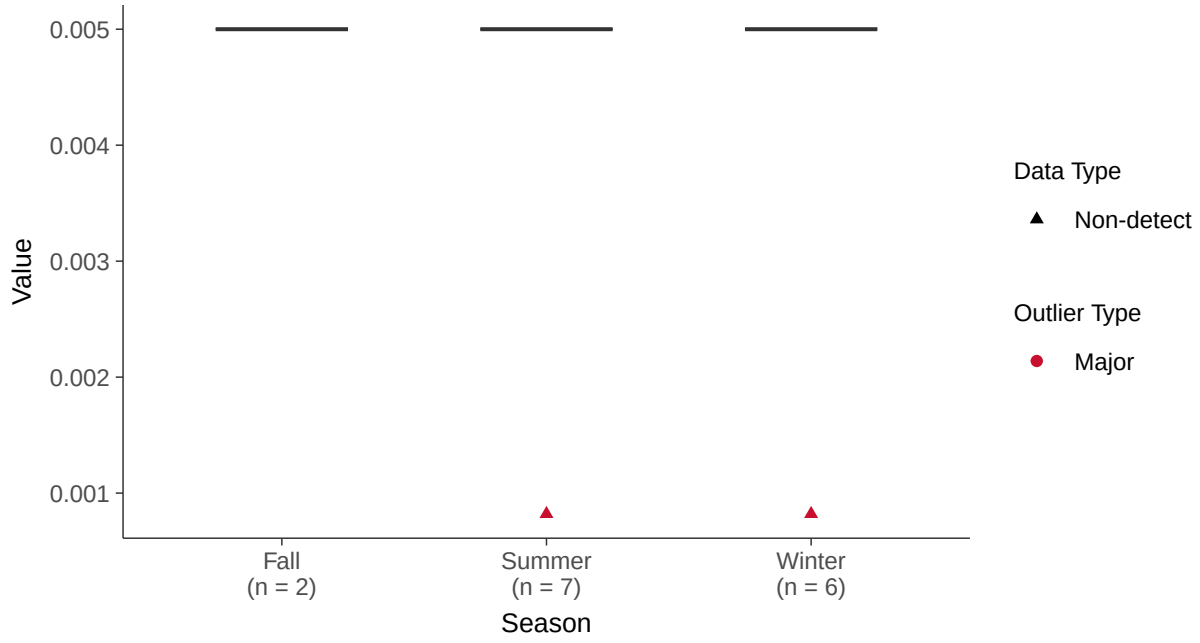


Boxplot

Vanadium, MW-8 (mg/l)

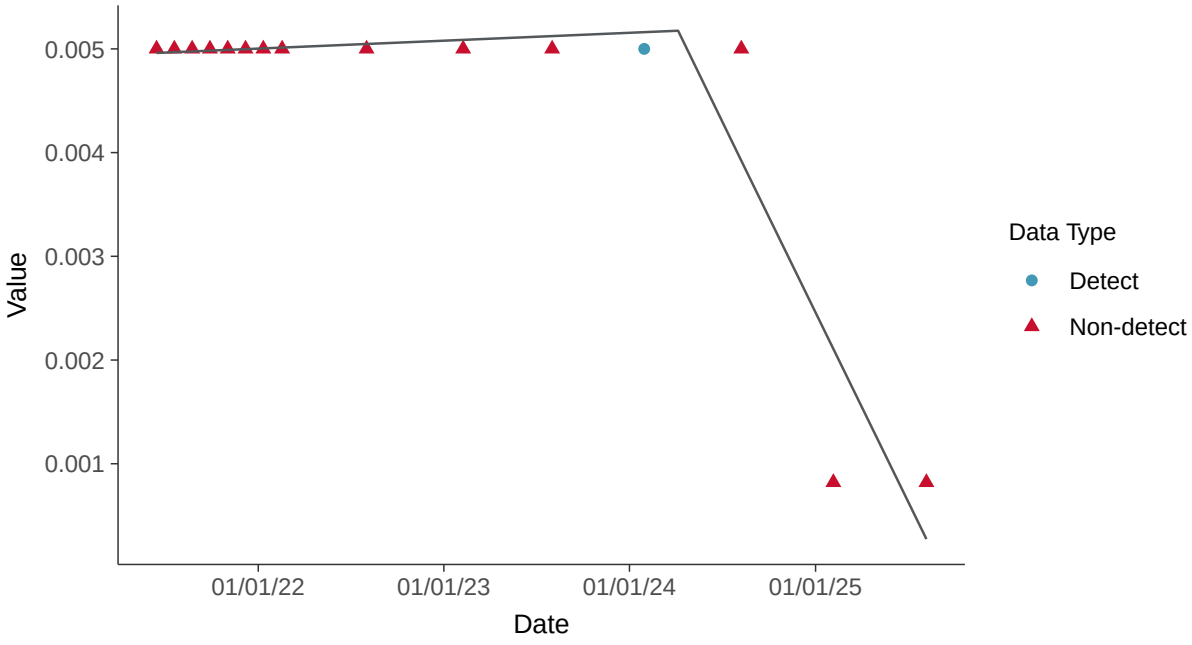
Boxplot by Season

Vanadium, MW-8 (mg/l)



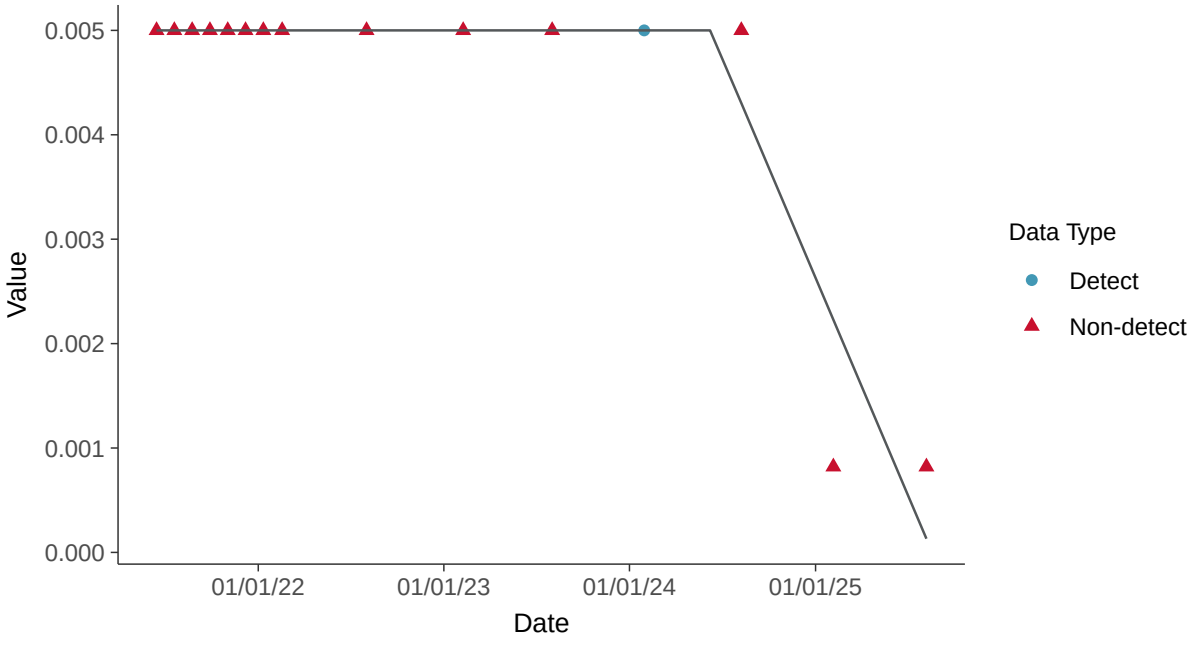
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-8 (mg/l)



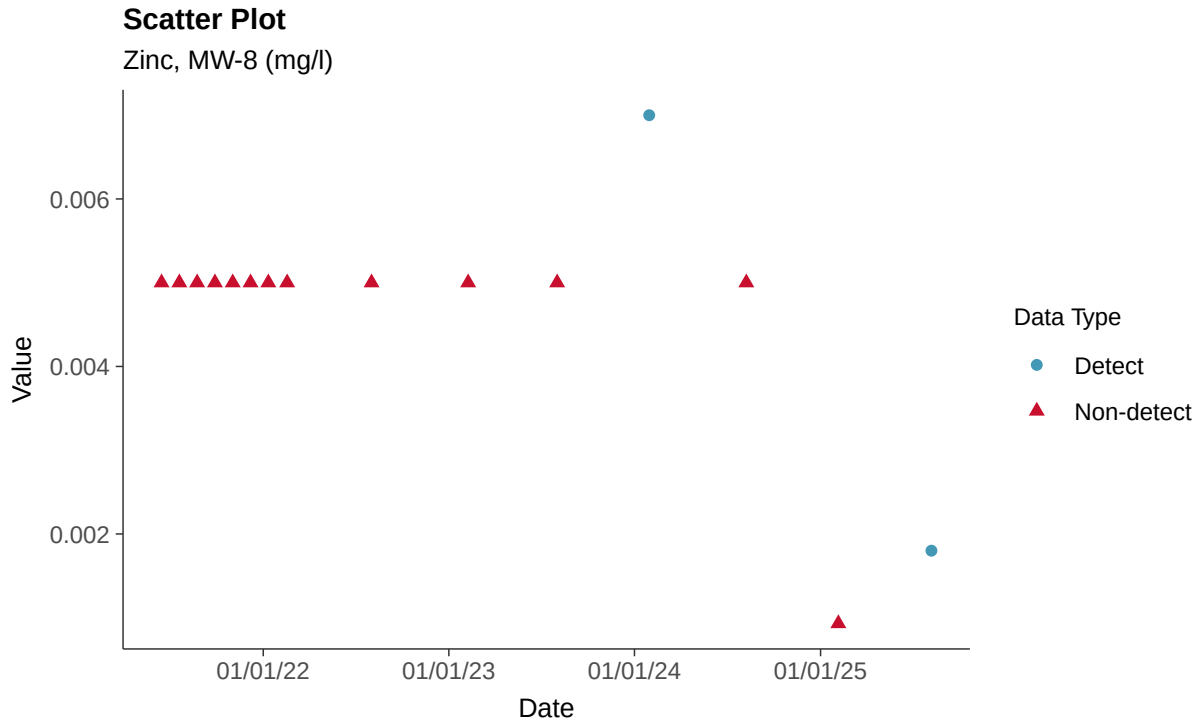
Trend Regression: Piecewise Linear-Linear-Linear

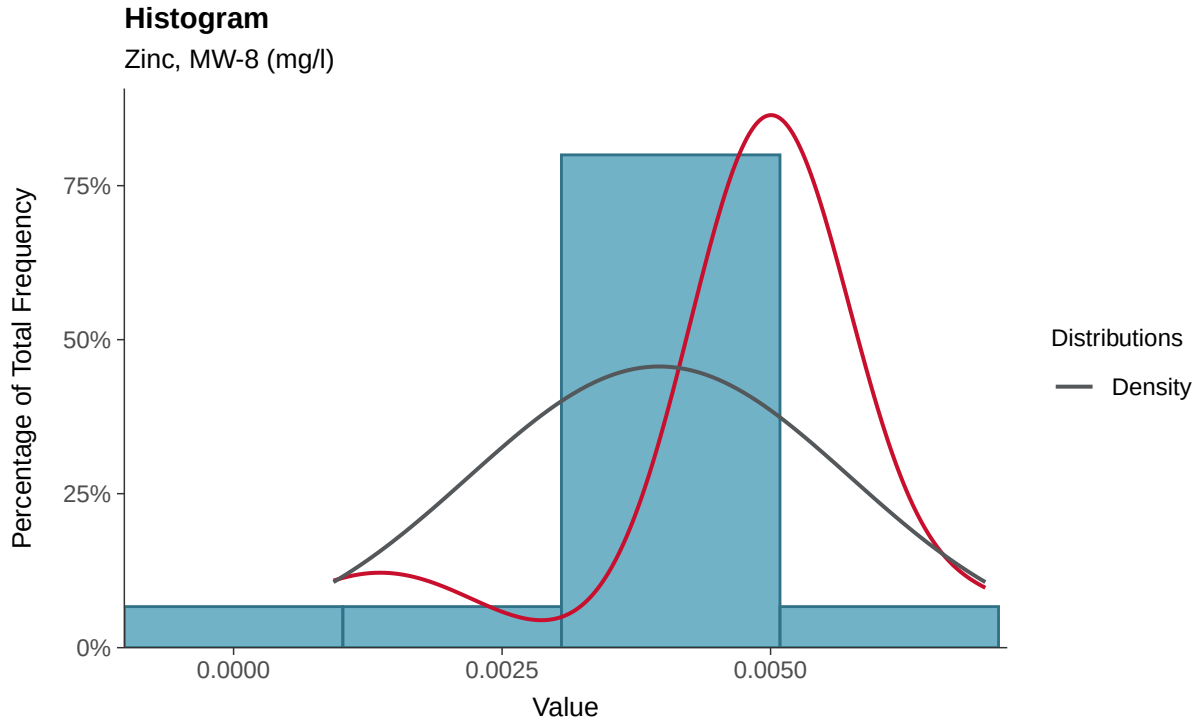
Vanadium, MW-8 (mg/l)



Part 115: Zinc, MW-8

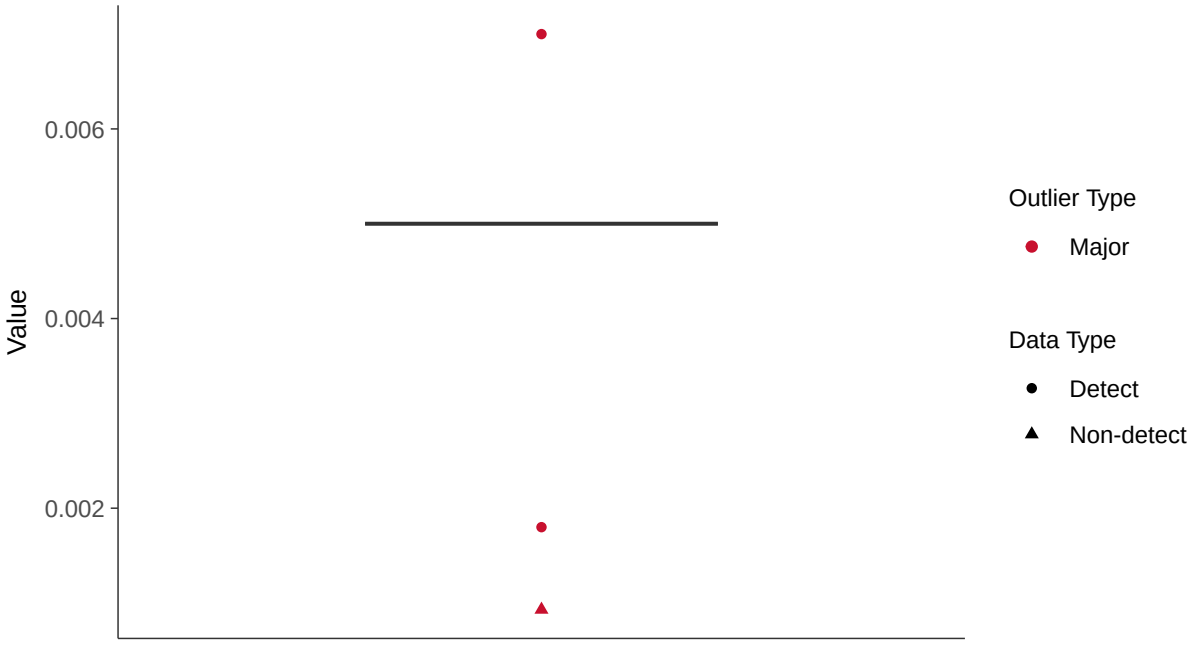
ID: 19_5_129





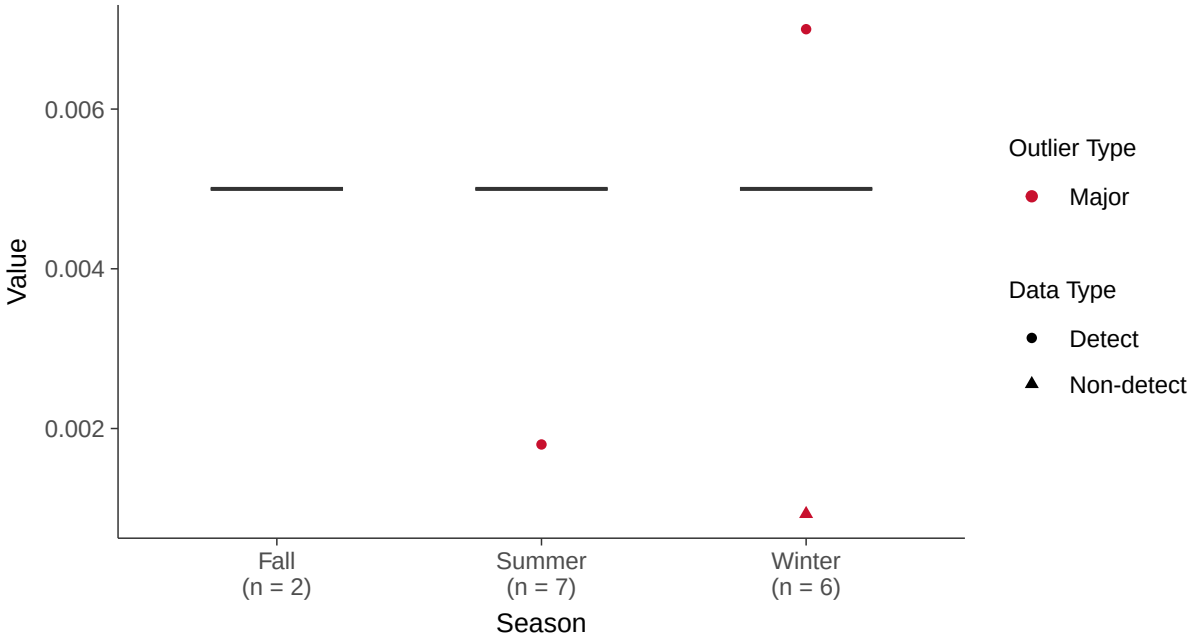
Boxplot

Zinc, MW-8 (mg/l)



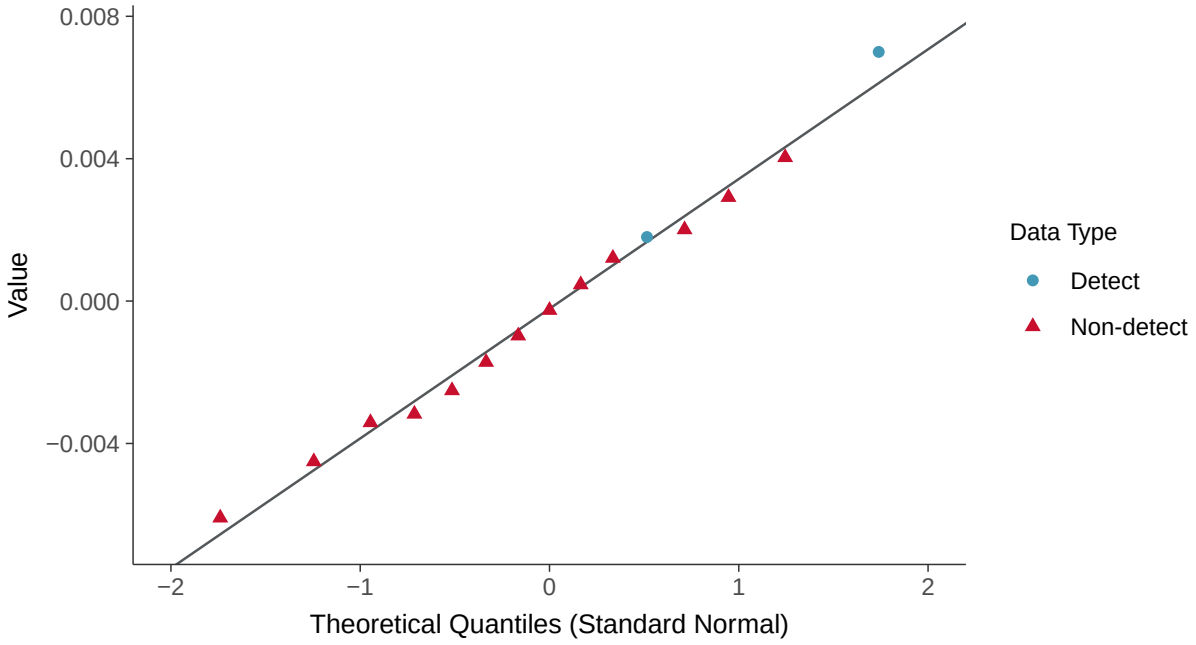
Boxplot by Season

Zinc, MW-8 (mg/l)



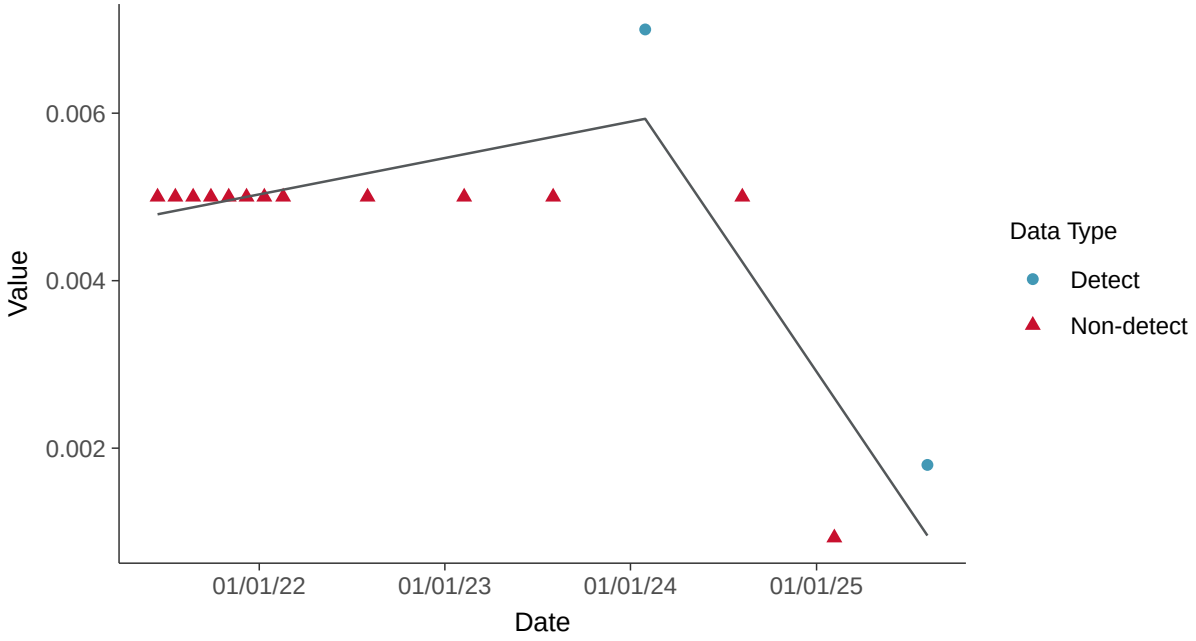
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-8 (mg/l)



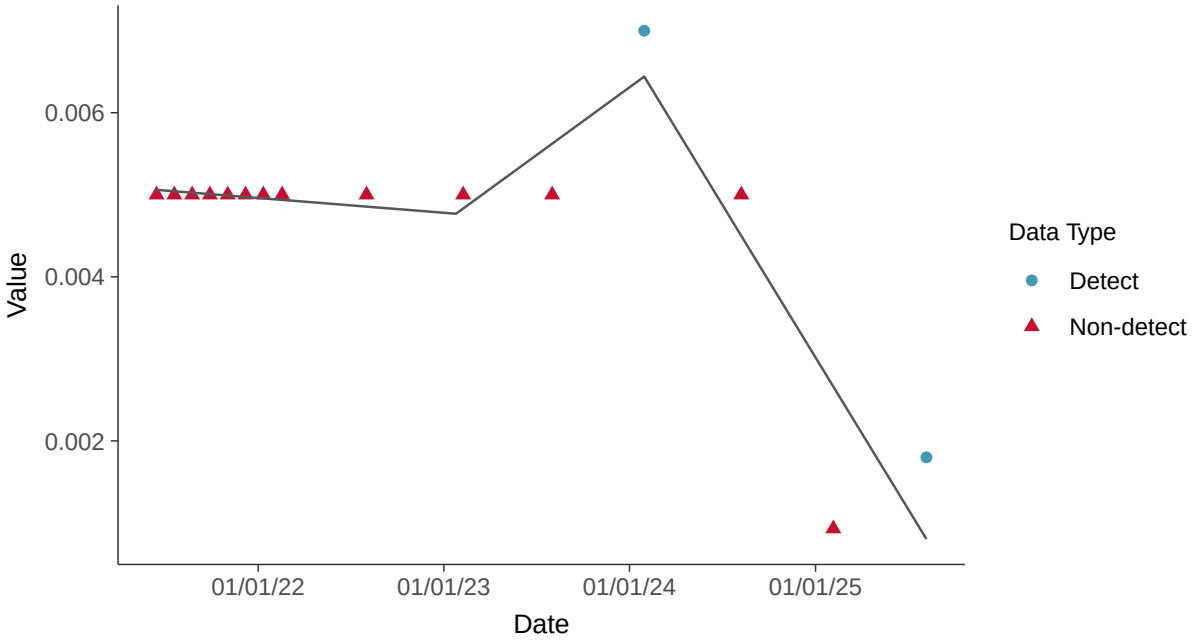
Trend Regression: Piecewise Linear-Linear

Zinc, MW-8 (mg/l)



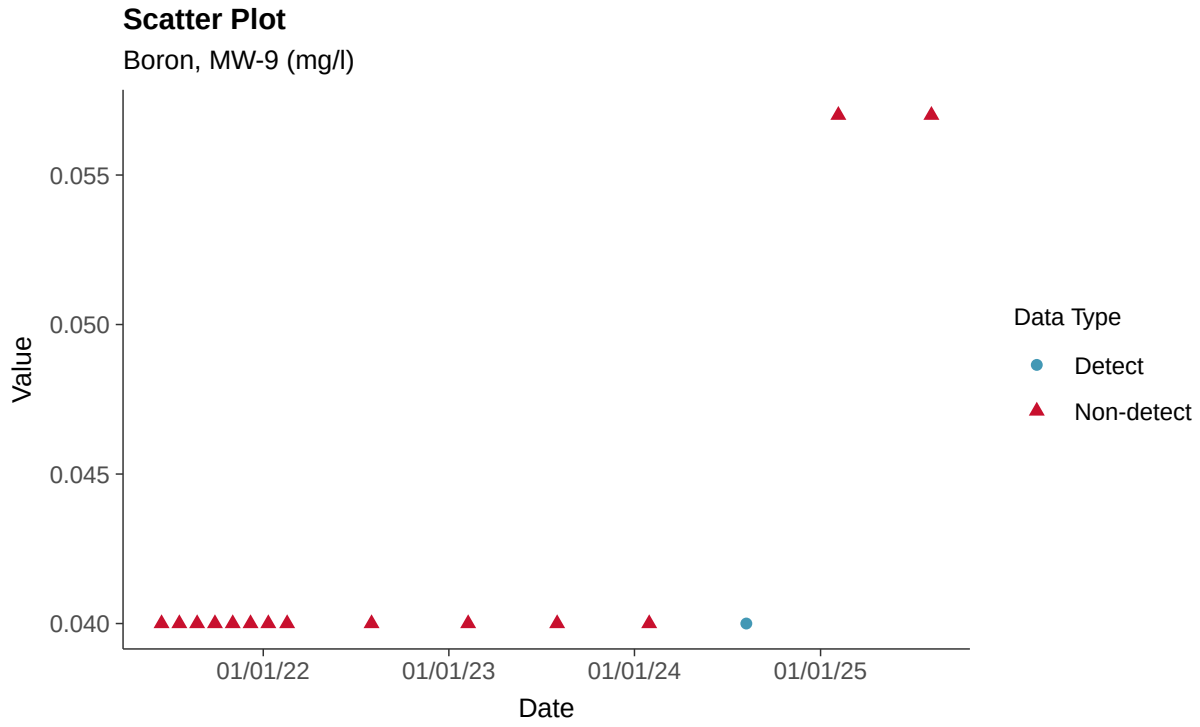
Trend Regression: Piecewise Linear-Linear-Linear

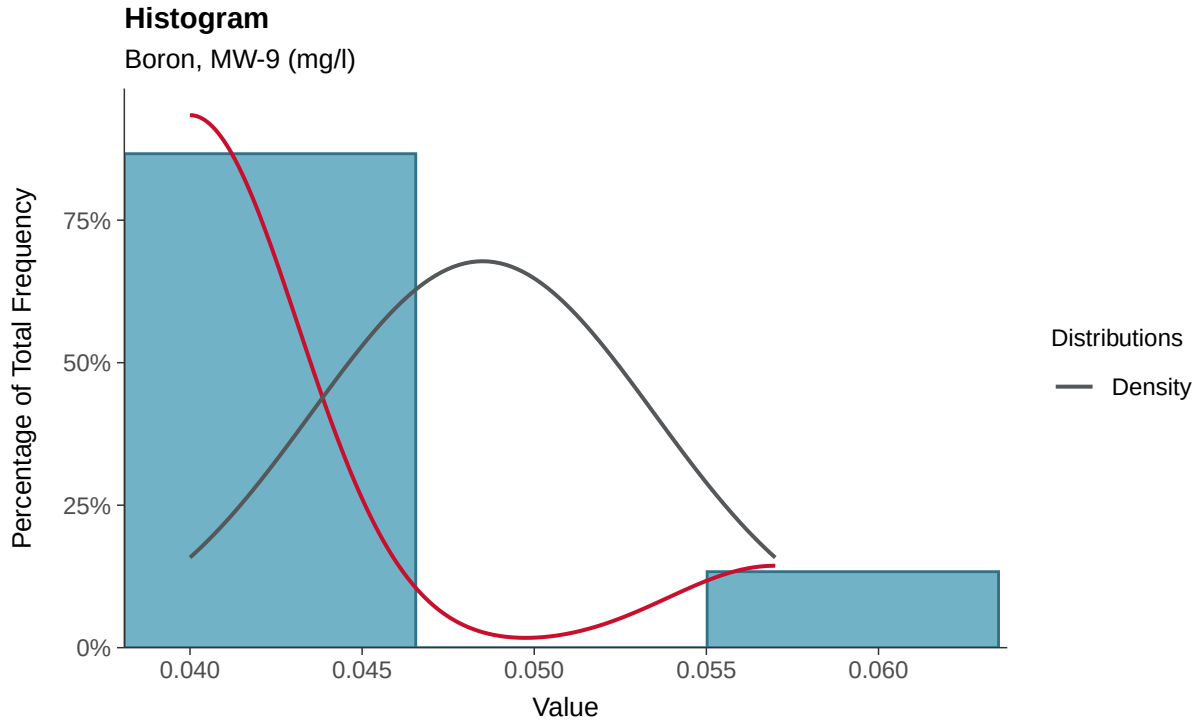
Zinc, MW-8 (mg/l)



Appendix III: Boron, MW-9

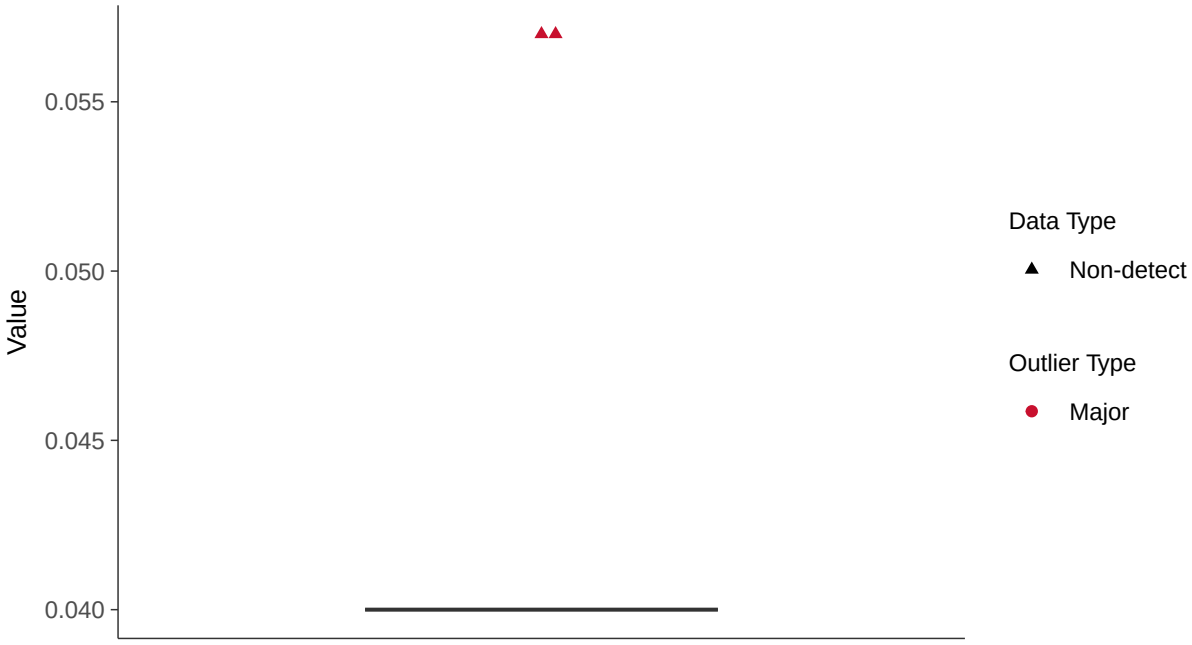
ID: 20_2_105





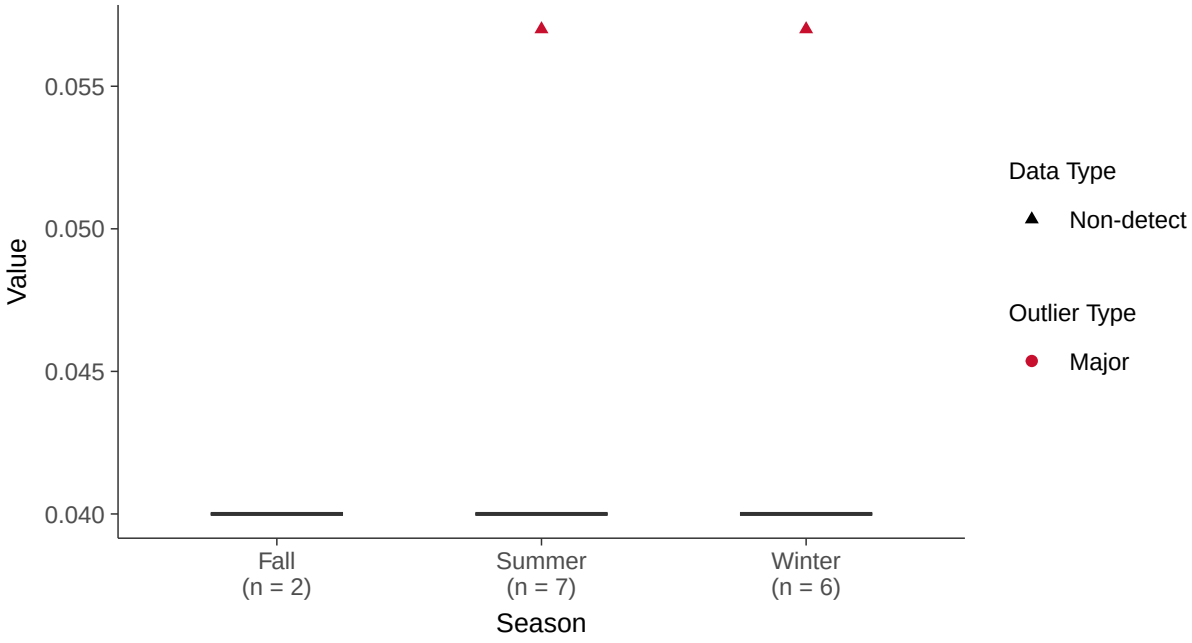
Boxplot

Boron, MW-9 (mg/l)



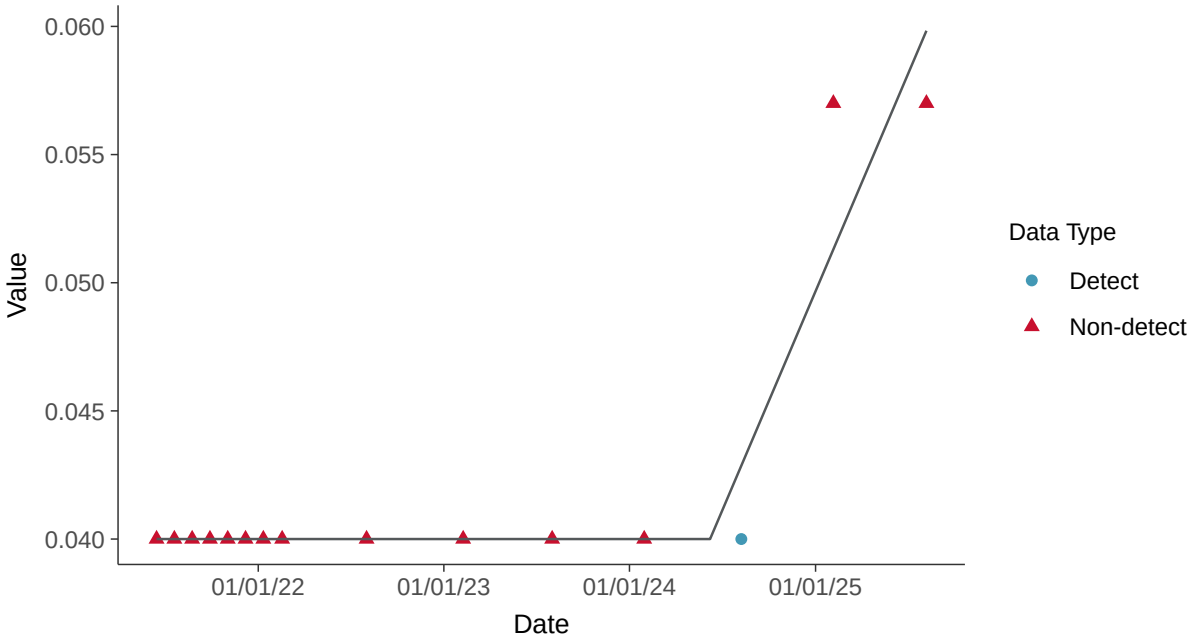
Boxplot by Season

Boron, MW-9 (mg/l)



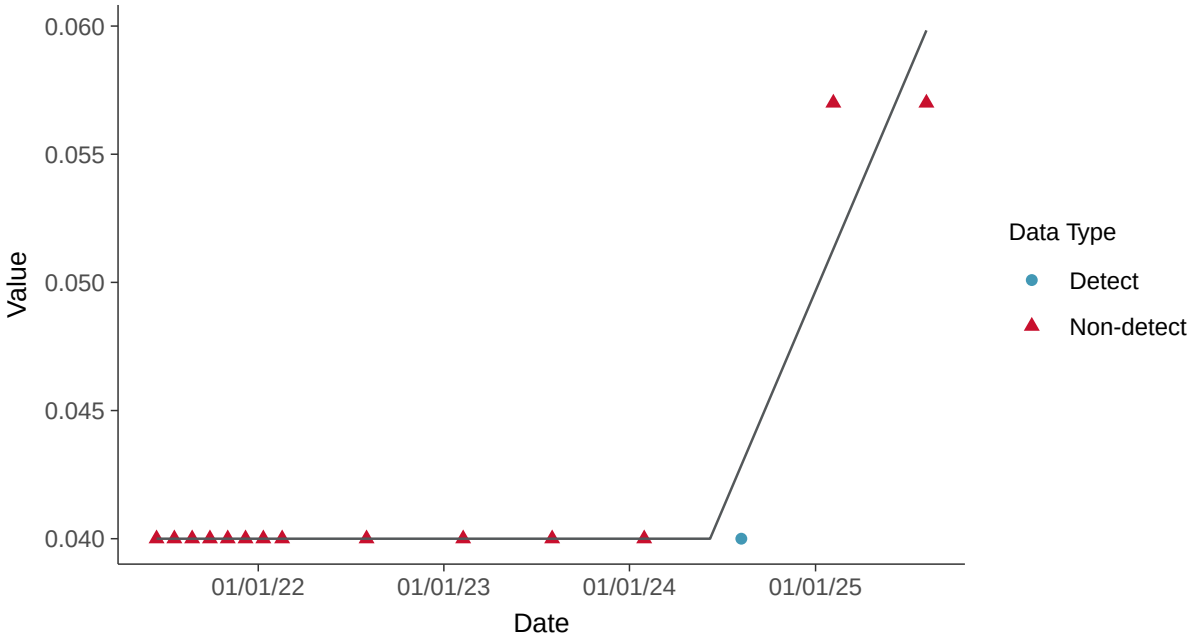
Trend Regression: Piecewise Linear-Linear

Boron, MW-9 (mg/l)



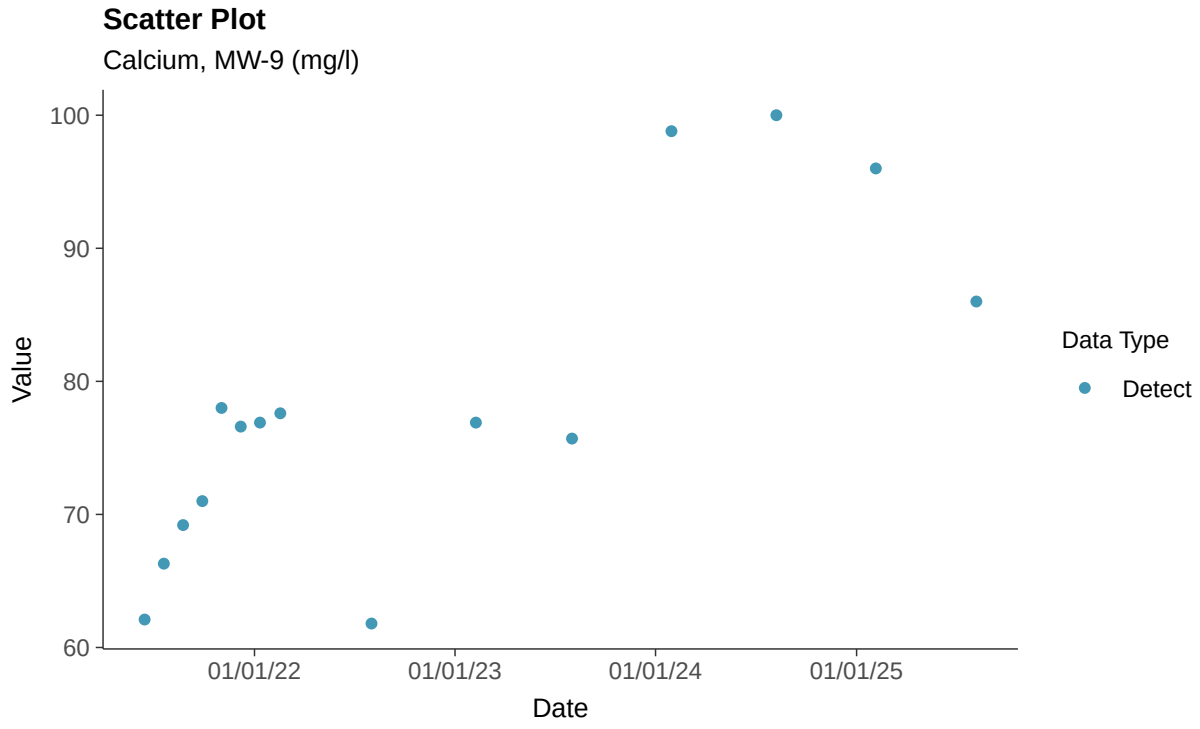
Trend Regression: Piecewise Linear-Linear-Linear

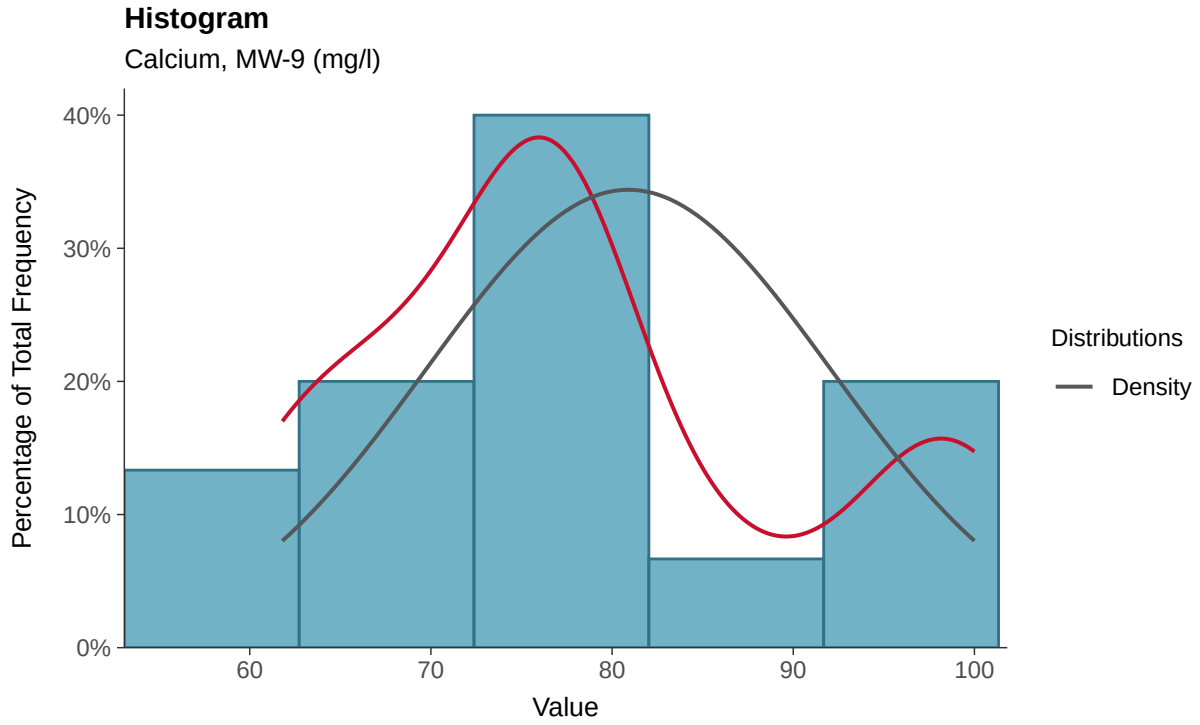
Boron, MW-9 (mg/l)



Appendix III: Calcium, MW-9

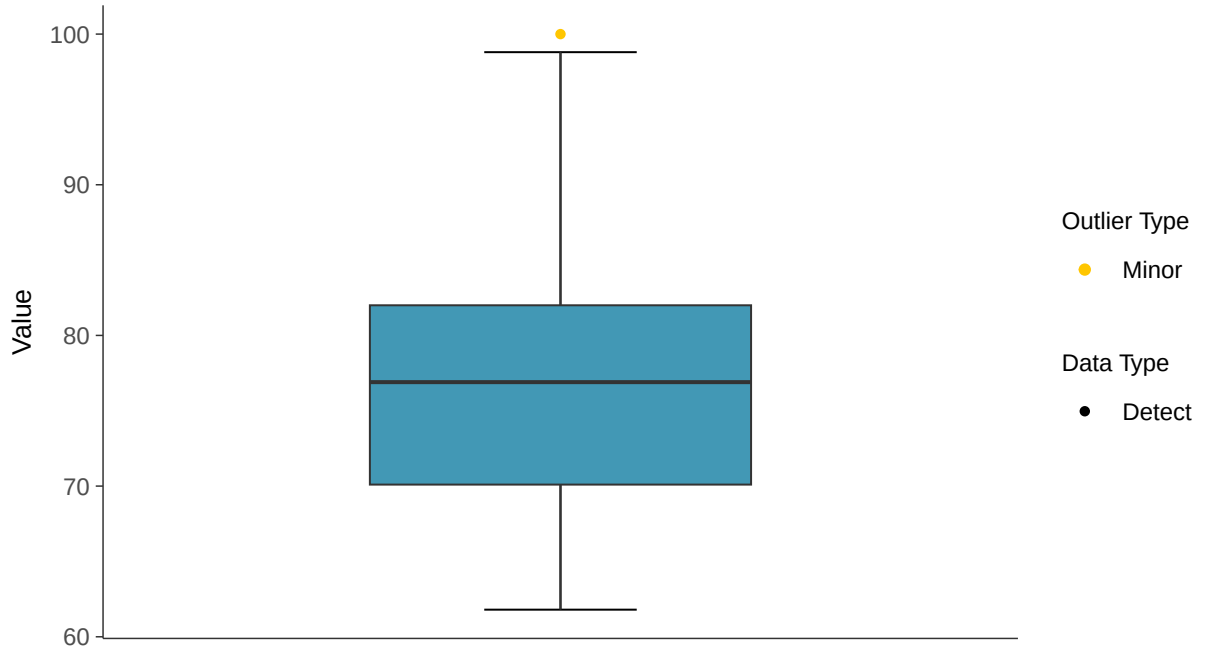
ID: 20_2_107





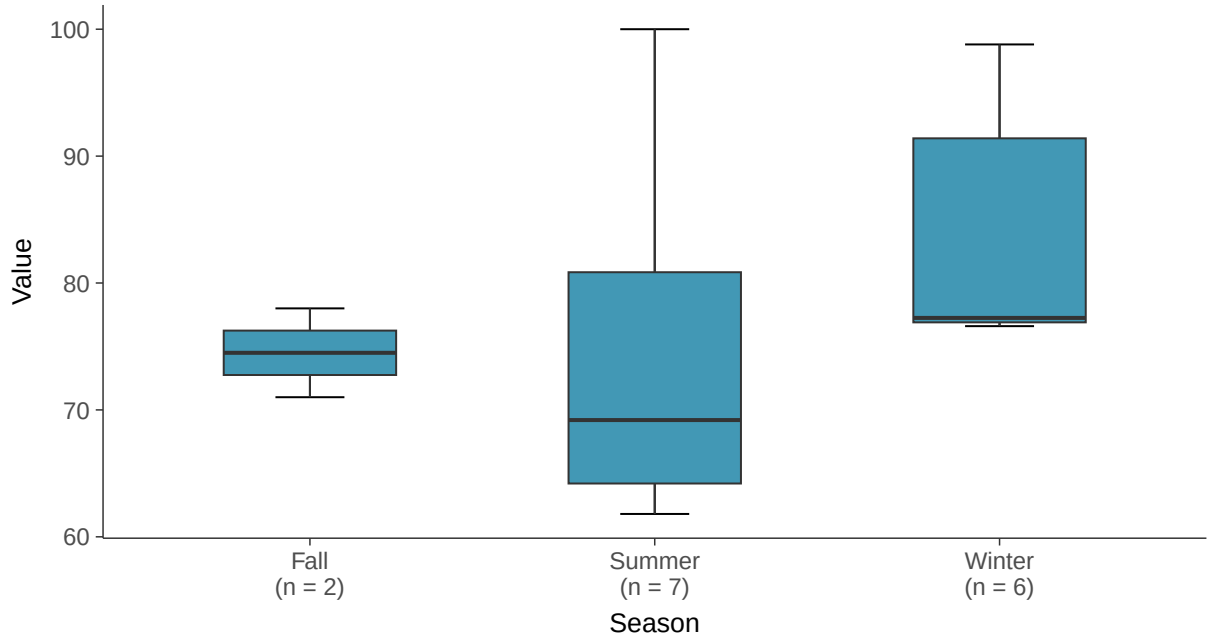
Boxplot

Calcium, MW-9 (mg/l)



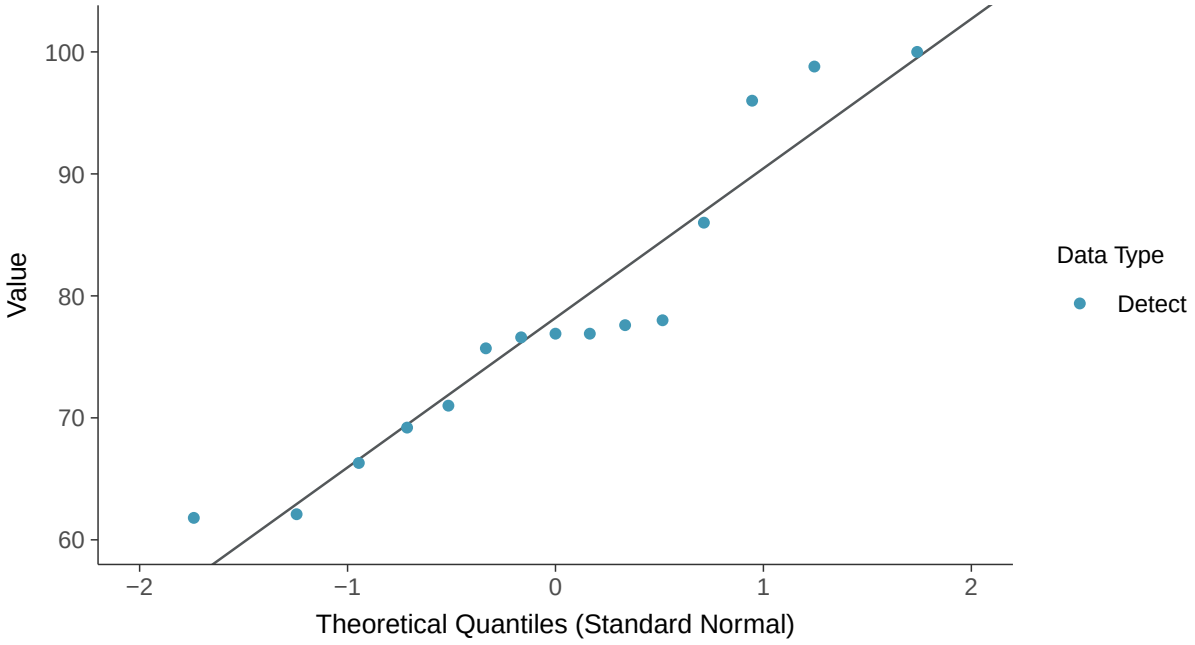
Boxplot by Season

Calcium, MW-9 (mg/l)



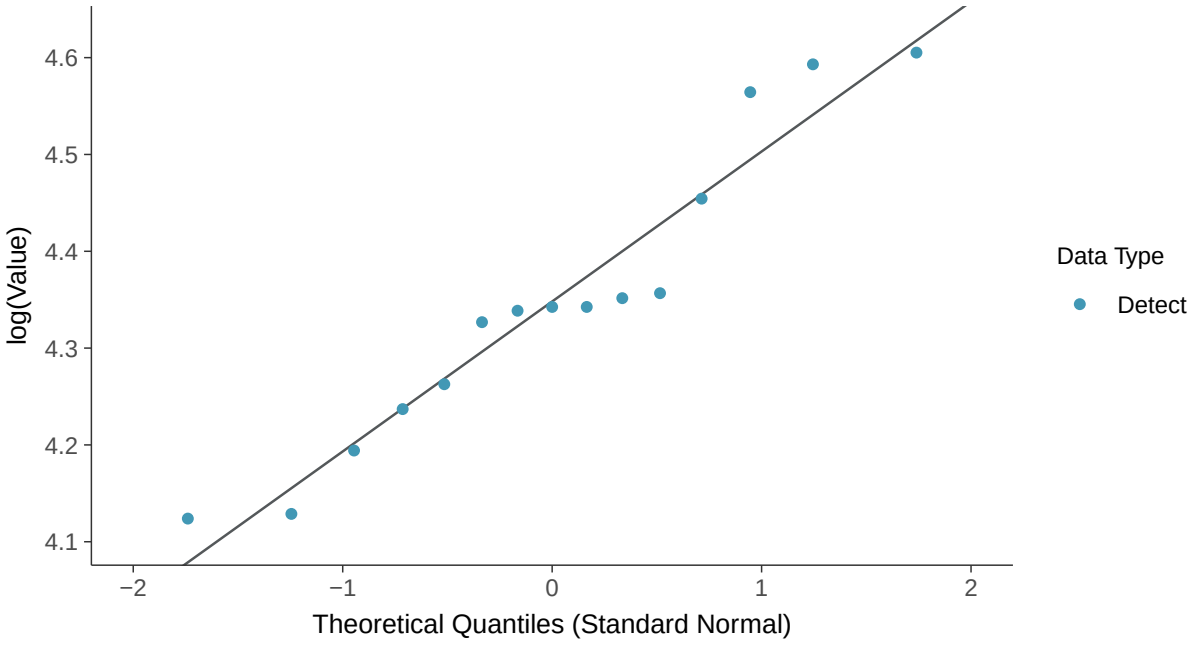
Normal Q-Q plot

Calcium, MW-9 (mg/l)



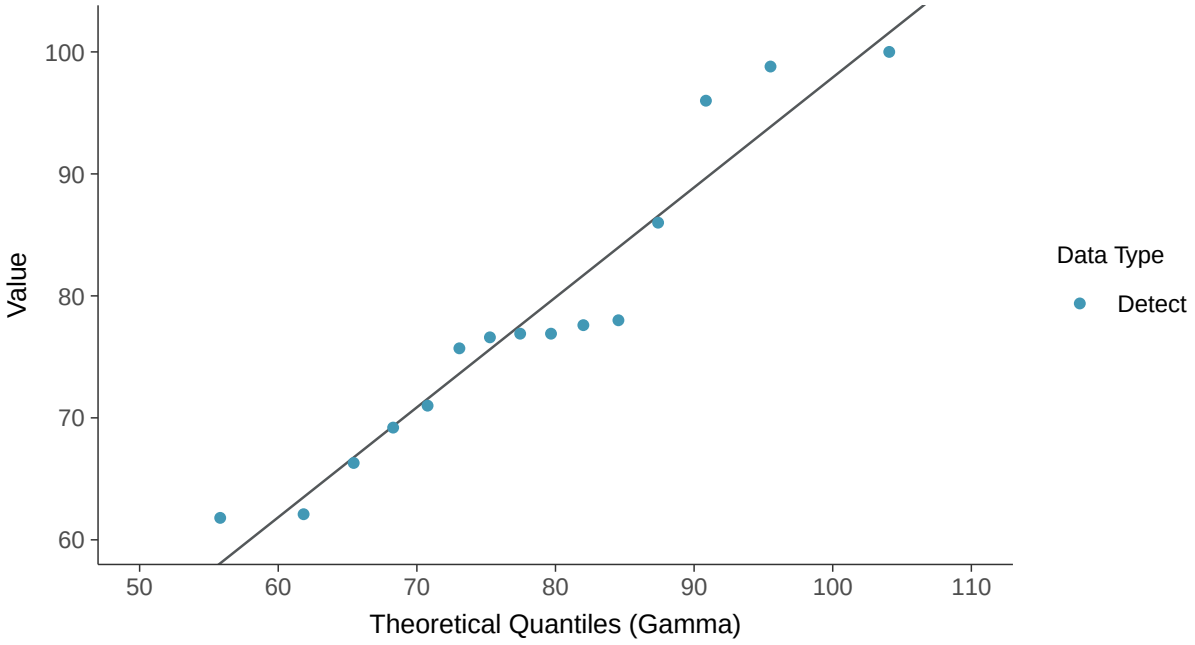
Lognormal Q-Q plot

Calcium, MW-9 (mg/l)



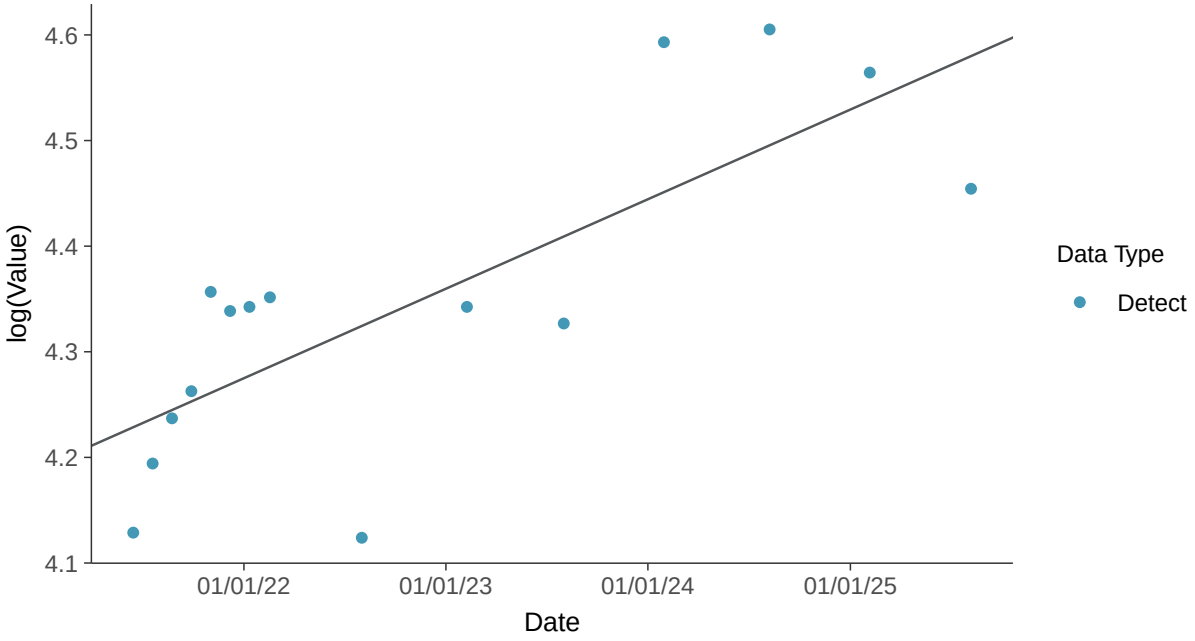
Gamma Q-Q plot

Calcium, MW-9 (mg/l)



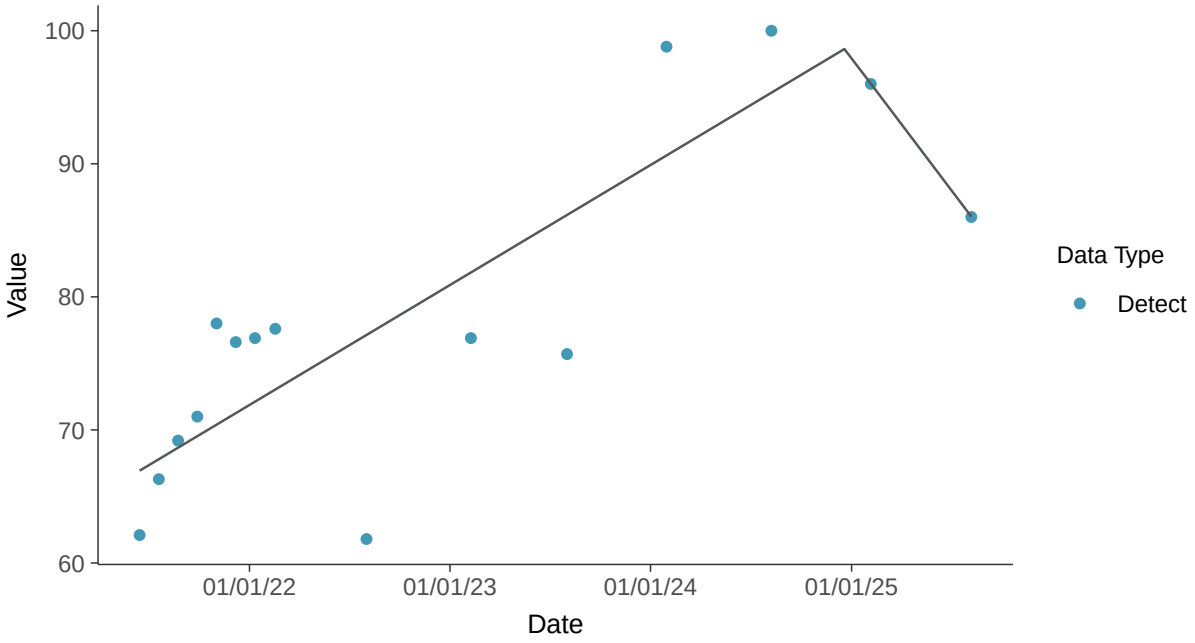
Trend Regression: Lognormal MLE

Calcium, MW-9 (mg/l)



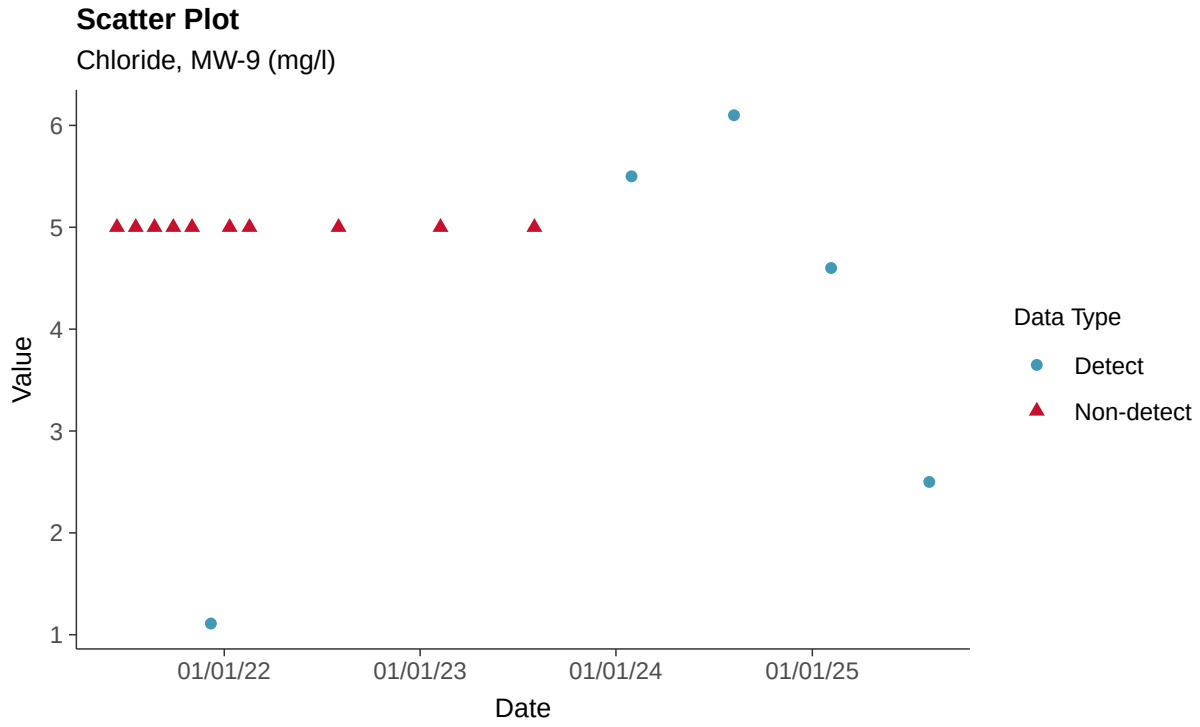
Trend Regression: Piecewise Linear-Linear

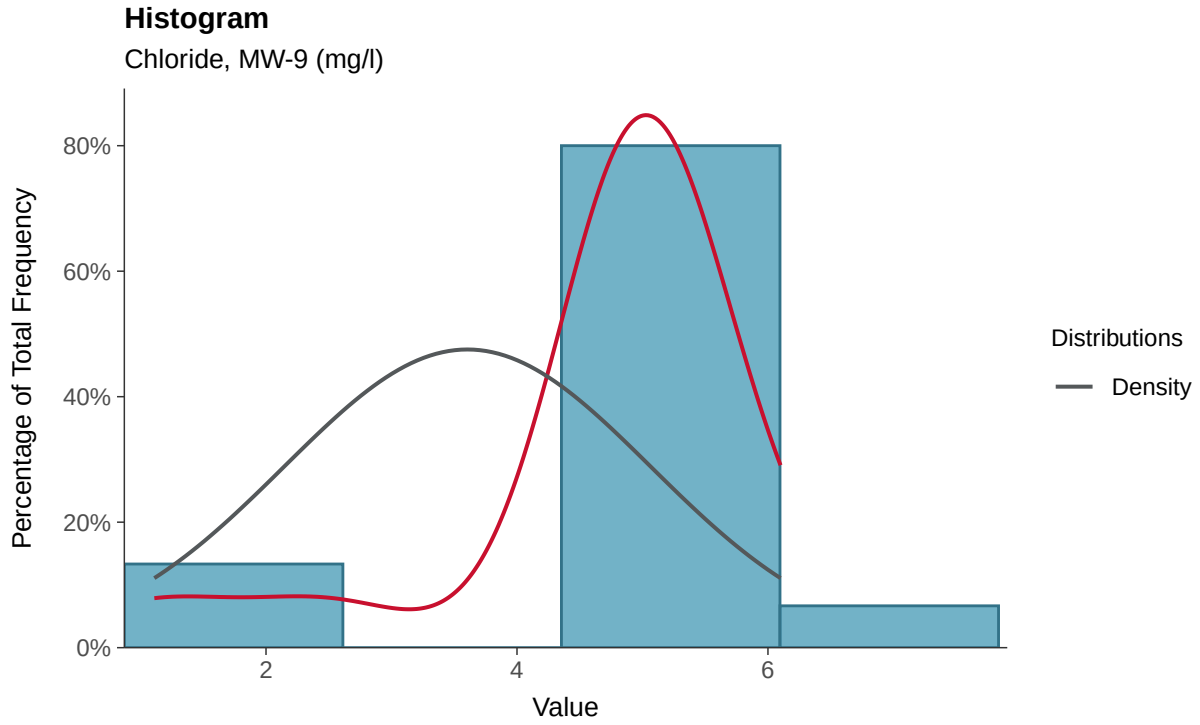
Calcium, MW-9 (mg/l)



Appendix III: Chloride, MW-9

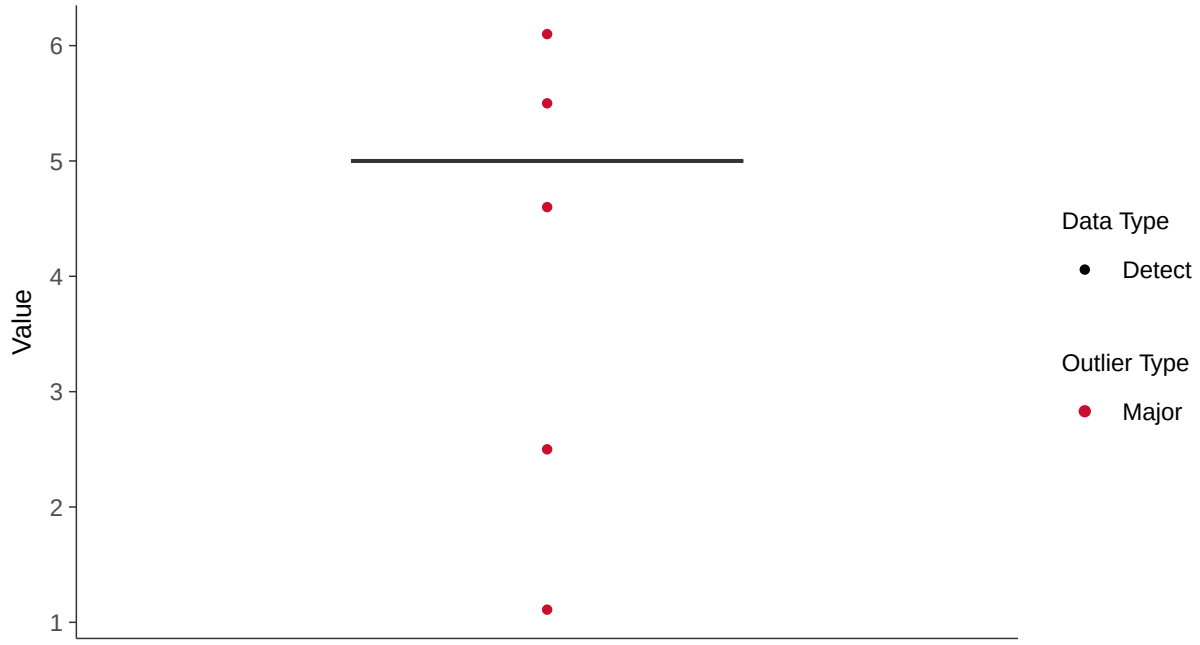
ID: 20_2_108





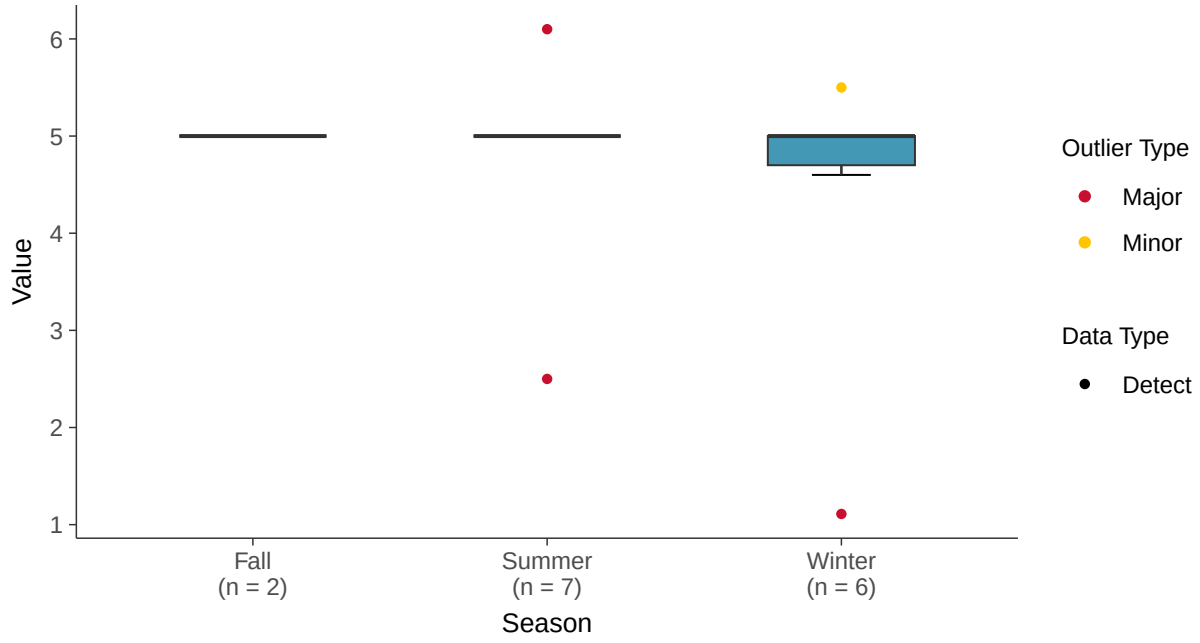
Boxplot

Chloride, MW-9 (mg/l)



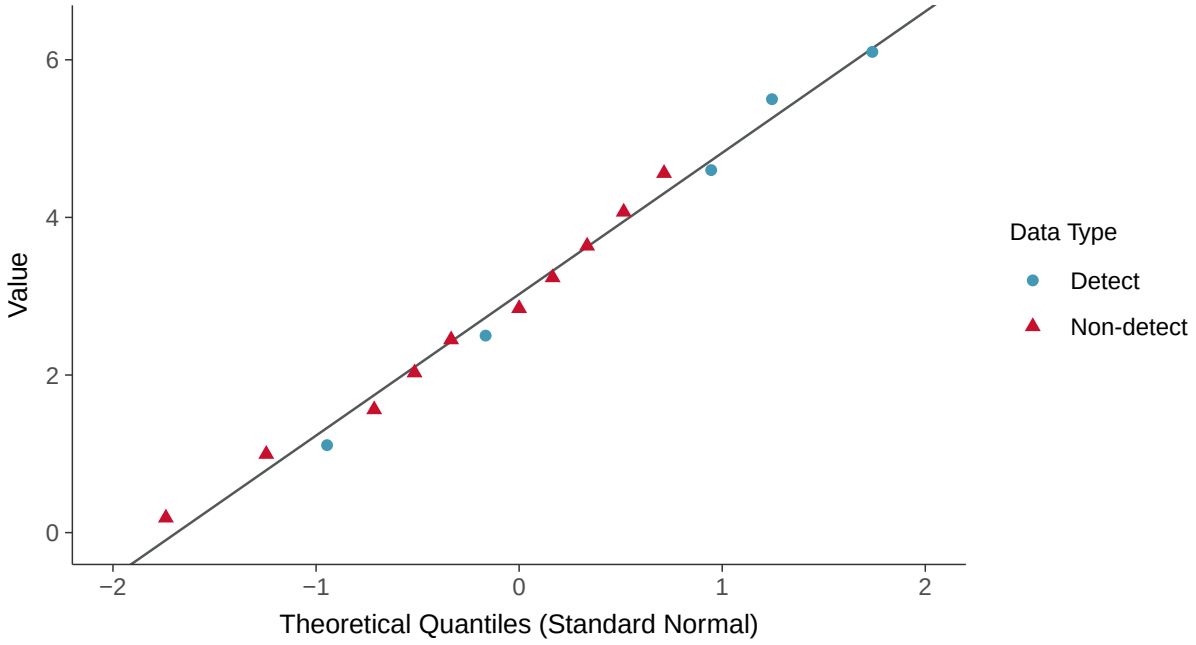
Boxplot by Season

Chloride, MW-9 (mg/l)



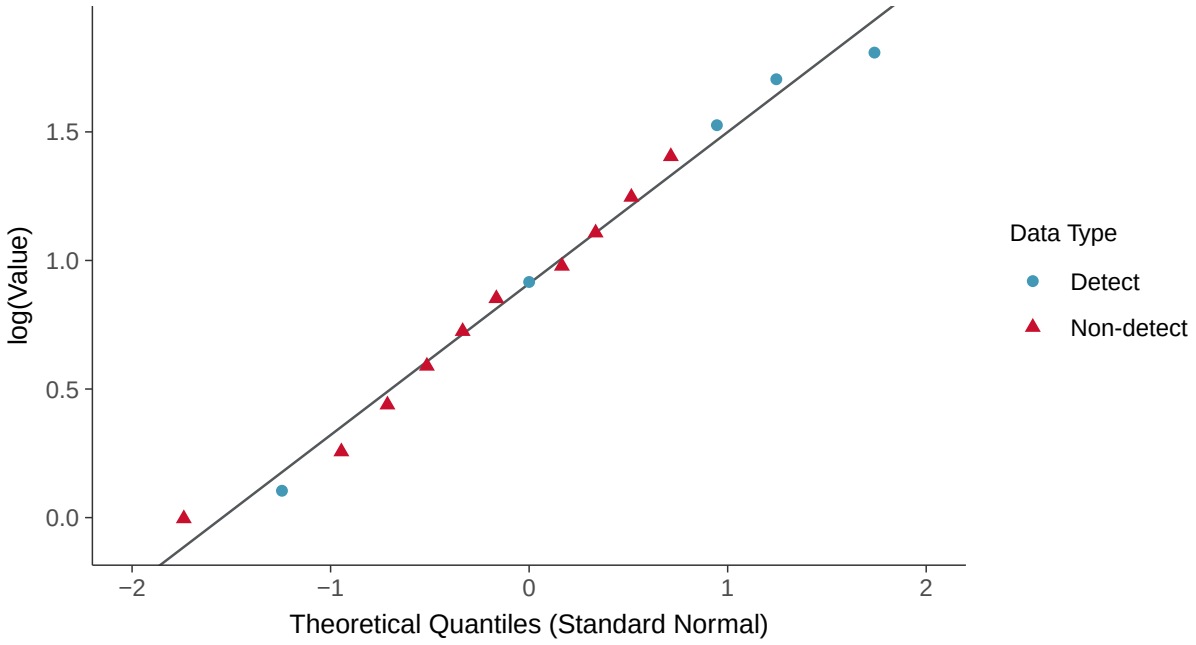
Normal Q-Q plot using ROS Imputed Estimates

Chloride, MW-9 (mg/l)



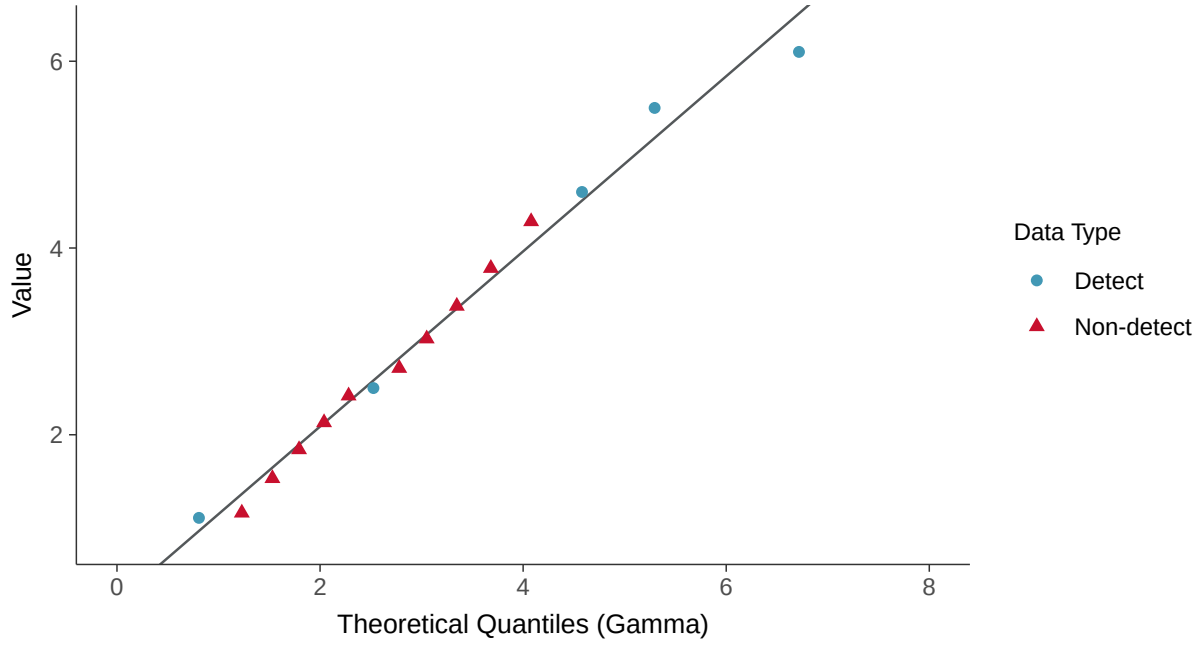
Lognormal Q-Q plot using ROS Imputed Estimates

Chloride, MW-9 (mg/l)



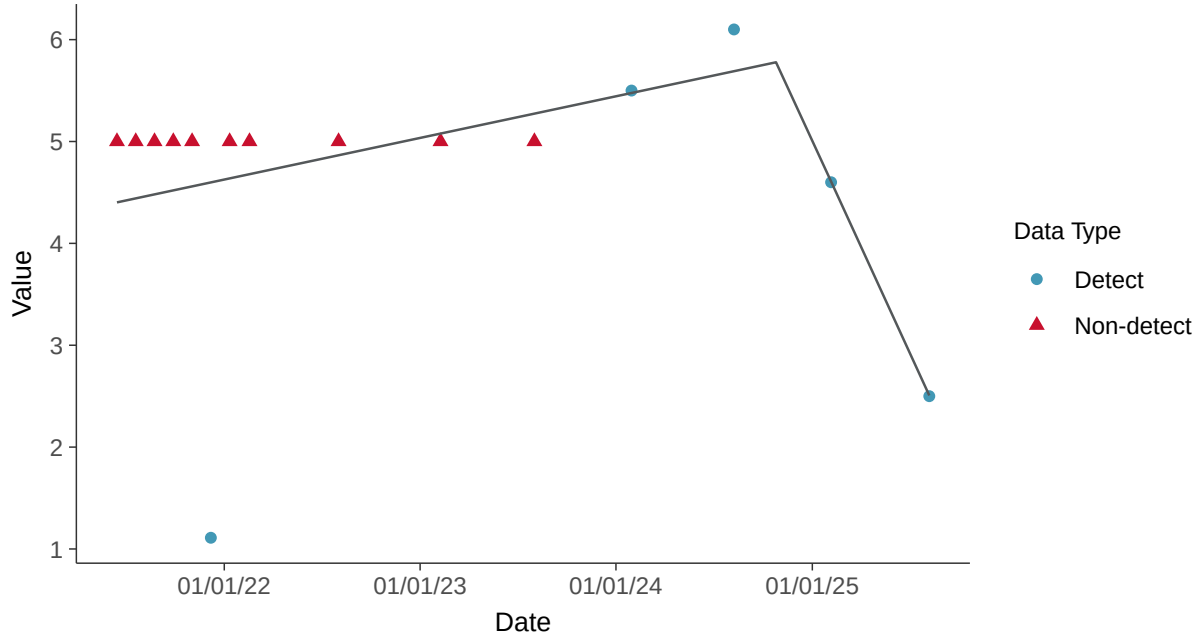
Gamma Q-Q plot using ROS Imputed Estimates

Chloride, MW-9 (mg/l)



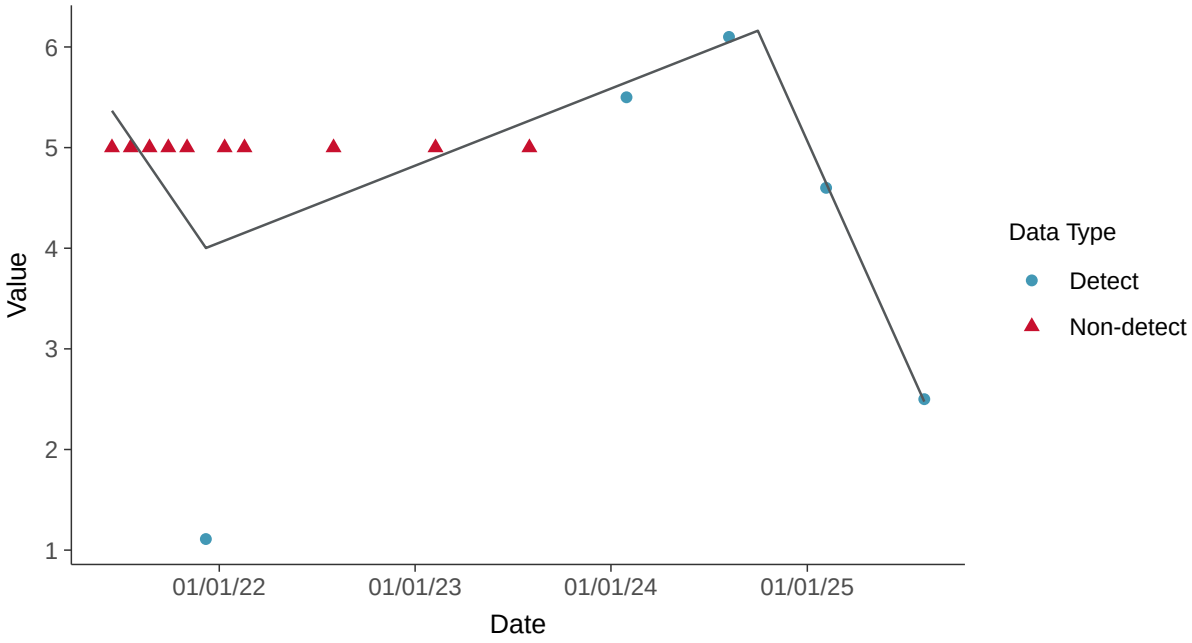
Trend Regression: Piecewise Linear-Linear

Chloride, MW-9 (mg/l)



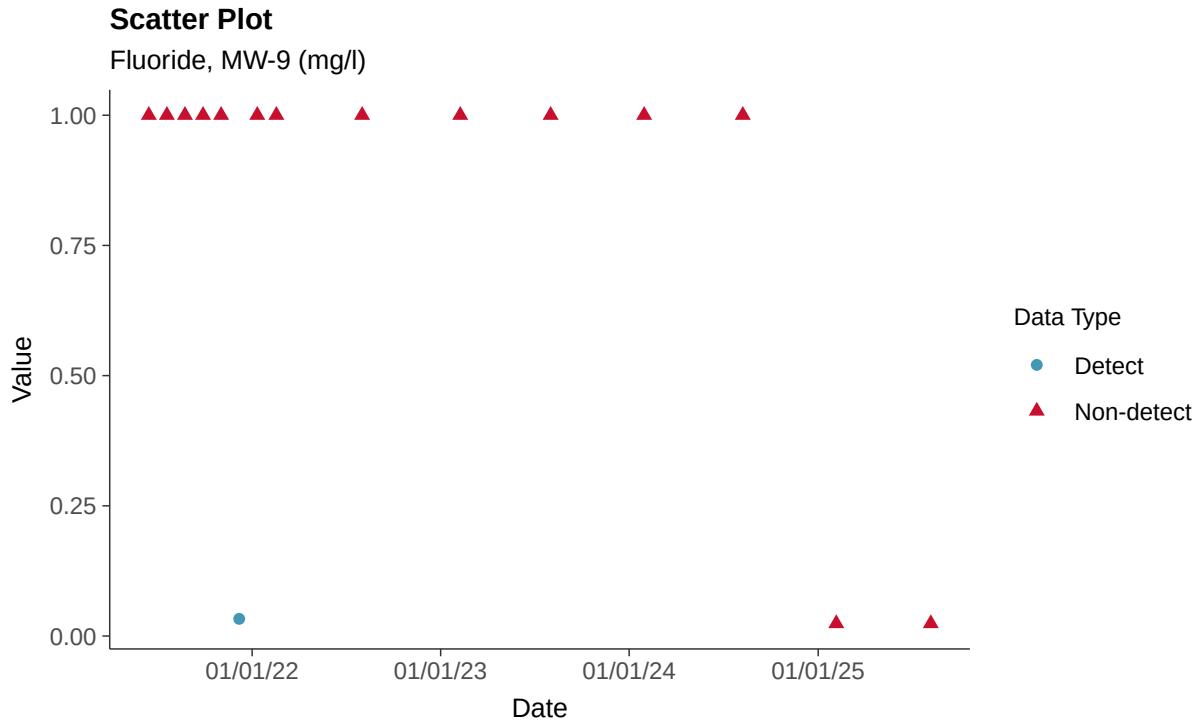
Trend Regression: Piecewise Linear-Linear-Linear

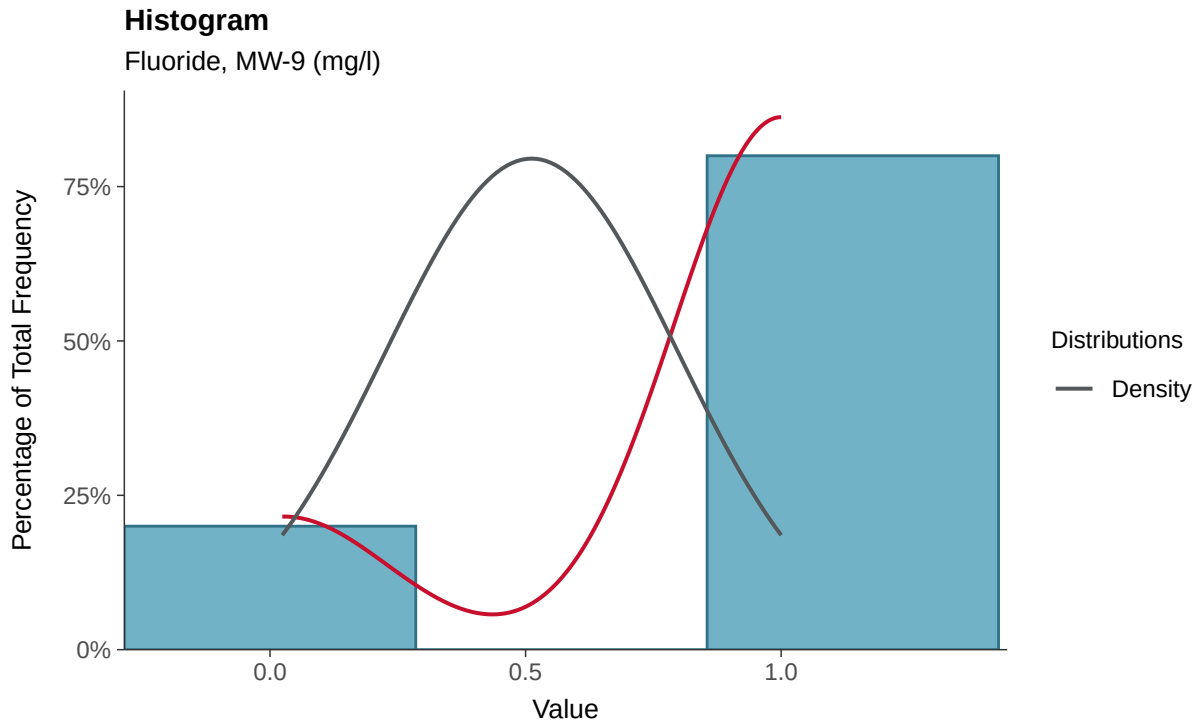
Chloride, MW-9 (mg/l)



Appendix III: Fluoride, MW-9

ID: 20_2_112



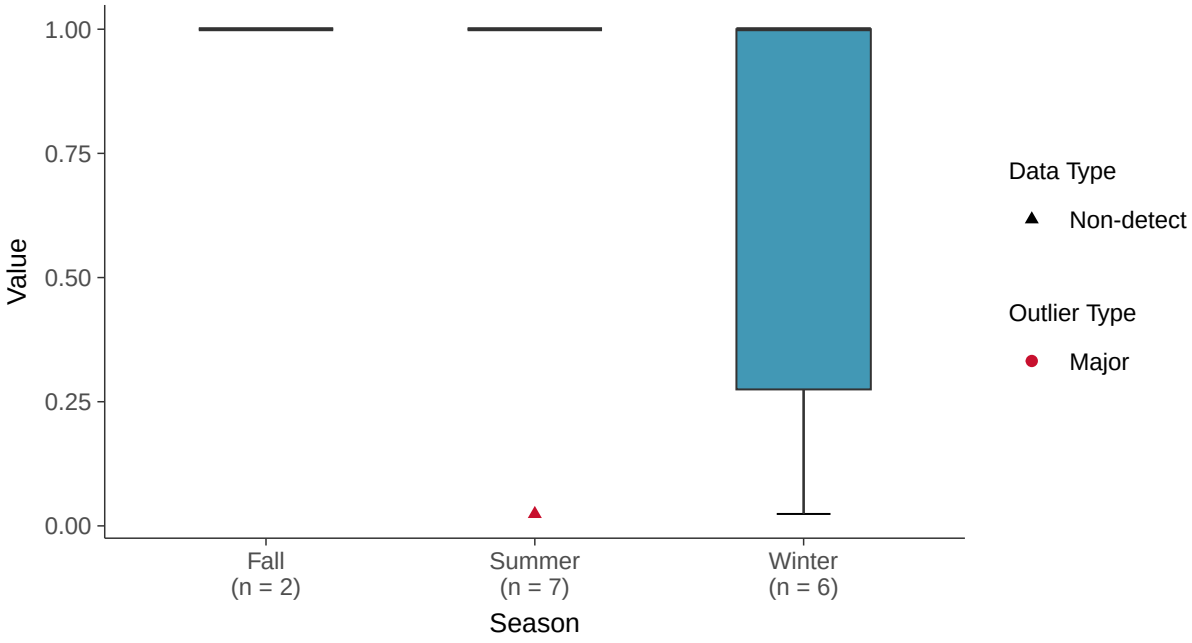


Boxplot

Fluoride, MW-9 (mg/l)

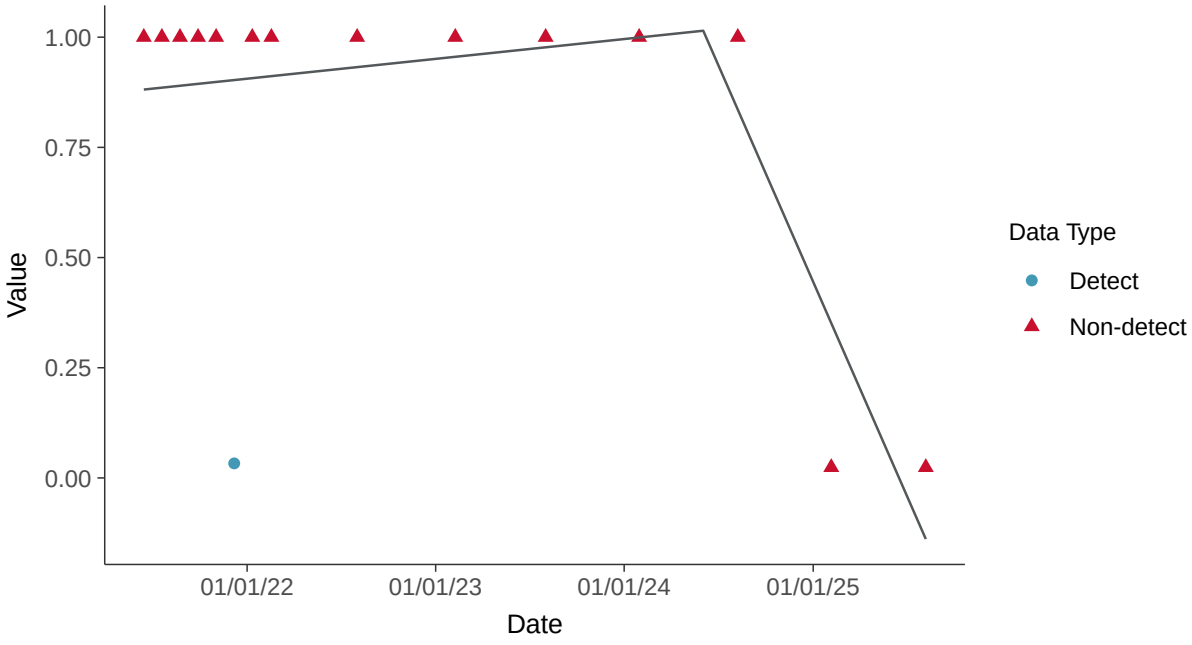
Boxplot by Season

Fluoride, MW-9 (mg/l)



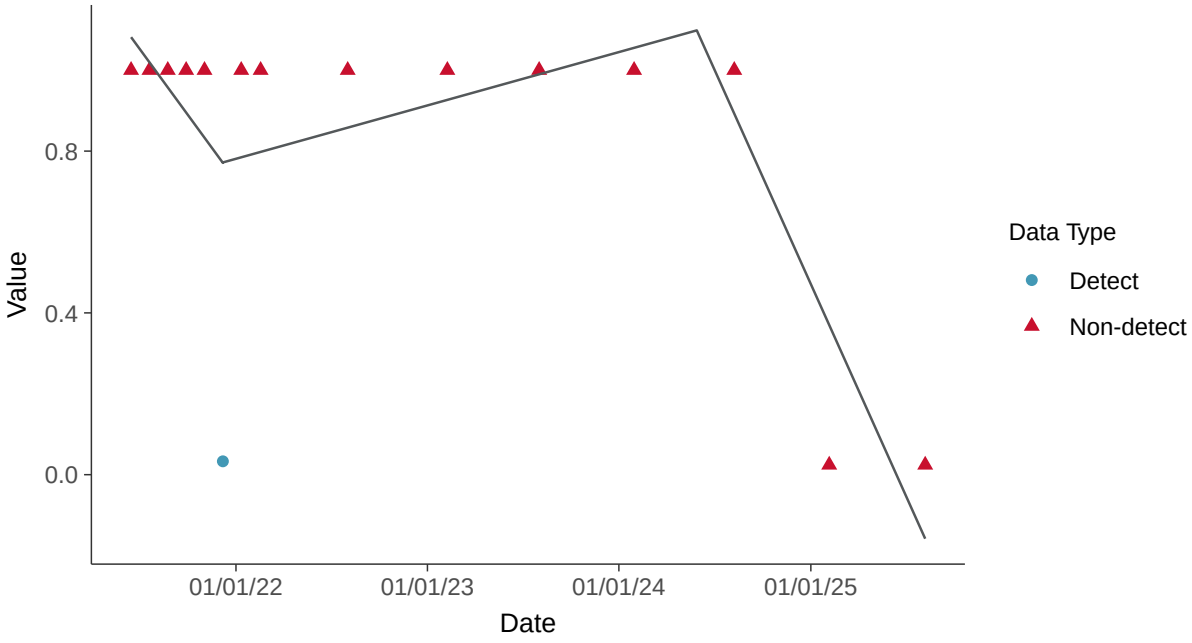
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-9 (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-9 (mg/l)

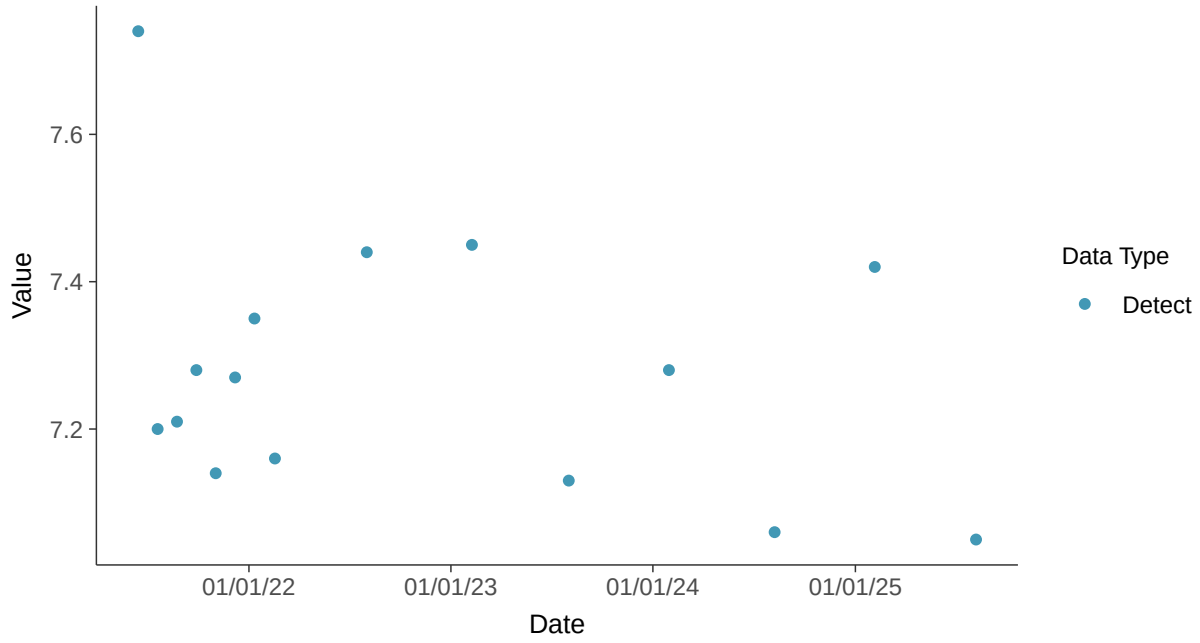


Appendix III: pH, Field, MW-9

ID: 20_2_120

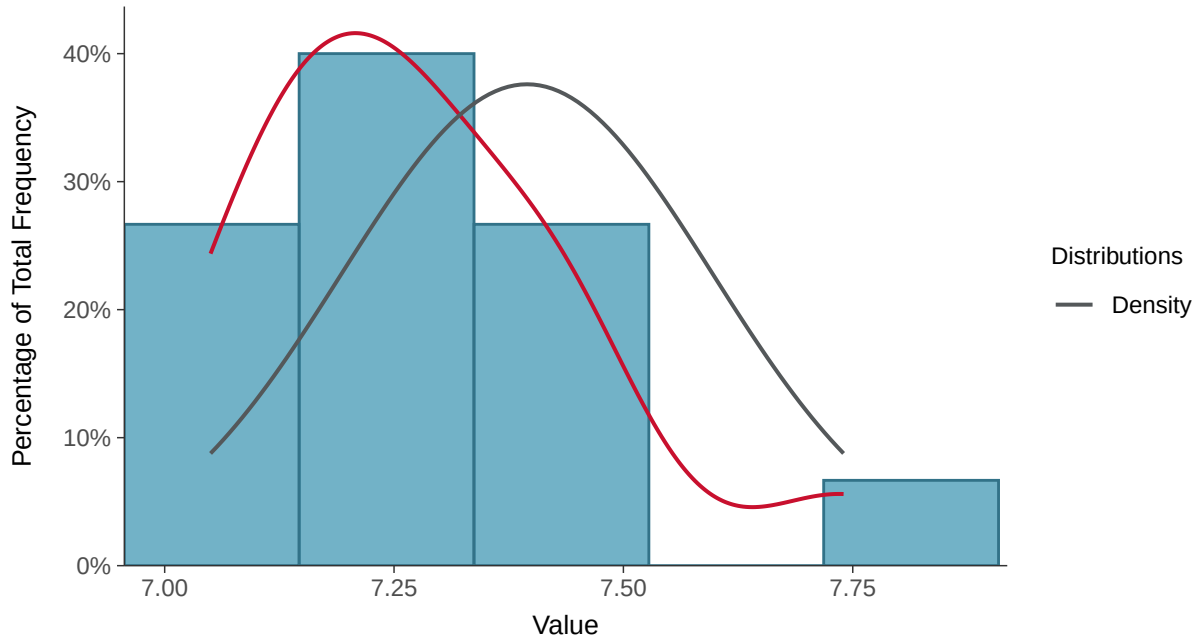
Scatter Plot

pH, Field, MW-9 (su)



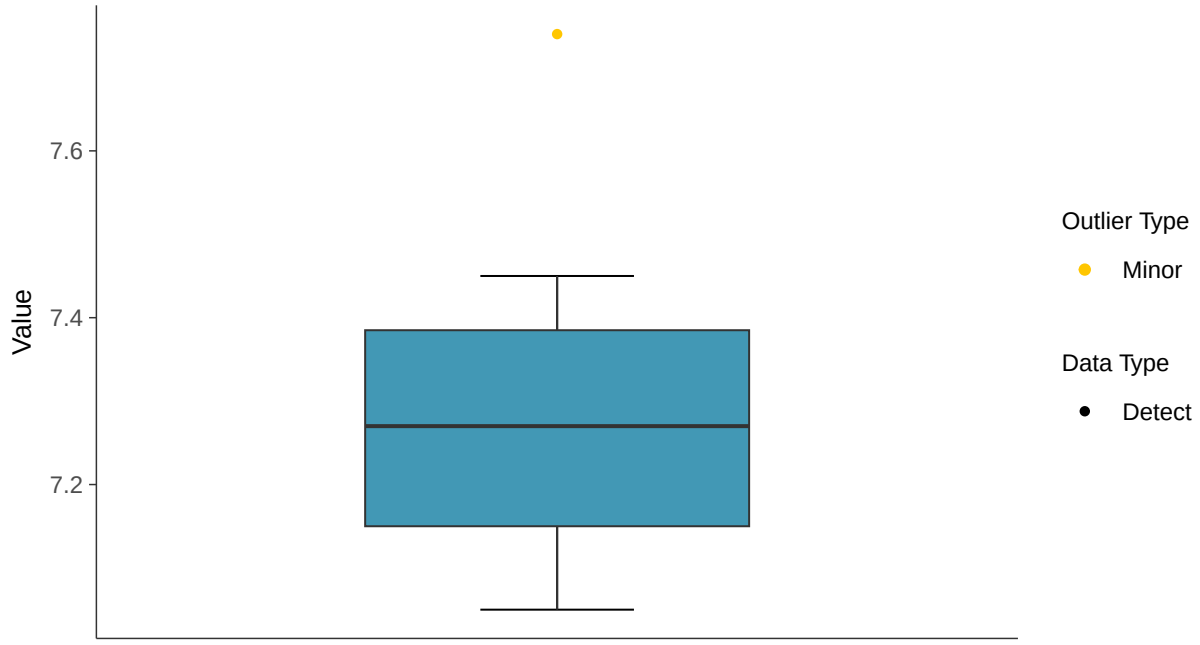
Histogram

pH, Field, MW-9 (su)



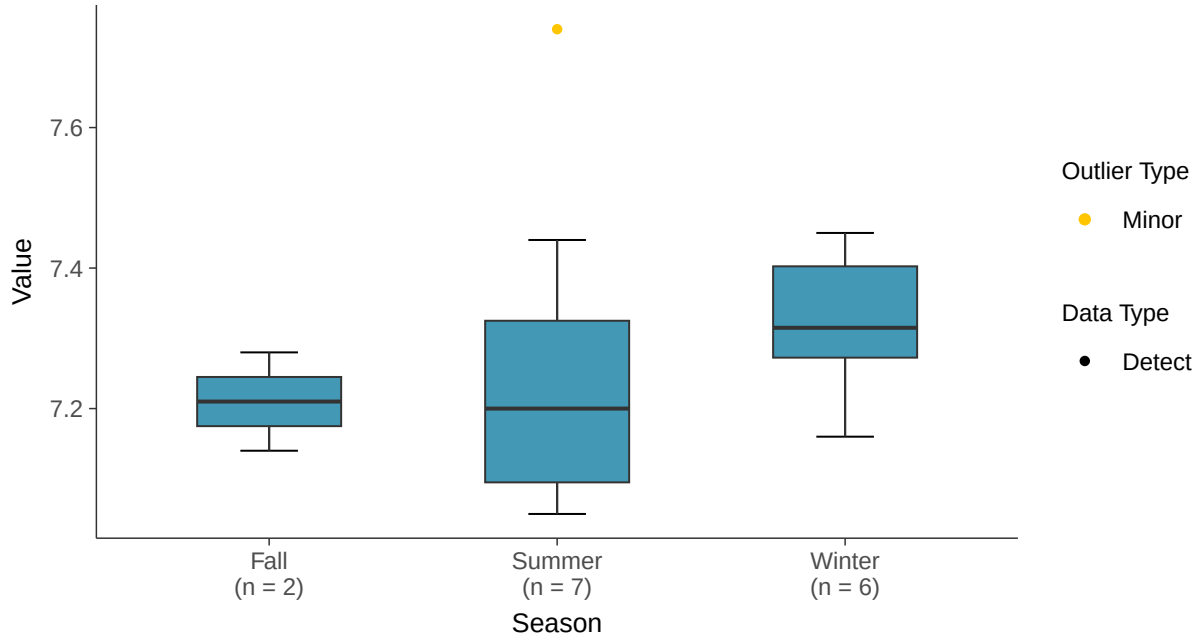
Boxplot

pH, Field, MW-9 (su)



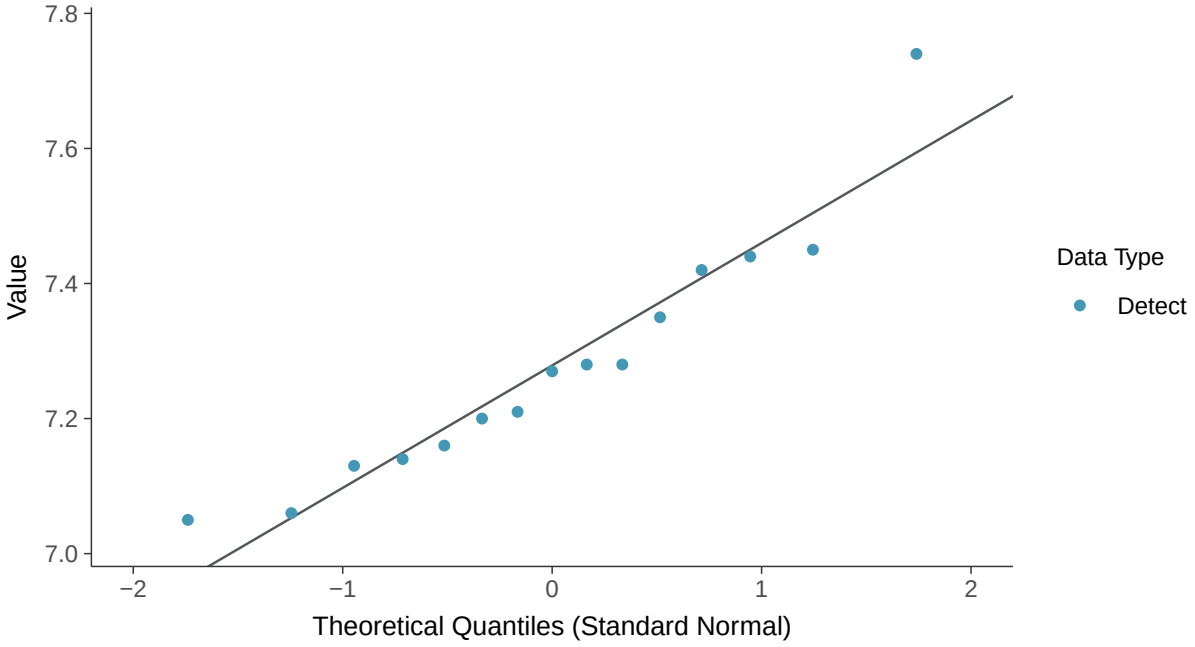
Boxplot by Season

pH, Field, MW-9 (su)



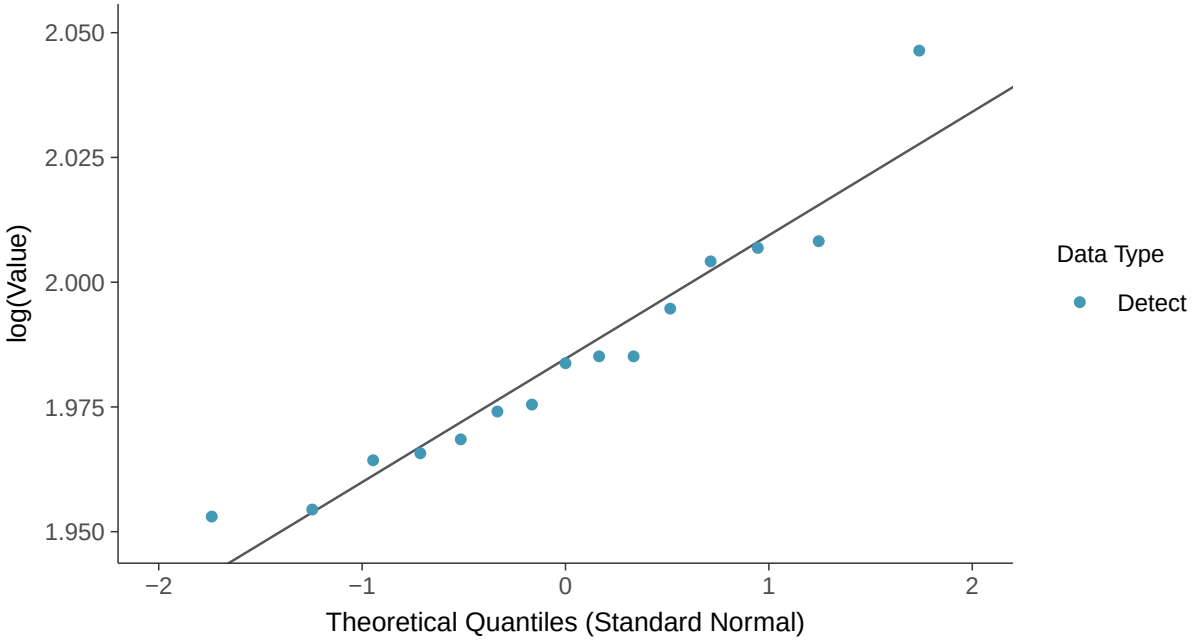
Normal Q-Q plot

pH, Field, MW-9 (su)



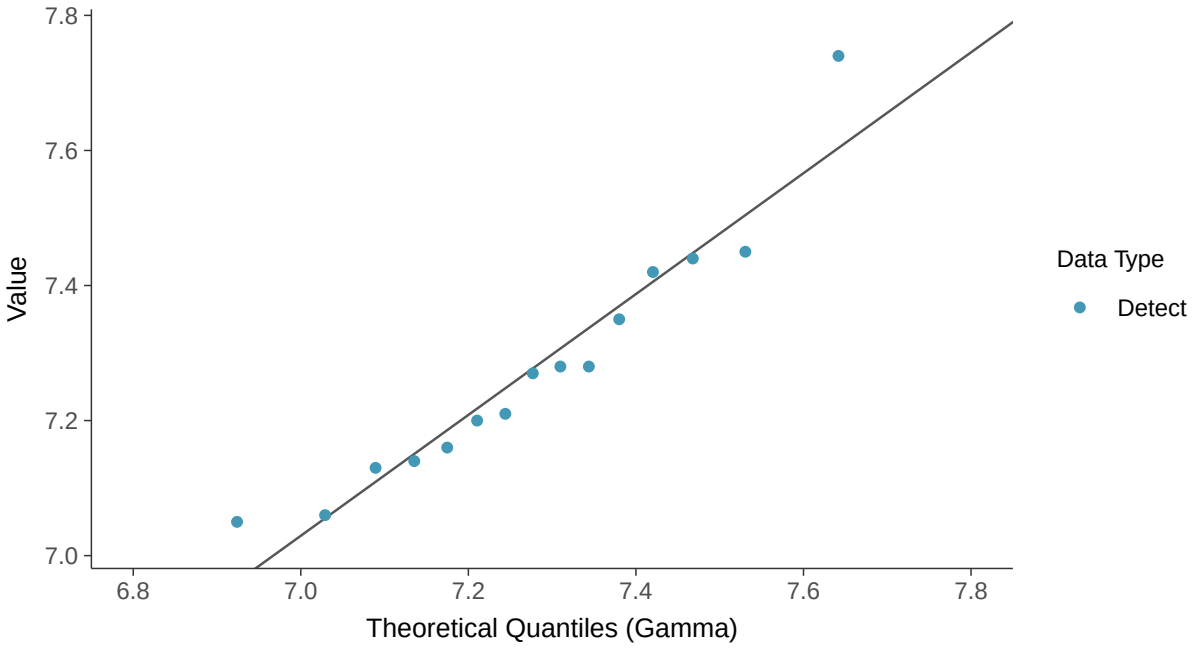
Lognormal Q-Q plot

pH, Field, MW-9 (su)



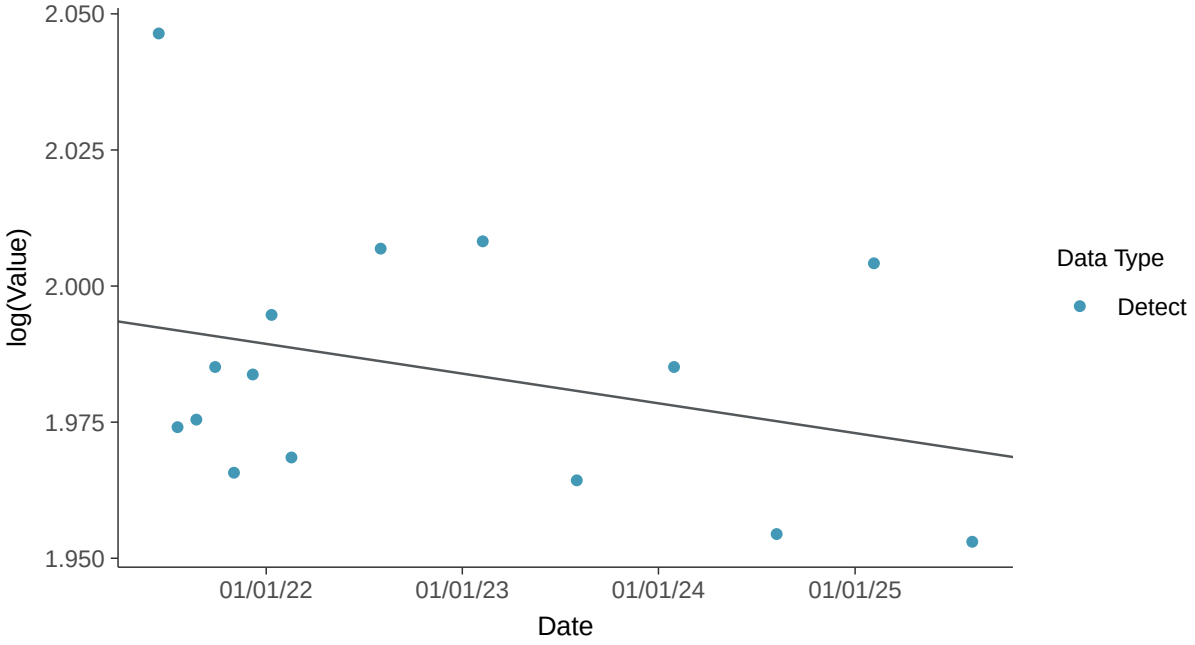
Gamma Q-Q plot

pH, Field, MW-9 (su)



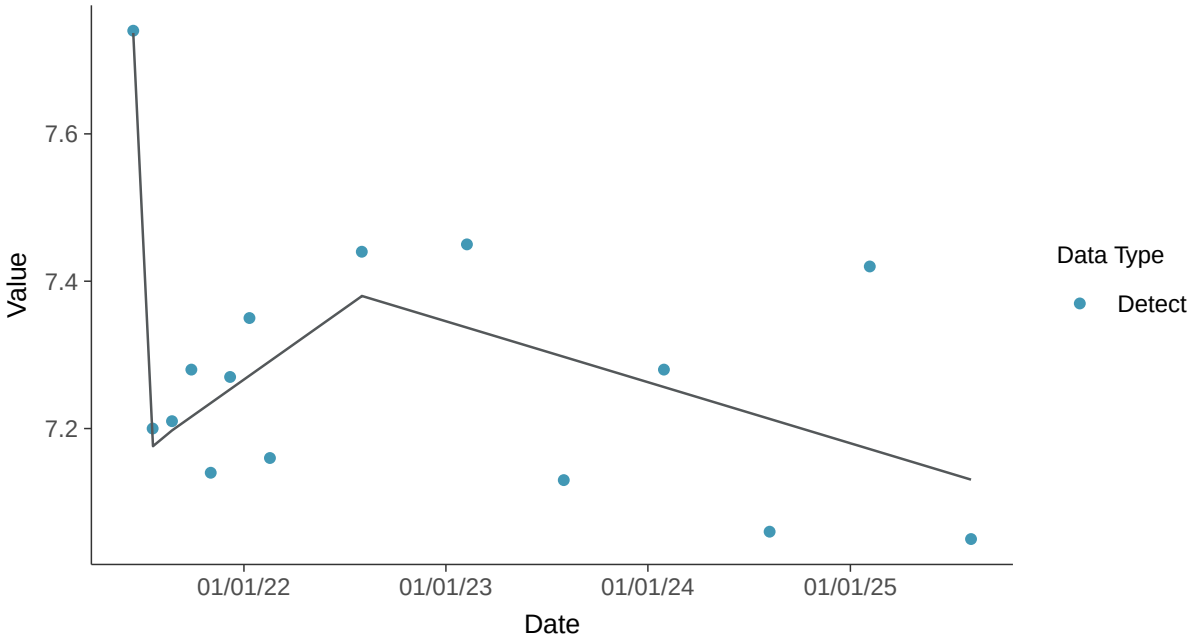
Trend Regression: Lognormal MLE

pH, Field, MW-9 (su)



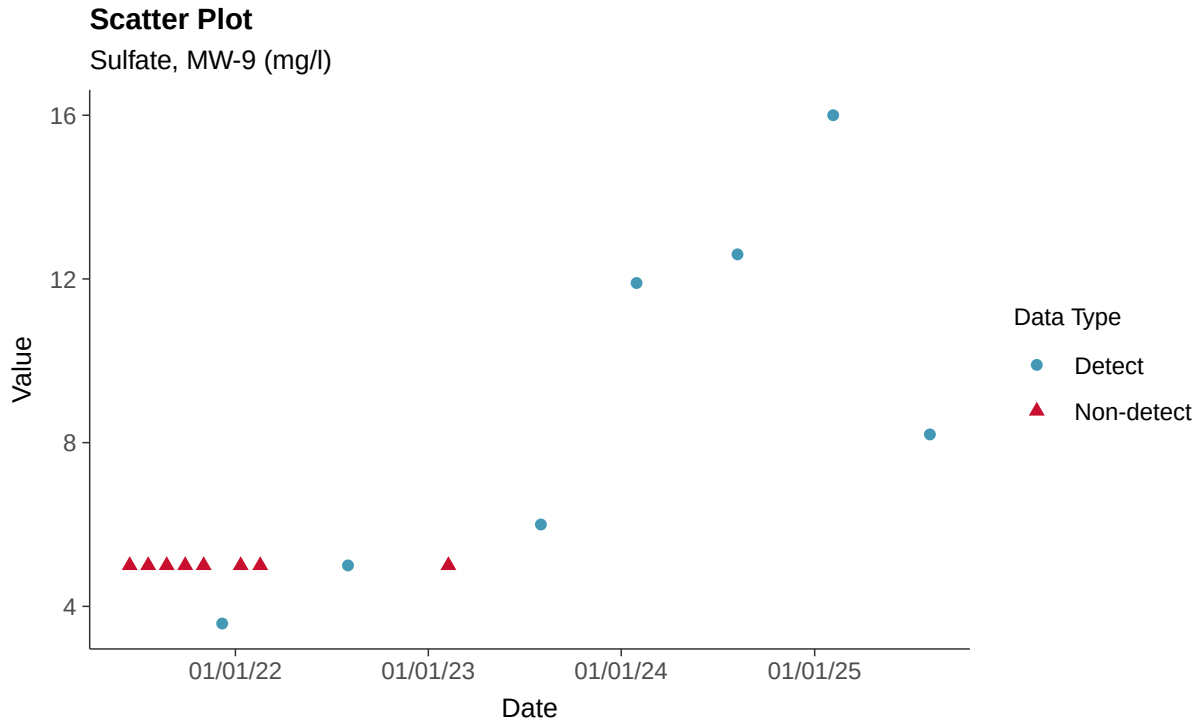
Trend Regression: Piecewise Linear-Linear-Linear

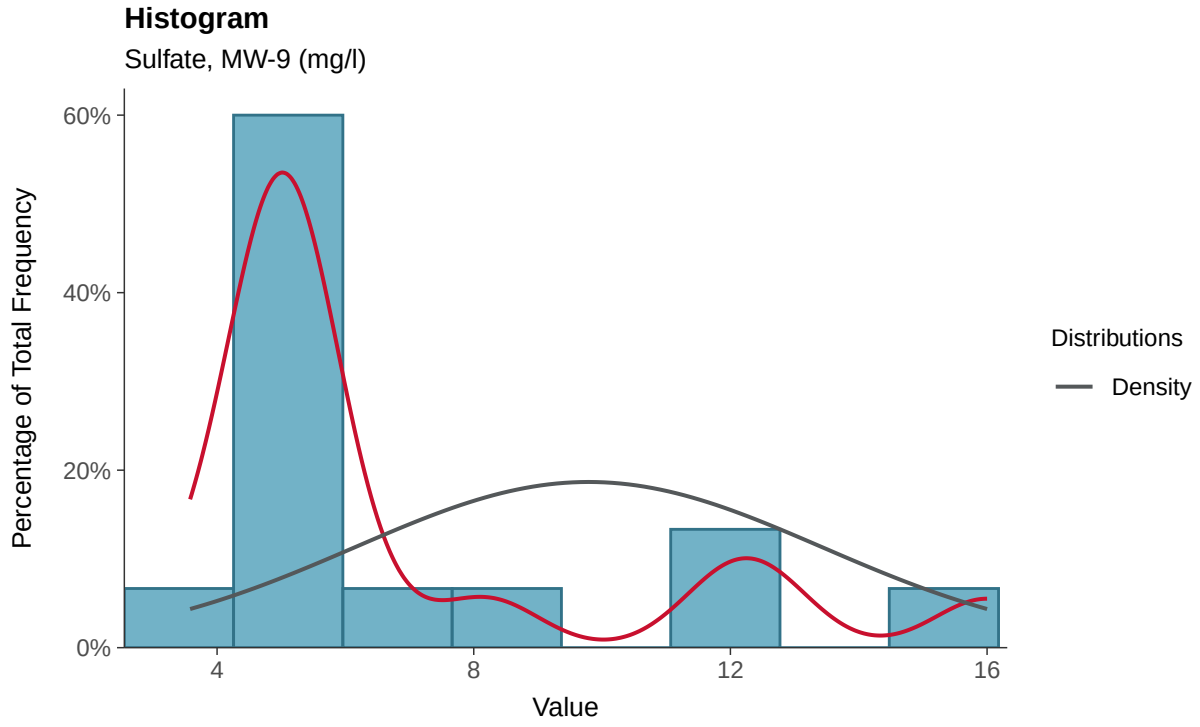
pH, Field, MW-9 (su)



Appendix III: Sulfate, MW-9

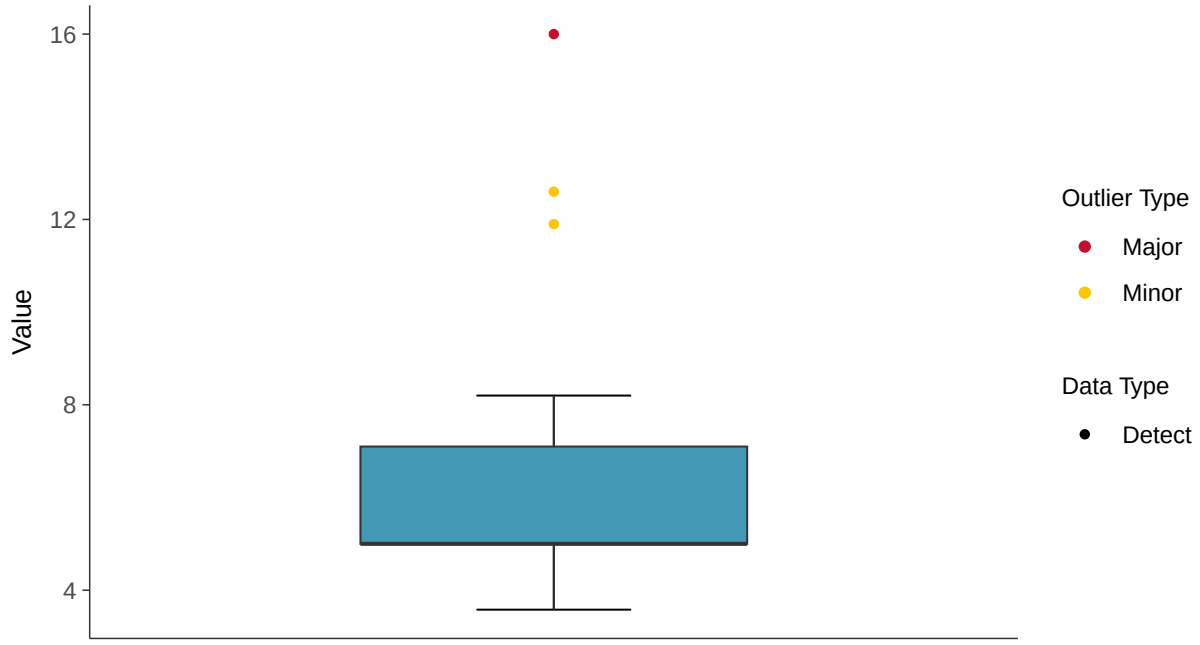
ID: 20_2_124





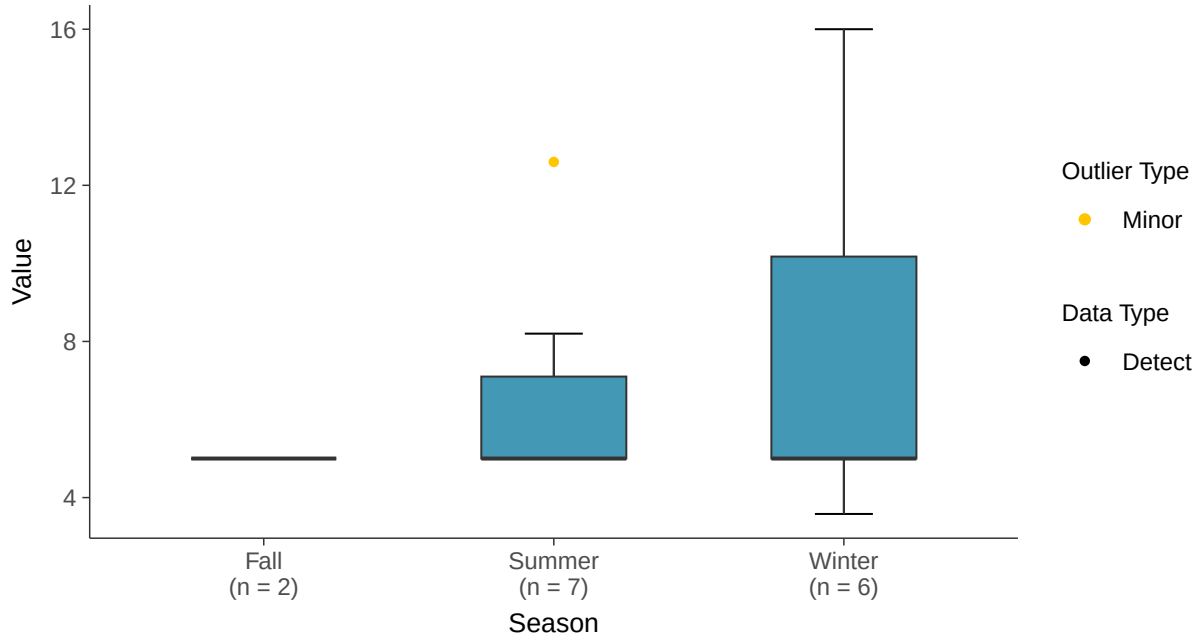
Boxplot

Sulfate, MW-9 (mg/l)



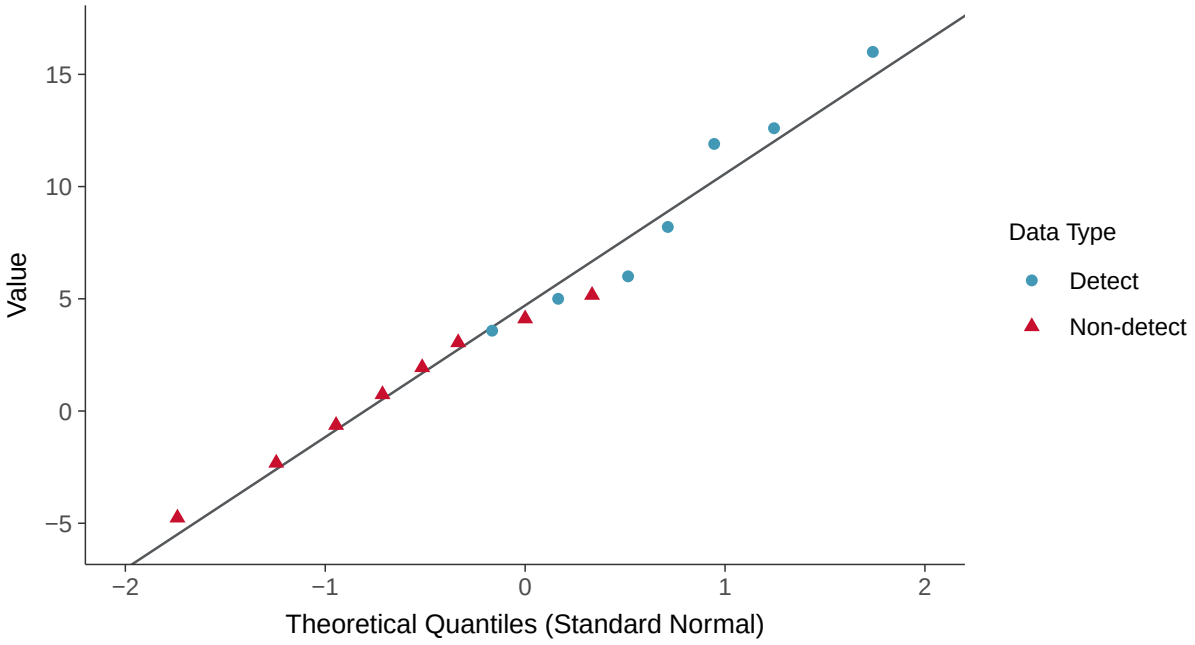
Boxplot by Season

Sulfate, MW-9 (mg/l)



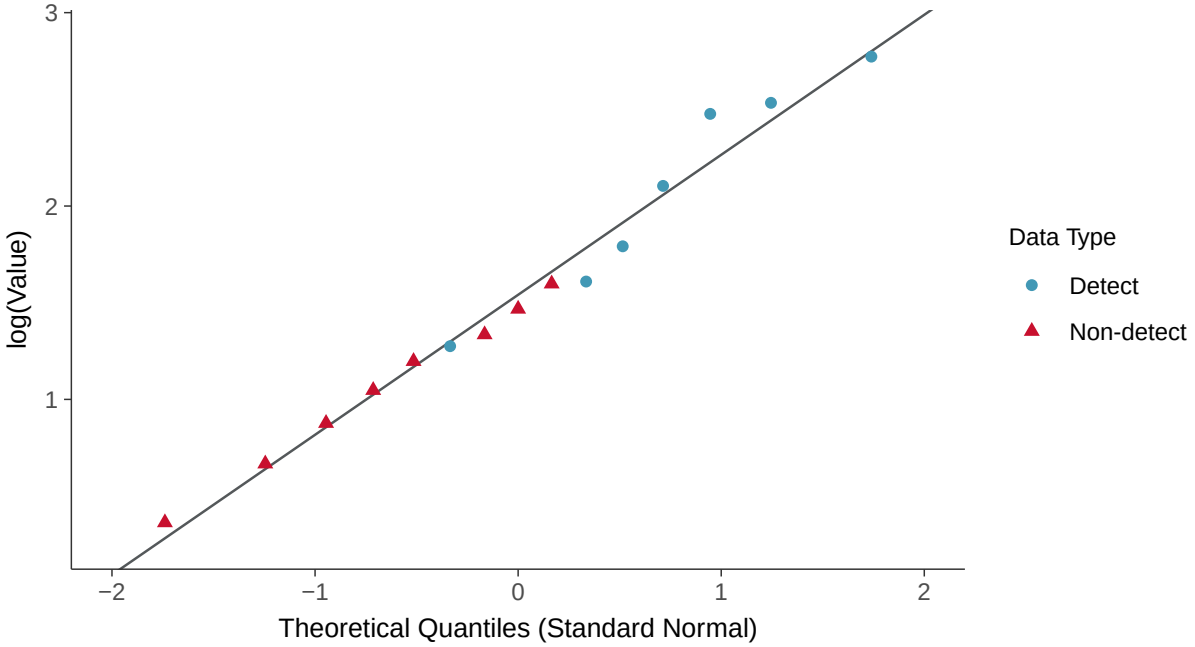
Normal Q-Q plot using ROS Imputed Estimates

Sulfate, MW-9 (mg/l)



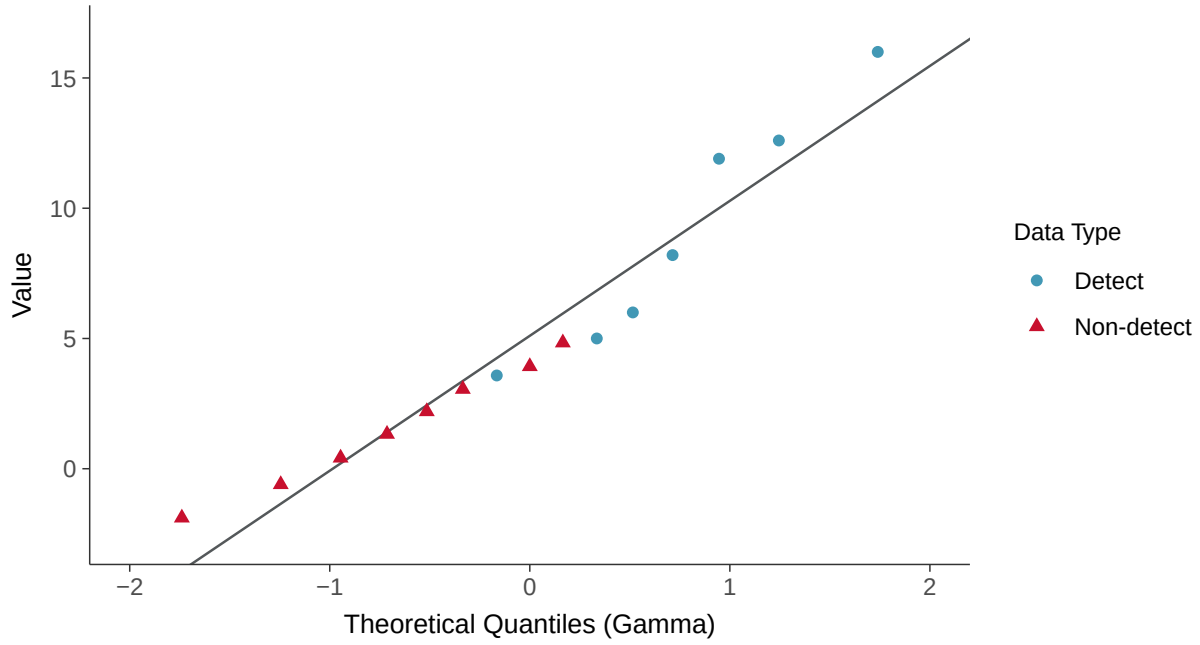
Lognormal Q-Q plot using ROS Imputed Estimates

Sulfate, MW-9 (mg/l)



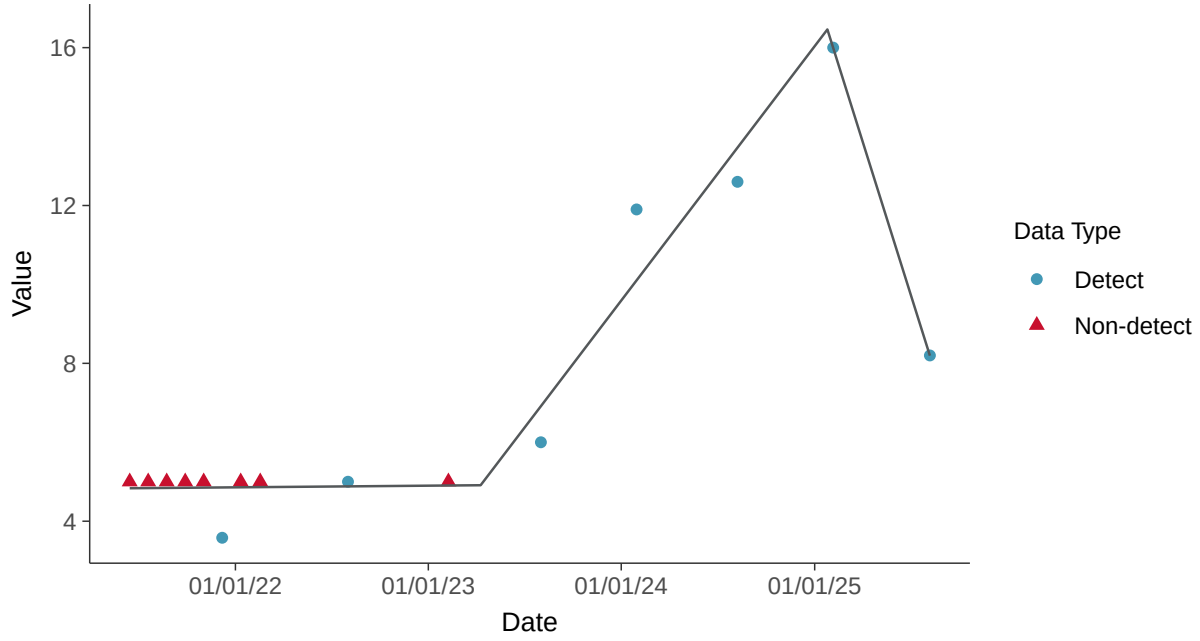
Gamma Q-Q plot using ROS Imputed Estimates

Sulfate, MW-9 (mg/l)



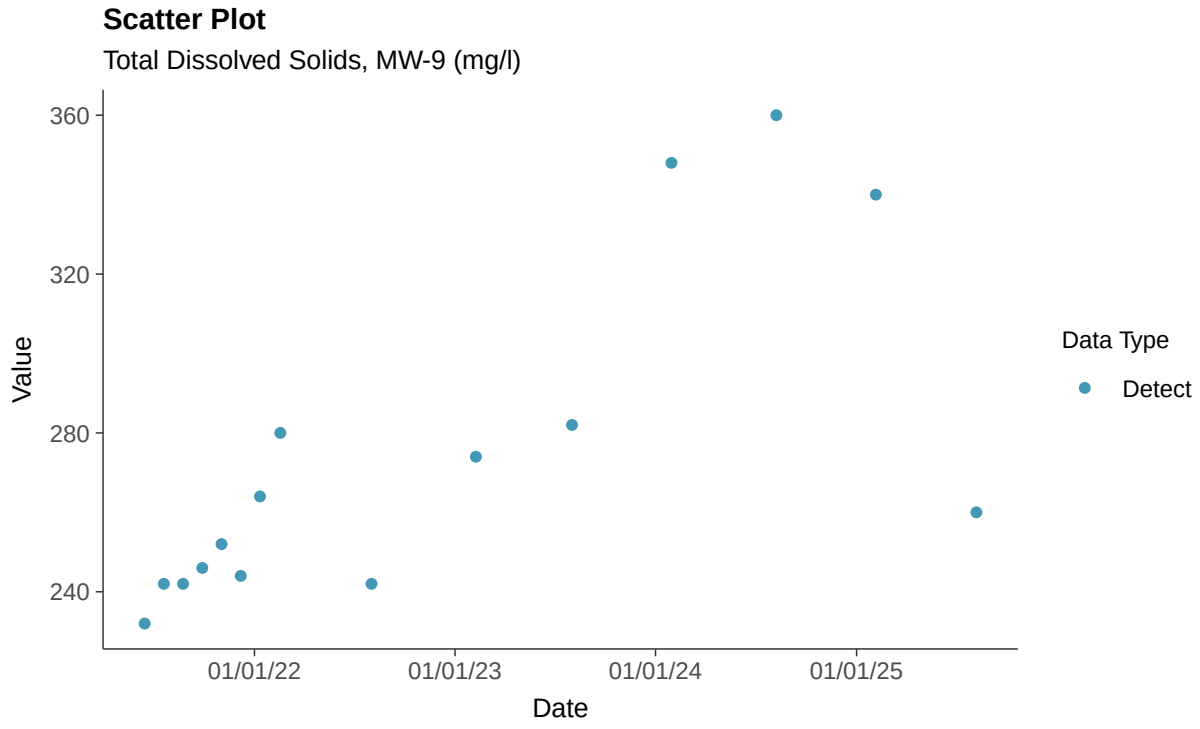
Trend Regression: Piecewise Linear-Linear-Linear

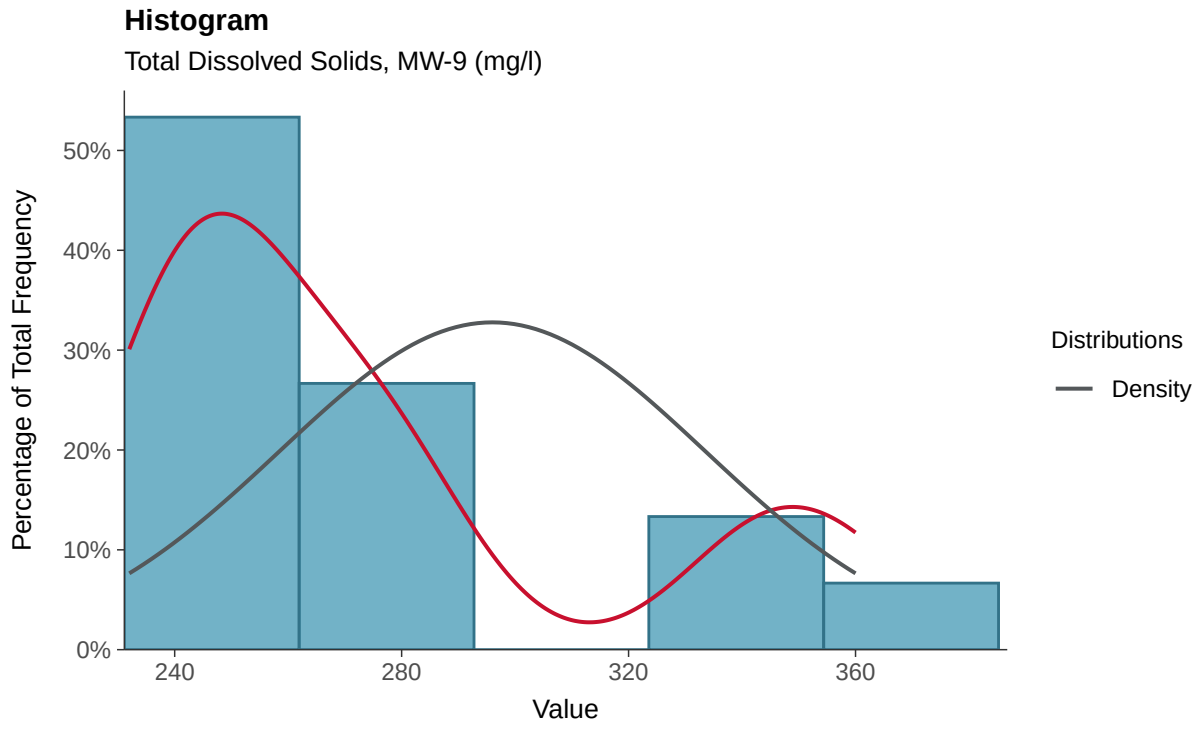
Sulfate, MW-9 (mg/l)



Appendix III: Total Dissolved Solids, MW-9

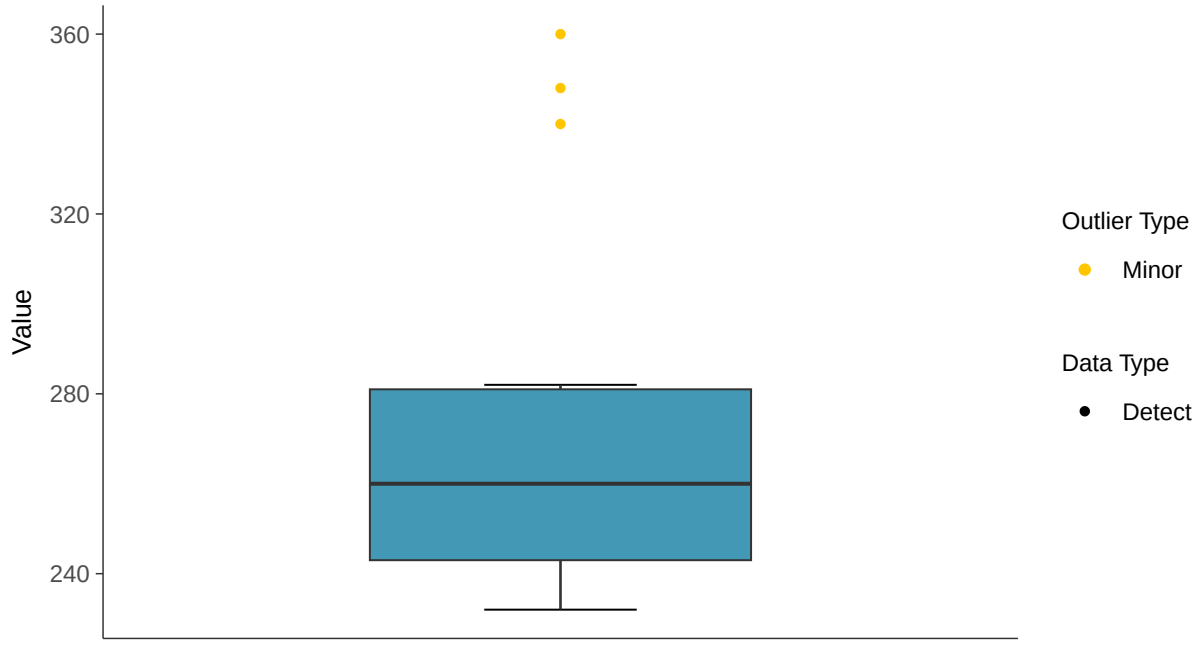
ID: 20_2_126





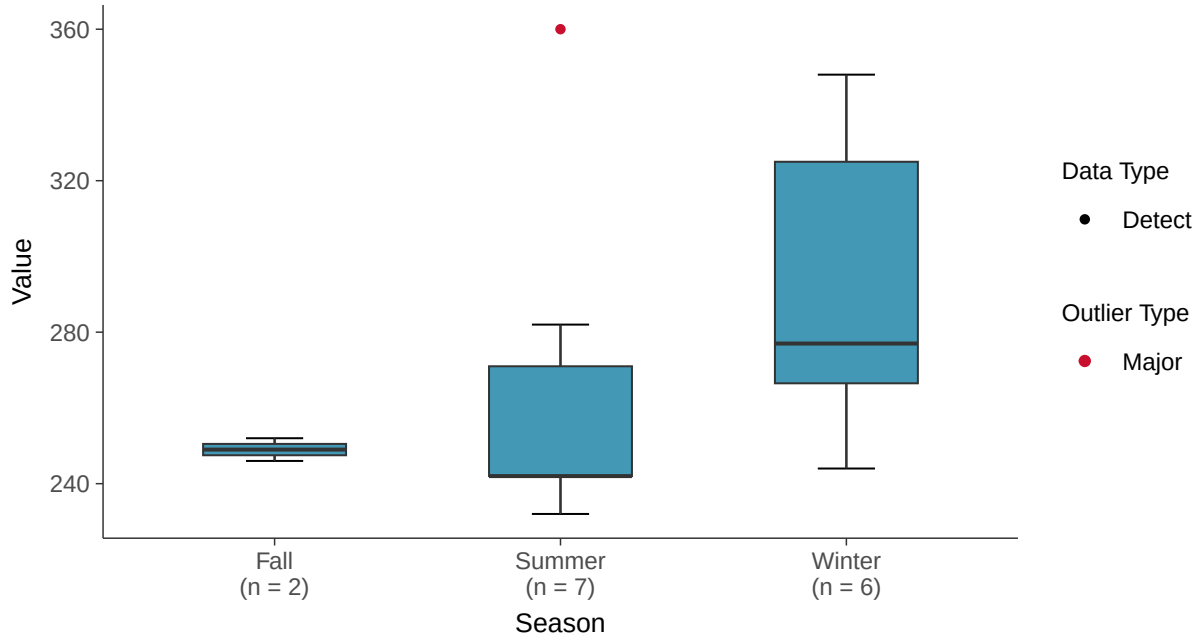
Boxplot

Total Dissolved Solids, MW-9 (mg/l)



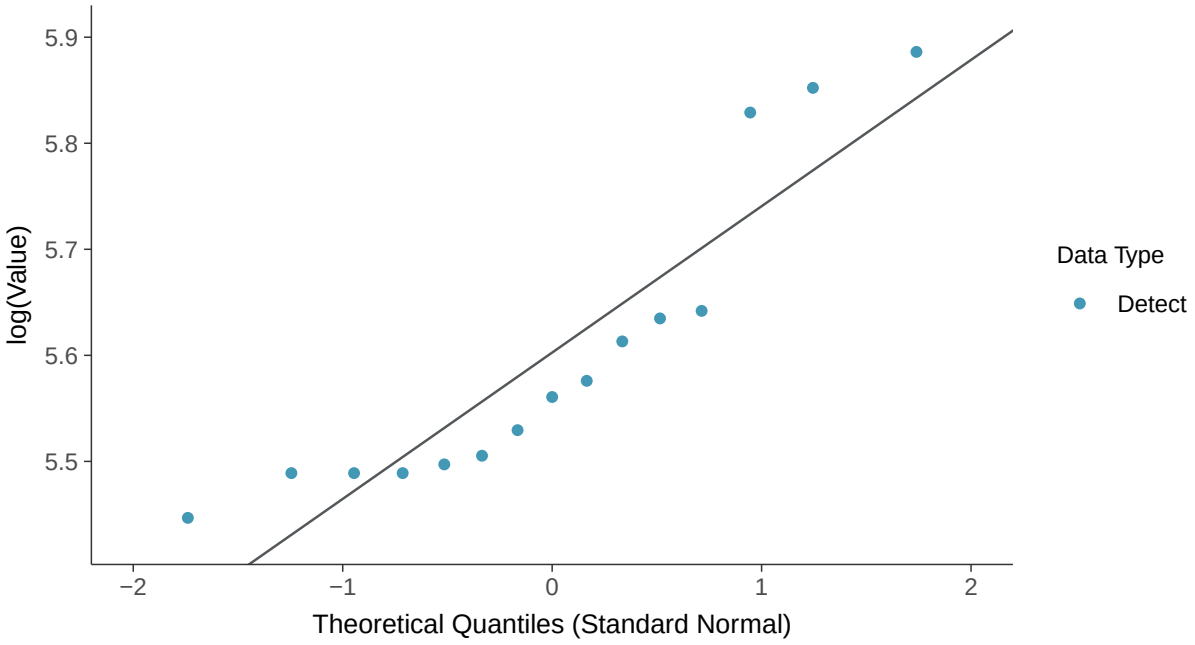
Boxplot by Season

Total Dissolved Solids, MW-9 (mg/l)



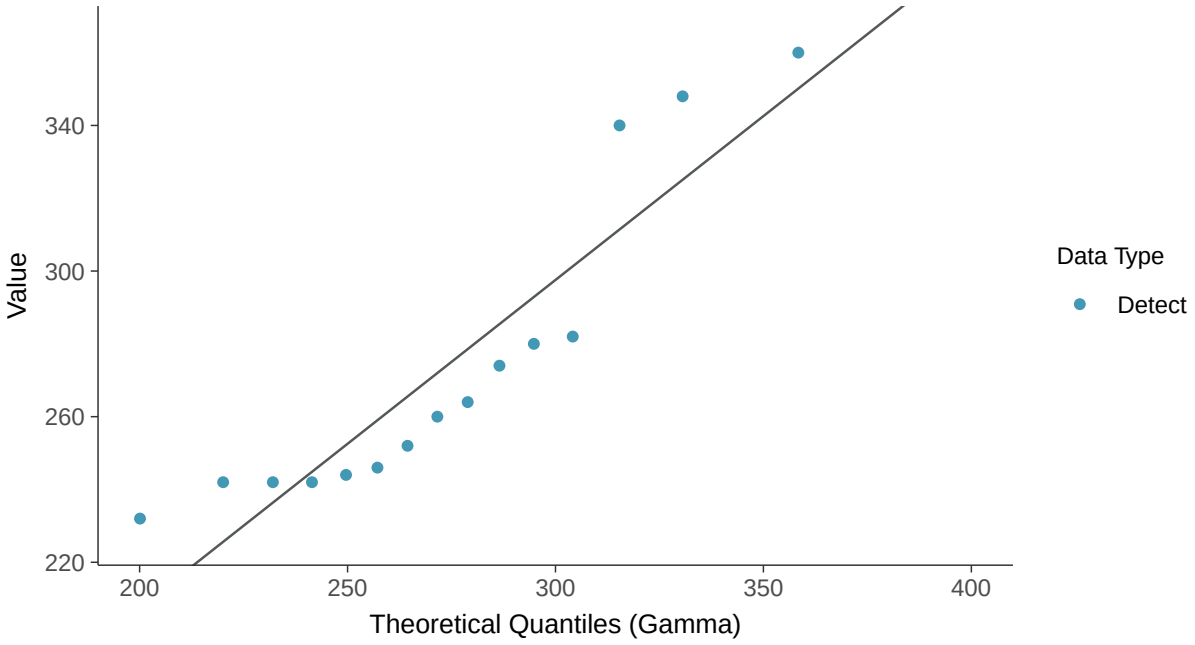
Lognormal Q-Q plot

Total Dissolved Solids, MW-9 (mg/l)



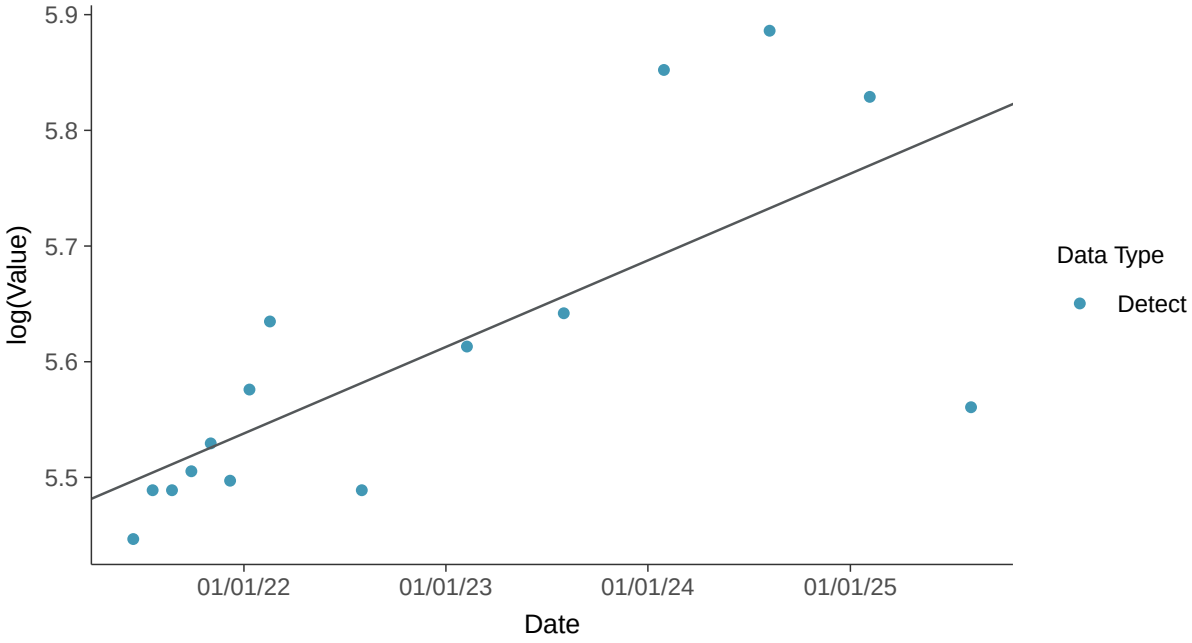
Gamma Q-Q plot

Total Dissolved Solids, MW-9 (mg/l)



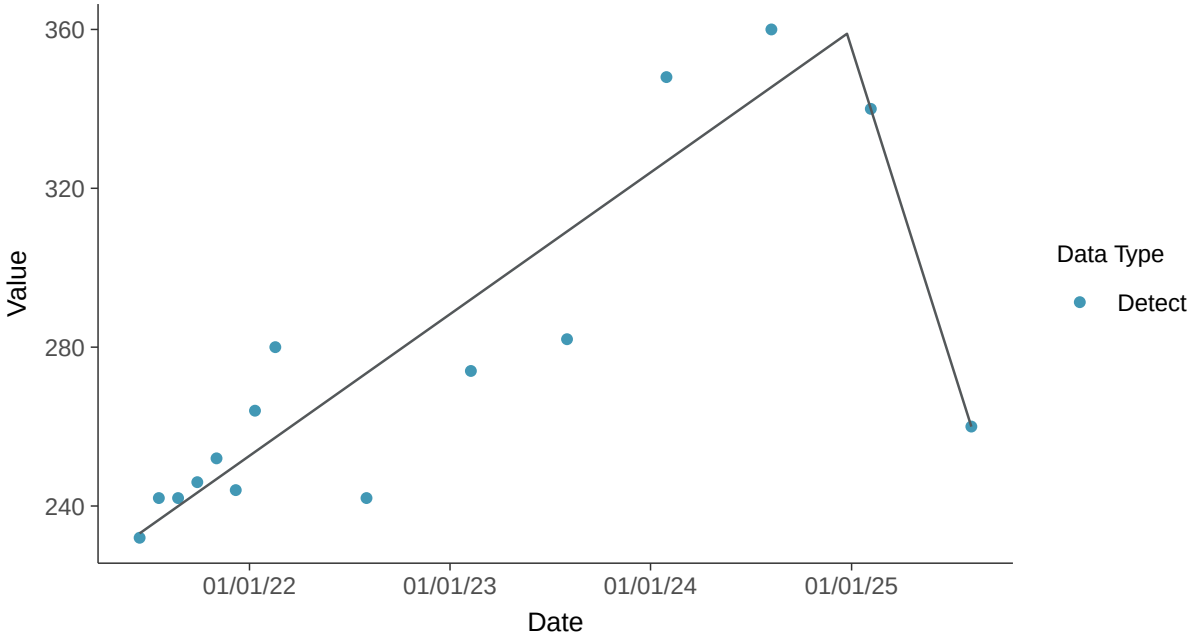
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-9 (mg/l)



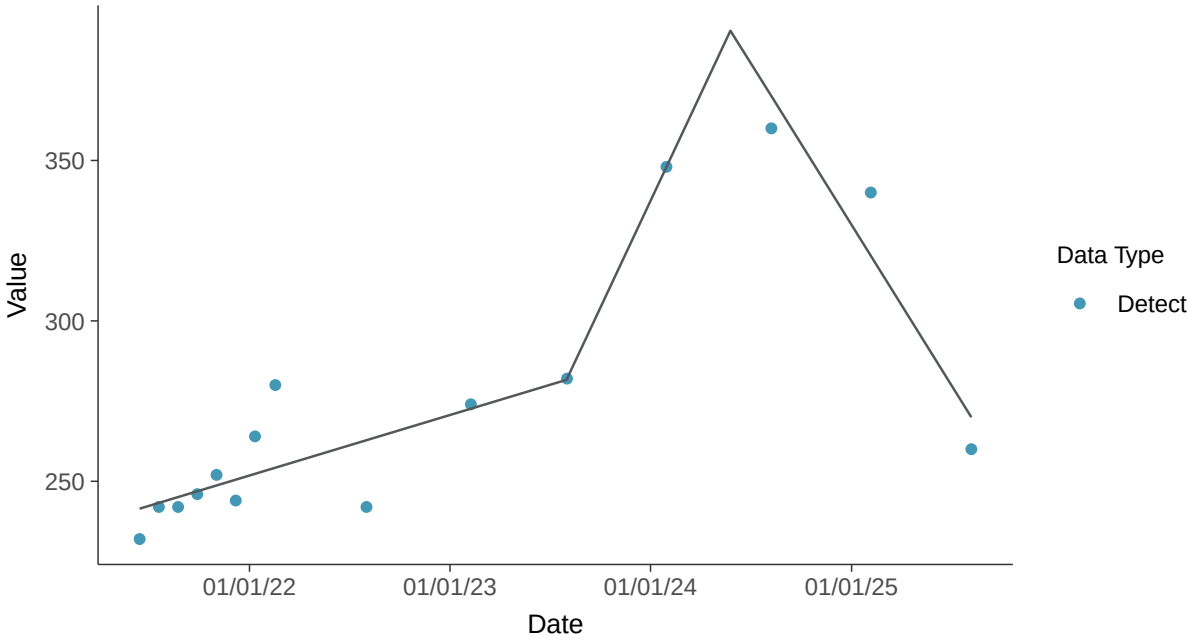
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-9 (mg/l)



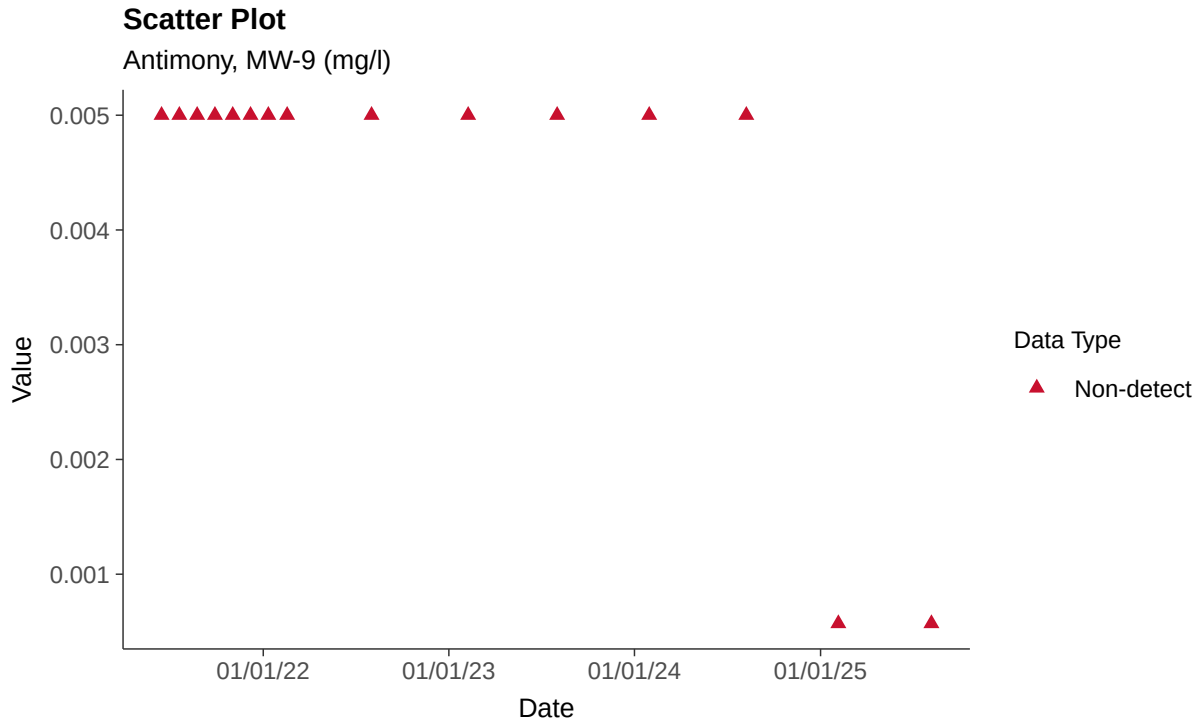
Trend Regression: Piecewise Linear-Linear-Linear

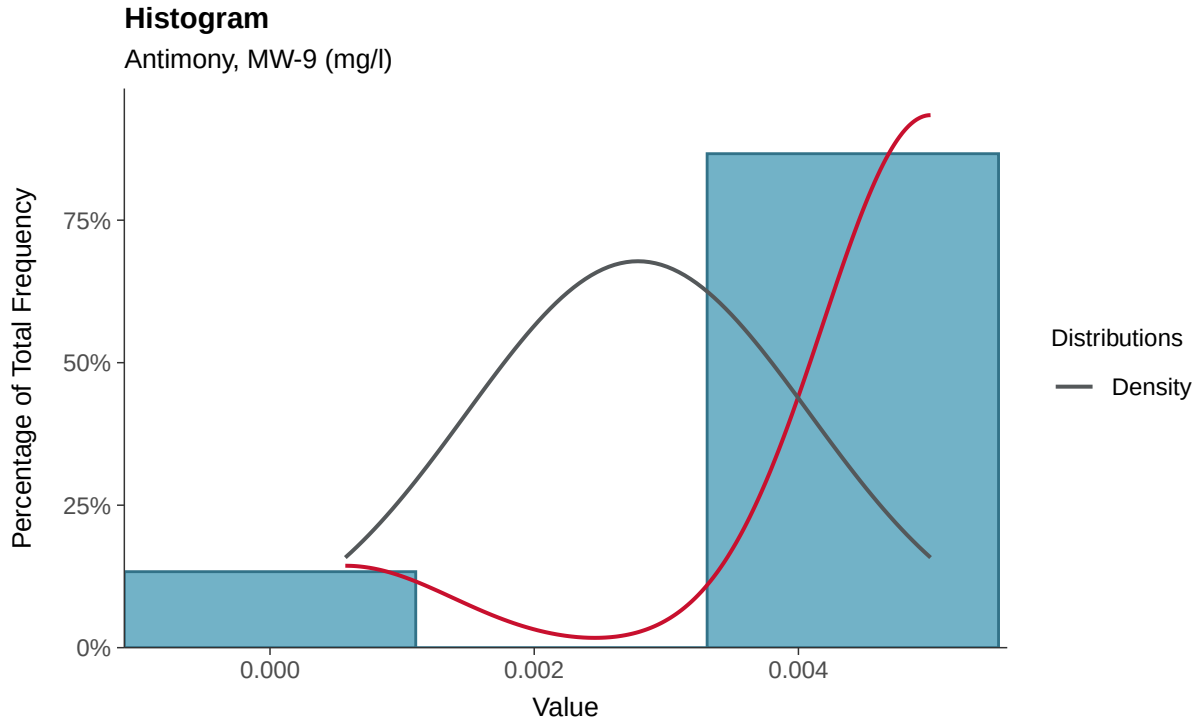
Total Dissolved Solids, MW-9 (mg/l)



Appendix IV: Antimony, MW-9

ID: 20_3_101



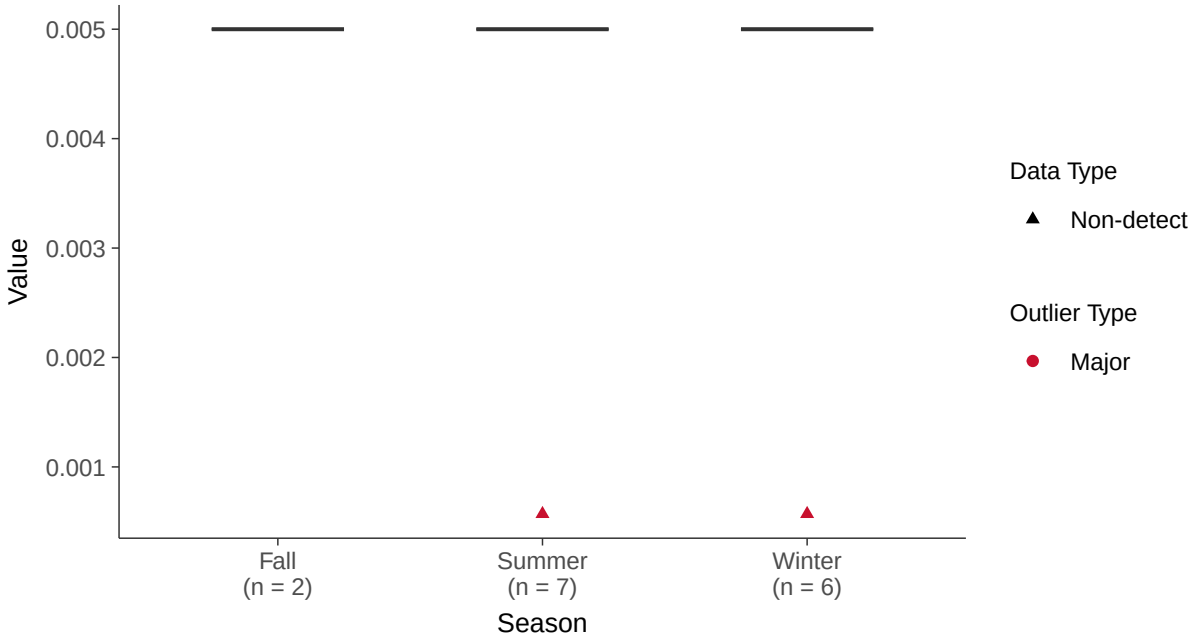


Boxplot

Antimony, MW-9 (mg/l)

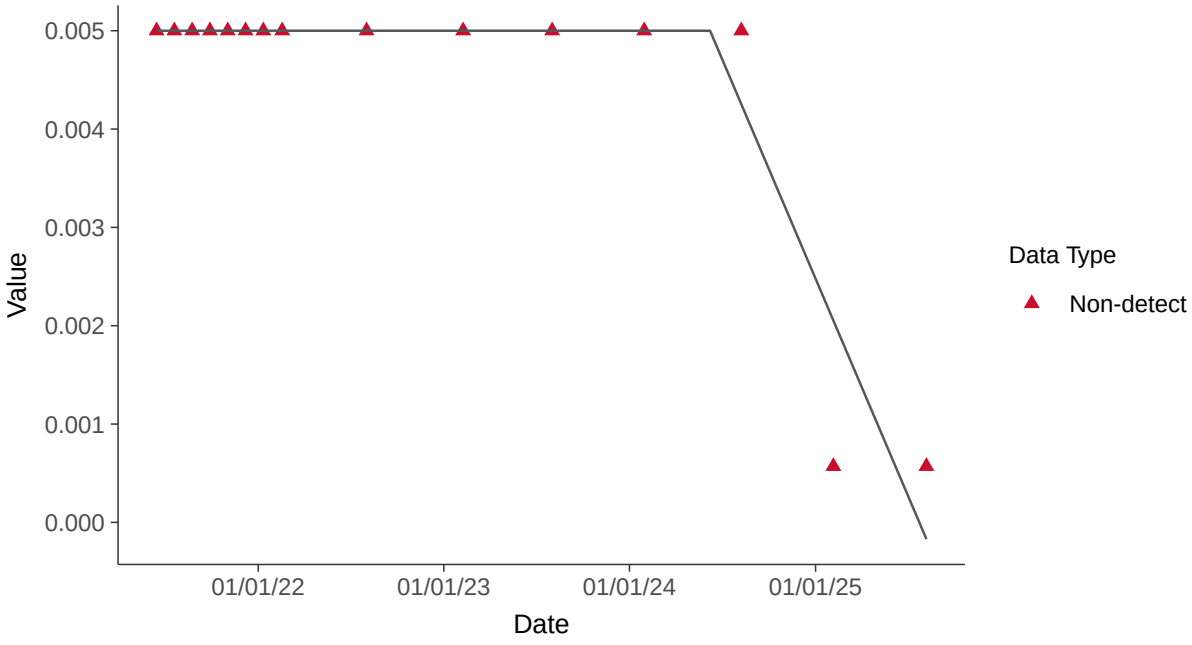
Boxplot by Season

Antimony, MW-9 (mg/l)



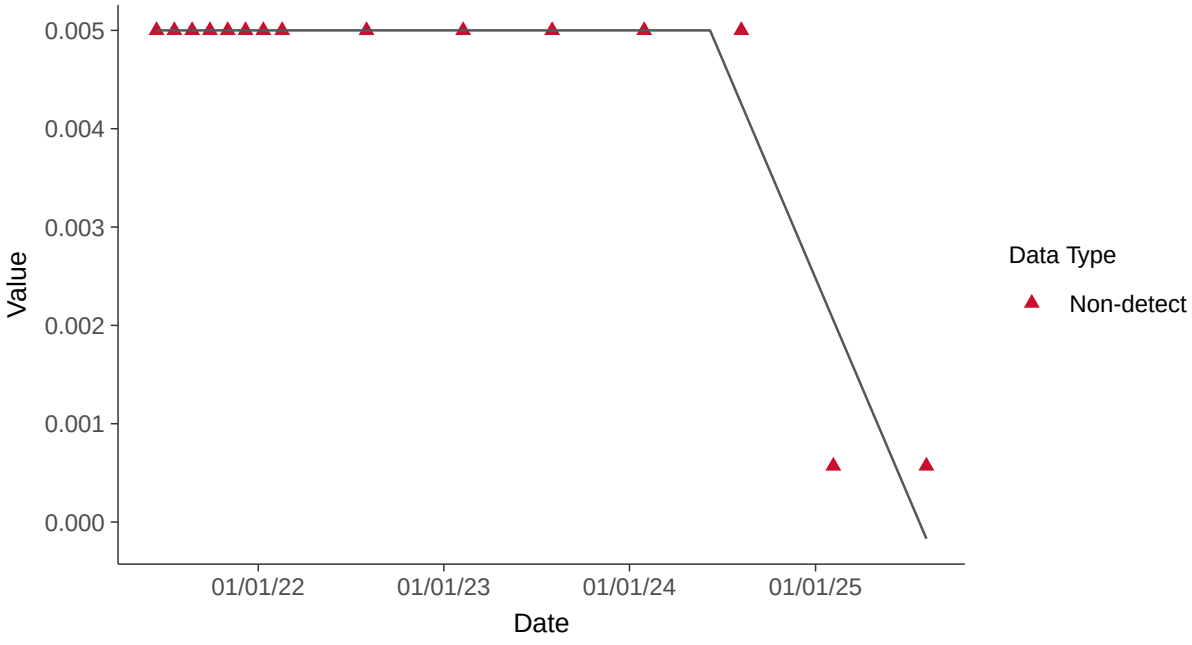
Trend Regression: Piecewise Linear-Linear

Antimony, MW-9 (mg/l)



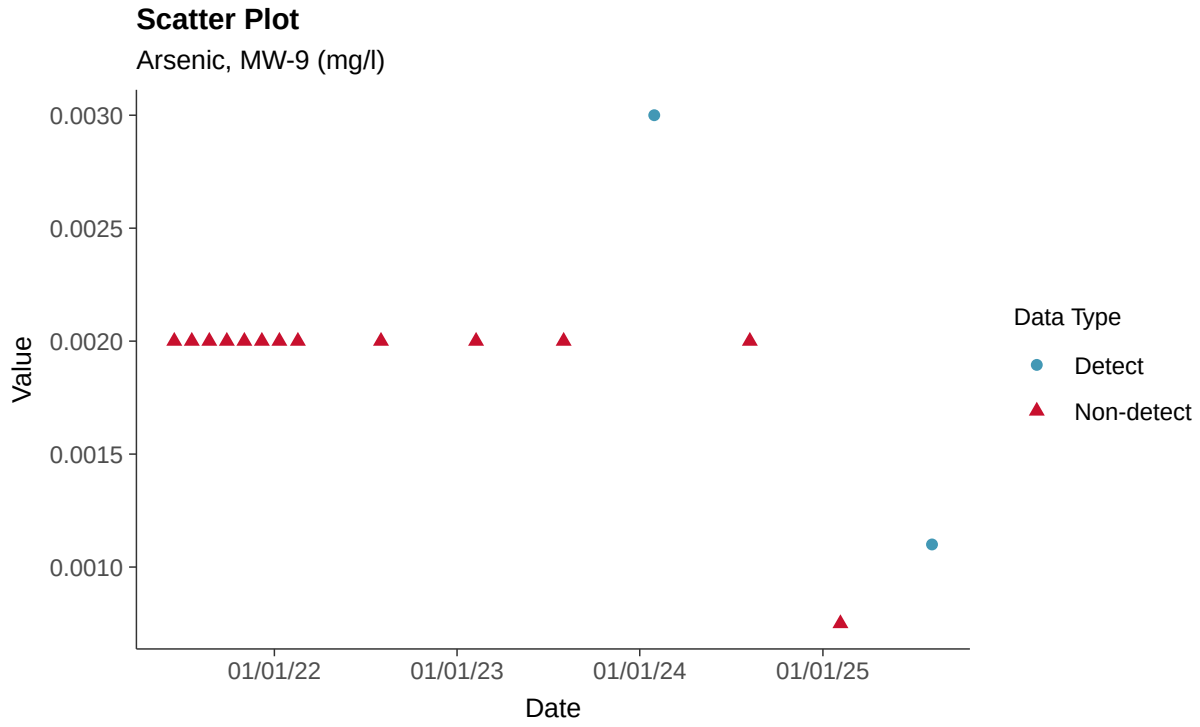
Trend Regression: Piecewise Linear-Linear-Linear

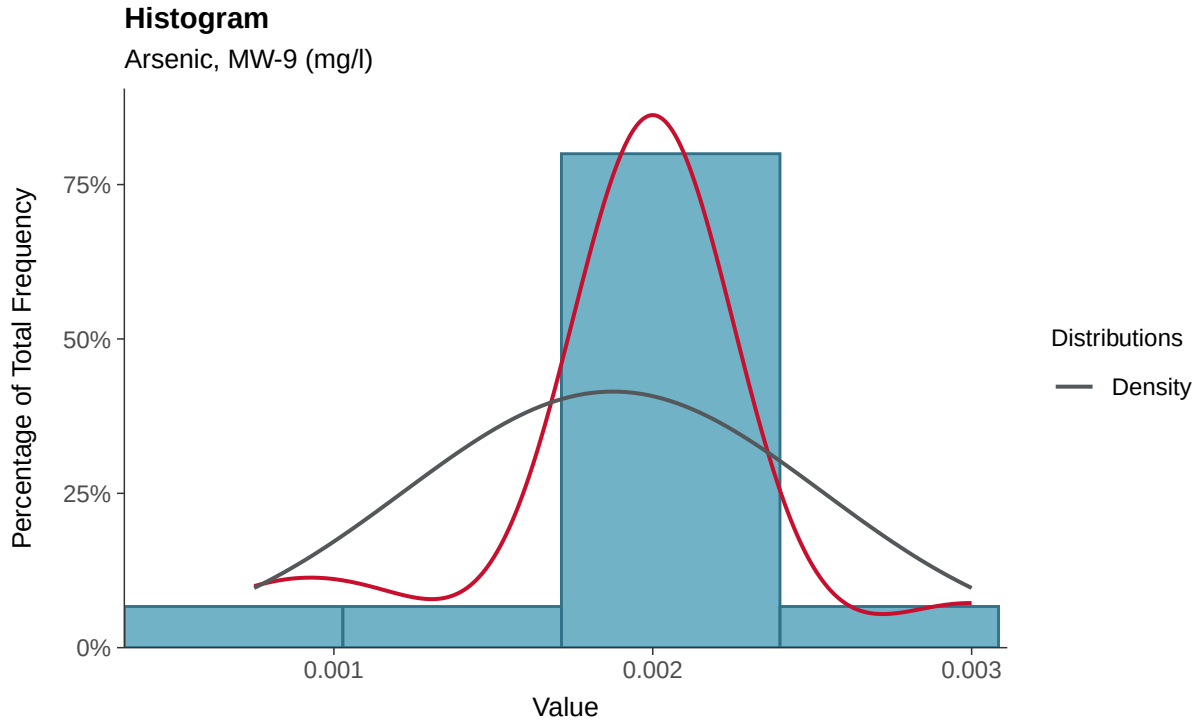
Antimony, MW-9 (mg/l)



Appendix IV: Arsenic, MW-9

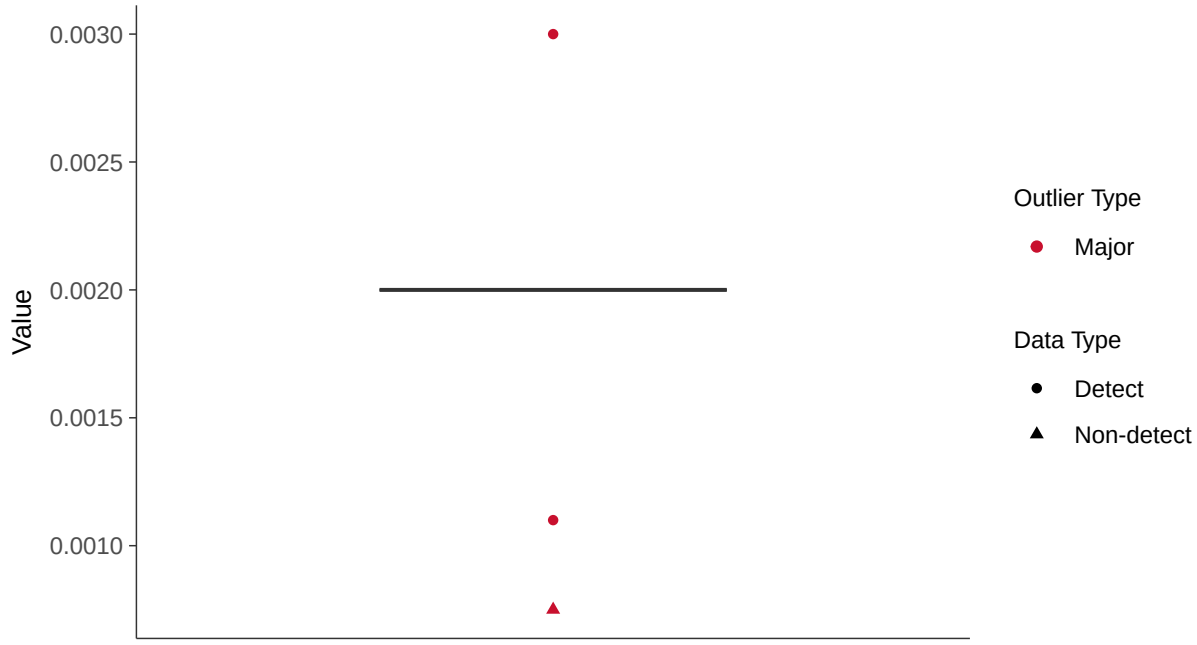
ID: 20_3_102





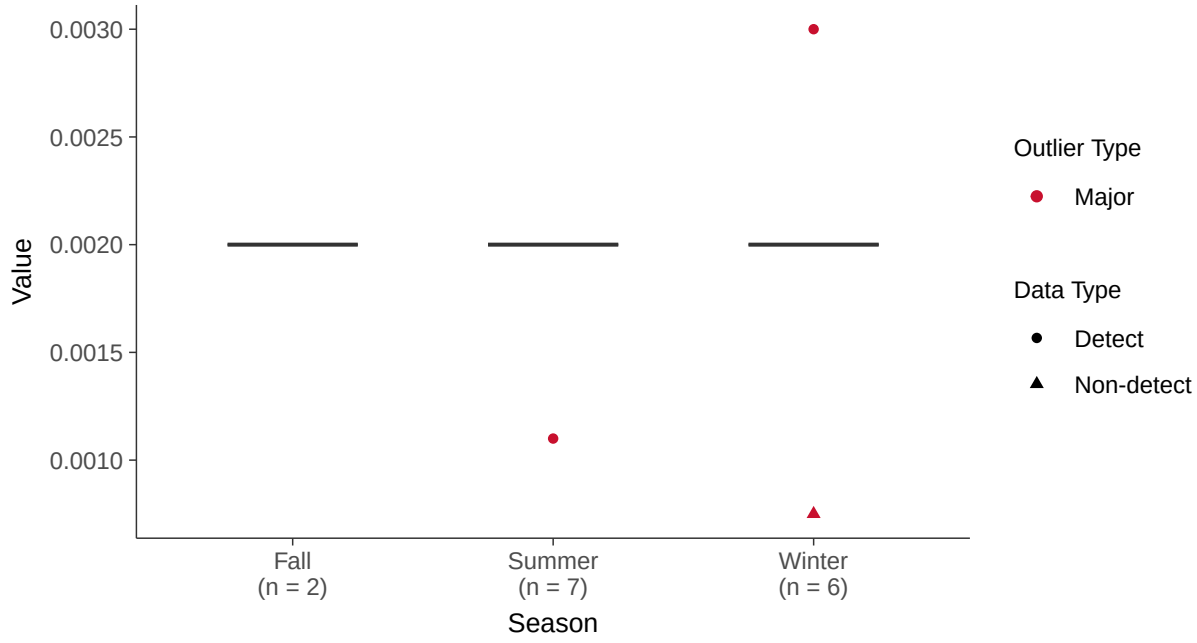
Boxplot

Arsenic, MW-9 (mg/l)



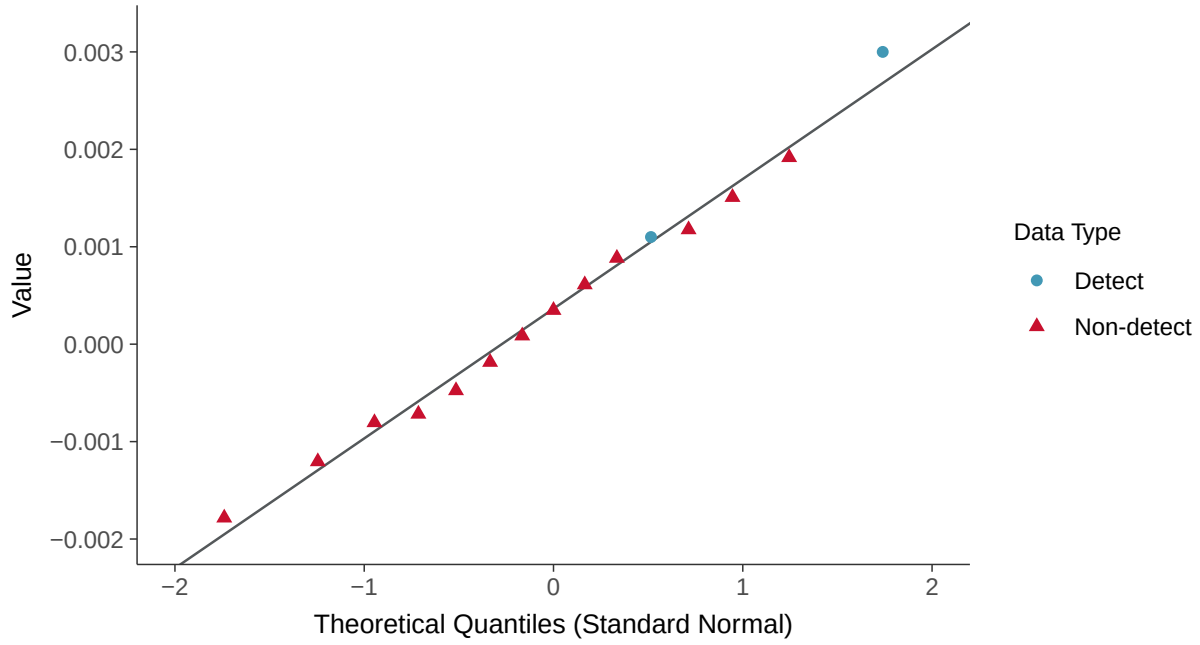
Boxplot by Season

Arsenic, MW-9 (mg/l)



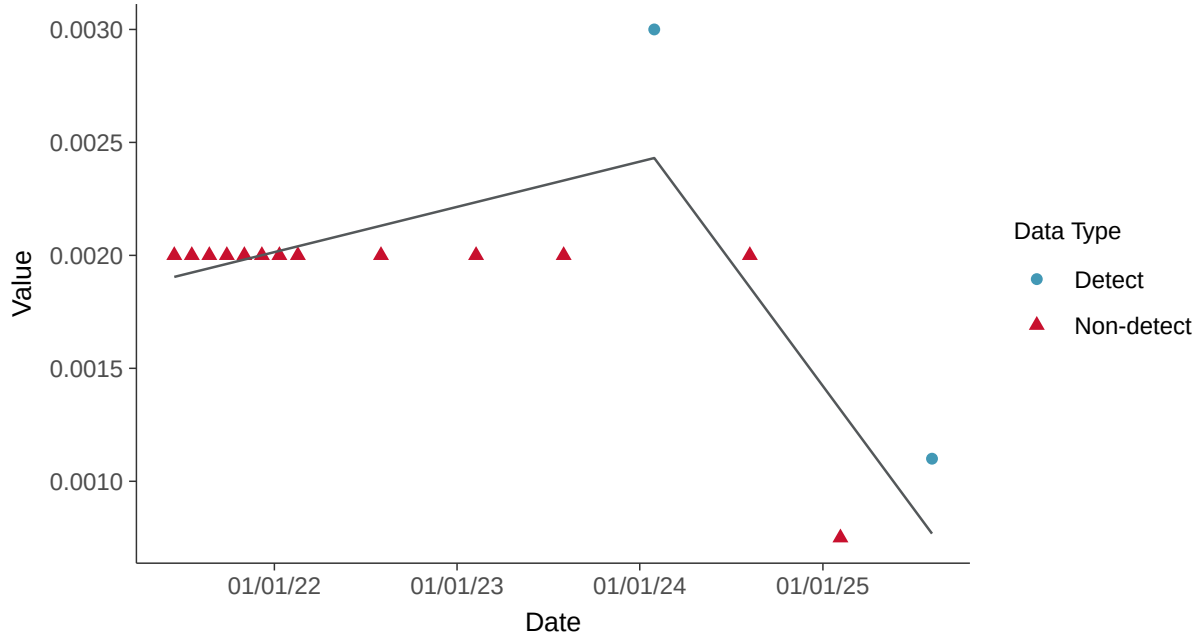
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-9 (mg/l)



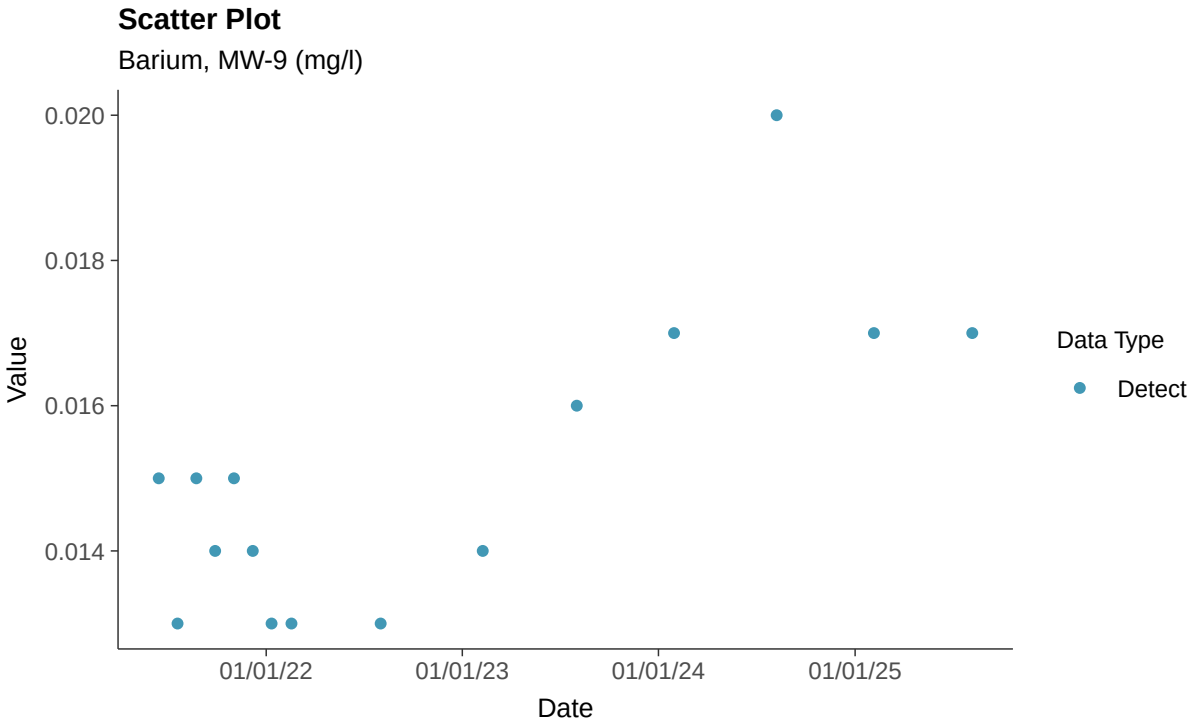
Trend Regression: Piecewise Linear-Linear

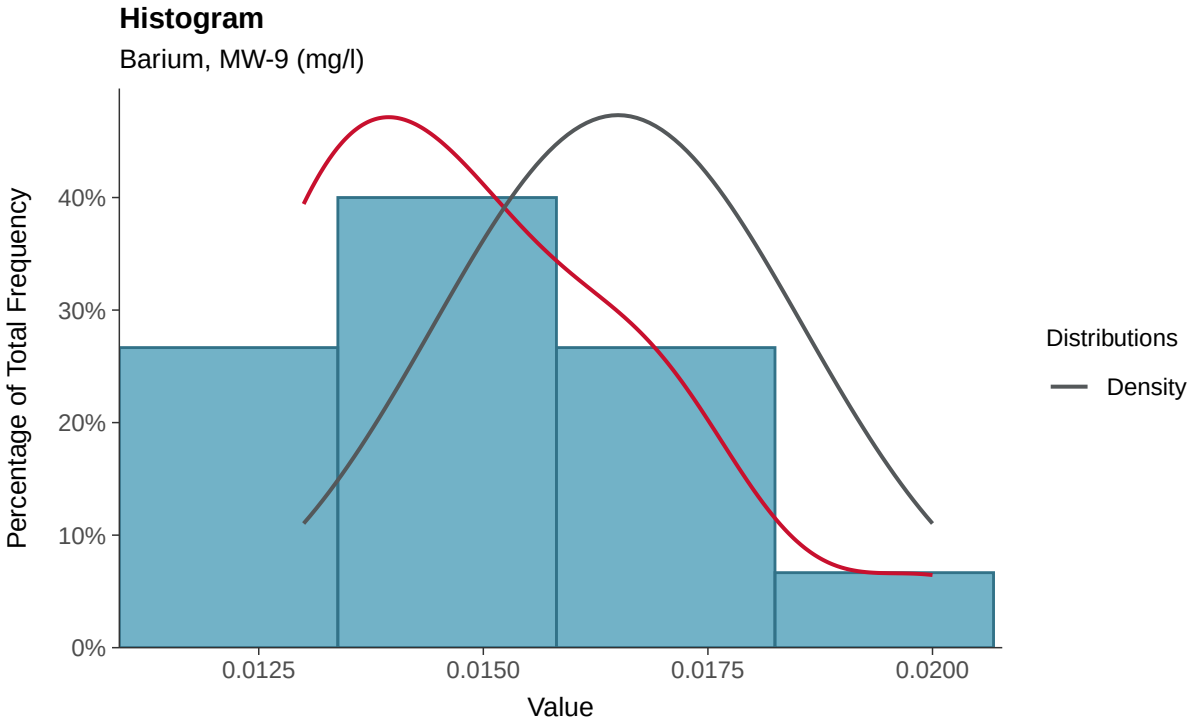
Arsenic, MW-9 (mg/l)



Appendix IV: Barium, MW-9

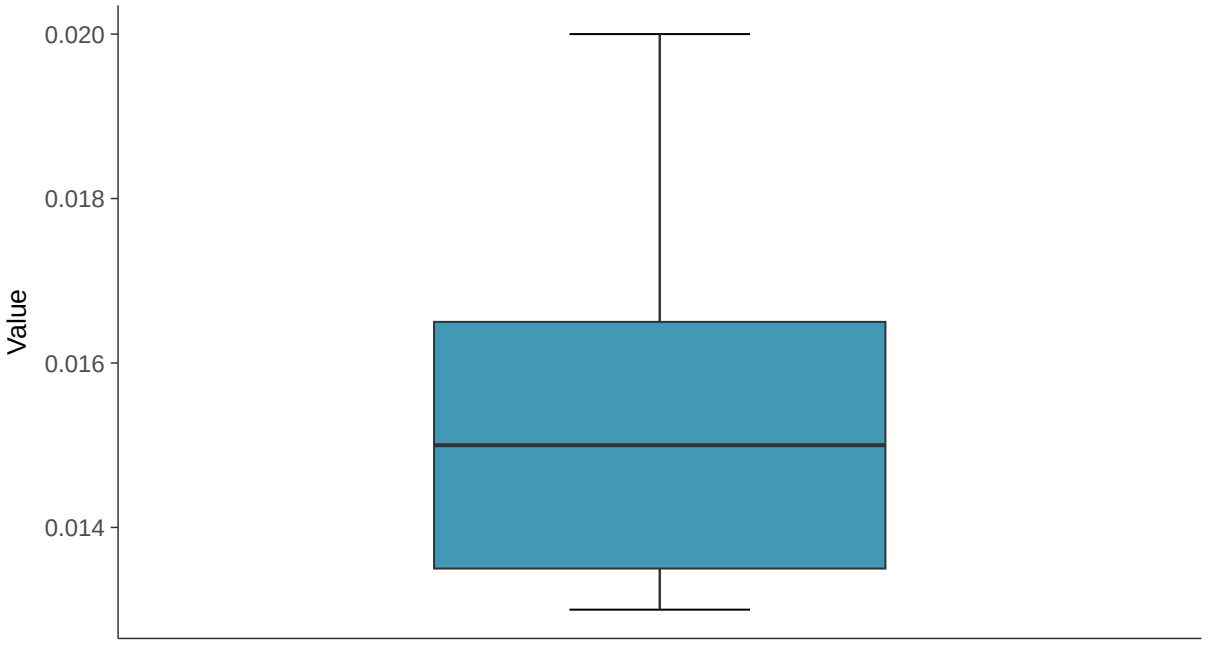
ID: 20_3_103





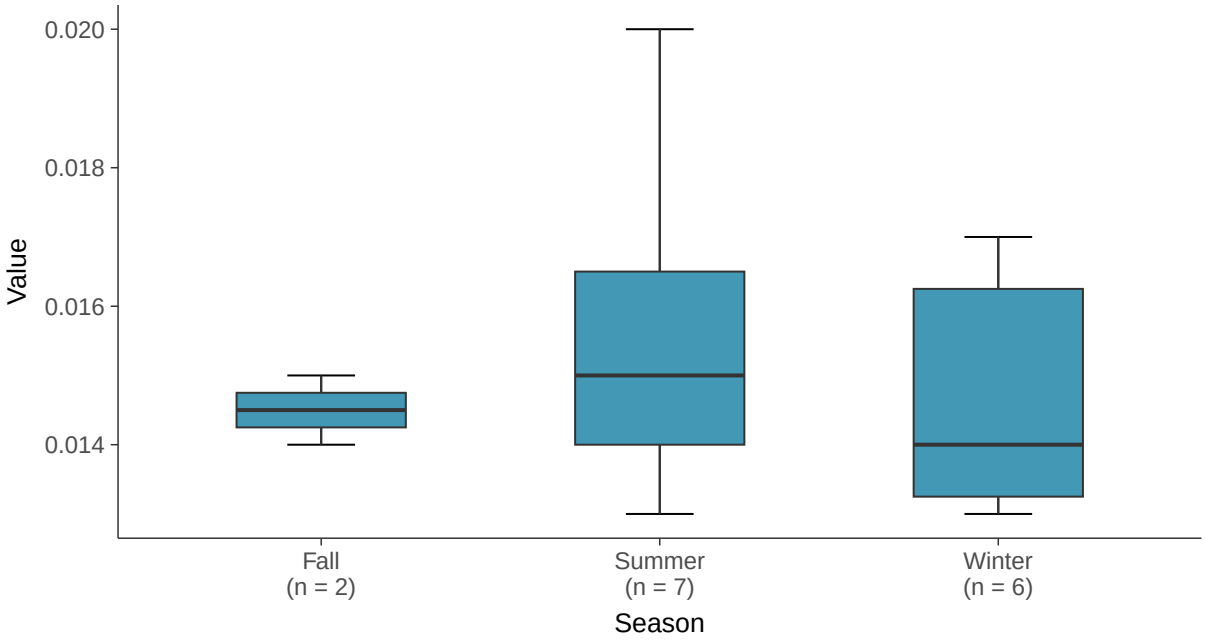
Boxplot

Barium, MW-9 (mg/l)



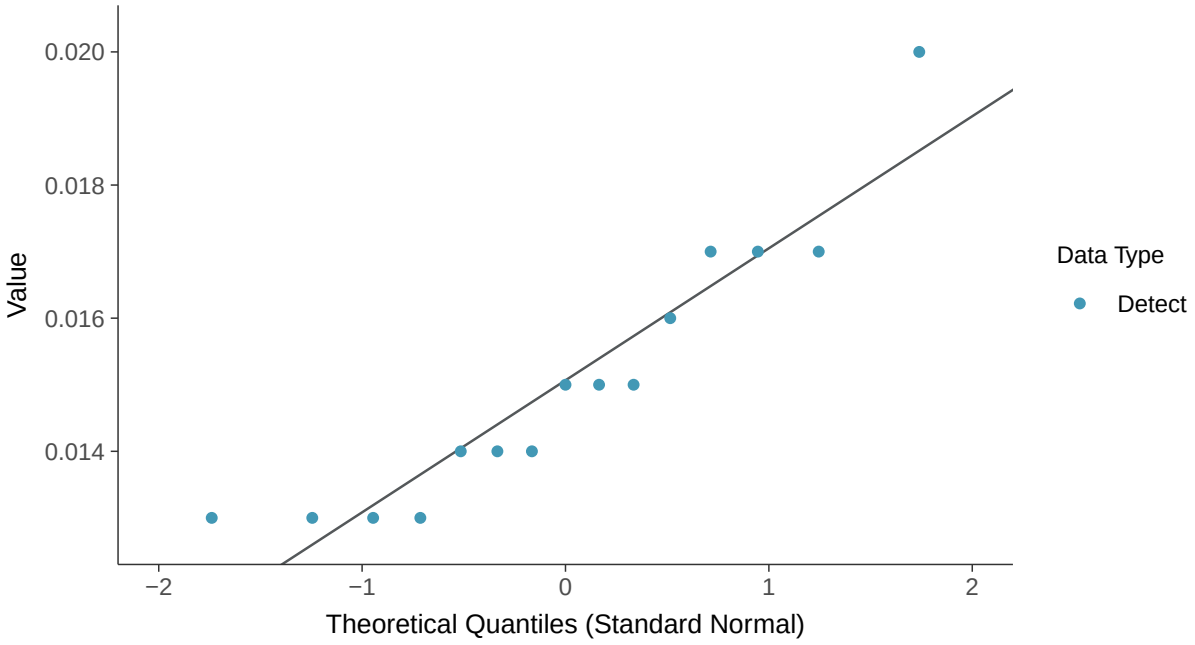
Boxplot by Season

Barium, MW-9 (mg/l)



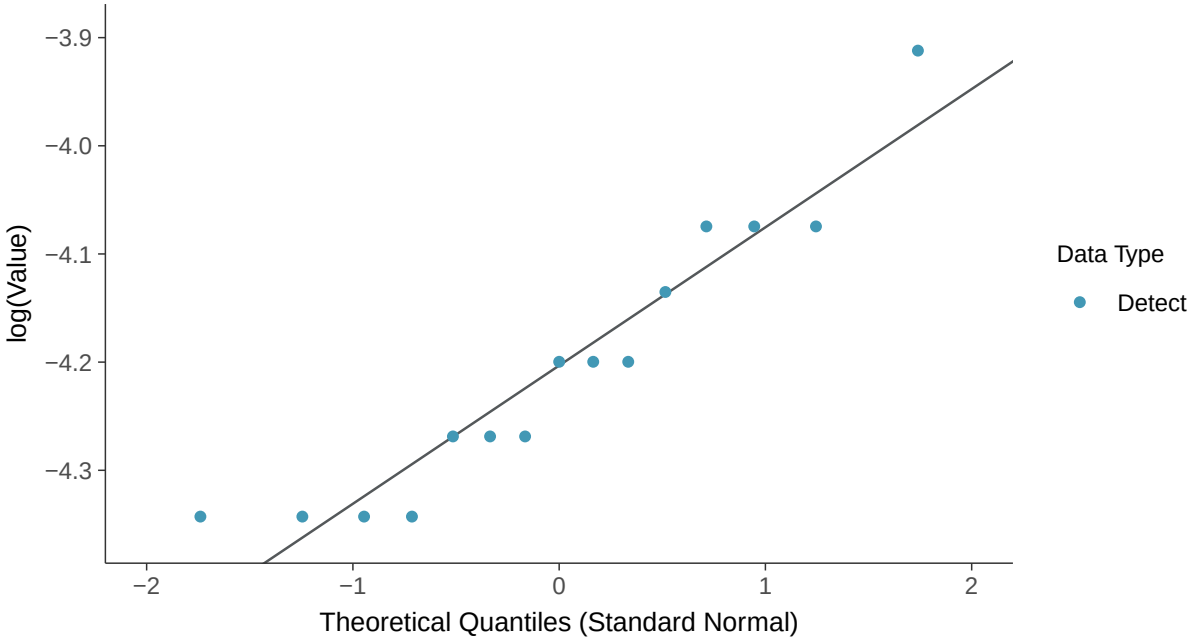
Normal Q-Q plot

Barium, MW-9 (mg/l)



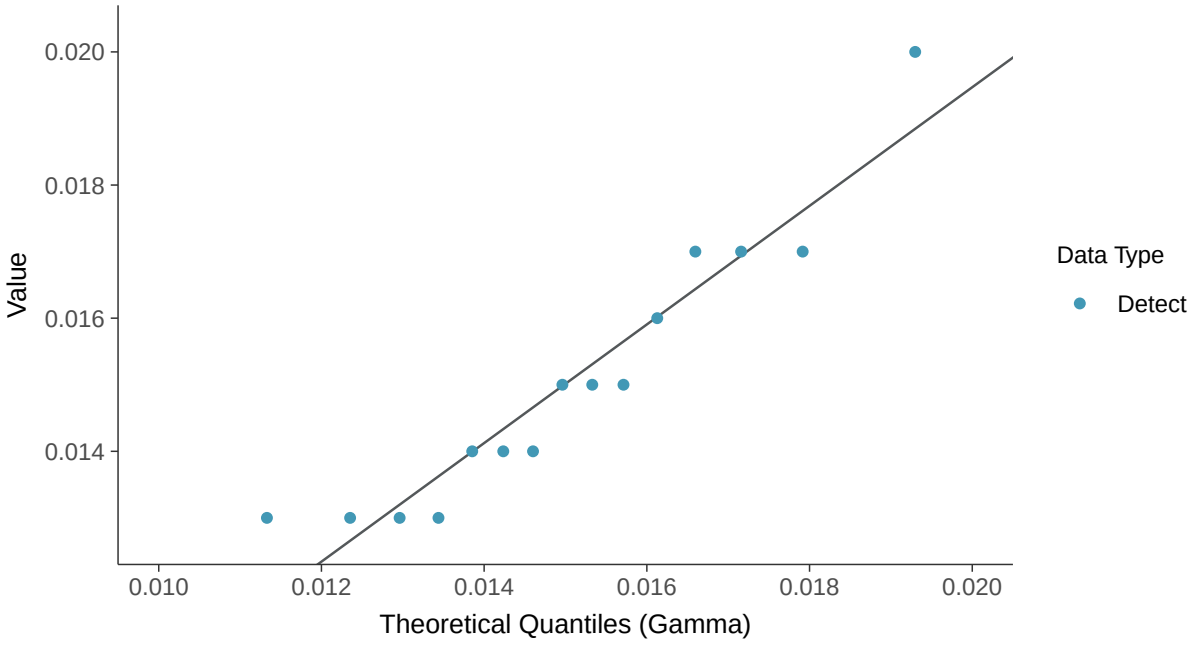
Lognormal Q-Q plot

Barium, MW-9 (mg/l)



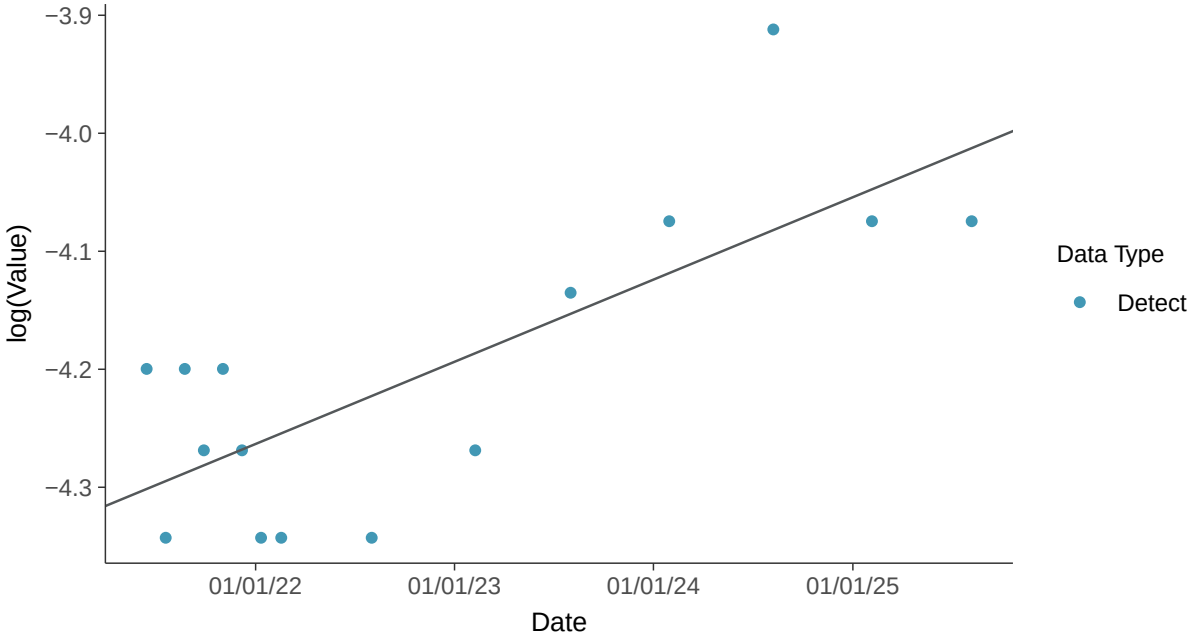
Gamma Q-Q plot

Barium, MW-9 (mg/l)



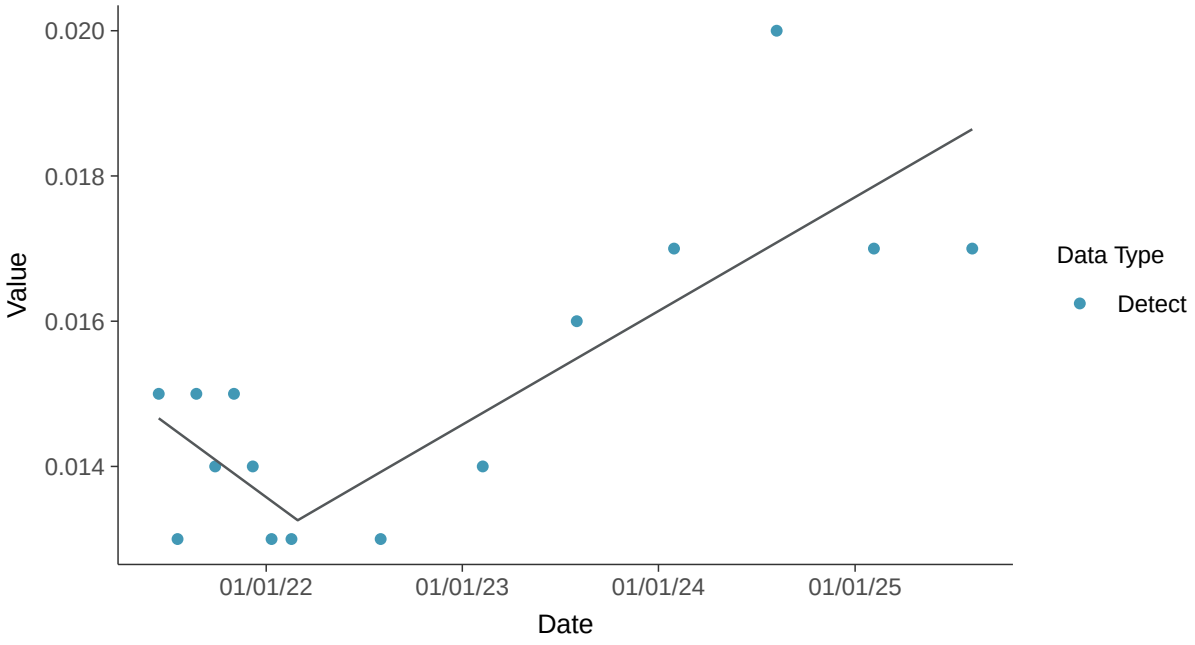
Trend Regression: Lognormal MLE

Barium, MW-9 (mg/l)



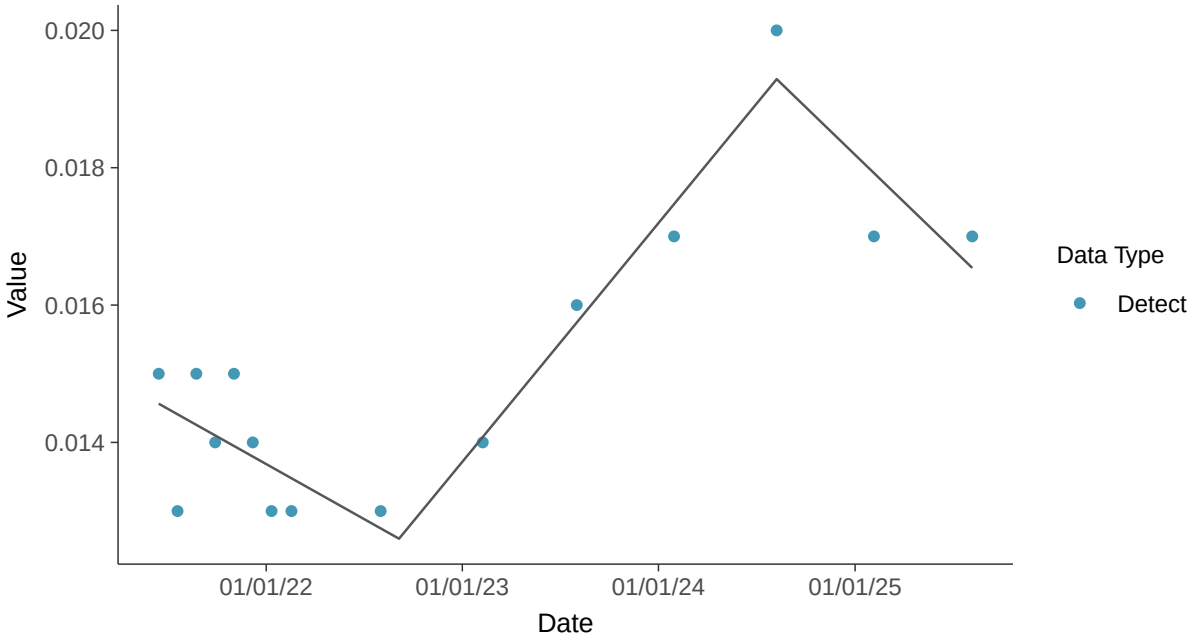
Trend Regression: Piecewise Linear-Linear

Barium, MW-9 (mg/l)



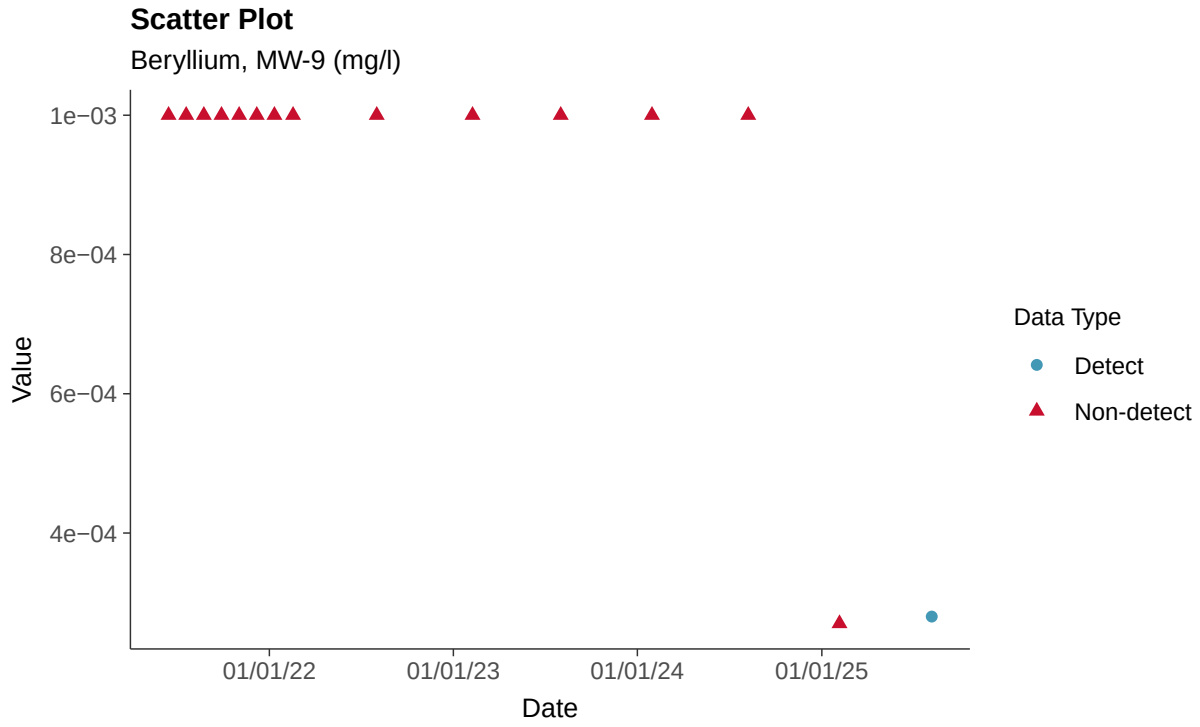
Trend Regression: Piecewise Linear-Linear-Linear

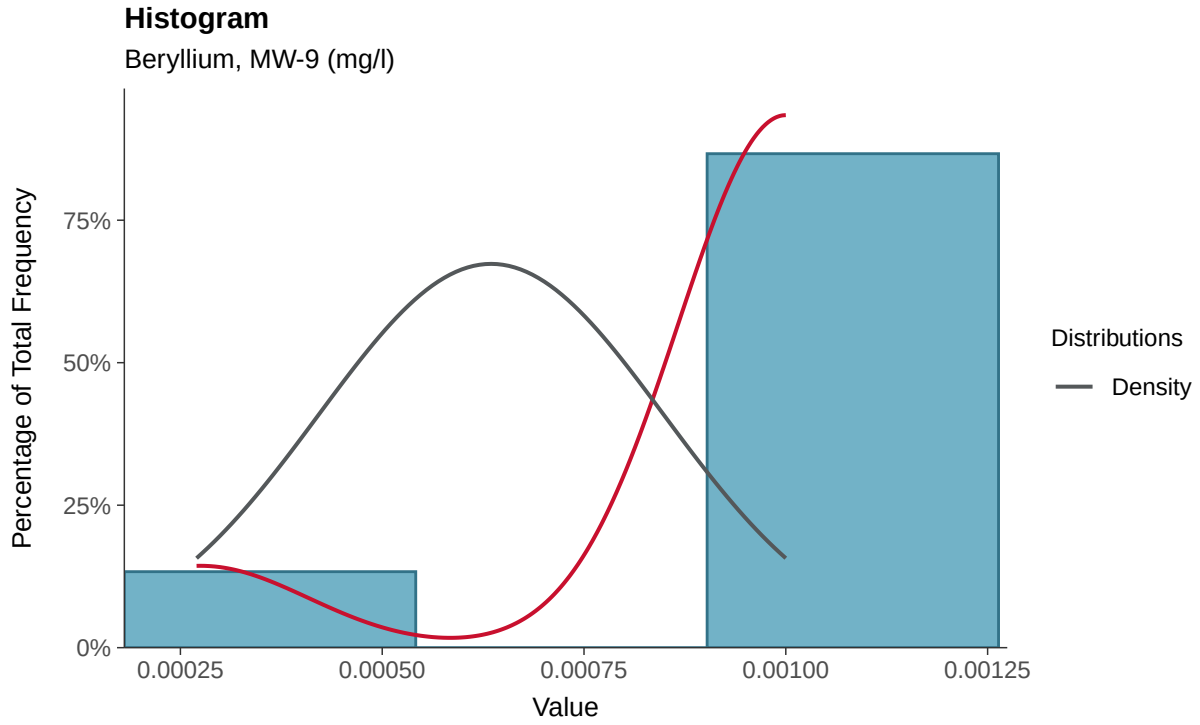
Barium, MW-9 (mg/l)



Appendix IV: Beryllium, MW-9

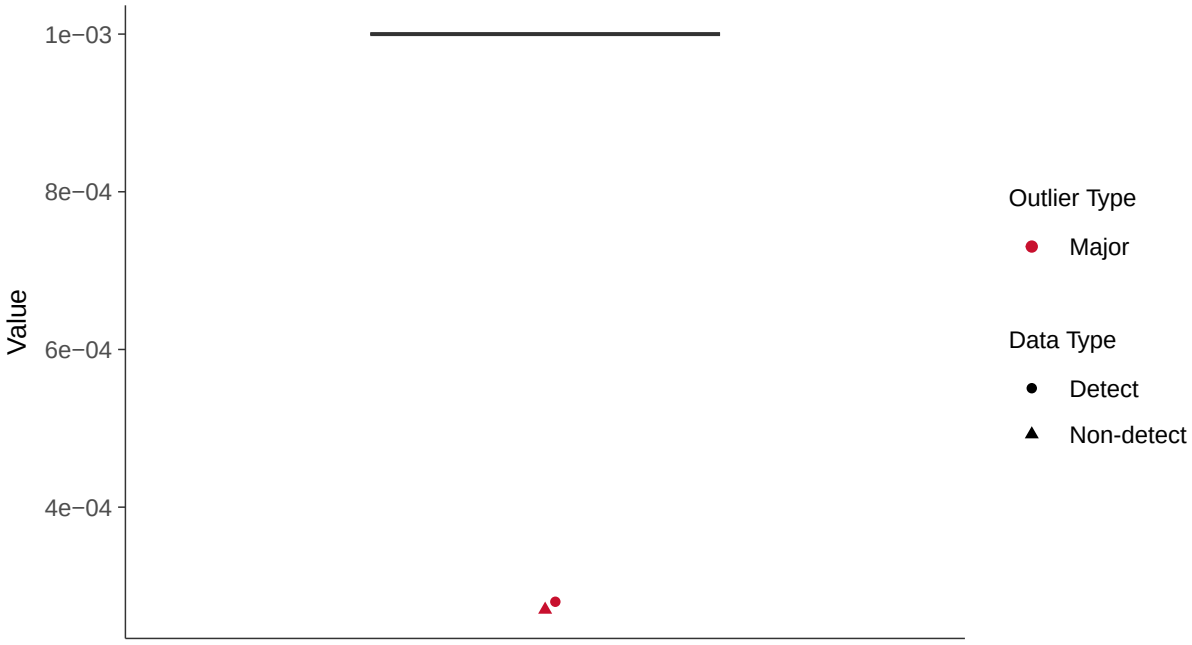
ID: 20_3_104





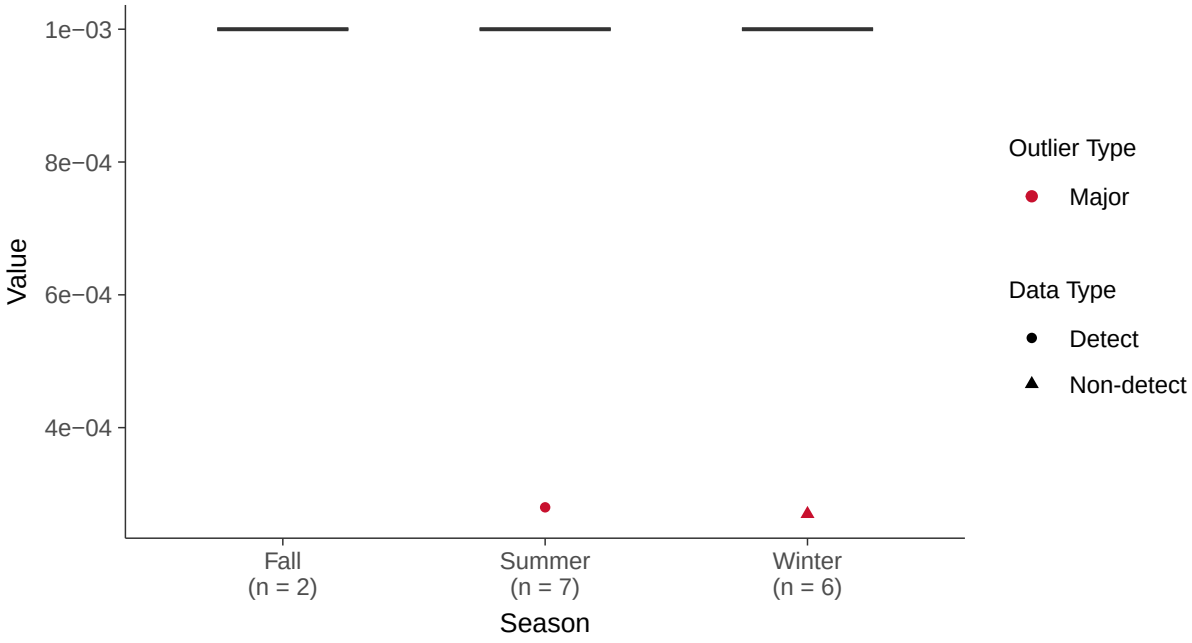
Boxplot

Beryllium, MW-9 (mg/l)



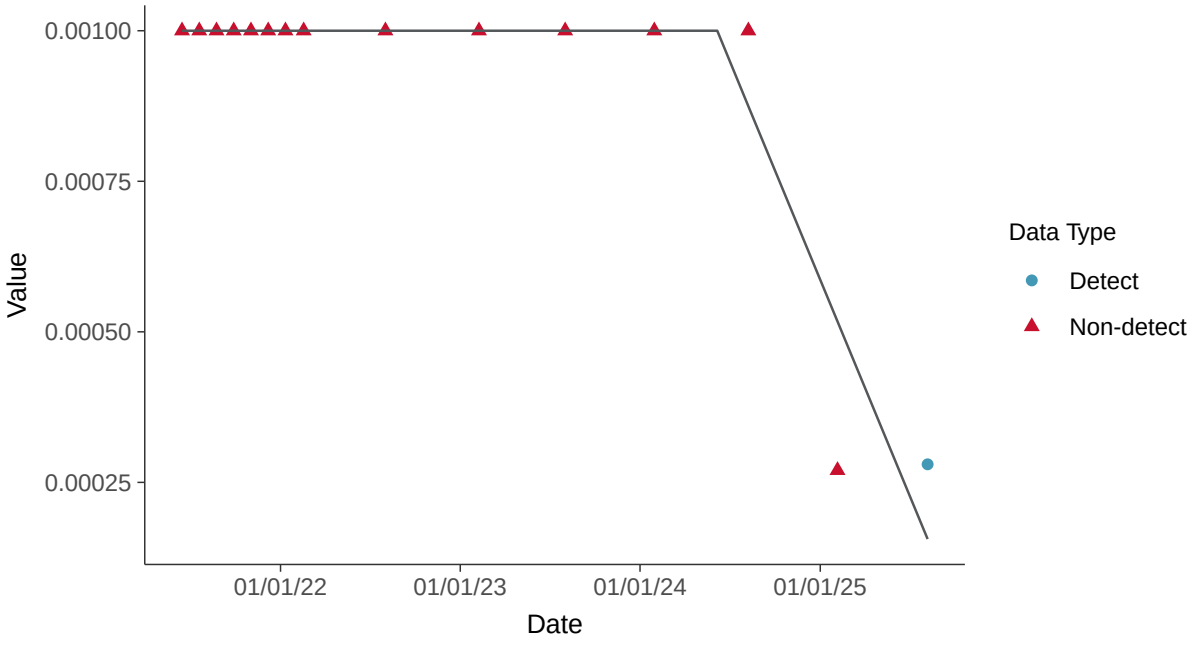
Boxplot by Season

Beryllium, MW-9 (mg/l)



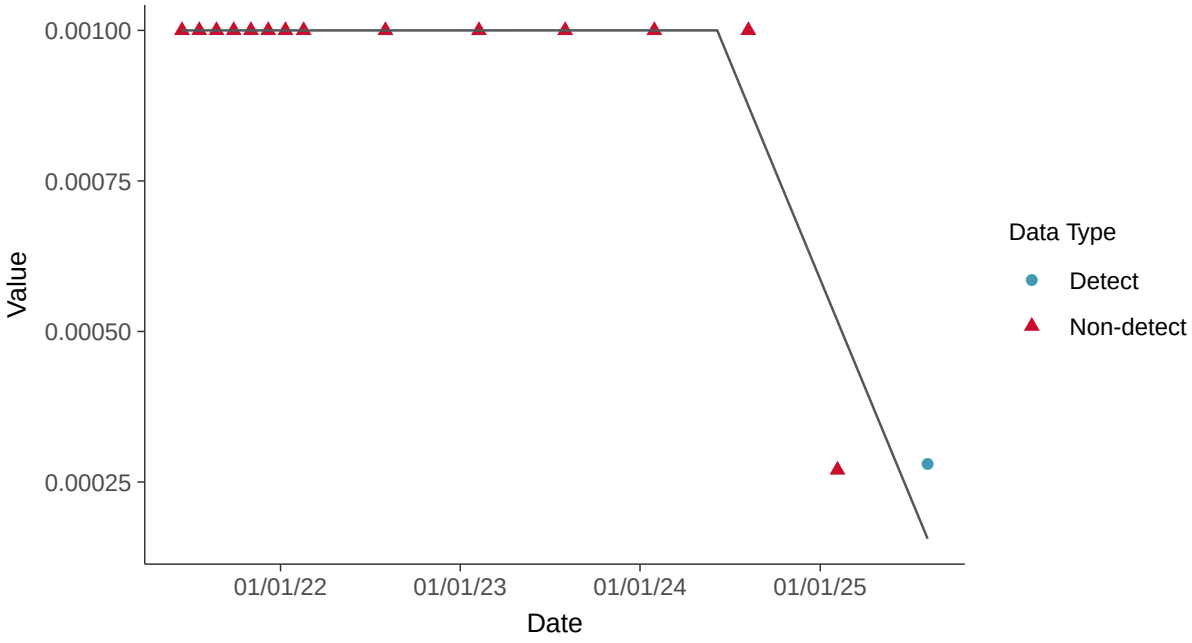
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-9 (mg/l)



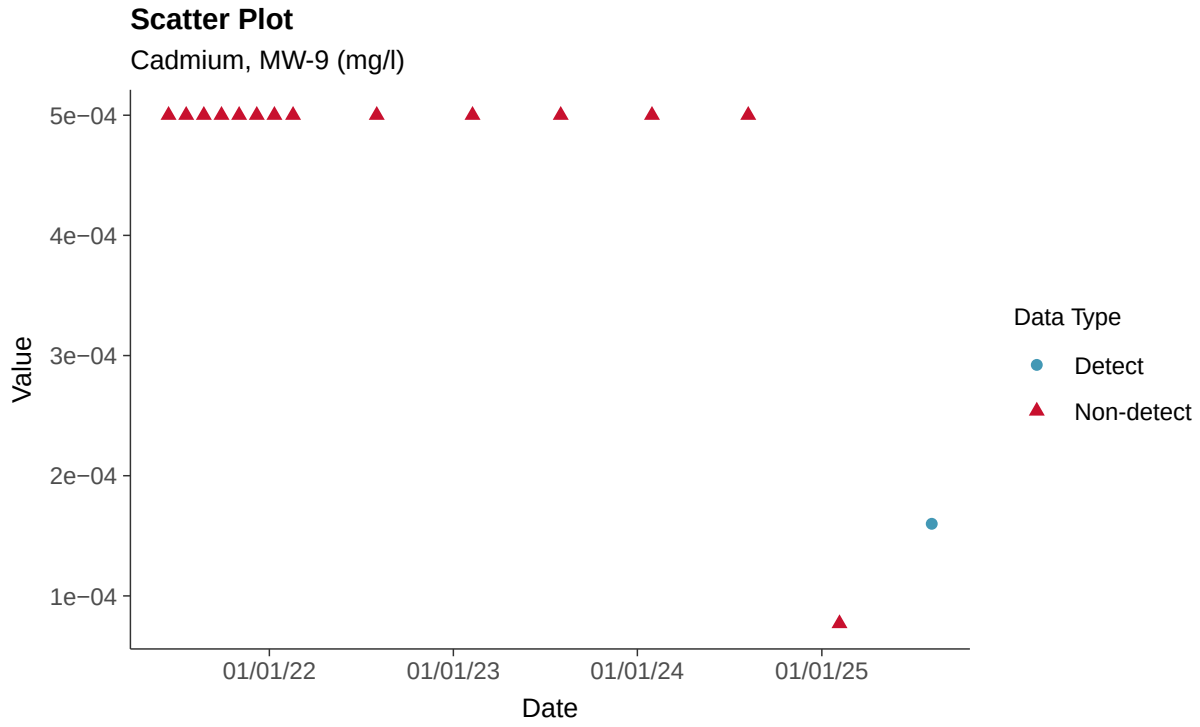
Trend Regression: Piecewise Linear-Linear-Linear

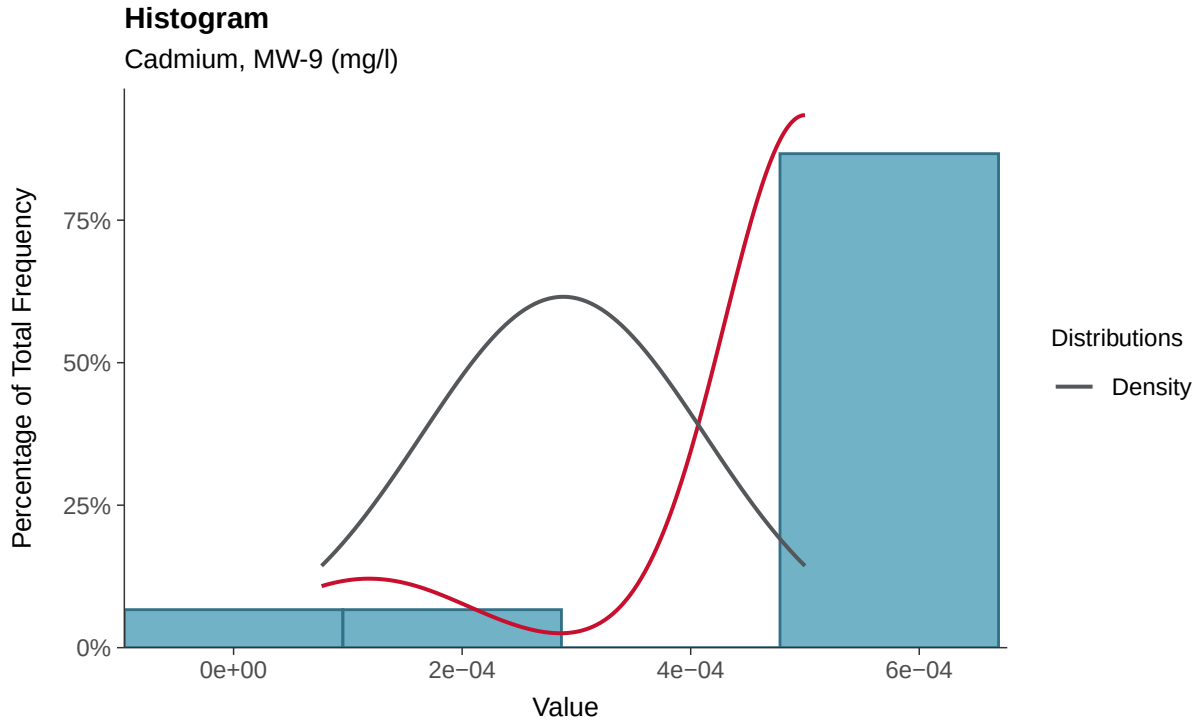
Beryllium, MW-9 (mg/l)



Appendix IV: Cadmium, MW-9

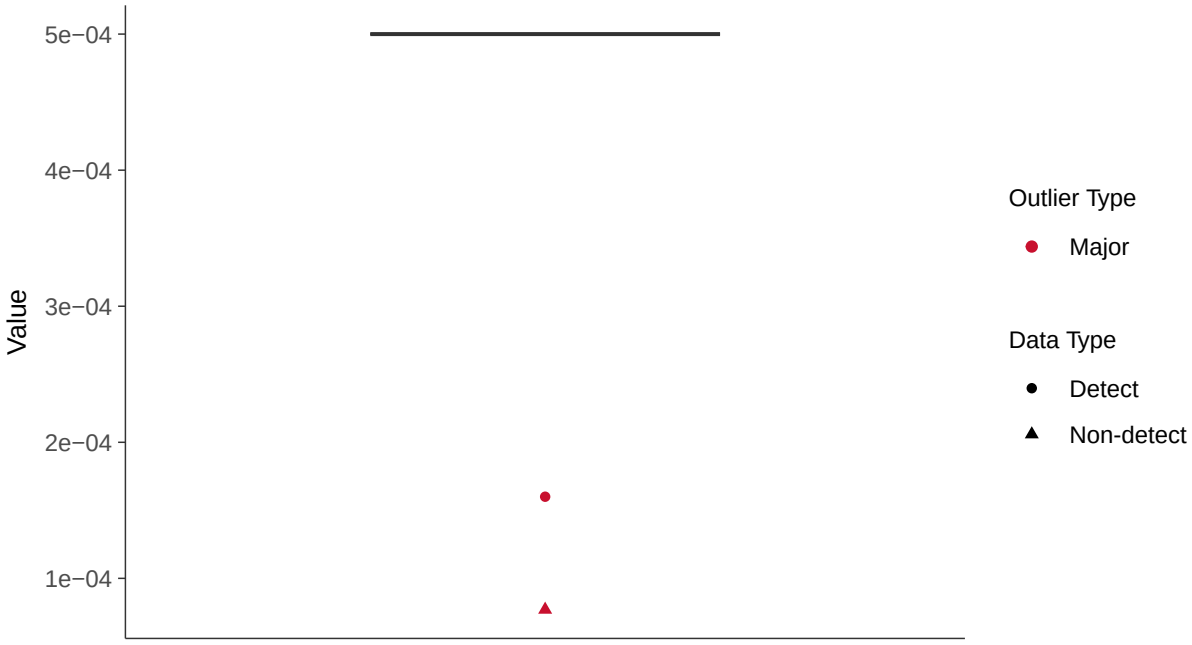
ID: 20_3_106





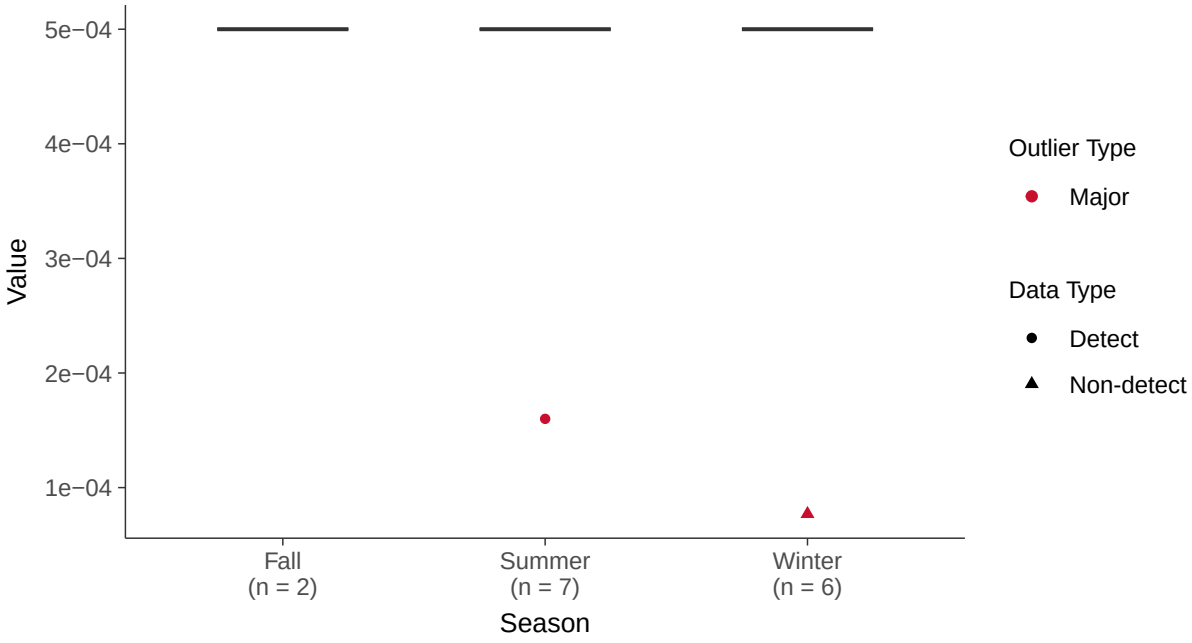
Boxplot

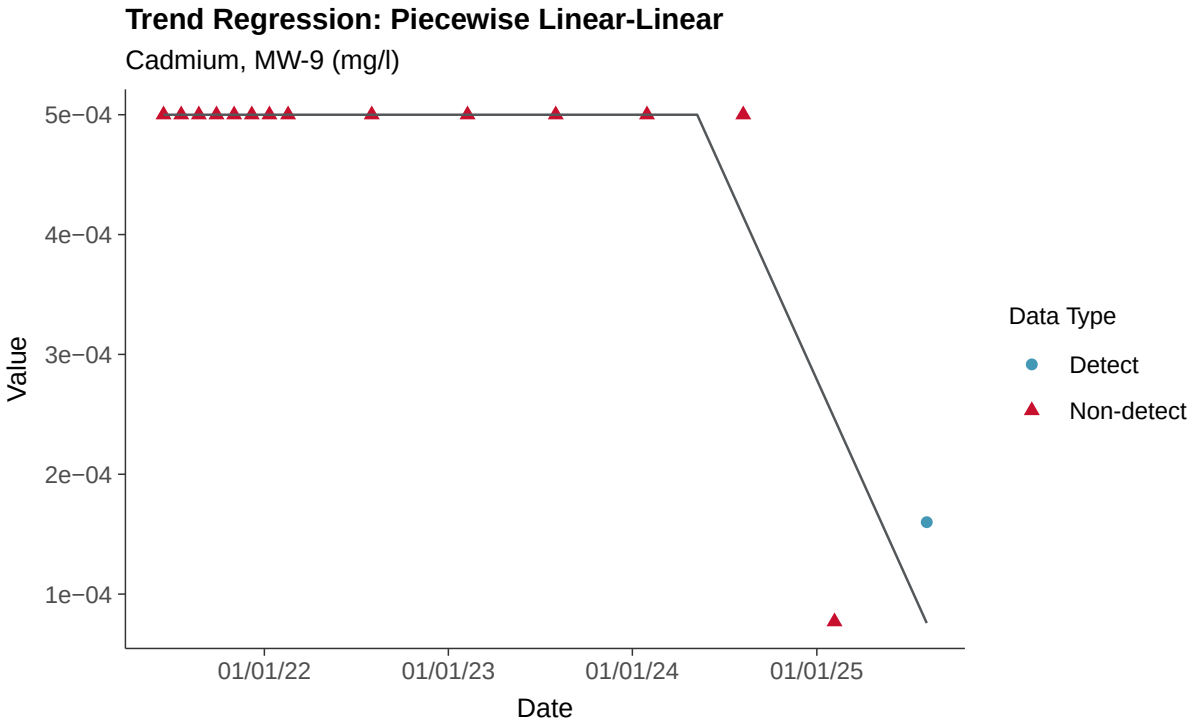
Cadmium, MW-9 (mg/l)



Boxplot by Season

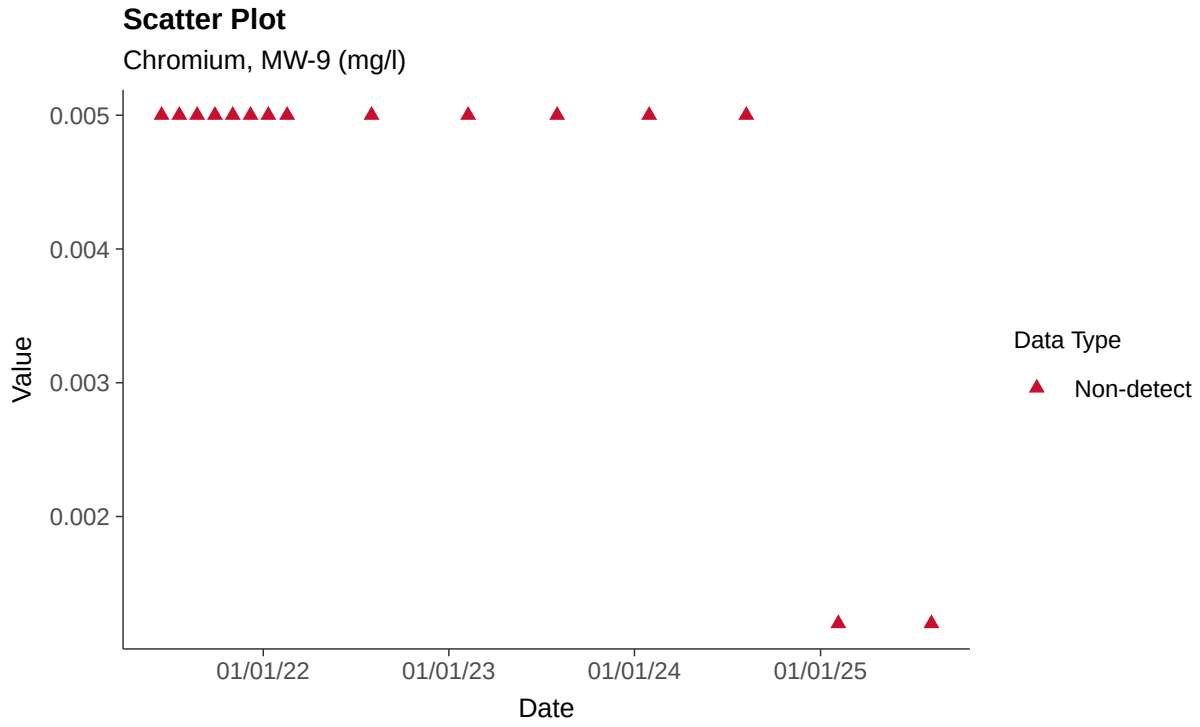
Cadmium, MW-9 (mg/l)

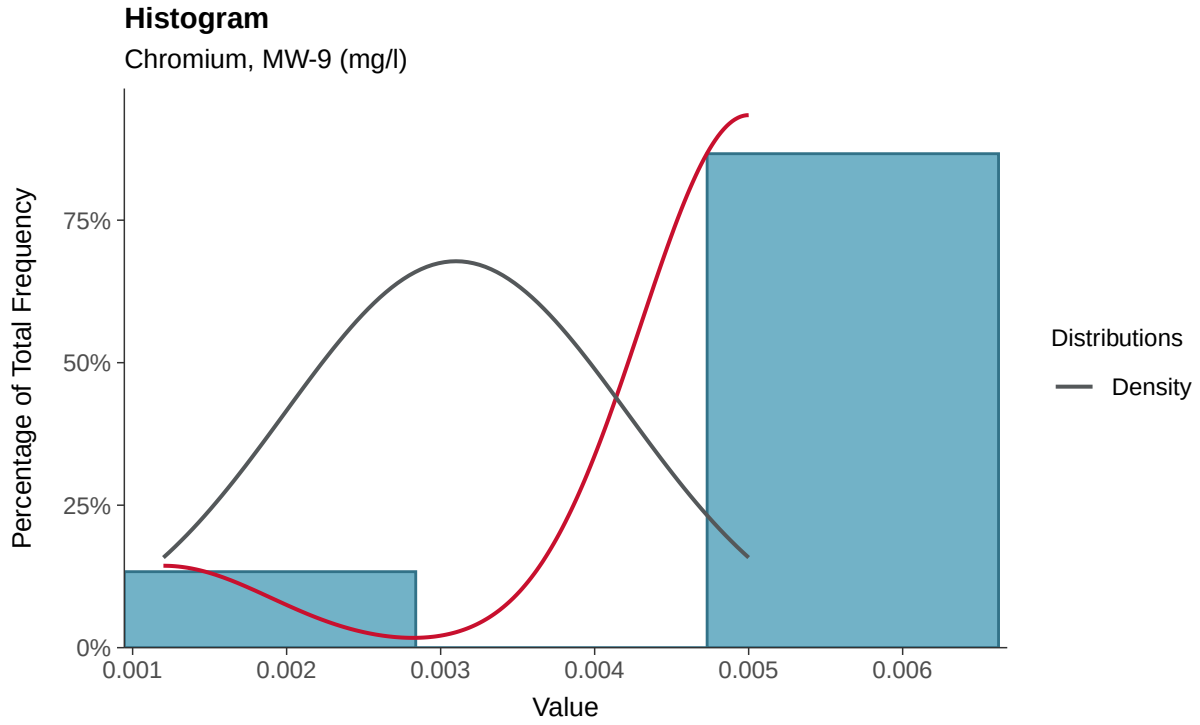



Trend Regression: Piecewise Linear-Linear
Cadmium, MW-9 (mg/l)
5e−04
4e−04
3e−04
2e−04
1e−04
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Chromium, MW-9

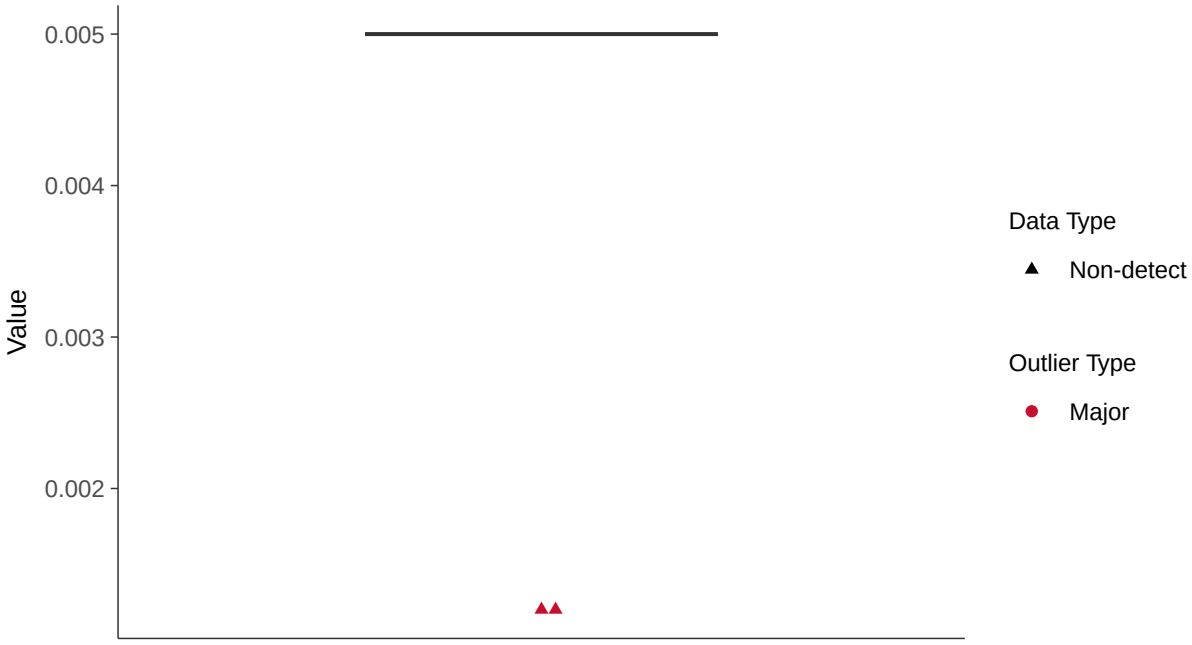
ID: 20_3_109





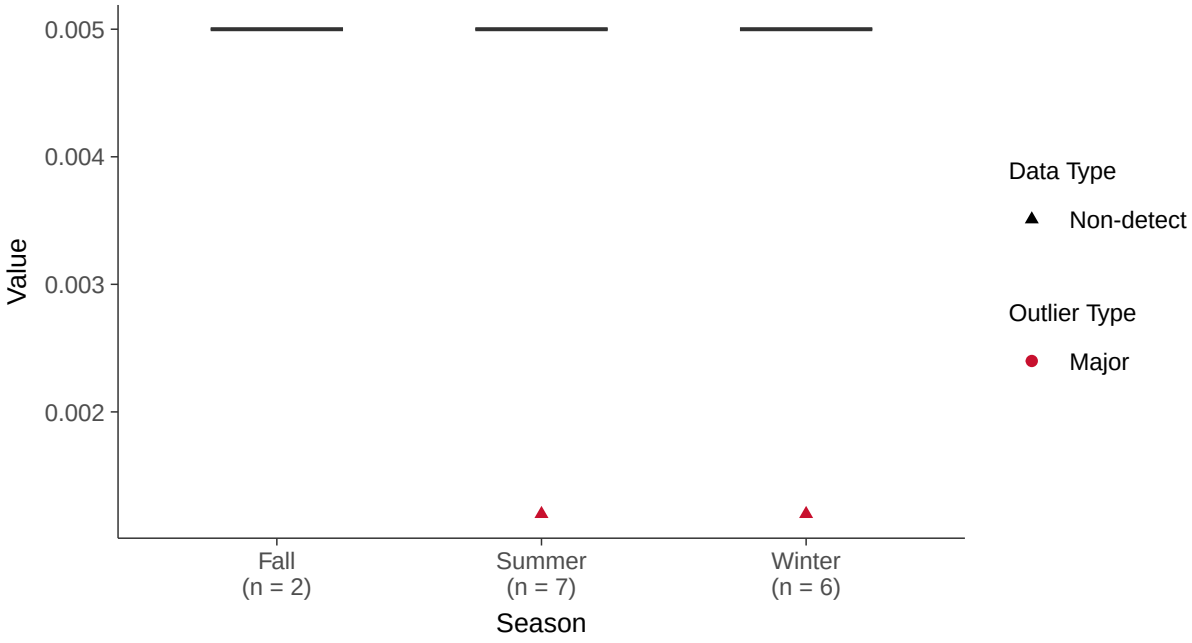
Boxplot

Chromium, MW-9 (mg/l)



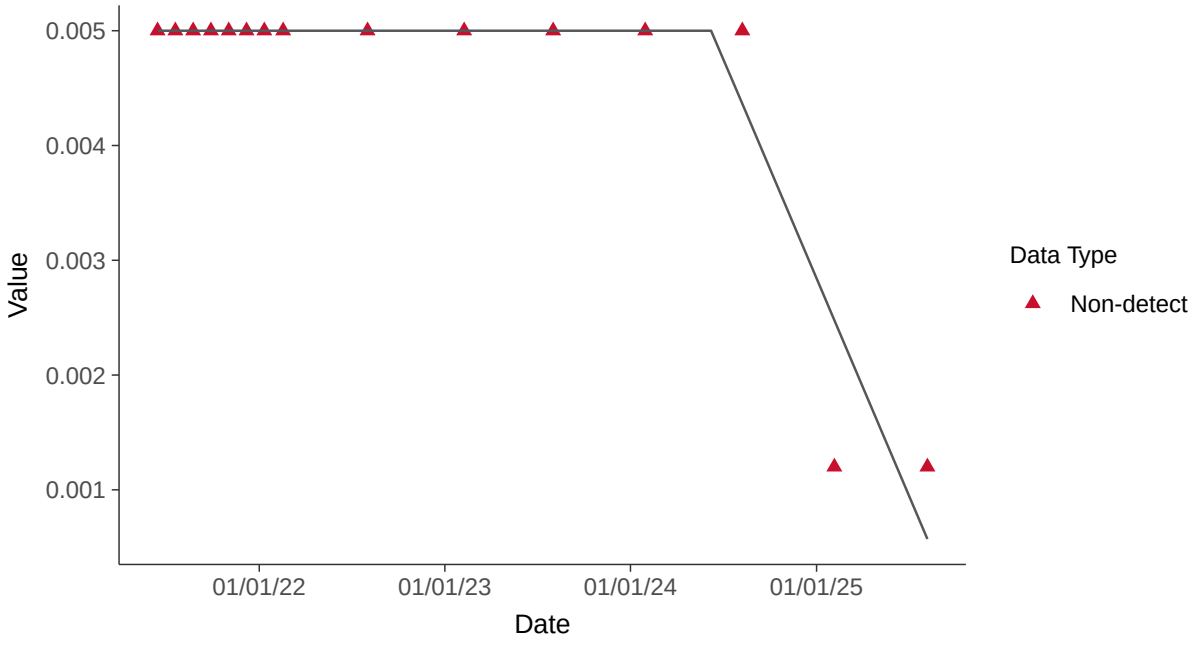
Boxplot by Season

Chromium, MW-9 (mg/l)



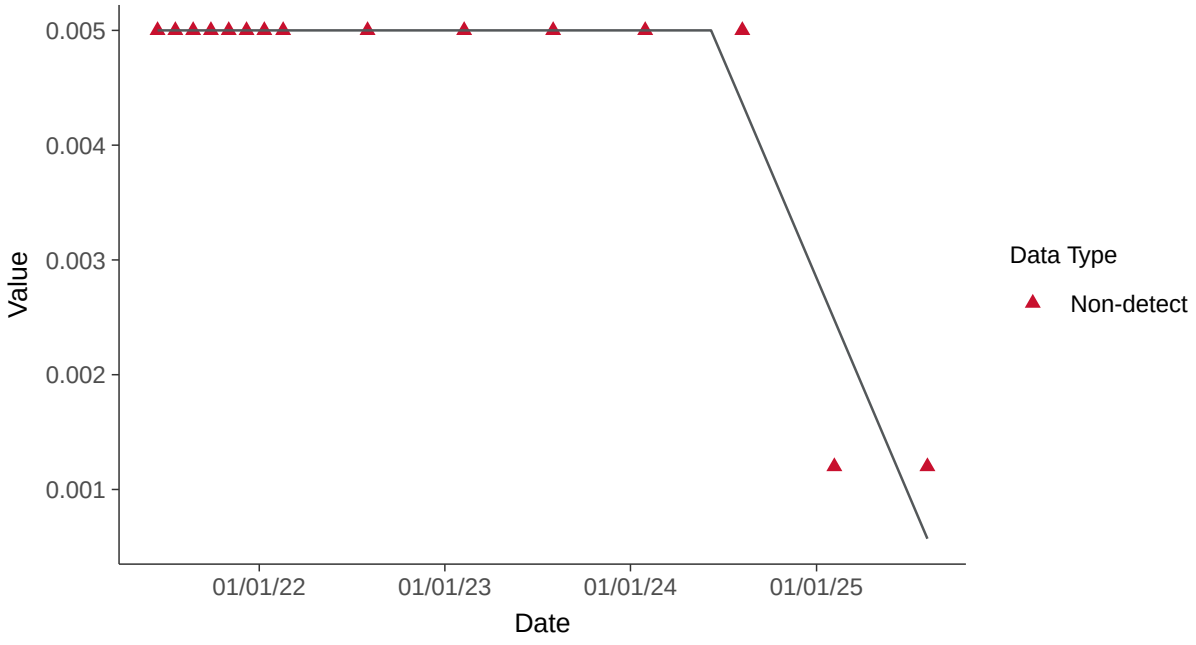
Trend Regression: Piecewise Linear-Linear

Chromium, MW-9 (mg/l)



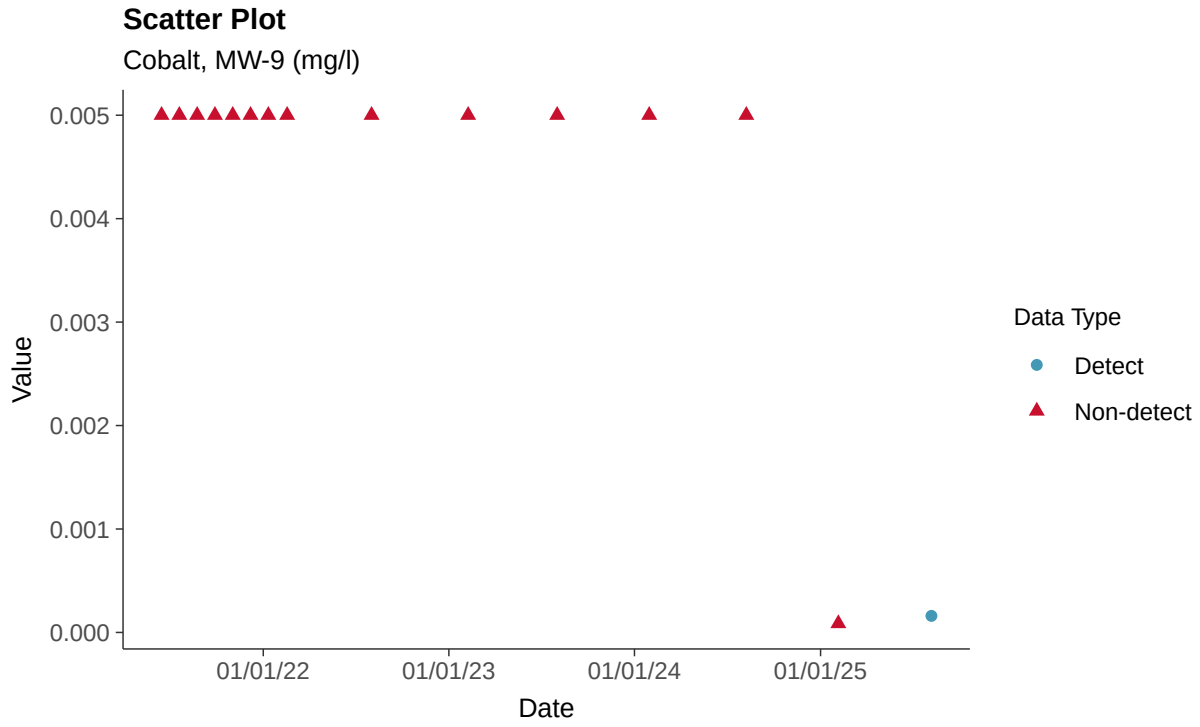
Trend Regression: Piecewise Linear-Linear-Linear

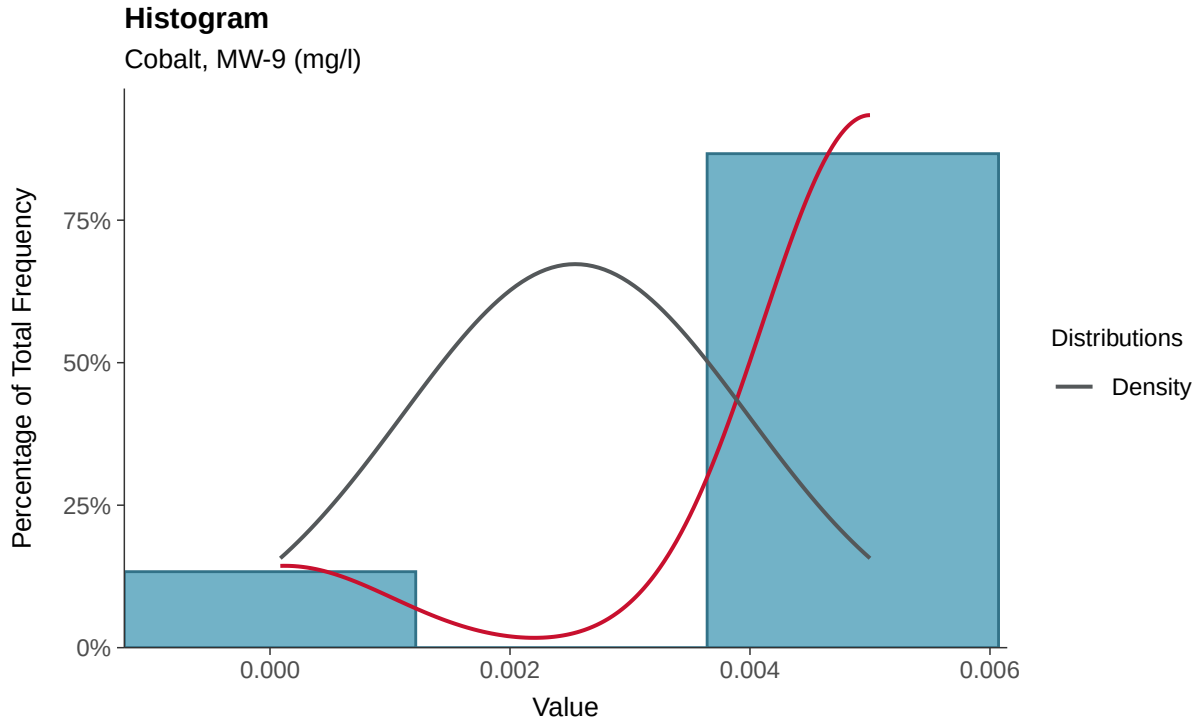
Chromium, MW-9 (mg/l)



Appendix IV: Cobalt, MW-9

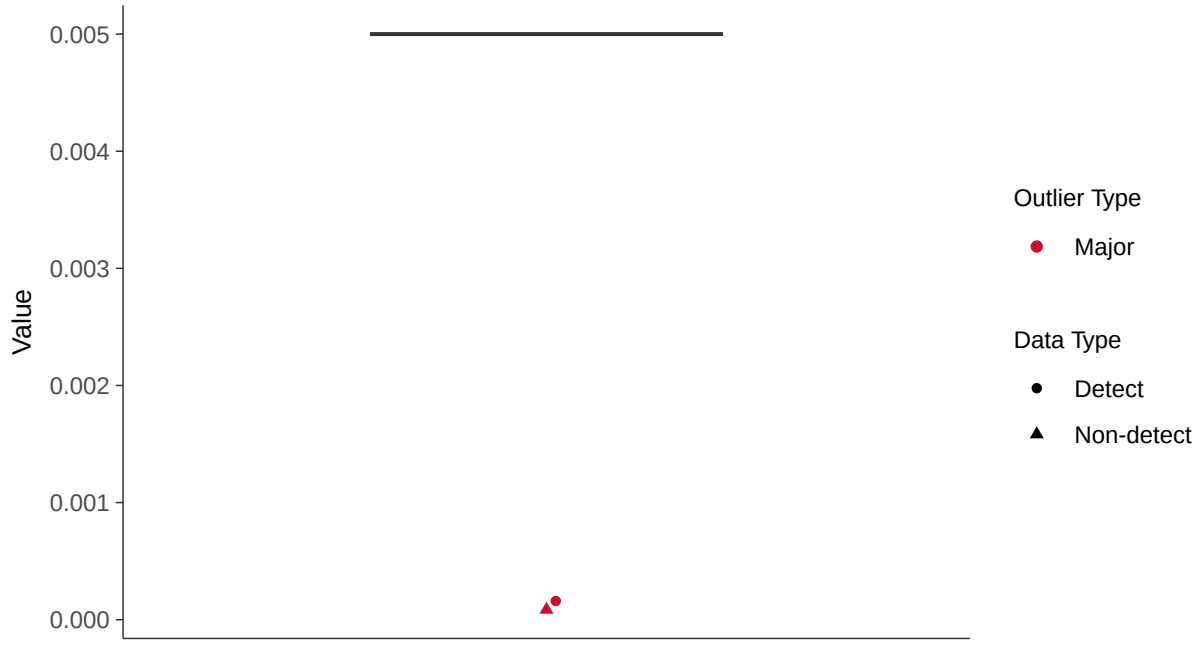
ID: 20_3_110





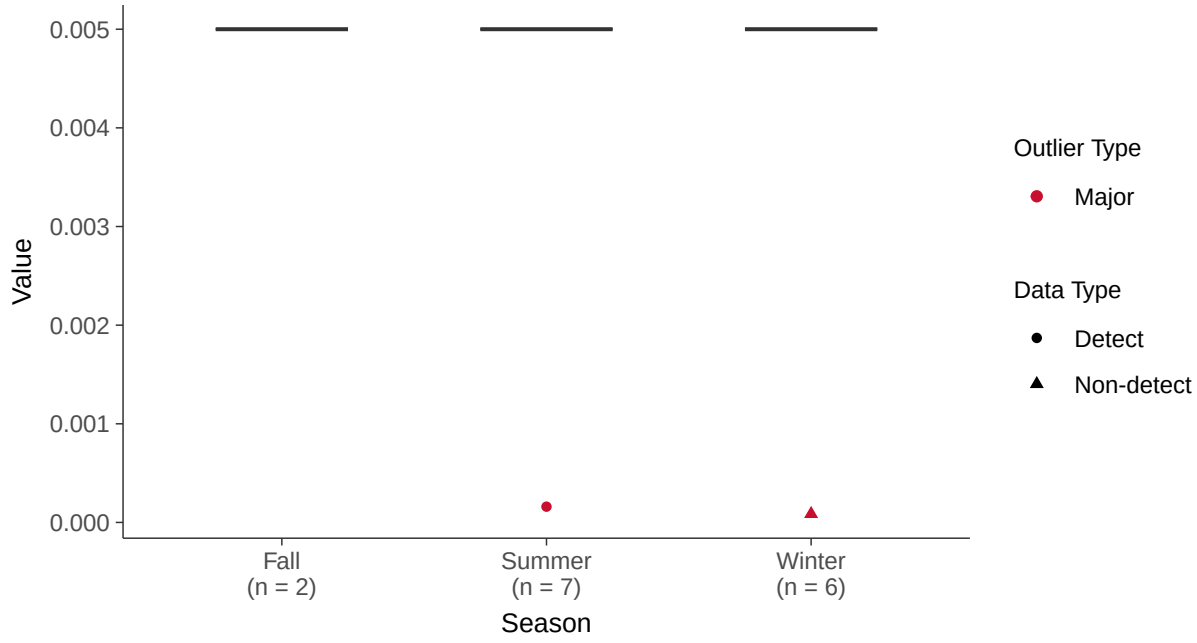
Boxplot

Cobalt, MW-9 (mg/l)



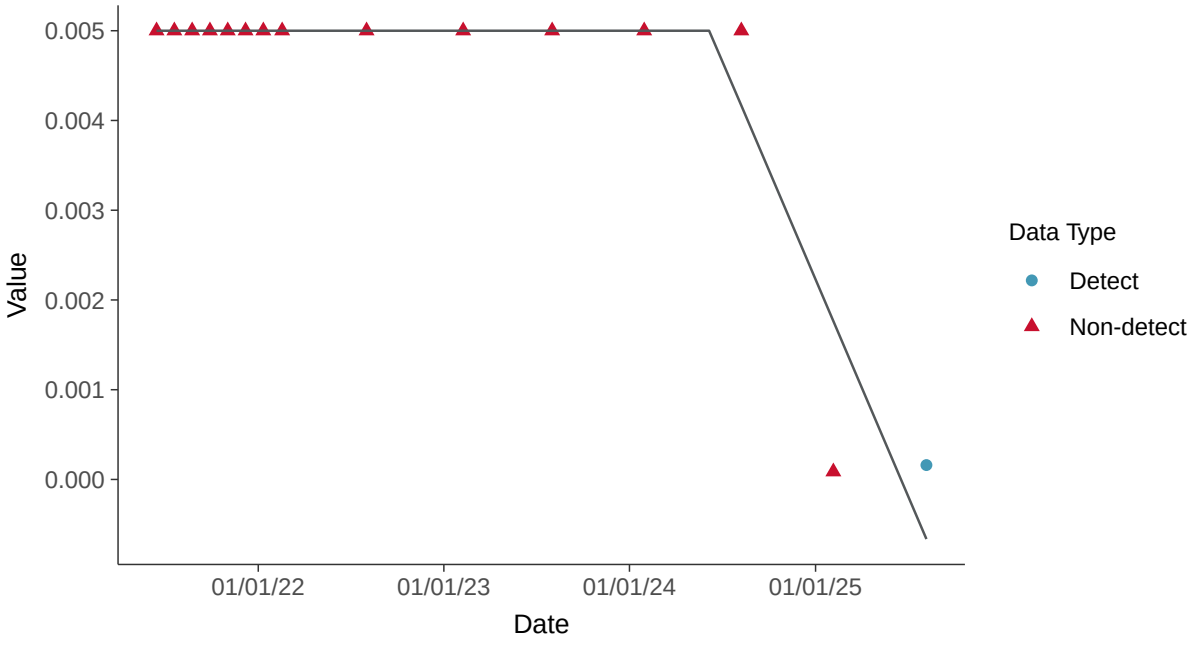
Boxplot by Season

Cobalt, MW-9 (mg/l)



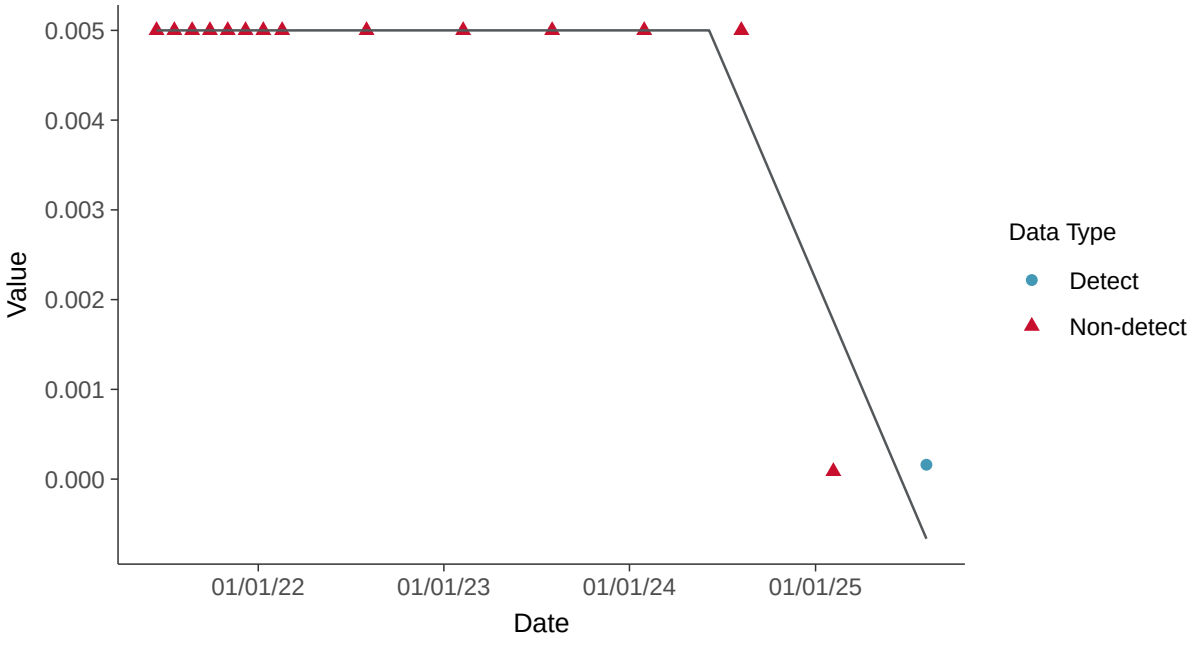
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-9 (mg/l)



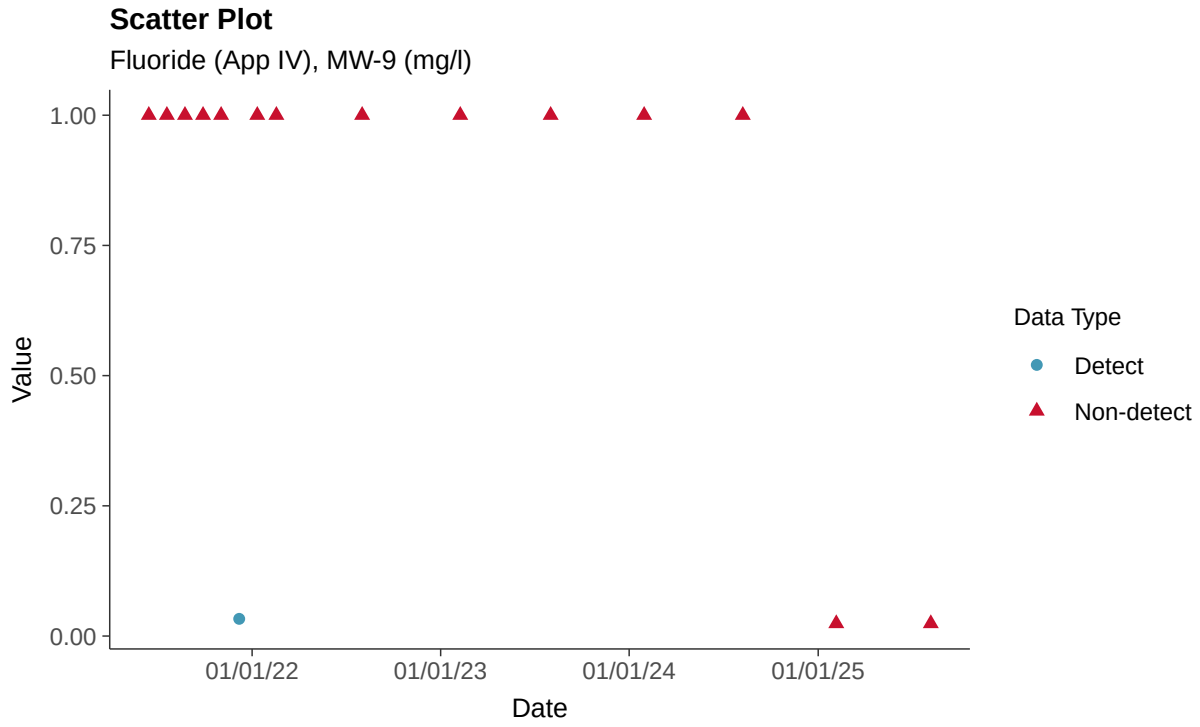
Trend Regression: Piecewise Linear-Linear-Linear

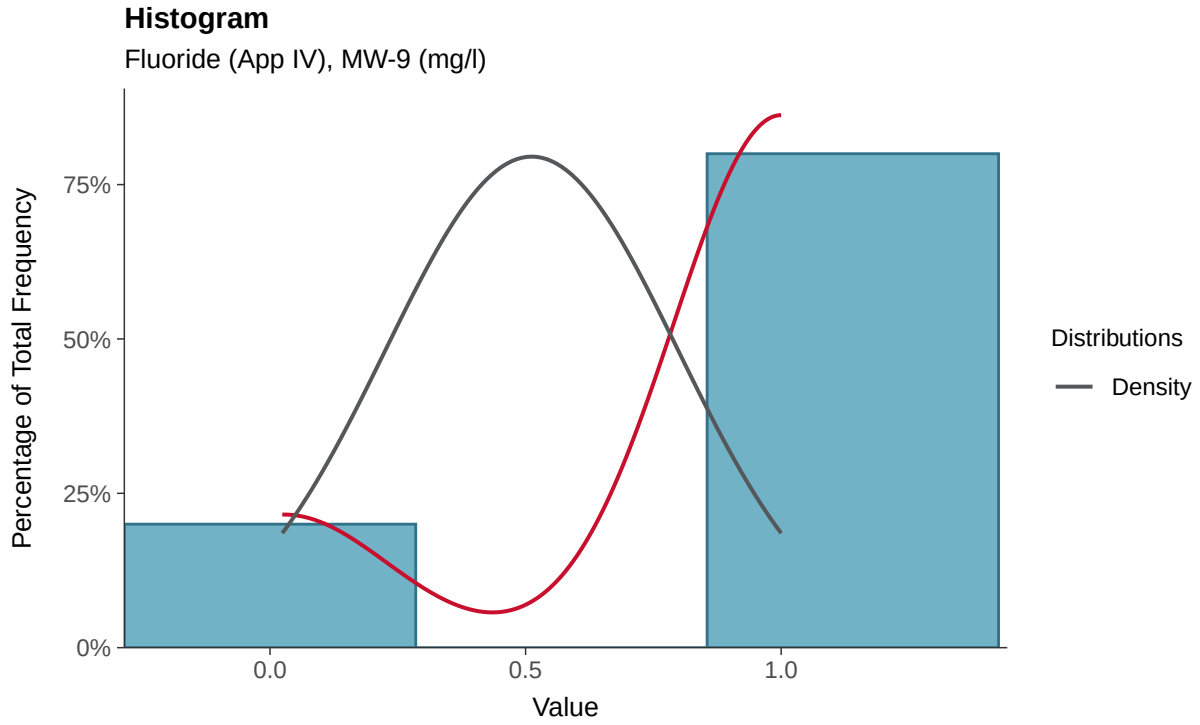
Cobalt, MW-9 (mg/l)



Appendix IV: Fluoride (App IV), MW-9

ID: 20_3_113



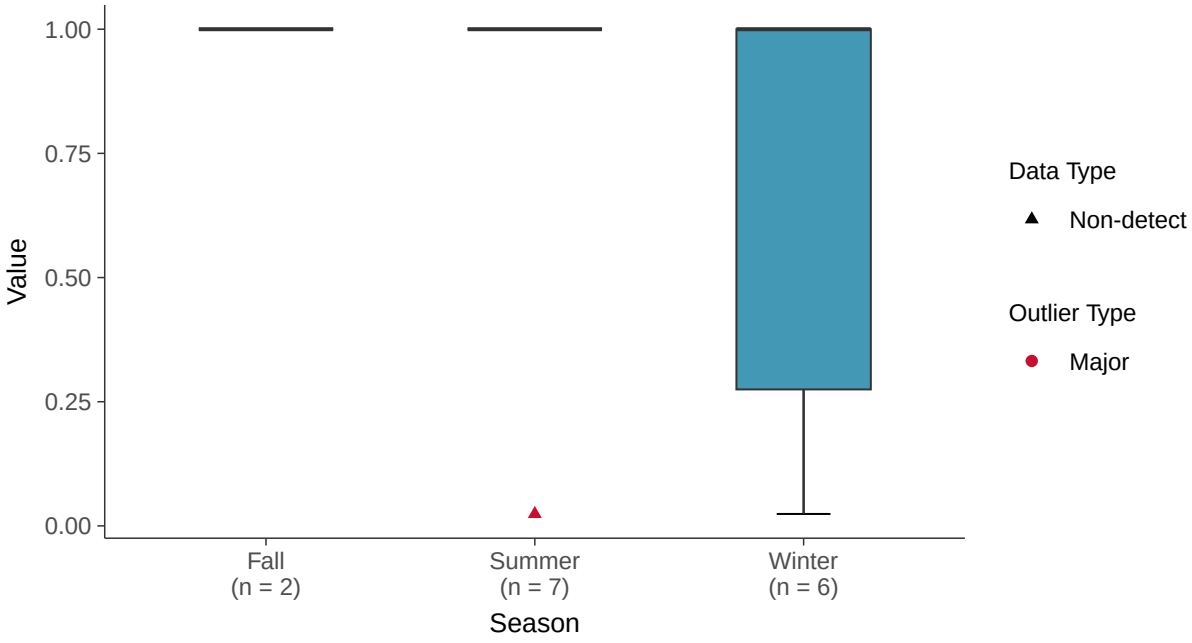


Boxplot

Fluoride (App IV), MW-9 (mg/l)

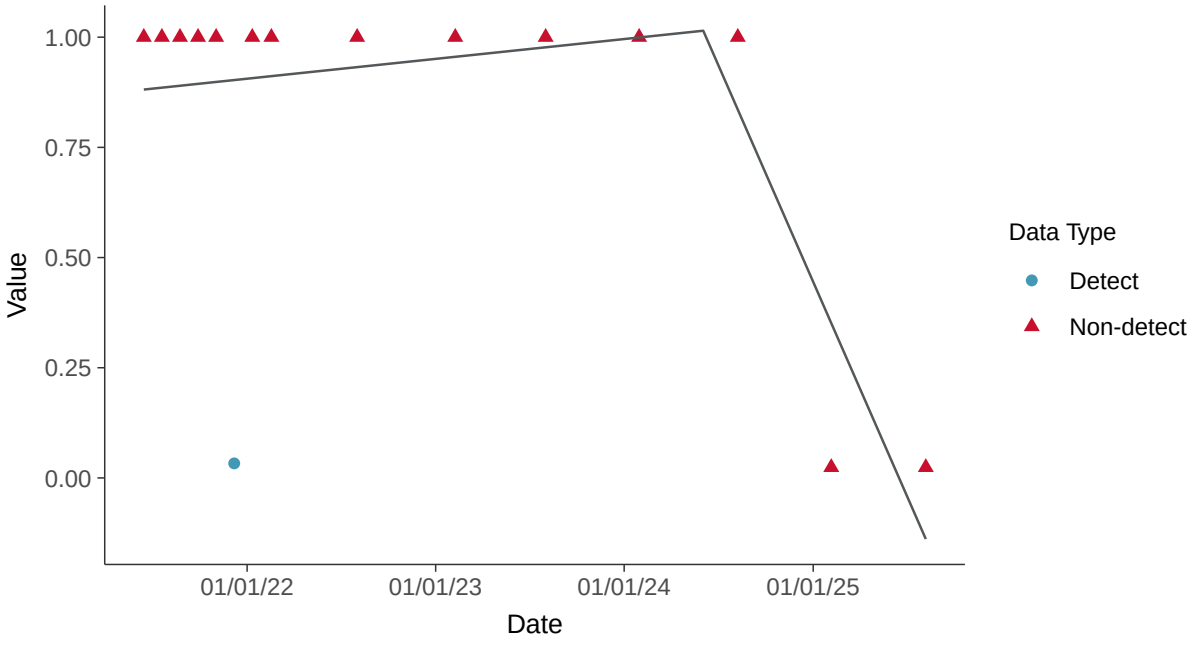
Boxplot by Season

Fluoride (App IV), MW-9 (mg/l)



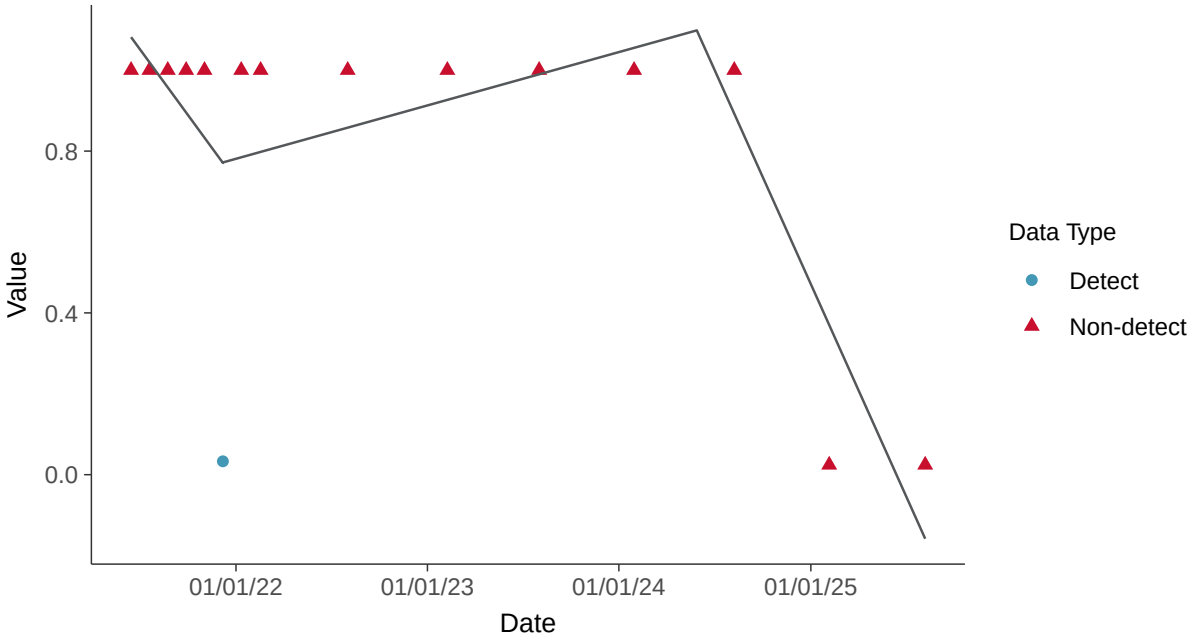
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-9 (mg/l)



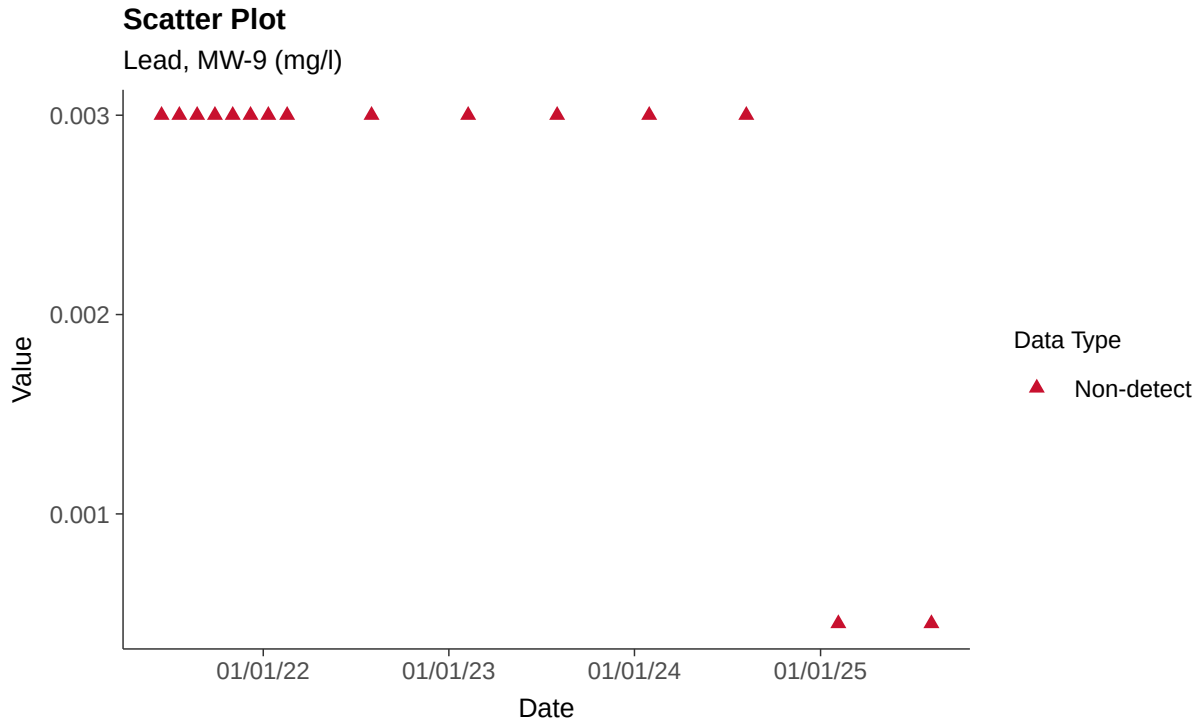
Trend Regression: Piecewise Linear-Linear-Linear

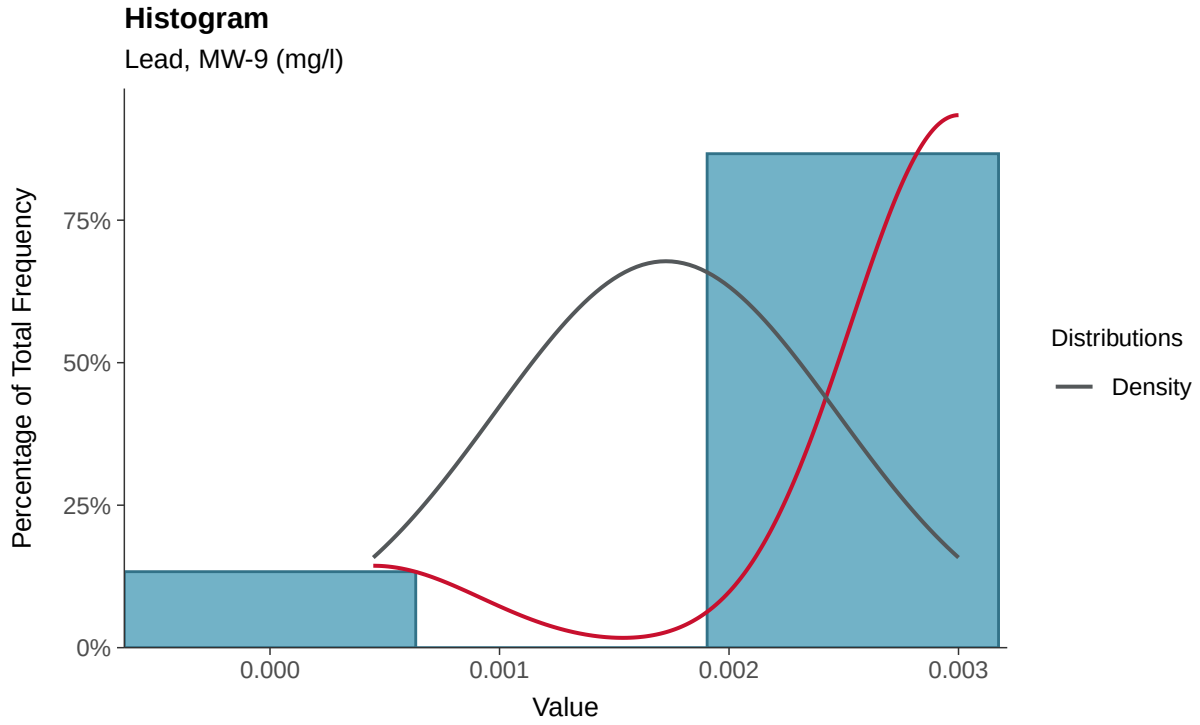
Fluoride (App IV), MW-9 (mg/l)



Appendix IV: Lead, MW-9

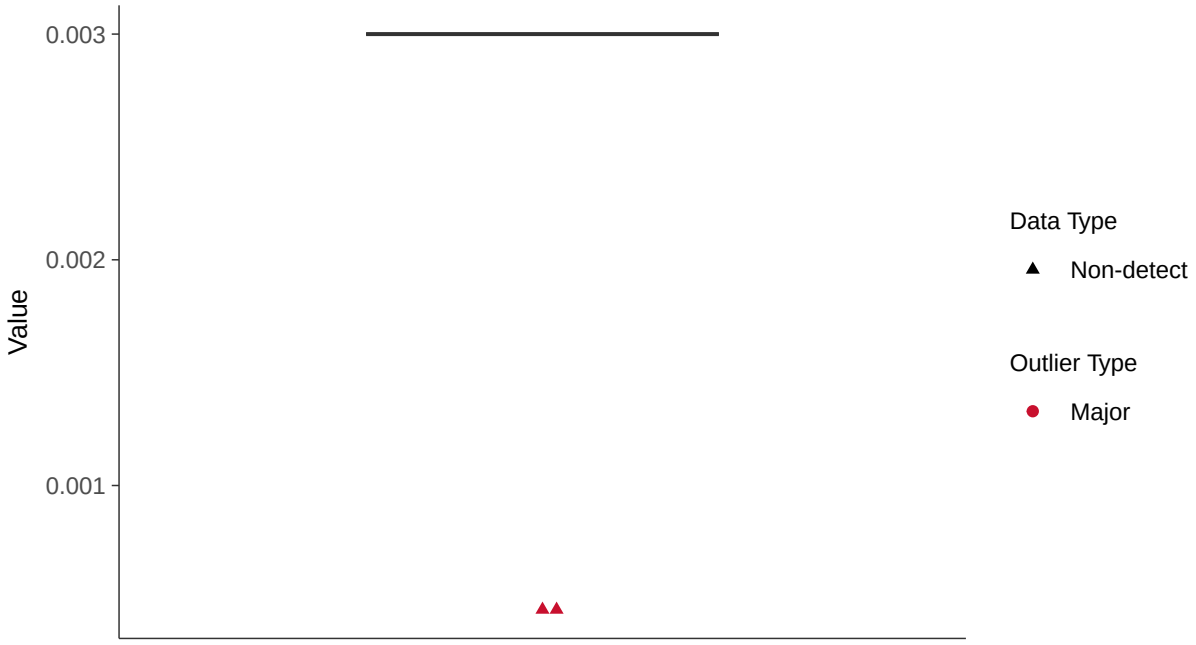
ID: 20_3_115





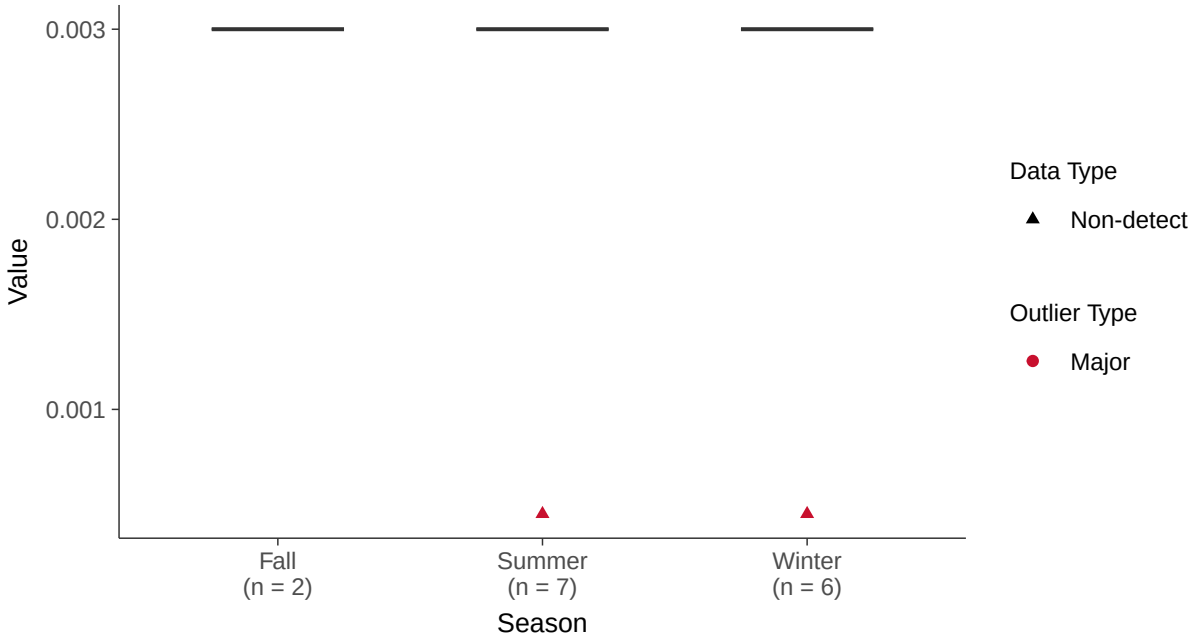
Boxplot

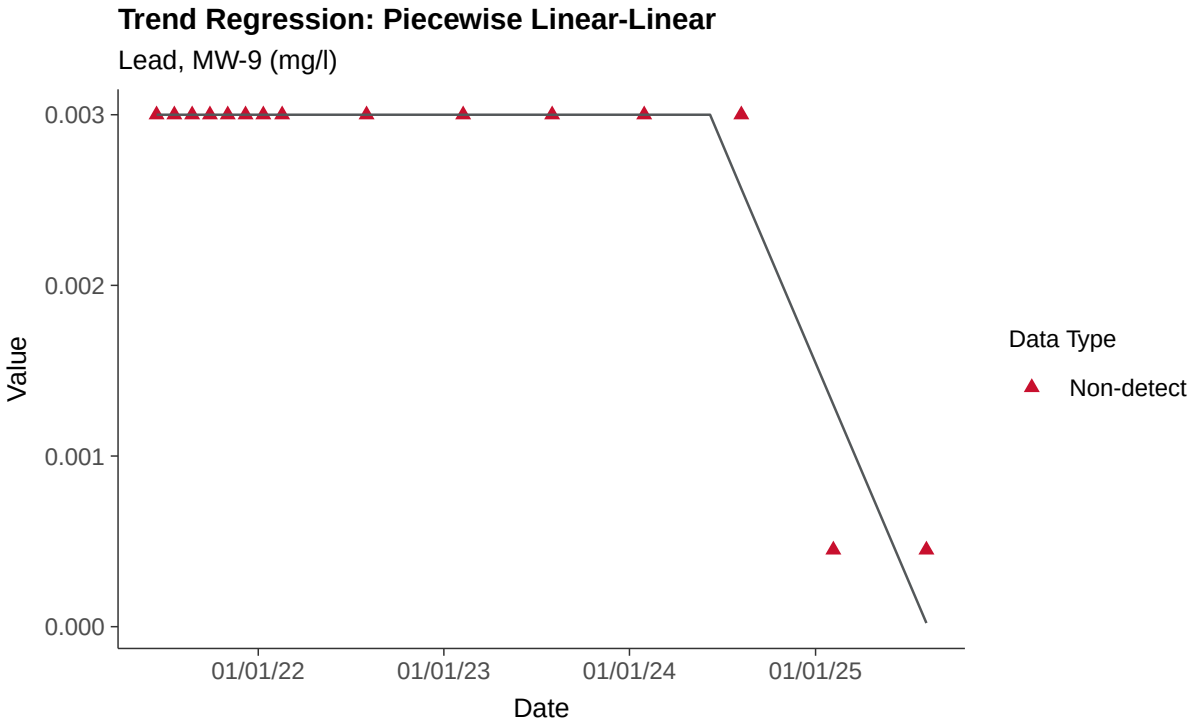
Lead, MW-9 (mg/l)



Boxplot by Season

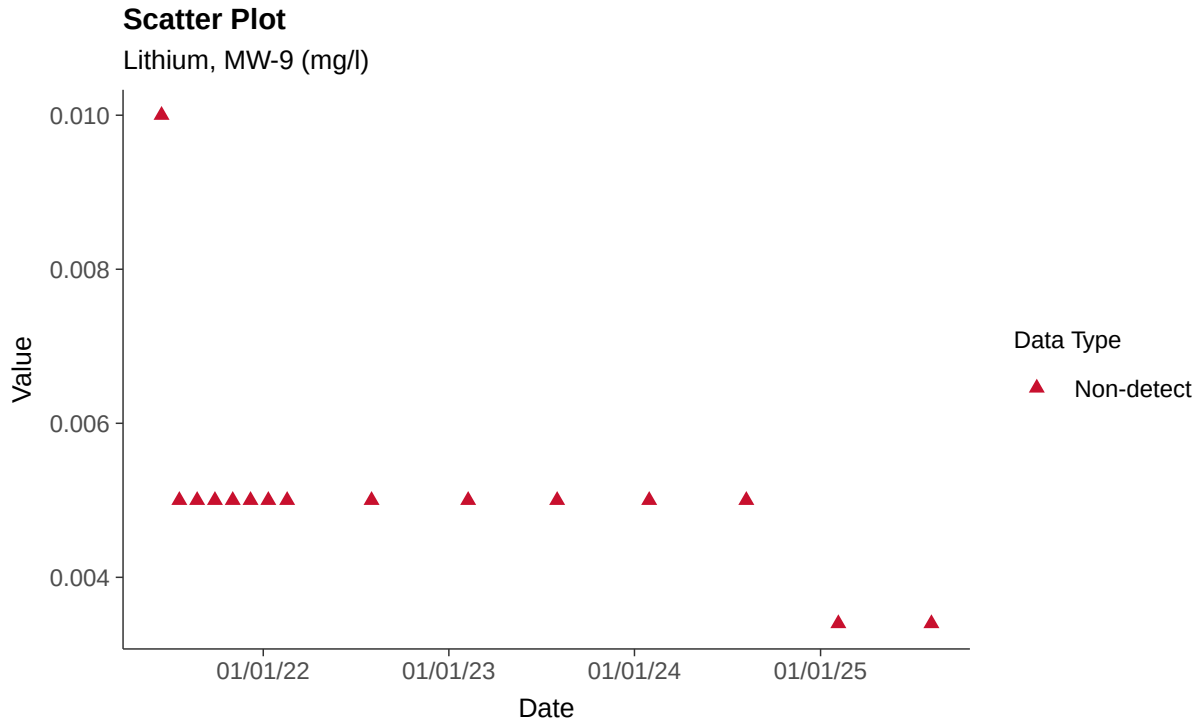
Lead, MW-9 (mg/l)

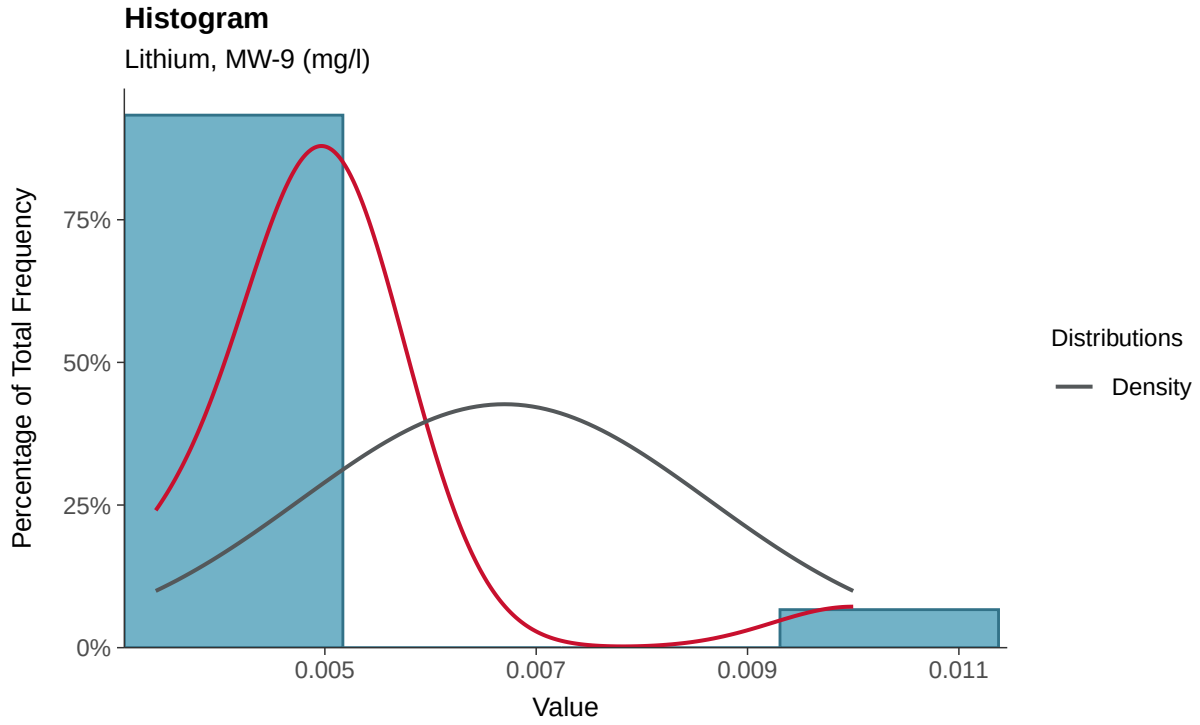



Trend Regression: Piecewise Linear-Linear
Lead, MW-9 (mg/l)
0.003
0.002
0.001
0.000
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Appendix IV: Lithium, MW-9

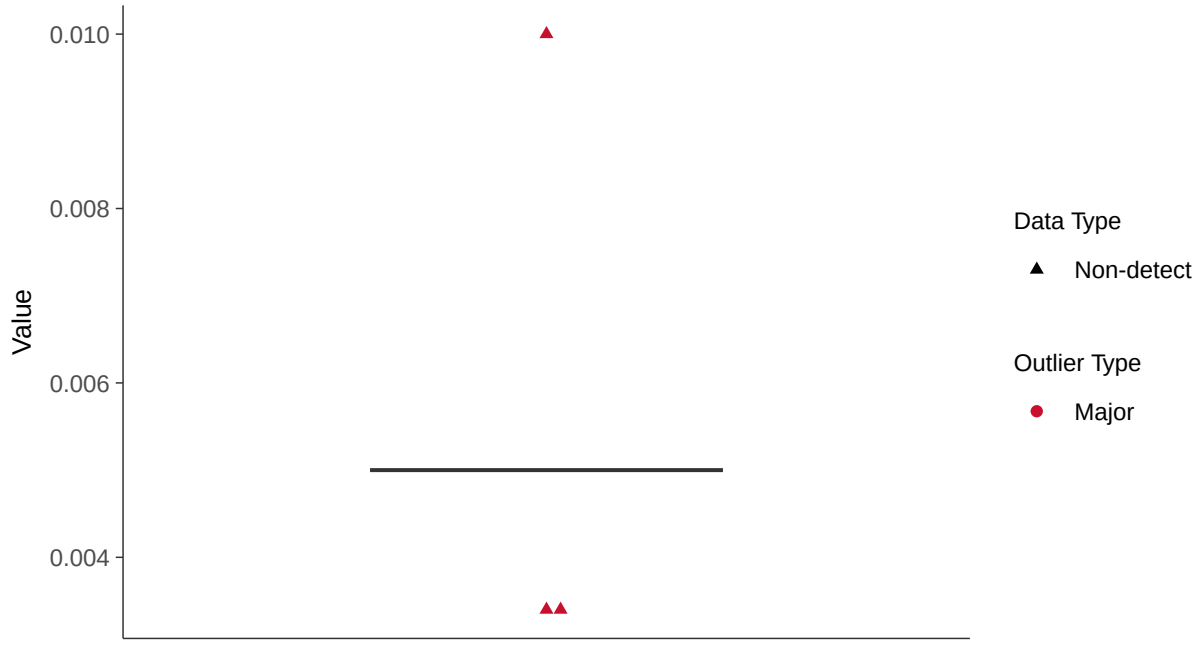
ID: 20_3_116





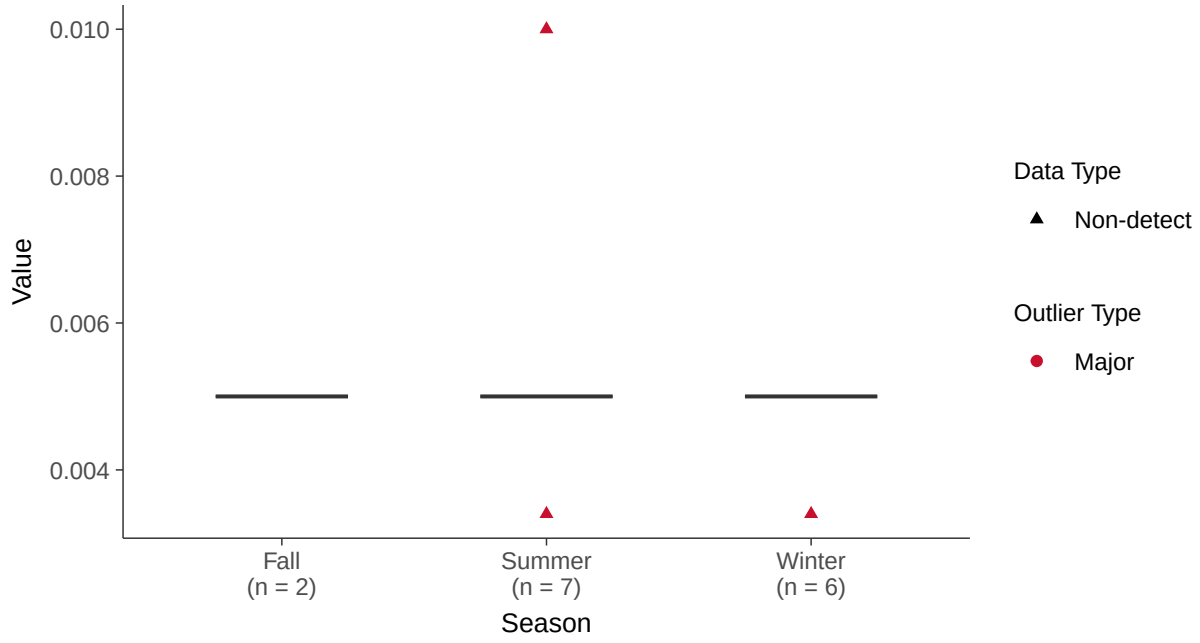
Boxplot

Lithium, MW-9 (mg/l)



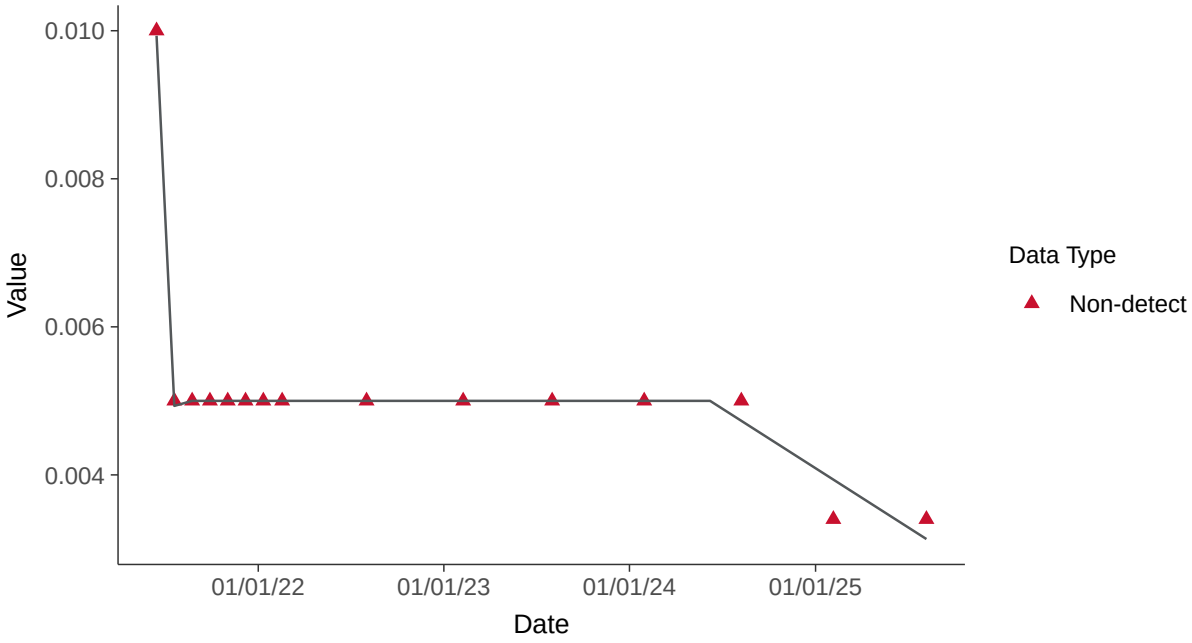
Boxplot by Season

Lithium, MW-9 (mg/l)



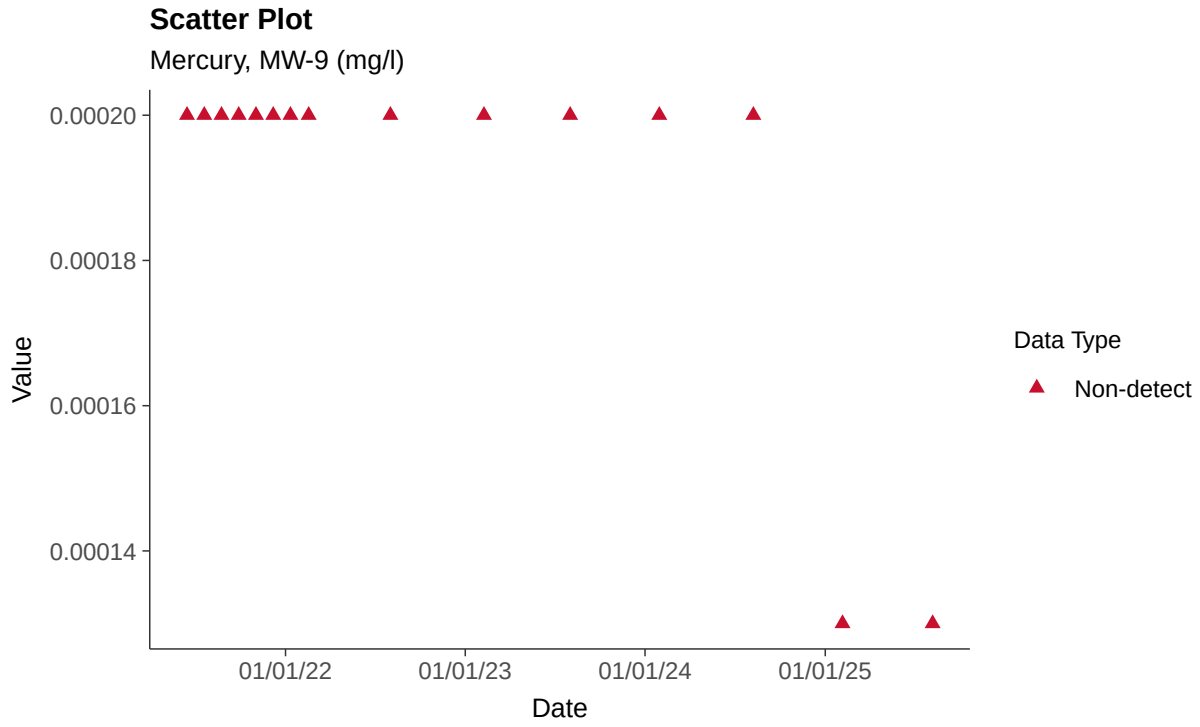
Trend Regression: Piecewise Linear-Linear-Linear

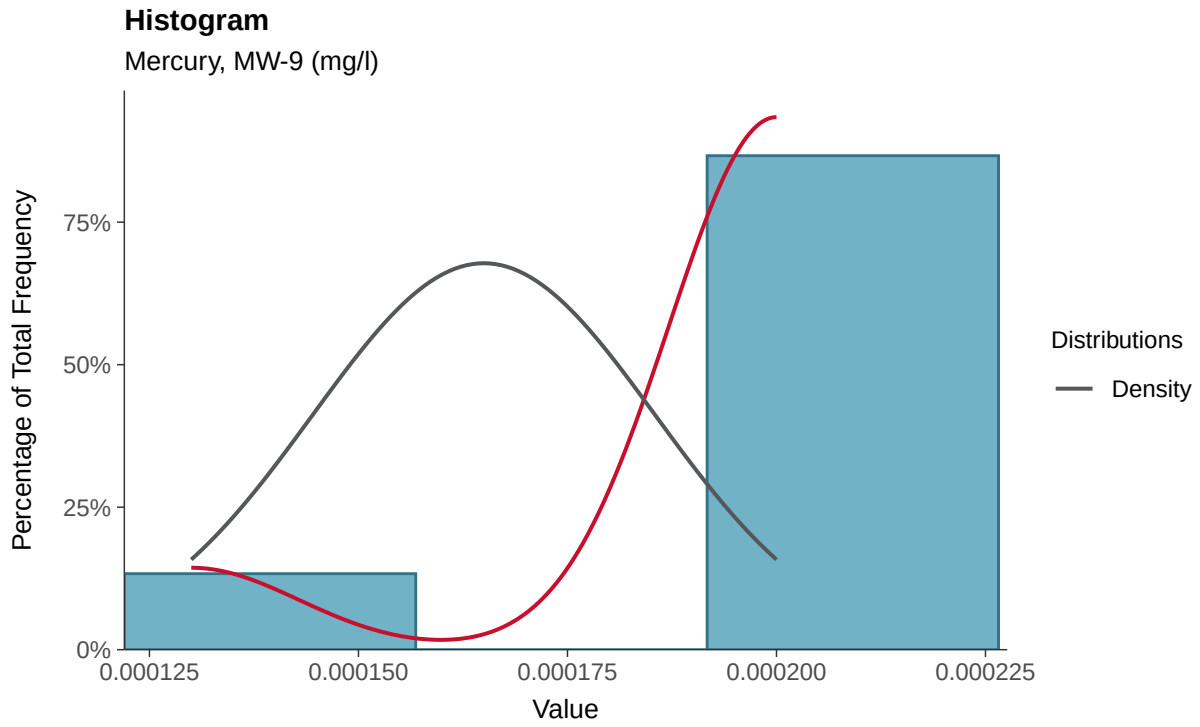
Lithium, MW-9 (mg/l)



Appendix IV: Mercury, MW-9

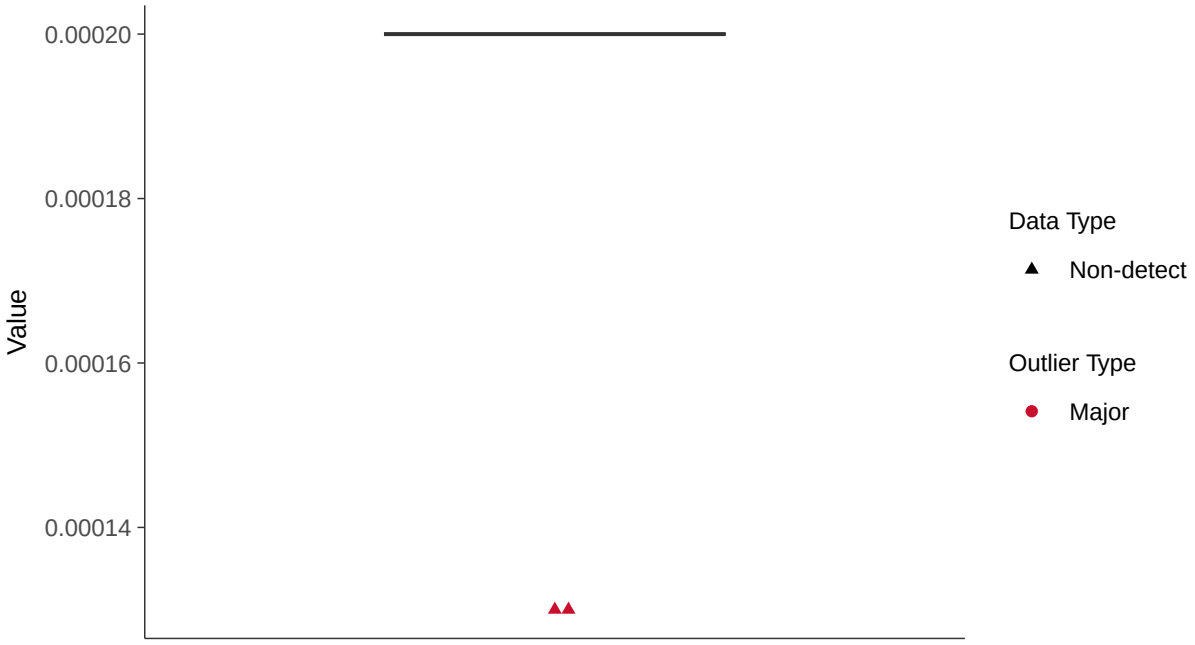
ID: 20_3_117





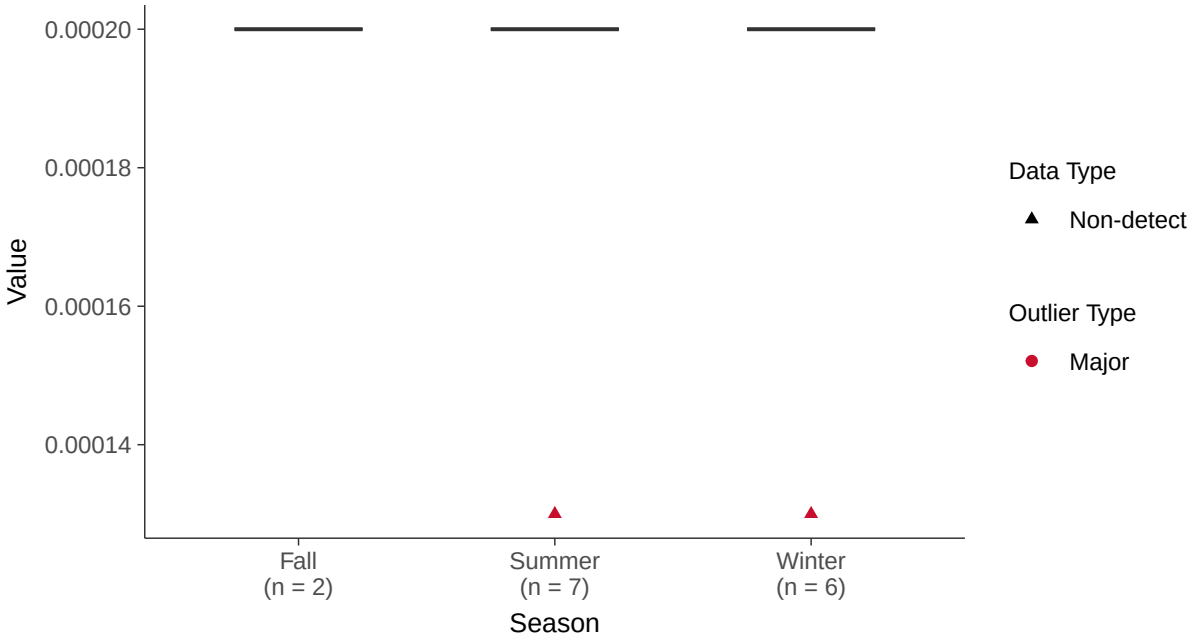
Boxplot

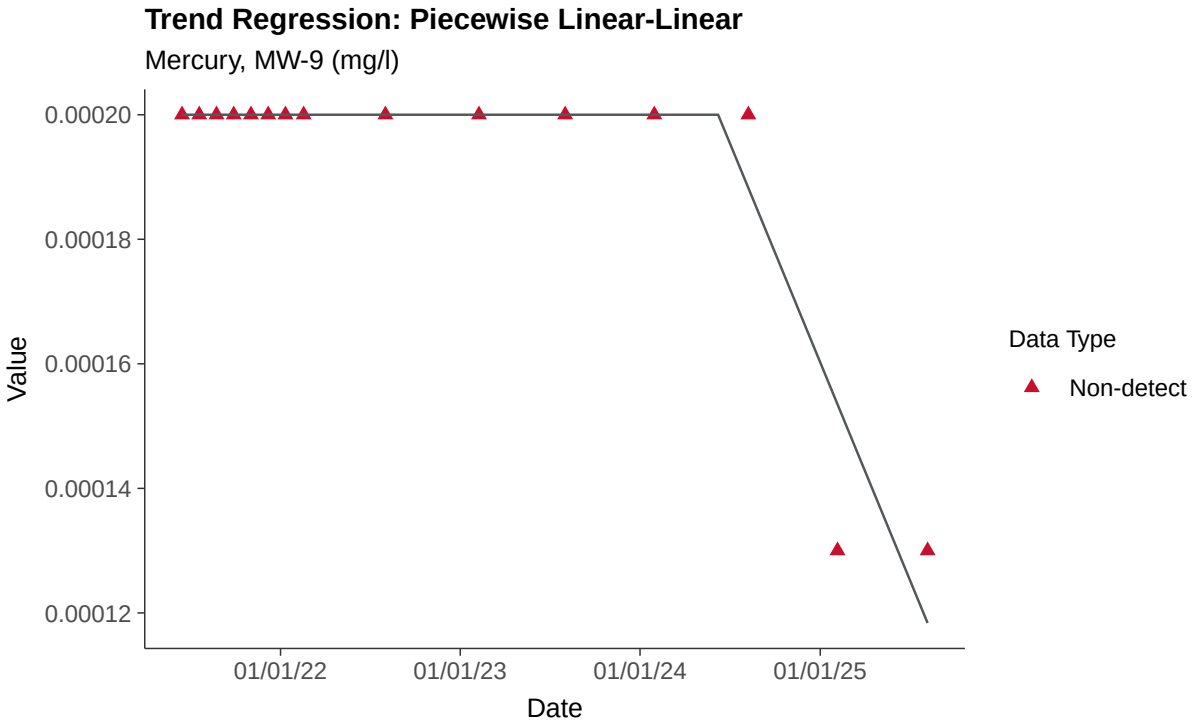
Mercury, MW-9 (mg/l)



Boxplot by Season

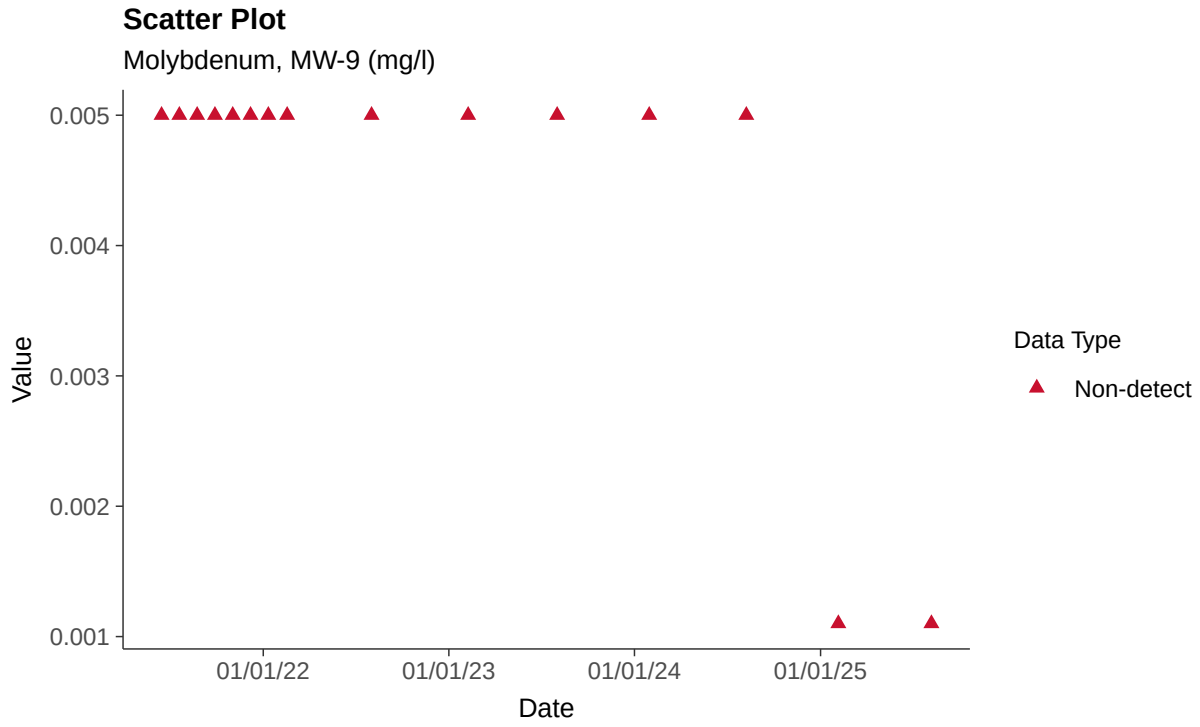
Mercury, MW-9 (mg/l)

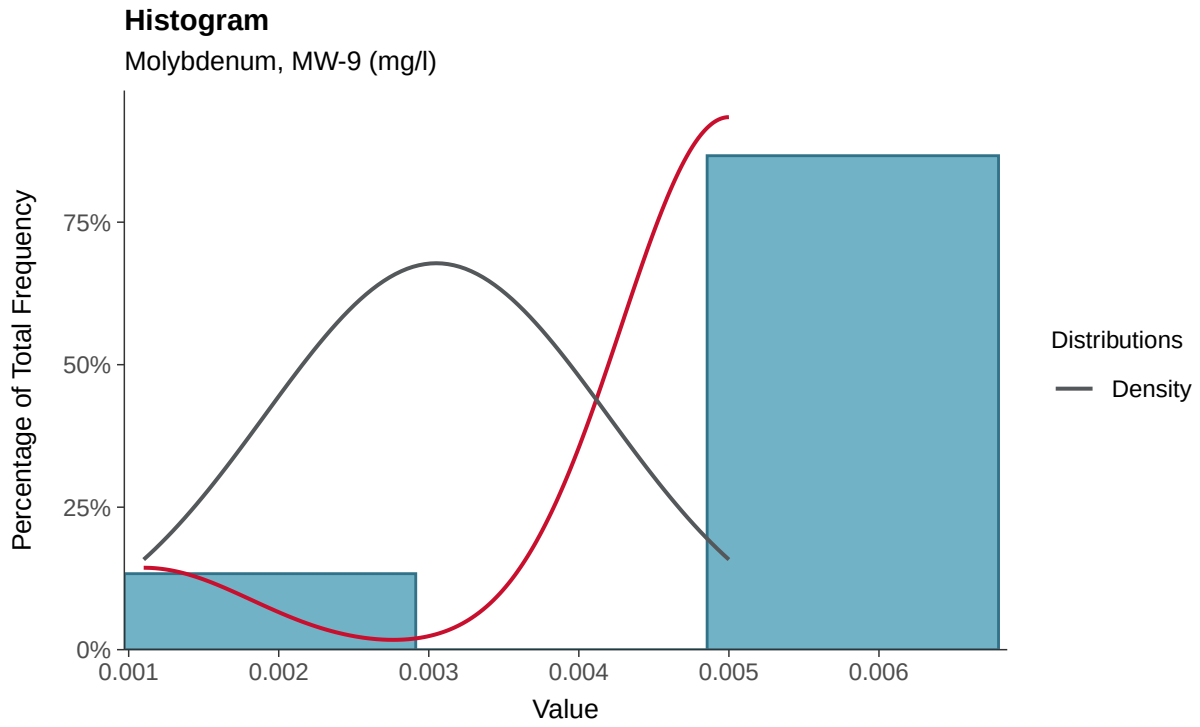



Trend Regression: Piecewise Linear-Linear
Mercury, MW-9 (mg/l)
0.00020
0.00018
0.00016
0.00014
0.00012
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Appendix IV: Molybdenum, MW-9

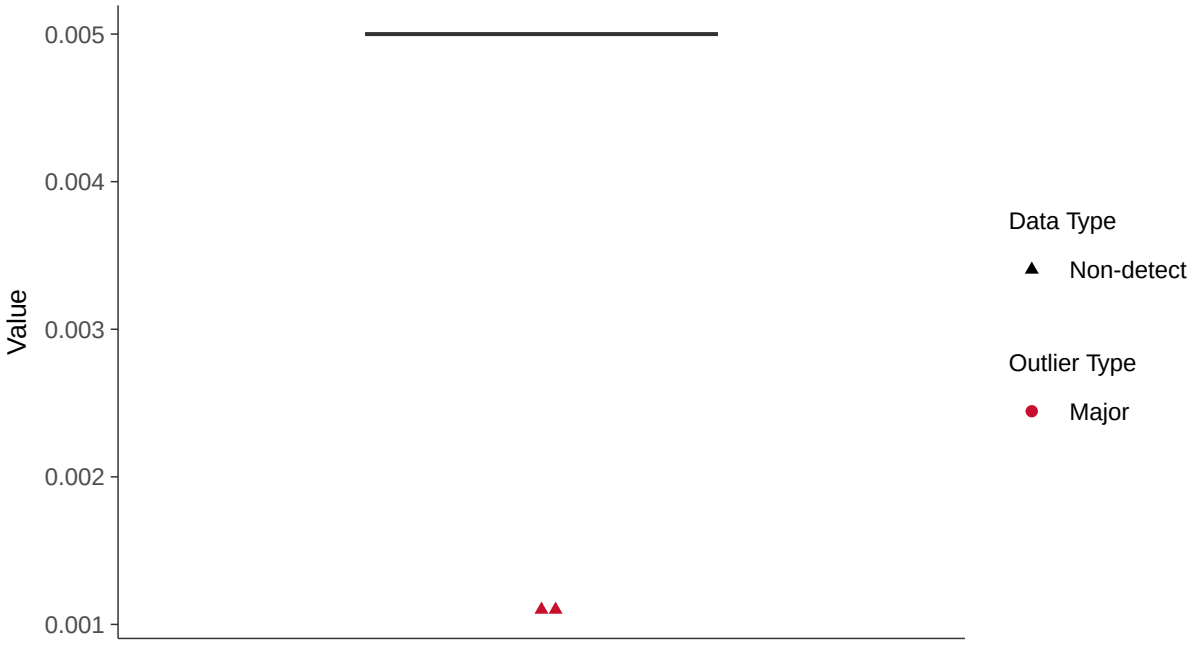
ID: 20_3_118





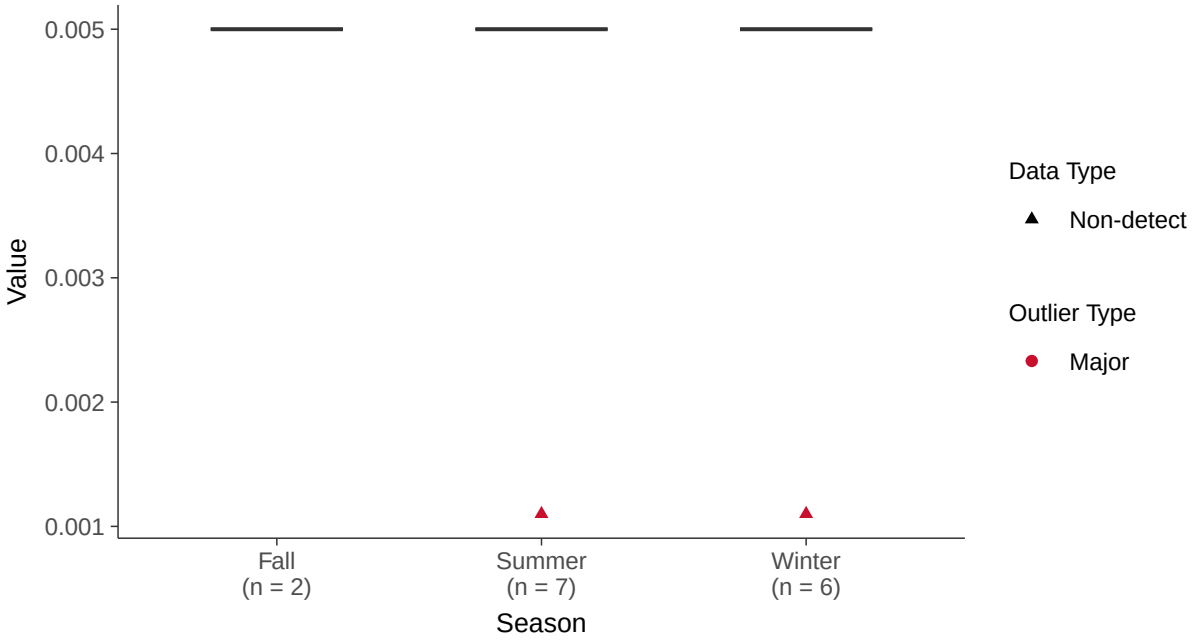
Boxplot

Molybdenum, MW-9 (mg/l)



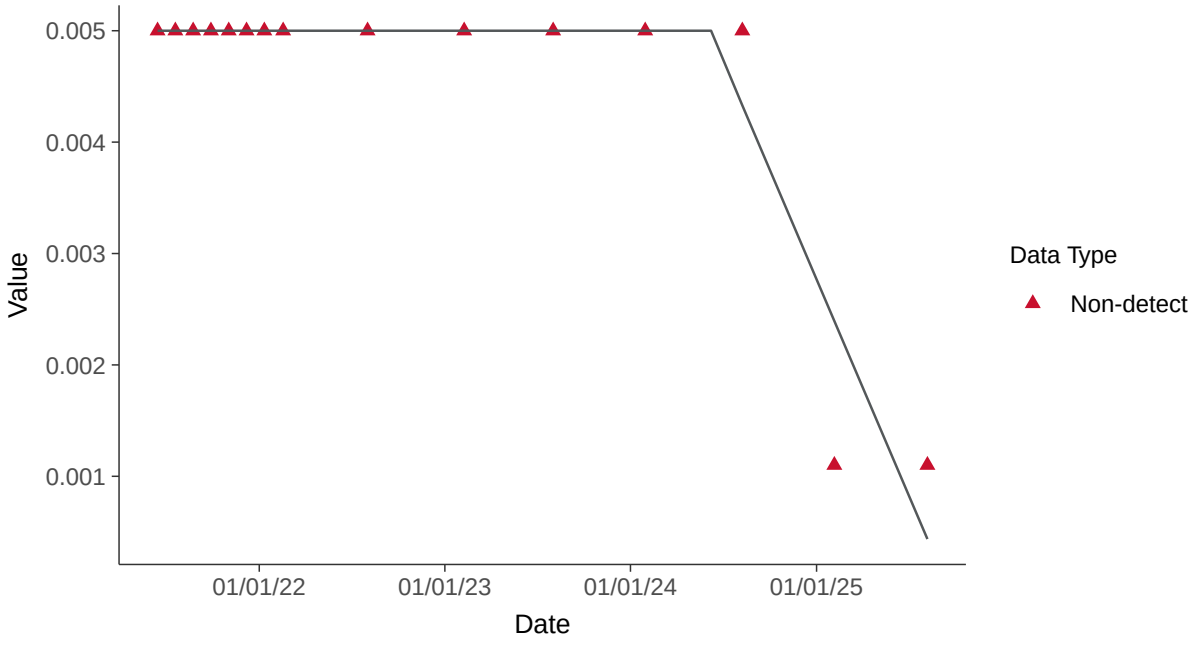
Boxplot by Season

Molybdenum, MW-9 (mg/l)



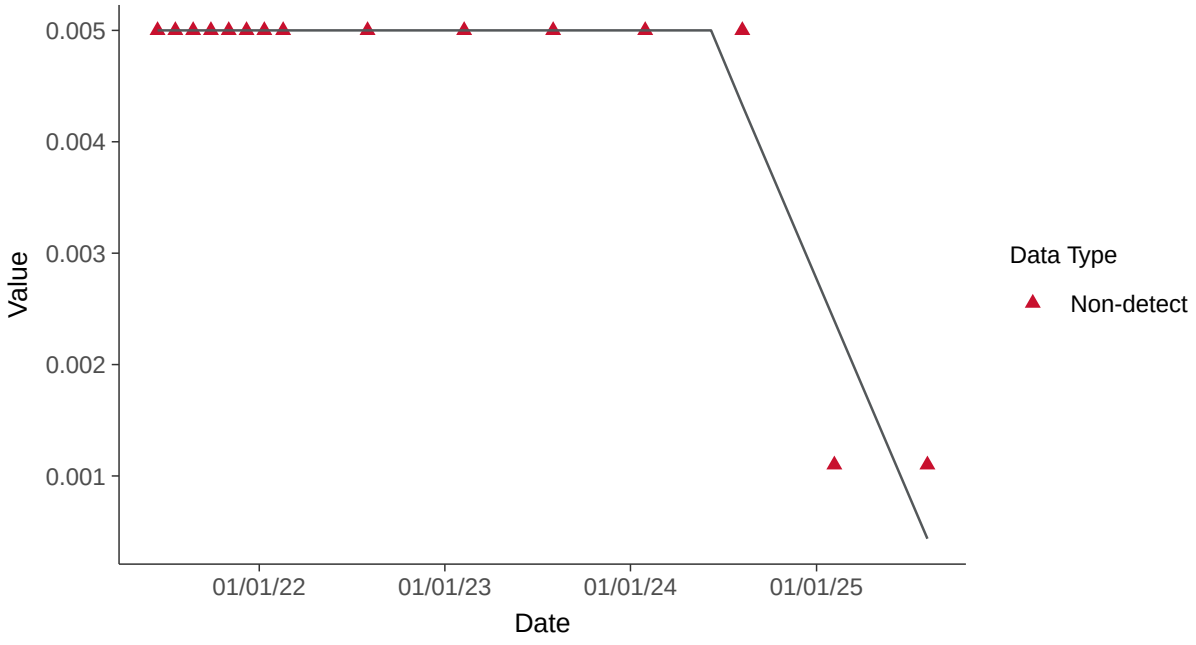
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-9 (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-9 (mg/l)

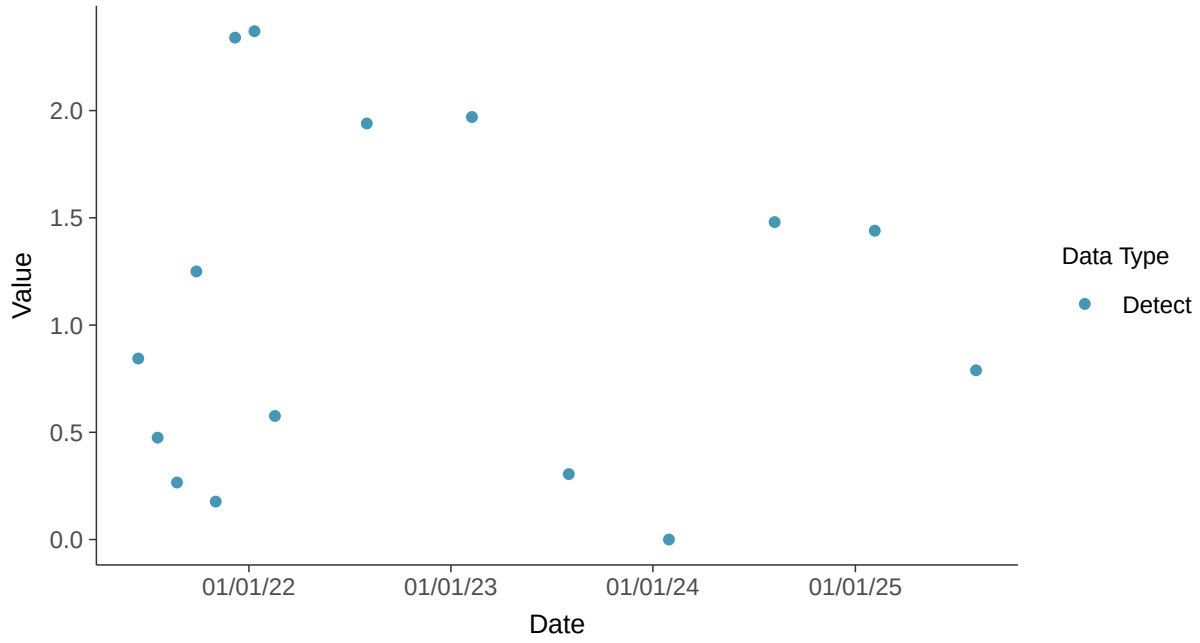


Appendix IV: Radium-226+228, MW-9

ID: 20_3_121

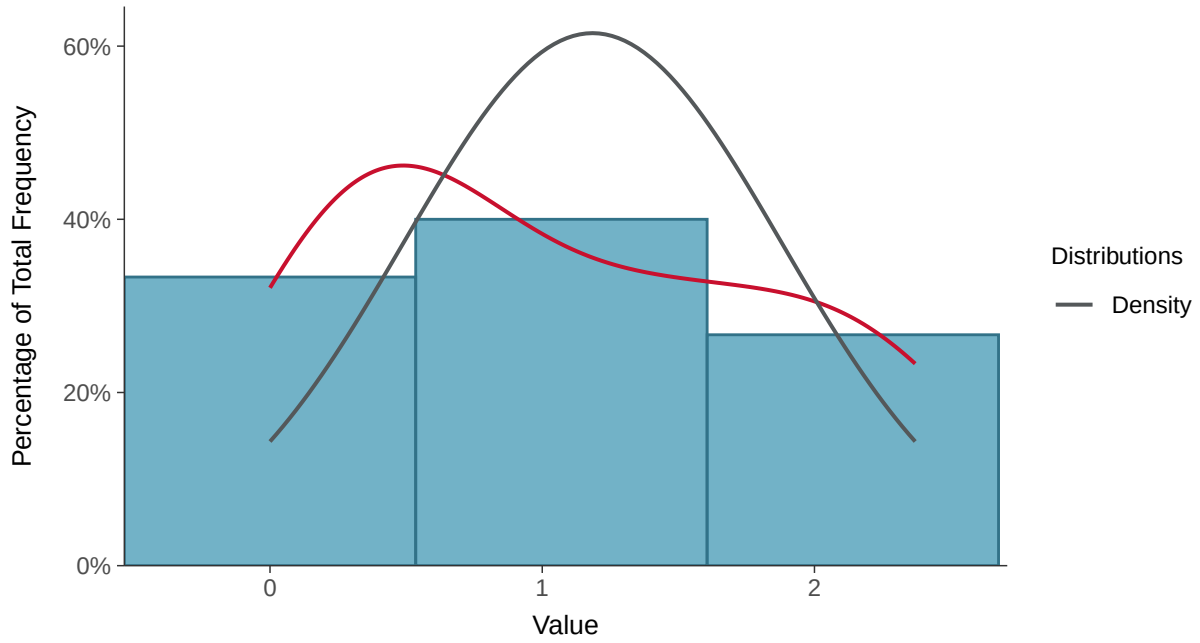
Scatter Plot

Radium-226+228, MW-9 (pci/l)



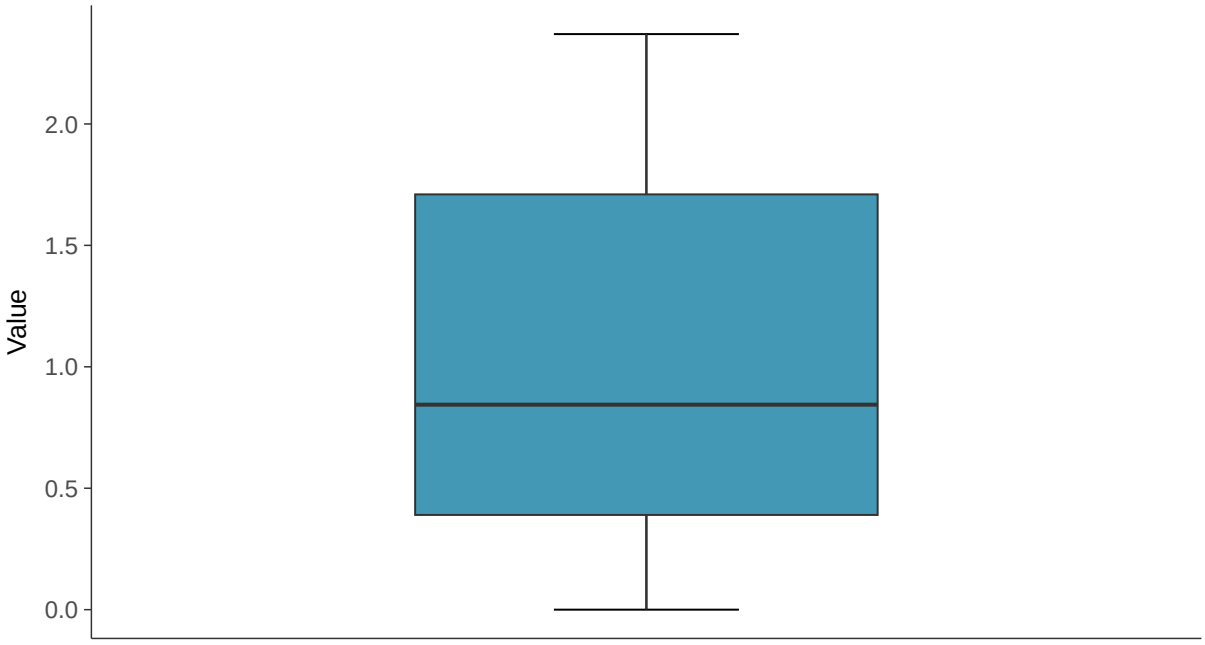
Histogram

Radium-226+228, MW-9 (pci/l)



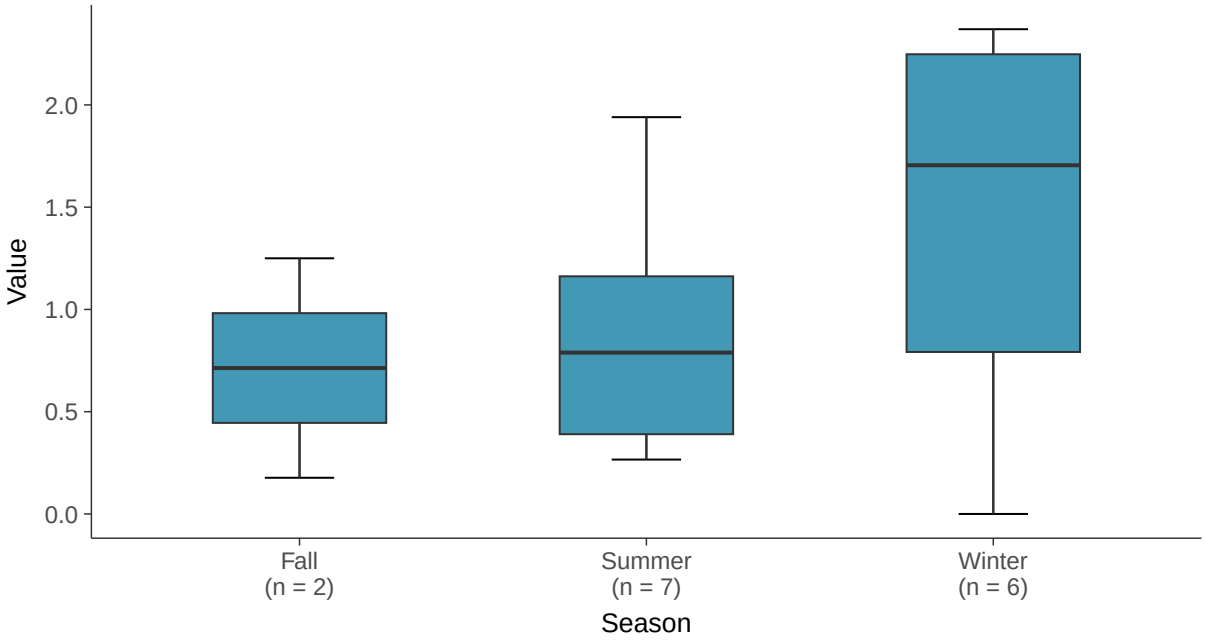
Boxplot

Radium-226+228, MW-9 (pci/l)



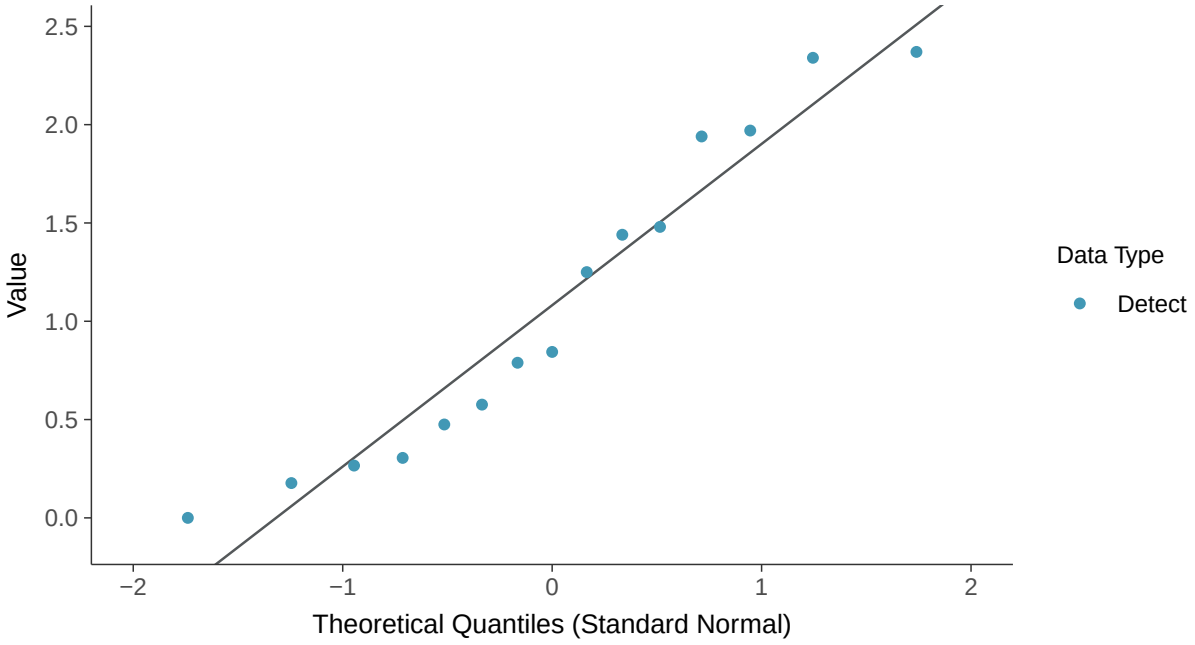
Boxplot by Season

Radium-226+228, MW-9 (pci/l)



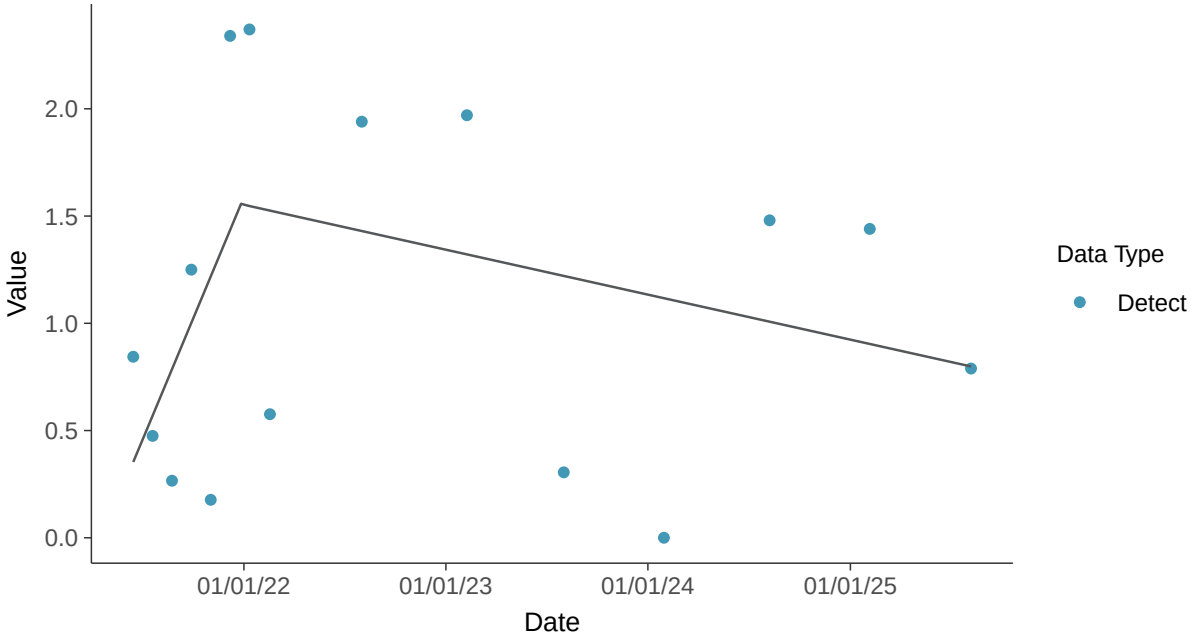
Normal Q-Q plot

Radium-226+228, MW-9 (pci/l)



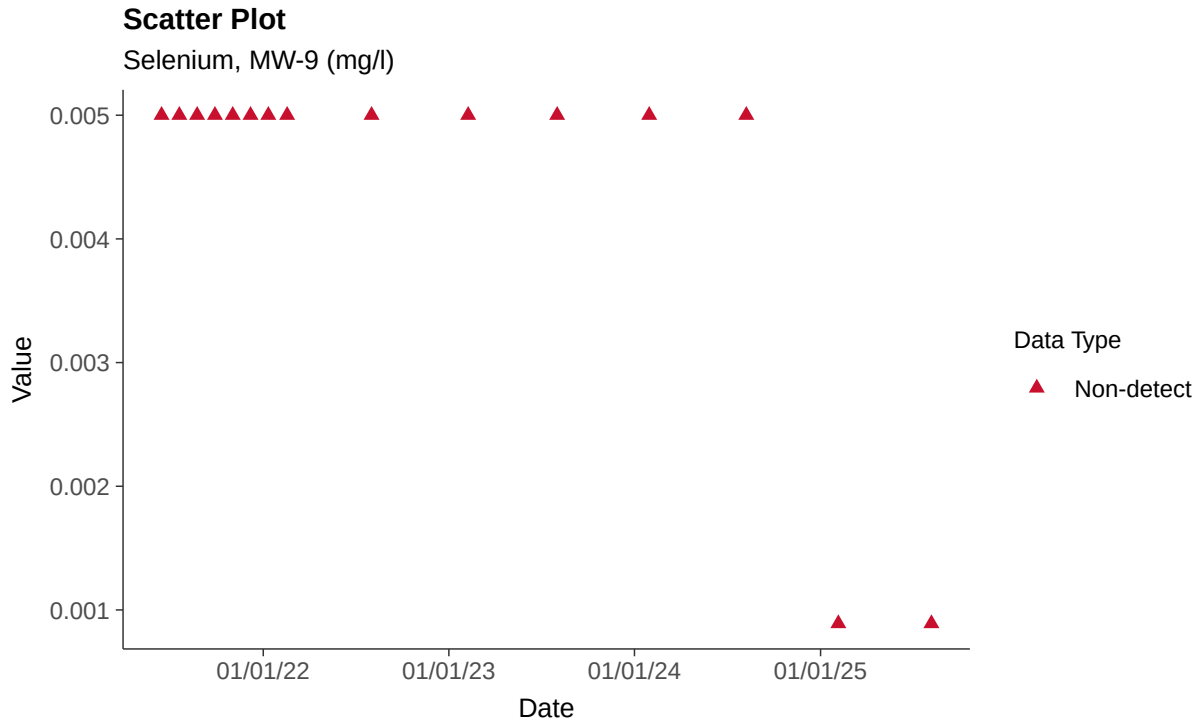
Trend Regression: Piecewise Linear-Linear

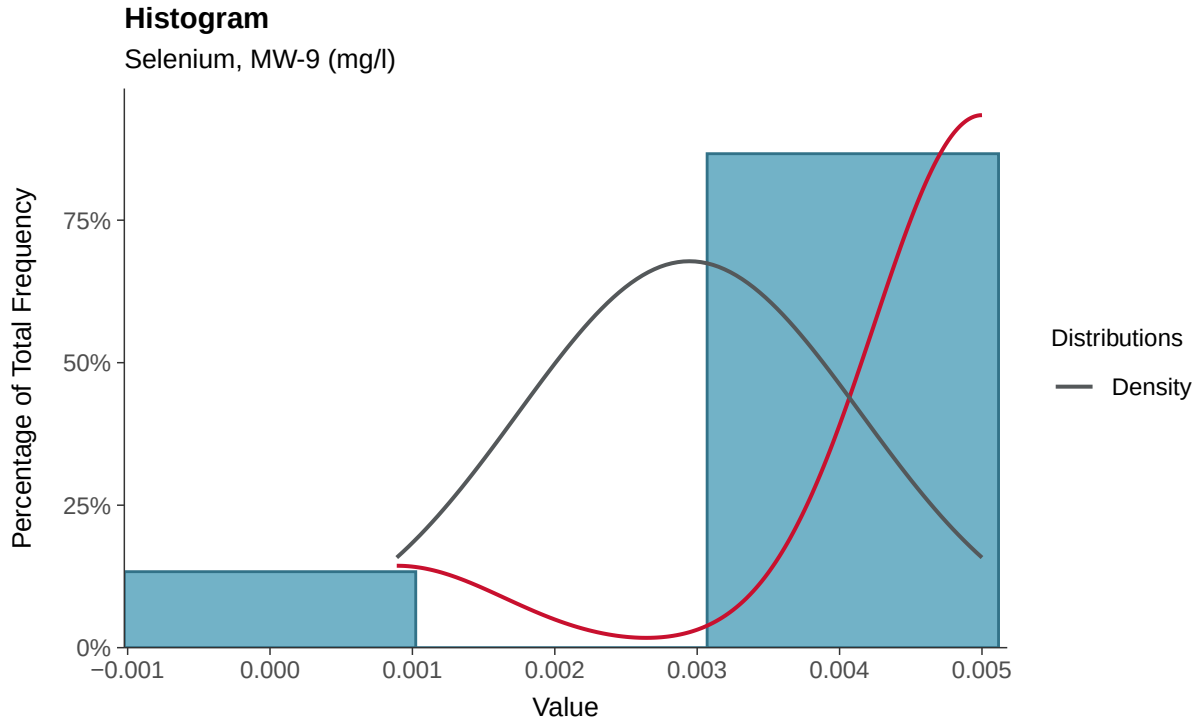
Radium-226+228, MW-9 (pci/l)



Appendix IV: Selenium, MW-9

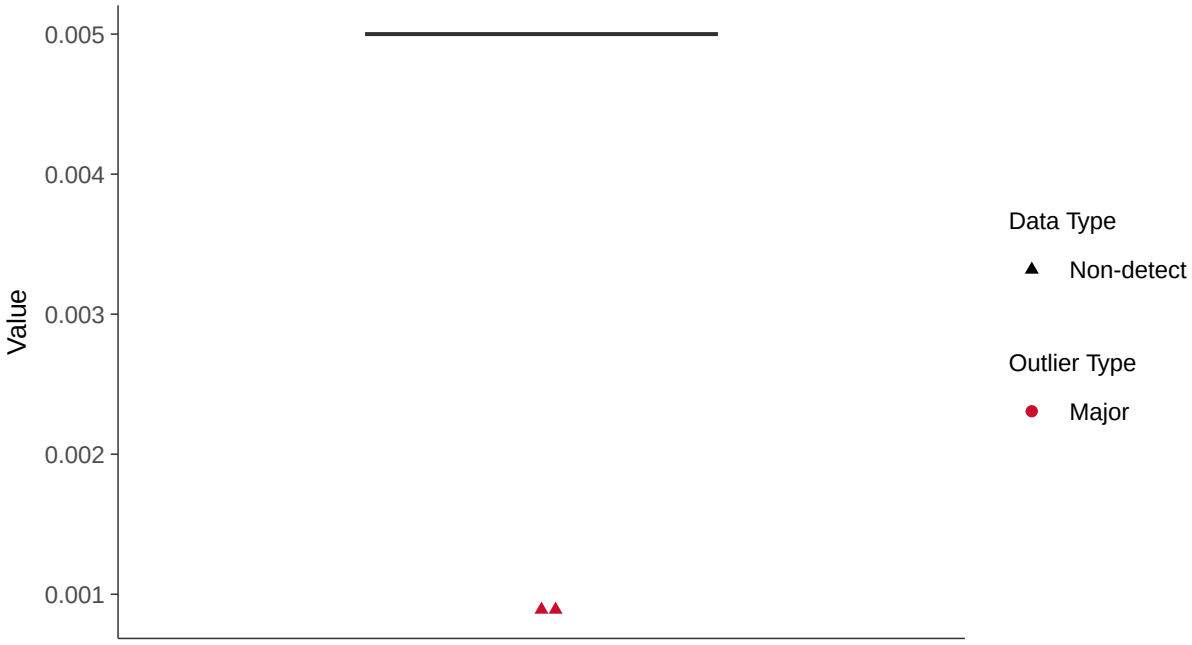
ID: 20_3_122





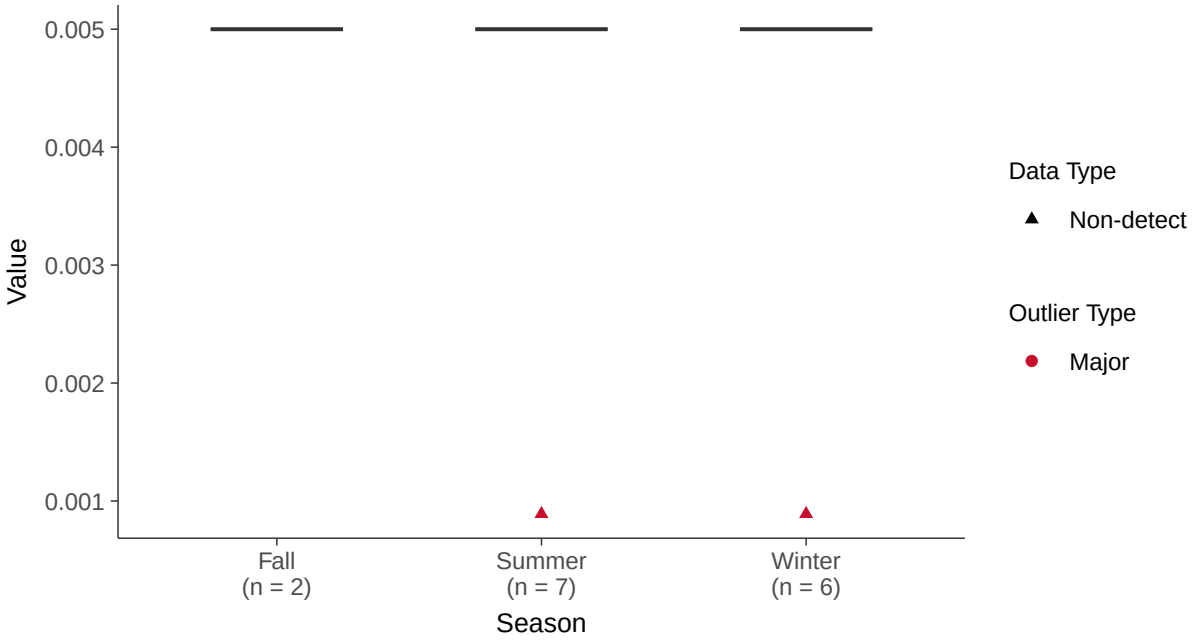
Boxplot

Selenium, MW-9 (mg/l)



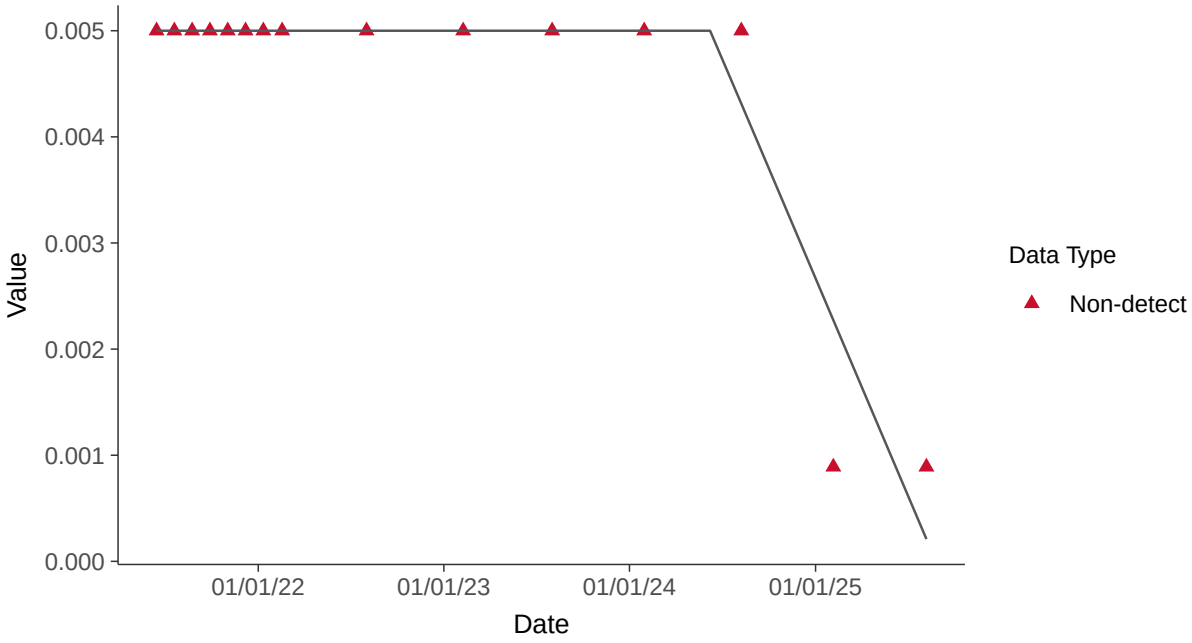
Boxplot by Season

Selenium, MW-9 (mg/l)



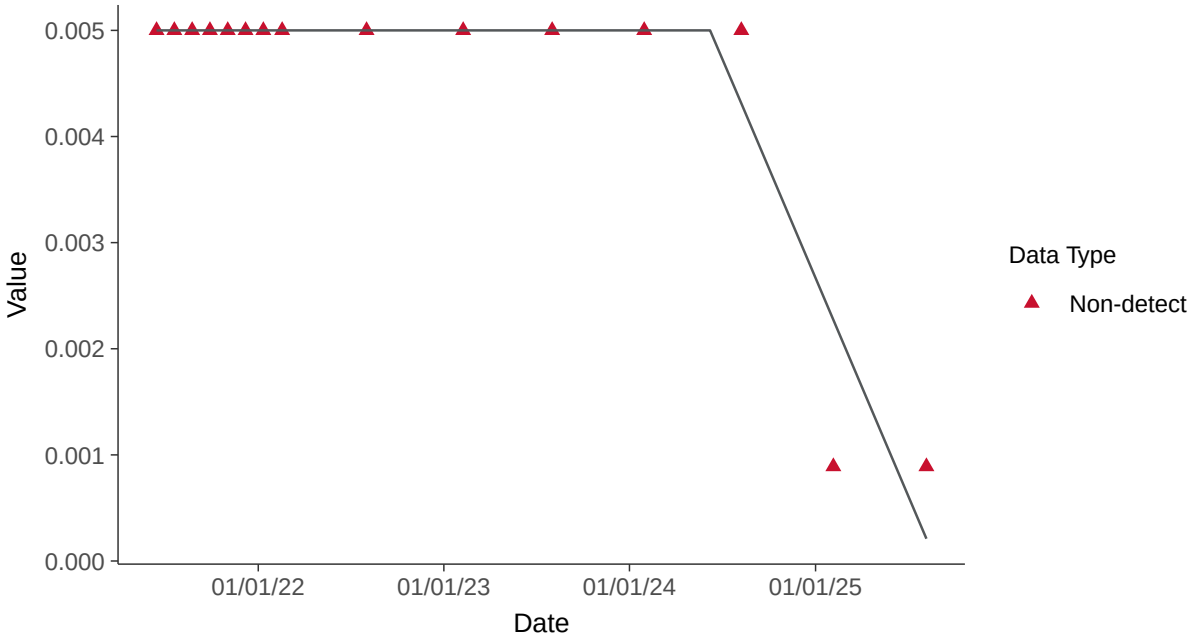
Trend Regression: Piecewise Linear-Linear

Selenium, MW-9 (mg/l)



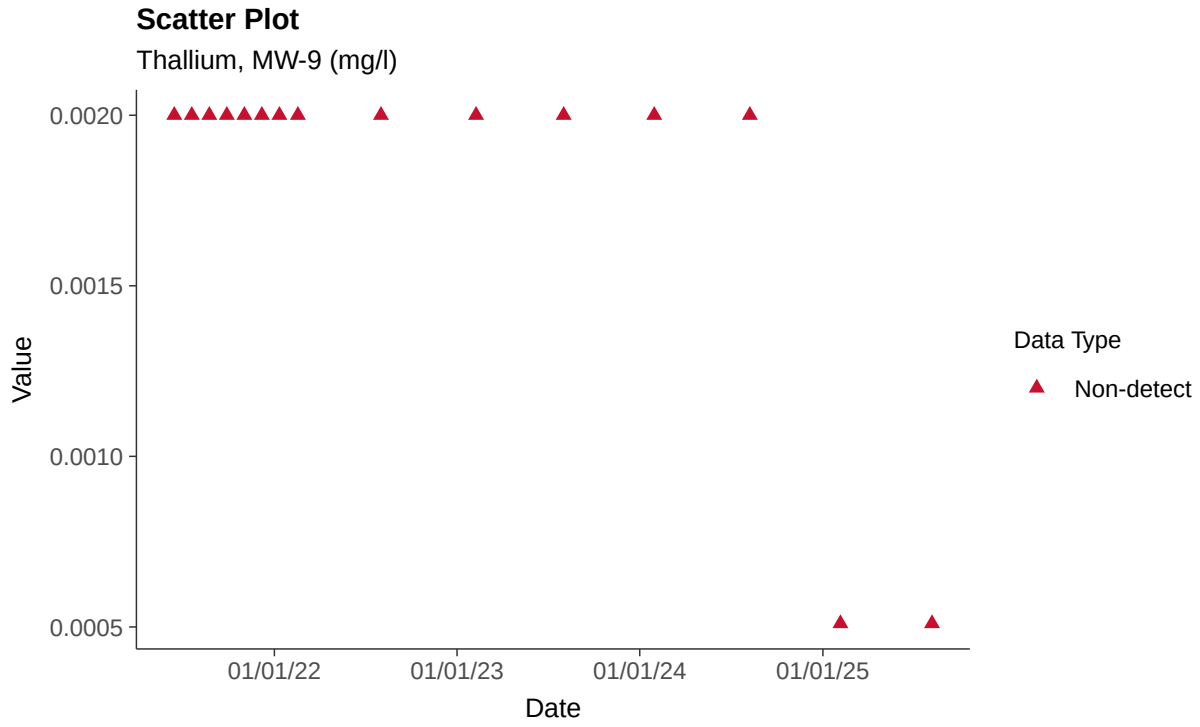
Trend Regression: Piecewise Linear-Linear-Linear

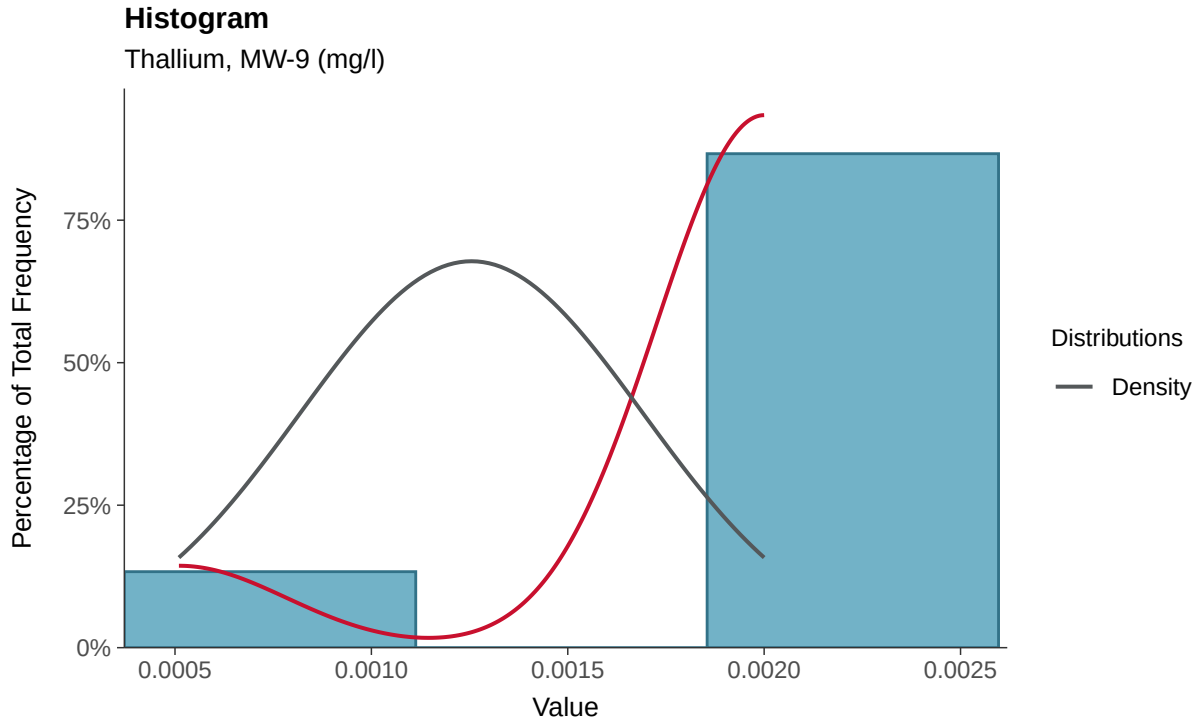
Selenium, MW-9 (mg/l)



Appendix IV: Thallium, MW-9

ID: 20_3_125



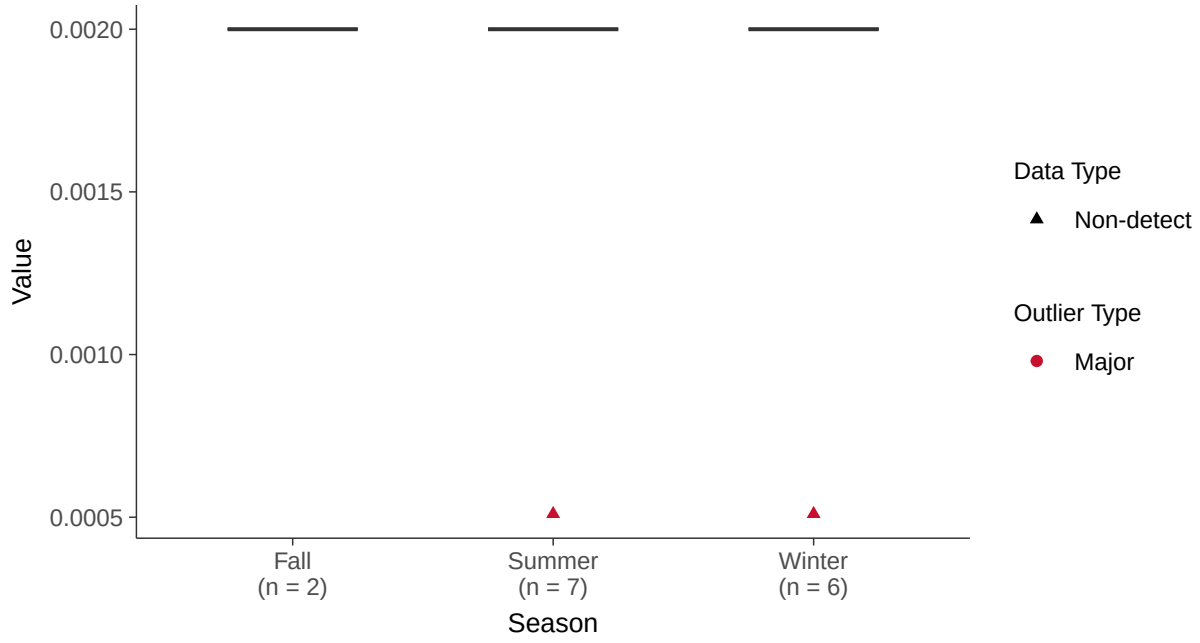


Boxplot

Thallium, MW-9 (mg/l)

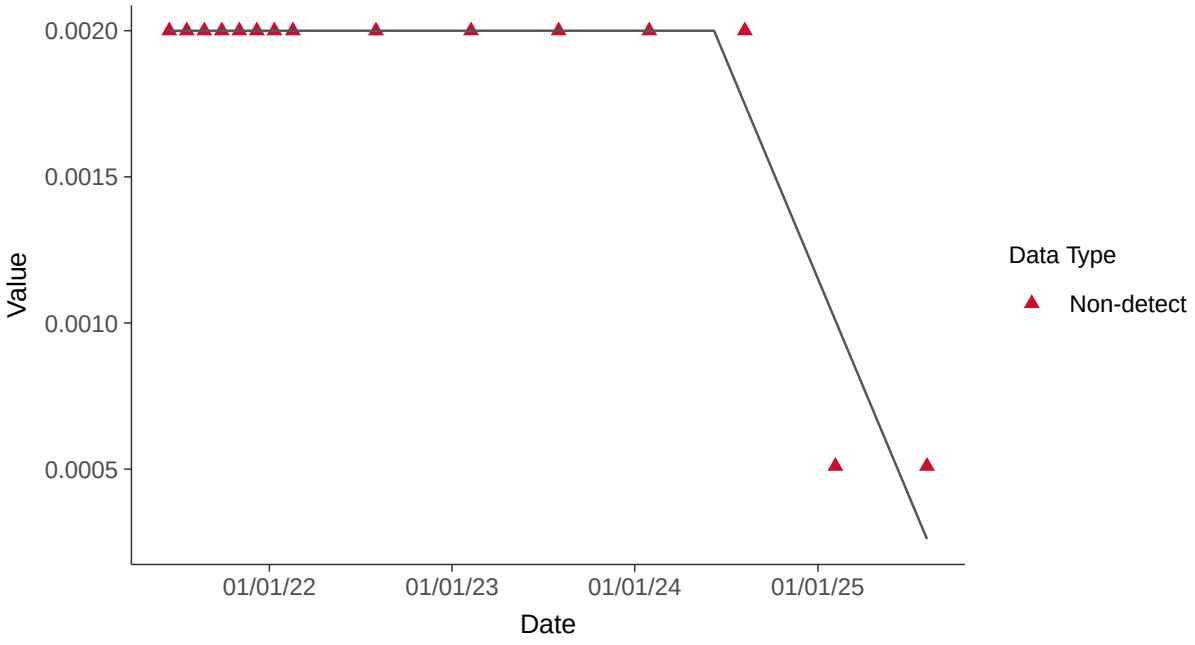
Boxplot by Season

Thallium, MW-9 (mg/l)



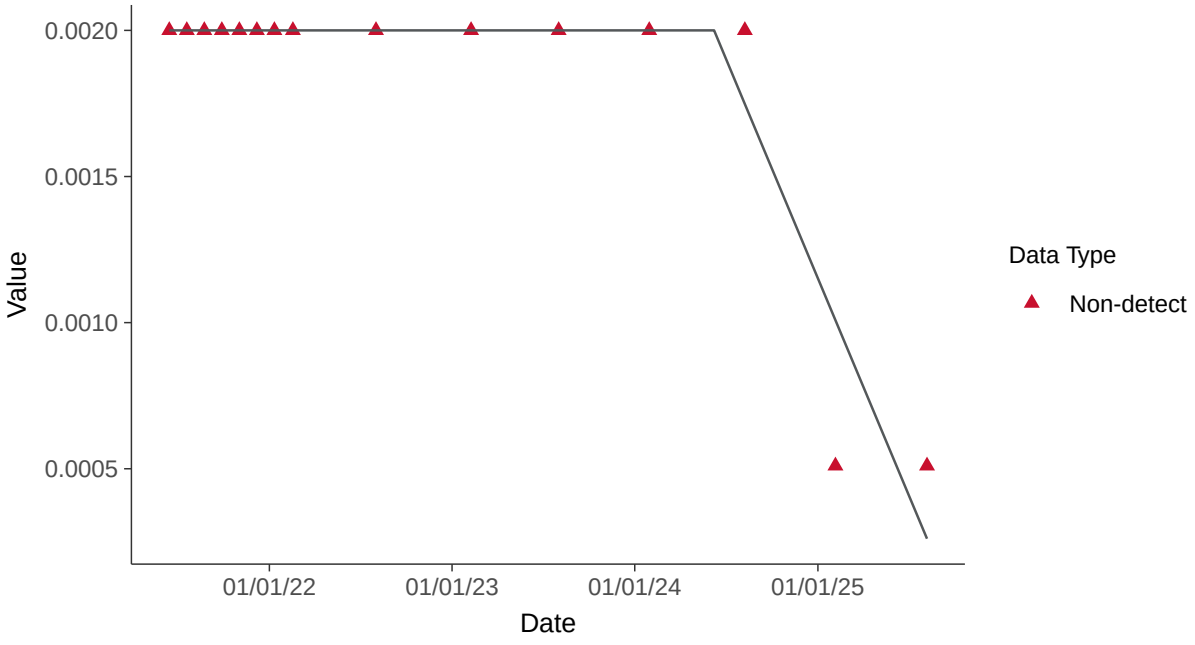
Trend Regression: Piecewise Linear-Linear

Thallium, MW-9 (mg/l)



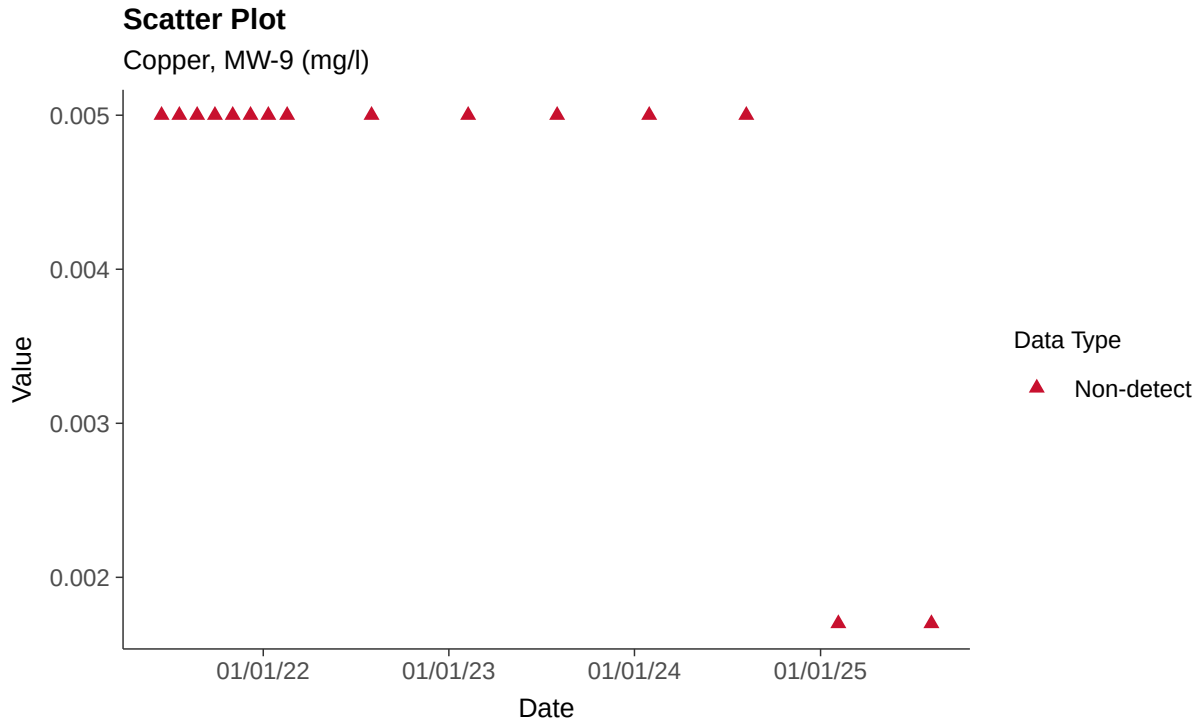
Trend Regression: Piecewise Linear-Linear-Linear

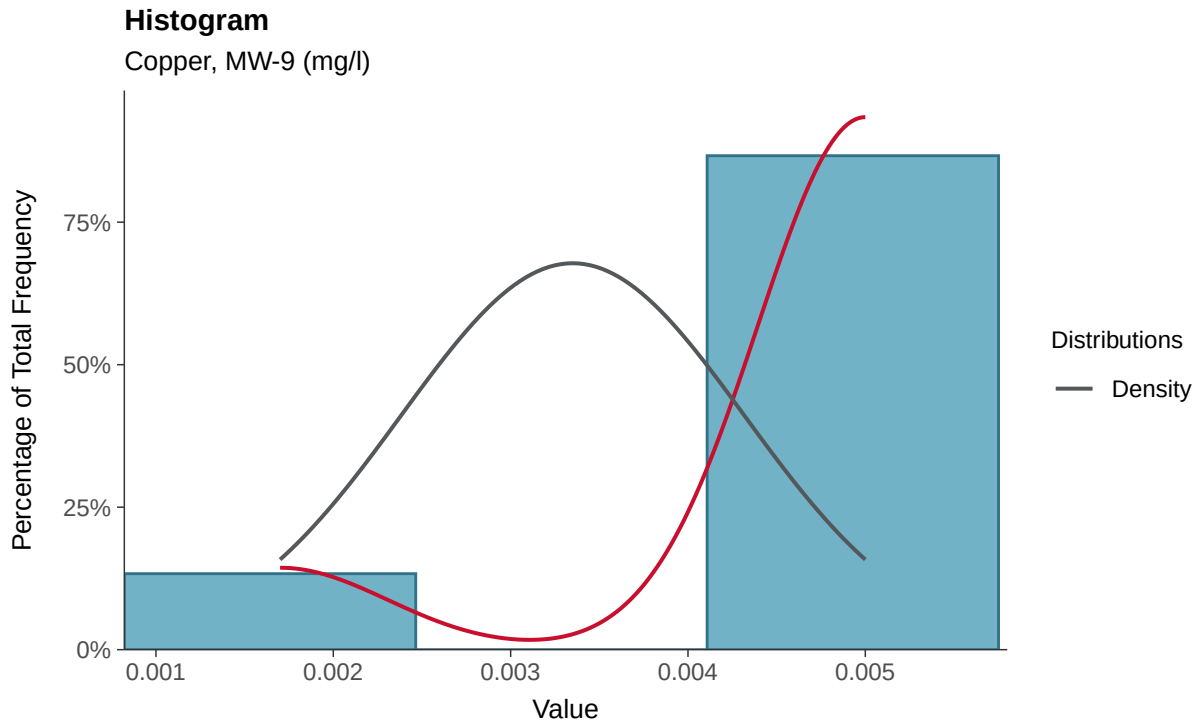
Thallium, MW-9 (mg/l)



Part 115: Copper, MW-9

ID: 20_5_111



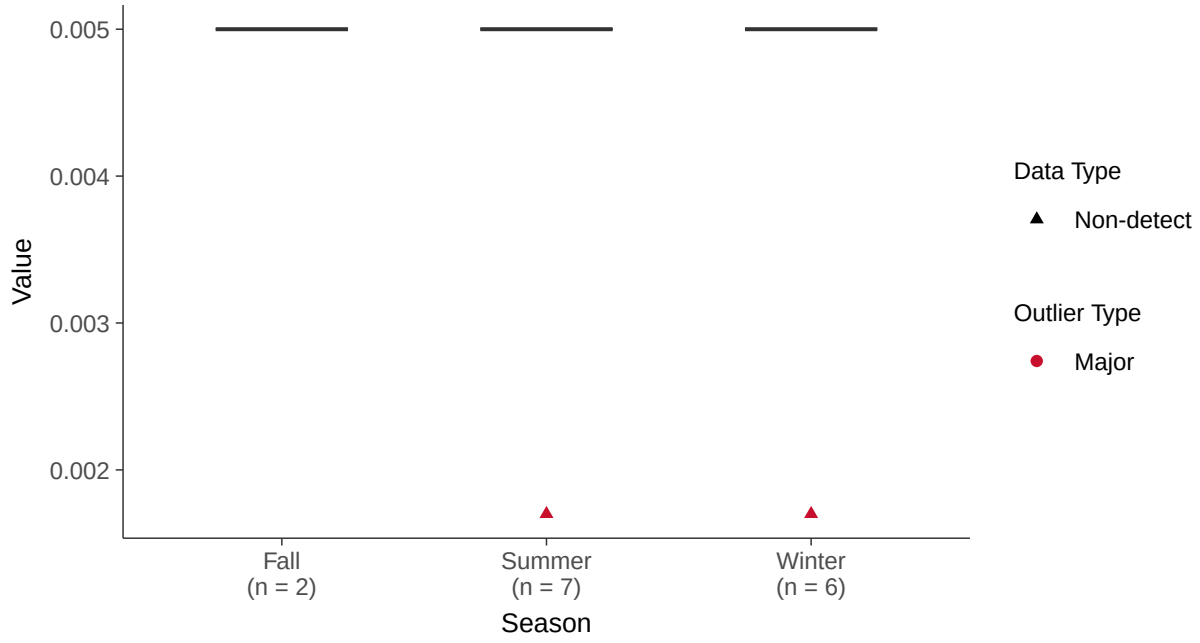


Boxplot

Copper, MW-9 (mg/l)

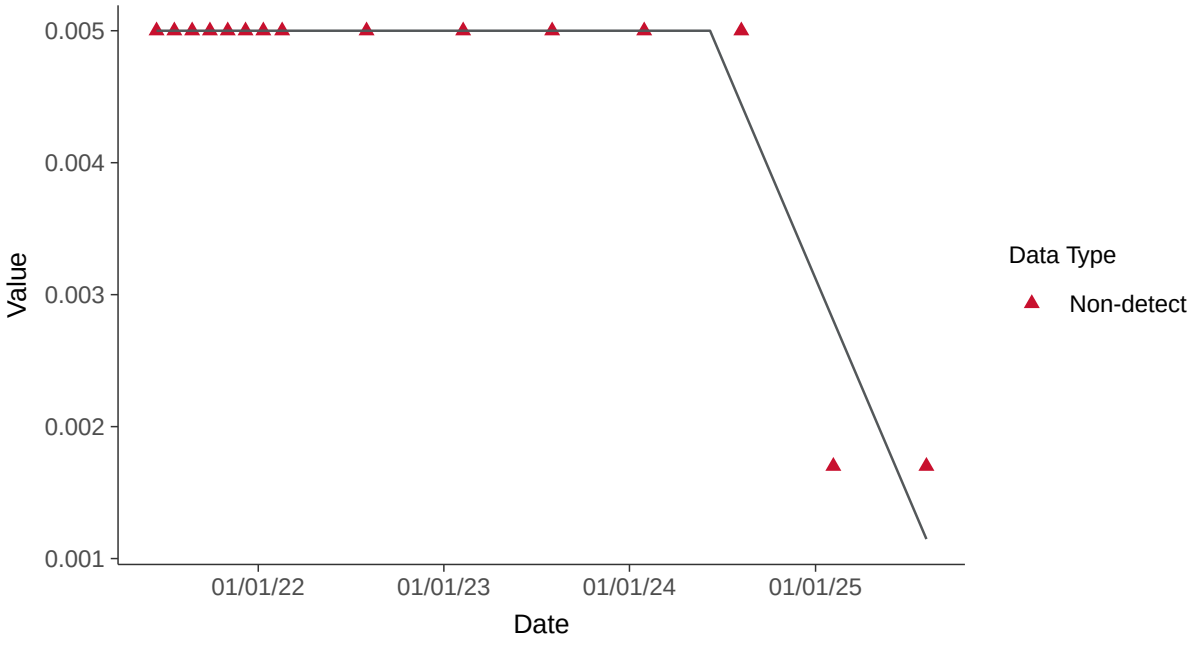
Boxplot by Season

Copper, MW-9 (mg/l)



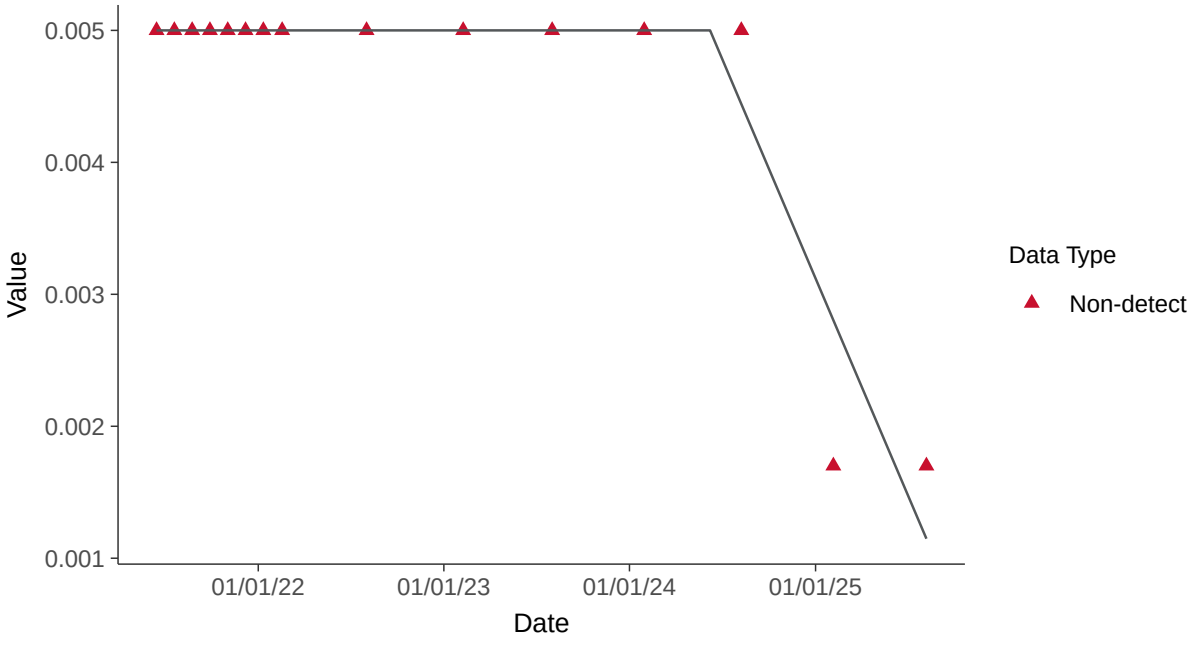
Trend Regression: Piecewise Linear-Linear

Copper, MW-9 (mg/l)



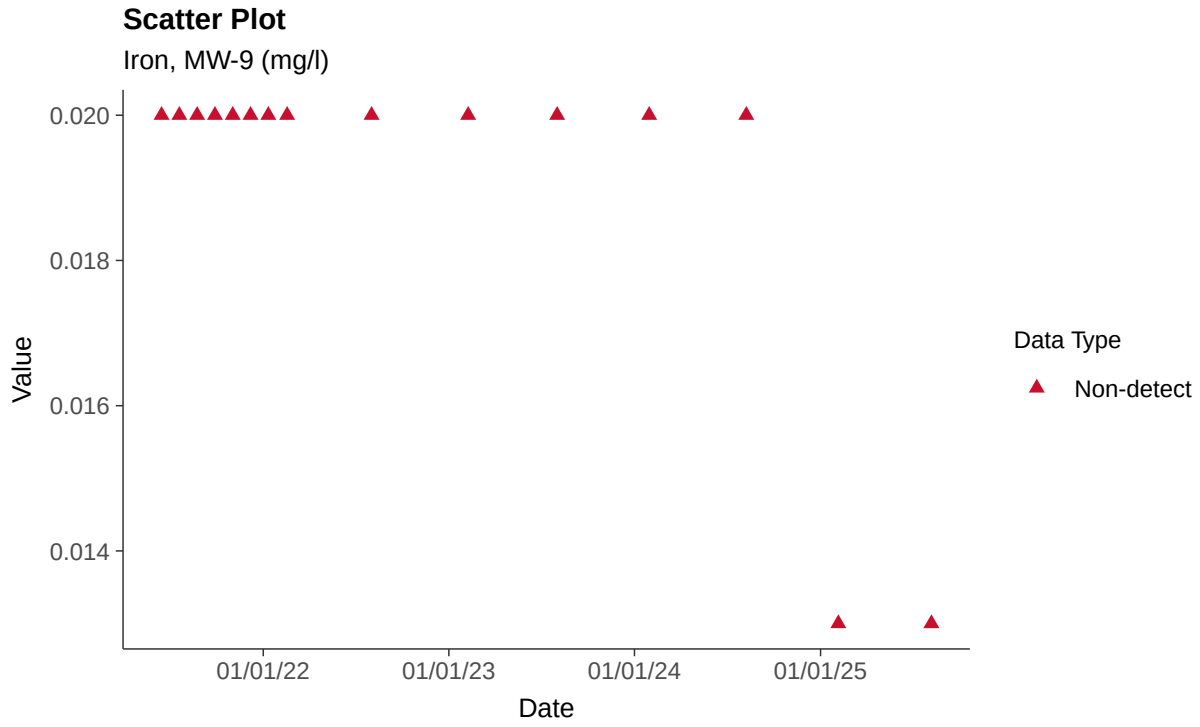
Trend Regression: Piecewise Linear-Linear-Linear

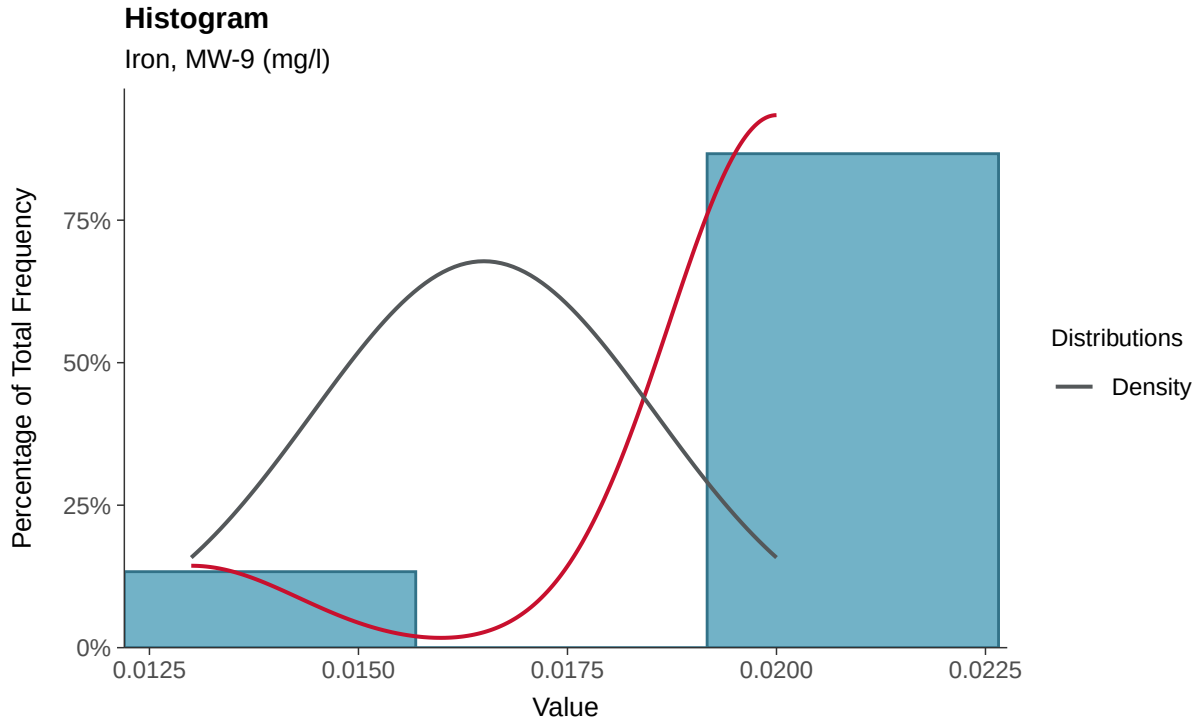
Copper, MW-9 (mg/l)



Part 115: Iron, MW-9

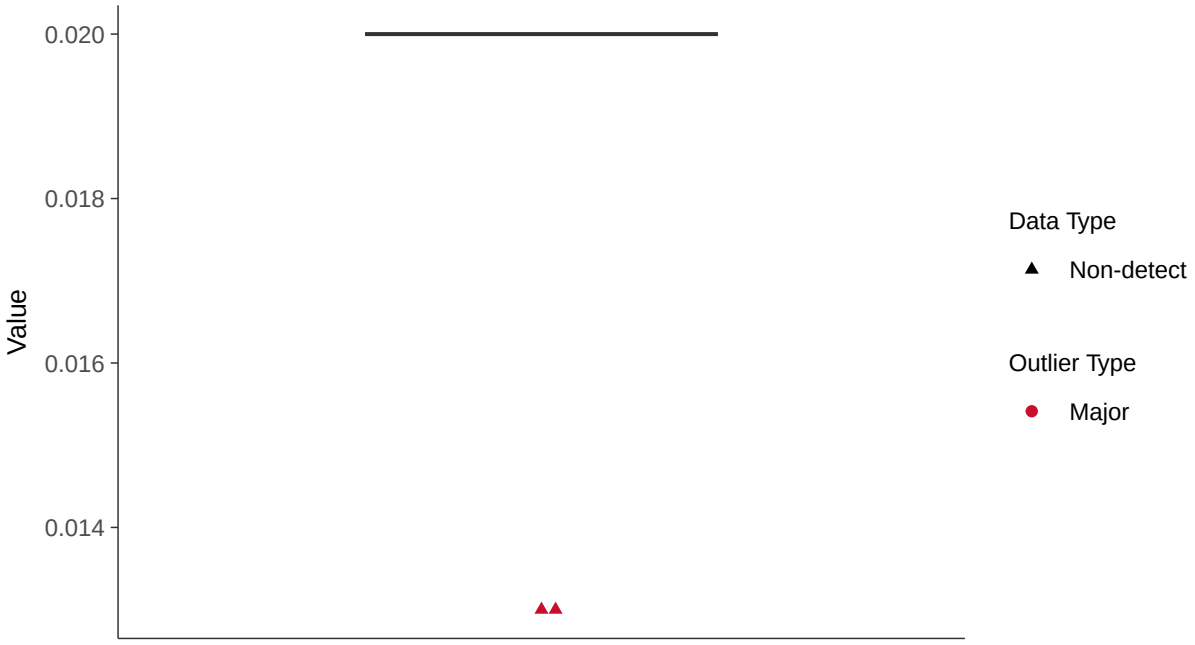
ID: 20_5_114





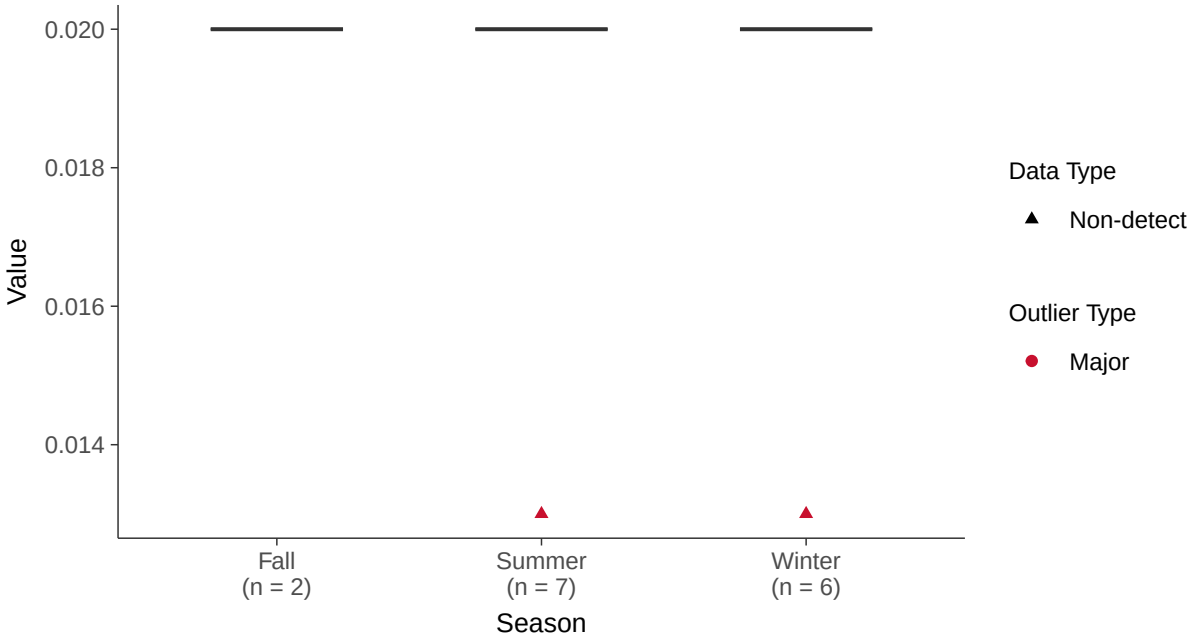
Boxplot

Iron, MW-9 (mg/l)



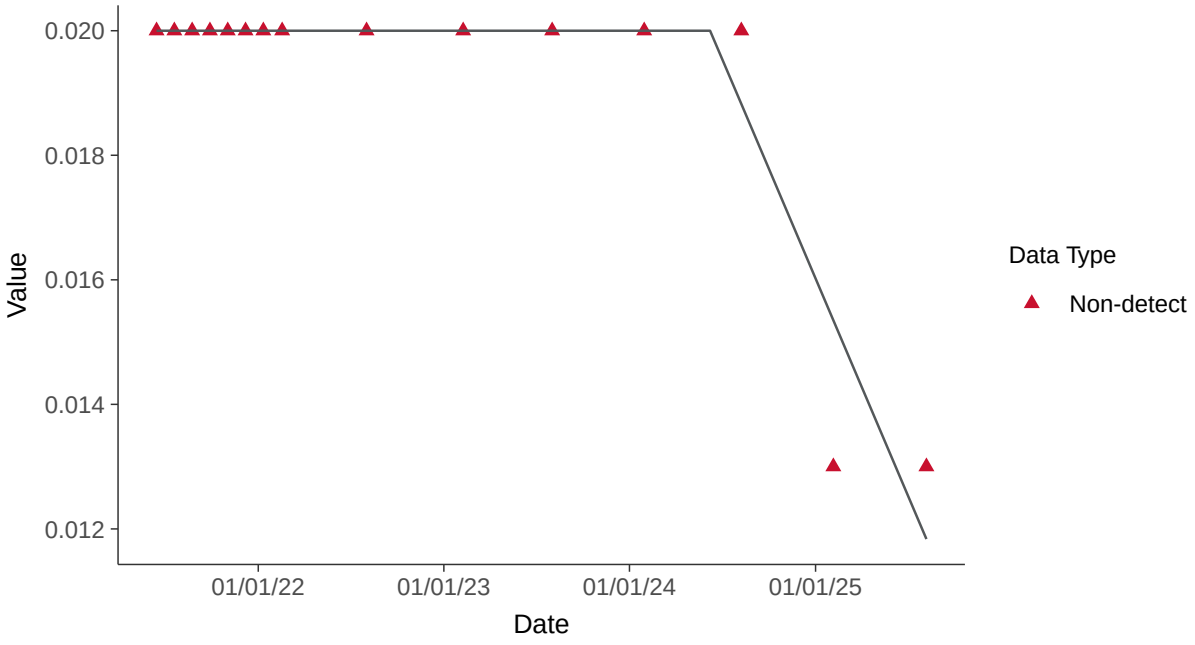
Boxplot by Season

Iron, MW-9 (mg/l)



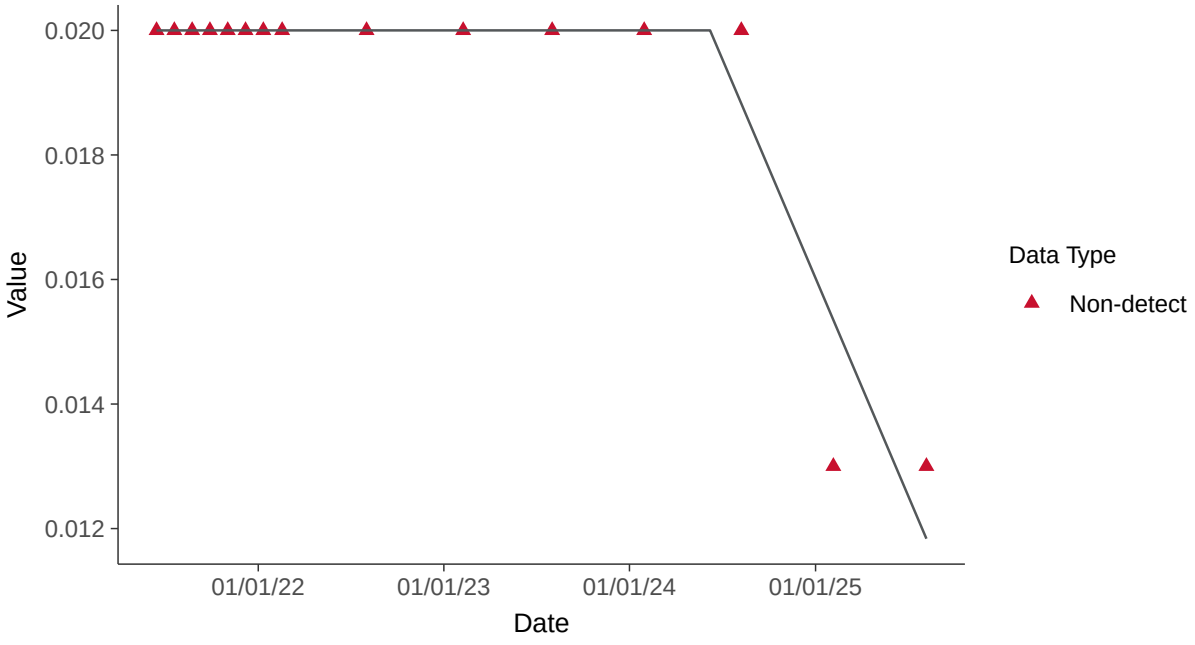
Trend Regression: Piecewise Linear-Linear

Iron, MW-9 (mg/l)



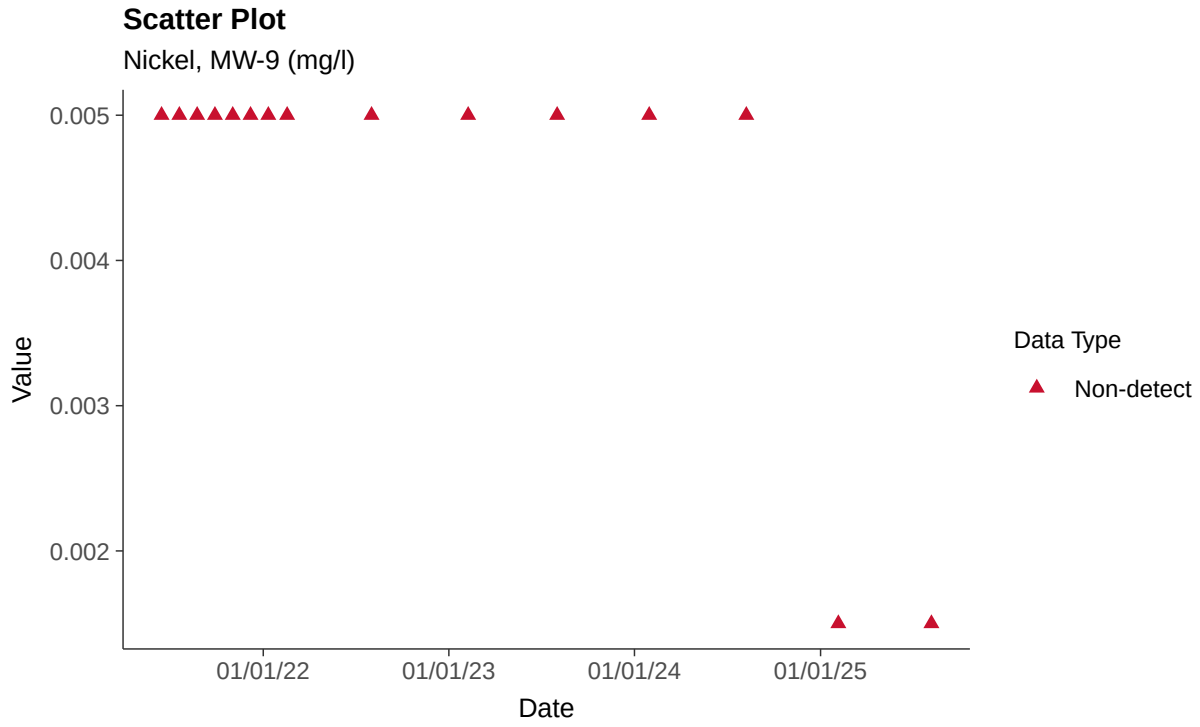
Trend Regression: Piecewise Linear-Linear-Linear

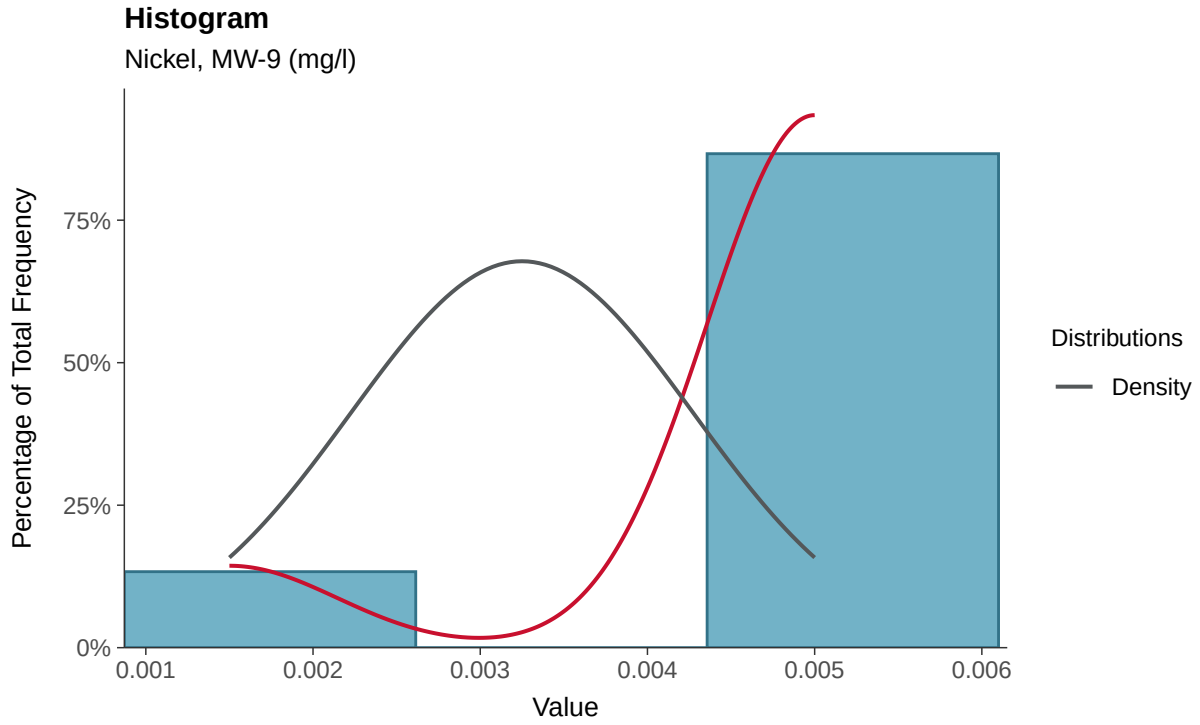
Iron, MW-9 (mg/l)



Part 115: Nickel, MW-9

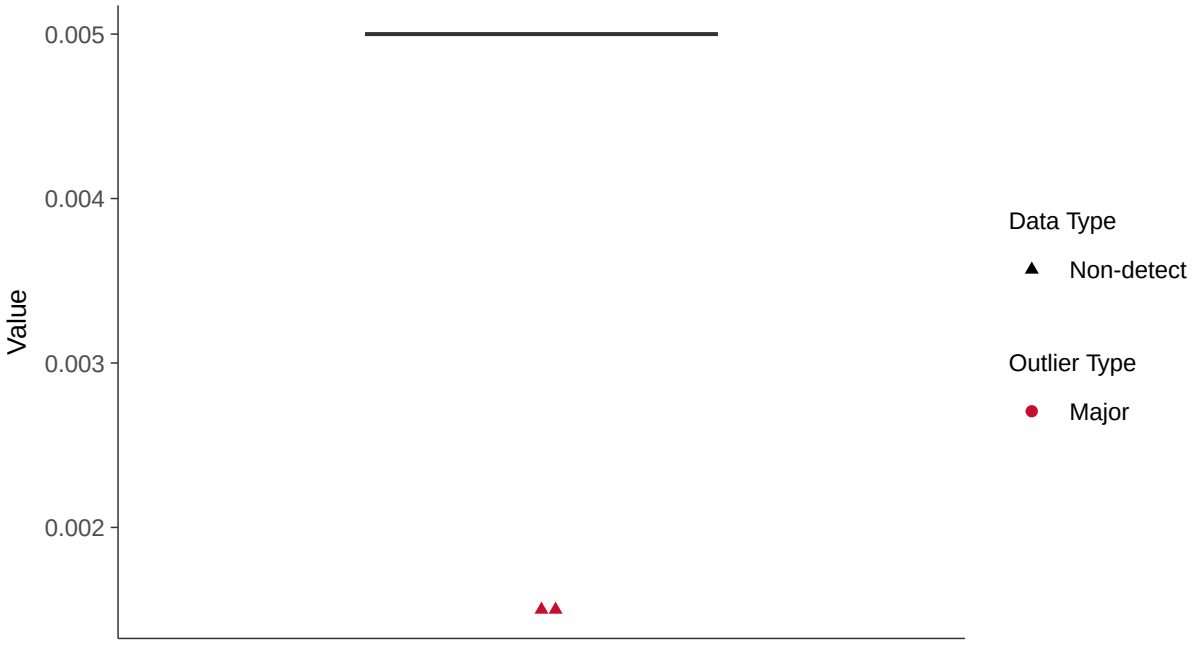
ID: 20_5_119





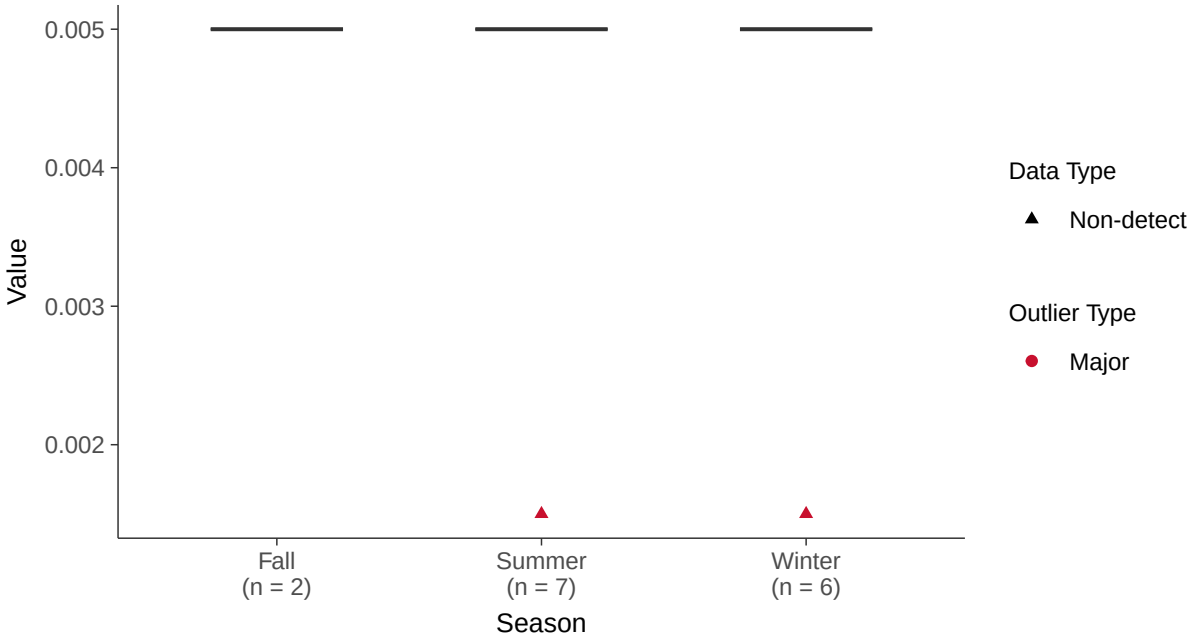
Boxplot

Nickel, MW-9 (mg/l)



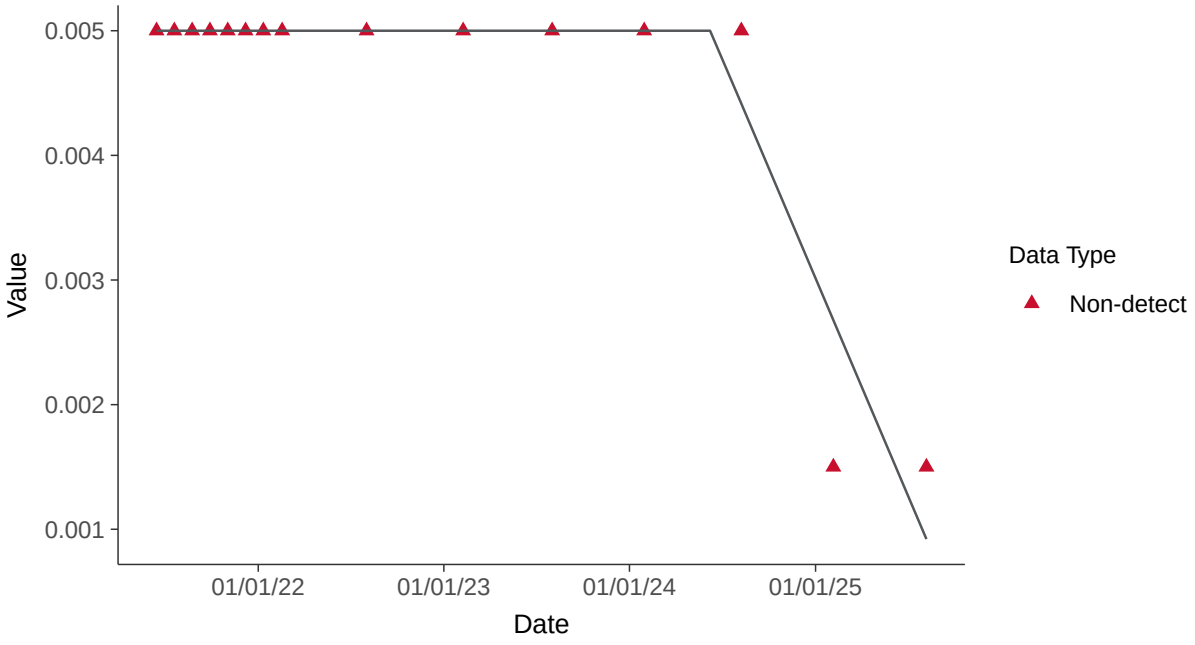
Boxplot by Season

Nickel, MW-9 (mg/l)



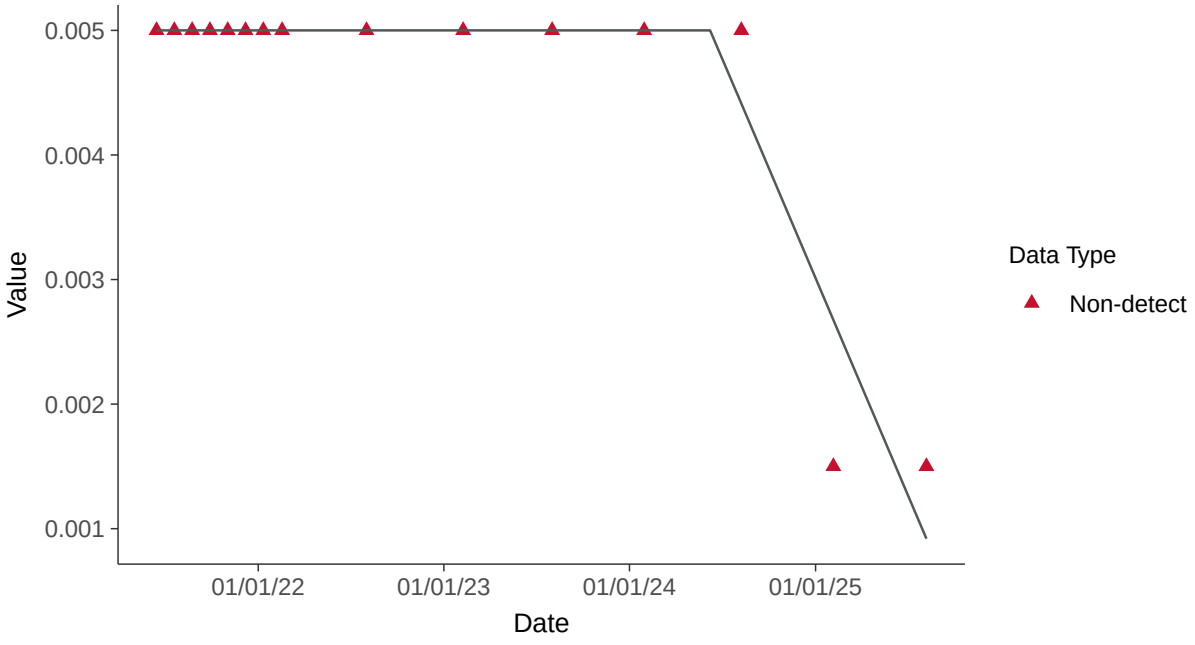
Trend Regression: Piecewise Linear-Linear

Nickel, MW-9 (mg/l)



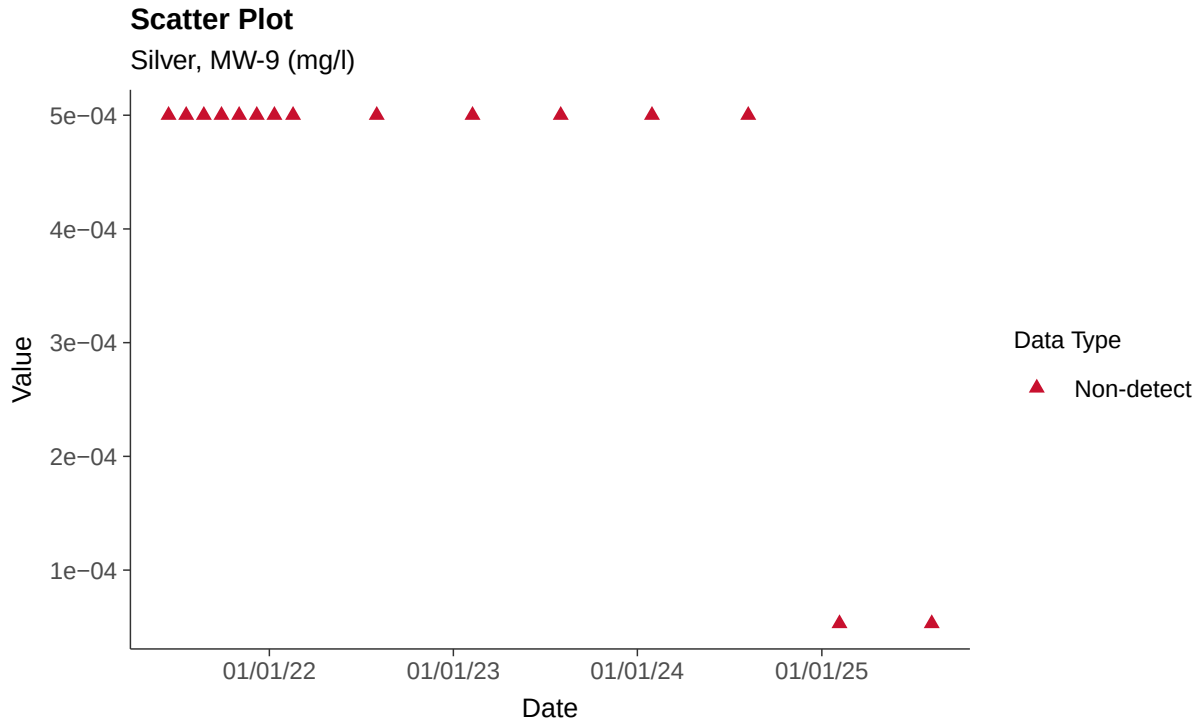
Trend Regression: Piecewise Linear-Linear-Linear

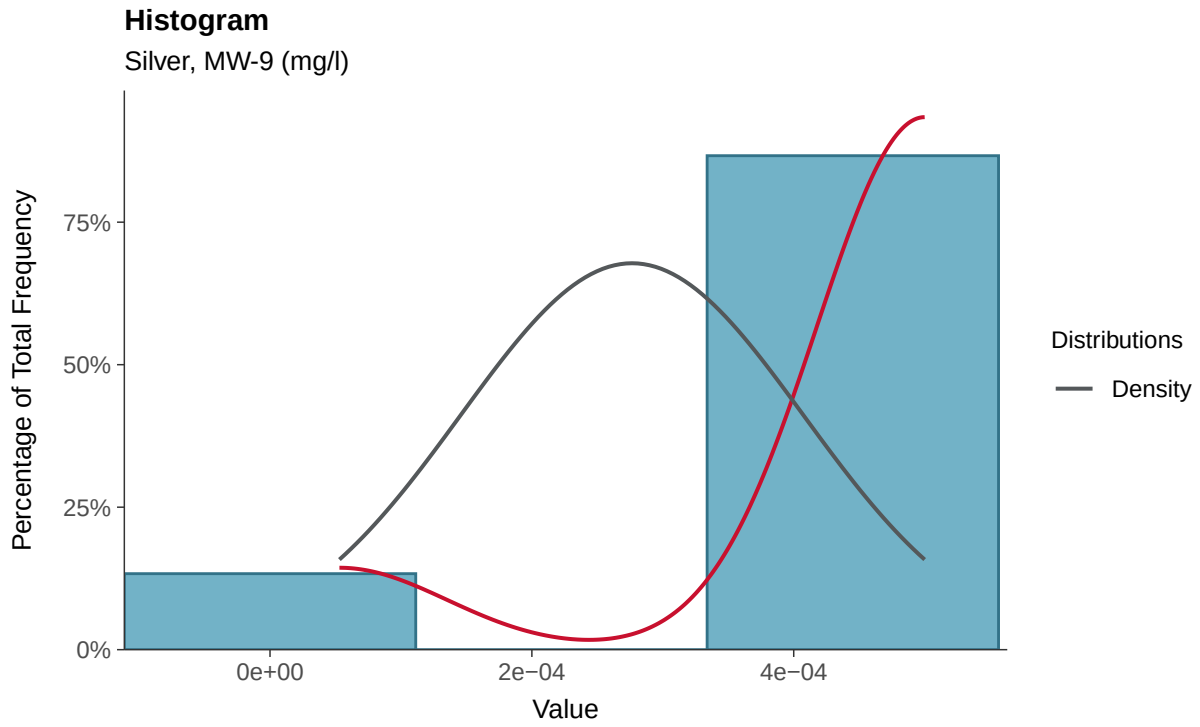
Nickel, MW-9 (mg/l)



Part 115: Silver, MW-9

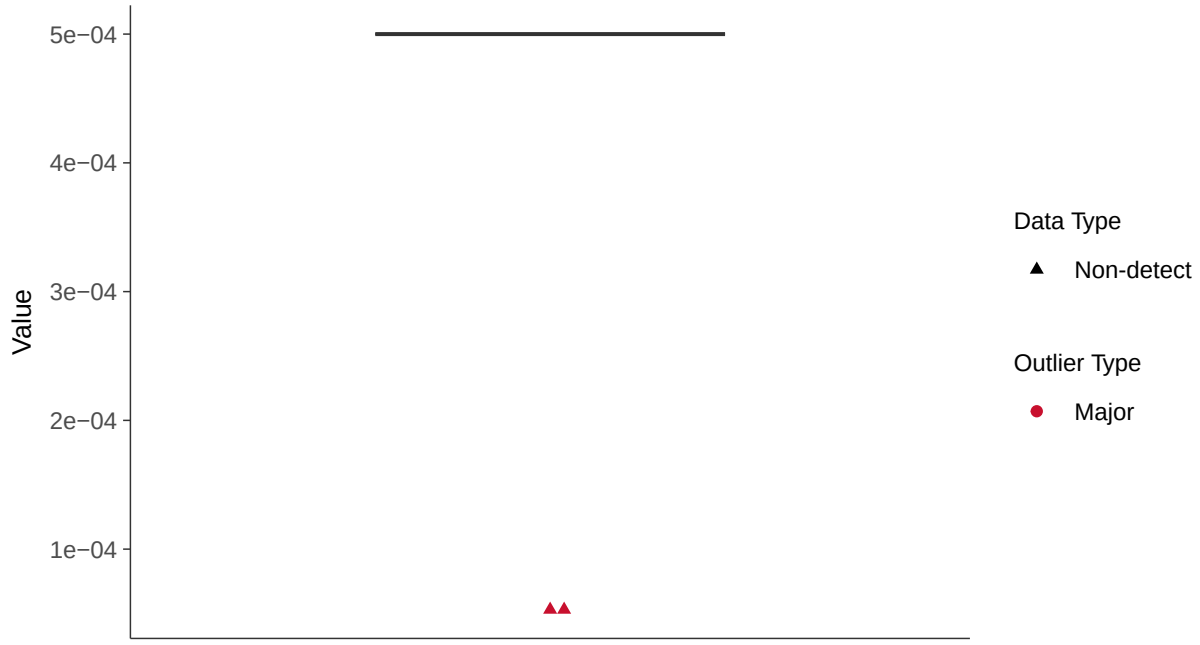
ID: 20_5_123





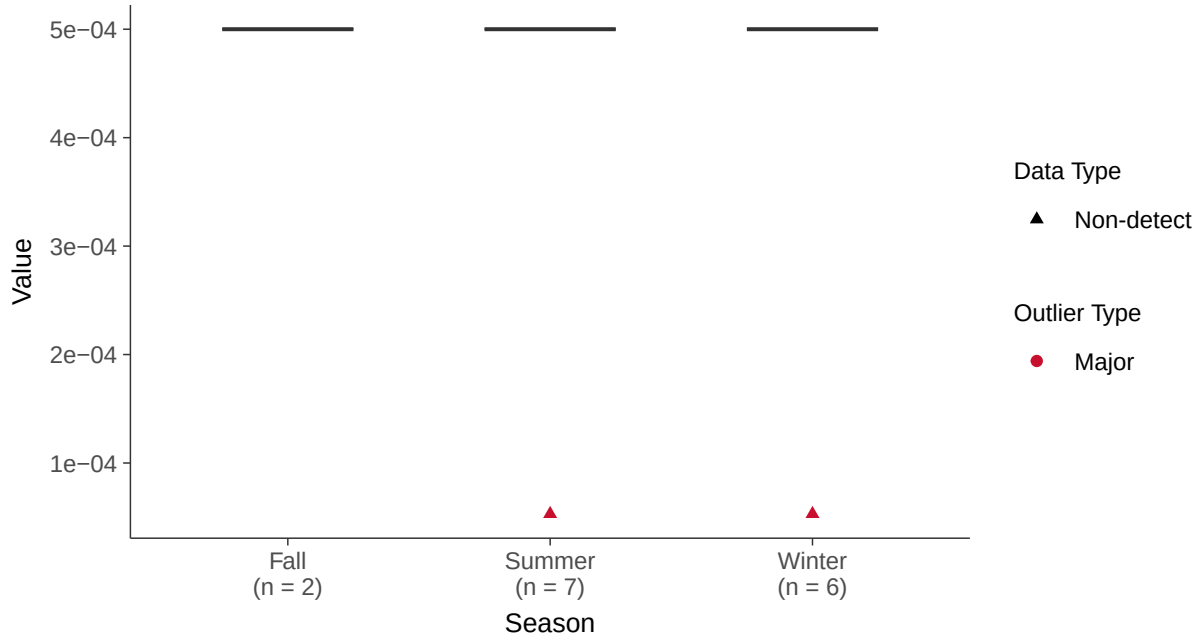
Boxplot

Silver, MW-9 (mg/l)



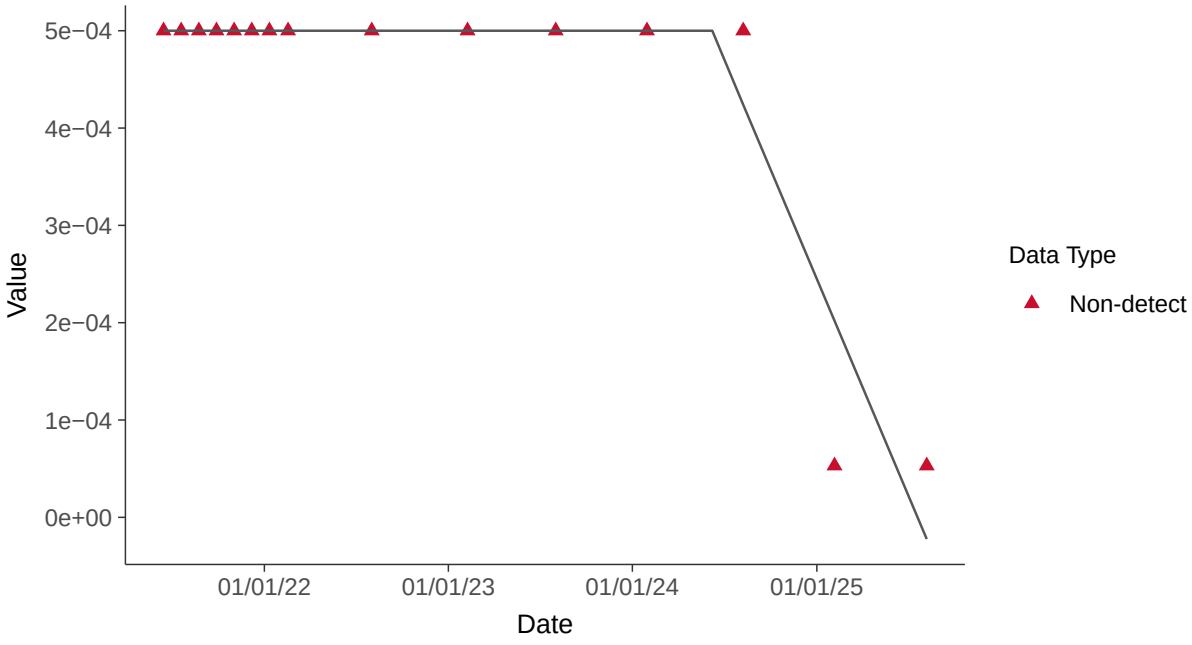
Boxplot by Season

Silver, MW-9 (mg/l)



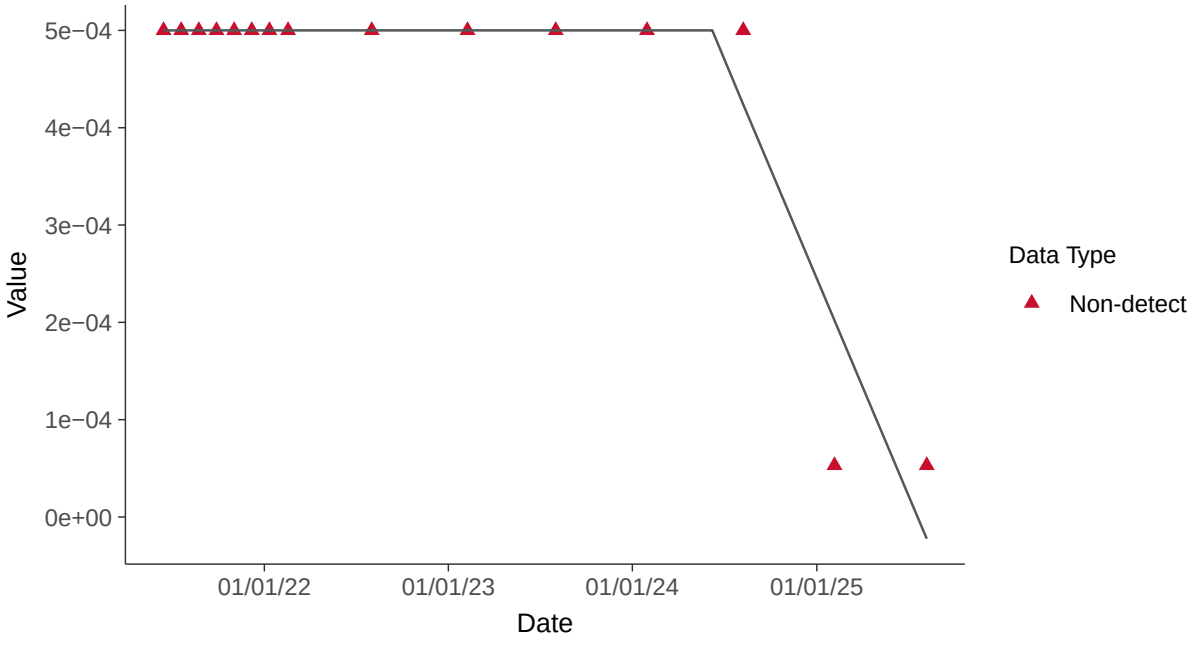
Trend Regression: Piecewise Linear-Linear

Silver, MW-9 (mg/l)



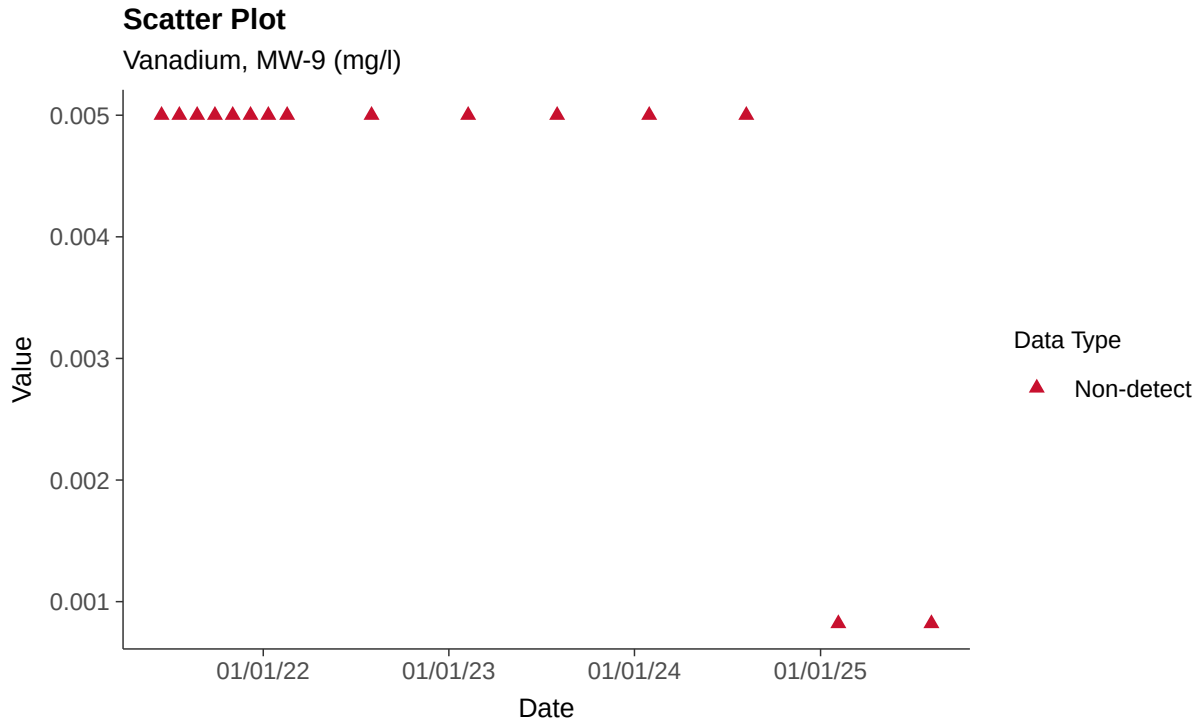
Trend Regression: Piecewise Linear-Linear-Linear

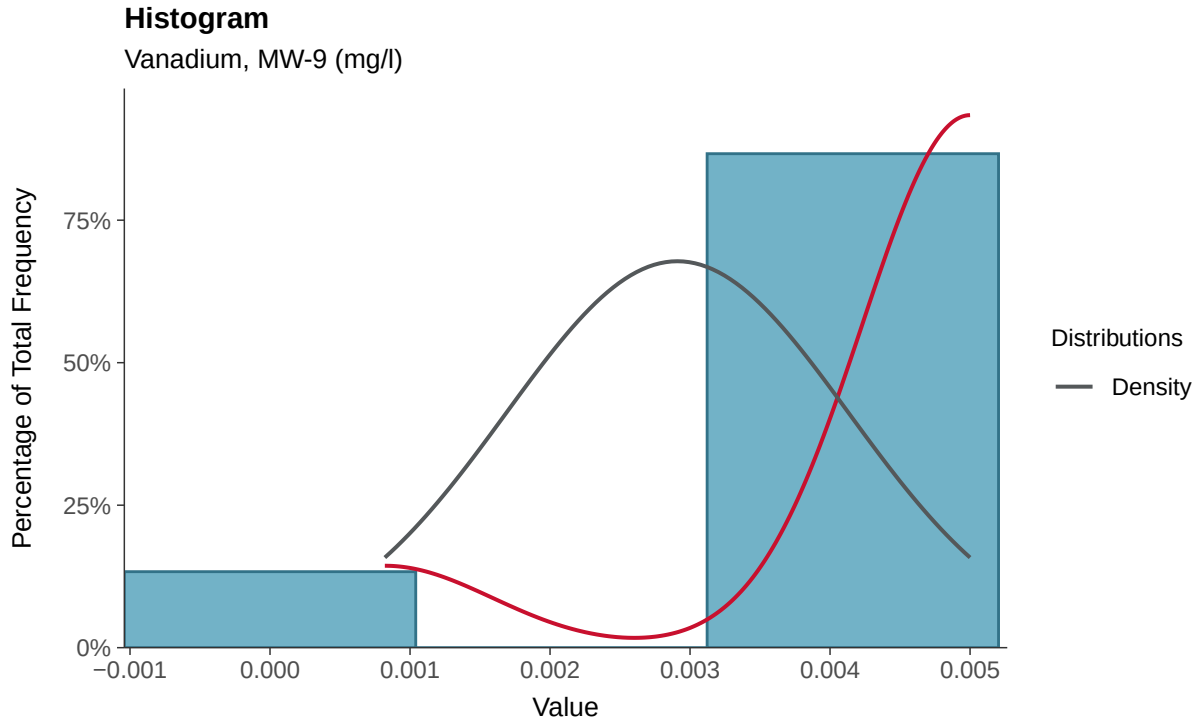
Silver, MW-9 (mg/l)



Part 115: Vanadium, MW-9

ID: 20_5_128



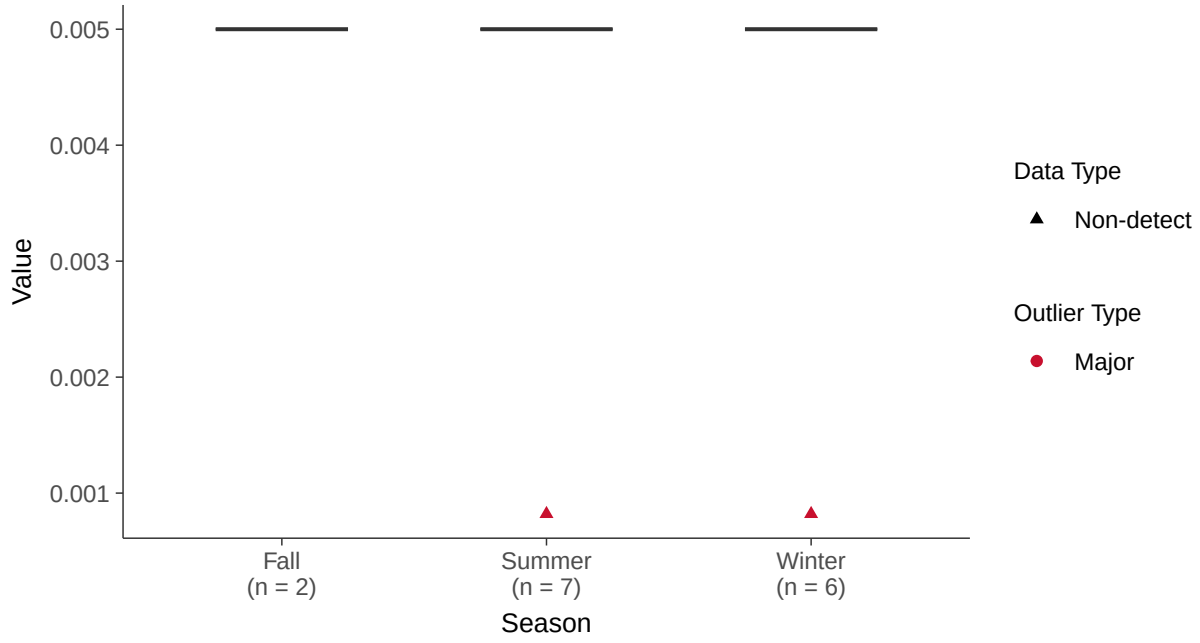


Boxplot

Vanadium, MW-9 (mg/l)

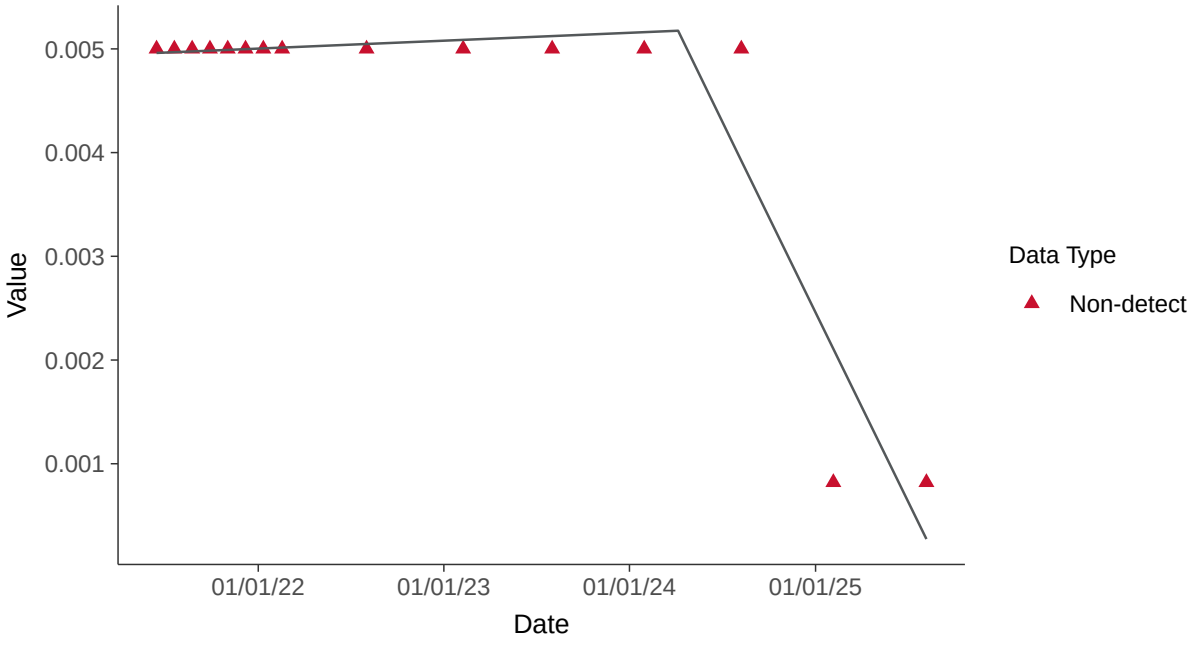
Boxplot by Season

Vanadium, MW-9 (mg/l)



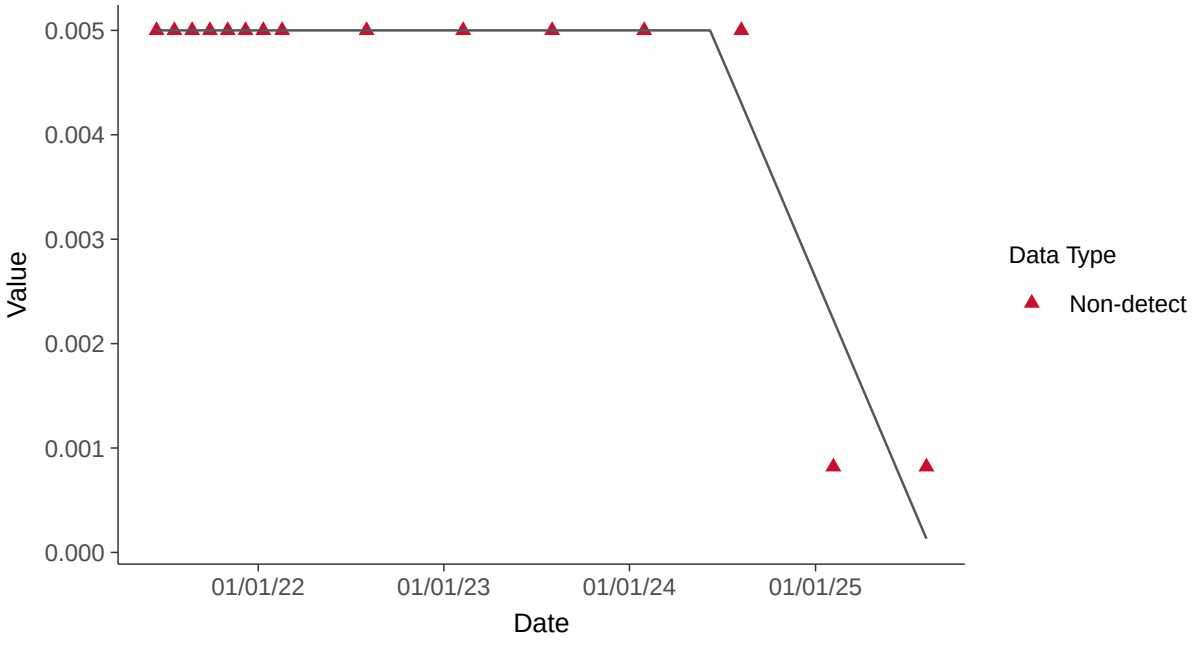
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-9 (mg/l)



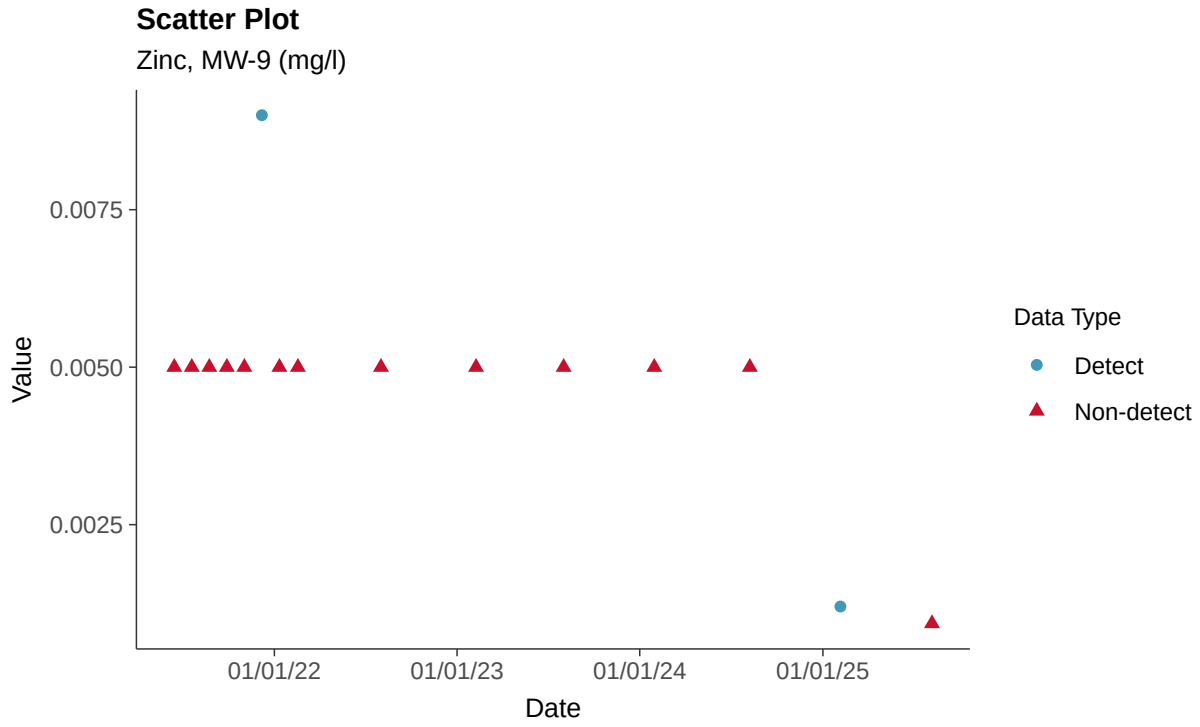
Trend Regression: Piecewise Linear-Linear-Linear

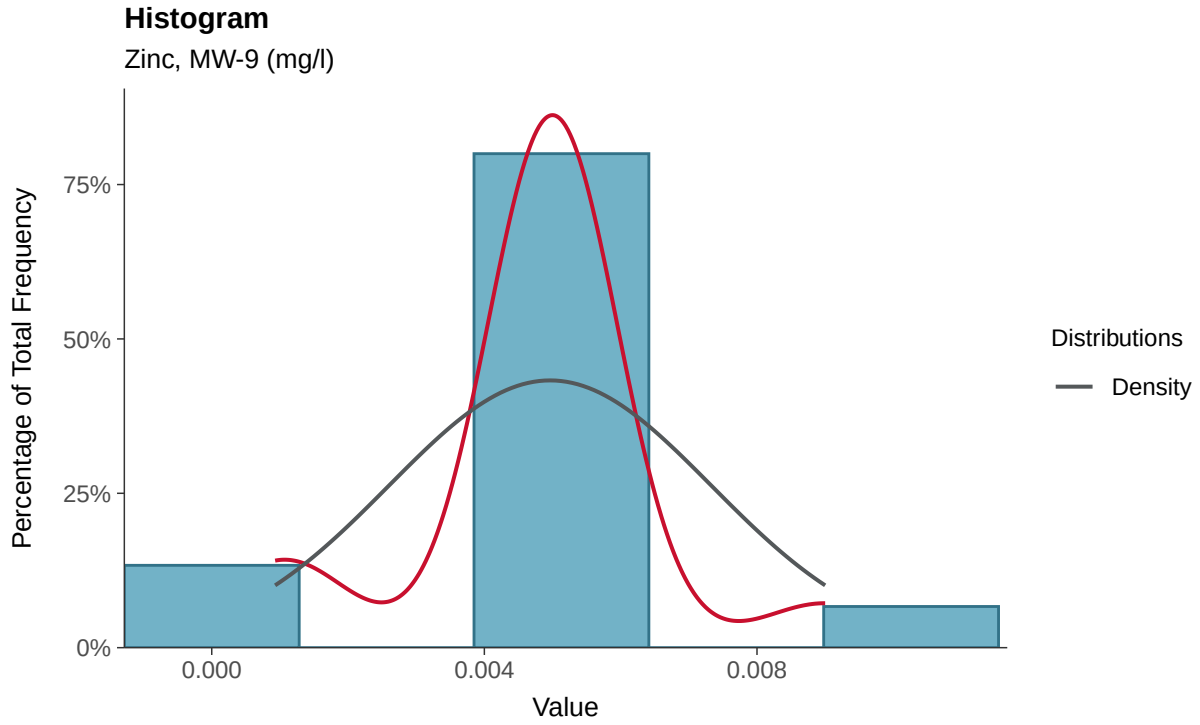
Vanadium, MW-9 (mg/l)



Part 115: Zinc, MW-9

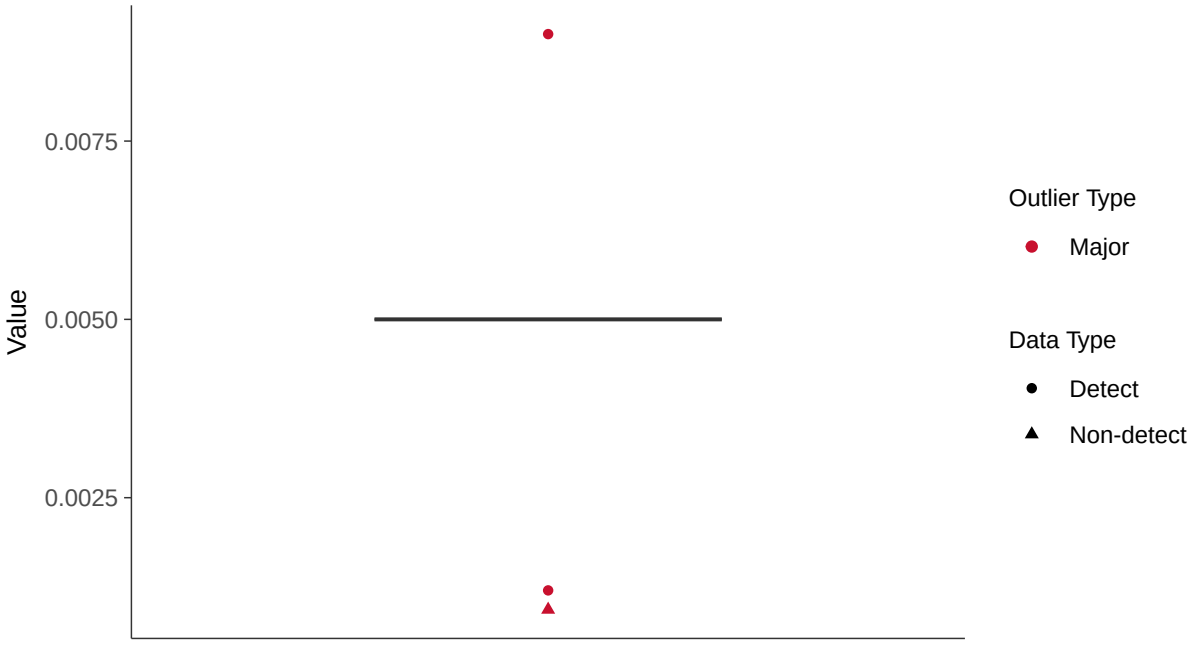
ID: 20_5_129





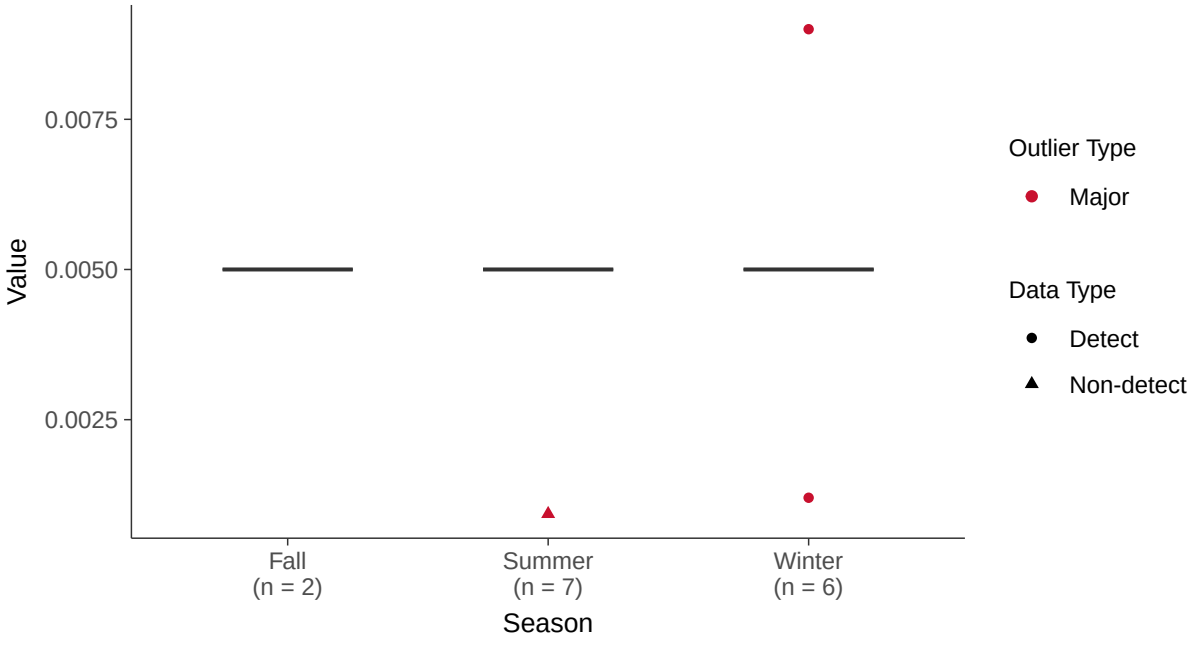
Boxplot

Zinc, MW-9 (mg/l)



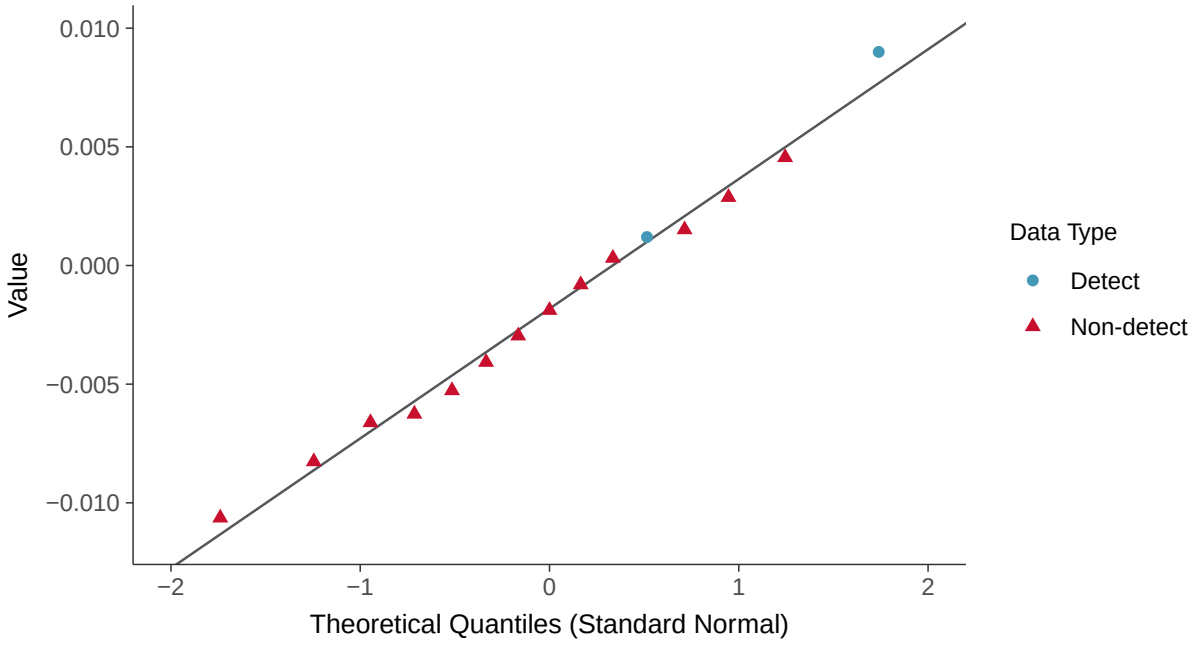
Boxplot by Season

Zinc, MW-9 (mg/l)



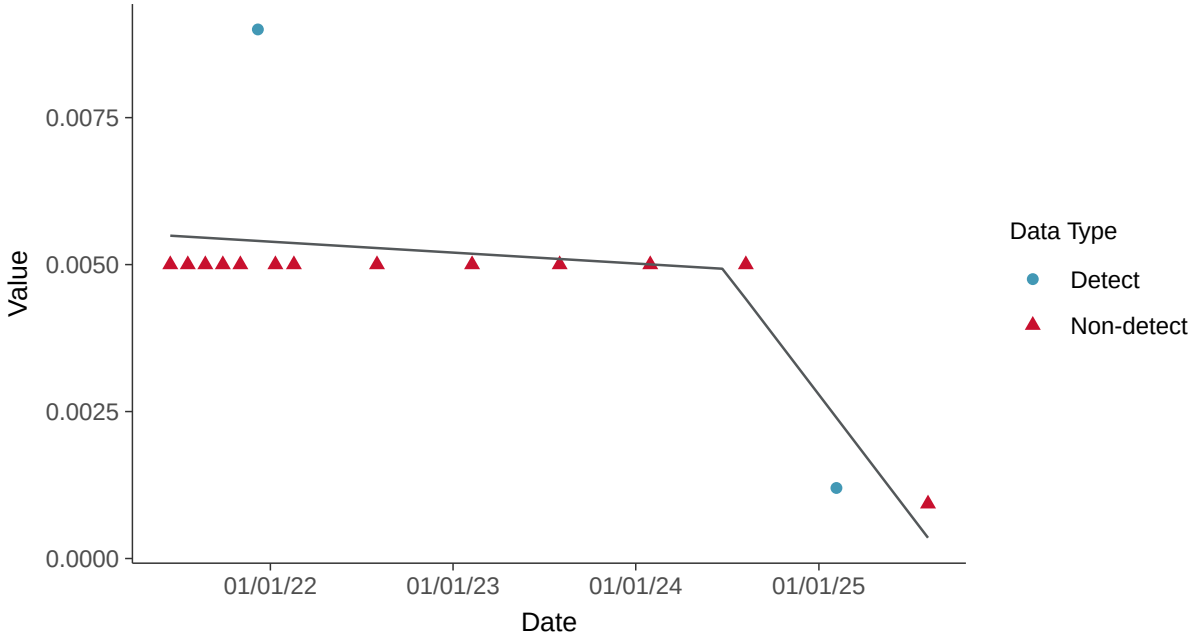
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-9 (mg/l)



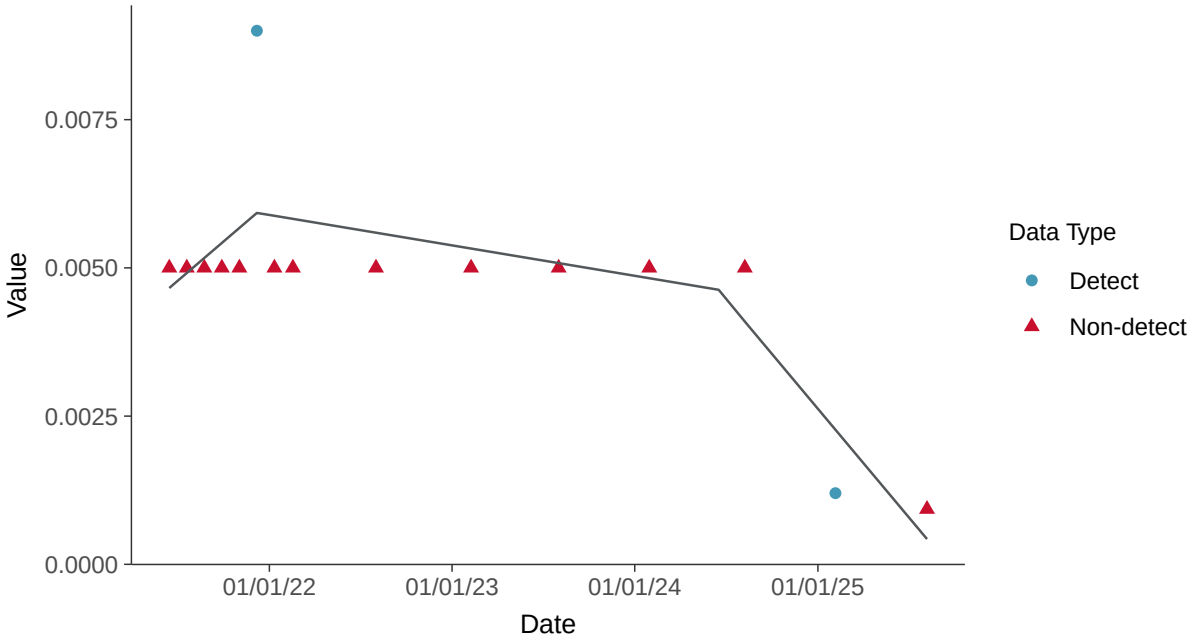
Trend Regression: Piecewise Linear-Linear

Zinc, MW-9 (mg/l)



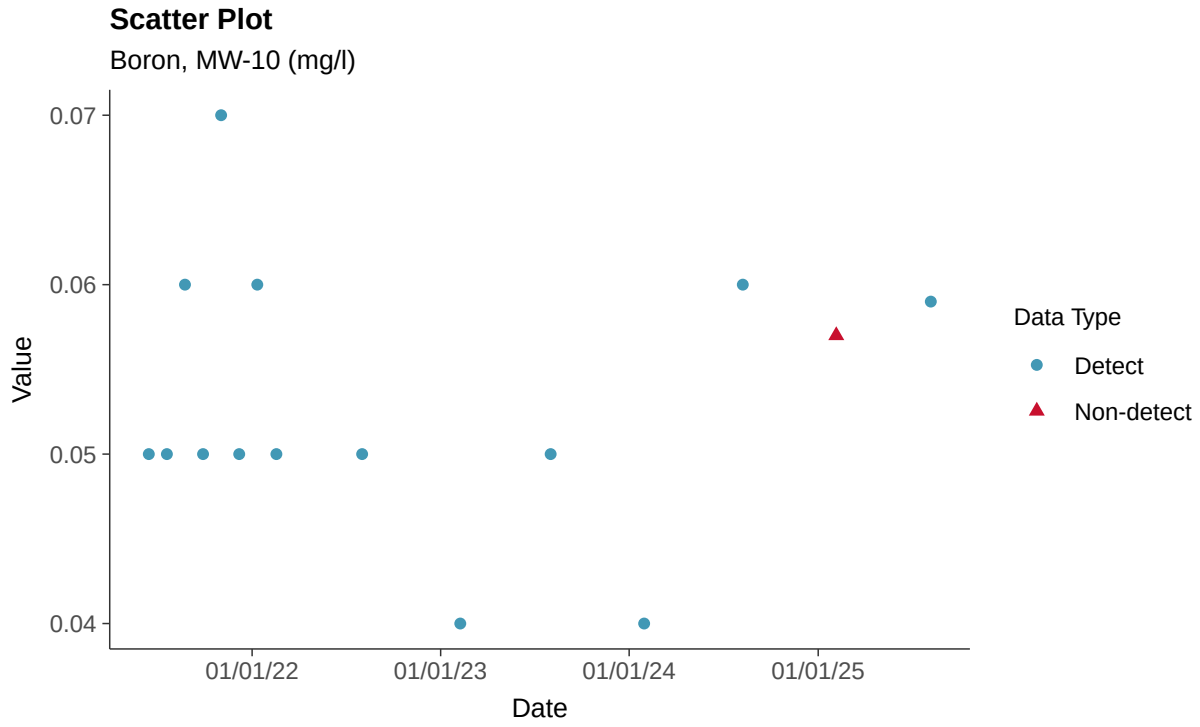
Trend Regression: Piecewise Linear-Linear-Linear

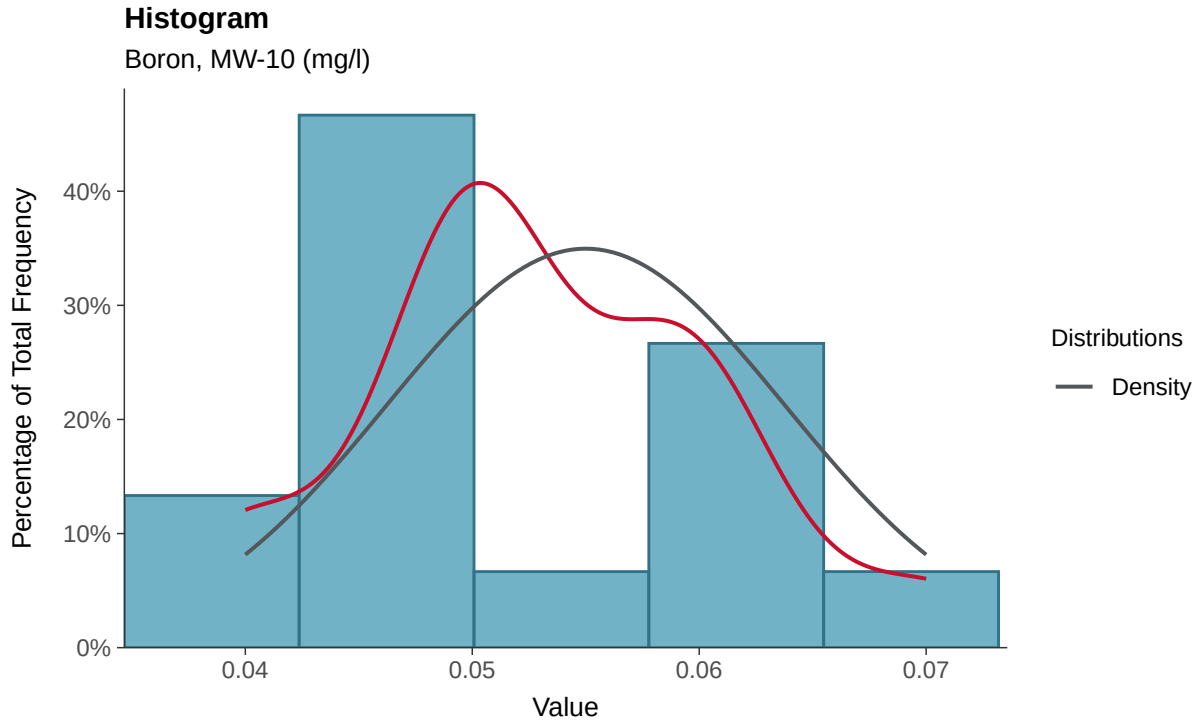
Zinc, MW-9 (mg/l)



Appendix III: Boron, MW-10

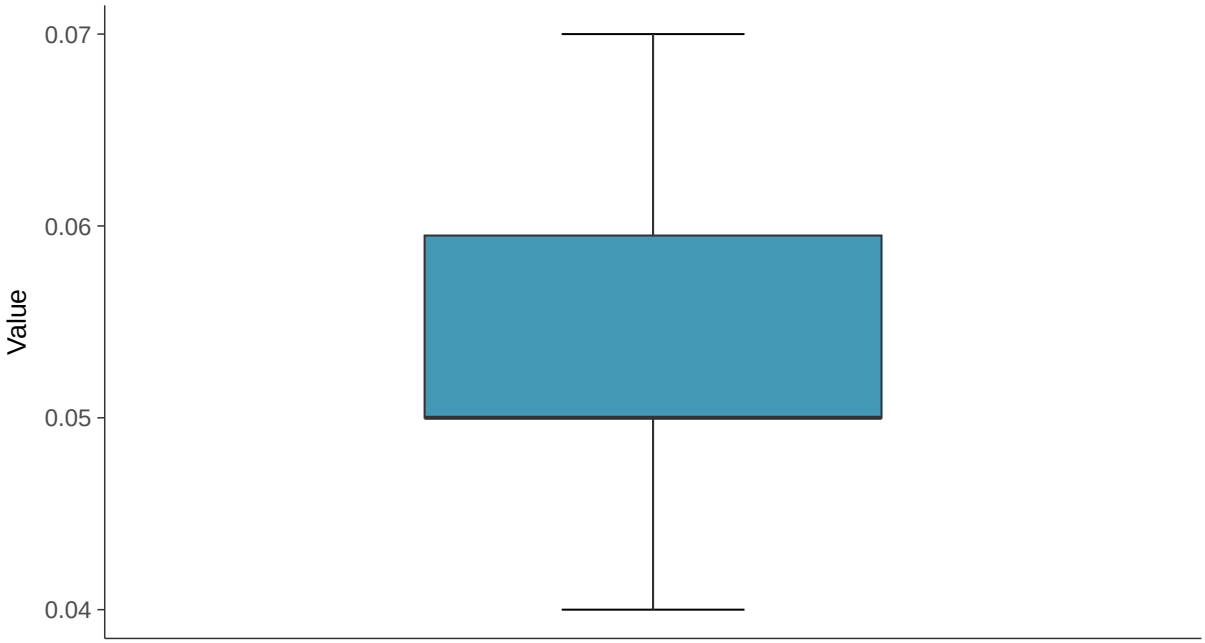
ID: 21_2_105





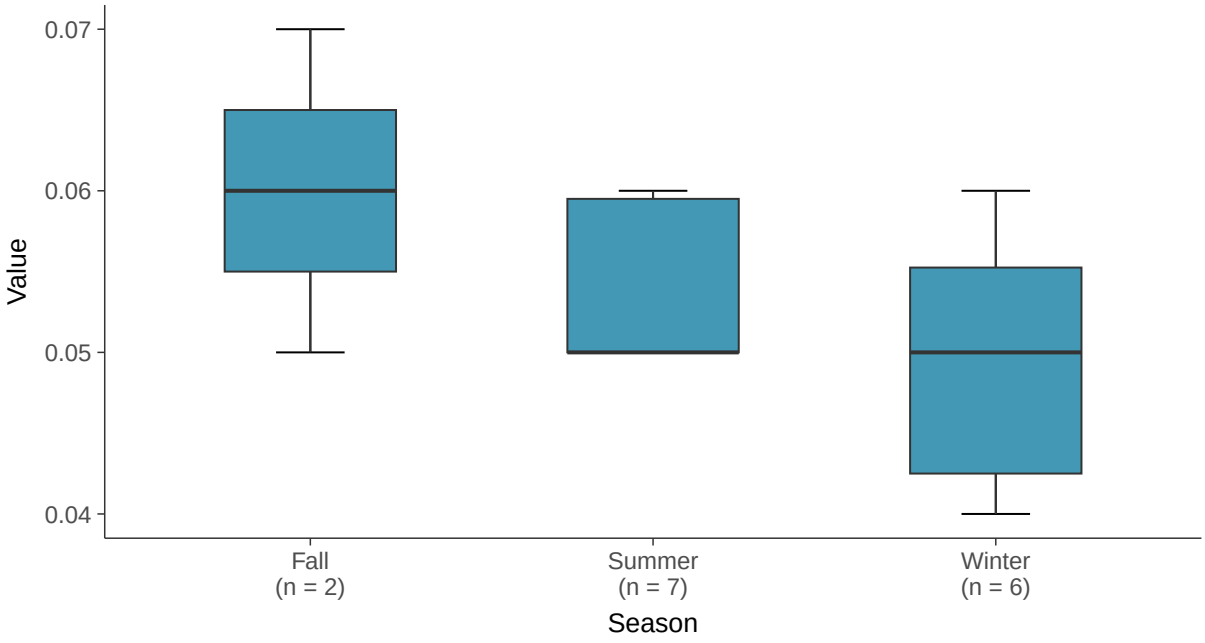
Boxplot

Boron, MW-10 (mg/l)



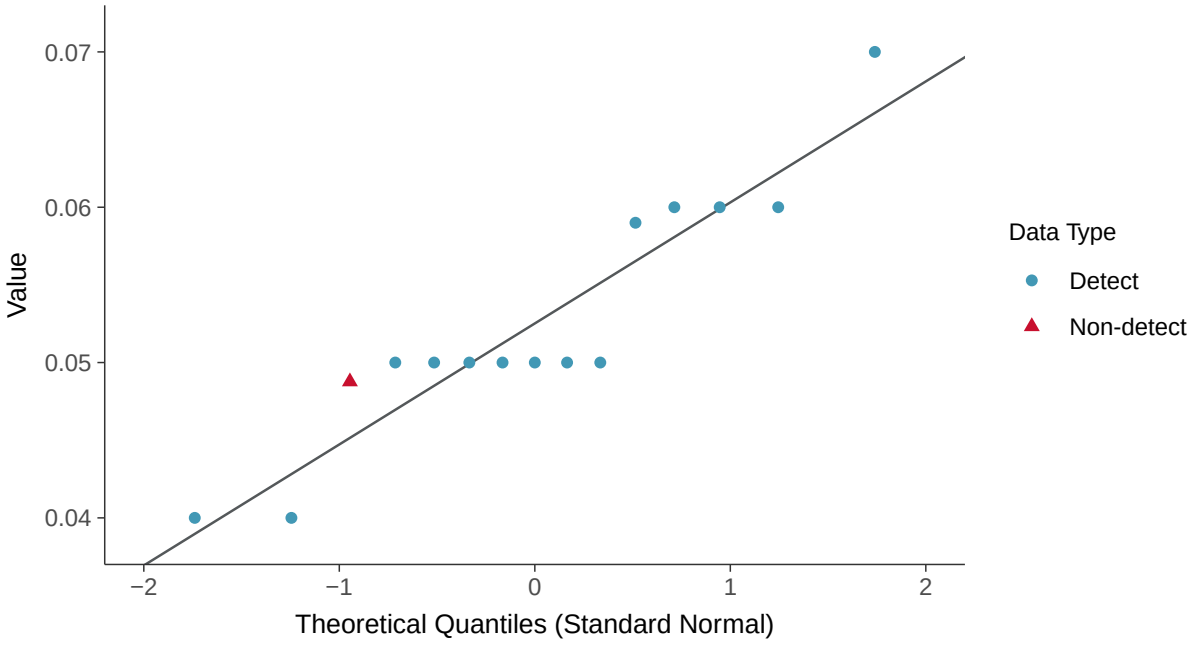
Boxplot by Season

Boron, MW-10 (mg/l)



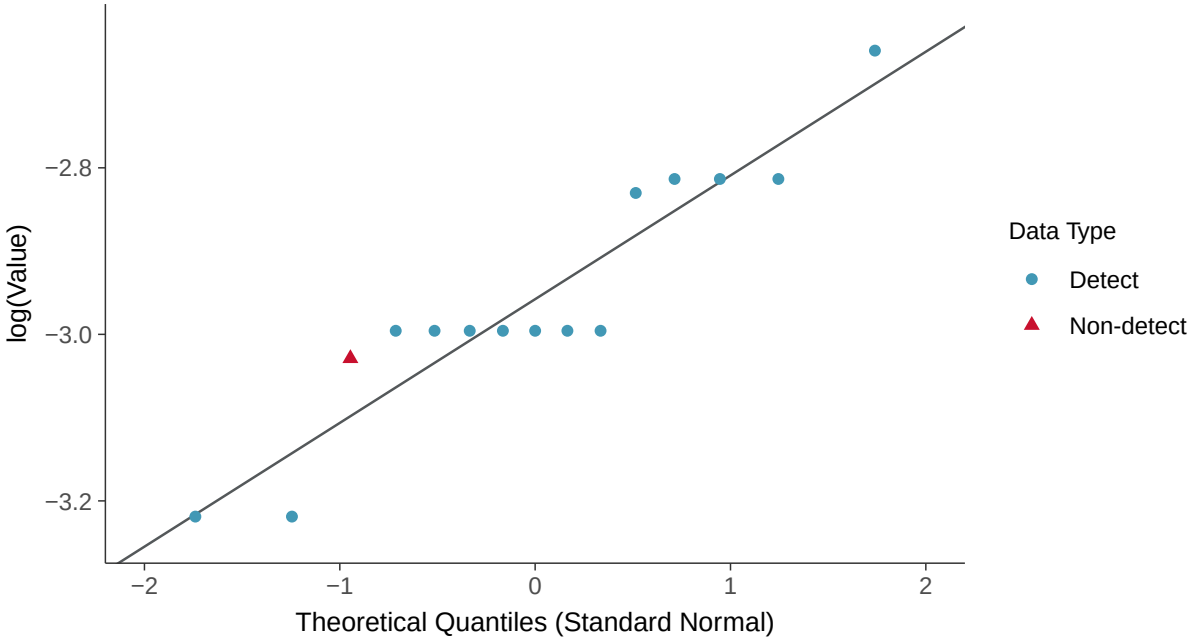
Normal Q-Q plot using ROS Imputed Estimates

Boron, MW-10 (mg/l)



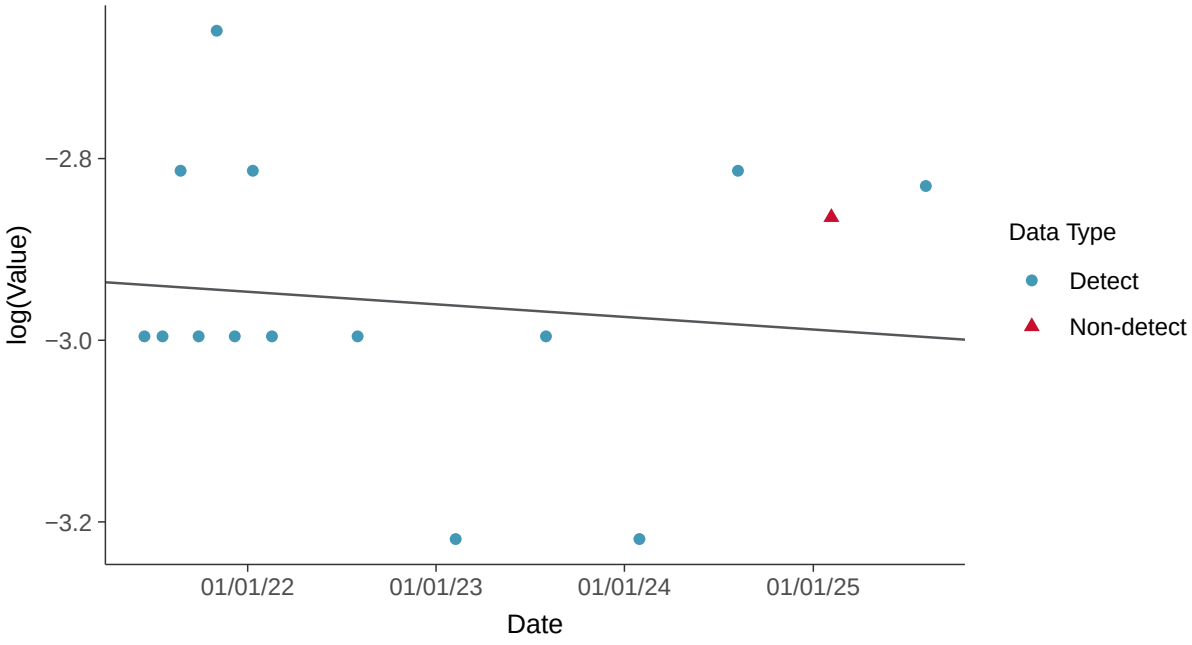
Lognormal Q-Q plot using ROS Imputed Estimates

Boron, MW-10 (mg/l)



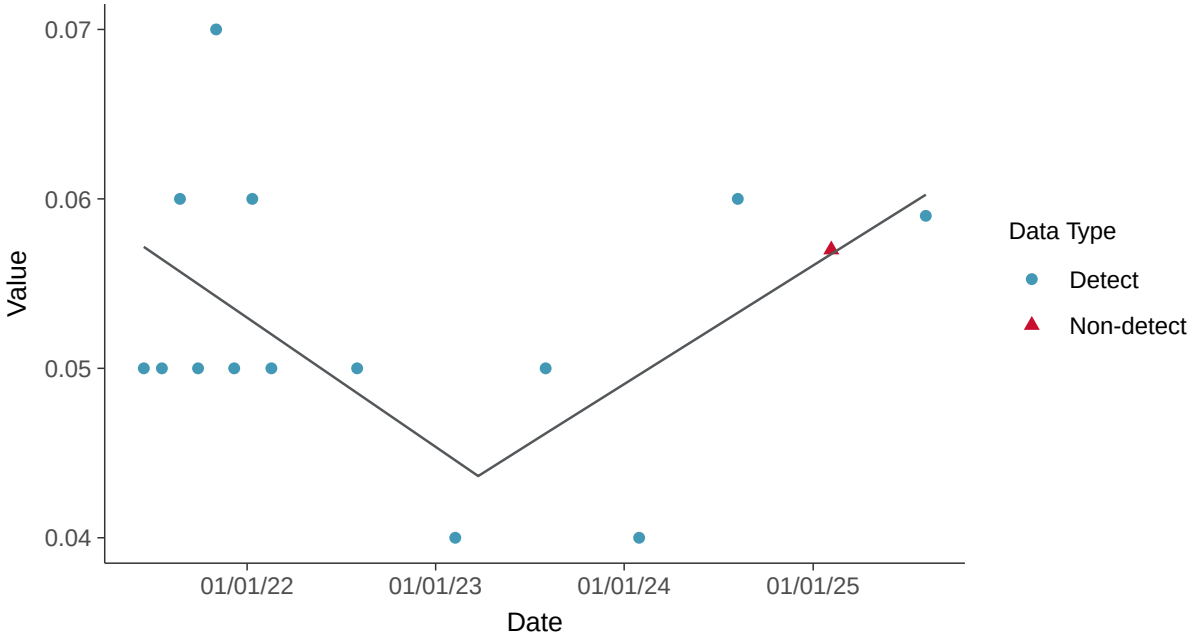
Trend Regression: Lognormal MLE

Boron, MW-10 (mg/l)



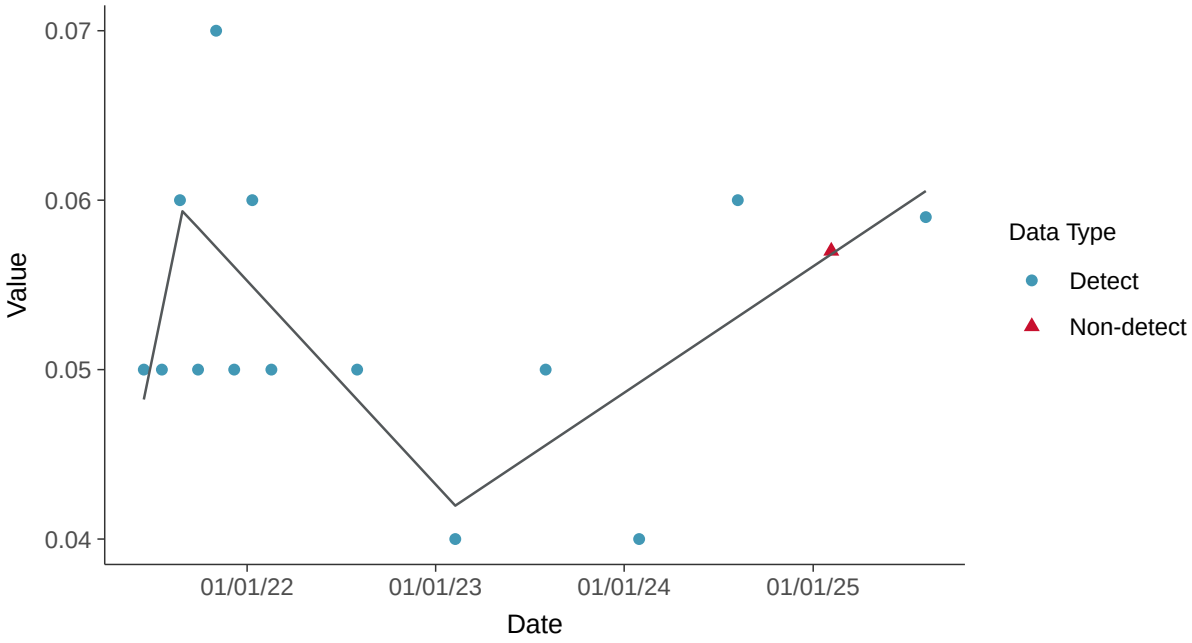
Trend Regression: Piecewise Linear-Linear

Boron, MW-10 (mg/l)



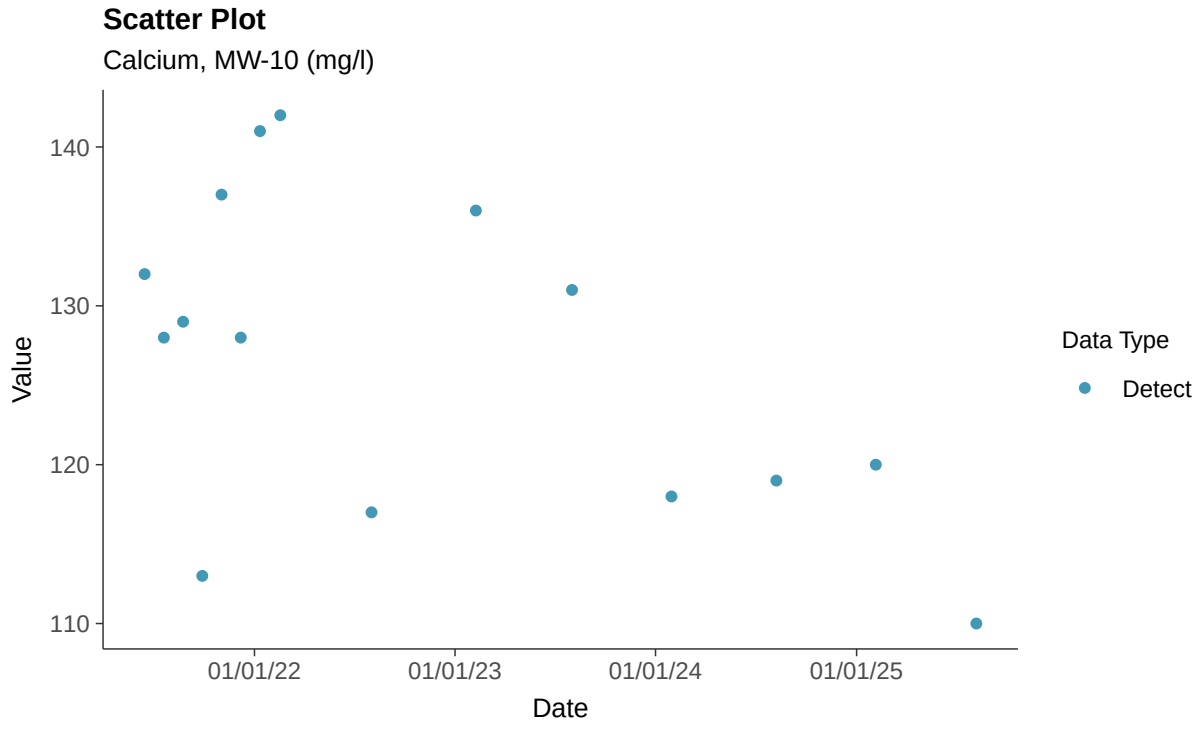
Trend Regression: Piecewise Linear-Linear-Linear

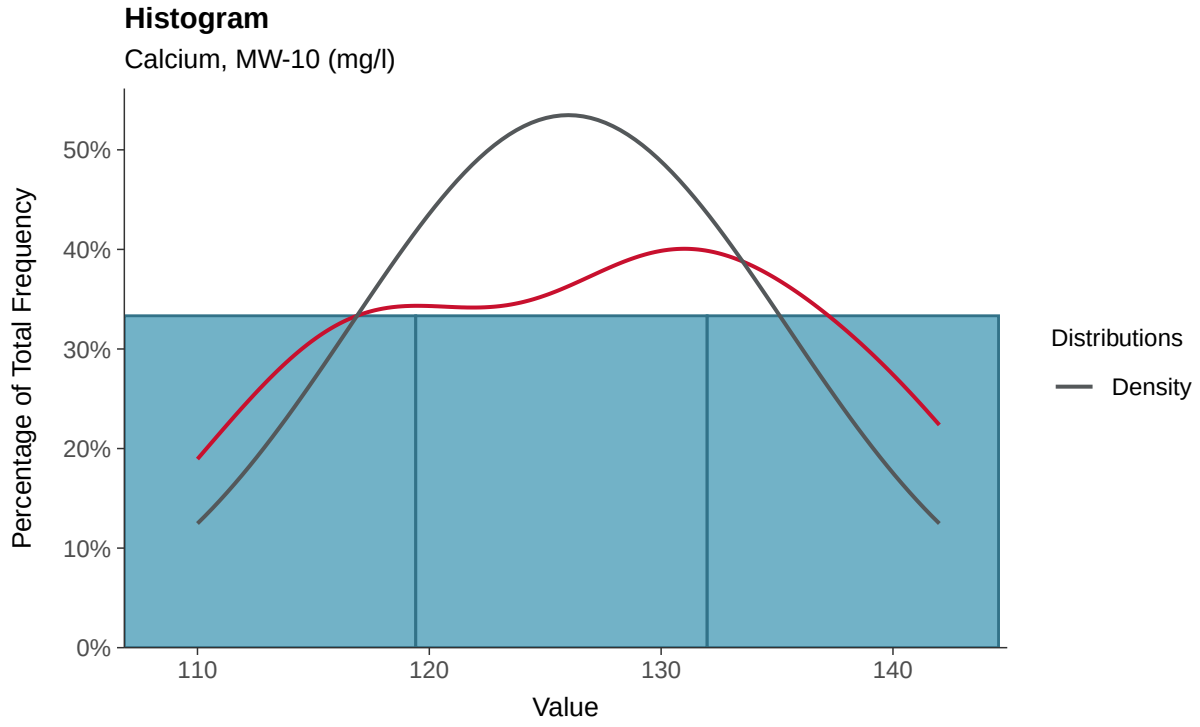
Boron, MW-10 (mg/l)



Appendix III: Calcium, MW-10

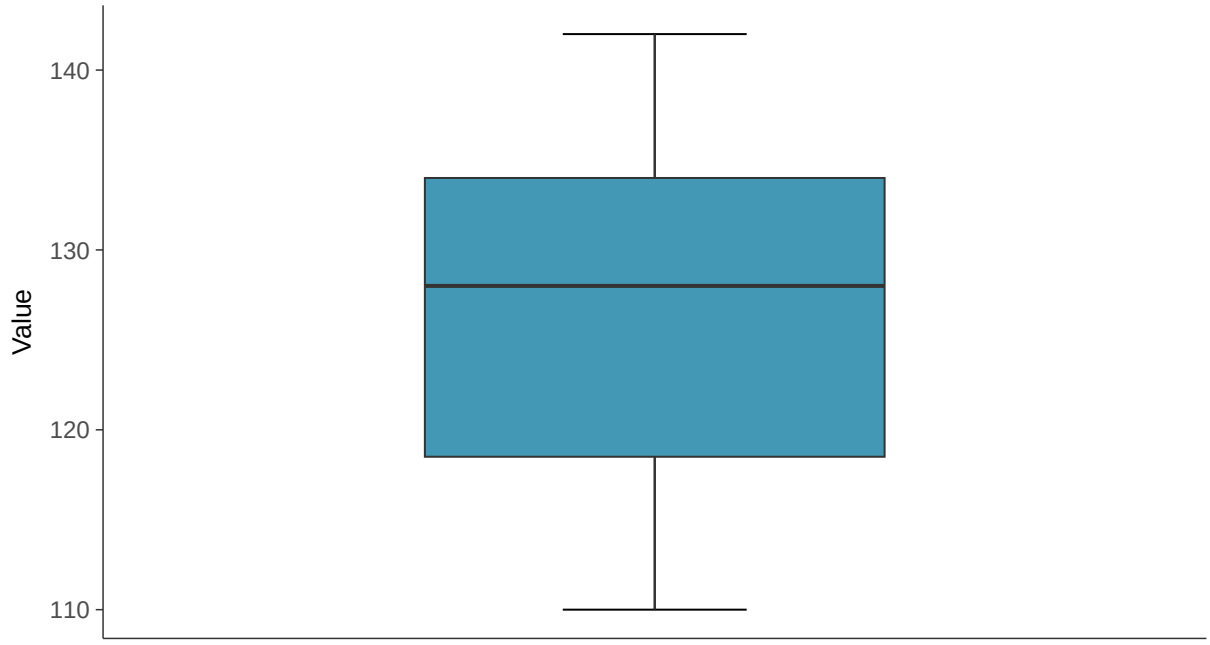
ID: 21_2_107





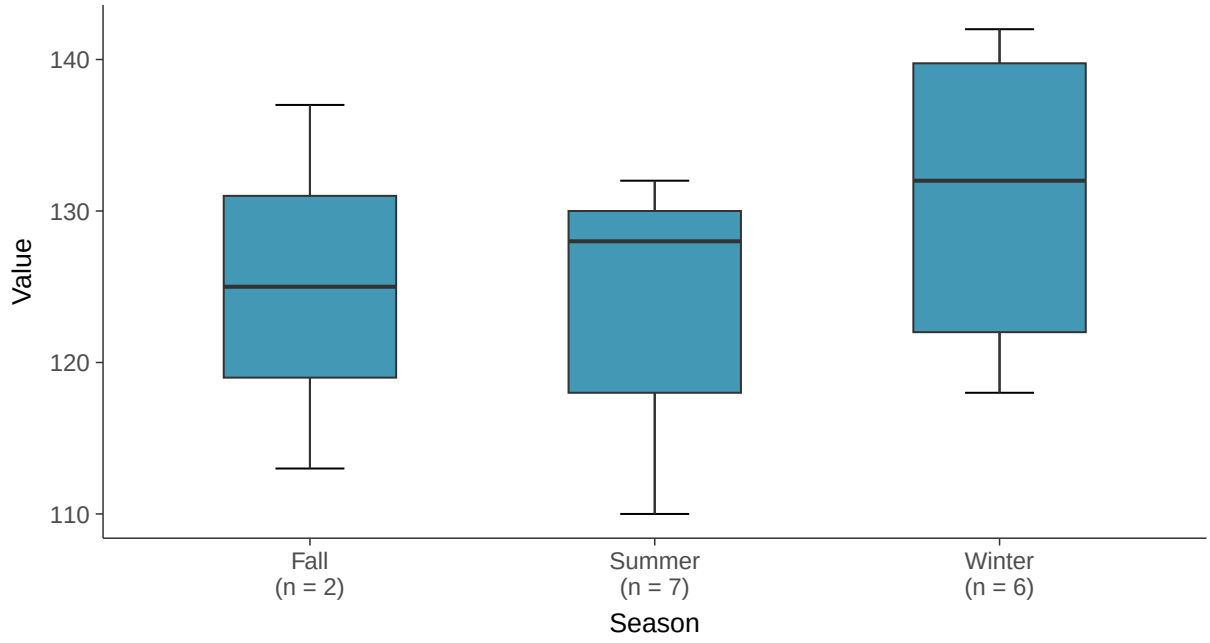
Boxplot

Calcium, MW-10 (mg/l)



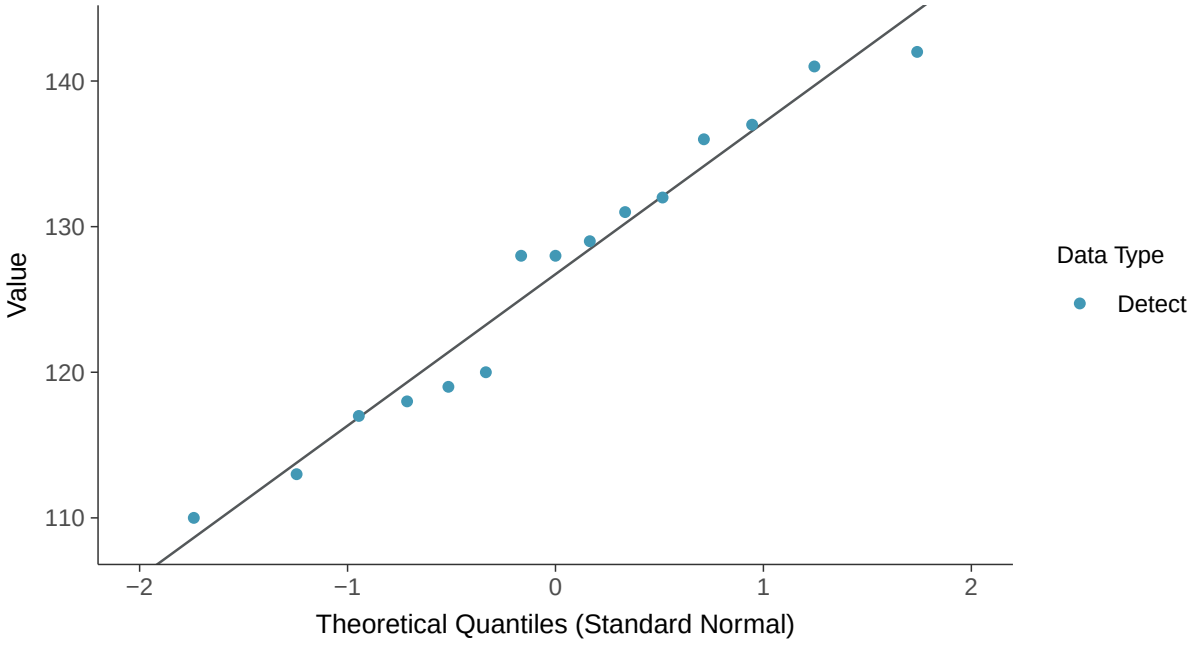
Boxplot by Season

Calcium, MW-10 (mg/l)



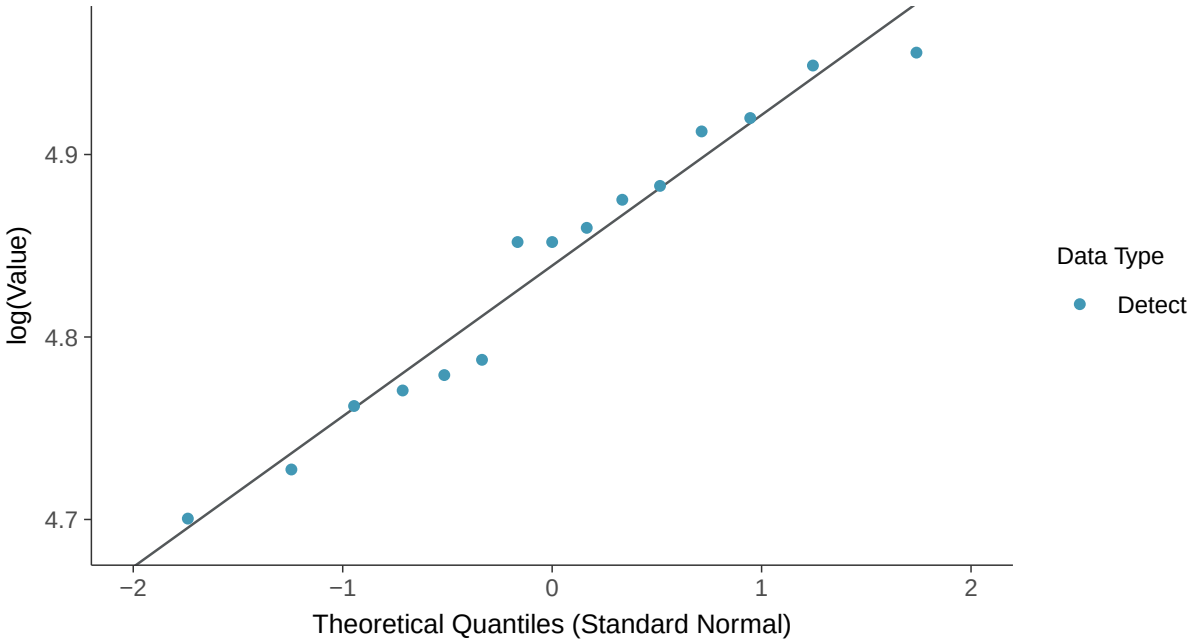
Normal Q-Q plot

Calcium, MW-10 (mg/l)



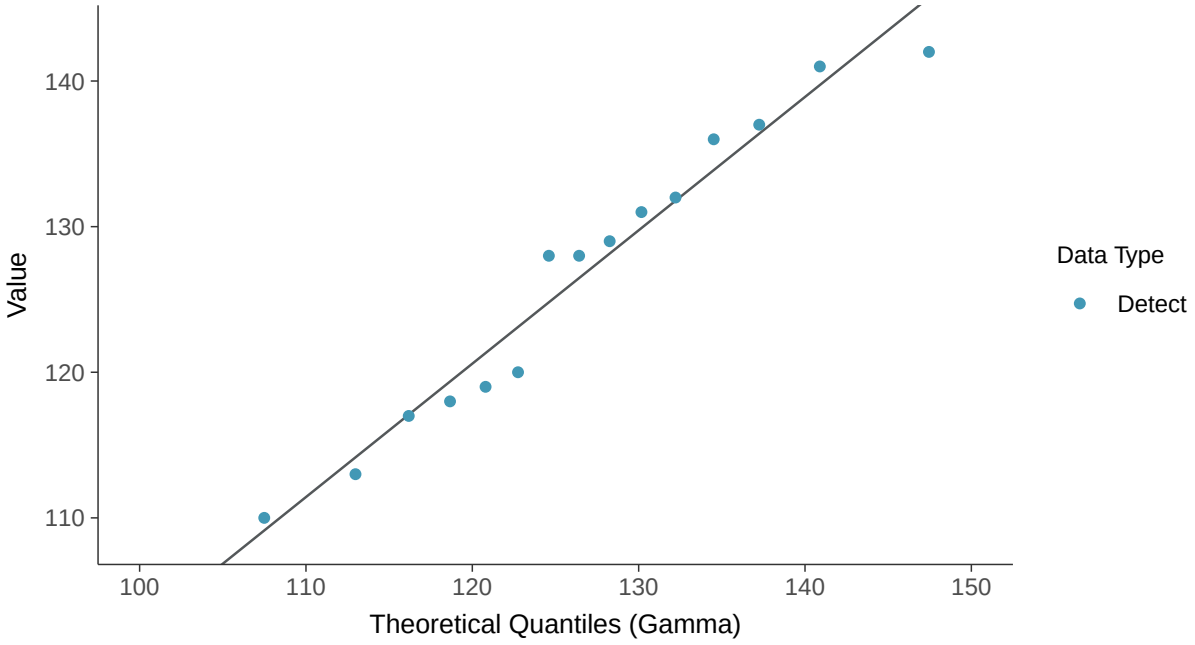
Lognormal Q-Q plot

Calcium, MW-10 (mg/l)



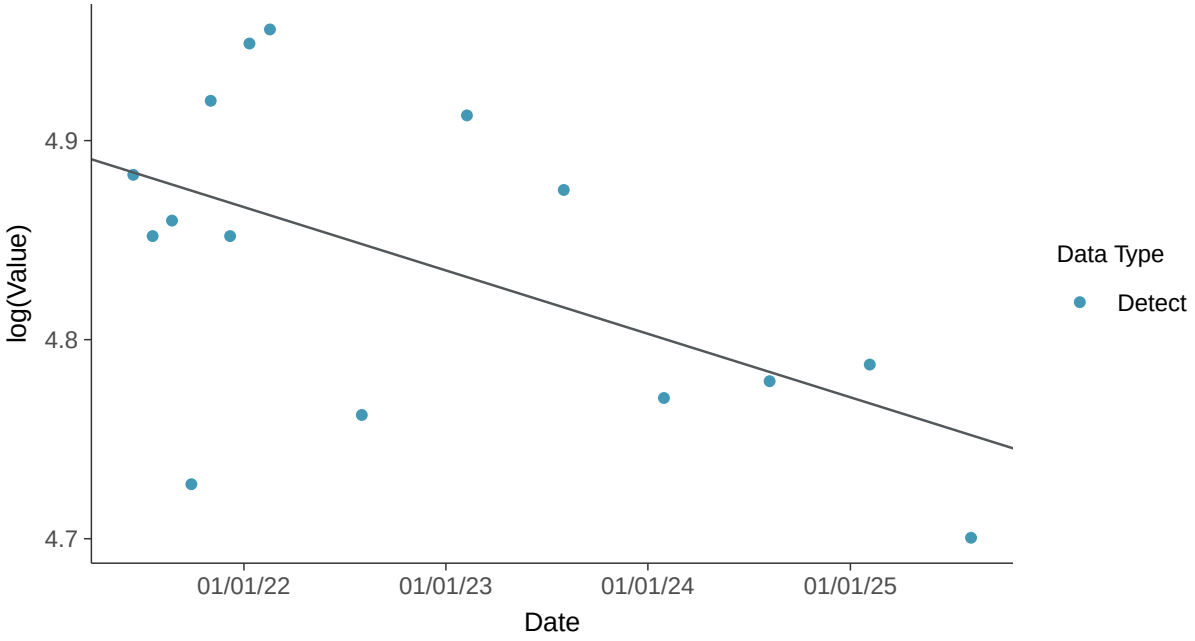
Gamma Q-Q plot

Calcium, MW-10 (mg/l)



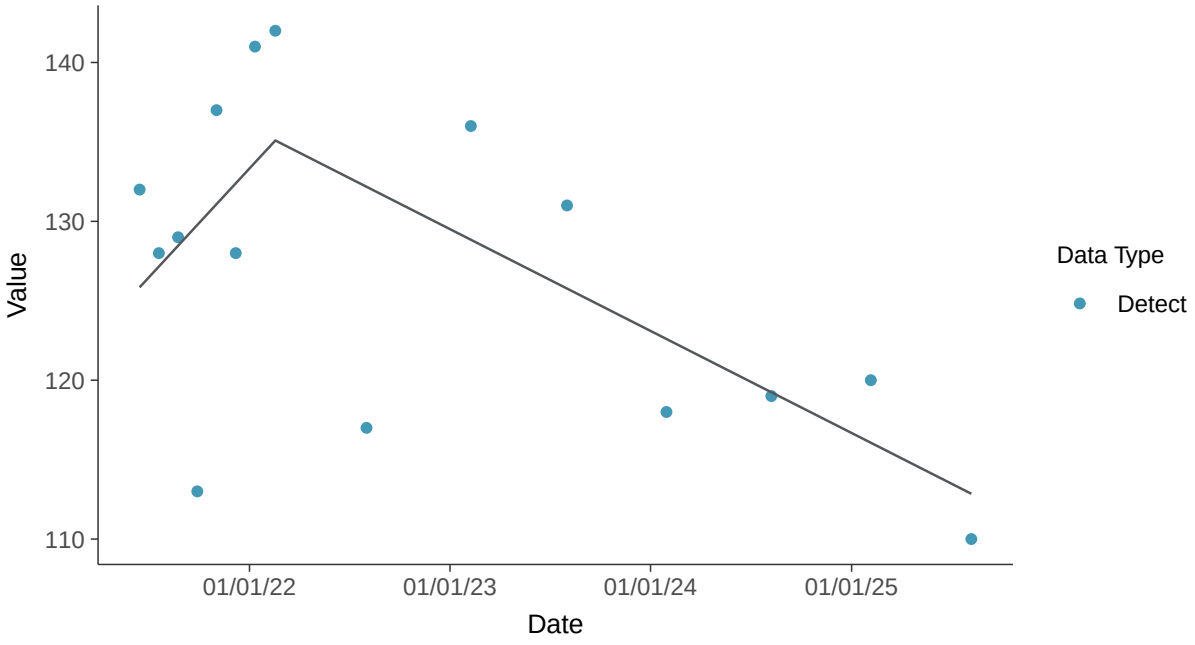
Trend Regression: Lognormal MLE

Calcium, MW-10 (mg/l)



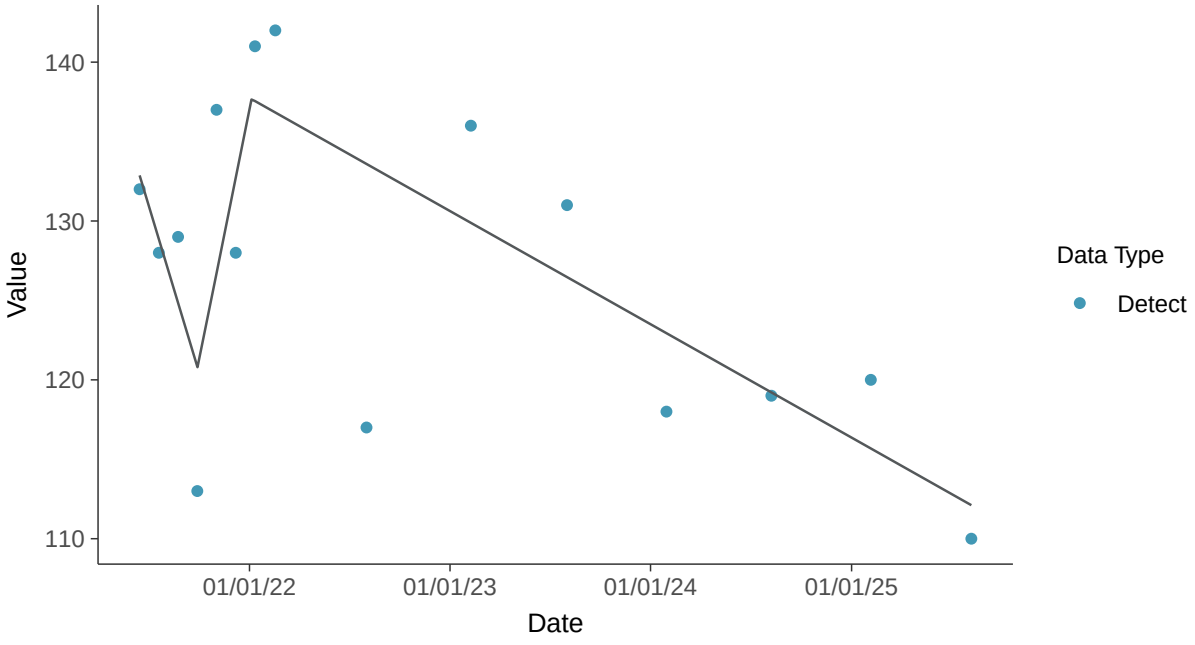
Trend Regression: Piecewise Linear-Linear

Calcium, MW-10 (mg/l)



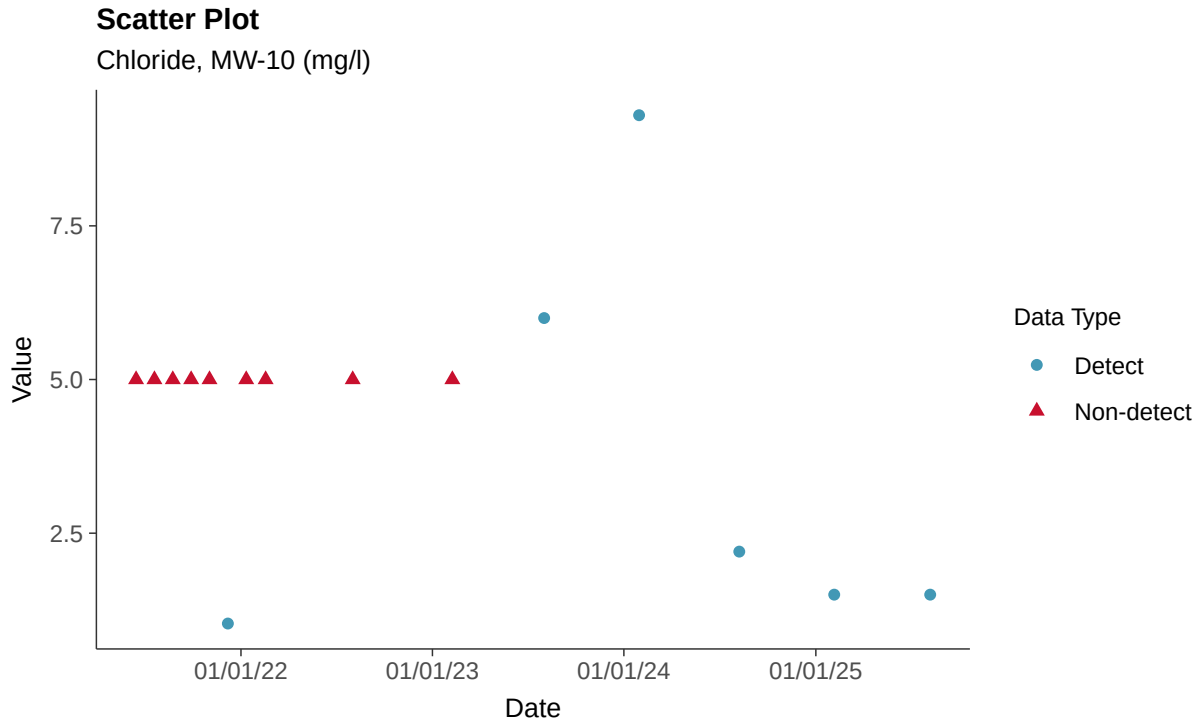
Trend Regression: Piecewise Linear-Linear-Linear

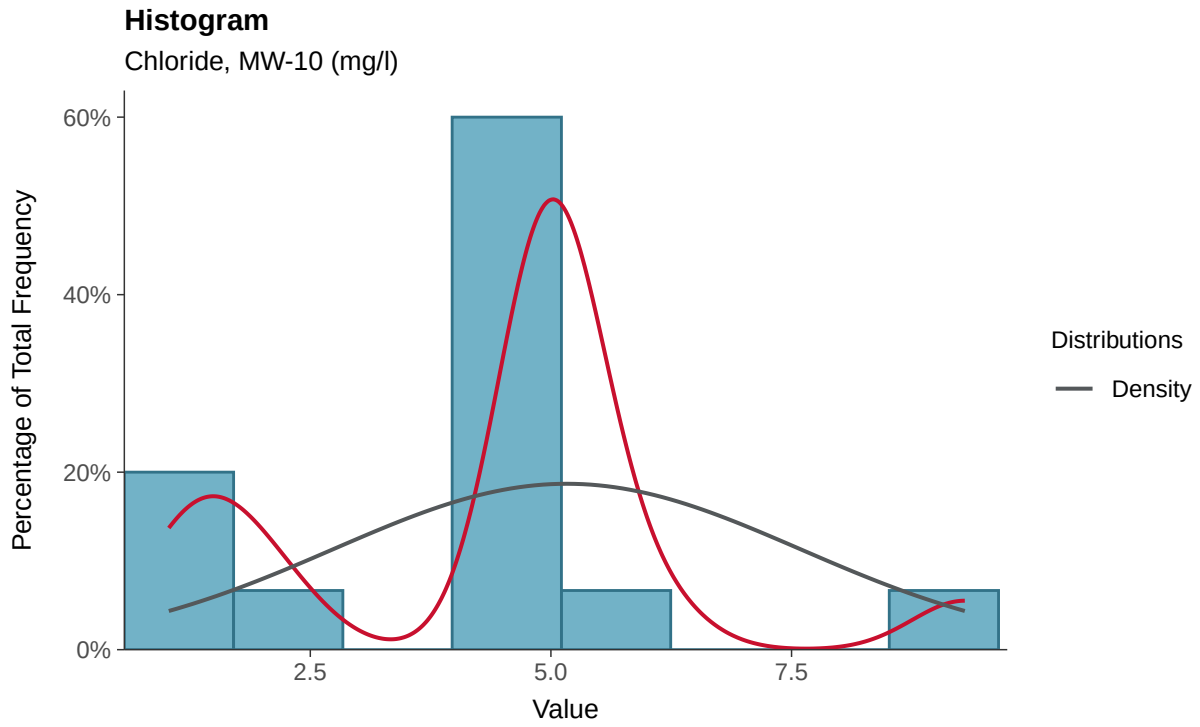
Calcium, MW-10 (mg/l)



Appendix III: Chloride, MW-10

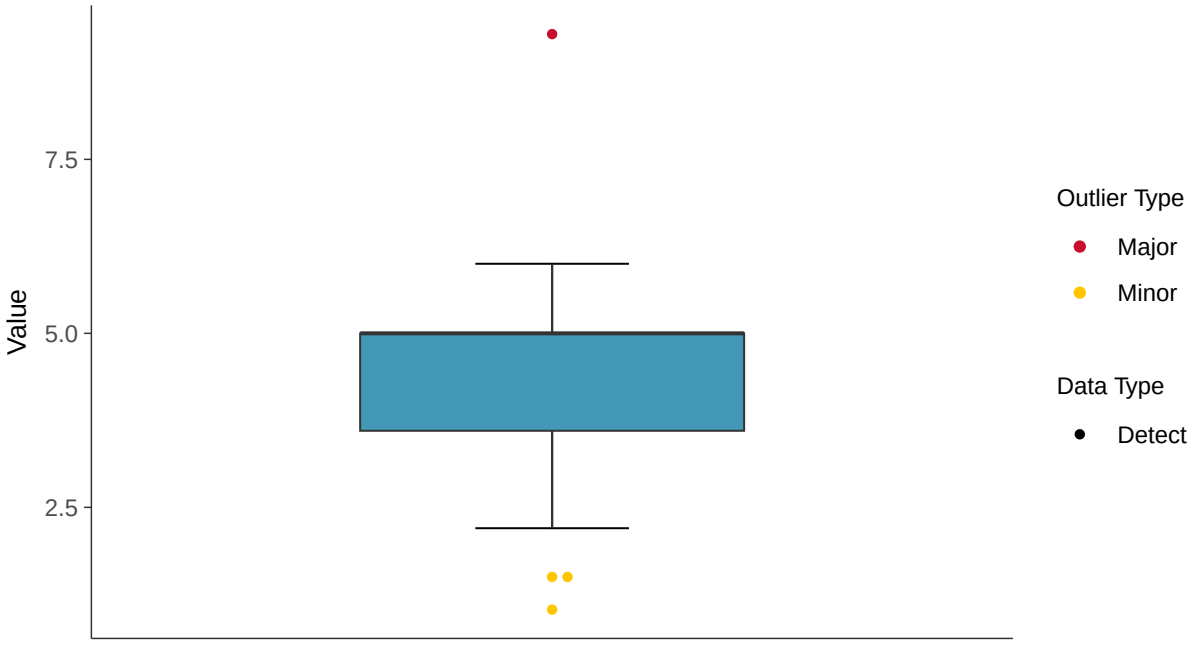
ID: 21_2_108





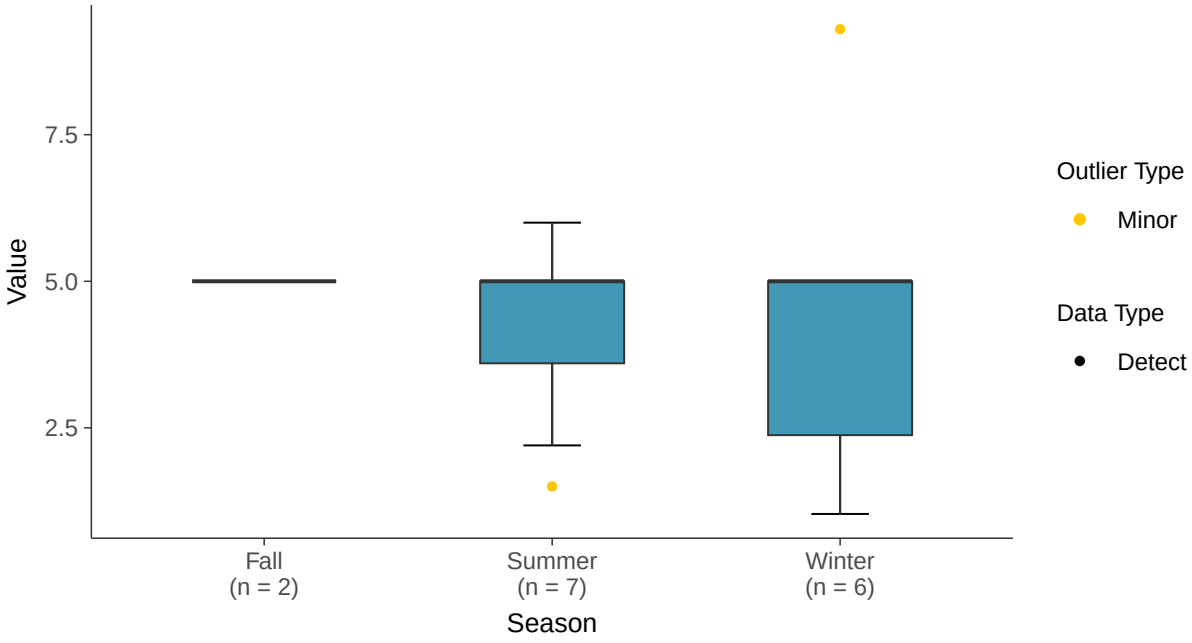
Boxplot

Chloride, MW-10 (mg/l)



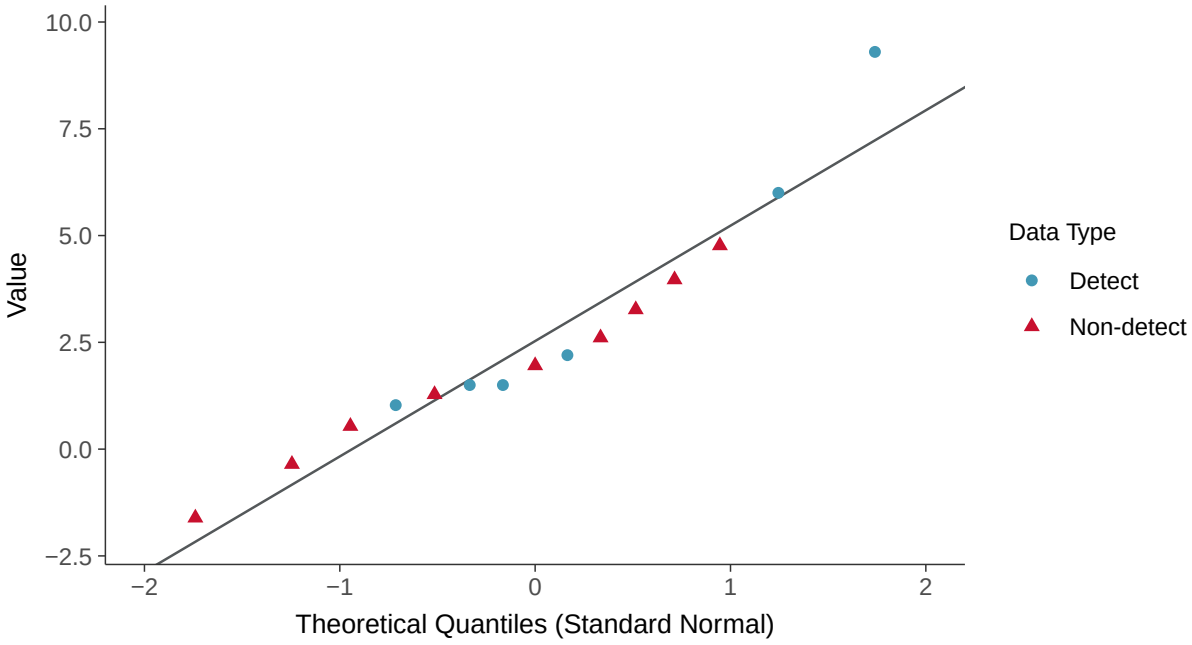
Boxplot by Season

Chloride, MW-10 (mg/l)



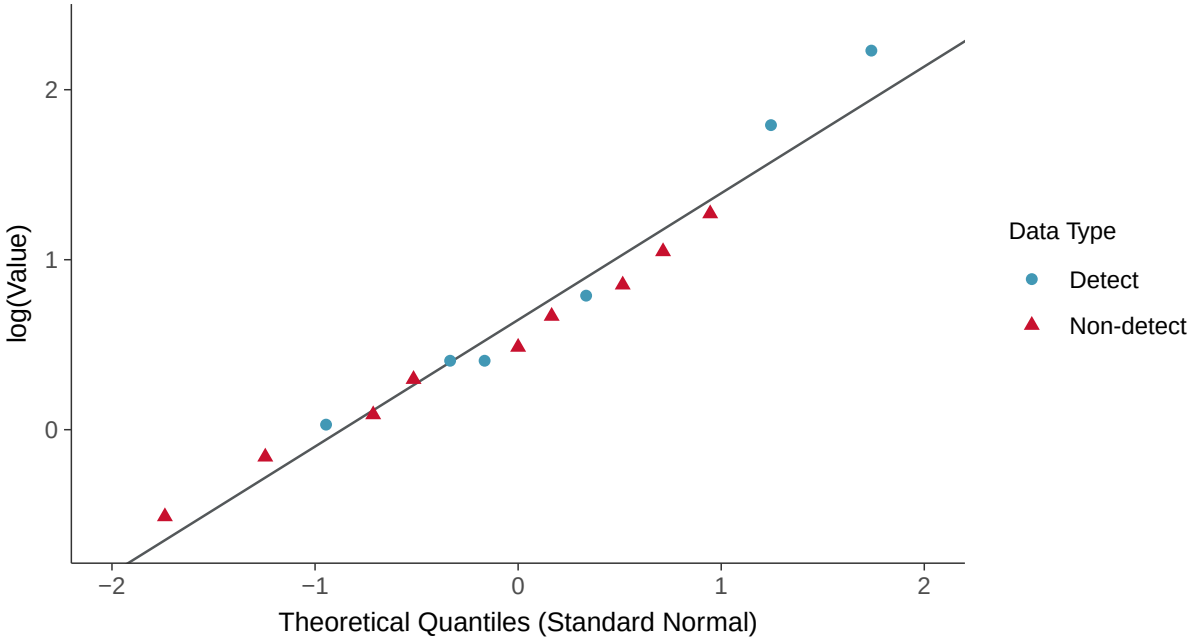
Normal Q-Q plot using ROS Imputed Estimates

Chloride, MW-10 (mg/l)



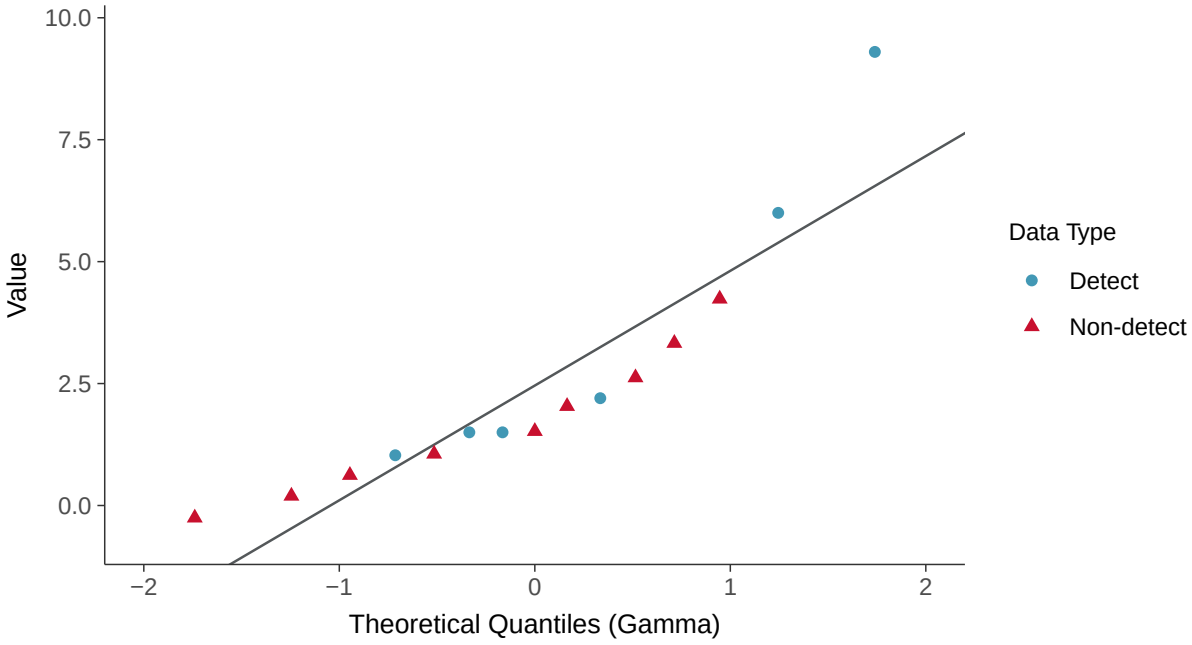
Lognormal Q-Q plot using ROS Imputed Estimates

Chloride, MW-10 (mg/l)



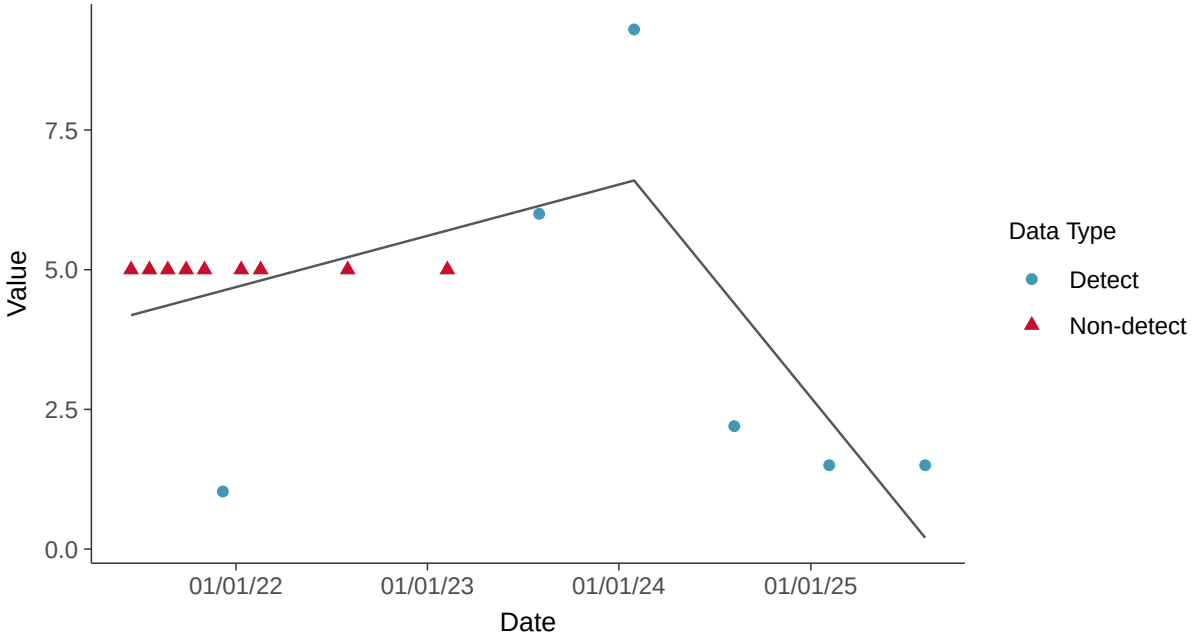
Gamma Q-Q plot using ROS Imputed Estimates

Chloride, MW-10 (mg/l)



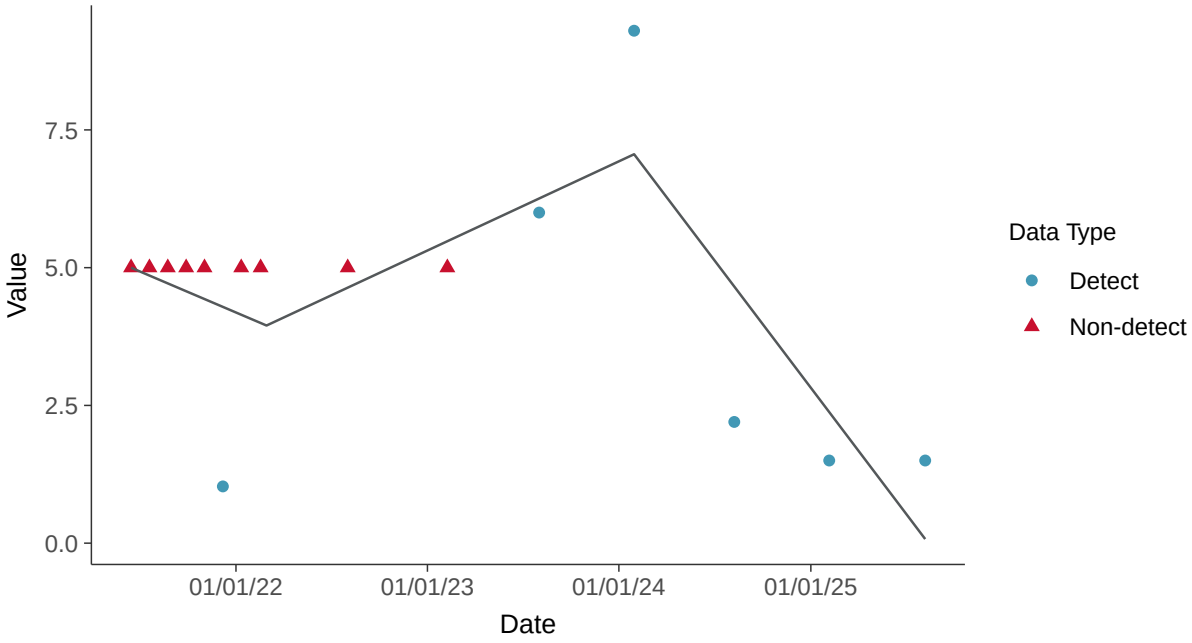
Trend Regression: Piecewise Linear-Linear

Chloride, MW-10 (mg/l)



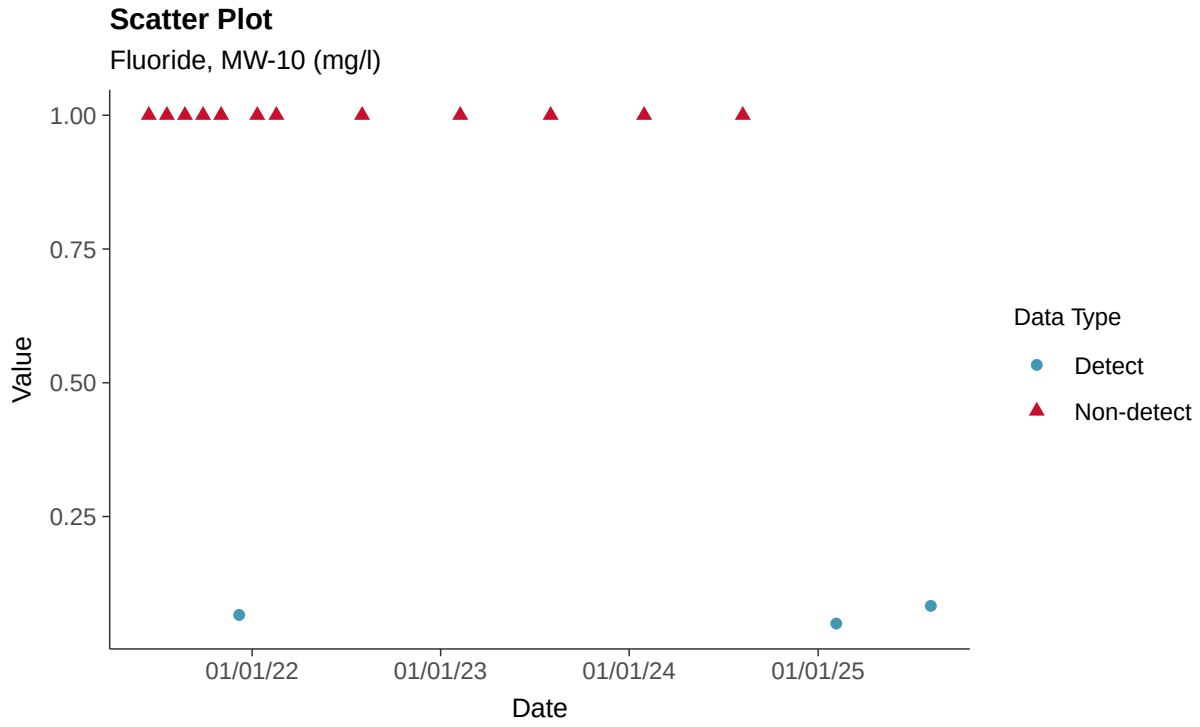
Trend Regression: Piecewise Linear-Linear-Linear

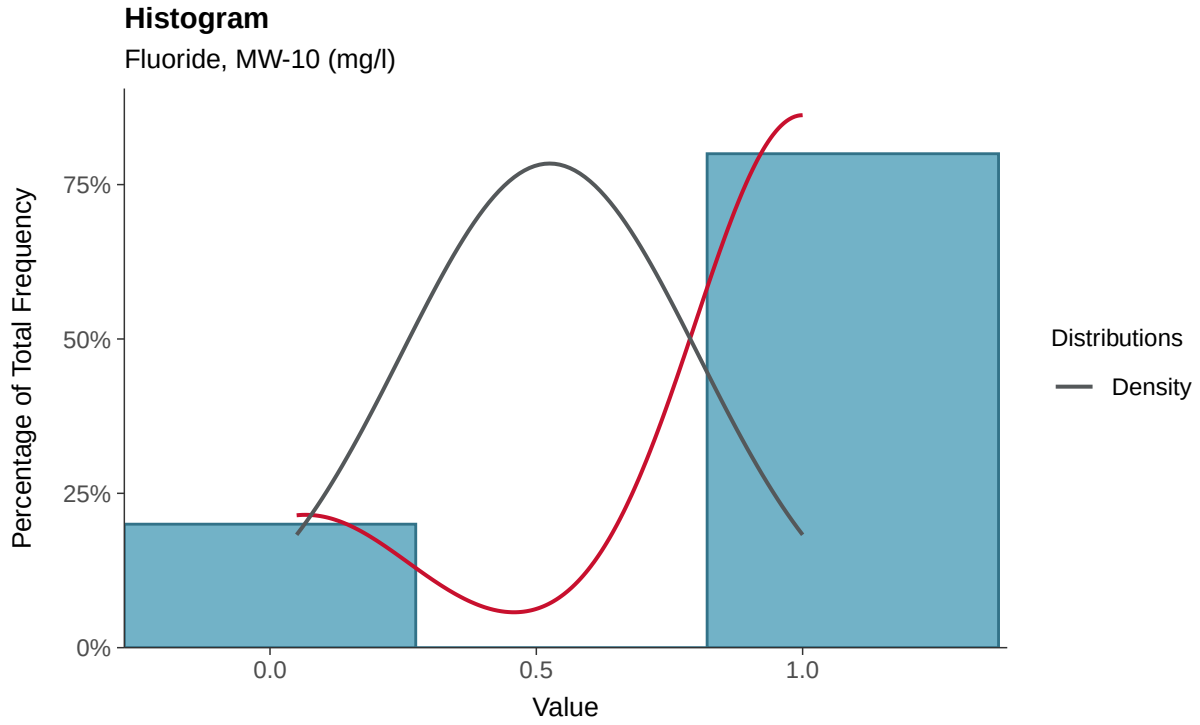
Chloride, MW-10 (mg/l)



Appendix III: Fluoride, MW-10

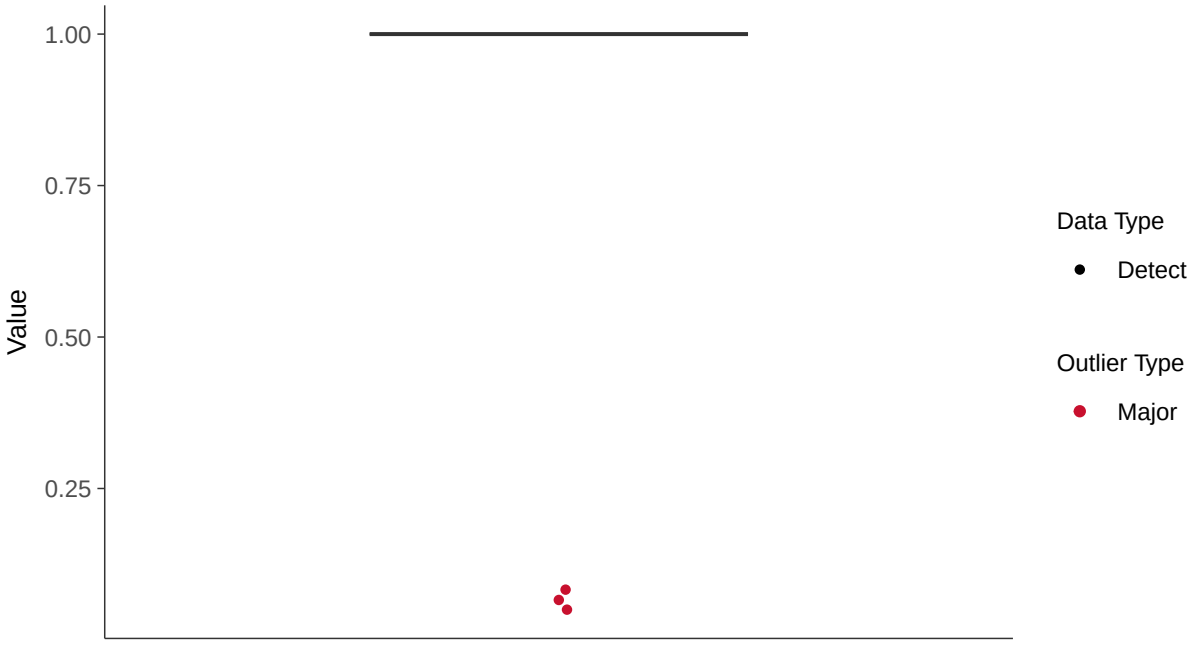
ID: 21_2_112





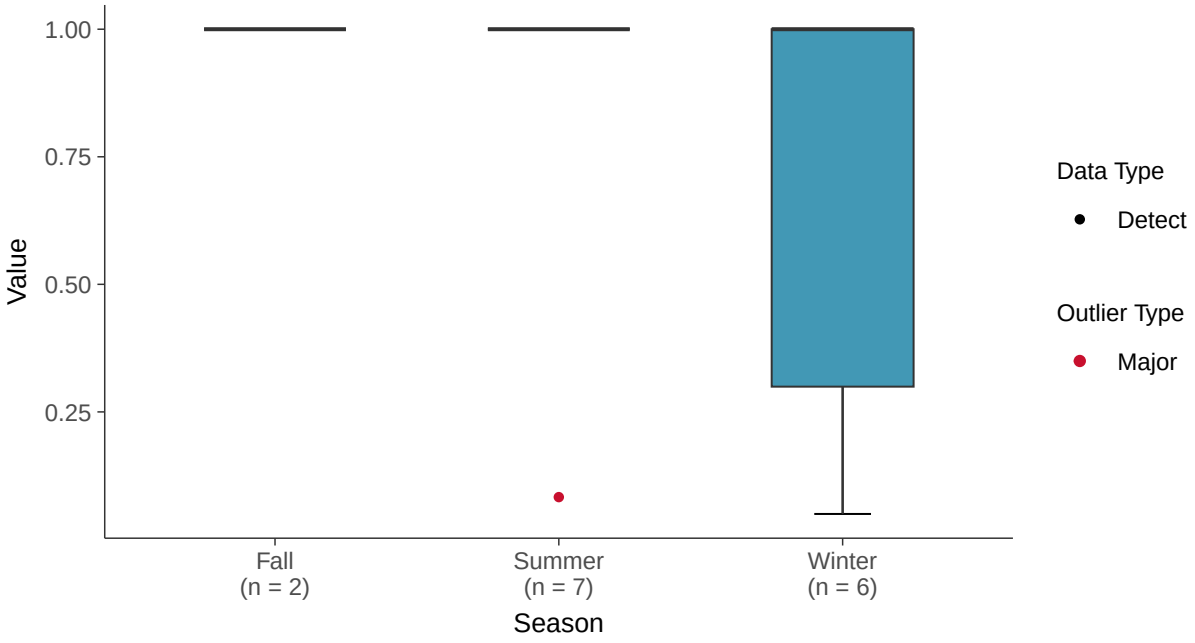
Boxplot

Fluoride, MW-10 (mg/l)



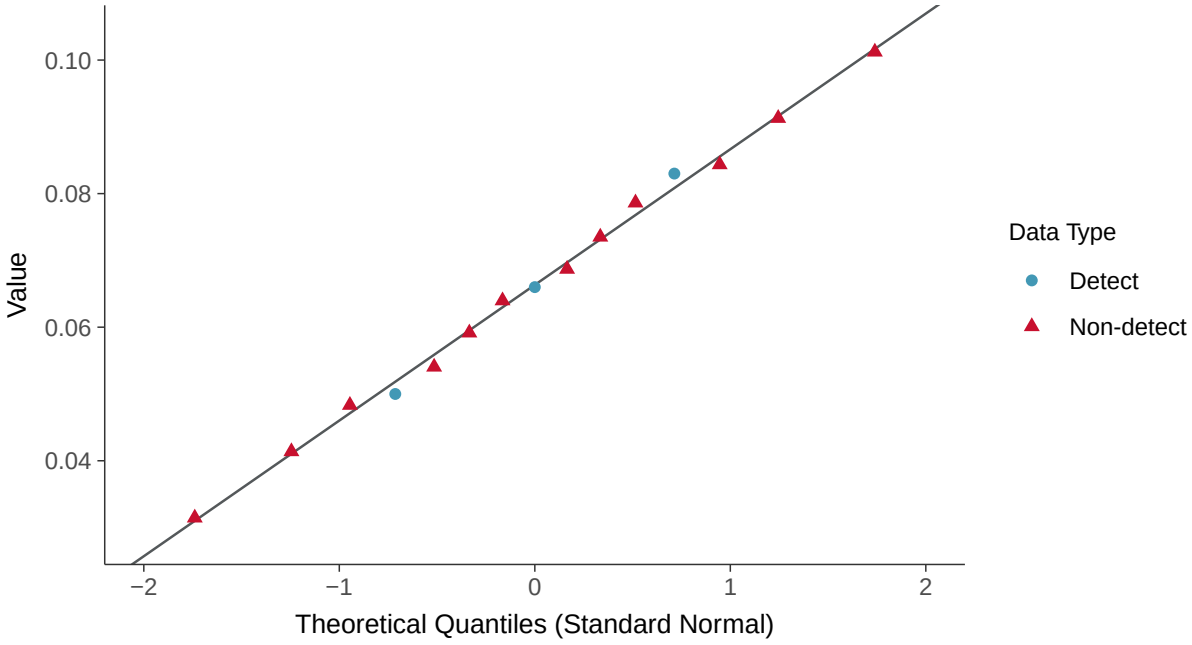
Boxplot by Season

Fluoride, MW-10 (mg/l)



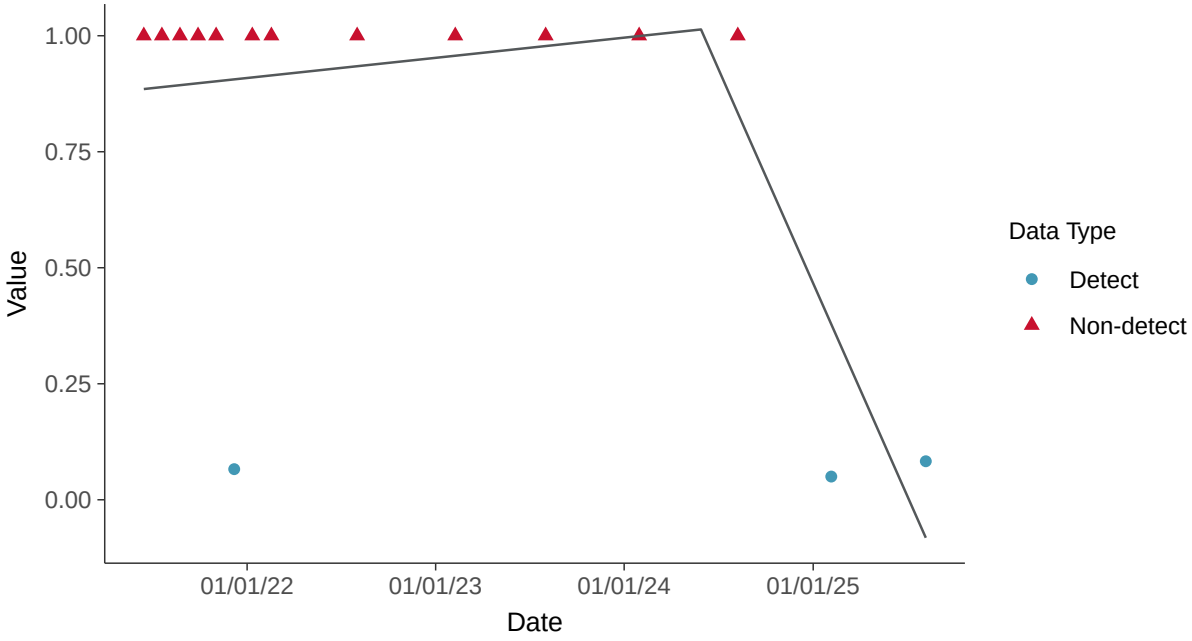
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-10 (mg/l)



Trend Regression: Piecewise Linear-Linear

Fluoride, MW-10 (mg/l)

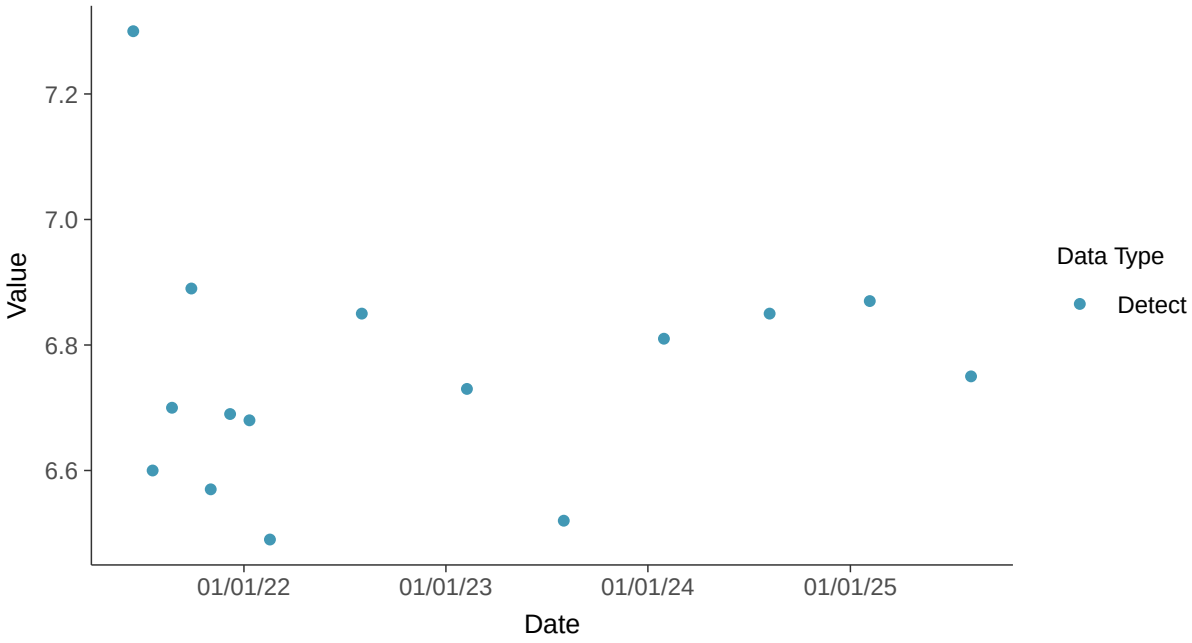


Appendix III: pH, Field, MW-10

ID: 21_2_120

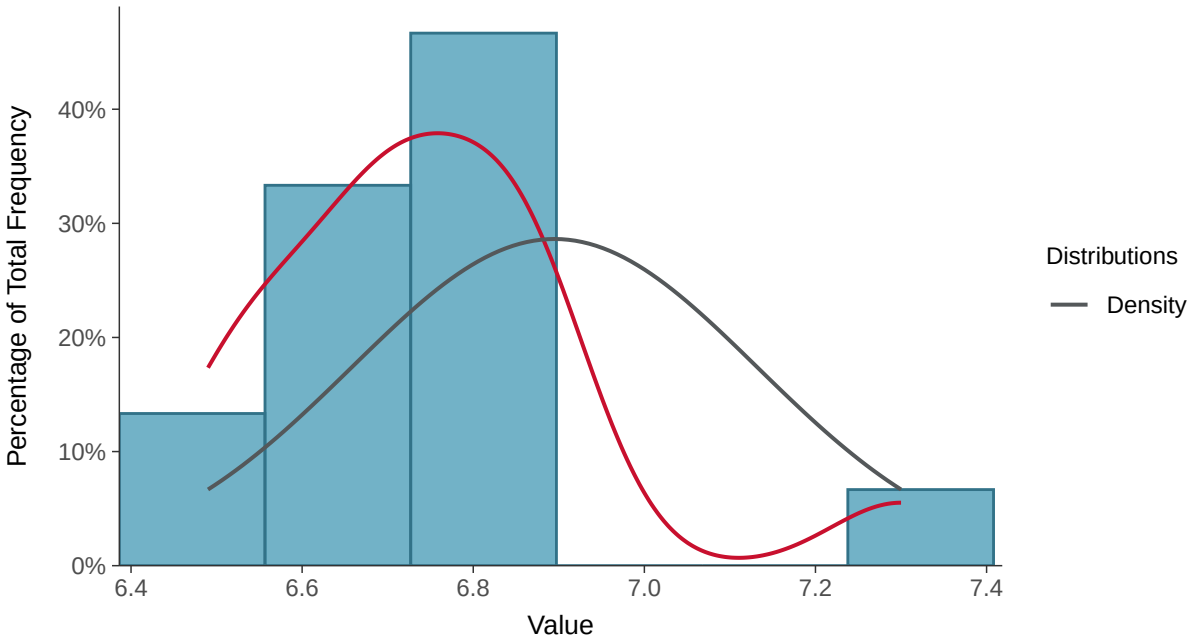
Scatter Plot

pH, Field, MW-10 (su)



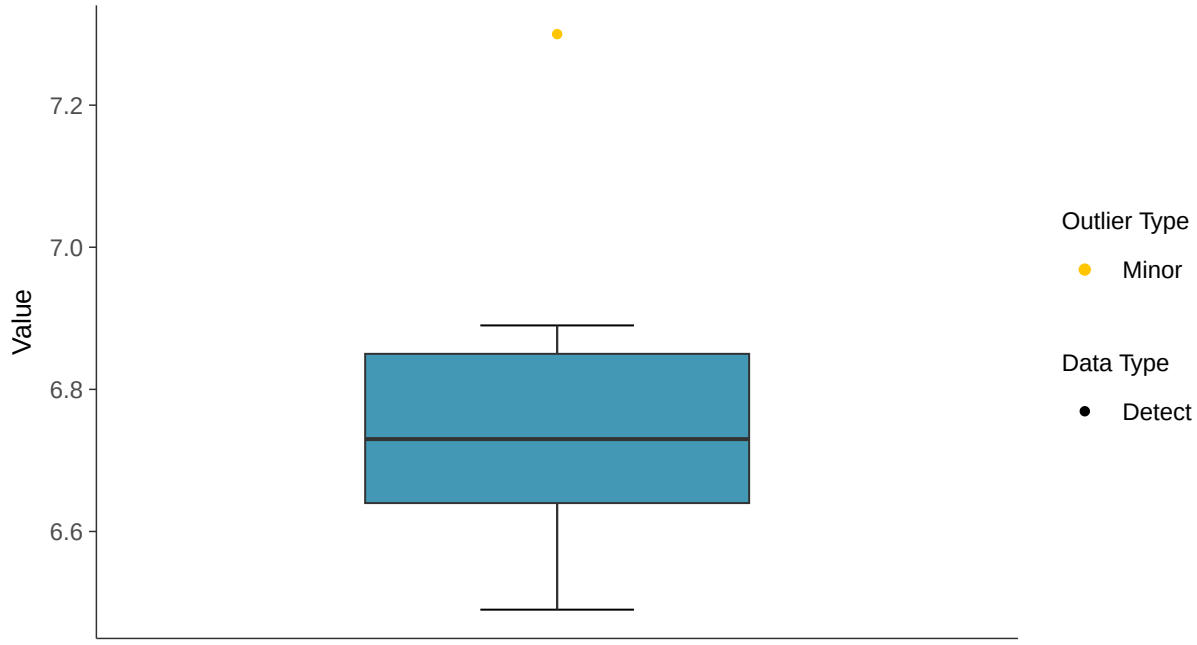
Histogram

pH, Field, MW-10 (su)



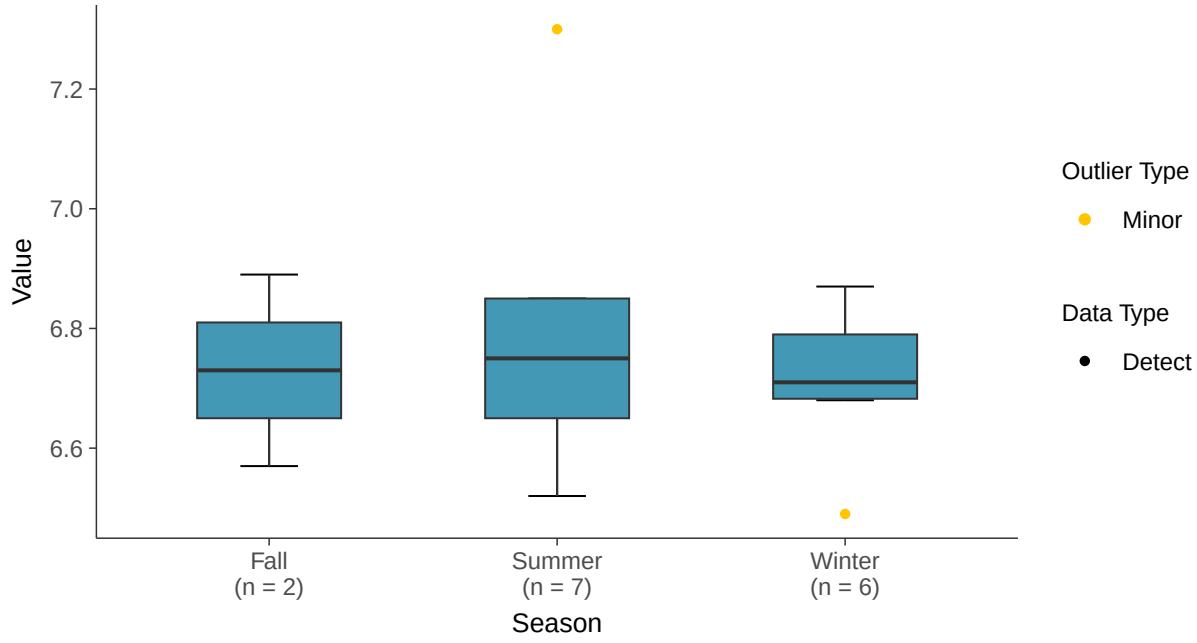
Boxplot

pH, Field, MW-10 (su)



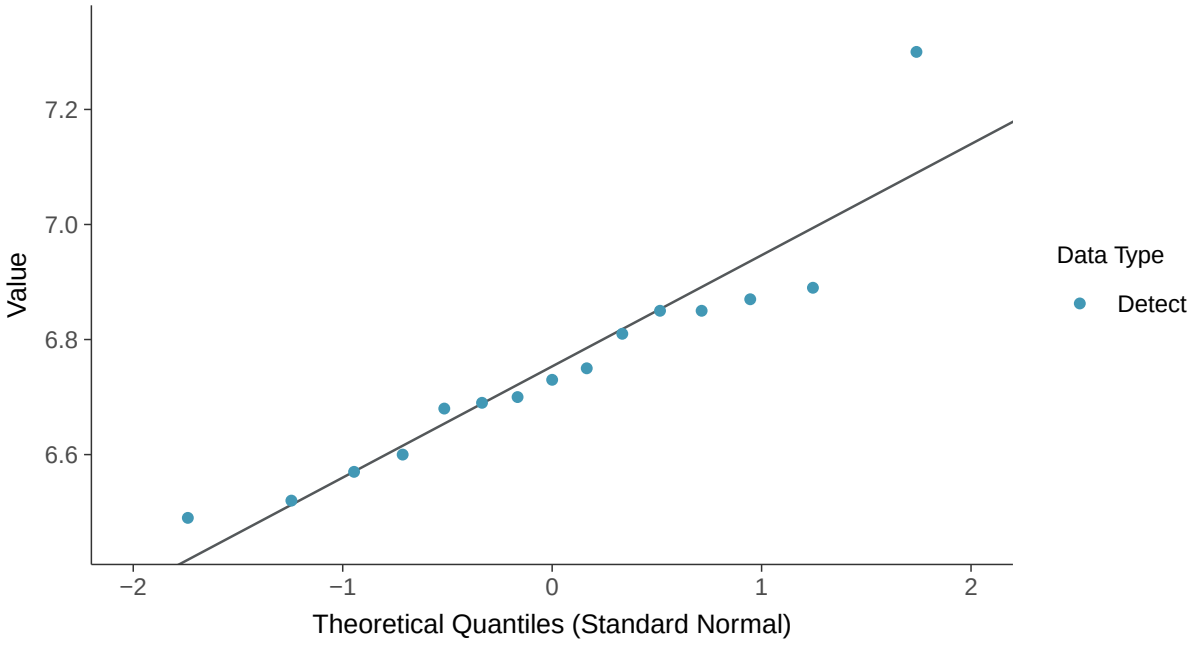
Boxplot by Season

pH, Field, MW-10 (su)



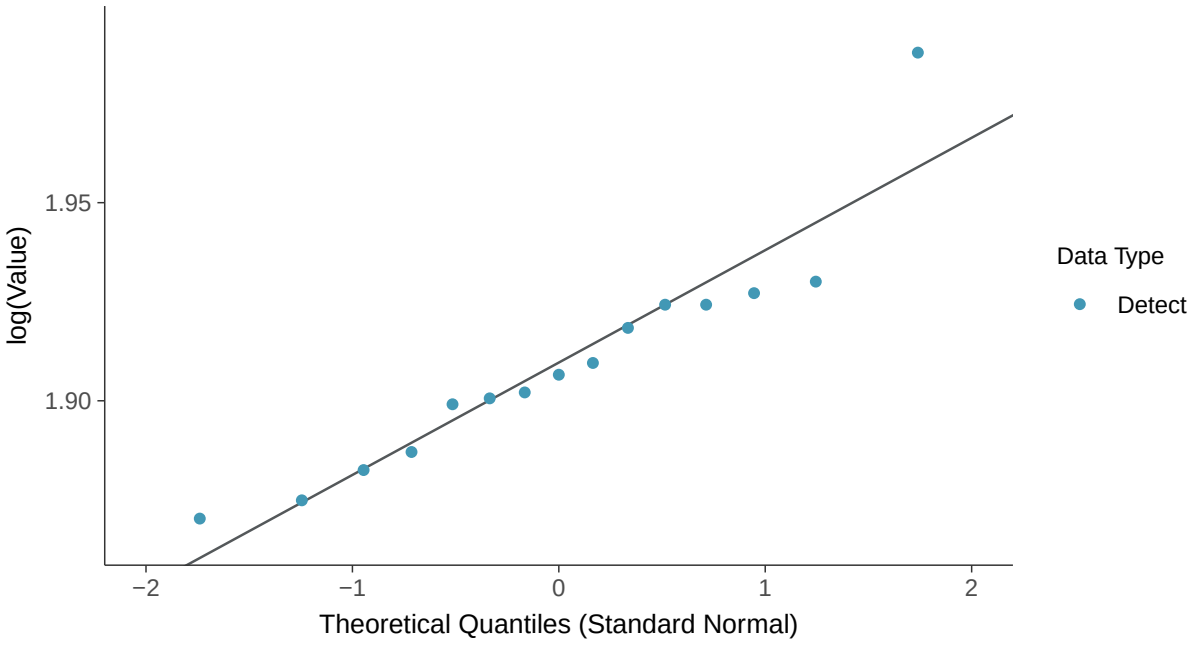
Normal Q-Q plot

pH, Field, MW-10 (su)



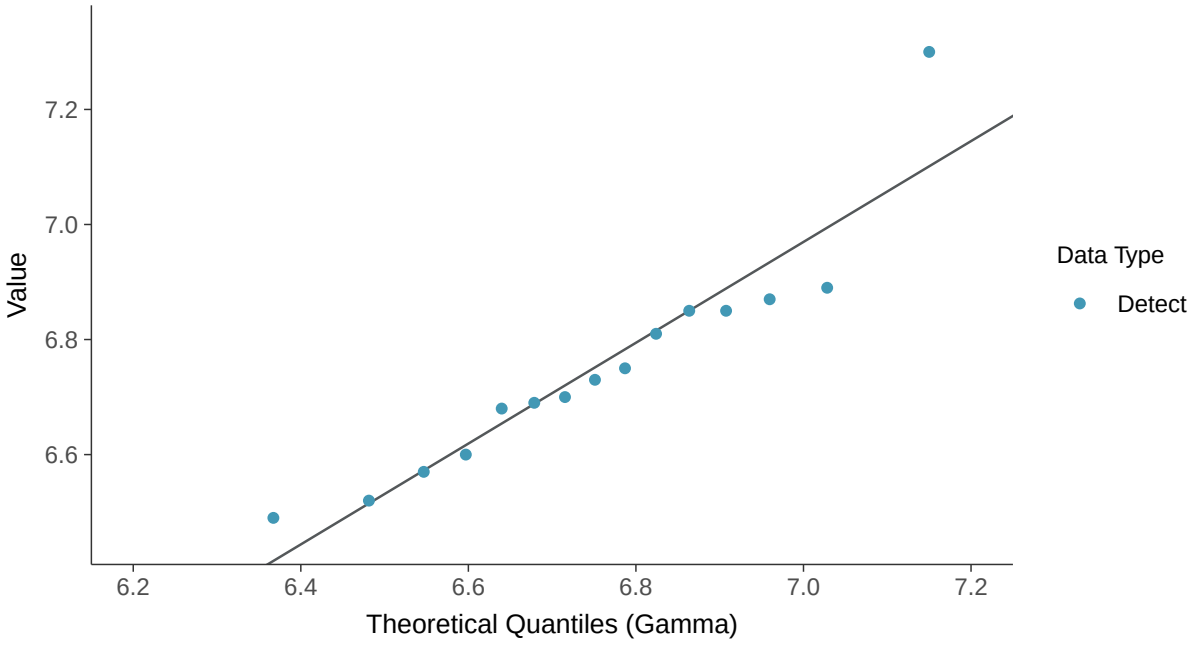
Lognormal Q-Q plot

pH, Field, MW-10 (su)



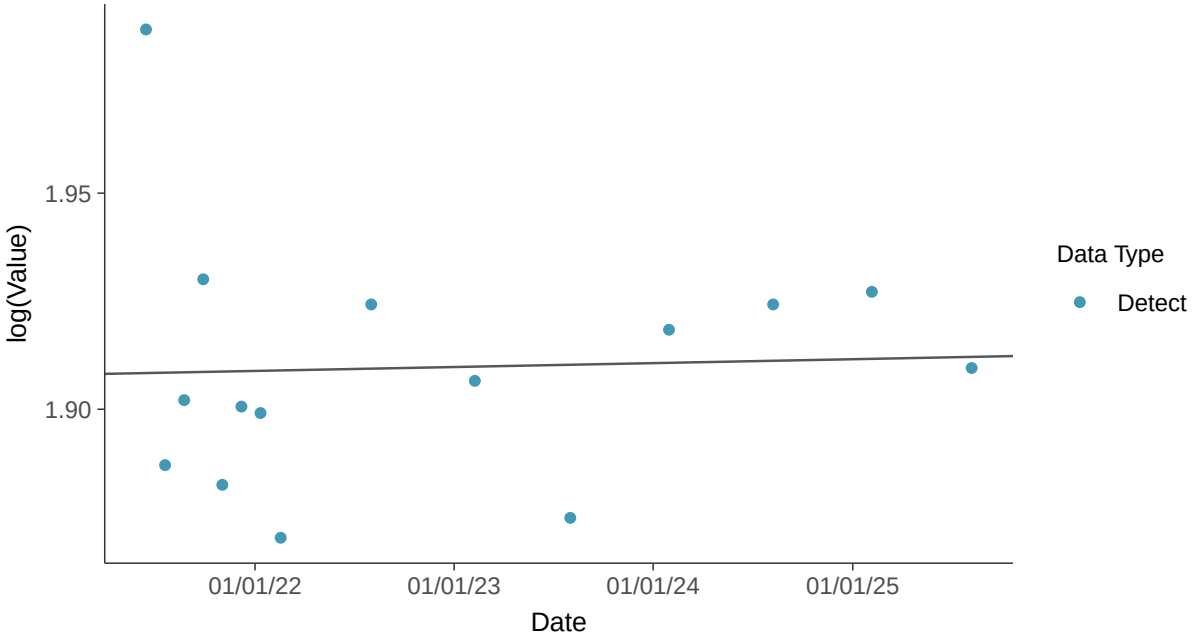
Gamma Q-Q plot

pH, Field, MW-10 (su)



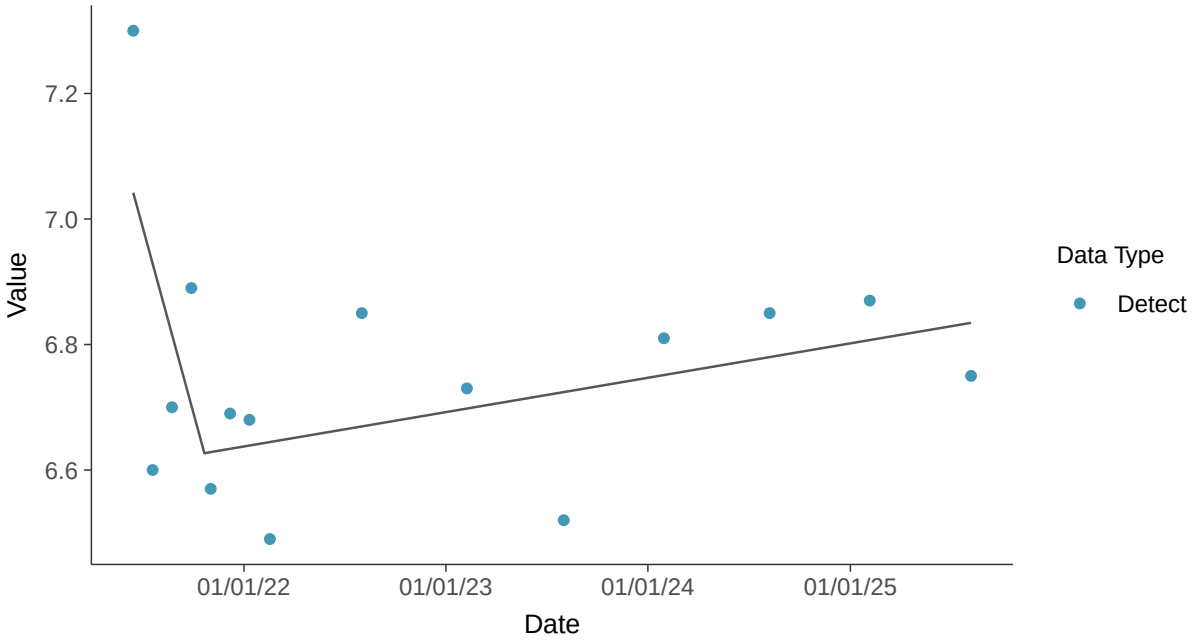
Trend Regression: Lognormal MLE

pH, Field, MW-10 (su)



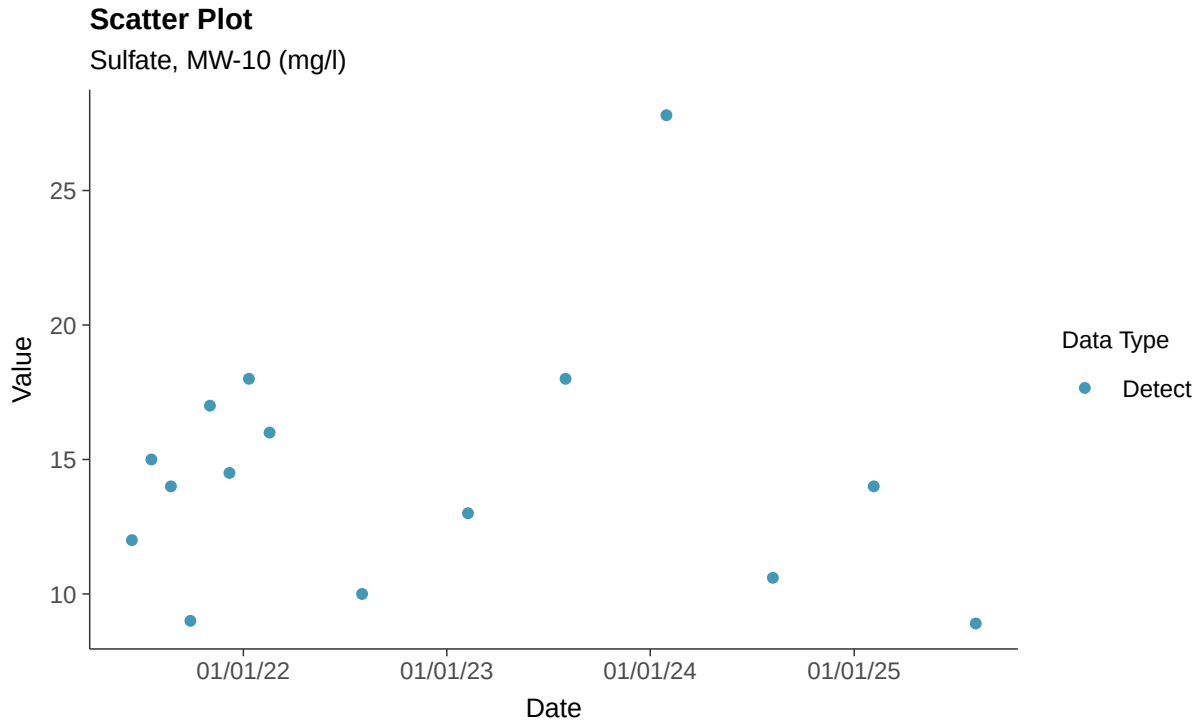
Trend Regression: Piecewise Linear-Linear

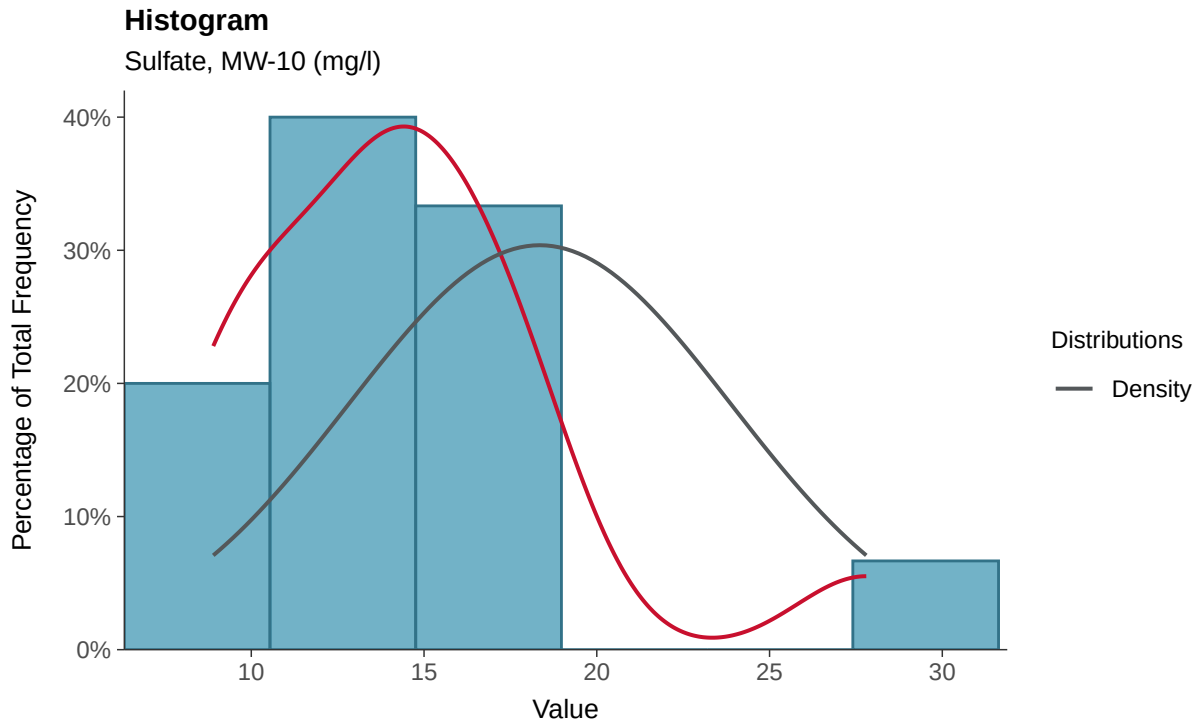
pH, Field, MW-10 (su)



Appendix III: Sulfate, MW-10

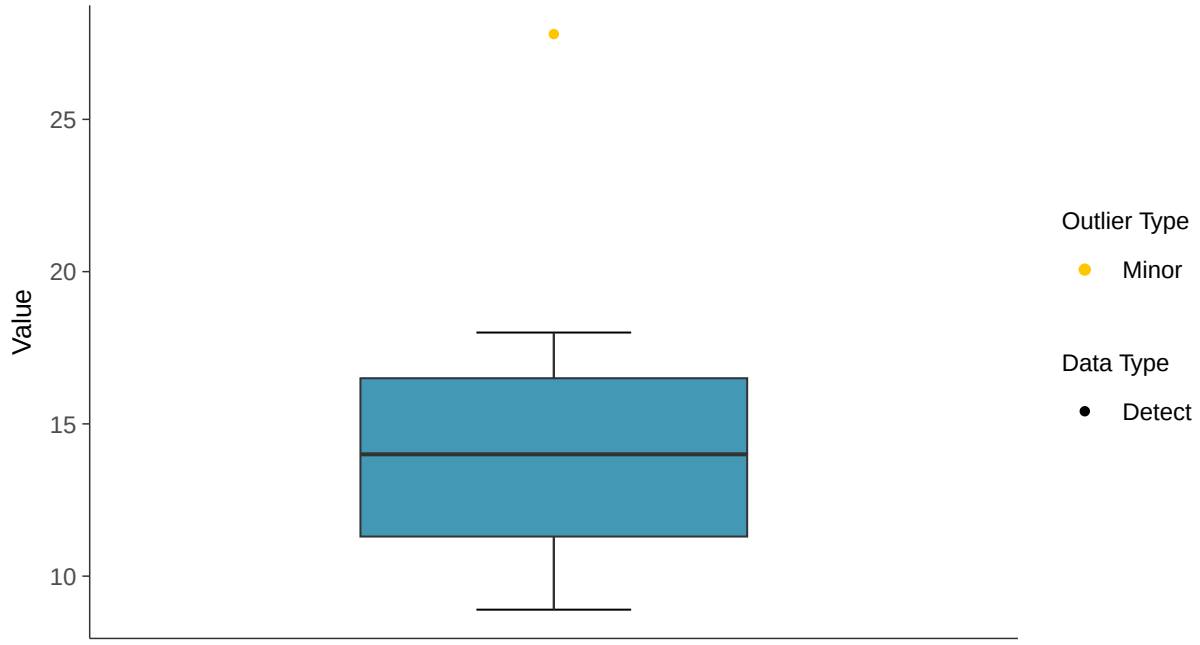
ID: 21_2_124





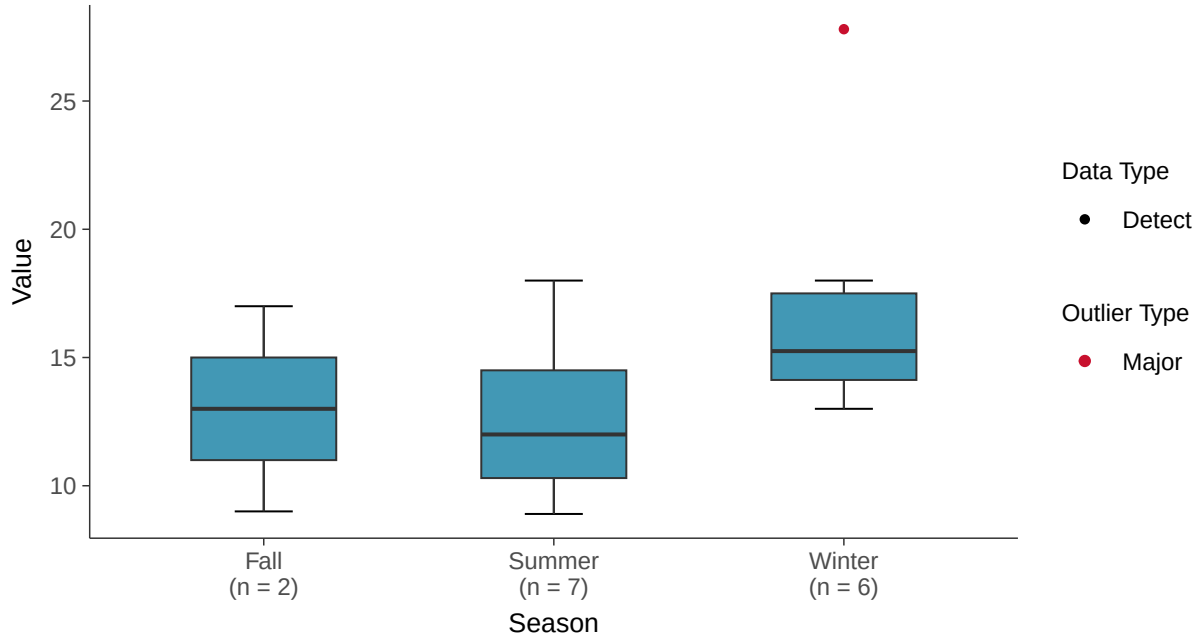
Boxplot

Sulfate, MW-10 (mg/l)



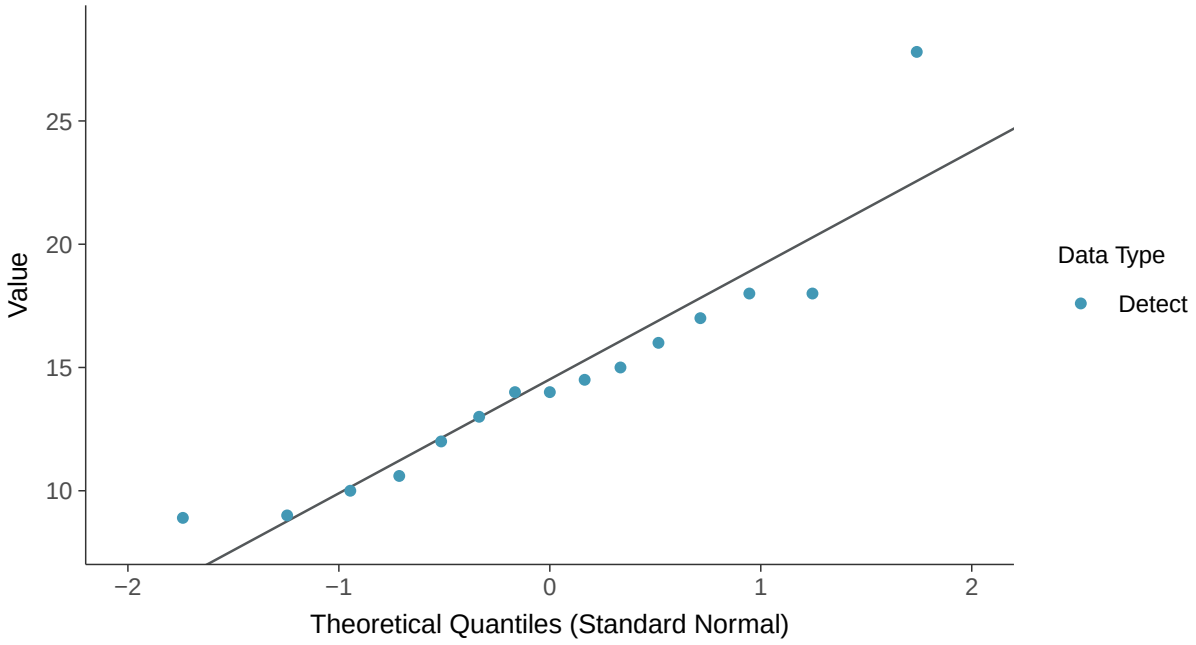
Boxplot by Season

Sulfate, MW-10 (mg/l)



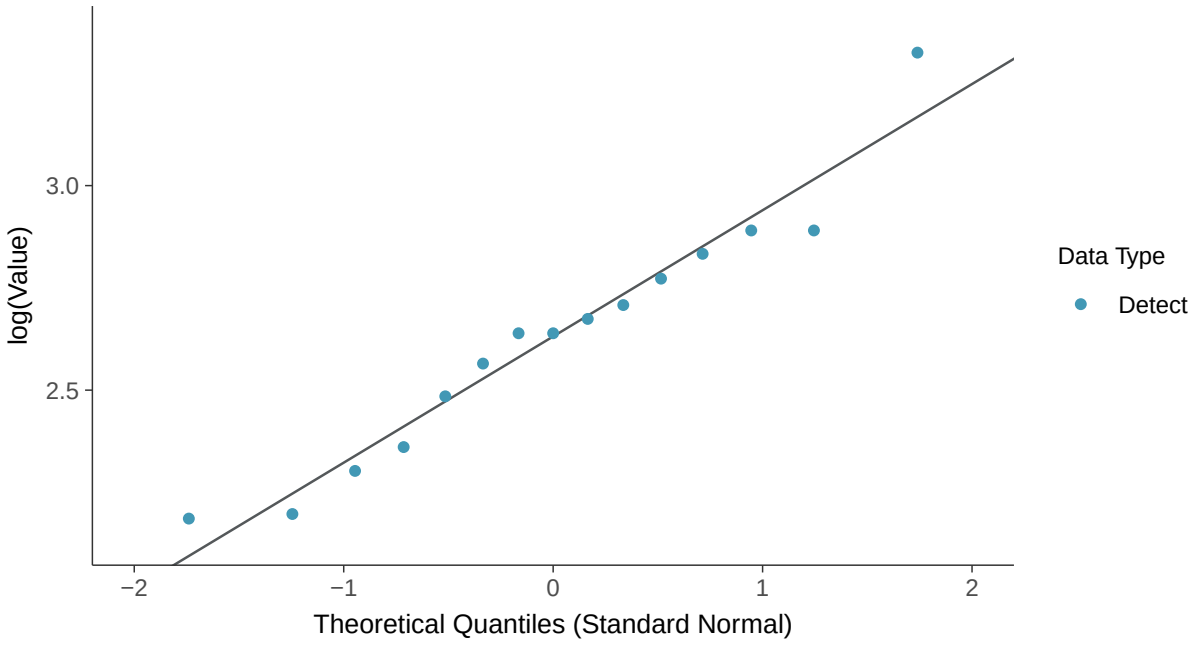
Normal Q-Q plot

Sulfate, MW-10 (mg/l)



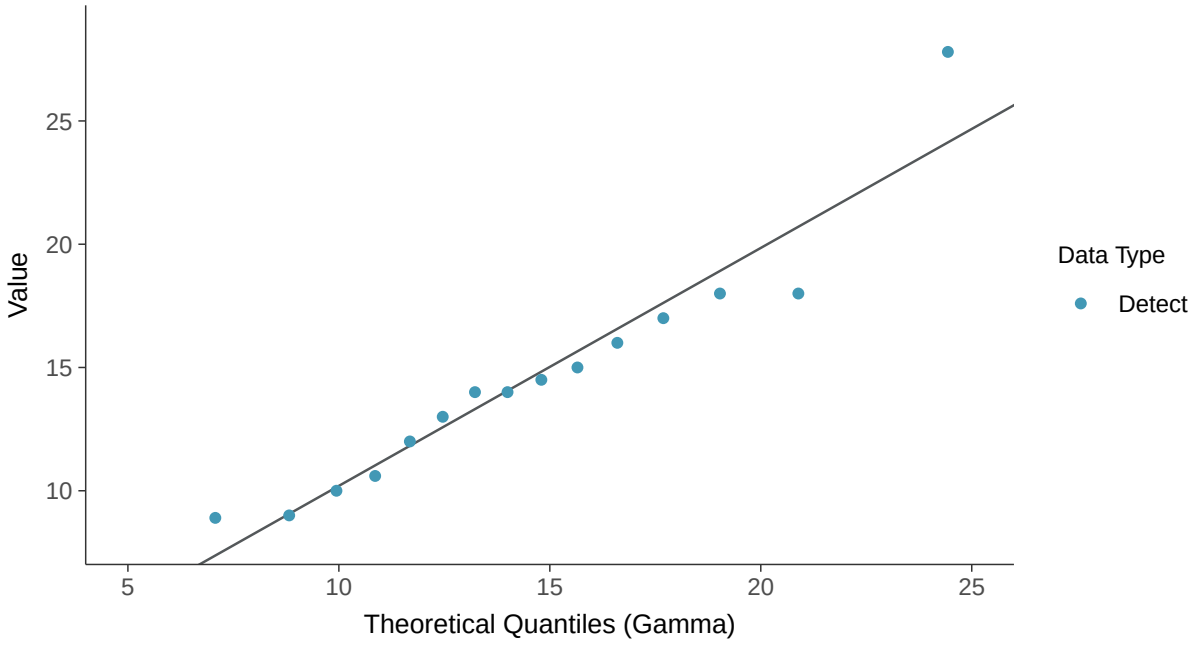
Lognormal Q-Q plot

Sulfate, MW-10 (mg/l)



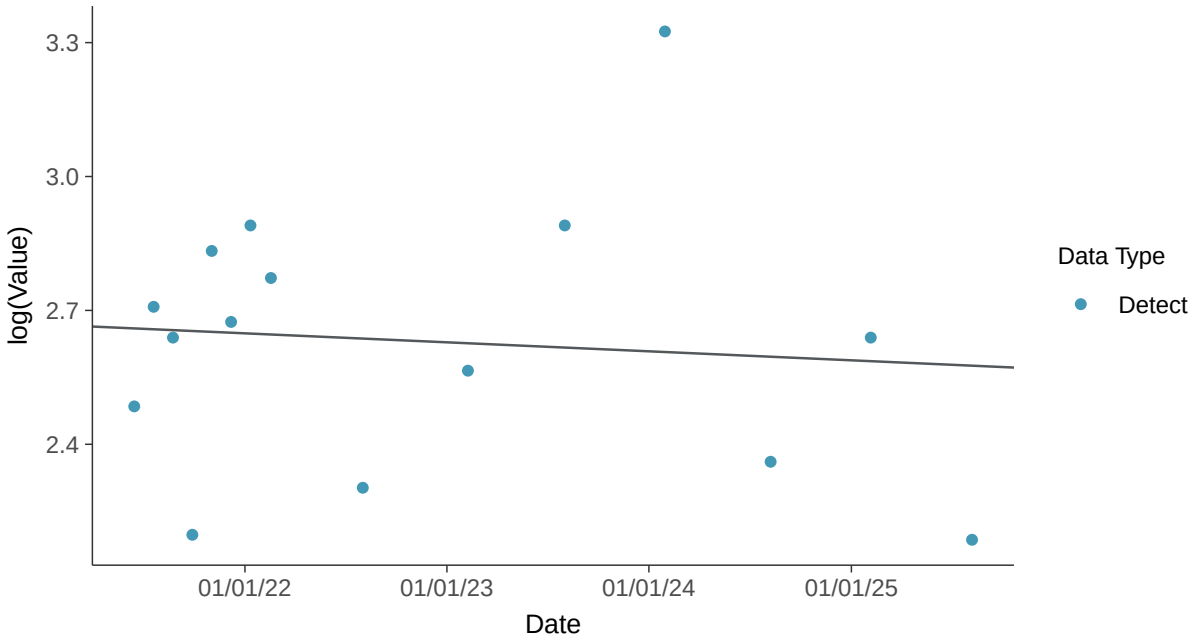
Gamma Q-Q plot

Sulfate, MW-10 (mg/l)



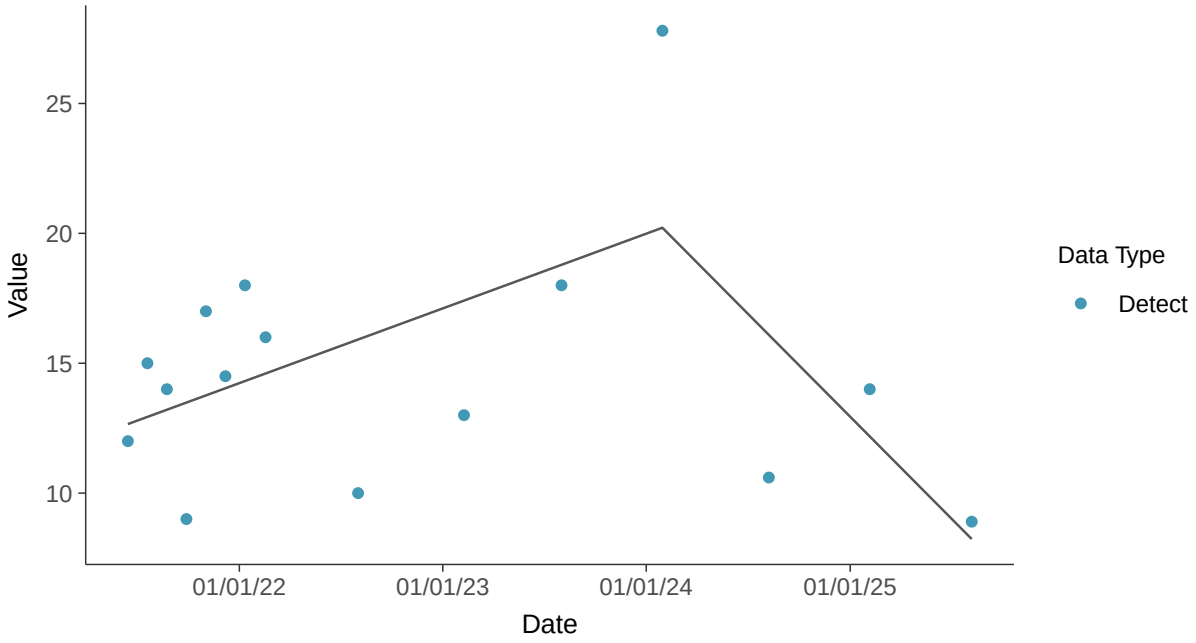
Trend Regression: Lognormal MLE

Sulfate, MW-10 (mg/l)



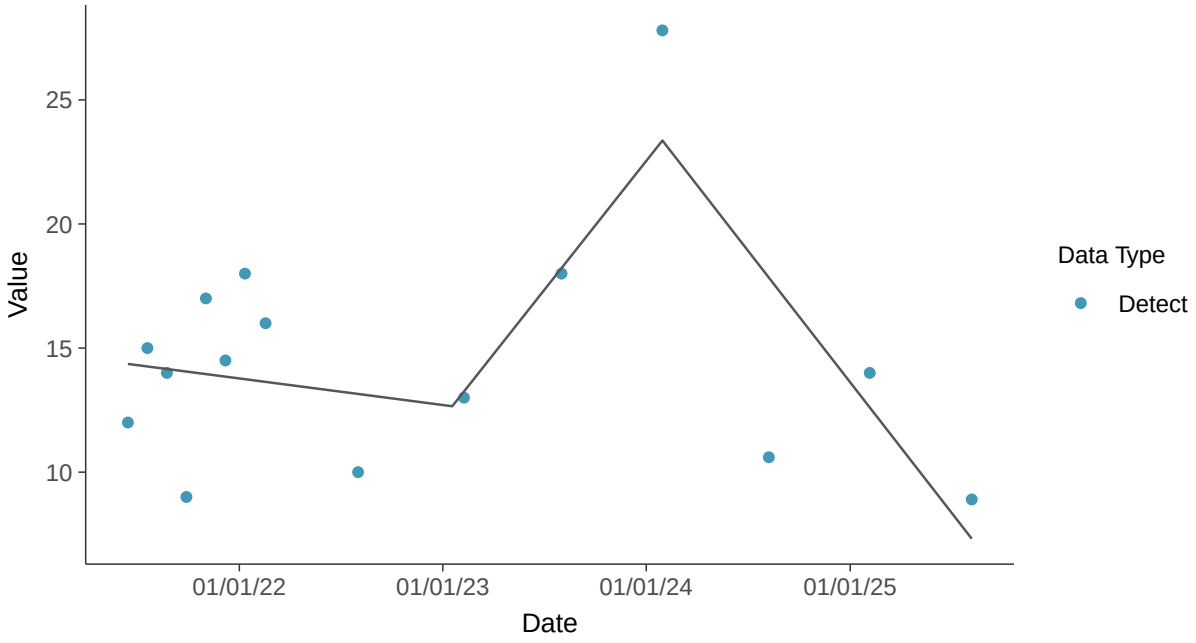
Trend Regression: Piecewise Linear-Linear

Sulfate, MW-10 (mg/l)



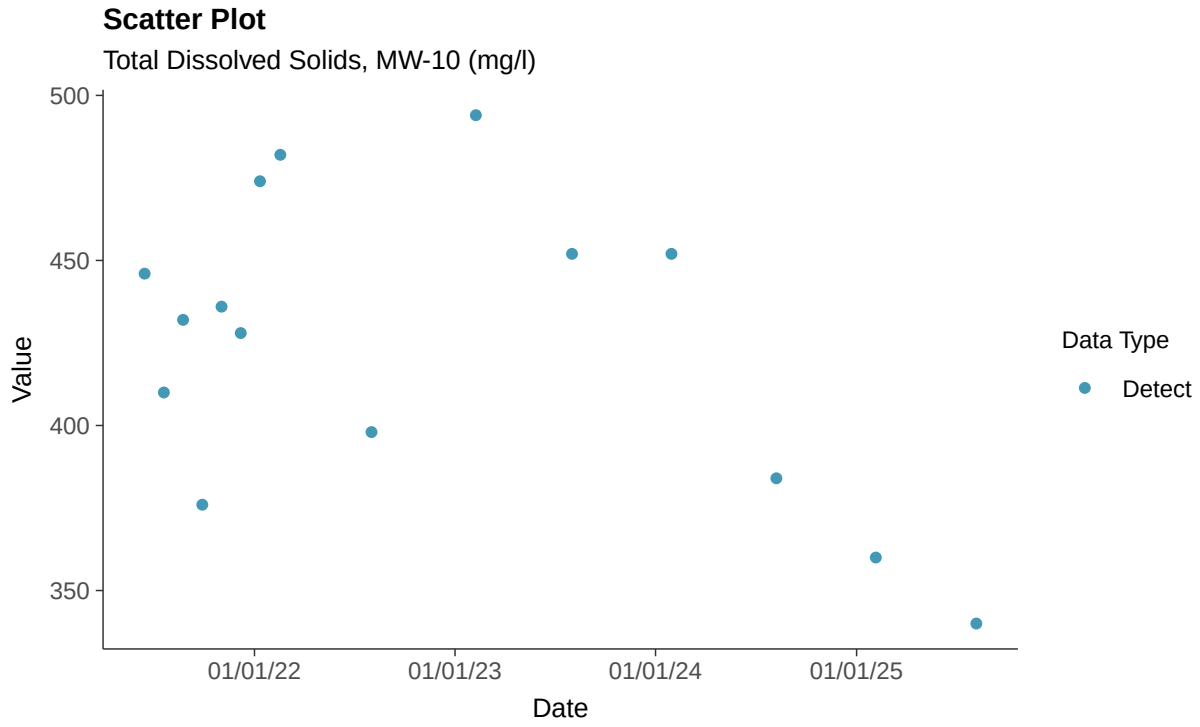
Trend Regression: Piecewise Linear-Linear-Linear

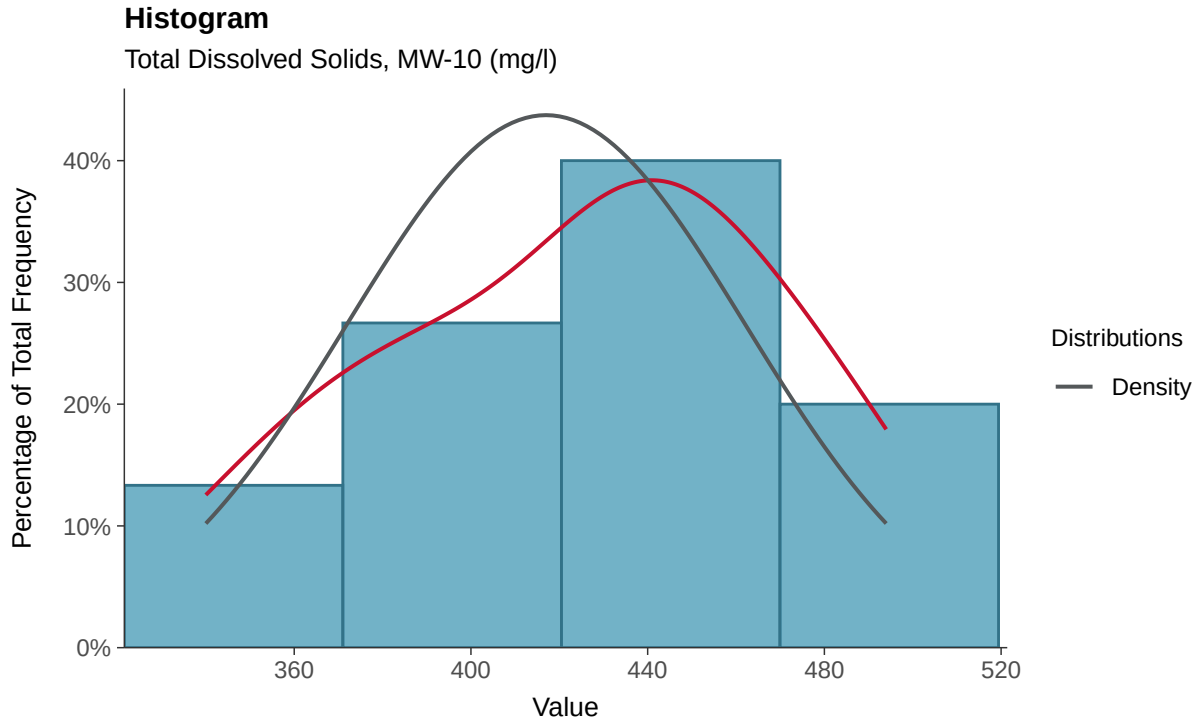
Sulfate, MW-10 (mg/l)



Appendix III: Total Dissolved Solids, MW-10

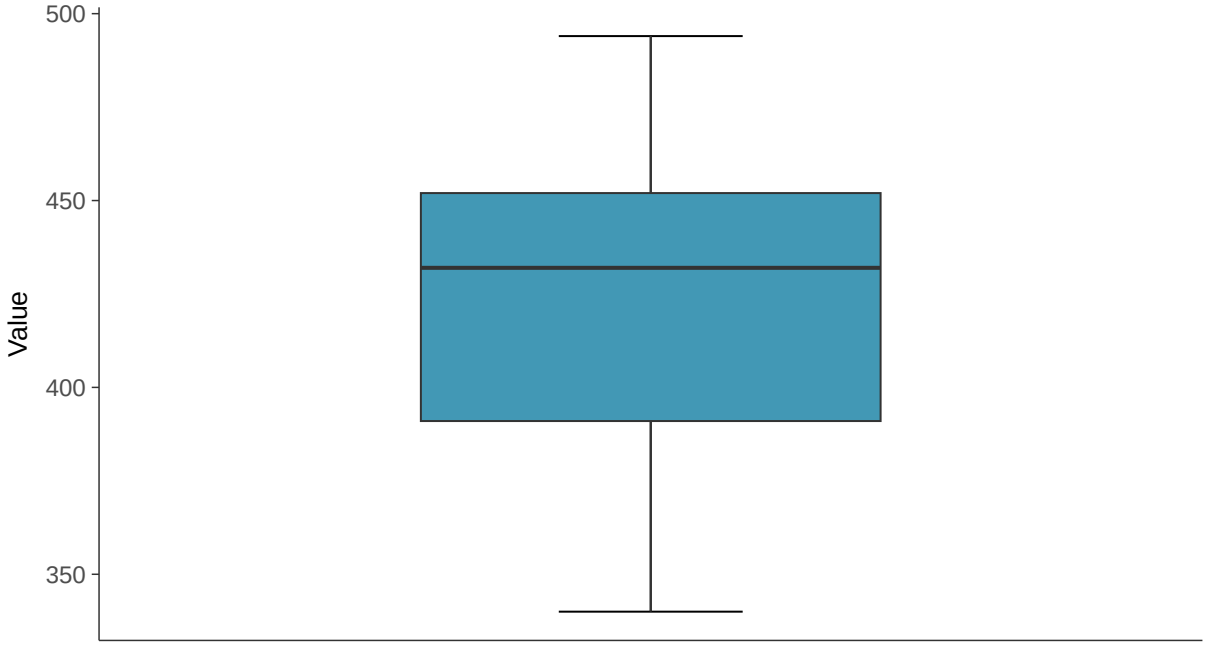
ID: 21_2_126





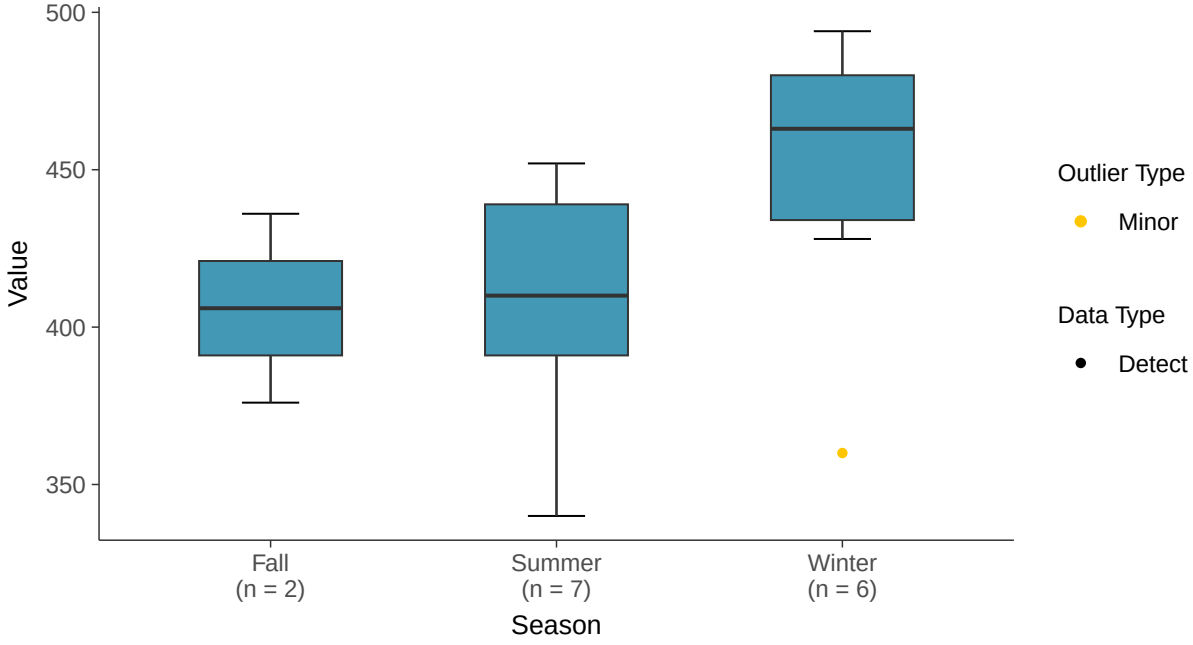
Boxplot

Total Dissolved Solids, MW-10 (mg/l)



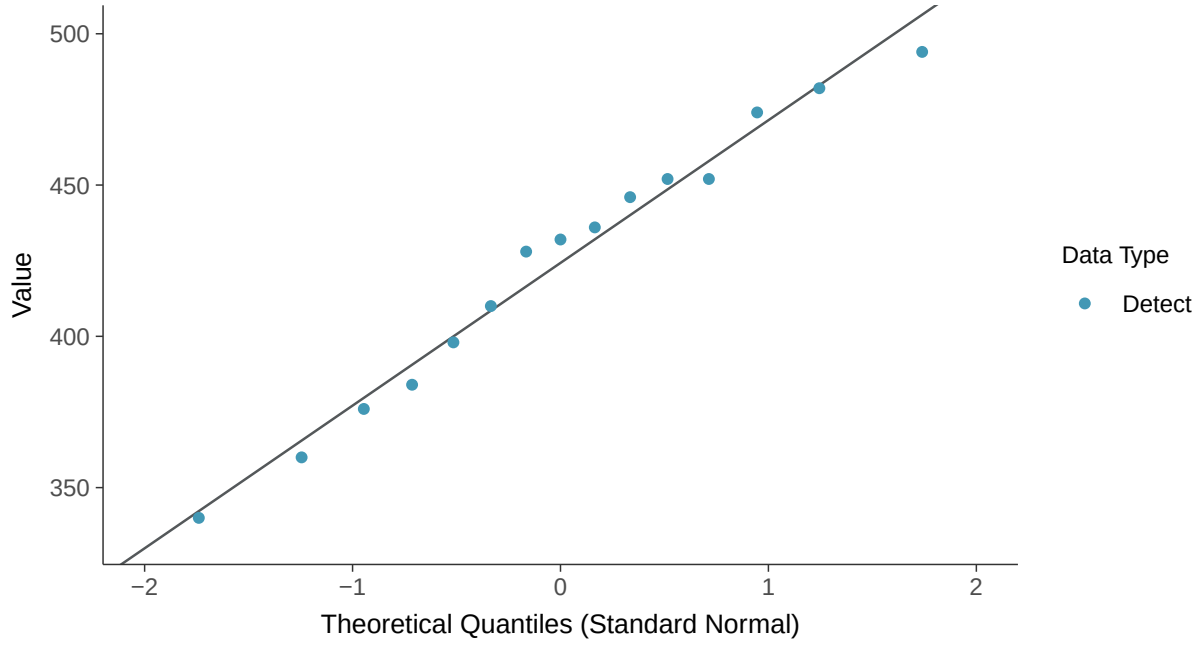
Boxplot by Season

Total Dissolved Solids, MW-10 (mg/l)



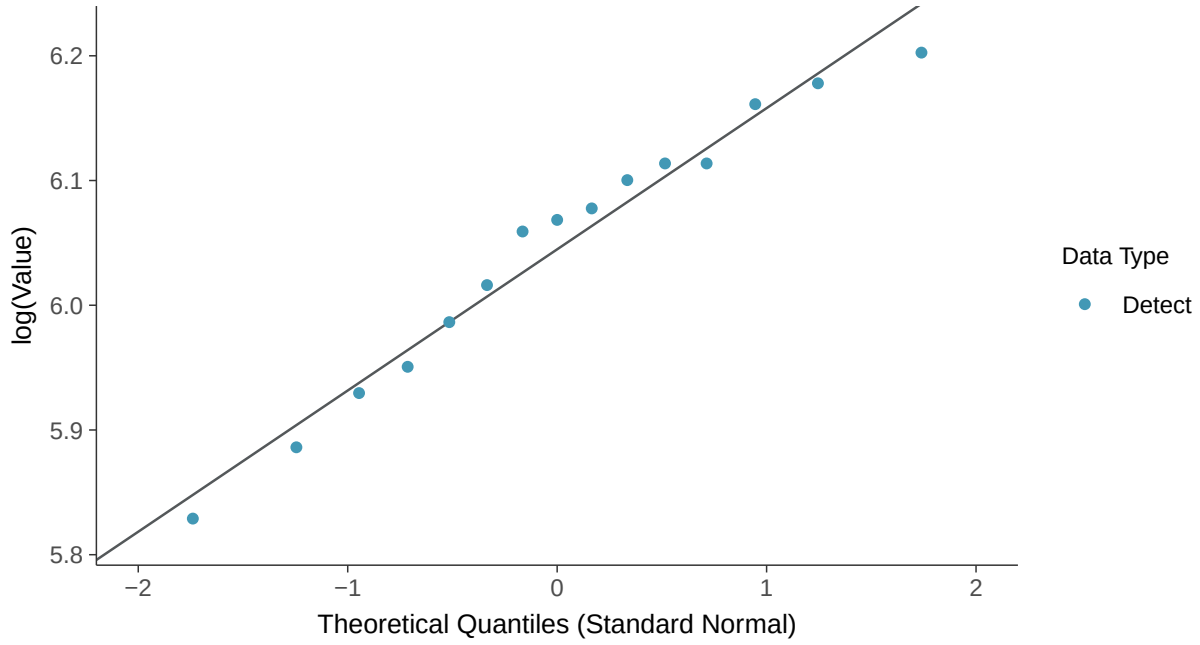
Normal Q-Q plot

Total Dissolved Solids, MW-10 (mg/l)



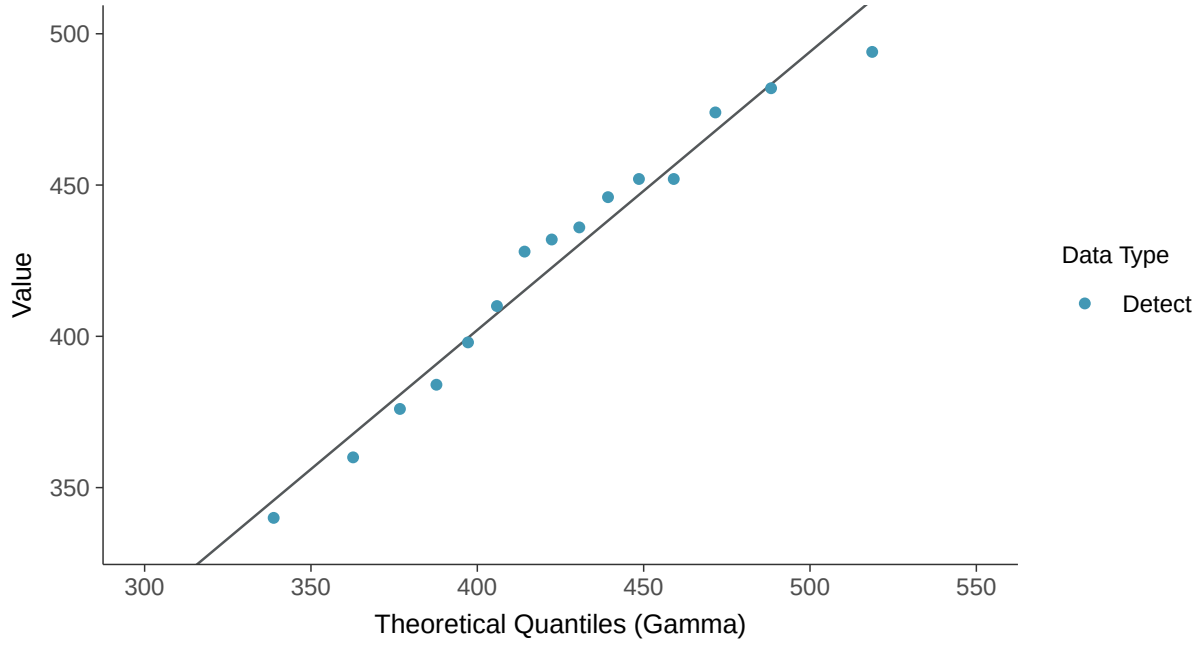
Lognormal Q-Q plot

Total Dissolved Solids, MW-10 (mg/l)



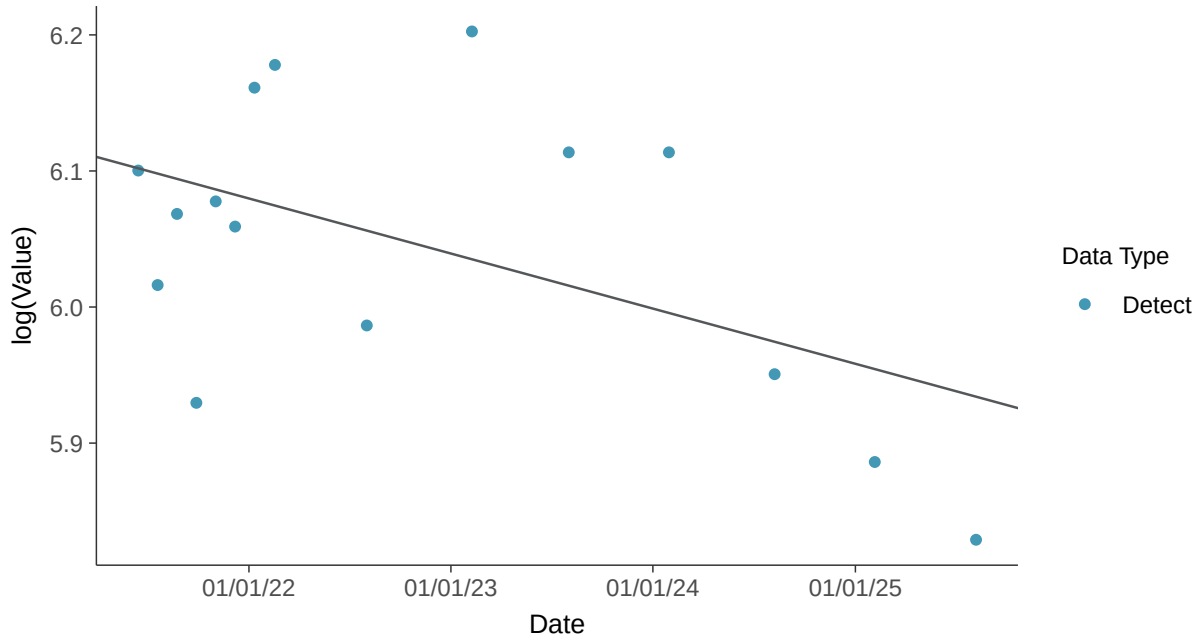
Gamma Q-Q plot

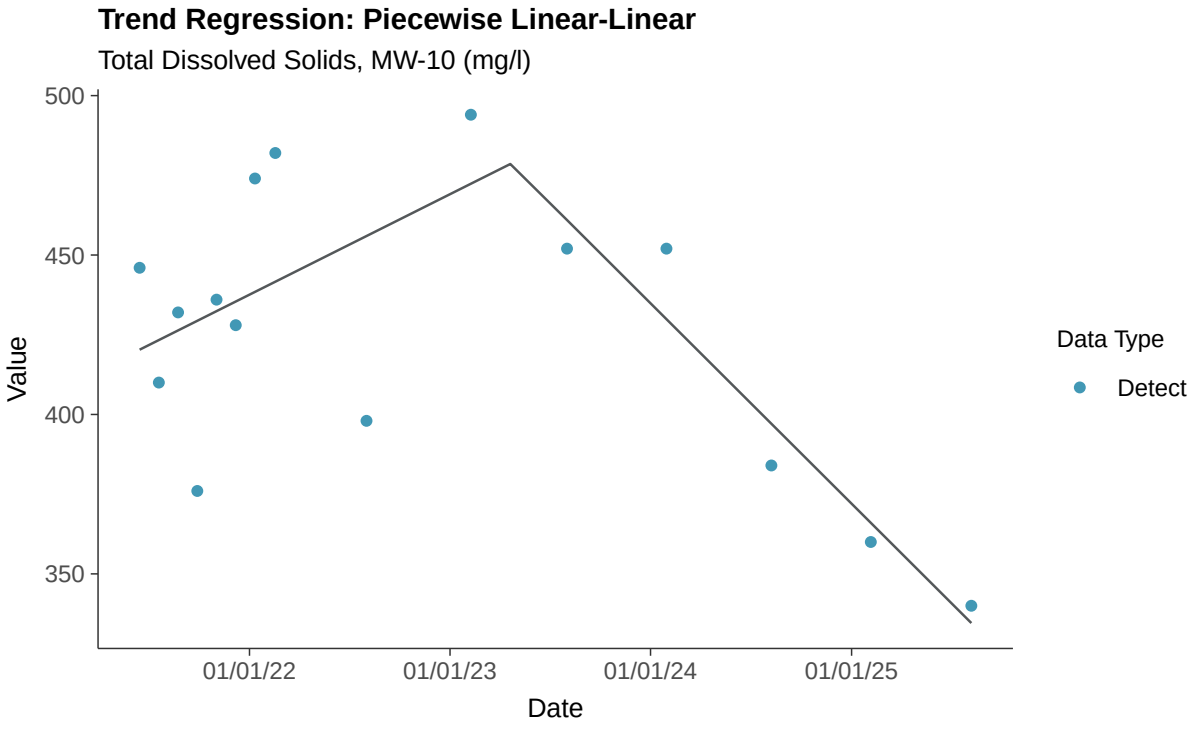
Total Dissolved Solids, MW-10 (mg/l)



Trend Regression: Lognormal MLE

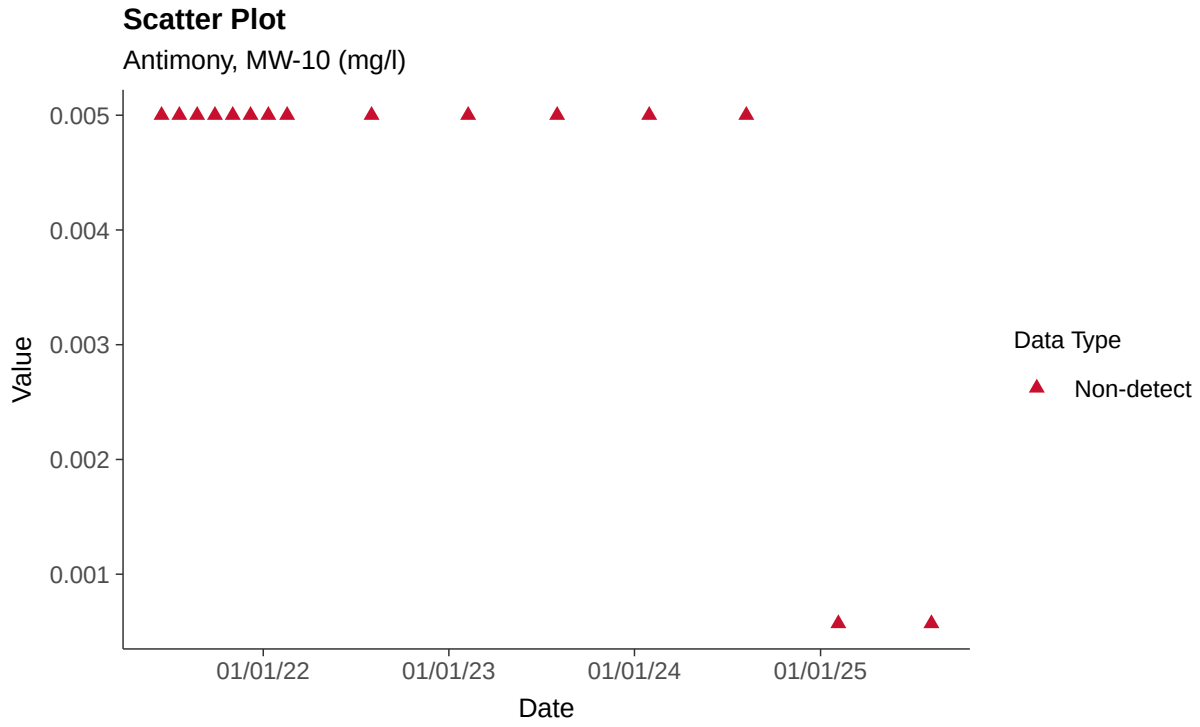
Total Dissolved Solids, MW-10 (mg/l)

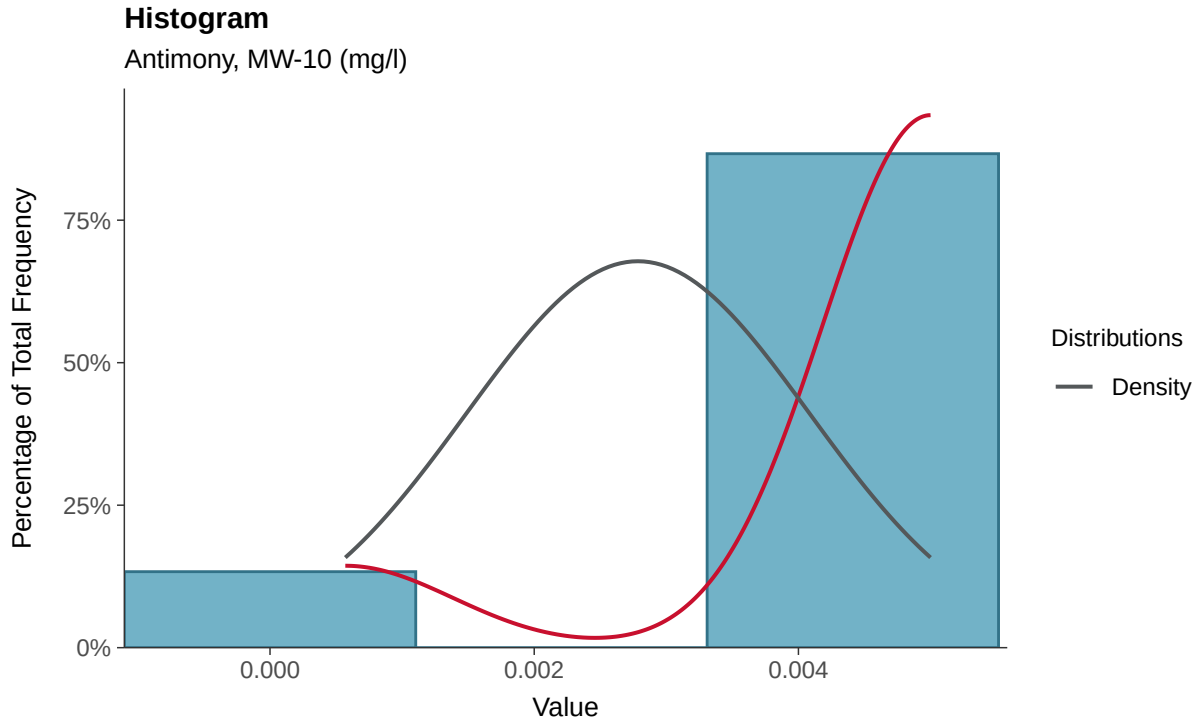



Trend Regression: Piecewise Linear-Linear
Total Dissolved Solids, MW-10 (mg/l)
500
450
400
350
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect

Appendix IV: Antimony, MW-10

ID: 21_3_101



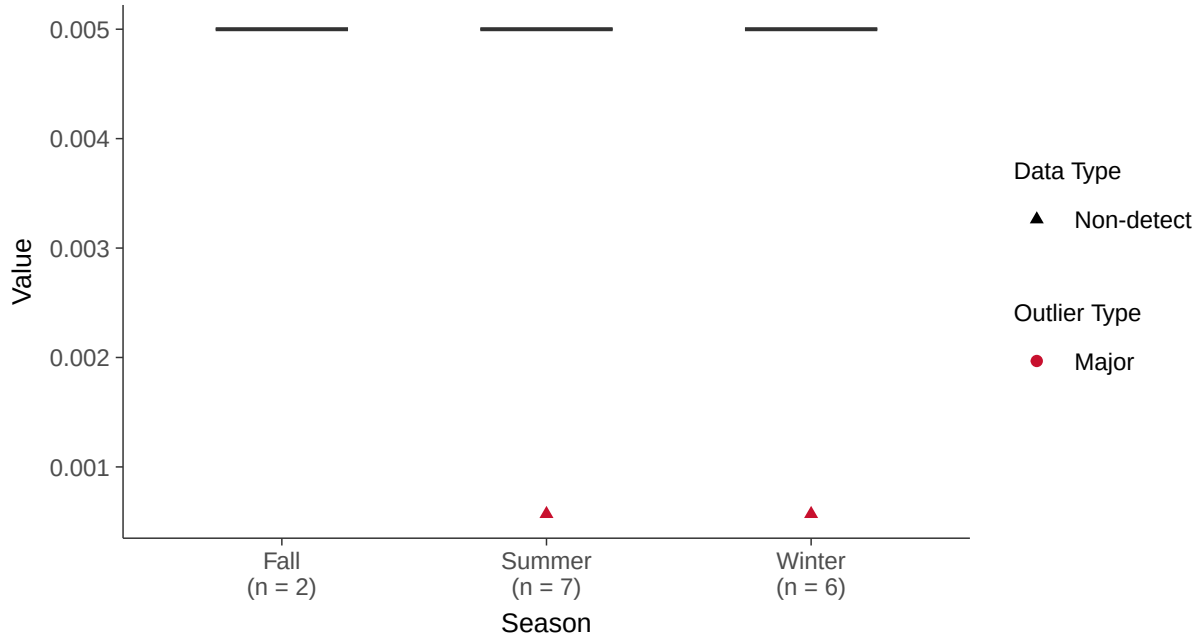


Boxplot

Antimony, MW-10 (mg/l)

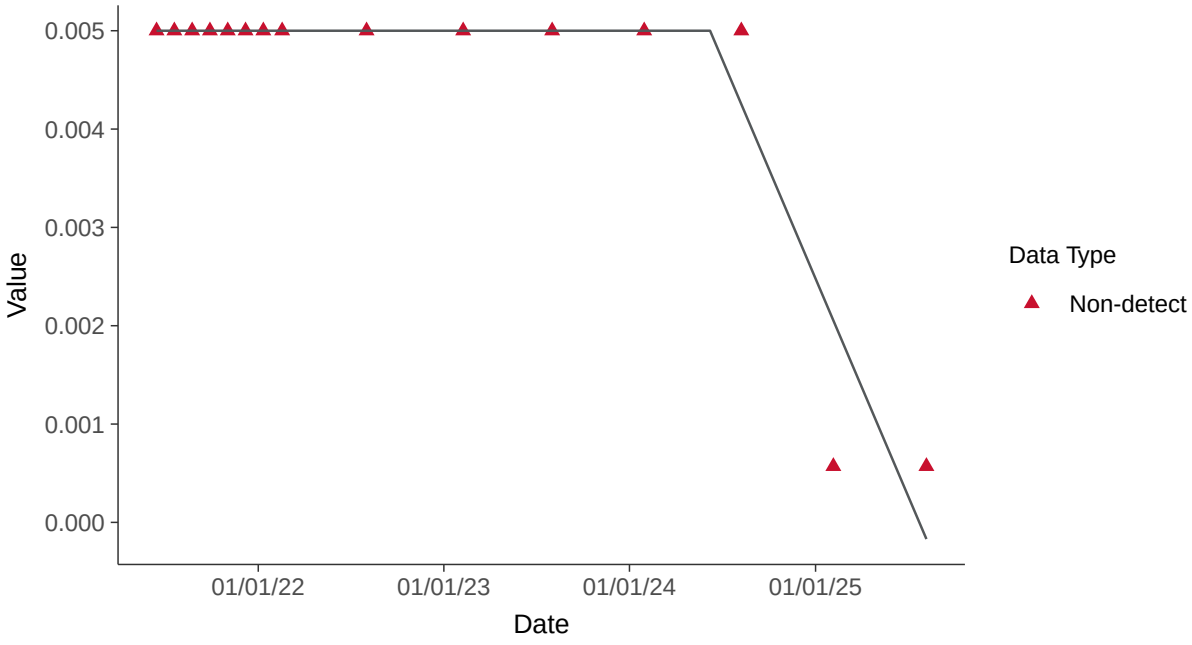
Boxplot by Season

Antimony, MW-10 (mg/l)



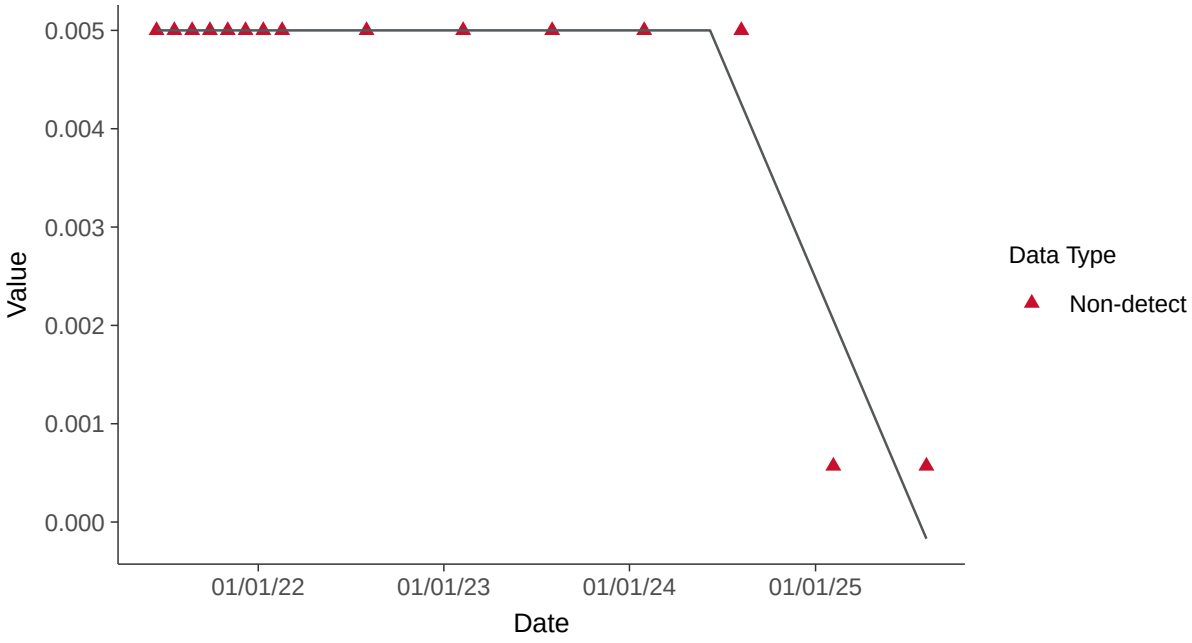
Trend Regression: Piecewise Linear-Linear

Antimony, MW-10 (mg/l)



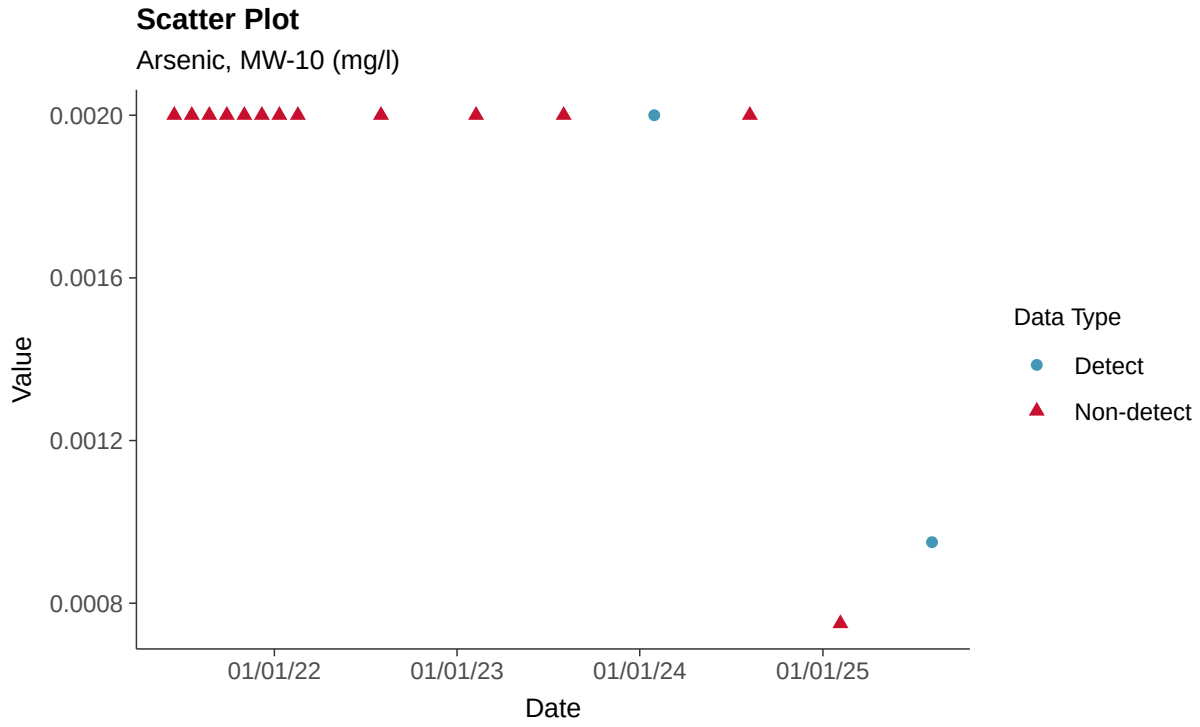
Trend Regression: Piecewise Linear-Linear-Linear

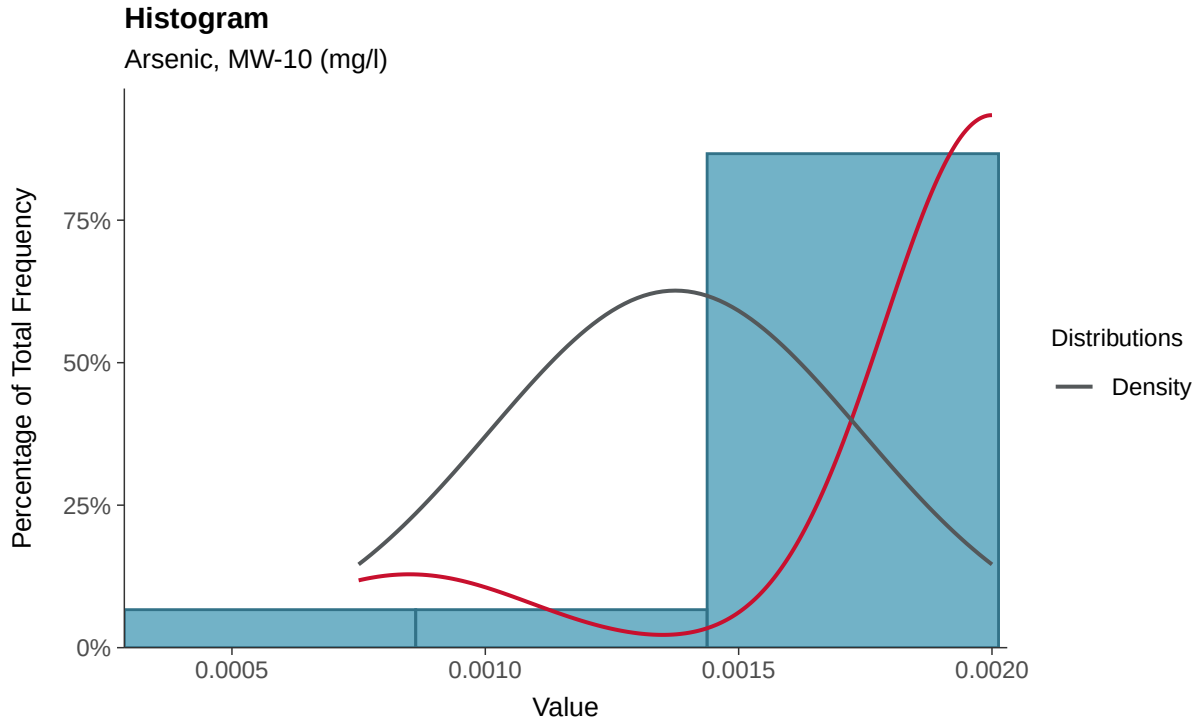
Antimony, MW-10 (mg/l)



Appendix IV: Arsenic, MW-10

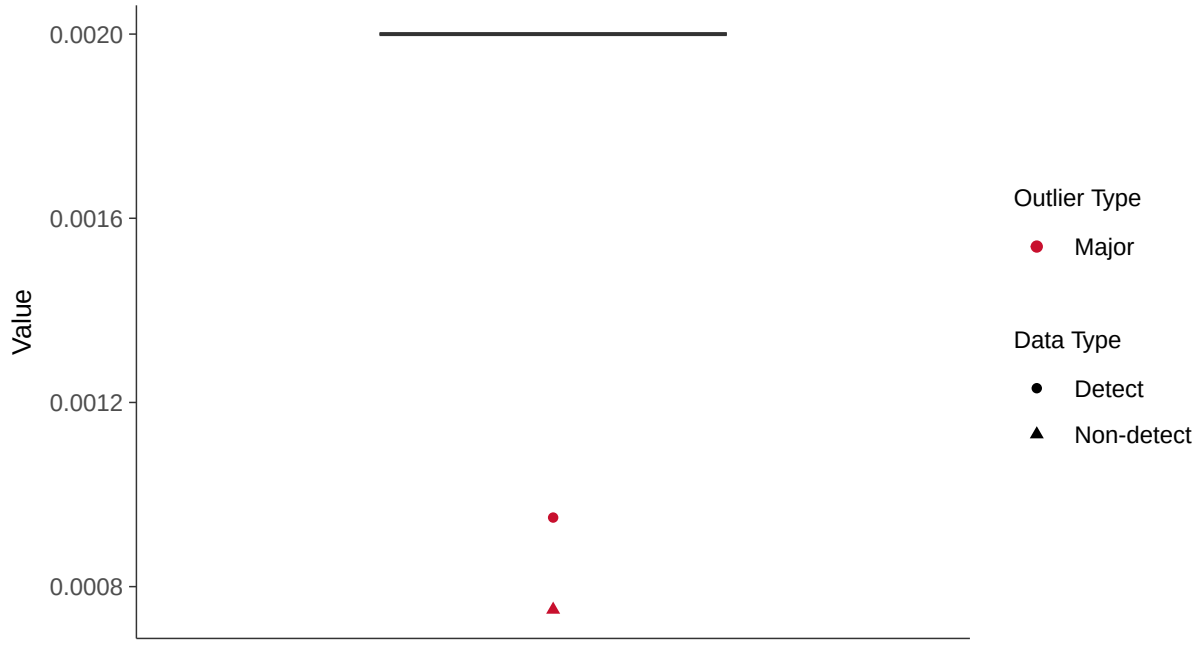
ID: 21_3_102





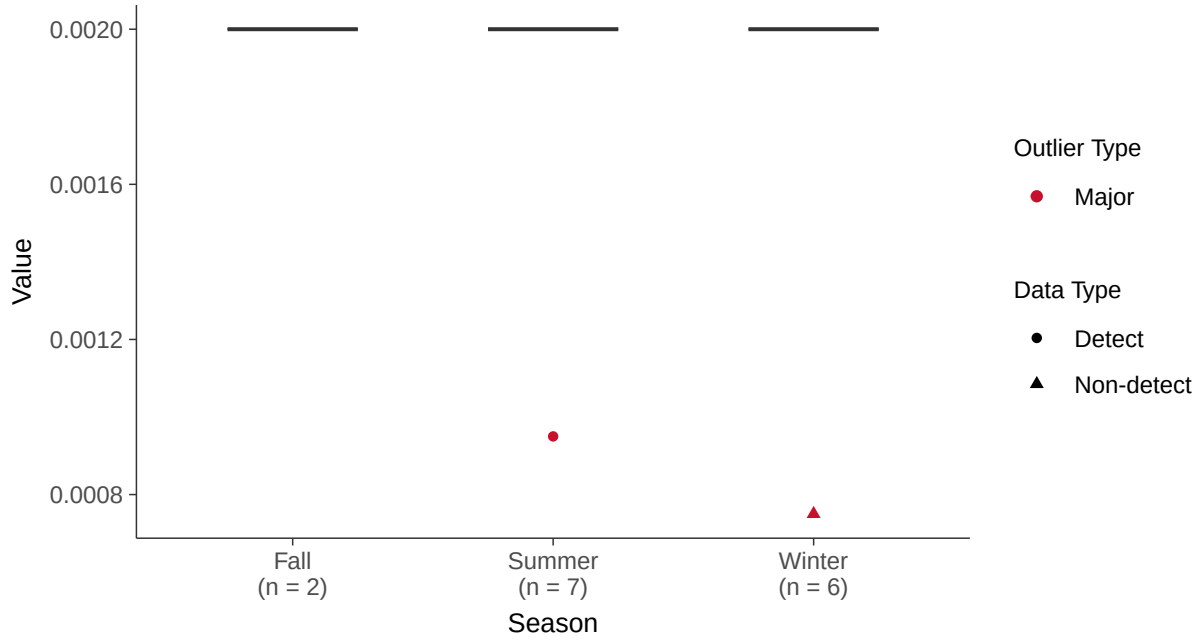
Boxplot

Arsenic, MW-10 (mg/l)



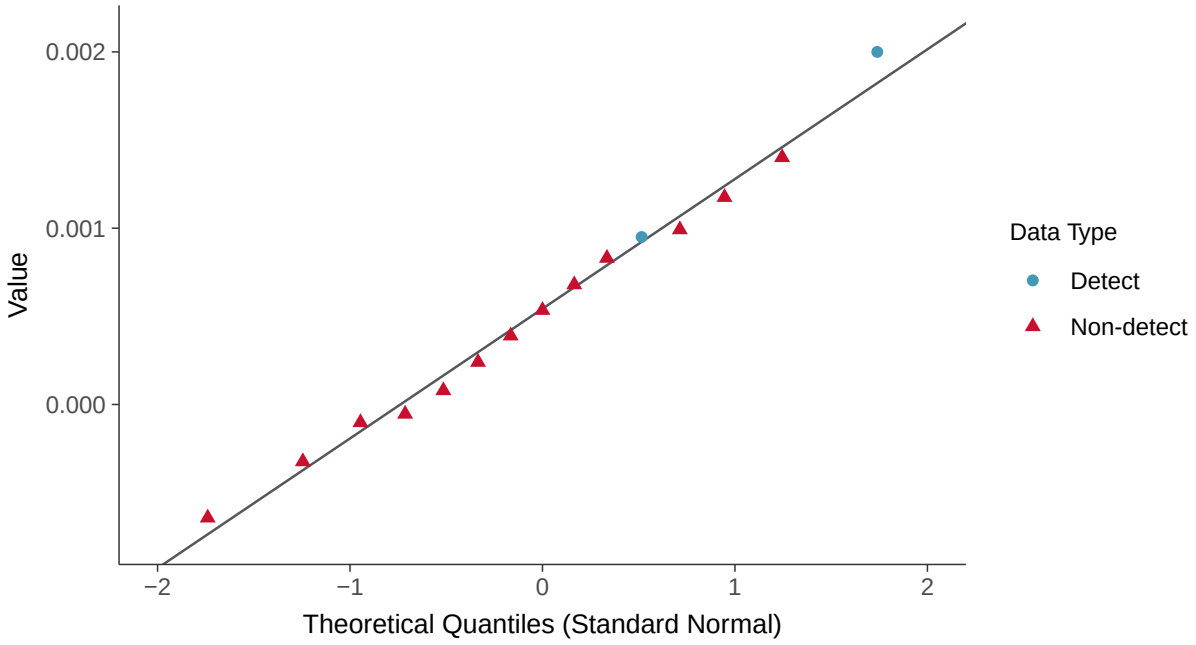
Boxplot by Season

Arsenic, MW-10 (mg/l)



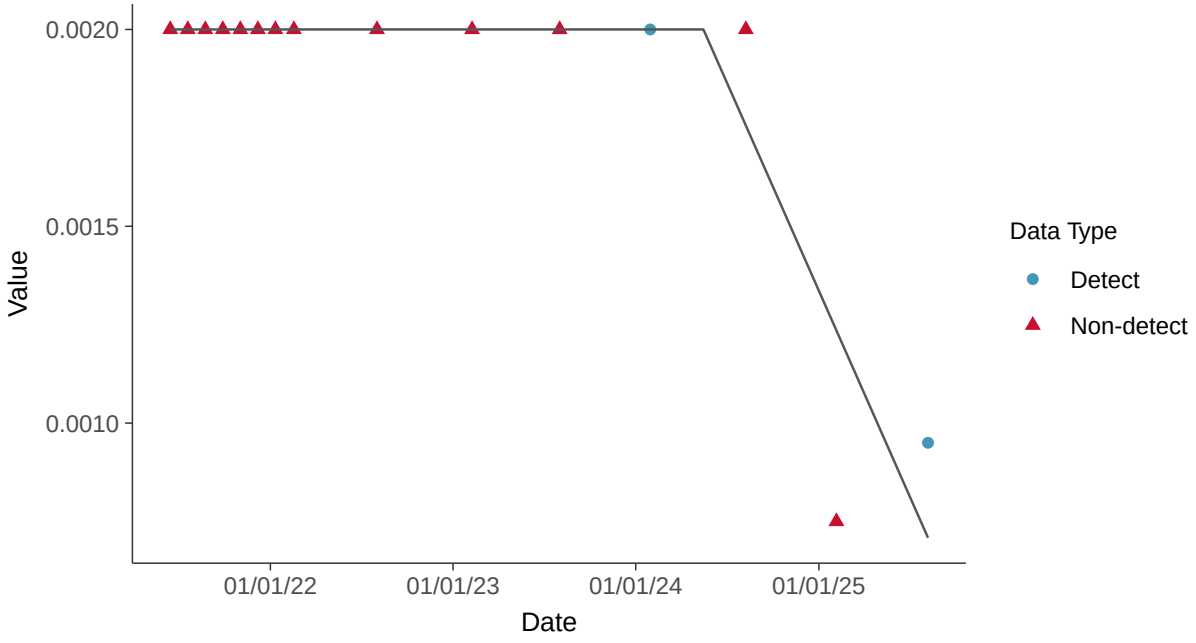
Normal Q-Q plot using ROS Imputed Estimates

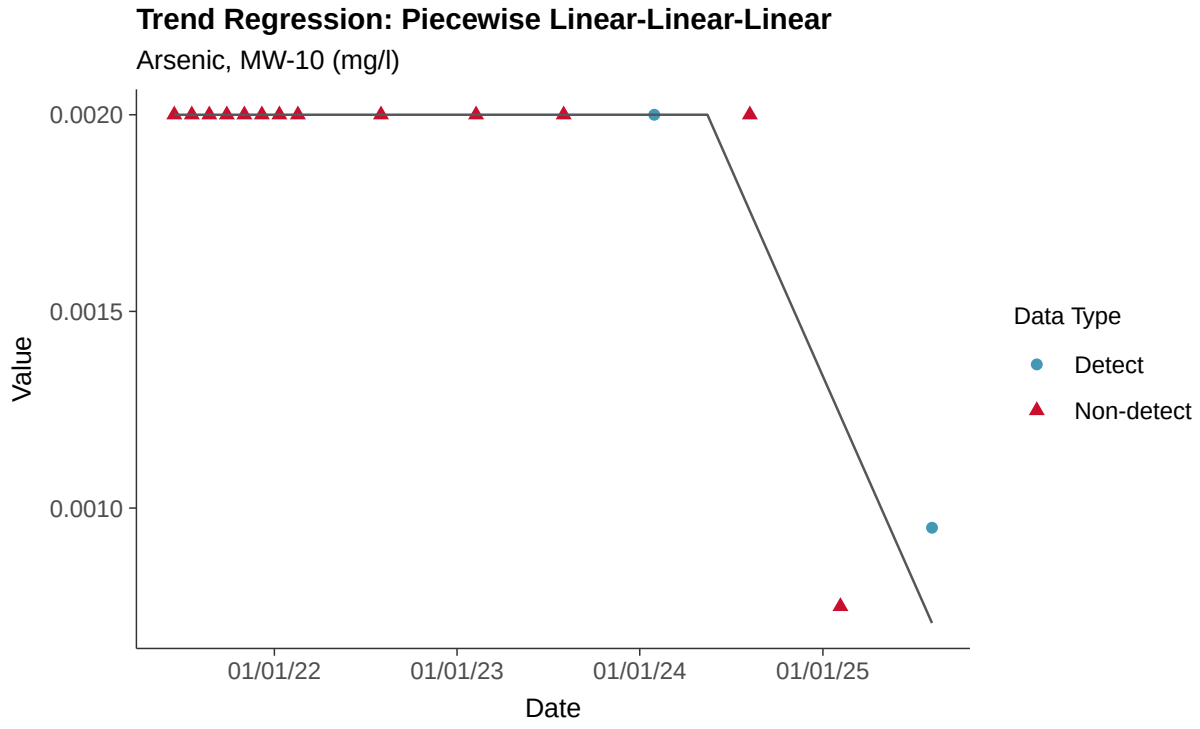
Arsenic, MW-10 (mg/l)



Trend Regression: Piecewise Linear-Linear

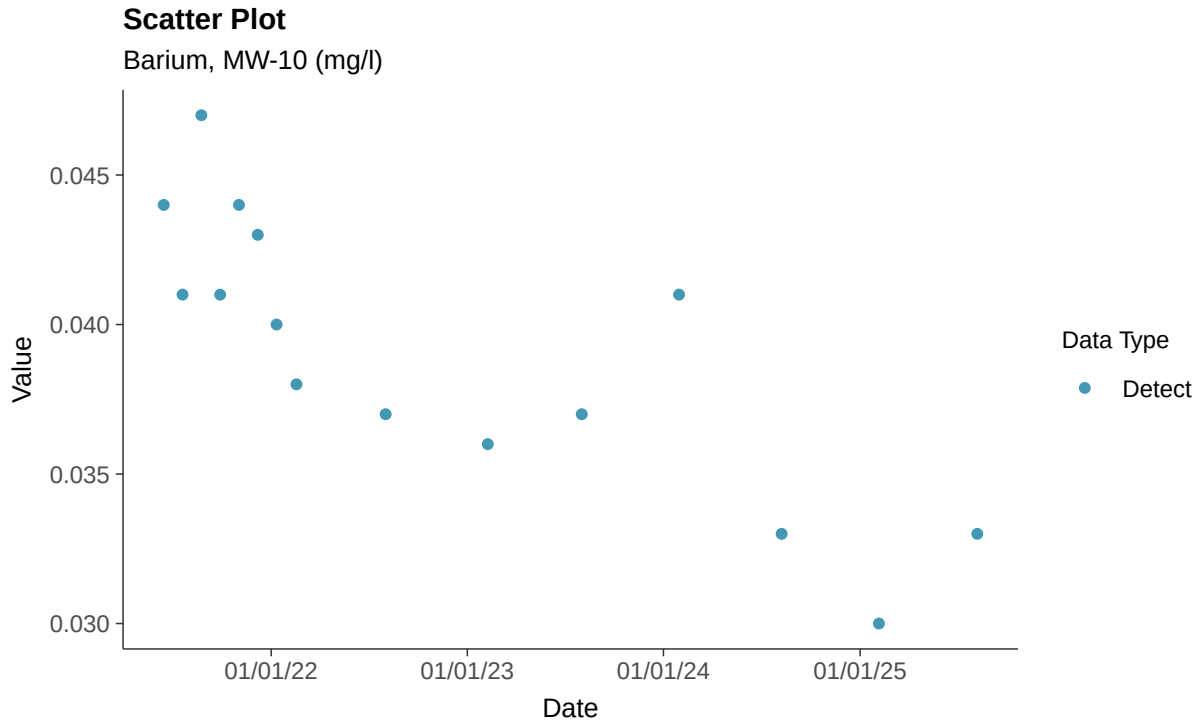
Arsenic, MW-10 (mg/l)

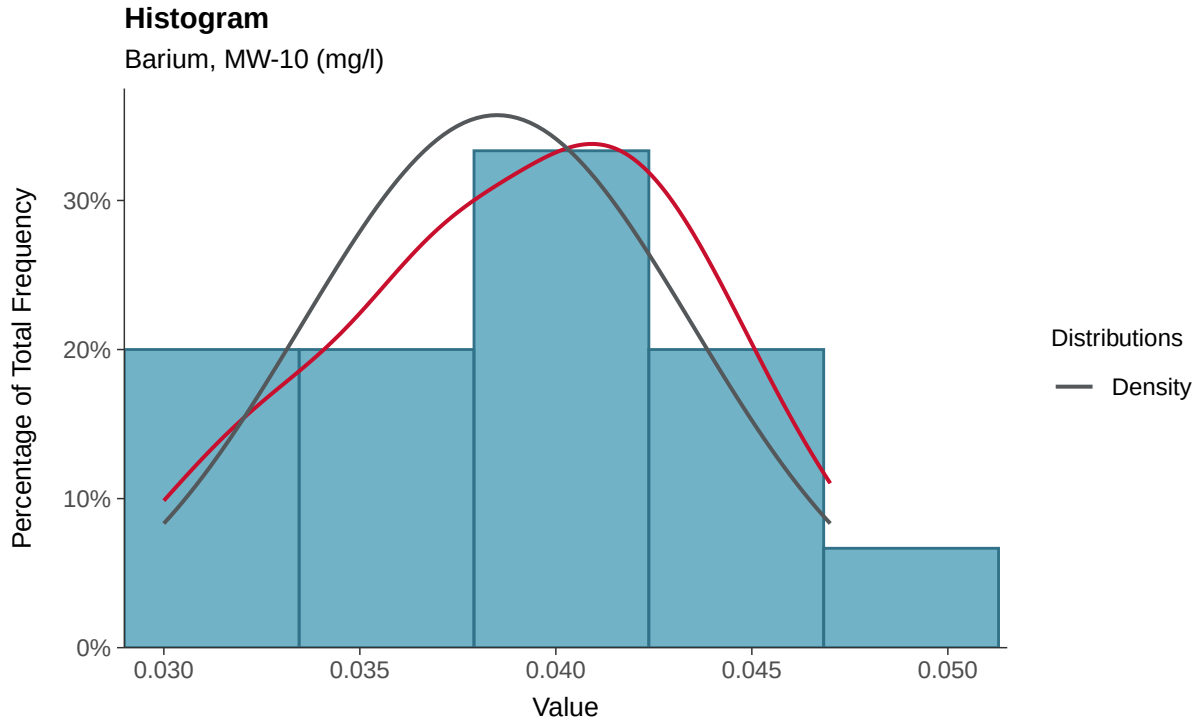



Trend Regression: Piecewise Linear-Linear-Linear
Arsenic, MW-10 (mg/l)
0.0020
0.0015
0.0010
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Barium, MW-10

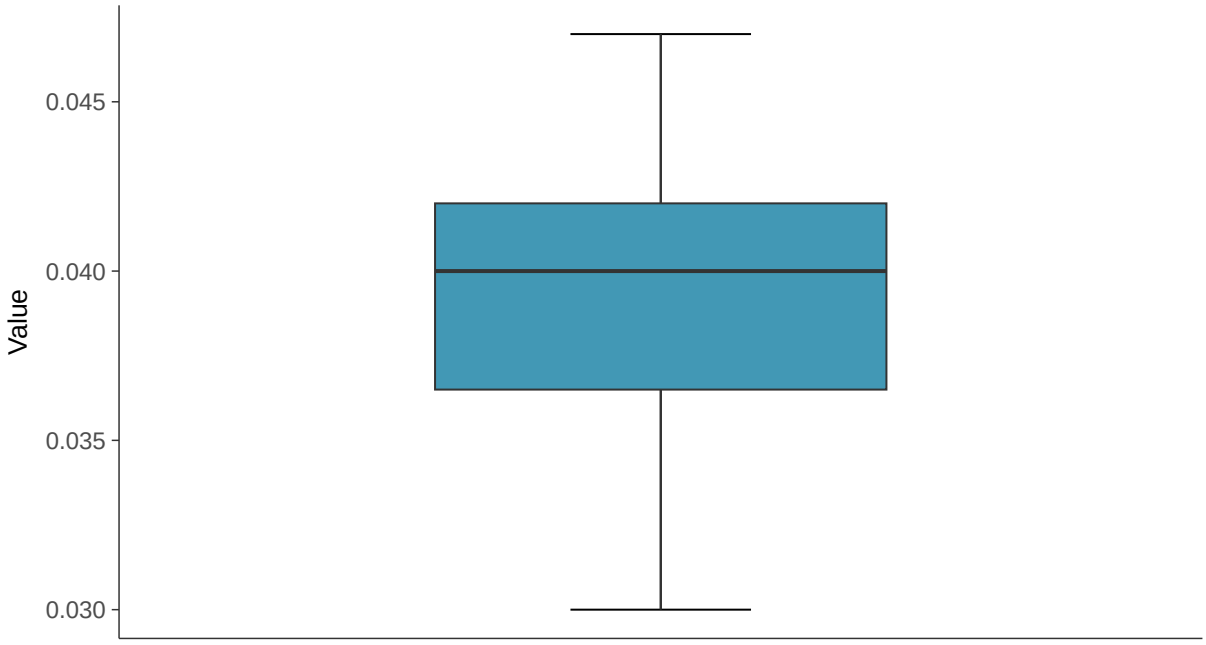
ID: 21_3_103





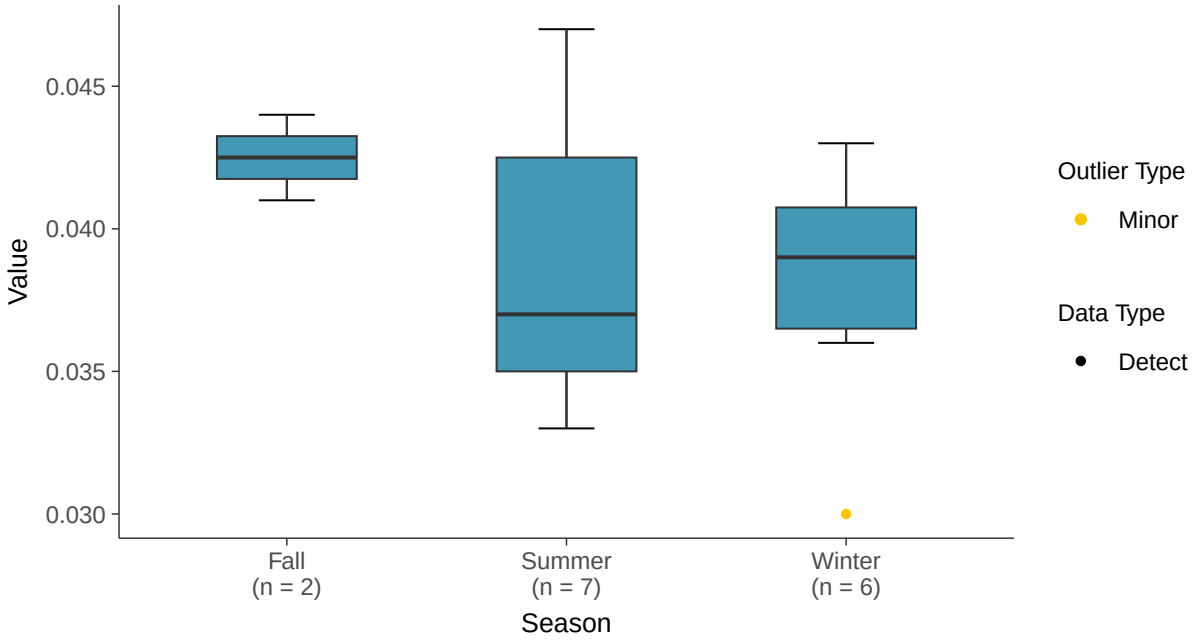
Boxplot

Barium, MW-10 (mg/l)



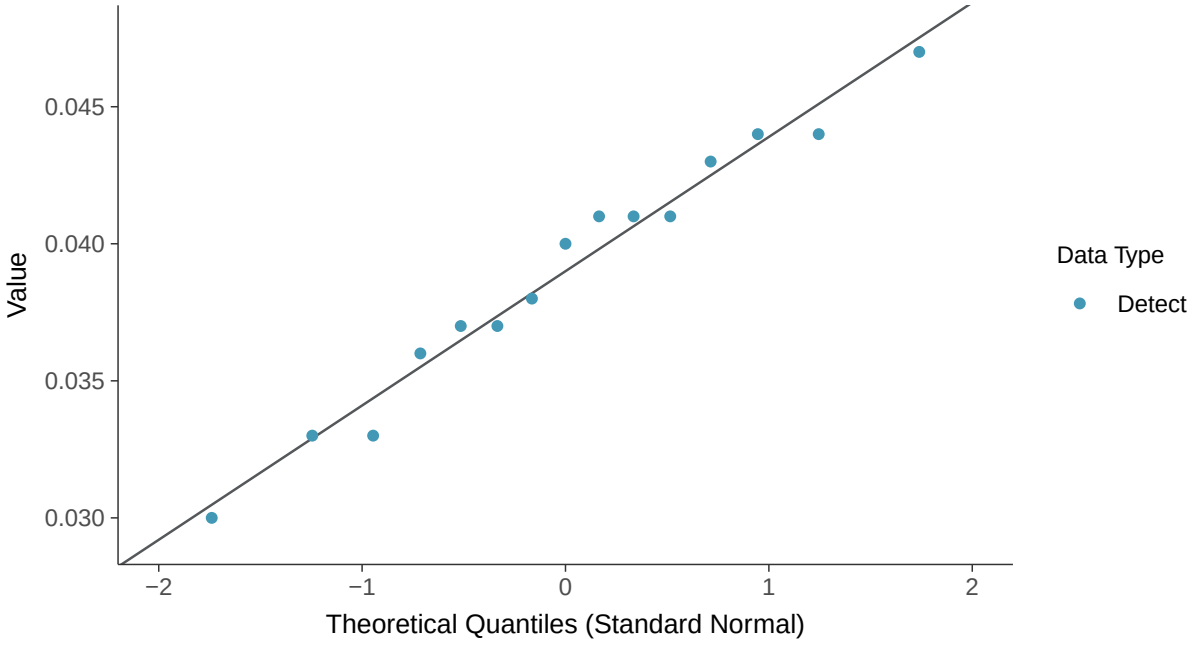
Boxplot by Season

Barium, MW-10 (mg/l)



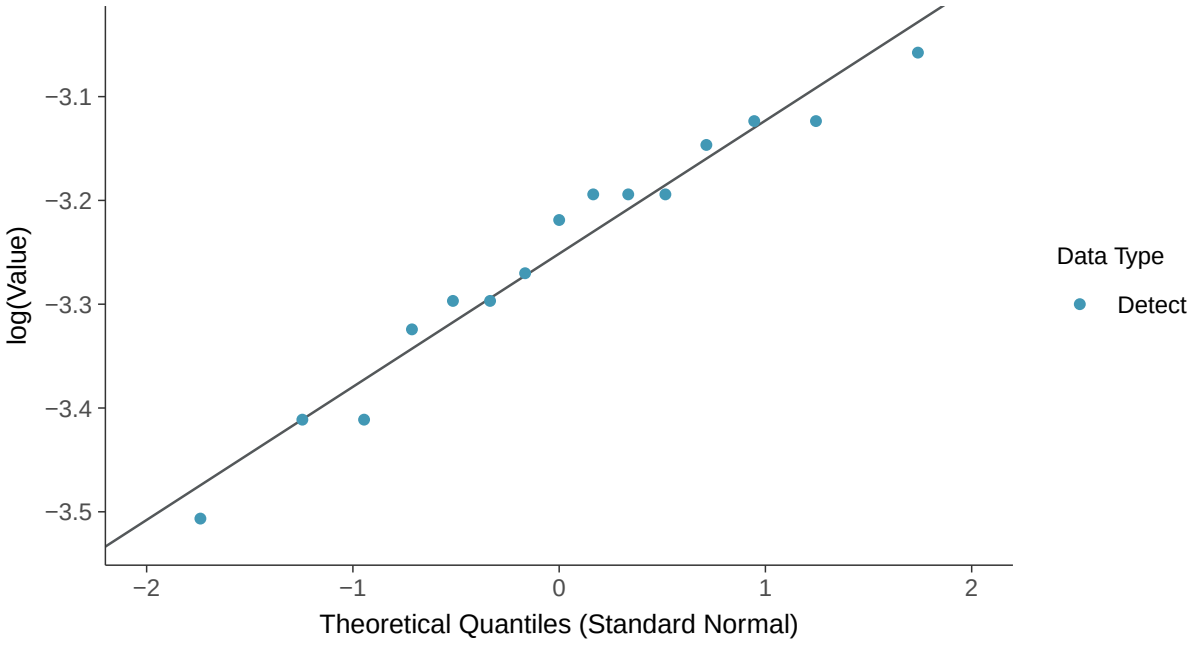
Normal Q-Q plot

Barium, MW-10 (mg/l)



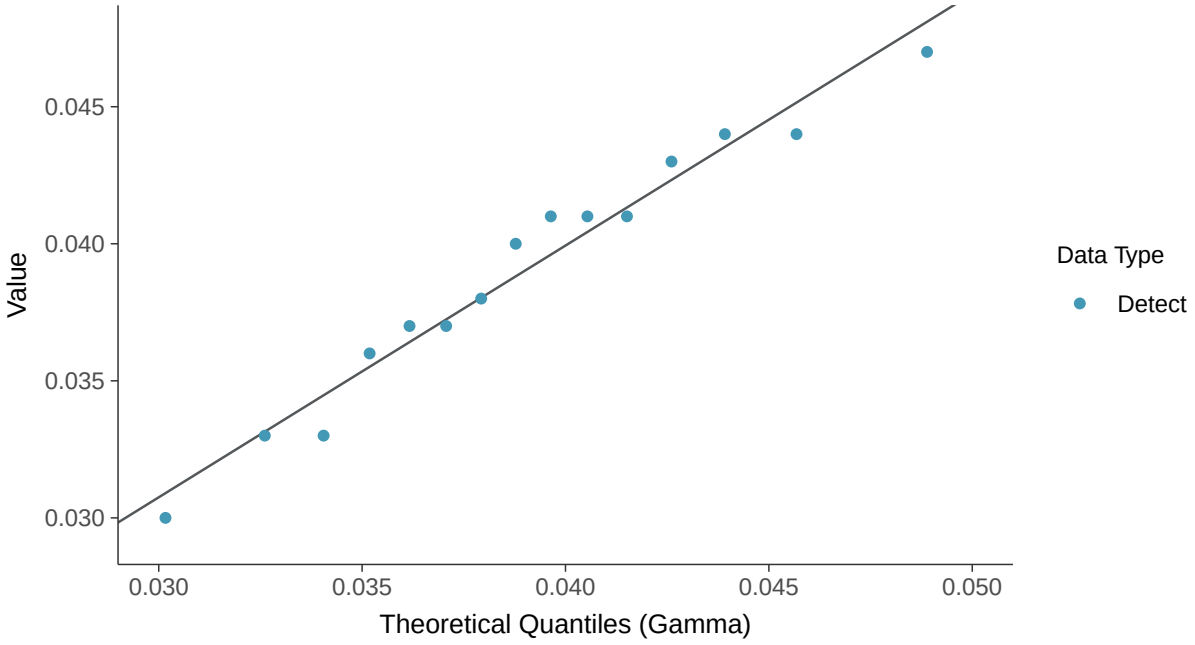
Lognormal Q-Q plot

Barium, MW-10 (mg/l)



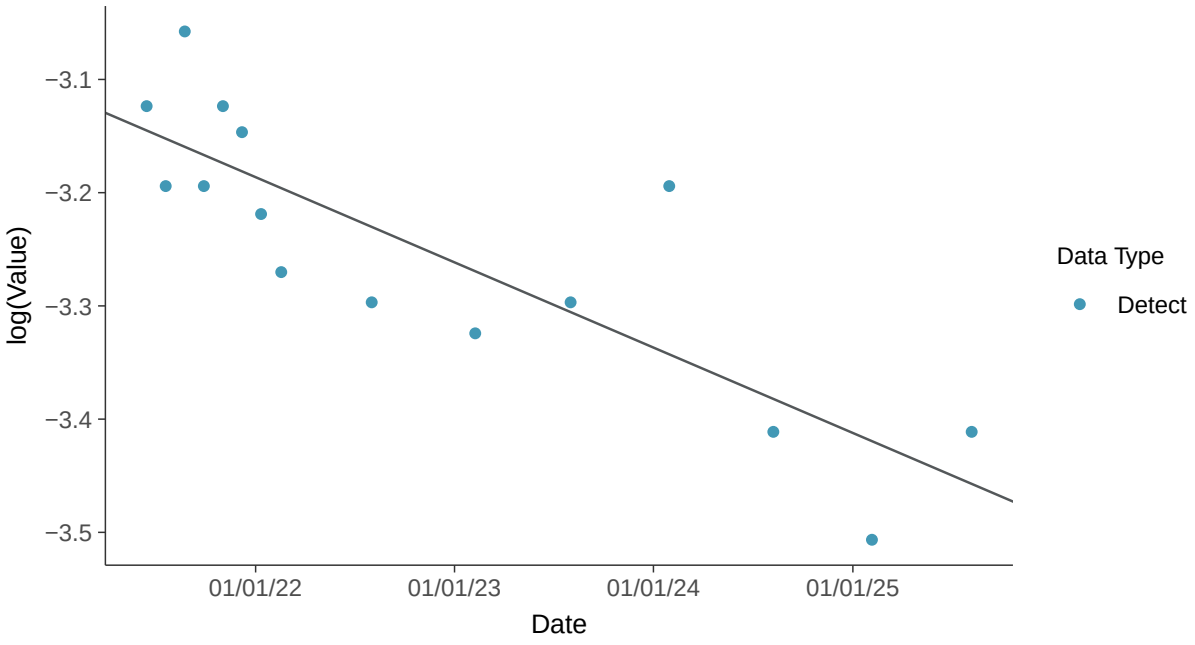
Gamma Q-Q plot

Barium, MW-10 (mg/l)



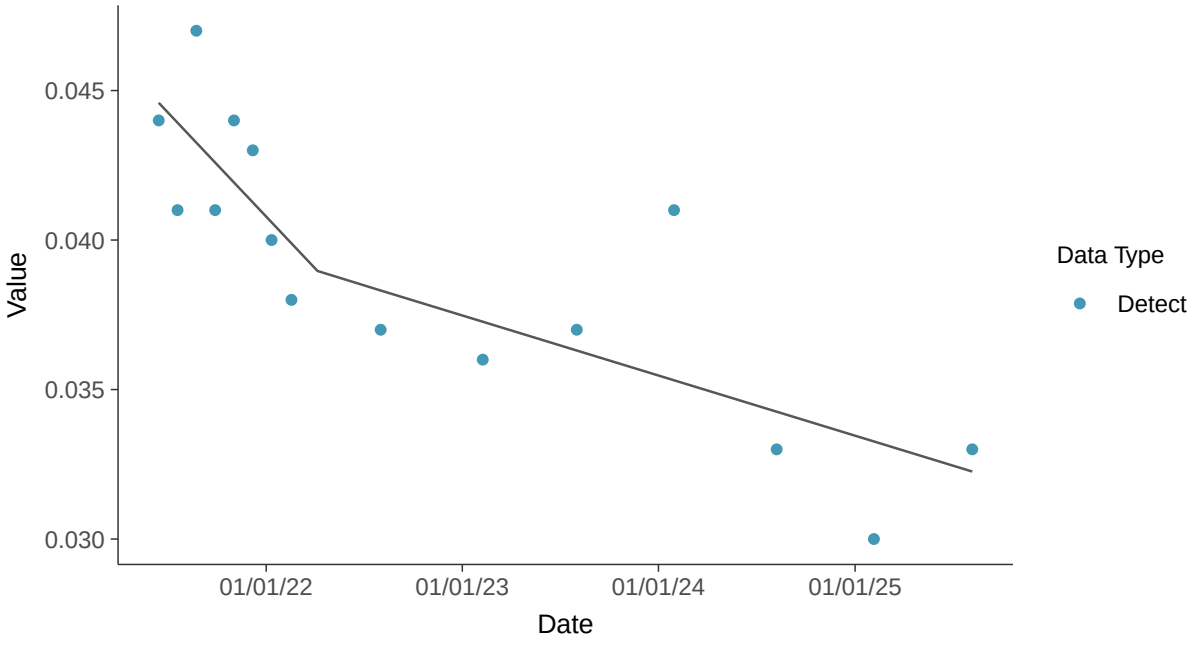
Trend Regression: Lognormal MLE

Barium, MW-10 (mg/l)



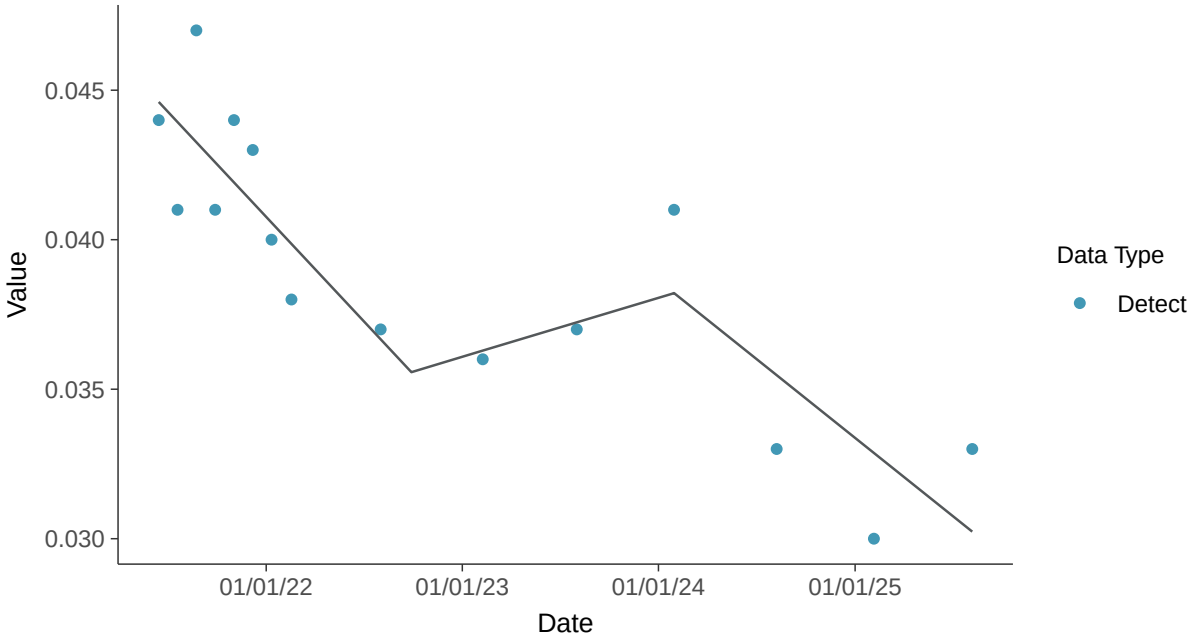
Trend Regression: Piecewise Linear-Linear

Barium, MW-10 (mg/l)



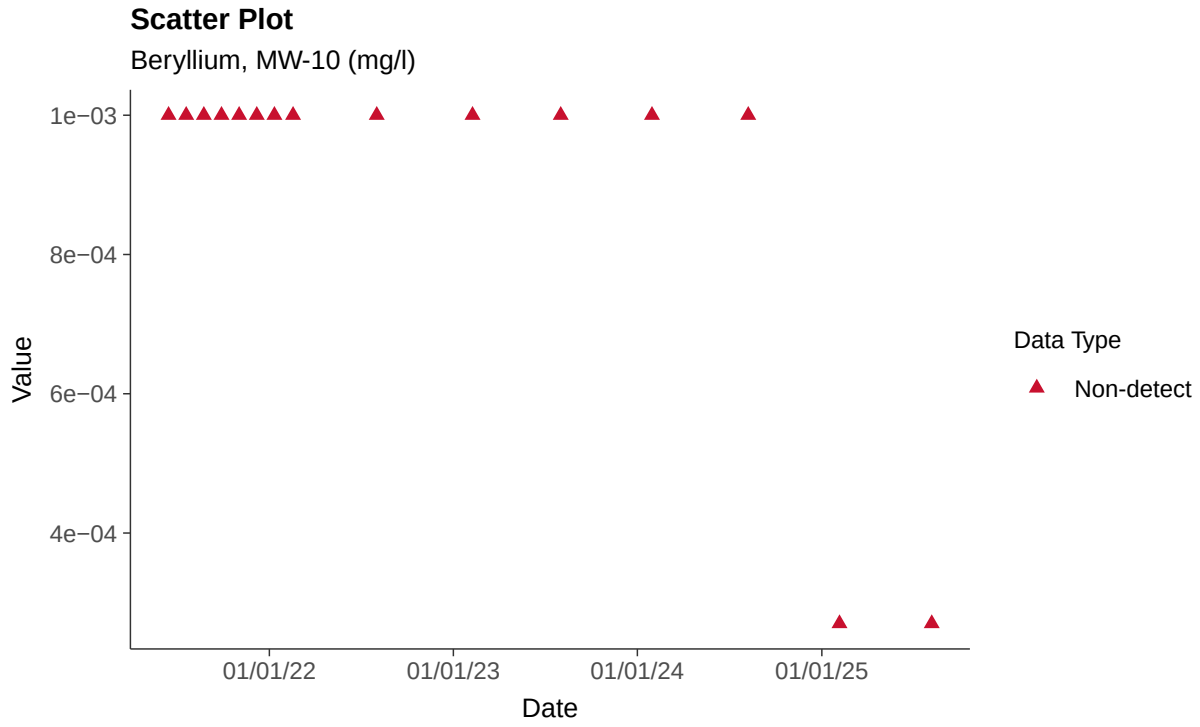
Trend Regression: Piecewise Linear-Linear-Linear

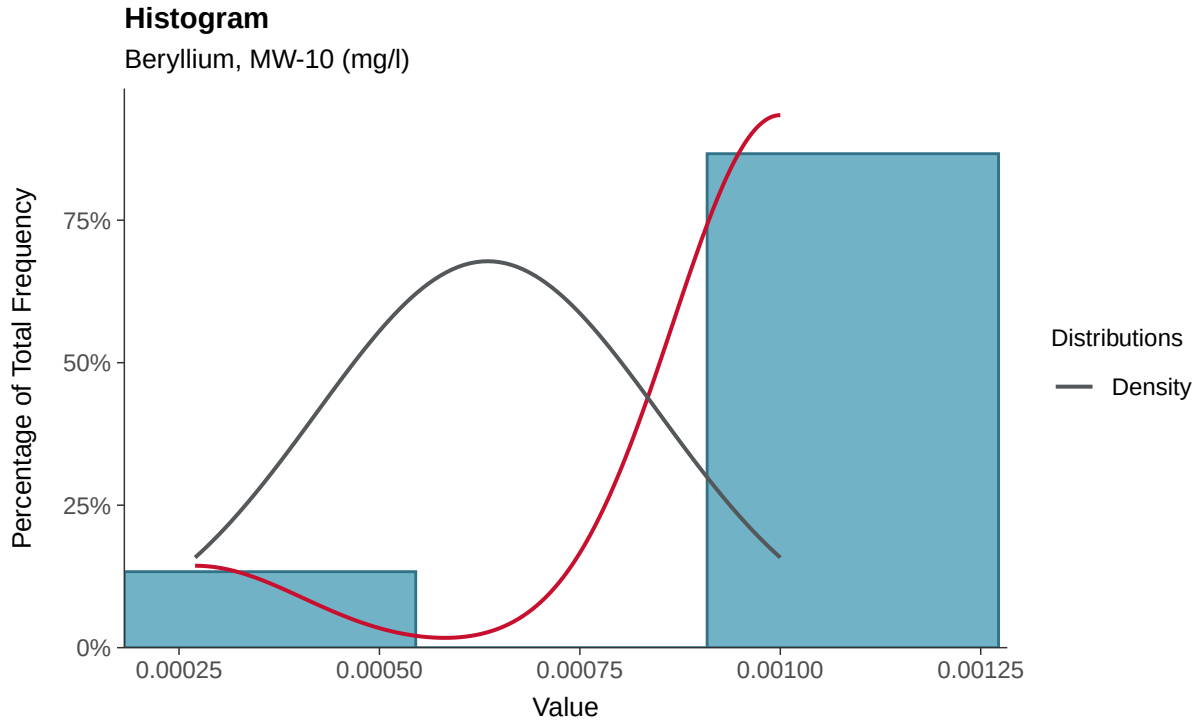
Barium, MW-10 (mg/l)



Appendix IV: Beryllium, MW-10

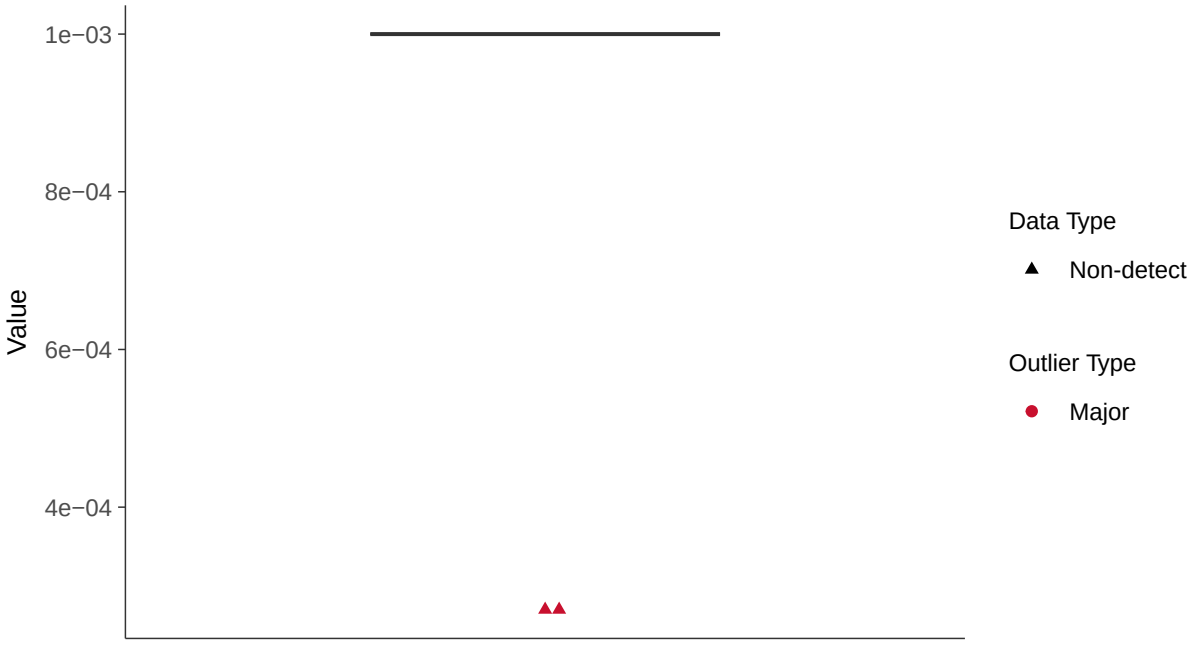
ID: 21_3_104





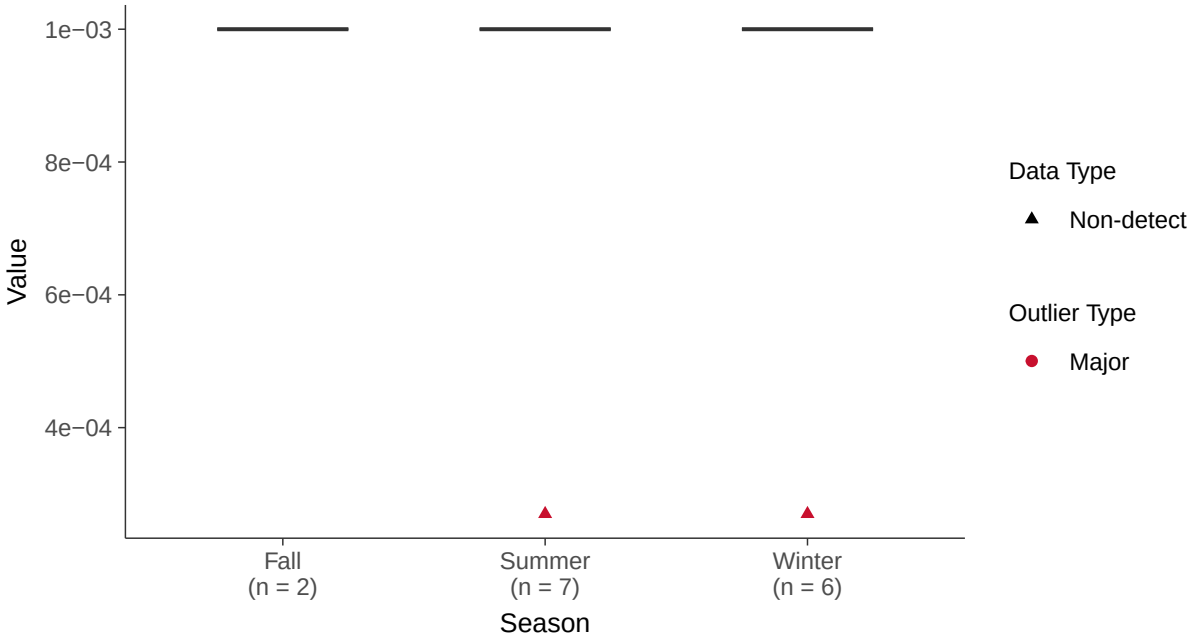
Boxplot

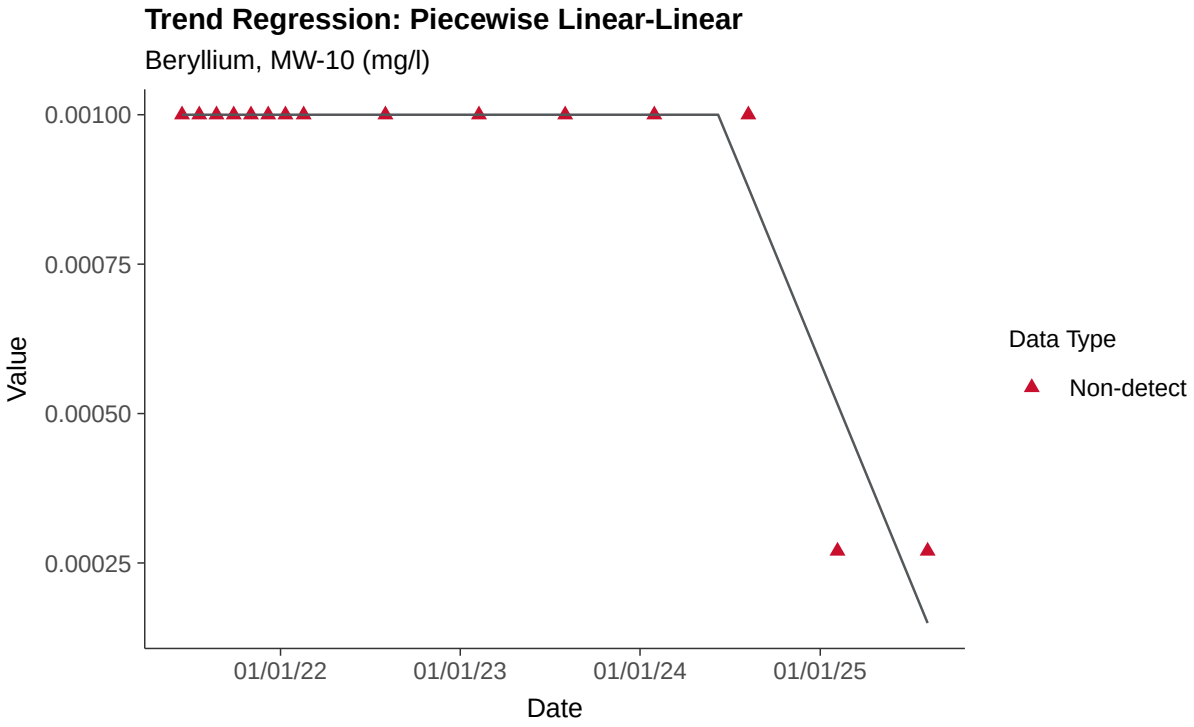
Beryllium, MW-10 (mg/l)



Boxplot by Season

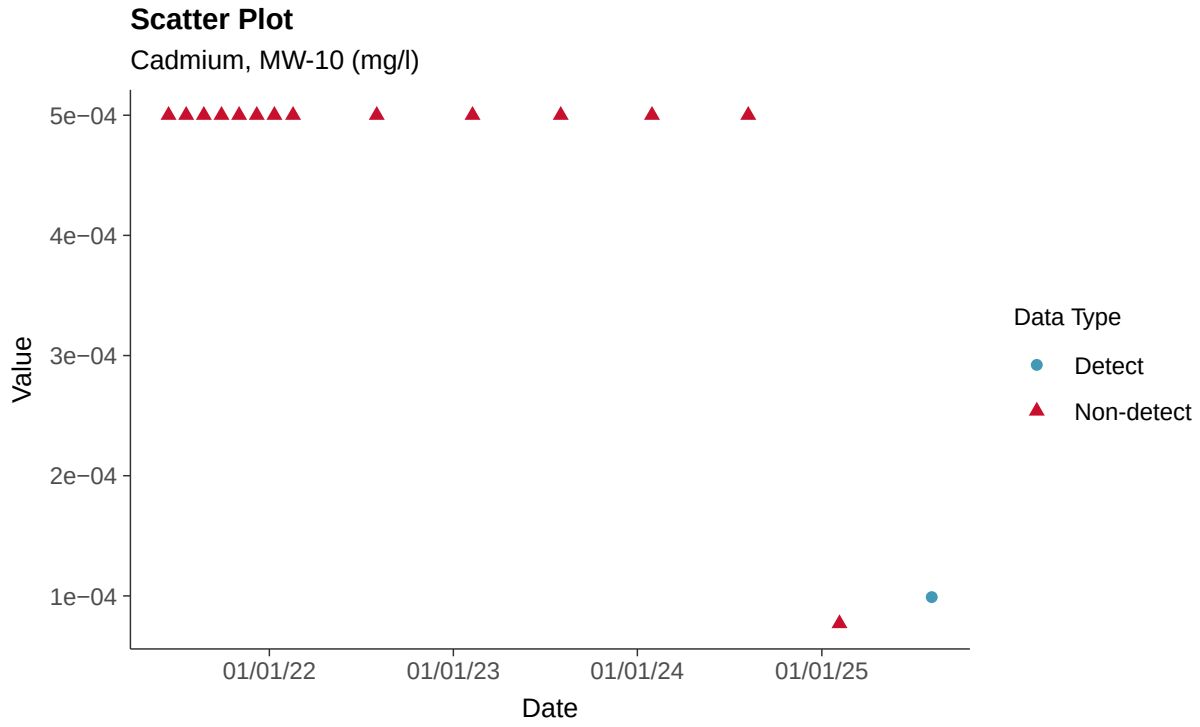
Beryllium, MW-10 (mg/l)

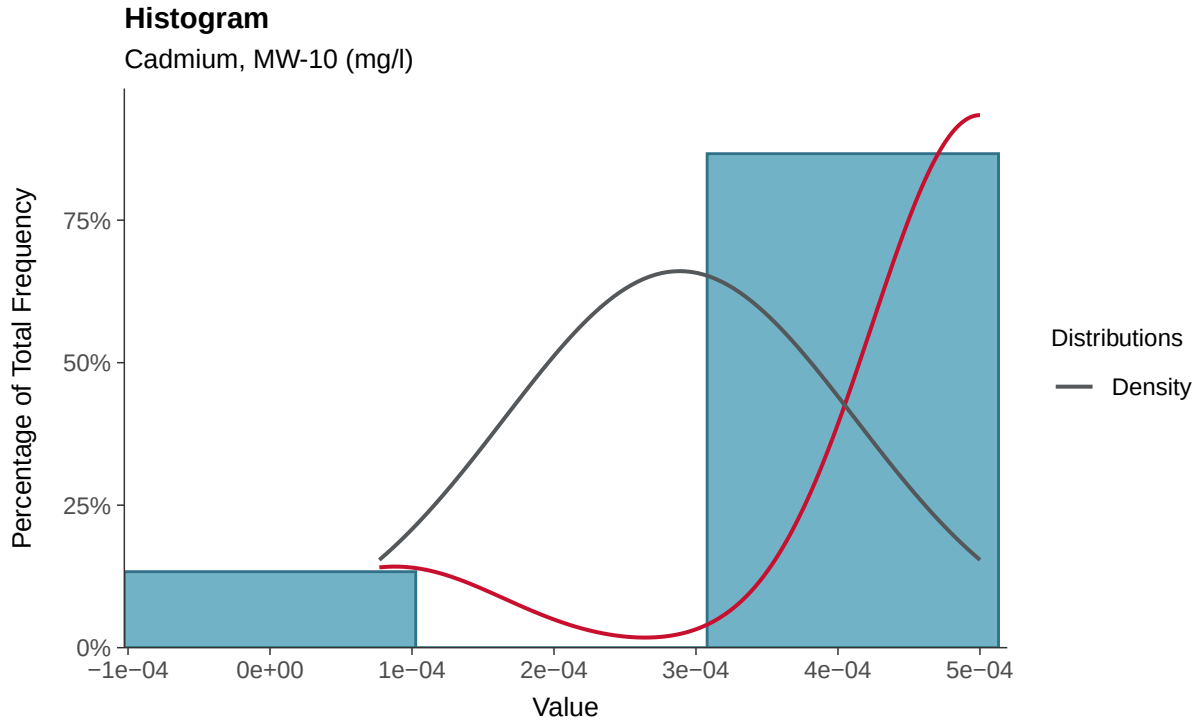



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-10 (mg/l)
0.00100
0.00075
0.00050
0.00025
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Appendix IV: Cadmium, MW-10

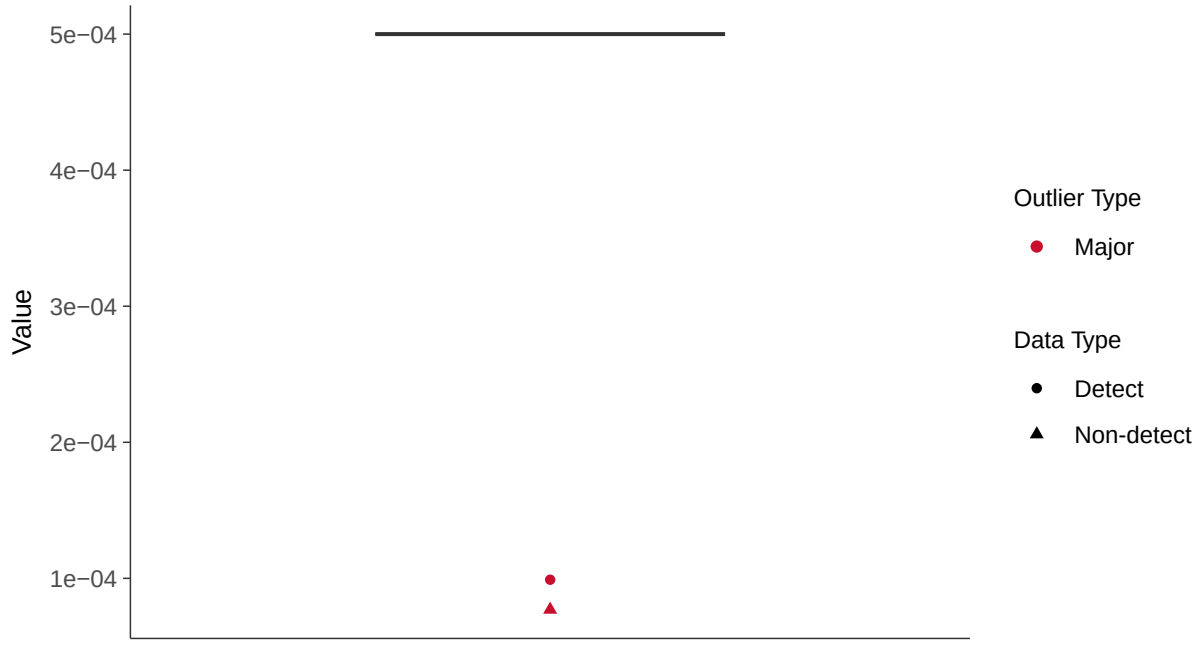
ID: 21_3_106





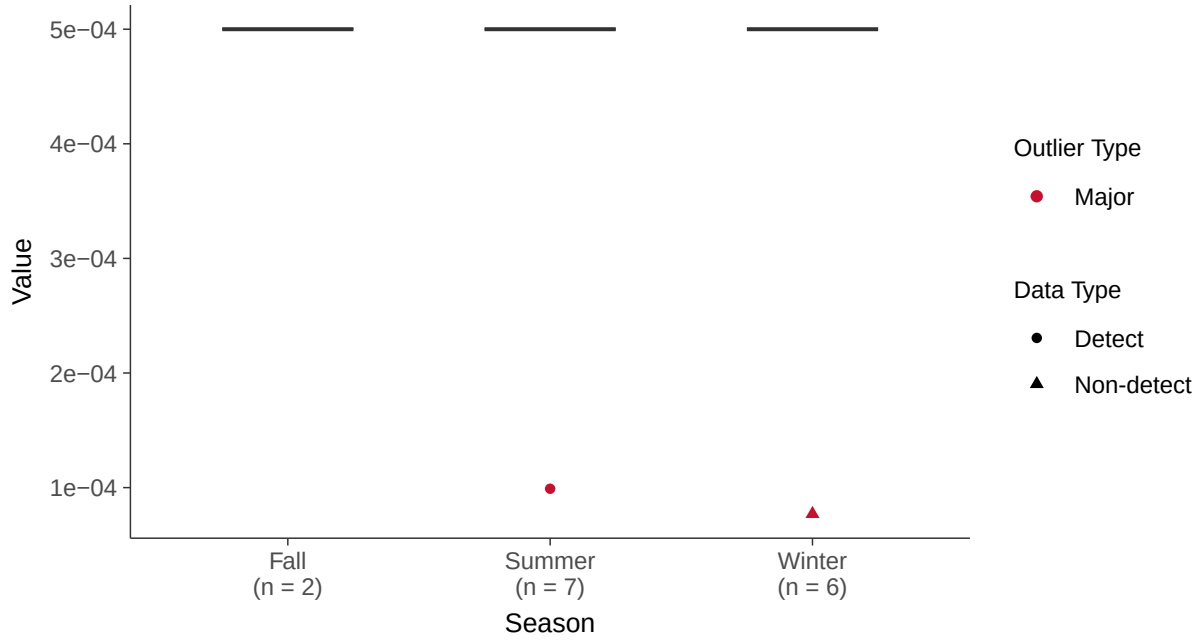
Boxplot

Cadmium, MW-10 (mg/l)



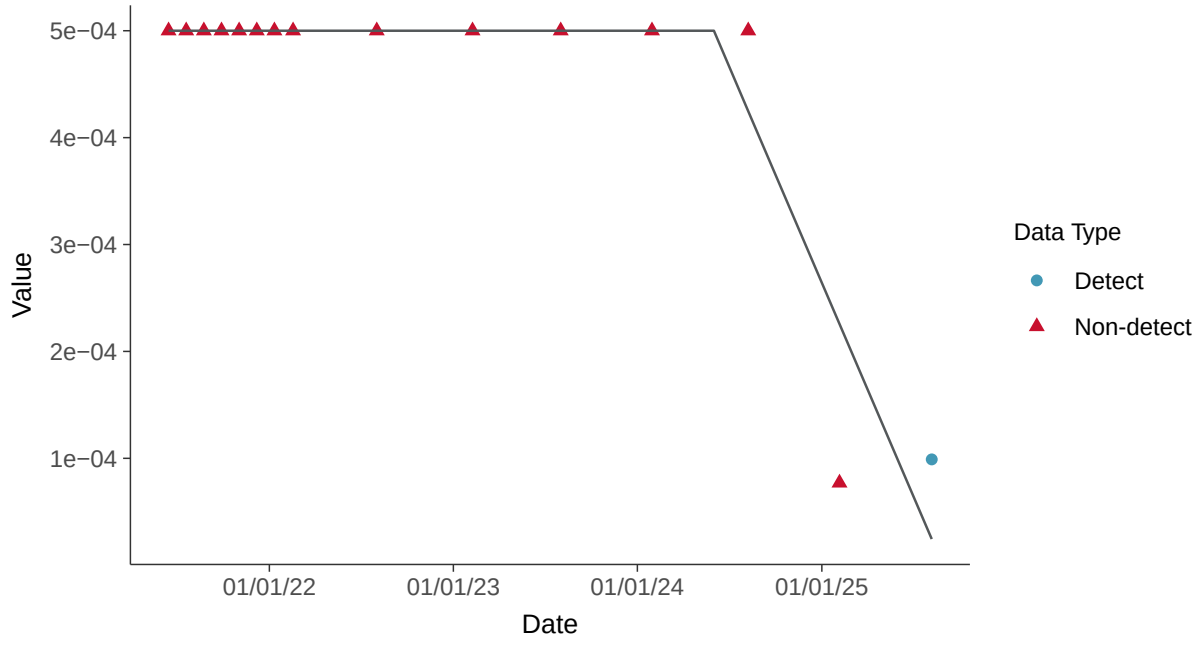
Boxplot by Season

Cadmium, MW-10 (mg/l)



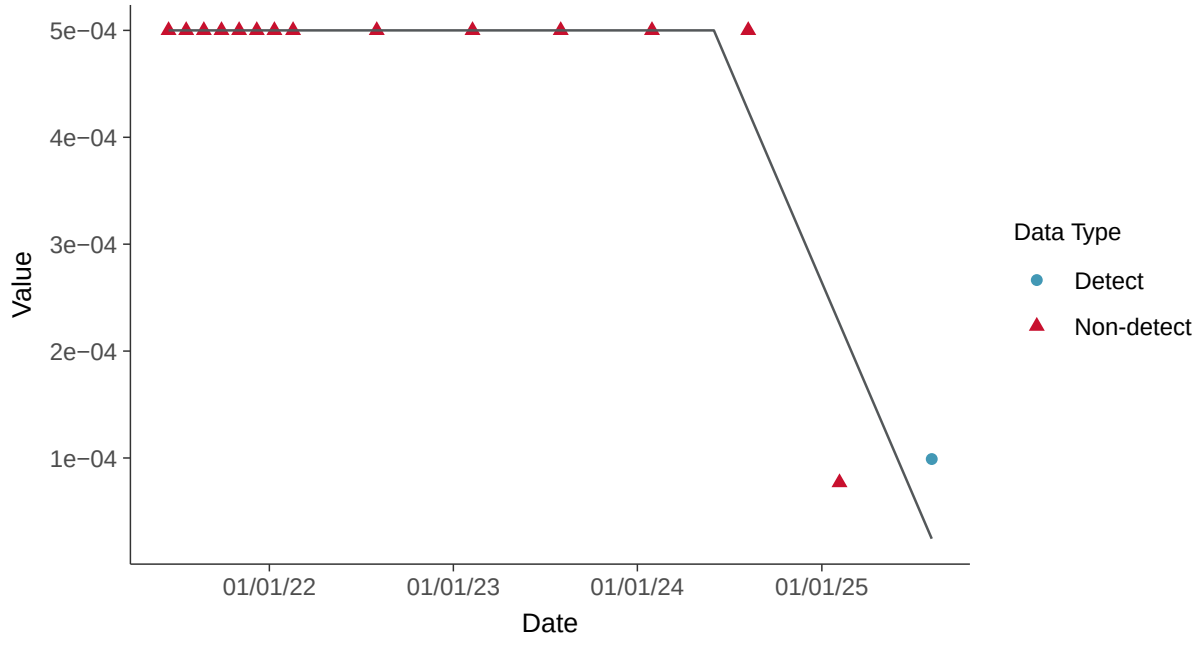
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-10 (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-10 (mg/l)

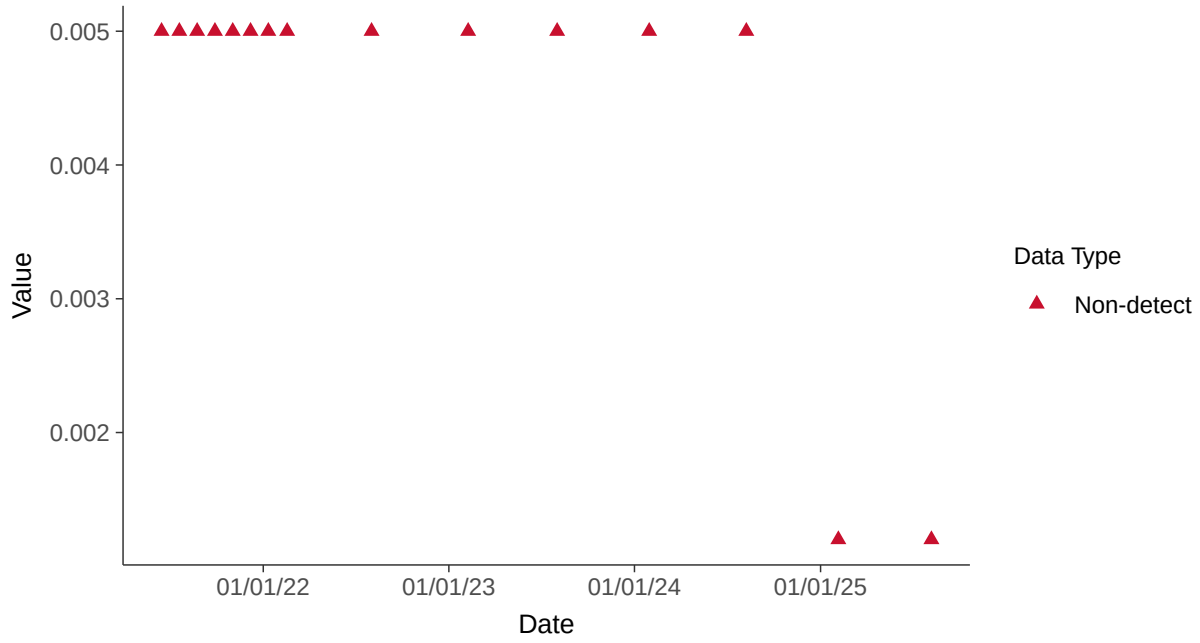


Appendix IV: Chromium, MW-10

ID: 21_3_109

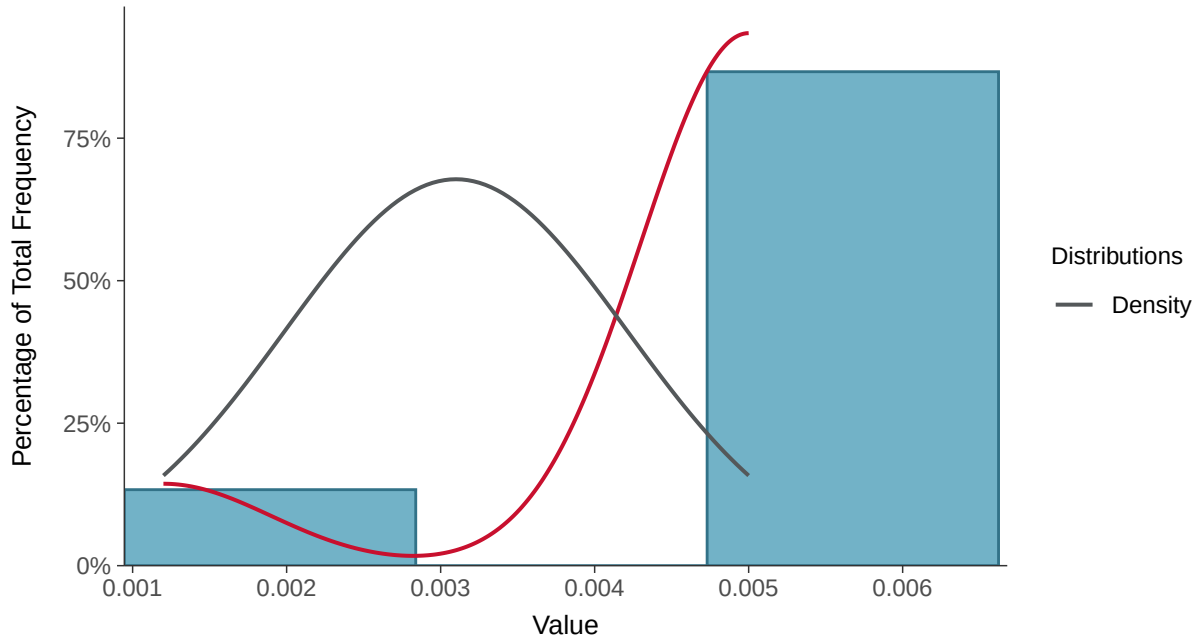
Scatter Plot

Chromium, MW-10 (mg/l)



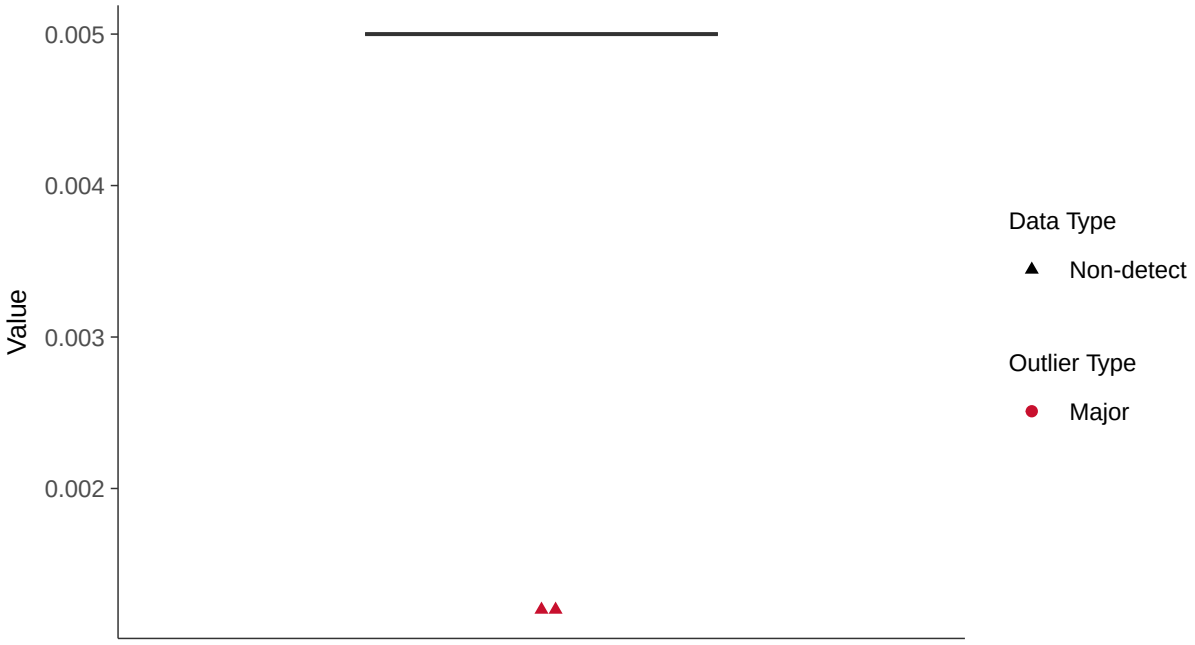
Histogram

Chromium, MW-10 (mg/l)



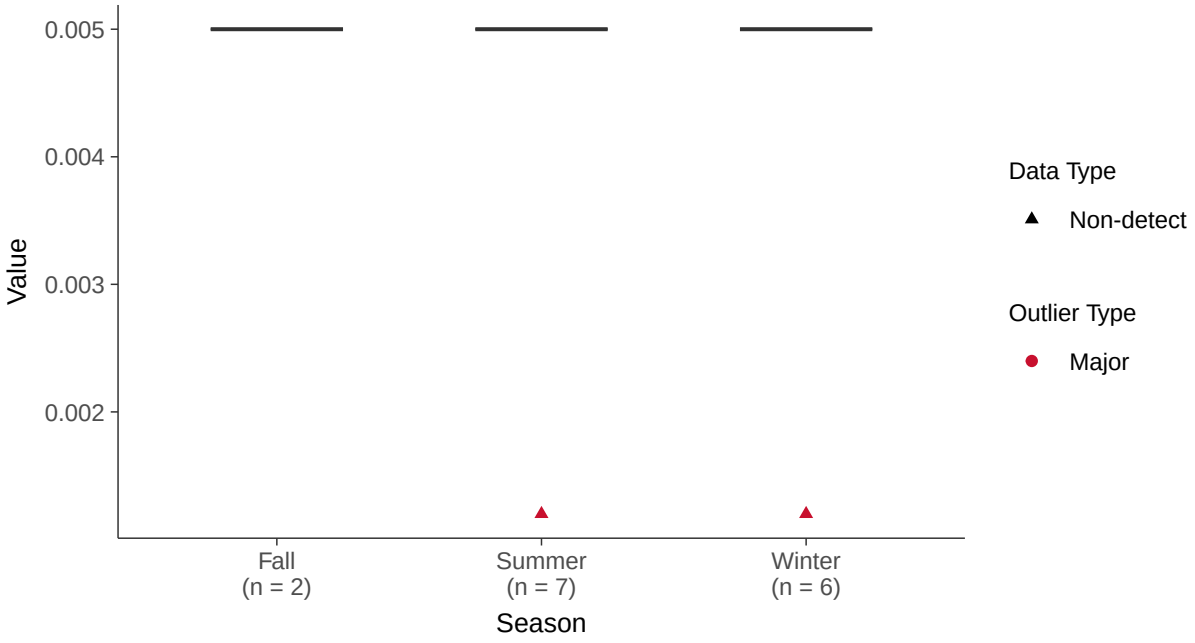
Boxplot

Chromium, MW-10 (mg/l)



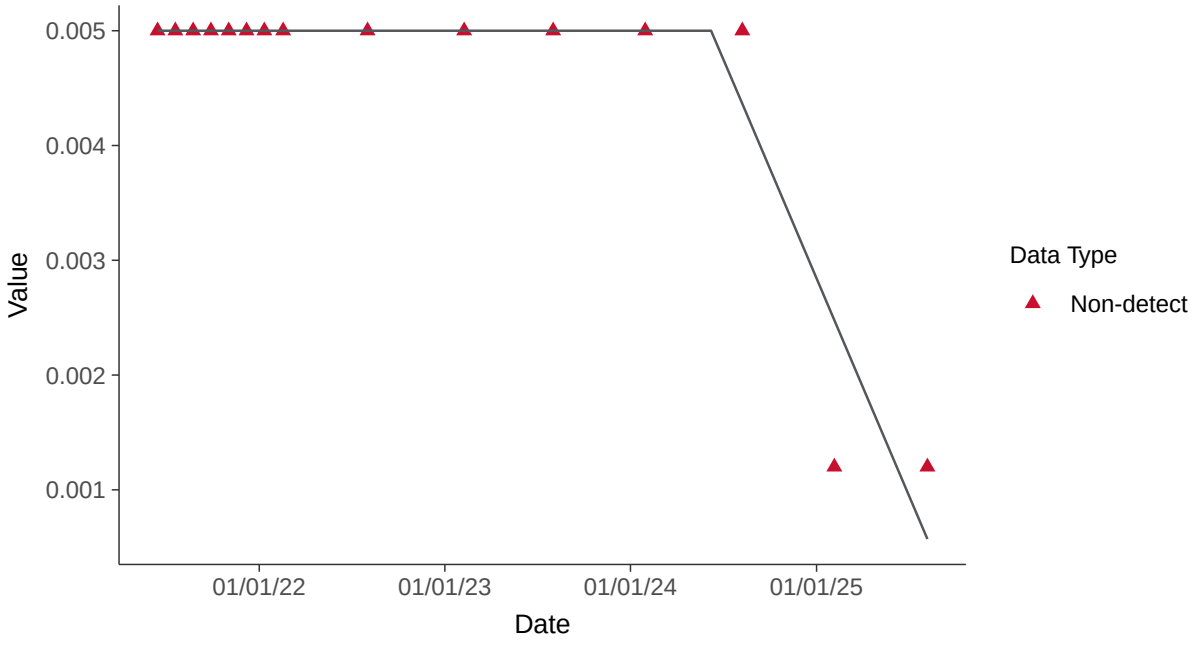
Boxplot by Season

Chromium, MW-10 (mg/l)



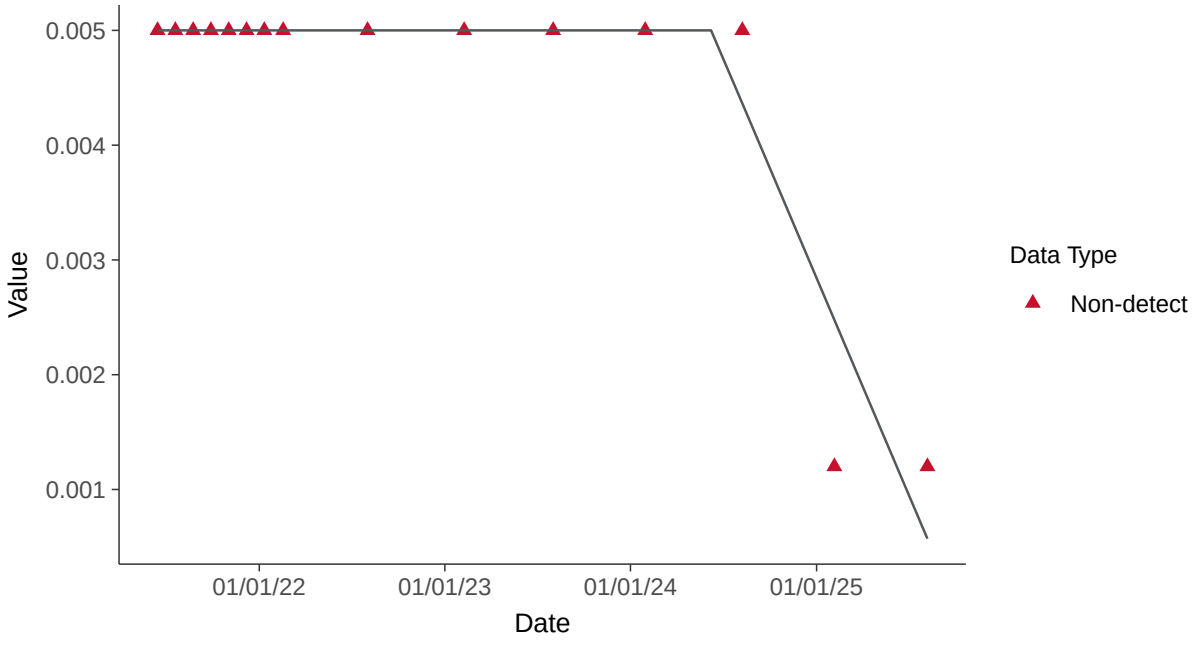
Trend Regression: Piecewise Linear-Linear

Chromium, MW-10 (mg/l)



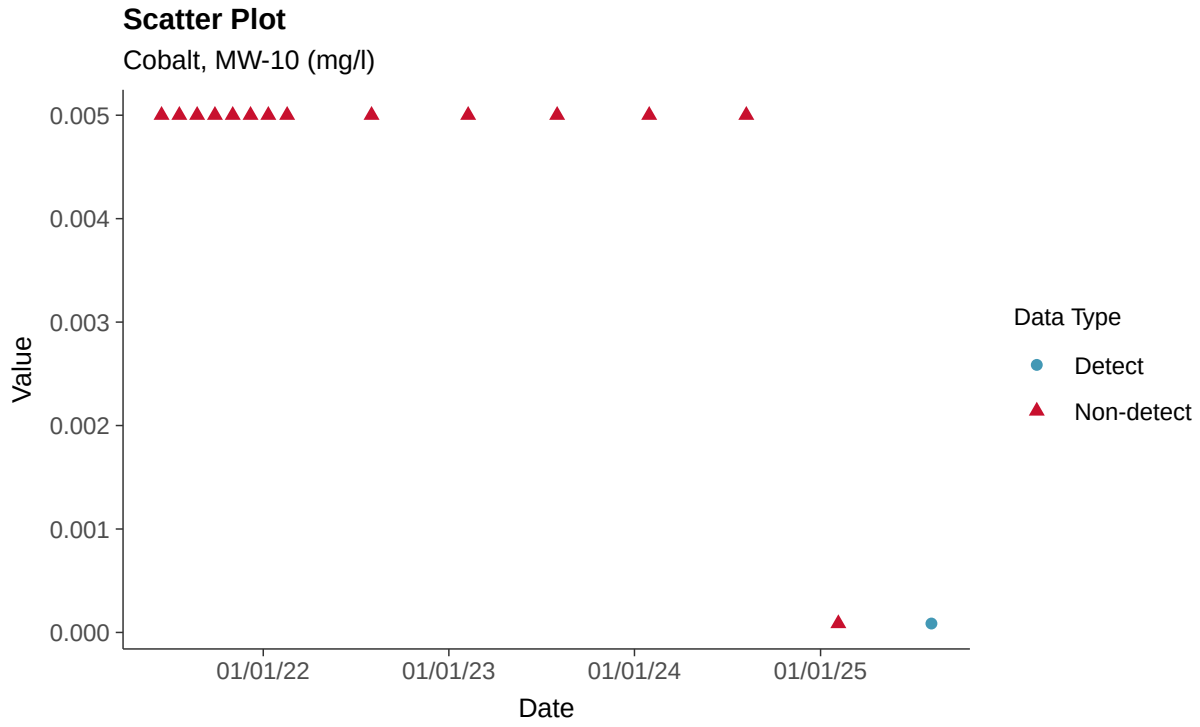
Trend Regression: Piecewise Linear-Linear-Linear

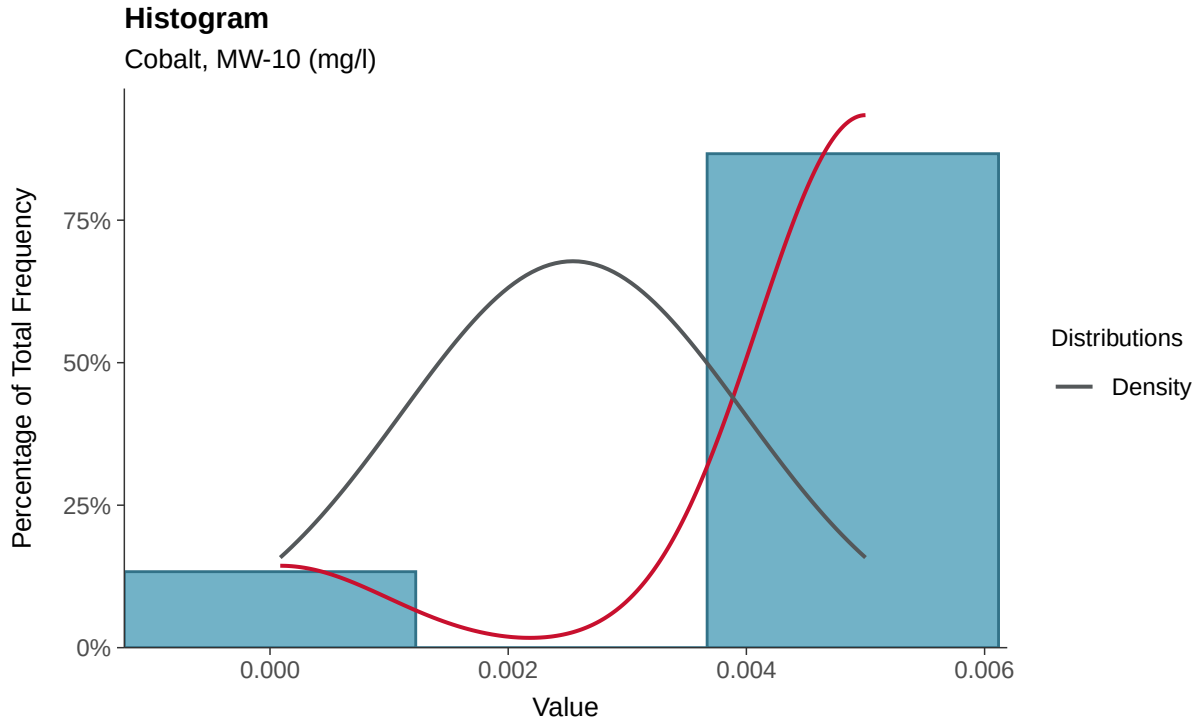
Chromium, MW-10 (mg/l)



Appendix IV: Cobalt, MW-10

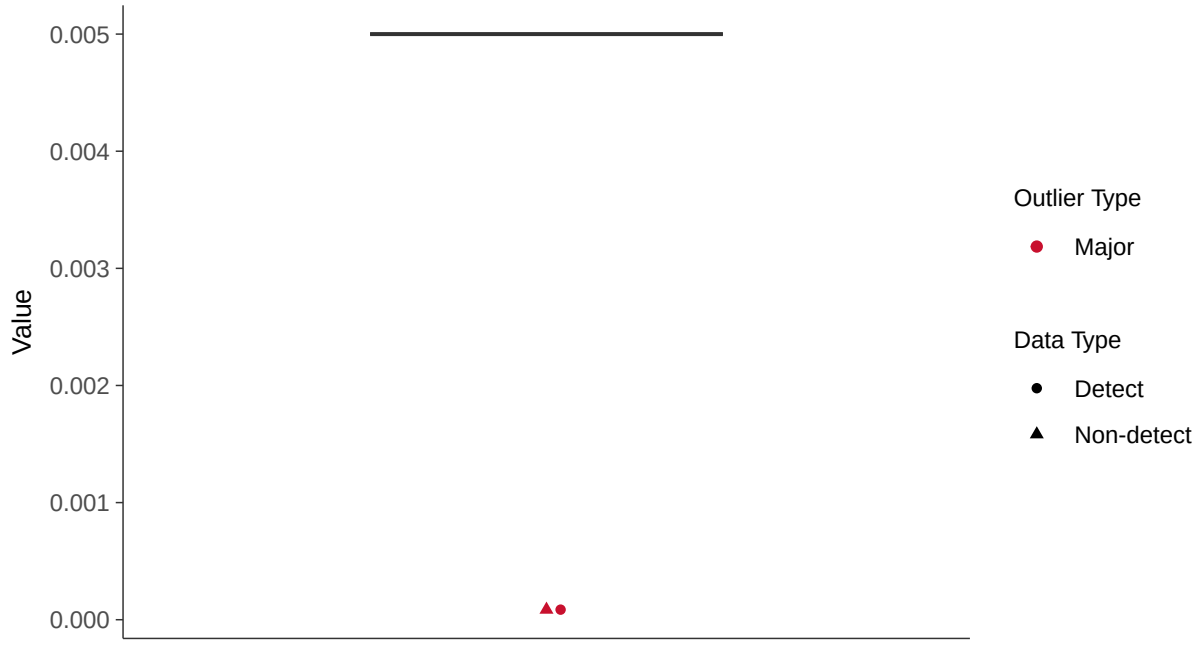
ID: 21_3_110





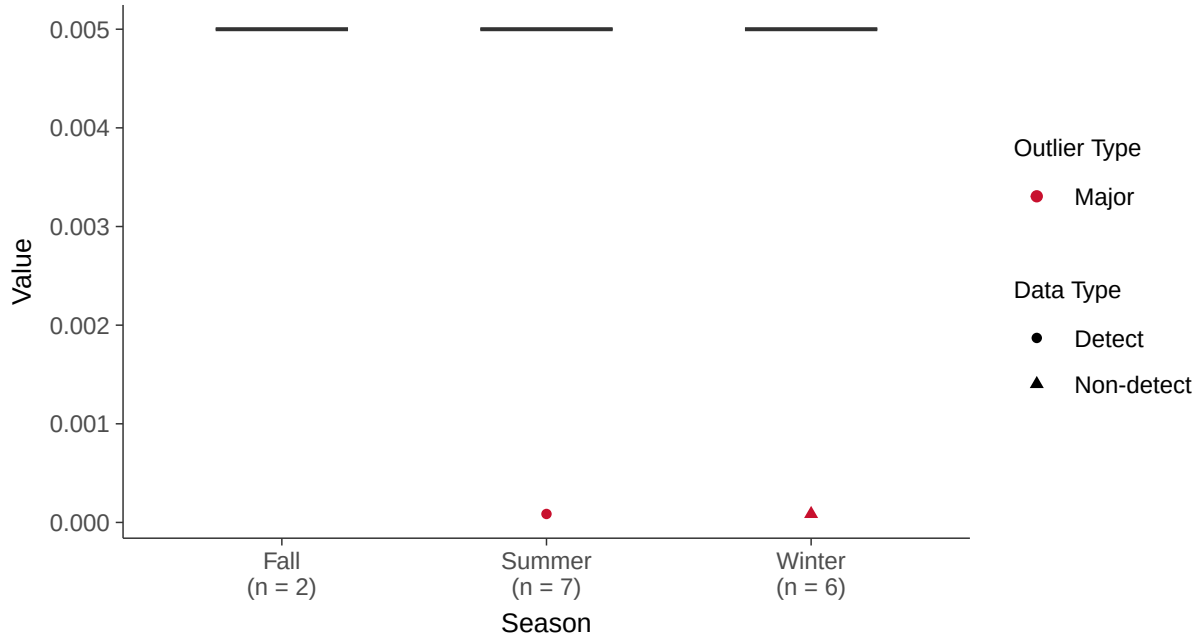
Boxplot

Cobalt, MW-10 (mg/l)



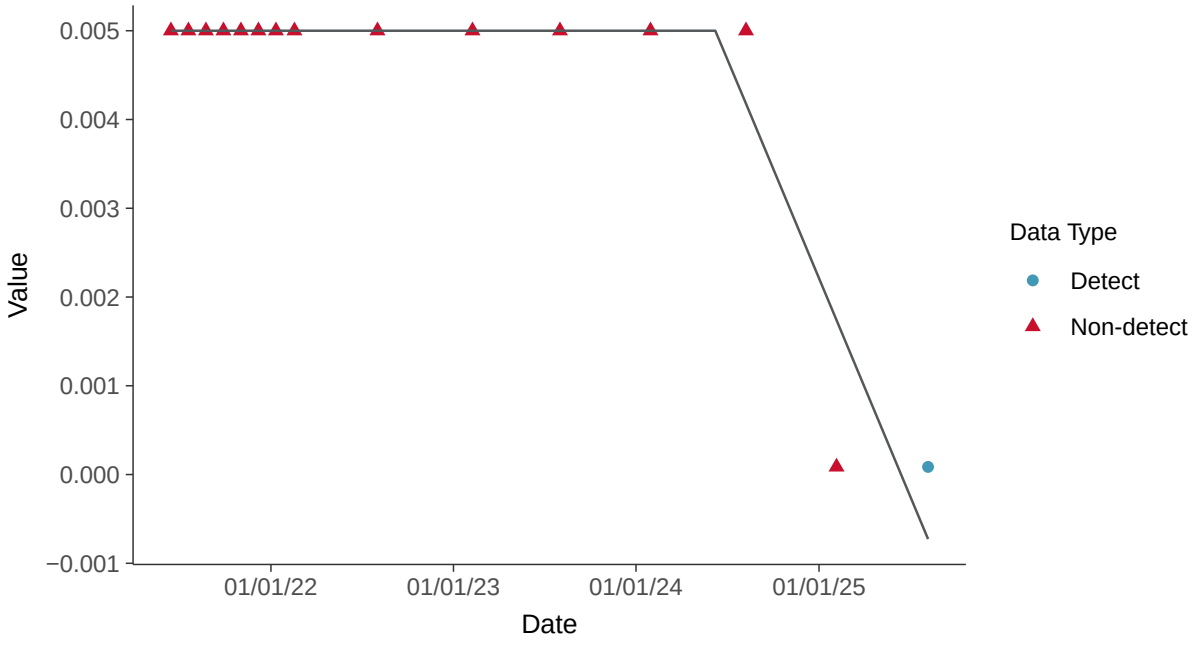
Boxplot by Season

Cobalt, MW-10 (mg/l)



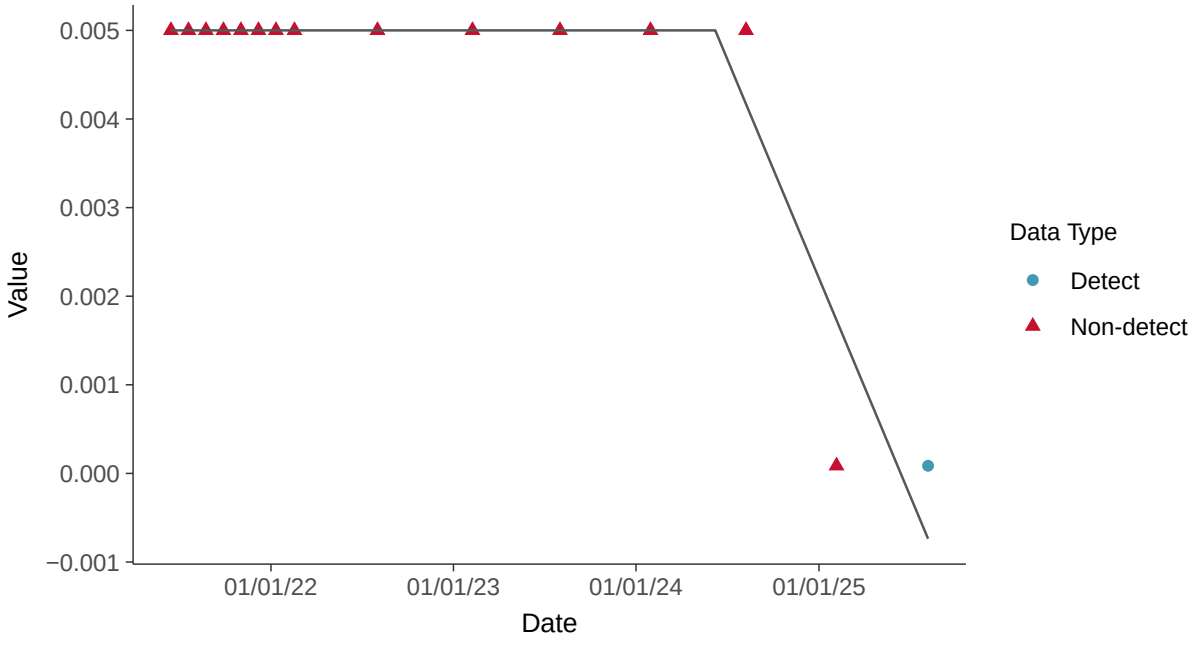
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-10 (mg/l)



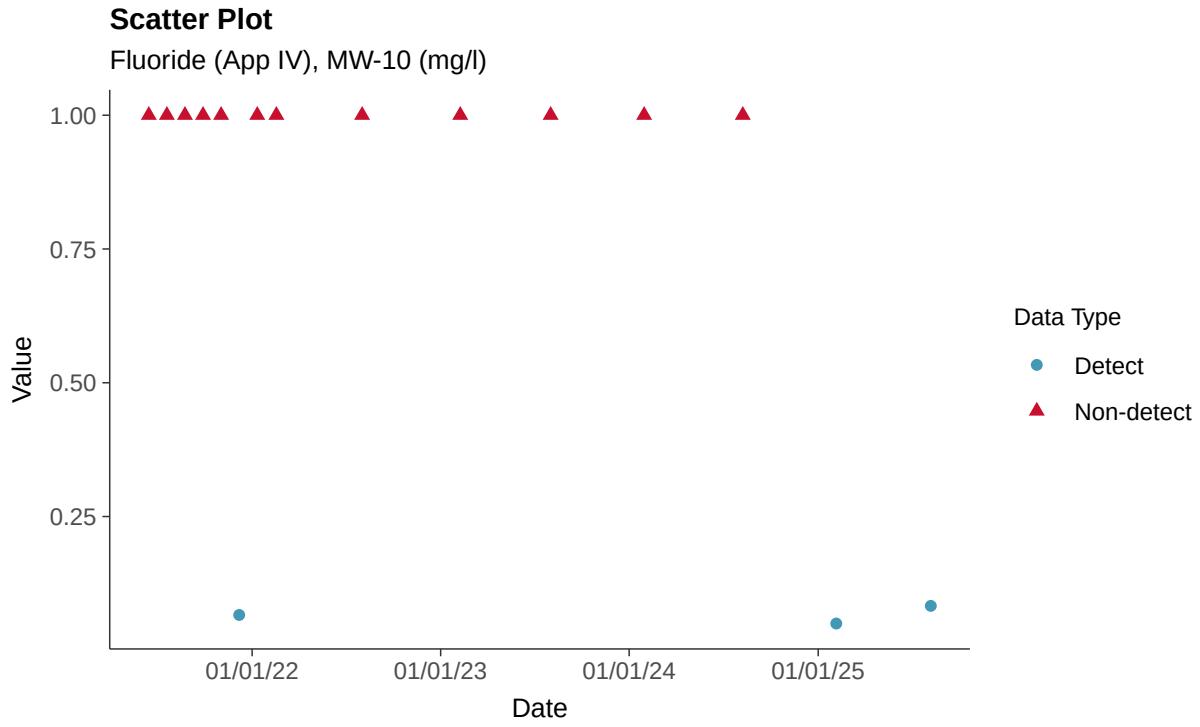
Trend Regression: Piecewise Linear-Linear-Linear

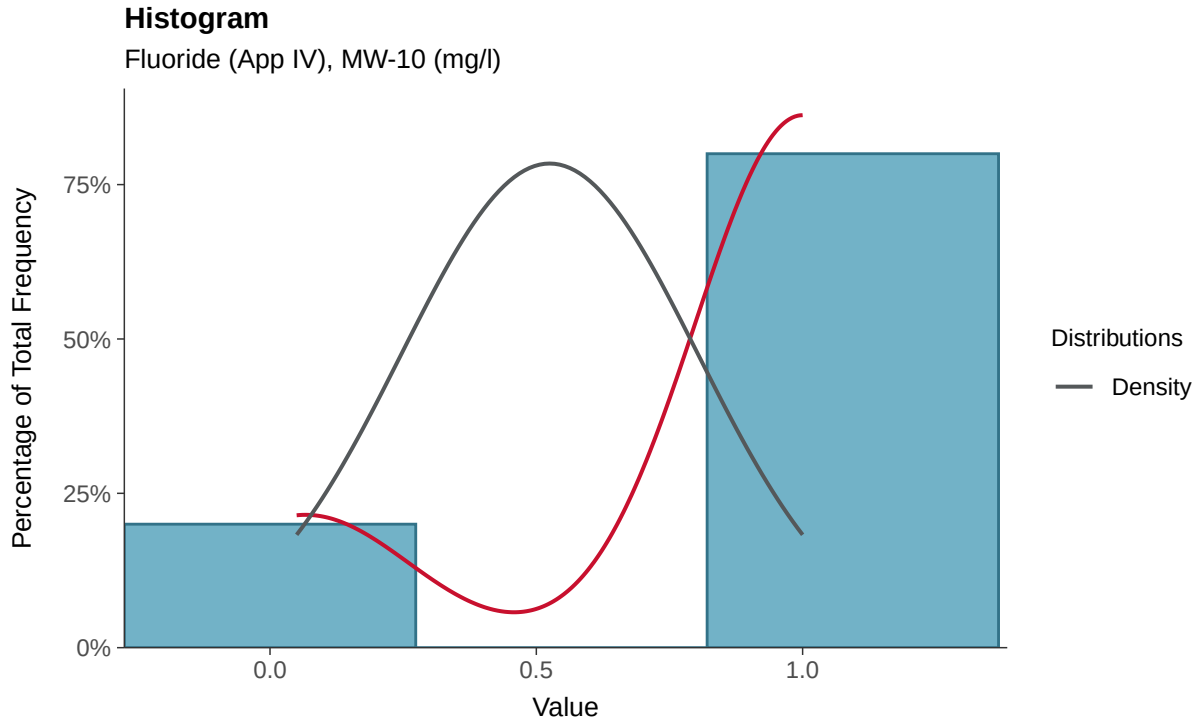
Cobalt, MW-10 (mg/l)



Appendix IV: Fluoride (App IV), MW-10

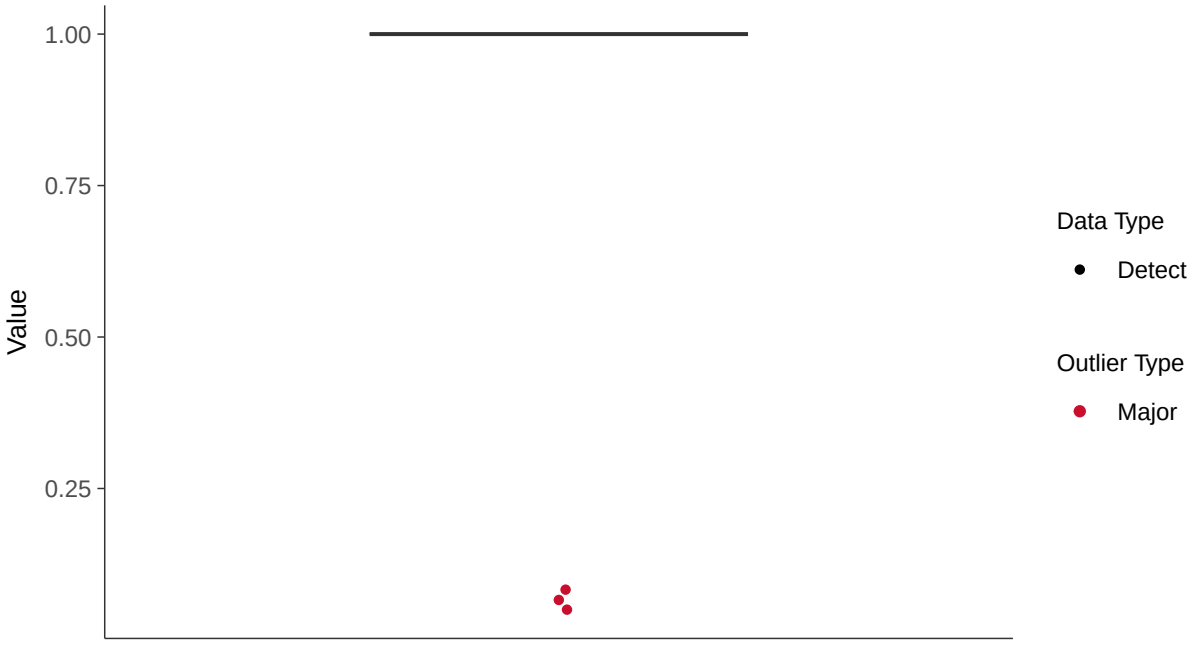
ID: 21_3_113





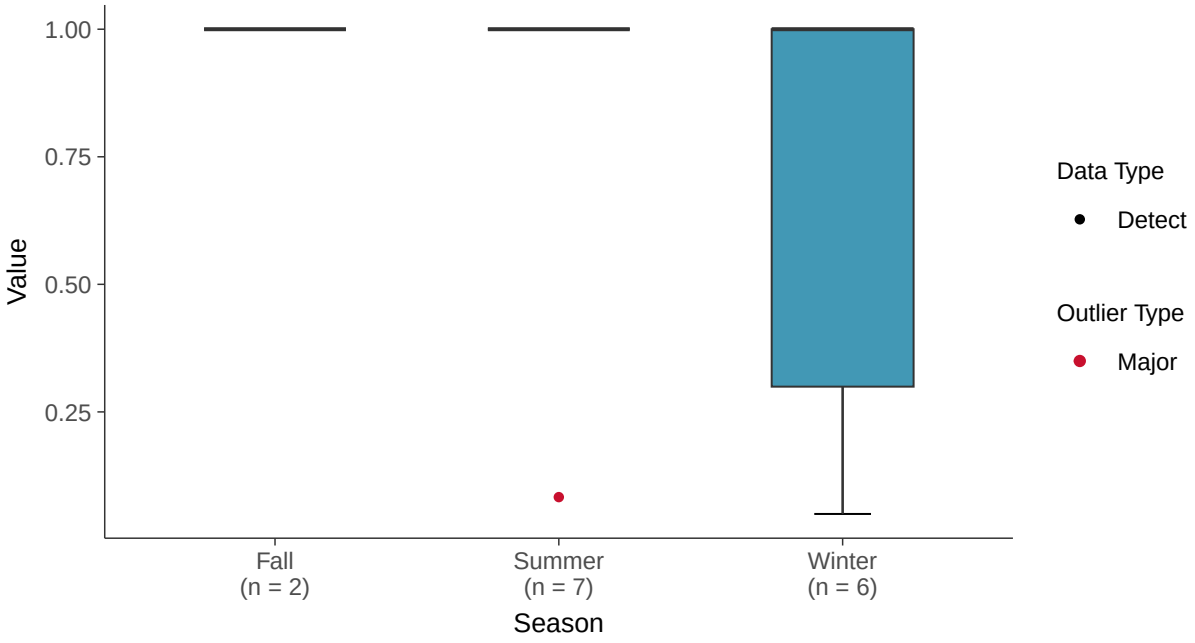
Boxplot

Fluoride (App IV), MW-10 (mg/l)



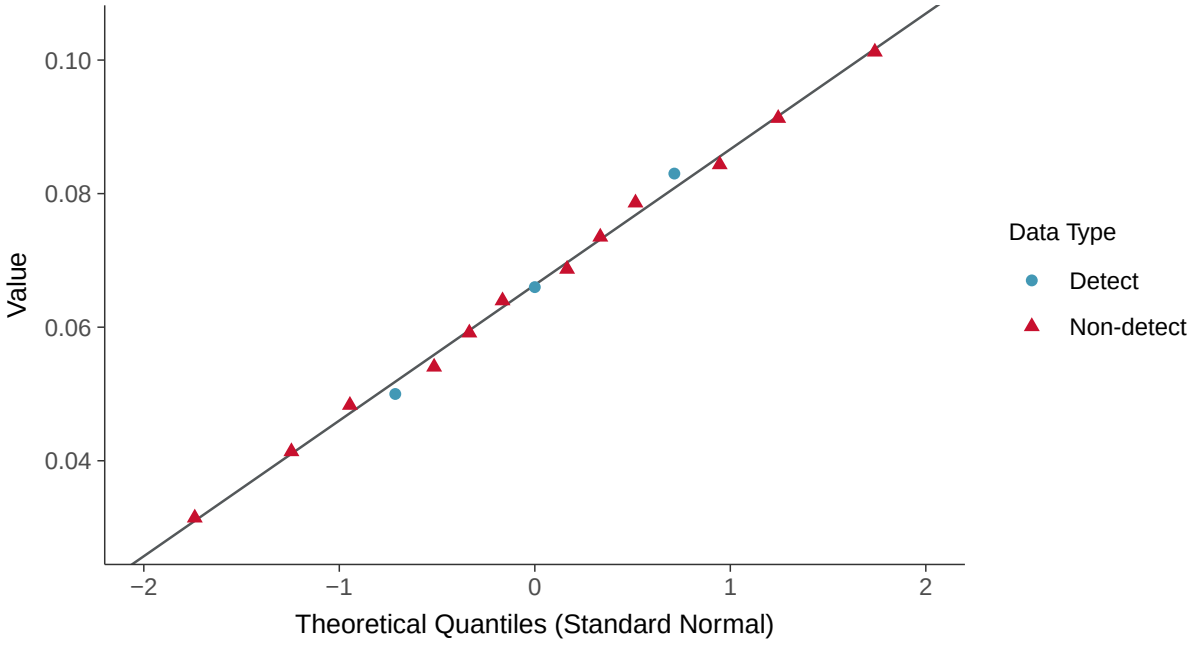
Boxplot by Season

Fluoride (App IV), MW-10 (mg/l)



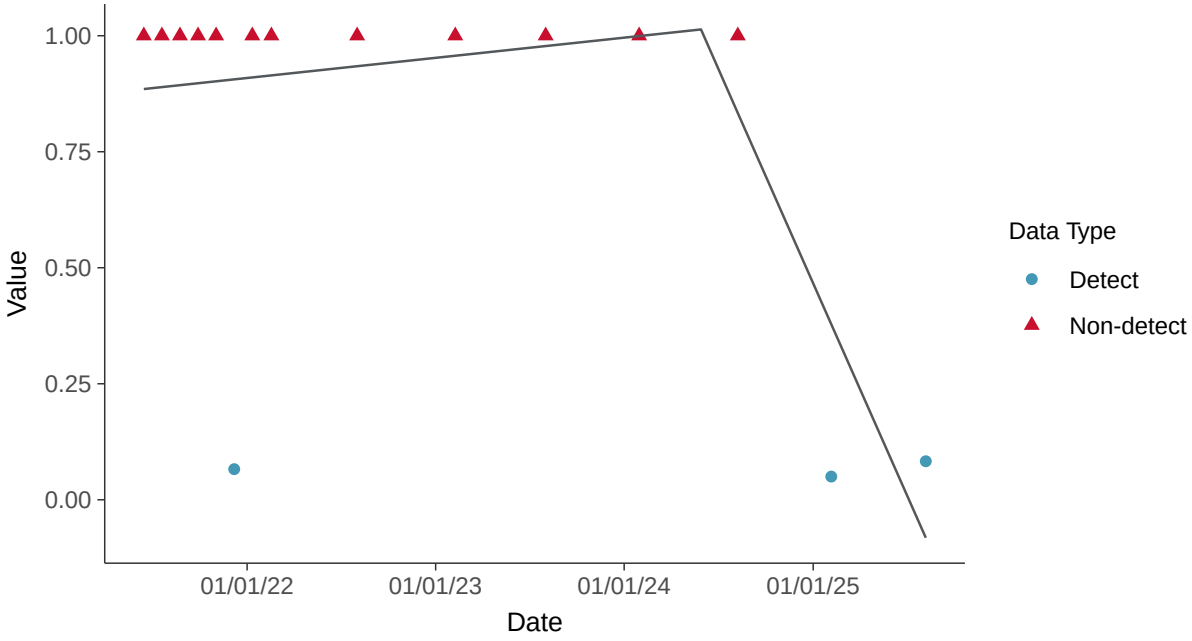
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-10 (mg/l)



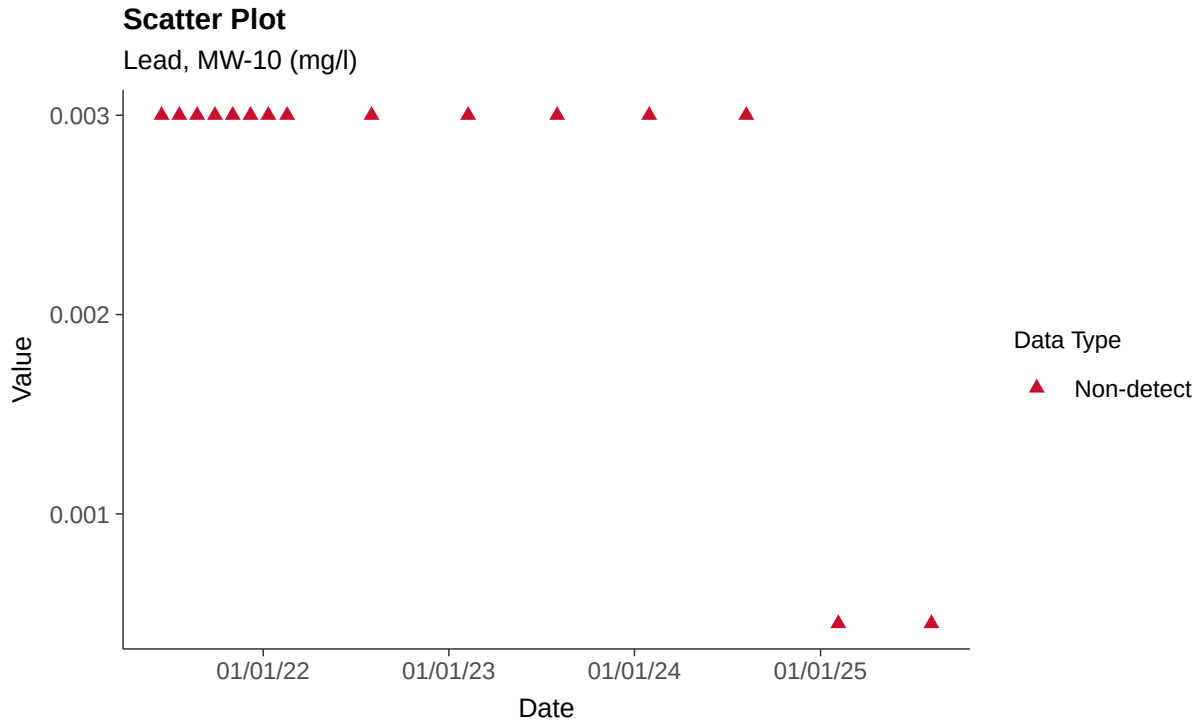
Trend Regression: Piecewise Linear-Linear

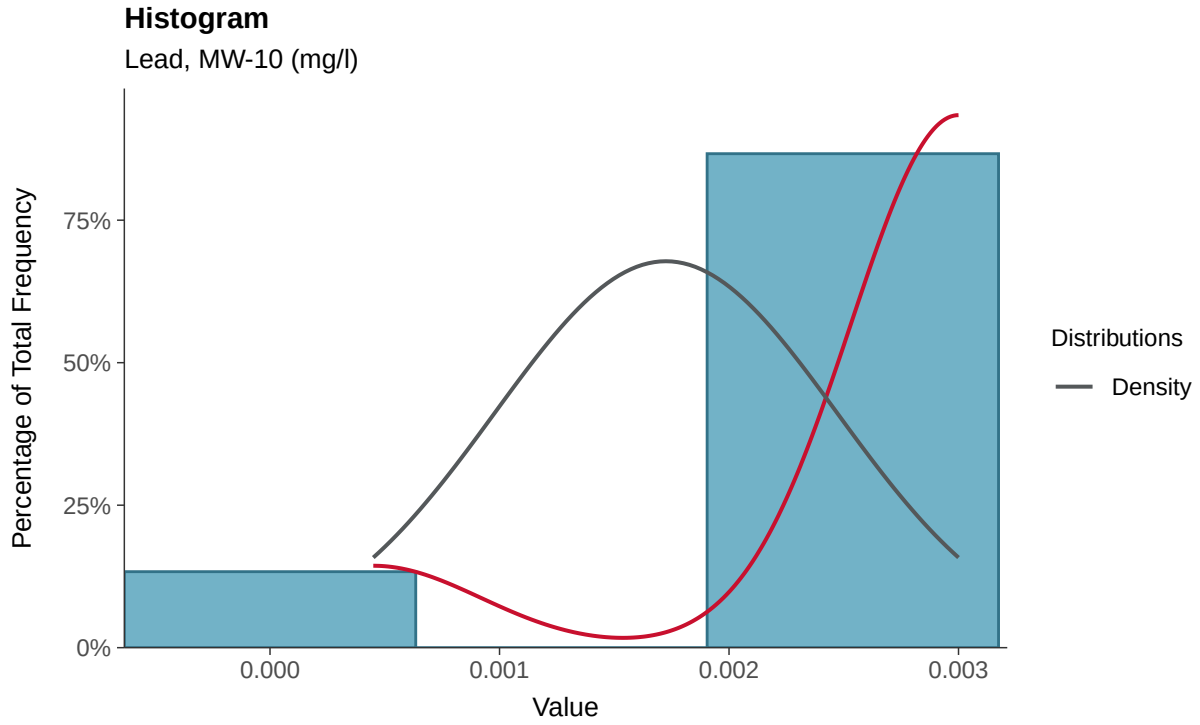
Fluoride (App IV), MW-10 (mg/l)



Appendix IV: Lead, MW-10

ID: 21_3_115



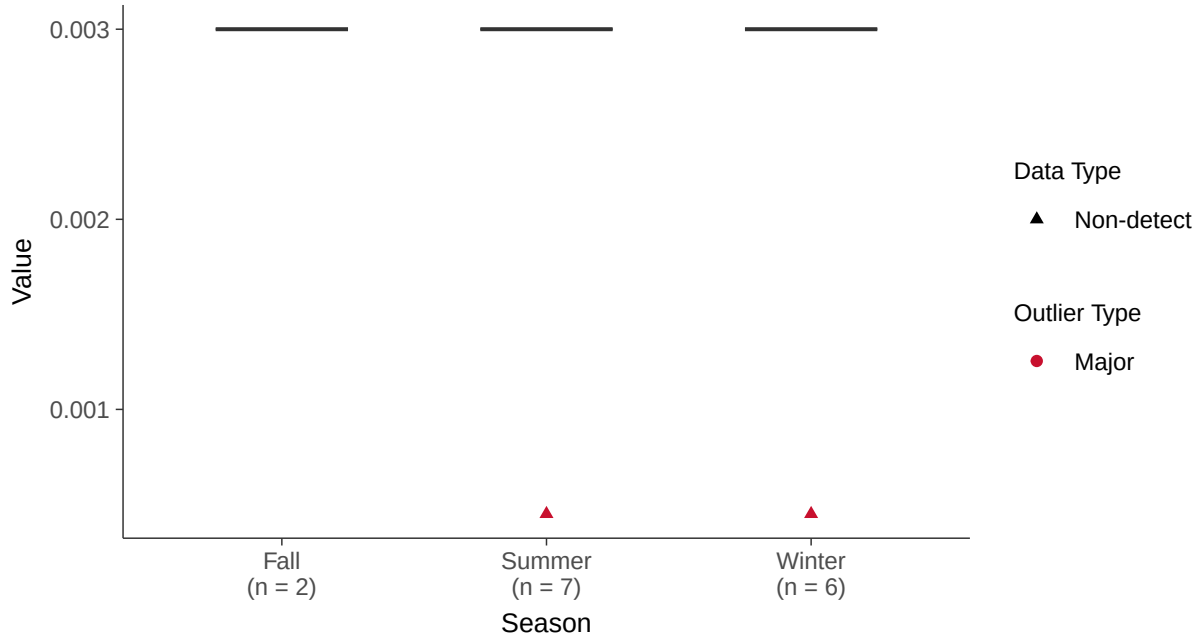


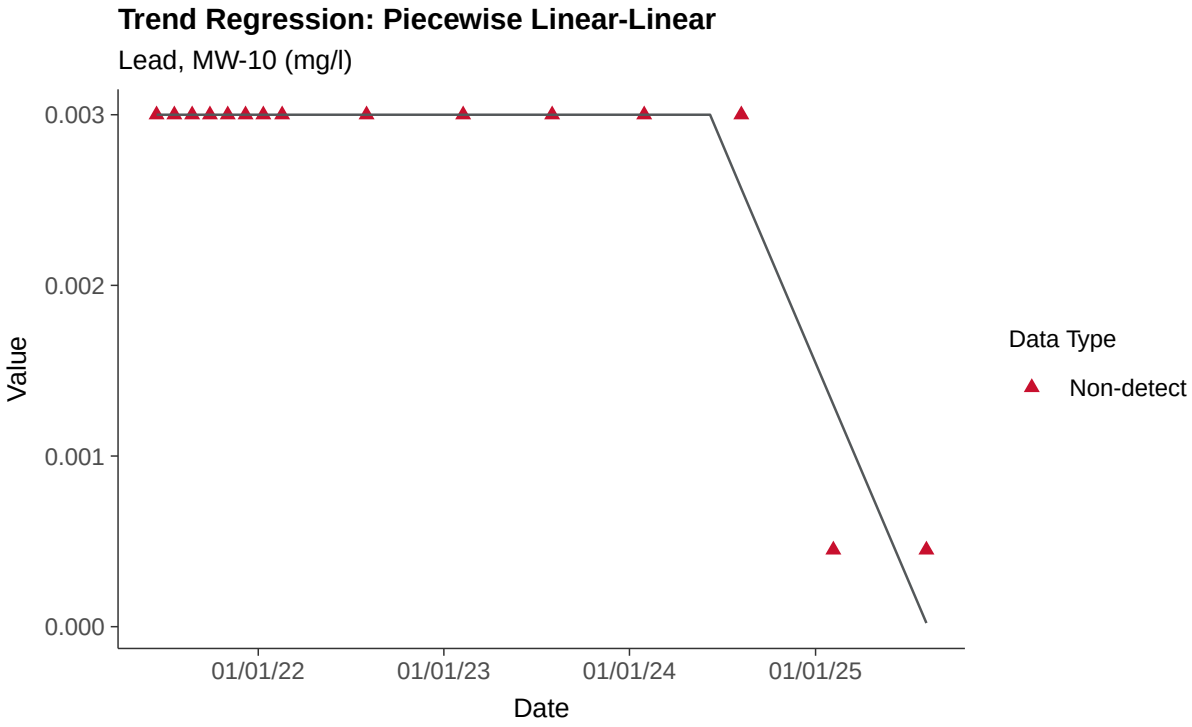
Boxplot

Lead, MW-10 (mg/l)

Boxplot by Season

Lead, MW-10 (mg/l)



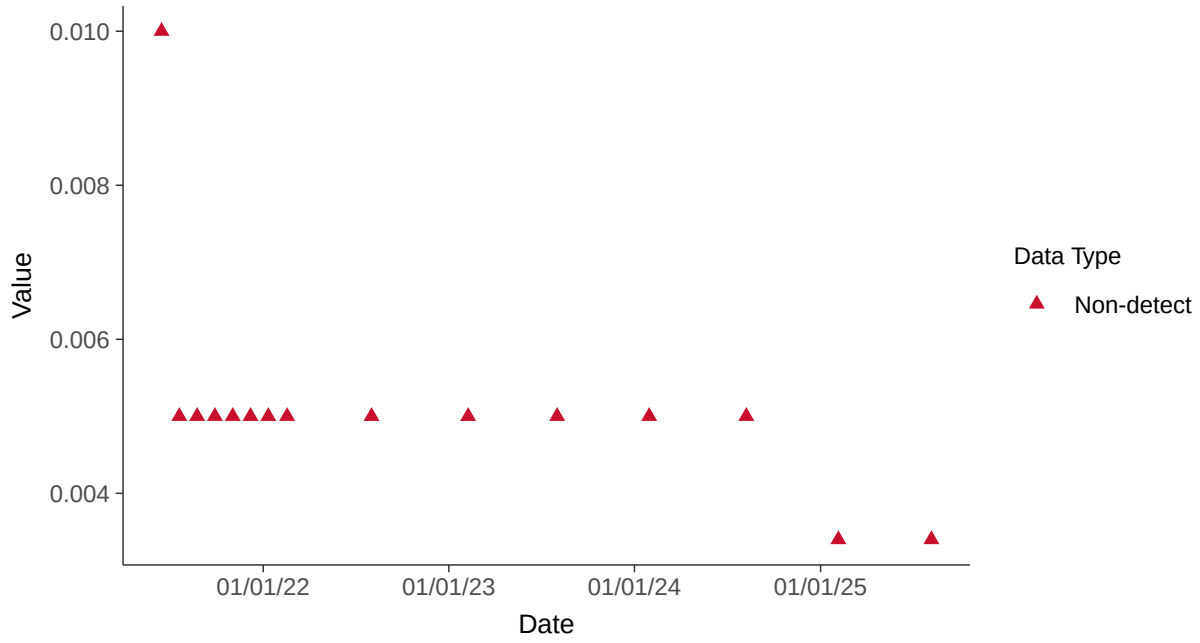

Trend Regression: Piecewise Linear-Linear
Lead, MW-10 (mg/l)
0.003
0.002
0.001
0.000
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Appendix IV: Lithium, MW-10

ID: 21_3_116

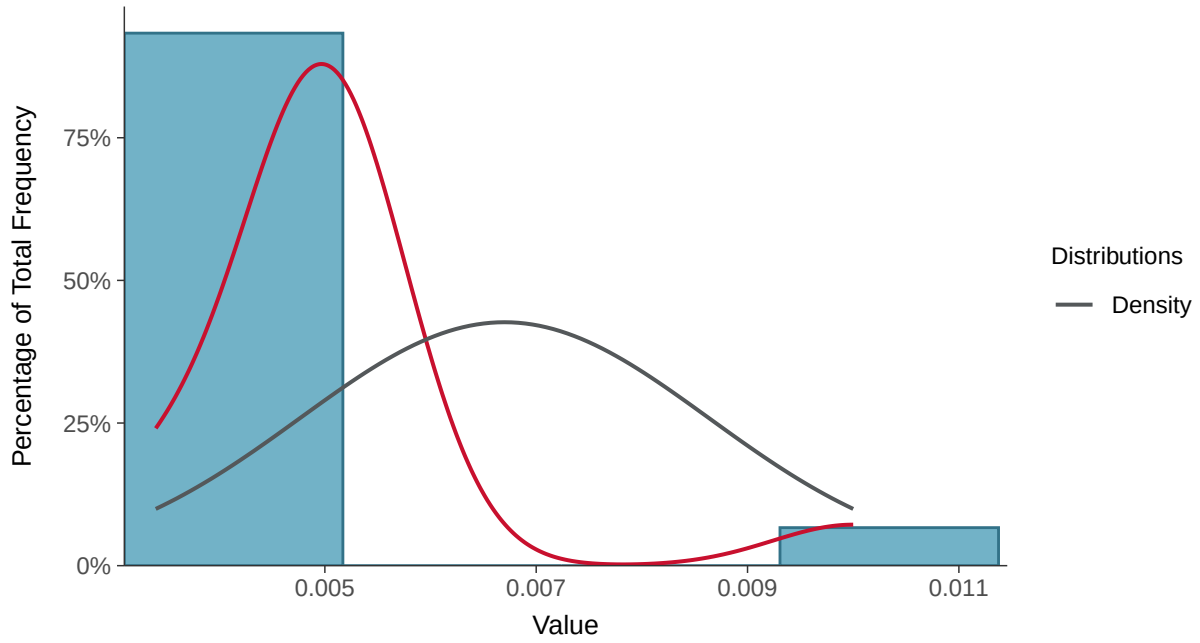
Scatter Plot

Lithium, MW-10 (mg/l)



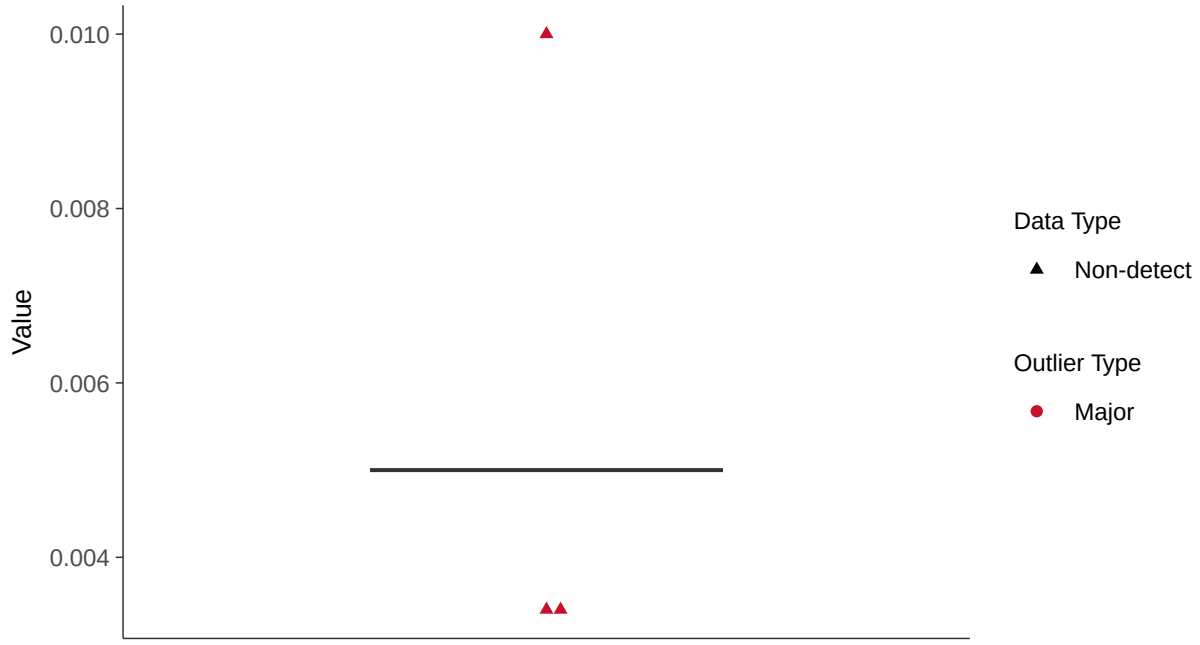
Histogram

Lithium, MW-10 (mg/l)



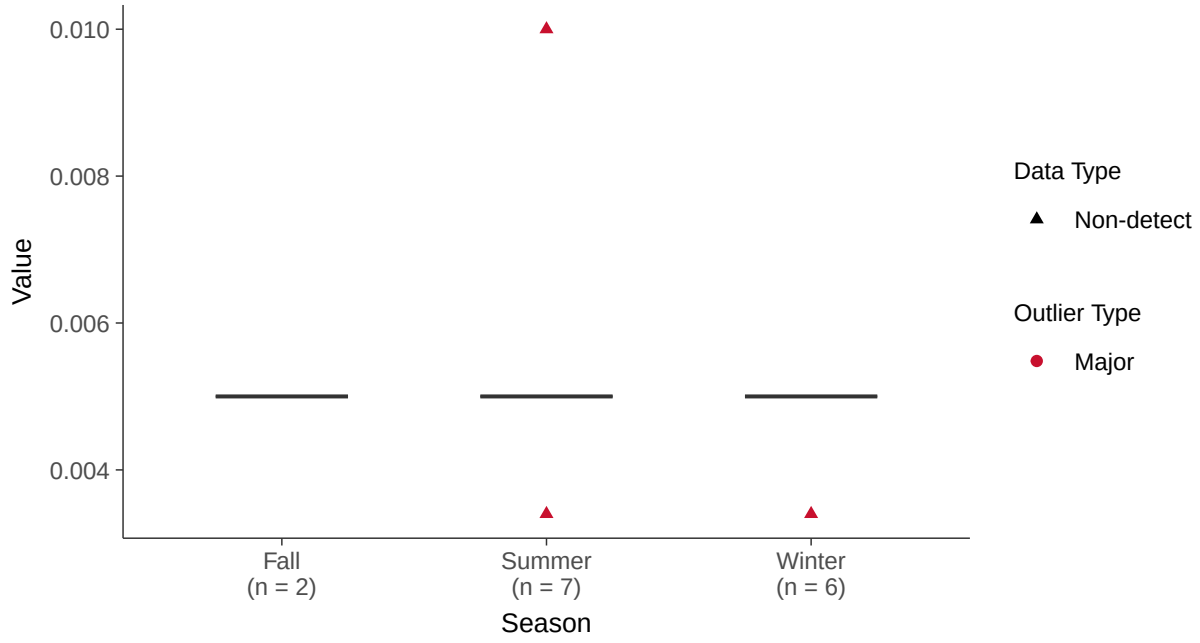
Boxplot

Lithium, MW-10 (mg/l)



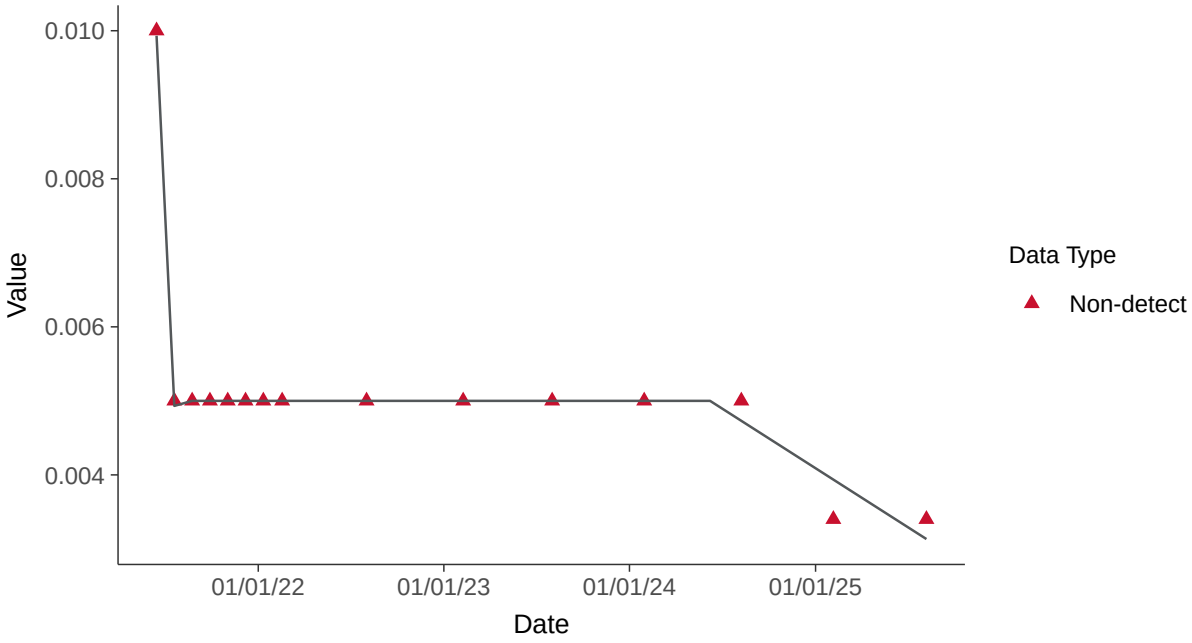
Boxplot by Season

Lithium, MW-10 (mg/l)



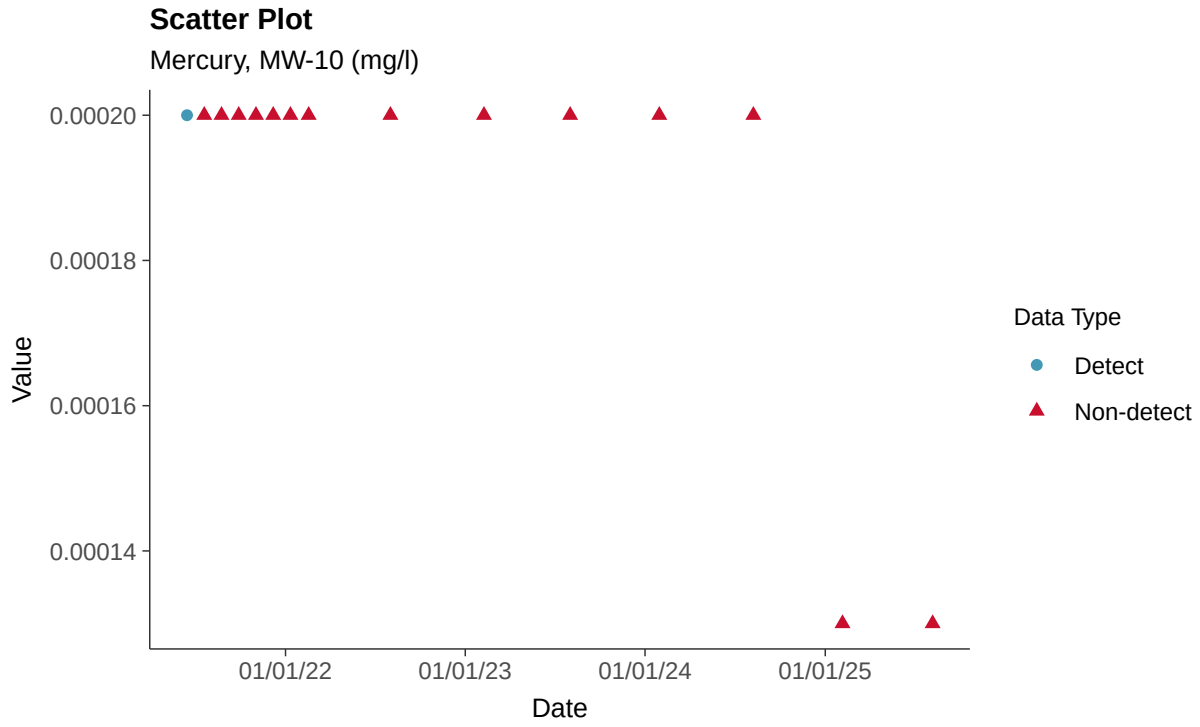
Trend Regression: Piecewise Linear-Linear-Linear

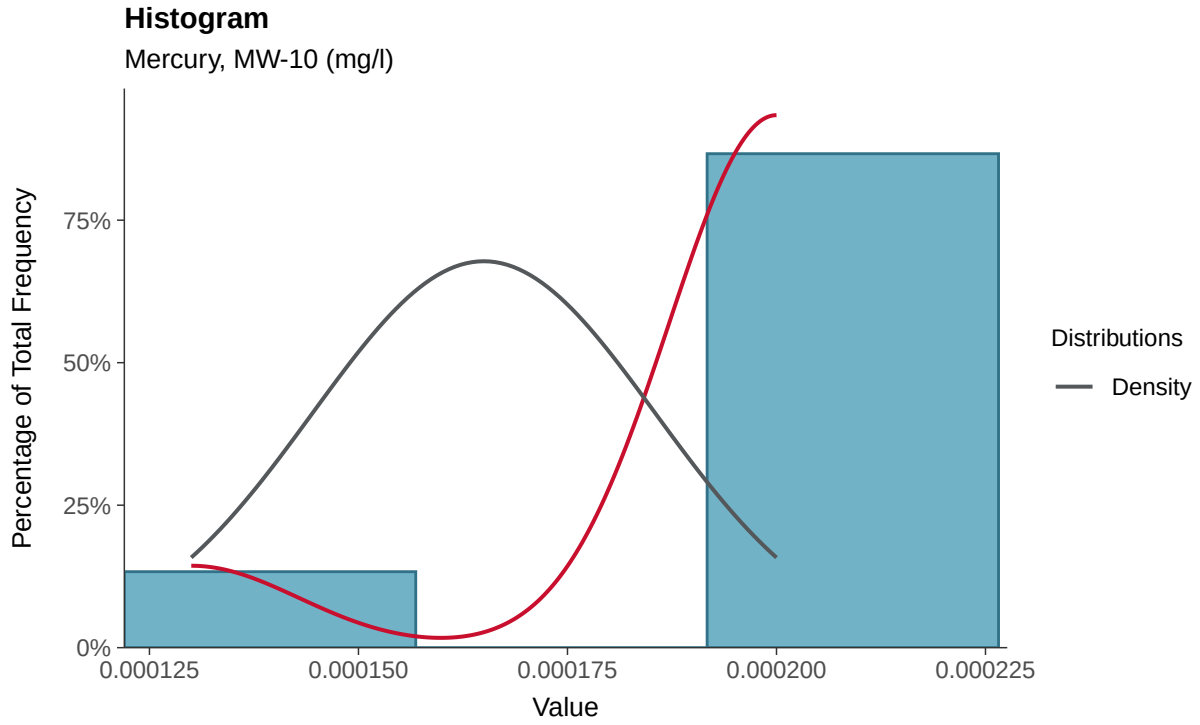
Lithium, MW-10 (mg/l)



Appendix IV: Mercury, MW-10

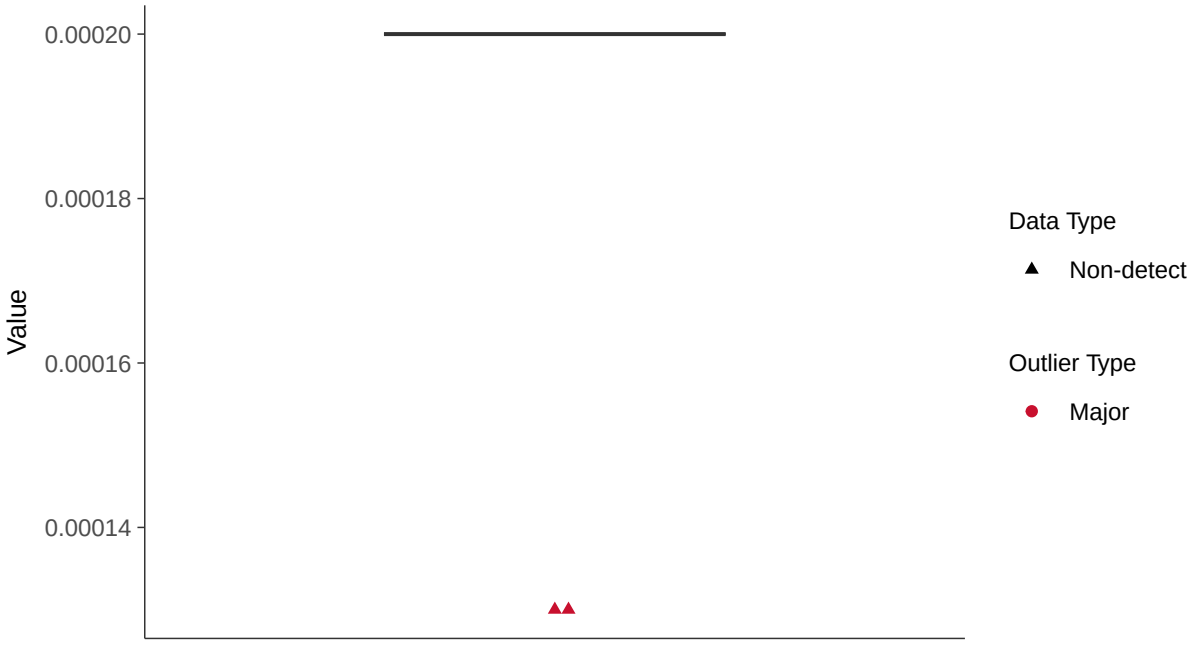
ID: 21_3_117





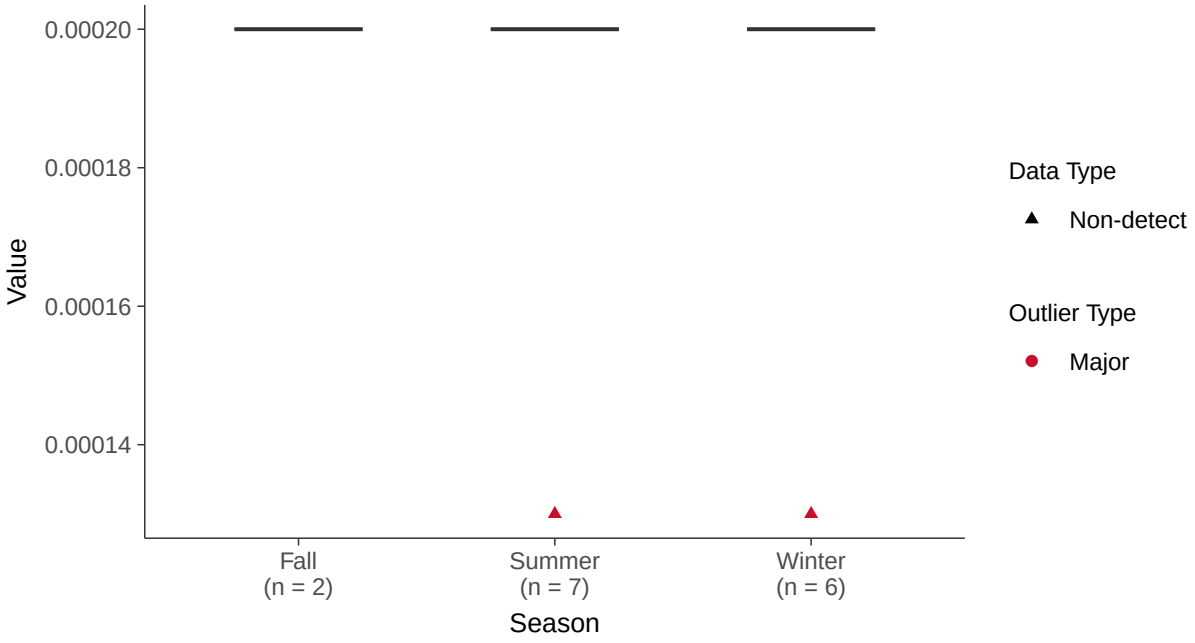
Boxplot

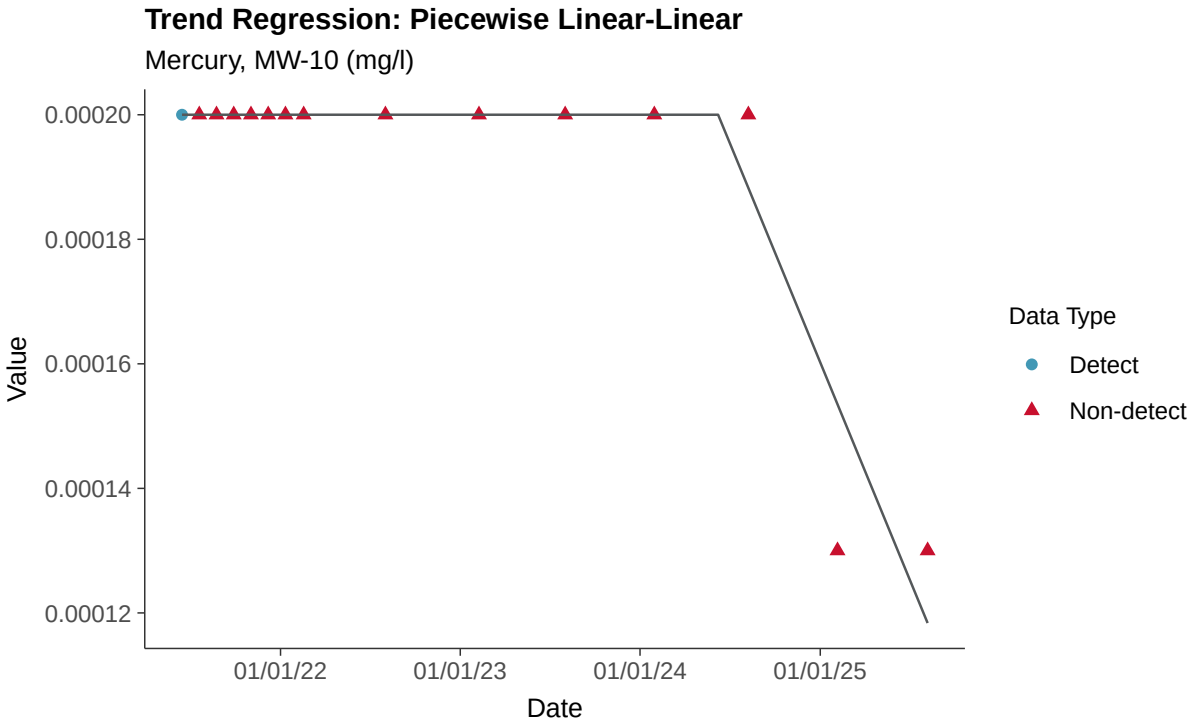
Mercury, MW-10 (mg/l)



Boxplot by Season

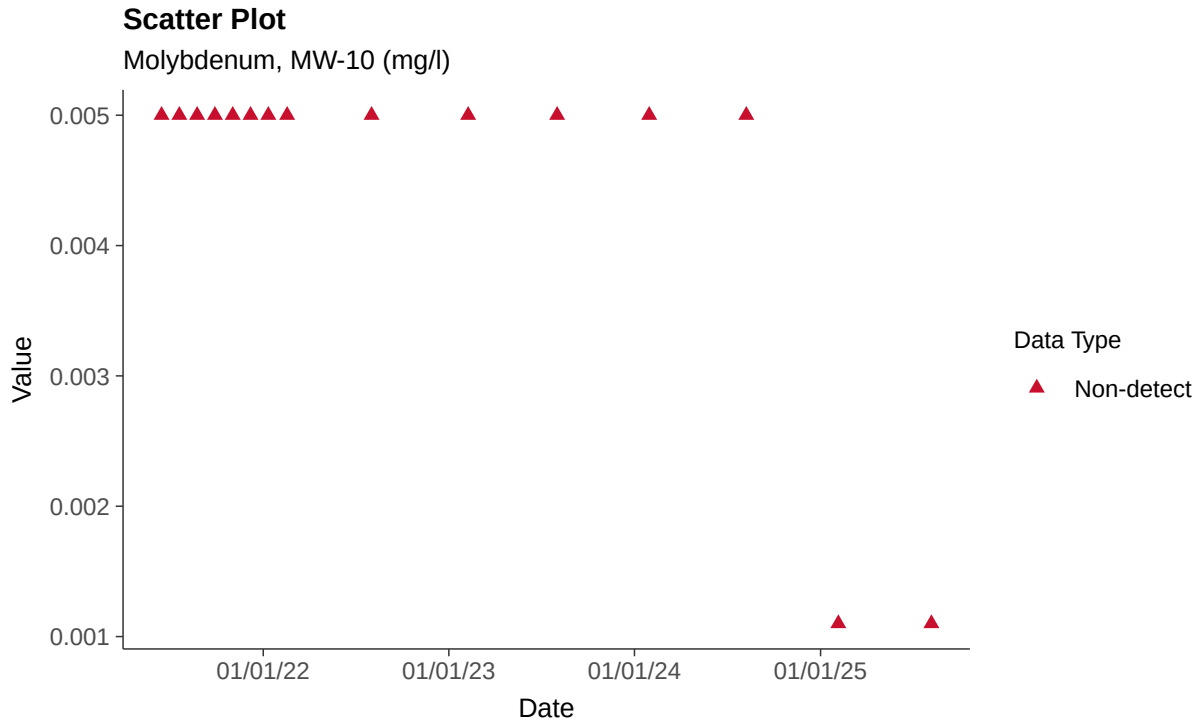
Mercury, MW-10 (mg/l)

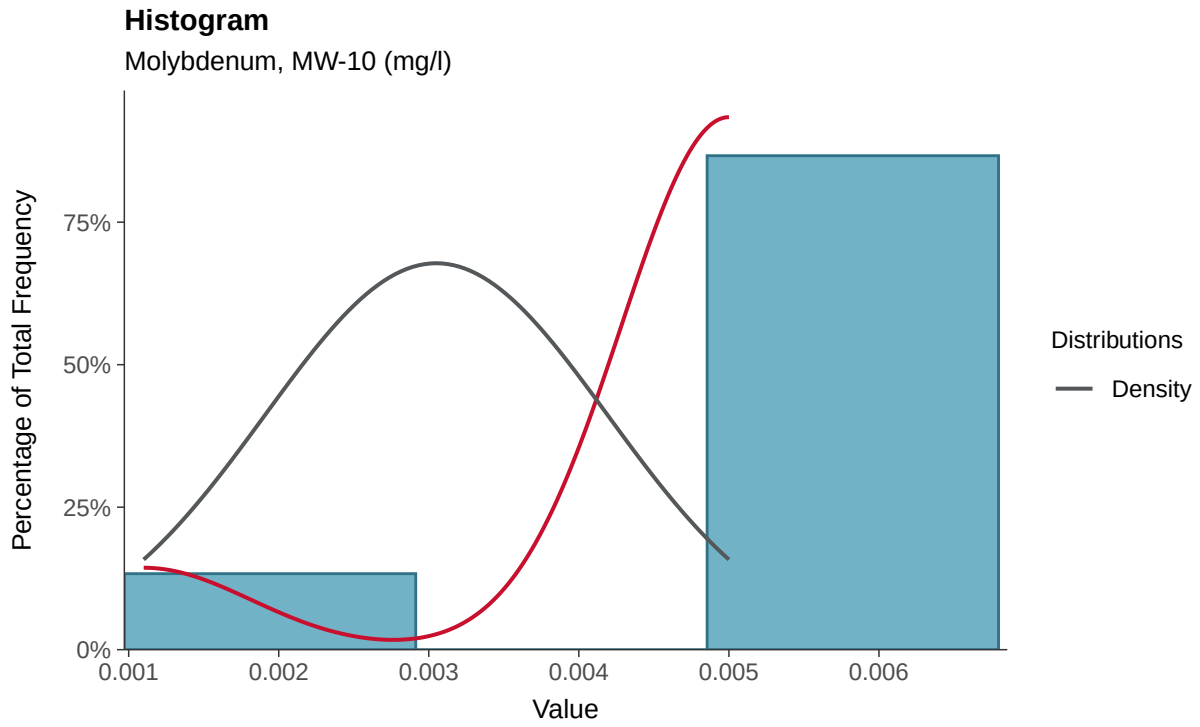



Trend Regression: Piecewise Linear-Linear
Mercury, MW-10 (mg/l)
Value
0.00020
0.00018
0.00016
0.00014
0.00012
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Molybdenum, MW-10

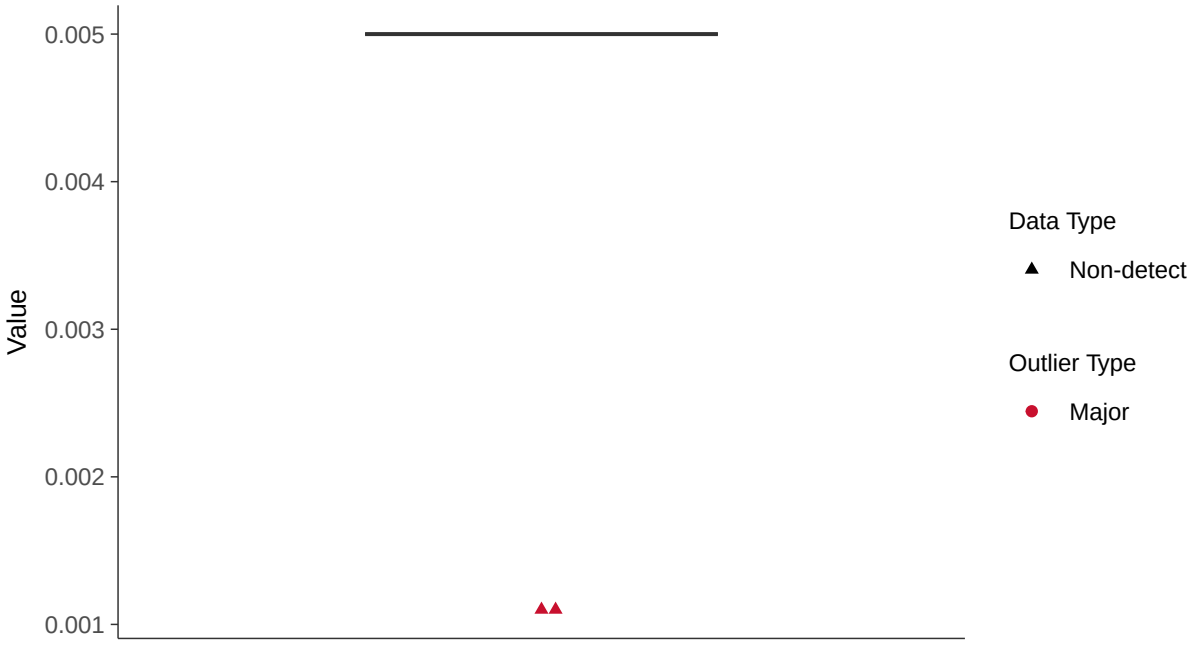
ID: 21_3_118





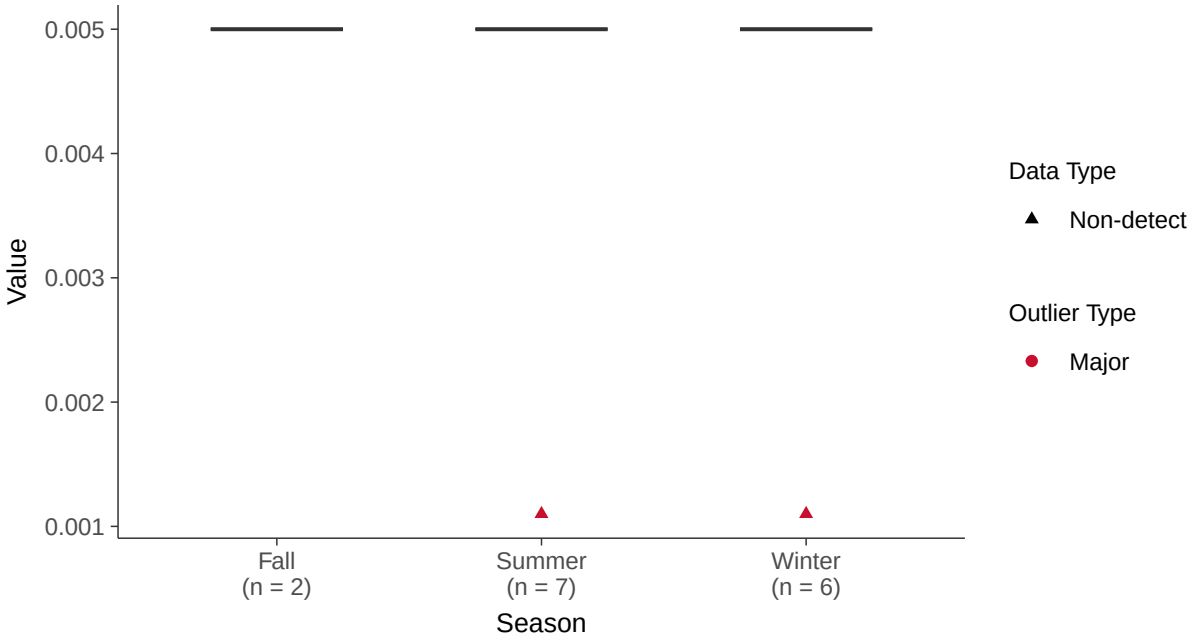
Boxplot

Molybdenum, MW-10 (mg/l)



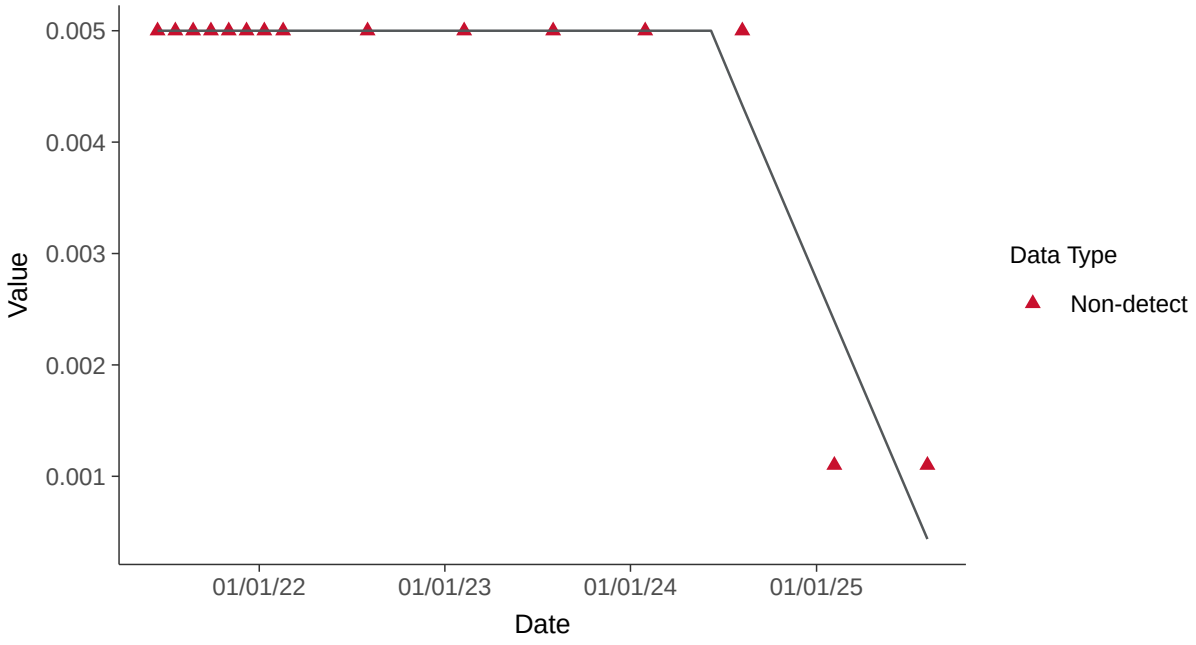
Boxplot by Season

Molybdenum, MW-10 (mg/l)



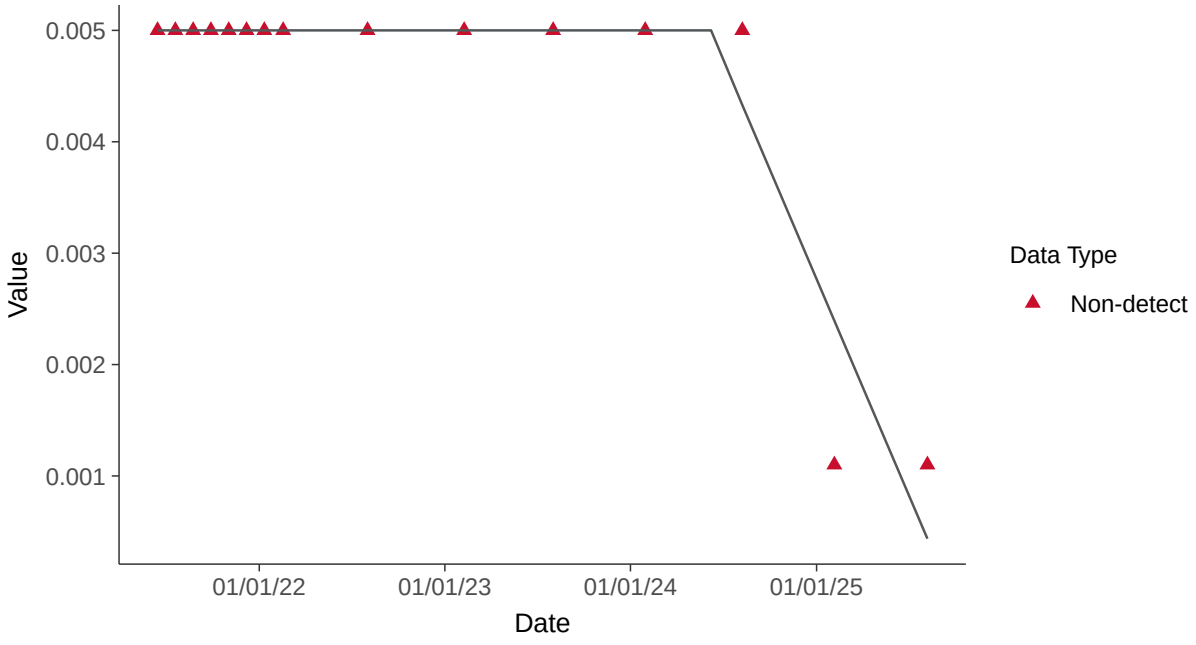
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-10 (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-10 (mg/l)

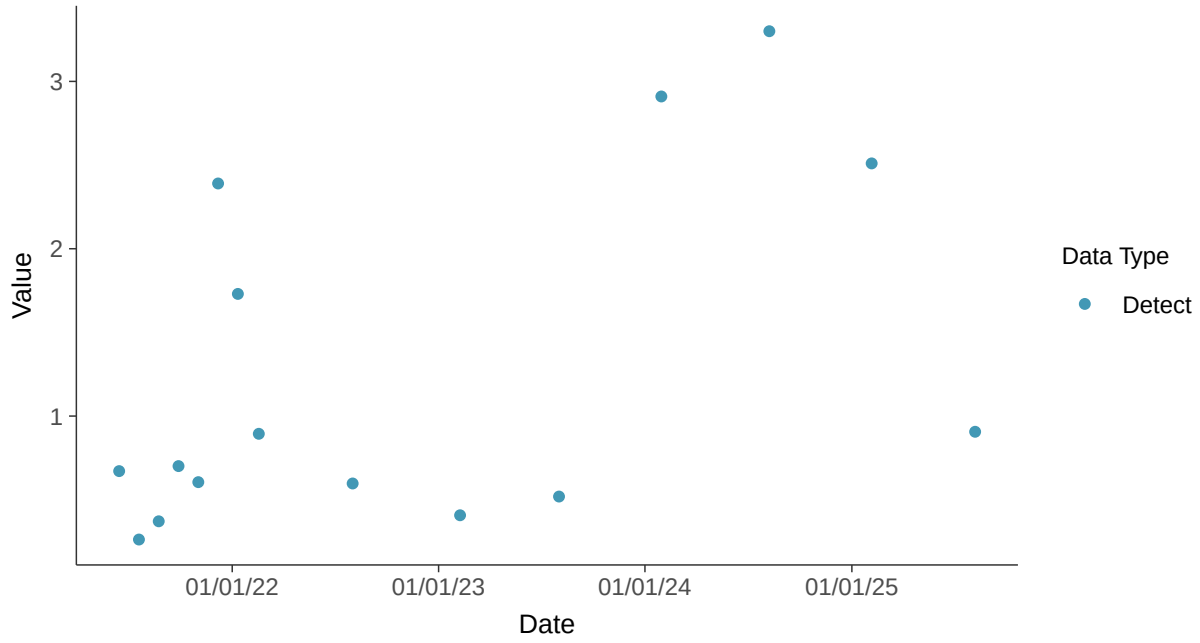


Appendix IV: Radium-226+228, MW-10

ID: 21_3_121

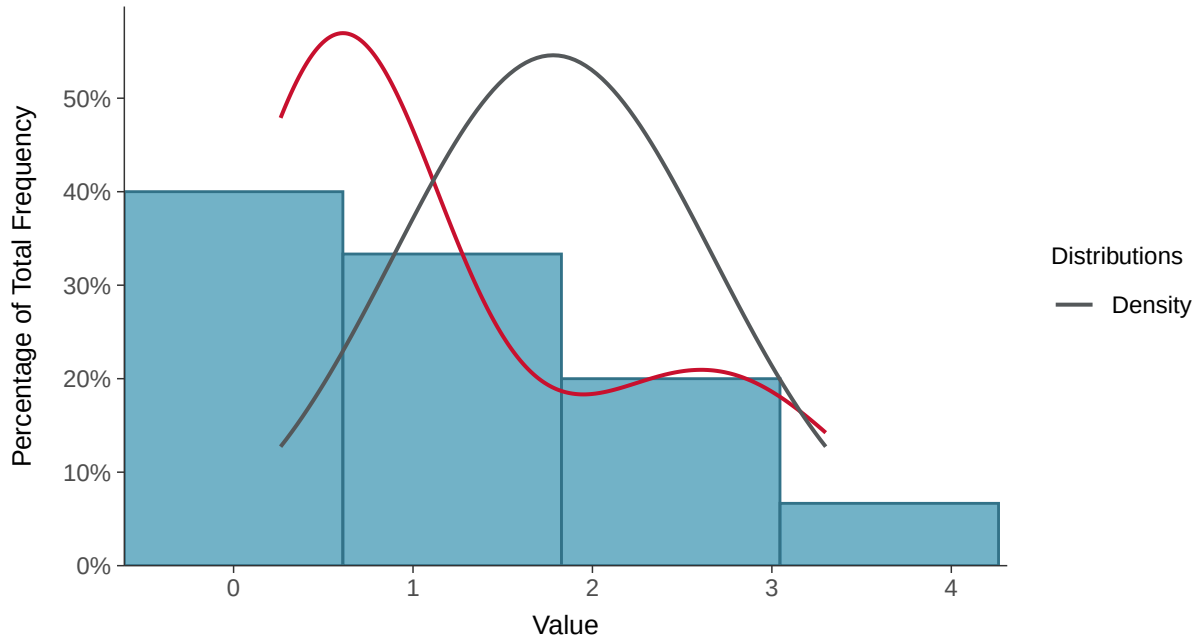
Scatter Plot

Radium-226+228, MW-10 (pci/l)



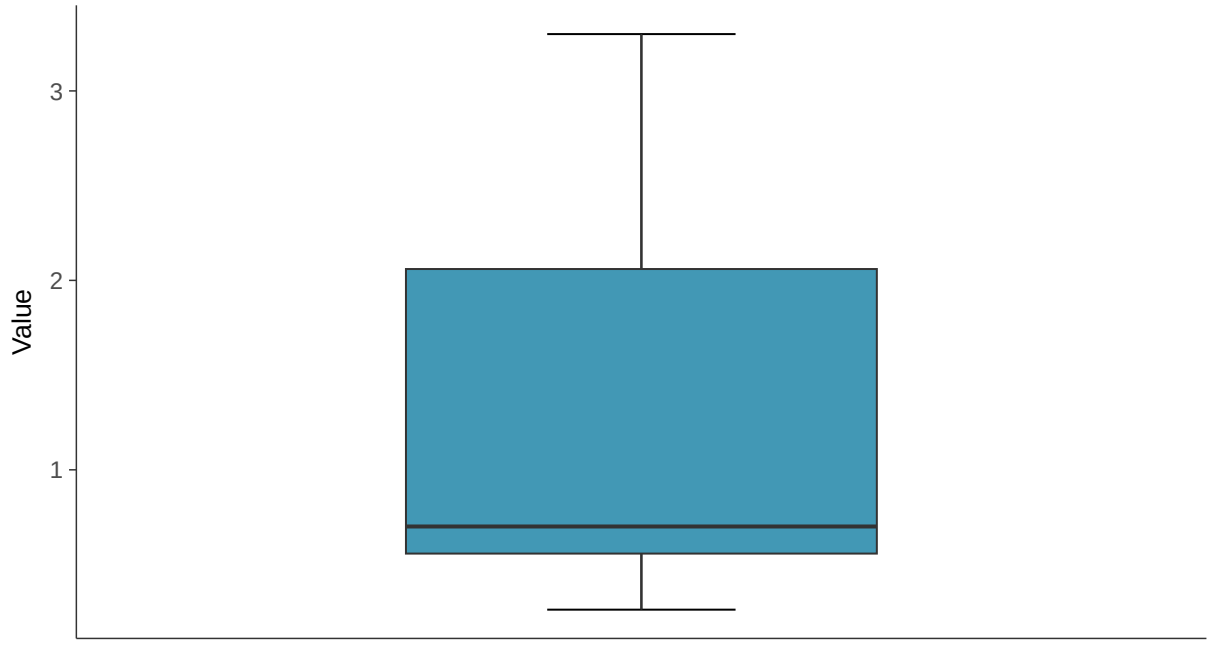
Histogram

Radium-226+228, MW-10 (pci/l)



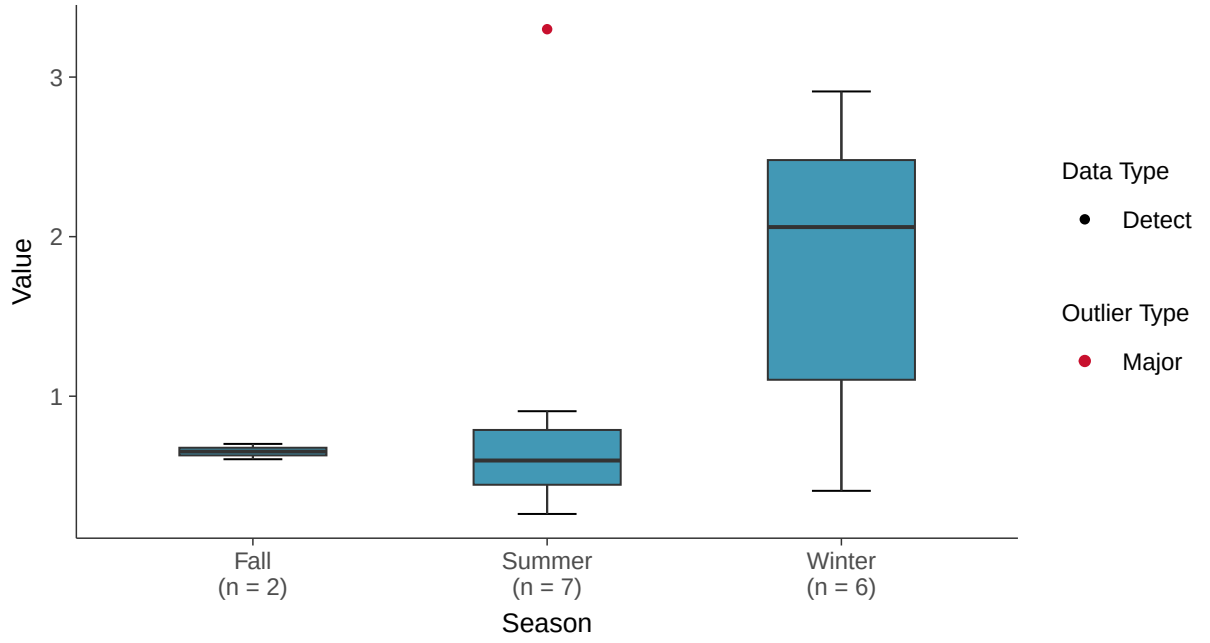
Boxplot

Radium-226+228, MW-10 (pci/l)



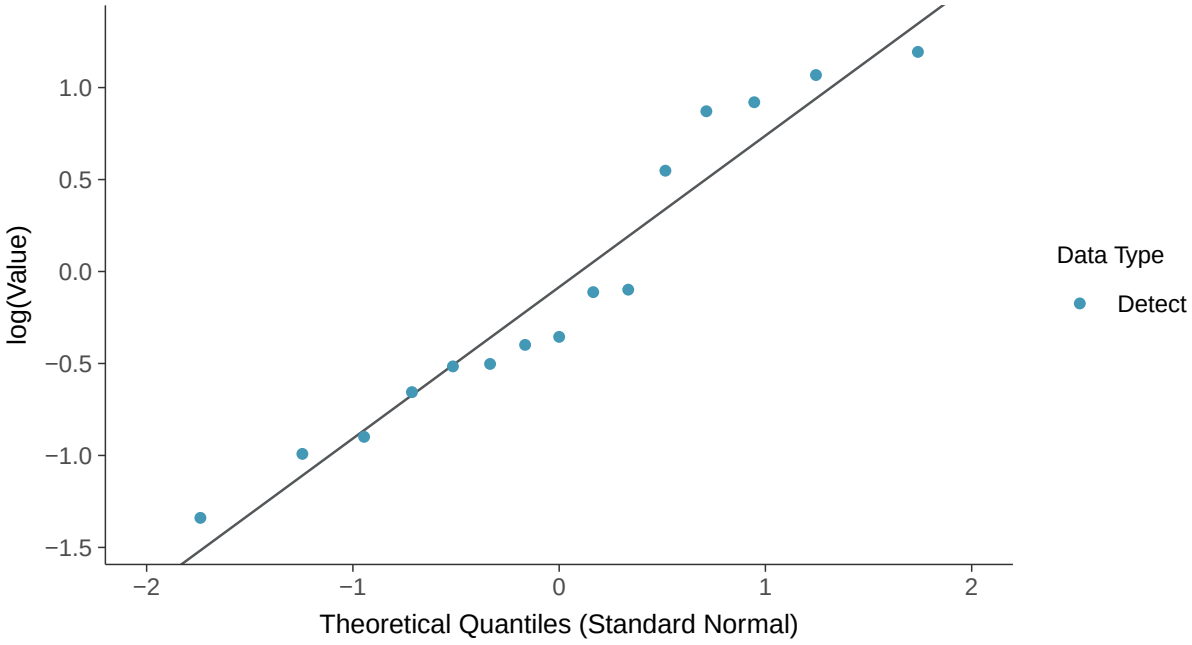
Boxplot by Season

Radium-226+228, MW-10 (pci/l)



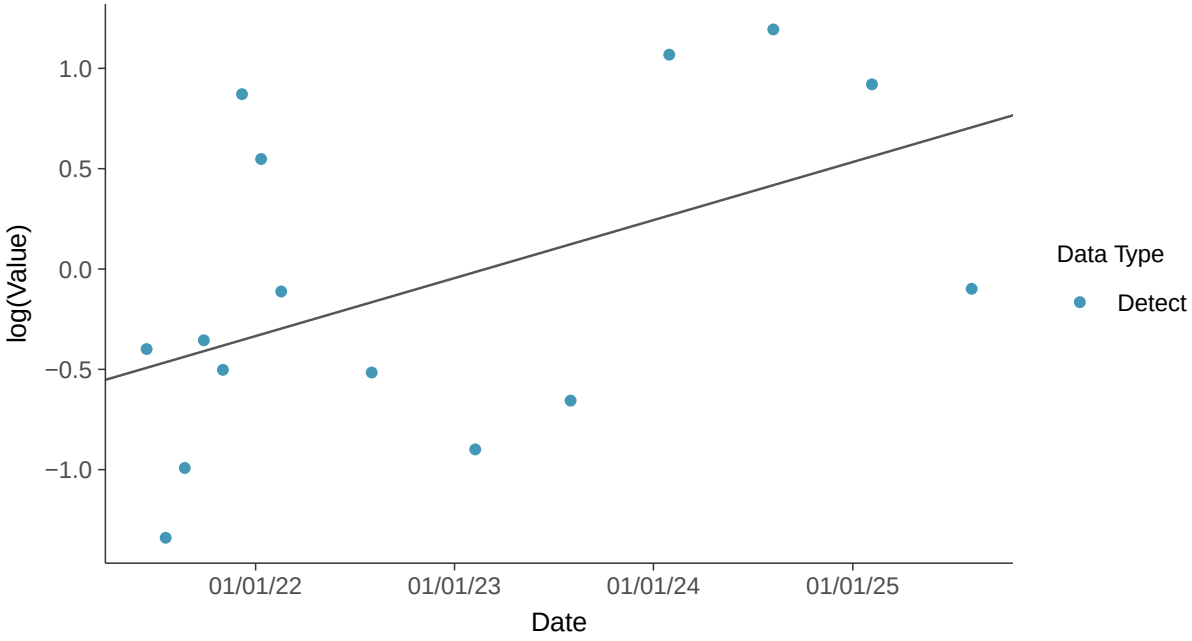
Lognormal Q-Q plot

Radium-226+228, MW-10 (pci/l)



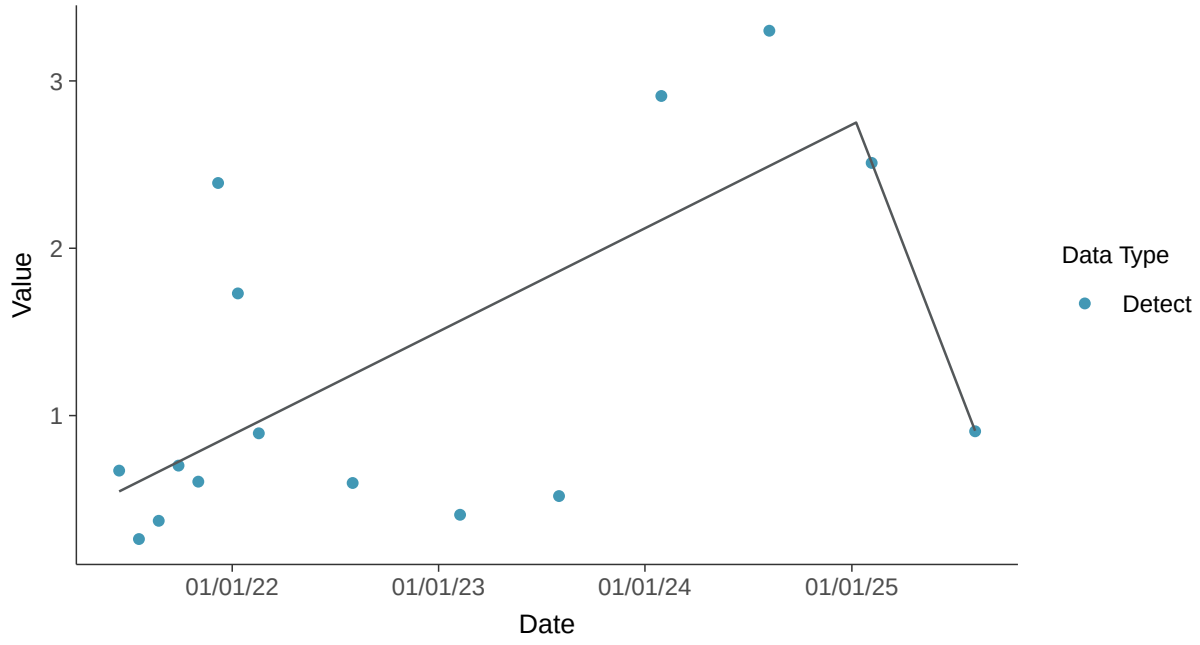
Trend Regression: Lognormal MLE

Radium-226+228, MW-10 (pci/l)



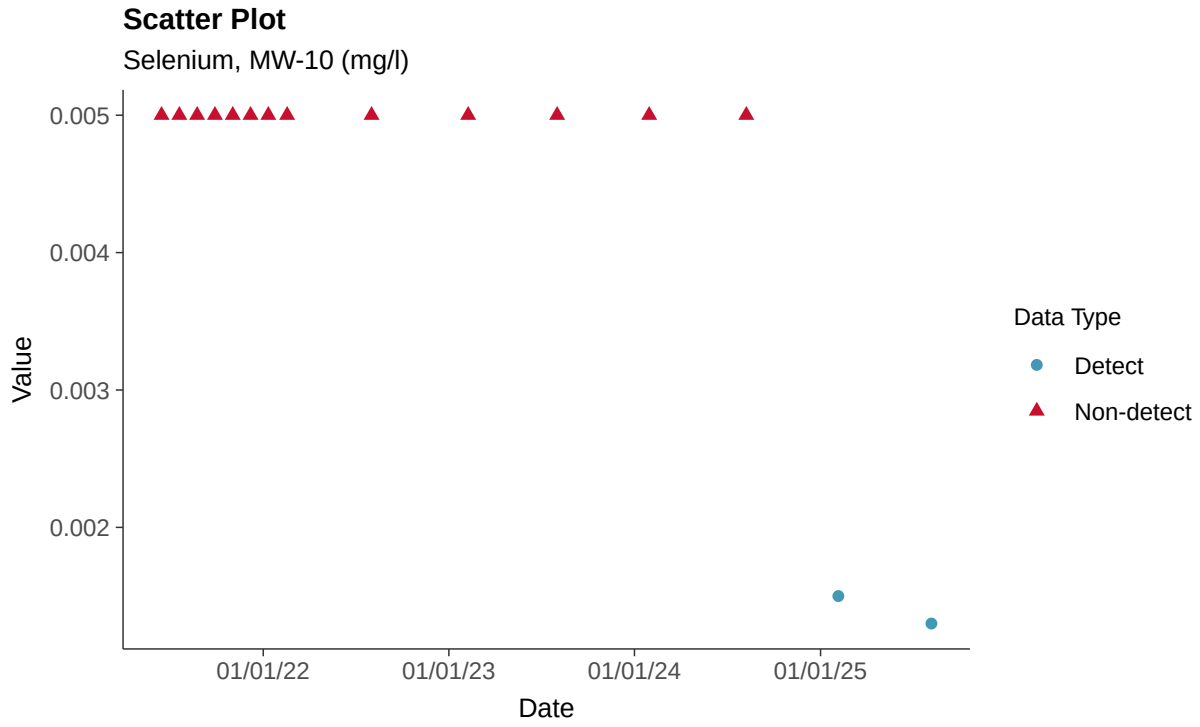
Trend Regression: Piecewise Linear-Linear

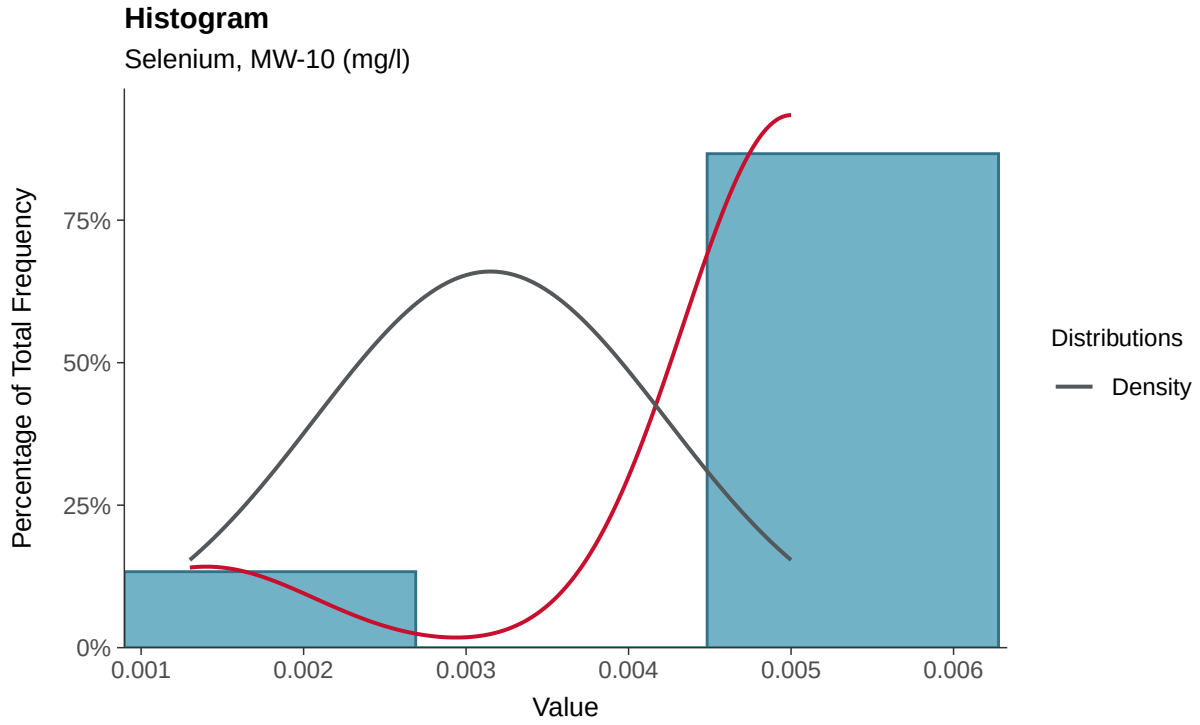
Radium-226+228, MW-10 (pci/l)



Appendix IV: Selenium, MW-10

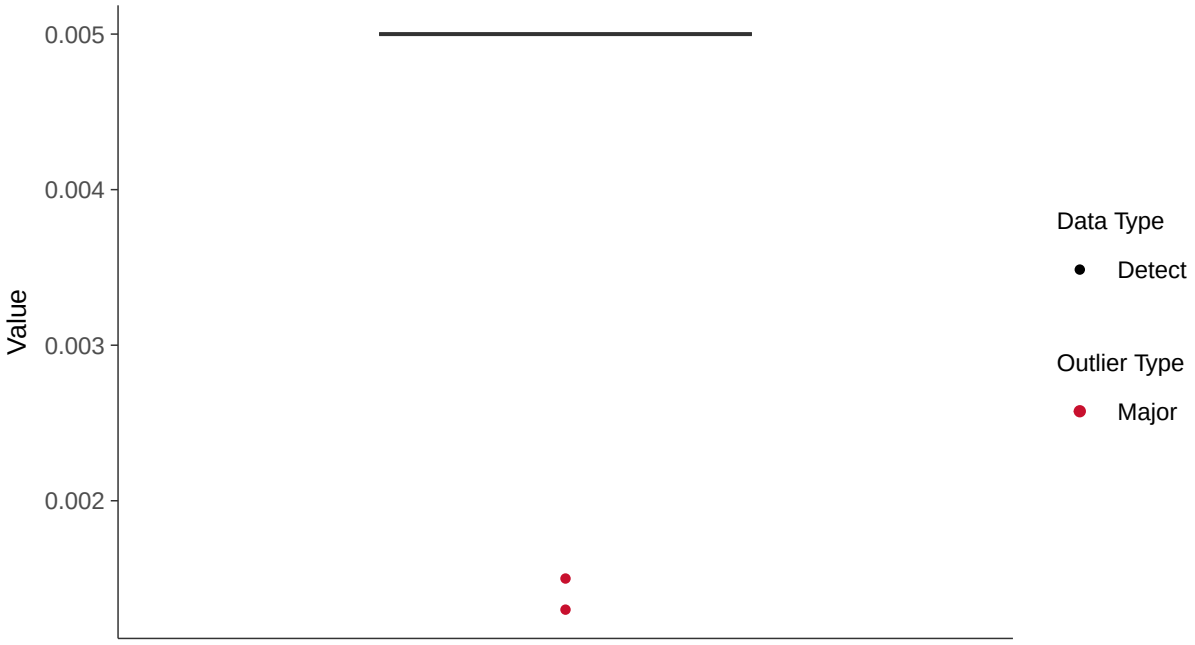
ID: 21_3_122





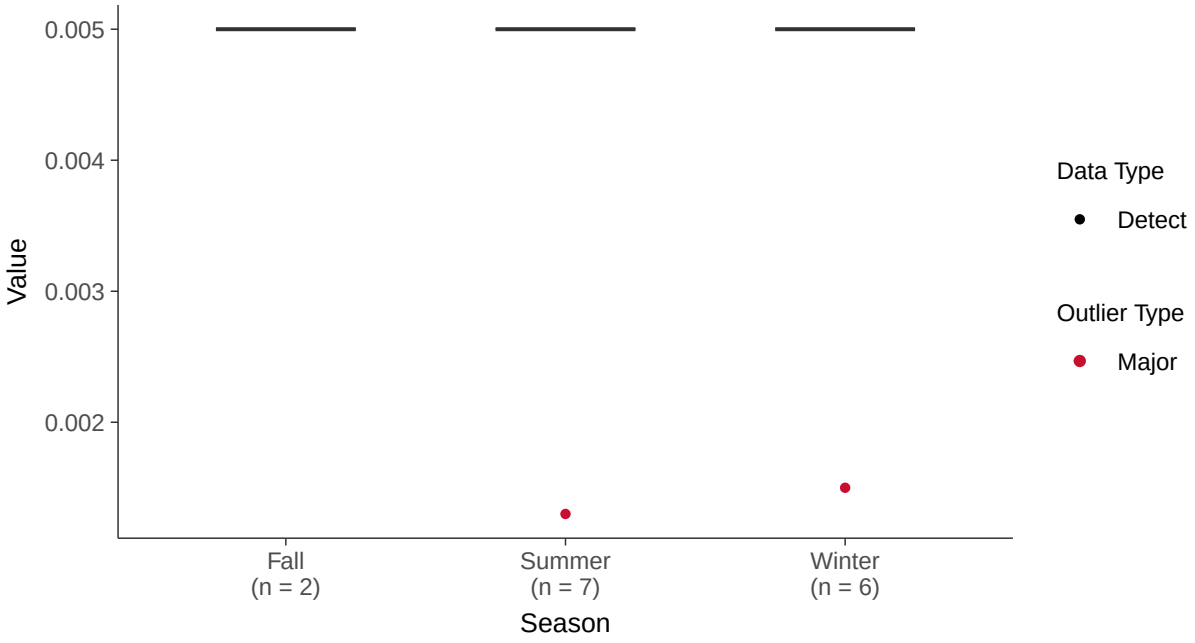
Boxplot

Selenium, MW-10 (mg/l)



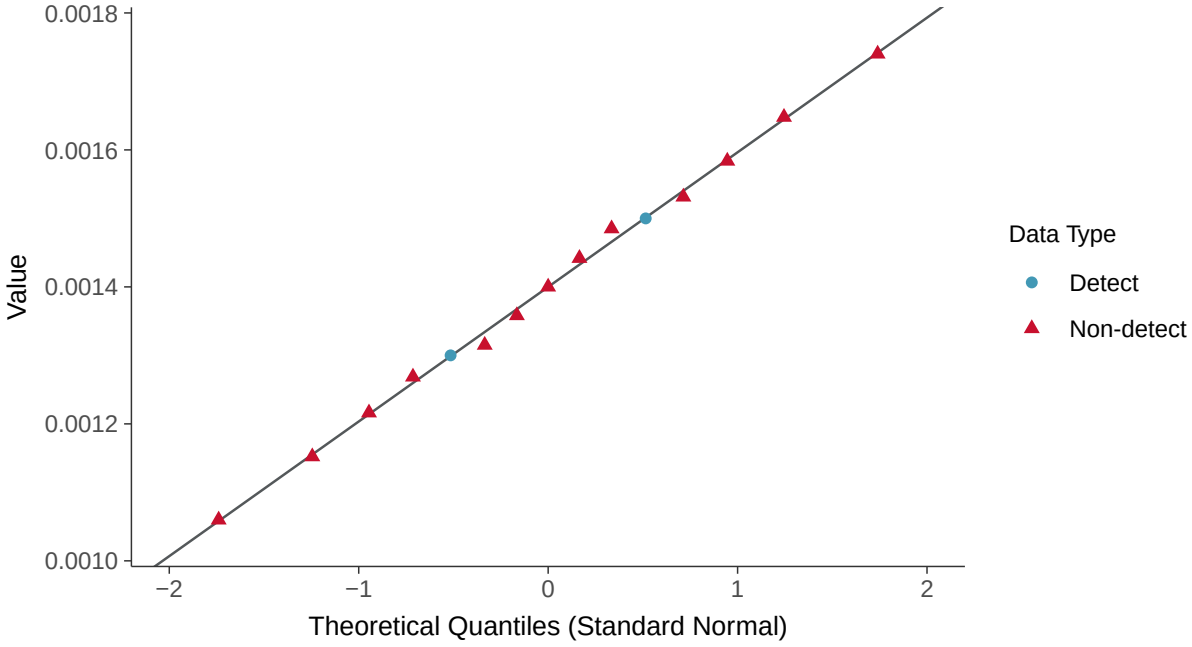
Boxplot by Season

Selenium, MW-10 (mg/l)



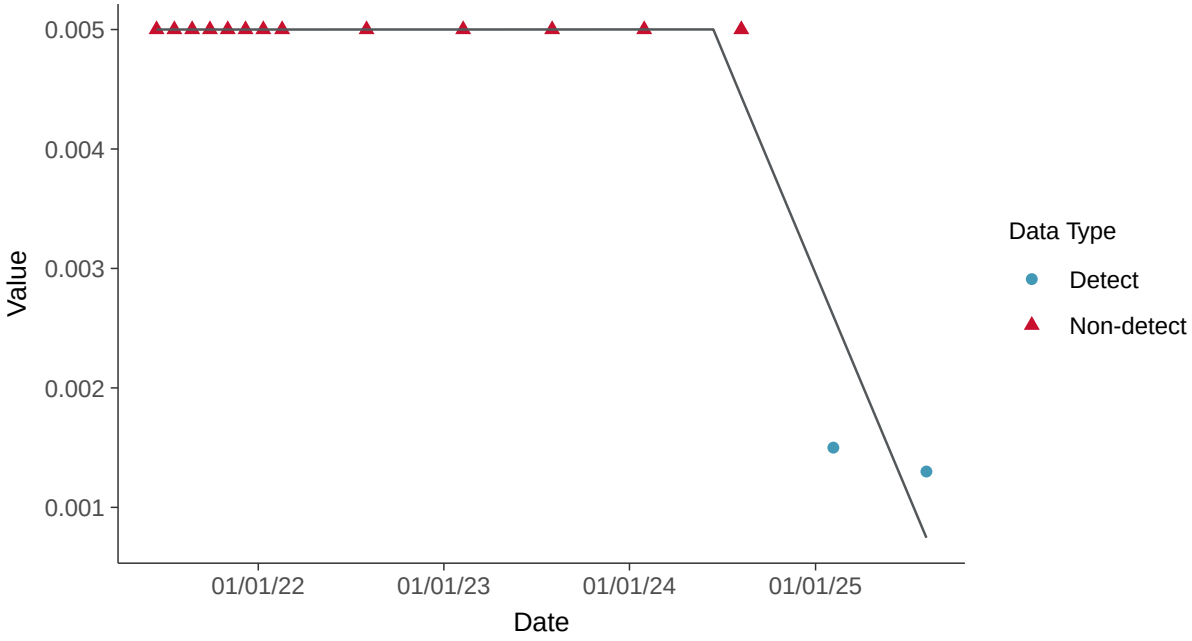
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-10 (mg/l)



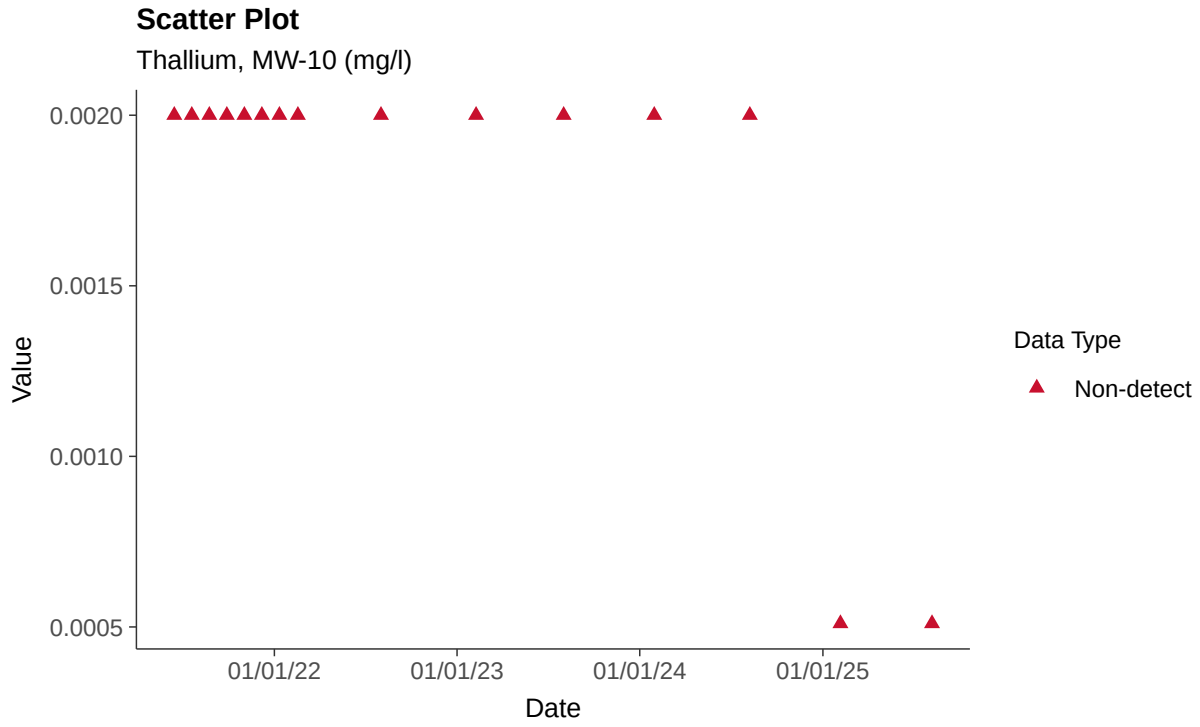
Trend Regression: Piecewise Linear-Linear

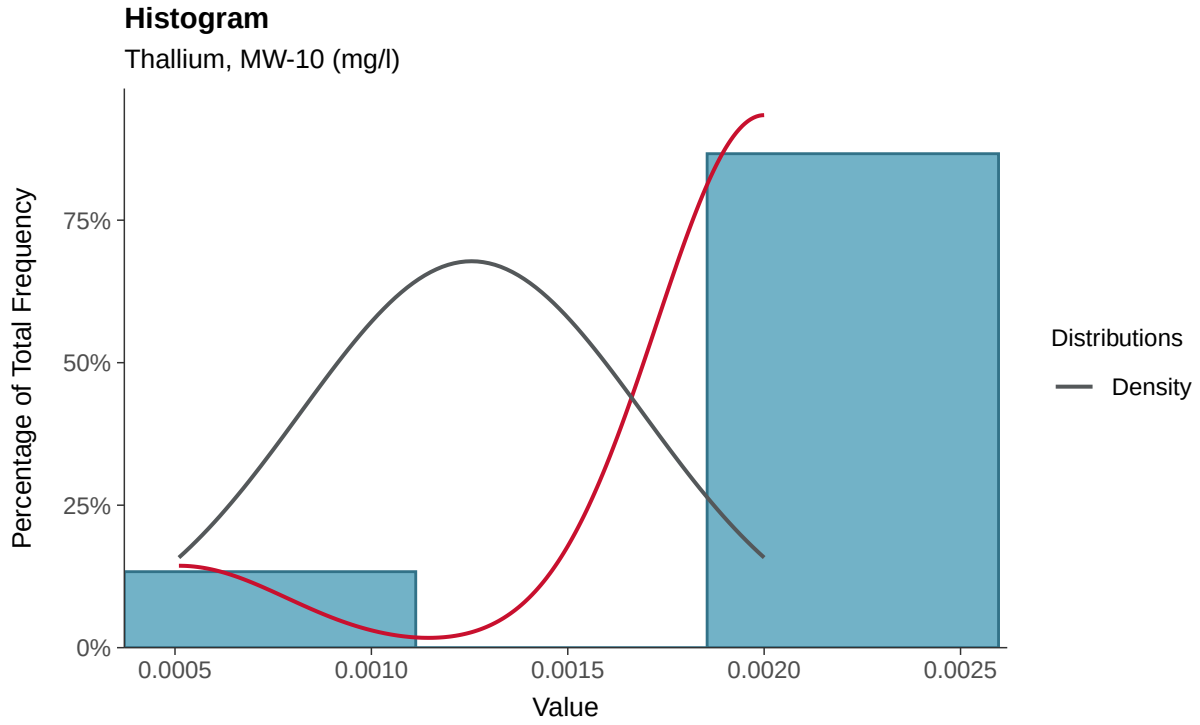
Selenium, MW-10 (mg/l)



Appendix IV: Thallium, MW-10

ID: 21_3_125



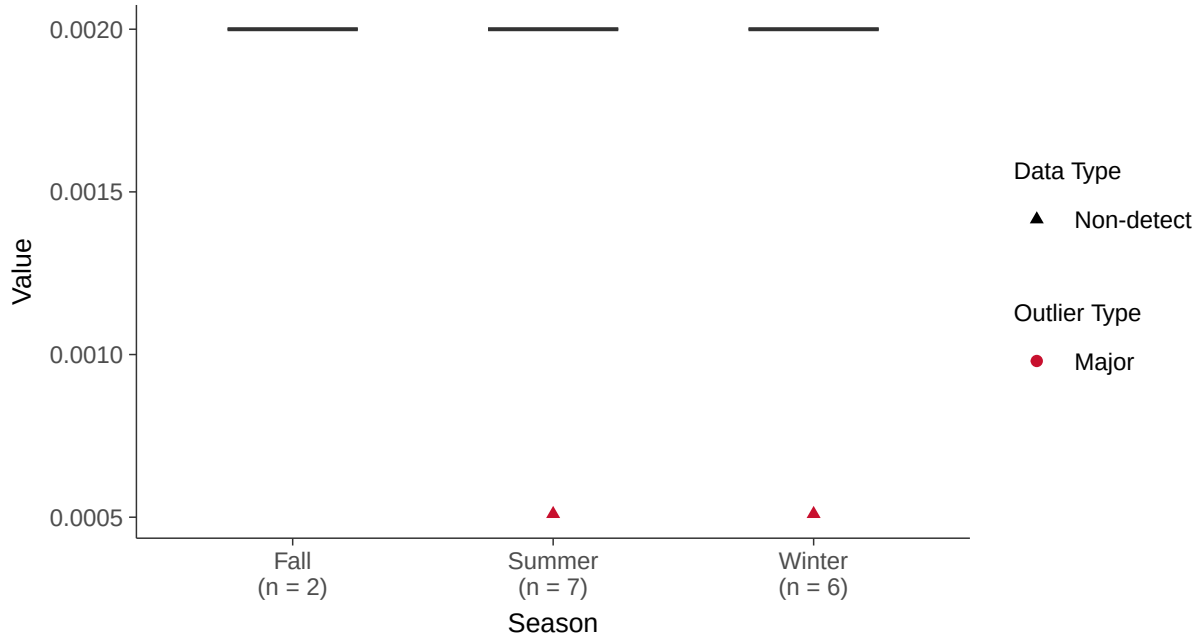


Boxplot

Thallium, MW-10 (mg/l)

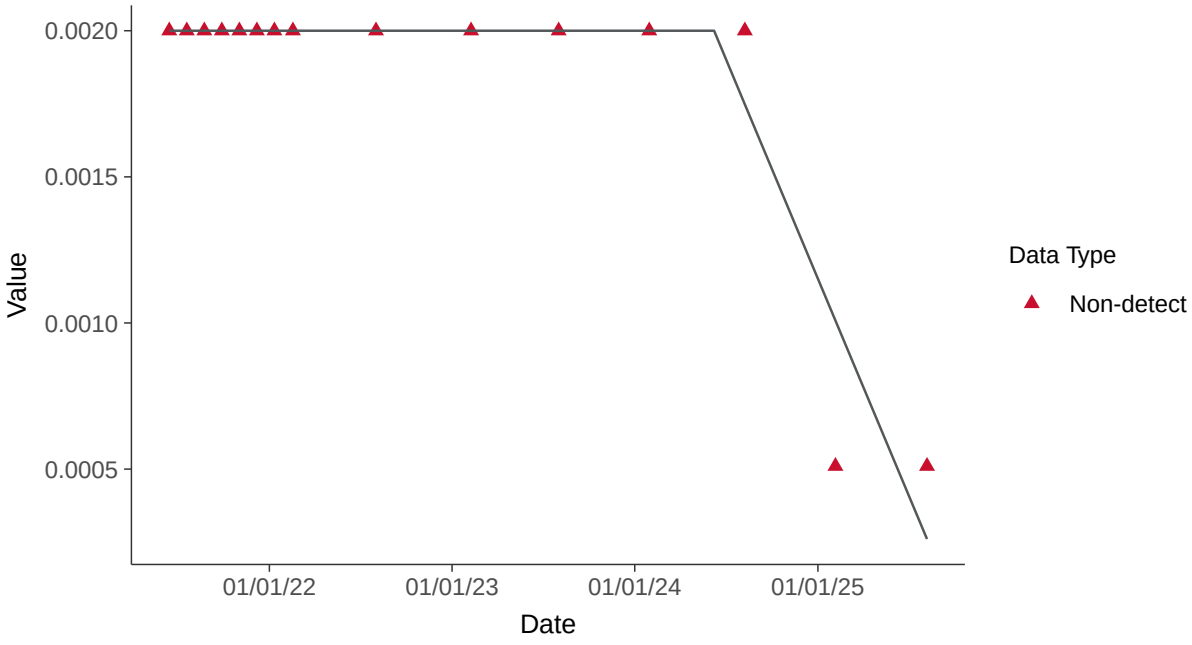
Boxplot by Season

Thallium, MW-10 (mg/l)



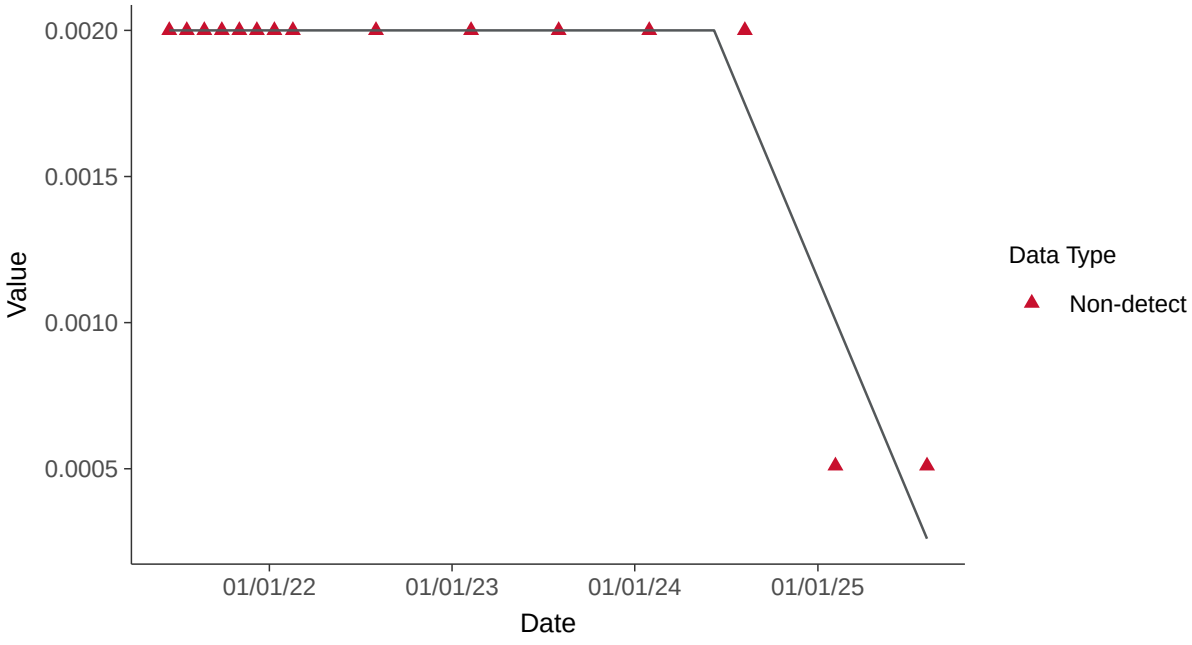
Trend Regression: Piecewise Linear-Linear

Thallium, MW-10 (mg/l)



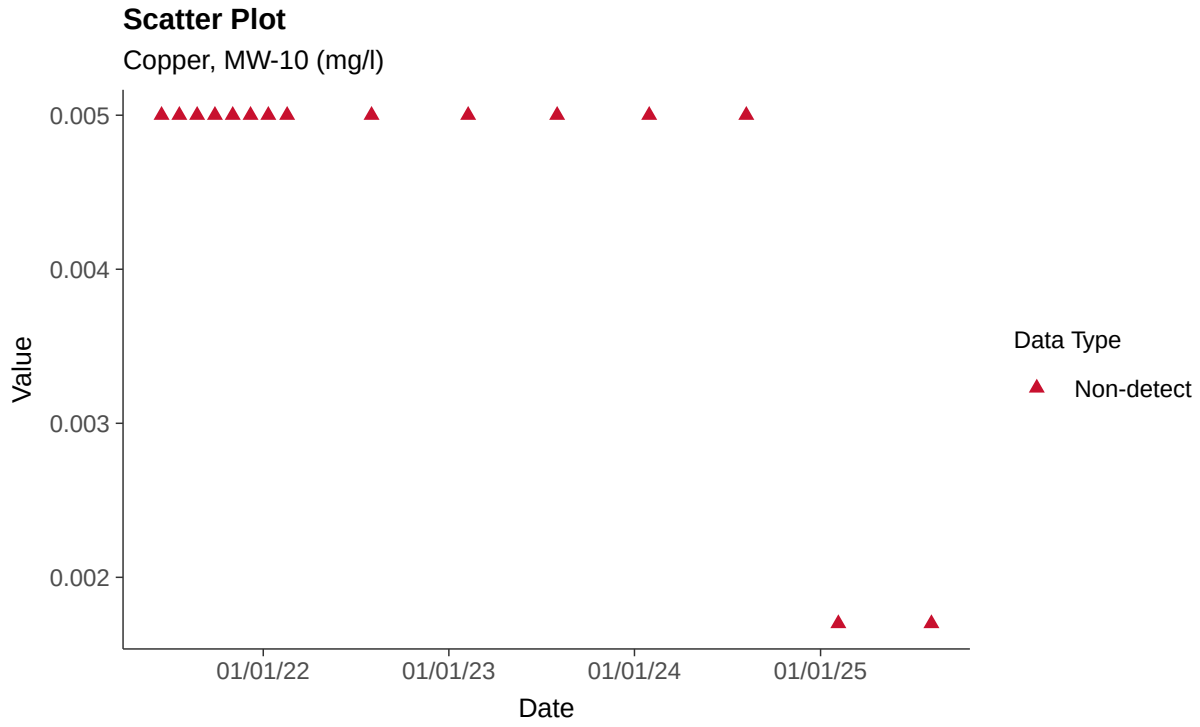
Trend Regression: Piecewise Linear-Linear-Linear

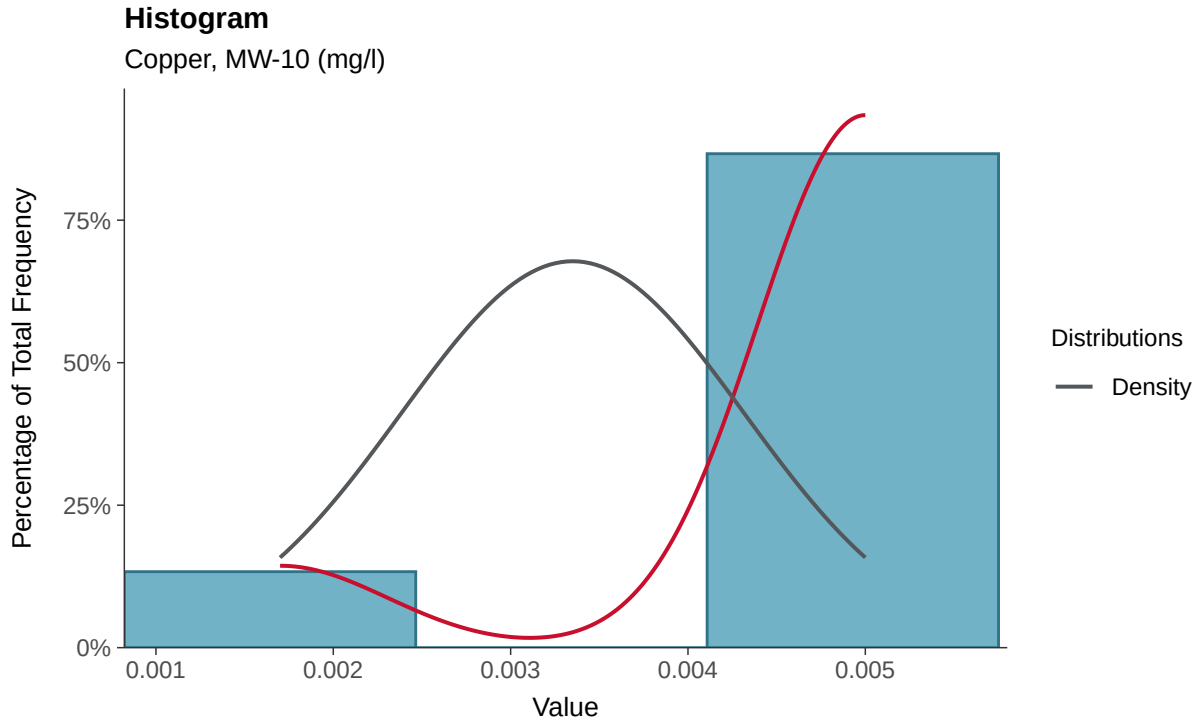
Thallium, MW-10 (mg/l)



Part 115: Copper, MW-10

ID: 21_5_111



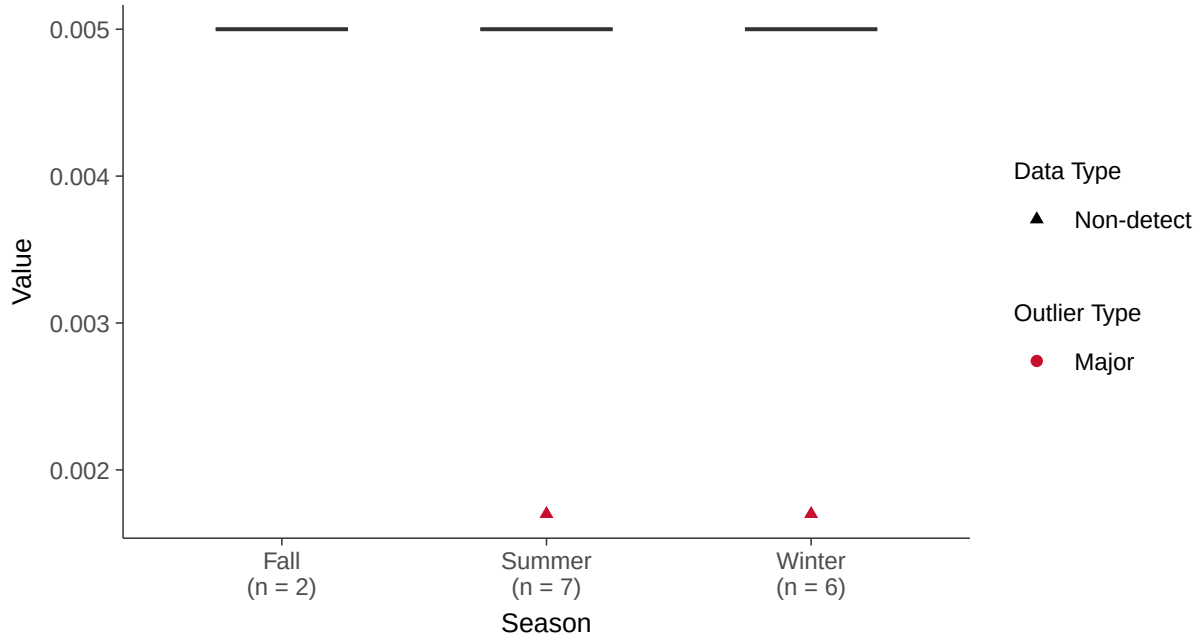


Boxplot

Copper, MW-10 (mg/l)

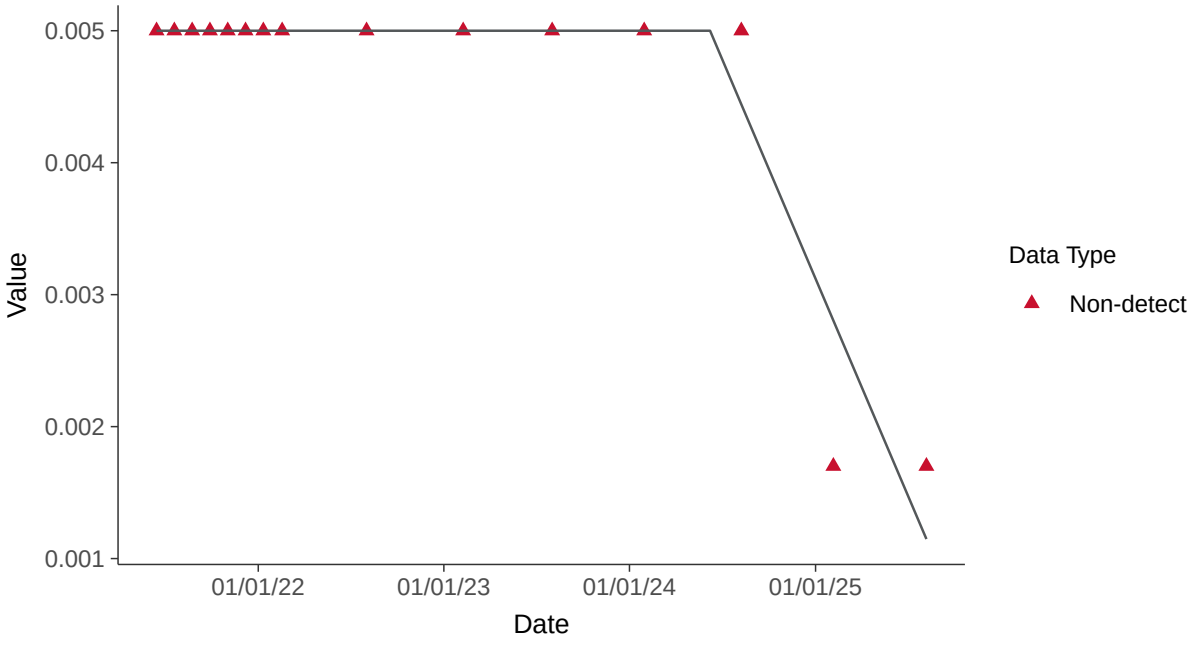
Boxplot by Season

Copper, MW-10 (mg/l)



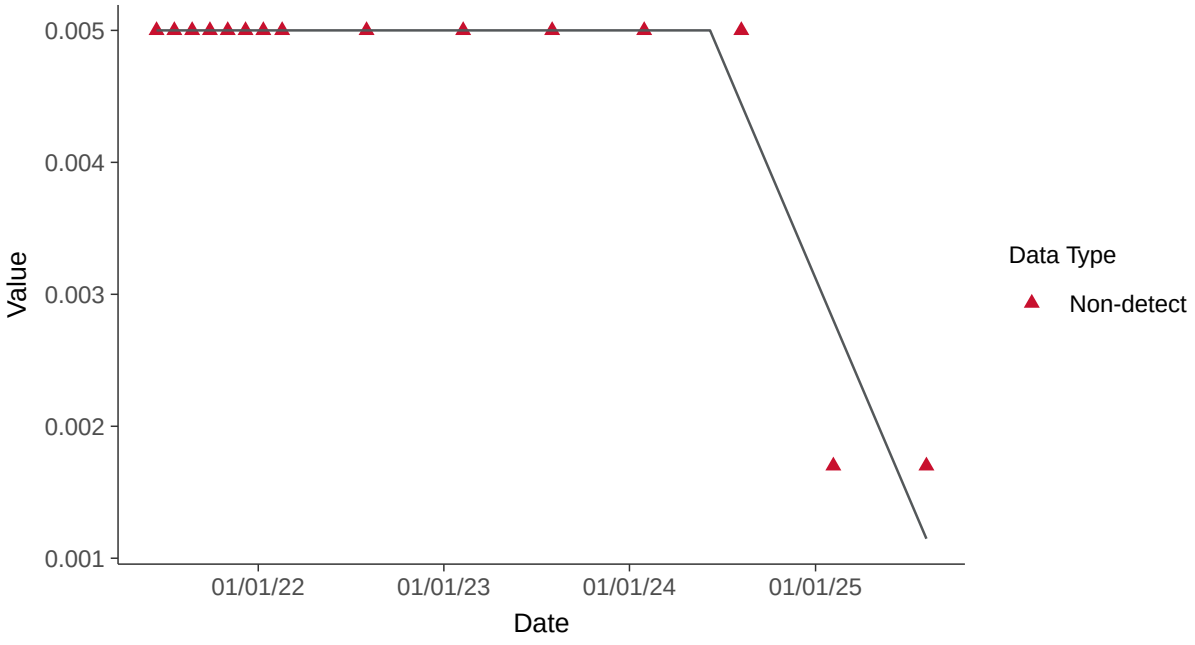
Trend Regression: Piecewise Linear-Linear

Copper, MW-10 (mg/l)



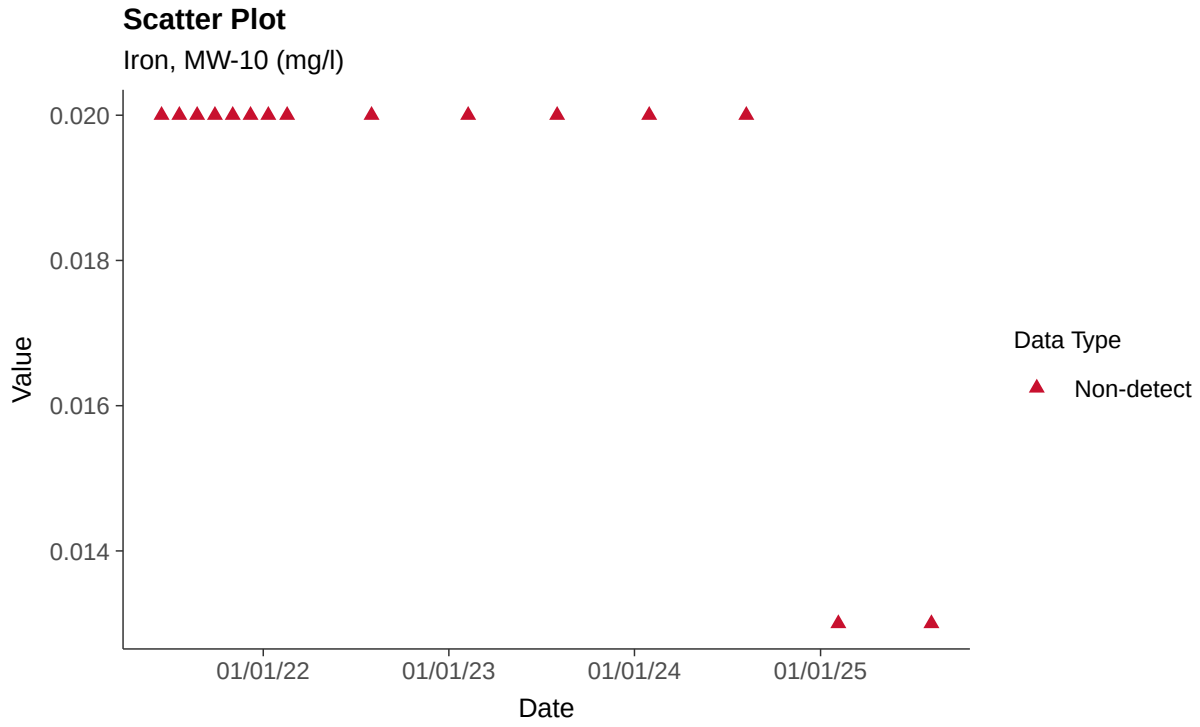
Trend Regression: Piecewise Linear-Linear-Linear

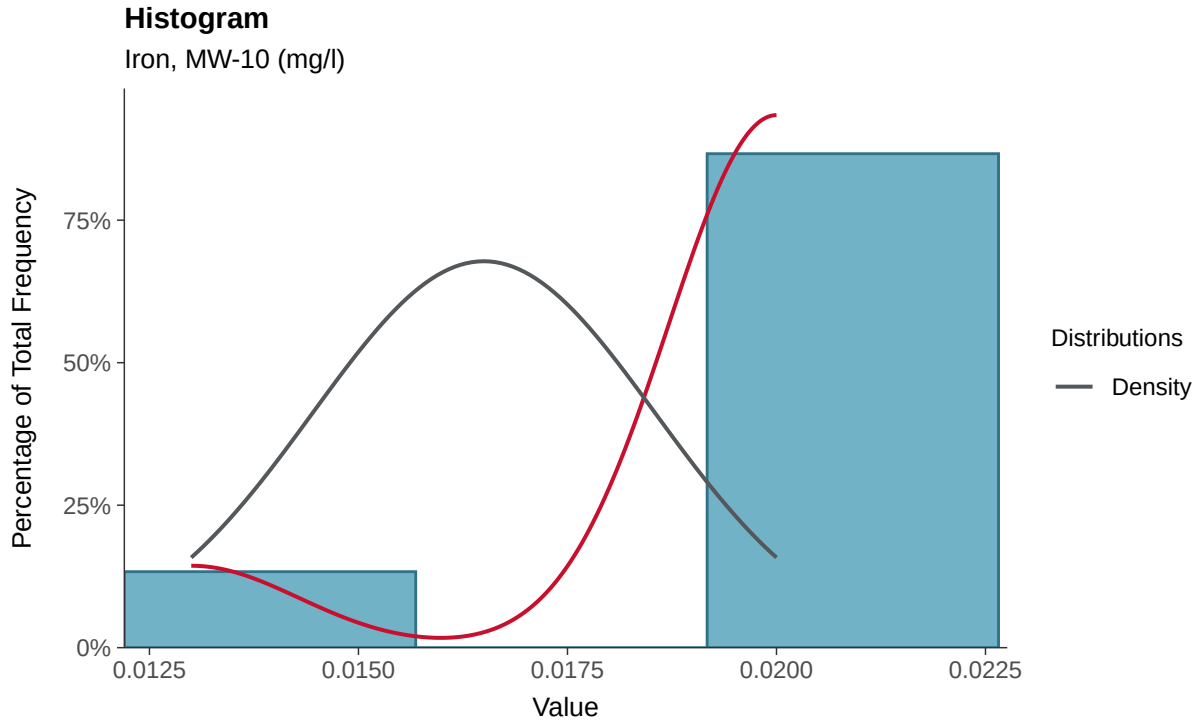
Copper, MW-10 (mg/l)



Part 115: Iron, MW-10

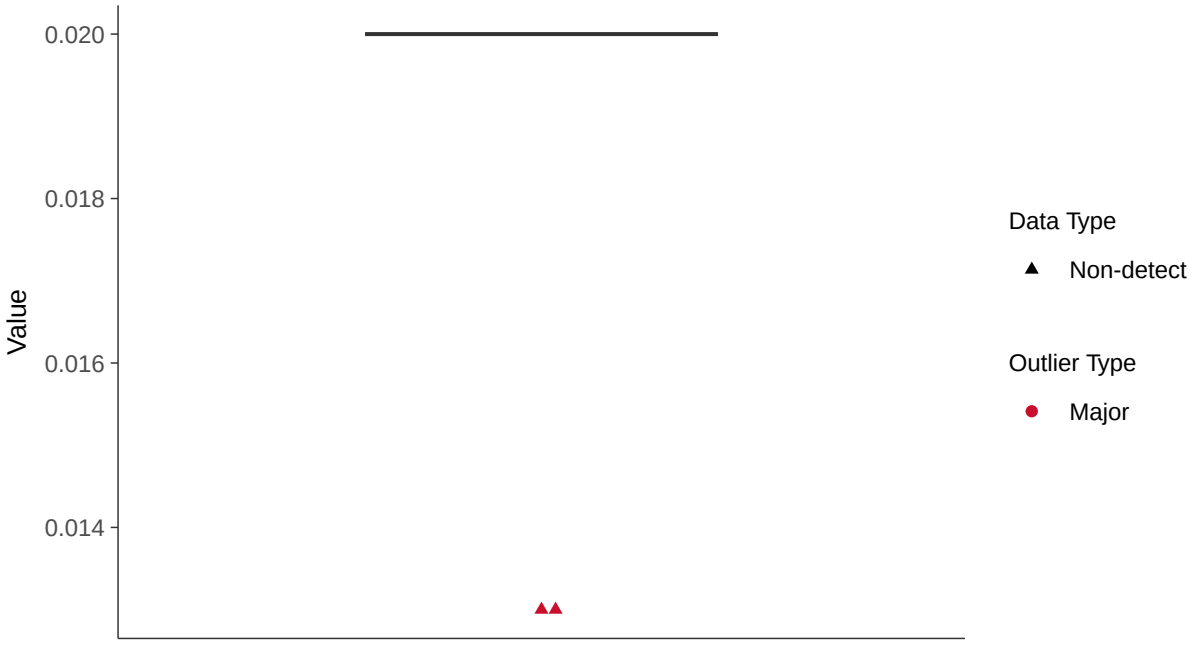
ID: 21_5_114





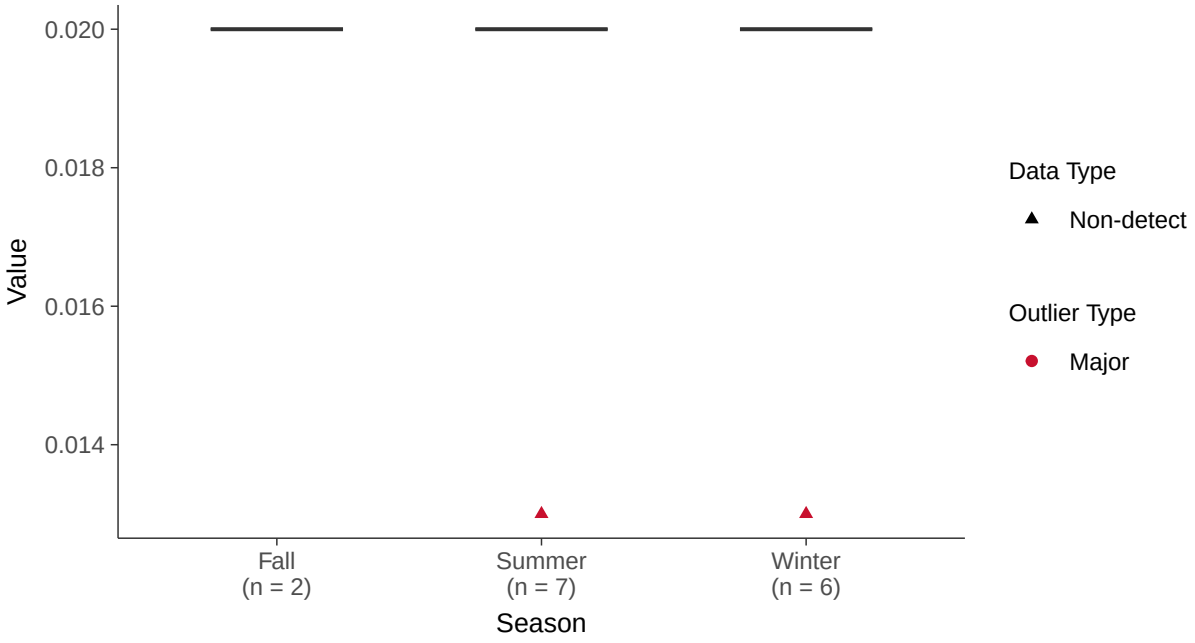
Boxplot

Iron, MW-10 (mg/l)



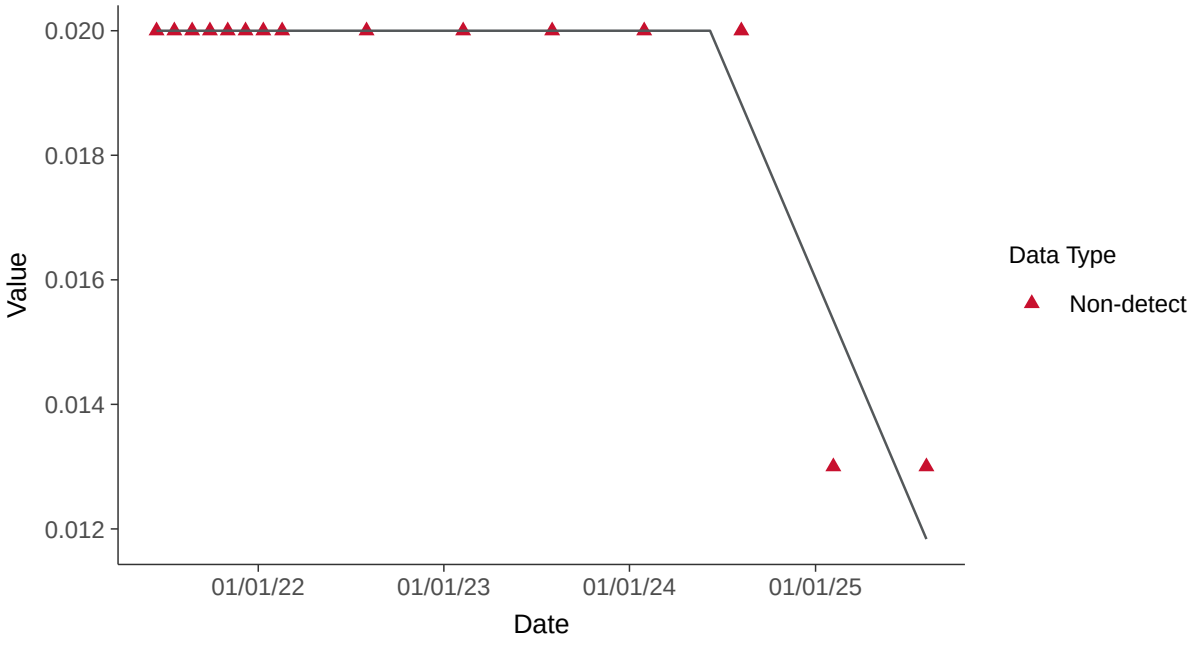
Boxplot by Season

Iron, MW-10 (mg/l)



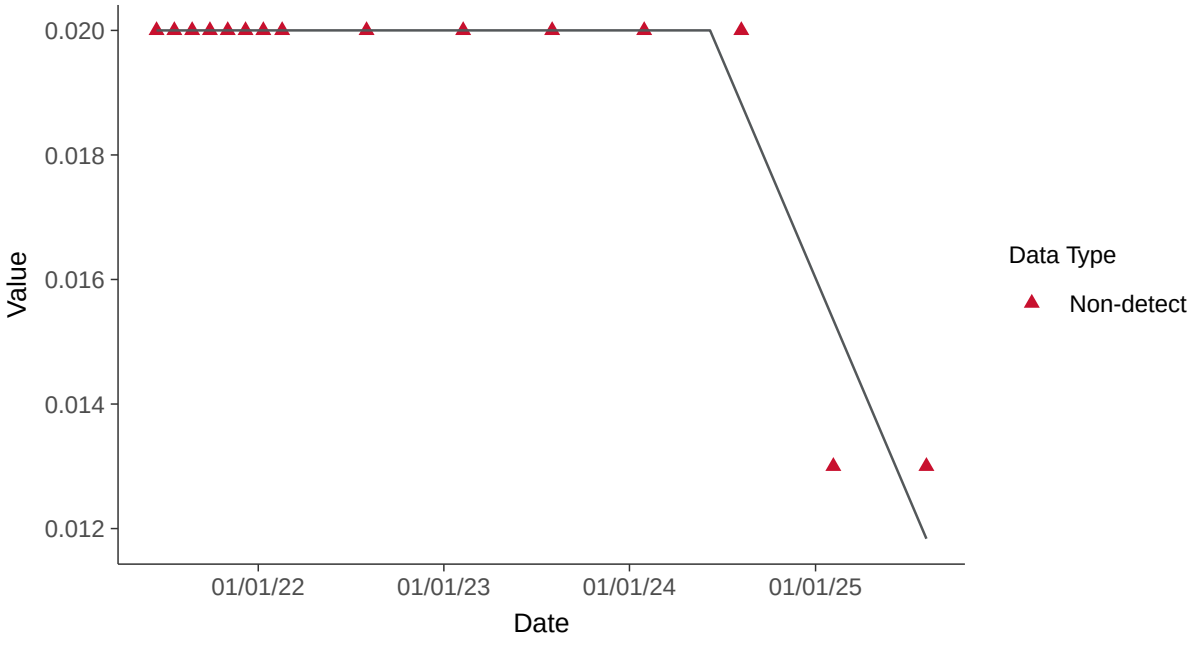
Trend Regression: Piecewise Linear-Linear

Iron, MW-10 (mg/l)



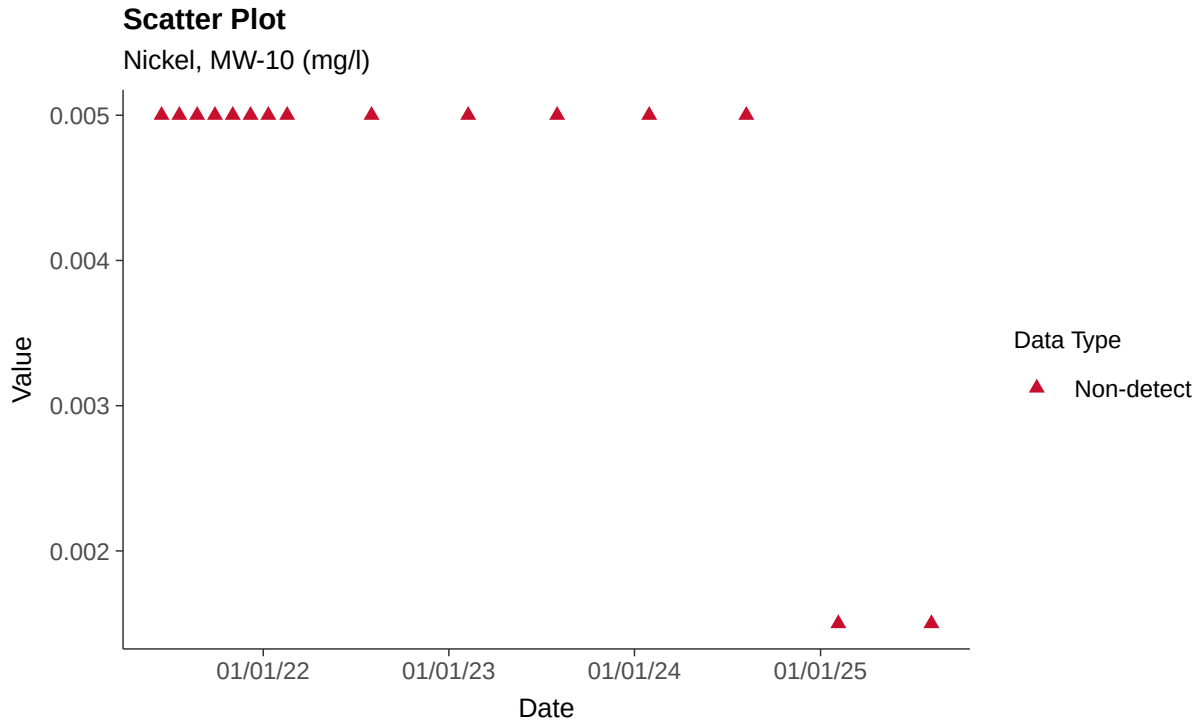
Trend Regression: Piecewise Linear-Linear-Linear

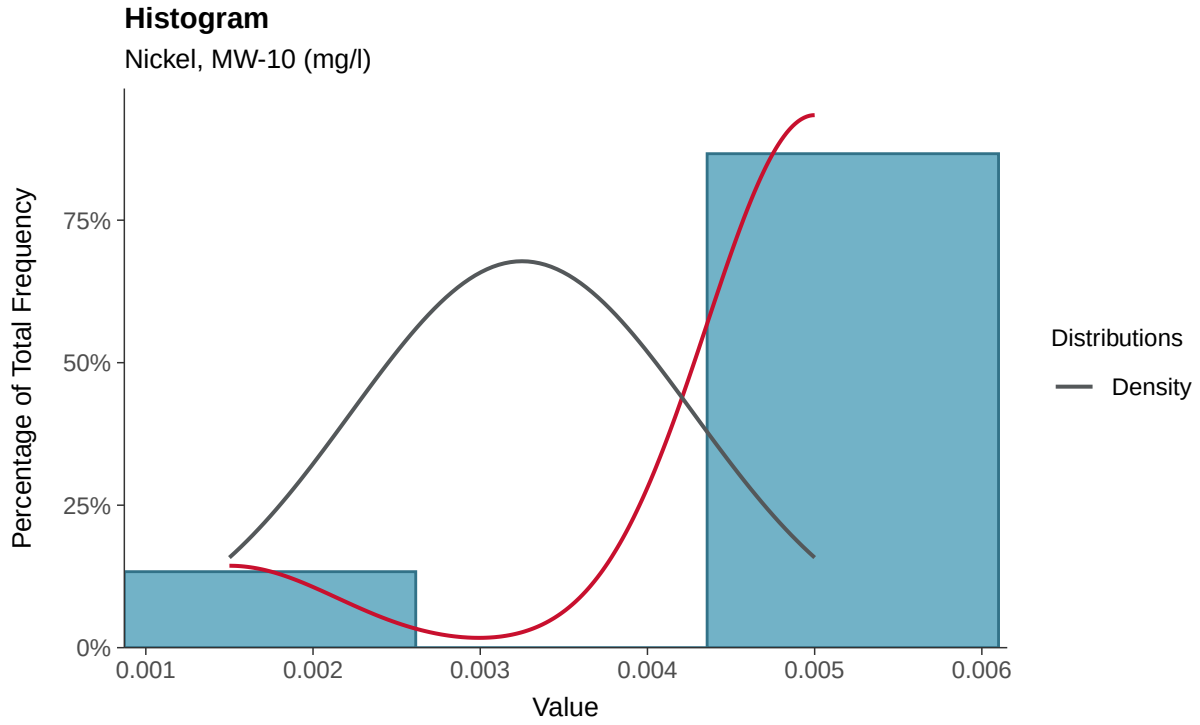
Iron, MW-10 (mg/l)



Part 115: Nickel, MW-10

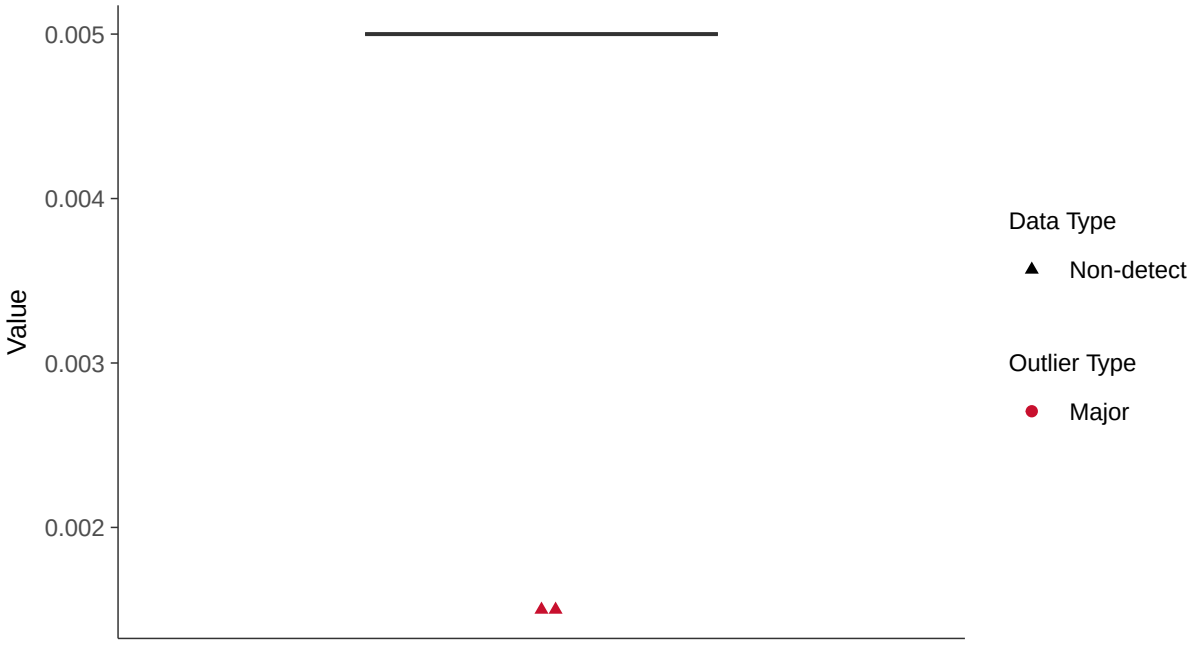
ID: 21_5_119





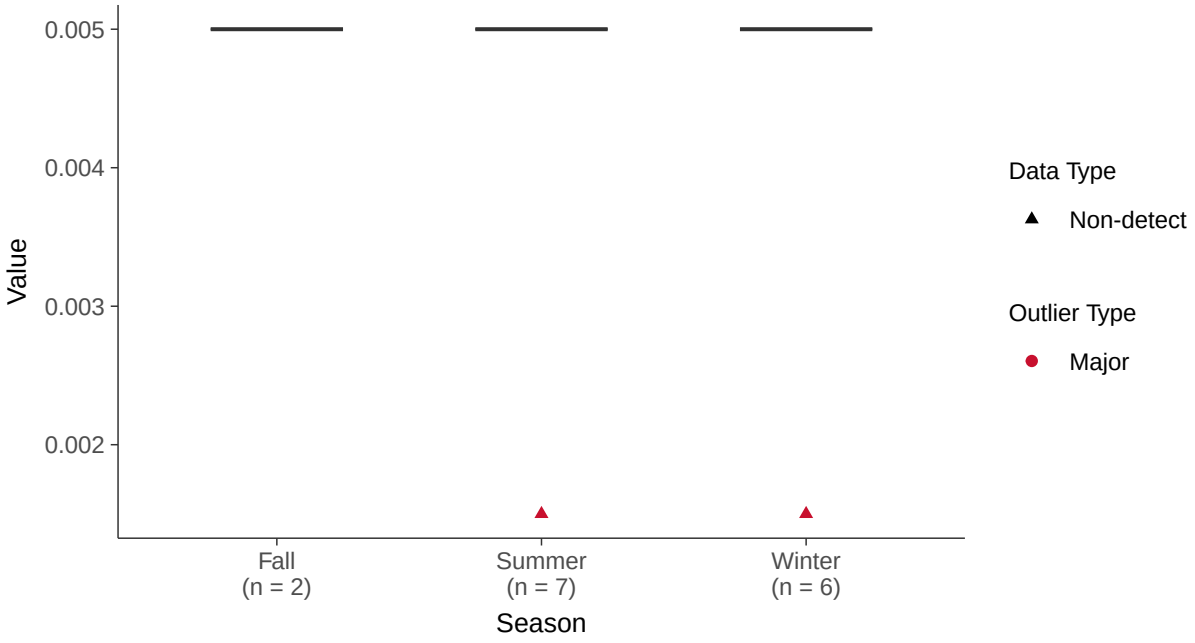
Boxplot

Nickel, MW-10 (mg/l)



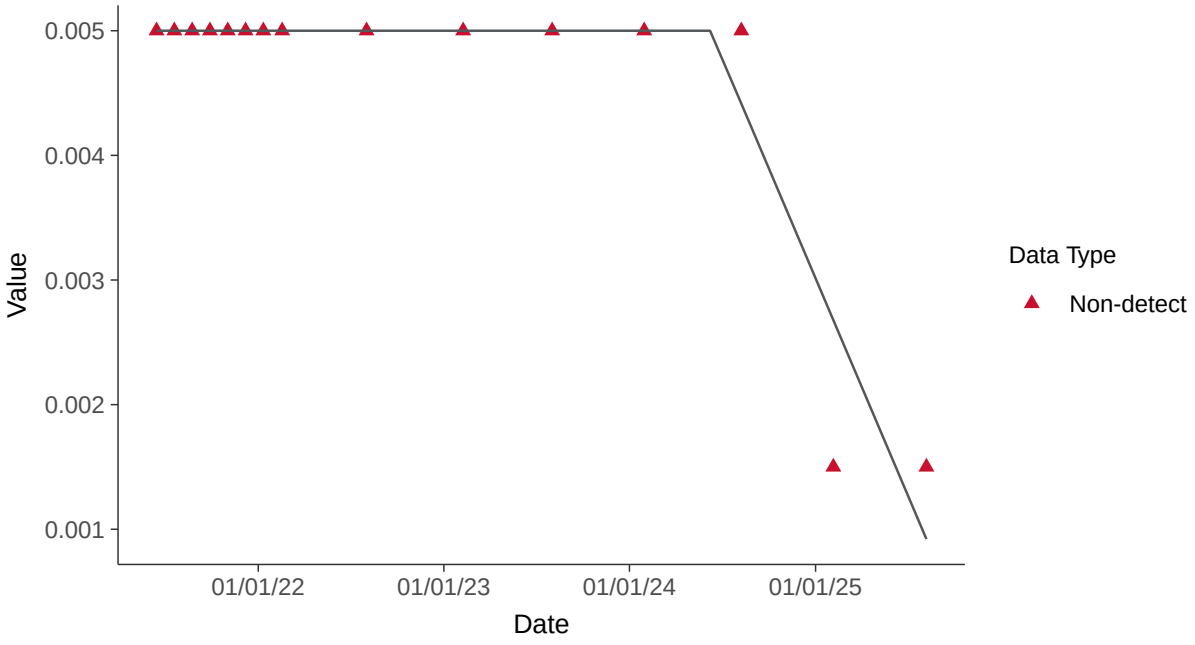
Boxplot by Season

Nickel, MW-10 (mg/l)



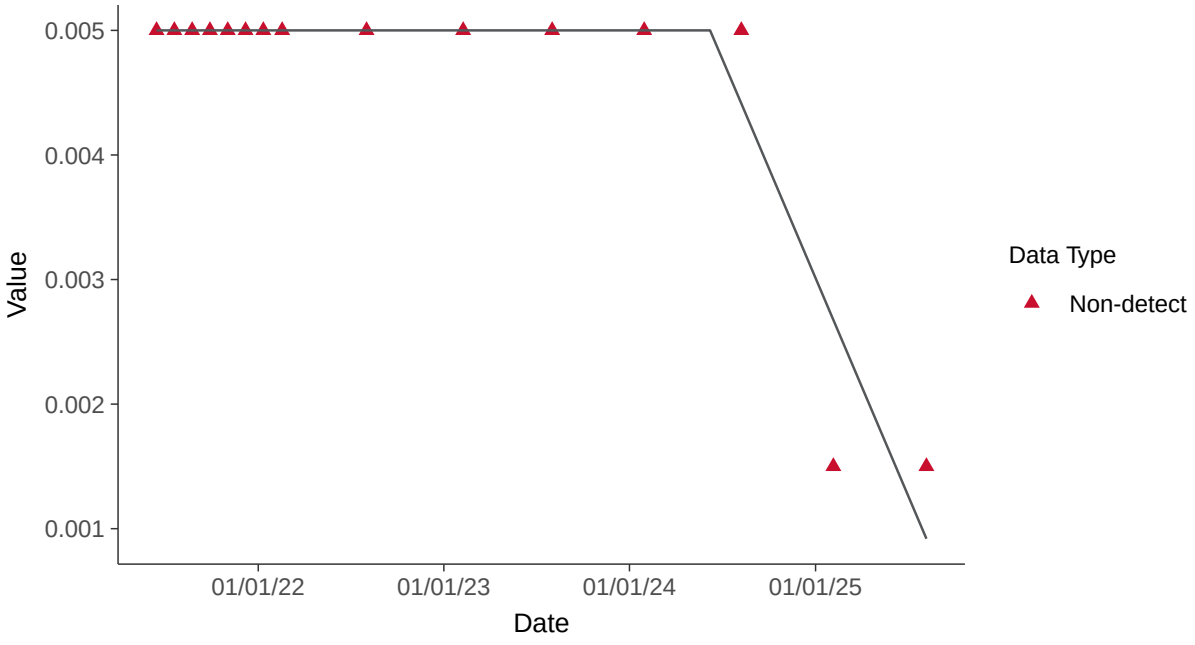
Trend Regression: Piecewise Linear-Linear

Nickel, MW-10 (mg/l)



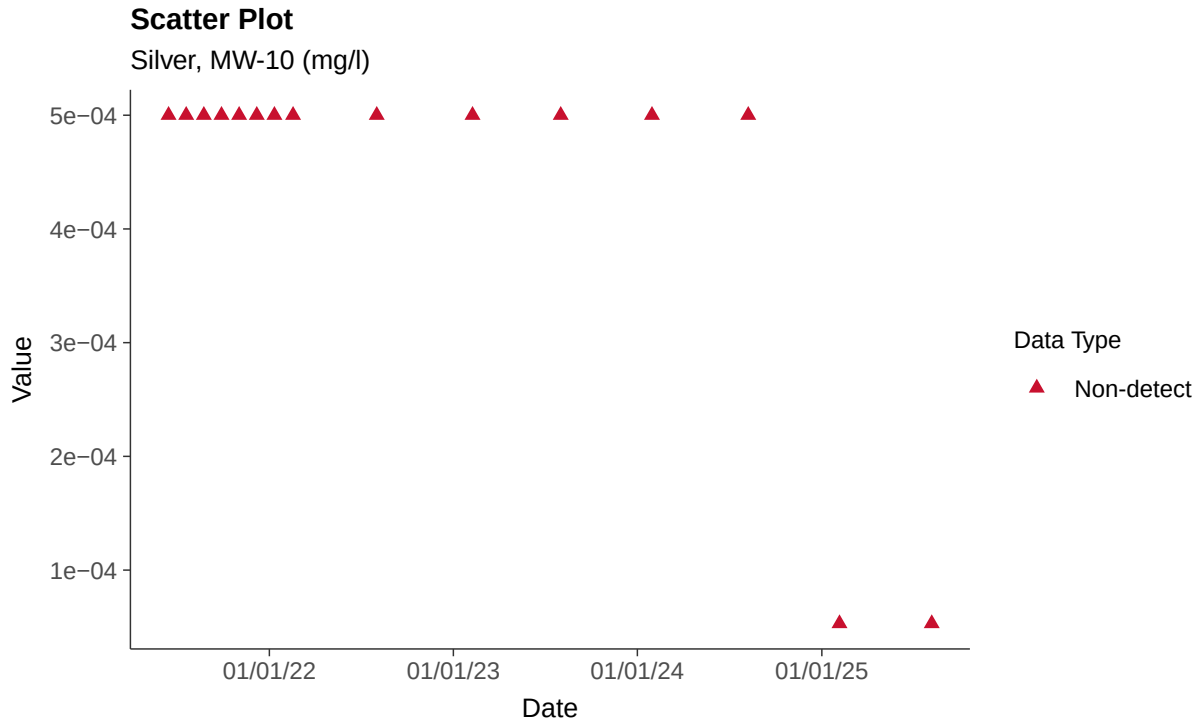
Trend Regression: Piecewise Linear-Linear-Linear

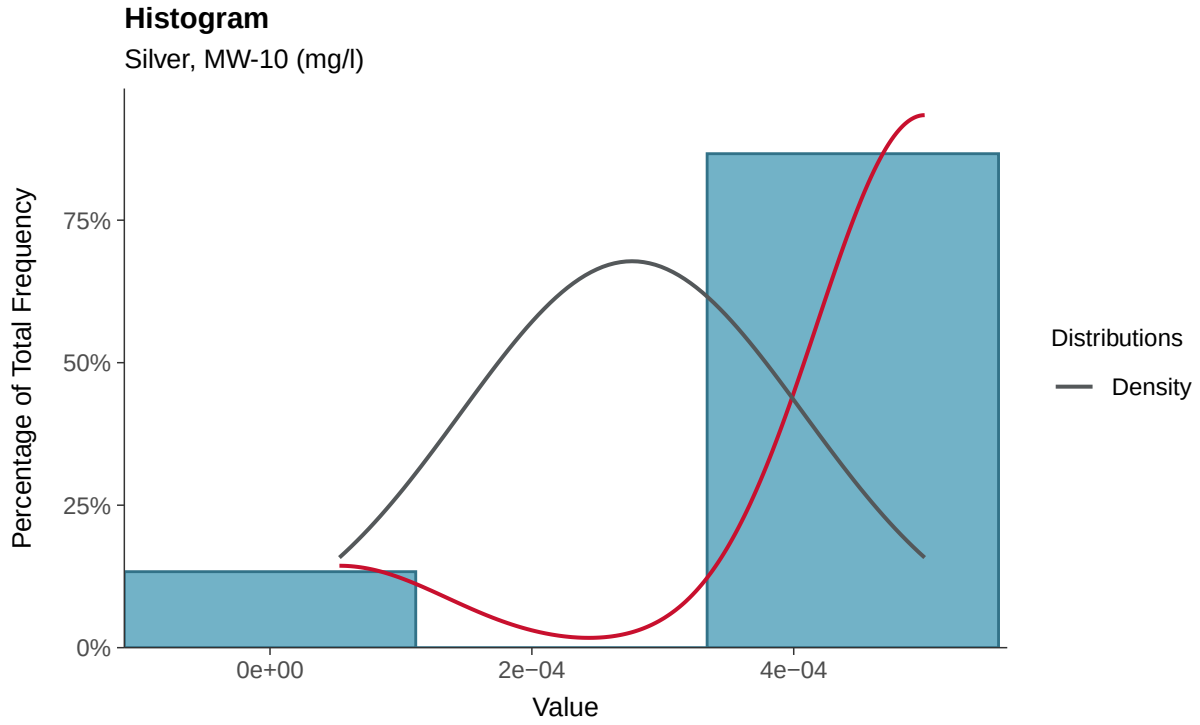
Nickel, MW-10 (mg/l)



Part 115: Silver, MW-10

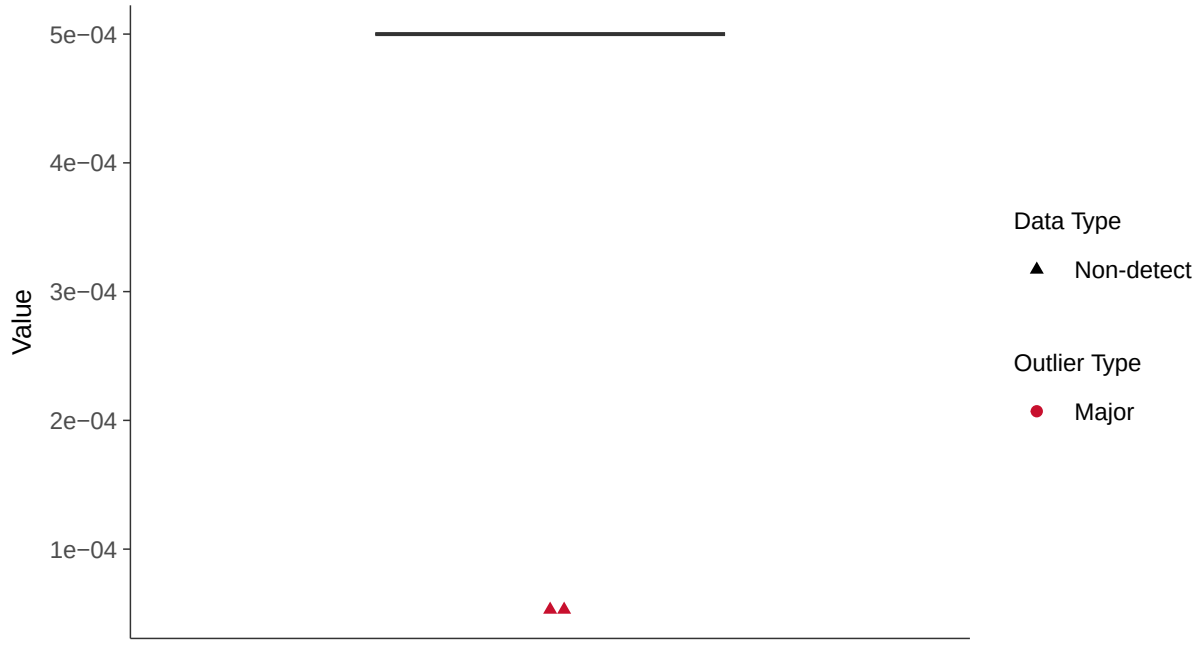
ID: 21_5_123





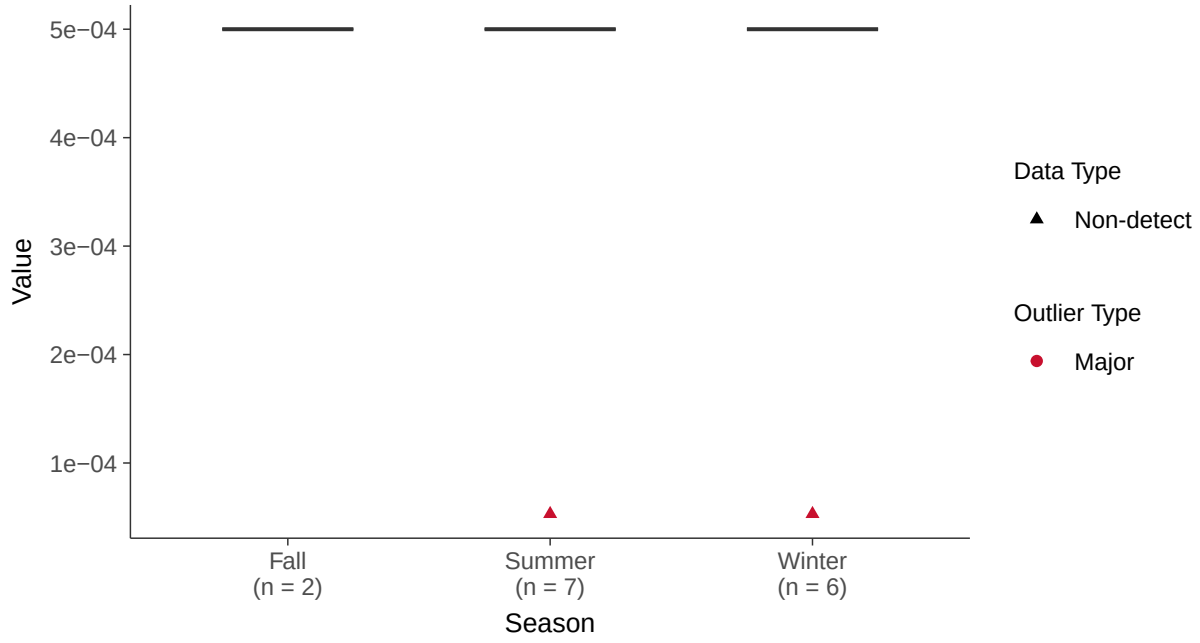
Boxplot

Silver, MW-10 (mg/l)



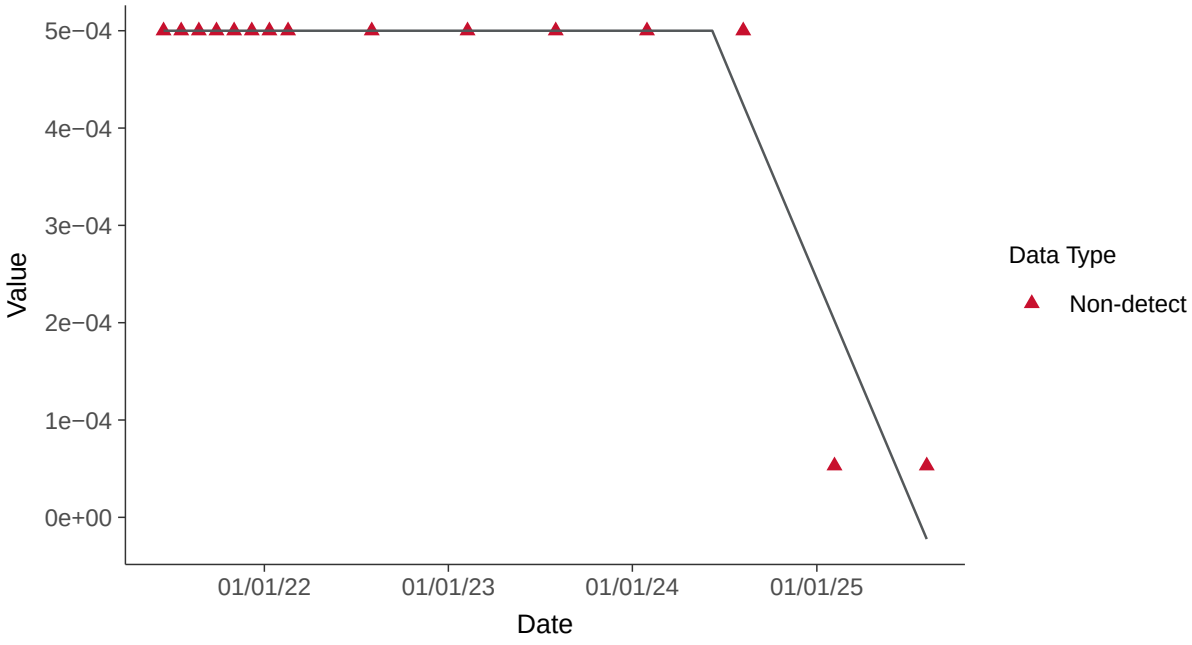
Boxplot by Season

Silver, MW-10 (mg/l)



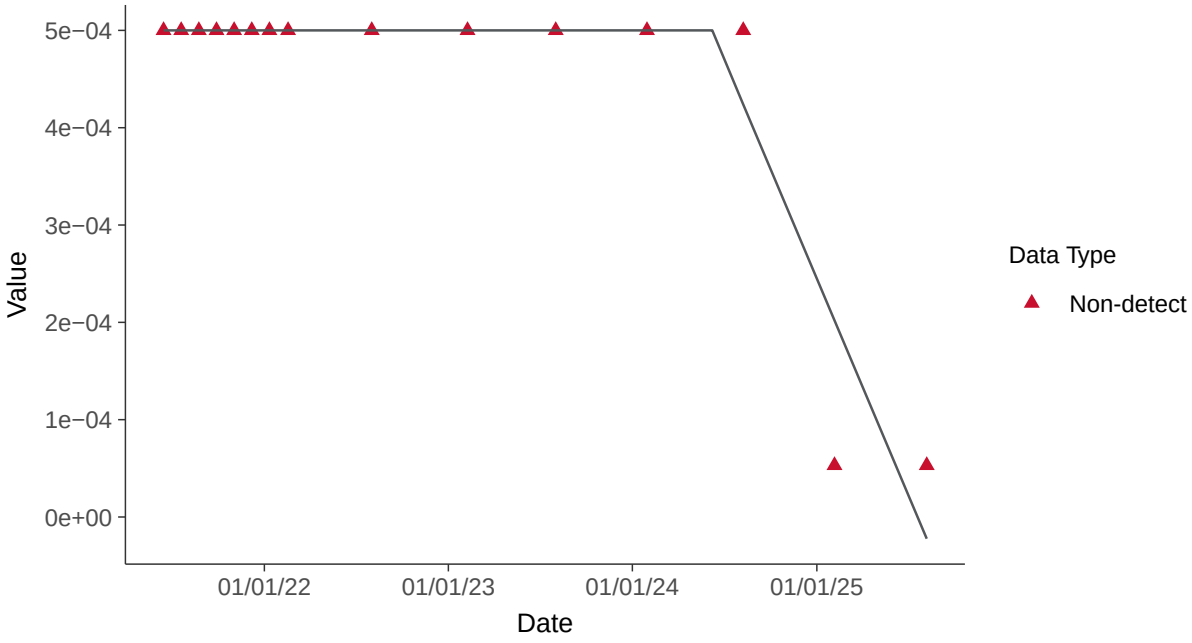
Trend Regression: Piecewise Linear-Linear

Silver, MW-10 (mg/l)



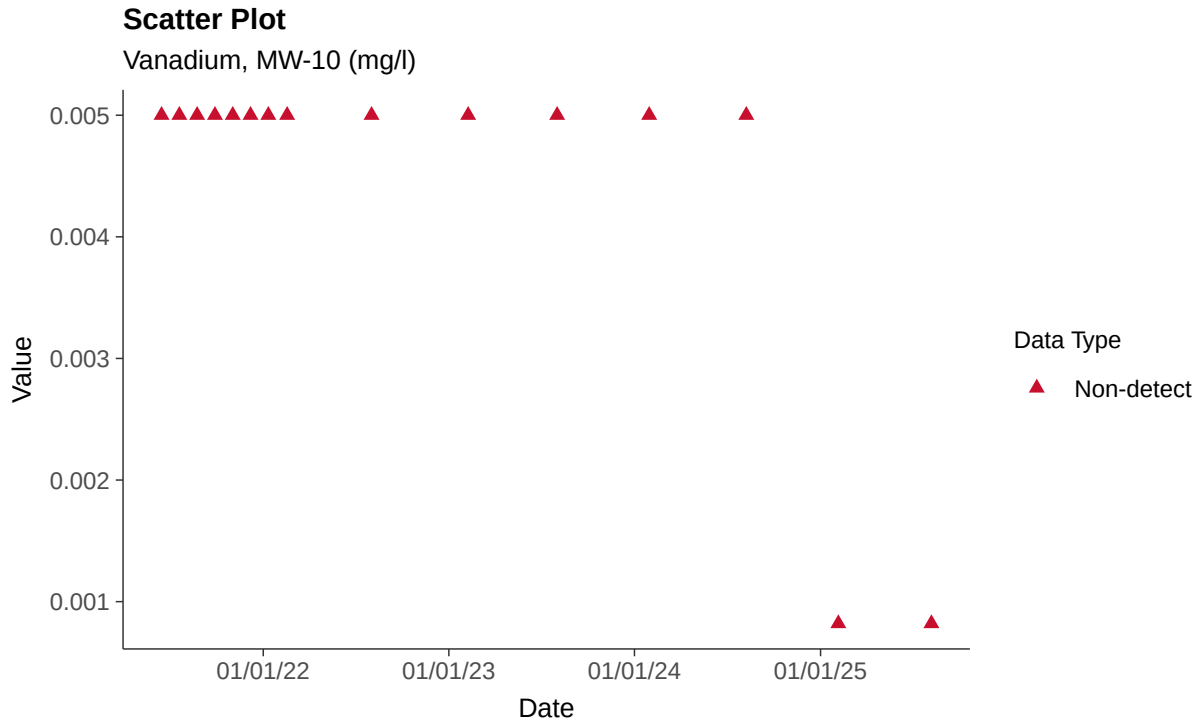
Trend Regression: Piecewise Linear-Linear-Linear

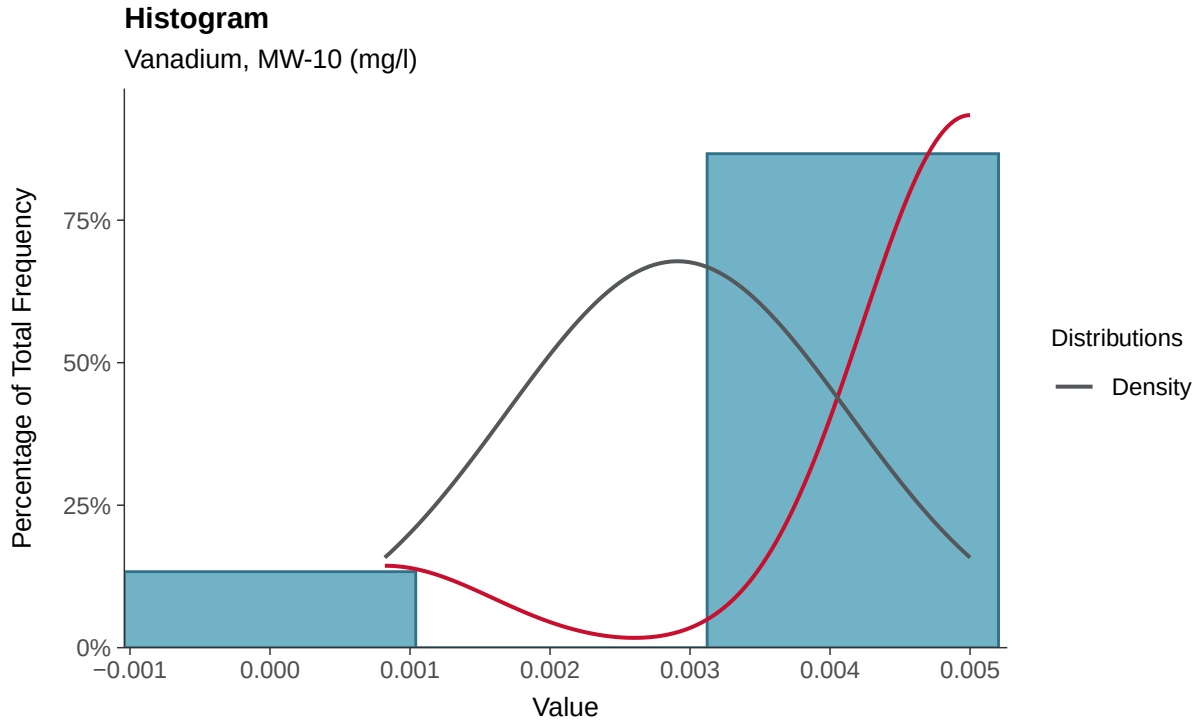
Silver, MW-10 (mg/l)



Part 115: Vanadium, MW-10

ID: 21_5_128



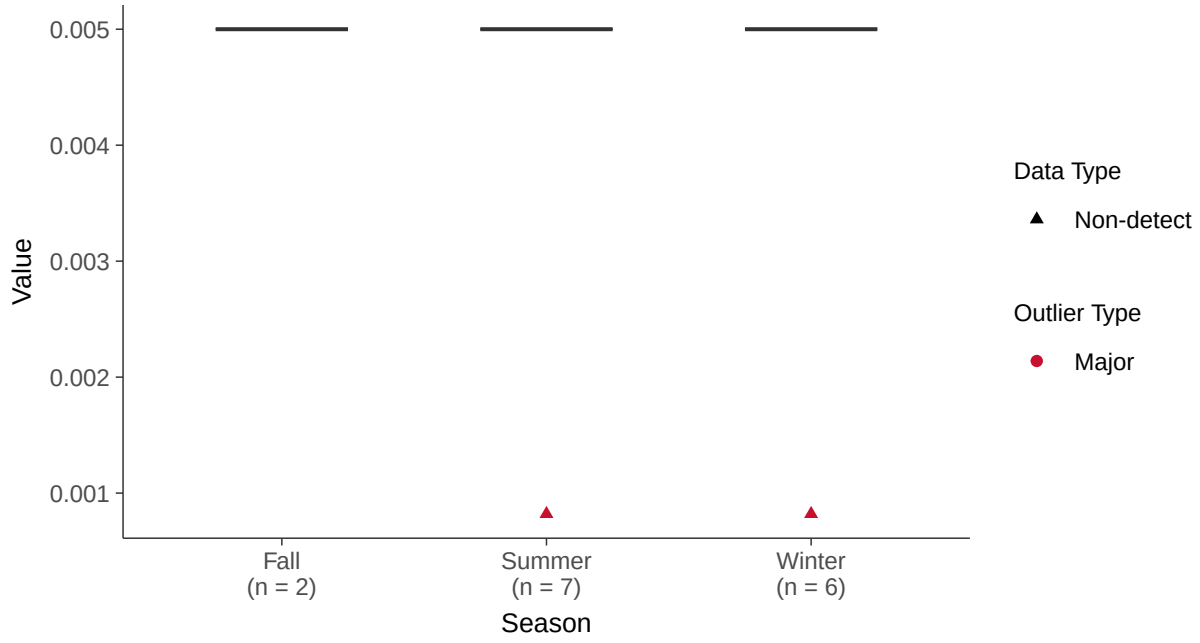


Boxplot

Vanadium, MW-10 (mg/l)

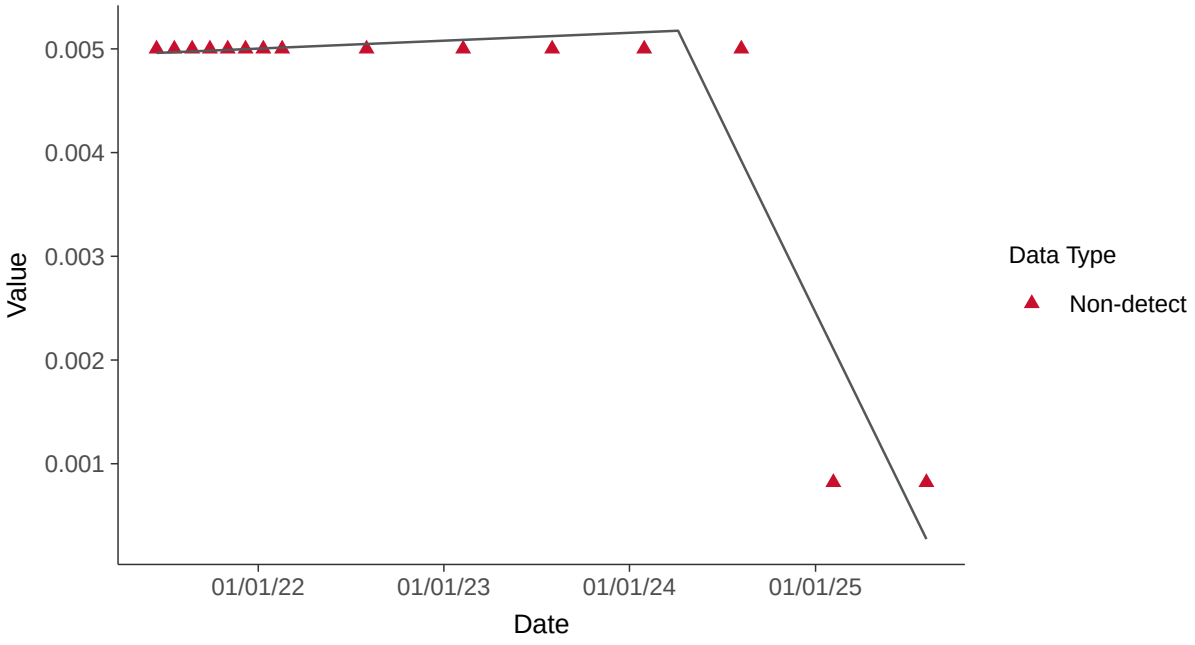
Boxplot by Season

Vanadium, MW-10 (mg/l)



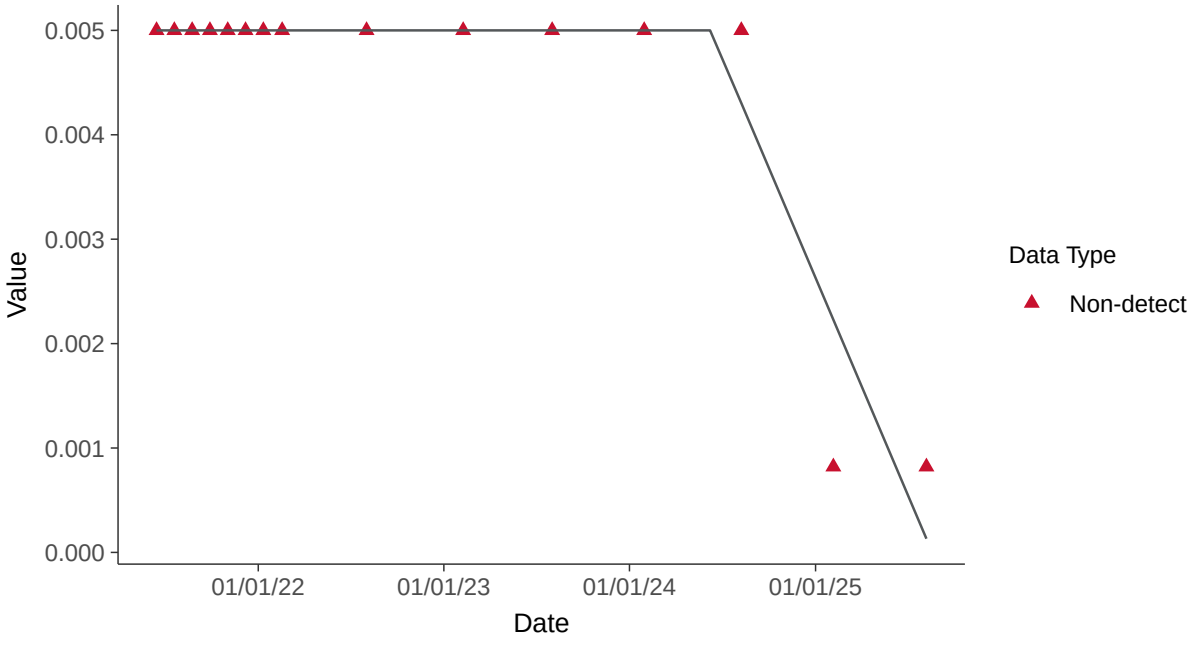
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-10 (mg/l)



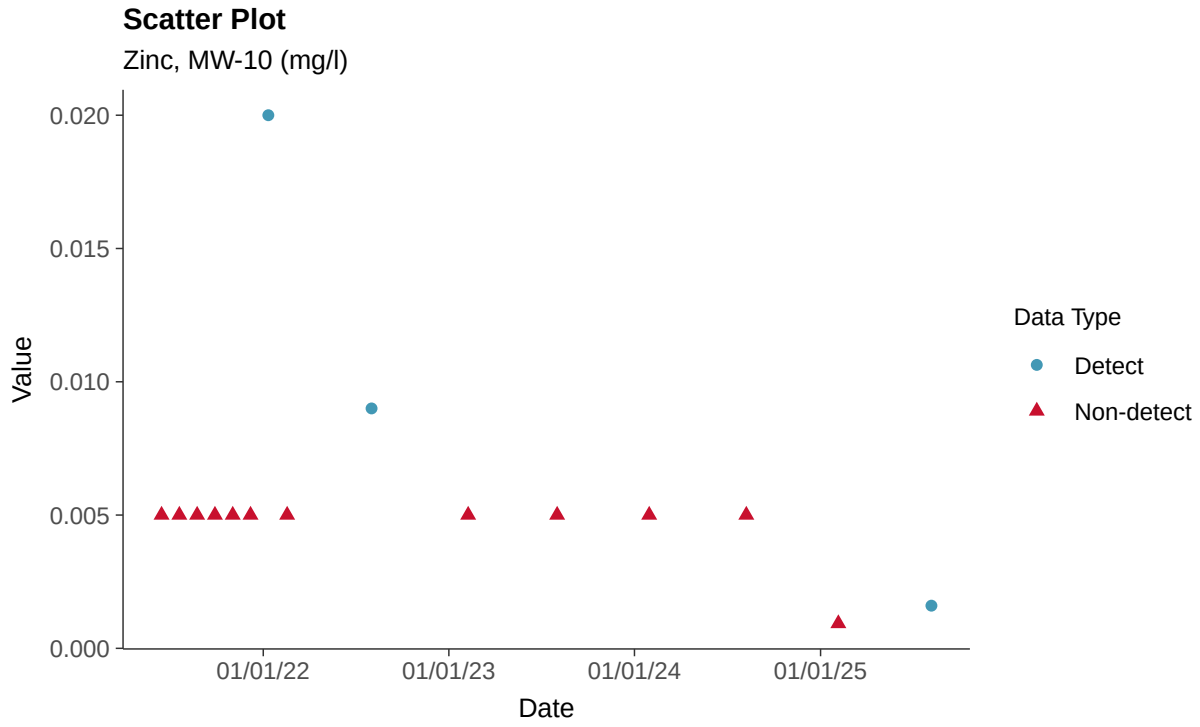
Trend Regression: Piecewise Linear-Linear-Linear

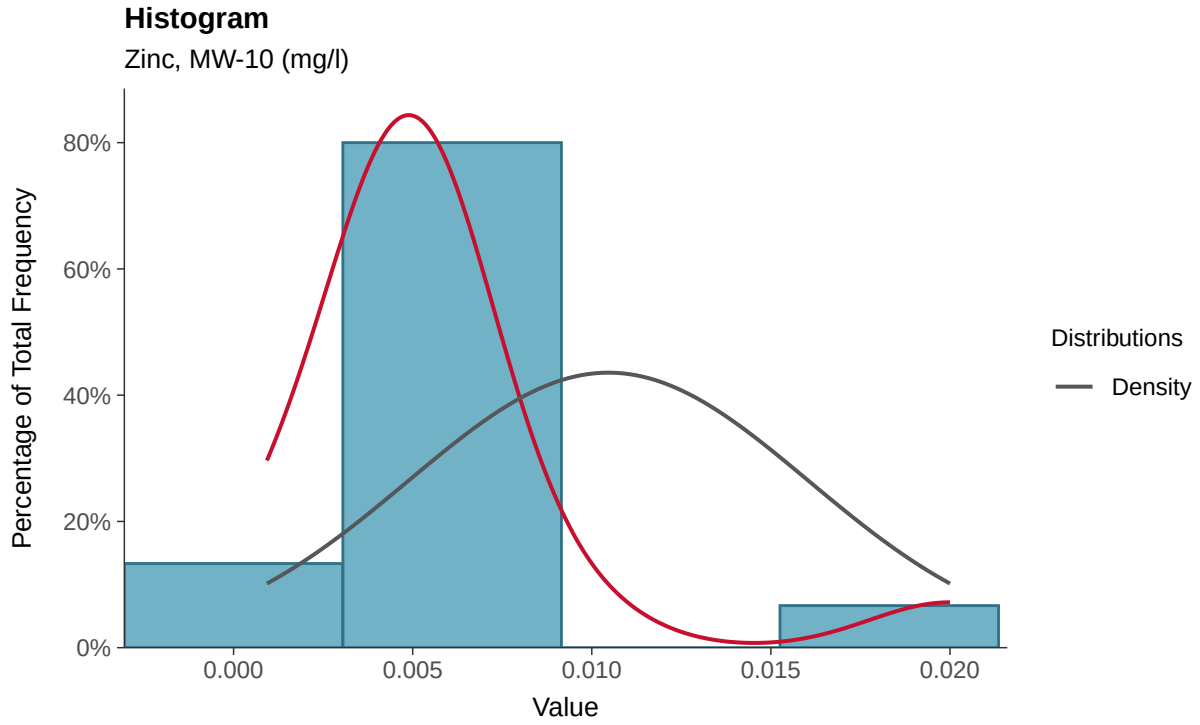
Vanadium, MW-10 (mg/l)



Part 115: Zinc, MW-10

ID: 21_5_129



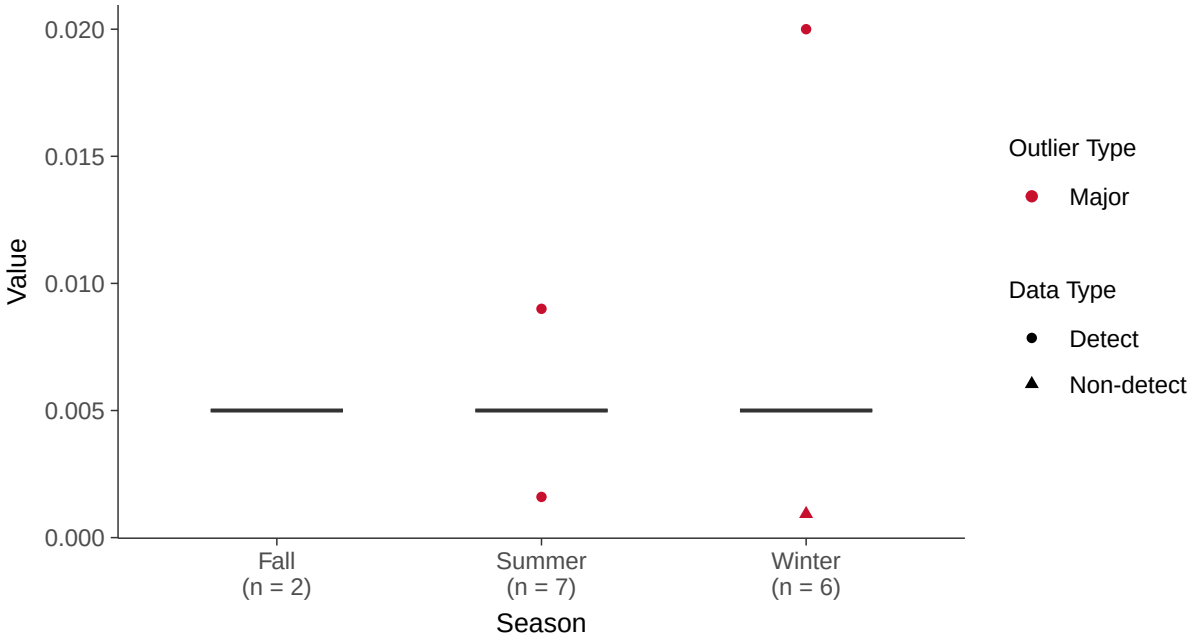


Boxplot

Zinc, MW-10 (mg/l)

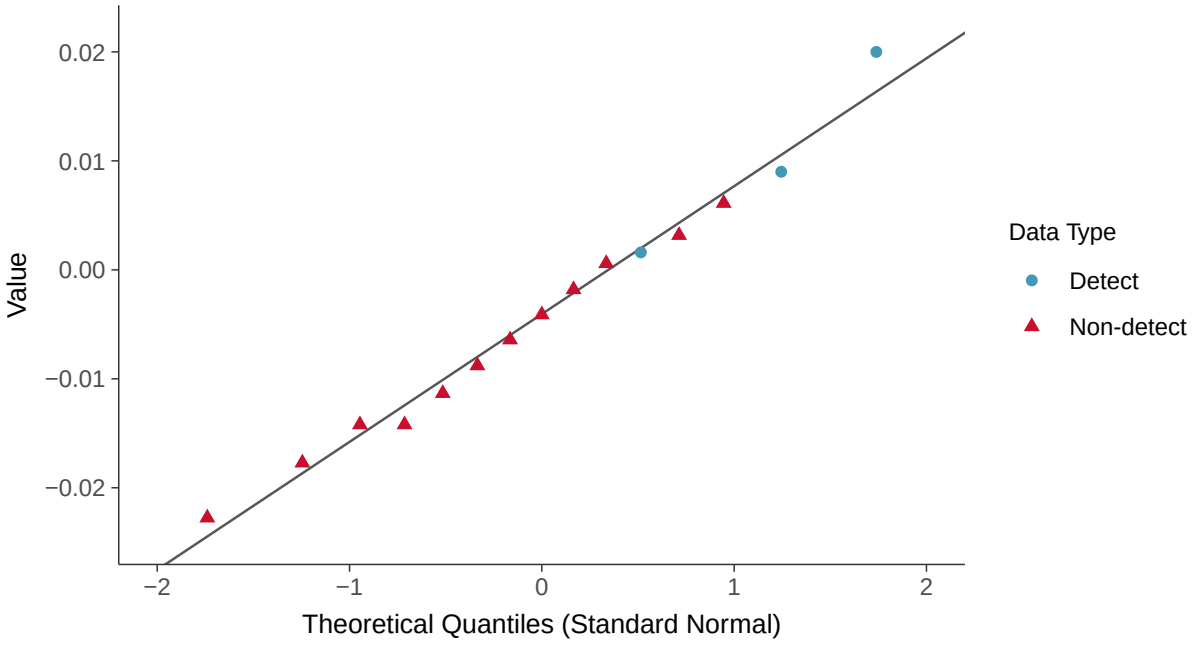
Boxplot by Season

Zinc, MW-10 (mg/l)



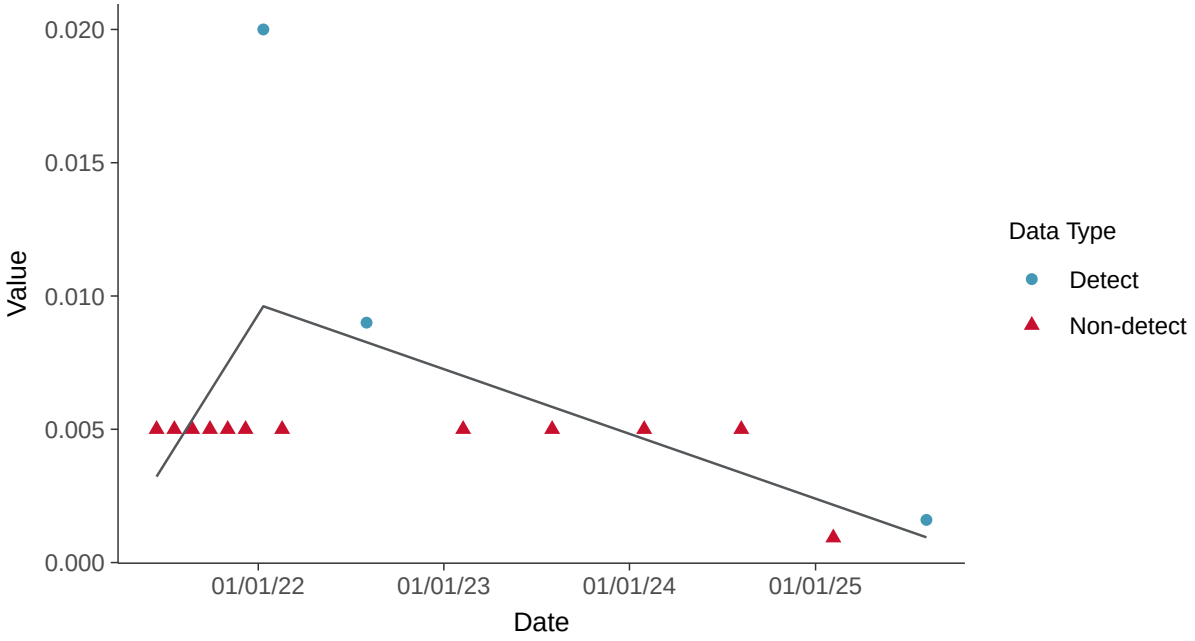
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-10 (mg/l)



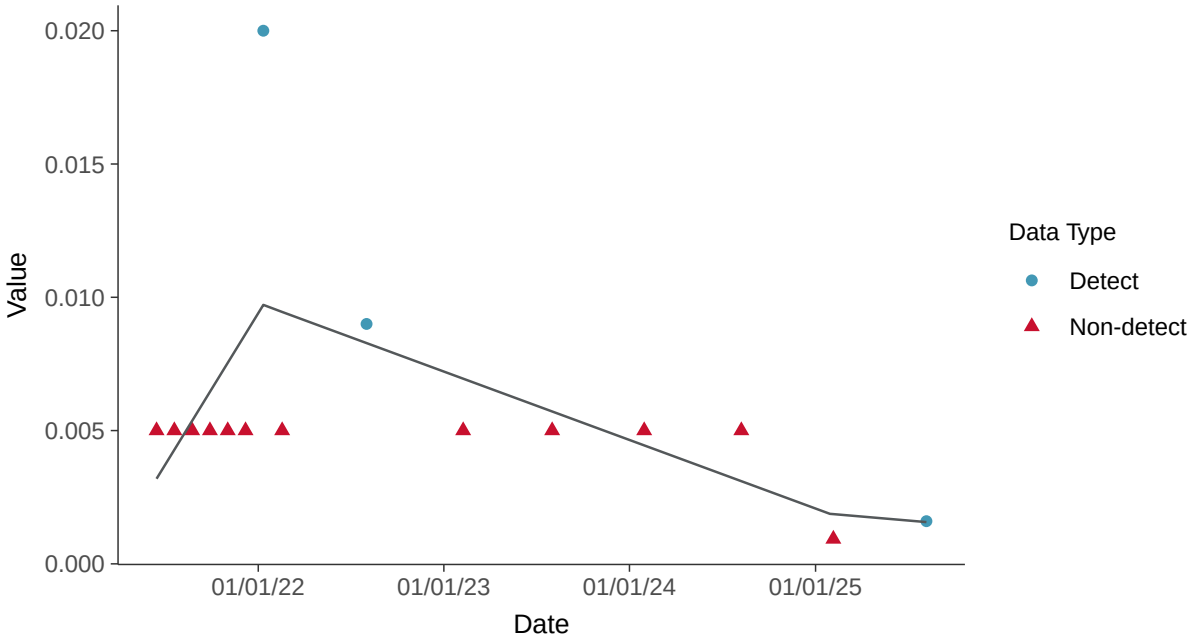
Trend Regression: Piecewise Linear-Linear

Zinc, MW-10 (mg/l)



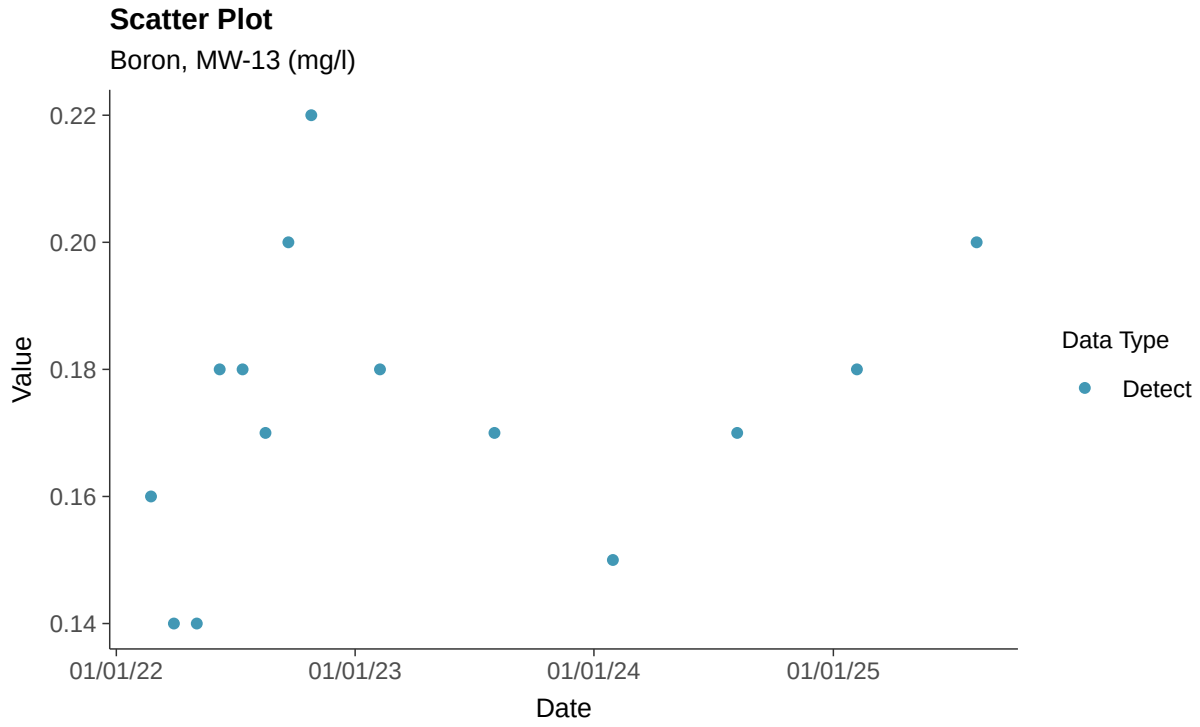
Trend Regression: Piecewise Linear-Linear-Linear

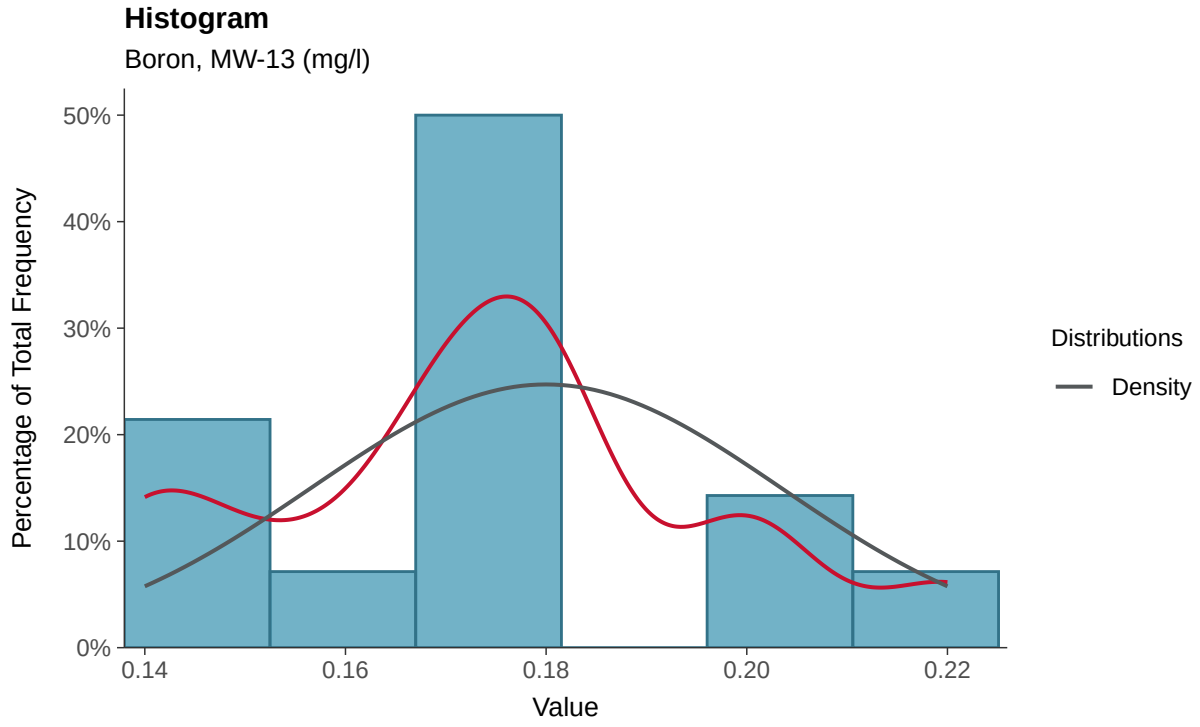
Zinc, MW-10 (mg/l)



Appendix III: Boron, MW-13

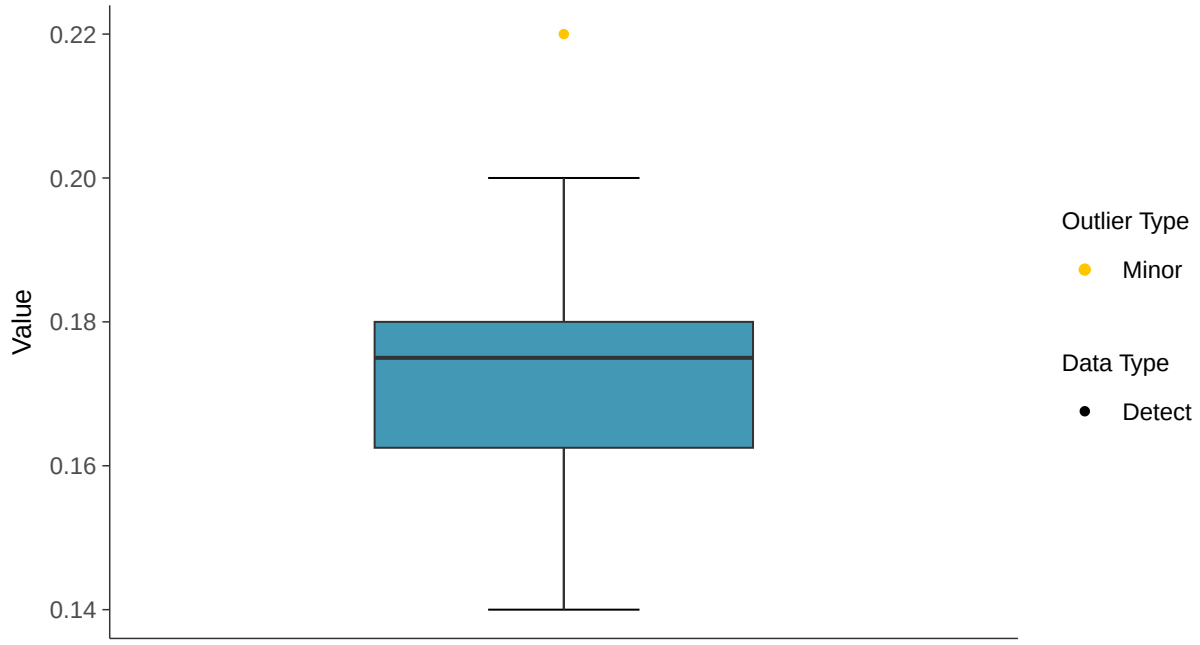
ID: 22_2_105





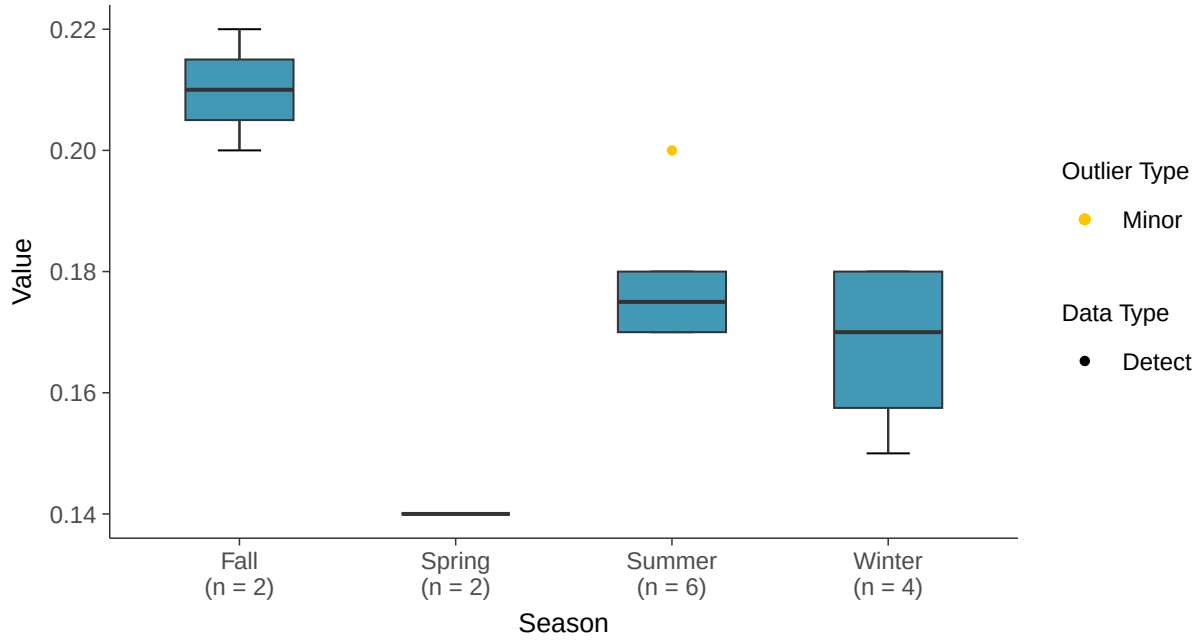
Boxplot

Boron, MW-13 (mg/l)



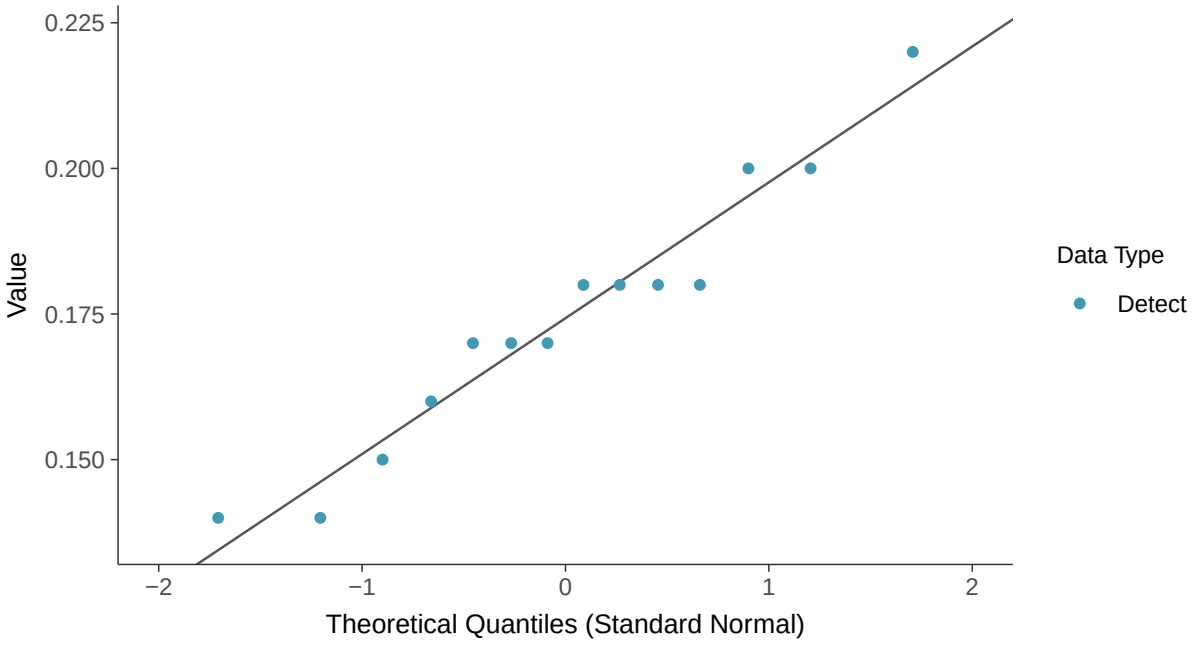
Boxplot by Season

Boron, MW-13 (mg/l)



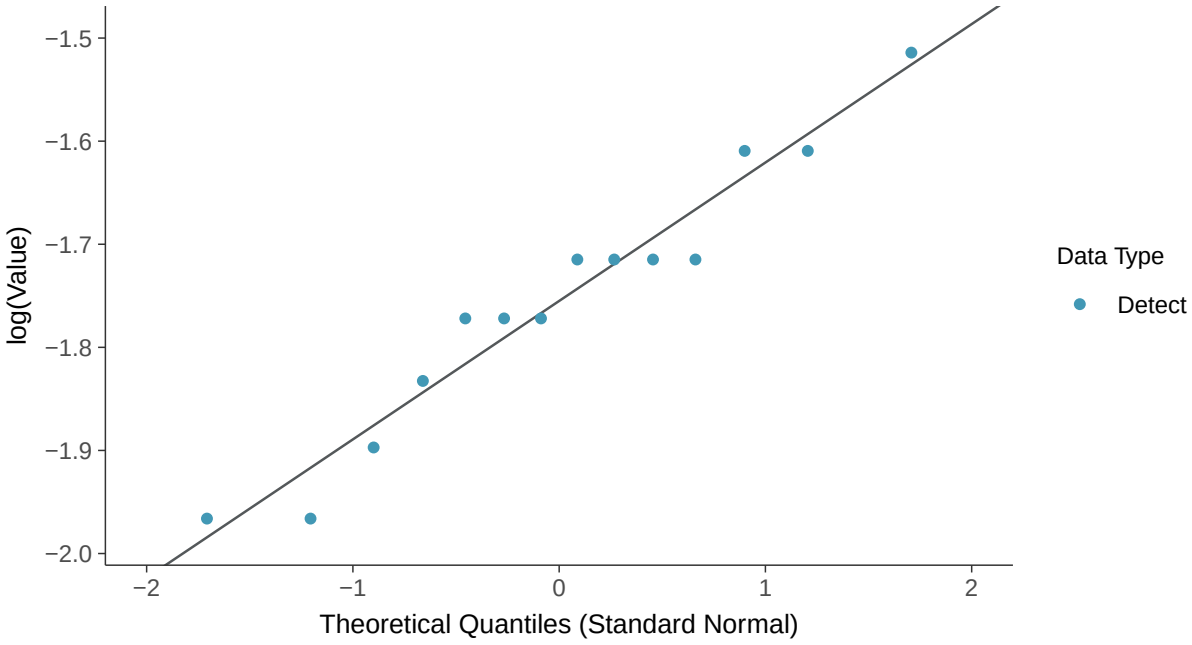
Normal Q-Q plot

Boron, MW-13 (mg/l)



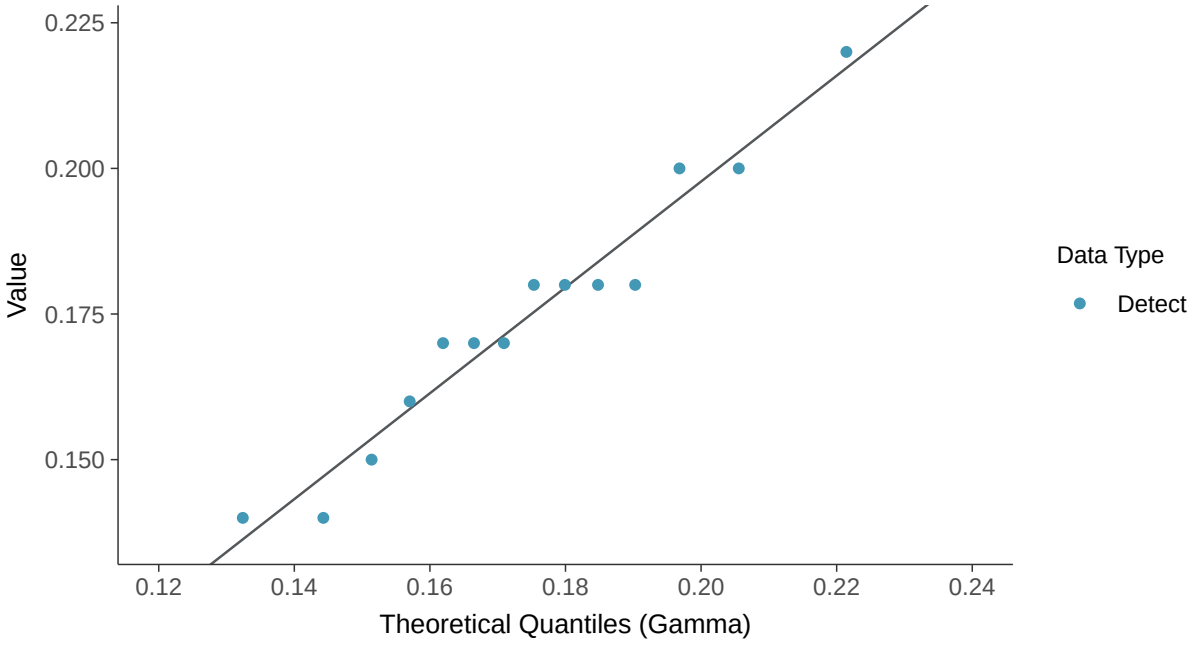
Lognormal Q-Q plot

Boron, MW-13 (mg/l)



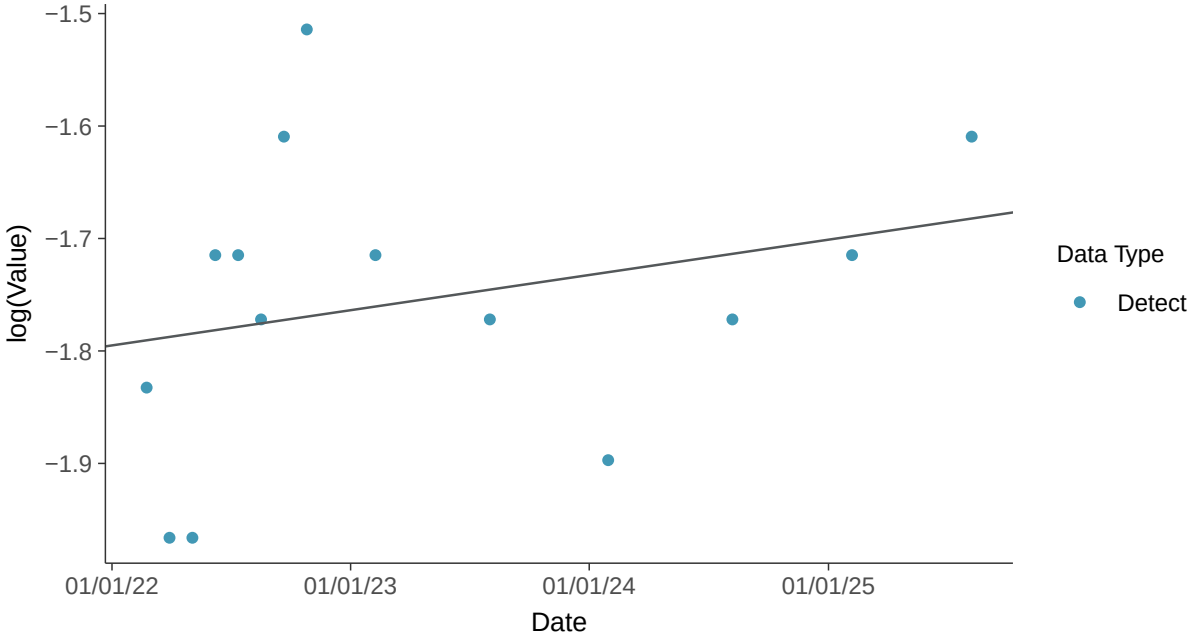
Gamma Q-Q plot

Boron, MW-13 (mg/l)



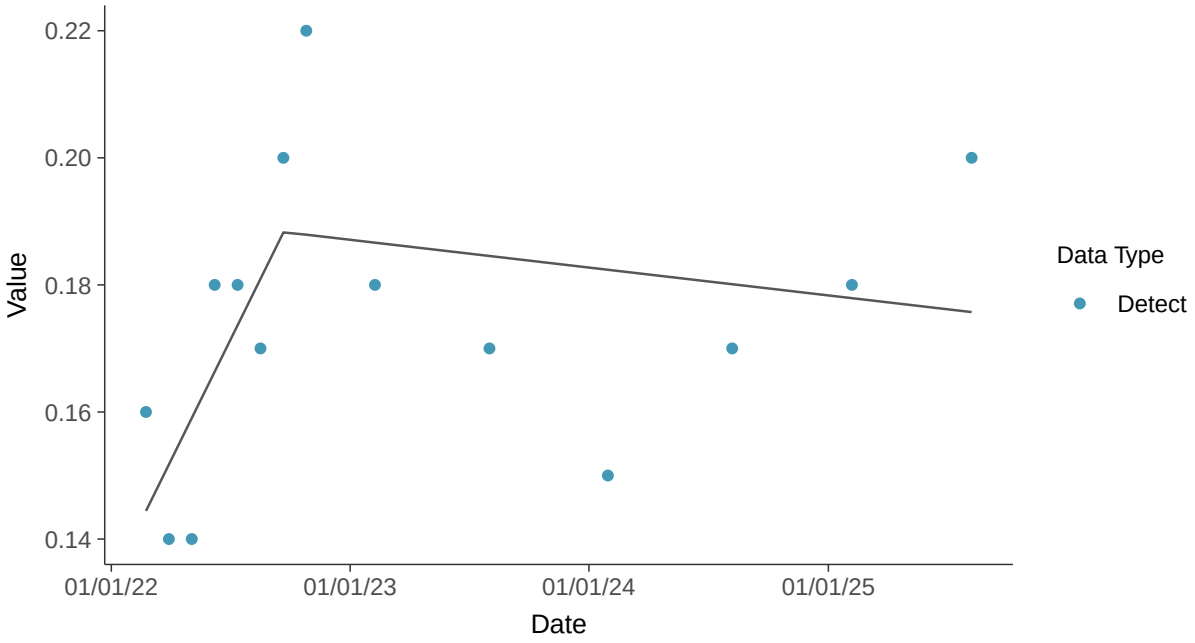
Trend Regression: Lognormal MLE

Boron, MW-13 (mg/l)



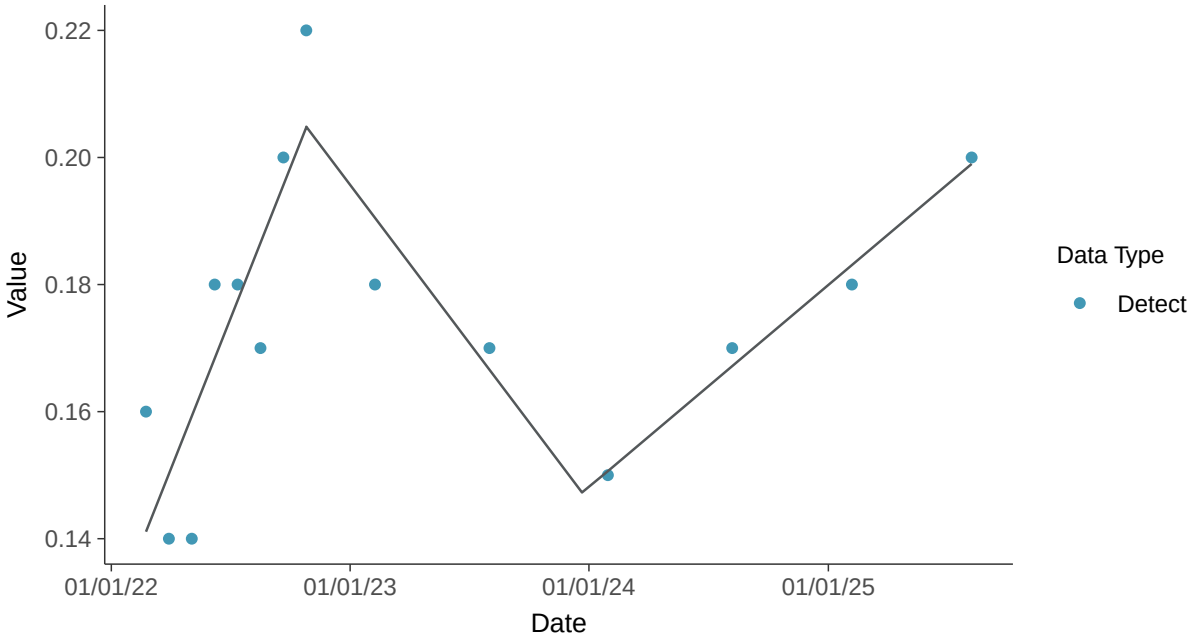
Trend Regression: Piecewise Linear-Linear

Boron, MW-13 (mg/l)



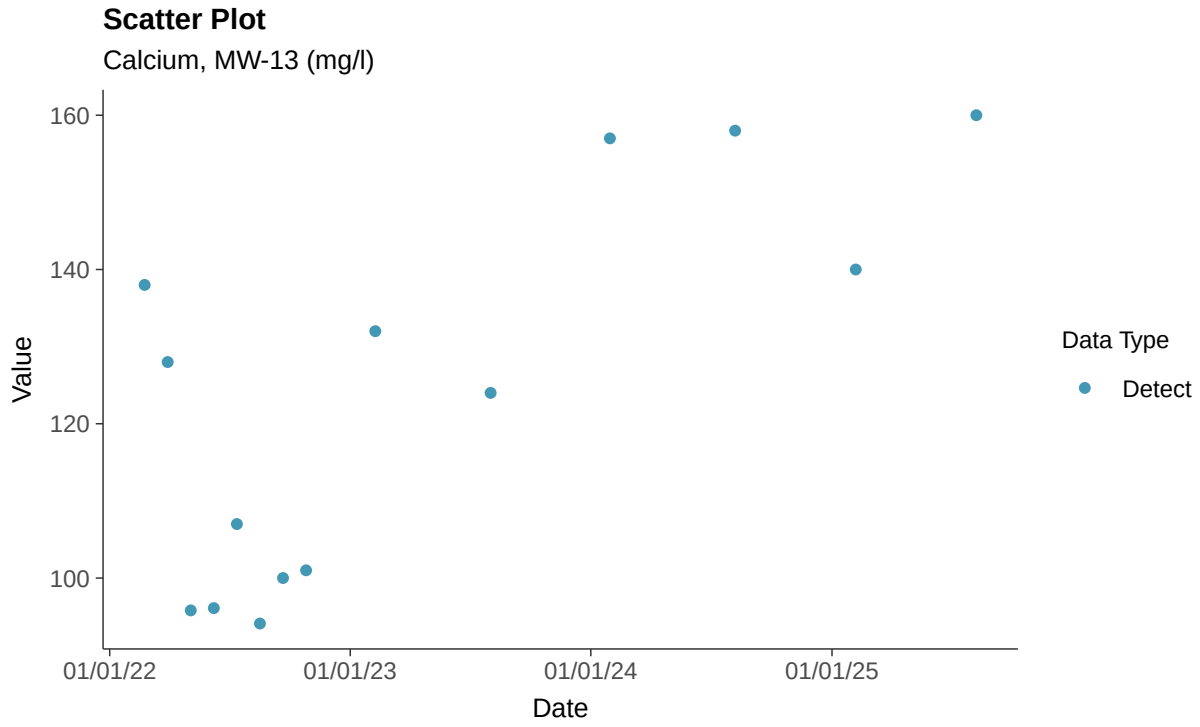
Trend Regression: Piecewise Linear-Linear-Linear

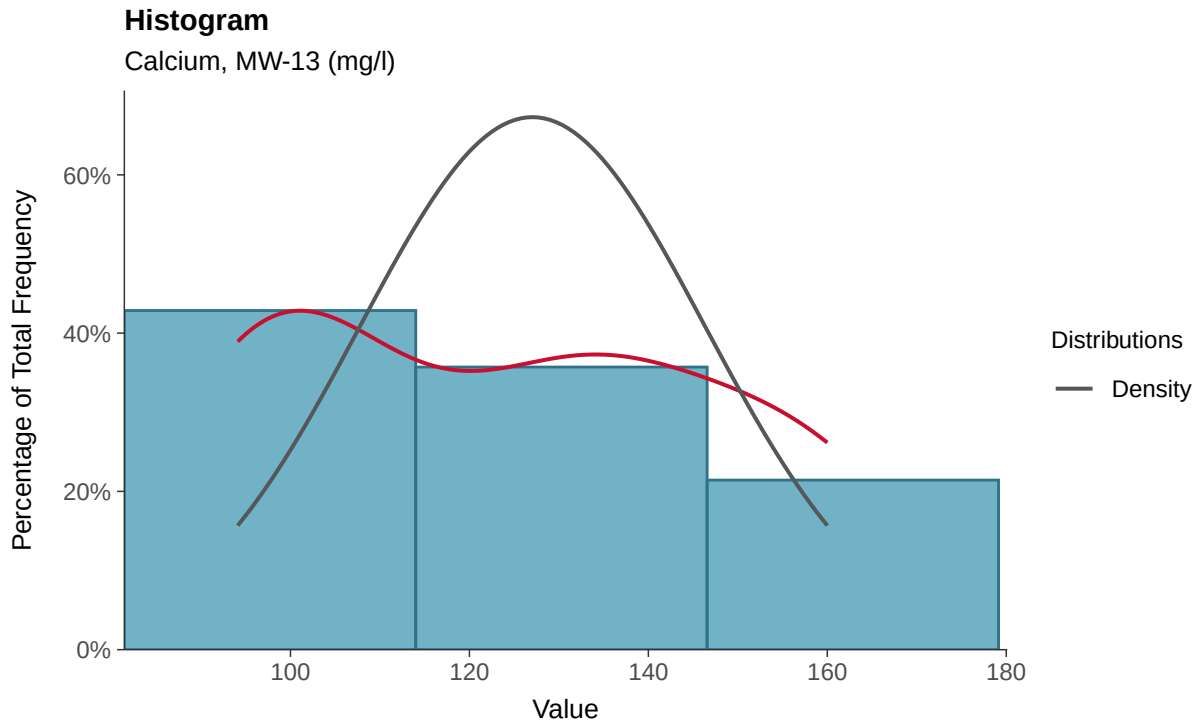
Boron, MW-13 (mg/l)



Appendix III: Calcium, MW-13

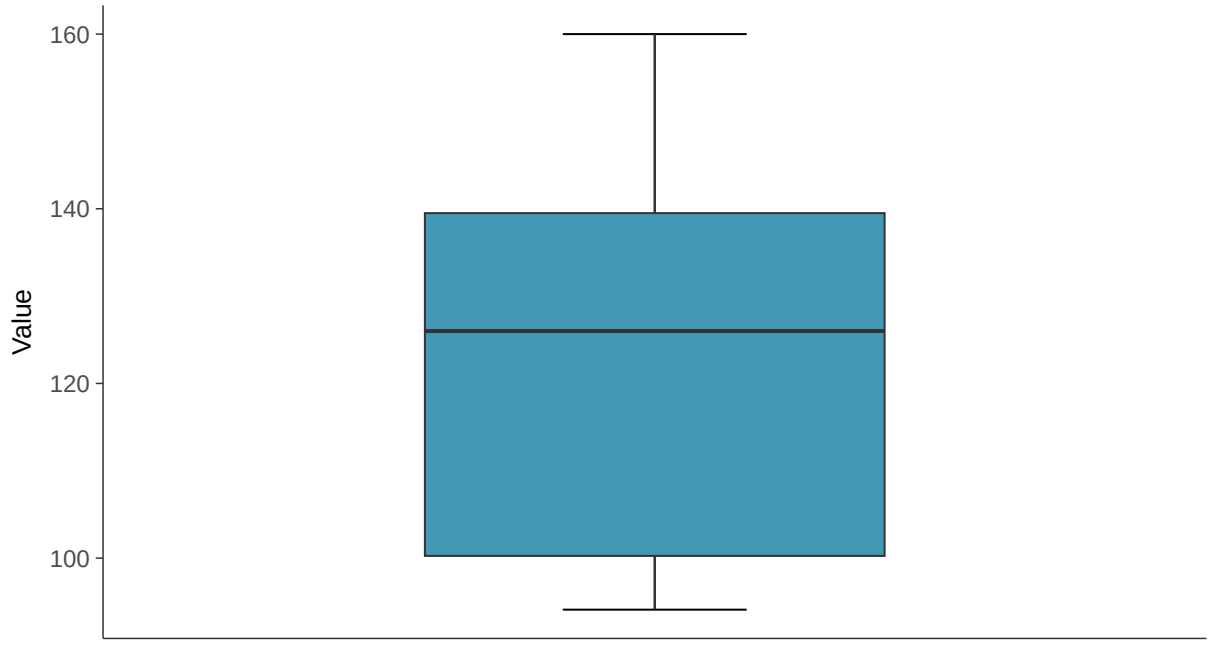
ID: 22_2_107





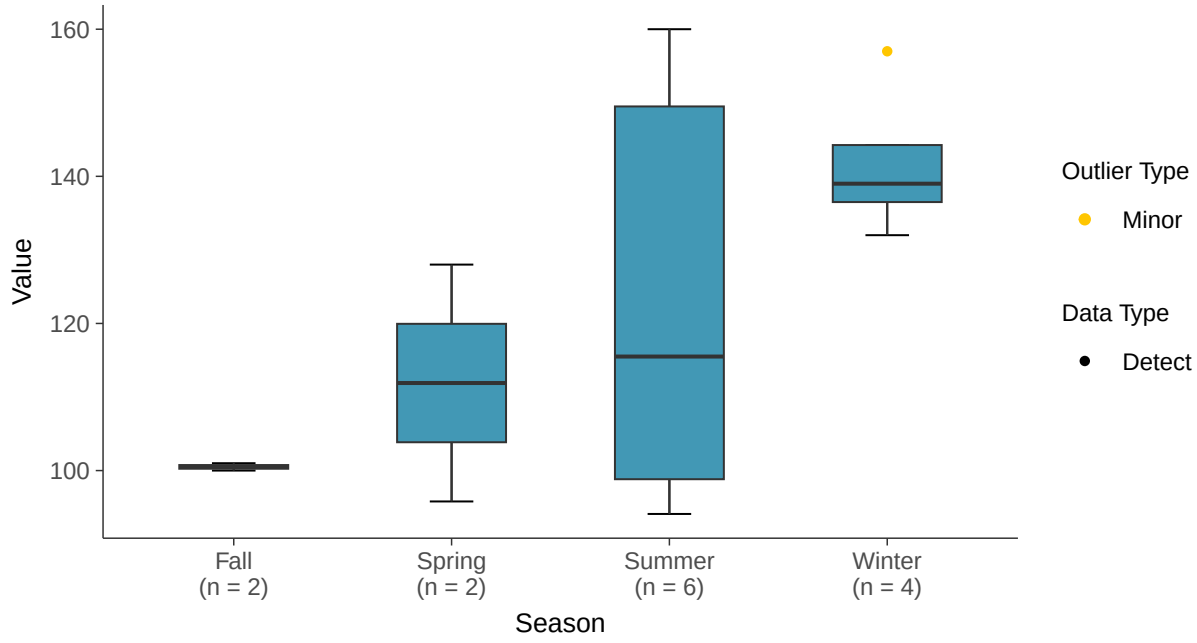
Boxplot

Calcium, MW-13 (mg/l)



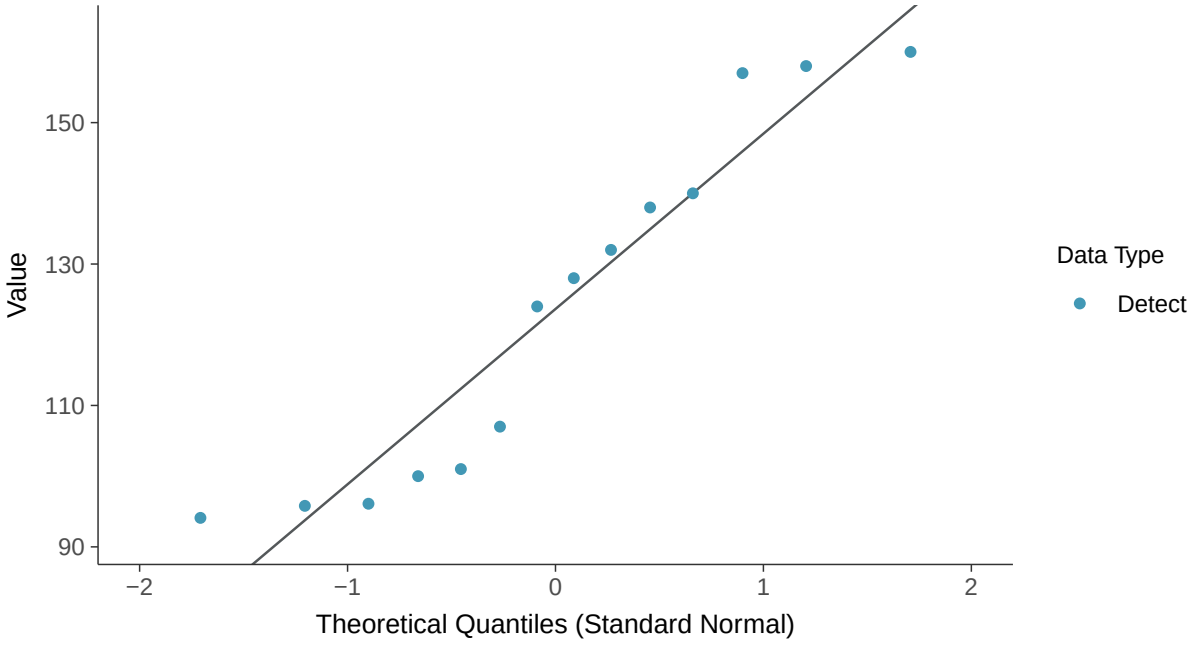
Boxplot by Season

Calcium, MW-13 (mg/l)



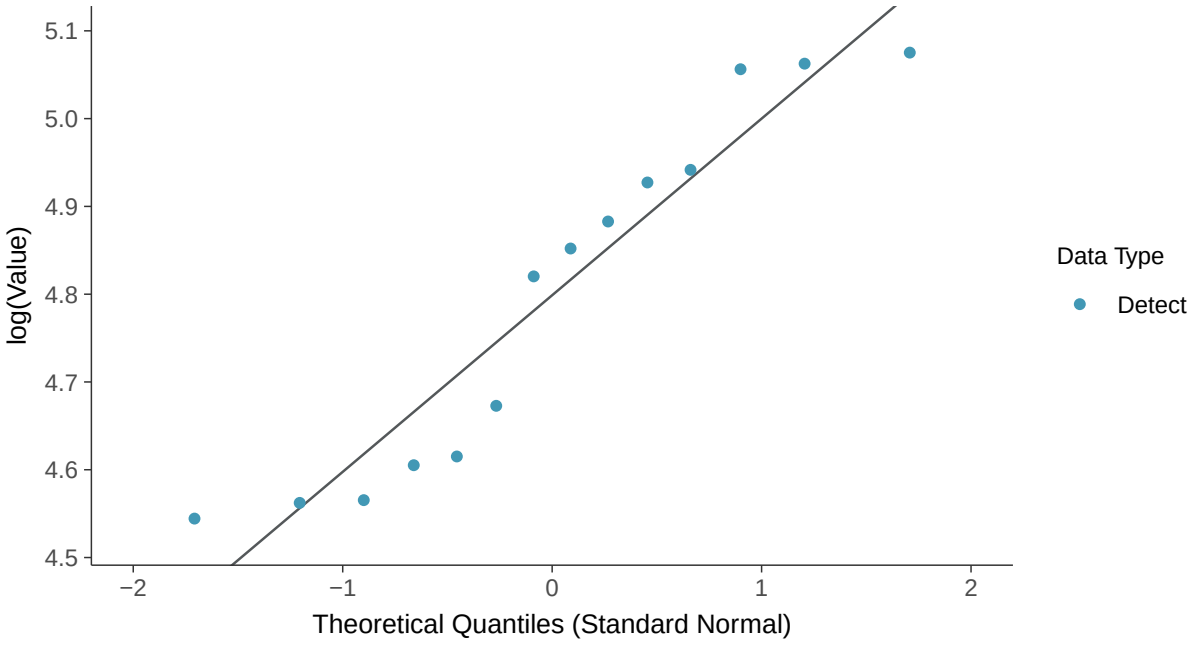
Normal Q-Q plot

Calcium, MW-13 (mg/l)



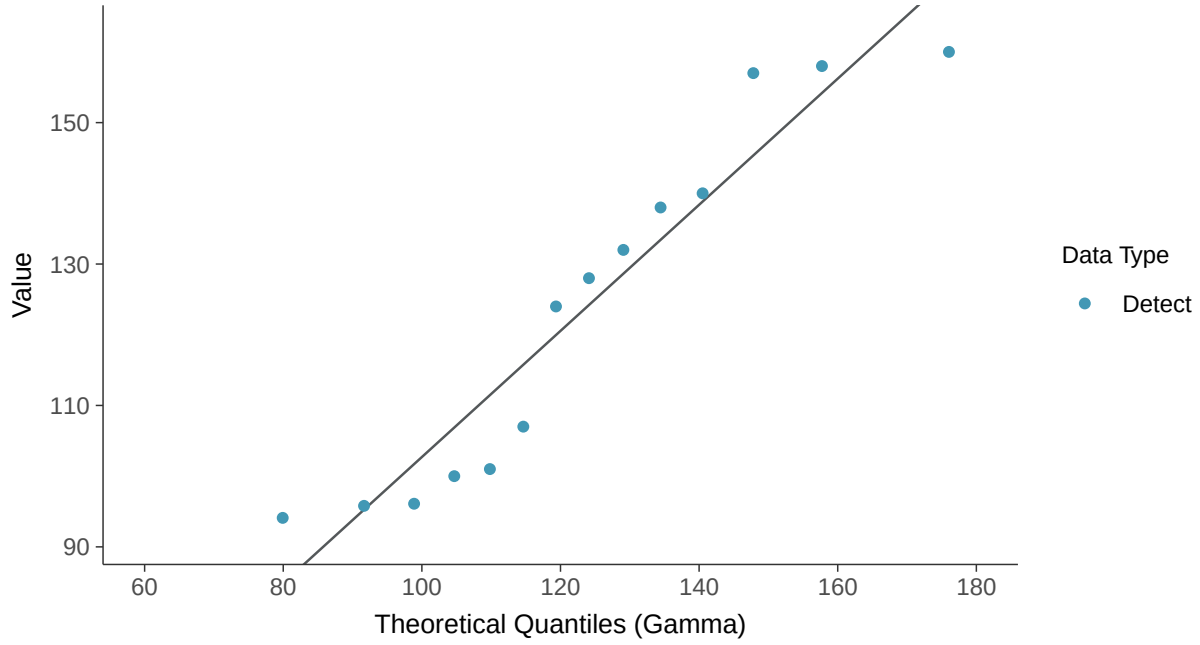
Lognormal Q-Q plot

Calcium, MW-13 (mg/l)



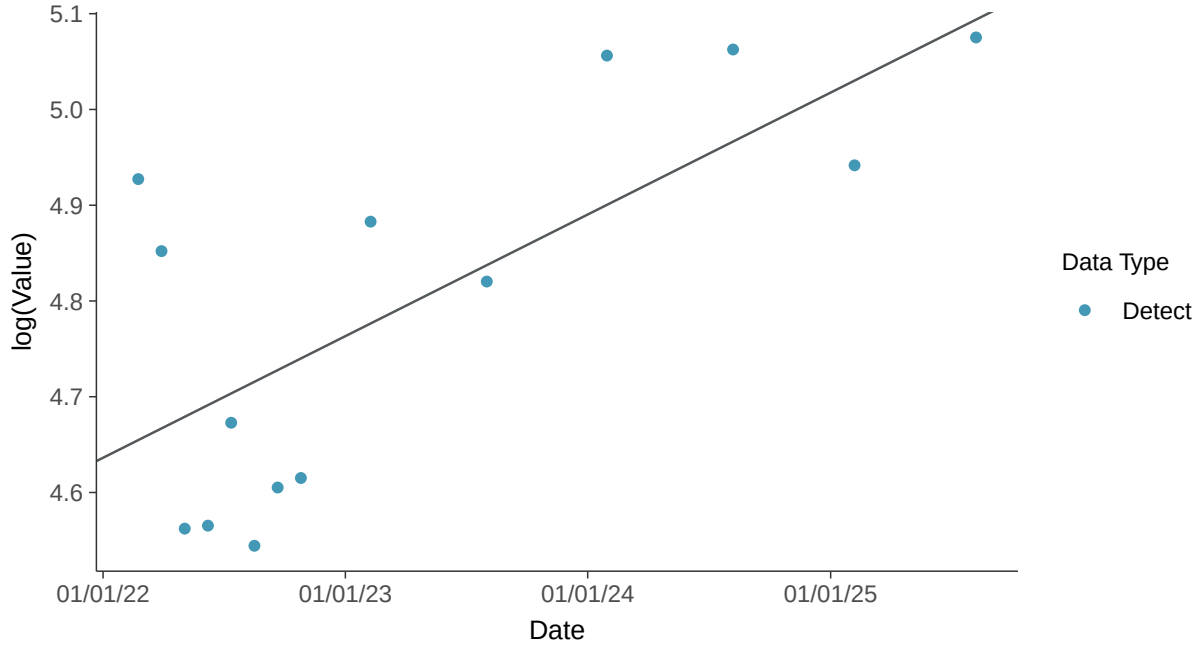
Gamma Q-Q plot

Calcium, MW-13 (mg/l)



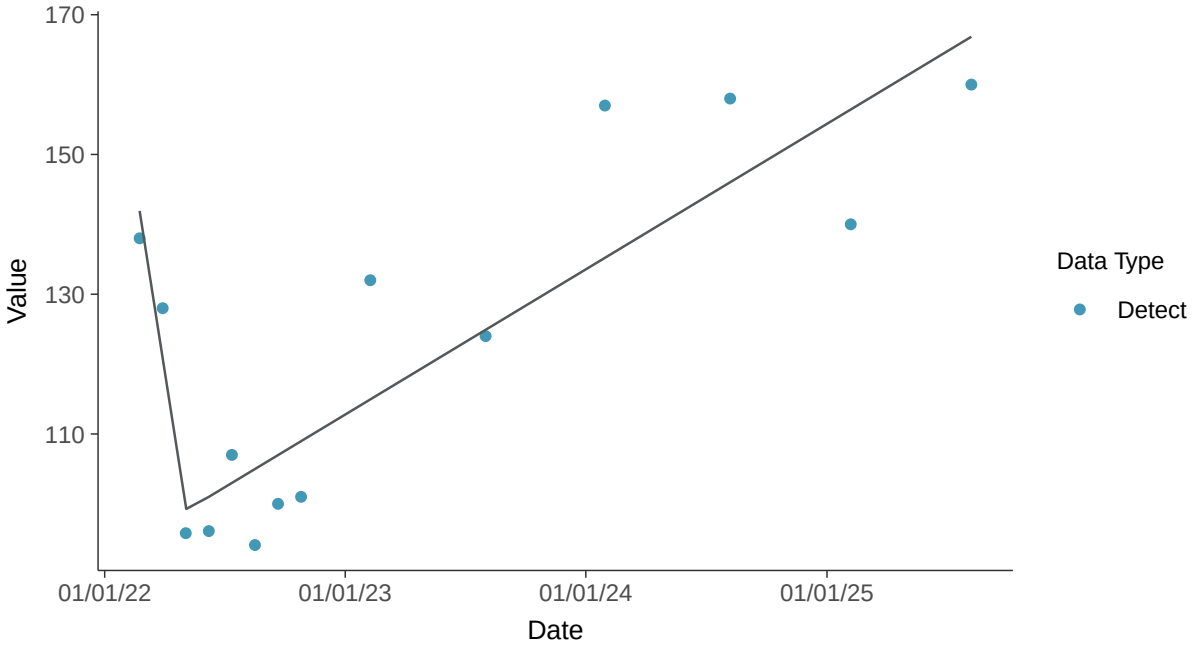
Trend Regression: Lognormal MLE

Calcium, MW-13 (mg/l)



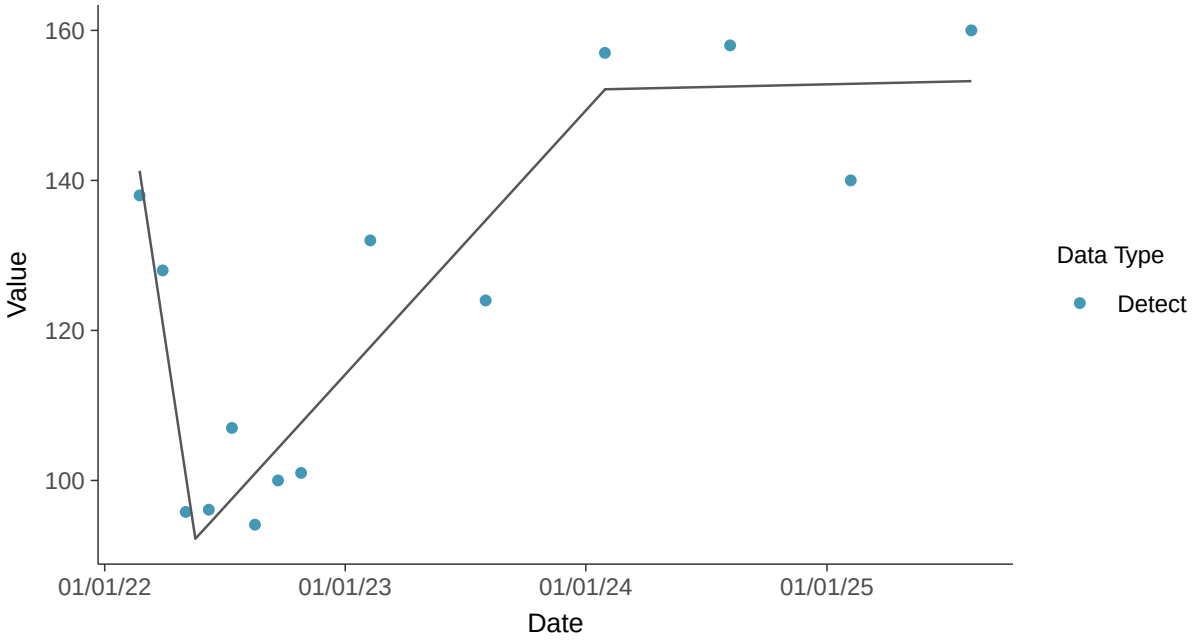
Trend Regression: Piecewise Linear-Linear

Calcium, MW-13 (mg/l)



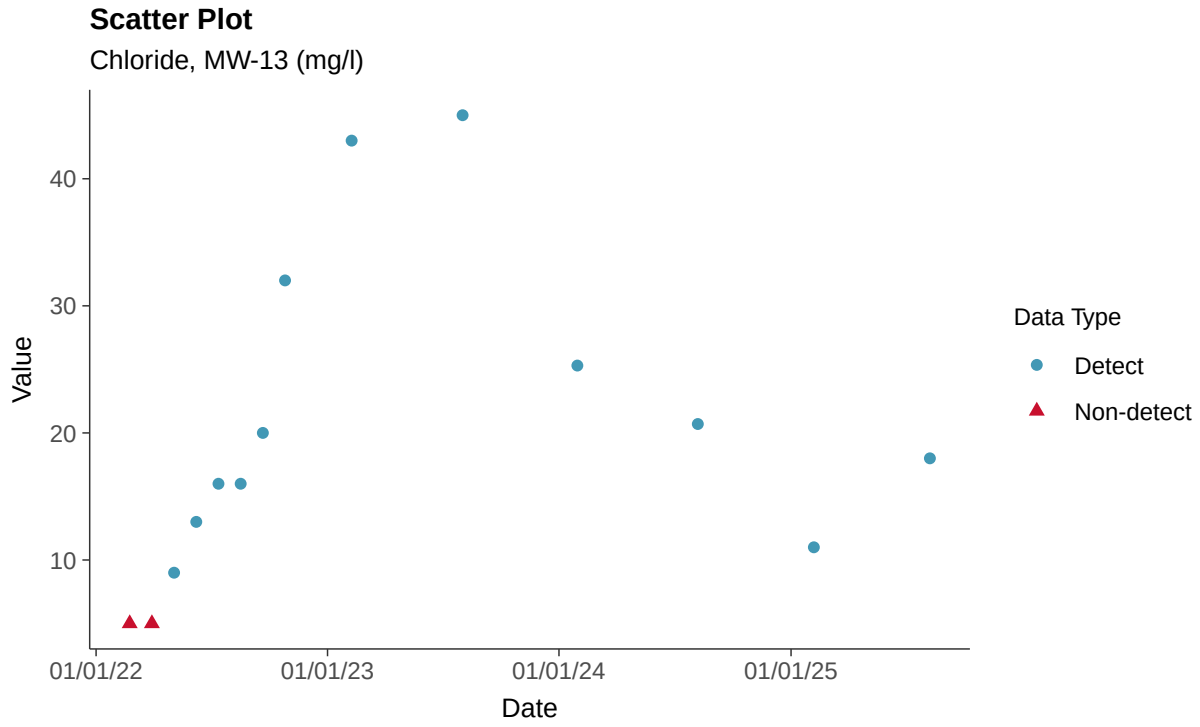
Trend Regression: Piecewise Linear-Linear-Linear

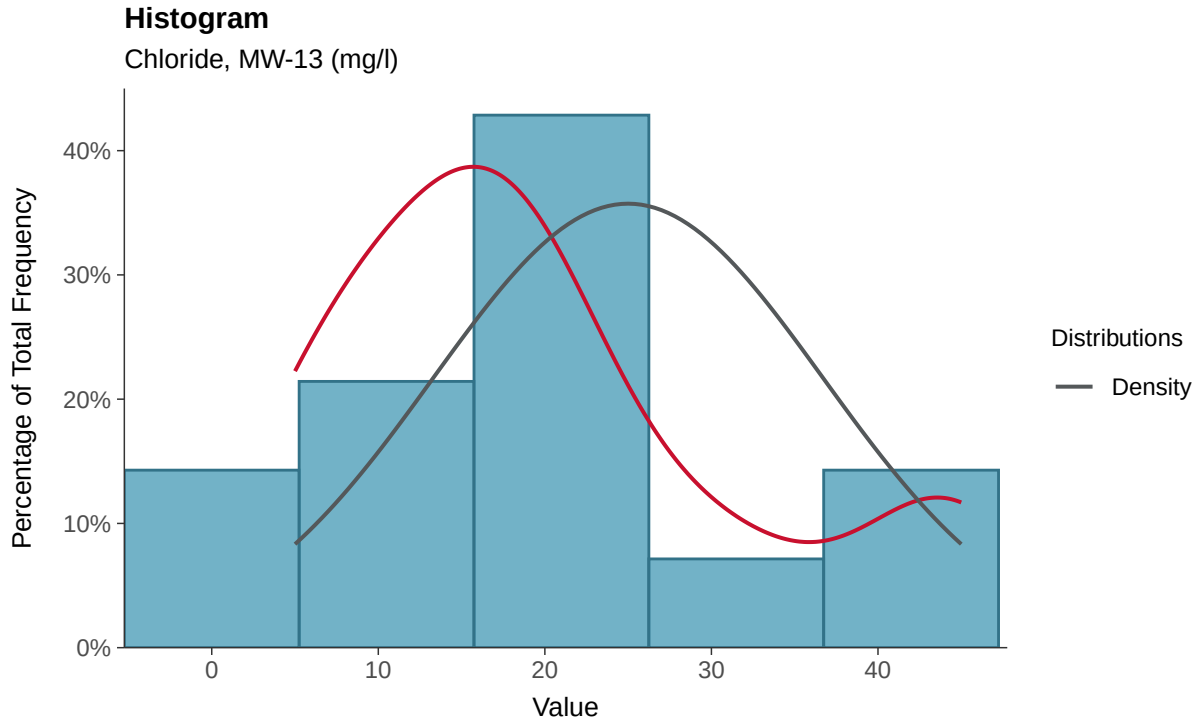
Calcium, MW-13 (mg/l)



Appendix III: Chloride, MW-13

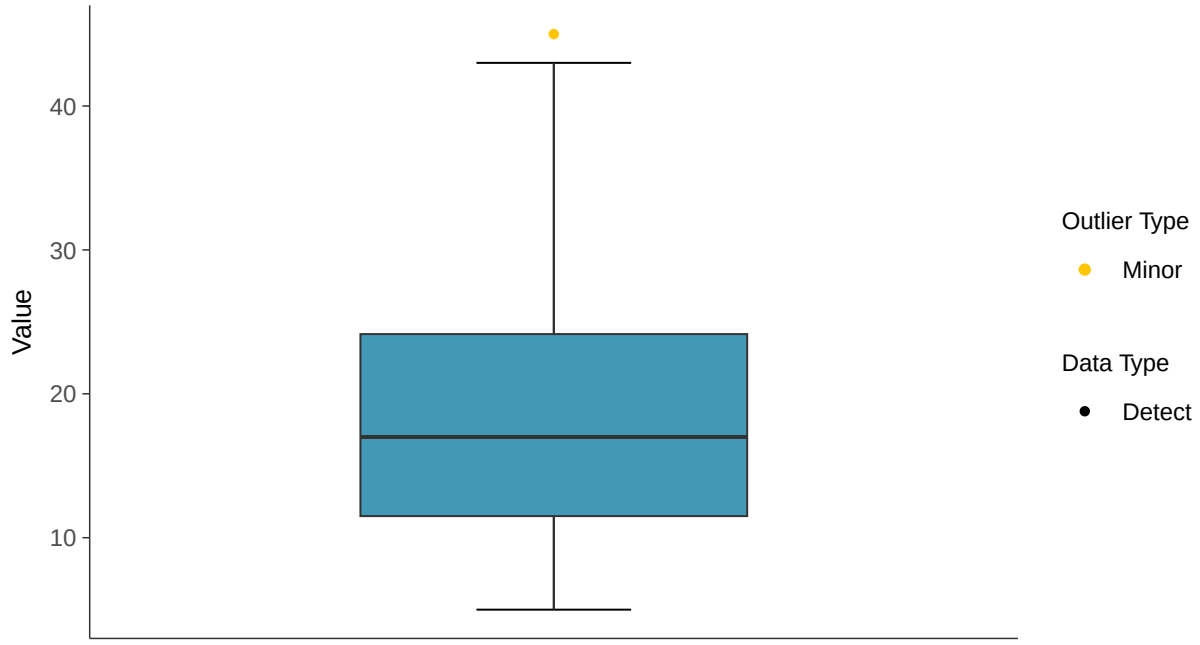
ID: 22_2_108





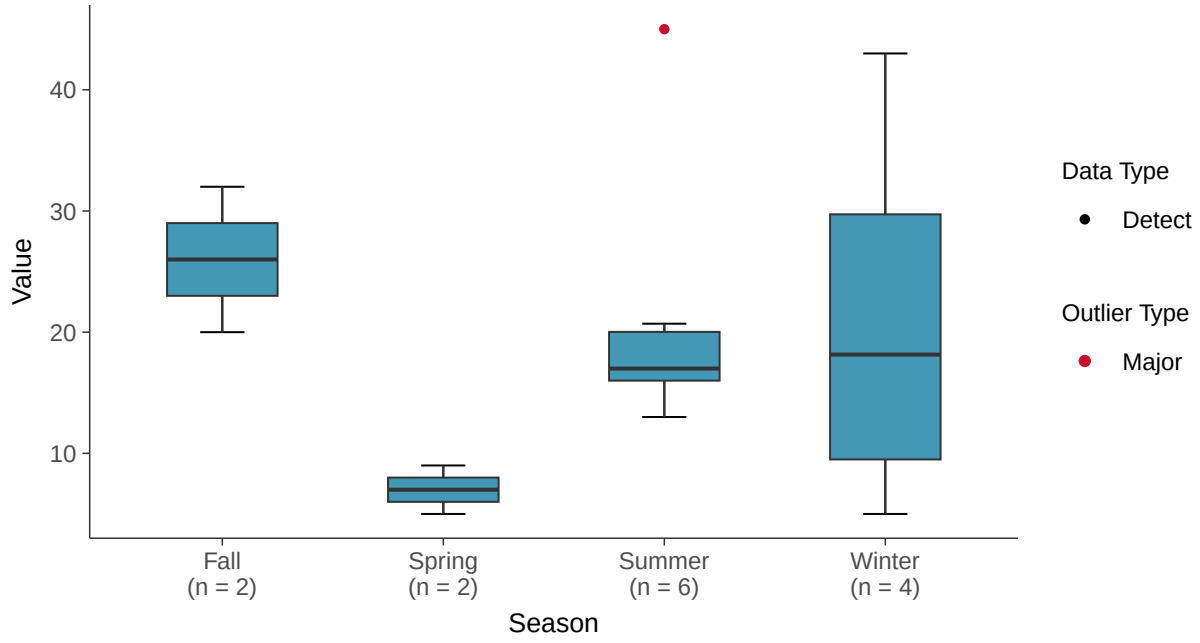
Boxplot

Chloride, MW-13 (mg/l)



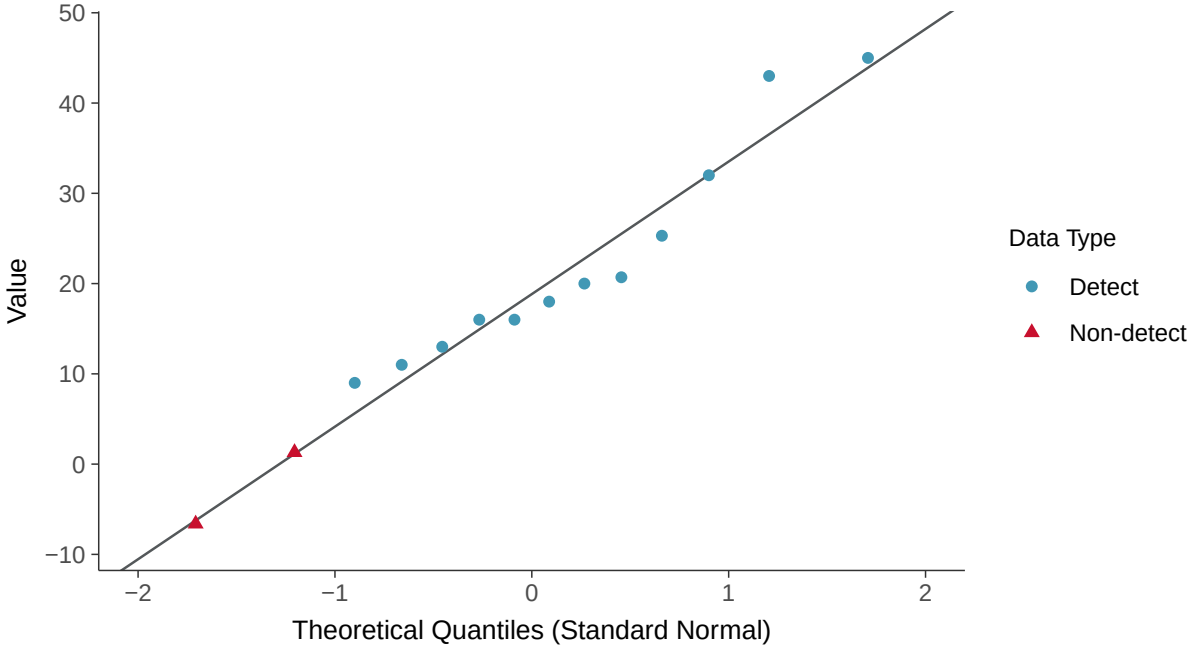
Boxplot by Season

Chloride, MW-13 (mg/l)



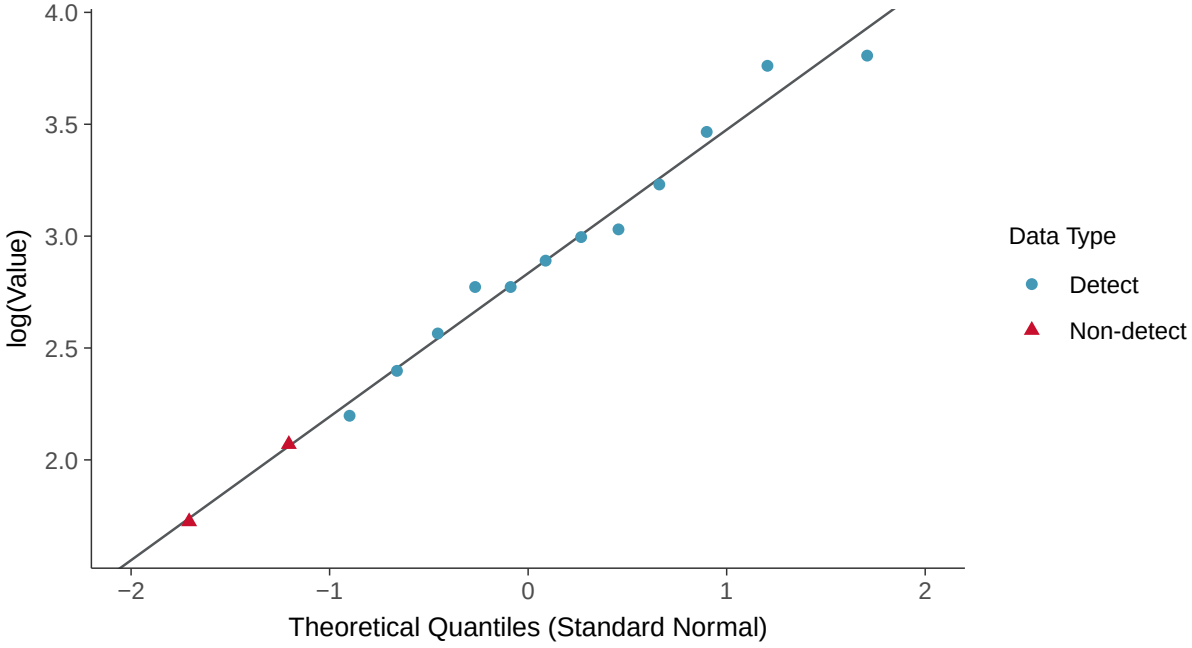
Normal Q-Q plot using ROS Imputed Estimates

Chloride, MW-13 (mg/l)



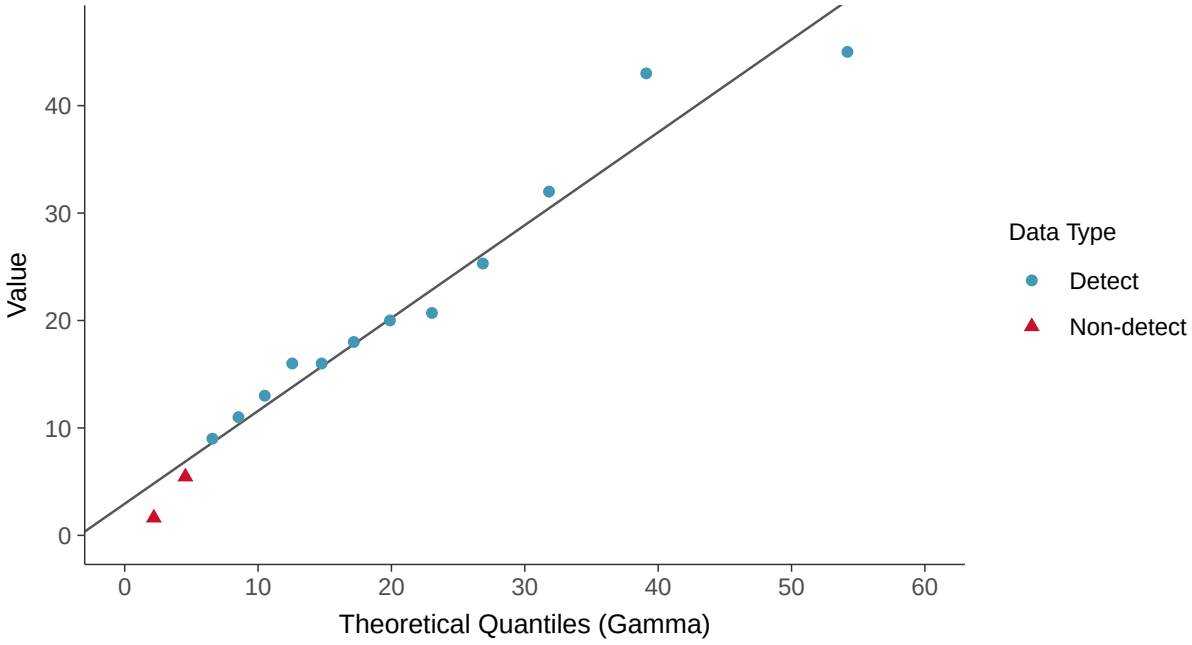
Lognormal Q-Q plot using ROS Imputed Estimates

Chloride, MW-13 (mg/l)



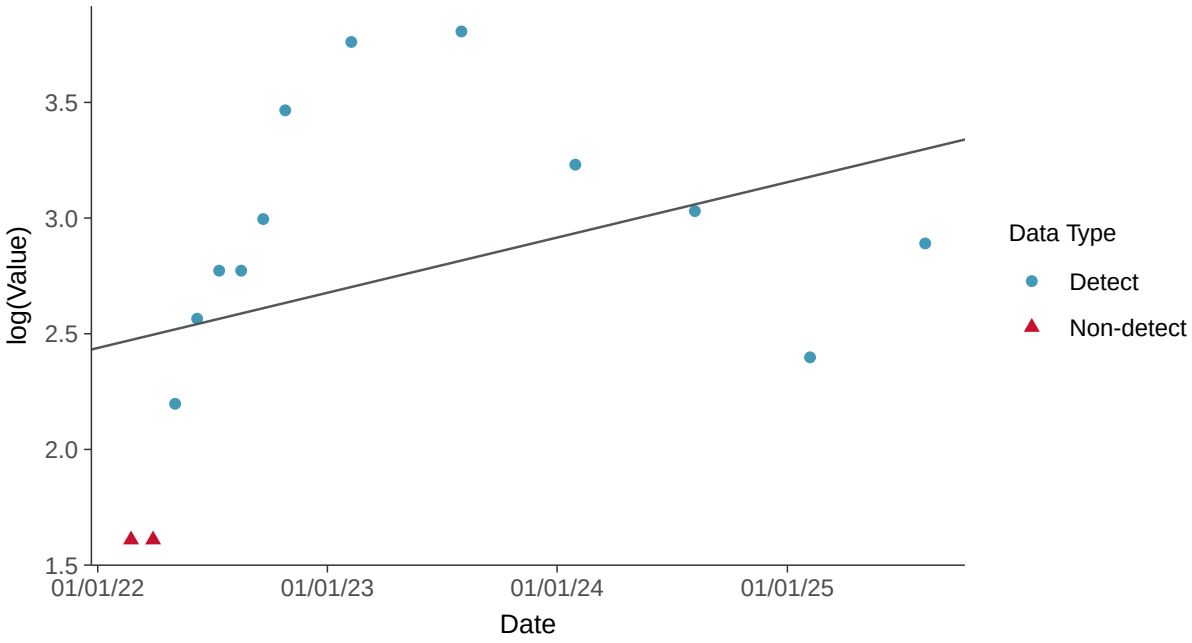
Gamma Q-Q plot using ROS Imputed Estimates

Chloride, MW-13 (mg/l)



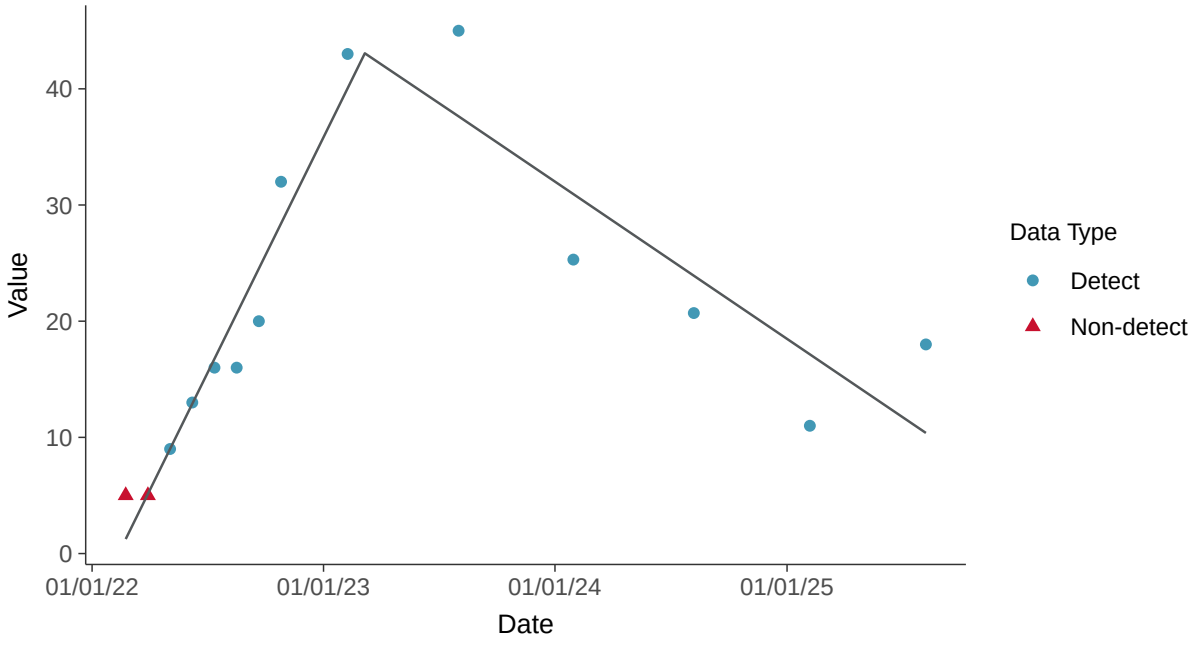
Trend Regression: Lognormal MLE

Chloride, MW-13 (mg/l)



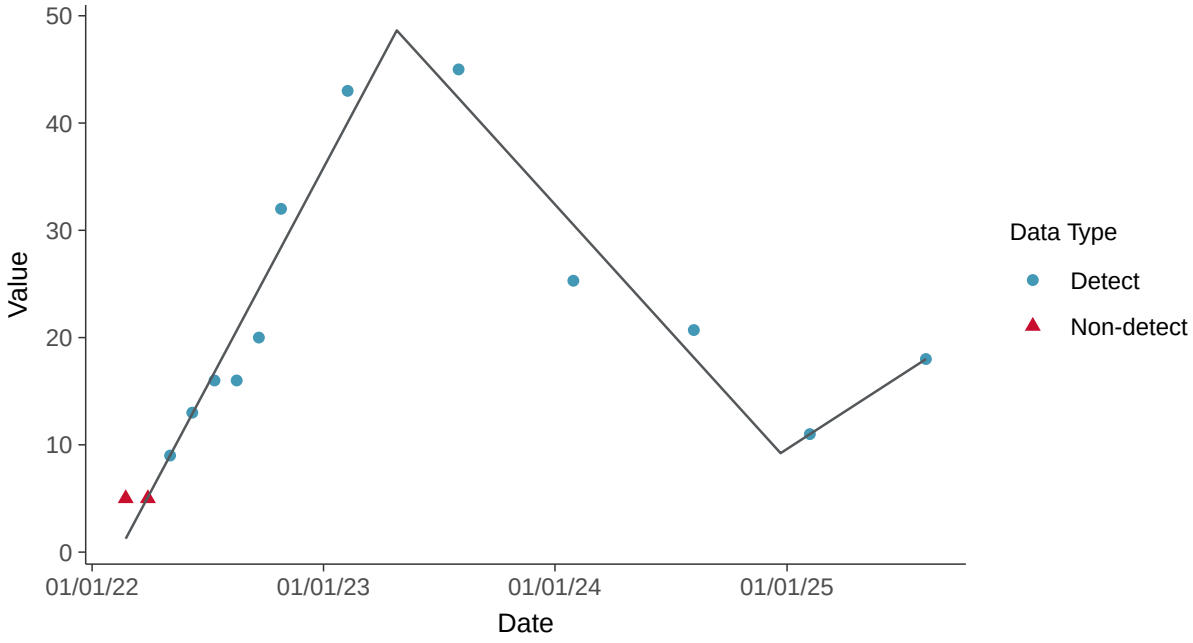
Trend Regression: Piecewise Linear-Linear

Chloride, MW-13 (mg/l)



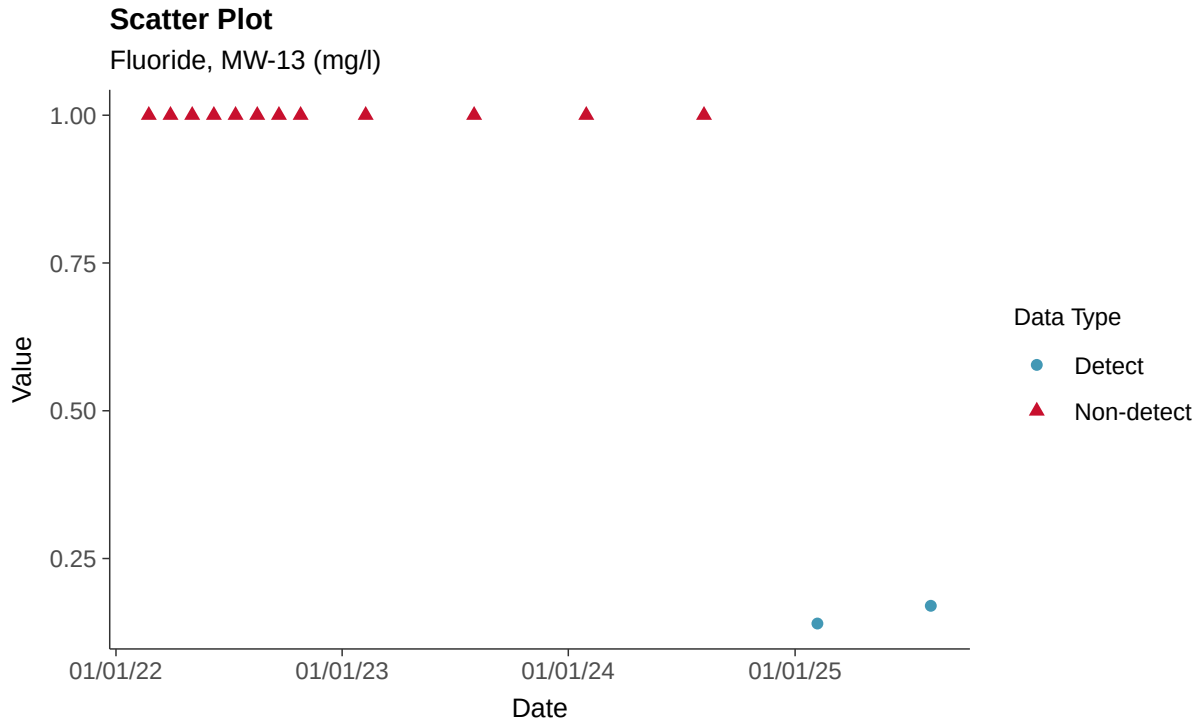
Trend Regression: Piecewise Linear-Linear-Linear

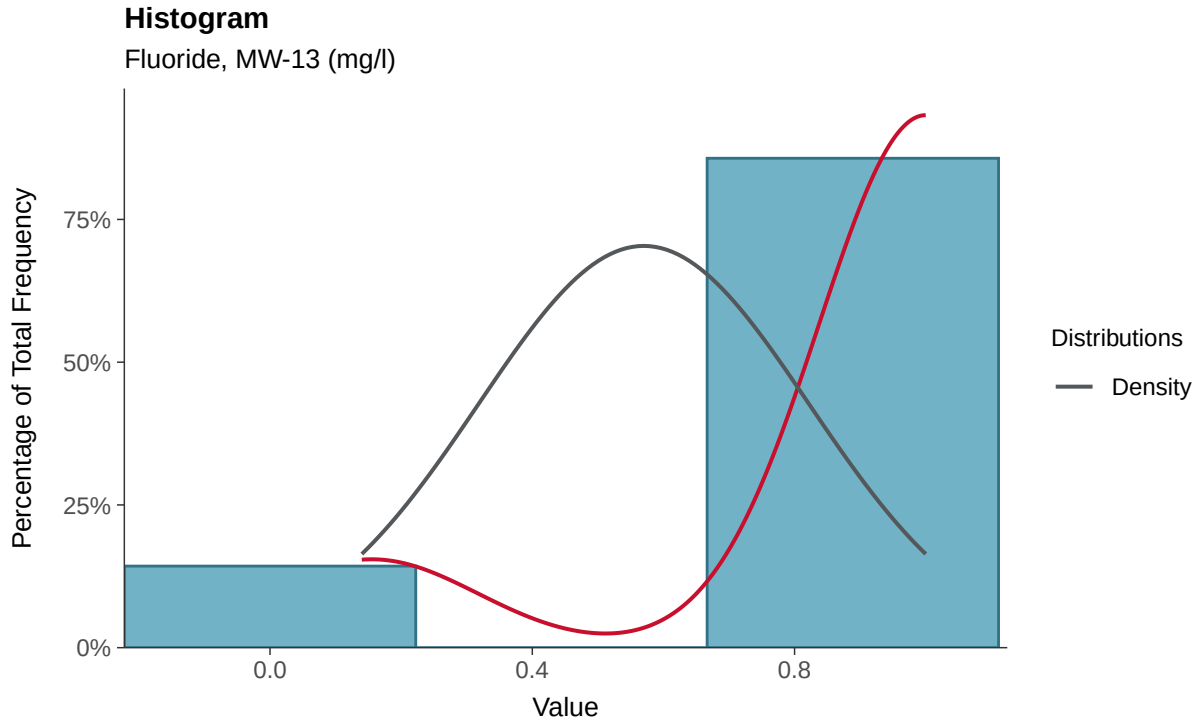
Chloride, MW-13 (mg/l)



Appendix III: Fluoride, MW-13

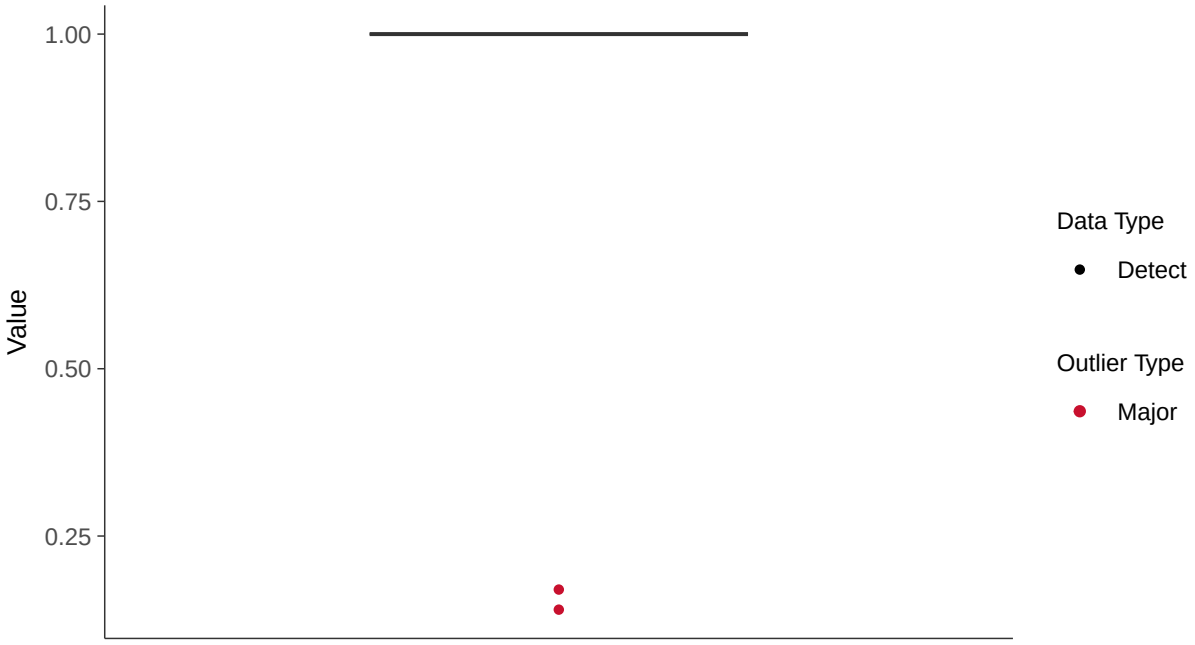
ID: 22_2_112





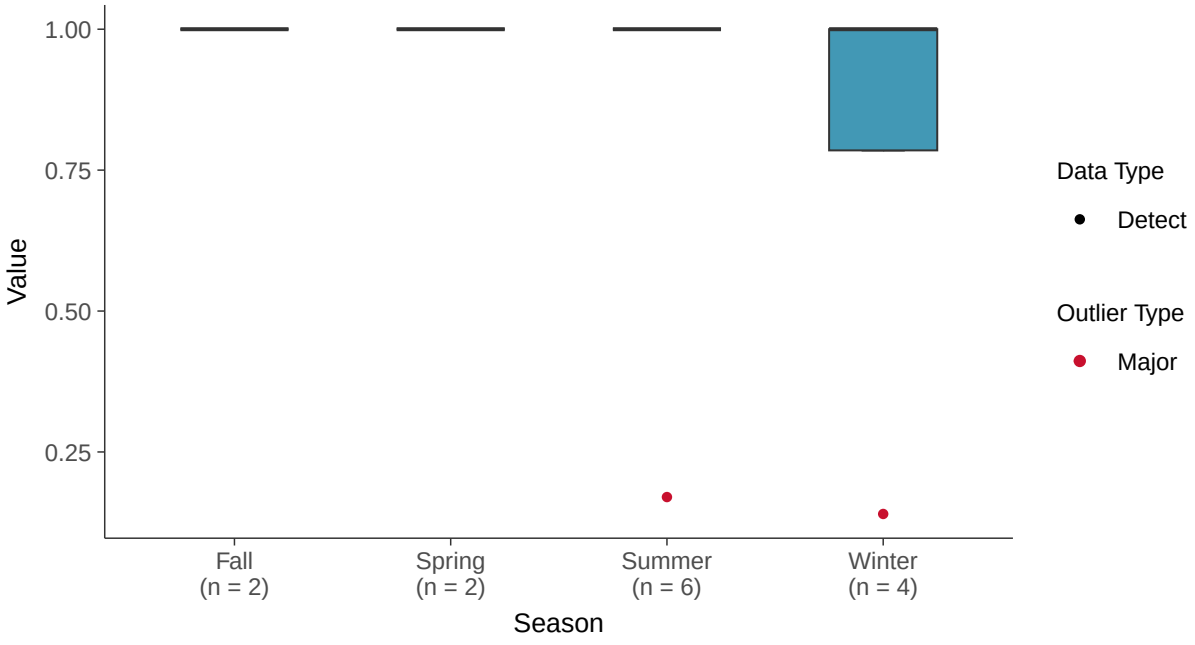
Boxplot

Fluoride, MW-13 (mg/l)



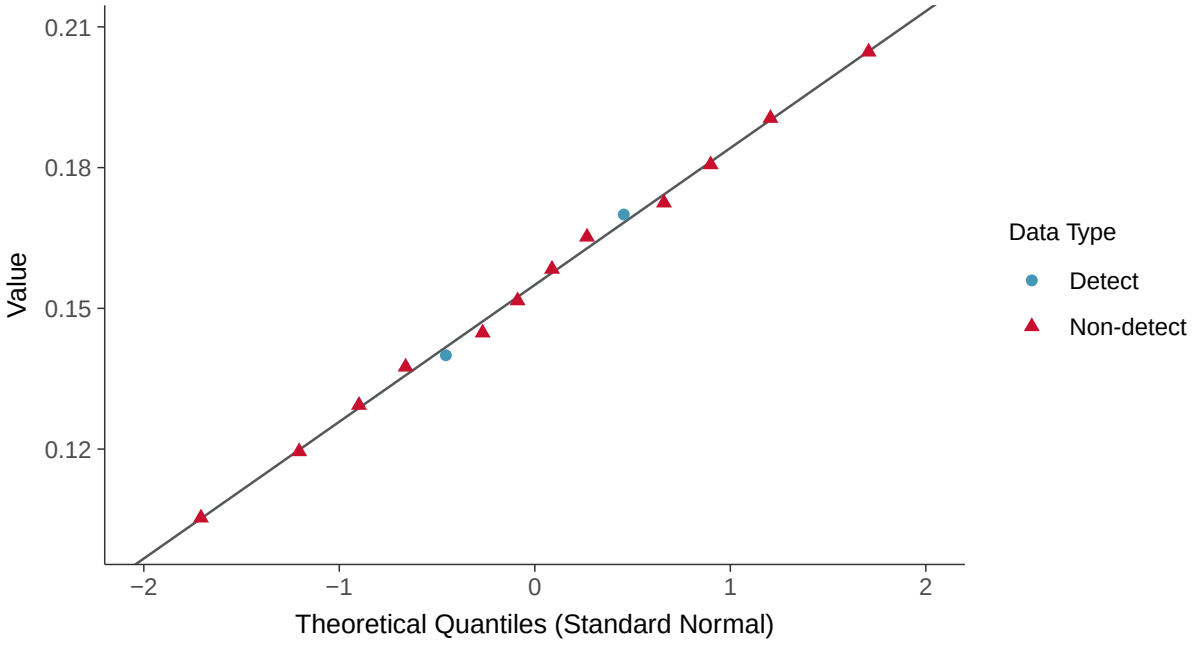
Boxplot by Season

Fluoride, MW-13 (mg/l)



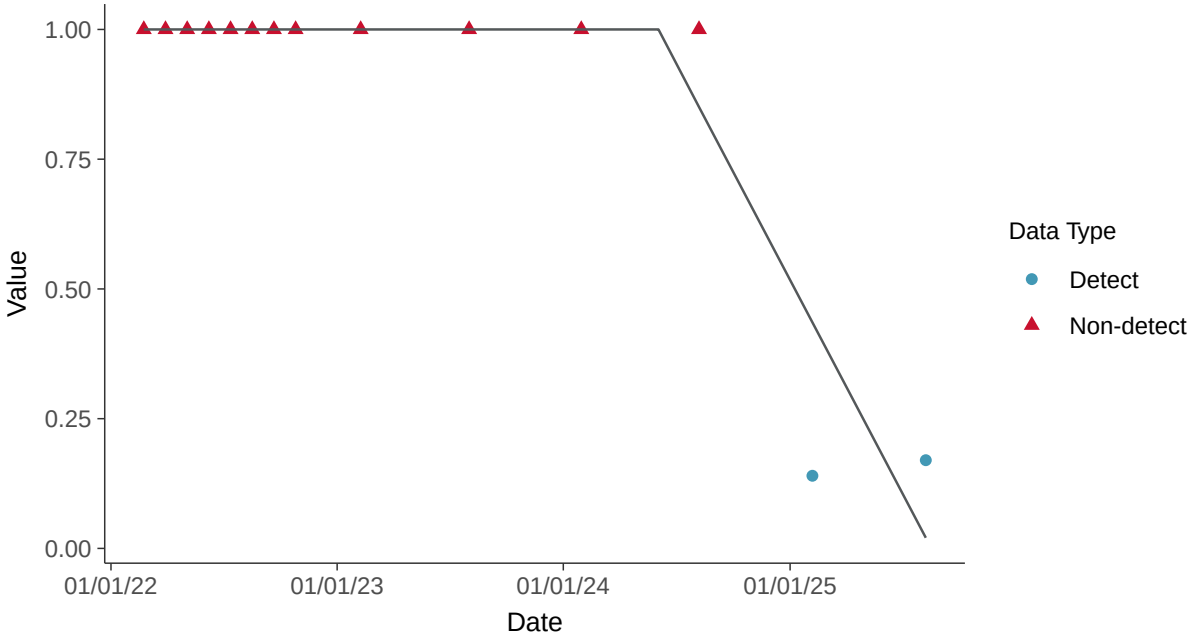
Normal Q-Q plot using ROS Imputed Estimates

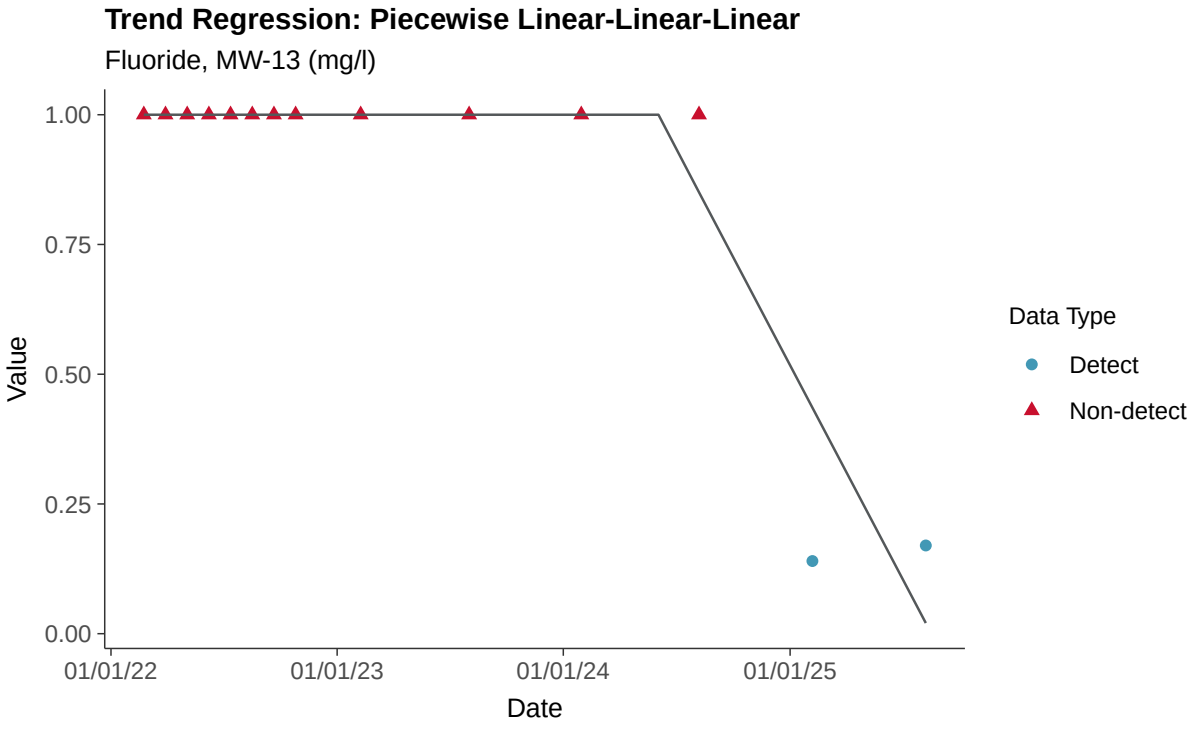
Fluoride, MW-13 (mg/l)



Trend Regression: Piecewise Linear-Linear

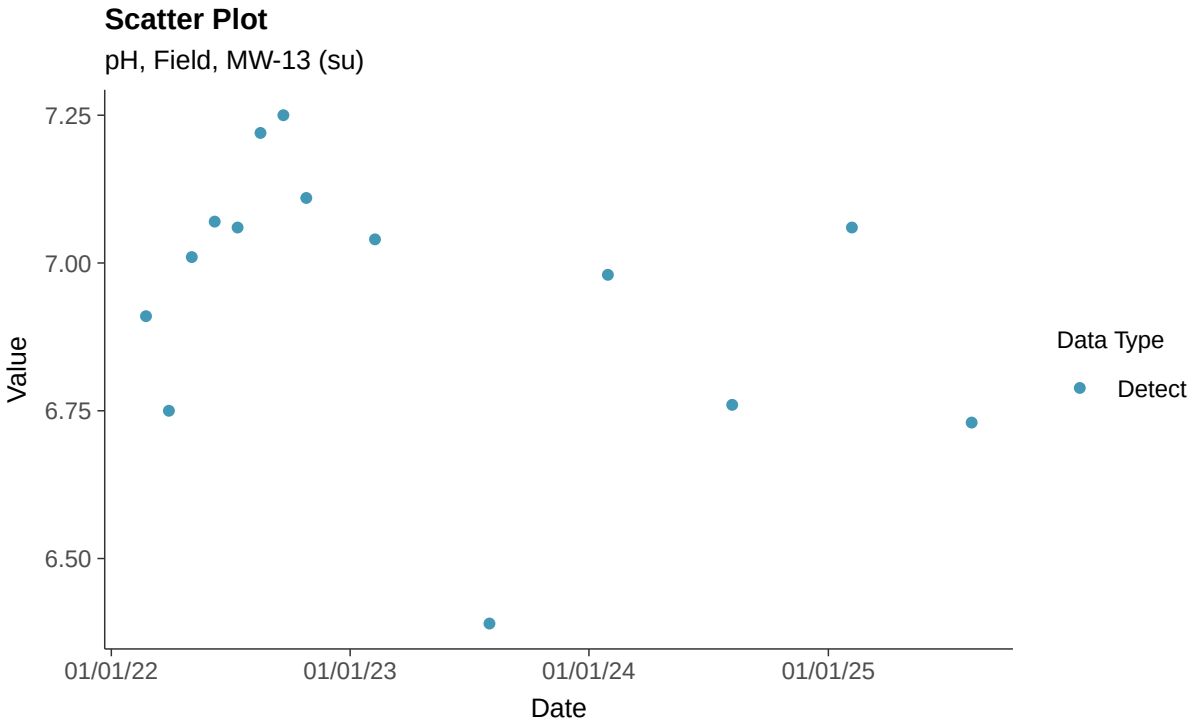
Fluoride, MW-13 (mg/l)

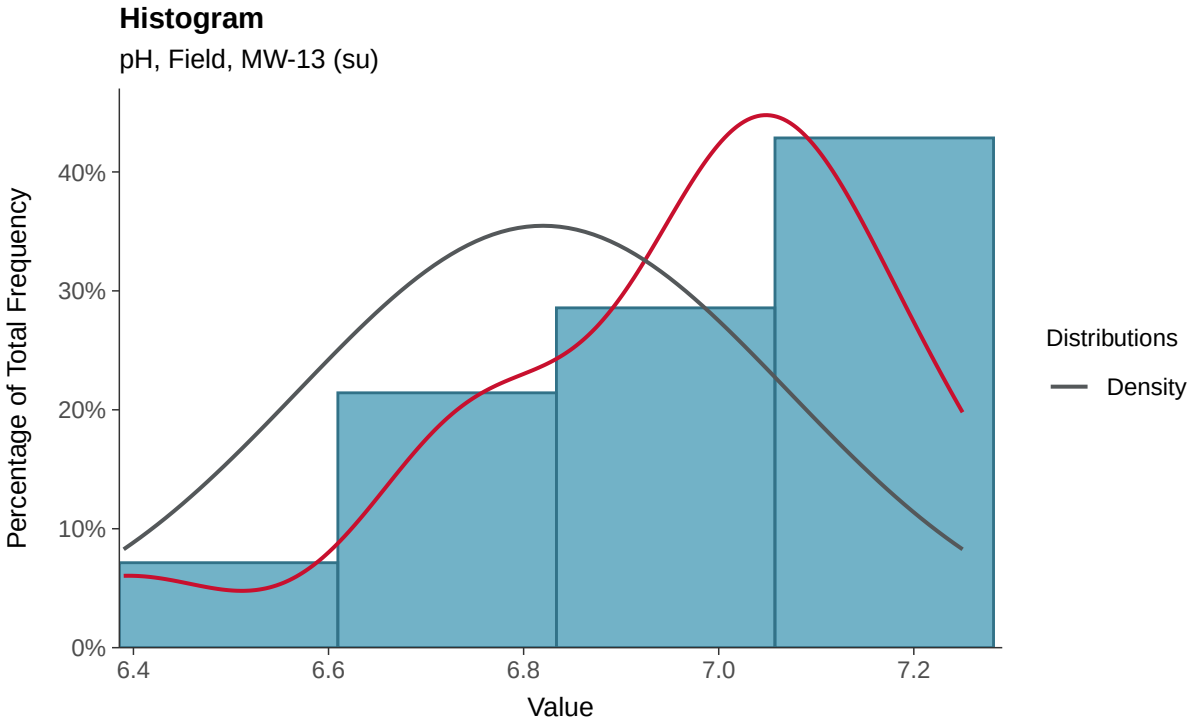



Trend Regression: Piecewise Linear-Linear-Linear
Fluoride, MW-13 (mg/l)
Value
1.00
0.75
0.50
0.25
0.00
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Appendix III: pH, Field, MW-13

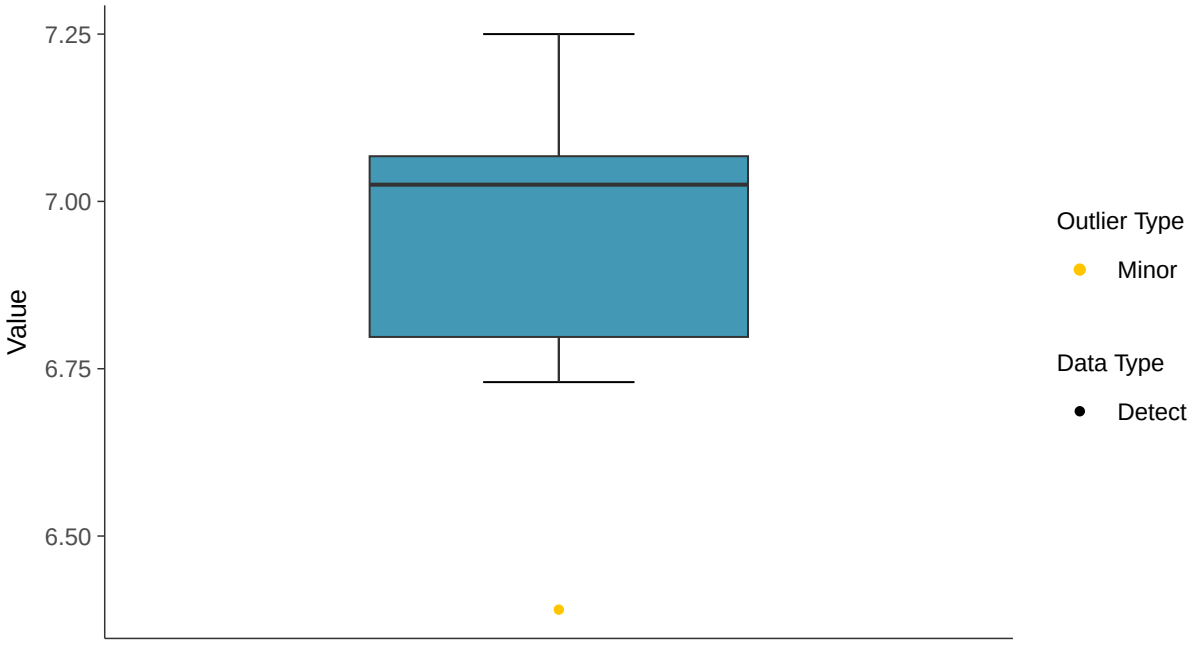
ID: 22_2_120





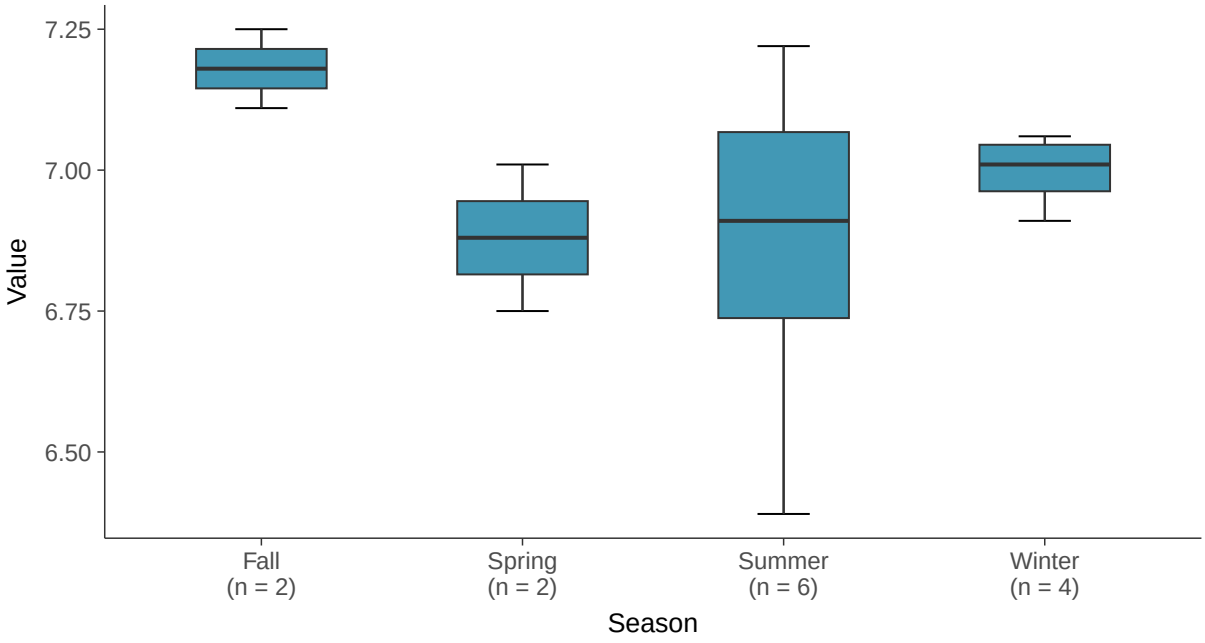
Boxplot

pH, Field, MW-13 (su)



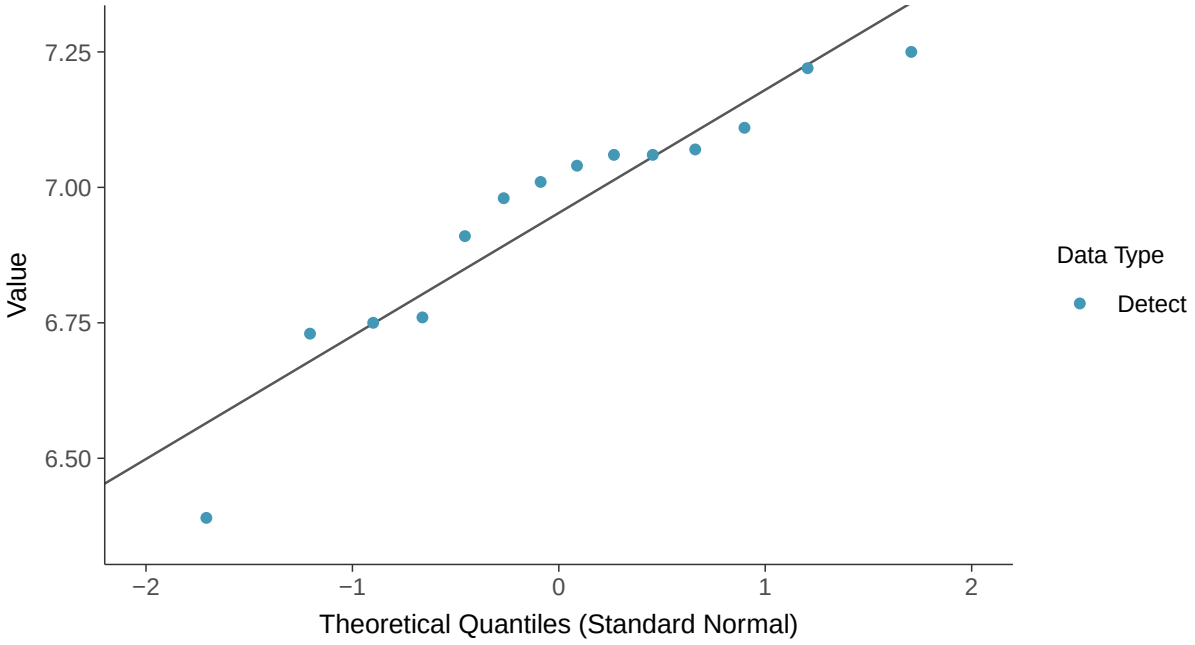
Boxplot by Season

pH, Field, MW-13 (su)



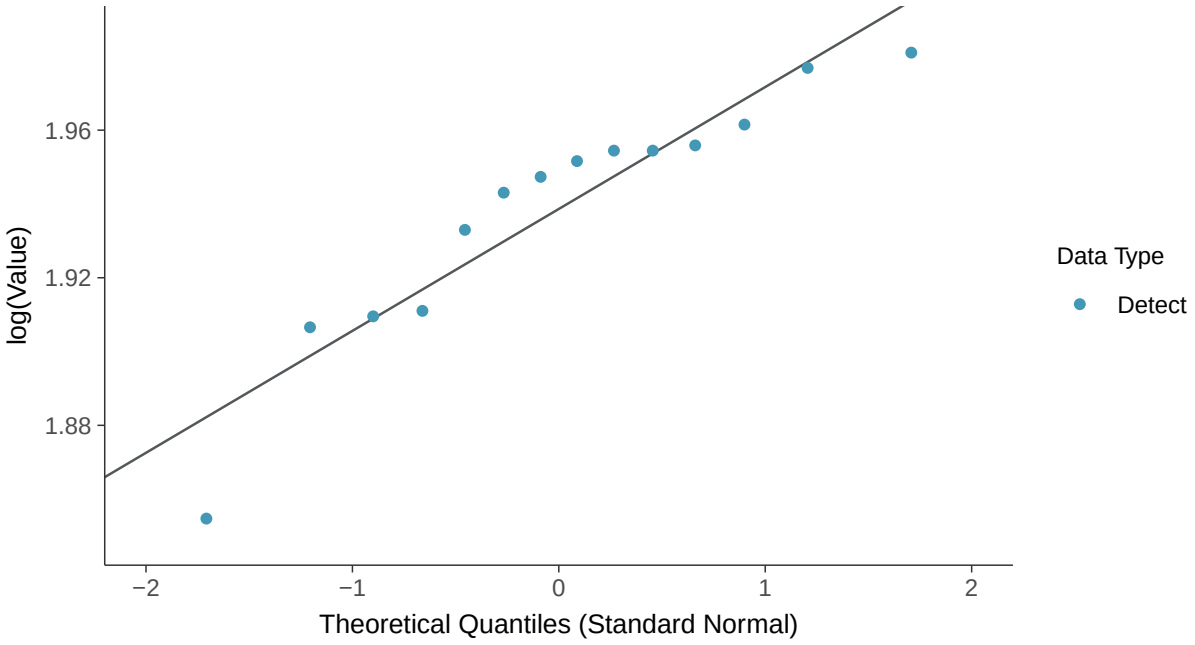
Normal Q-Q plot

pH, Field, MW-13 (su)



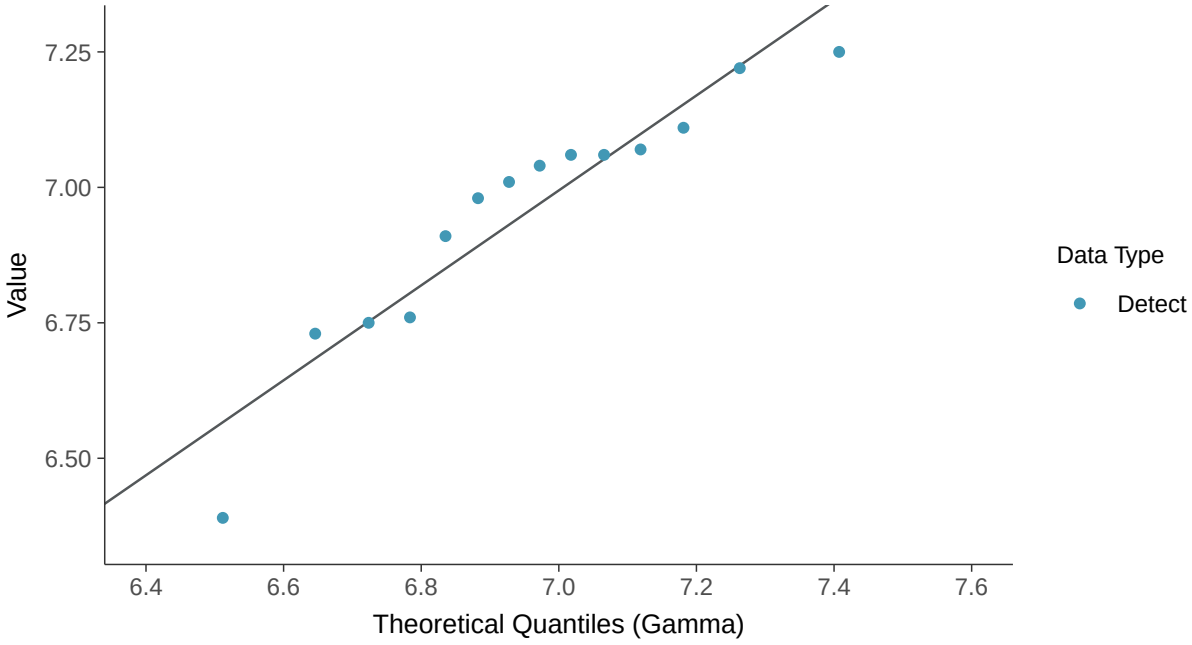
Lognormal Q-Q plot

pH, Field, MW-13 (su)



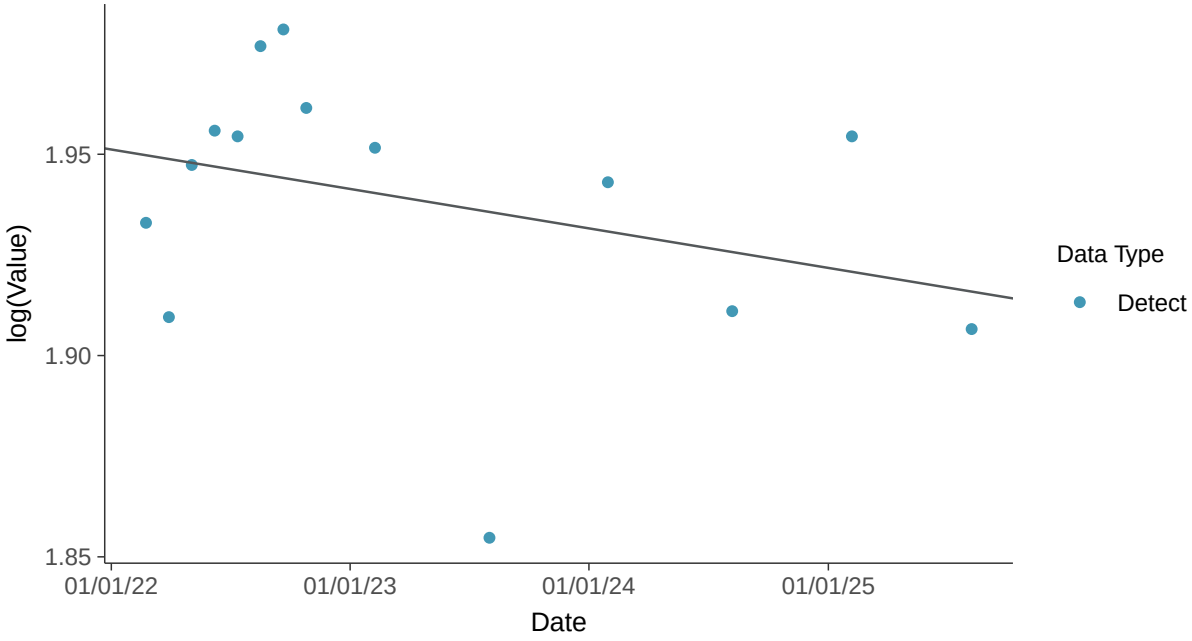
Gamma Q-Q plot

pH, Field, MW-13 (su)



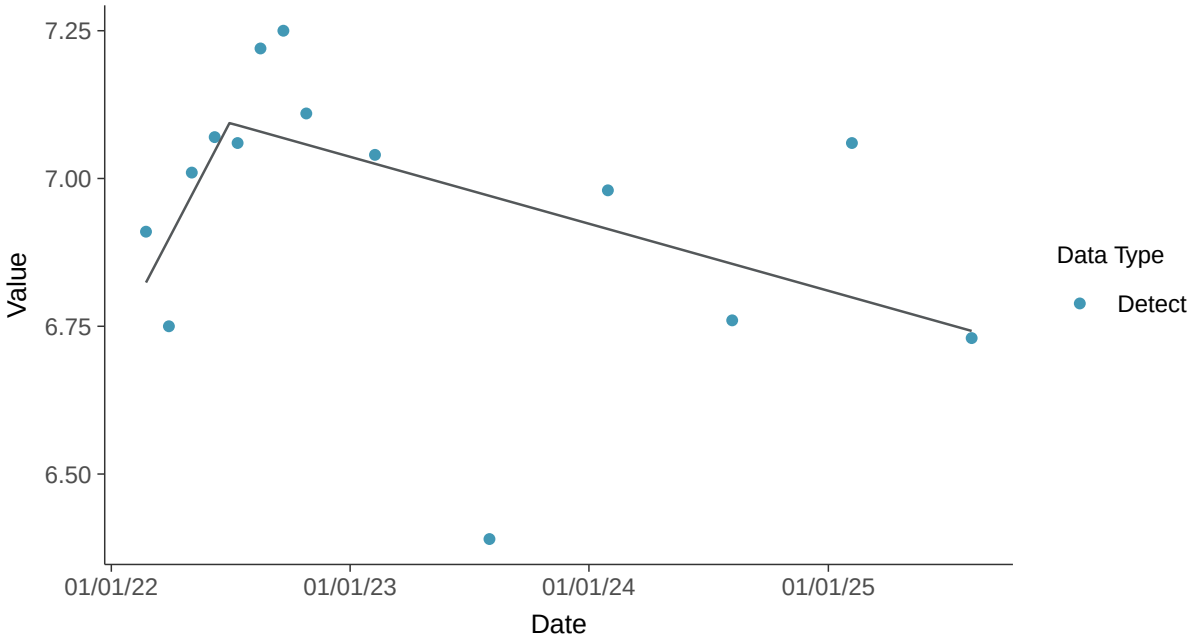
Trend Regression: Lognormal MLE

pH, Field, MW-13 (su)



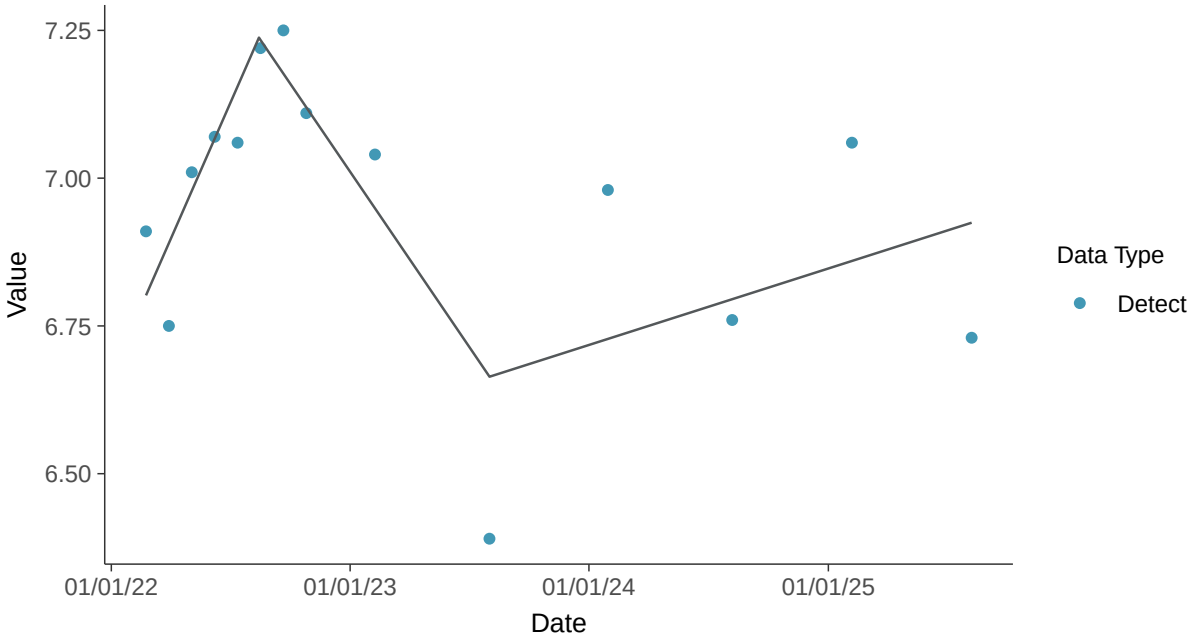
Trend Regression: Piecewise Linear-Linear

pH, Field, MW-13 (su)



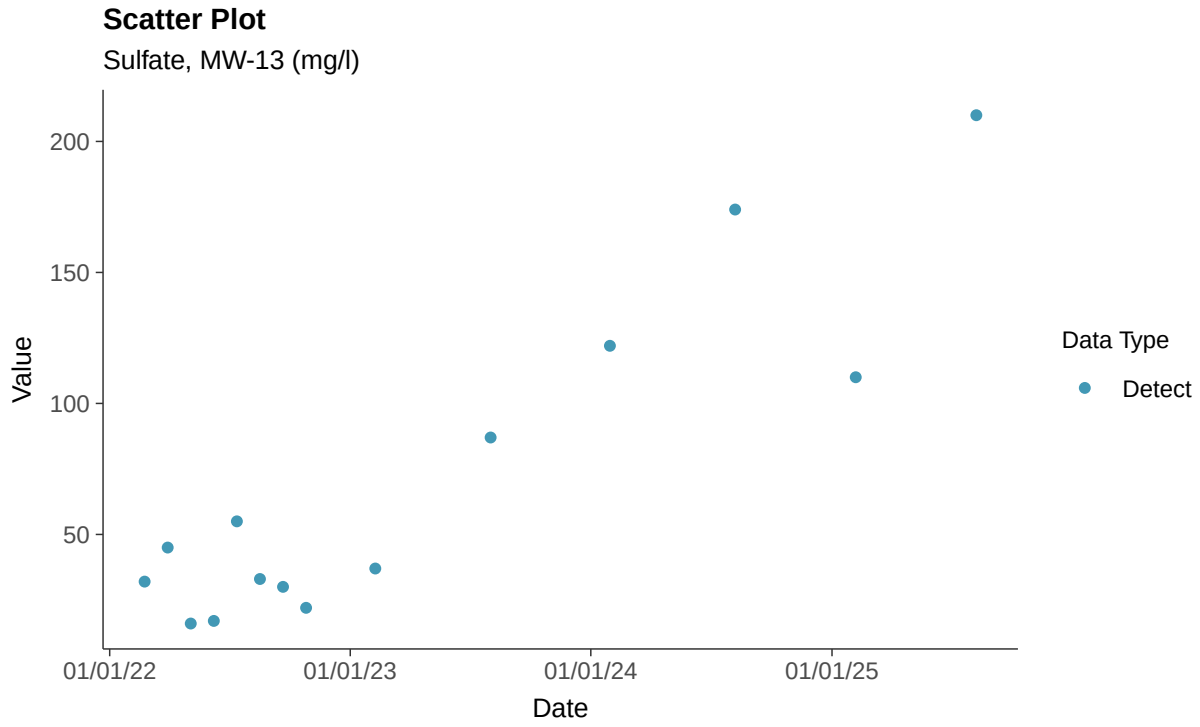
Trend Regression: Piecewise Linear-Linear-Linear

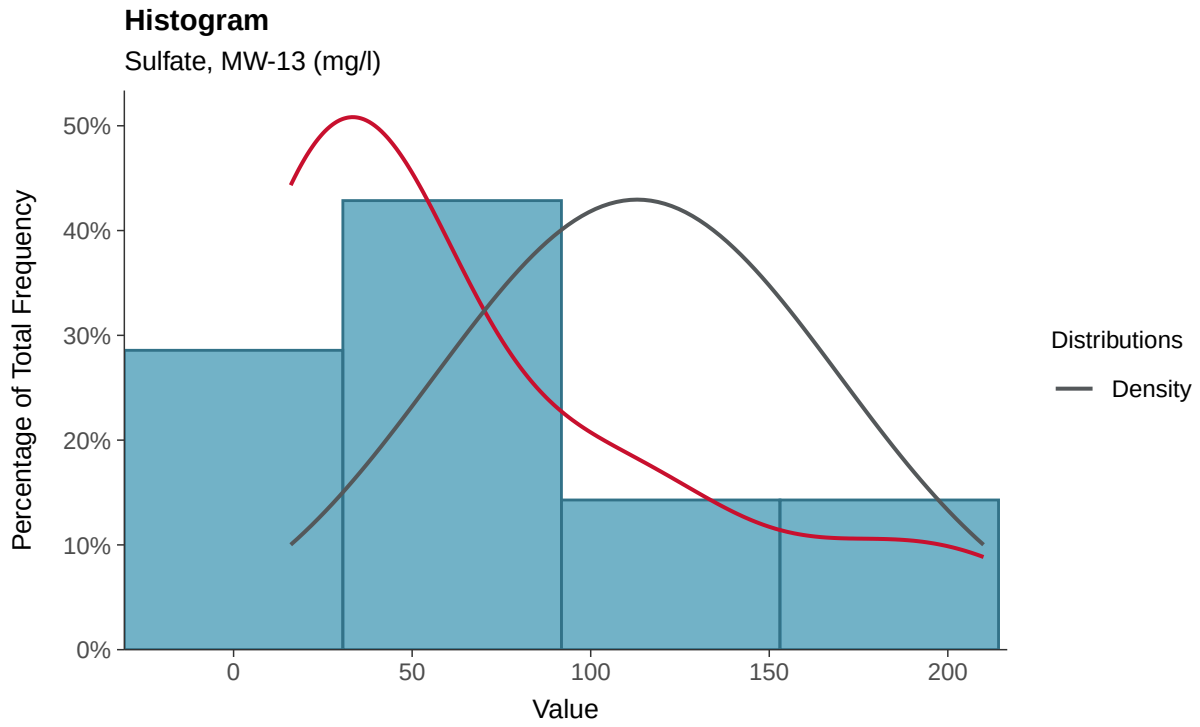
pH, Field, MW-13 (su)



Appendix III: Sulfate, MW-13

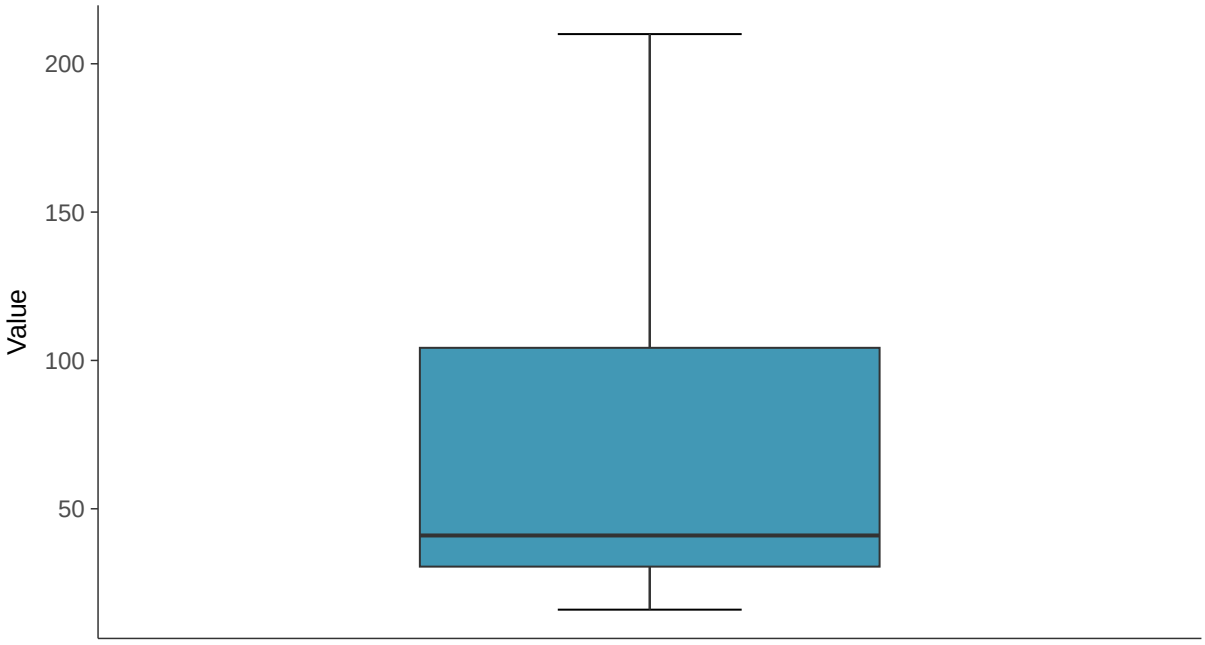
ID: 22_2_124





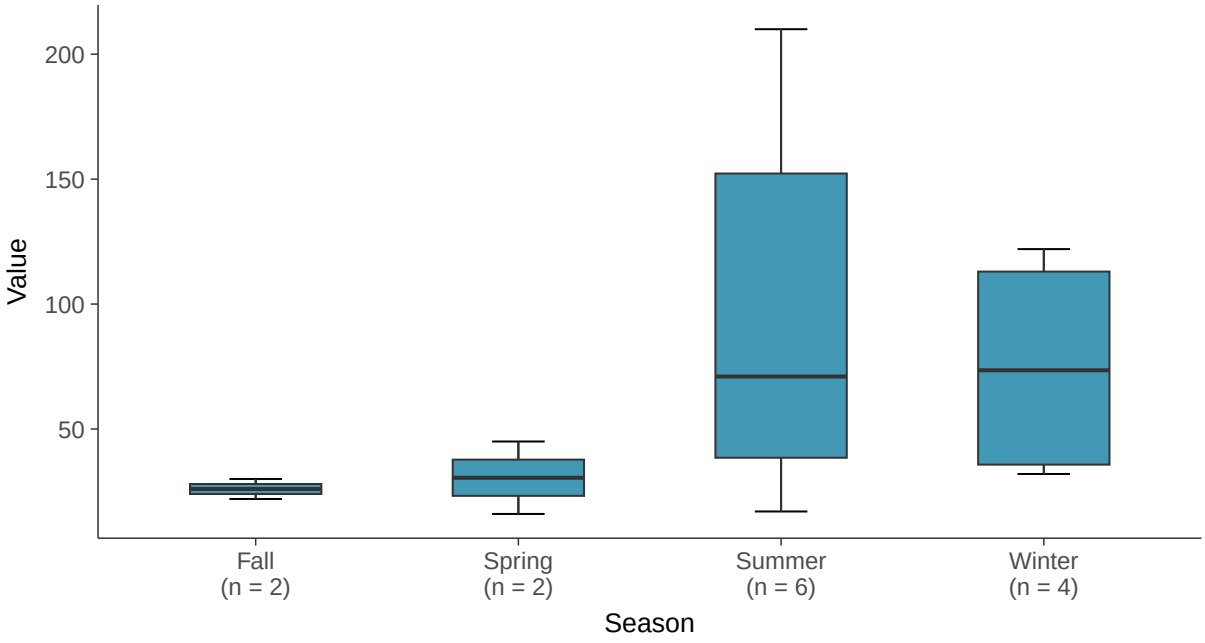
Boxplot

Sulfate, MW-13 (mg/l)



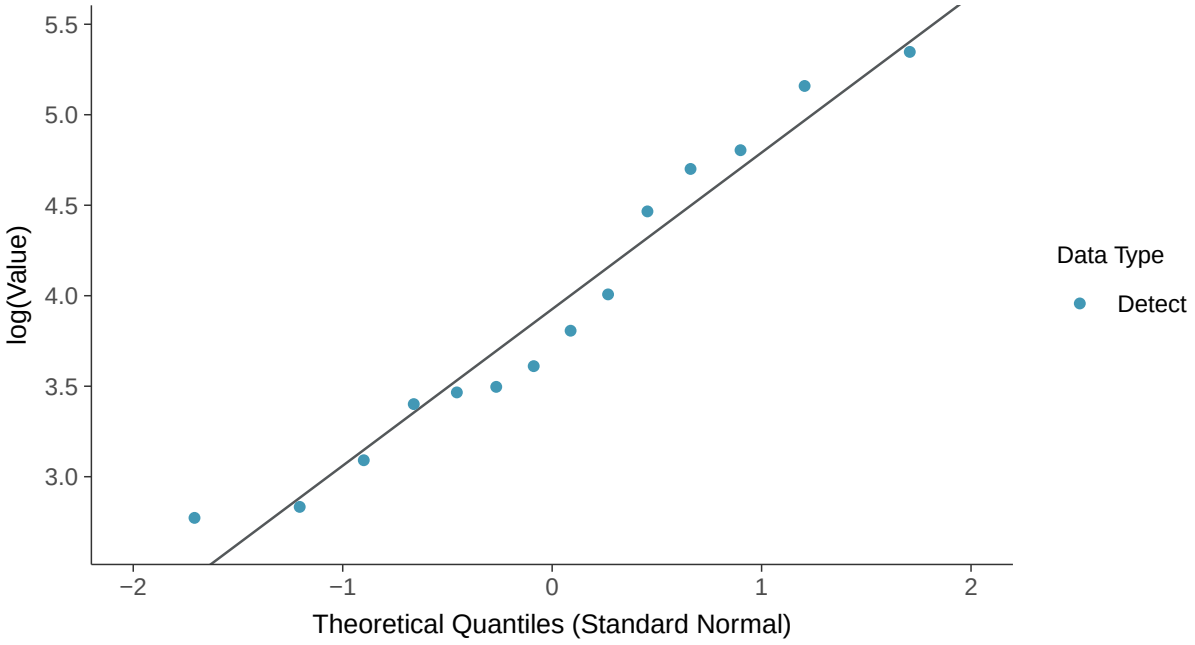
Boxplot by Season

Sulfate, MW-13 (mg/l)



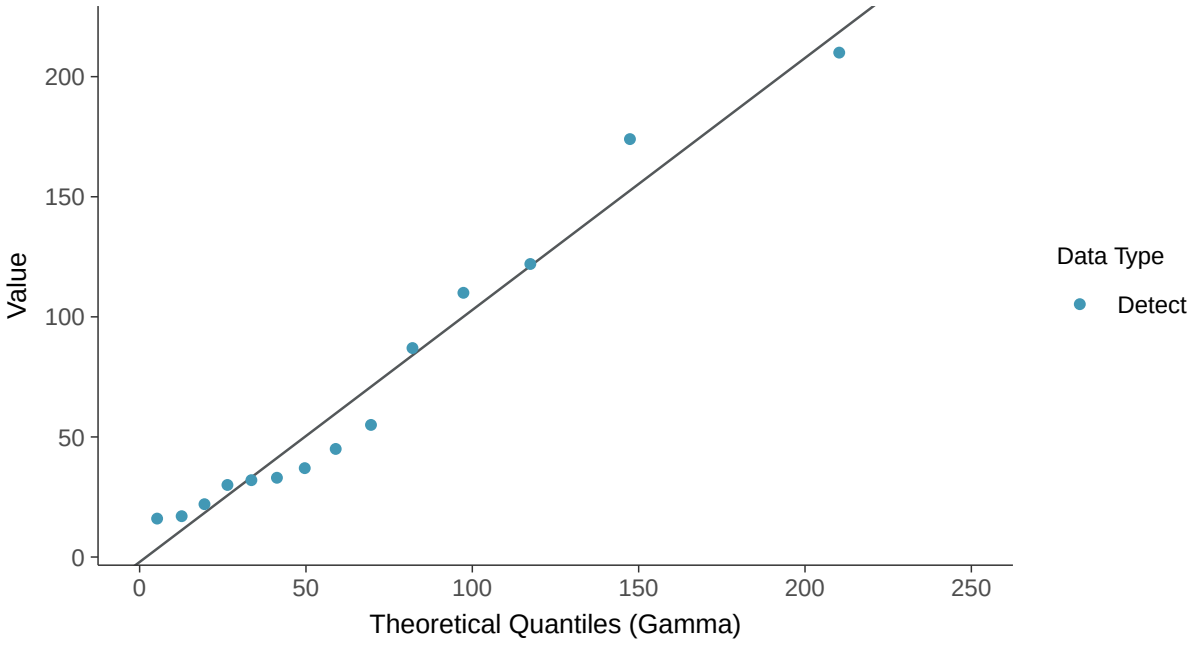
Lognormal Q-Q plot

Sulfate, MW-13 (mg/l)



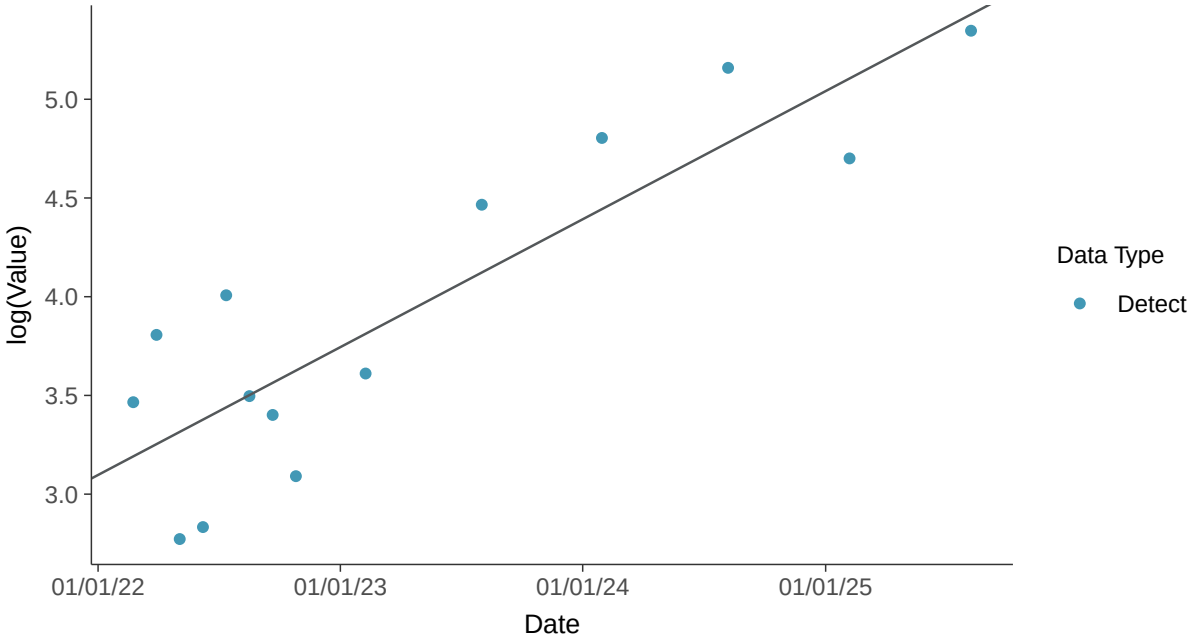
Gamma Q-Q plot

Sulfate, MW-13 (mg/l)



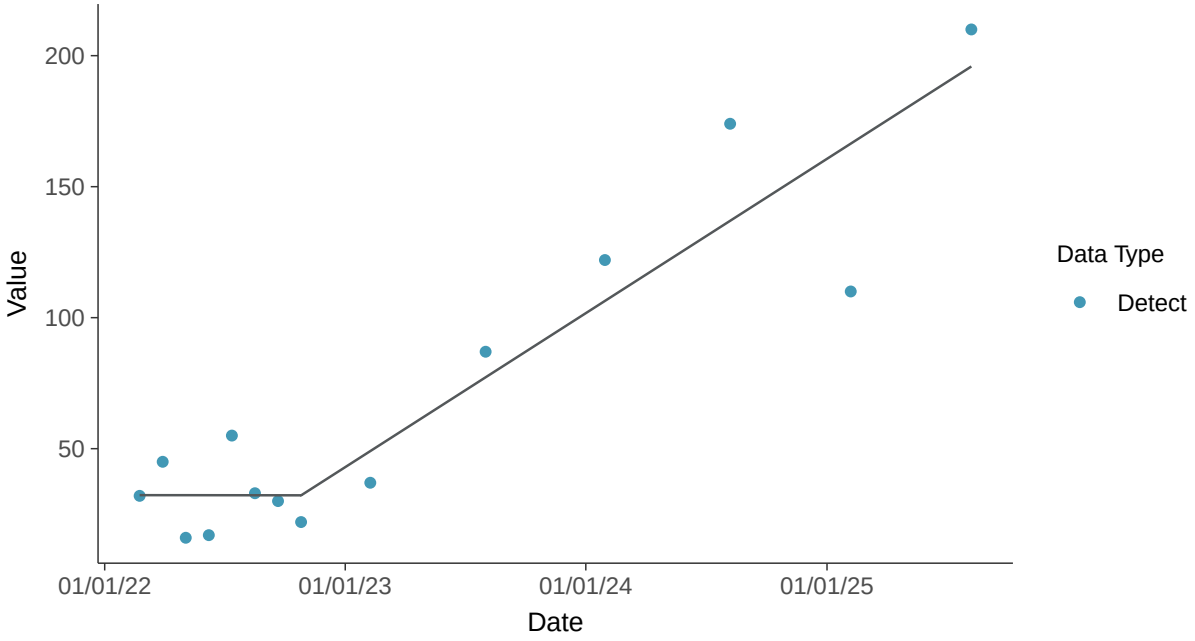
Trend Regression: Lognormal MLE

Sulfate, MW-13 (mg/l)



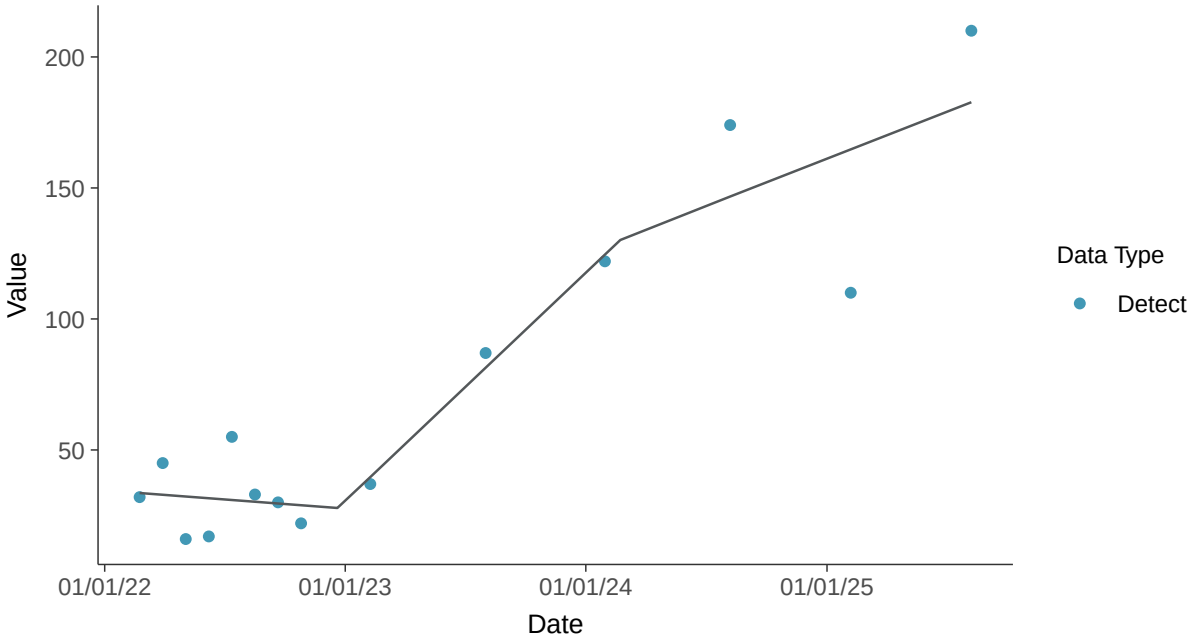
Trend Regression: Piecewise Linear-Linear

Sulfate, MW-13 (mg/l)



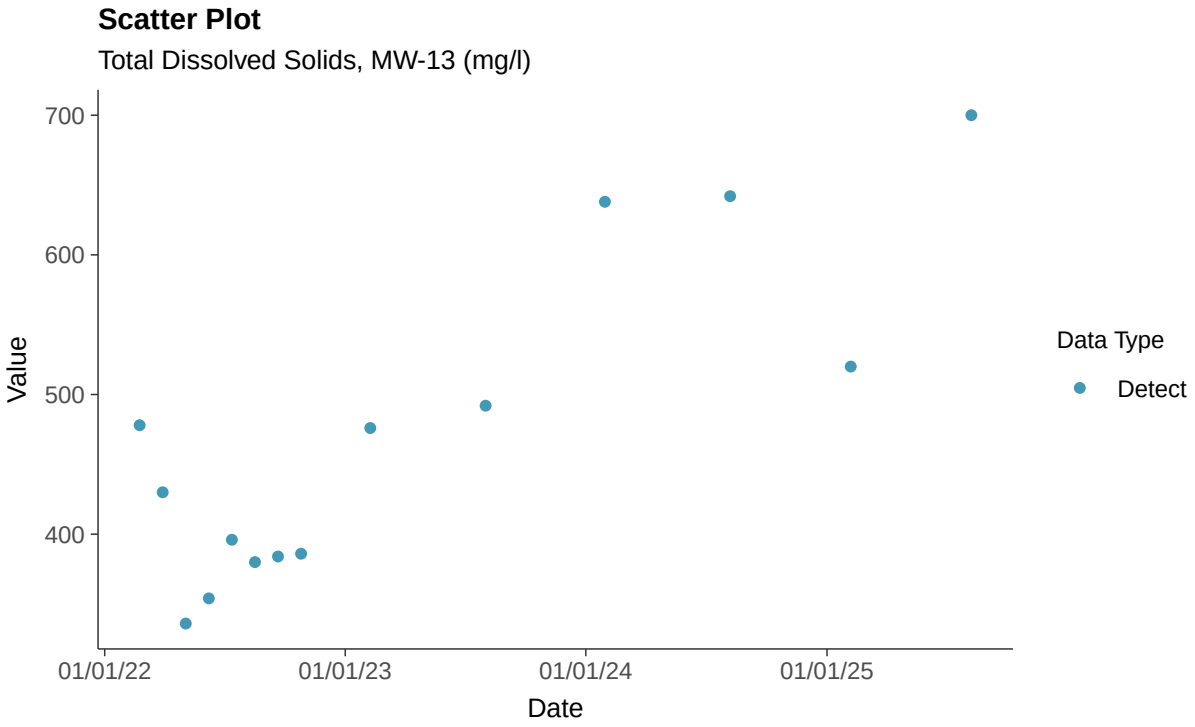
Trend Regression: Piecewise Linear-Linear-Linear

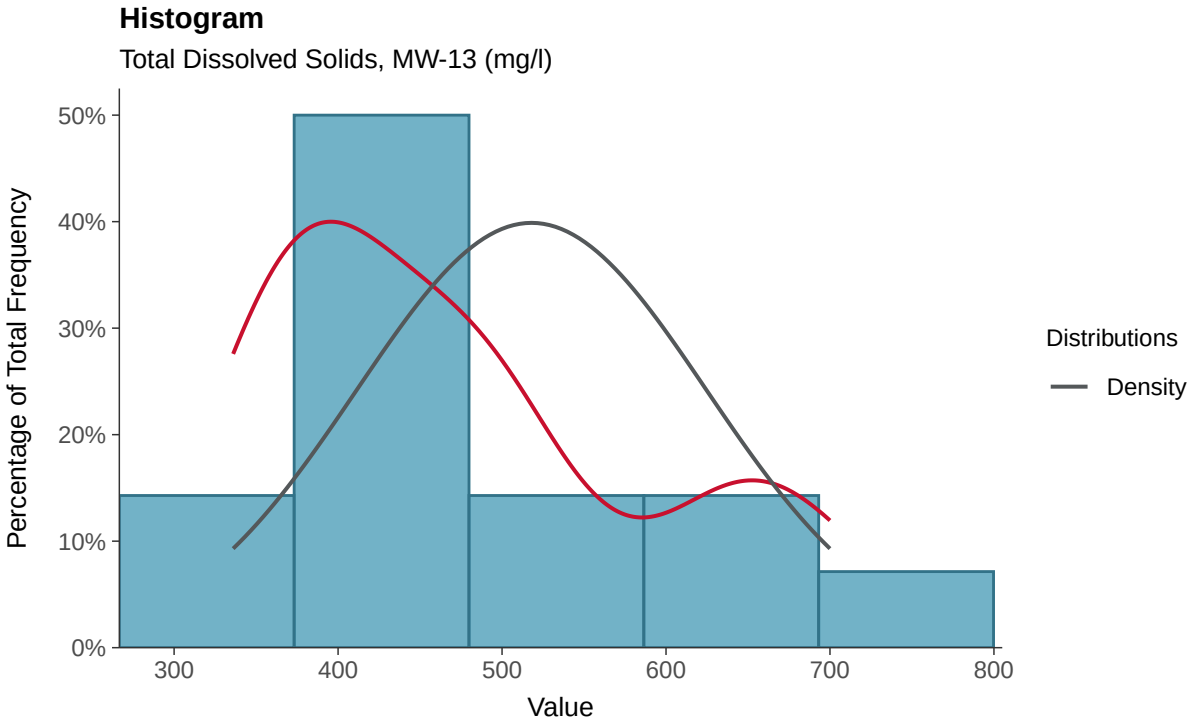
Sulfate, MW-13 (mg/l)



Appendix III: Total Dissolved Solids, MW-13

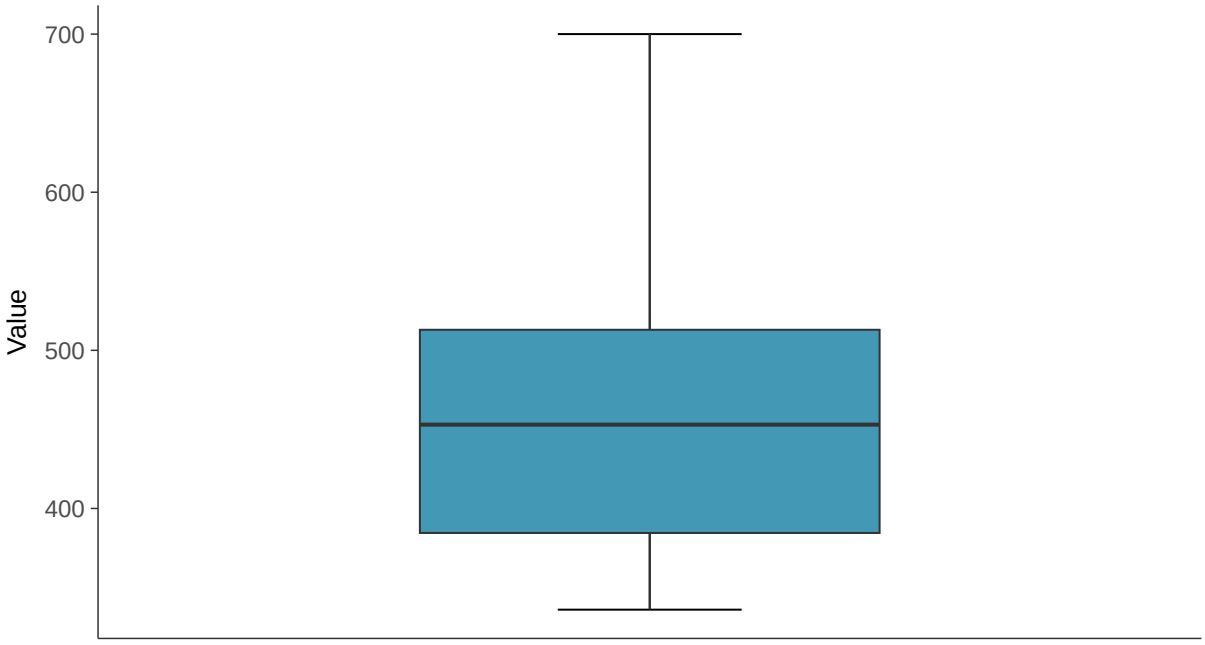
ID: 22_2_126





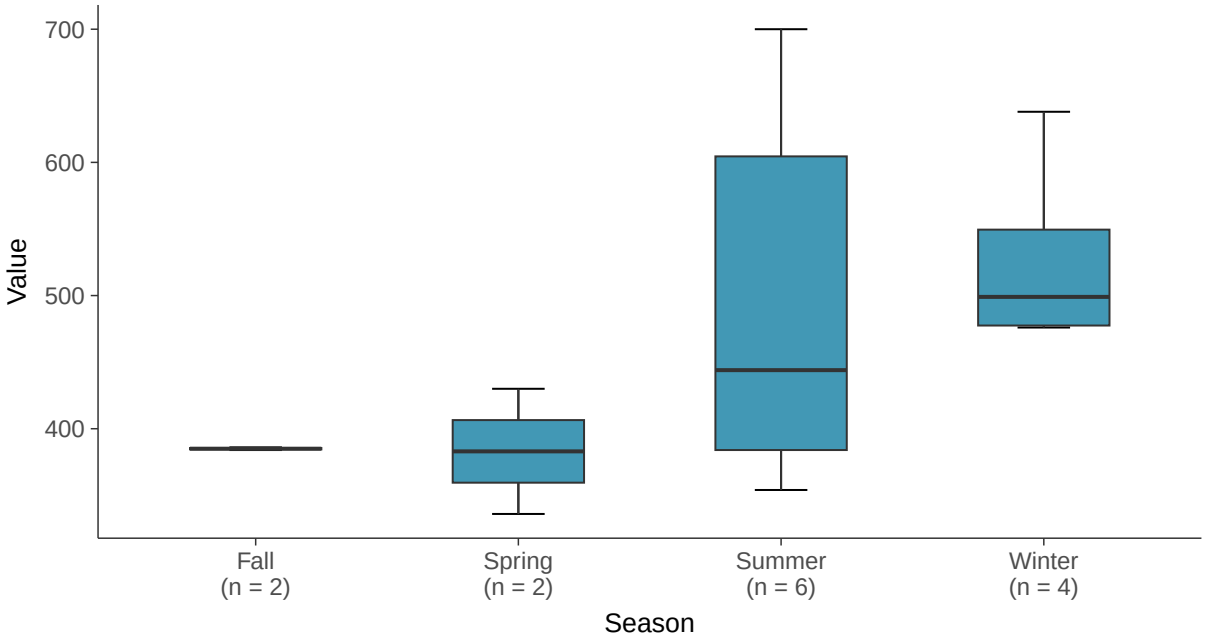
Boxplot

Total Dissolved Solids, MW-13 (mg/l)



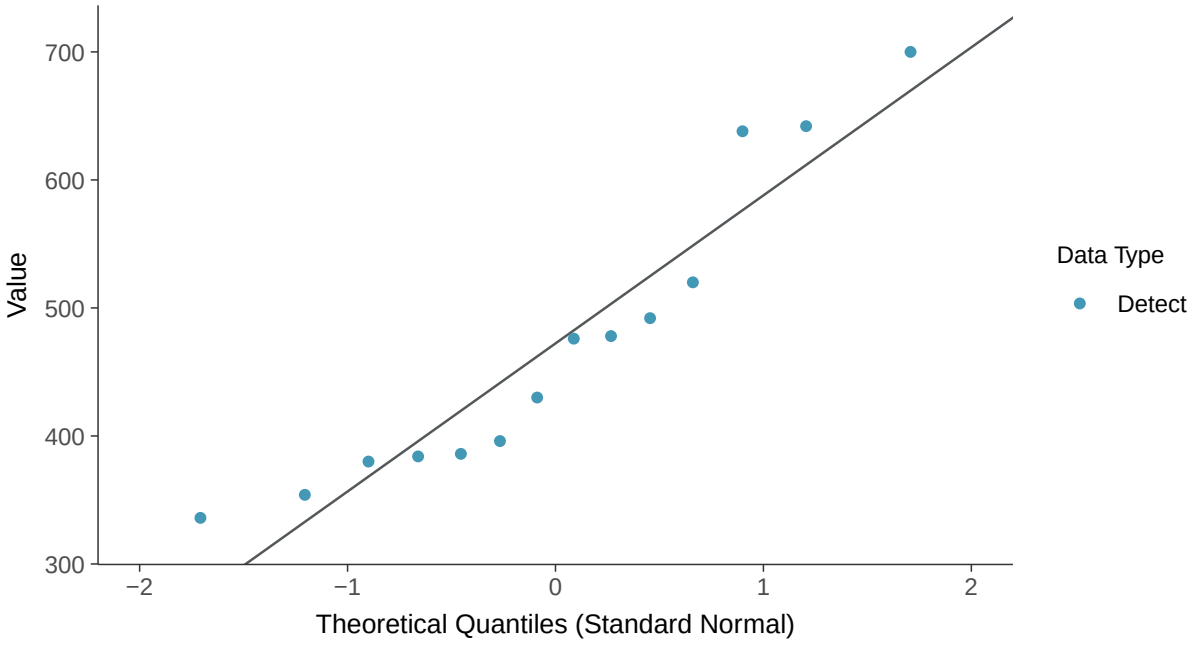
Boxplot by Season

Total Dissolved Solids, MW-13 (mg/l)



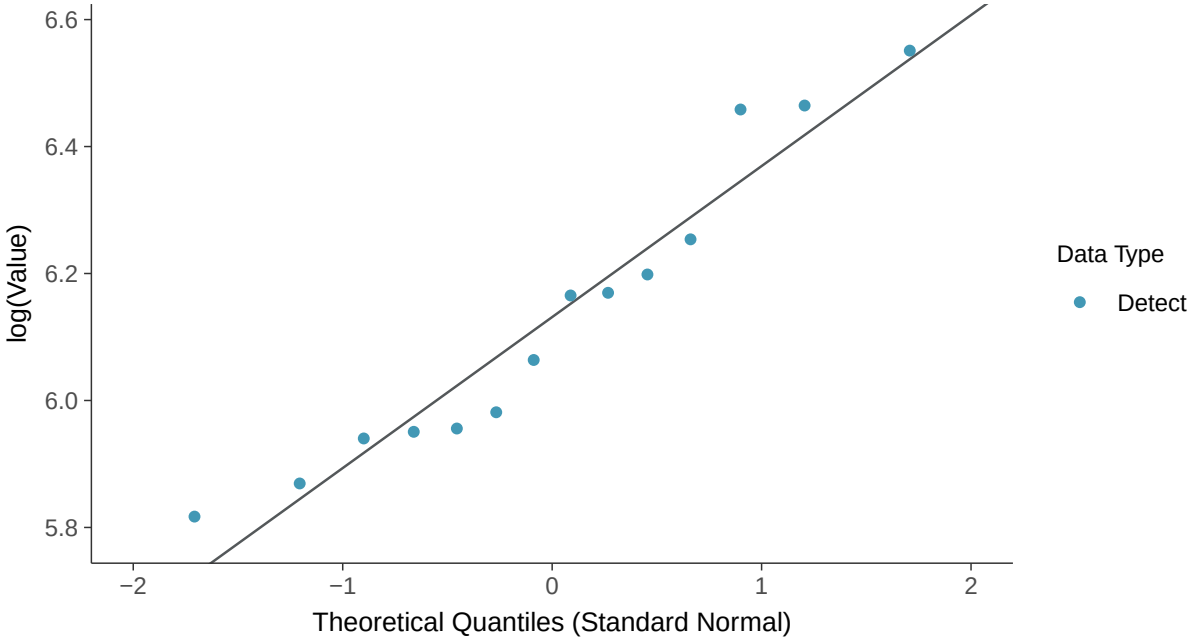
Normal Q-Q plot

Total Dissolved Solids, MW-13 (mg/l)



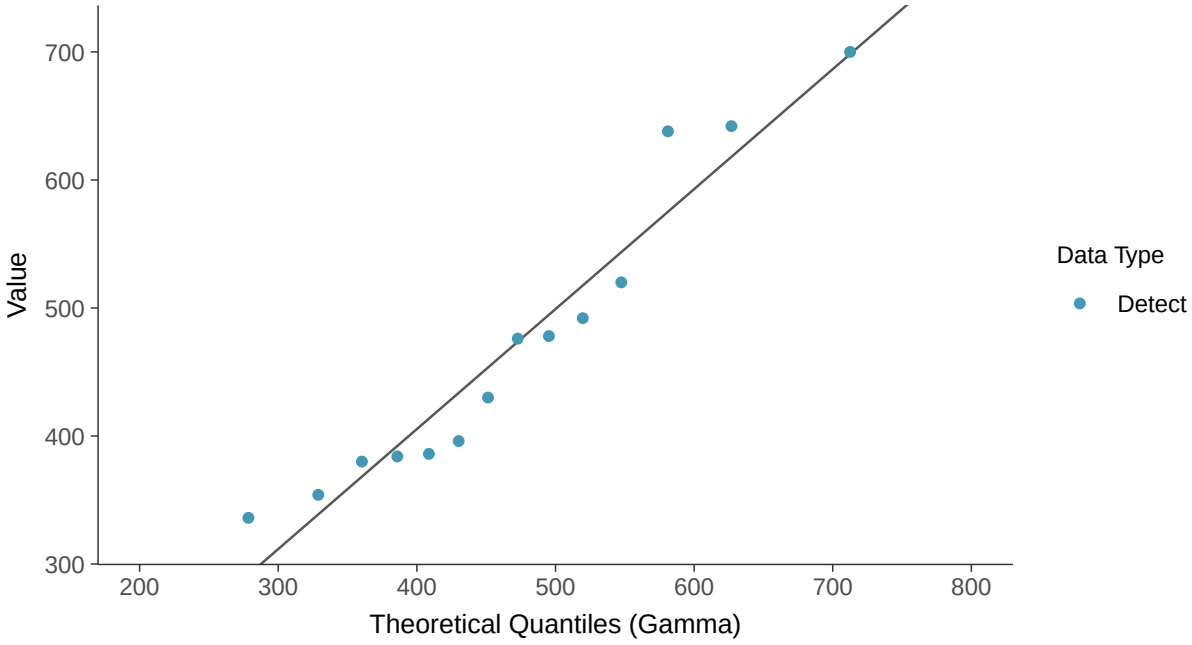
Lognormal Q-Q plot

Total Dissolved Solids, MW-13 (mg/l)



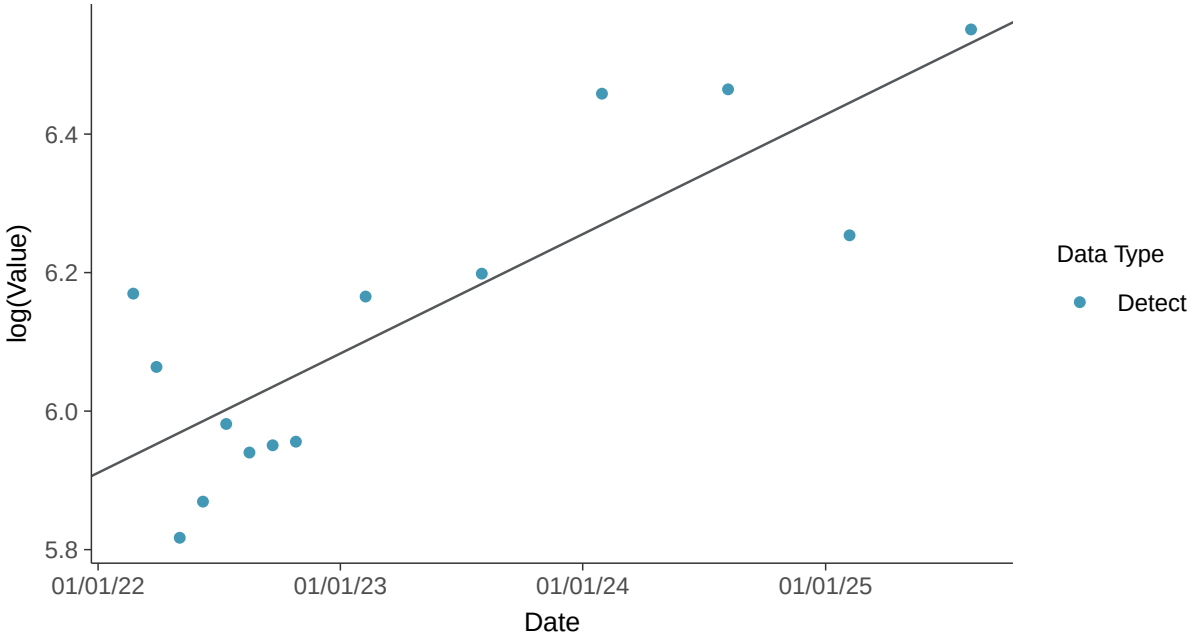
Gamma Q-Q plot

Total Dissolved Solids, MW-13 (mg/l)



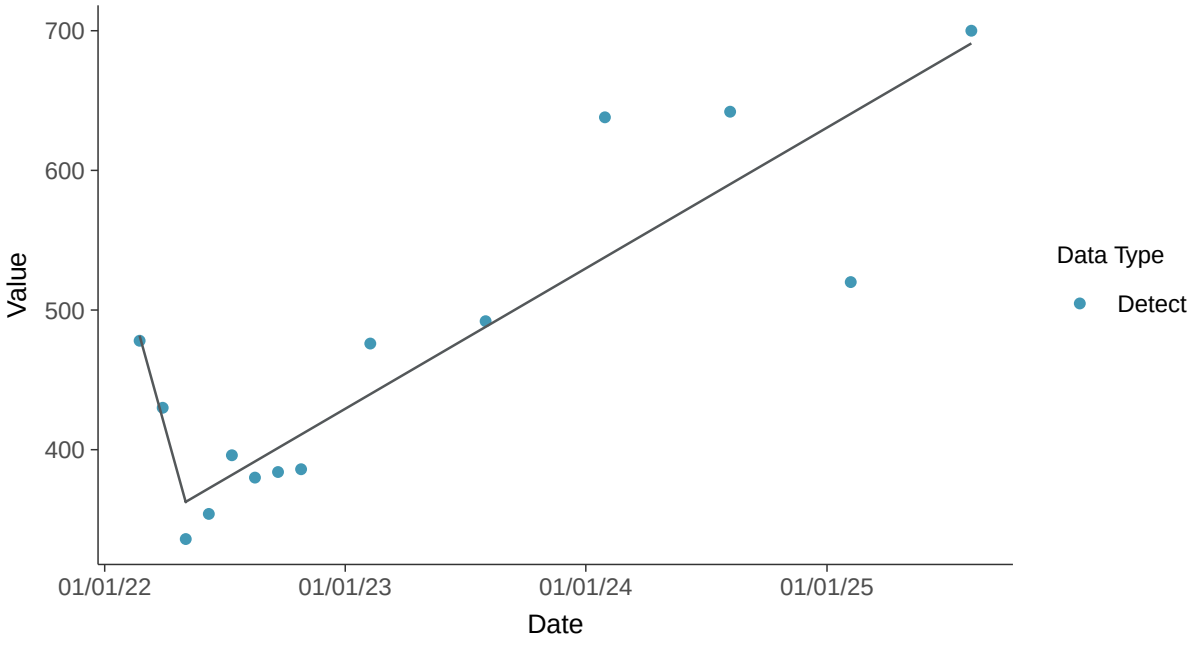
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-13 (mg/l)



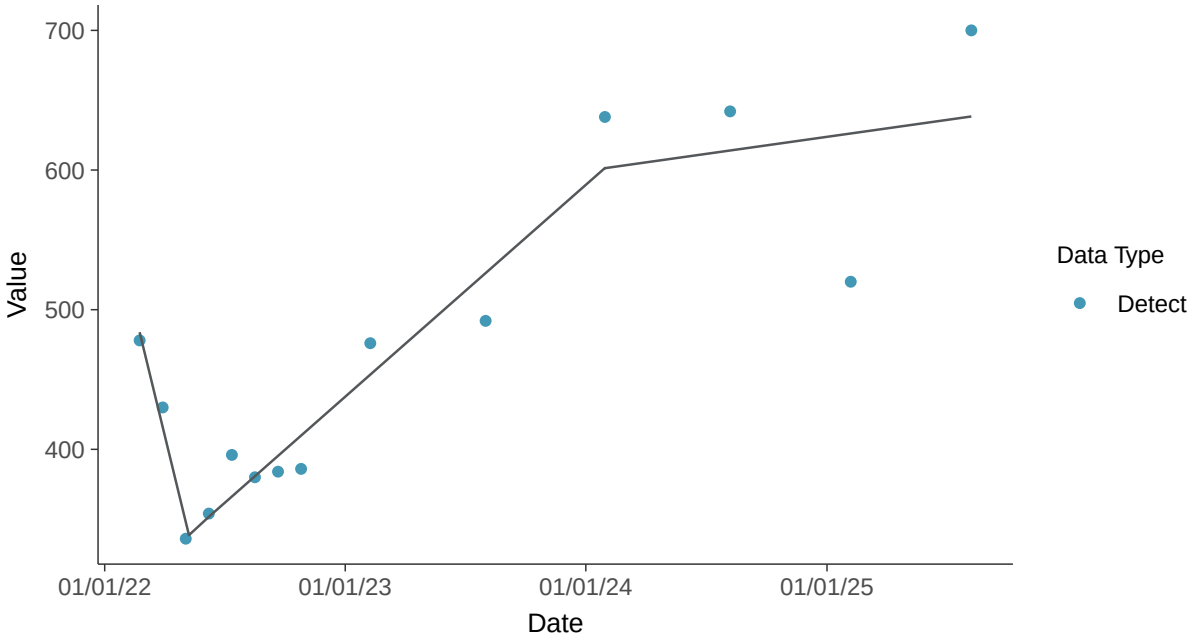
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-13 (mg/l)



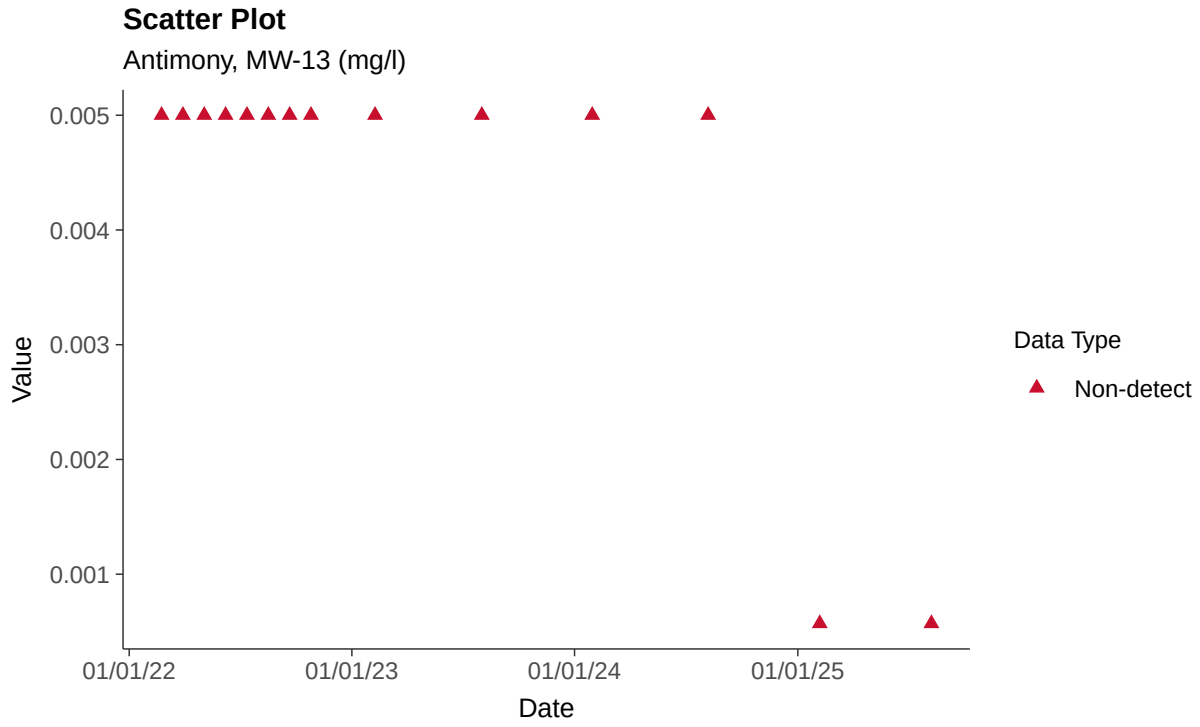
Trend Regression: Piecewise Linear-Linear-Linear

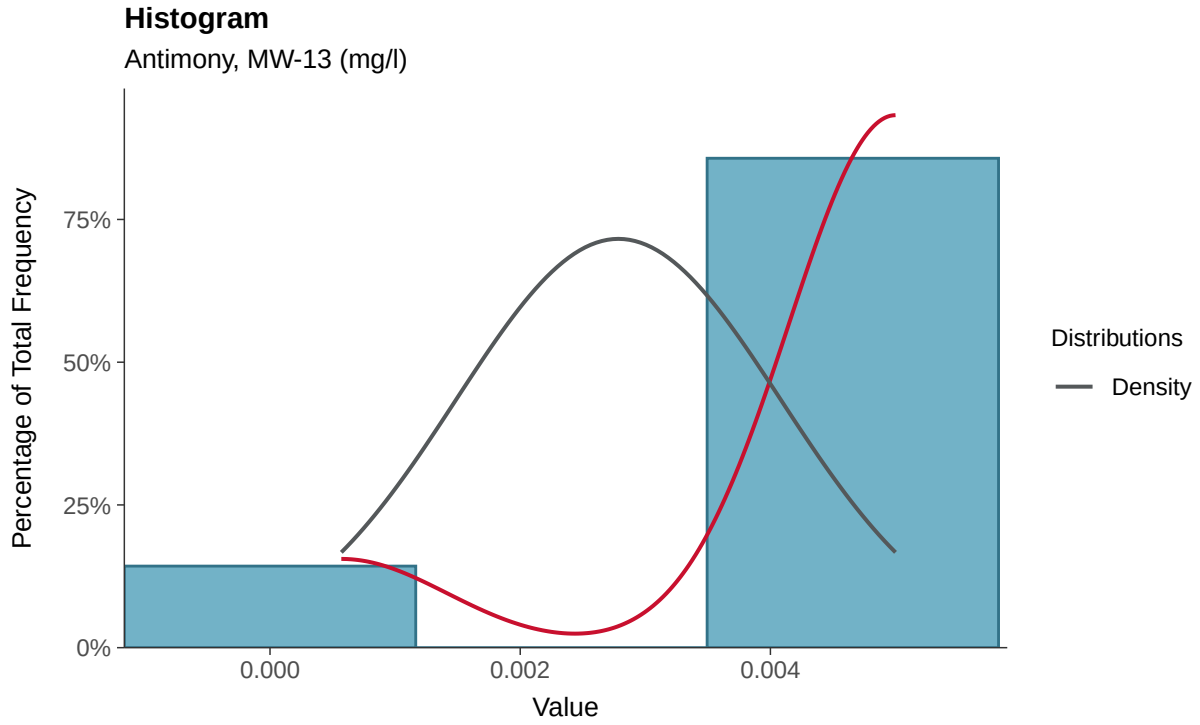
Total Dissolved Solids, MW-13 (mg/l)



Appendix IV: Antimony, MW-13

ID: 22_3_101



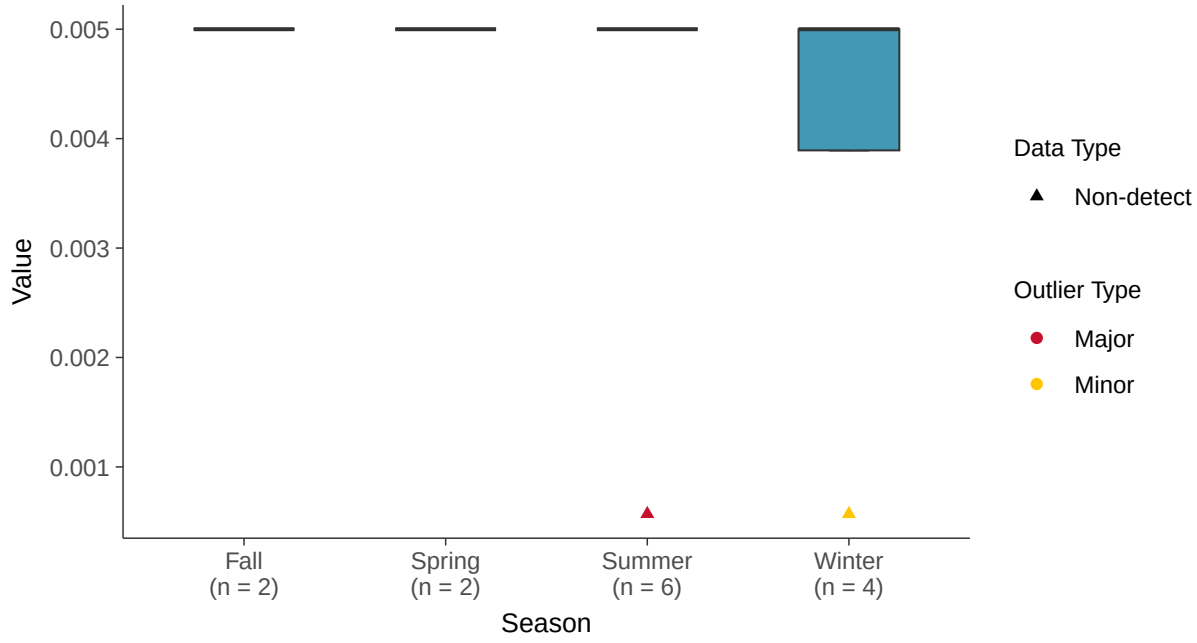


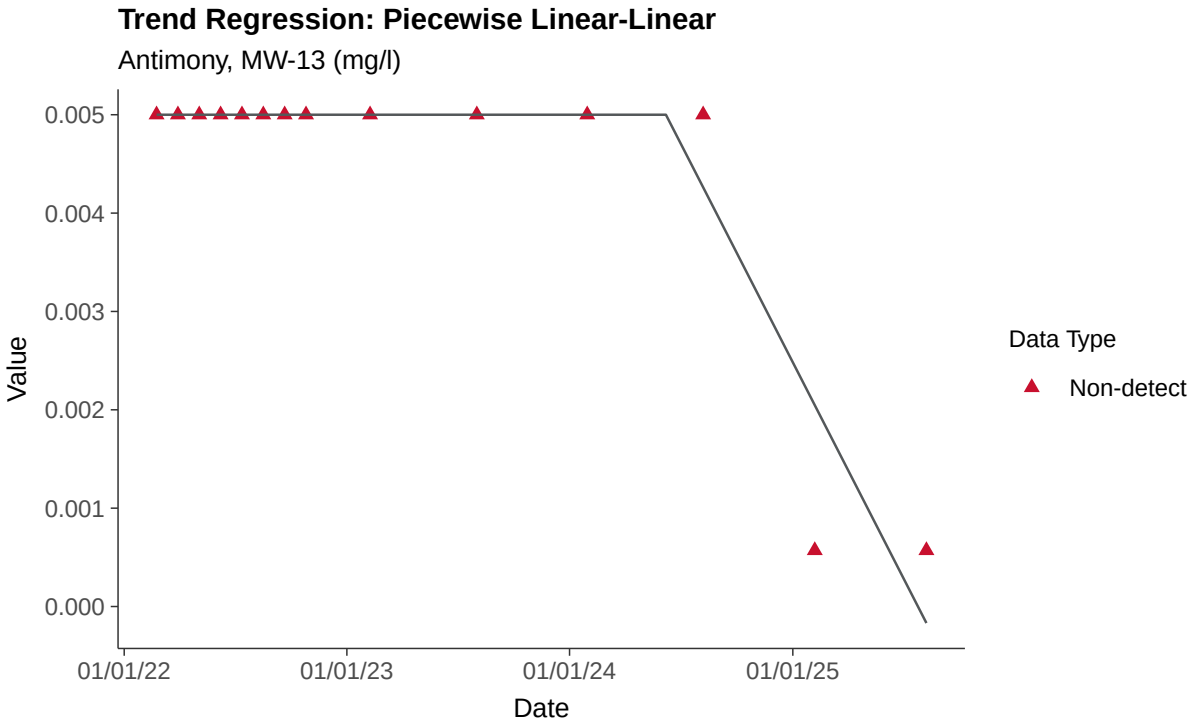
Boxplot

Antimony, MW-13 (mg/l)

Boxplot by Season

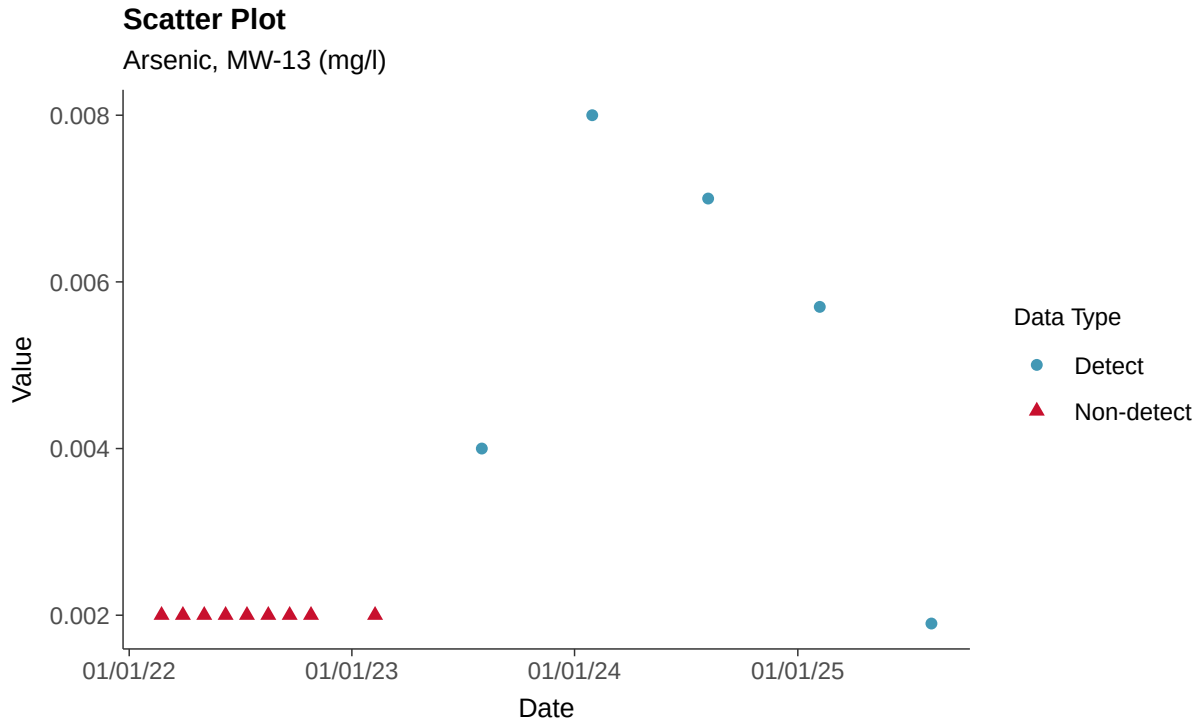
Antimony, MW-13 (mg/l)

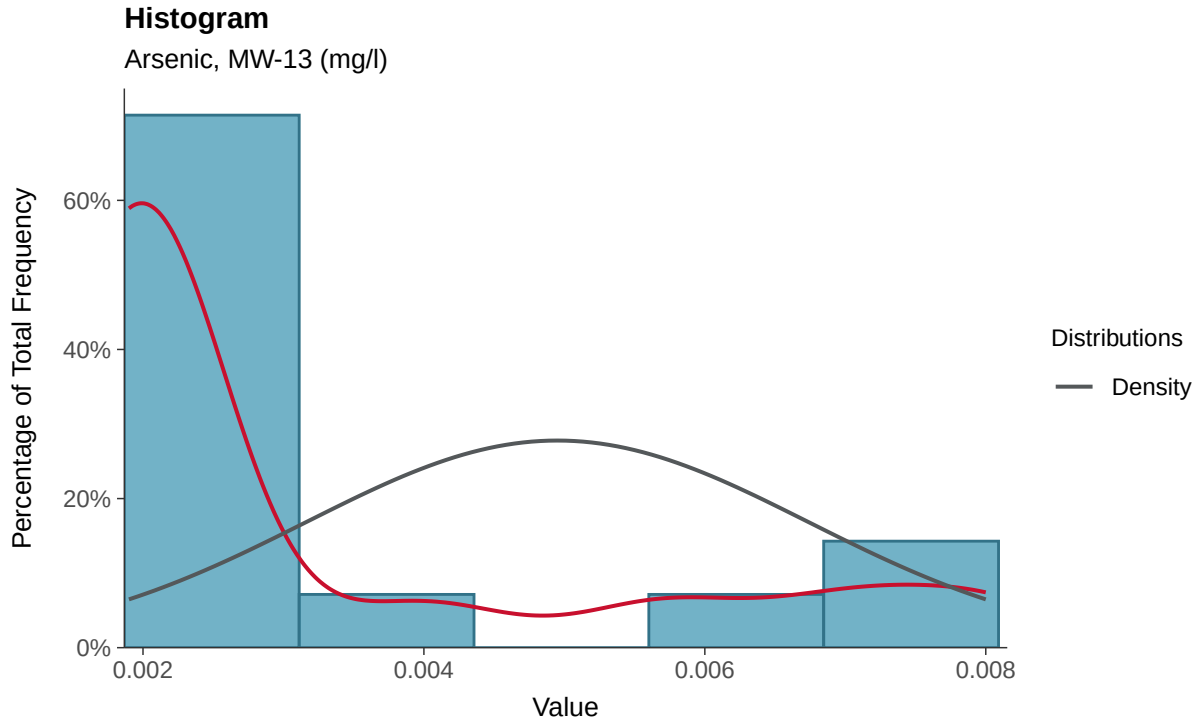



Trend Regression: Piecewise Linear-Linear
Antimony, MW-13 (mg/l)
0.005
0.004
0.003
0.002
0.001
0.000
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Appendix IV: Arsenic, MW-13

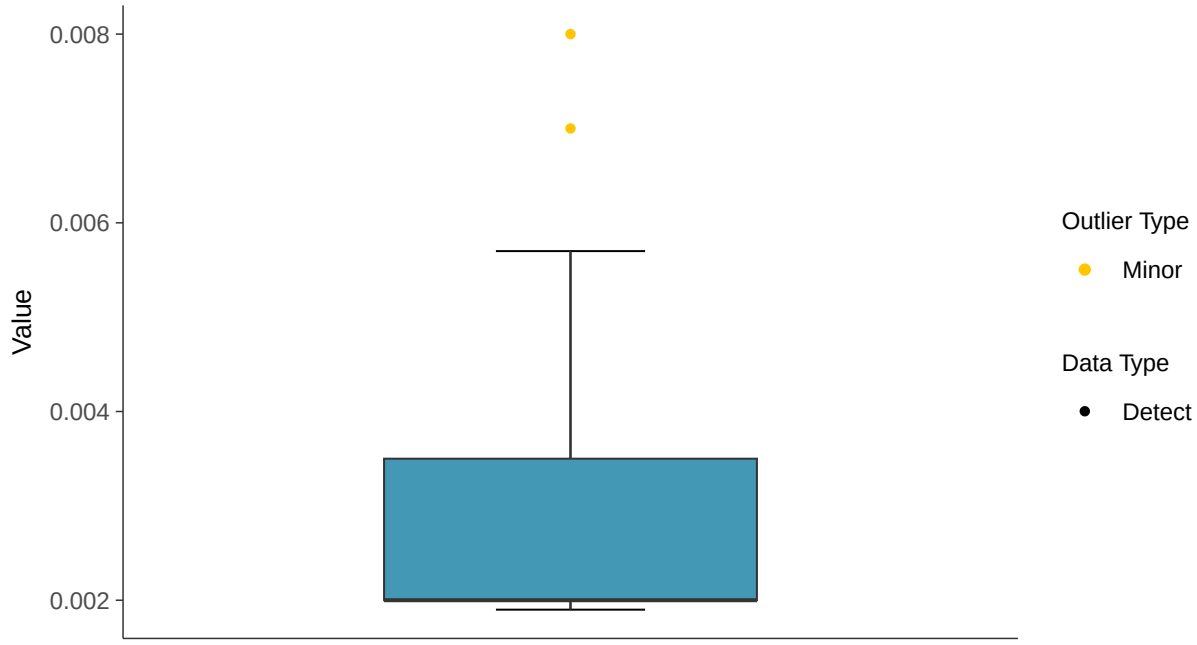
ID: 22_3_102





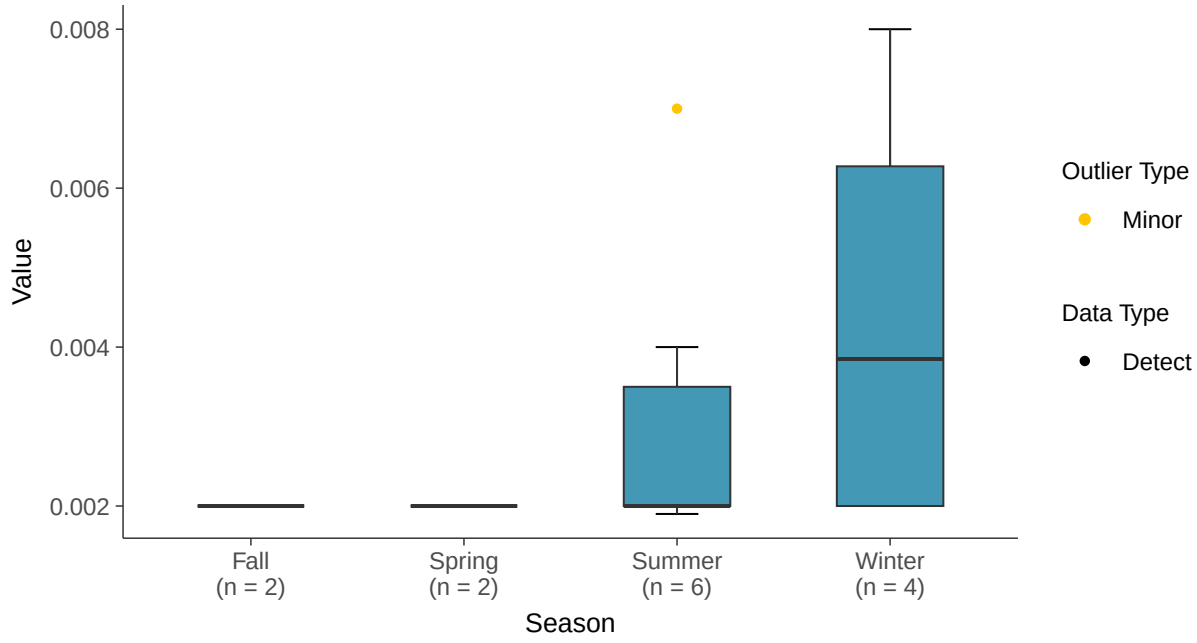
Boxplot

Arsenic, MW-13 (mg/l)



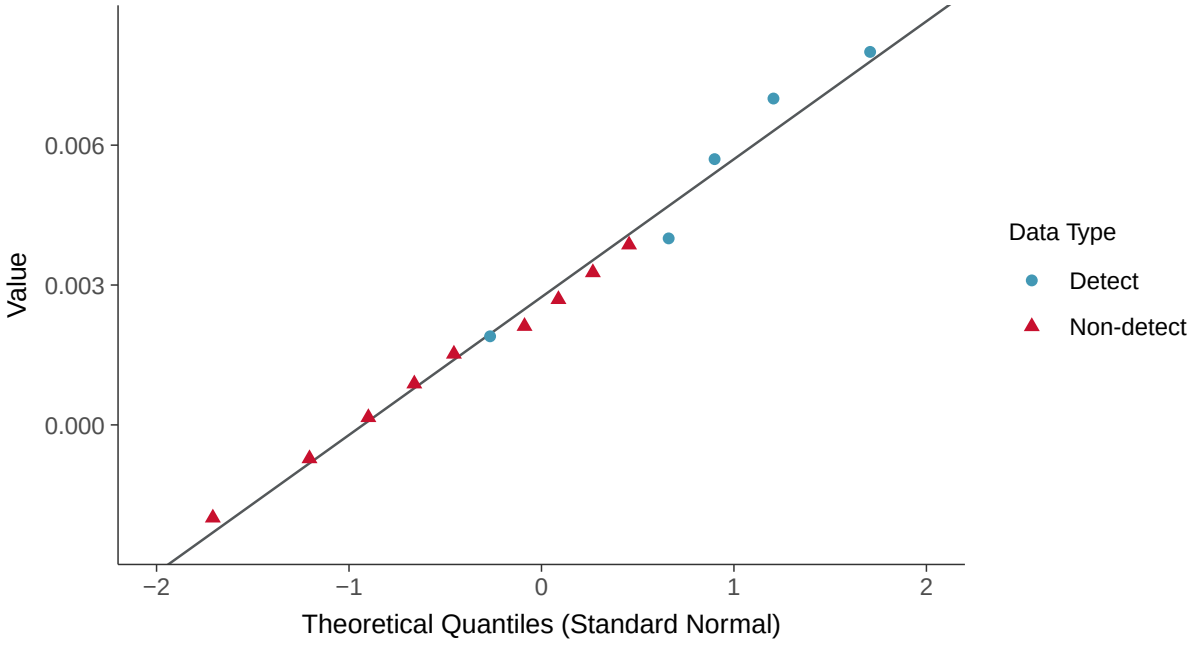
Boxplot by Season

Arsenic, MW-13 (mg/l)



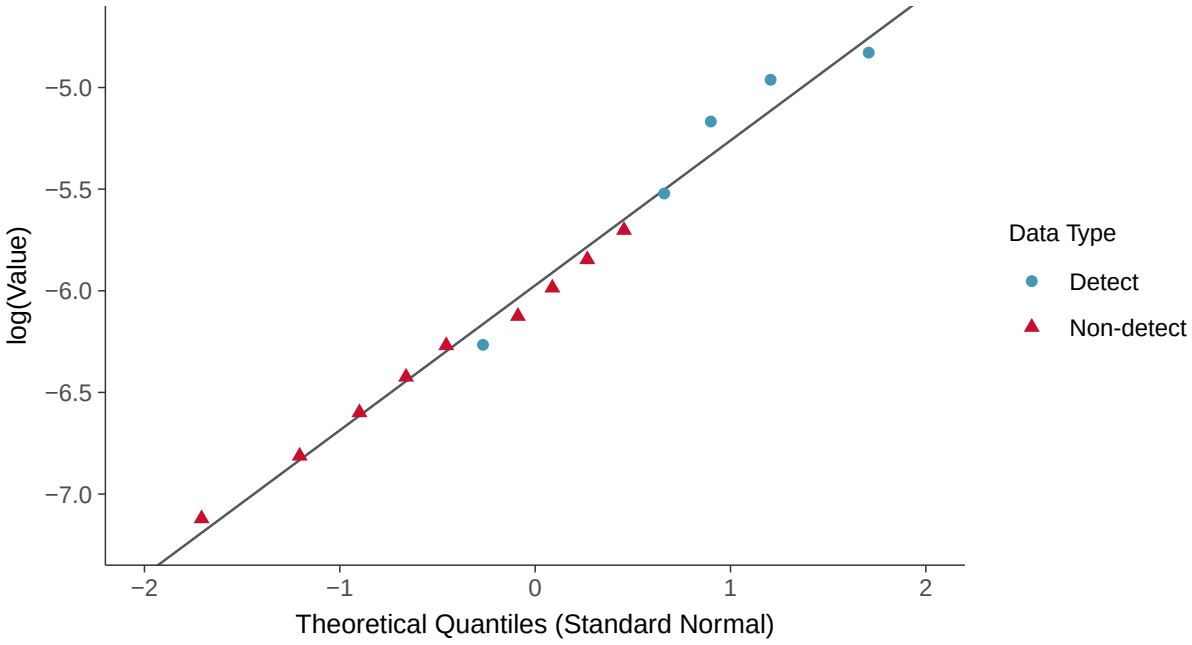
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-13 (mg/l)



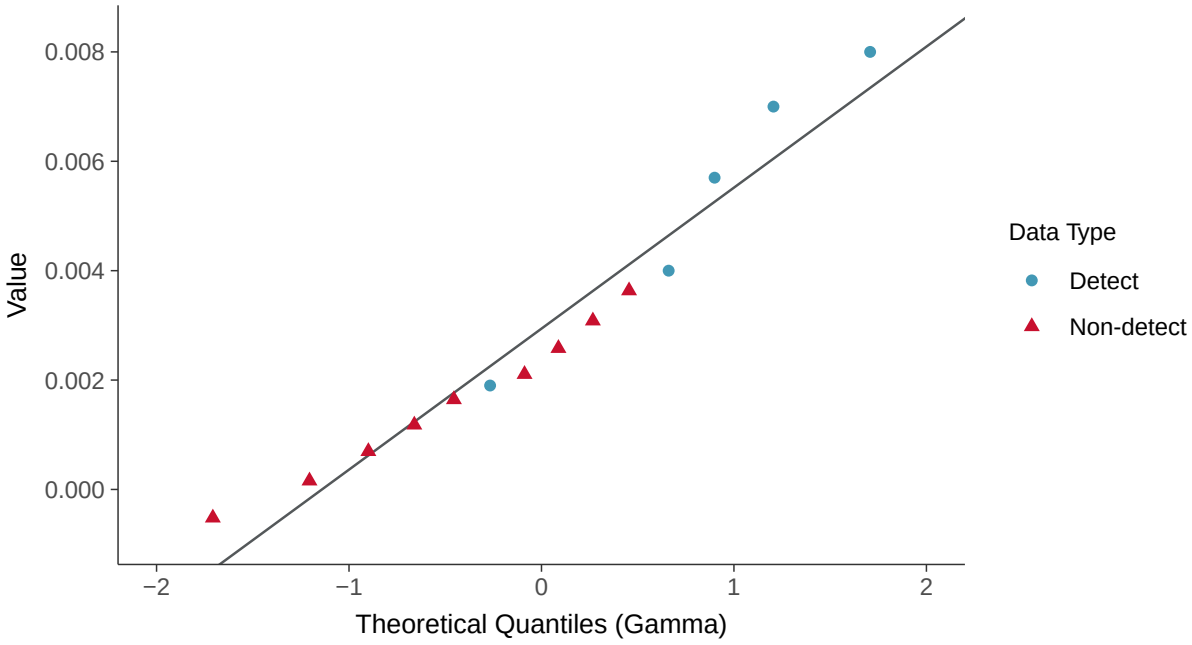
Lognormal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-13 (mg/l)



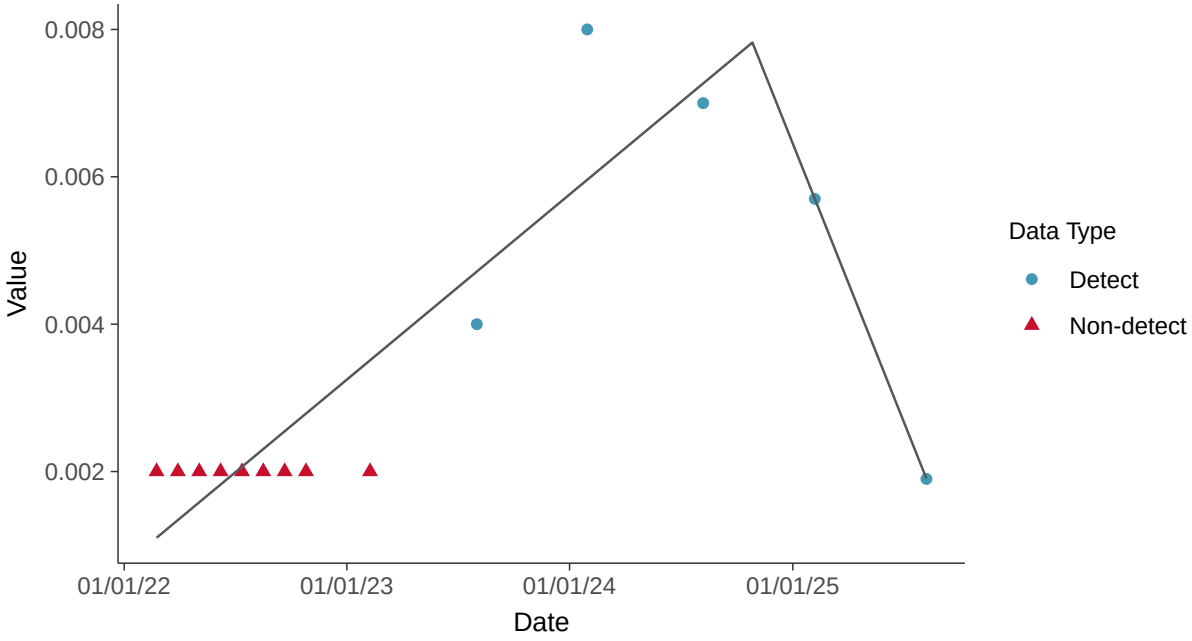
Gamma Q-Q plot using ROS Imputed Estimates

Arsenic, MW-13 (mg/l)



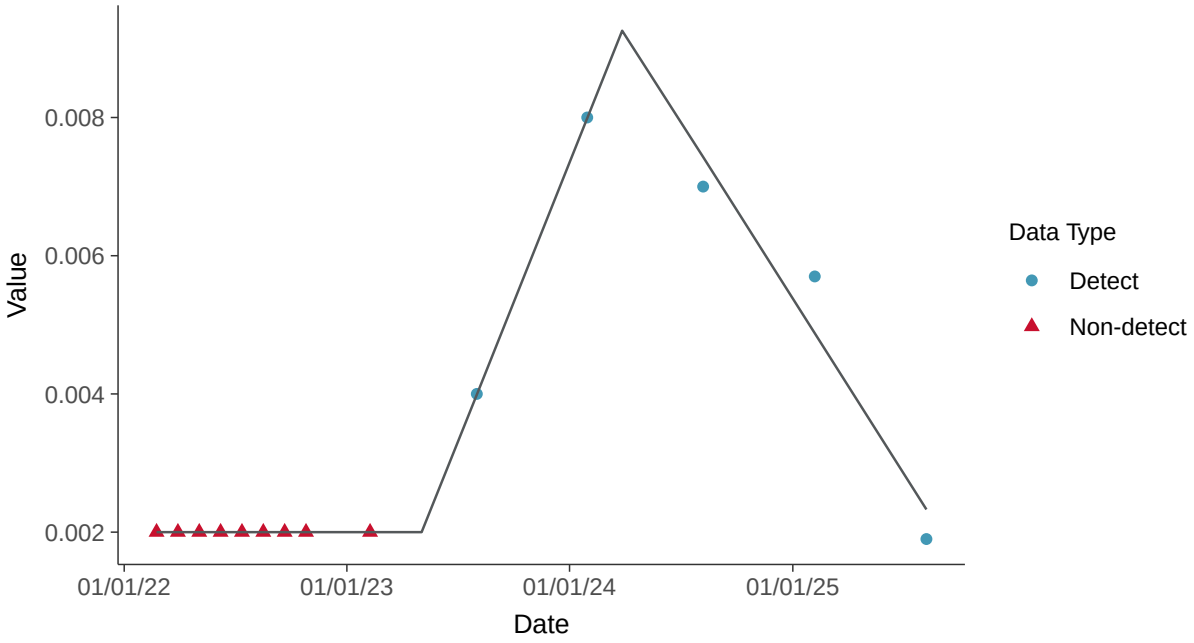
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-13 (mg/l)



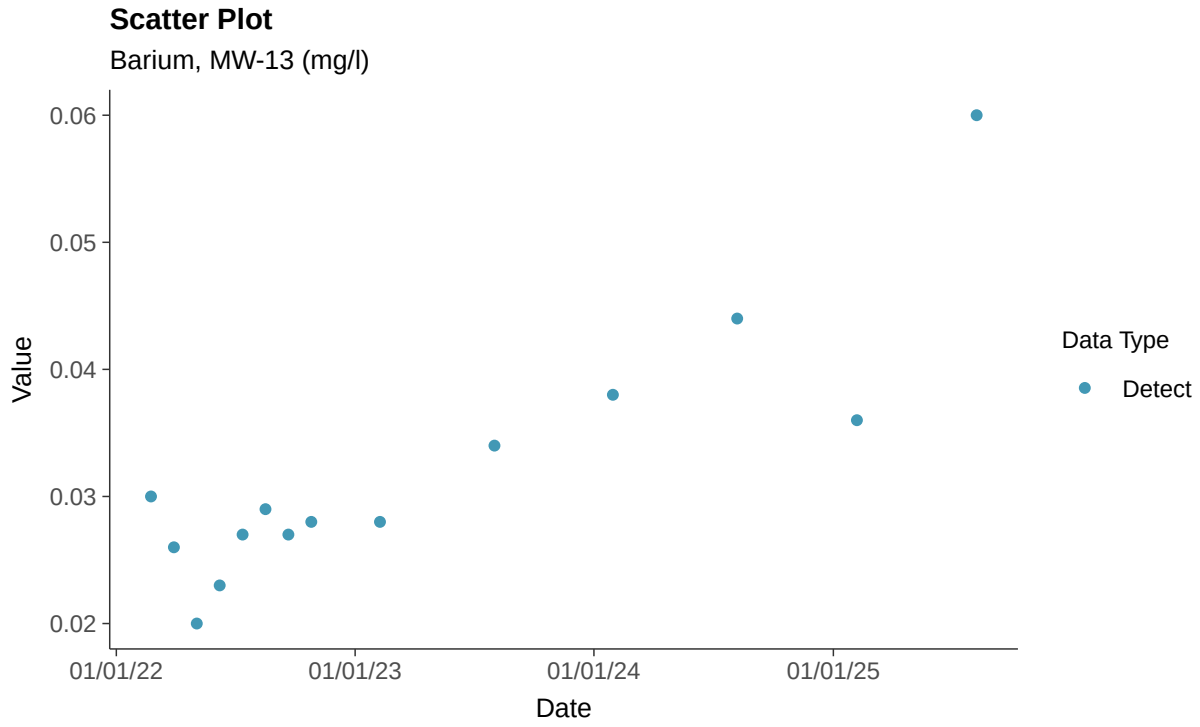
Trend Regression: Piecewise Linear-Linear-Linear

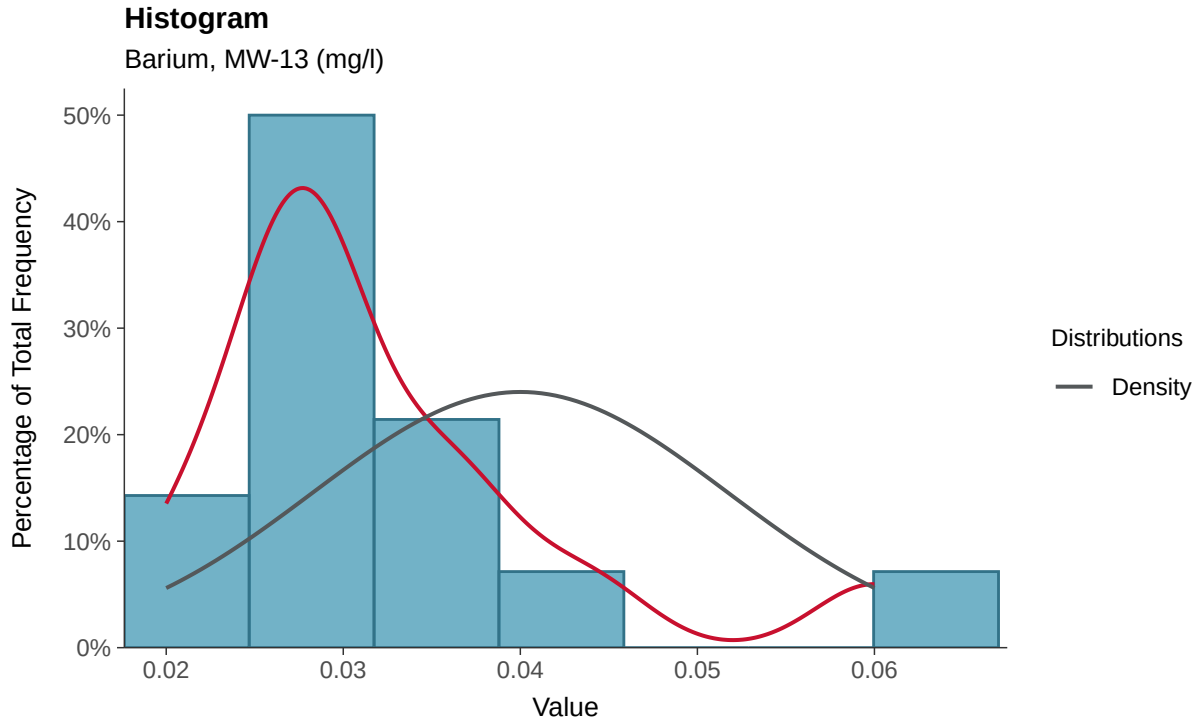
Arsenic, MW-13 (mg/l)



Appendix IV: Barium, MW-13

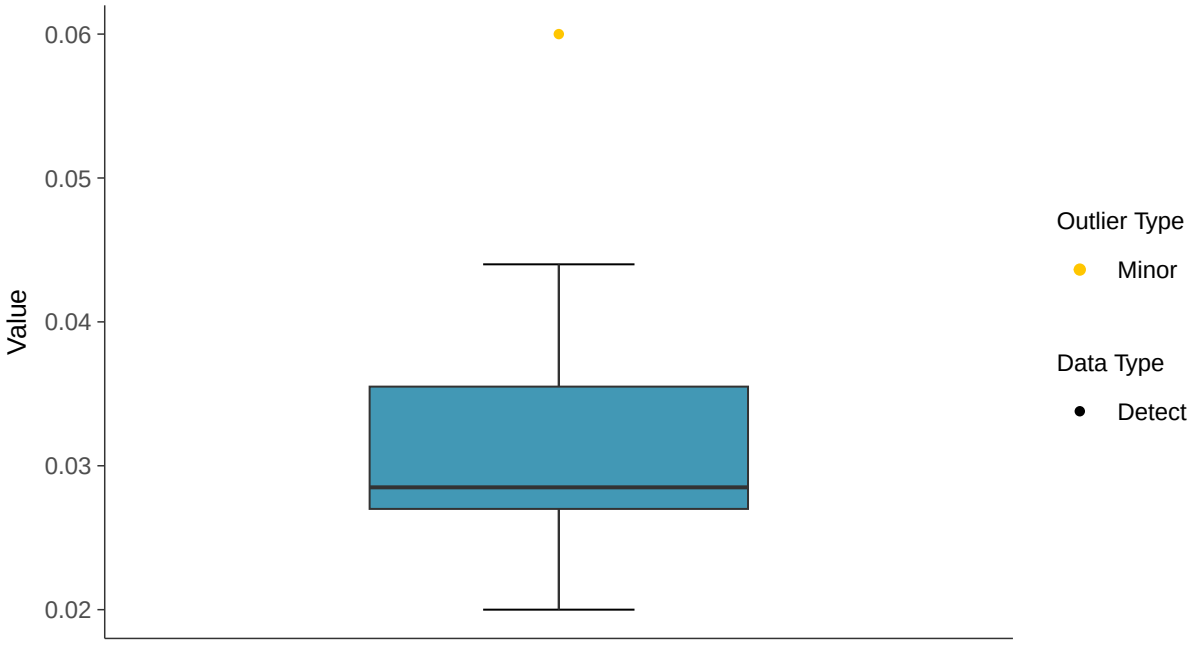
ID: 22_3_103





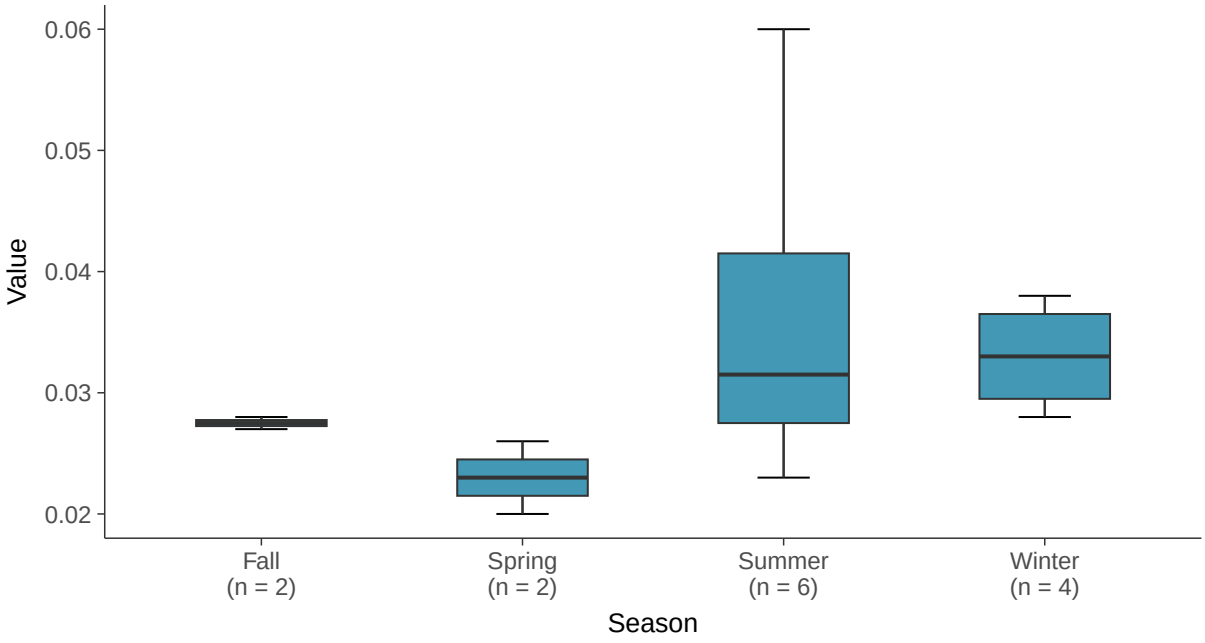
Boxplot

Barium, MW-13 (mg/l)



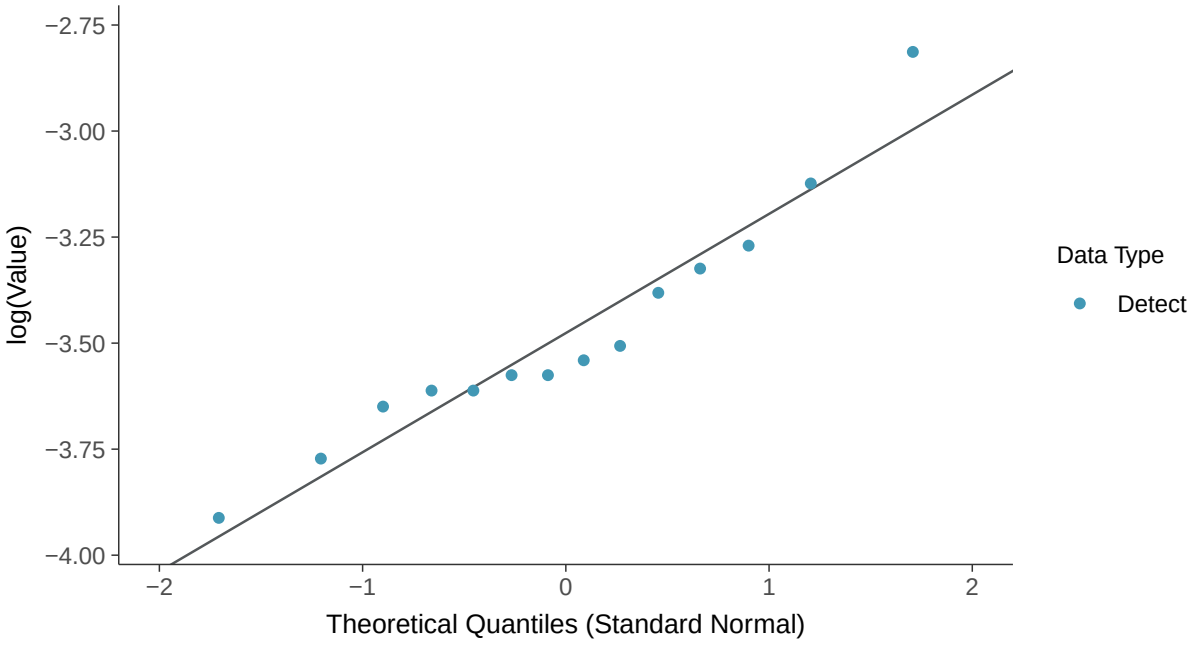
Boxplot by Season

Barium, MW-13 (mg/l)



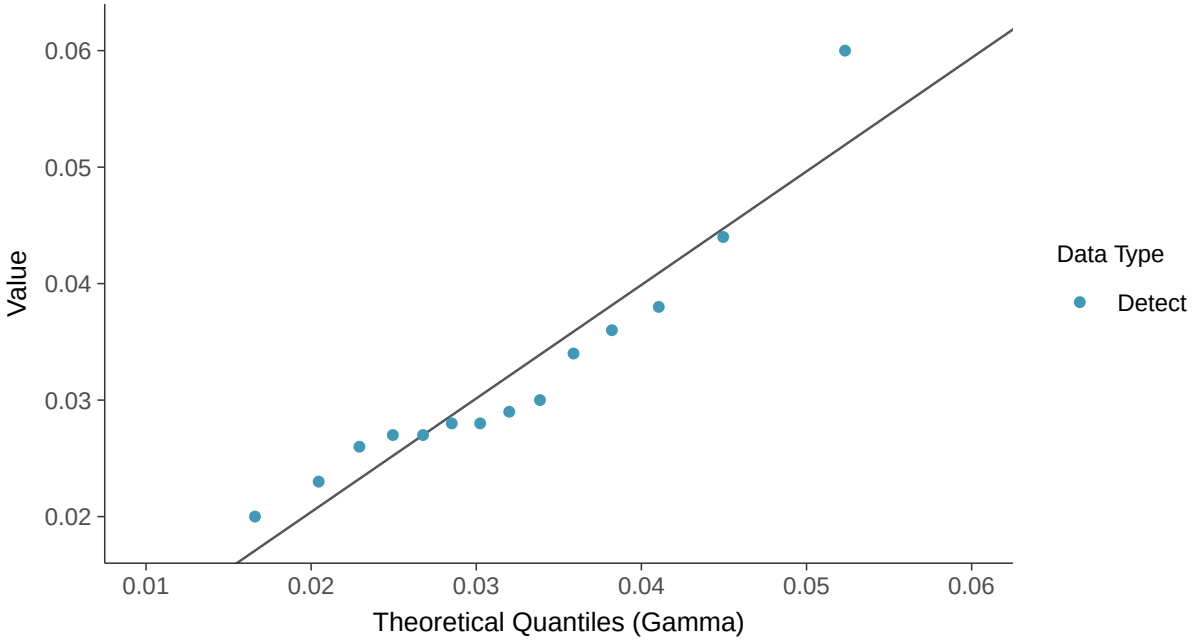
Lognormal Q-Q plot

Barium, MW-13 (mg/l)



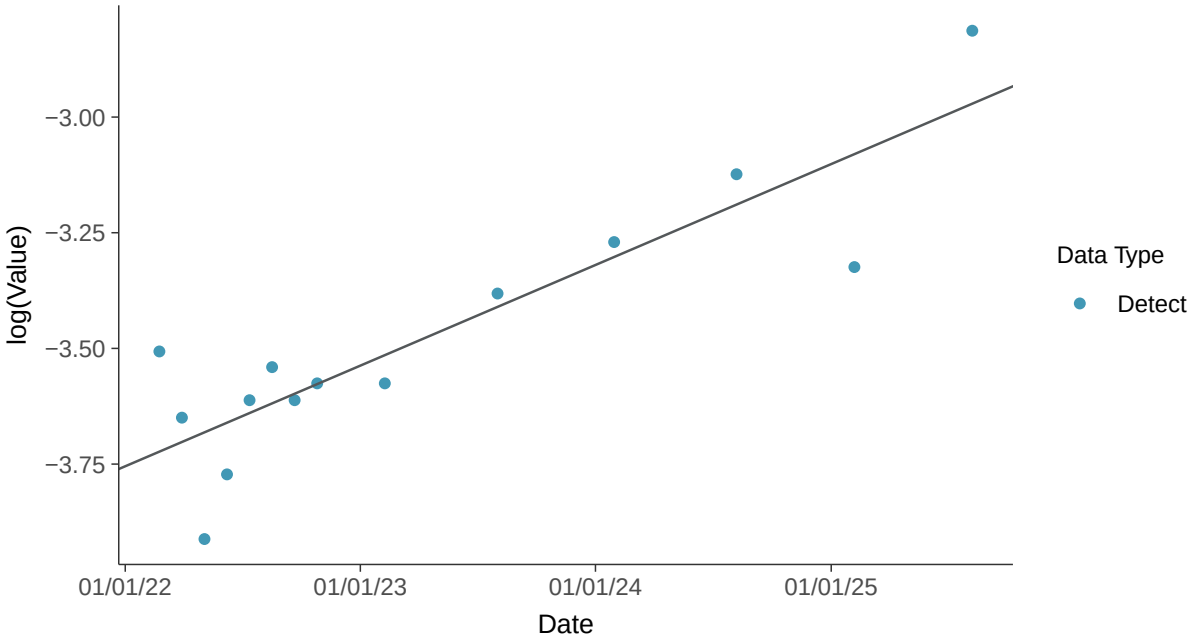
Gamma Q-Q plot

Barium, MW-13 (mg/l)



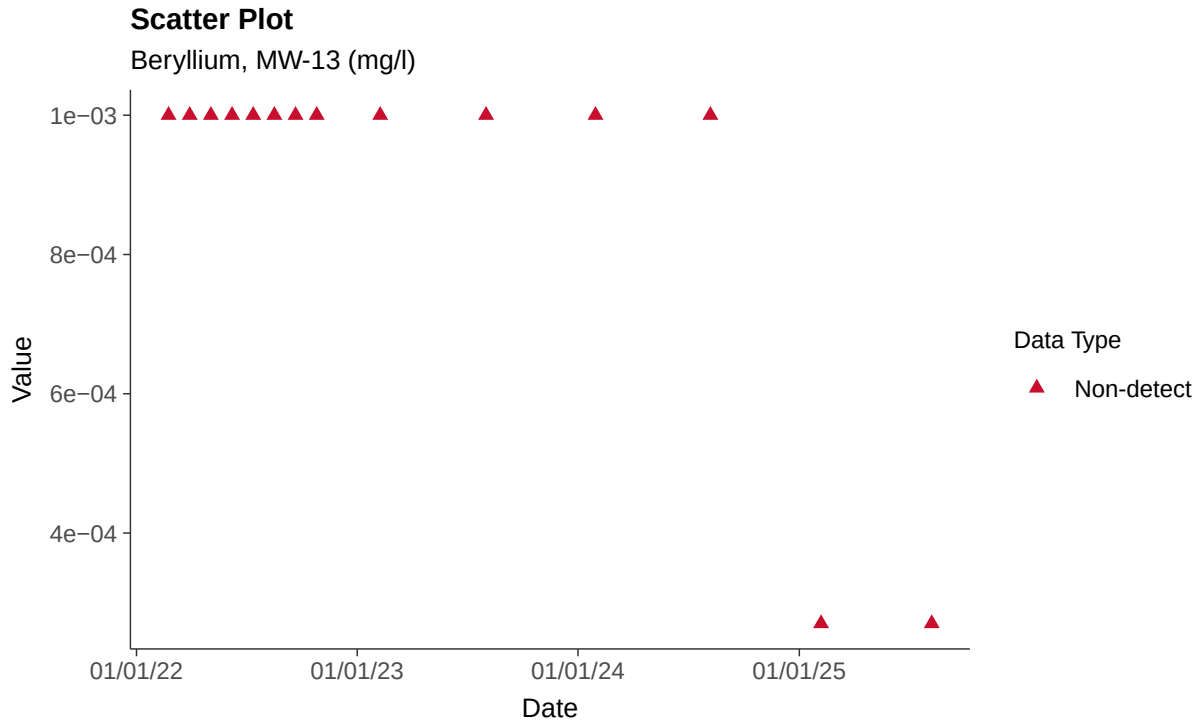
Trend Regression: Lognormal MLE

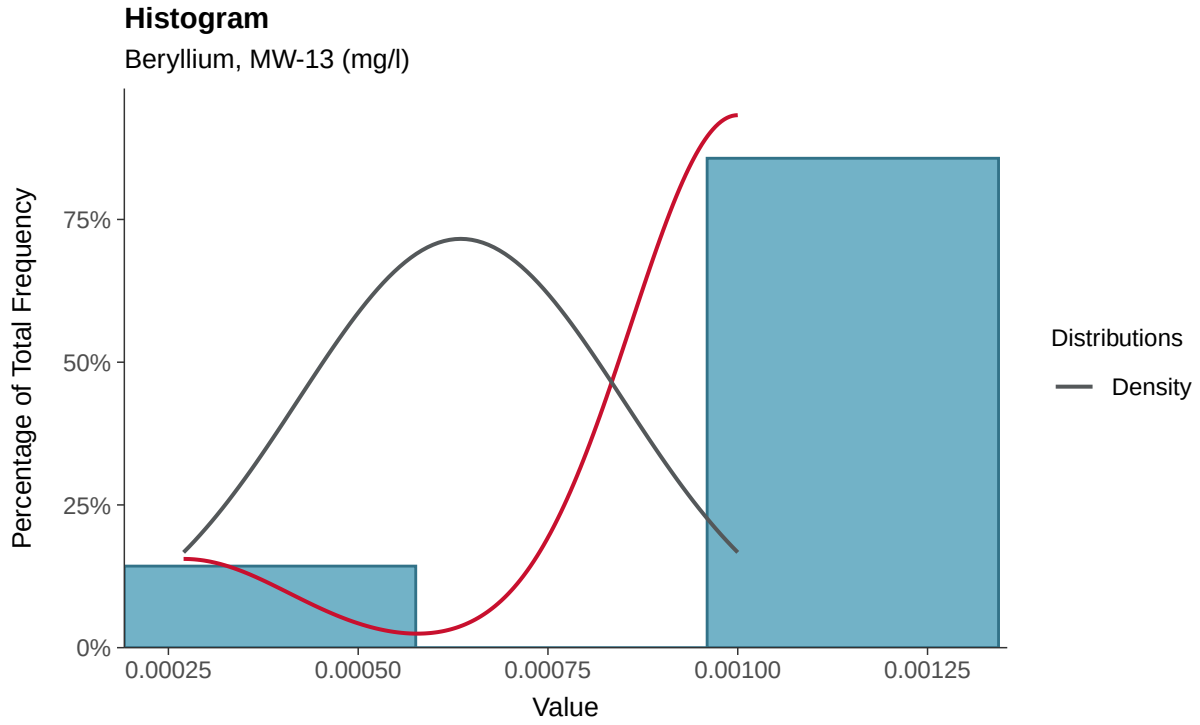
Barium, MW-13 (mg/l)



Appendix IV: Beryllium, MW-13

ID: 22_3_104



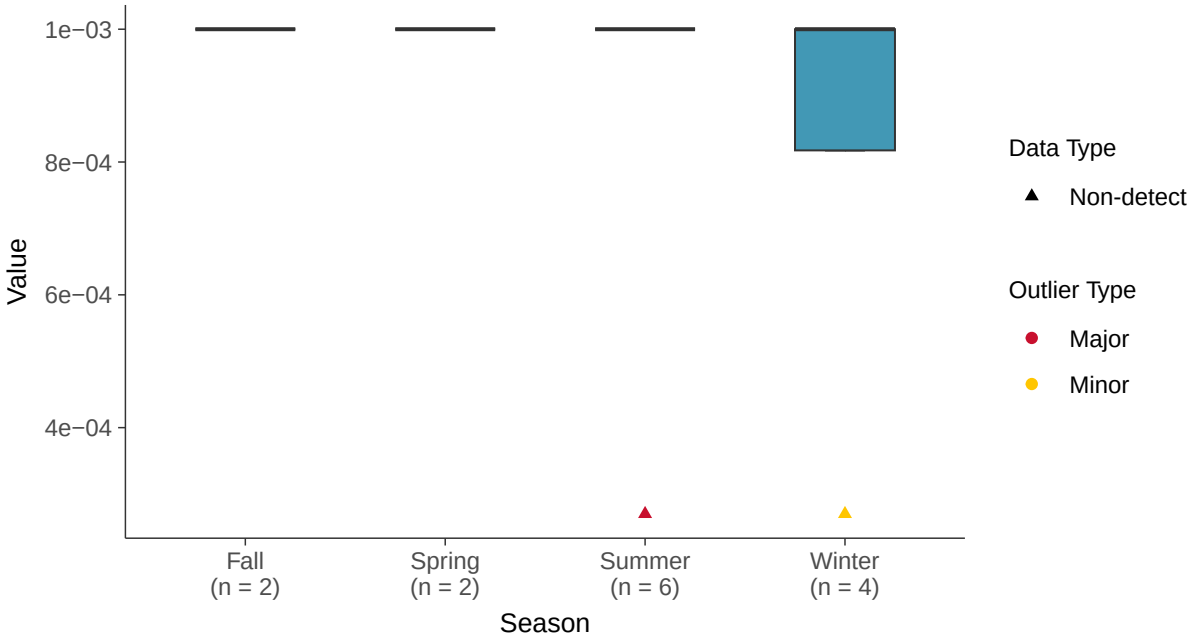


Boxplot

Beryllium, MW-13 (mg/l)

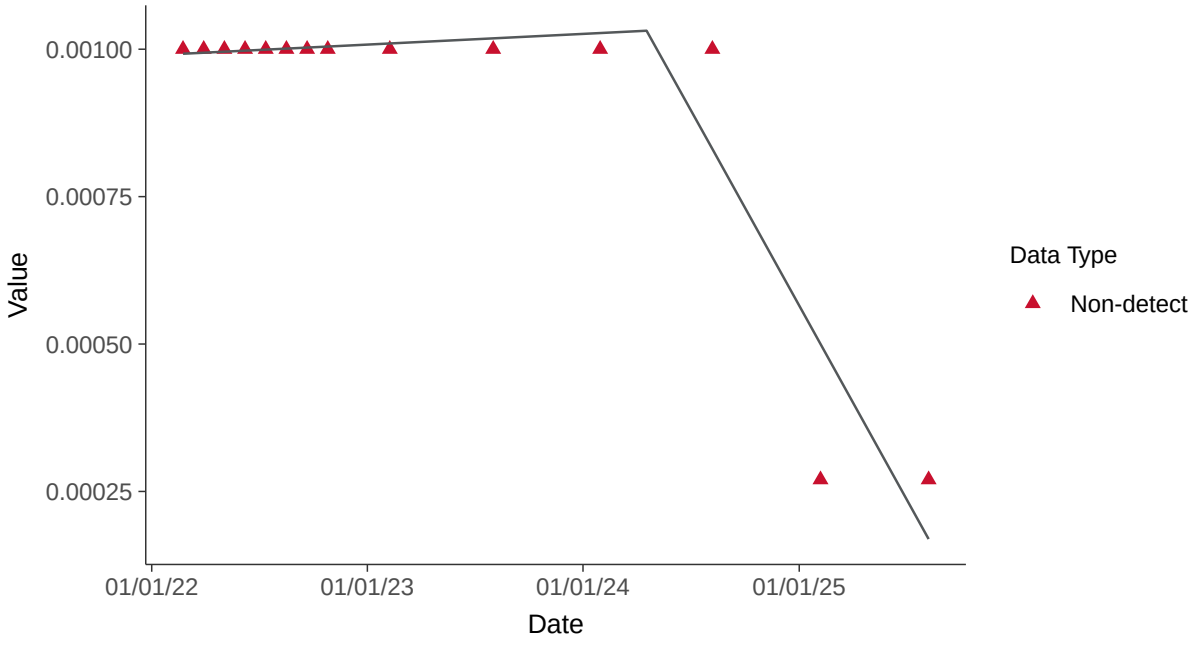
Boxplot by Season

Beryllium, MW-13 (mg/l)



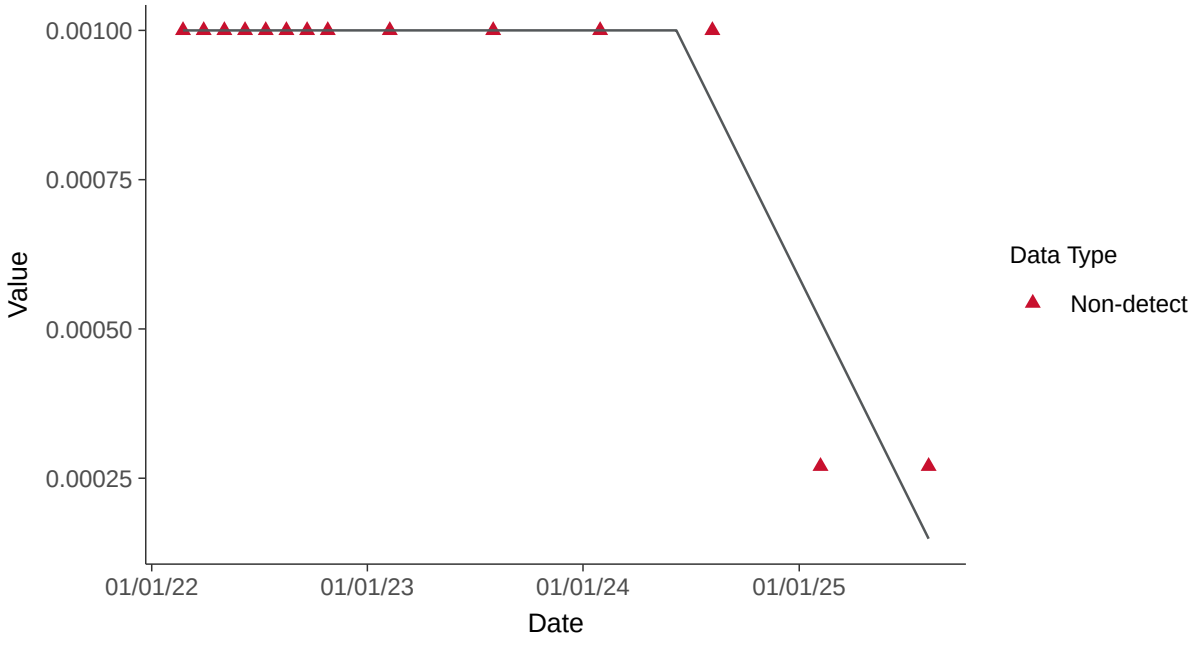
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-13 (mg/l)



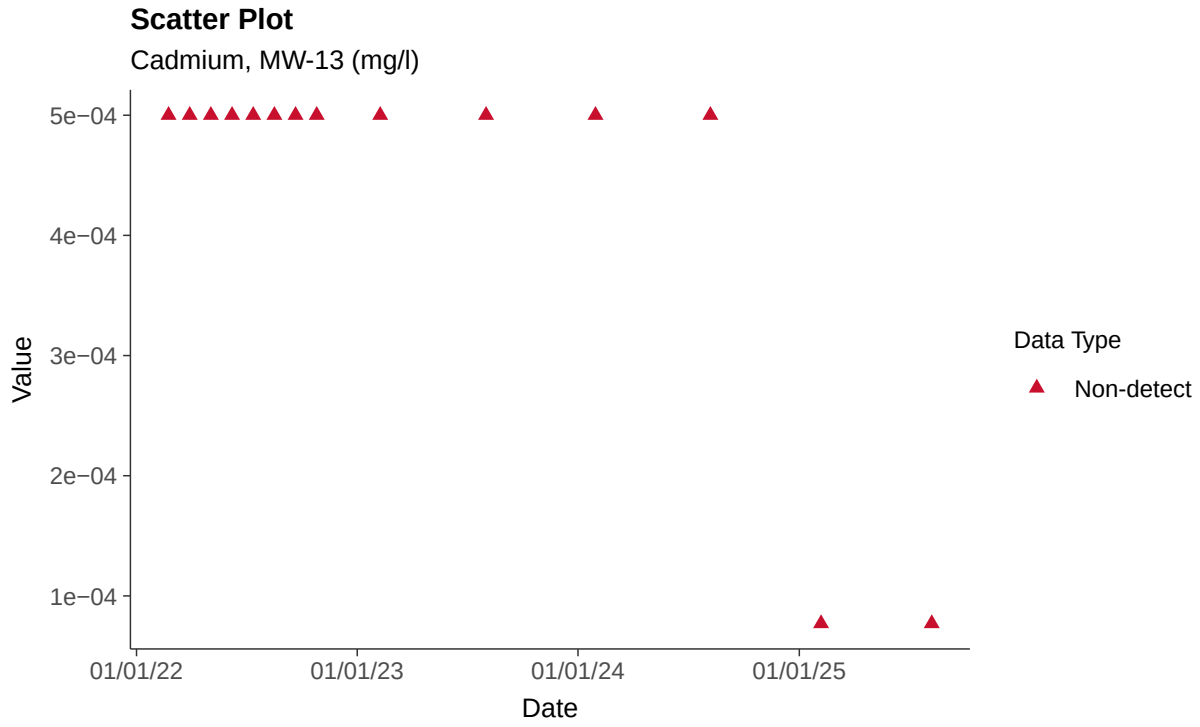
Trend Regression: Piecewise Linear-Linear-Linear

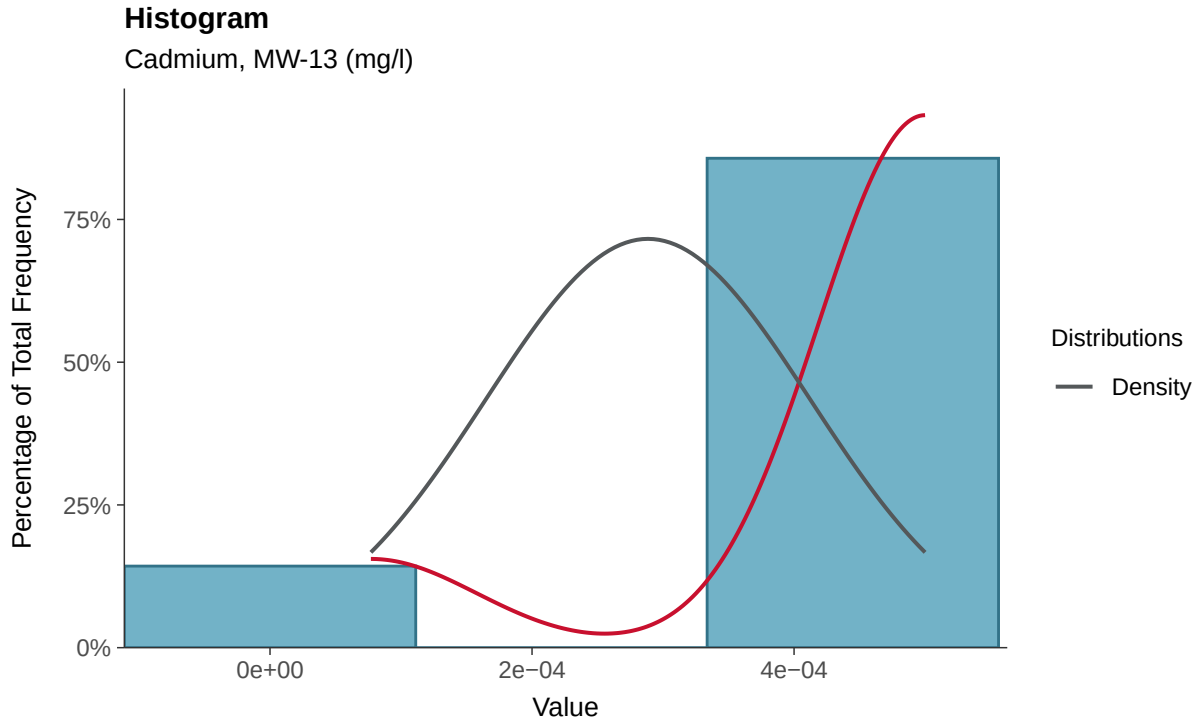
Beryllium, MW-13 (mg/l)



Appendix IV: Cadmium, MW-13

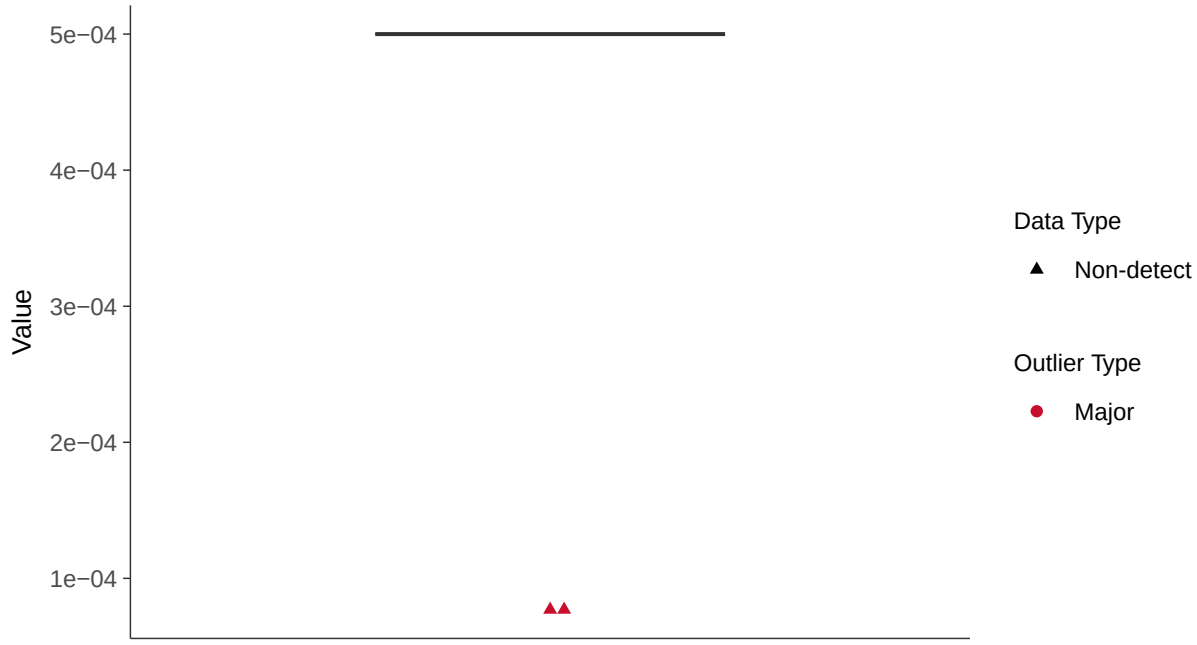
ID: 22_3_106





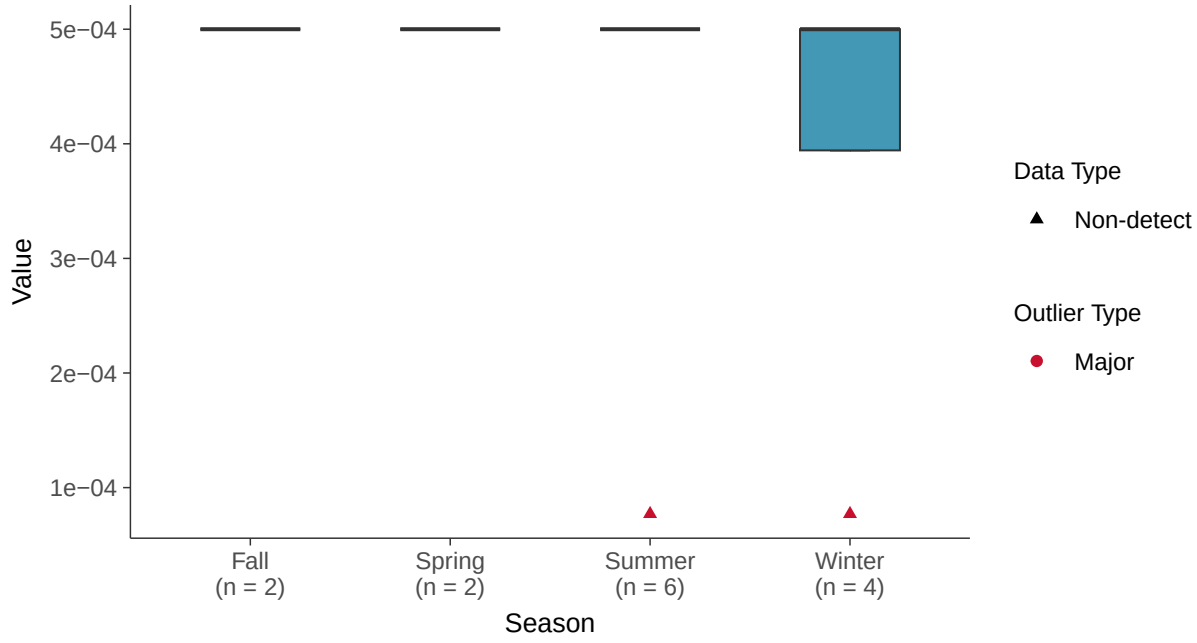
Boxplot

Cadmium, MW-13 (mg/l)



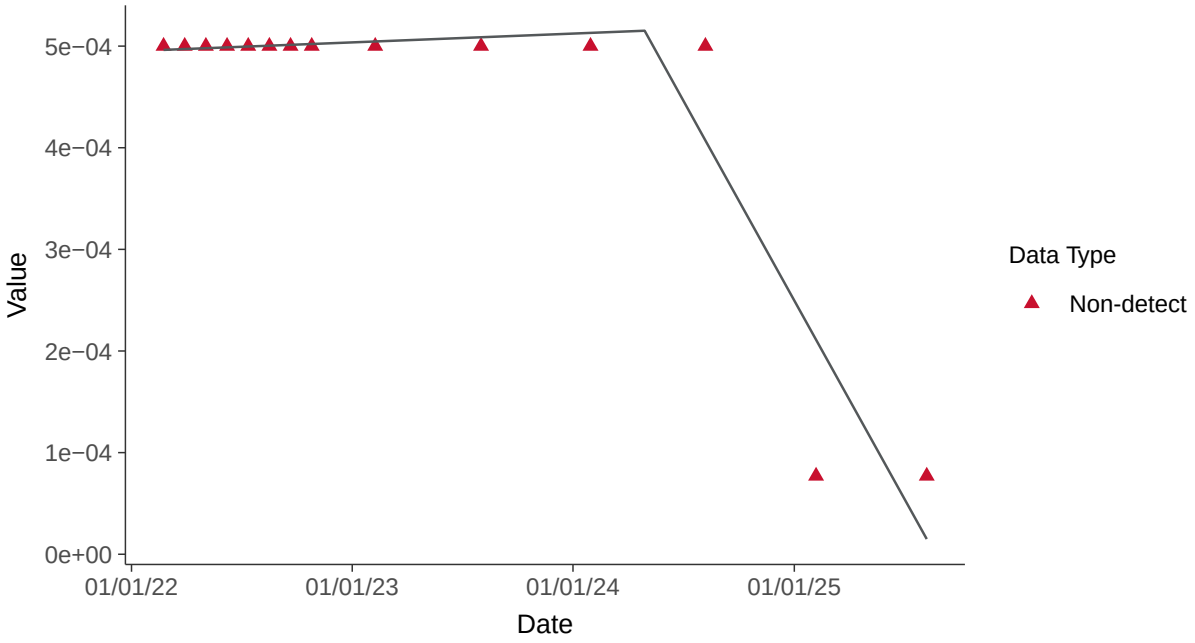
Boxplot by Season

Cadmium, MW-13 (mg/l)



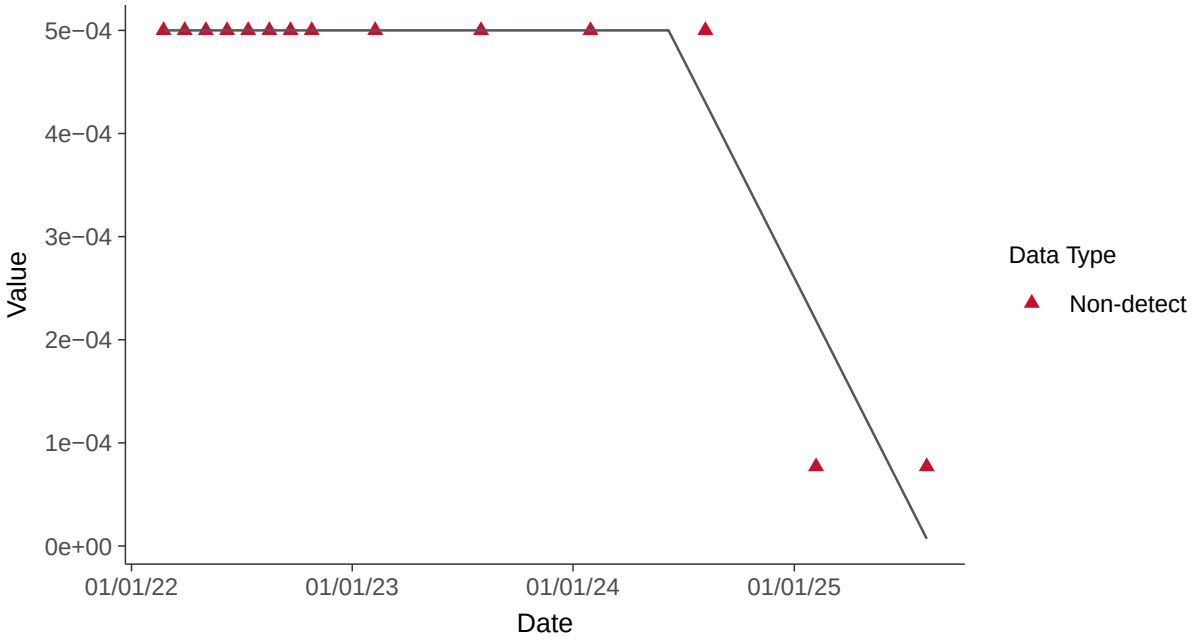
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-13 (mg/l)



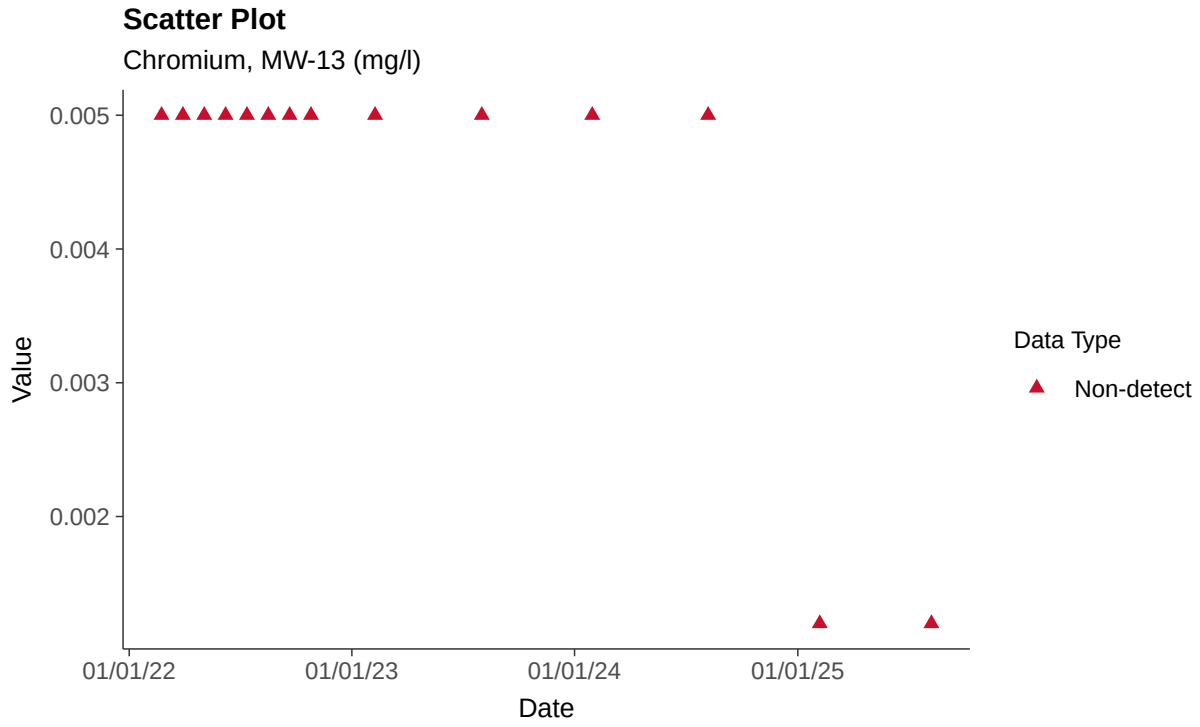
Trend Regression: Piecewise Linear-Linear-Linear

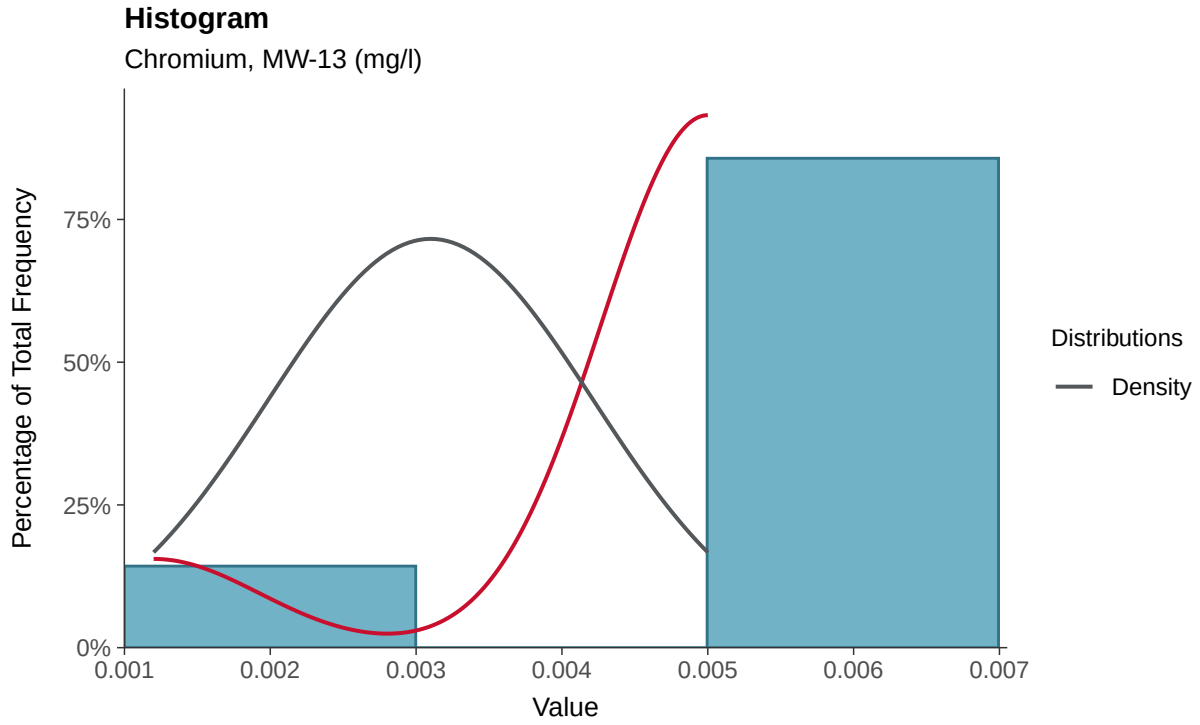
Cadmium, MW-13 (mg/l)



Appendix IV: Chromium, MW-13

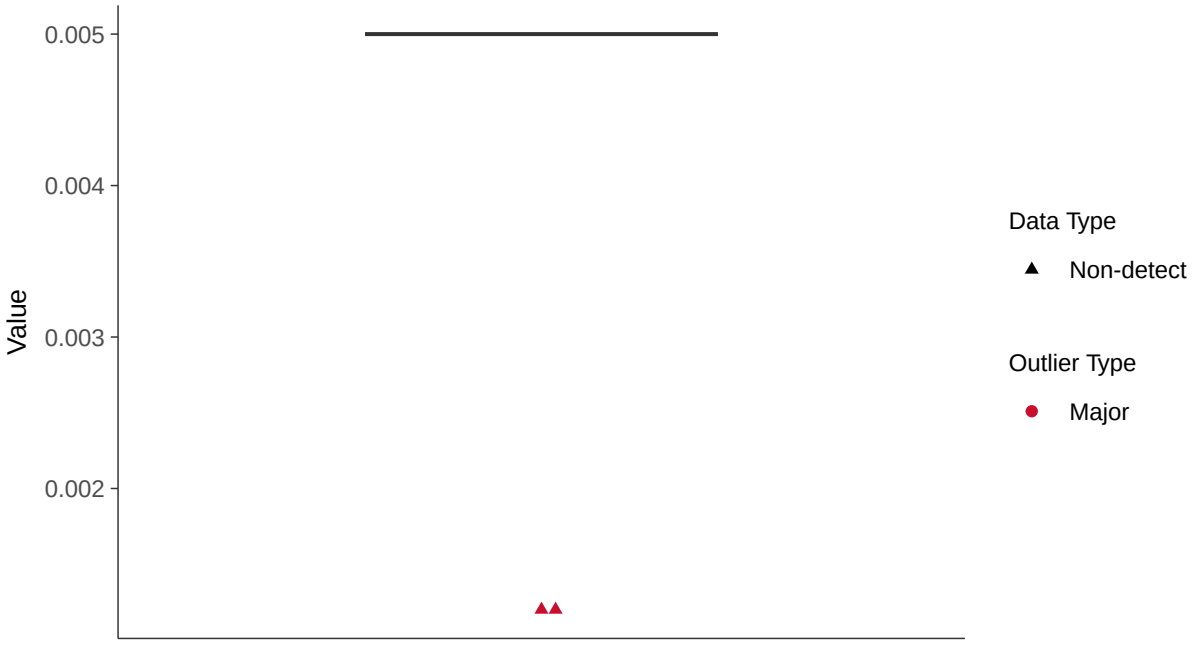
ID: 22_3_109





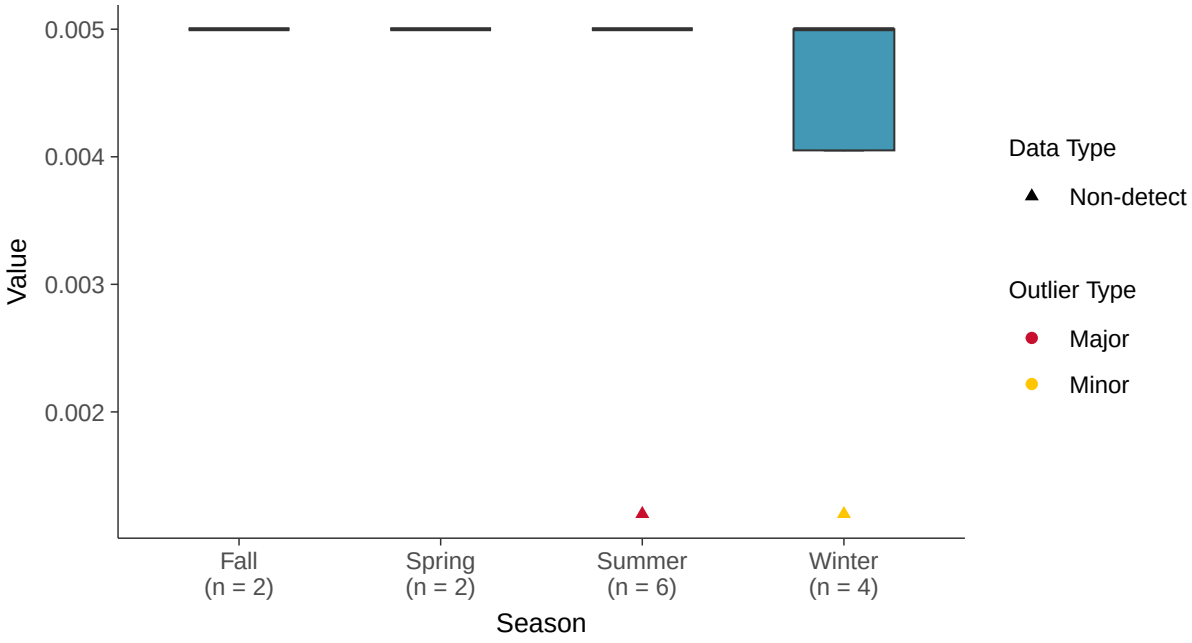
Boxplot

Chromium, MW-13 (mg/l)



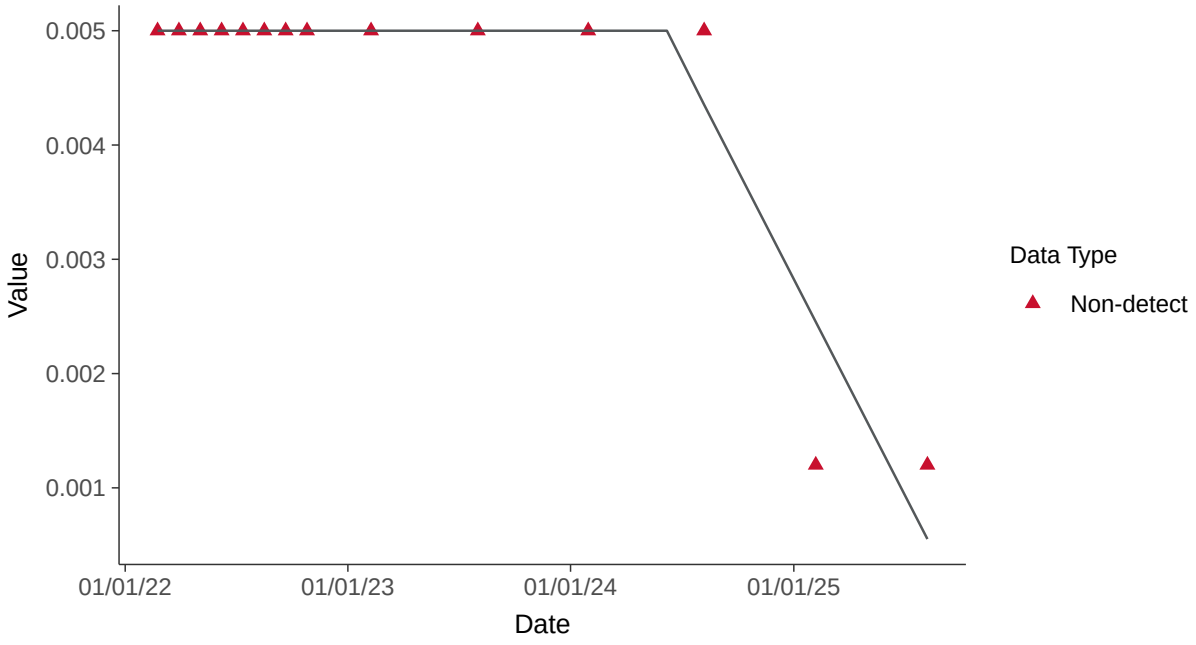
Boxplot by Season

Chromium, MW-13 (mg/l)



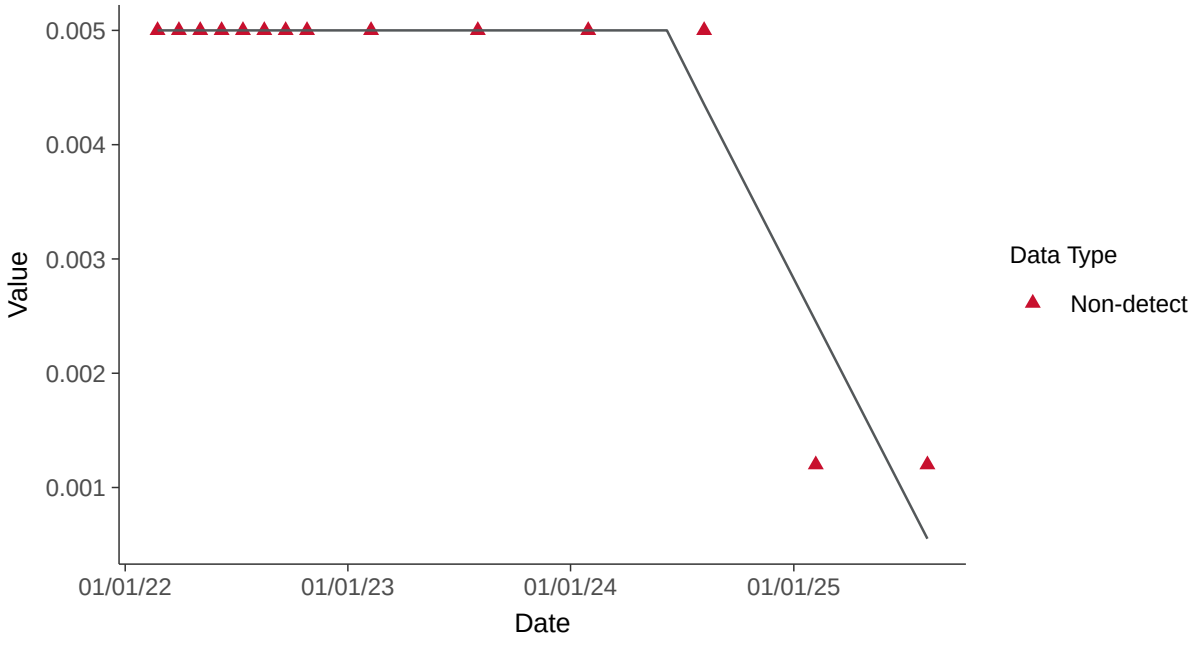
Trend Regression: Piecewise Linear-Linear

Chromium, MW-13 (mg/l)



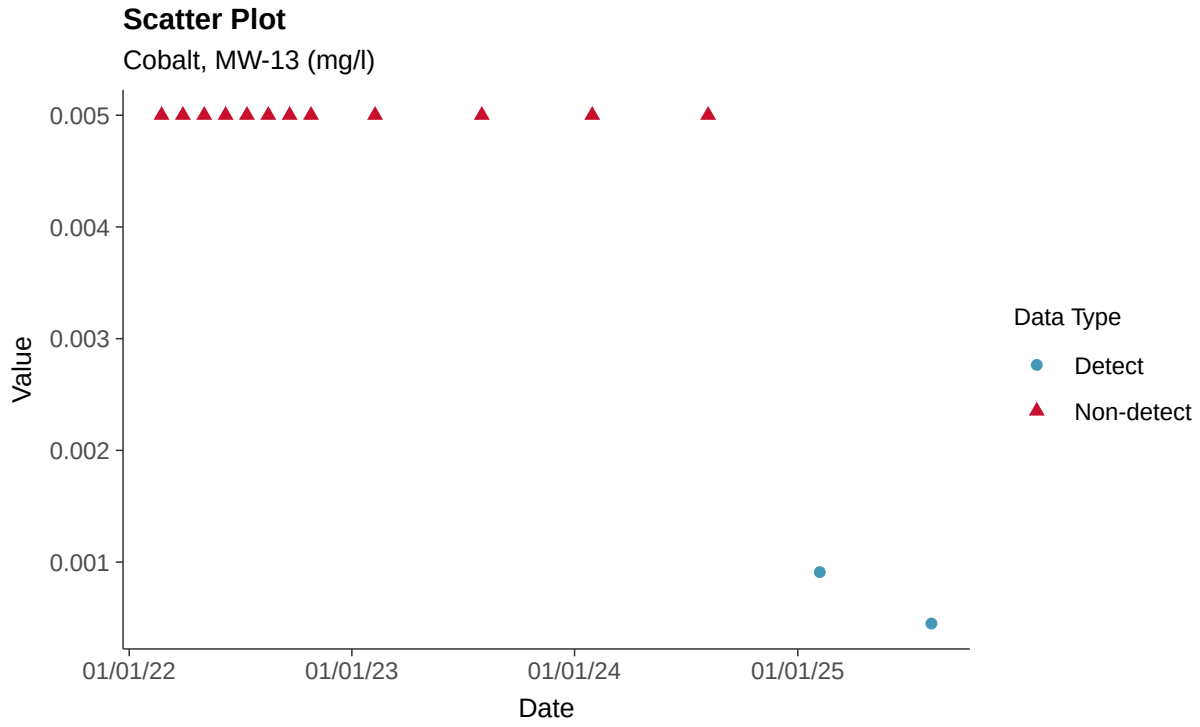
Trend Regression: Piecewise Linear-Linear-Linear

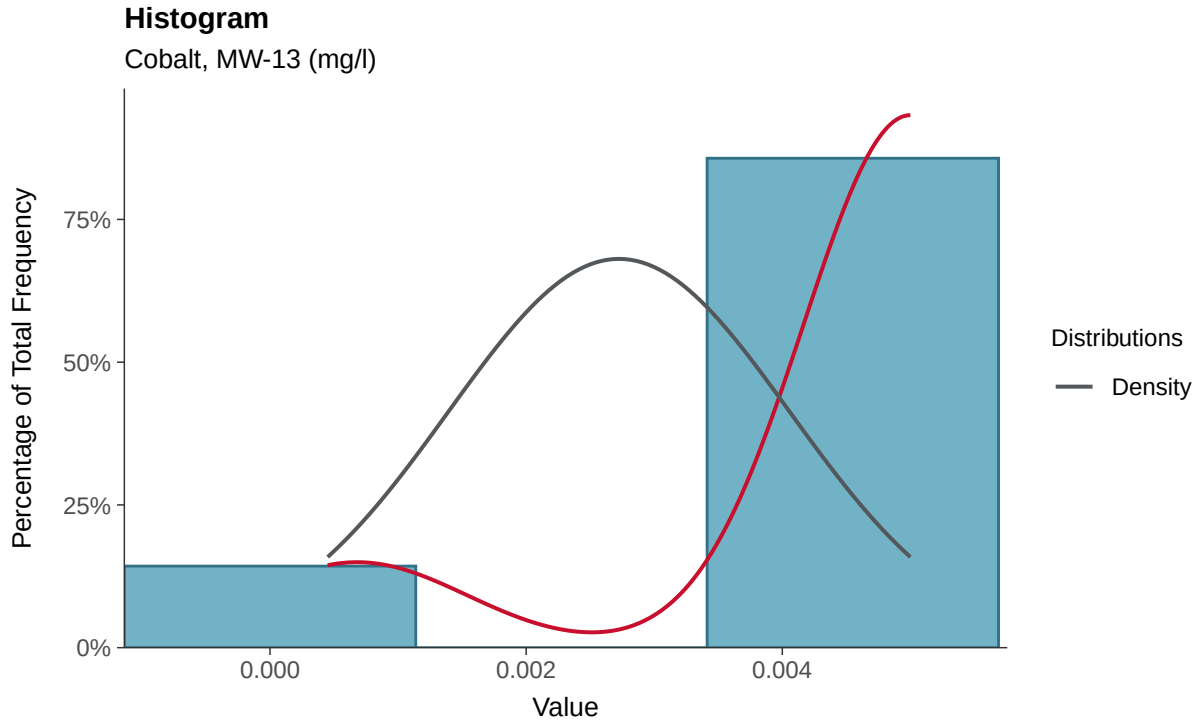
Chromium, MW-13 (mg/l)



Appendix IV: Cobalt, MW-13

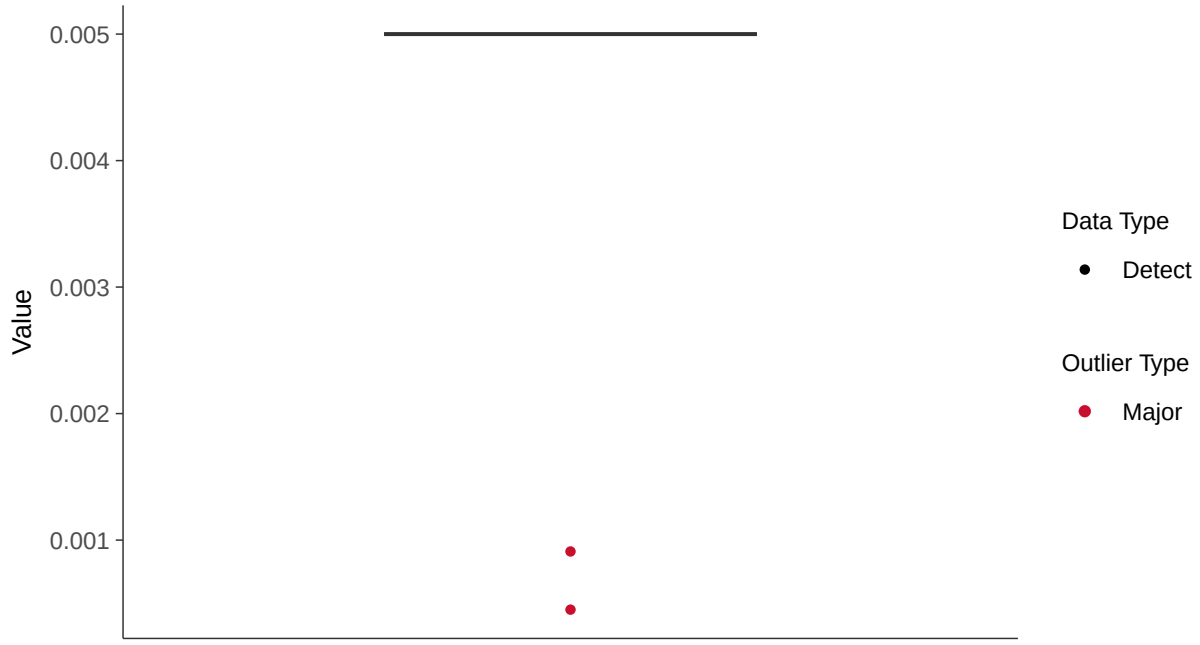
ID: 22_3_110





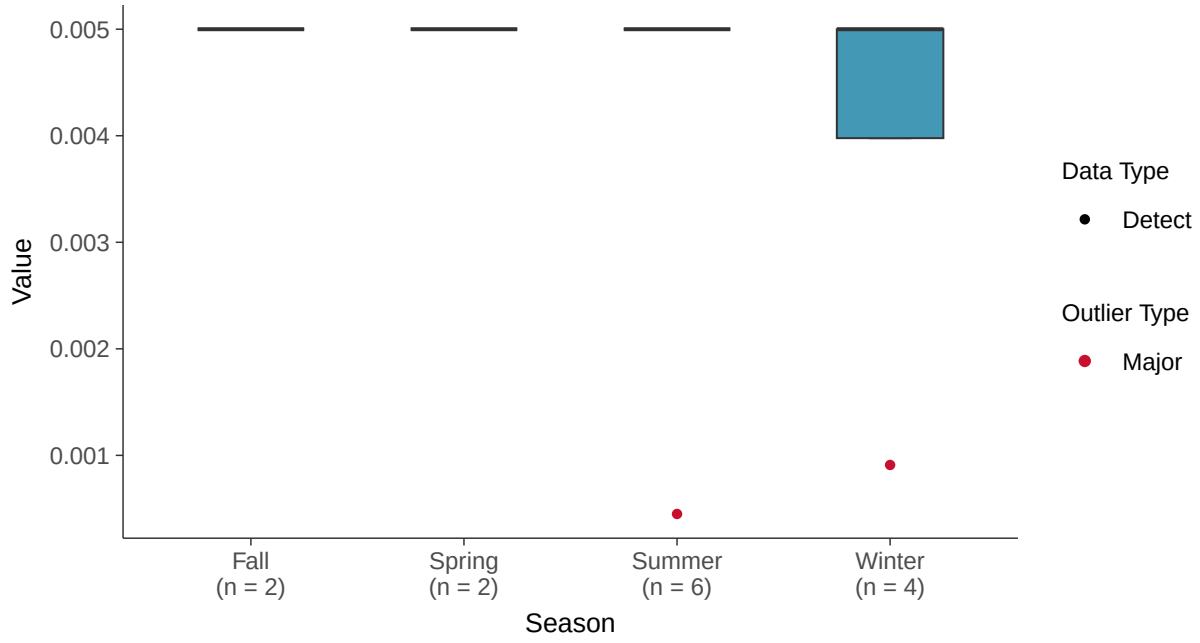
Boxplot

Cobalt, MW-13 (mg/l)



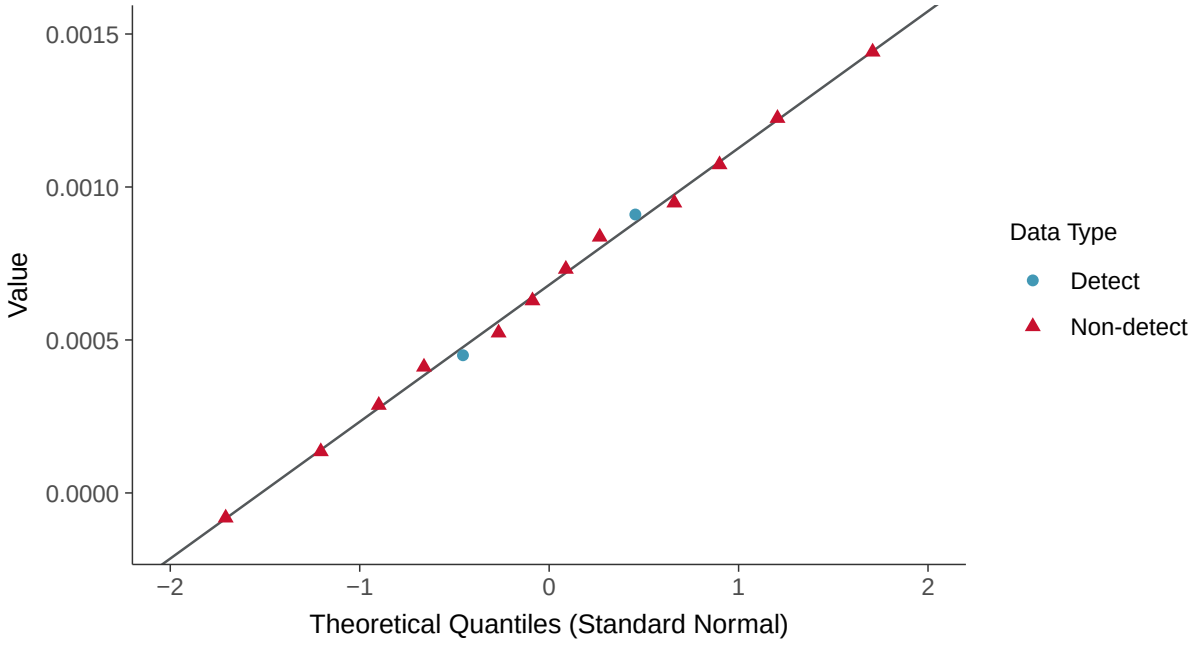
Boxplot by Season

Cobalt, MW-13 (mg/l)



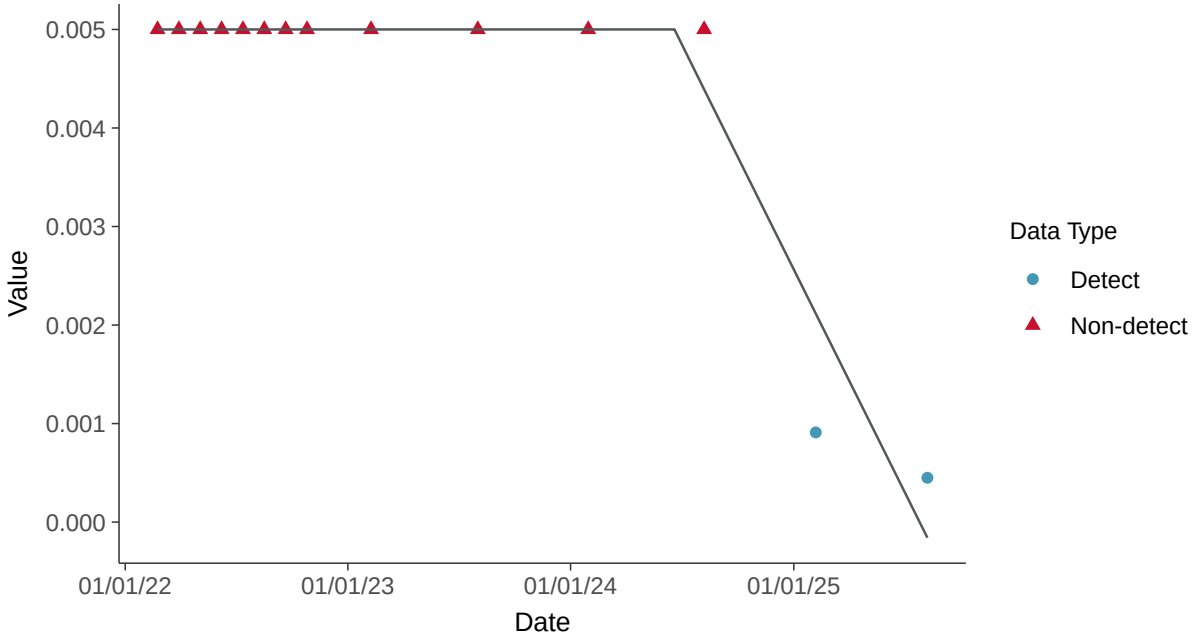
Normal Q-Q plot using ROS Imputed Estimates

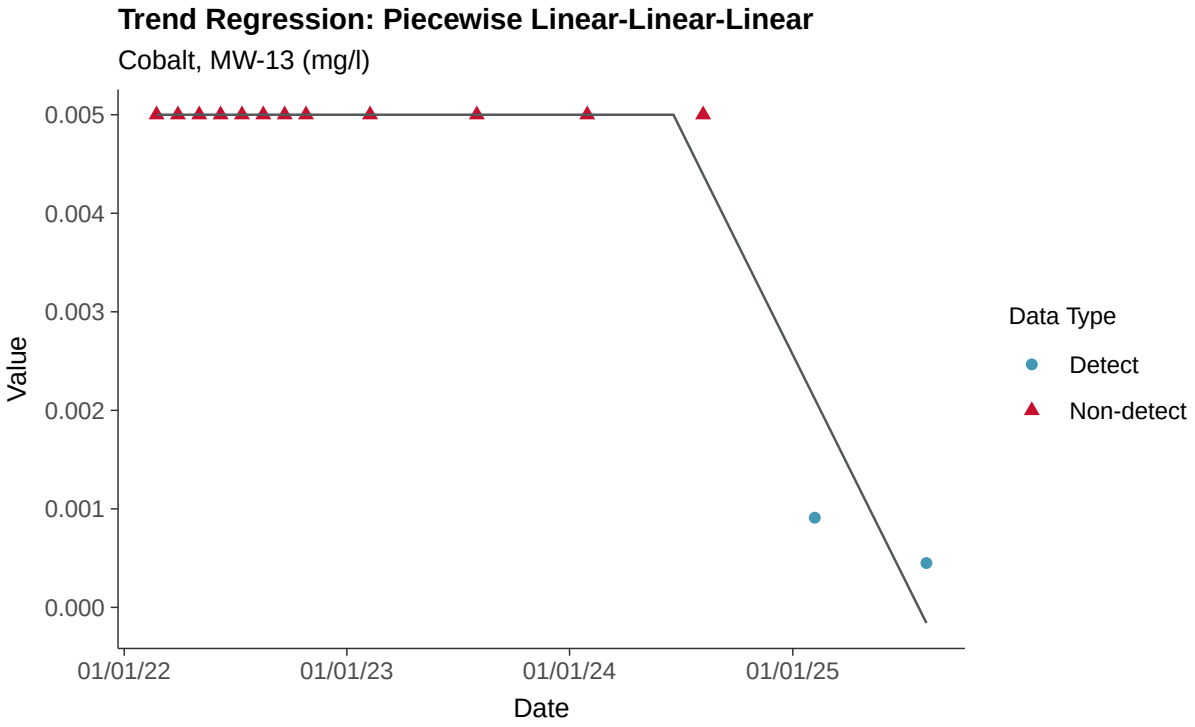
Cobalt, MW-13 (mg/l)



Trend Regression: Piecewise Linear-Linear

Cobalt, MW-13 (mg/l)



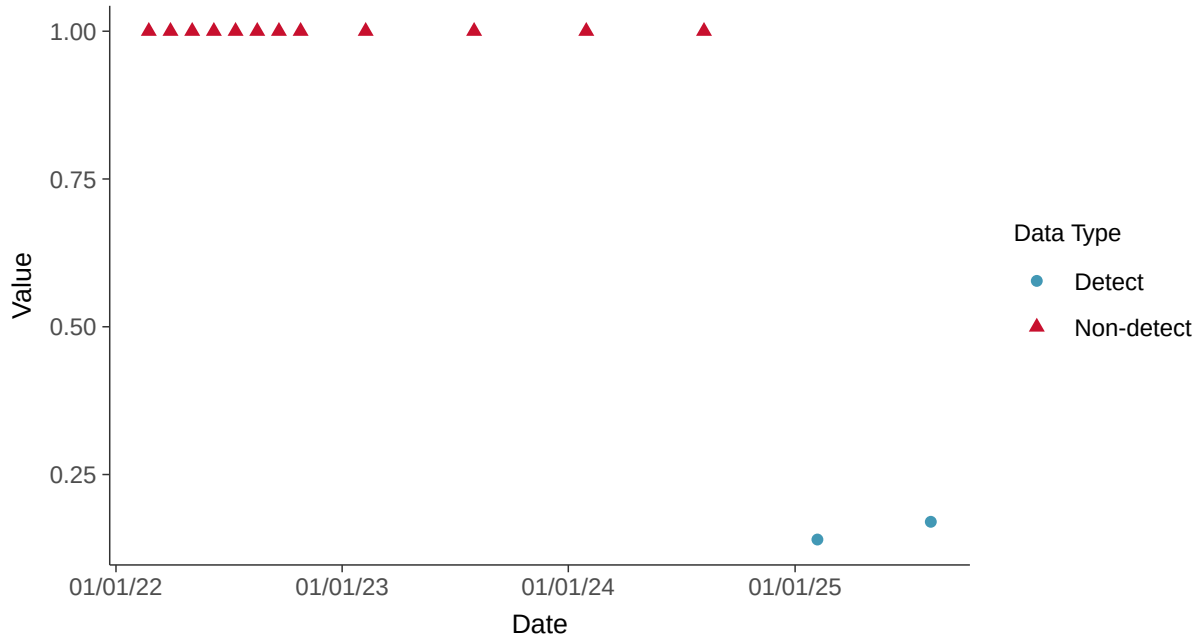

Trend Regression: Piecewise Linear-Linear-Linear
Cobalt, MW-13 (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Fluoride (App IV), MW-13

ID: 22_3_113

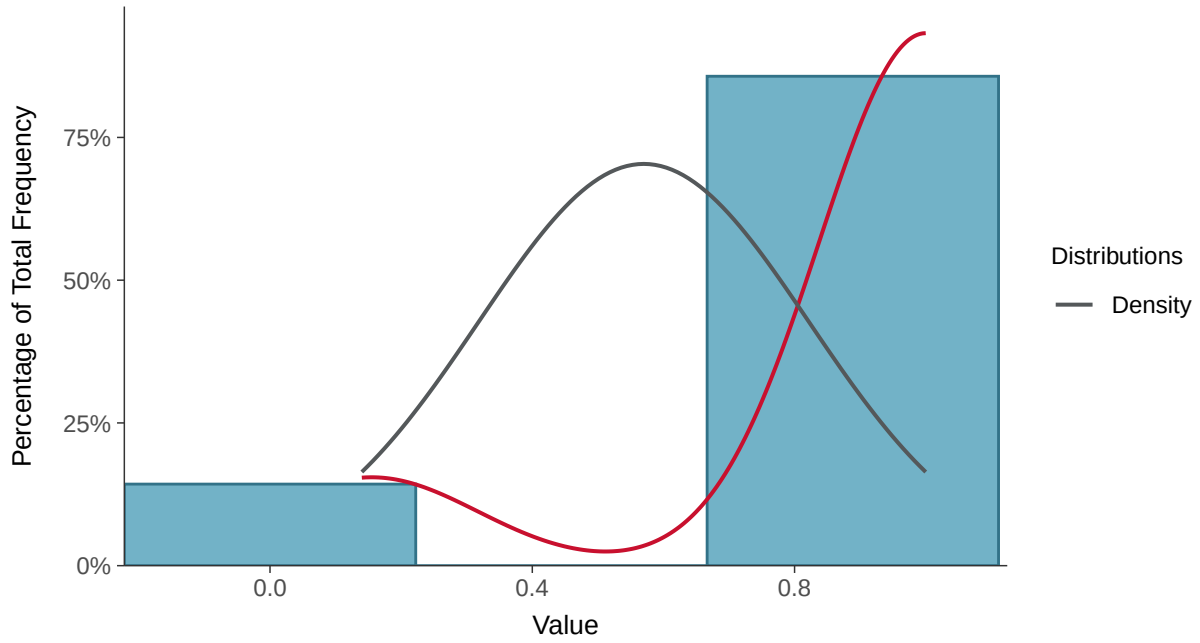
Scatter Plot

Fluoride (App IV), MW-13 (mg/l)



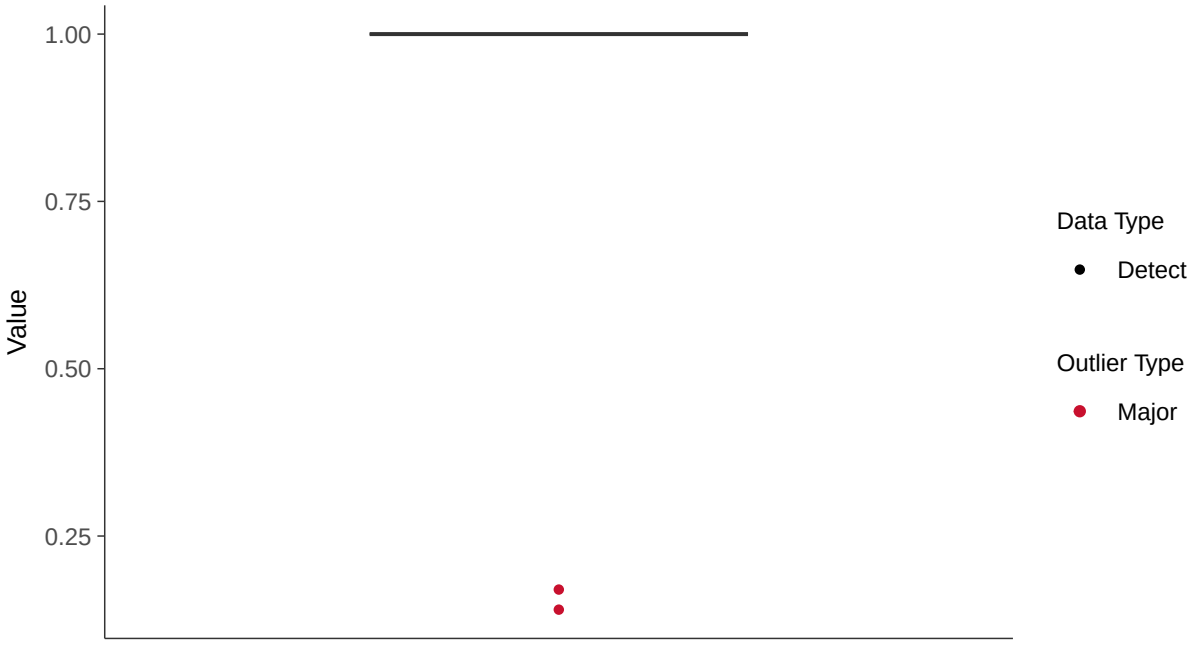
Histogram

Fluoride (App IV), MW-13 (mg/l)



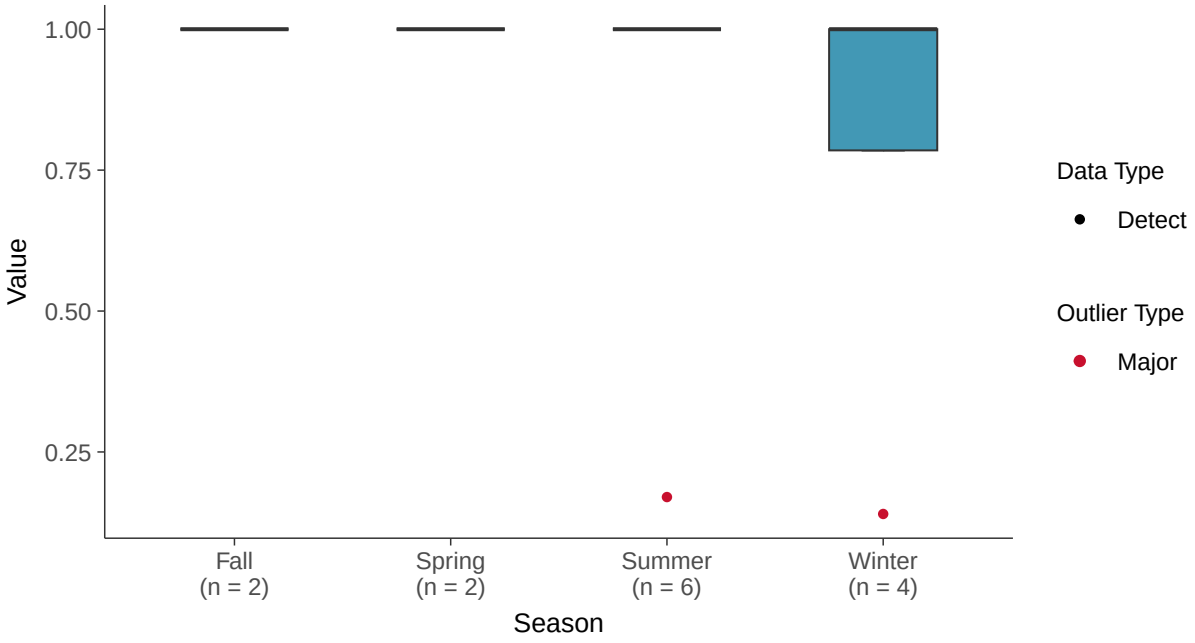
Boxplot

Fluoride (App IV), MW-13 (mg/l)



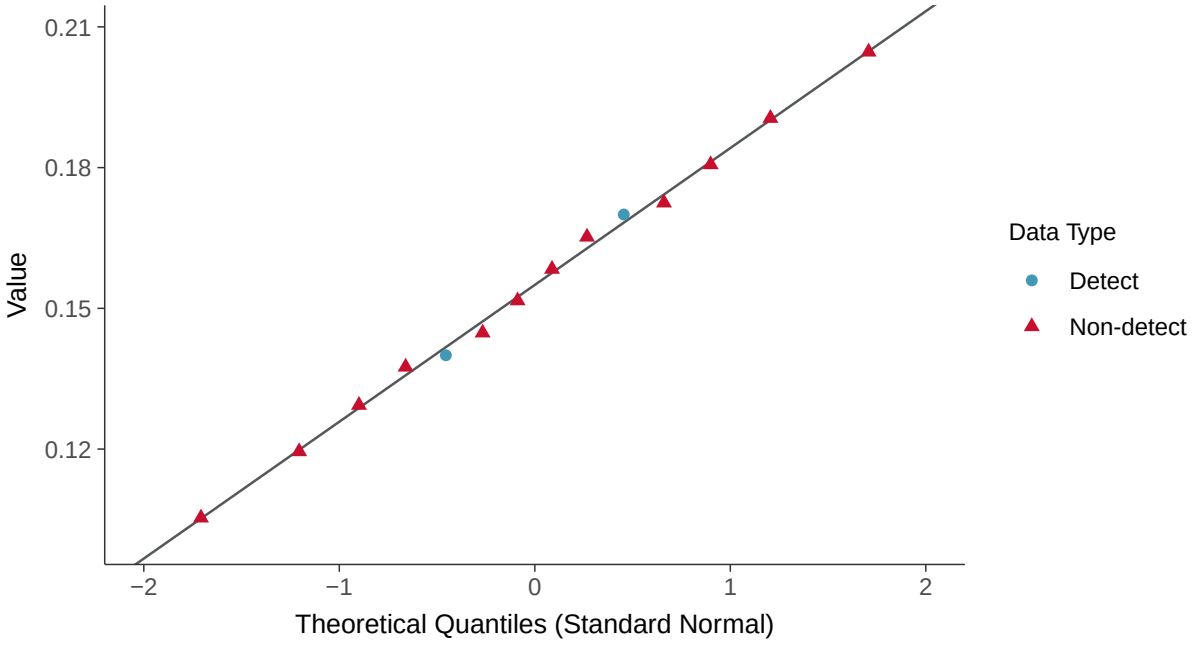
Boxplot by Season

Fluoride (App IV), MW-13 (mg/l)



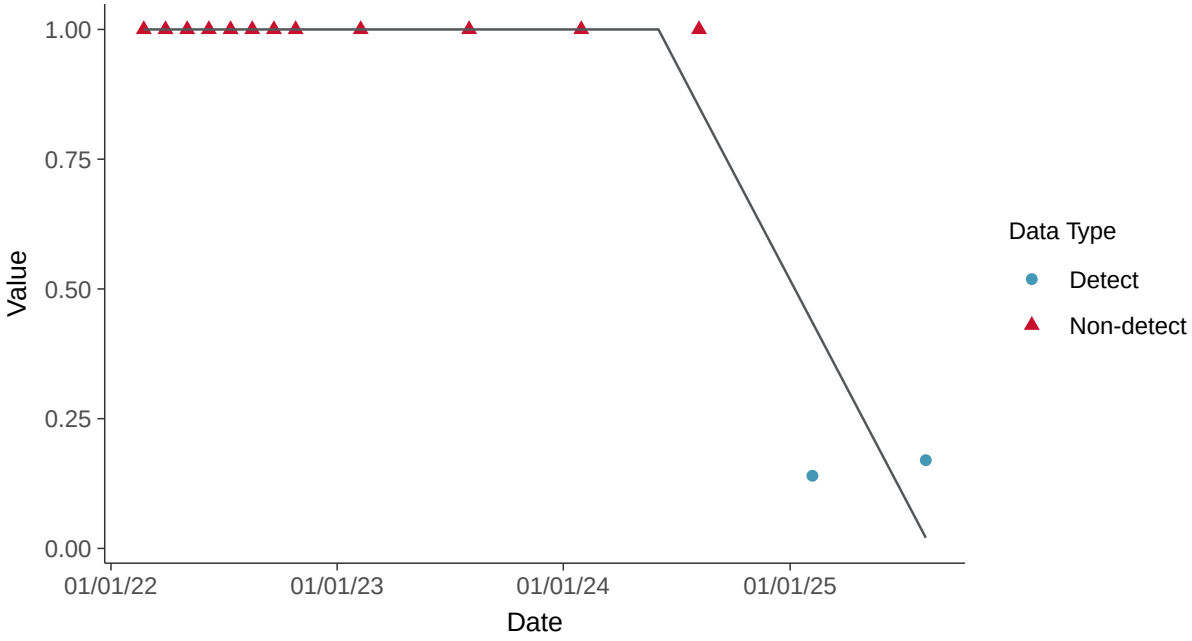
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-13 (mg/l)



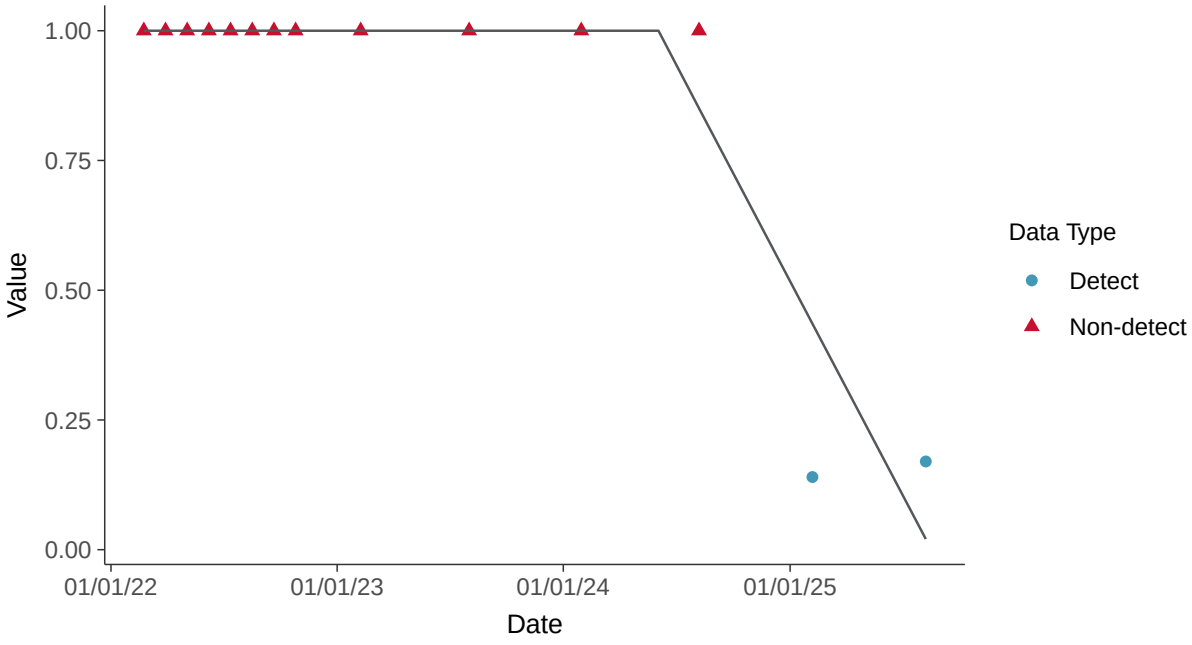
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-13 (mg/l)



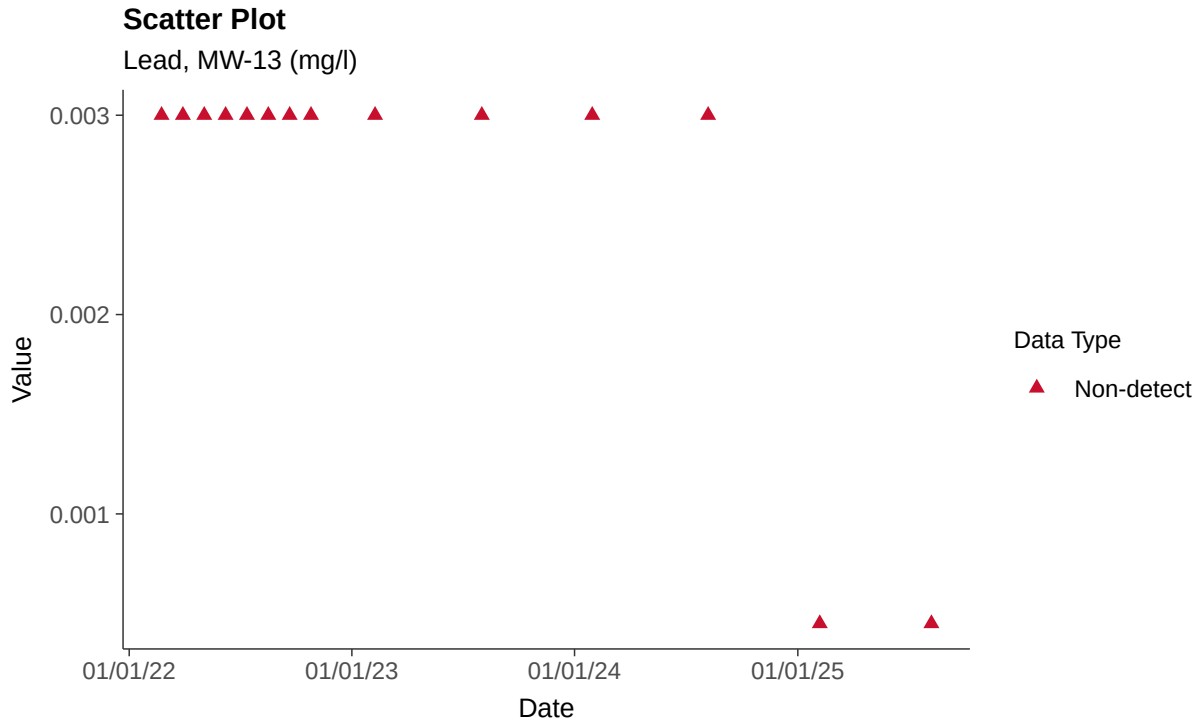
Trend Regression: Piecewise Linear-Linear-Linear

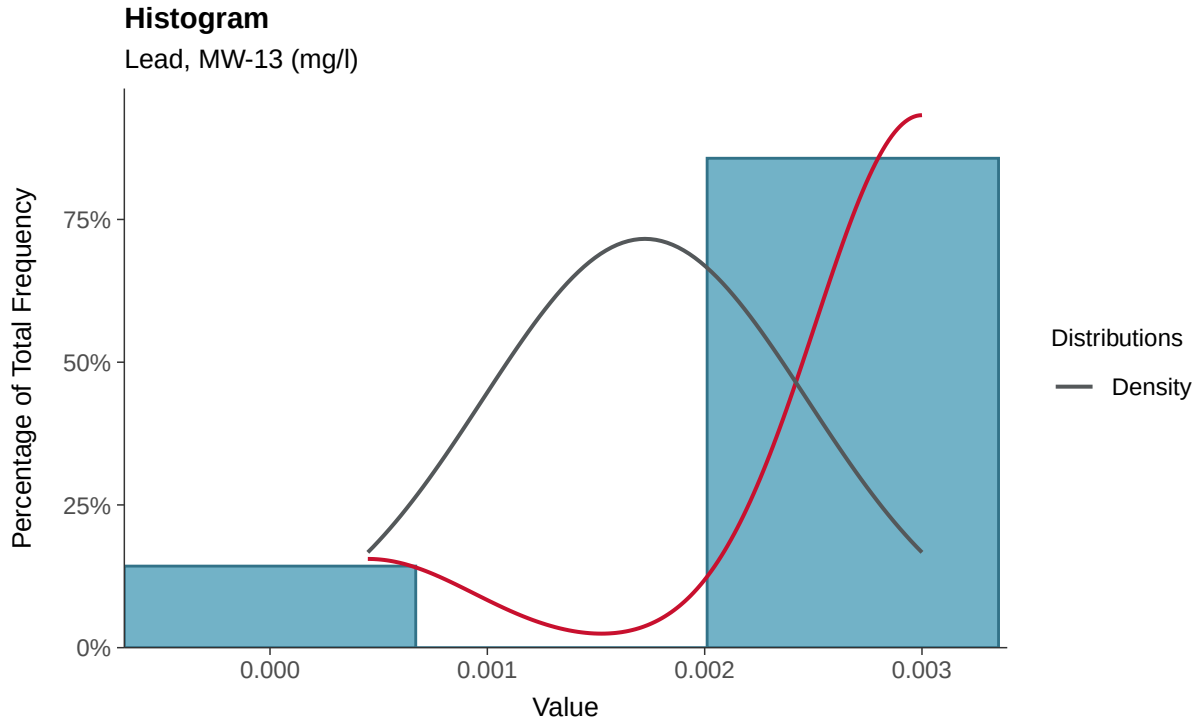
Fluoride (App IV), MW-13 (mg/l)



Appendix IV: Lead, MW-13

ID: 22_3_115



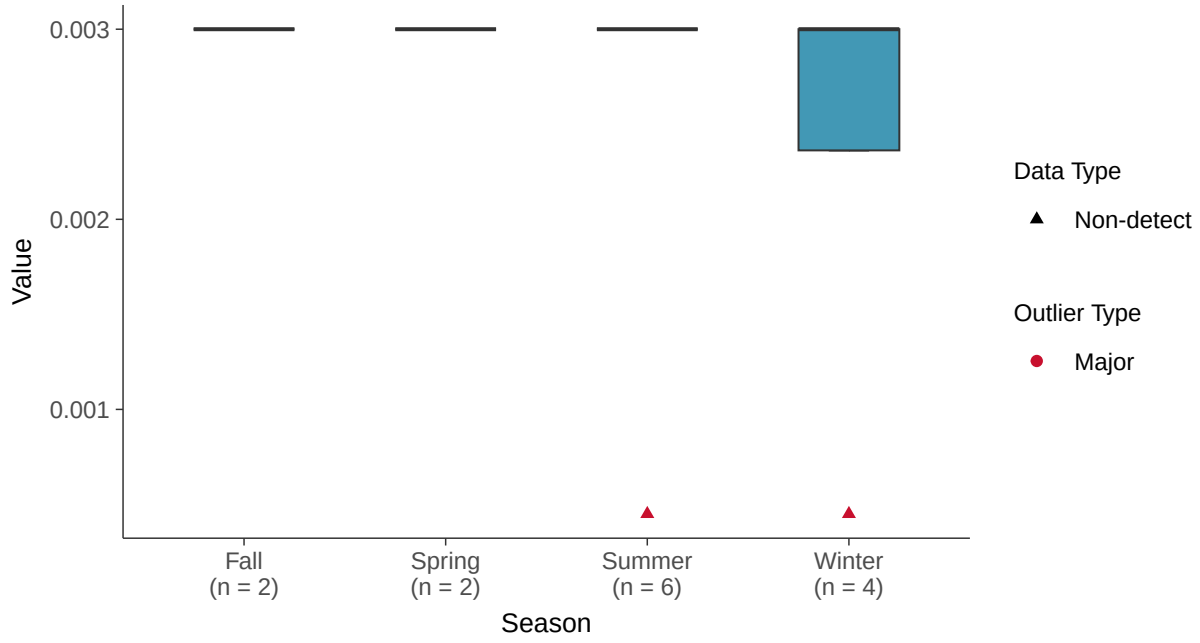


Boxplot

Lead, MW-13 (mg/l)

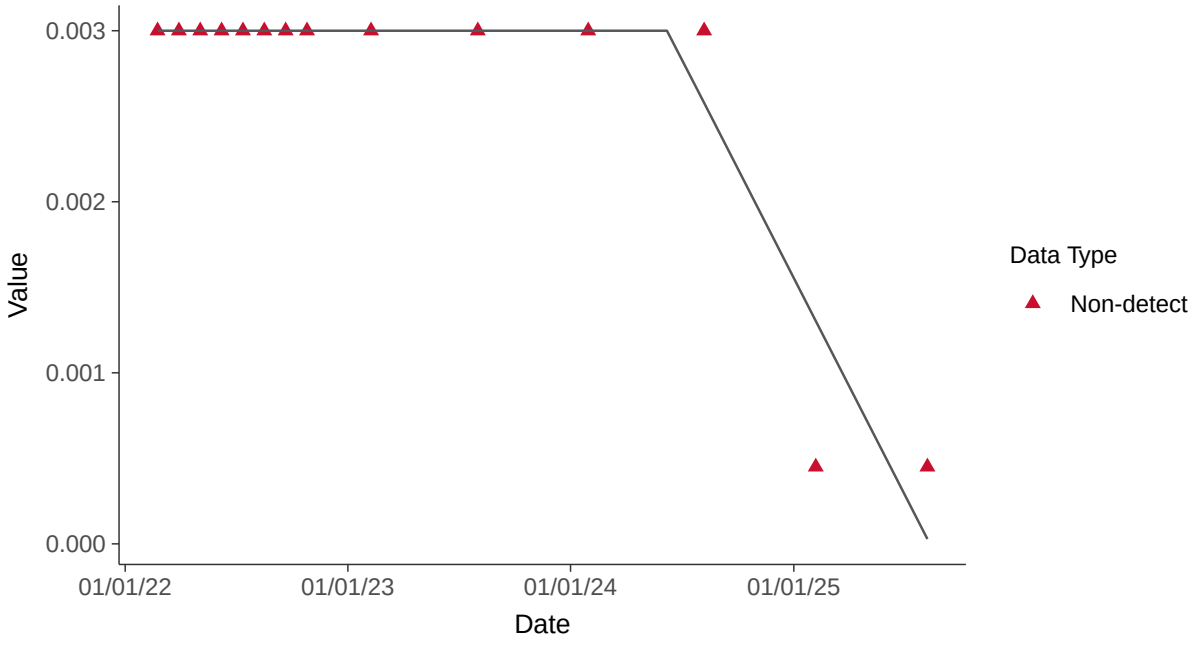
Boxplot by Season

Lead, MW-13 (mg/l)



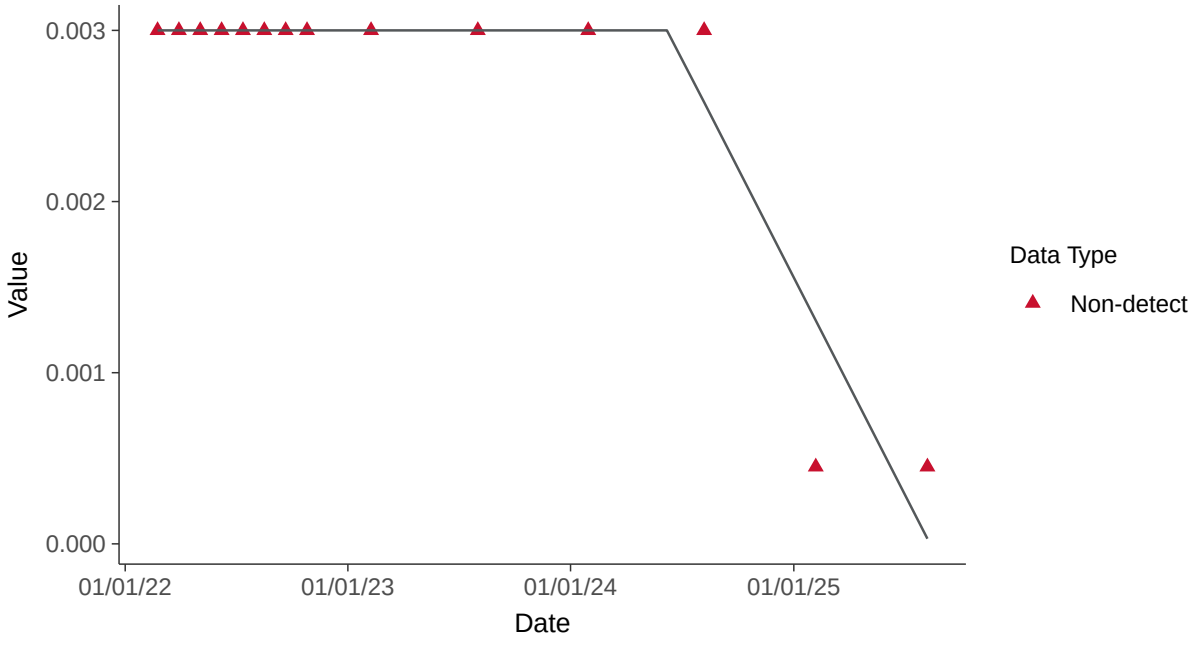
Trend Regression: Piecewise Linear-Linear

Lead, MW-13 (mg/l)



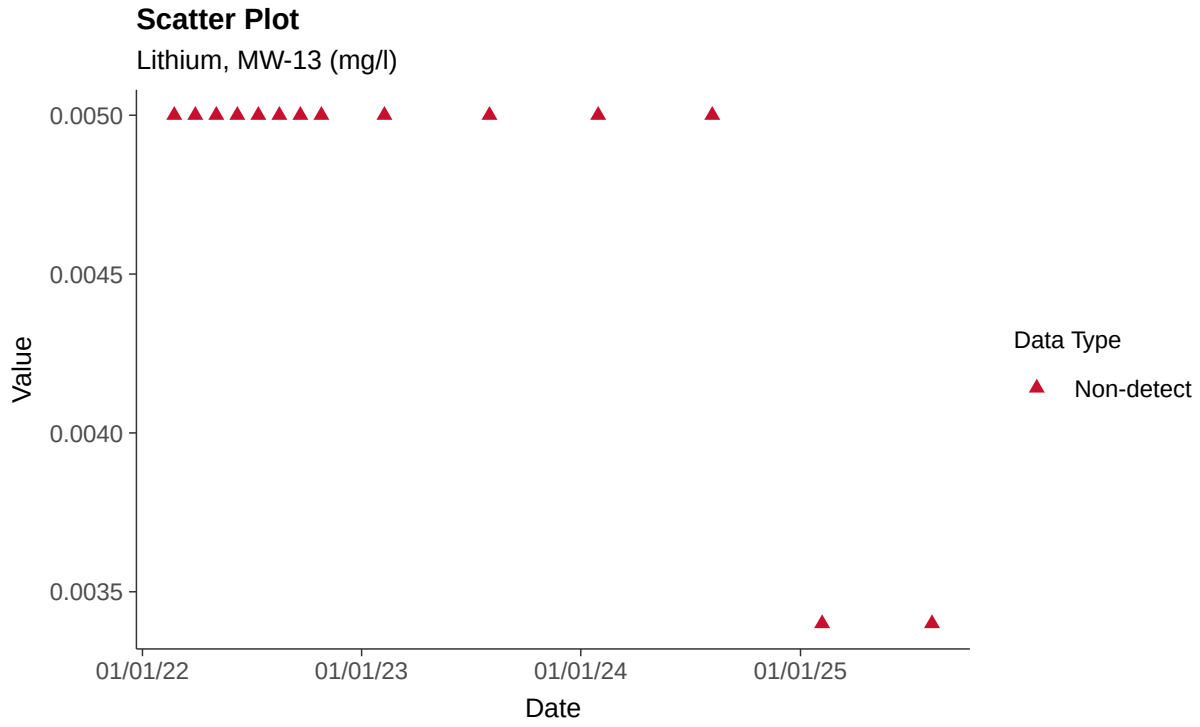
Trend Regression: Piecewise Linear-Linear-Linear

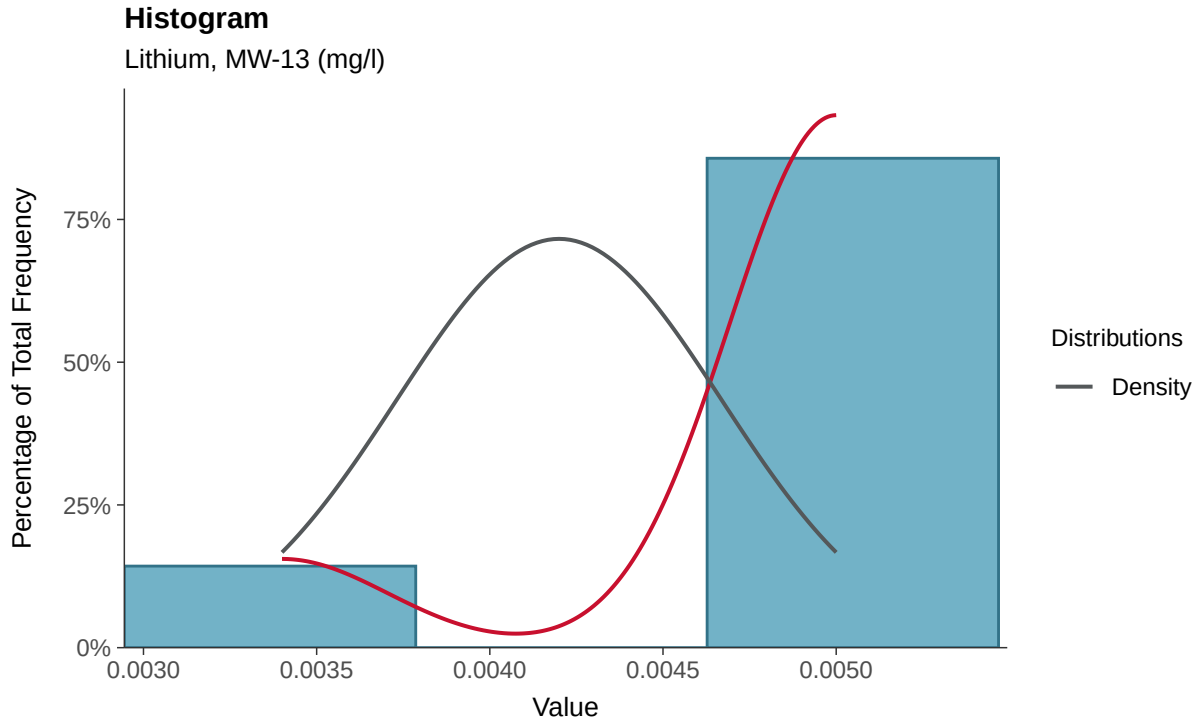
Lead, MW-13 (mg/l)



Appendix IV: Lithium, MW-13

ID: 22_3_116



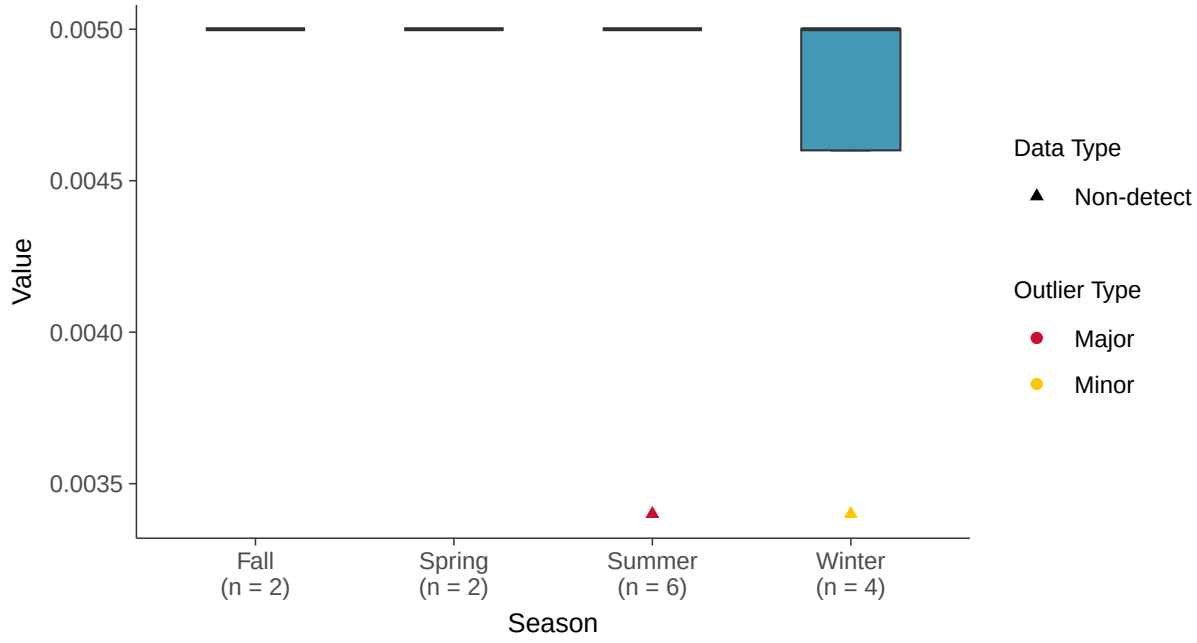


Boxplot

Lithium, MW-13 (mg/l)

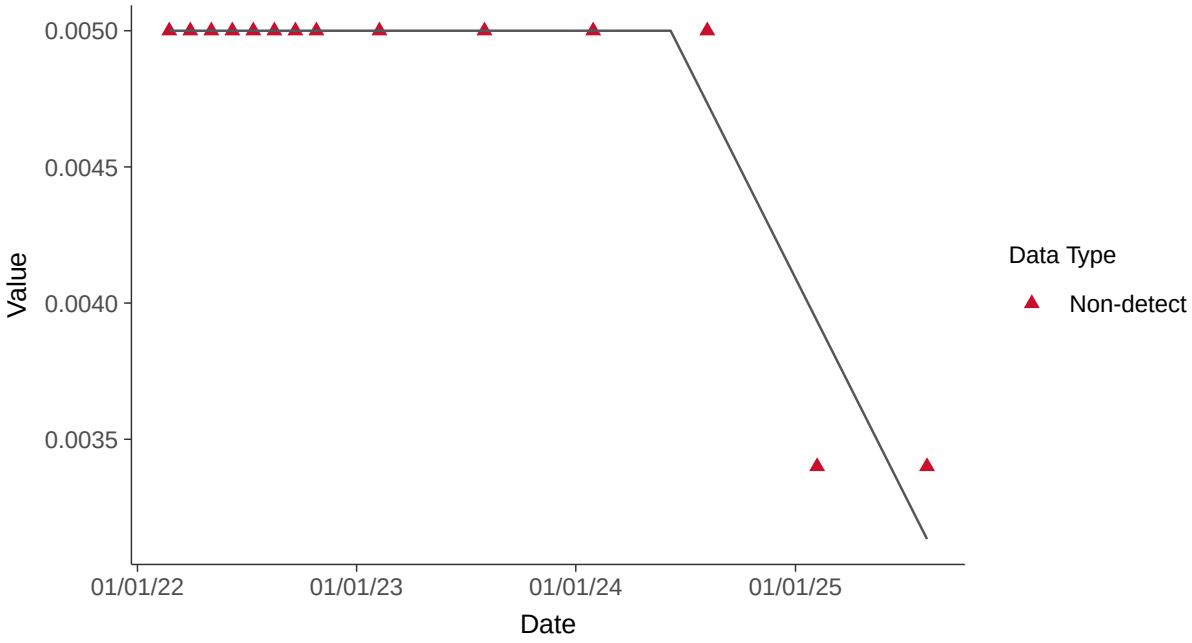
Boxplot by Season

Lithium, MW-13 (mg/l)



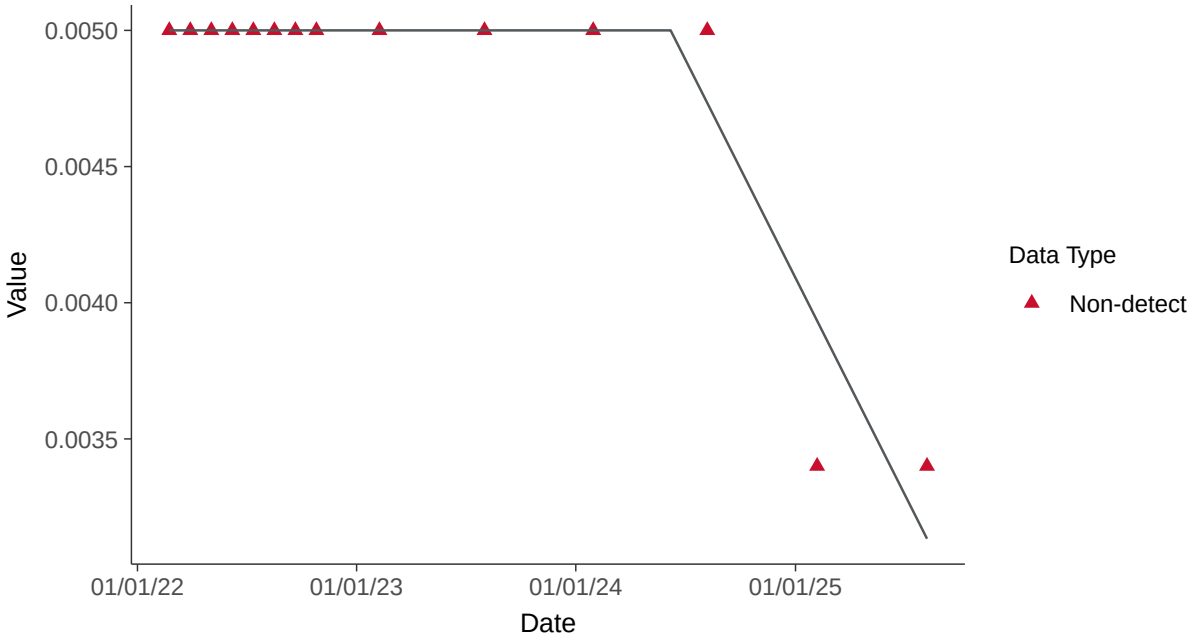
Trend Regression: Piecewise Linear-Linear

Lithium, MW-13 (mg/l)



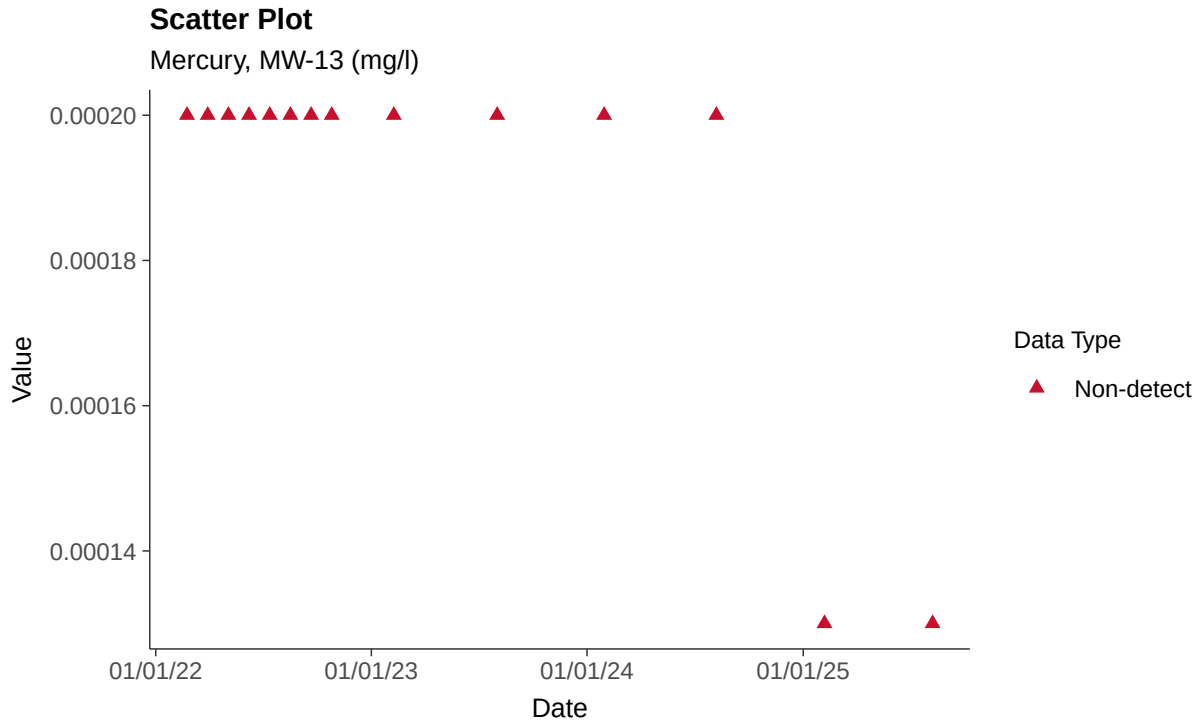
Trend Regression: Piecewise Linear-Linear-Linear

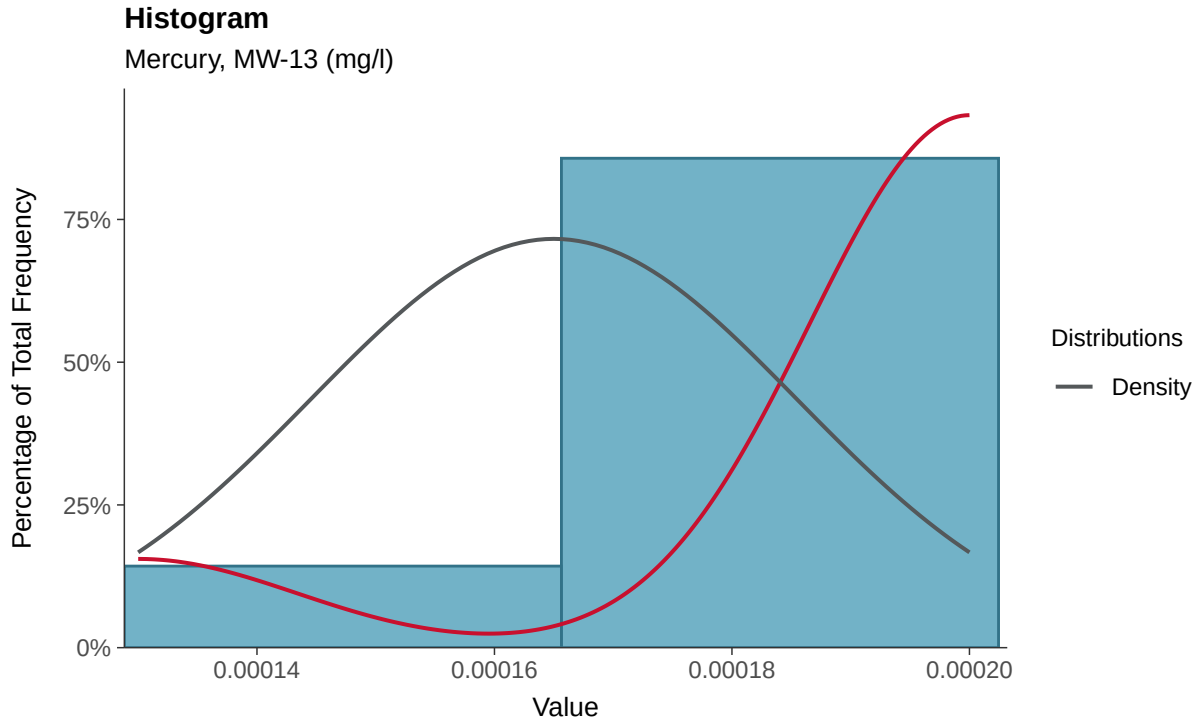
Lithium, MW-13 (mg/l)



Appendix IV: Mercury, MW-13

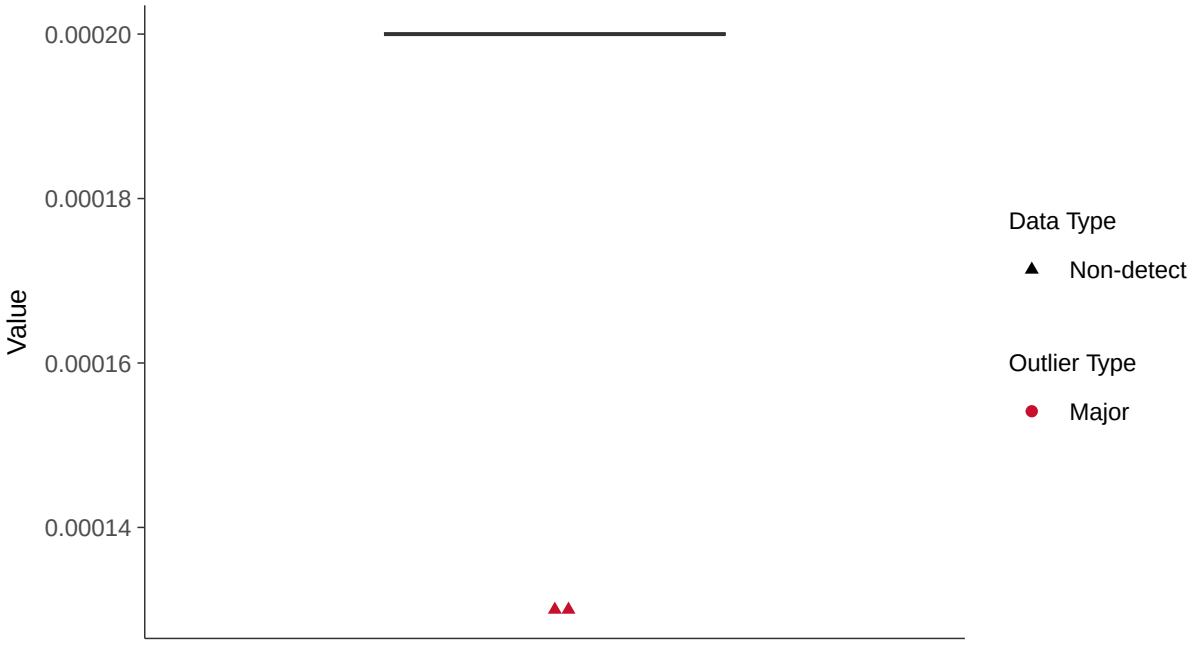
ID: 22_3_117





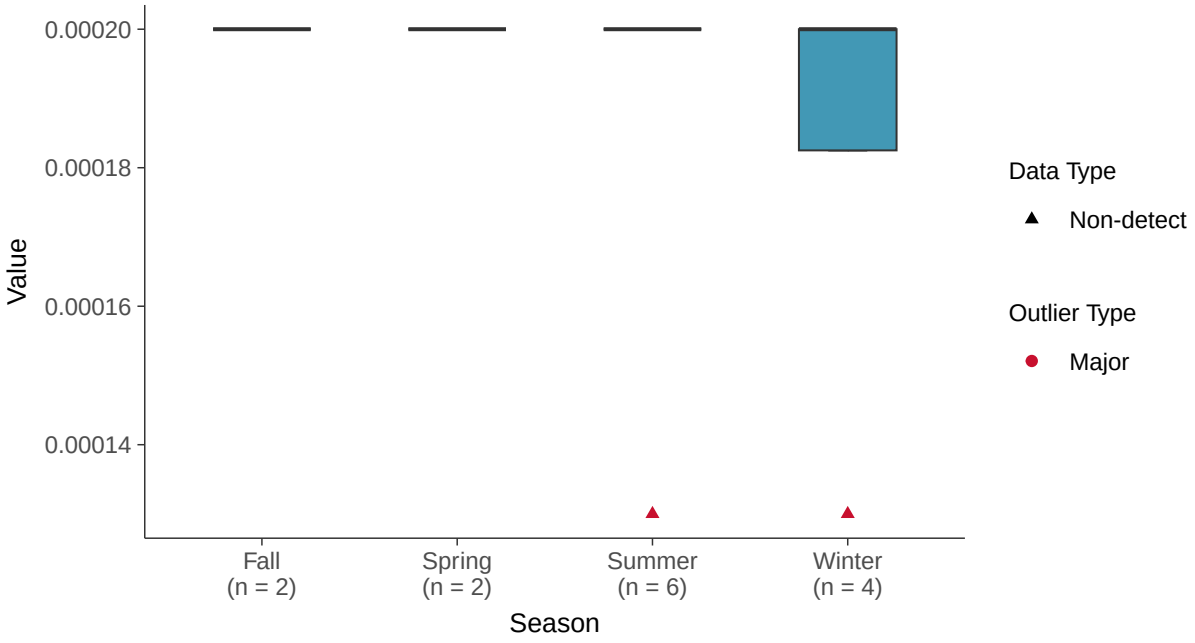
Boxplot

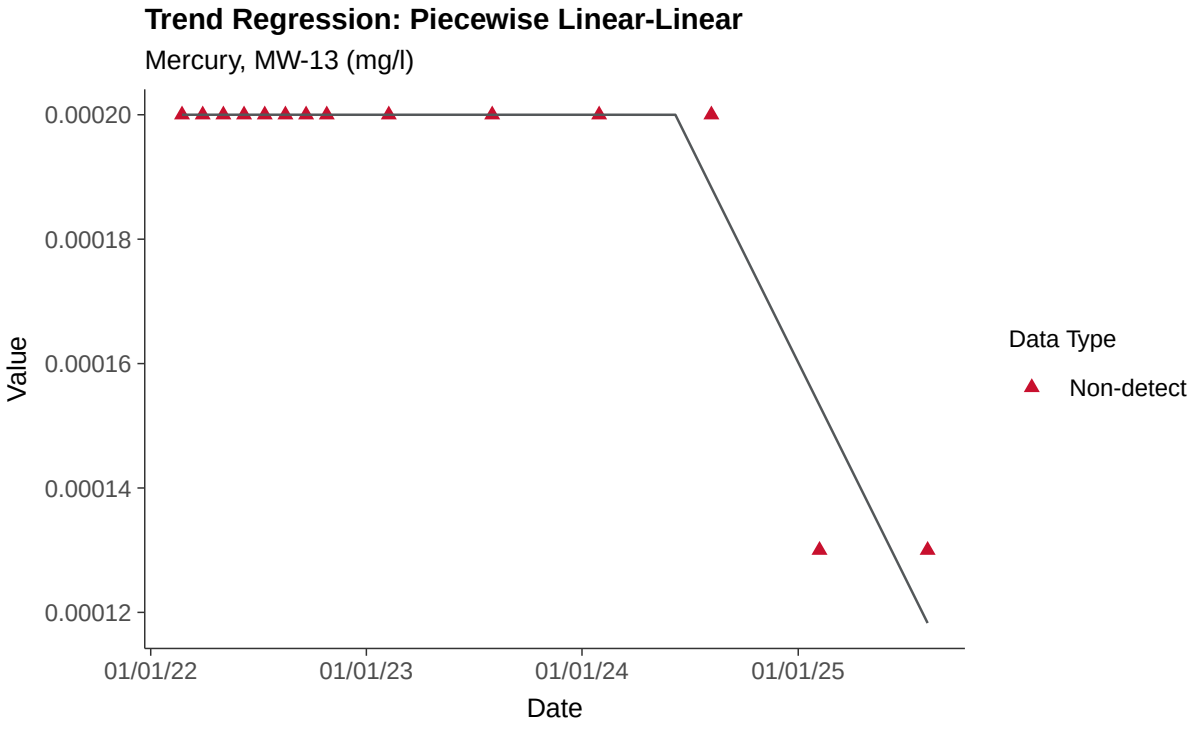
Mercury, MW-13 (mg/l)



Boxplot by Season

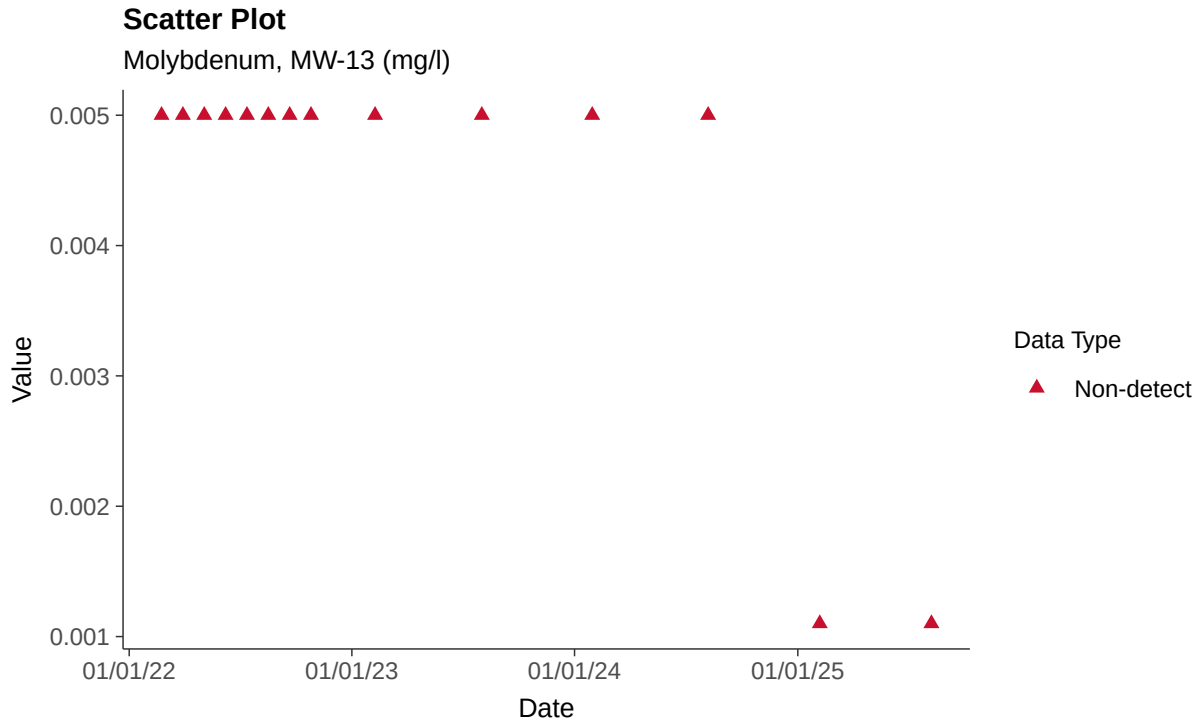
Mercury, MW-13 (mg/l)

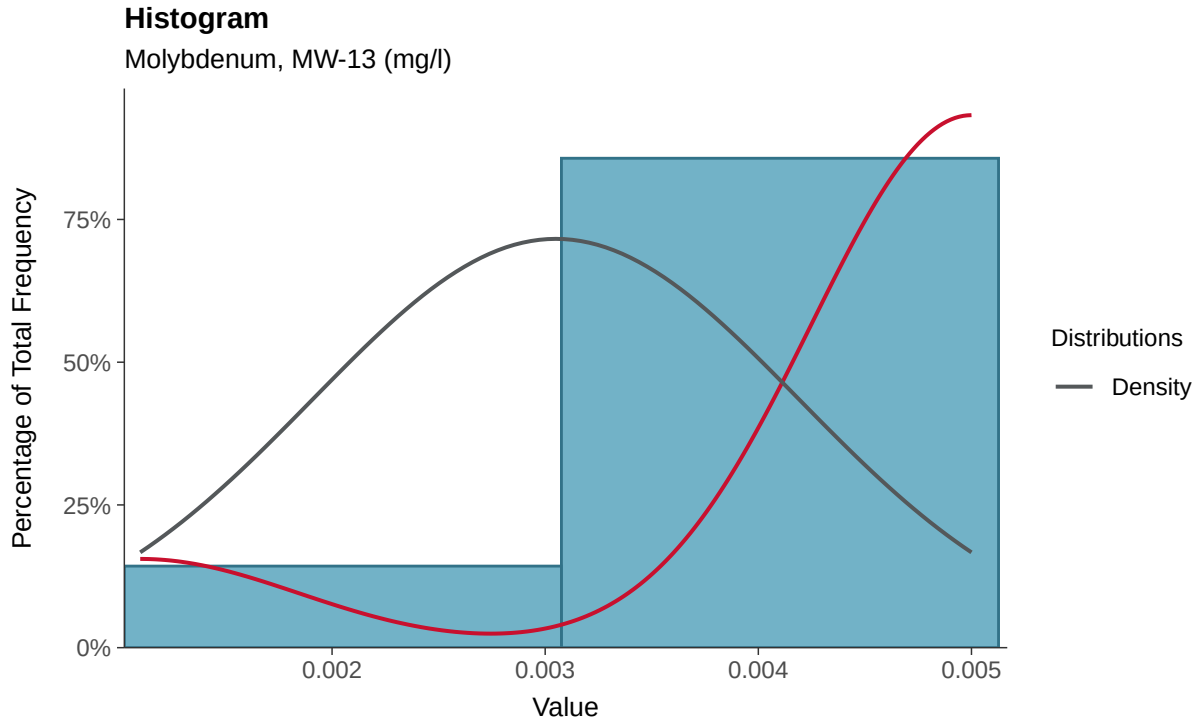



Trend Regression: Piecewise Linear-Linear
Mercury, MW-13 (mg/l)
0.00020
0.00018
0.00016
0.00014
0.00012
Value
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Appendix IV: Molybdenum, MW-13

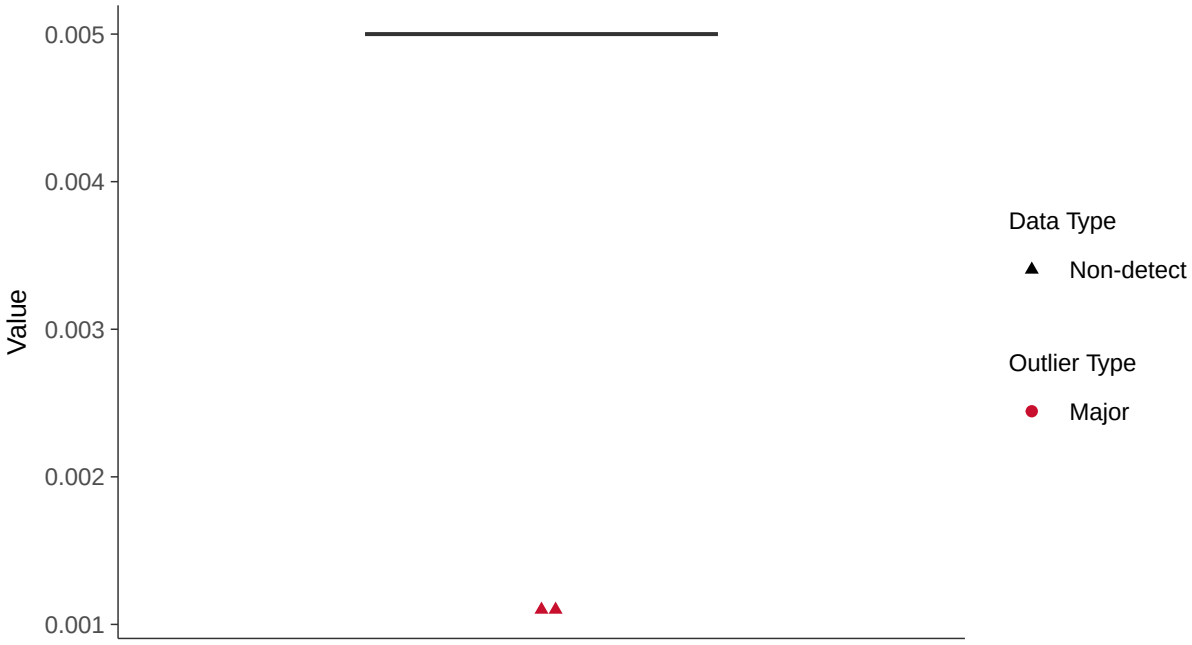
ID: 22_3_118





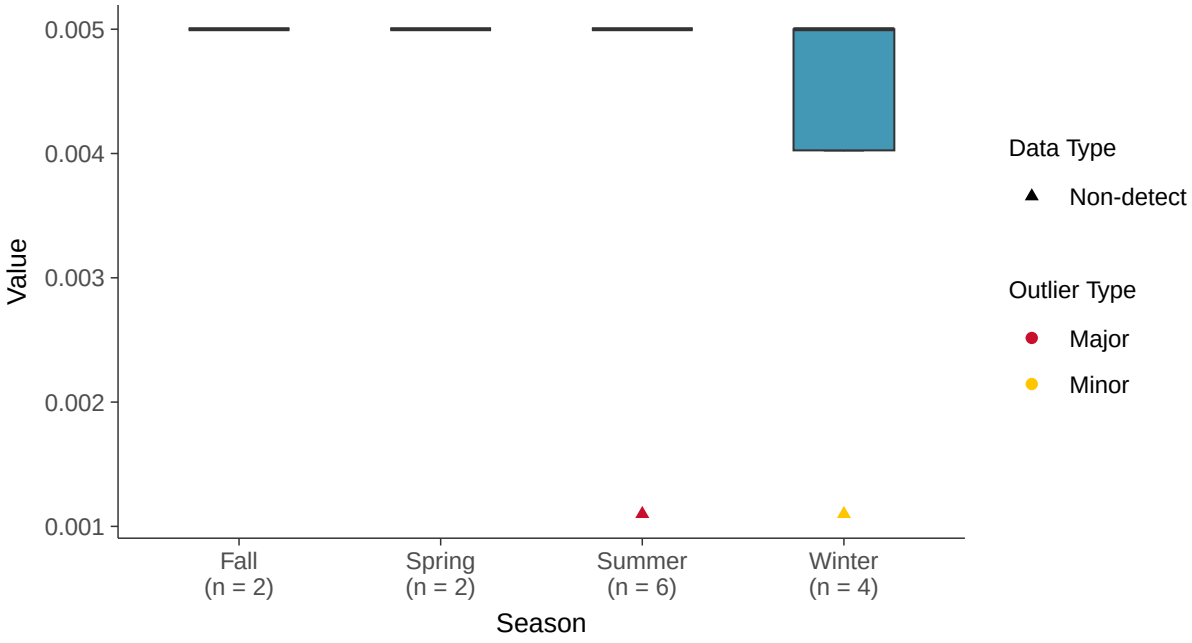
Boxplot

Molybdenum, MW-13 (mg/l)



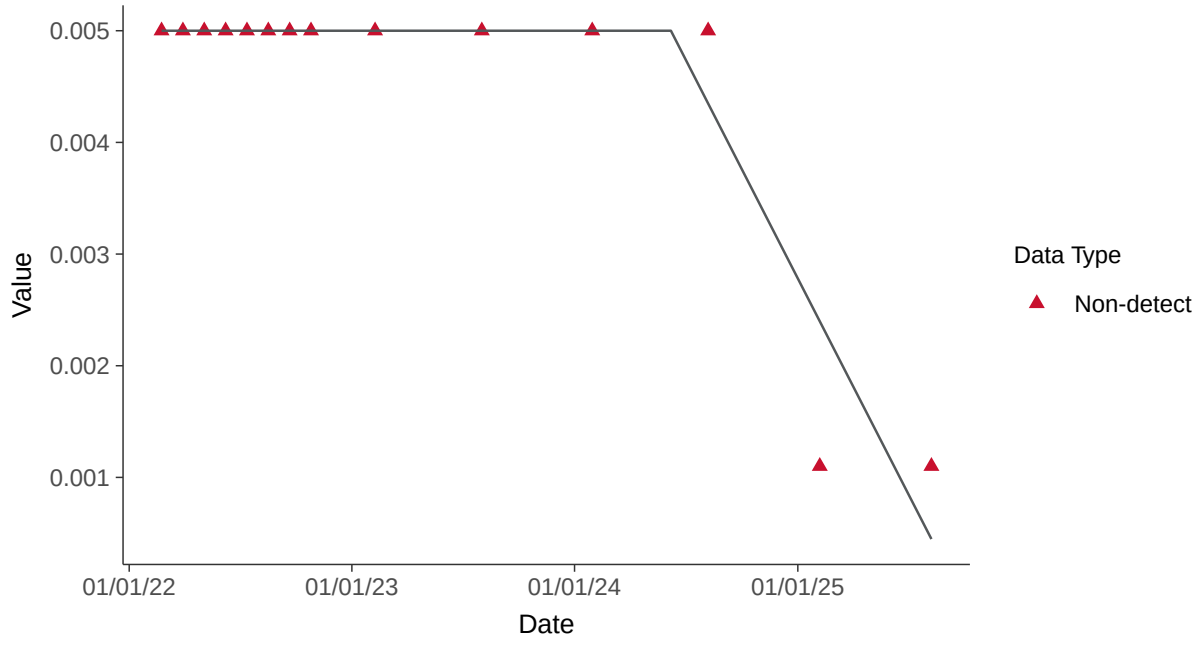
Boxplot by Season

Molybdenum, MW-13 (mg/l)



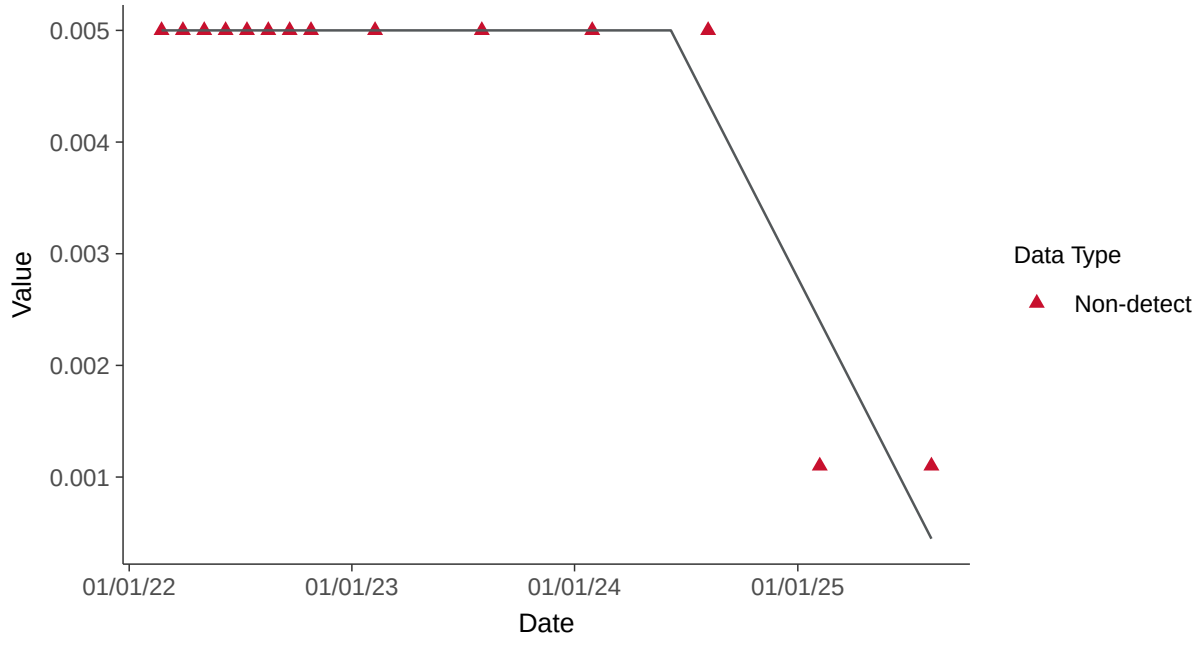
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-13 (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-13 (mg/l)

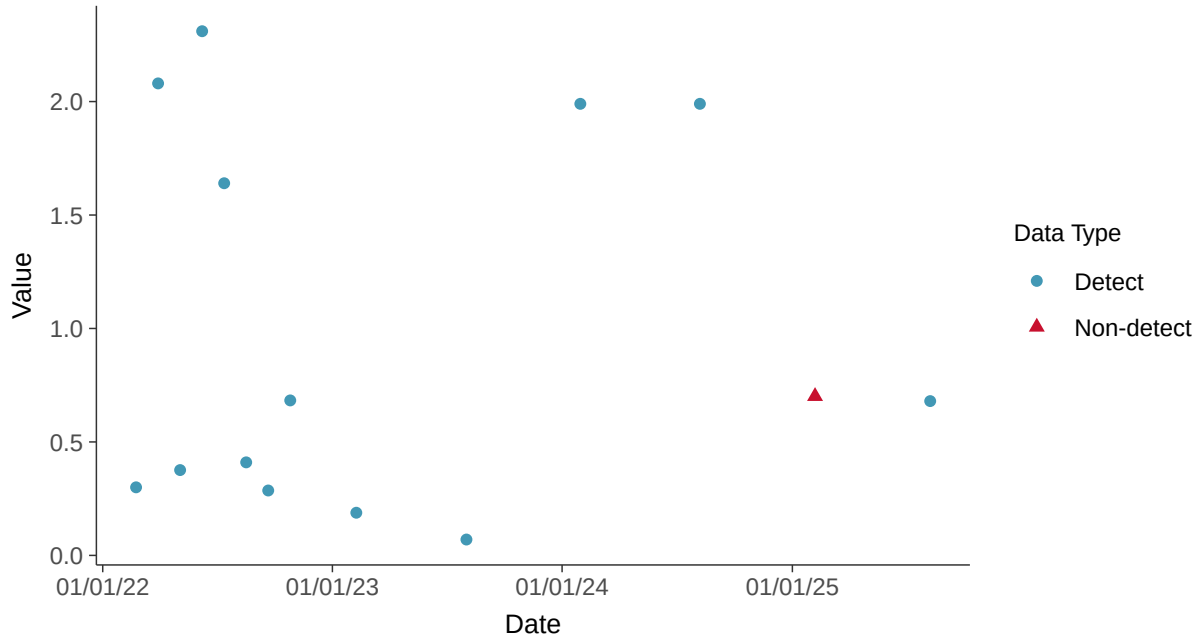


Appendix IV: Radium-226+228, MW-13

ID: 22_3_121

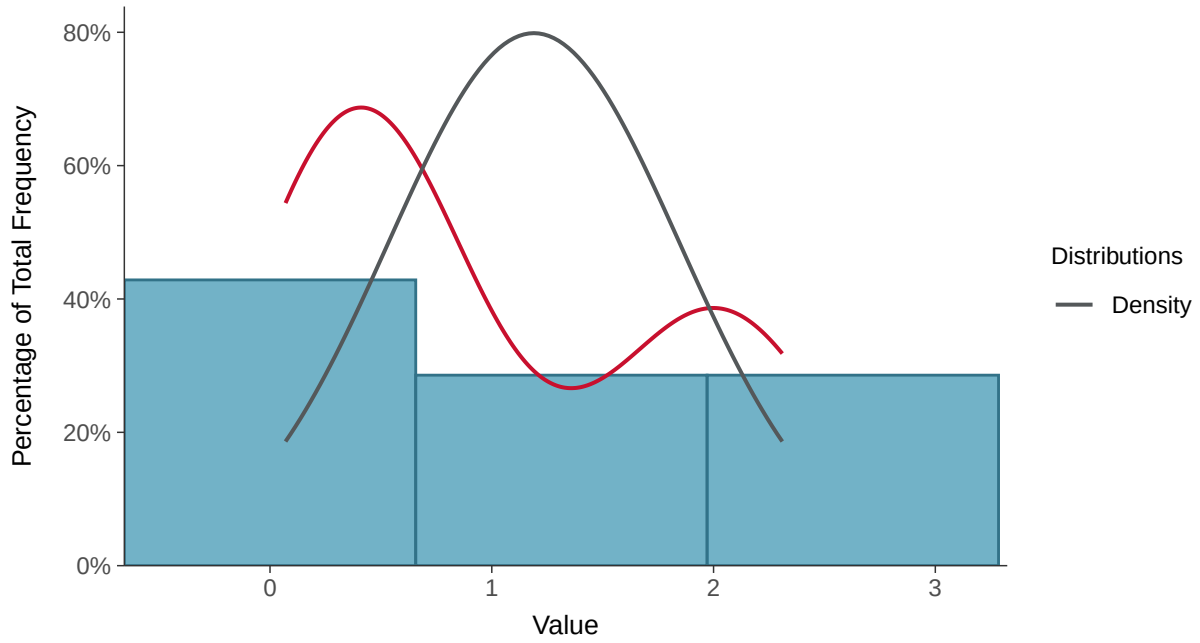
Scatter Plot

Radium-226+228, MW-13 (pci/l)



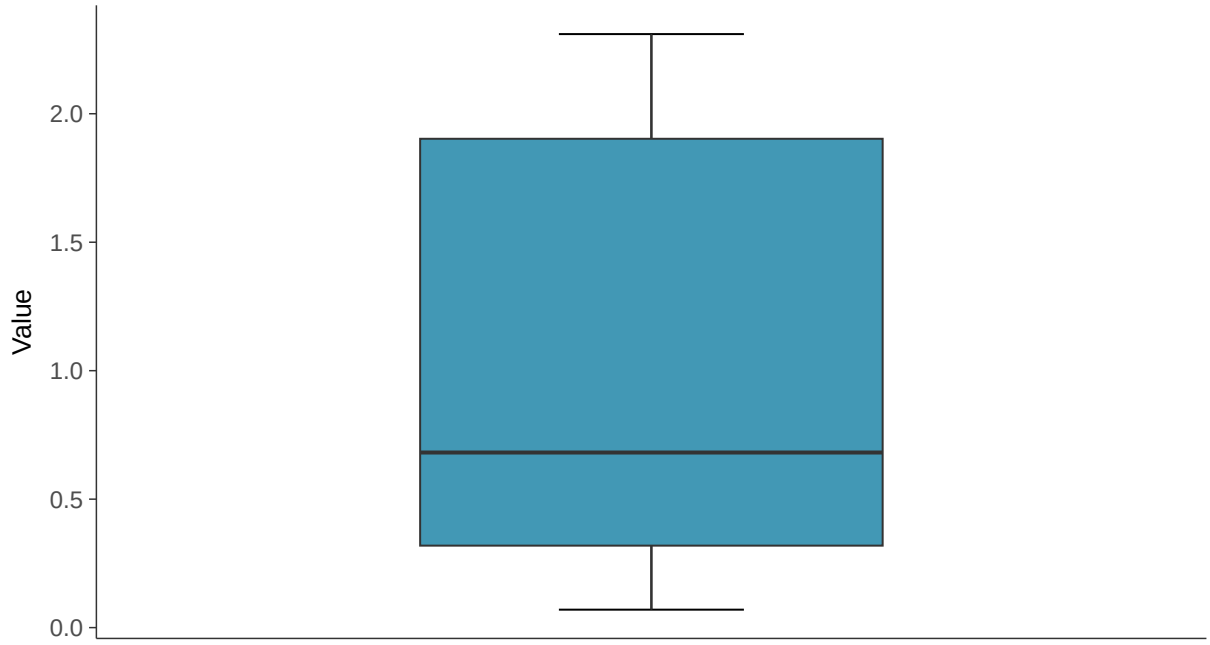
Histogram

Radium-226+228, MW-13 (pci/l)



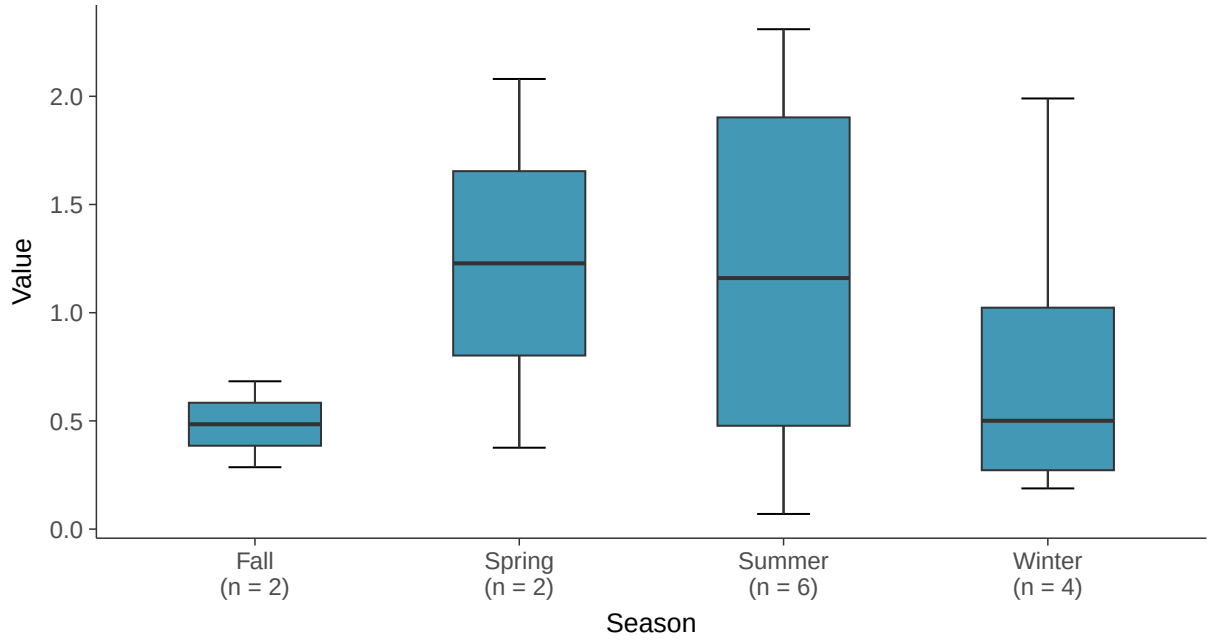
Boxplot

Radium-226+228, MW-13 (pci/l)



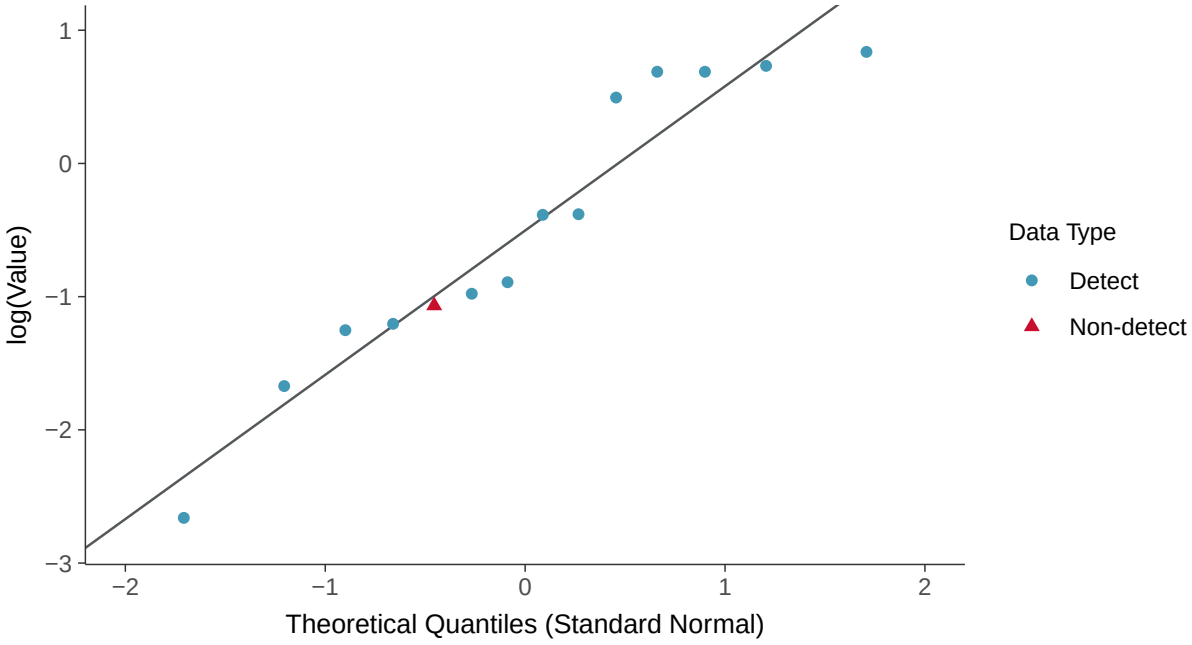
Boxplot by Season

Radium-226+228, MW-13 (pci/l)



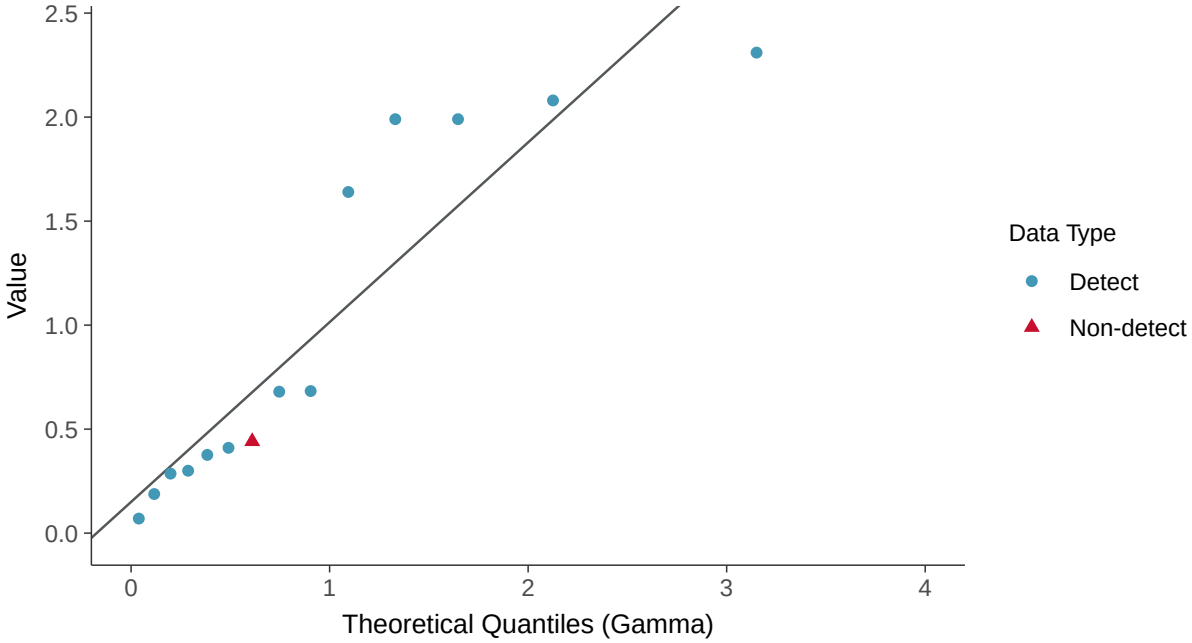
Lognormal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-13 (pci/l)



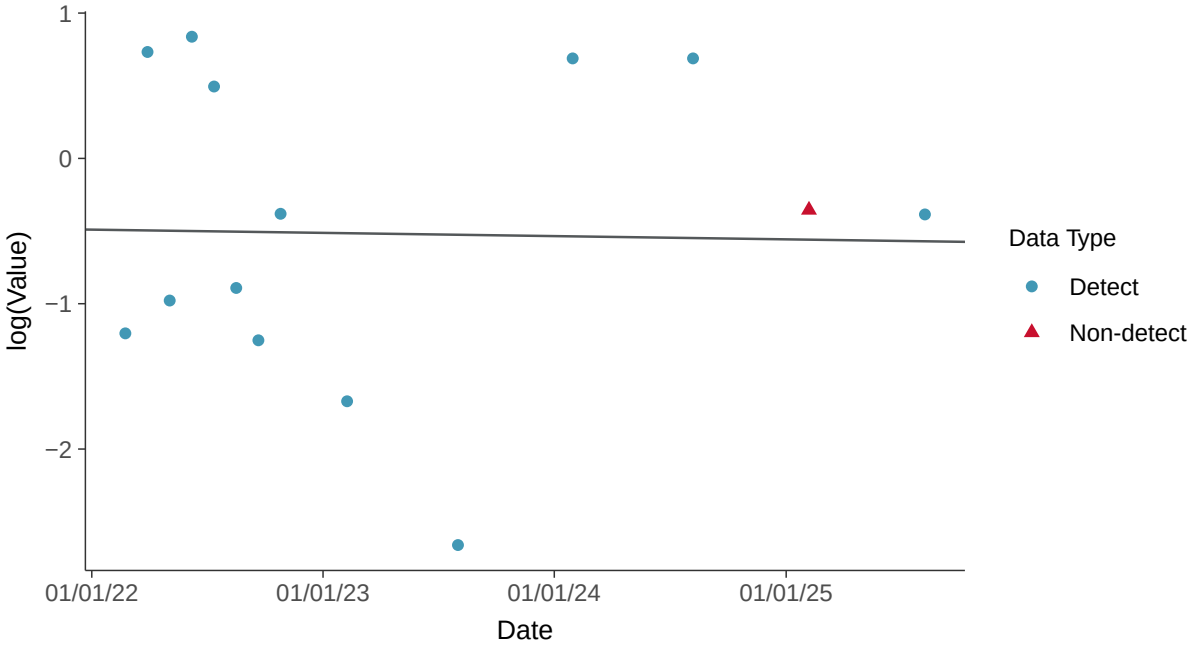
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-13 (pci/l)



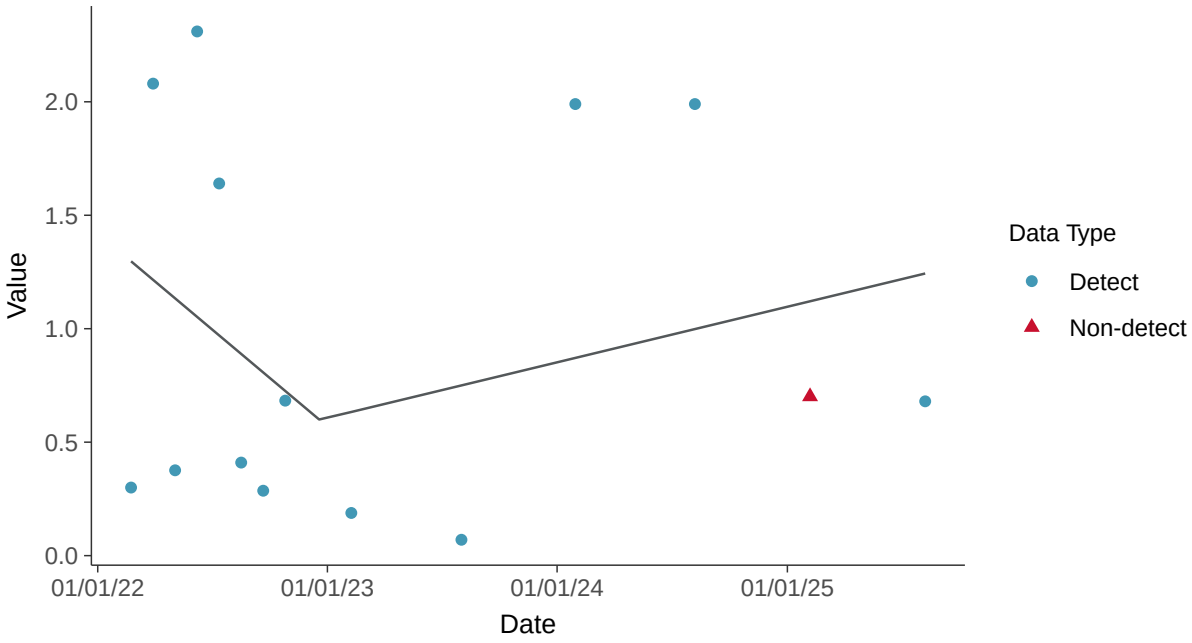
Trend Regression: Lognormal MLE

Radium-226+228, MW-13 (pci/l)



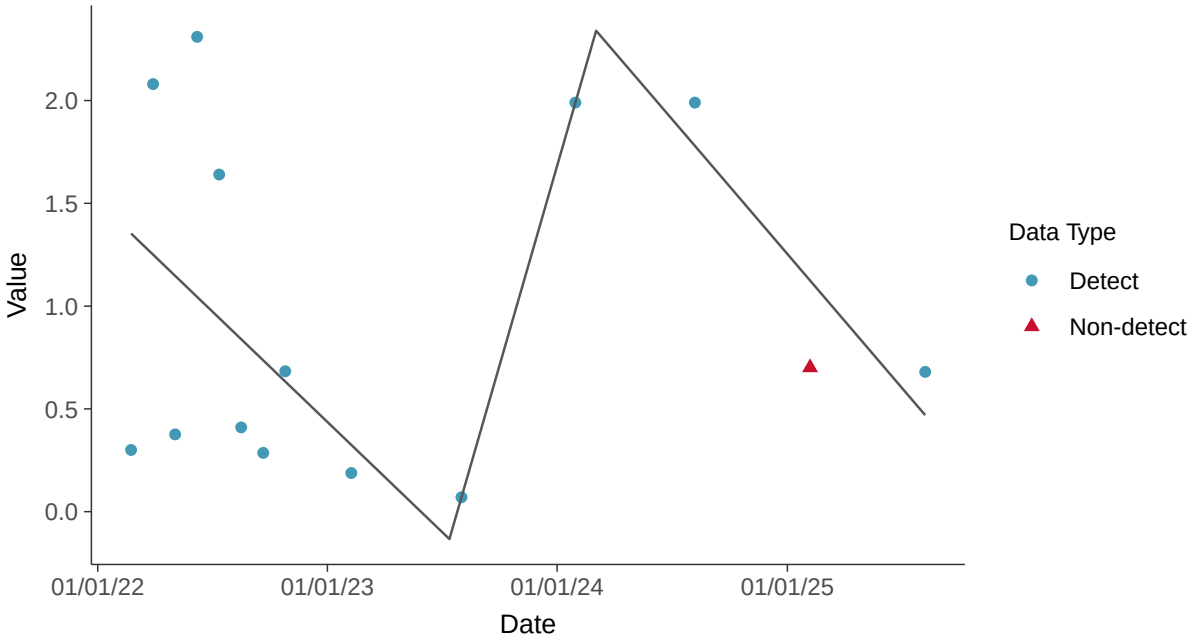
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-13 (pci/l)



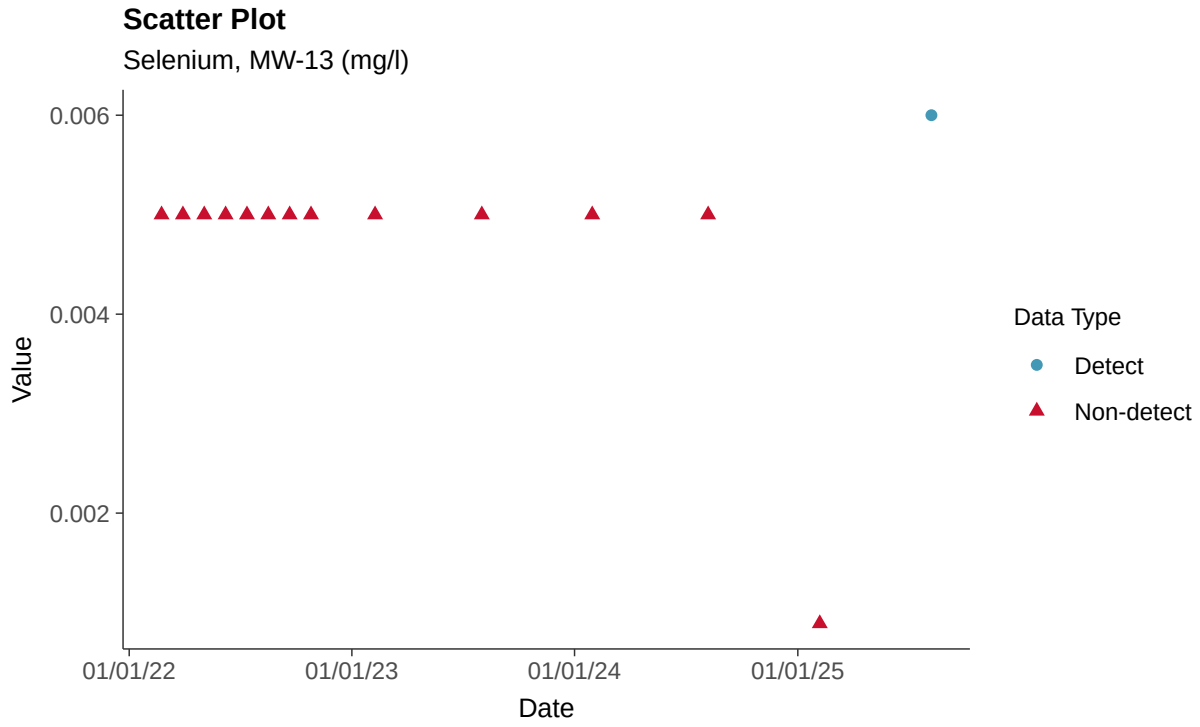
Trend Regression: Piecewise Linear-Linear-Linear

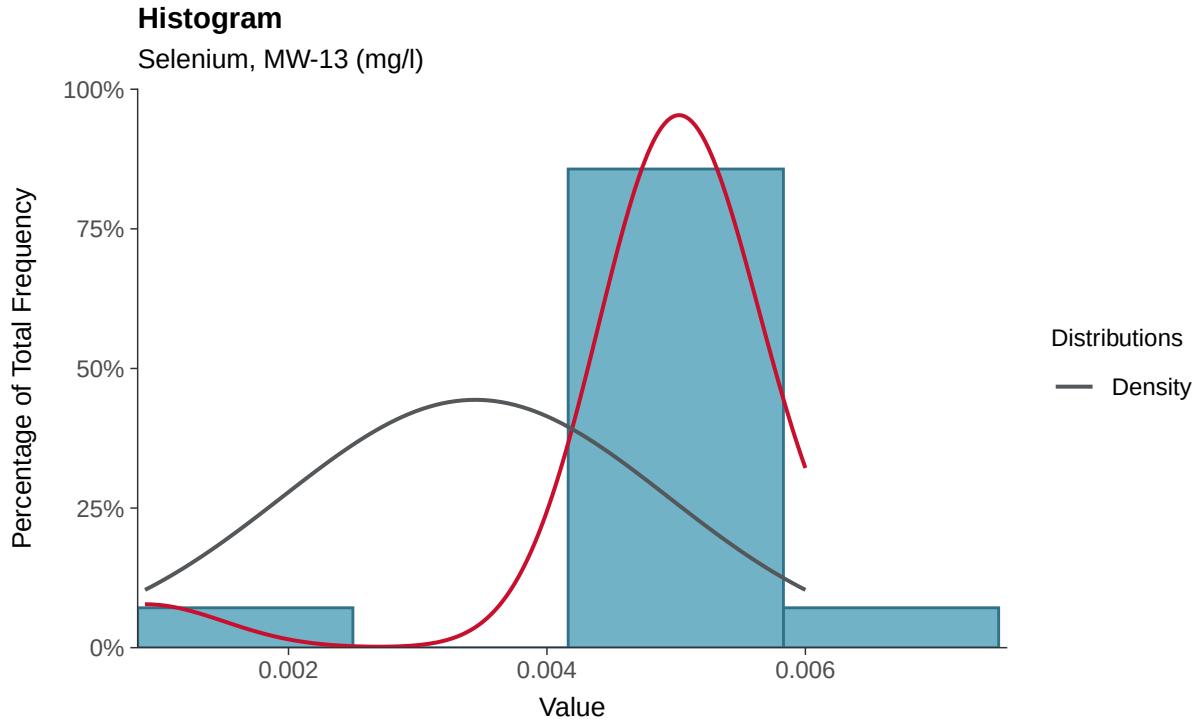
Radium-226+228, MW-13 (pci/l)



Appendix IV: Selenium, MW-13

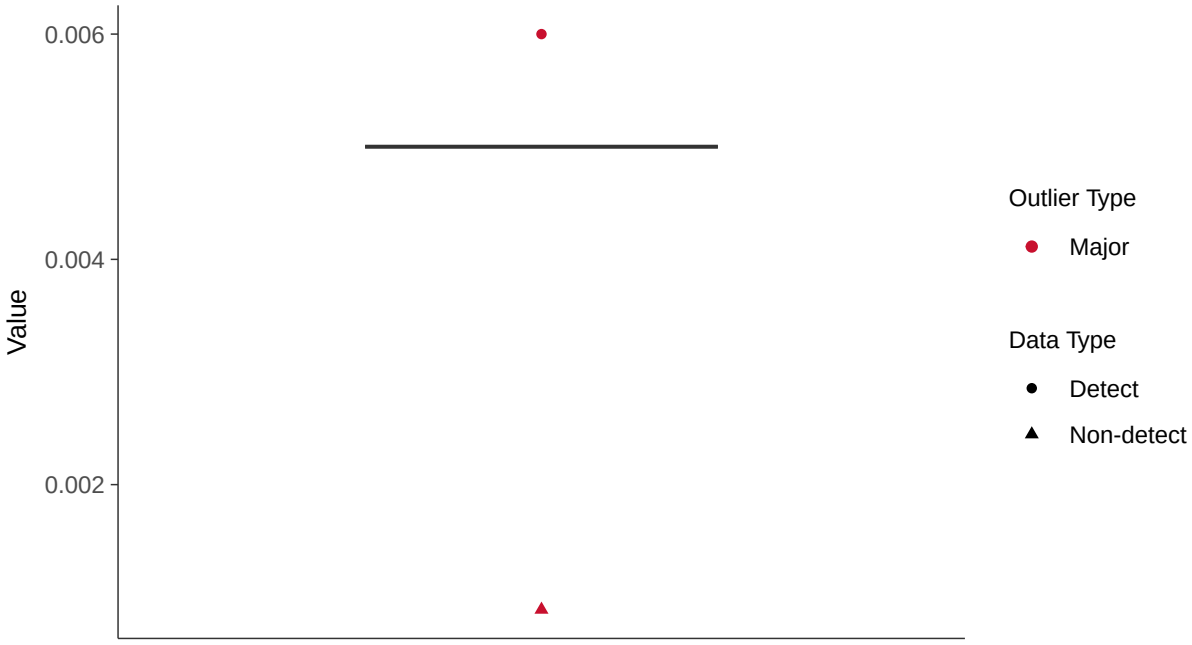
ID: 22_3_122





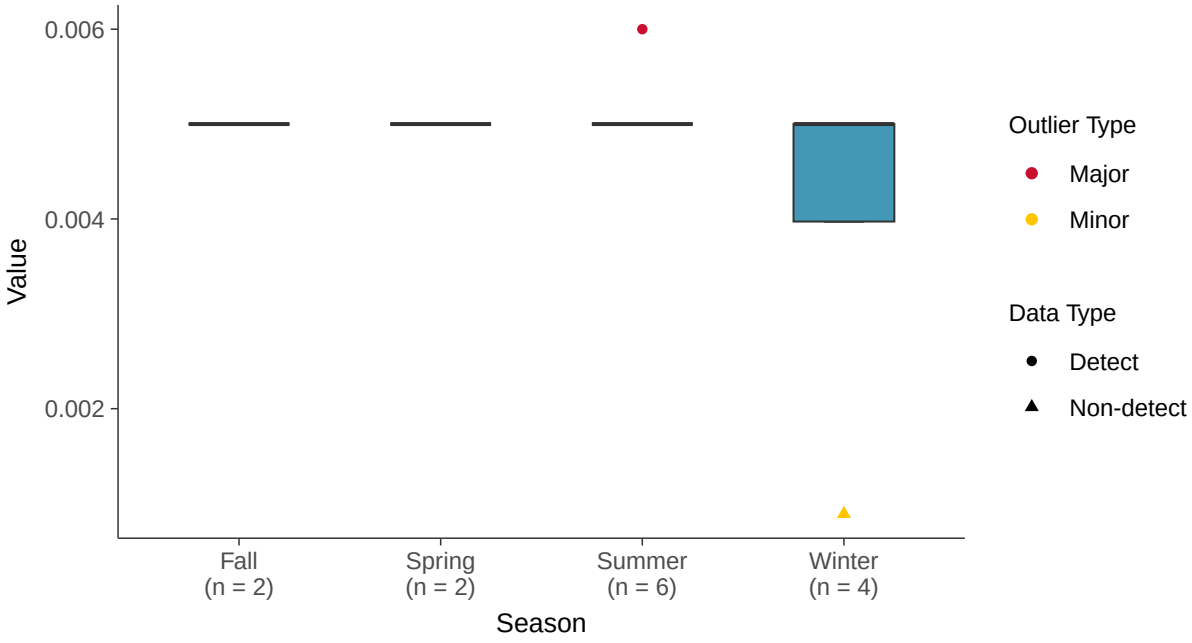
Boxplot

Selenium, MW-13 (mg/l)



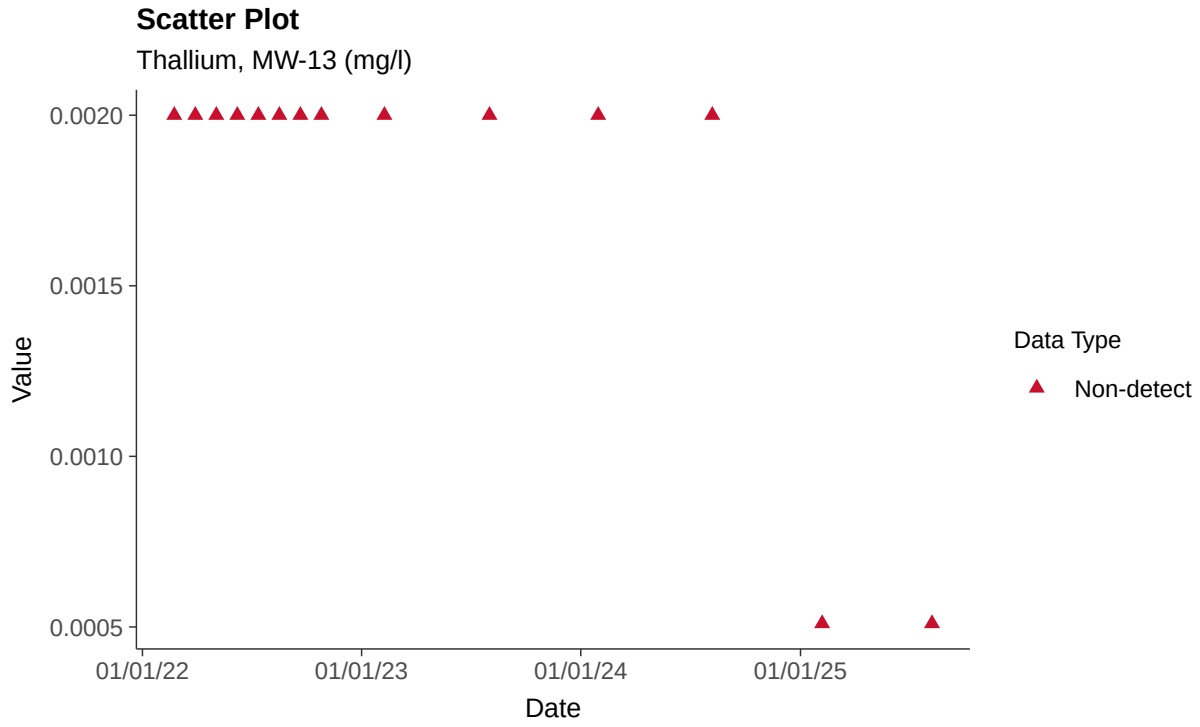
Boxplot by Season

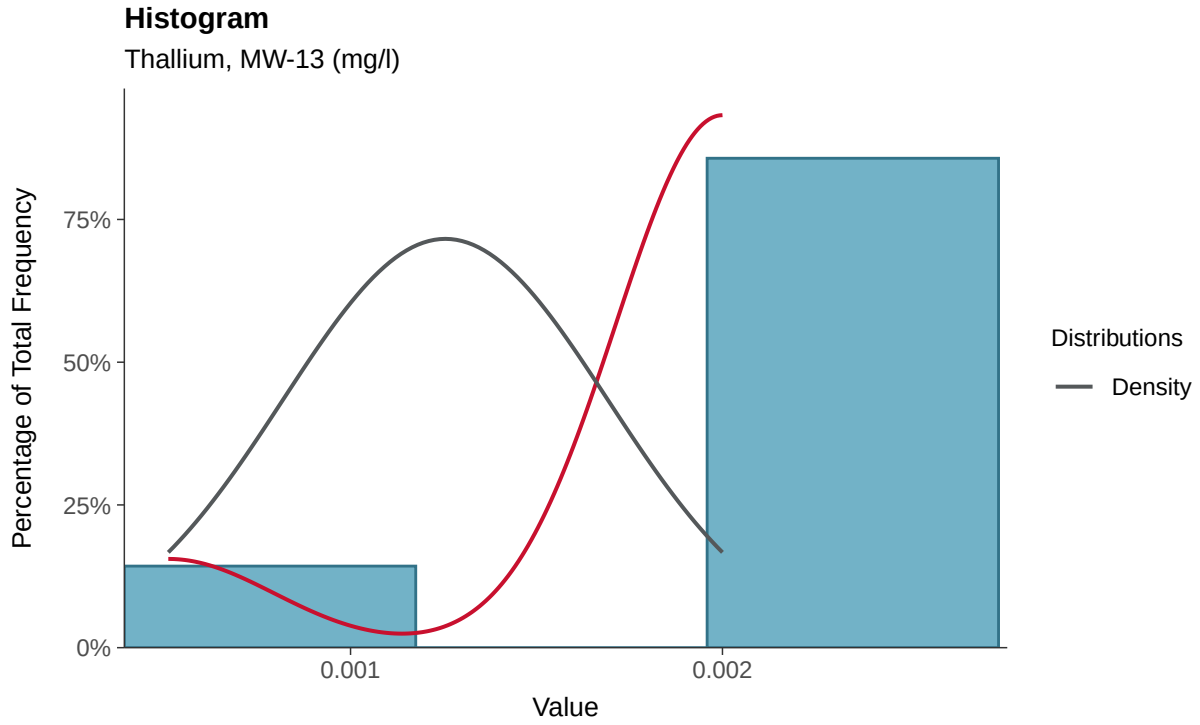
Selenium, MW-13 (mg/l)



Appendix IV: Thallium, MW-13

ID: 22_3_125



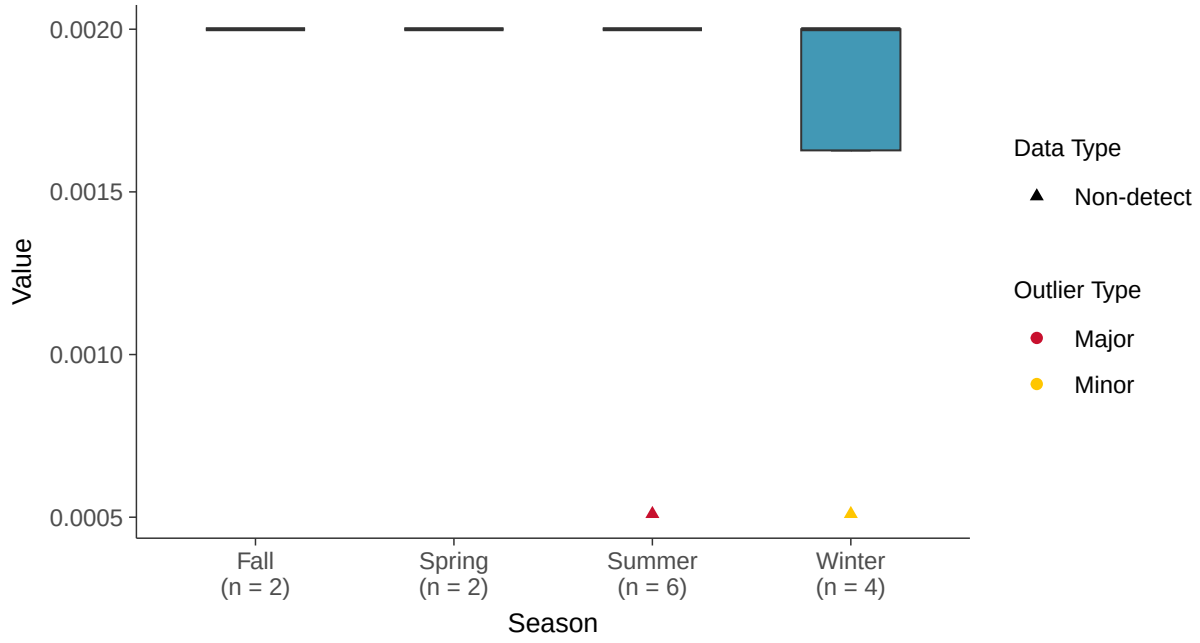


Boxplot

Thallium, MW-13 (mg/l)

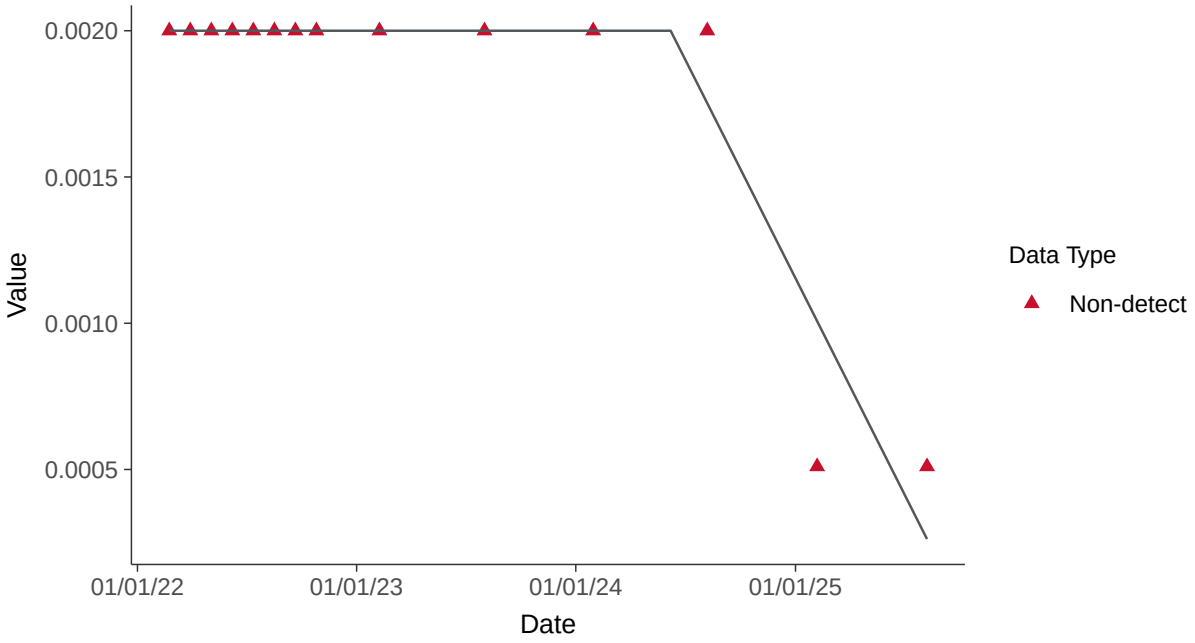
Boxplot by Season

Thallium, MW-13 (mg/l)



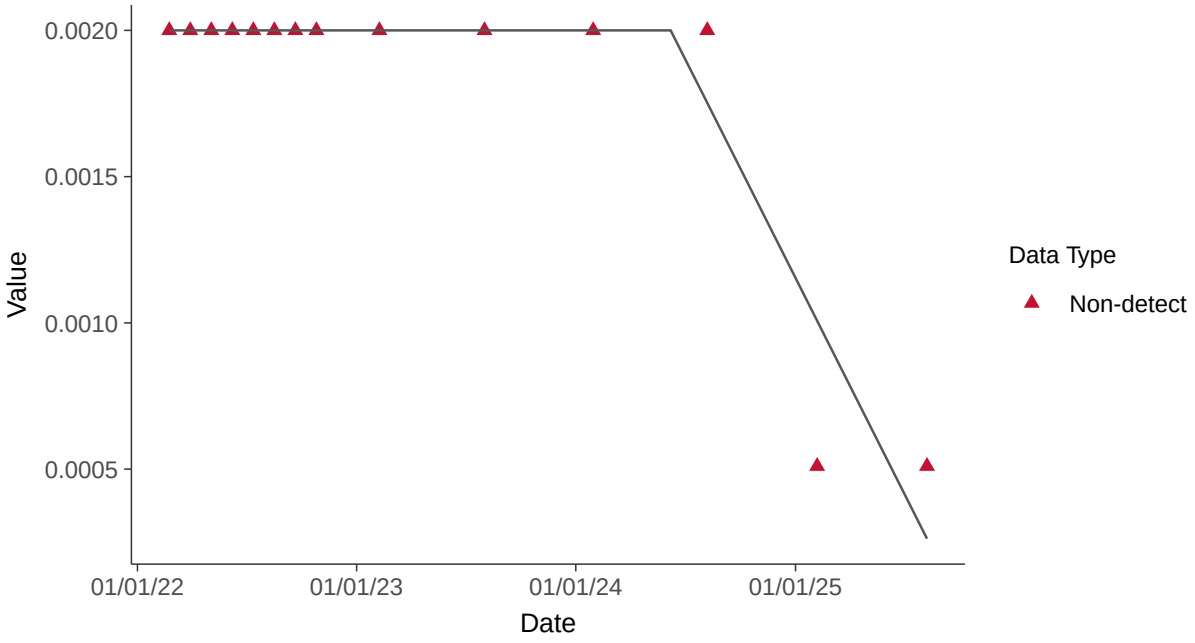
Trend Regression: Piecewise Linear-Linear

Thallium, MW-13 (mg/l)



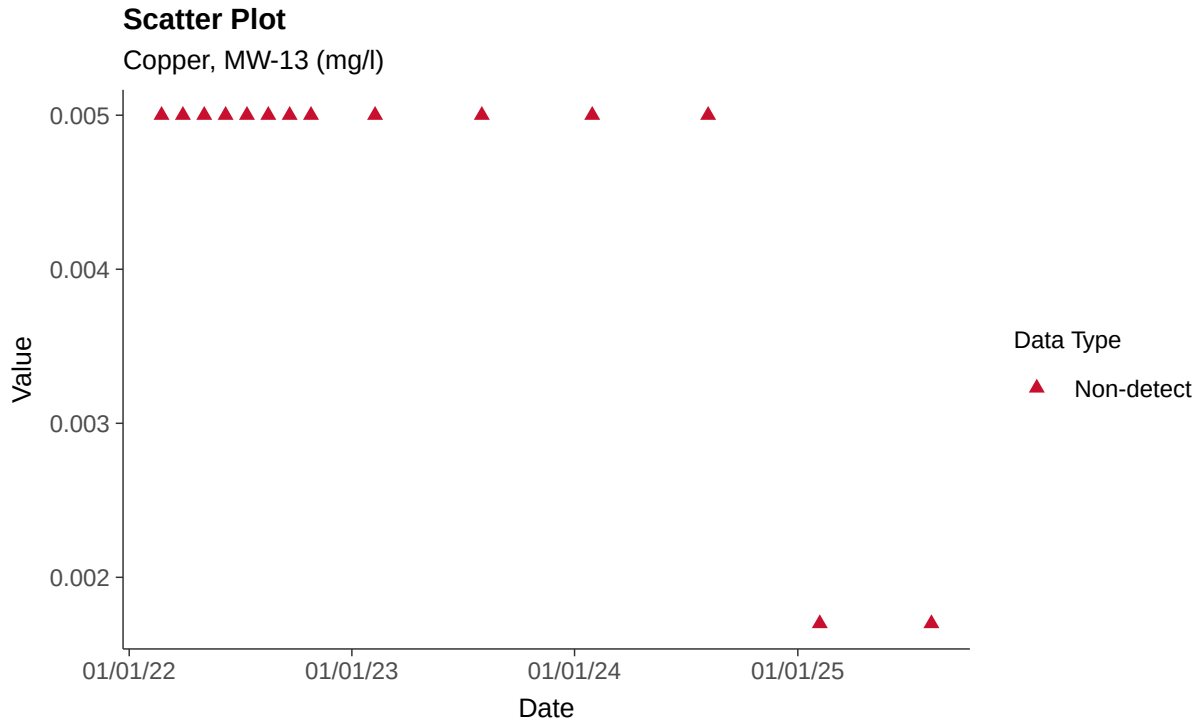
Trend Regression: Piecewise Linear-Linear-Linear

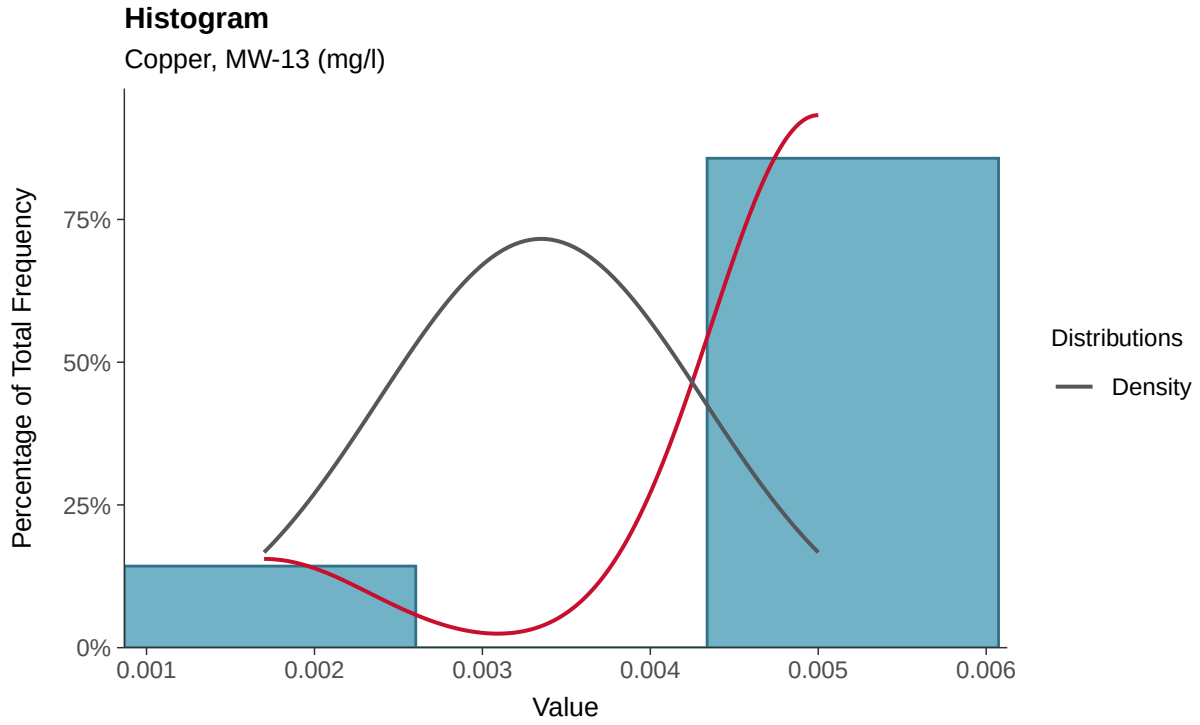
Thallium, MW-13 (mg/l)



Part 115: Copper, MW-13

ID: 22_5_111



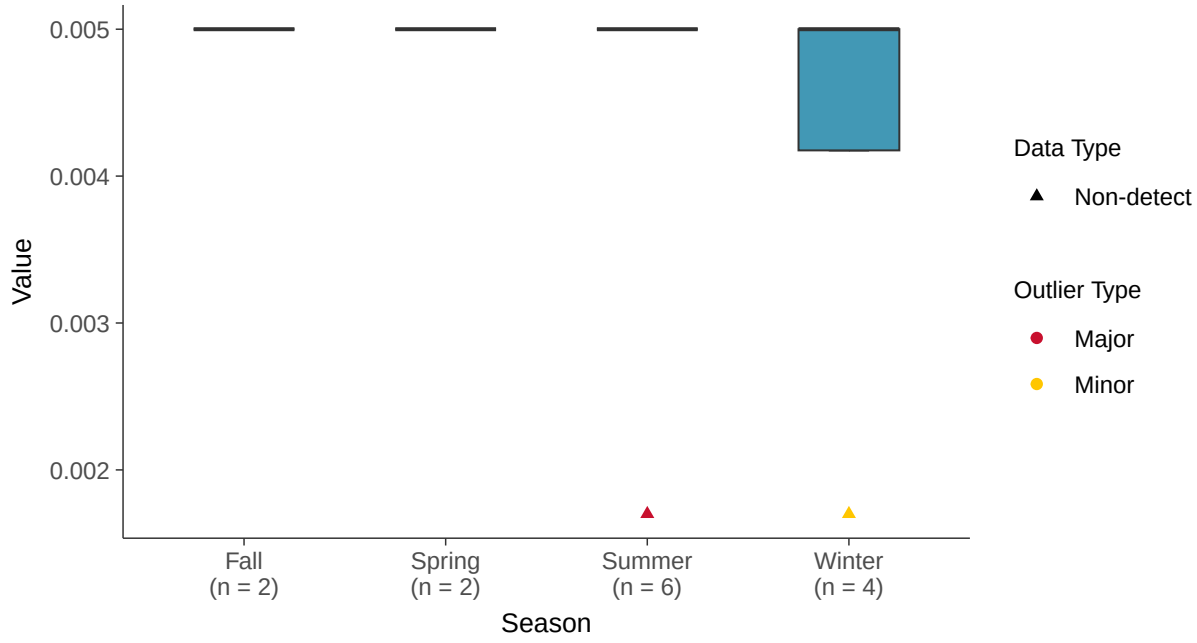


Boxplot

Copper, MW-13 (mg/l)

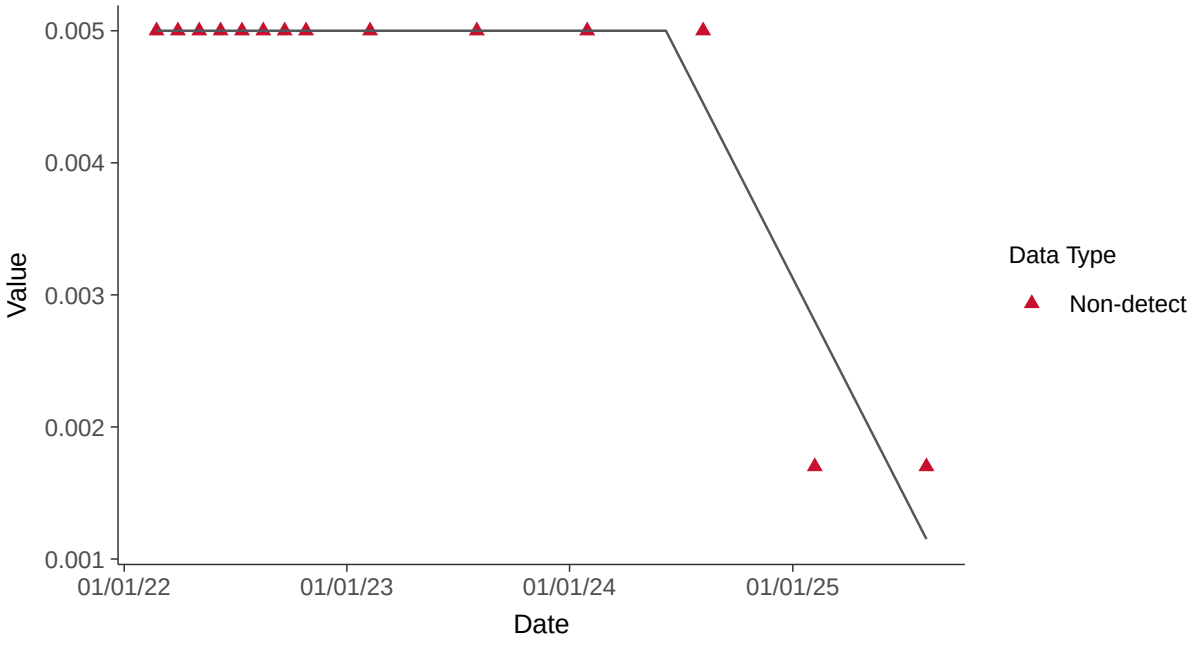
Boxplot by Season

Copper, MW-13 (mg/l)



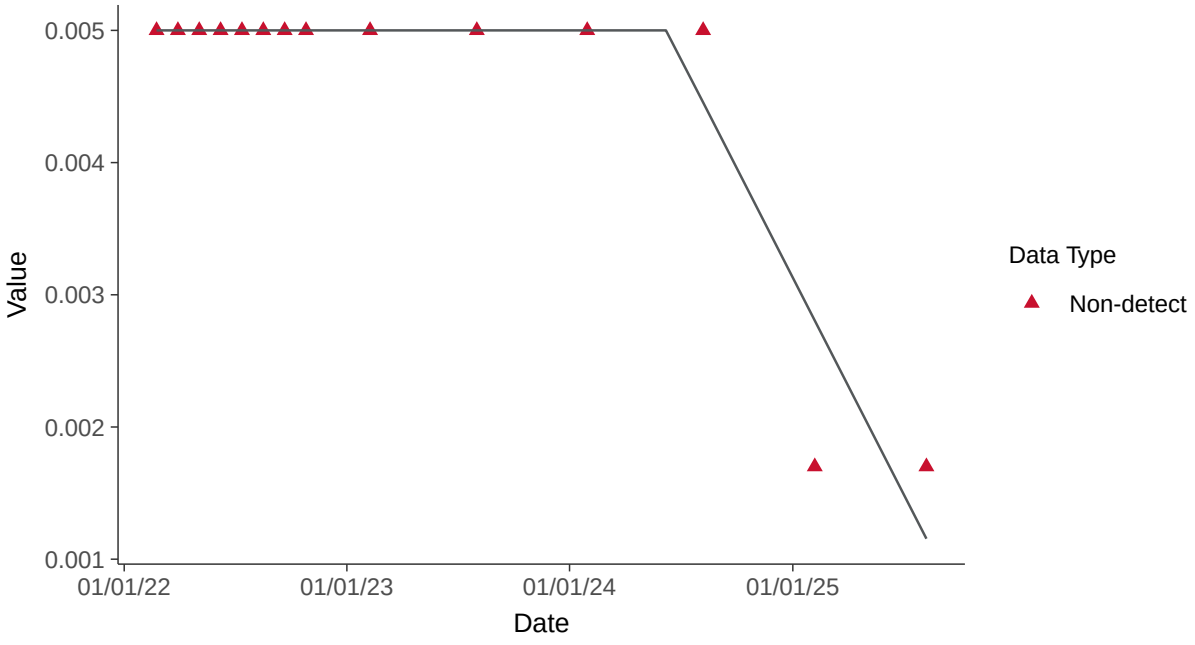
Trend Regression: Piecewise Linear-Linear

Copper, MW-13 (mg/l)



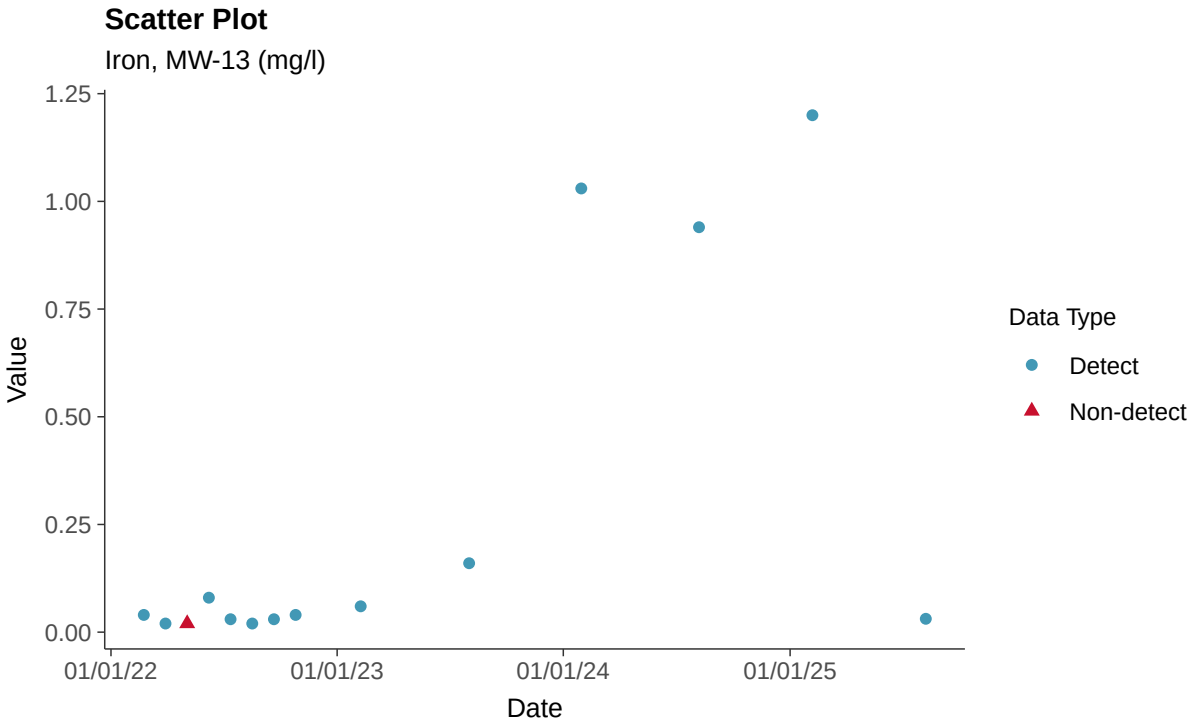
Trend Regression: Piecewise Linear-Linear-Linear

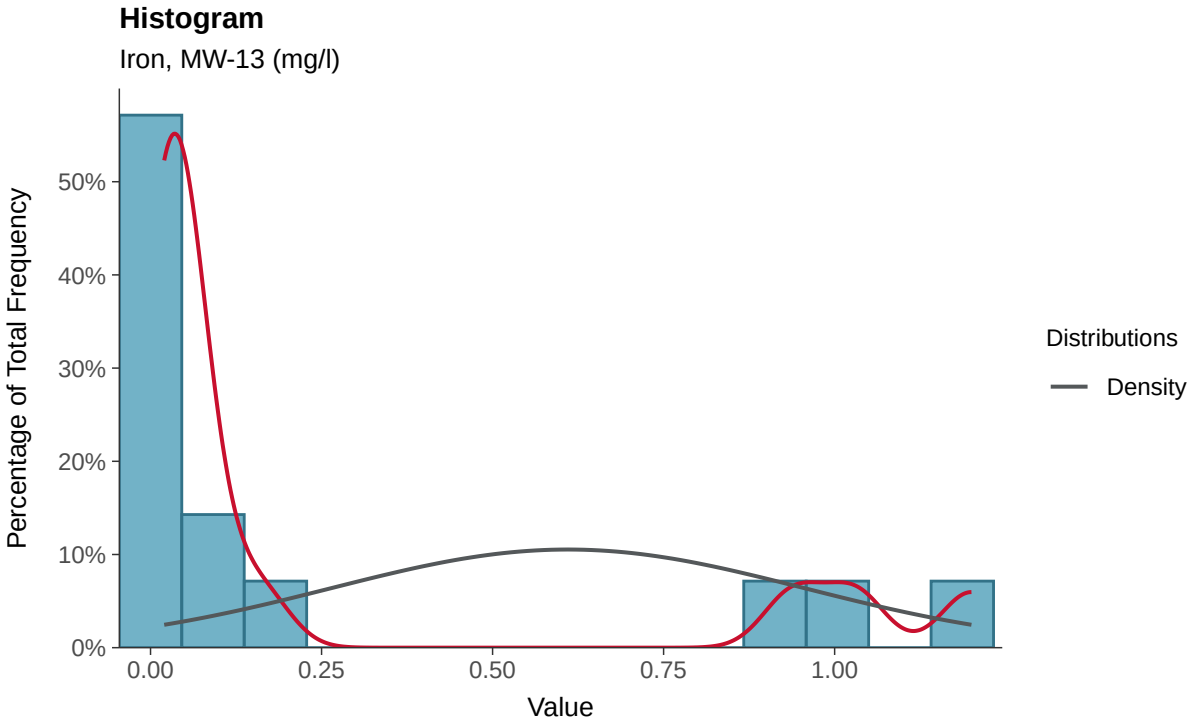
Copper, MW-13 (mg/l)



Part 115: Iron, MW-13

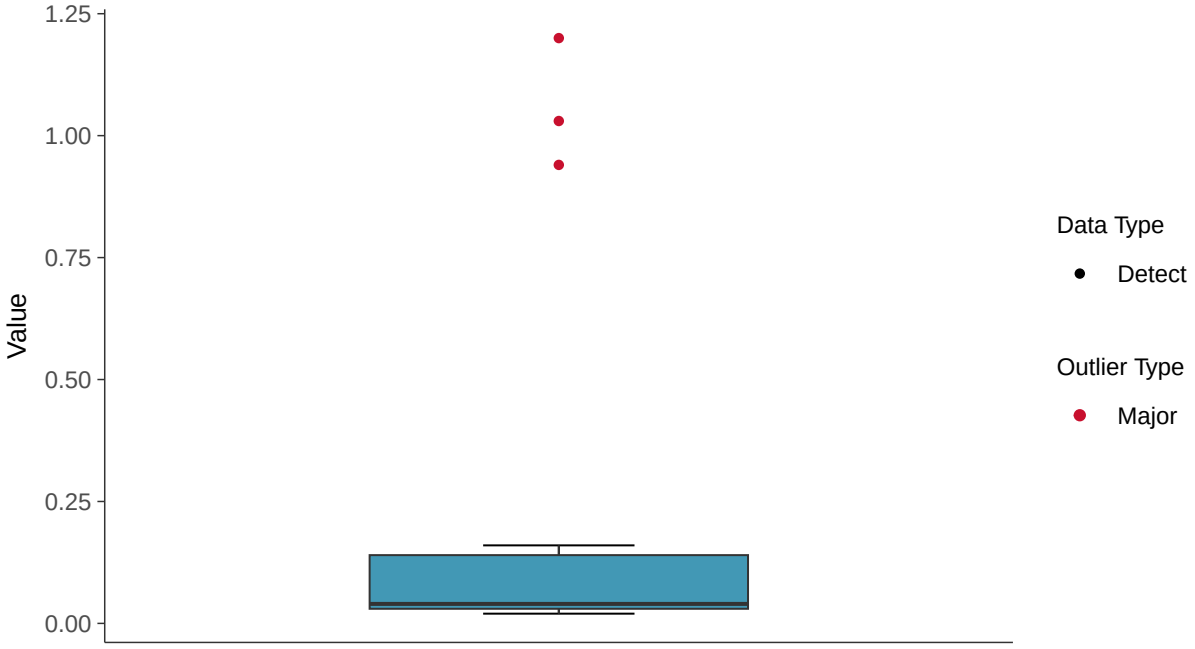
ID: 22_5_114





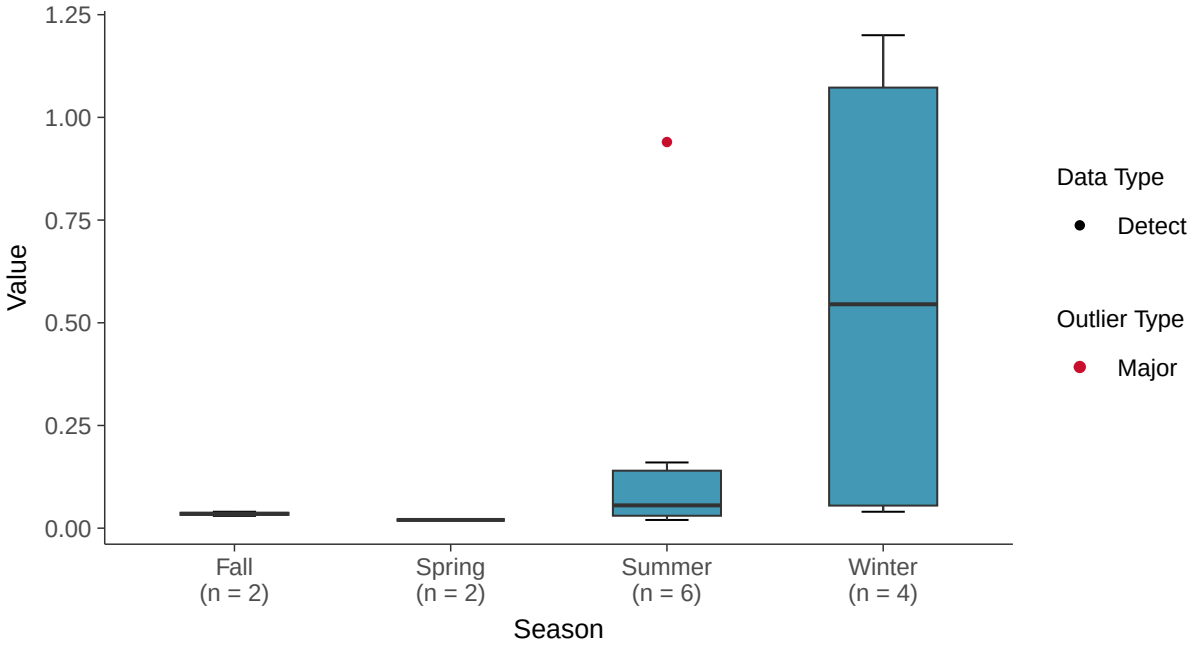
Boxplot

Iron, MW-13 (mg/l)



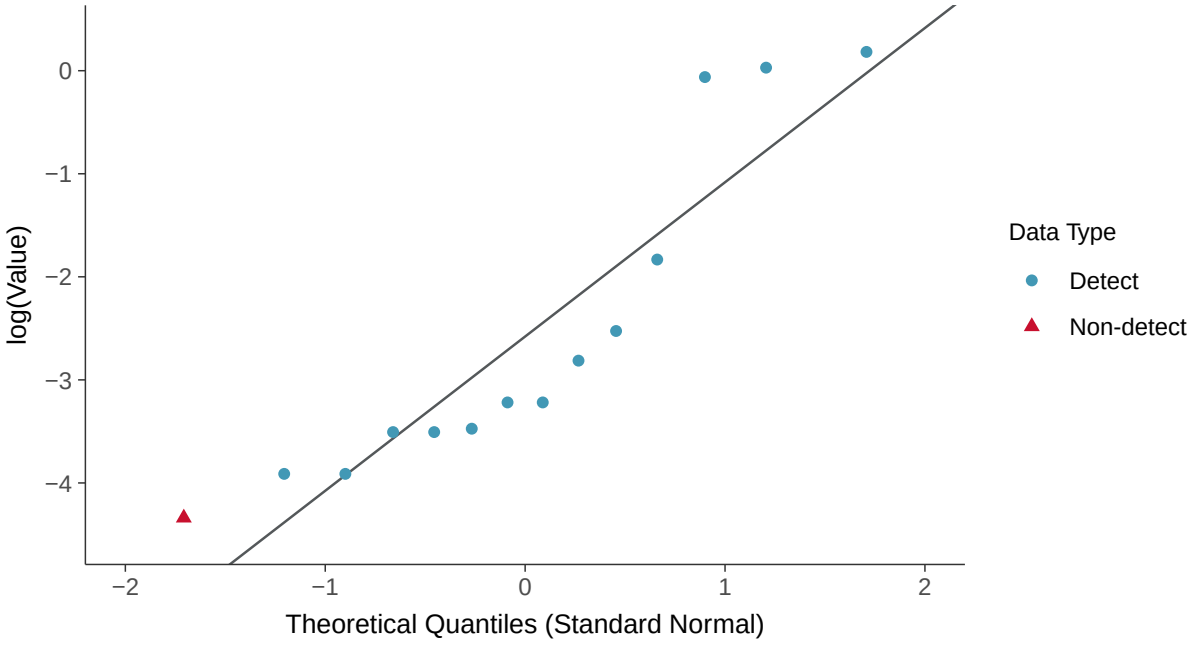
Boxplot by Season

Iron, MW-13 (mg/l)



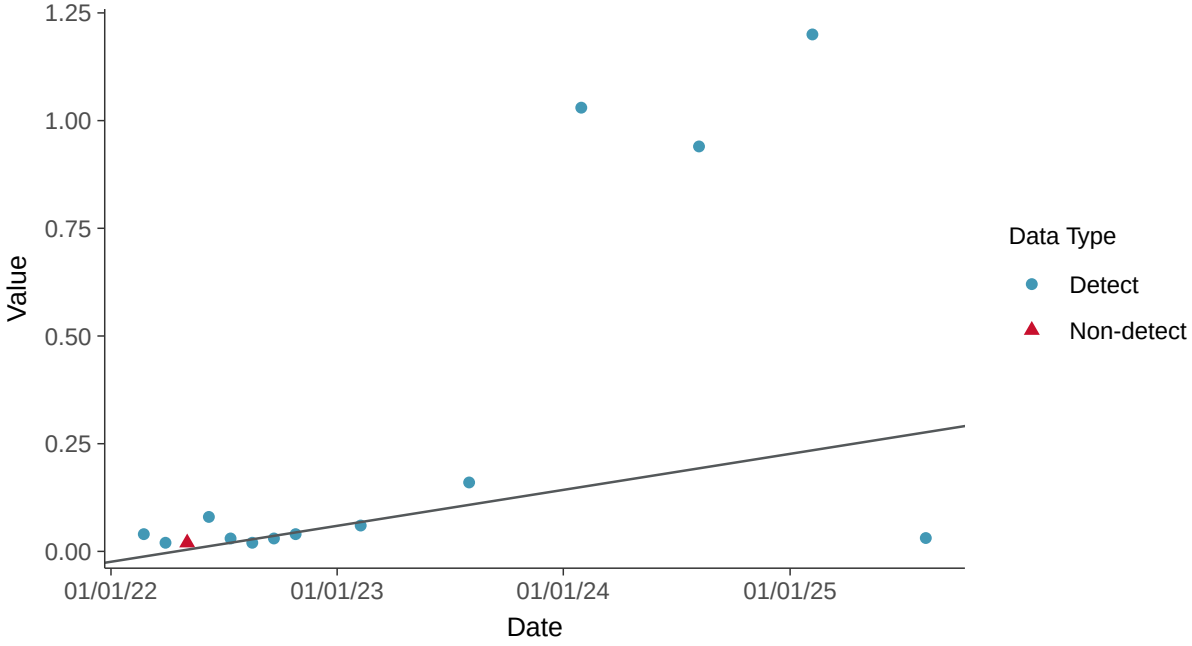
Lognormal Q-Q plot using ROS Imputed Estimates

Iron, MW-13 (mg/l)



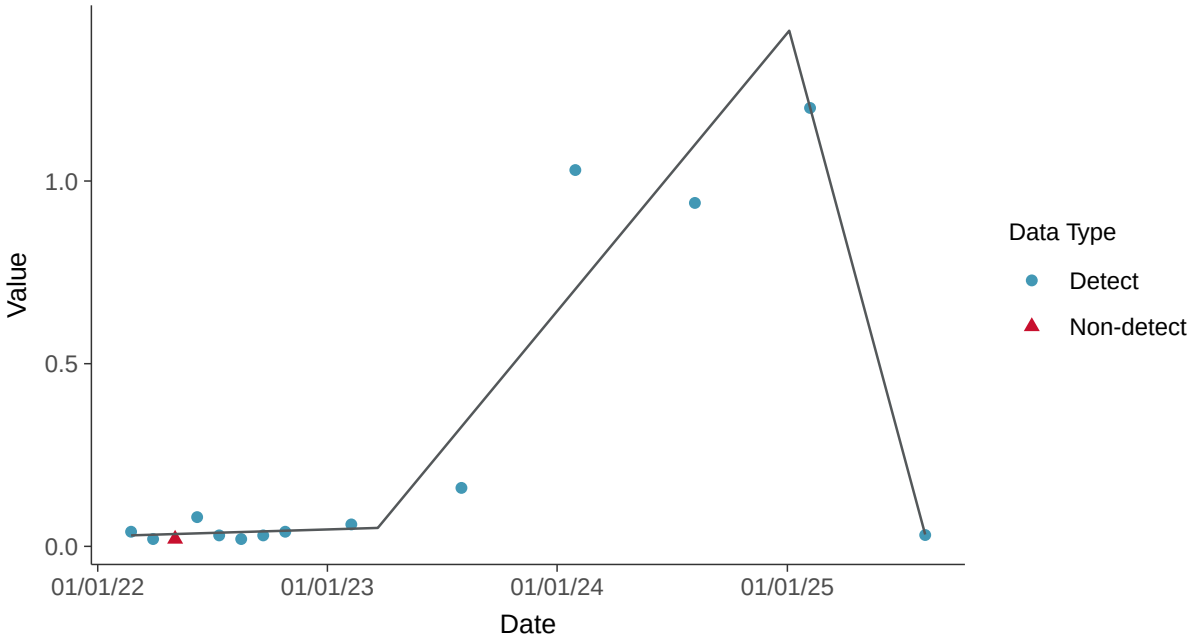
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Iron, MW-13 (mg/l)



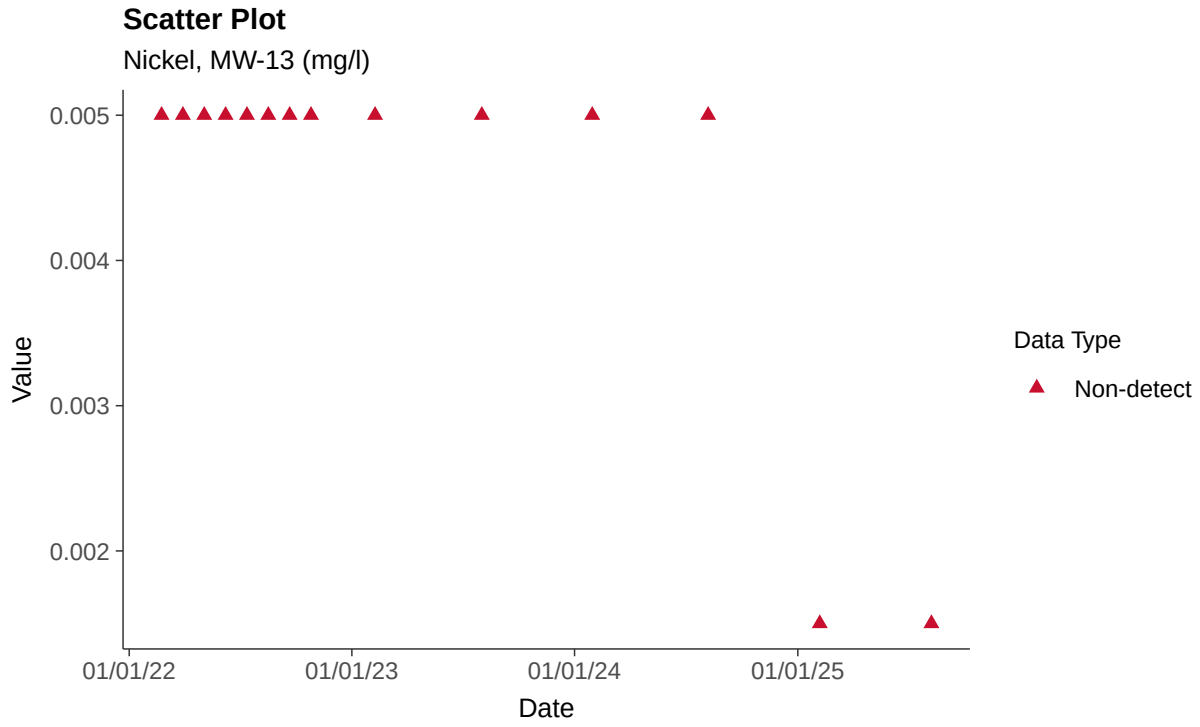
Trend Regression: Piecewise Linear-Linear-Linear

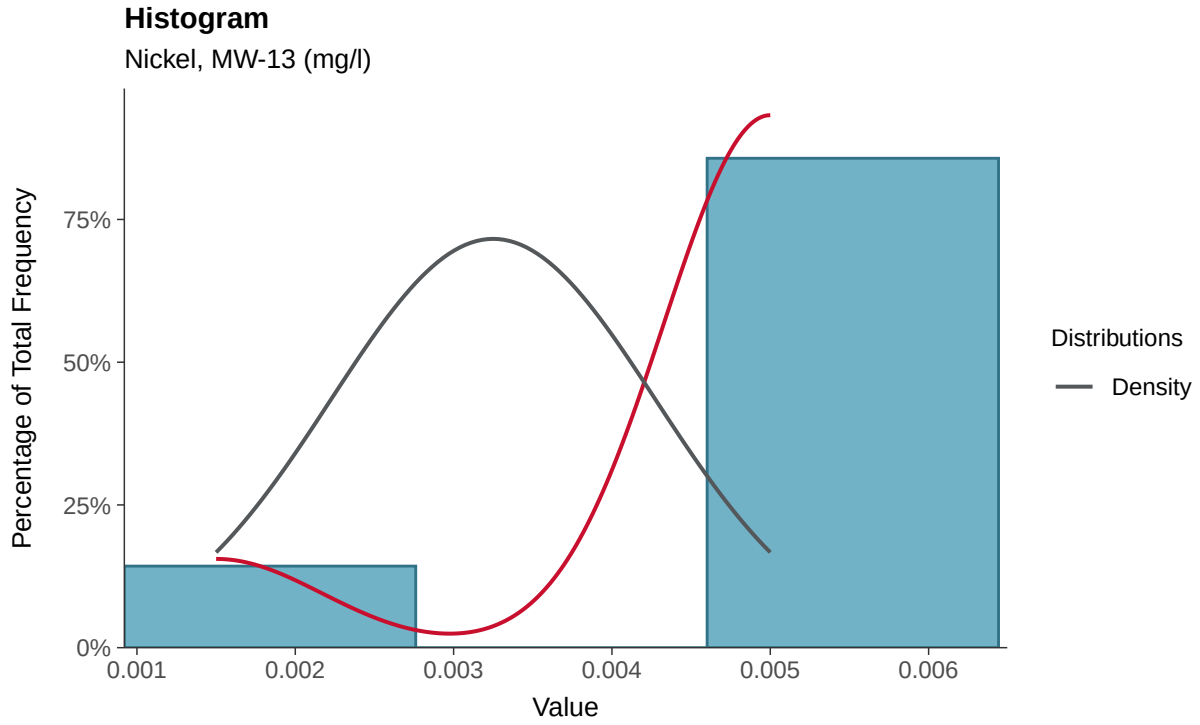
Iron, MW-13 (mg/l)



Part 115: Nickel, MW-13

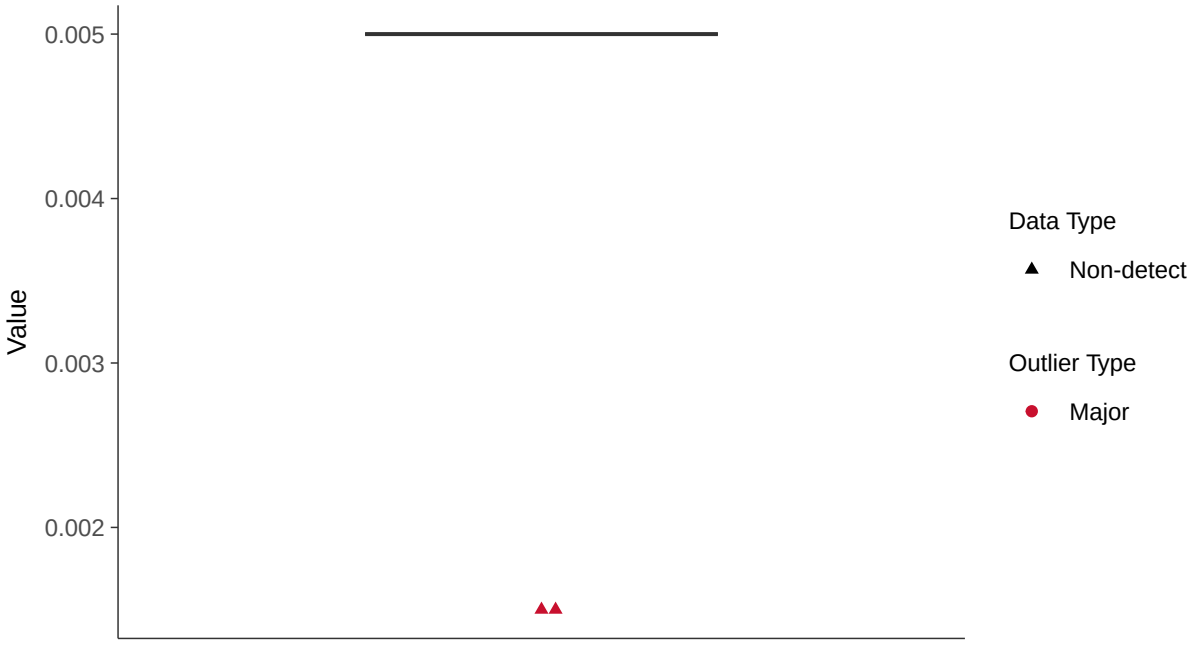
ID: 22_5_119





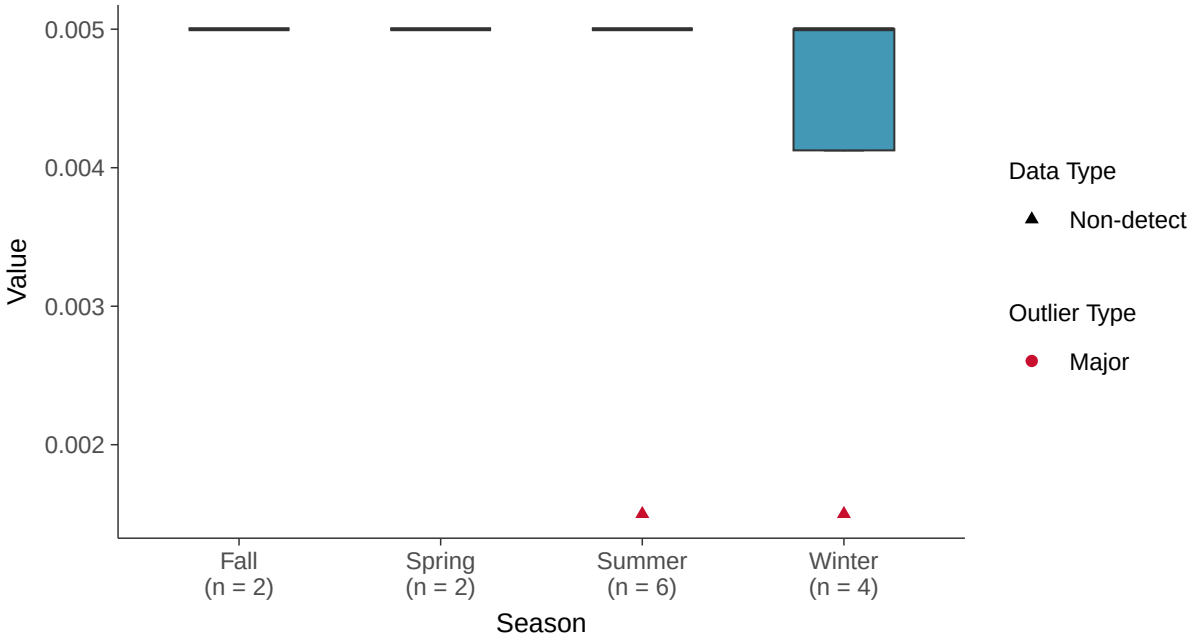
Boxplot

Nickel, MW-13 (mg/l)



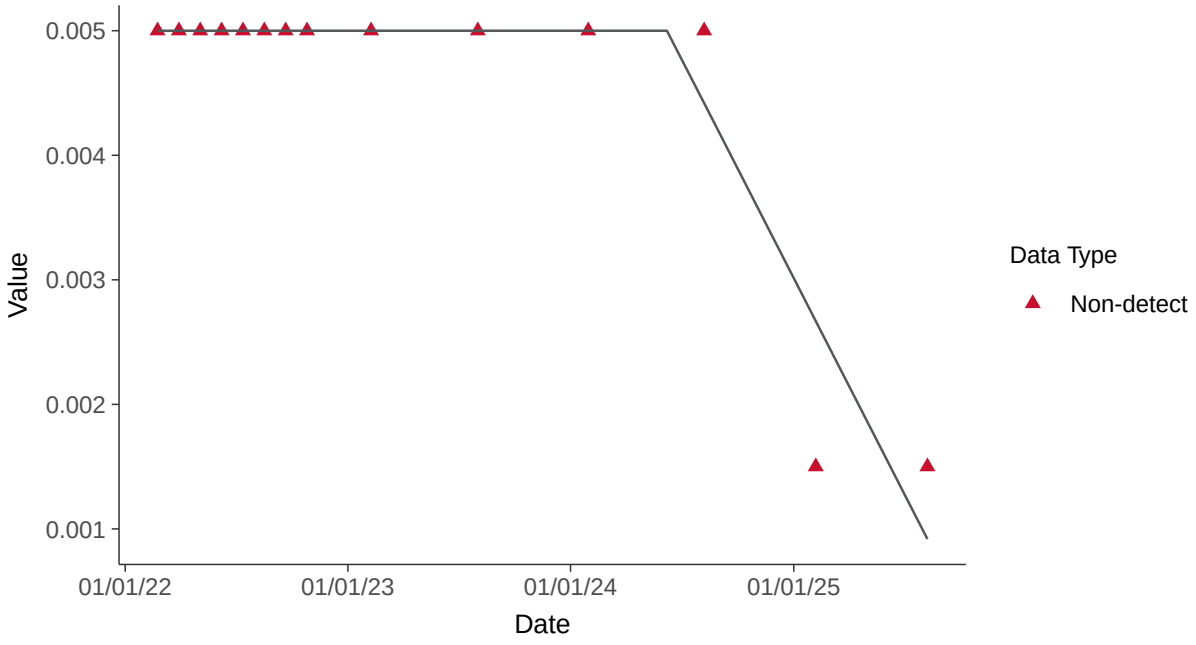
Boxplot by Season

Nickel, MW-13 (mg/l)



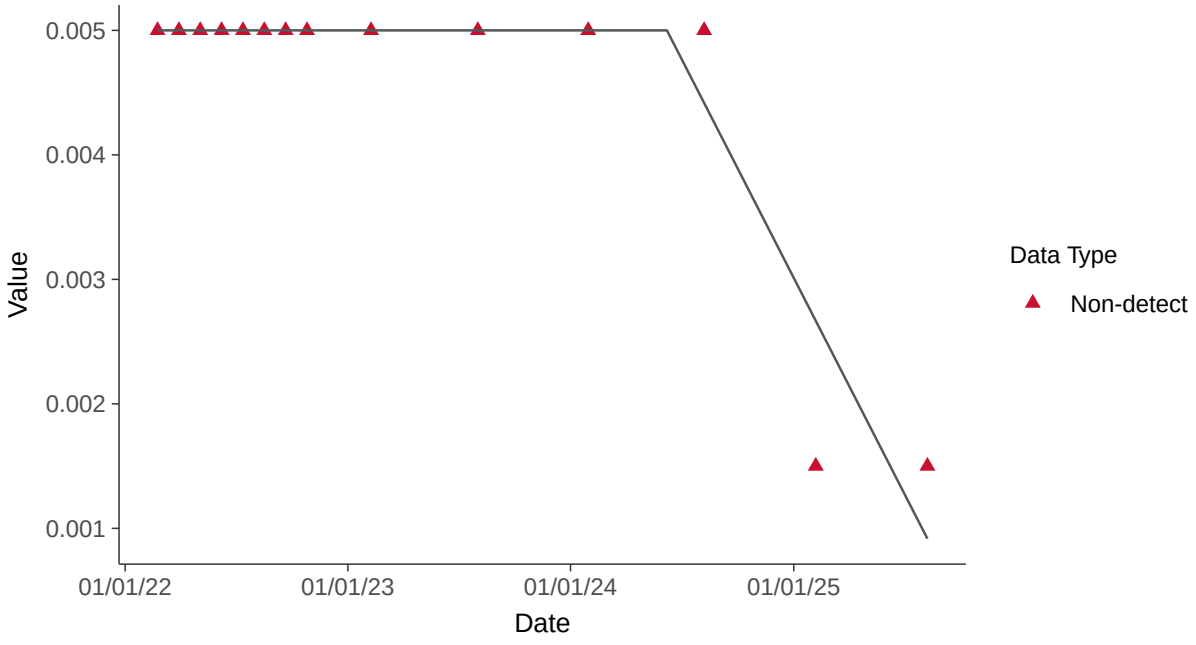
Trend Regression: Piecewise Linear-Linear

Nickel, MW-13 (mg/l)



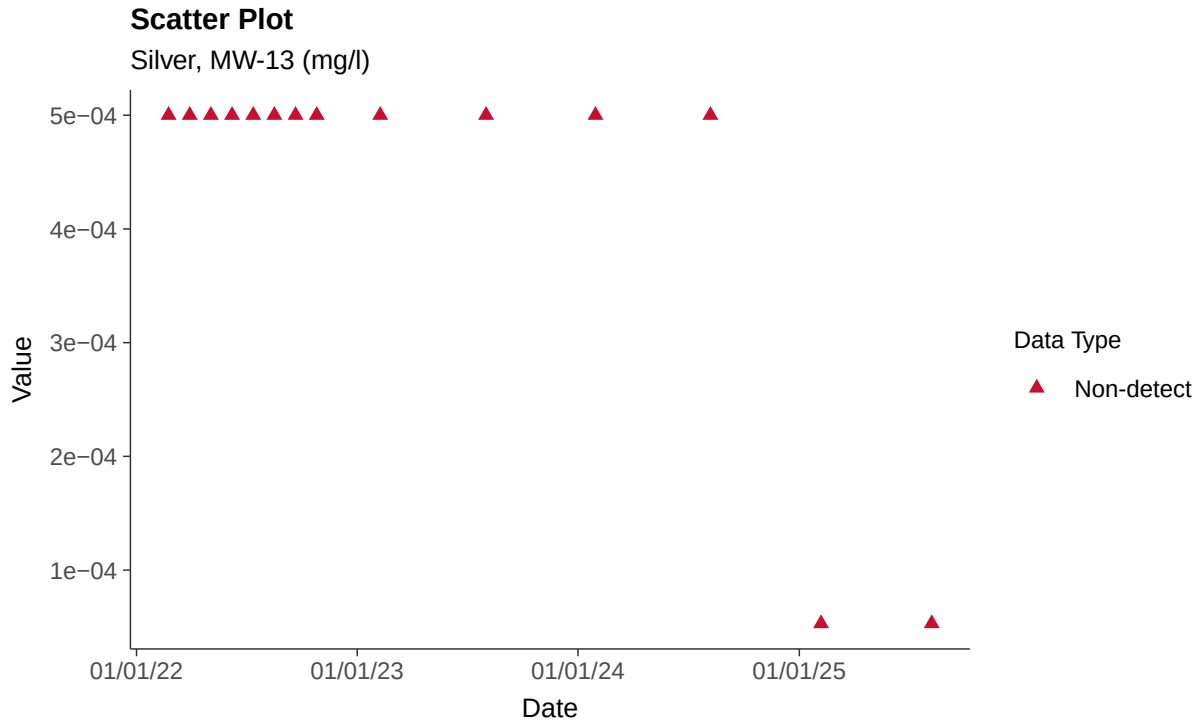
Trend Regression: Piecewise Linear-Linear-Linear

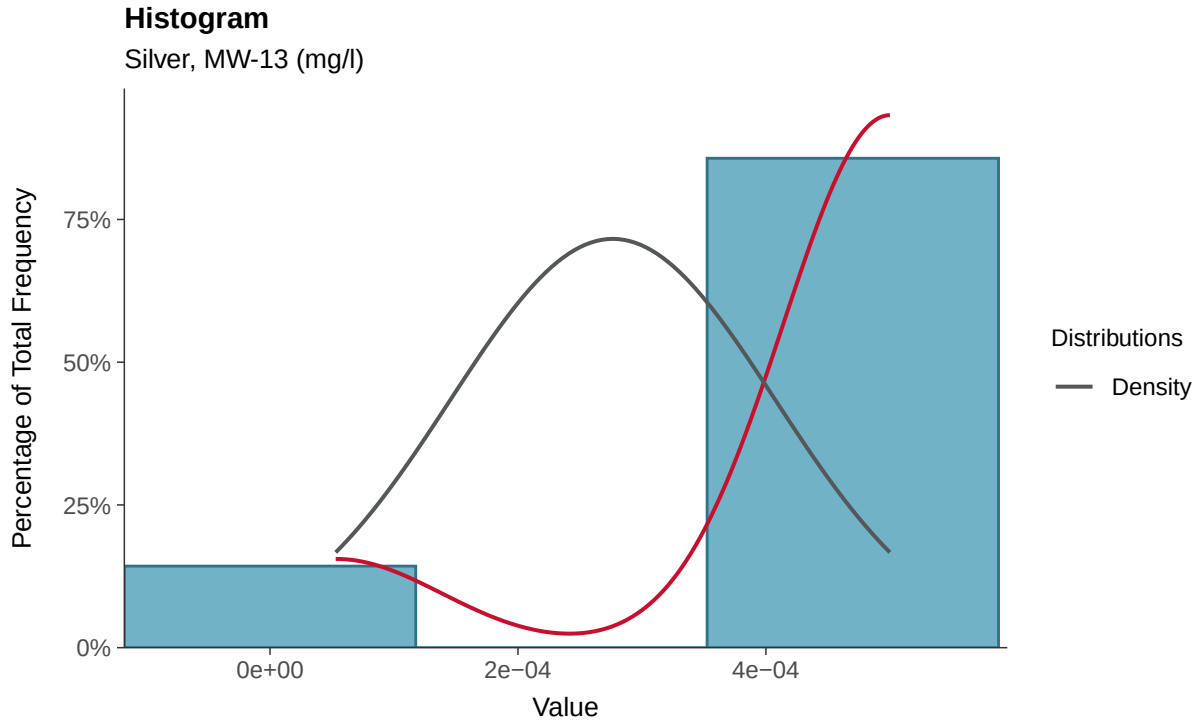
Nickel, MW-13 (mg/l)



Part 115: Silver, MW-13

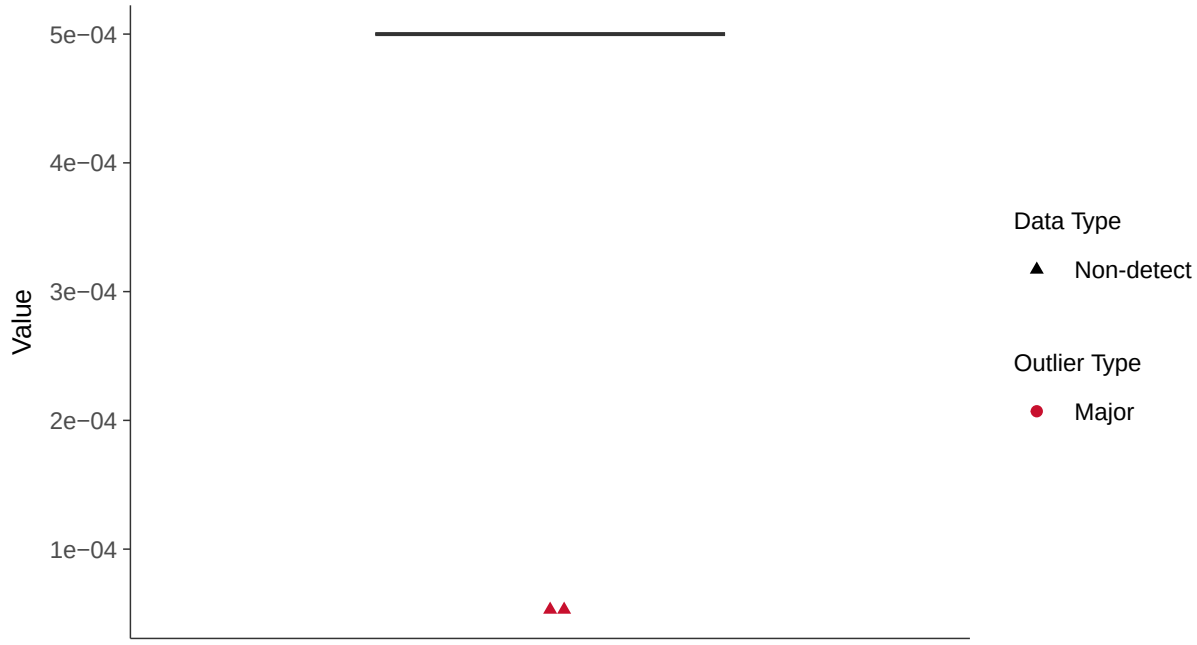
ID: 22_5_123





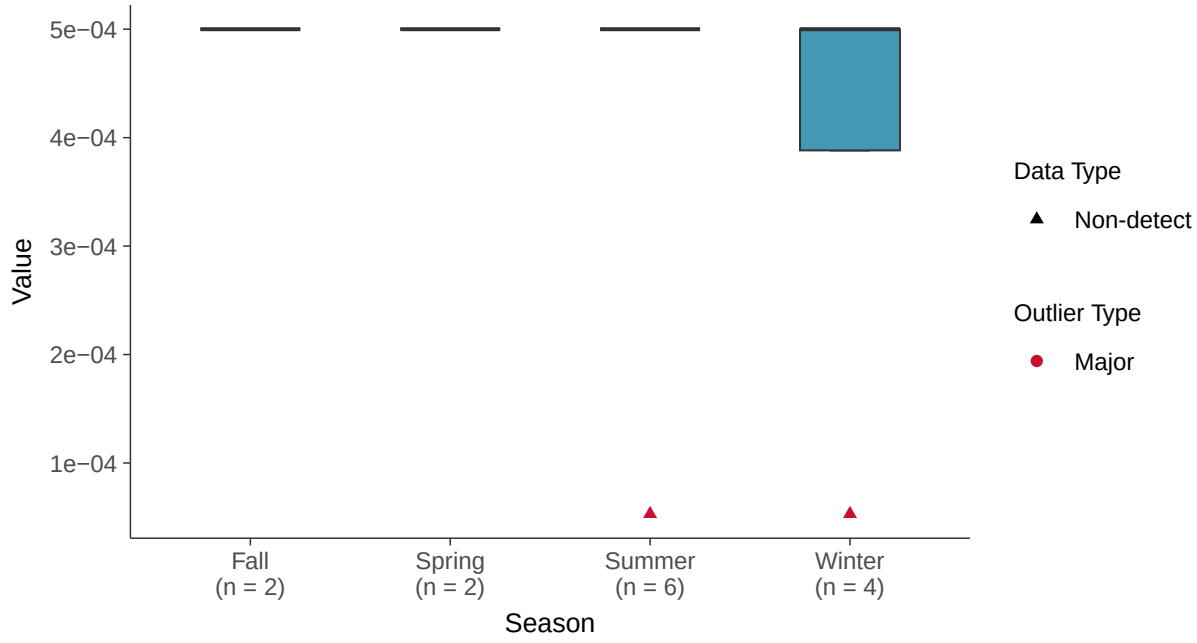
Boxplot

Silver, MW-13 (mg/l)



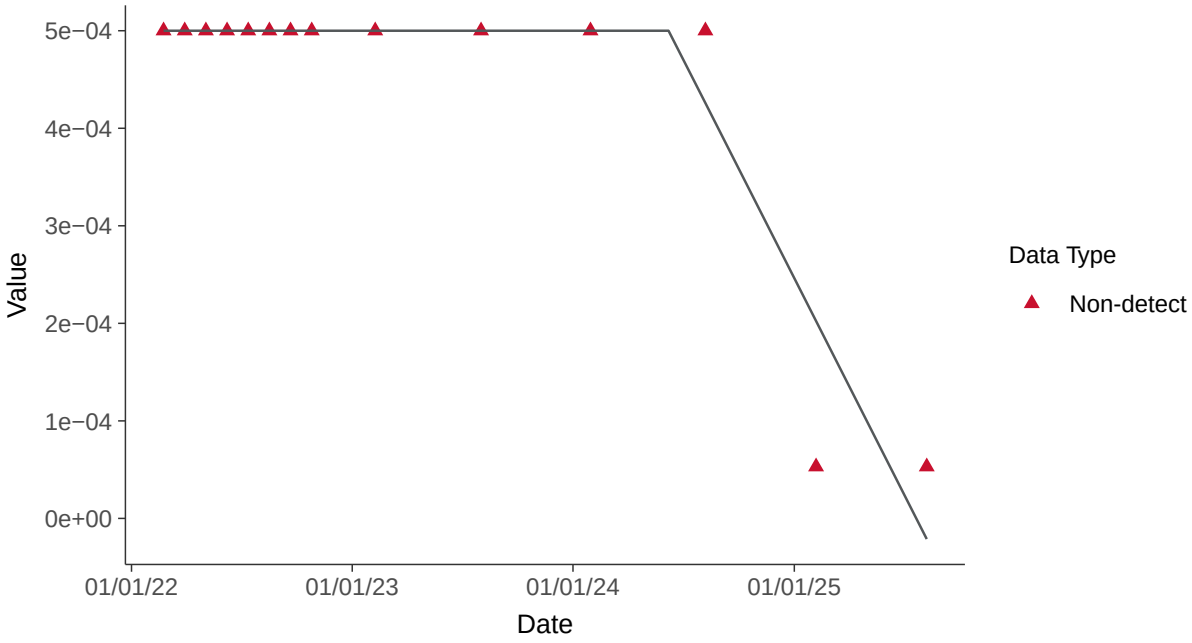
Boxplot by Season

Silver, MW-13 (mg/l)



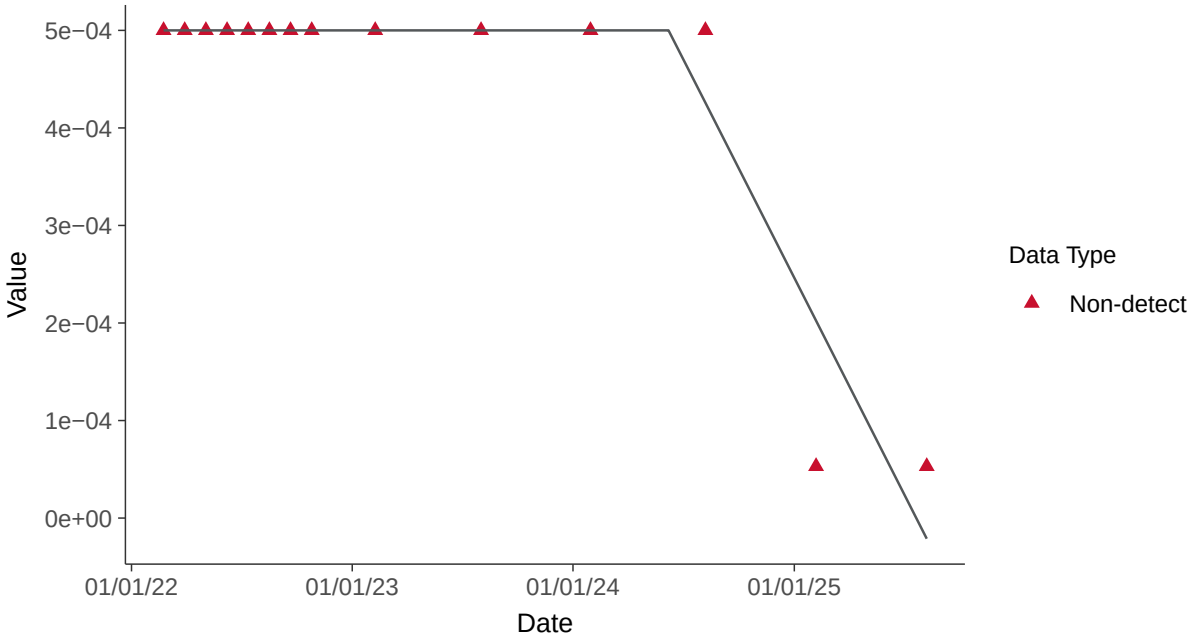
Trend Regression: Piecewise Linear-Linear

Silver, MW-13 (mg/l)



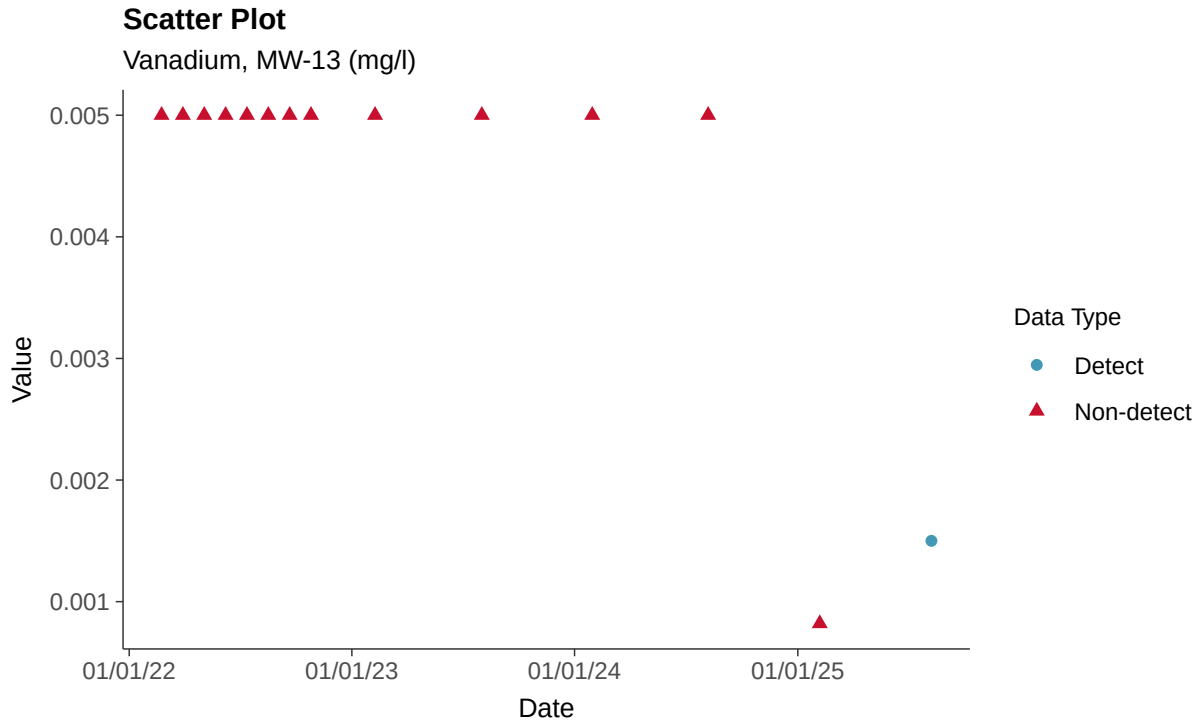
Trend Regression: Piecewise Linear-Linear-Linear

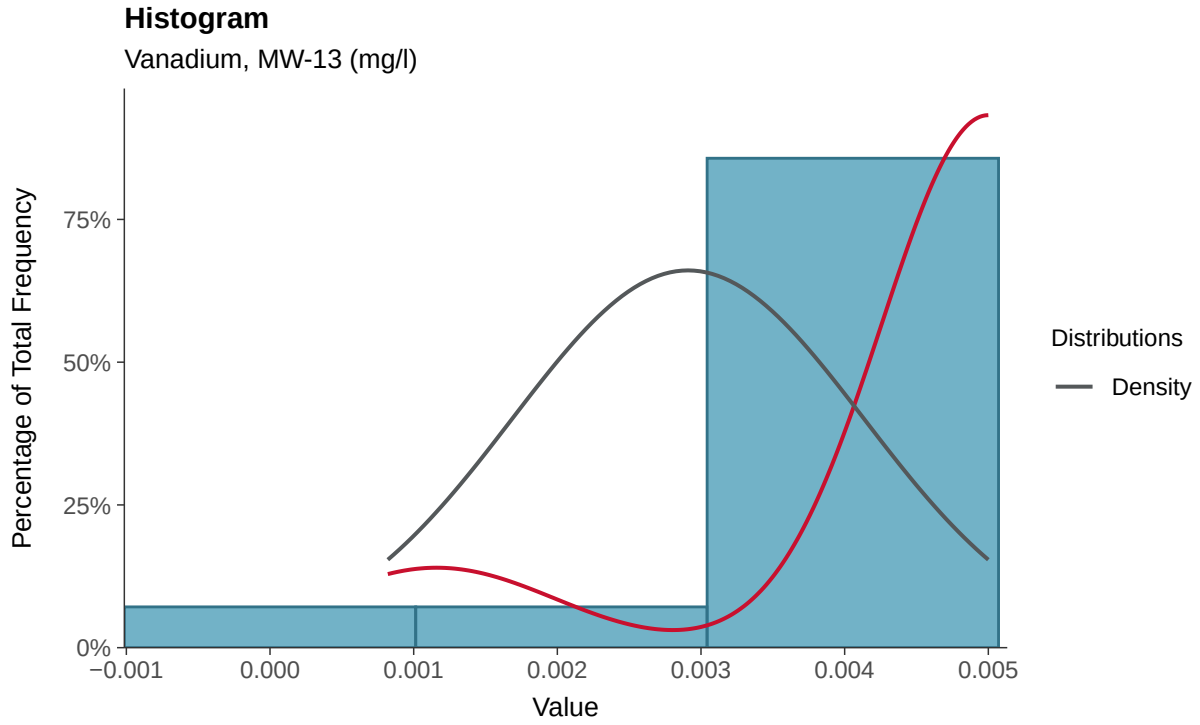
Silver, MW-13 (mg/l)



Part 115: Vanadium, MW-13

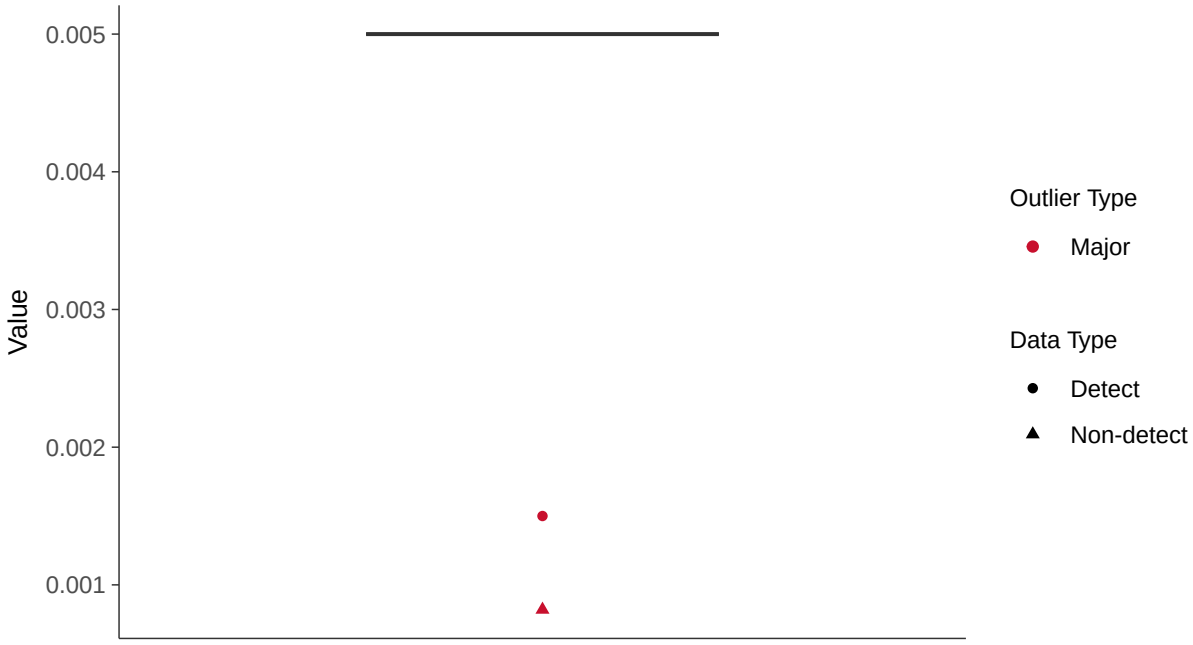
ID: 22_5_128





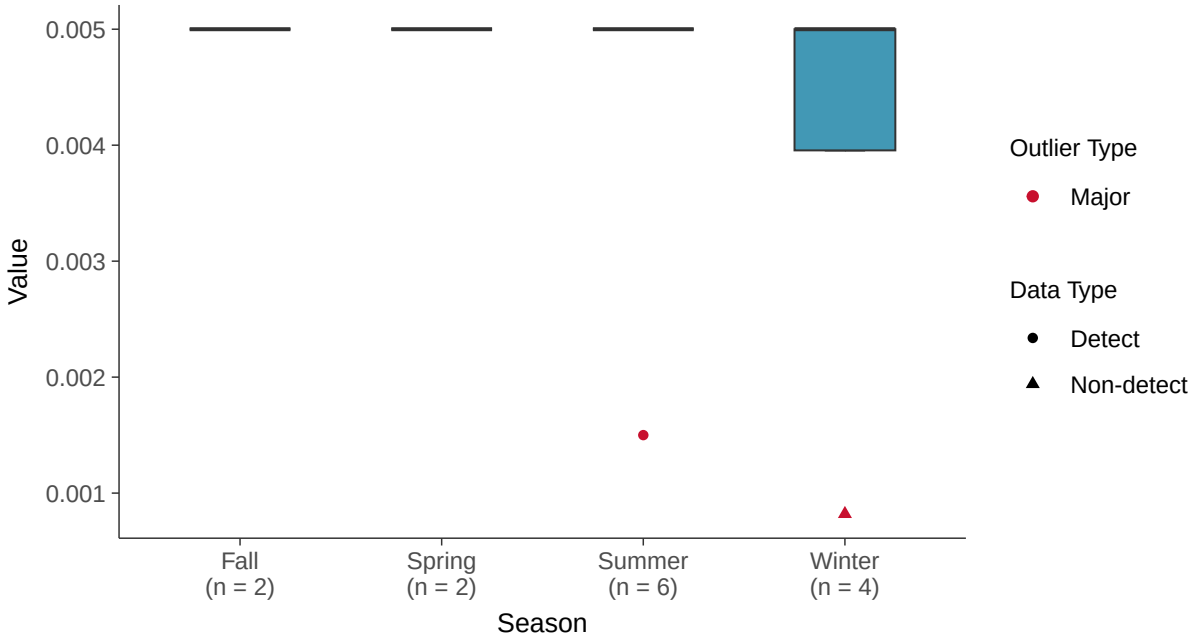
Boxplot

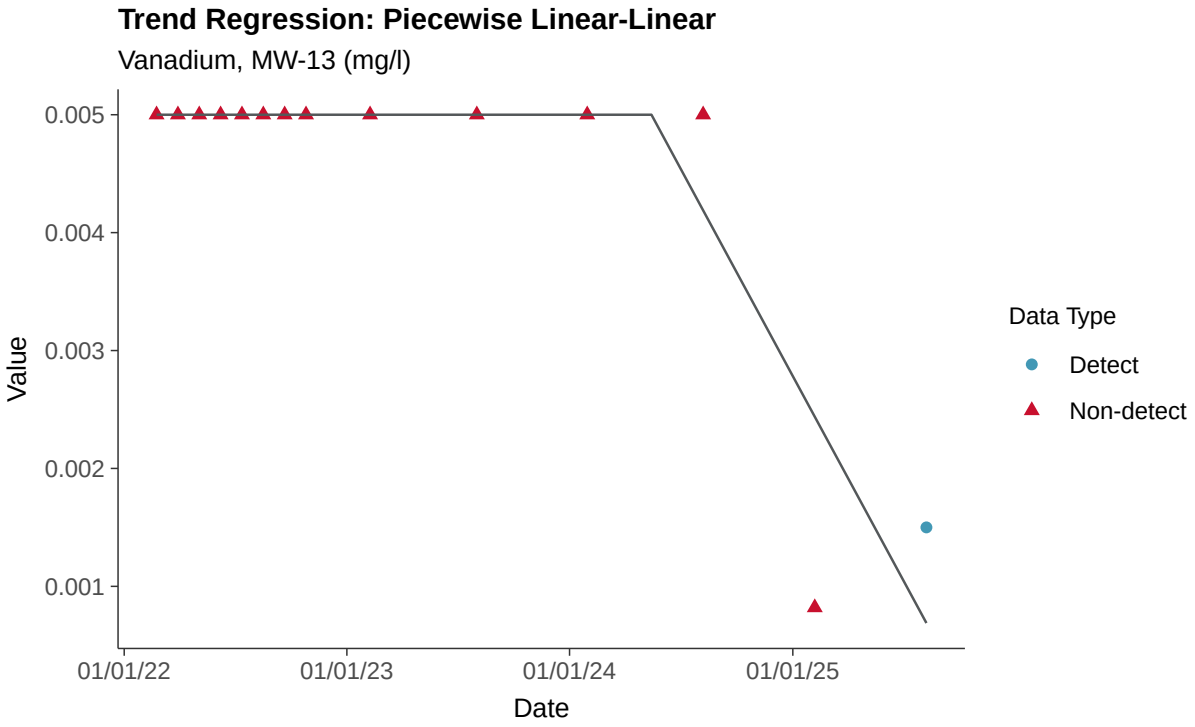
Vanadium, MW-13 (mg/l)



Boxplot by Season

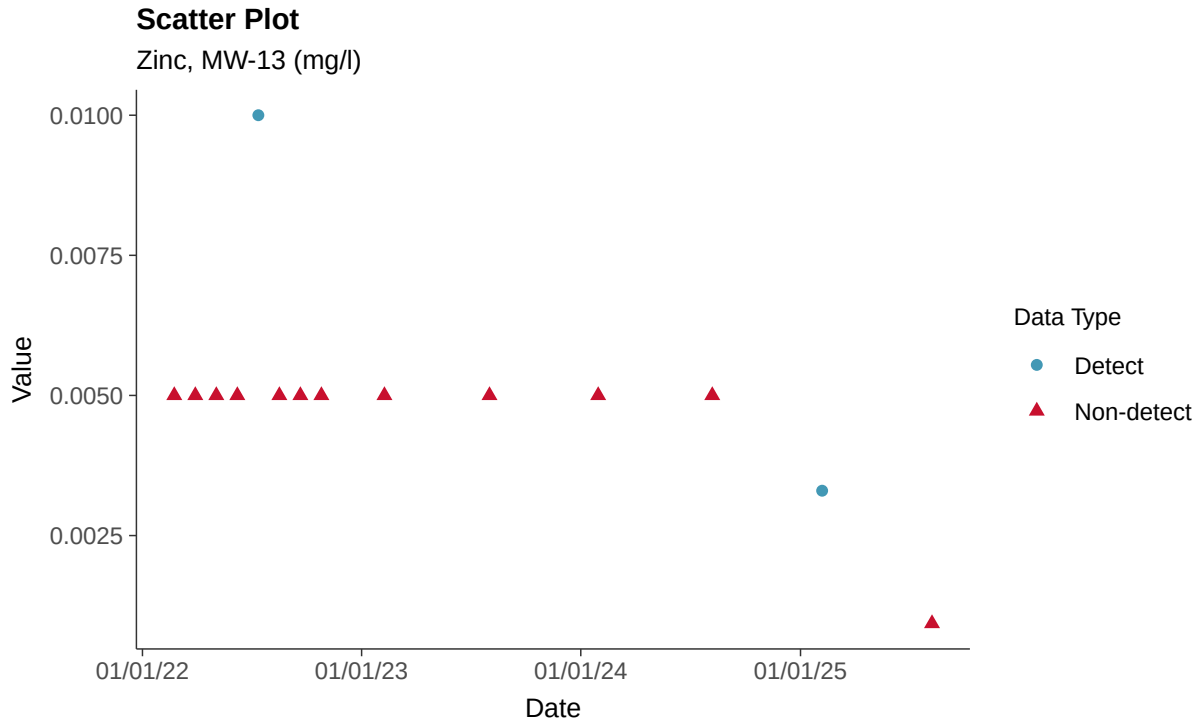
Vanadium, MW-13 (mg/l)

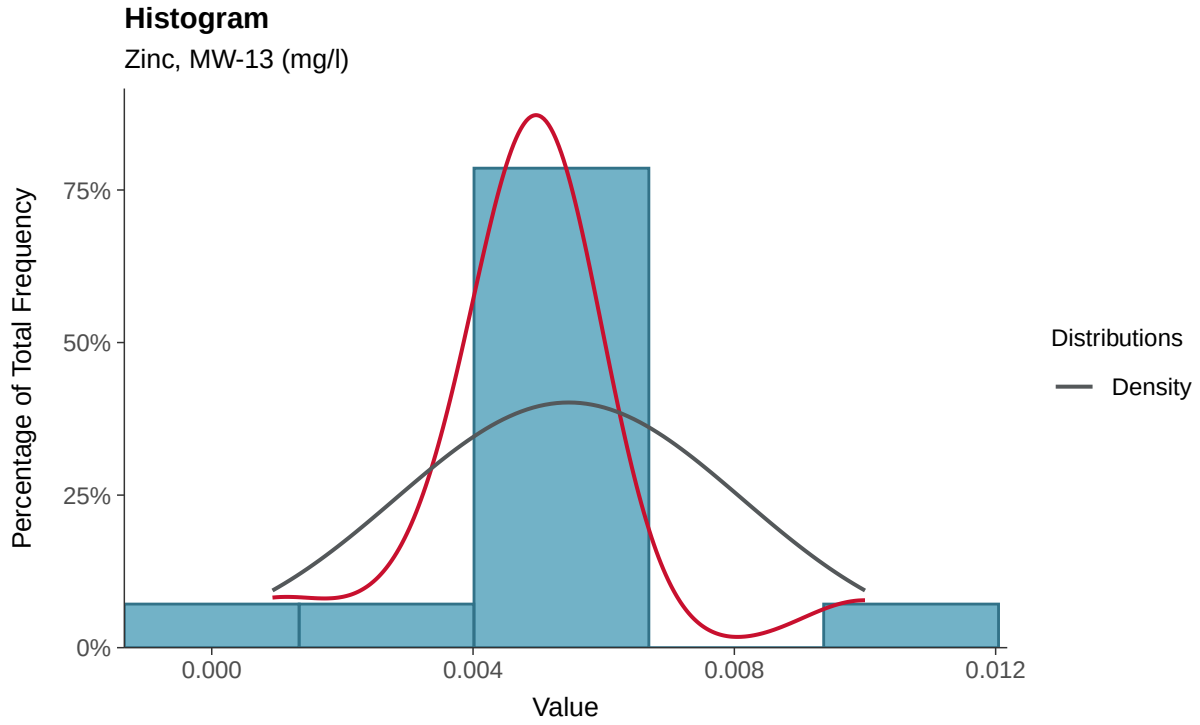



Trend Regression: Piecewise Linear-Linear
Vanadium, MW-13 (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
01/01/22
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Part 115: Zinc, MW-13

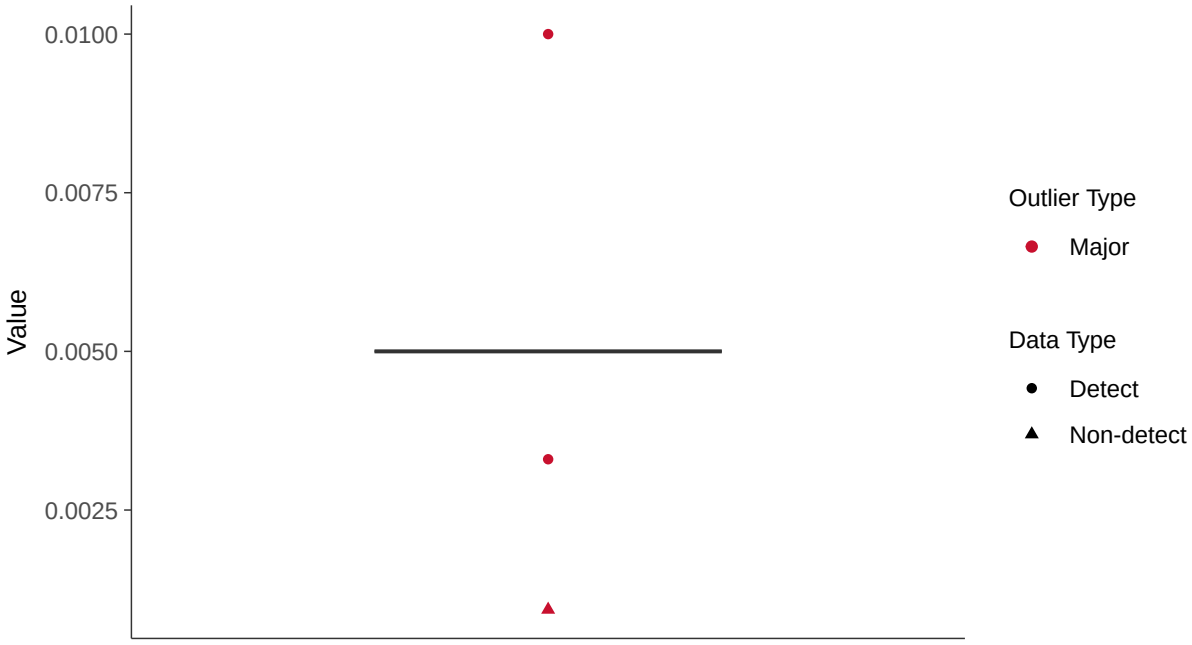
ID: 22_5_129





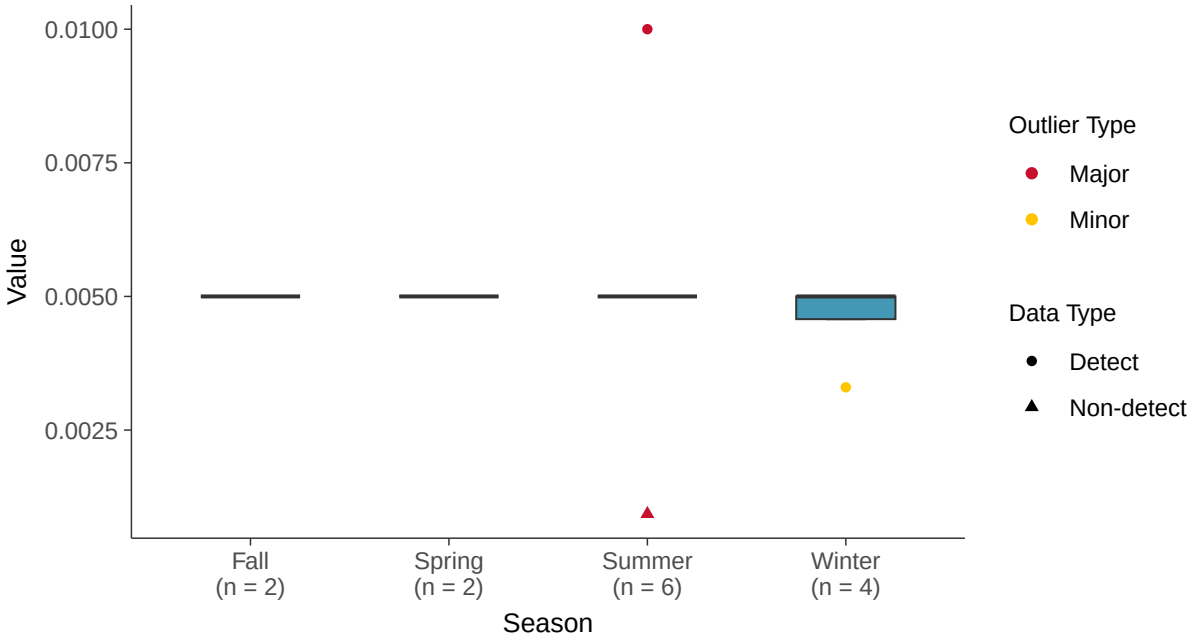
Boxplot

Zinc, MW-13 (mg/l)



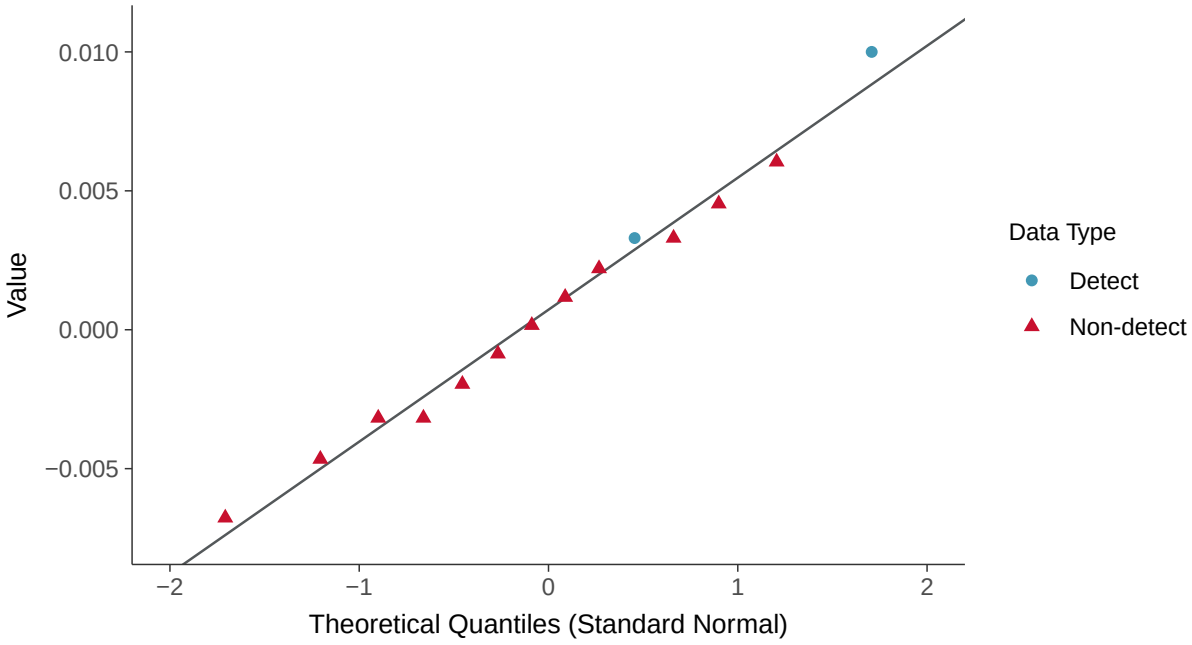
Boxplot by Season

Zinc, MW-13 (mg/l)



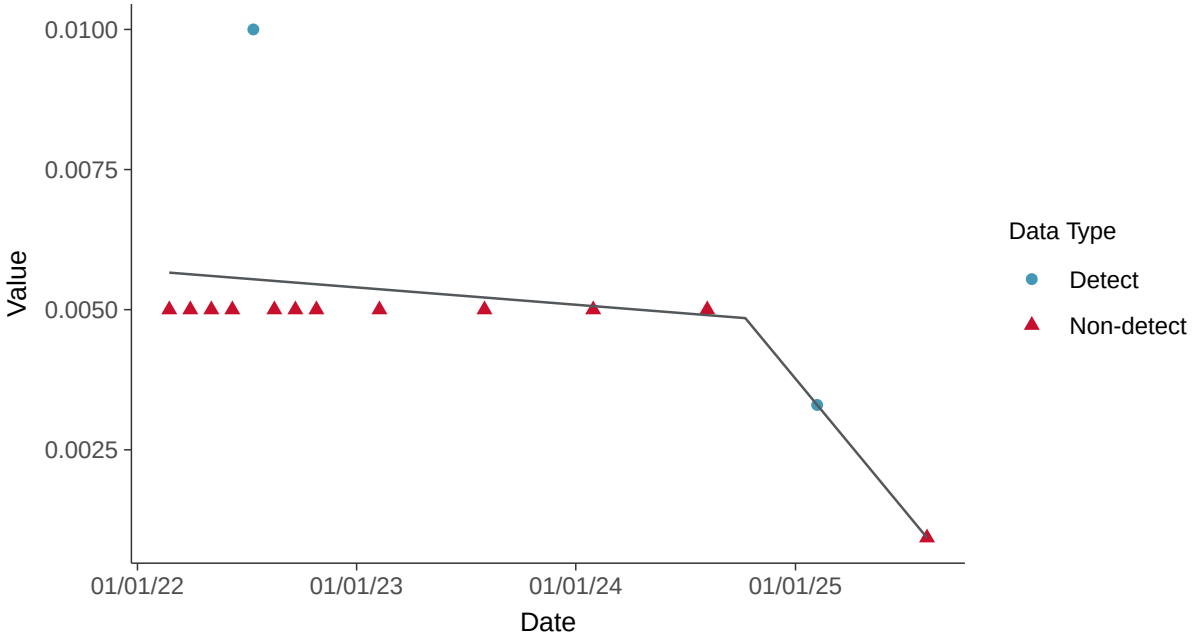
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-13 (mg/l)



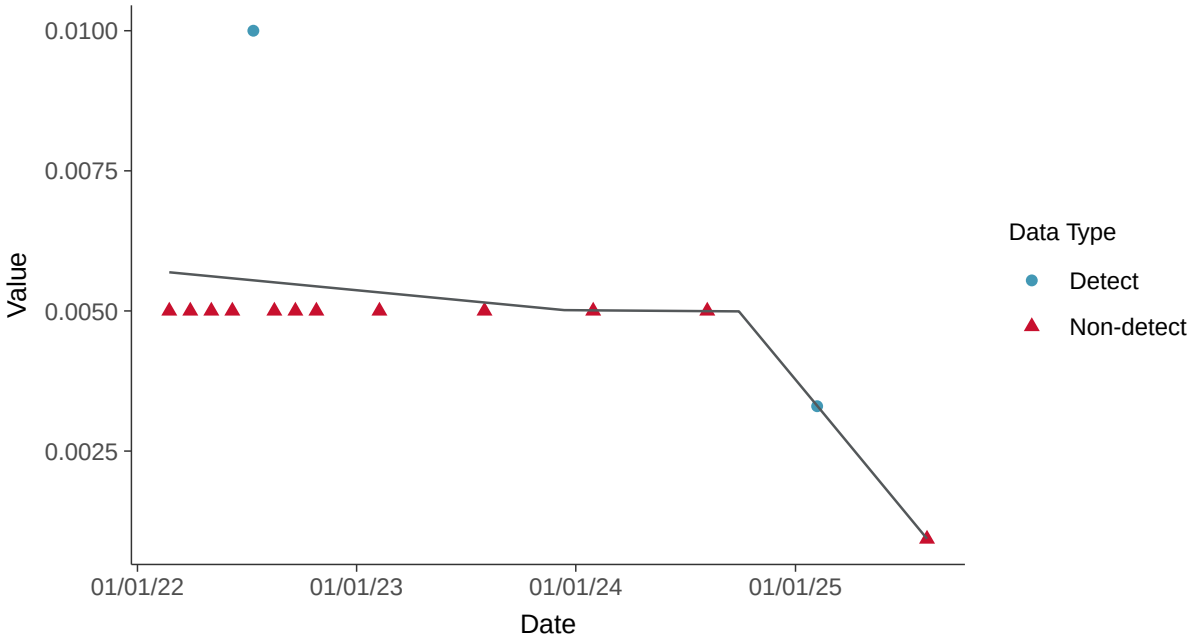
Trend Regression: Piecewise Linear-Linear

Zinc, MW-13 (mg/l)



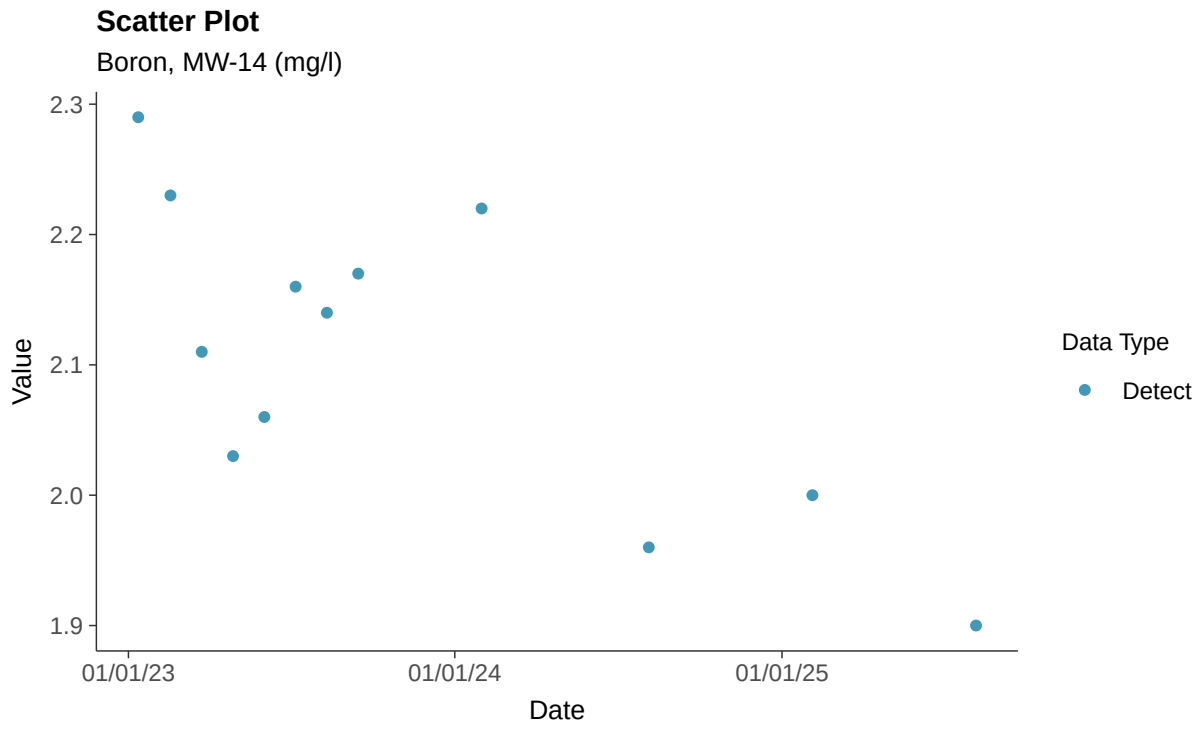
Trend Regression: Piecewise Linear-Linear-Linear

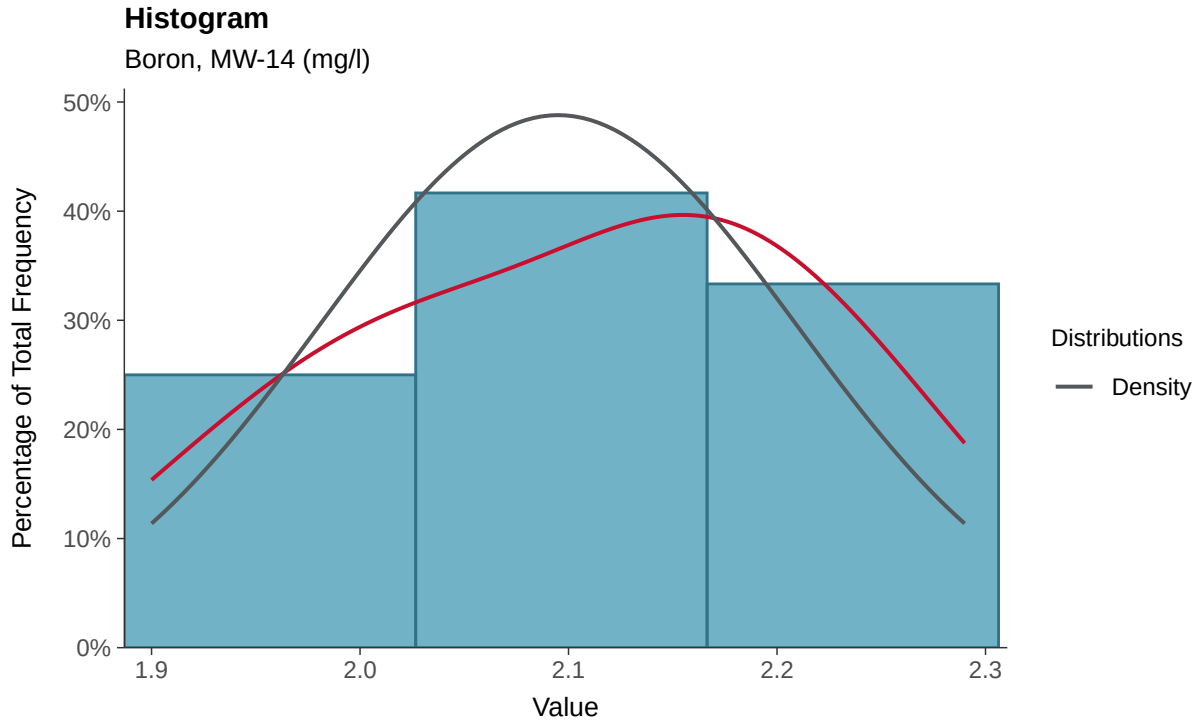
Zinc, MW-13 (mg/l)



Appendix III: Boron, MW-14

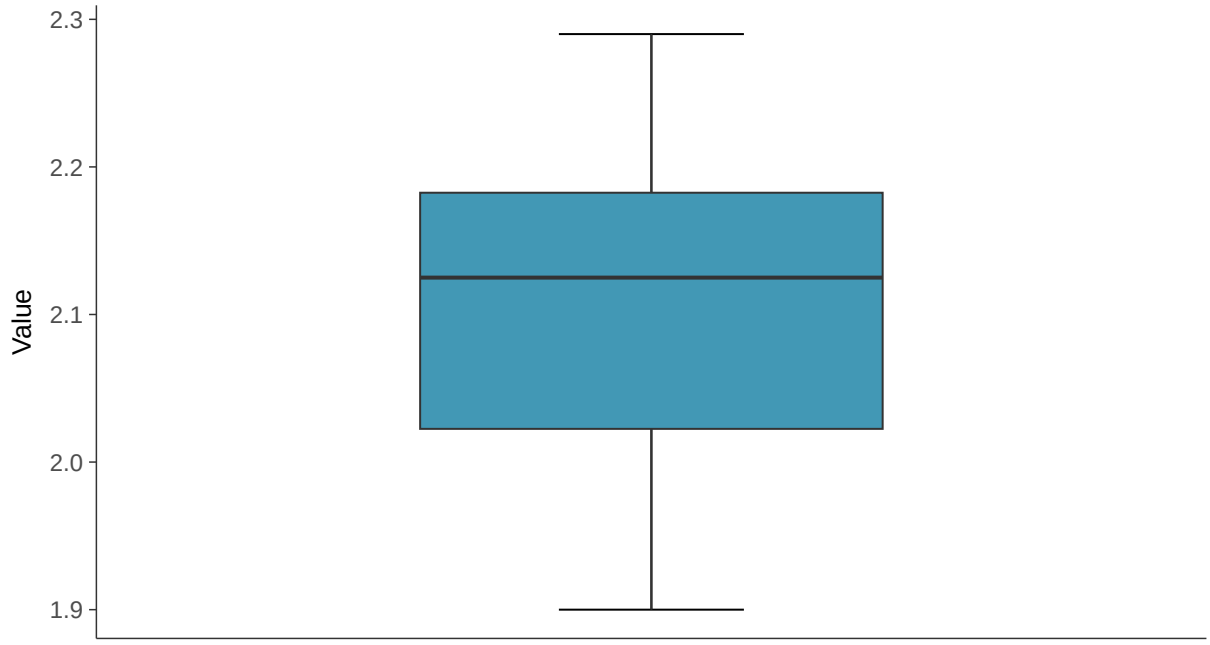
ID: 23_2_105





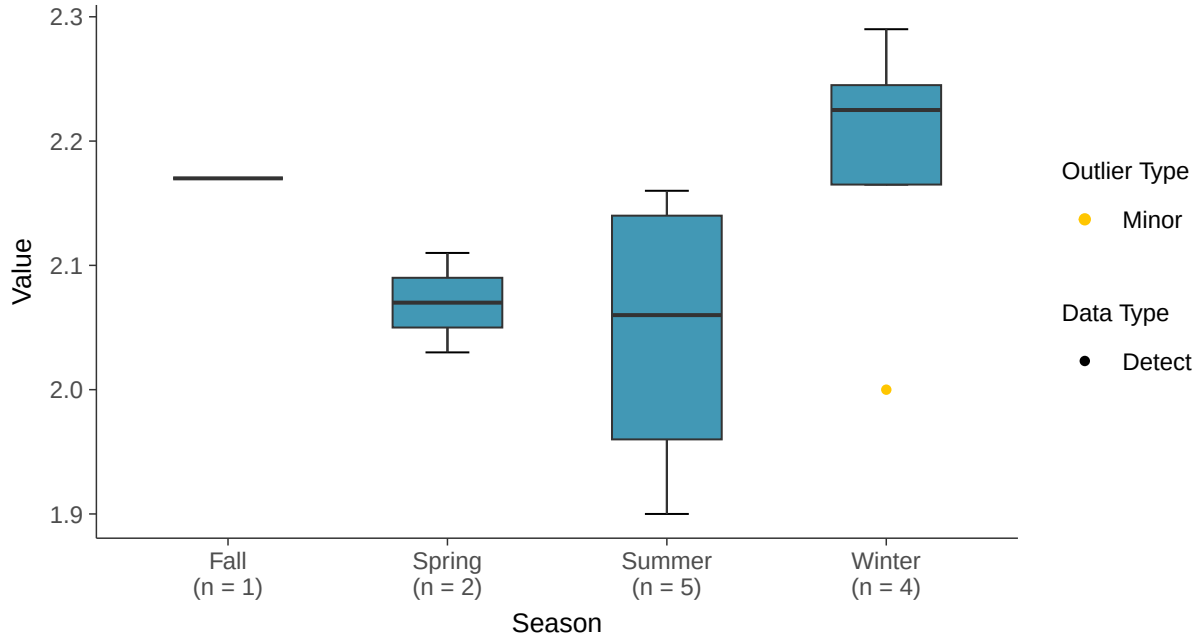
Boxplot

Boron, MW-14 (mg/l)



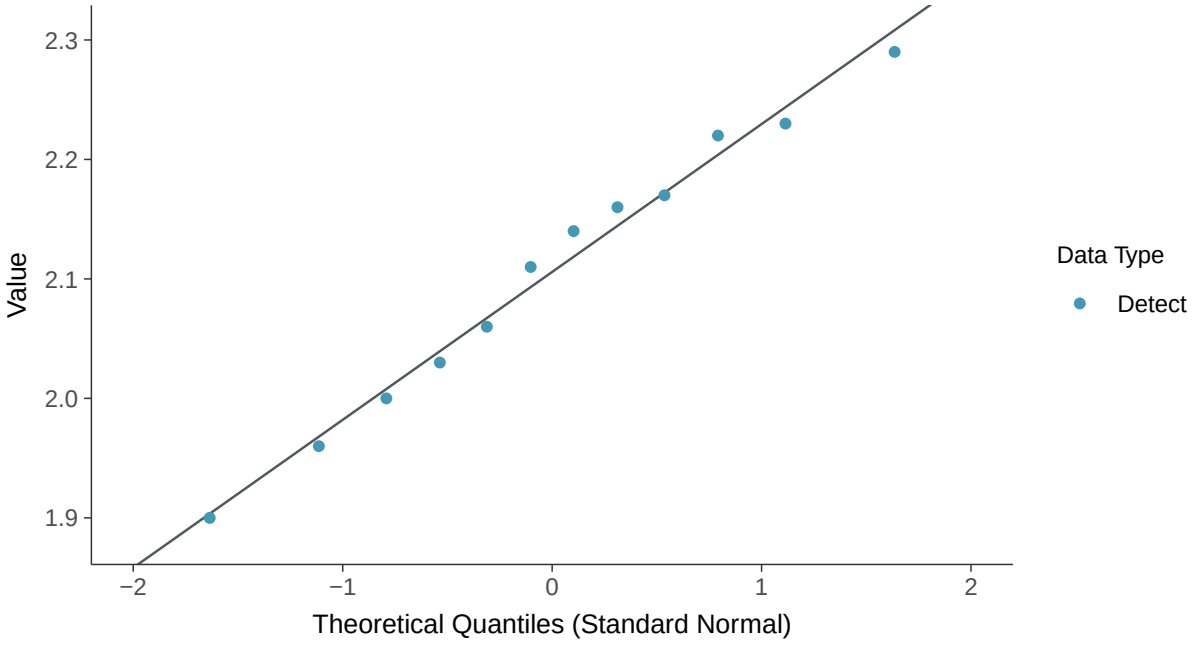
Boxplot by Season

Boron, MW-14 (mg/l)



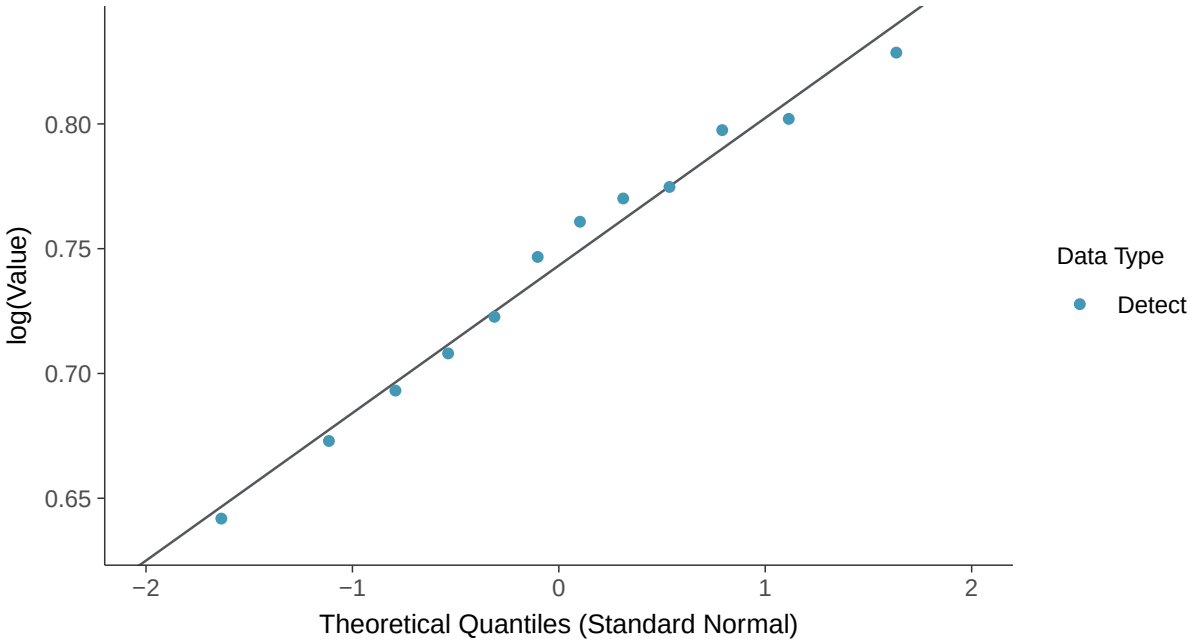
Normal Q-Q plot

Boron, MW-14 (mg/l)



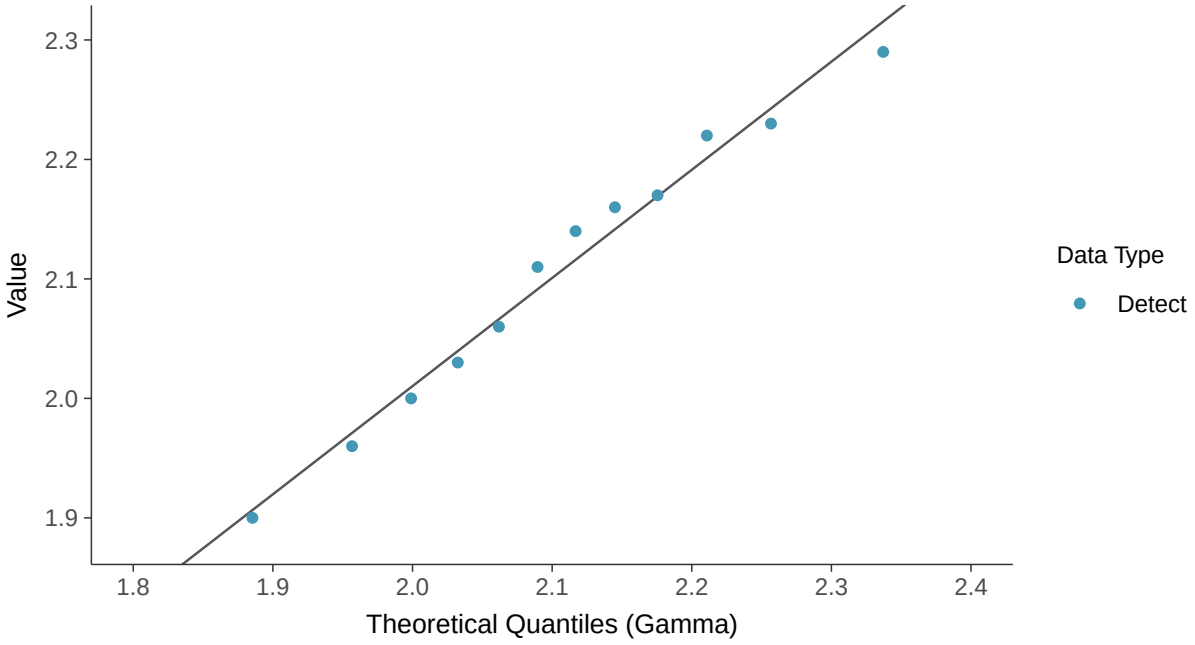
Lognormal Q-Q plot

Boron, MW-14 (mg/l)



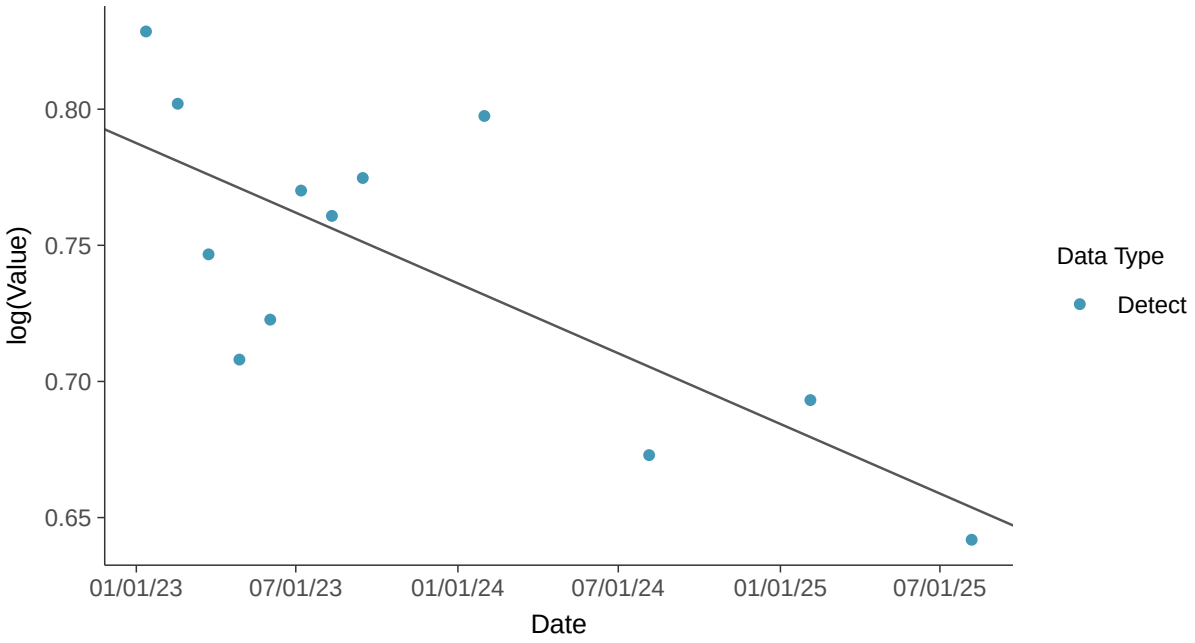
Gamma Q-Q plot

Boron, MW-14 (mg/l)



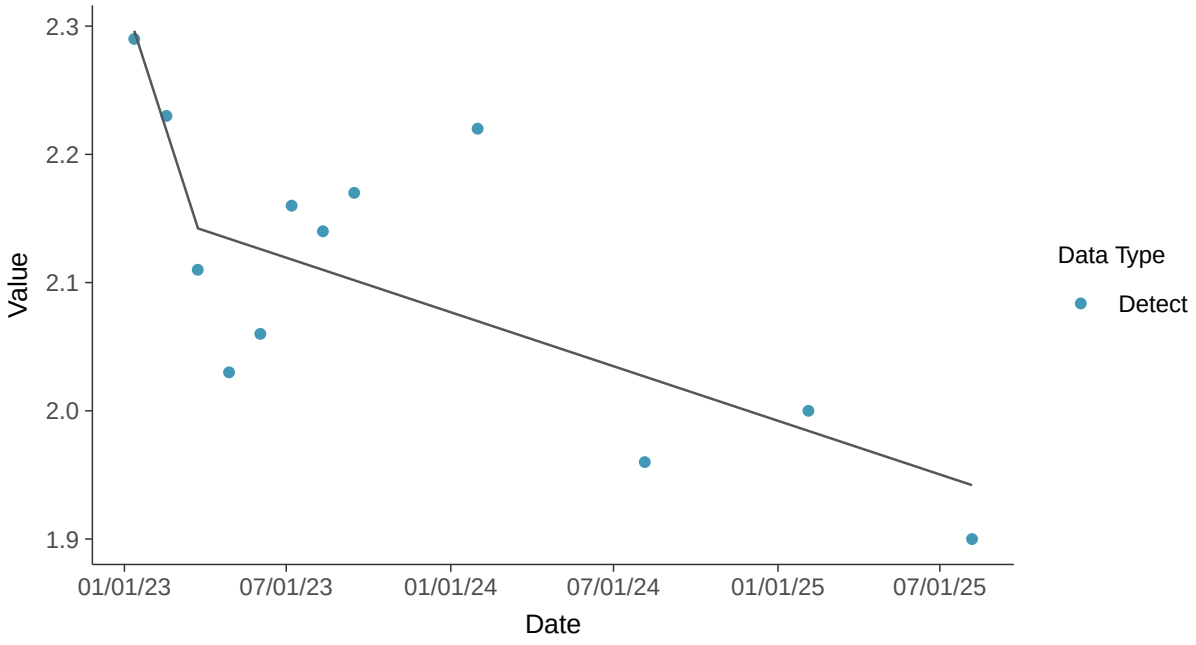
Trend Regression: Lognormal MLE

Boron, MW-14 (mg/l)



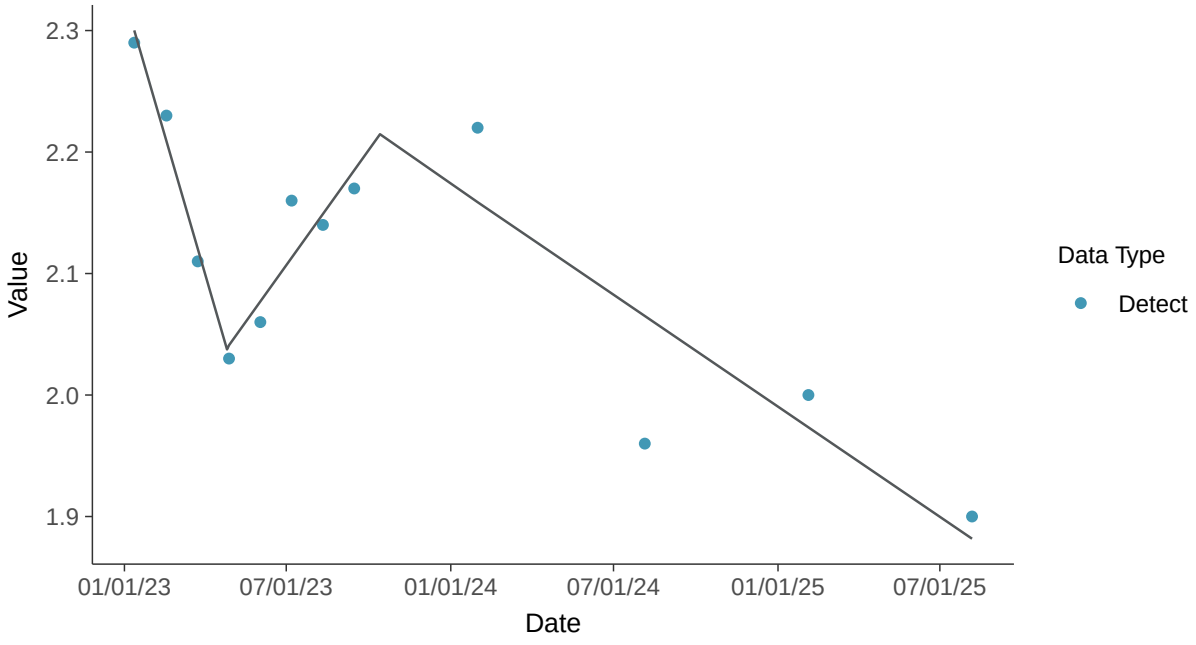
Trend Regression: Piecewise Linear-Linear

Boron, MW-14 (mg/l)



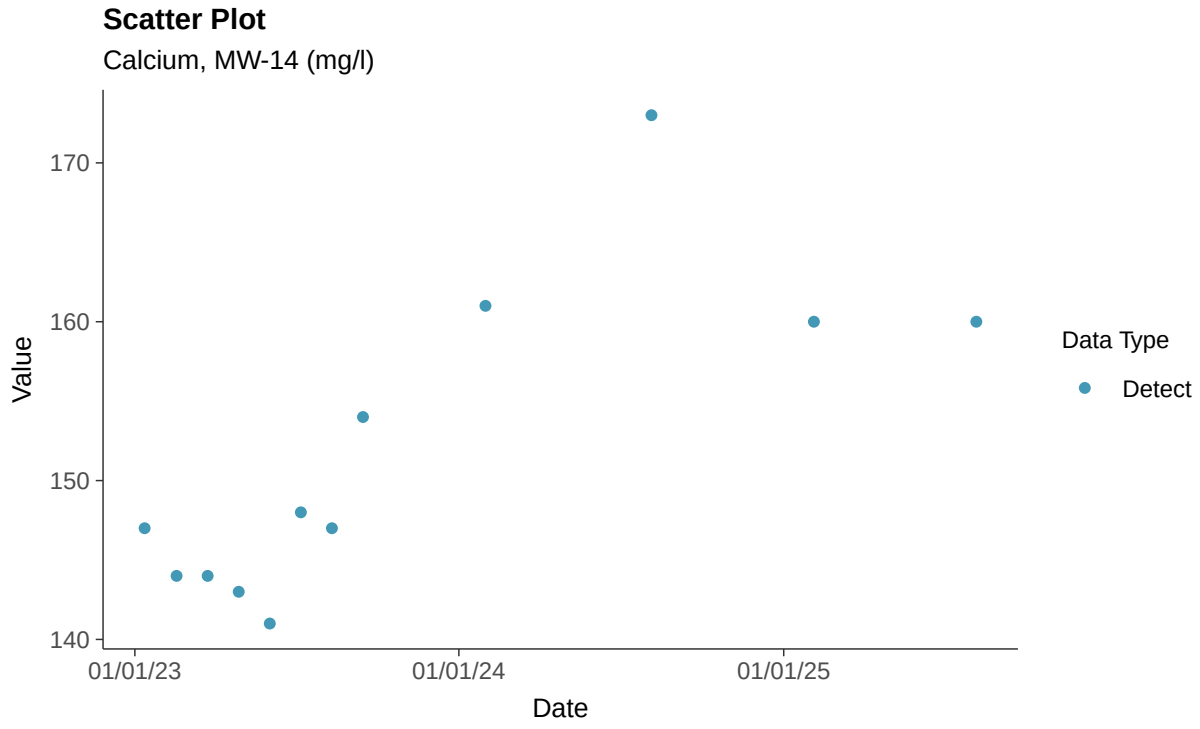
Trend Regression: Piecewise Linear-Linear-Linear

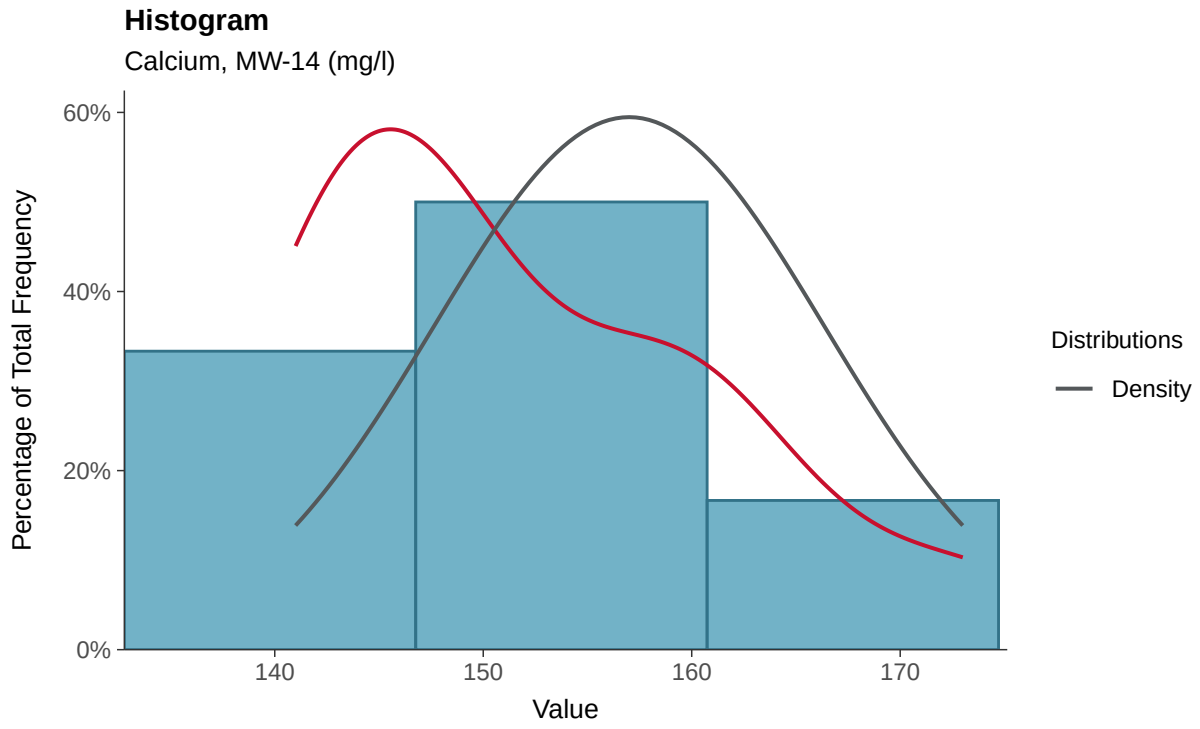
Boron, MW-14 (mg/l)



Appendix III: Calcium, MW-14

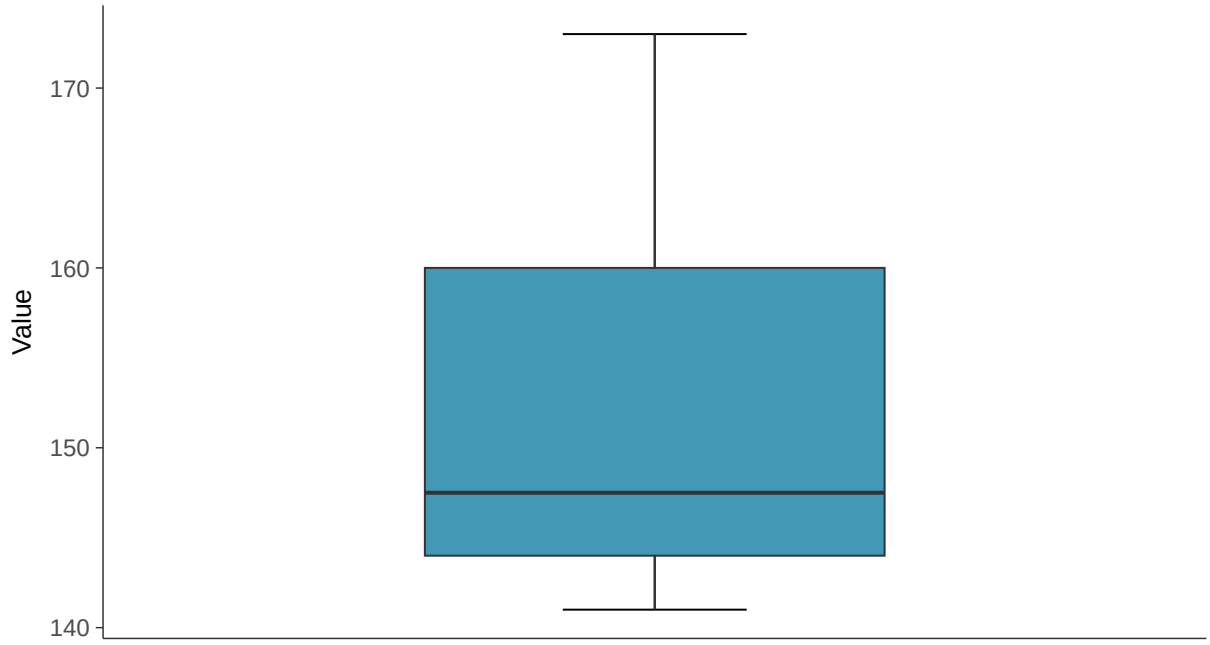
ID: 23_2_107





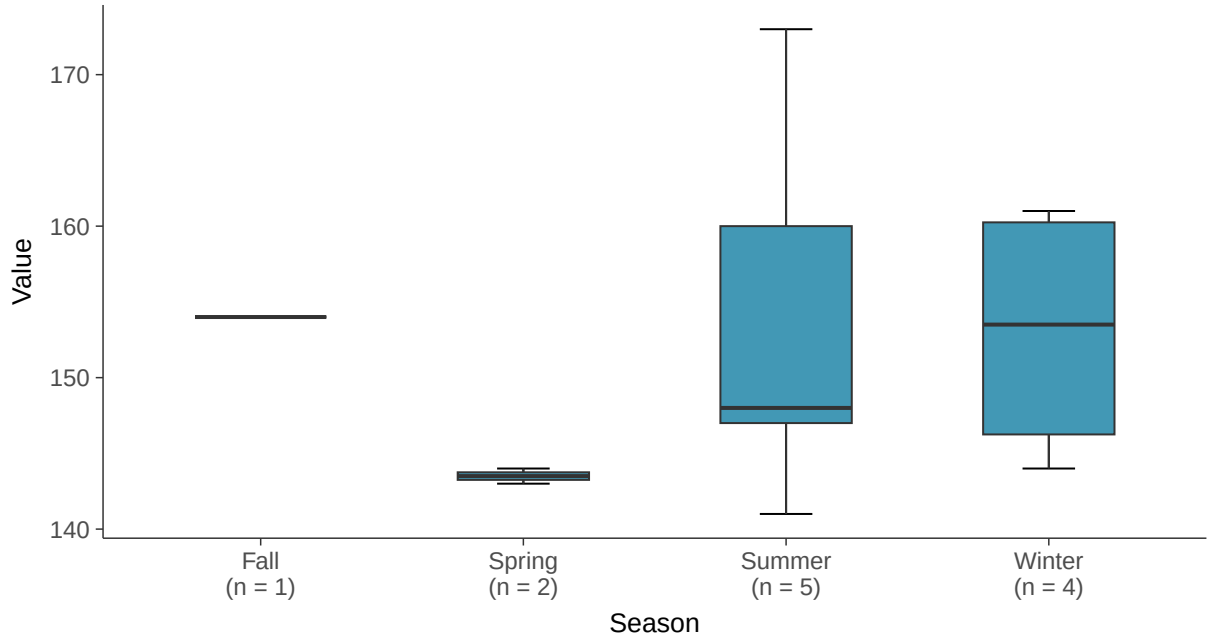
Boxplot

Calcium, MW-14 (mg/l)



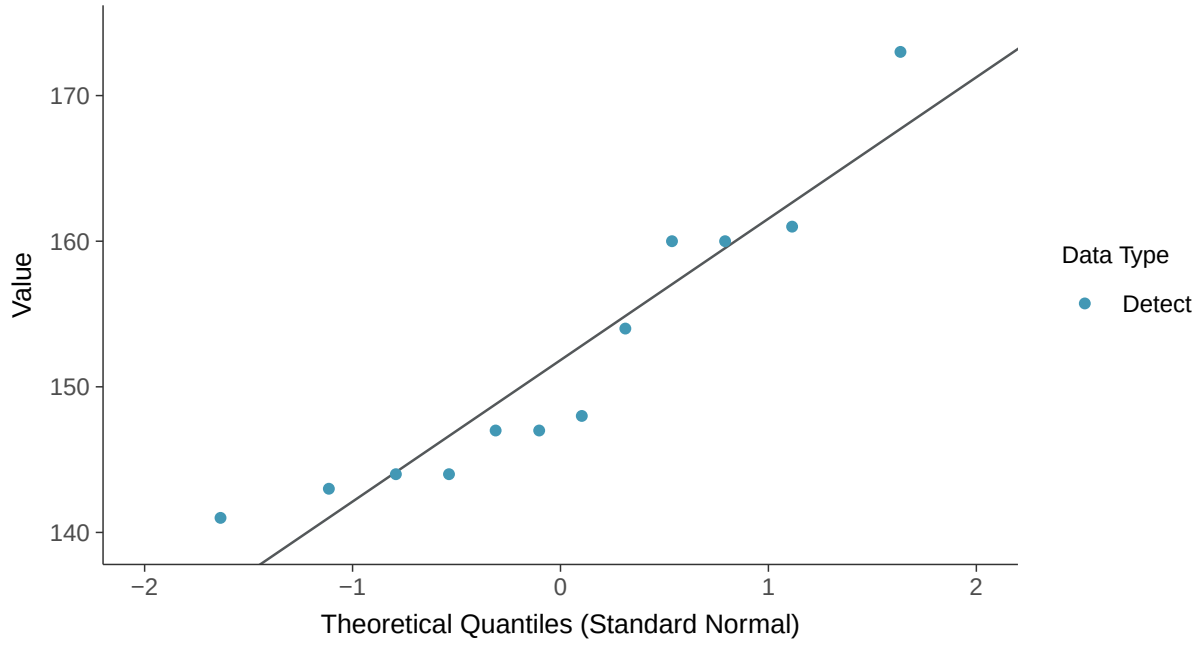
Boxplot by Season

Calcium, MW-14 (mg/l)



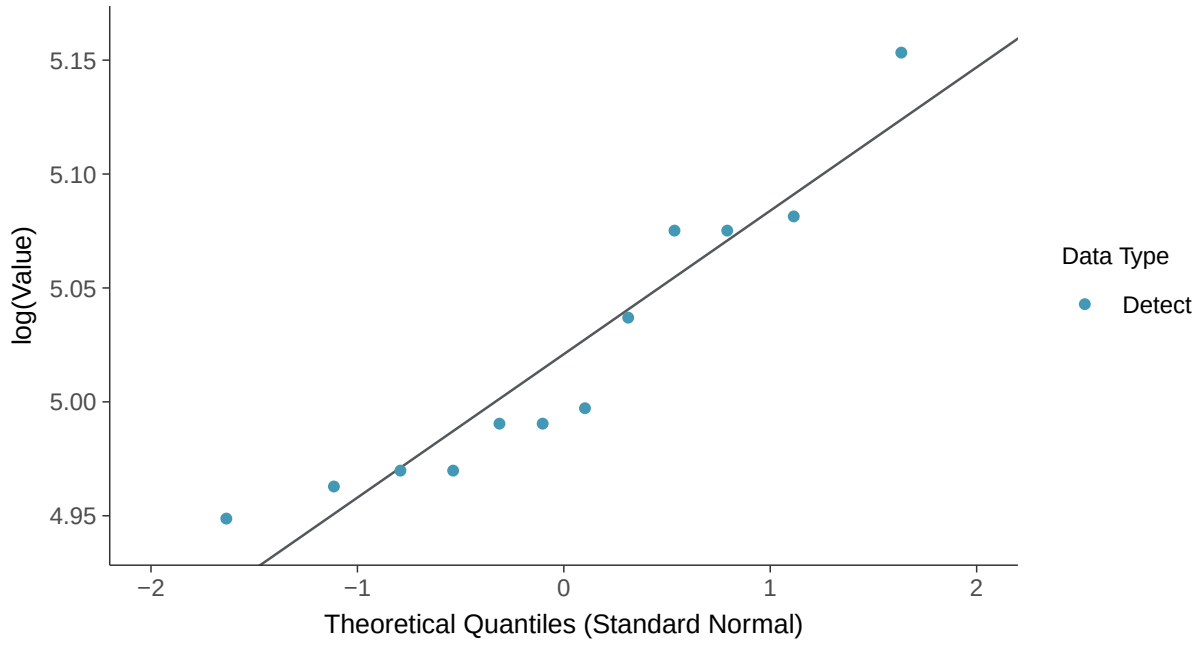
Normal Q-Q plot

Calcium, MW-14 (mg/l)



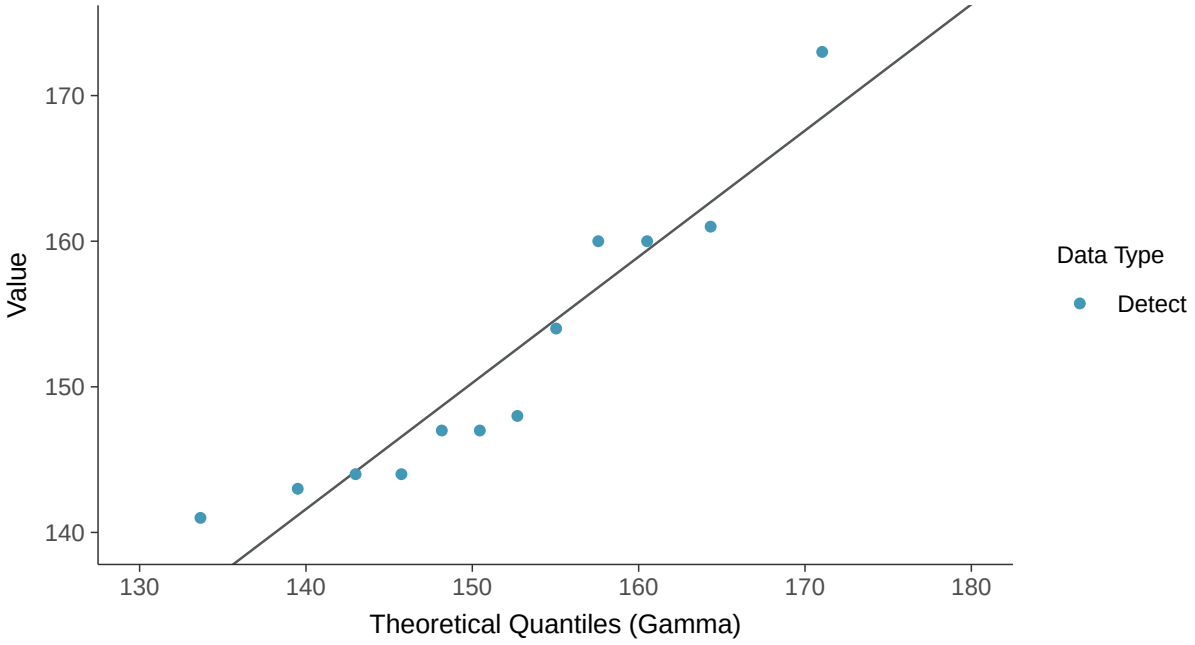
Lognormal Q-Q plot

Calcium, MW-14 (mg/l)



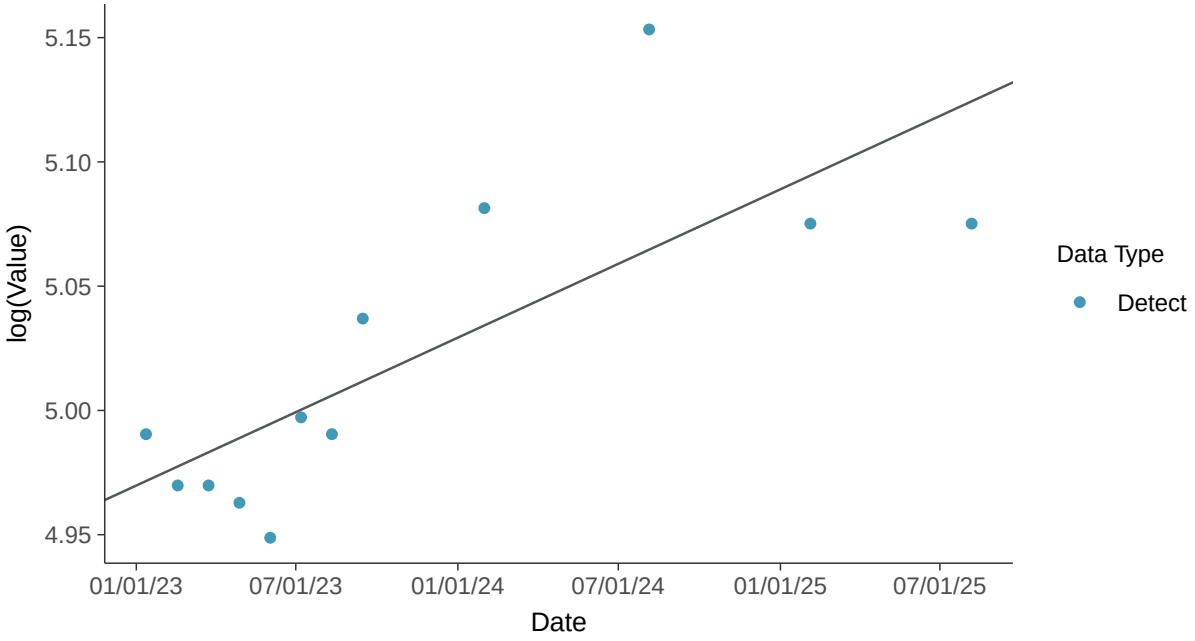
Gamma Q-Q plot

Calcium, MW-14 (mg/l)



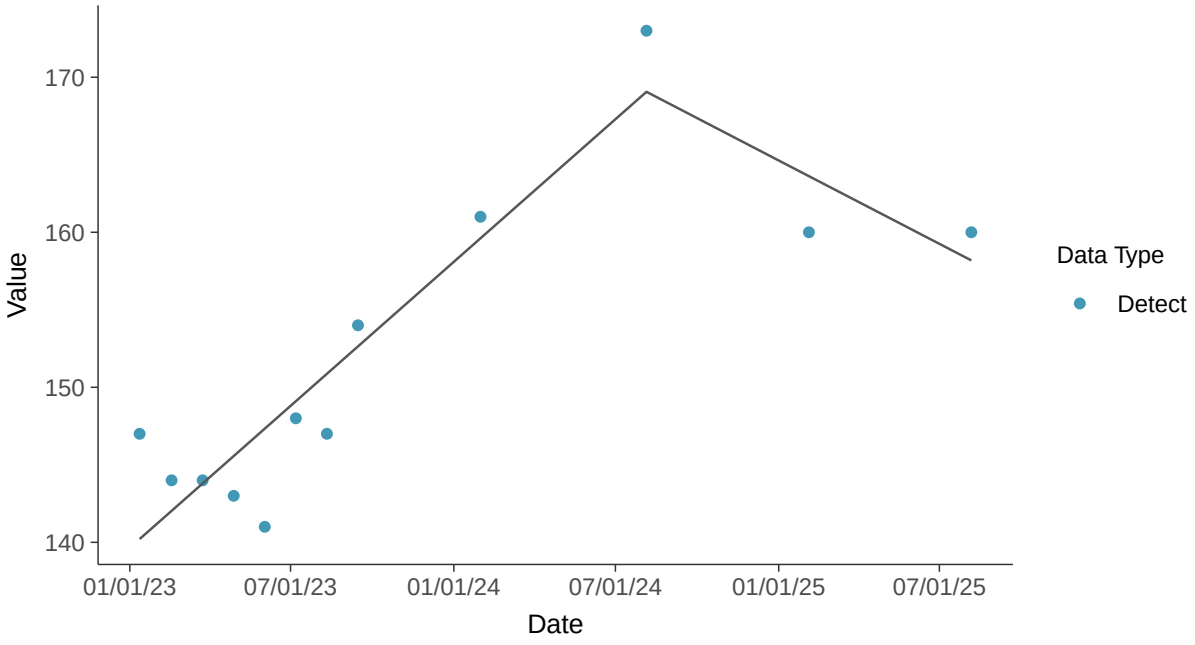
Trend Regression: Lognormal MLE

Calcium, MW-14 (mg/l)



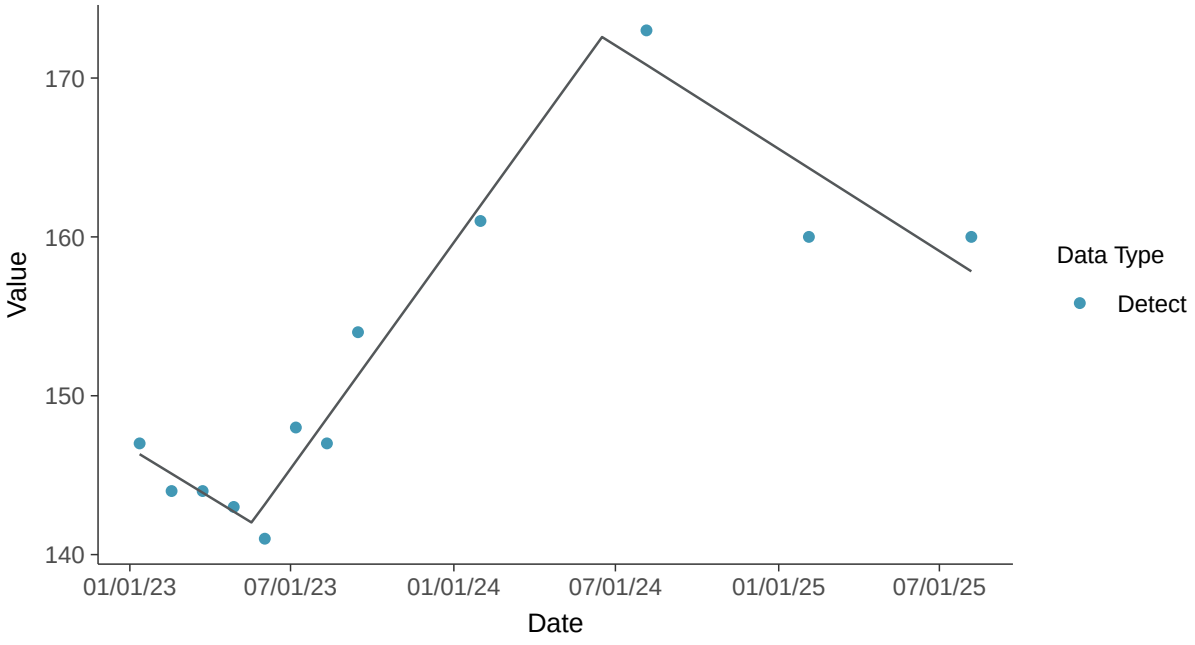
Trend Regression: Piecewise Linear-Linear

Calcium, MW-14 (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-14 (mg/l)

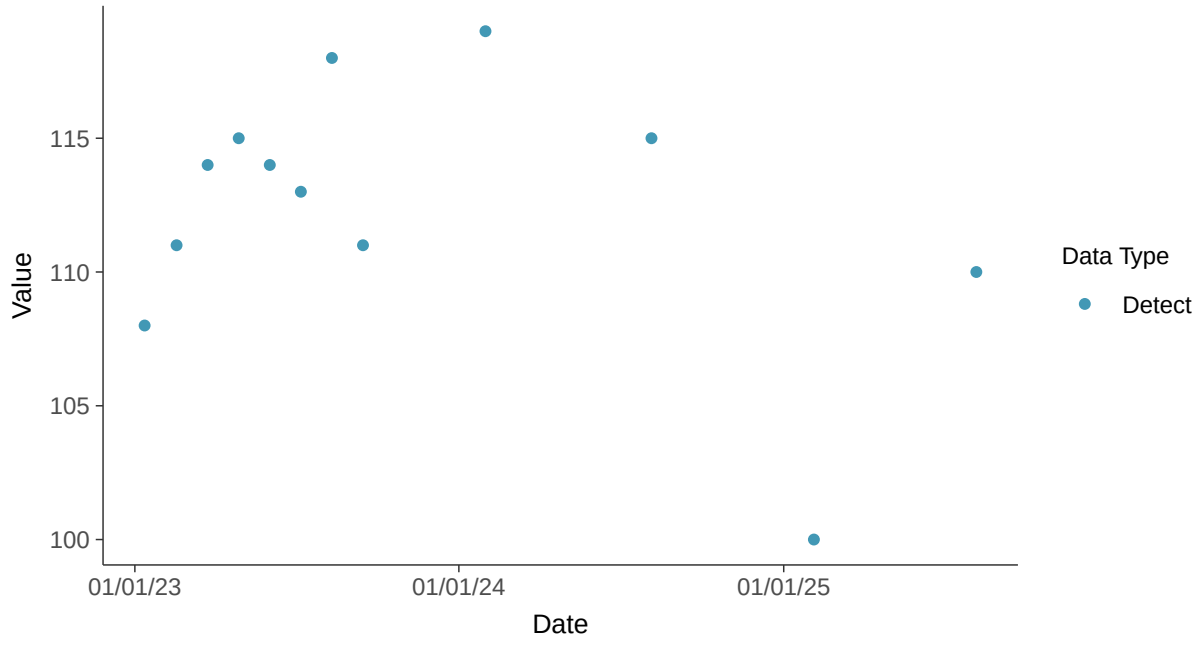


Appendix III: Chloride, MW-14

ID: 23_2_108

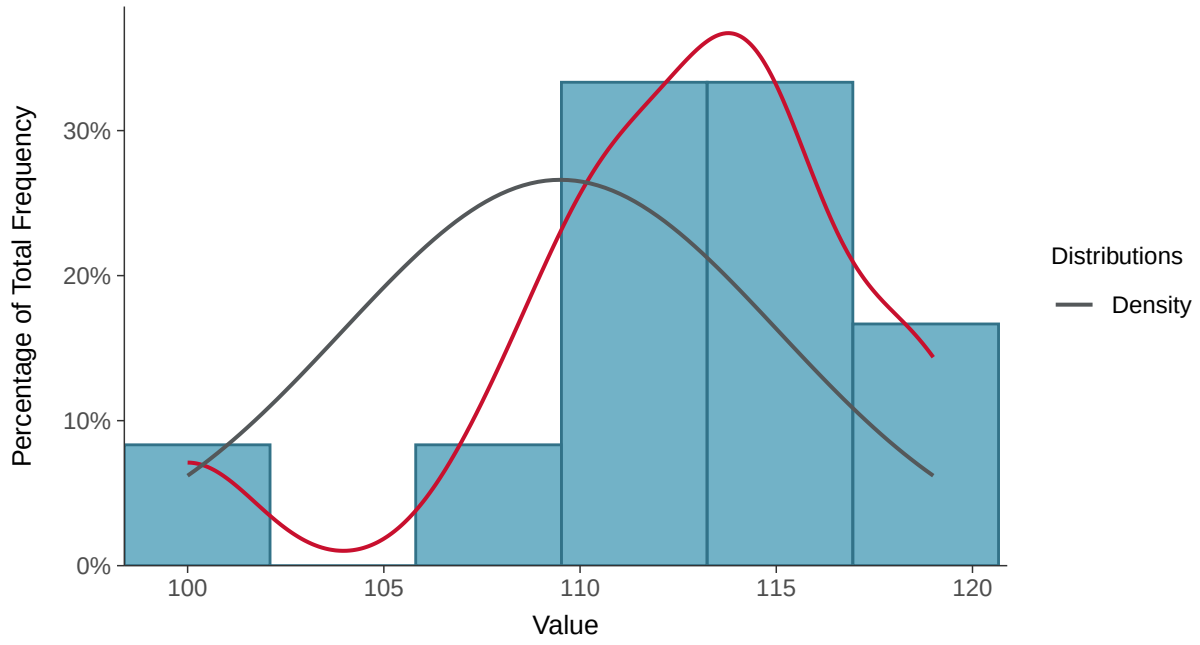
Scatter Plot

Chloride, MW-14 (mg/l)



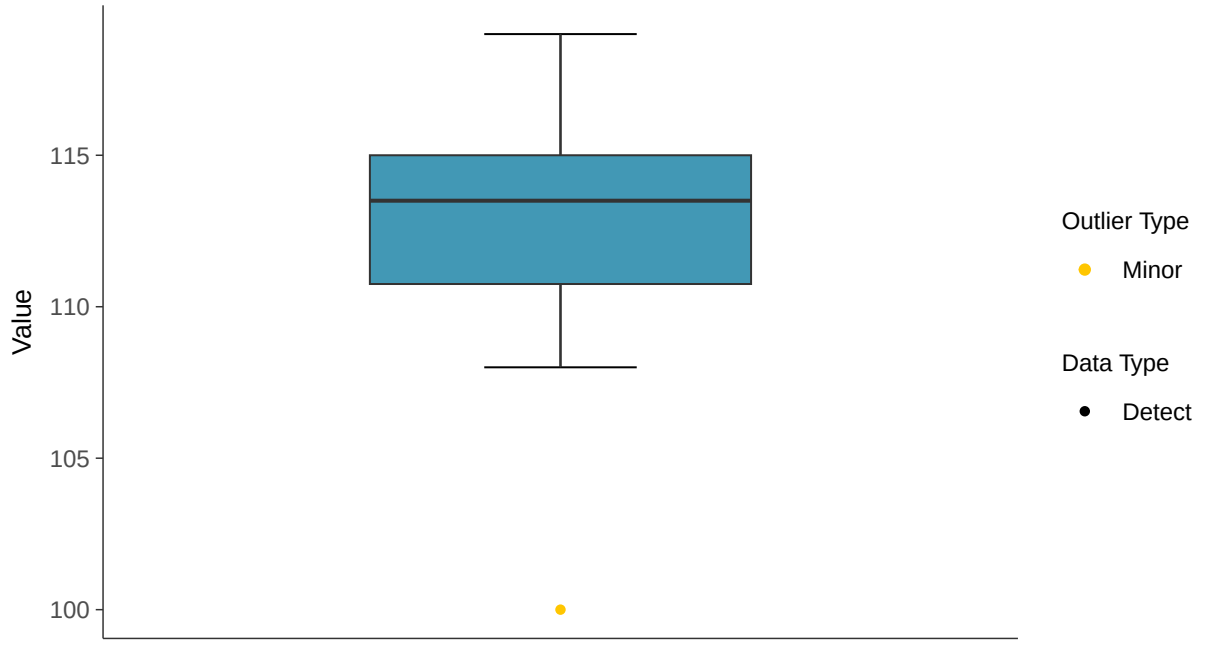
Histogram

Chloride, MW-14 (mg/l)



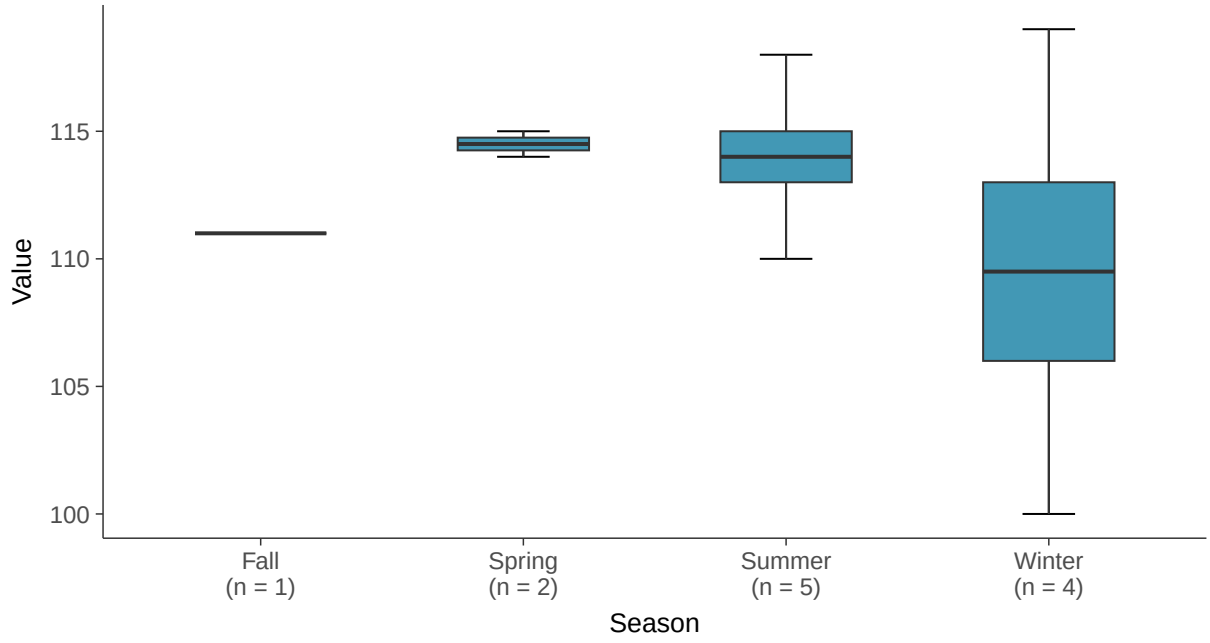
Boxplot

Chloride, MW-14 (mg/l)



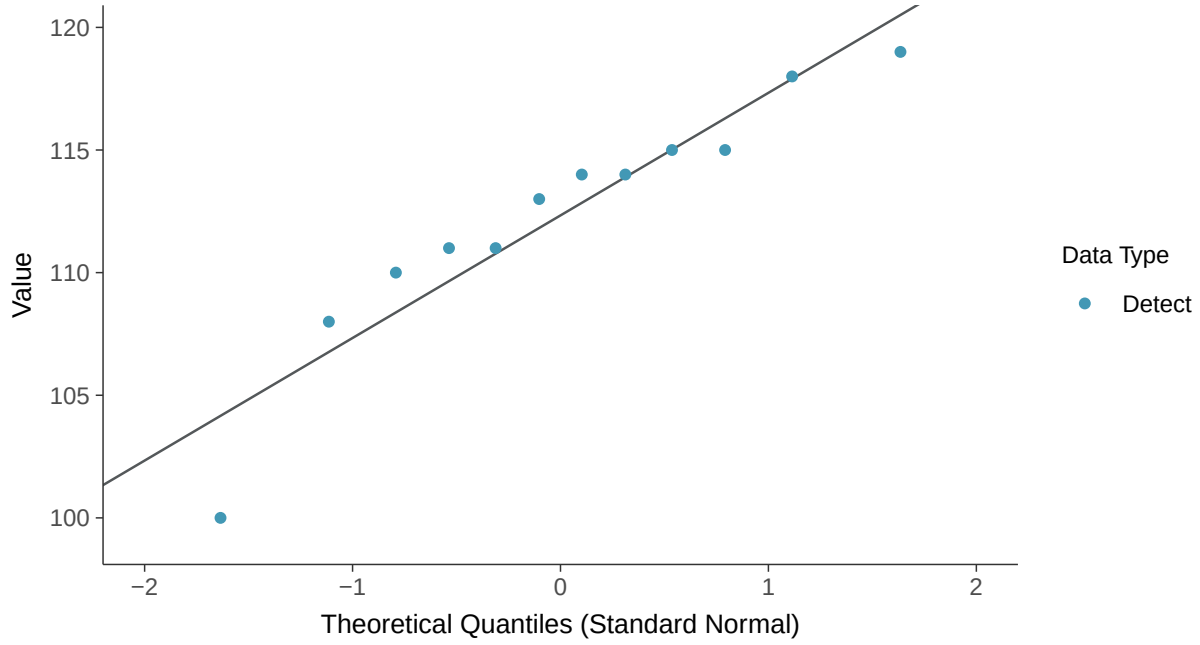
Boxplot by Season

Chloride, MW-14 (mg/l)



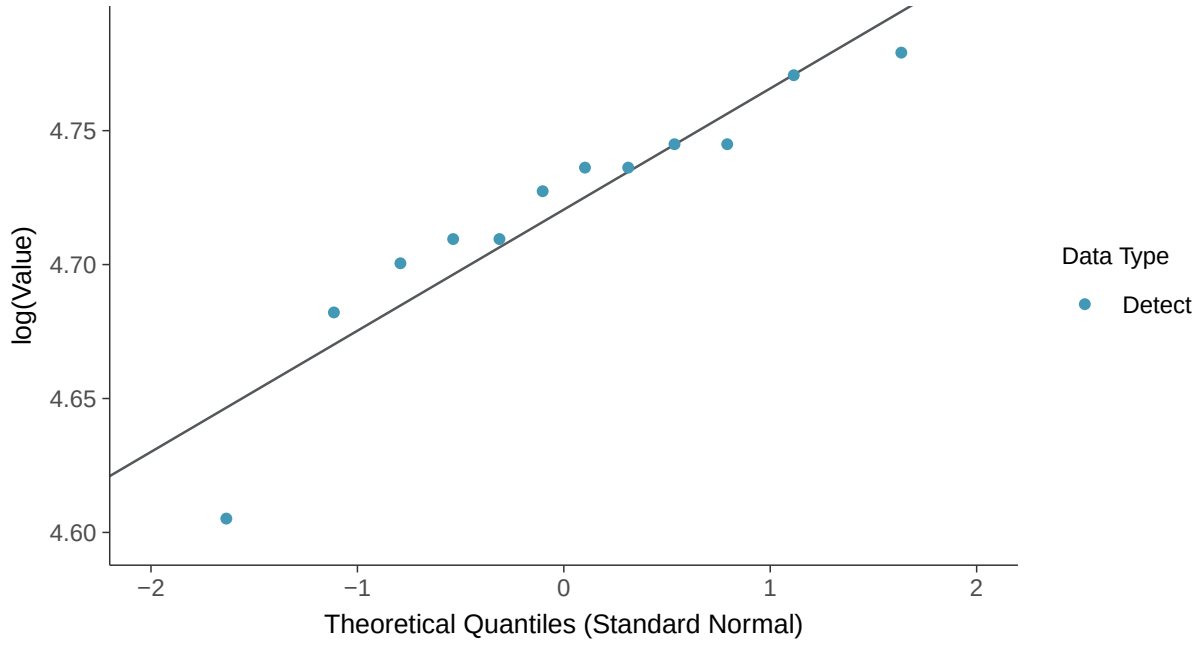
Normal Q-Q plot

Chloride, MW-14 (mg/l)



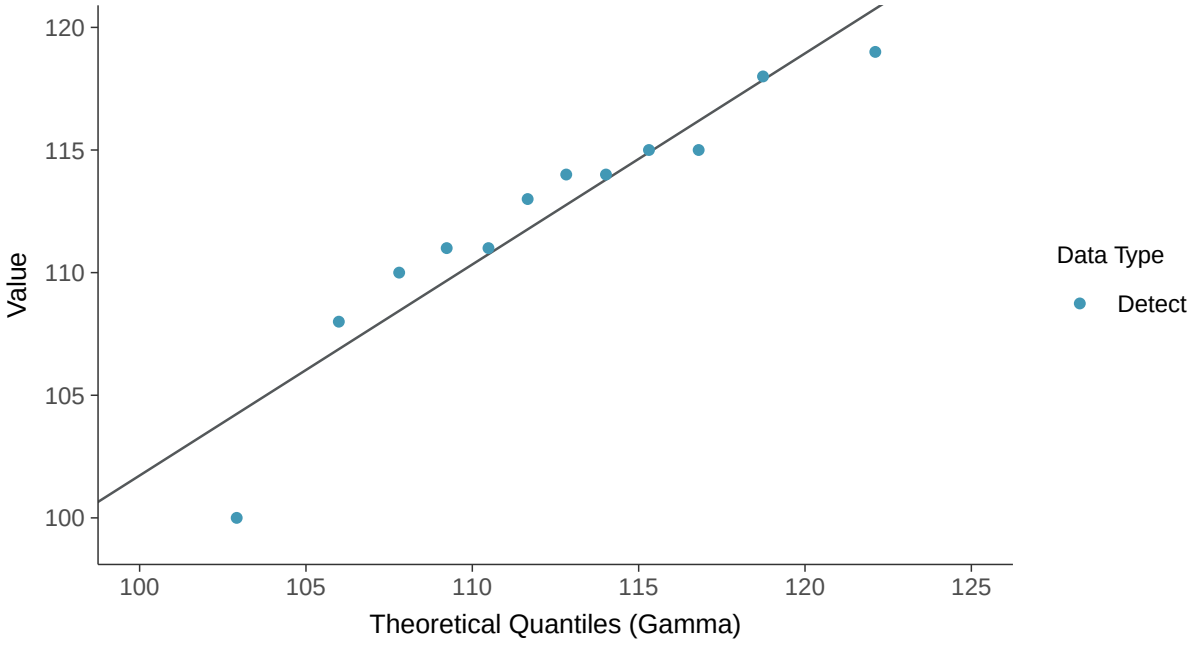
Lognormal Q-Q plot

Chloride, MW-14 (mg/l)



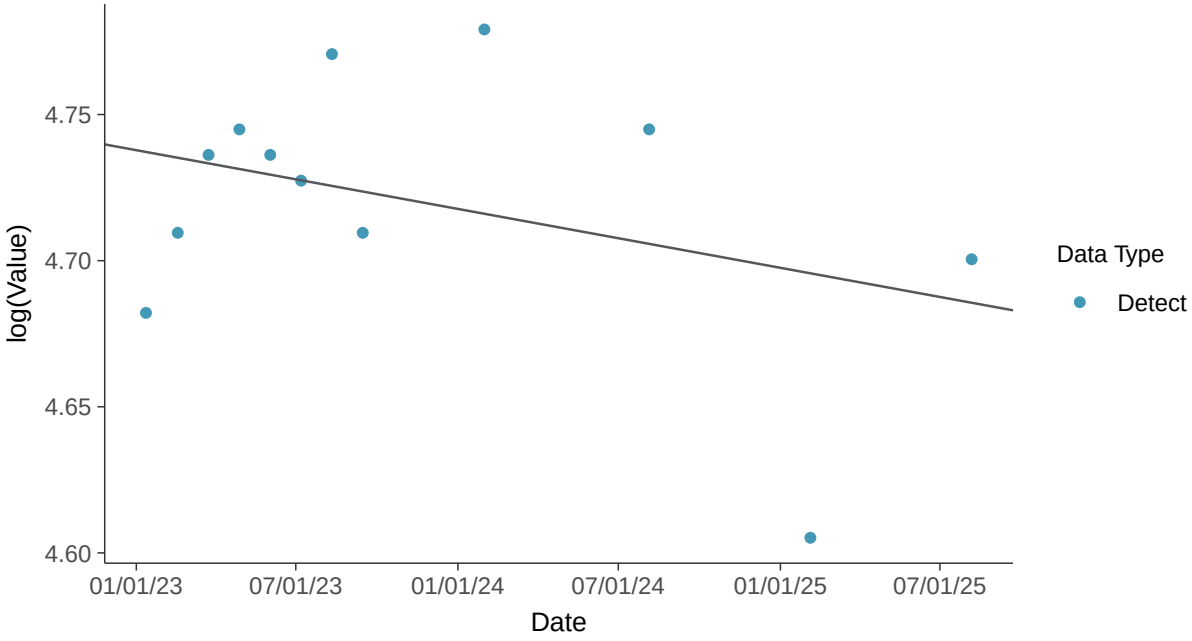
Gamma Q-Q plot

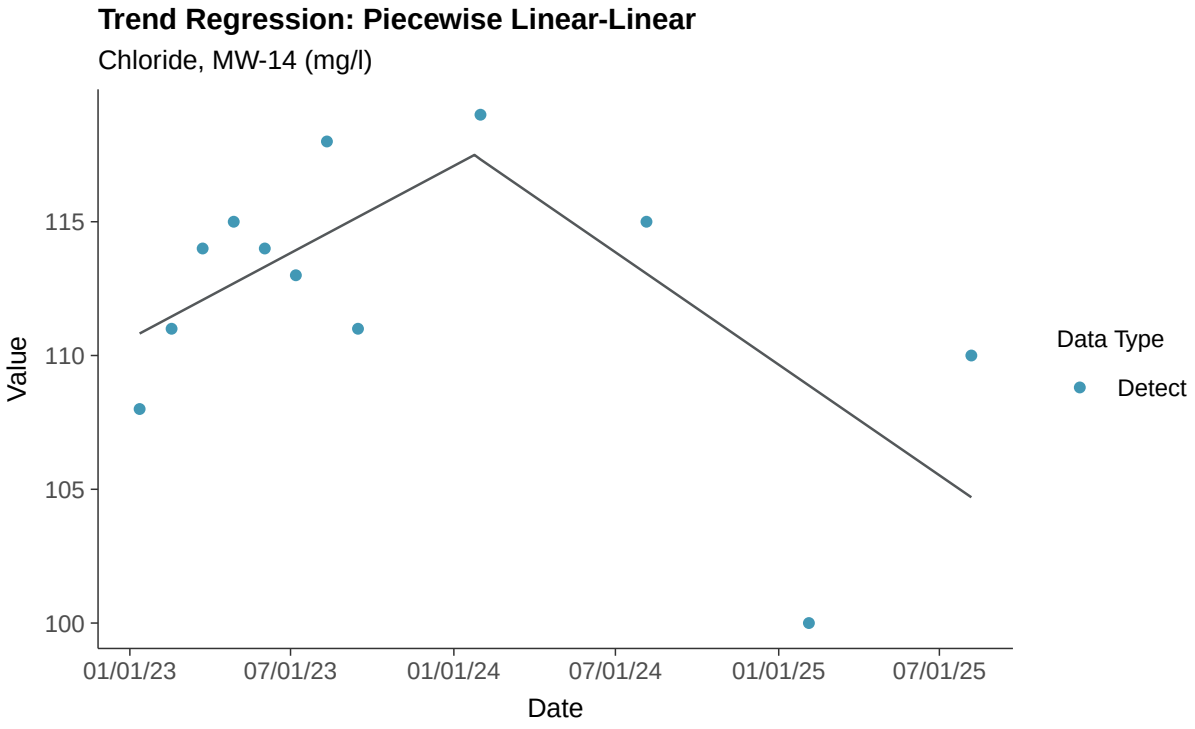
Chloride, MW-14 (mg/l)



Trend Regression: Lognormal MLE

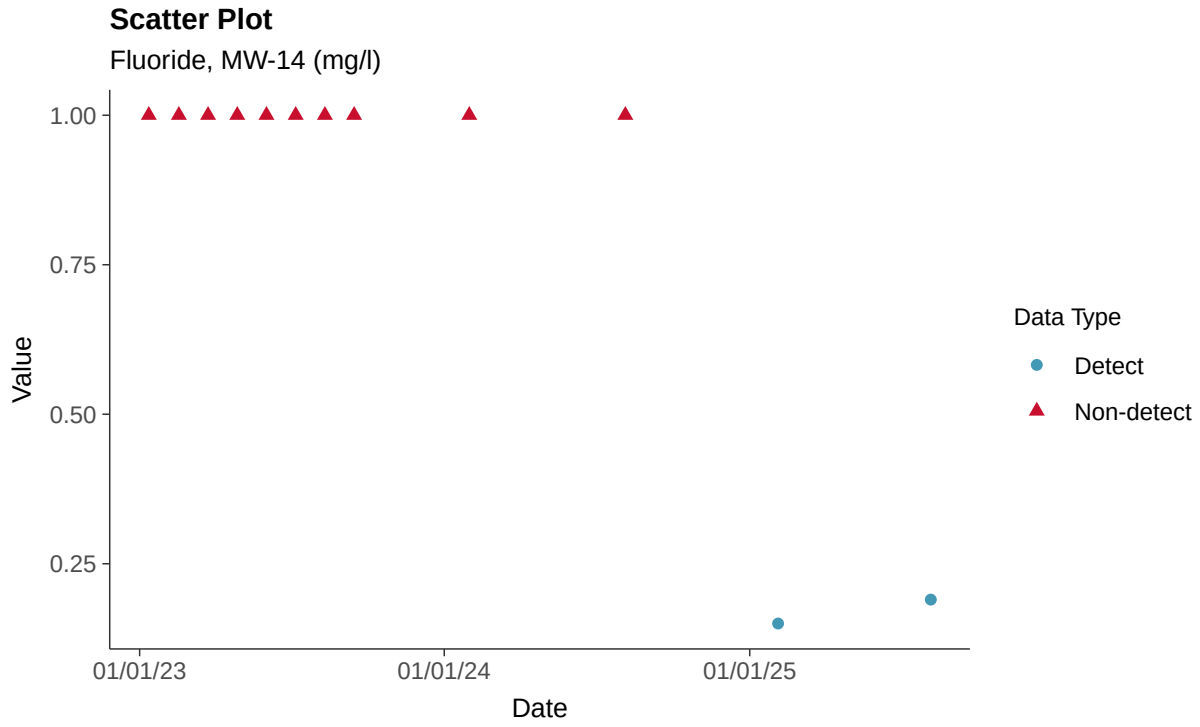
Chloride, MW-14 (mg/l)

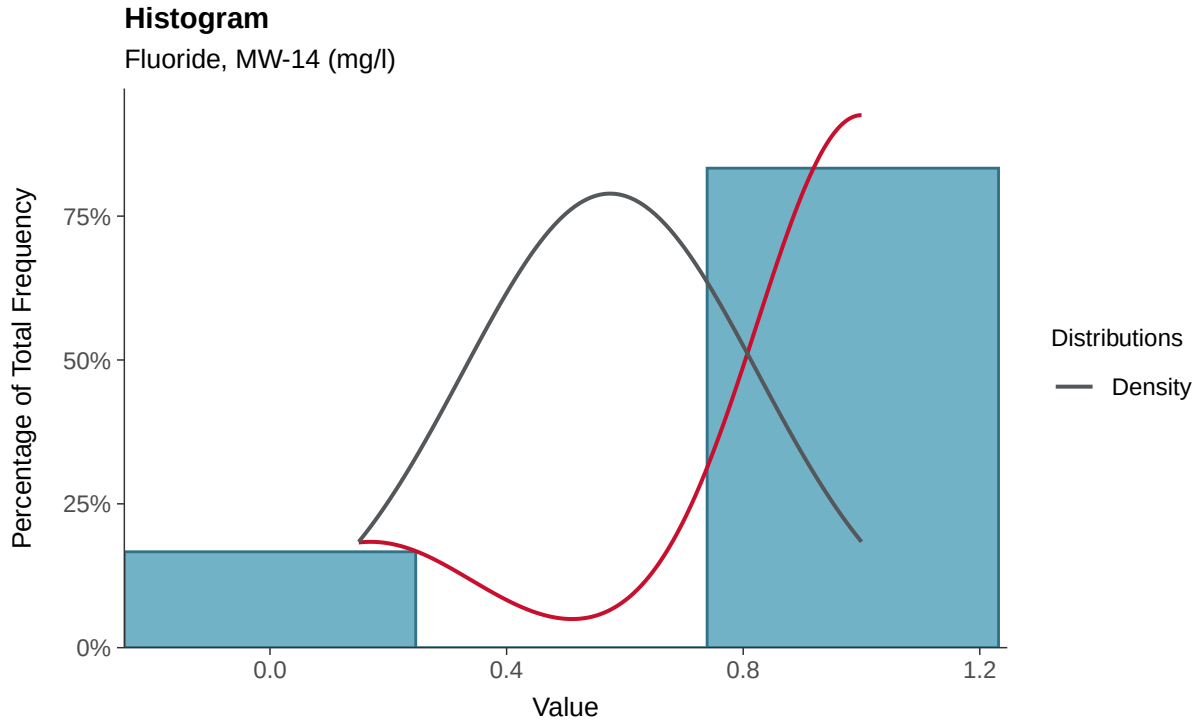



Trend Regression: Piecewise Linear-Linear
Chloride, MW-14 (mg/l)
Value
115
110
105
100
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect

Appendix III: Fluoride, MW-14

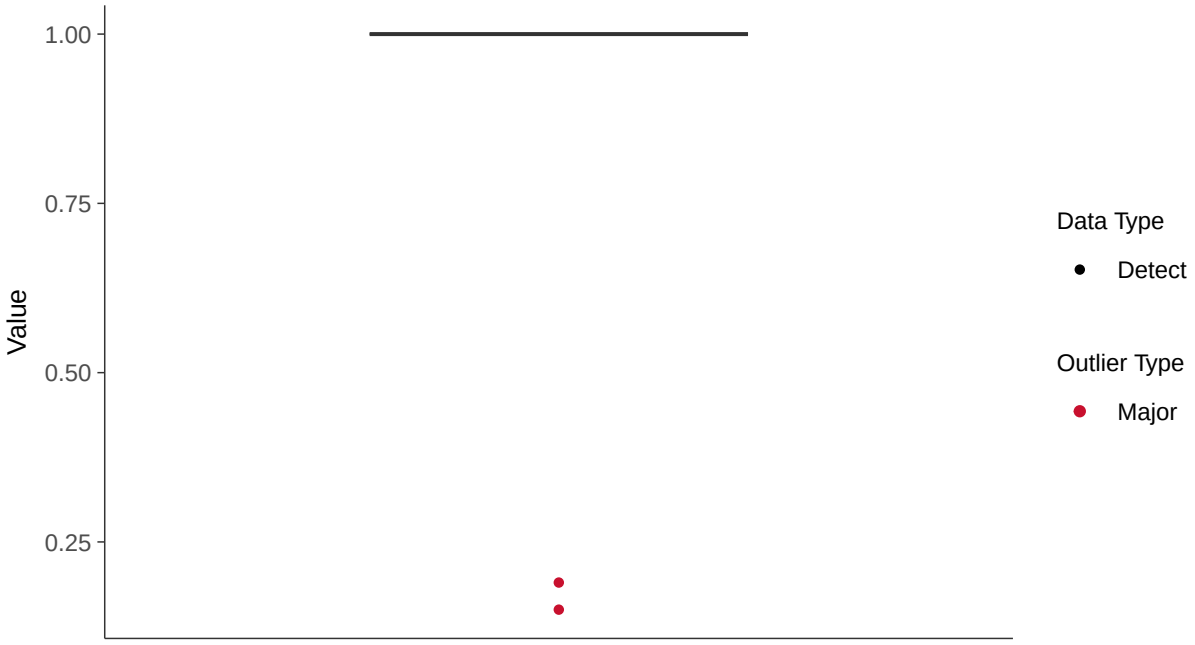
ID: 23_2_112





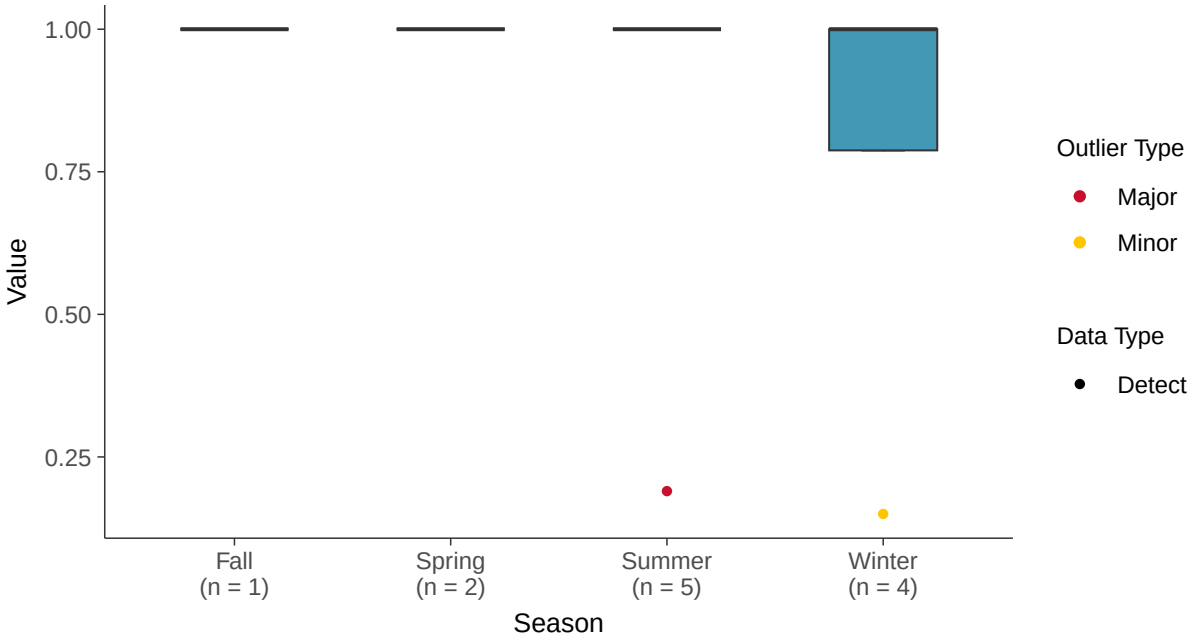
Boxplot

Fluoride, MW-14 (mg/l)



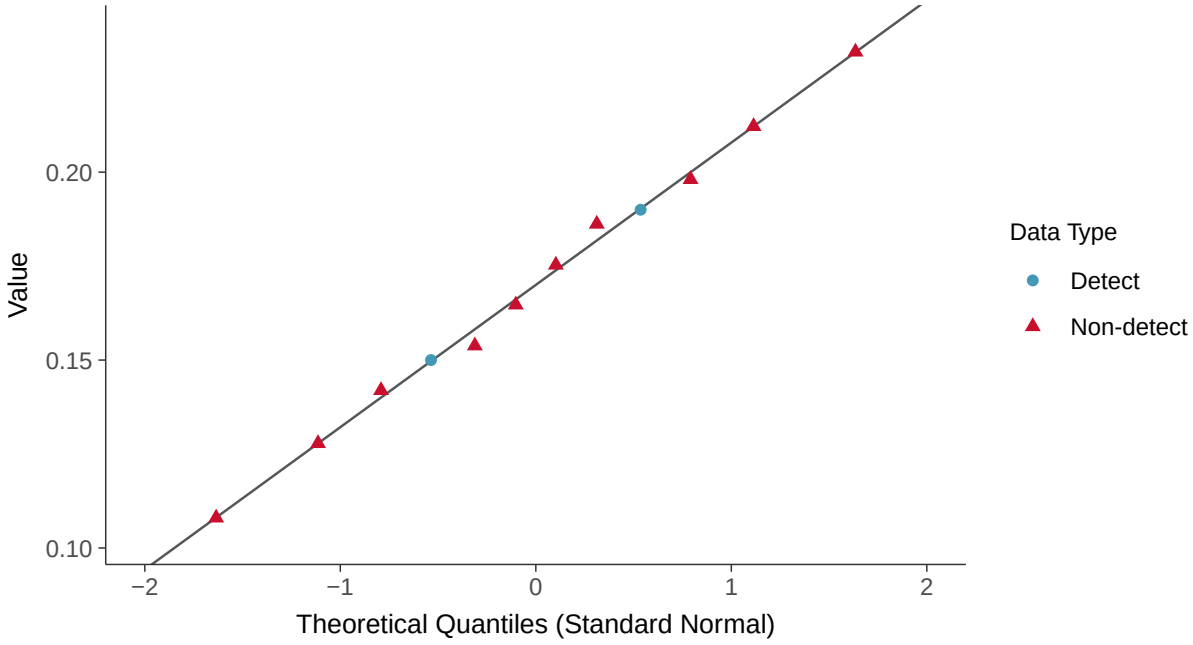
Boxplot by Season

Fluoride, MW-14 (mg/l)



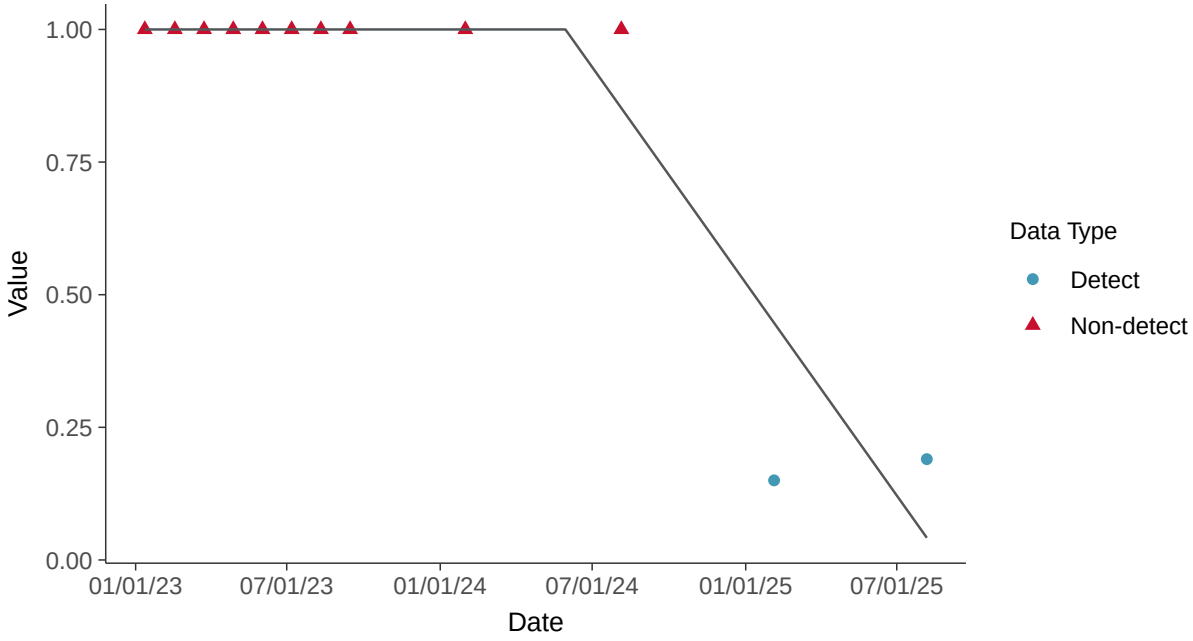
Normal Q-Q plot using ROS Imputed Estimates

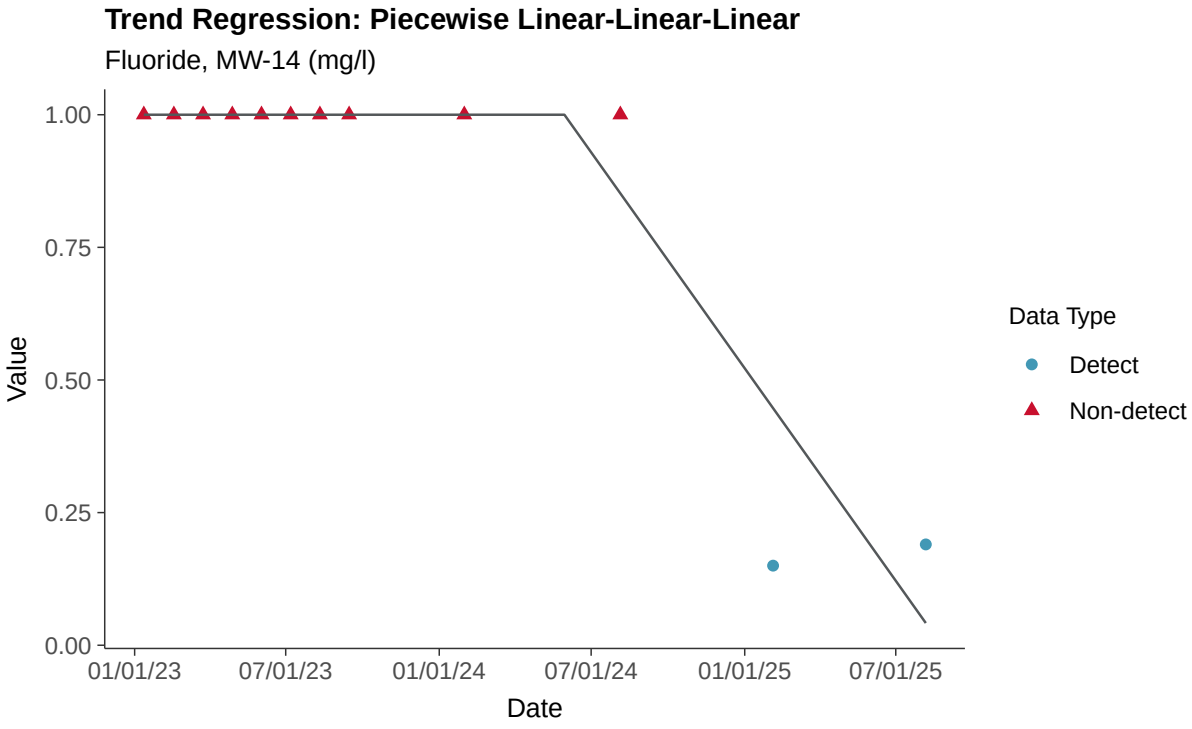
Fluoride, MW-14 (mg/l)



Trend Regression: Piecewise Linear-Linear

Fluoride, MW-14 (mg/l)



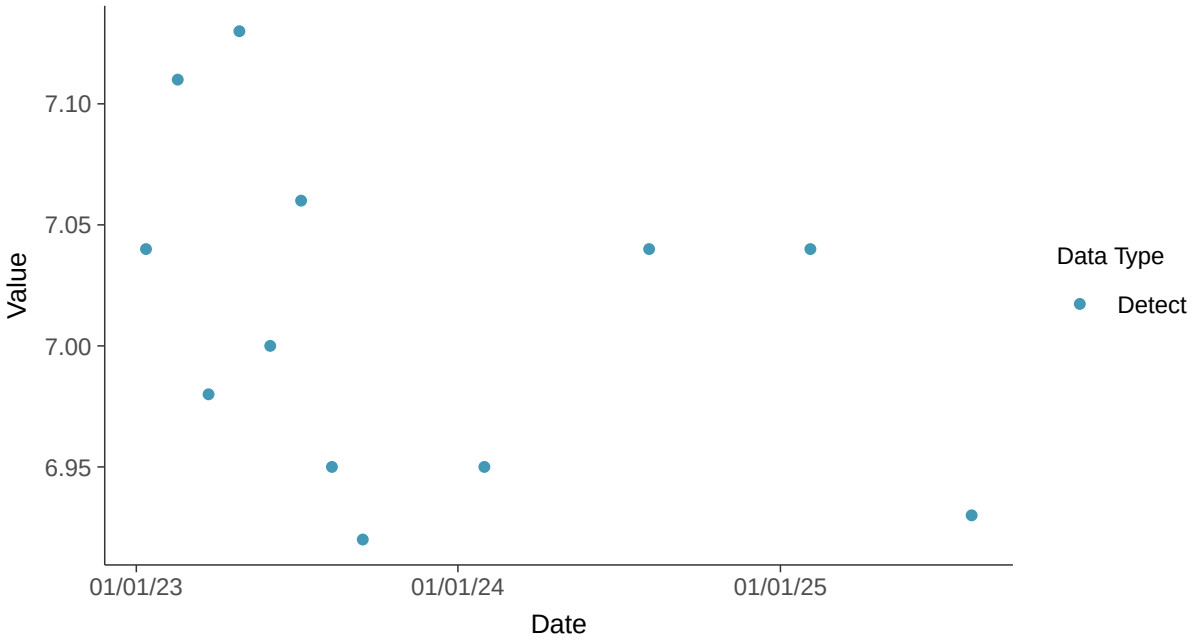

Trend Regression: Piecewise Linear-Linear-Linear
Fluoride, MW-14 (mg/l)
Value
1.00
0.75
0.50
0.25
0.00
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Appendix III: pH, Field, MW-14

ID: 23_2_120

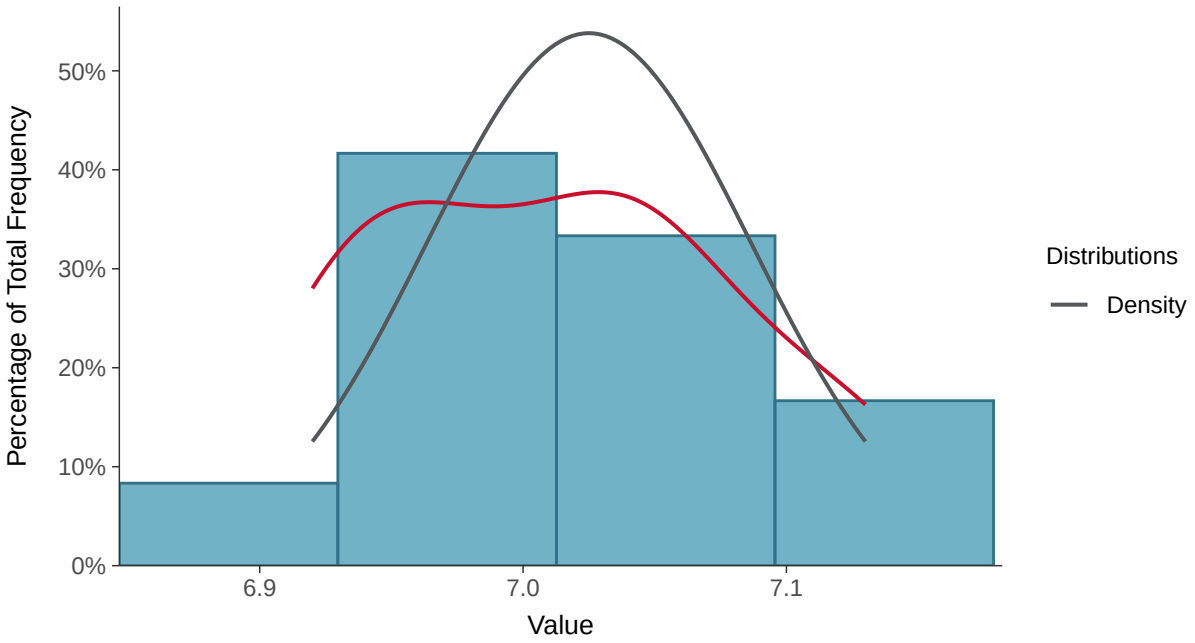
Scatter Plot

pH, Field, MW-14 (su)



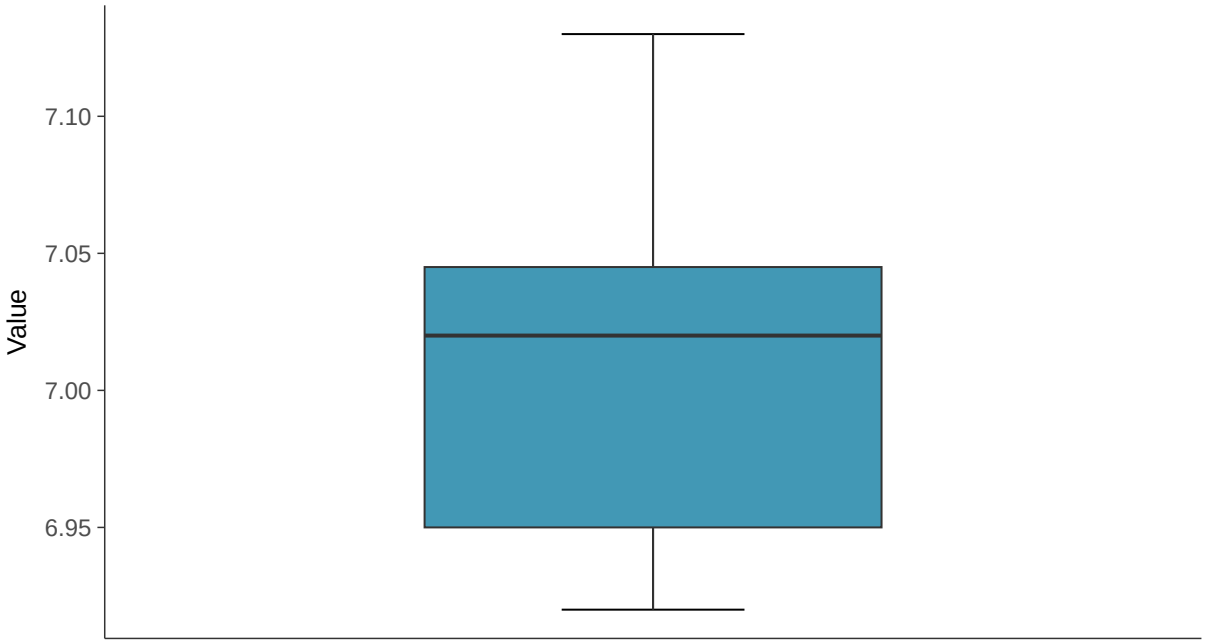
Histogram

pH, Field, MW-14 (su)



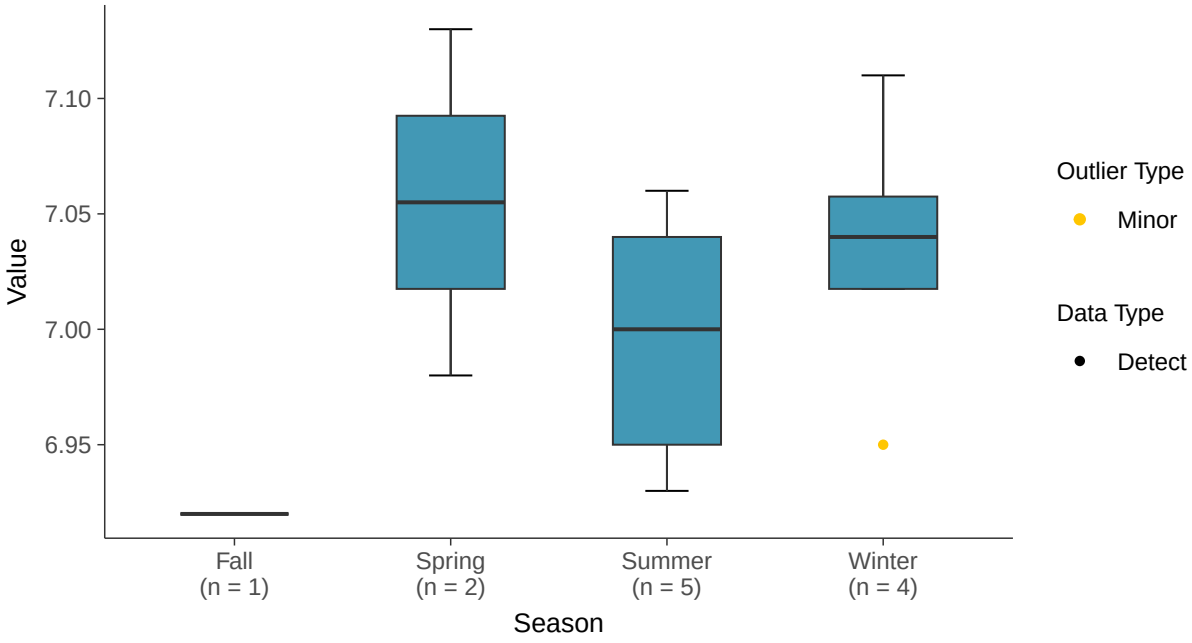
Boxplot

pH, Field, MW-14 (su)



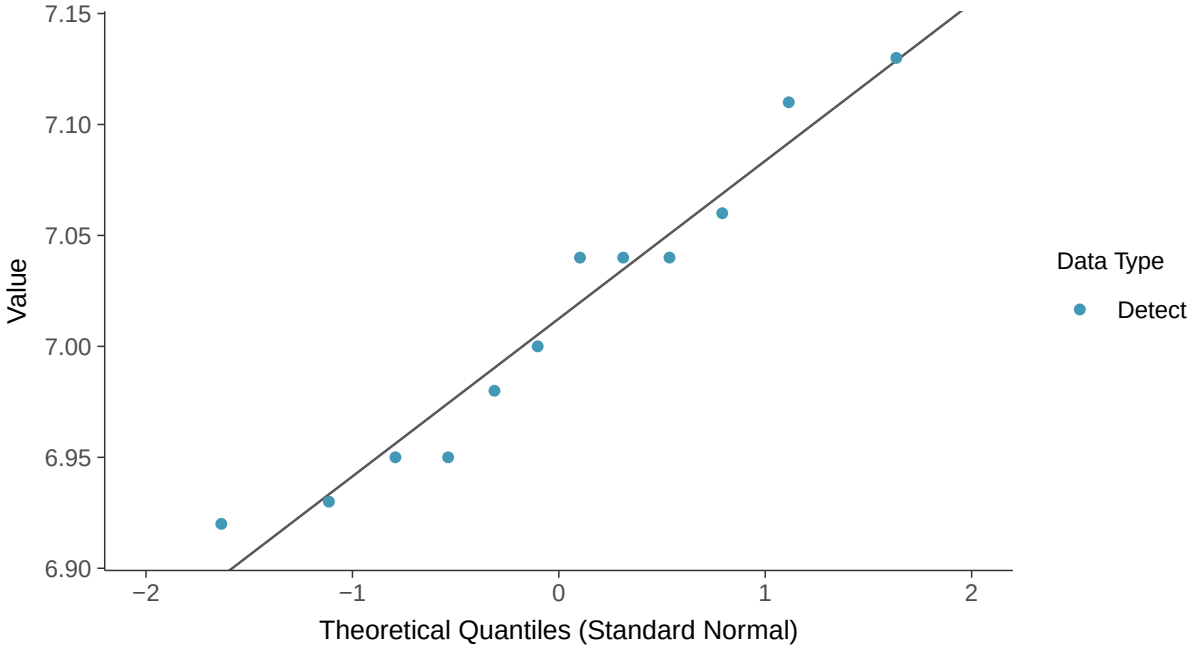
Boxplot by Season

pH, Field, MW-14 (su)



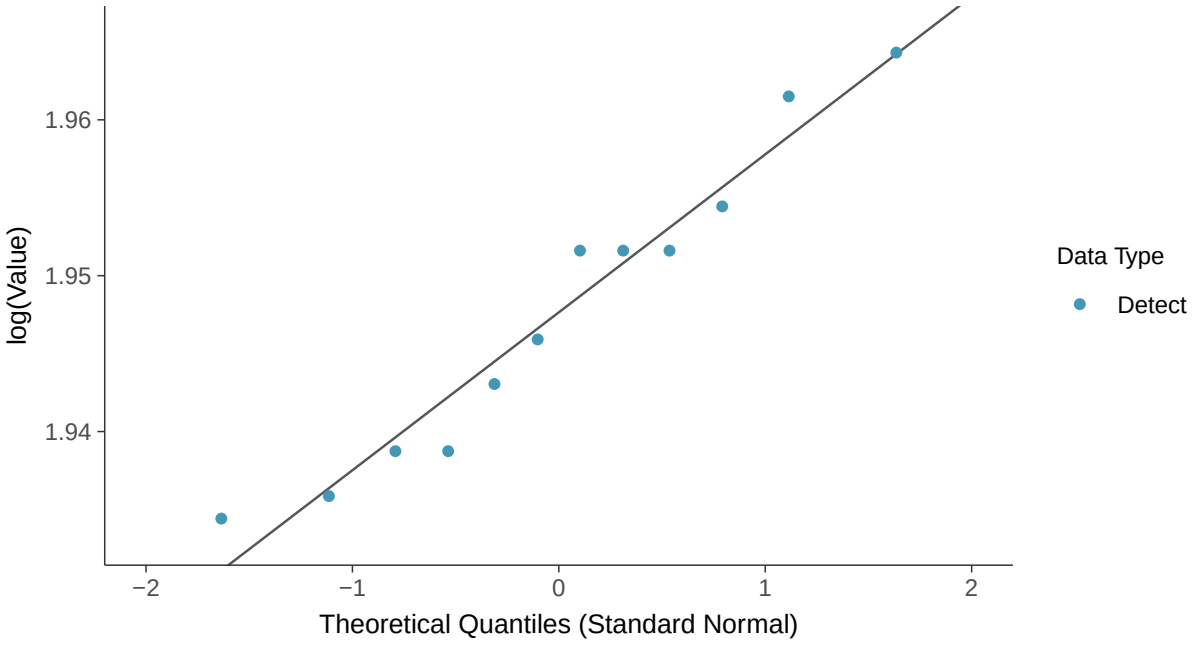
Normal Q-Q plot

pH, Field, MW-14 (su)



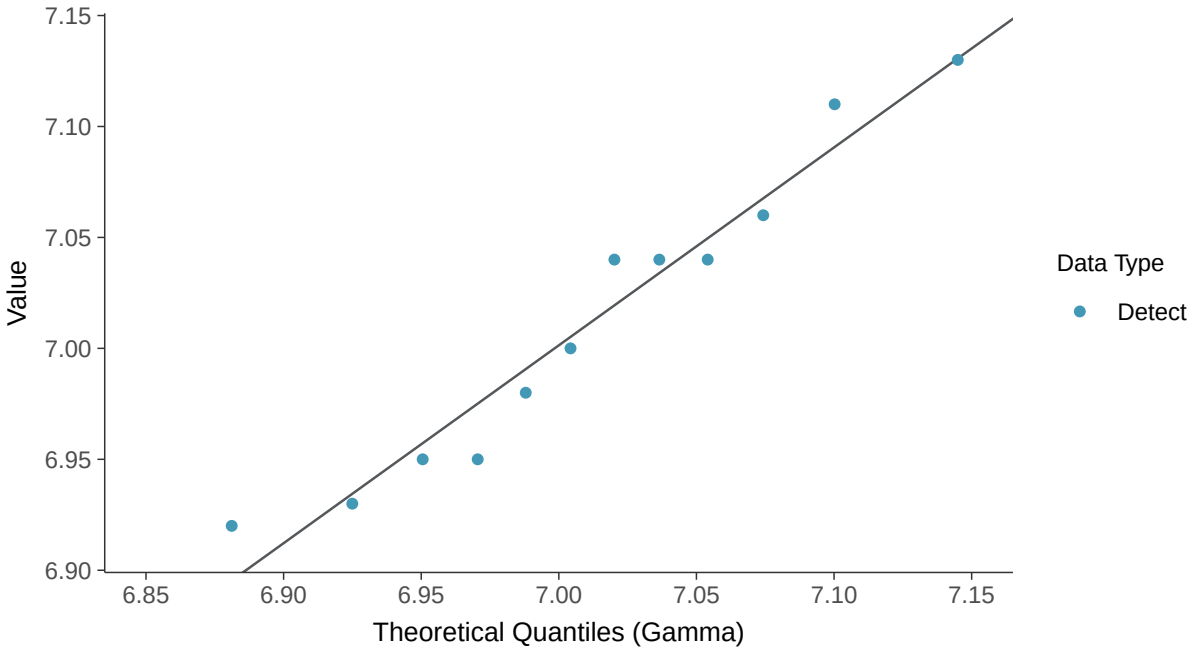
Lognormal Q-Q plot

pH, Field, MW-14 (su)



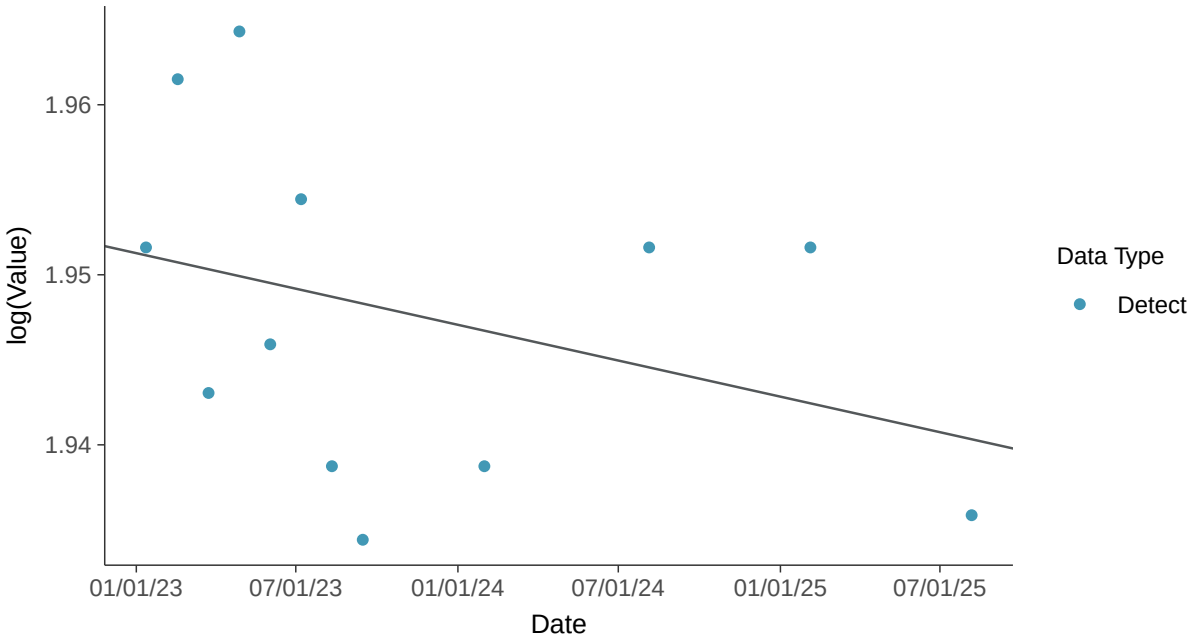
Gamma Q-Q plot

pH, Field, MW-14 (su)



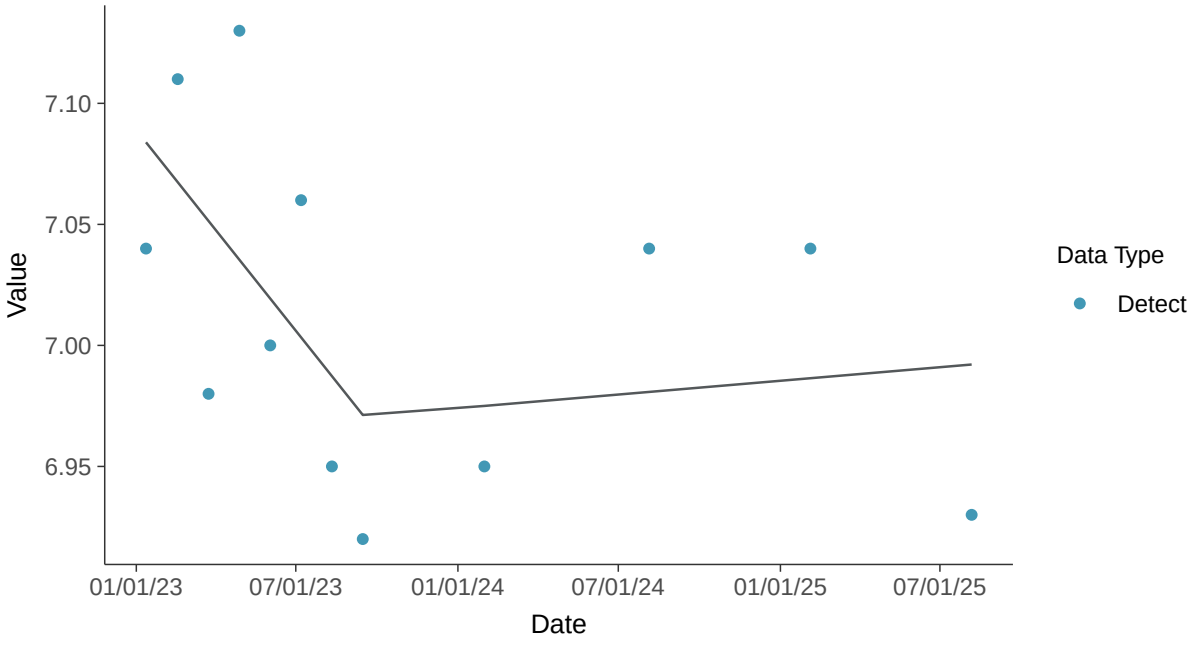
Trend Regression: Lognormal MLE

pH, Field, MW-14 (su)



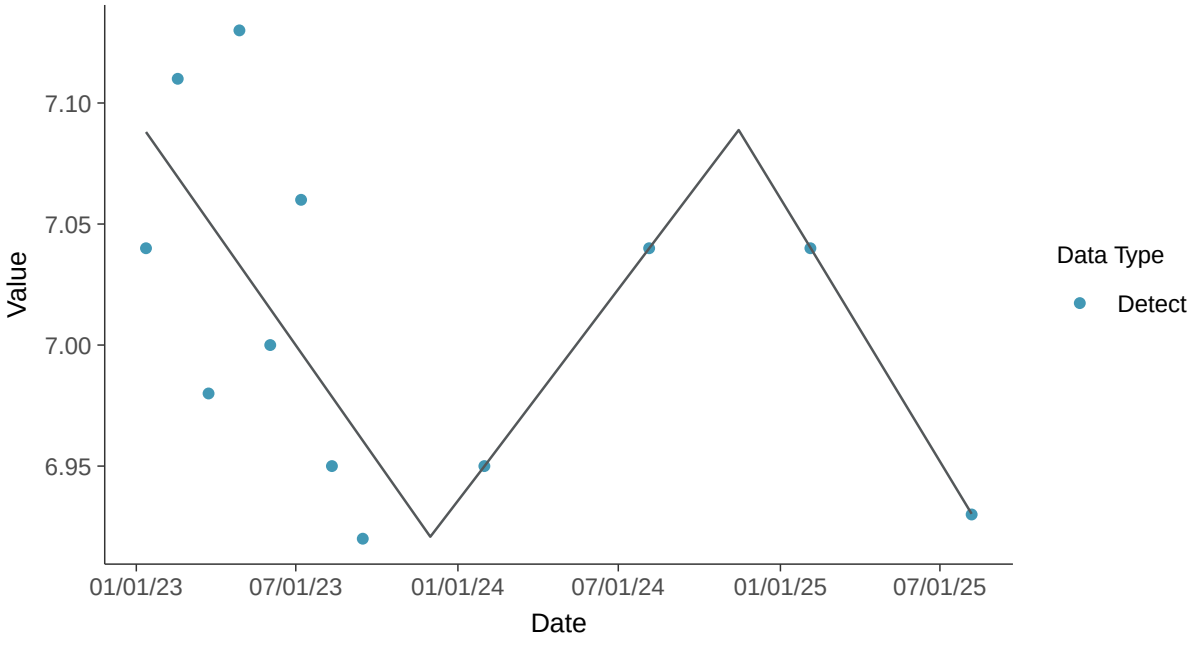
Trend Regression: Piecewise Linear-Linear

pH, Field, MW-14 (su)



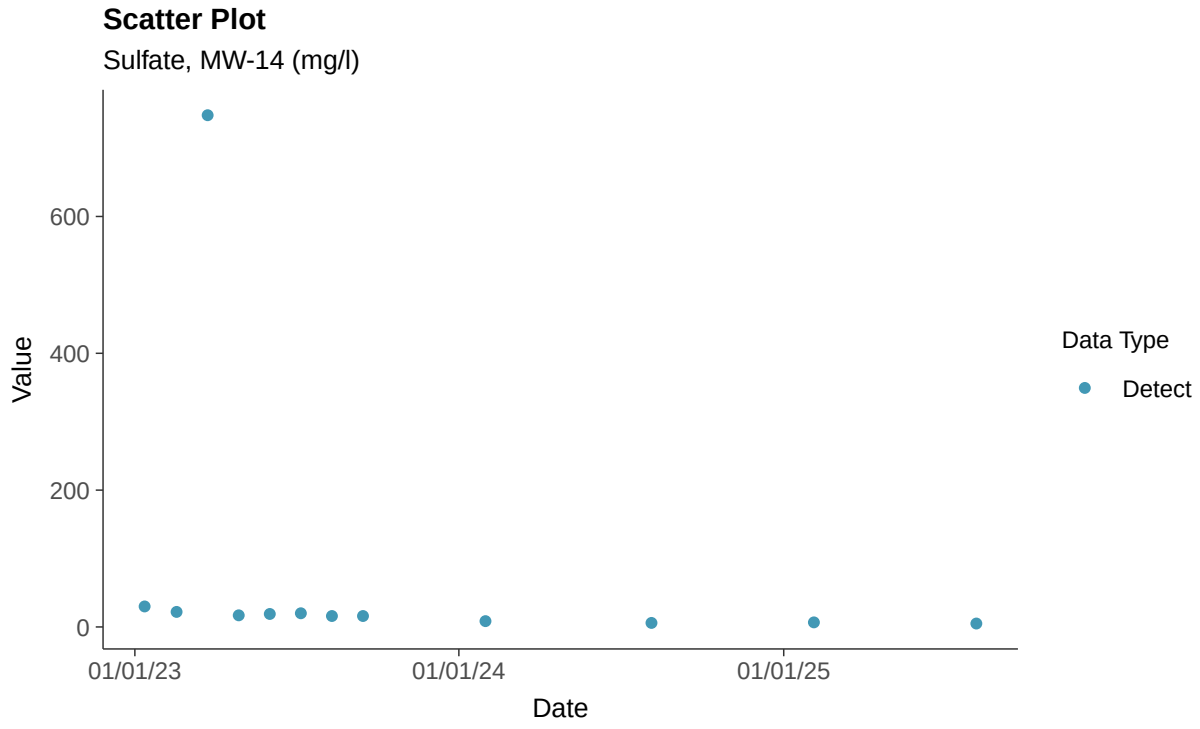
Trend Regression: Piecewise Linear-Linear-Linear

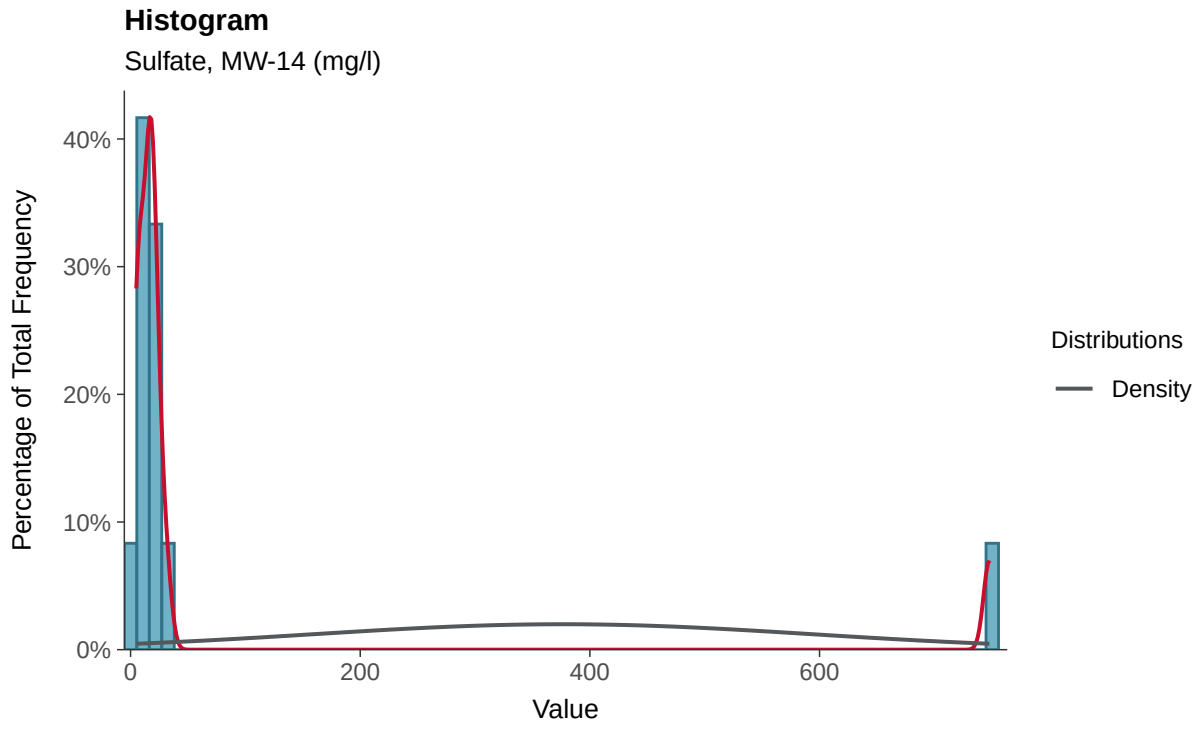
pH, Field, MW-14 (su)



Appendix III: Sulfate, MW-14

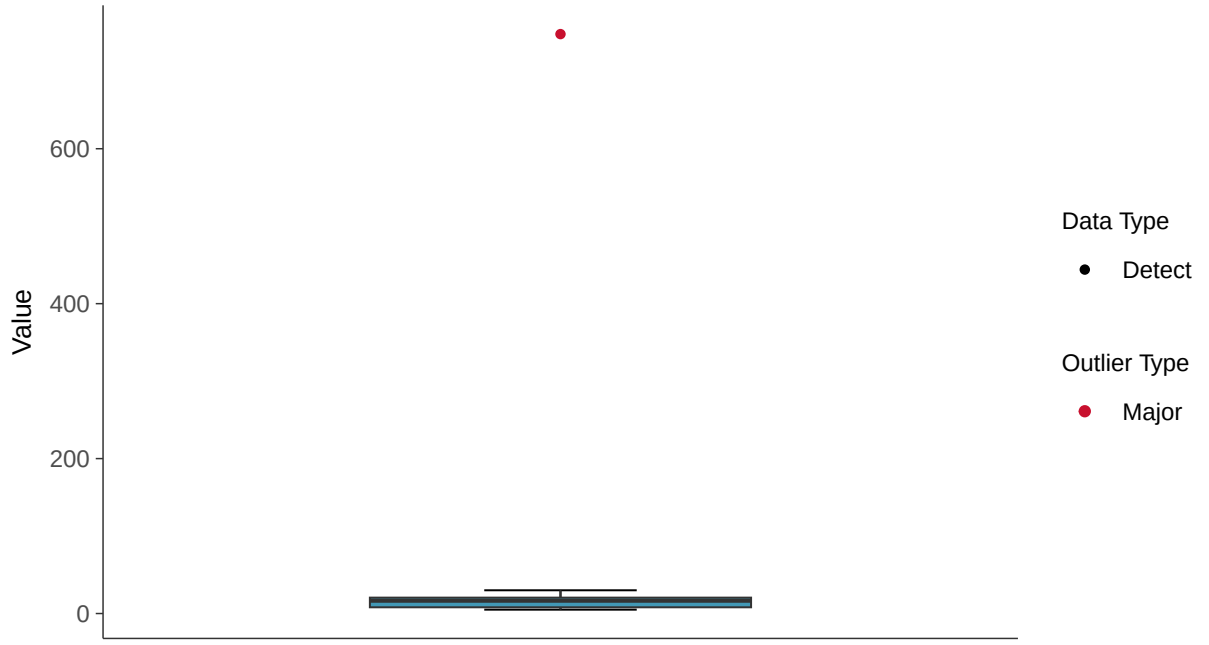
ID: 23_2_124





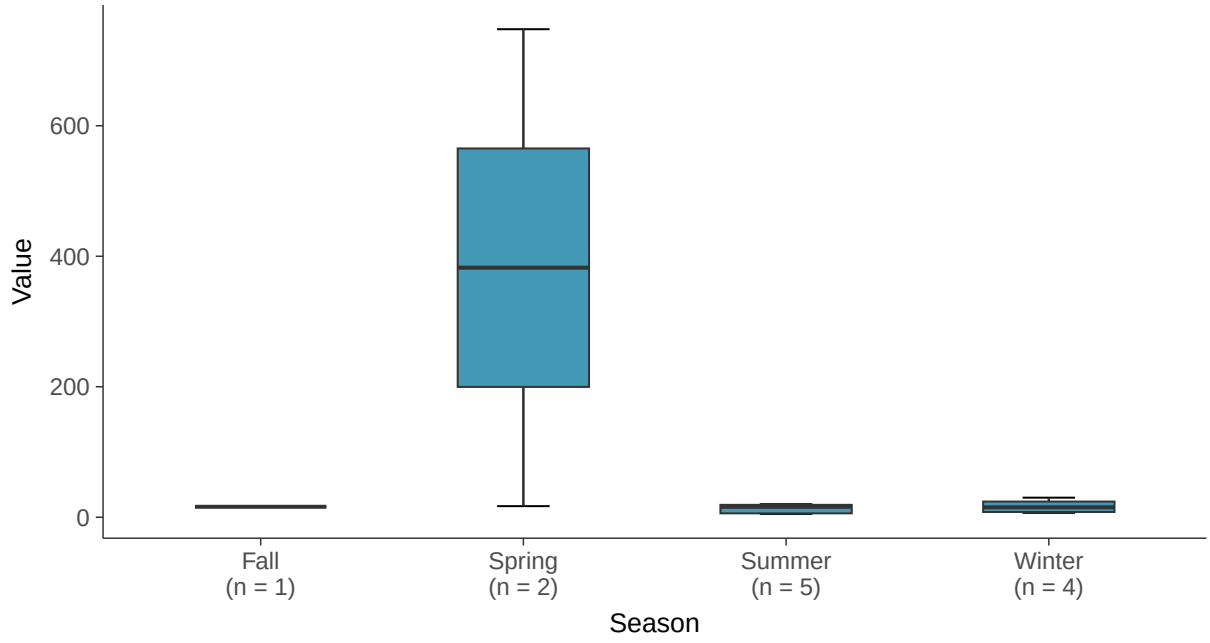
Boxplot

Sulfate, MW-14 (mg/l)



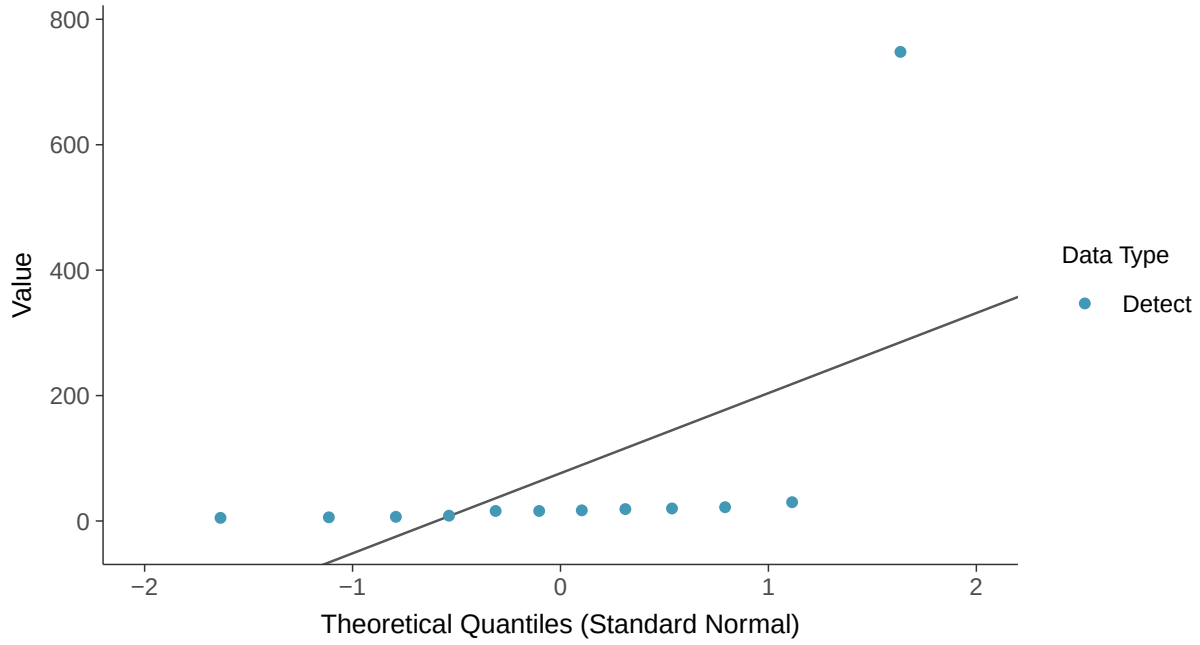
Boxplot by Season

Sulfate, MW-14 (mg/l)



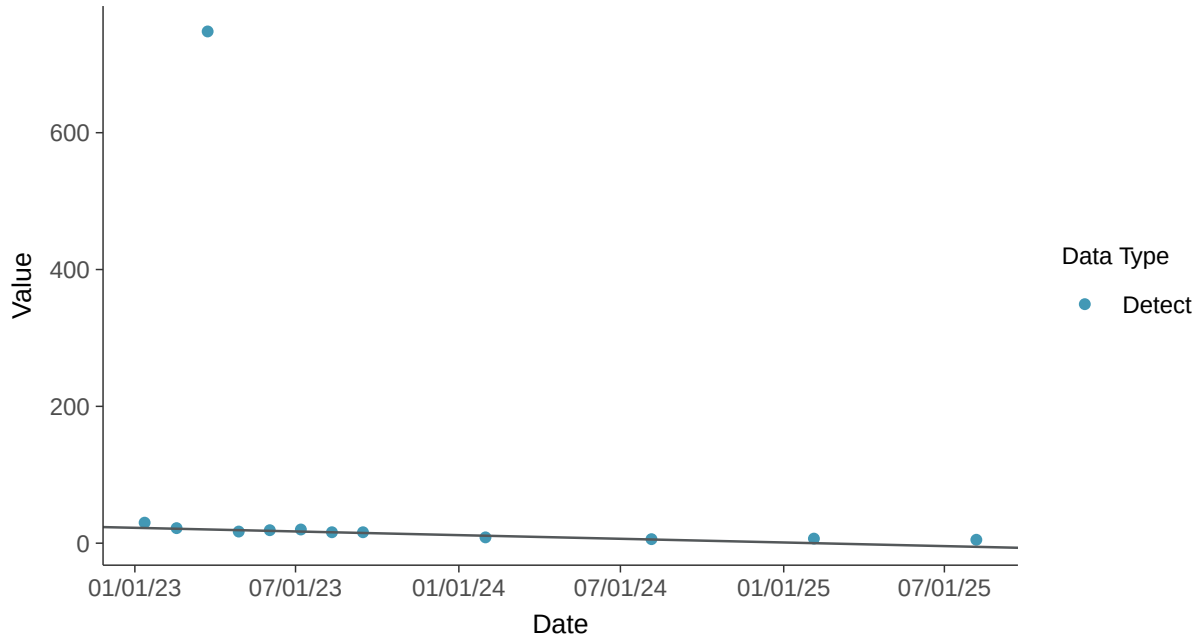
Normal Q-Q plot

Sulfate, MW-14 (mg/l)



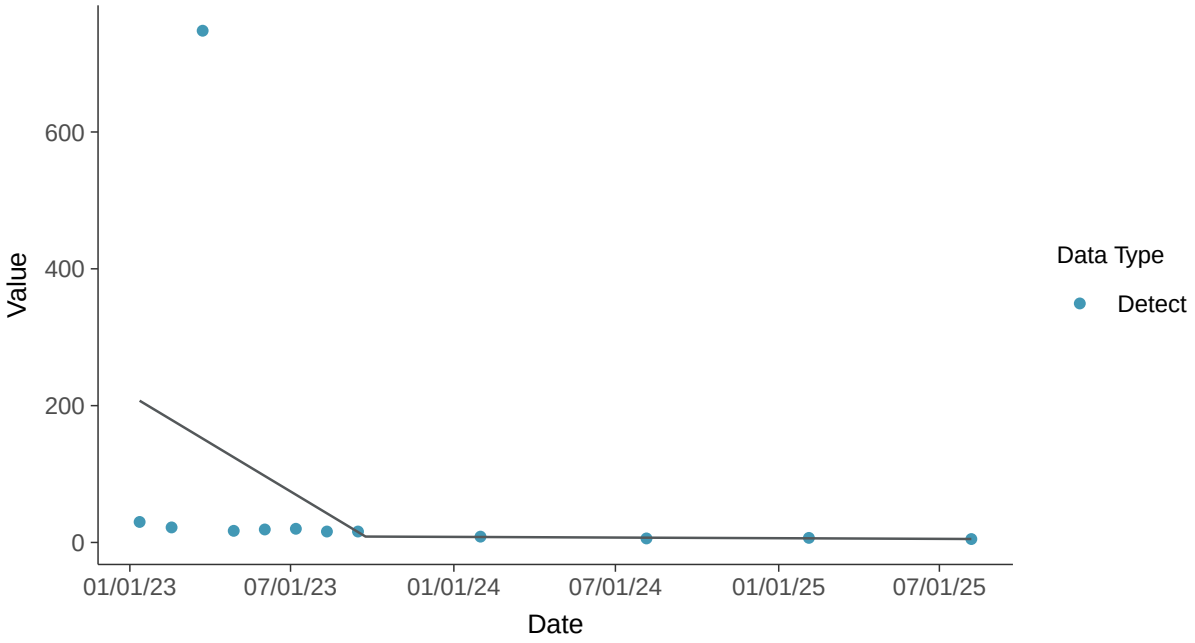
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Sulfate, MW-14 (mg/l)



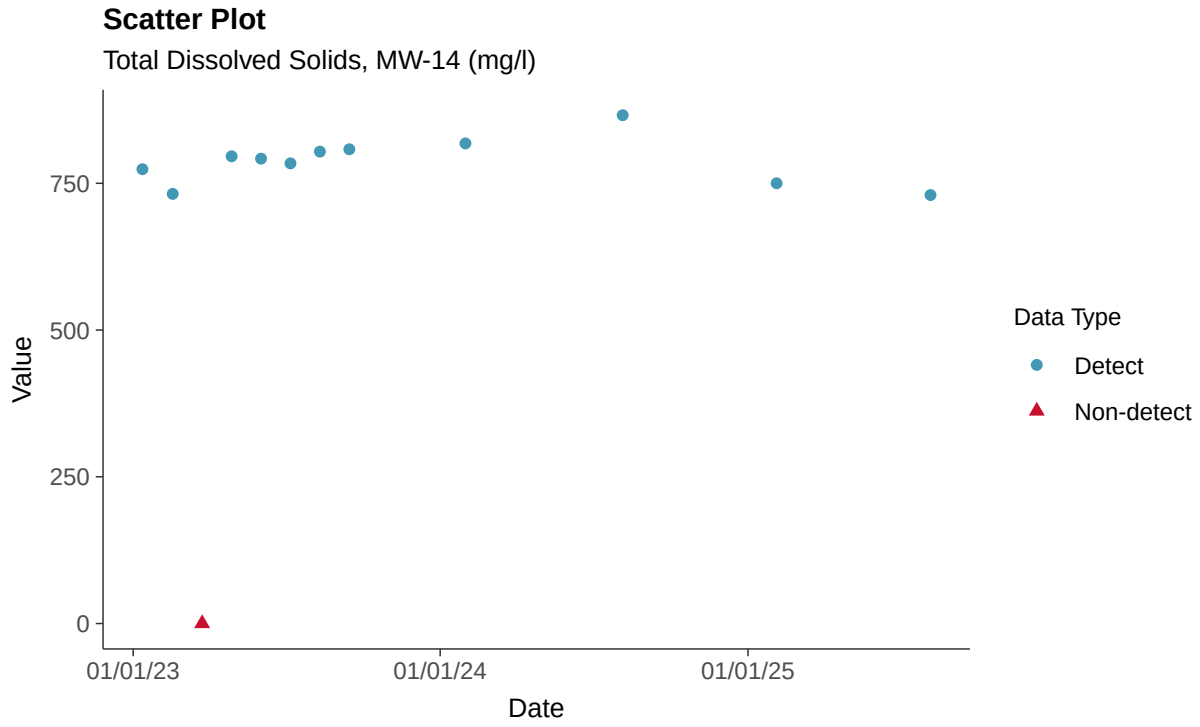
Trend Regression: Piecewise Linear-Linear

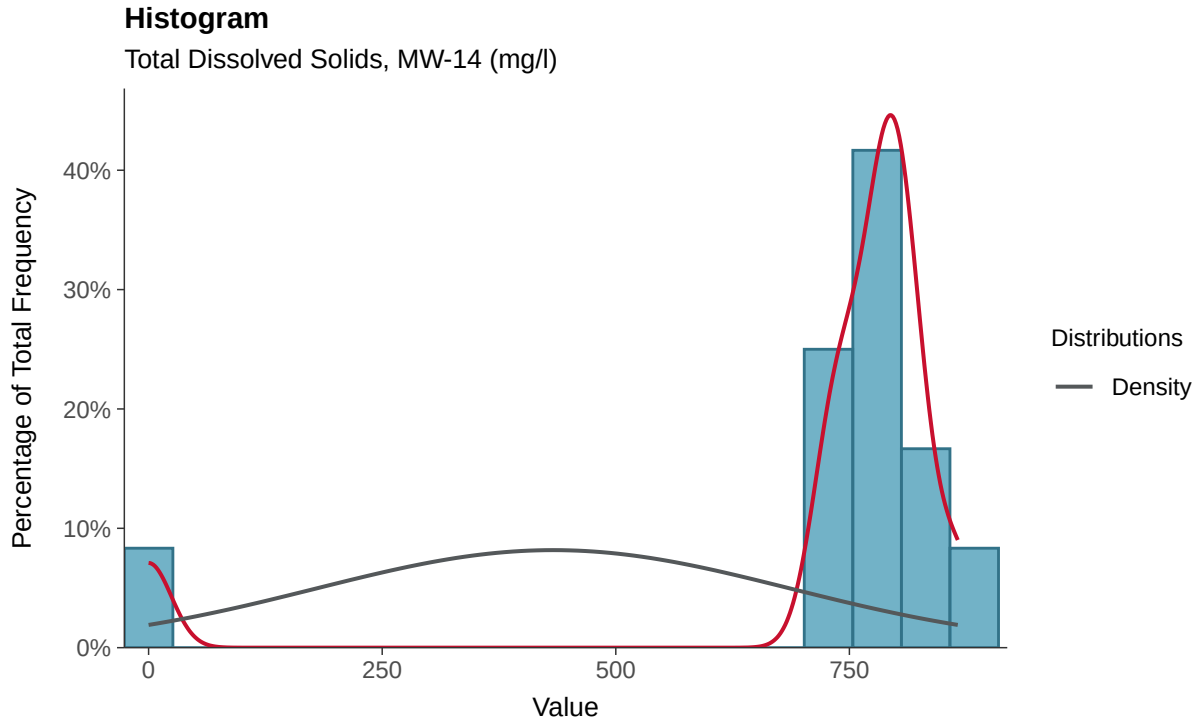
Sulfate, MW-14 (mg/l)



Appendix III: Total Dissolved Solids, MW-14

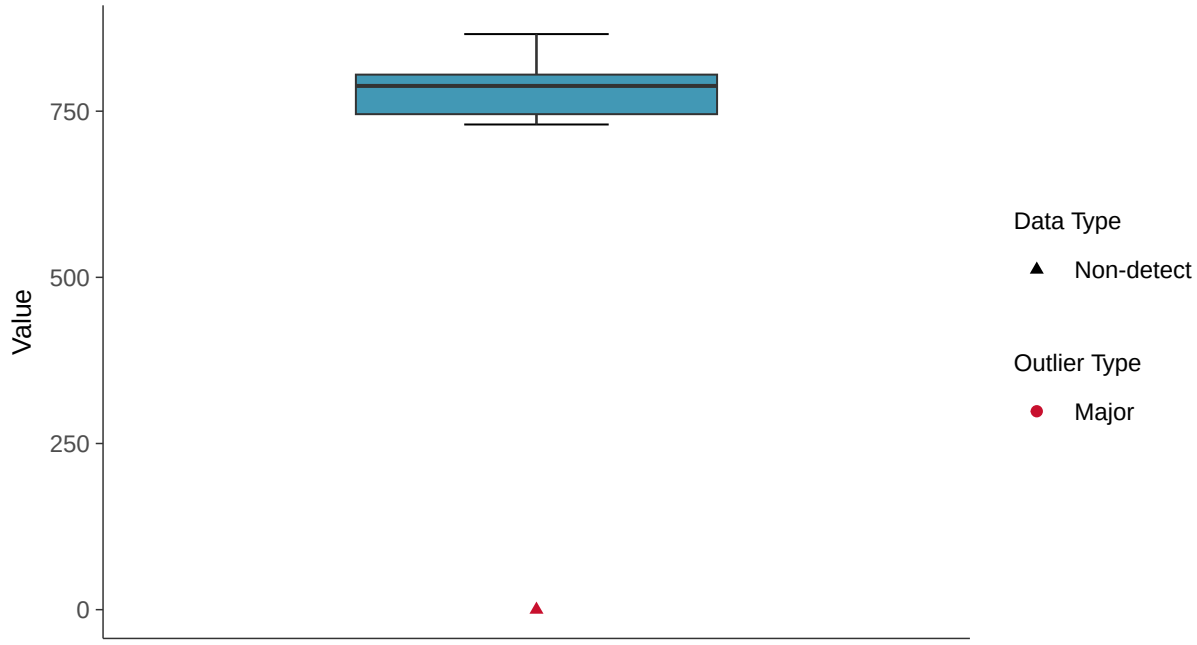
ID: 23_2_126





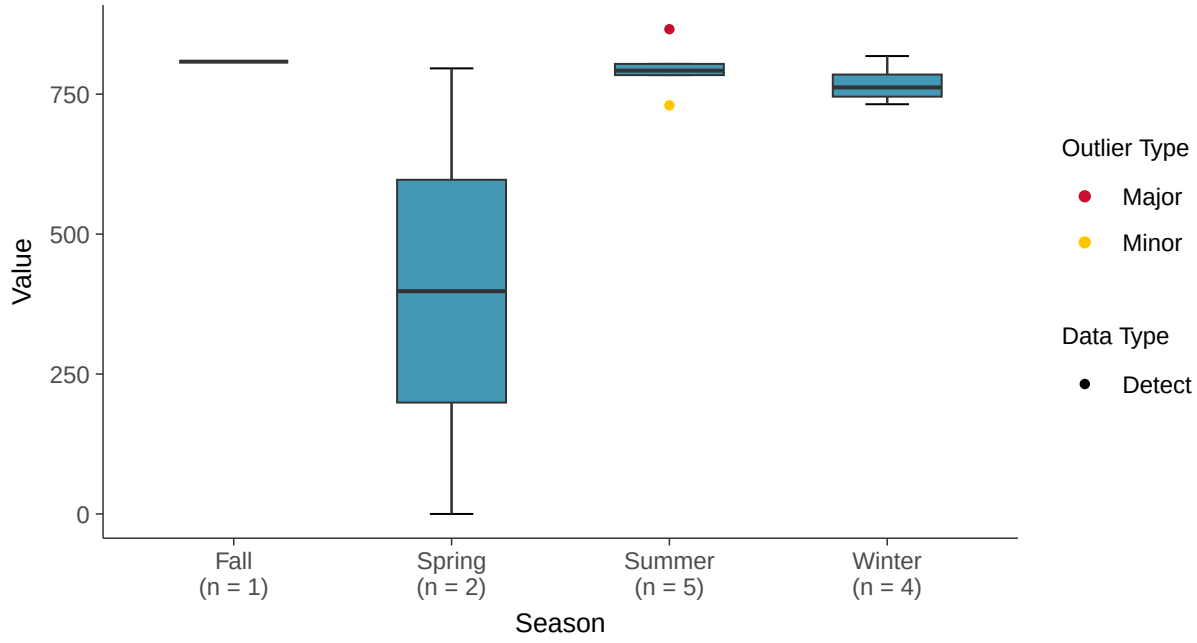
Boxplot

Total Dissolved Solids, MW-14 (mg/l)



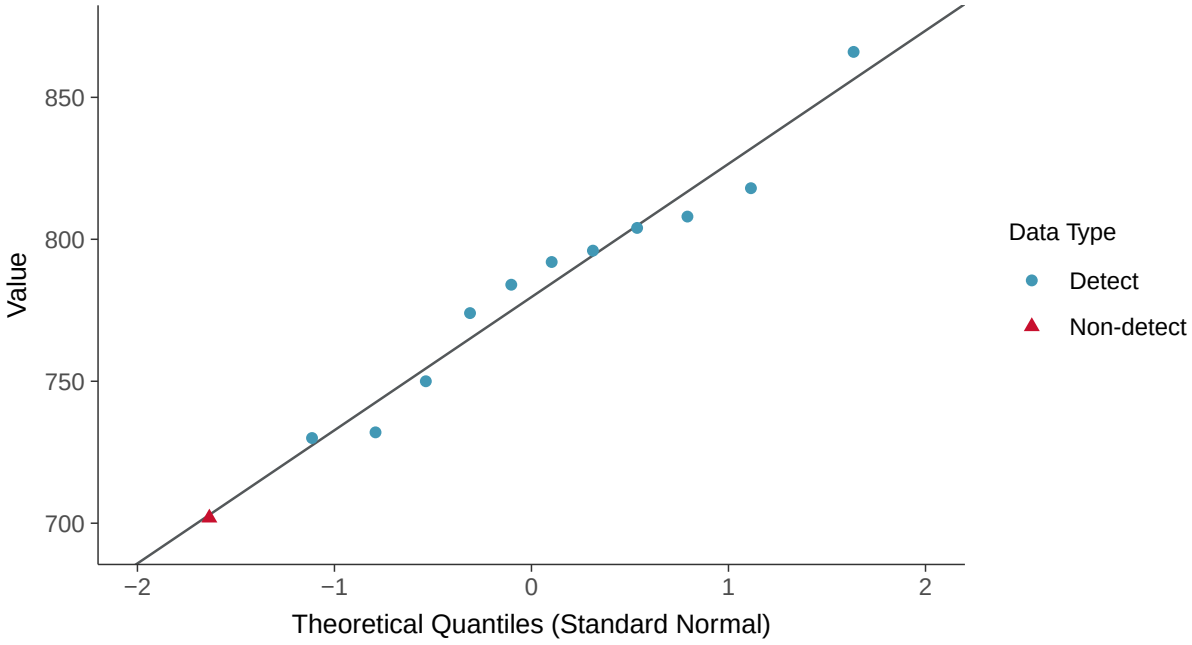
Boxplot by Season

Total Dissolved Solids, MW-14 (mg/l)



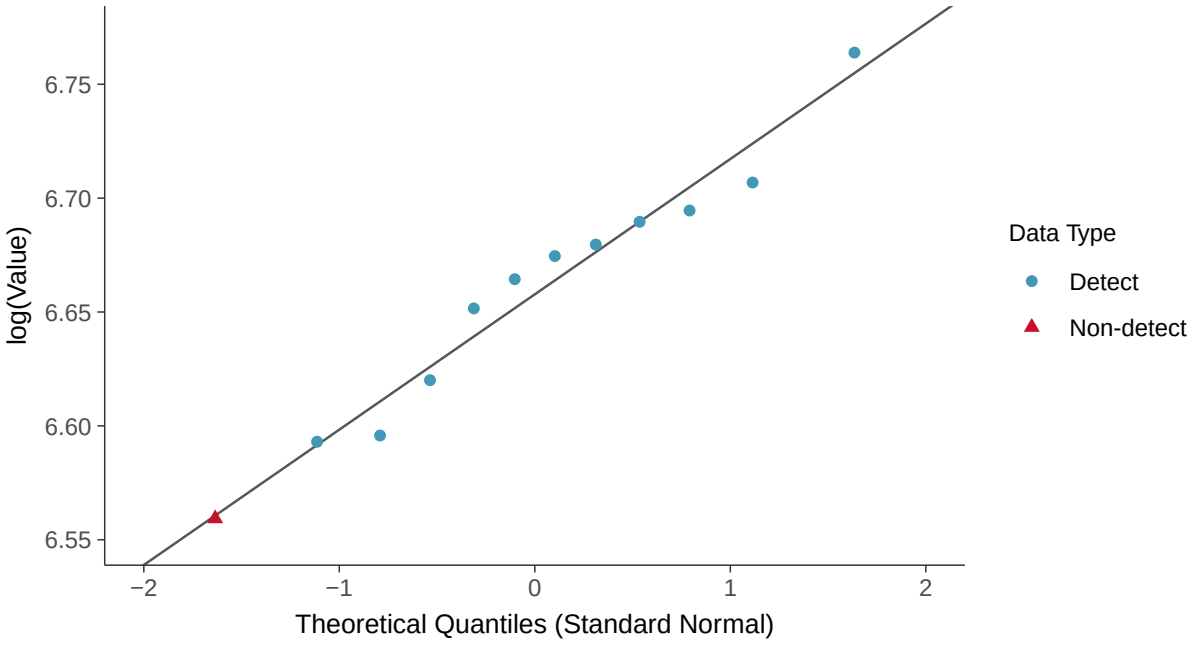
Normal Q-Q plot using ROS Imputed Estimates

Total Dissolved Solids, MW-14 (mg/l)



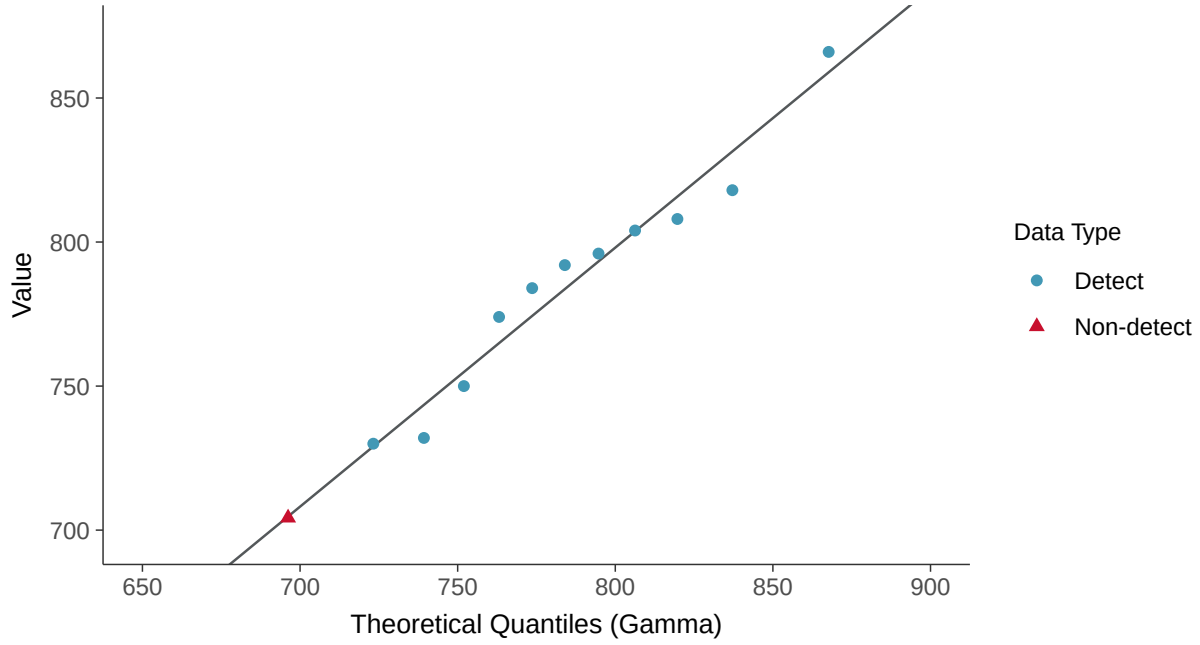
Lognormal Q-Q plot using ROS Imputed Estimates

Total Dissolved Solids, MW-14 (mg/l)



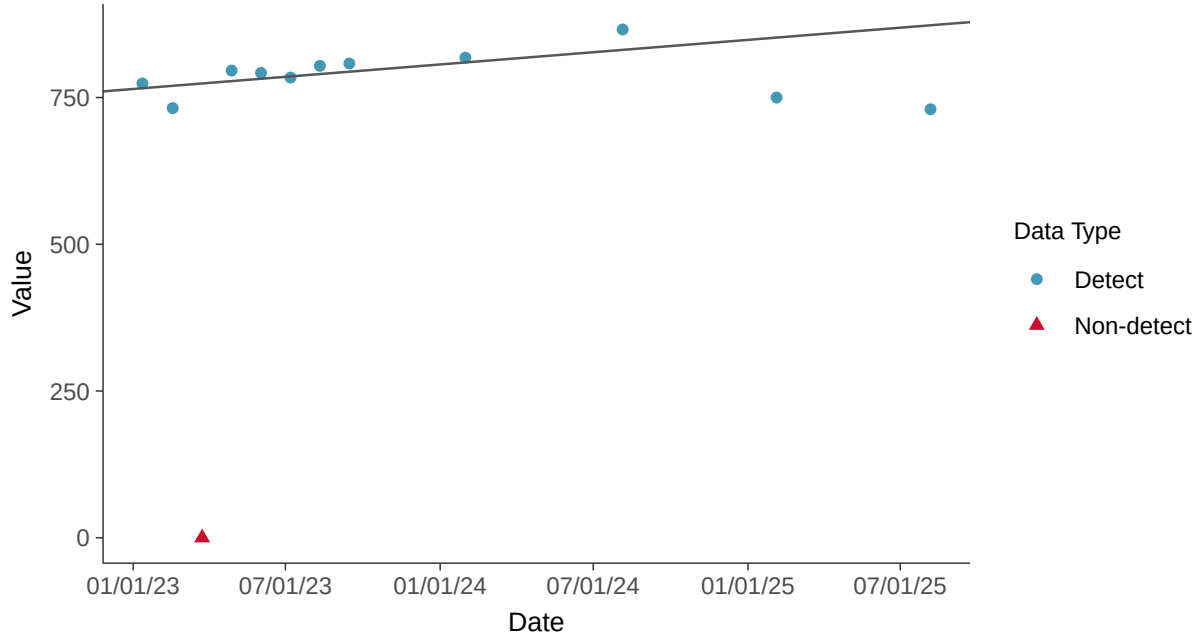
Gamma Q-Q plot using ROS Imputed Estimates

Total Dissolved Solids, MW-14 (mg/l)



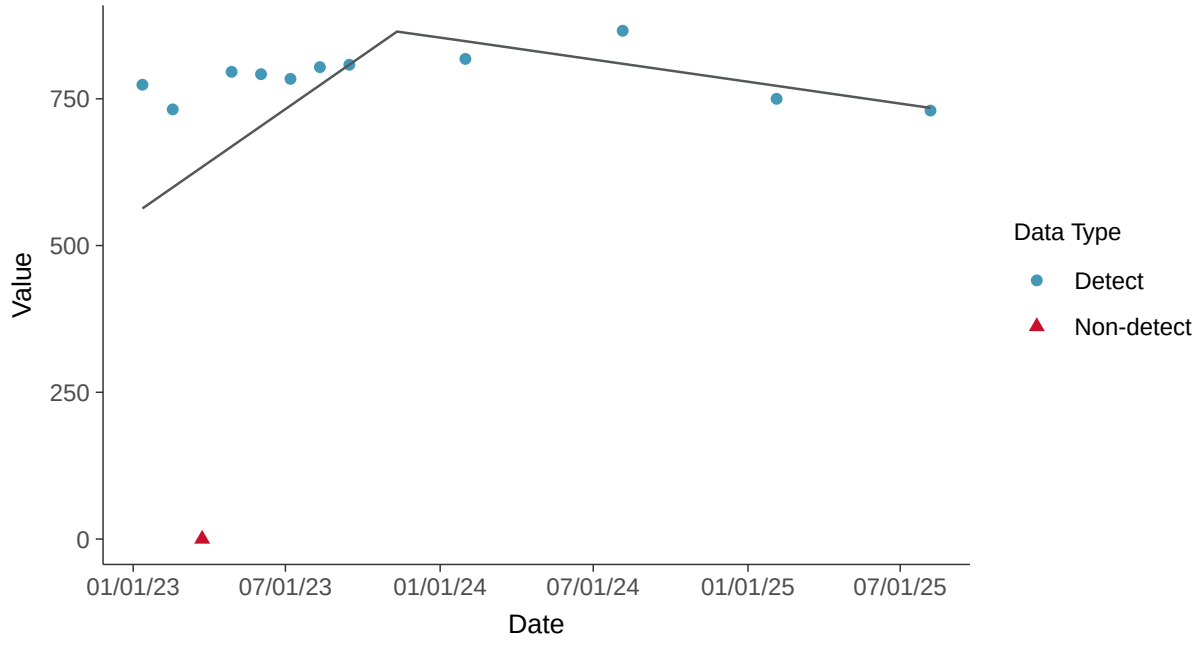
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Total Dissolved Solids, MW-14 (mg/l)



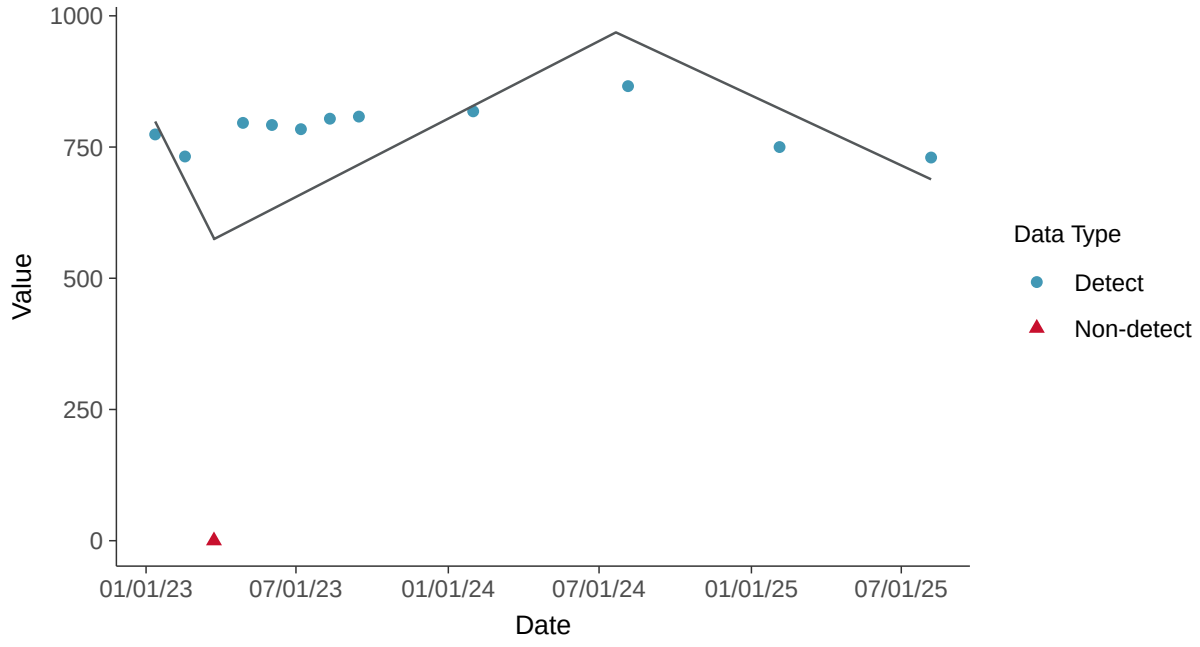
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-14 (mg/l)



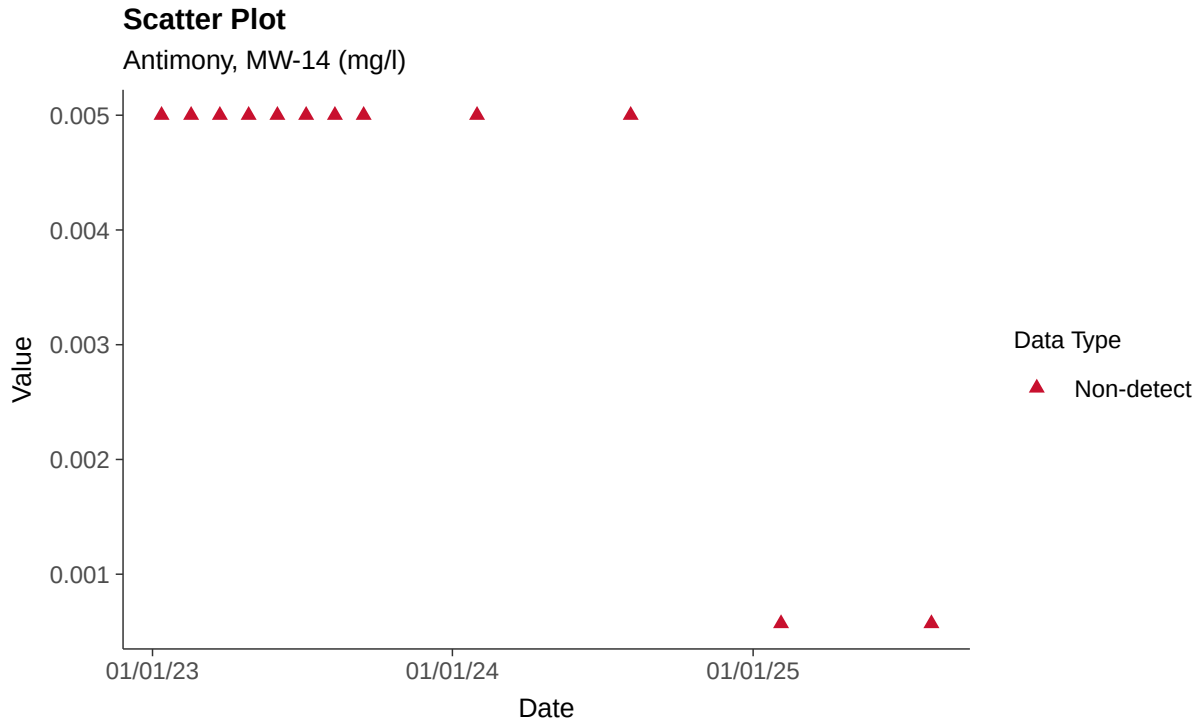
Trend Regression: Piecewise Linear-Linear-Linear

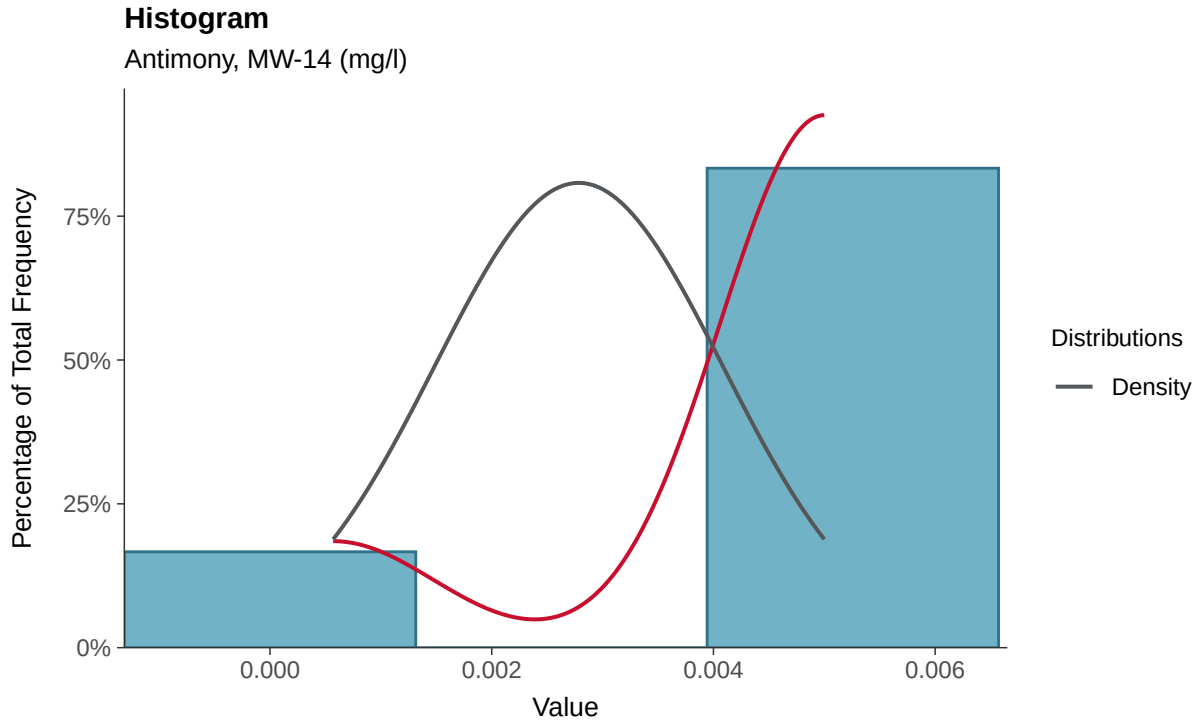
Total Dissolved Solids, MW-14 (mg/l)



Appendix IV: Antimony, MW-14

ID: 23_3_101



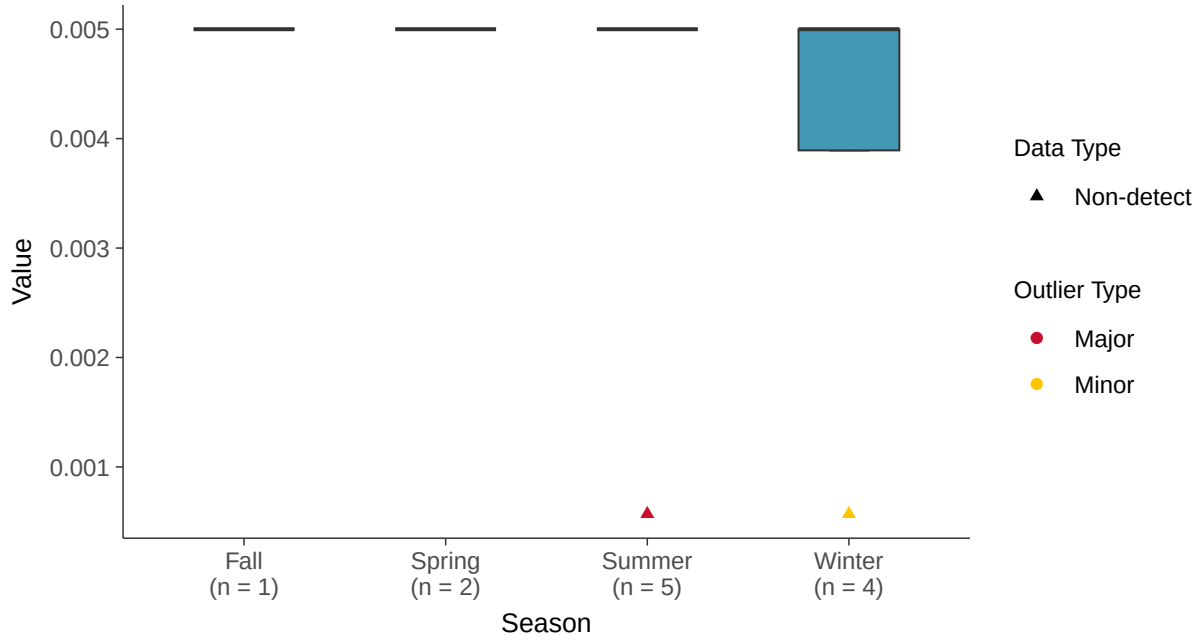


Boxplot

Antimony, MW-14 (mg/l)

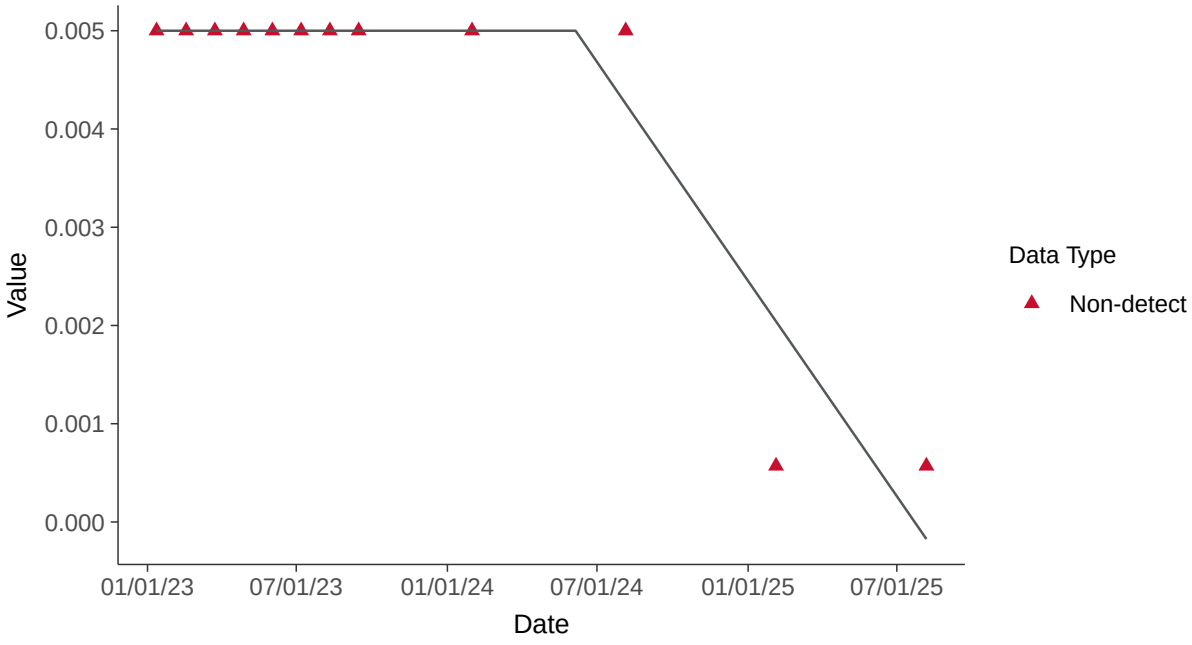
Boxplot by Season

Antimony, MW-14 (mg/l)



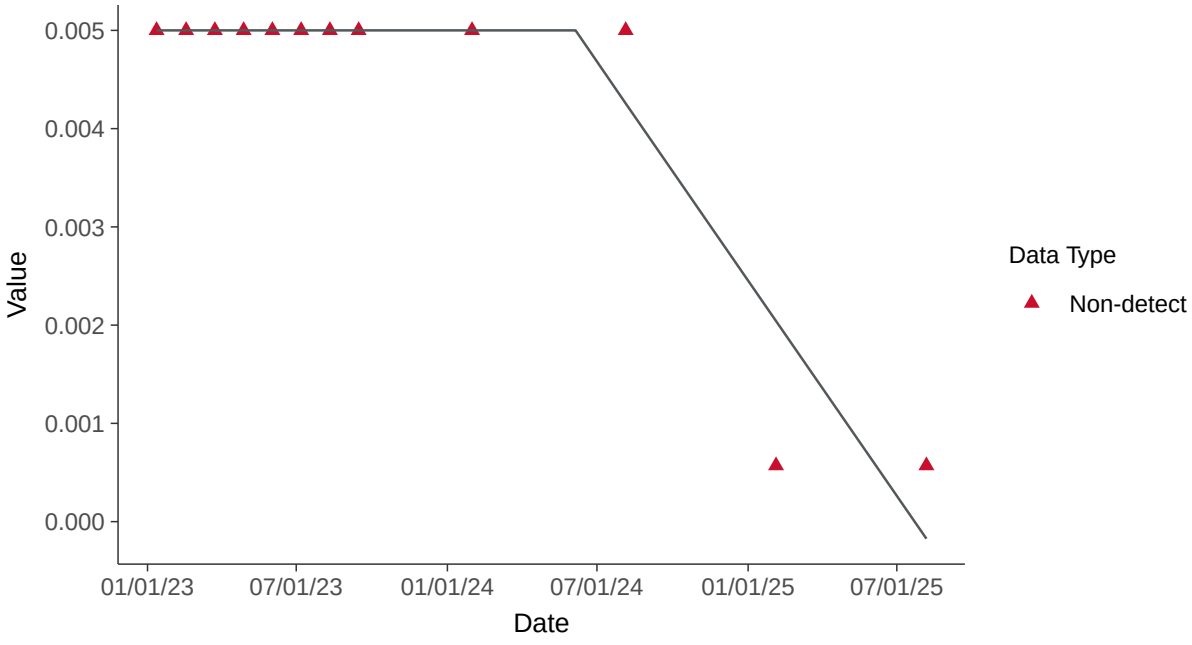
Trend Regression: Piecewise Linear-Linear

Antimony, MW-14 (mg/l)



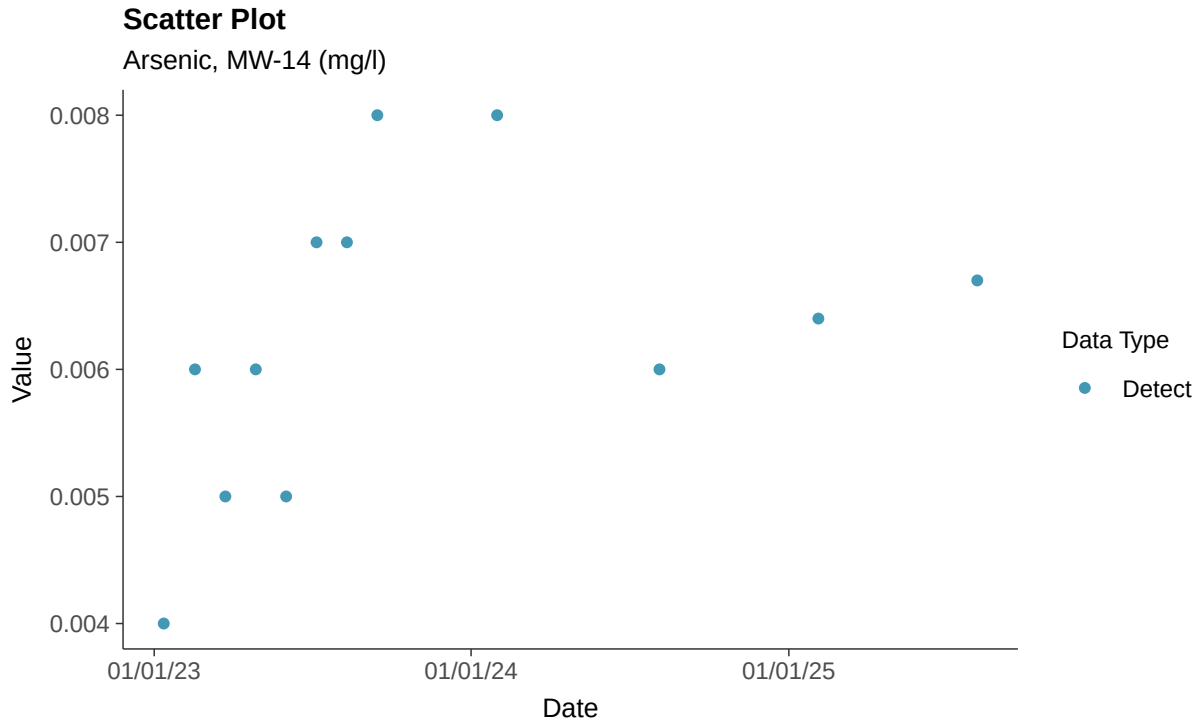
Trend Regression: Piecewise Linear-Linear-Linear

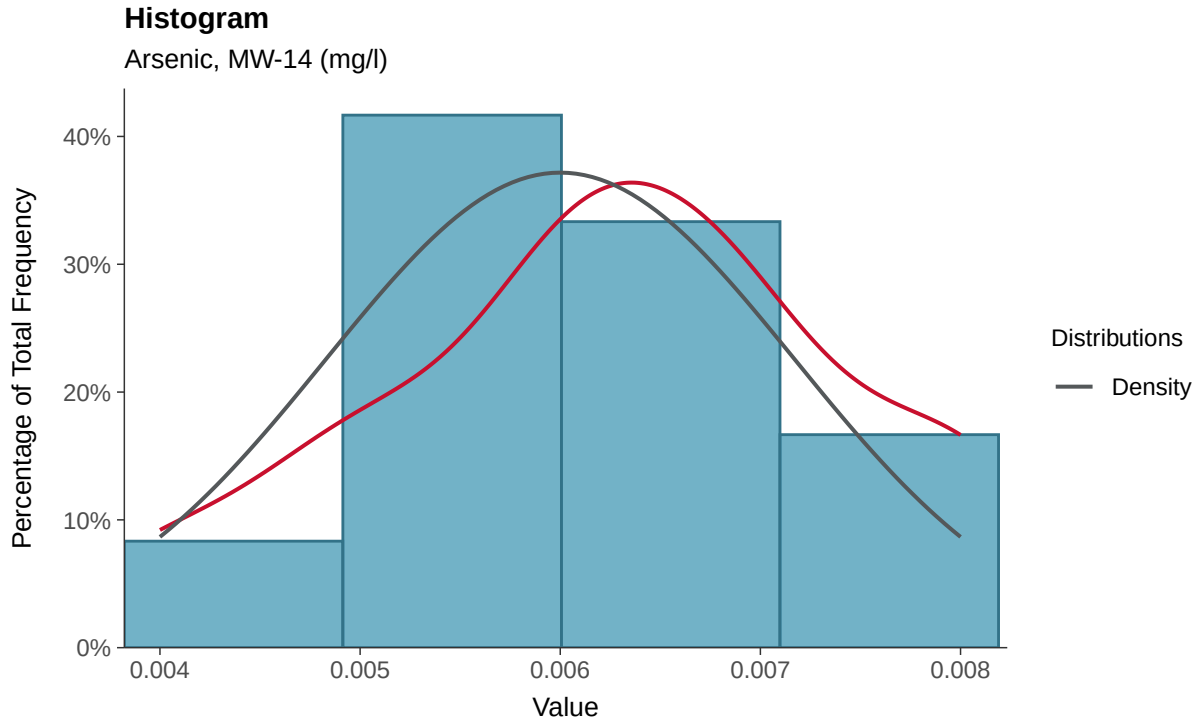
Antimony, MW-14 (mg/l)



Appendix IV: Arsenic, MW-14

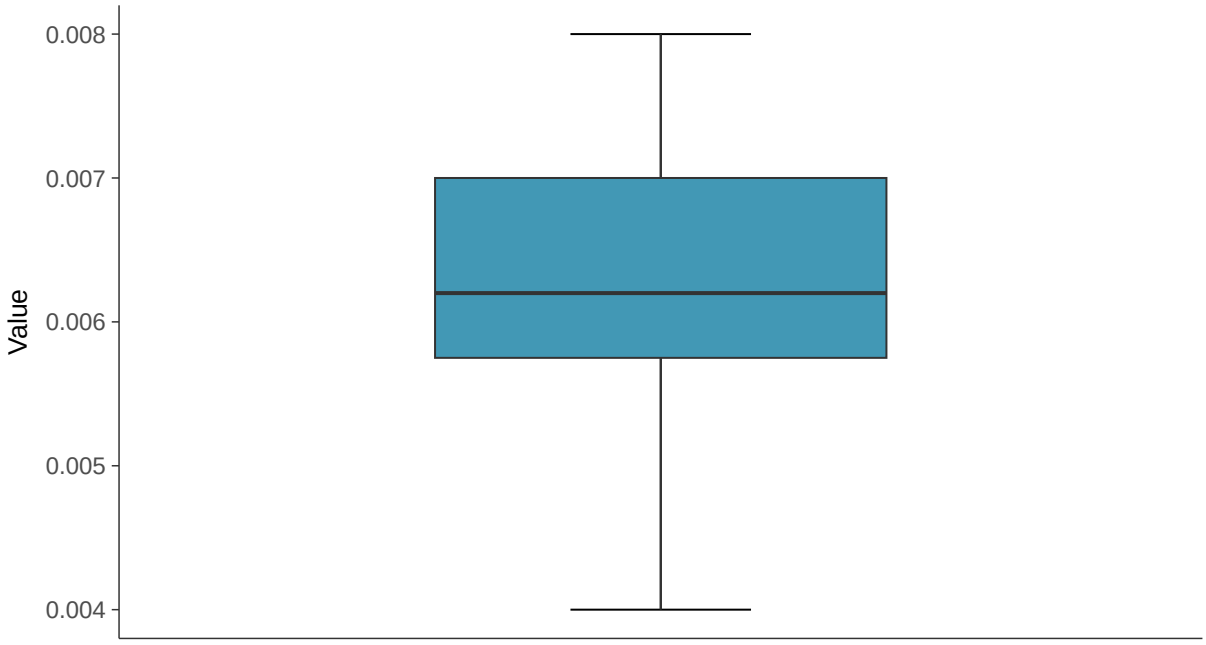
ID: 23_3_102





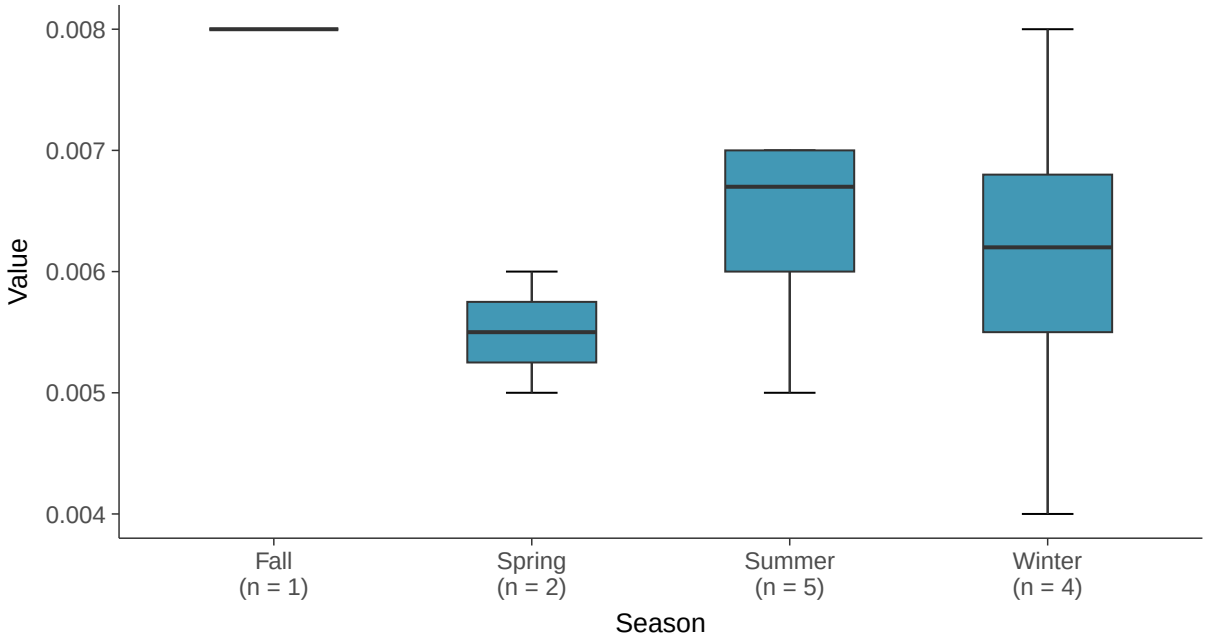
Boxplot

Arsenic, MW-14 (mg/l)



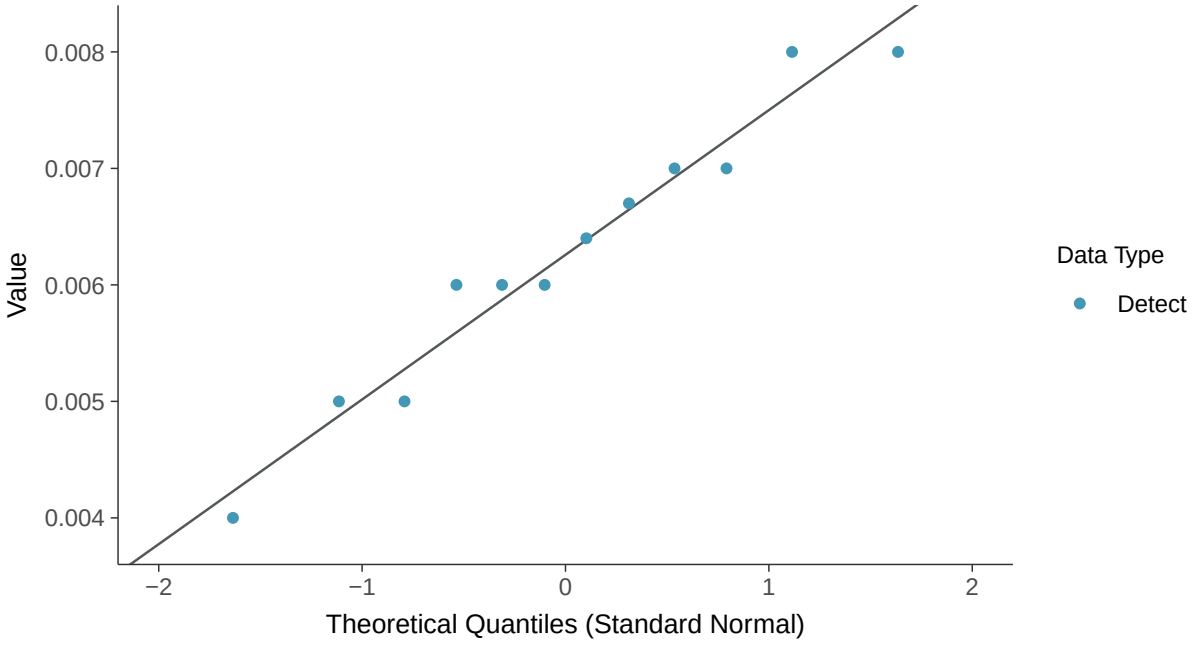
Boxplot by Season

Arsenic, MW-14 (mg/l)



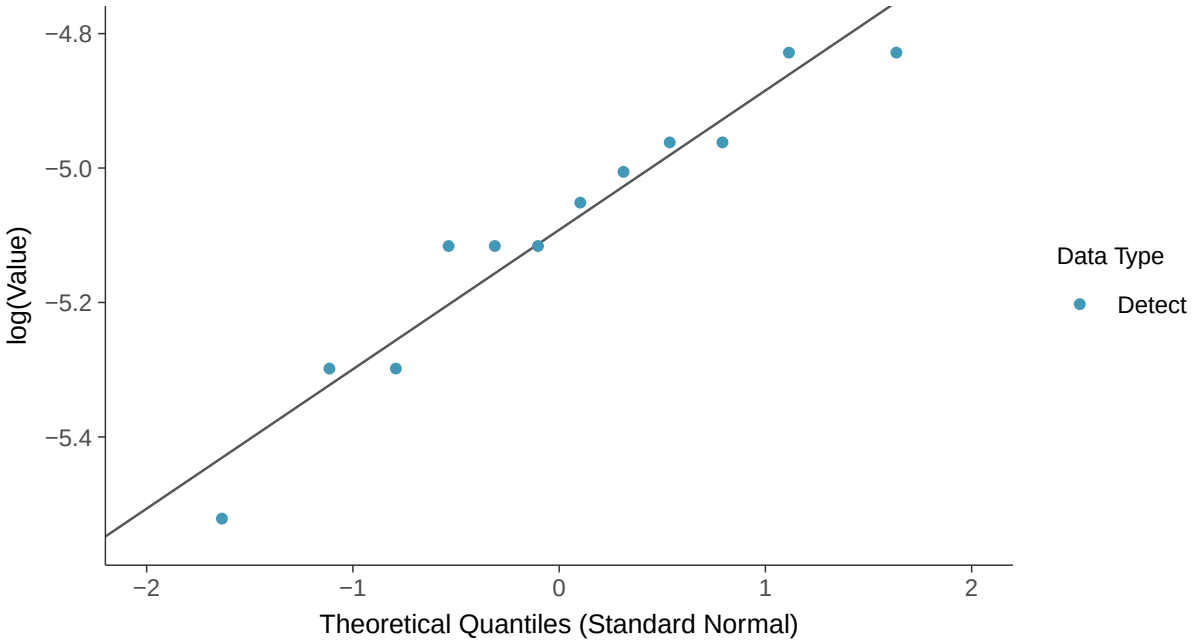
Normal Q-Q plot

Arsenic, MW-14 (mg/l)



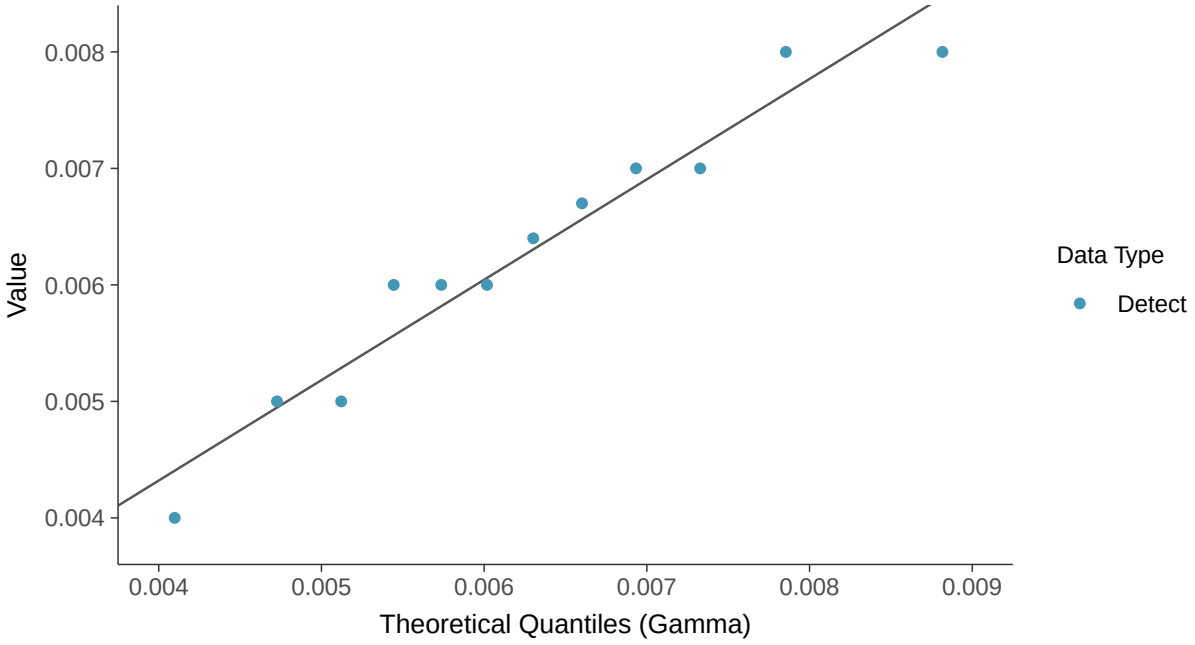
Lognormal Q-Q plot

Arsenic, MW-14 (mg/l)



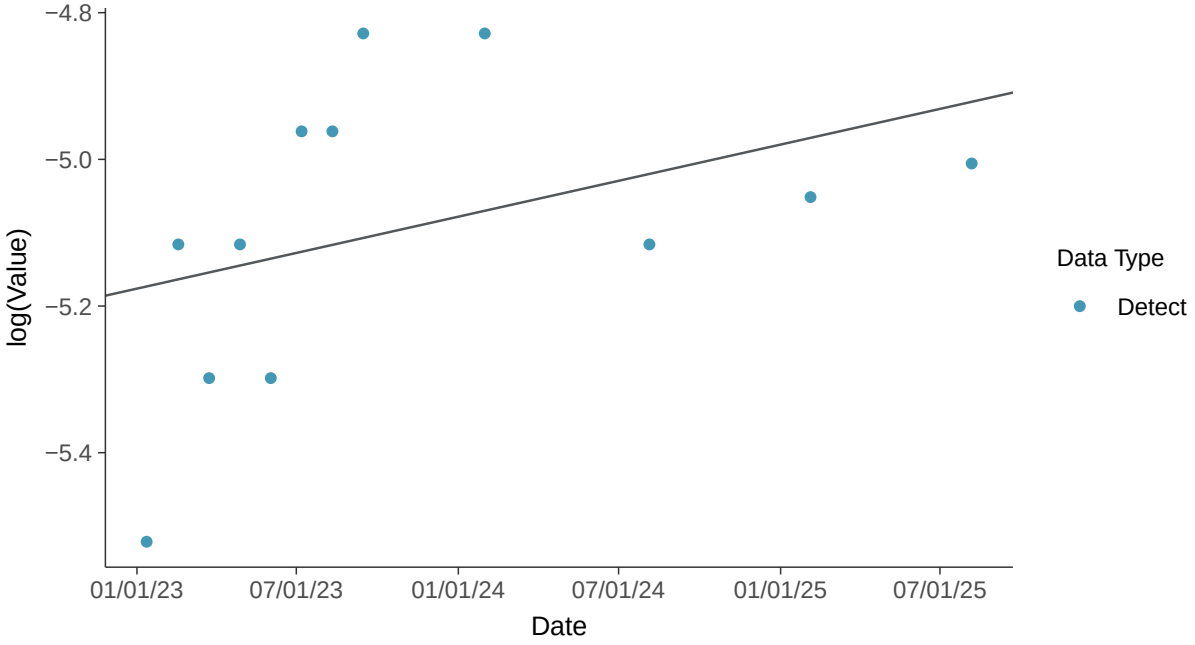
Gamma Q-Q plot

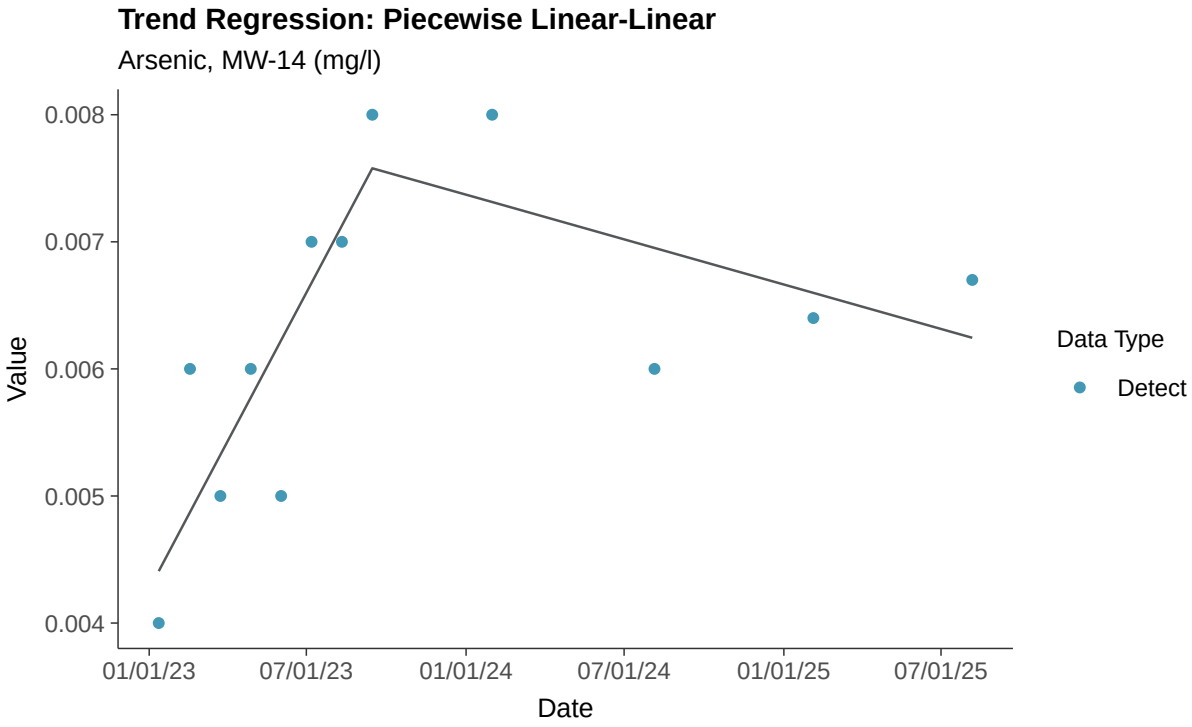
Arsenic, MW-14 (mg/l)



Trend Regression: Lognormal MLE

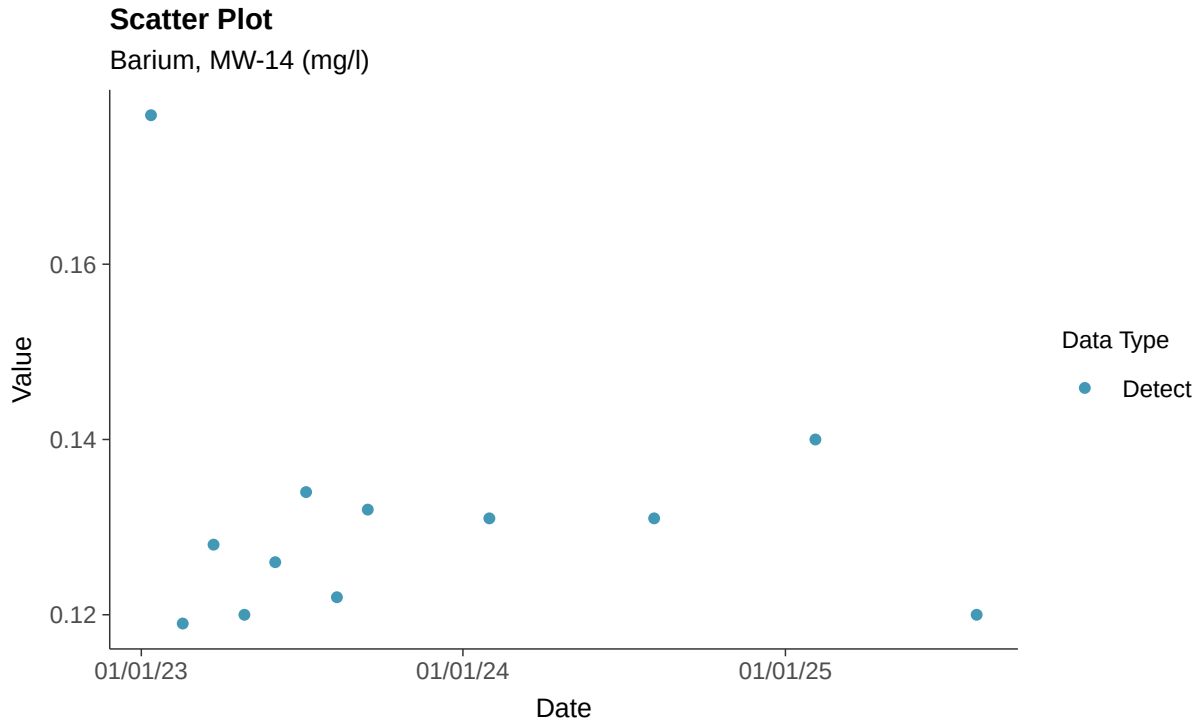
Arsenic, MW-14 (mg/l)

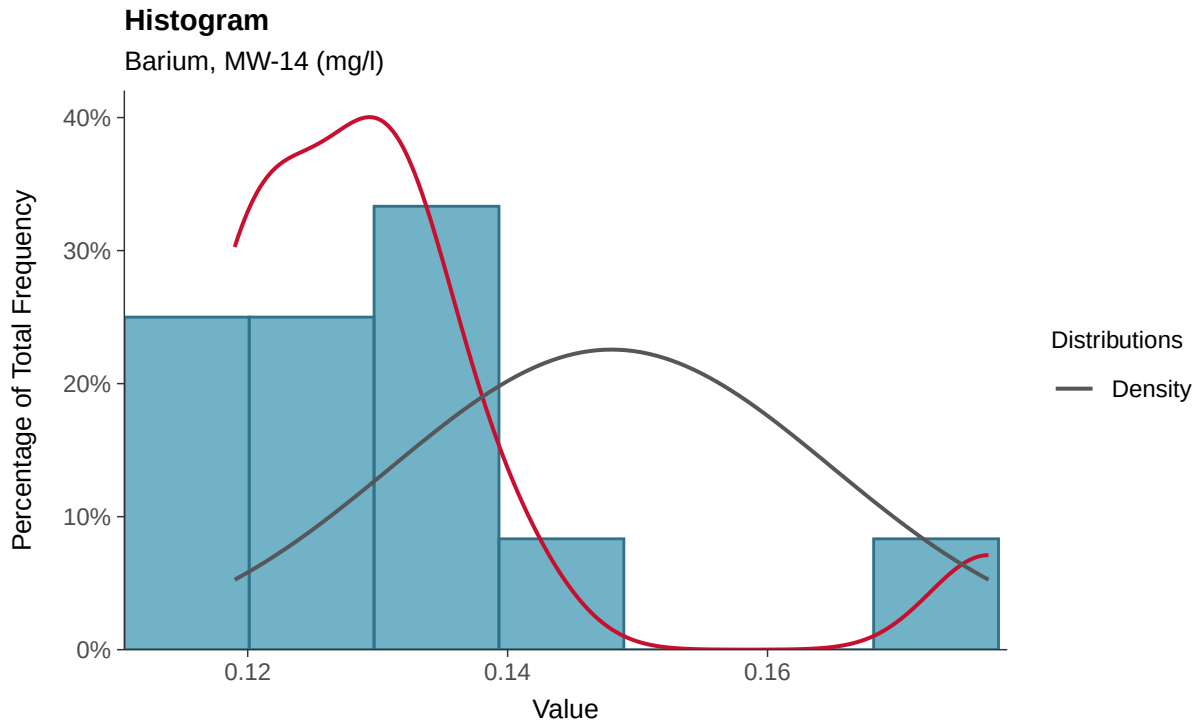



Trend Regression: Piecewise Linear-Linear
Arsenic, MW-14 (mg/l)
Value
0.008
0.007
0.006
0.005
0.004
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect

Appendix IV: Barium, MW-14

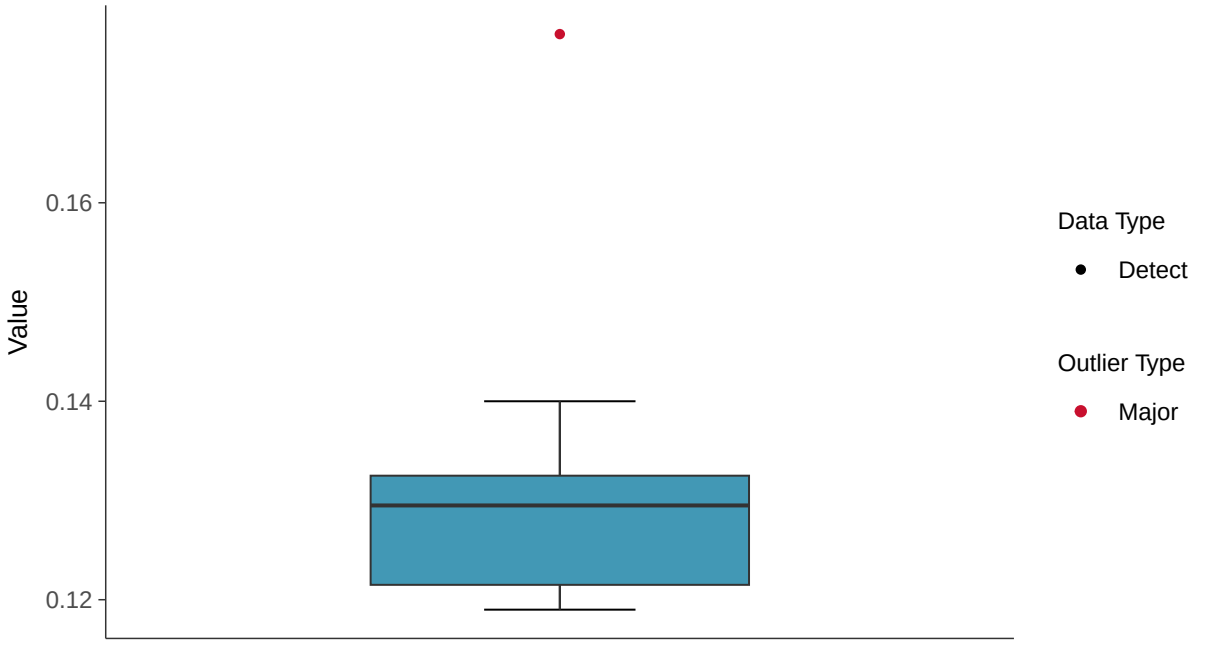
ID: 23_3_103





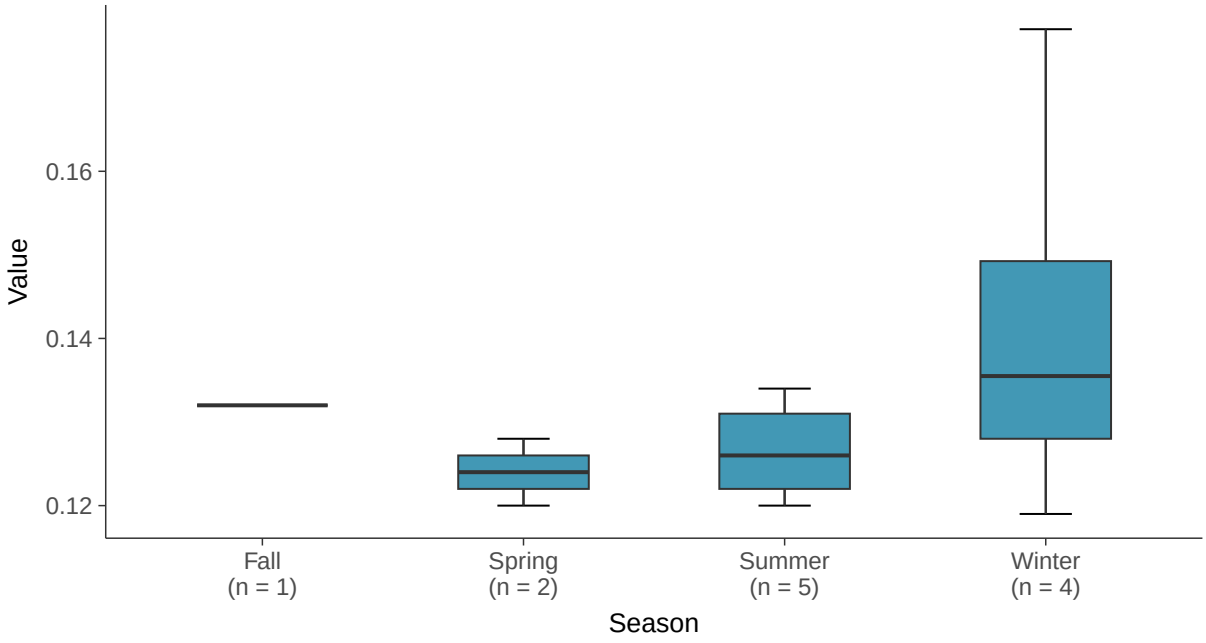
Boxplot

Barium, MW-14 (mg/l)



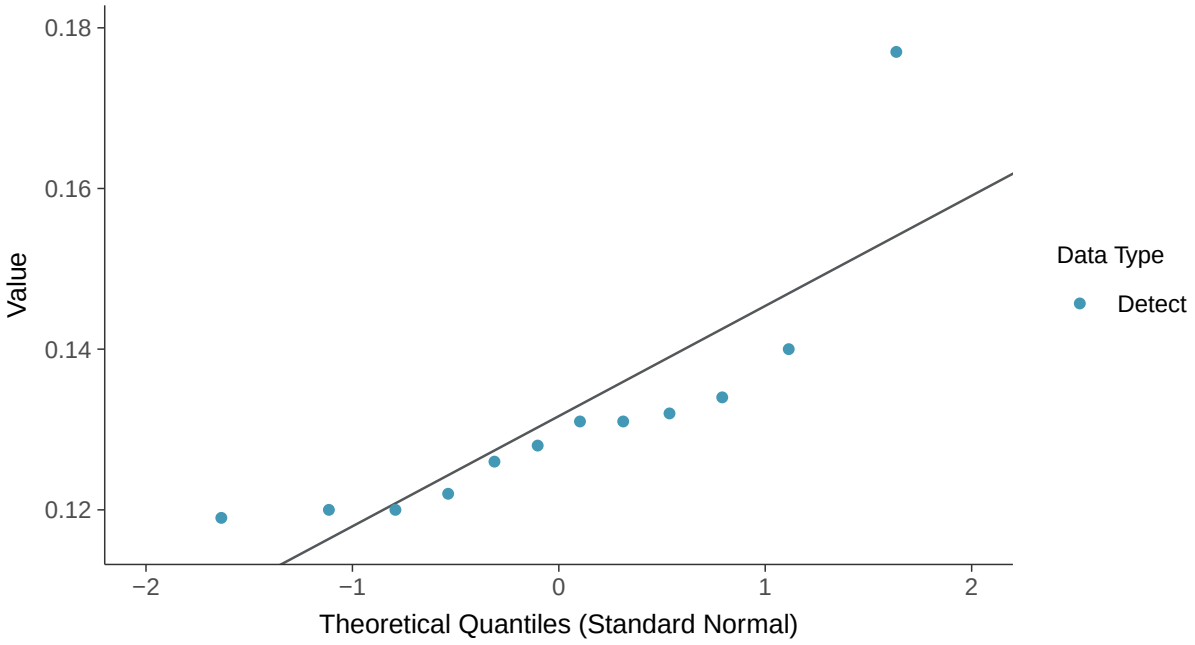
Boxplot by Season

Barium, MW-14 (mg/l)



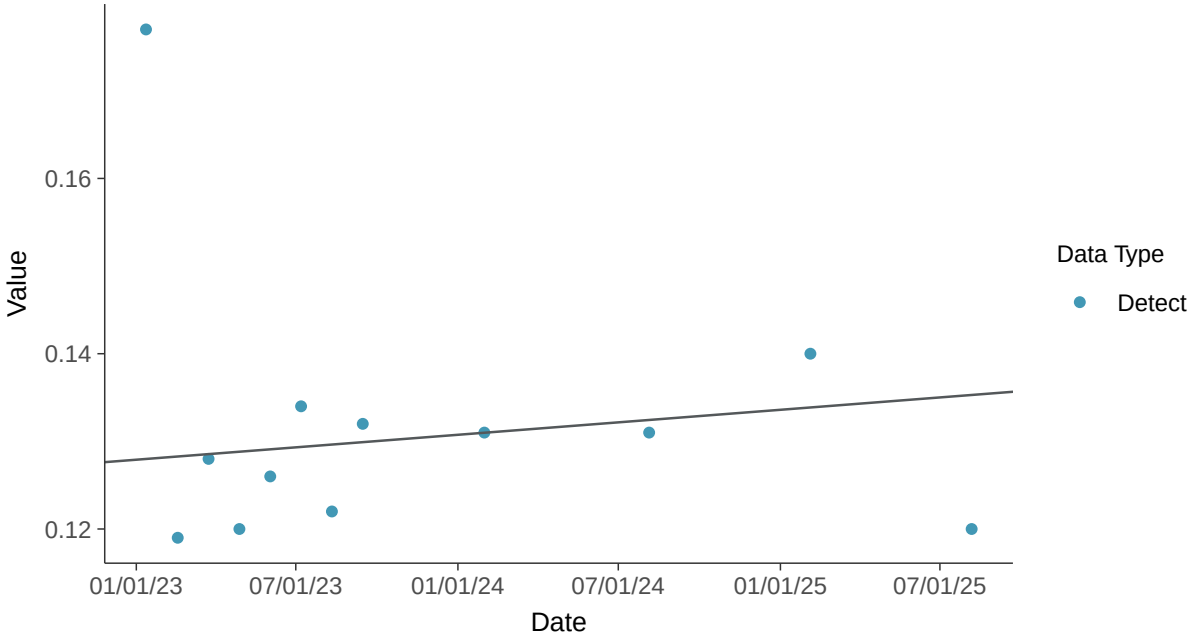
Normal Q-Q plot

Barium, MW-14 (mg/l)



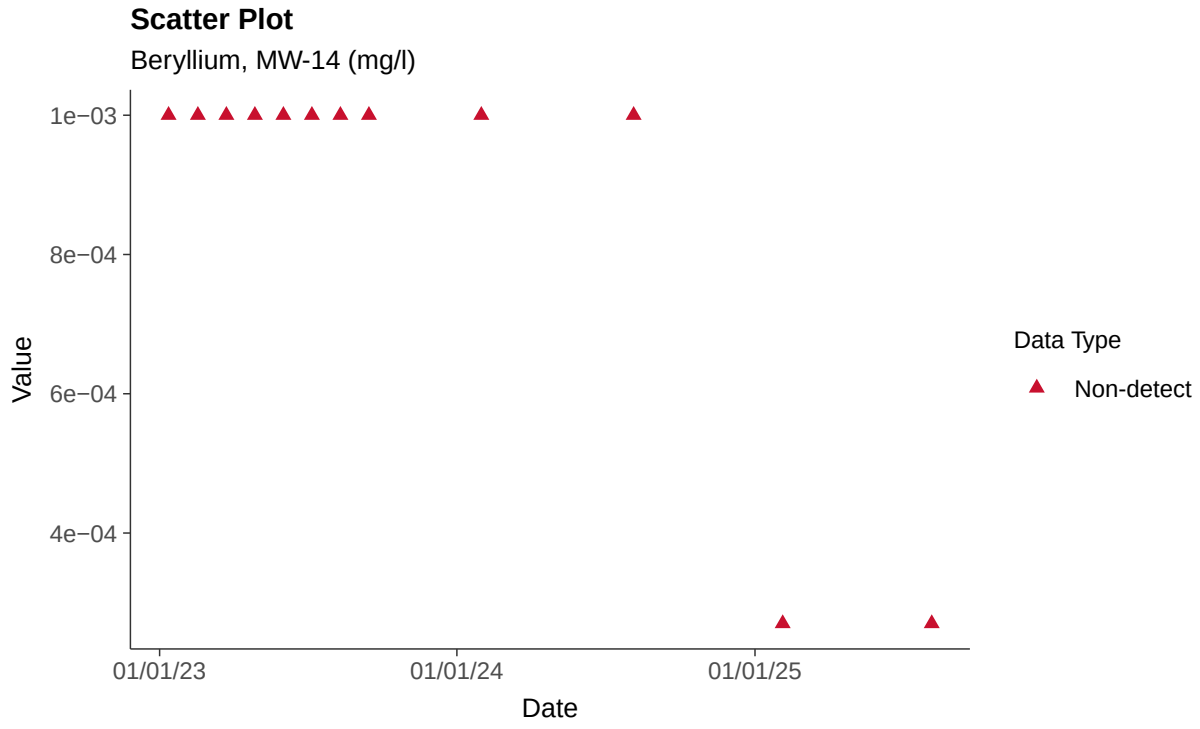
Trend Regression: Mann-Kendall/Theil-Sen Estimate

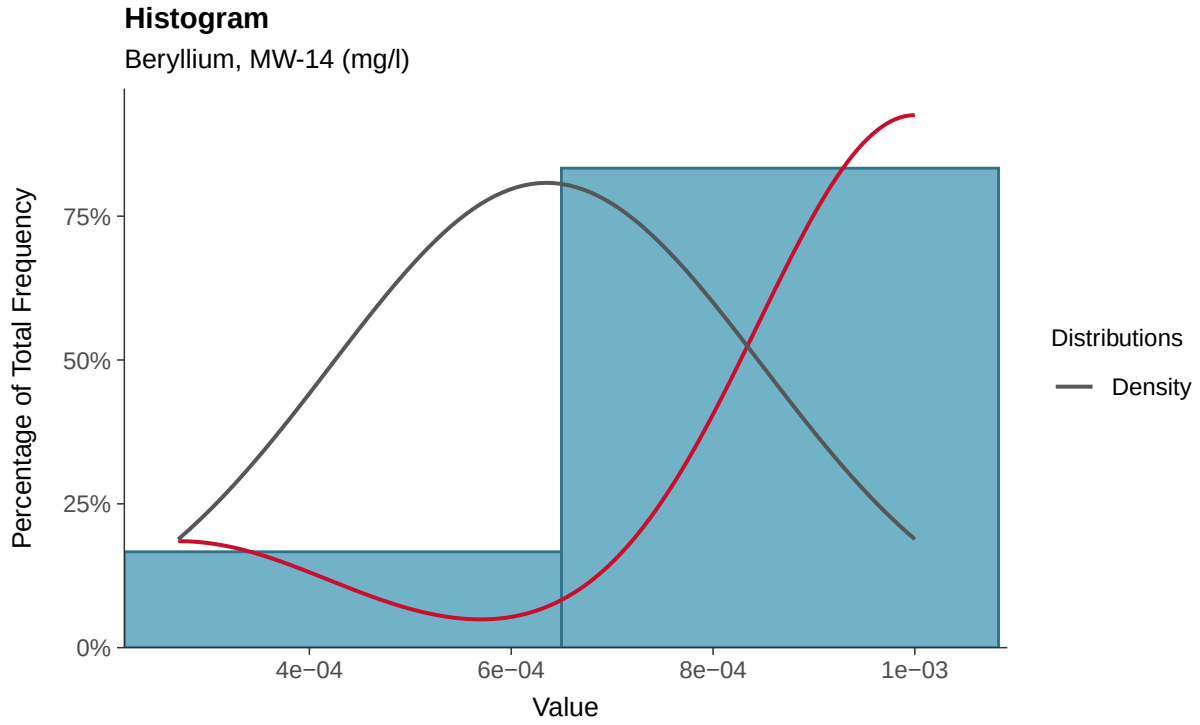
Barium, MW-14 (mg/l)



Appendix IV: Beryllium, MW-14

ID: 23_3_104



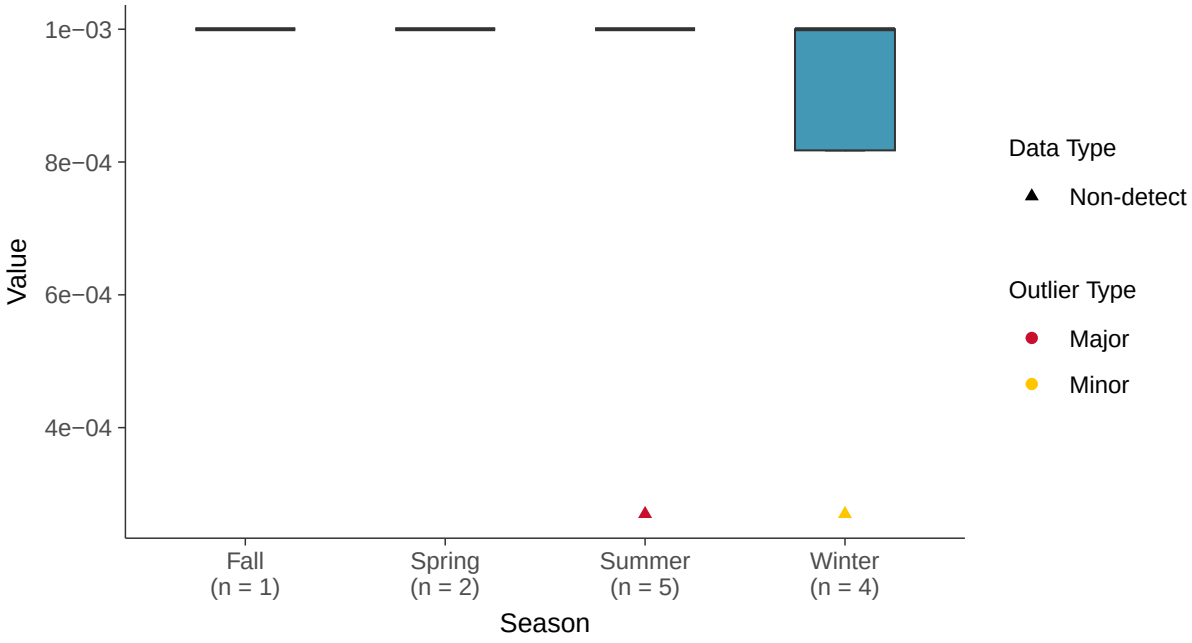


Boxplot

Beryllium, MW-14 (mg/l)

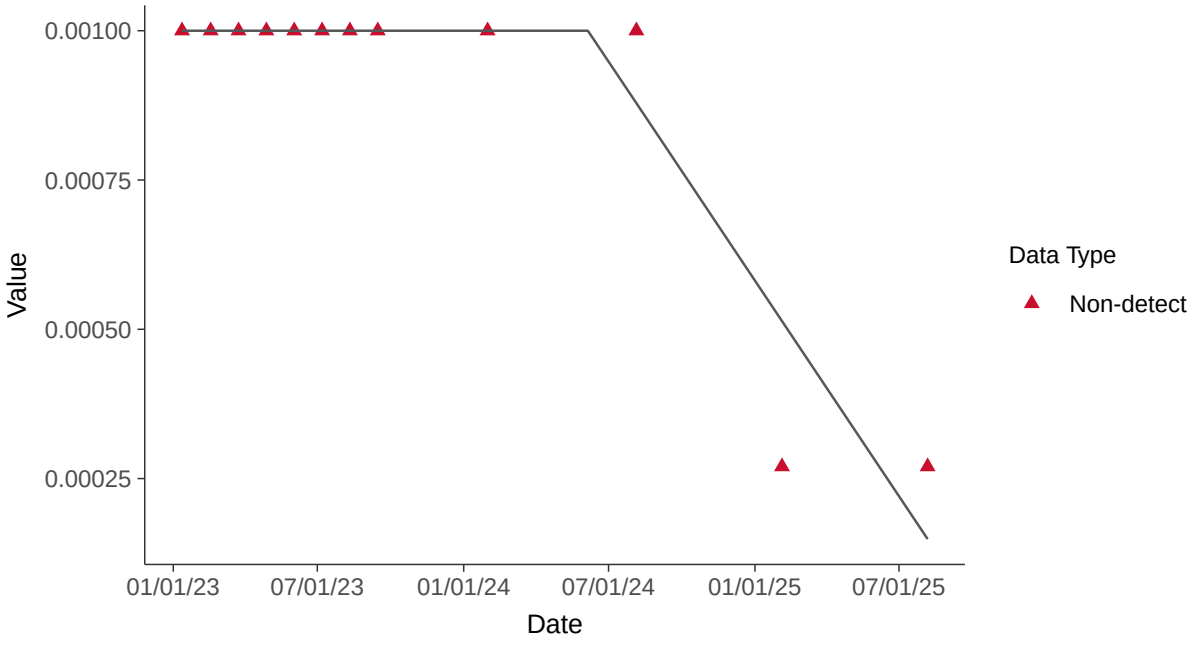
Boxplot by Season

Beryllium, MW-14 (mg/l)



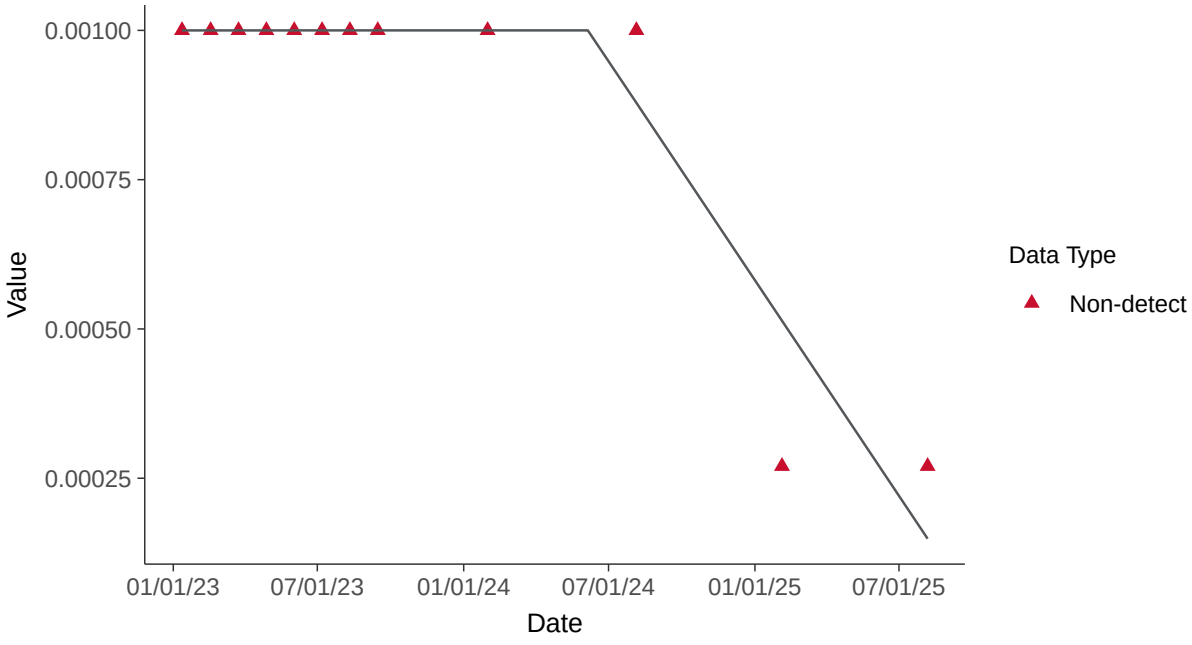
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-14 (mg/l)



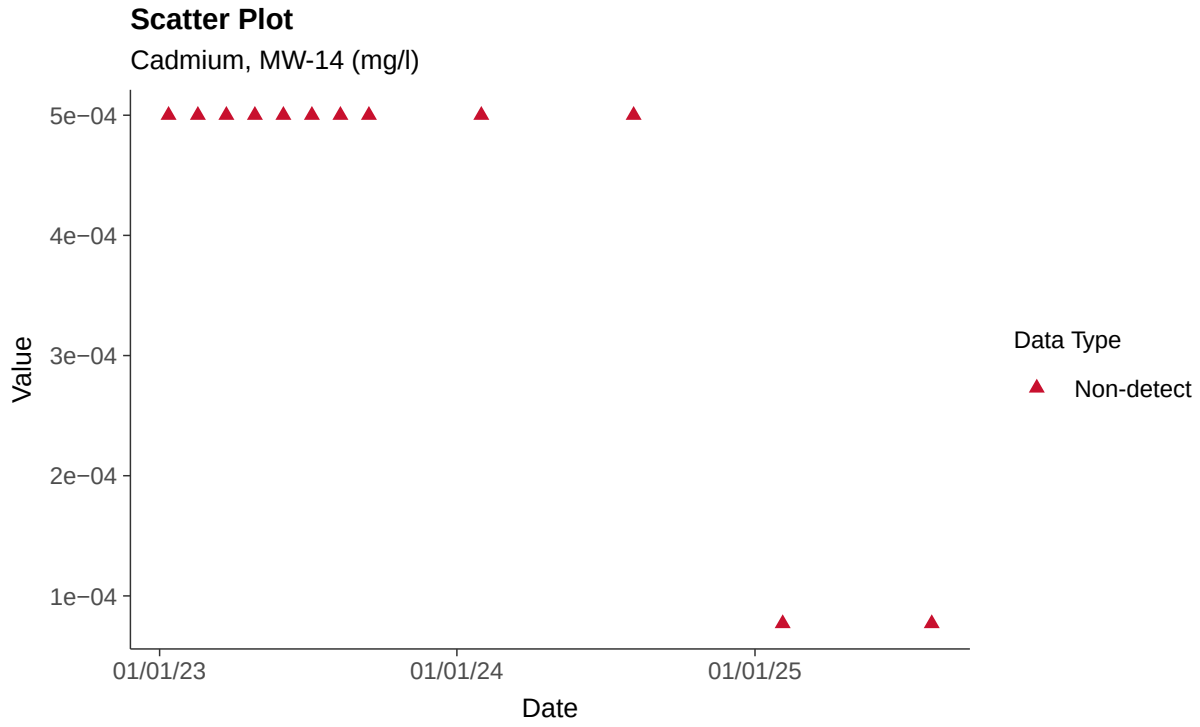
Trend Regression: Piecewise Linear-Linear-Linear

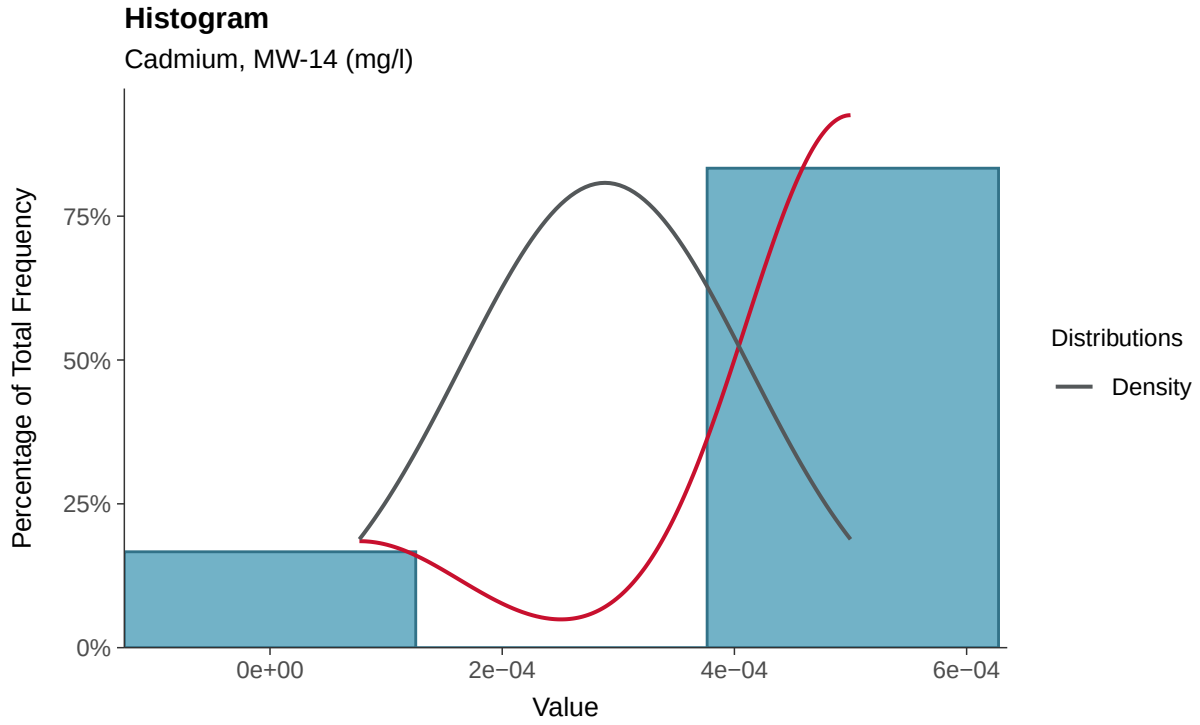
Beryllium, MW-14 (mg/l)



Appendix IV: Cadmium, MW-14

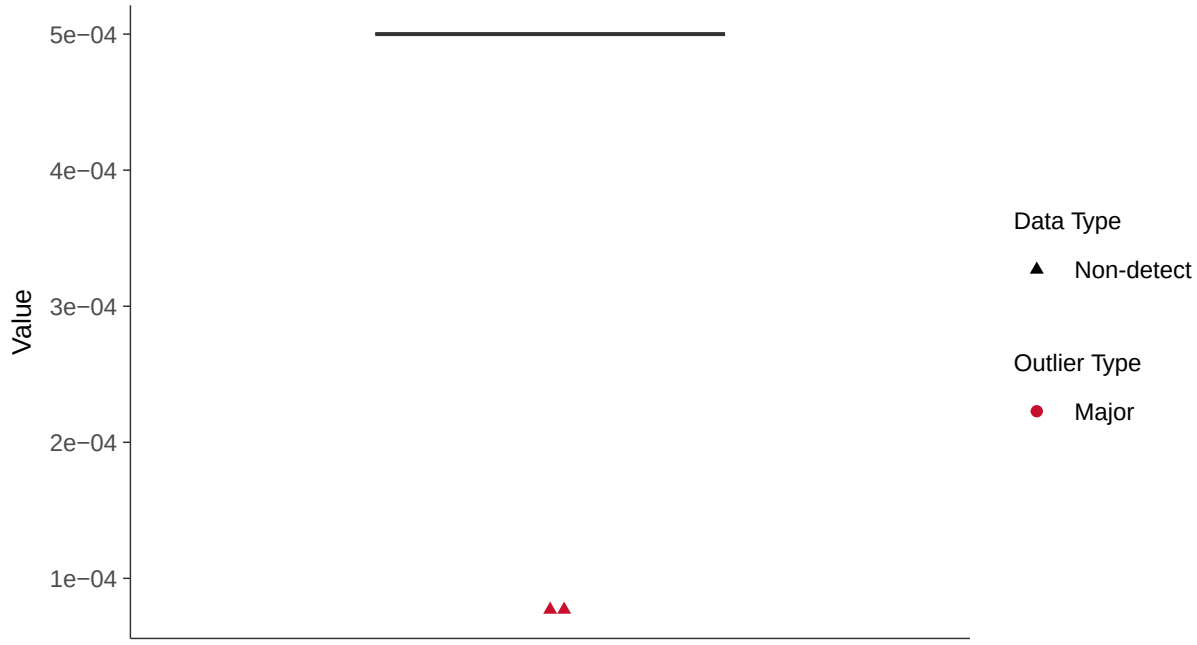
ID: 23_3_106





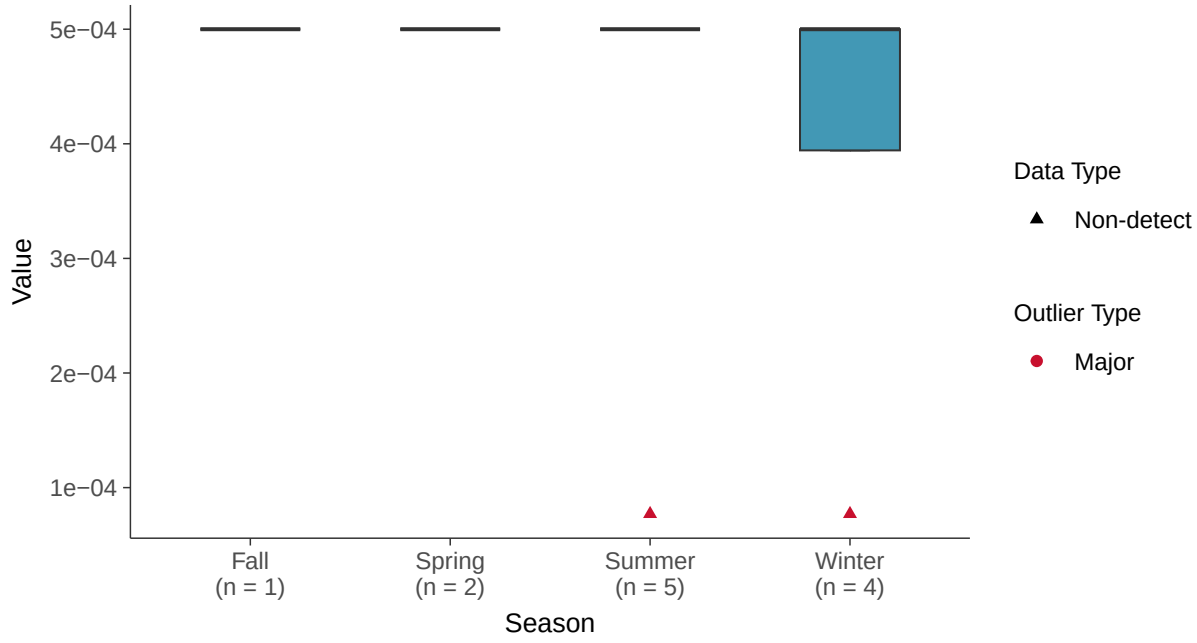
Boxplot

Cadmium, MW-14 (mg/l)



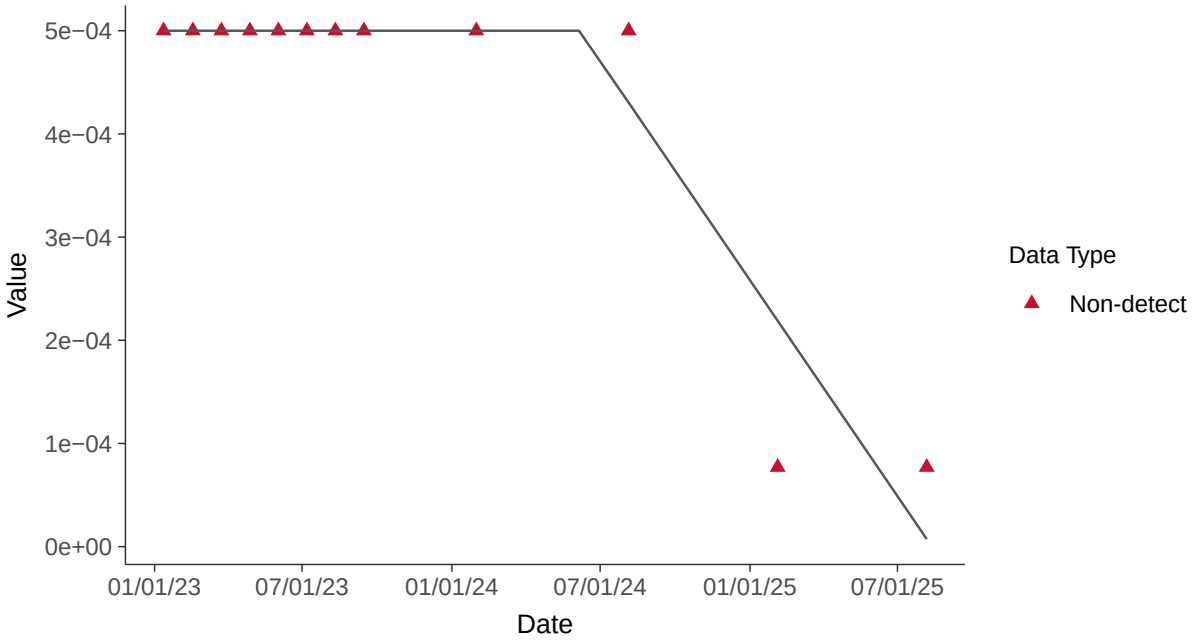
Boxplot by Season

Cadmium, MW-14 (mg/l)



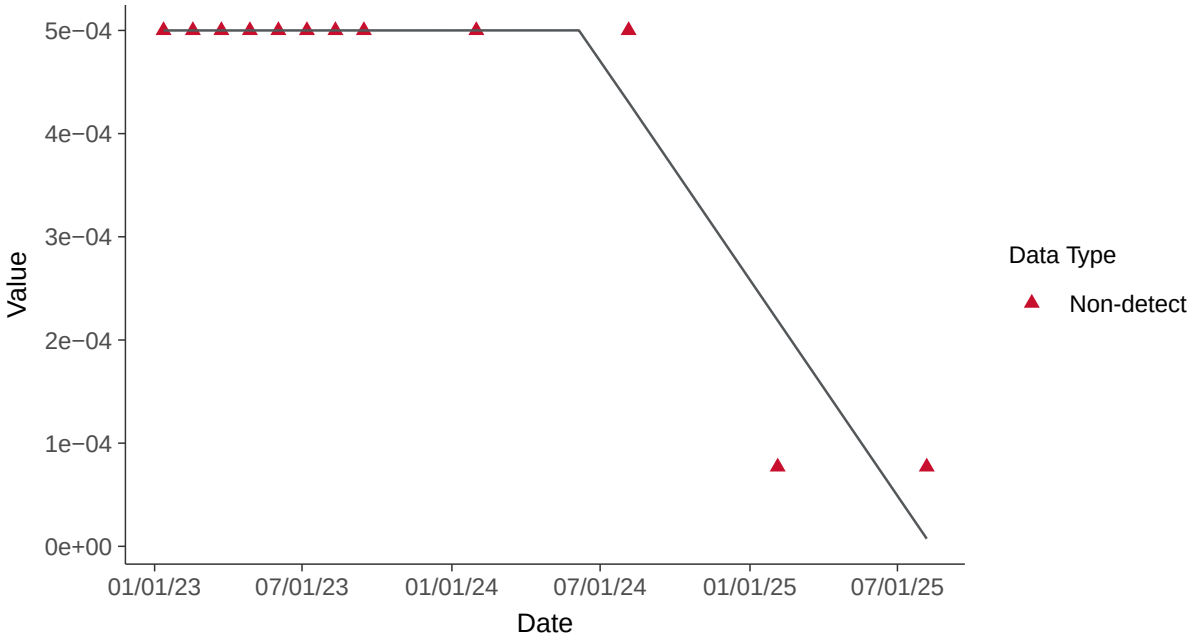
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-14 (mg/l)



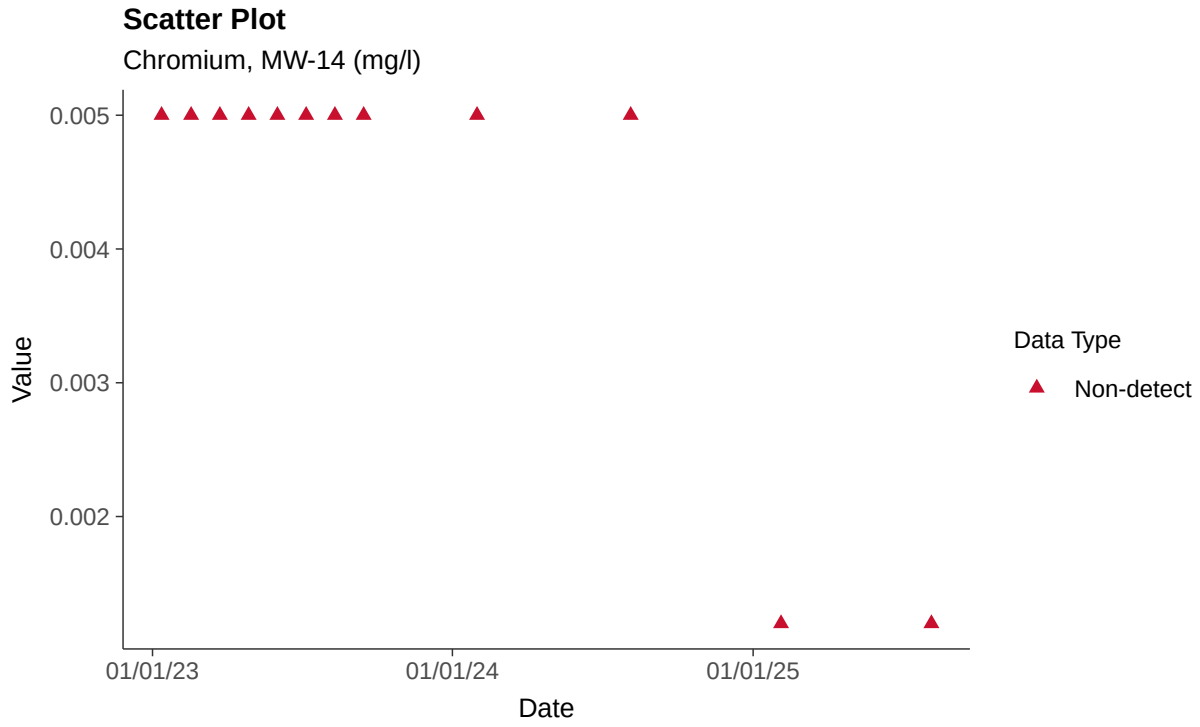
Trend Regression: Piecewise Linear-Linear-Linear

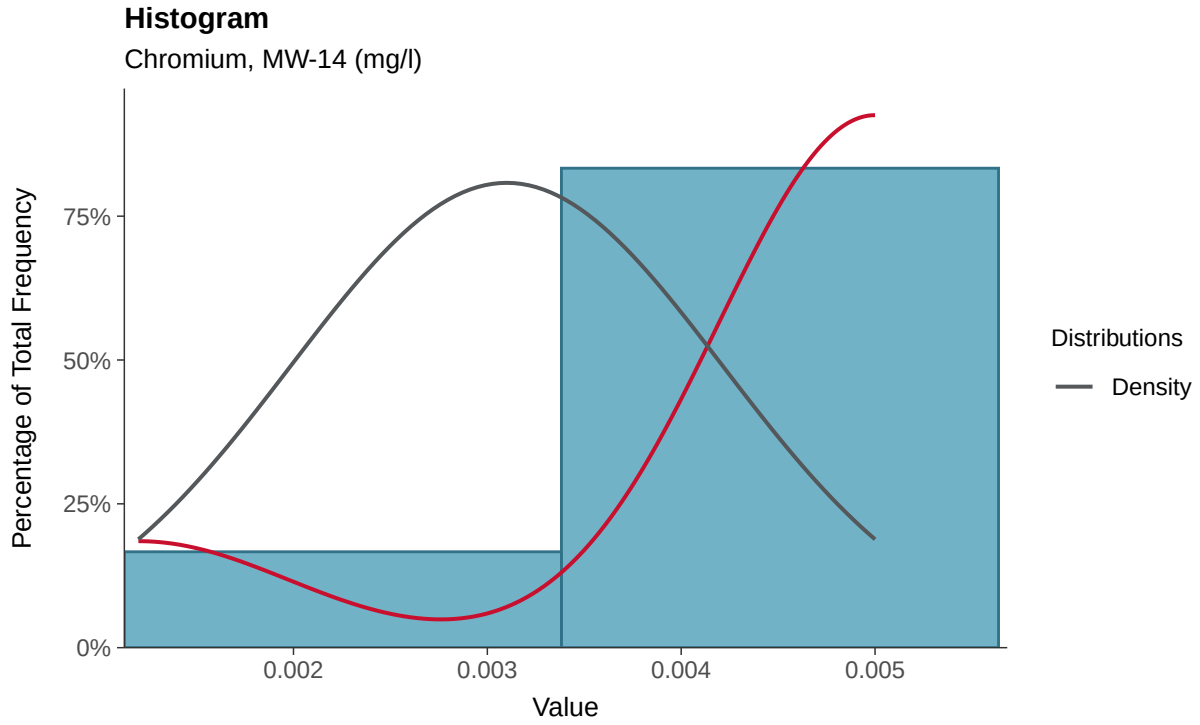
Cadmium, MW-14 (mg/l)



Appendix IV: Chromium, MW-14

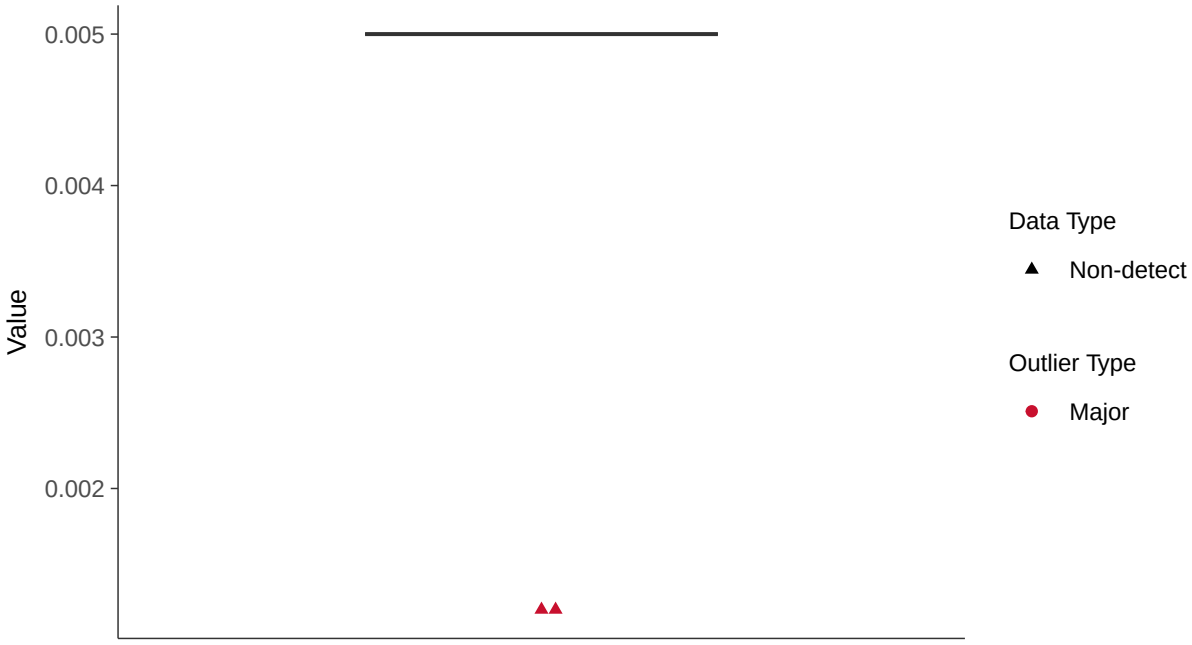
ID: 23_3_109





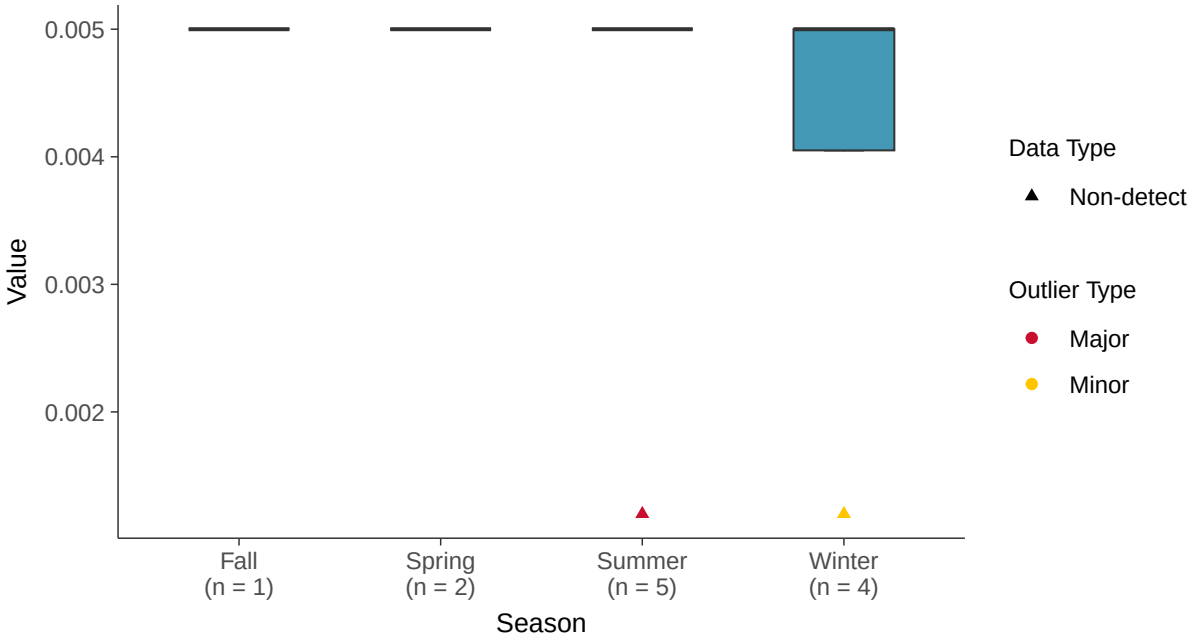
Boxplot

Chromium, MW-14 (mg/l)



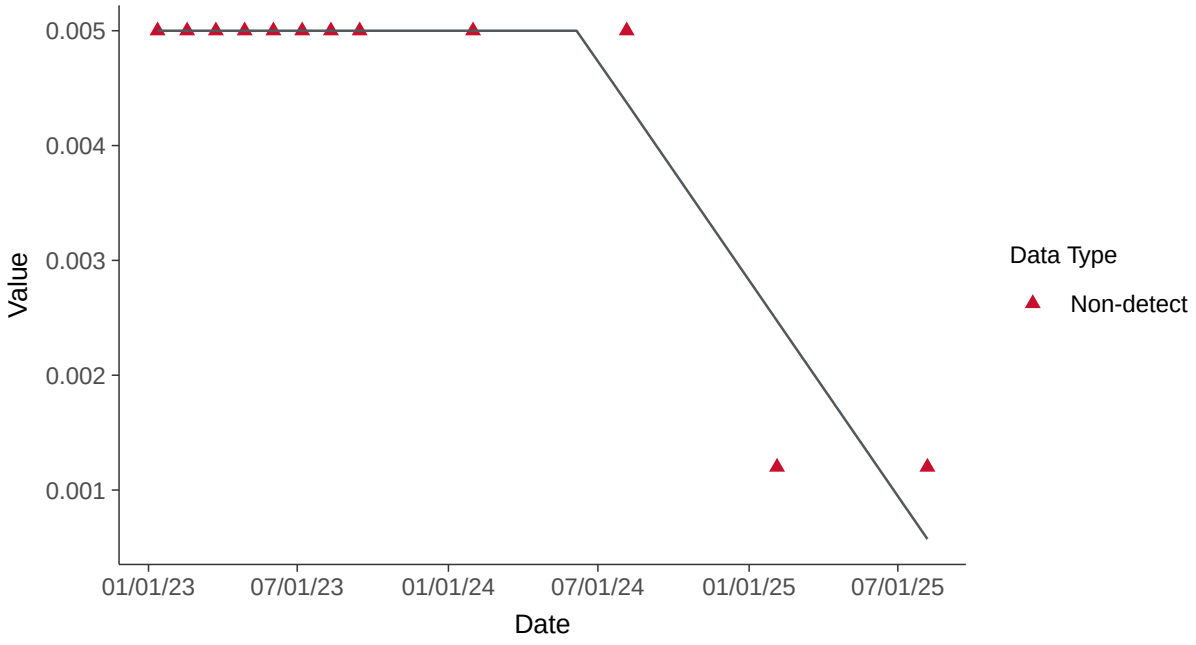
Boxplot by Season

Chromium, MW-14 (mg/l)



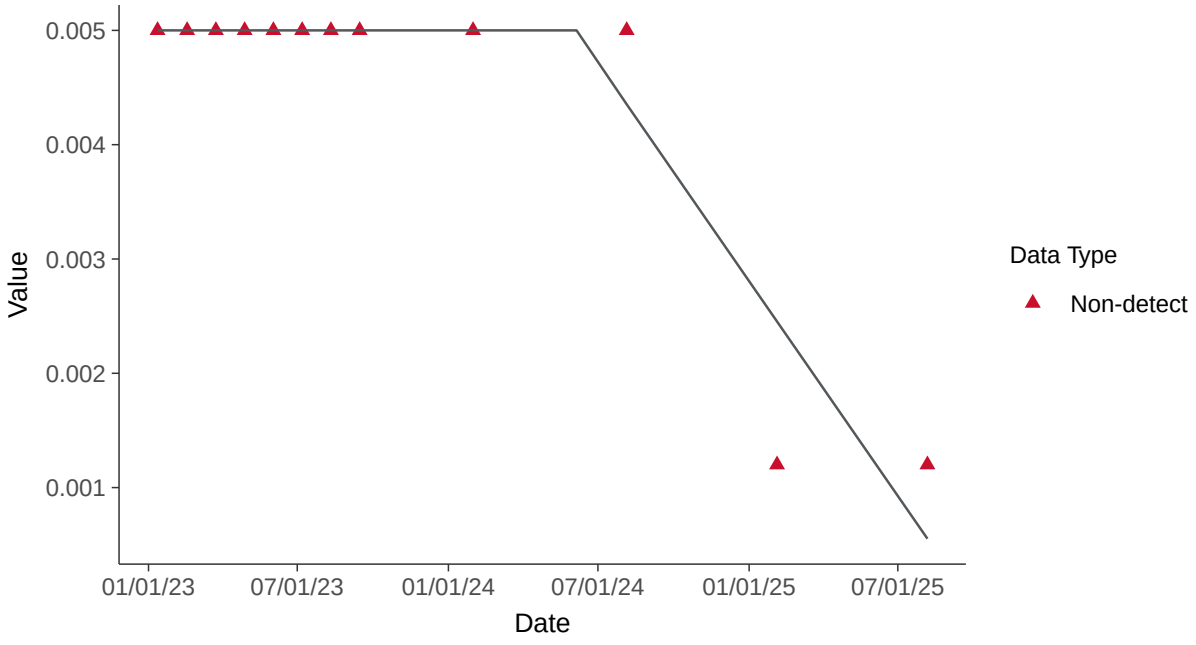
Trend Regression: Piecewise Linear-Linear

Chromium, MW-14 (mg/l)



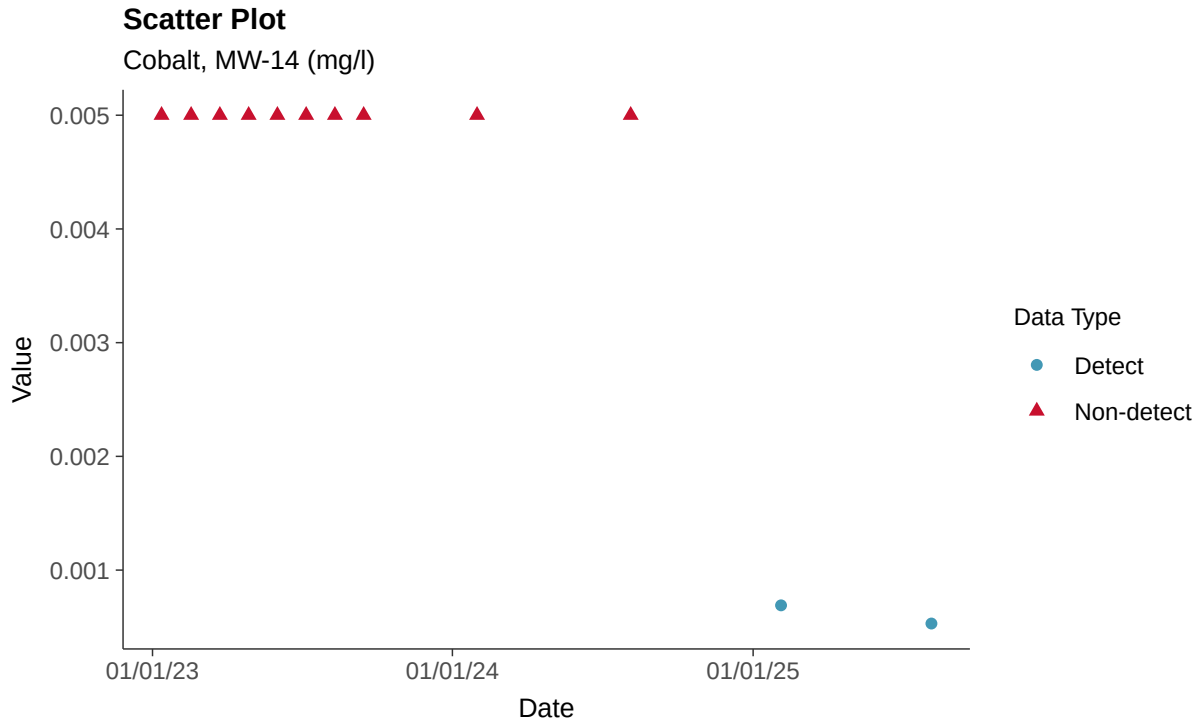
Trend Regression: Piecewise Linear-Linear-Linear

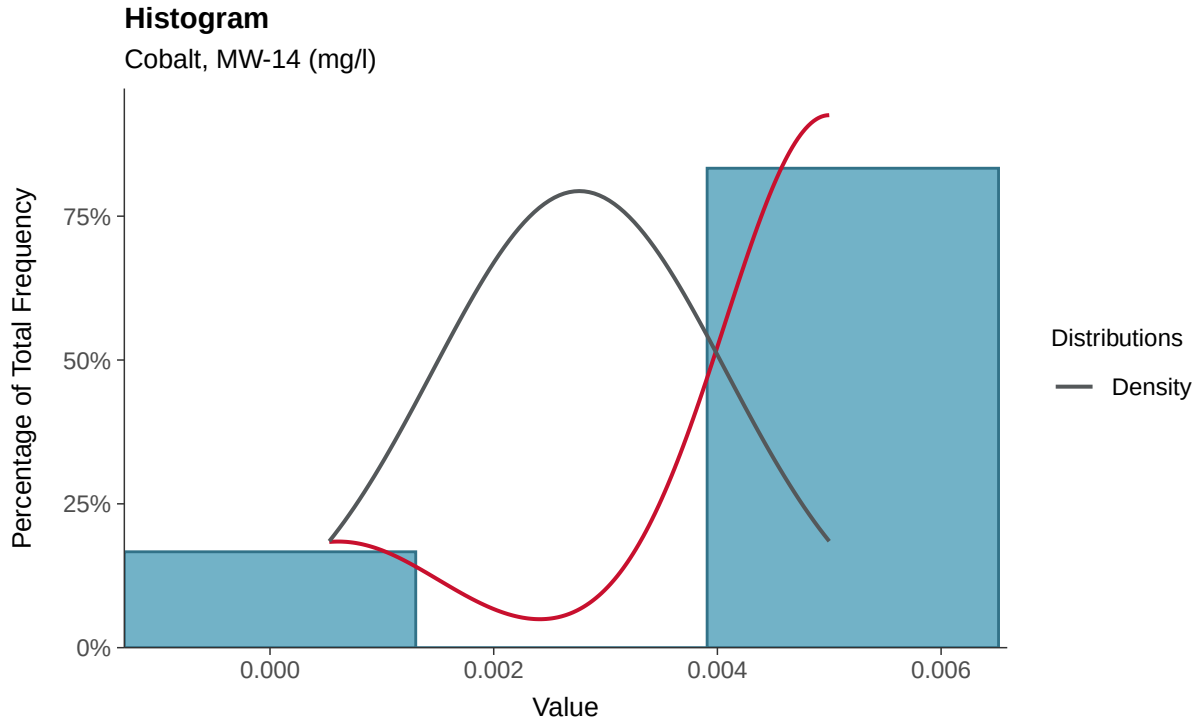
Chromium, MW-14 (mg/l)



Appendix IV: Cobalt, MW-14

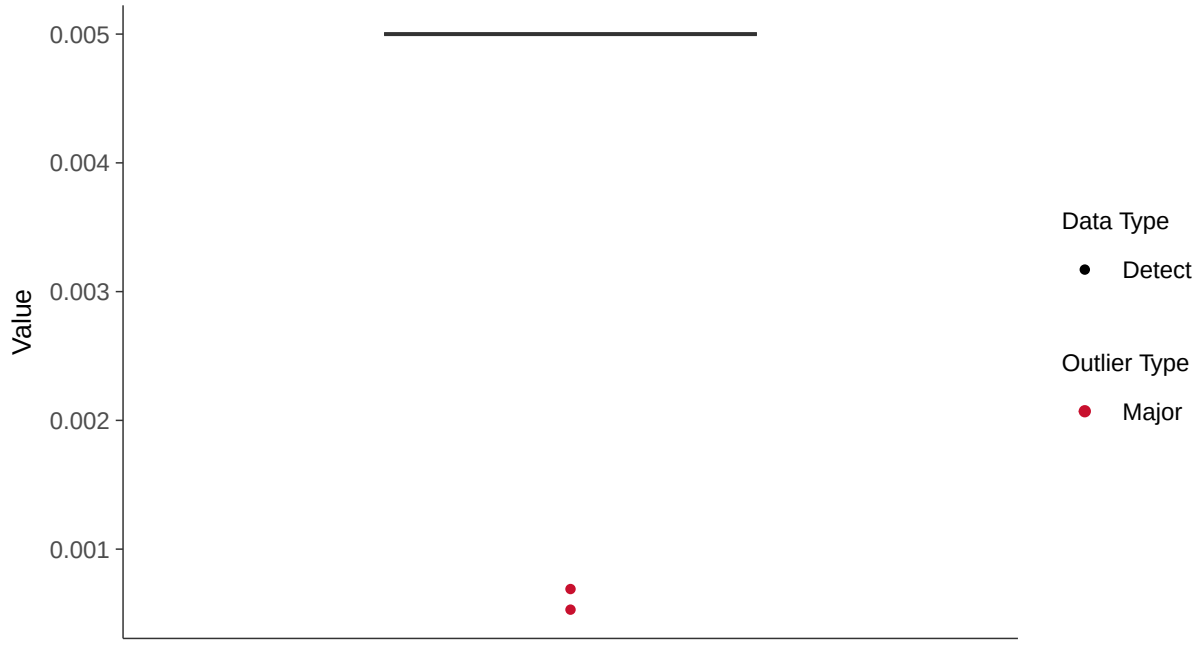
ID: 23_3_110





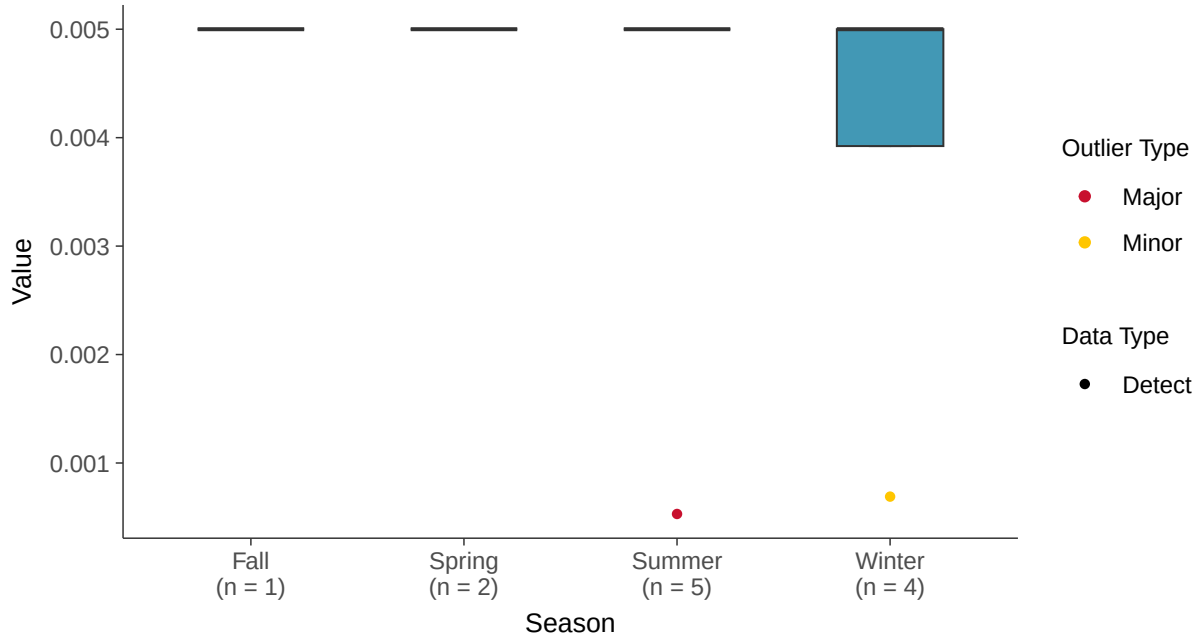
Boxplot

Cobalt, MW-14 (mg/l)



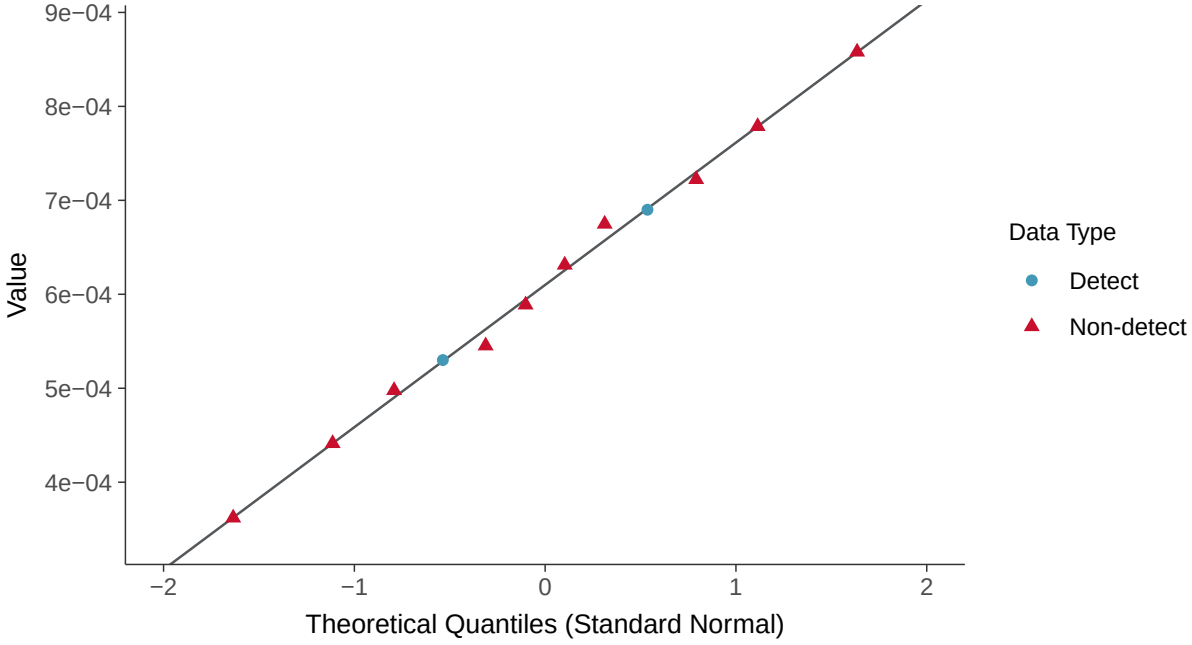
Boxplot by Season

Cobalt, MW-14 (mg/l)



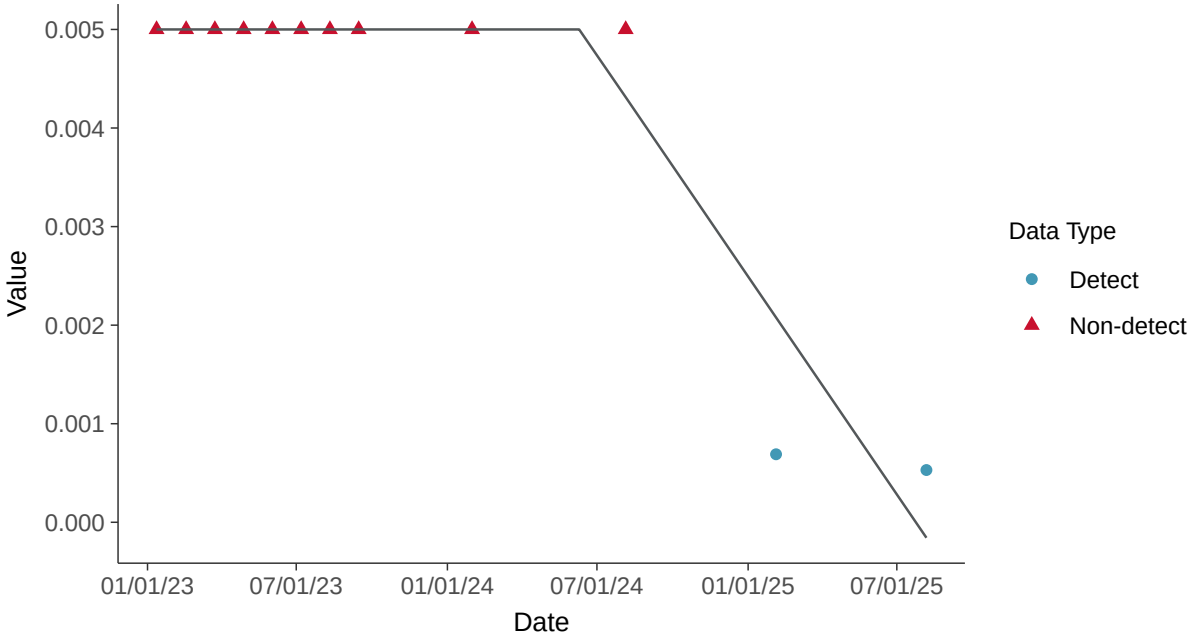
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-14 (mg/l)



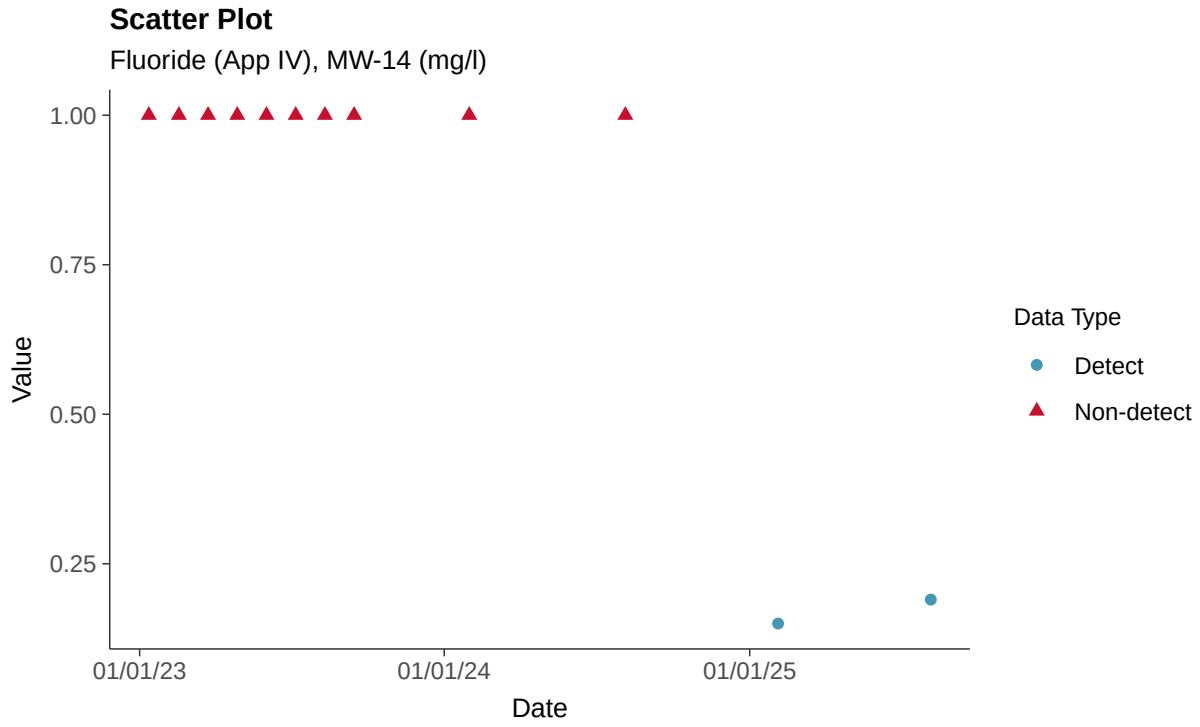
Trend Regression: Piecewise Linear-Linear

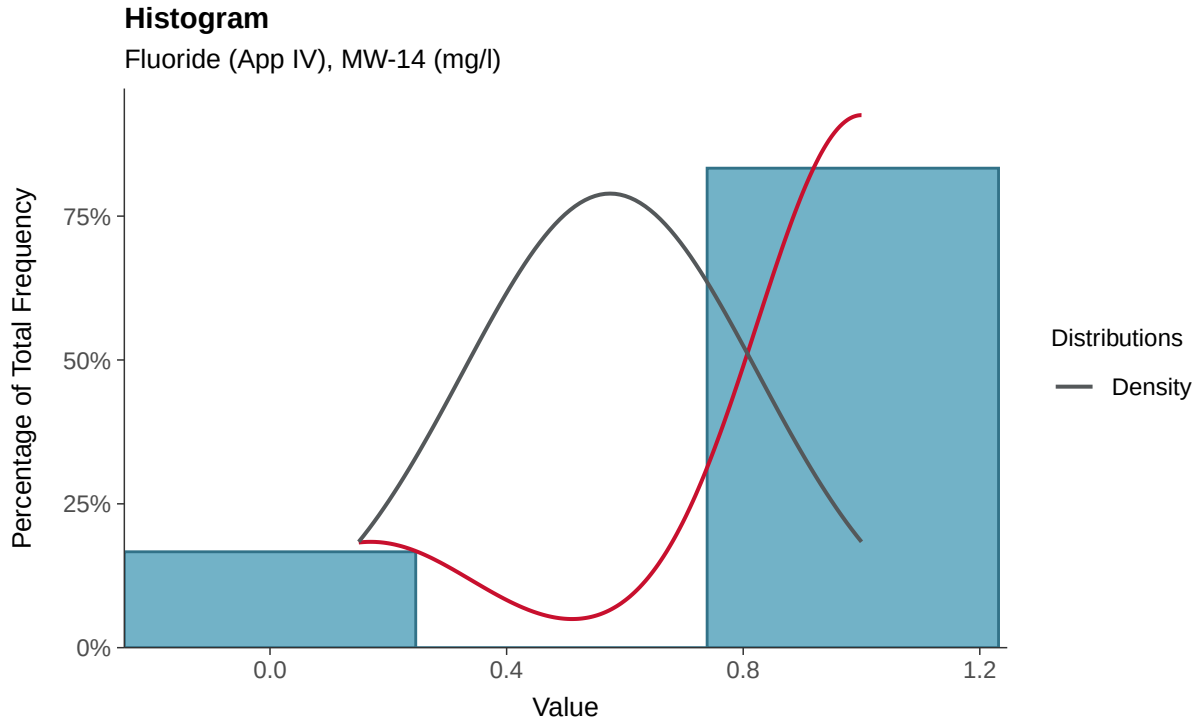
Cobalt, MW-14 (mg/l)



Appendix IV: Fluoride (App IV), MW-14

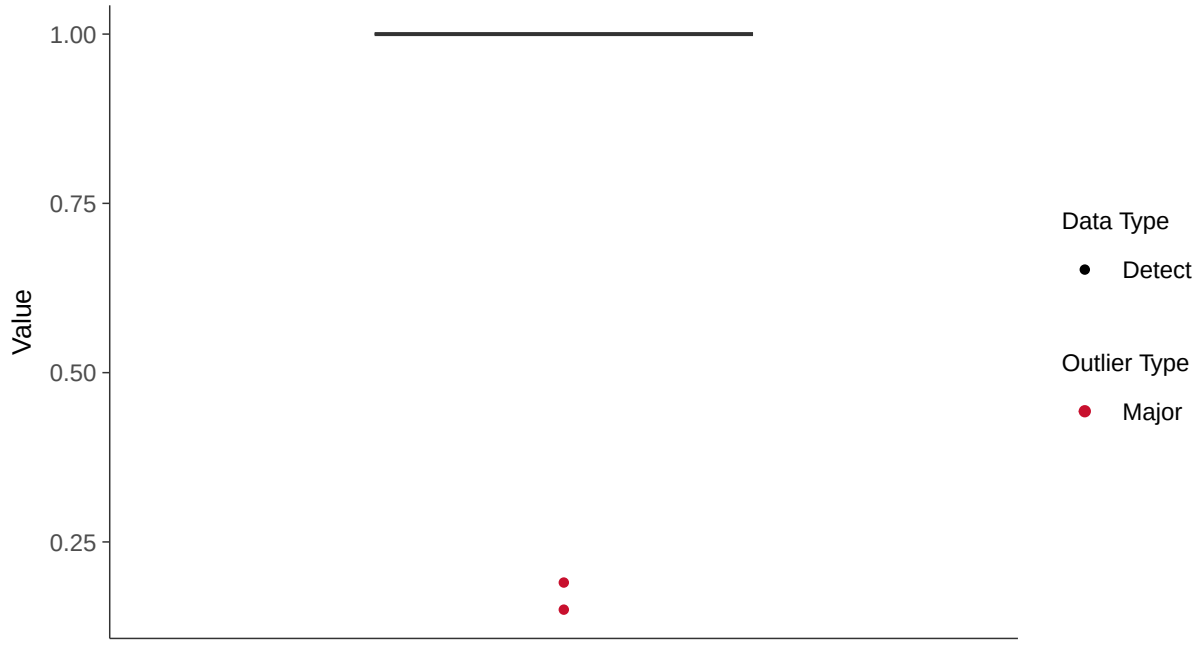
ID: 23_3_113





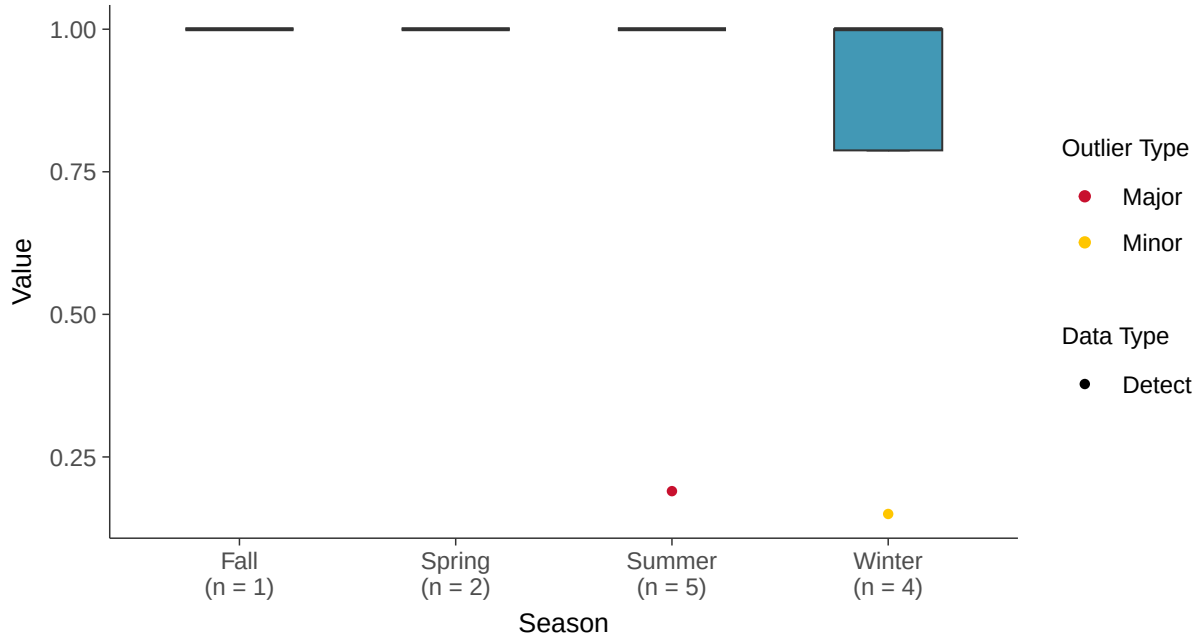
Boxplot

Fluoride (App IV), MW-14 (mg/l)



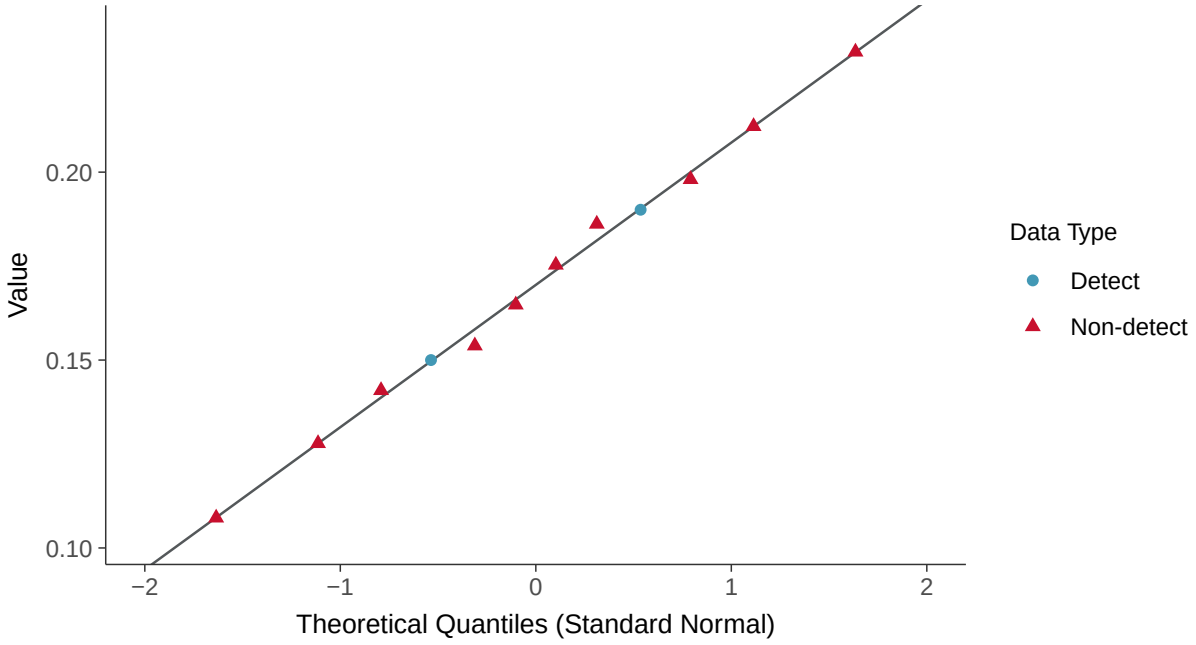
Boxplot by Season

Fluoride (App IV), MW-14 (mg/l)



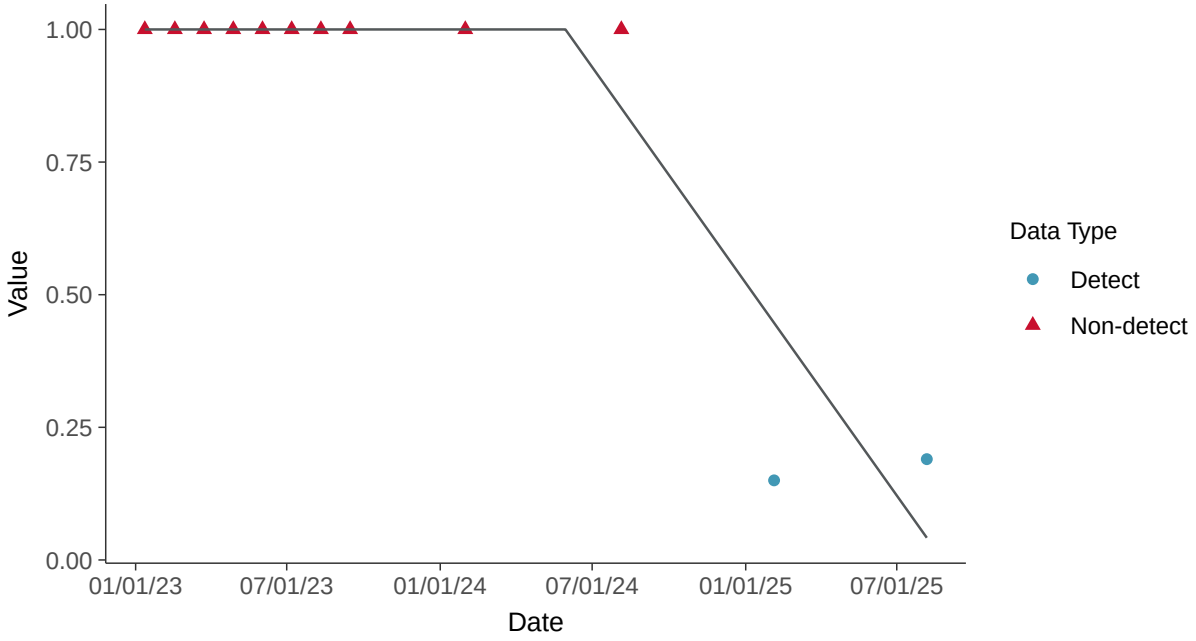
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-14 (mg/l)



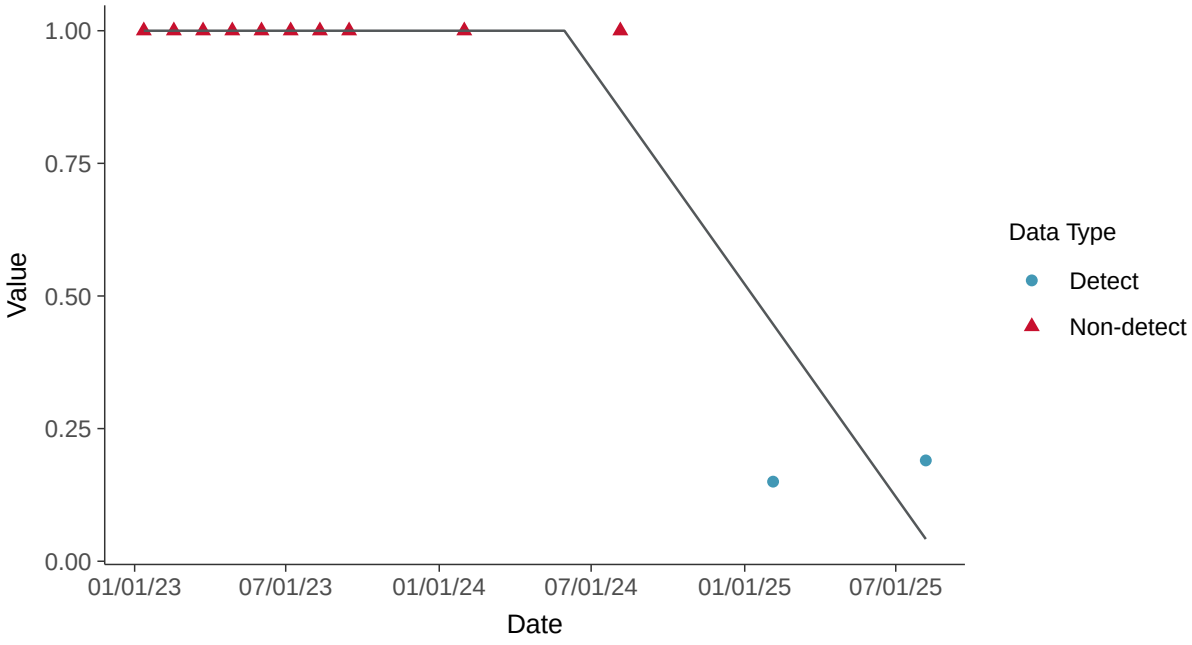
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-14 (mg/l)



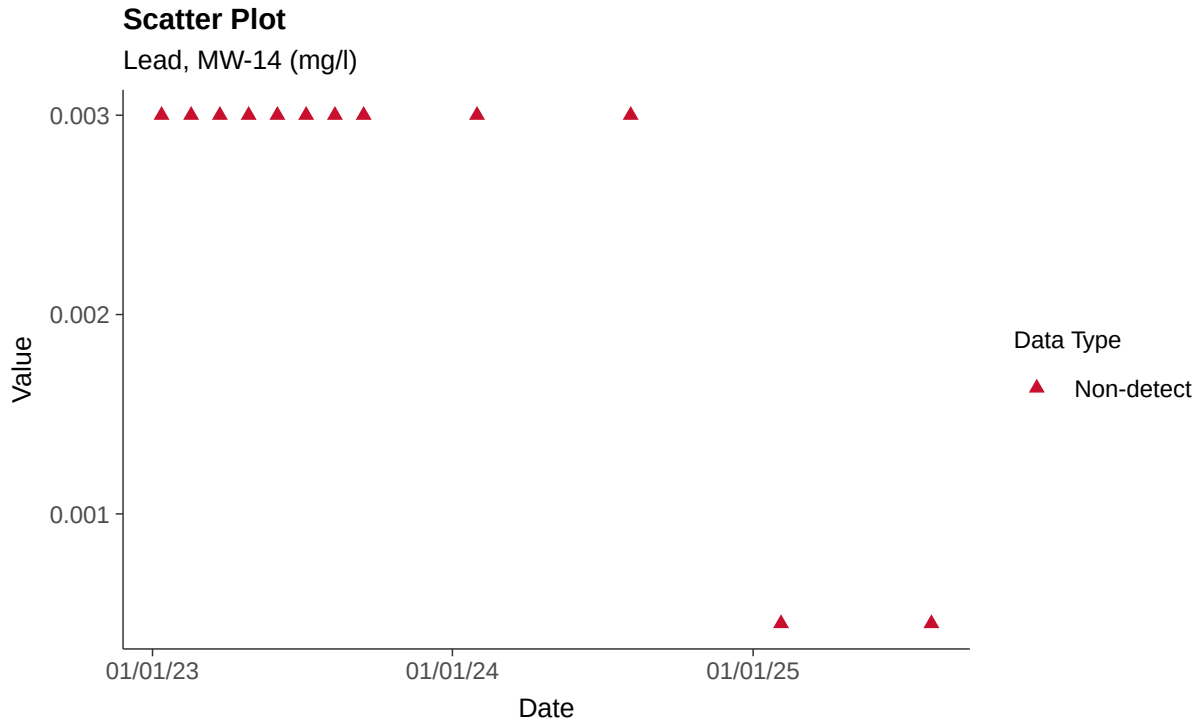
Trend Regression: Piecewise Linear-Linear-Linear

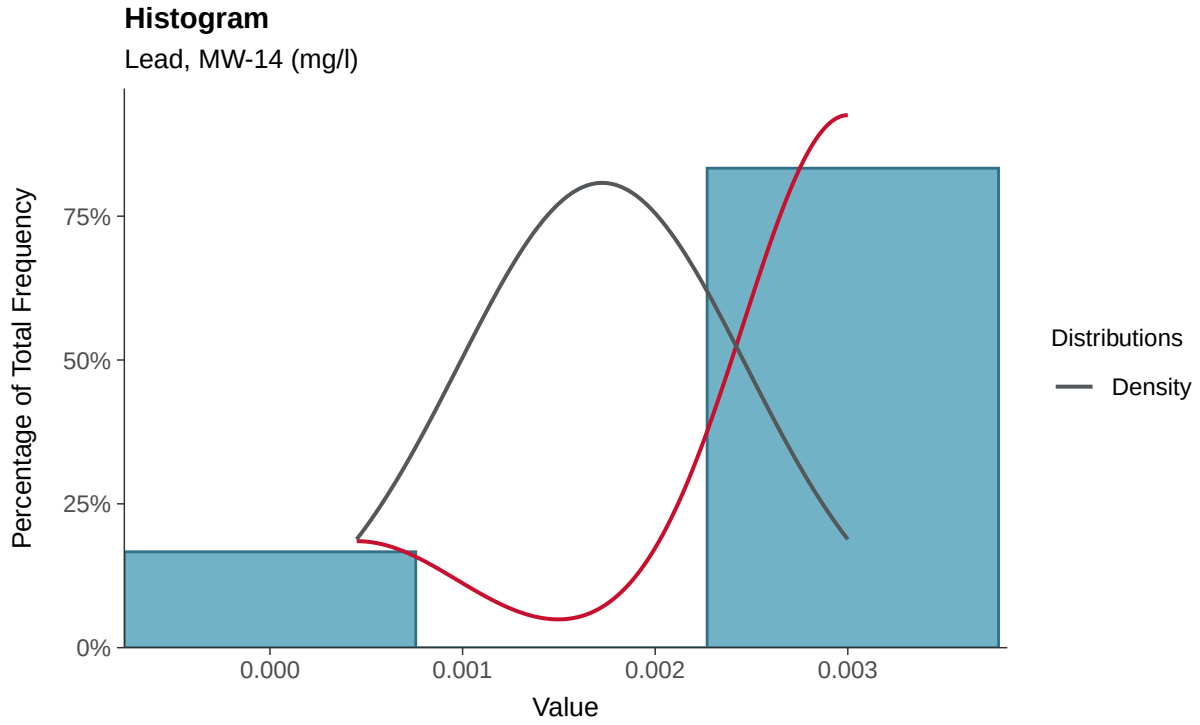
Fluoride (App IV), MW-14 (mg/l)



Appendix IV: Lead, MW-14

ID: 23_3_115



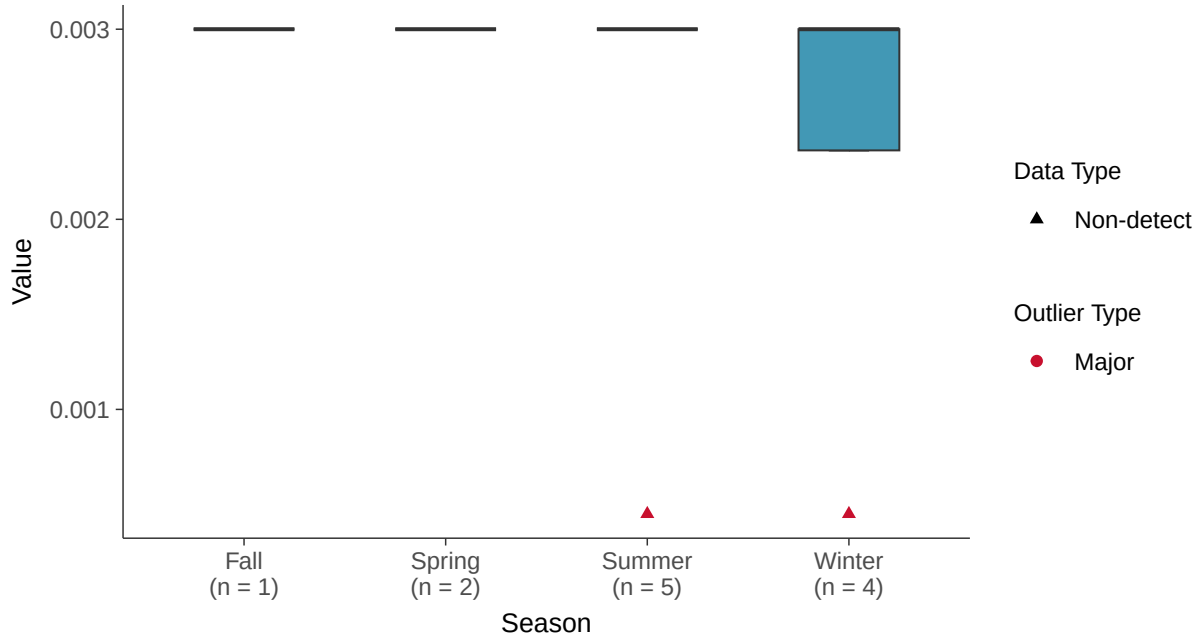


Boxplot

Lead, MW-14 (mg/l)

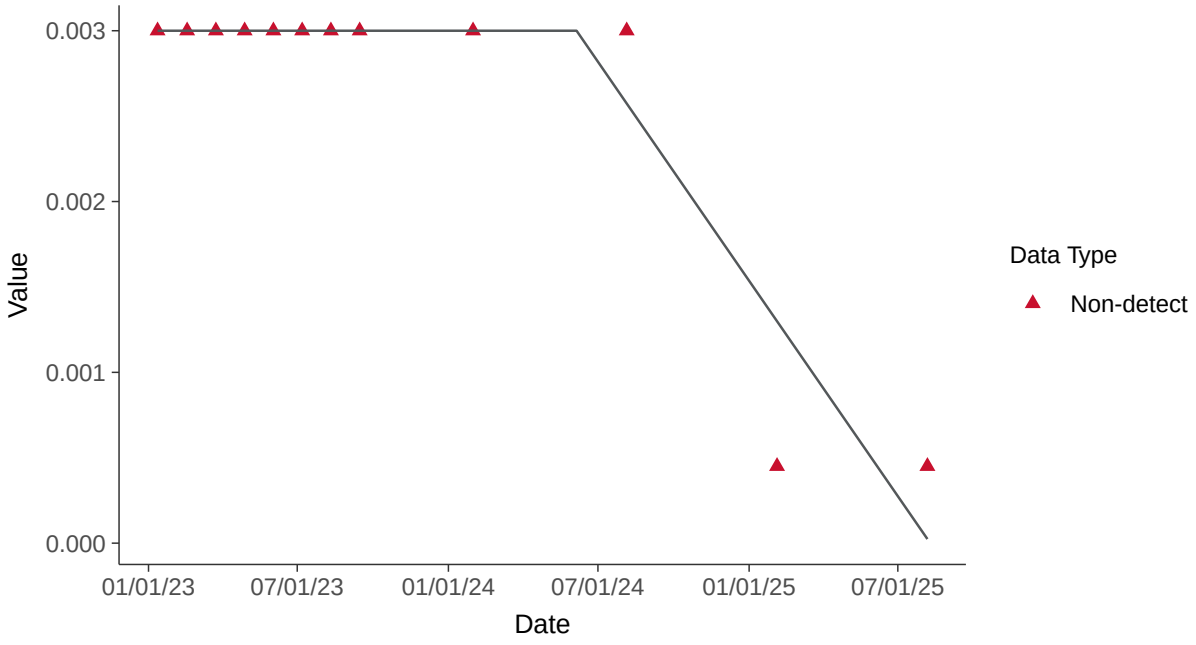
Boxplot by Season

Lead, MW-14 (mg/l)



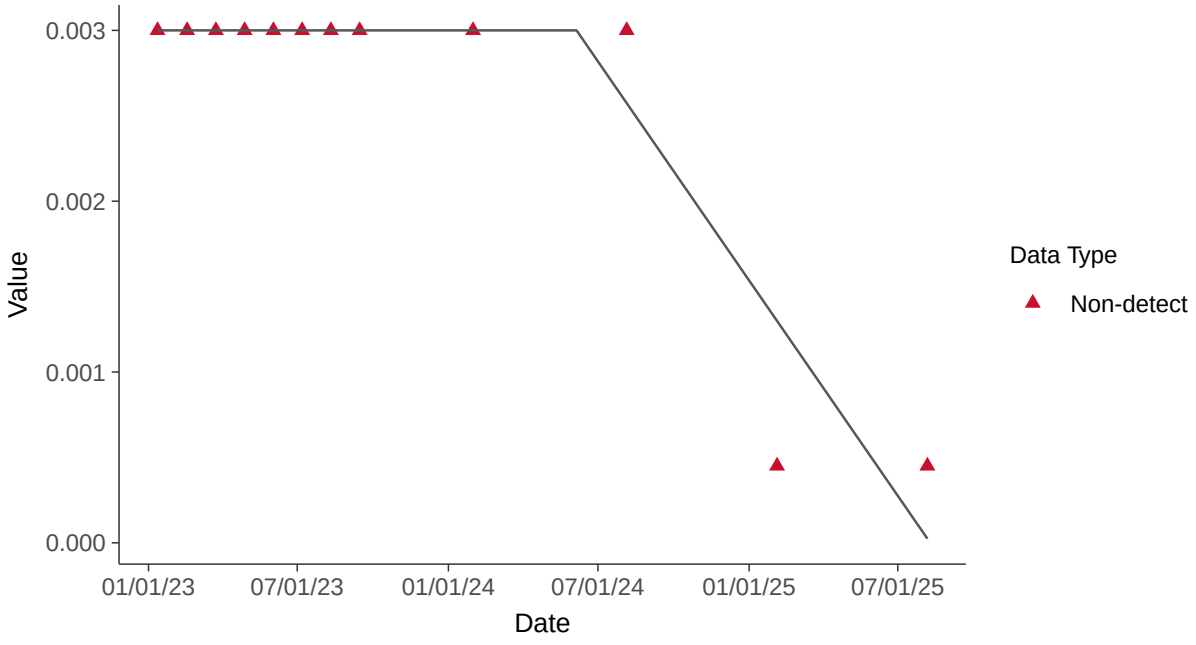
Trend Regression: Piecewise Linear-Linear

Lead, MW-14 (mg/l)



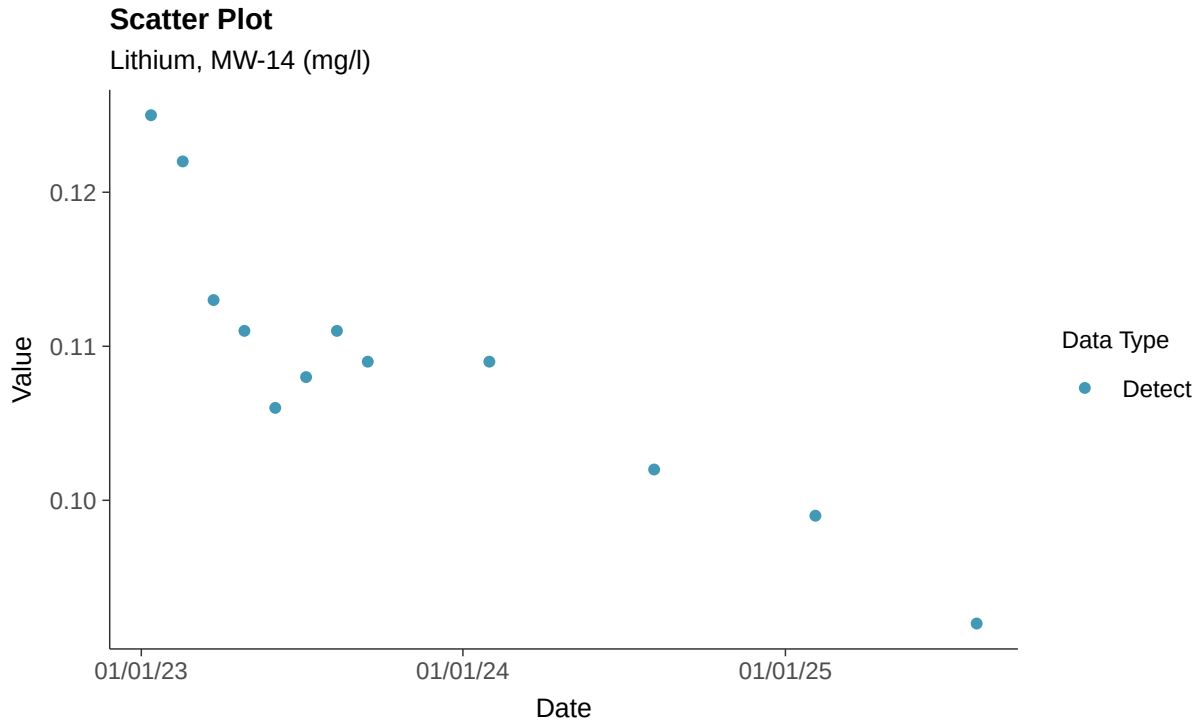
Trend Regression: Piecewise Linear-Linear-Linear

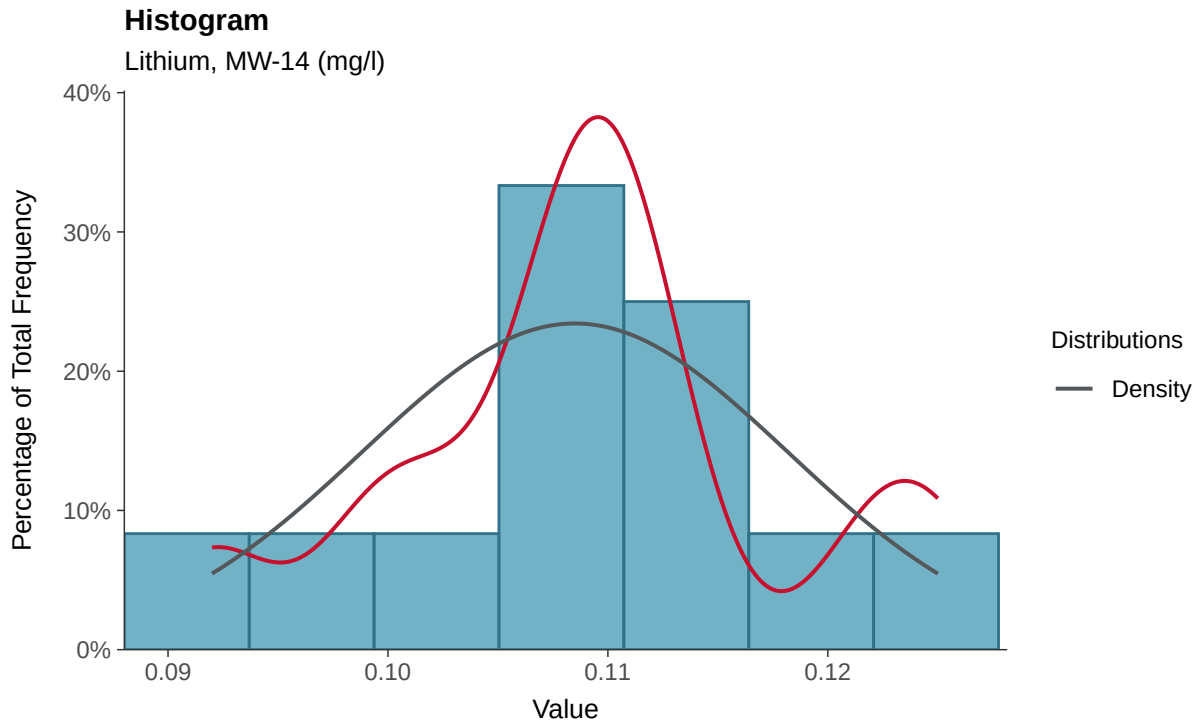
Lead, MW-14 (mg/l)



Appendix IV: Lithium, MW-14

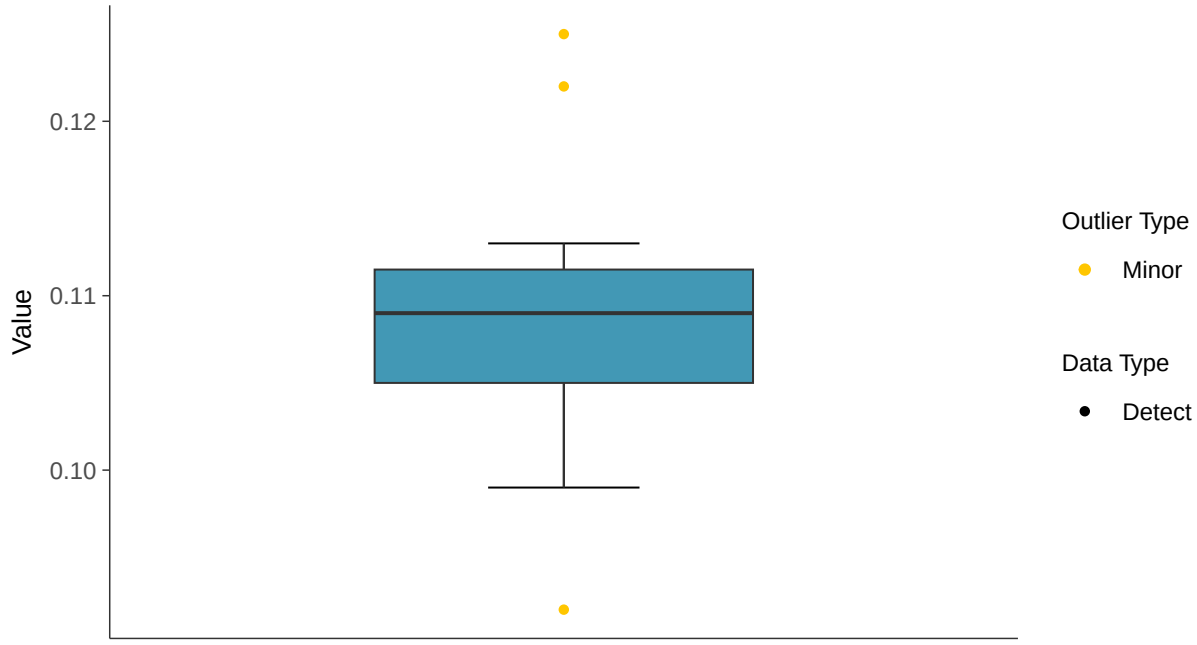
ID: 23_3_116





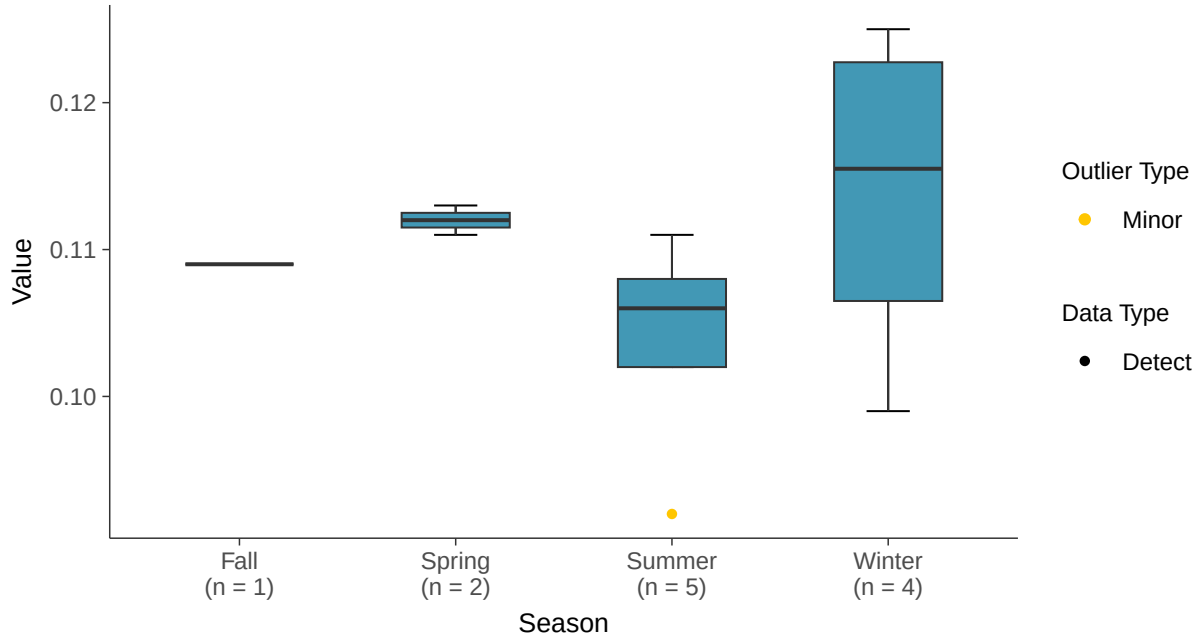
Boxplot

Lithium, MW-14 (mg/l)



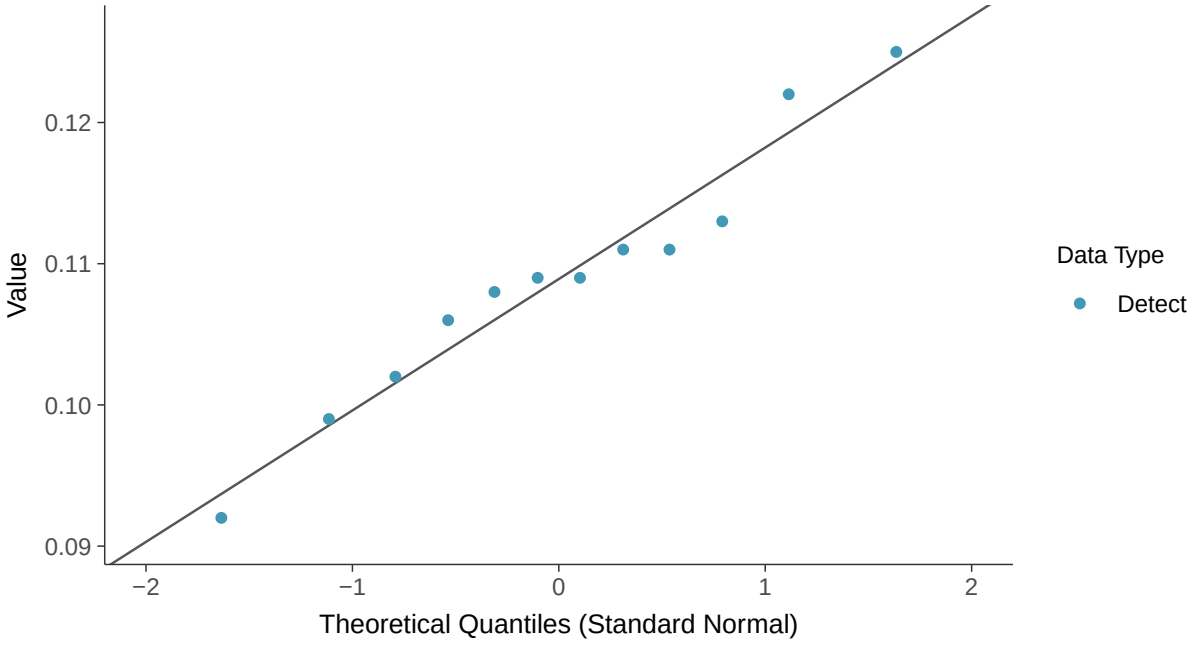
Boxplot by Season

Lithium, MW-14 (mg/l)



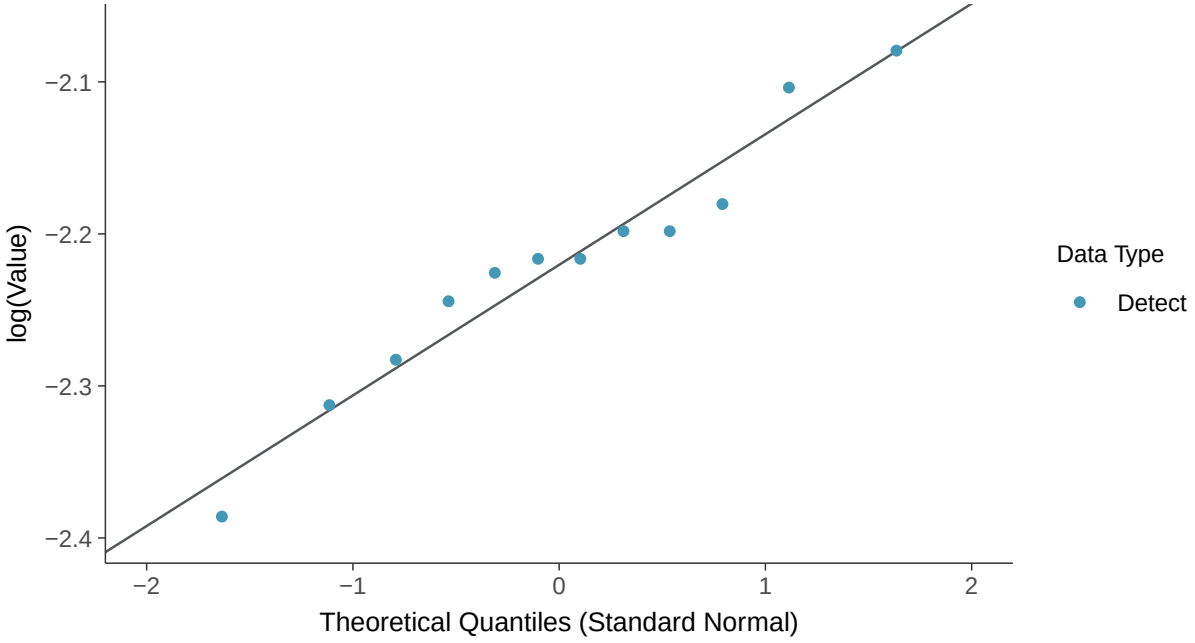
Normal Q-Q plot

Lithium, MW-14 (mg/l)



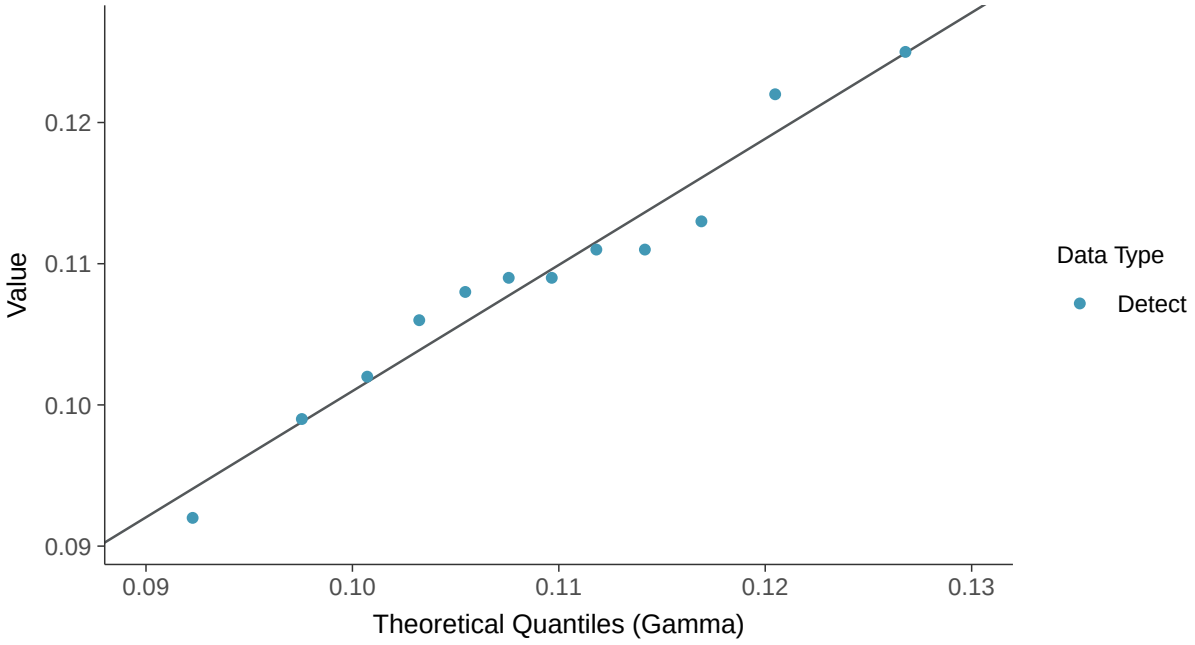
Lognormal Q-Q plot

Lithium, MW-14 (mg/l)



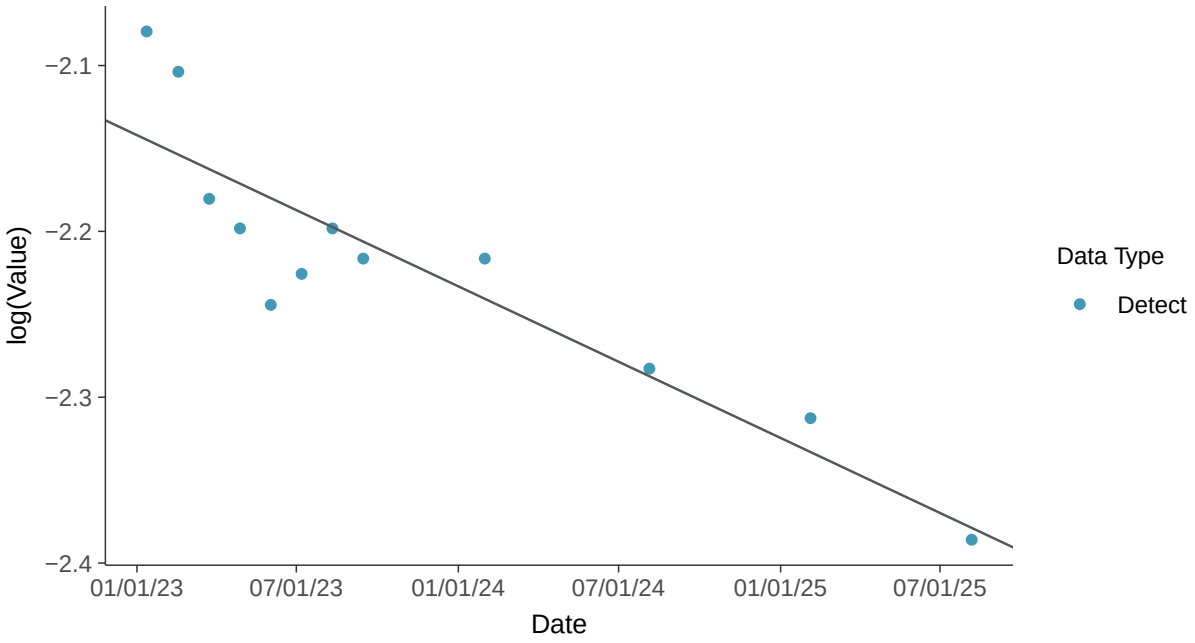
Gamma Q-Q plot

Lithium, MW-14 (mg/l)



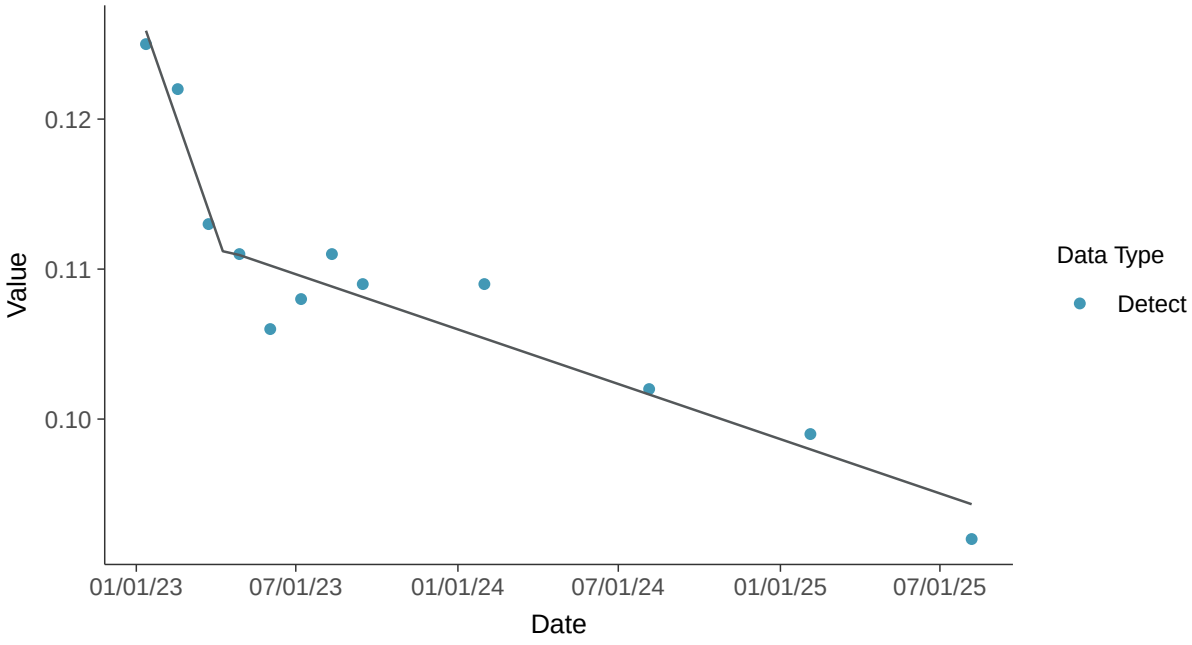
Trend Regression: Lognormal MLE

Lithium, MW-14 (mg/l)



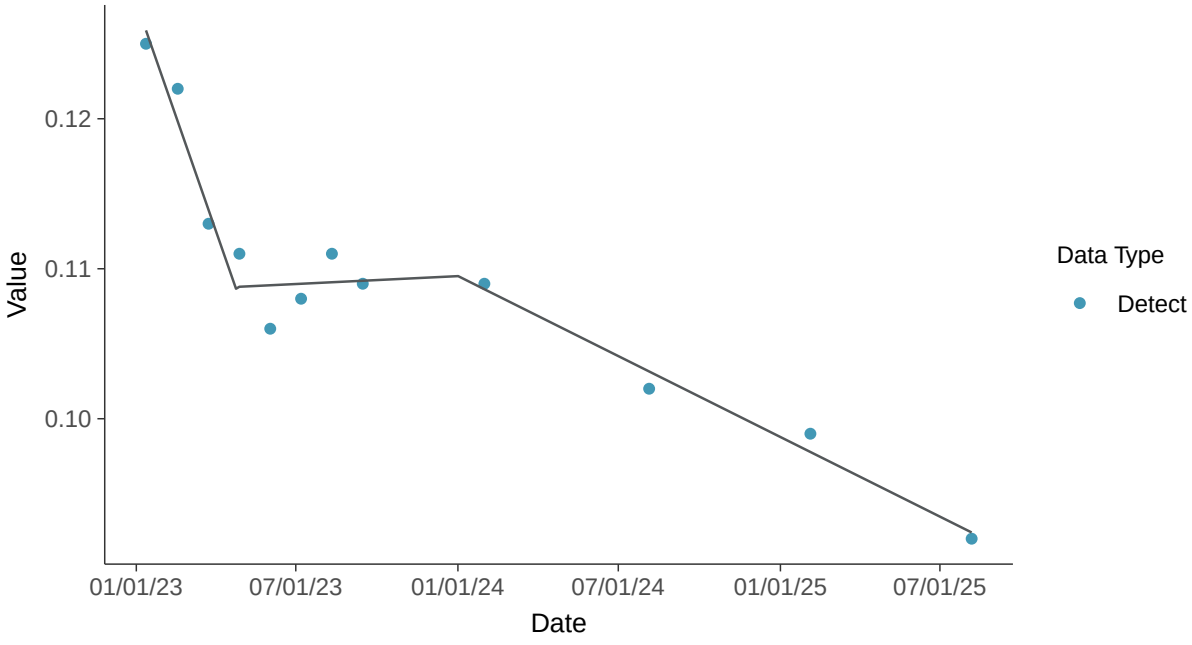
Trend Regression: Piecewise Linear-Linear

Lithium, MW-14 (mg/l)



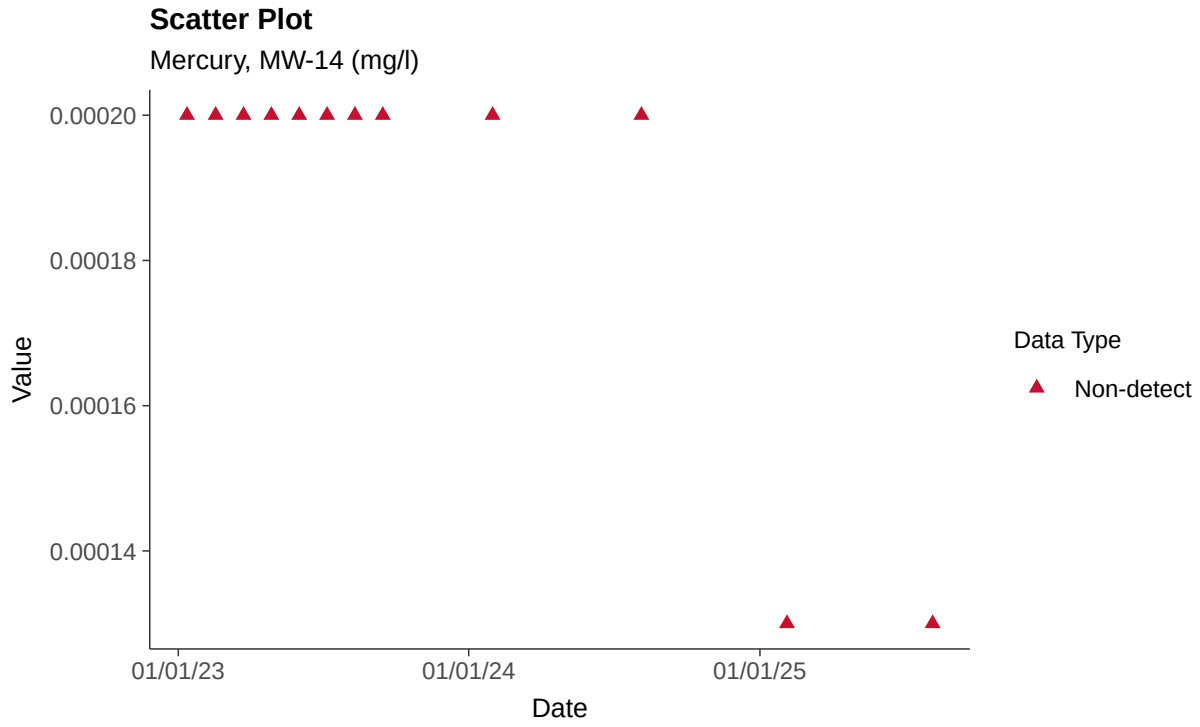
Trend Regression: Piecewise Linear-Linear-Linear

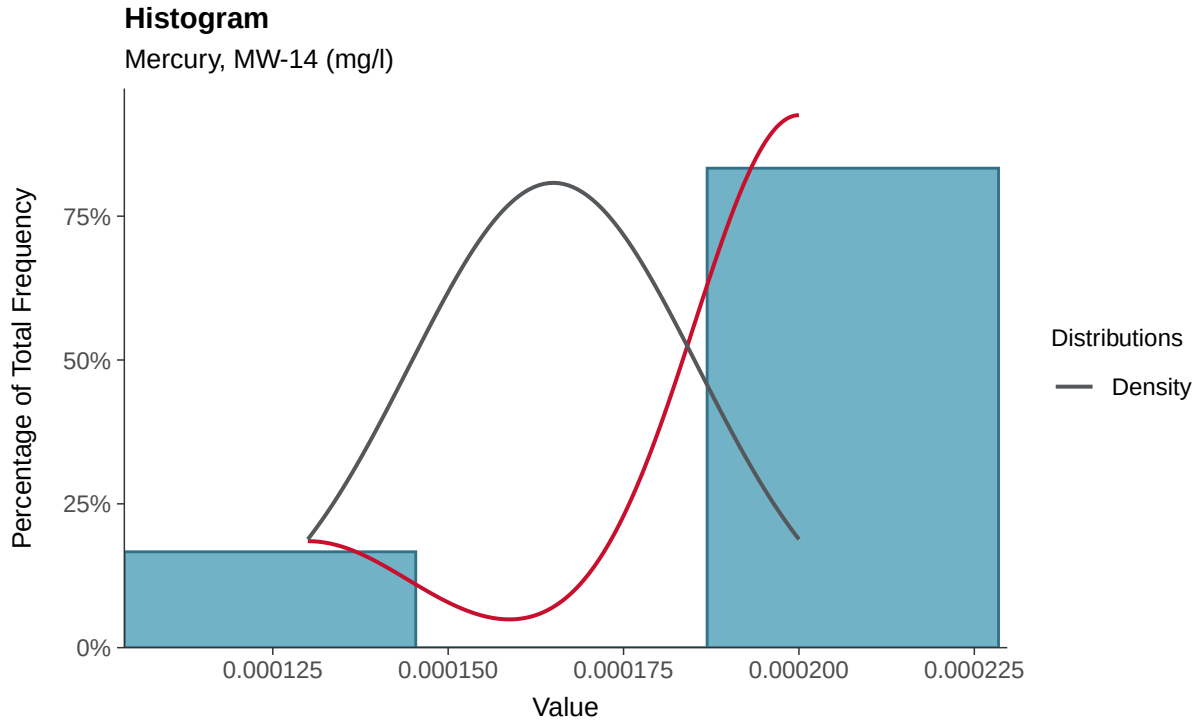
Lithium, MW-14 (mg/l)



Appendix IV: Mercury, MW-14

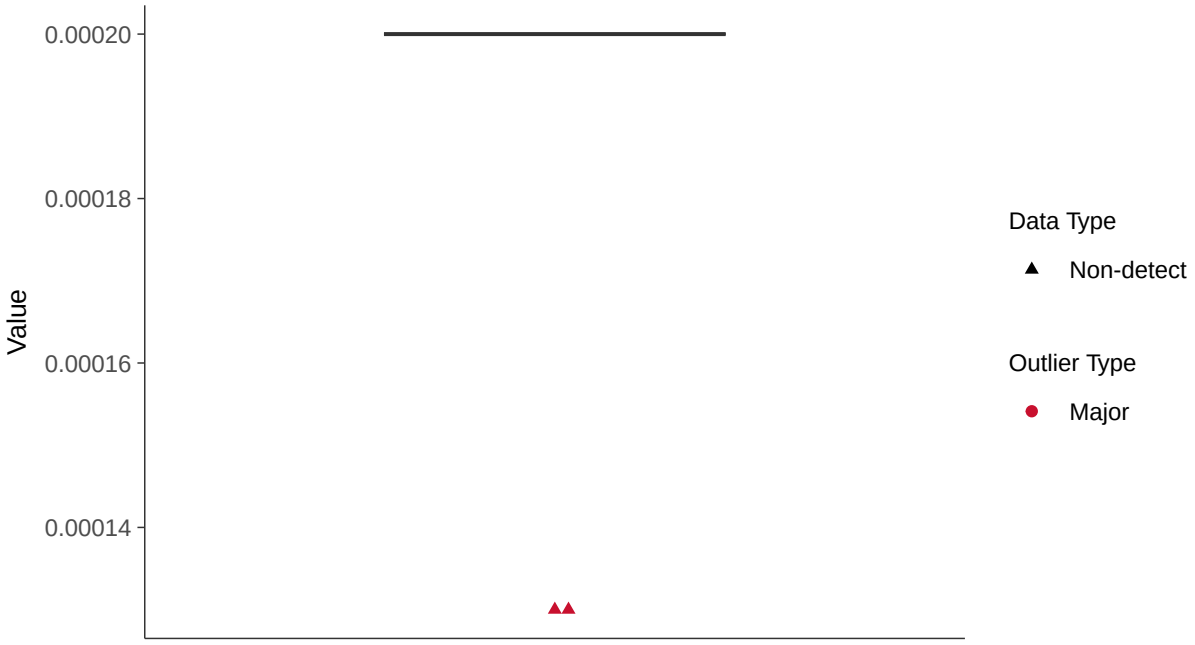
ID: 23_3_117





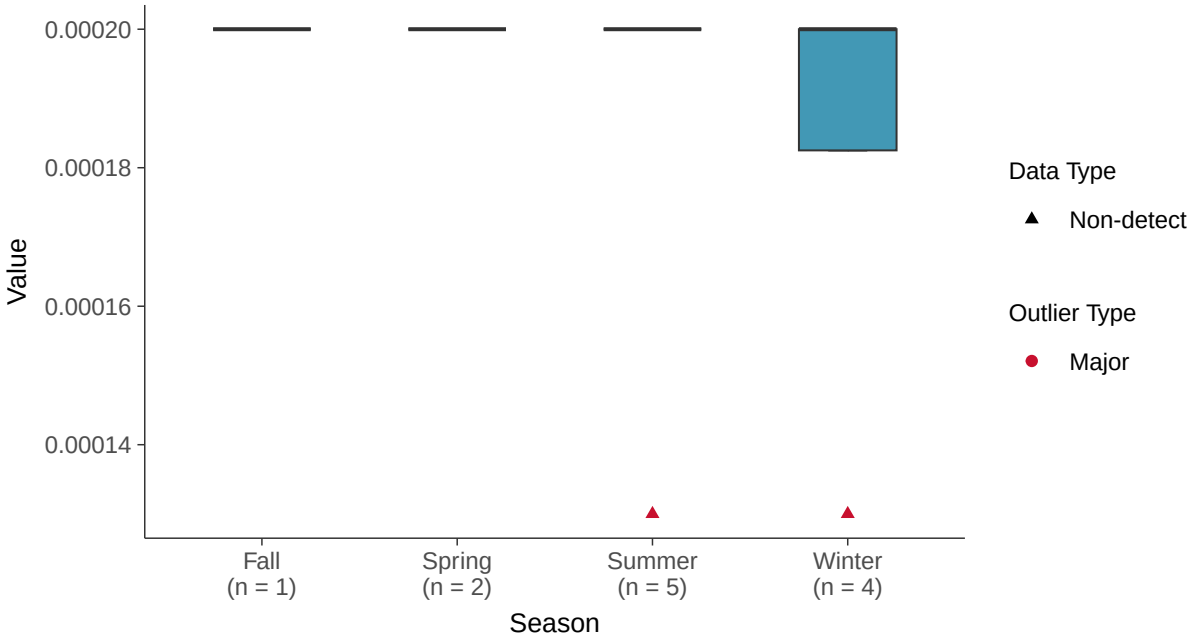
Boxplot

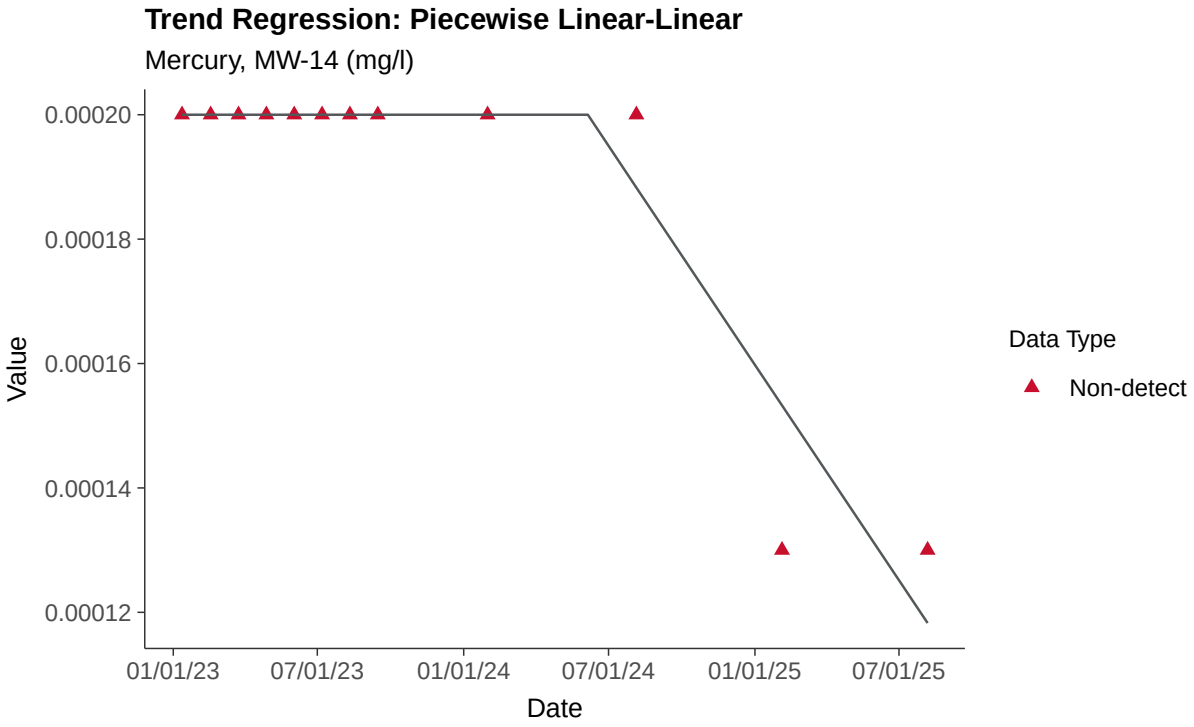
Mercury, MW-14 (mg/l)



Boxplot by Season

Mercury, MW-14 (mg/l)



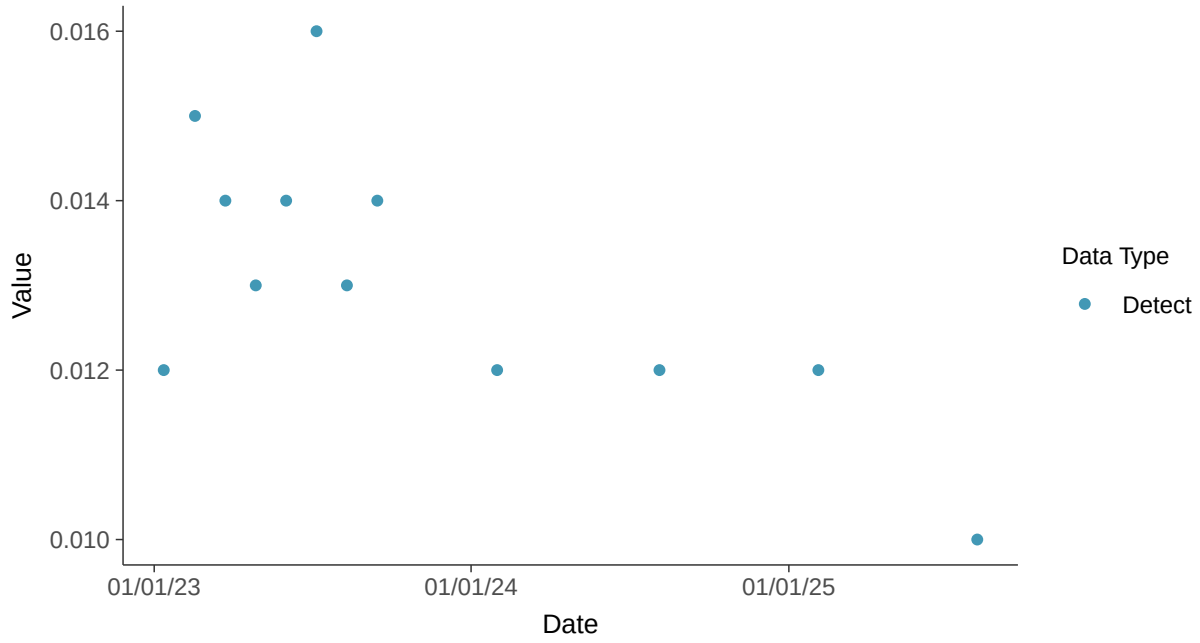

Trend Regression: Piecewise Linear-Linear
Mercury, MW-14 (mg/l)
0.00020
0.00018
0.00016
0.00014
0.00012
Value
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Molybdenum, MW-14

ID: 23_3_118

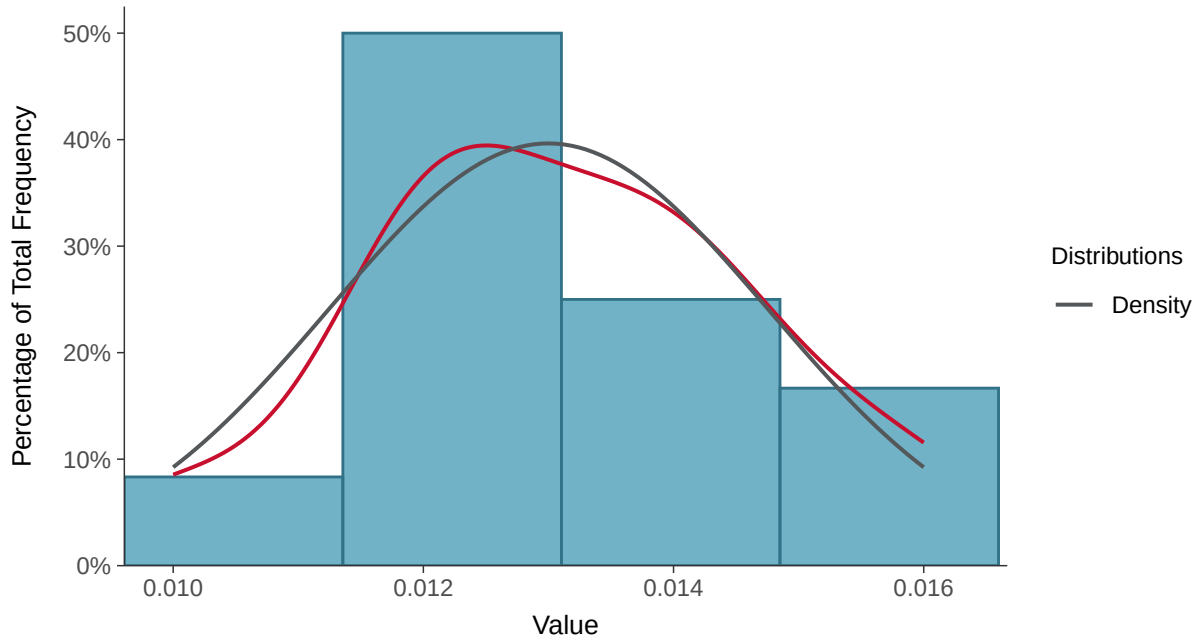
Scatter Plot

Molybdenum, MW-14 (mg/l)



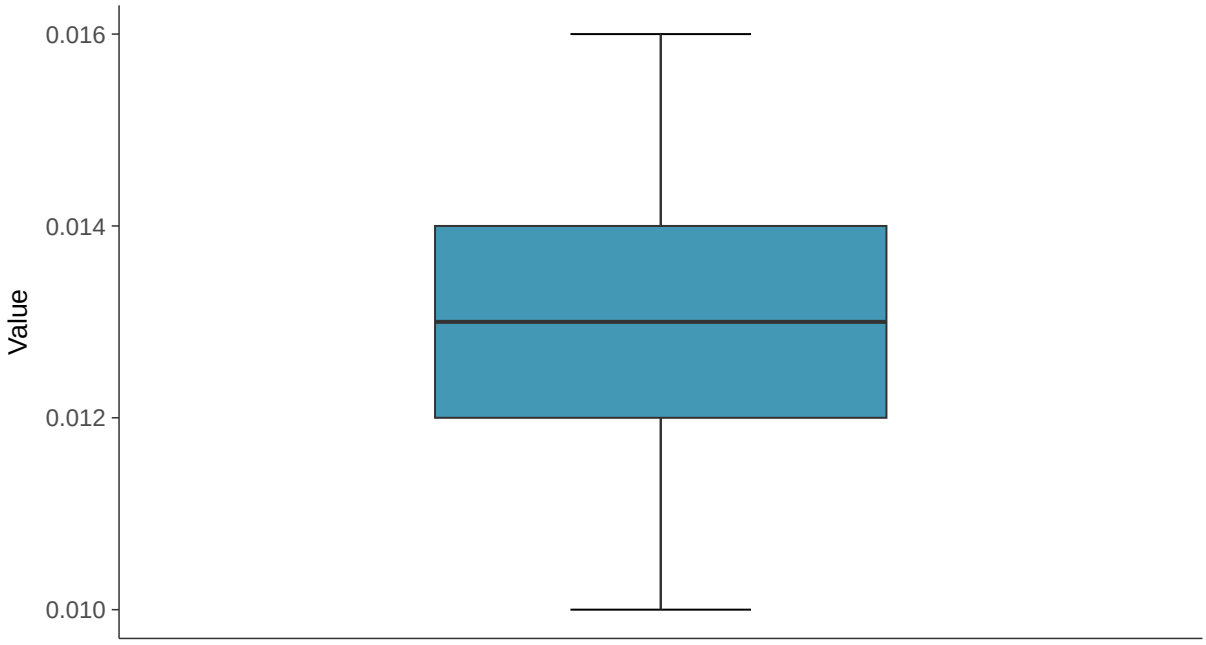
Histogram

Molybdenum, MW-14 (mg/l)



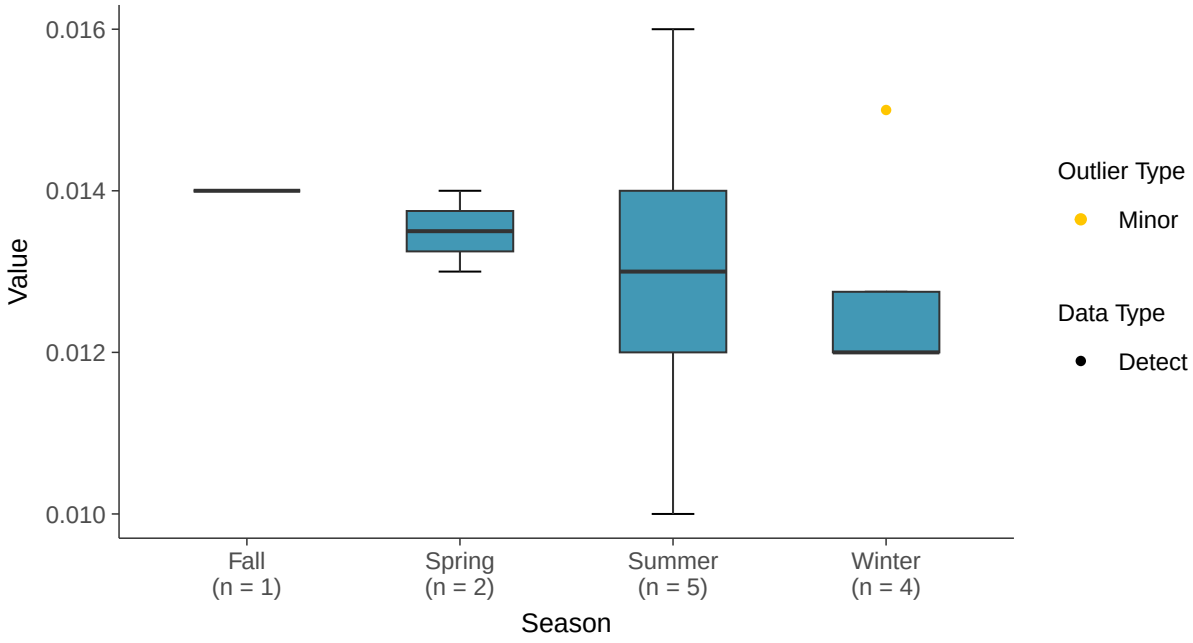
Boxplot

Molybdenum, MW-14 (mg/l)



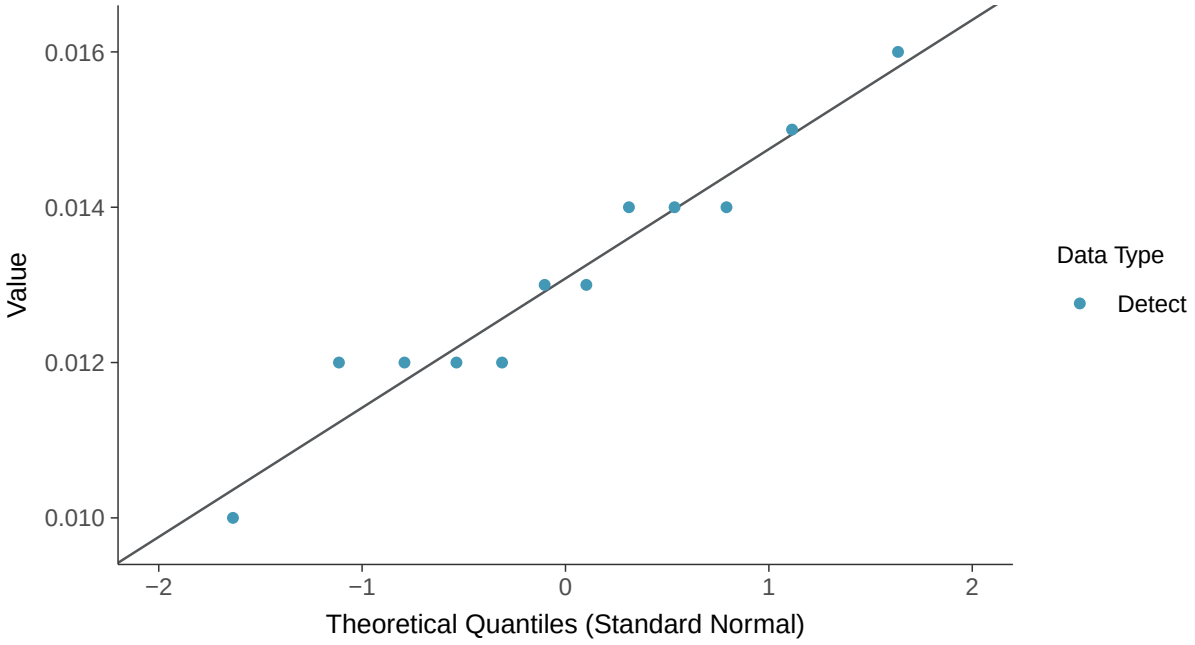
Boxplot by Season

Molybdenum, MW-14 (mg/l)



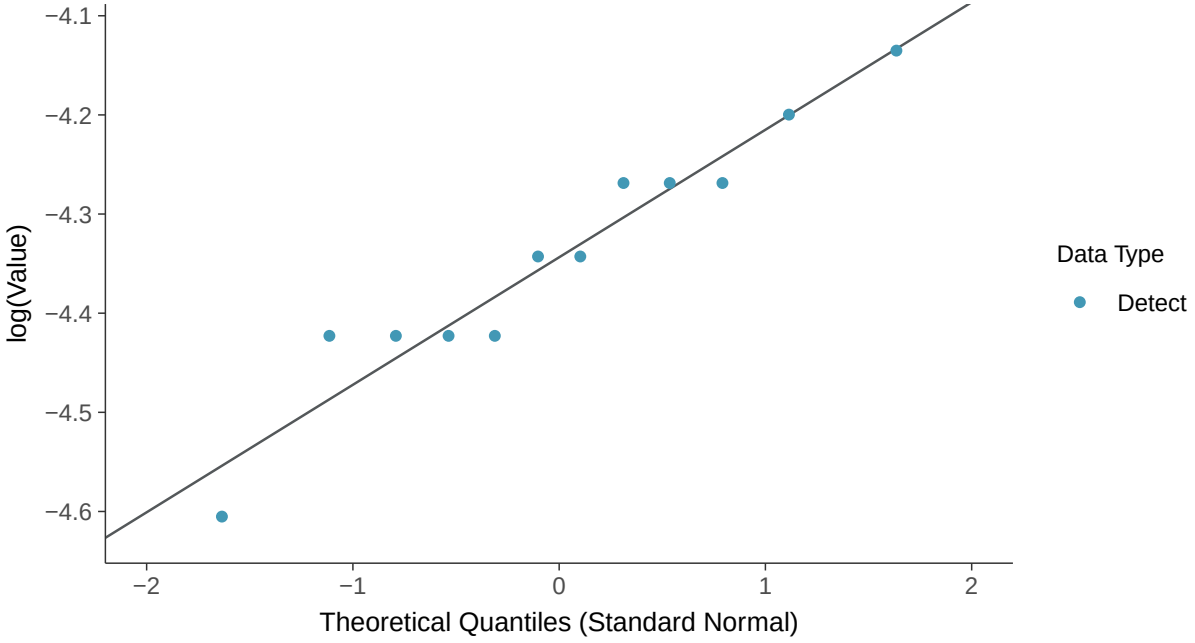
Normal Q-Q plot

Molybdenum, MW-14 (mg/l)



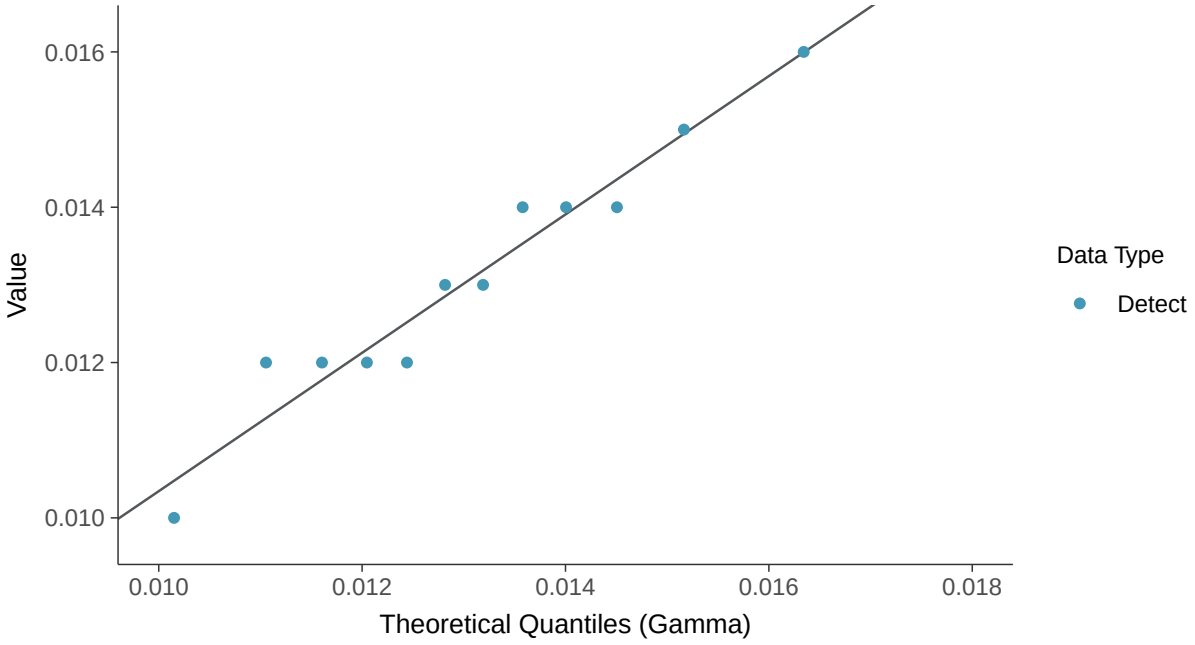
Lognormal Q-Q plot

Molybdenum, MW-14 (mg/l)



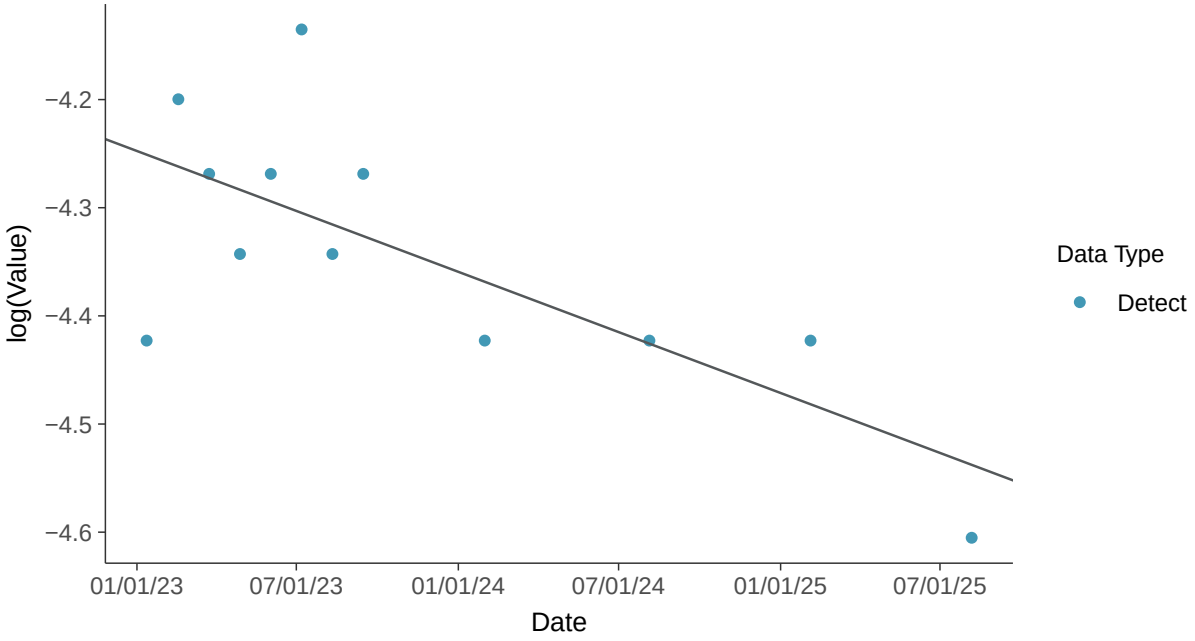
Gamma Q-Q plot

Molybdenum, MW-14 (mg/l)



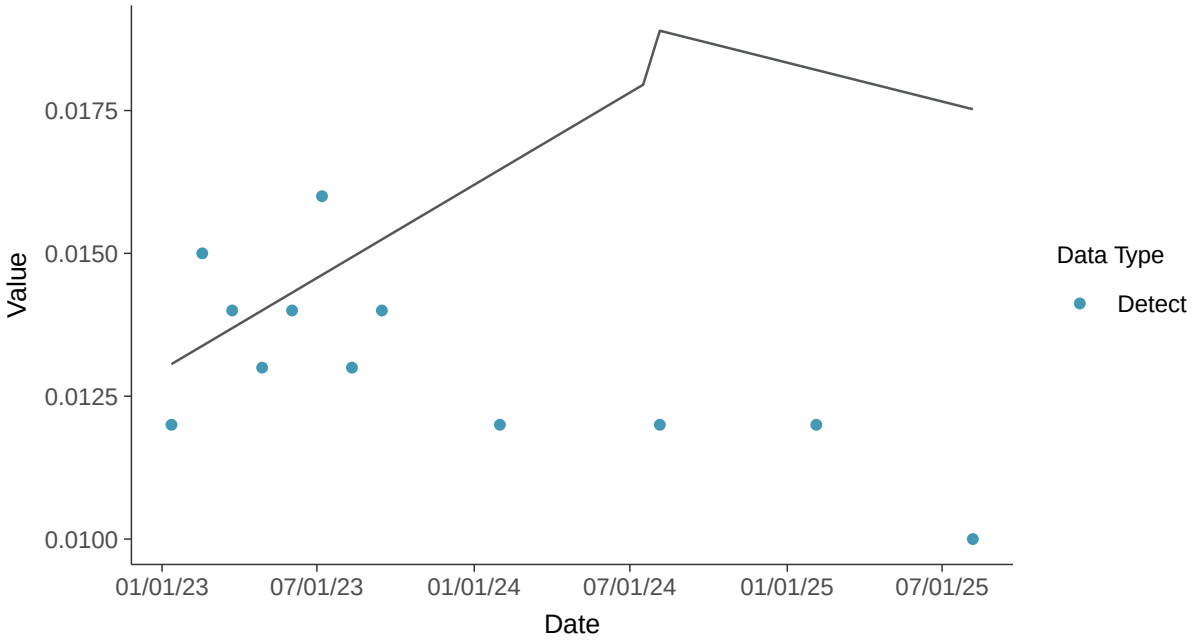
Trend Regression: Lognormal MLE

Molybdenum, MW-14 (mg/l)



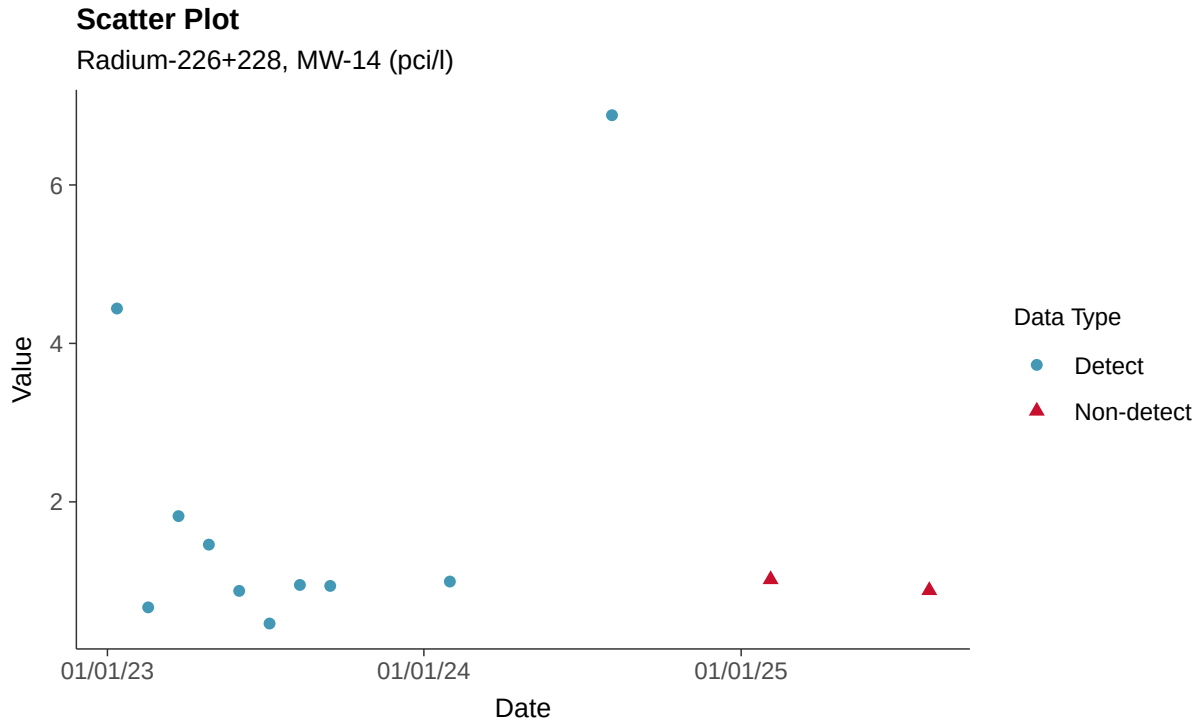
Trend Regression: Piecewise Linear-Linear-Linear

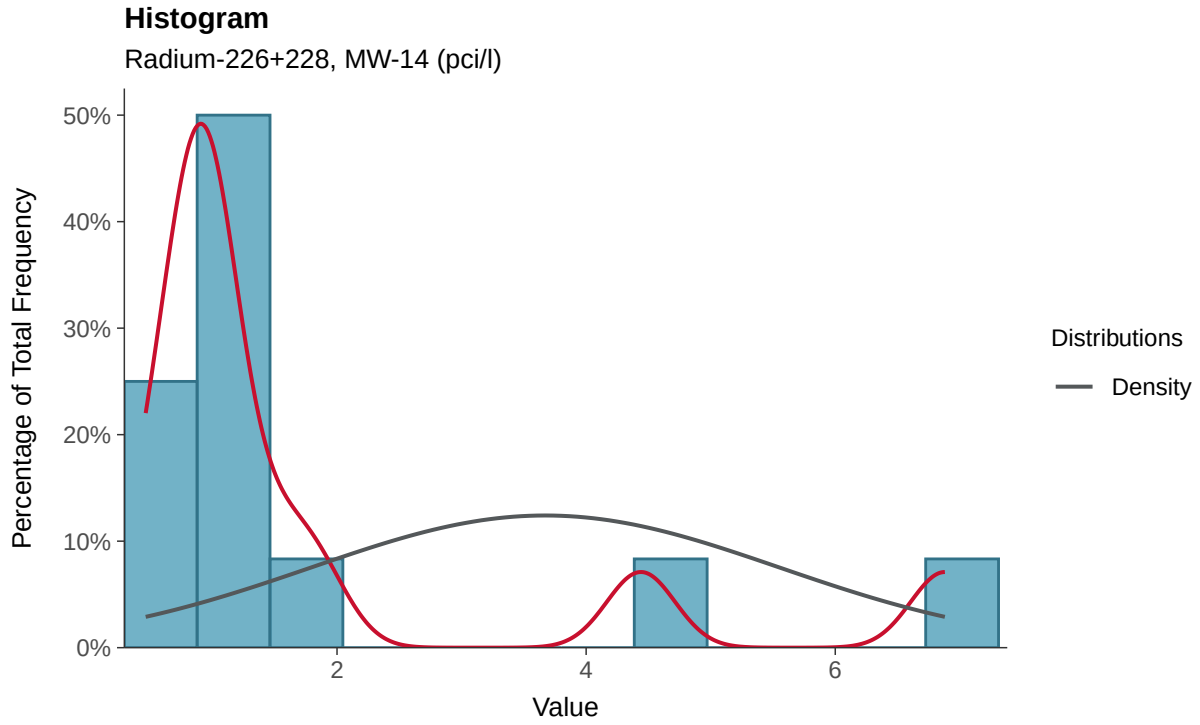
Molybdenum, MW-14 (mg/l)



Appendix IV: Radium-226+228, MW-14

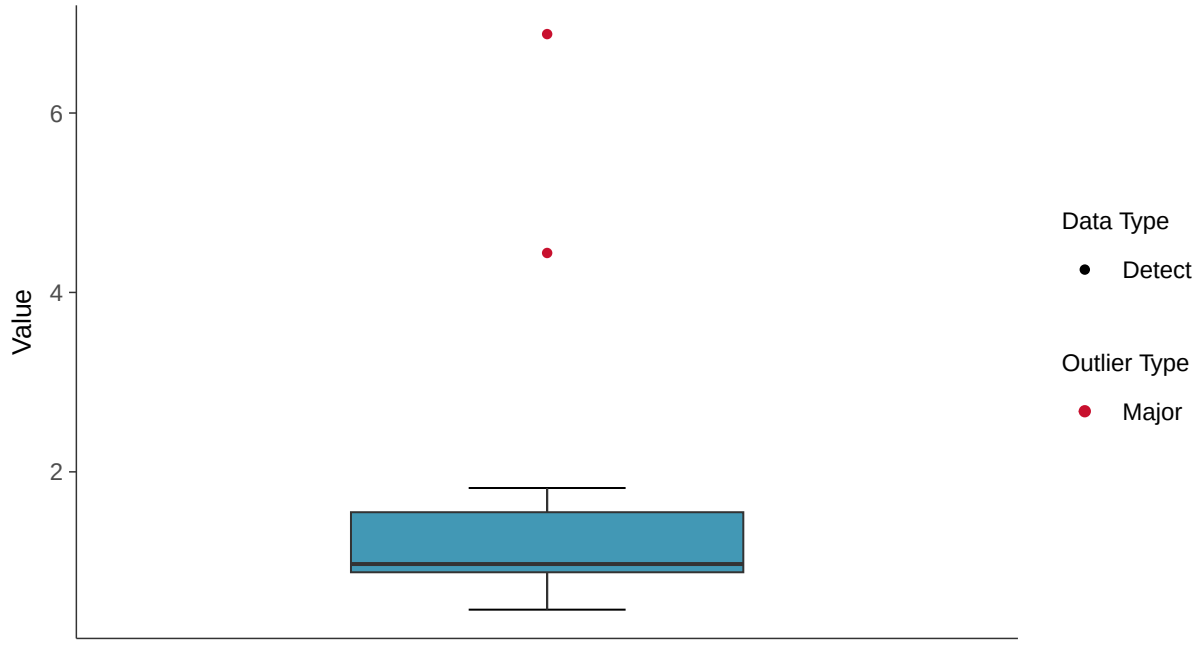
ID: 23_3_121





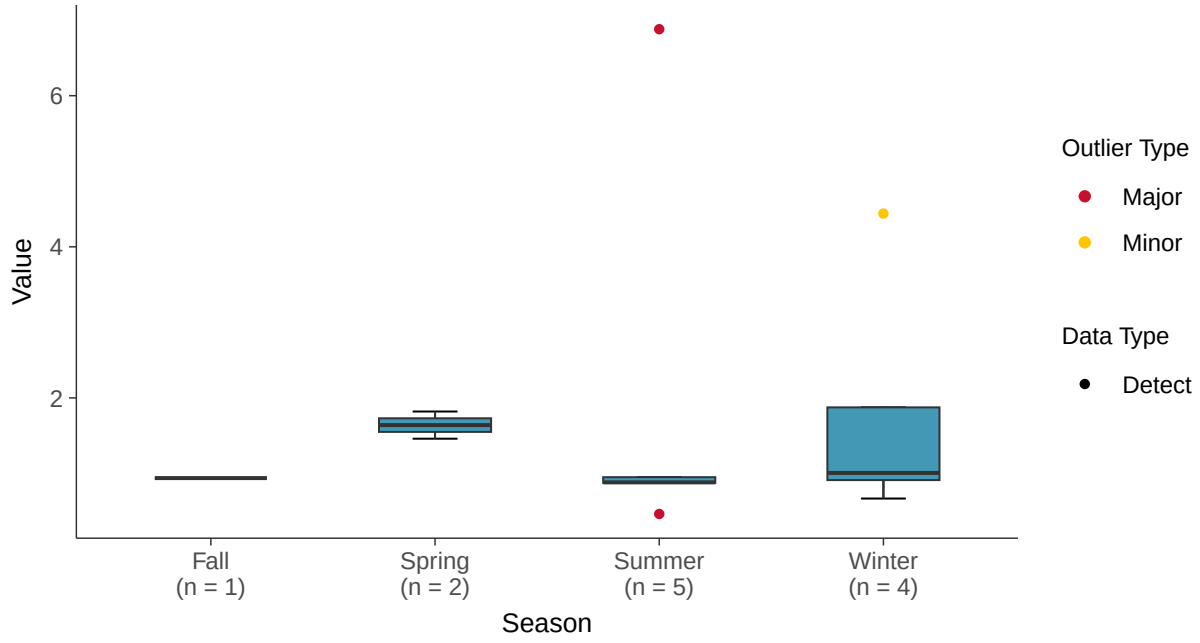
Boxplot

Radium-226+228, MW-14 (pci/l)



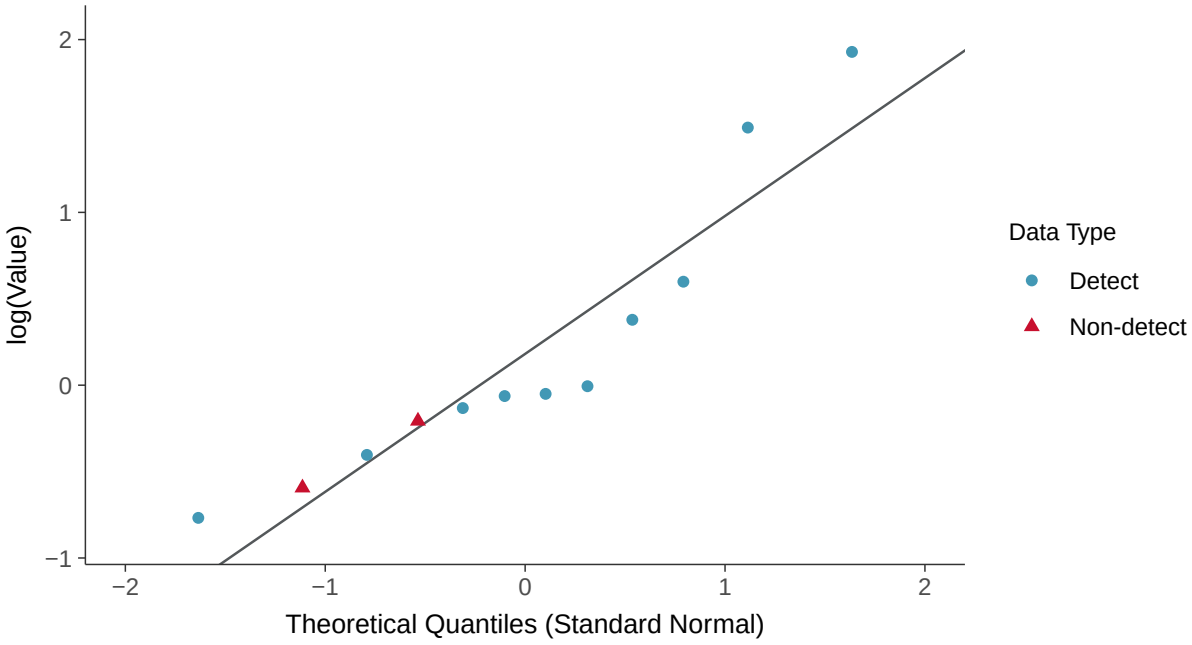
Boxplot by Season

Radium-226+228, MW-14 (pci/l)



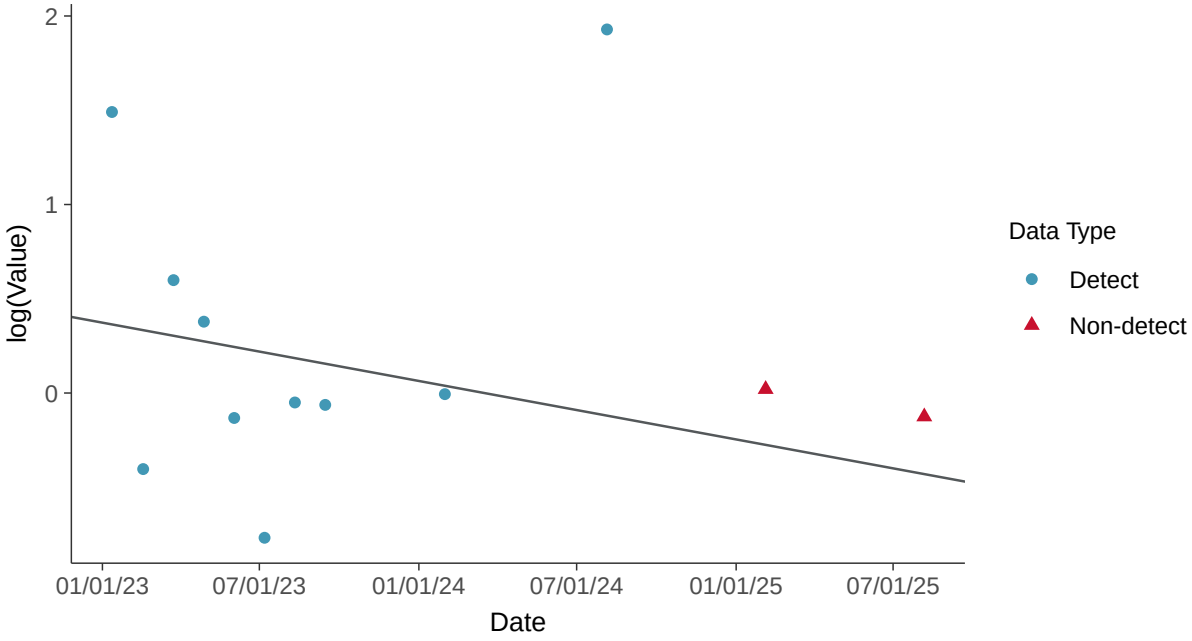
Lognormal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-14 (pci/l)



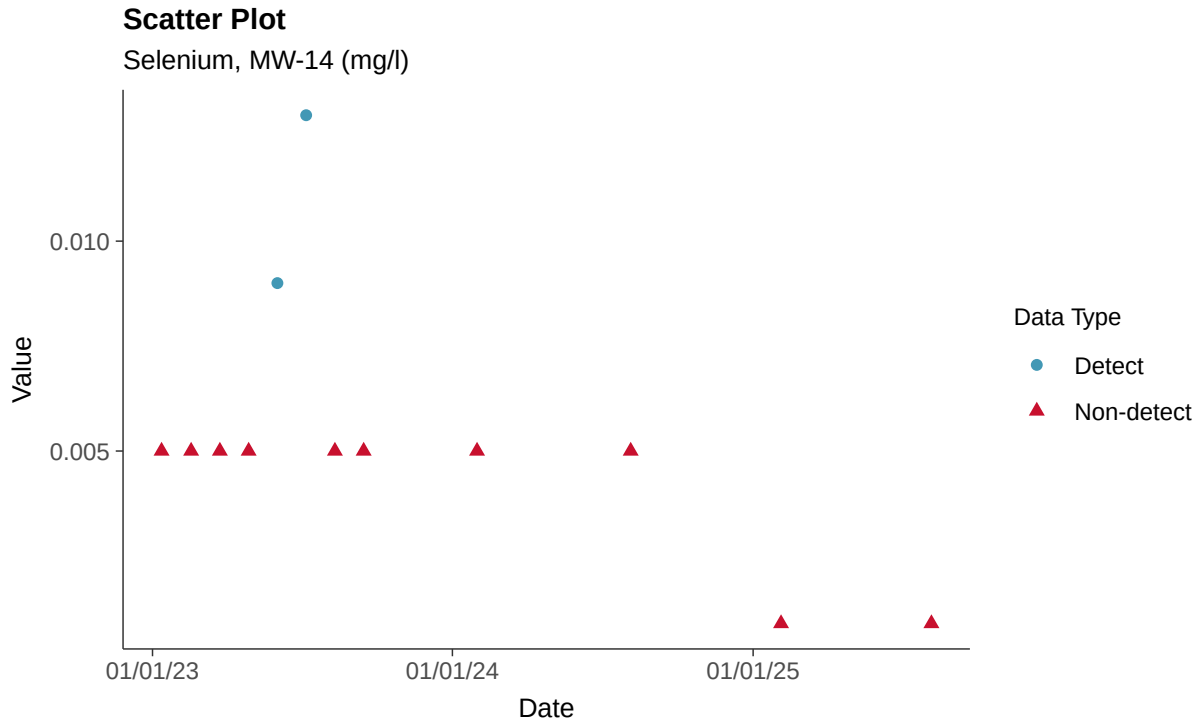
Trend Regression: Lognormal MLE

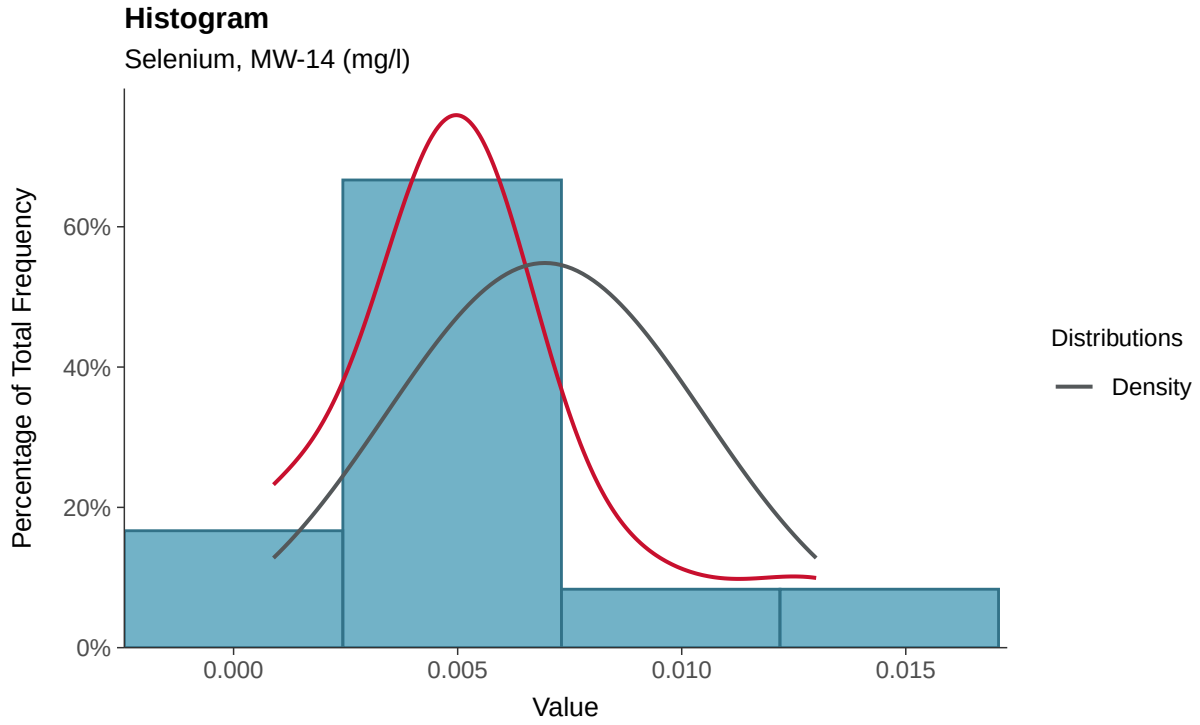
Radium-226+228, MW-14 (pci/l)



Appendix IV: Selenium, MW-14

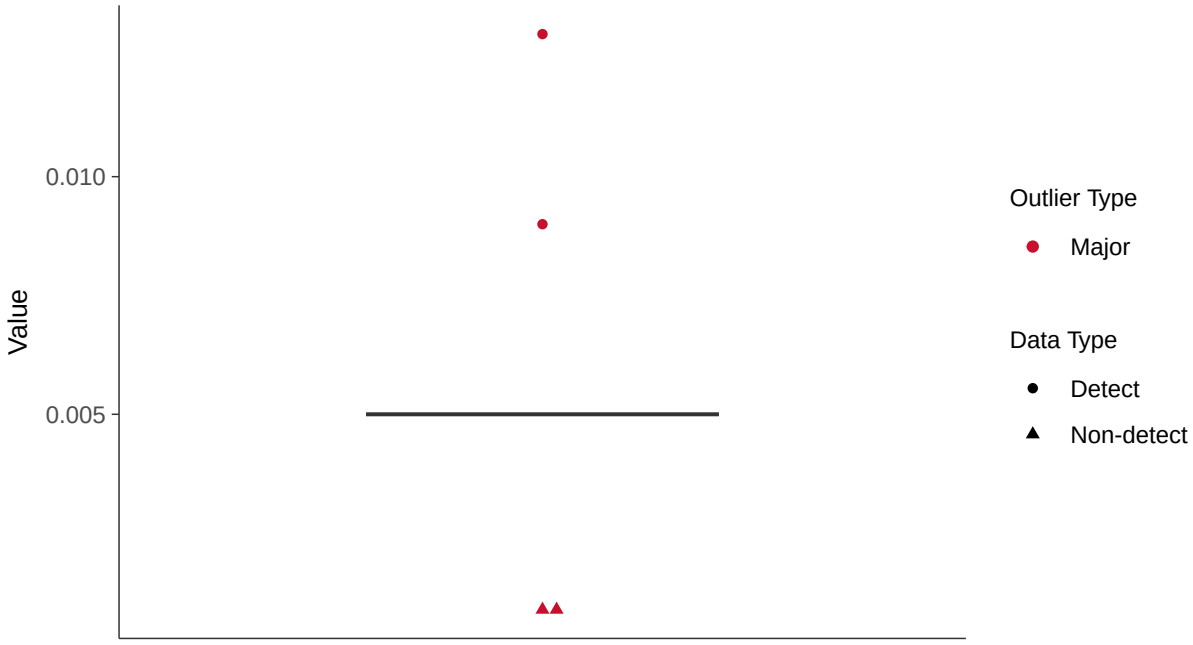
ID: 23_3_122





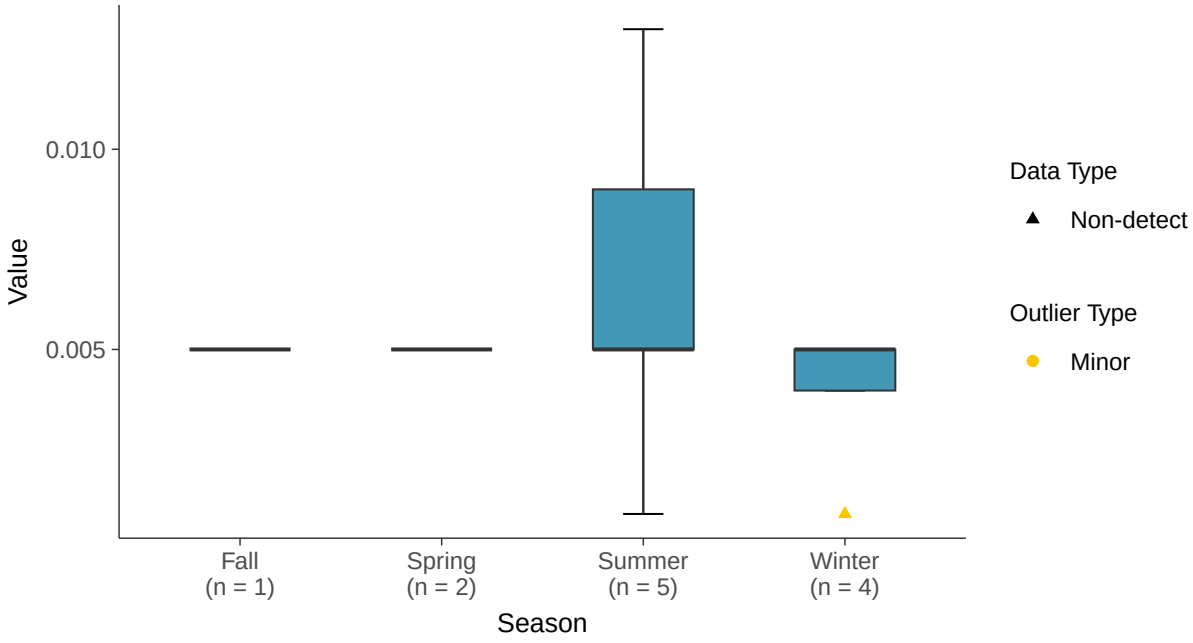
Boxplot

Selenium, MW-14 (mg/l)



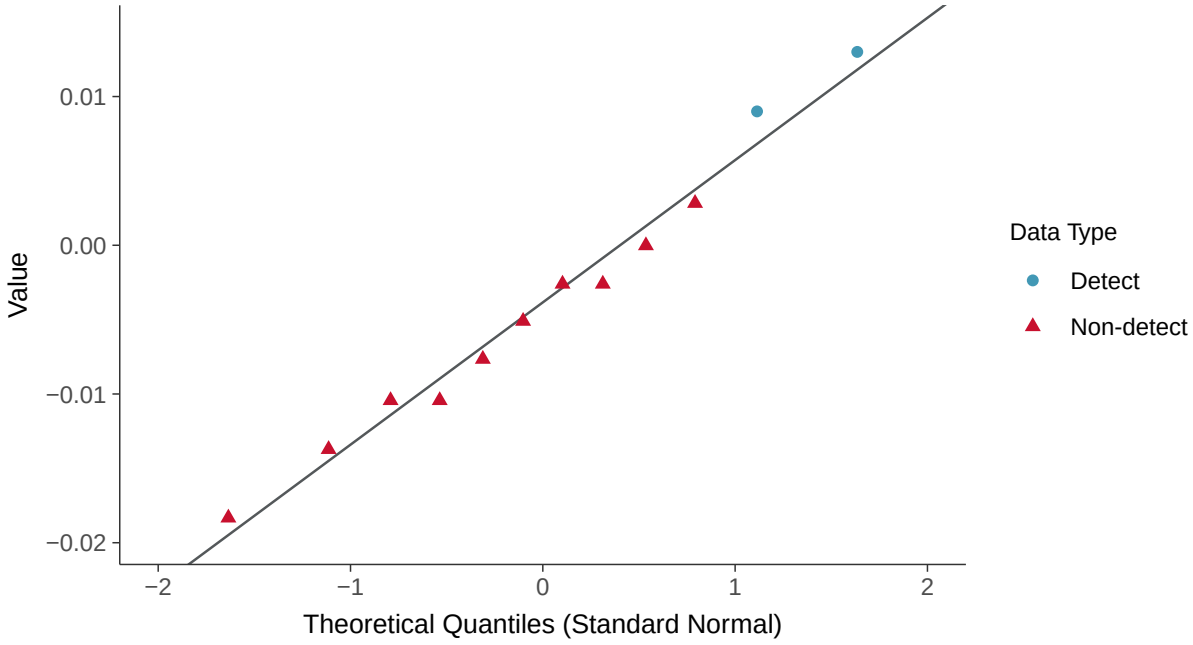
Boxplot by Season

Selenium, MW-14 (mg/l)



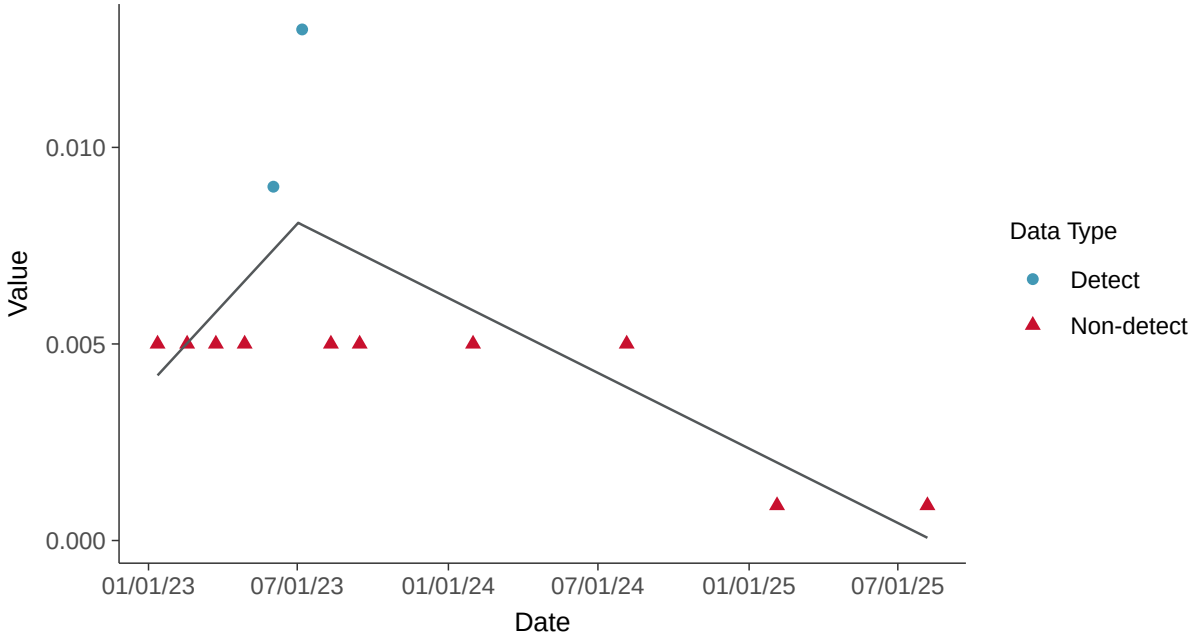
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-14 (mg/l)



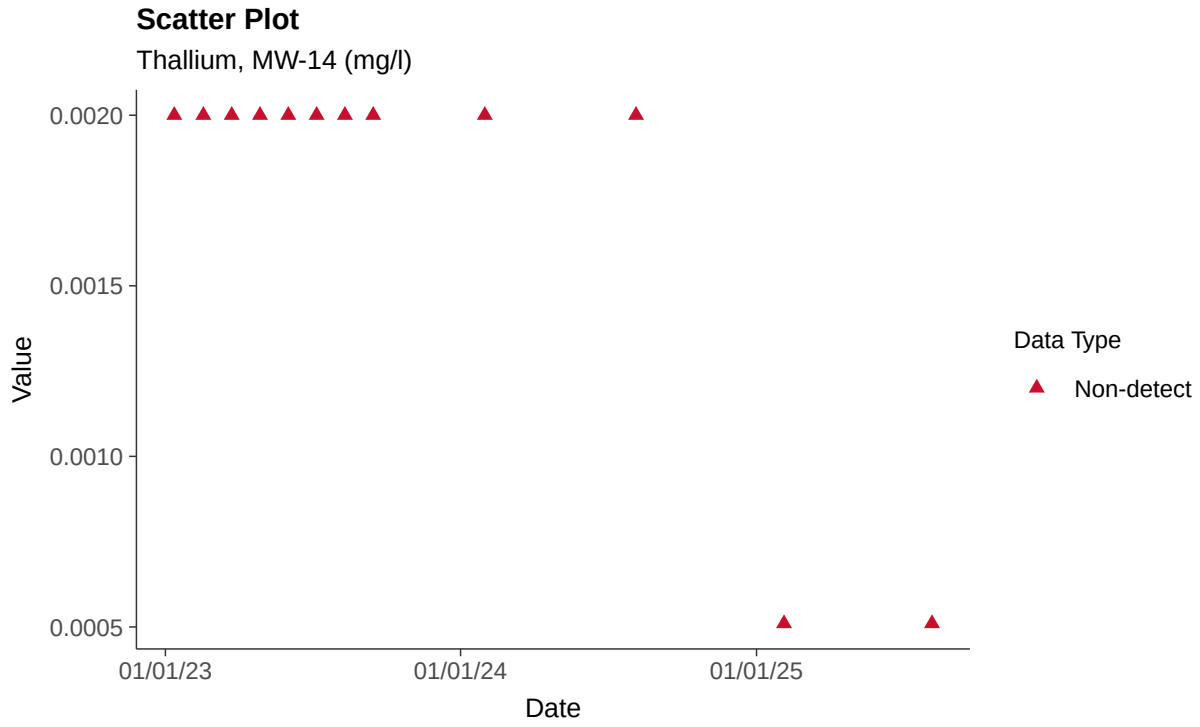
Trend Regression: Piecewise Linear-Linear

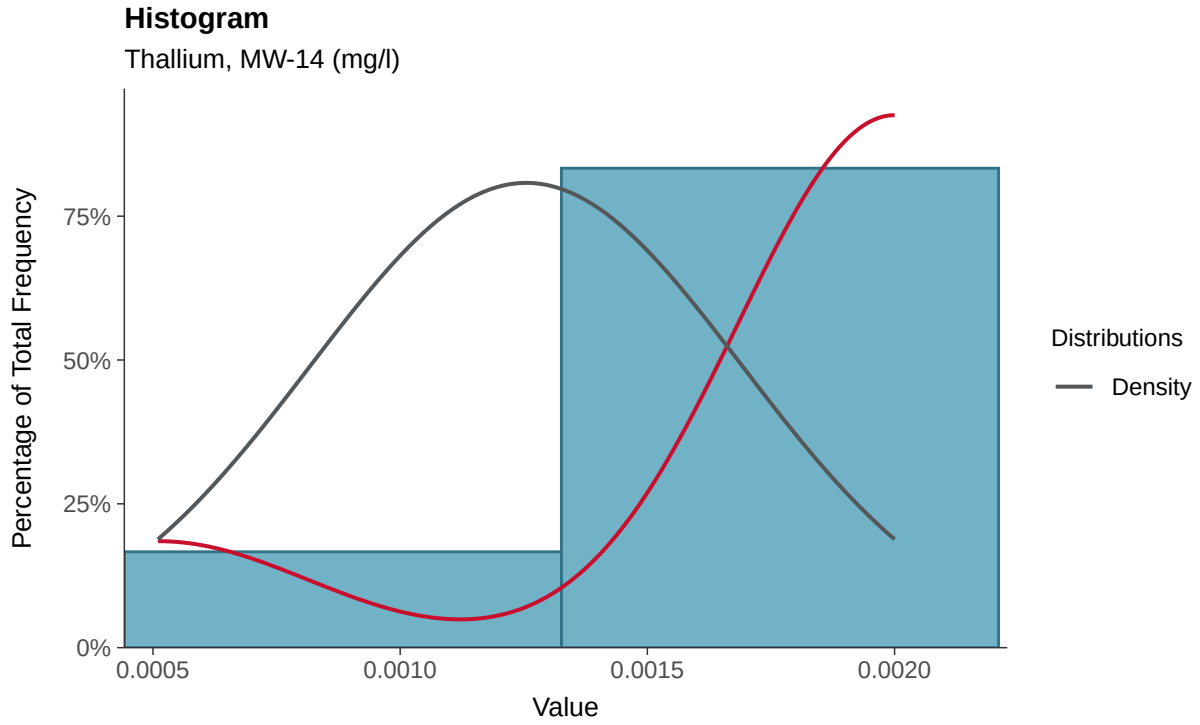
Selenium, MW-14 (mg/l)



Appendix IV: Thallium, MW-14

ID: 23_3_125



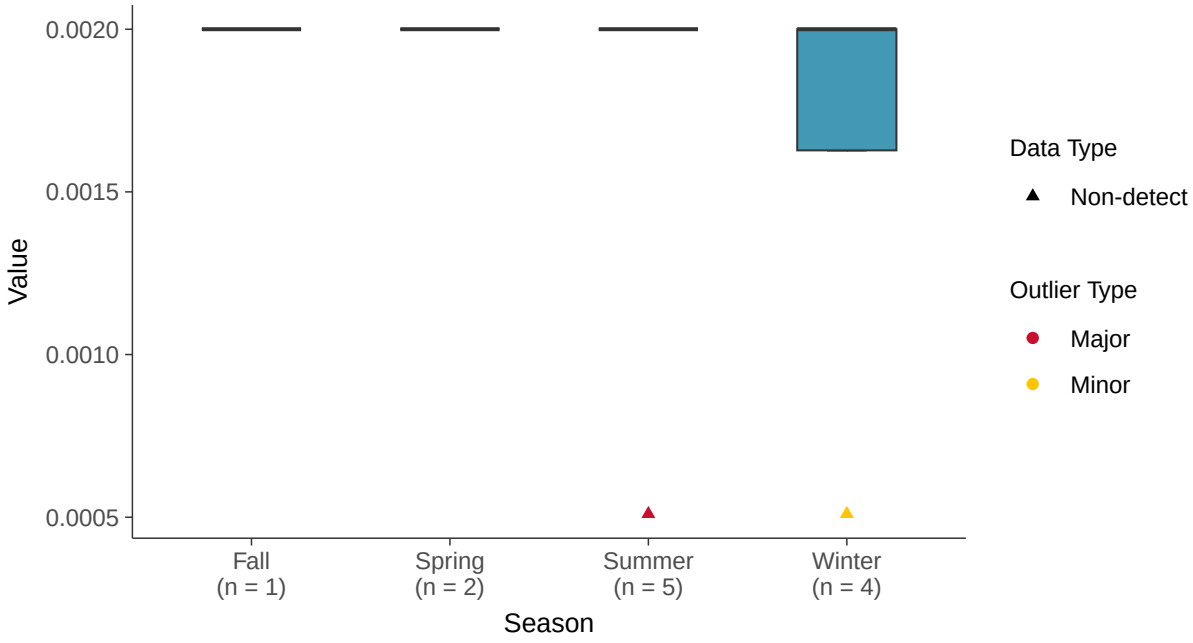


Boxplot

Thallium, MW-14 (mg/l)

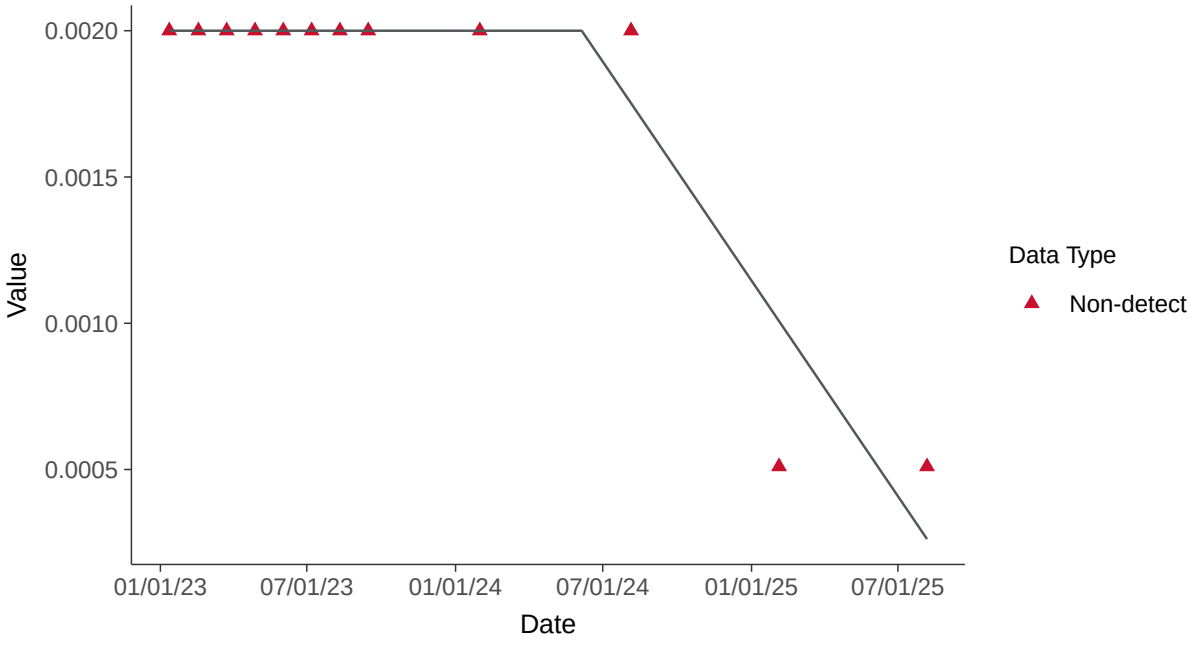
Boxplot by Season

Thallium, MW-14 (mg/l)



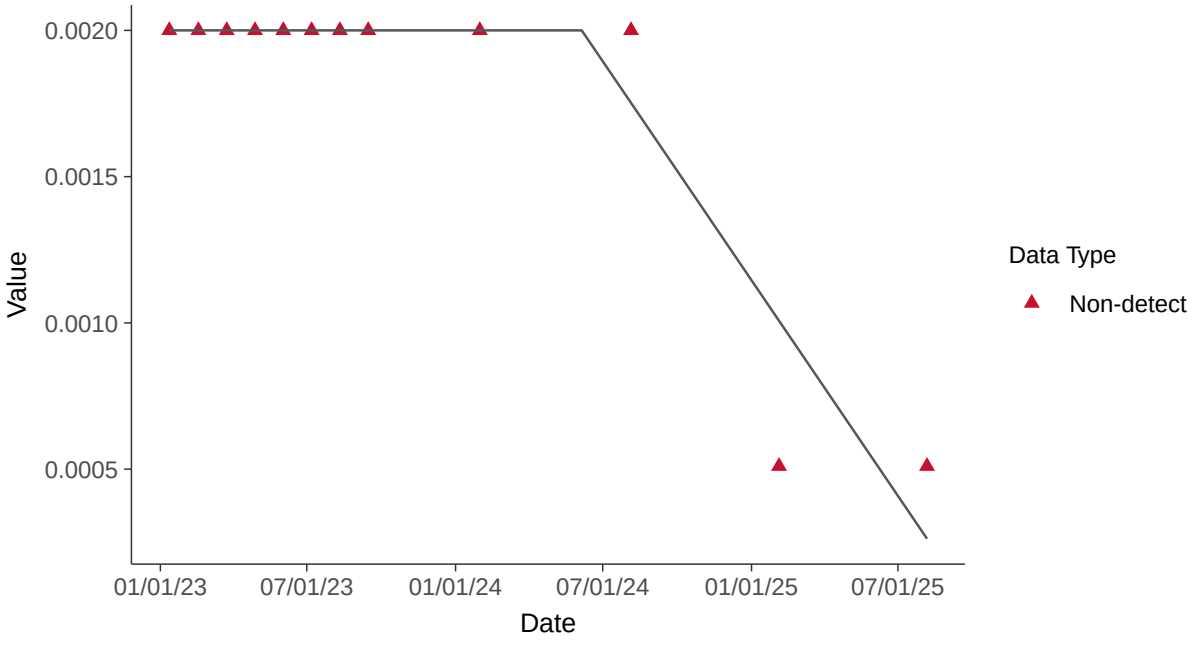
Trend Regression: Piecewise Linear-Linear

Thallium, MW-14 (mg/l)



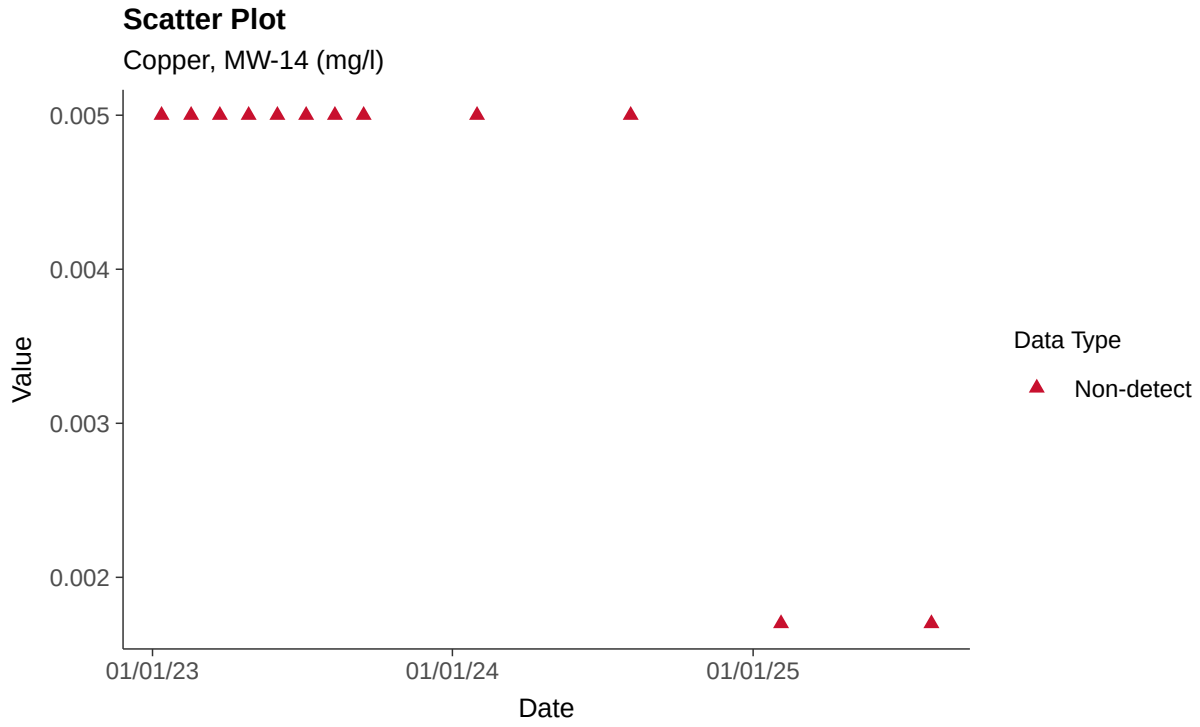
Trend Regression: Piecewise Linear-Linear-Linear

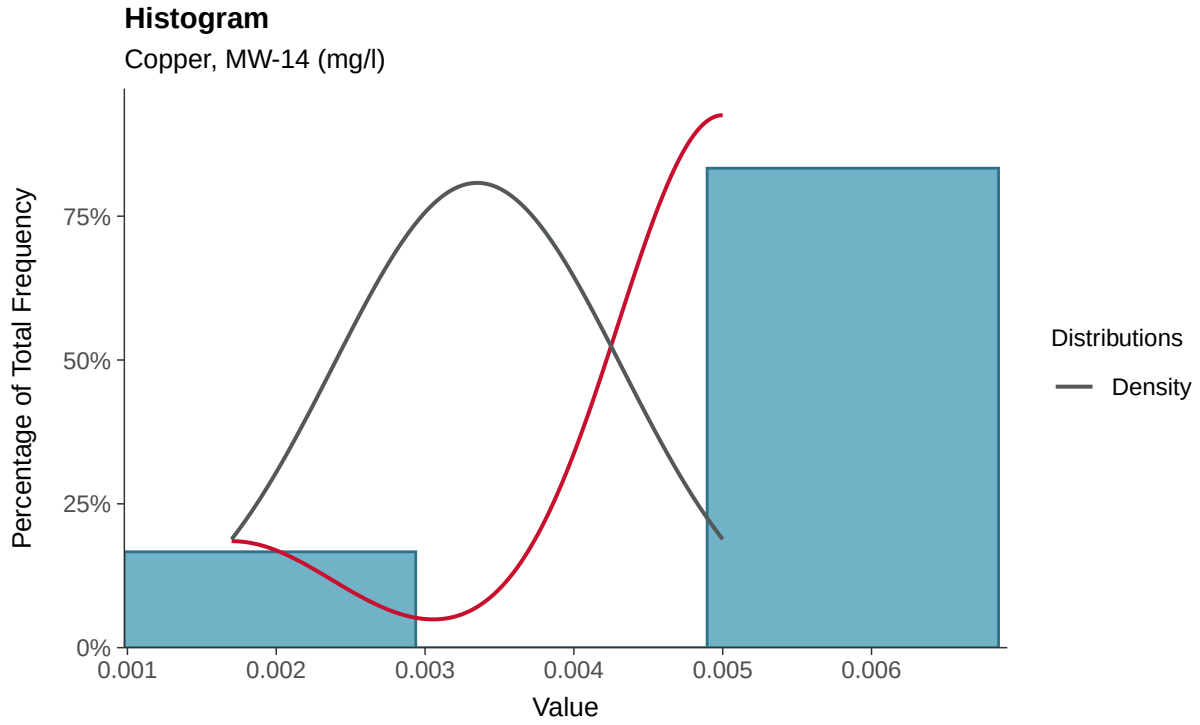
Thallium, MW-14 (mg/l)



Part 115: Copper, MW-14

ID: 23_5_111



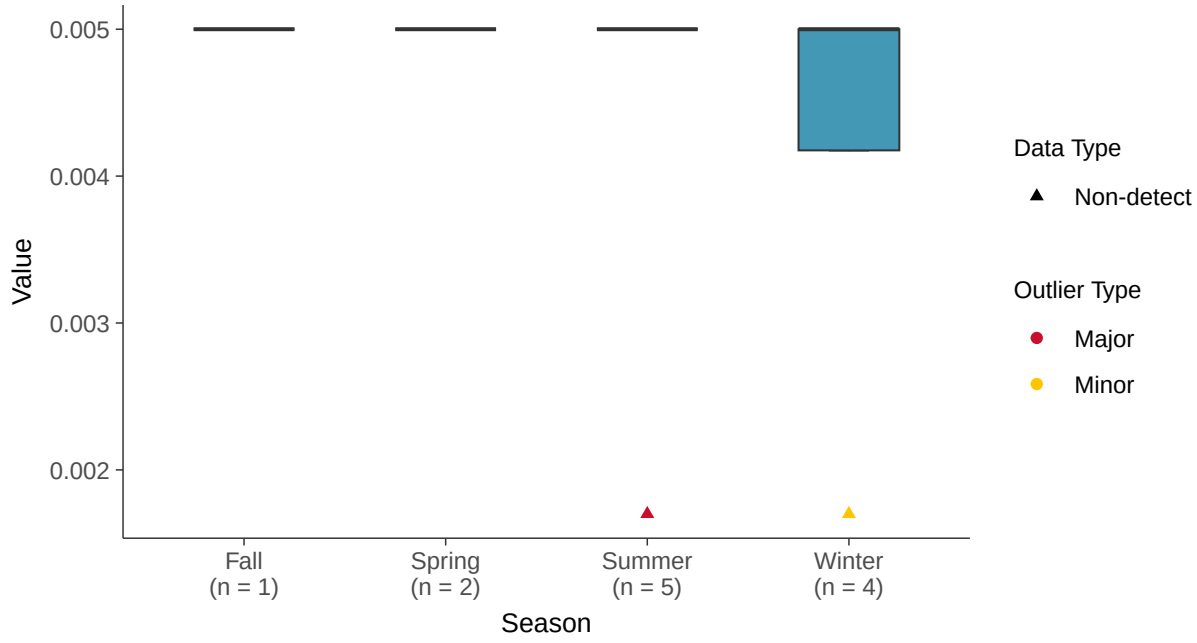


Boxplot

Copper, MW-14 (mg/l)

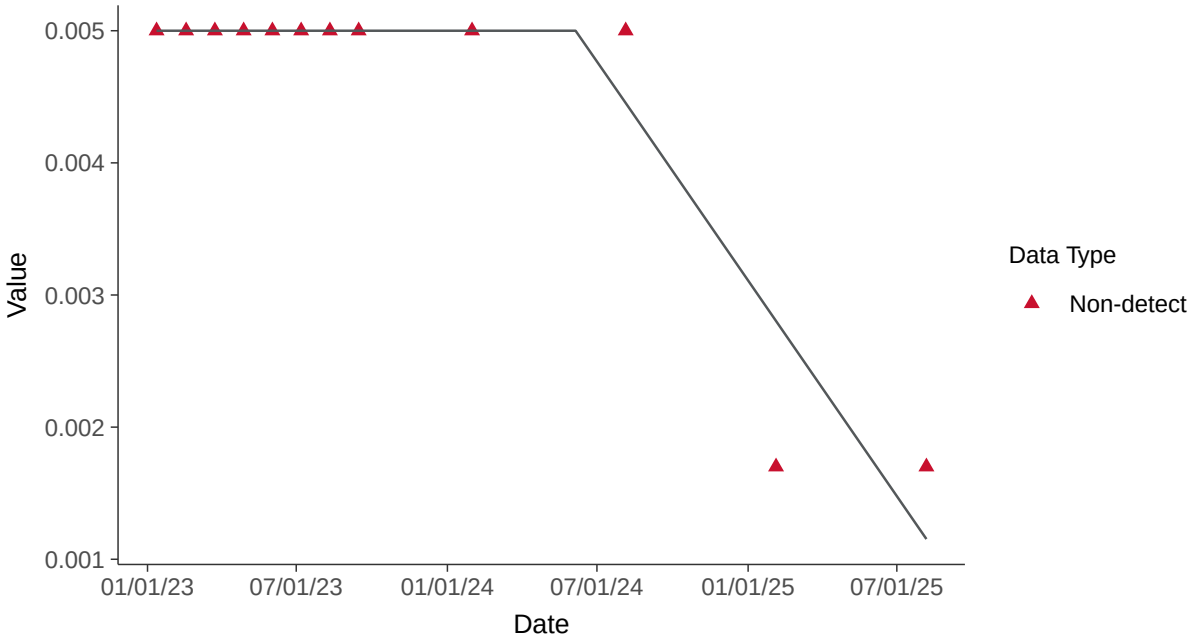
Boxplot by Season

Copper, MW-14 (mg/l)



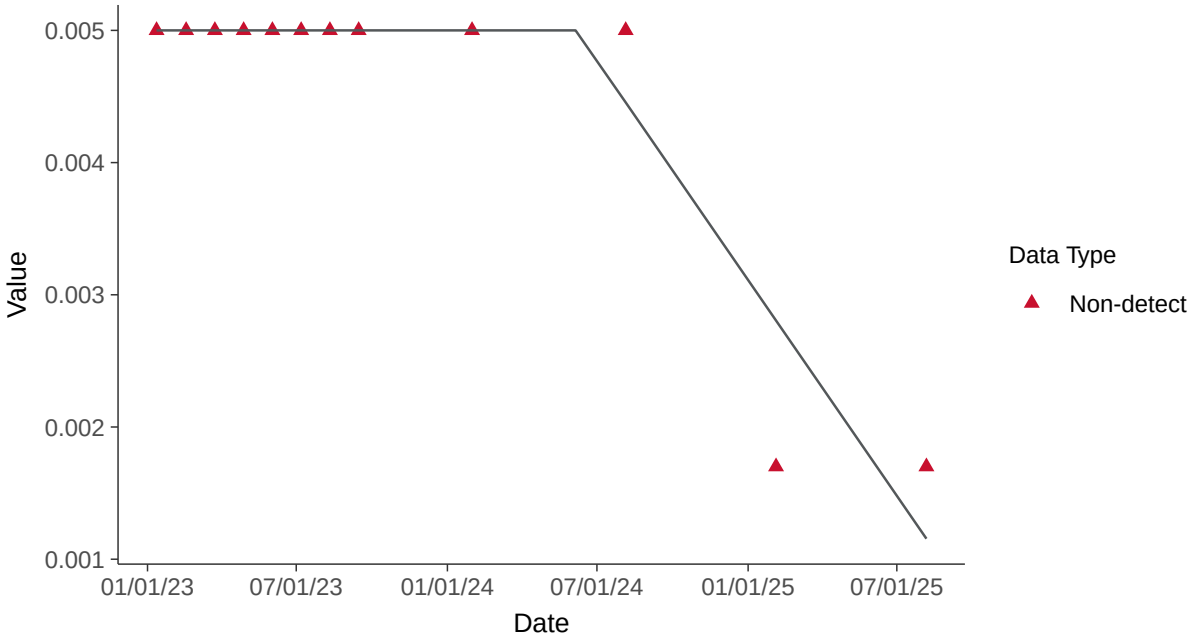
Trend Regression: Piecewise Linear-Linear

Copper, MW-14 (mg/l)



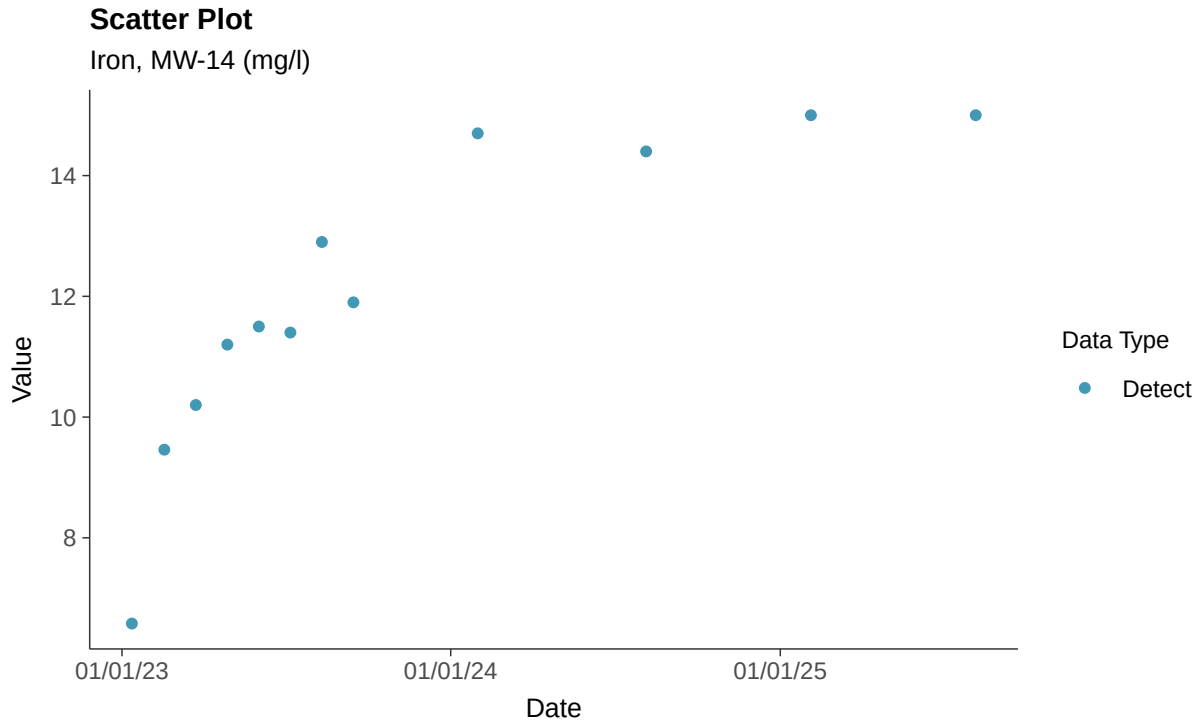
Trend Regression: Piecewise Linear-Linear-Linear

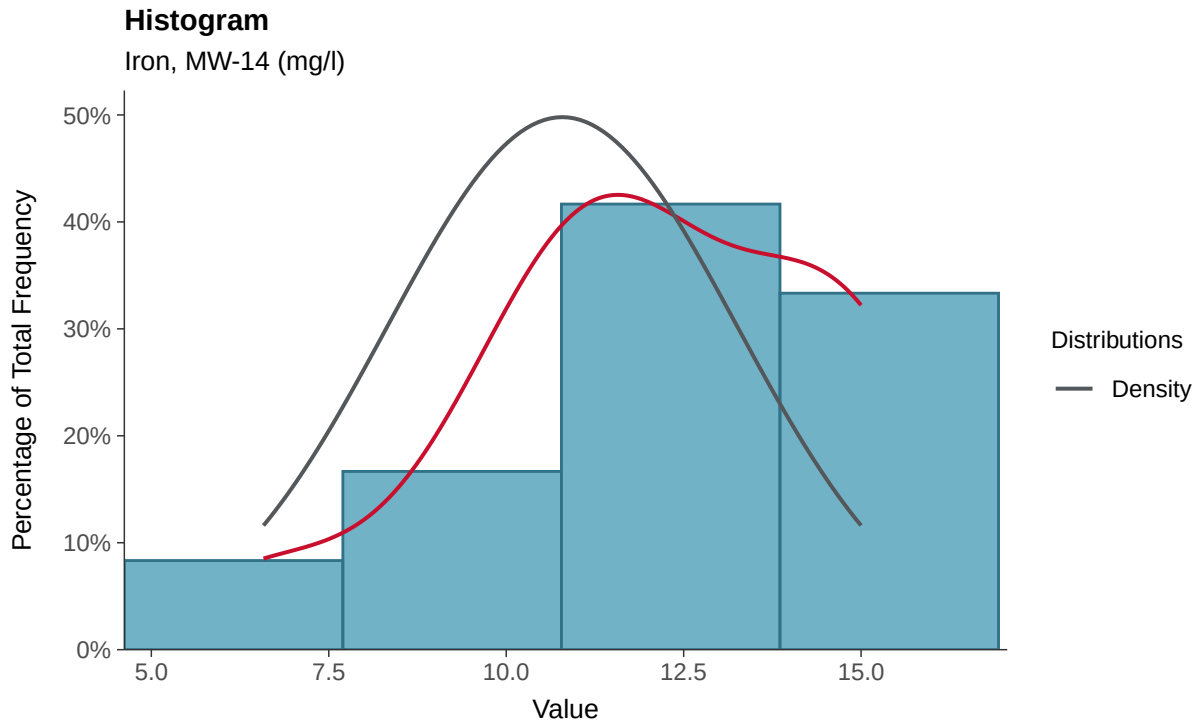
Copper, MW-14 (mg/l)



Part 115: Iron, MW-14

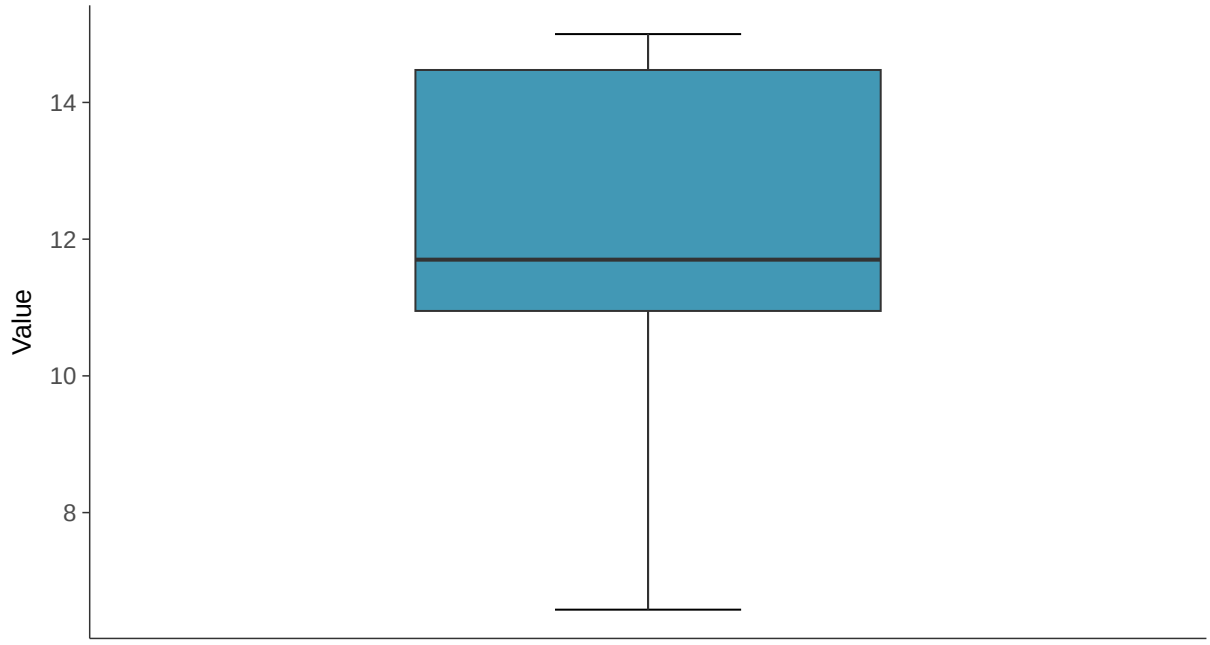
ID: 23_5_114





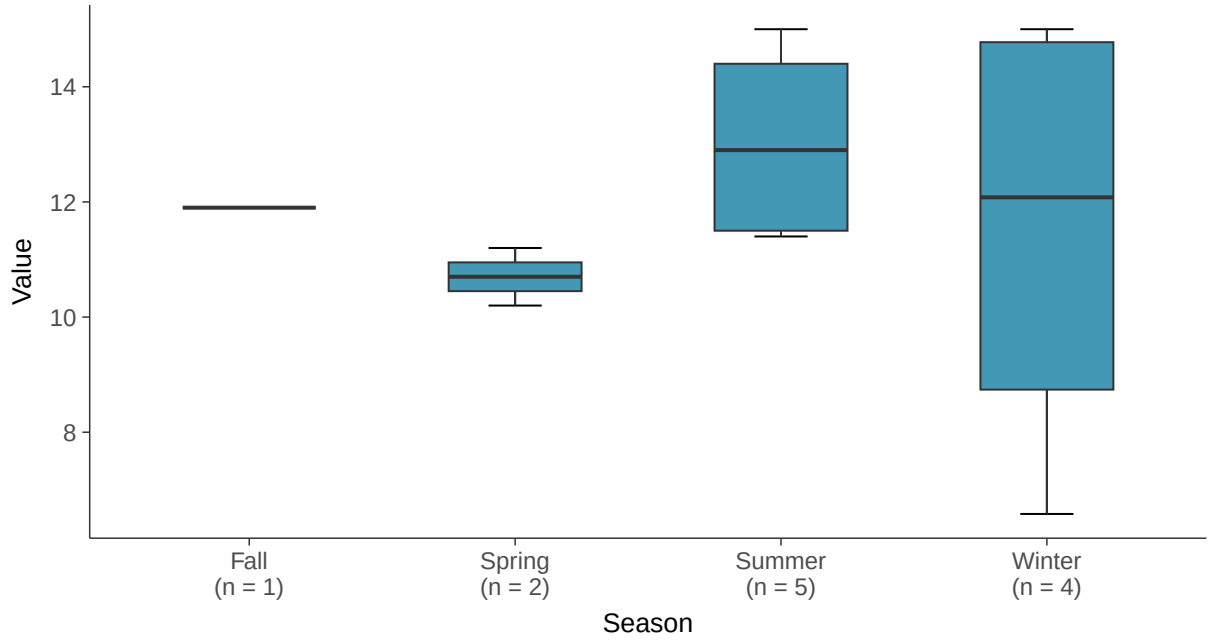
Boxplot

Iron, MW-14 (mg/l)



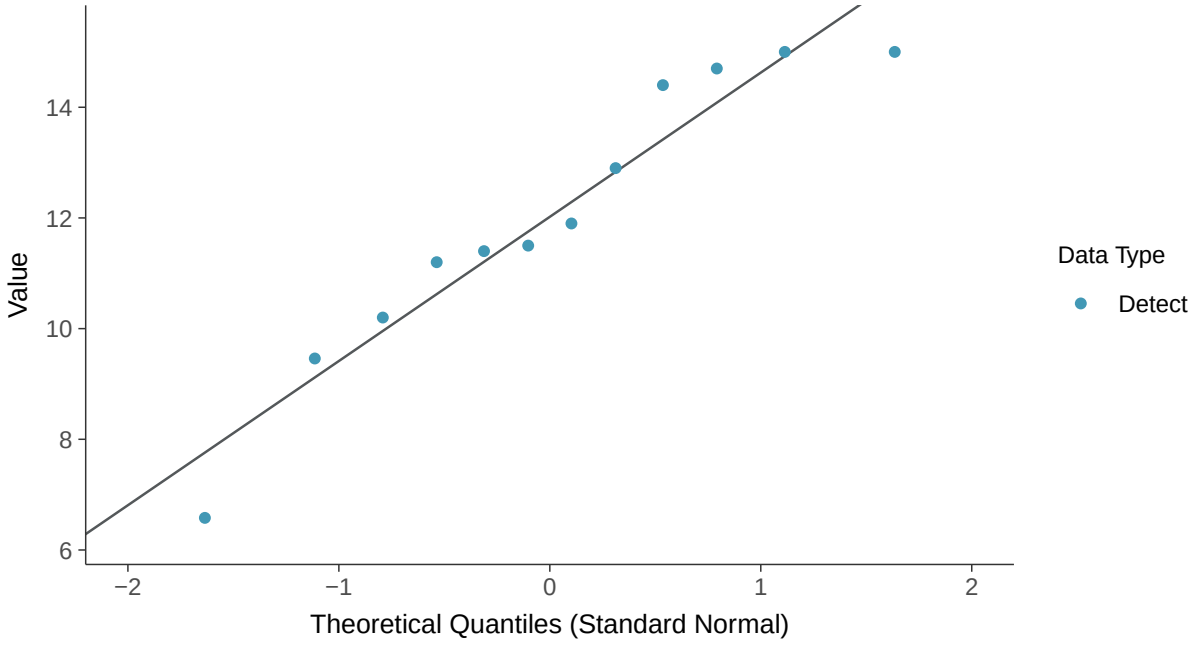
Boxplot by Season

Iron, MW-14 (mg/l)



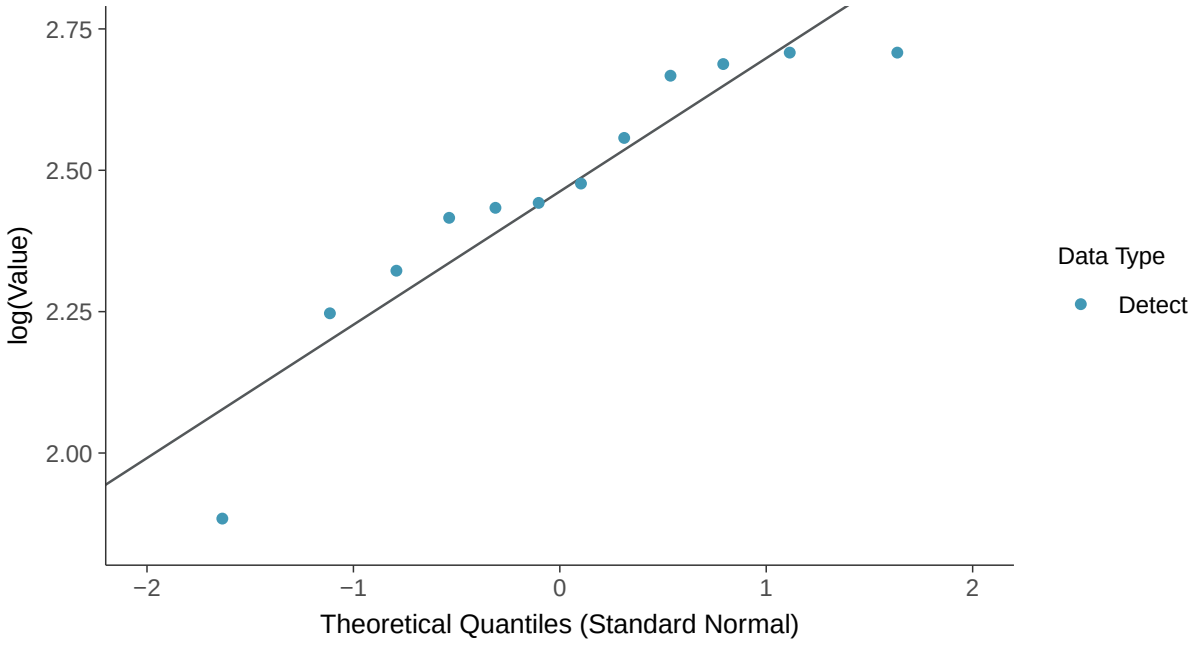
Normal Q-Q plot

Iron, MW-14 (mg/l)



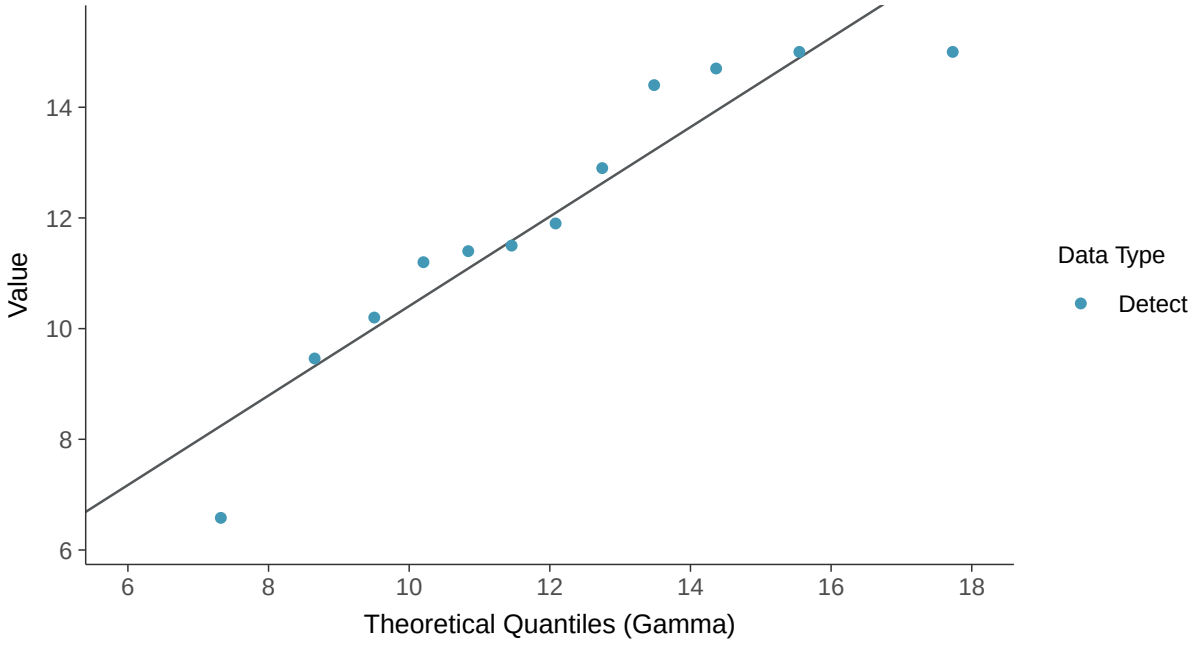
Lognormal Q-Q plot

Iron, MW-14 (mg/l)



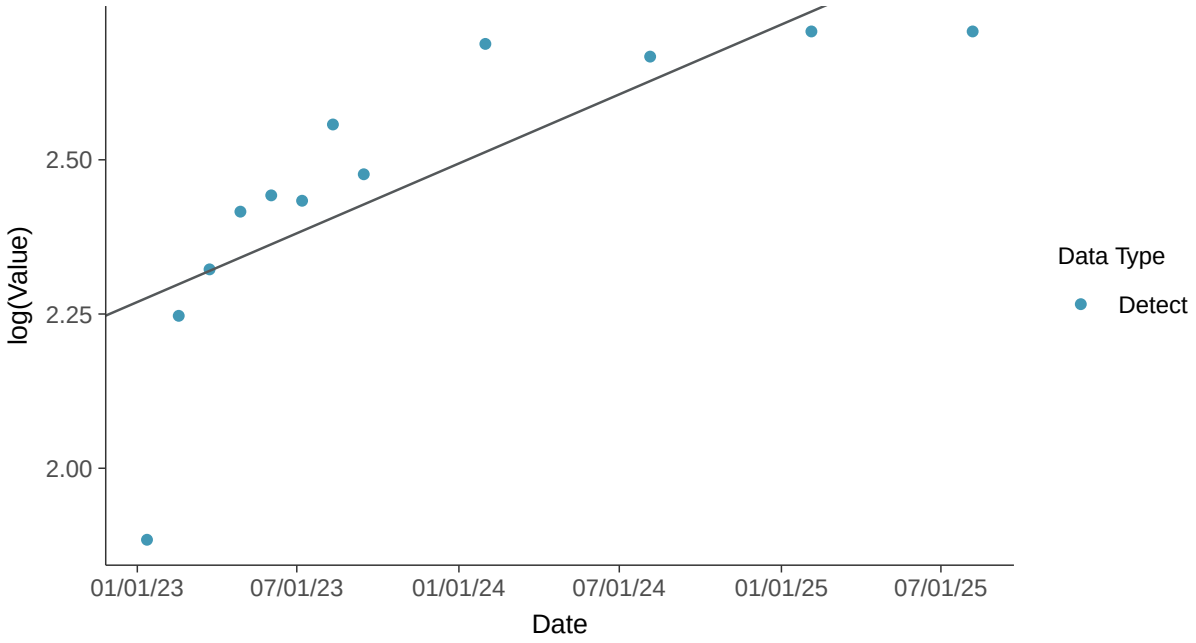
Gamma Q-Q plot

Iron, MW-14 (mg/l)



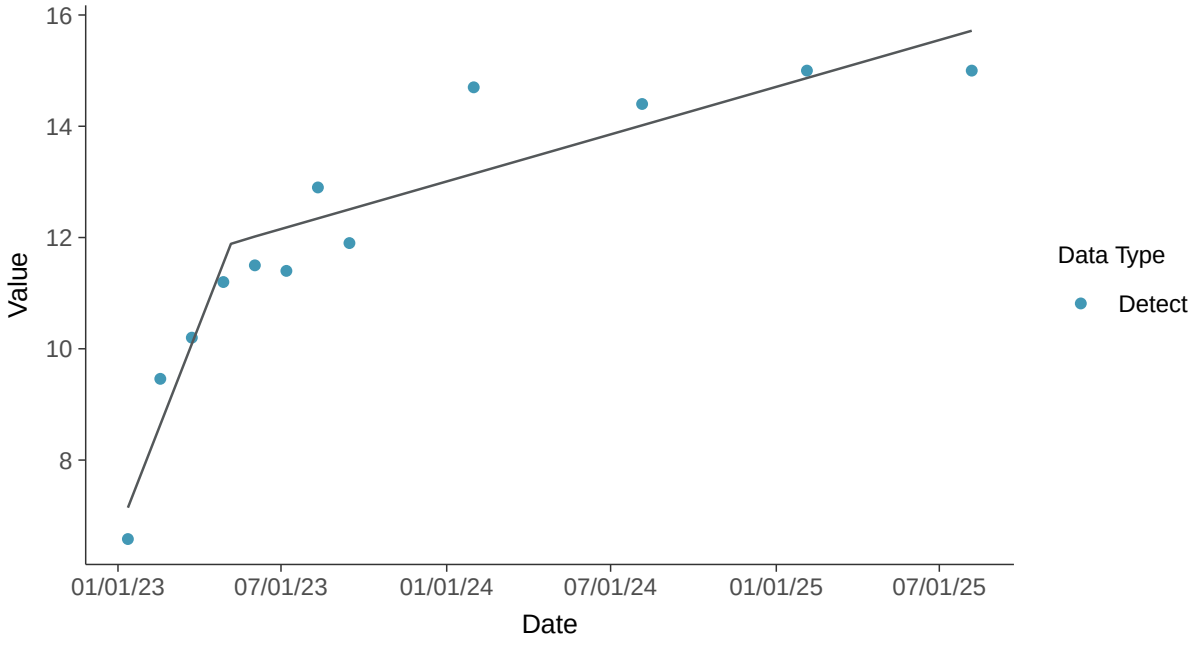
Trend Regression: Lognormal MLE

Iron, MW-14 (mg/l)



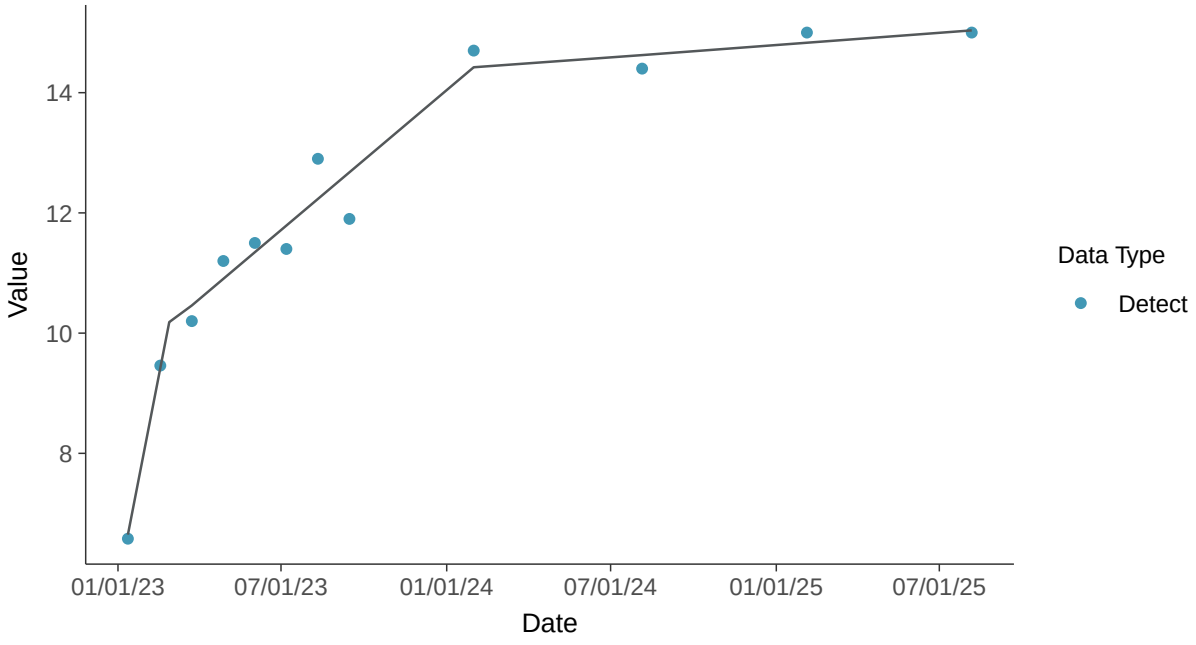
Trend Regression: Piecewise Linear-Linear

Iron, MW-14 (mg/l)



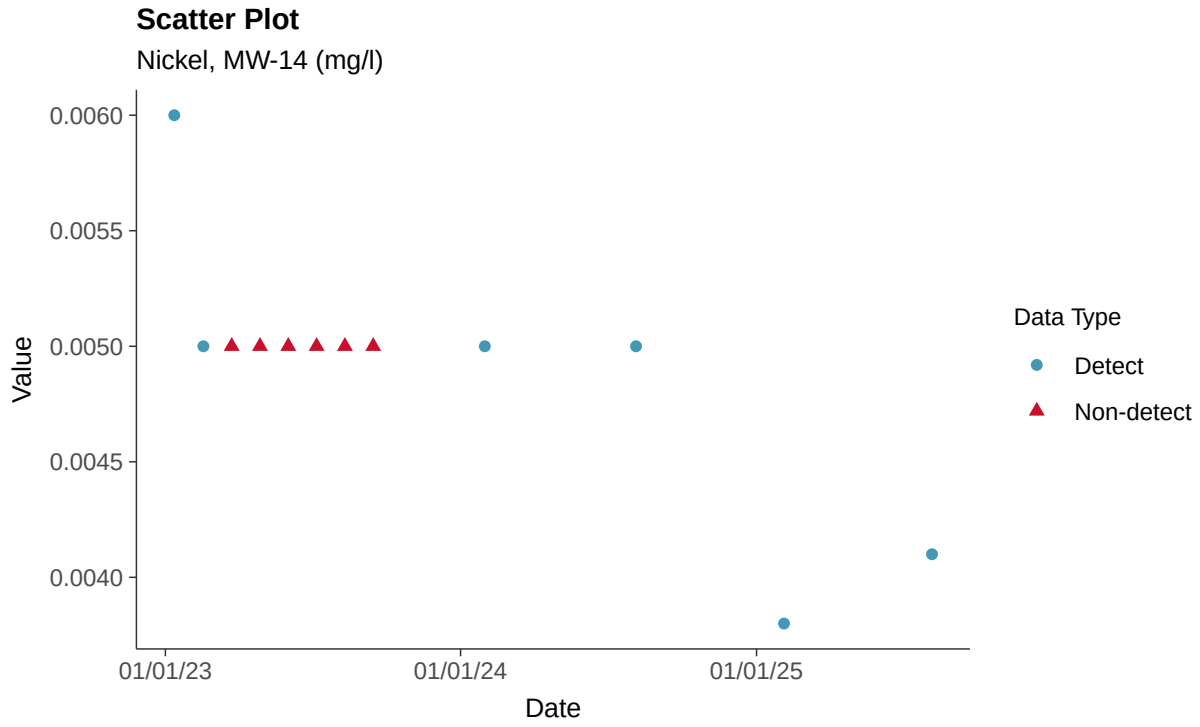
Trend Regression: Piecewise Linear-Linear-Linear

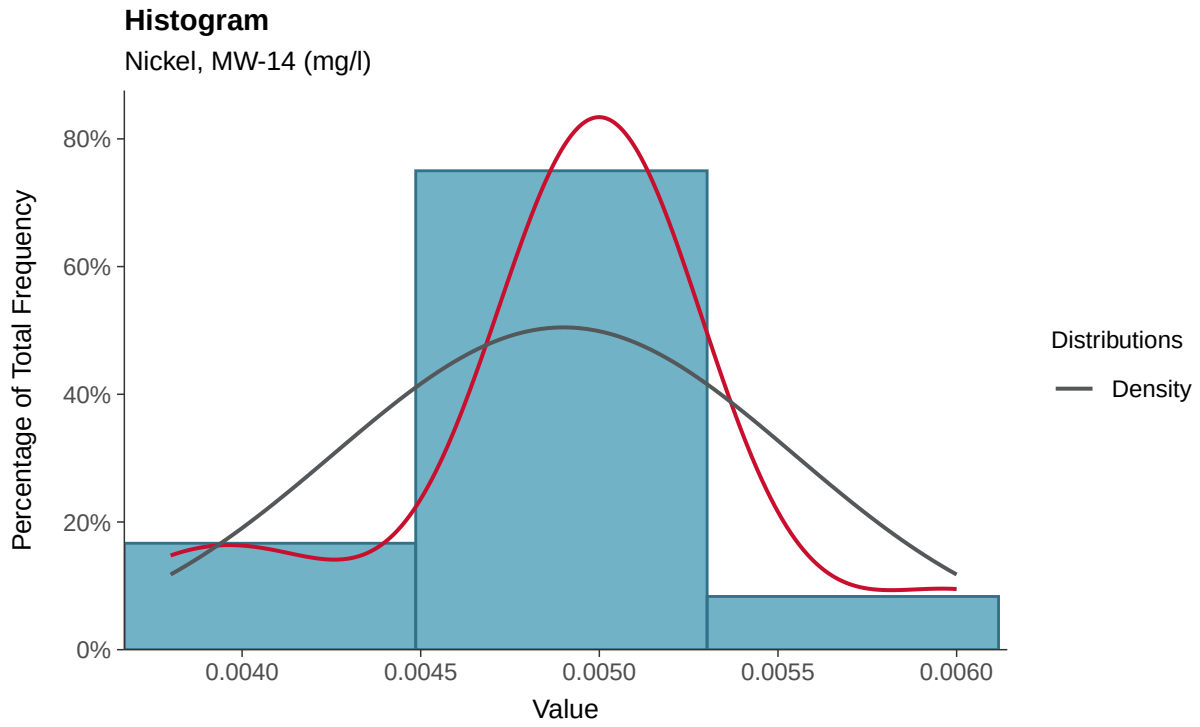
Iron, MW-14 (mg/l)



Part 115: Nickel, MW-14

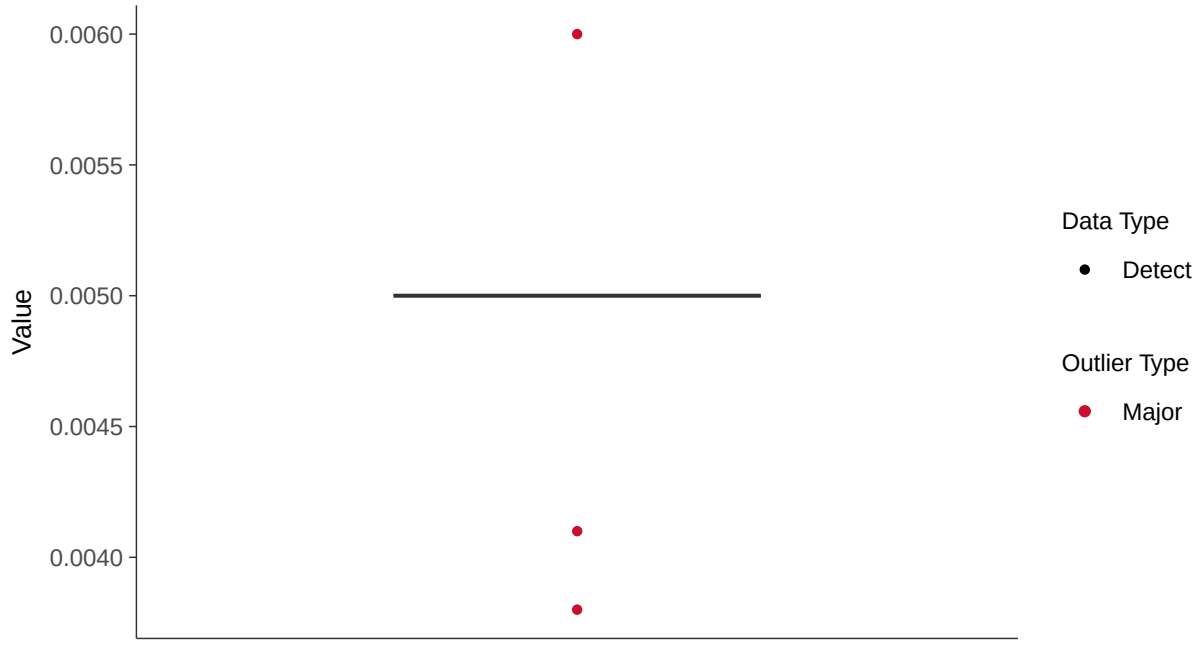
ID: 23_5_119





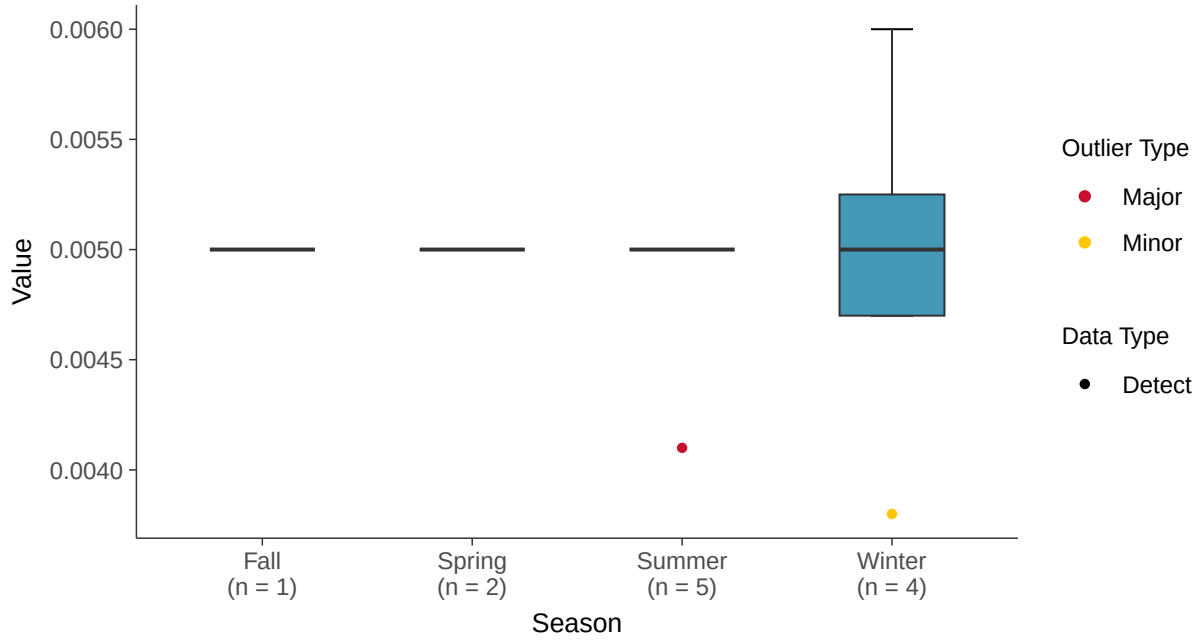
Boxplot

Nickel, MW-14 (mg/l)



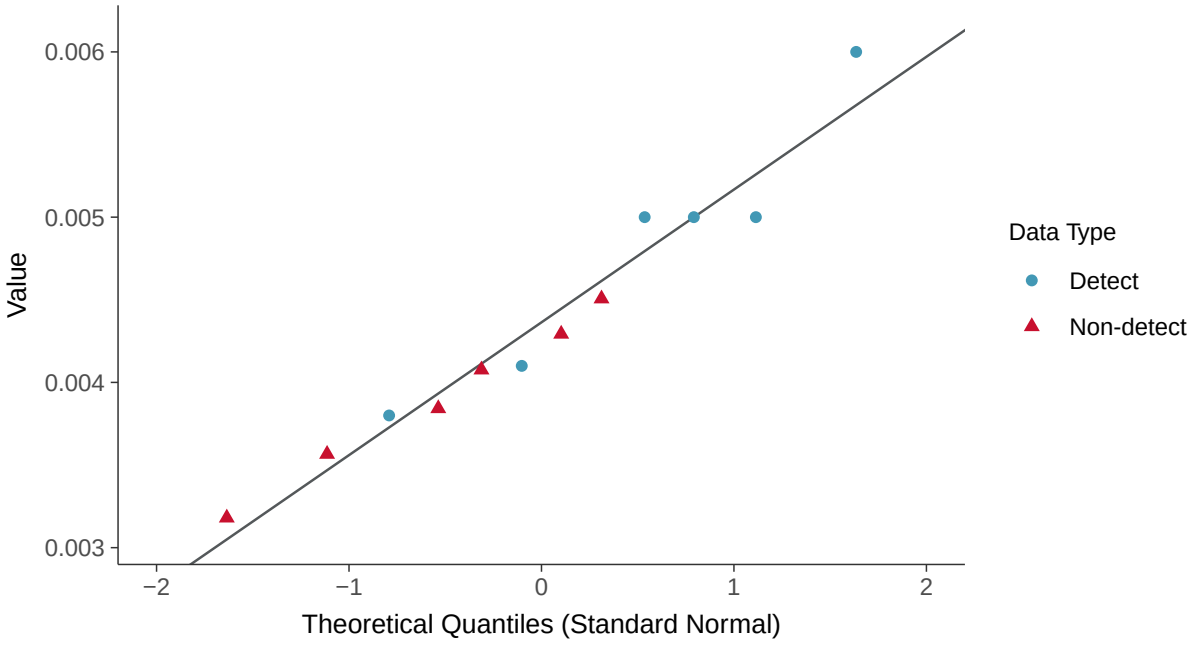
Boxplot by Season

Nickel, MW-14 (mg/l)



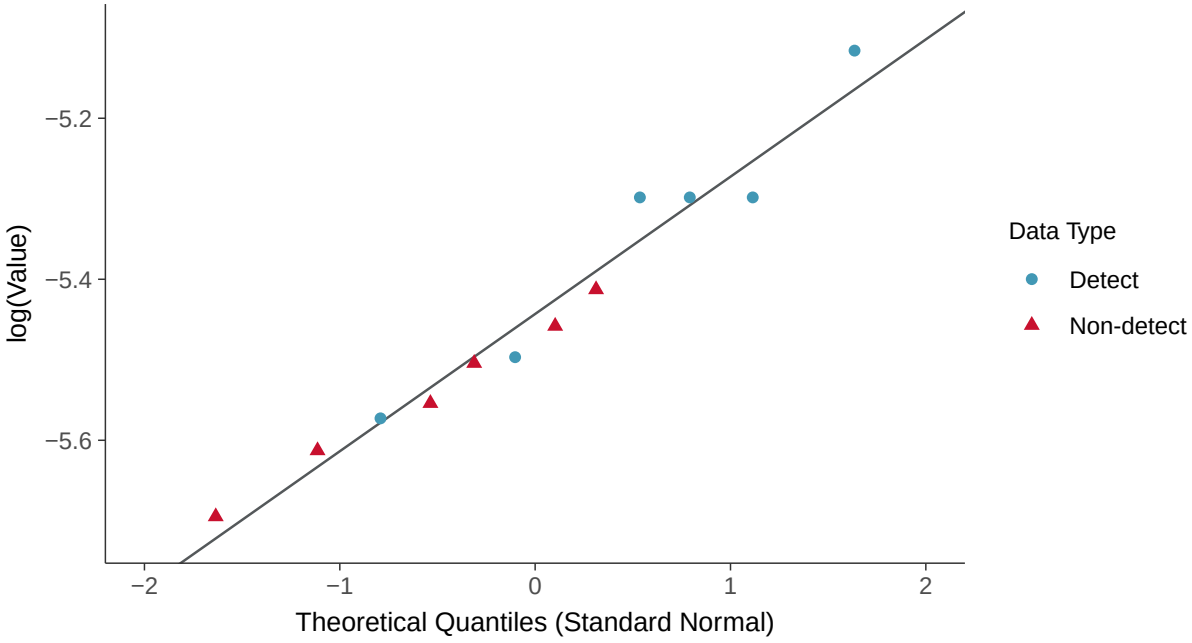
Normal Q-Q plot using ROS Imputed Estimates

Nickel, MW-14 (mg/l)



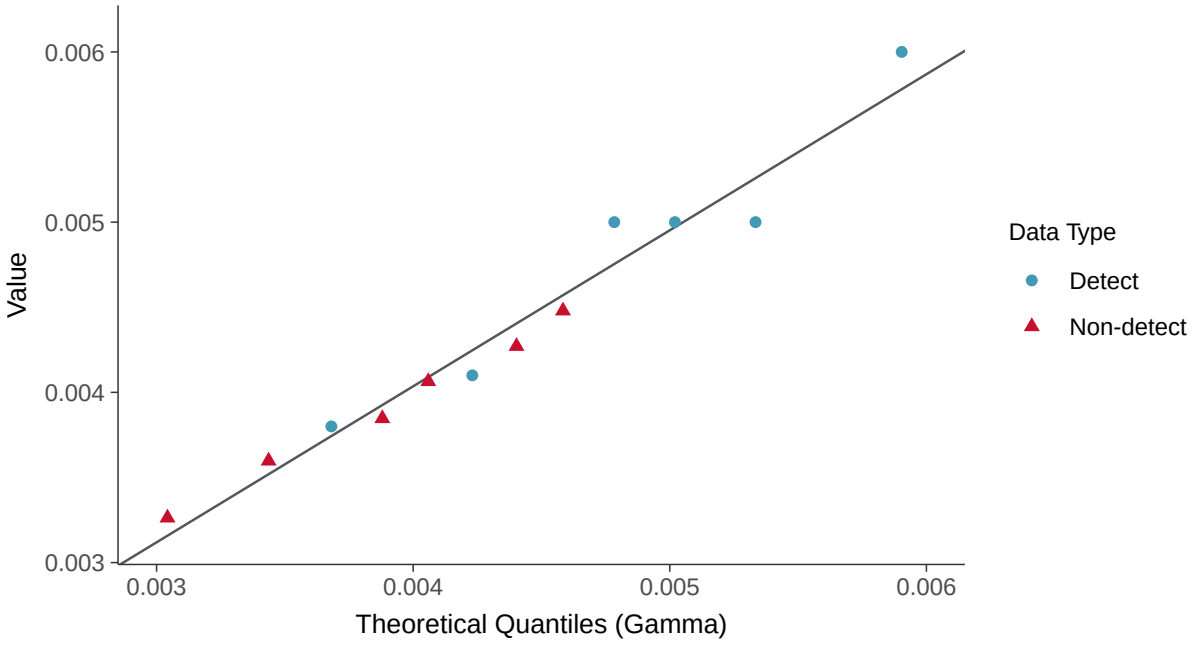
Lognormal Q-Q plot using ROS Imputed Estimates

Nickel, MW-14 (mg/l)



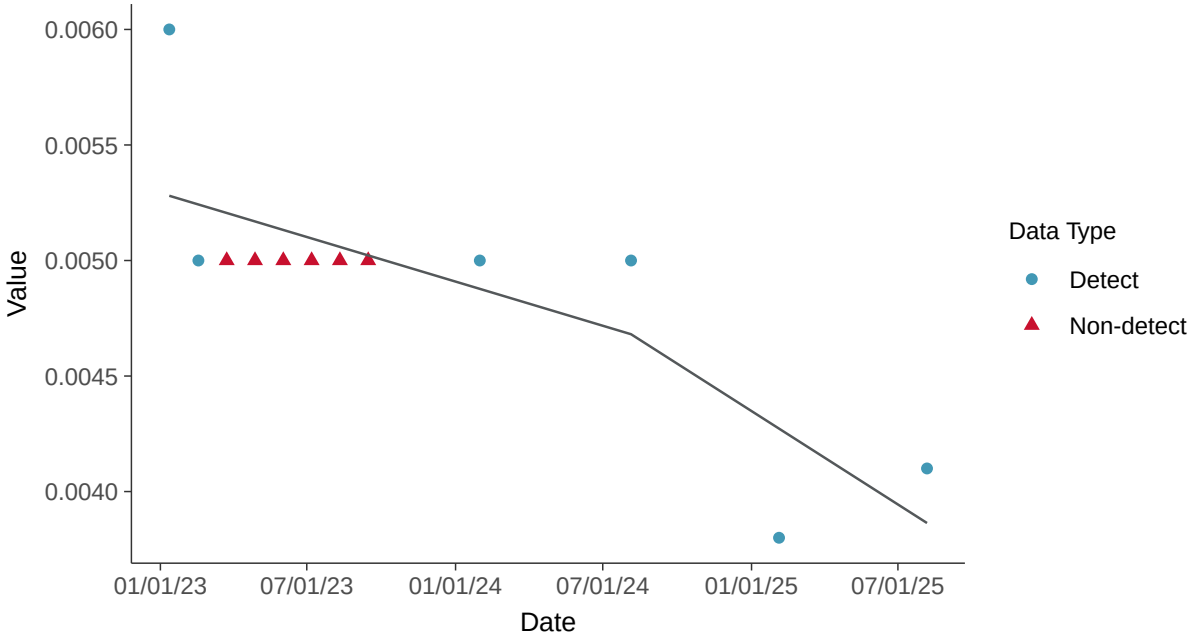
Gamma Q-Q plot using ROS Imputed Estimates

Nickel, MW-14 (mg/l)



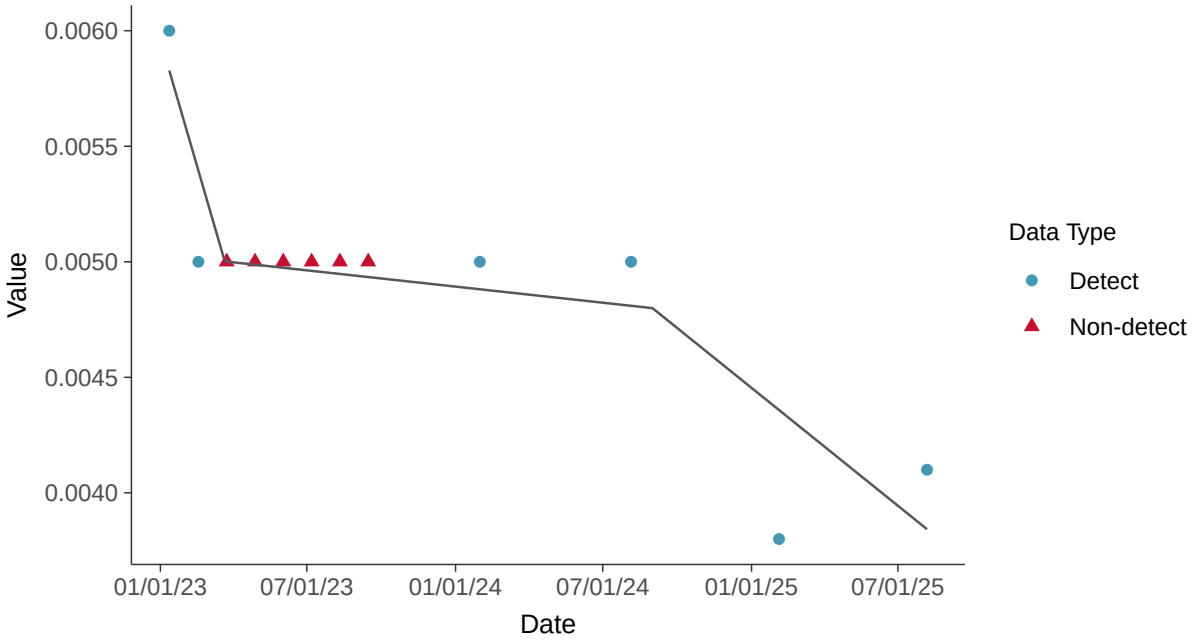
Trend Regression: Piecewise Linear-Linear

Nickel, MW-14 (mg/l)



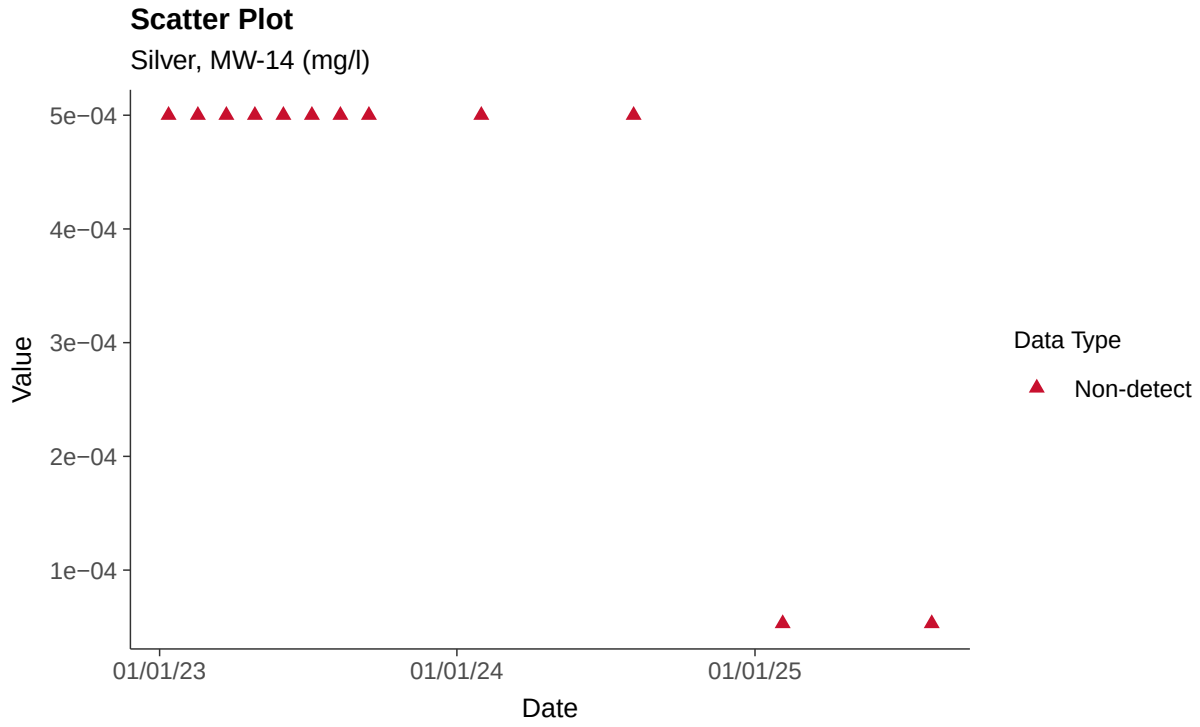
Trend Regression: Piecewise Linear-Linear-Linear

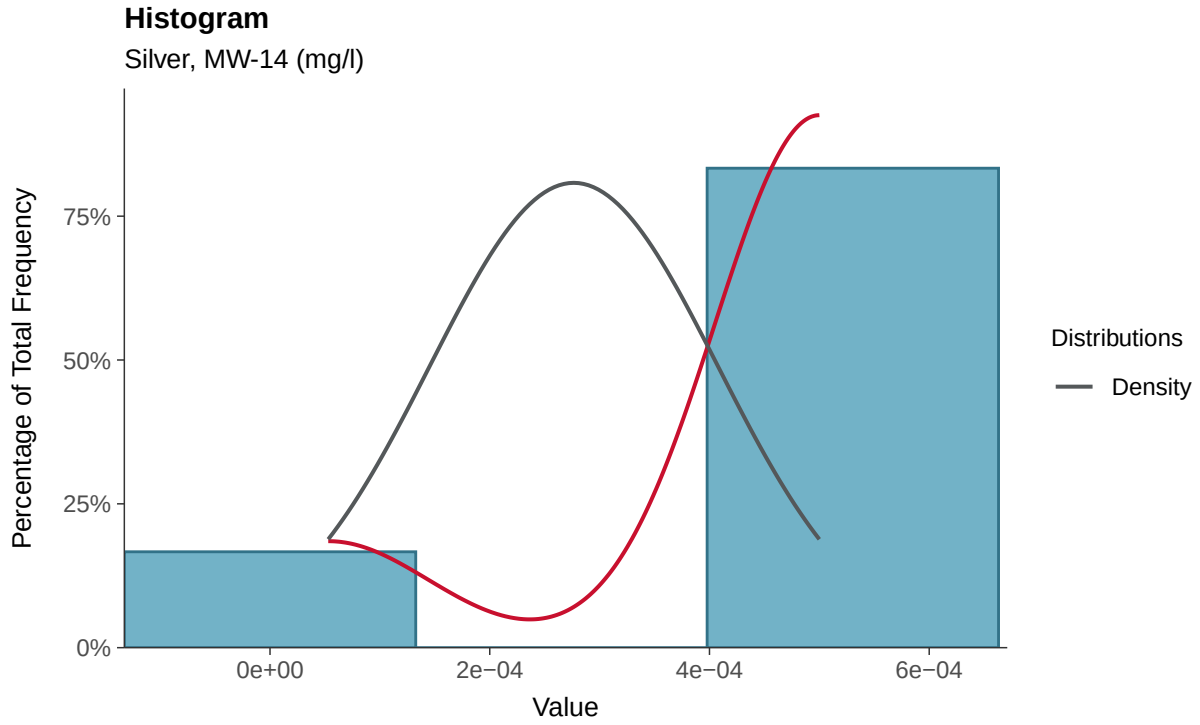
Nickel, MW-14 (mg/l)



Part 115: Silver, MW-14

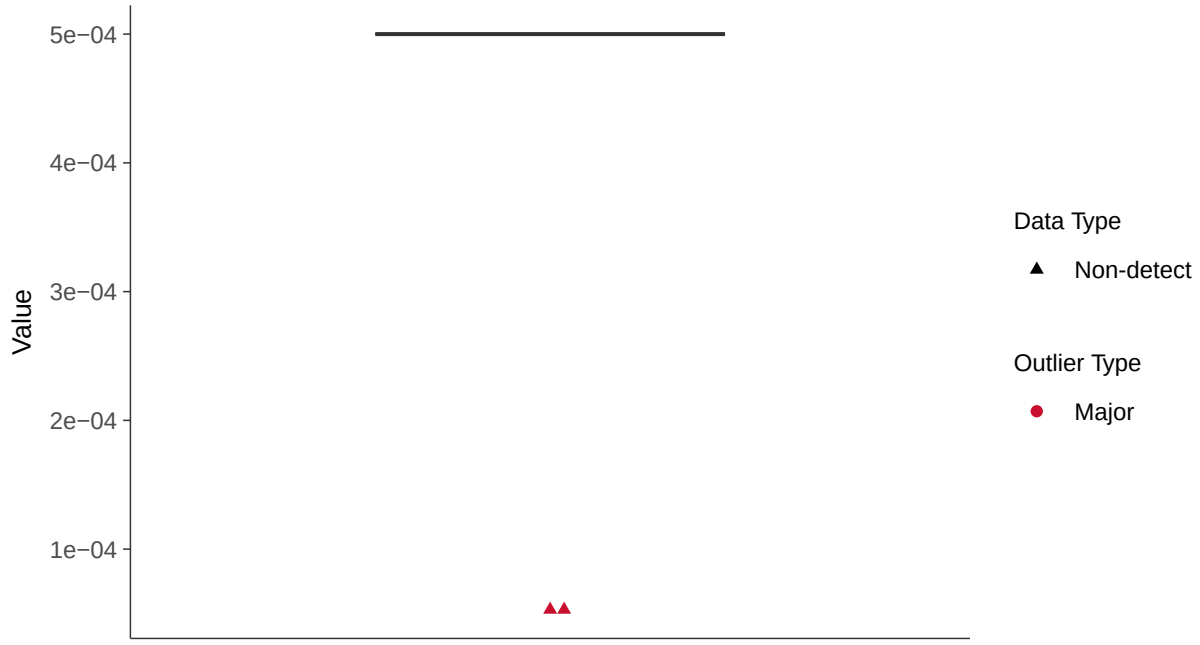
ID: 23_5_123





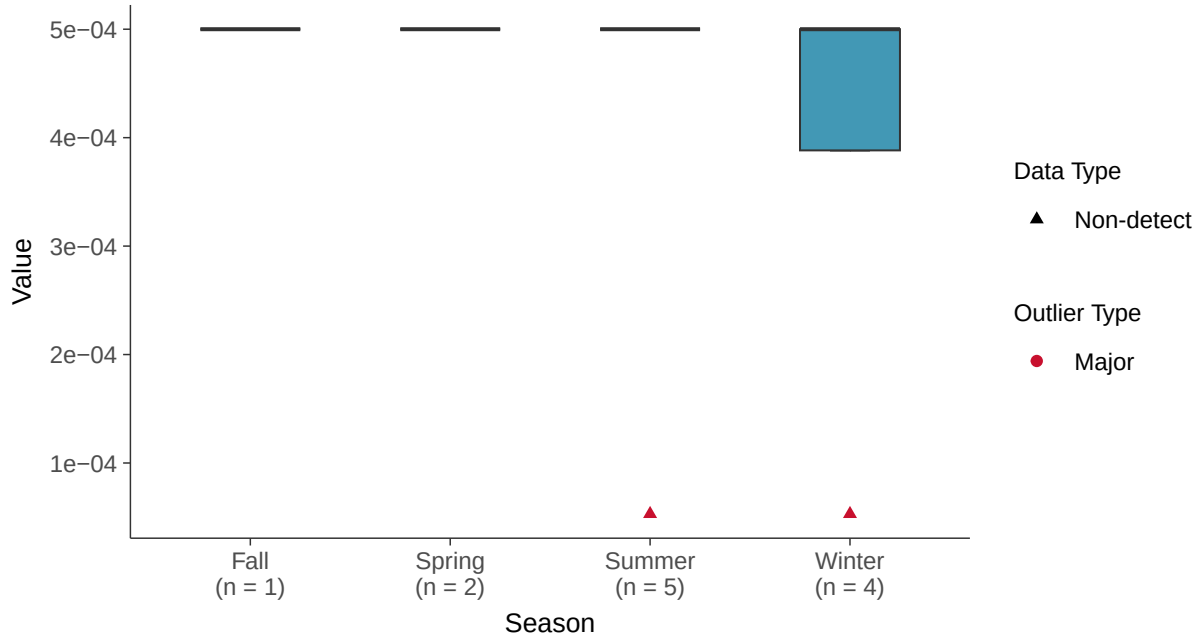
Boxplot

Silver, MW-14 (mg/l)



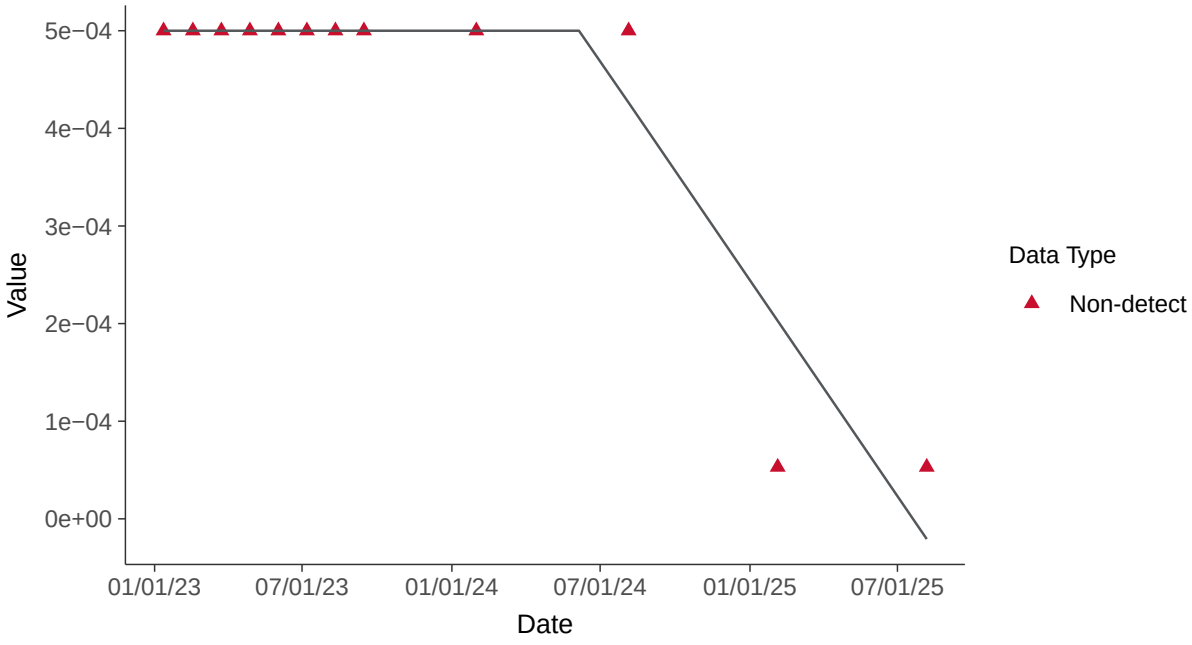
Boxplot by Season

Silver, MW-14 (mg/l)



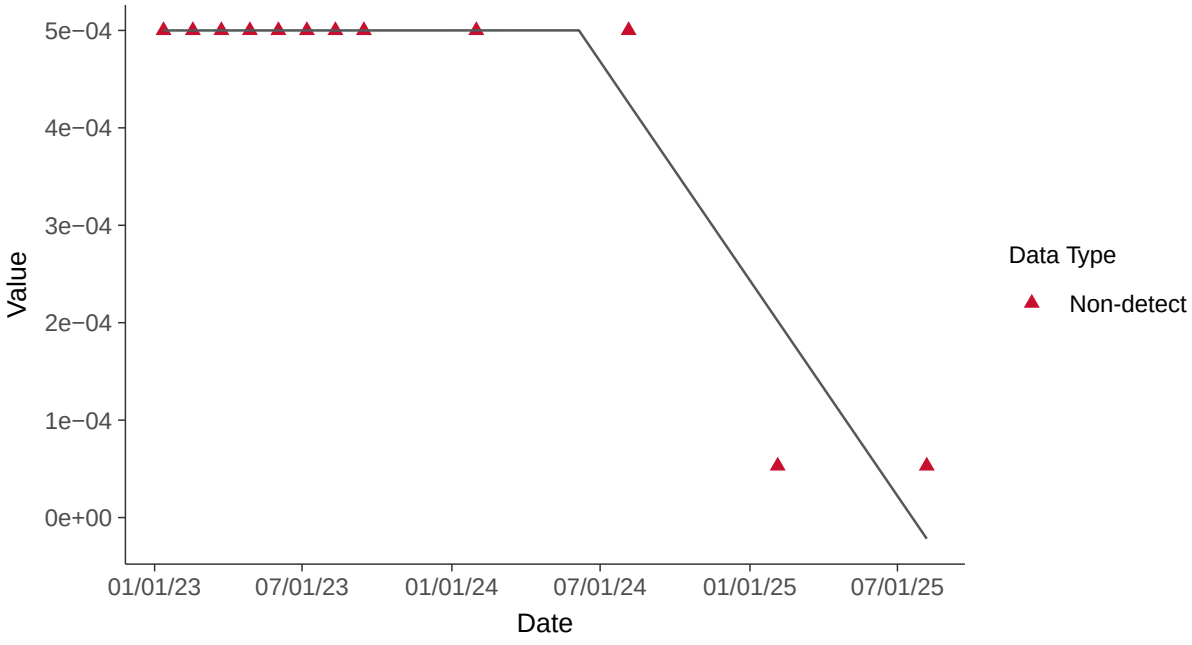
Trend Regression: Piecewise Linear-Linear

Silver, MW-14 (mg/l)



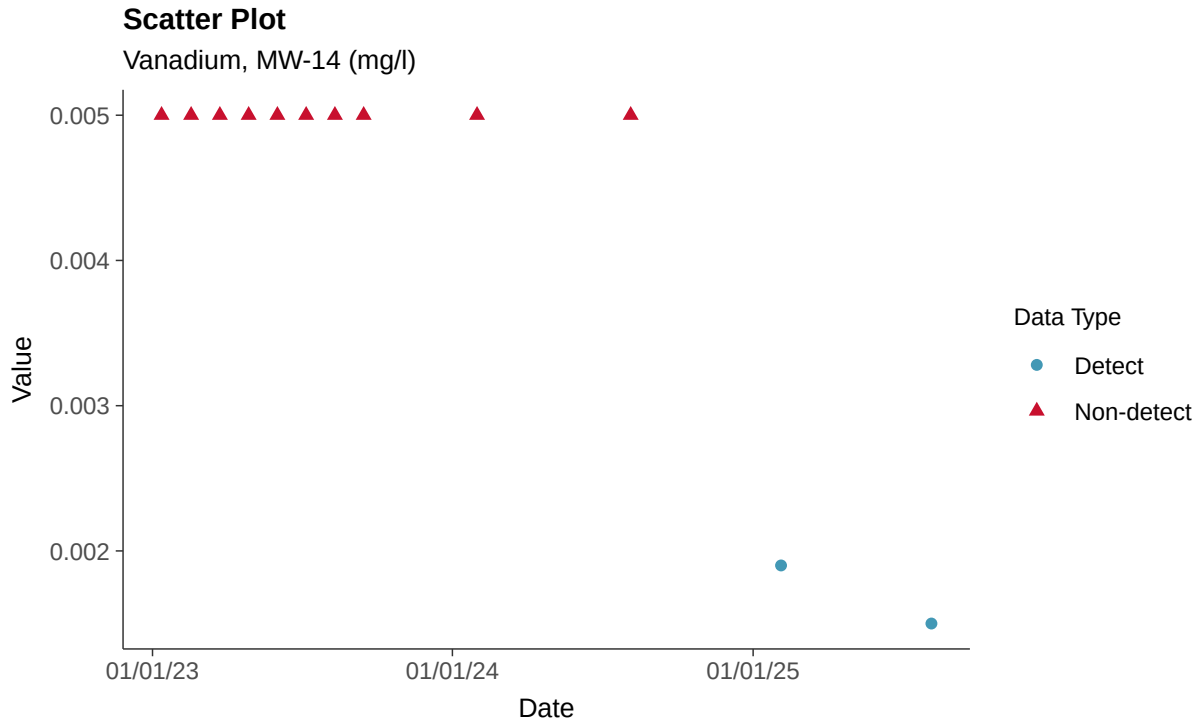
Trend Regression: Piecewise Linear-Linear-Linear

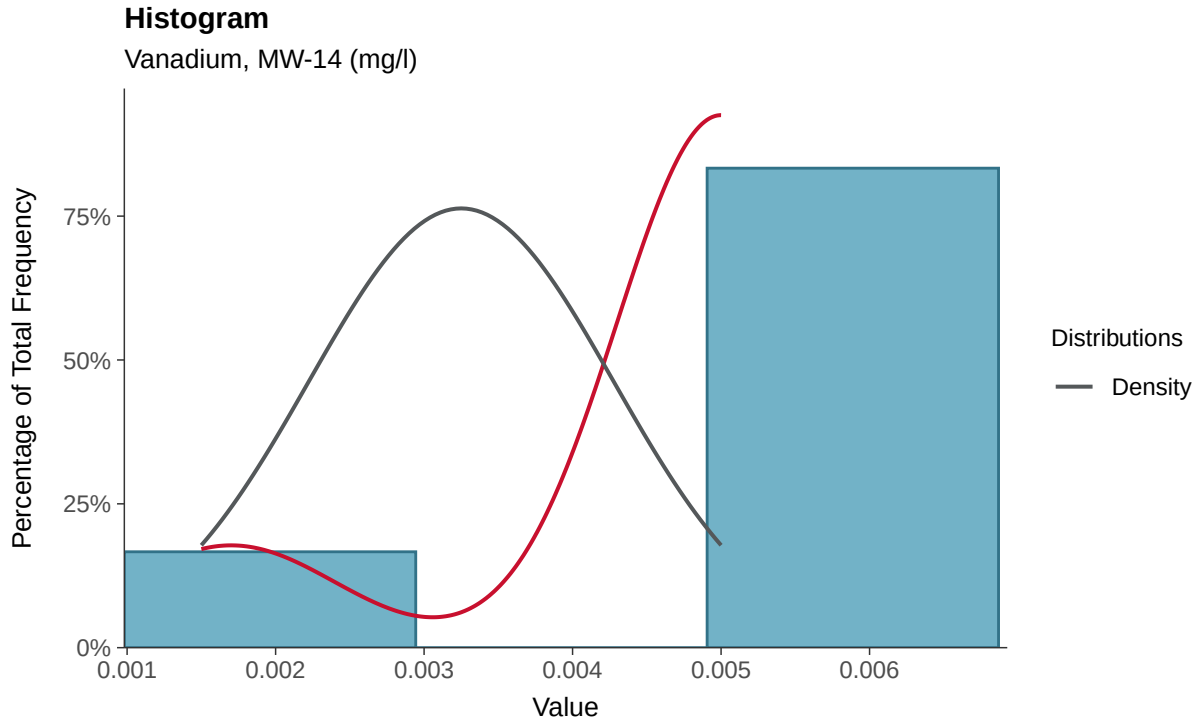
Silver, MW-14 (mg/l)



Part 115: Vanadium, MW-14

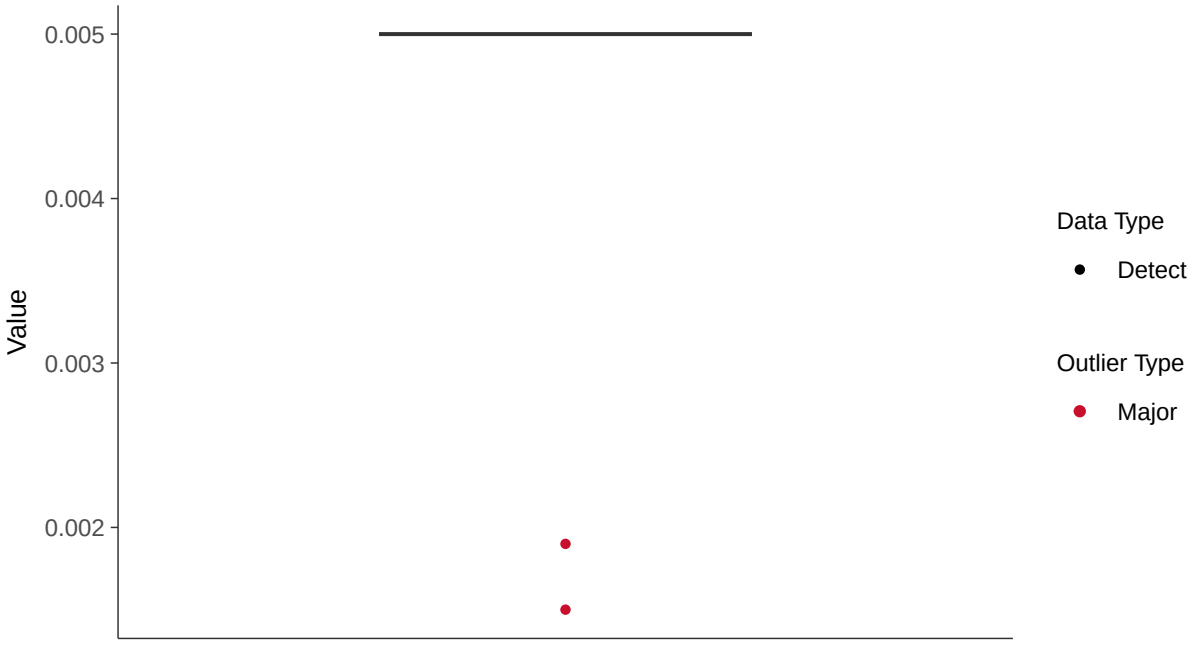
ID: 23_5_128





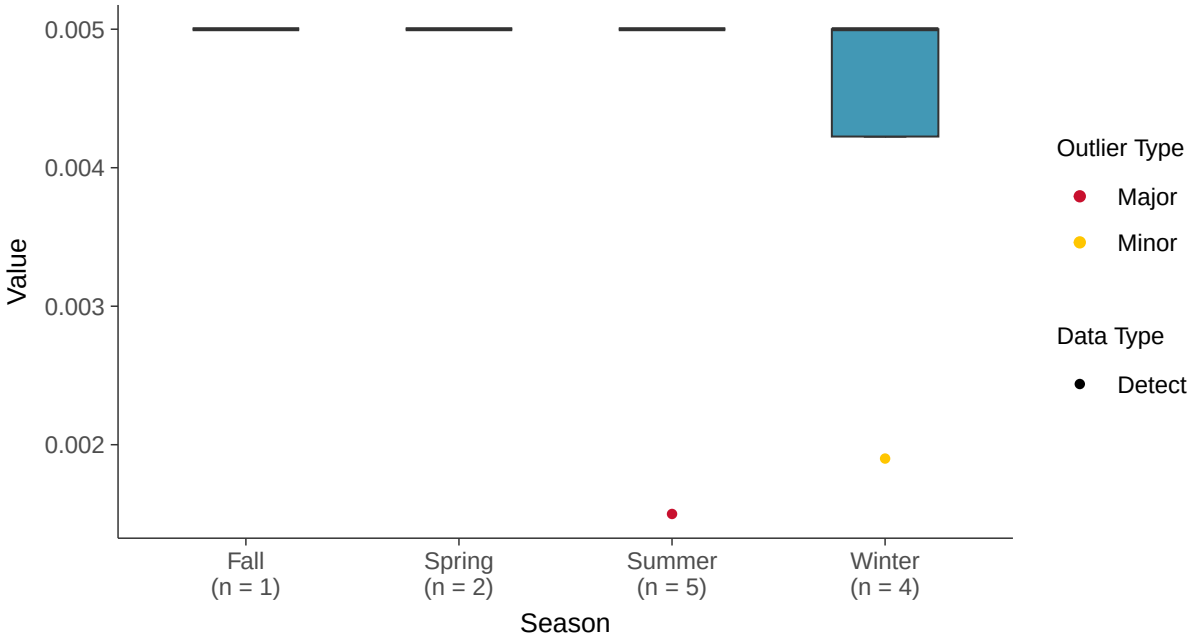
Boxplot

Vanadium, MW-14 (mg/l)



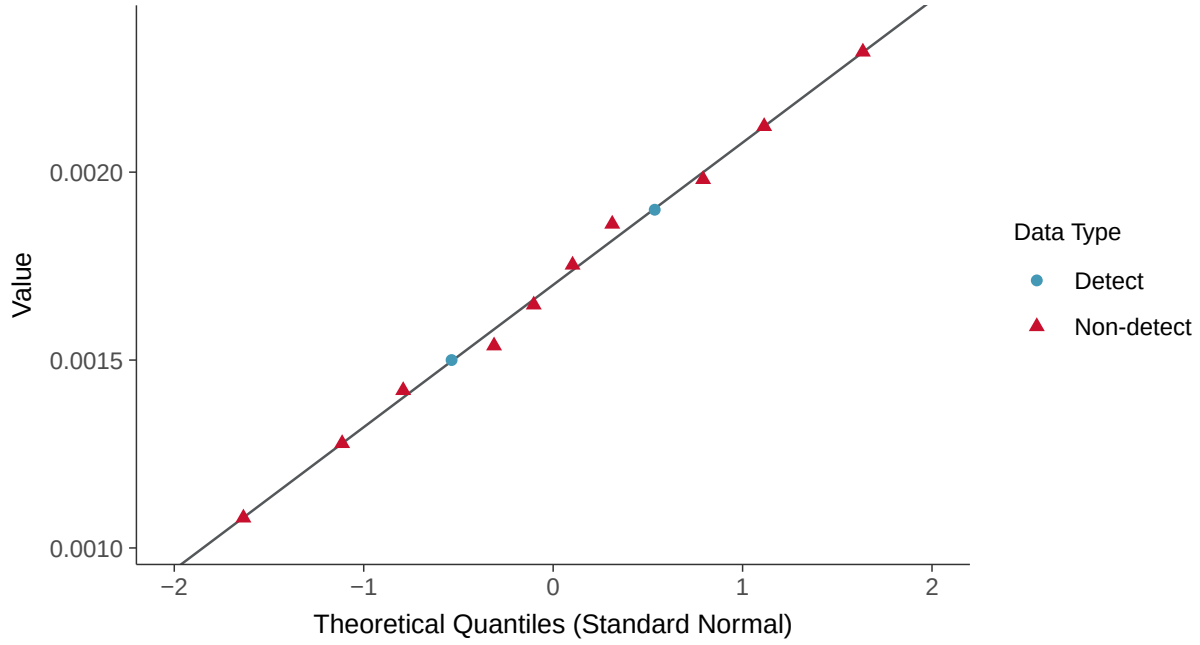
Boxplot by Season

Vanadium, MW-14 (mg/l)



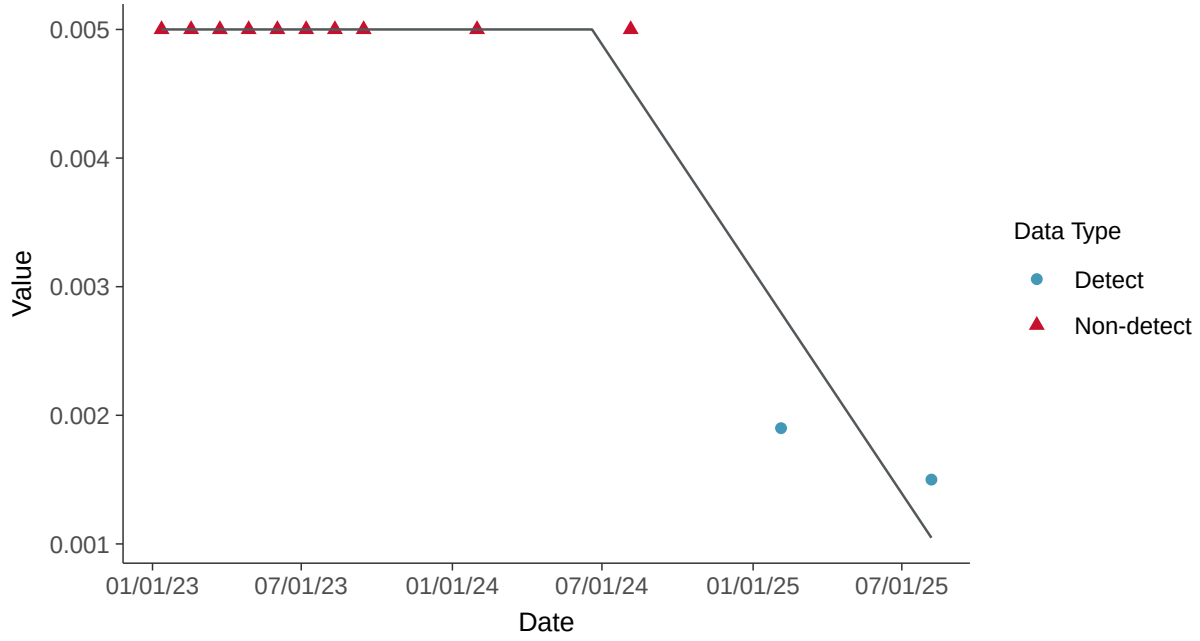
Normal Q-Q plot using ROS Imputed Estimates

Vanadium, MW-14 (mg/l)



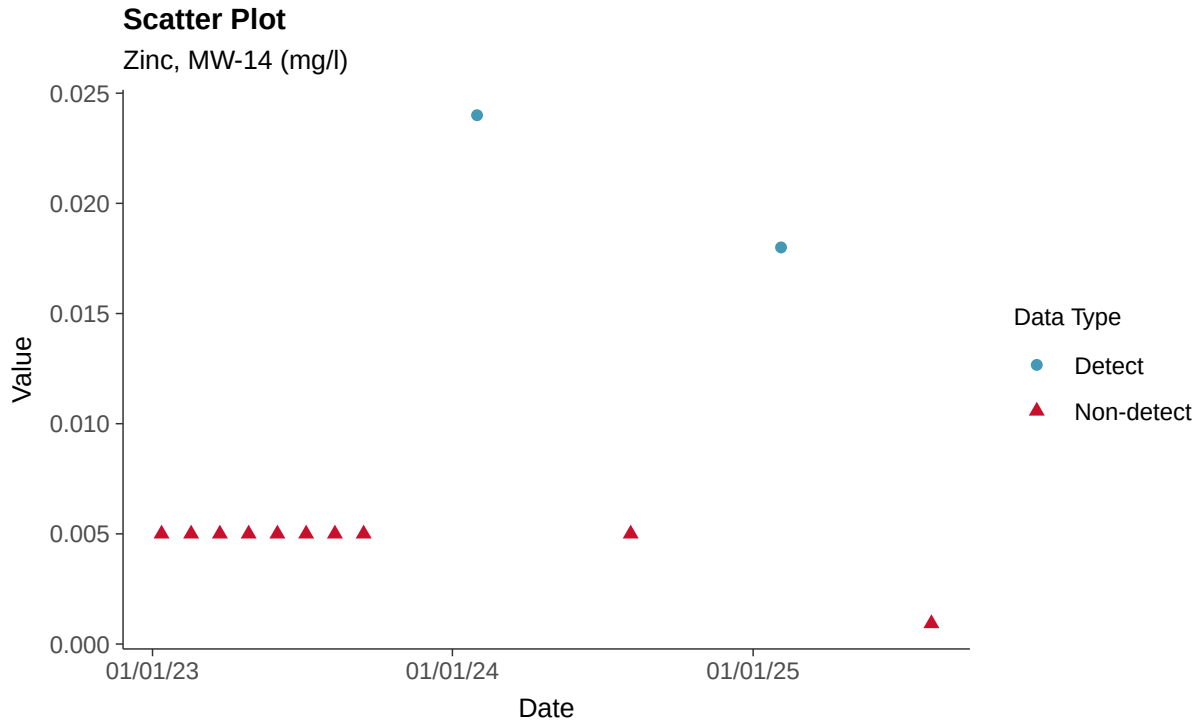
Trend Regression: Piecewise Linear-Linear

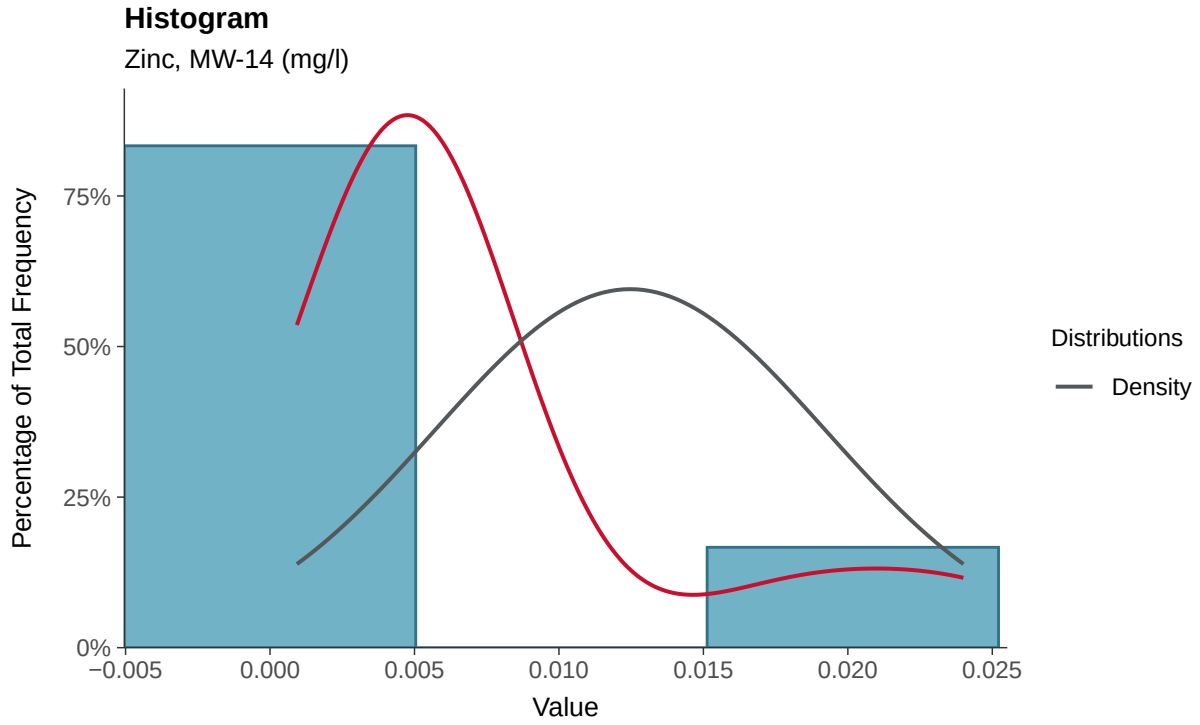
Vanadium, MW-14 (mg/l)



Part 115: Zinc, MW-14

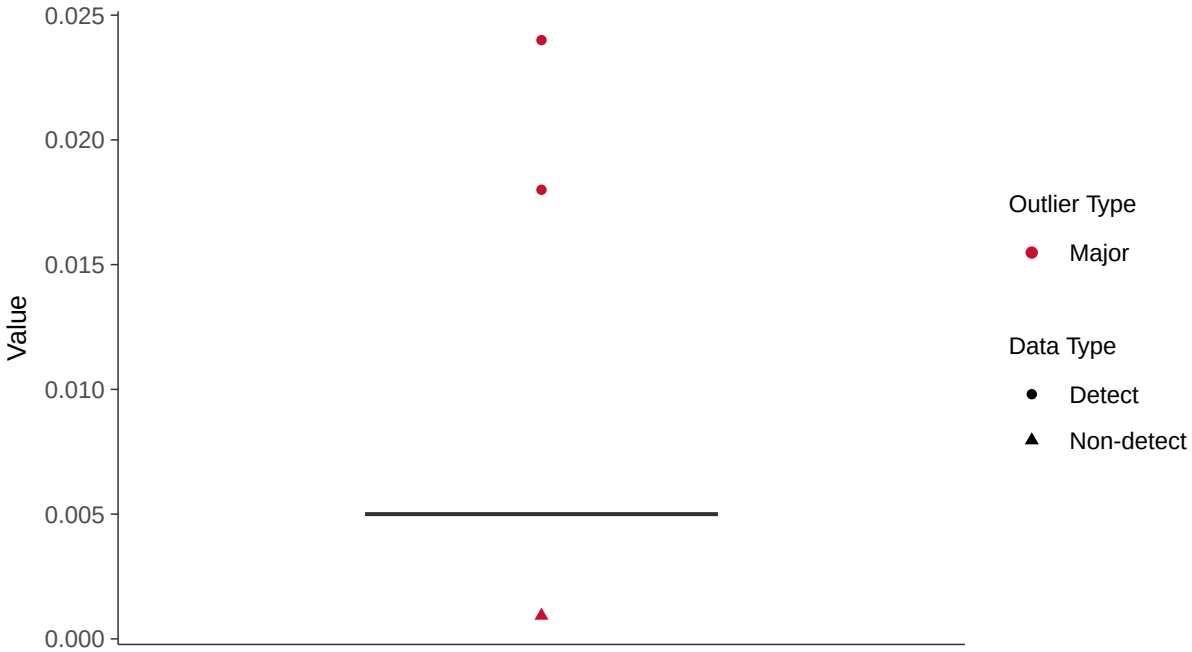
ID: 23_5_129





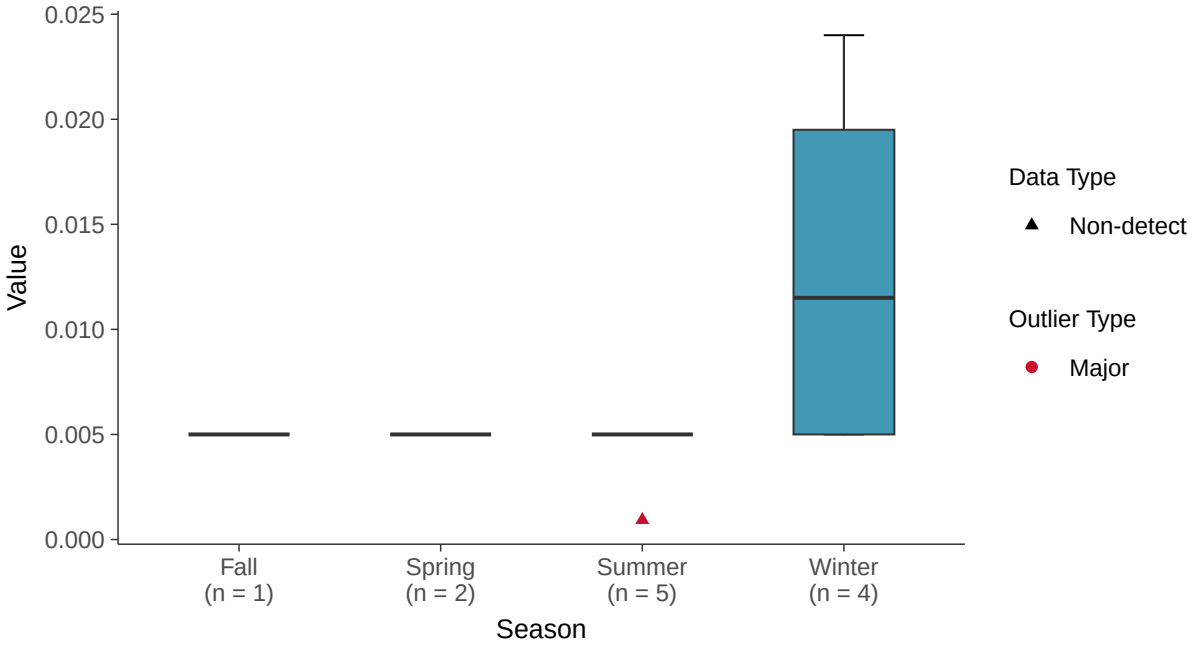
Boxplot

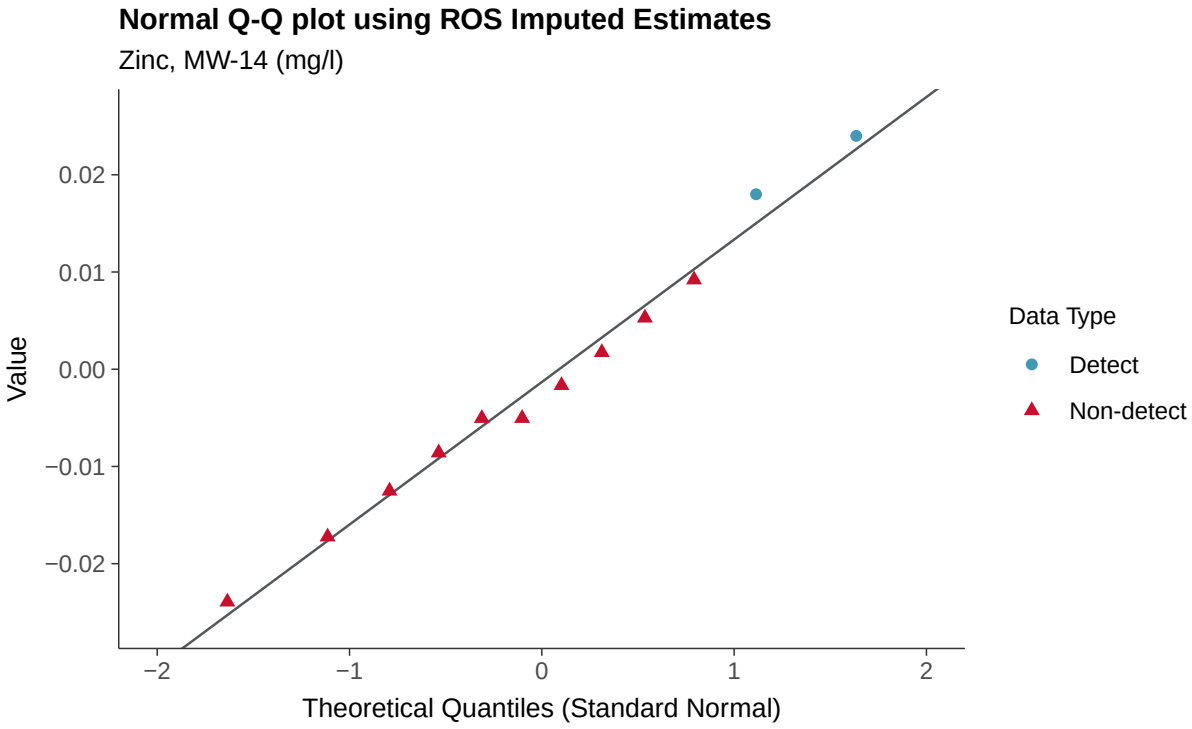
Zinc, MW-14 (mg/l)



Boxplot by Season

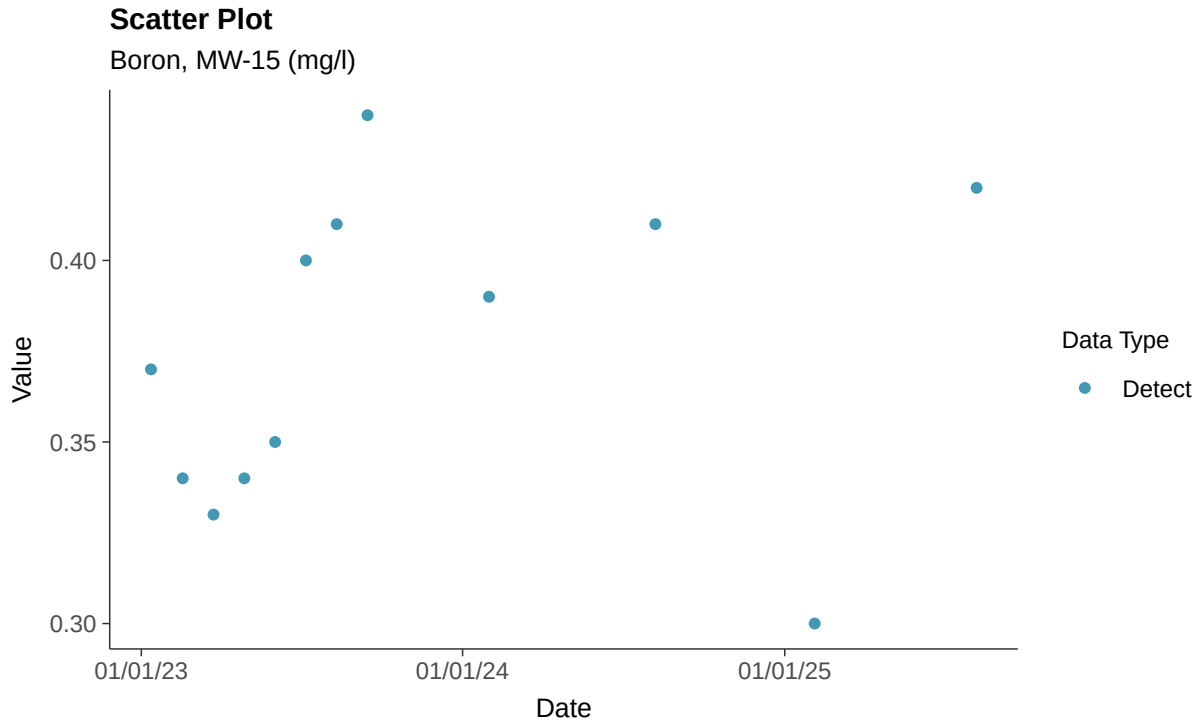
Zinc, MW-14 (mg/l)

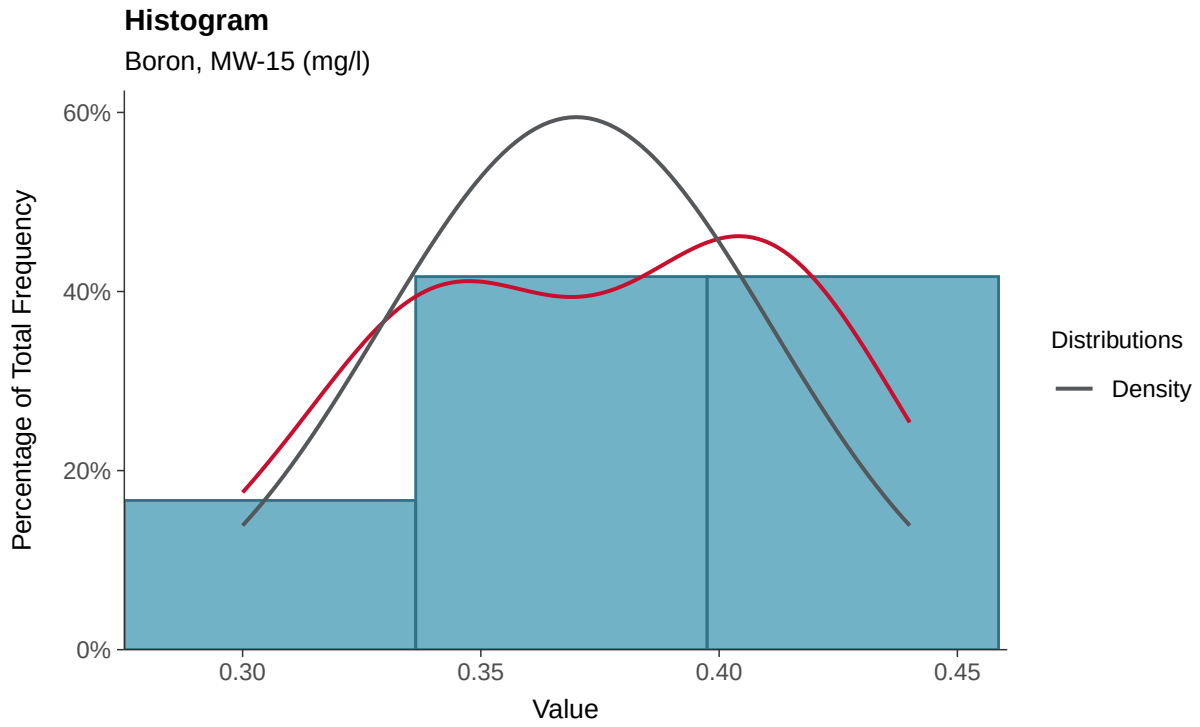



Normal Q-Q plot using ROS Imputed Estimates
Zinc, MW-14 (mg/l)
Value
0.02
0.01
0.00
−0.01
−0.02
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect
Non-detect

Appendix III: Boron, MW-15

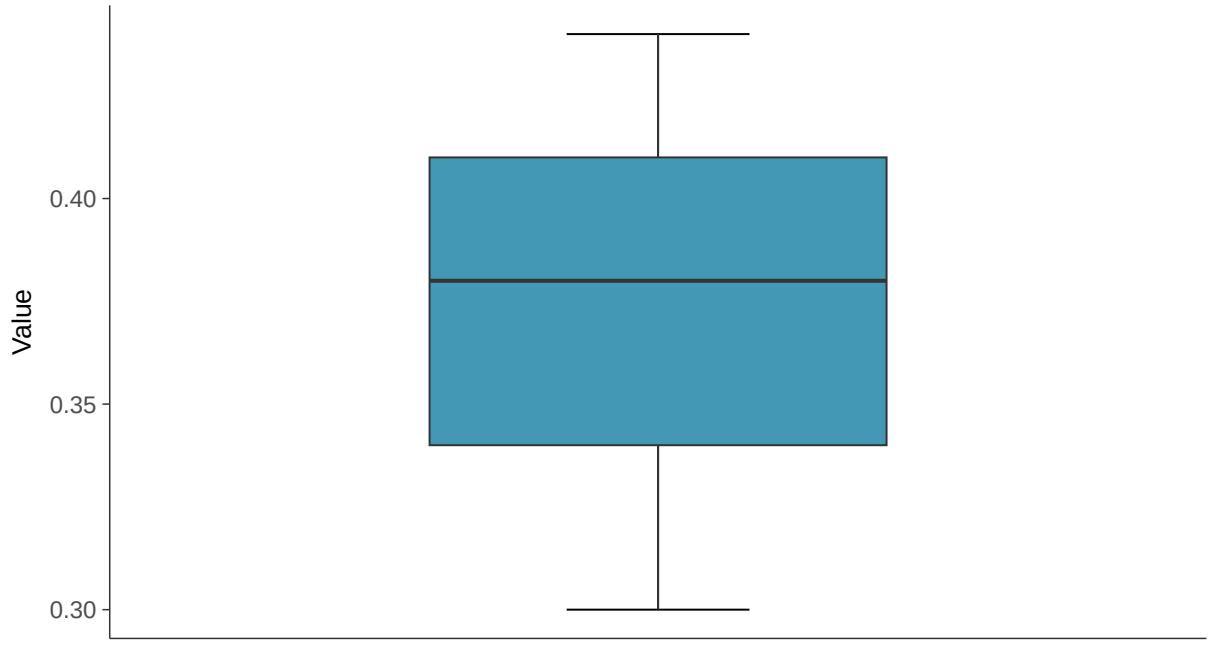
ID: 24_2_105





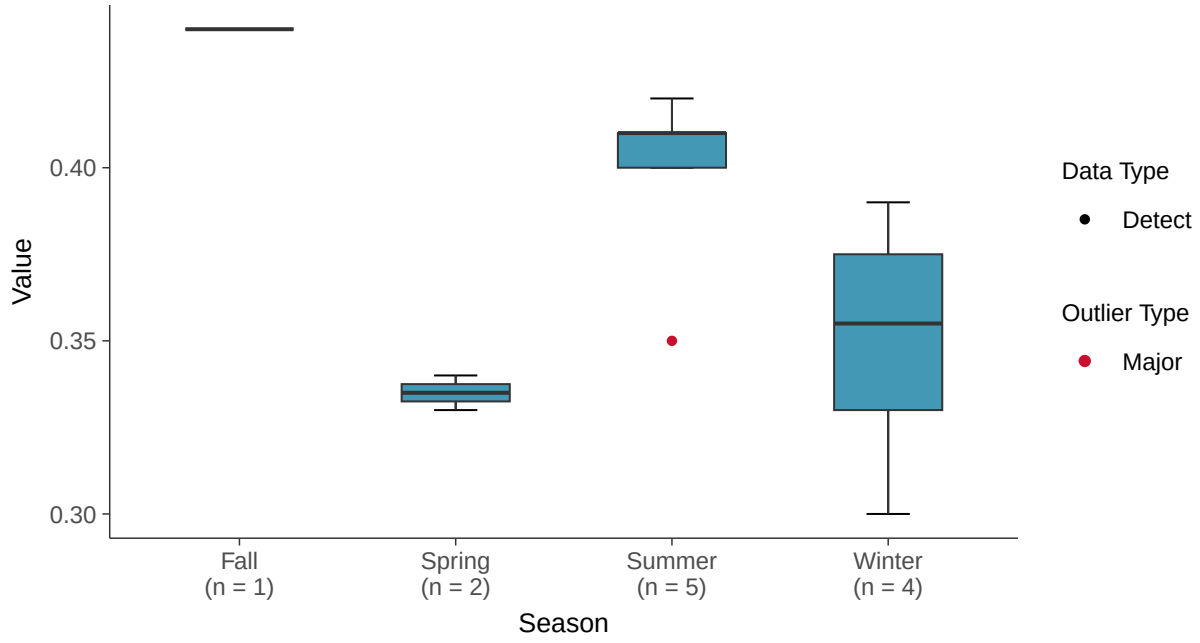
Boxplot

Boron, MW-15 (mg/l)



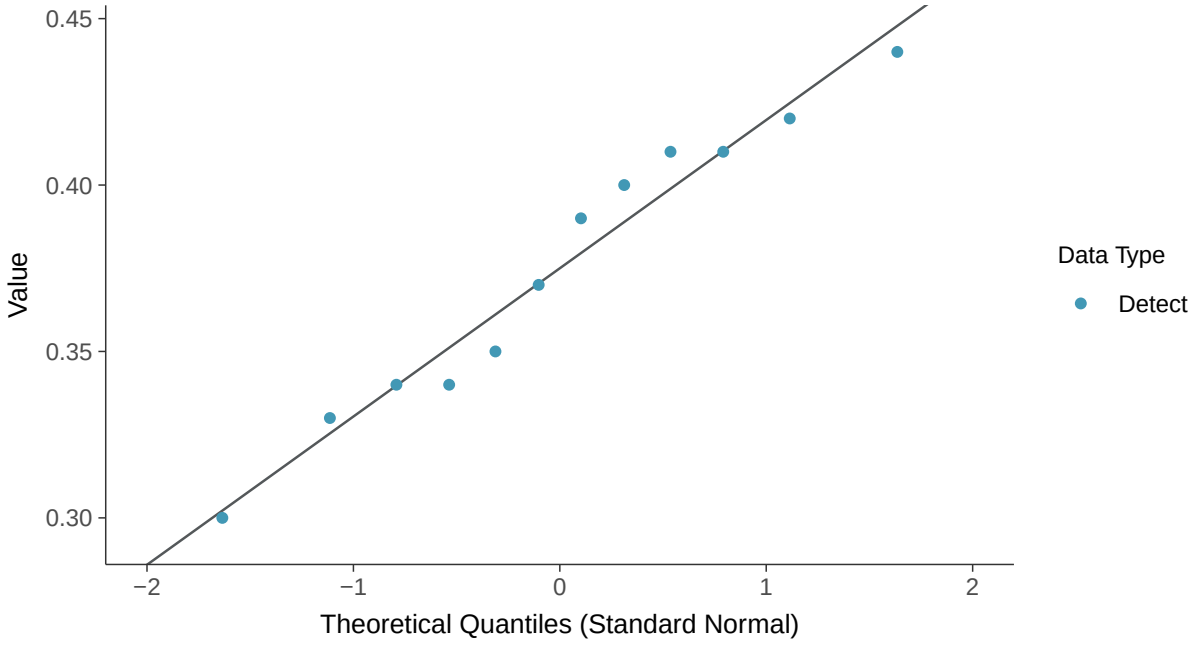
Boxplot by Season

Boron, MW-15 (mg/l)



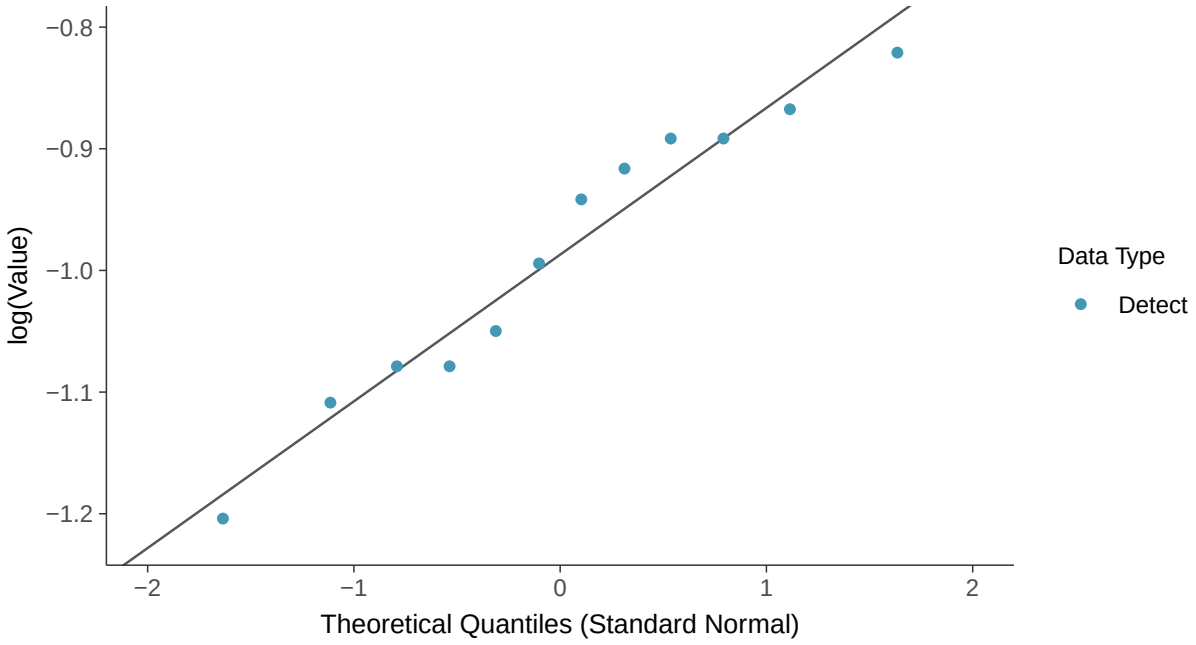
Normal Q-Q plot

Boron, MW-15 (mg/l)



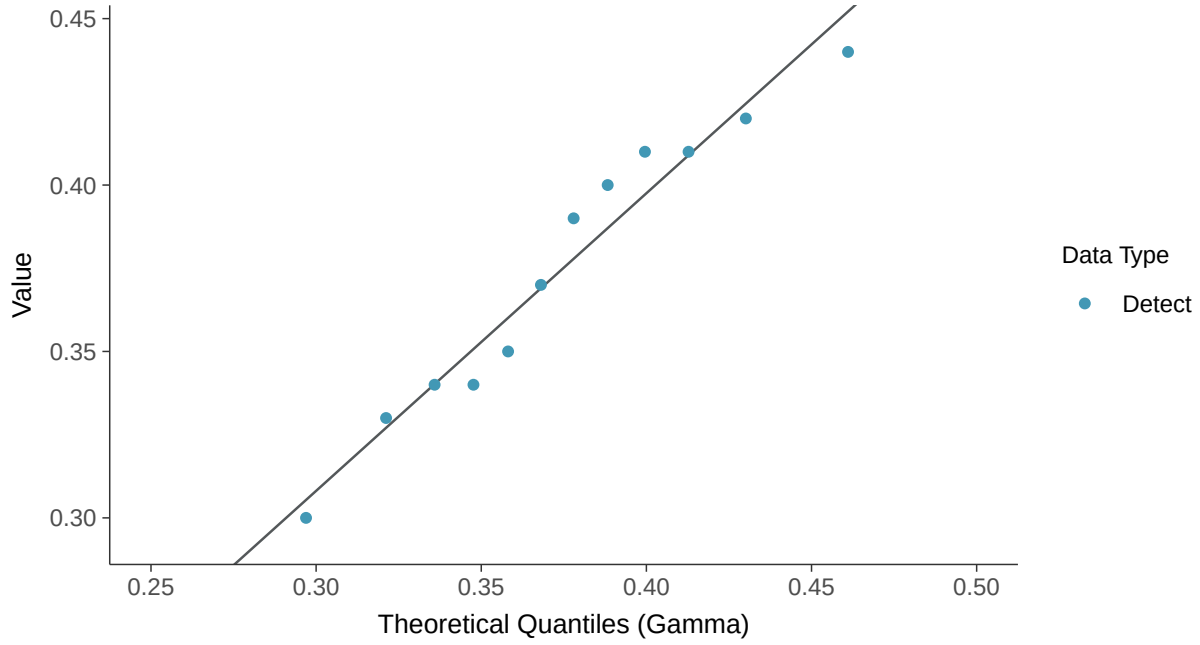
Lognormal Q-Q plot

Boron, MW-15 (mg/l)



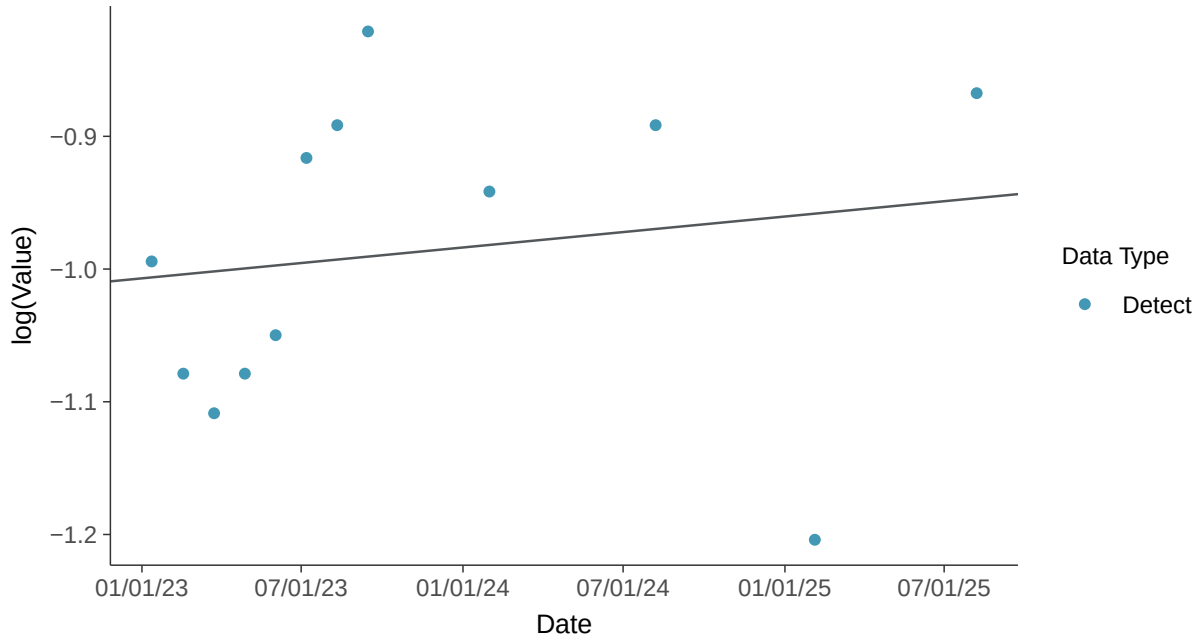
Gamma Q-Q plot

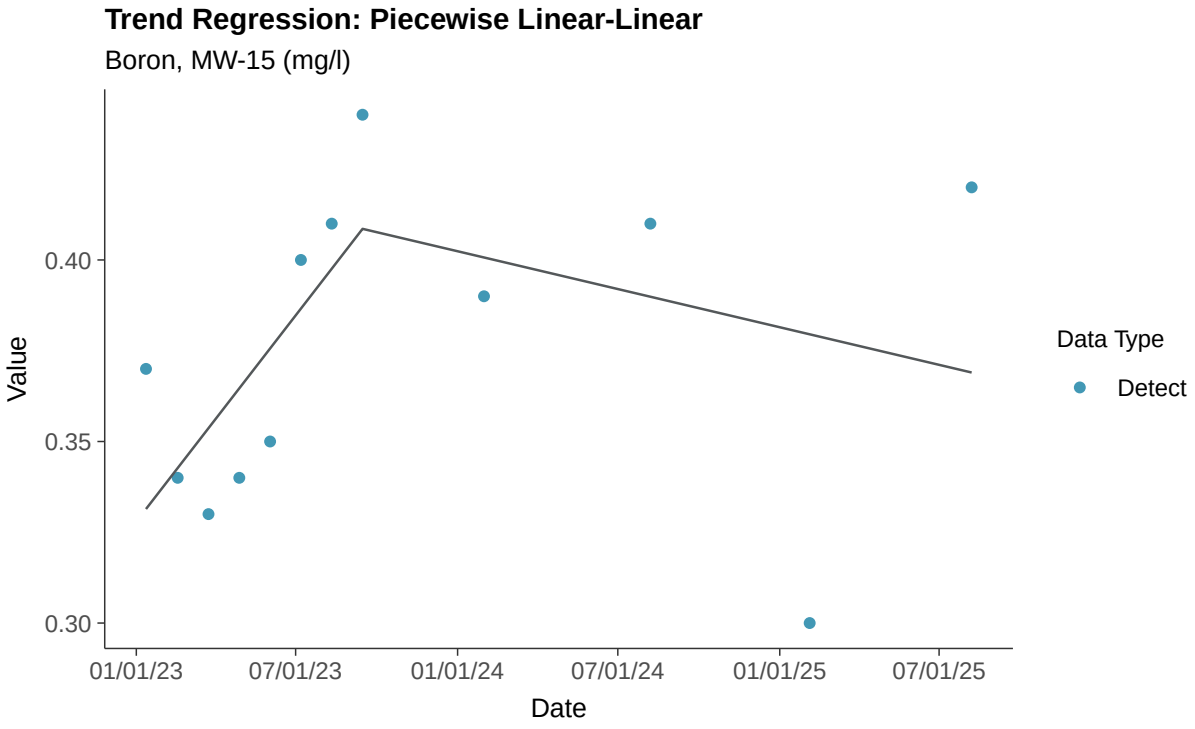
Boron, MW-15 (mg/l)



Trend Regression: Lognormal MLE

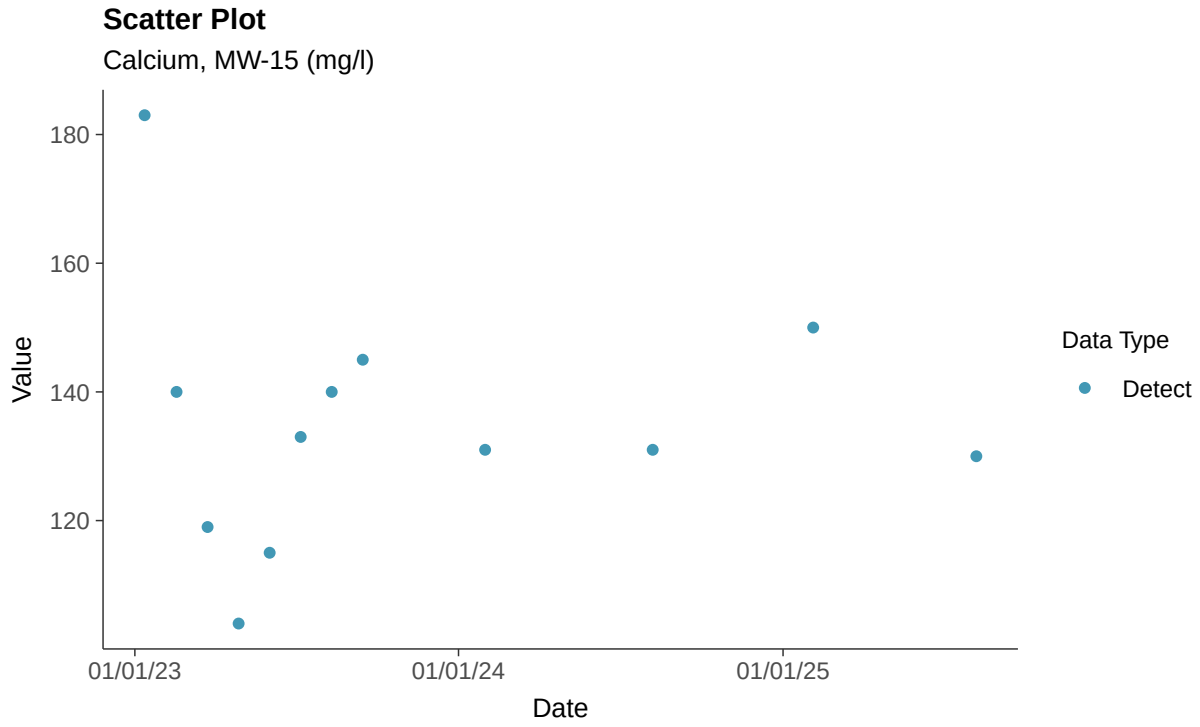
Boron, MW-15 (mg/l)

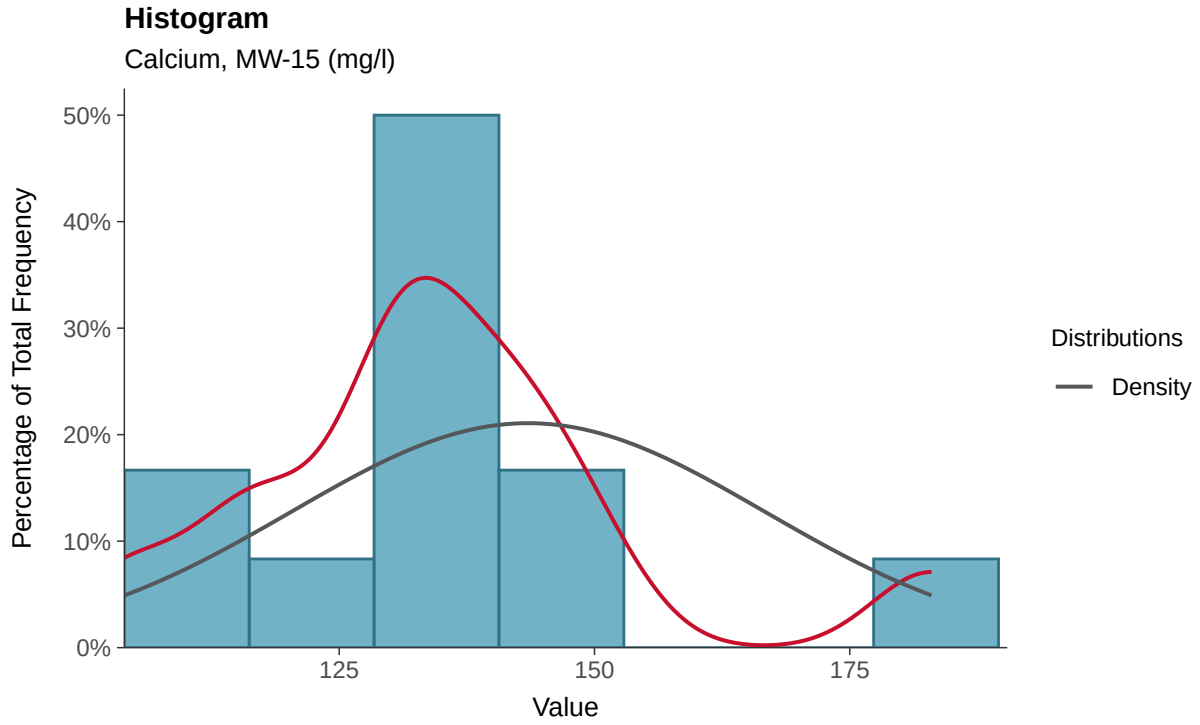



Trend Regression: Piecewise Linear-Linear
Boron, MW-15 (mg/l)
Value
0.40
0.35
0.30
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect

Appendix III: Calcium, MW-15

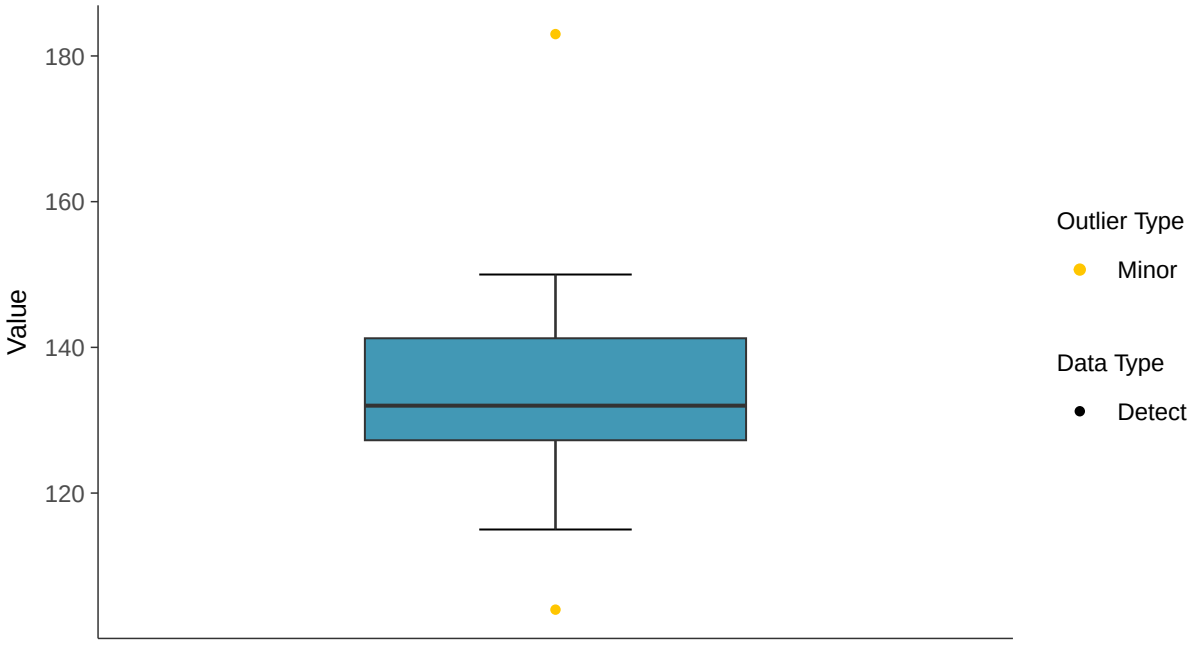
ID: 24_2_107





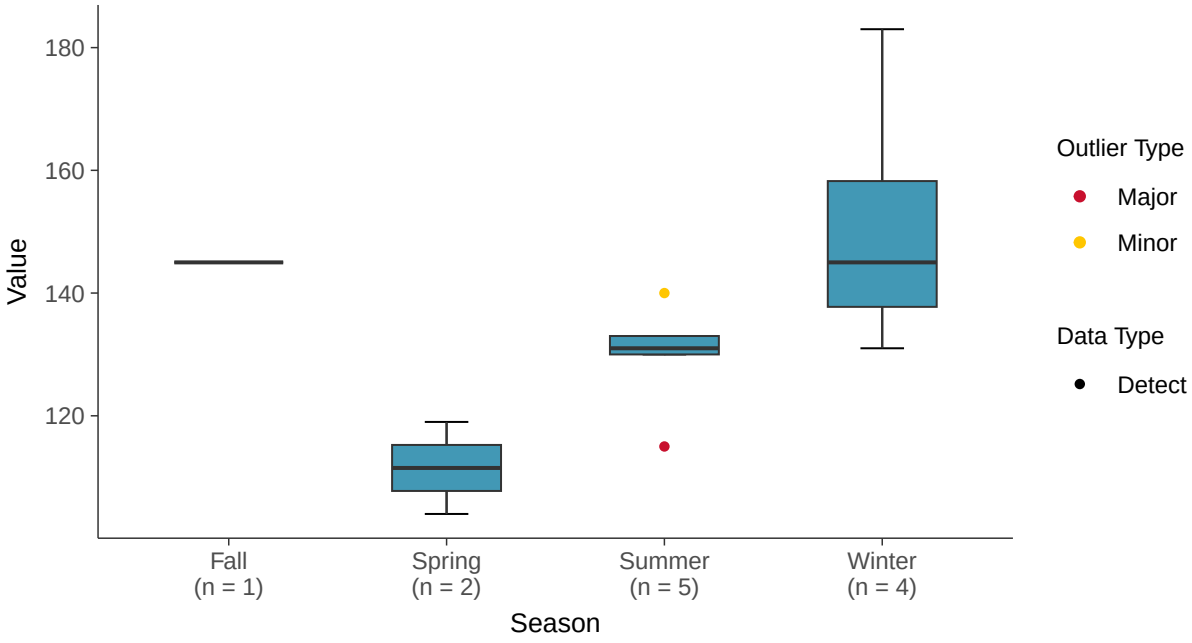
Boxplot

Calcium, MW-15 (mg/l)



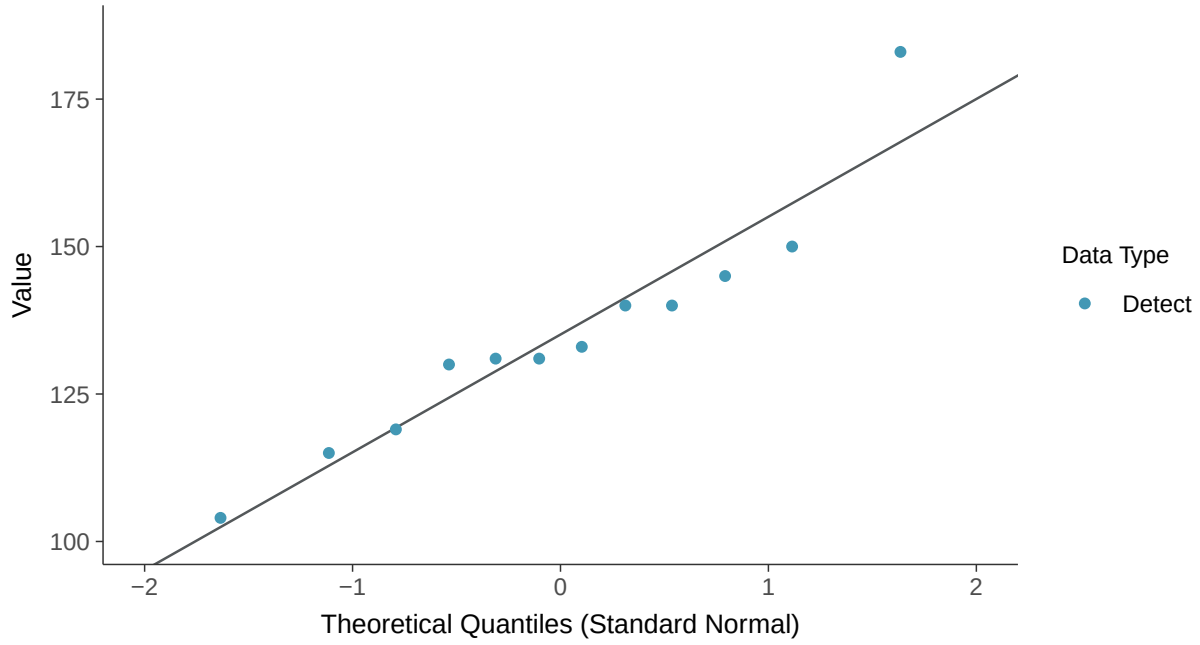
Boxplot by Season

Calcium, MW-15 (mg/l)



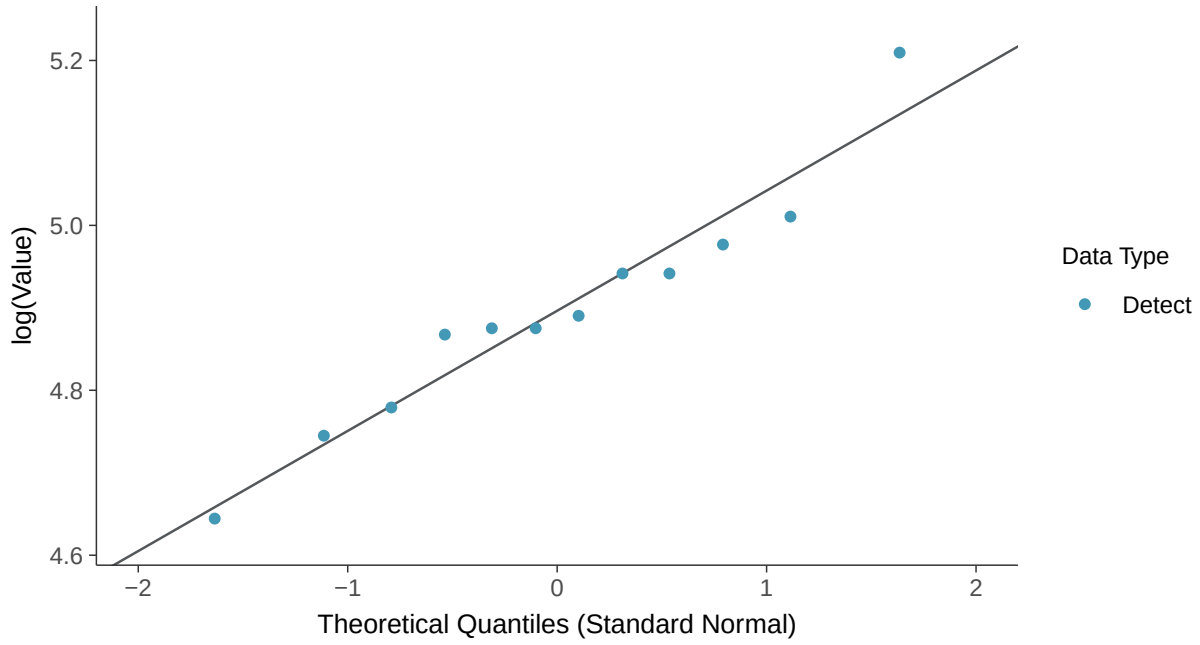
Normal Q-Q plot

Calcium, MW-15 (mg/l)



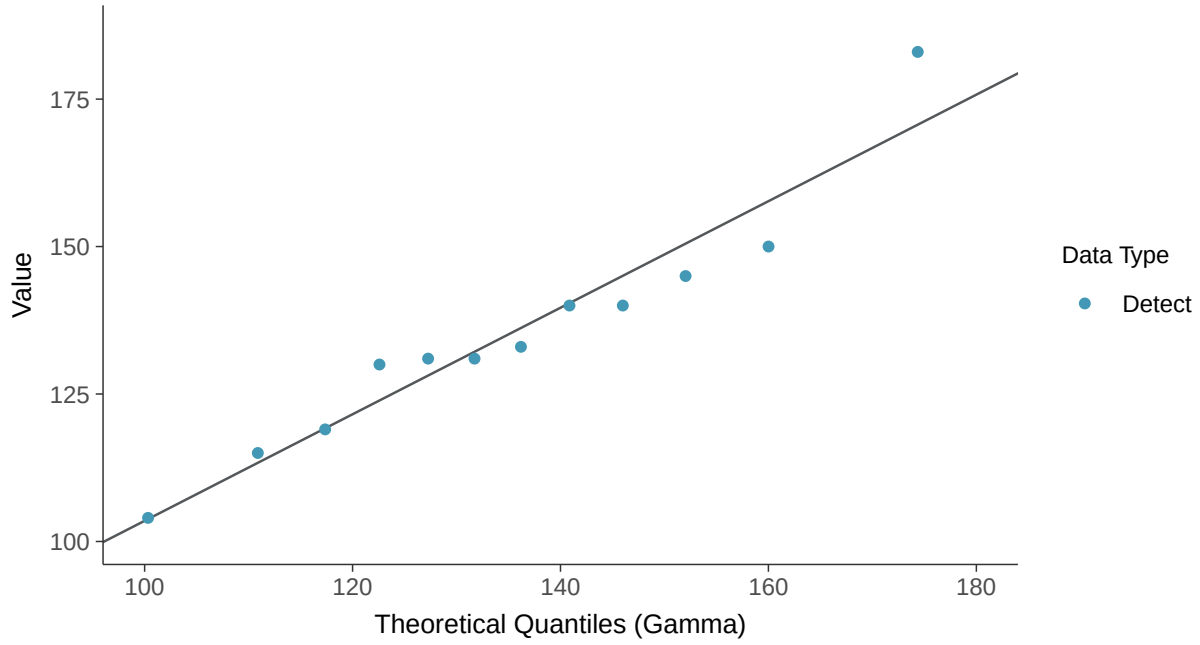
Lognormal Q-Q plot

Calcium, MW-15 (mg/l)



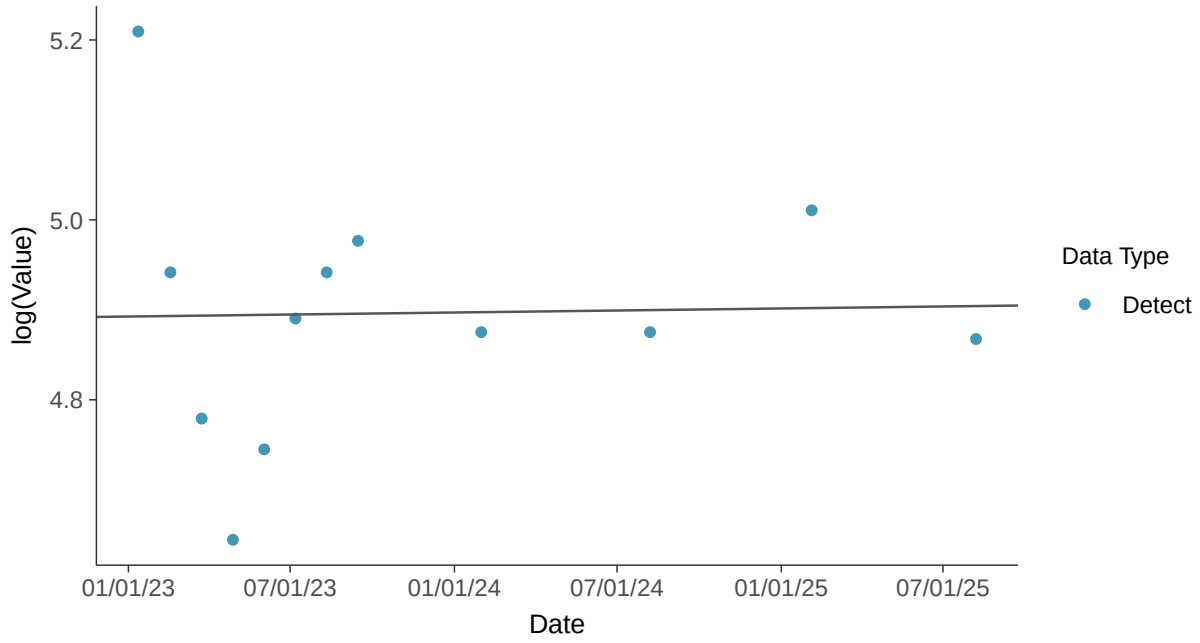
Gamma Q-Q plot

Calcium, MW-15 (mg/l)



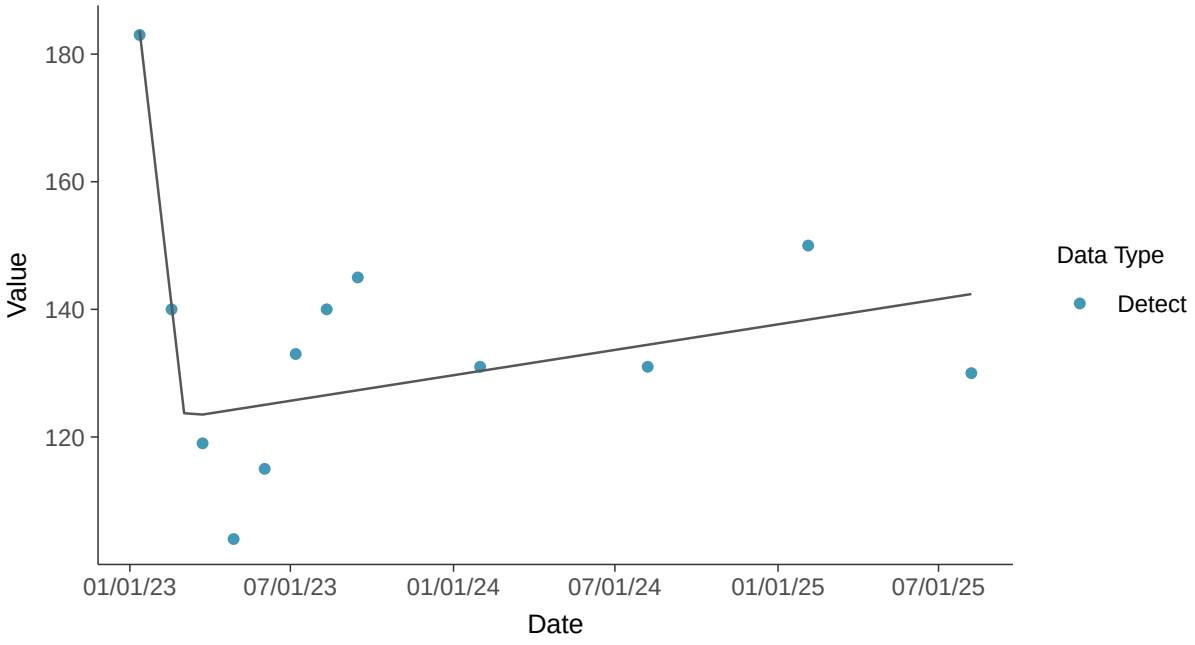
Trend Regression: Lognormal MLE

Calcium, MW-15 (mg/l)



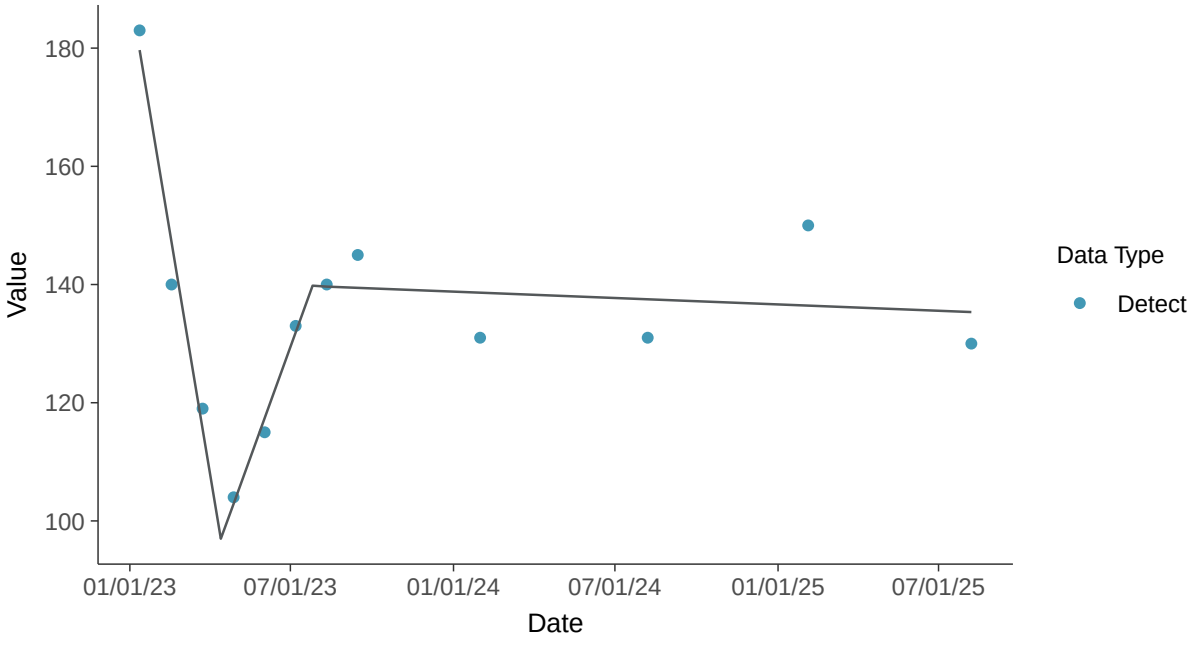
Trend Regression: Piecewise Linear-Linear

Calcium, MW-15 (mg/l)



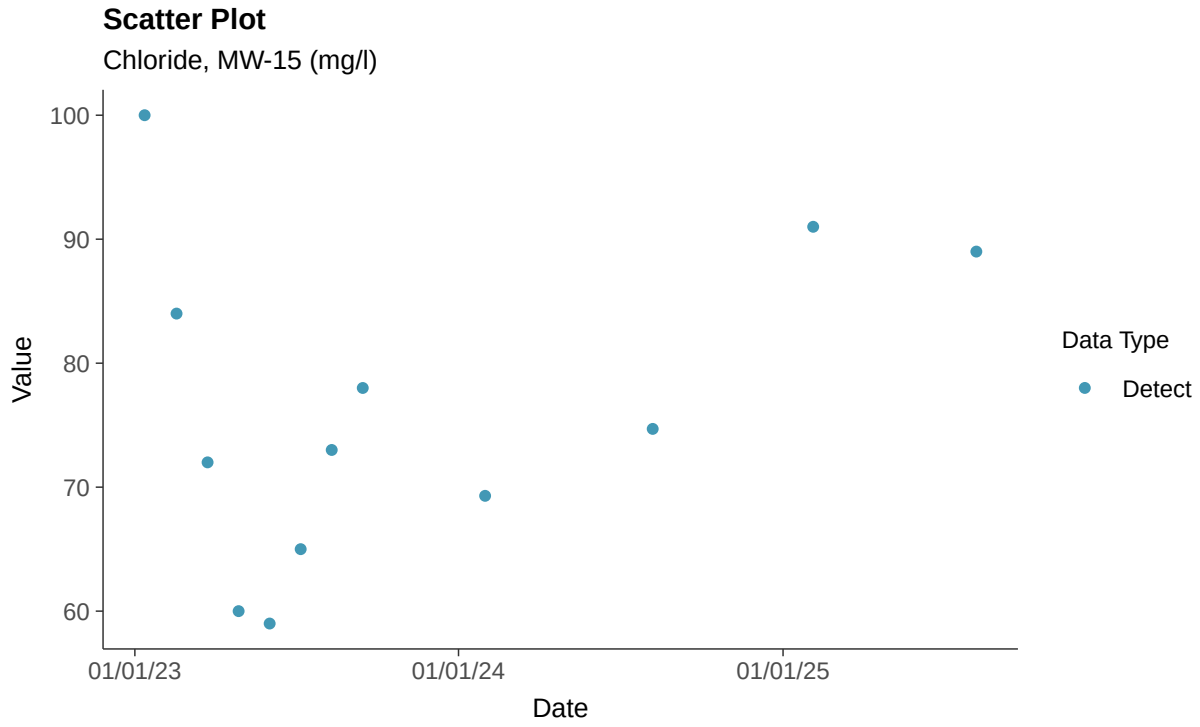
Trend Regression: Piecewise Linear-Linear-Linear

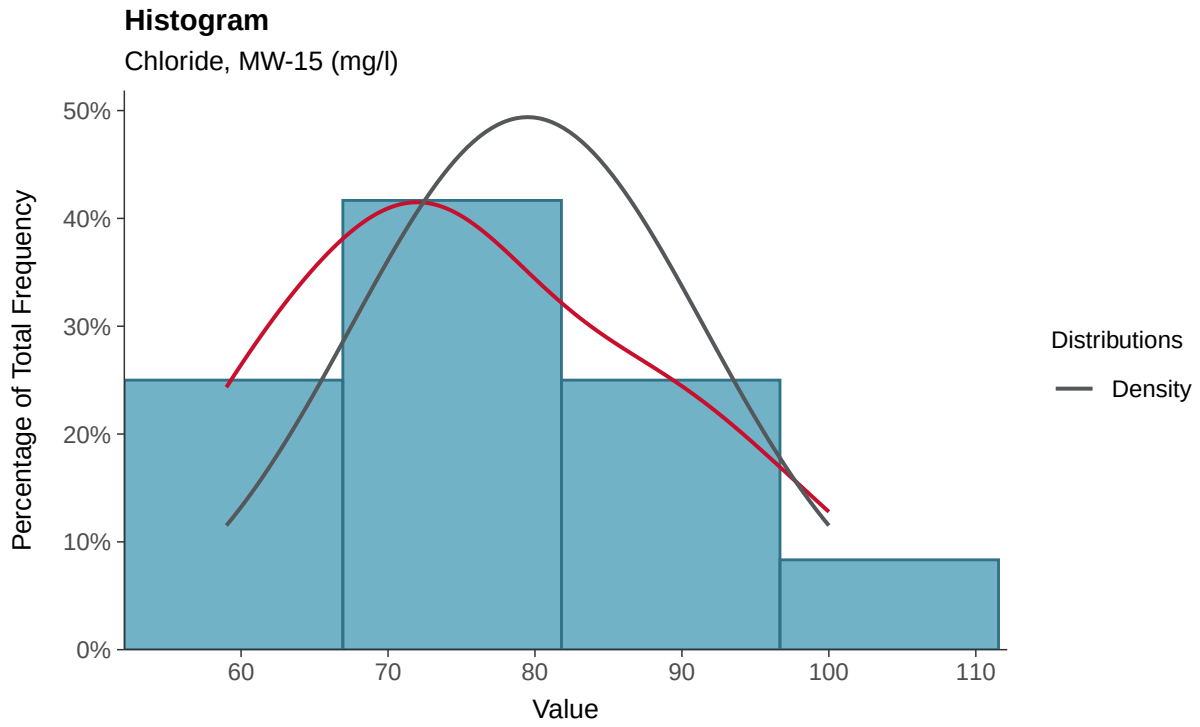
Calcium, MW-15 (mg/l)



Appendix III: Chloride, MW-15

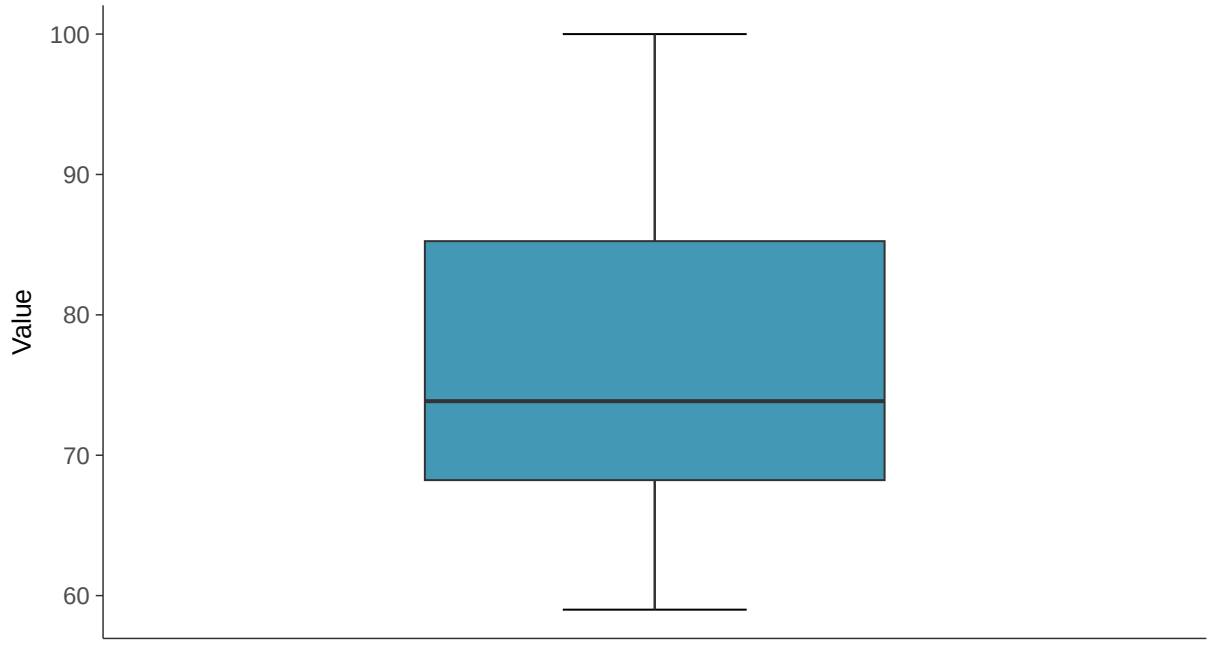
ID: 24_2_108





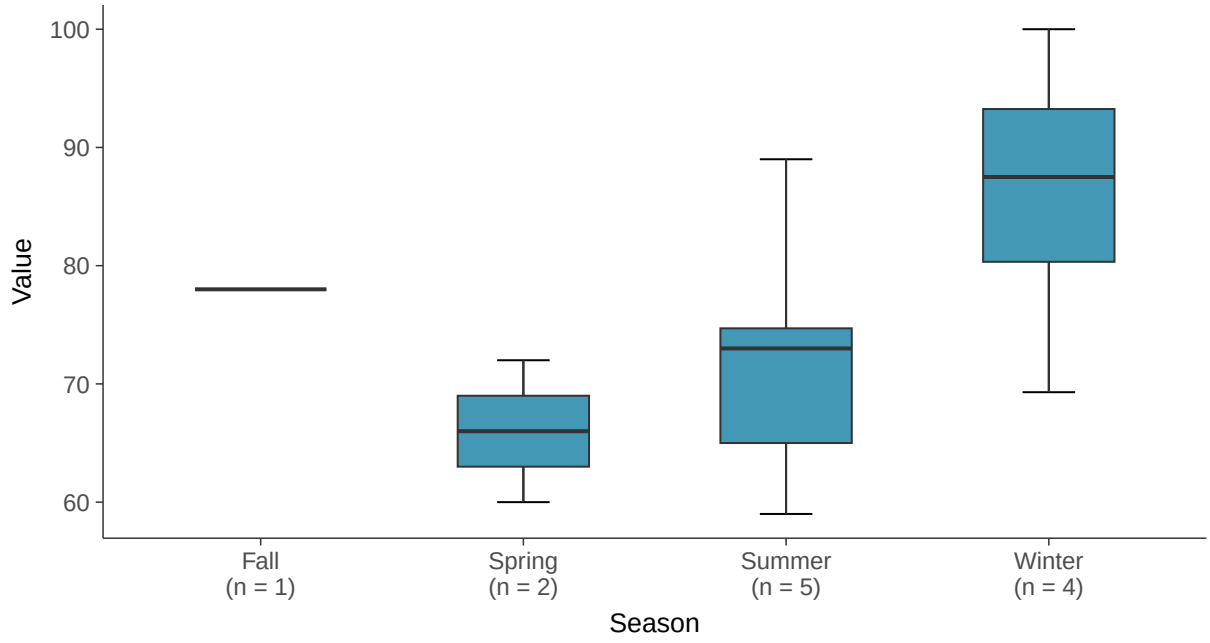
Boxplot

Chloride, MW-15 (mg/l)



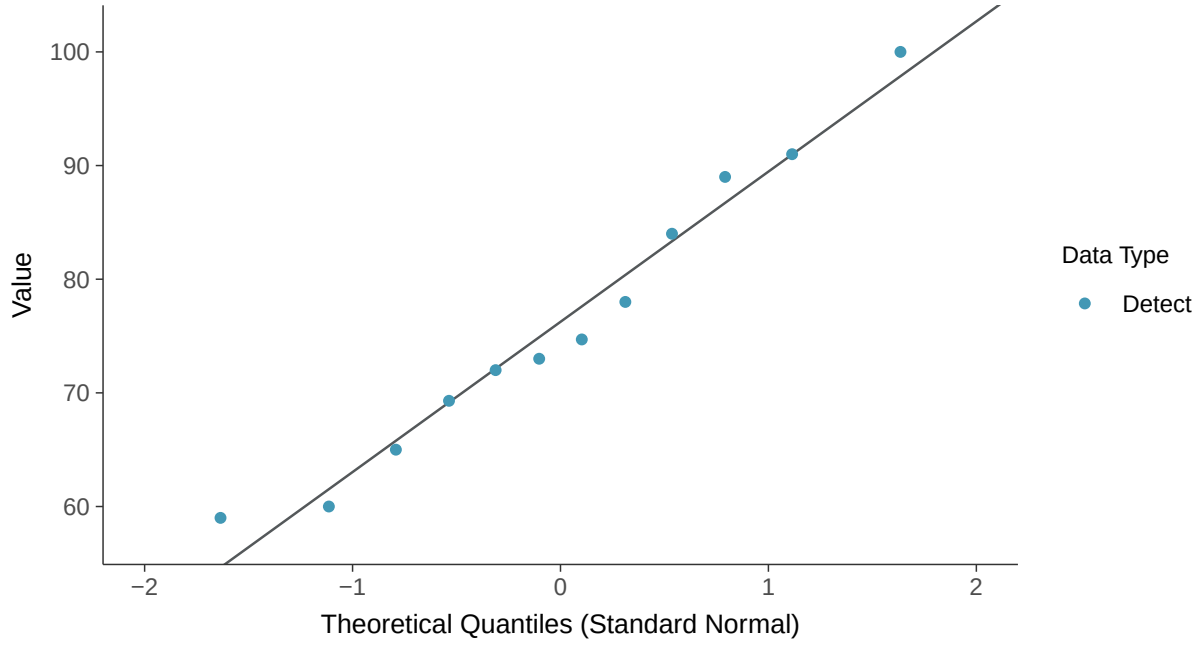
Boxplot by Season

Chloride, MW-15 (mg/l)



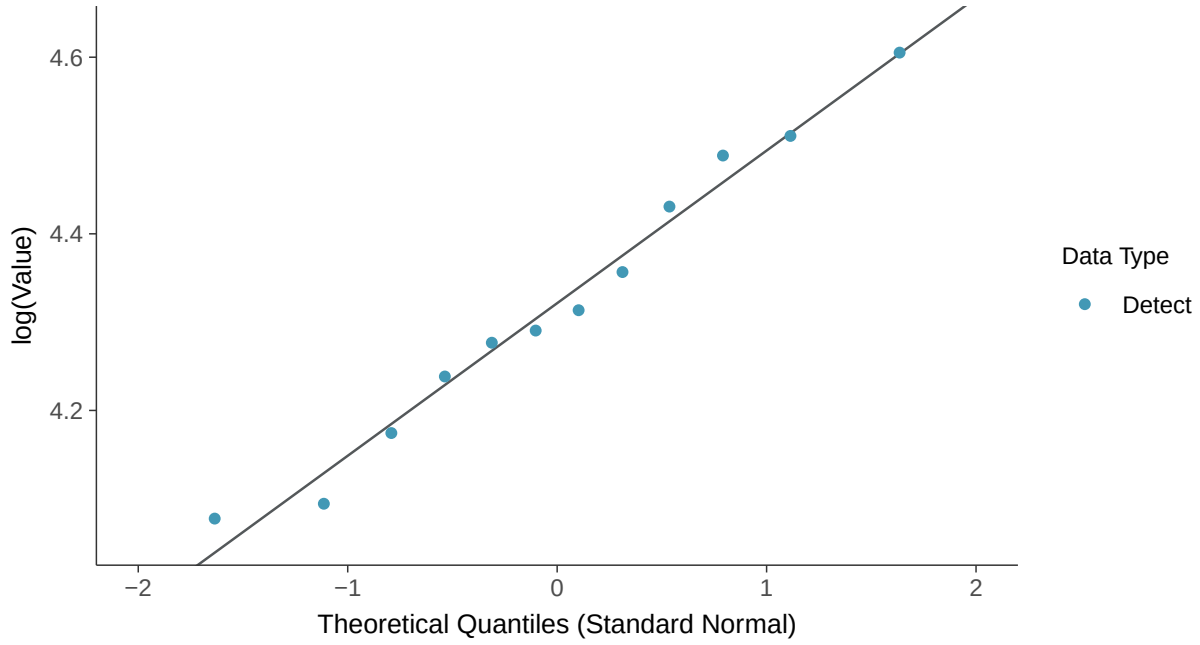
Normal Q-Q plot

Chloride, MW-15 (mg/l)



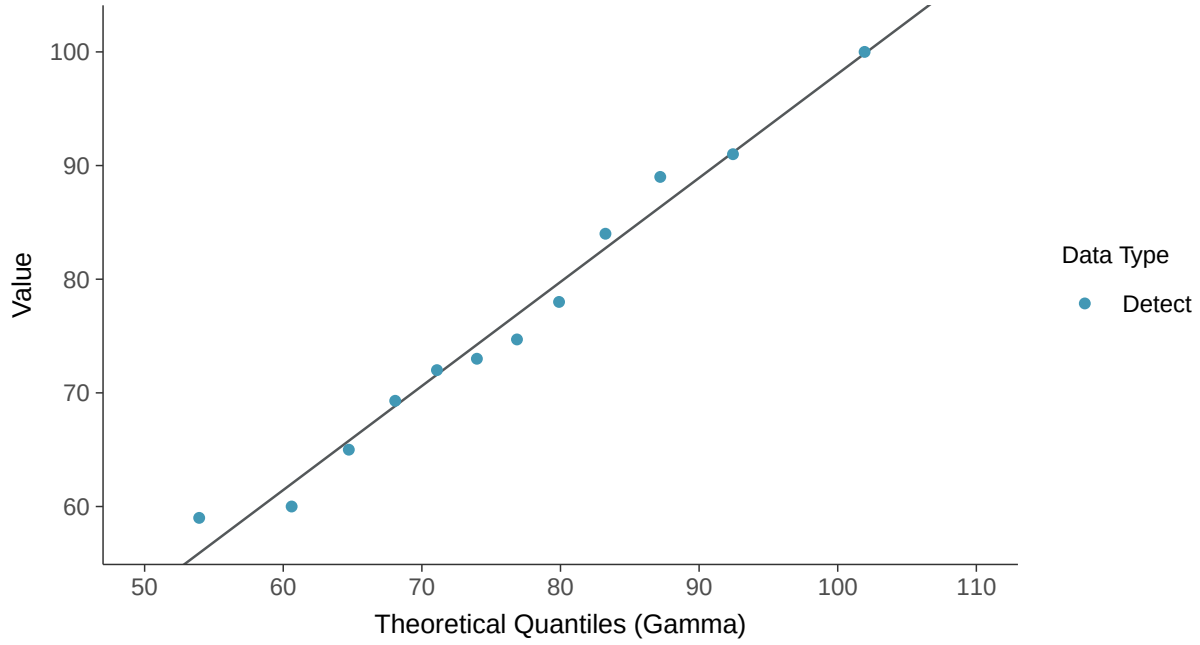
Lognormal Q-Q plot

Chloride, MW-15 (mg/l)



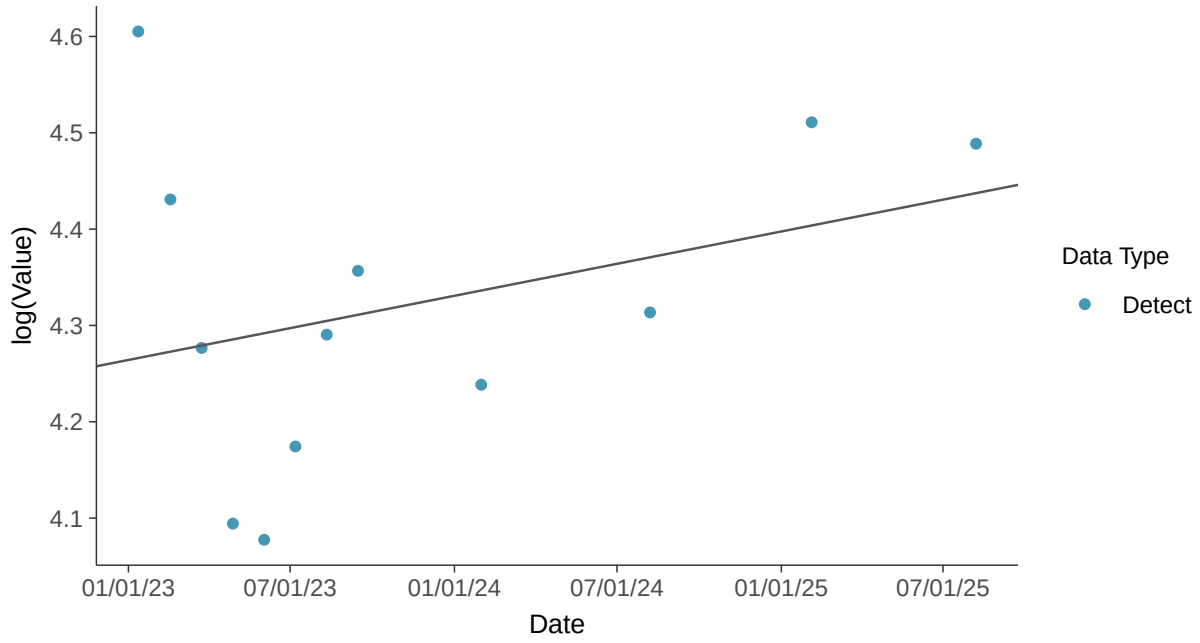
Gamma Q-Q plot

Chloride, MW-15 (mg/l)



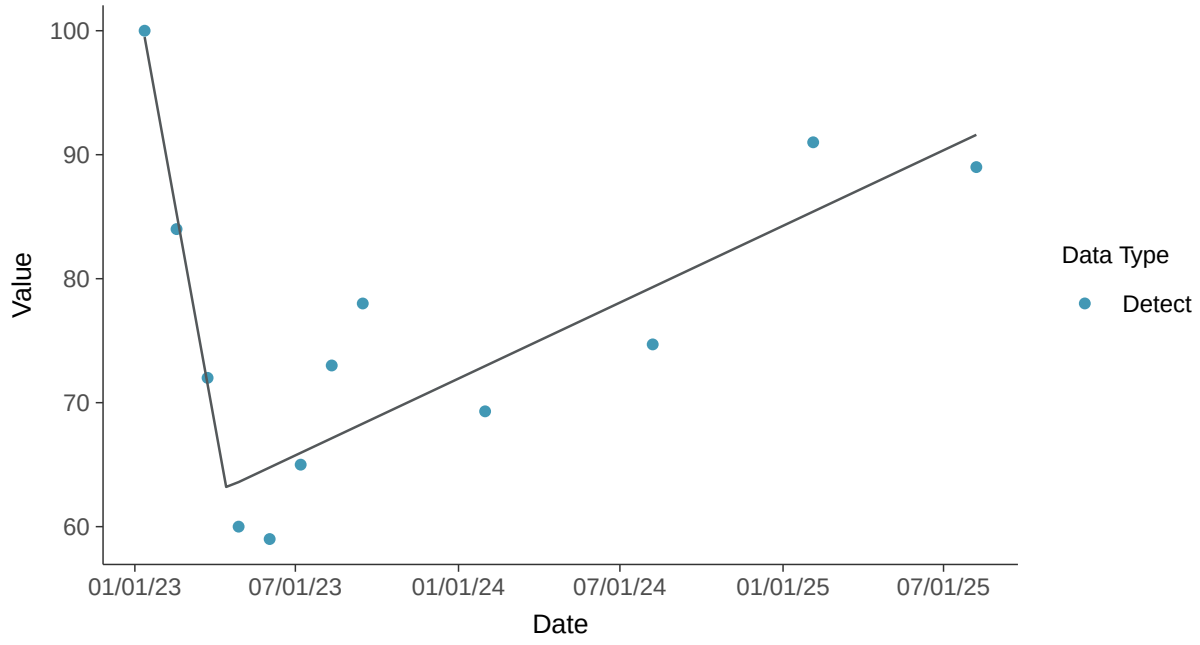
Trend Regression: Lognormal MLE

Chloride, MW-15 (mg/l)



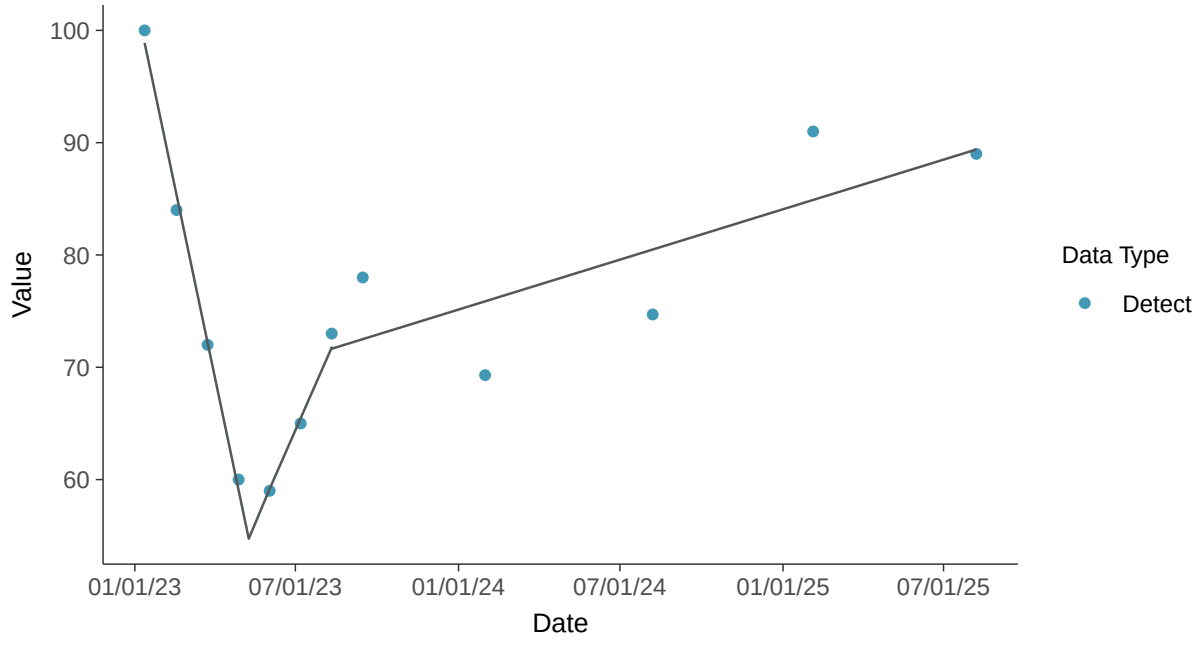
Trend Regression: Piecewise Linear-Linear

Chloride, MW-15 (mg/l)



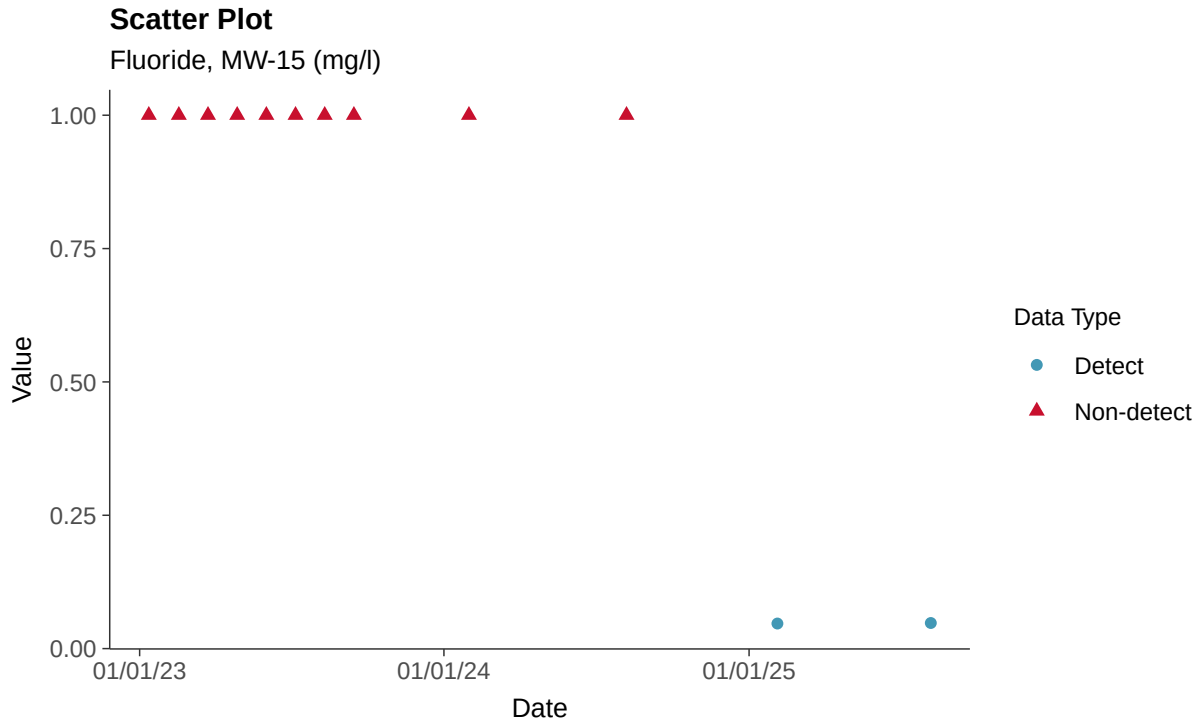
Trend Regression: Piecewise Linear-Linear-Linear

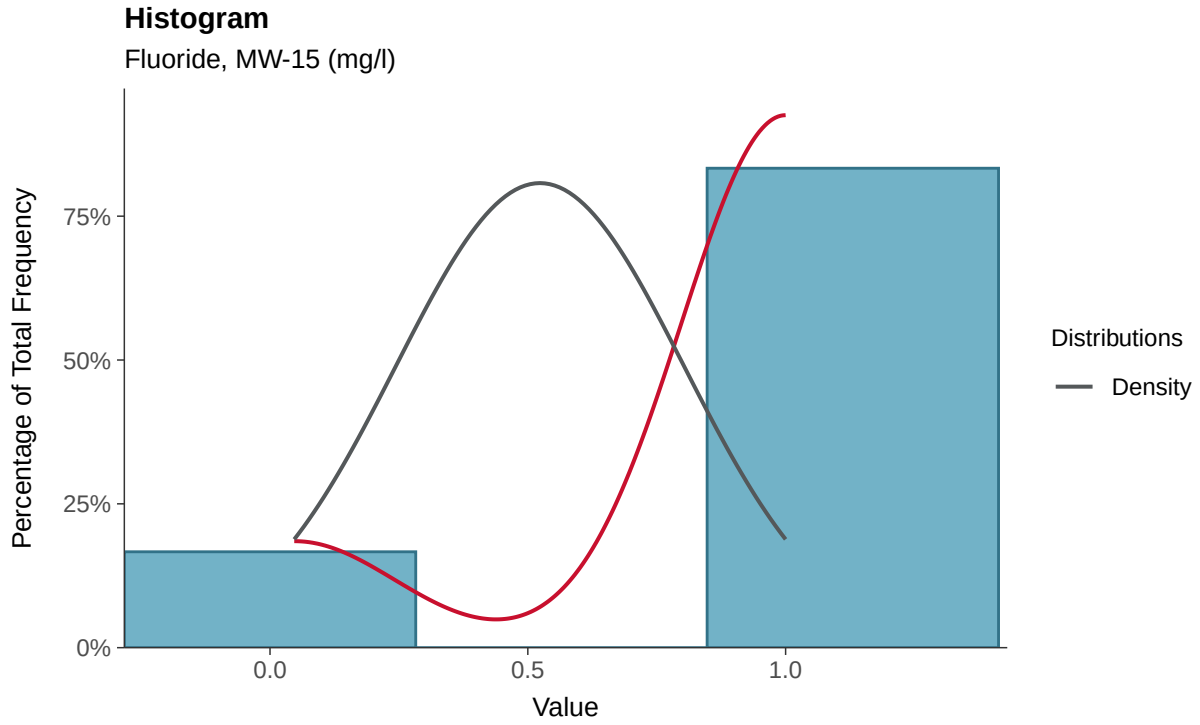
Chloride, MW-15 (mg/l)



Appendix III: Fluoride, MW-15

ID: 24_2_112



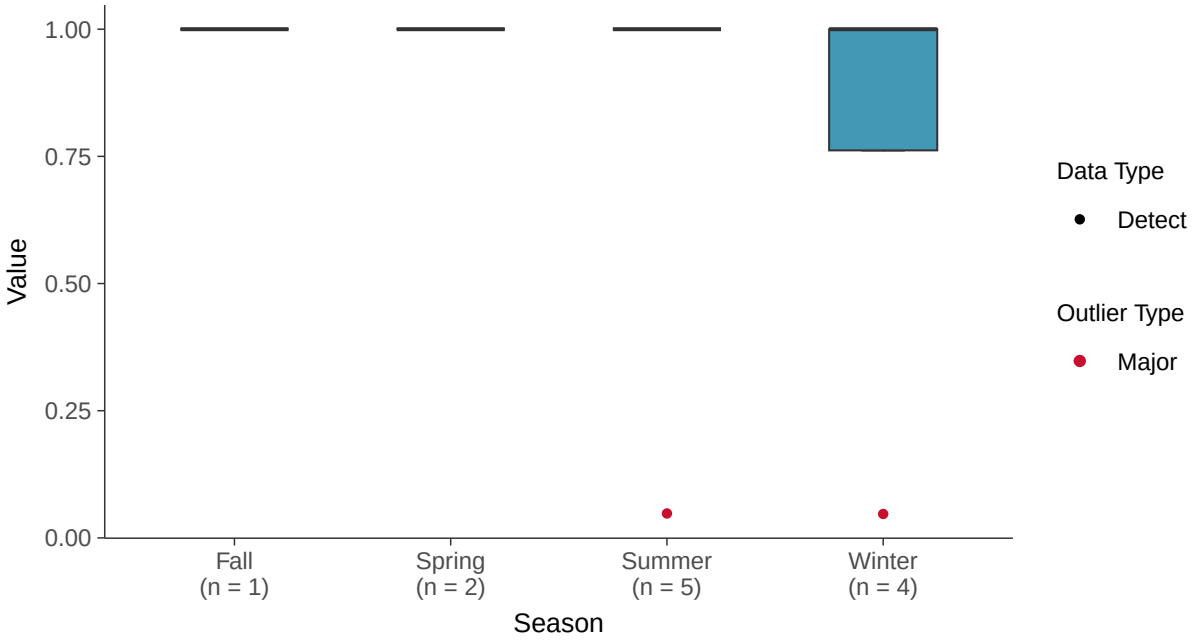


Boxplot

Fluoride, MW-15 (mg/l)

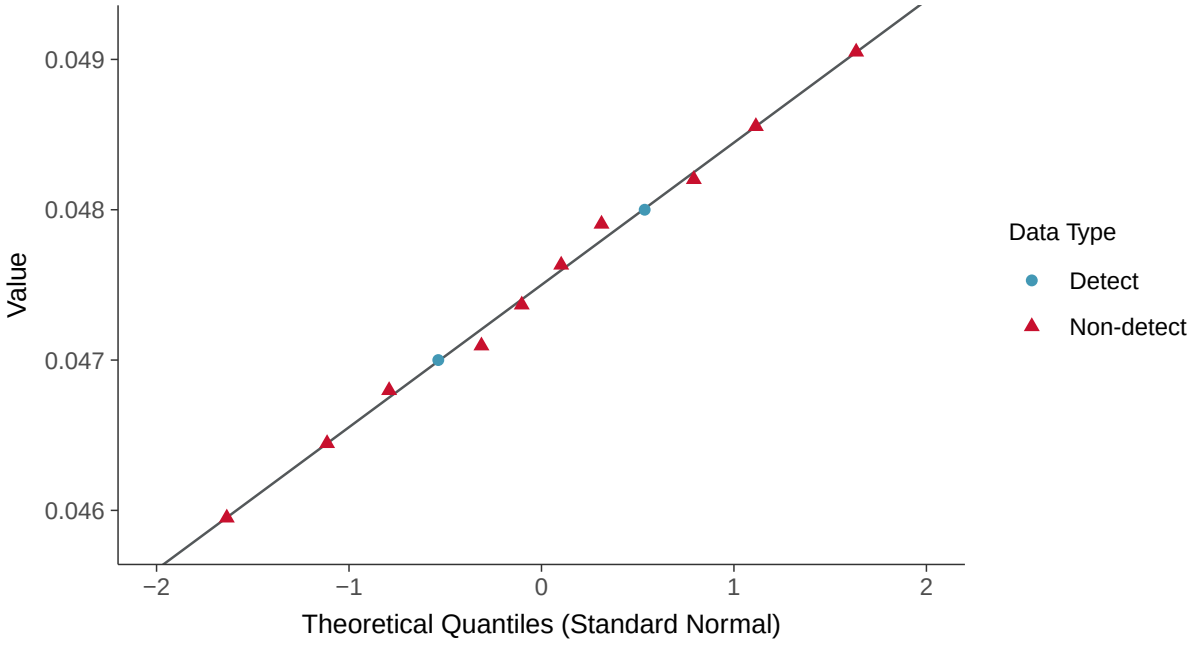
Boxplot by Season

Fluoride, MW-15 (mg/l)



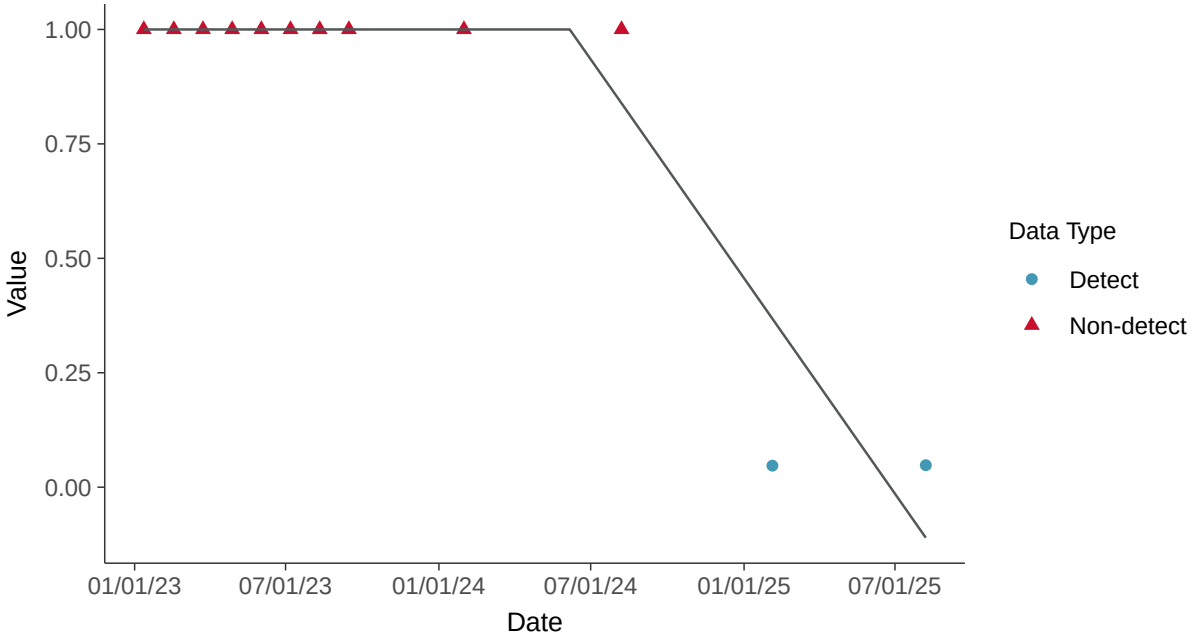
Normal Q-Q plot using ROS Imputed Estimates

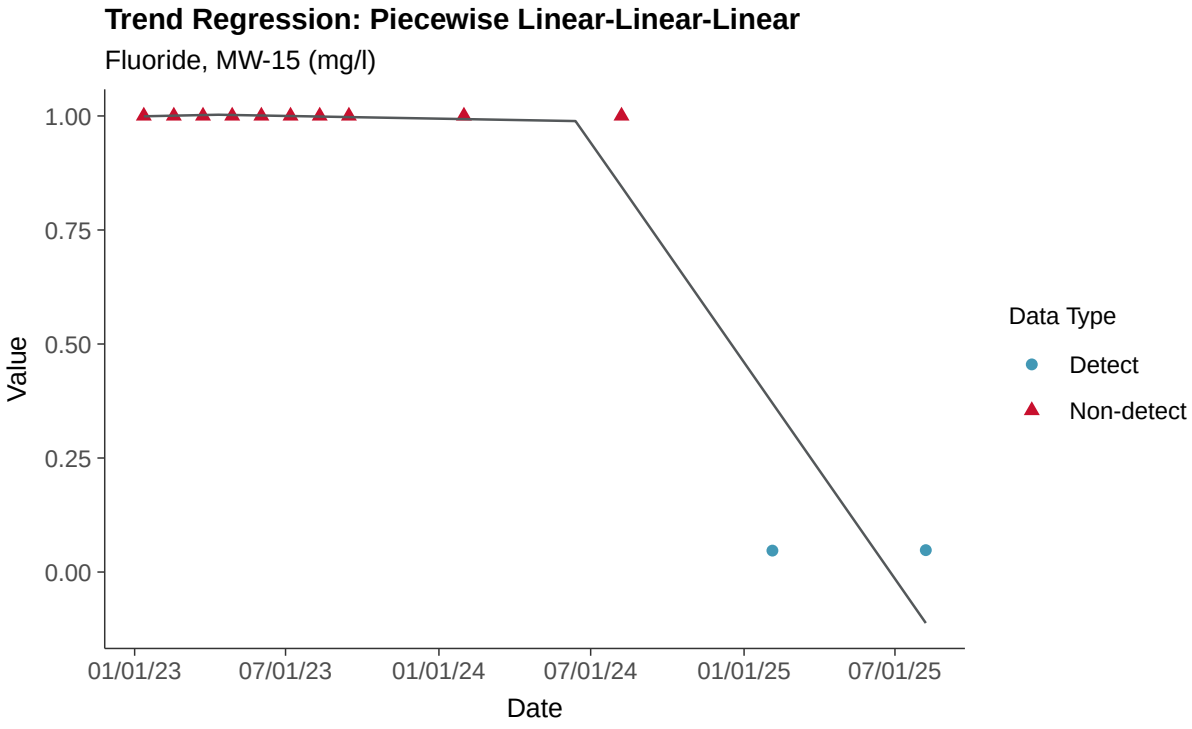
Fluoride, MW-15 (mg/l)



Trend Regression: Piecewise Linear-Linear

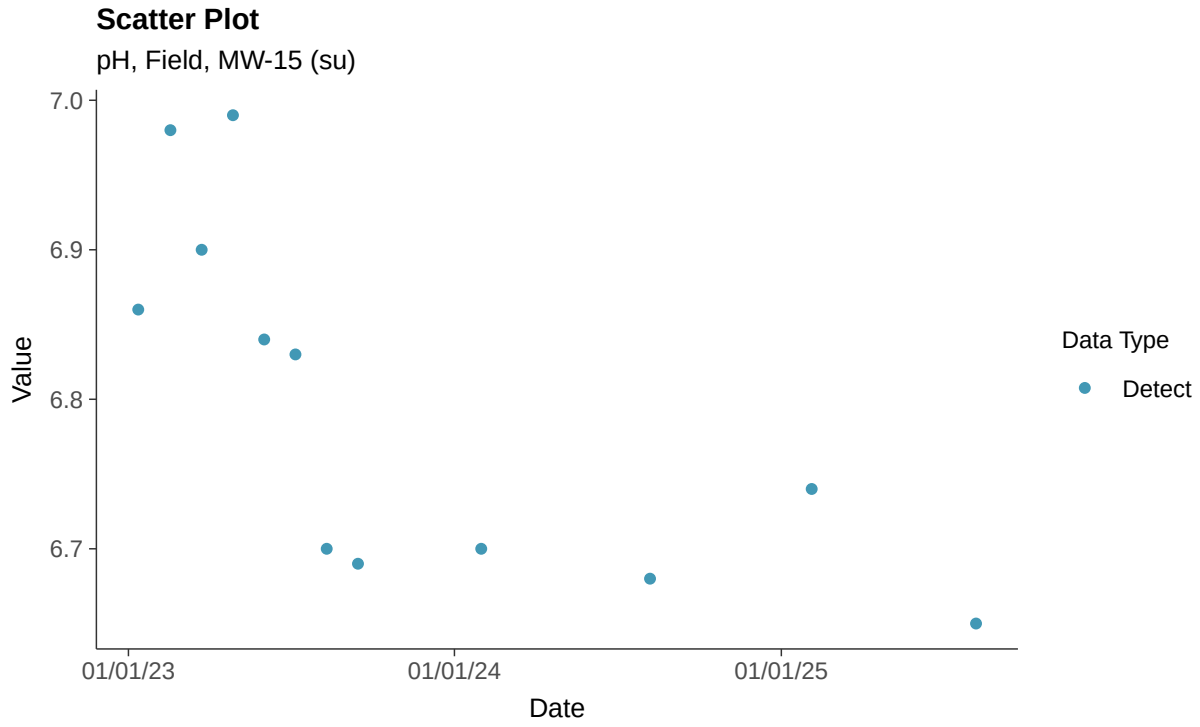
Fluoride, MW-15 (mg/l)

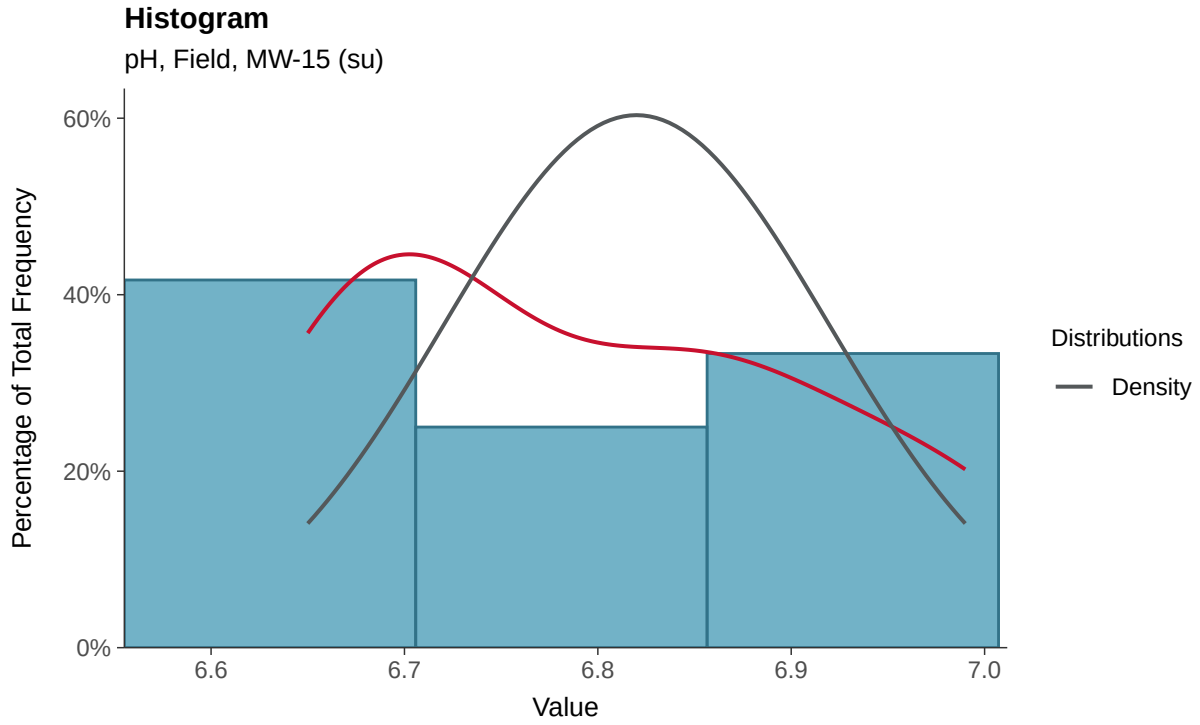



Trend Regression: Piecewise Linear-Linear-Linear
Fluoride, MW-15 (mg/l)
Value
1.00
0.75
0.50
0.25
0.00
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Appendix III: pH, Field, MW-15

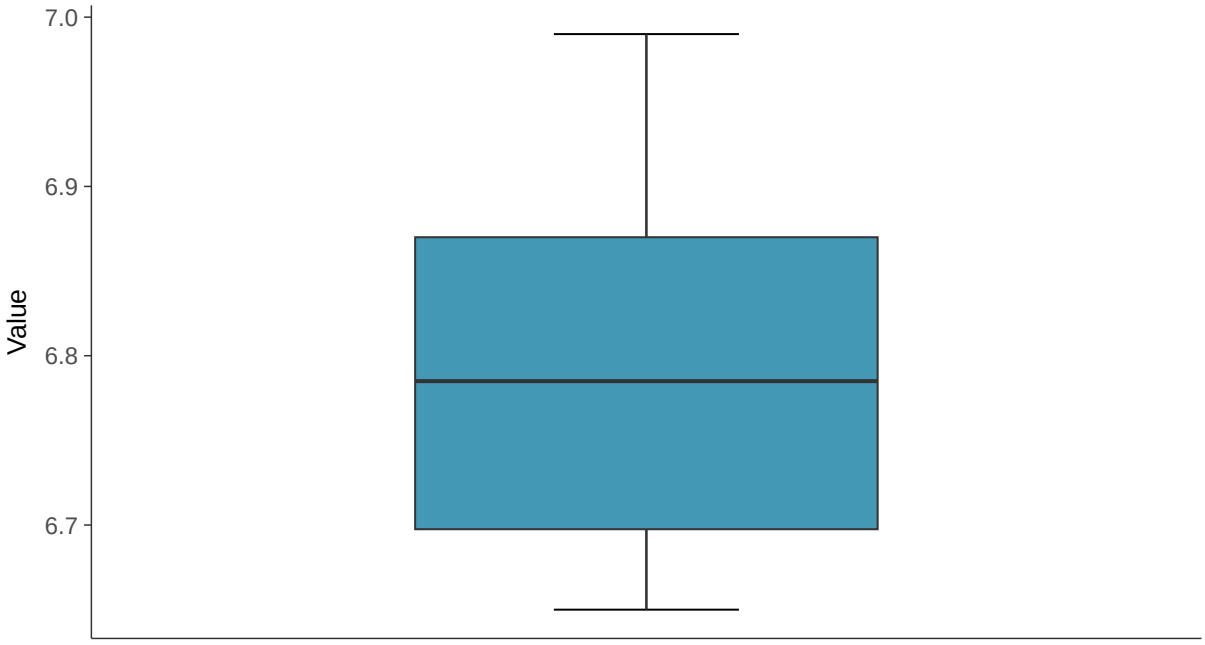
ID: 24_2_120





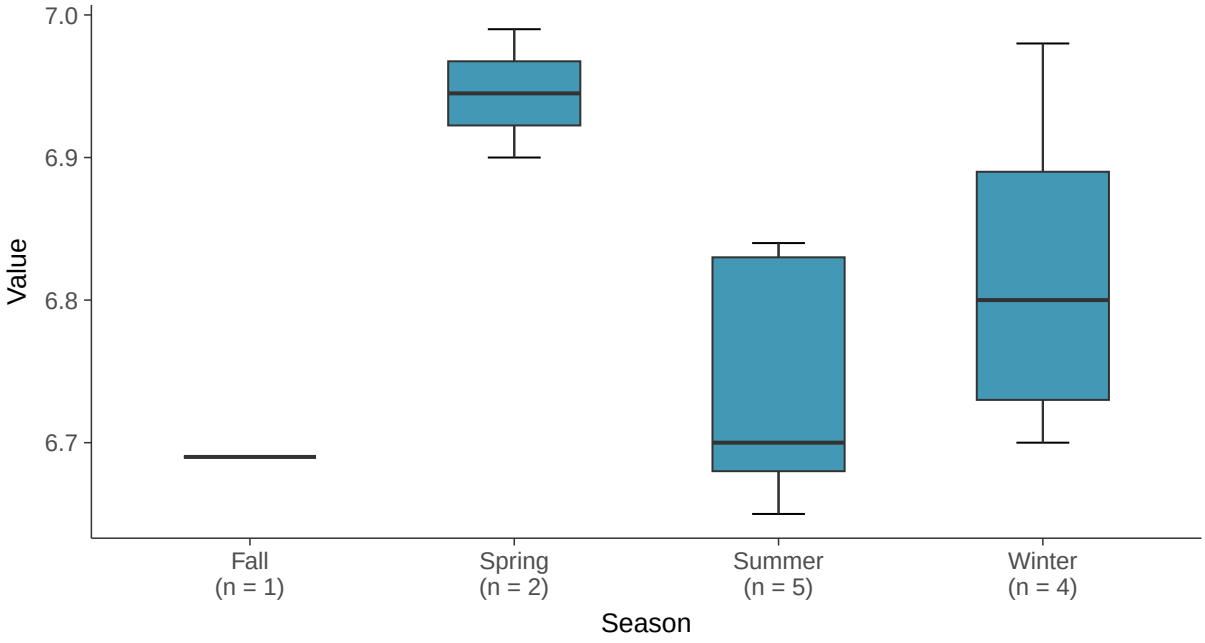
Boxplot

pH, Field, MW-15 (su)



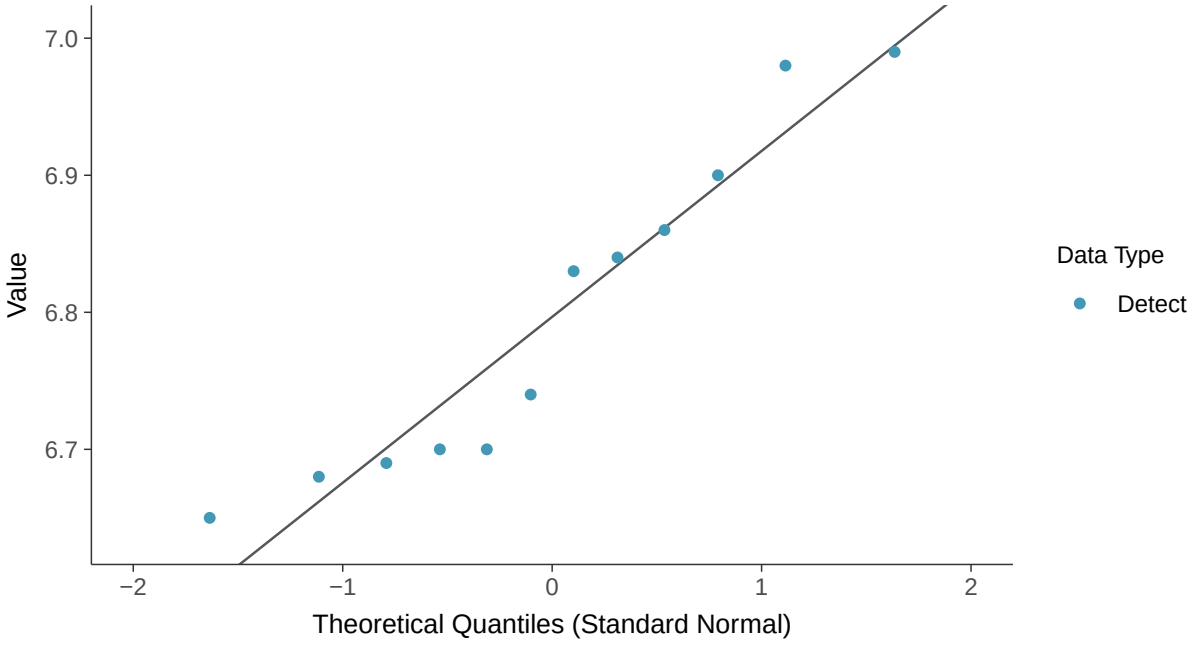
Boxplot by Season

pH, Field, MW-15 (su)



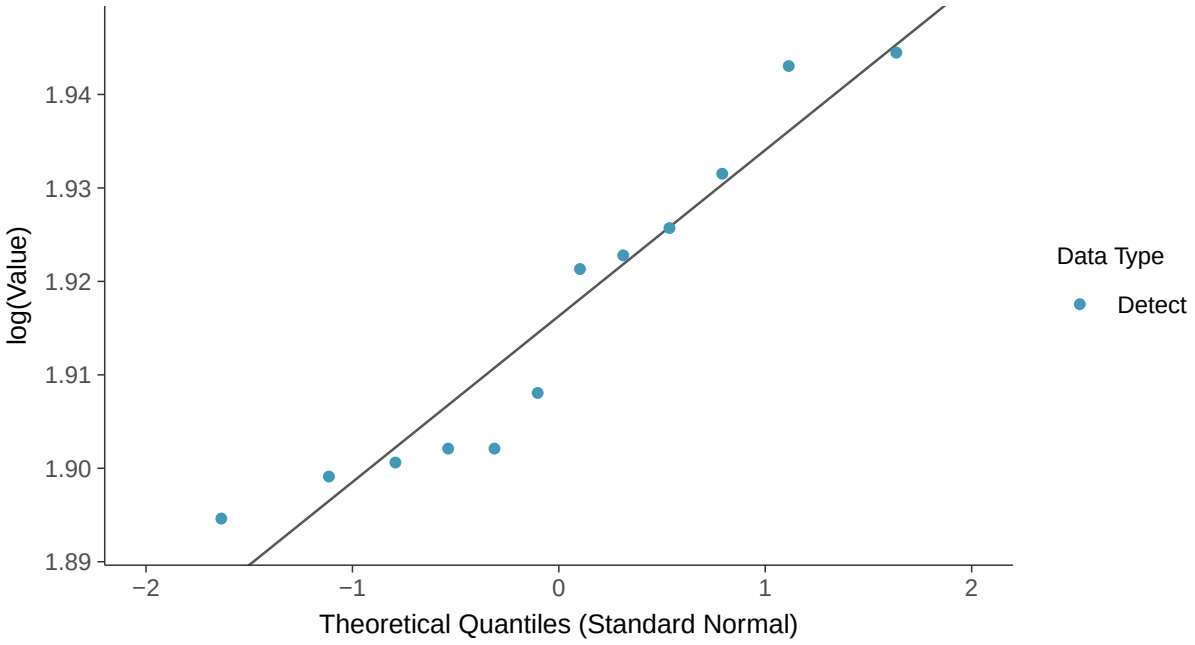
Normal Q-Q plot

pH, Field, MW-15 (su)



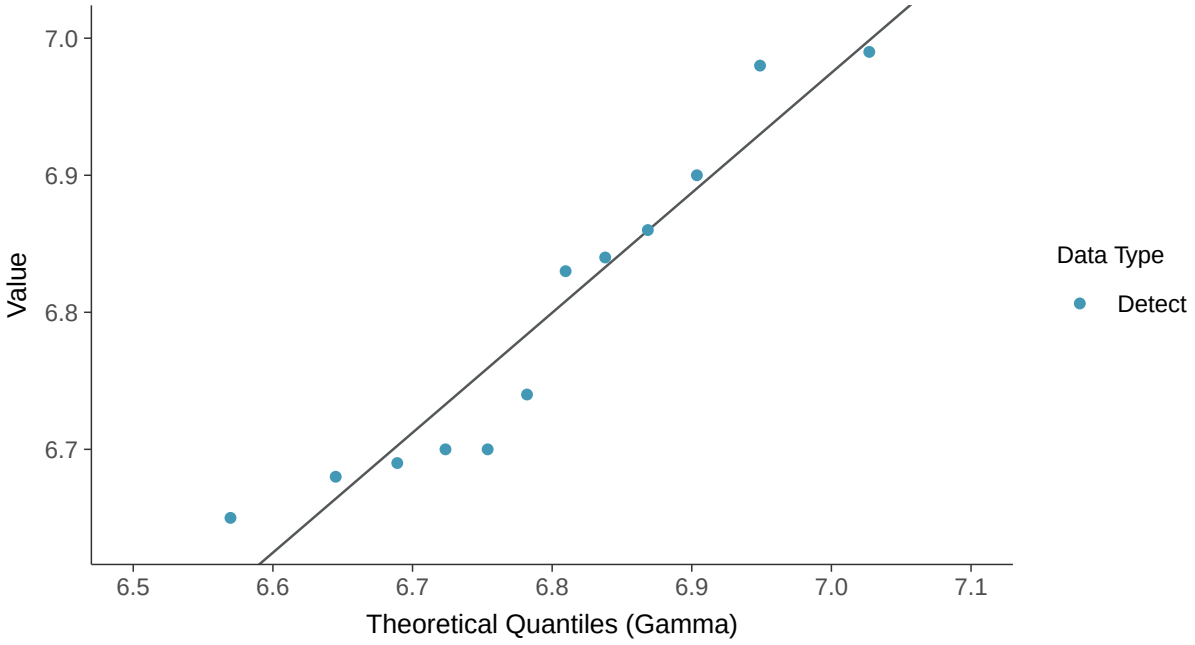
Lognormal Q-Q plot

pH, Field, MW-15 (su)



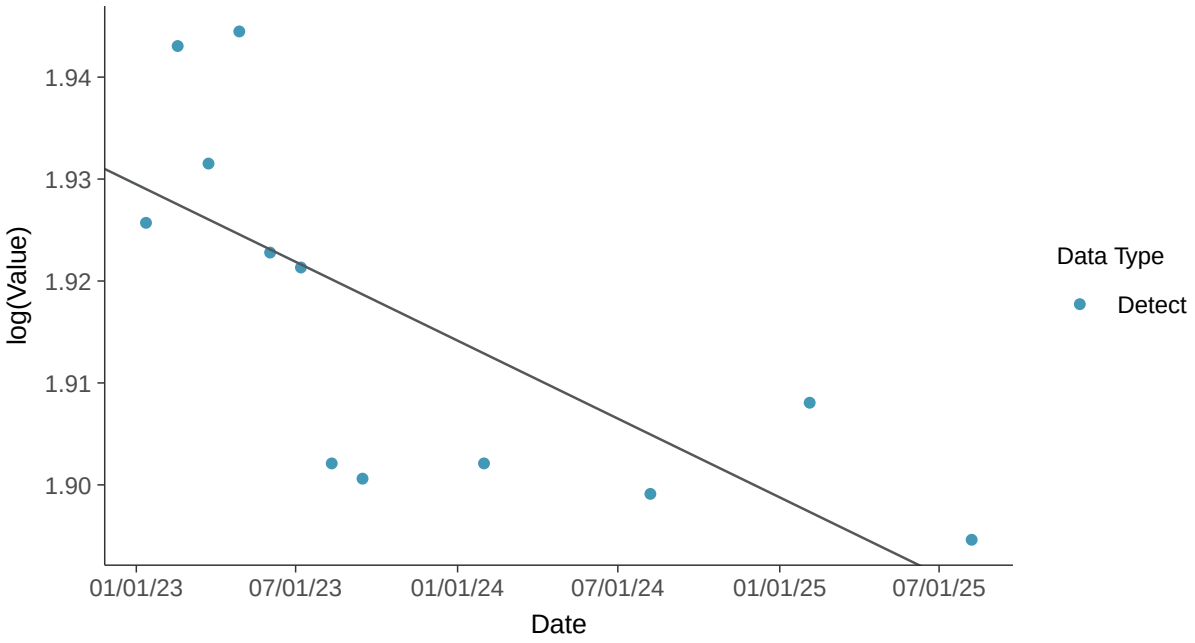
Gamma Q-Q plot

pH, Field, MW-15 (su)



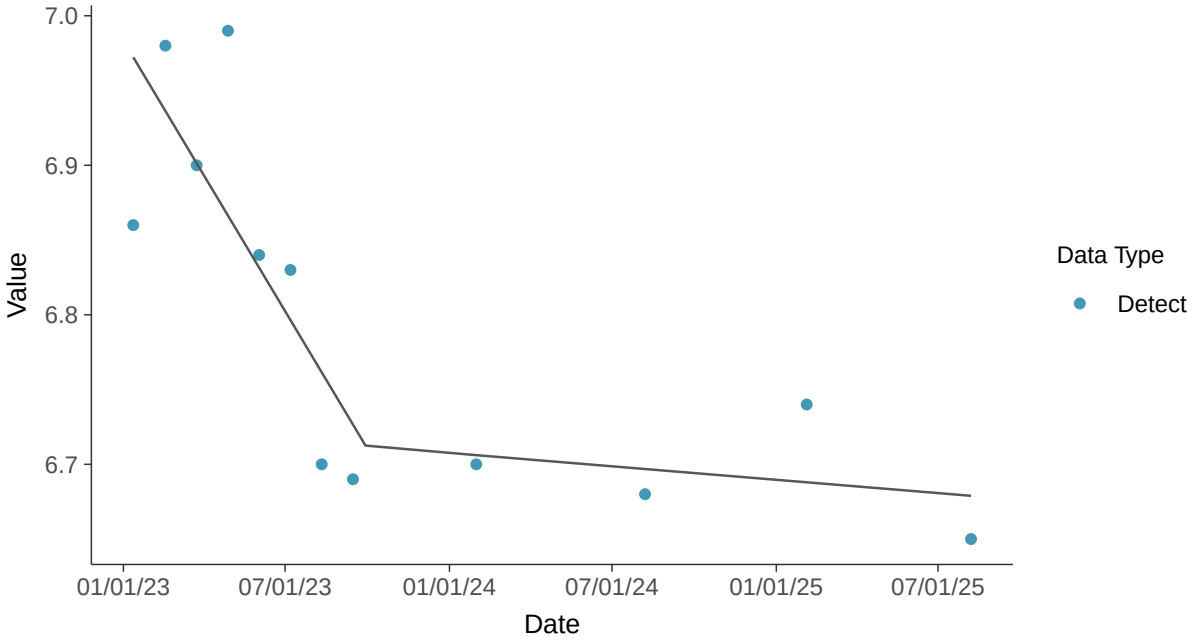
Trend Regression: Lognormal MLE

pH, Field, MW-15 (su)



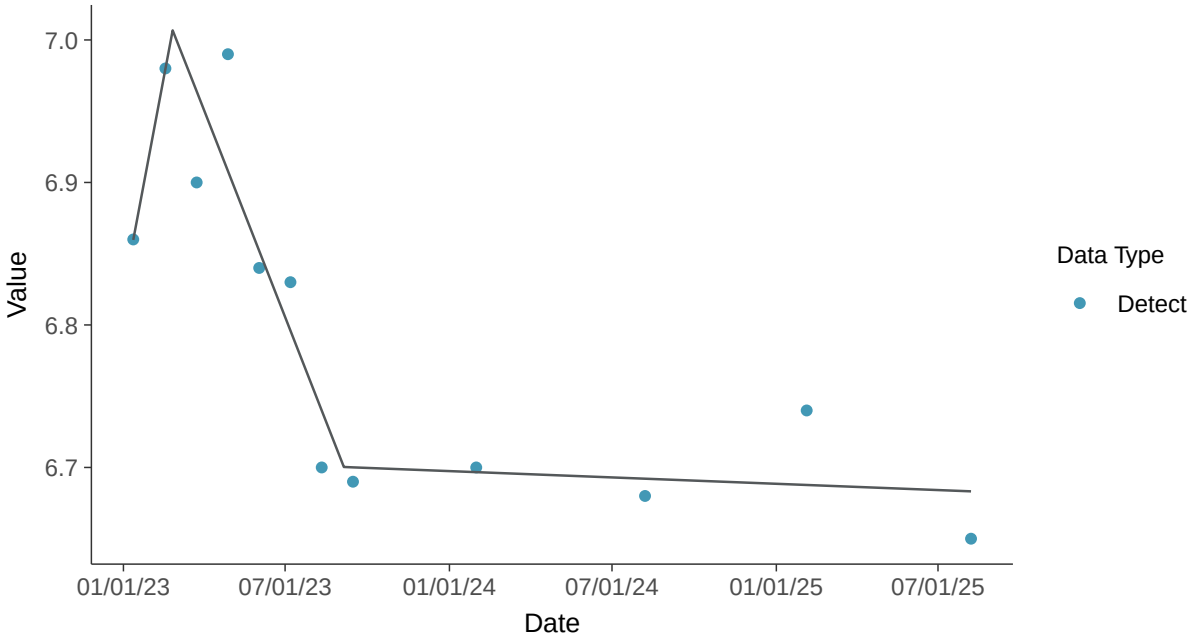
Trend Regression: Piecewise Linear-Linear

pH, Field, MW-15 (su)



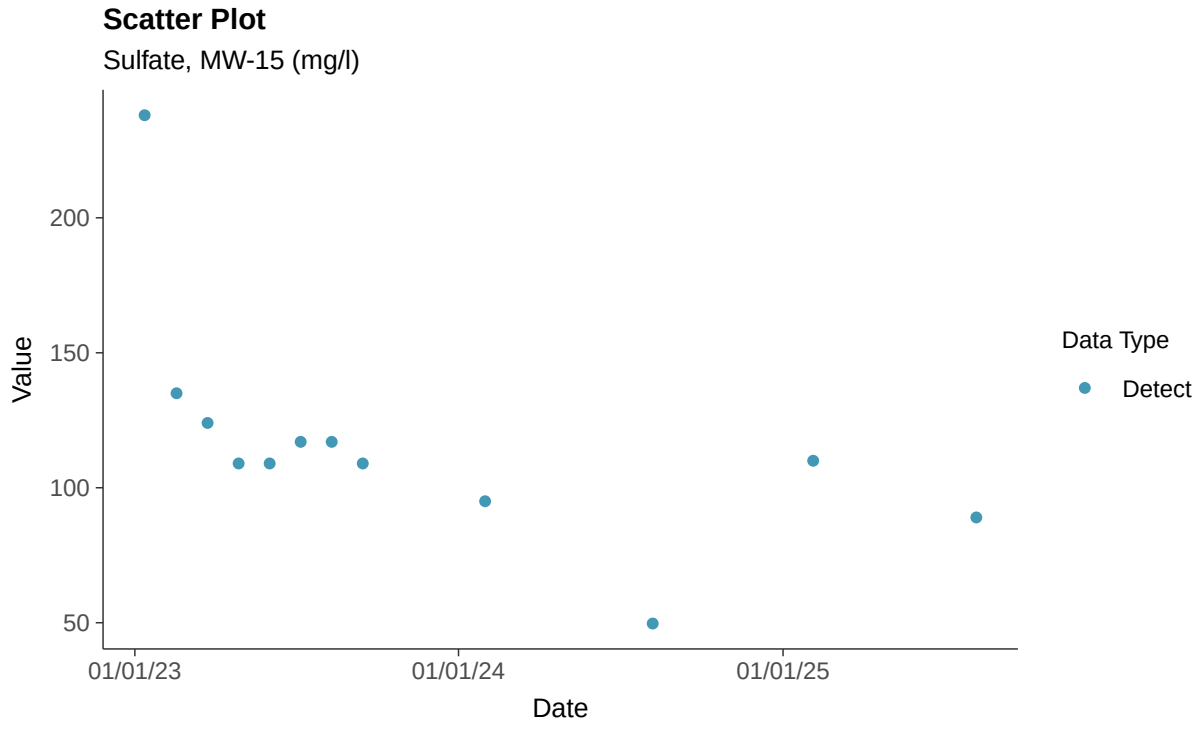
Trend Regression: Piecewise Linear-Linear-Linear

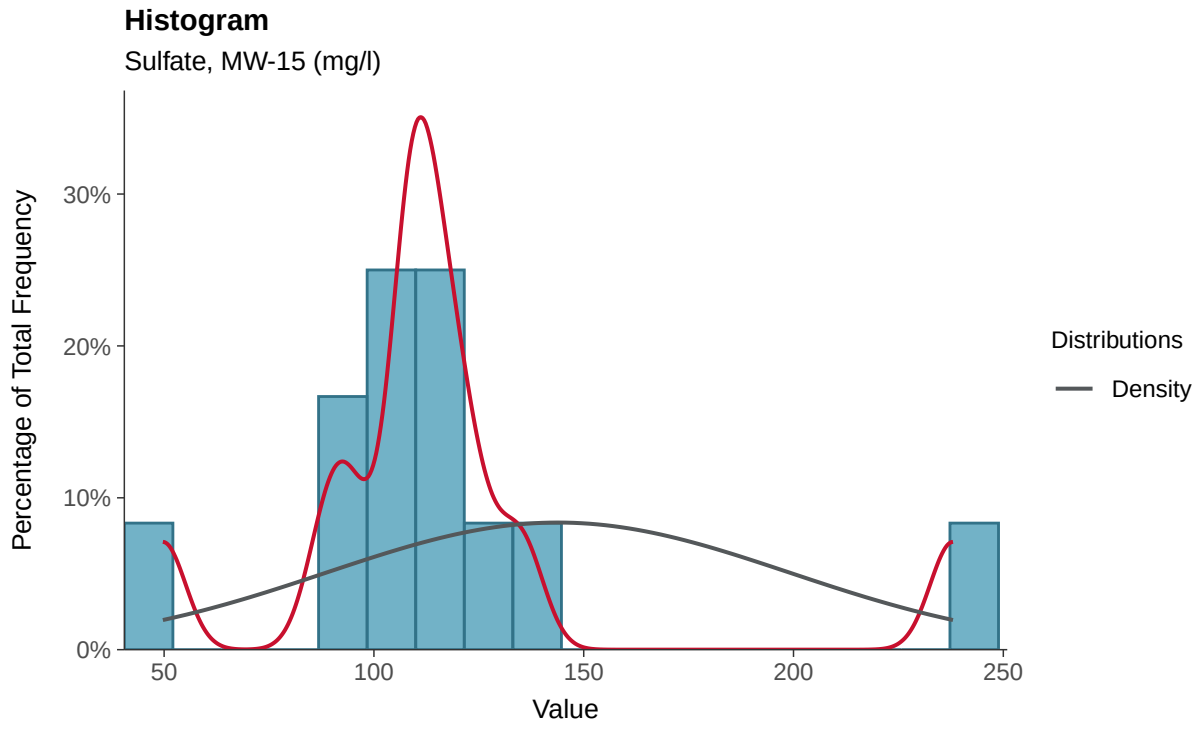
pH, Field, MW-15 (su)



Appendix III: Sulfate, MW-15

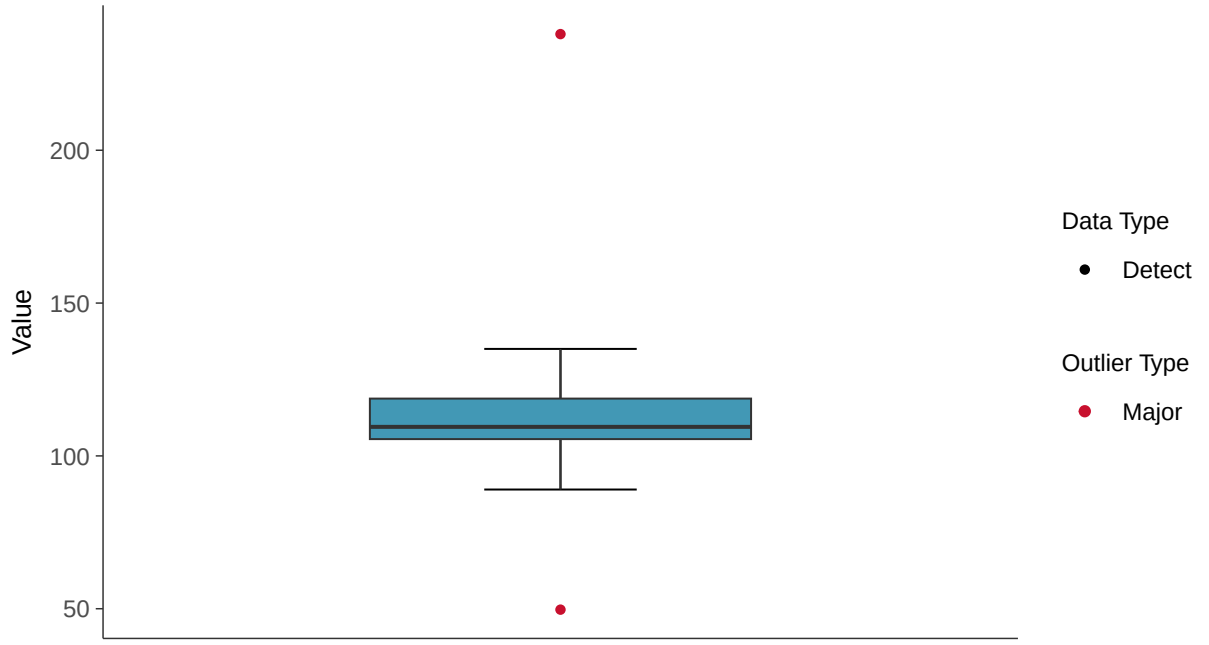
ID: 24_2_124





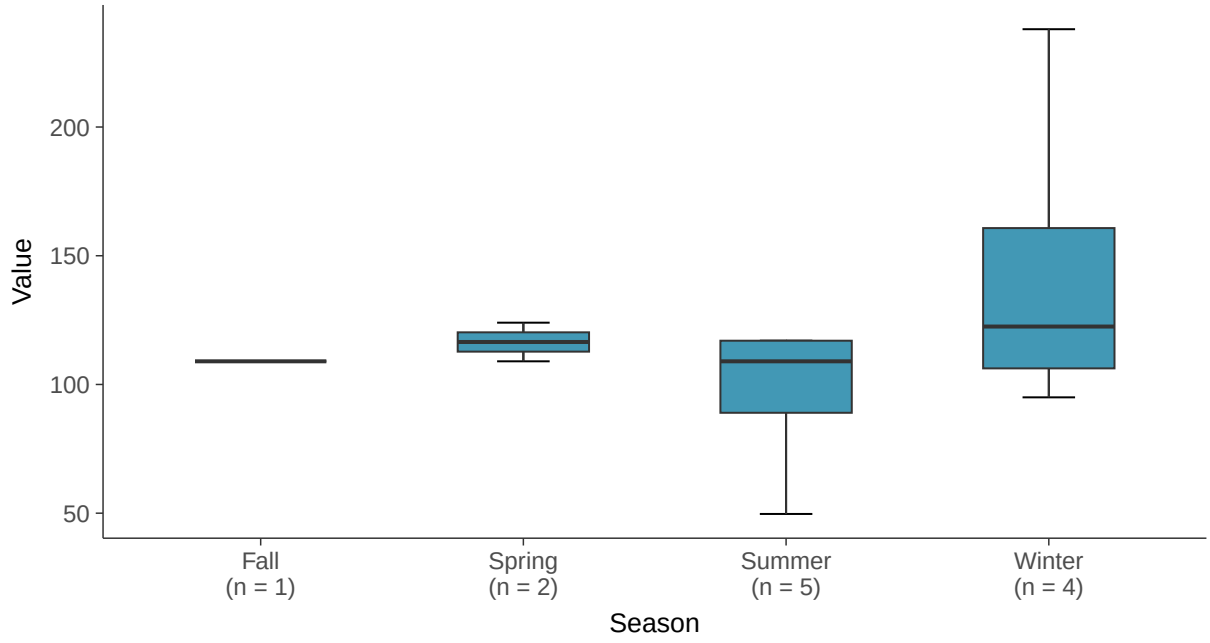
Boxplot

Sulfate, MW-15 (mg/l)



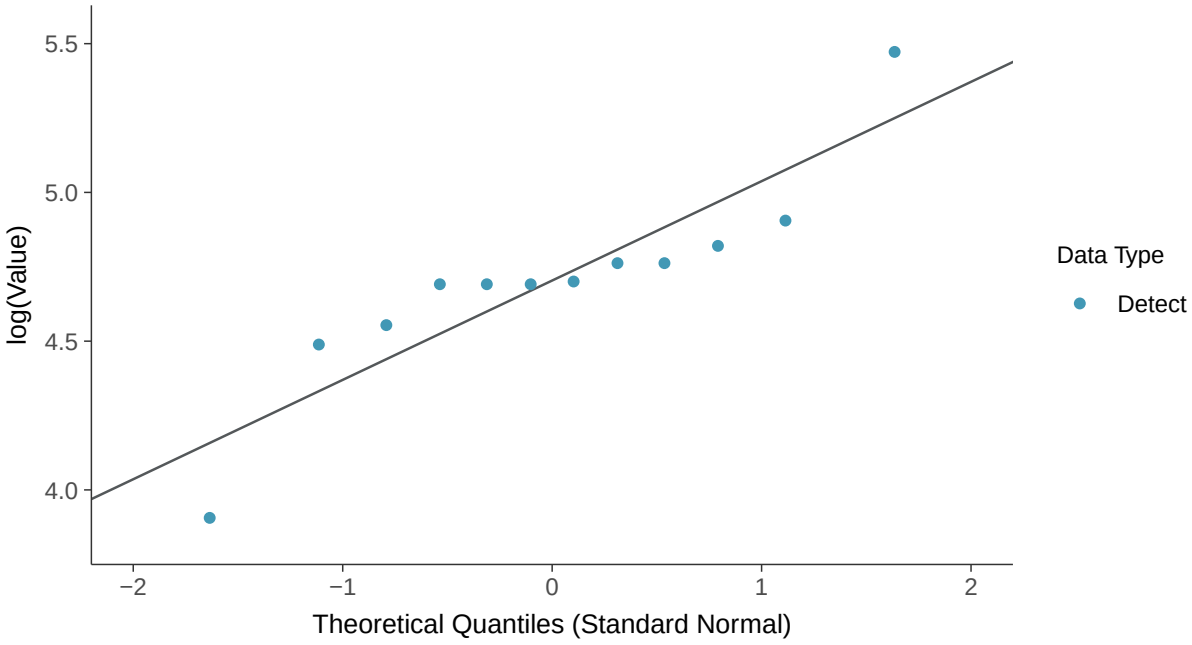
Boxplot by Season

Sulfate, MW-15 (mg/l)



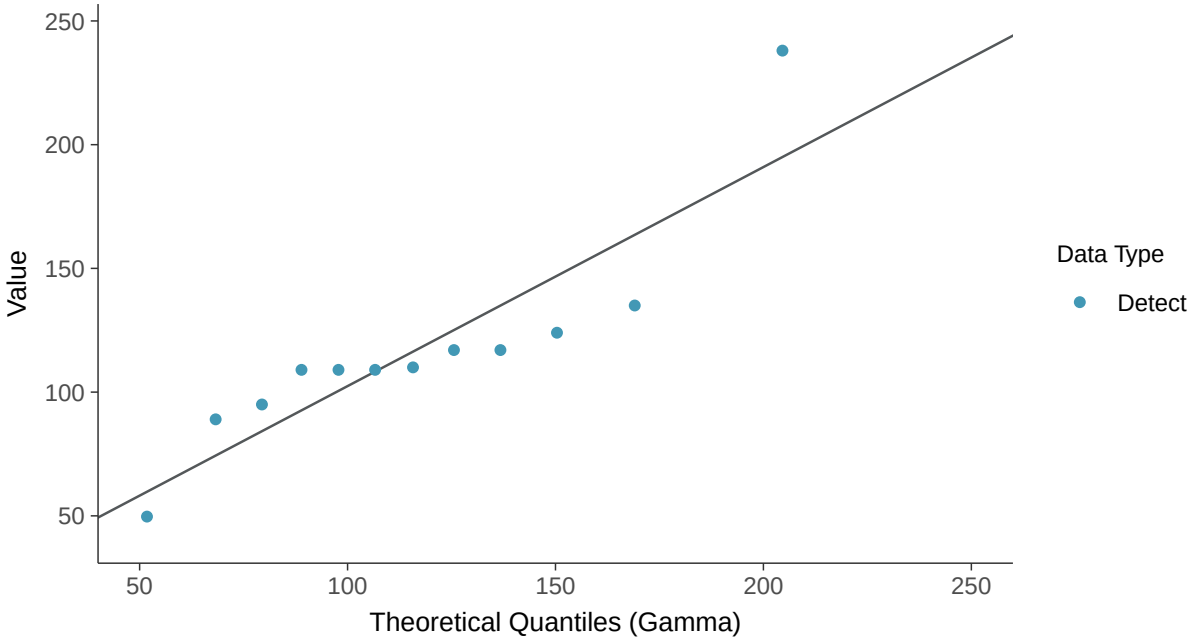
Lognormal Q-Q plot

Sulfate, MW-15 (mg/l)



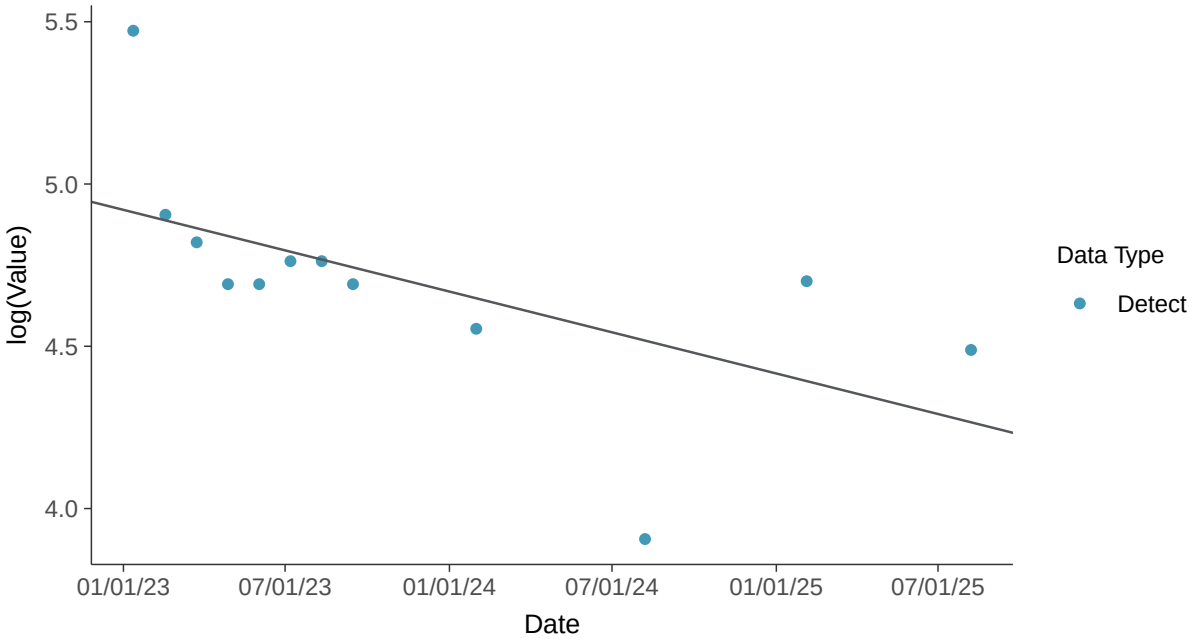
Gamma Q-Q plot

Sulfate, MW-15 (mg/l)



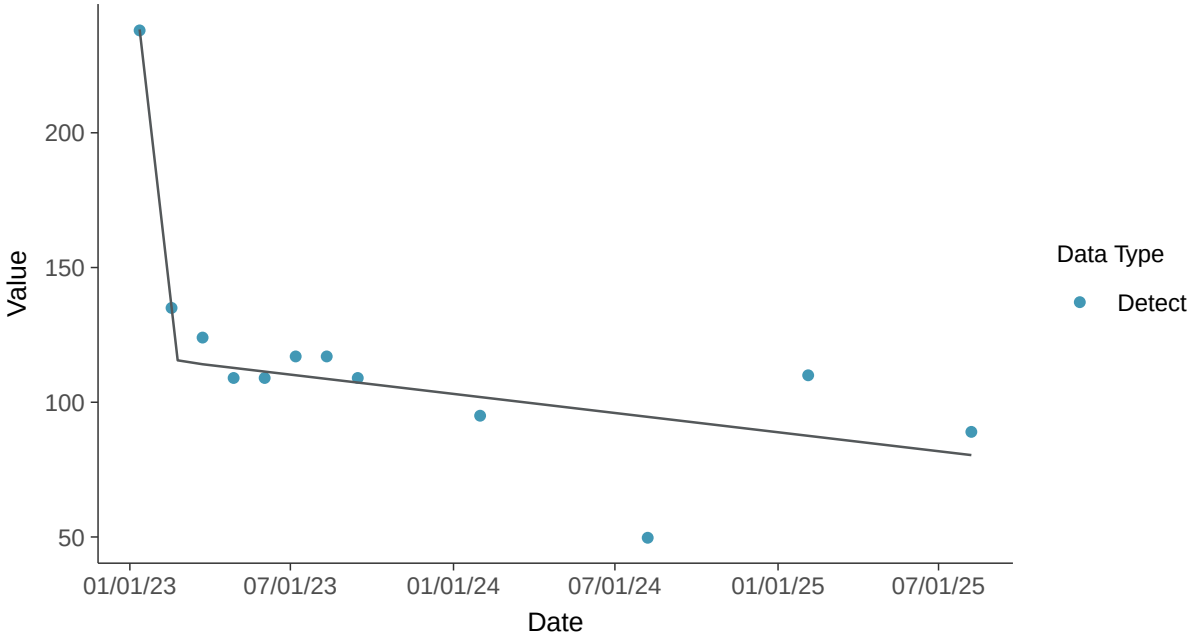
Trend Regression: Lognormal MLE

Sulfate, MW-15 (mg/l)



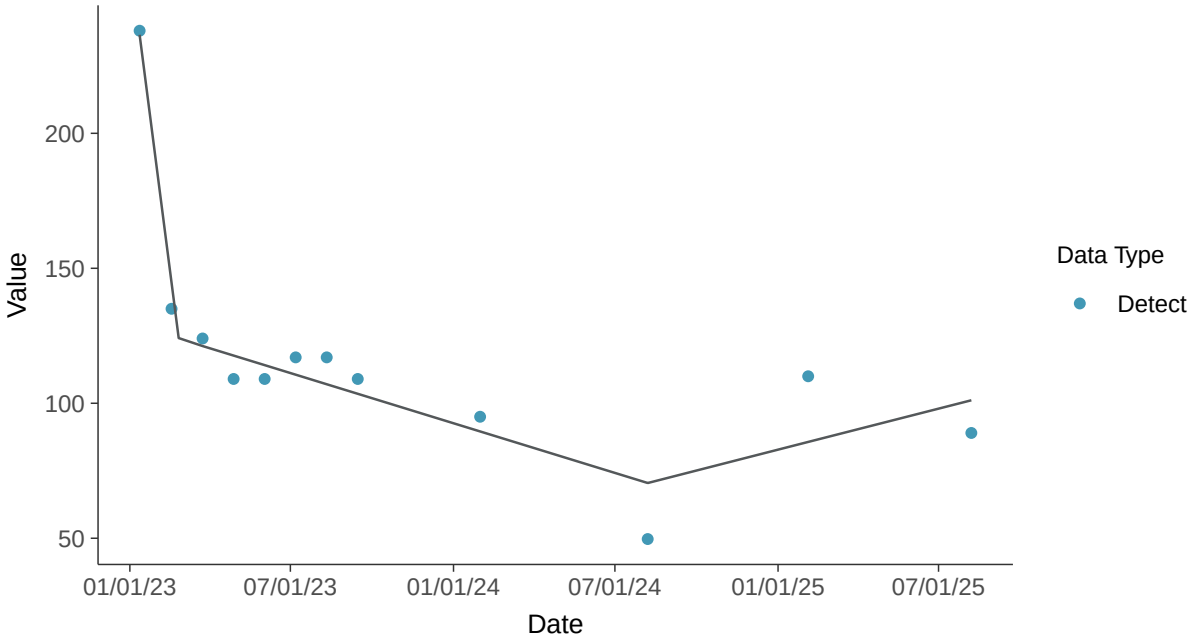
Trend Regression: Piecewise Linear-Linear

Sulfate, MW-15 (mg/l)



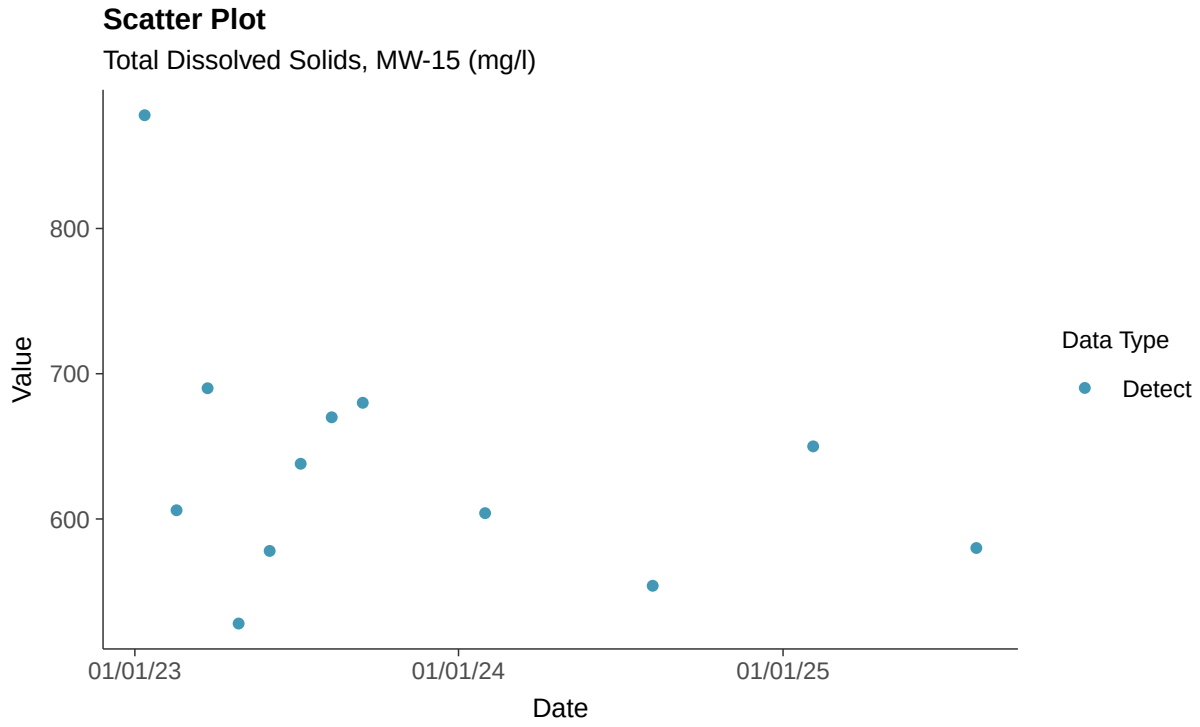
Trend Regression: Piecewise Linear-Linear-Linear

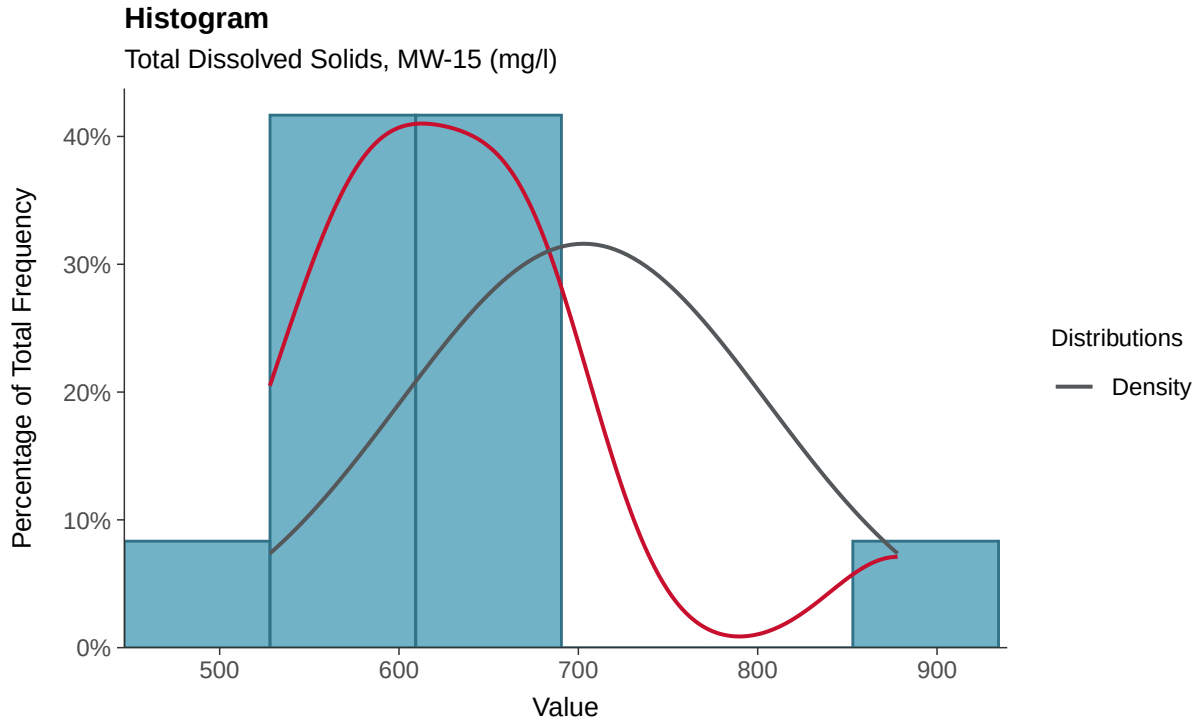
Sulfate, MW-15 (mg/l)



Appendix III: Total Dissolved Solids, MW-15

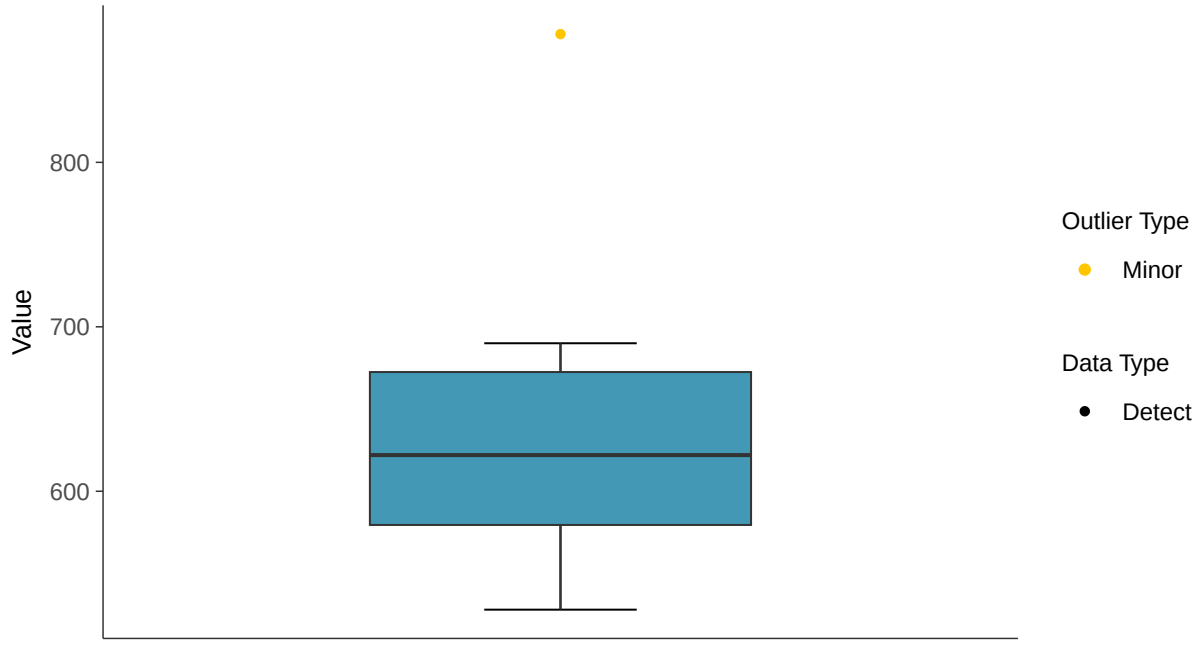
ID: 24_2_126





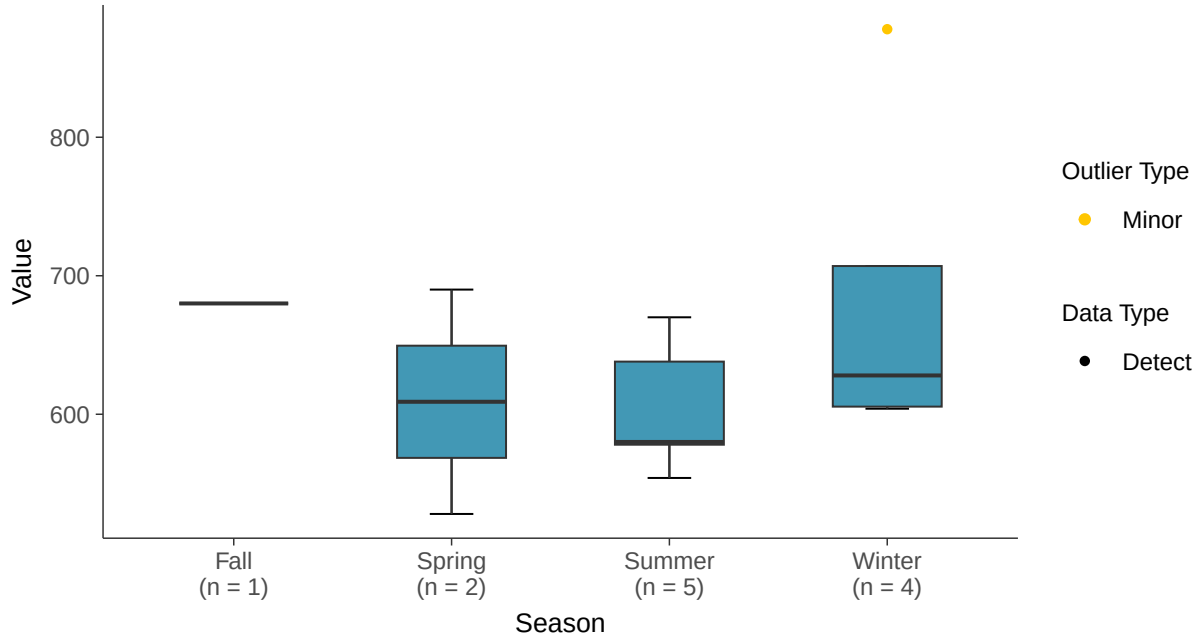
Boxplot

Total Dissolved Solids, MW-15 (mg/l)



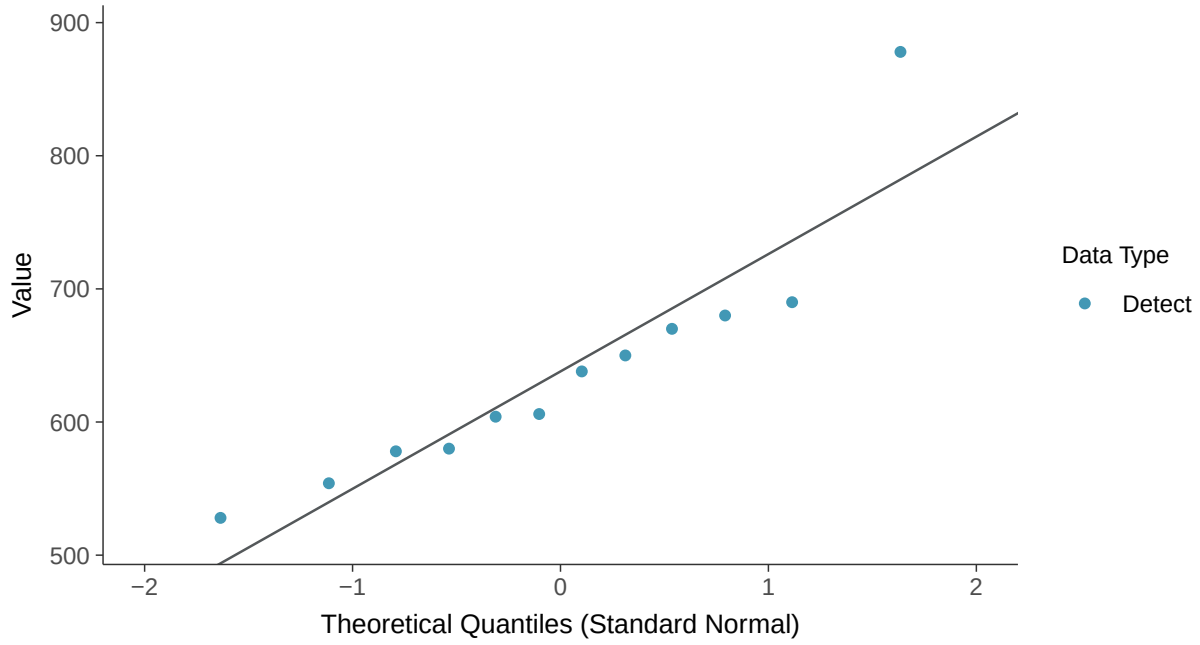
Boxplot by Season

Total Dissolved Solids, MW-15 (mg/l)



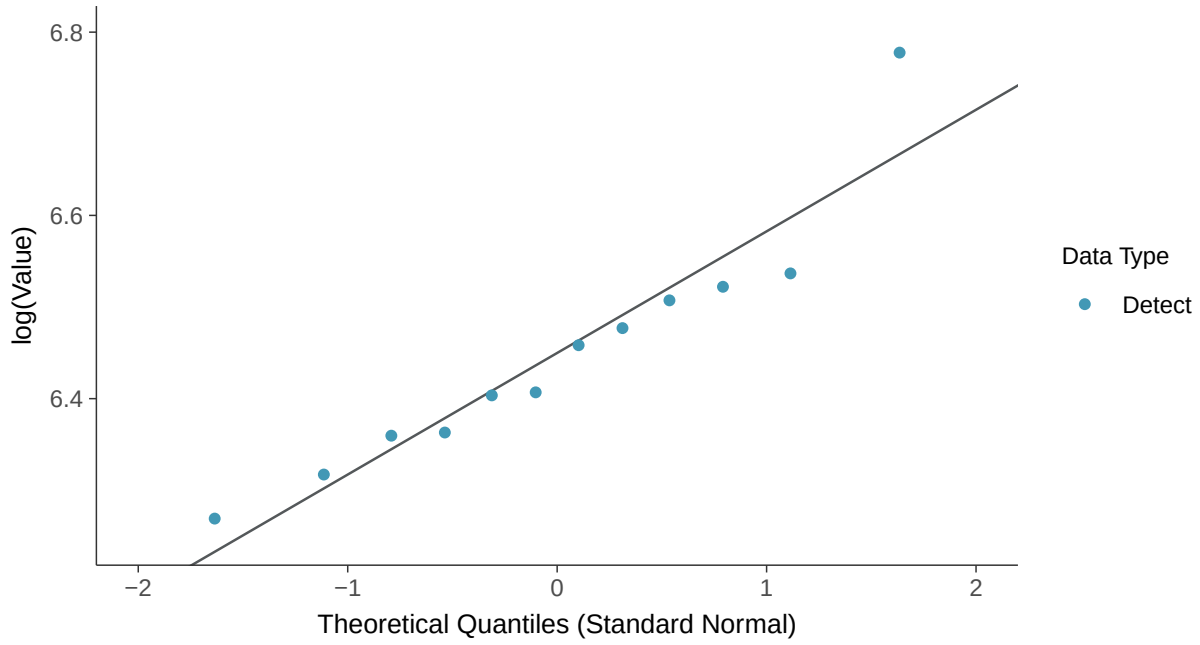
Normal Q-Q plot

Total Dissolved Solids, MW-15 (mg/l)



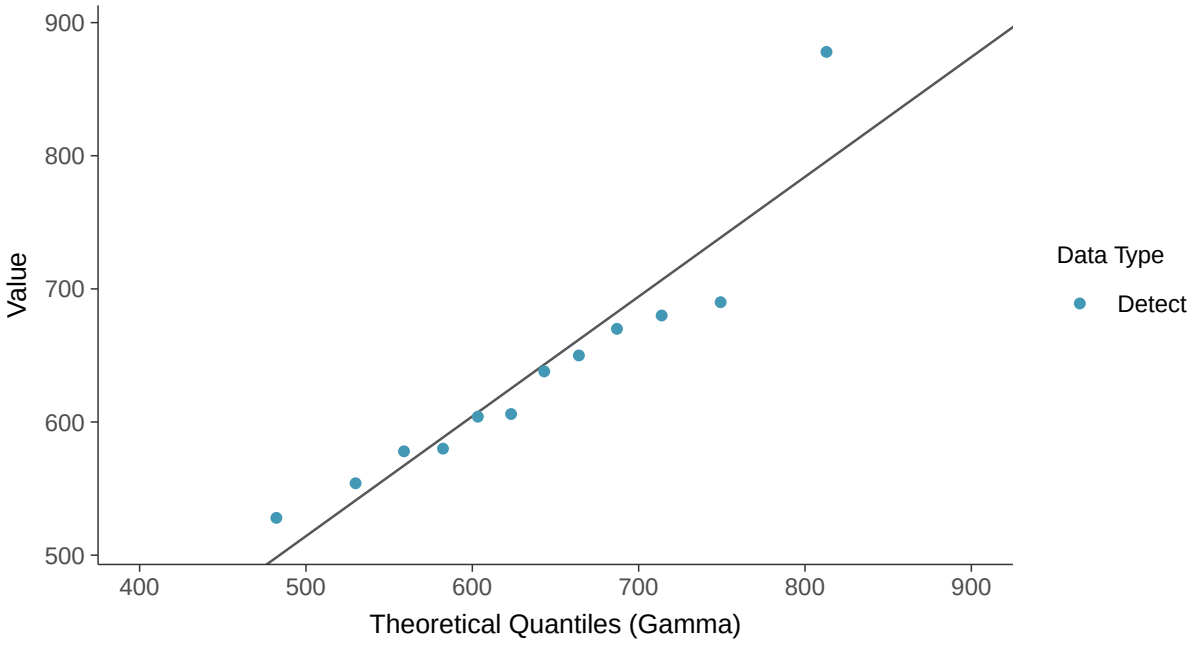
Lognormal Q-Q plot

Total Dissolved Solids, MW-15 (mg/l)



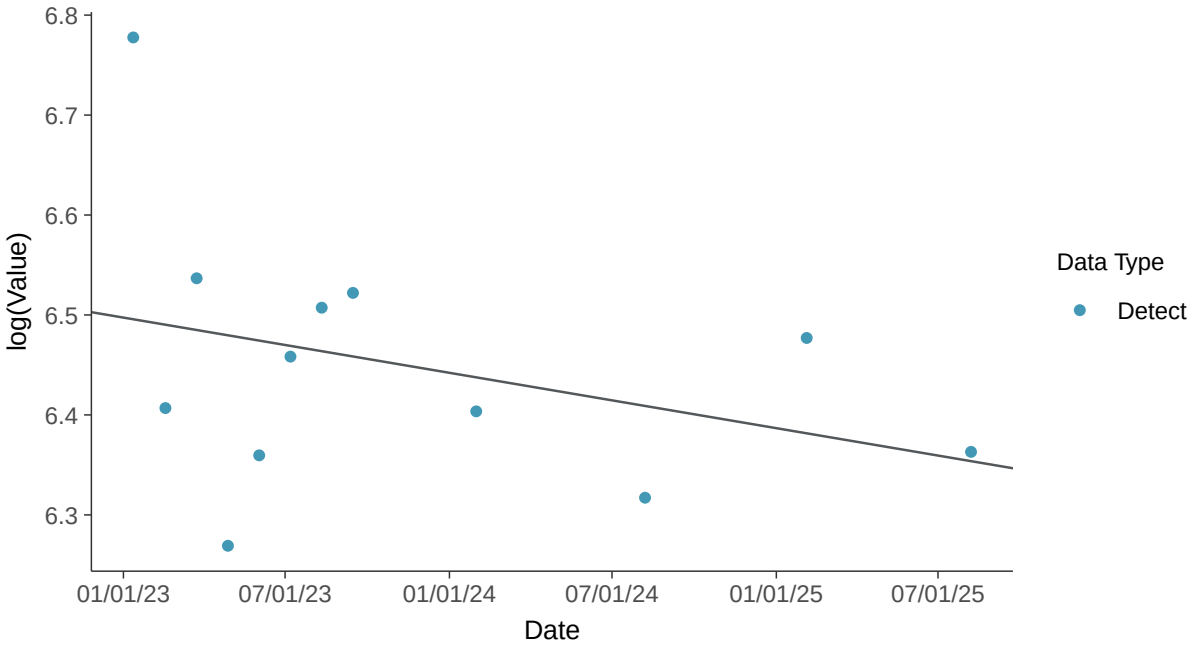
Gamma Q-Q plot

Total Dissolved Solids, MW-15 (mg/l)



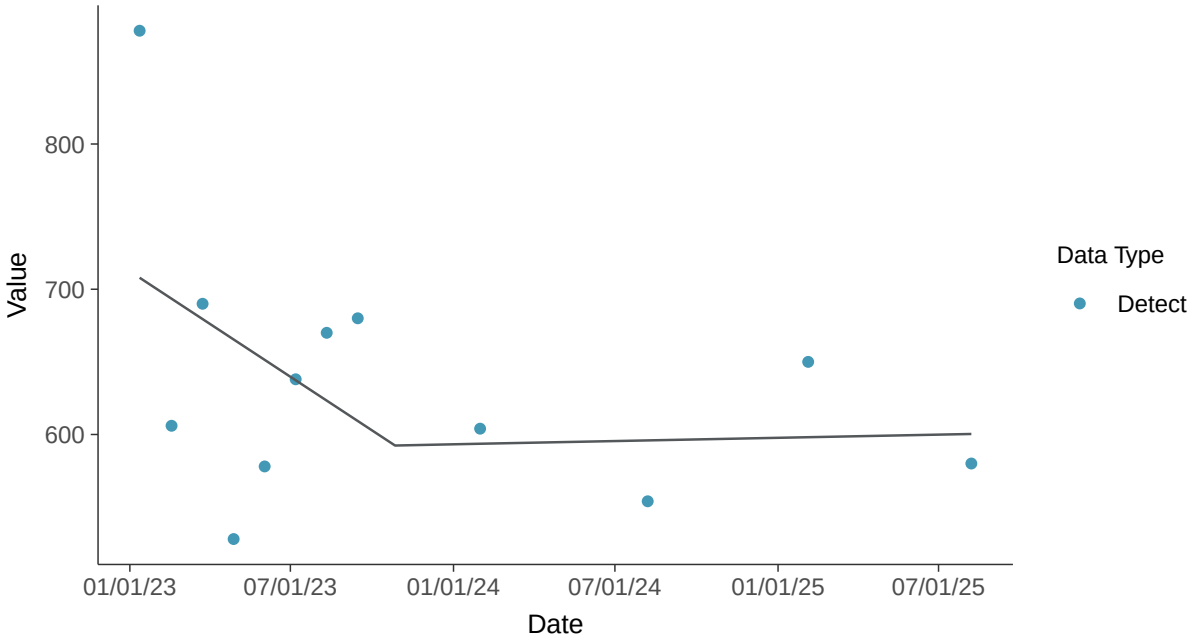
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-15 (mg/l)



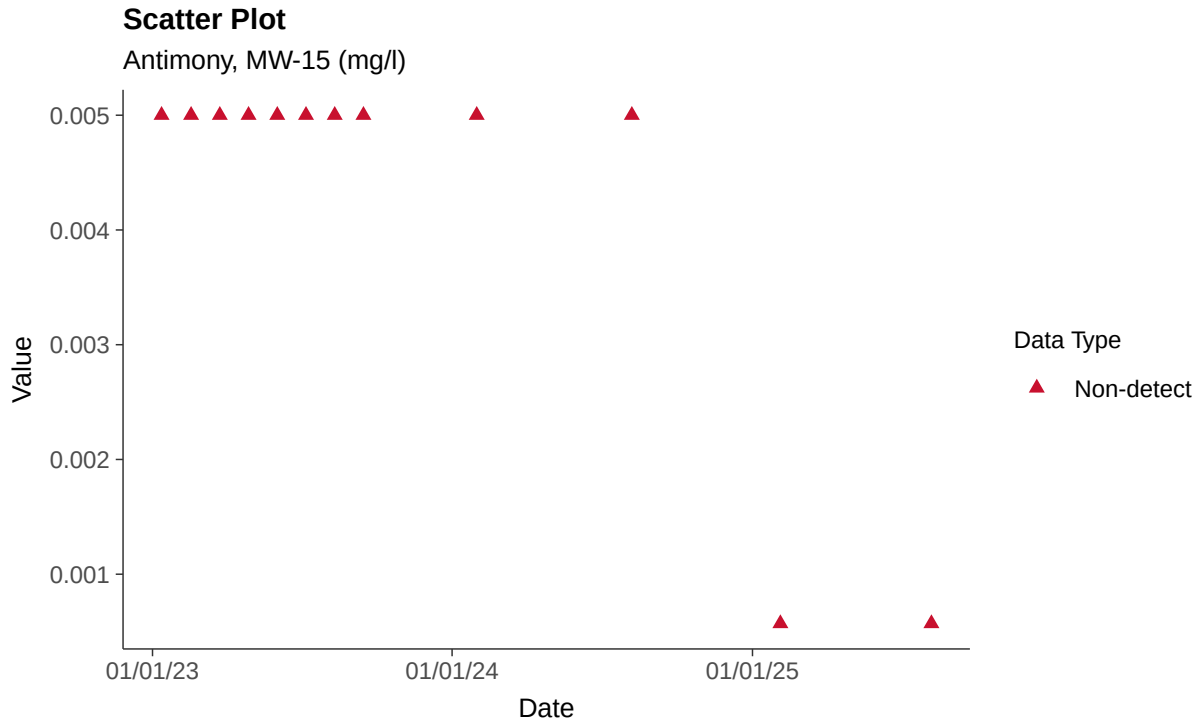
Trend Regression: Piecewise Linear-Linear

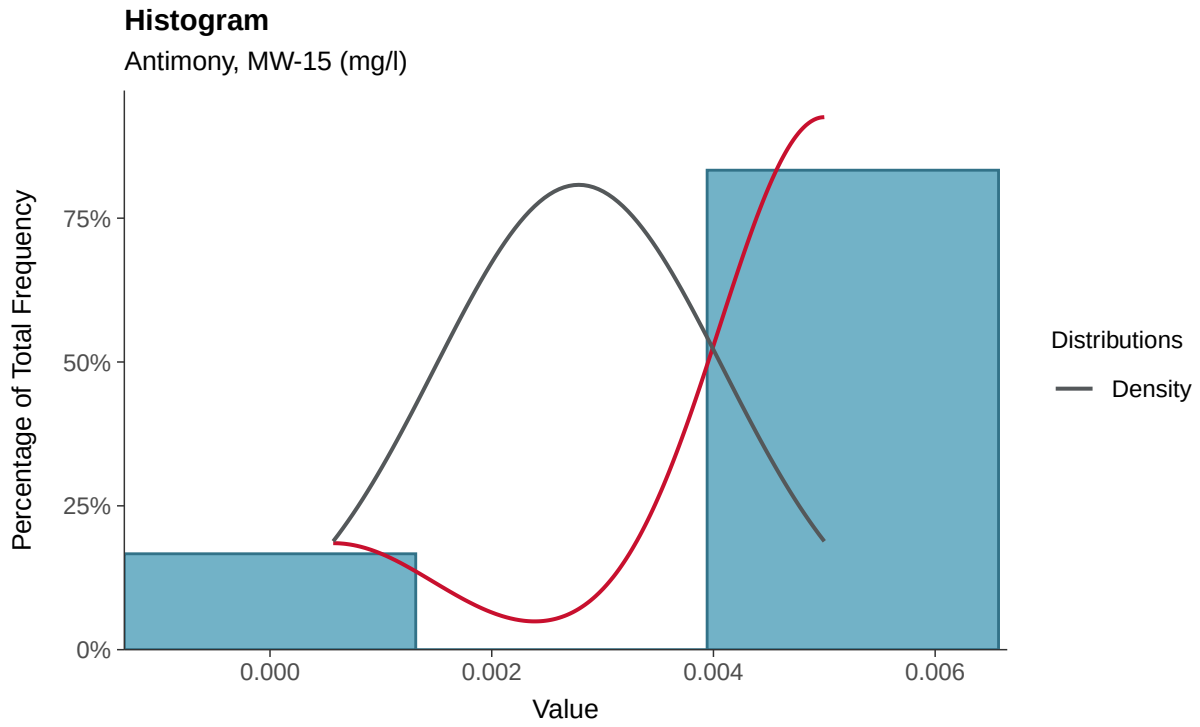
Total Dissolved Solids, MW-15 (mg/l)



Appendix IV: Antimony, MW-15

ID: 24_3_101



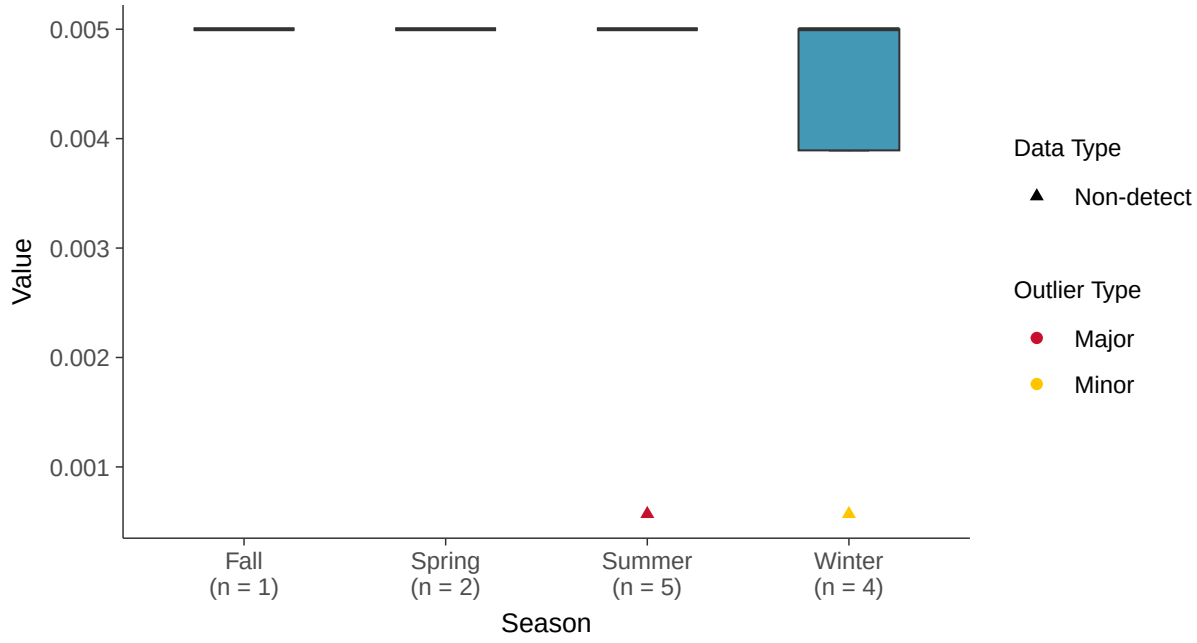


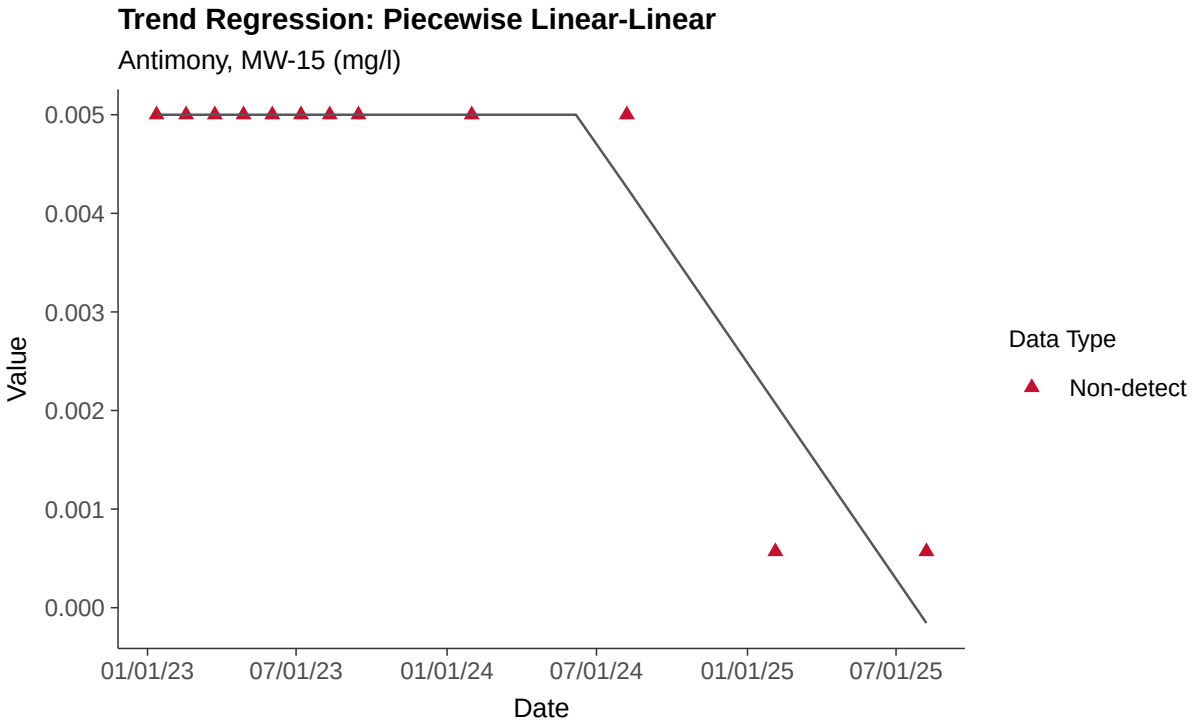
Boxplot

Antimony, MW-15 (mg/l)

Boxplot by Season

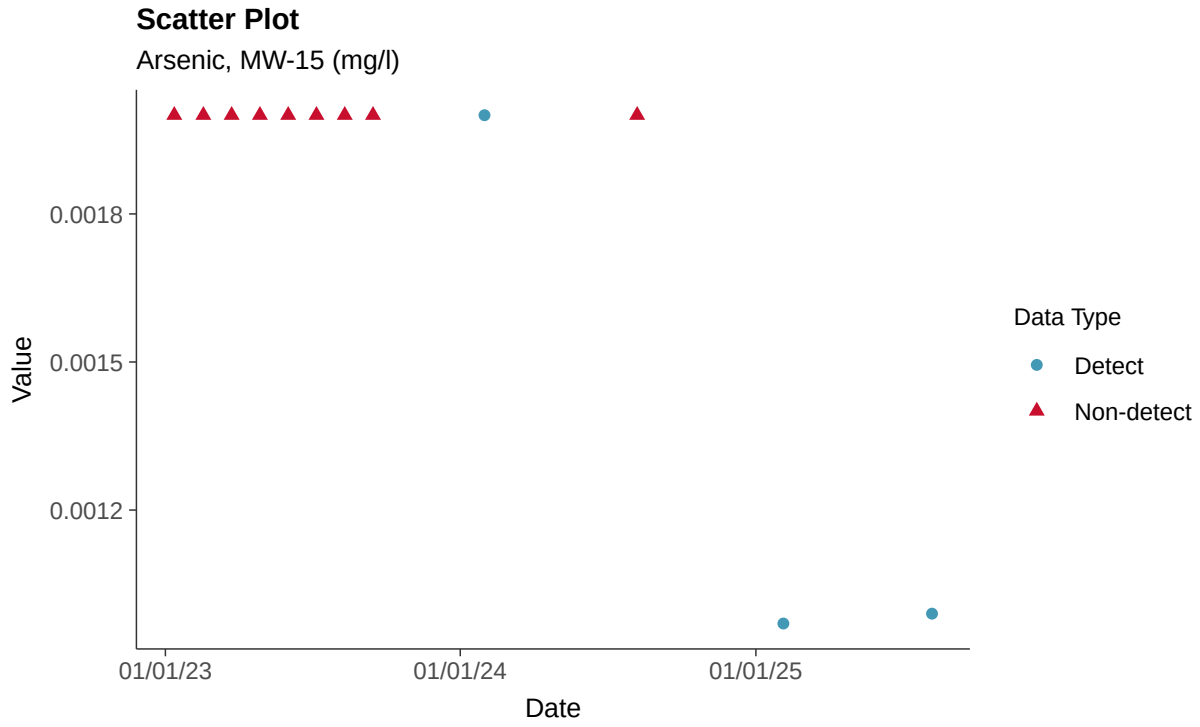
Antimony, MW-15 (mg/l)

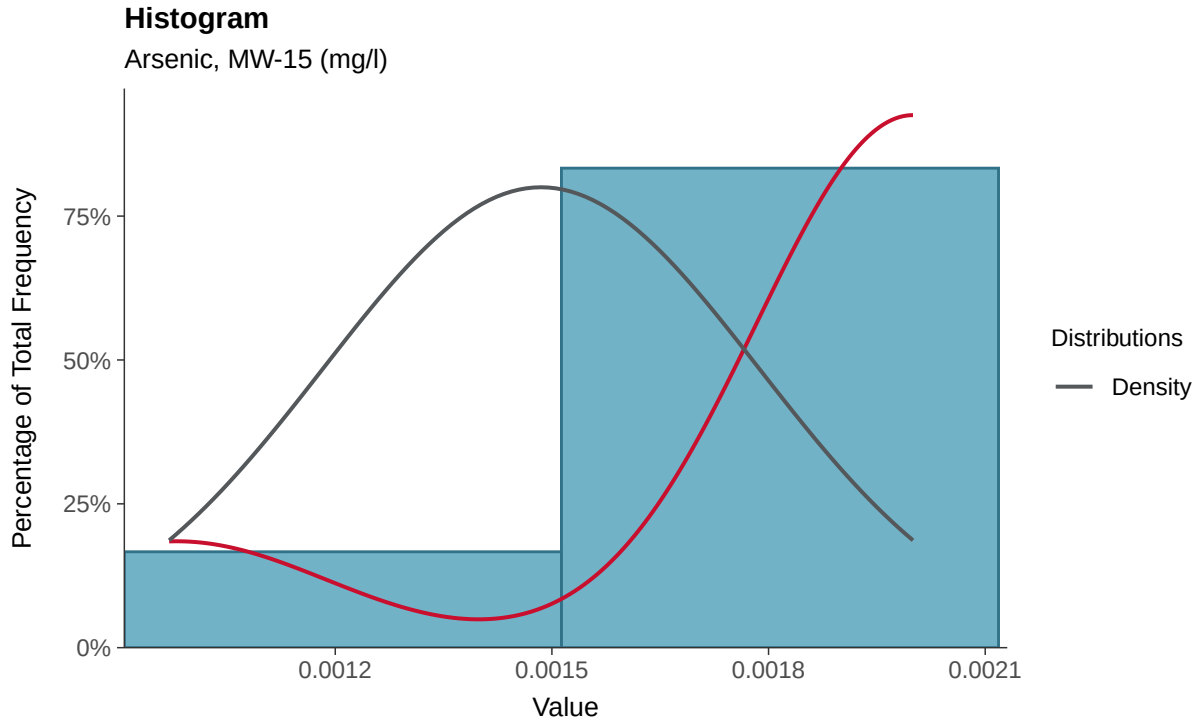



Trend Regression: Piecewise Linear-Linear
Antimony, MW-15 (mg/l)
0.005
0.004
0.003
0.002
0.001
0.000
Value
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Arsenic, MW-15

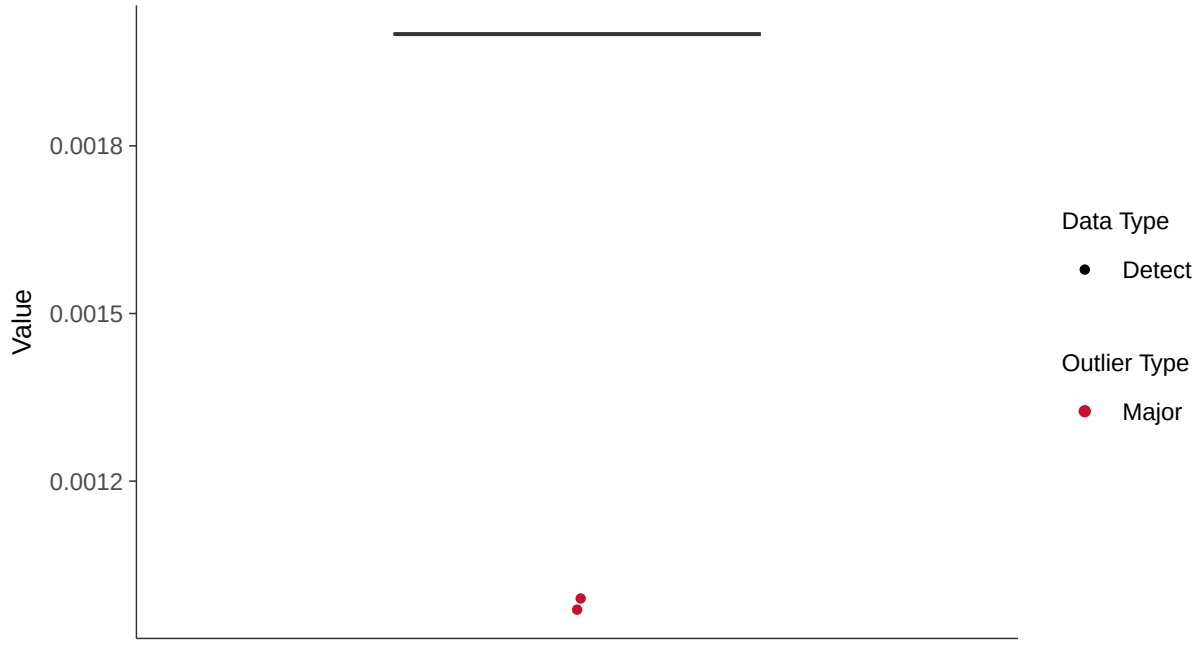
ID: 24_3_102





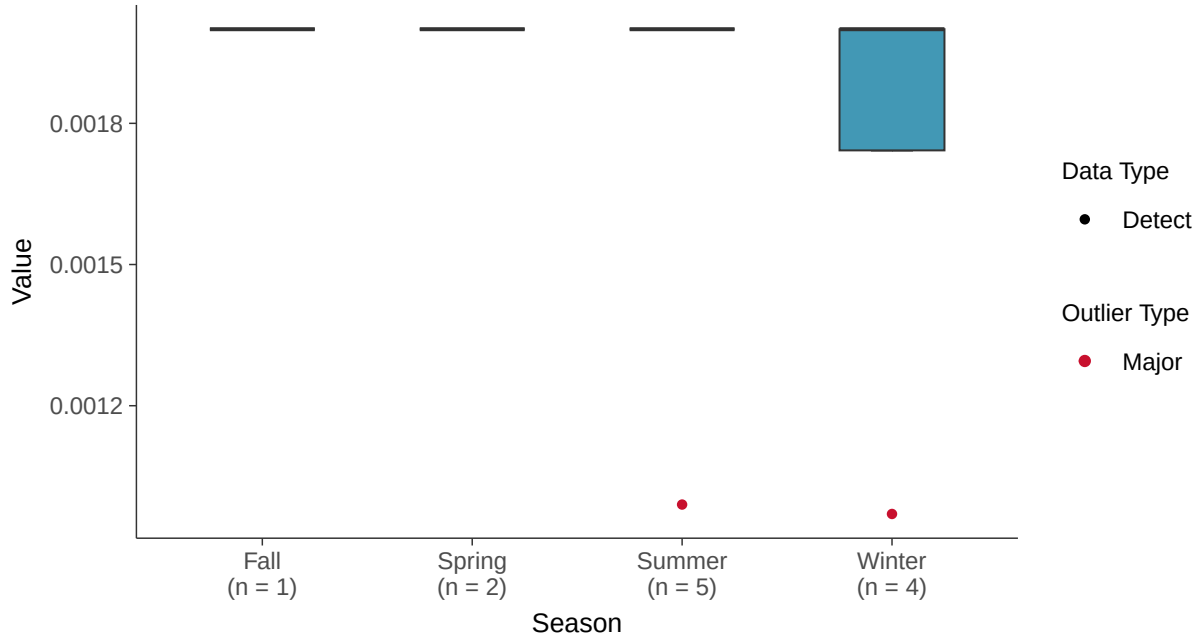
Boxplot

Arsenic, MW-15 (mg/l)



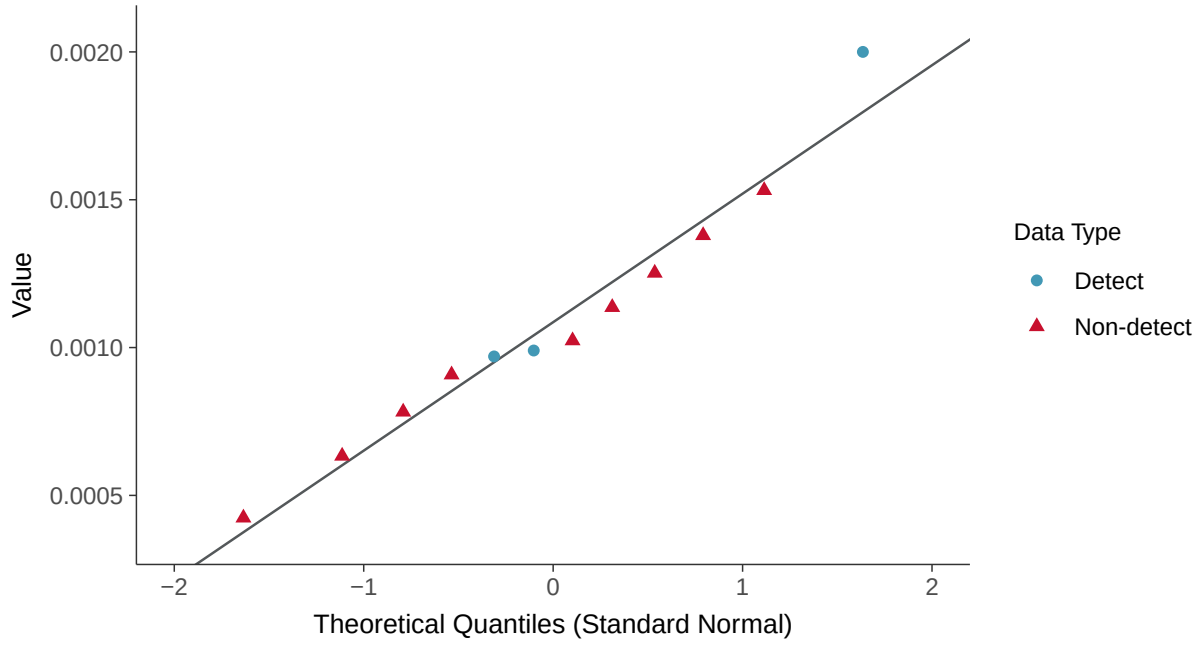
Boxplot by Season

Arsenic, MW-15 (mg/l)



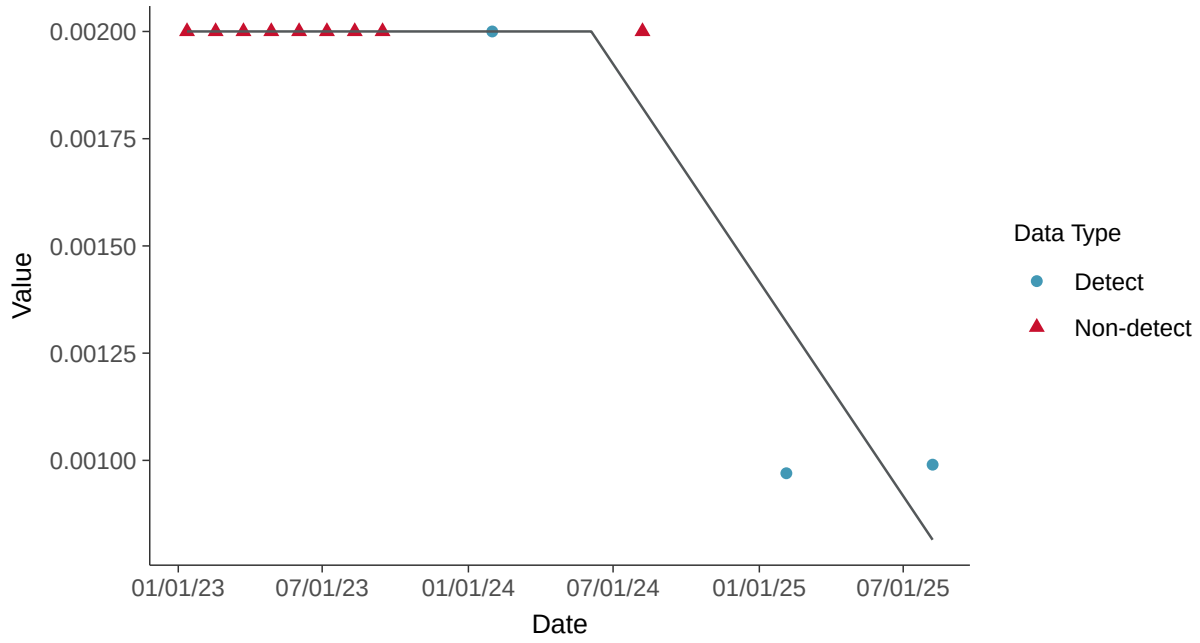
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-15 (mg/l)



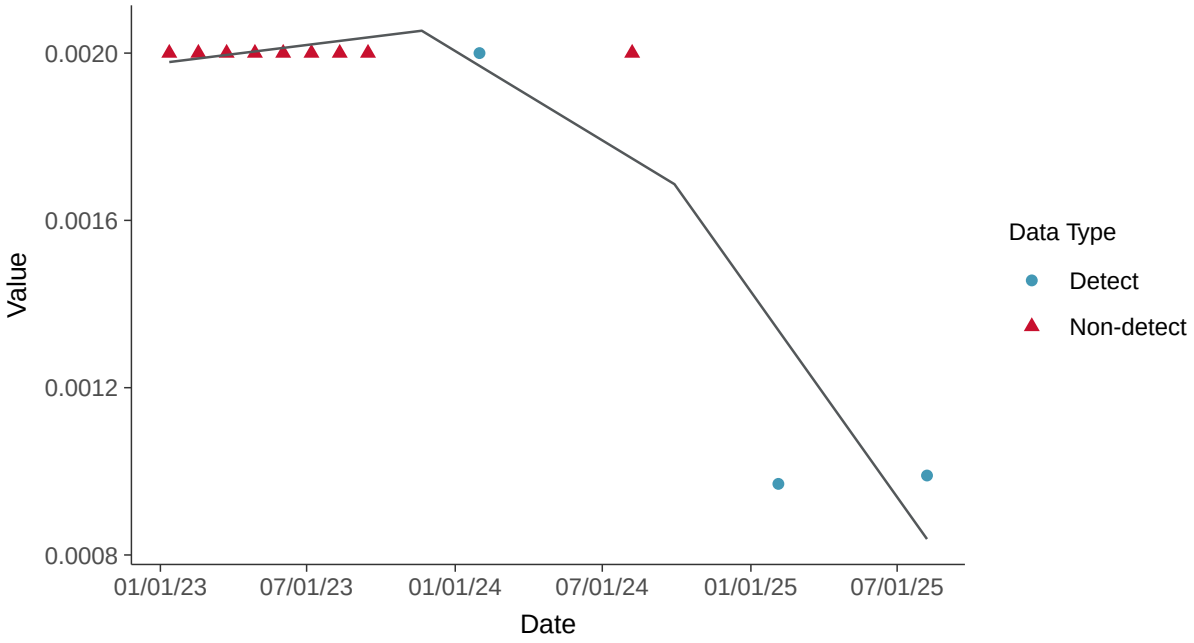
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-15 (mg/l)



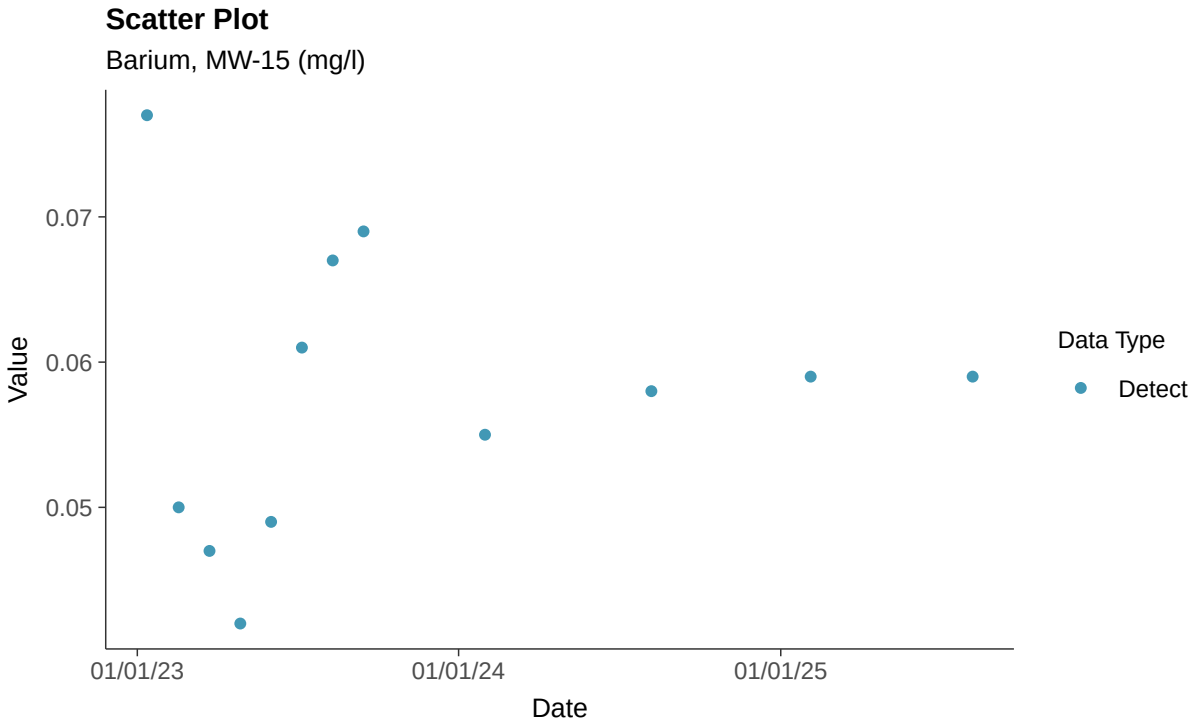
Trend Regression: Piecewise Linear-Linear-Linear

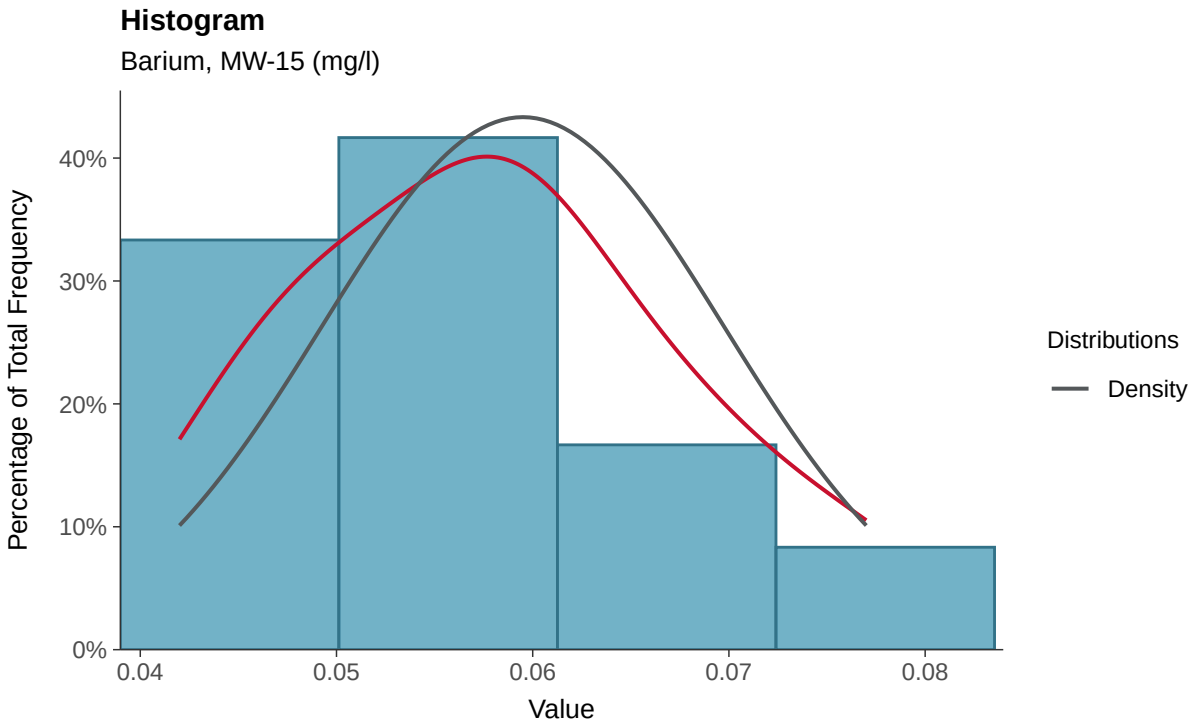
Arsenic, MW-15 (mg/l)



Appendix IV: Barium, MW-15

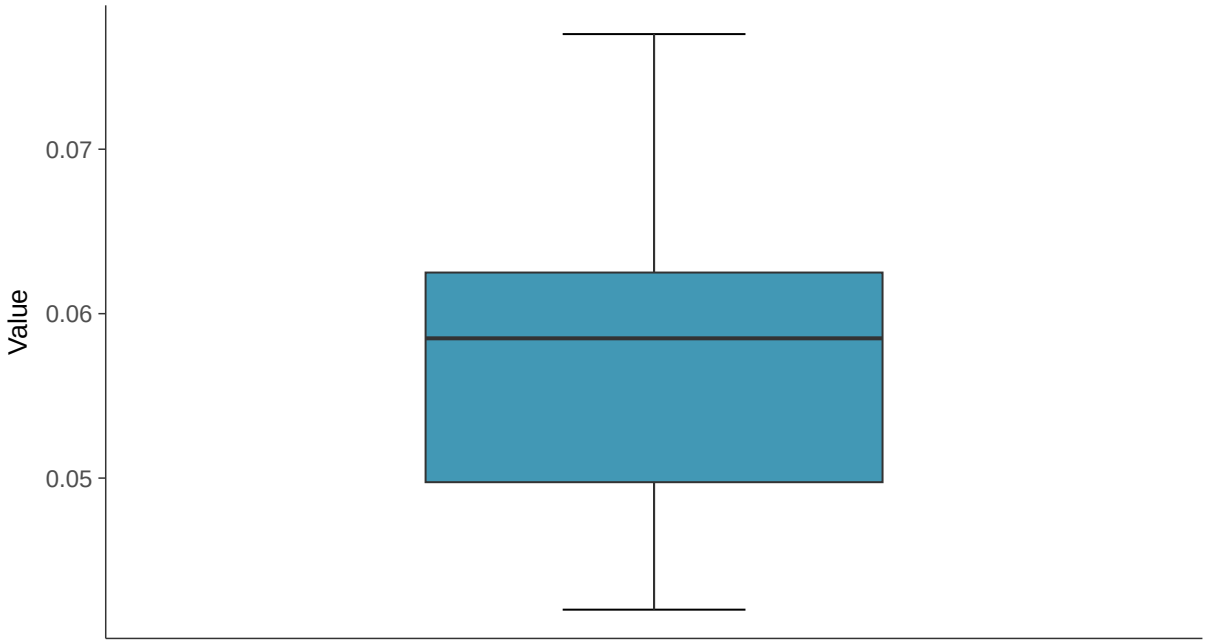
ID: 24_3_103





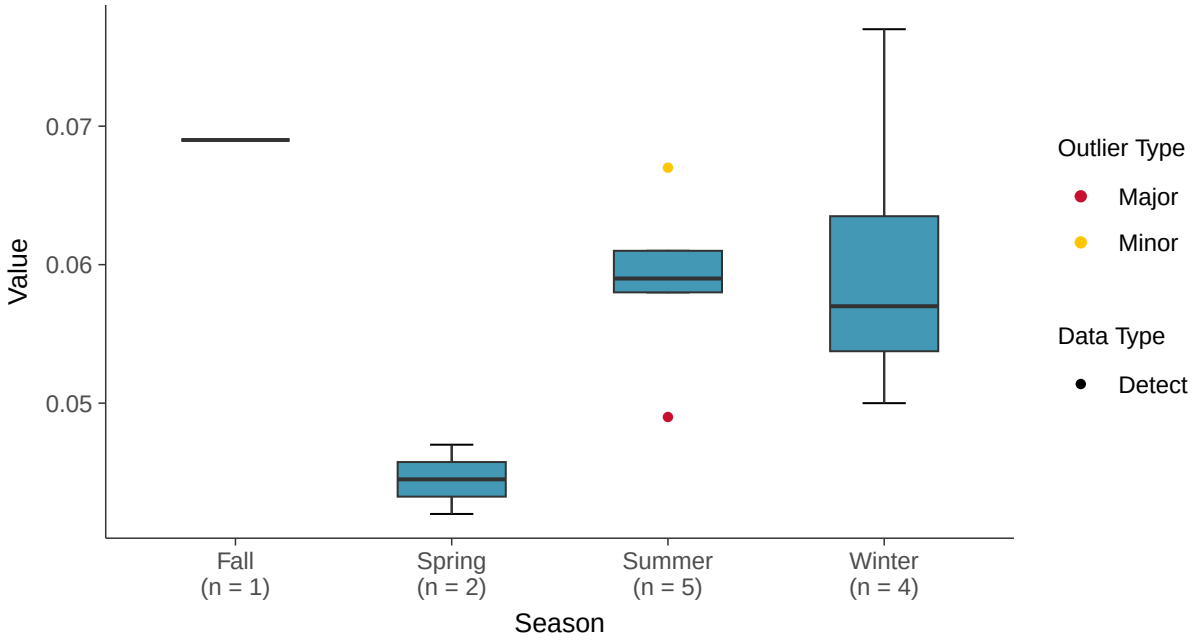
Boxplot

Barium, MW-15 (mg/l)



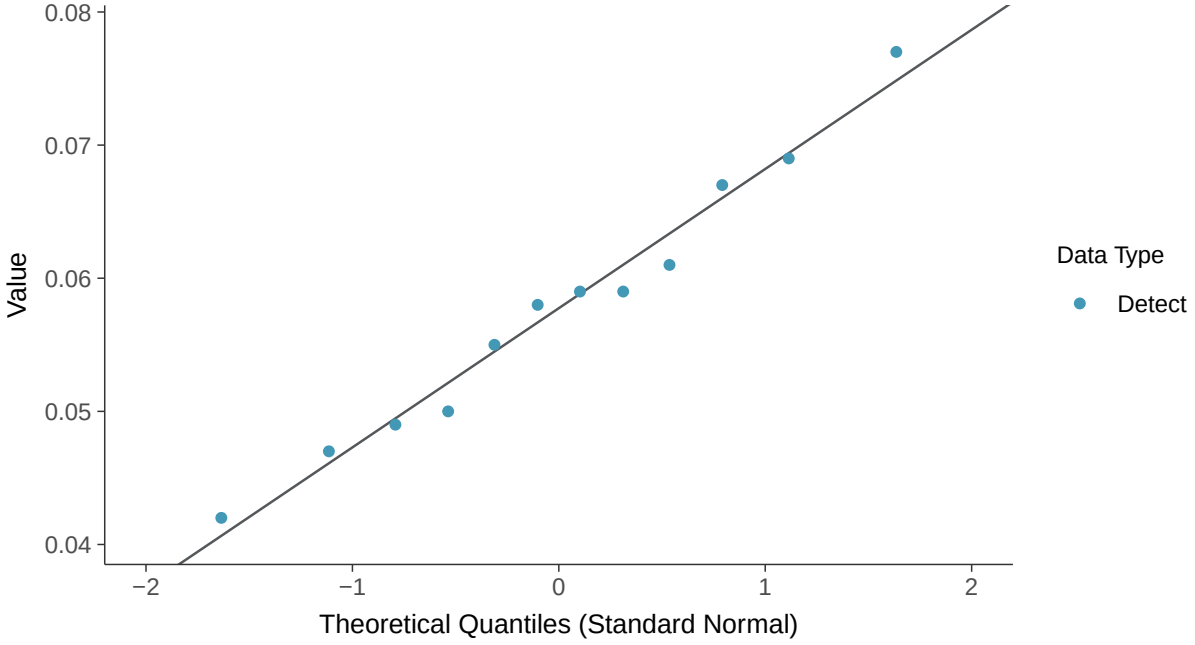
Boxplot by Season

Barium, MW-15 (mg/l)



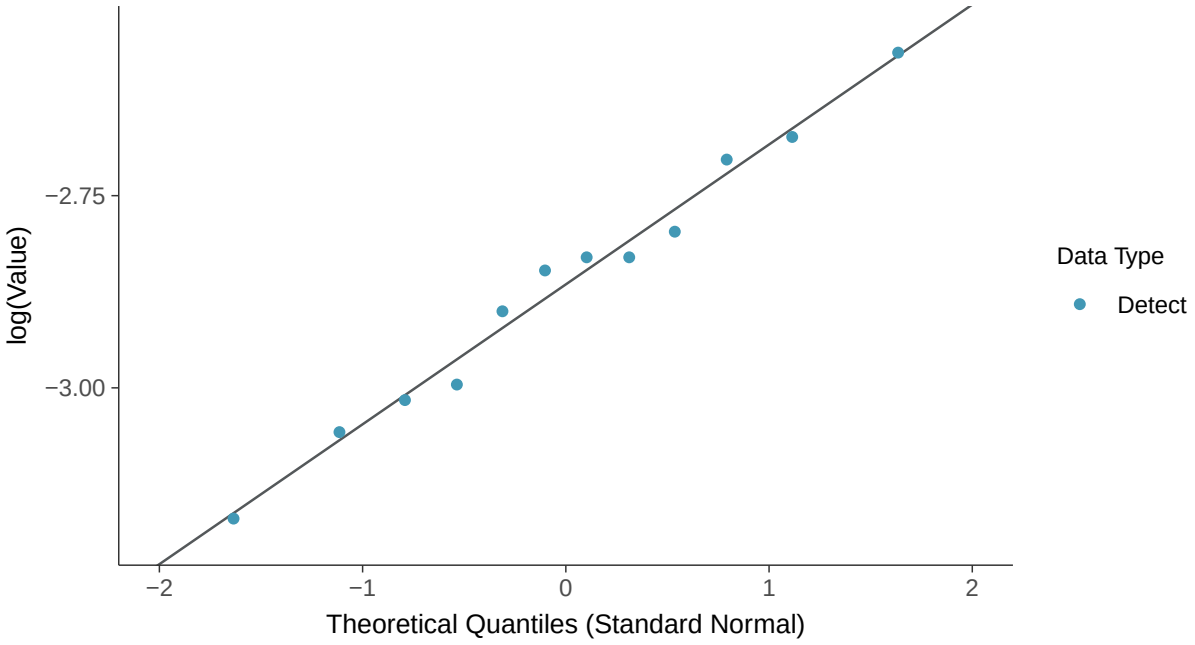
Normal Q-Q plot

Barium, MW-15 (mg/l)



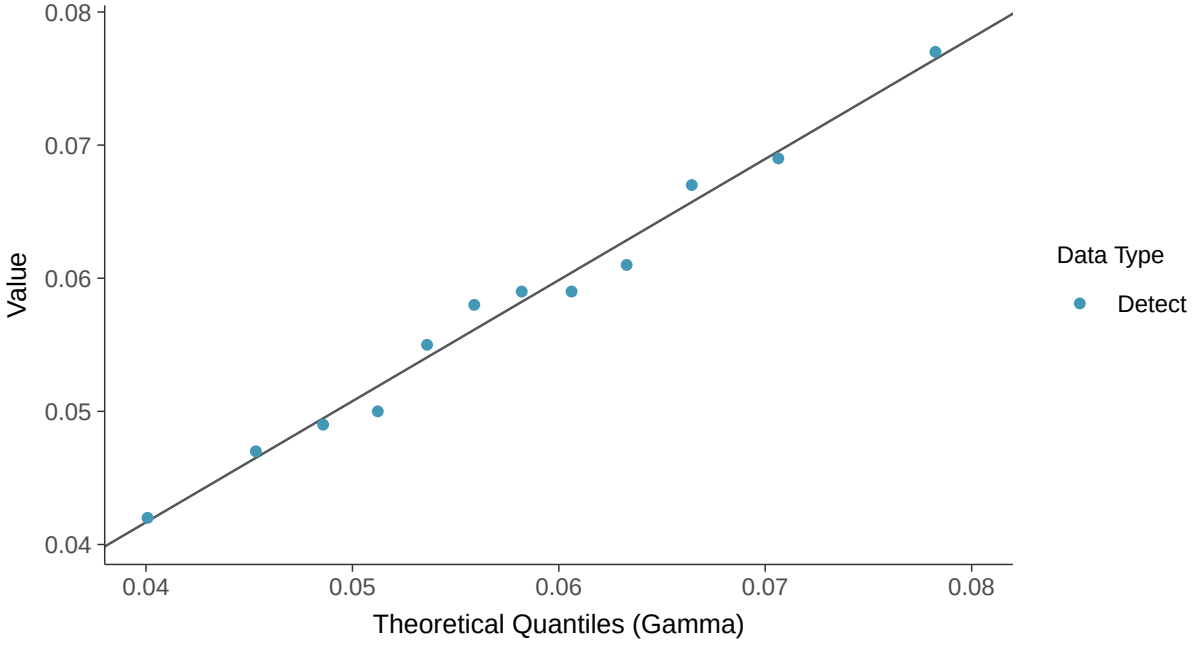
Lognormal Q-Q plot

Barium, MW-15 (mg/l)



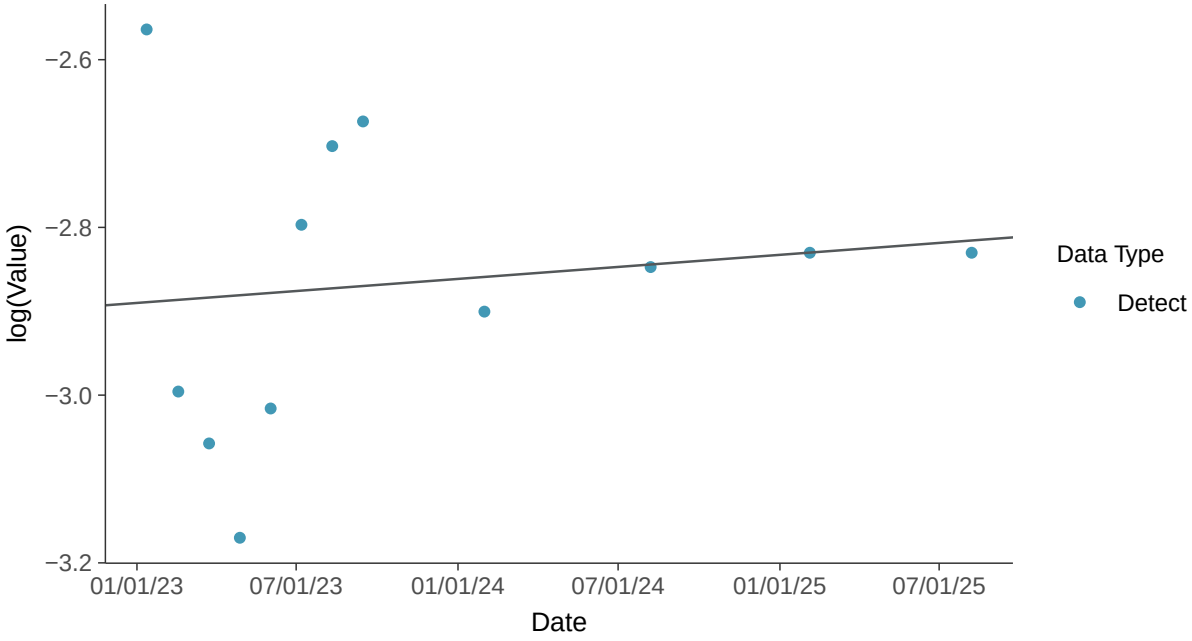
Gamma Q-Q plot

Barium, MW-15 (mg/l)



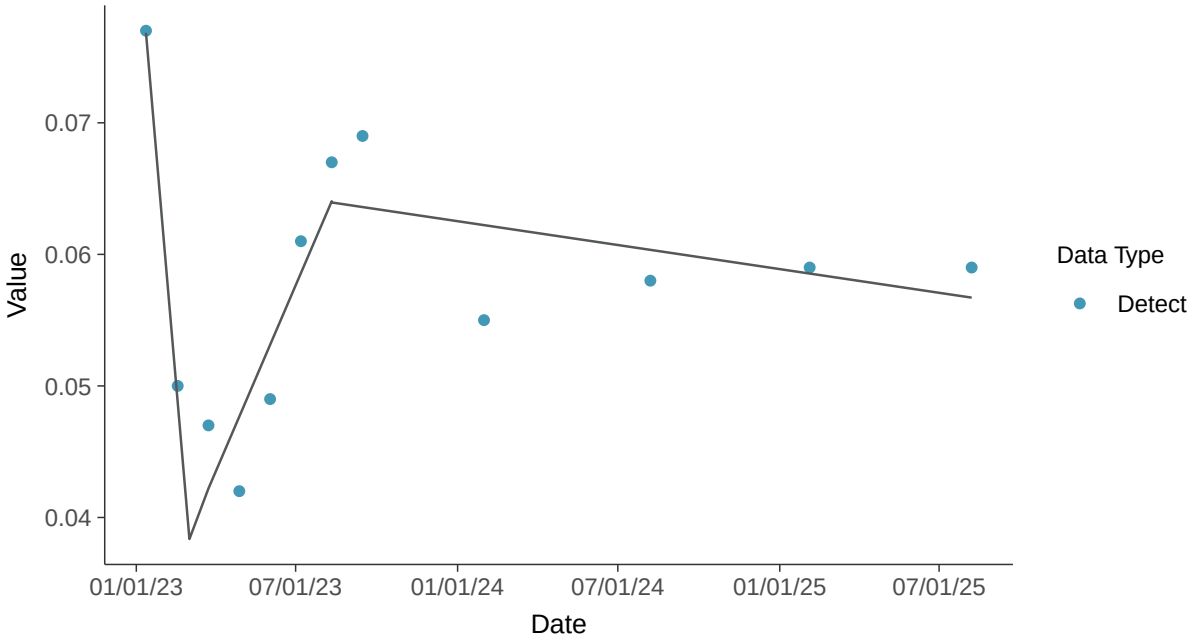
Trend Regression: Lognormal MLE

Barium, MW-15 (mg/l)



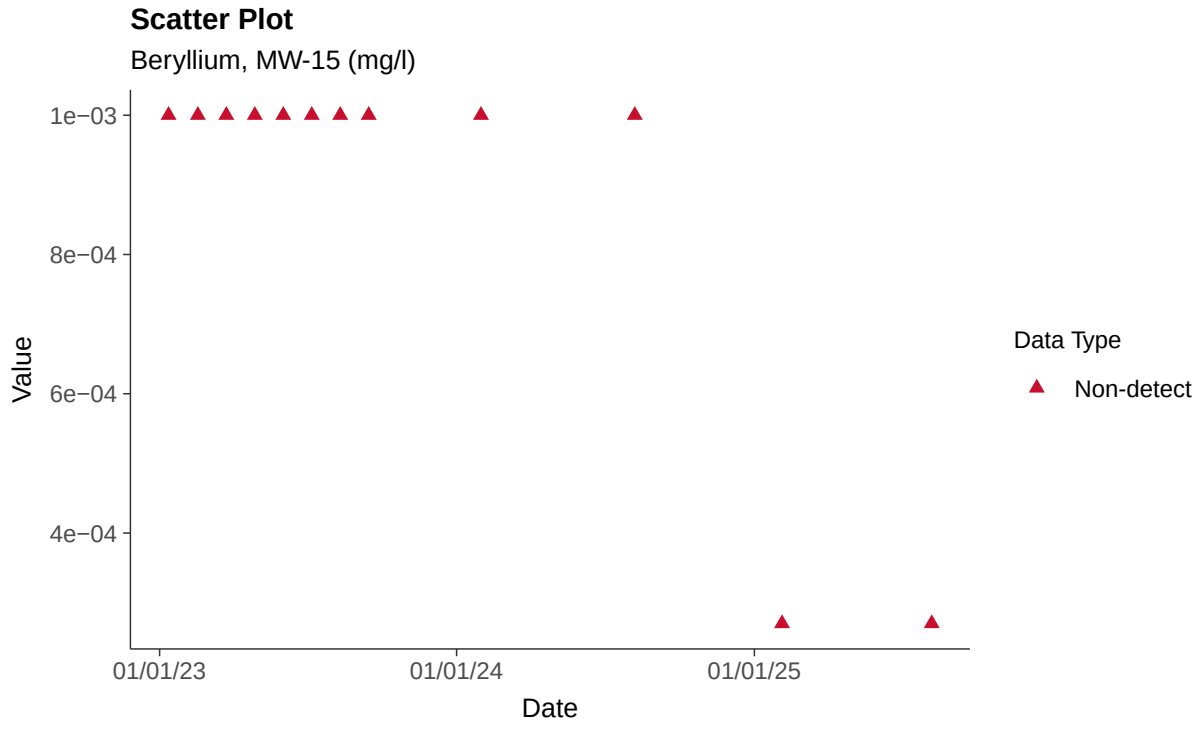
Trend Regression: Piecewise Linear-Linear-Linear

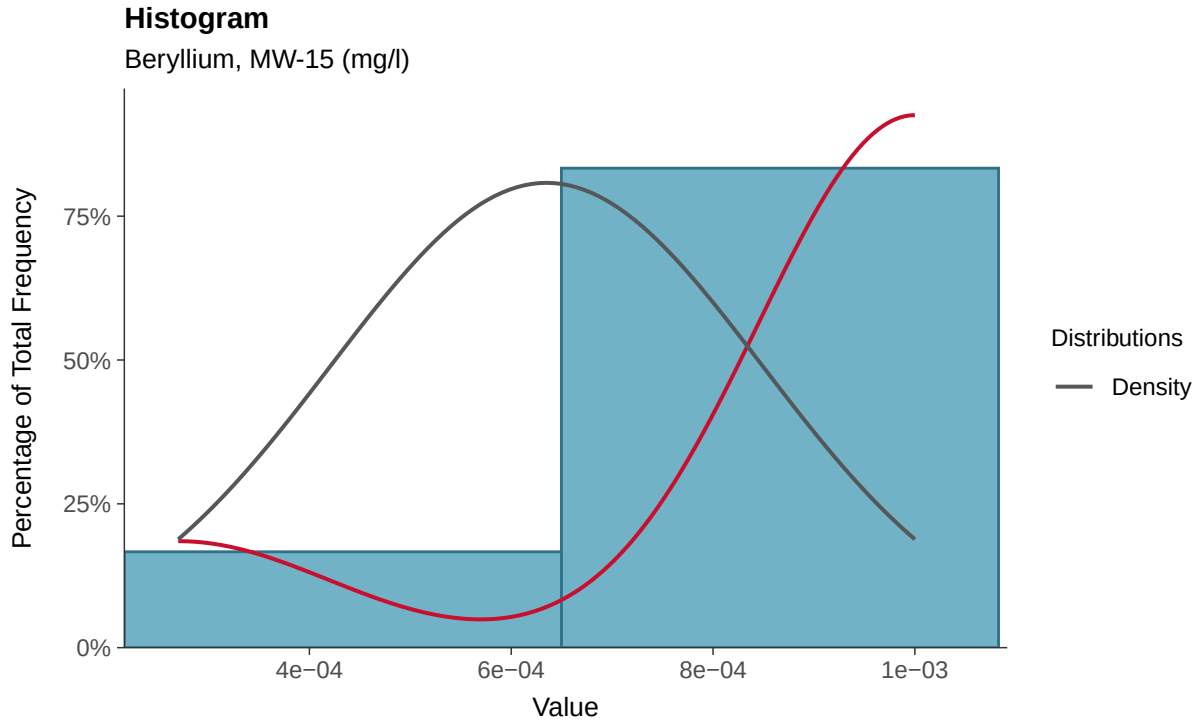
Barium, MW-15 (mg/l)



Appendix IV: Beryllium, MW-15

ID: 24_3_104



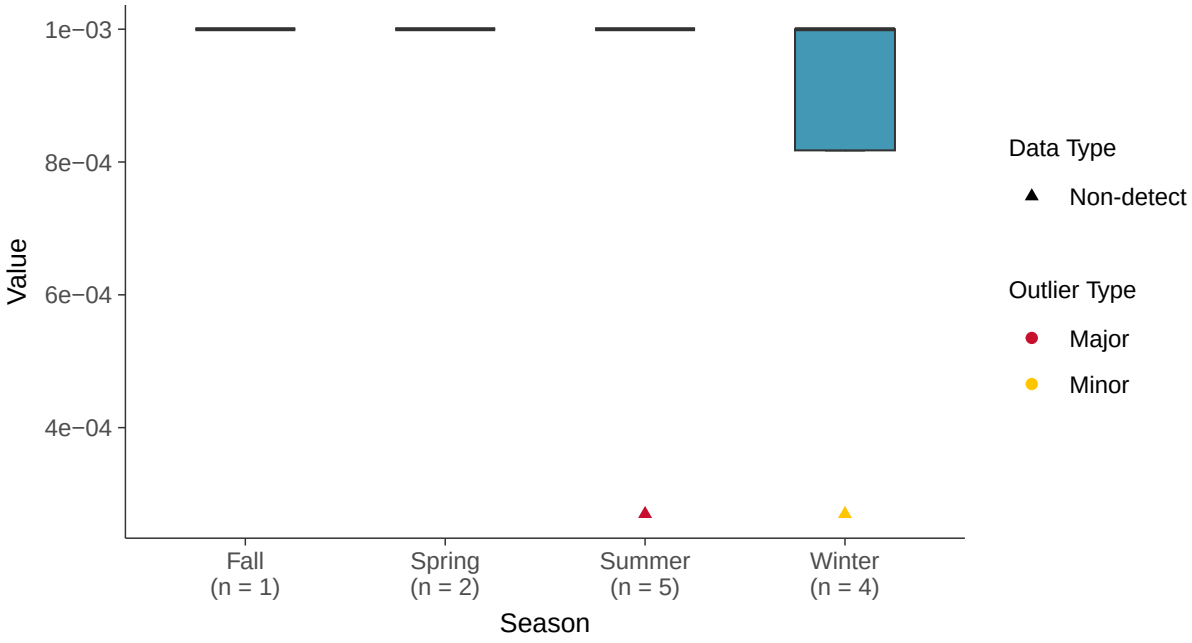


Boxplot

Beryllium, MW-15 (mg/l)

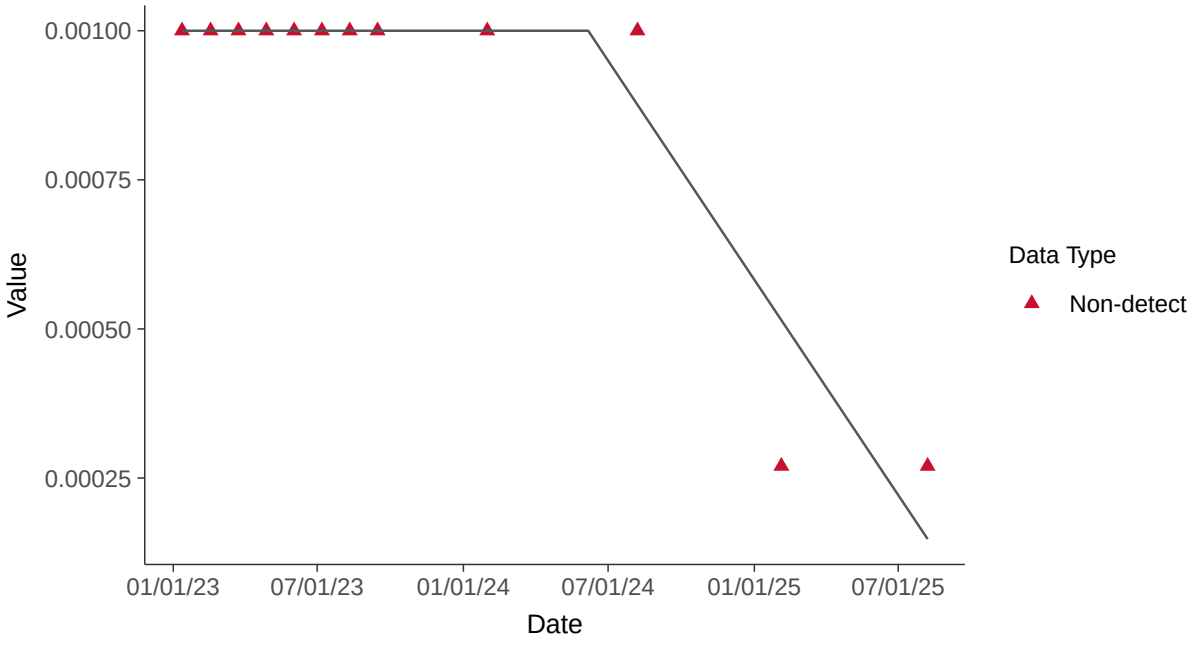
Boxplot by Season

Beryllium, MW-15 (mg/l)



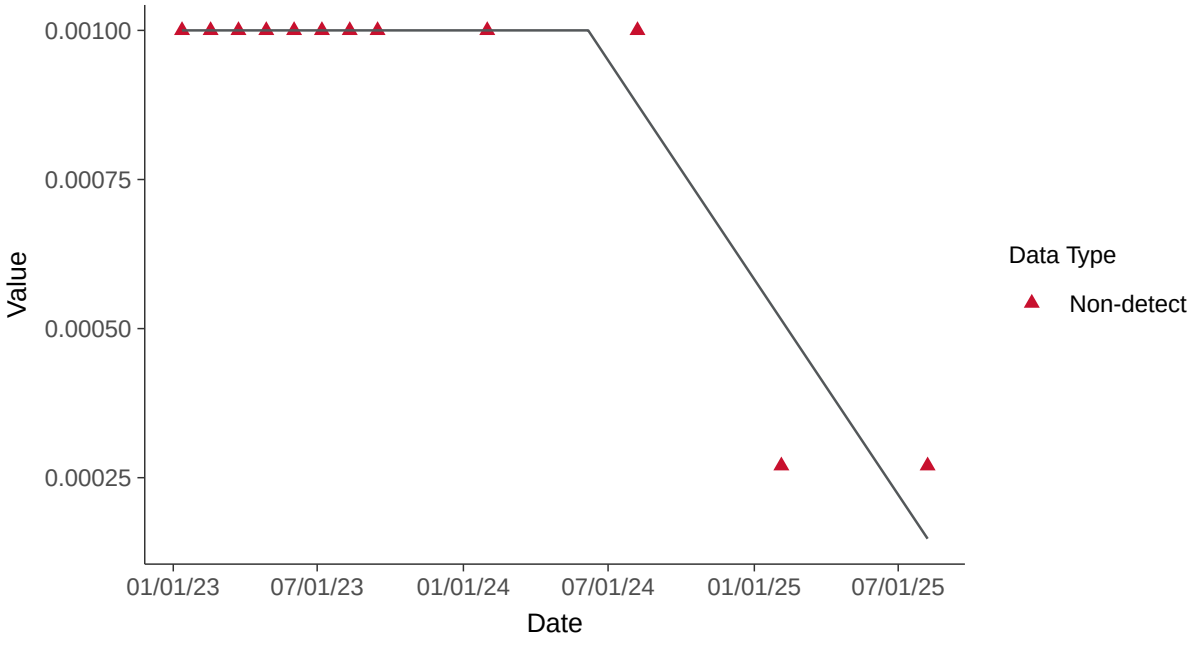
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-15 (mg/l)



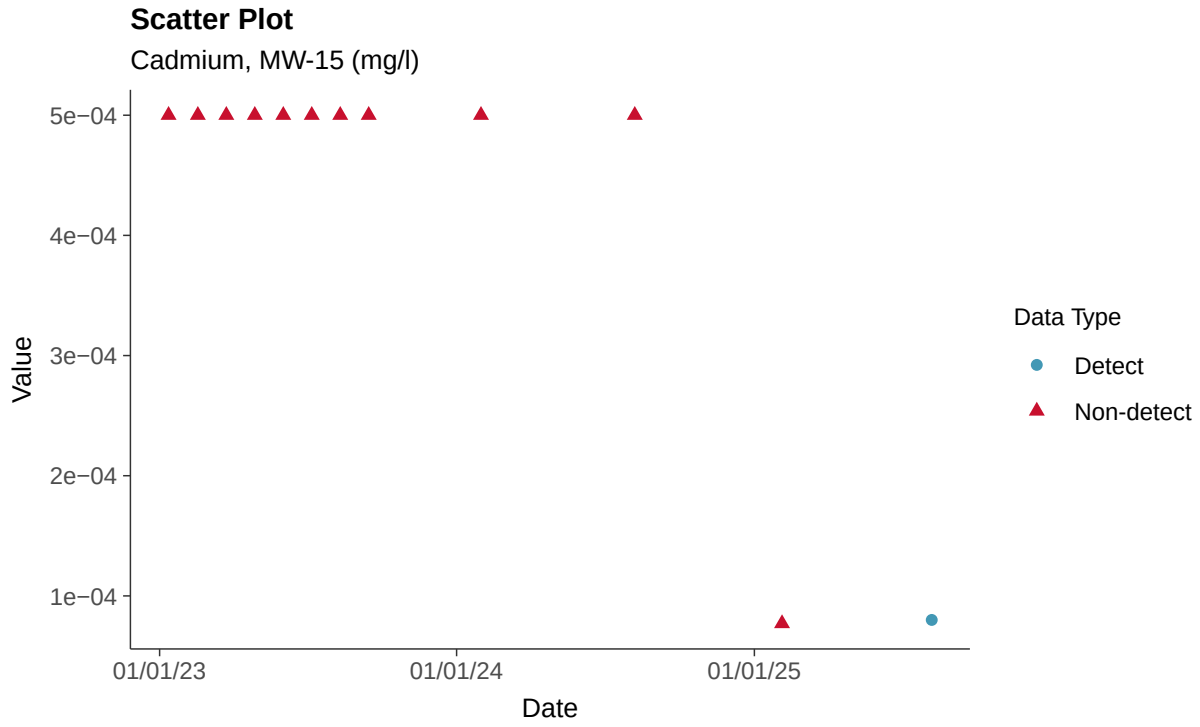
Trend Regression: Piecewise Linear-Linear-Linear

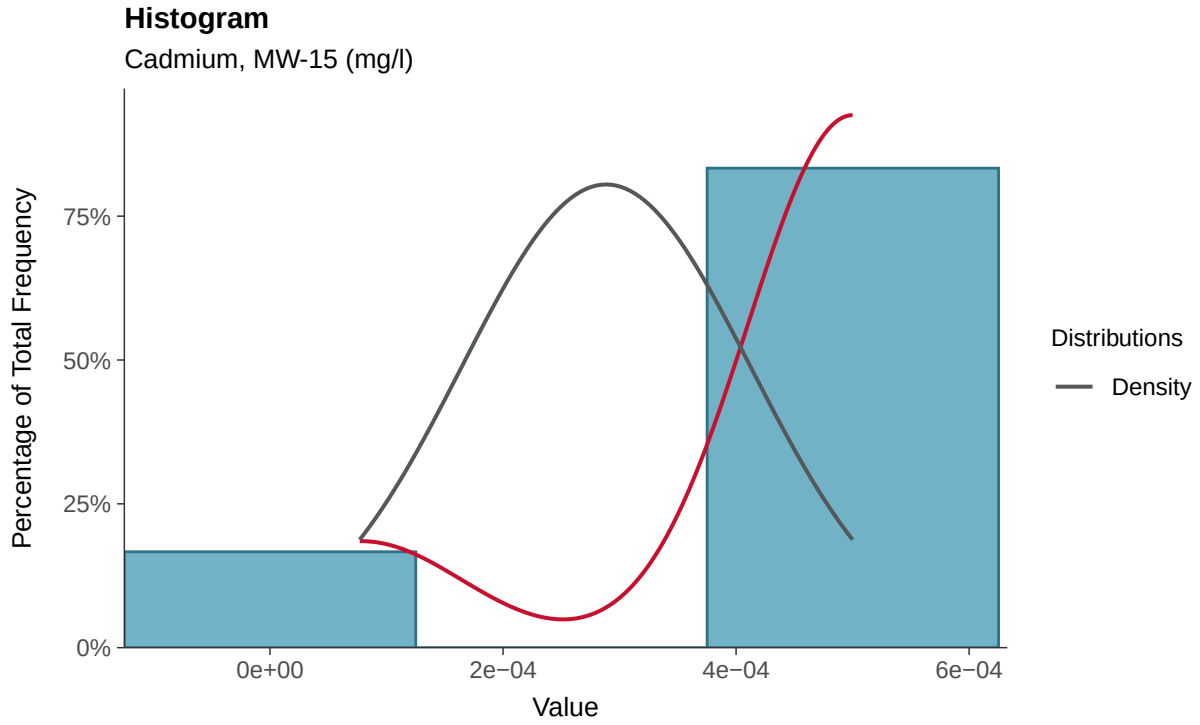
Beryllium, MW-15 (mg/l)



Appendix IV: Cadmium, MW-15

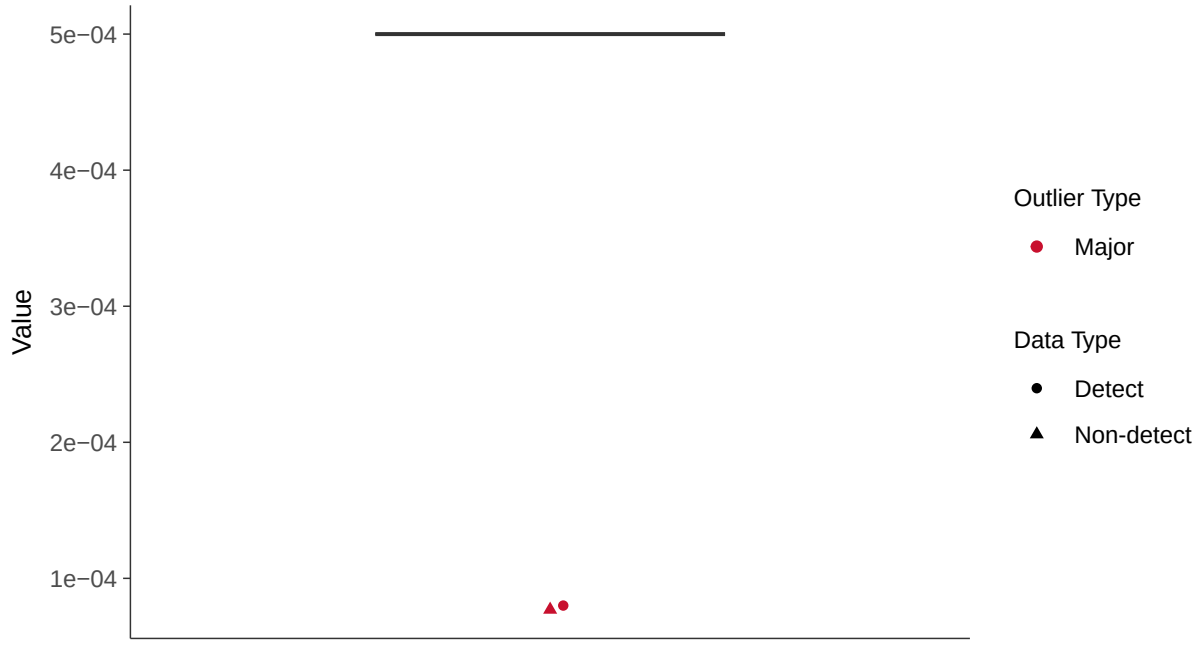
ID: 24_3_106





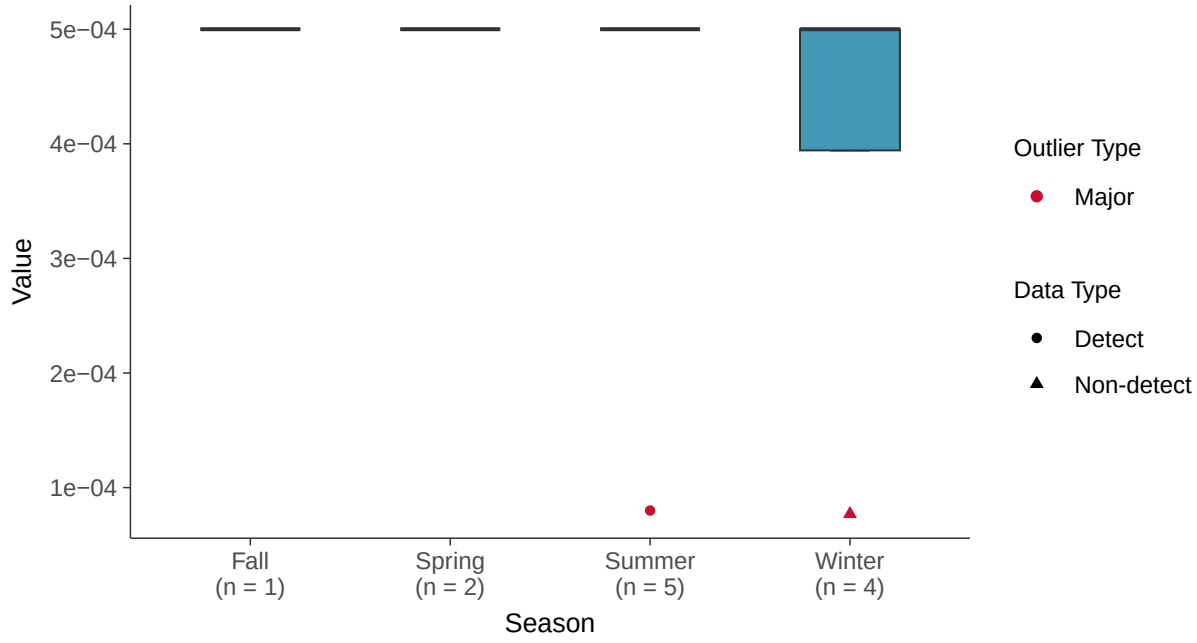
Boxplot

Cadmium, MW-15 (mg/l)



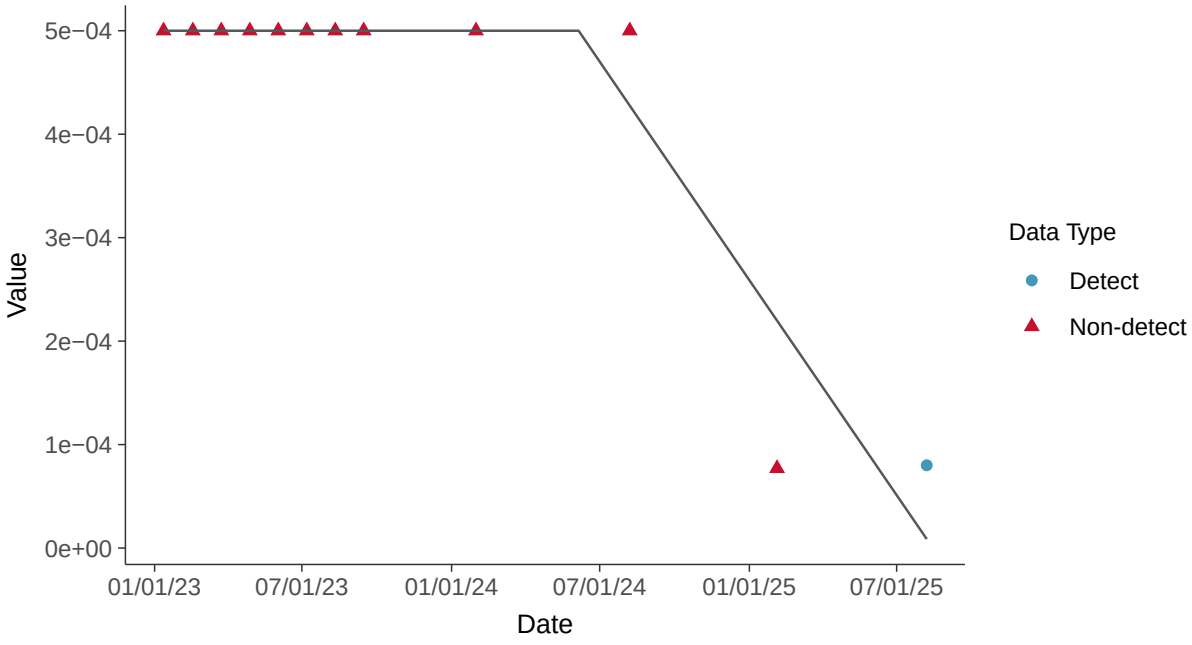
Boxplot by Season

Cadmium, MW-15 (mg/l)



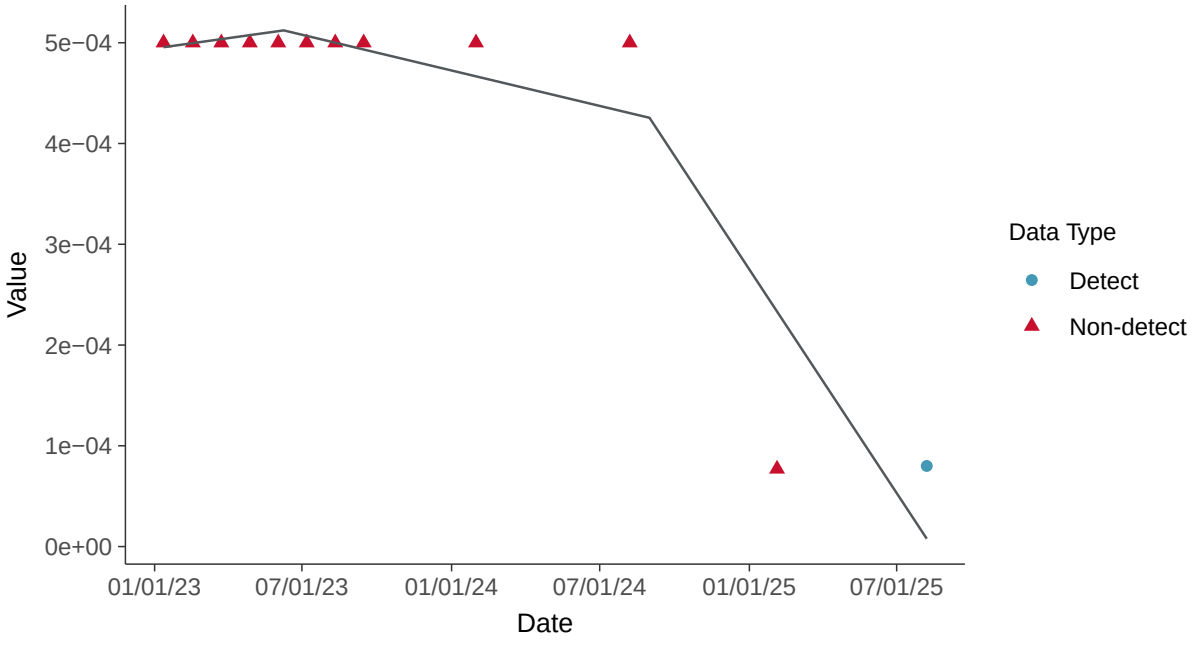
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-15 (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-15 (mg/l)

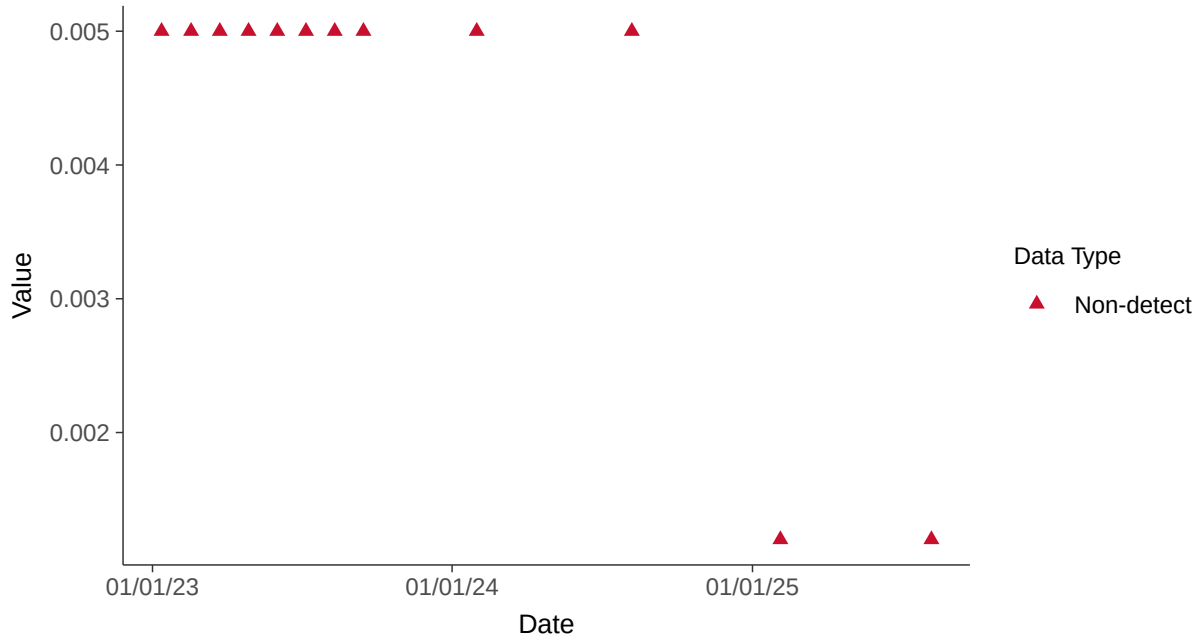


Appendix IV: Chromium, MW-15

ID: 24_3_109

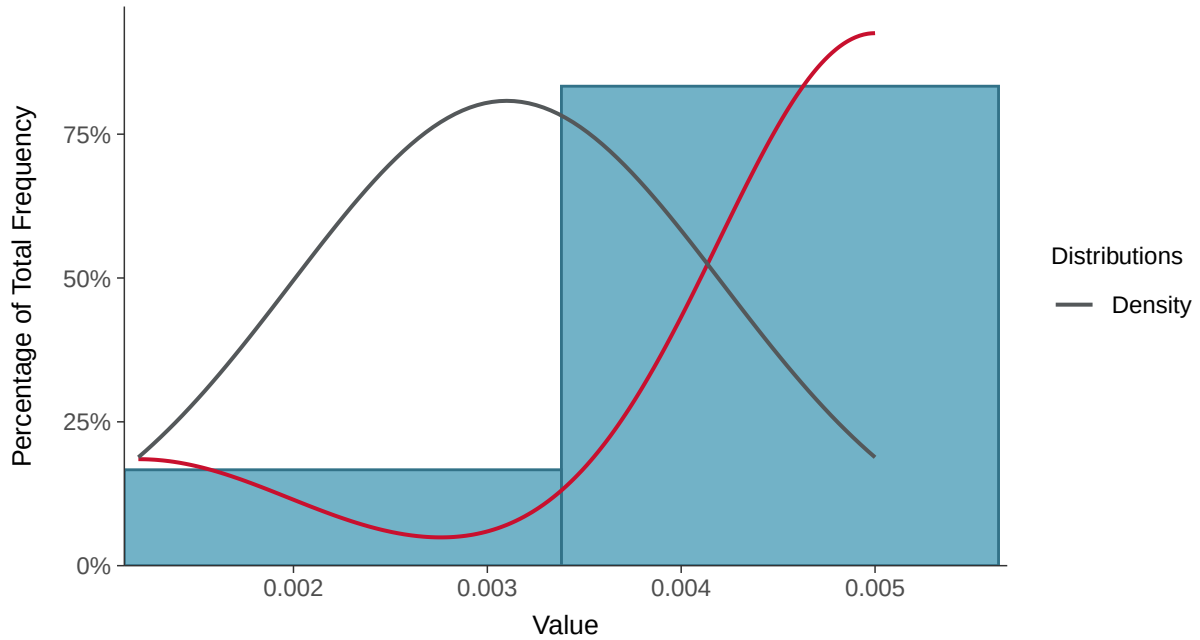
Scatter Plot

Chromium, MW-15 (mg/l)



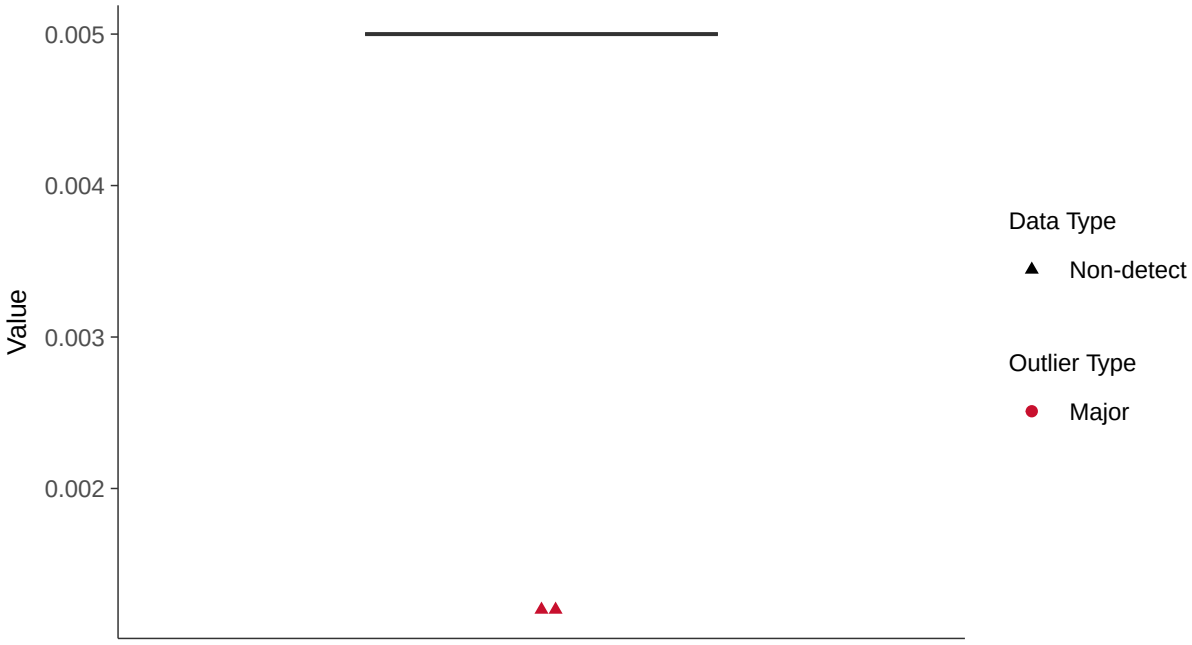
Histogram

Chromium, MW-15 (mg/l)



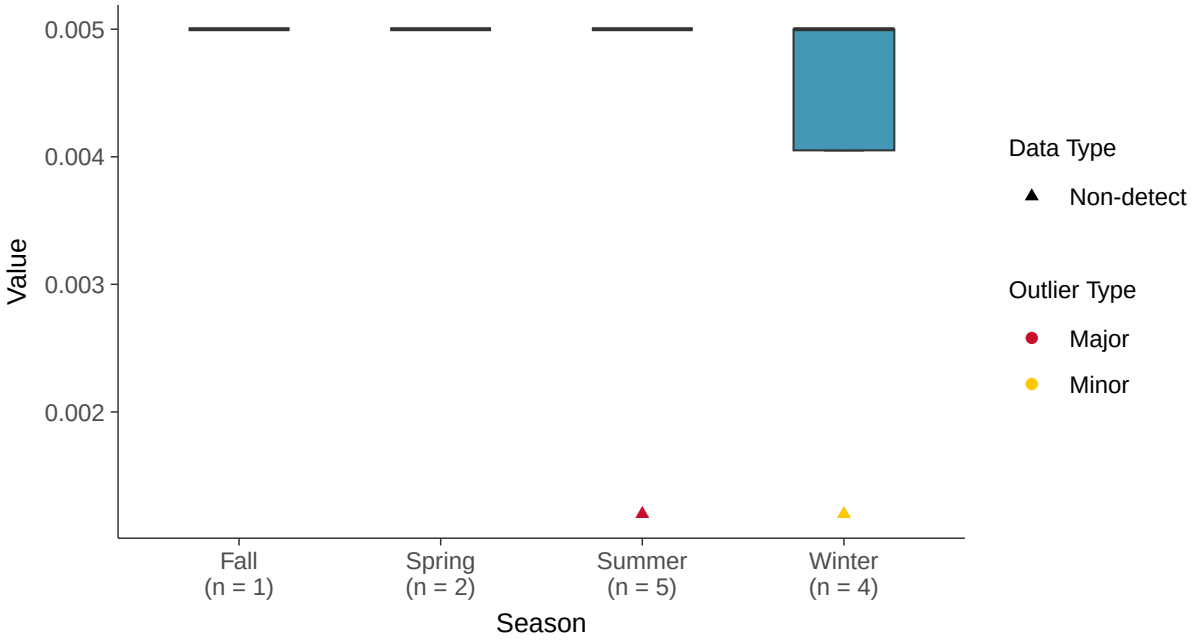
Boxplot

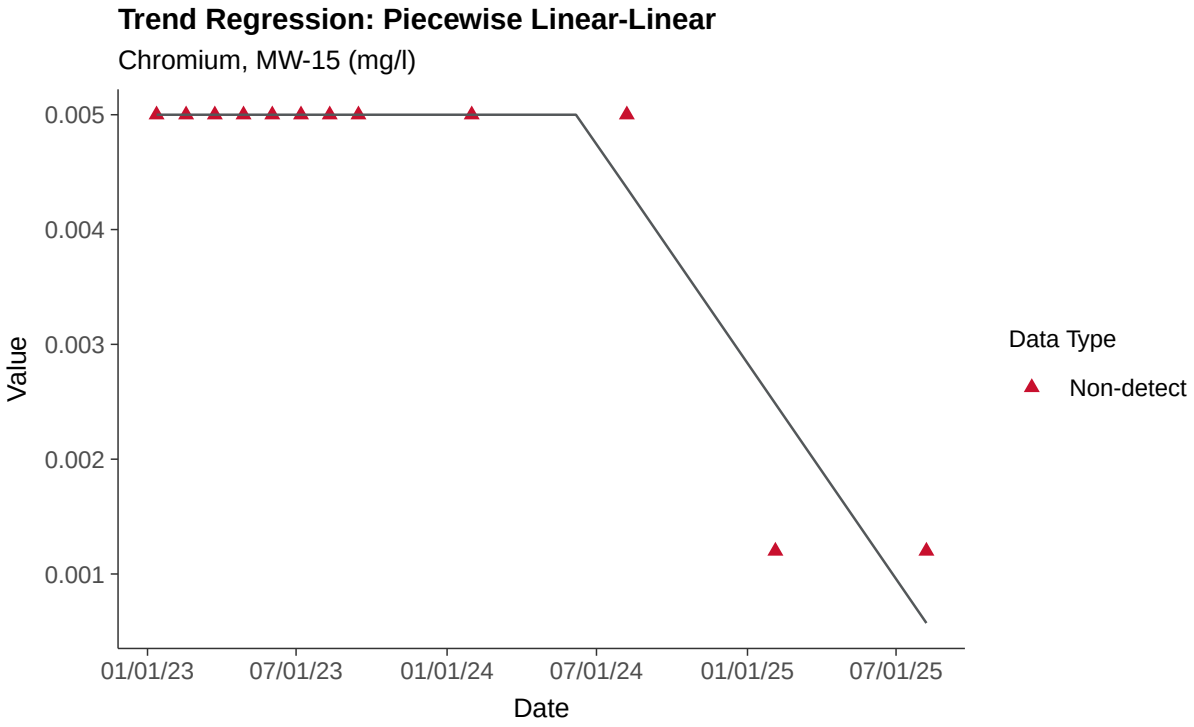
Chromium, MW-15 (mg/l)



Boxplot by Season

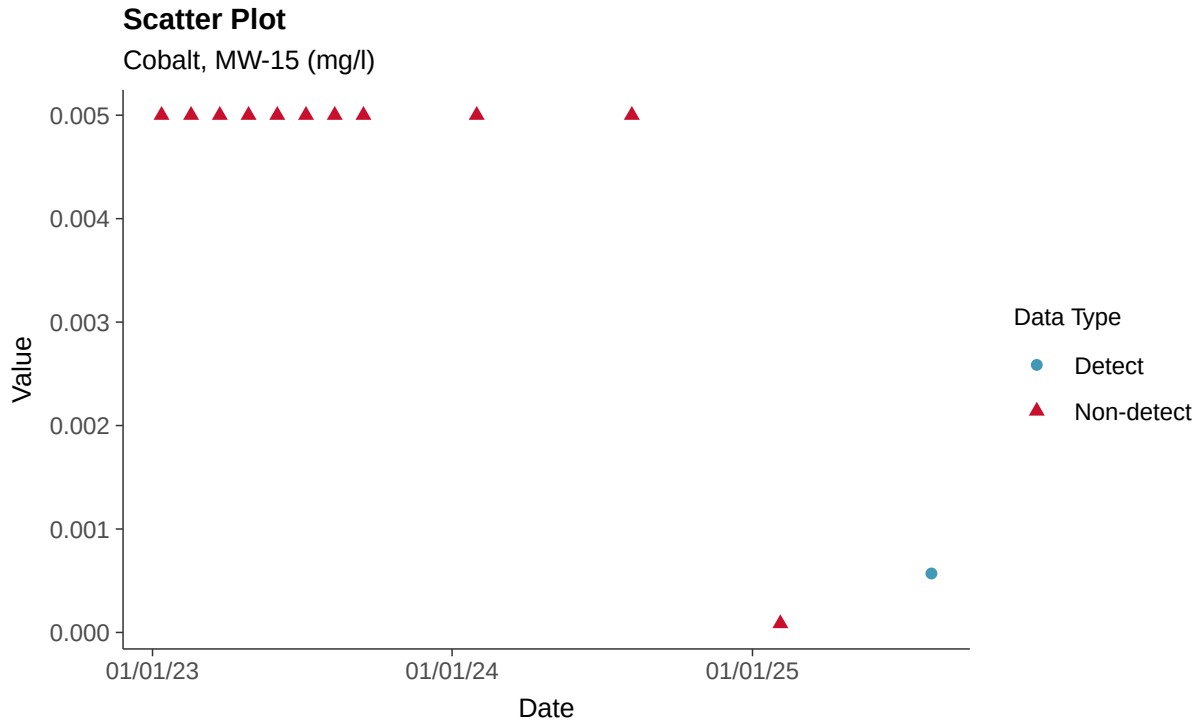
Chromium, MW-15 (mg/l)

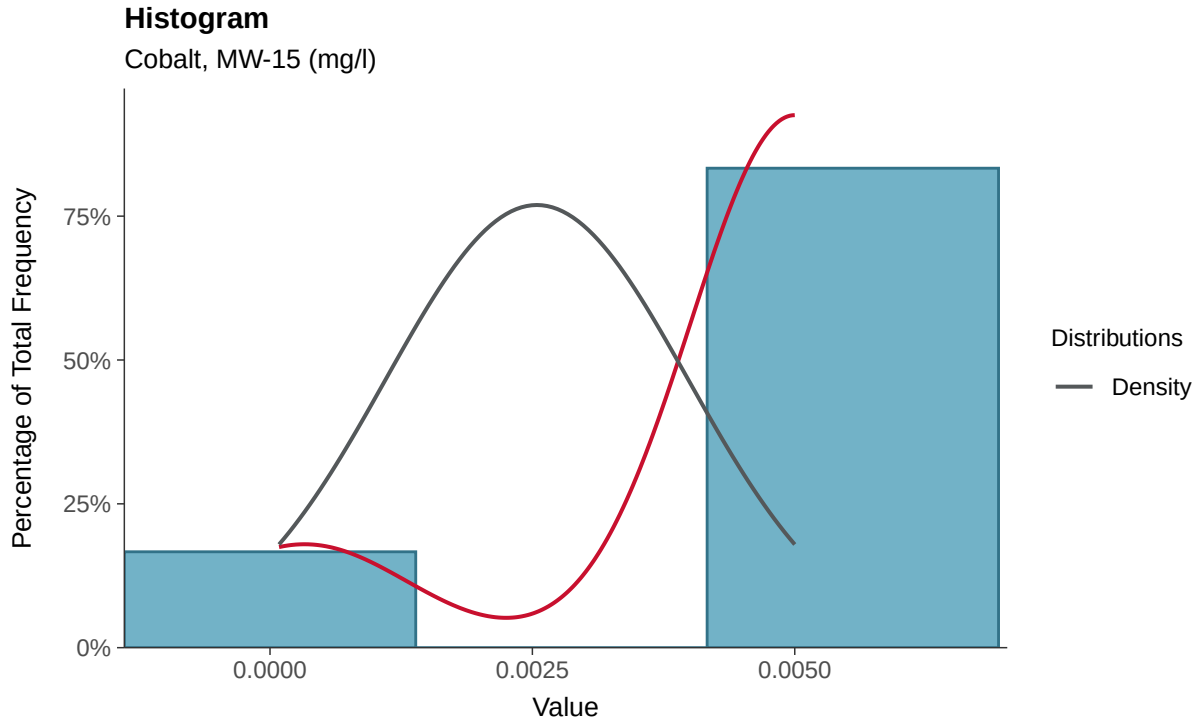



Trend Regression: Piecewise Linear-Linear
Chromium, MW-15 (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Cobalt, MW-15

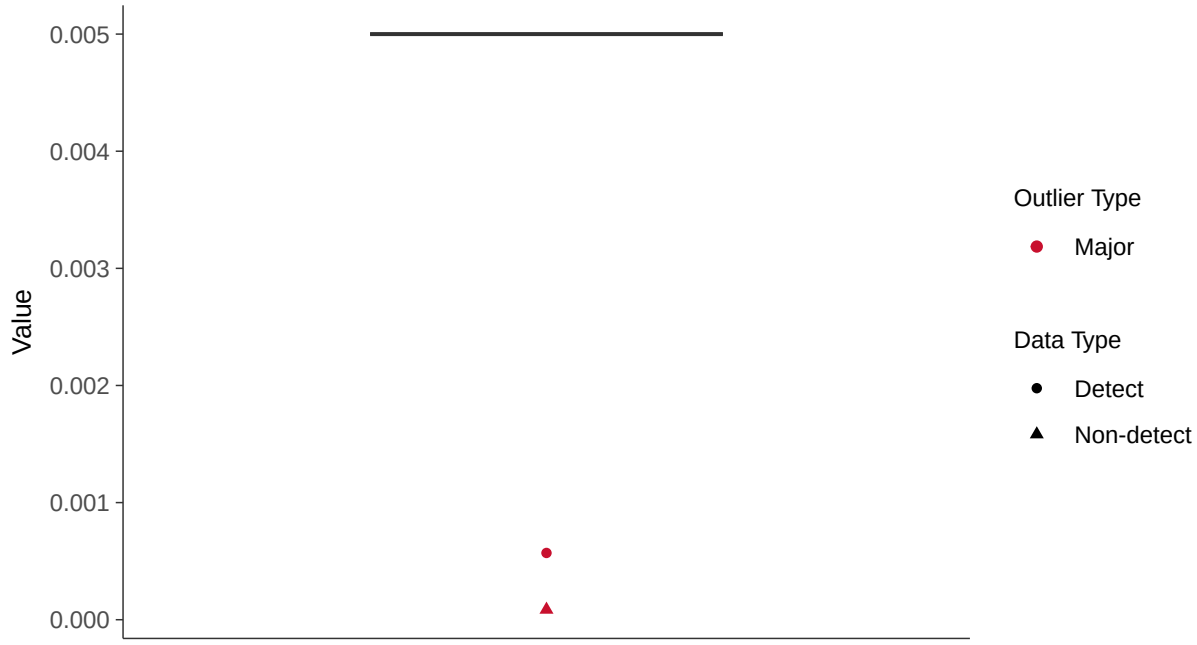
ID: 24_3_110





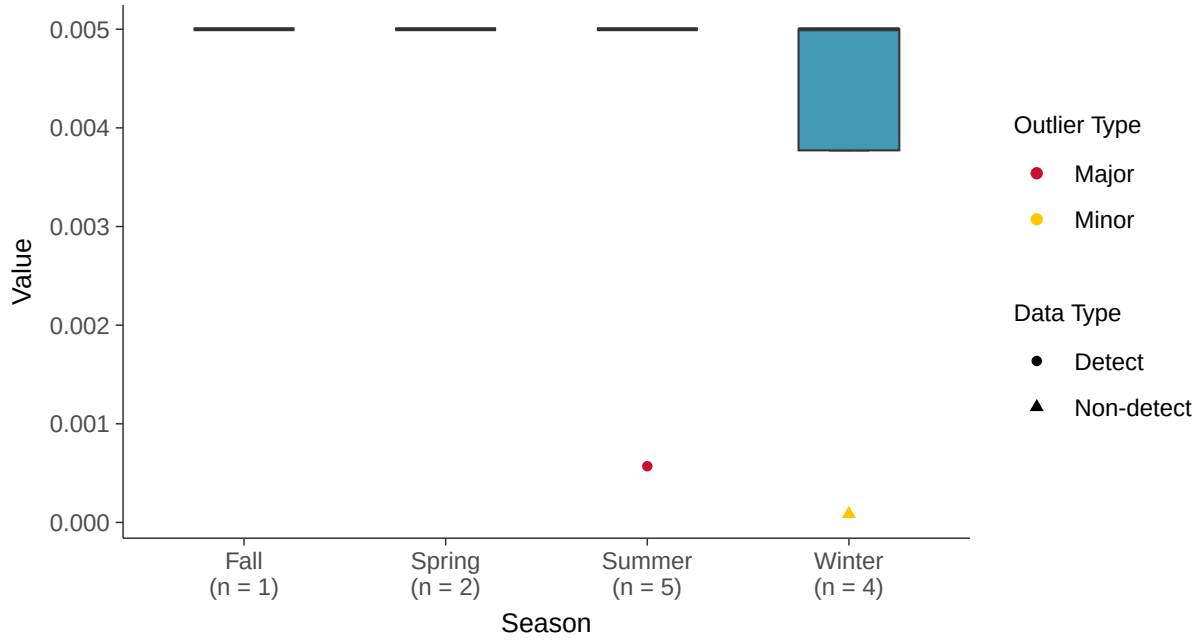
Boxplot

Cobalt, MW-15 (mg/l)



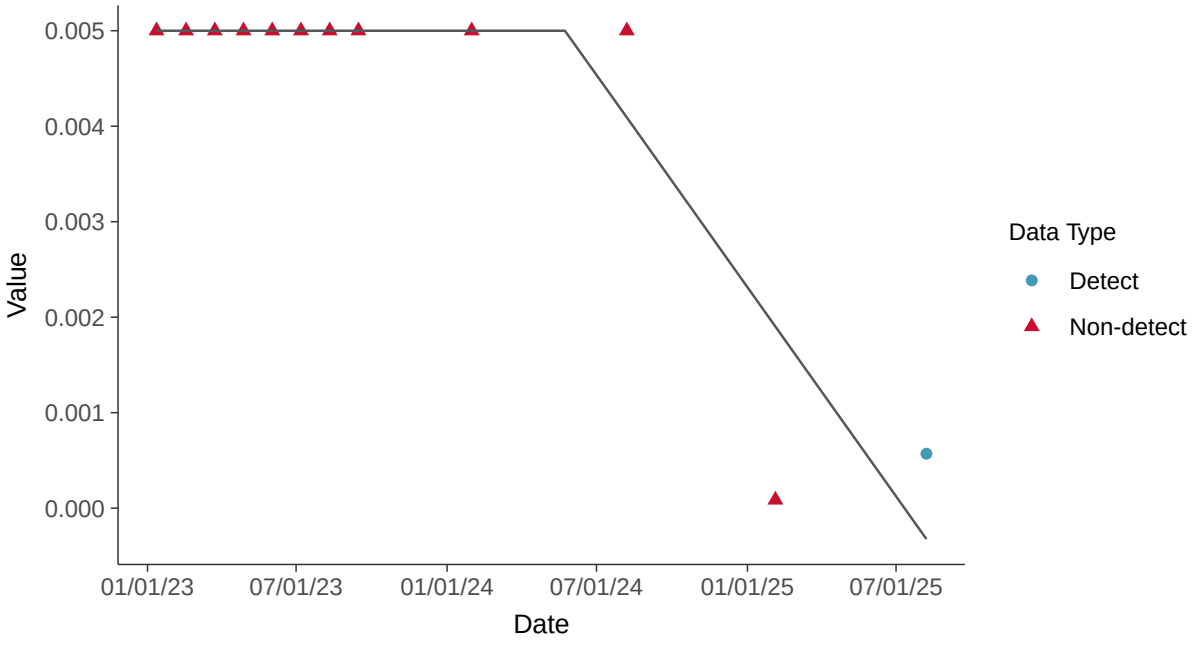
Boxplot by Season

Cobalt, MW-15 (mg/l)



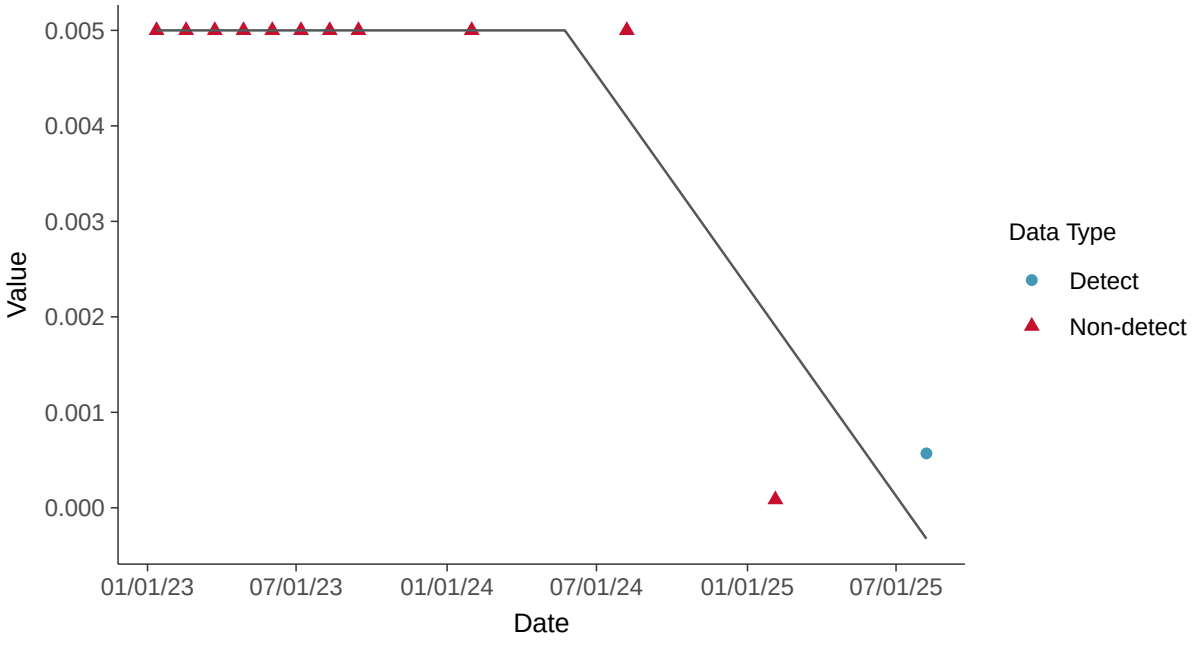
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-15 (mg/l)



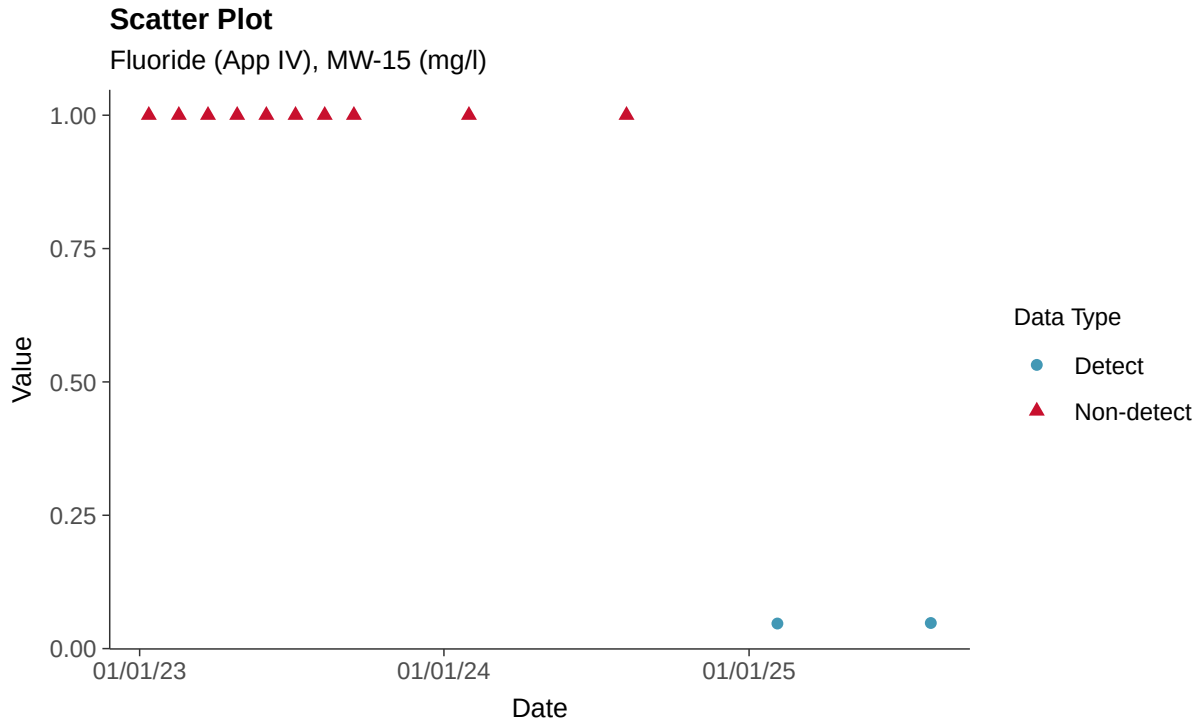
Trend Regression: Piecewise Linear-Linear-Linear

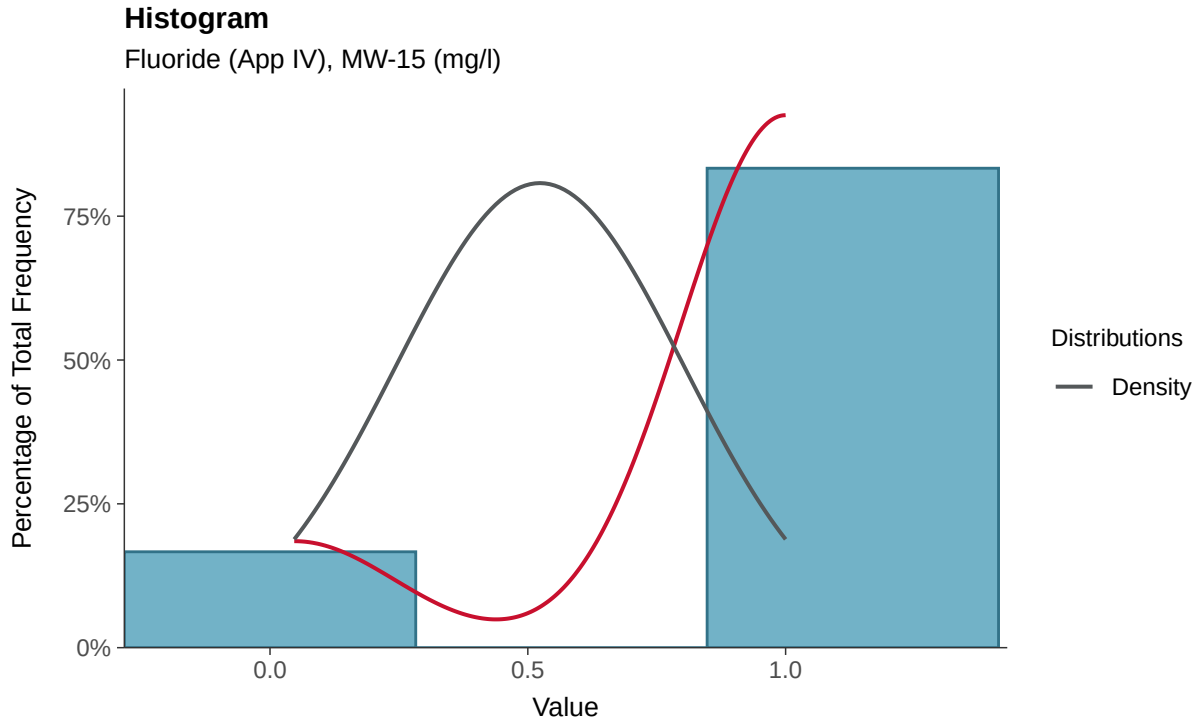
Cobalt, MW-15 (mg/l)



Appendix IV: Fluoride (App IV), MW-15

ID: 24_3_113



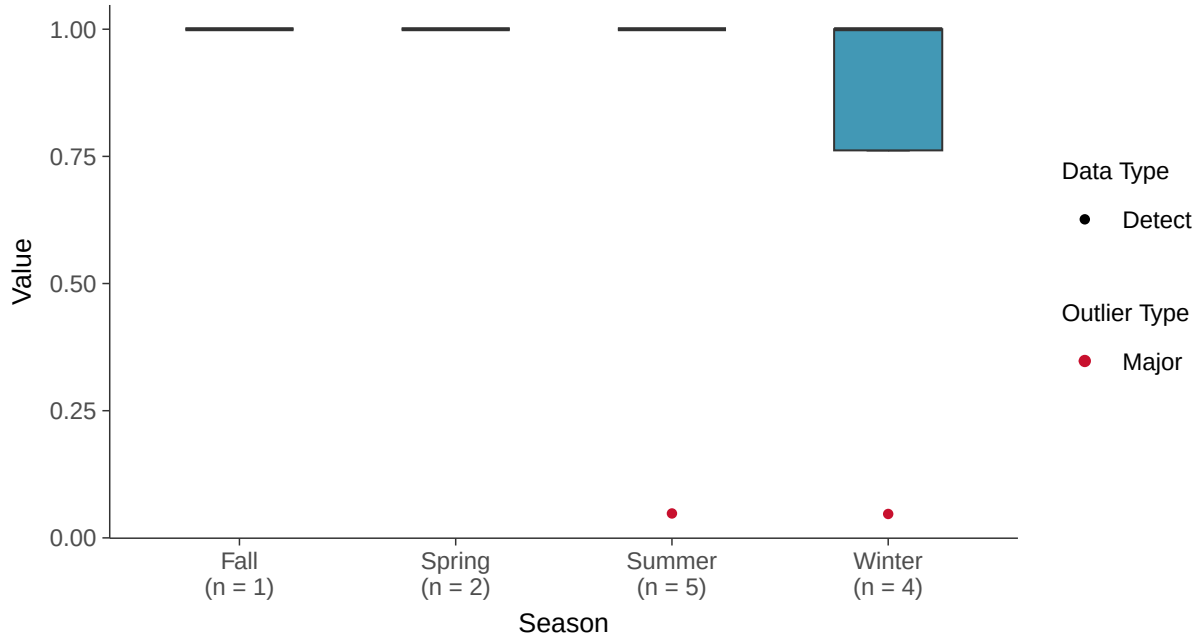


Boxplot

Fluoride (App IV), MW-15 (mg/l)

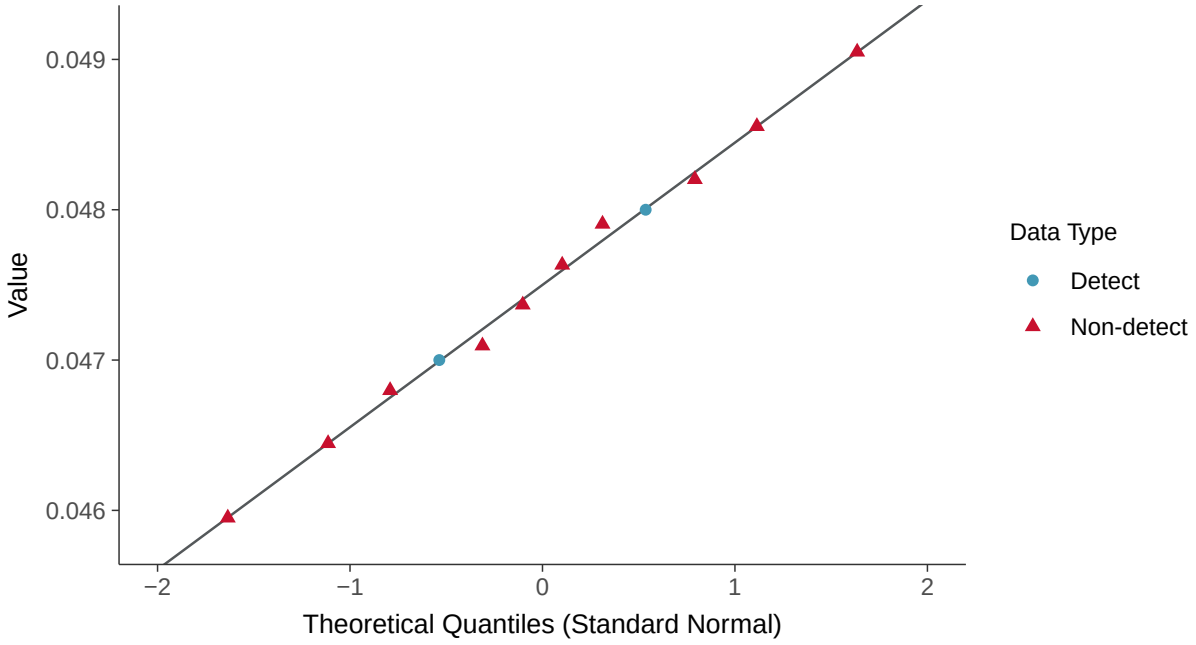
Boxplot by Season

Fluoride (App IV), MW-15 (mg/l)



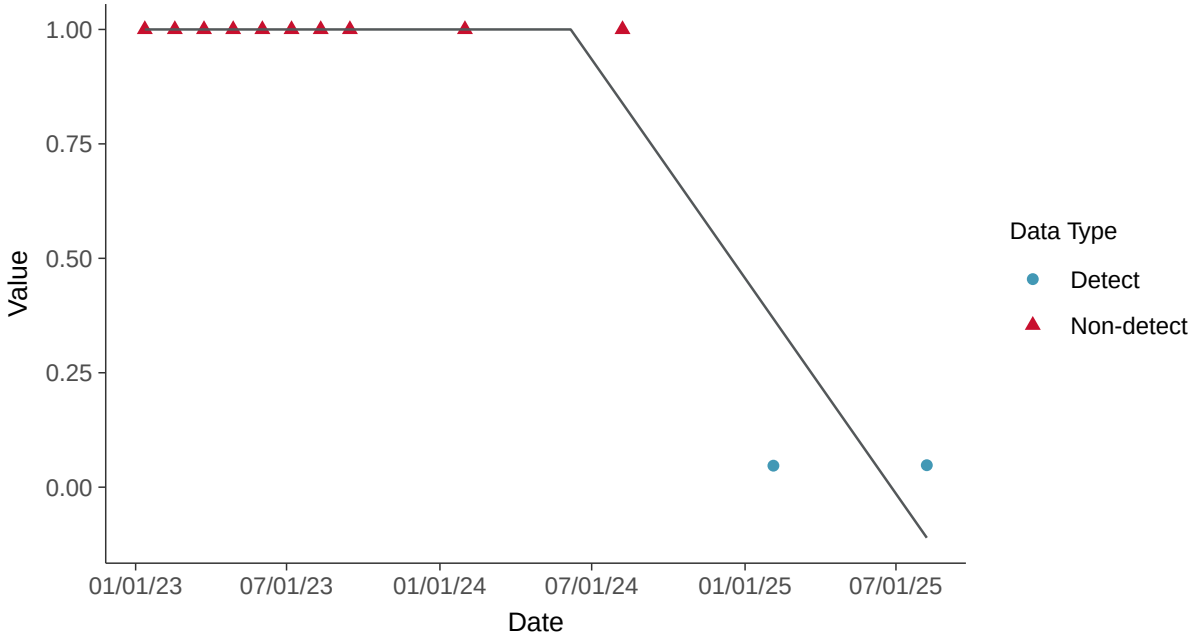
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-15 (mg/l)



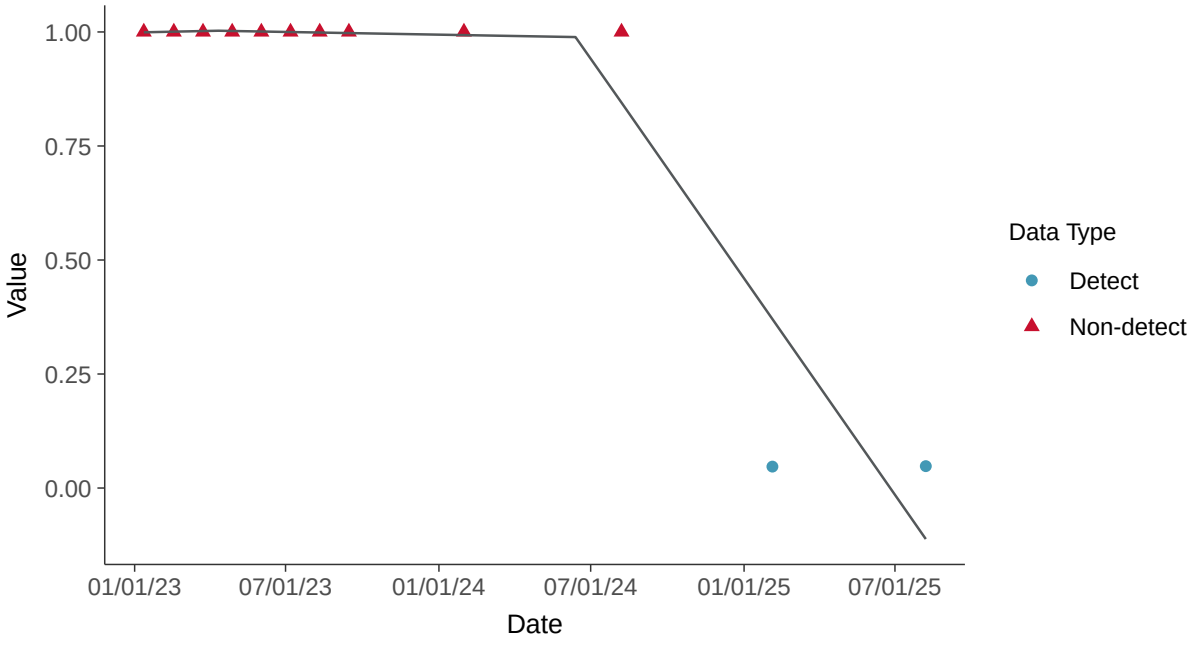
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-15 (mg/l)



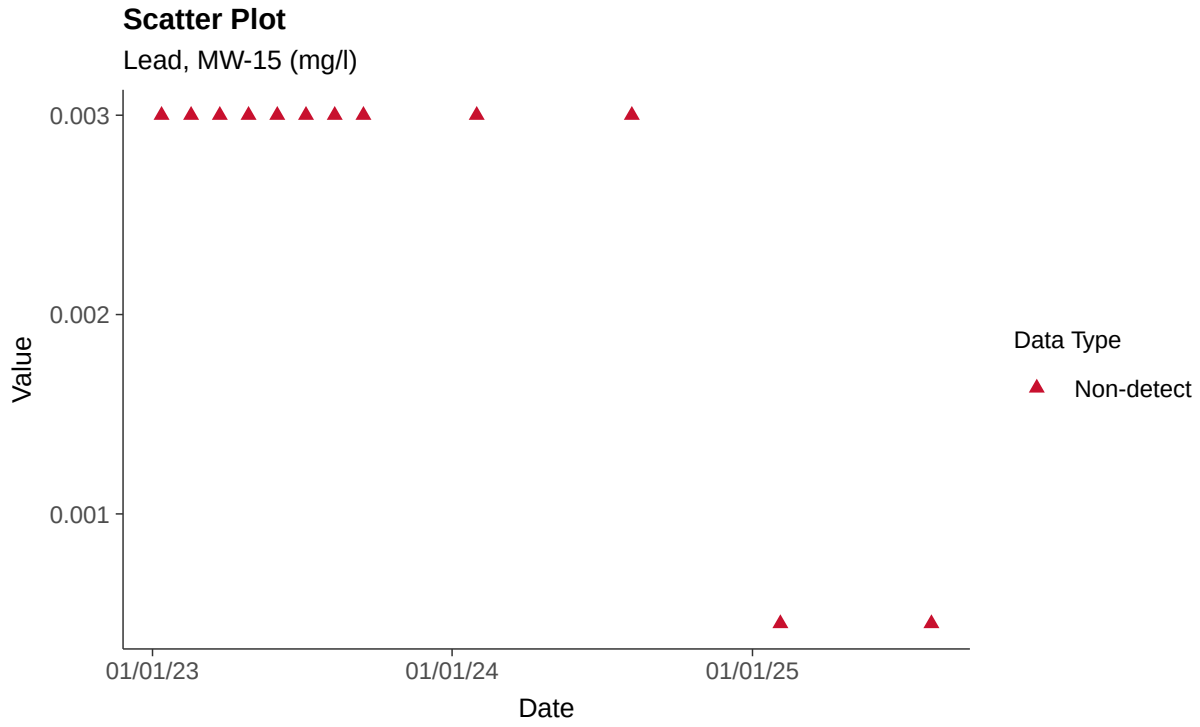
Trend Regression: Piecewise Linear-Linear-Linear

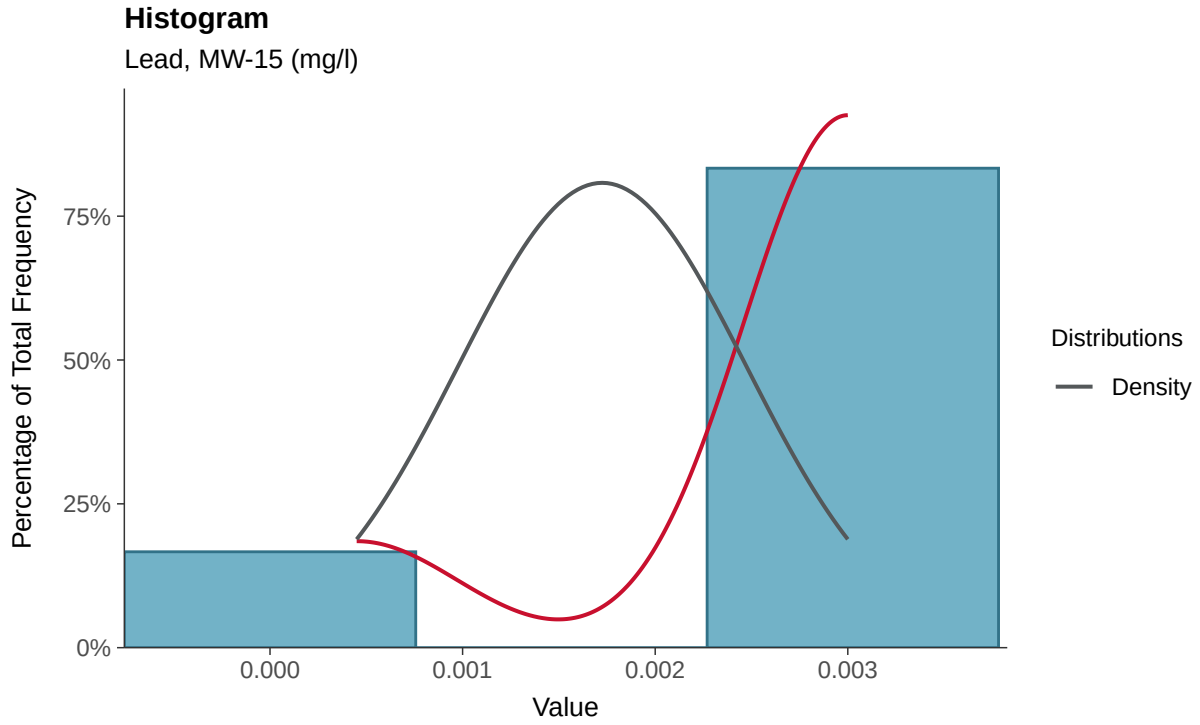
Fluoride (App IV), MW-15 (mg/l)



Appendix IV: Lead, MW-15

ID: 24_3_115



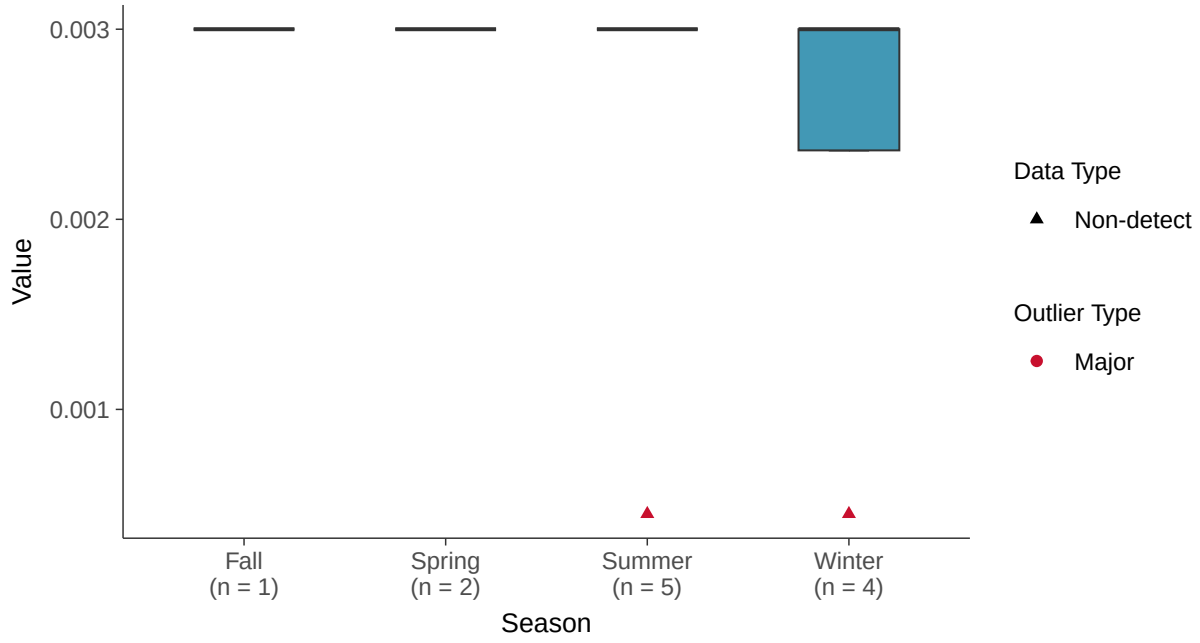


Boxplot

Lead, MW-15 (mg/l)

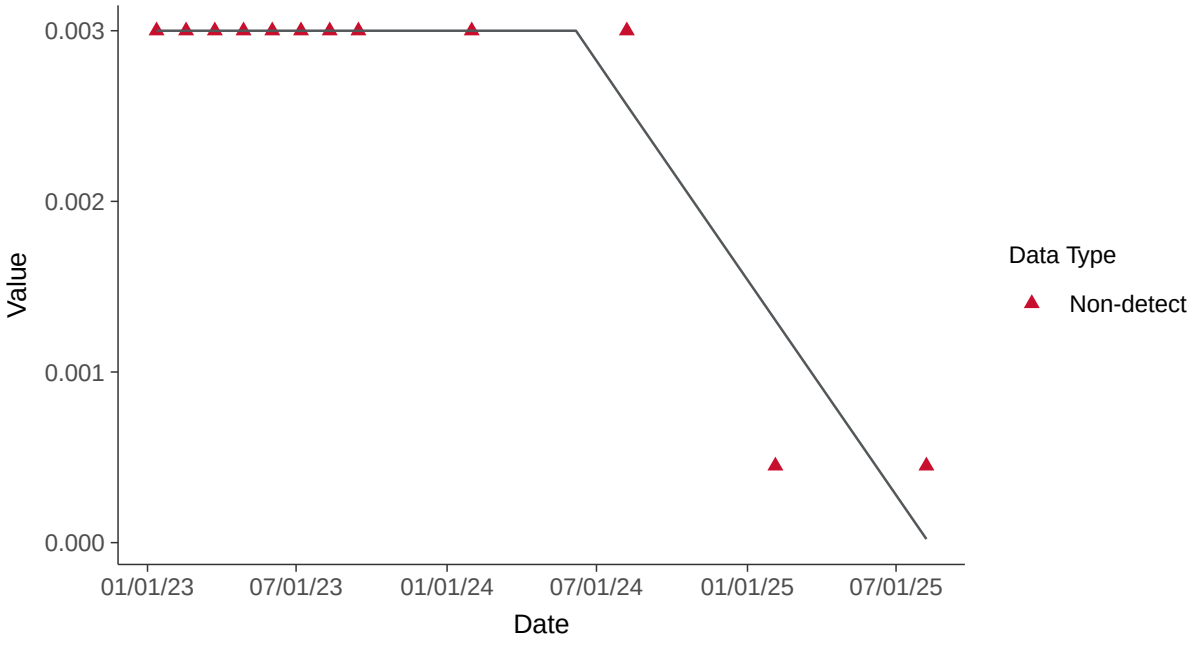
Boxplot by Season

Lead, MW-15 (mg/l)



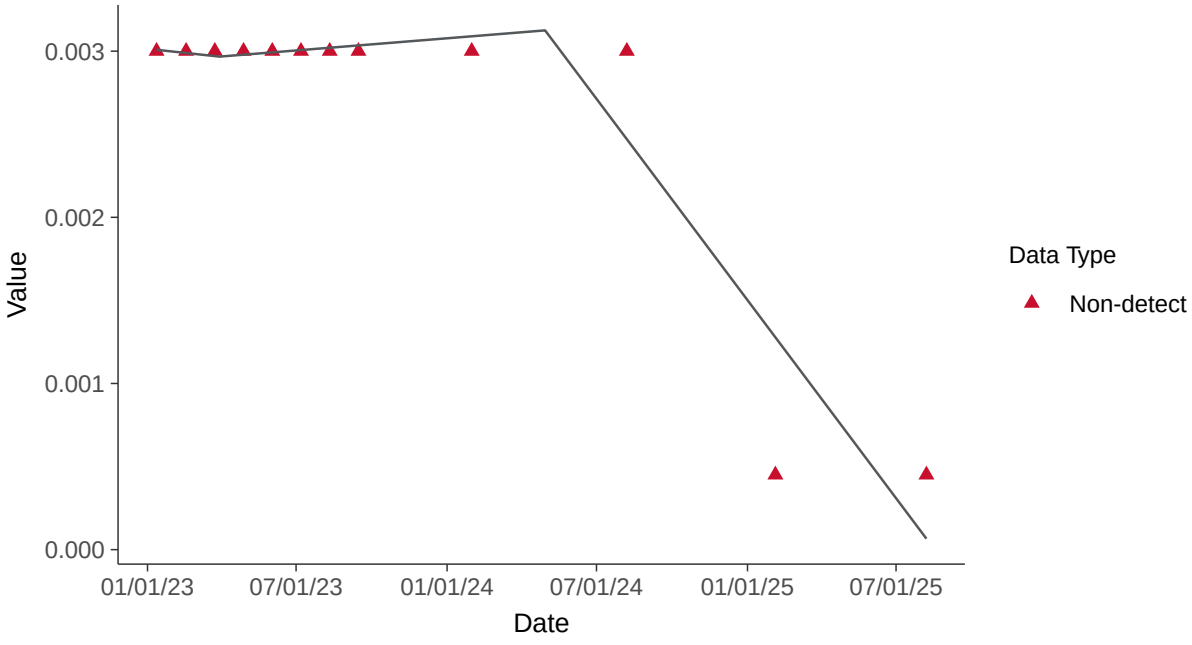
Trend Regression: Piecewise Linear-Linear

Lead, MW-15 (mg/l)



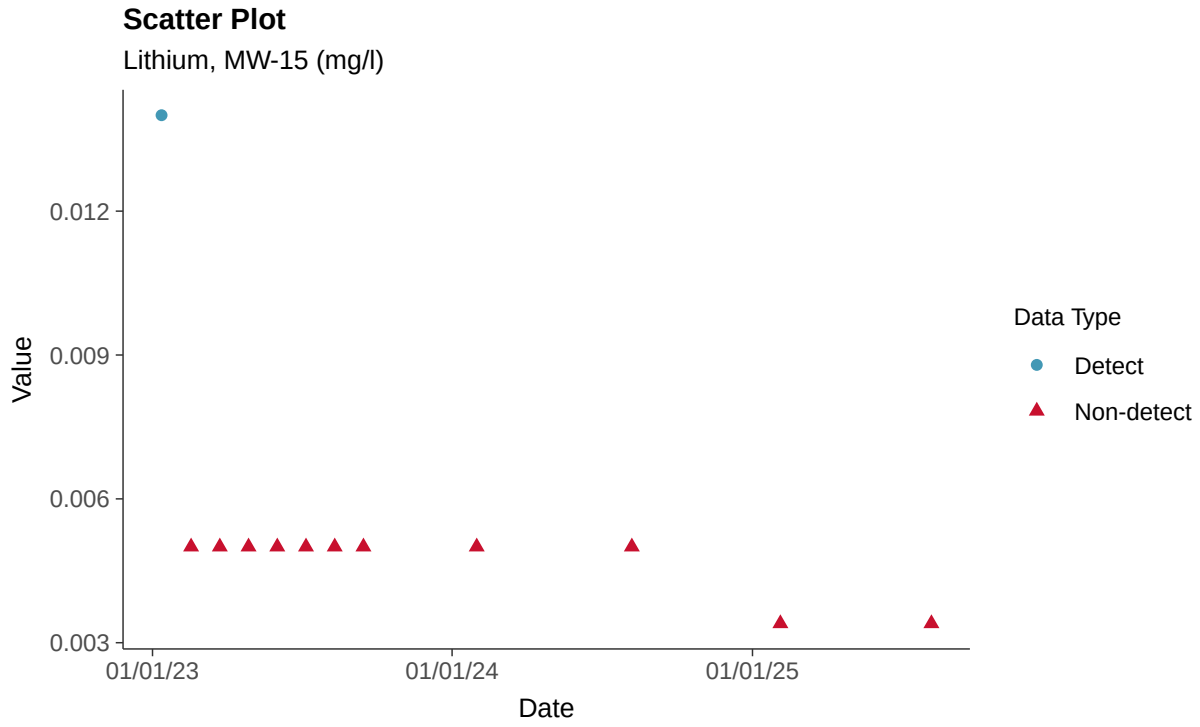
Trend Regression: Piecewise Linear-Linear-Linear

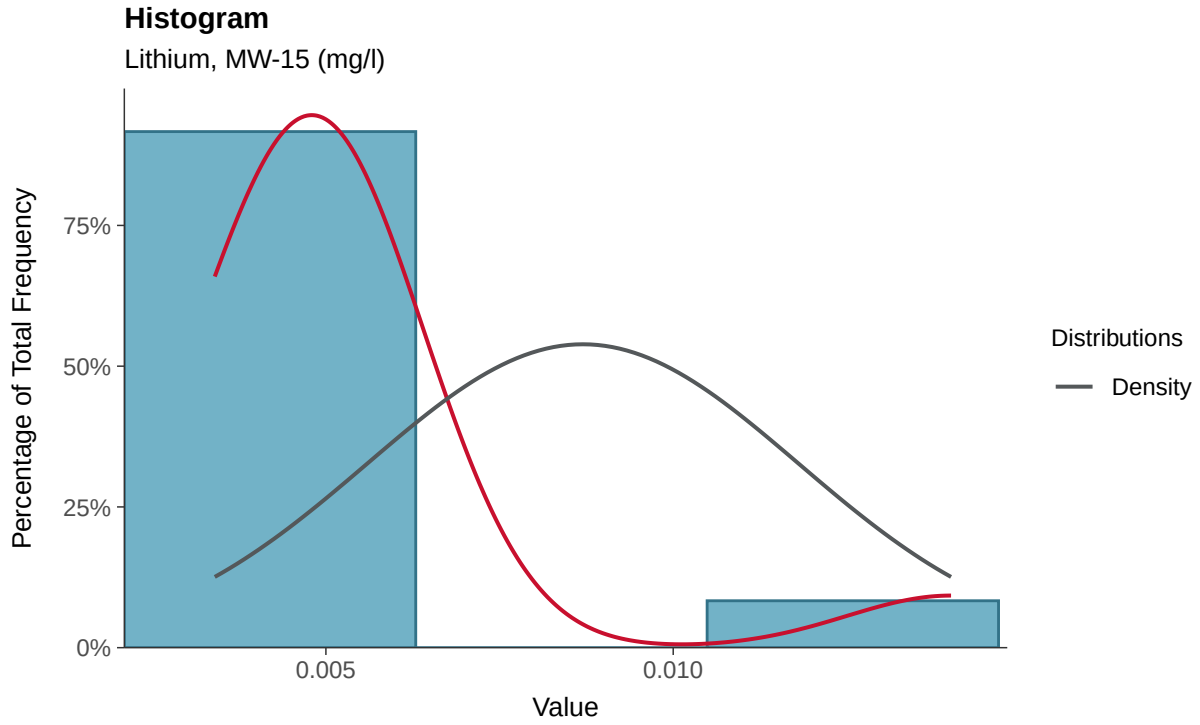
Lead, MW-15 (mg/l)



Appendix IV: Lithium, MW-15

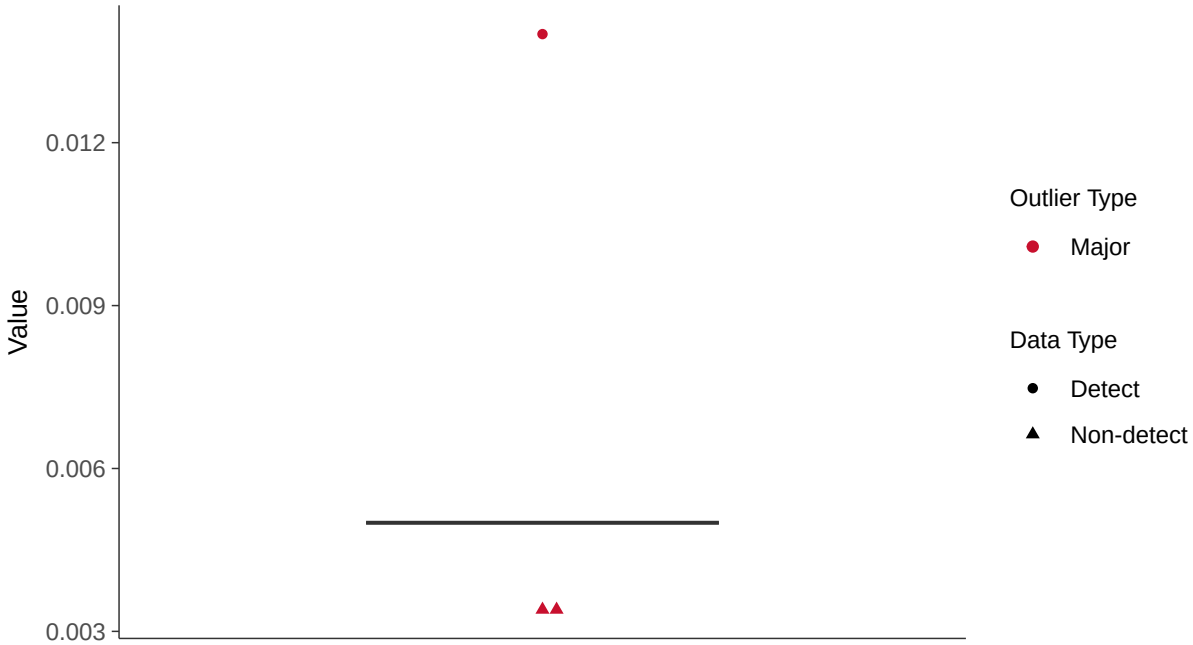
ID: 24_3_116





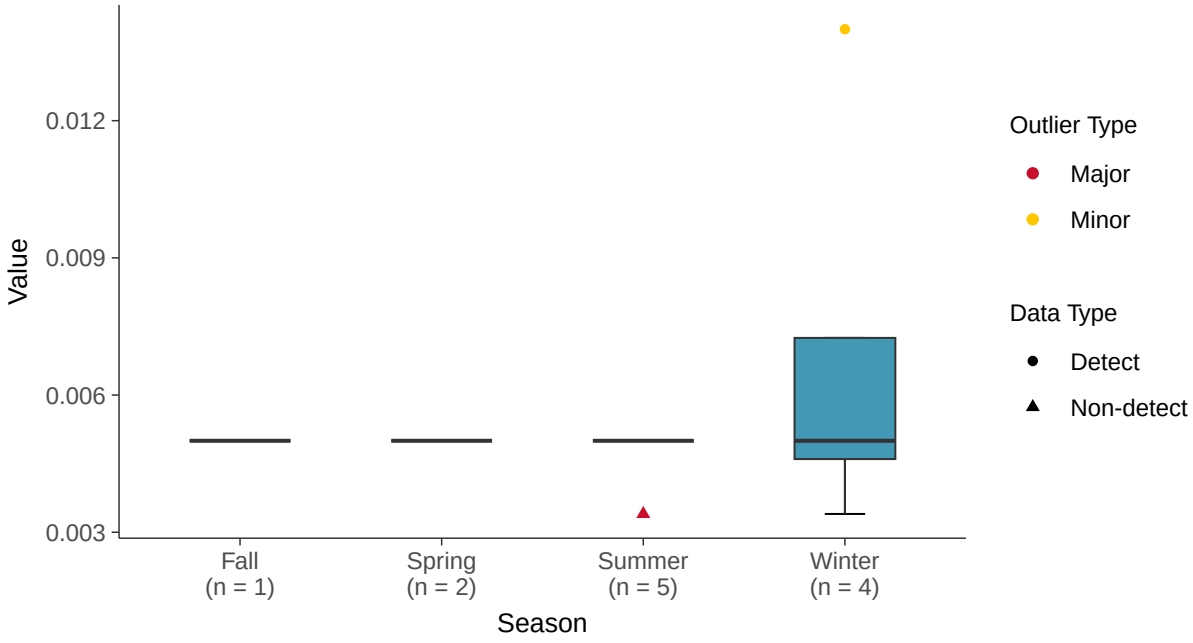
Boxplot

Lithium, MW-15 (mg/l)



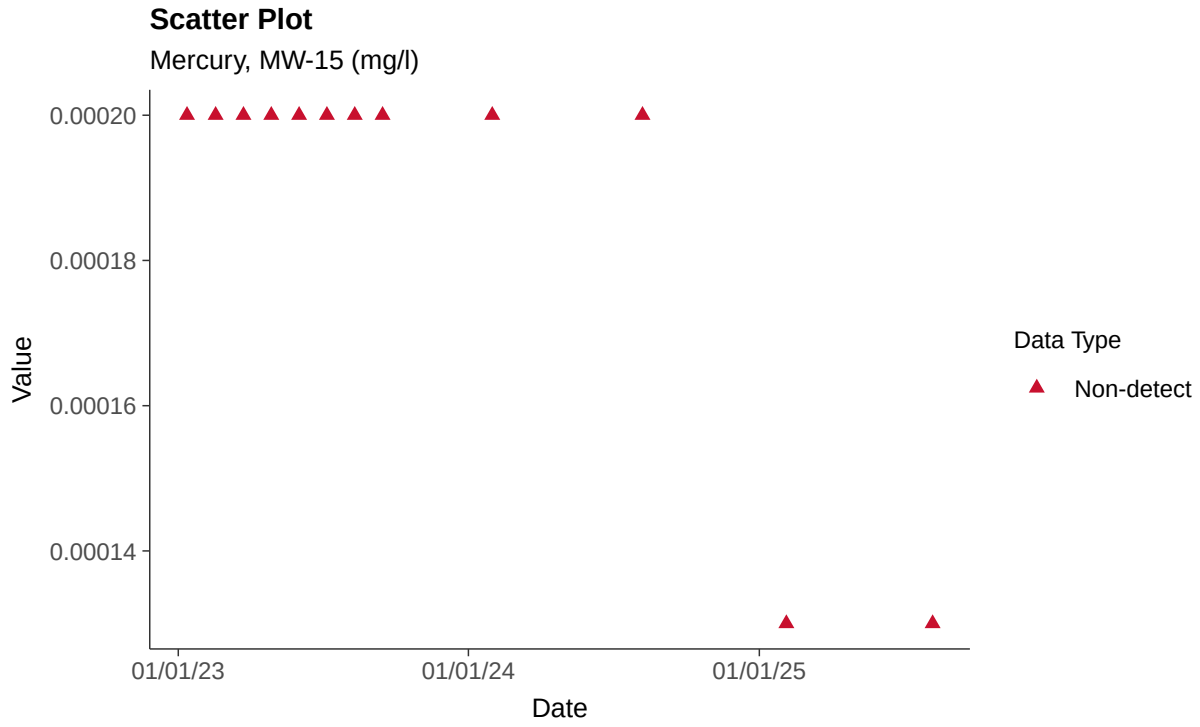
Boxplot by Season

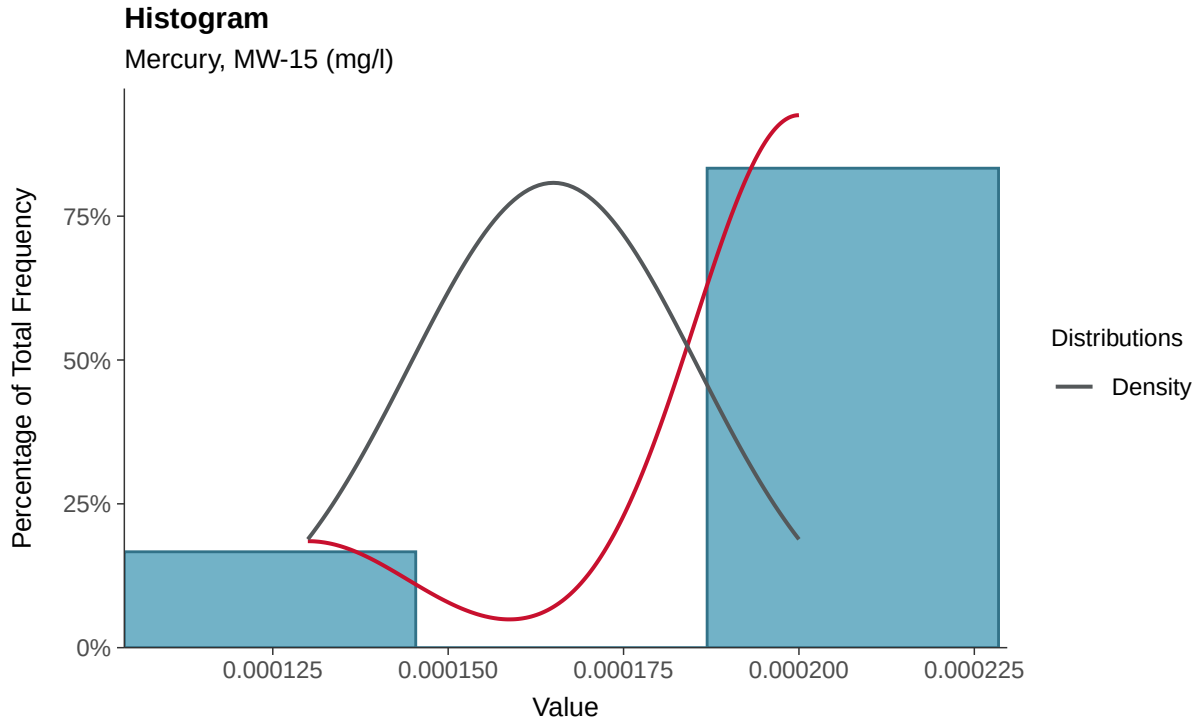
Lithium, MW-15 (mg/l)



Appendix IV: Mercury, MW-15

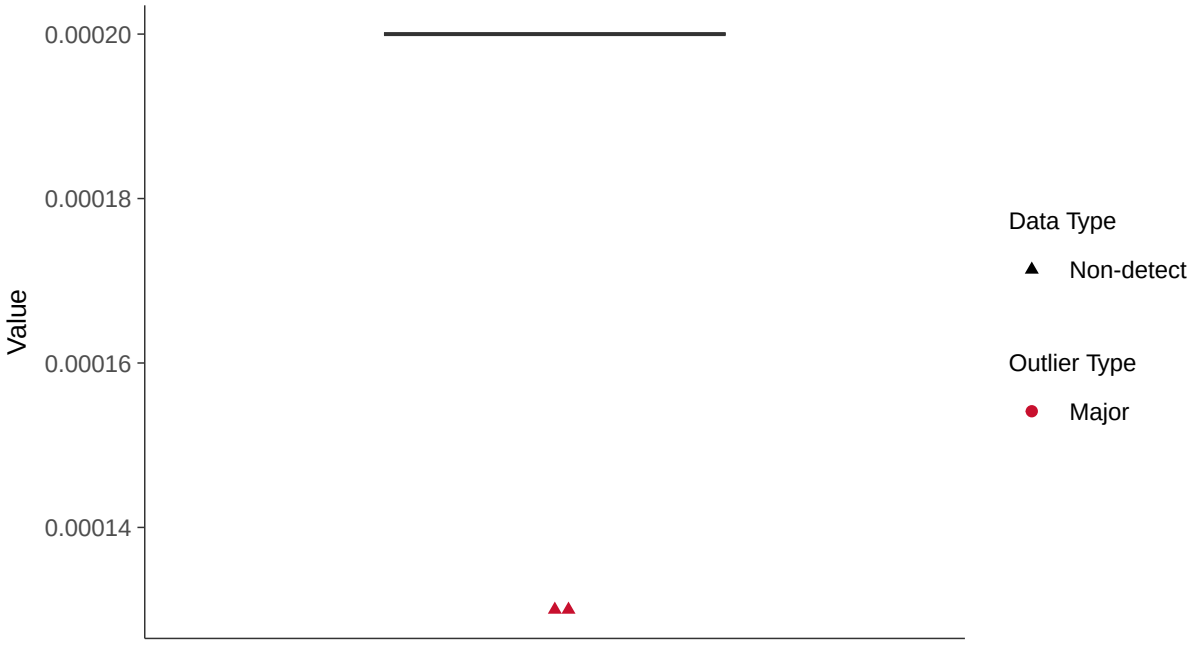
ID: 24_3_117





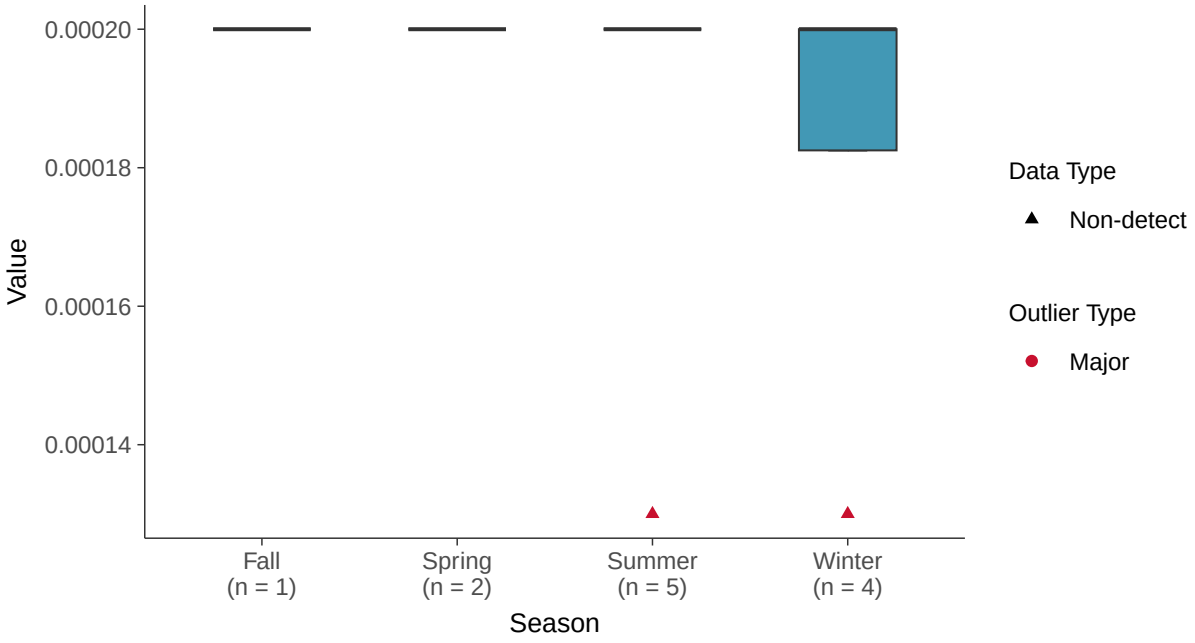
Boxplot

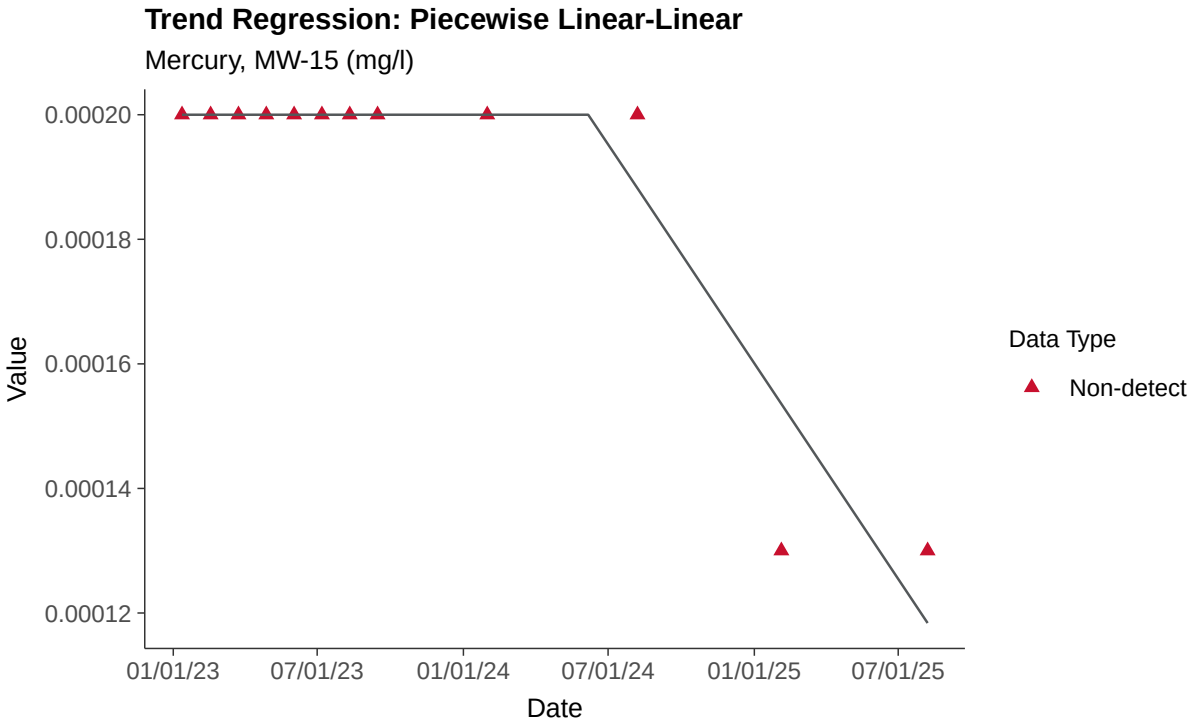
Mercury, MW-15 (mg/l)



Boxplot by Season

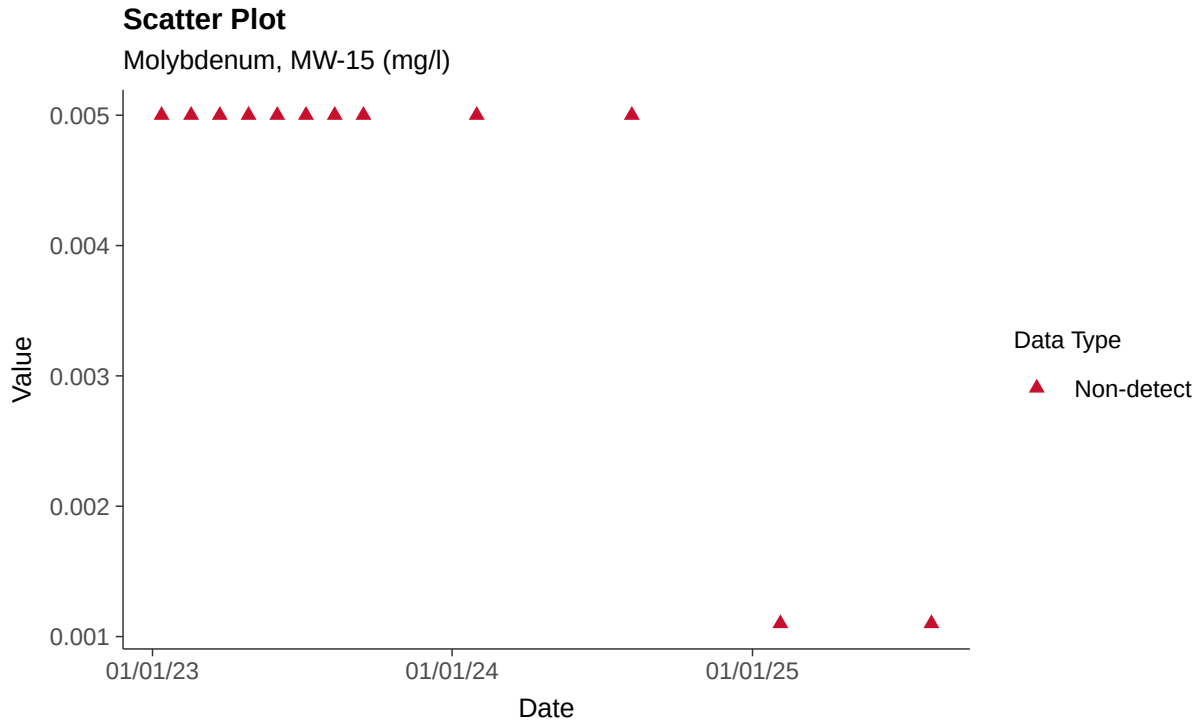
Mercury, MW-15 (mg/l)

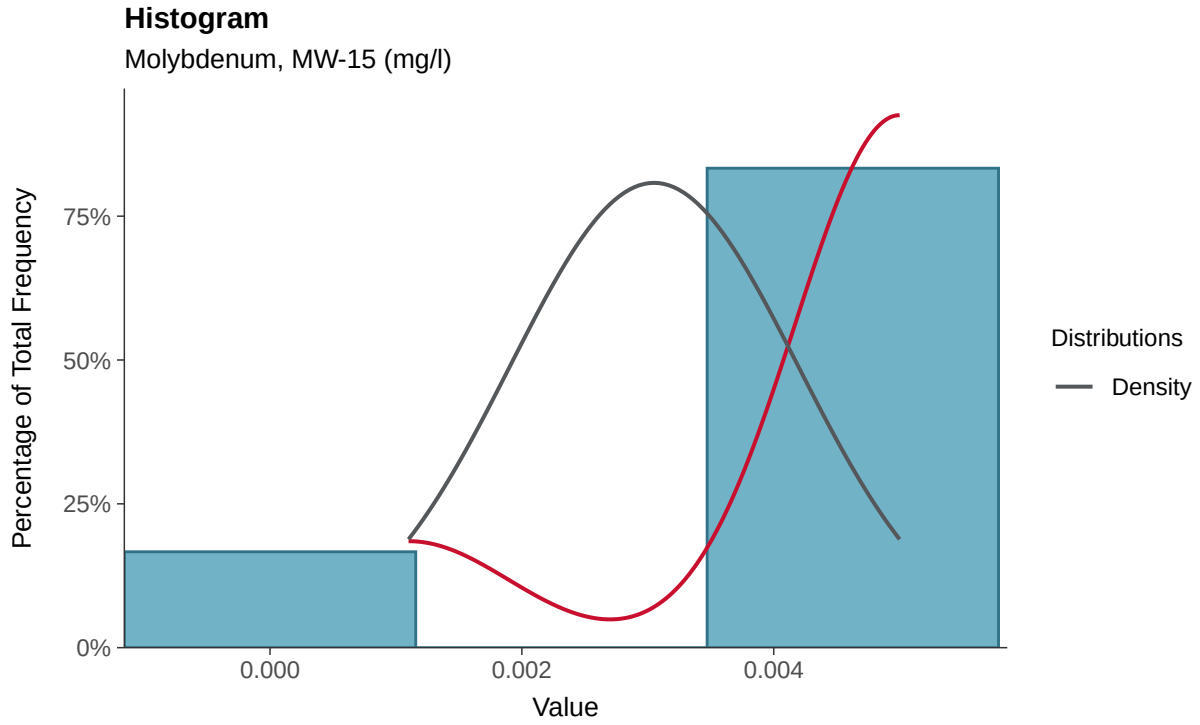



Trend Regression: Piecewise Linear-Linear
Mercury, MW-15 (mg/l)
Value
0.00020
0.00018
0.00016
0.00014
0.00012
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Molybdenum, MW-15

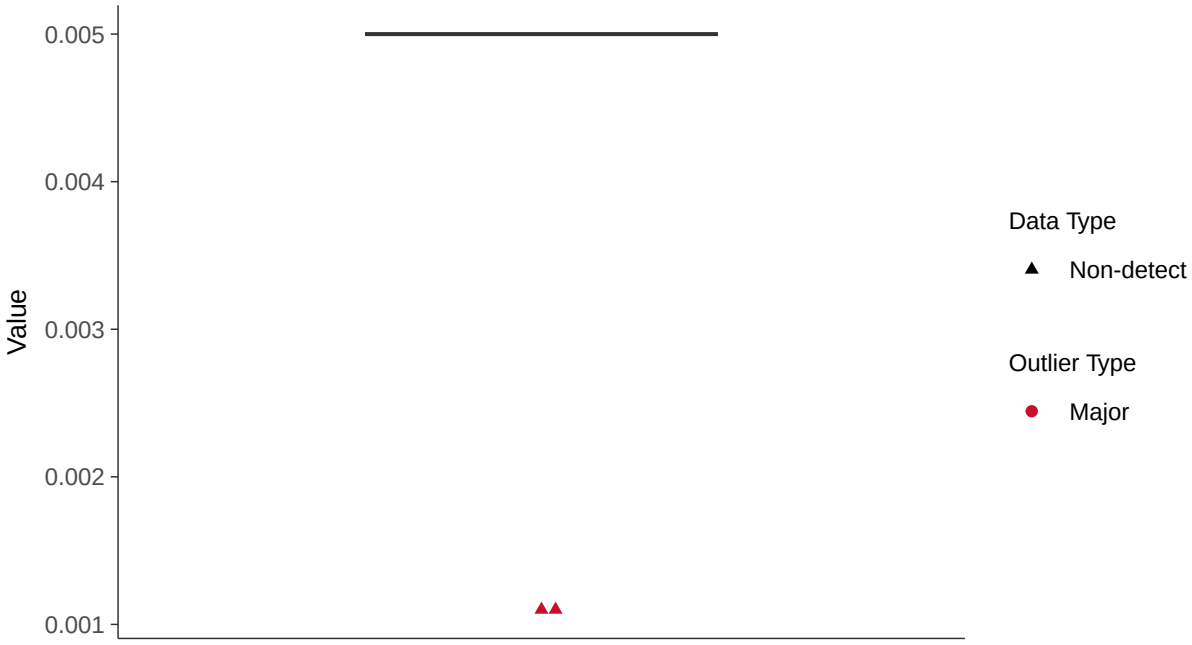
ID: 24_3_118





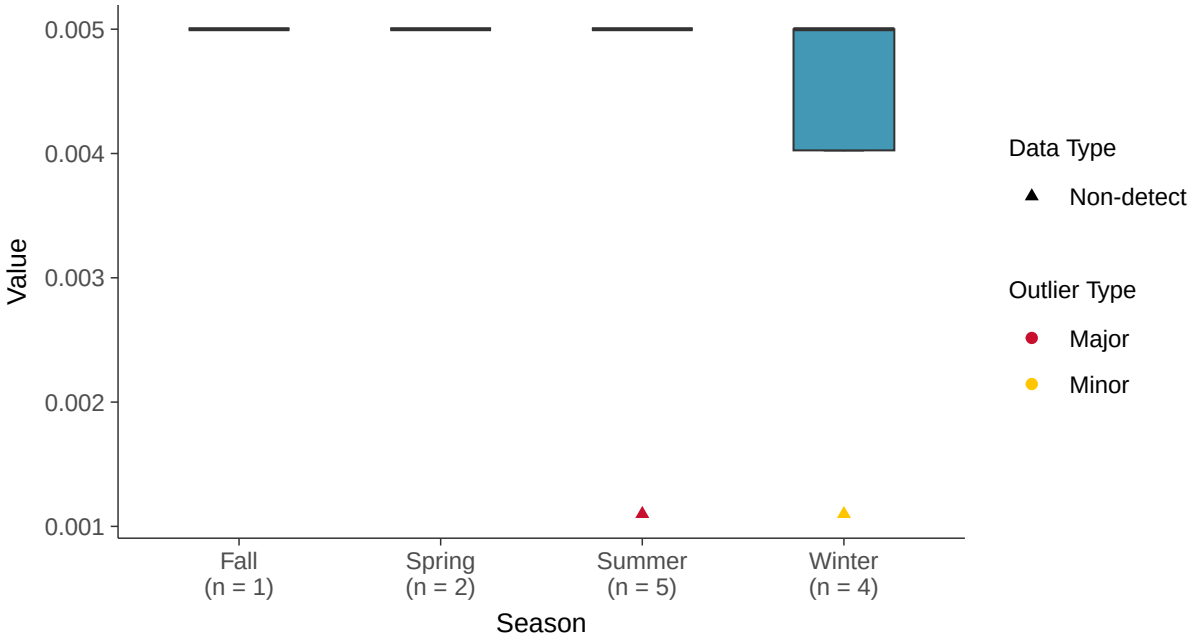
Boxplot

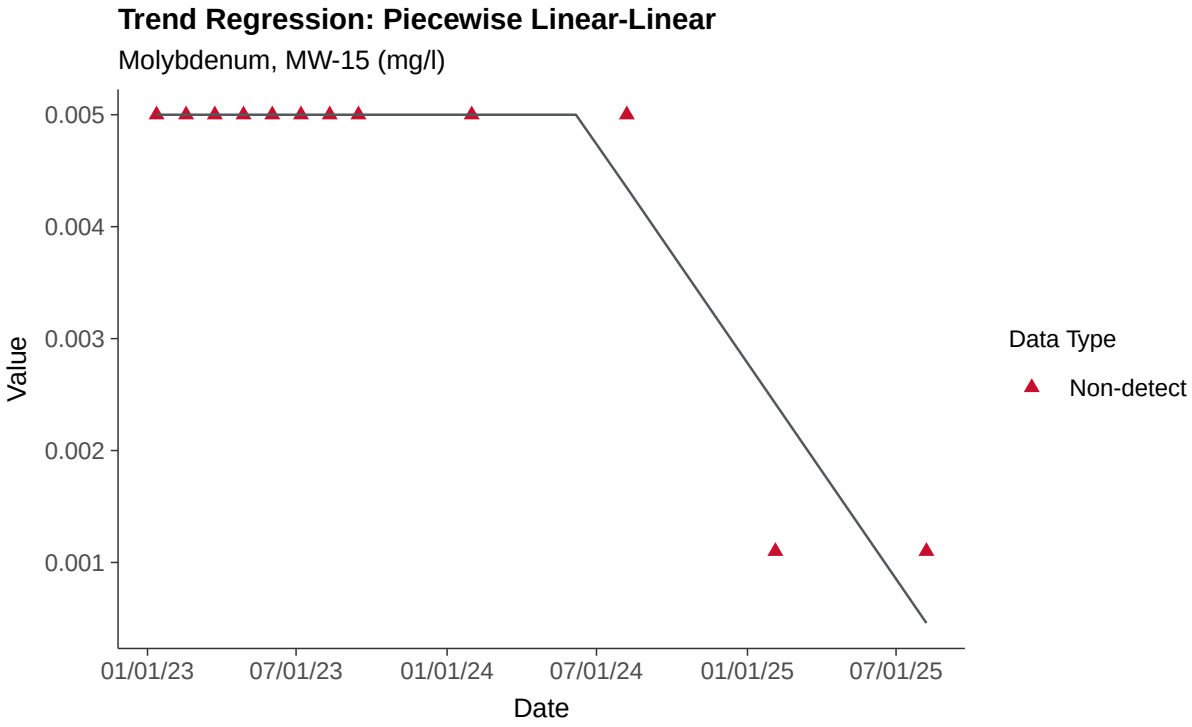
Molybdenum, MW-15 (mg/l)



Boxplot by Season

Molybdenum, MW-15 (mg/l)



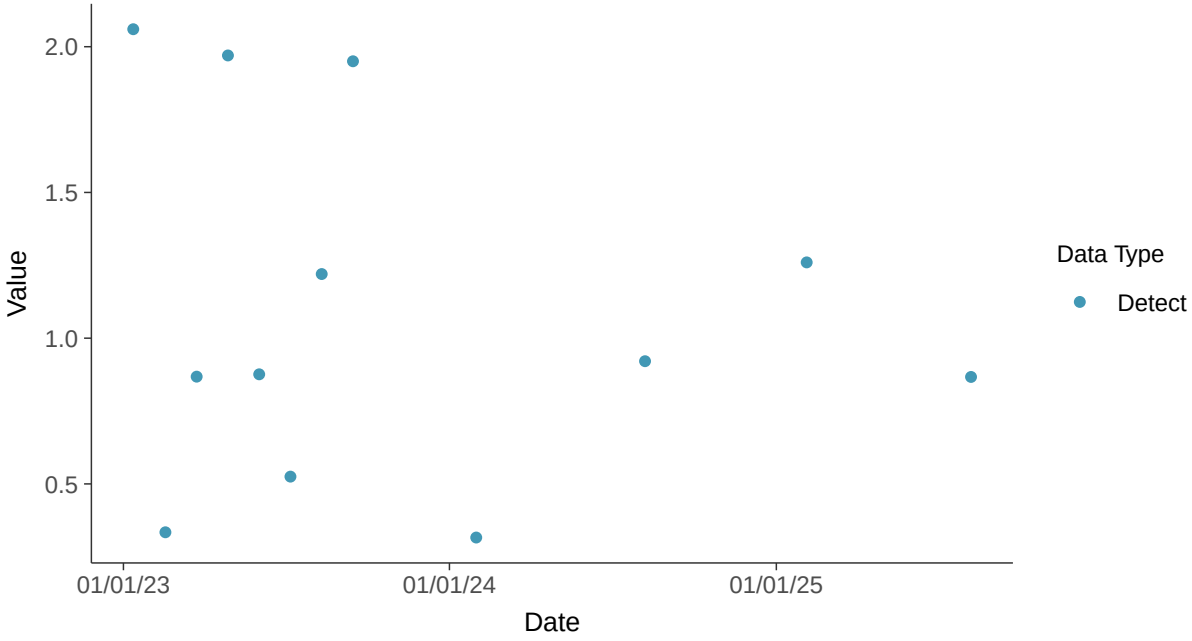

Trend Regression: Piecewise Linear-Linear
Molybdenum, MW-15 (mg/l)
0.005
0.004
0.003
0.002
0.001
Value
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Radium-226+228, MW-15

ID: 24_3_121

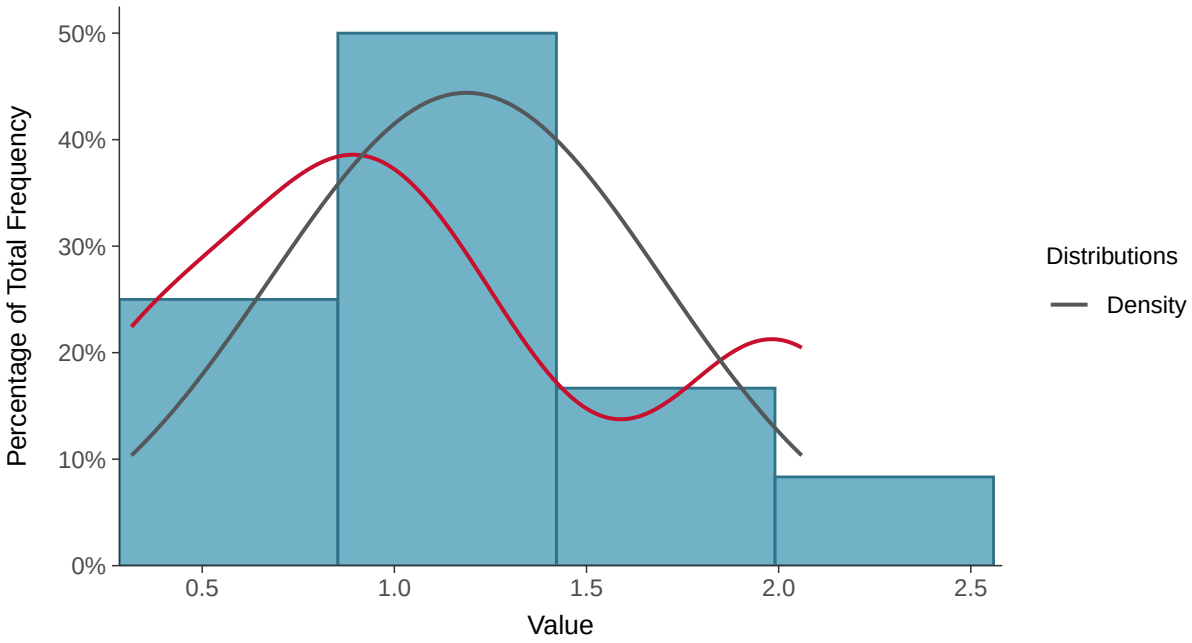
Scatter Plot

Radium-226+228, MW-15 (pci/l)



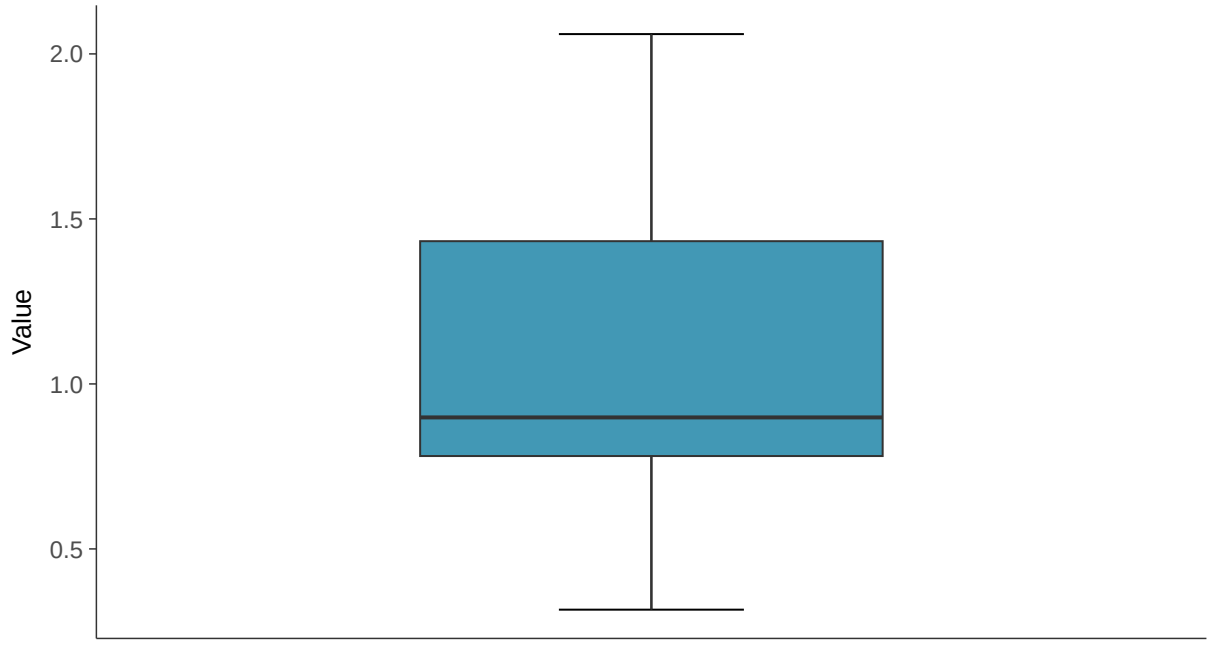
Histogram

Radium-226+228, MW-15 (pci/l)



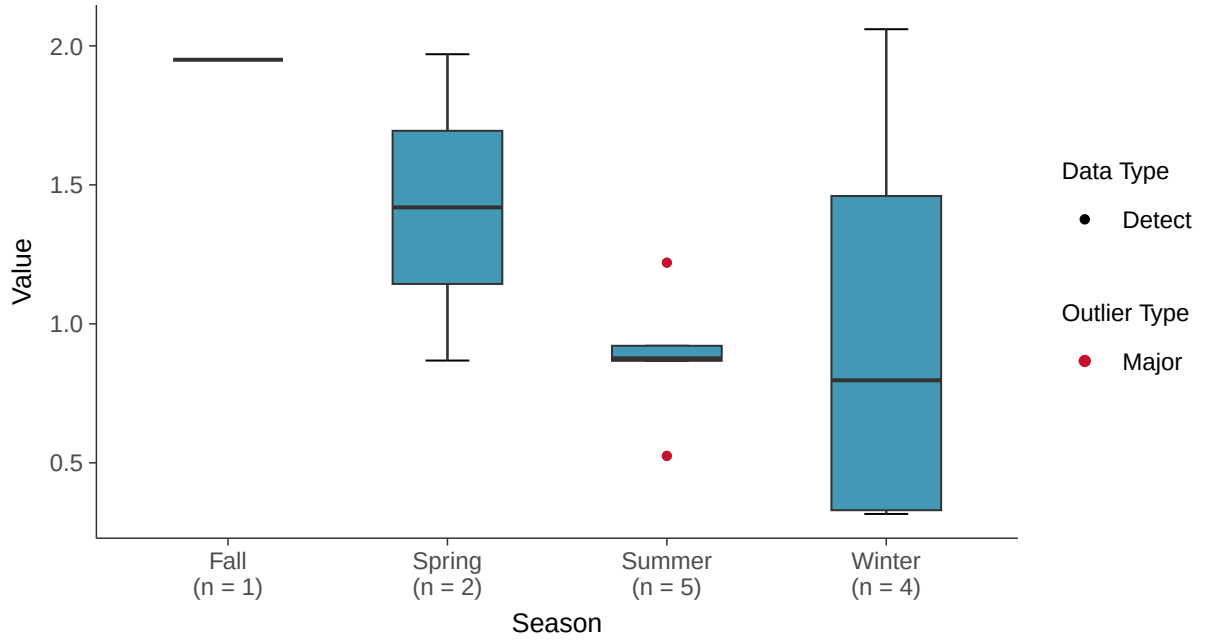
Boxplot

Radium-226+228, MW-15 (pci/l)



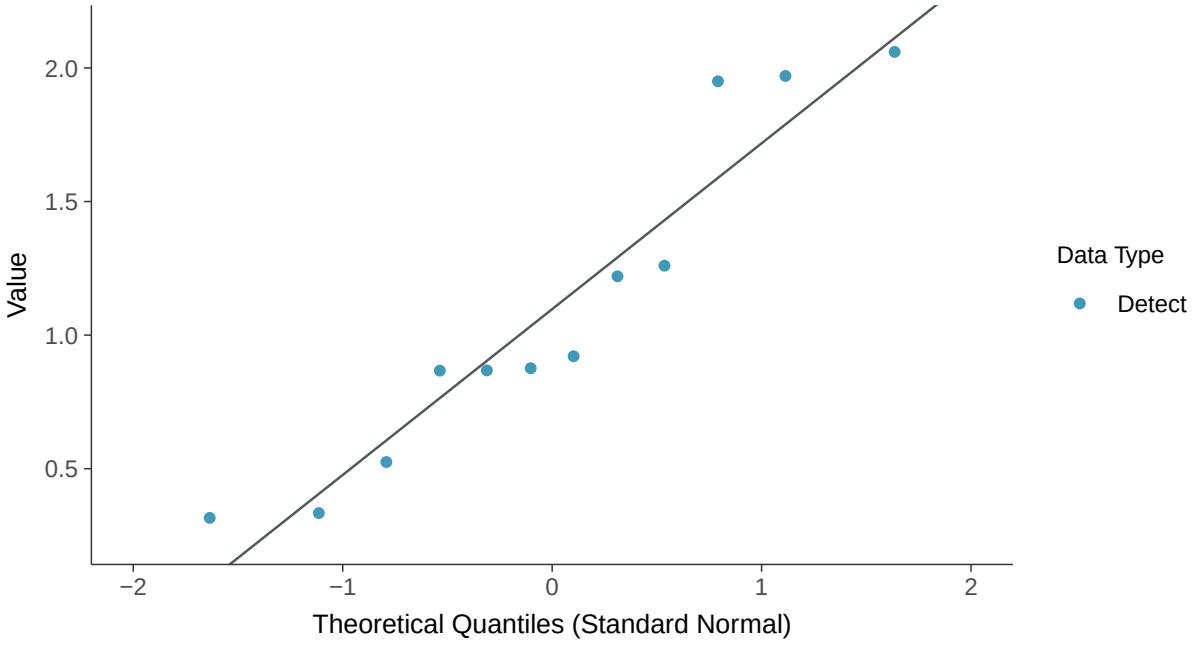
Boxplot by Season

Radium-226+228, MW-15 (pci/l)



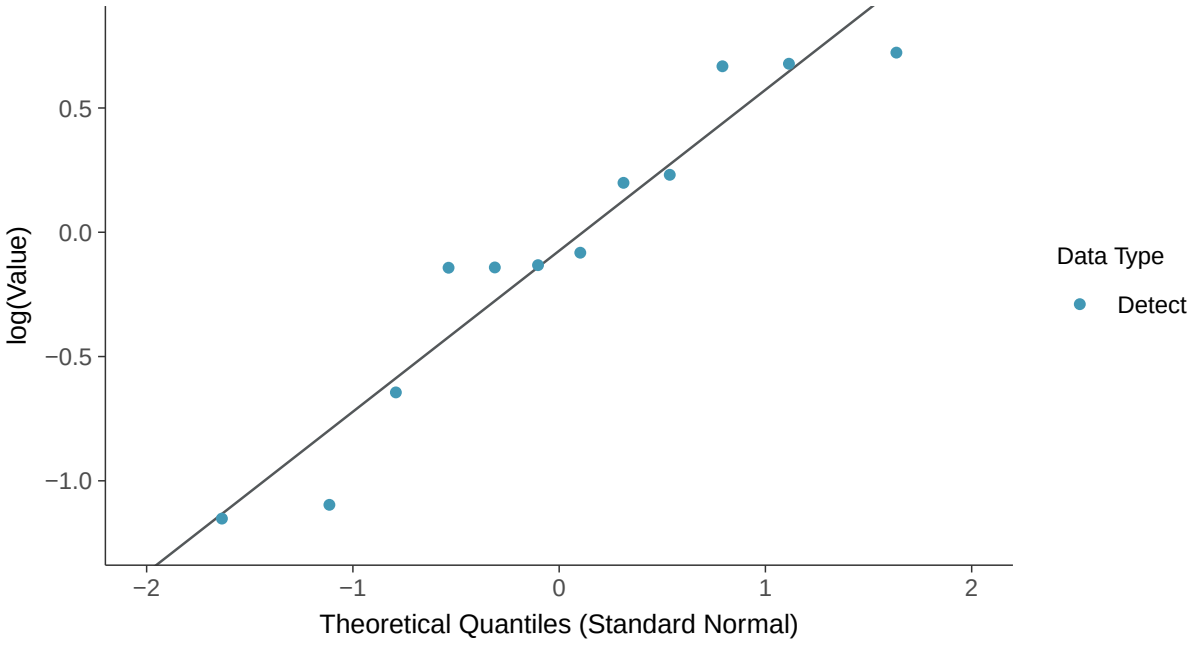
Normal Q-Q plot

Radium-226+228, MW-15 (pci/l)



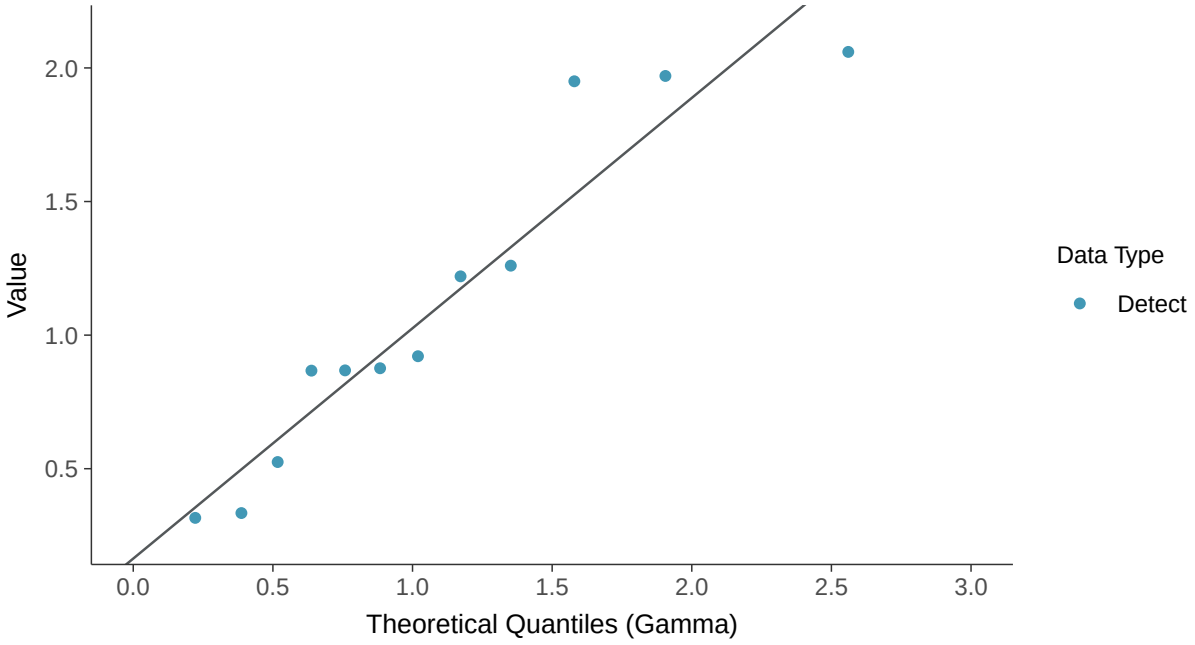
Lognormal Q-Q plot

Radium-226+228, MW-15 (pci/l)



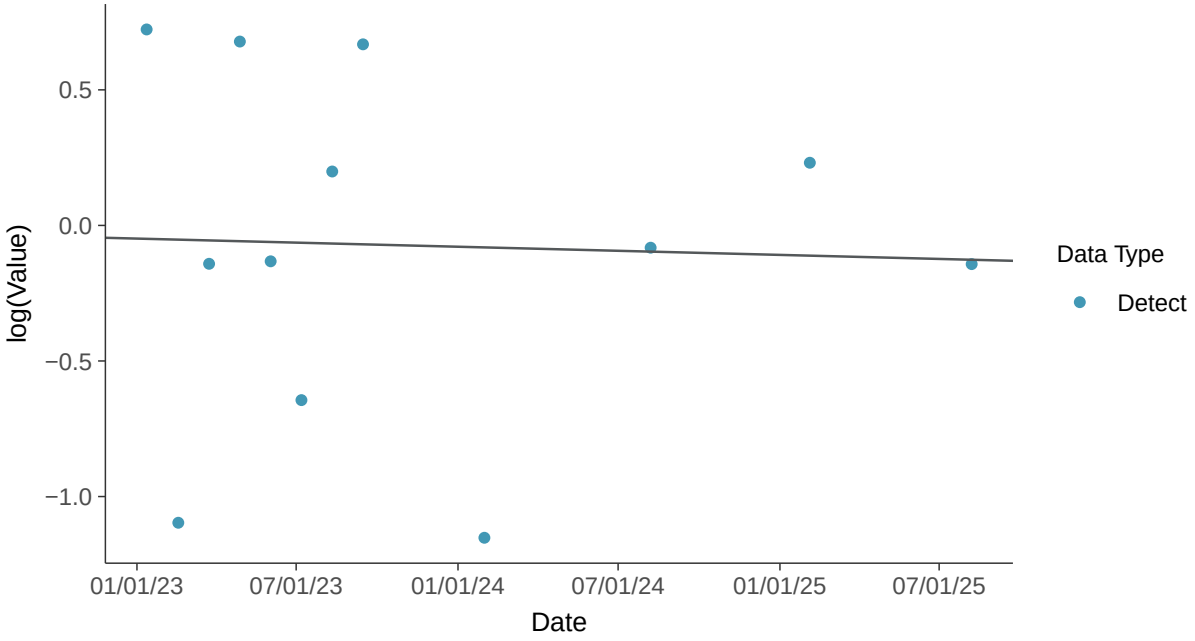
Gamma Q-Q plot

Radium-226+228, MW-15 (pci/l)



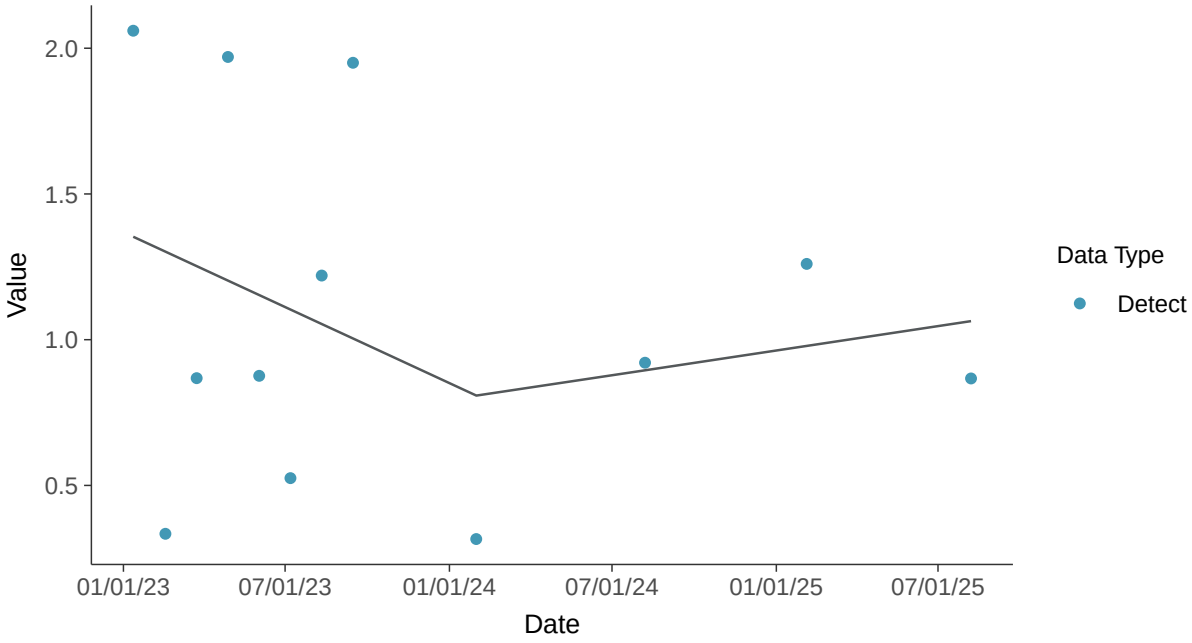
Trend Regression: Lognormal MLE

Radium-226+228, MW-15 (pci/l)



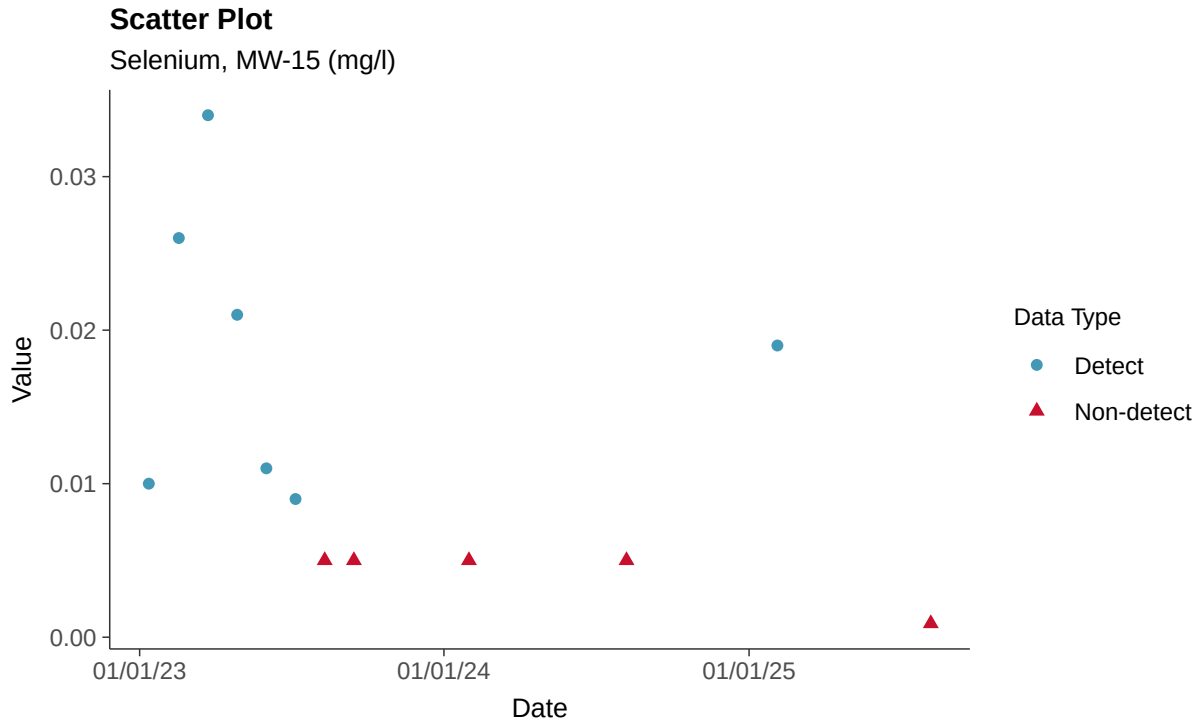
Trend Regression: Piecewise Linear-Linear

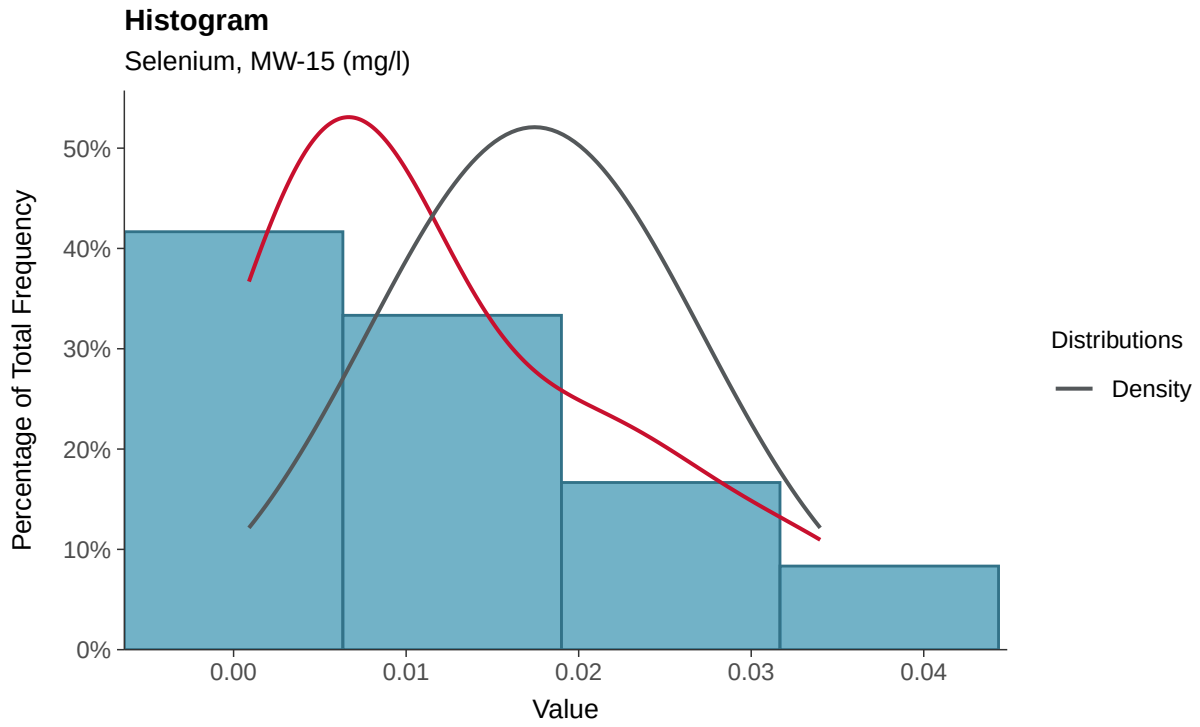
Radium-226+228, MW-15 (pci/l)



Appendix IV: Selenium, MW-15

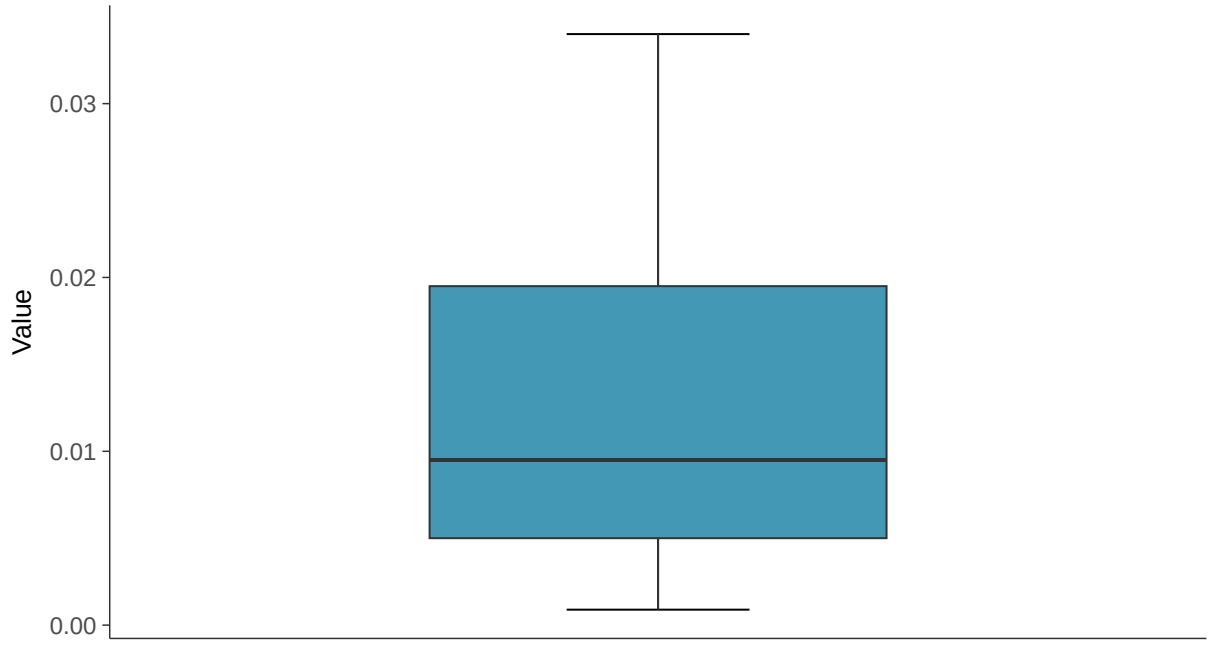
ID: 24_3_122





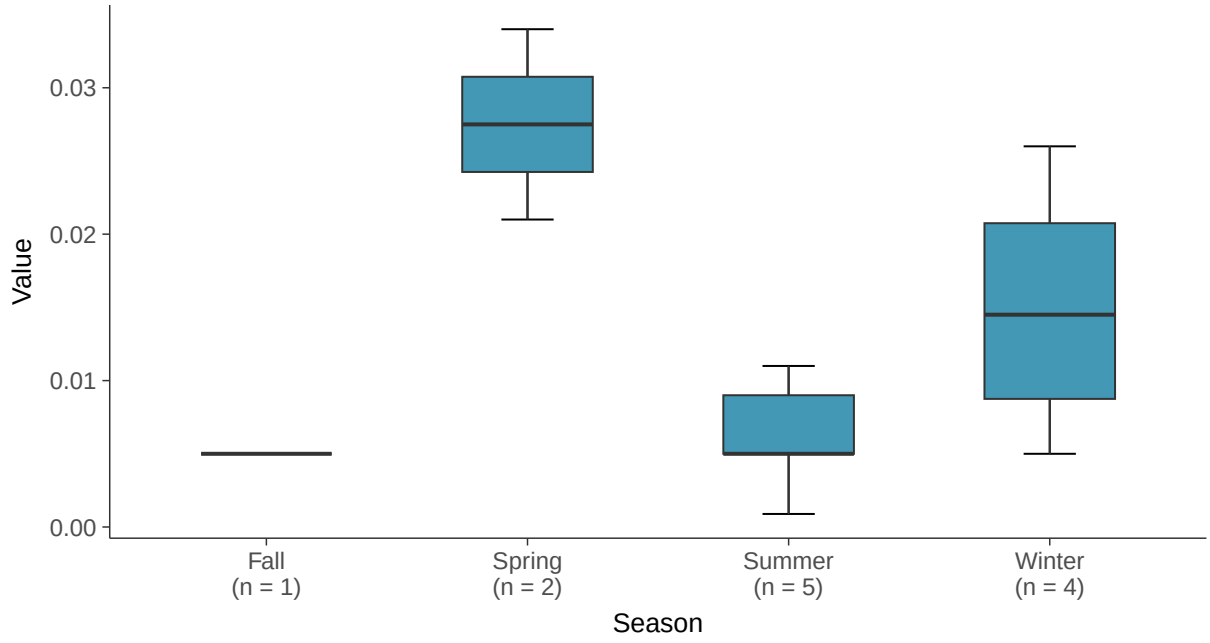
Boxplot

Selenium, MW-15 (mg/l)



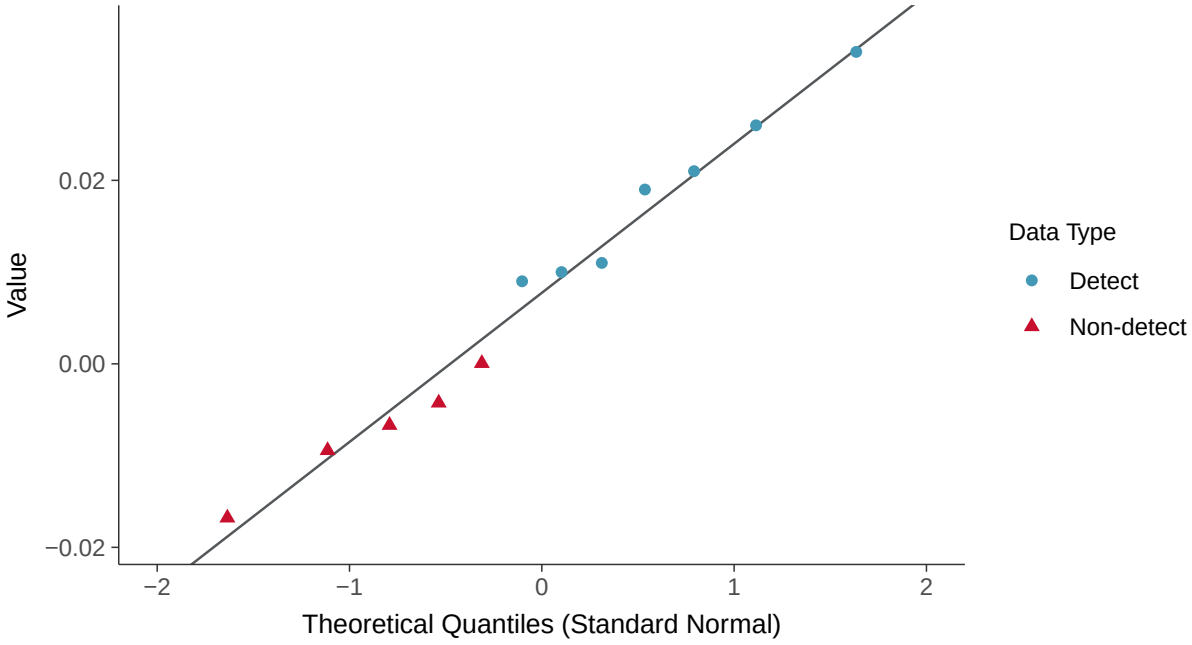
Boxplot by Season

Selenium, MW-15 (mg/l)



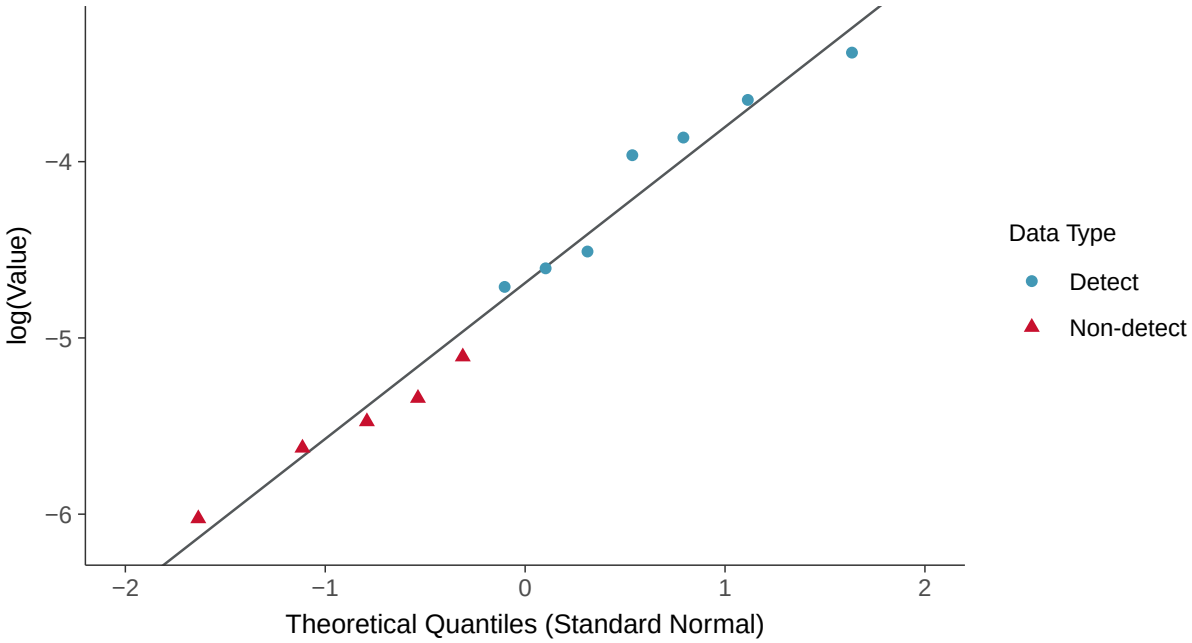
Normal Q-Q plot using ROS Imputed Estimates

Selenium, MW-15 (mg/l)



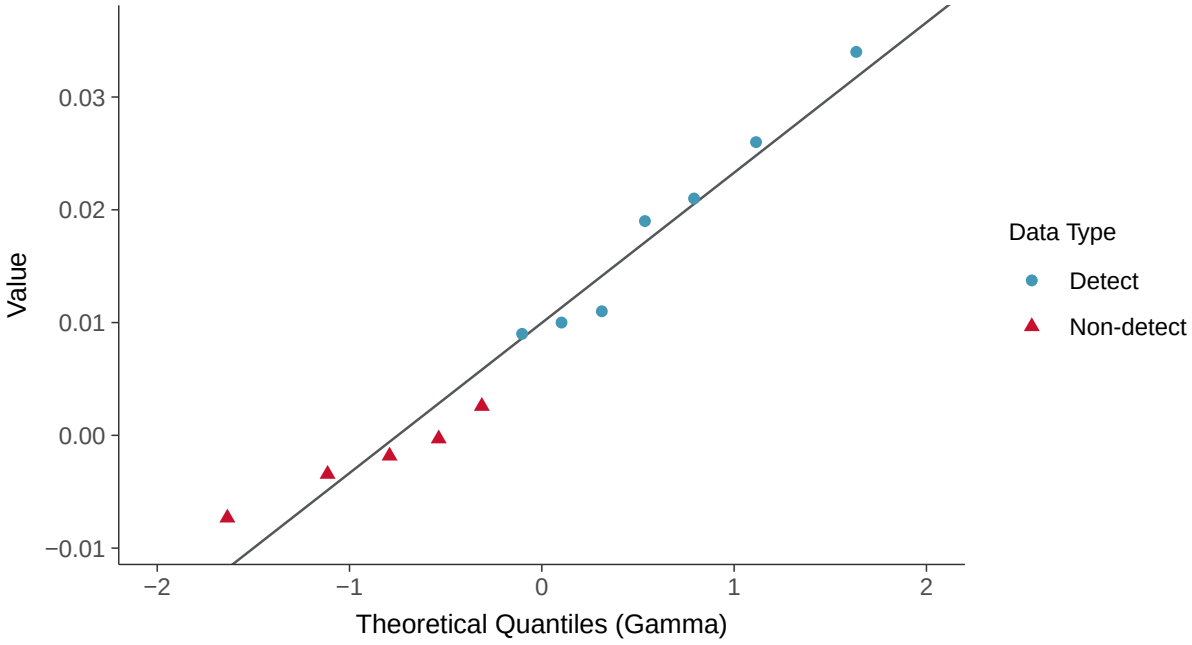
Lognormal Q-Q plot using ROS Imputed Estimates

Selenium, MW-15 (mg/l)



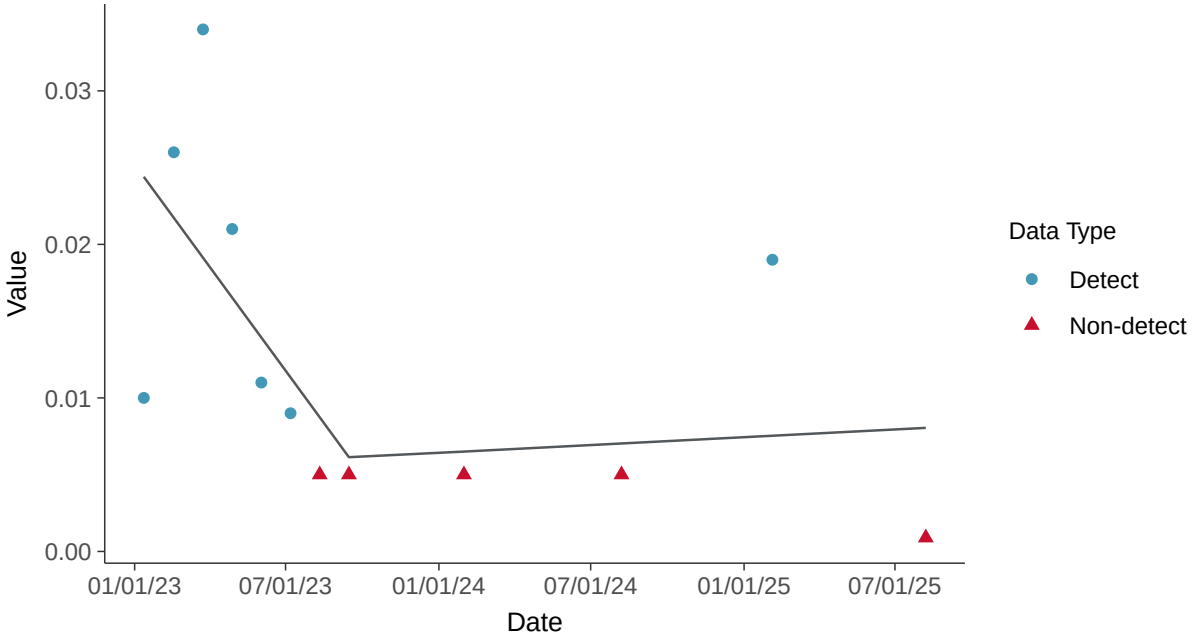
Gamma Q-Q plot using ROS Imputed Estimates

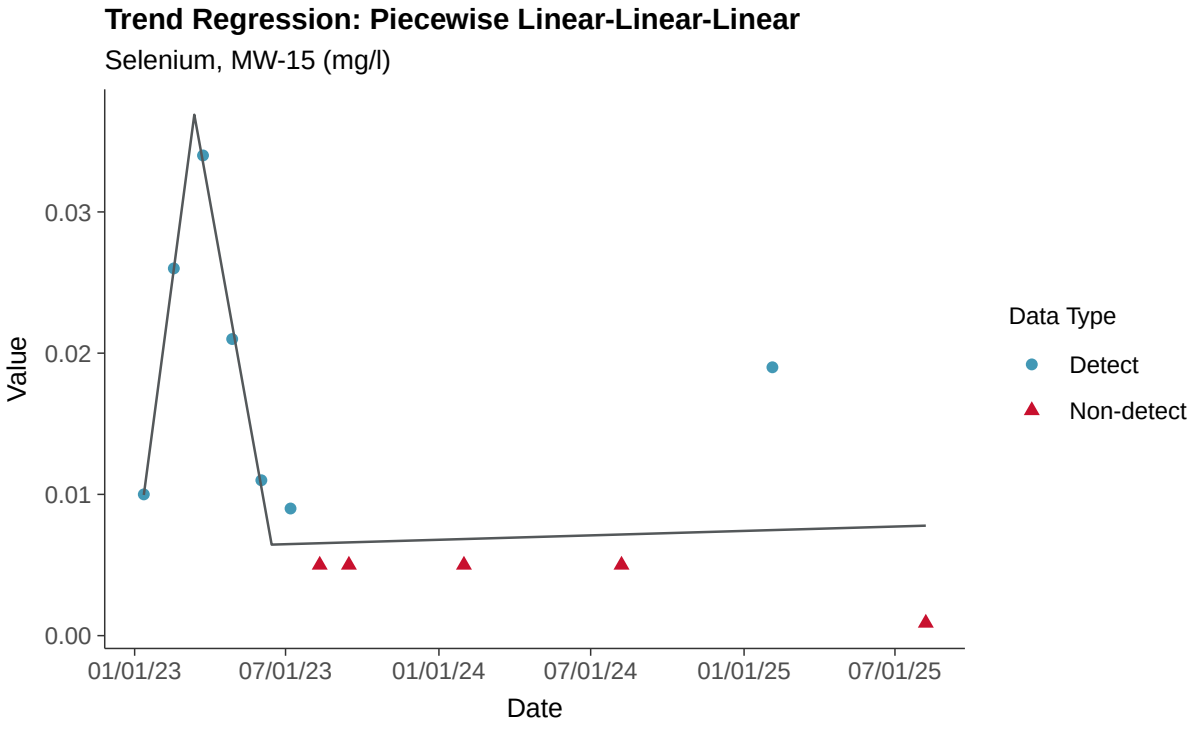
Selenium, MW-15 (mg/l)



Trend Regression: Piecewise Linear-Linear

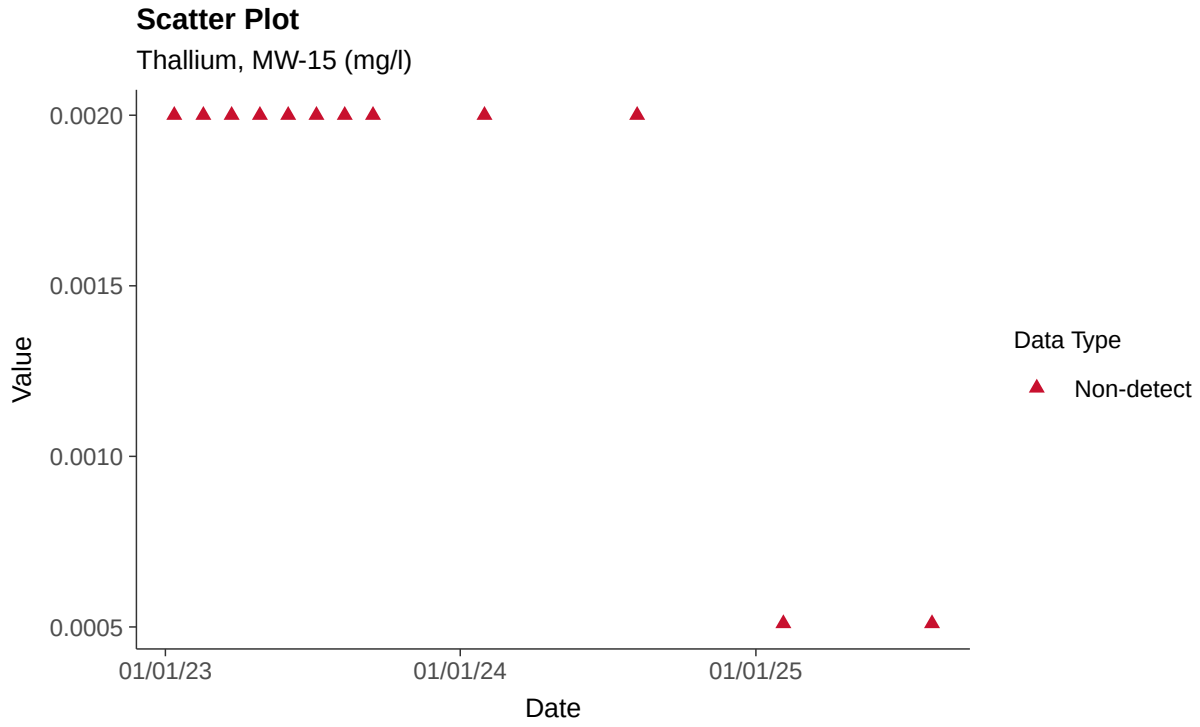
Selenium, MW-15 (mg/l)

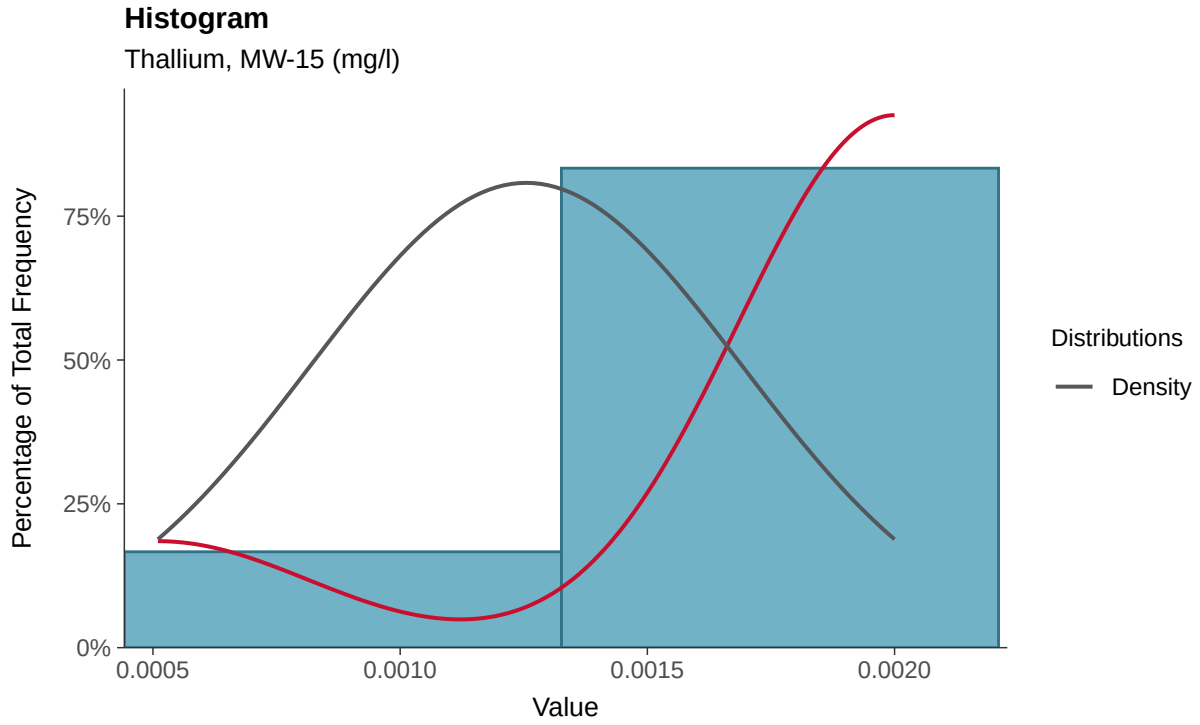



Trend Regression: Piecewise Linear-Linear-Linear
Selenium, MW-15 (mg/l)
Value
0.03
0.02
0.01
0.00
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Thallium, MW-15

ID: 24_3_125



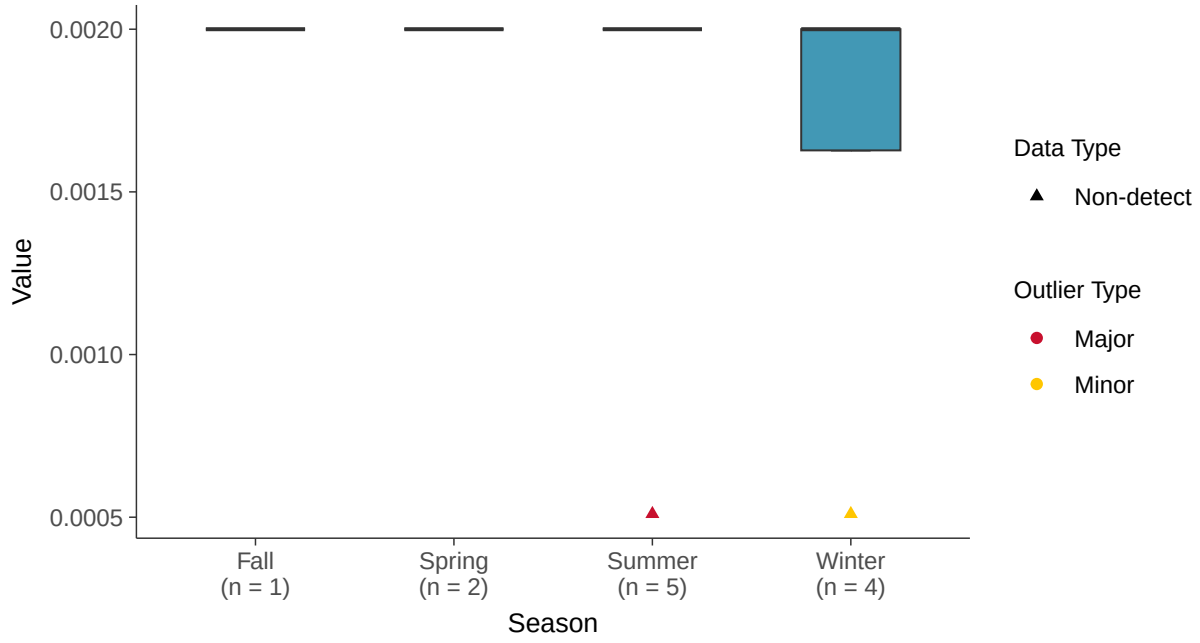


Boxplot

Thallium, MW-15 (mg/l)

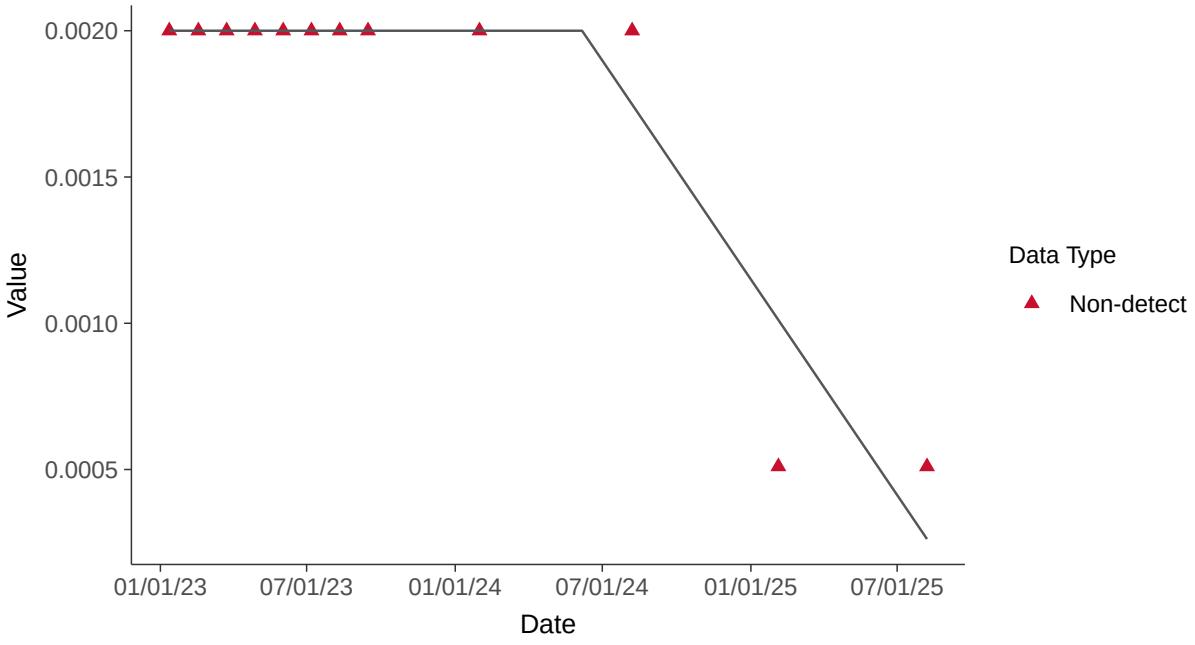
Boxplot by Season

Thallium, MW-15 (mg/l)



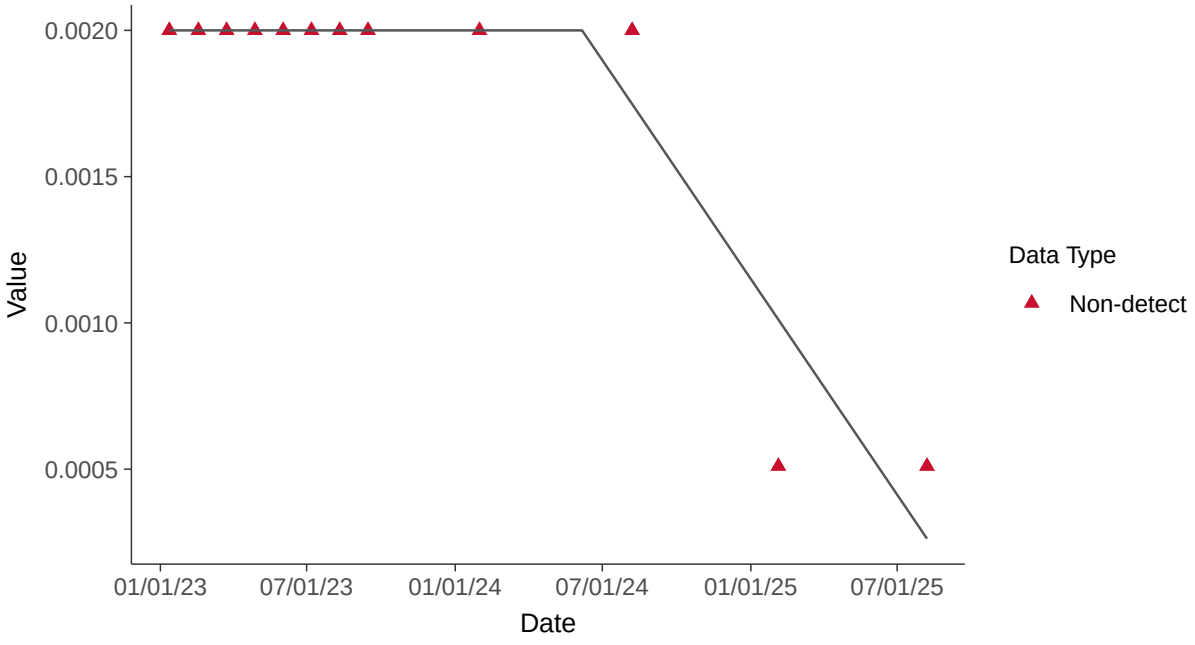
Trend Regression: Piecewise Linear-Linear

Thallium, MW-15 (mg/l)



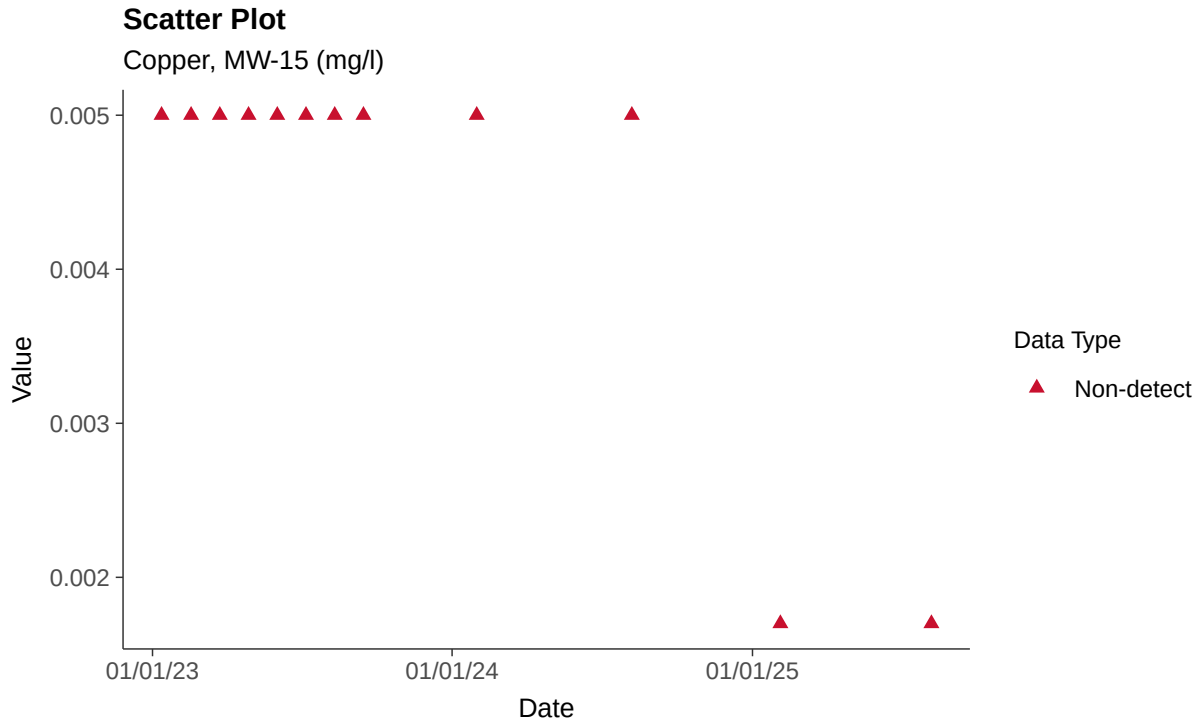
Trend Regression: Piecewise Linear-Linear-Linear

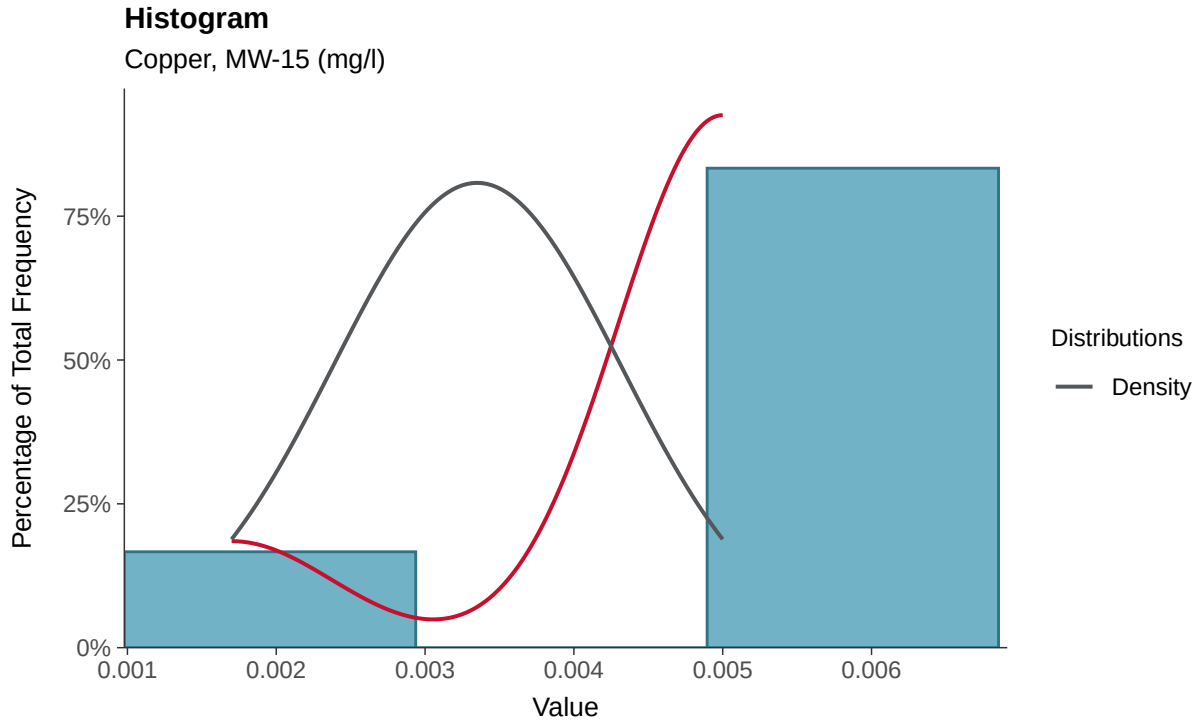
Thallium, MW-15 (mg/l)



Part 115: Copper, MW-15

ID: 24_5_111



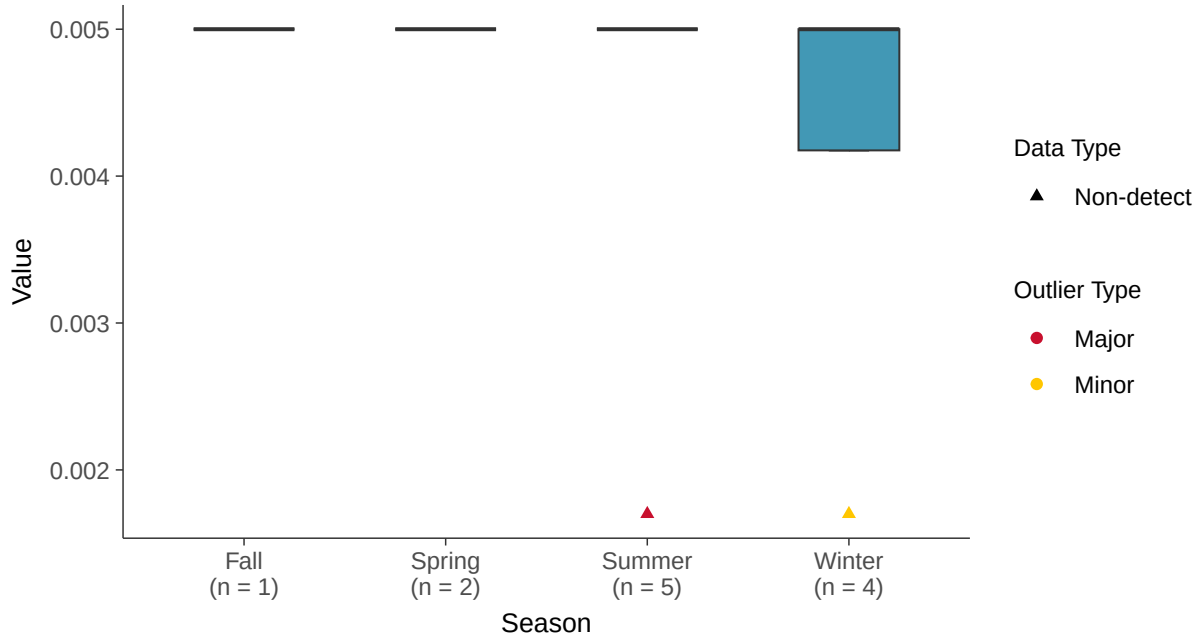


Boxplot

Copper, MW-15 (mg/l)

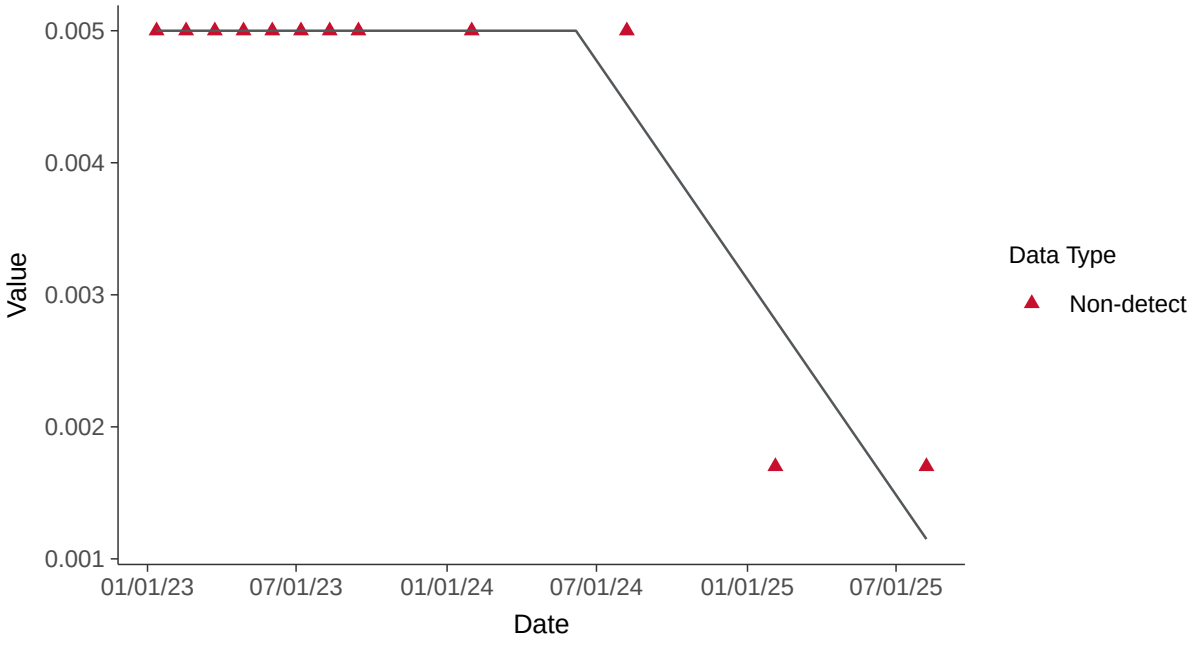
Boxplot by Season

Copper, MW-15 (mg/l)



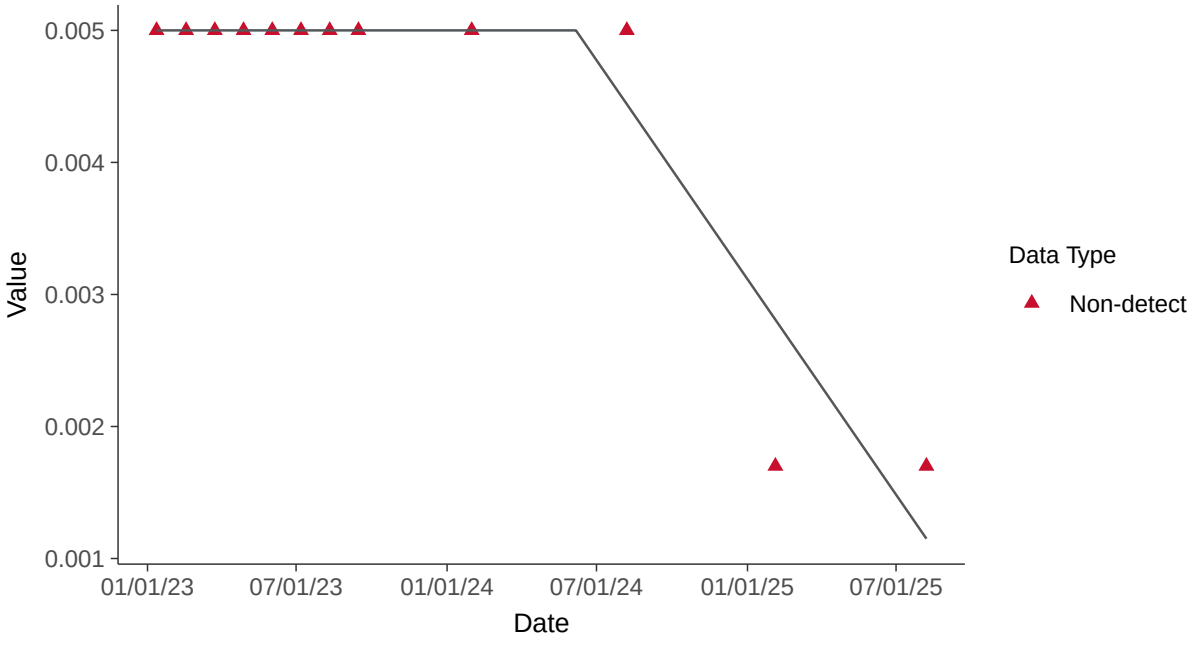
Trend Regression: Piecewise Linear-Linear

Copper, MW-15 (mg/l)



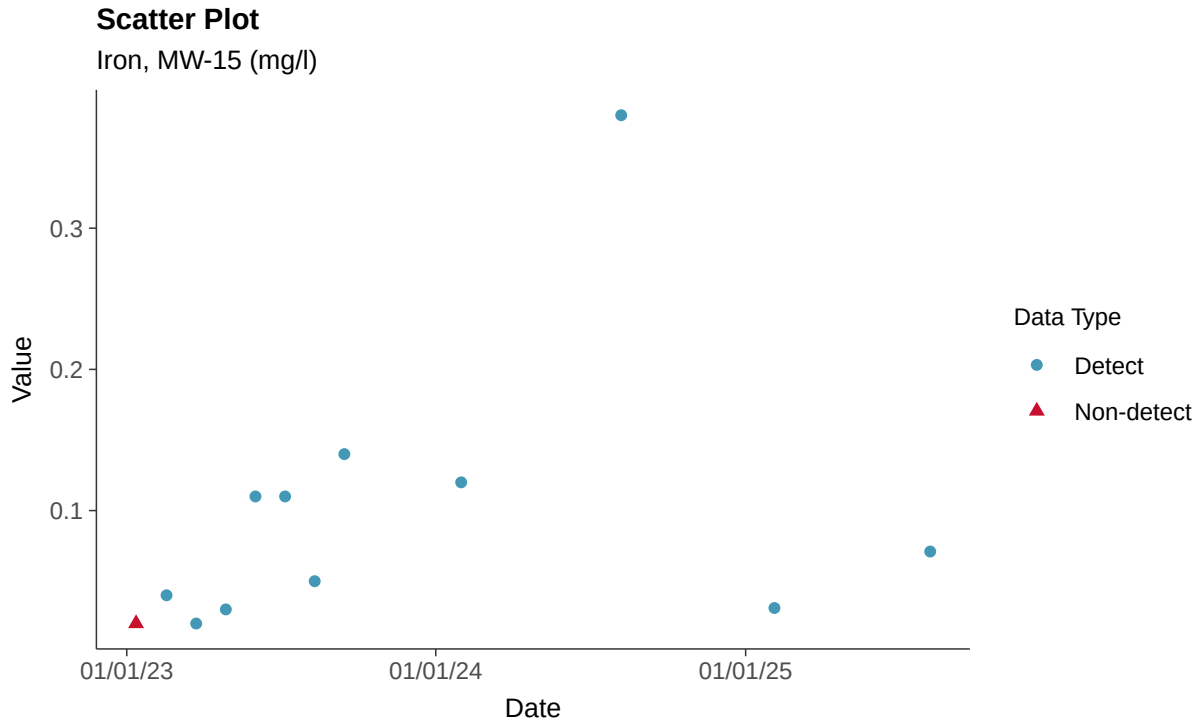
Trend Regression: Piecewise Linear-Linear-Linear

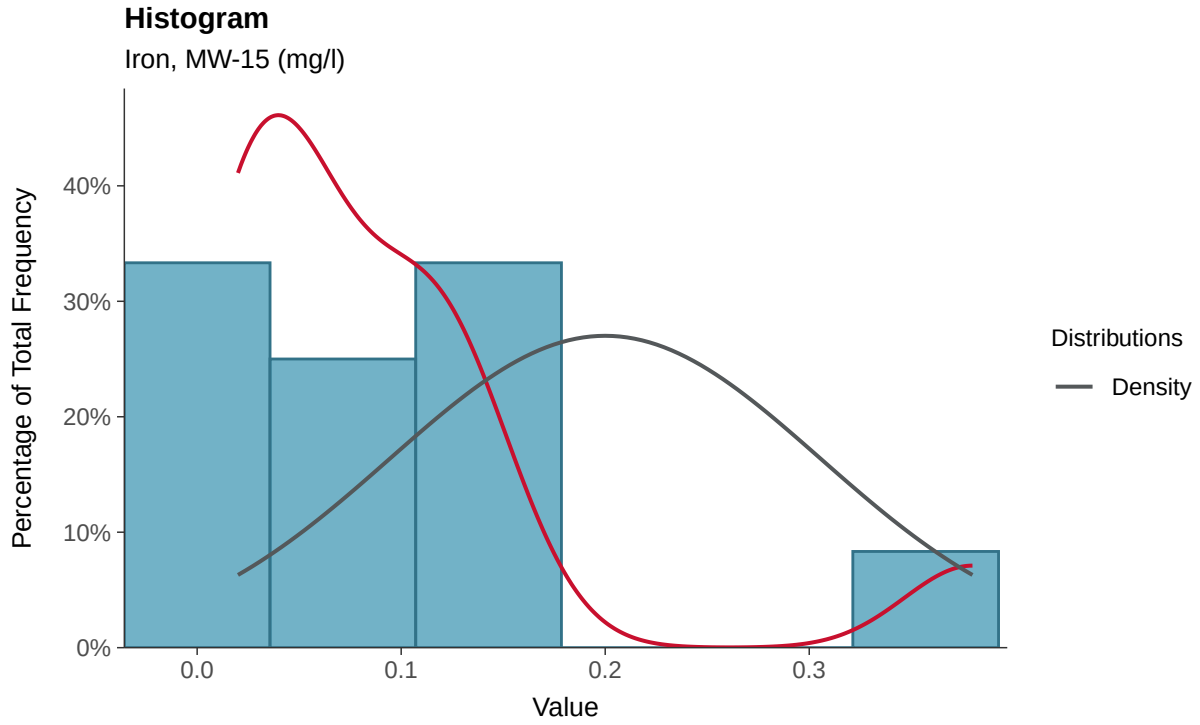
Copper, MW-15 (mg/l)



Part 115: Iron, MW-15

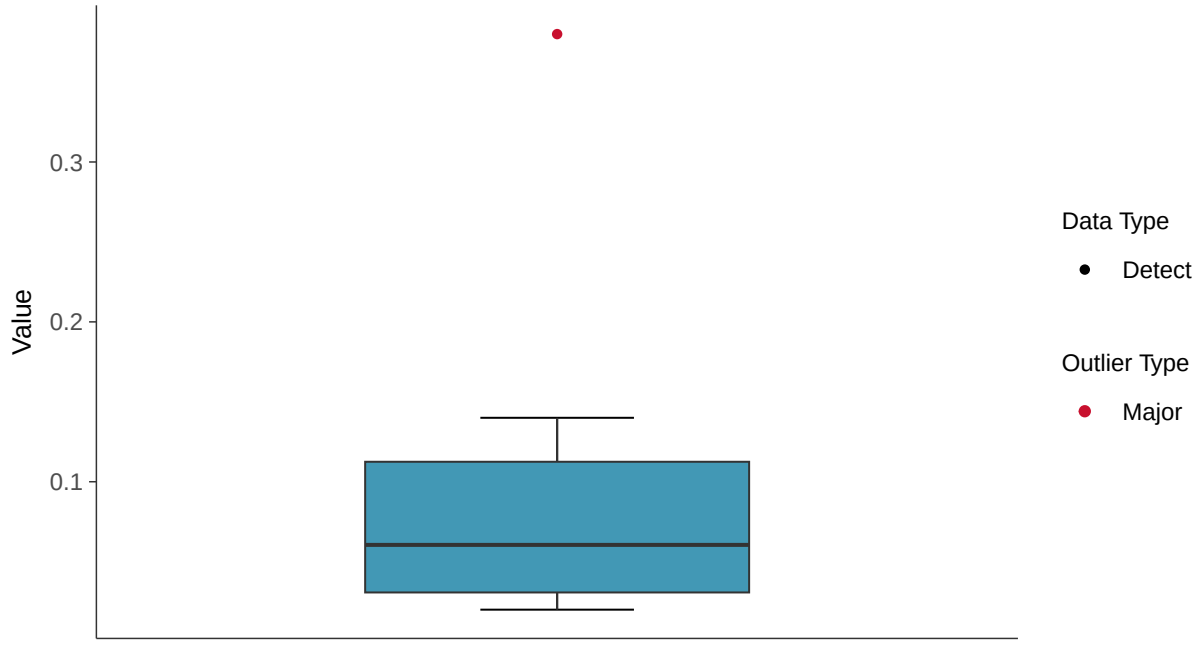
ID: 24_5_114





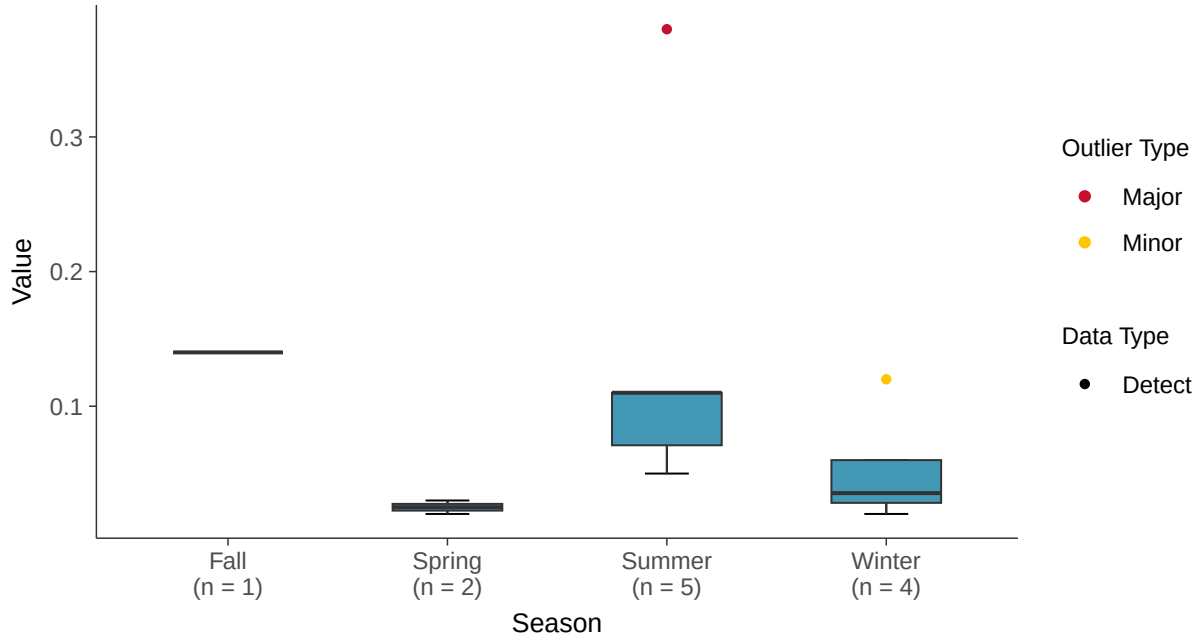
Boxplot

Iron, MW-15 (mg/l)



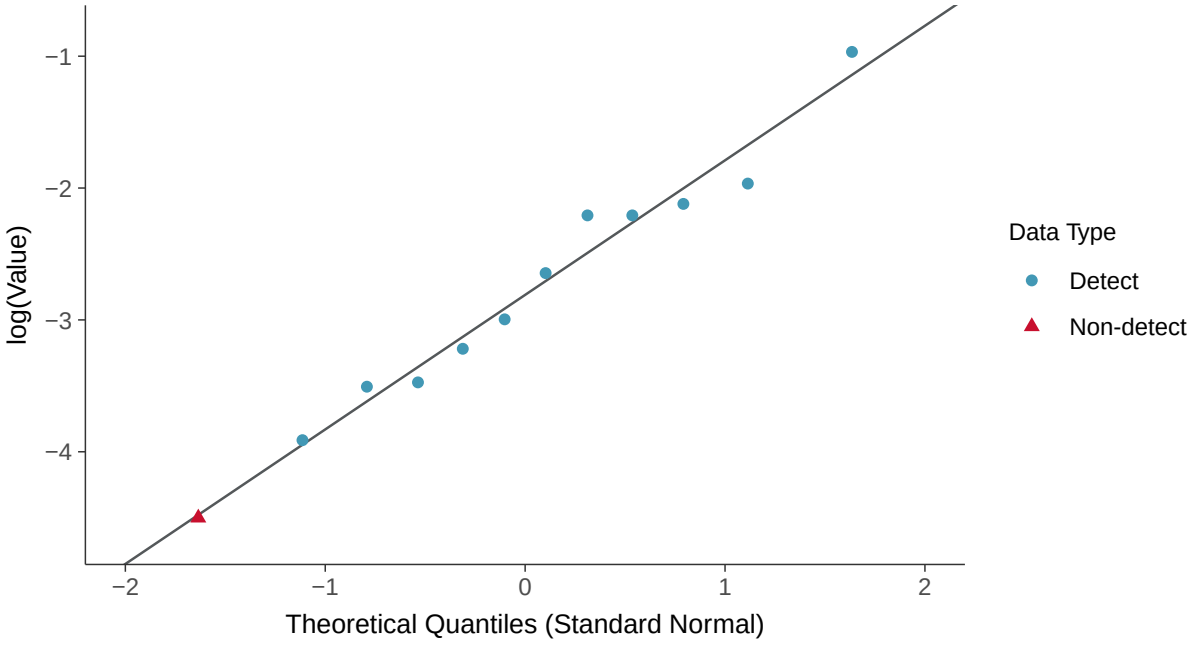
Boxplot by Season

Iron, MW-15 (mg/l)



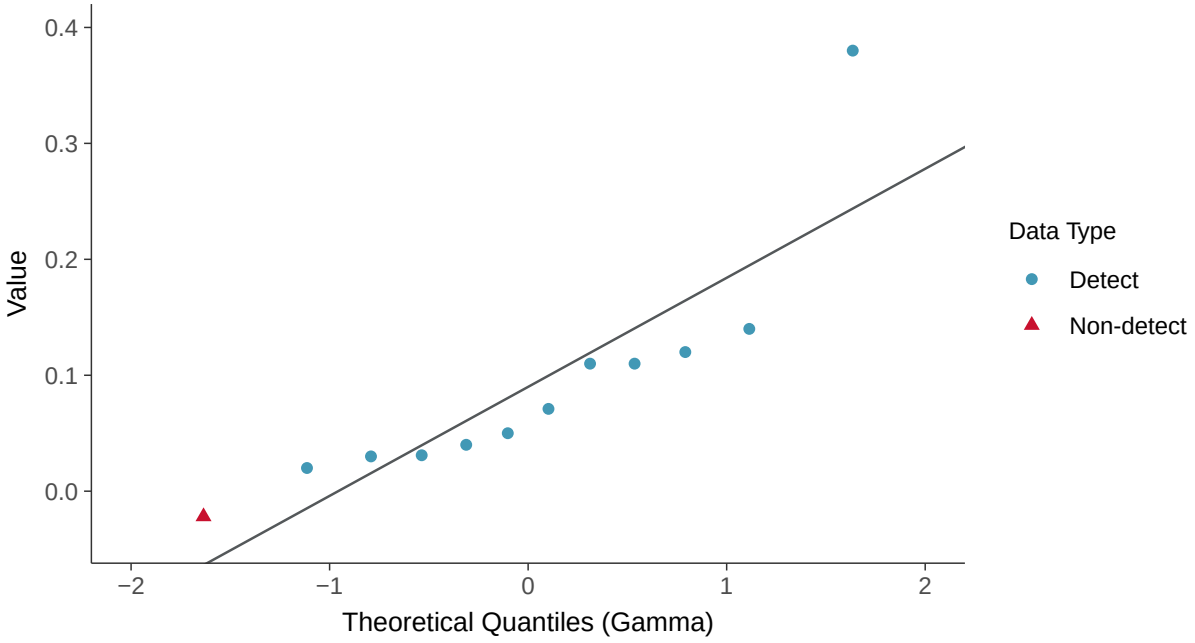
Lognormal Q-Q plot using ROS Imputed Estimates

Iron, MW-15 (mg/l)



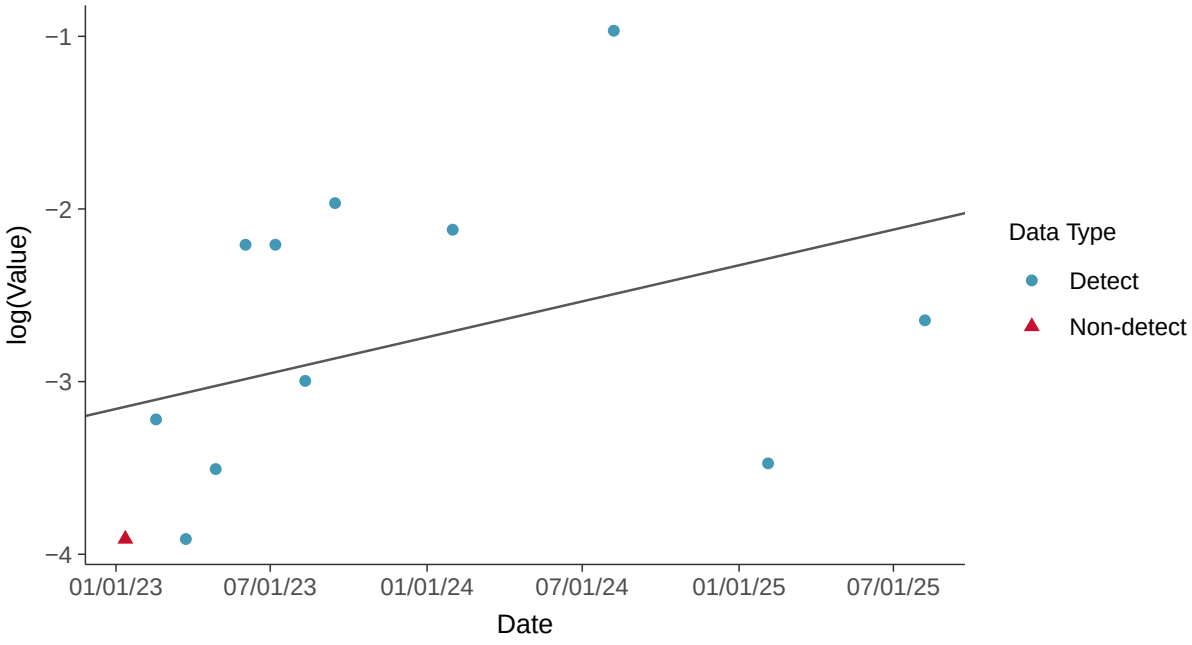
Gamma Q-Q plot using ROS Imputed Estimates

Iron, MW-15 (mg/l)



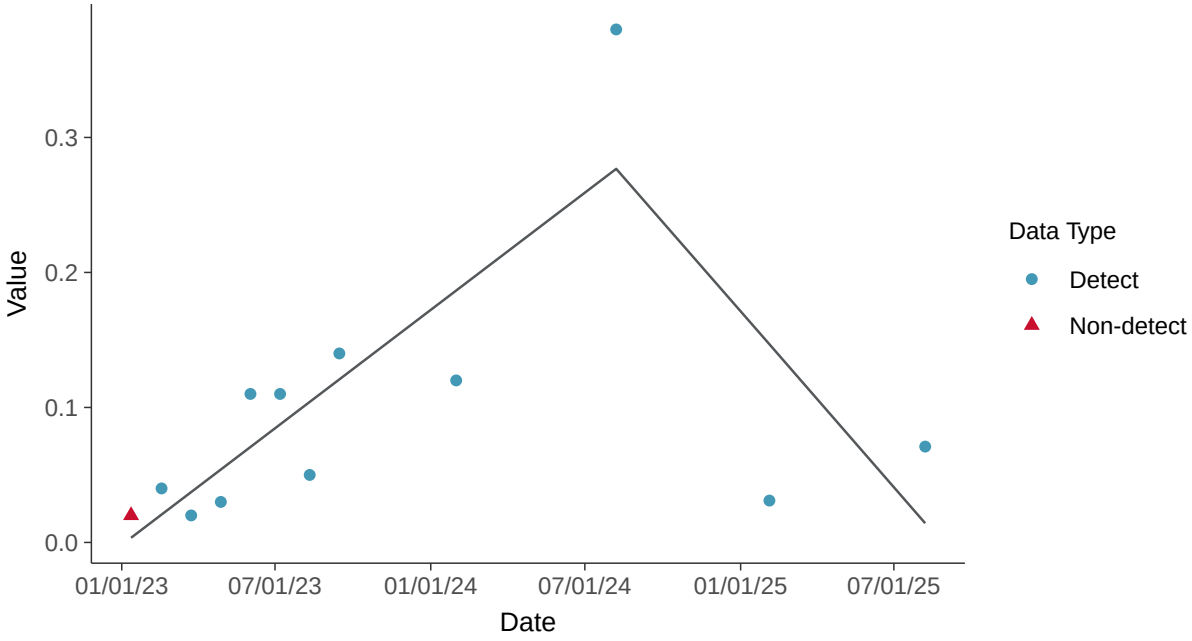
Trend Regression: Lognormal MLE

Iron, MW-15 (mg/l)



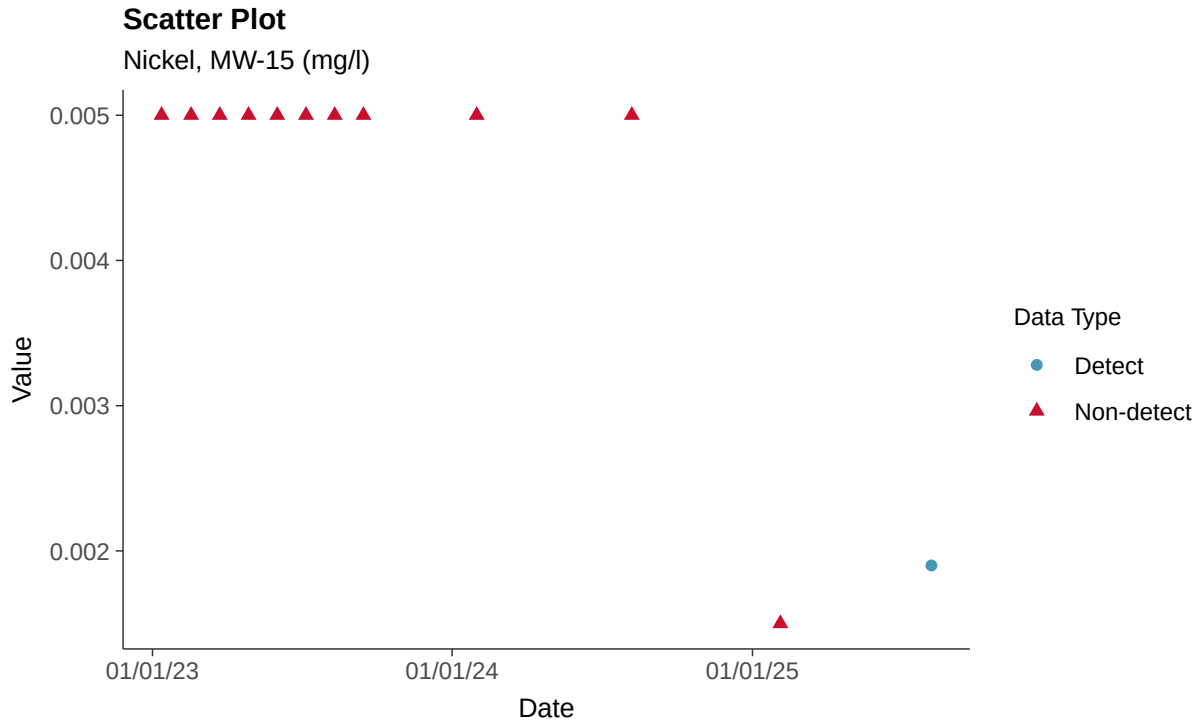
Trend Regression: Piecewise Linear-Linear

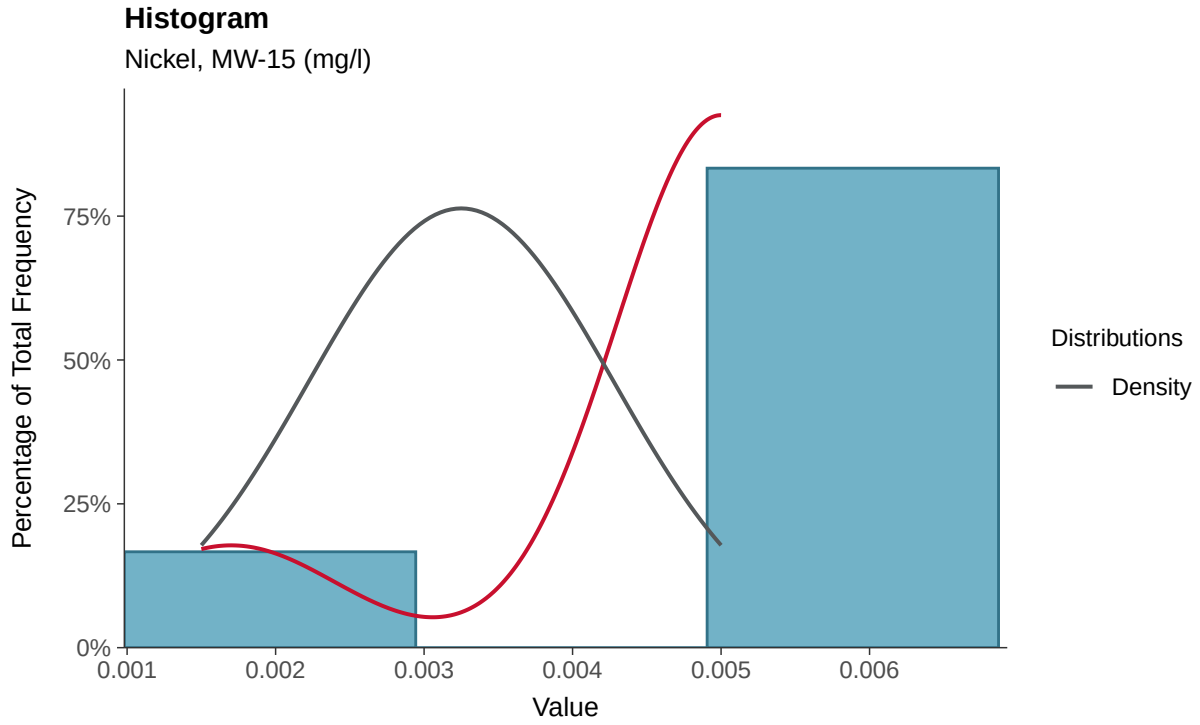
Iron, MW-15 (mg/l)



Part 115: Nickel, MW-15

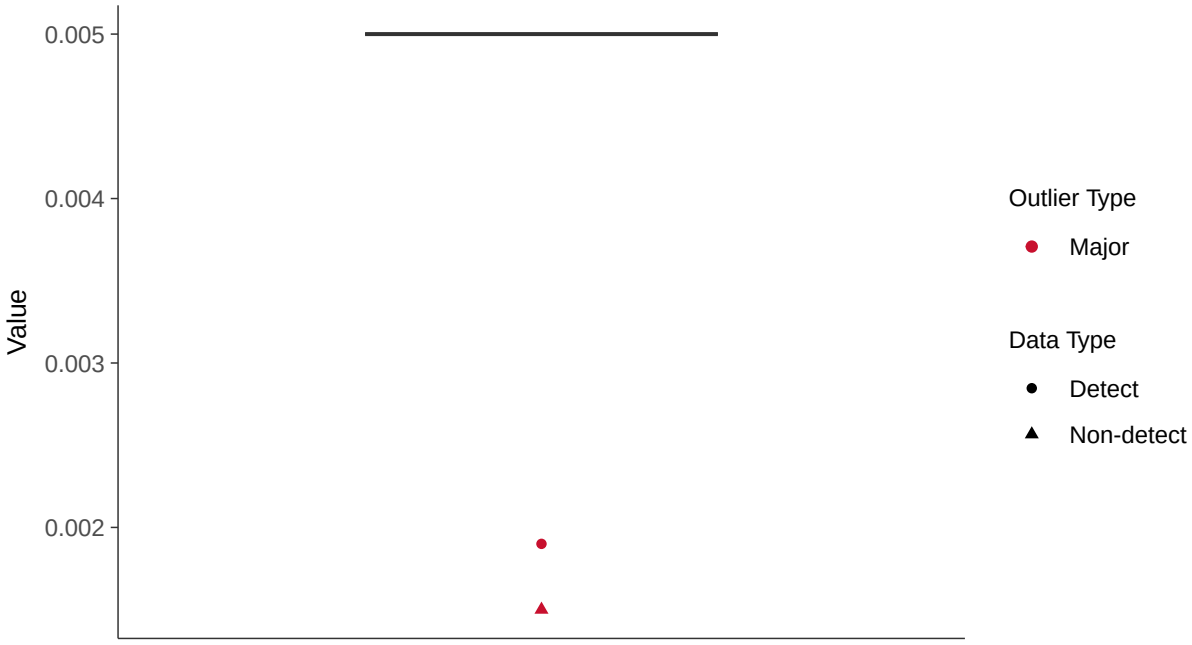
ID: 24_5_119





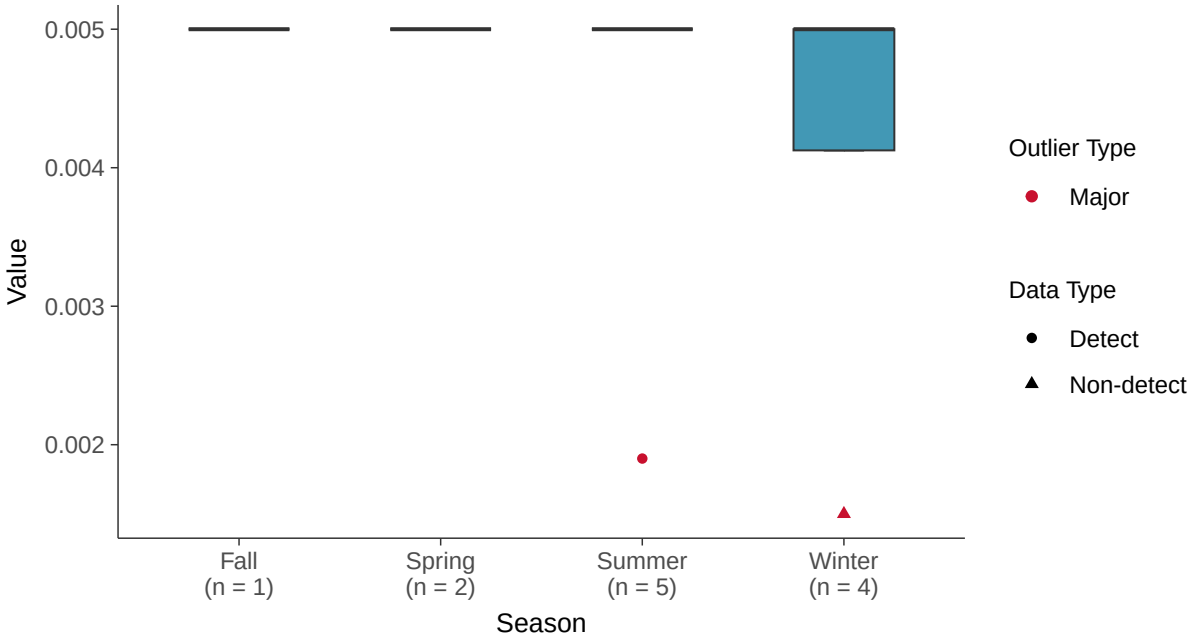
Boxplot

Nickel, MW-15 (mg/l)



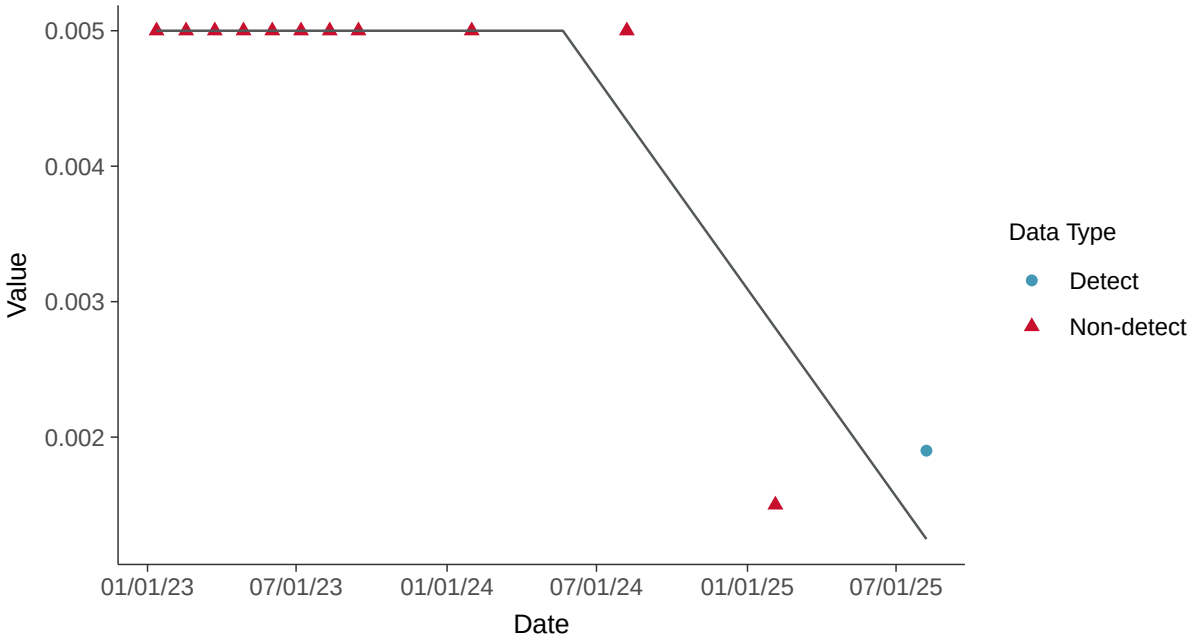
Boxplot by Season

Nickel, MW-15 (mg/l)



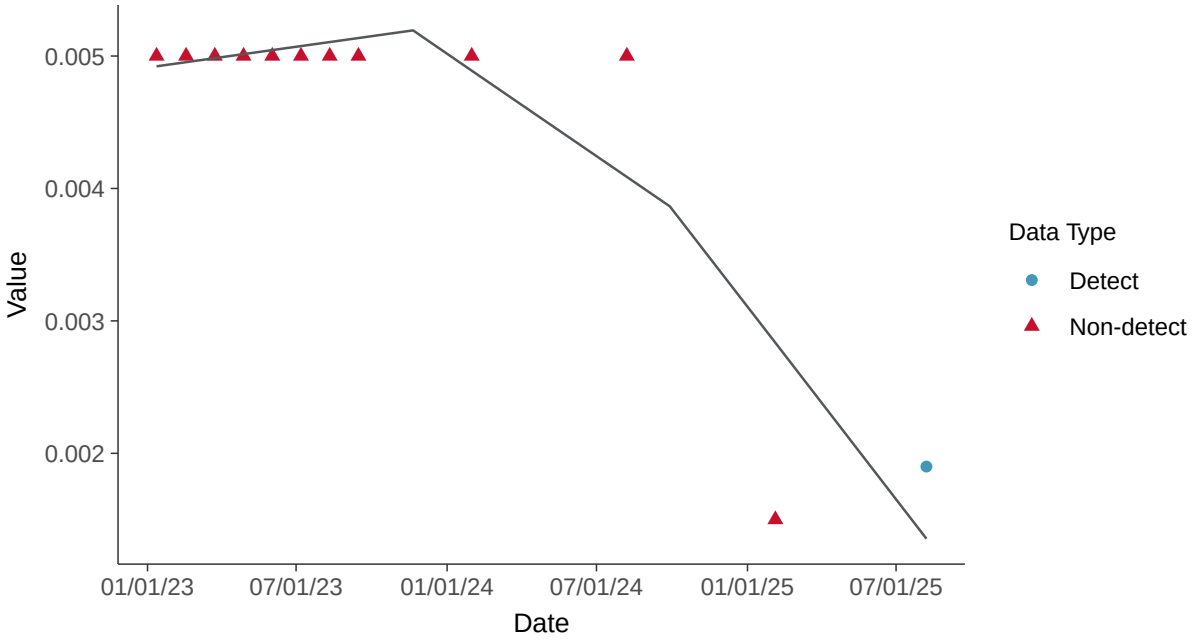
Trend Regression: Piecewise Linear-Linear

Nickel, MW-15 (mg/l)



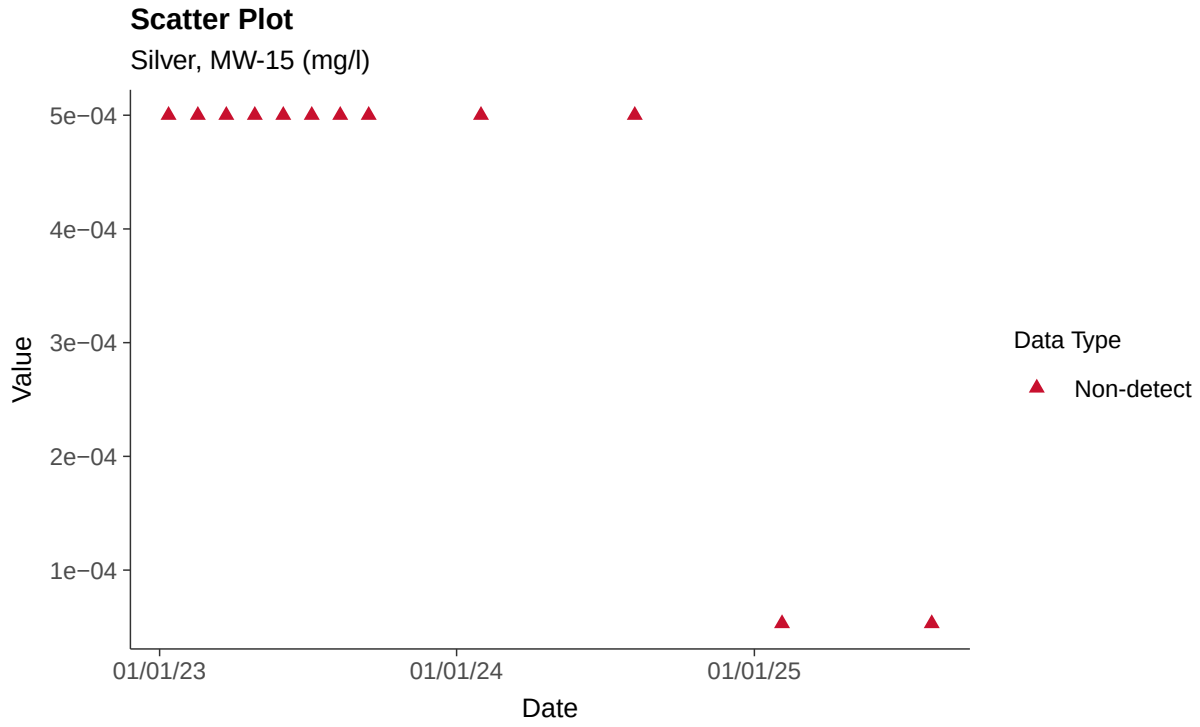
Trend Regression: Piecewise Linear-Linear-Linear

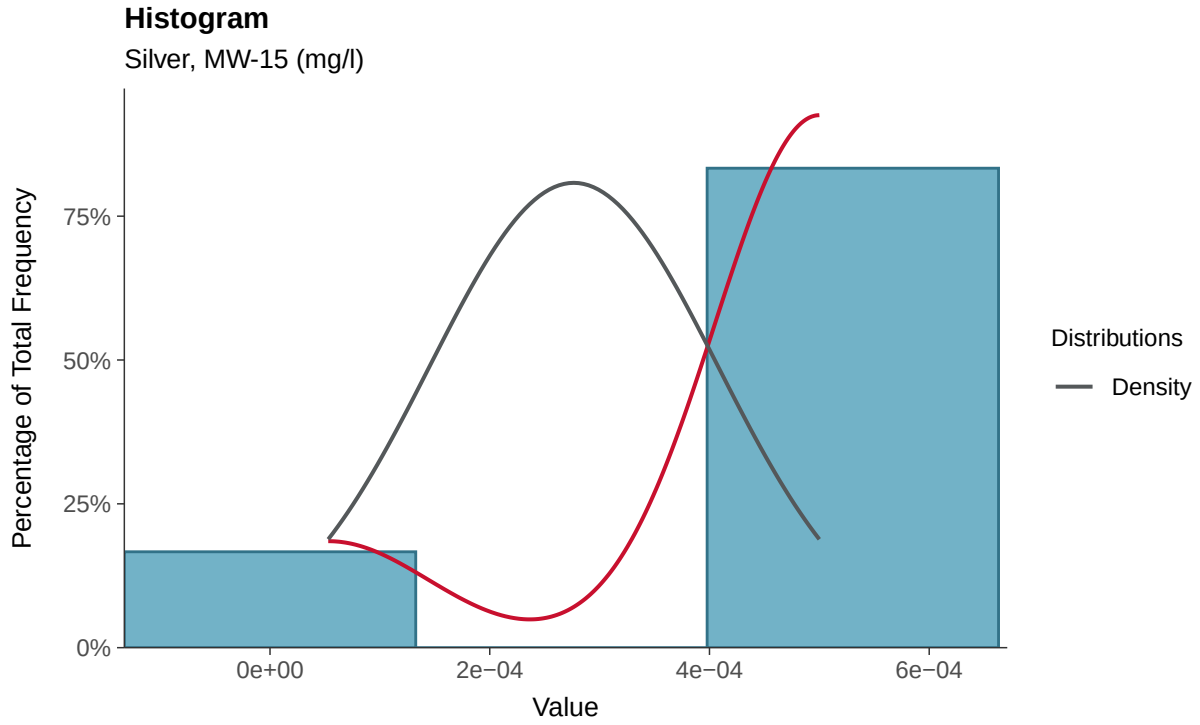
Nickel, MW-15 (mg/l)



Part 115: Silver, MW-15

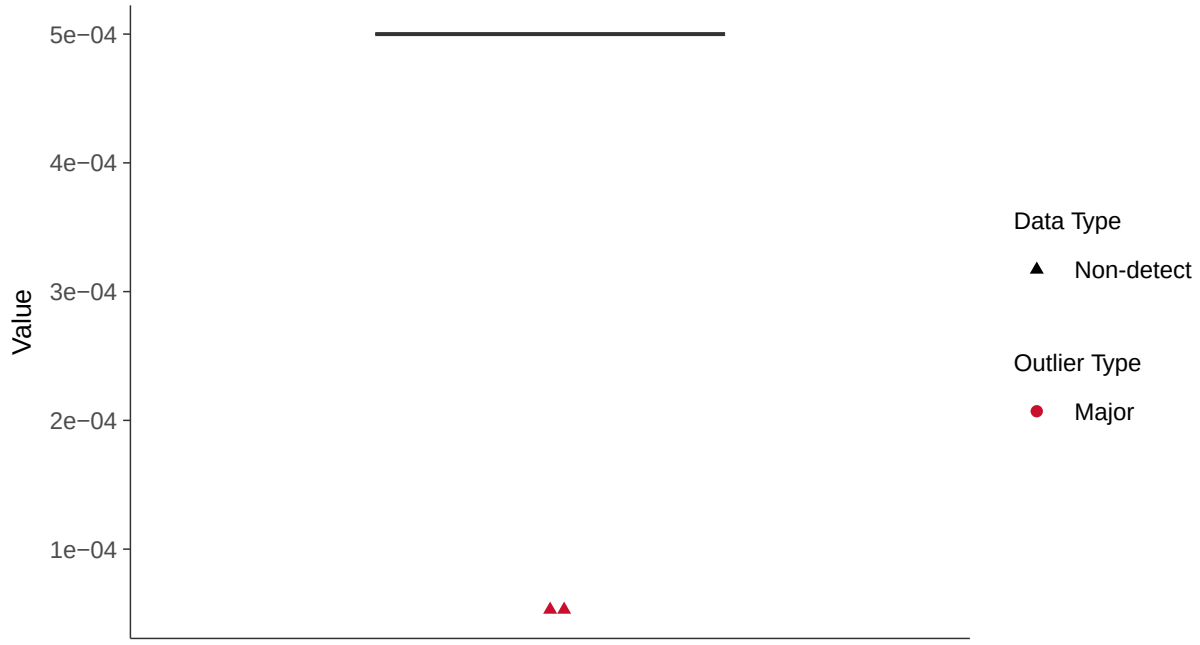
ID: 24_5_123





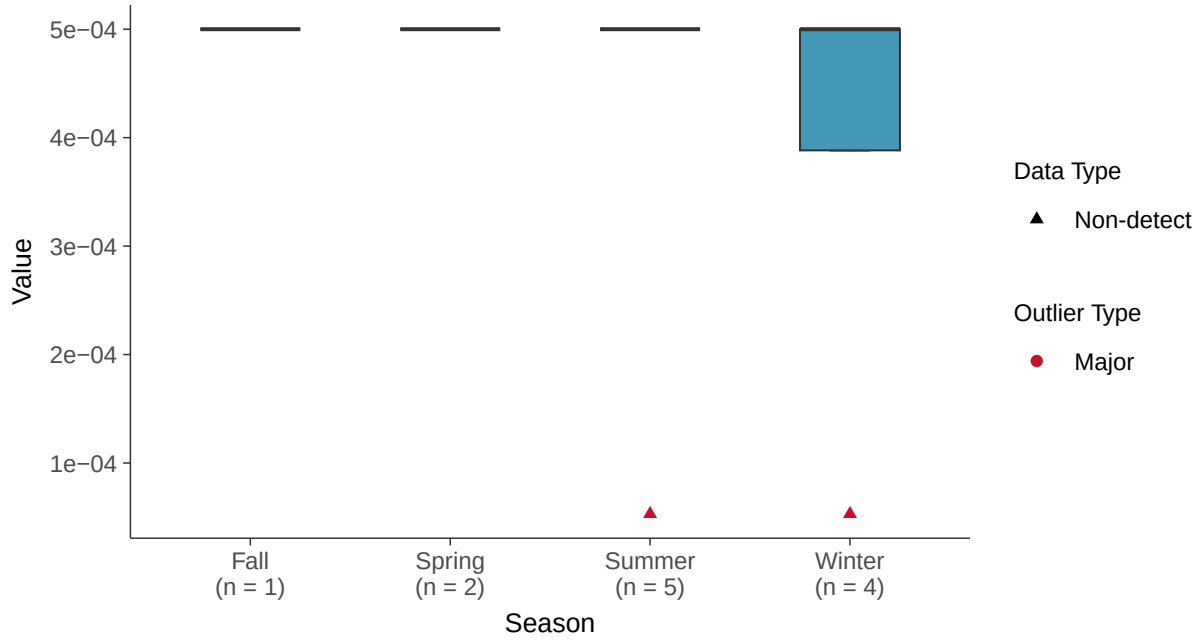
Boxplot

Silver, MW-15 (mg/l)



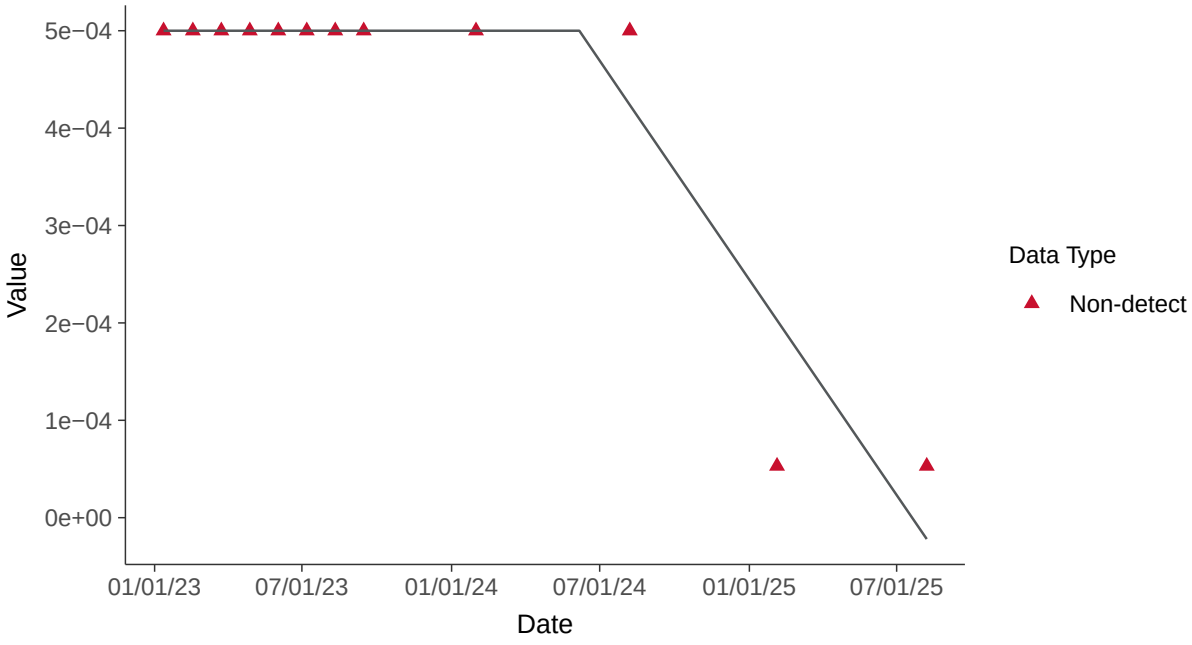
Boxplot by Season

Silver, MW-15 (mg/l)



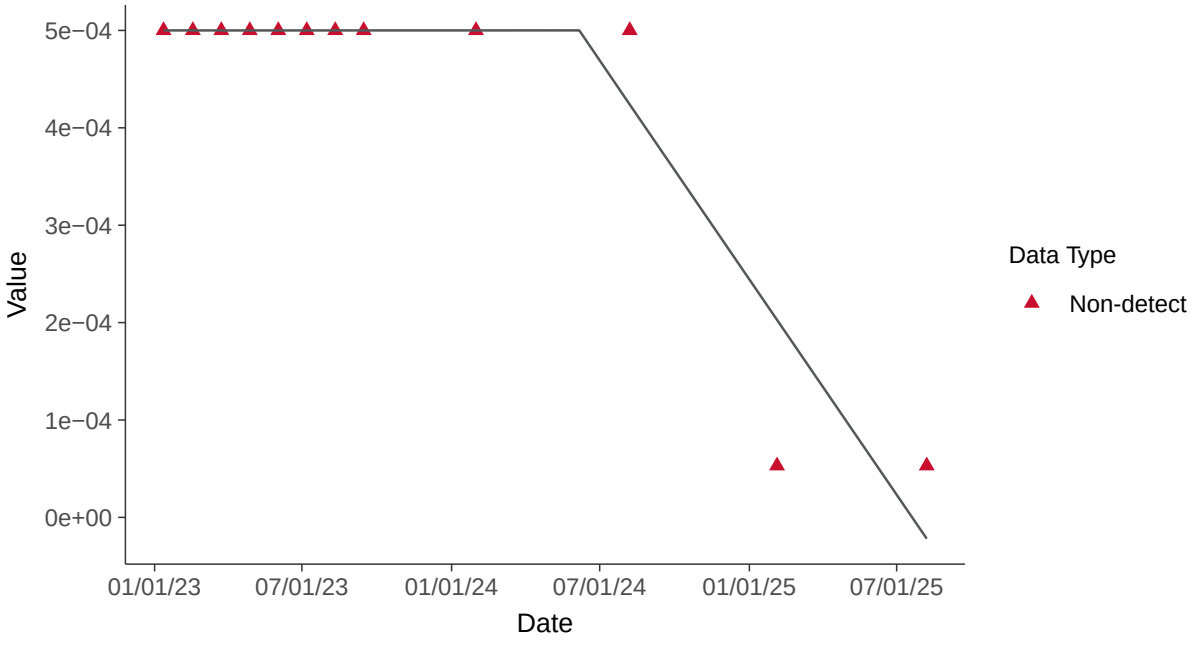
Trend Regression: Piecewise Linear-Linear

Silver, MW-15 (mg/l)



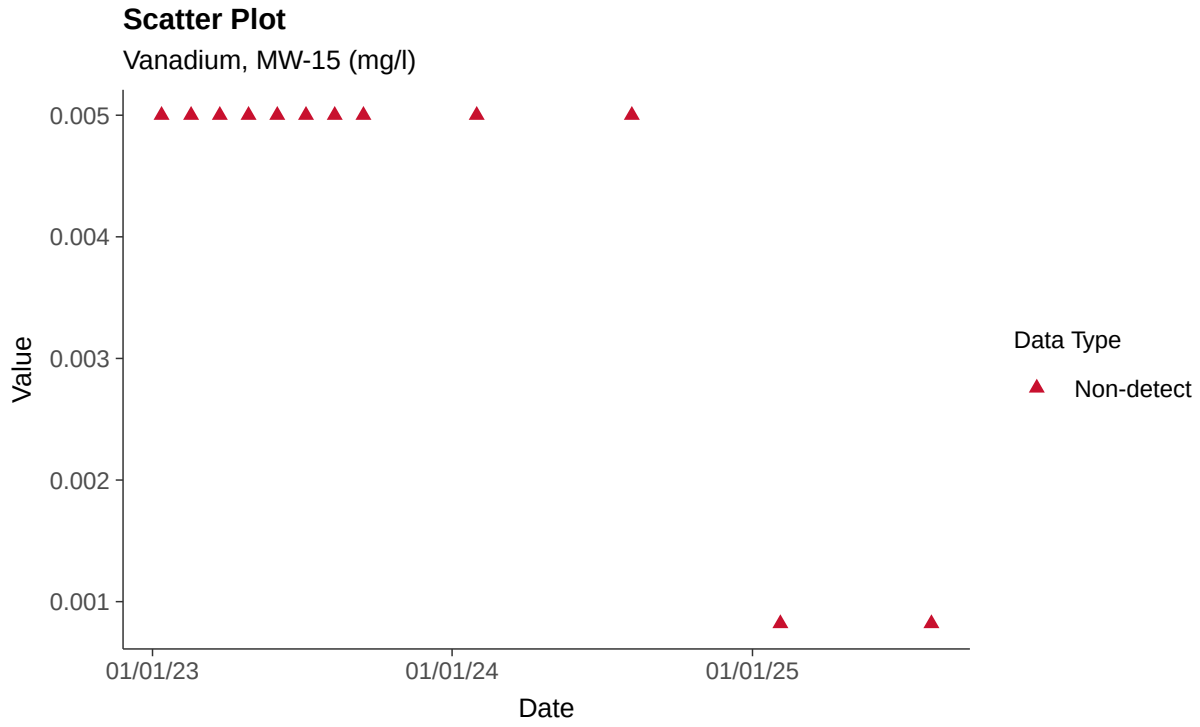
Trend Regression: Piecewise Linear-Linear-Linear

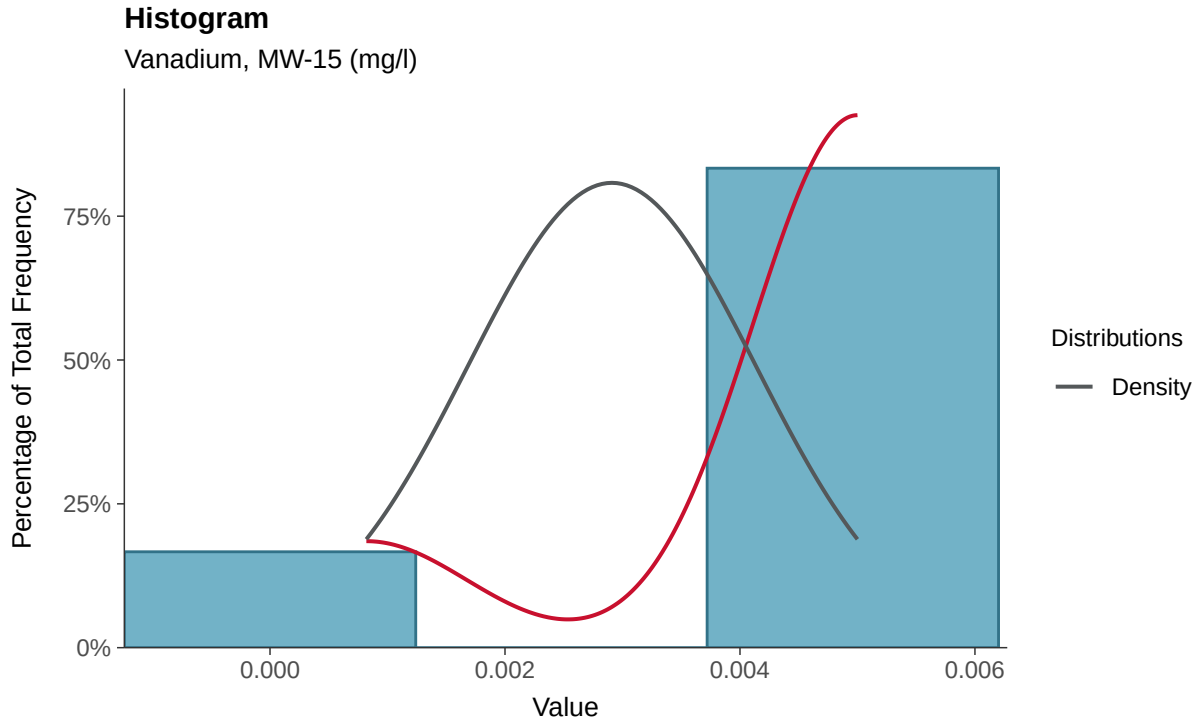
Silver, MW-15 (mg/l)



Part 115: Vanadium, MW-15

ID: 24_5_128



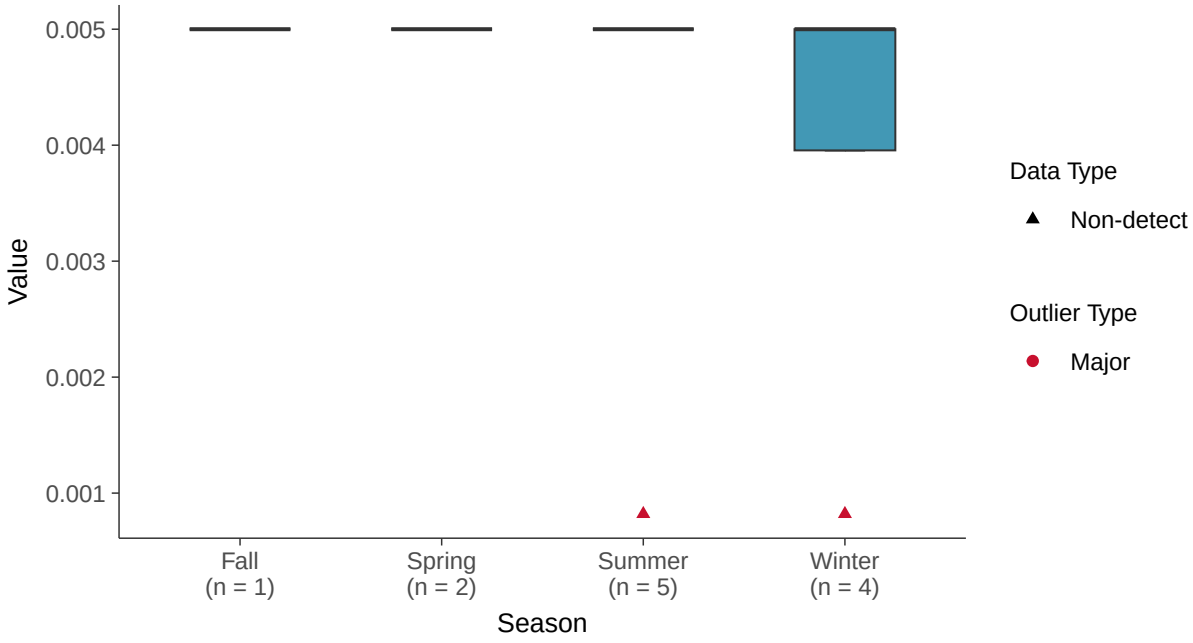


Boxplot

Vanadium, MW-15 (mg/l)

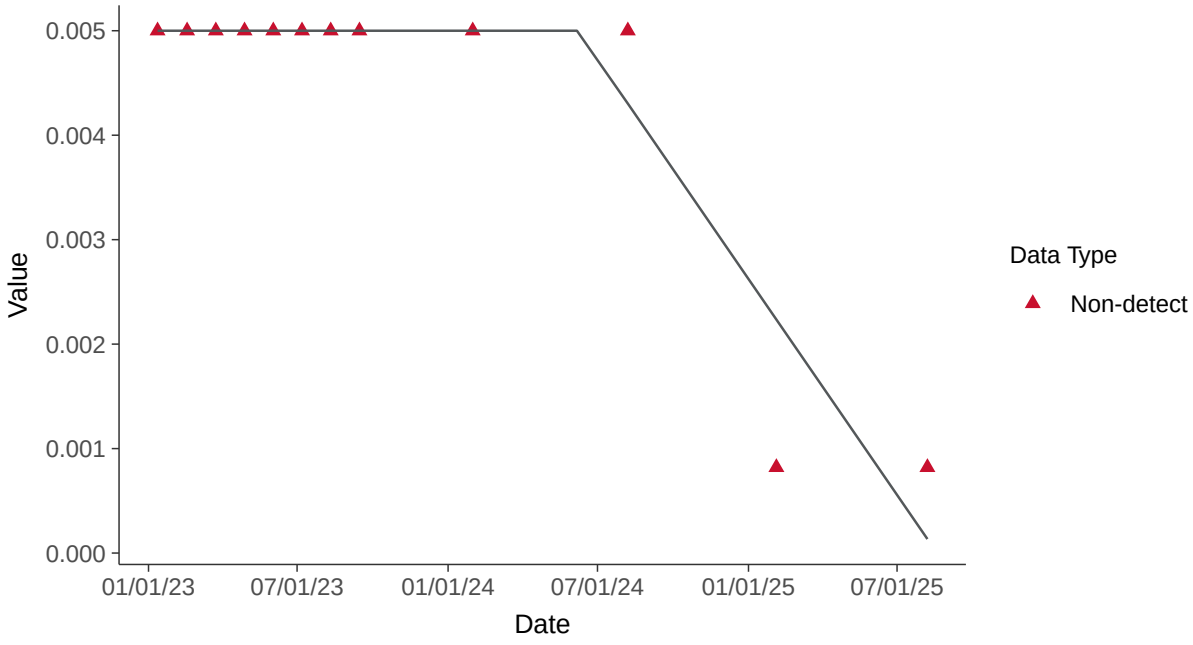
Boxplot by Season

Vanadium, MW-15 (mg/l)



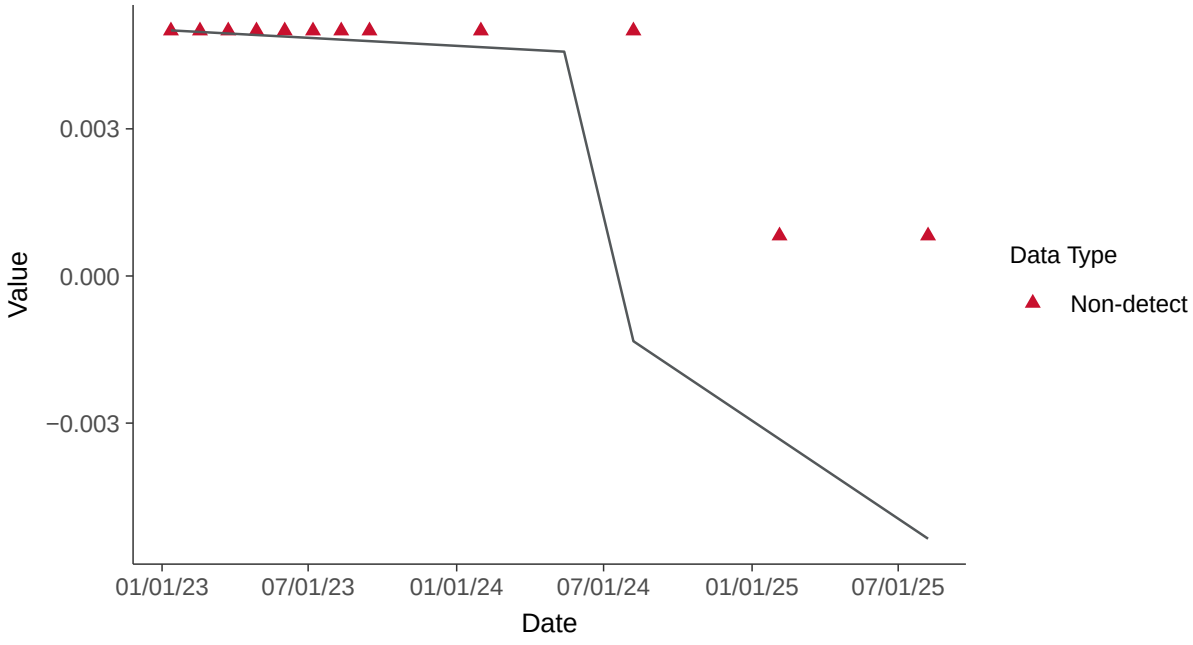
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-15 (mg/l)



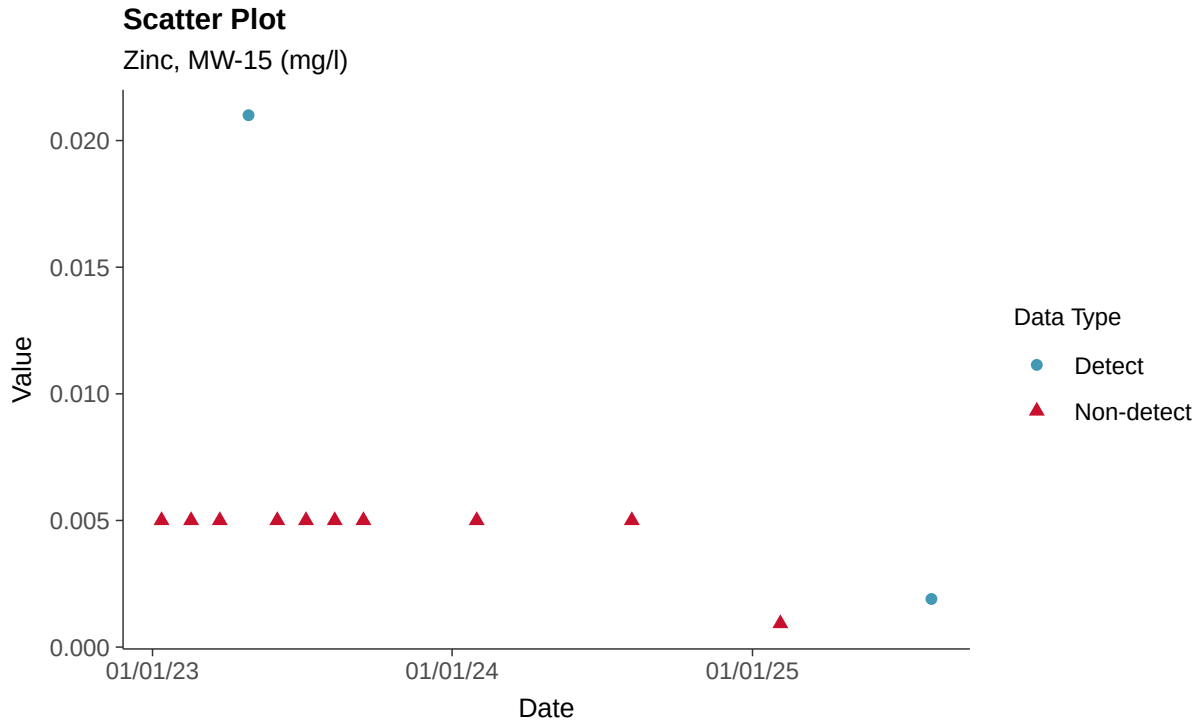
Trend Regression: Piecewise Linear-Linear-Linear

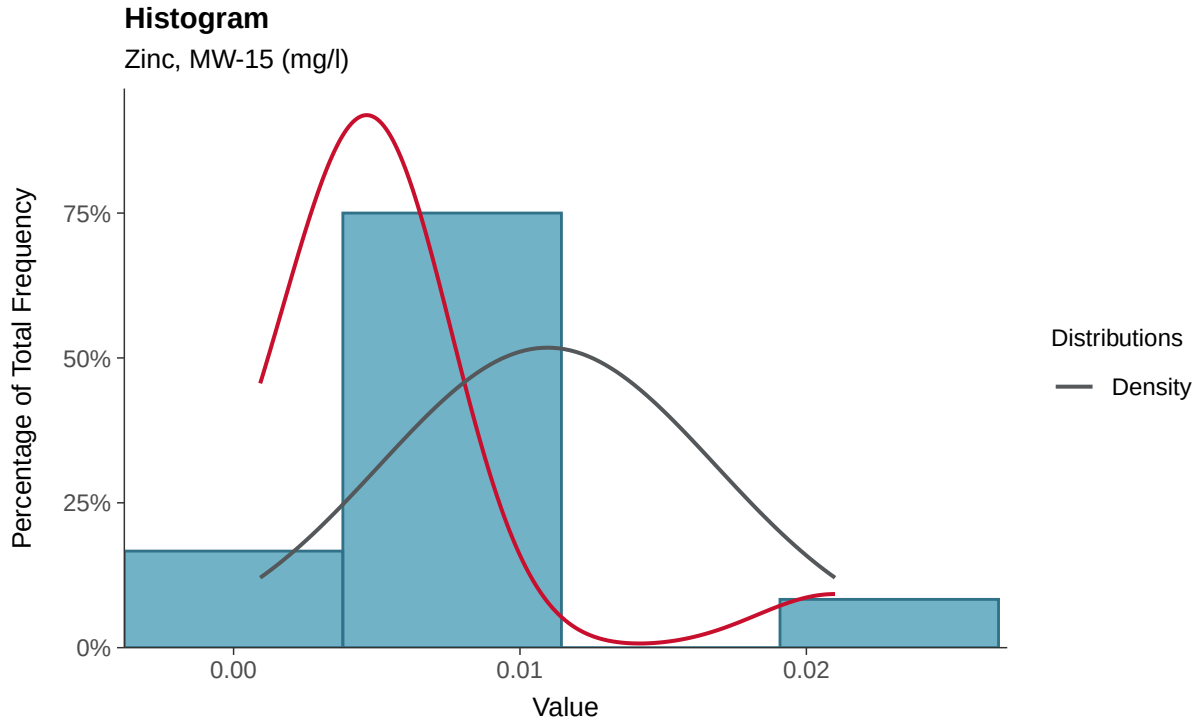
Vanadium, MW-15 (mg/l)



Part 115: Zinc, MW-15

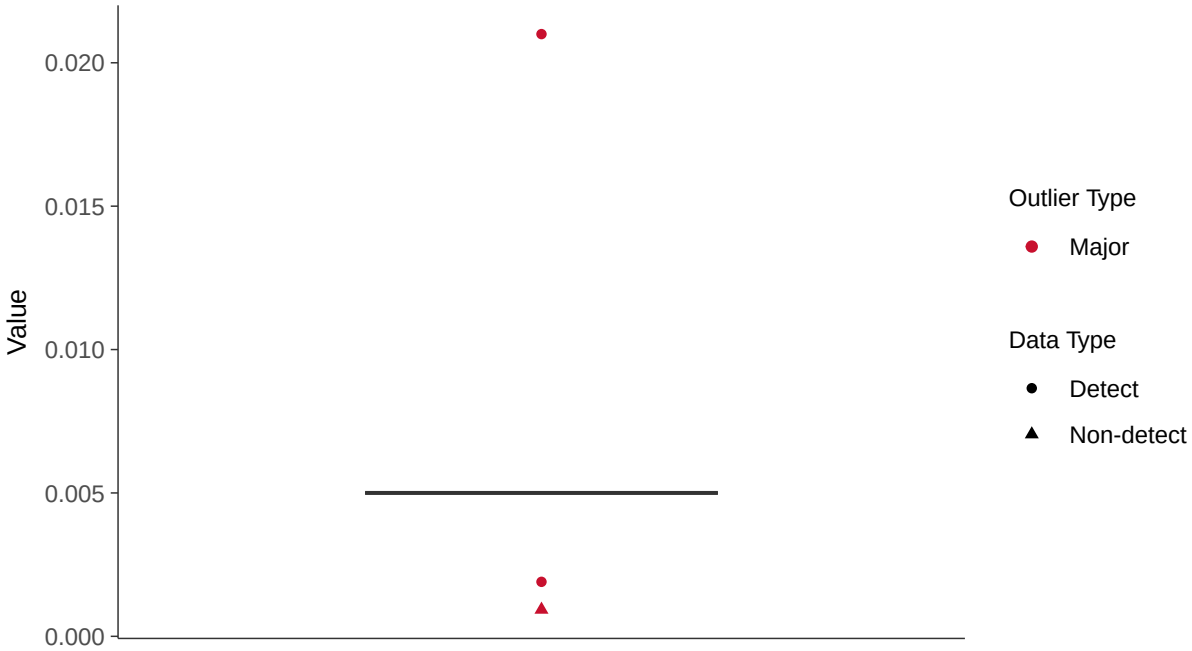
ID: 24_5_129





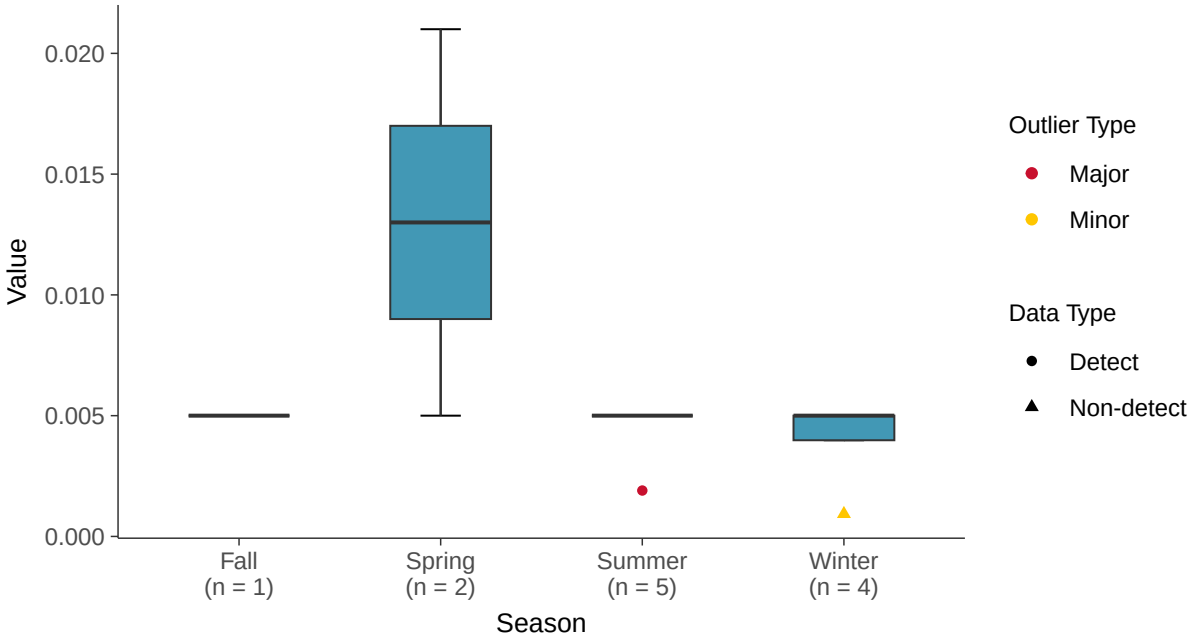
Boxplot

Zinc, MW-15 (mg/l)



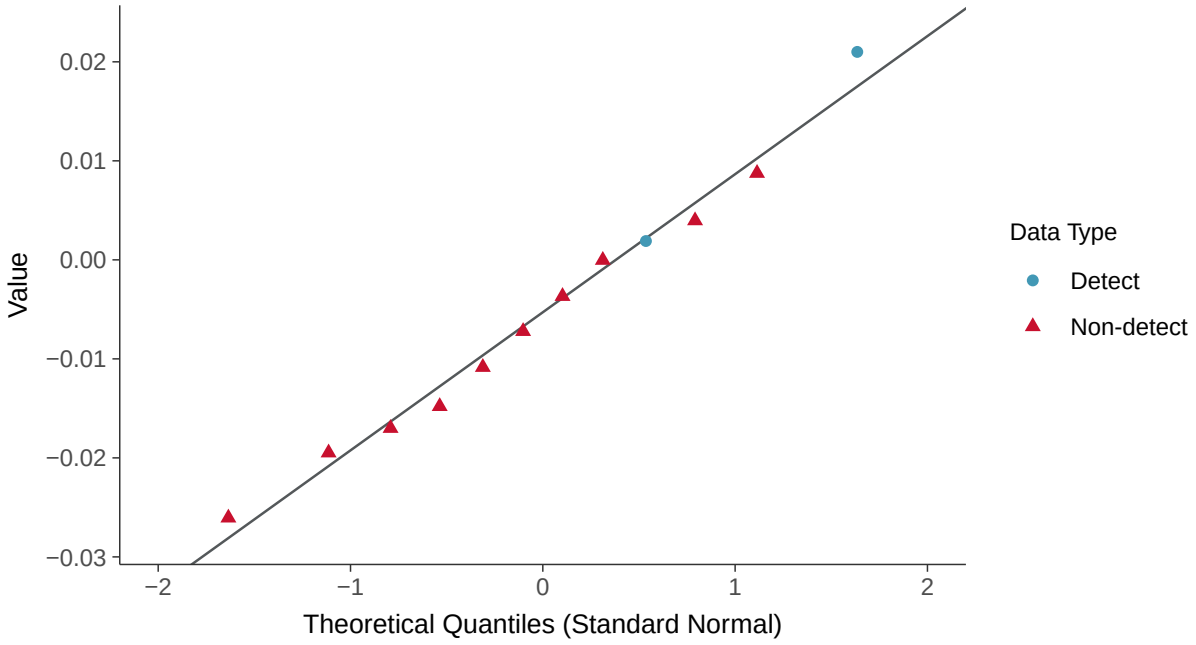
Boxplot by Season

Zinc, MW-15 (mg/l)



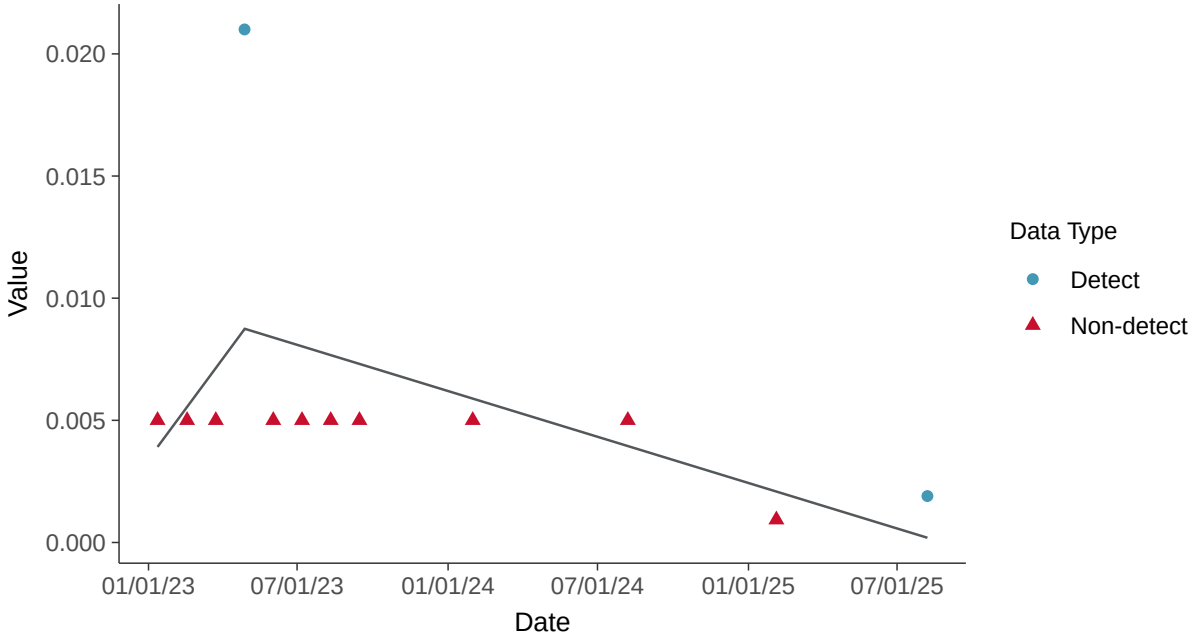
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-15 (mg/l)



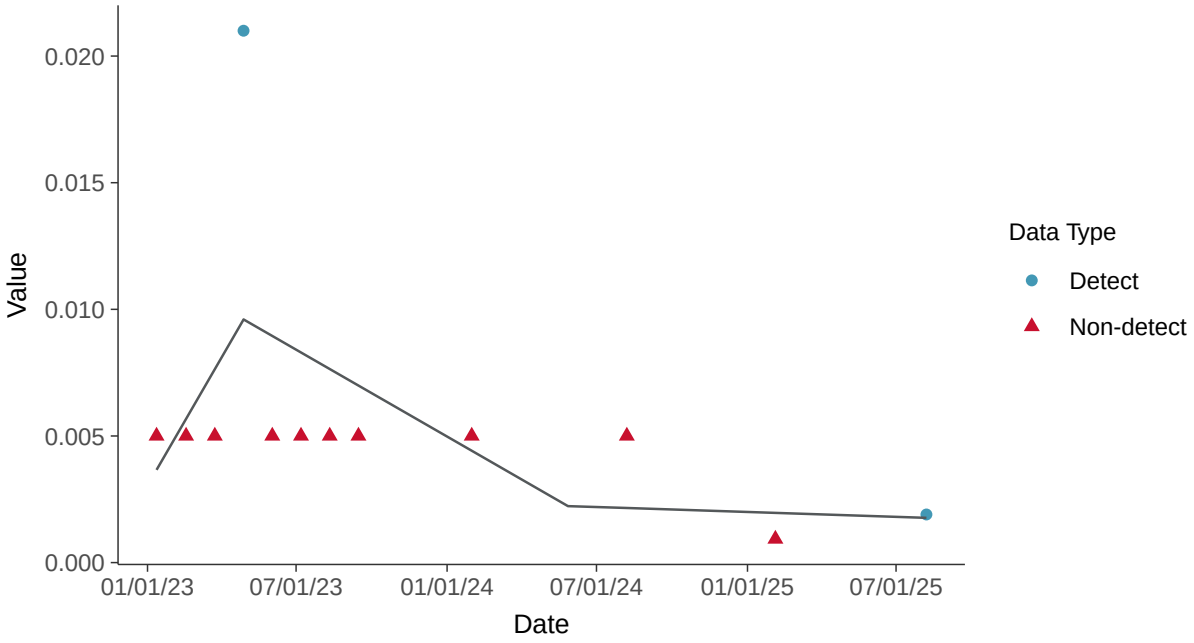
Trend Regression: Piecewise Linear-Linear

Zinc, MW-15 (mg/l)



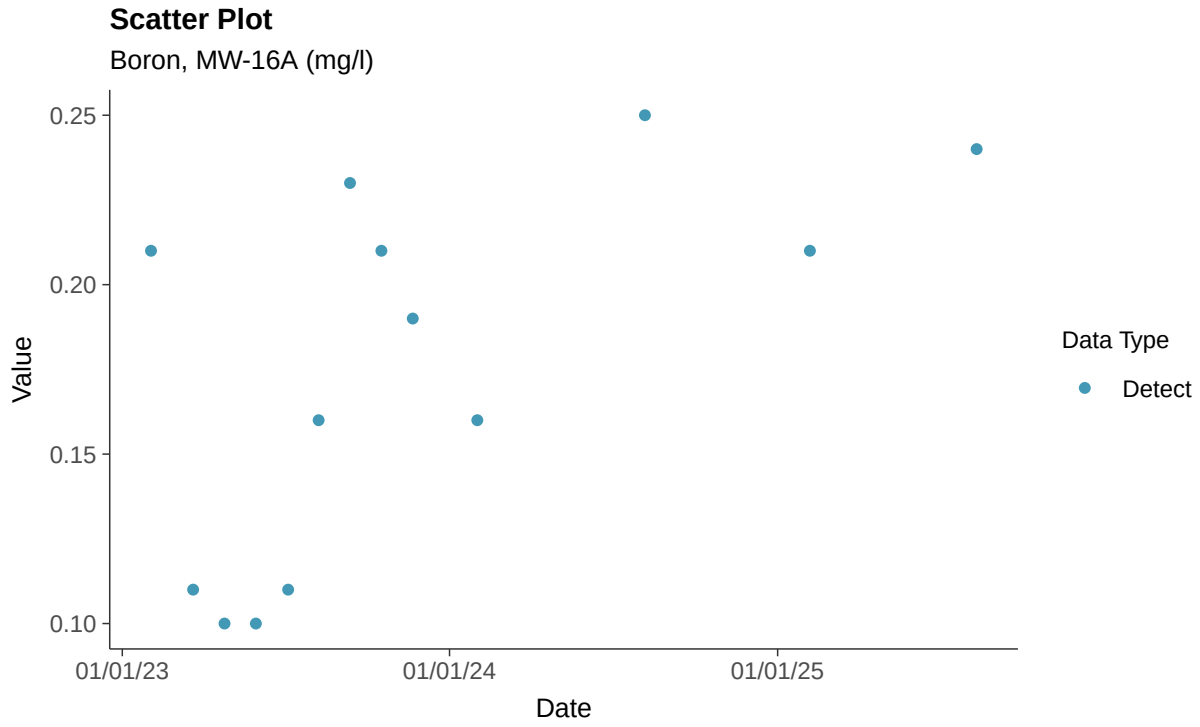
Trend Regression: Piecewise Linear-Linear-Linear

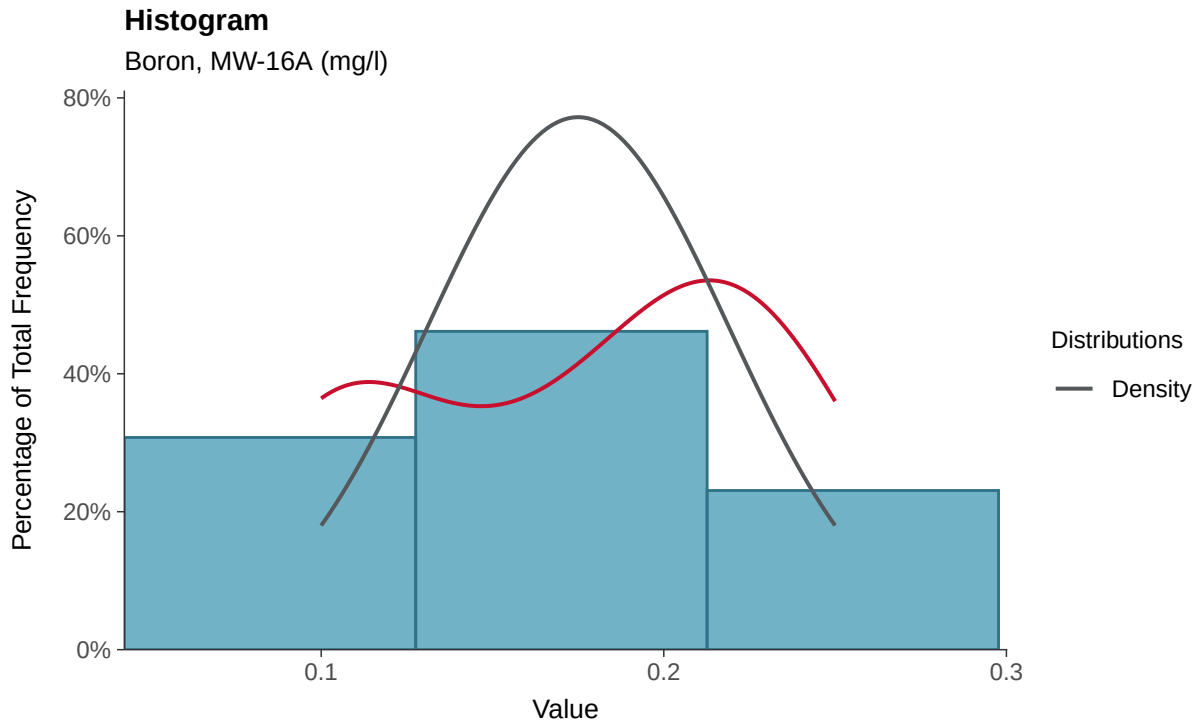
Zinc, MW-15 (mg/l)



Appendix III: Boron, MW-16A

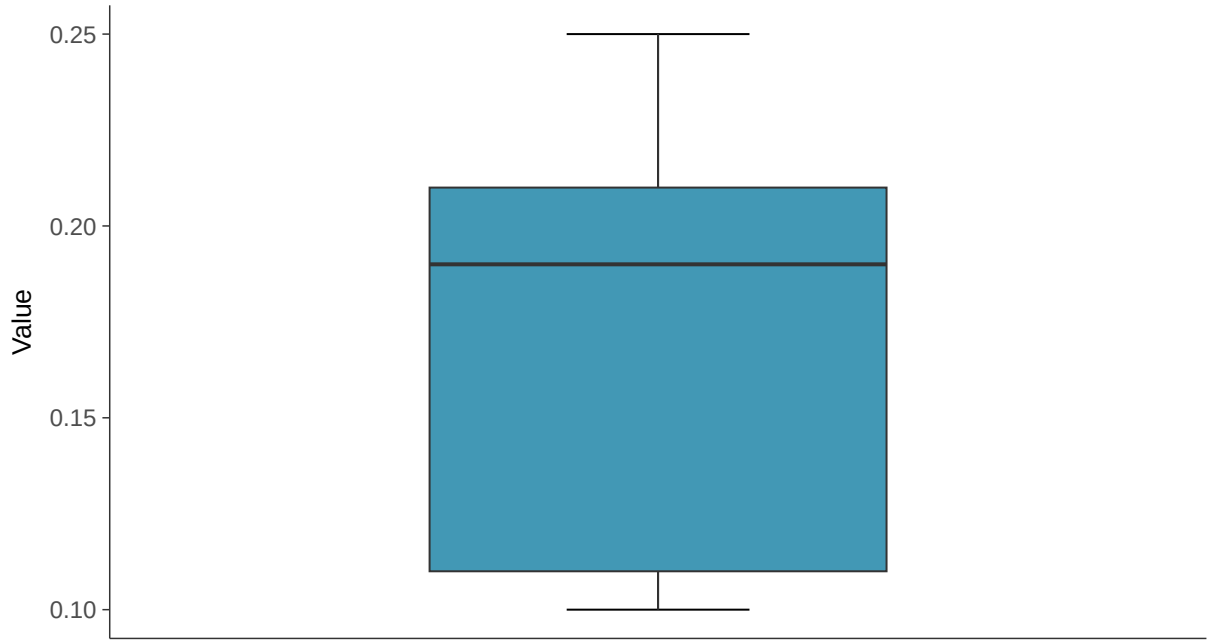
ID: 25_2_105





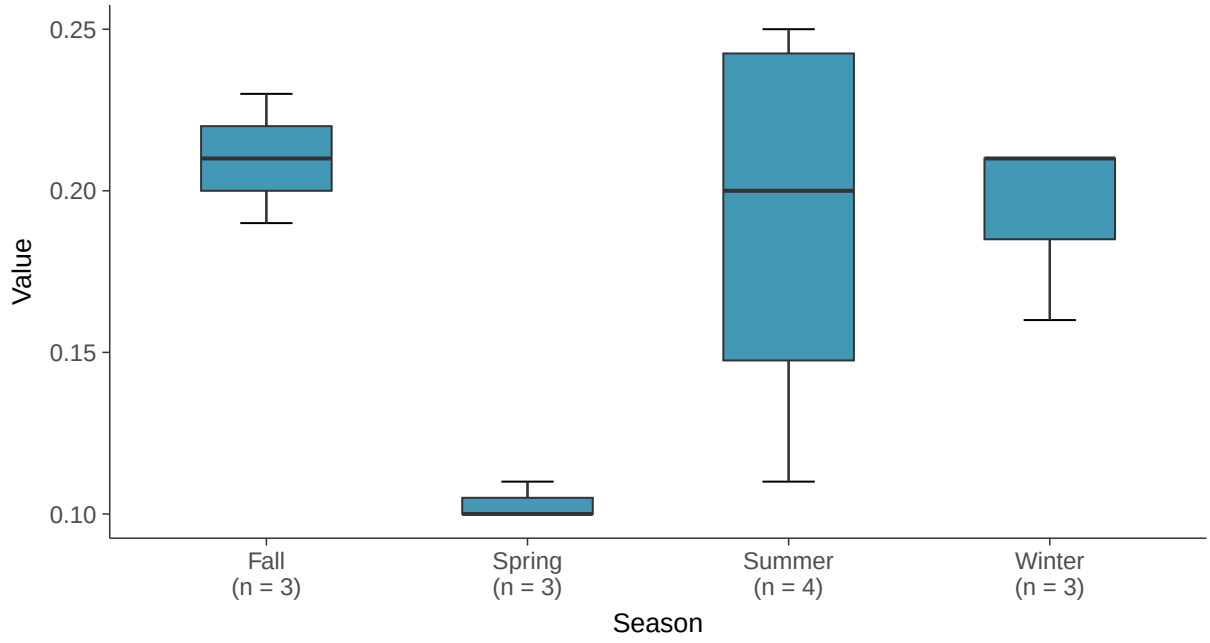
Boxplot

Boron, MW-16A (mg/l)



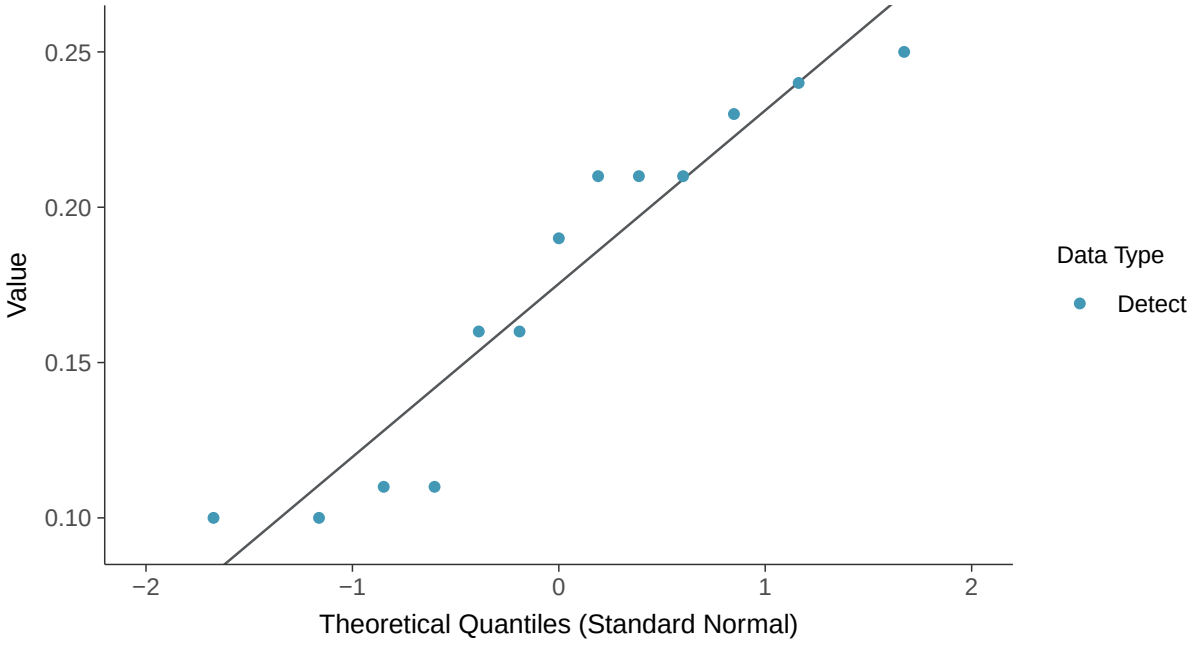
Boxplot by Season

Boron, MW-16A (mg/l)



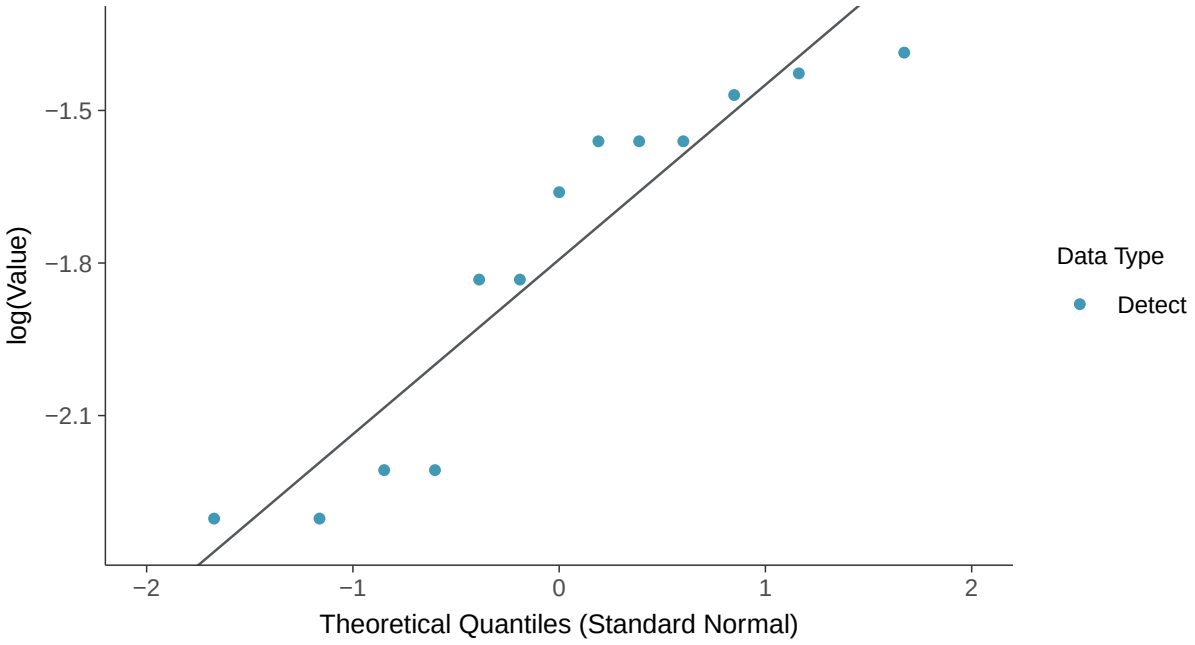
Normal Q-Q plot

Boron, MW-16A (mg/l)



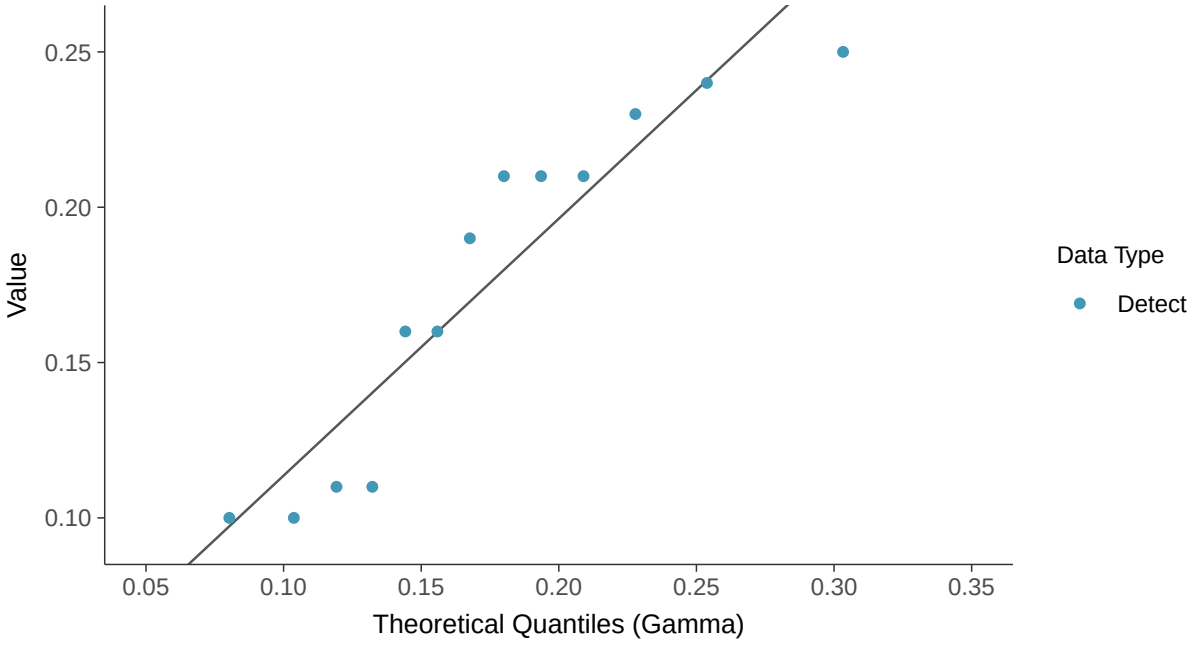
Lognormal Q-Q plot

Boron, MW-16A (mg/l)



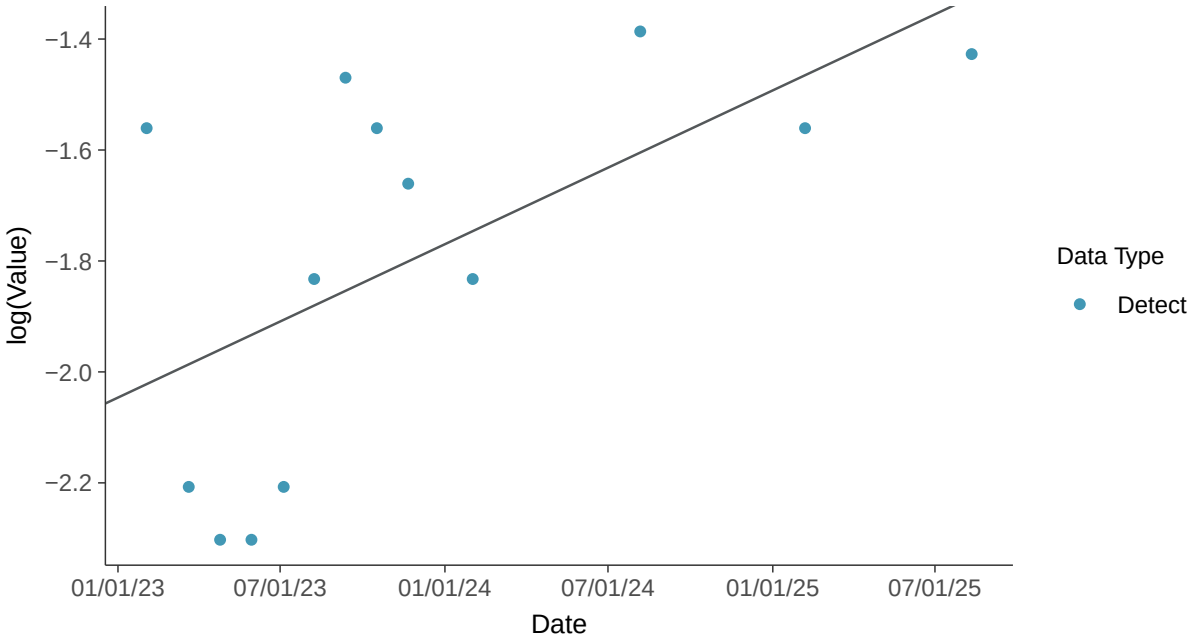
Gamma Q-Q plot

Boron, MW-16A (mg/l)



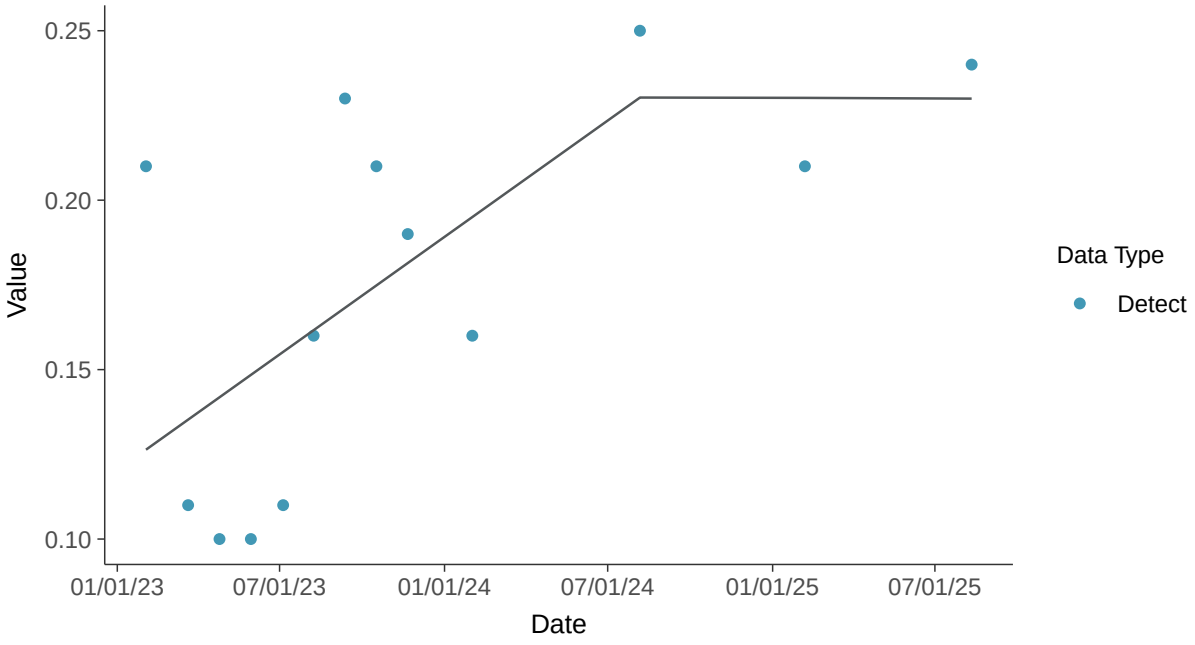
Trend Regression: Lognormal MLE

Boron, MW-16A (mg/l)



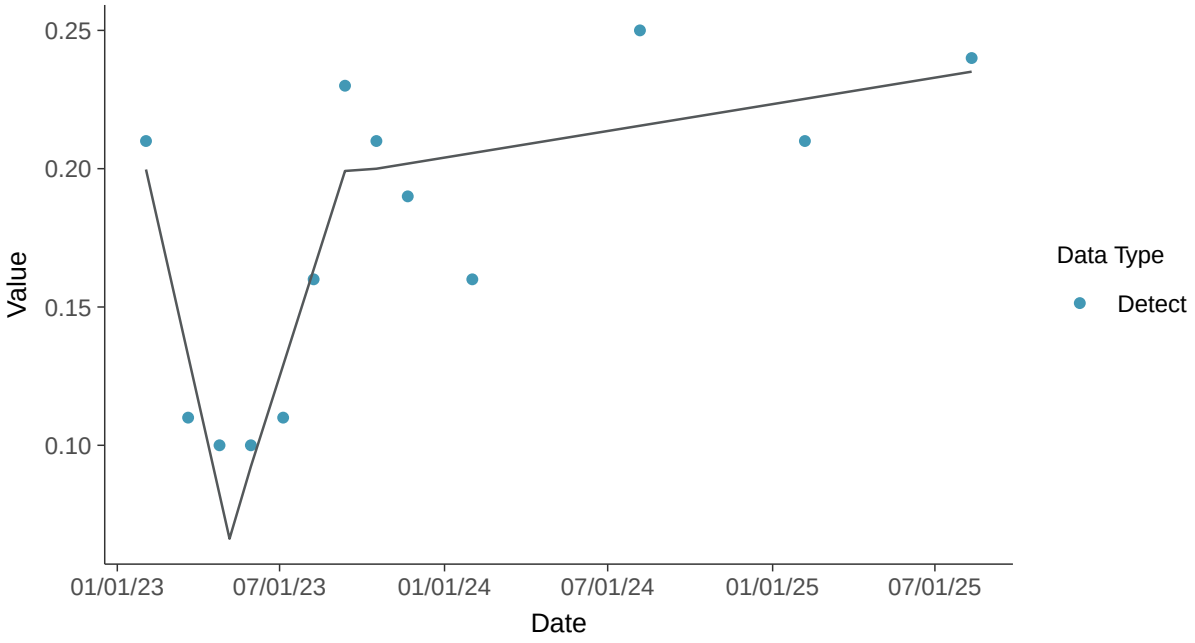
Trend Regression: Piecewise Linear-Linear

Boron, MW-16A (mg/l)



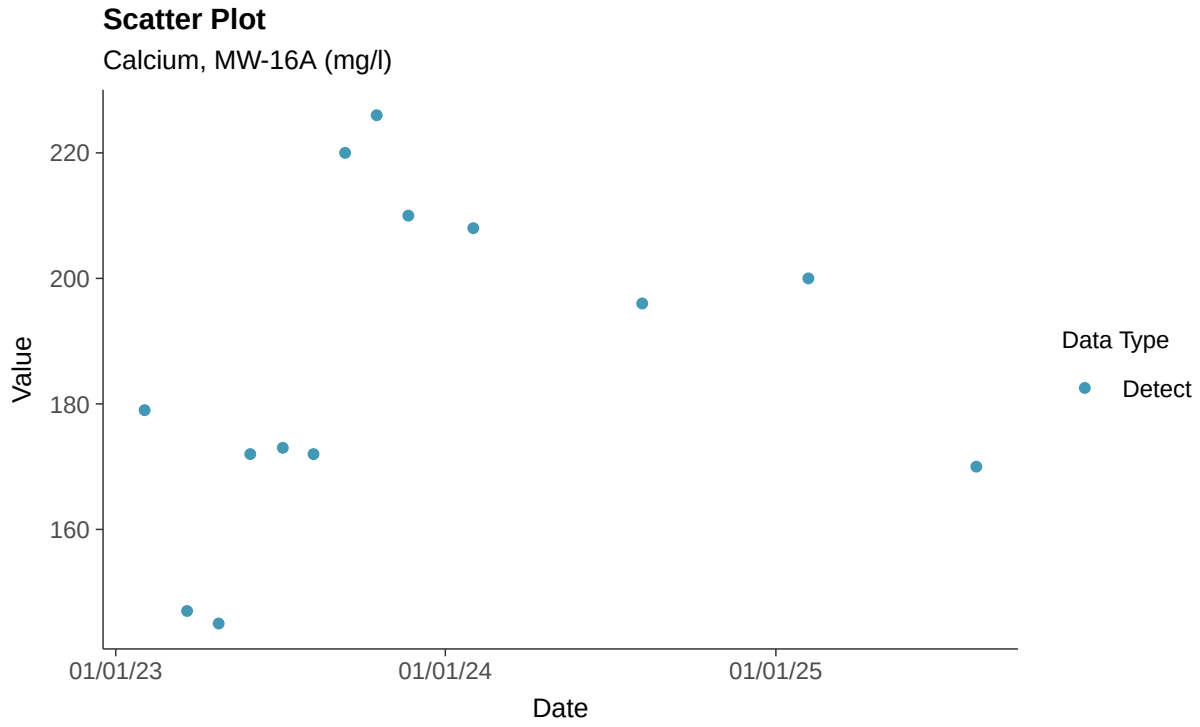
Trend Regression: Piecewise Linear-Linear-Linear

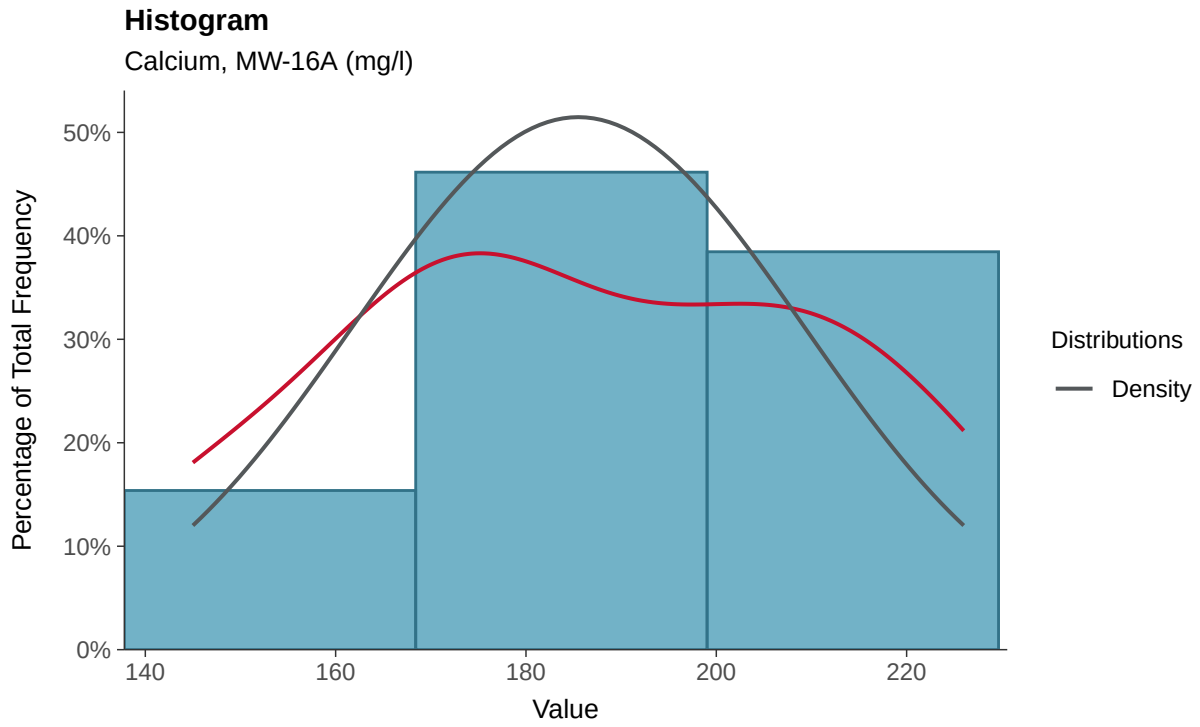
Boron, MW-16A (mg/l)



Appendix III: Calcium, MW-16A

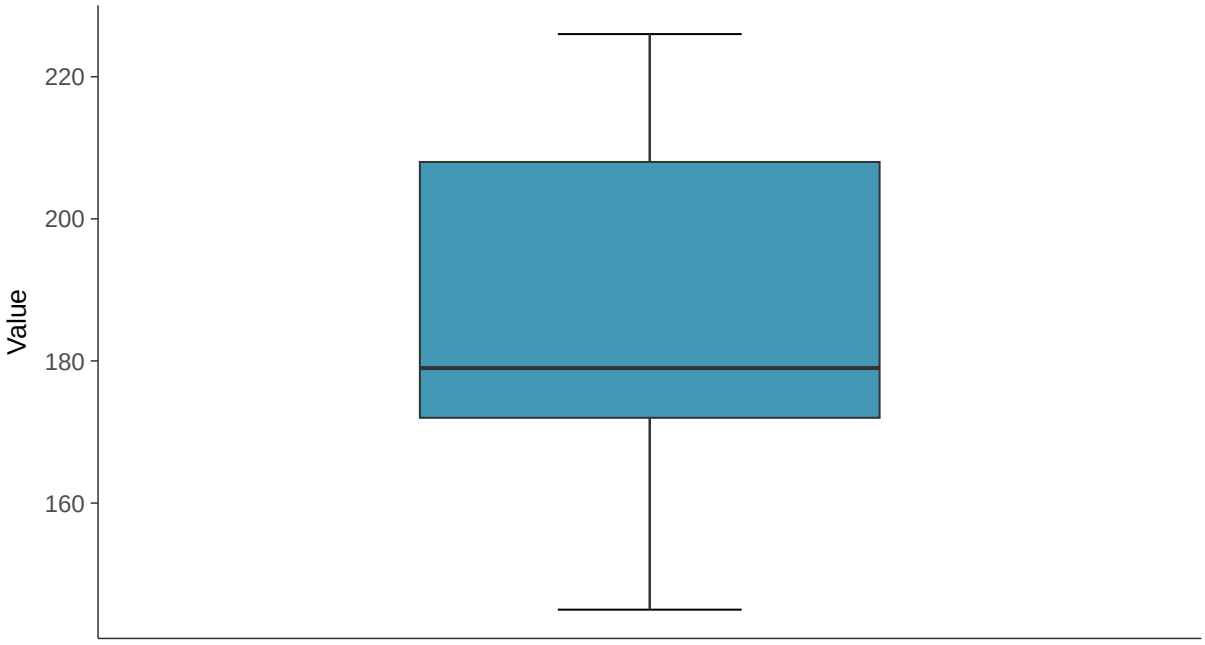
ID: 25_2_107





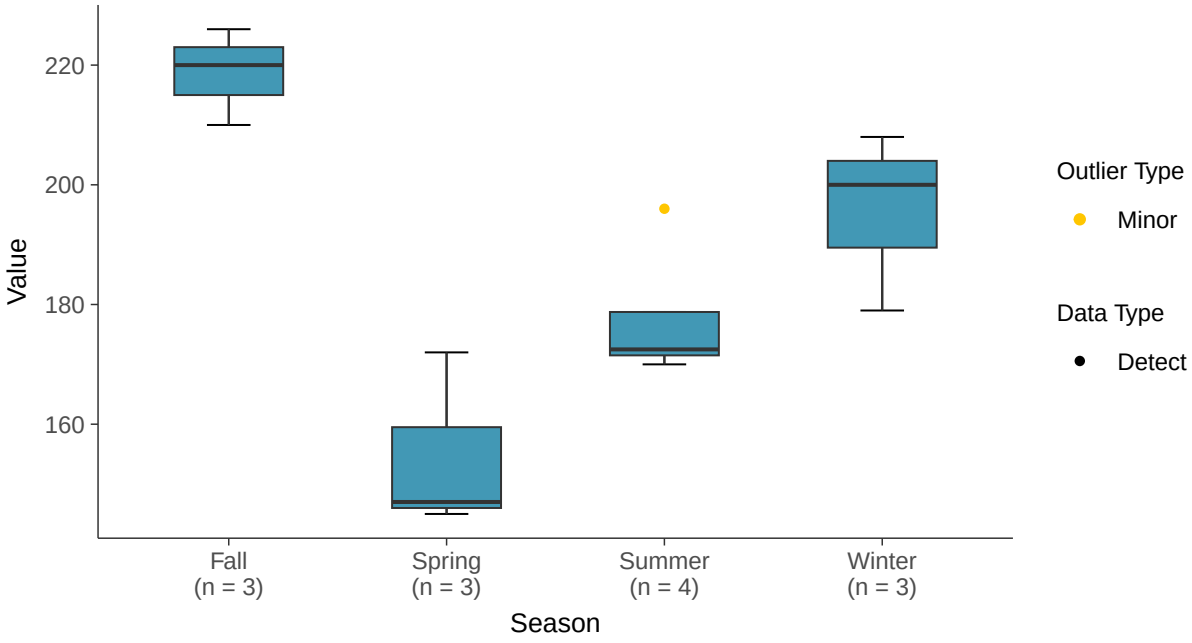
Boxplot

Calcium, MW-16A (mg/l)



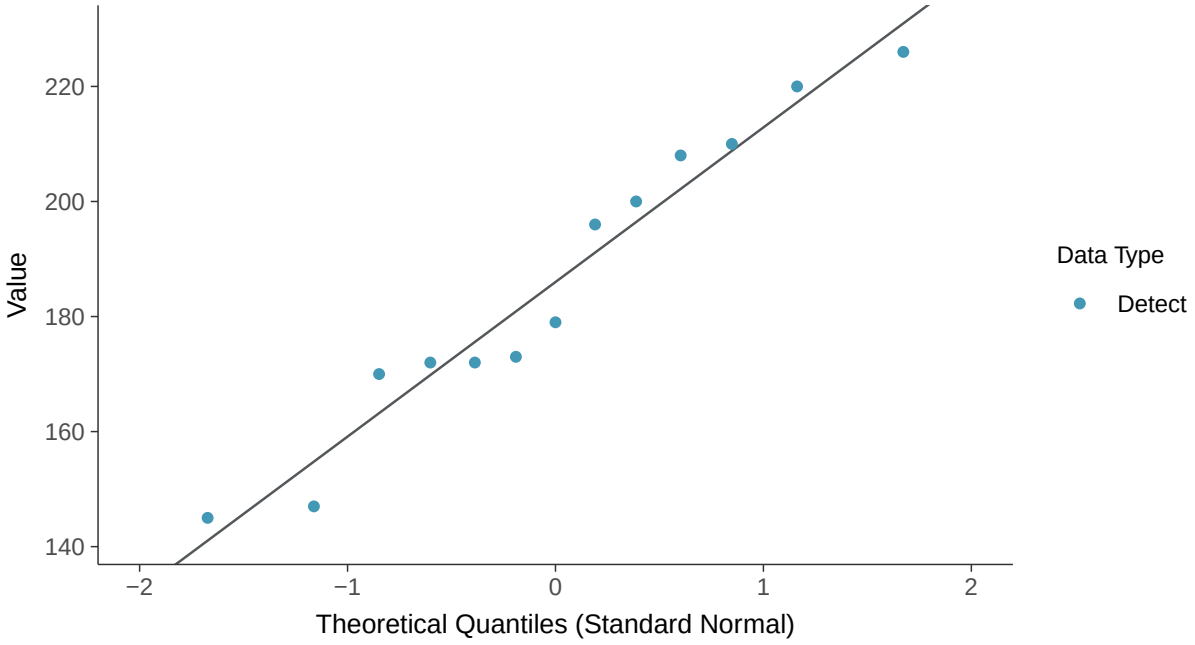
Boxplot by Season

Calcium, MW-16A (mg/l)



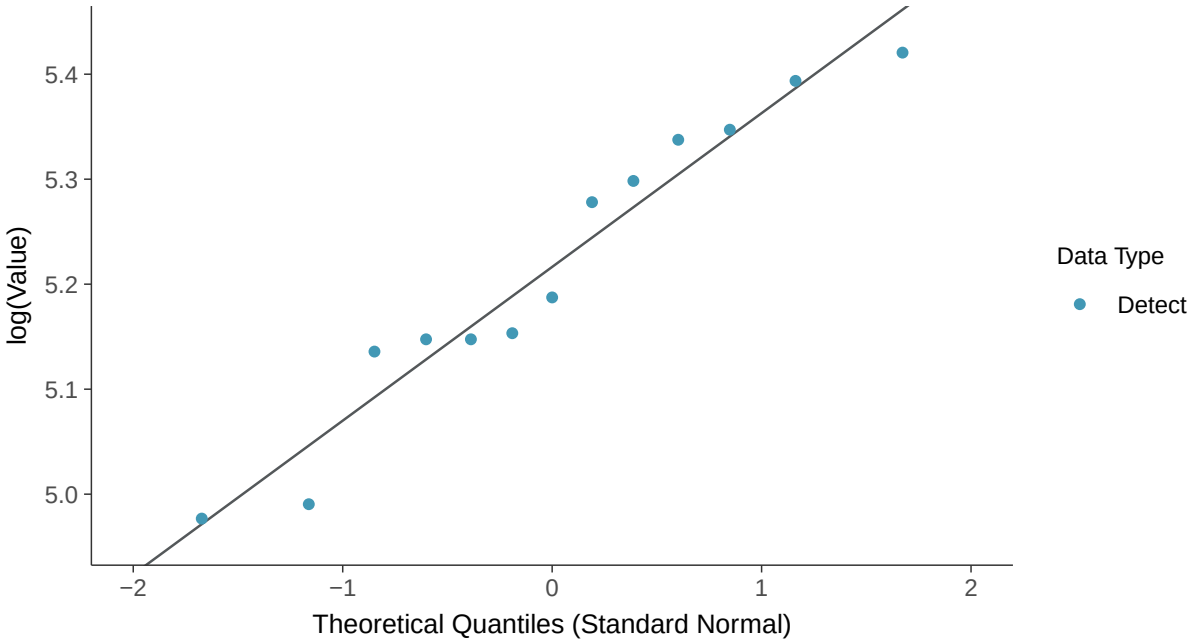
Normal Q-Q plot

Calcium, MW-16A (mg/l)



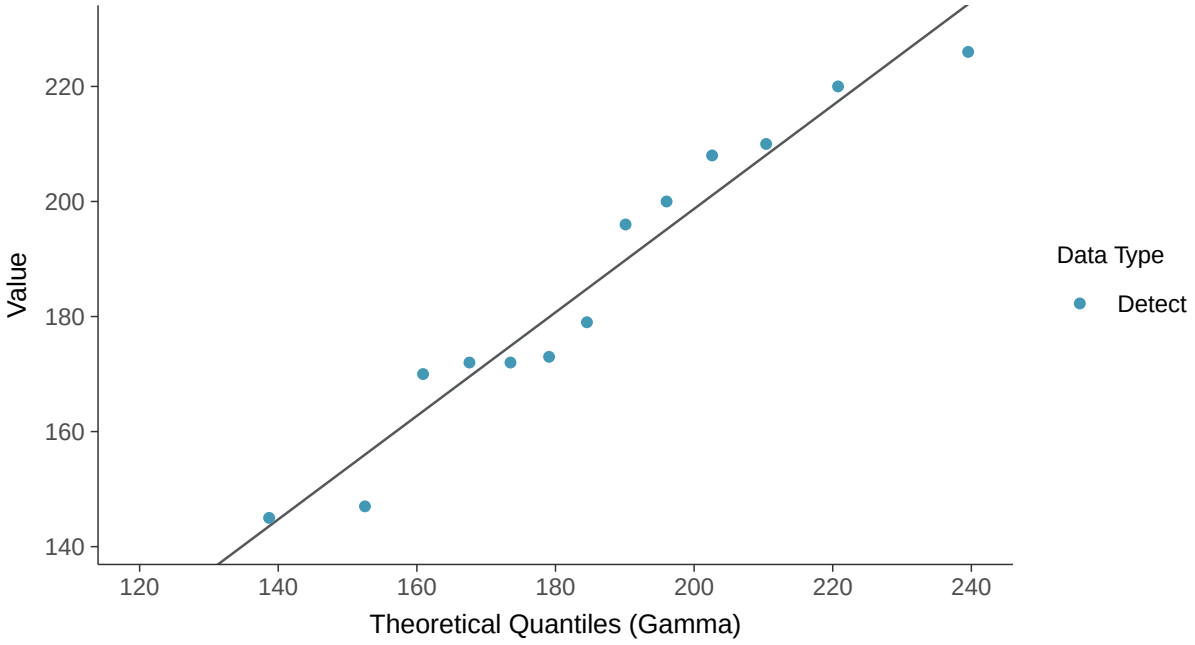
Lognormal Q-Q plot

Calcium, MW-16A (mg/l)



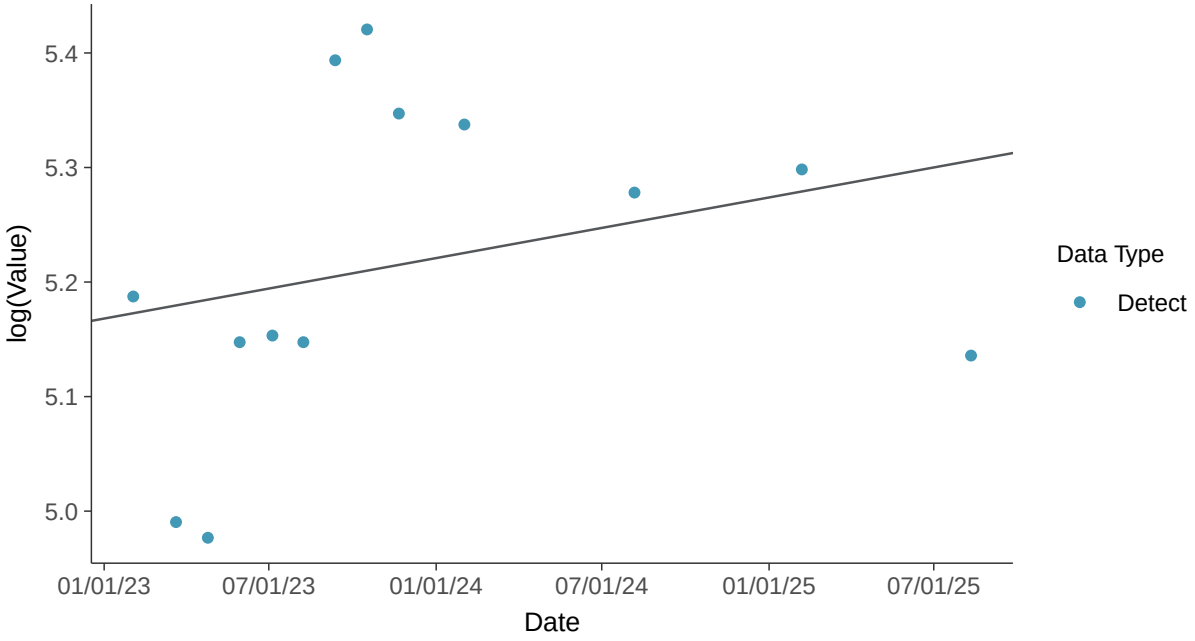
Gamma Q-Q plot

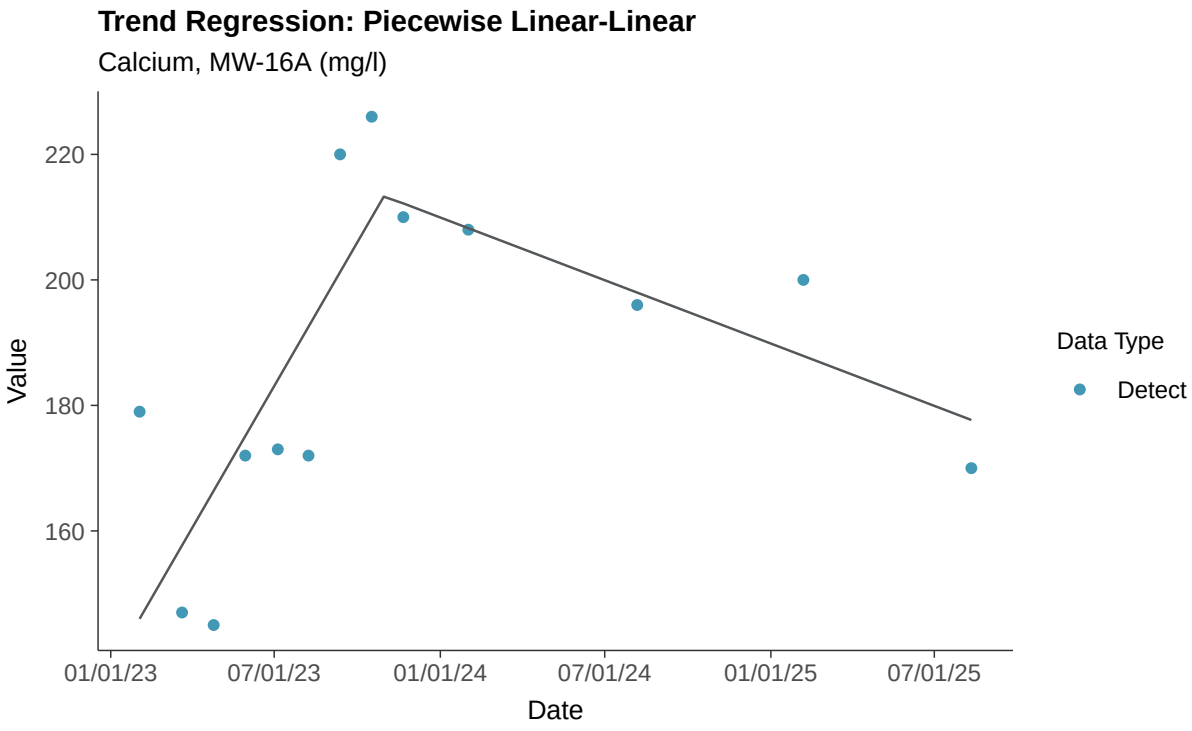
Calcium, MW-16A (mg/l)



Trend Regression: Lognormal MLE

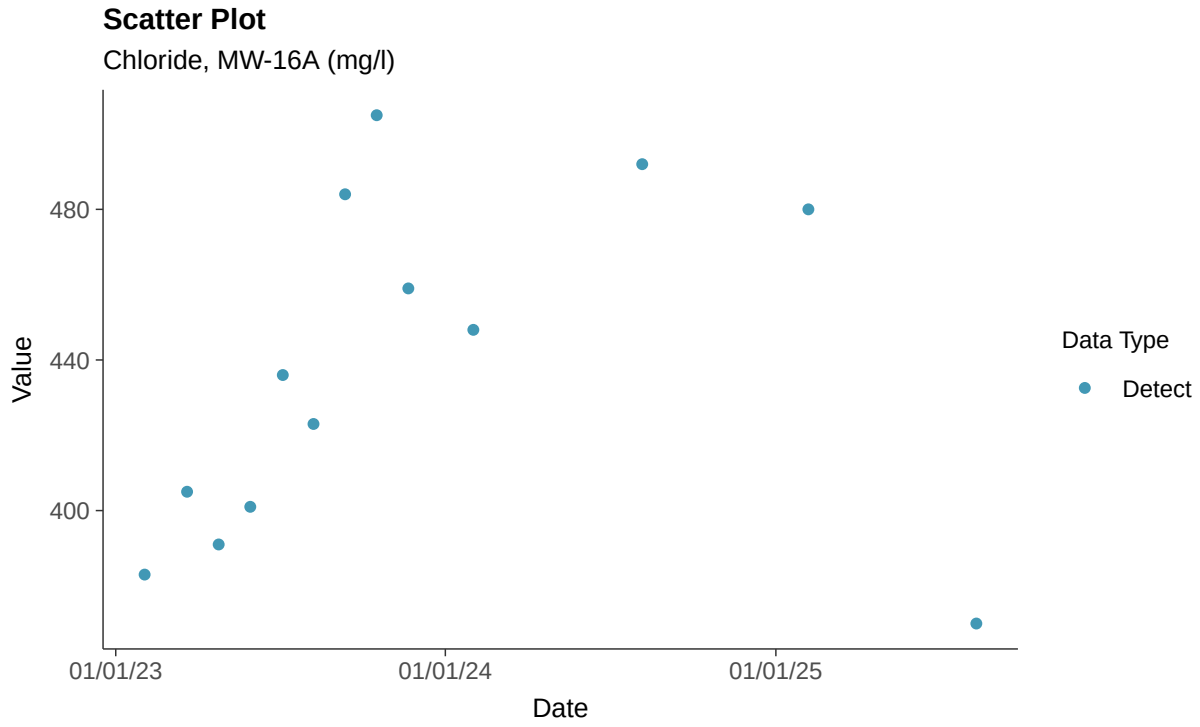
Calcium, MW-16A (mg/l)

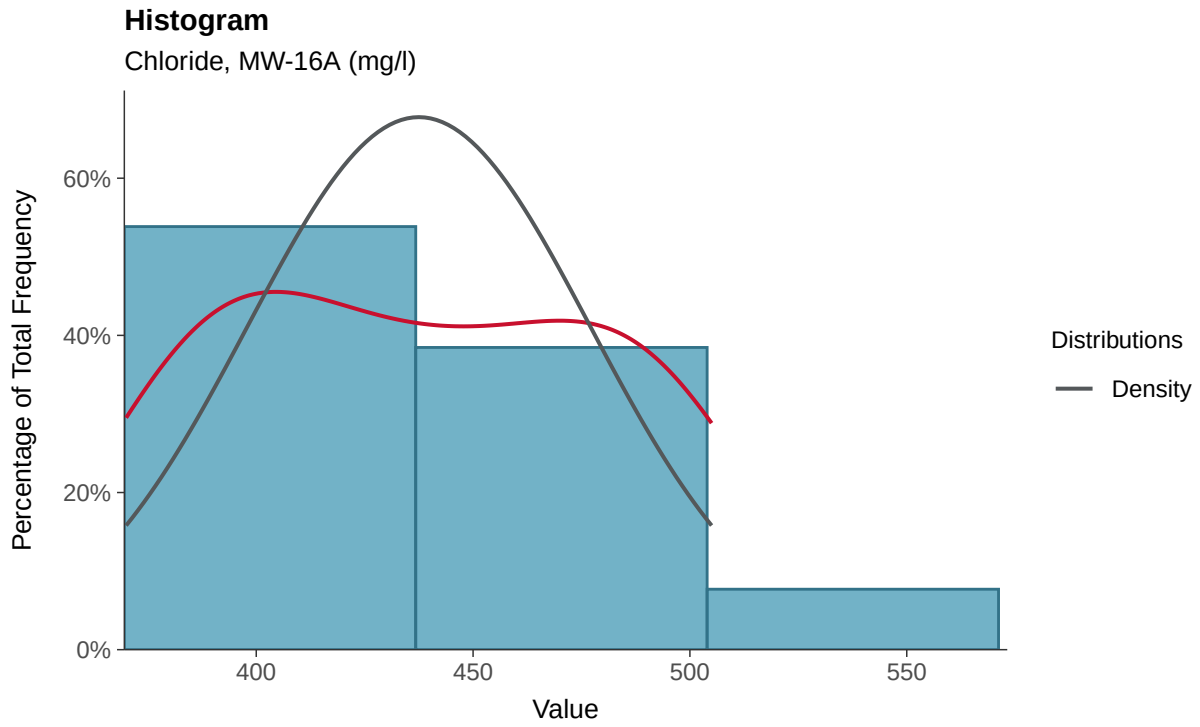



Trend Regression: Piecewise Linear-Linear
Calcium, MW-16A (mg/l)
Value
220
200
180
160
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect

Appendix III: Chloride, MW-16A

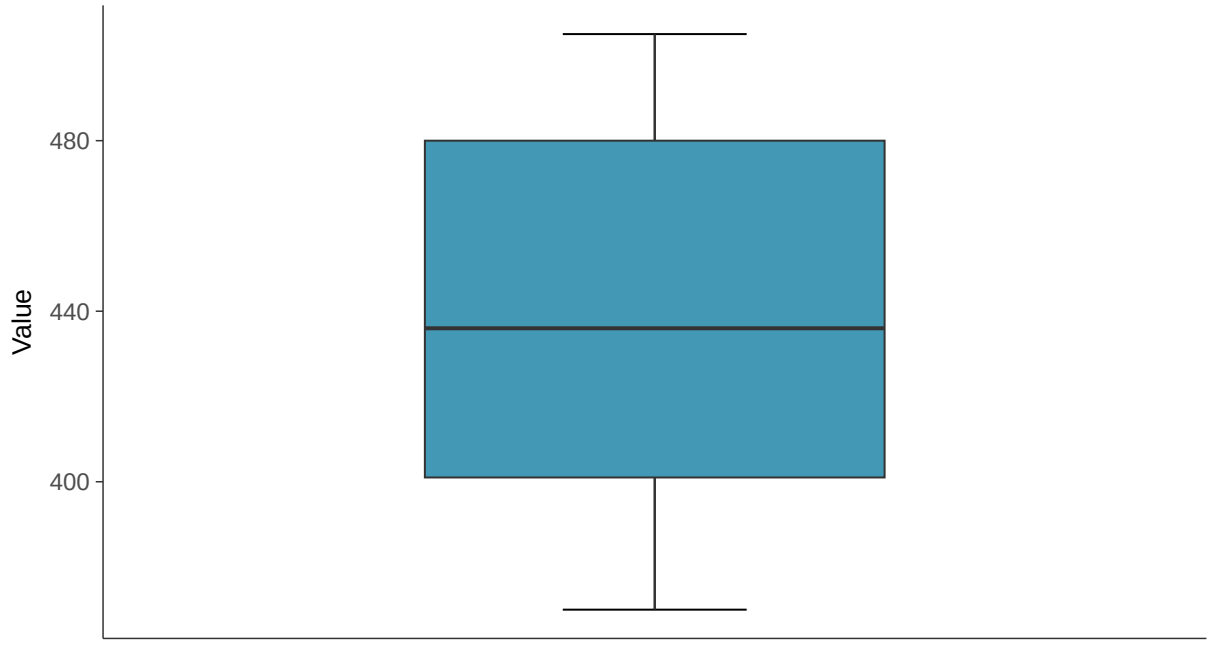
ID: 25_2_108





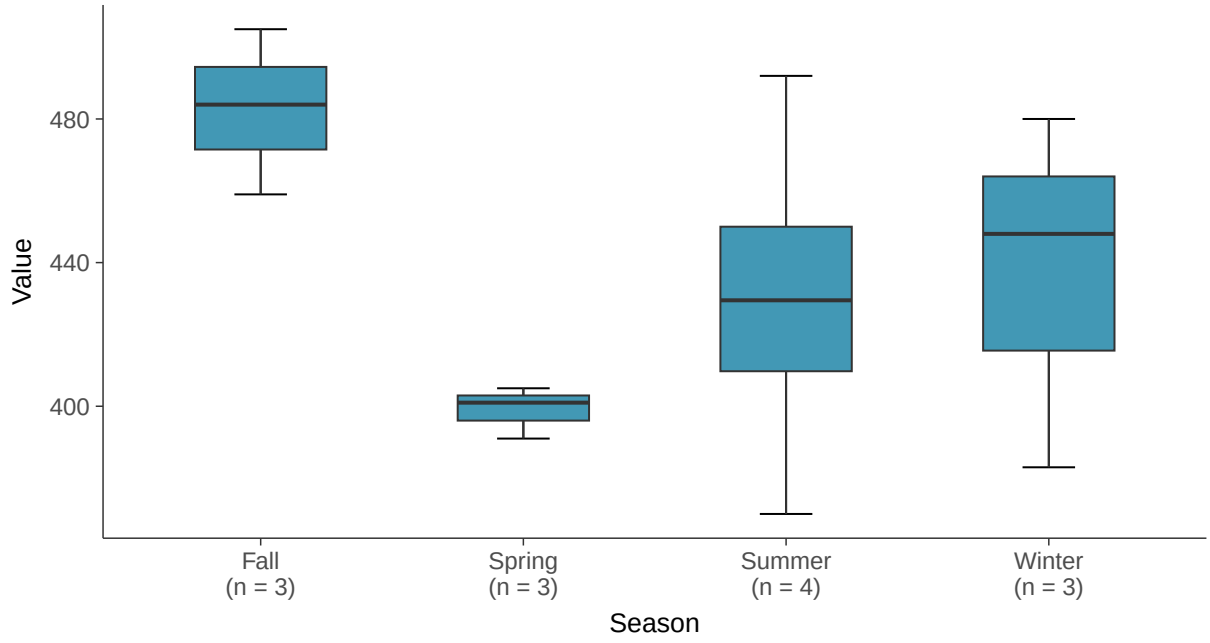
Boxplot

Chloride, MW-16A (mg/l)



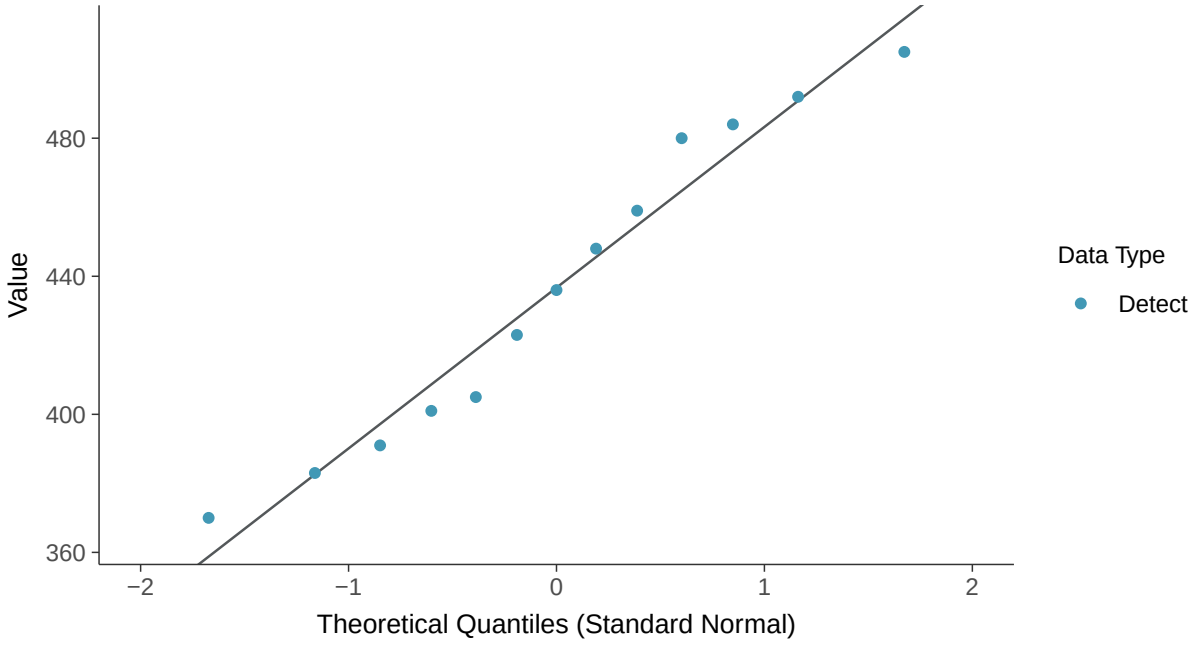
Boxplot by Season

Chloride, MW-16A (mg/l)



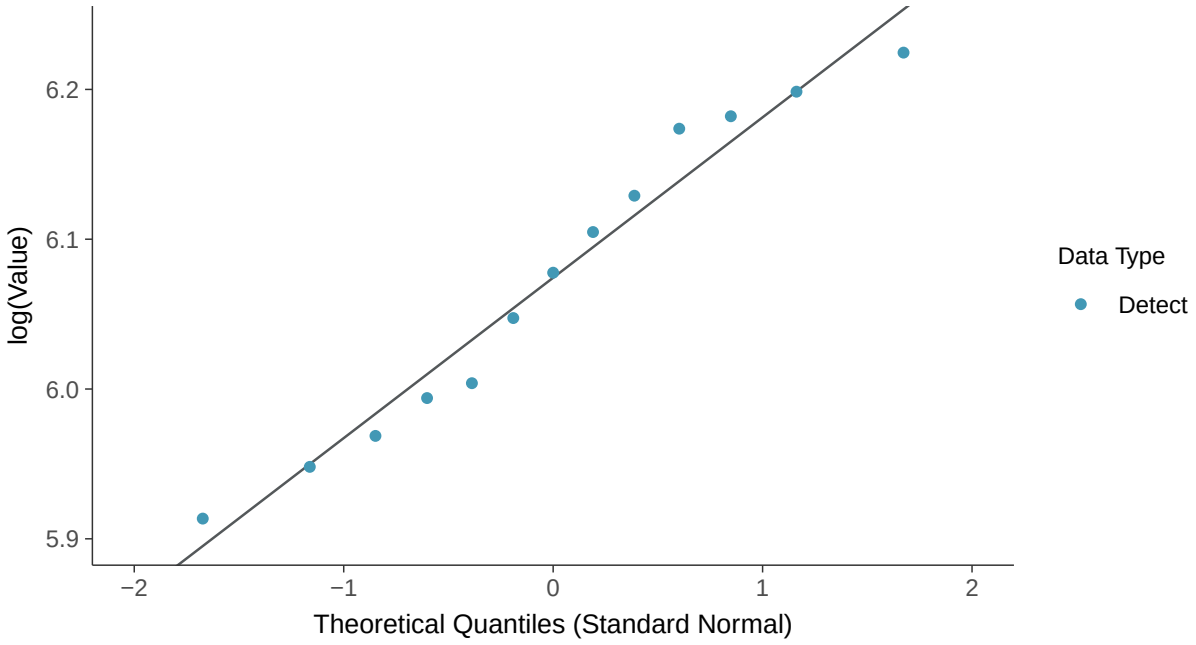
Normal Q-Q plot

Chloride, MW-16A (mg/l)



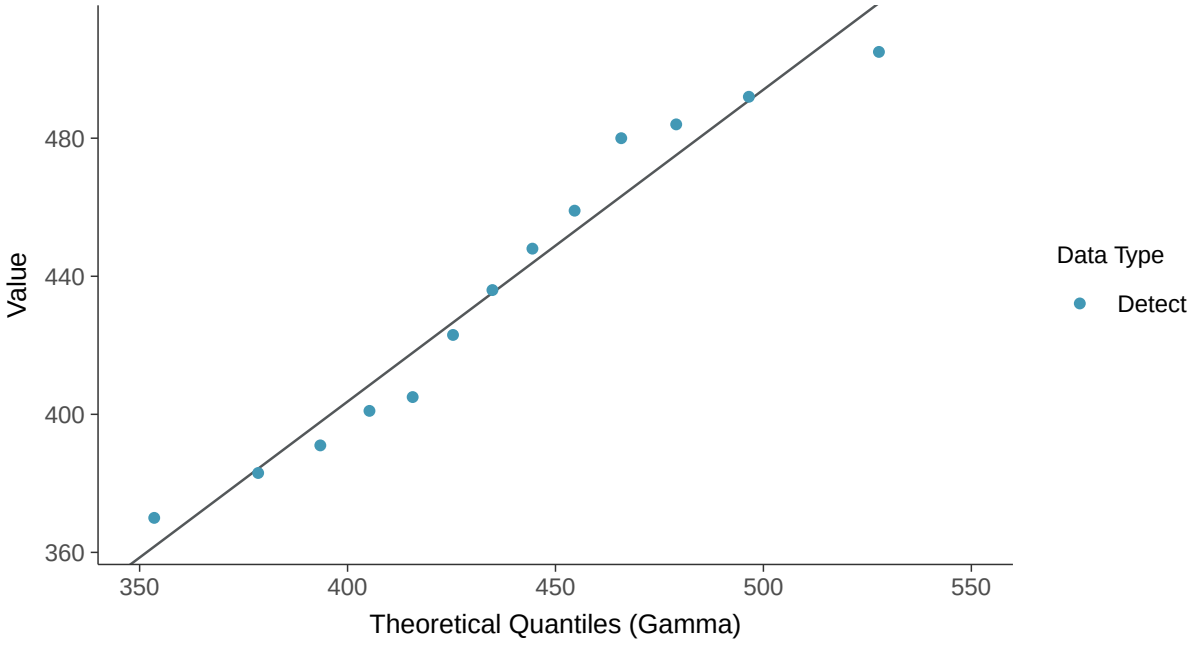
Lognormal Q-Q plot

Chloride, MW-16A (mg/l)



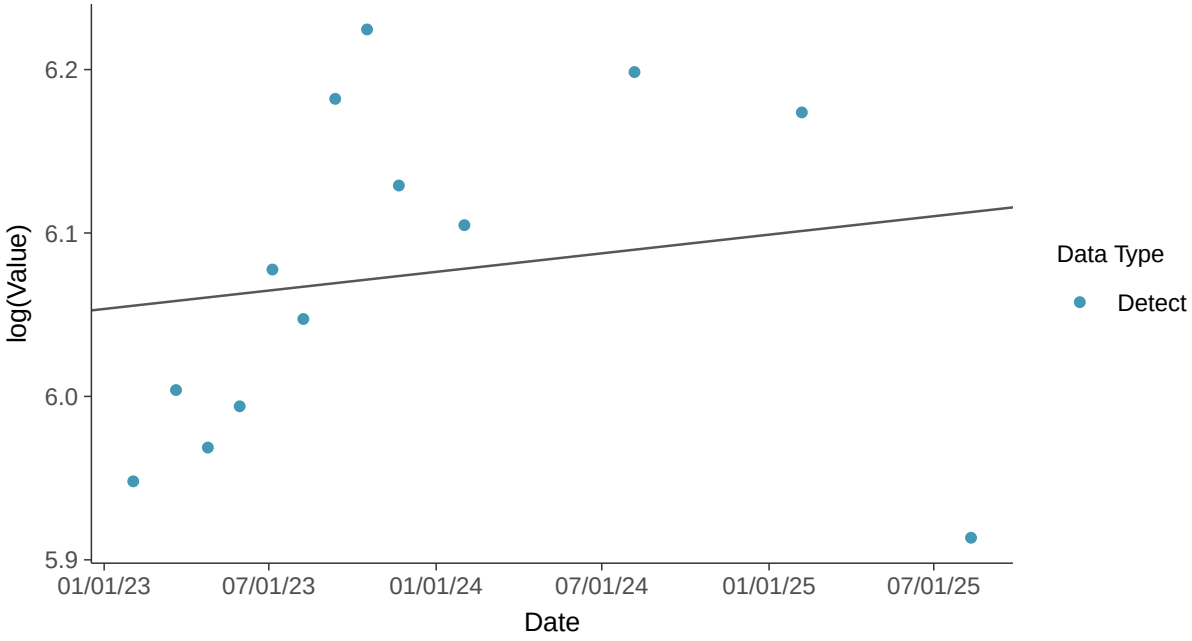
Gamma Q-Q plot

Chloride, MW-16A (mg/l)



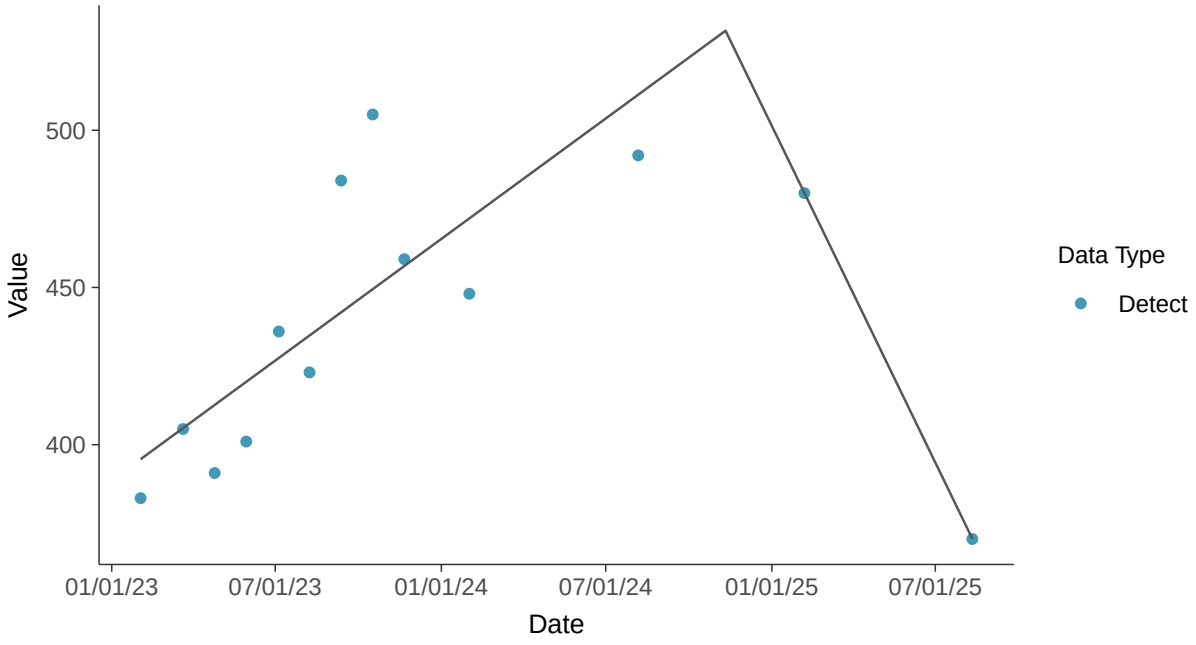
Trend Regression: Lognormal MLE

Chloride, MW-16A (mg/l)



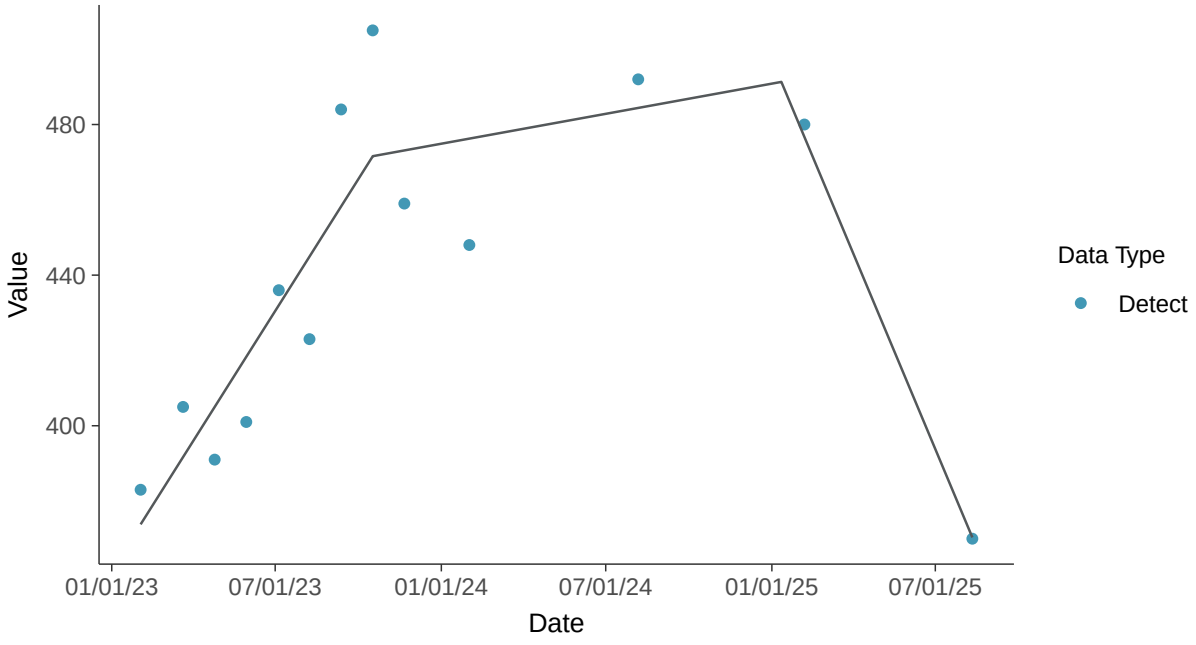
Trend Regression: Piecewise Linear-Linear

Chloride, MW-16A (mg/l)



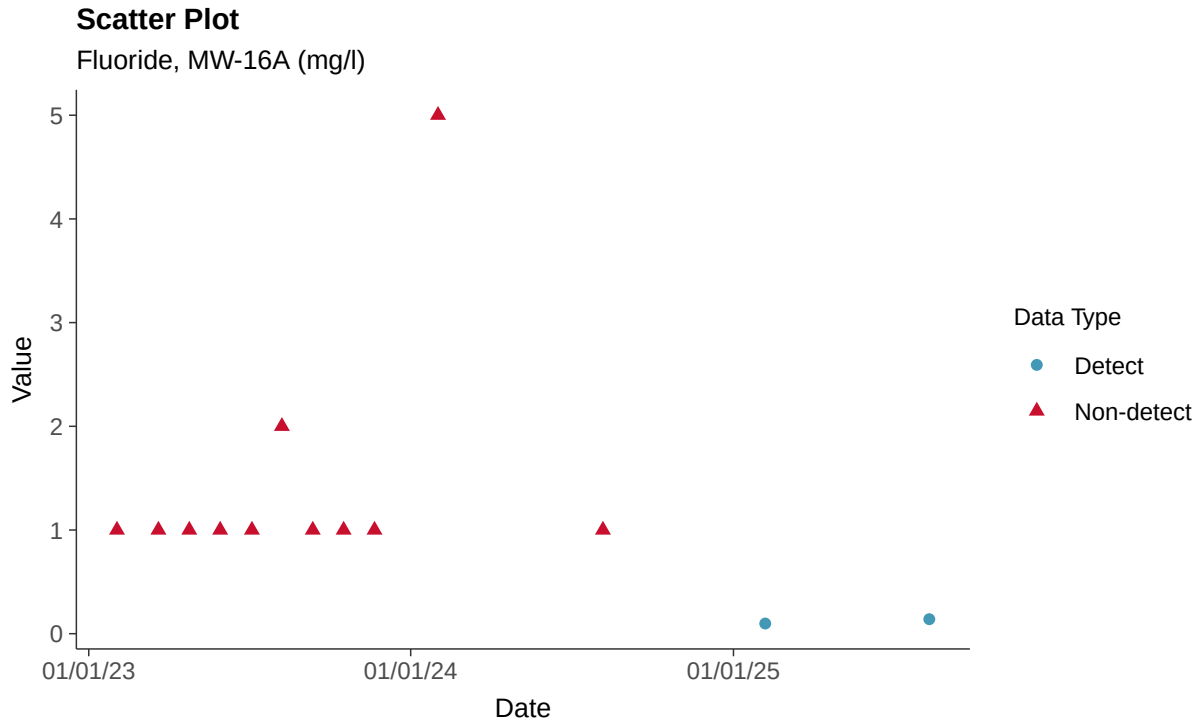
Trend Regression: Piecewise Linear-Linear-Linear

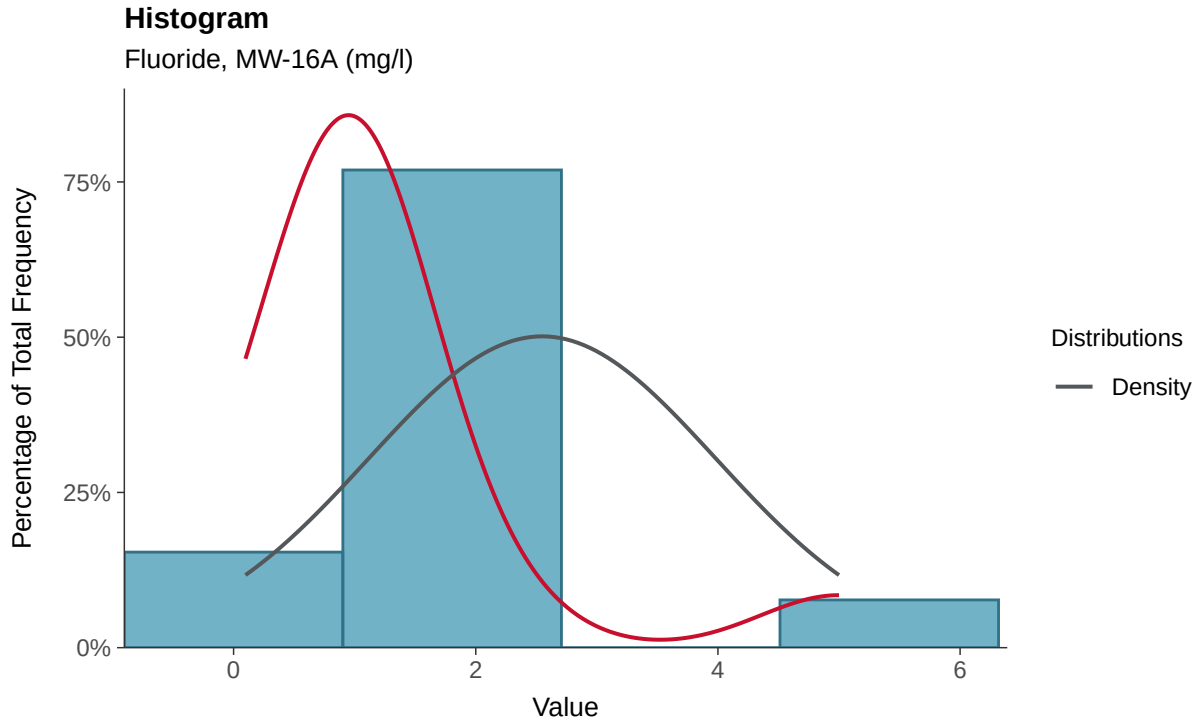
Chloride, MW-16A (mg/l)



Appendix III: Fluoride, MW-16A

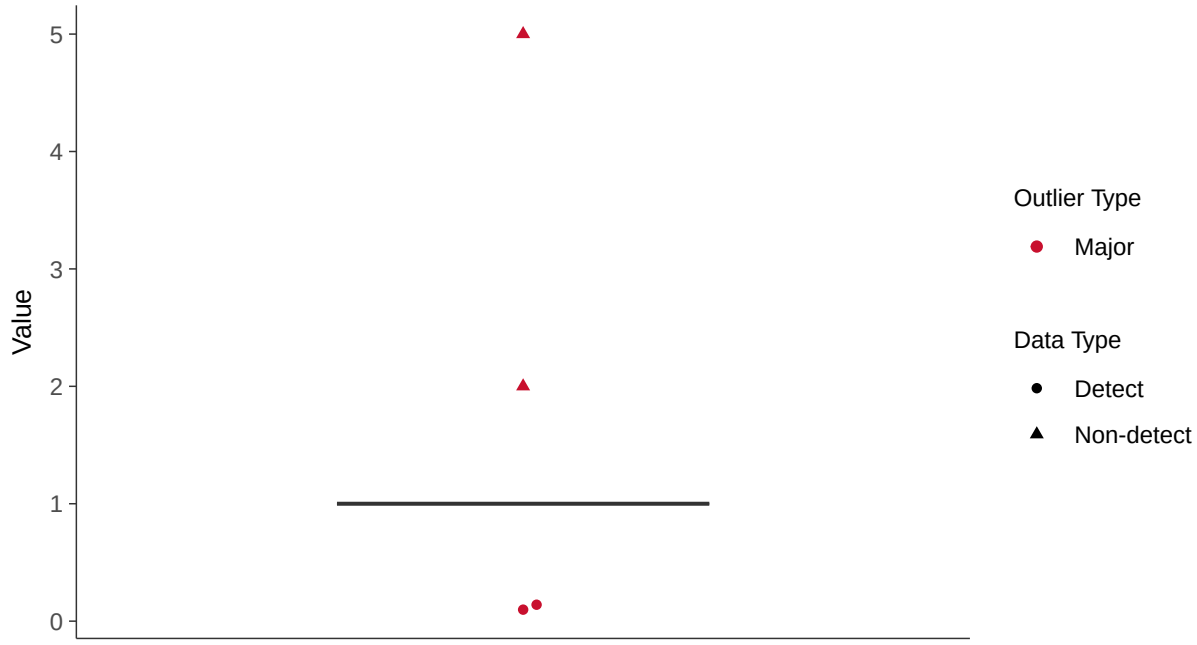
ID: 25_2_112





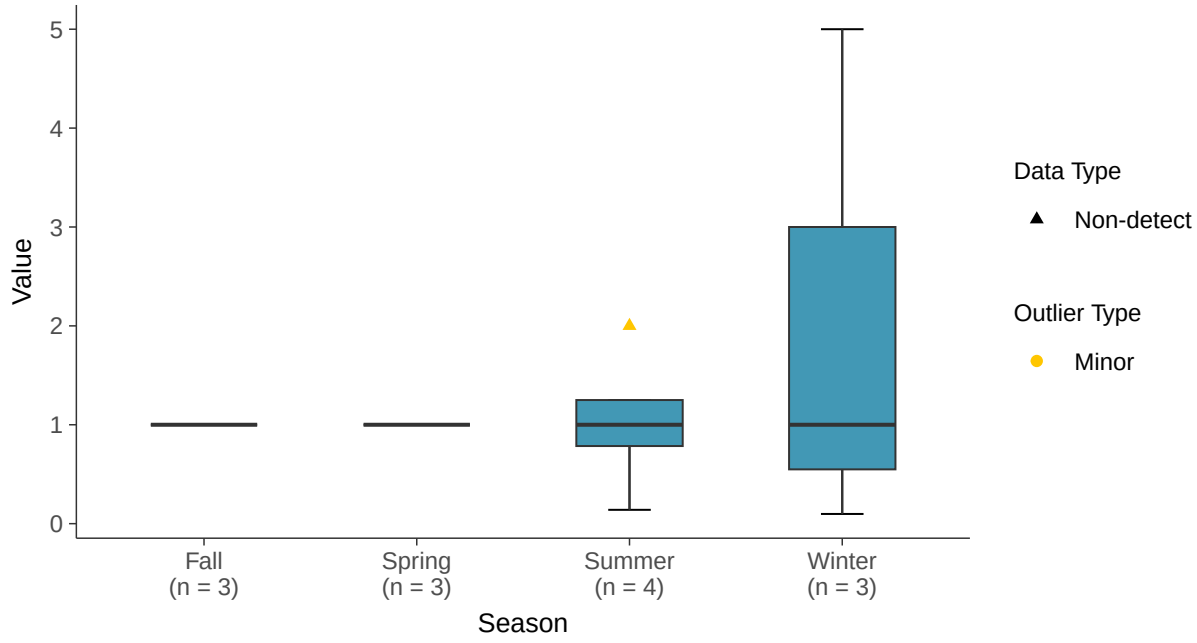
Boxplot

Fluoride, MW-16A (mg/l)



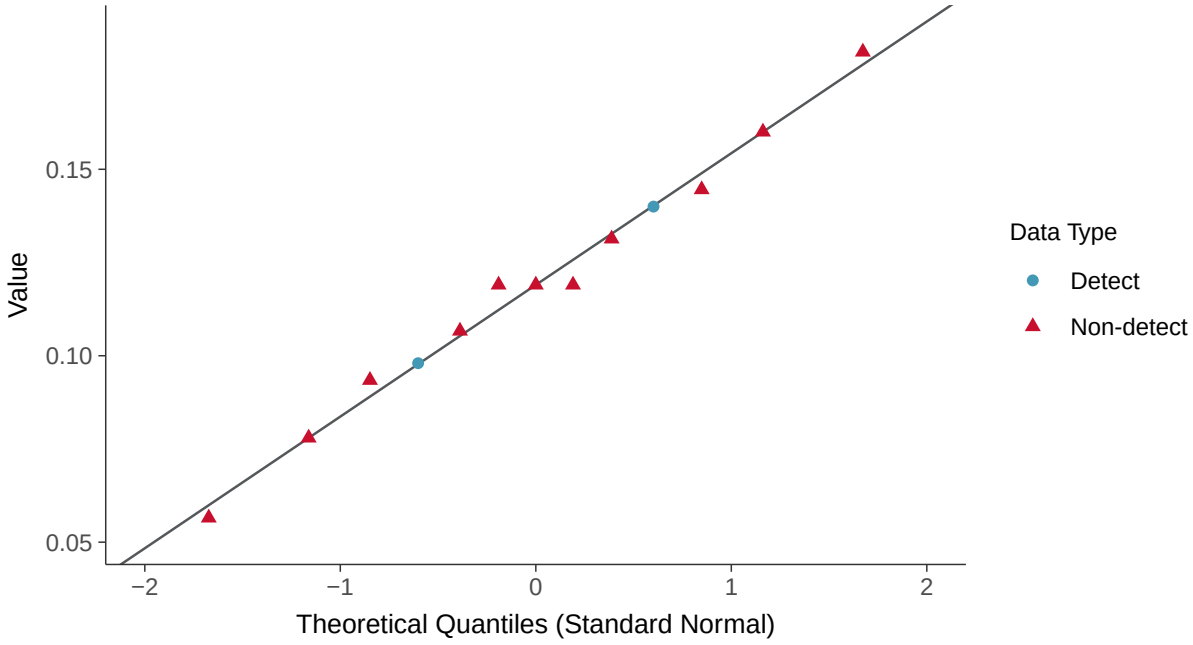
Boxplot by Season

Fluoride, MW-16A (mg/l)



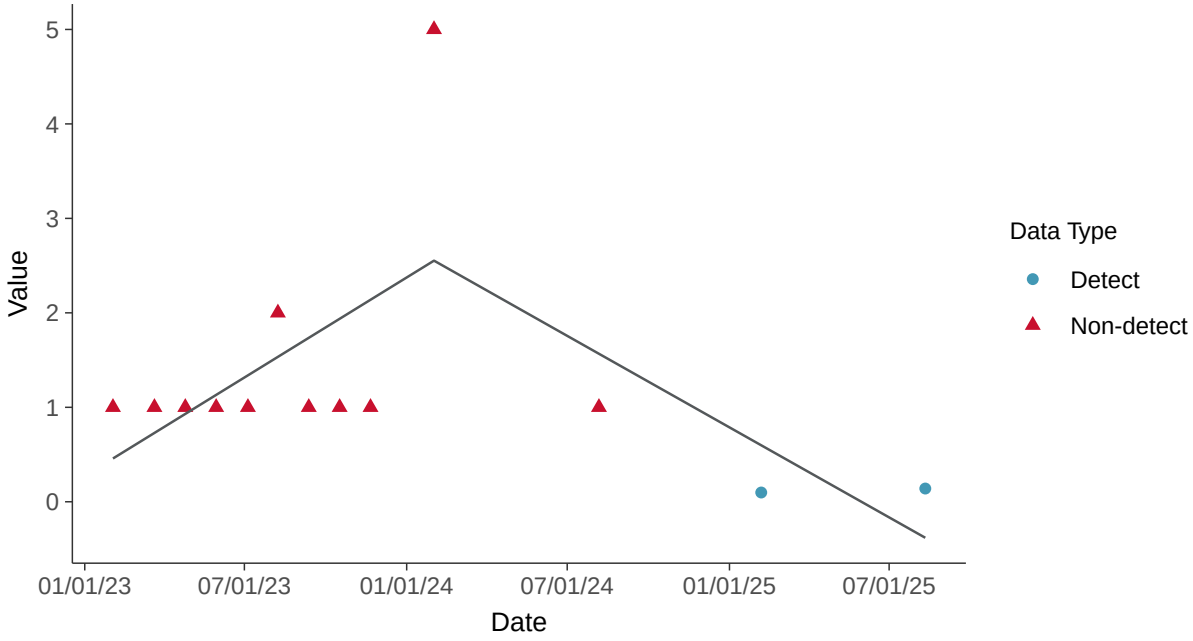
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-16A (mg/l)



Trend Regression: Piecewise Linear-Linear

Fluoride, MW-16A (mg/l)

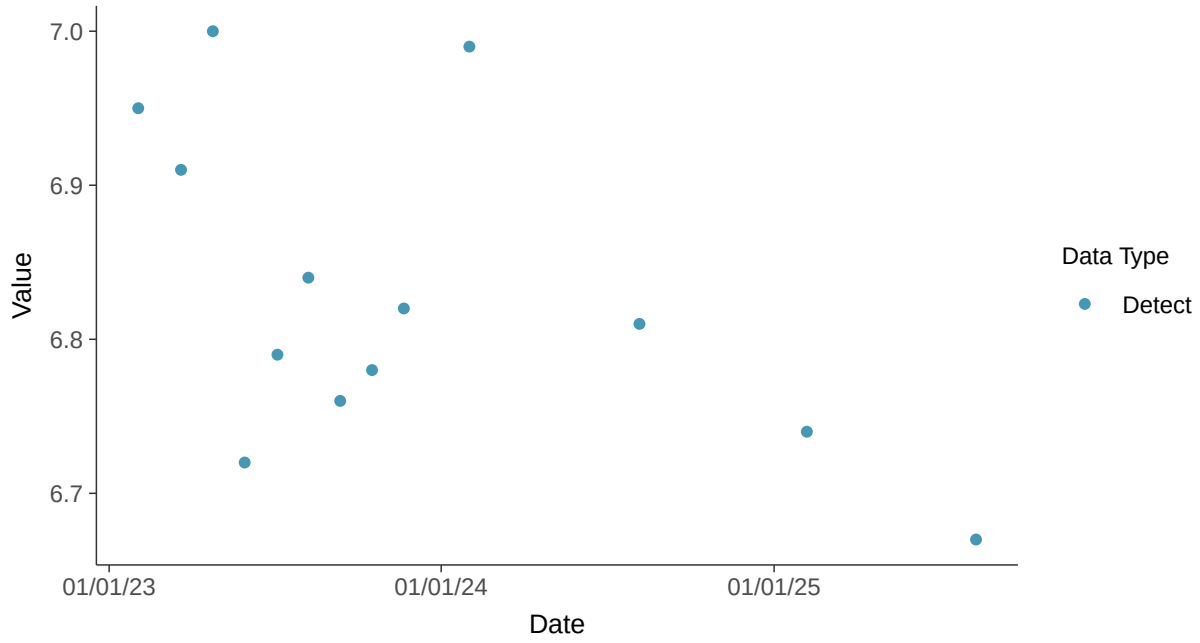


Appendix III: pH, Field, MW-16A

ID: 25_2_120

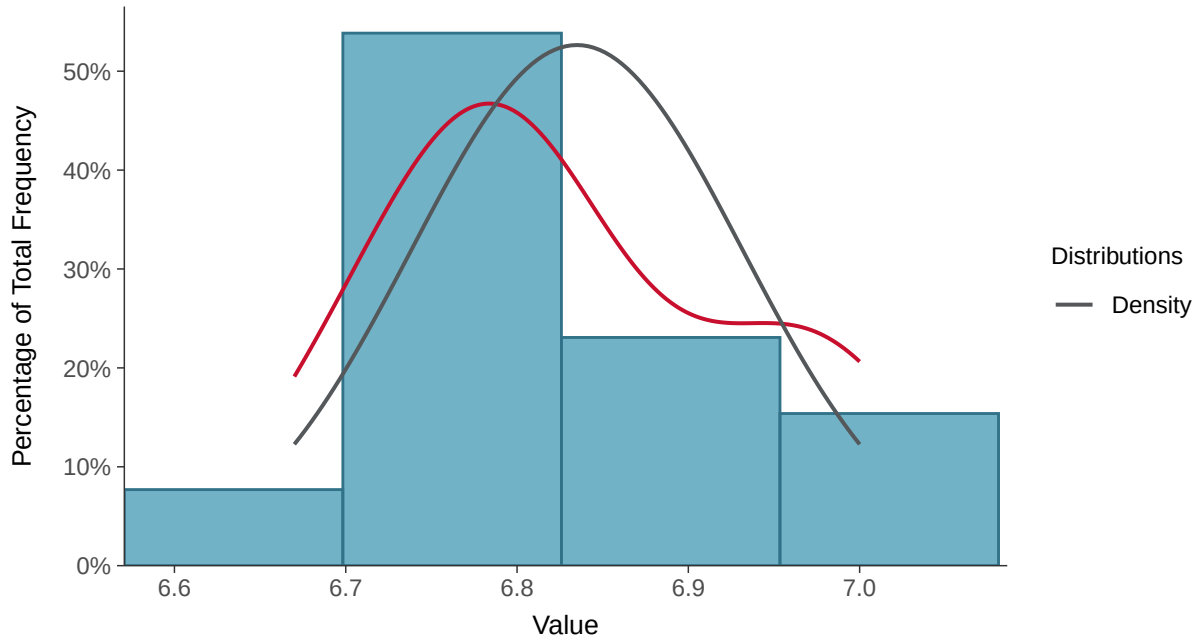
Scatter Plot

pH, Field, MW-16A (su)



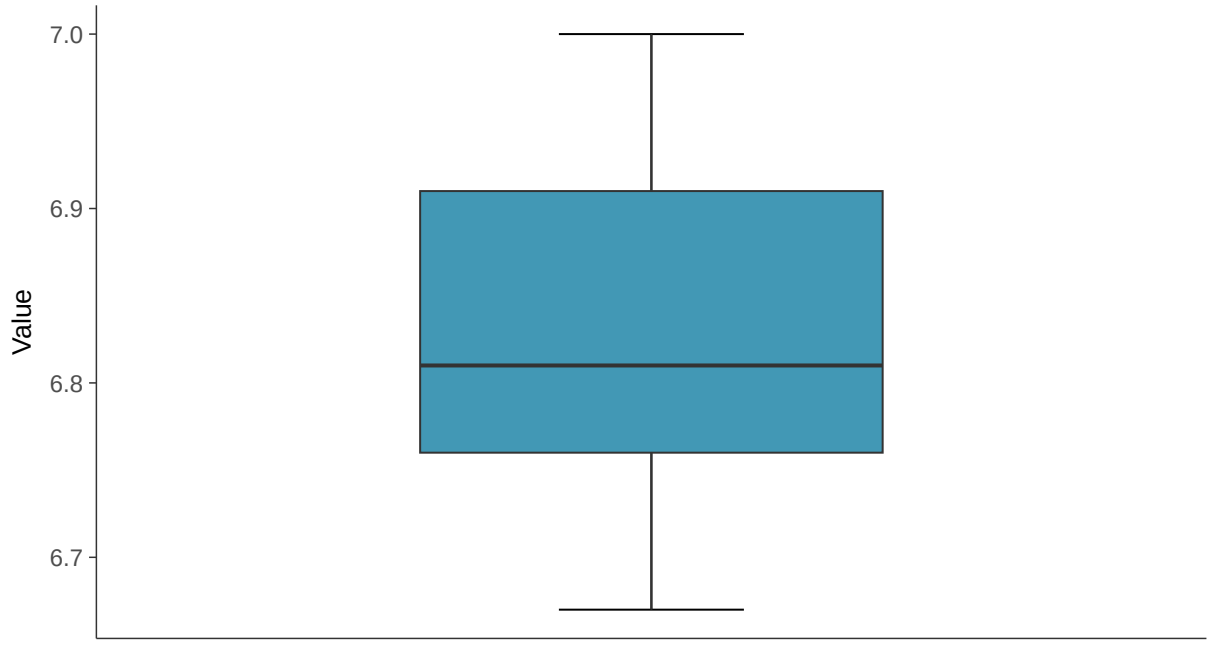
Histogram

pH, Field, MW-16A (su)



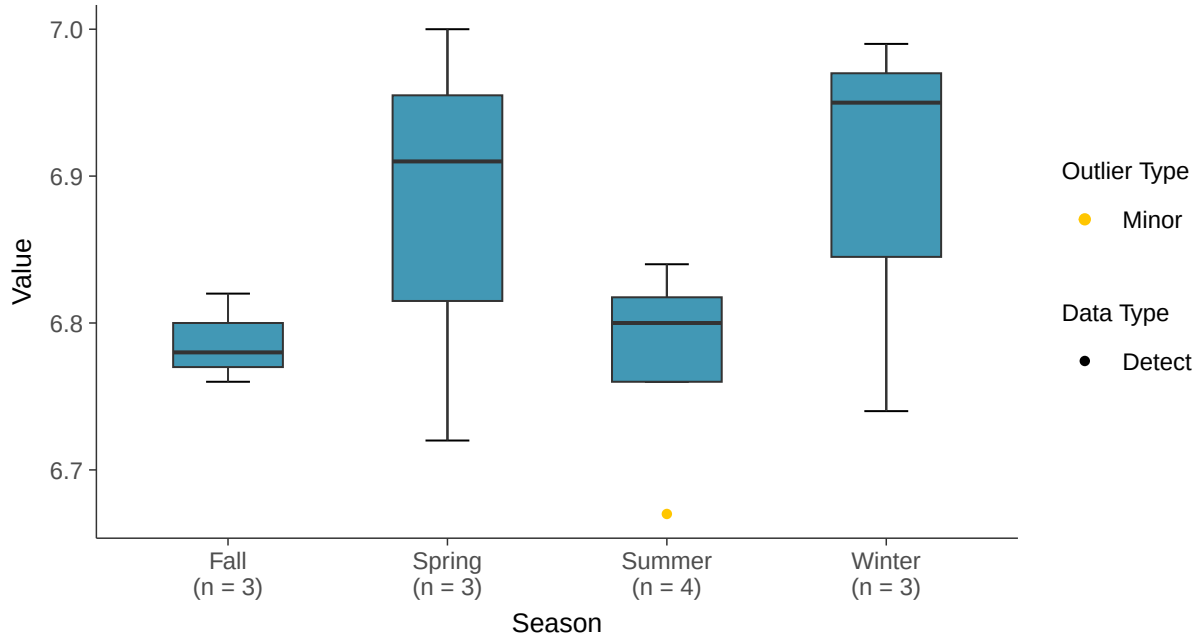
Boxplot

pH, Field, MW-16A (su)



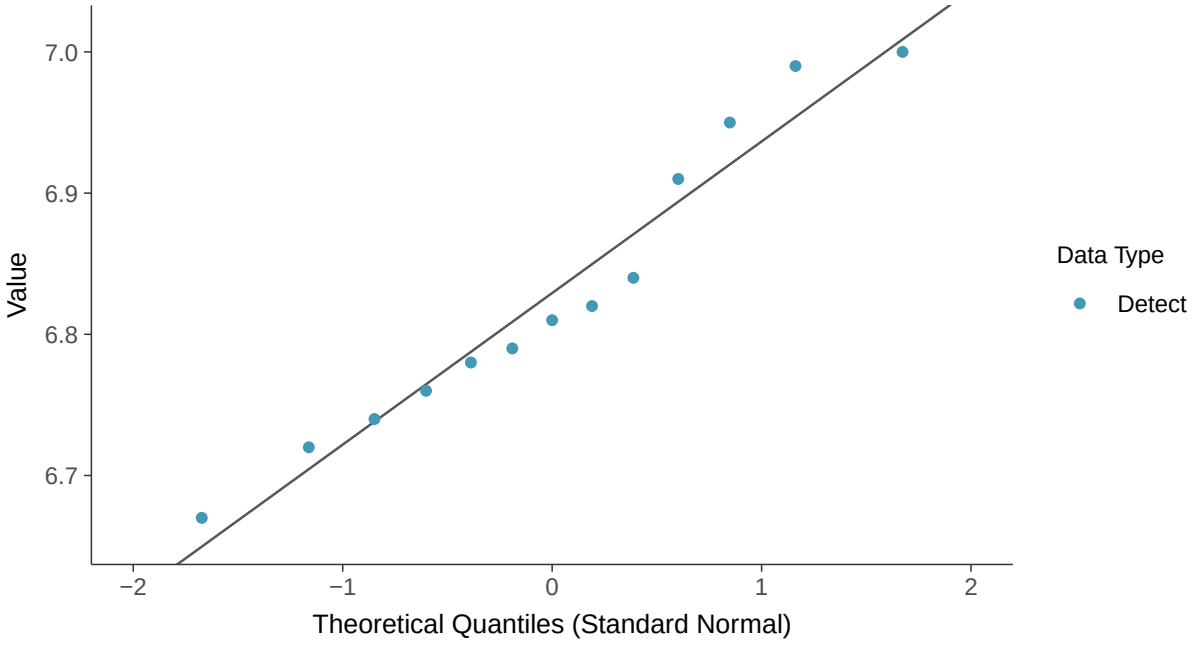
Boxplot by Season

pH, Field, MW-16A (su)



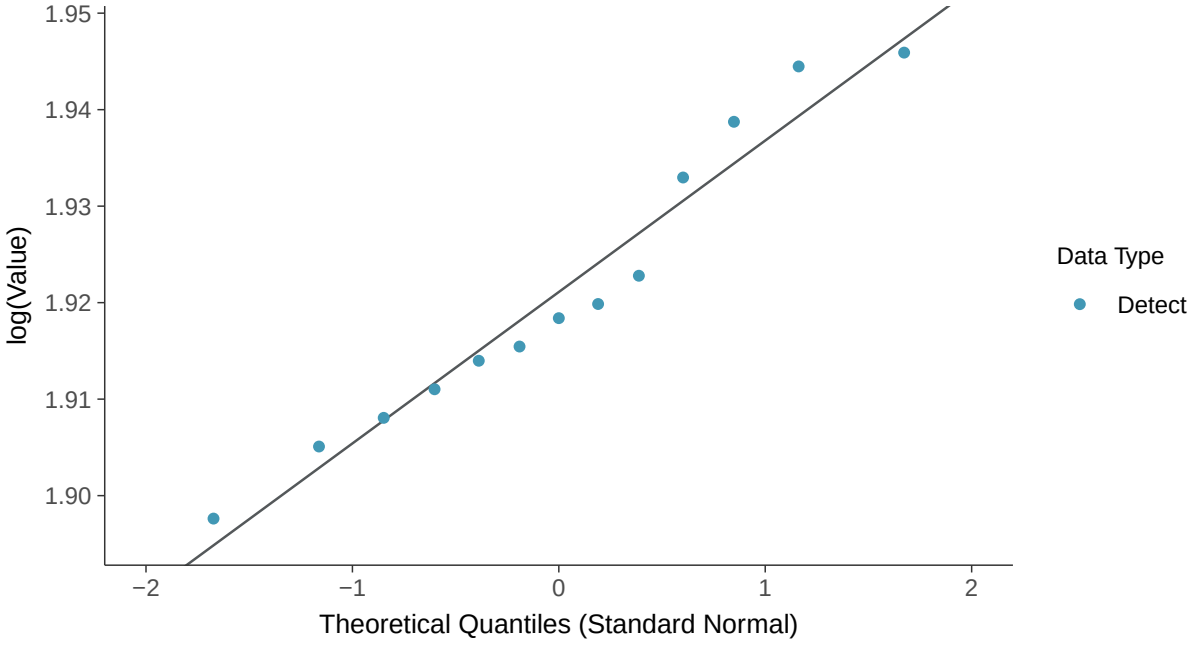
Normal Q-Q plot

pH, Field, MW-16A (su)



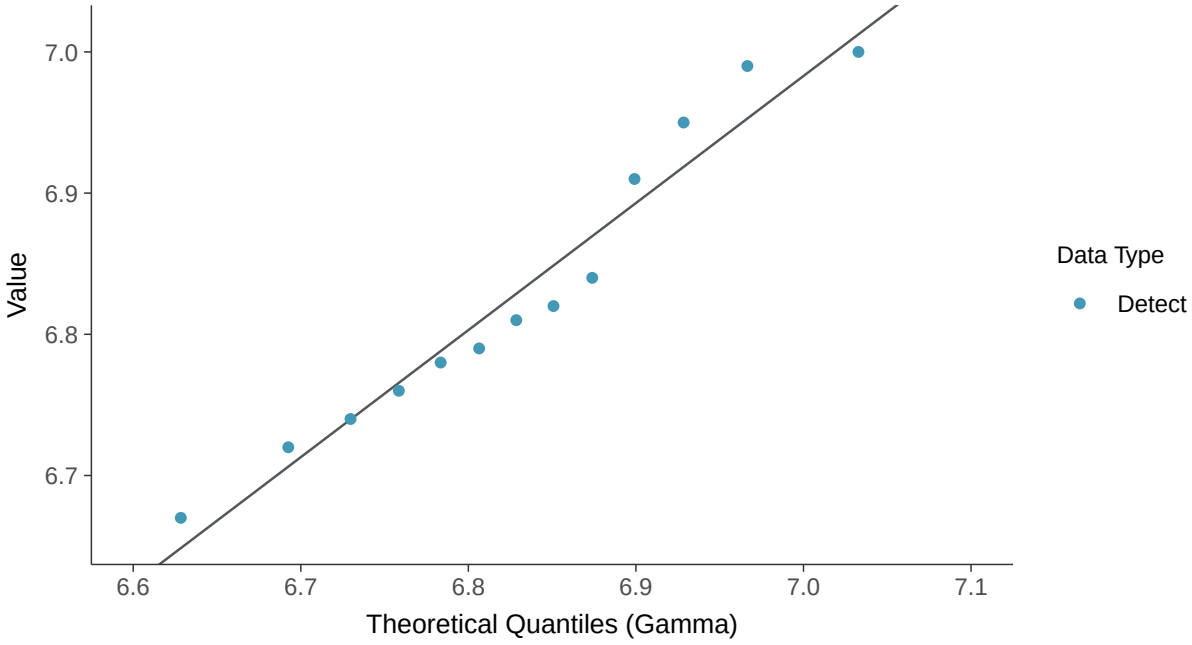
Lognormal Q-Q plot

pH, Field, MW-16A (su)



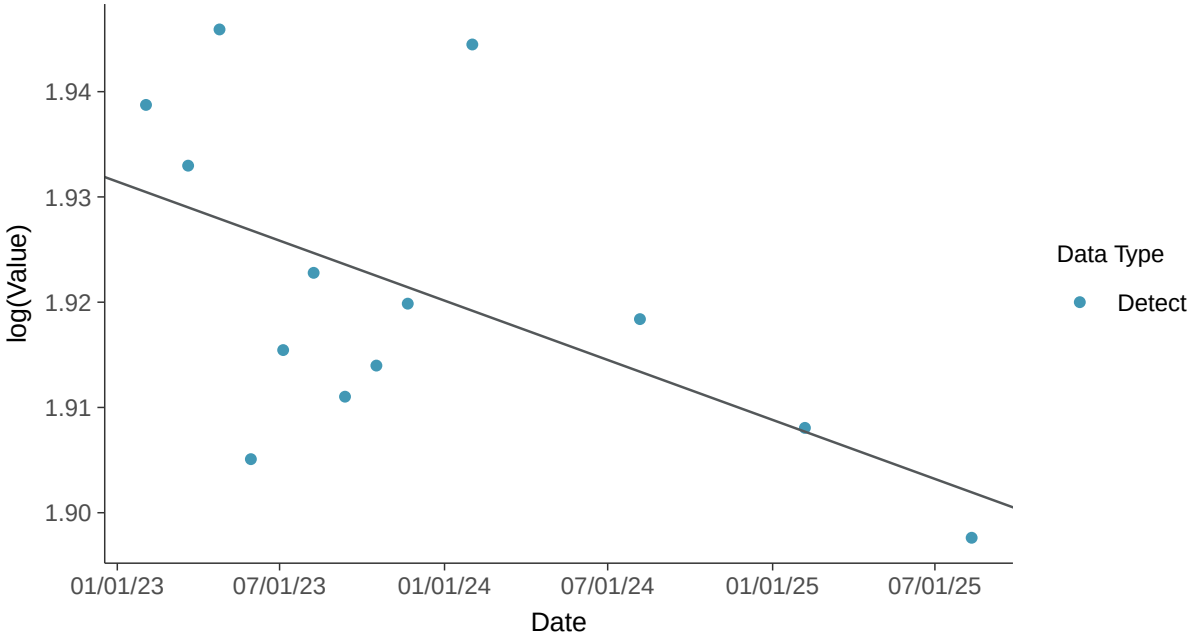
Gamma Q-Q plot

pH, Field, MW-16A (su)



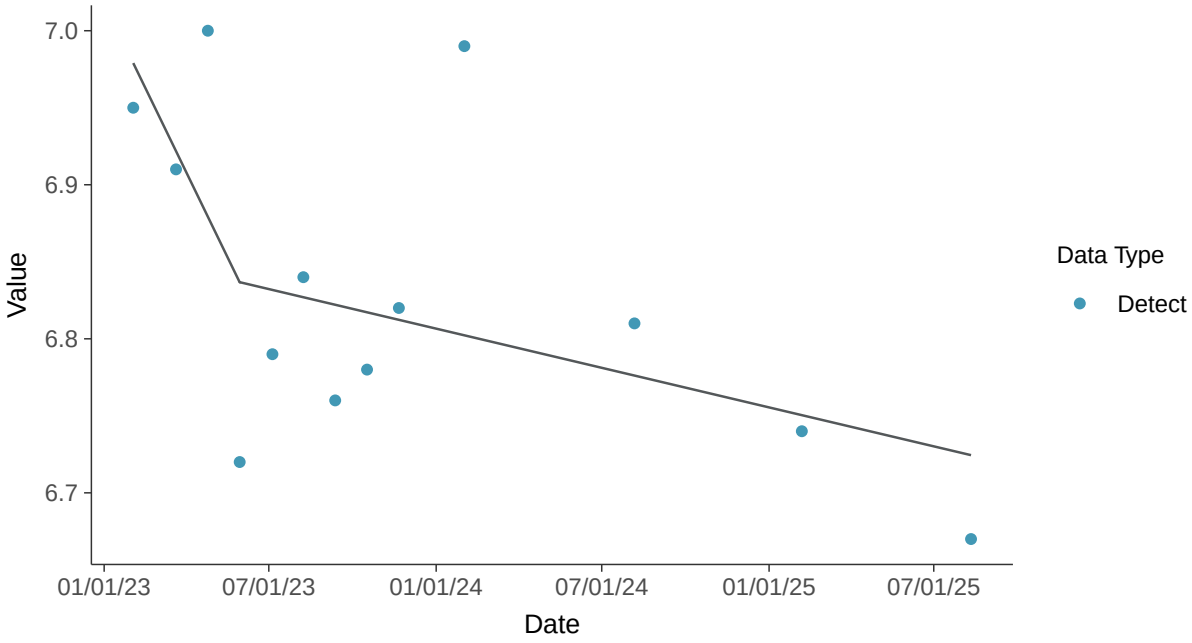
Trend Regression: Lognormal MLE

pH, Field, MW-16A (su)



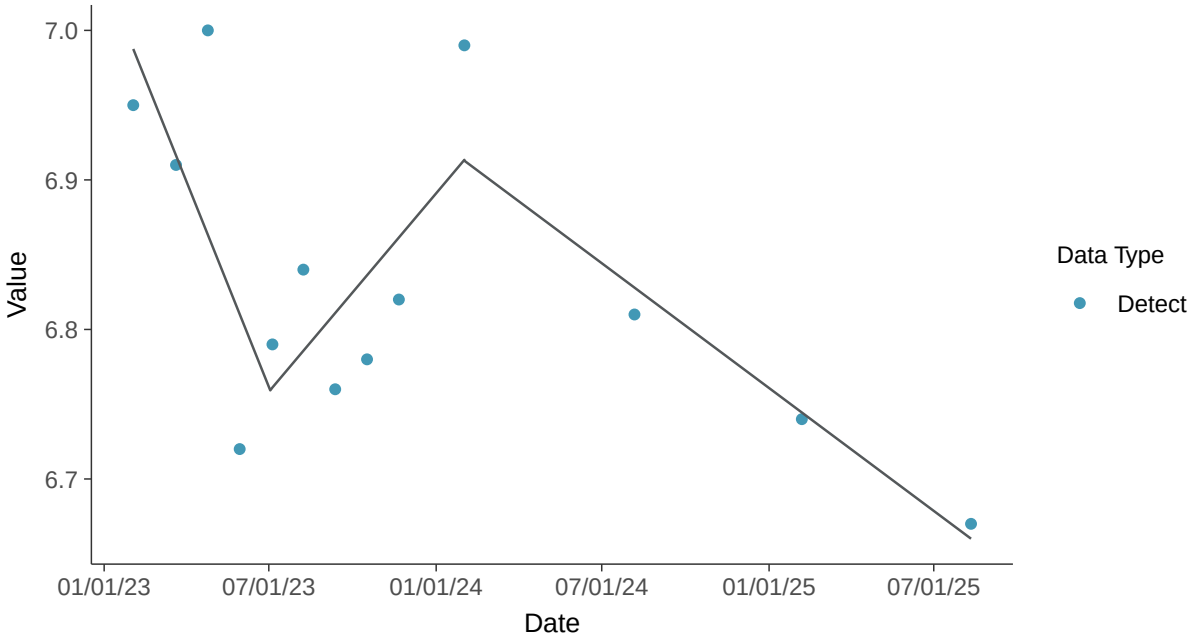
Trend Regression: Piecewise Linear-Linear

pH, Field, MW-16A (su)



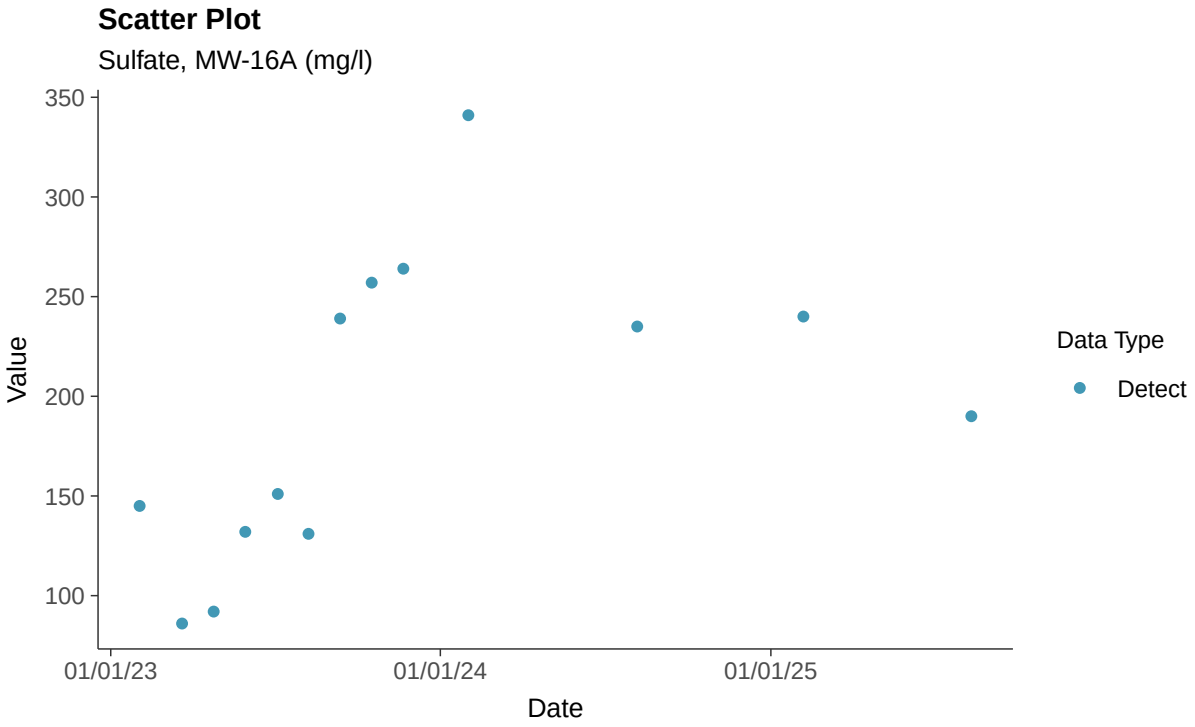
Trend Regression: Piecewise Linear-Linear-Linear

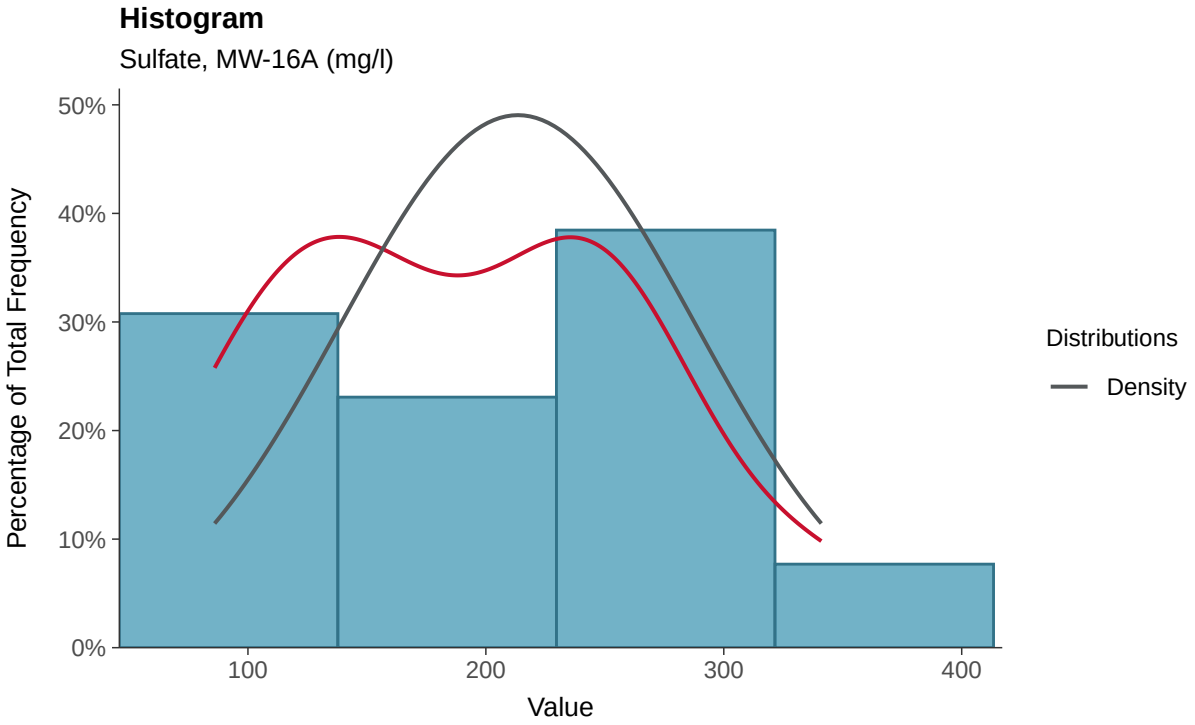
pH, Field, MW-16A (su)



Appendix III: Sulfate, MW-16A

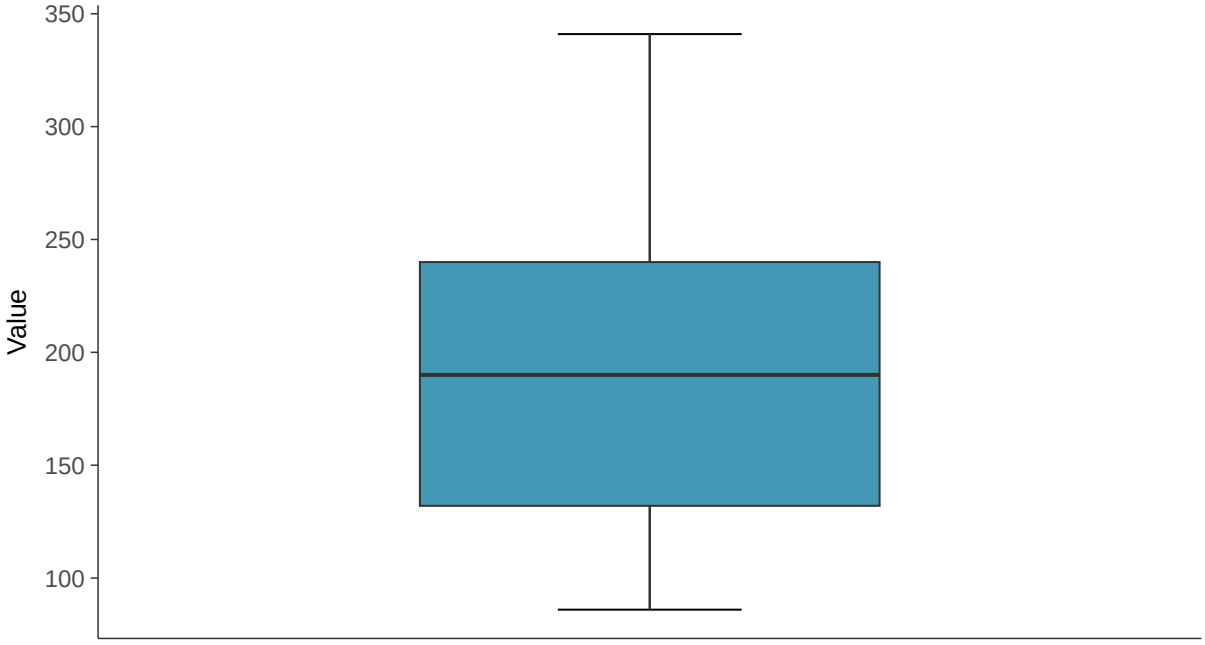
ID: 25_2_124





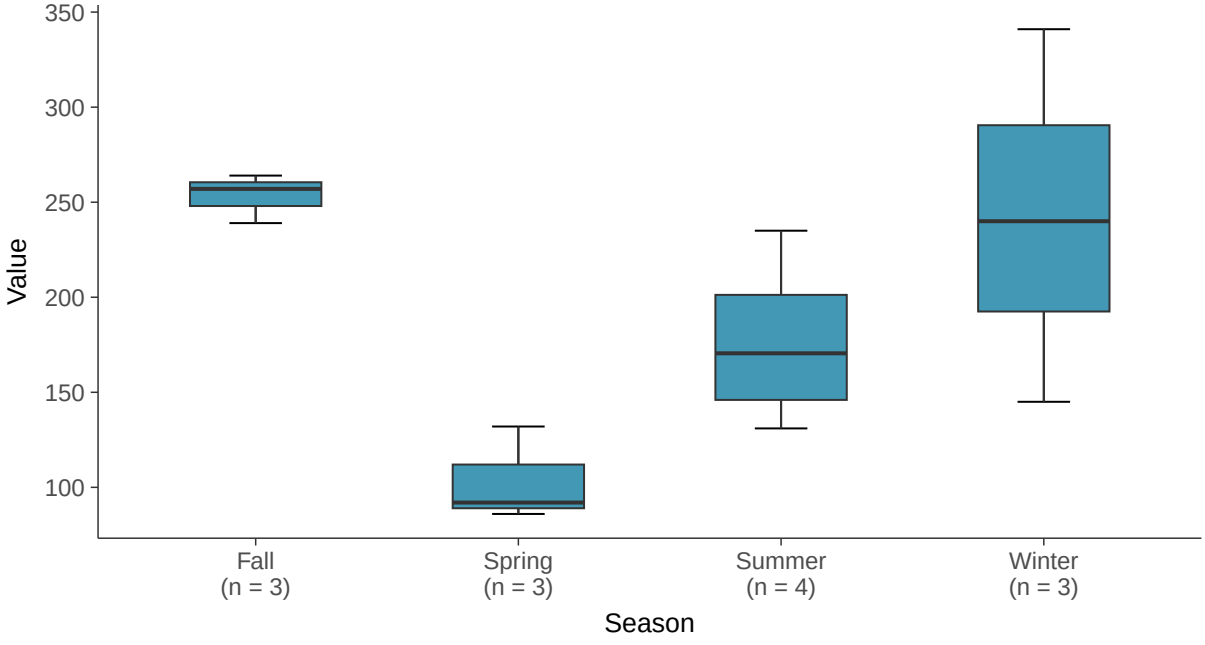
Boxplot

Sulfate, MW-16A (mg/l)



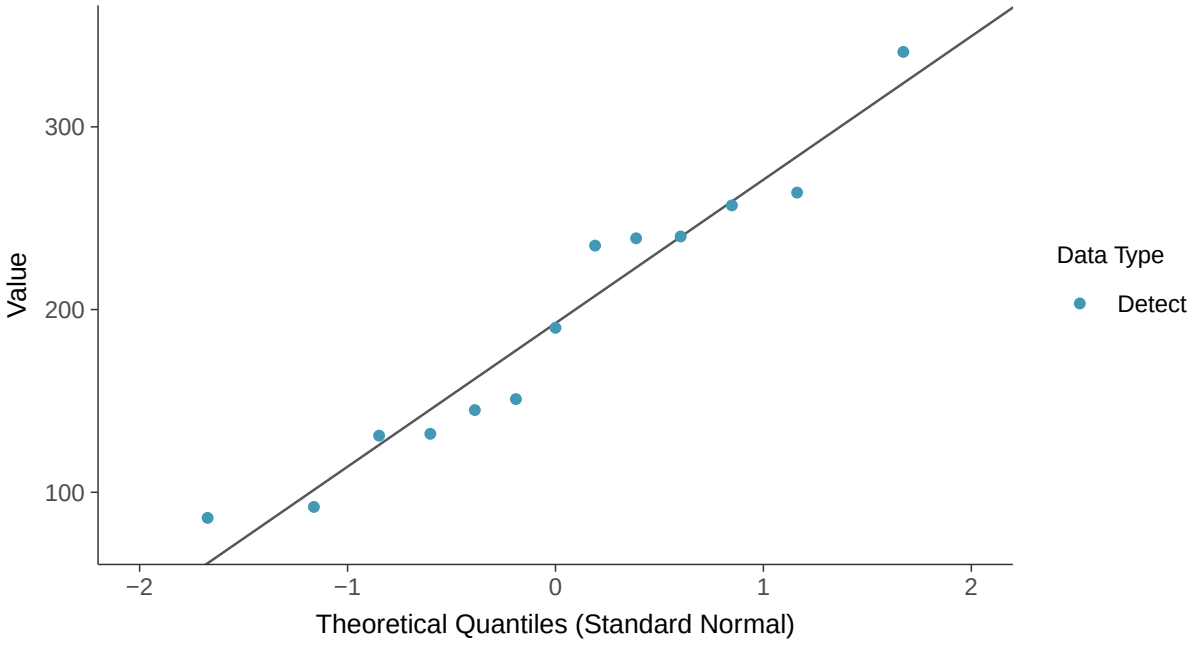
Boxplot by Season

Sulfate, MW-16A (mg/l)



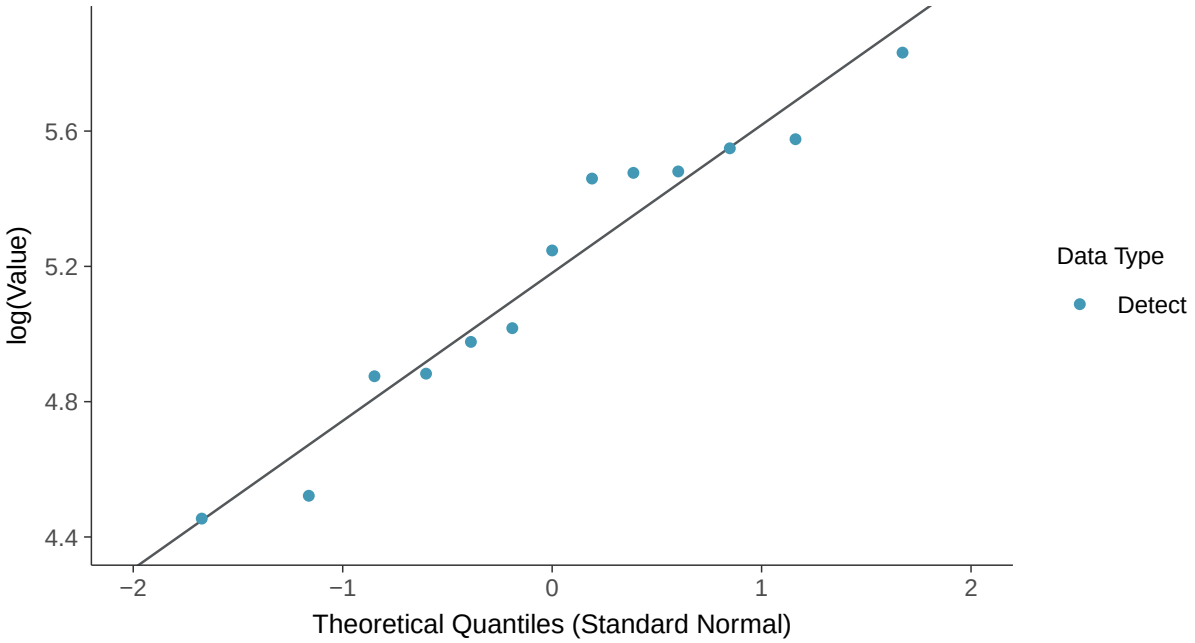
Normal Q-Q plot

Sulfate, MW-16A (mg/l)



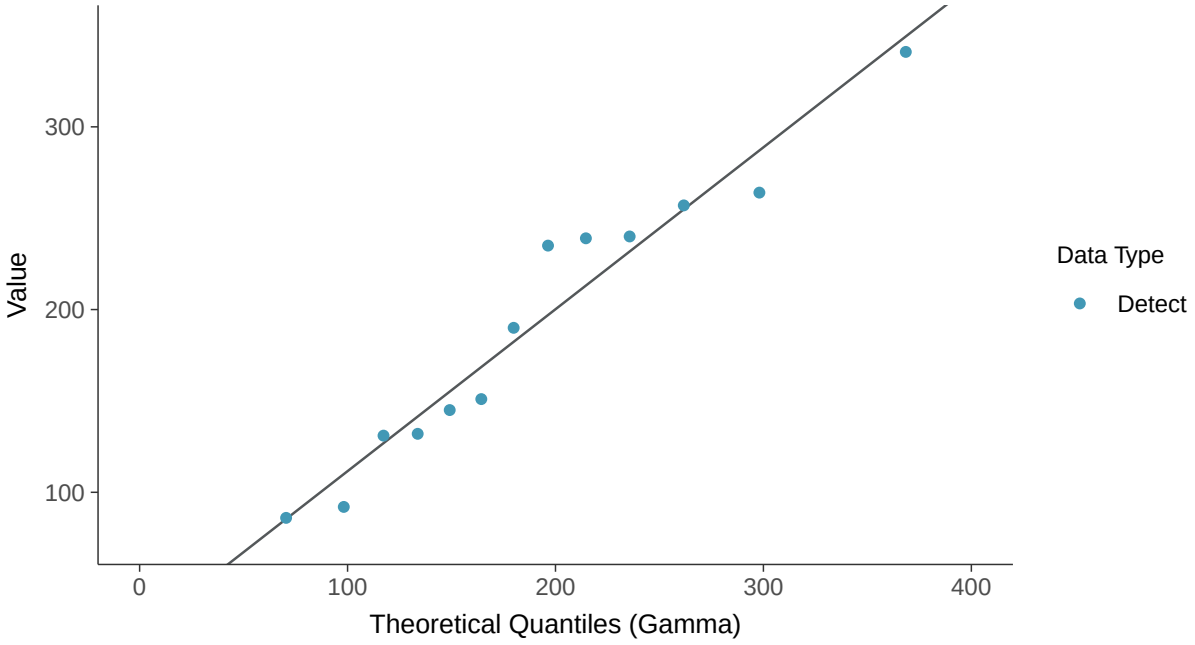
Lognormal Q-Q plot

Sulfate, MW-16A (mg/l)



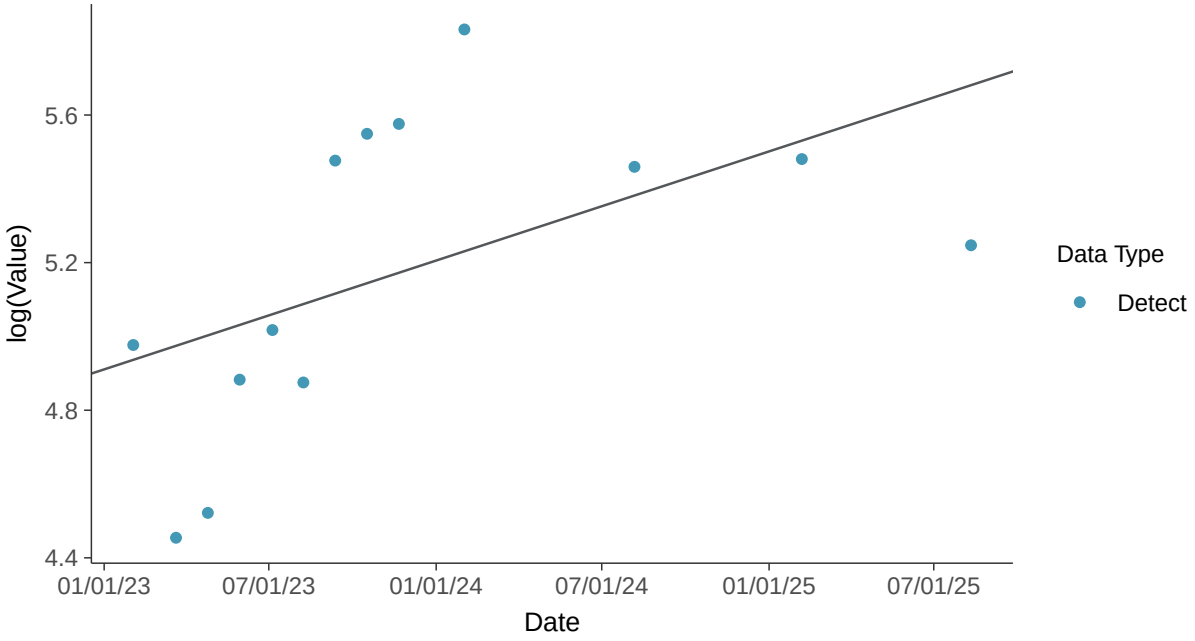
Gamma Q-Q plot

Sulfate, MW-16A (mg/l)



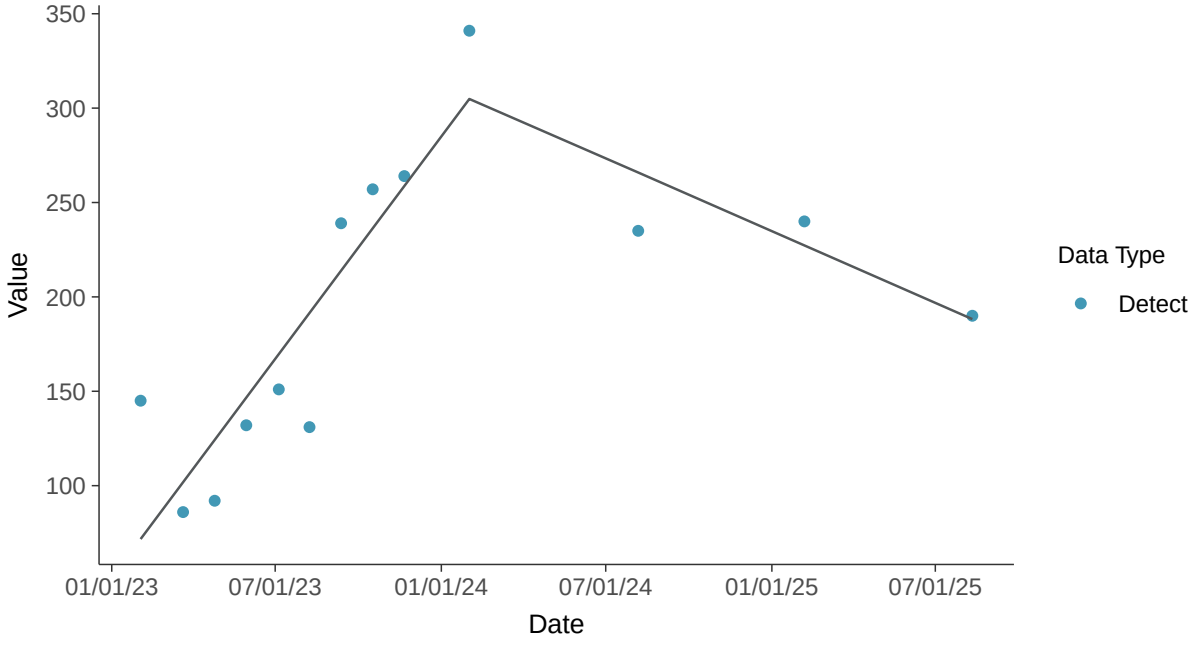
Trend Regression: Lognormal MLE

Sulfate, MW-16A (mg/l)



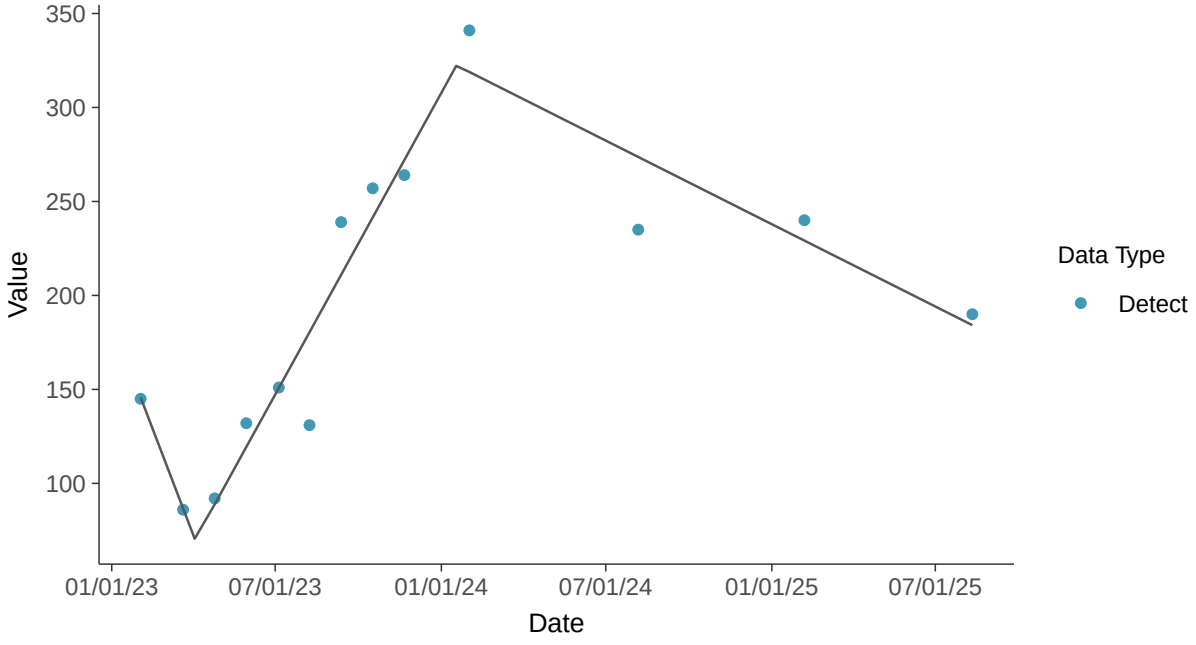
Trend Regression: Piecewise Linear-Linear

Sulfate, MW-16A (mg/l)



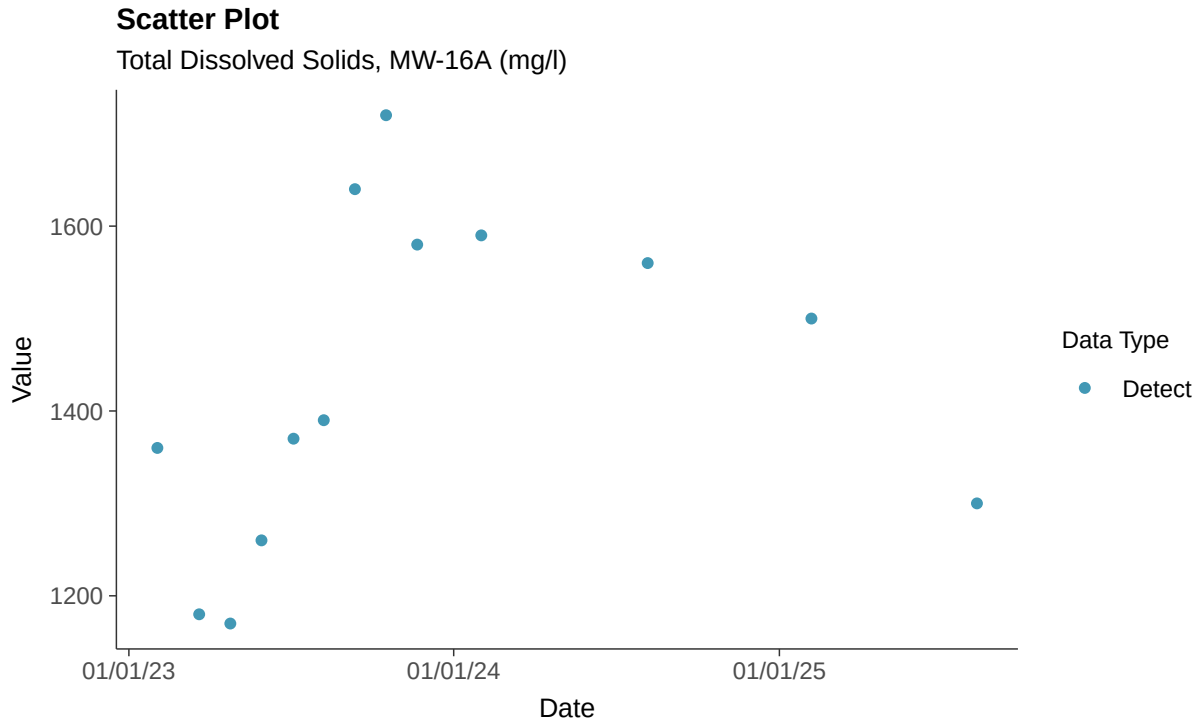
Trend Regression: Piecewise Linear-Linear-Linear

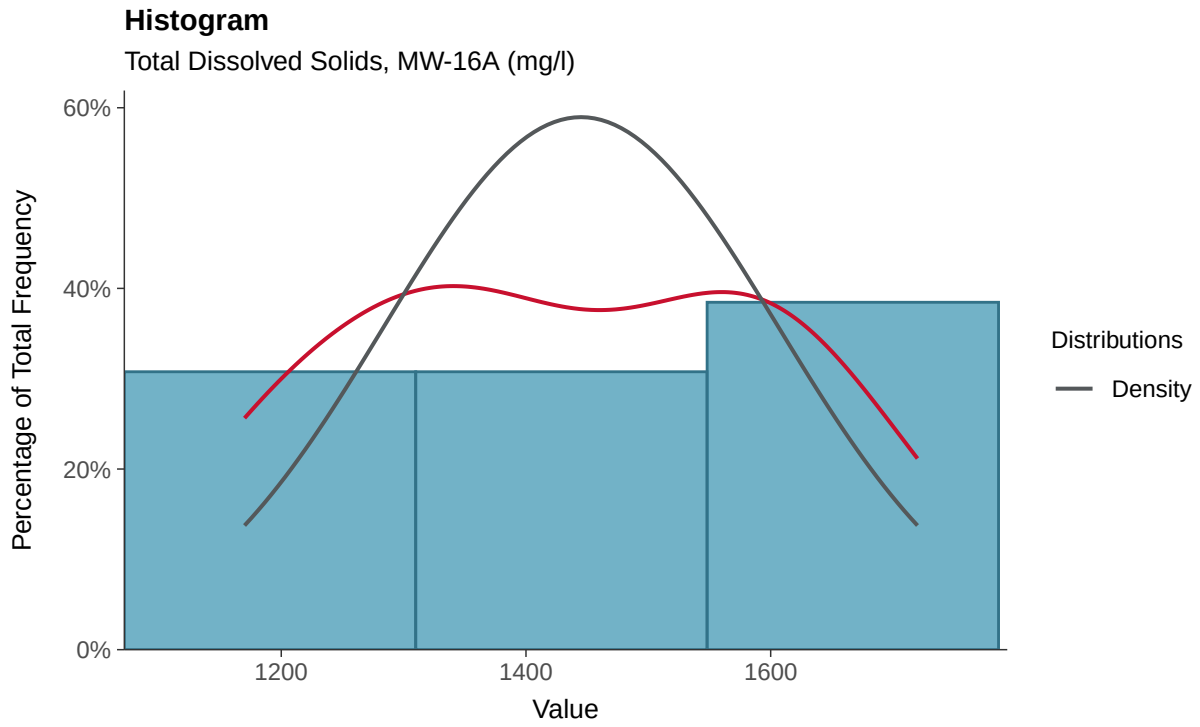
Sulfate, MW-16A (mg/l)



Appendix III: Total Dissolved Solids, MW-16A

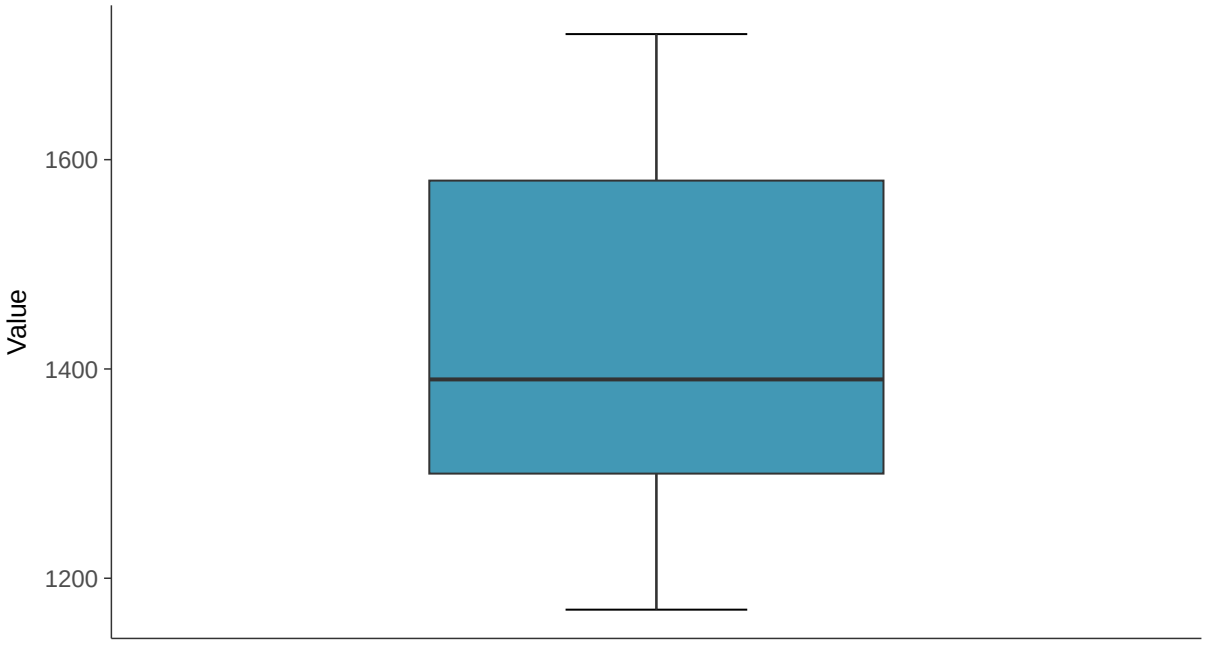
ID: 25_2_126





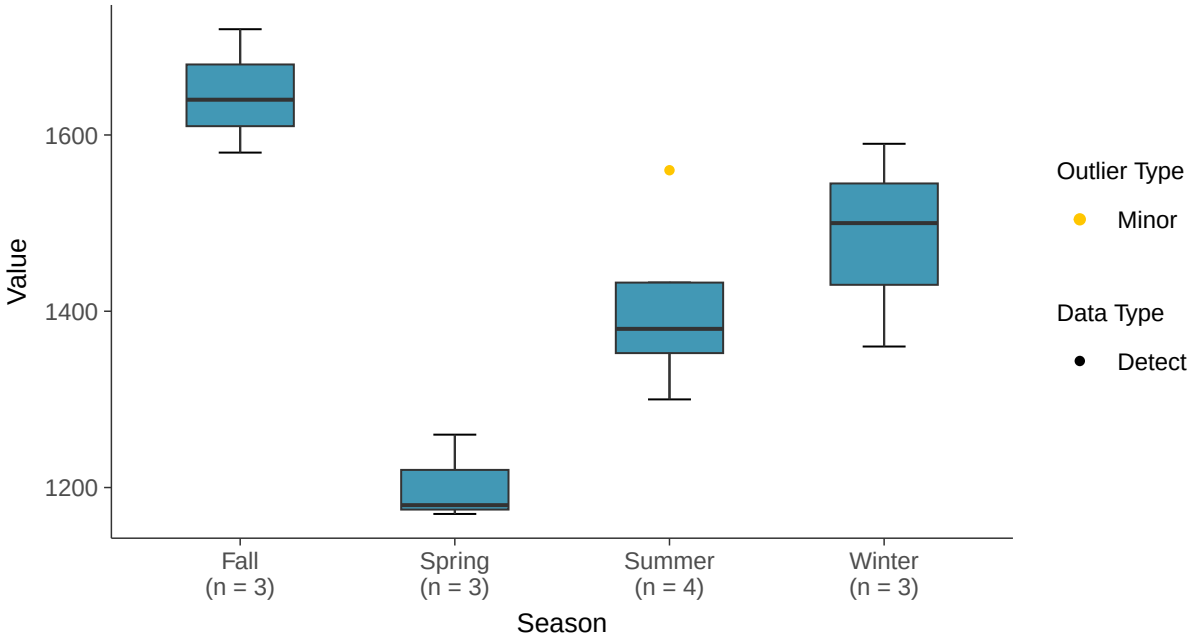
Boxplot

Total Dissolved Solids, MW-16A (mg/l)



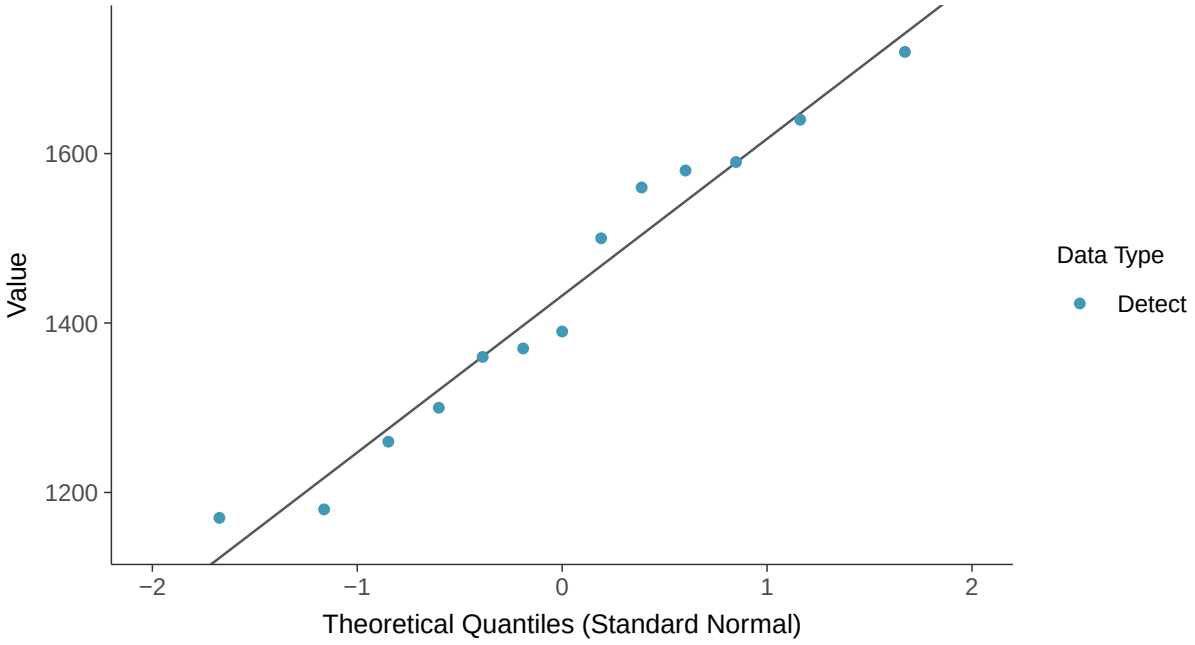
Boxplot by Season

Total Dissolved Solids, MW-16A (mg/l)



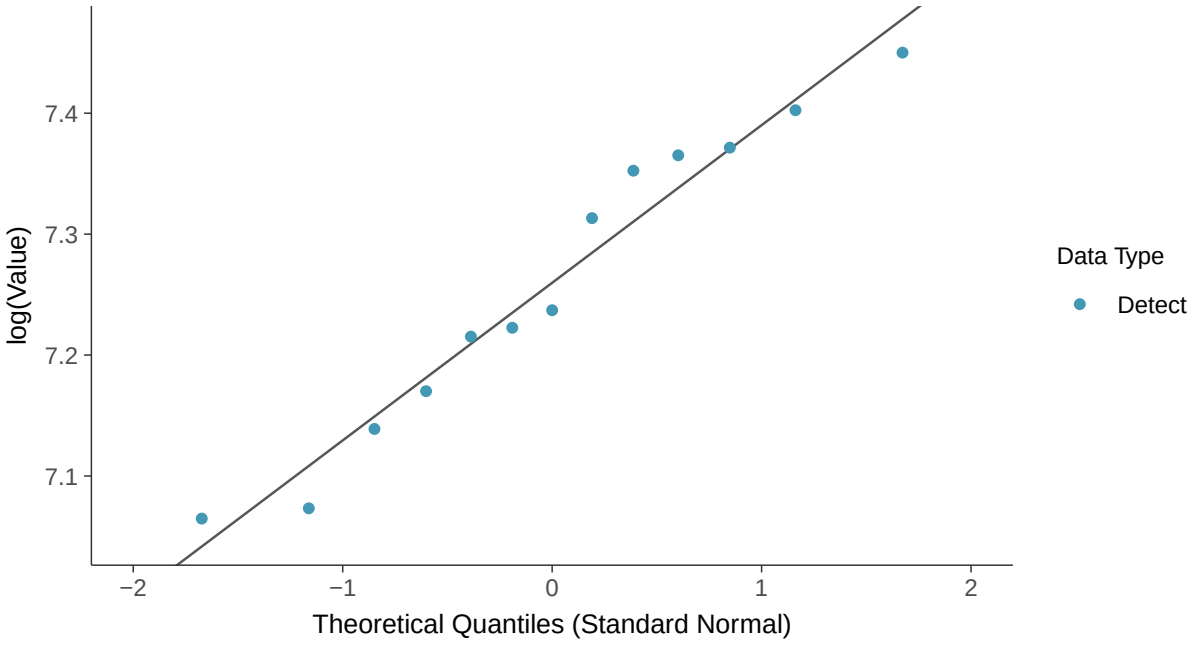
Normal Q-Q plot

Total Dissolved Solids, MW-16A (mg/l)



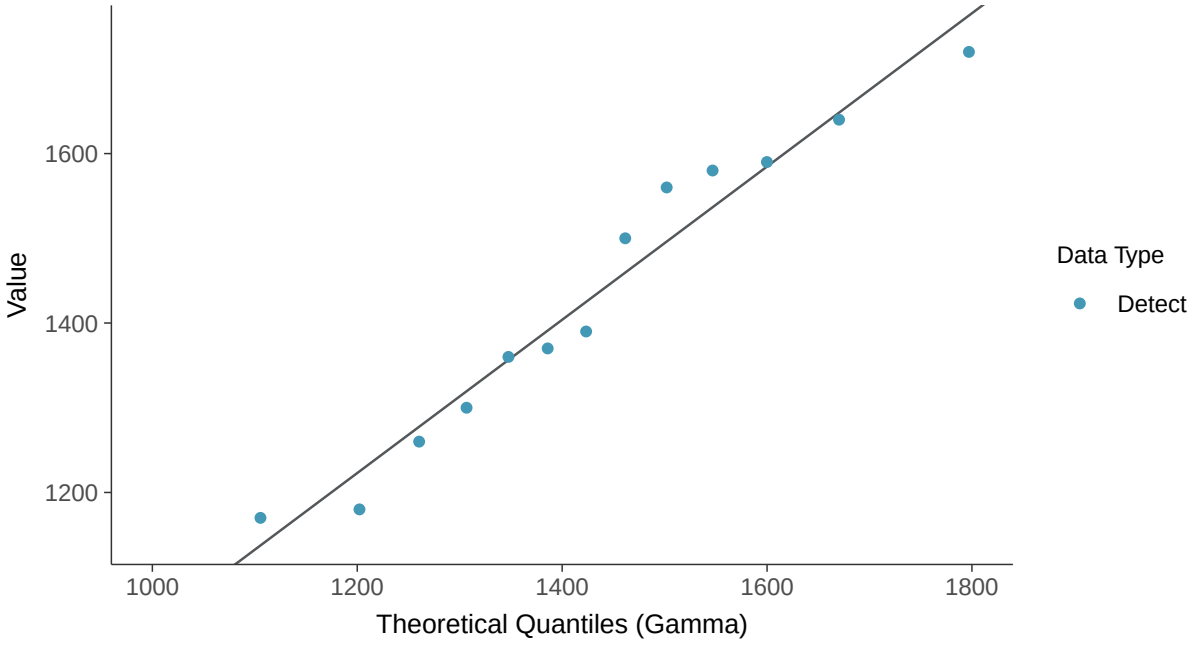
Lognormal Q-Q plot

Total Dissolved Solids, MW-16A (mg/l)



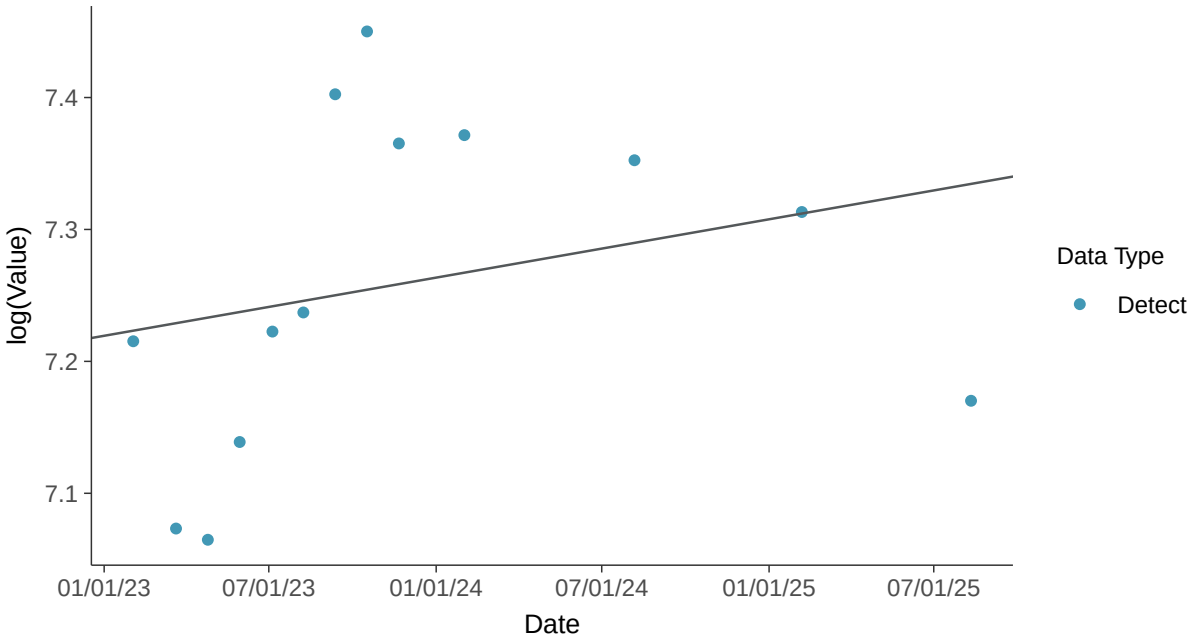
Gamma Q-Q plot

Total Dissolved Solids, MW-16A (mg/l)



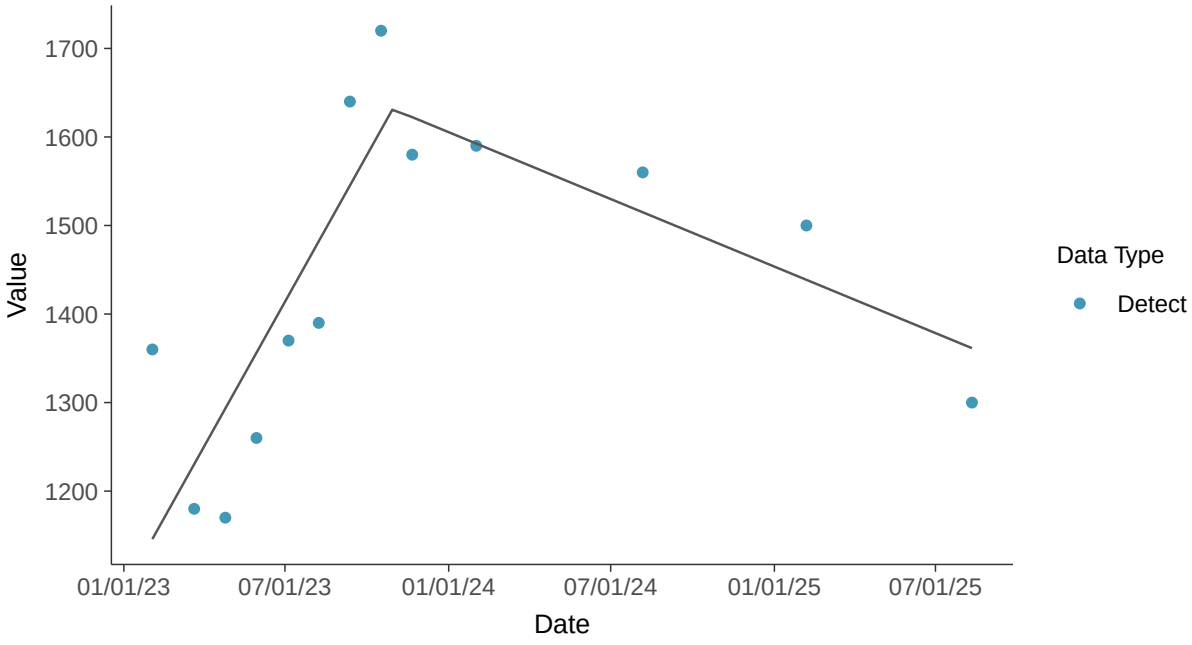
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-16A (mg/l)



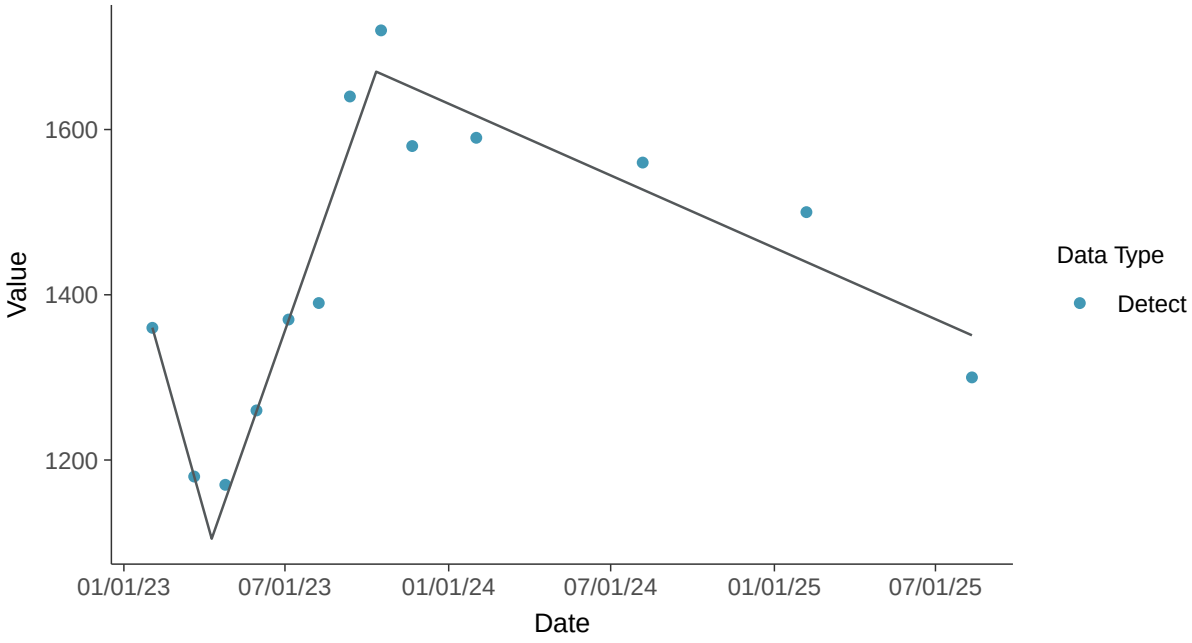
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-16A (mg/l)



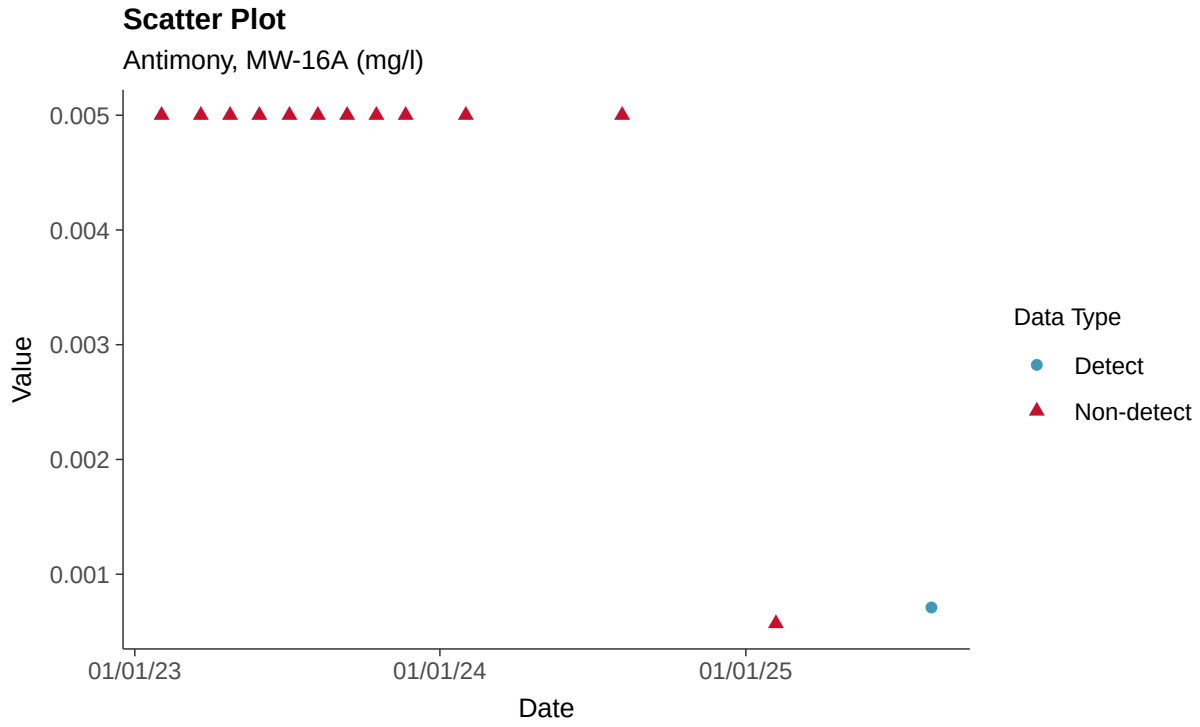
Trend Regression: Piecewise Linear-Linear-Linear

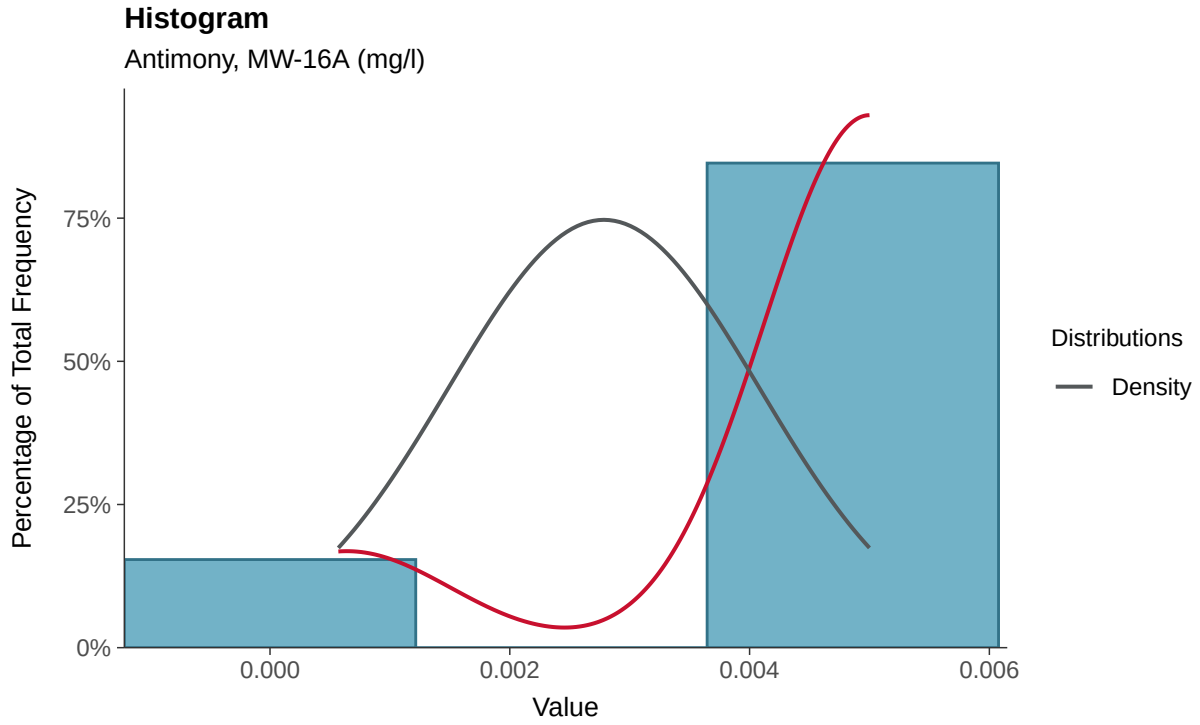
Total Dissolved Solids, MW-16A (mg/l)



Appendix IV: Antimony, MW-16A

ID: 25_3_101



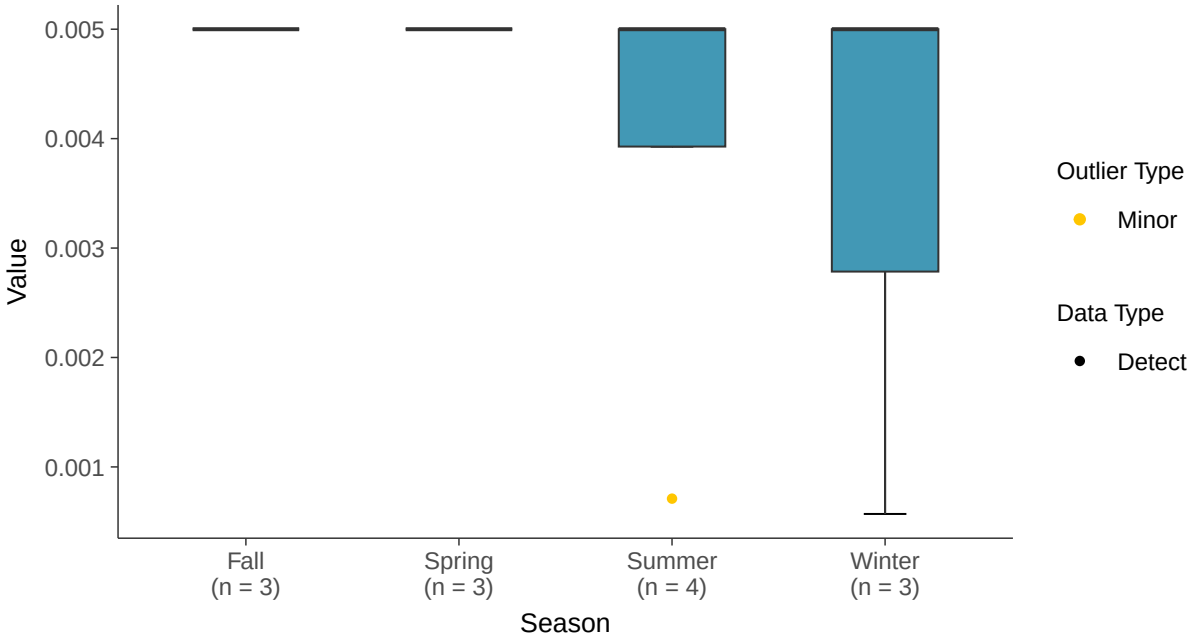


Boxplot

Antimony, MW-16A (mg/l)

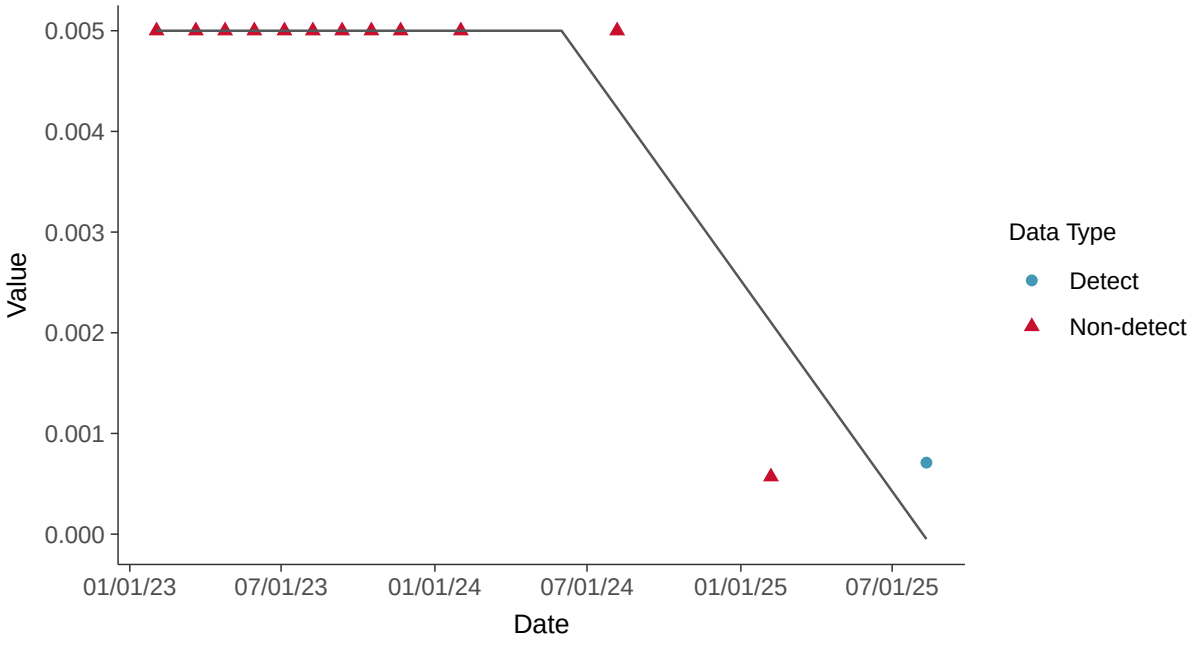
Boxplot by Season

Antimony, MW-16A (mg/l)



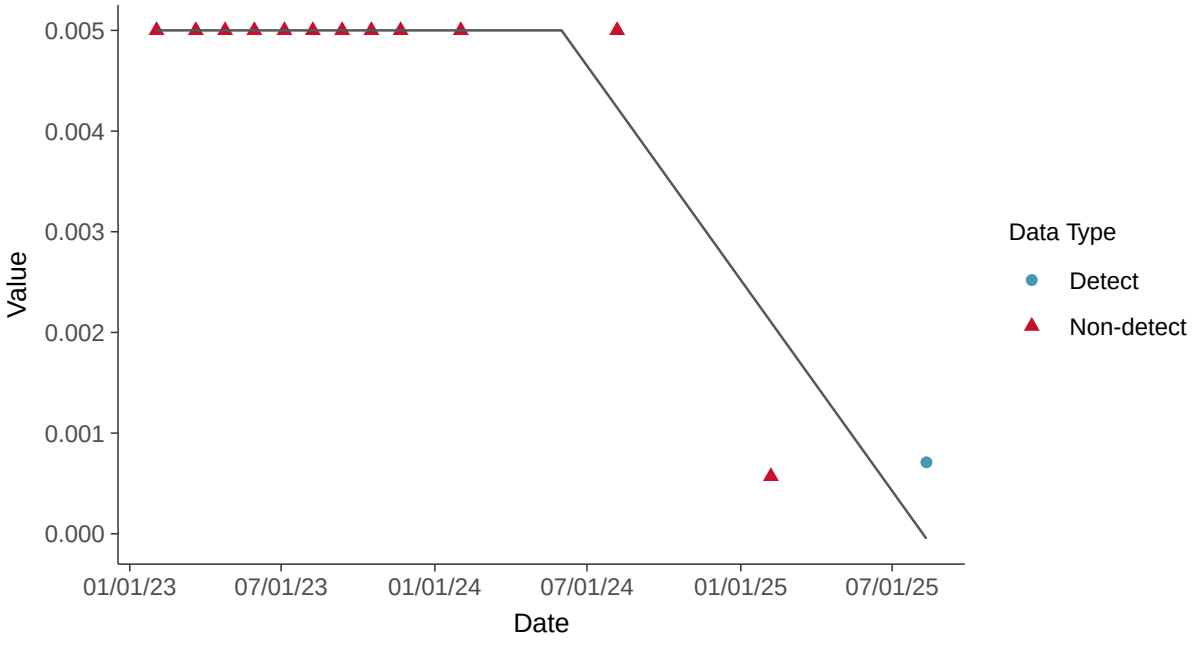
Trend Regression: Piecewise Linear-Linear

Antimony, MW-16A (mg/l)



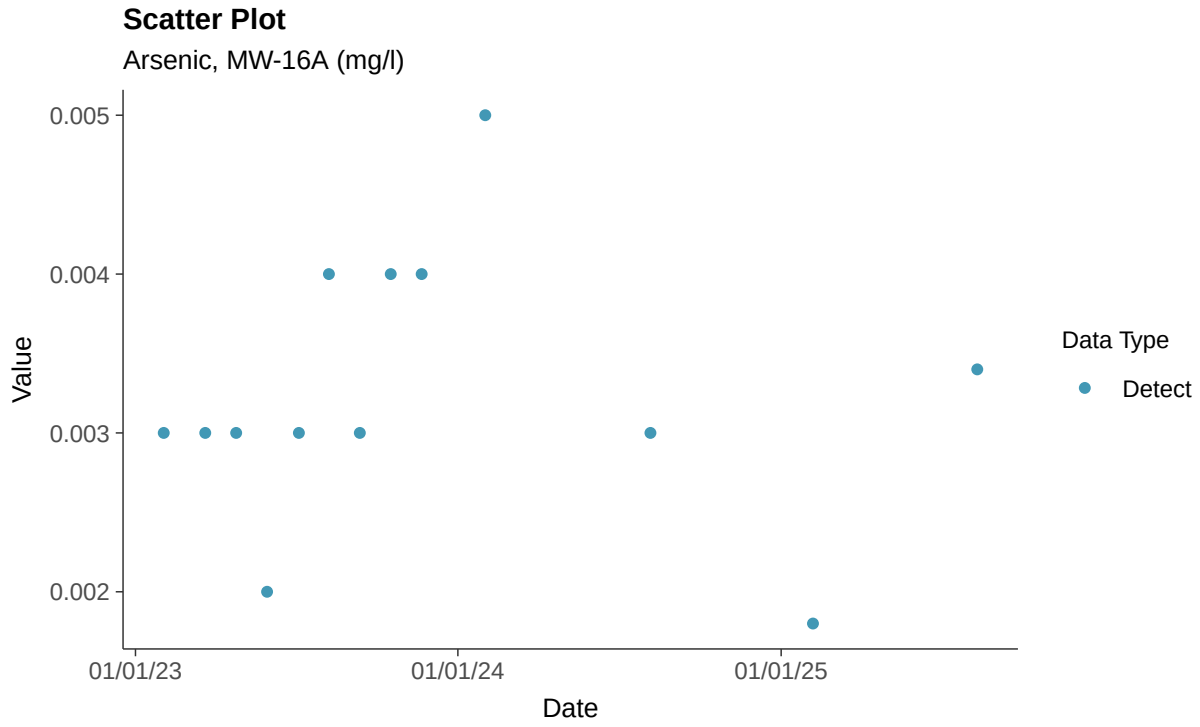
Trend Regression: Piecewise Linear-Linear-Linear

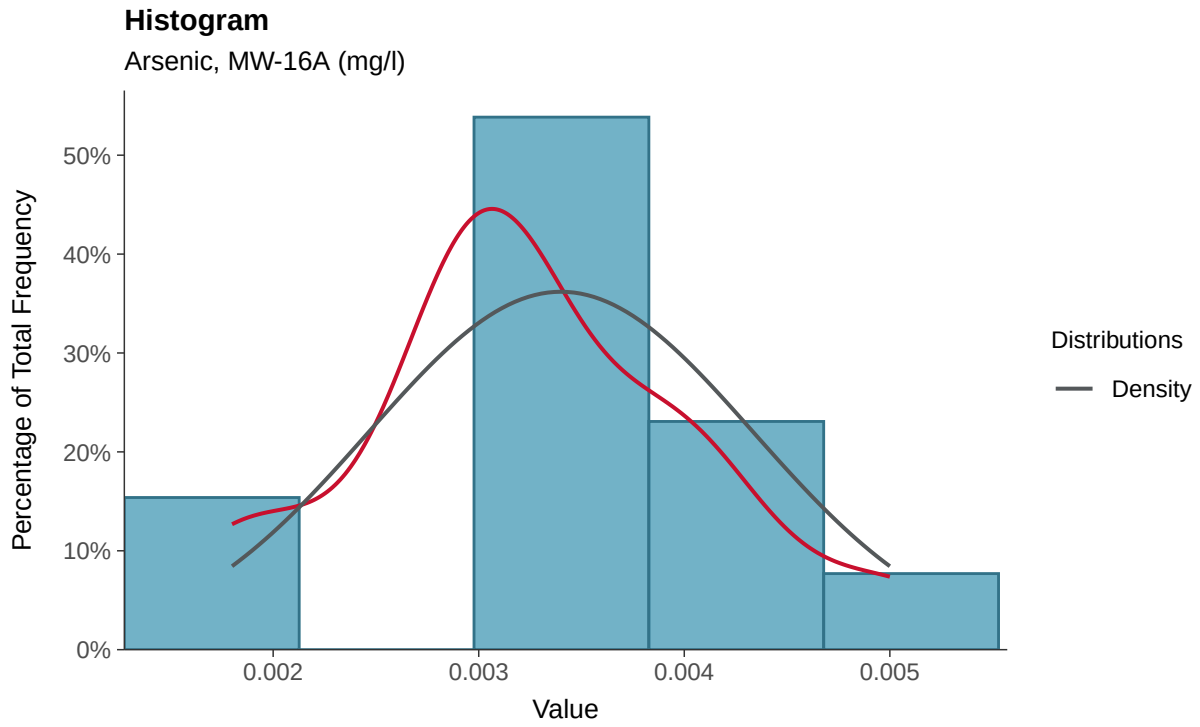
Antimony, MW-16A (mg/l)



Appendix IV: Arsenic, MW-16A

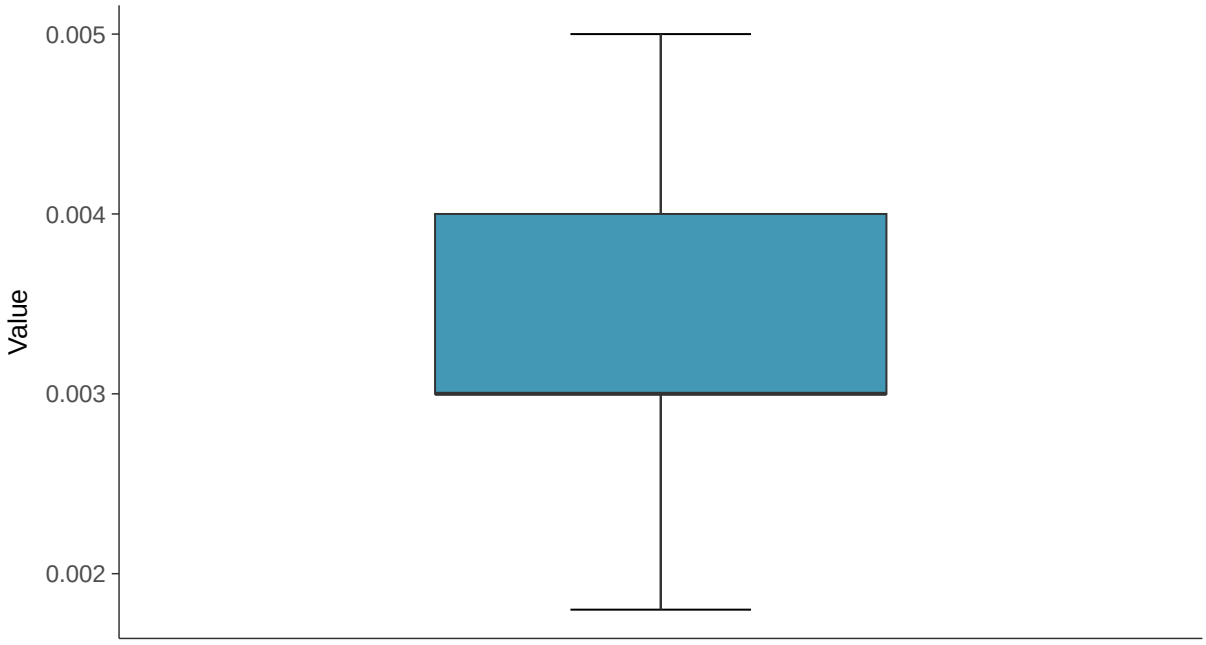
ID: 25_3_102





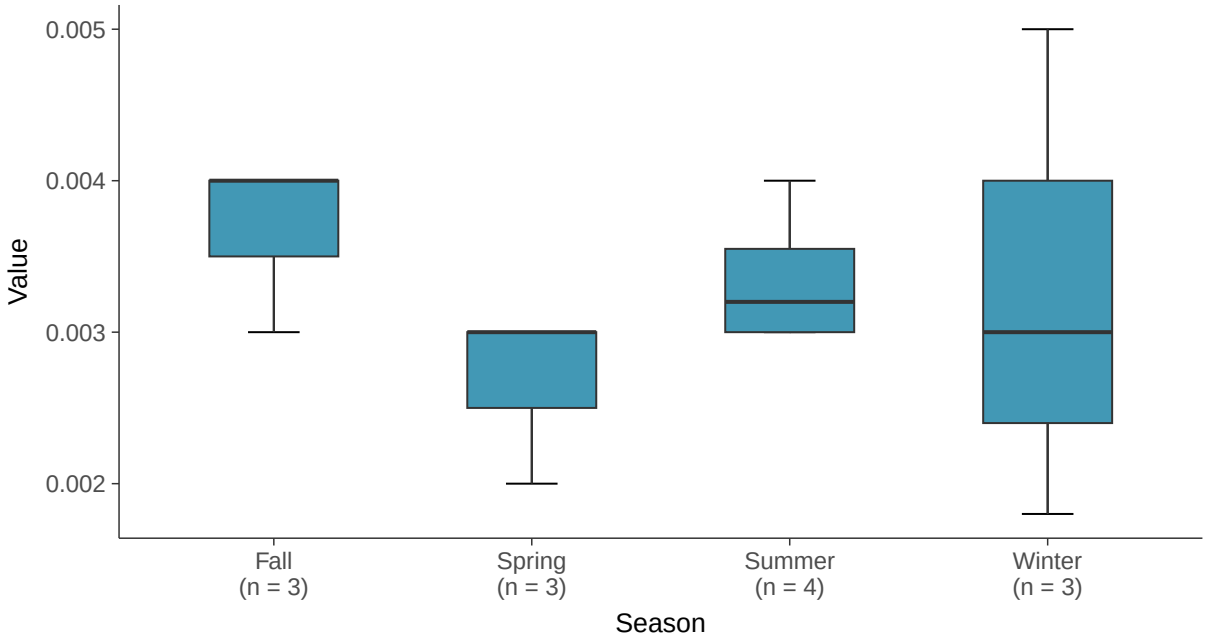
Boxplot

Arsenic, MW-16A (mg/l)



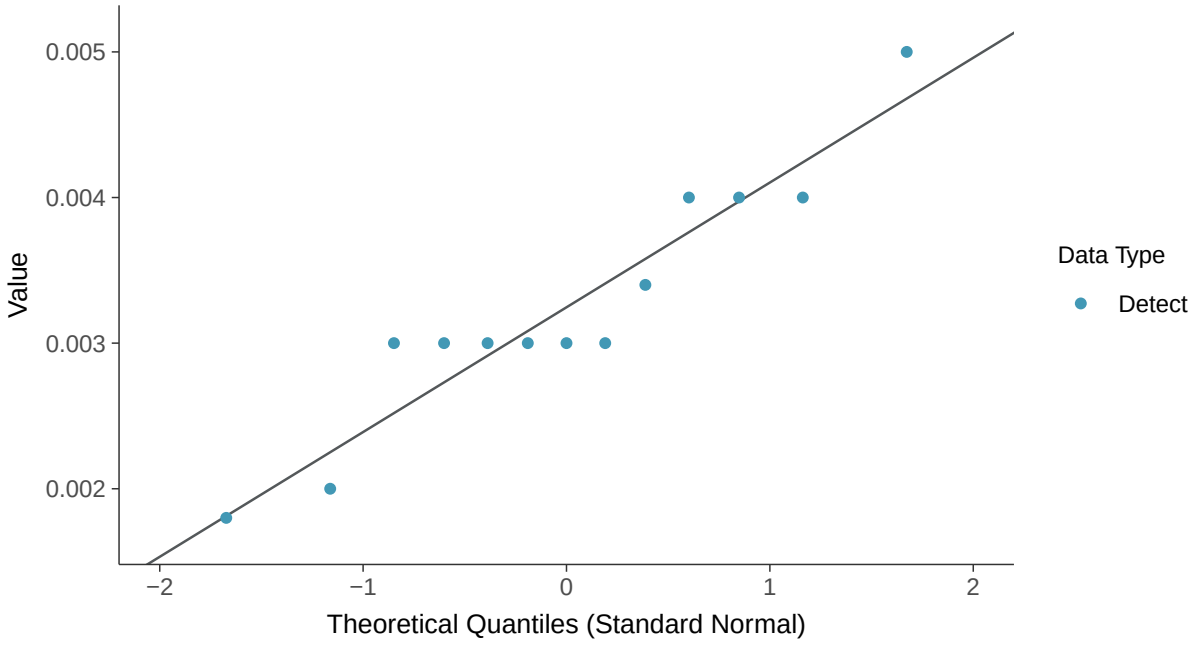
Boxplot by Season

Arsenic, MW-16A (mg/l)



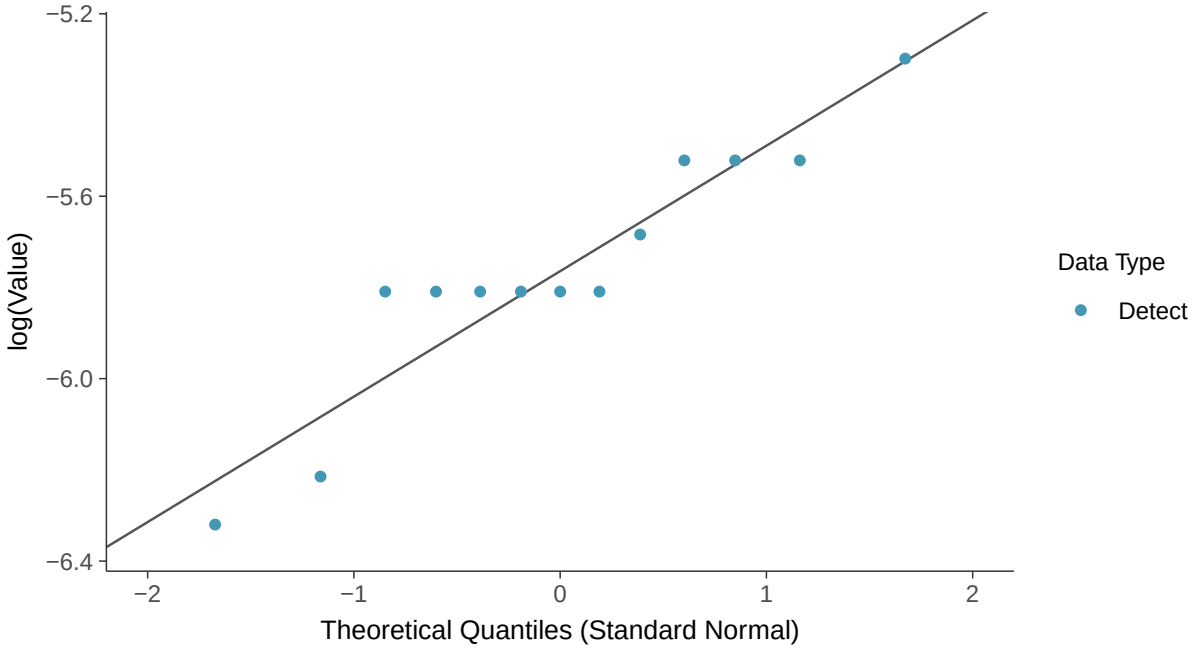
Normal Q-Q plot

Arsenic, MW-16A (mg/l)



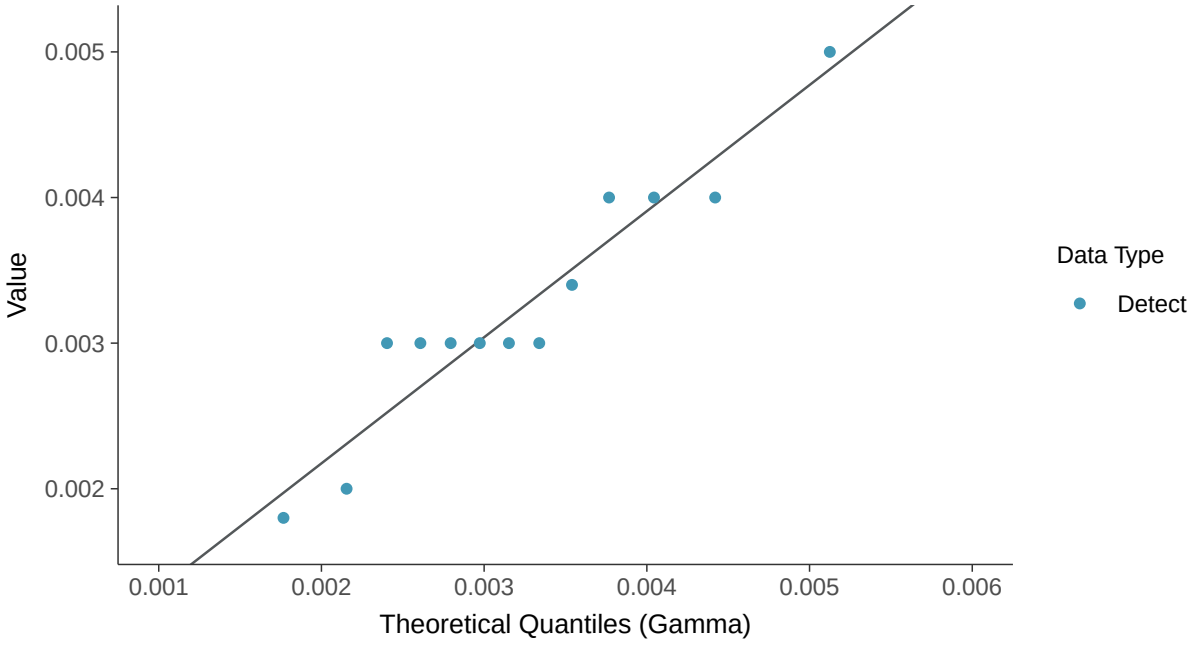
Lognormal Q-Q plot

Arsenic, MW-16A (mg/l)



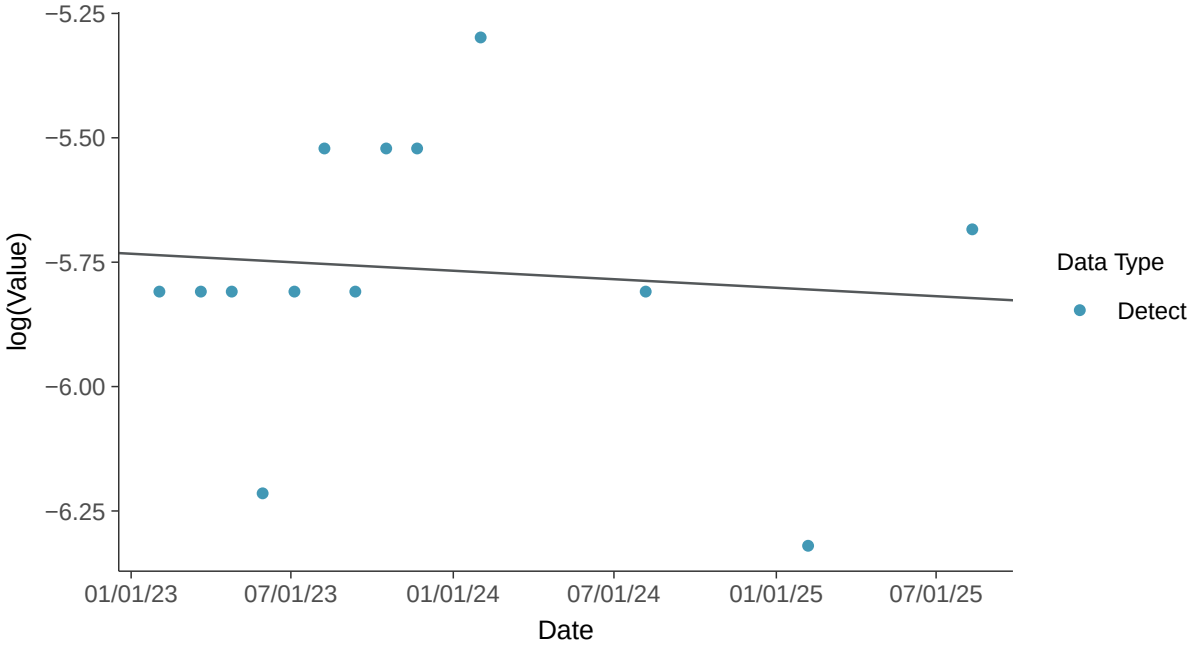
Gamma Q-Q plot

Arsenic, MW-16A (mg/l)



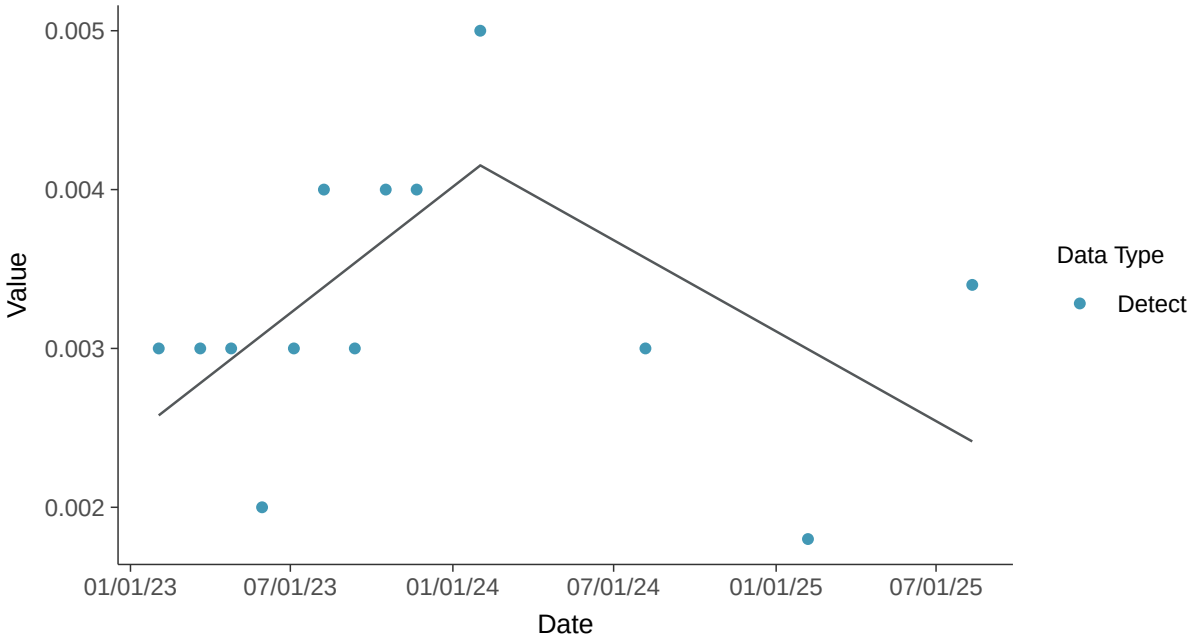
Trend Regression: Lognormal MLE

Arsenic, MW-16A (mg/l)



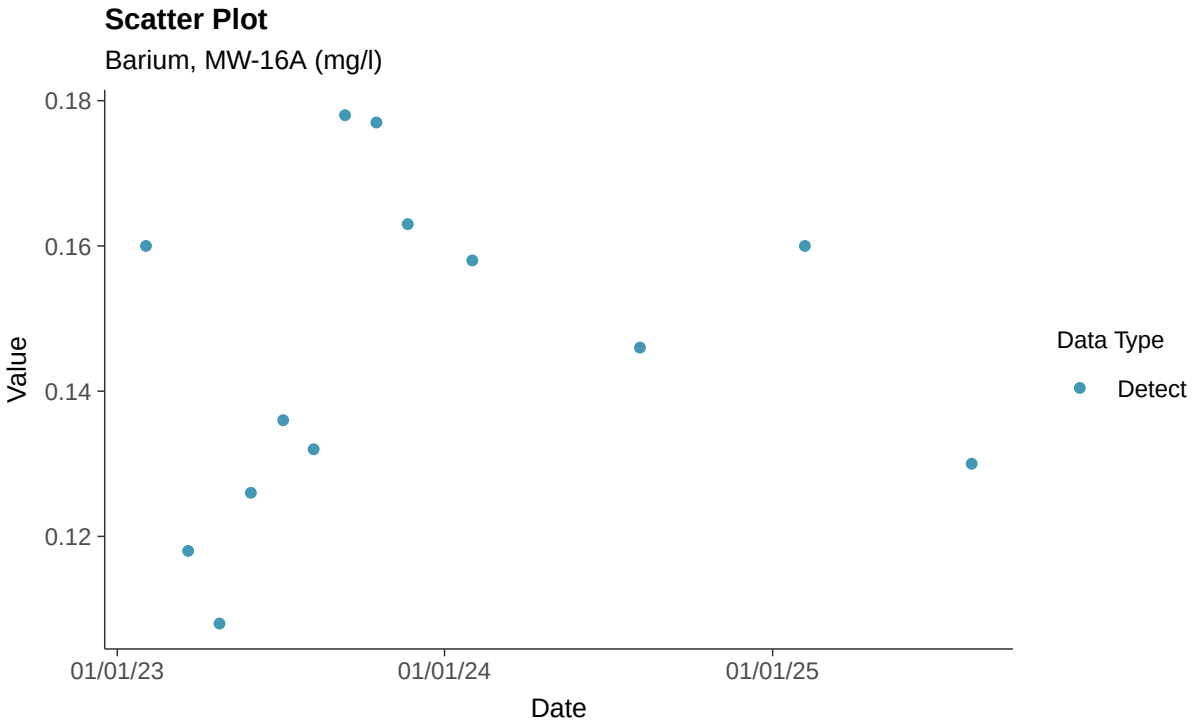
Trend Regression: Piecewise Linear-Linear

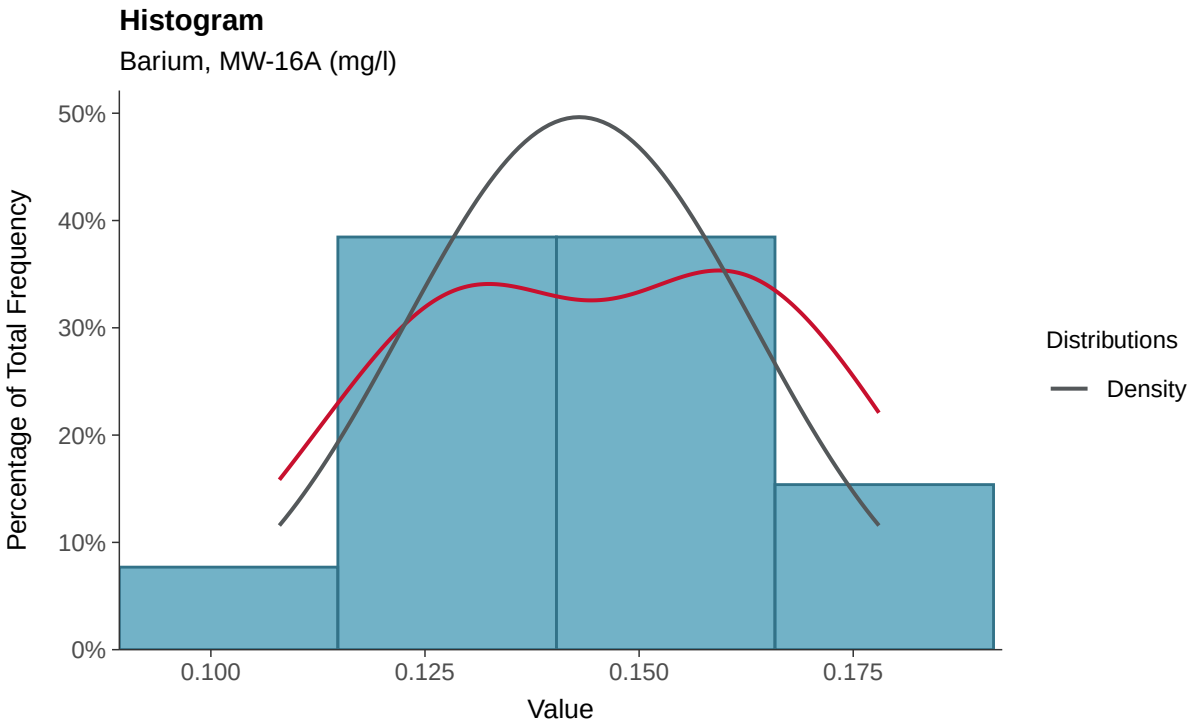
Arsenic, MW-16A (mg/l)



Appendix IV: Barium, MW-16A

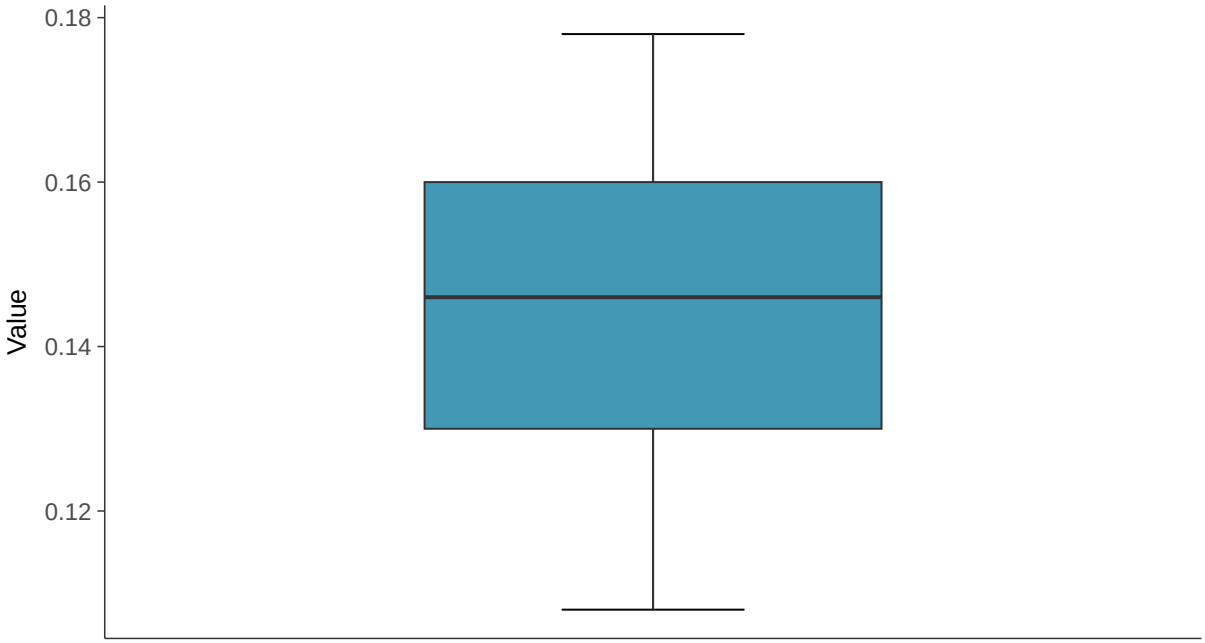
ID: 25_3_103





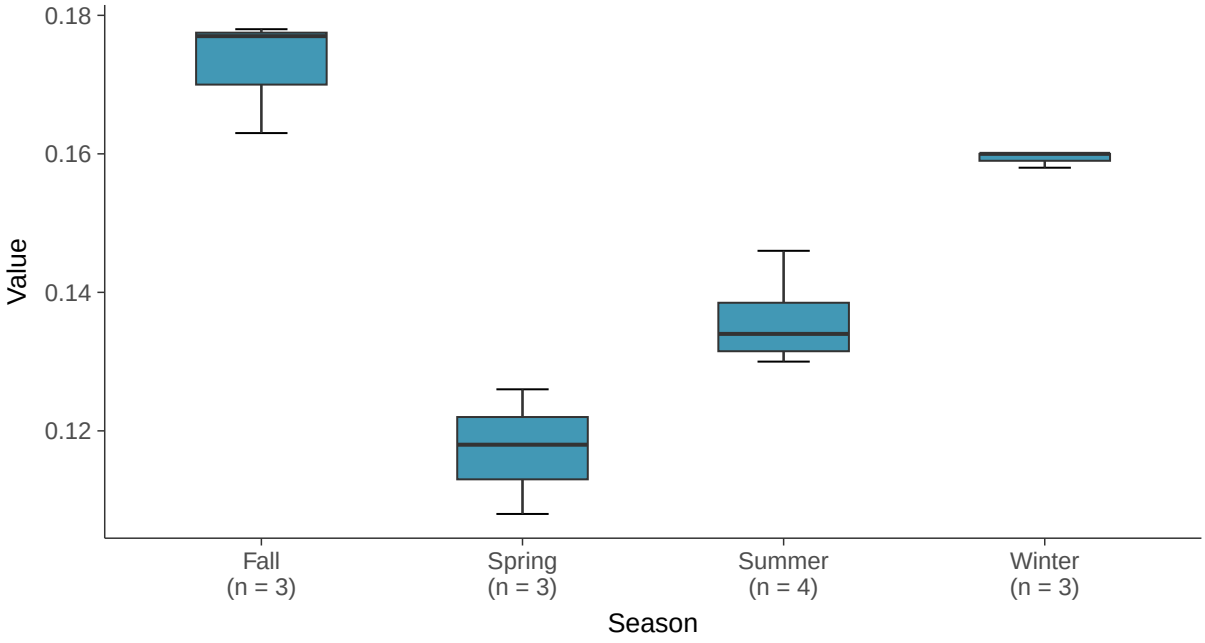
Boxplot

Barium, MW-16A (mg/l)



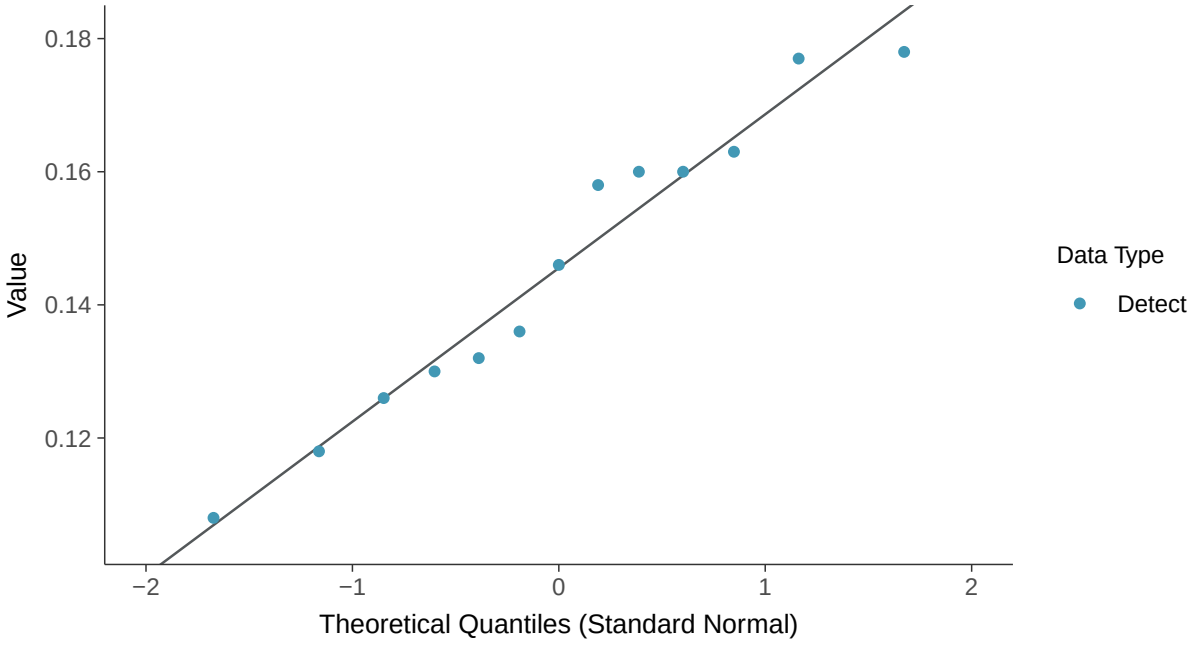
Boxplot by Season

Barium, MW-16A (mg/l)



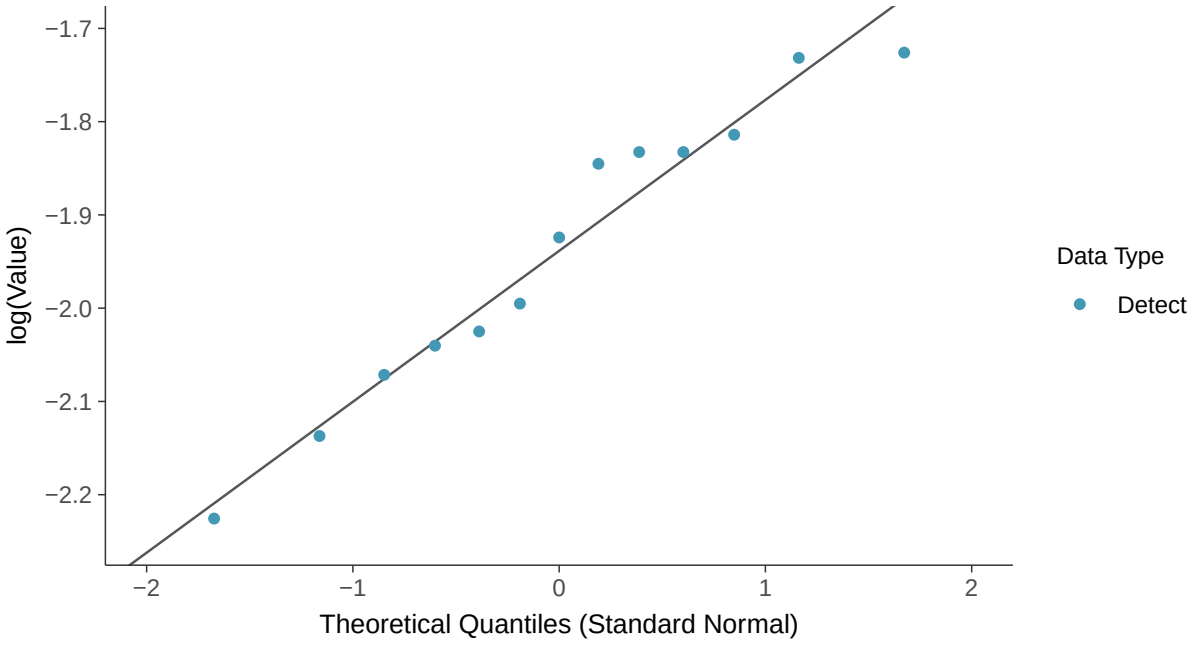
Normal Q-Q plot

Barium, MW-16A (mg/l)



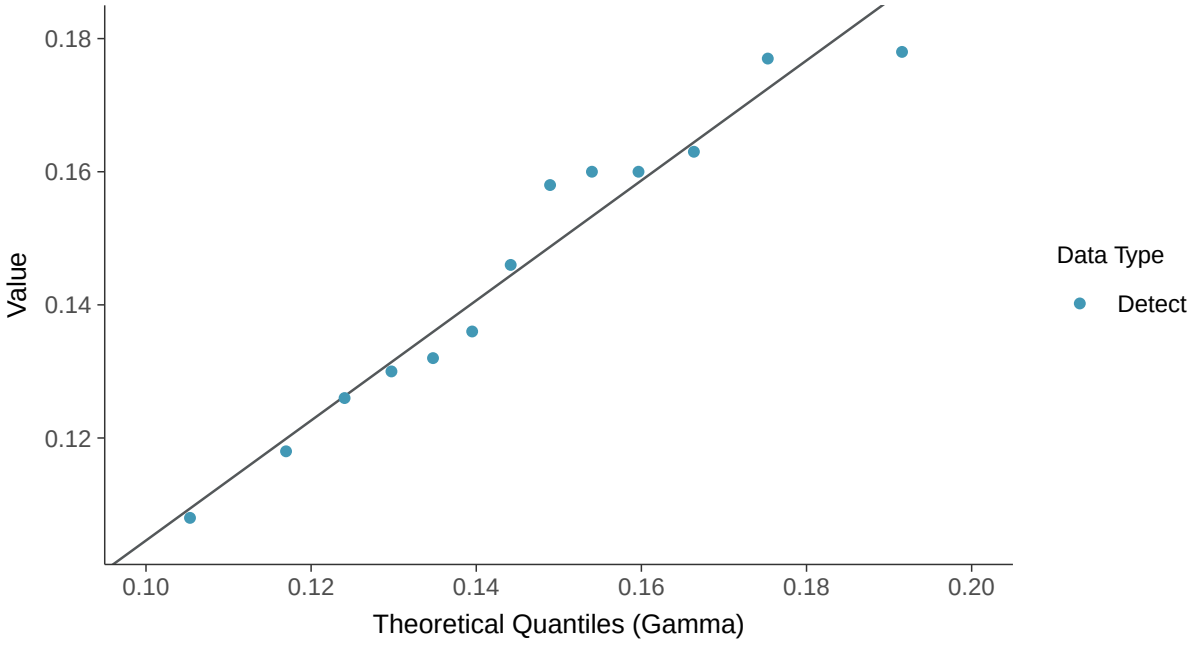
Lognormal Q-Q plot

Barium, MW-16A (mg/l)



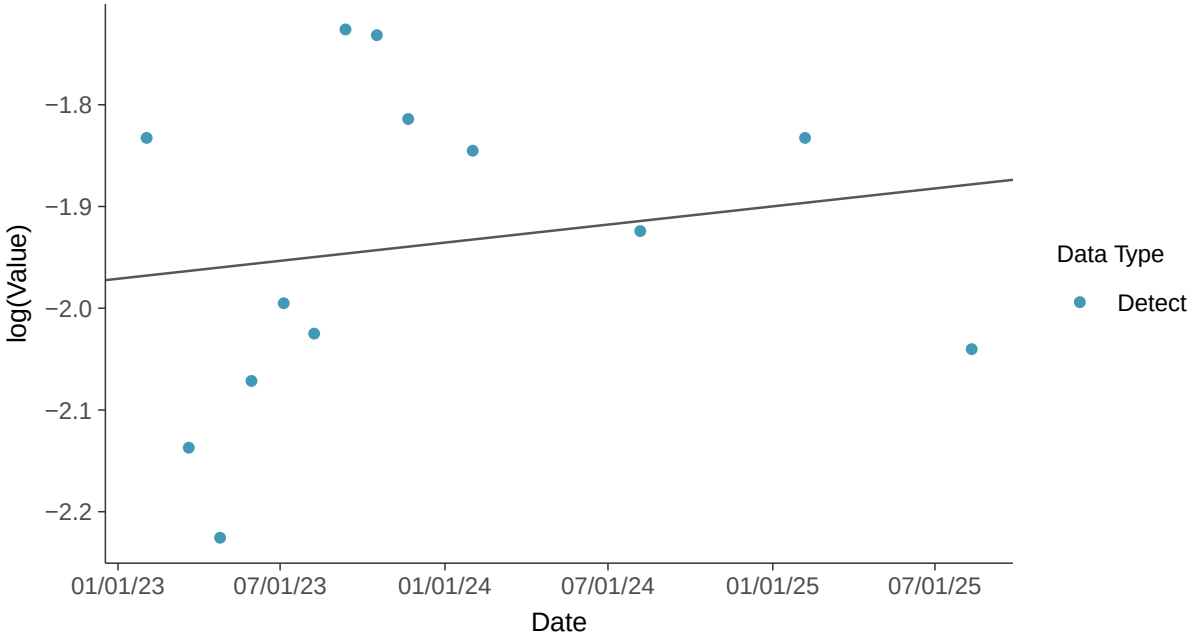
Gamma Q-Q plot

Barium, MW-16A (mg/l)



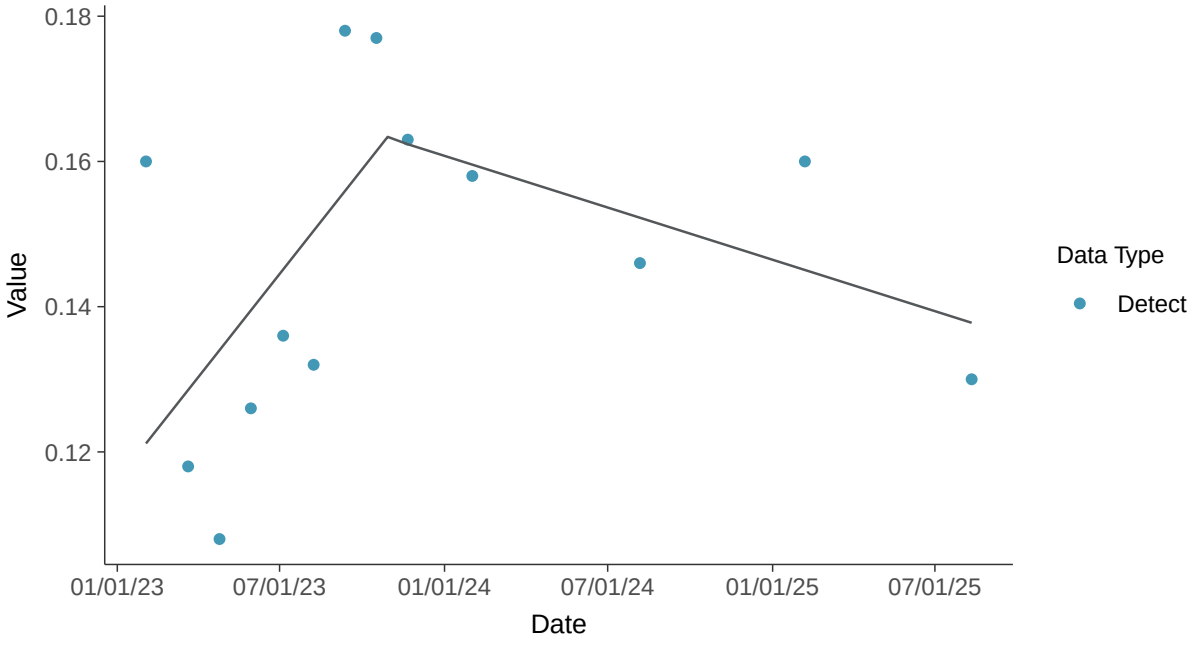
Trend Regression: Lognormal MLE

Barium, MW-16A (mg/l)



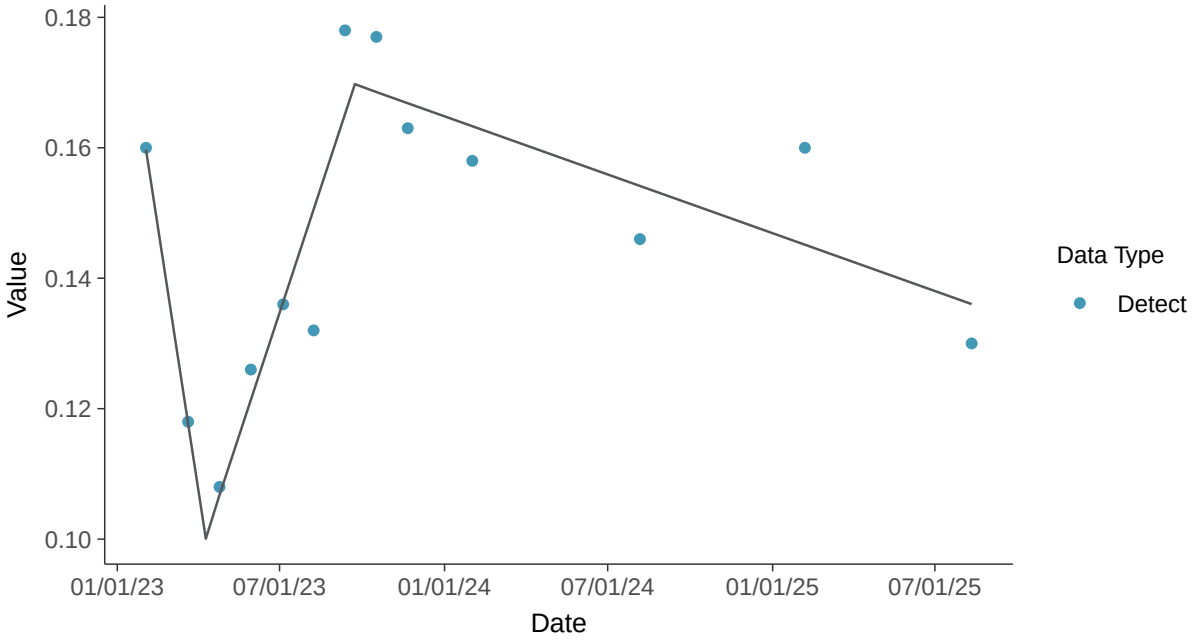
Trend Regression: Piecewise Linear-Linear

Barium, MW-16A (mg/l)



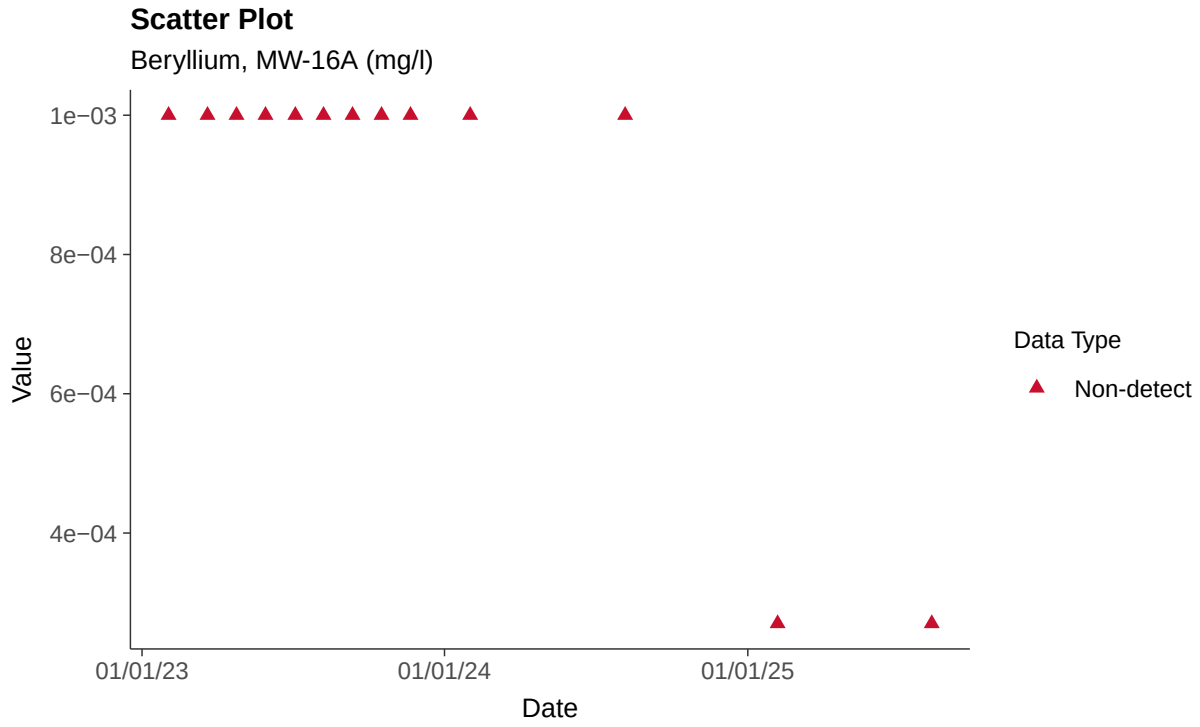
Trend Regression: Piecewise Linear-Linear-Linear

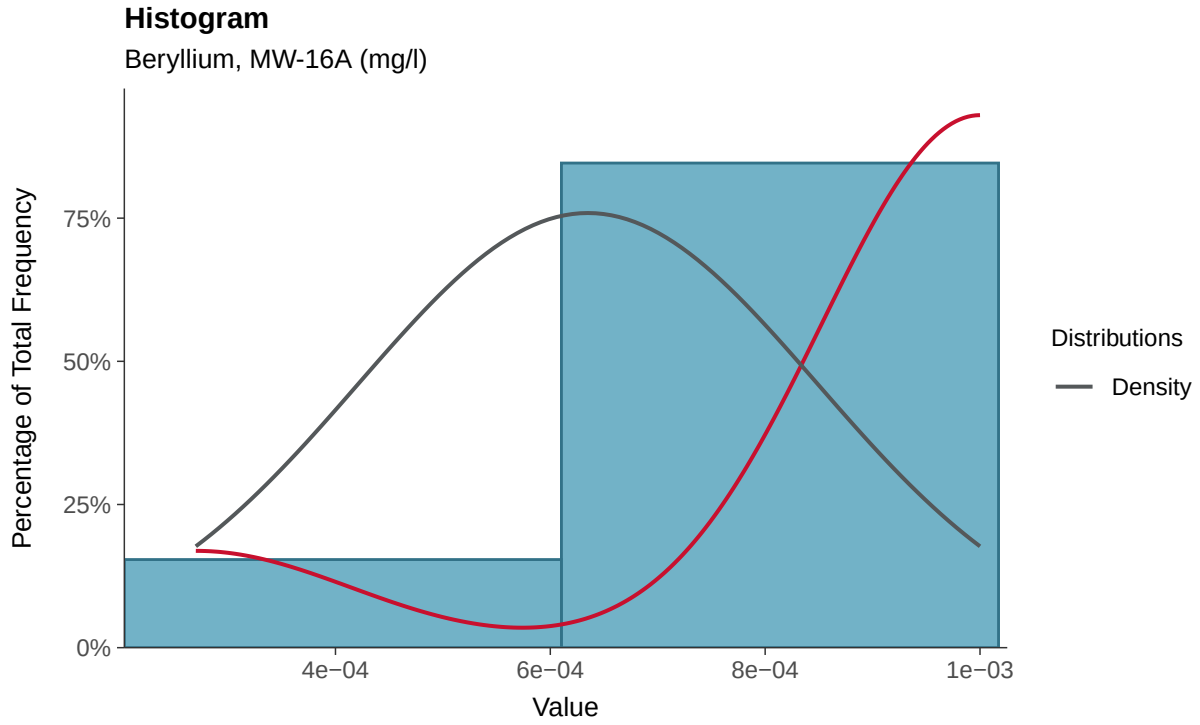
Barium, MW-16A (mg/l)



Appendix IV: Beryllium, MW-16A

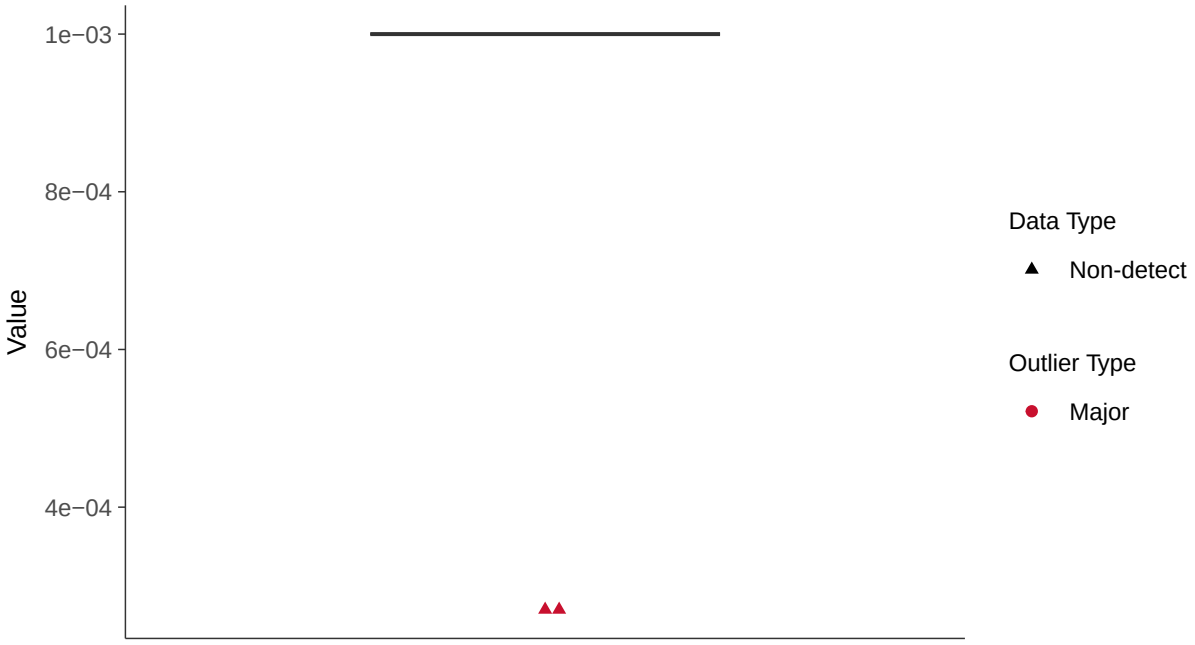
ID: 25_3_104





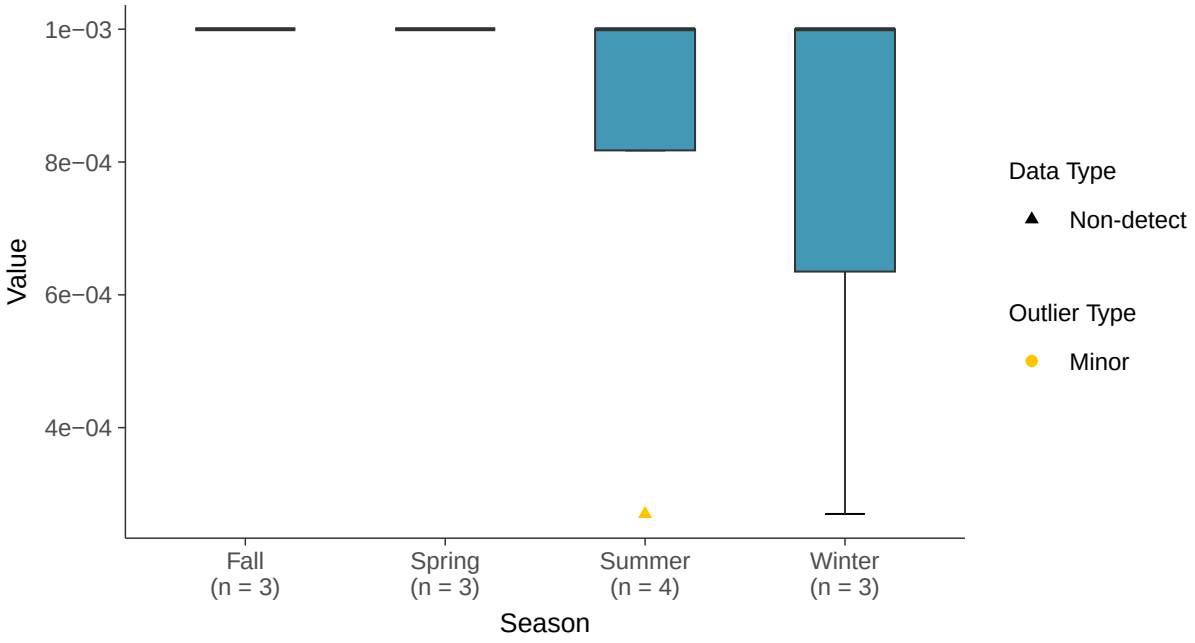
Boxplot

Beryllium, MW-16A (mg/l)



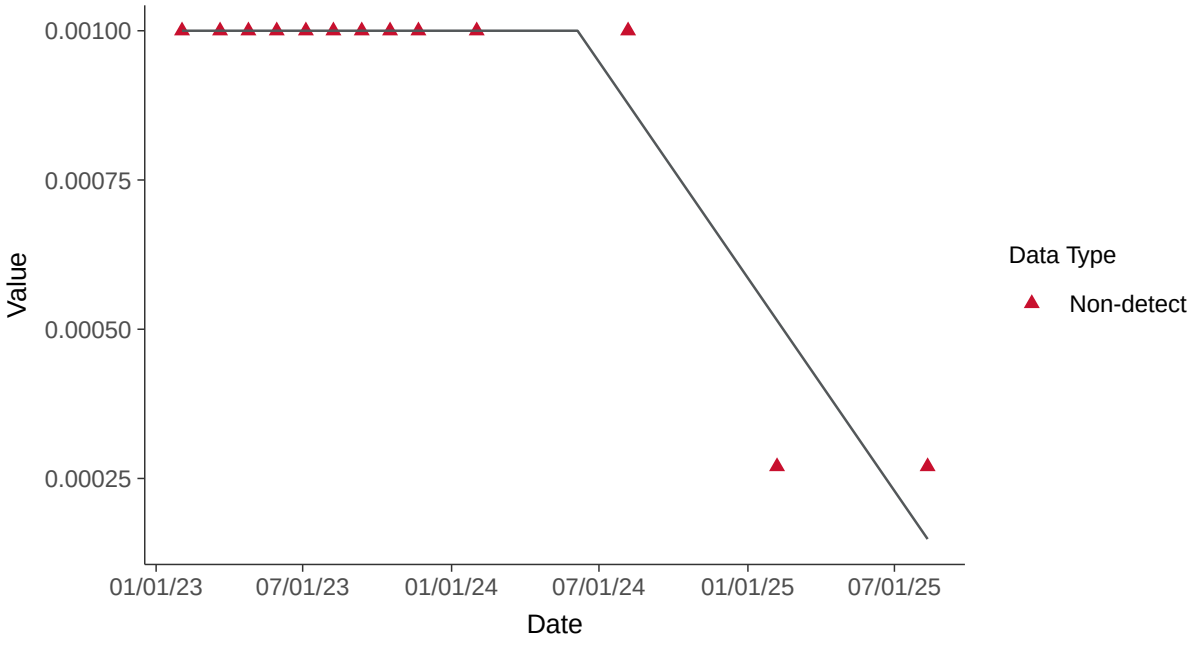
Boxplot by Season

Beryllium, MW-16A (mg/l)



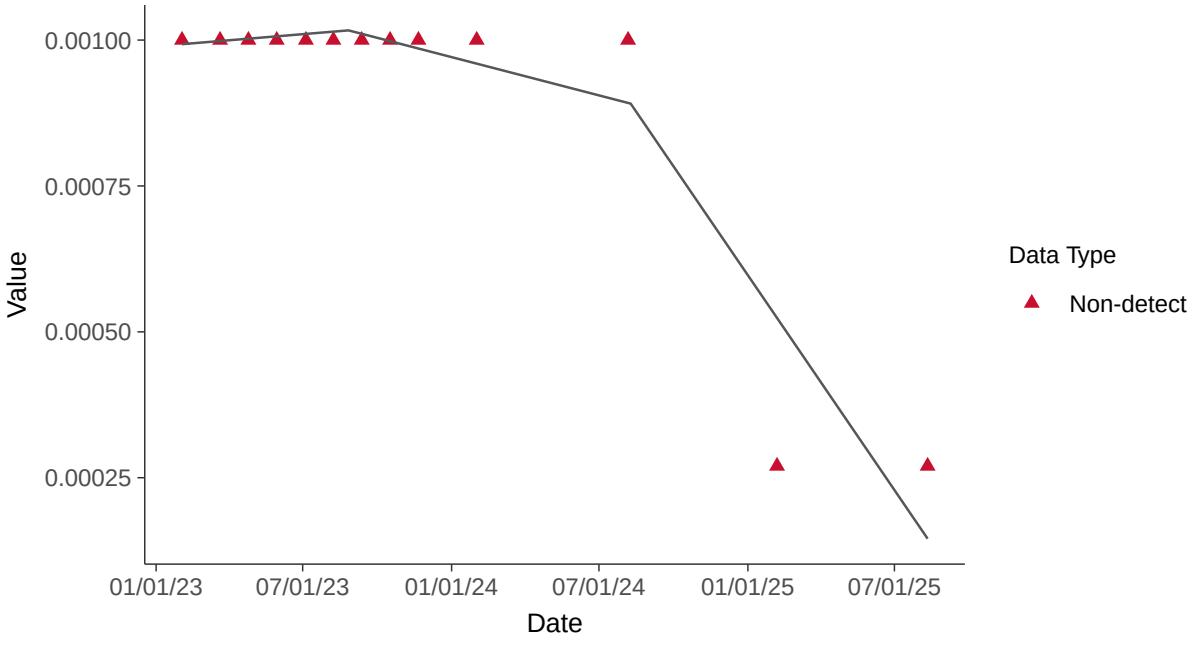
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-16A (mg/l)



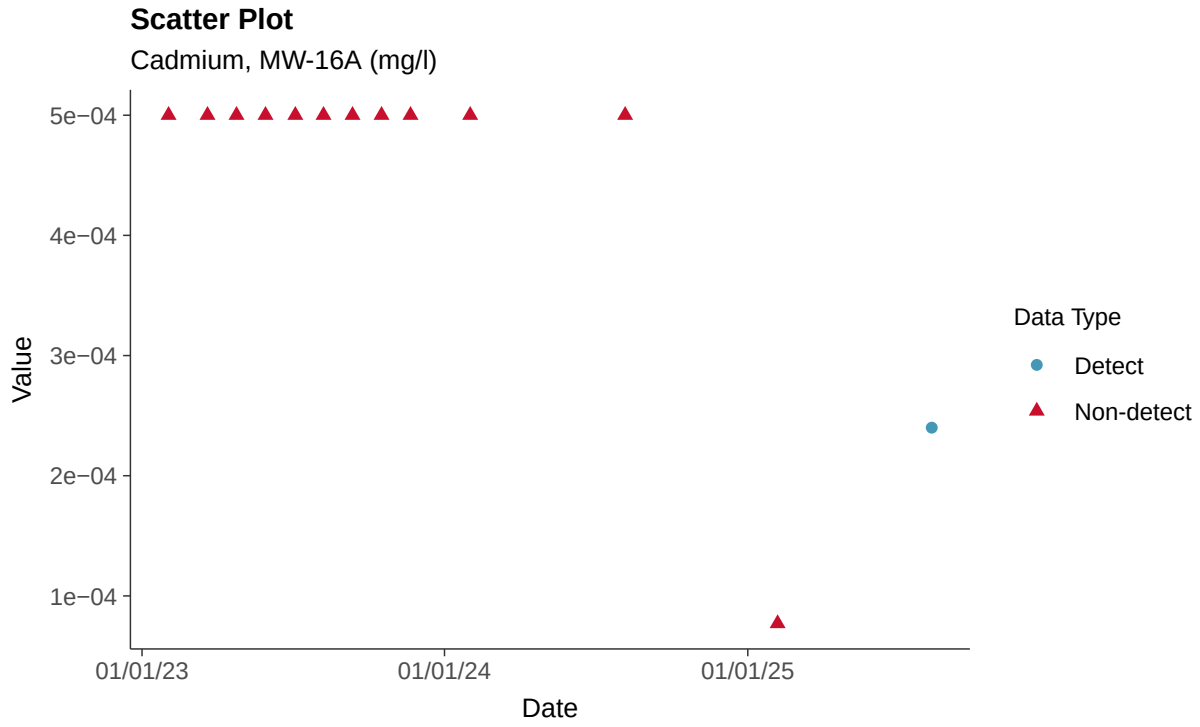
Trend Regression: Piecewise Linear-Linear-Linear

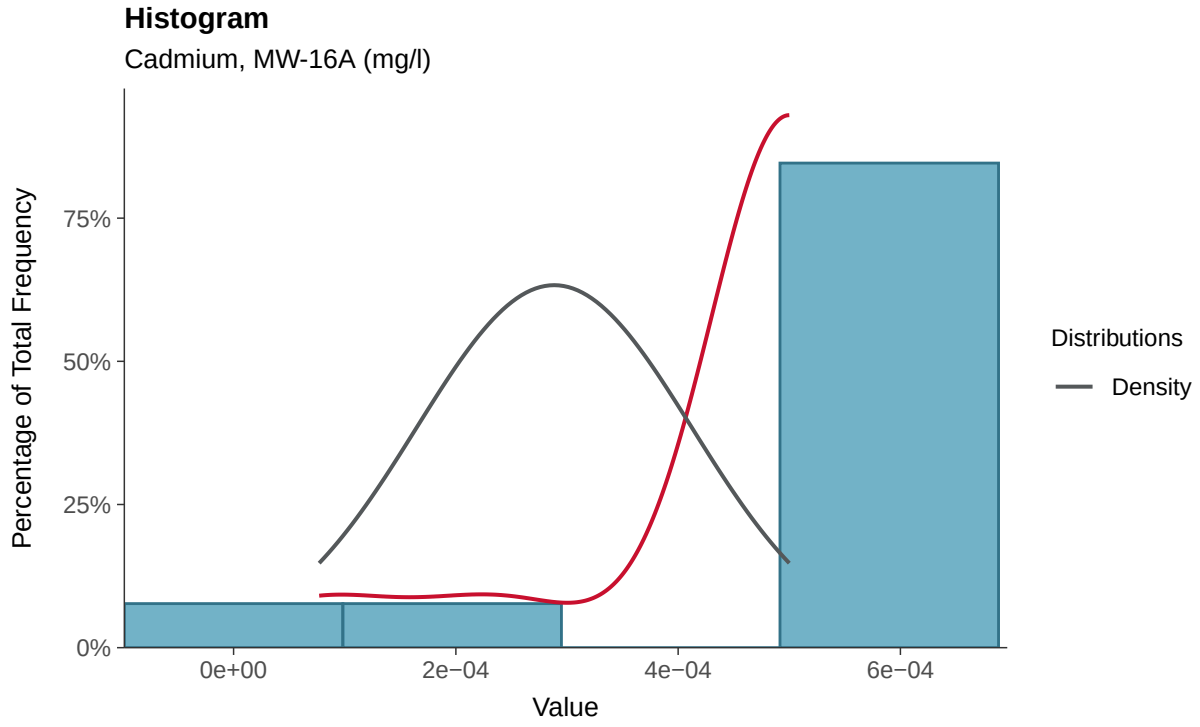
Beryllium, MW-16A (mg/l)



Appendix IV: Cadmium, MW-16A

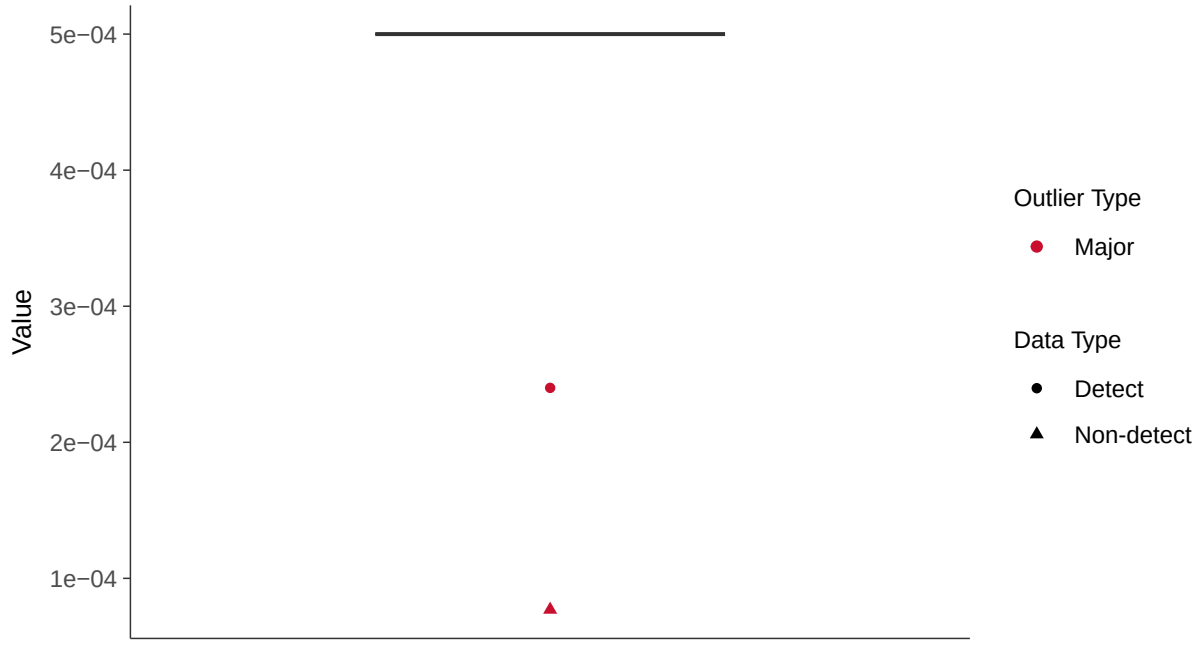
ID: 25_3_106





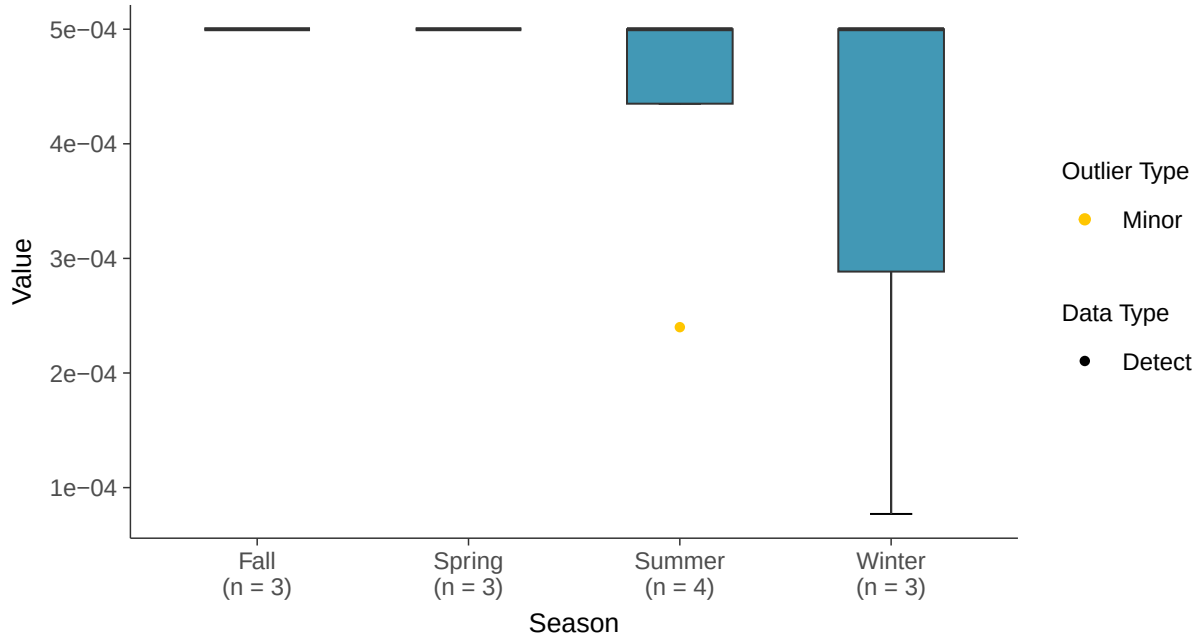
Boxplot

Cadmium, MW-16A (mg/l)



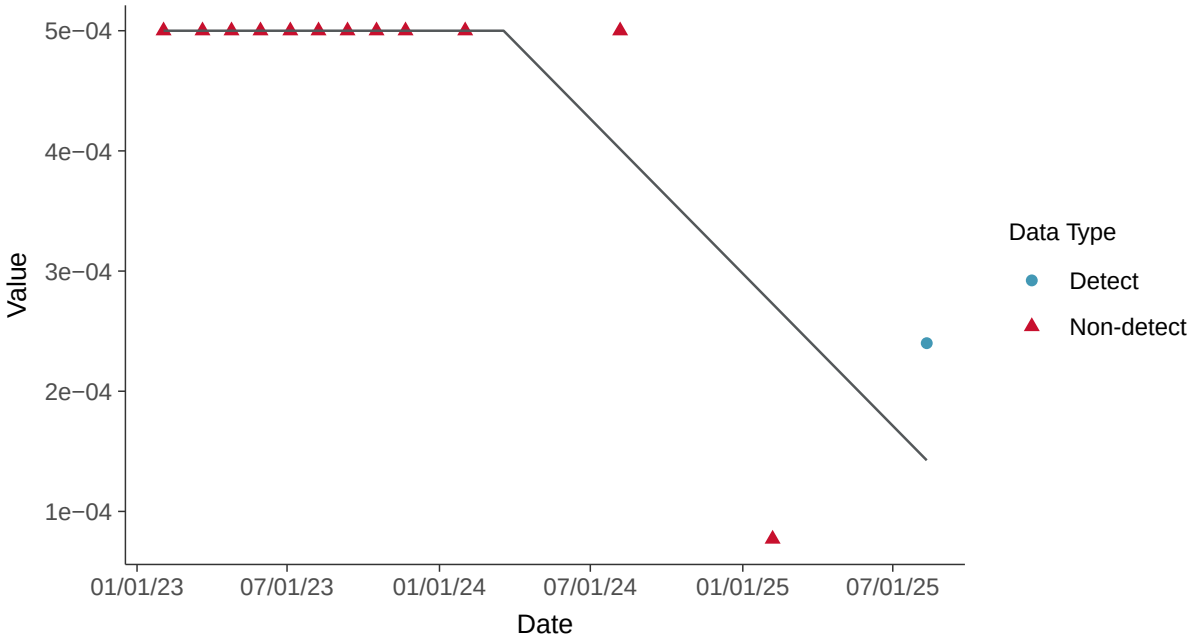
Boxplot by Season

Cadmium, MW-16A (mg/l)



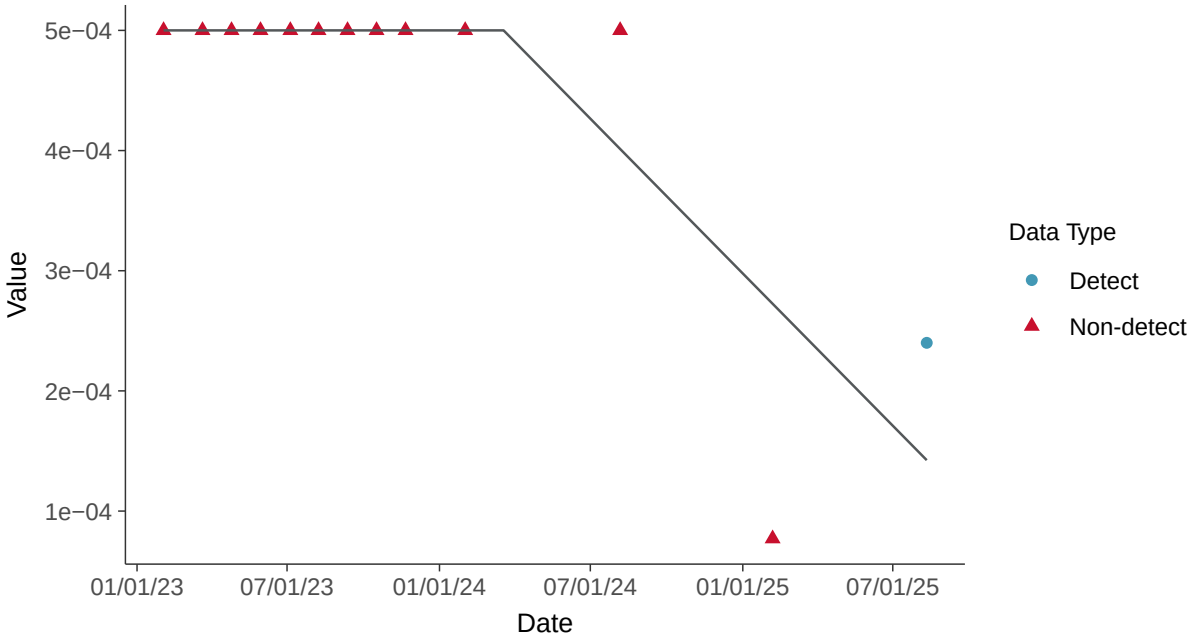
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-16A (mg/l)



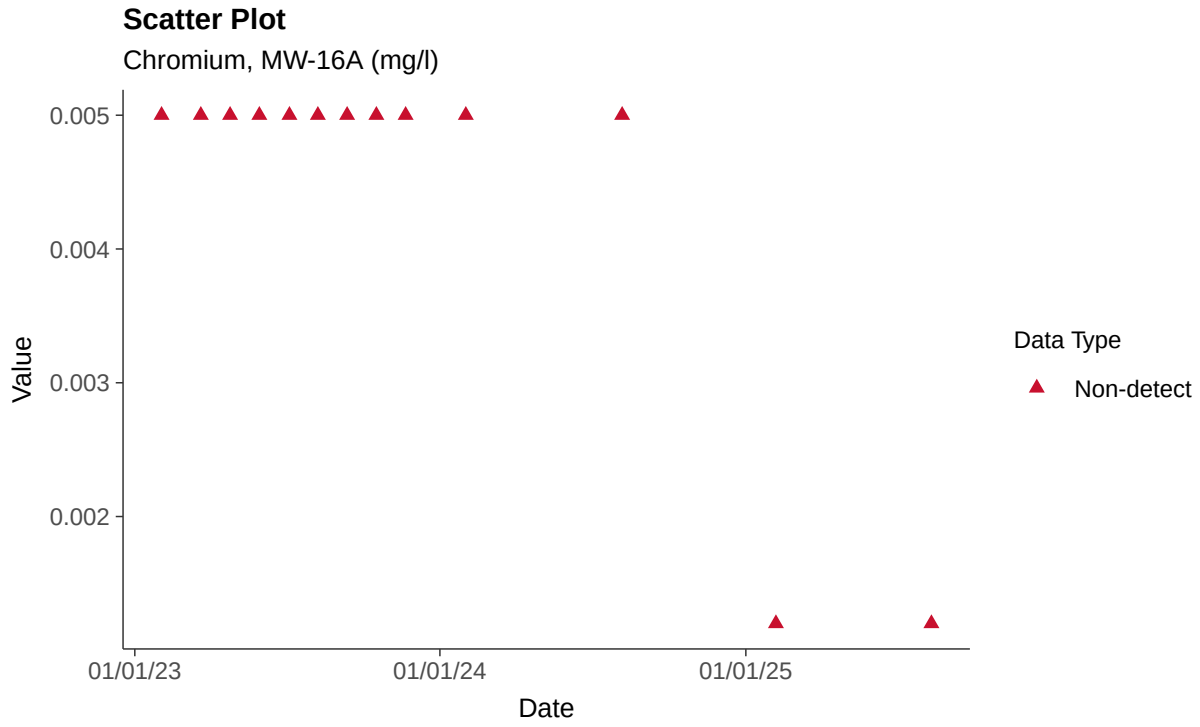
Trend Regression: Piecewise Linear-Linear-Linear

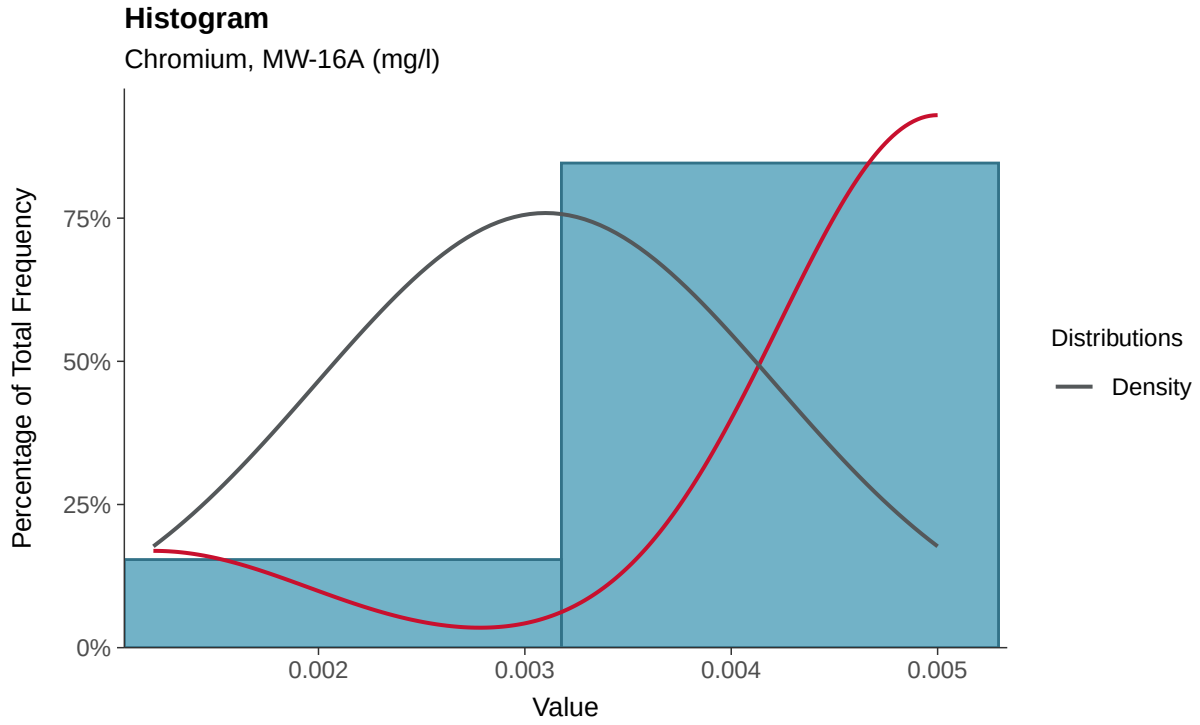
Cadmium, MW-16A (mg/l)



Appendix IV: Chromium, MW-16A

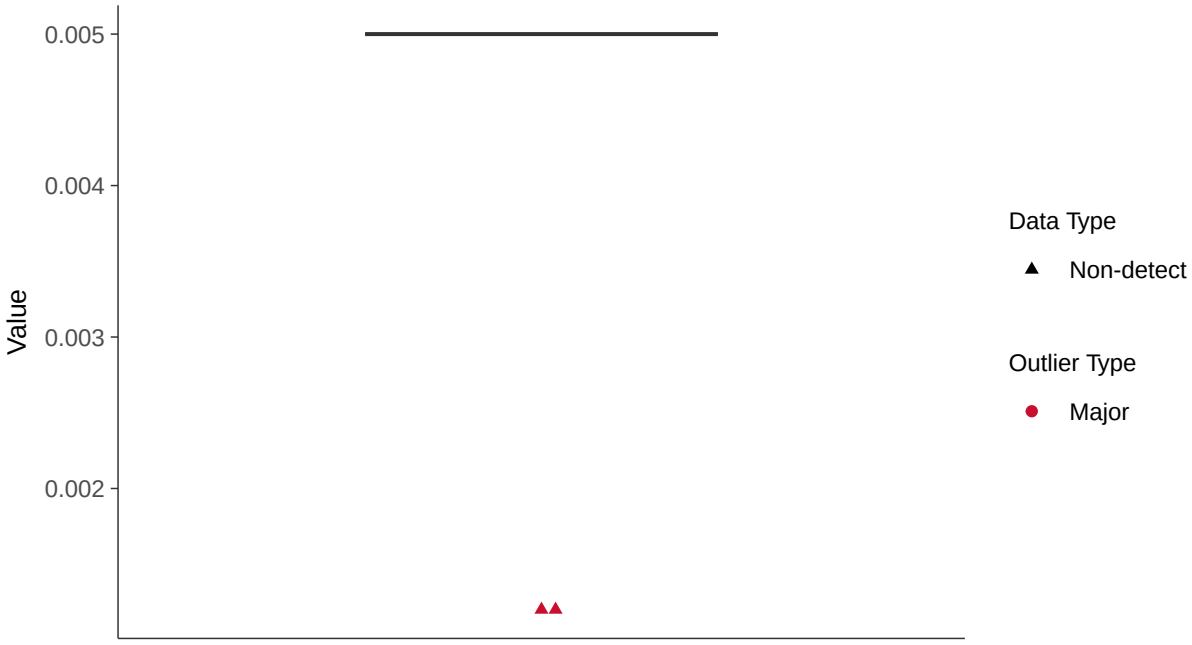
ID: 25_3_109





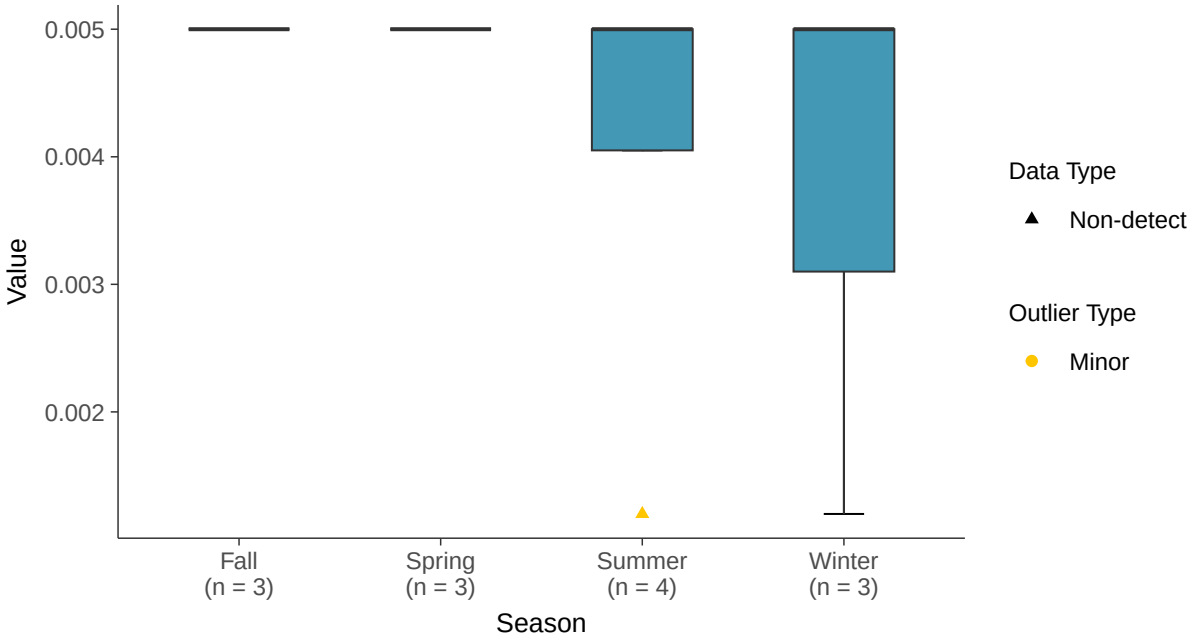
Boxplot

Chromium, MW-16A (mg/l)



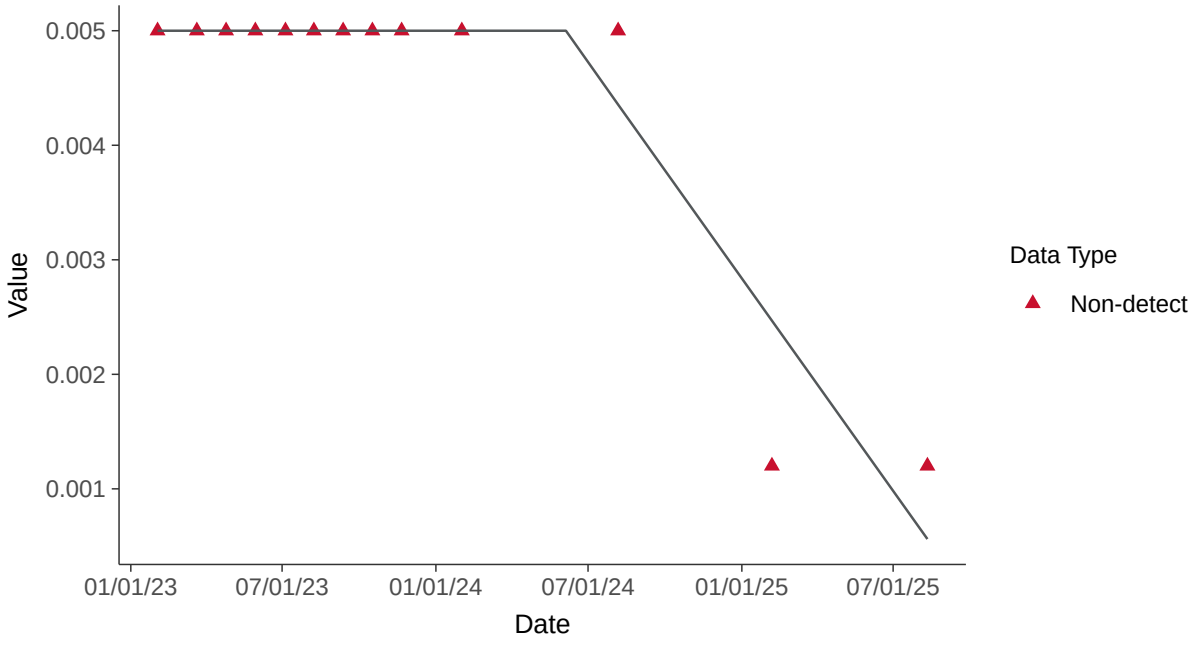
Boxplot by Season

Chromium, MW-16A (mg/l)



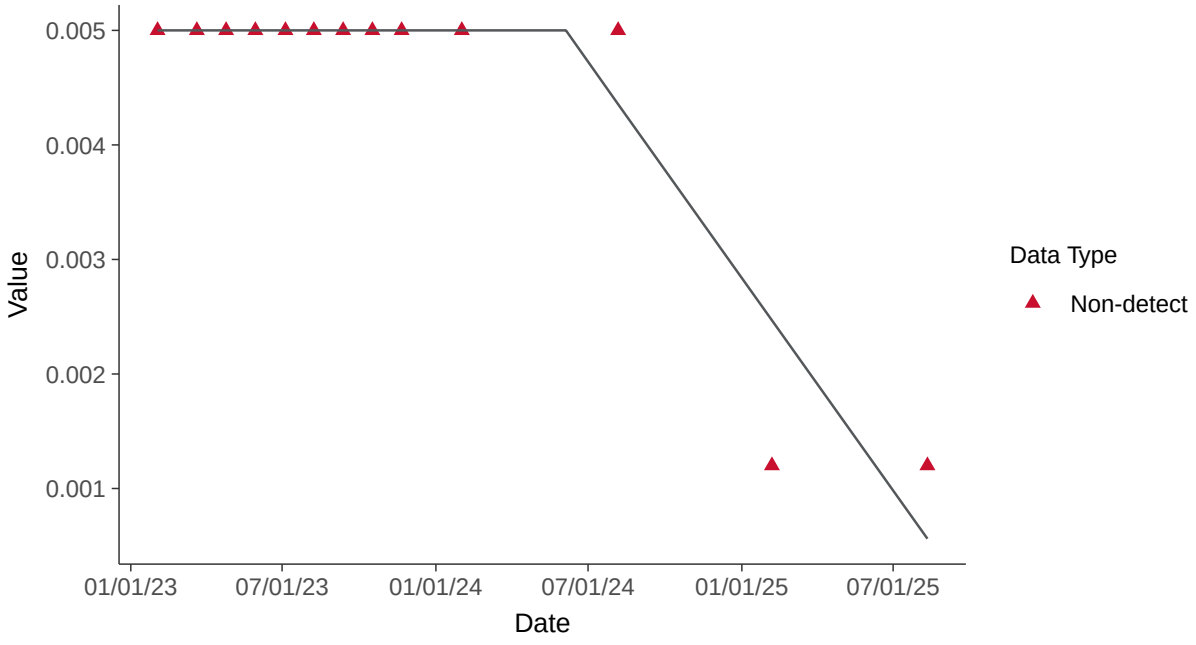
Trend Regression: Piecewise Linear-Linear

Chromium, MW-16A (mg/l)



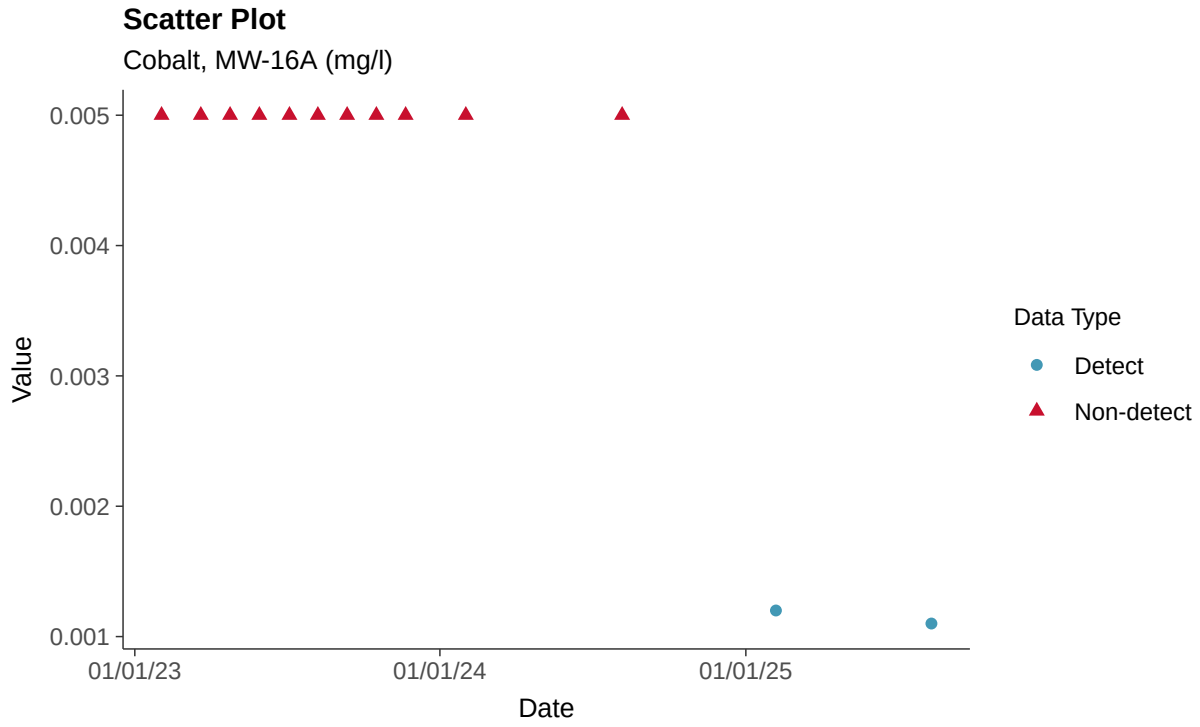
Trend Regression: Piecewise Linear-Linear-Linear

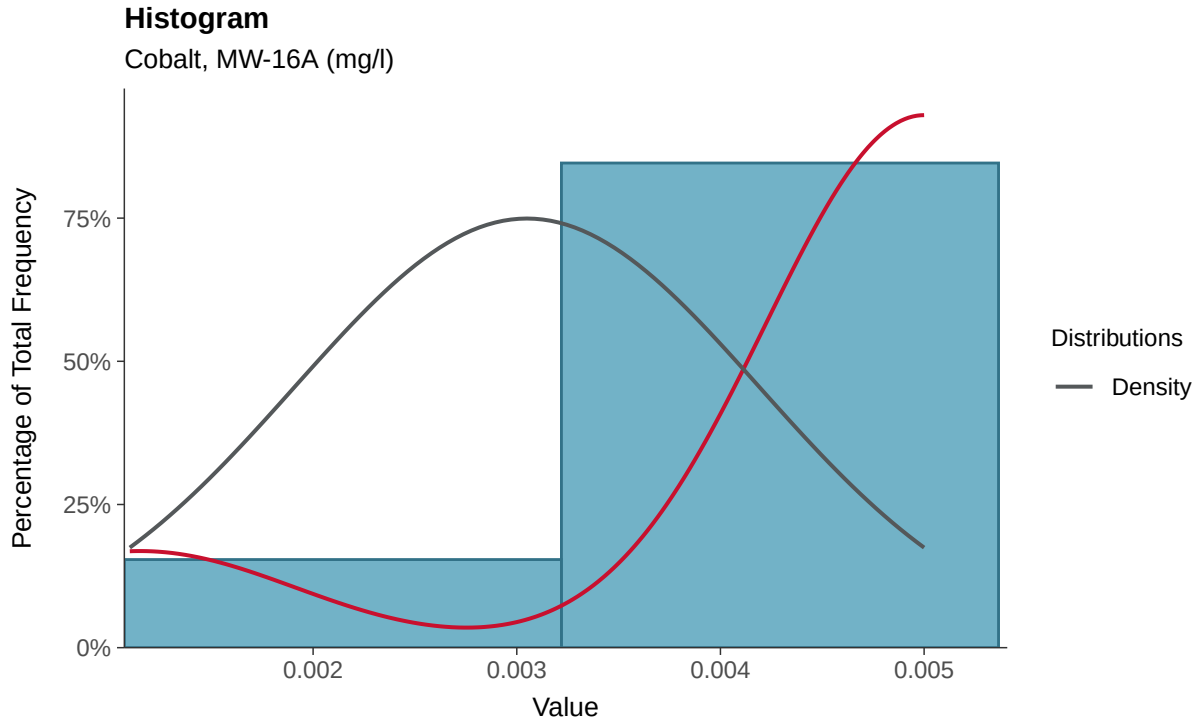
Chromium, MW-16A (mg/l)



Appendix IV: Cobalt, MW-16A

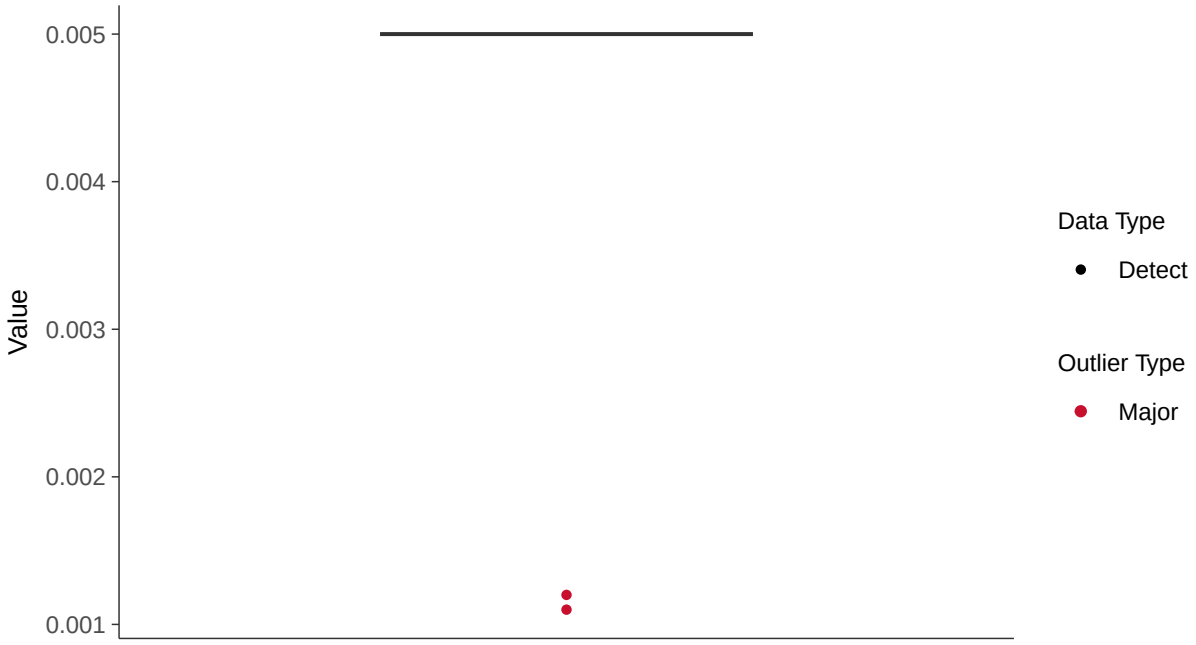
ID: 25_3_110





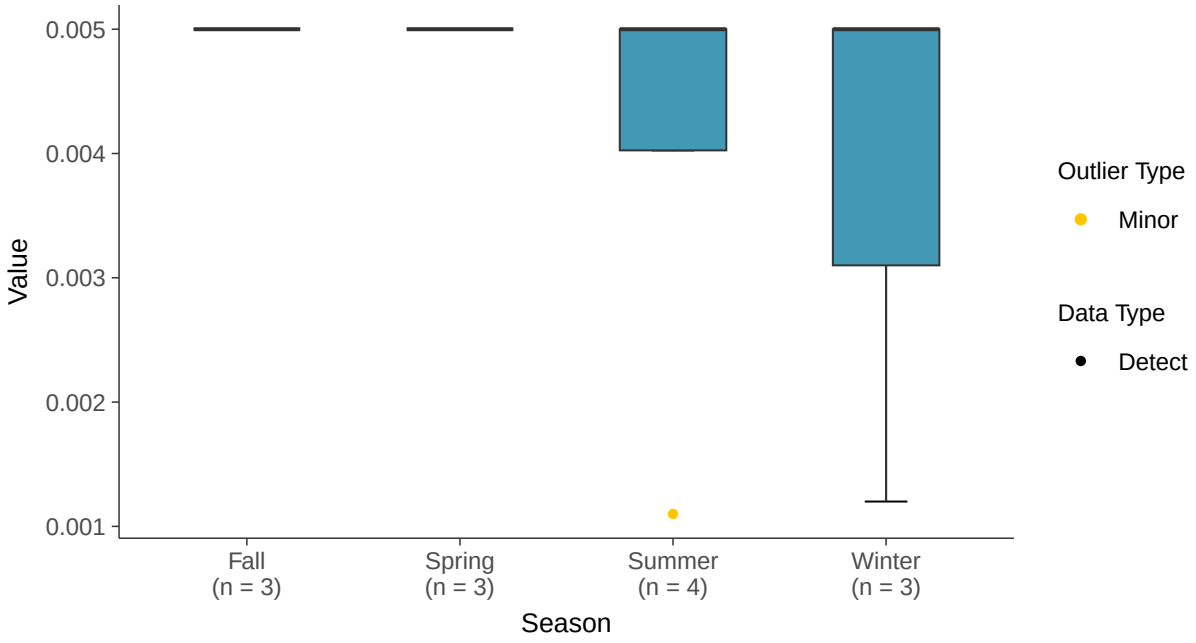
Boxplot

Cobalt, MW-16A (mg/l)



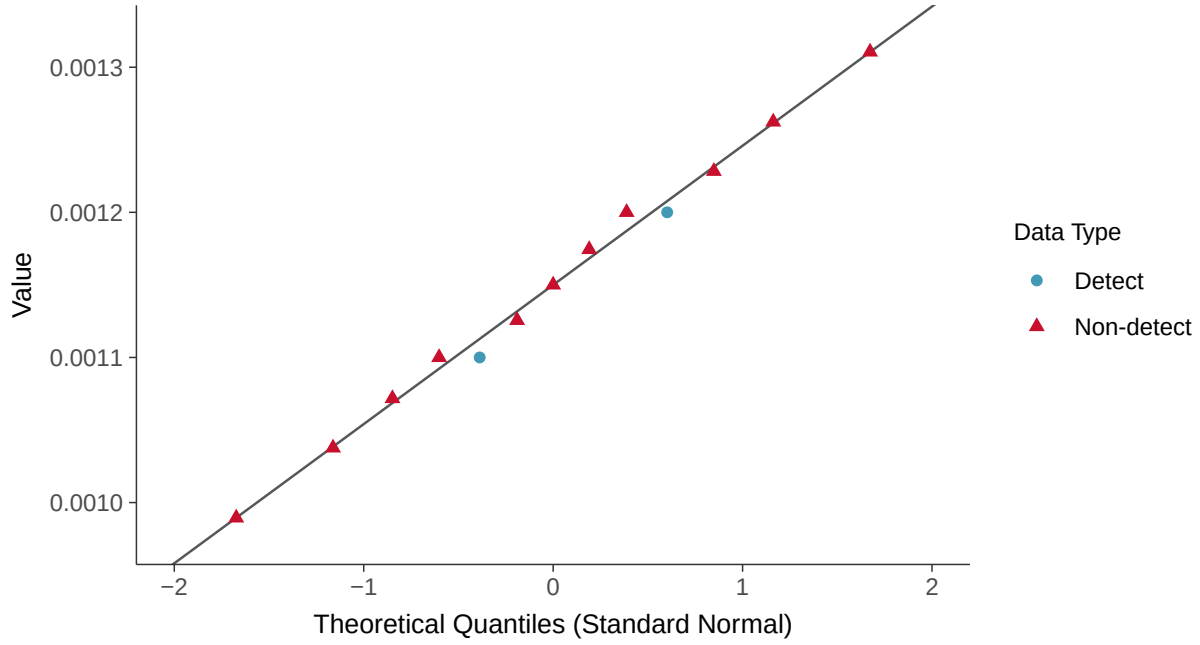
Boxplot by Season

Cobalt, MW-16A (mg/l)



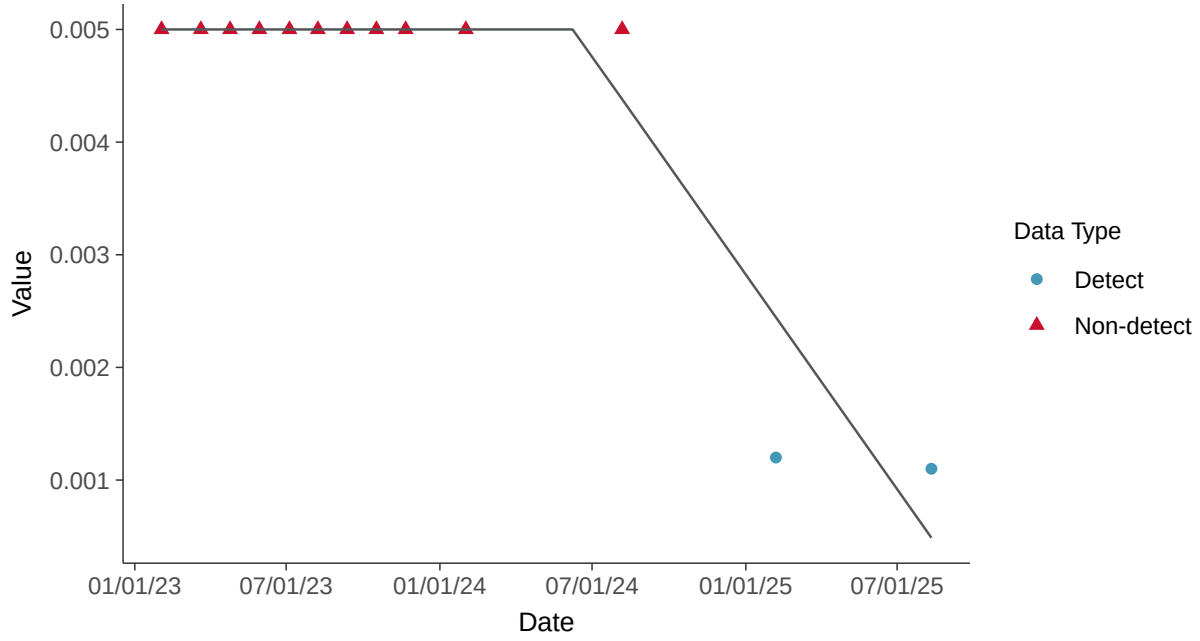
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-16A (mg/l)



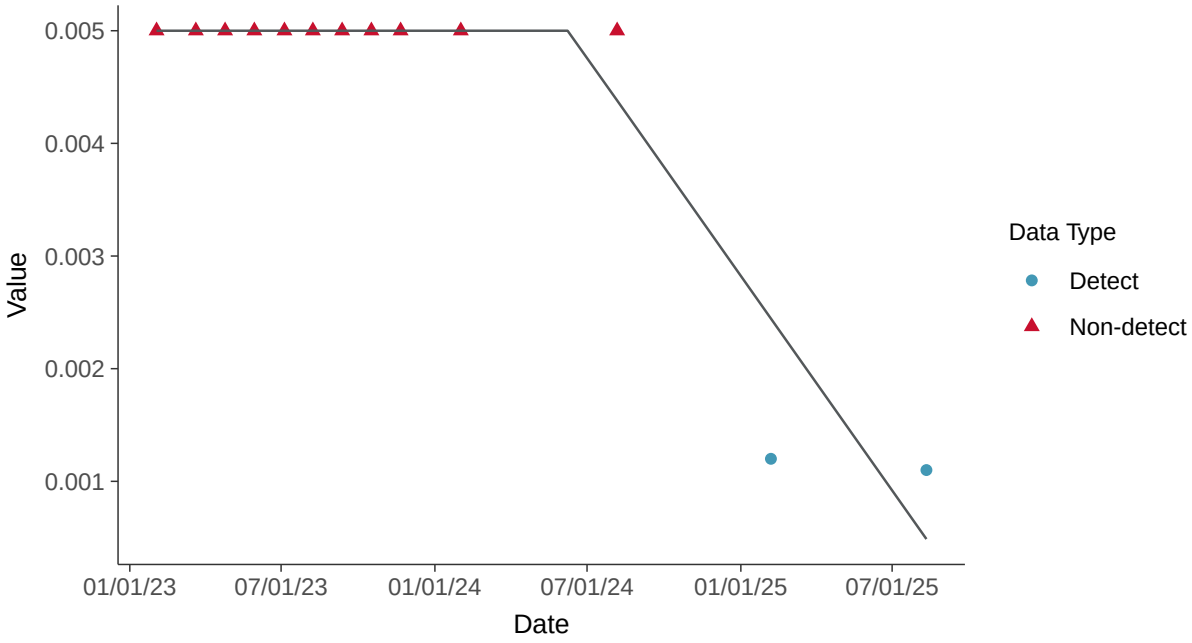
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-16A (mg/l)



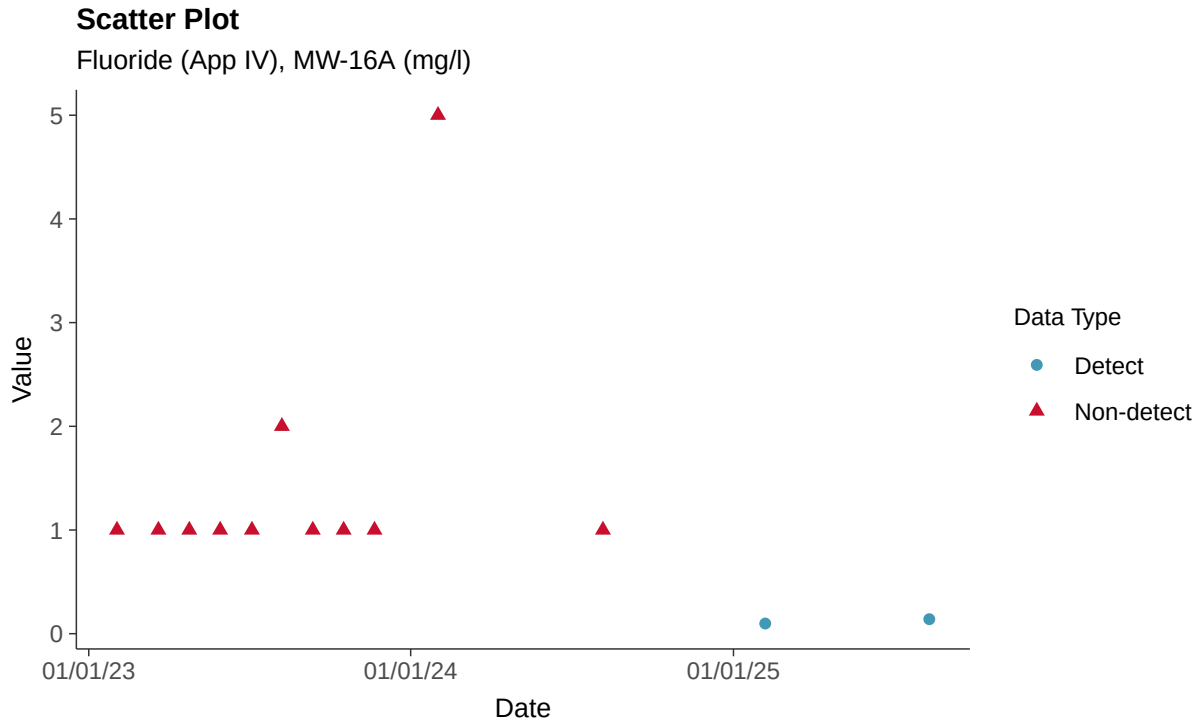
Trend Regression: Piecewise Linear-Linear-Linear

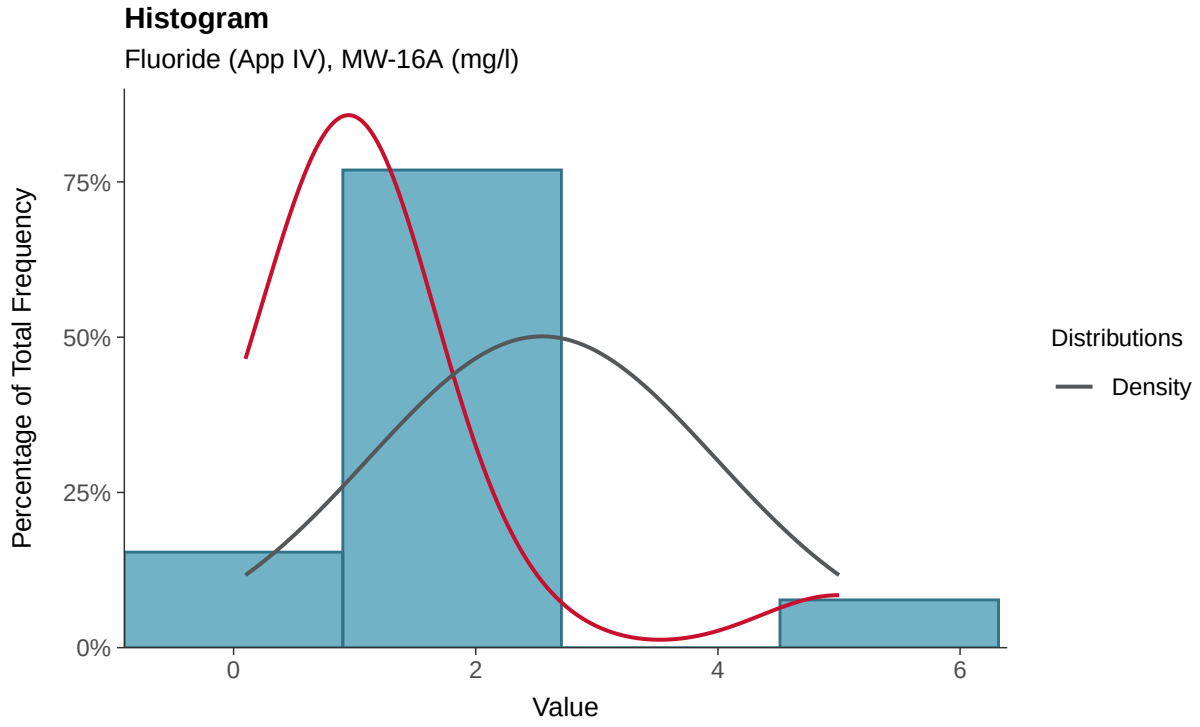
Cobalt, MW-16A (mg/l)



Appendix IV: Fluoride (App IV), MW-16A

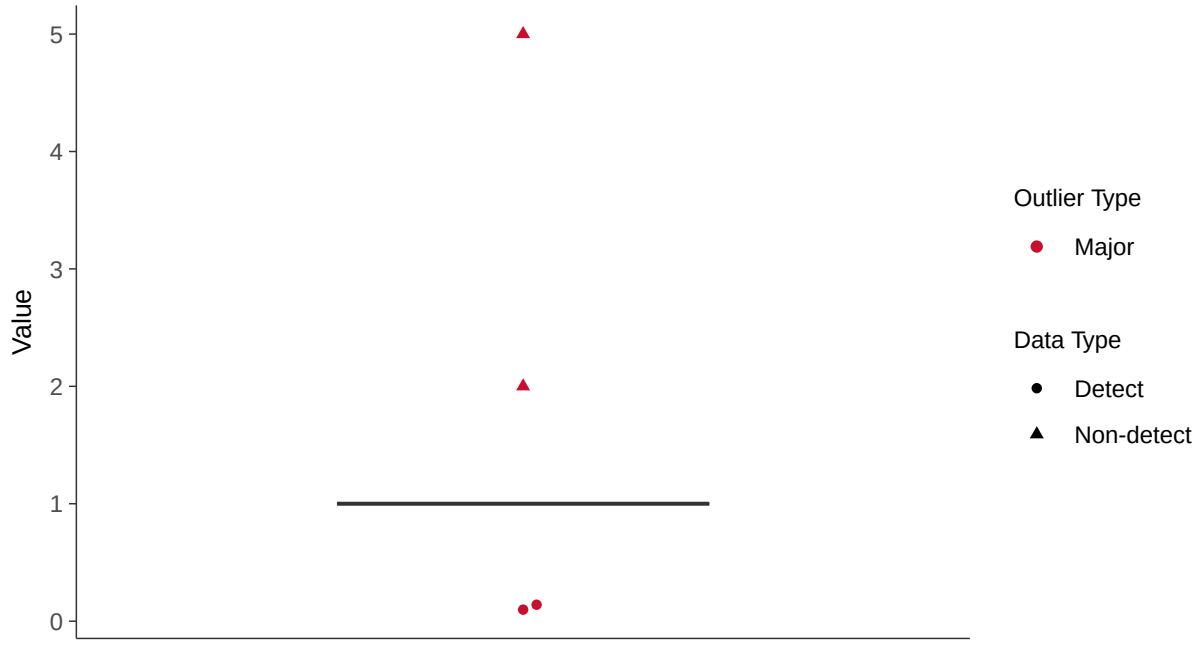
ID: 25_3_113





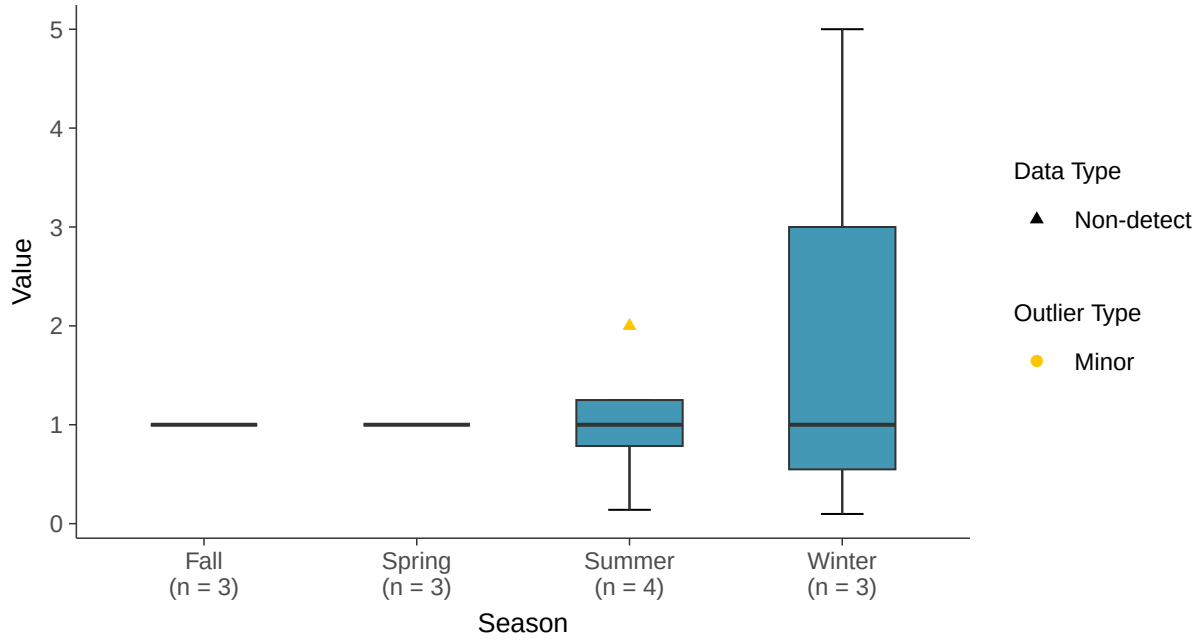
Boxplot

Fluoride (App IV), MW-16A (mg/l)



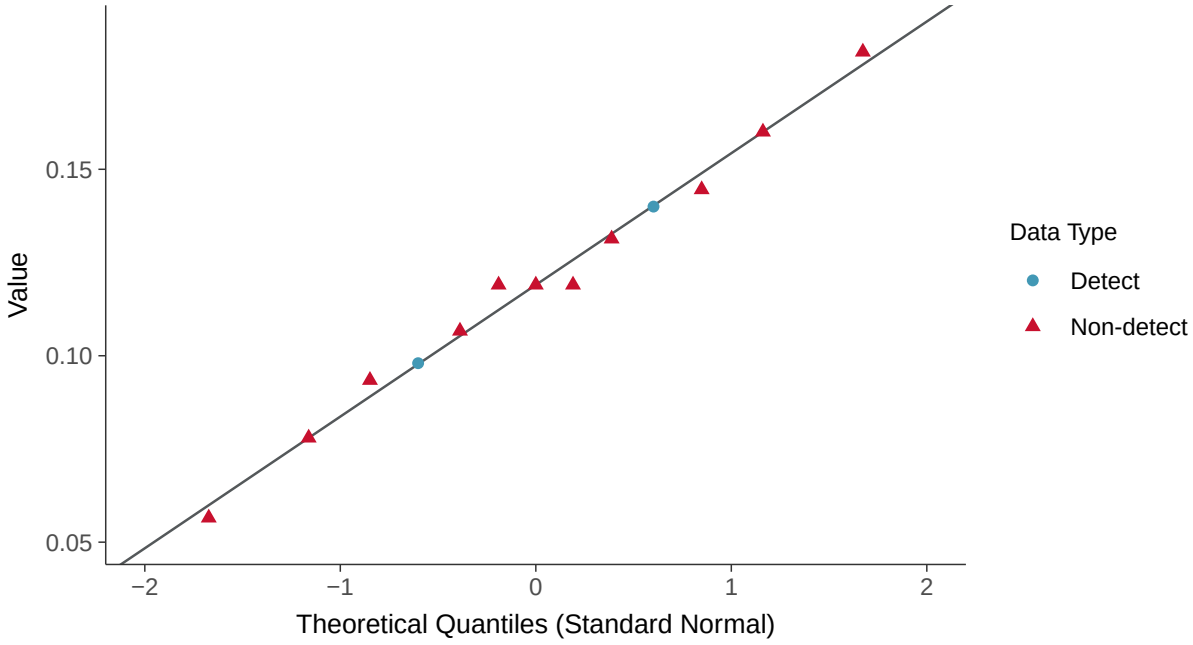
Boxplot by Season

Fluoride (App IV), MW-16A (mg/l)



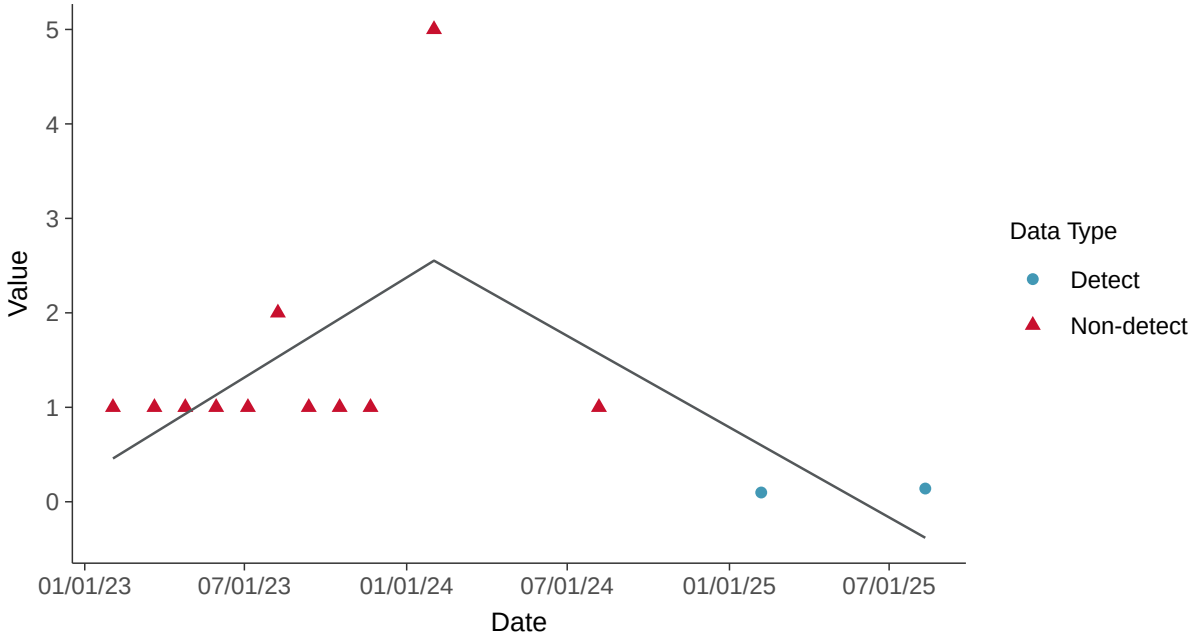
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-16A (mg/l)



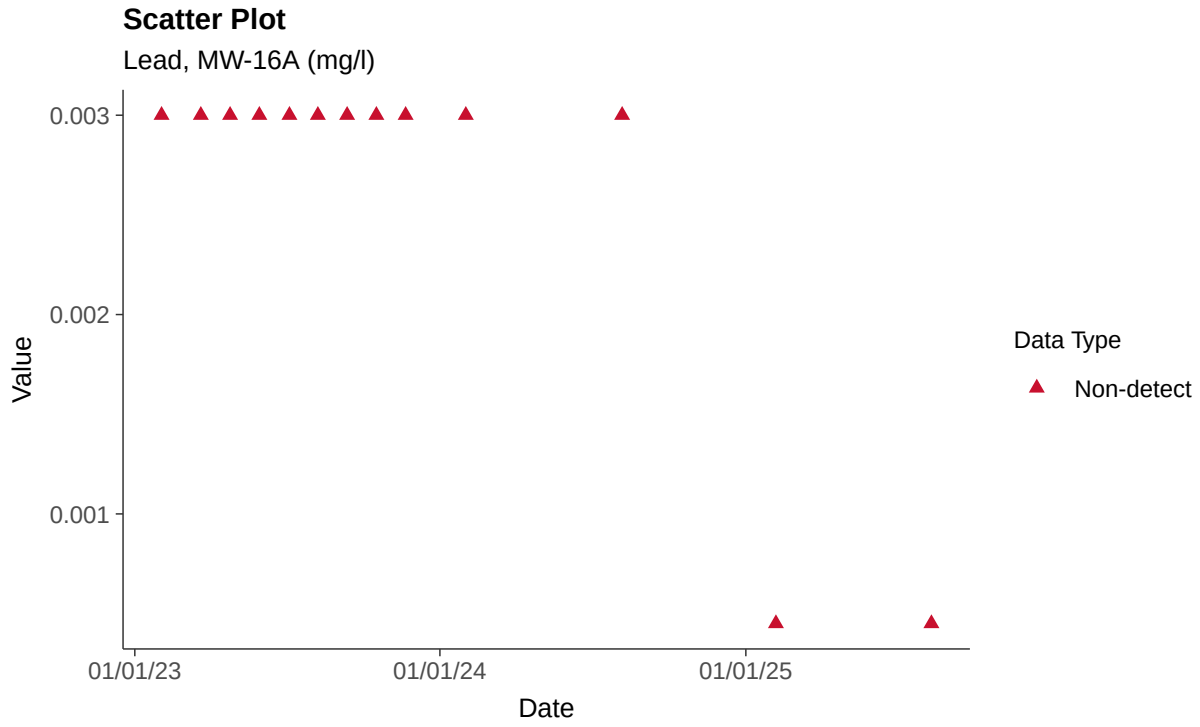
Trend Regression: Piecewise Linear-Linear

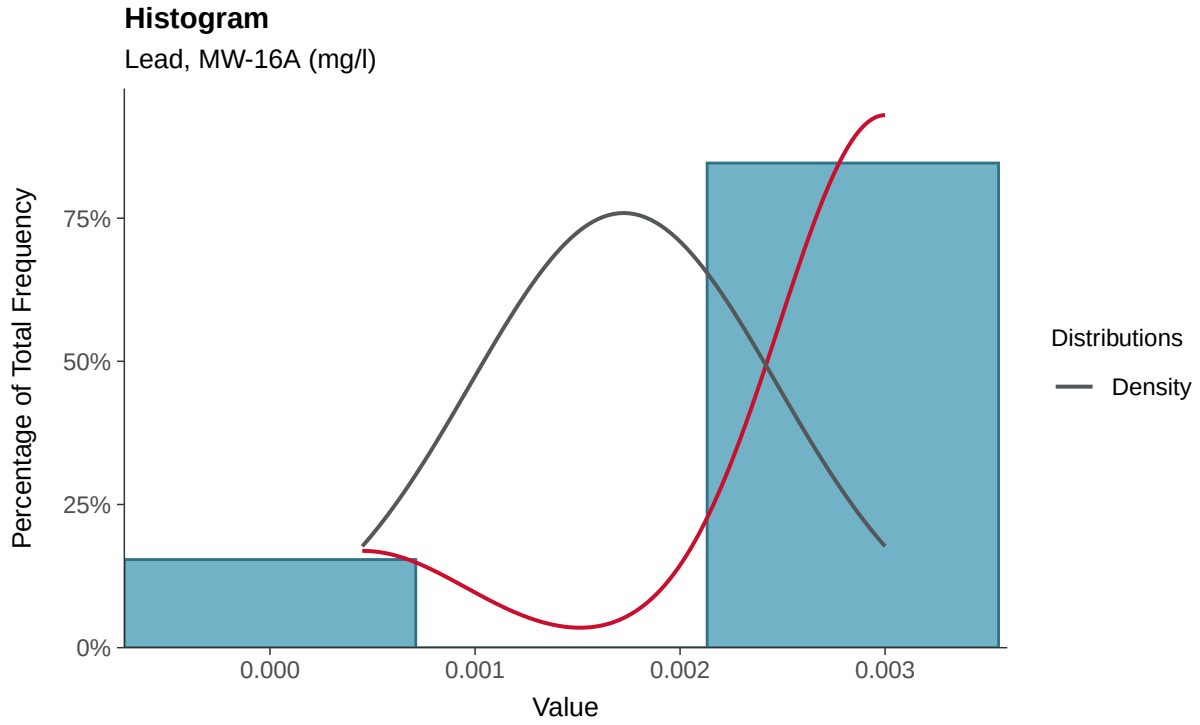
Fluoride (App IV), MW-16A (mg/l)



Appendix IV: Lead, MW-16A

ID: 25_3_115



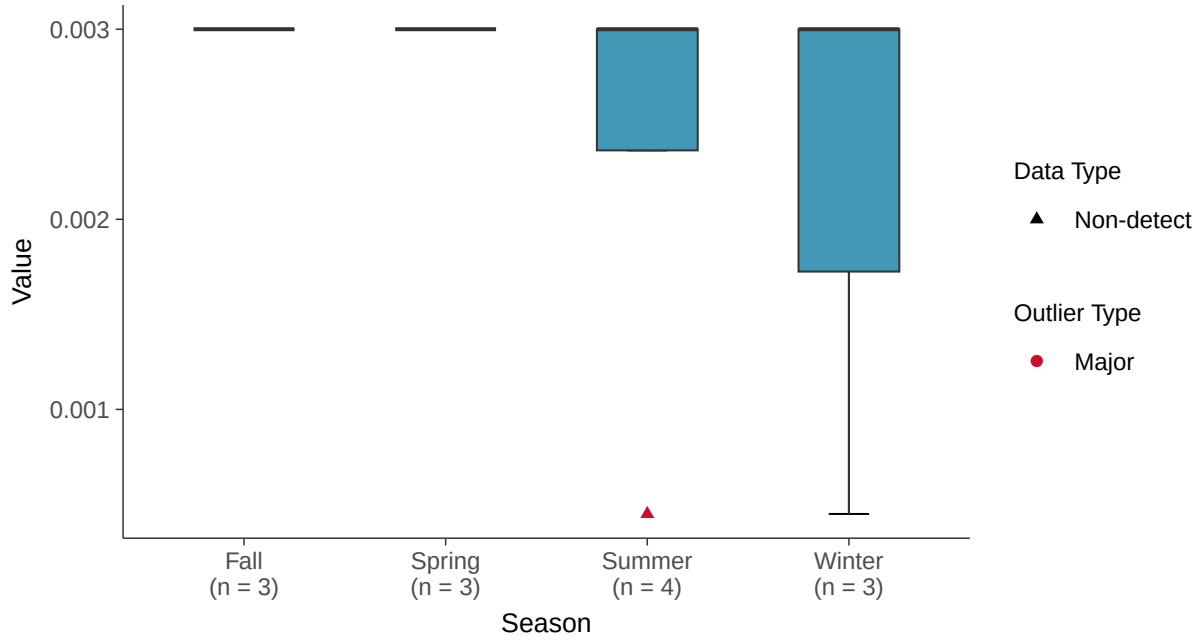


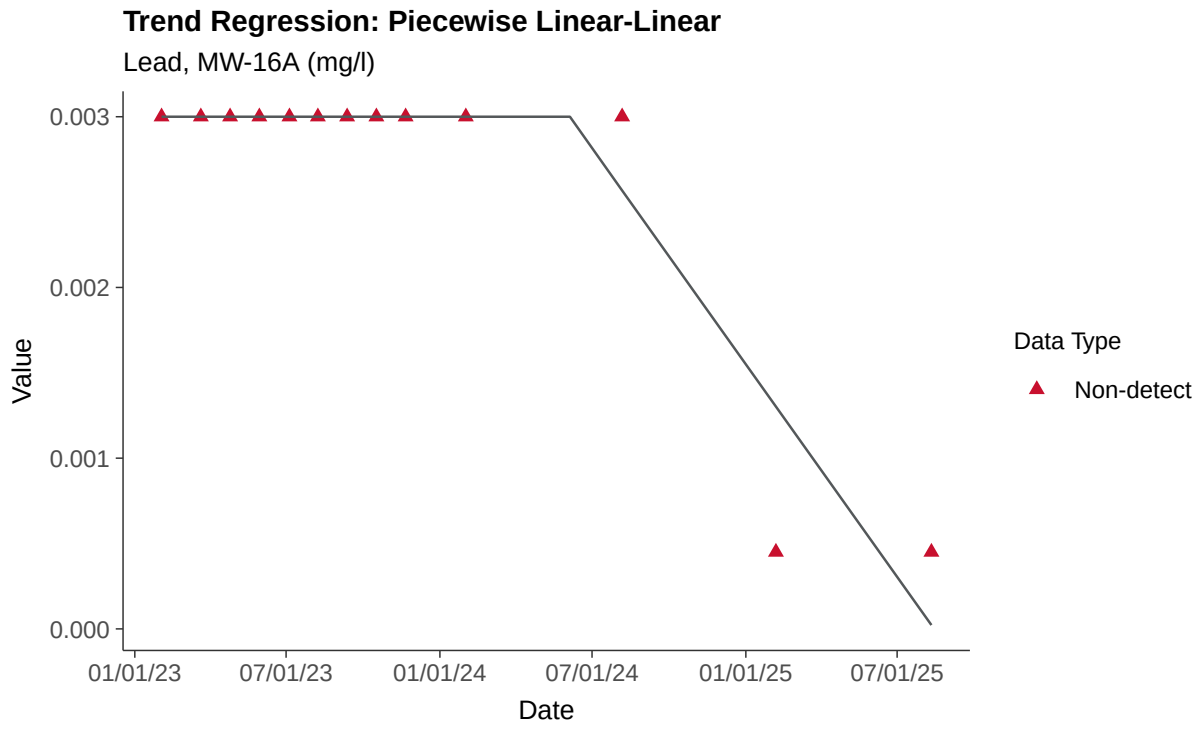
Boxplot

Lead, MW-16A (mg/l)

Boxplot by Season

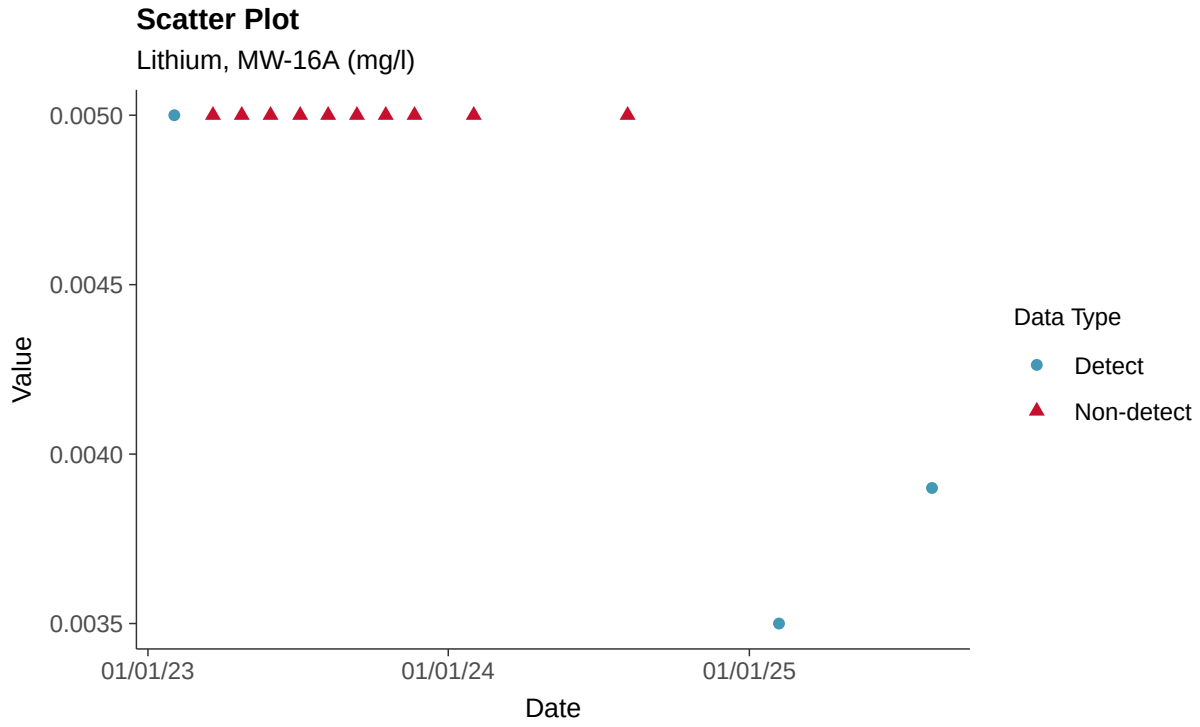
Lead, MW-16A (mg/l)

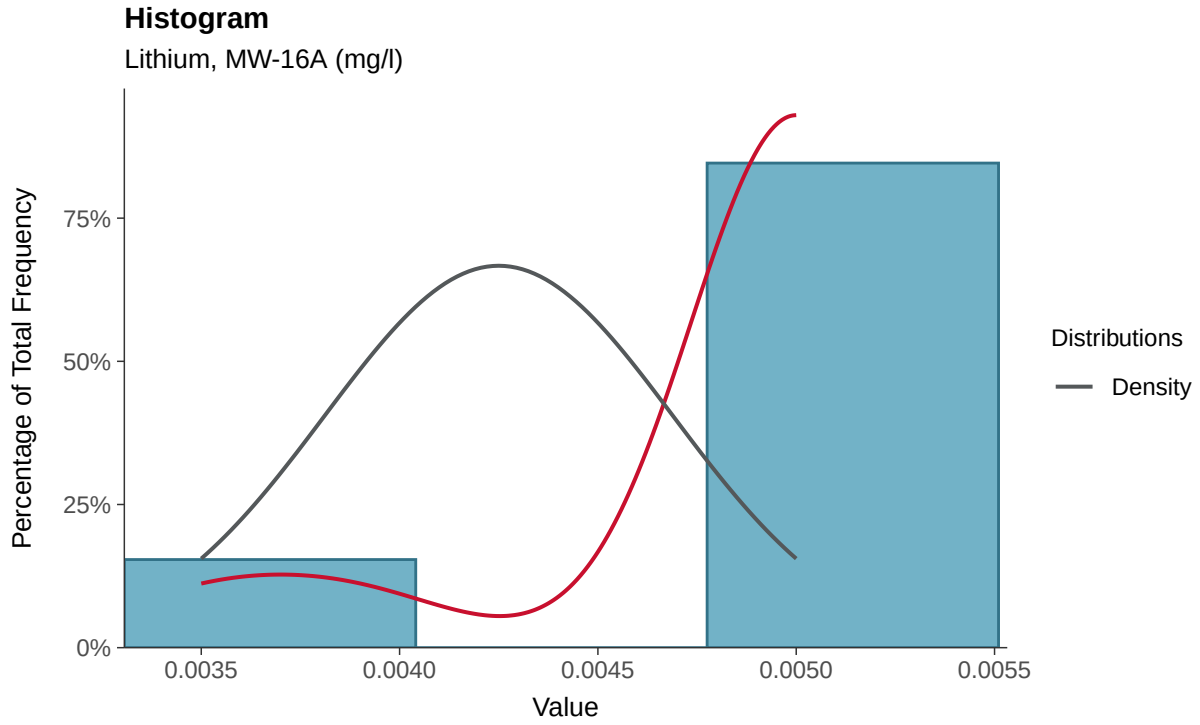



Trend Regression: Piecewise Linear-Linear
Lead, MW-16A (mg/l)
0.003
0.002
0.001
0.000
Value
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Lithium, MW-16A

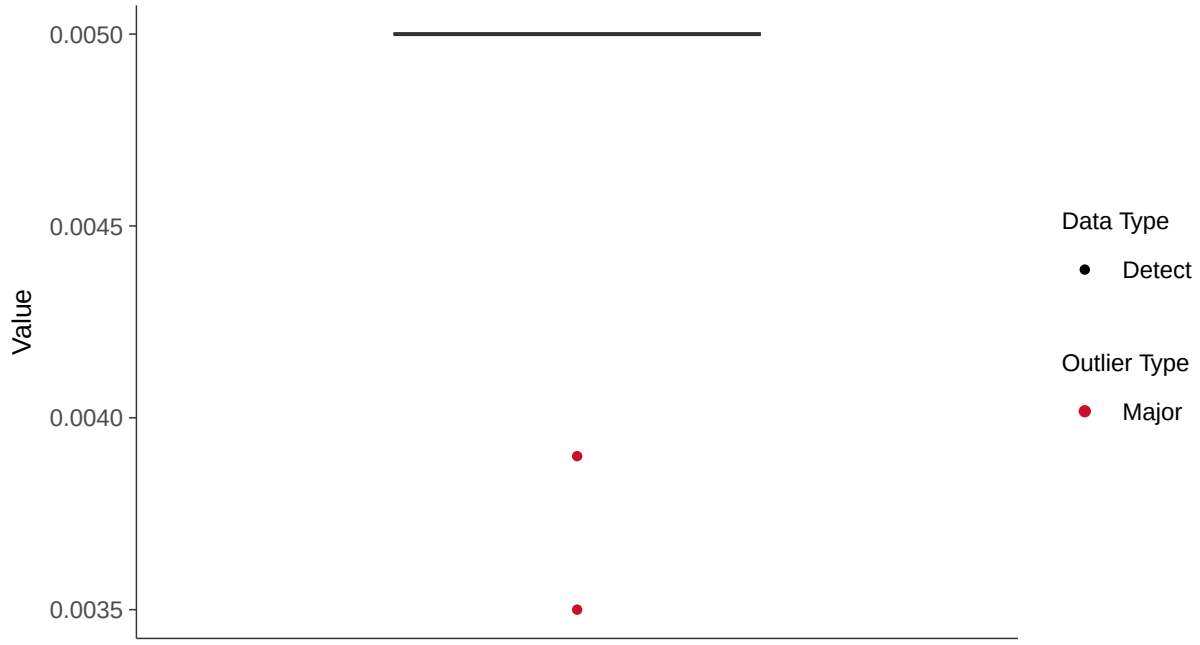
ID: 25_3_116





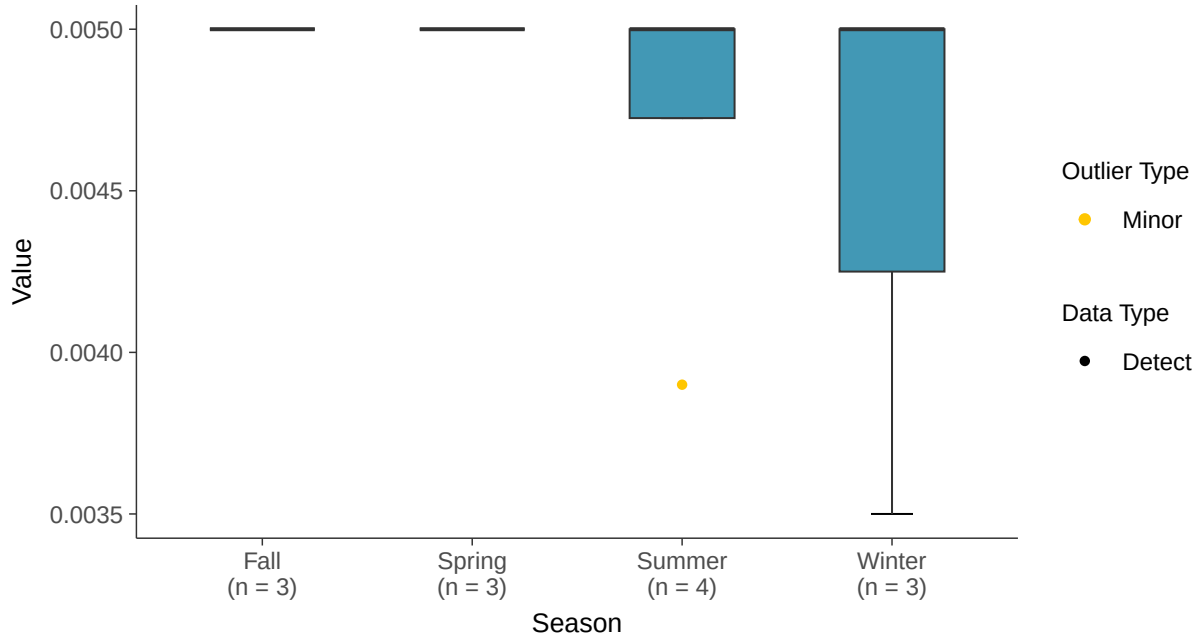
Boxplot

Lithium, MW-16A (mg/l)



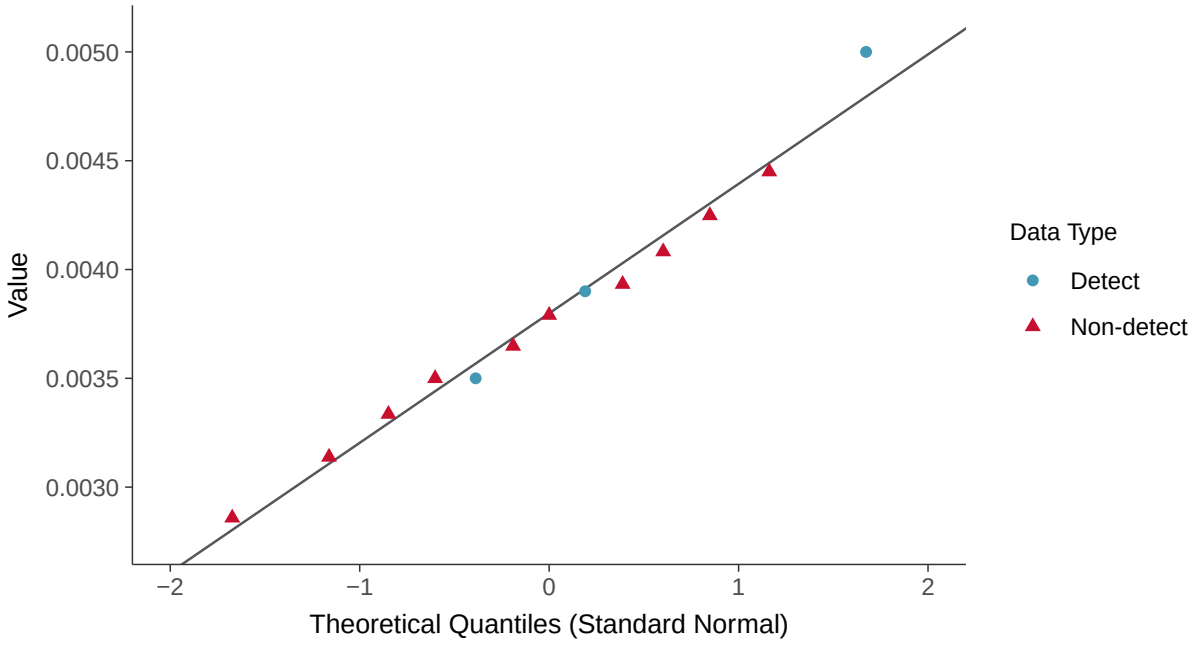
Boxplot by Season

Lithium, MW-16A (mg/l)



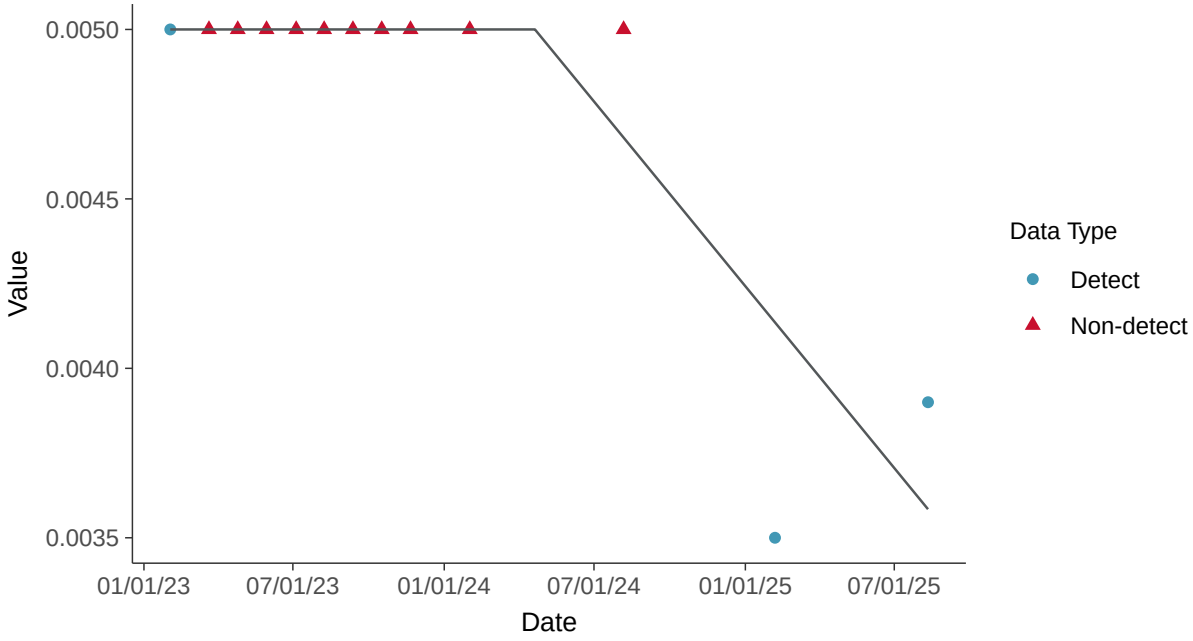
Normal Q-Q plot using ROS Imputed Estimates

Lithium, MW-16A (mg/l)



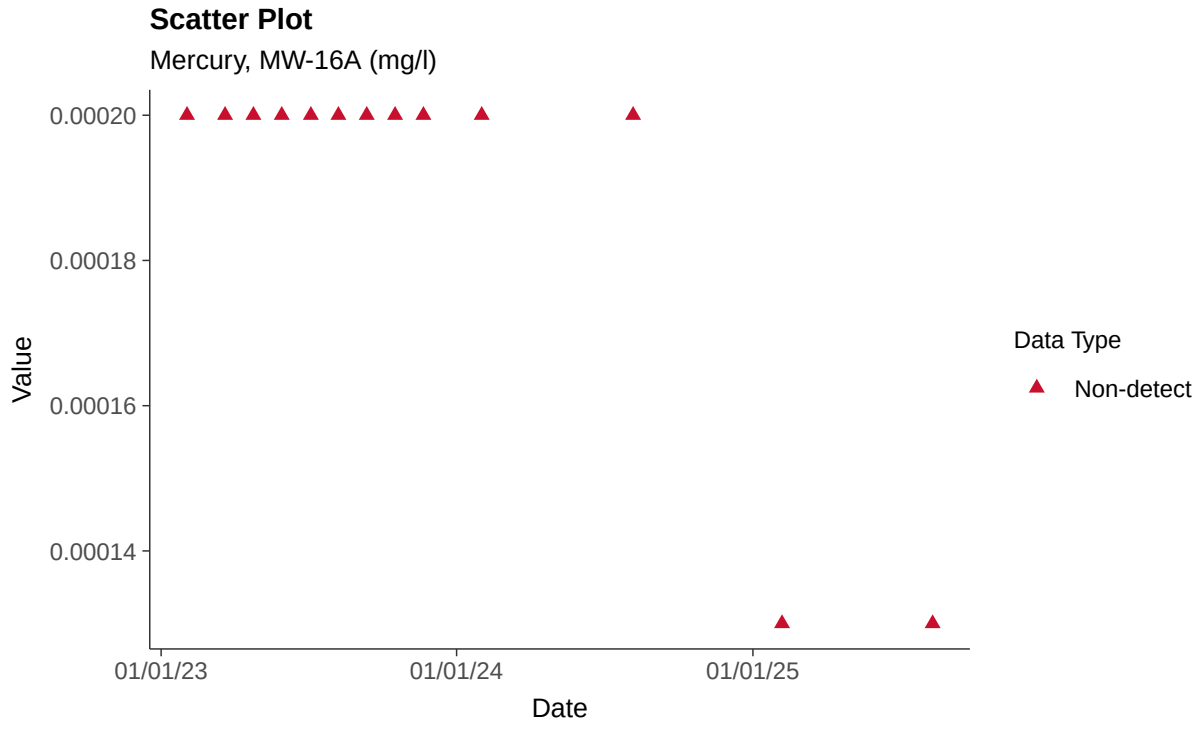
Trend Regression: Piecewise Linear-Linear

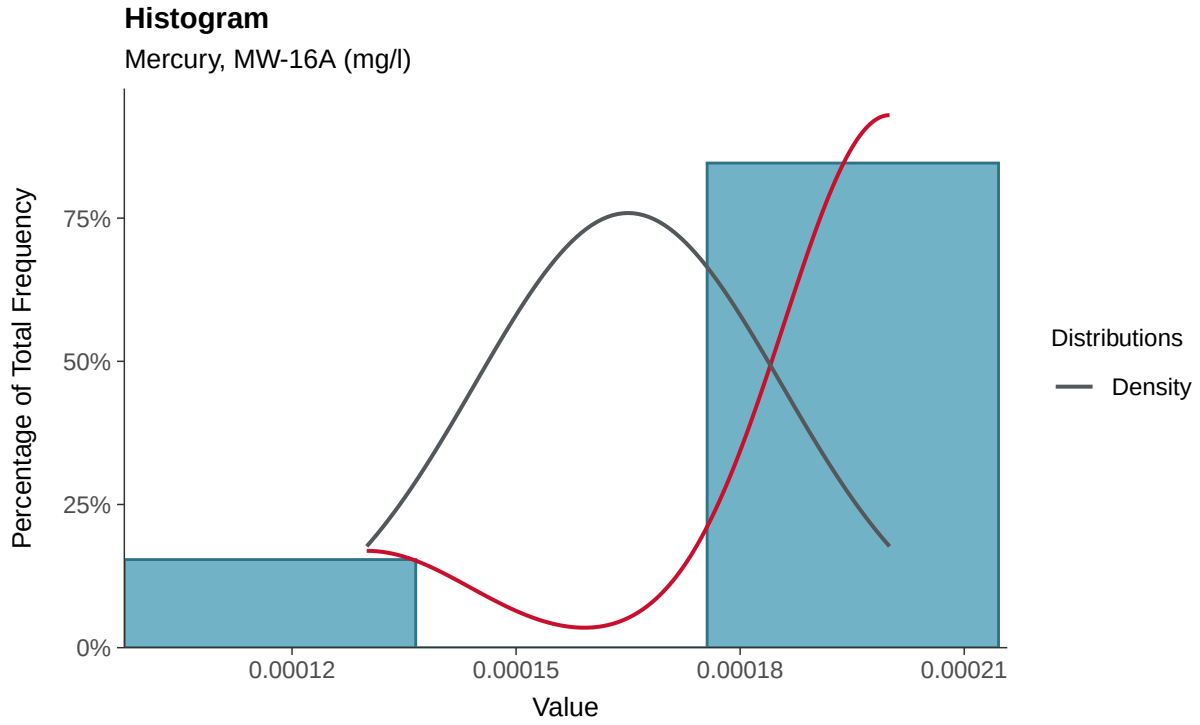
Lithium, MW-16A (mg/l)



Appendix IV: Mercury, MW-16A

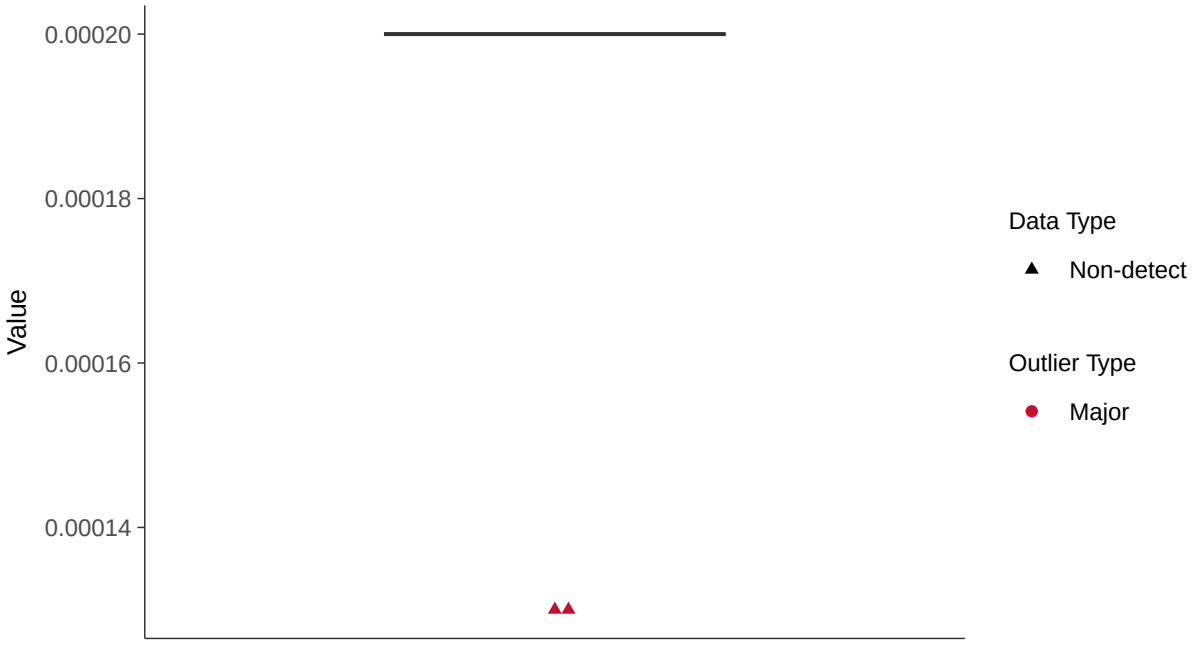
ID: 25_3_117





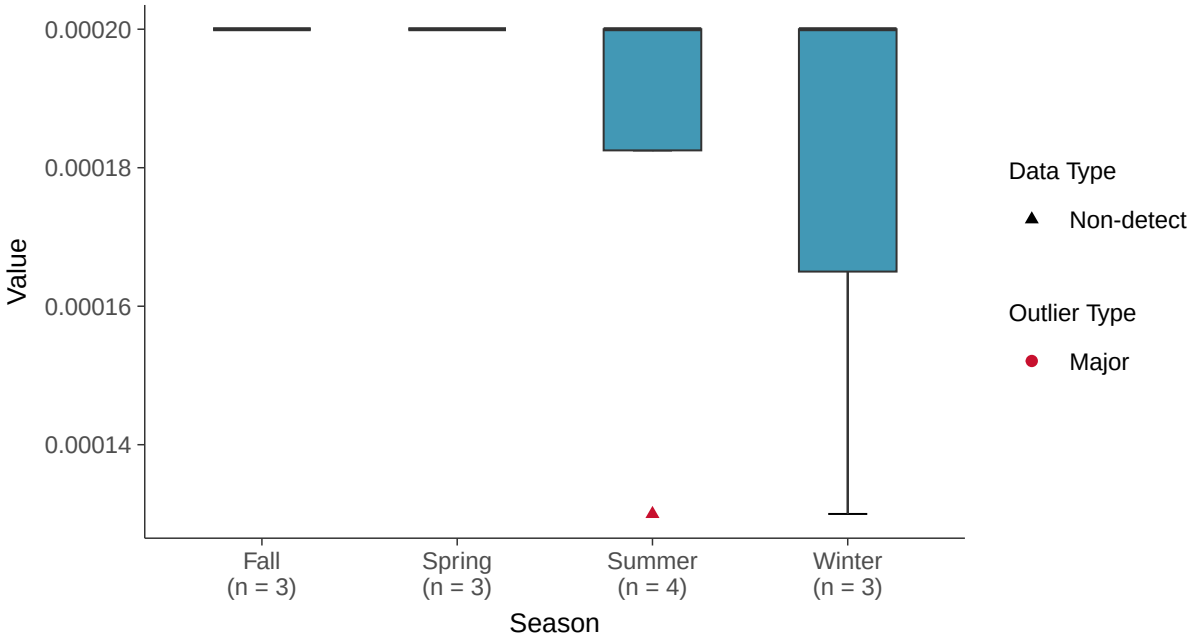
Boxplot

Mercury, MW-16A (mg/l)



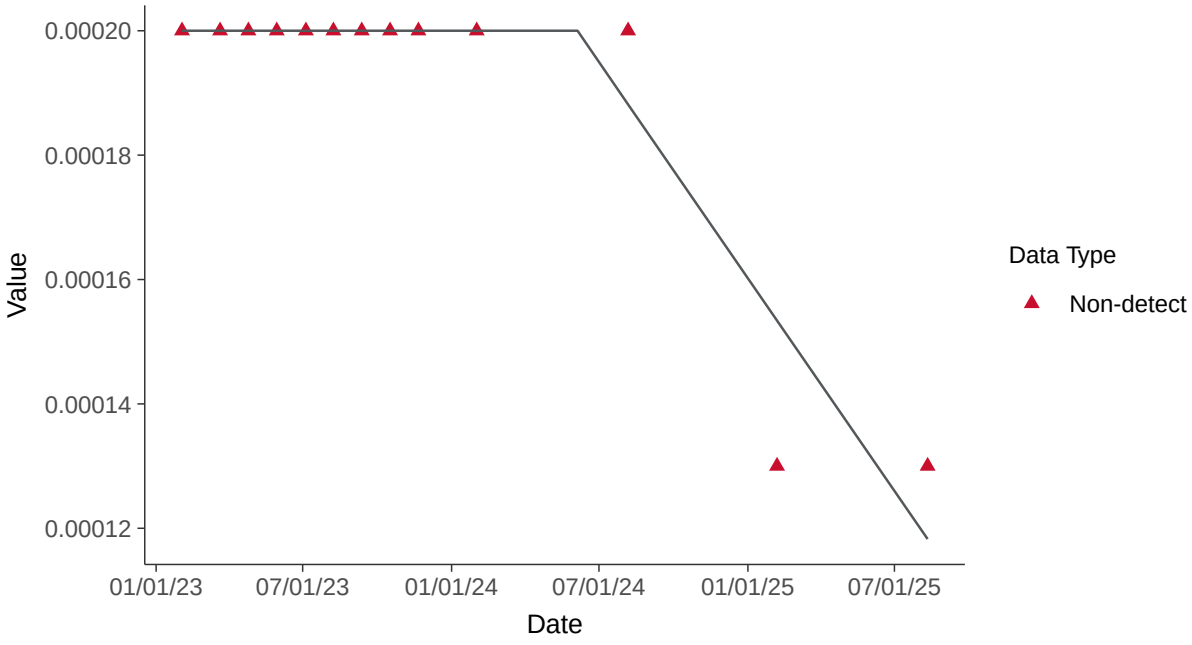
Boxplot by Season

Mercury, MW-16A (mg/l)



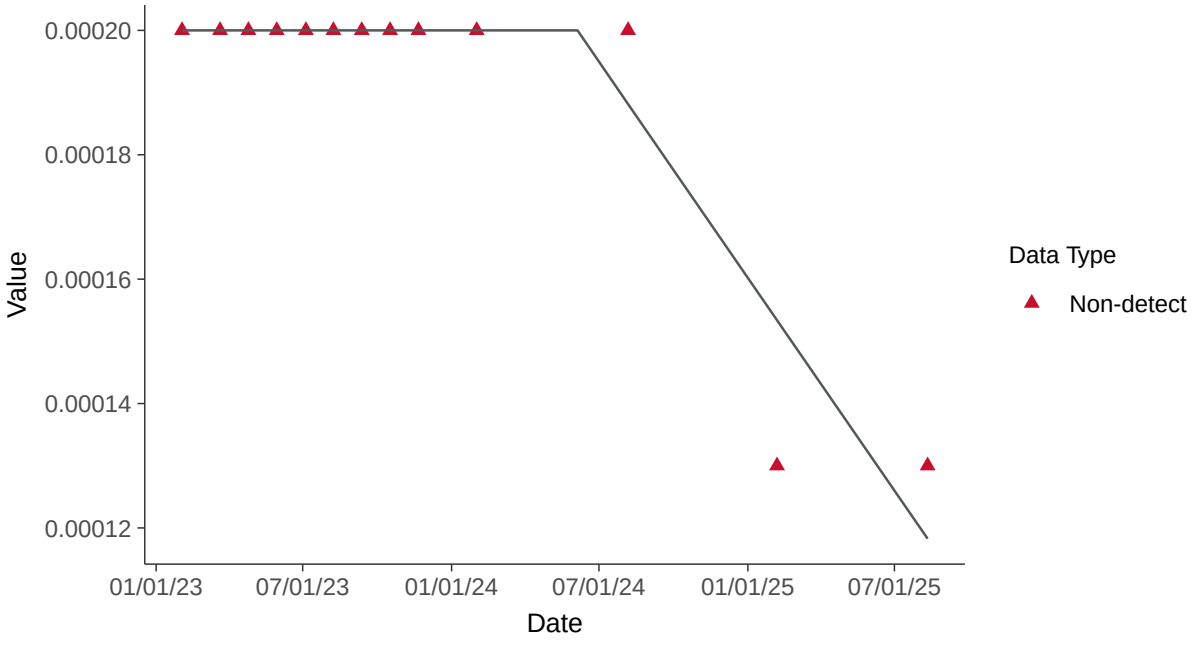
Trend Regression: Piecewise Linear-Linear

Mercury, MW-16A (mg/l)



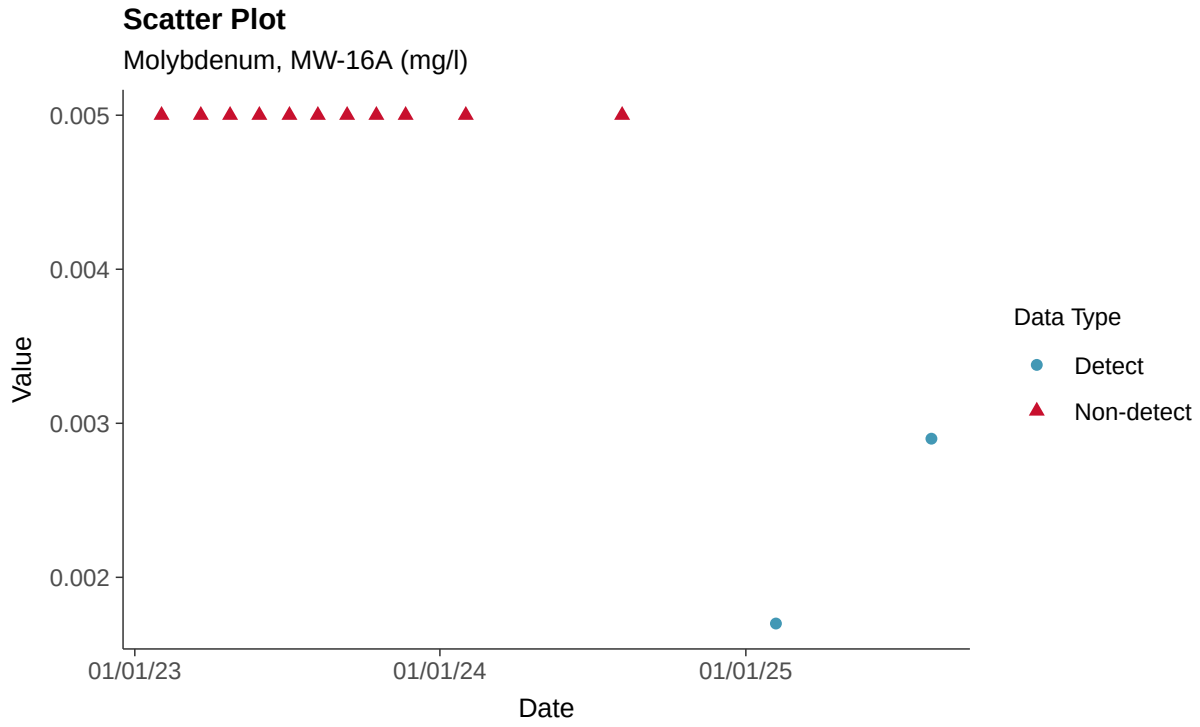
Trend Regression: Piecewise Linear-Linear-Linear

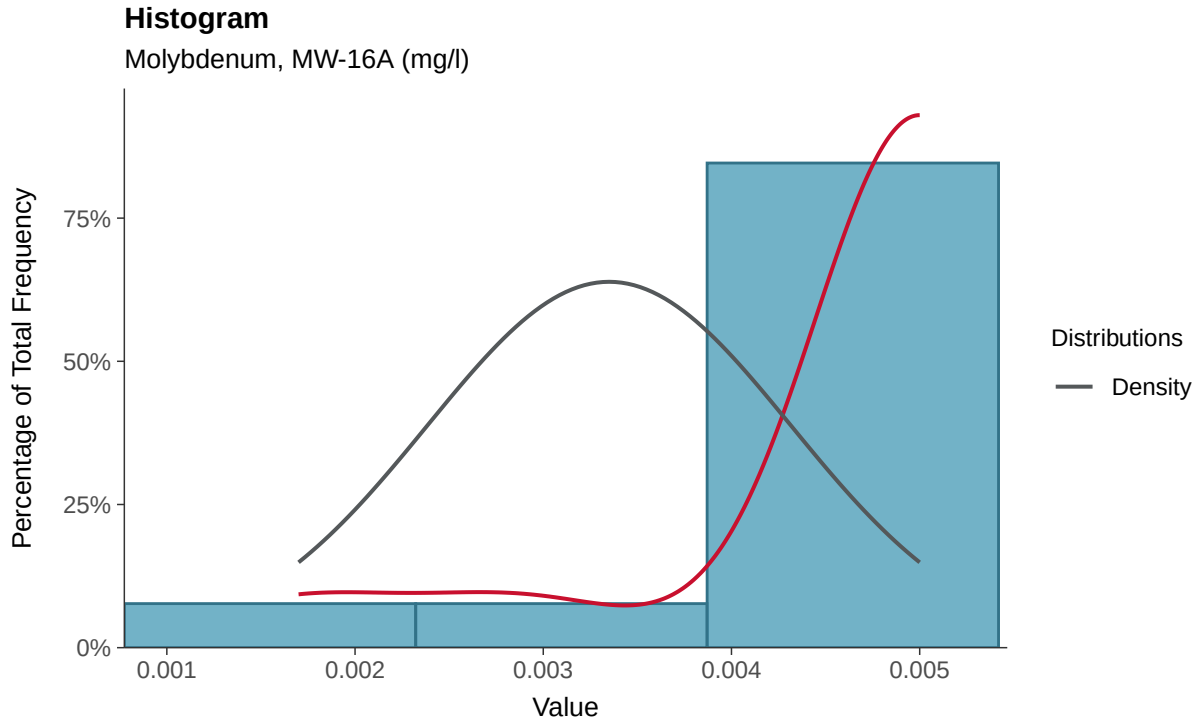
Mercury, MW-16A (mg/l)



Appendix IV: Molybdenum, MW-16A

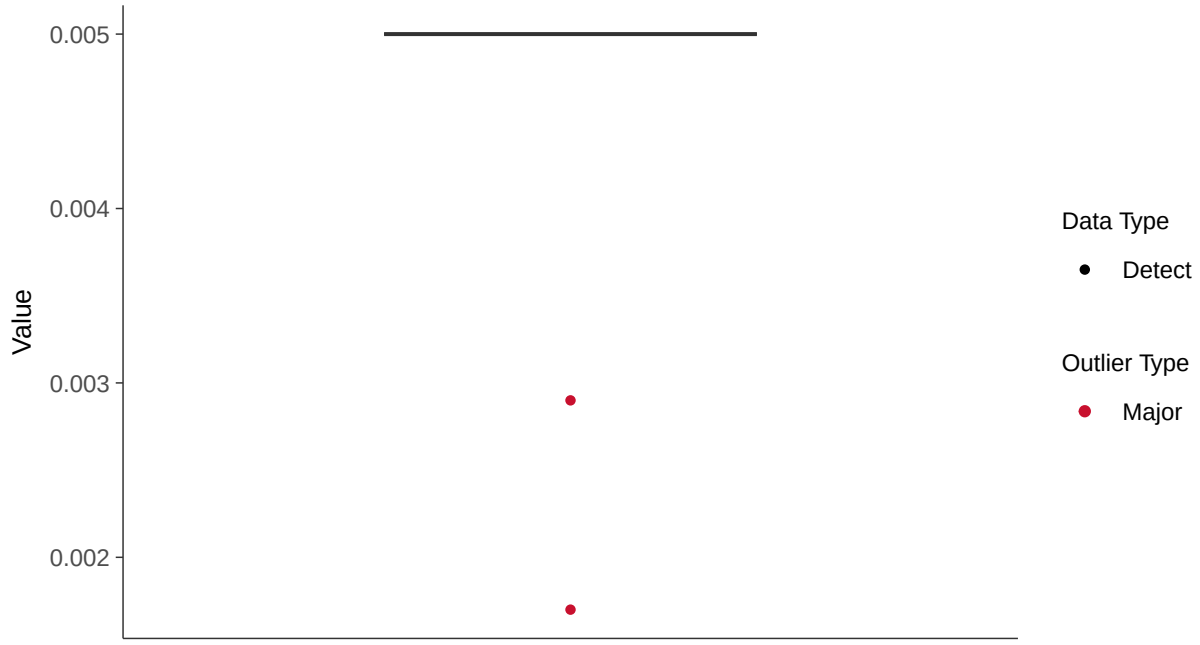
ID: 25_3_118





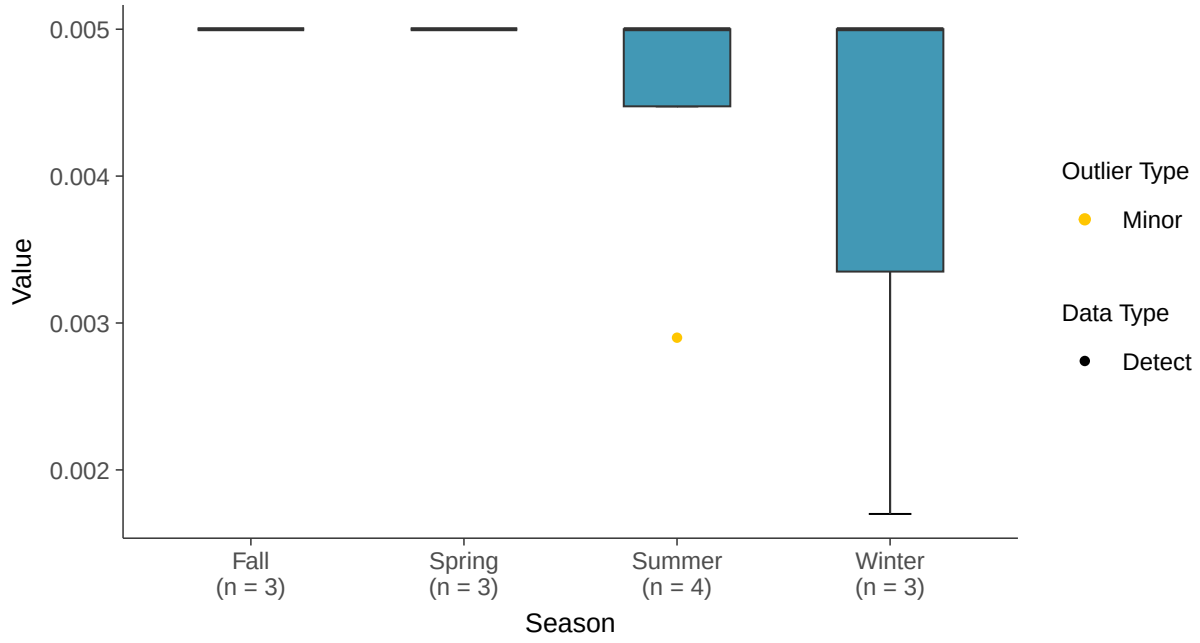
Boxplot

Molybdenum, MW-16A (mg/l)



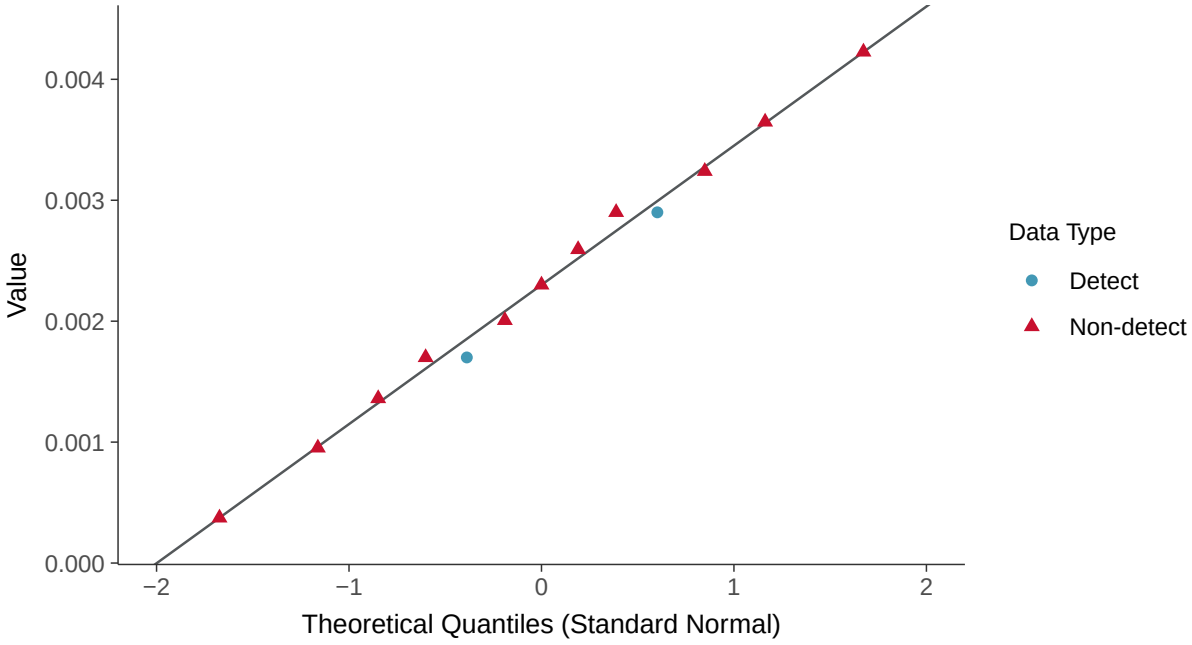
Boxplot by Season

Molybdenum, MW-16A (mg/l)



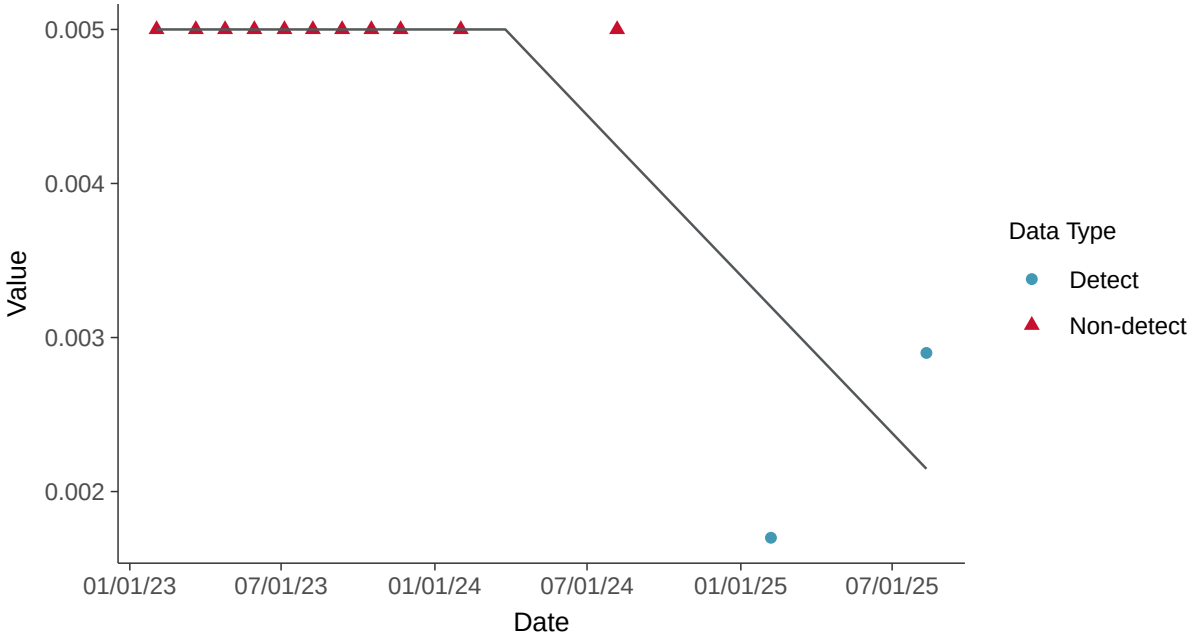
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-16A (mg/l)



Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-16A (mg/l)

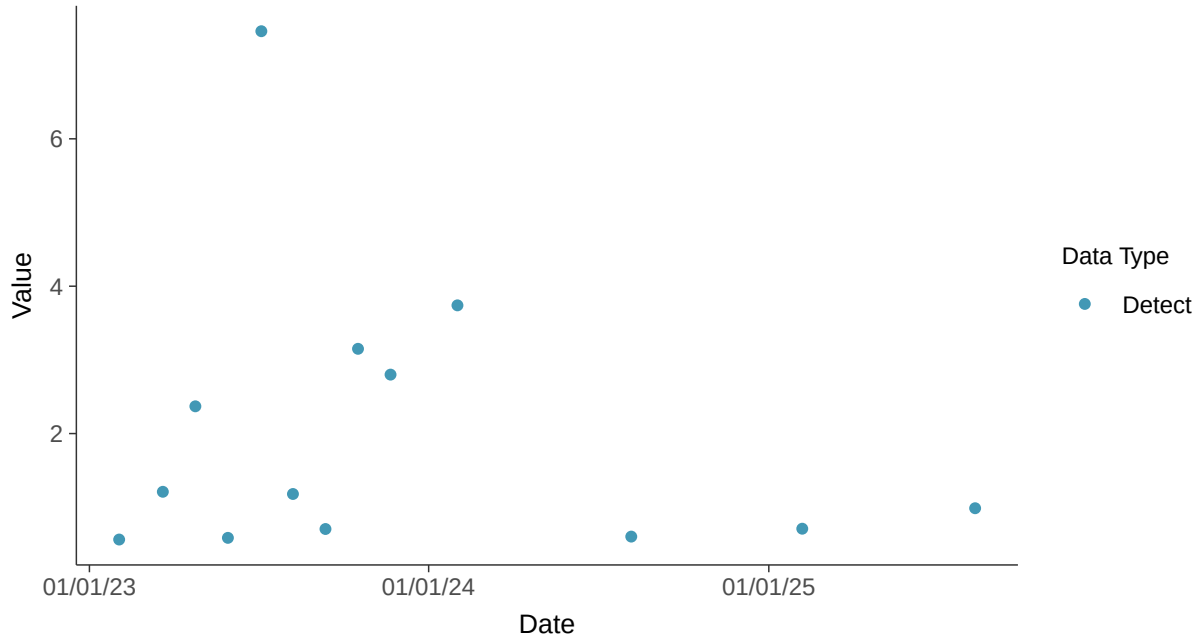


Appendix IV: Radium-226+228, MW-16A

ID: 25_3_121

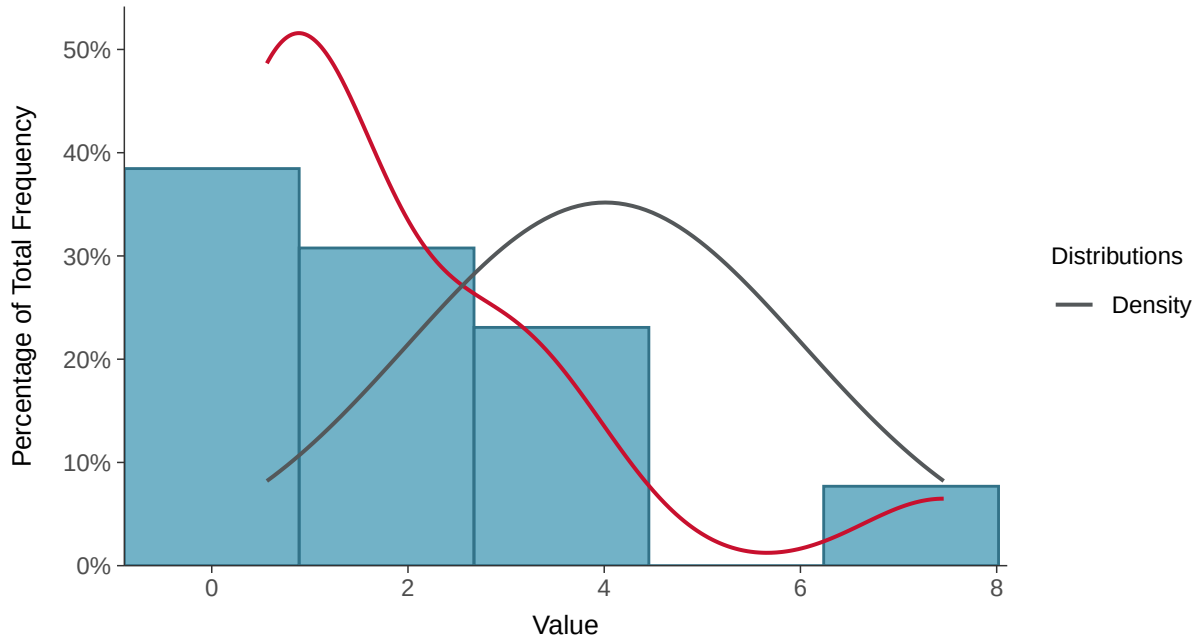
Scatter Plot

Radium-226+228, MW-16A (pci/l)



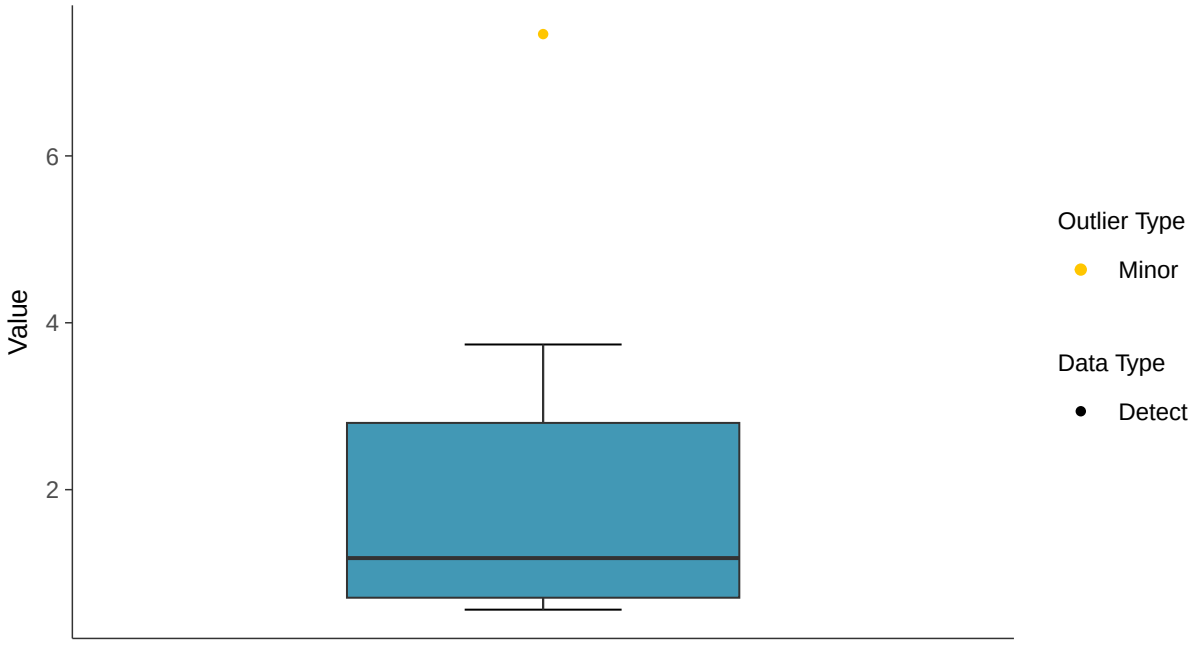
Histogram

Radium-226+228, MW-16A (pci/l)



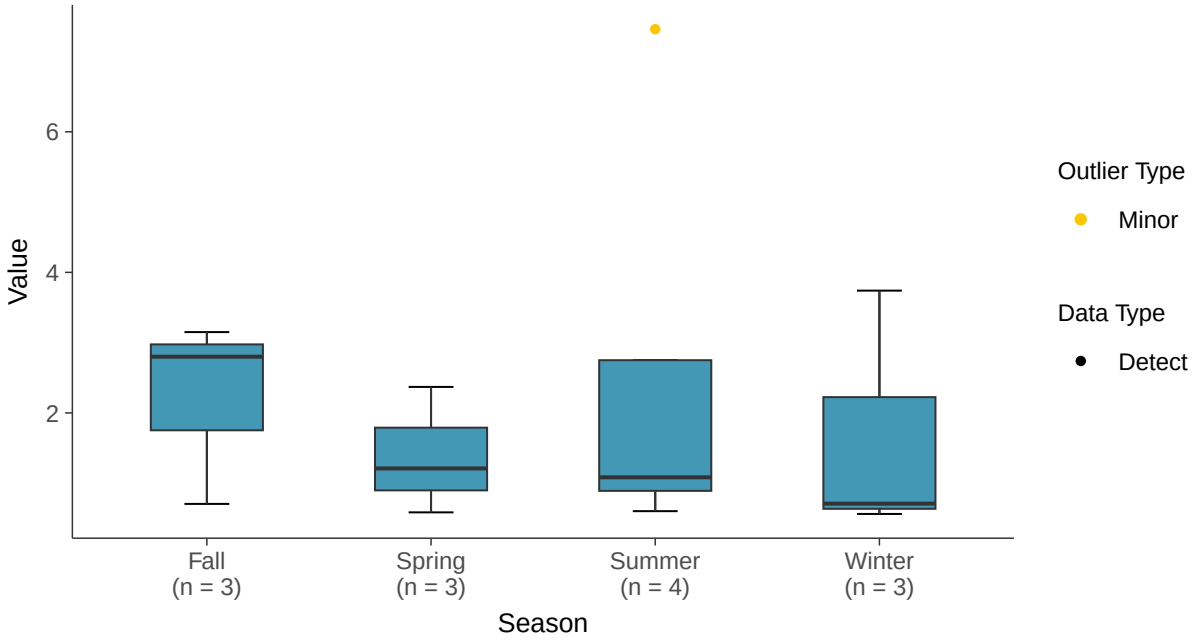
Boxplot

Radium-226+228, MW-16A (pci/l)



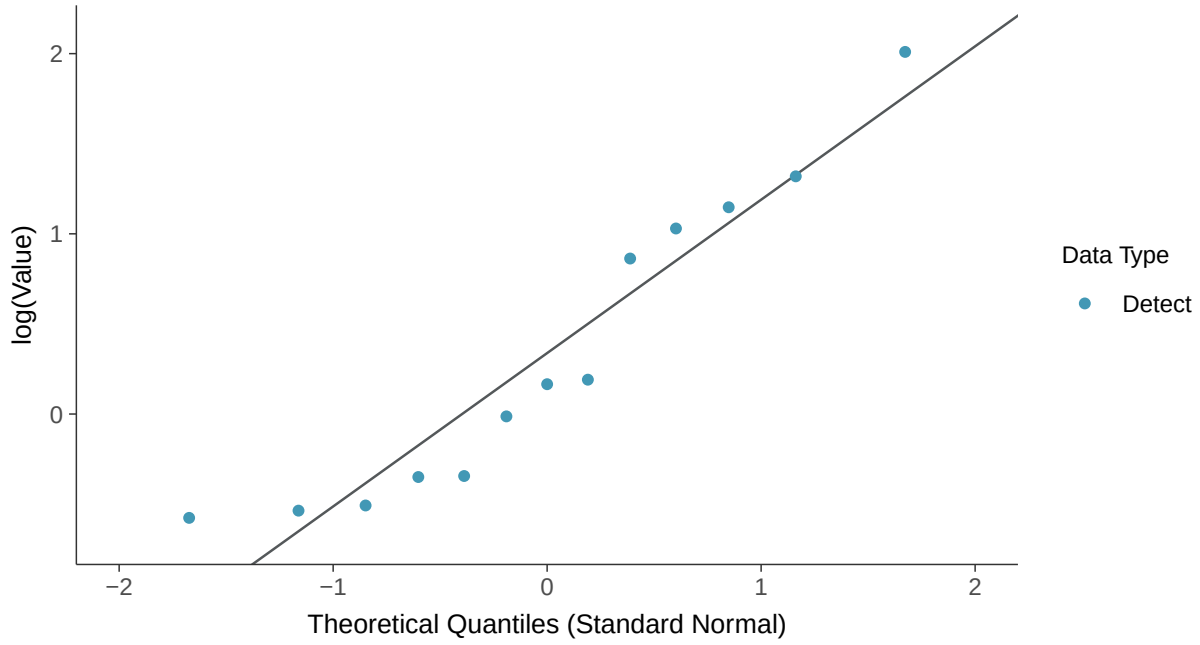
Boxplot by Season

Radium-226+228, MW-16A (pci/l)



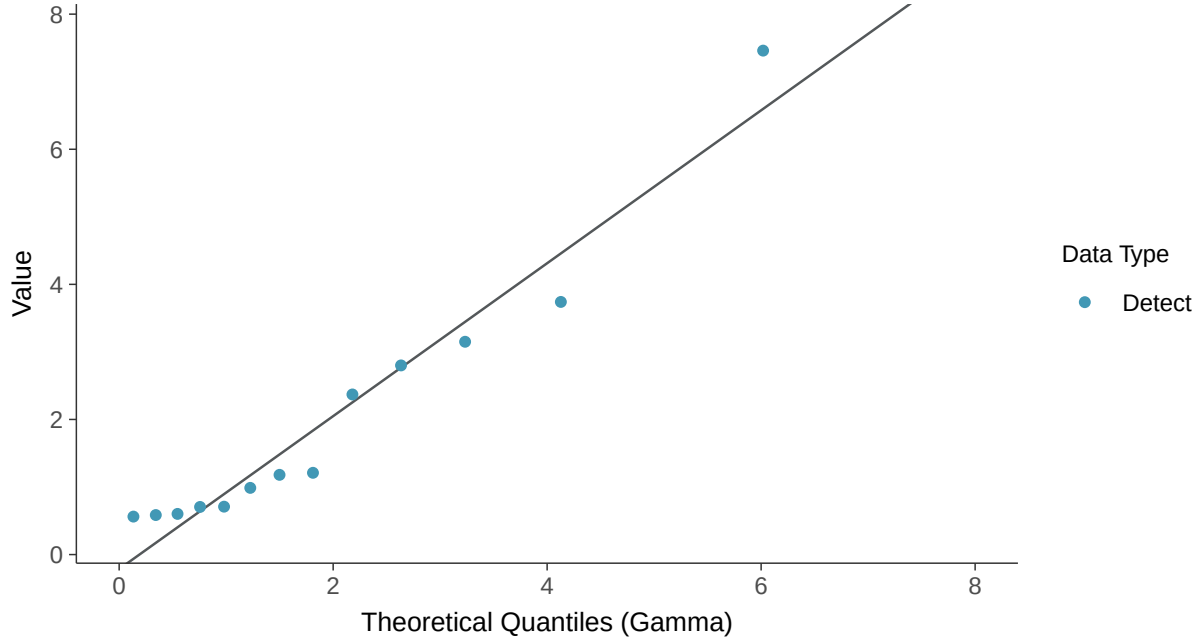
Lognormal Q-Q plot

Radium-226+228, MW-16A (pci/l)



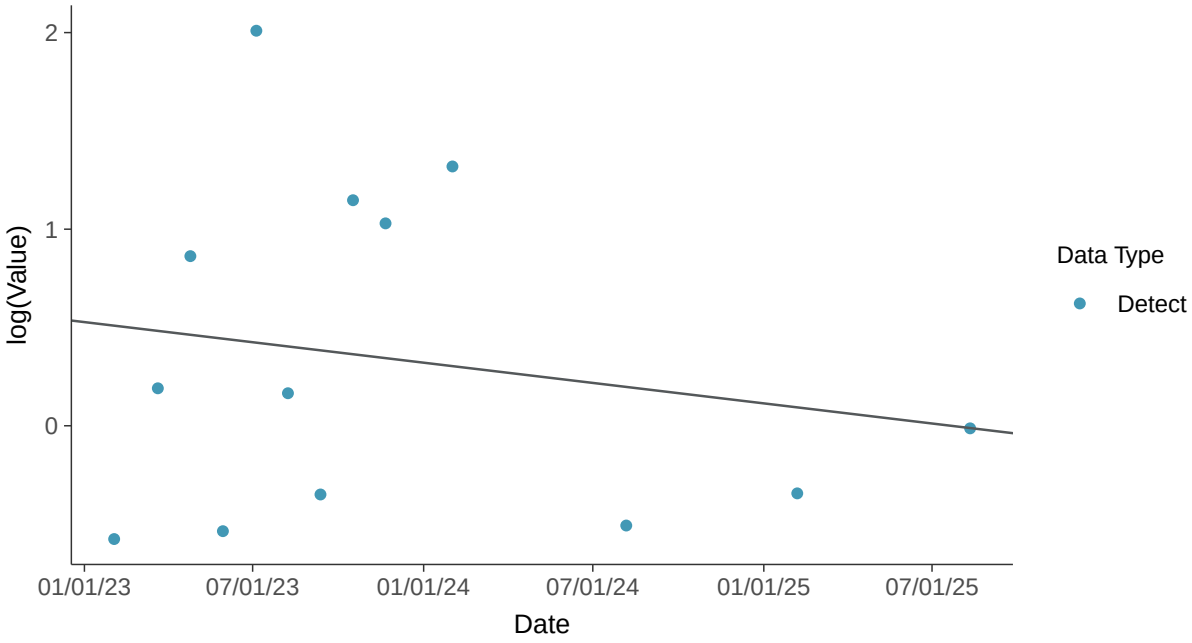
Gamma Q-Q plot

Radium-226+228, MW-16A (pci/l)



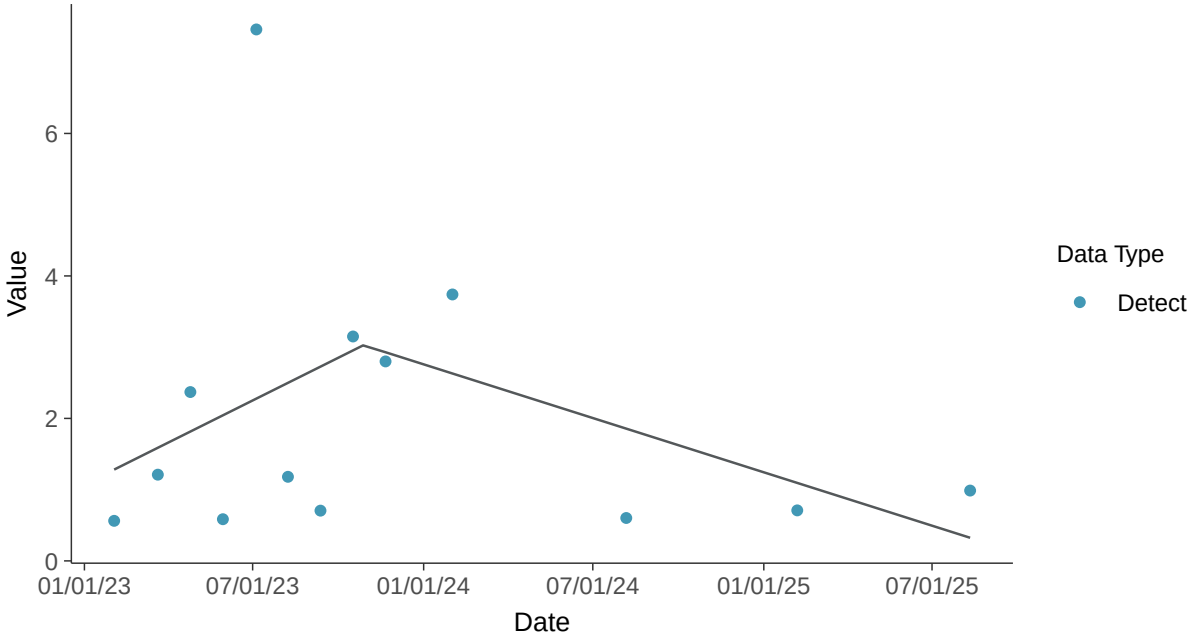
Trend Regression: Lognormal MLE

Radium-226+228, MW-16A (pci/l)



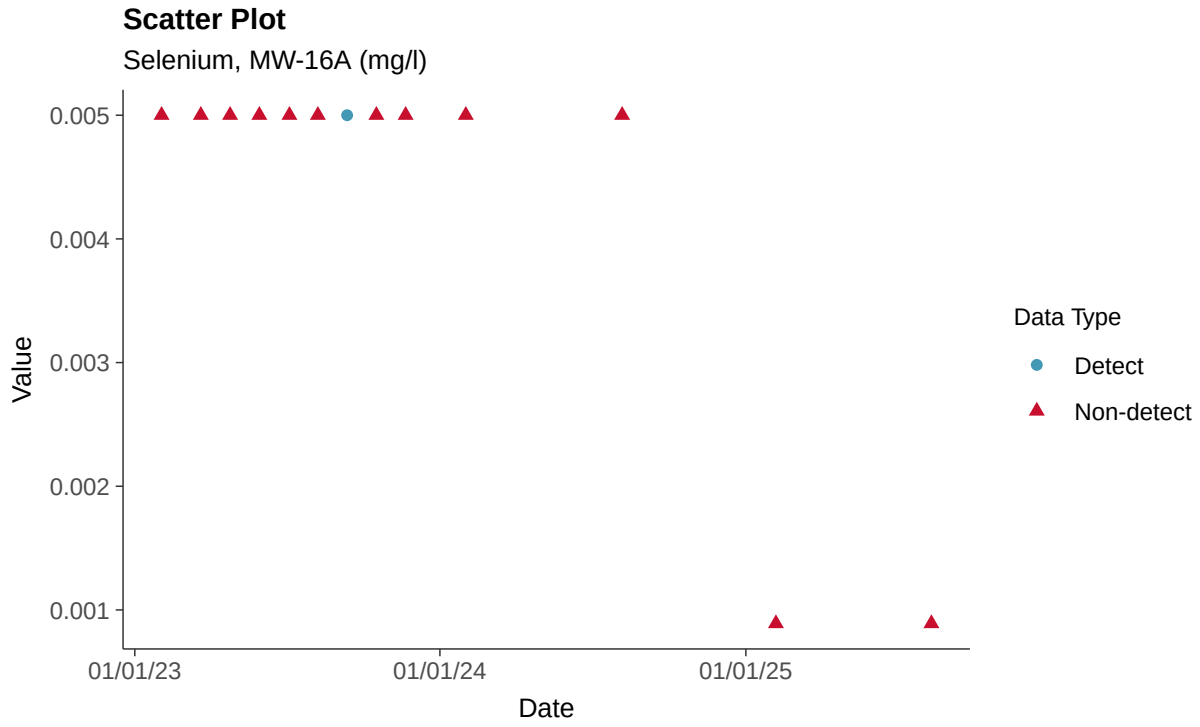
Trend Regression: Piecewise Linear-Linear

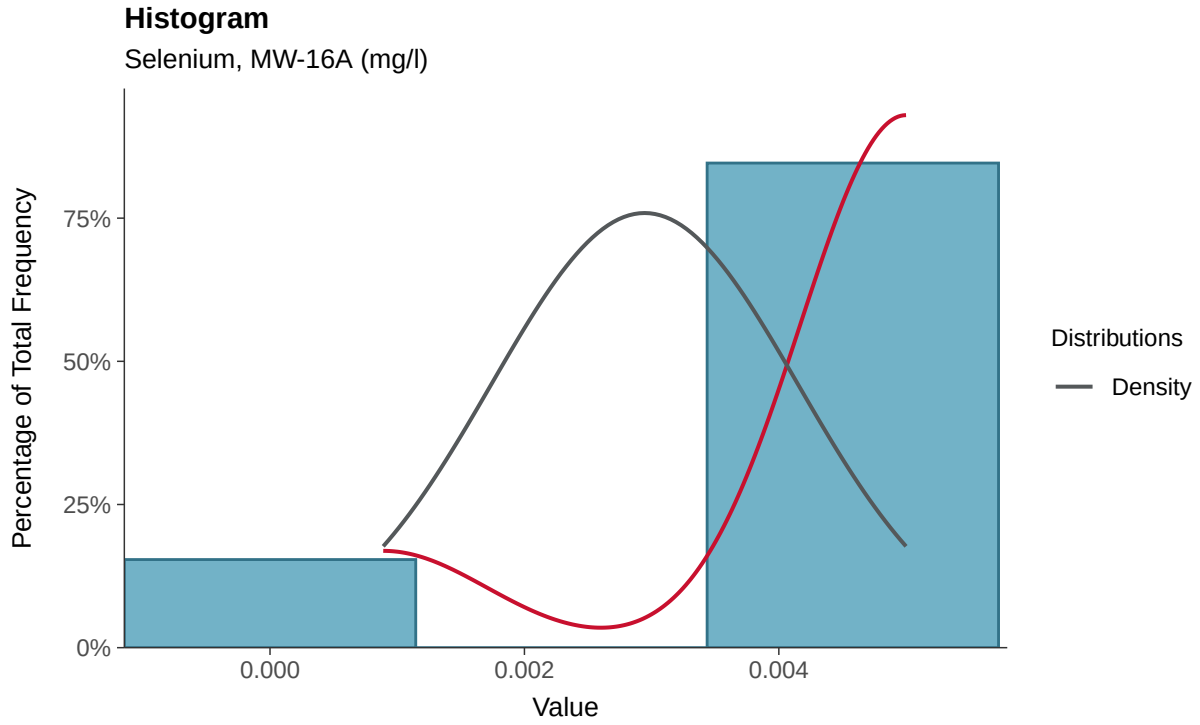
Radium-226+228, MW-16A (pci/l)



Appendix IV: Selenium, MW-16A

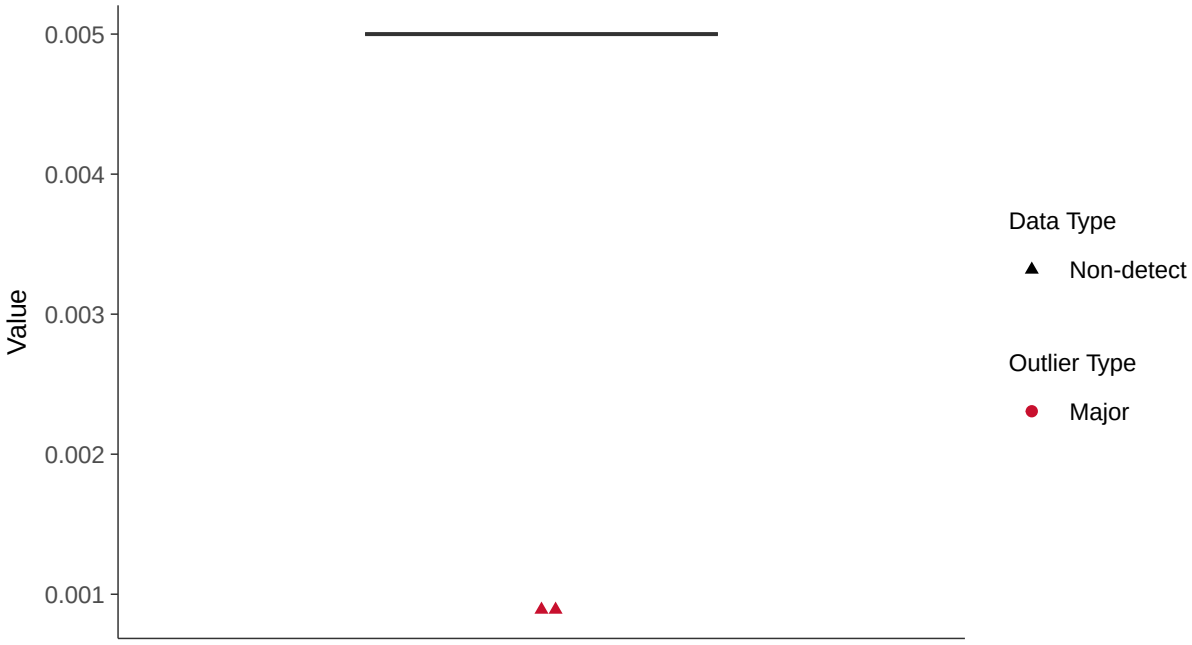
ID: 25_3_122





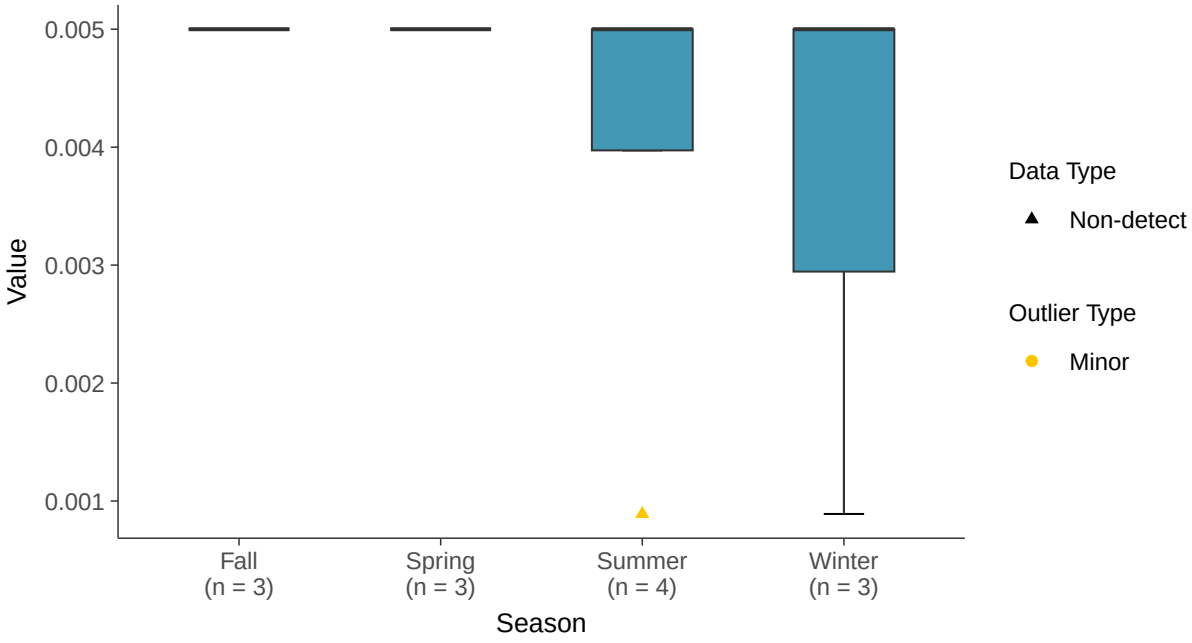
Boxplot

Selenium, MW-16A (mg/l)



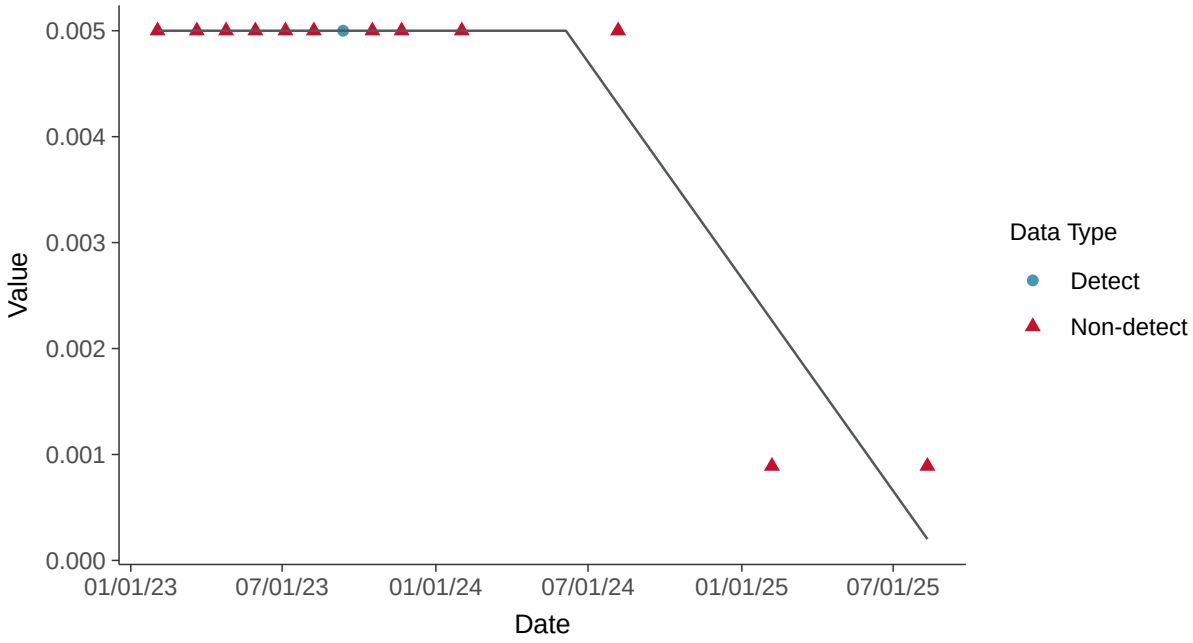
Boxplot by Season

Selenium, MW-16A (mg/l)



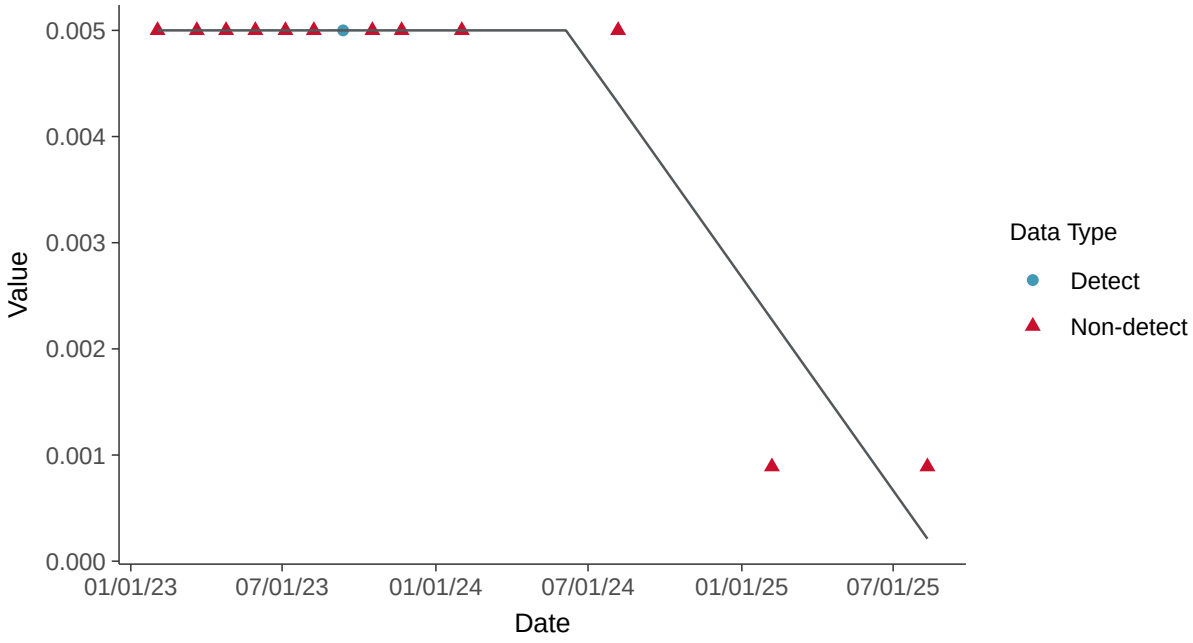
Trend Regression: Piecewise Linear-Linear

Selenium, MW-16A (mg/l)



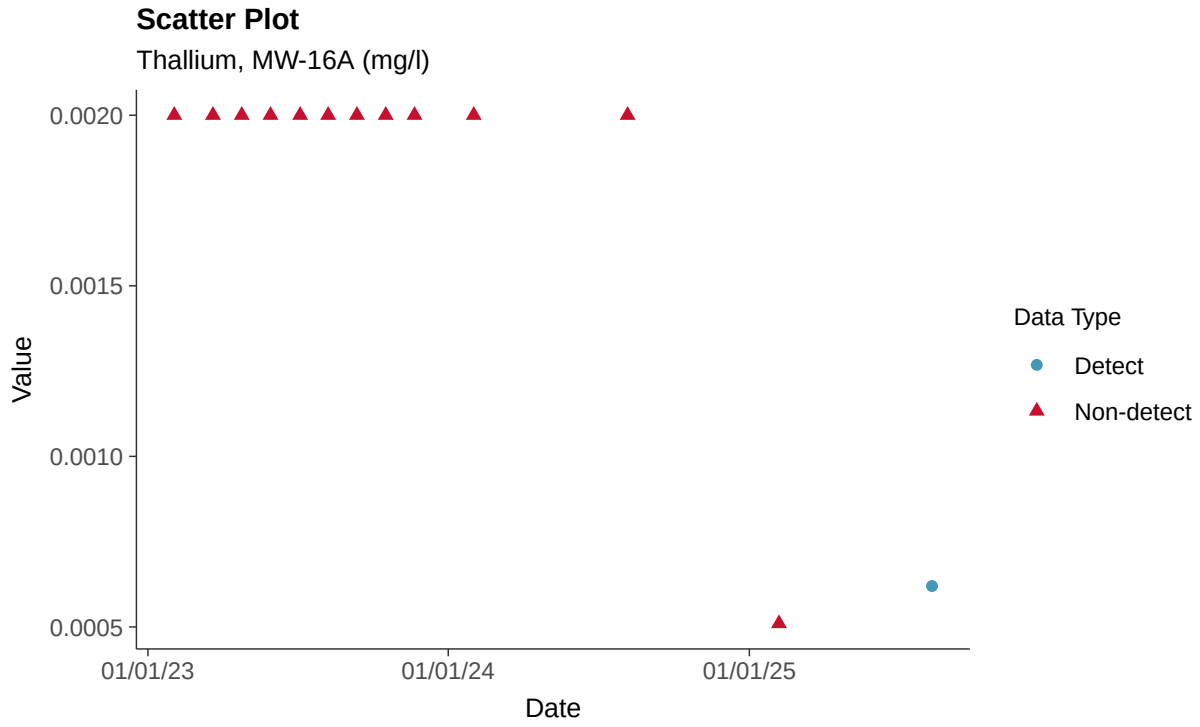
Trend Regression: Piecewise Linear-Linear-Linear

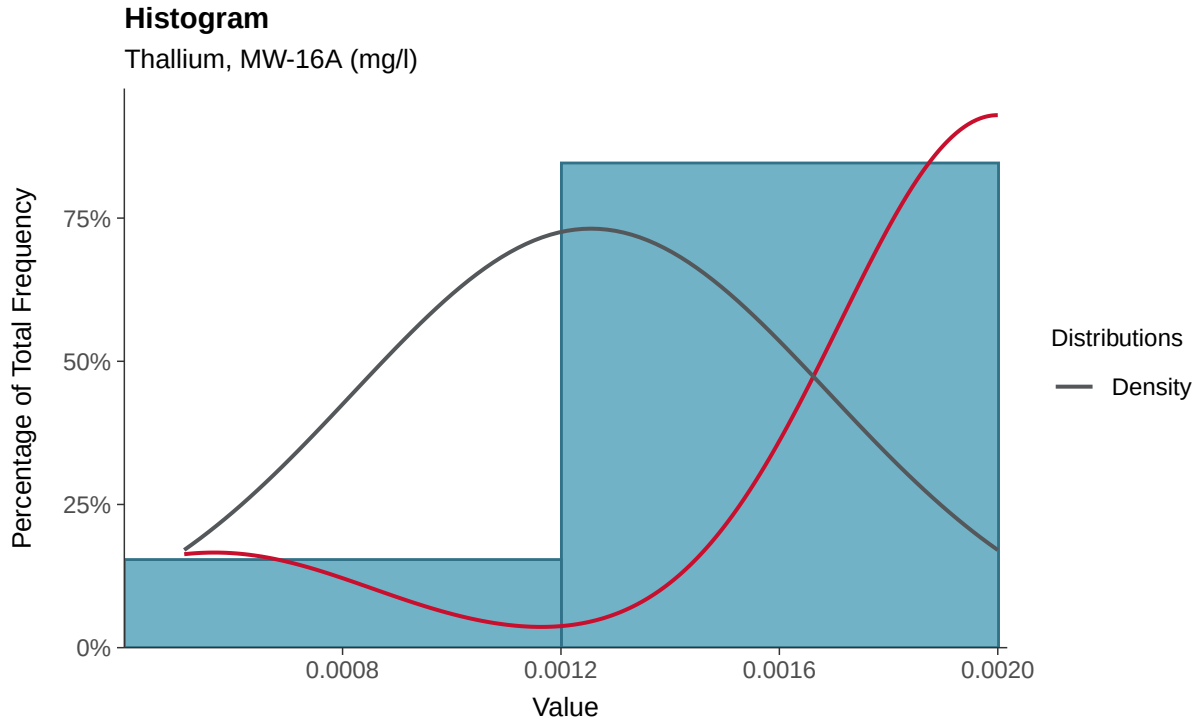
Selenium, MW-16A (mg/l)



Appendix IV: Thallium, MW-16A

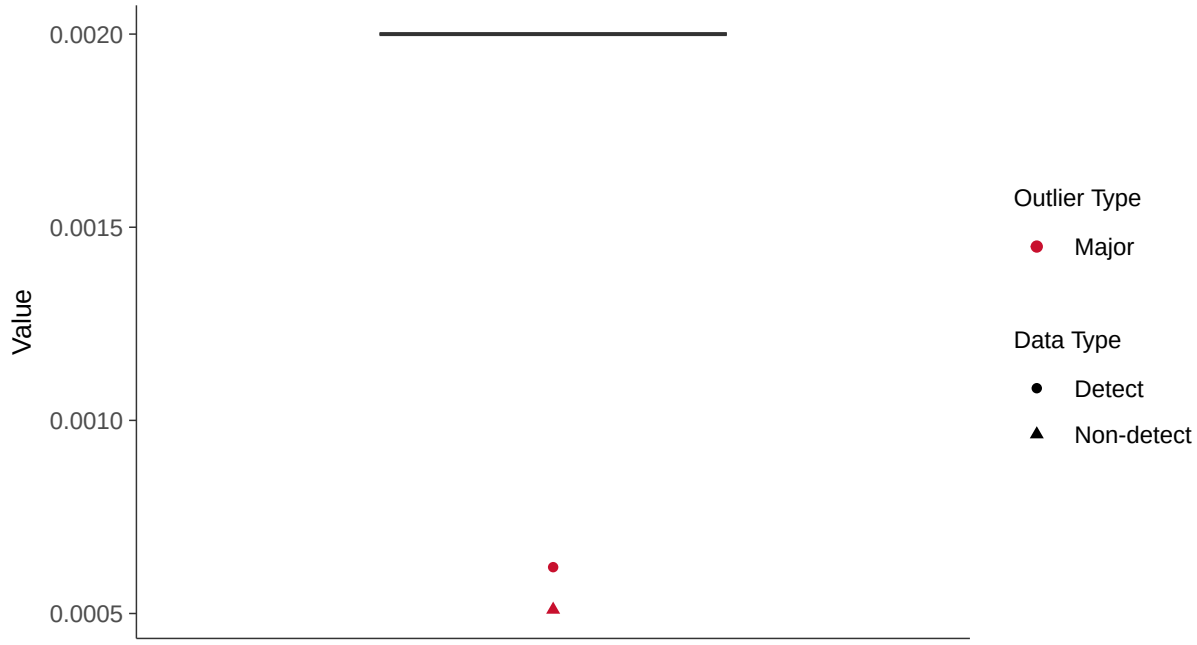
ID: 25_3_125





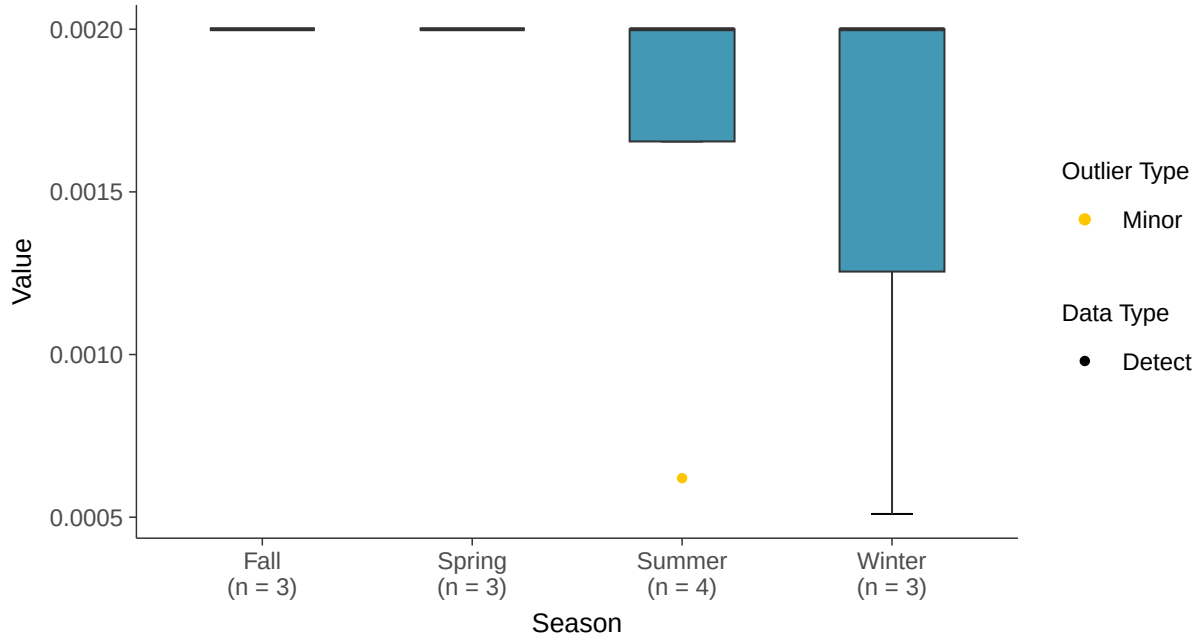
Boxplot

Thallium, MW-16A (mg/l)



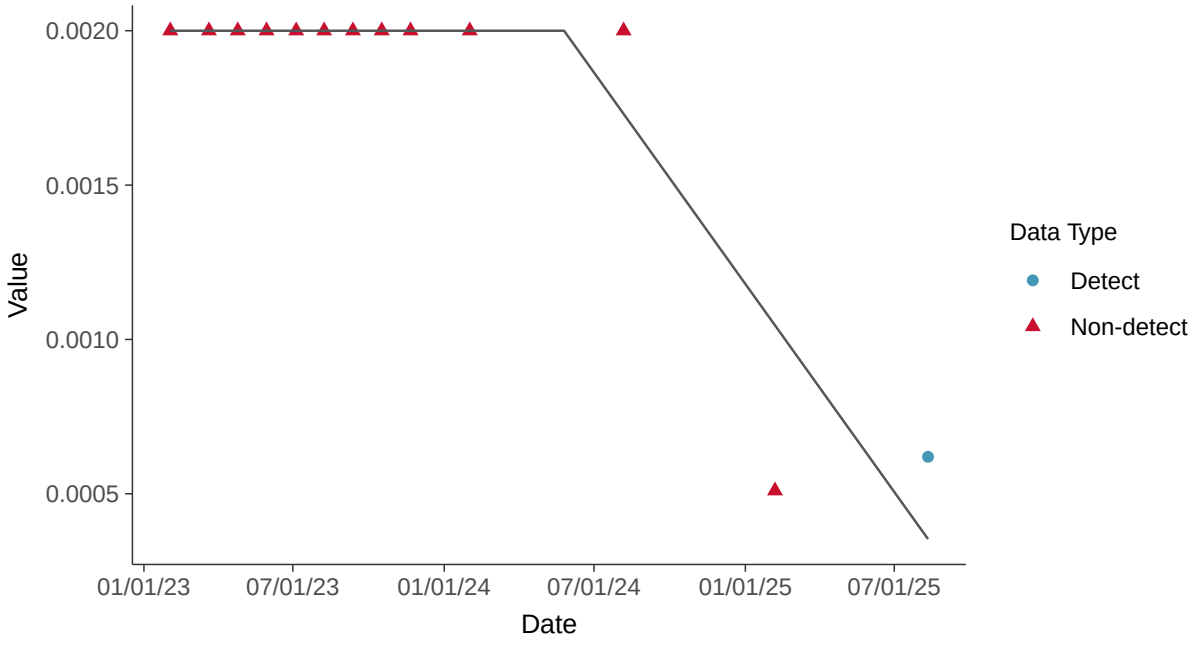
Boxplot by Season

Thallium, MW-16A (mg/l)



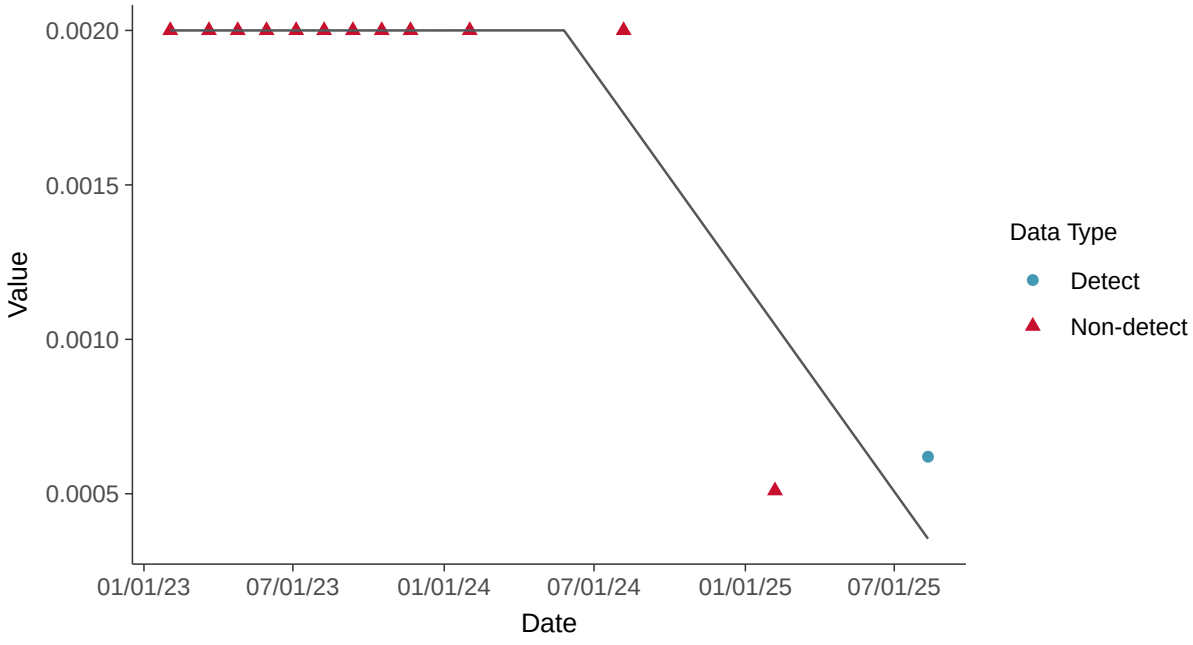
Trend Regression: Piecewise Linear-Linear

Thallium, MW-16A (mg/l)



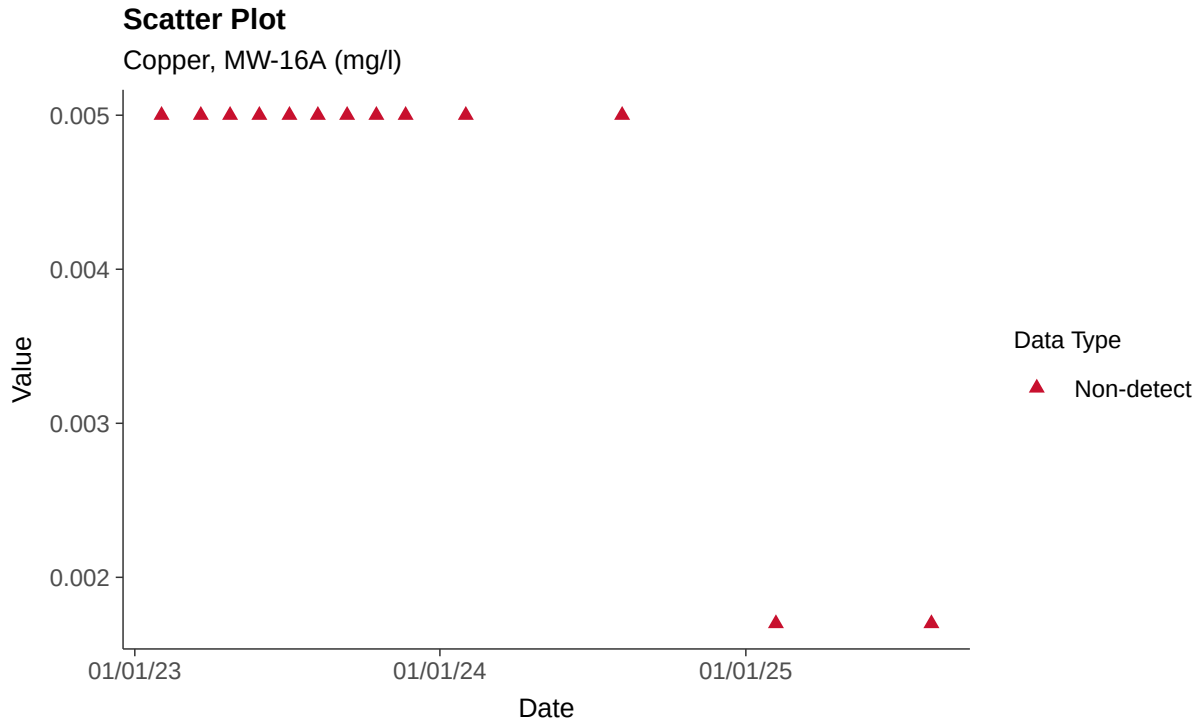
Trend Regression: Piecewise Linear-Linear-Linear

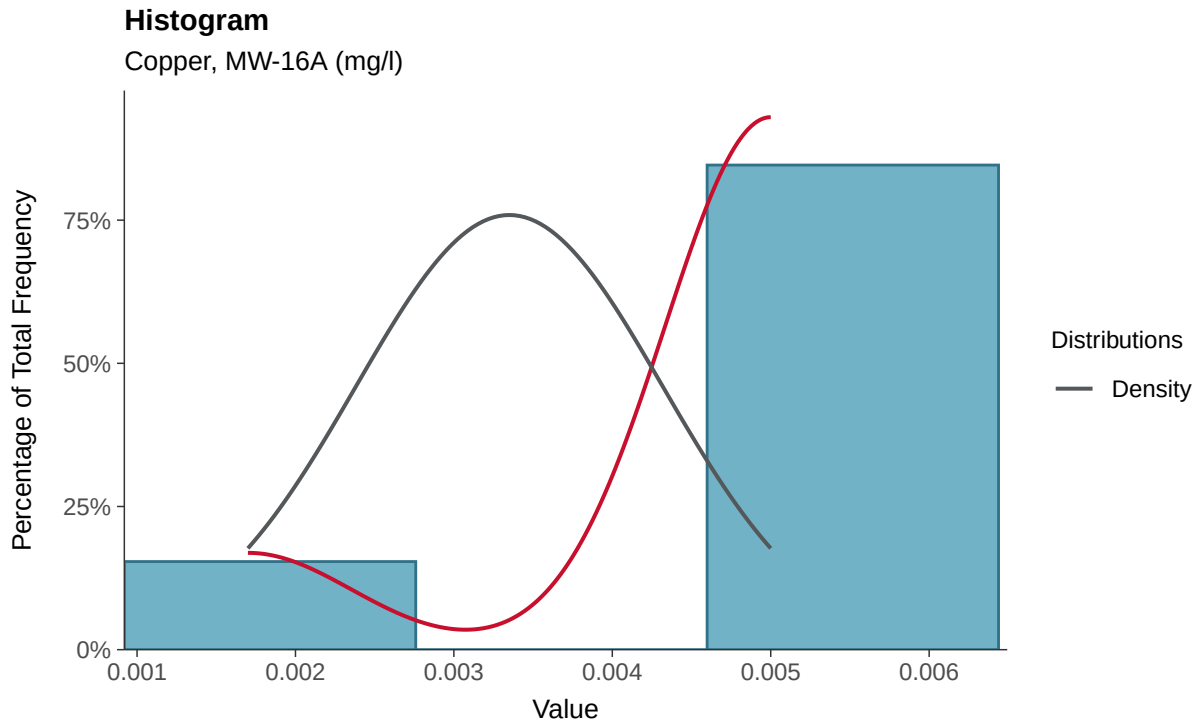
Thallium, MW-16A (mg/l)



Part 115: Copper, MW-16A

ID: 25_5_111



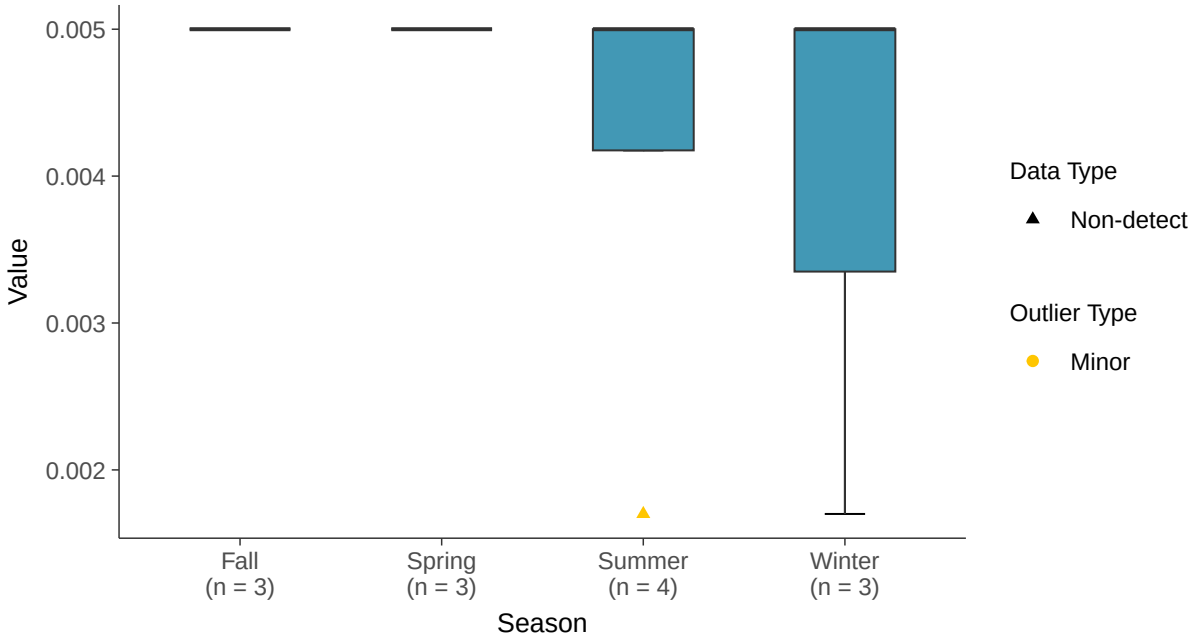


Boxplot

Copper, MW-16A (mg/l)

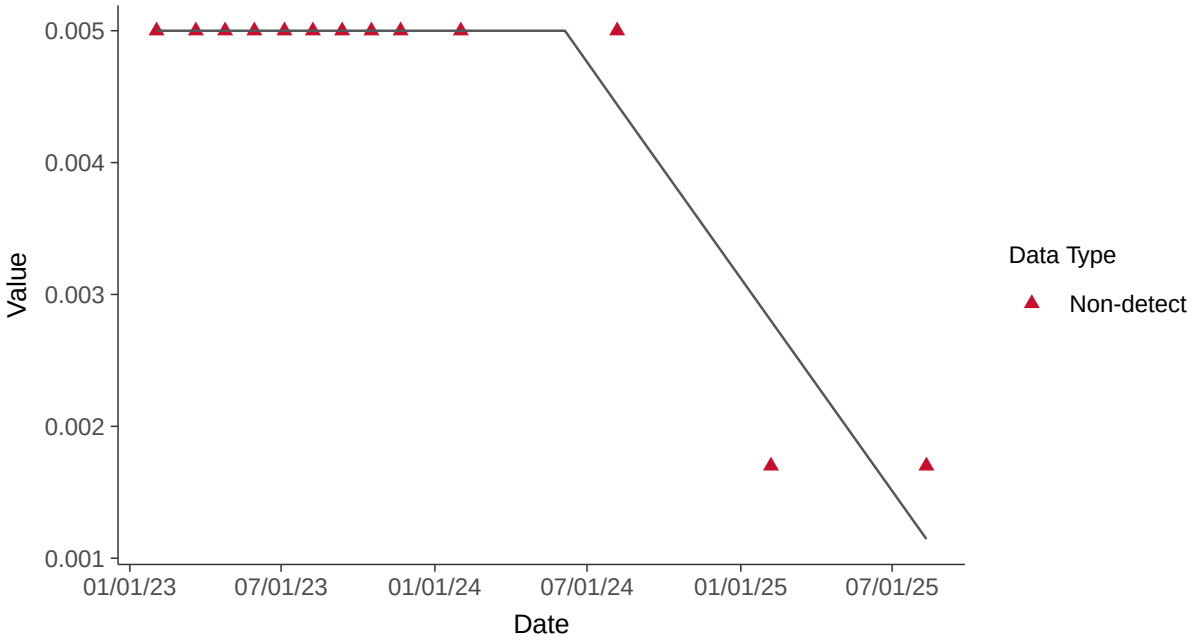
Boxplot by Season

Copper, MW-16A (mg/l)



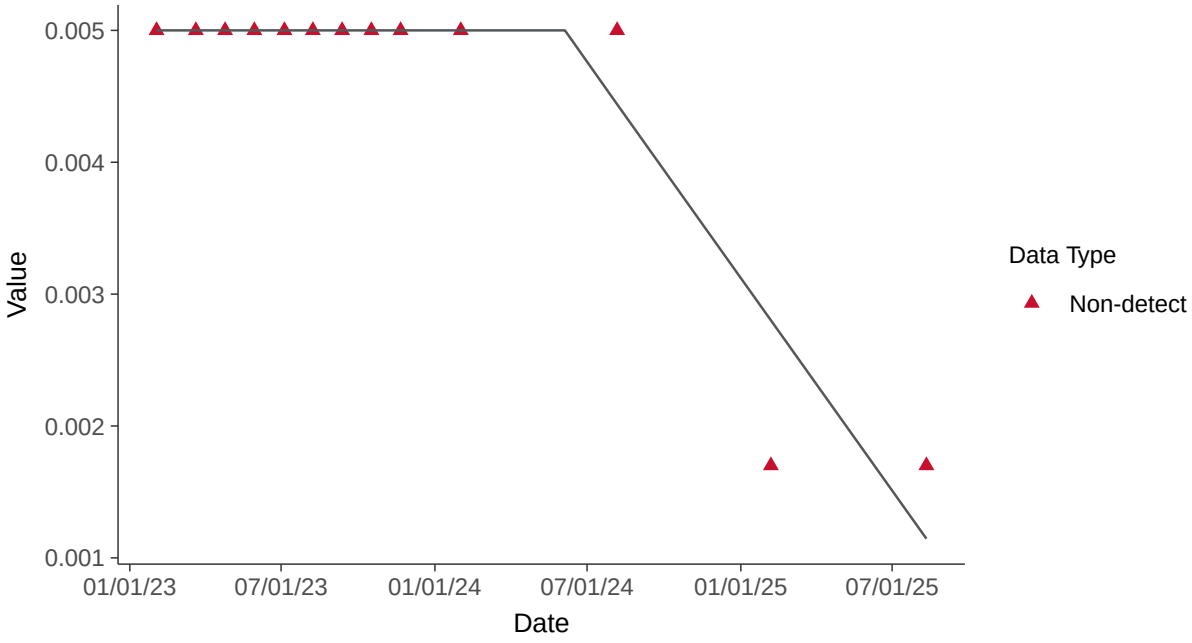
Trend Regression: Piecewise Linear-Linear

Copper, MW-16A (mg/l)



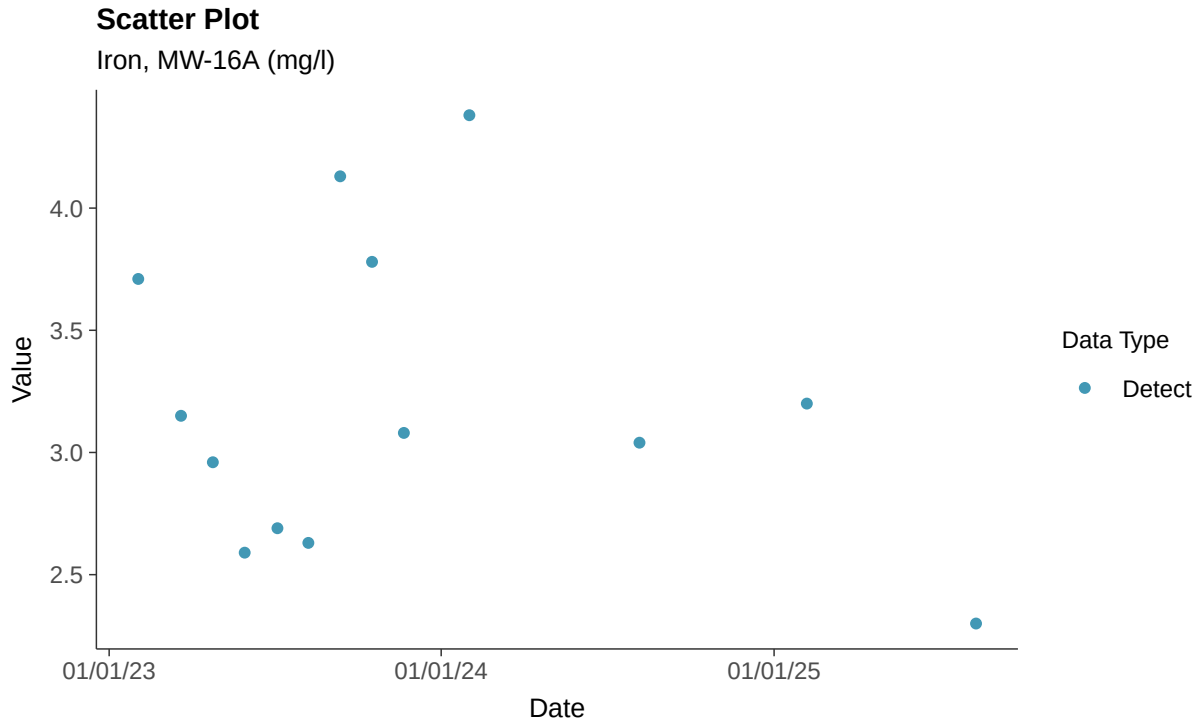
Trend Regression: Piecewise Linear-Linear-Linear

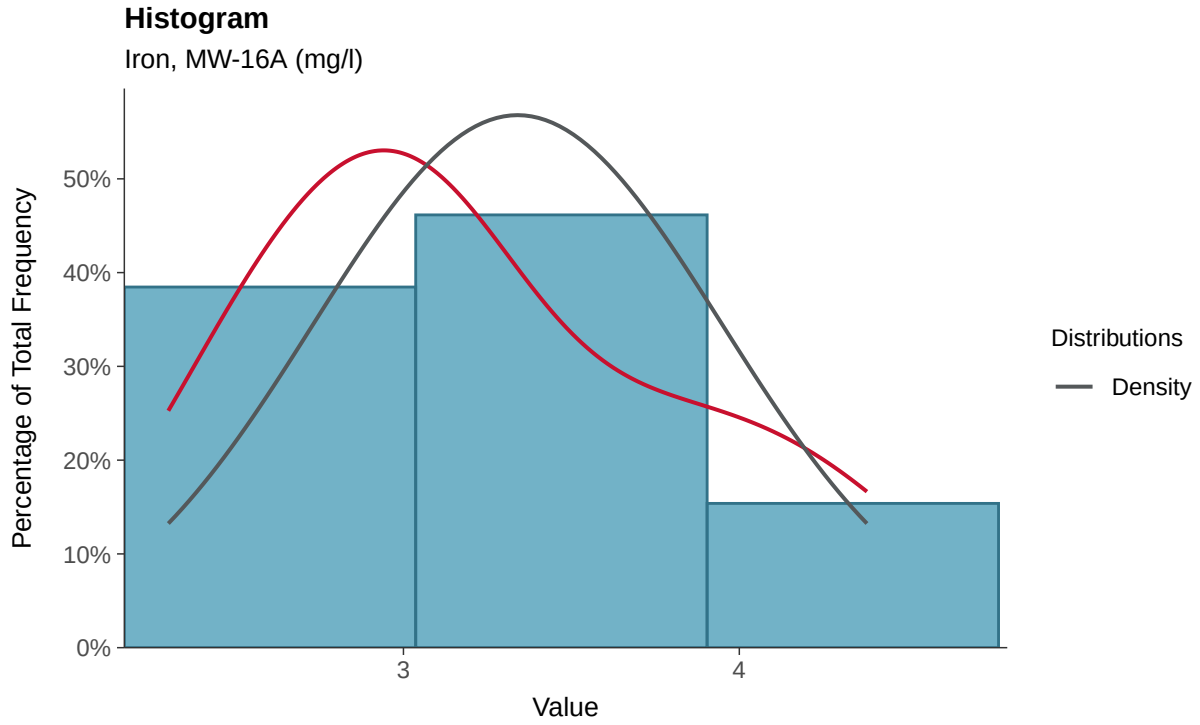
Copper, MW-16A (mg/l)



Part 115: Iron, MW-16A

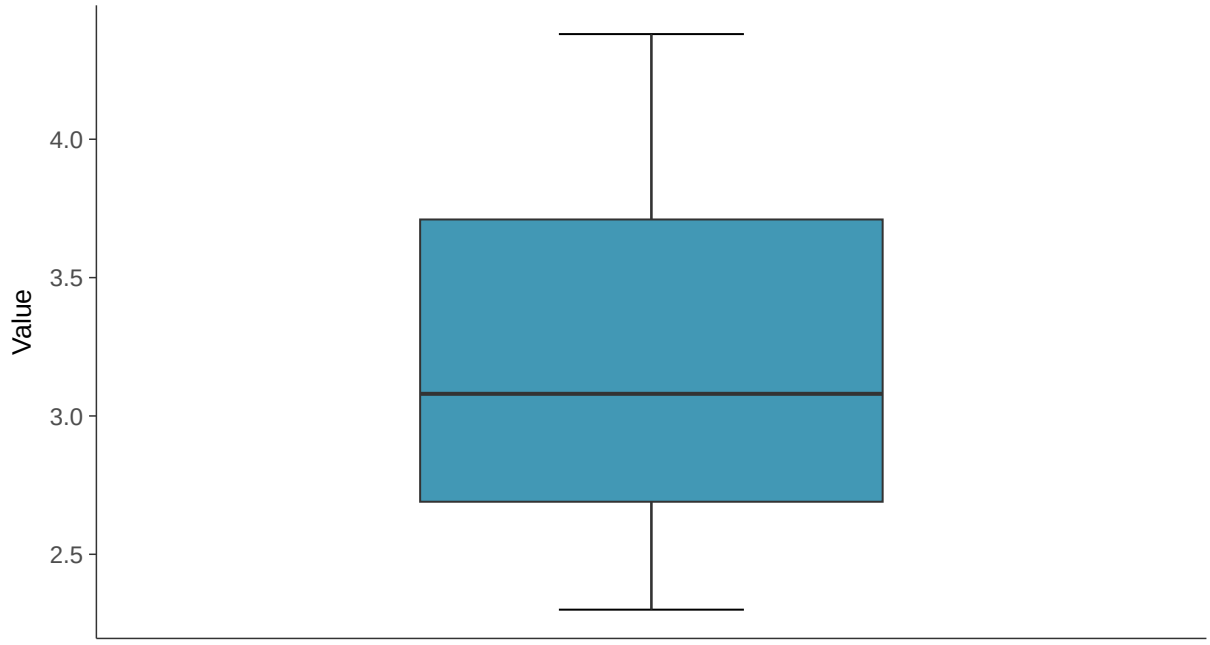
ID: 25_5_114





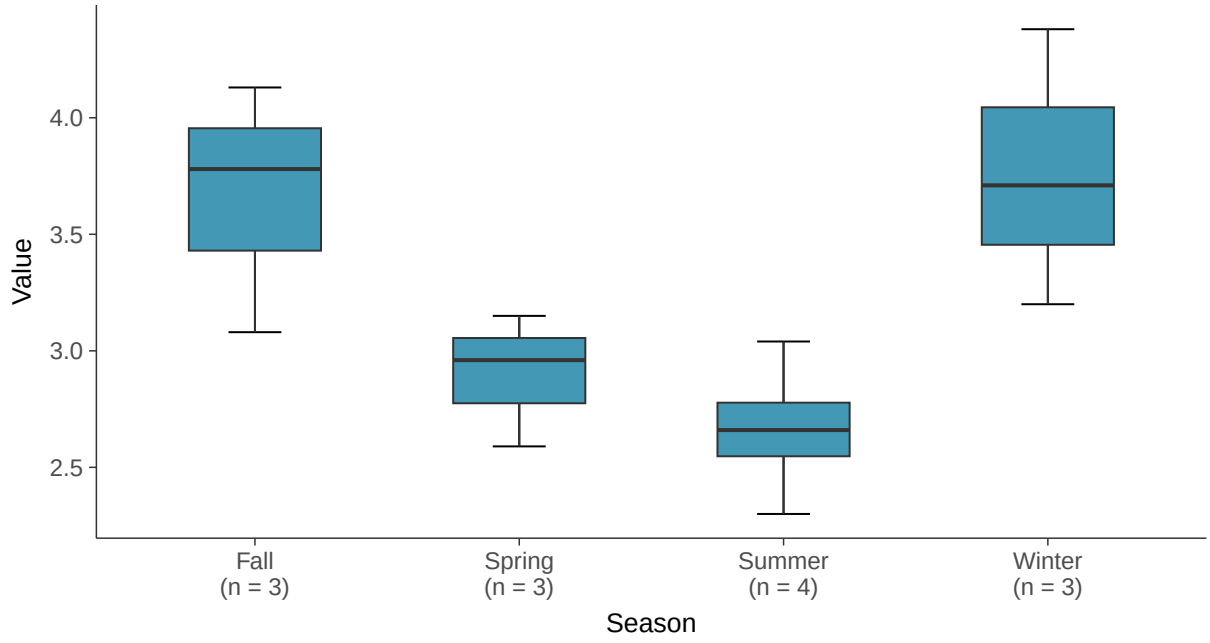
Boxplot

Iron, MW-16A (mg/l)



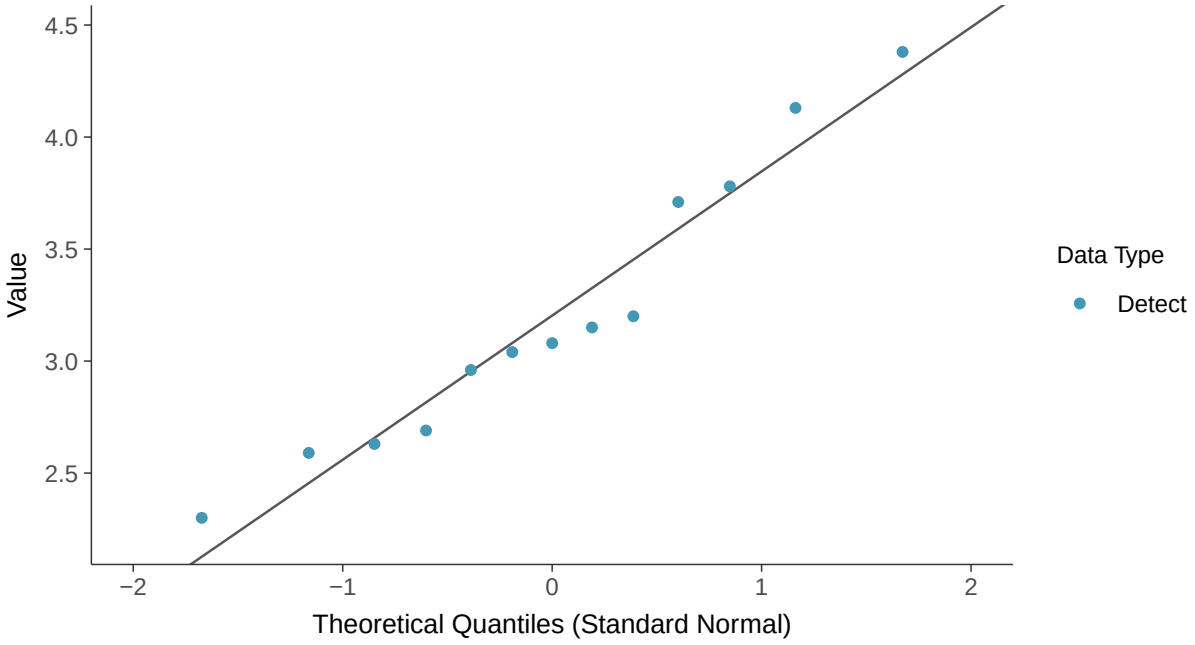
Boxplot by Season

Iron, MW-16A (mg/l)



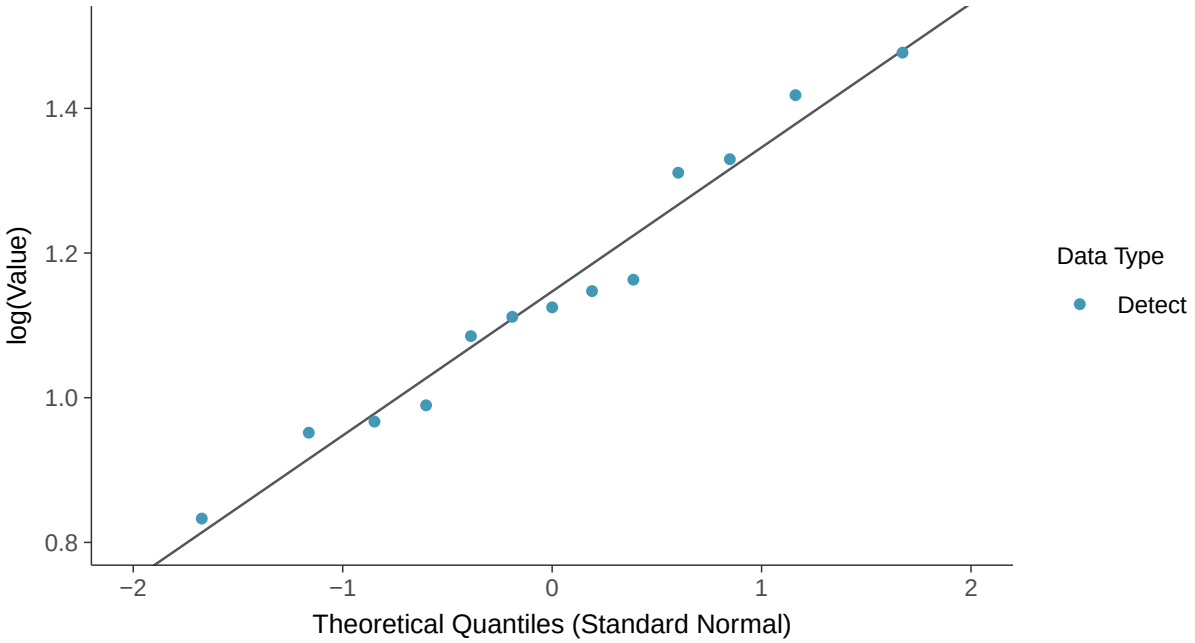
Normal Q-Q plot

Iron, MW-16A (mg/l)



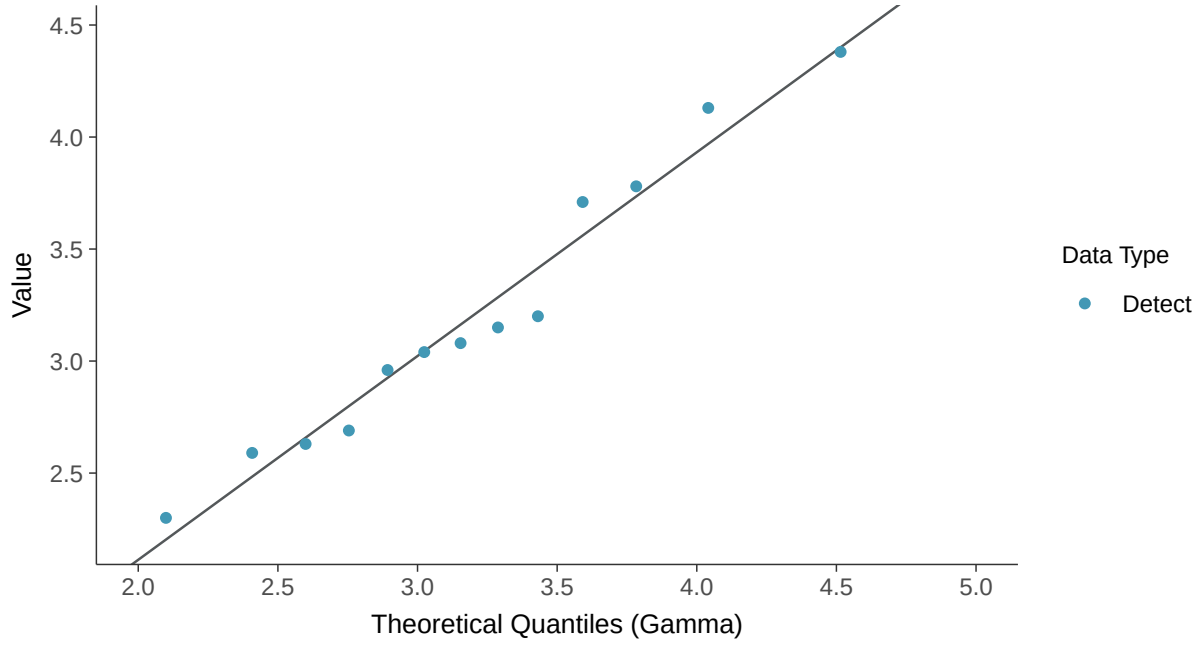
Lognormal Q-Q plot

Iron, MW-16A (mg/l)



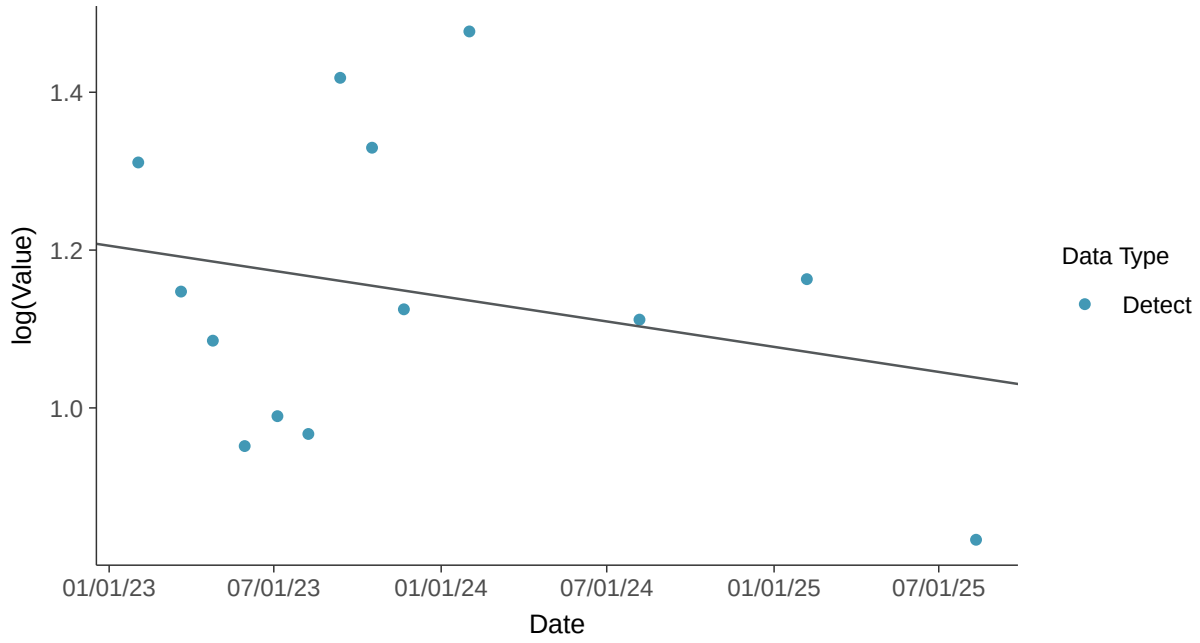
Gamma Q-Q plot

Iron, MW-16A (mg/l)



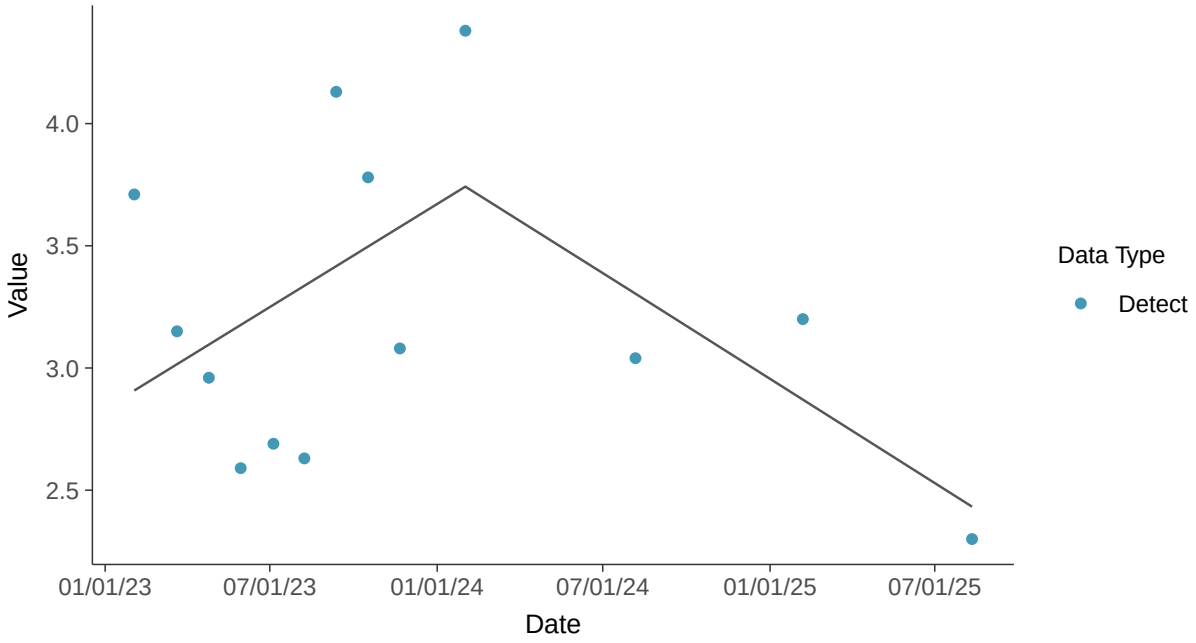
Trend Regression: Lognormal MLE

Iron, MW-16A (mg/l)



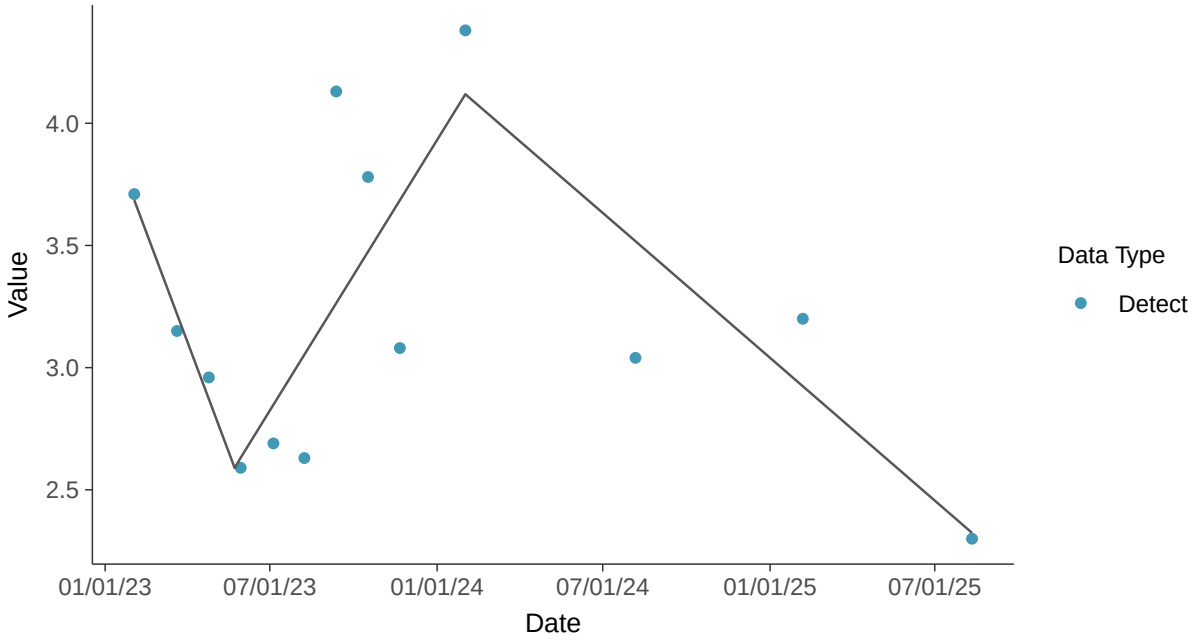
Trend Regression: Piecewise Linear-Linear

Iron, MW-16A (mg/l)



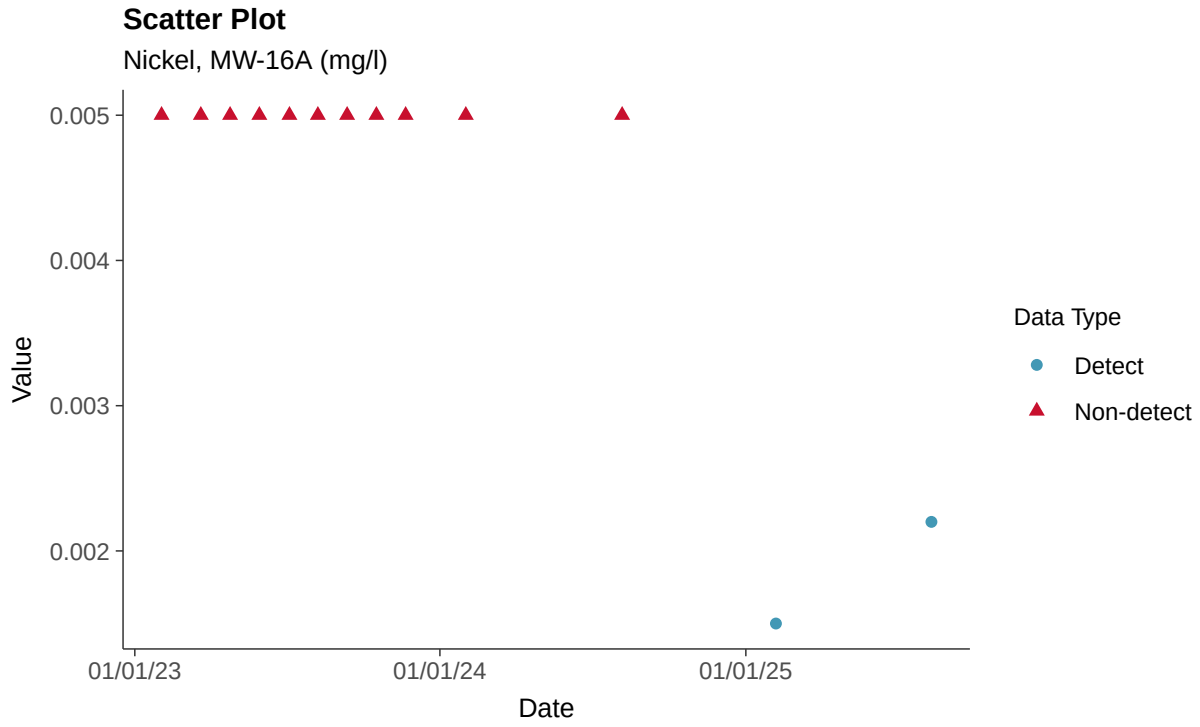
Trend Regression: Piecewise Linear-Linear-Linear

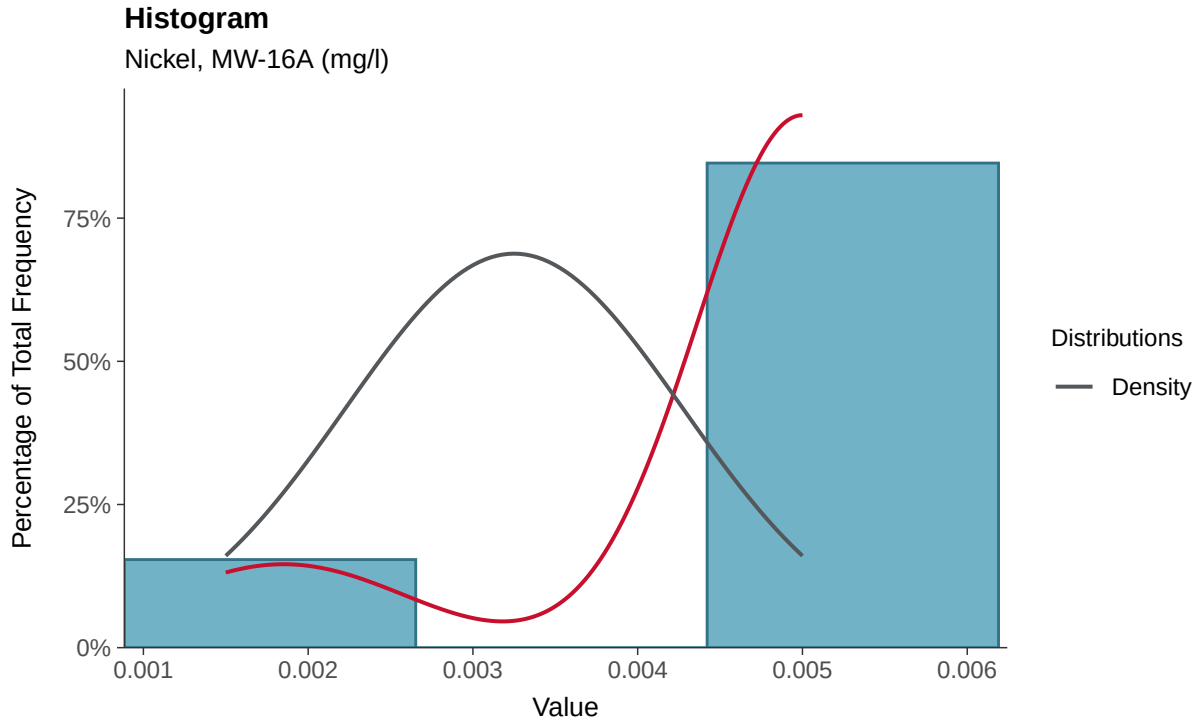
Iron, MW-16A (mg/l)



Part 115: Nickel, MW-16A

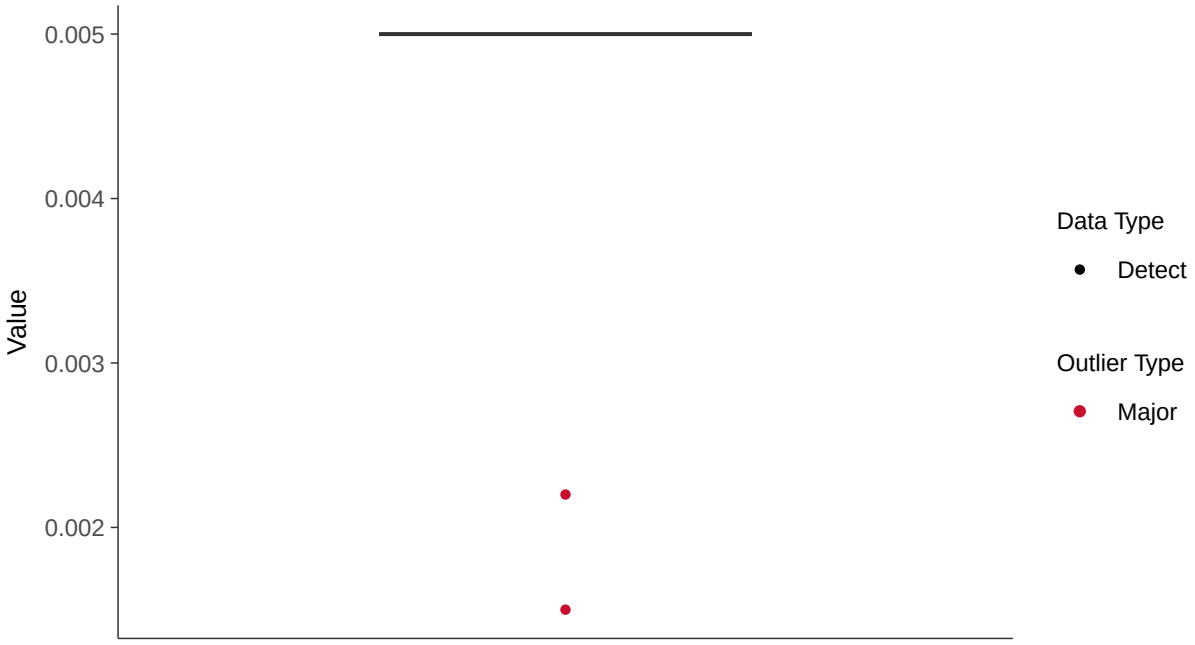
ID: 25_5_119





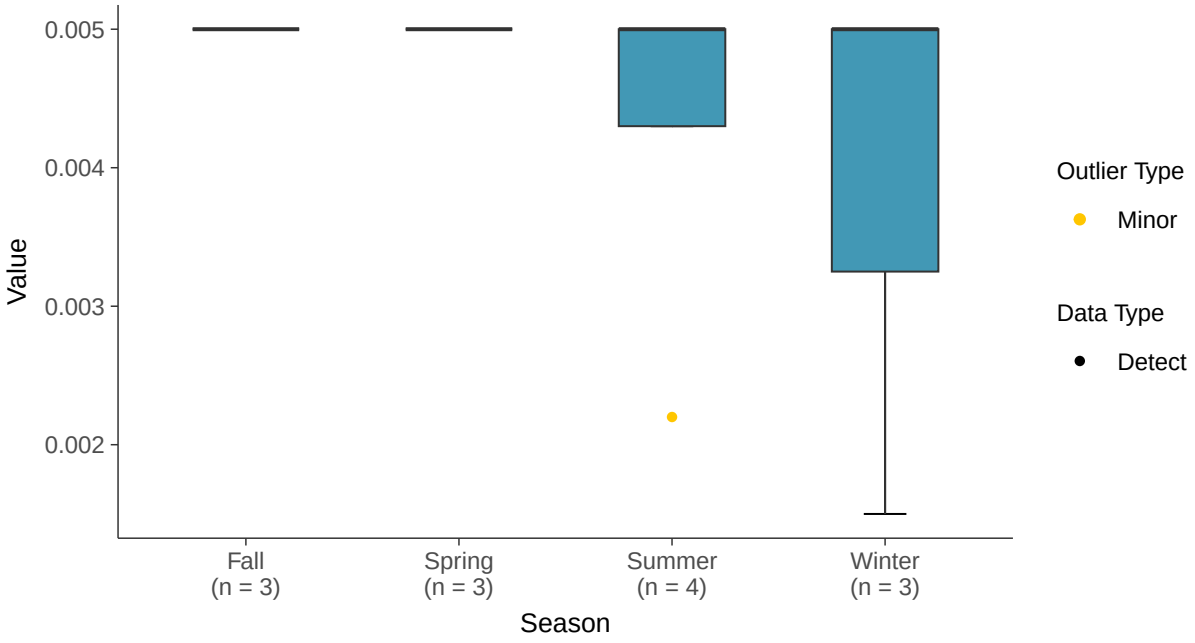
Boxplot

Nickel, MW-16A (mg/l)



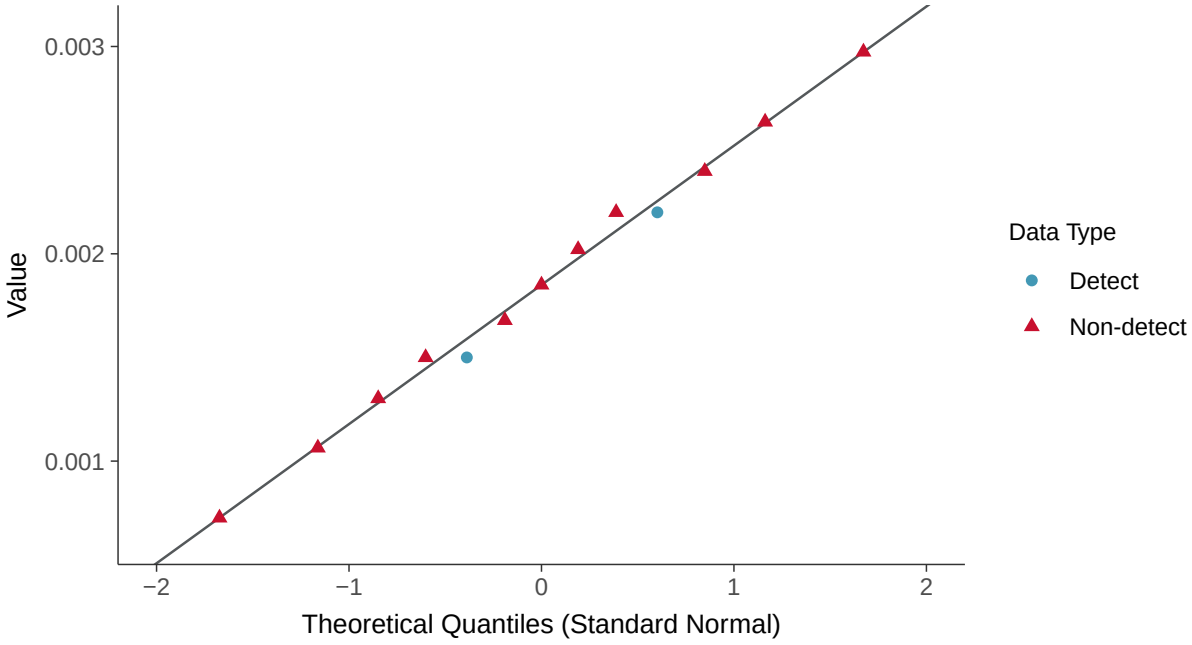
Boxplot by Season

Nickel, MW-16A (mg/l)



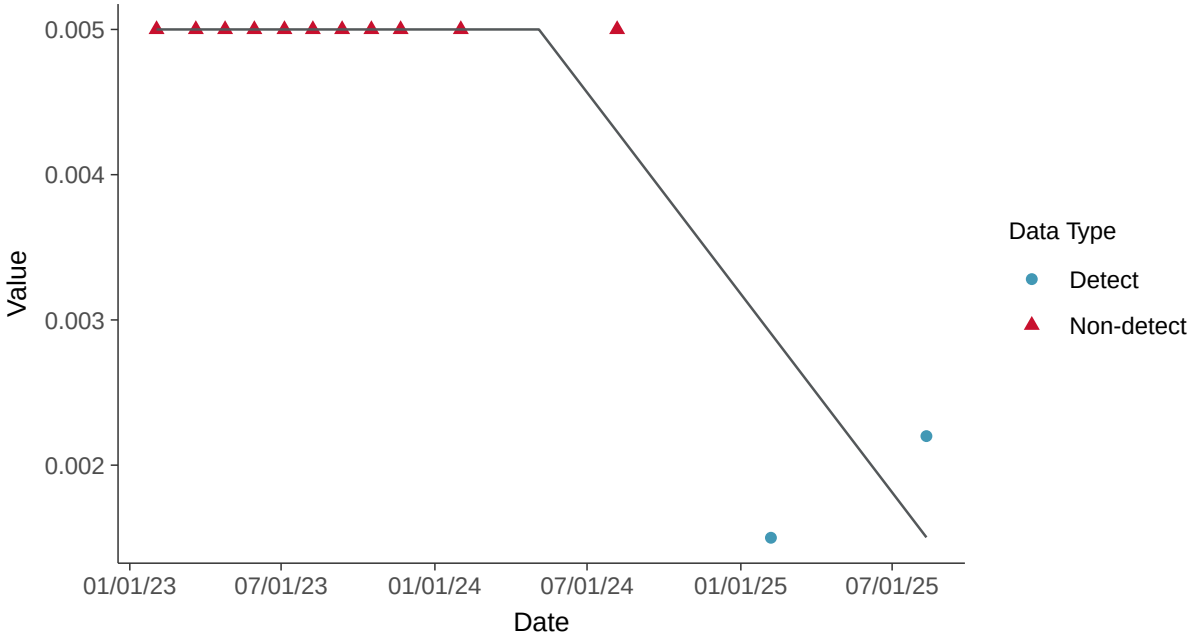
Normal Q-Q plot using ROS Imputed Estimates

Nickel, MW-16A (mg/l)



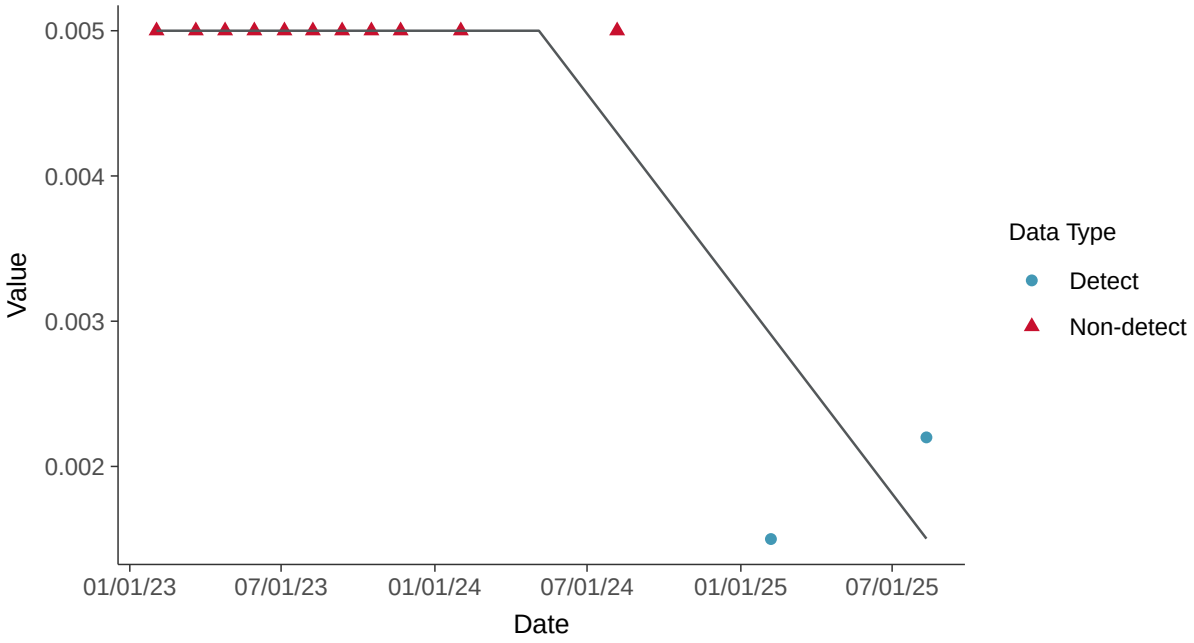
Trend Regression: Piecewise Linear-Linear

Nickel, MW-16A (mg/l)



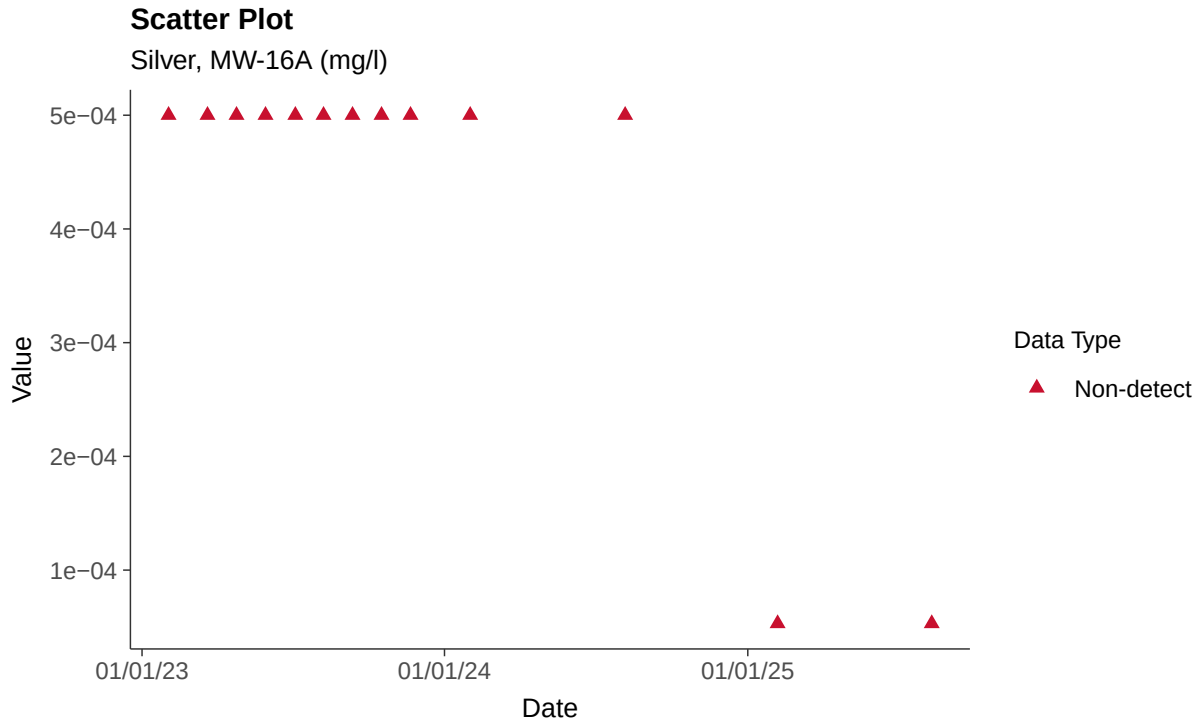
Trend Regression: Piecewise Linear-Linear-Linear

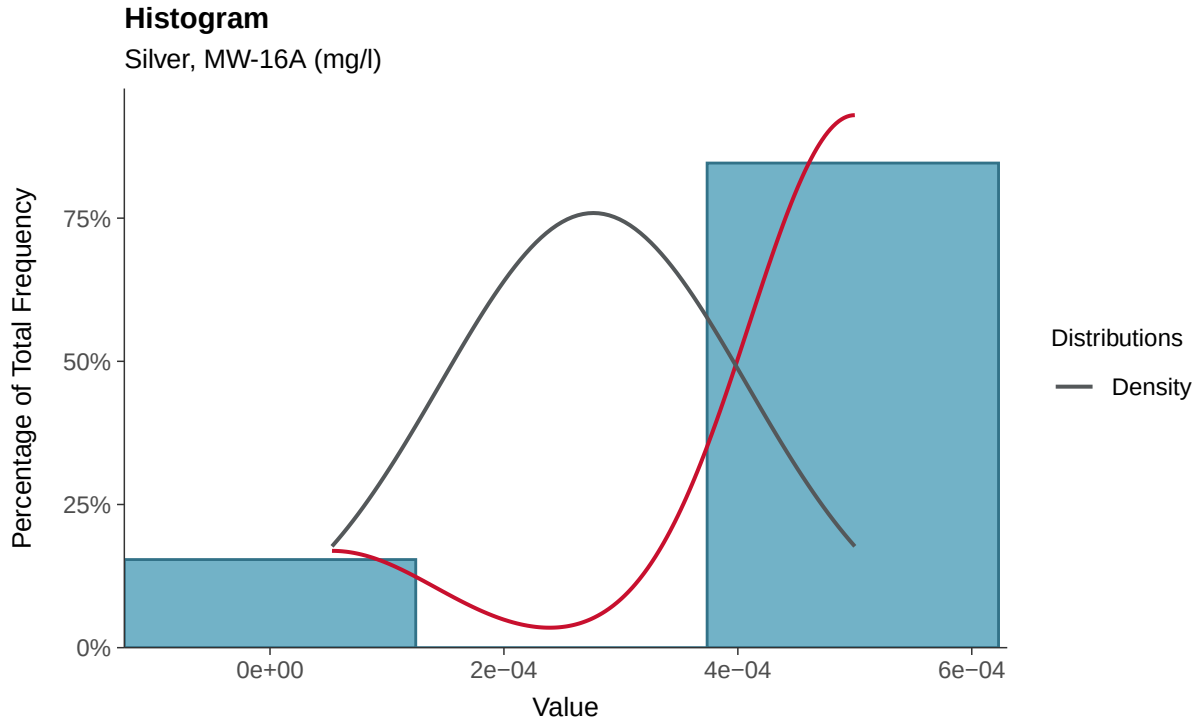
Nickel, MW-16A (mg/l)



Part 115: Silver, MW-16A

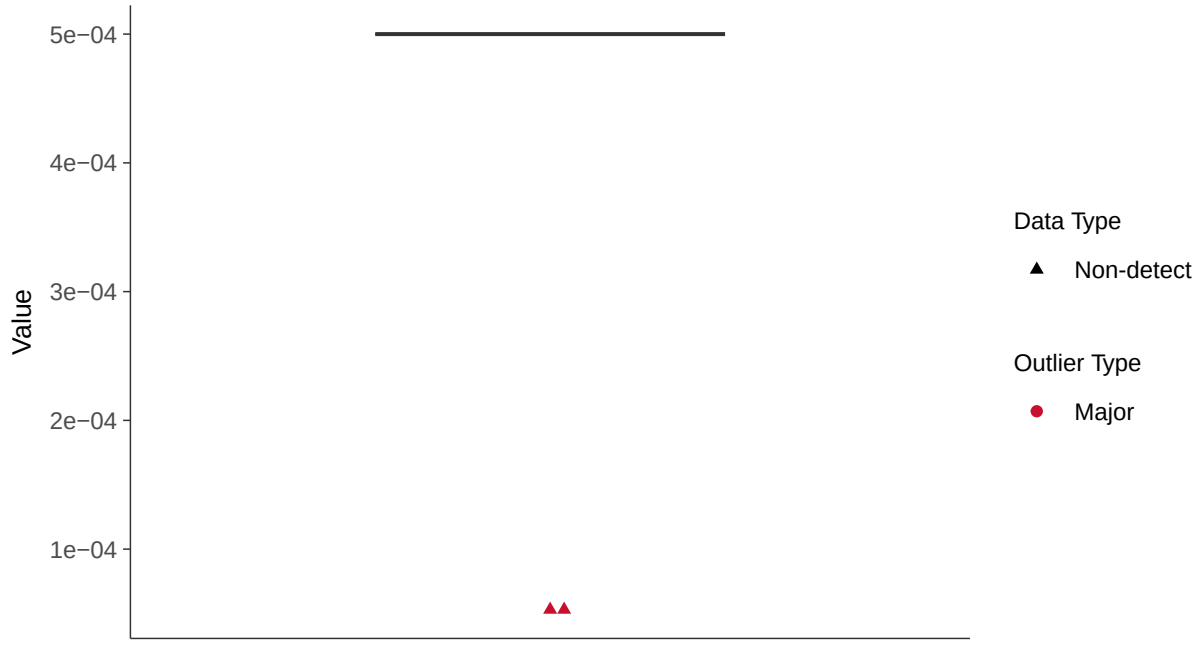
ID: 25_5_123





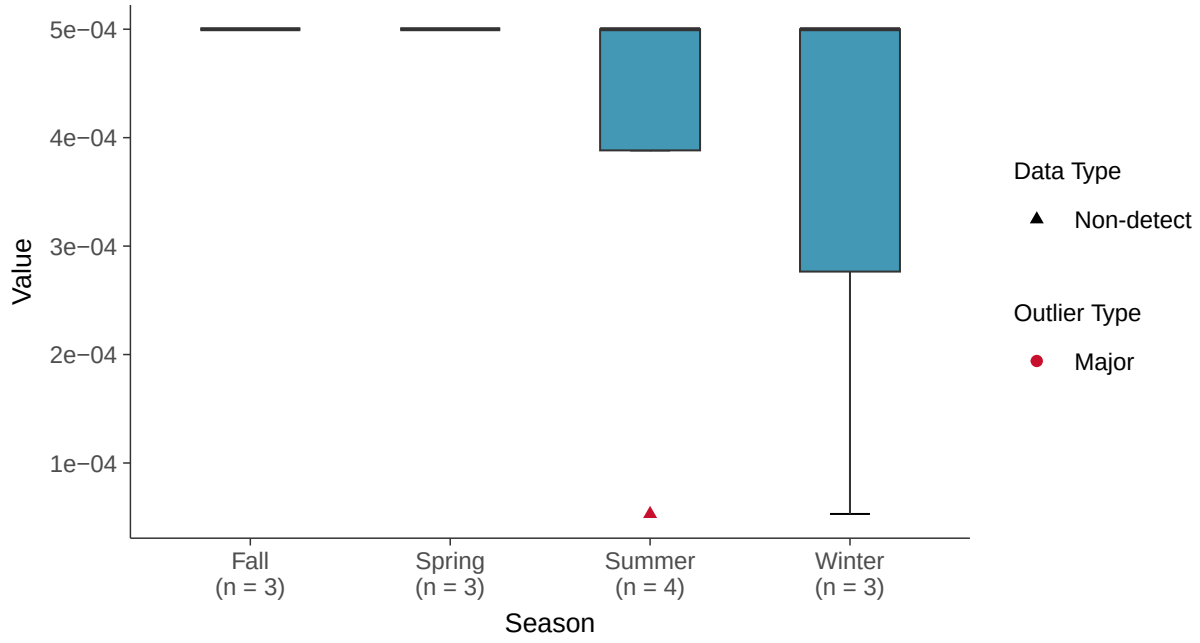
Boxplot

Silver, MW-16A (mg/l)



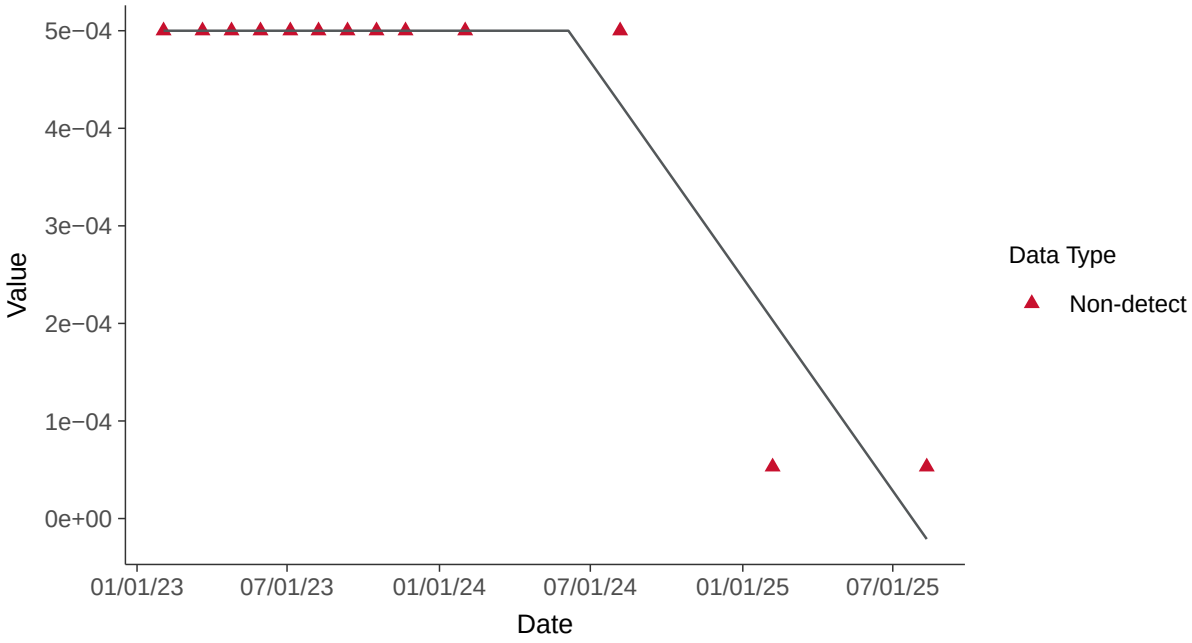
Boxplot by Season

Silver, MW-16A (mg/l)



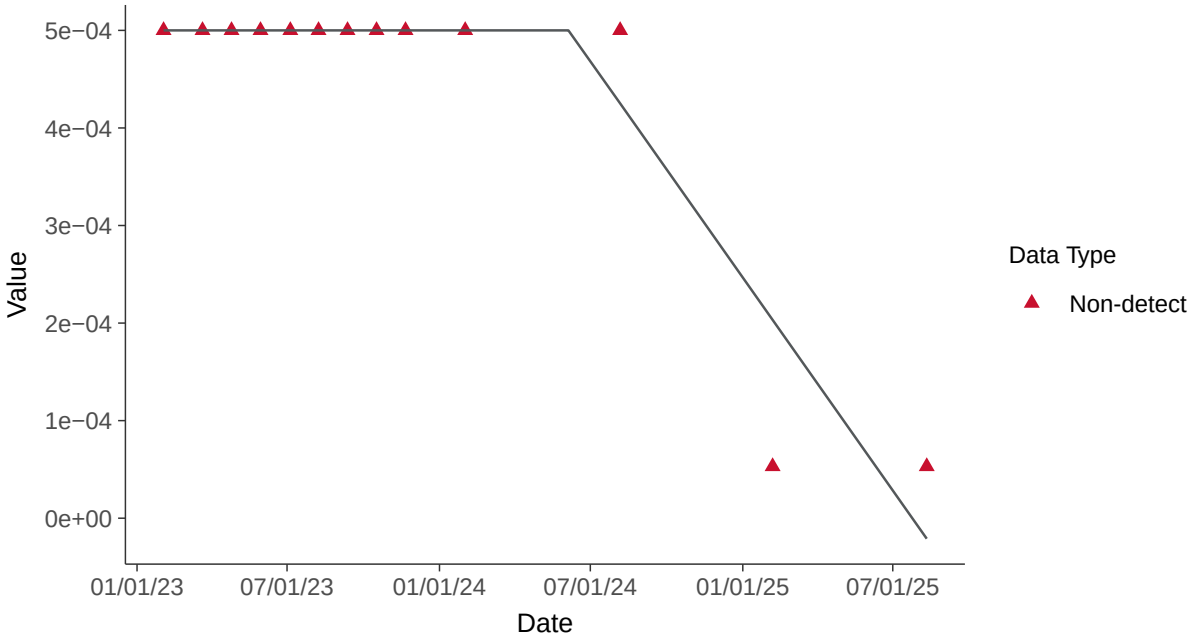
Trend Regression: Piecewise Linear-Linear

Silver, MW-16A (mg/l)



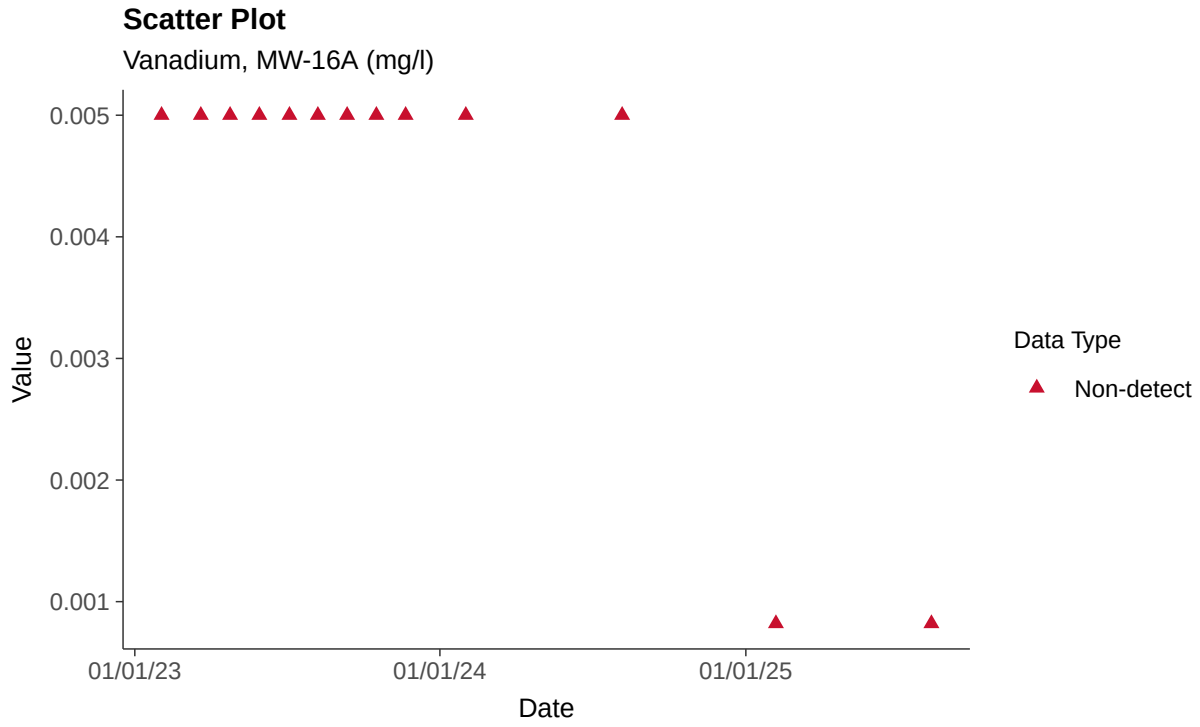
Trend Regression: Piecewise Linear-Linear-Linear

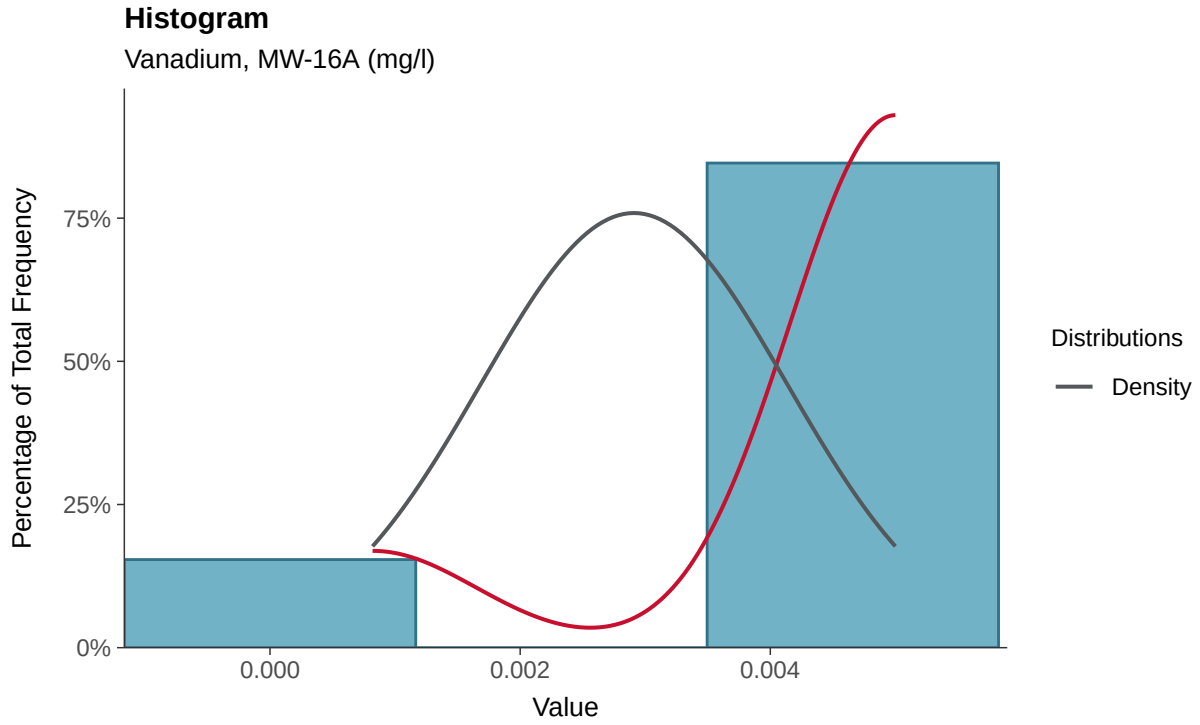
Silver, MW-16A (mg/l)



Part 115: Vanadium, MW-16A

ID: 25_5_128



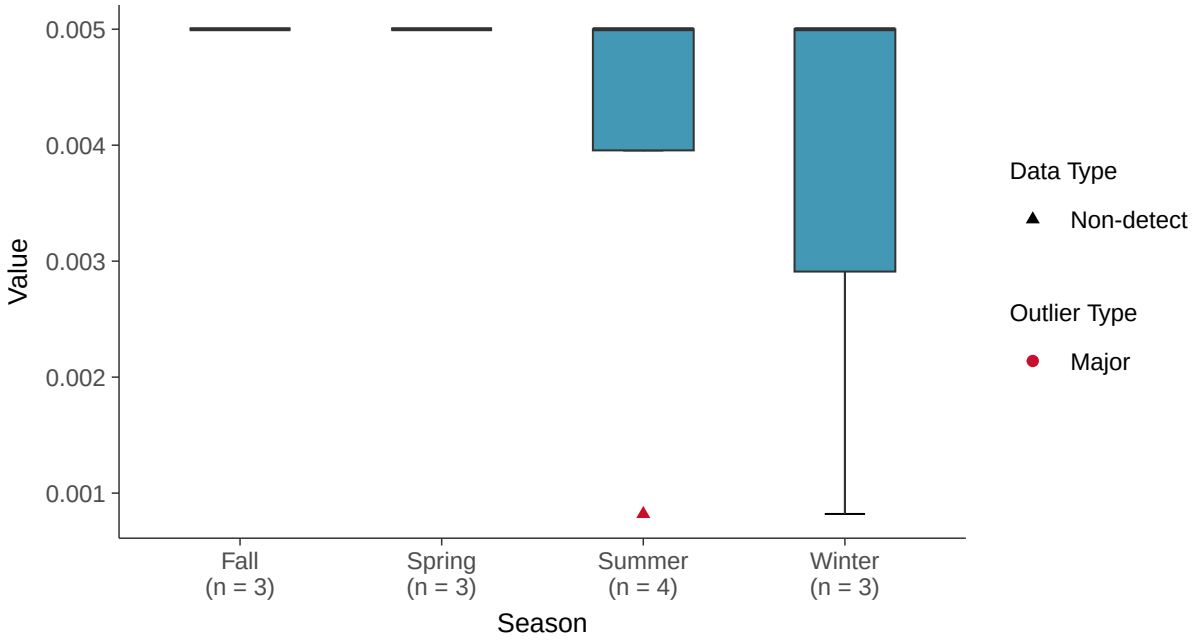


Boxplot

Vanadium, MW-16A (mg/l)

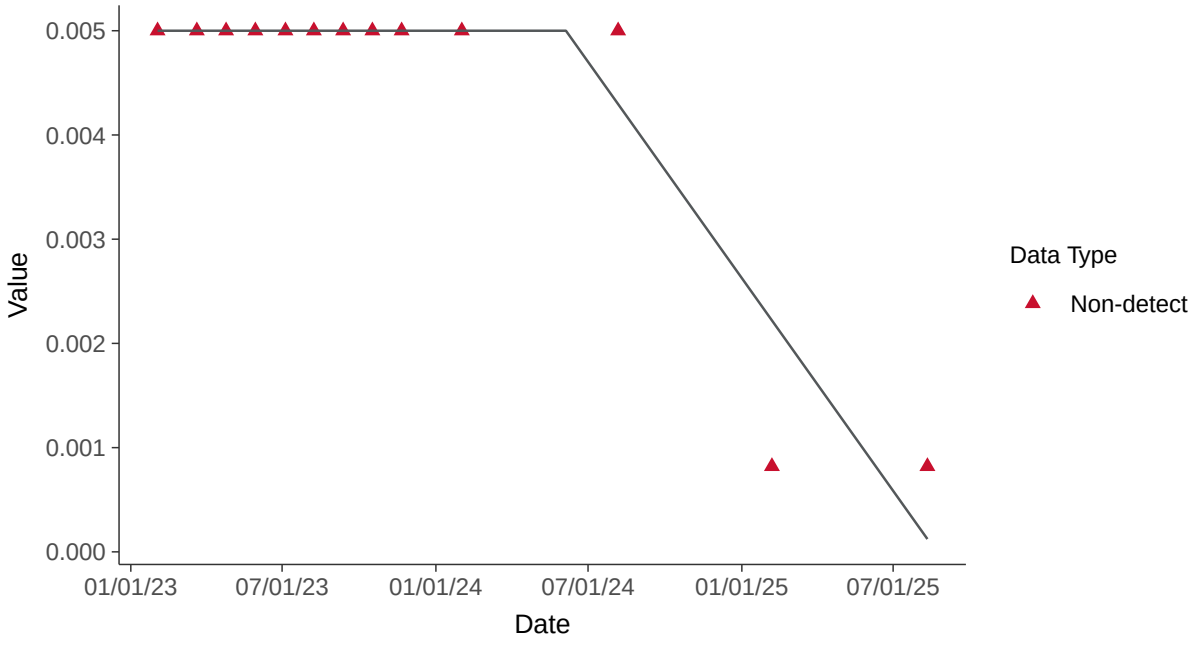
Boxplot by Season

Vanadium, MW-16A (mg/l)



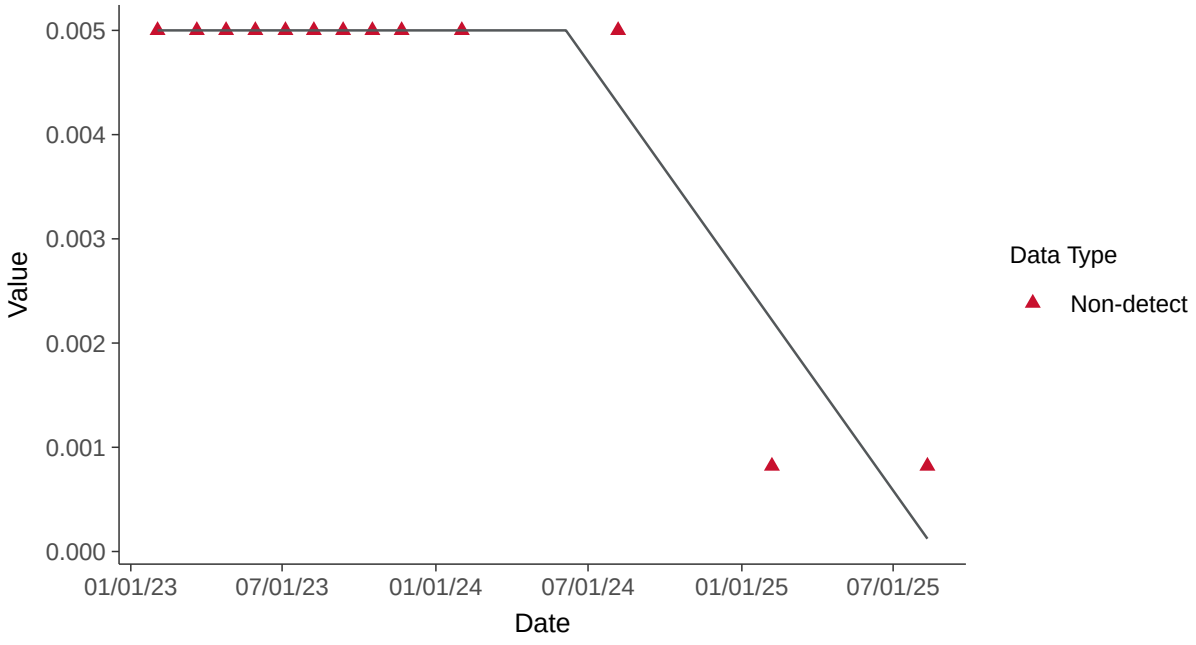
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-16A (mg/l)



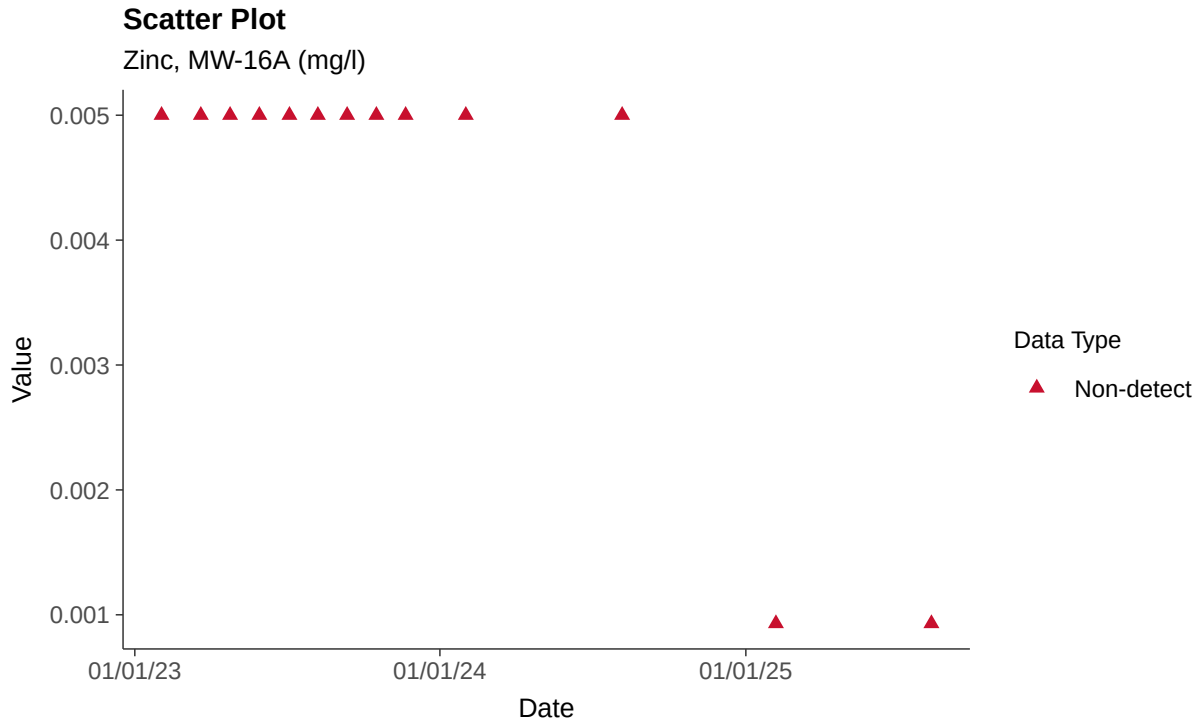
Trend Regression: Piecewise Linear-Linear-Linear

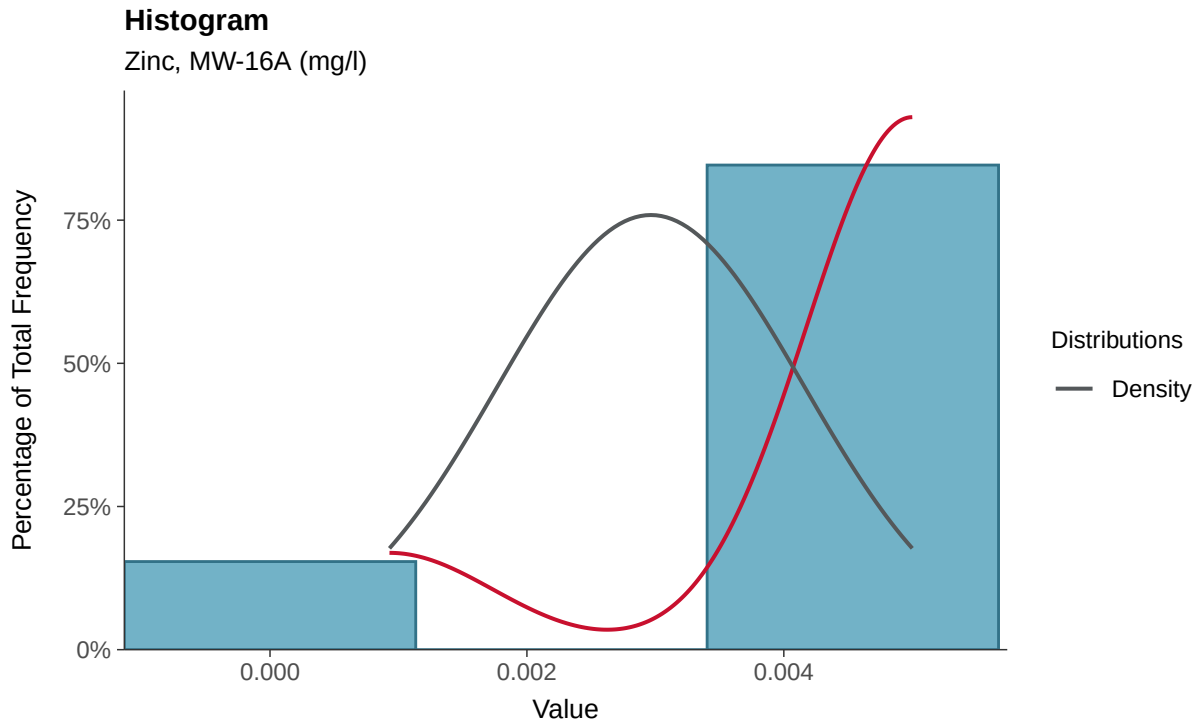
Vanadium, MW-16A (mg/l)



Part 115: Zinc, MW-16A

ID: 25_5_129



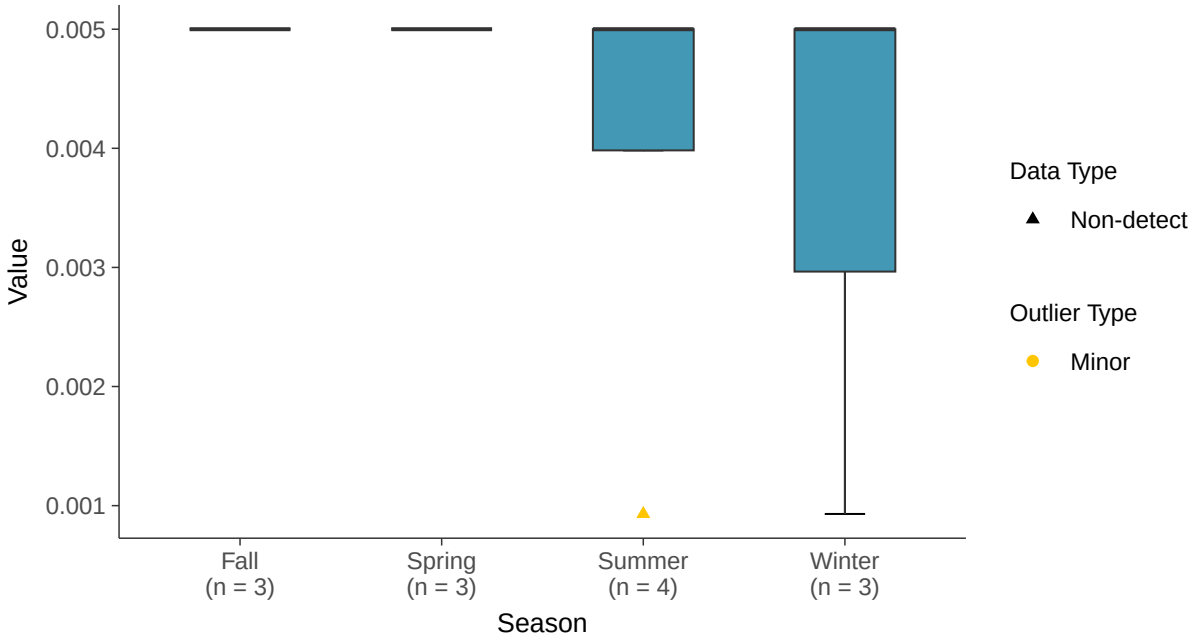


Boxplot

Zinc, MW-16A (mg/l)

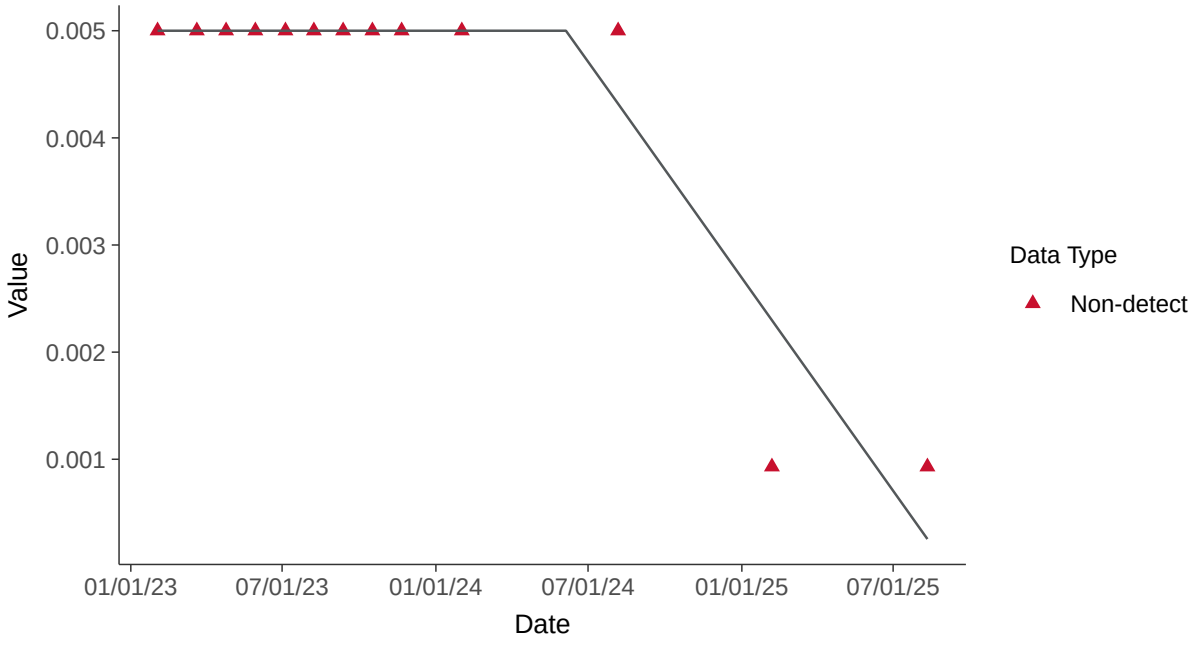
Boxplot by Season

Zinc, MW-16A (mg/l)



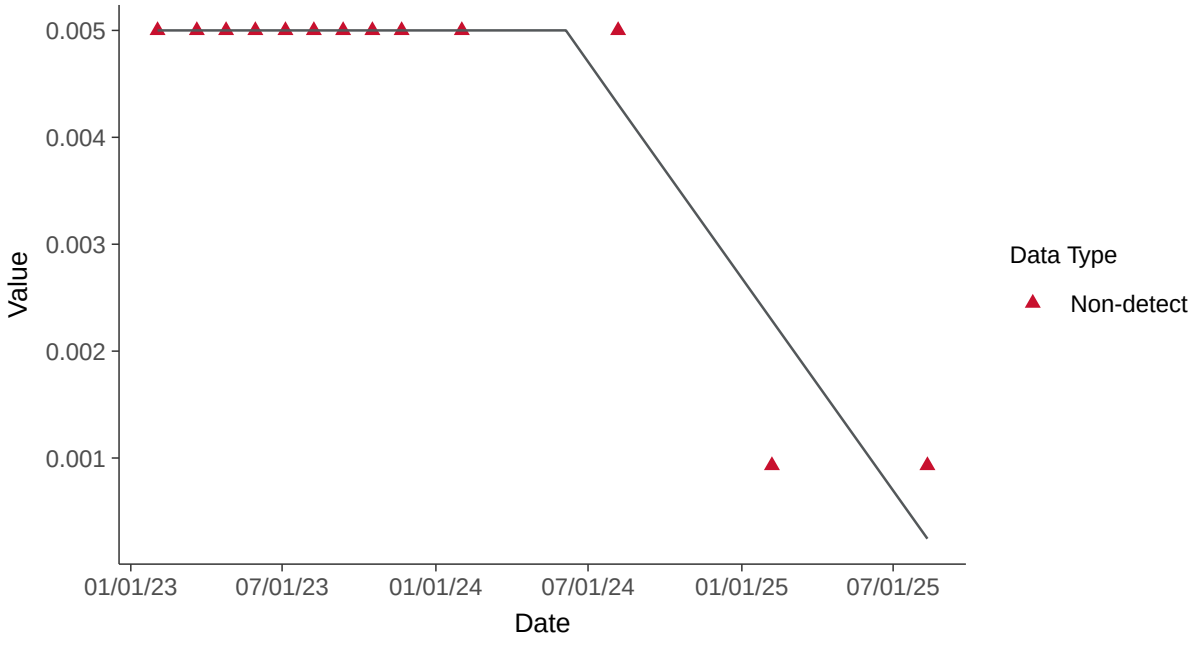
Trend Regression: Piecewise Linear-Linear

Zinc, MW-16A (mg/l)



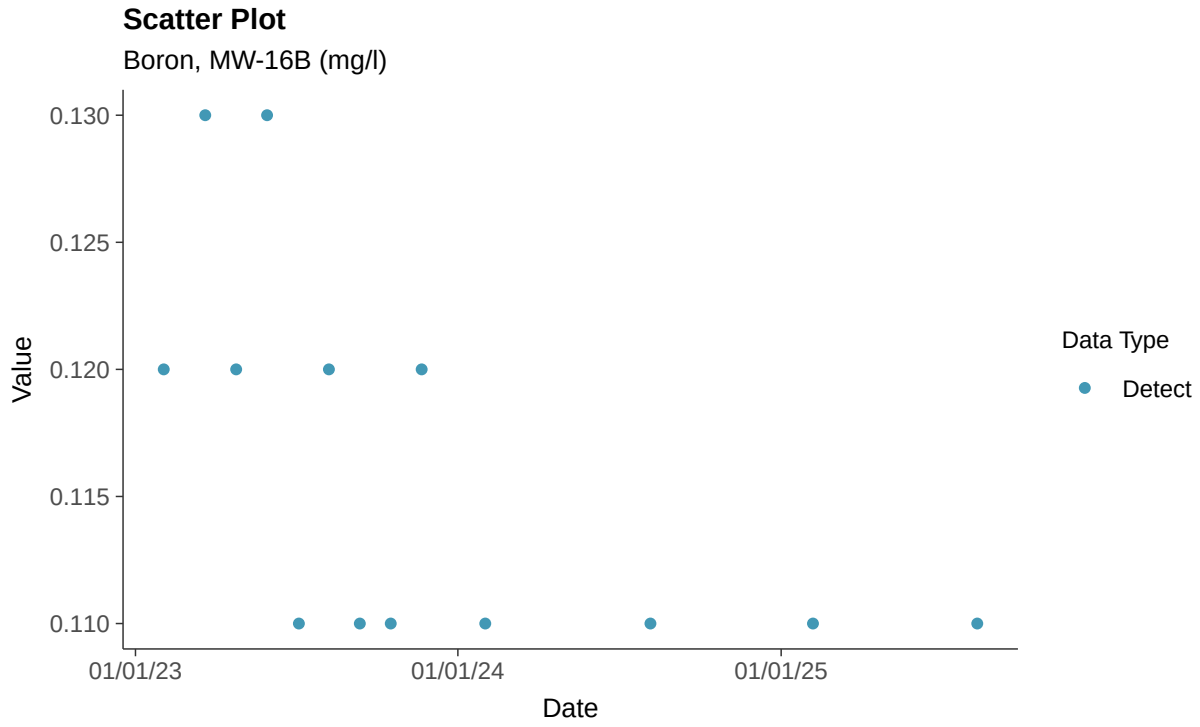
Trend Regression: Piecewise Linear-Linear-Linear

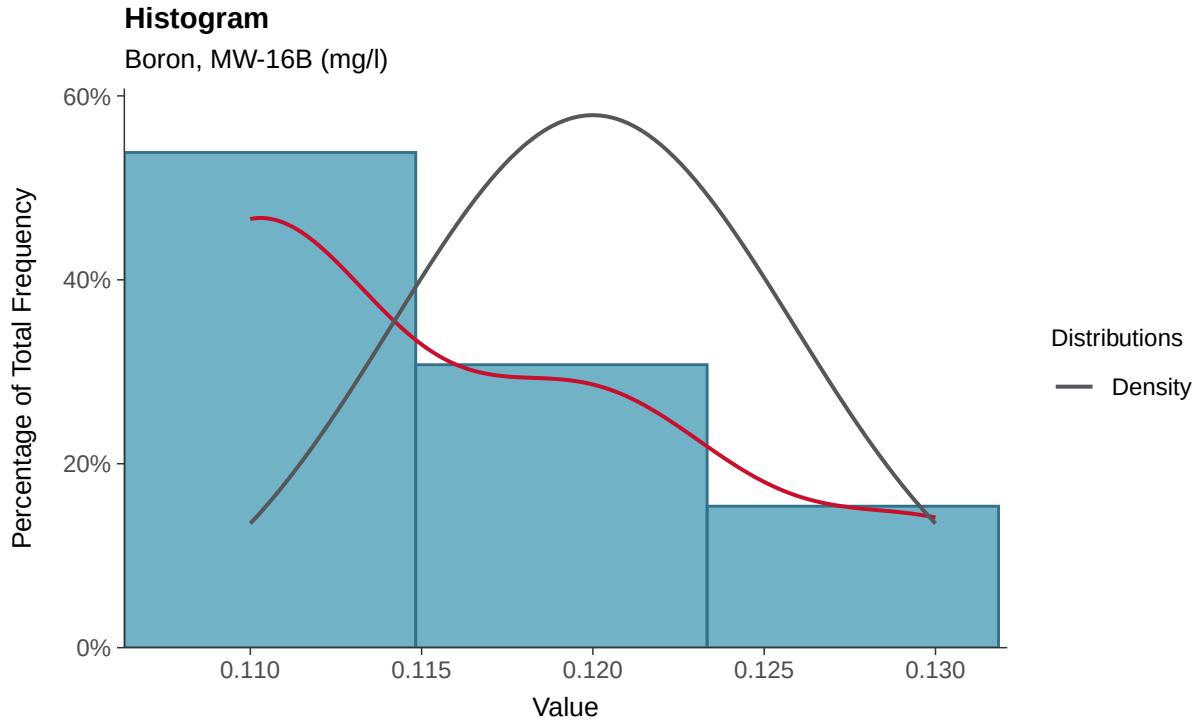
Zinc, MW-16A (mg/l)



Appendix III: Boron, MW-16B

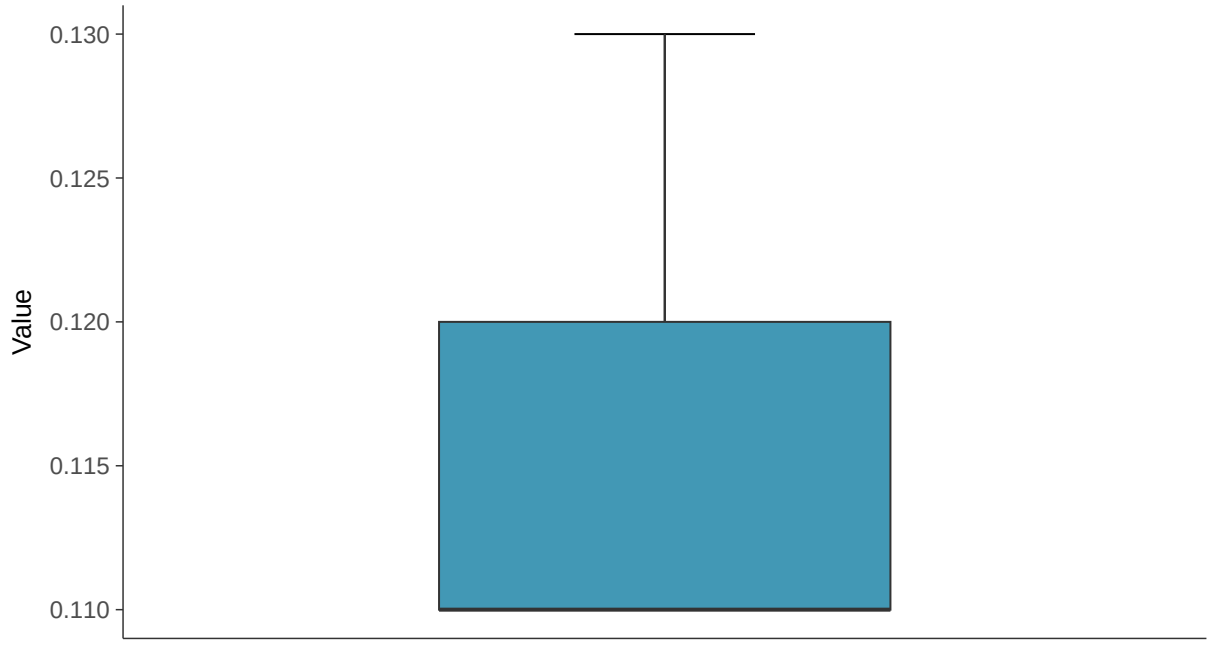
ID: 26_2_105





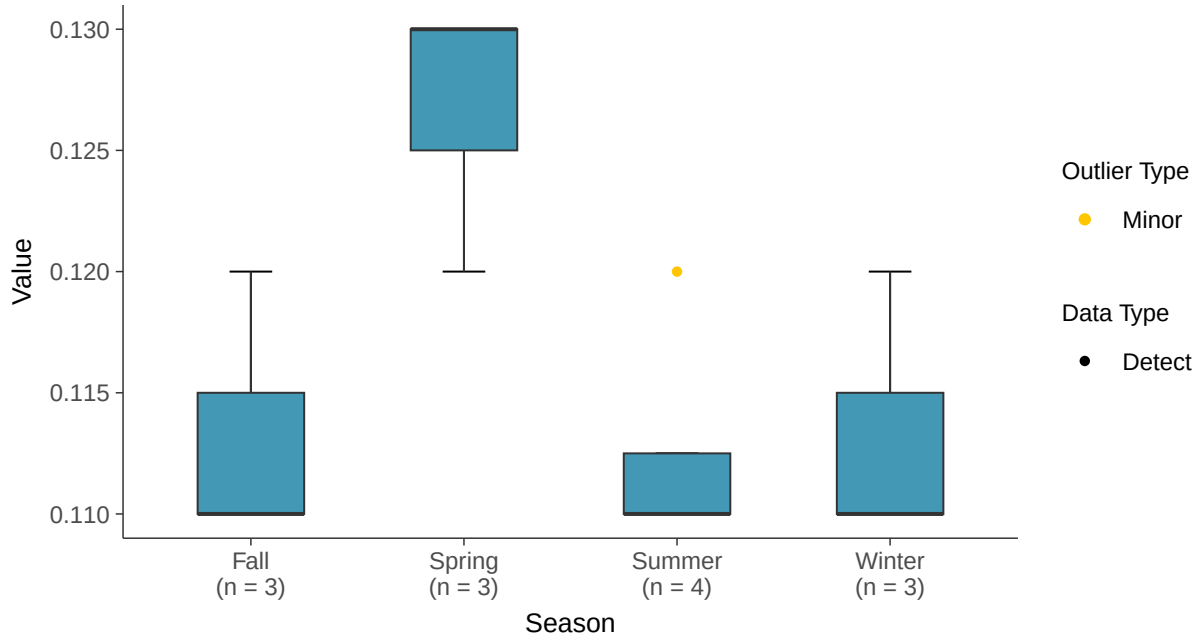
Boxplot

Boron, MW-16B (mg/l)



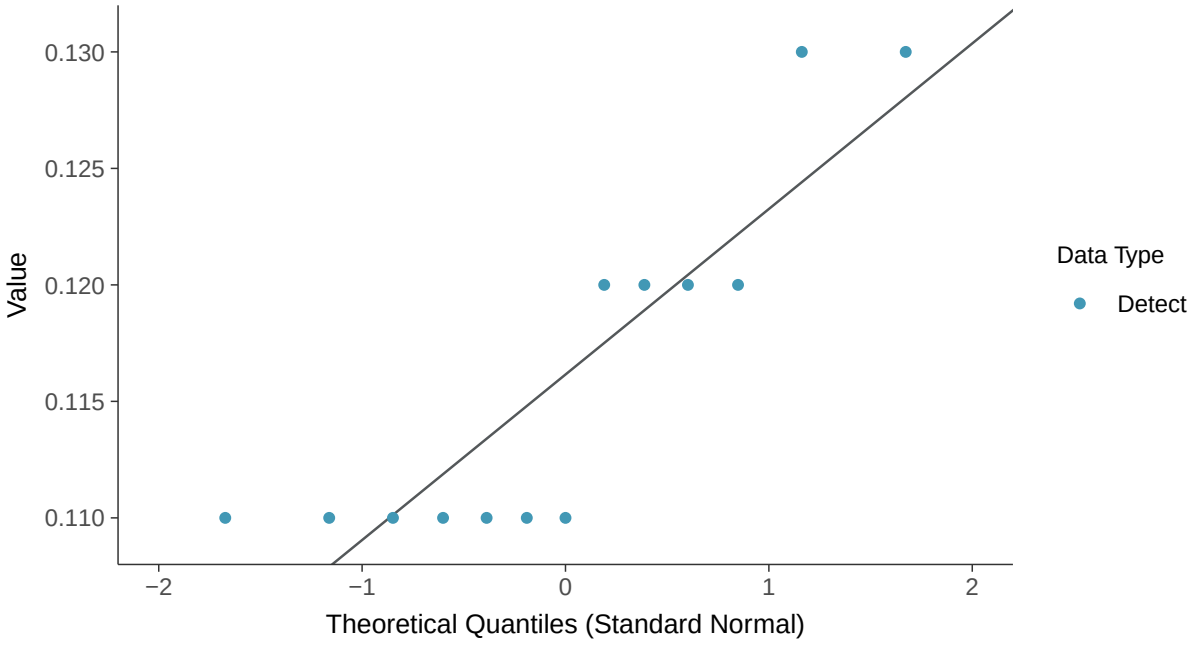
Boxplot by Season

Boron, MW-16B (mg/l)



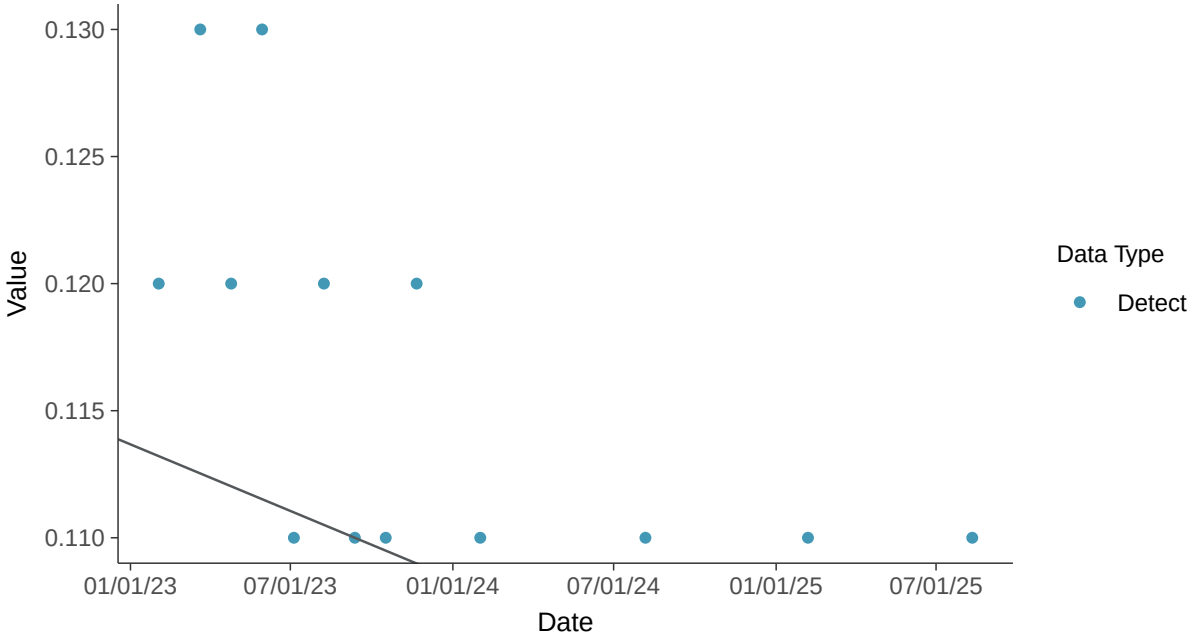
Normal Q-Q plot

Boron, MW-16B (mg/l)



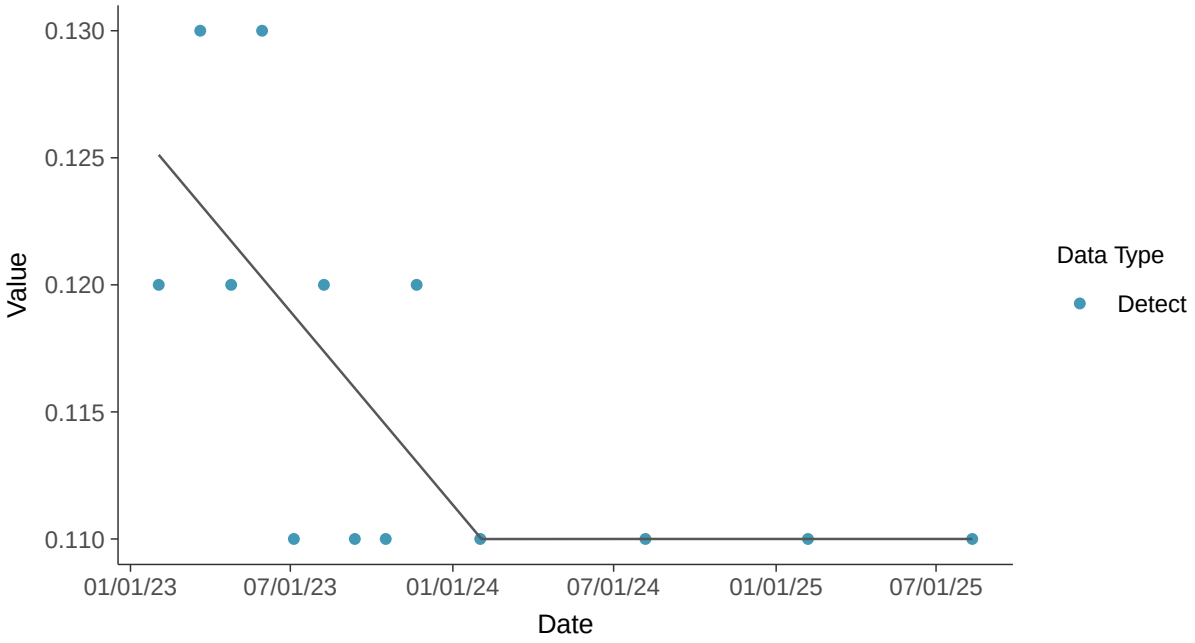
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Boron, MW-16B (mg/l)



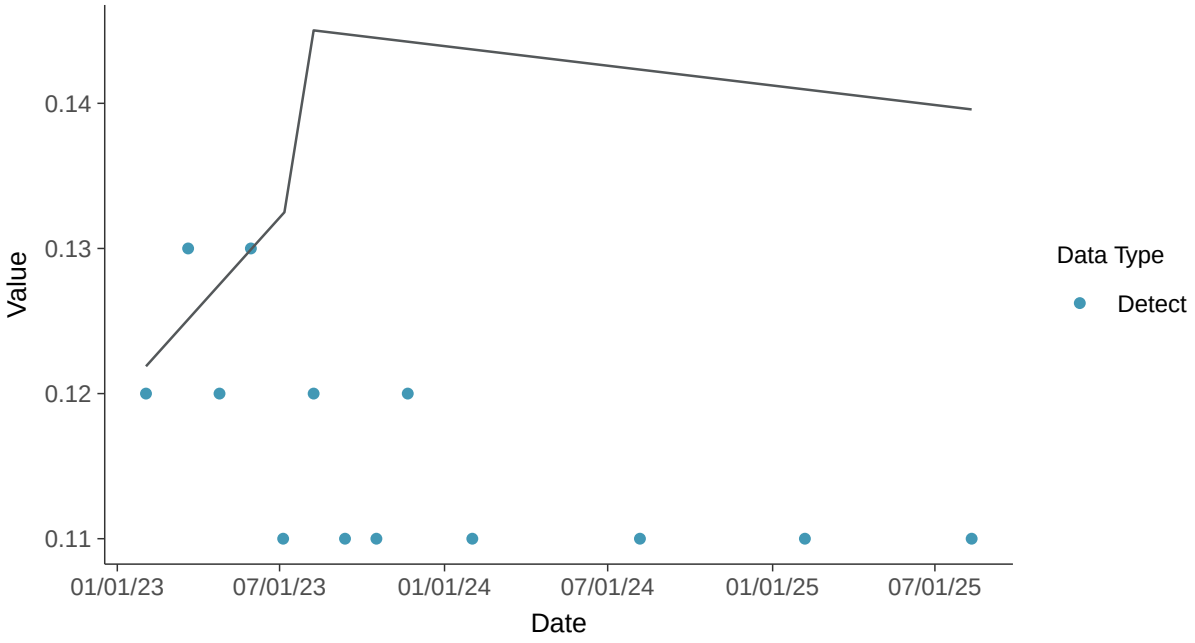
Trend Regression: Piecewise Linear-Linear

Boron, MW-16B (mg/l)



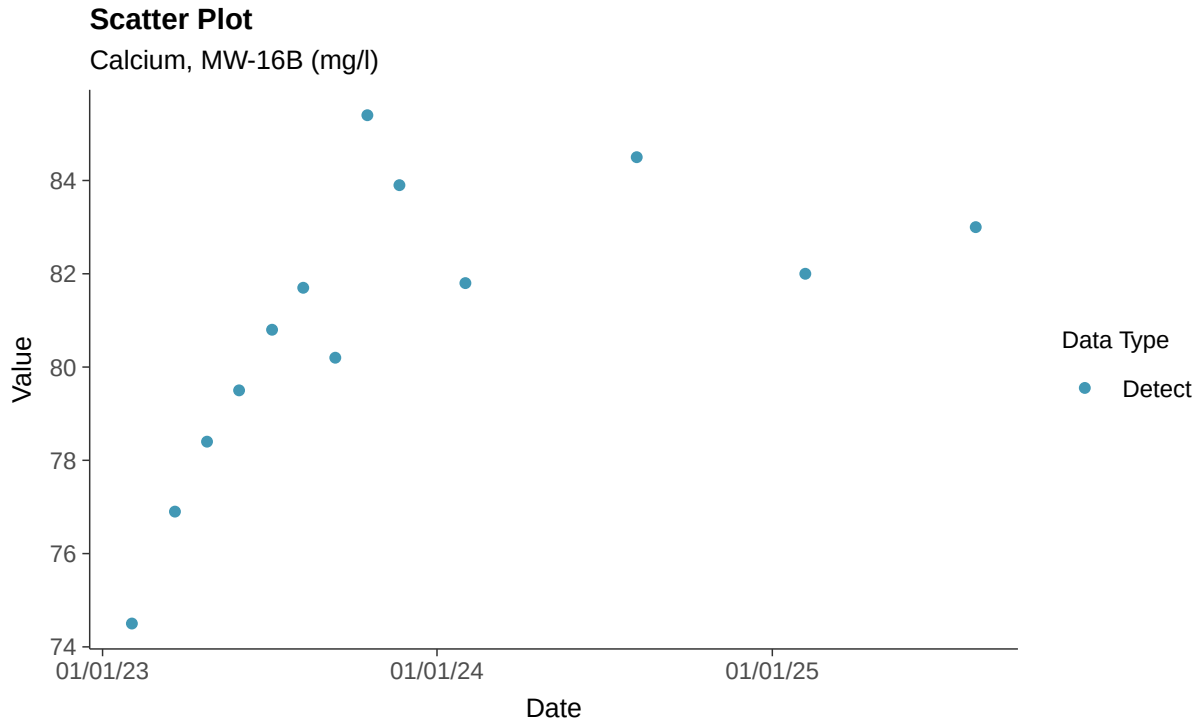
Trend Regression: Piecewise Linear-Linear-Linear

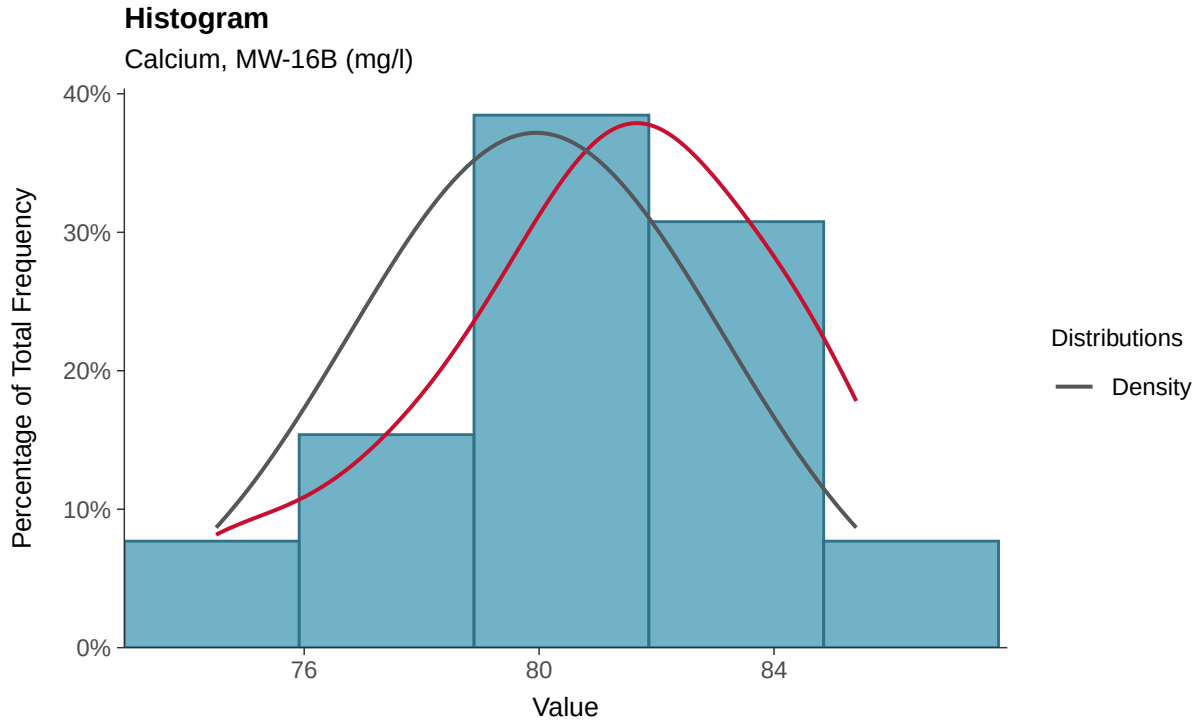
Boron, MW-16B (mg/l)



Appendix III: Calcium, MW-16B

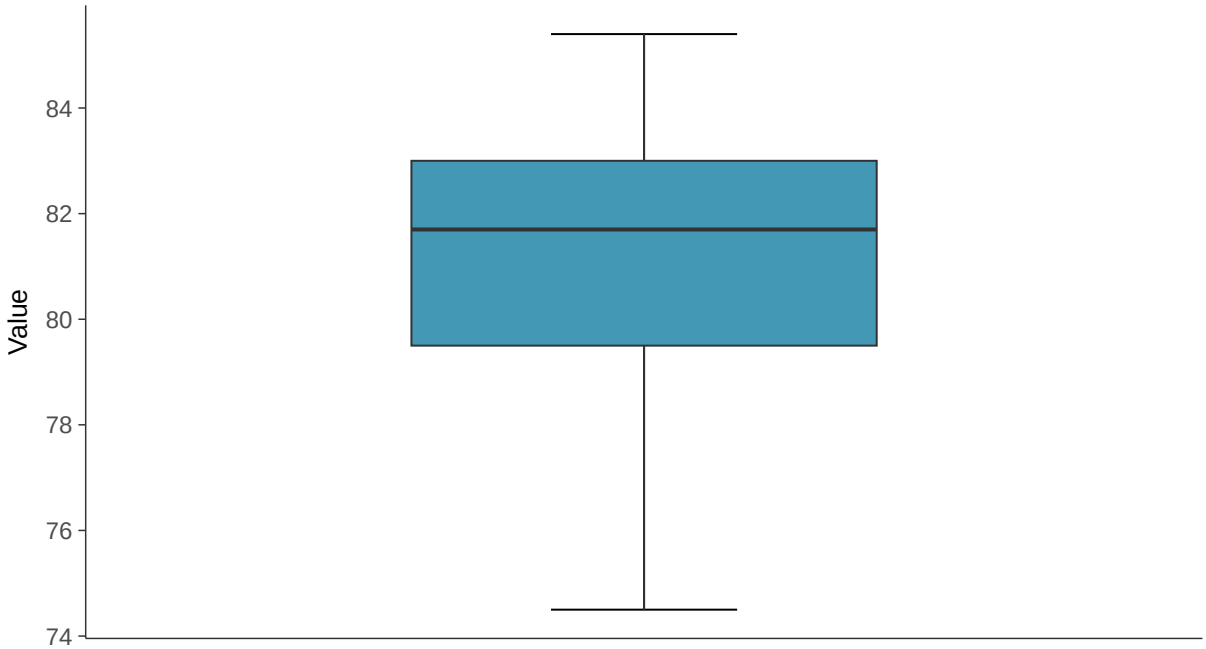
ID: 26_2_107





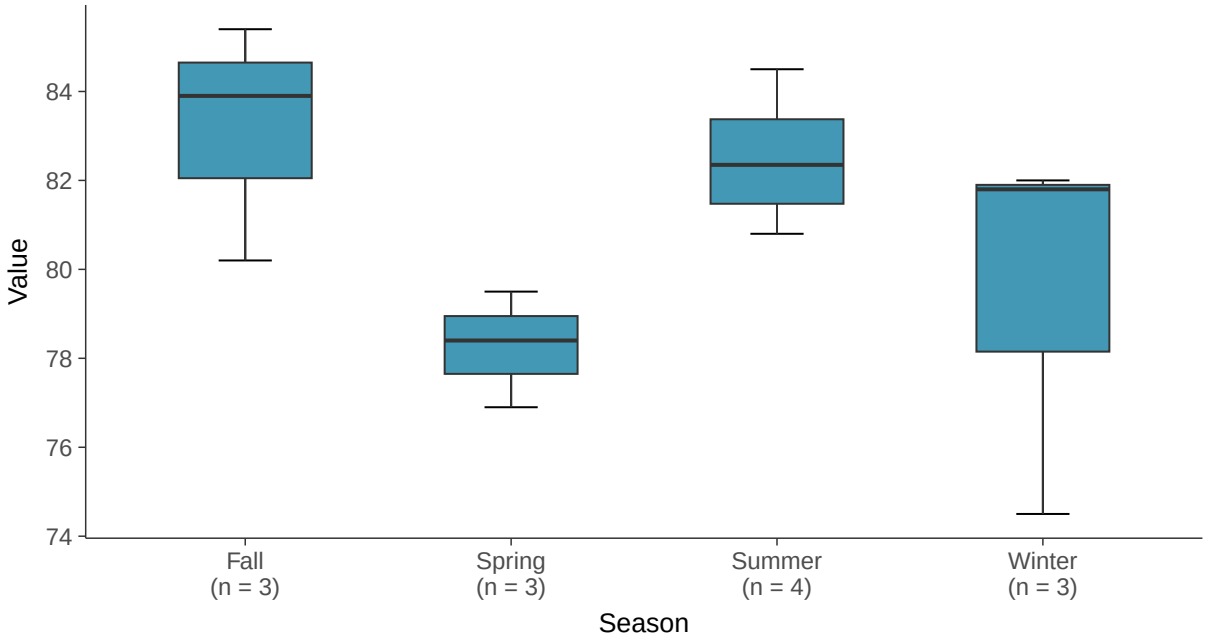
Boxplot

Calcium, MW-16B (mg/l)



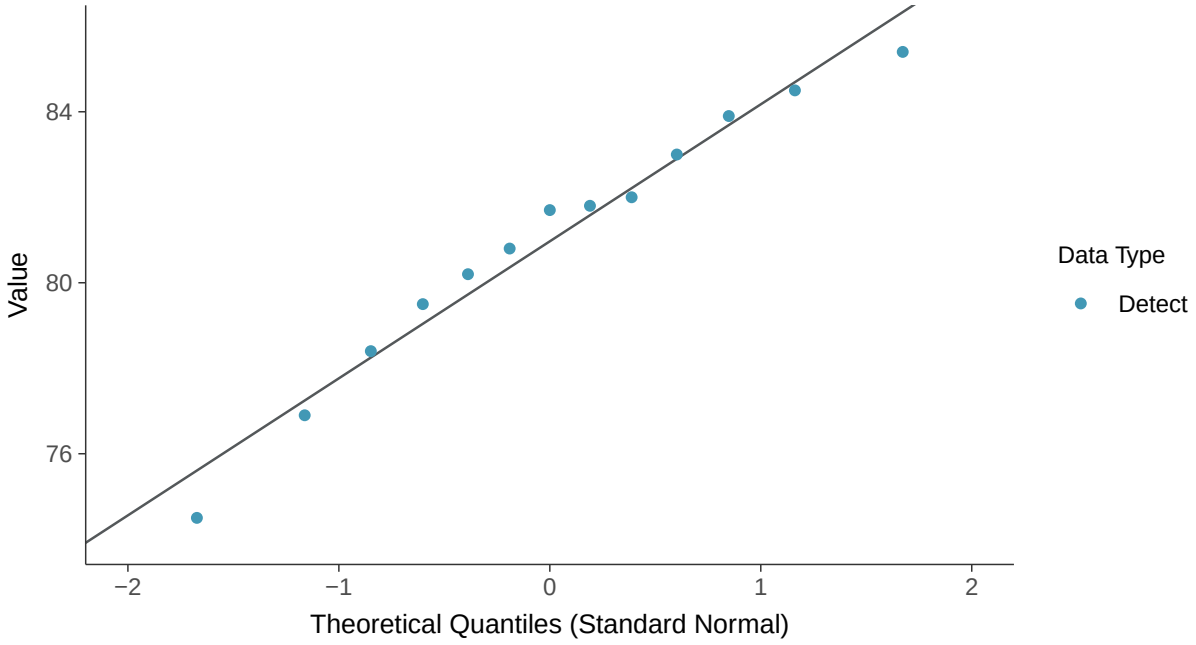
Boxplot by Season

Calcium, MW-16B (mg/l)



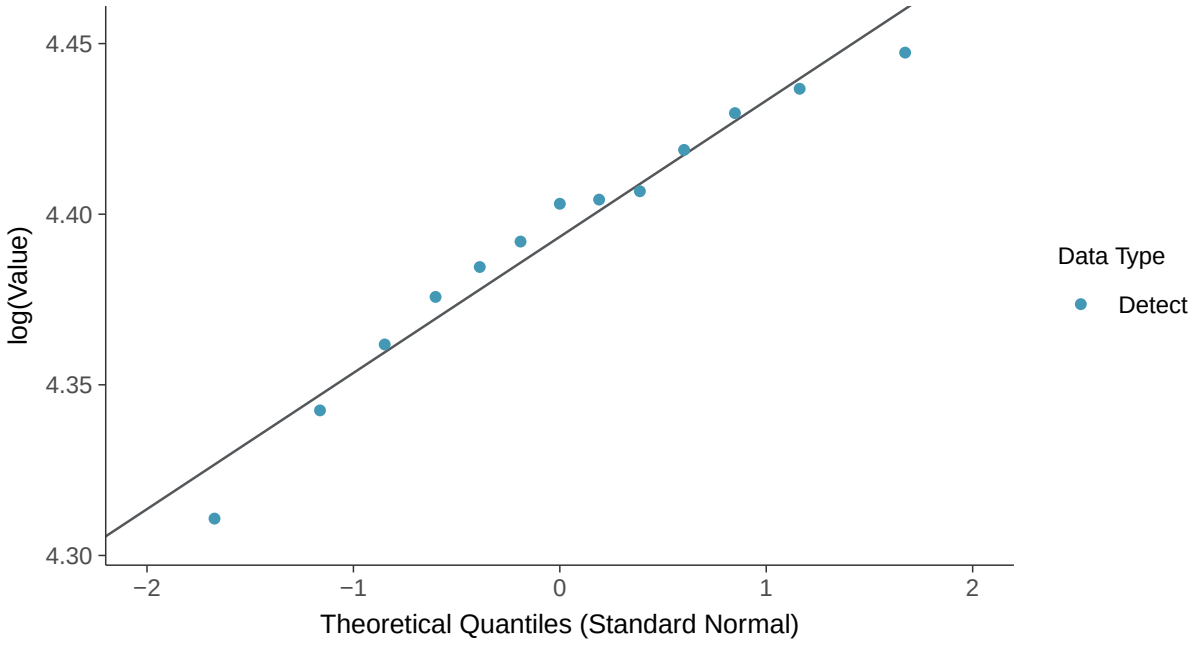
Normal Q-Q plot

Calcium, MW-16B (mg/l)



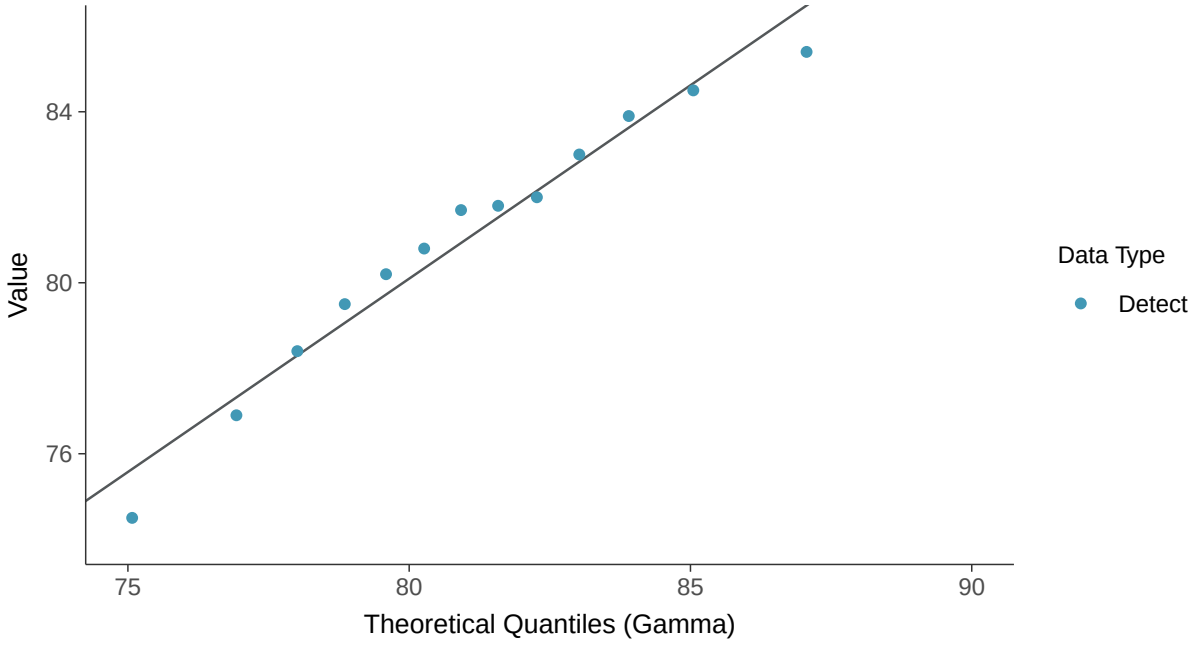
Lognormal Q-Q plot

Calcium, MW-16B (mg/l)



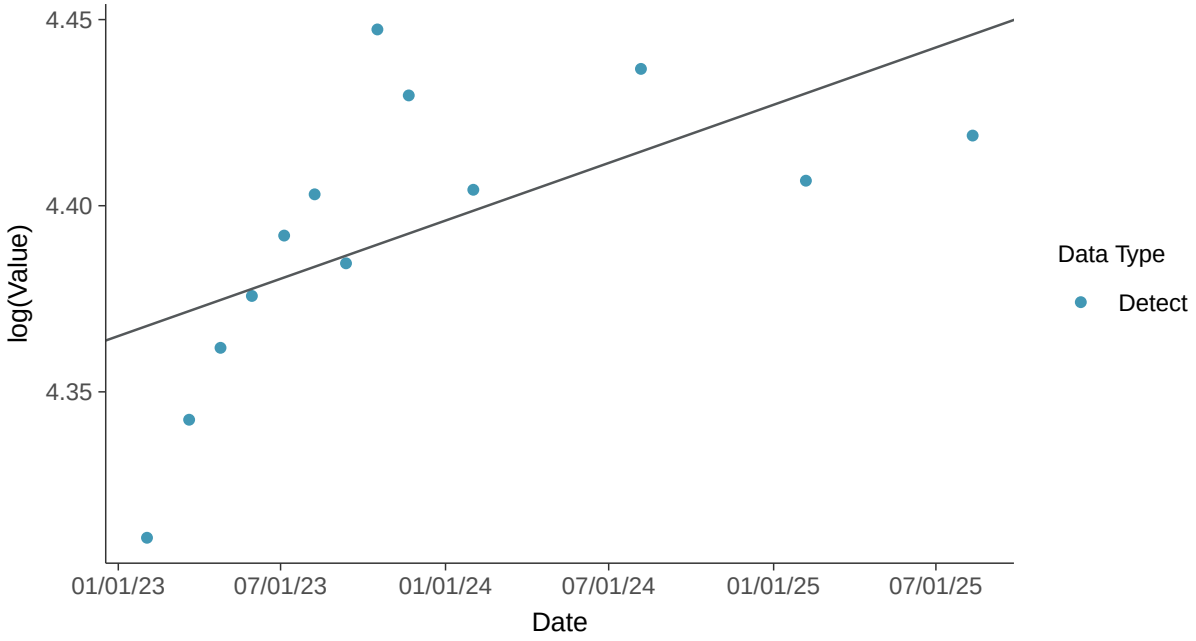
Gamma Q-Q plot

Calcium, MW-16B (mg/l)



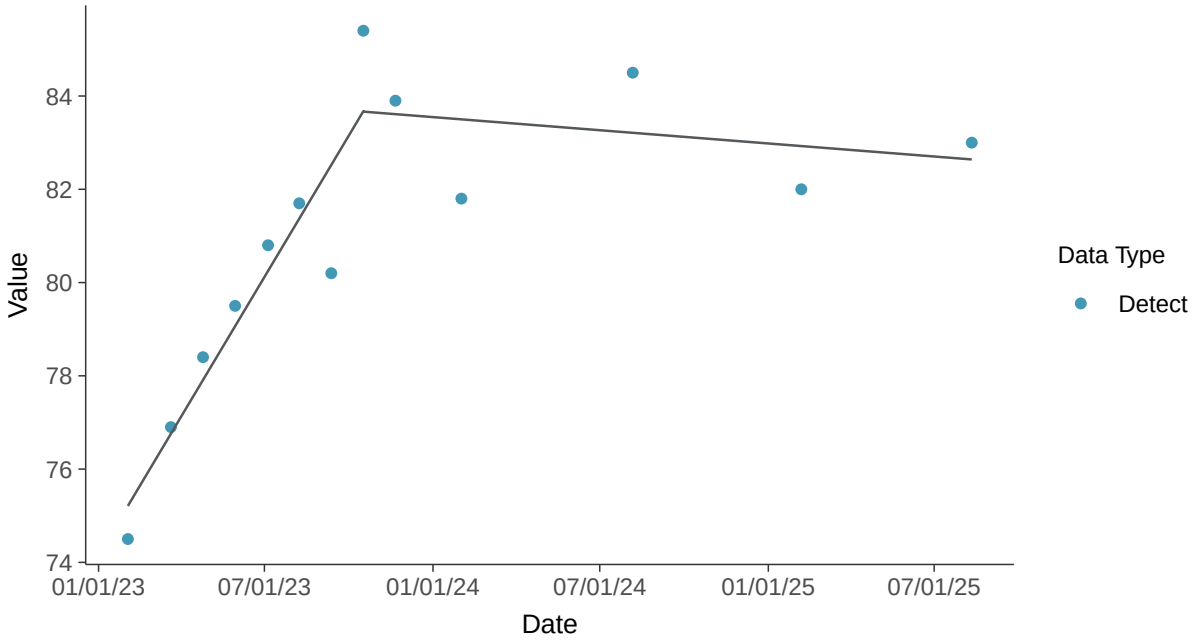
Trend Regression: Lognormal MLE

Calcium, MW-16B (mg/l)



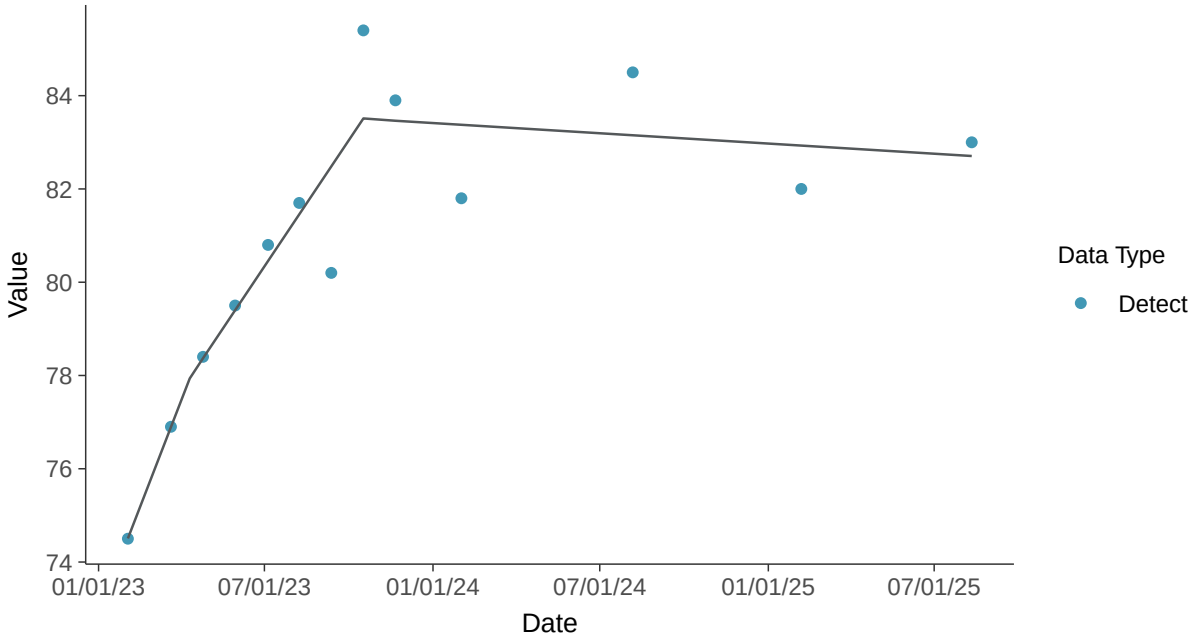
Trend Regression: Piecewise Linear-Linear

Calcium, MW-16B (mg/l)



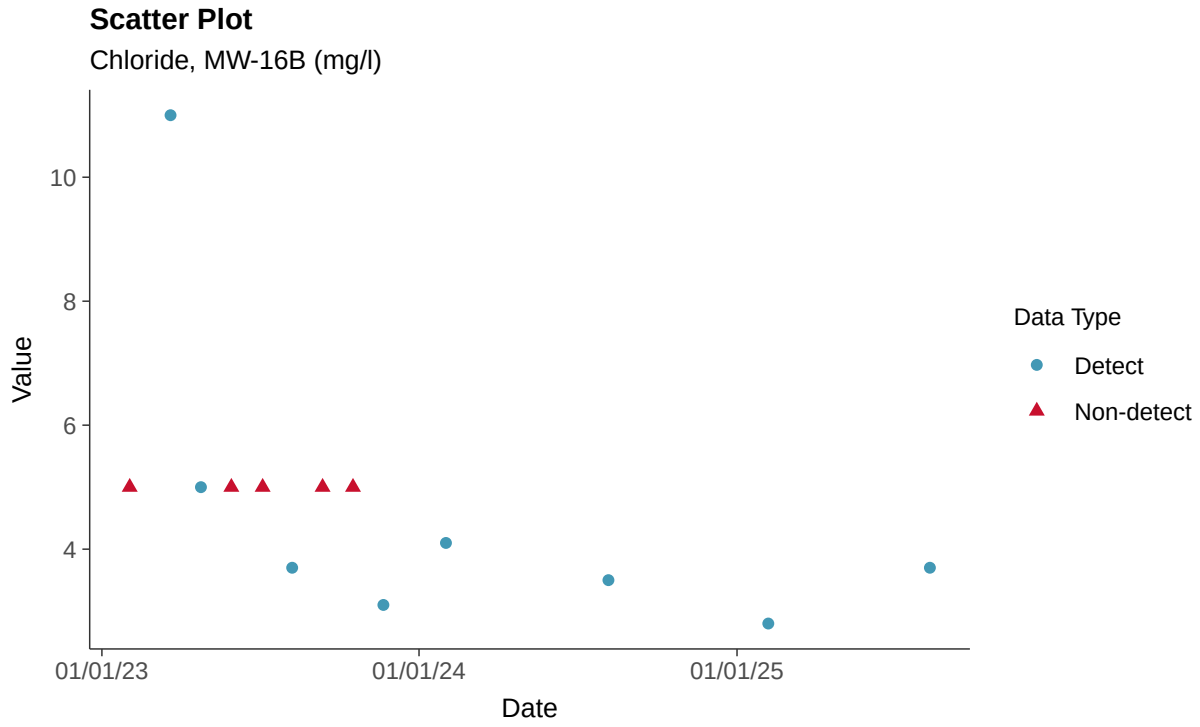
Trend Regression: Piecewise Linear-Linear-Linear

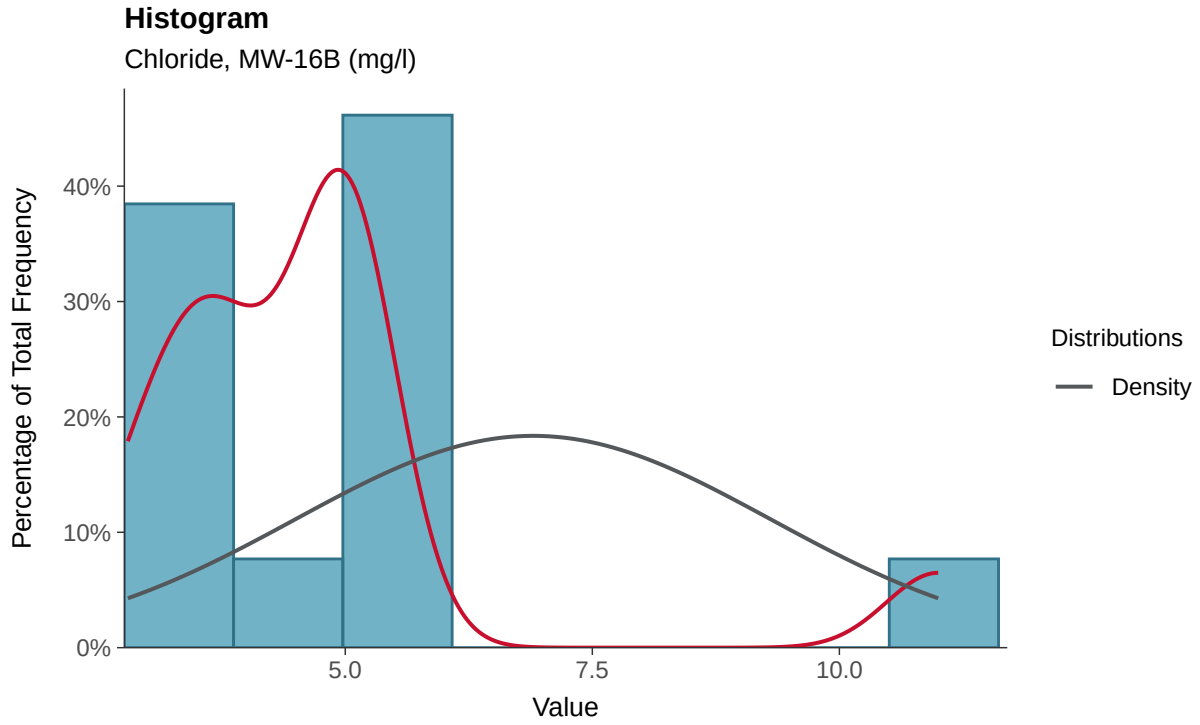
Calcium, MW-16B (mg/l)



Appendix III: Chloride, MW-16B

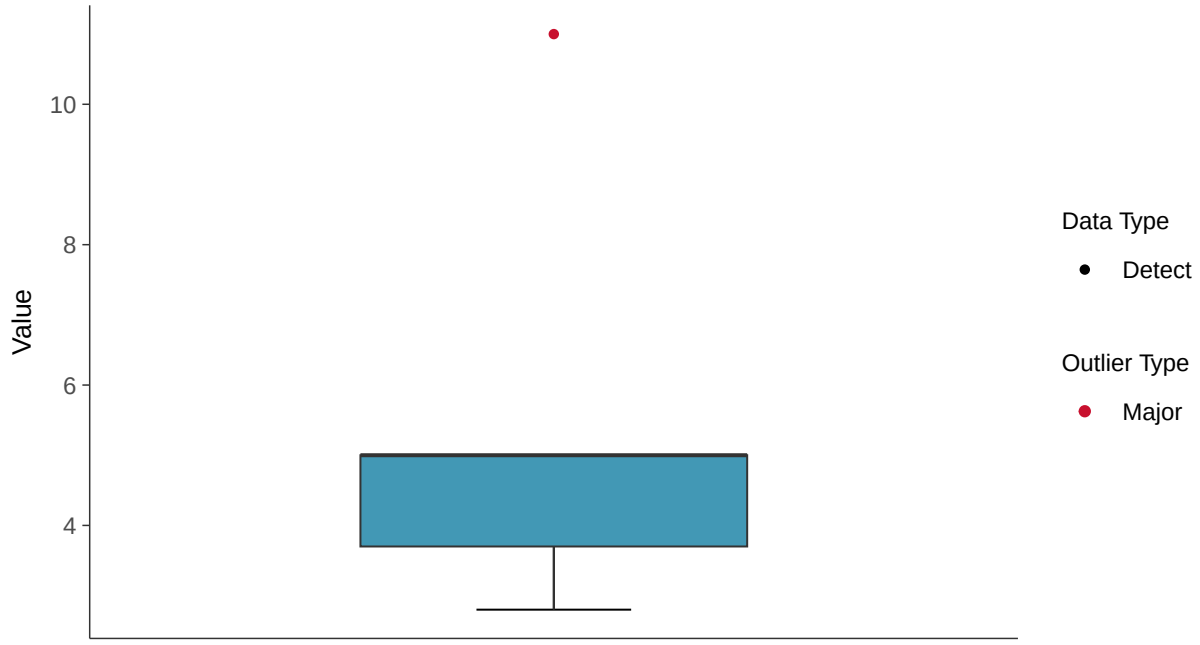
ID: 26_2_108





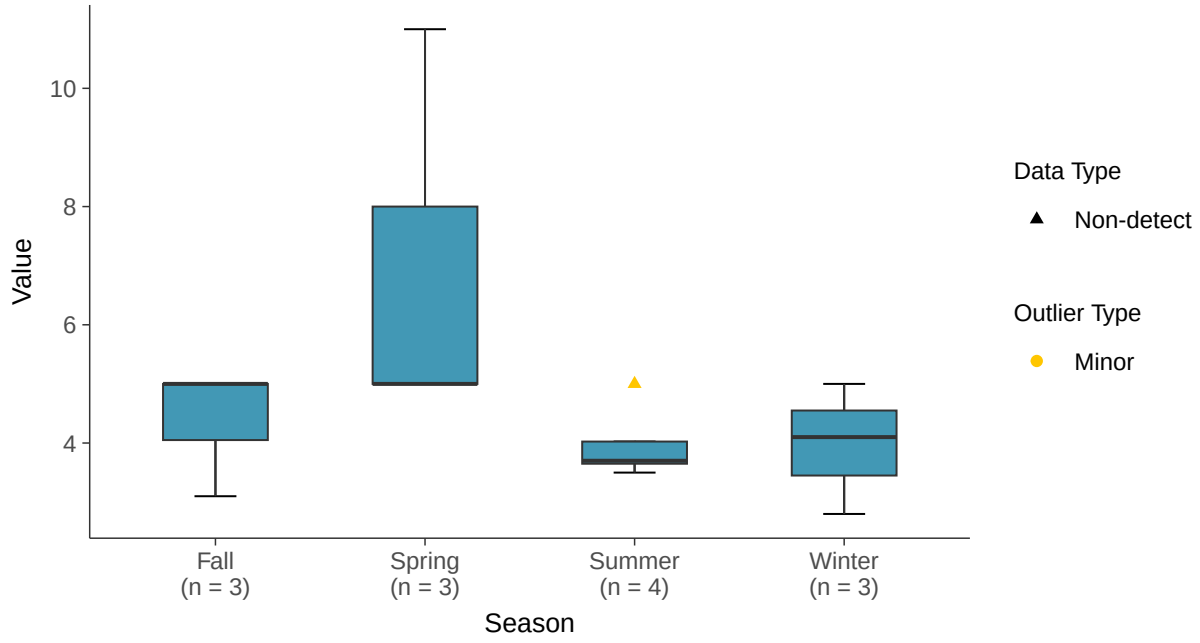
Boxplot

Chloride, MW-16B (mg/l)



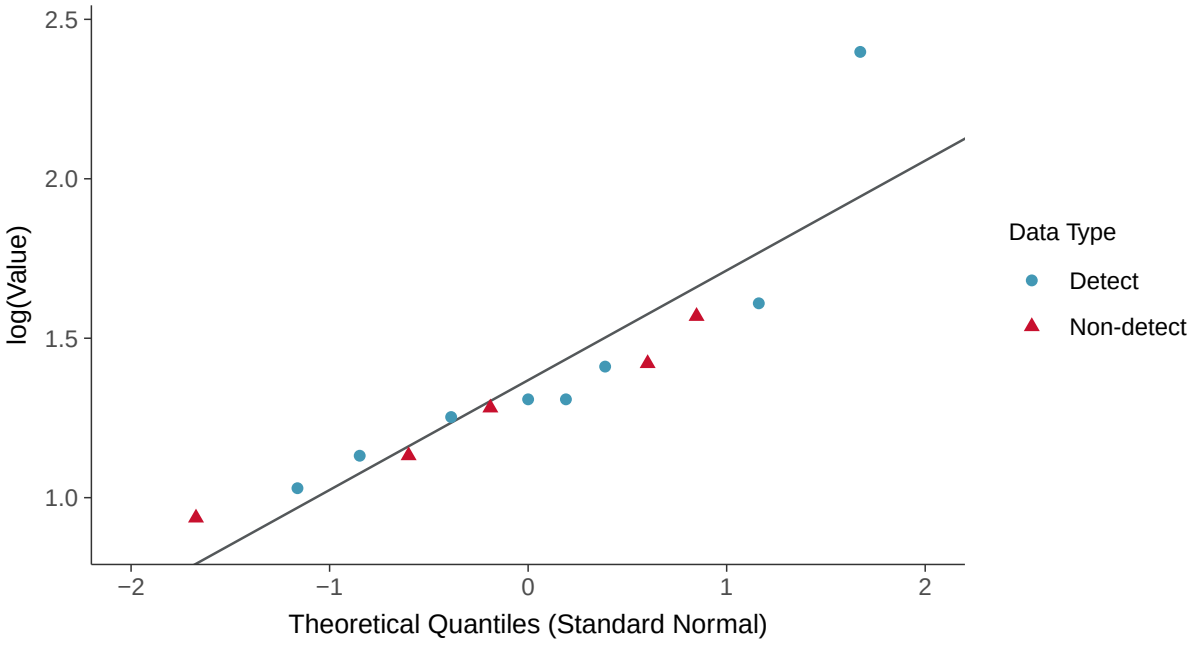
Boxplot by Season

Chloride, MW-16B (mg/l)



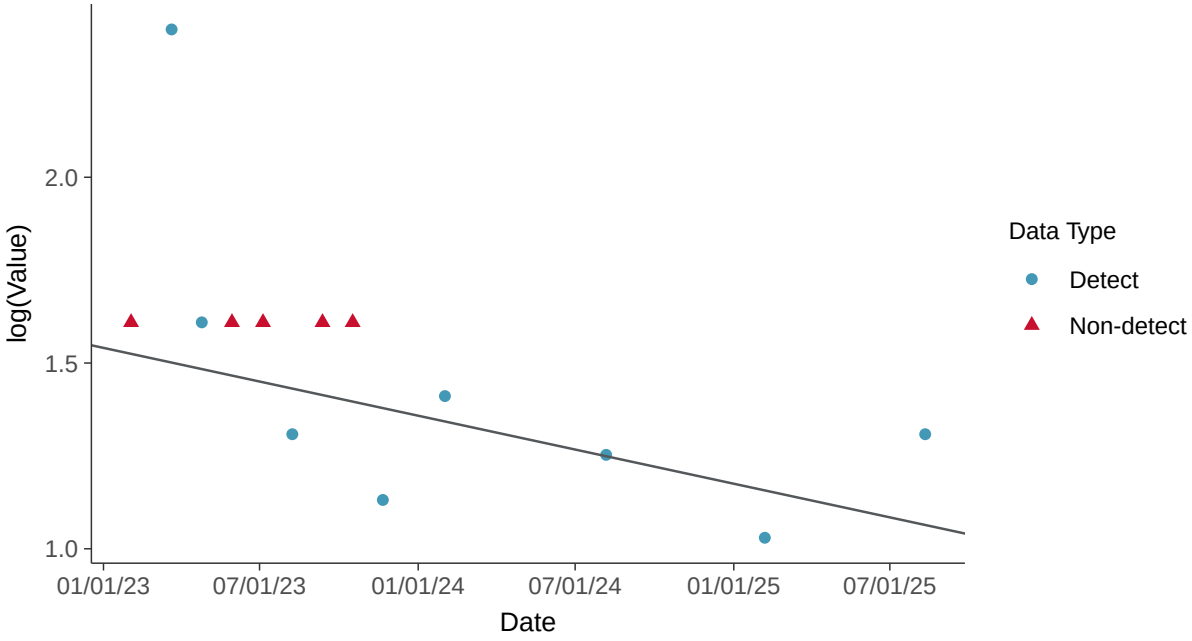
Lognormal Q-Q plot using ROS Imputed Estimates

Chloride, MW-16B (mg/l)



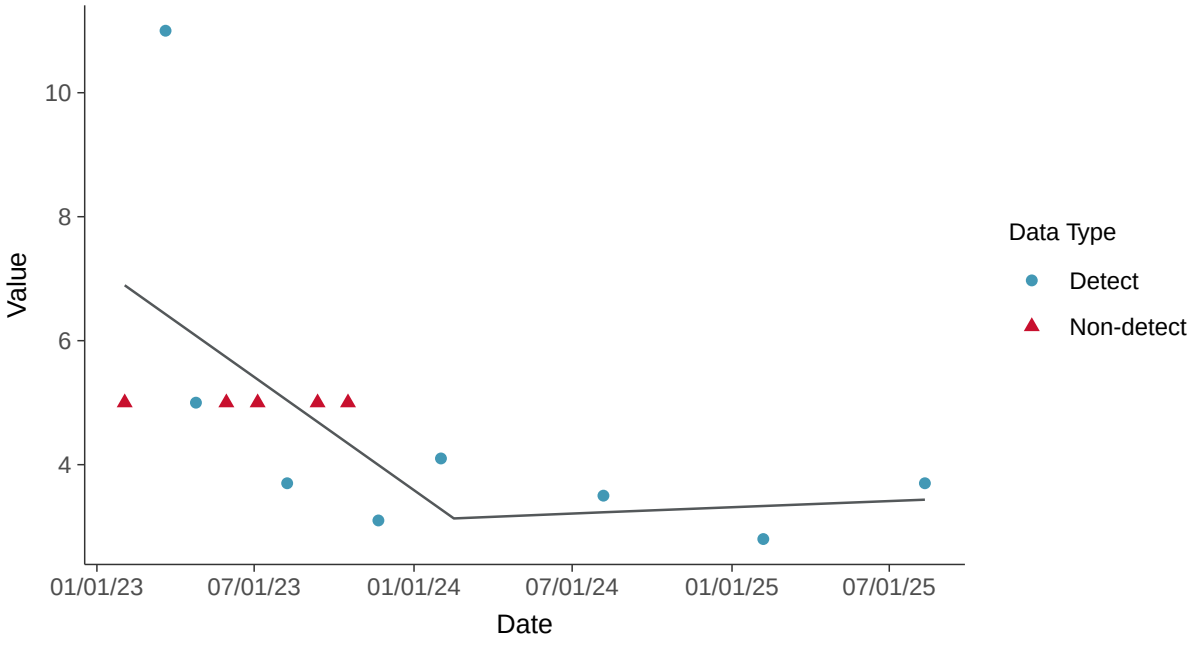
Trend Regression: Lognormal MLE

Chloride, MW-16B (mg/l)



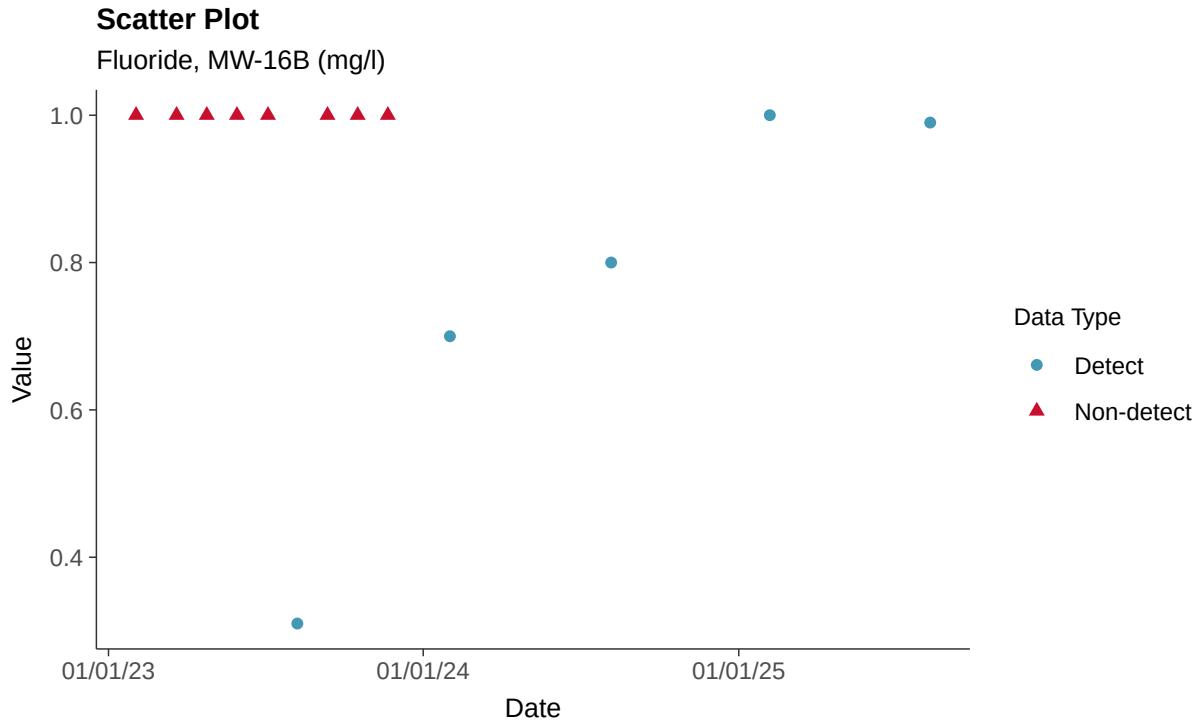
Trend Regression: Piecewise Linear-Linear

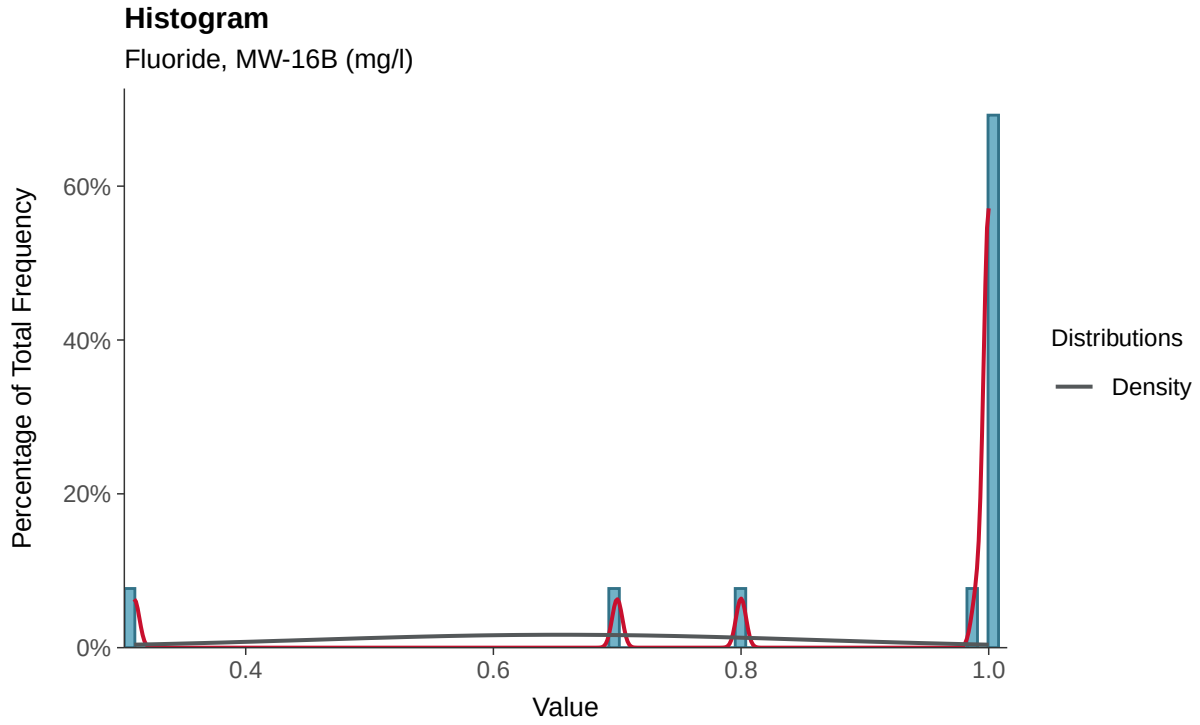
Chloride, MW-16B (mg/l)



Appendix III: Fluoride, MW-16B

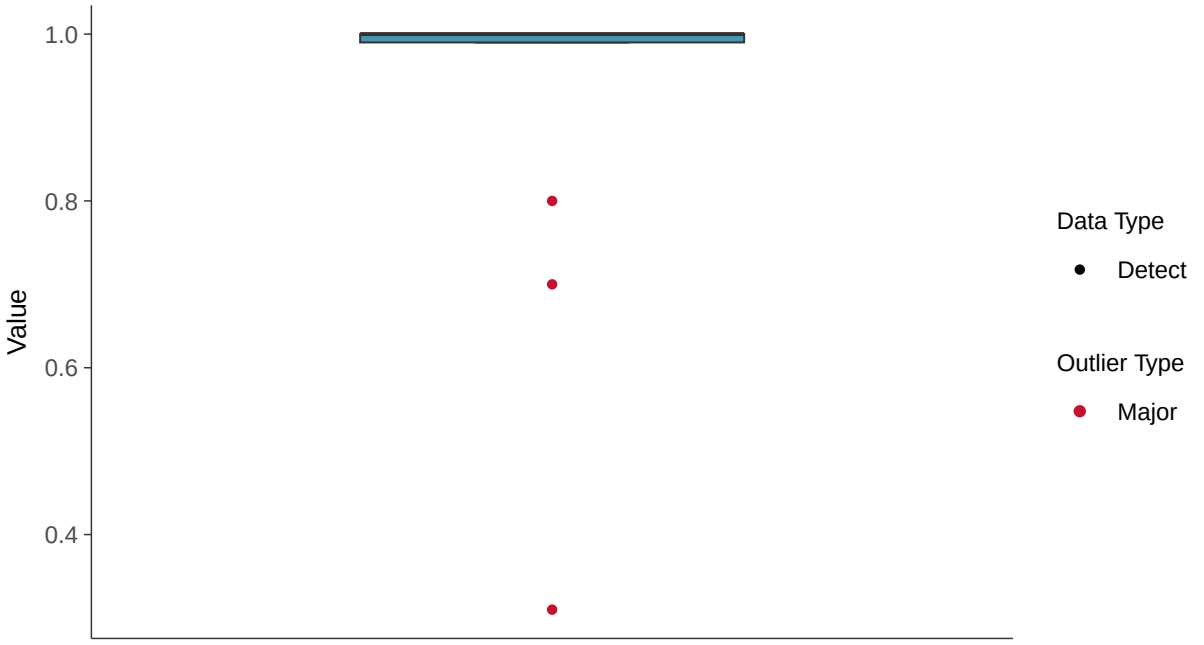
ID: 26_2_112





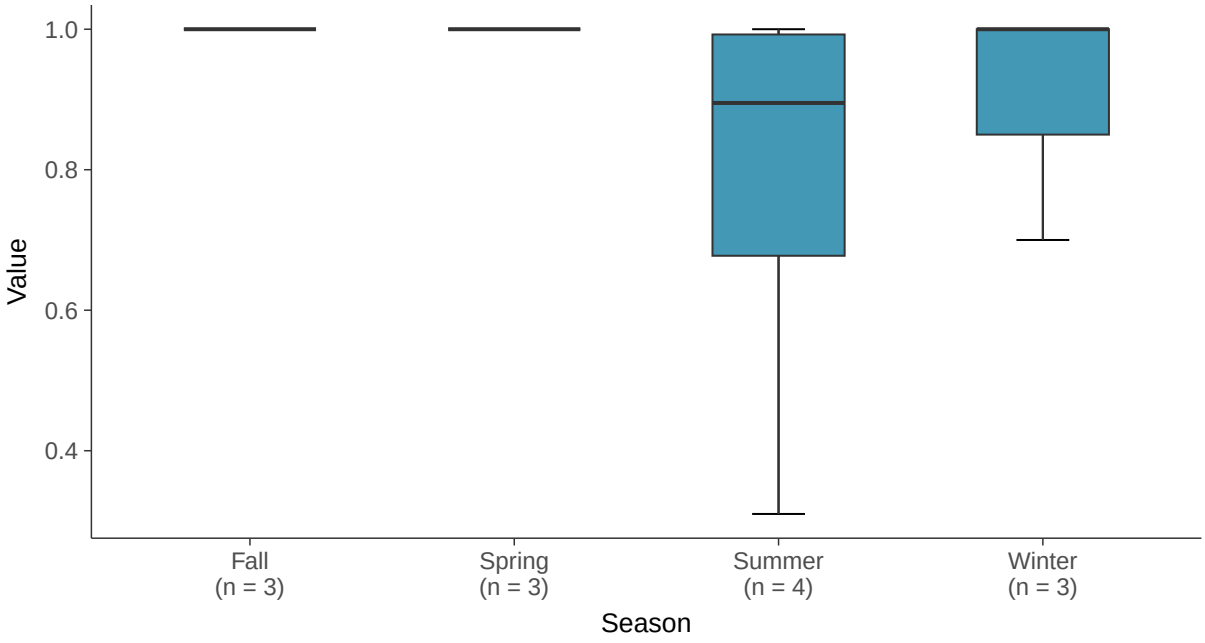
Boxplot

Fluoride, MW-16B (mg/l)



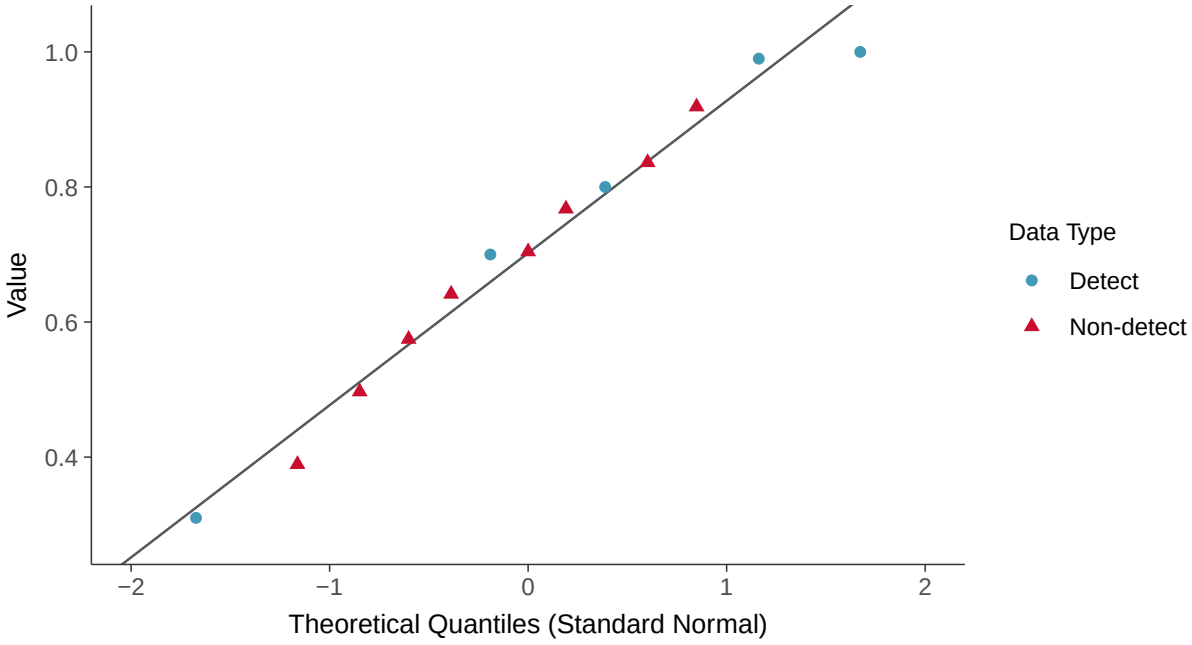
Boxplot by Season

Fluoride, MW-16B (mg/l)



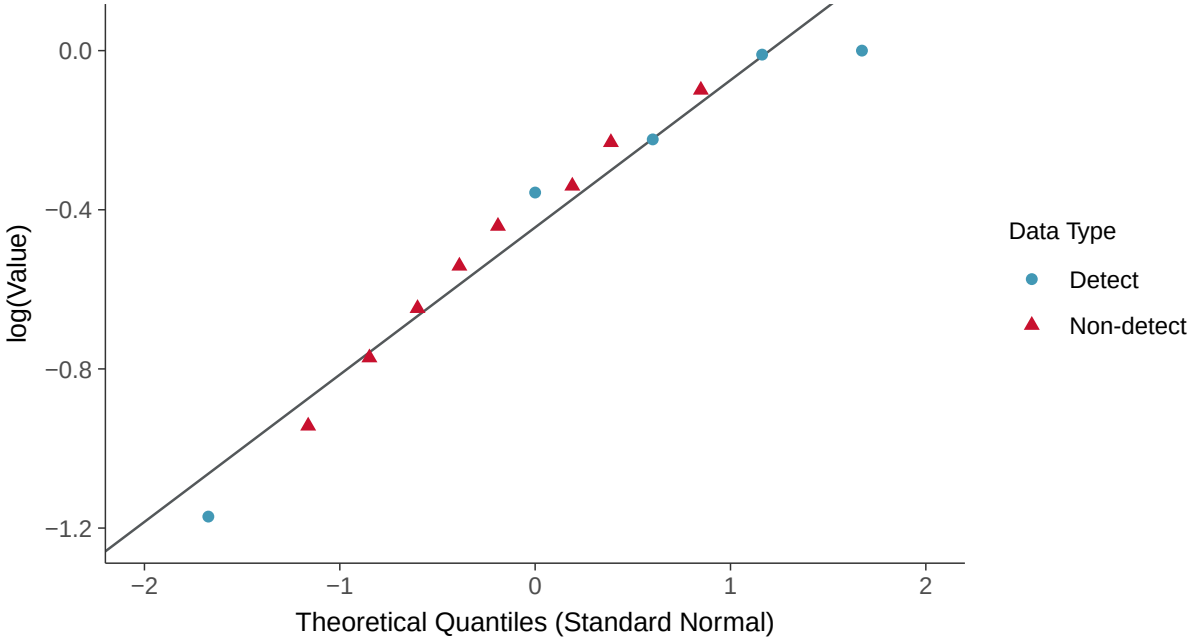
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-16B (mg/l)



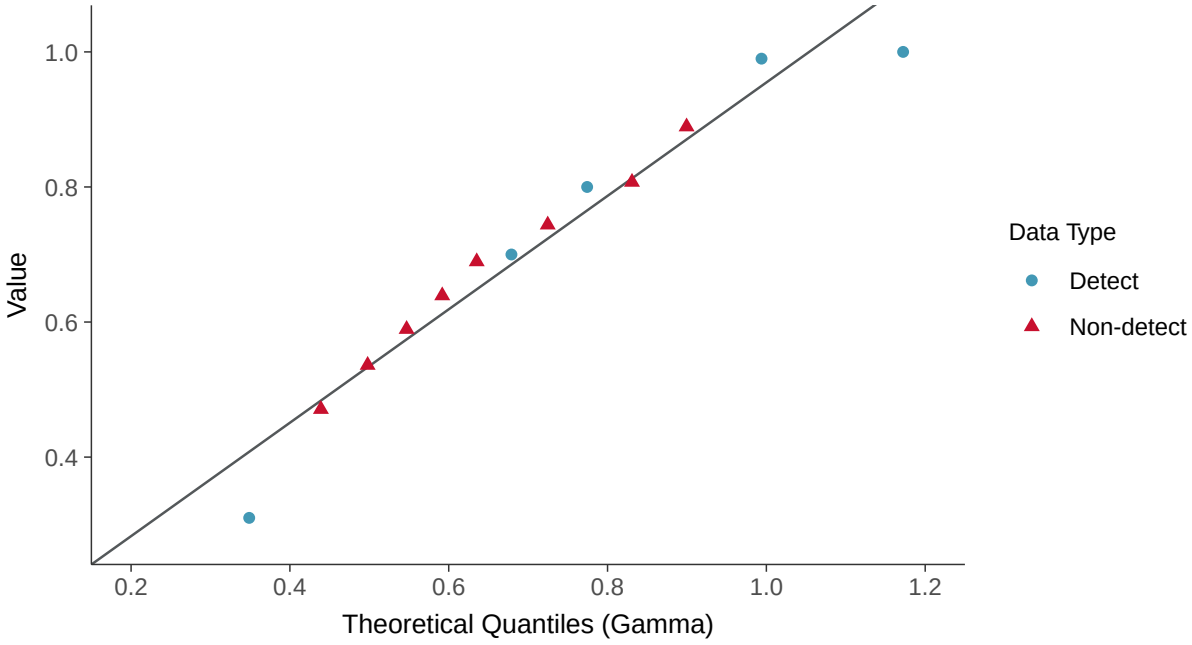
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-16B (mg/l)



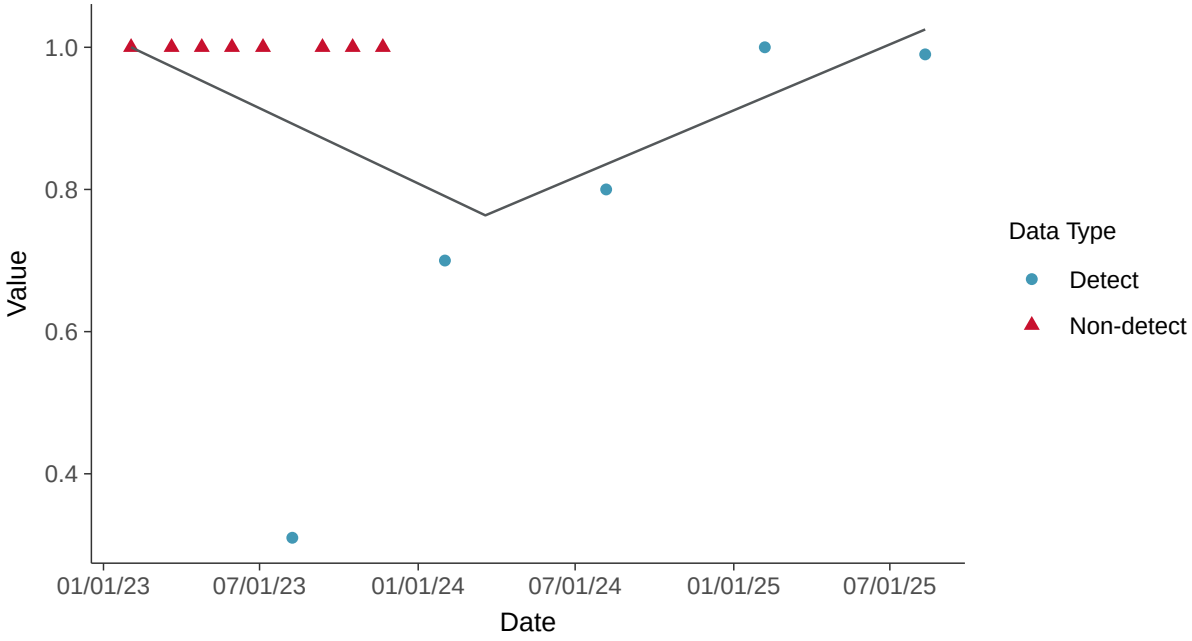
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-16B (mg/l)



Trend Regression: Piecewise Linear-Linear

Fluoride, MW-16B (mg/l)

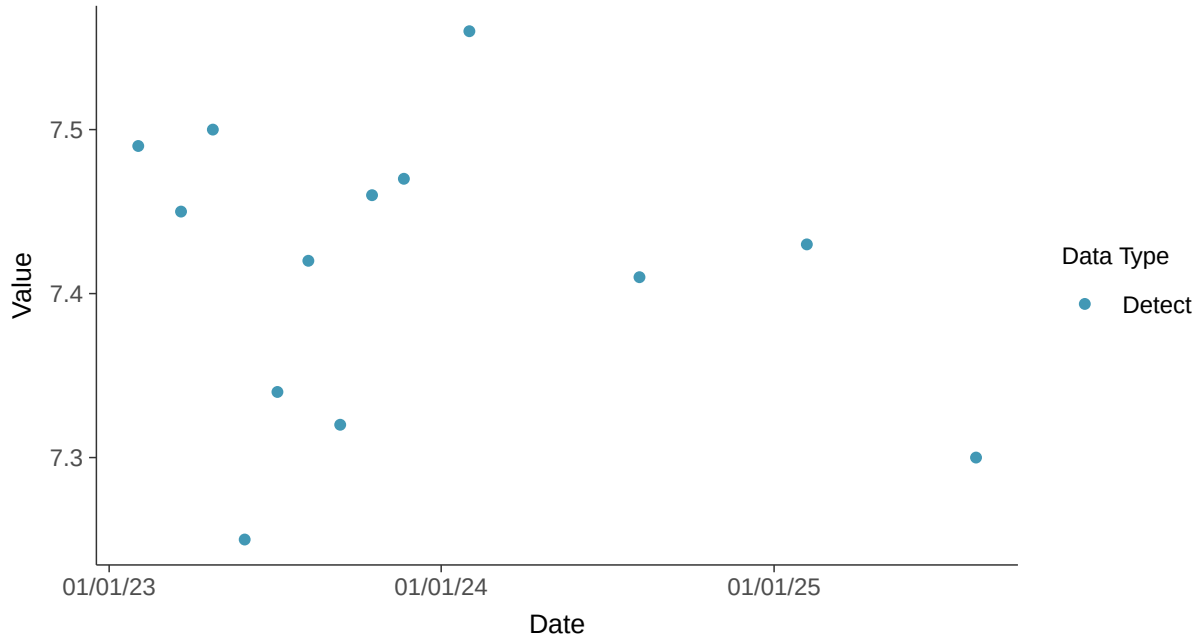


Appendix III: pH, Field, MW-16B

ID: 26_2_120

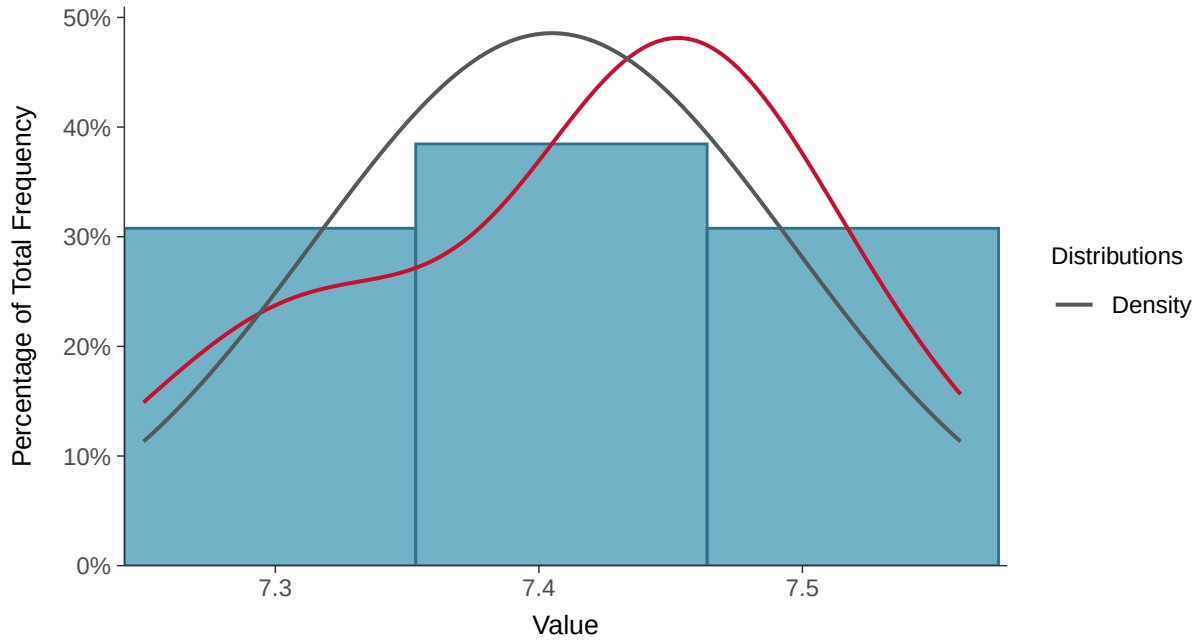
Scatter Plot

pH, Field, MW-16B (su)



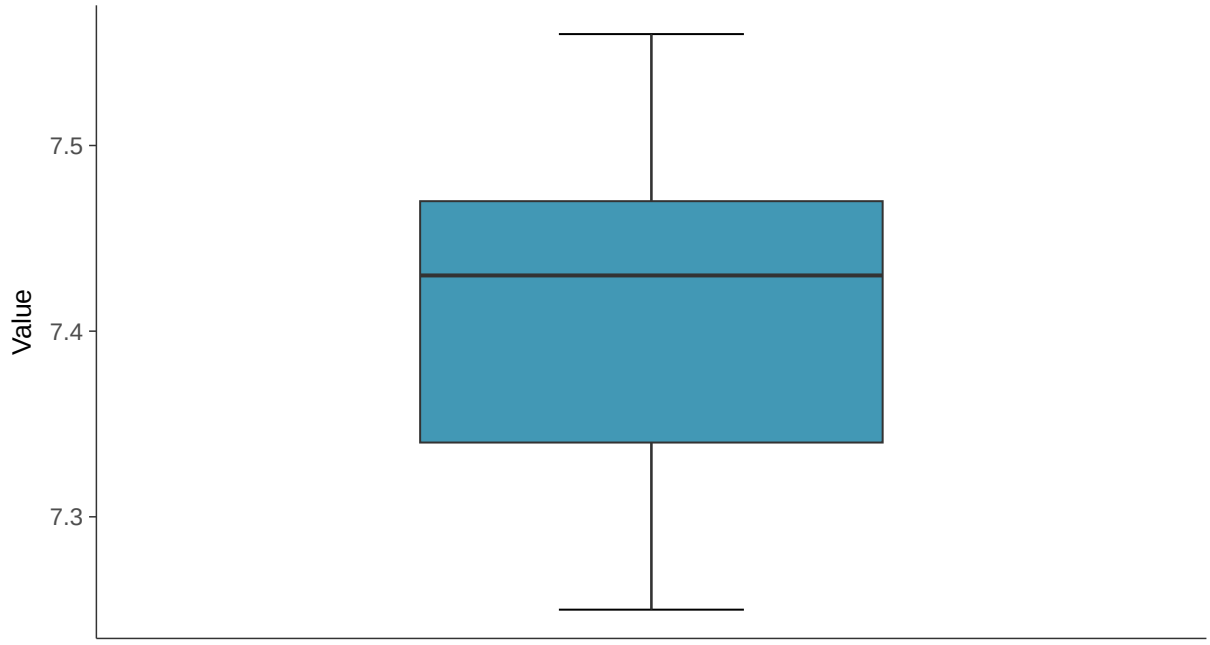
Histogram

pH, Field, MW-16B (su)



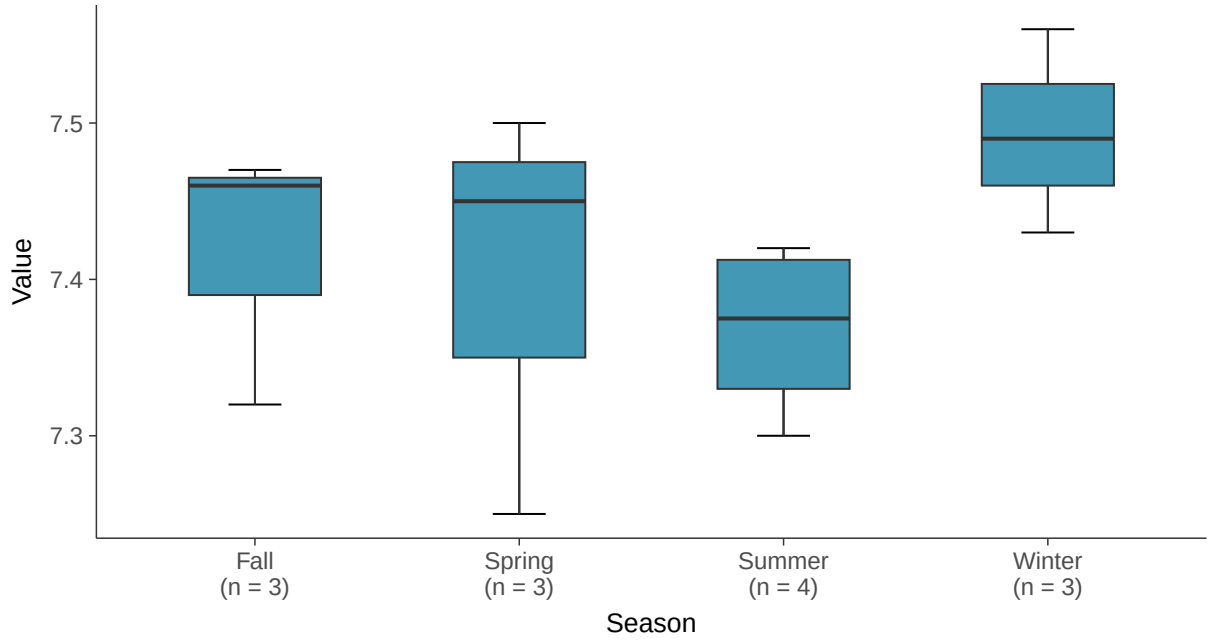
Boxplot

pH, Field, MW-16B (su)



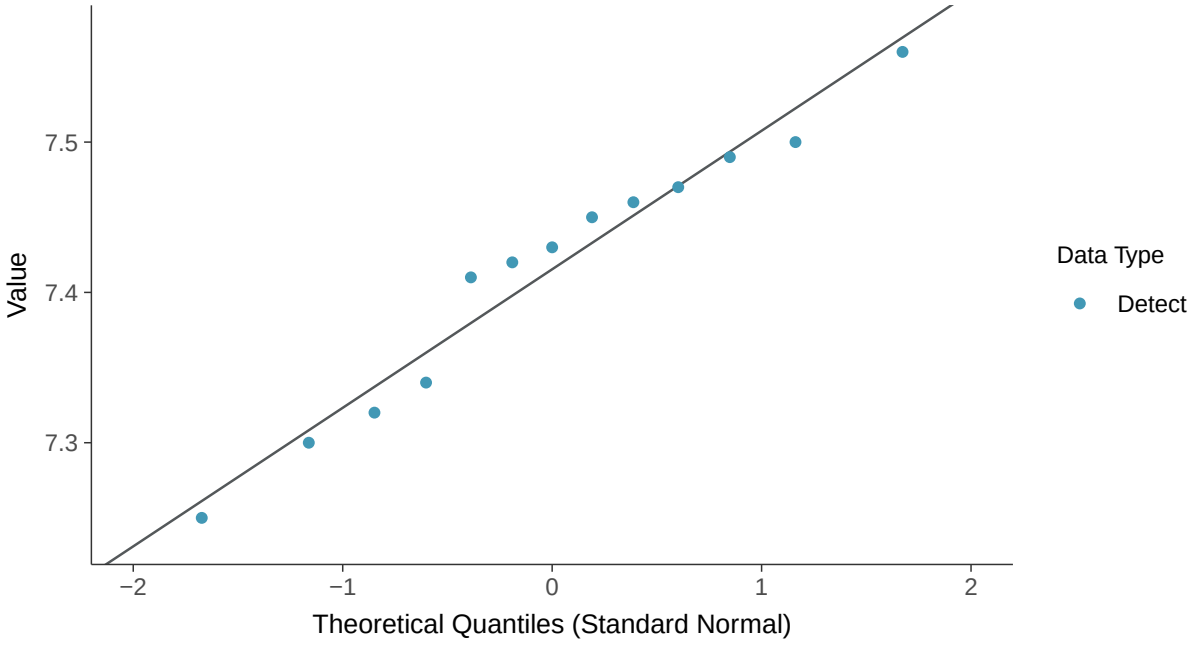
Boxplot by Season

pH, Field, MW-16B (su)



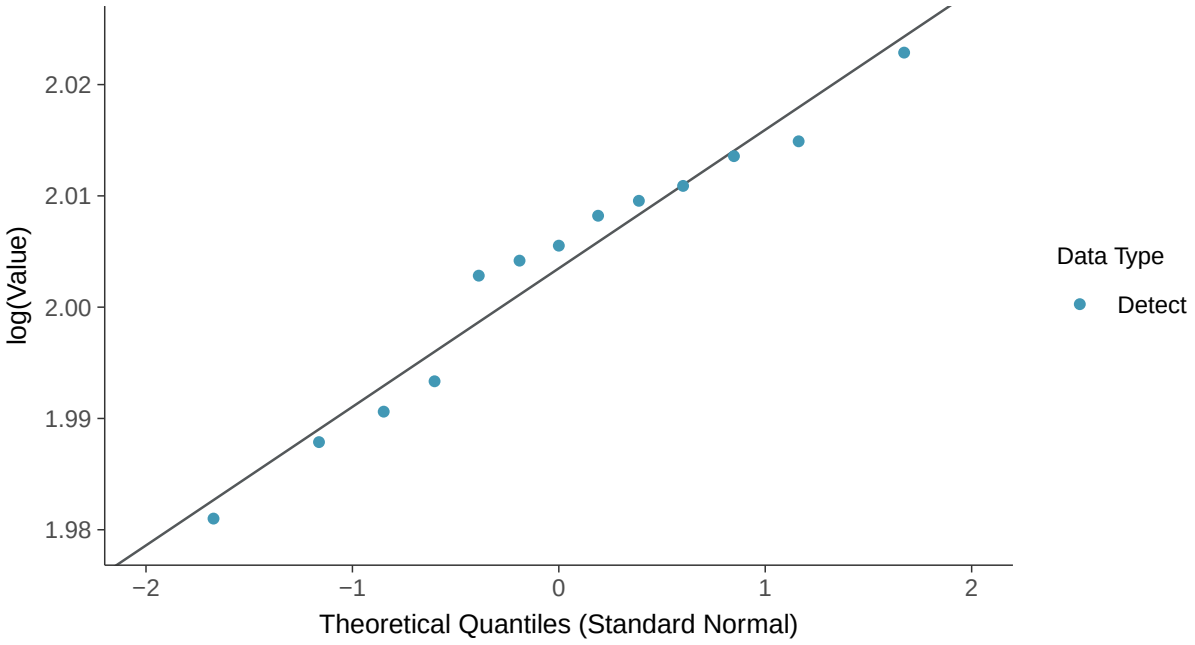
Normal Q-Q plot

pH, Field, MW-16B (su)



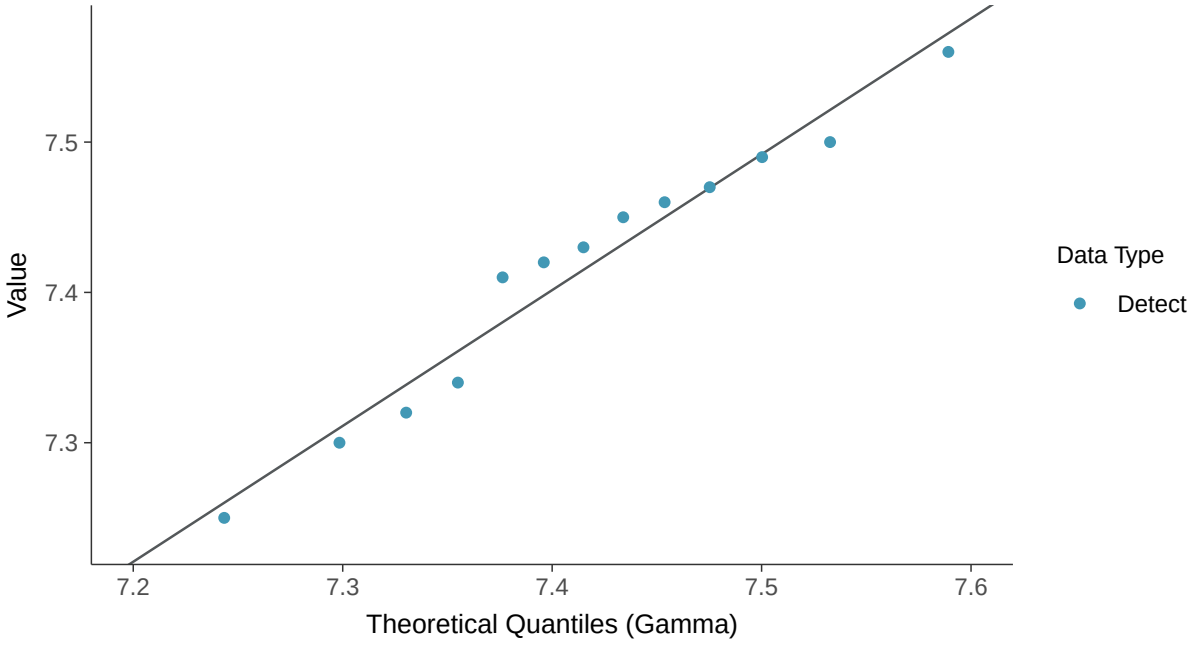
Lognormal Q-Q plot

pH, Field, MW-16B (su)



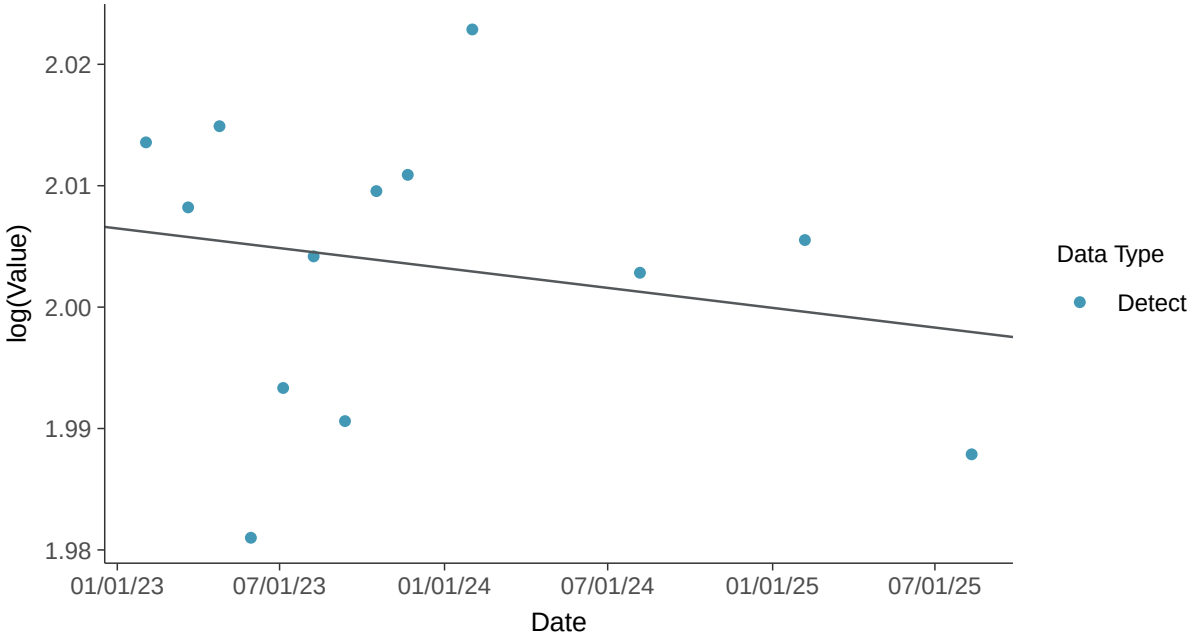
Gamma Q-Q plot

pH, Field, MW-16B (su)



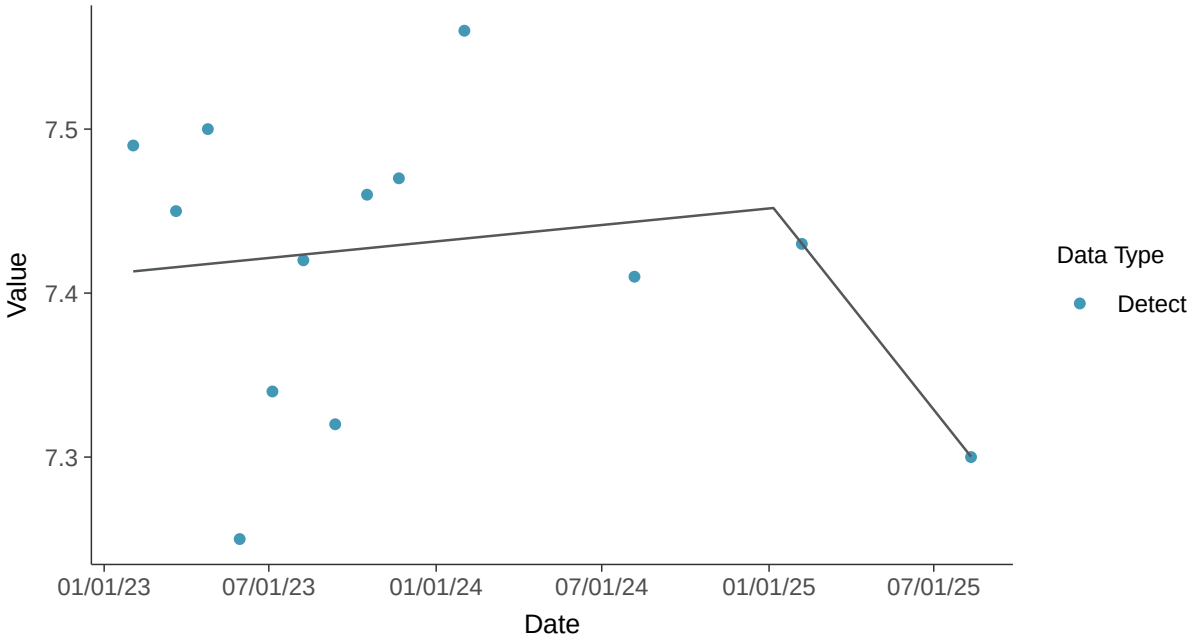
Trend Regression: Lognormal MLE

pH, Field, MW-16B (su)



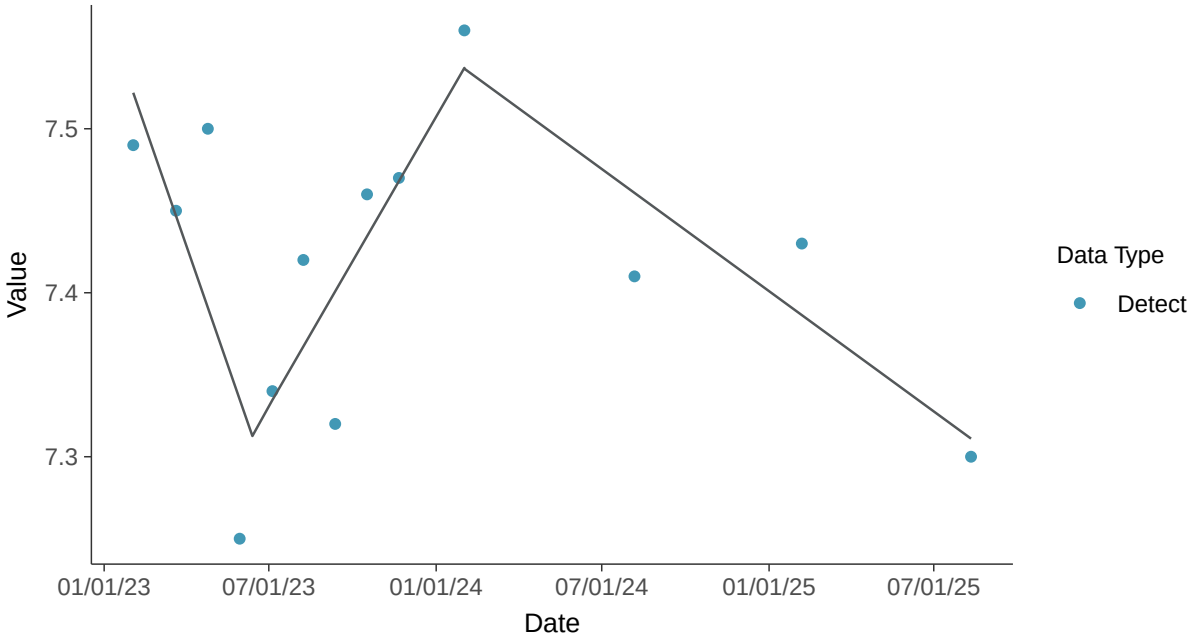
Trend Regression: Piecewise Linear-Linear

pH, Field, MW-16B (su)



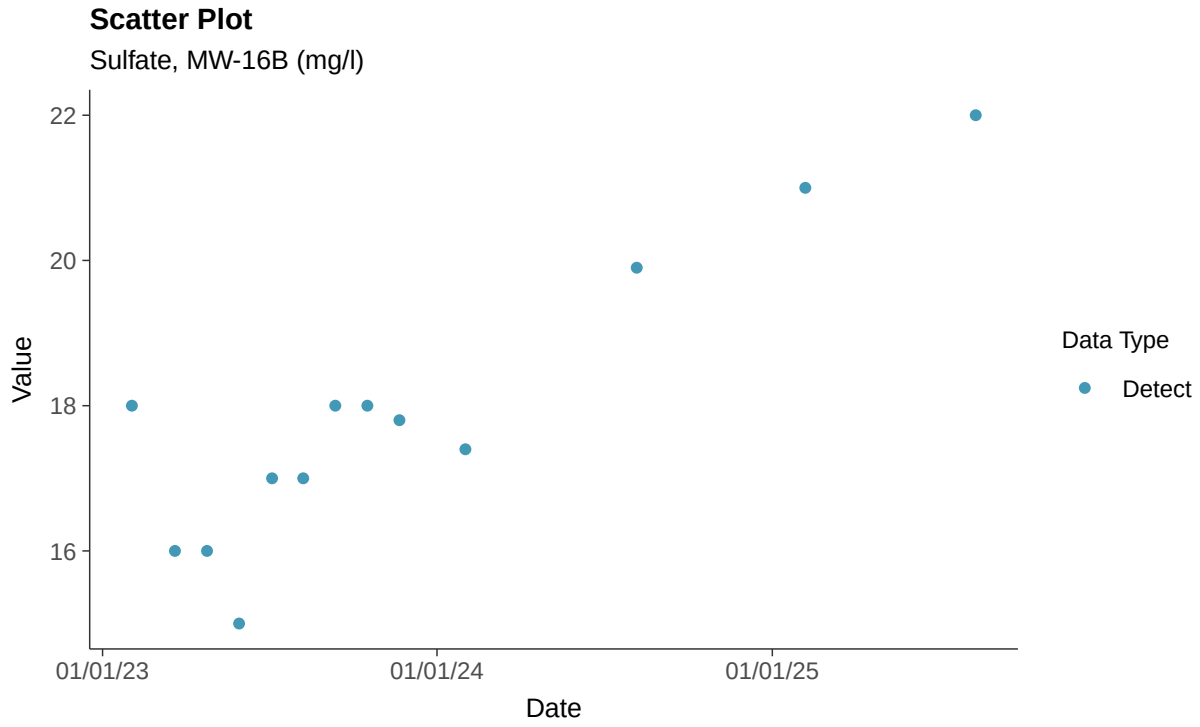
Trend Regression: Piecewise Linear-Linear-Linear

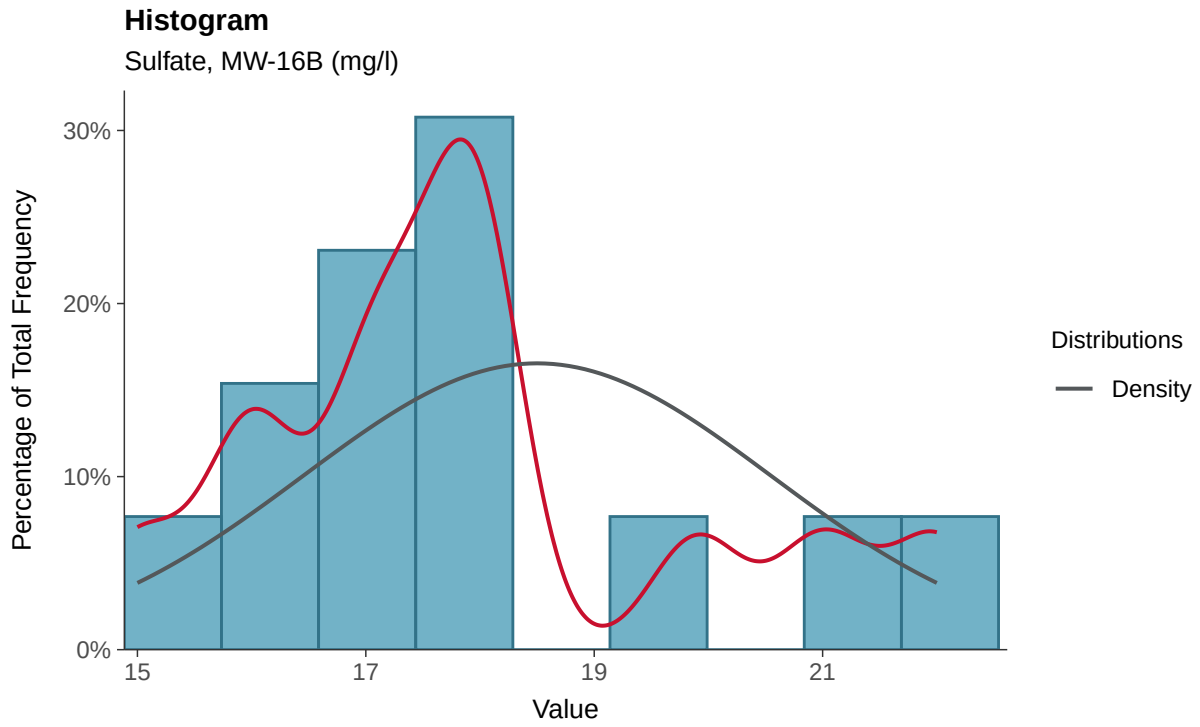
pH, Field, MW-16B (su)



Appendix III: Sulfate, MW-16B

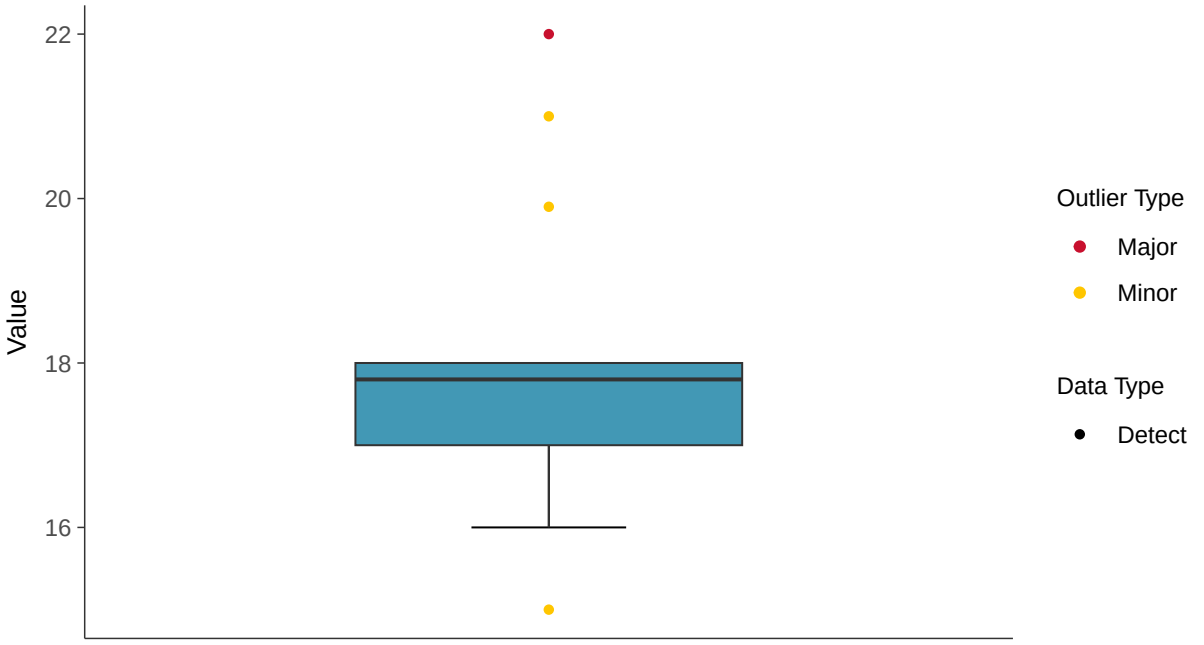
ID: 26_2_124





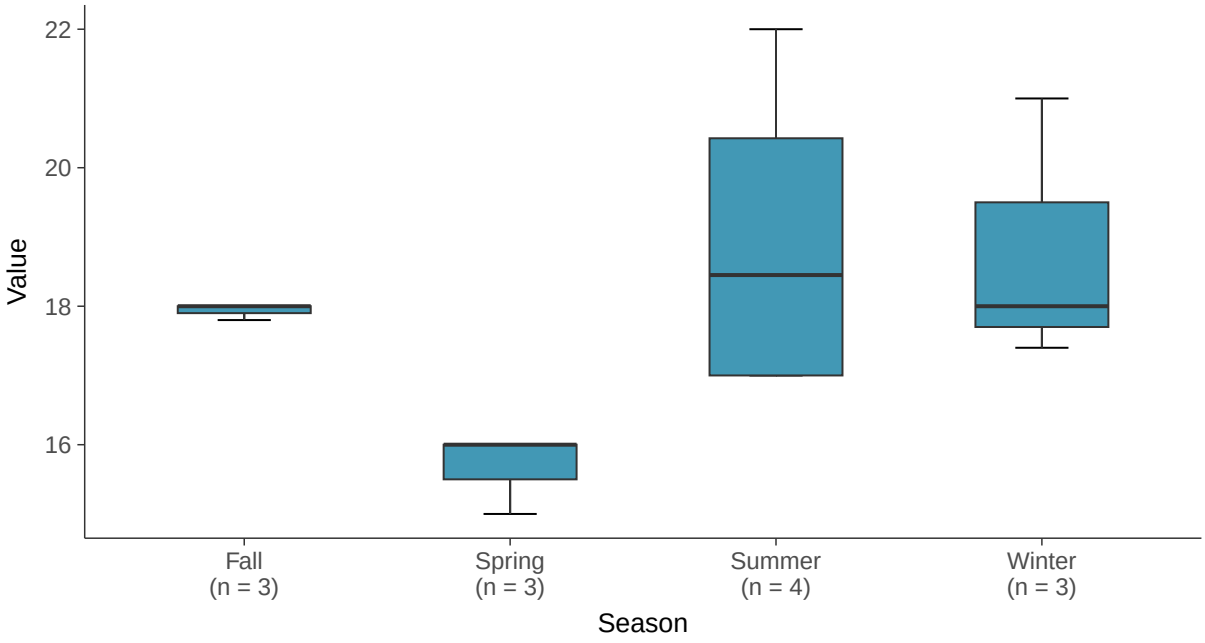
Boxplot

Sulfate, MW-16B (mg/l)



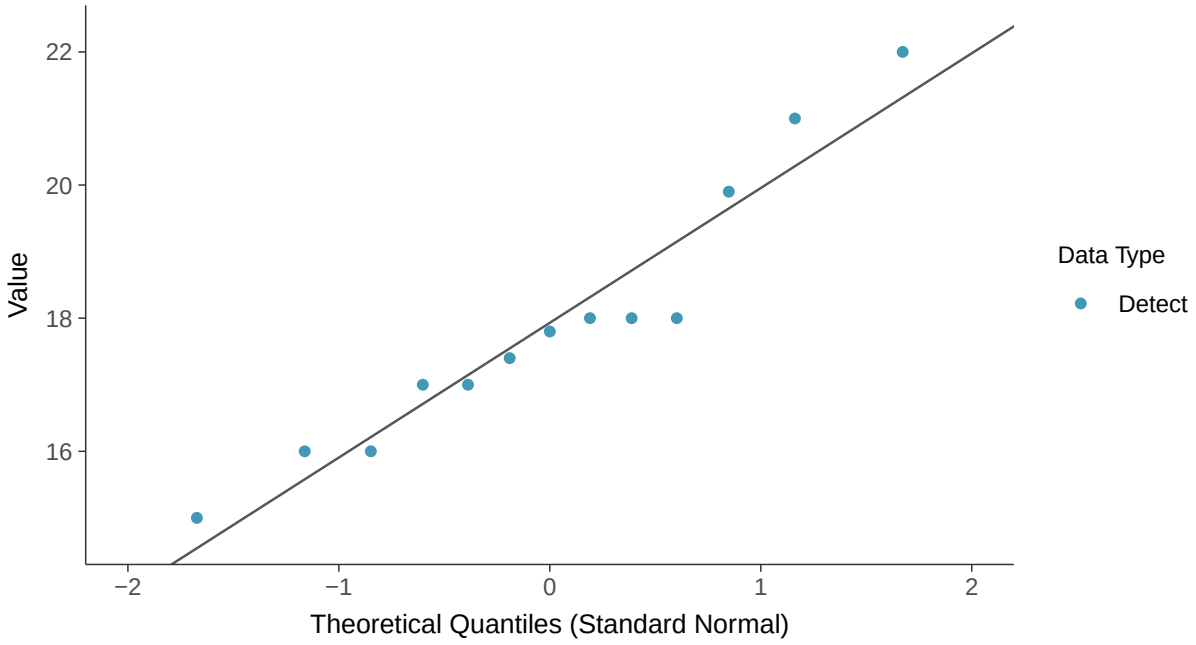
Boxplot by Season

Sulfate, MW-16B (mg/l)



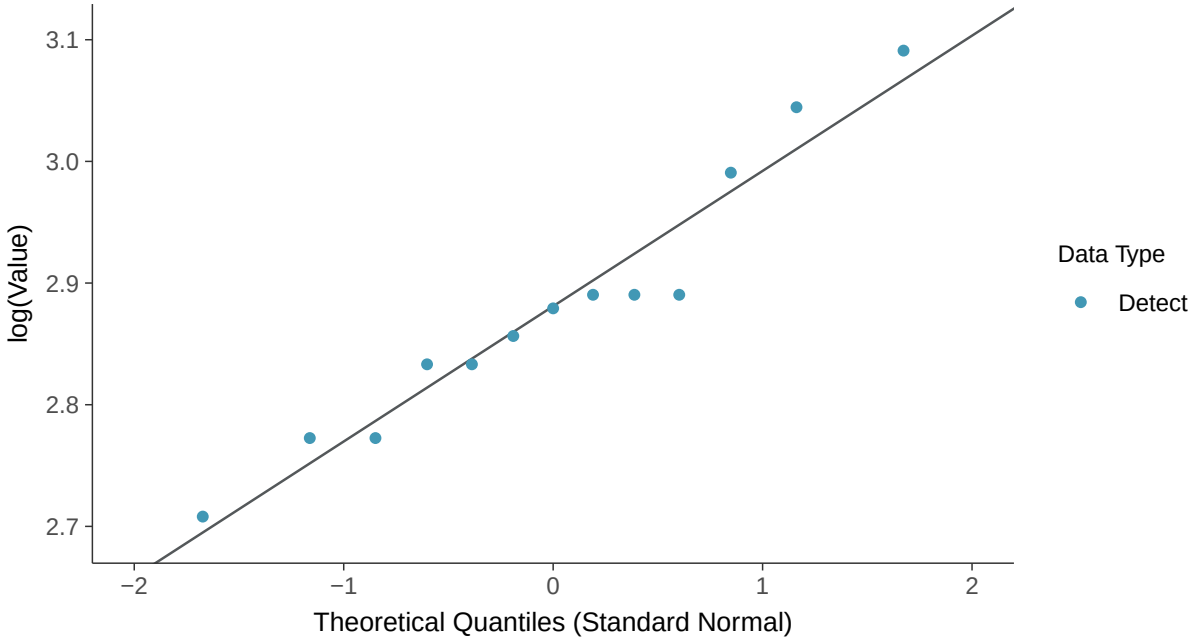
Normal Q-Q plot

Sulfate, MW-16B (mg/l)



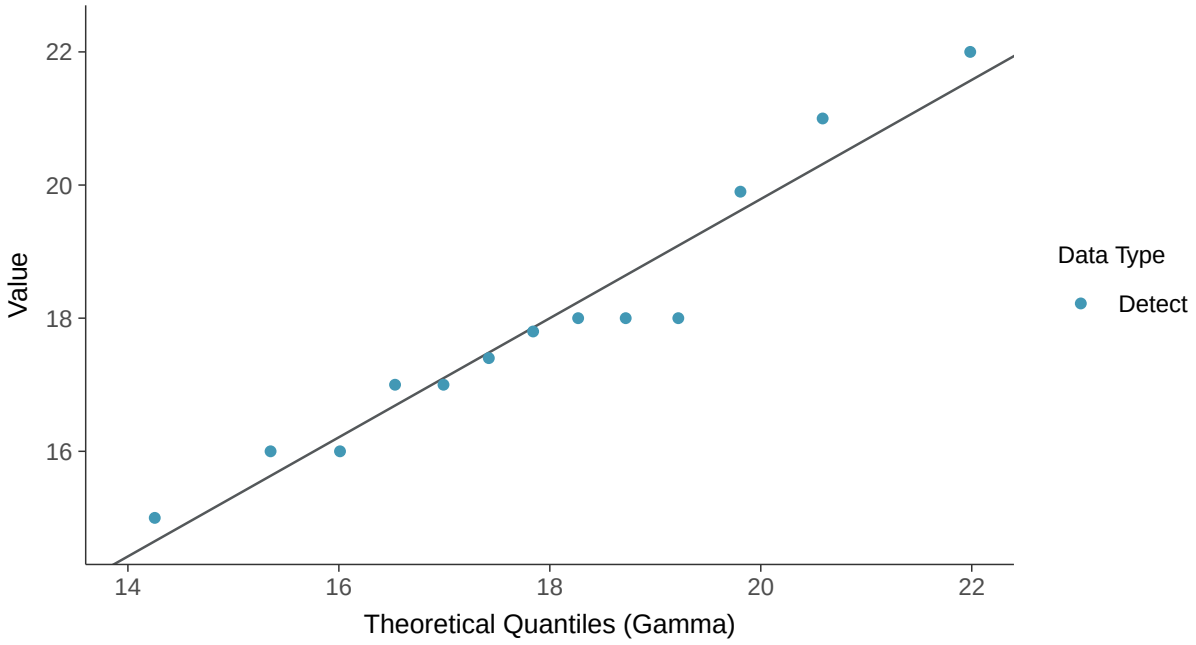
Lognormal Q-Q plot

Sulfate, MW-16B (mg/l)



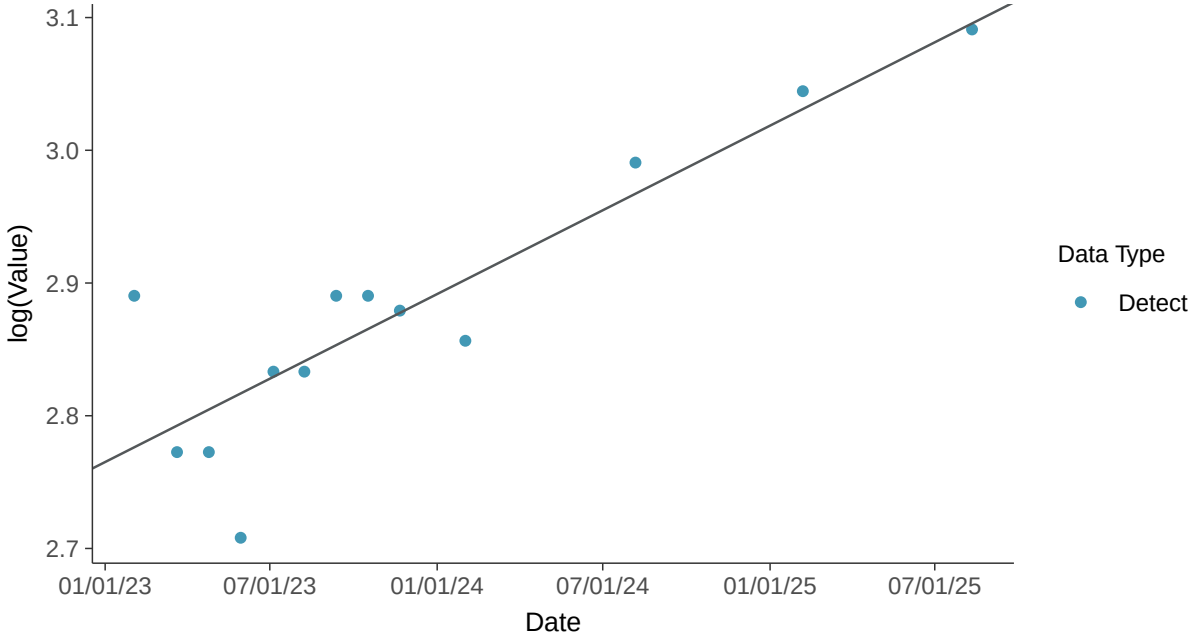
Gamma Q-Q plot

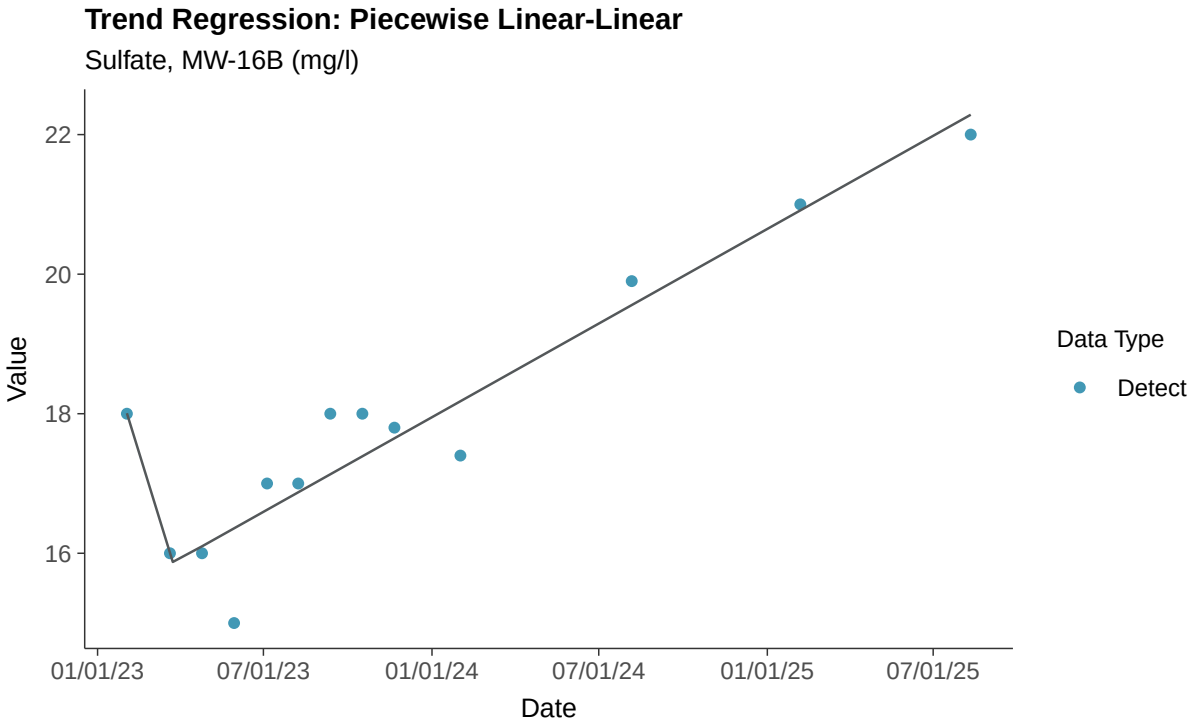
Sulfate, MW-16B (mg/l)



Trend Regression: Lognormal MLE

Sulfate, MW-16B (mg/l)



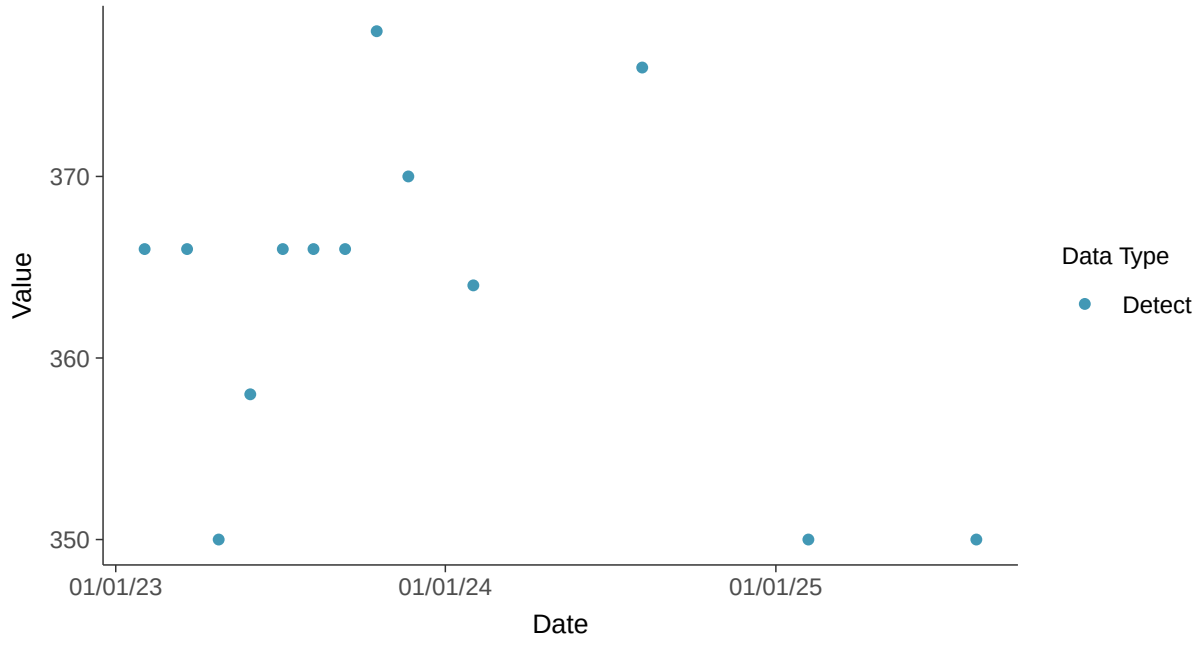

Trend Regression: Piecewise Linear-Linear
Sulfate, MW-16B (mg/l)
Value
22
20
18
16
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect

Appendix III: Total Dissolved Solids, MW-16B

ID: 26_2_126

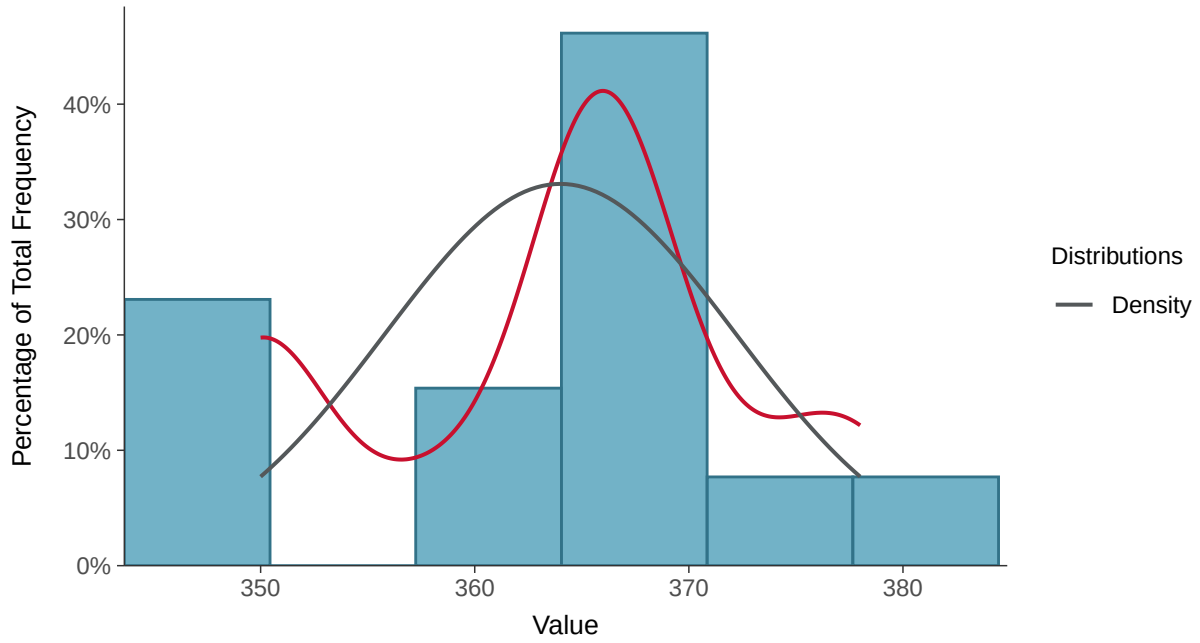
Scatter Plot

Total Dissolved Solids, MW-16B (mg/l)



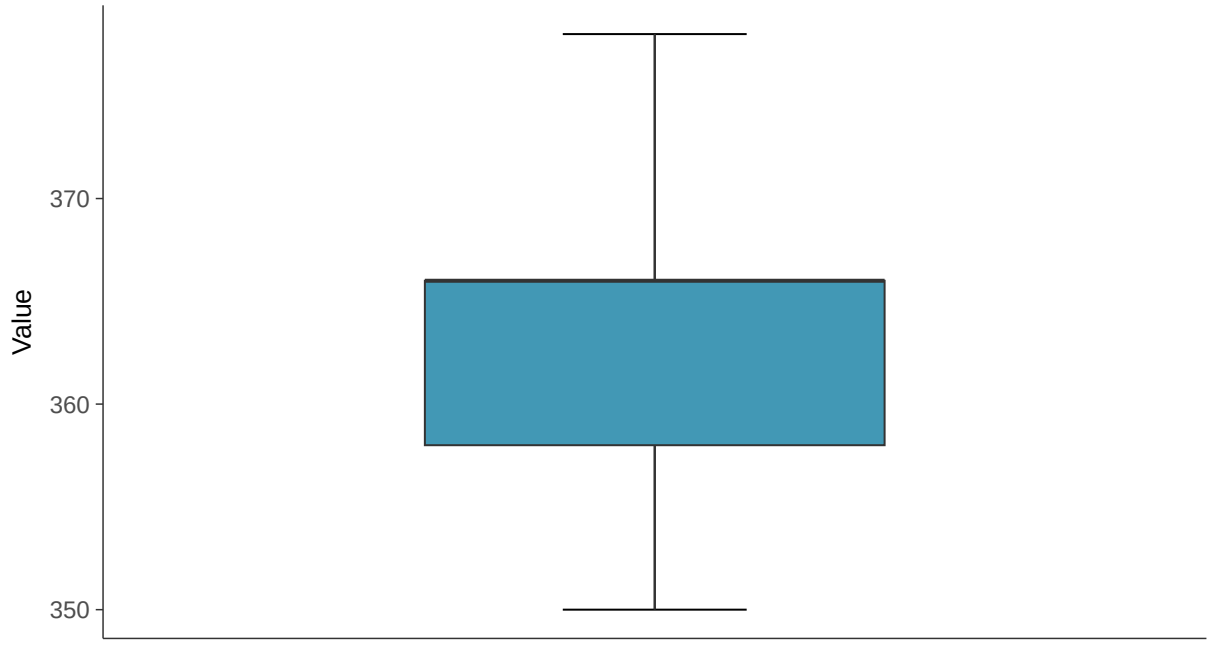
Histogram

Total Dissolved Solids, MW-16B (mg/l)



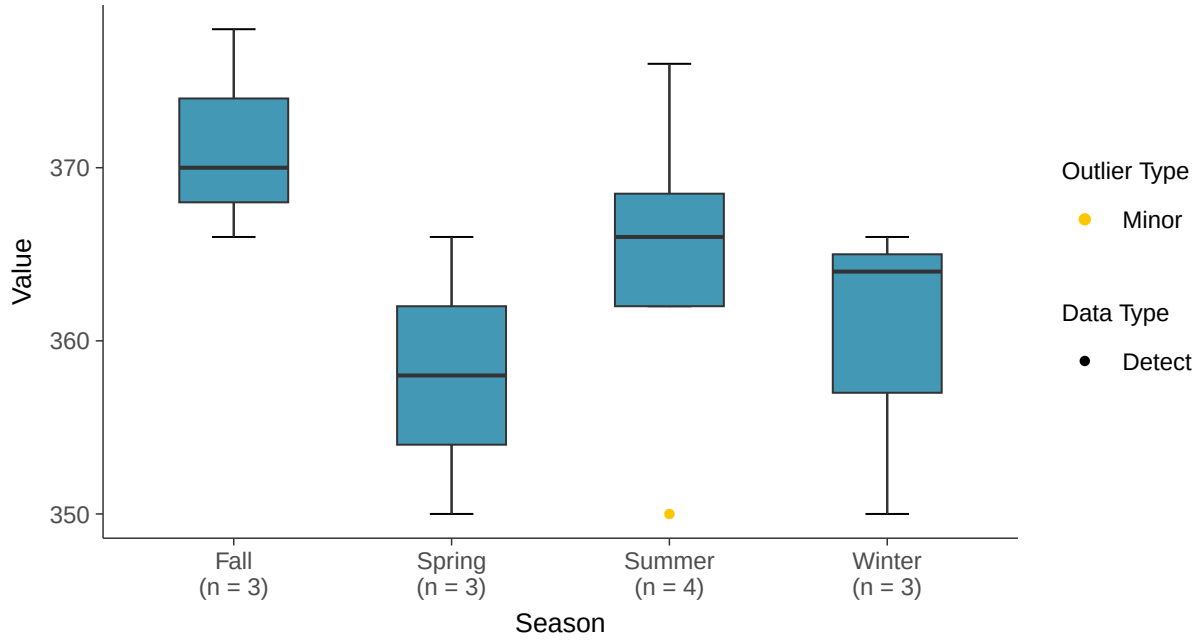
Boxplot

Total Dissolved Solids, MW-16B (mg/l)



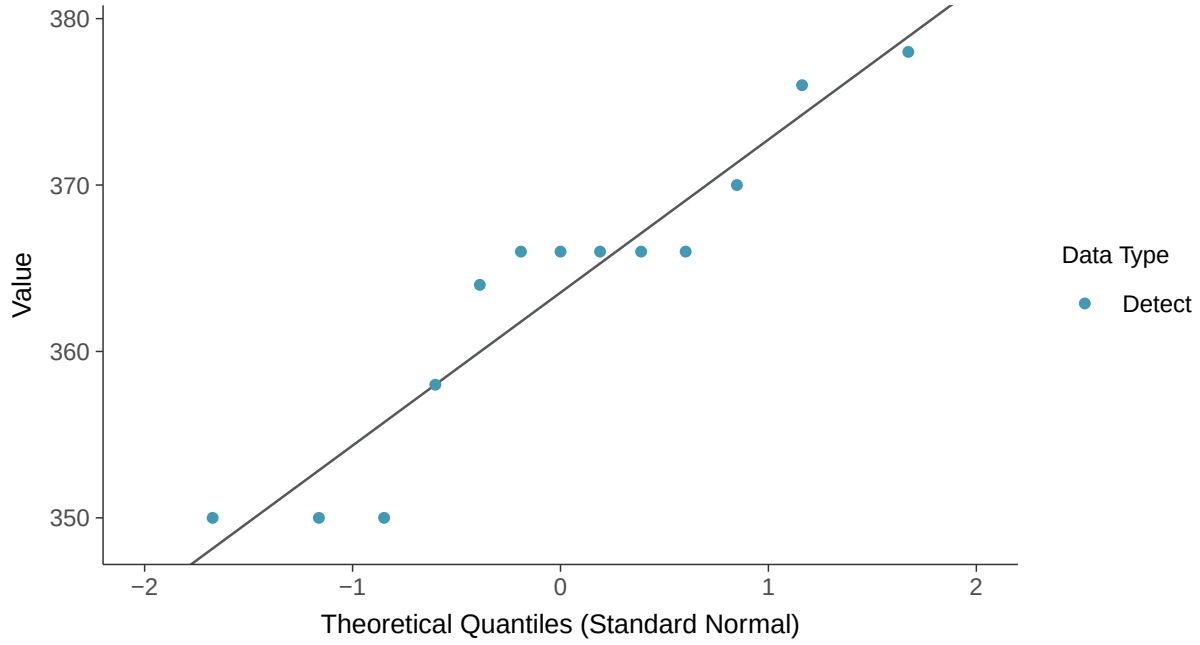
Boxplot by Season

Total Dissolved Solids, MW-16B (mg/l)



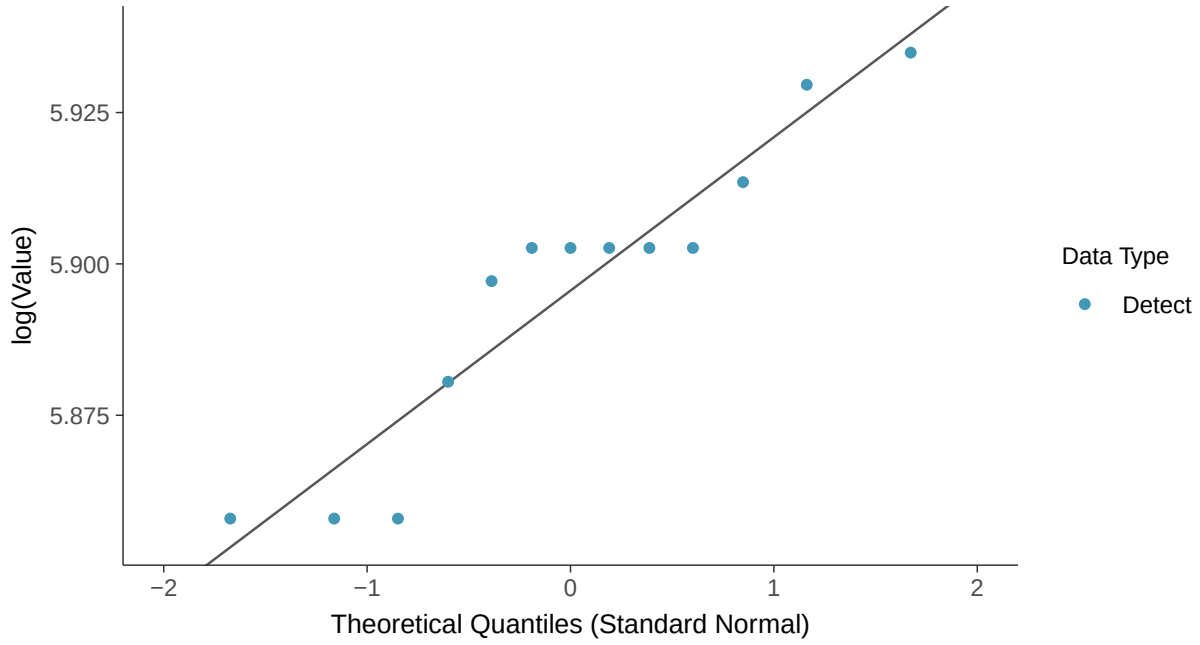
Normal Q-Q plot

Total Dissolved Solids, MW-16B (mg/l)



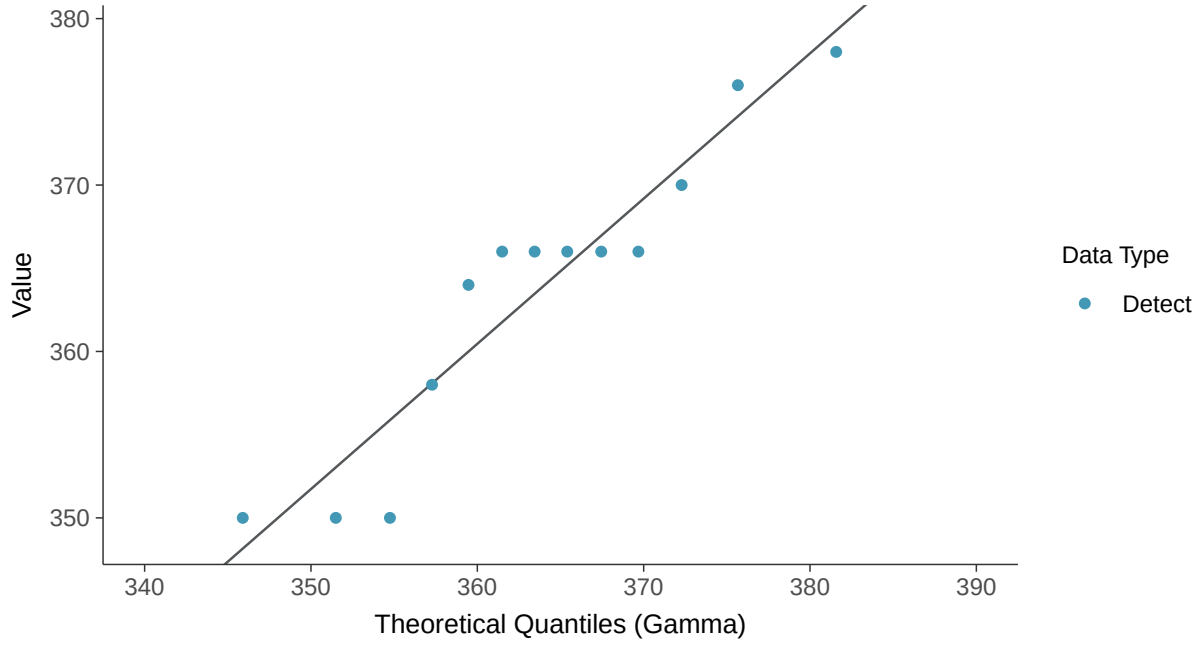
Lognormal Q-Q plot

Total Dissolved Solids, MW-16B (mg/l)



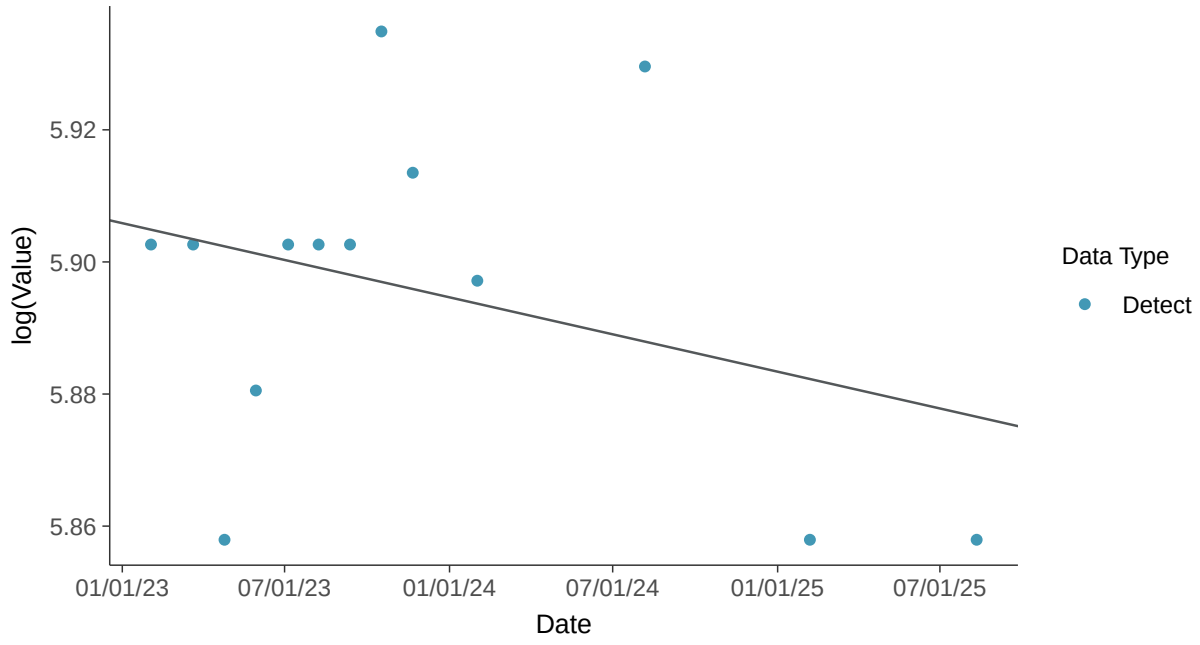
Gamma Q-Q plot

Total Dissolved Solids, MW-16B (mg/l)



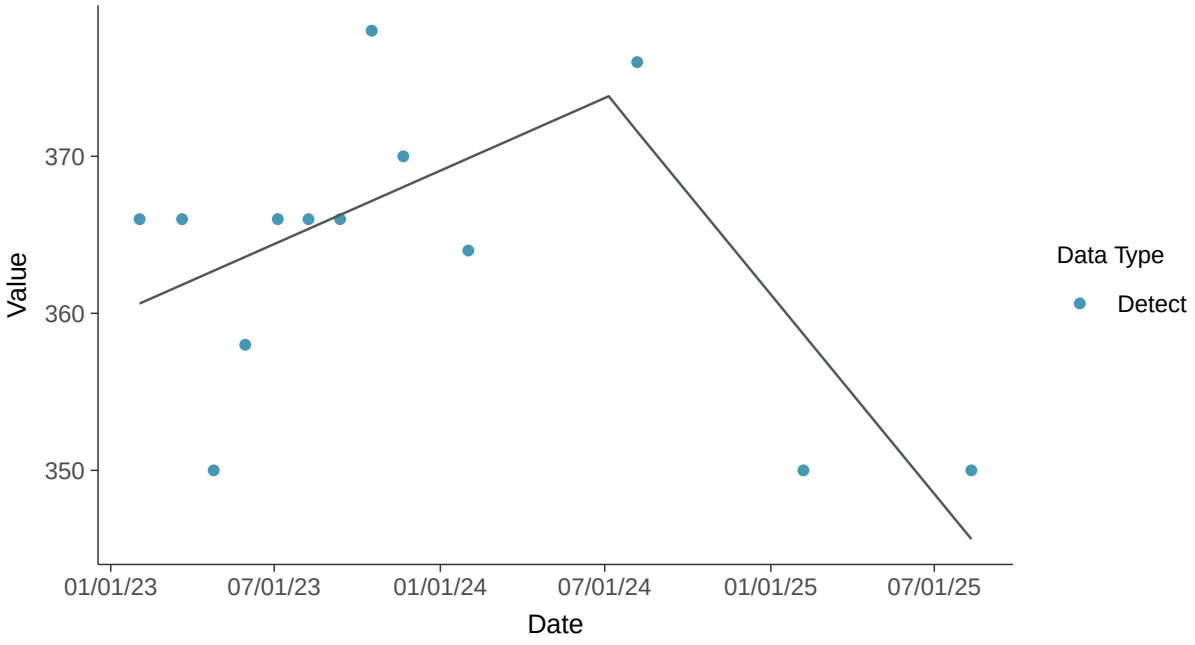
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-16B (mg/l)



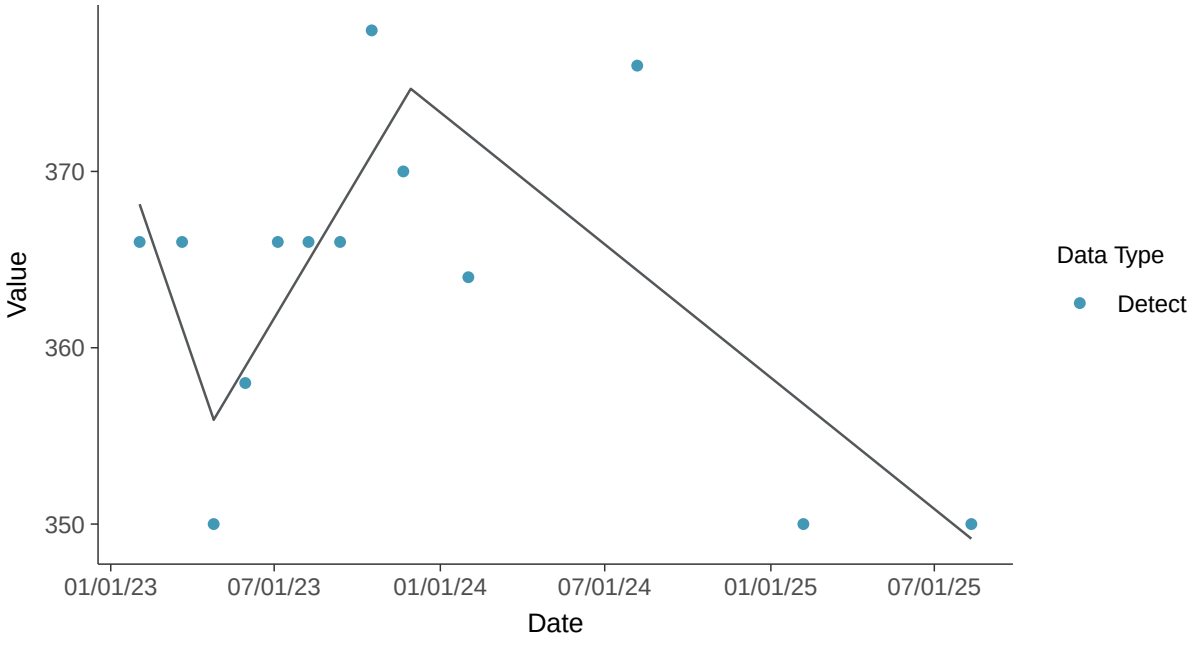
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-16B (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Total Dissolved Solids, MW-16B (mg/l)

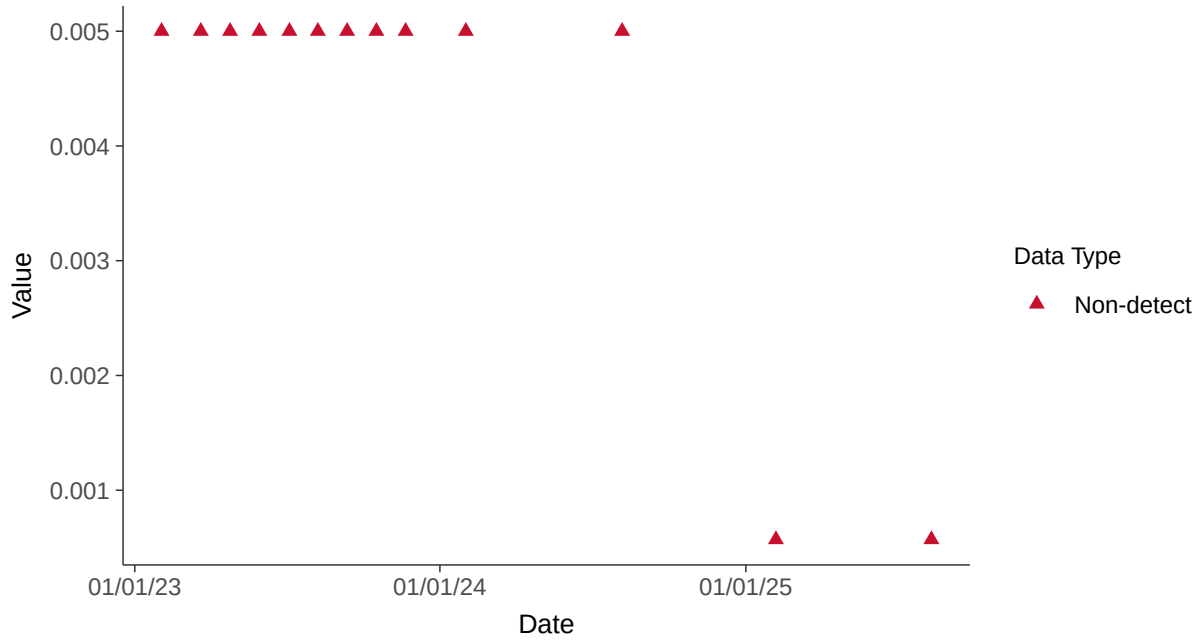


Appendix IV: Antimony, MW-16B

ID: 26_3_101

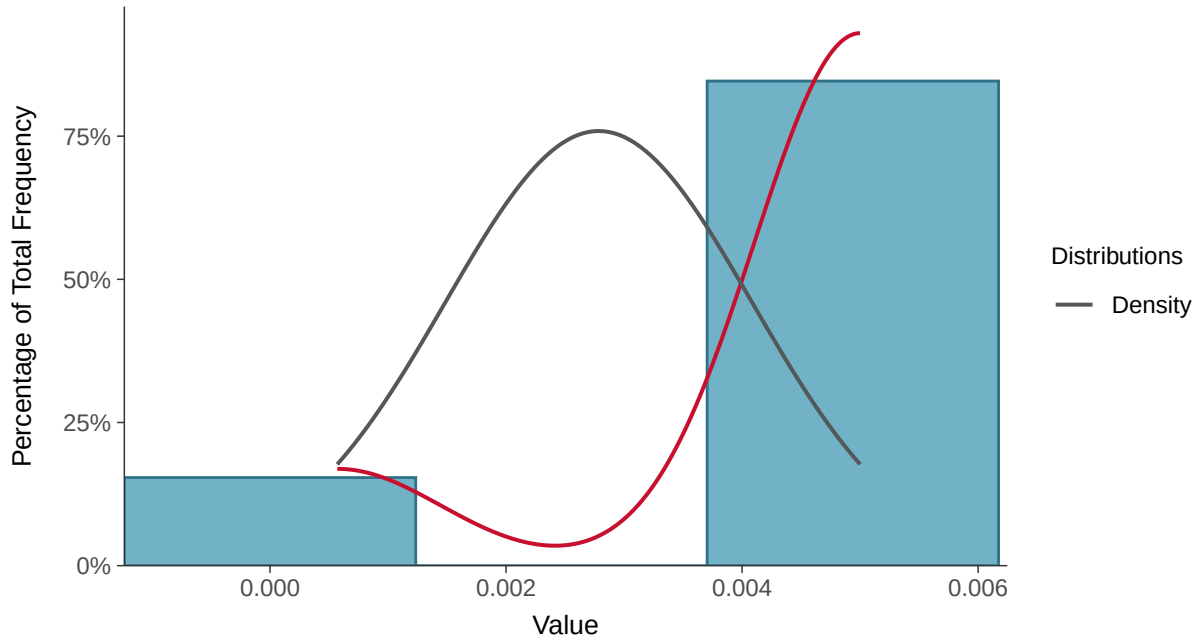
Scatter Plot

Antimony, MW-16B (mg/l)



Histogram

Antimony, MW-16B (mg/l)

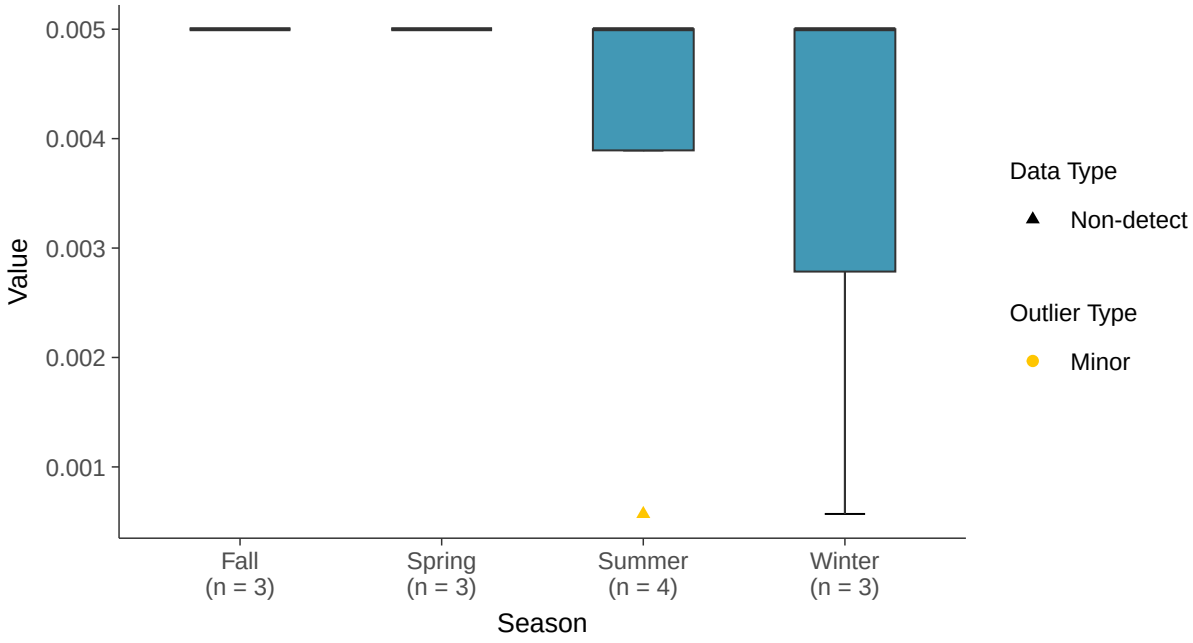


Boxplot

Antimony, MW-16B (mg/l)

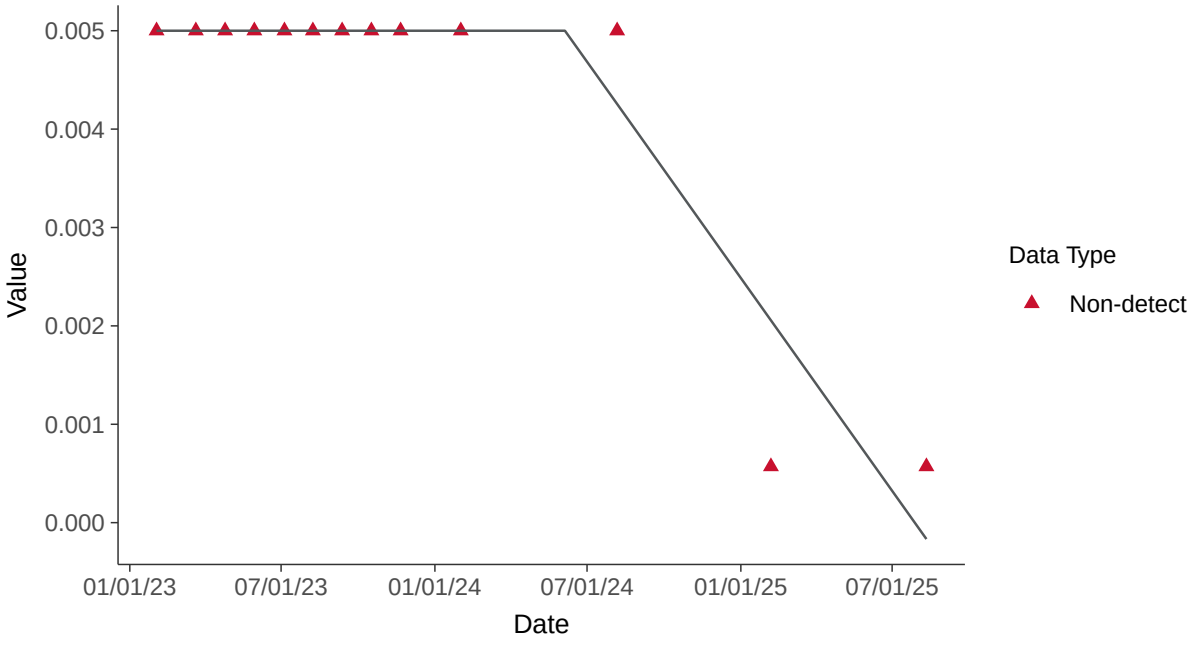
Boxplot by Season

Antimony, MW-16B (mg/l)



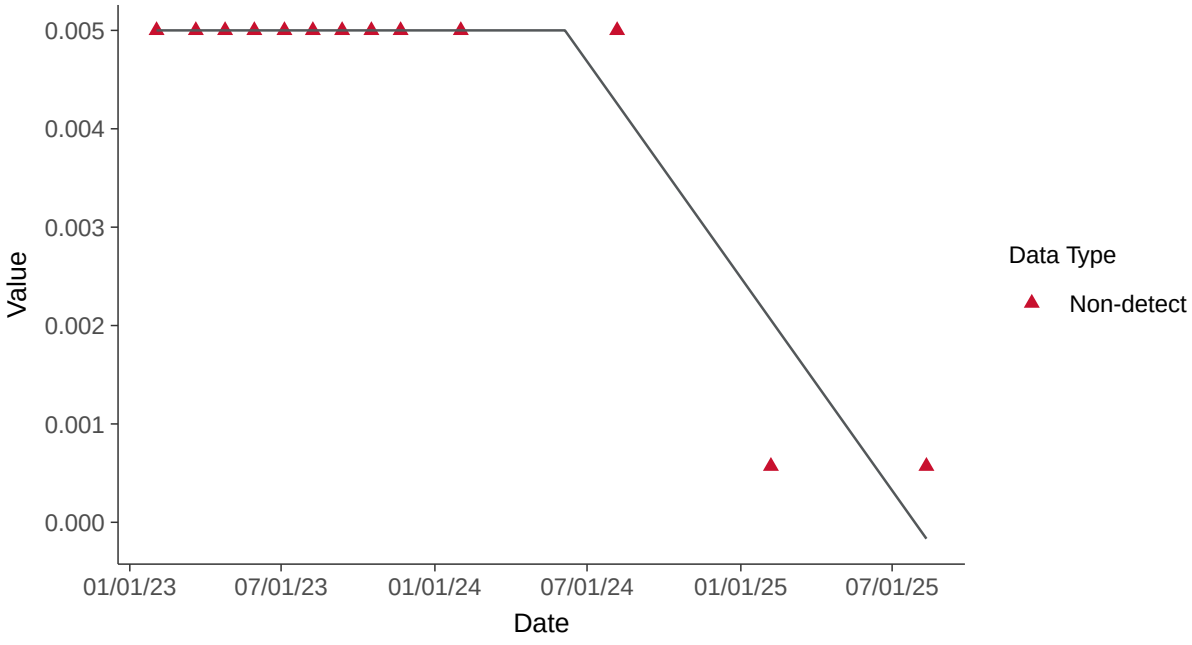
Trend Regression: Piecewise Linear-Linear

Antimony, MW-16B (mg/l)



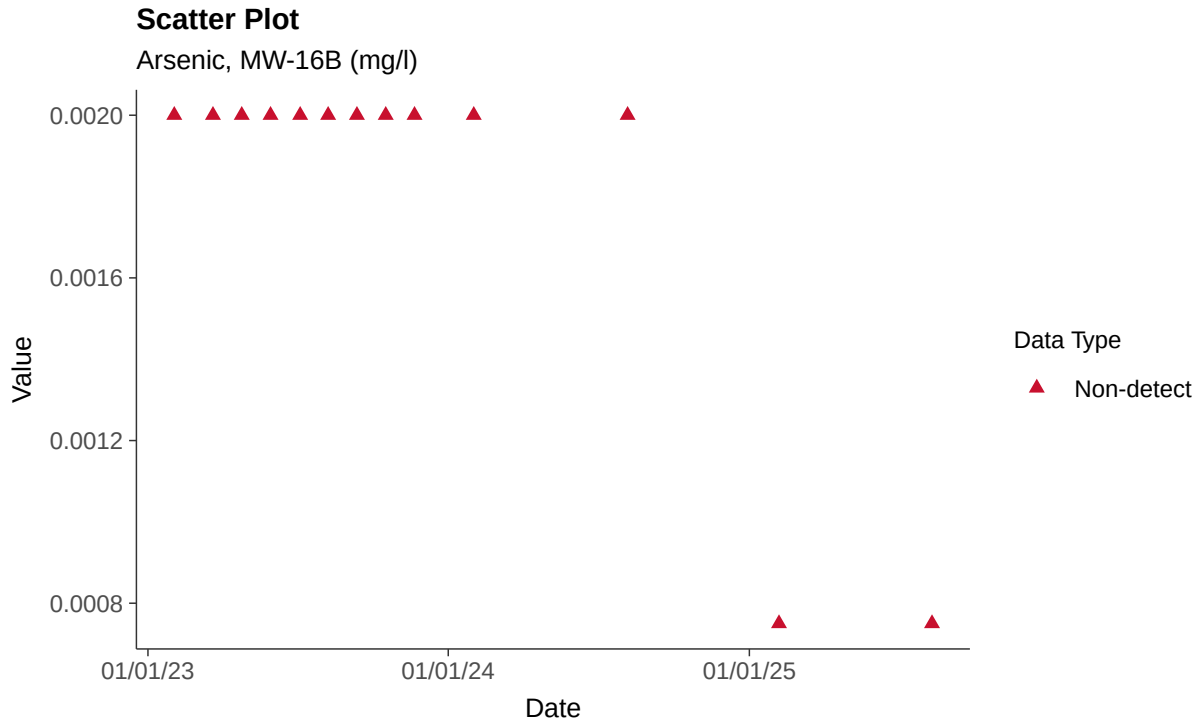
Trend Regression: Piecewise Linear-Linear-Linear

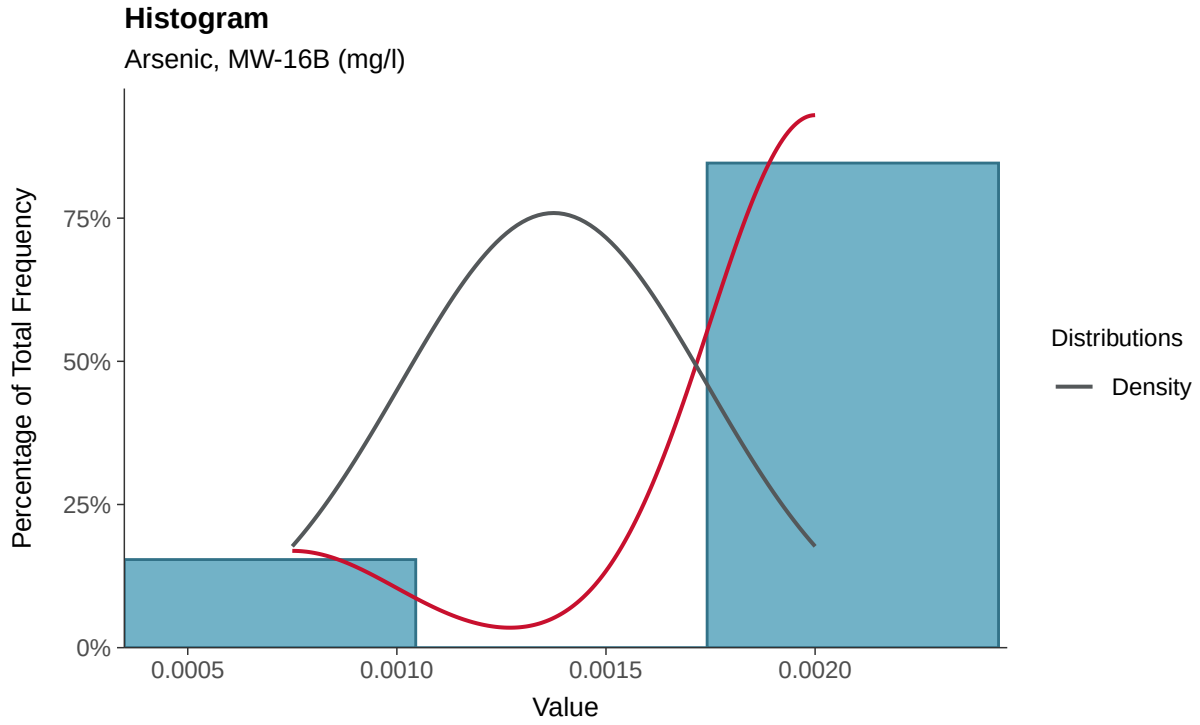
Antimony, MW-16B (mg/l)



Appendix IV: Arsenic, MW-16B

ID: 26_3_102



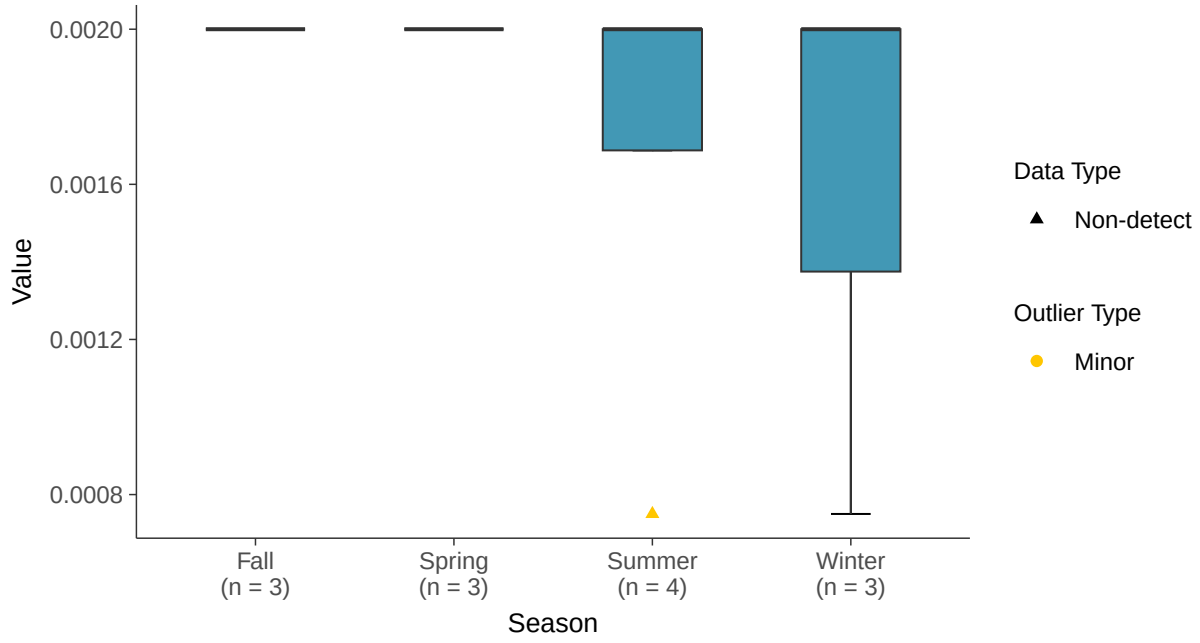


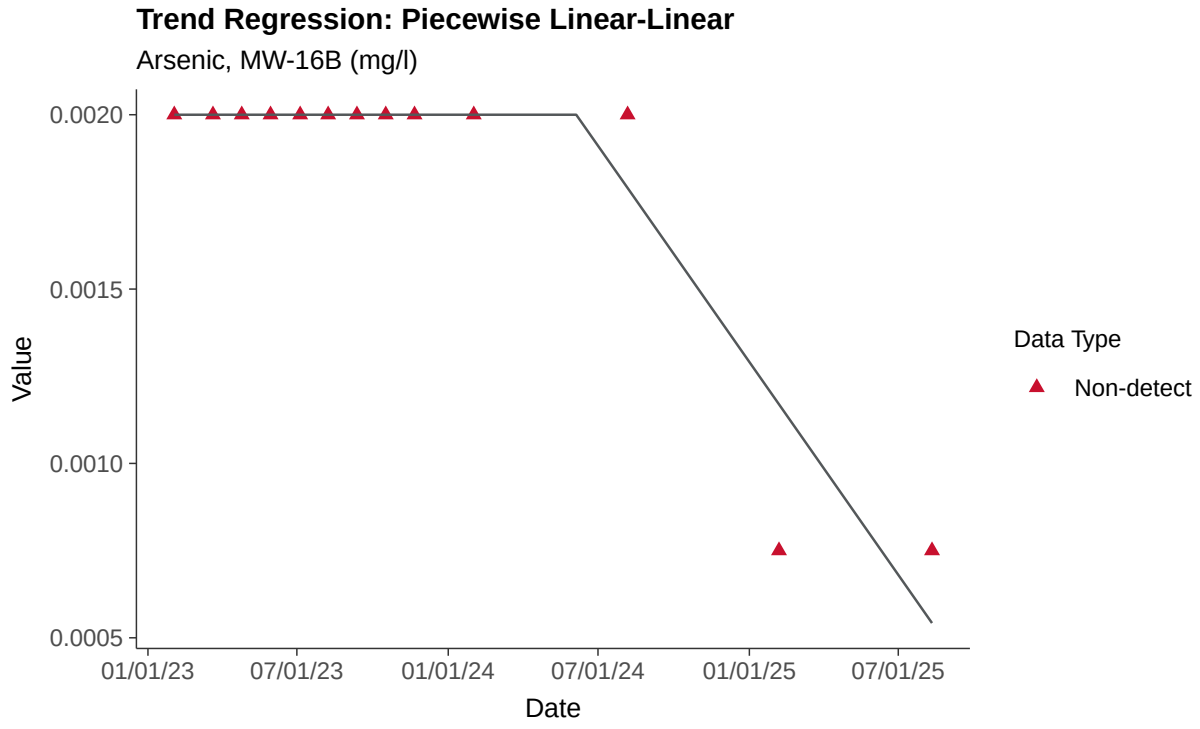
Boxplot

Arsenic, MW-16B (mg/l)

Boxplot by Season

Arsenic, MW-16B (mg/l)



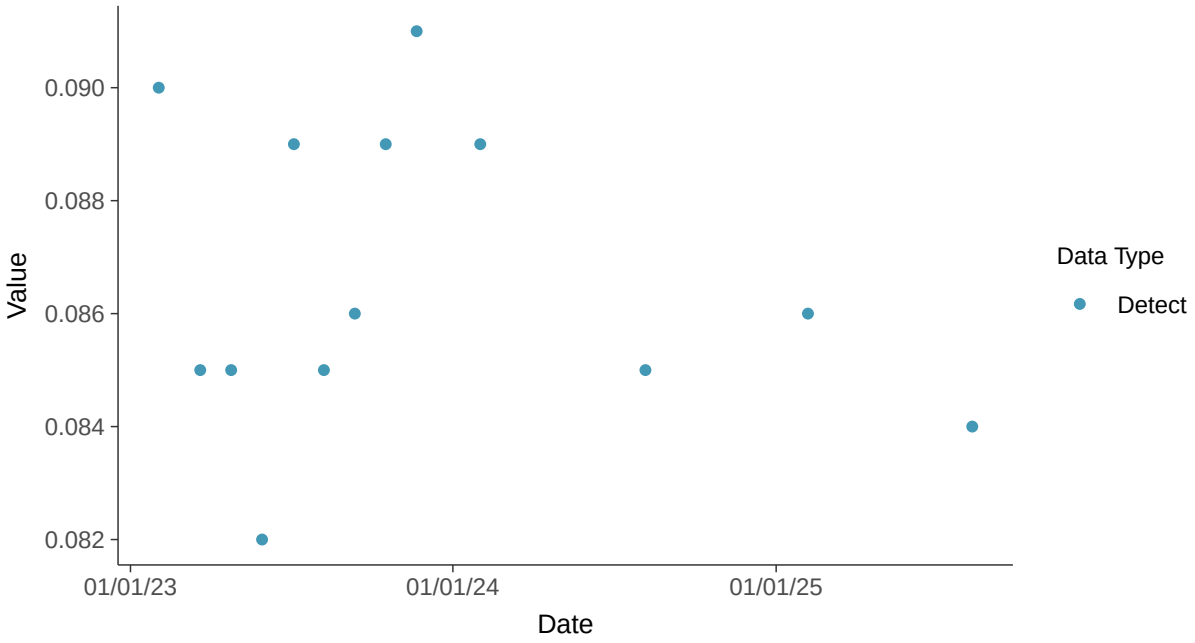

Trend Regression: Piecewise Linear-Linear
Arsenic, MW-16B (mg/l)
Value
0.0020
0.0015
0.0010
0.0005
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Barium, MW-16B

ID: 26_3_103

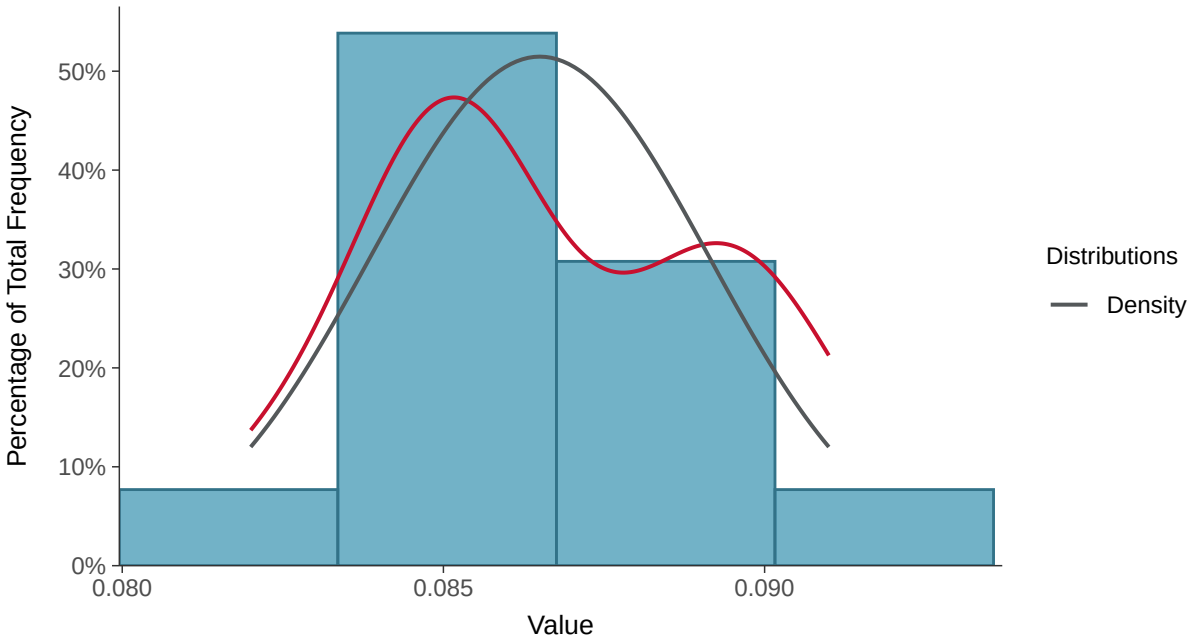
Scatter Plot

Barium, MW-16B (mg/l)



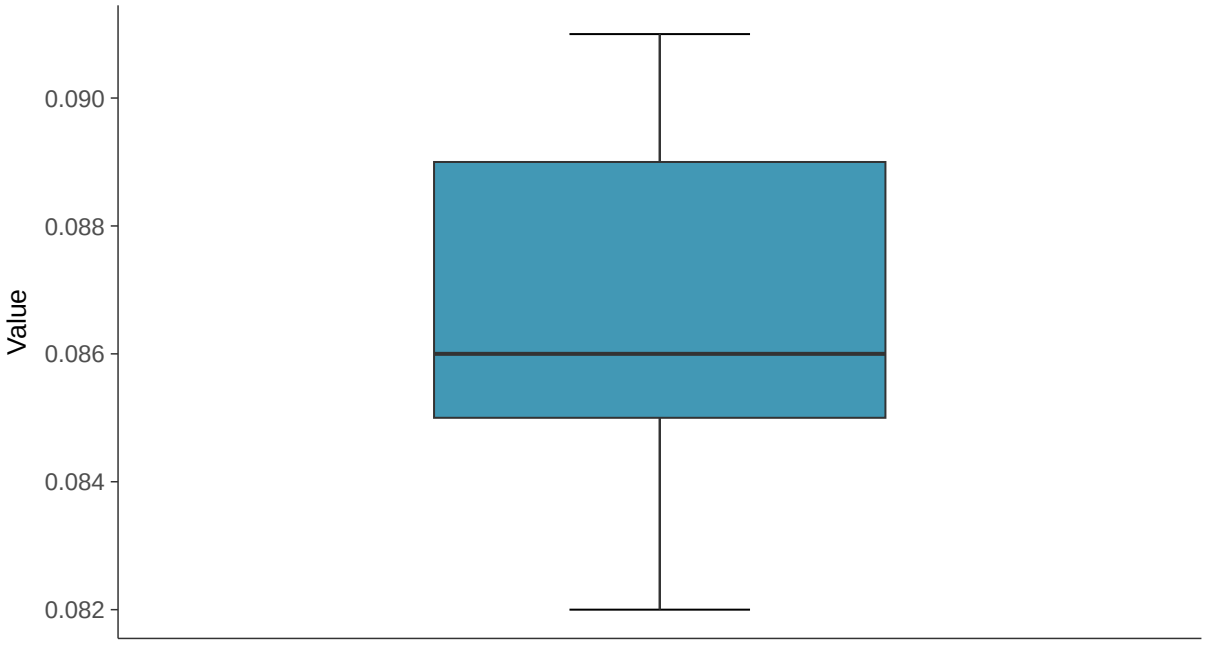
Histogram

Barium, MW-16B (mg/l)



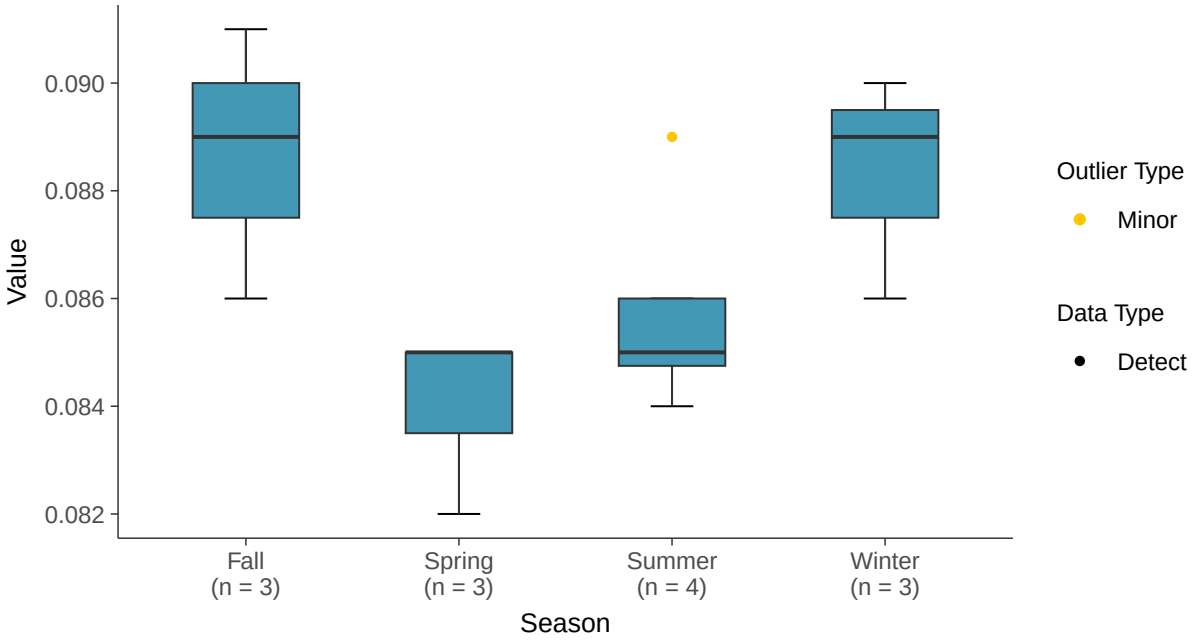
Boxplot

Barium, MW-16B (mg/l)



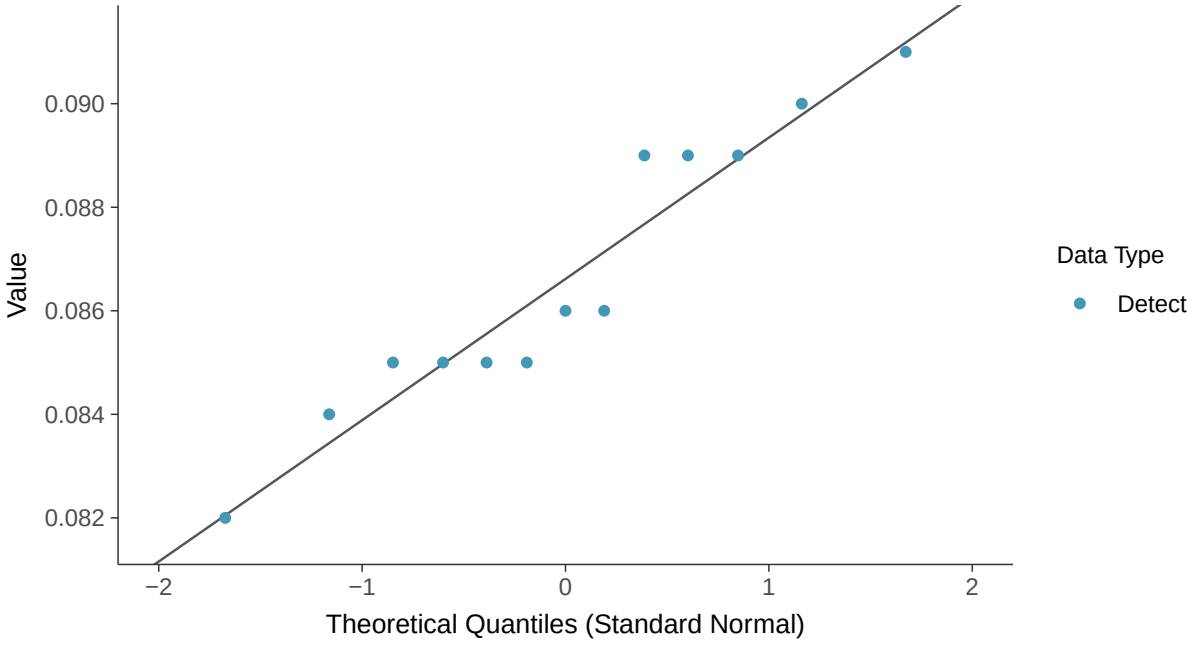
Boxplot by Season

Barium, MW-16B (mg/l)



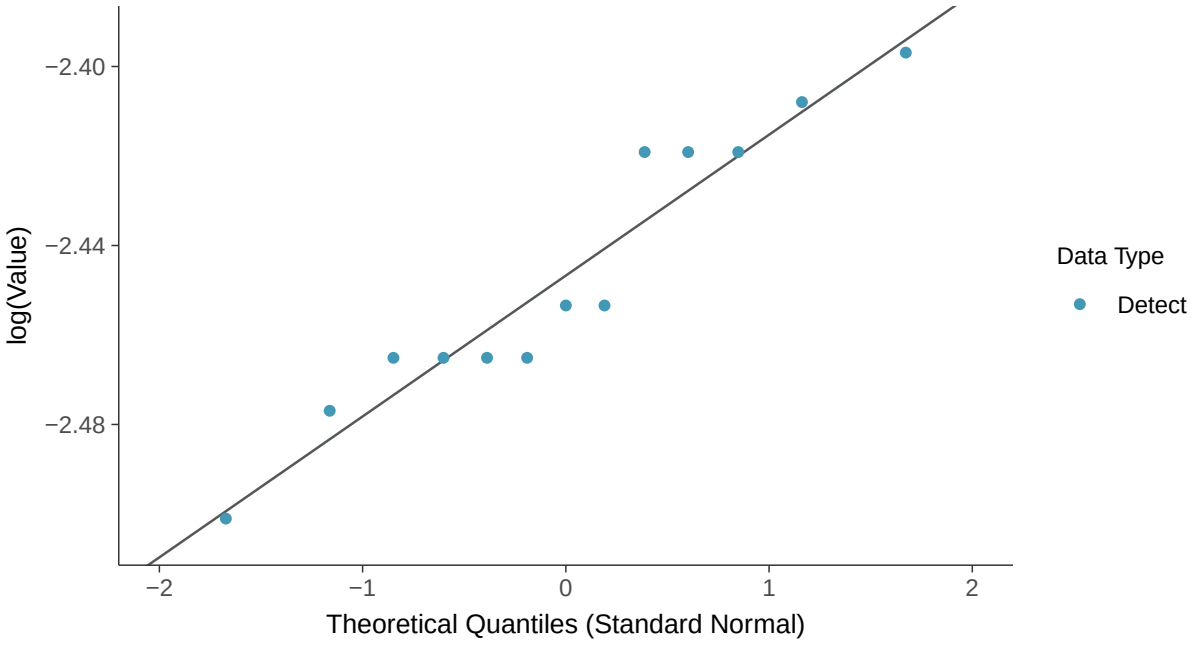
Normal Q-Q plot

Barium, MW-16B (mg/l)



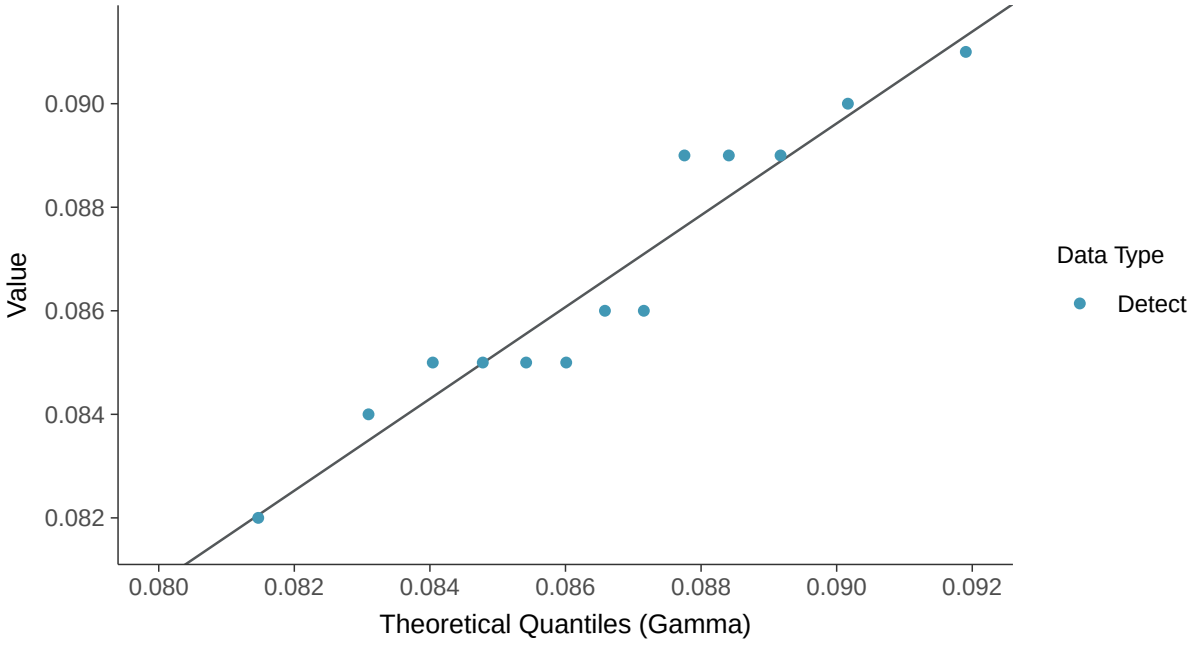
Lognormal Q-Q plot

Barium, MW-16B (mg/l)



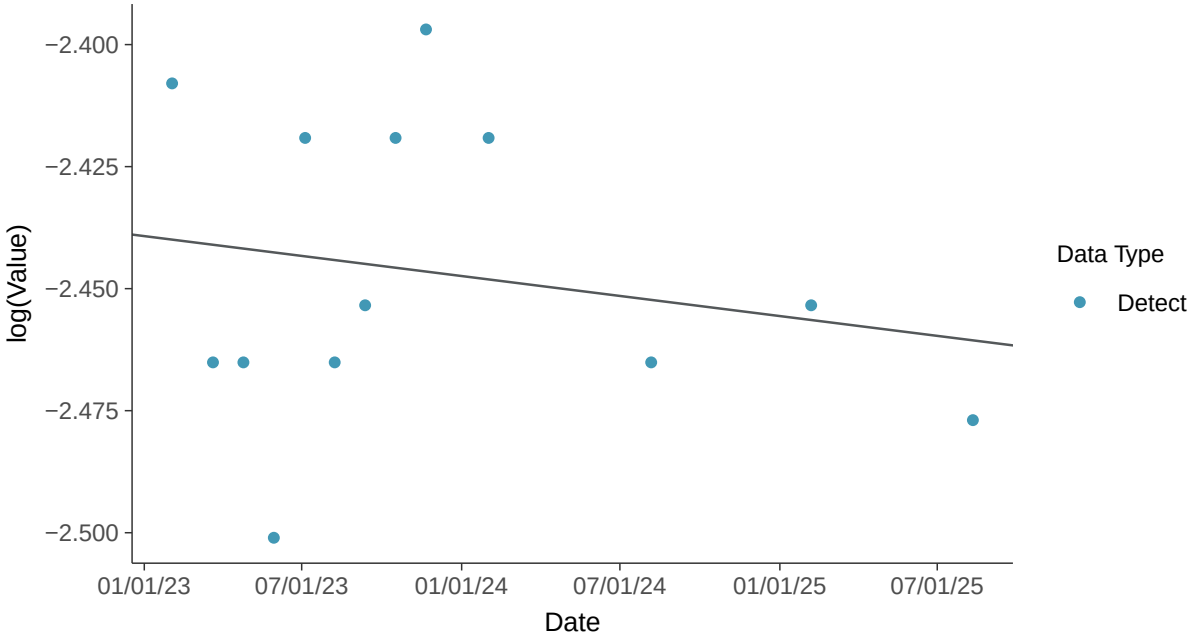
Gamma Q-Q plot

Barium, MW-16B (mg/l)



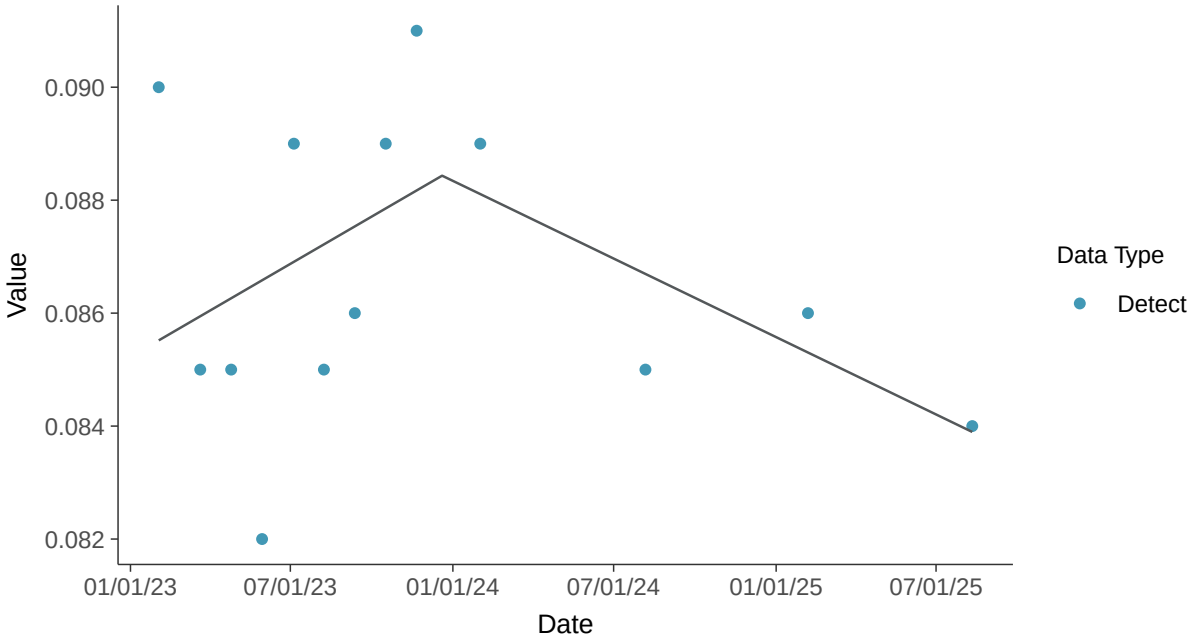
Trend Regression: Lognormal MLE

Barium, MW-16B (mg/l)



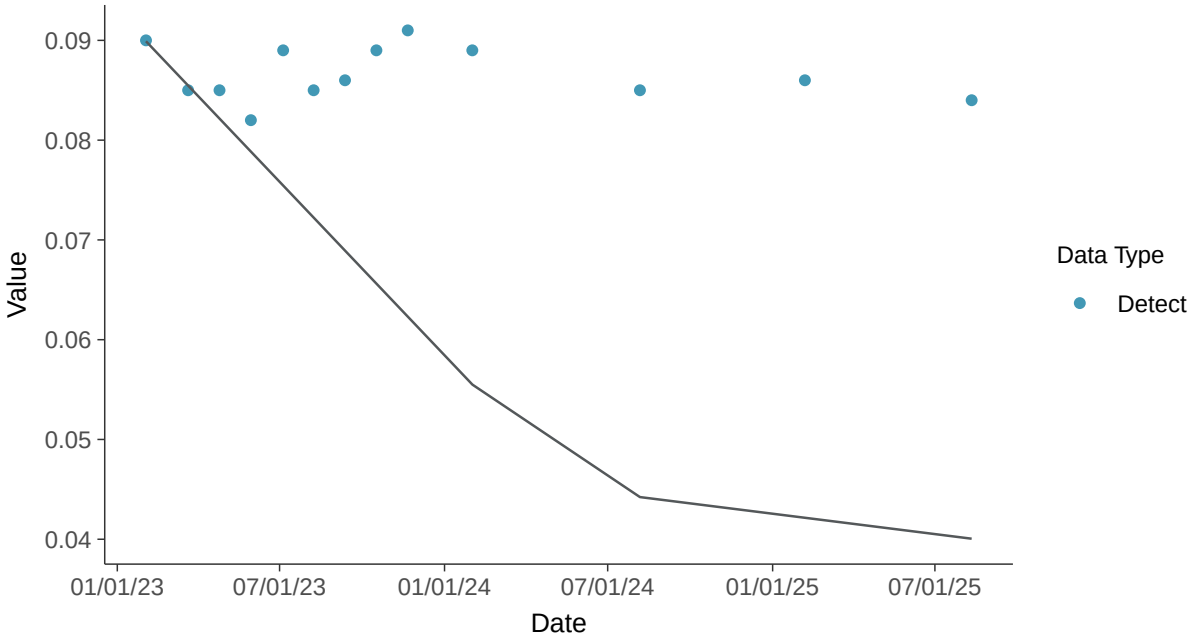
Trend Regression: Piecewise Linear-Linear

Barium, MW-16B (mg/l)



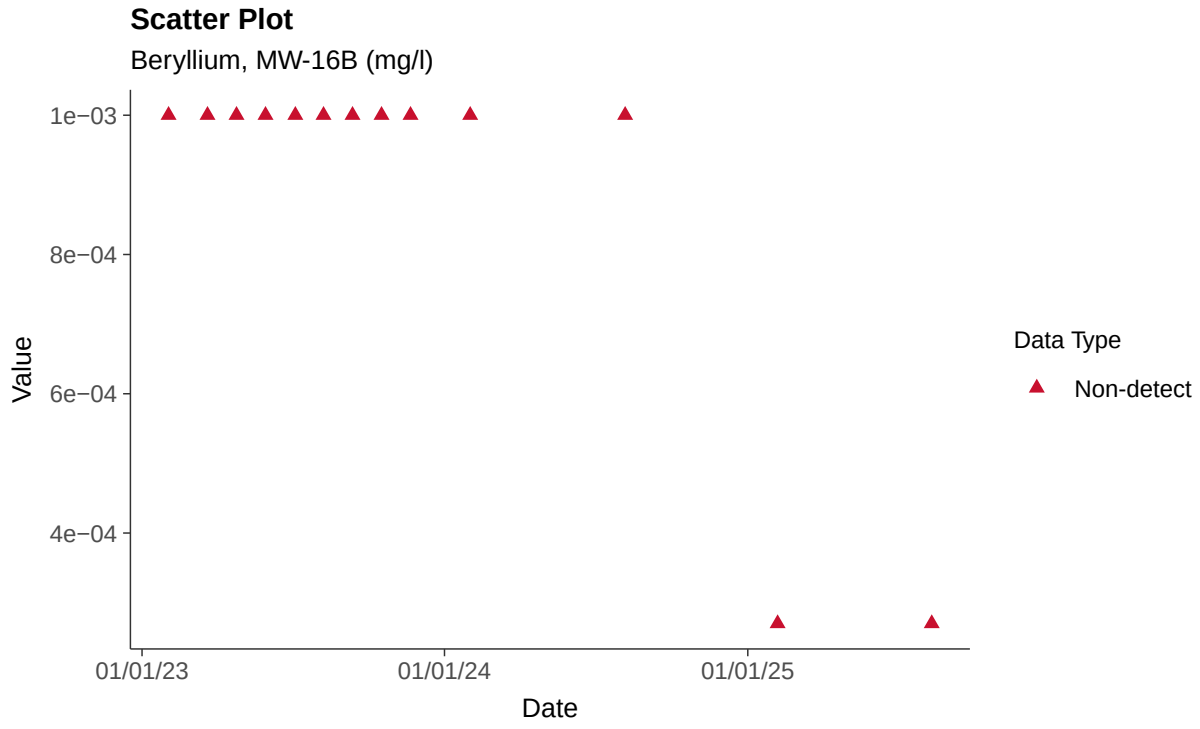
Trend Regression: Piecewise Linear-Linear-Linear

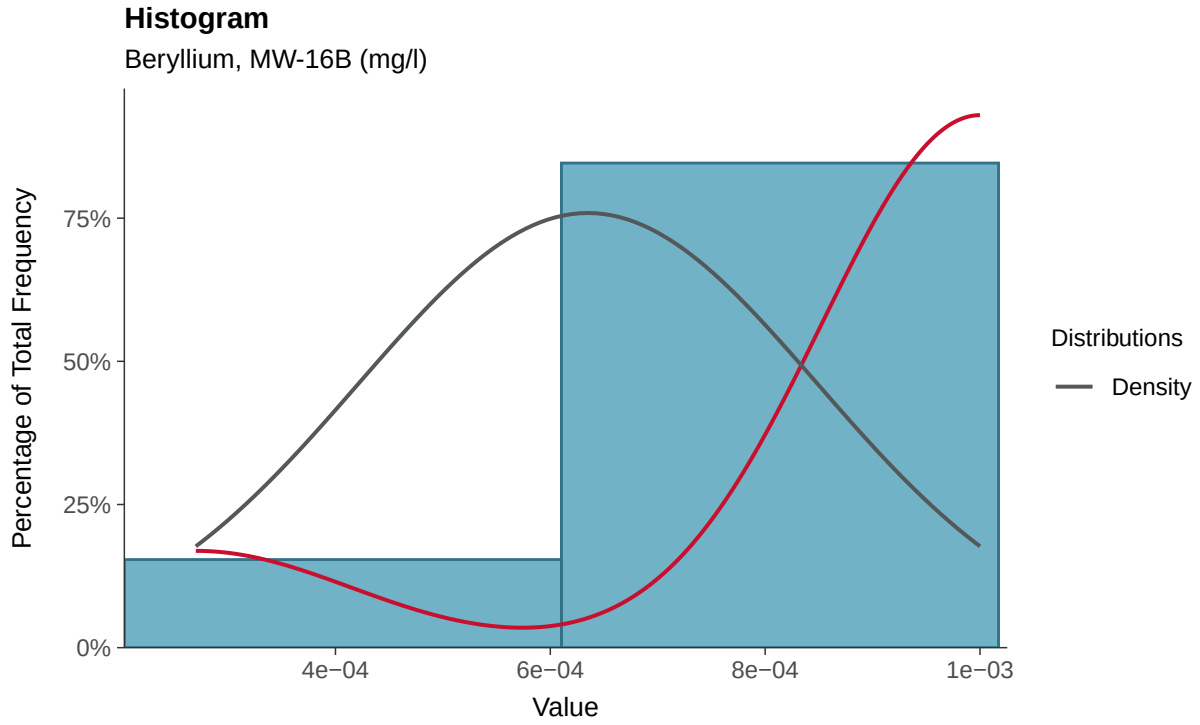
Barium, MW-16B (mg/l)



Appendix IV: Beryllium, MW-16B

ID: 26_3_104



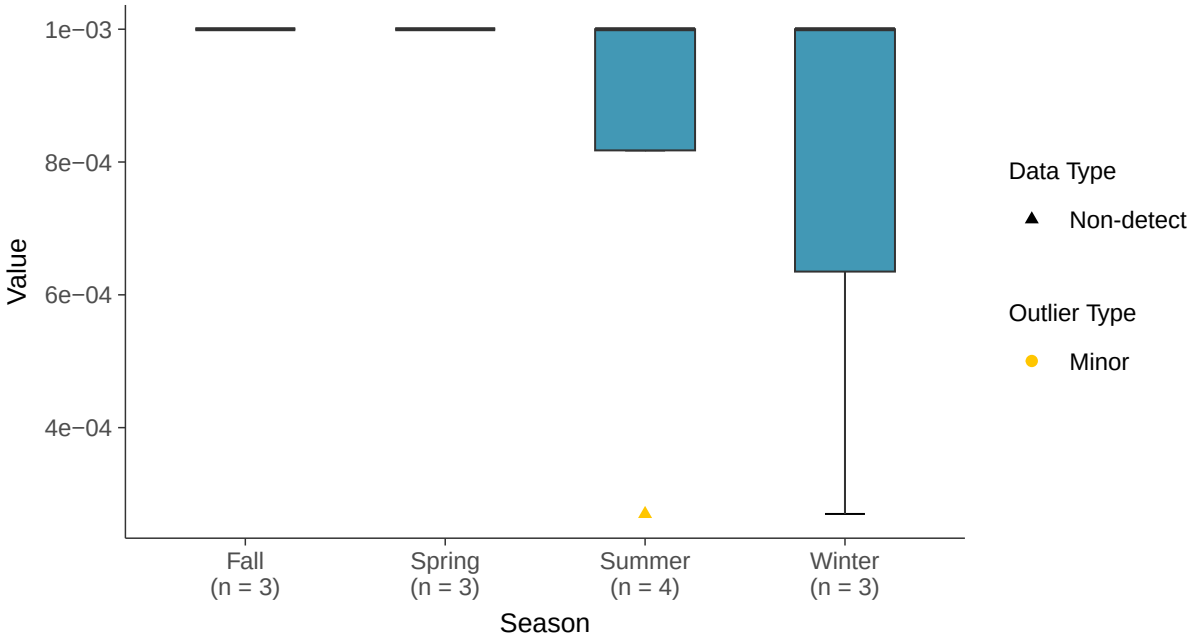


Boxplot

Beryllium, MW-16B (mg/l)

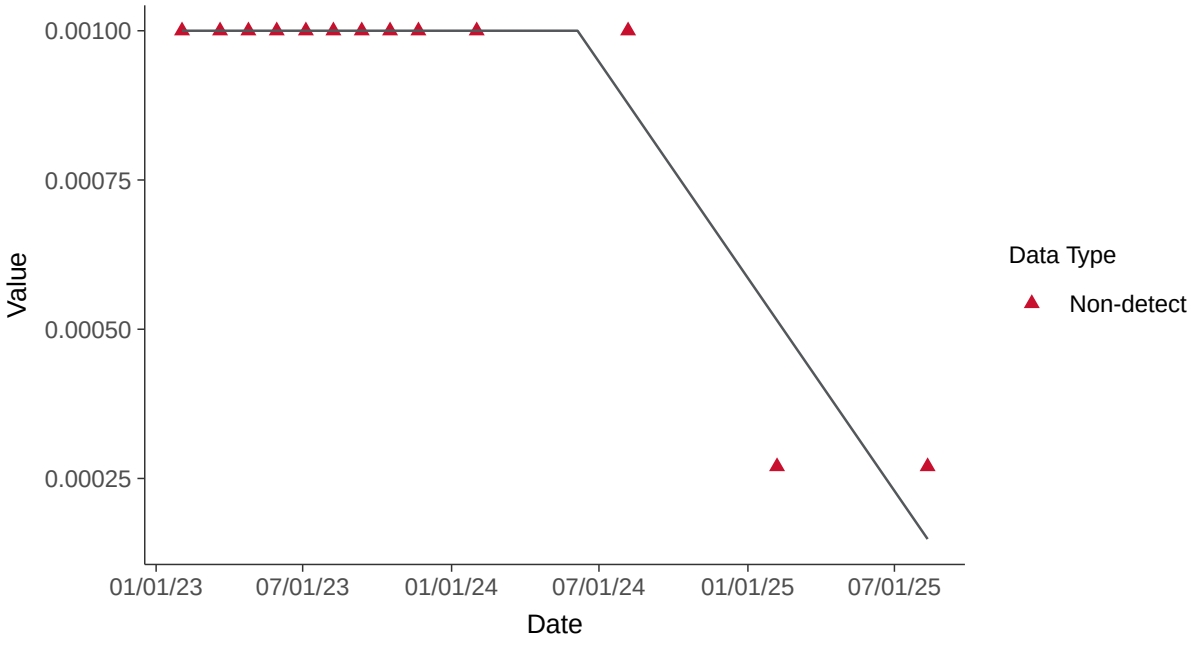
Boxplot by Season

Beryllium, MW-16B (mg/l)



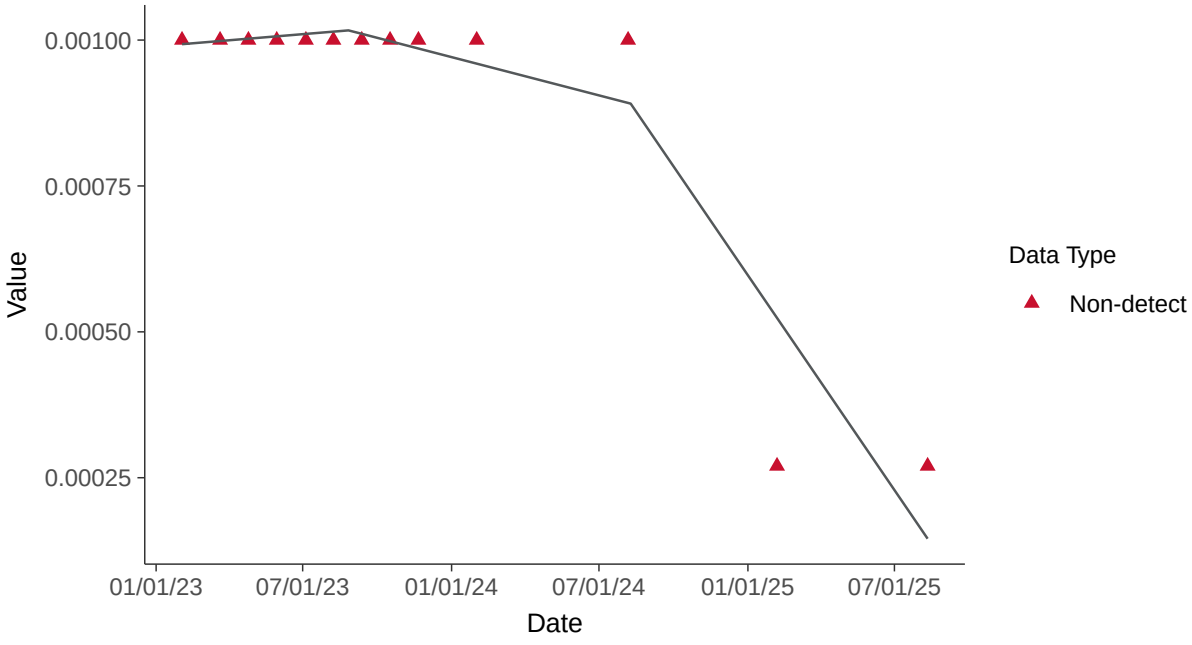
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-16B (mg/l)



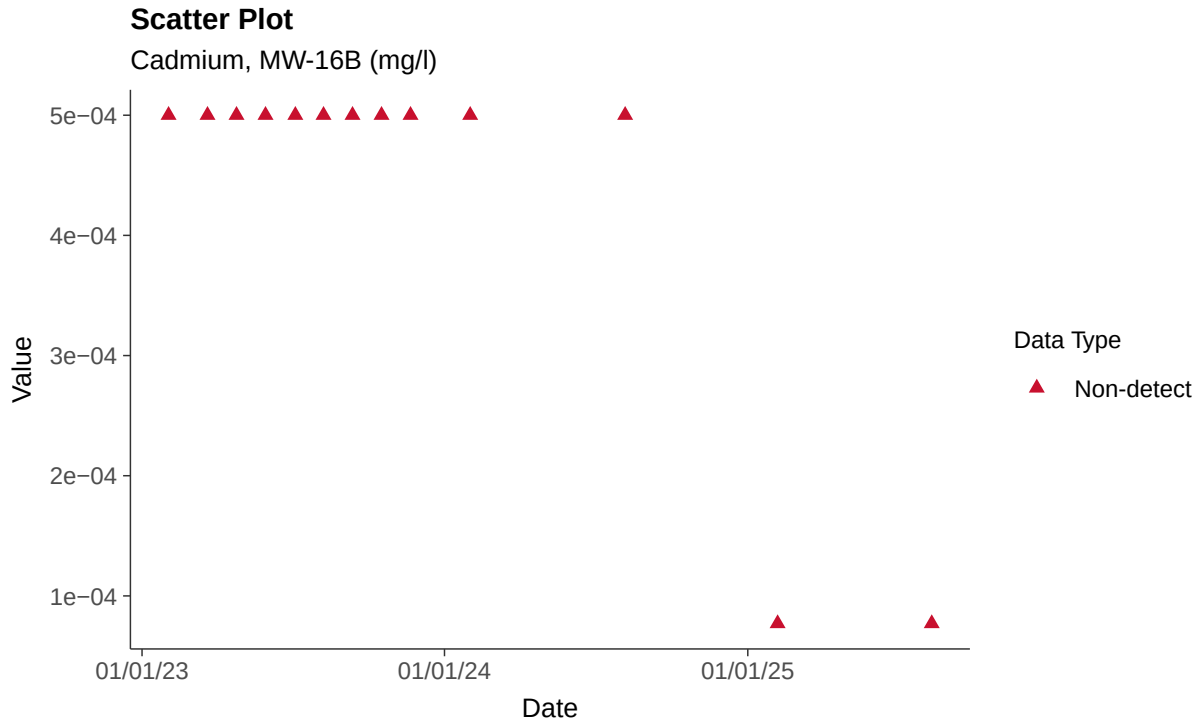
Trend Regression: Piecewise Linear-Linear-Linear

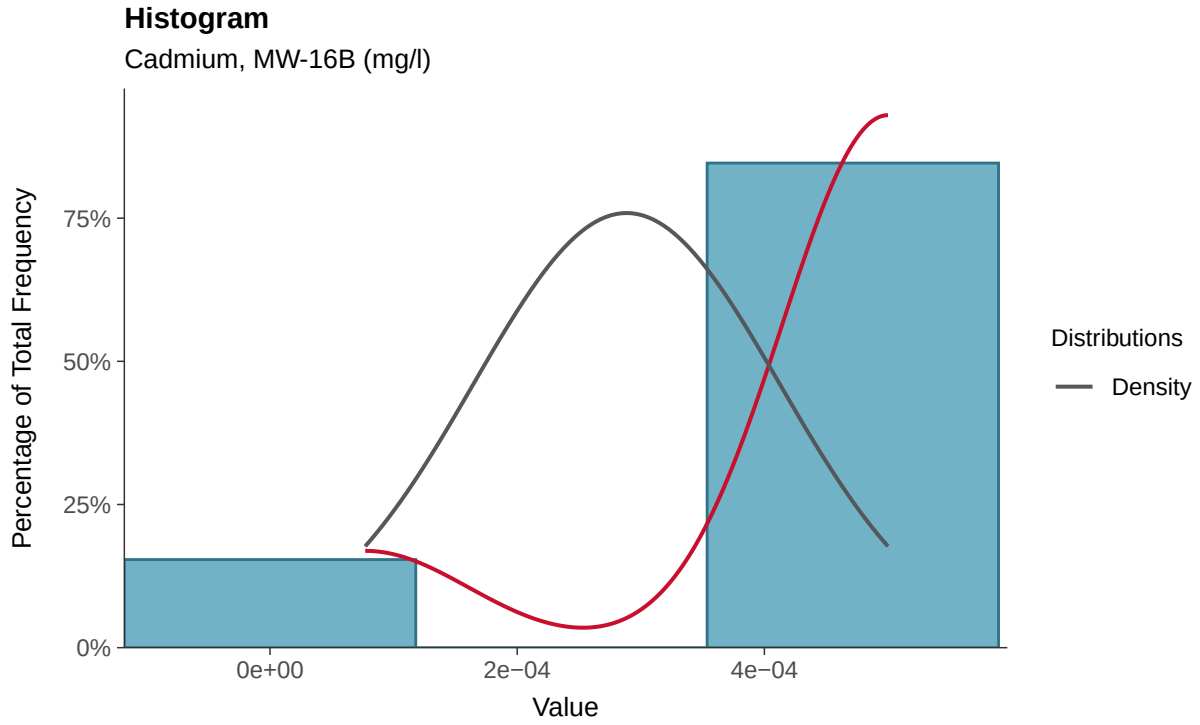
Beryllium, MW-16B (mg/l)



Appendix IV: Cadmium, MW-16B

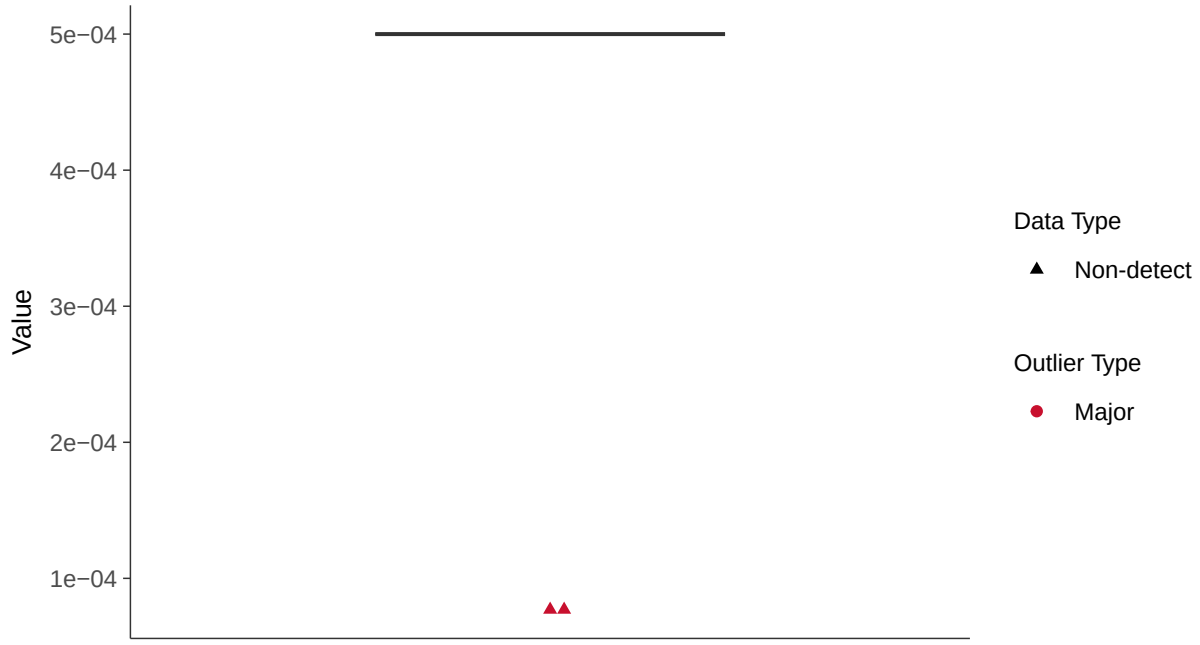
ID: 26_3_106





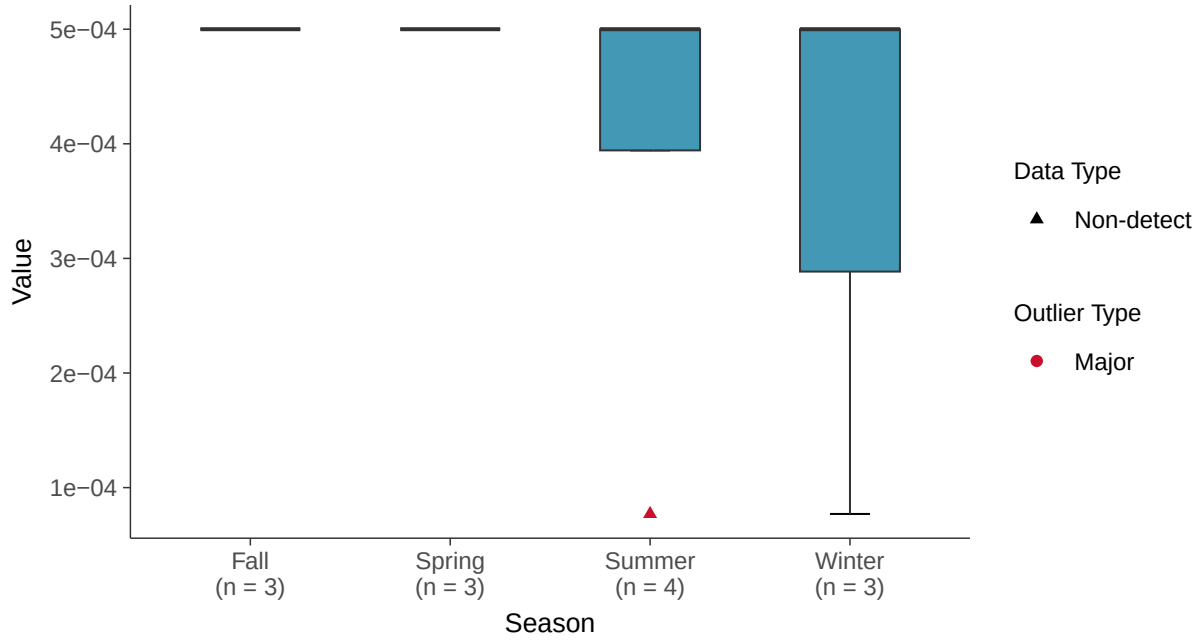
Boxplot

Cadmium, MW-16B (mg/l)



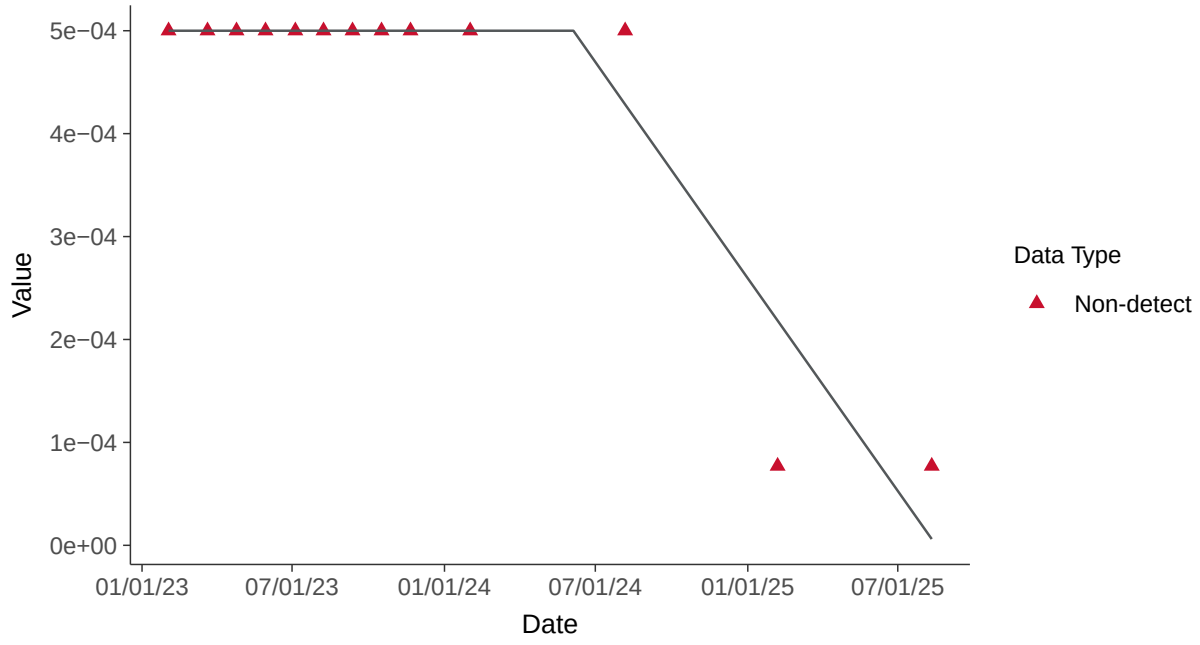
Boxplot by Season

Cadmium, MW-16B (mg/l)



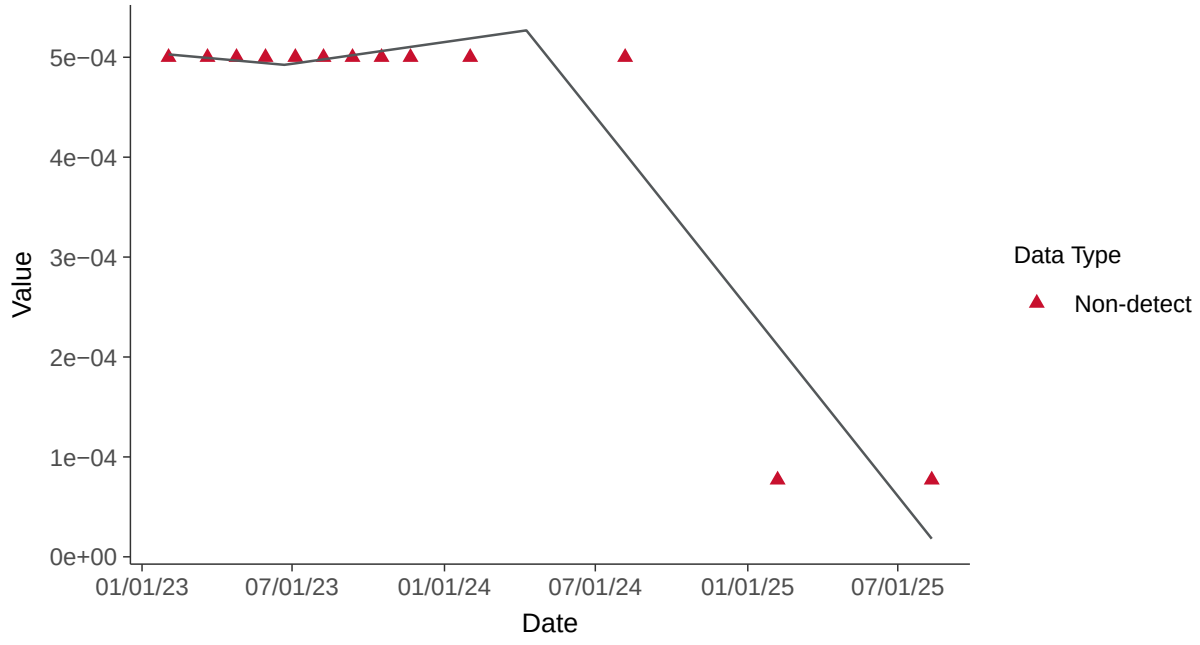
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-16B (mg/l)



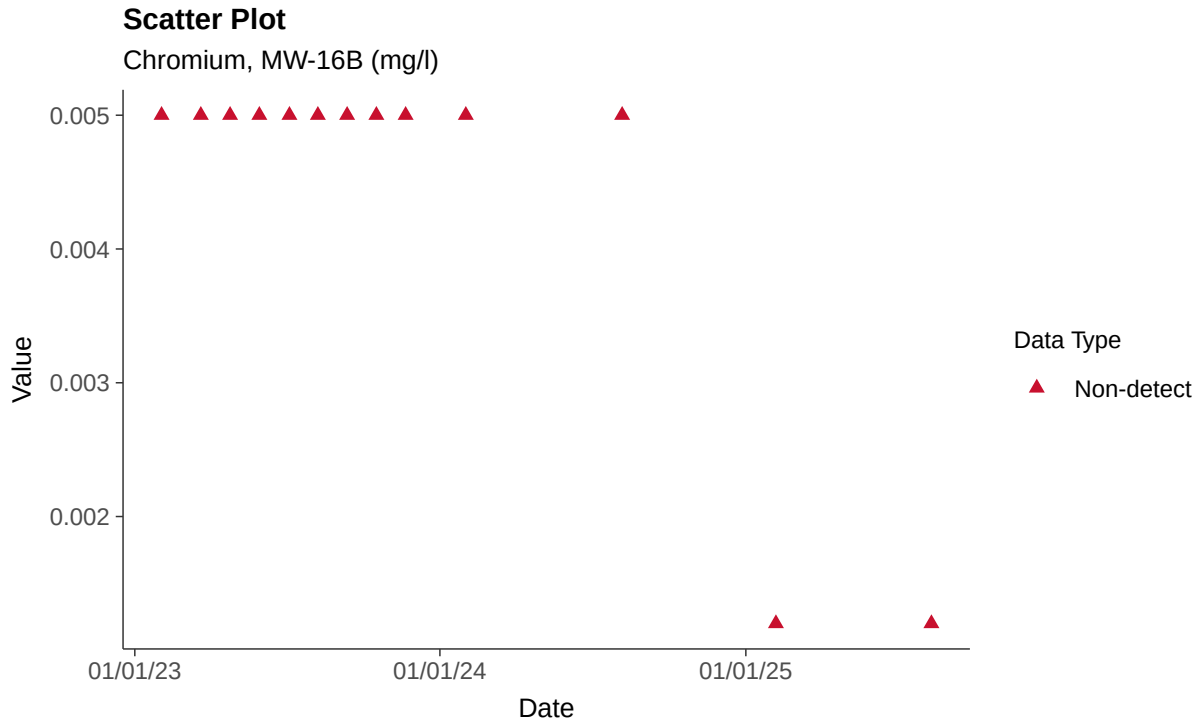
Trend Regression: Piecewise Linear-Linear-Linear

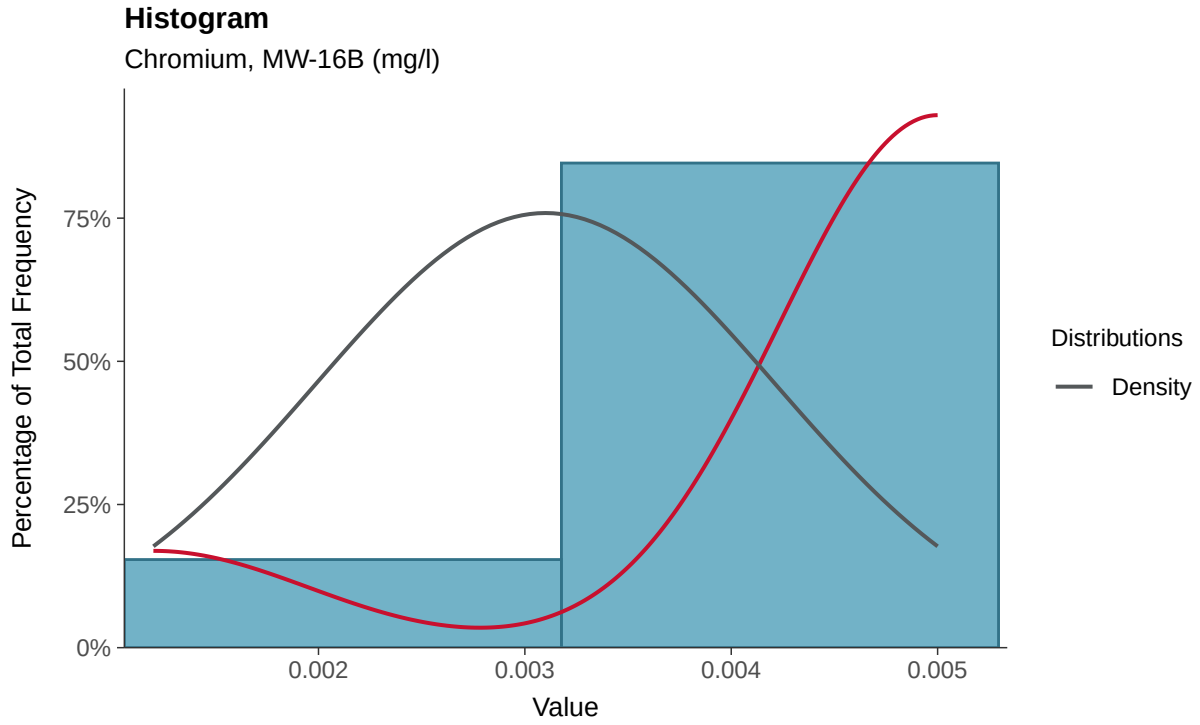
Cadmium, MW-16B (mg/l)



Appendix IV: Chromium, MW-16B

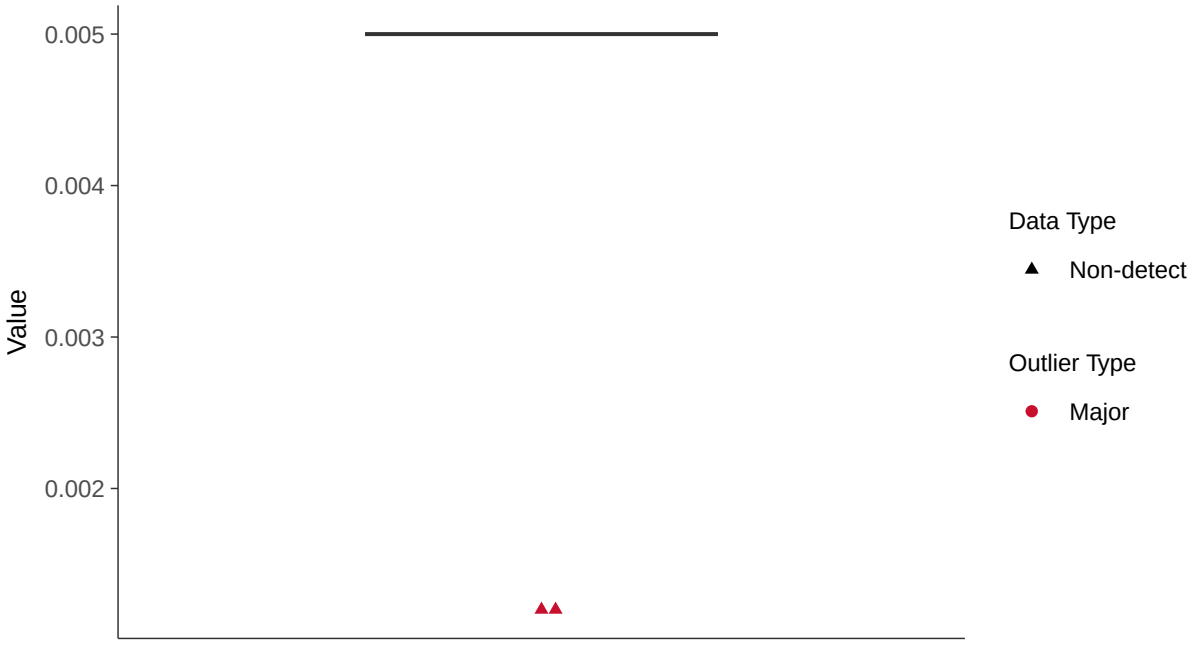
ID: 26_3_109





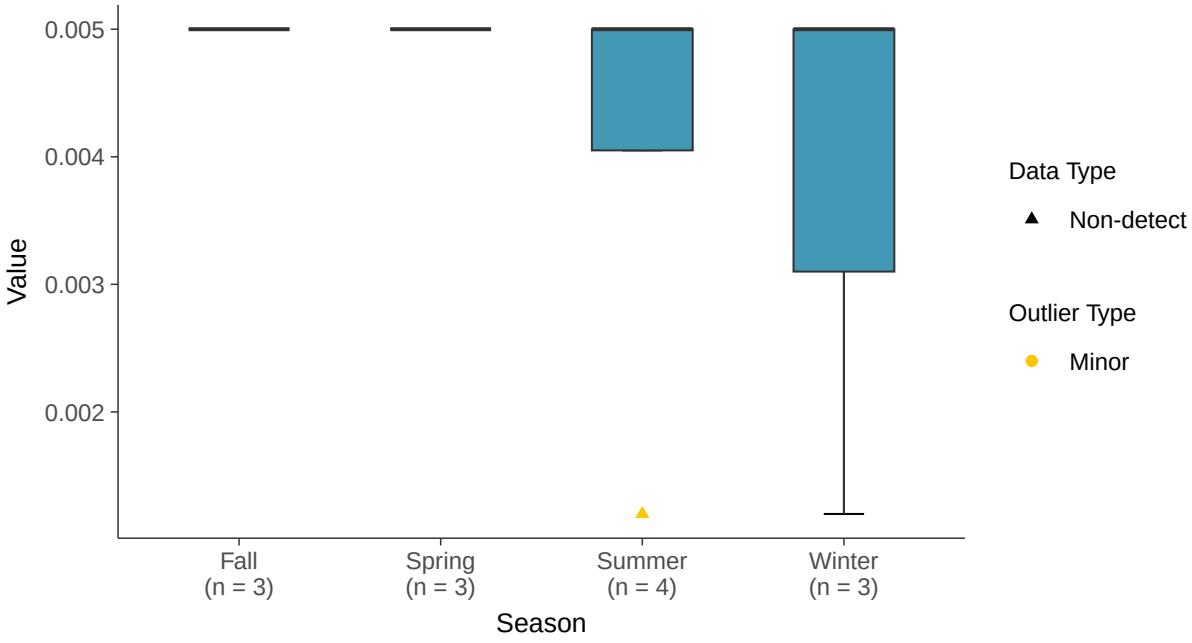
Boxplot

Chromium, MW-16B (mg/l)



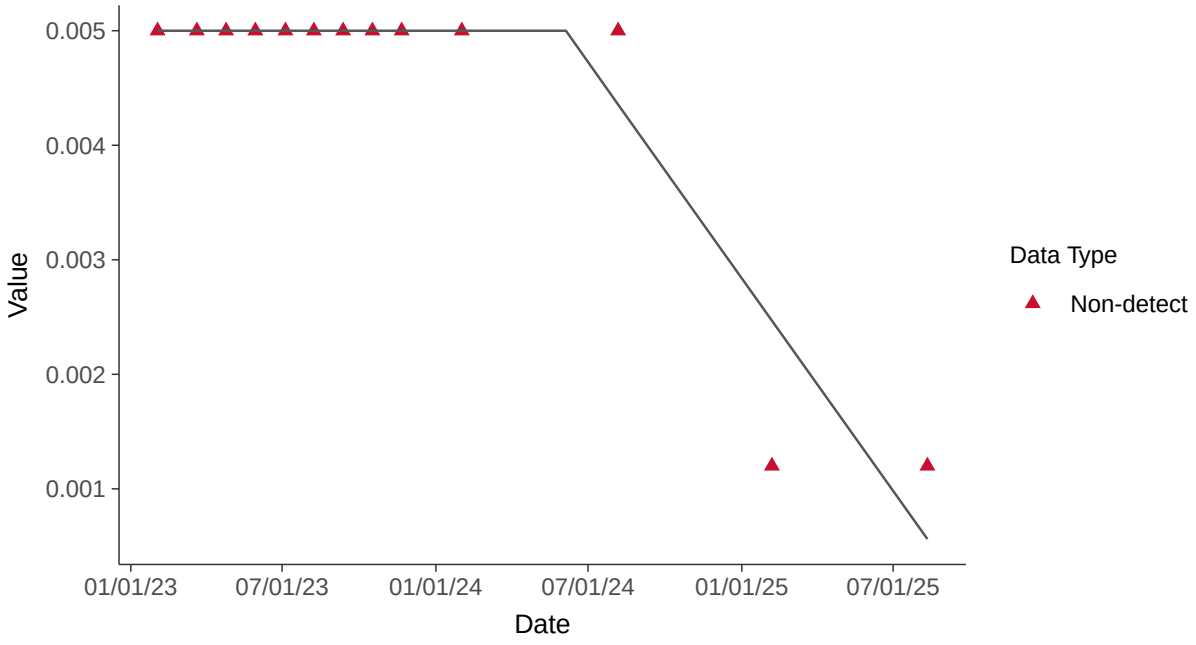
Boxplot by Season

Chromium, MW-16B (mg/l)



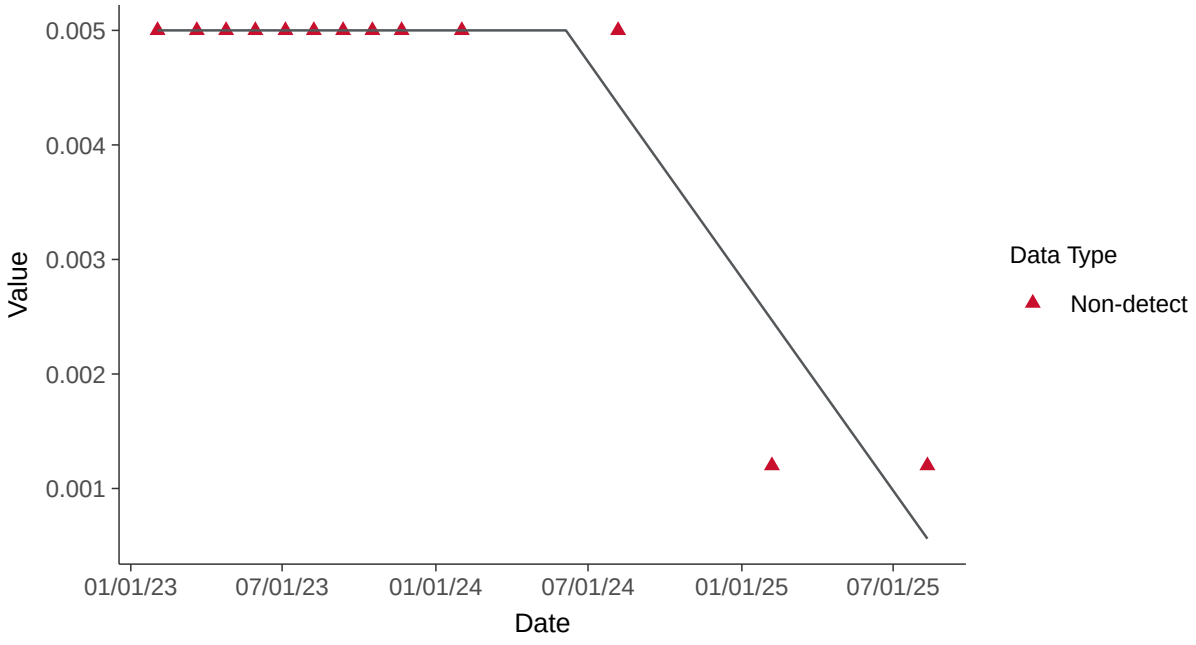
Trend Regression: Piecewise Linear-Linear

Chromium, MW-16B (mg/l)



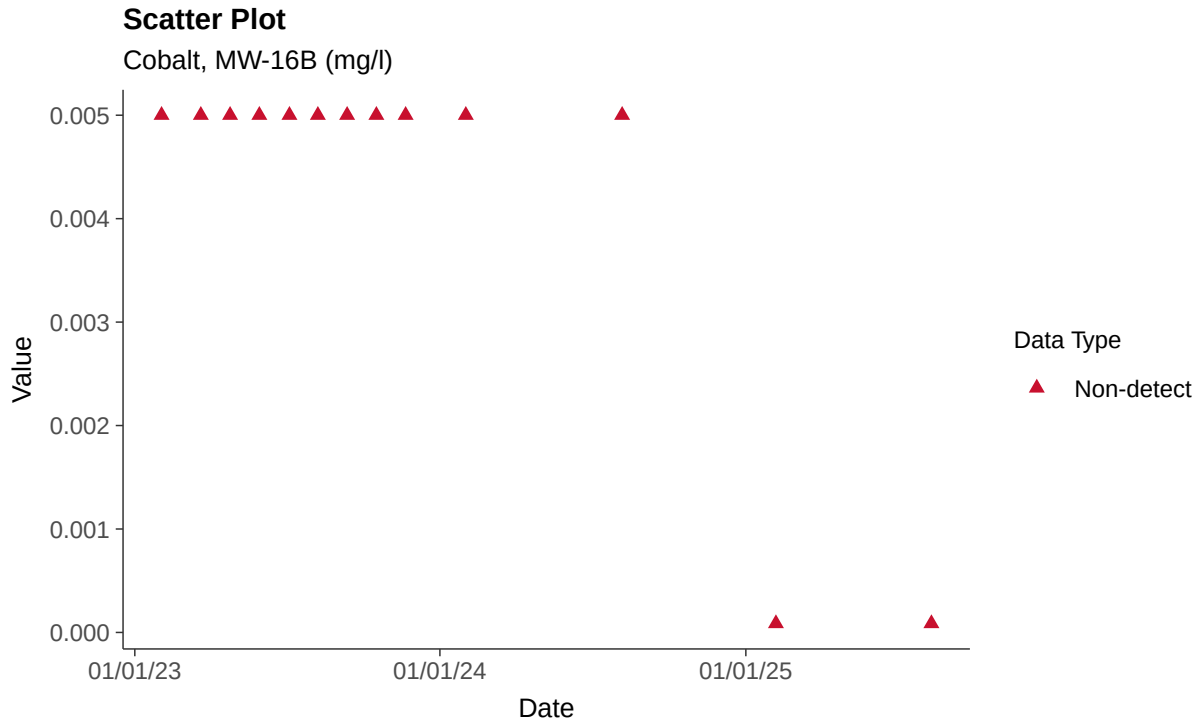
Trend Regression: Piecewise Linear-Linear-Linear

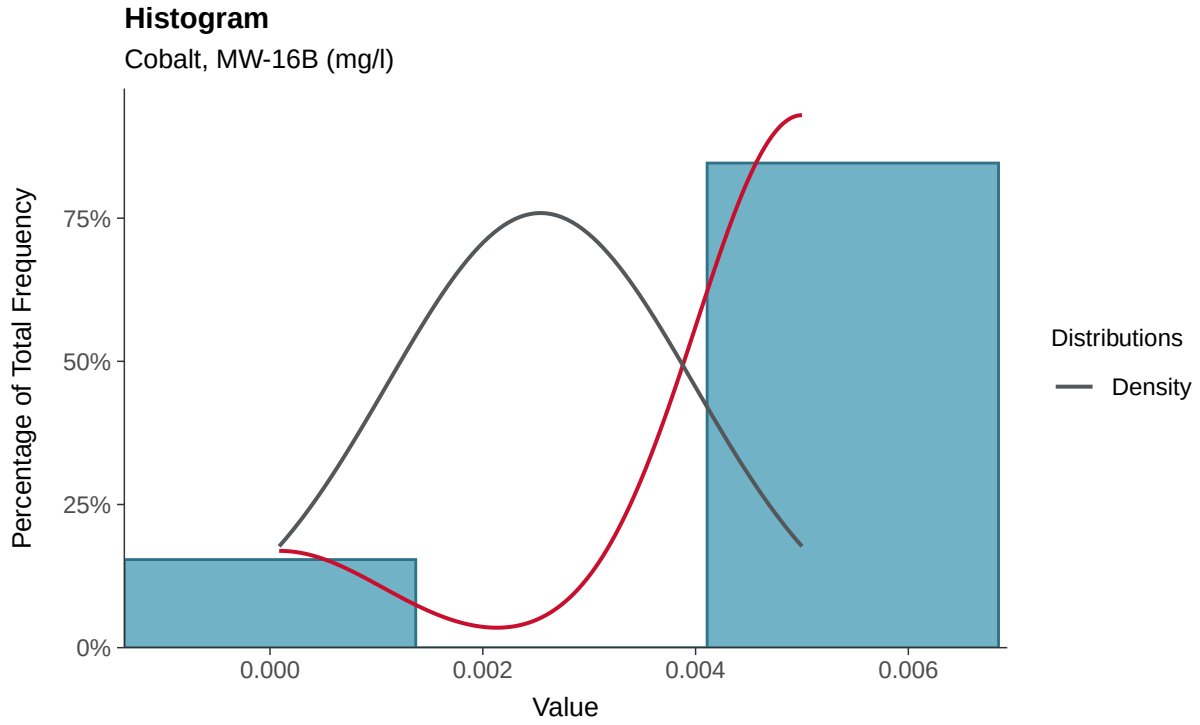
Chromium, MW-16B (mg/l)



Appendix IV: Cobalt, MW-16B

ID: 26_3_110



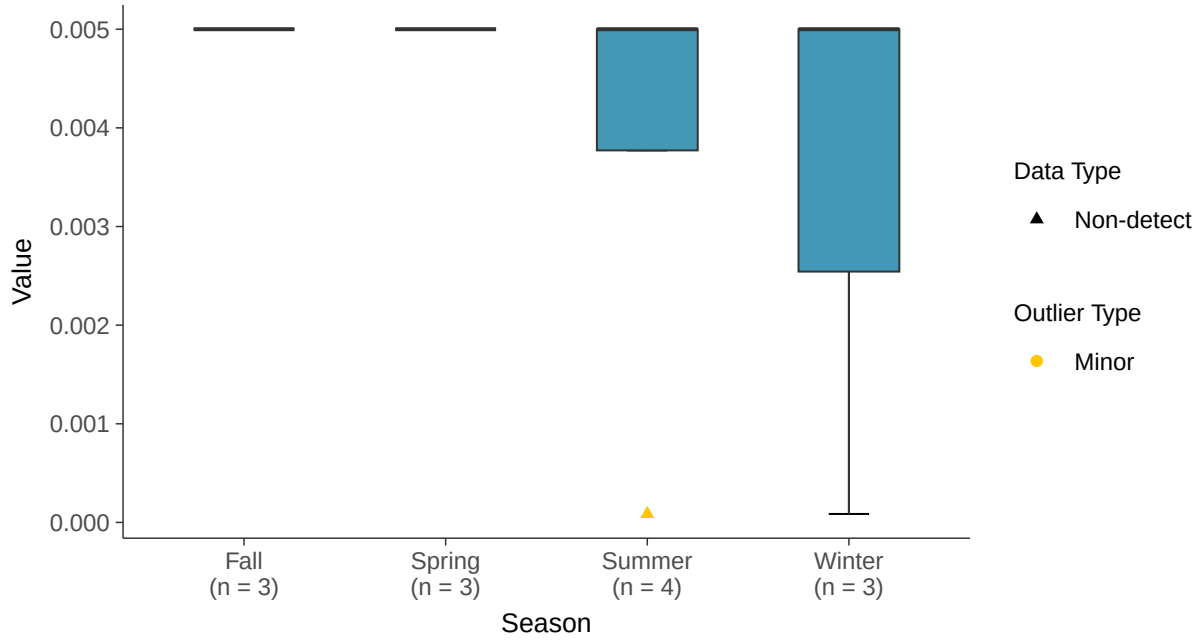


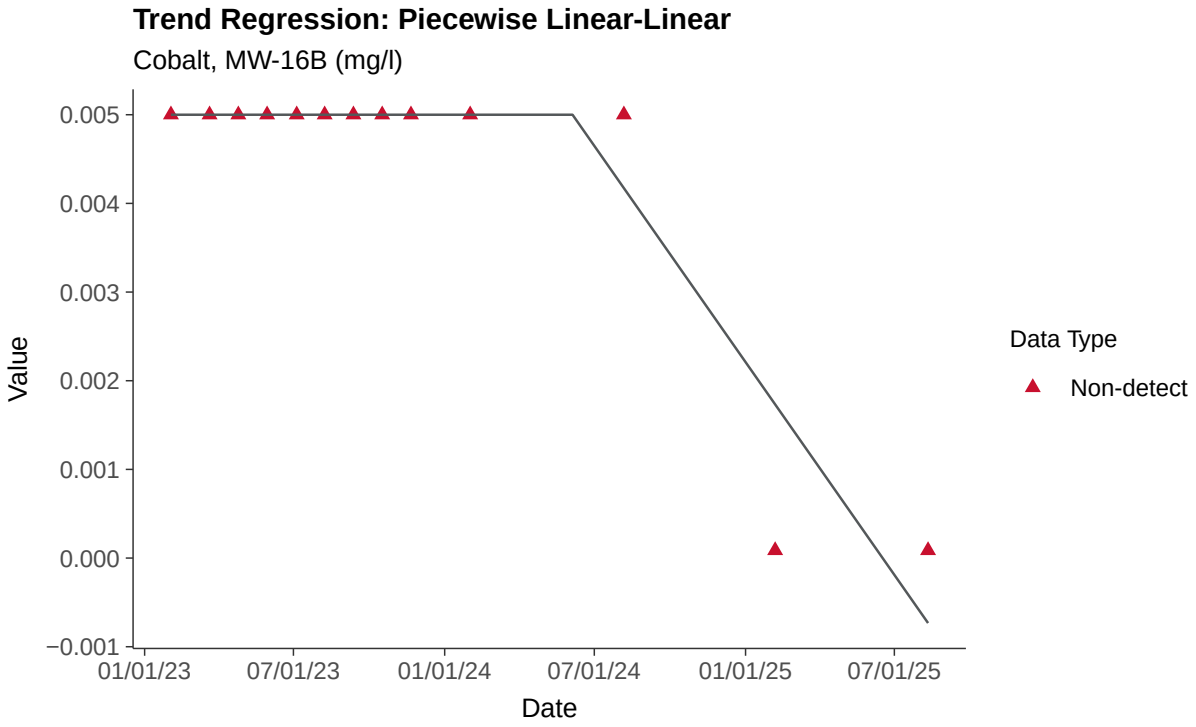
Boxplot

Cobalt, MW-16B (mg/l)

Boxplot by Season

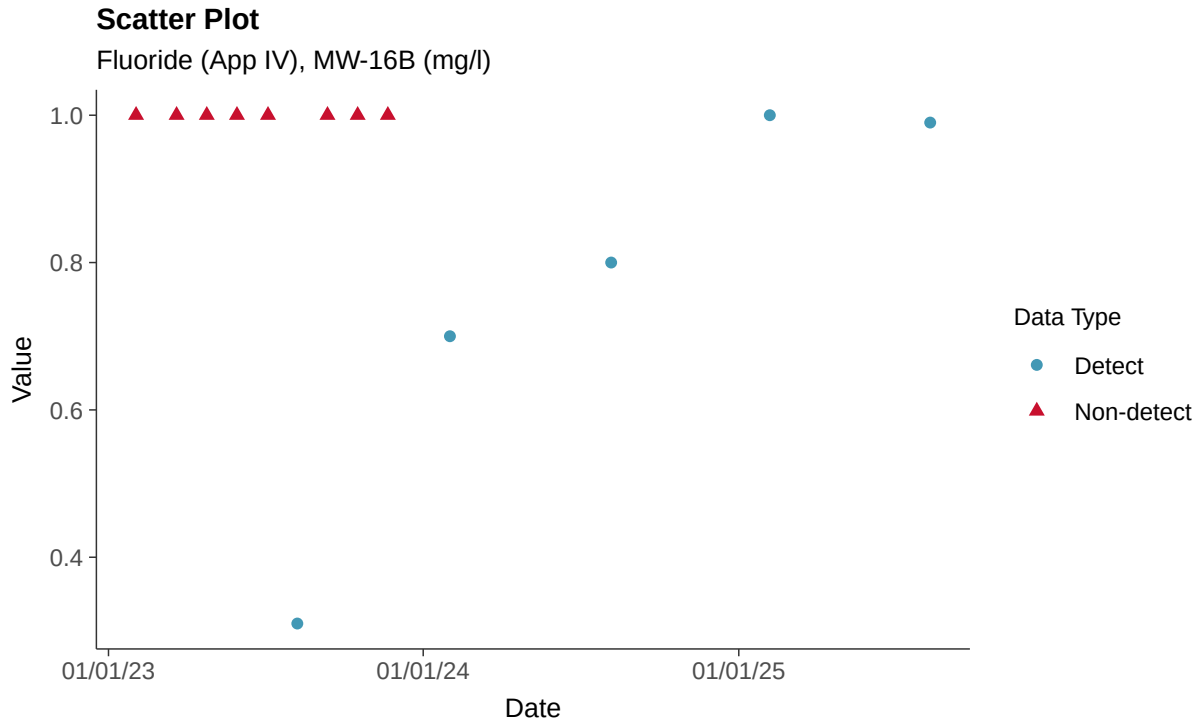
Cobalt, MW-16B (mg/l)

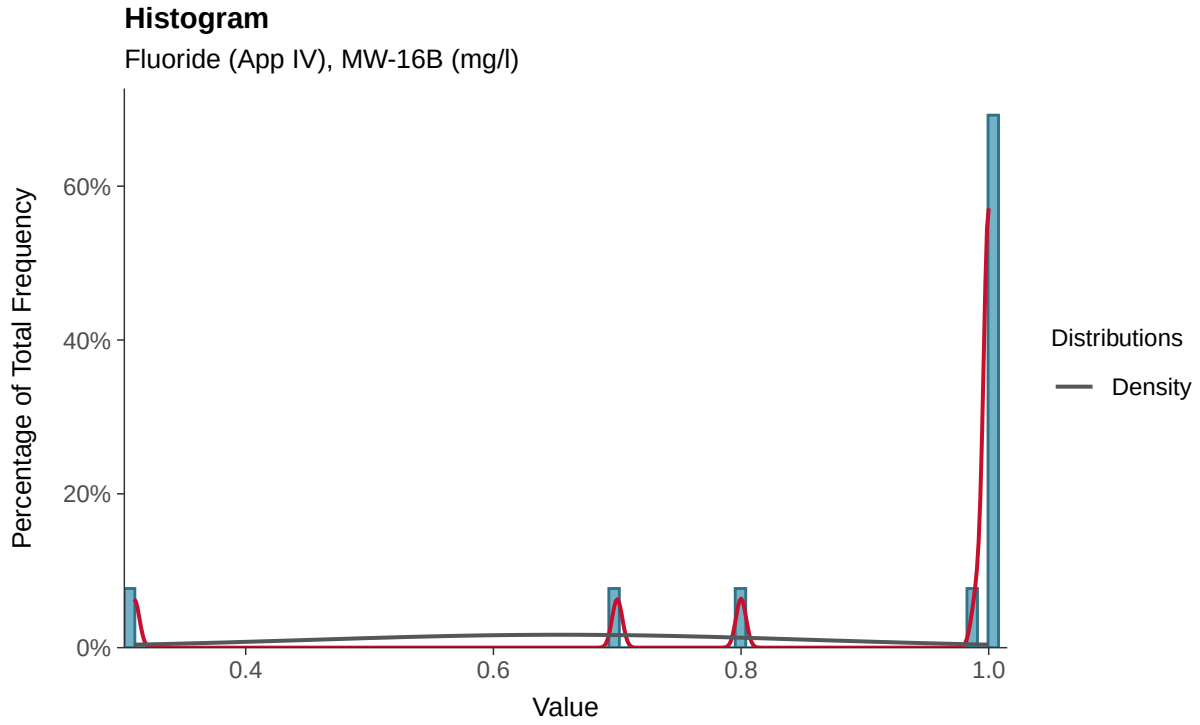



Trend Regression: Piecewise Linear-Linear
Cobalt, MW-16B (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
−0.001
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Fluoride (App IV), MW-16B

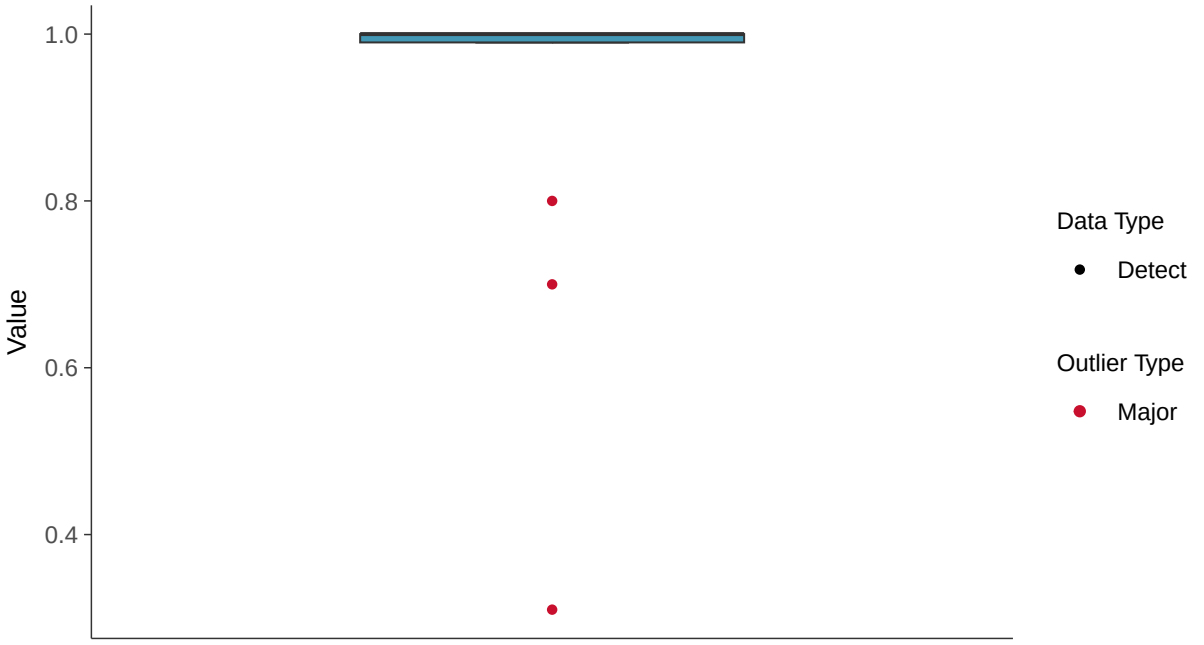
ID: 26_3_113





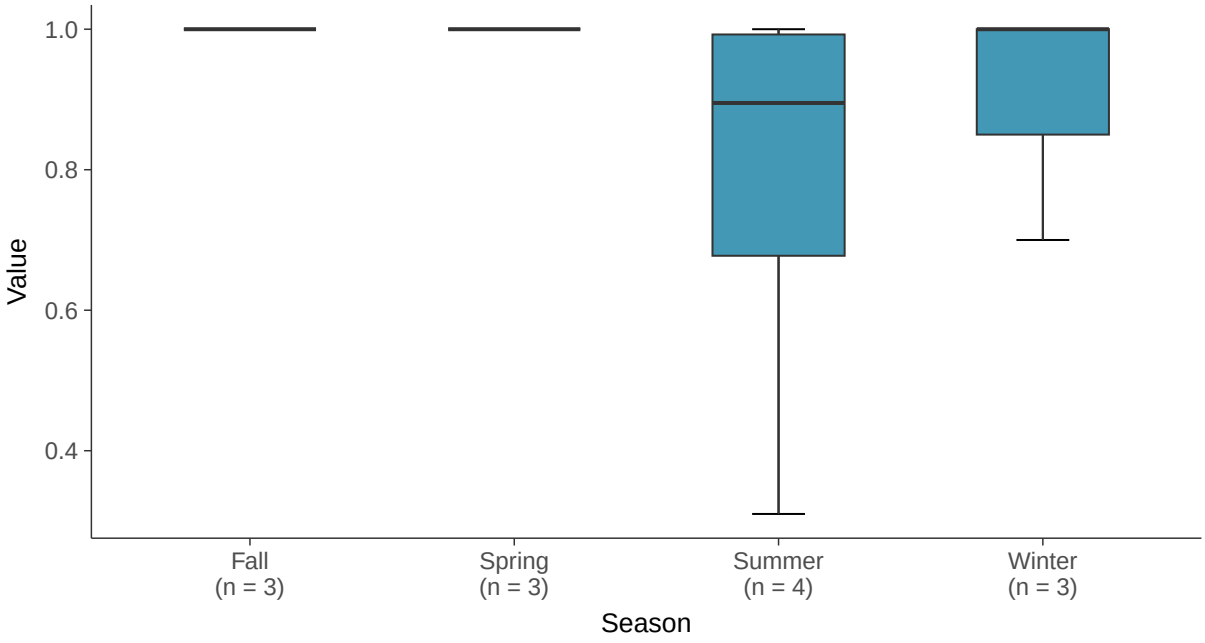
Boxplot

Fluoride (App IV), MW-16B (mg/l)



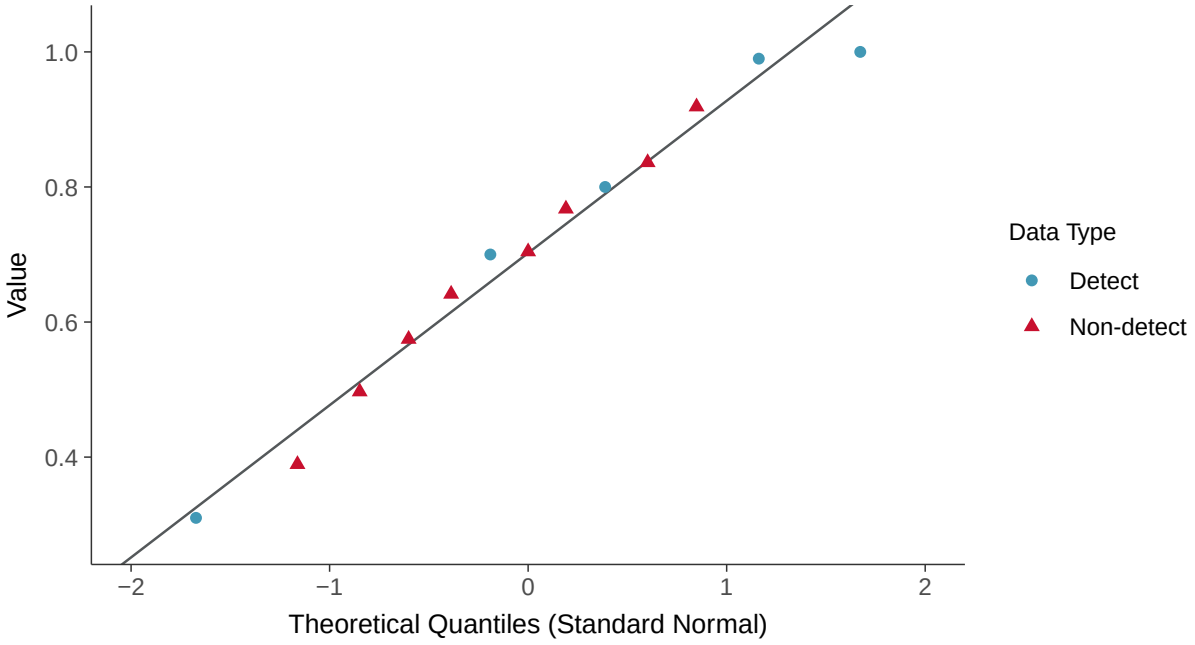
Boxplot by Season

Fluoride (App IV), MW-16B (mg/l)



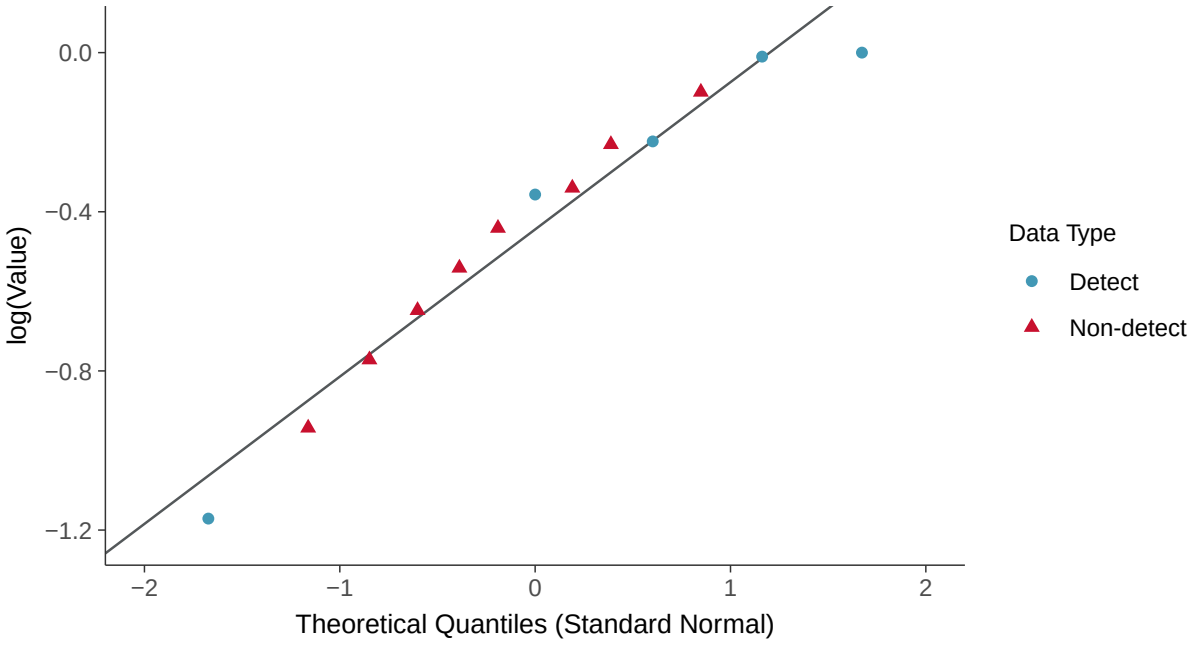
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-16B (mg/l)



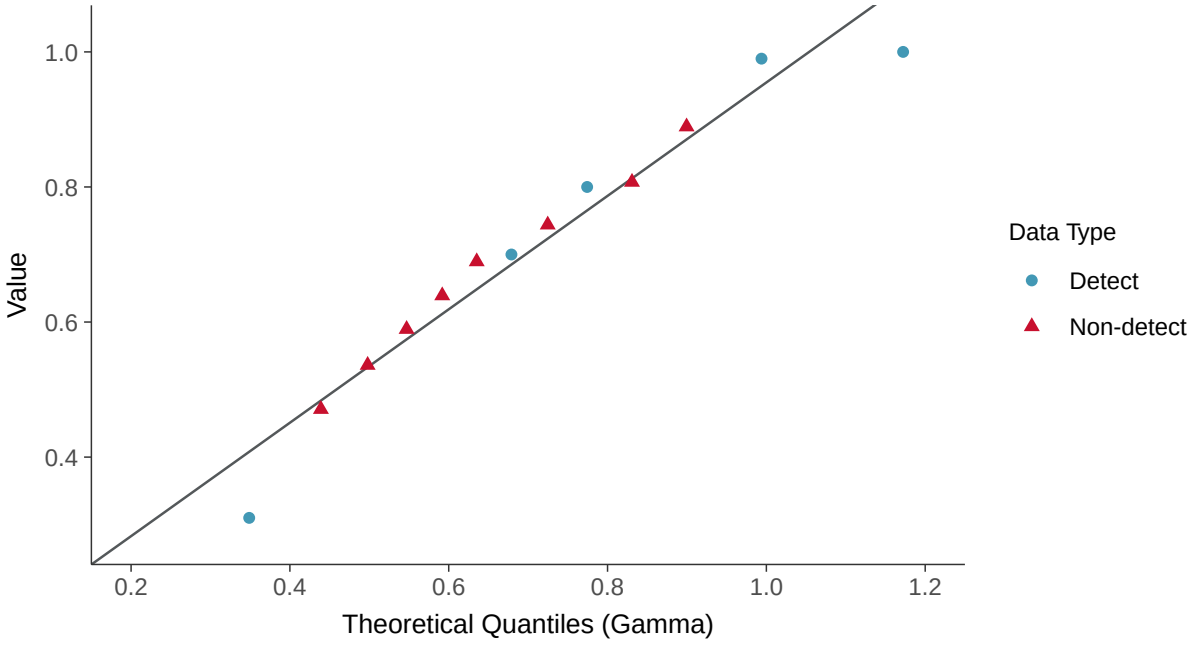
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-16B (mg/l)



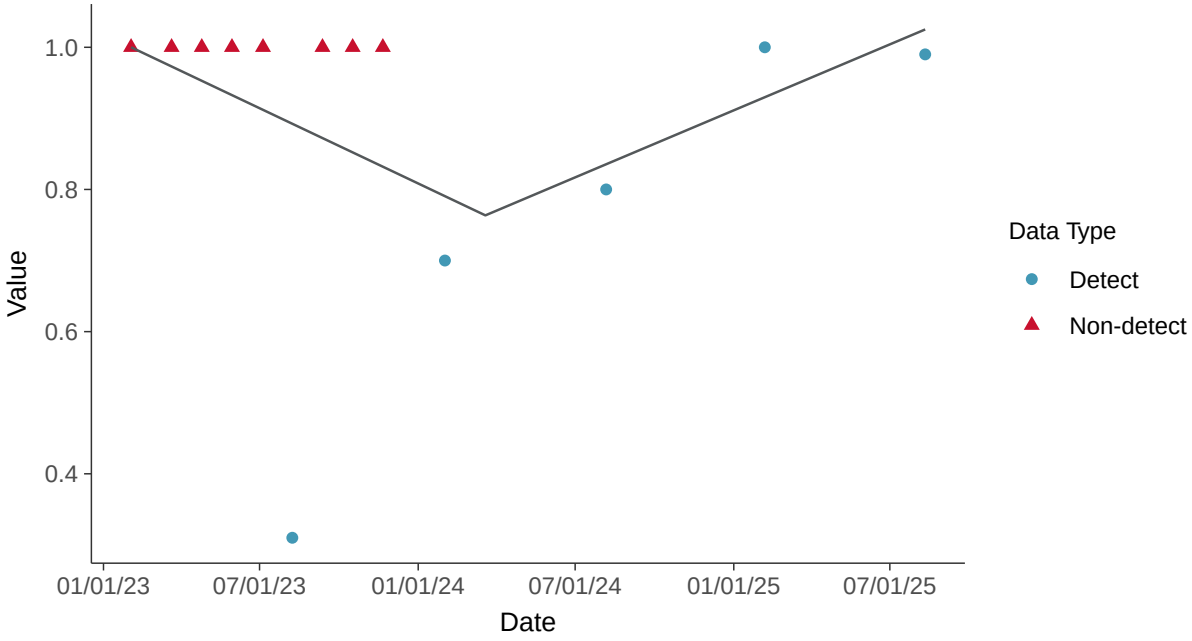
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-16B (mg/l)



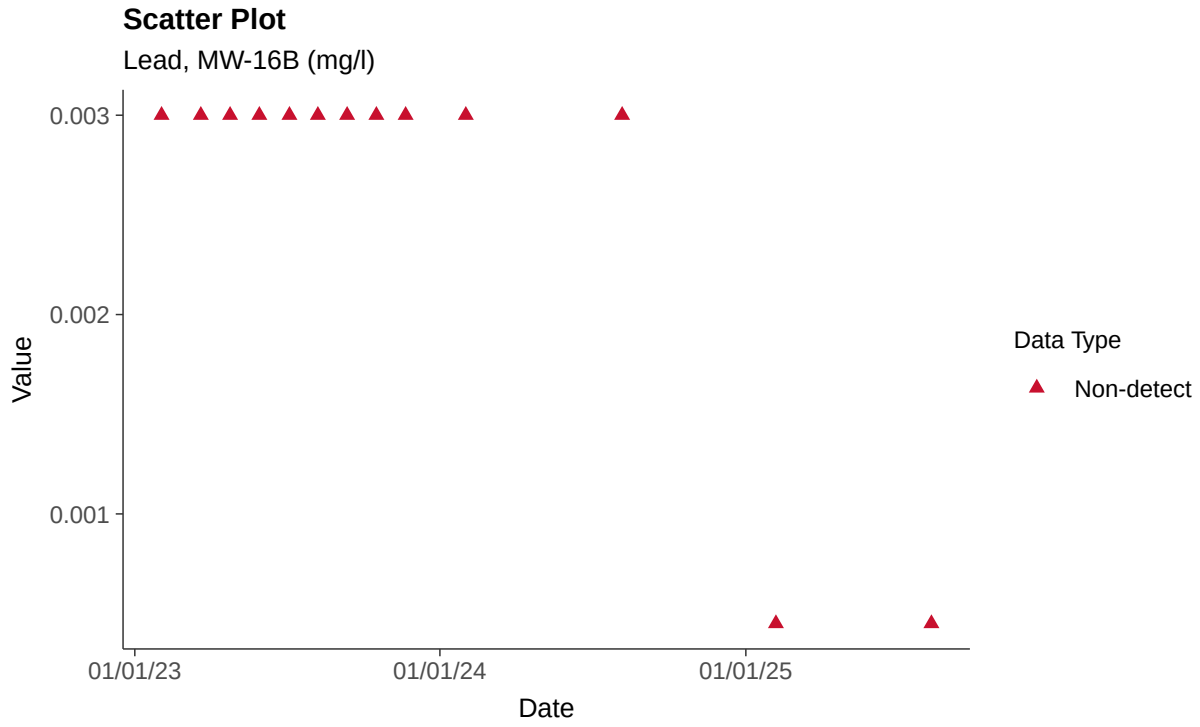
Trend Regression: Piecewise Linear-Linear

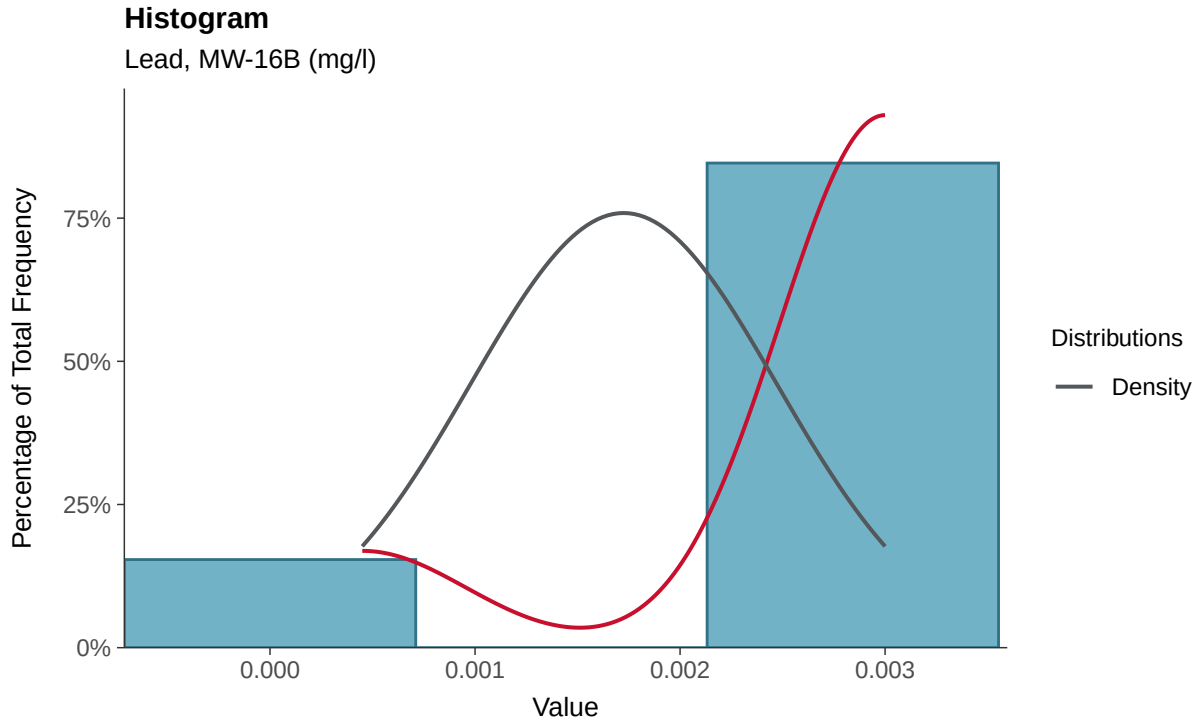
Fluoride (App IV), MW-16B (mg/l)



Appendix IV: Lead, MW-16B

ID: 26_3_115



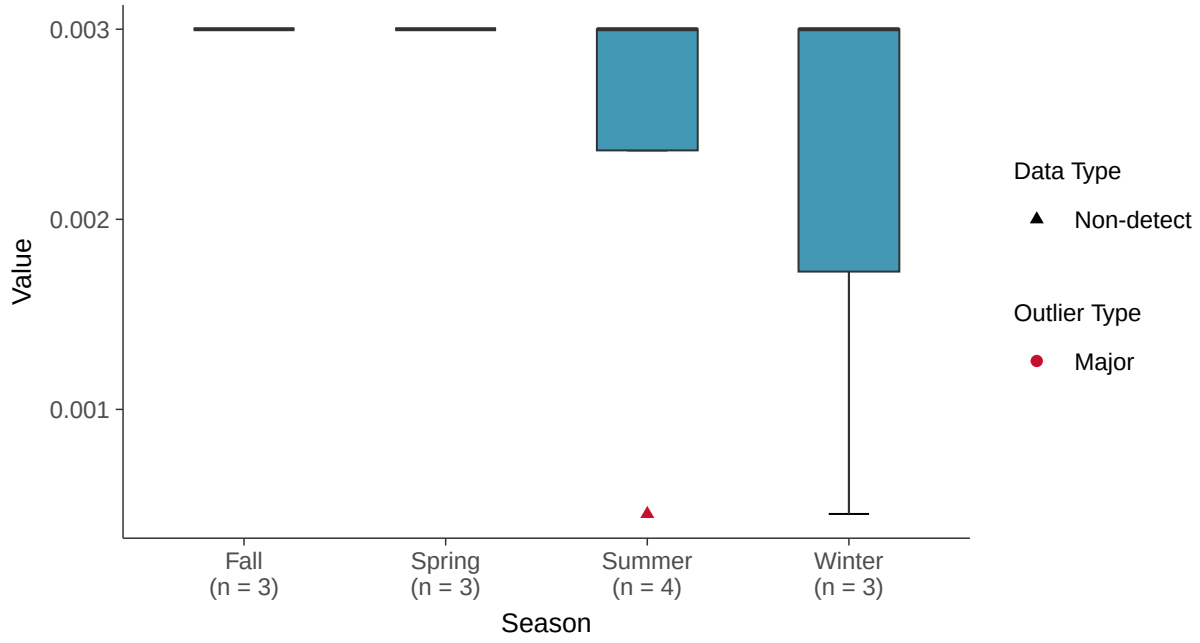


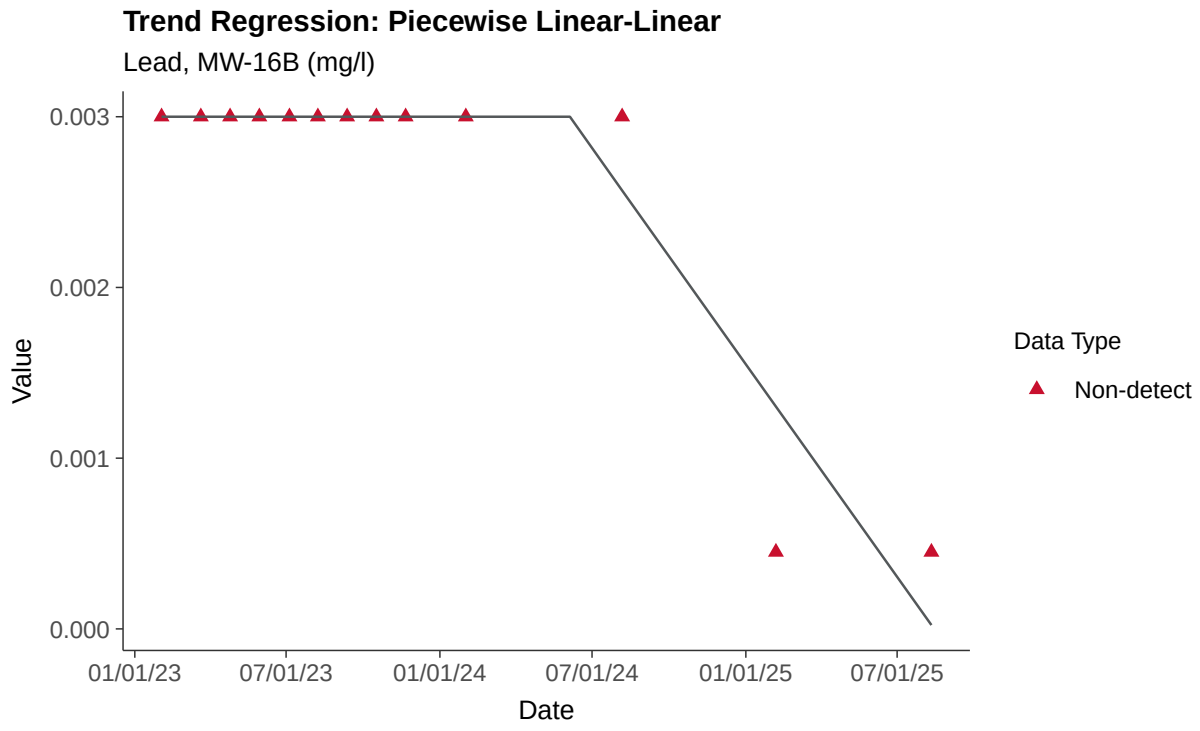
Boxplot

Lead, MW-16B (mg/l)

Boxplot by Season

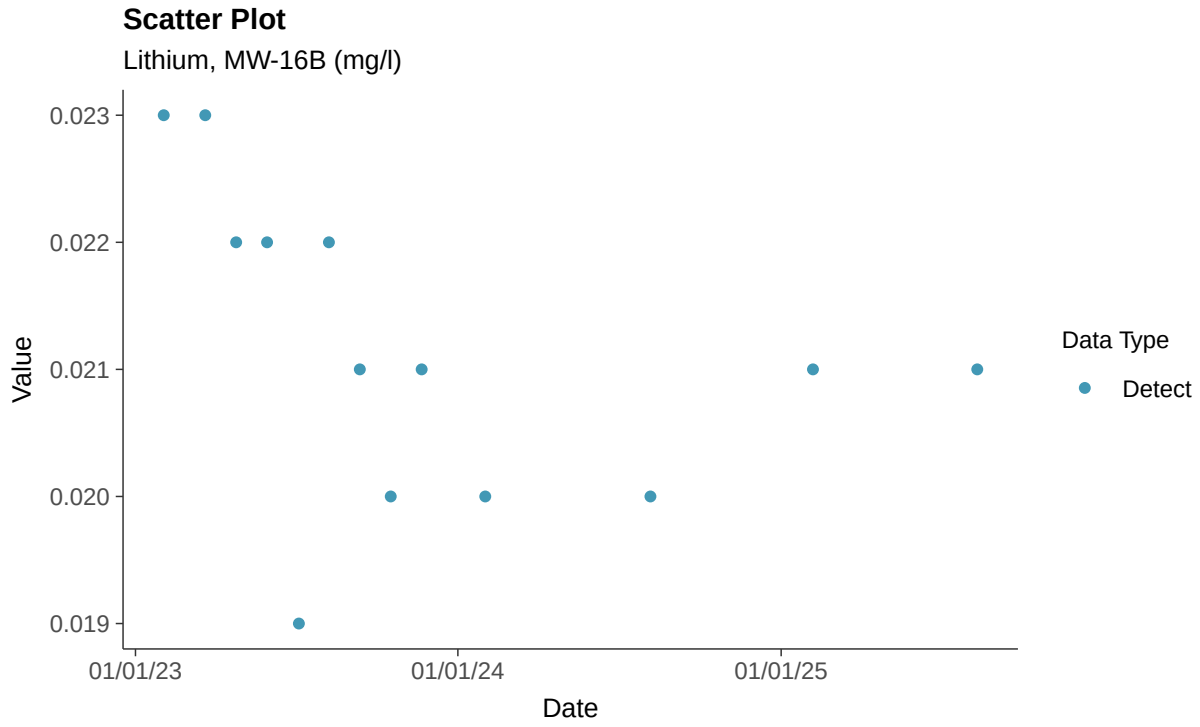
Lead, MW-16B (mg/l)

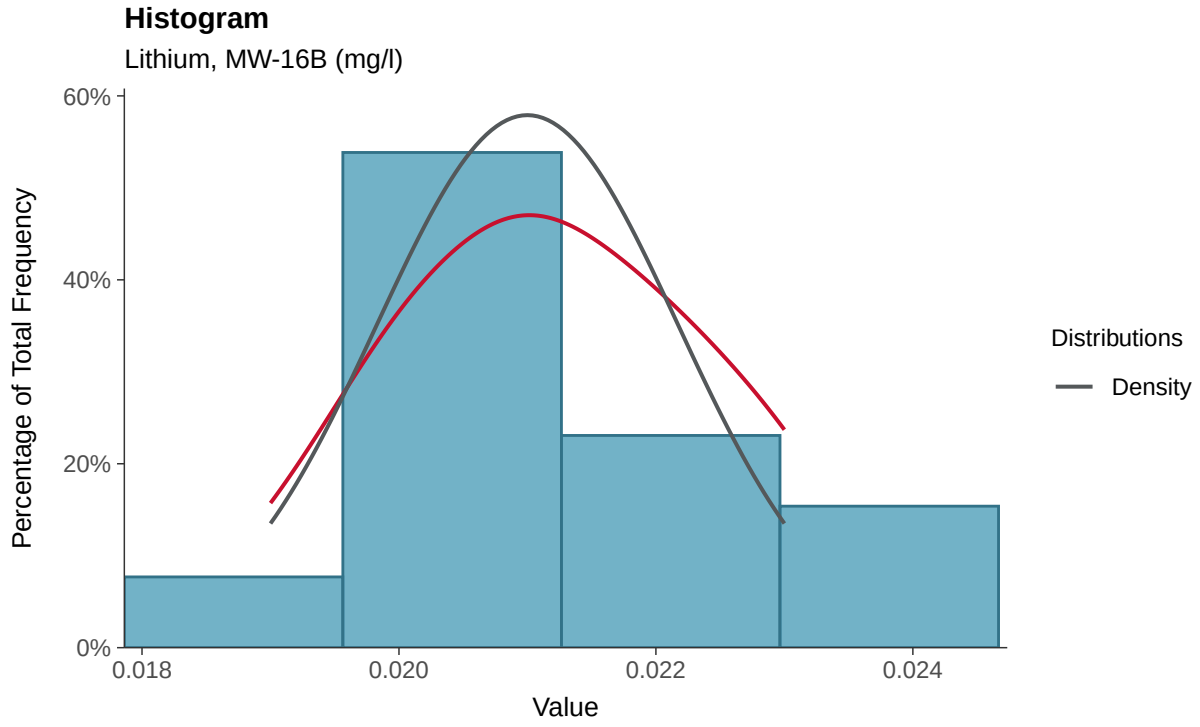



Trend Regression: Piecewise Linear-Linear
Lead, MW-16B (mg/l)
0.003
0.002
0.001
0.000
Value
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Lithium, MW-16B

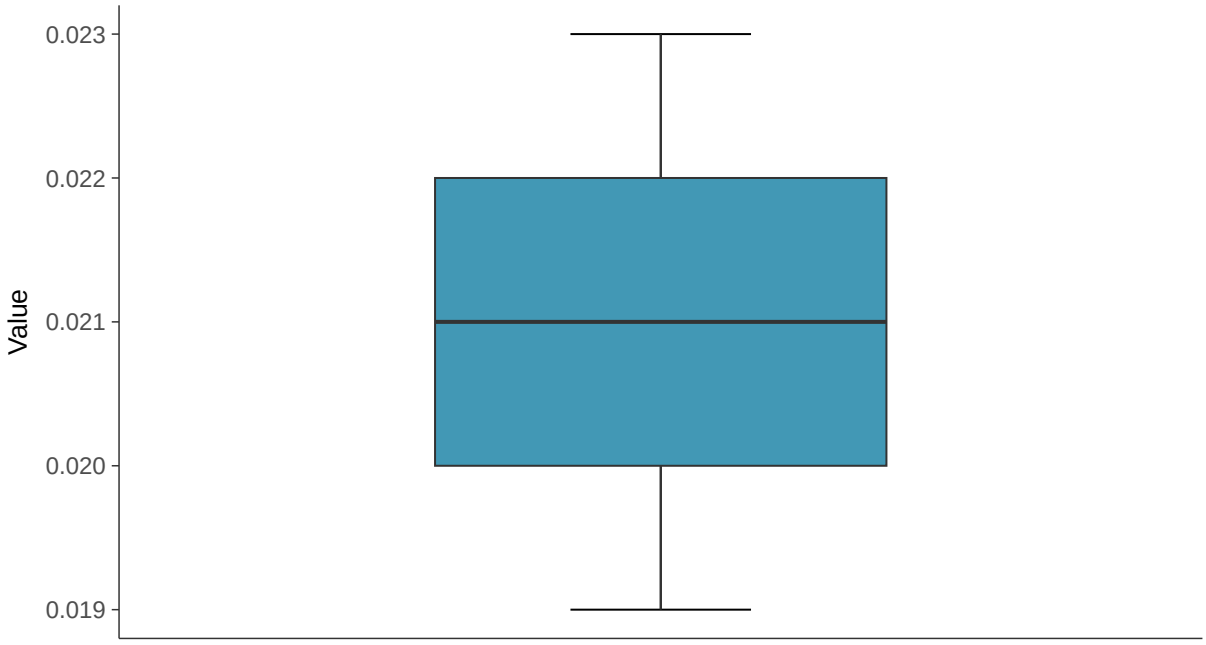
ID: 26_3_116





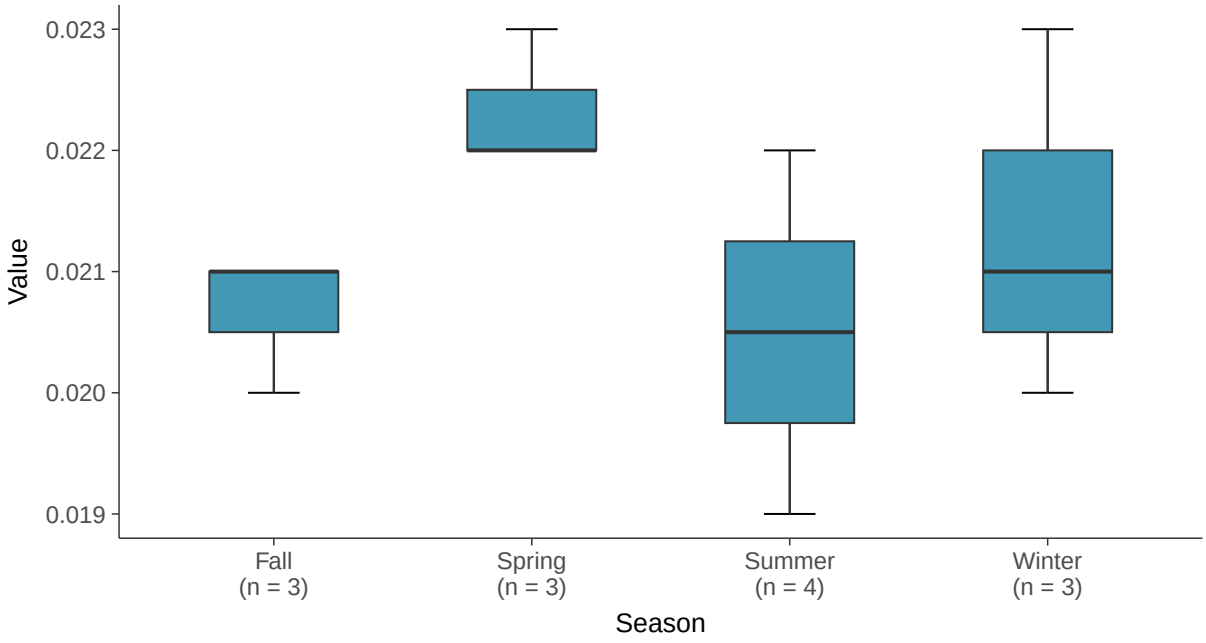
Boxplot

Lithium, MW-16B (mg/l)



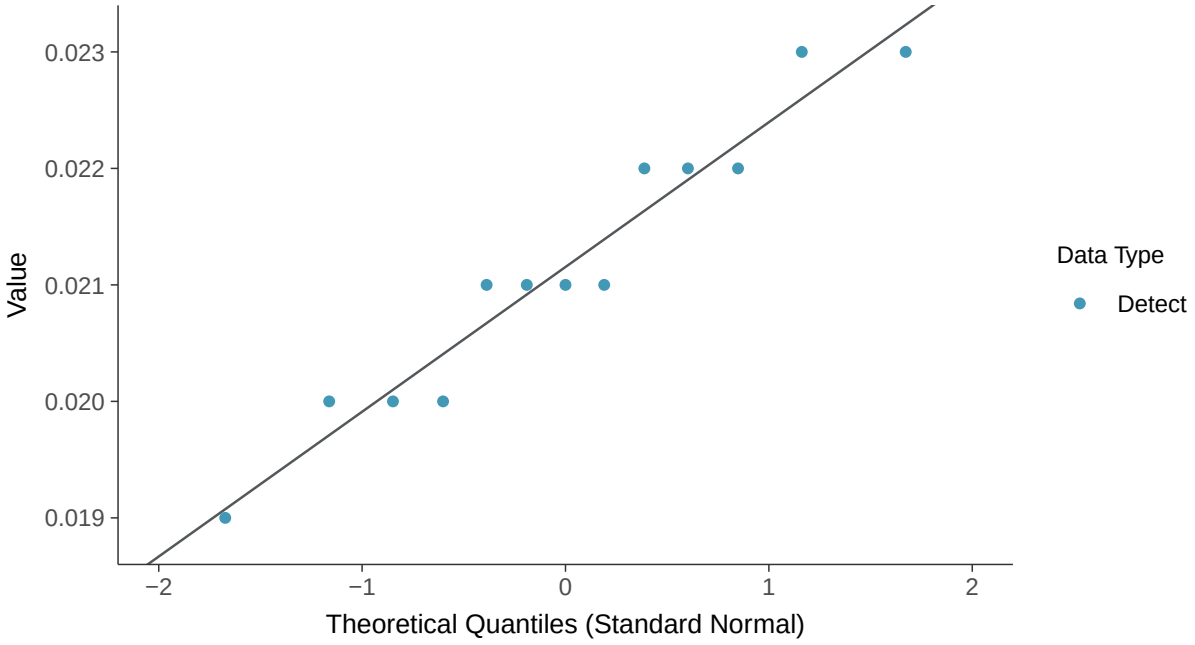
Boxplot by Season

Lithium, MW-16B (mg/l)



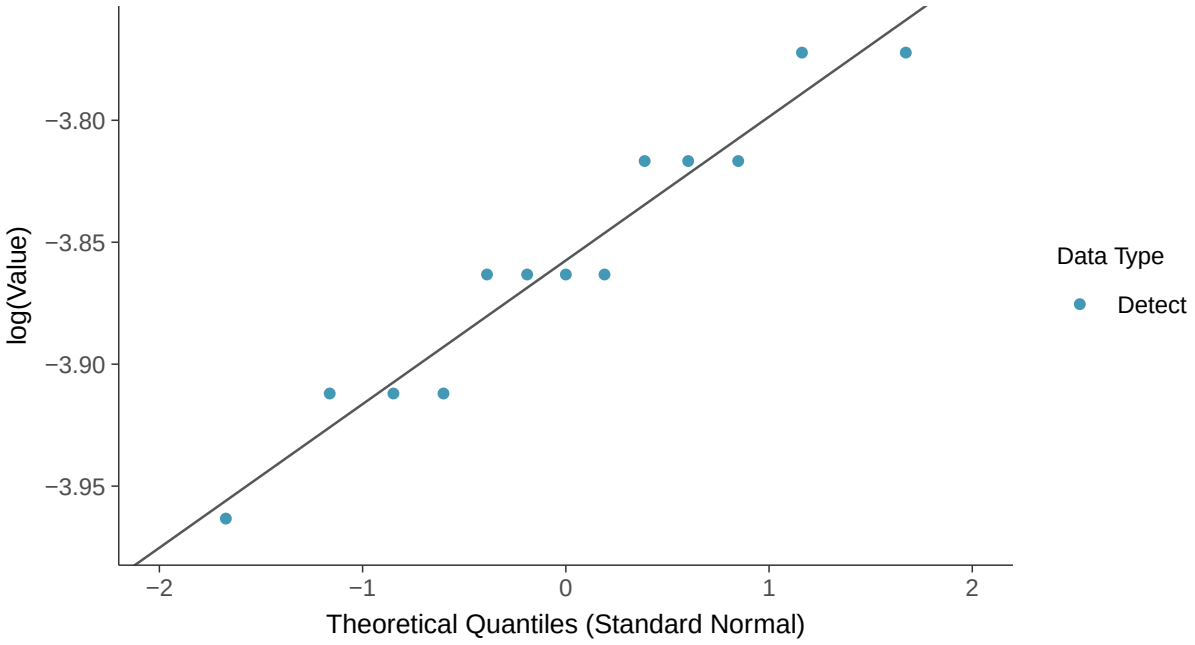
Normal Q-Q plot

Lithium, MW-16B (mg/l)



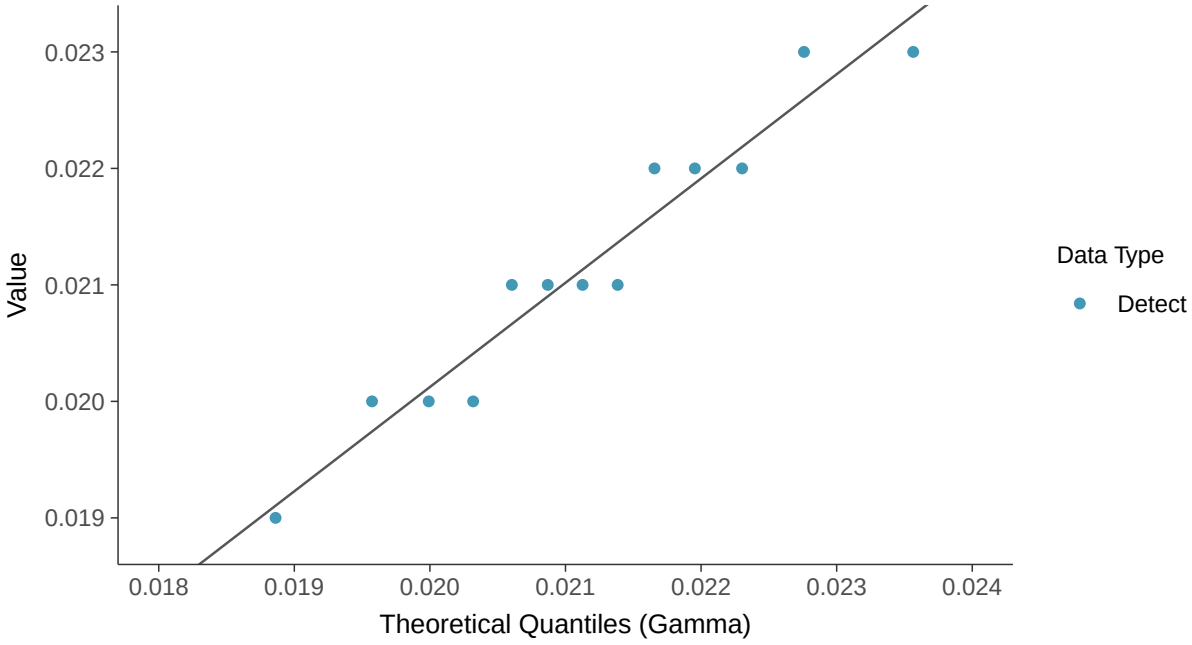
Lognormal Q-Q plot

Lithium, MW-16B (mg/l)



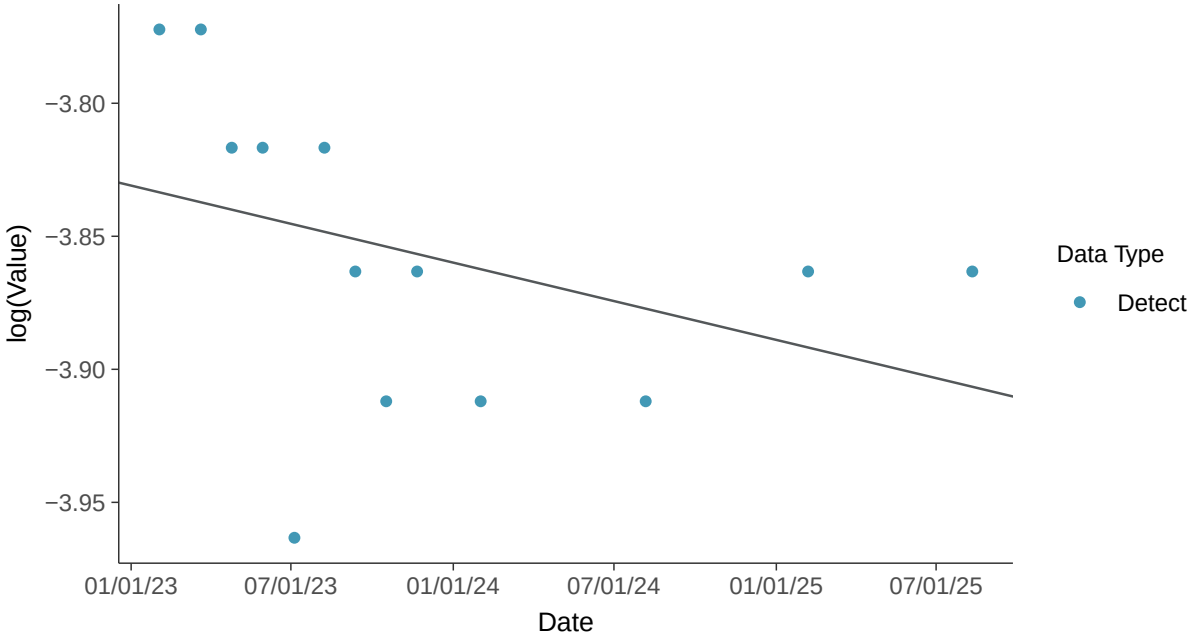
Gamma Q-Q plot

Lithium, MW-16B (mg/l)



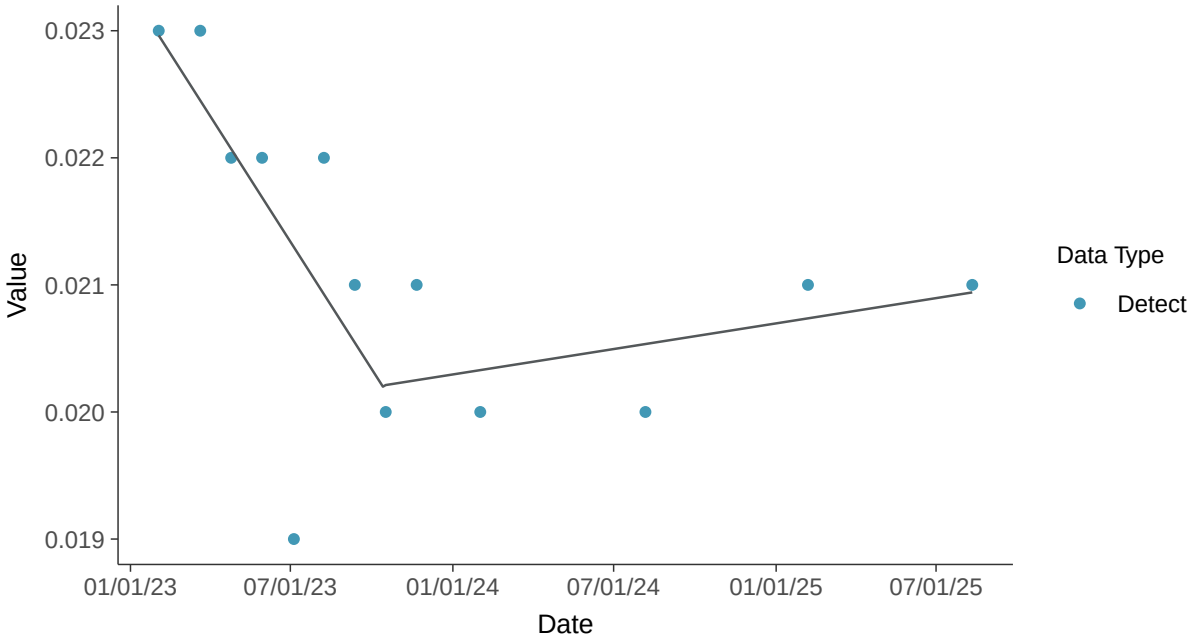
Trend Regression: Lognormal MLE

Lithium, MW-16B (mg/l)



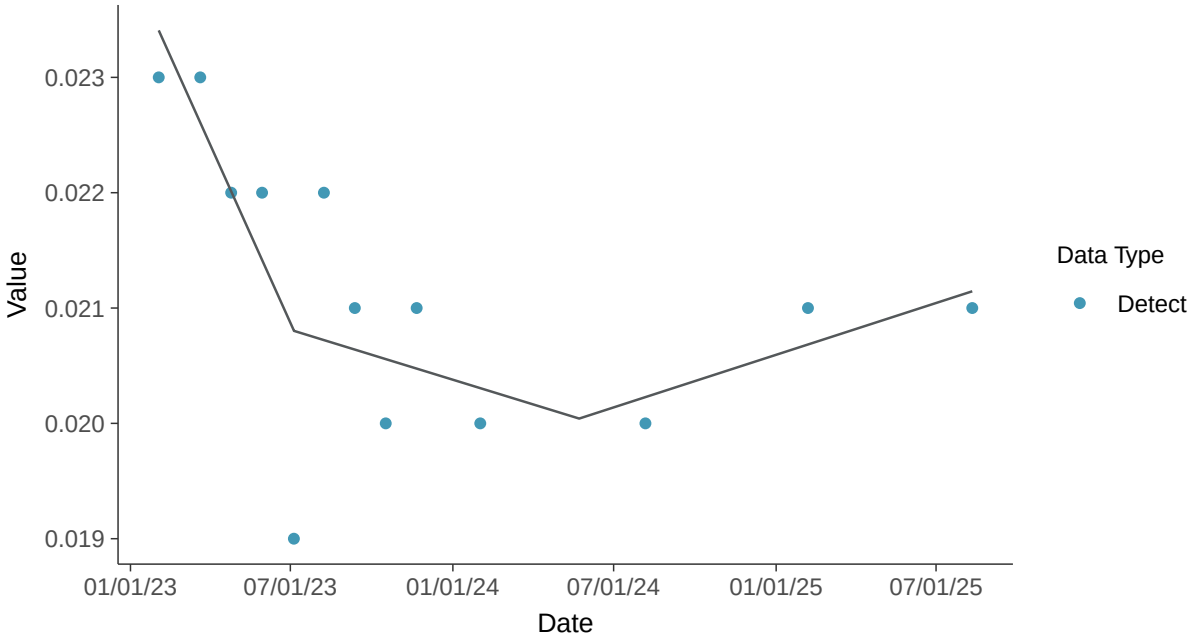
Trend Regression: Piecewise Linear-Linear

Lithium, MW-16B (mg/l)



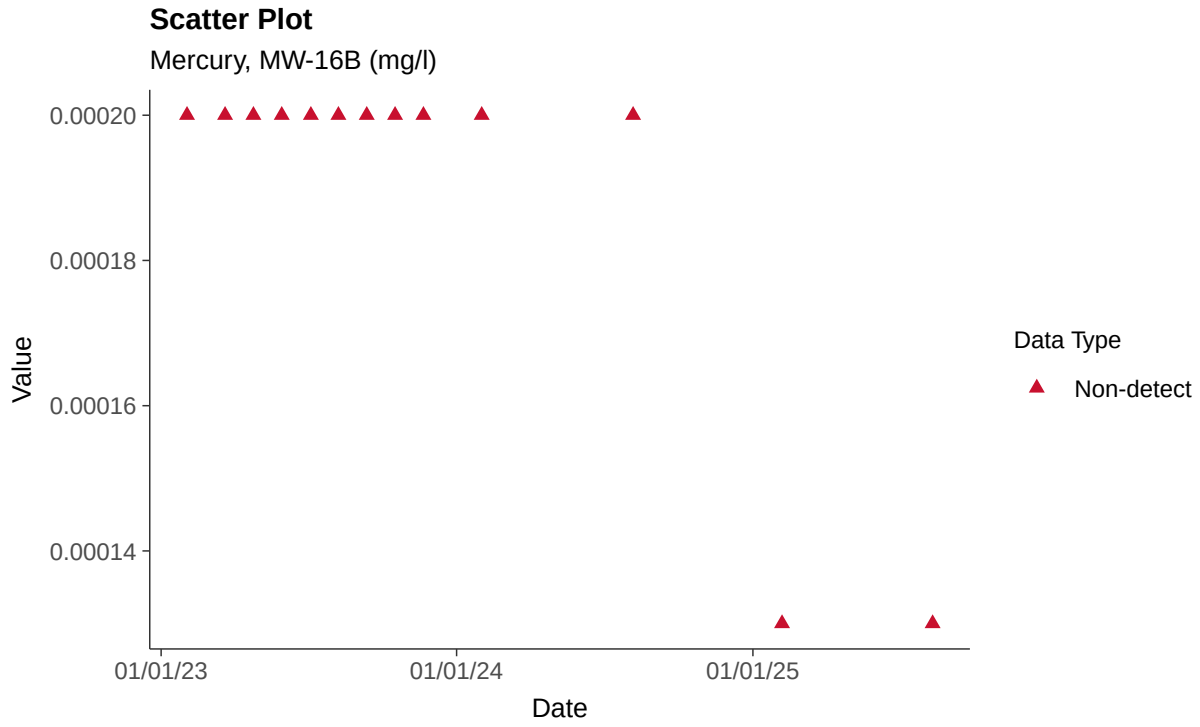
Trend Regression: Piecewise Linear-Linear-Linear

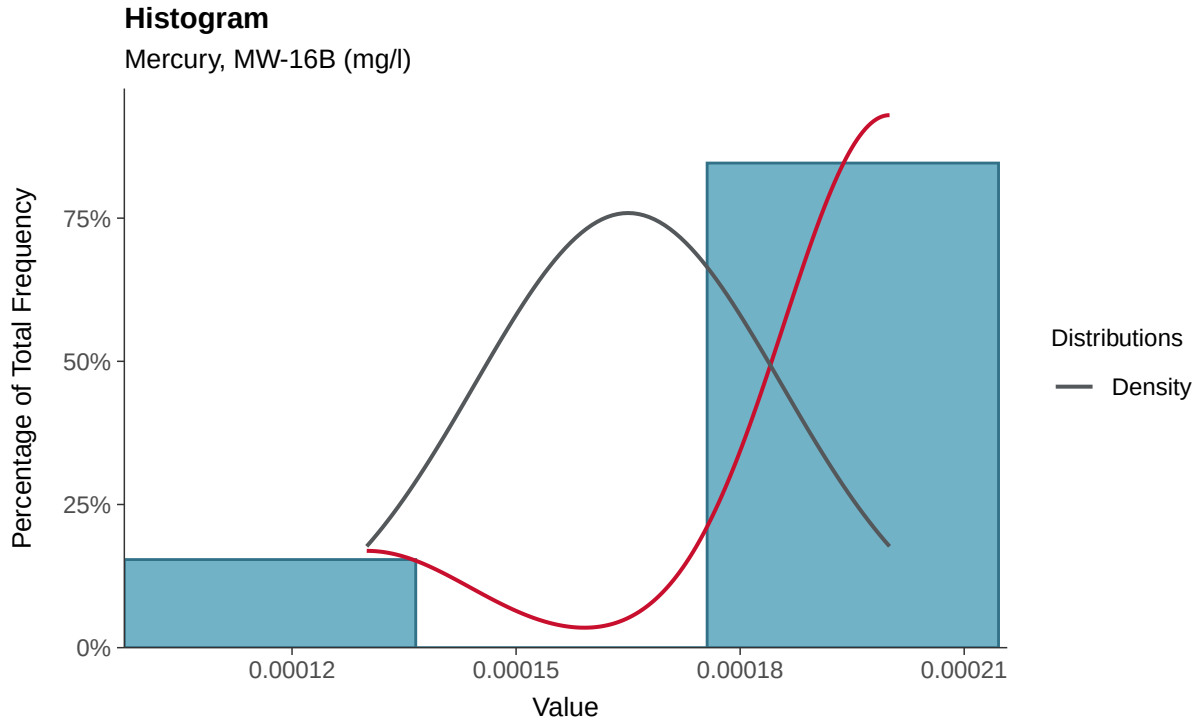
Lithium, MW-16B (mg/l)



Appendix IV: Mercury, MW-16B

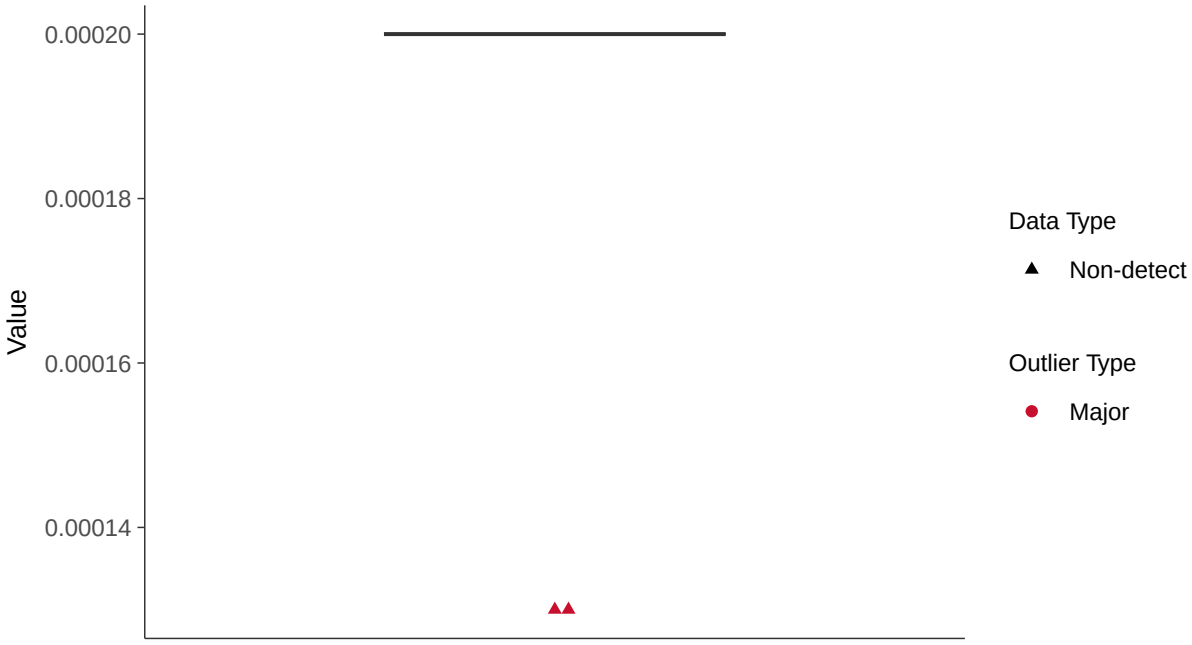
ID: 26_3_117





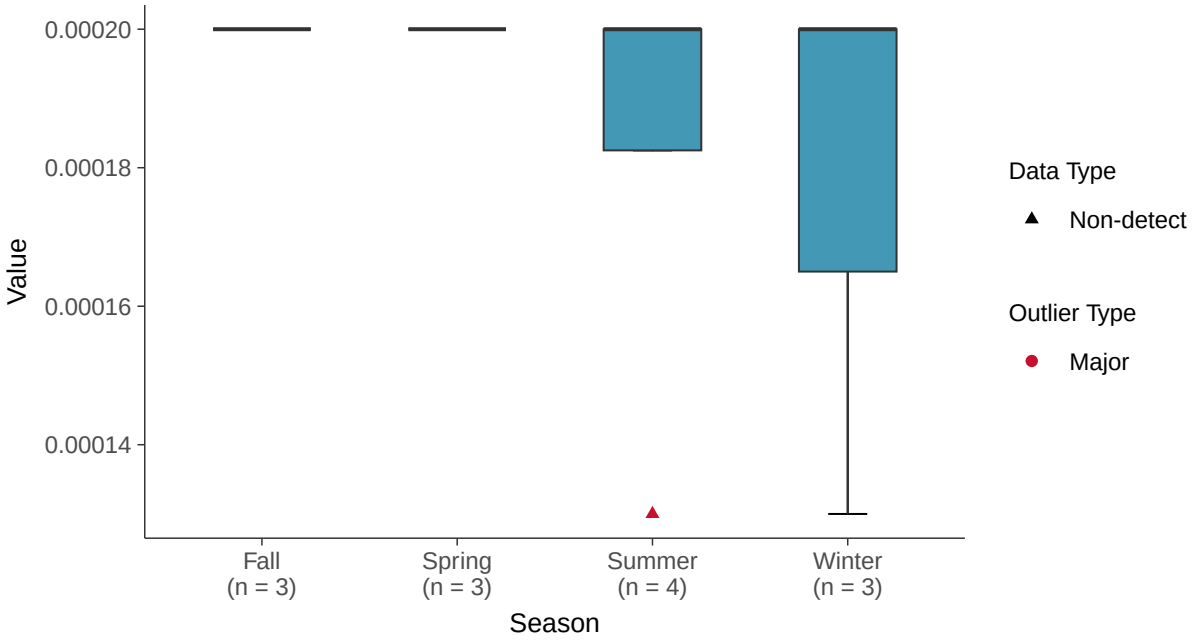
Boxplot

Mercury, MW-16B (mg/l)



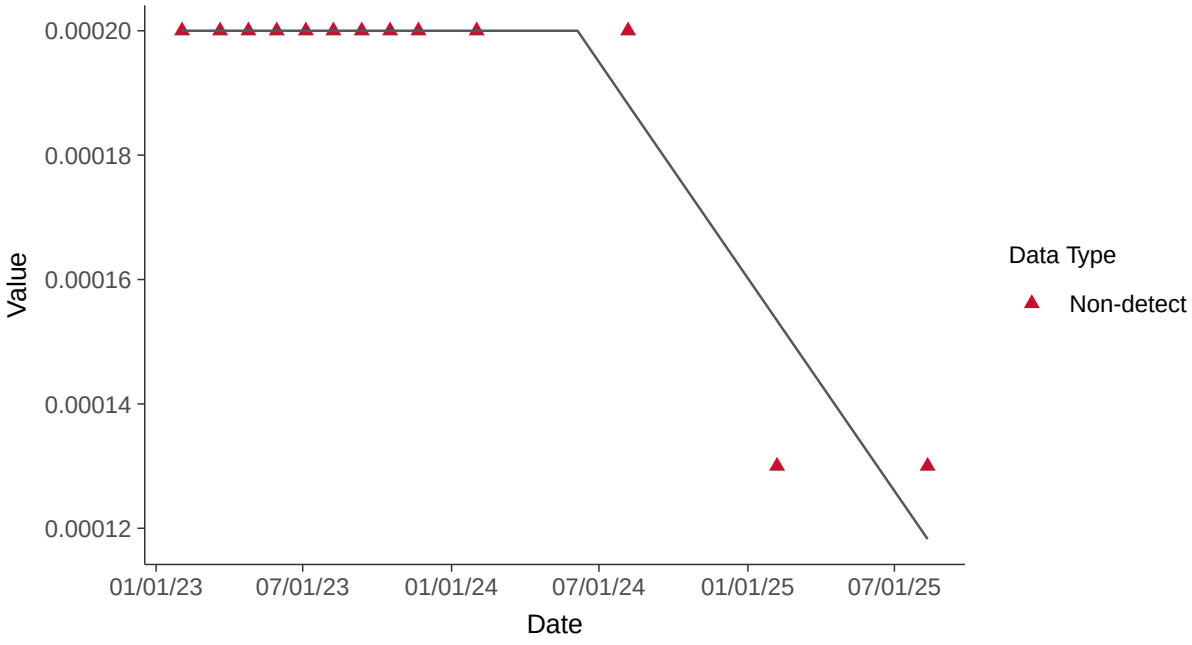
Boxplot by Season

Mercury, MW-16B (mg/l)



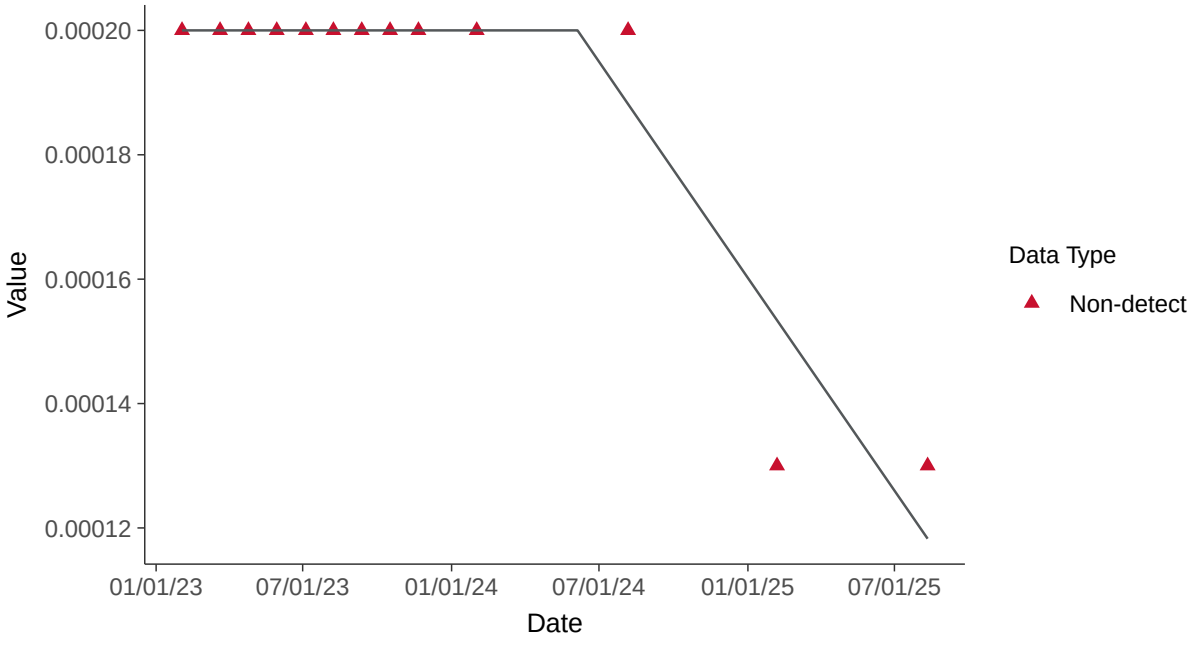
Trend Regression: Piecewise Linear-Linear

Mercury, MW-16B (mg/l)



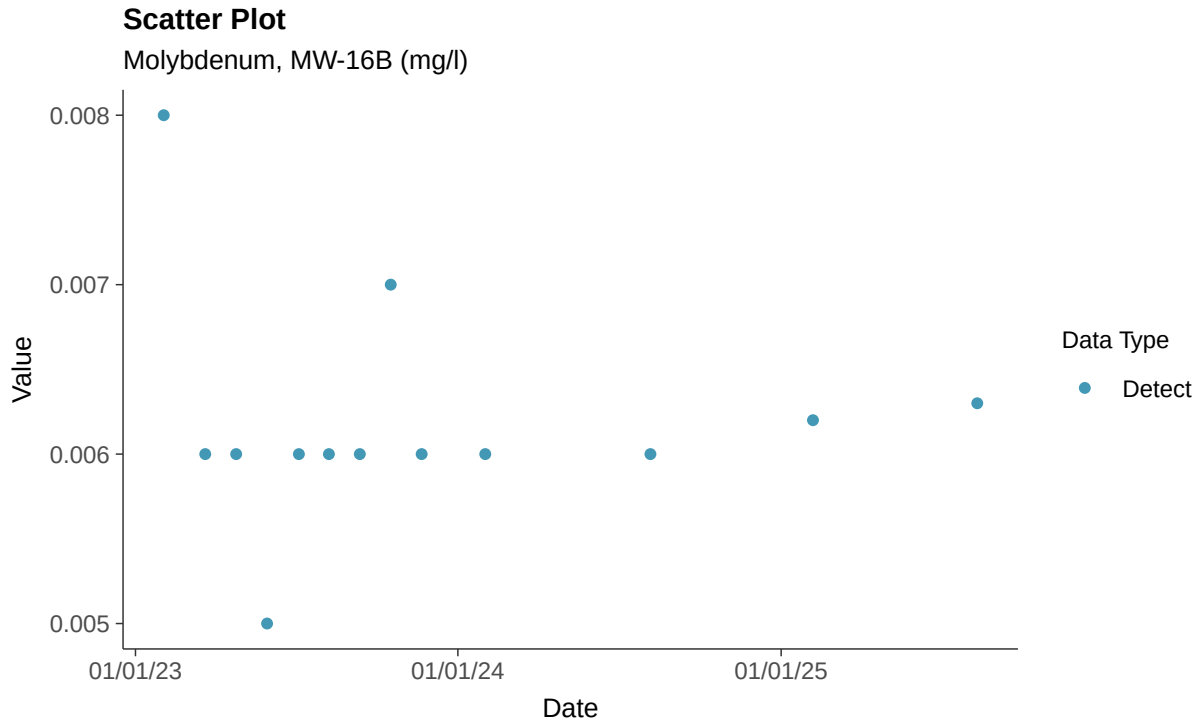
Trend Regression: Piecewise Linear-Linear-Linear

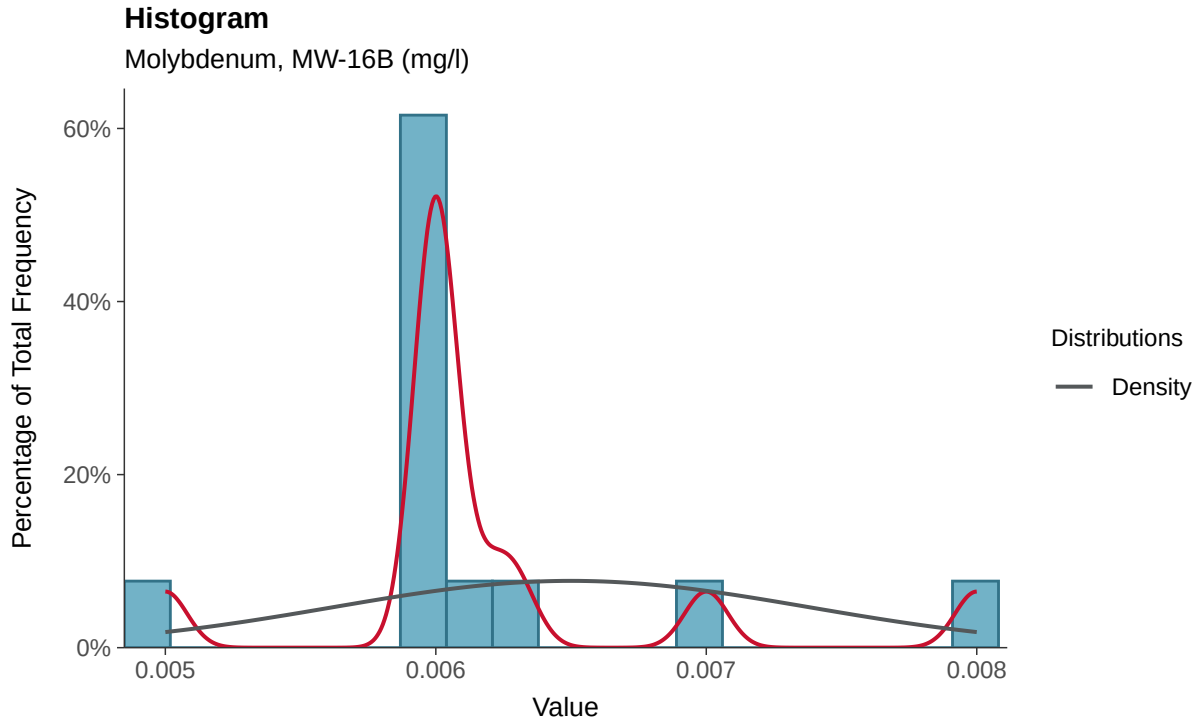
Mercury, MW-16B (mg/l)



Appendix IV: Molybdenum, MW-16B

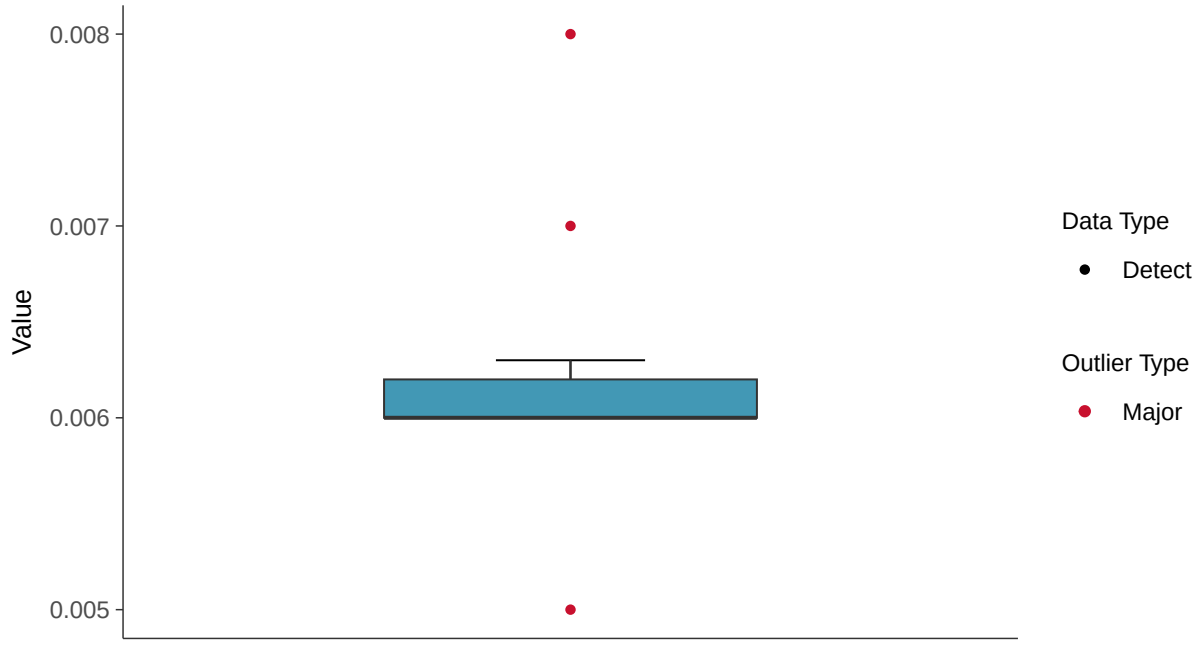
ID: 26_3_118





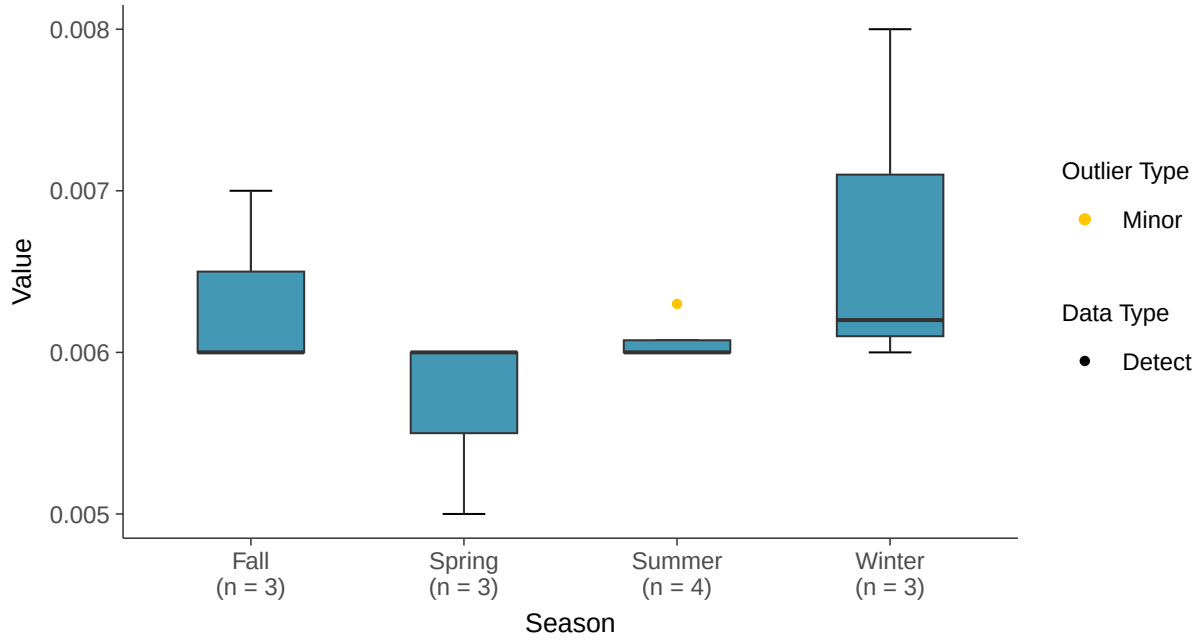
Boxplot

Molybdenum, MW-16B (mg/l)



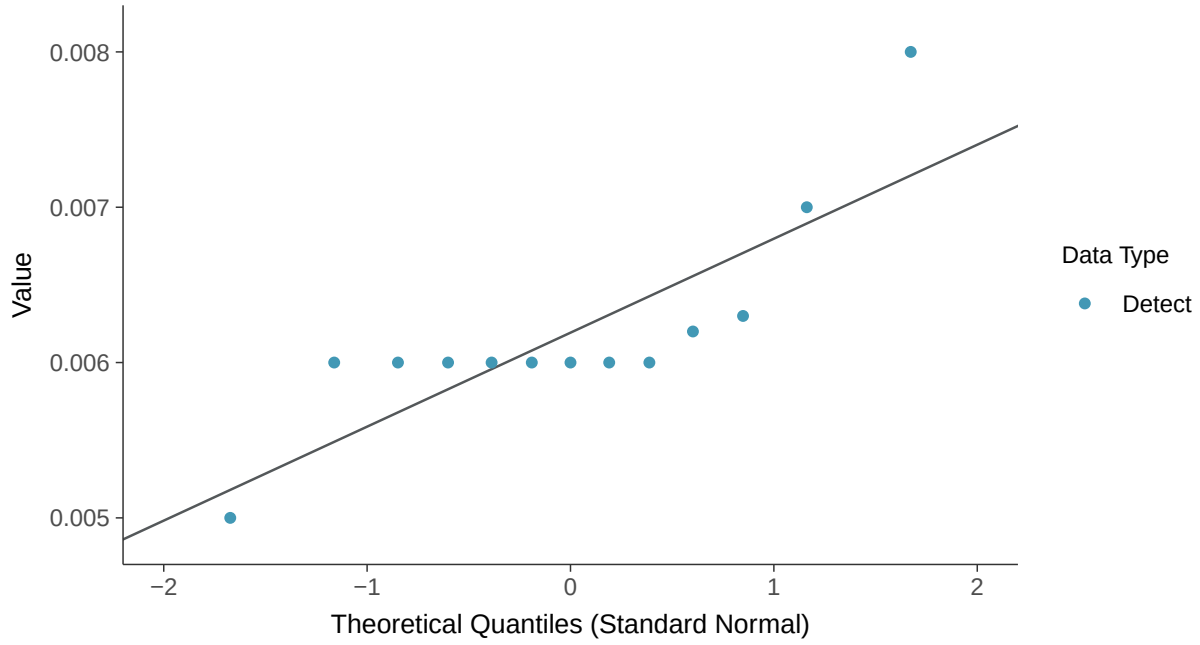
Boxplot by Season

Molybdenum, MW-16B (mg/l)



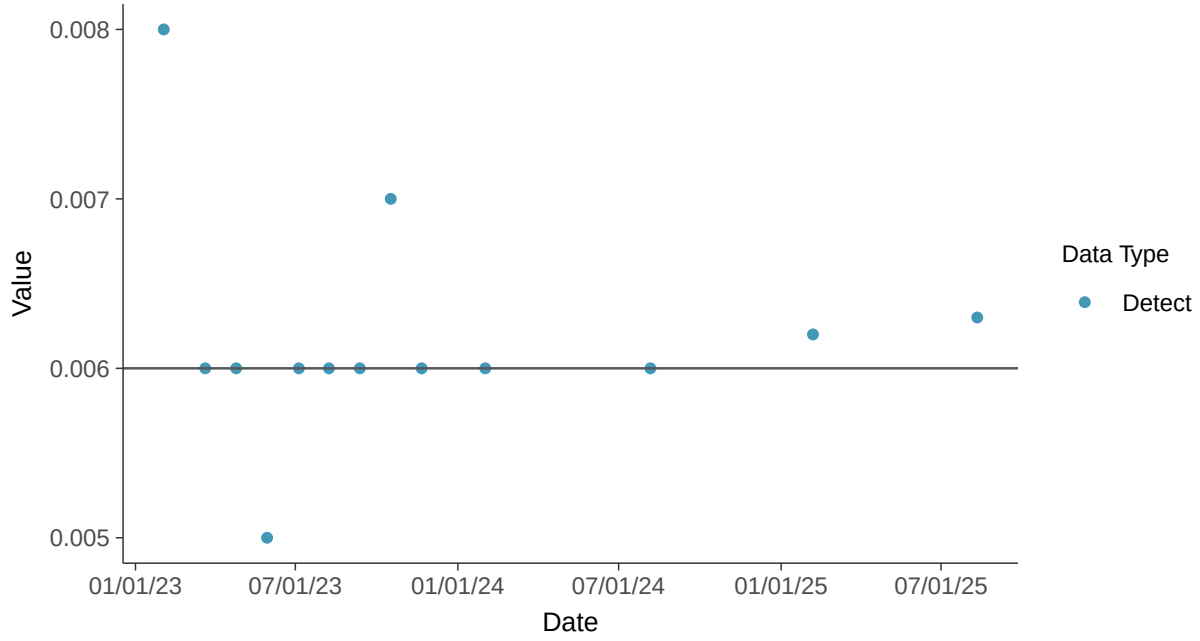
Normal Q-Q plot

Molybdenum, MW-16B (mg/l)



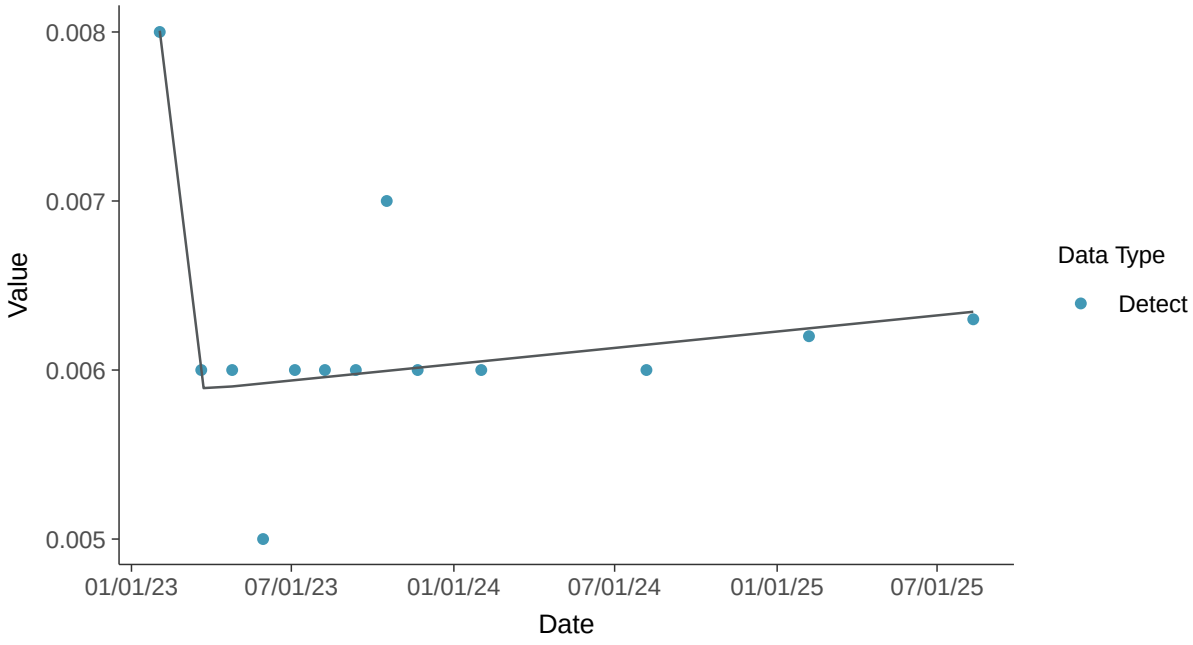
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Molybdenum, MW-16B (mg/l)



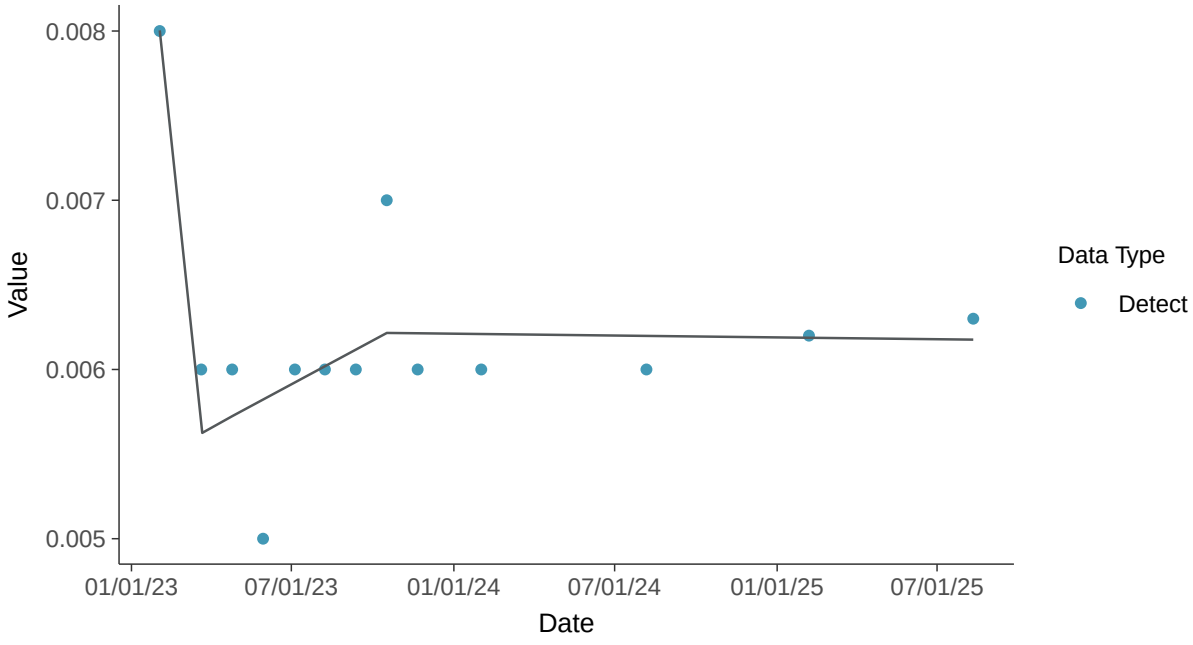
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-16B (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-16B (mg/l)

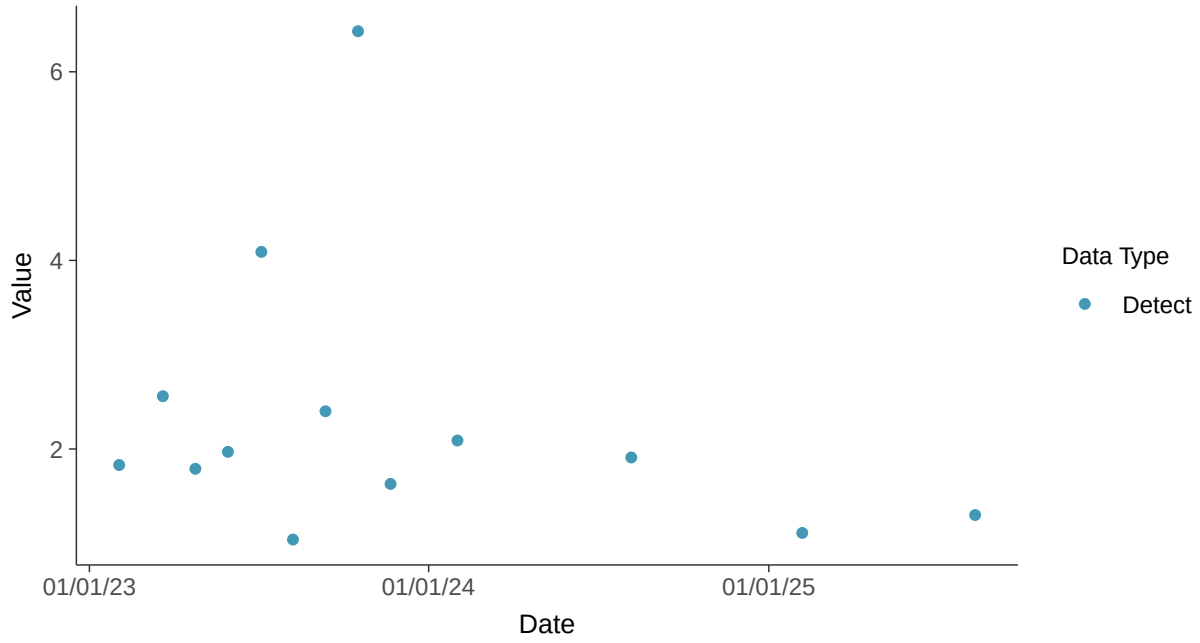


Appendix IV: Radium-226+228, MW-16B

ID: 26_3_121

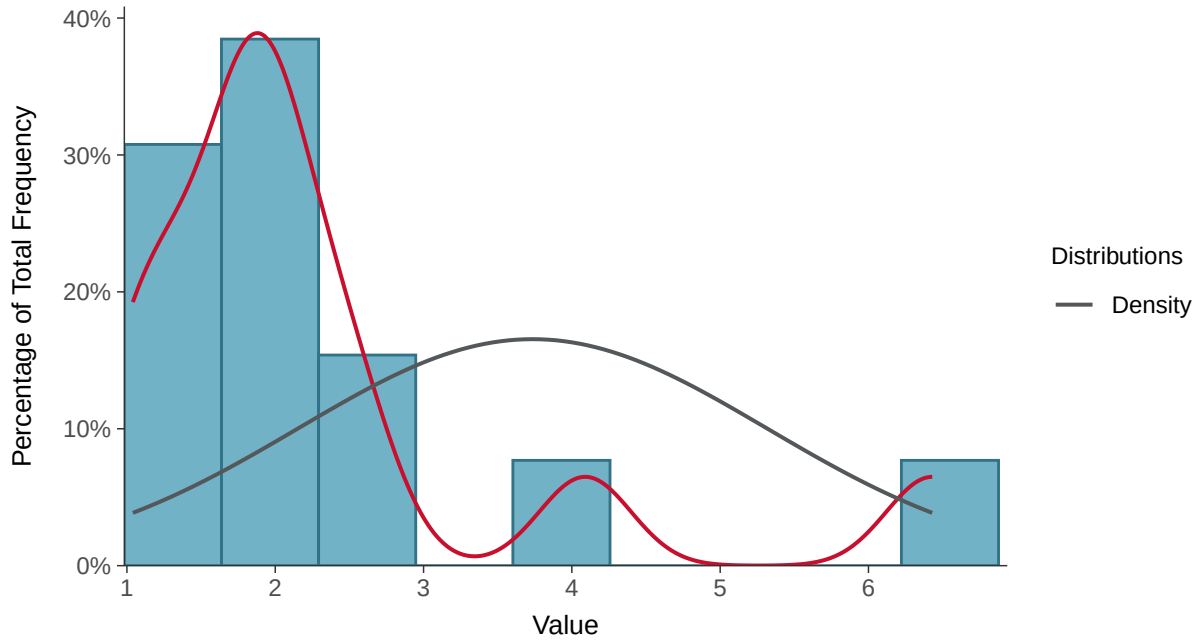
Scatter Plot

Radium-226+228, MW-16B (pci/l)



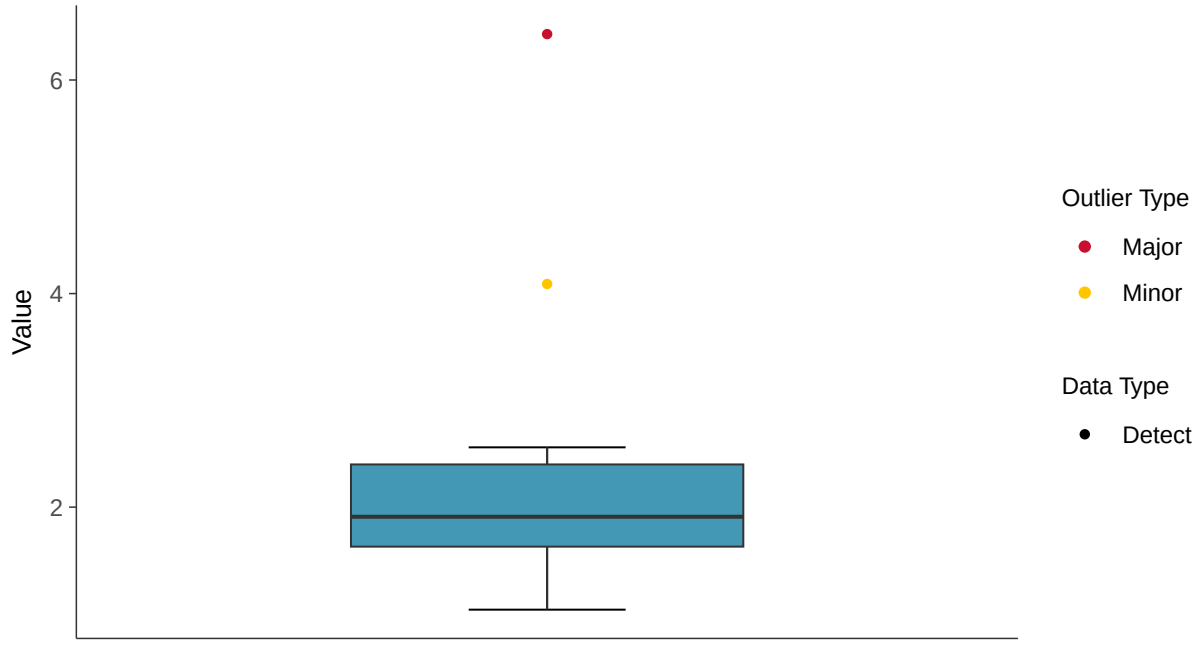
Histogram

Radium-226+228, MW-16B (pci/l)



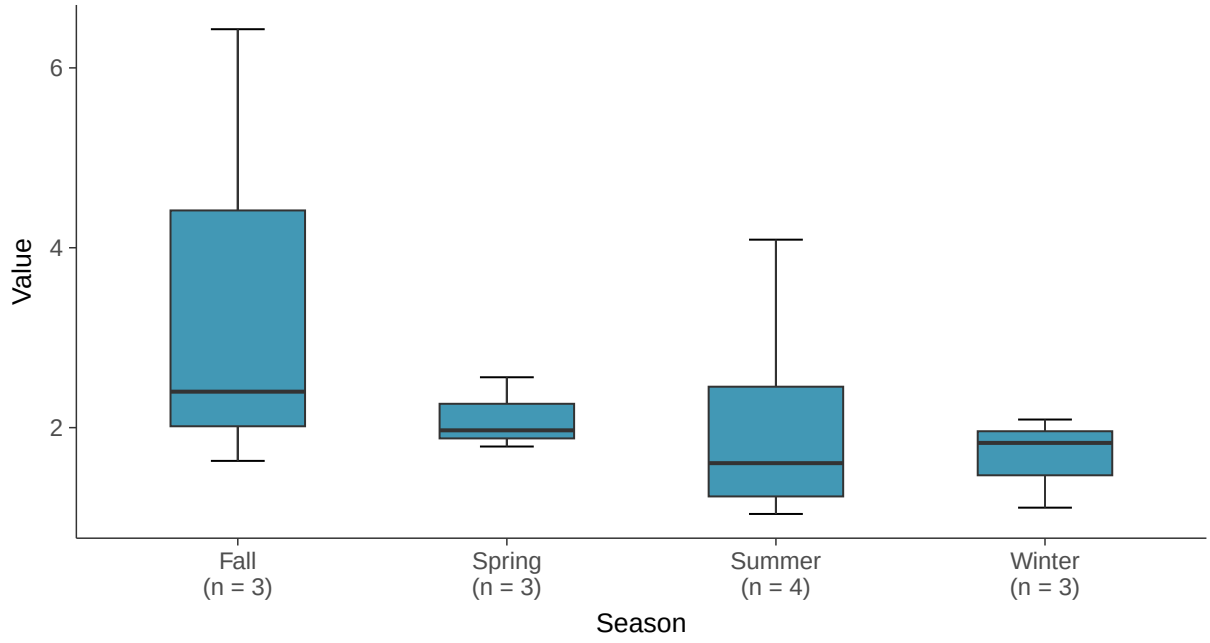
Boxplot

Radium-226+228, MW-16B (pci/l)



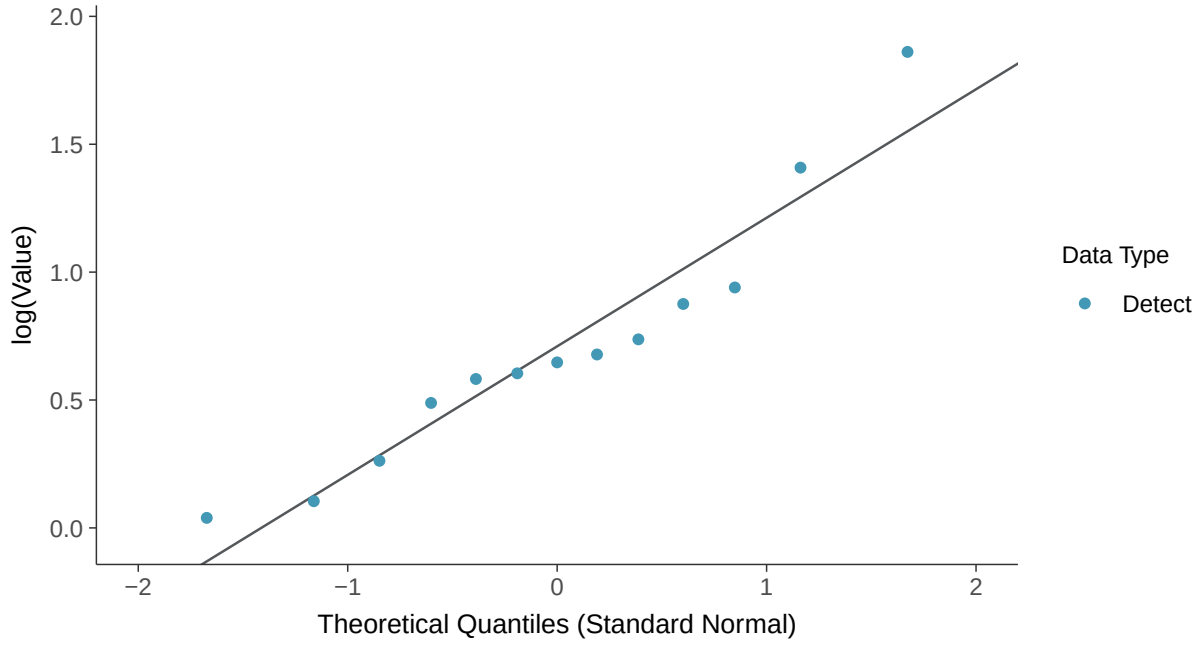
Boxplot by Season

Radium-226+228, MW-16B (pci/l)



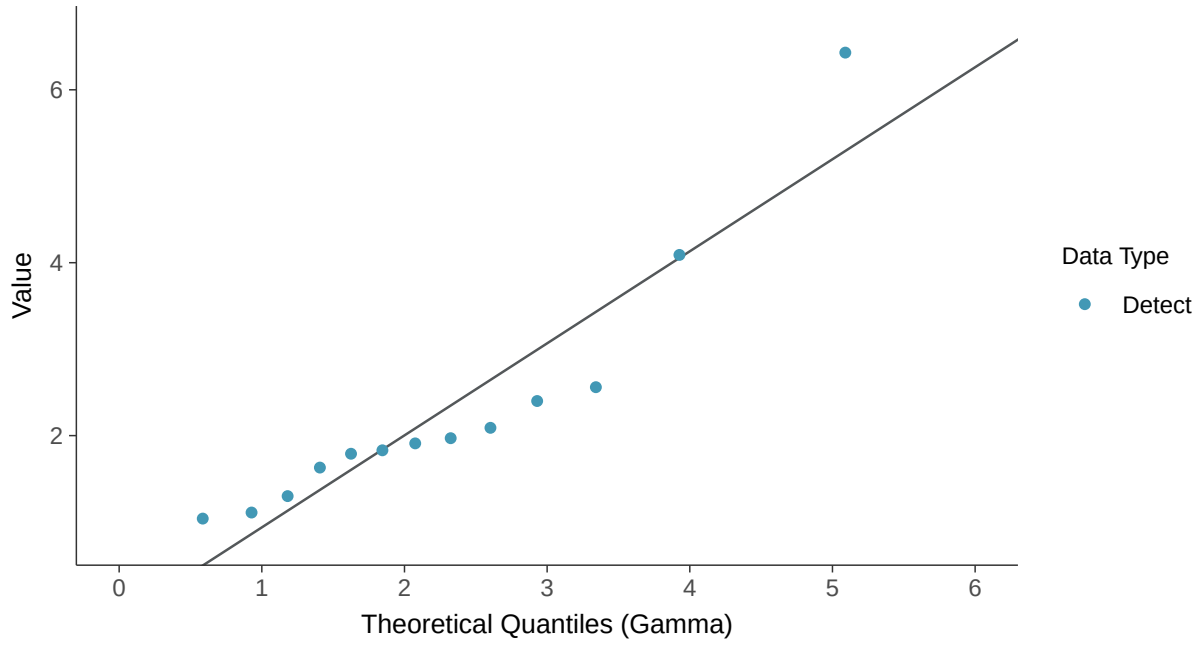
Lognormal Q-Q plot

Radium-226+228, MW-16B (pci/l)



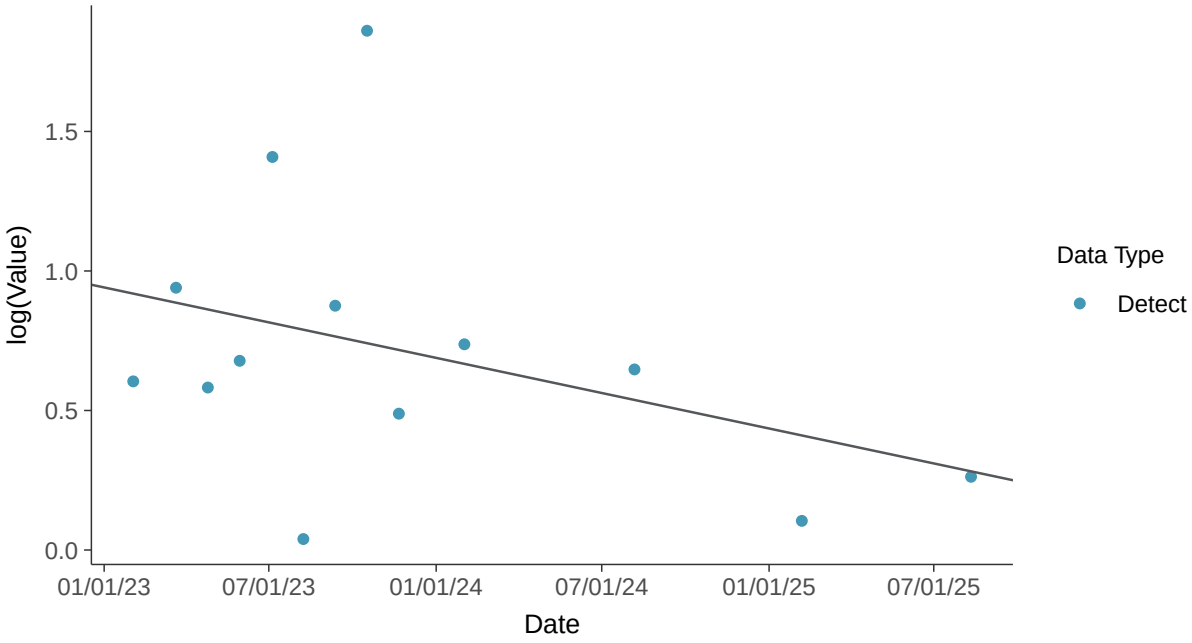
Gamma Q-Q plot

Radium-226+228, MW-16B (pci/l)



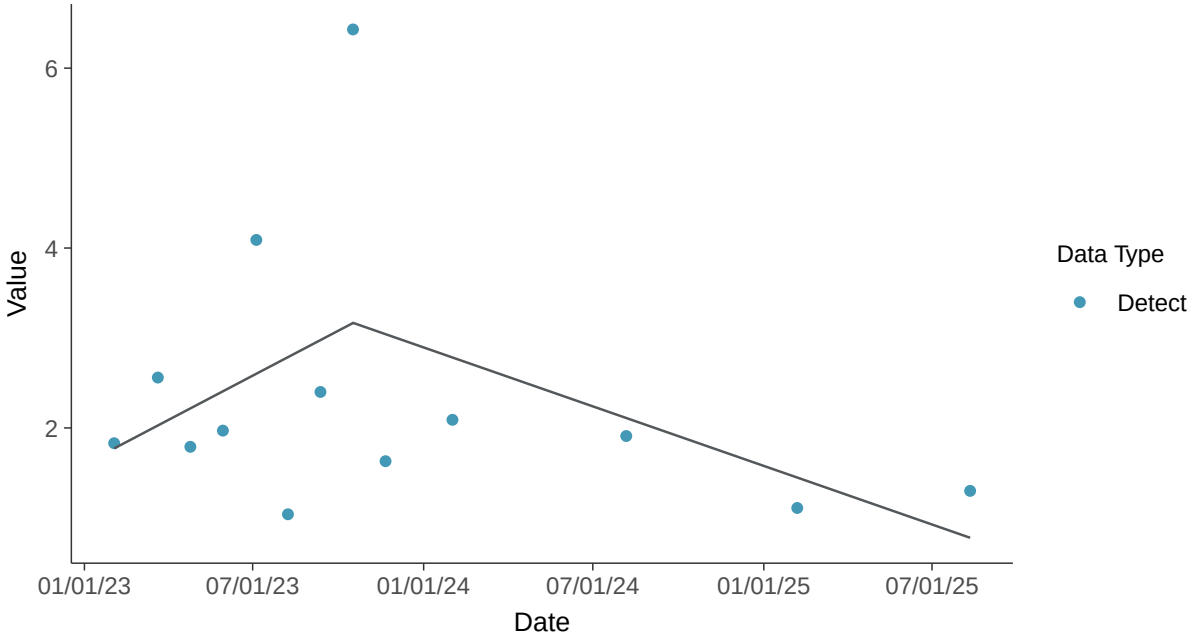
Trend Regression: Lognormal MLE

Radium-226+228, MW-16B (pci/l)



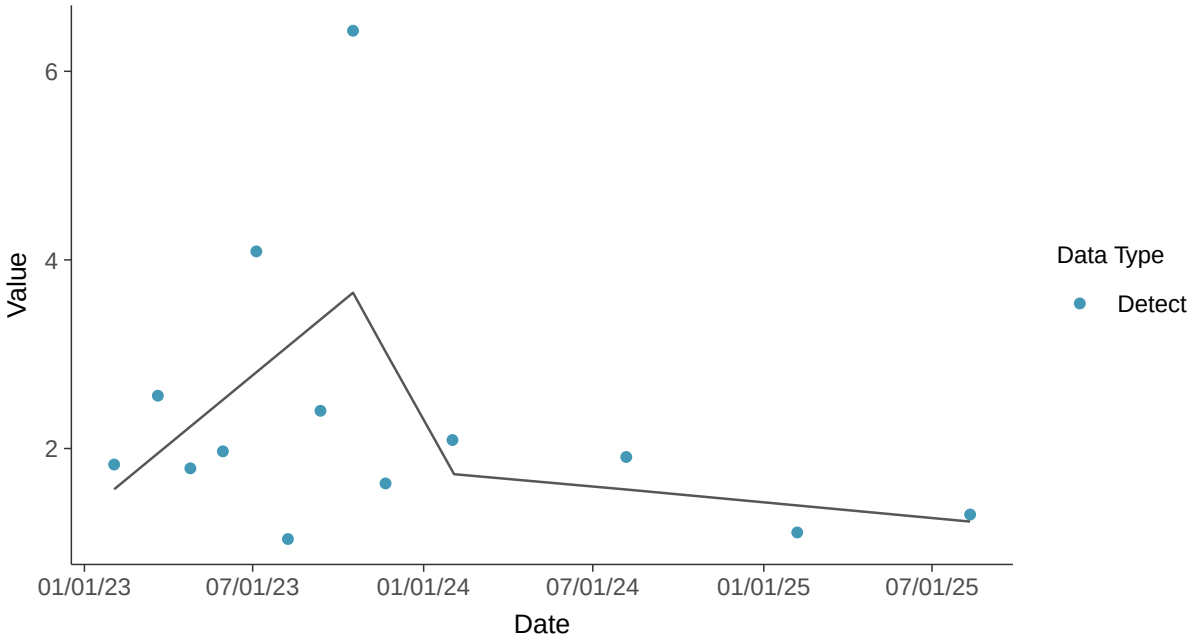
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-16B (pci/l)



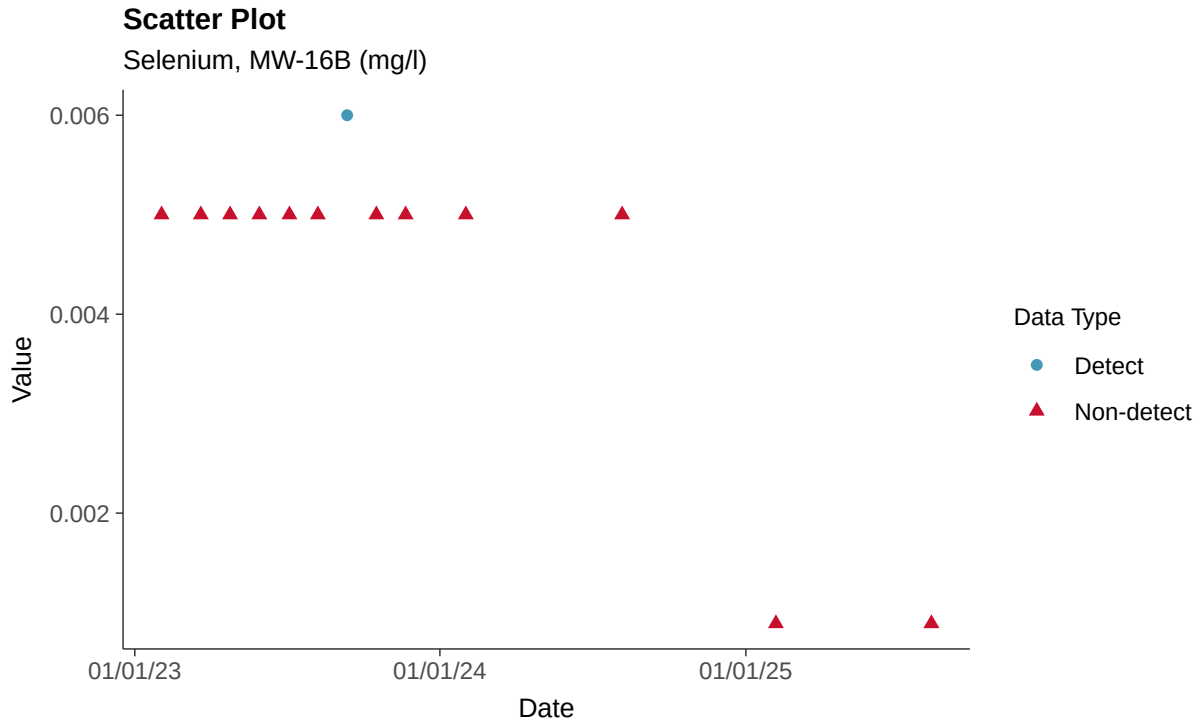
Trend Regression: Piecewise Linear-Linear-Linear

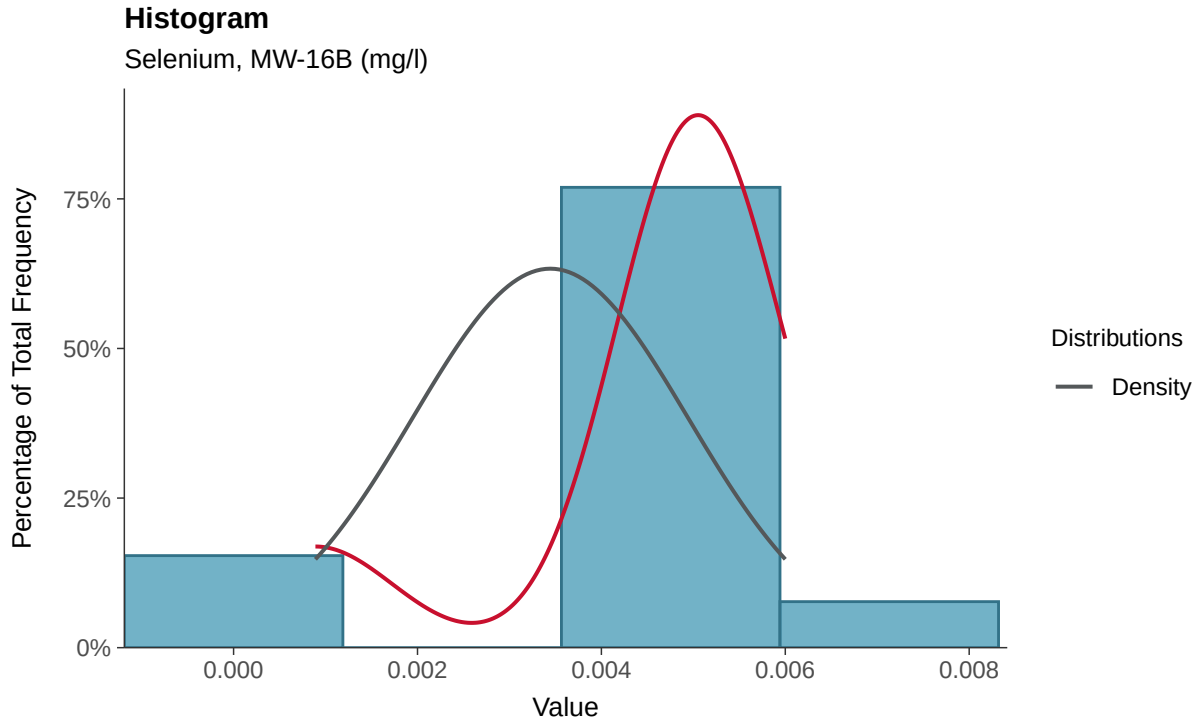
Radium-226+228, MW-16B (pci/l)



Appendix IV: Selenium, MW-16B

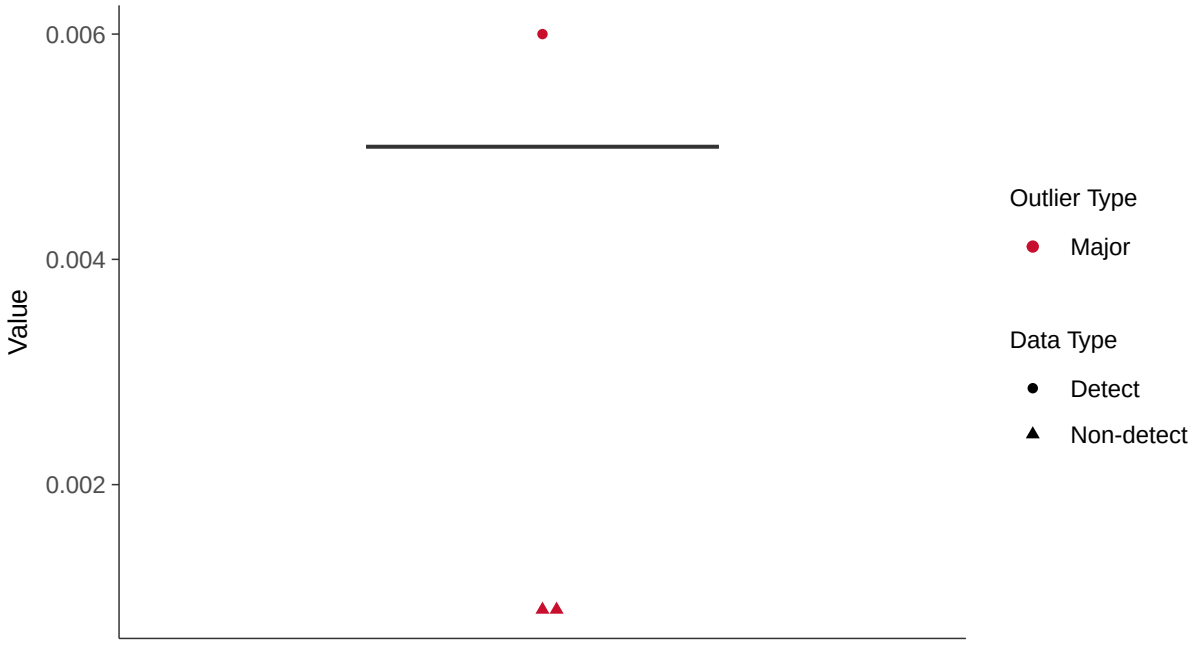
ID: 26_3_122





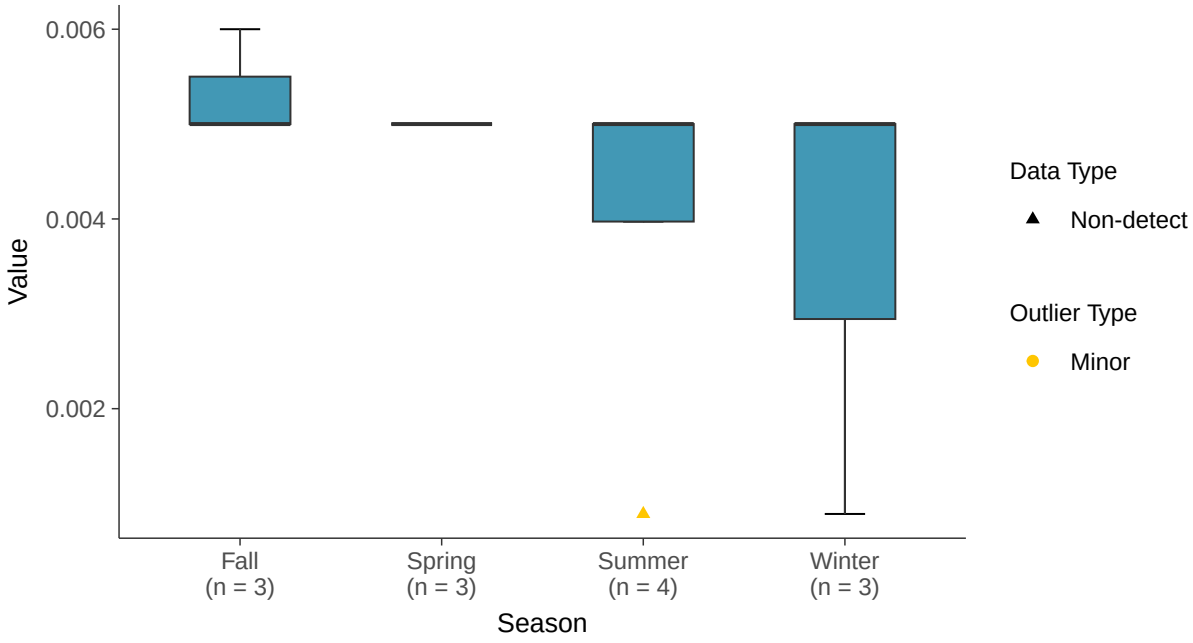
Boxplot

Selenium, MW-16B (mg/l)



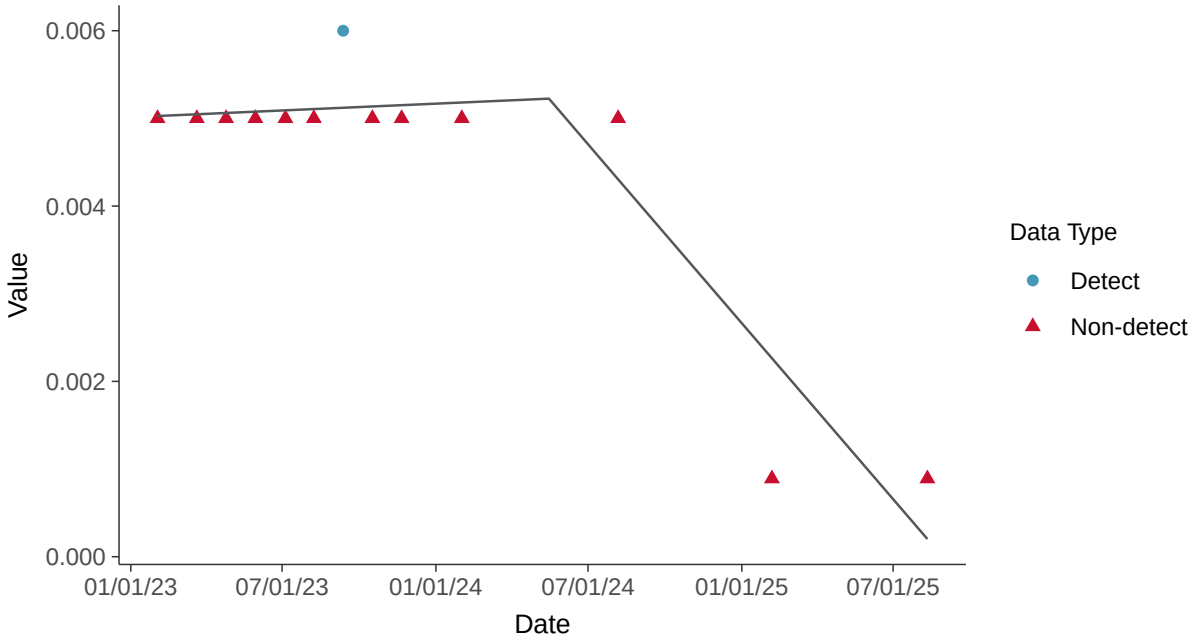
Boxplot by Season

Selenium, MW-16B (mg/l)



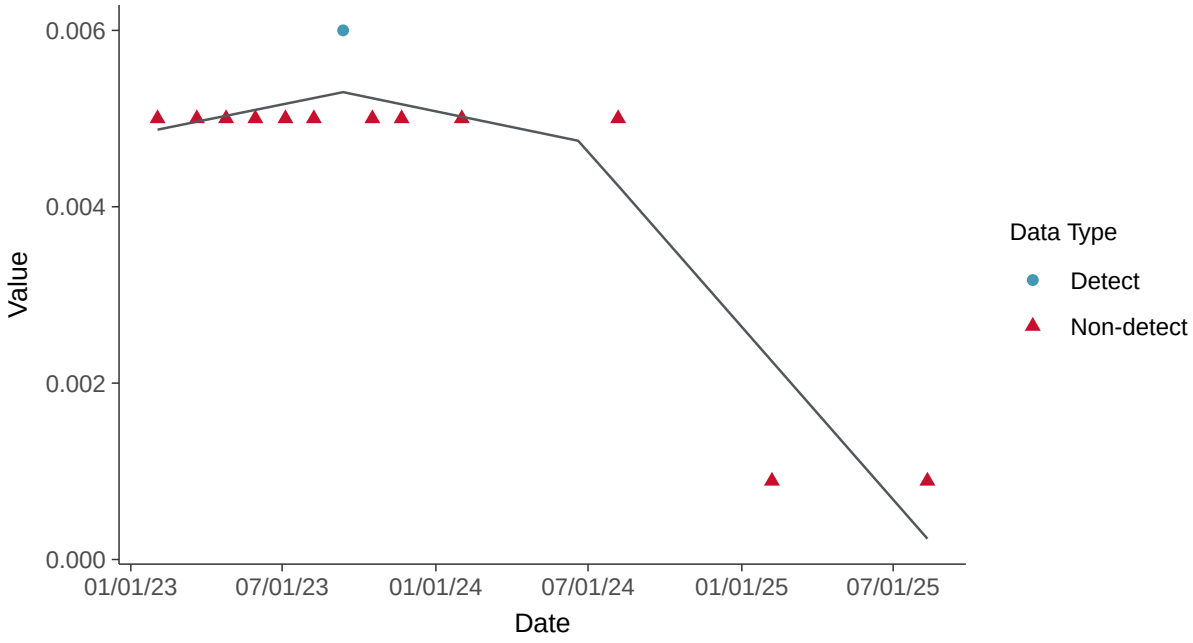
Trend Regression: Piecewise Linear-Linear

Selenium, MW-16B (mg/l)



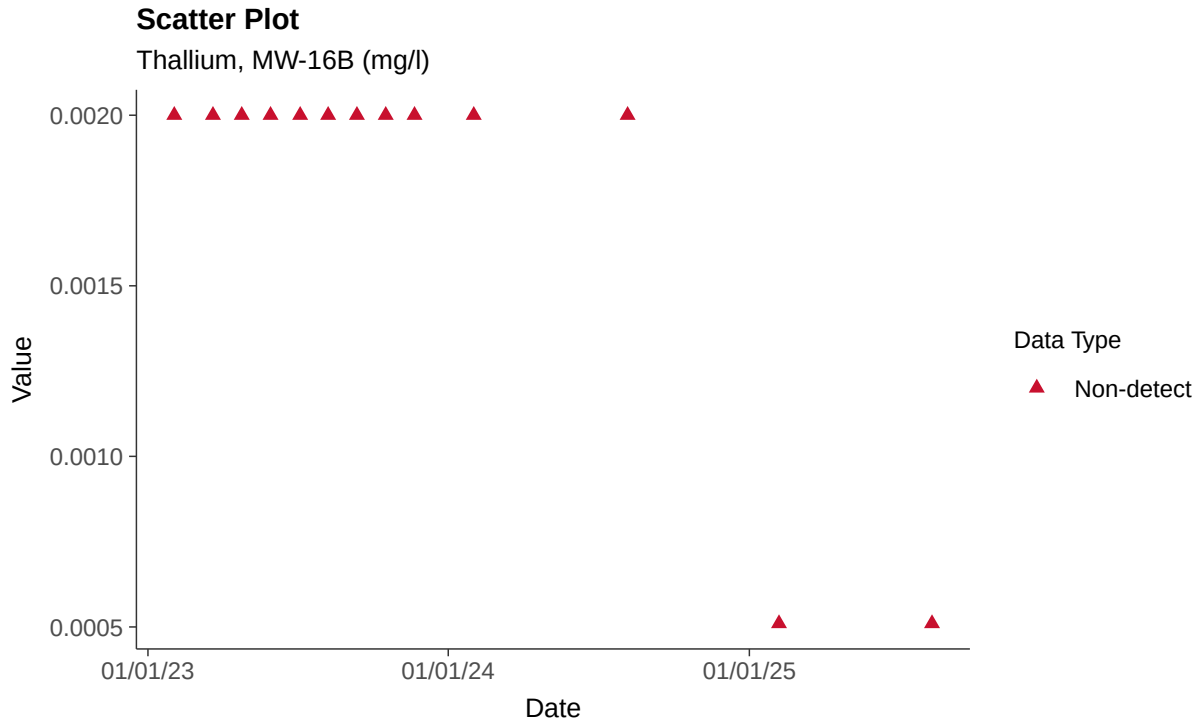
Trend Regression: Piecewise Linear-Linear-Linear

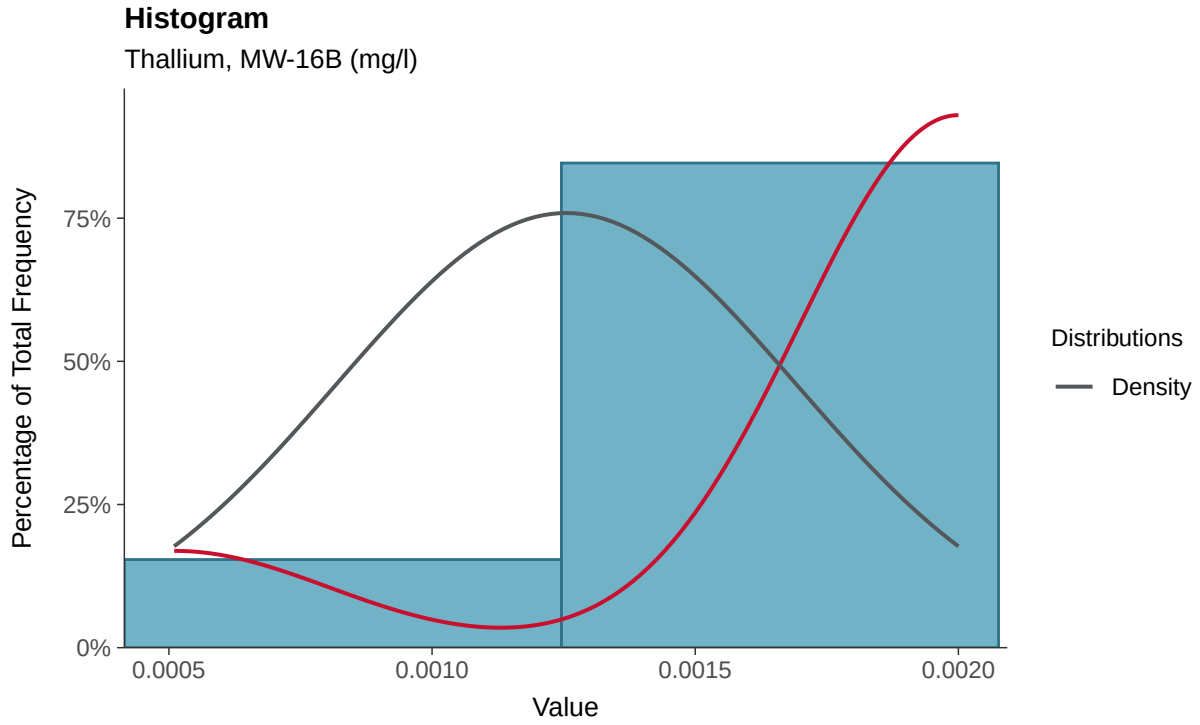
Selenium, MW-16B (mg/l)



Appendix IV: Thallium, MW-16B

ID: 26_3_125



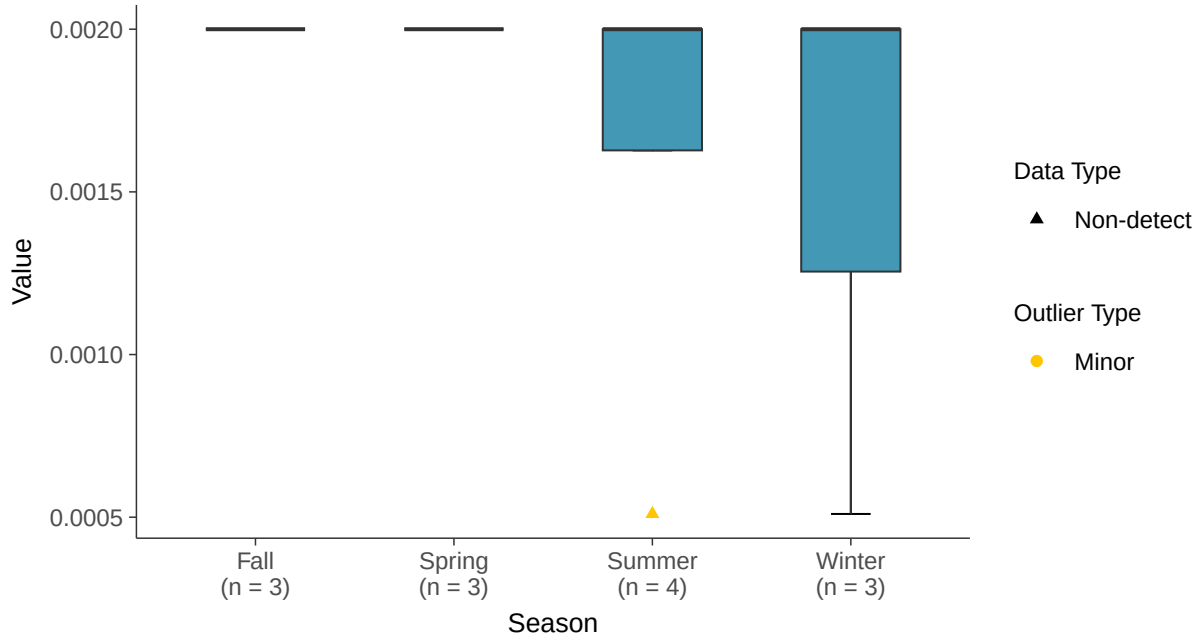


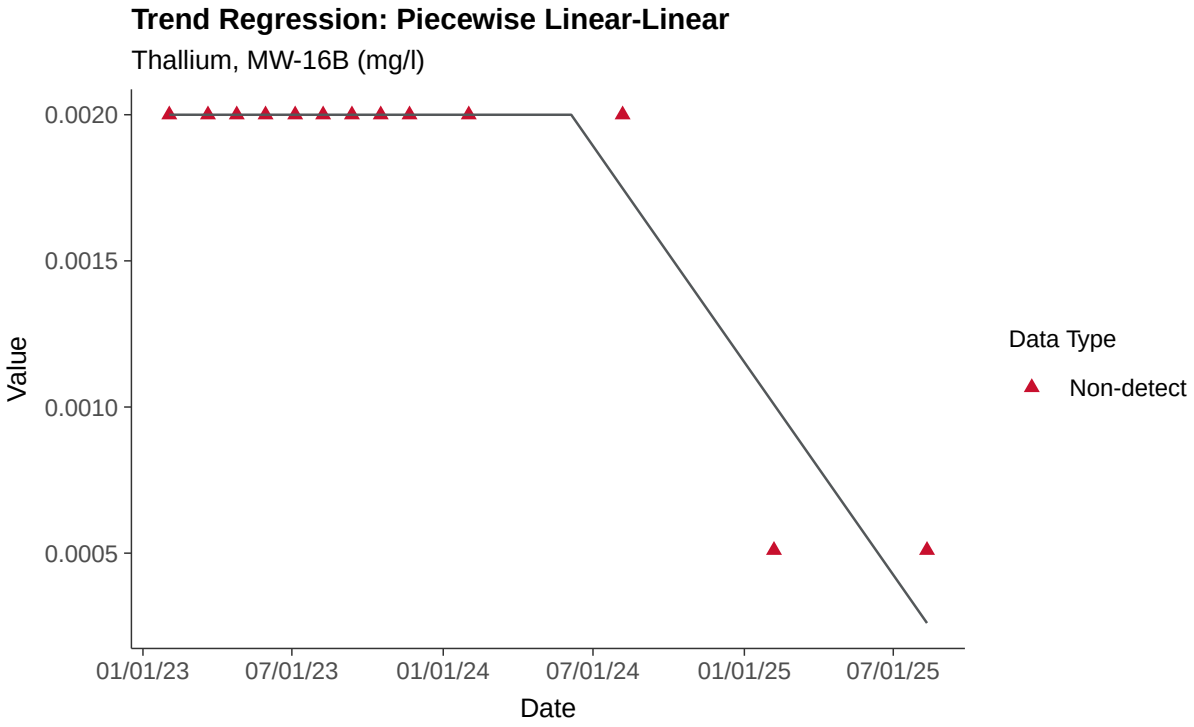
Boxplot

Thallium, MW-16B (mg/l)

Boxplot by Season

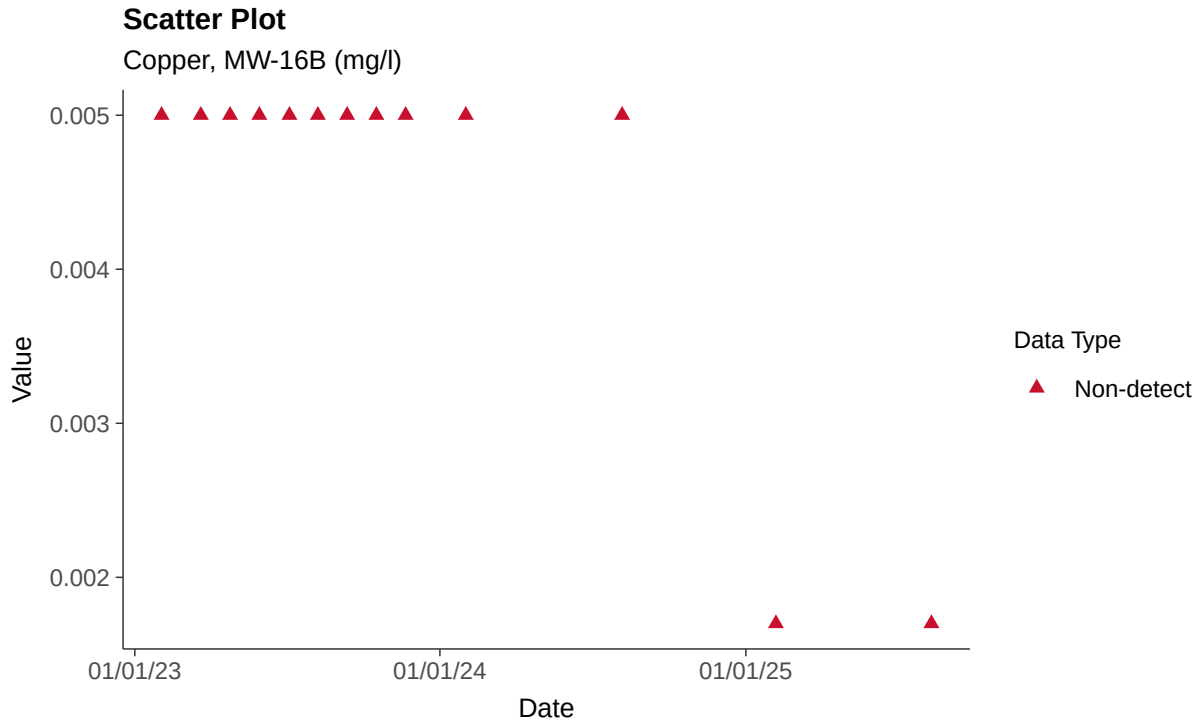
Thallium, MW-16B (mg/l)

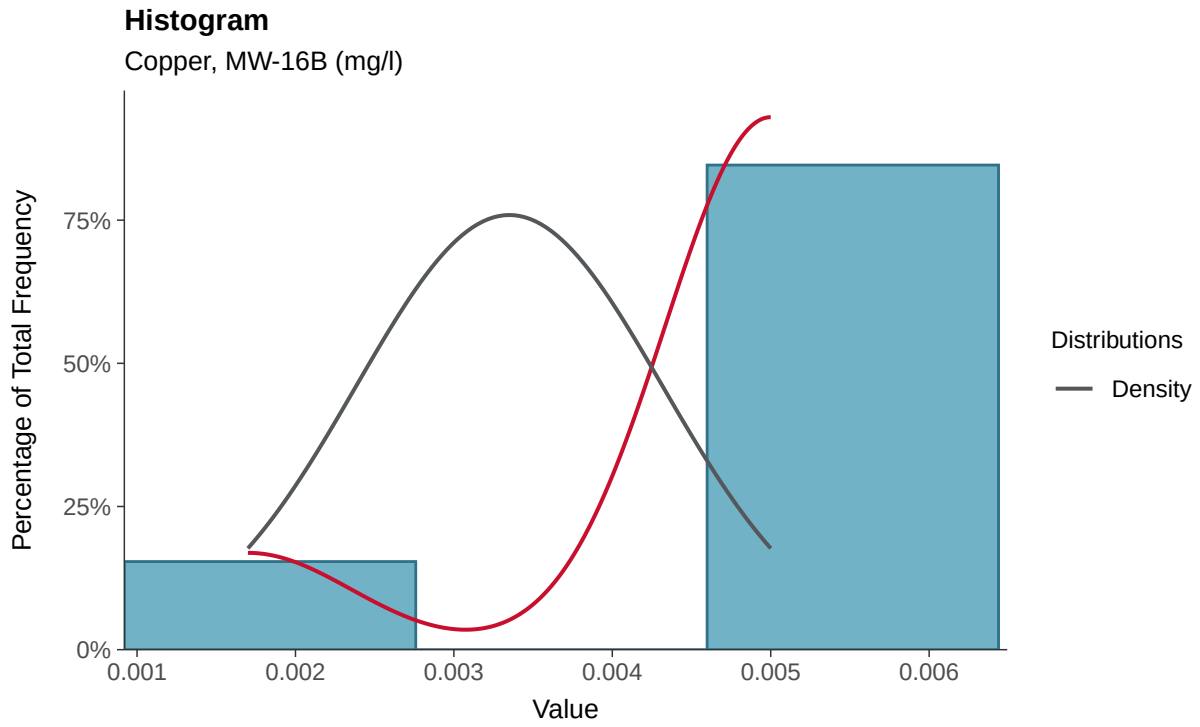



Trend Regression: Piecewise Linear-Linear
Thallium, MW-16B (mg/l)
Value
0.0020
0.0015
0.0010
0.0005
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Copper, MW-16B

ID: 26_5_111



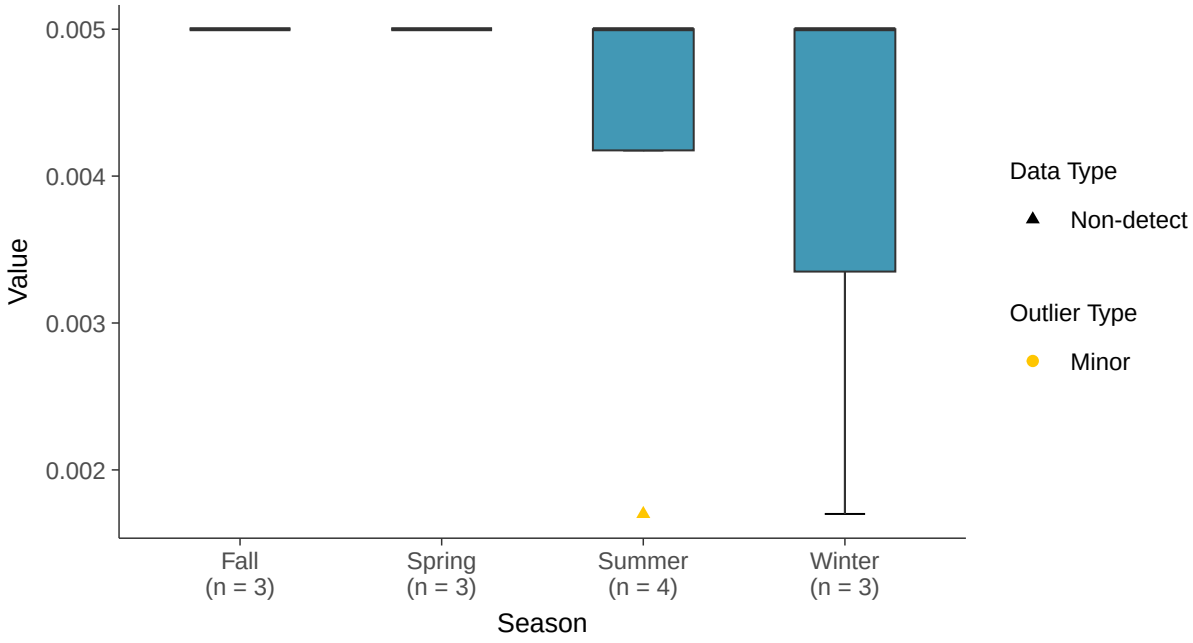


Boxplot

Copper, MW-16B (mg/l)

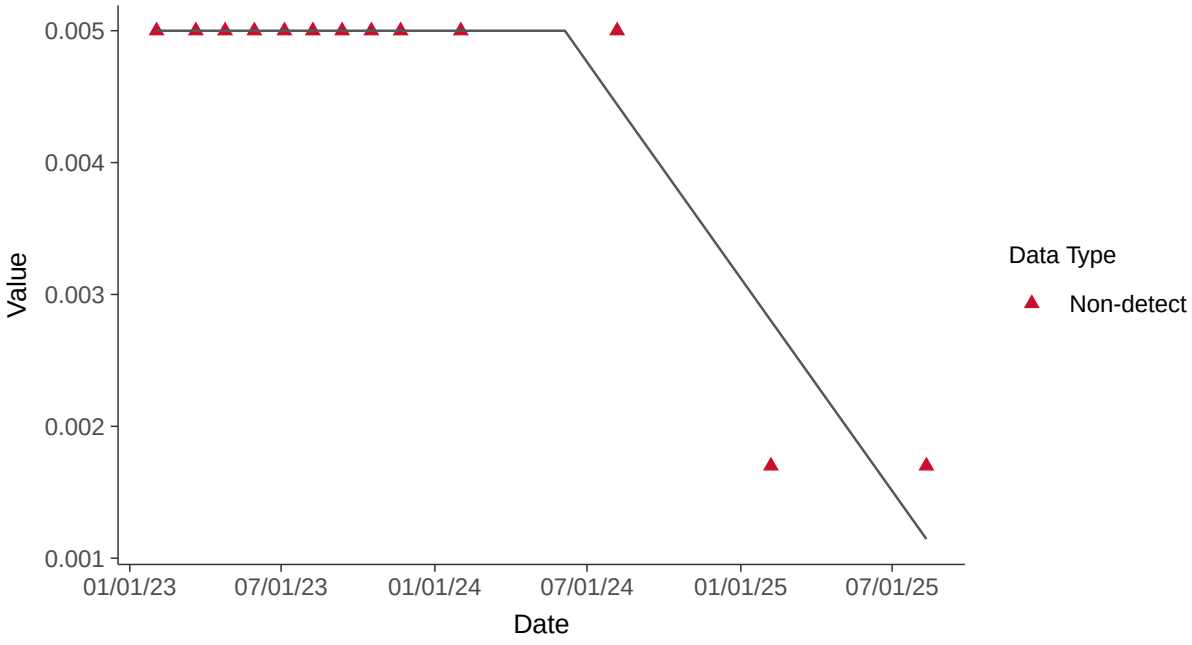
Boxplot by Season

Copper, MW-16B (mg/l)



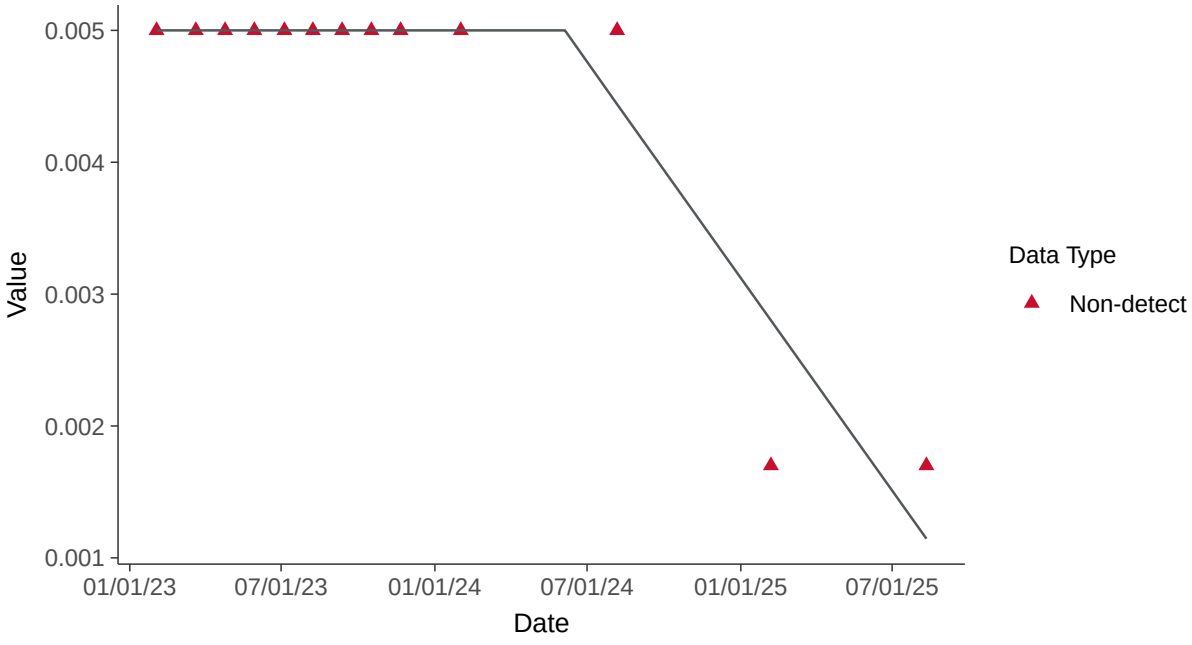
Trend Regression: Piecewise Linear-Linear

Copper, MW-16B (mg/l)



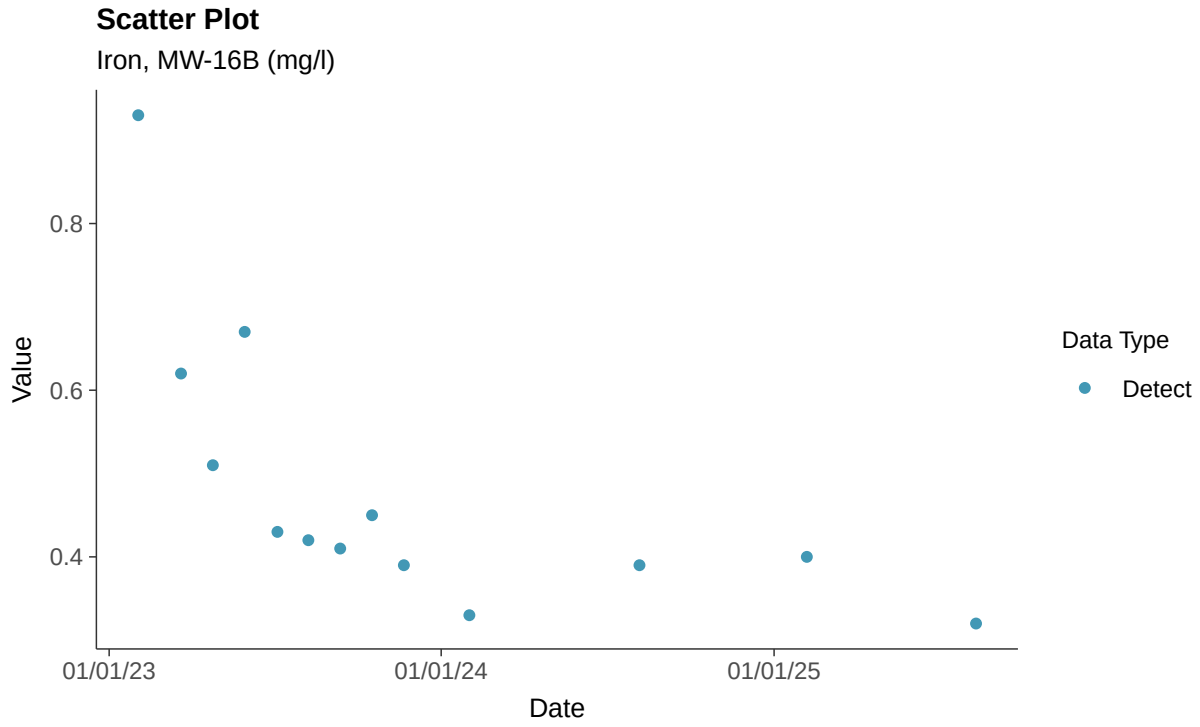
Trend Regression: Piecewise Linear-Linear-Linear

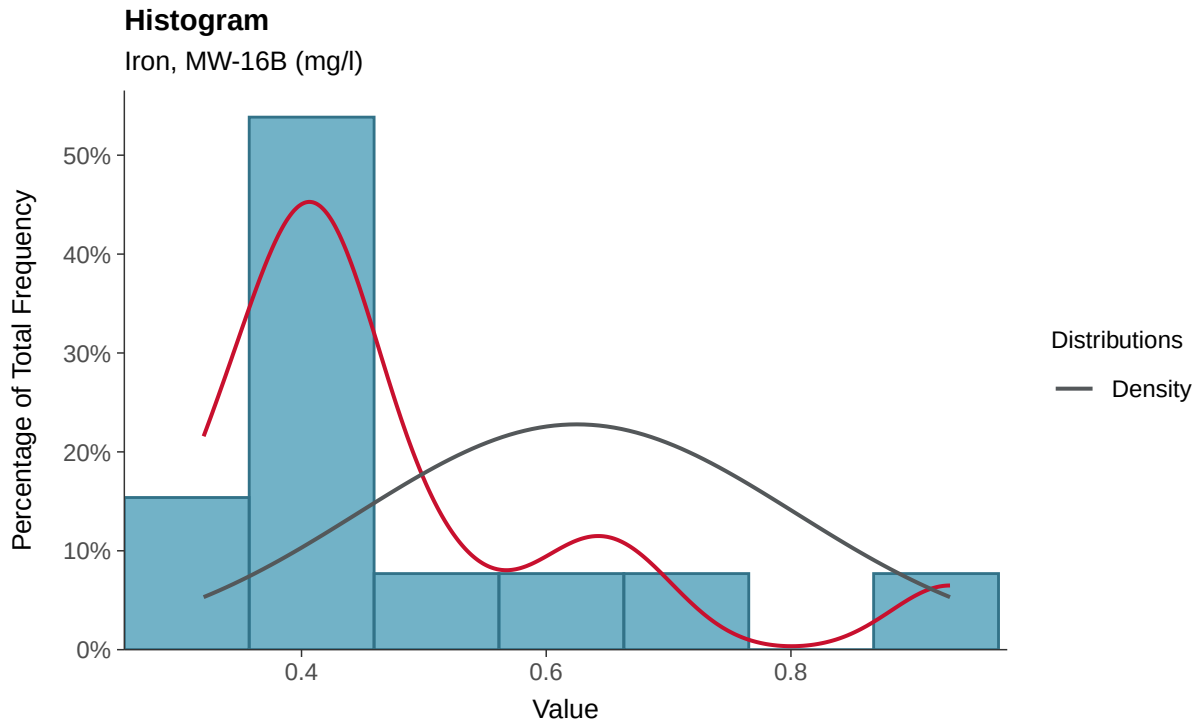
Copper, MW-16B (mg/l)



Part 115: Iron, MW-16B

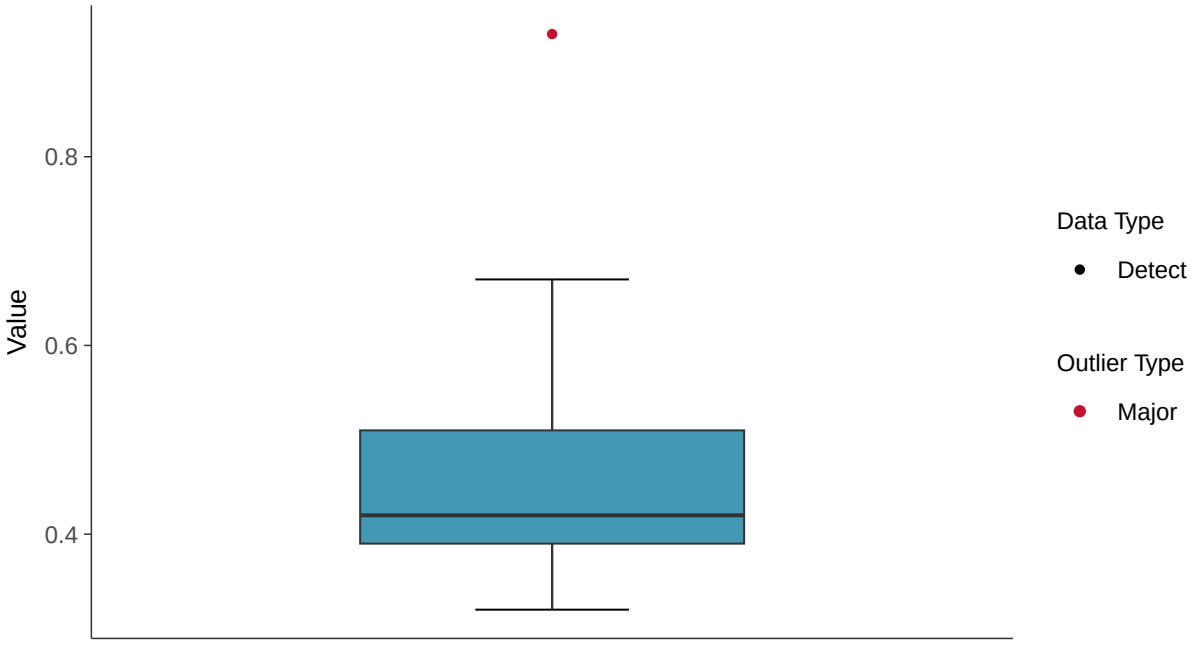
ID: 26_5_114





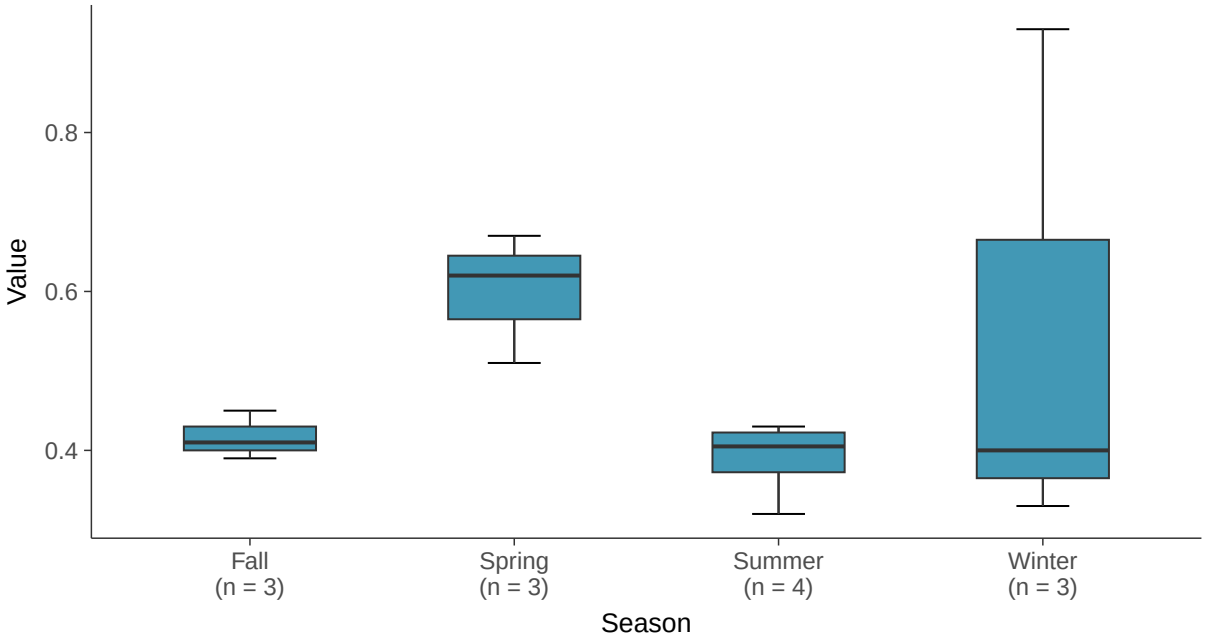
Boxplot

Iron, MW-16B (mg/l)



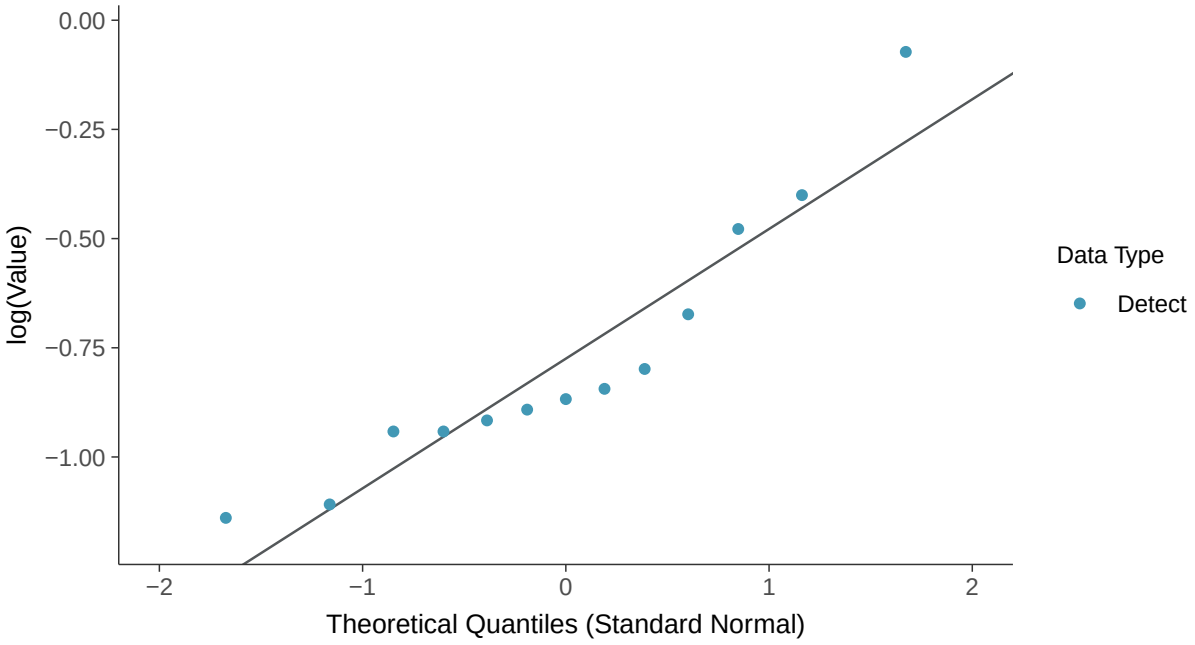
Boxplot by Season

Iron, MW-16B (mg/l)



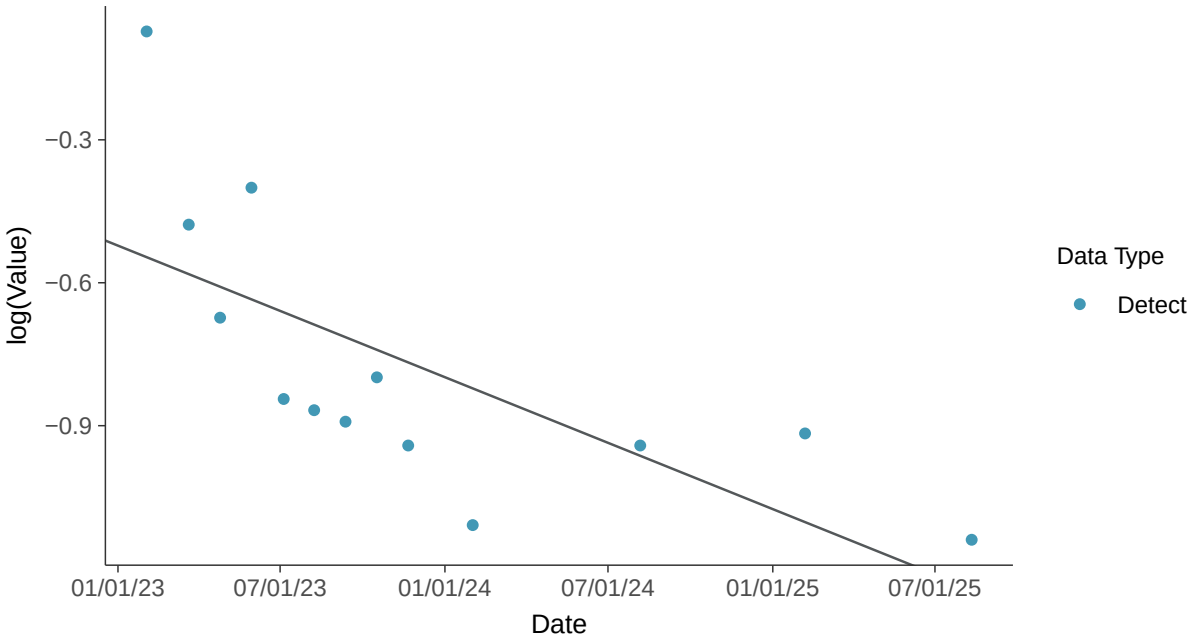
Lognormal Q-Q plot

Iron, MW-16B (mg/l)



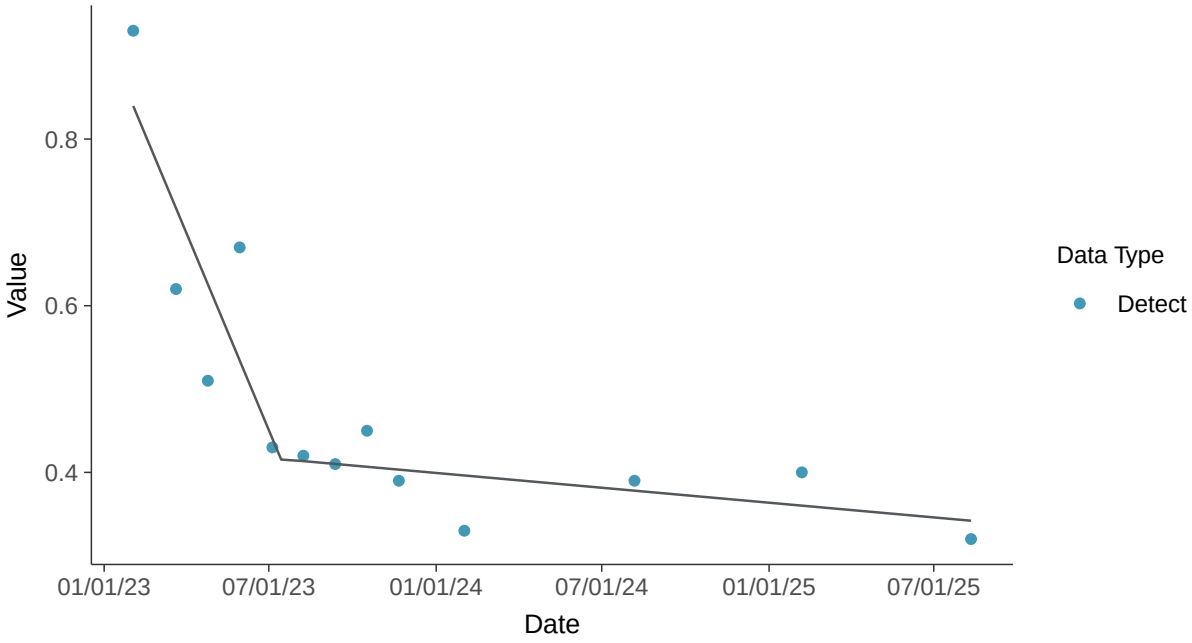
Trend Regression: Lognormal MLE

Iron, MW-16B (mg/l)



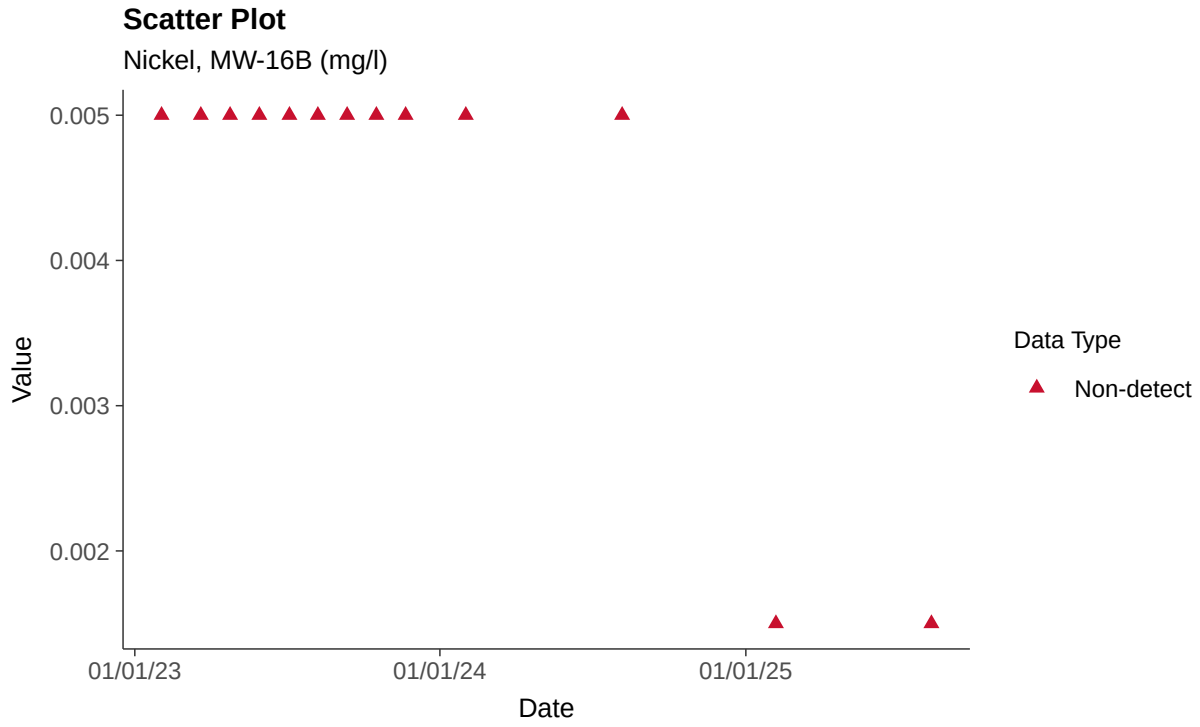
Trend Regression: Piecewise Linear-Linear

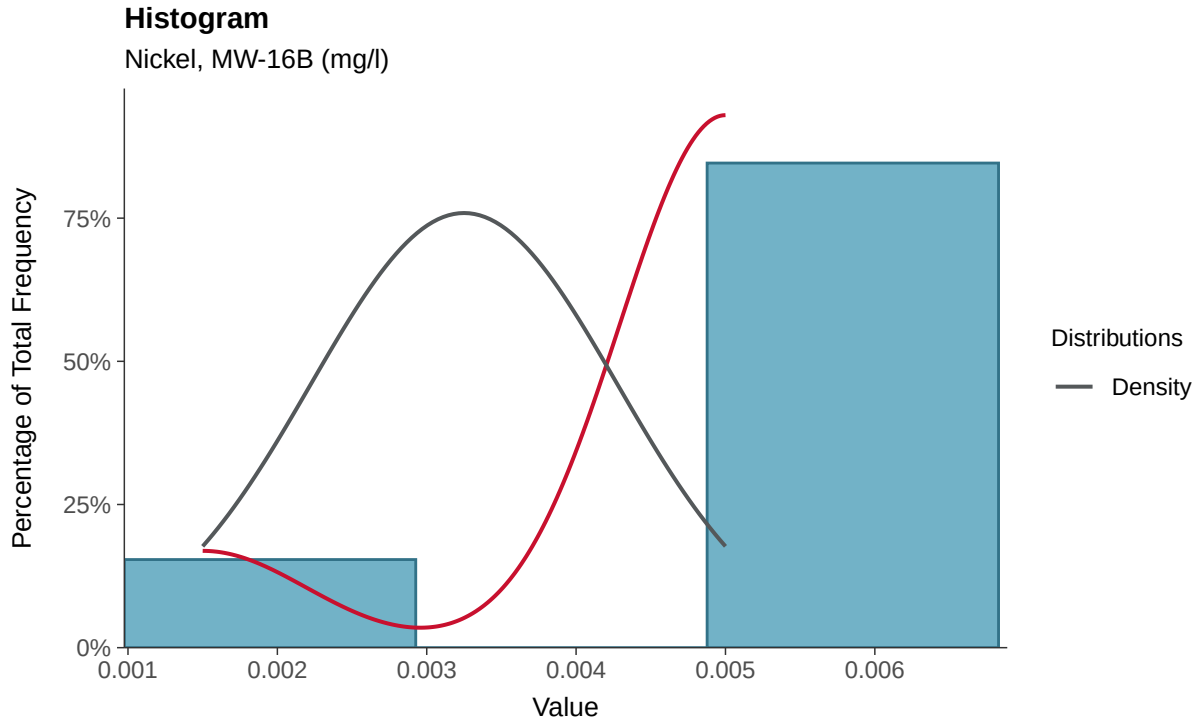
Iron, MW-16B (mg/l)



Part 115: Nickel, MW-16B

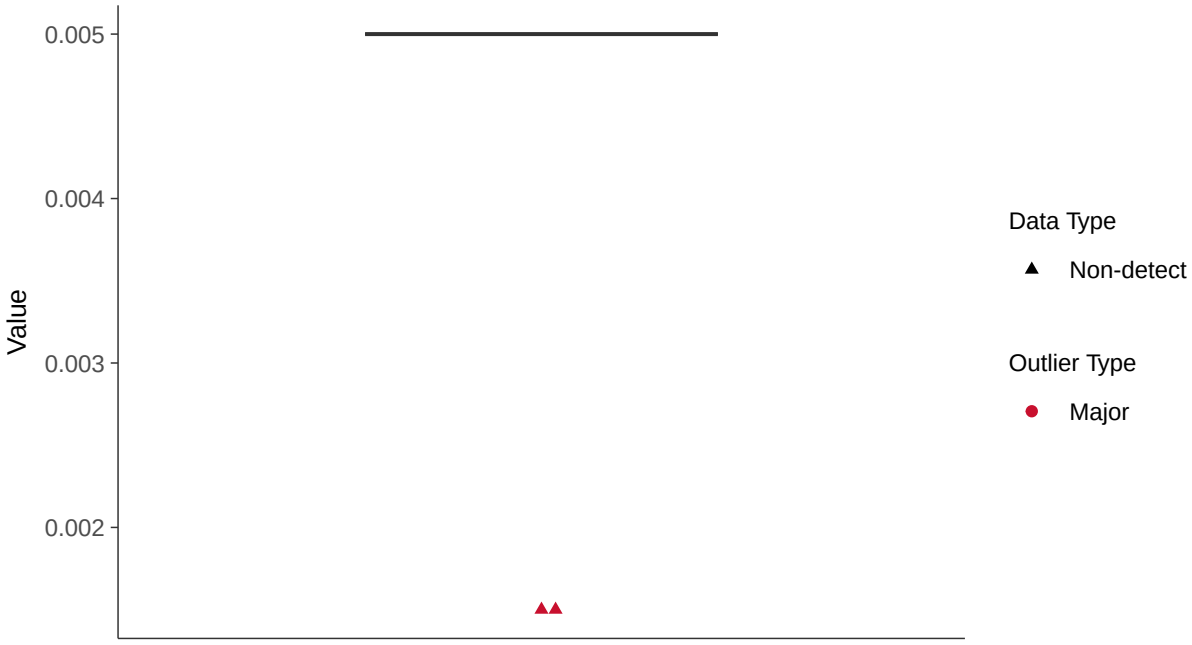
ID: 26_5_119





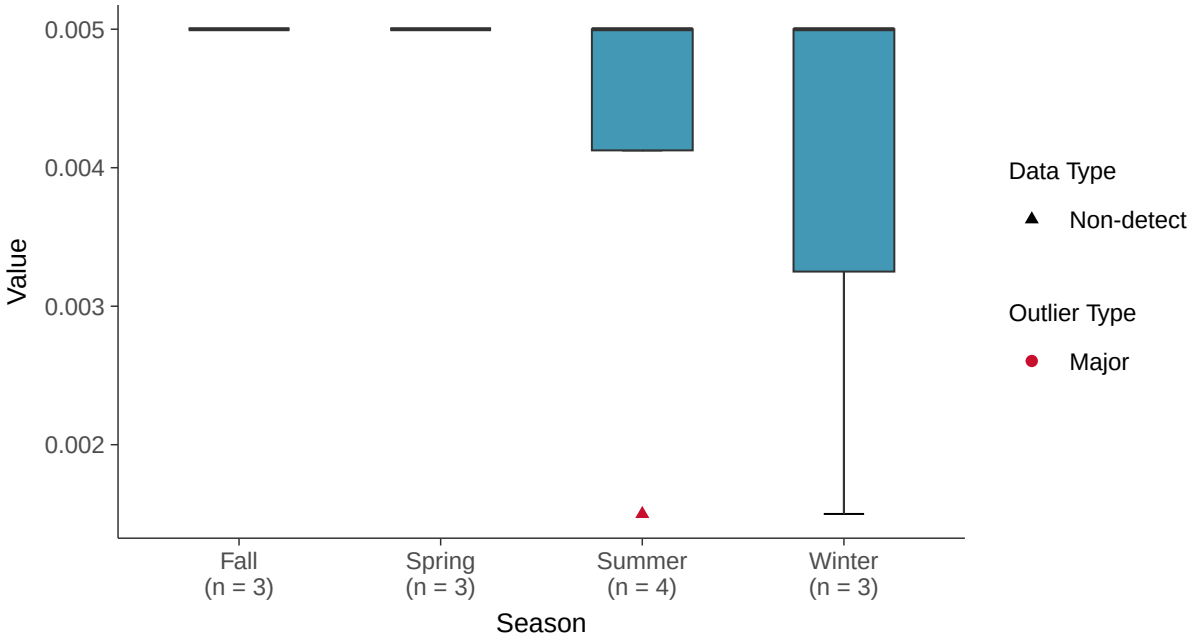
Boxplot

Nickel, MW-16B (mg/l)



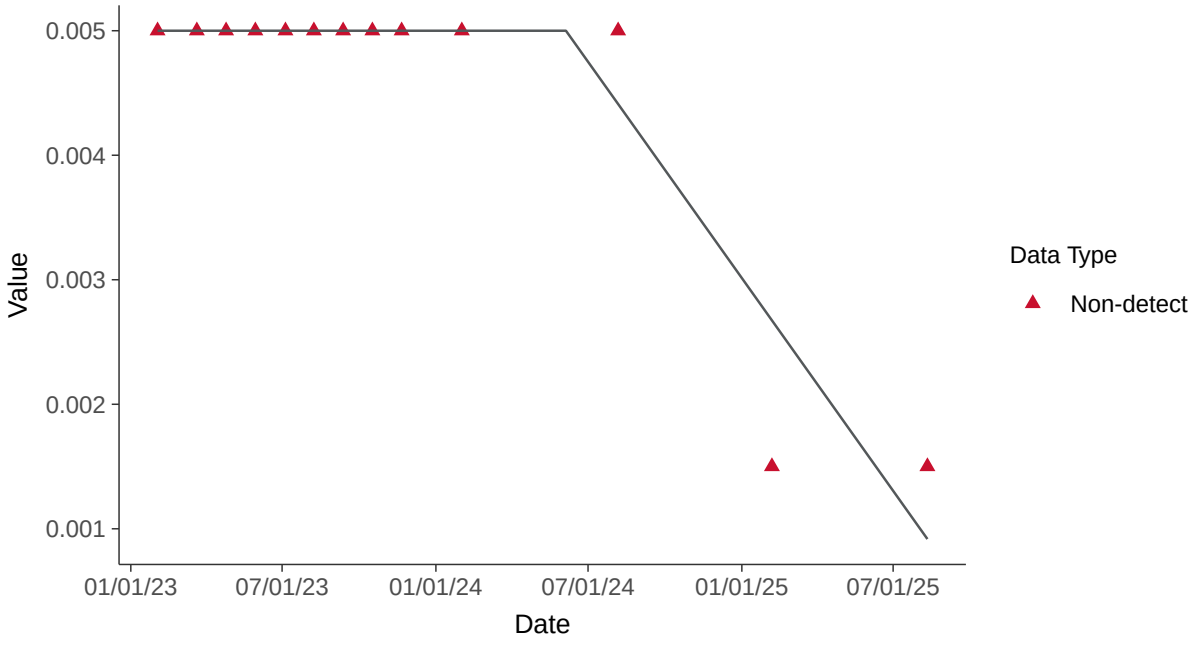
Boxplot by Season

Nickel, MW-16B (mg/l)



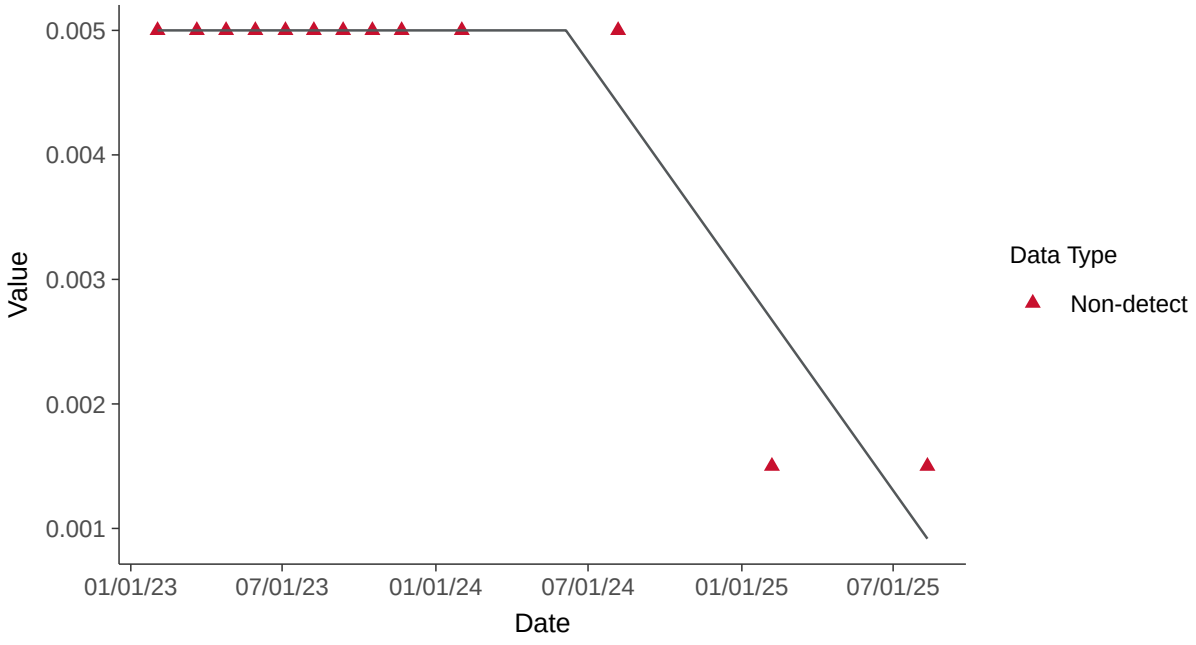
Trend Regression: Piecewise Linear-Linear

Nickel, MW-16B (mg/l)



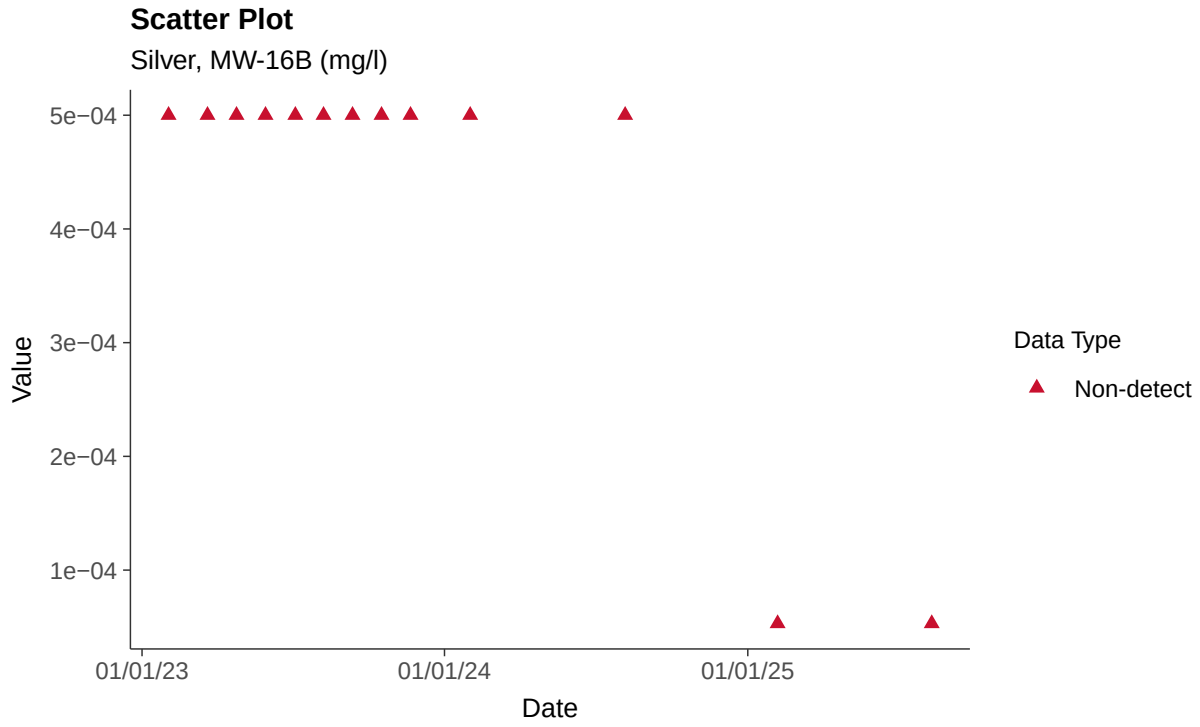
Trend Regression: Piecewise Linear-Linear-Linear

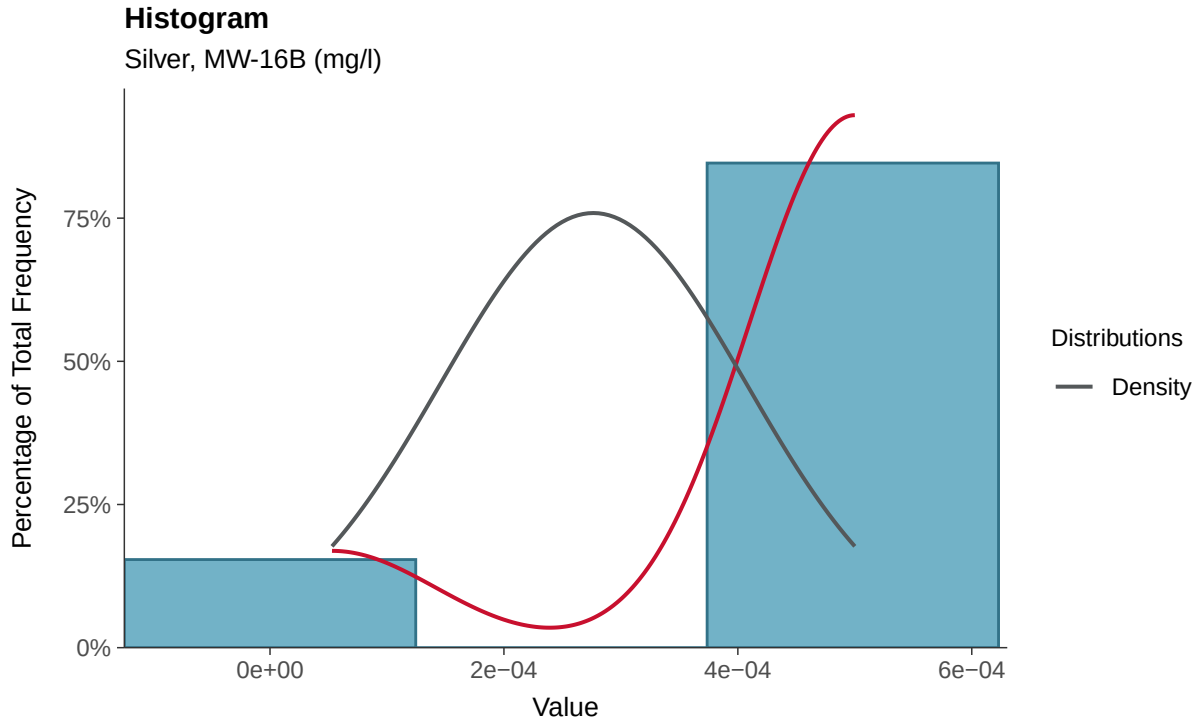
Nickel, MW-16B (mg/l)



Part 115: Silver, MW-16B

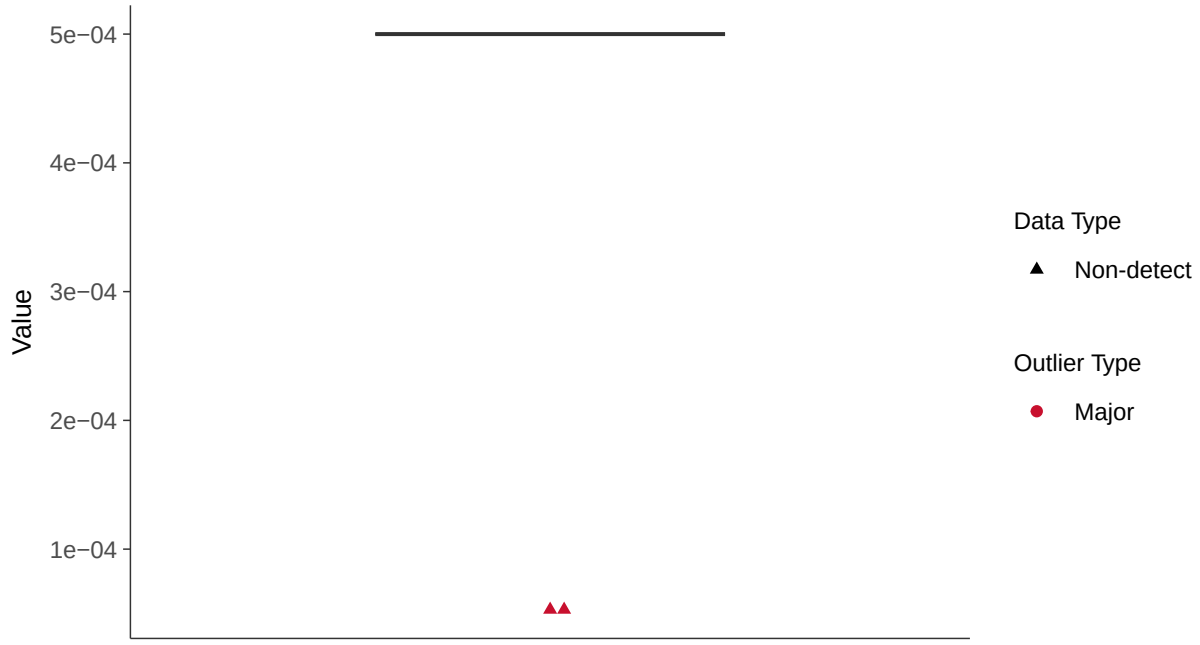
ID: 26_5_123





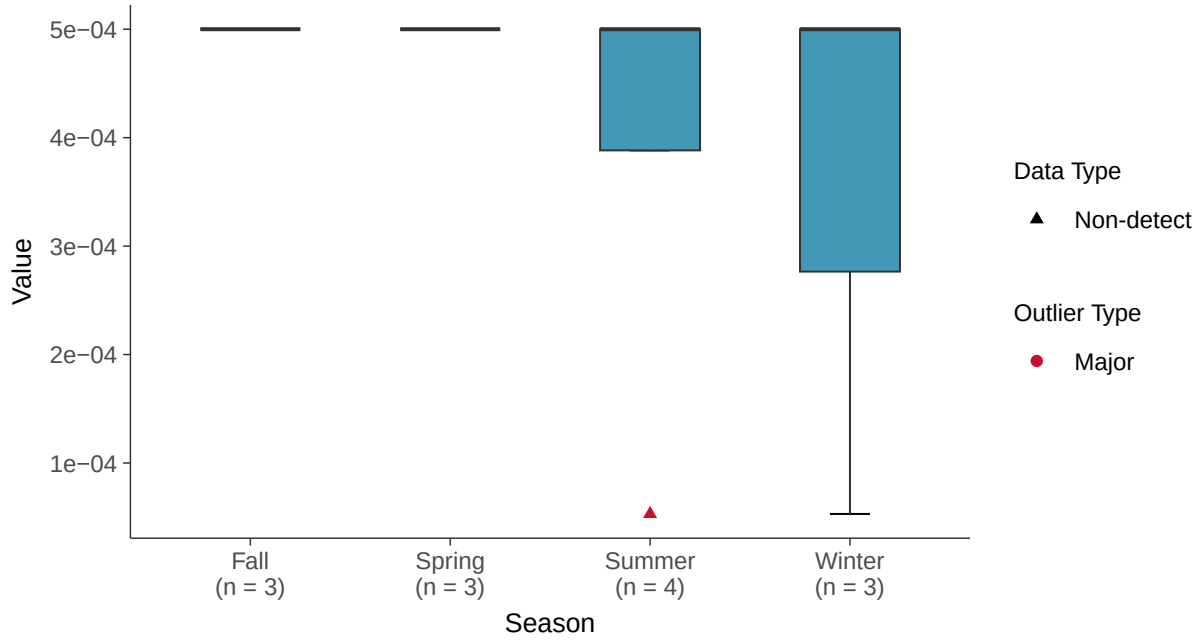
Boxplot

Silver, MW-16B (mg/l)



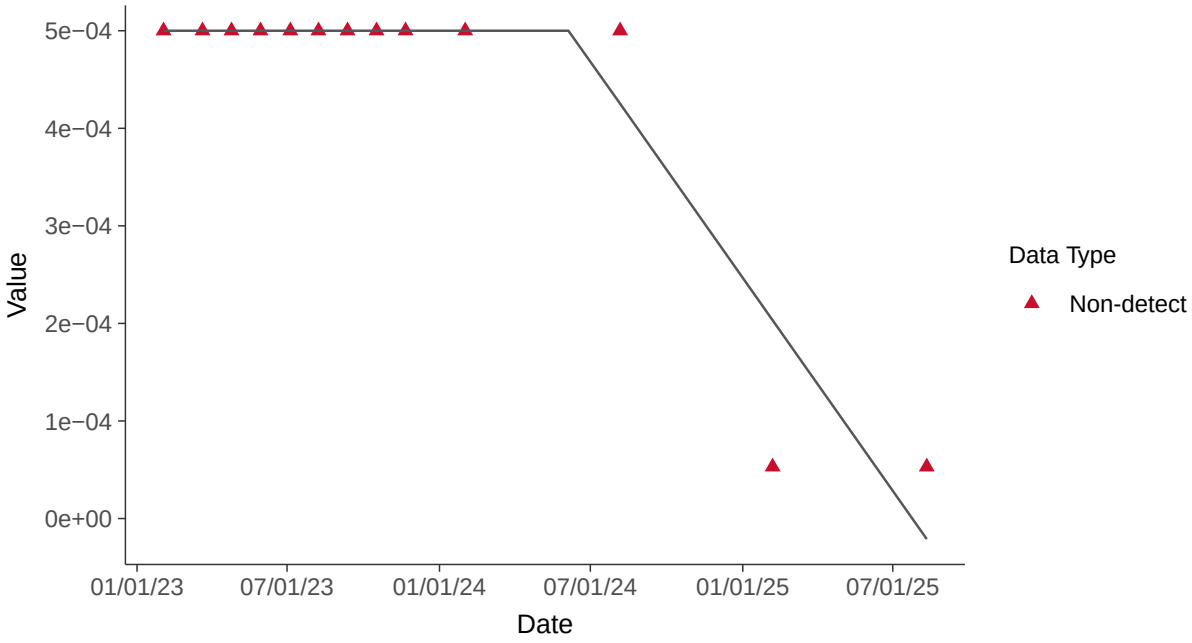
Boxplot by Season

Silver, MW-16B (mg/l)



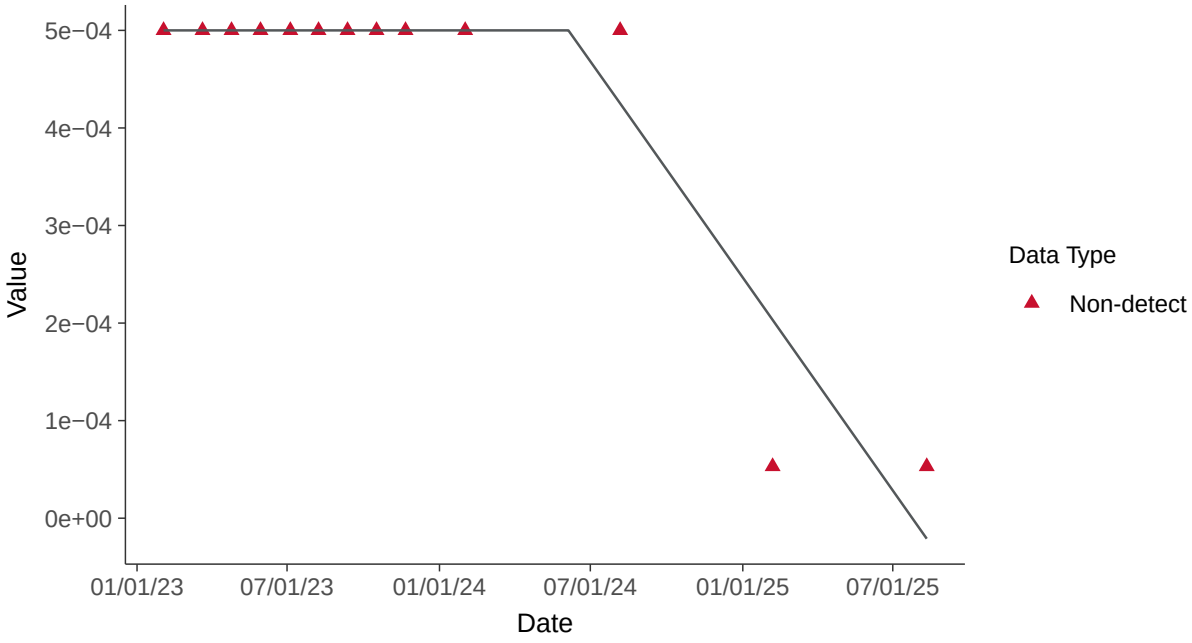
Trend Regression: Piecewise Linear-Linear

Silver, MW-16B (mg/l)



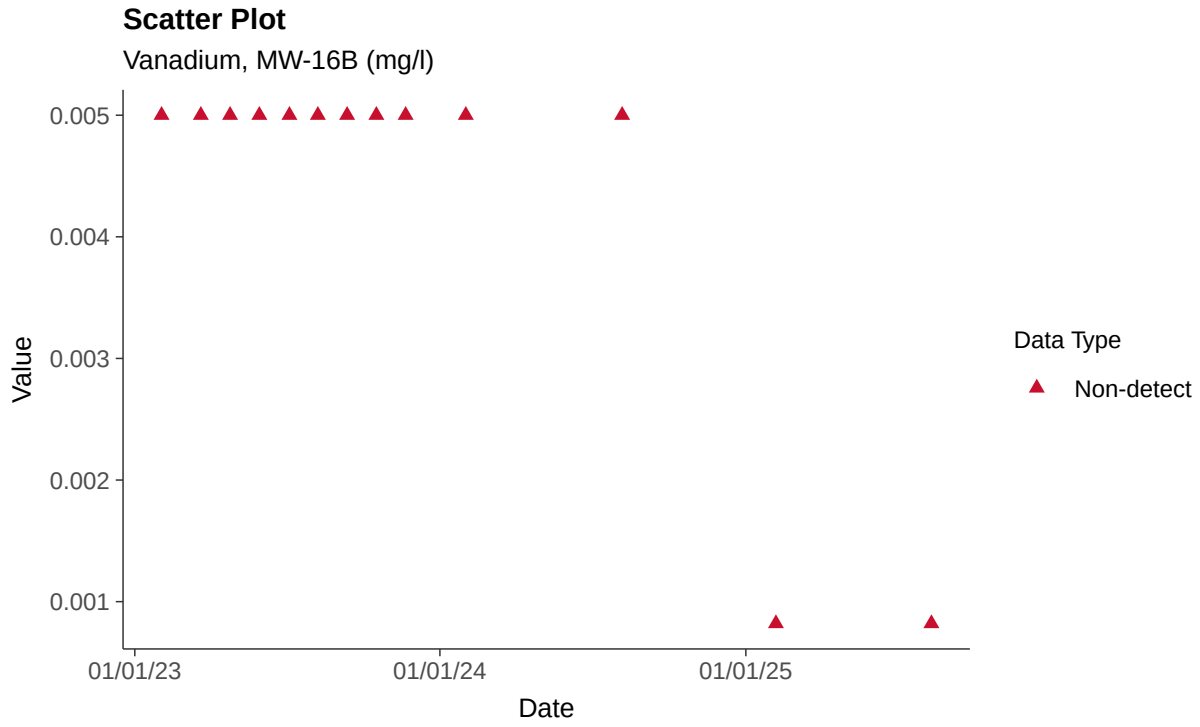
Trend Regression: Piecewise Linear-Linear-Linear

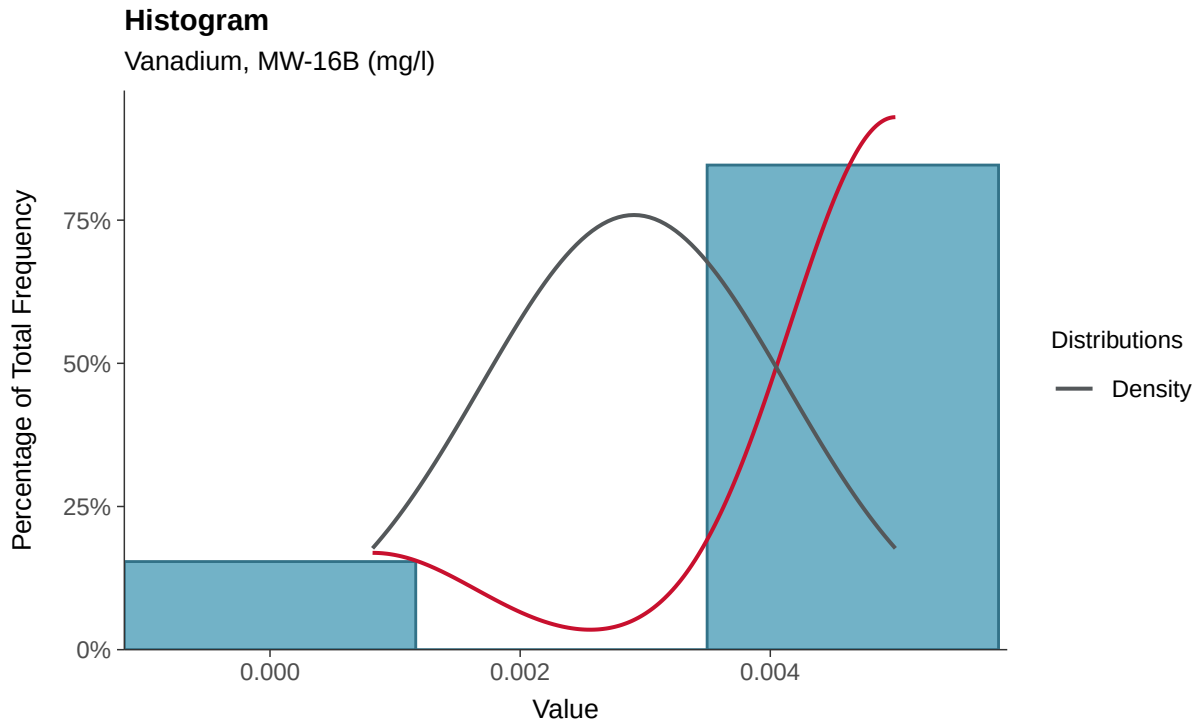
Silver, MW-16B (mg/l)



Part 115: Vanadium, MW-16B

ID: 26_5_128



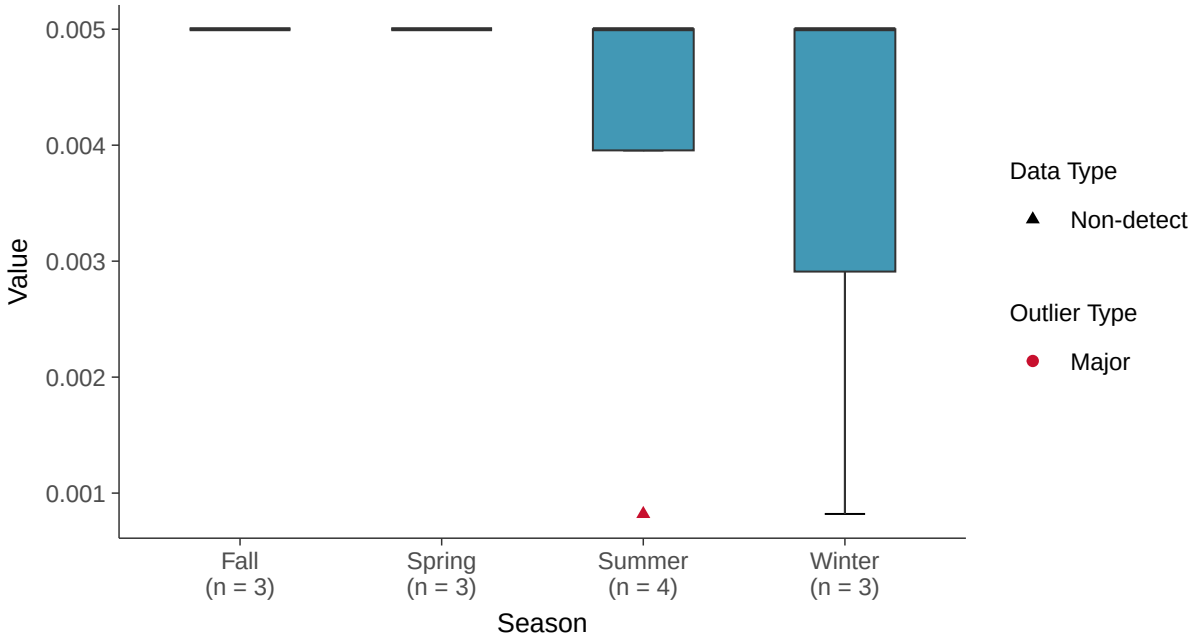


Boxplot

Vanadium, MW-16B (mg/l)

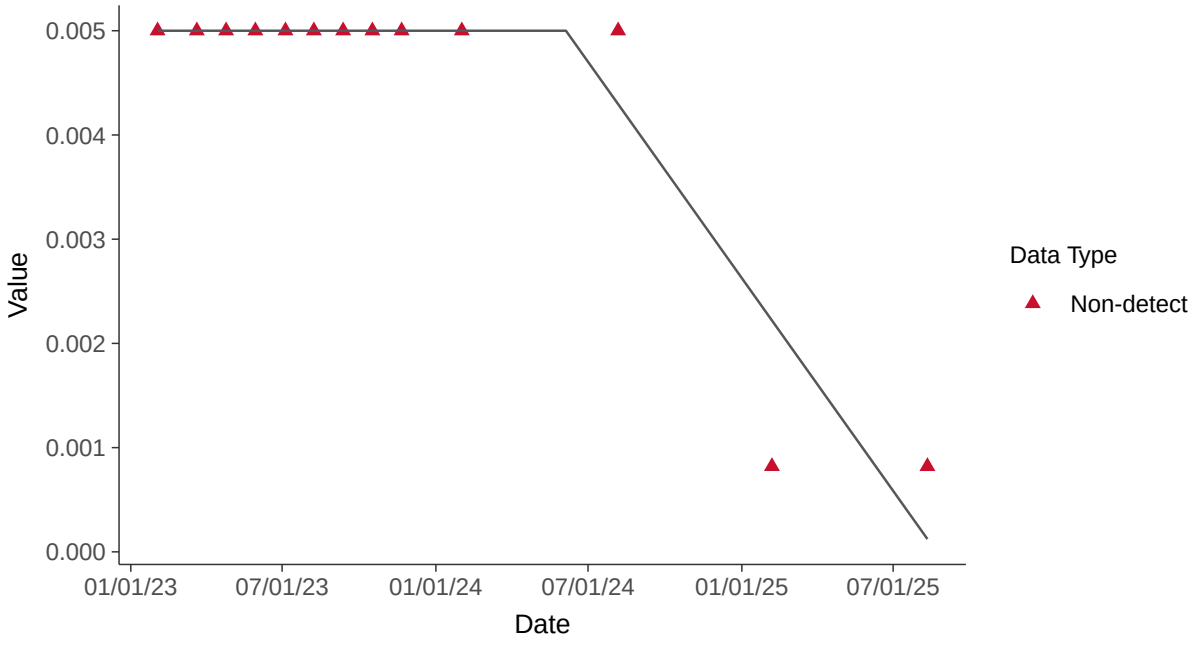
Boxplot by Season

Vanadium, MW-16B (mg/l)



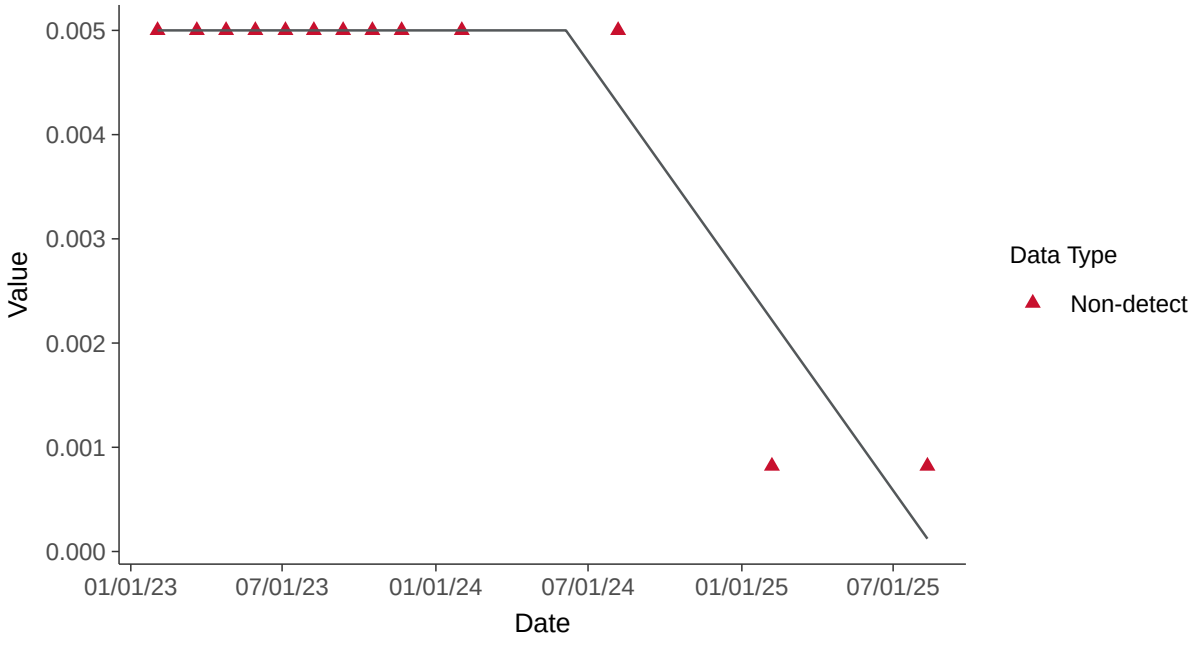
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-16B (mg/l)



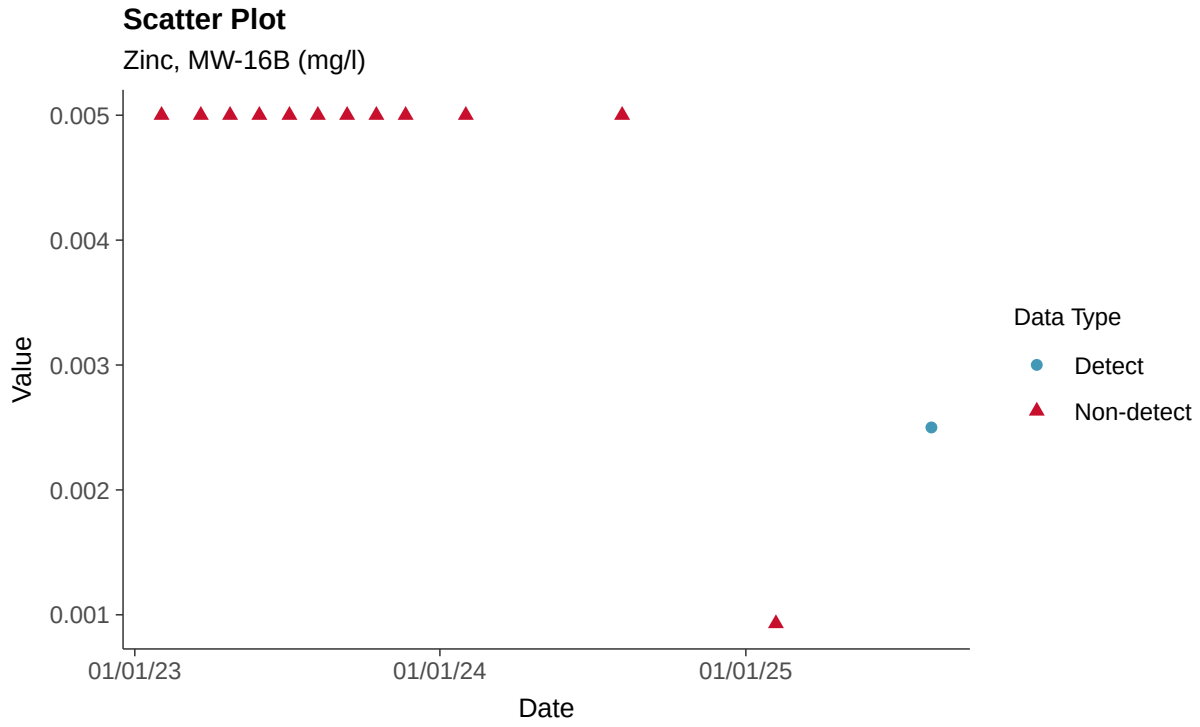
Trend Regression: Piecewise Linear-Linear-Linear

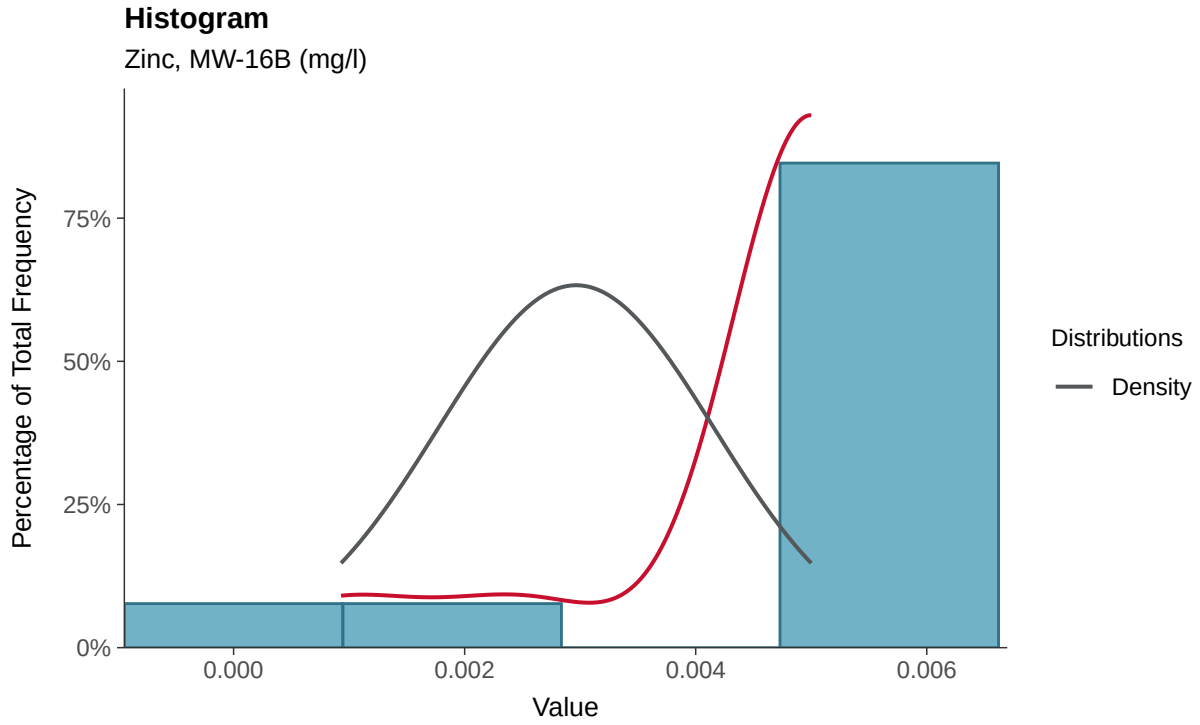
Vanadium, MW-16B (mg/l)



Part 115: Zinc, MW-16B

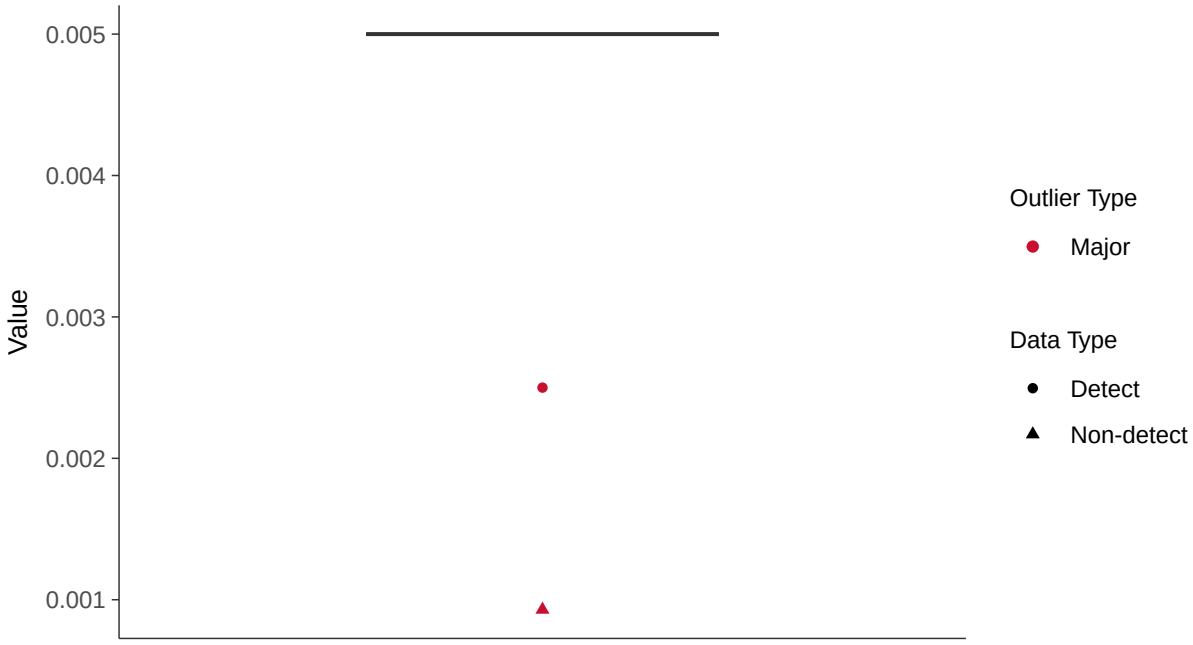
ID: 26_5_129





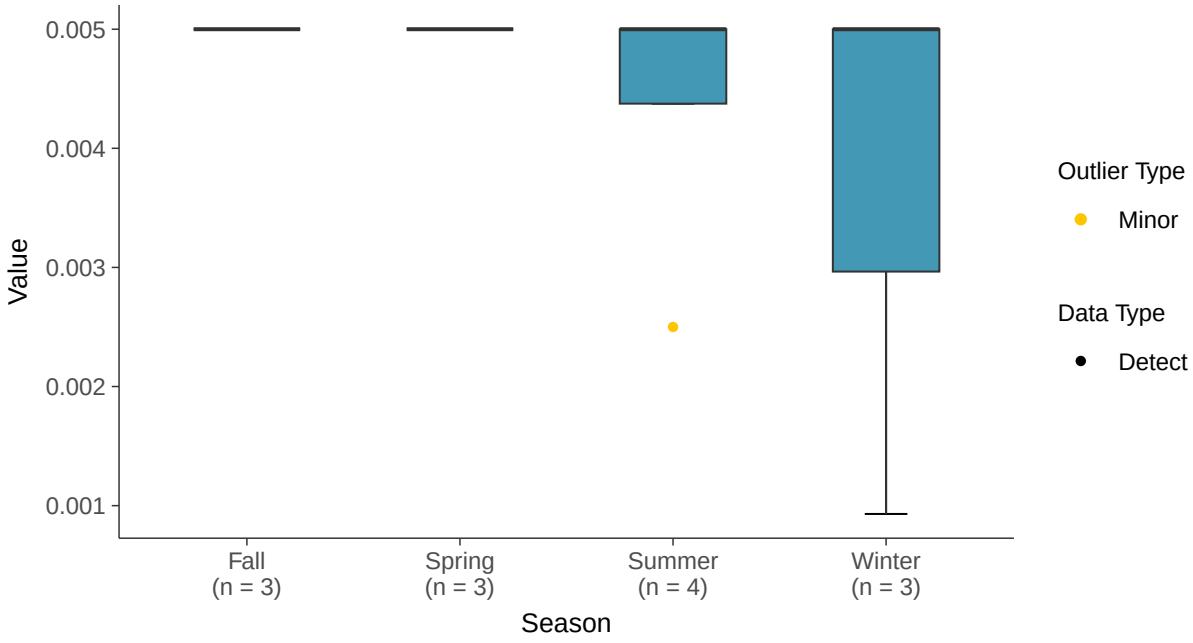
Boxplot

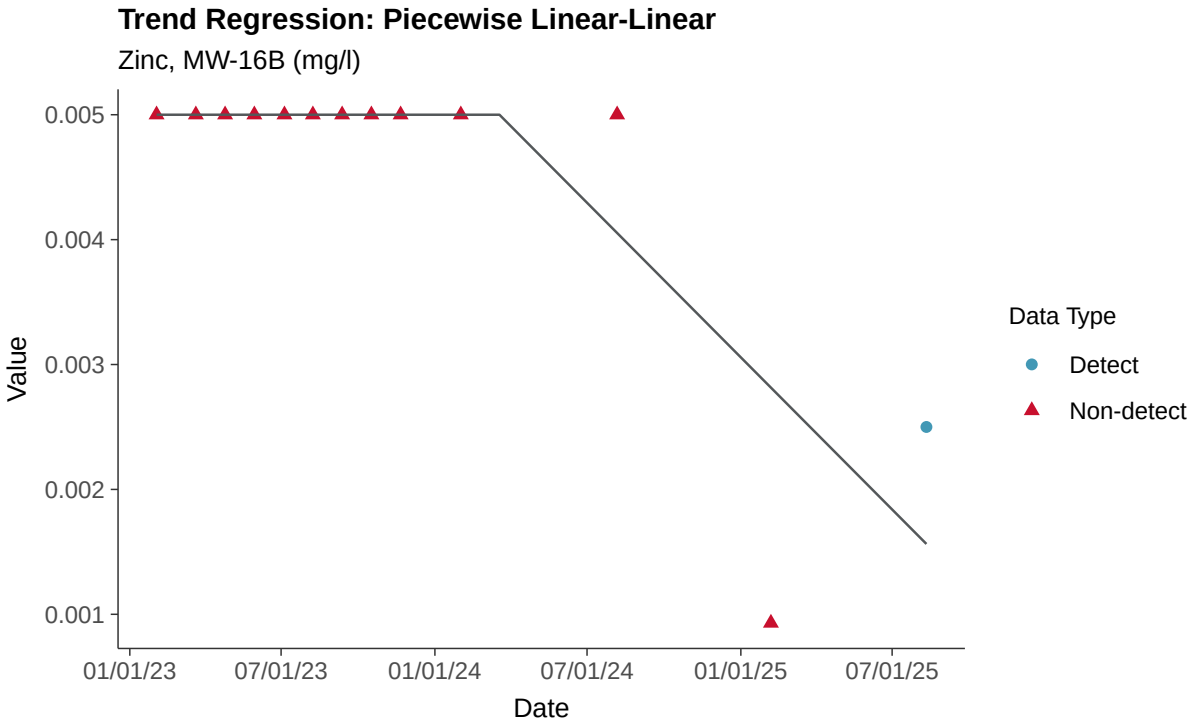
Zinc, MW-16B (mg/l)



Boxplot by Season

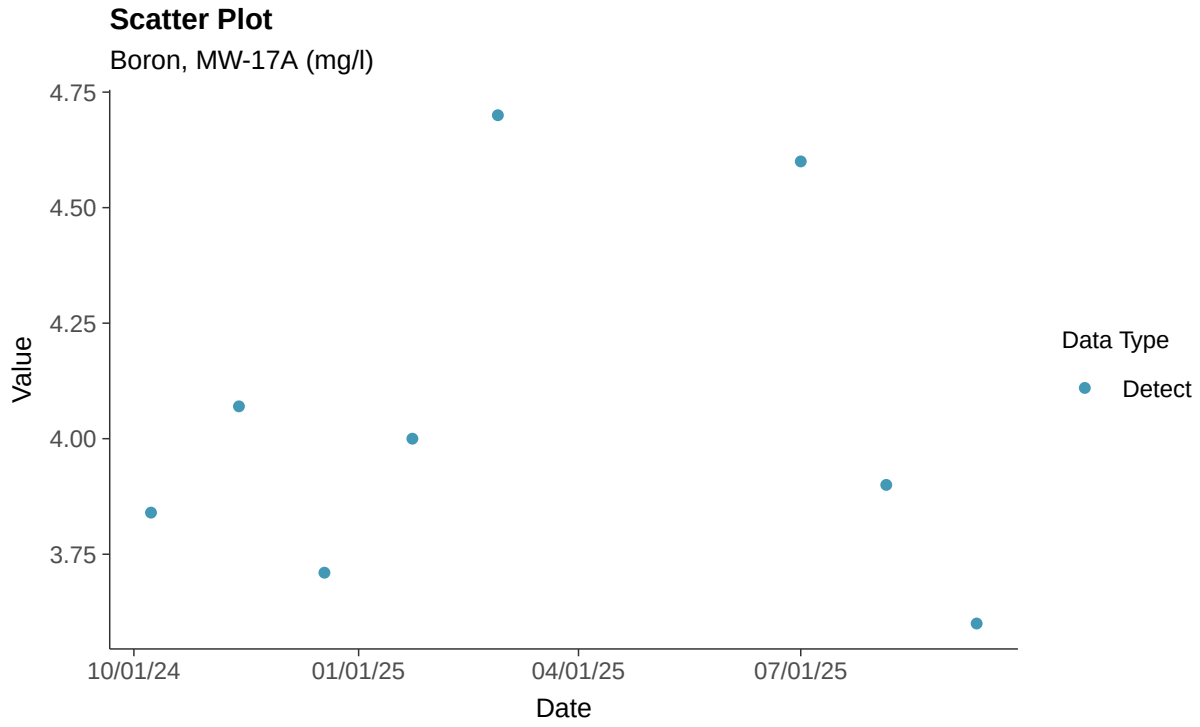
Zinc, MW-16B (mg/l)

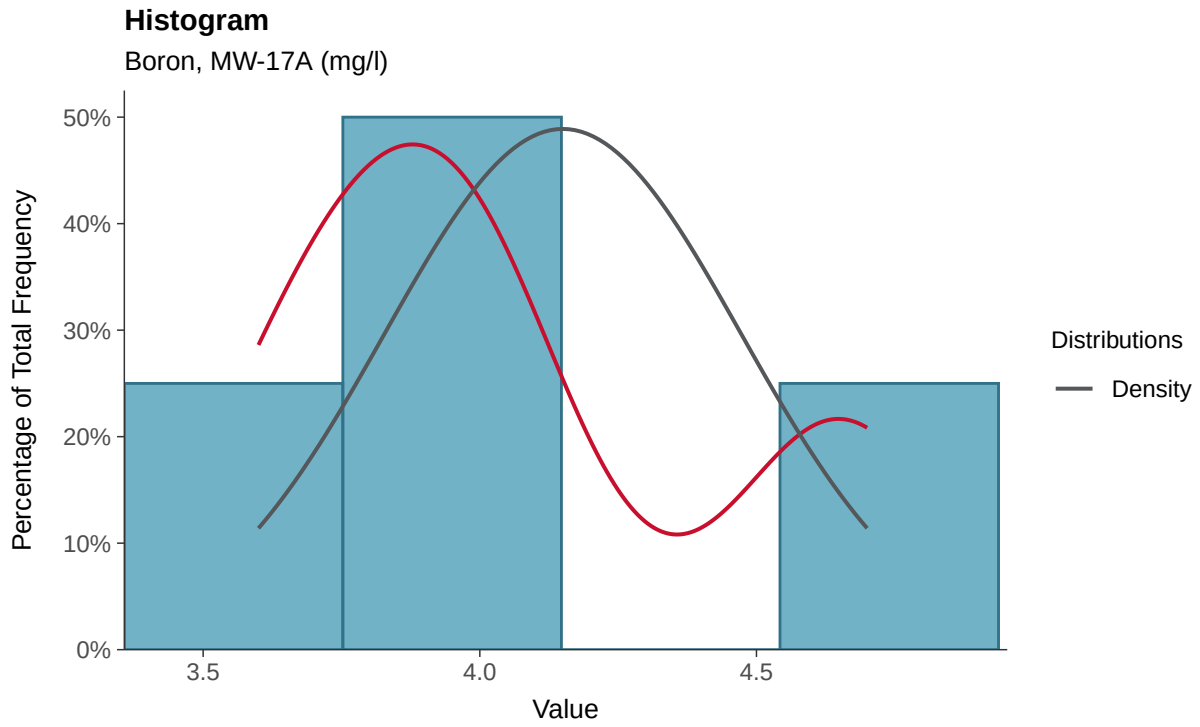



Trend Regression: Piecewise Linear-Linear
Zinc, MW-16B (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Appendix III: Boron, MW-17A

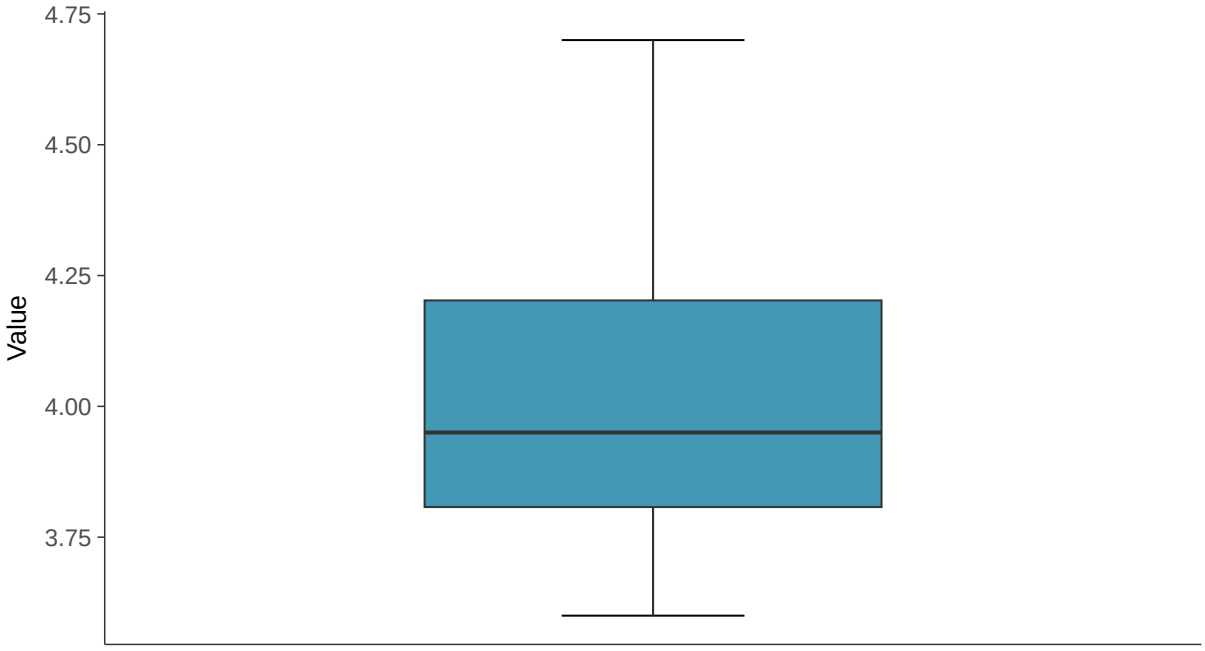
ID: 27_2_105





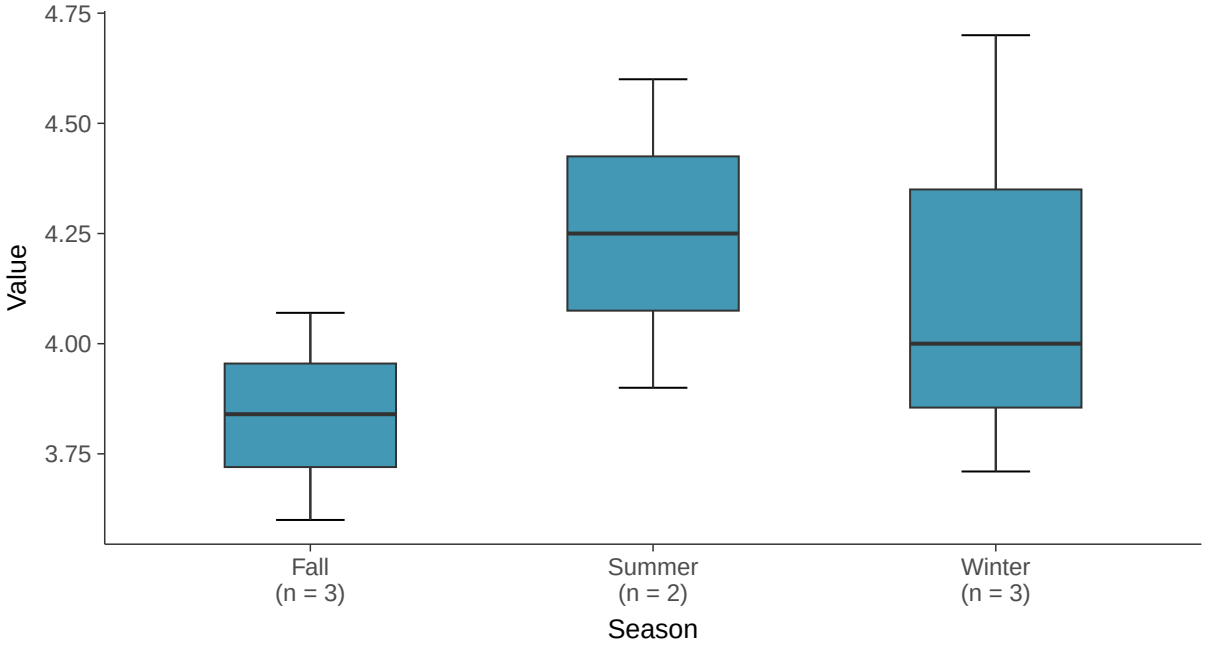
Boxplot

Boron, MW-17A (mg/l)



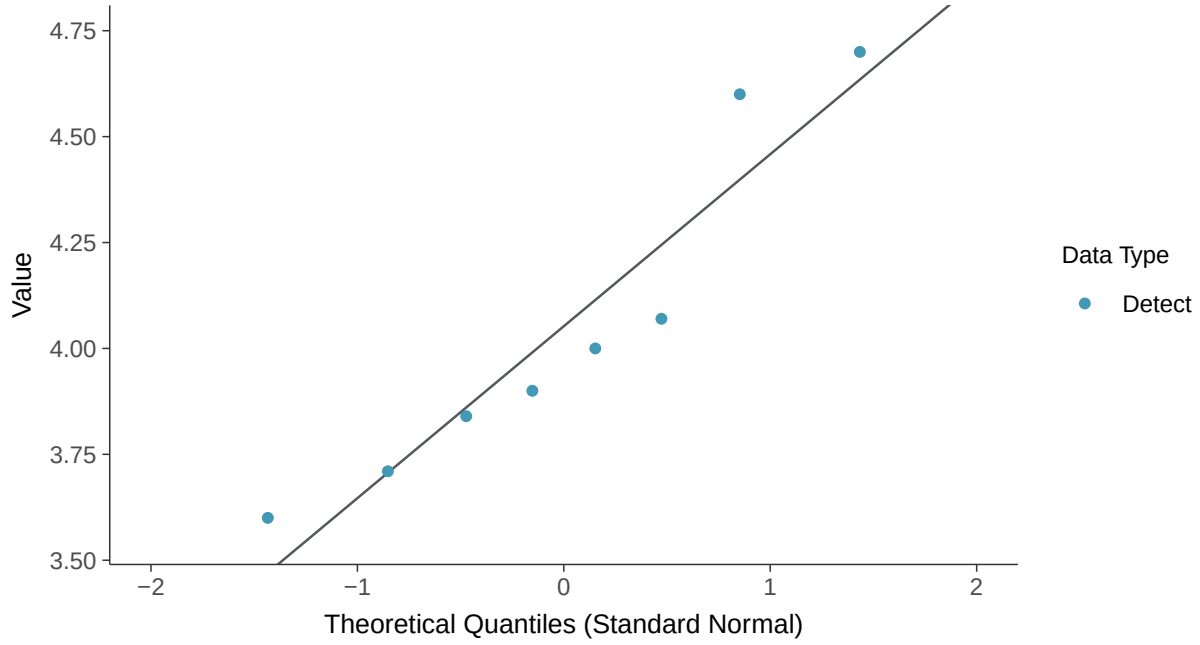
Boxplot by Season

Boron, MW-17A (mg/l)



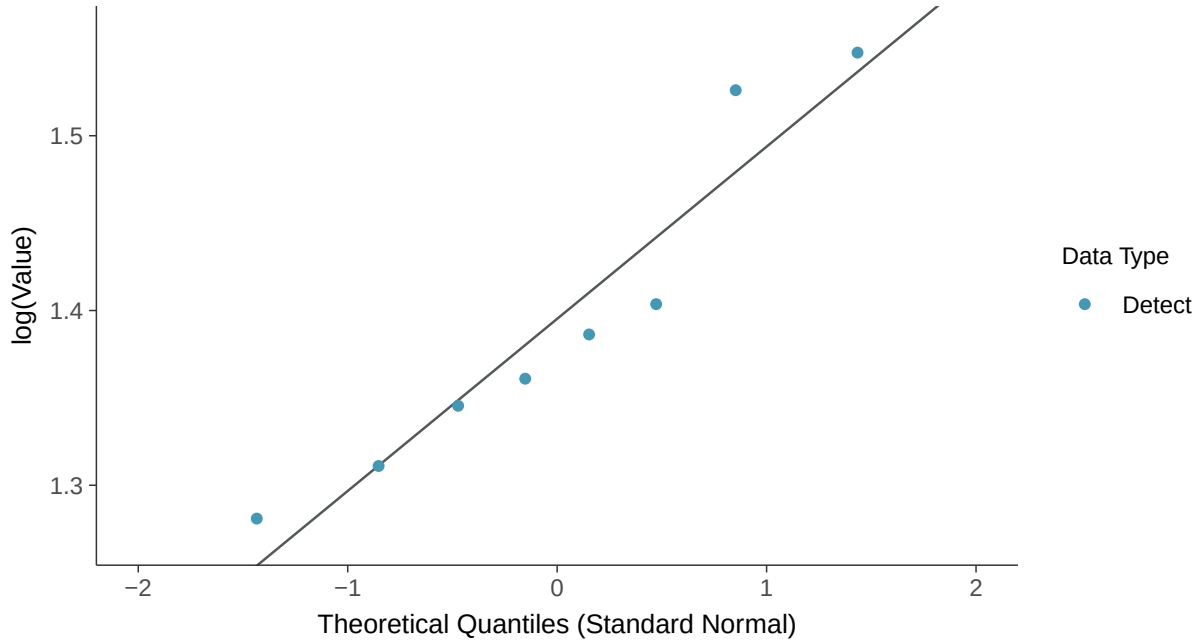
Normal Q-Q plot

Boron, MW-17A (mg/l)



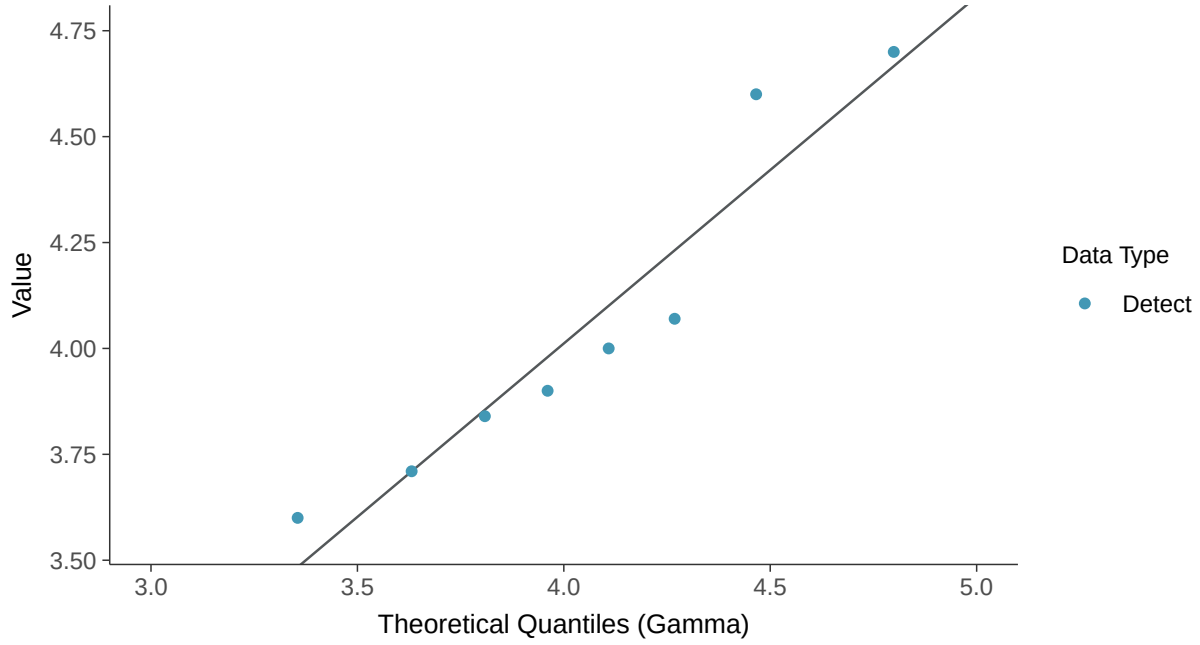
Lognormal Q-Q plot

Boron, MW-17A (mg/l)



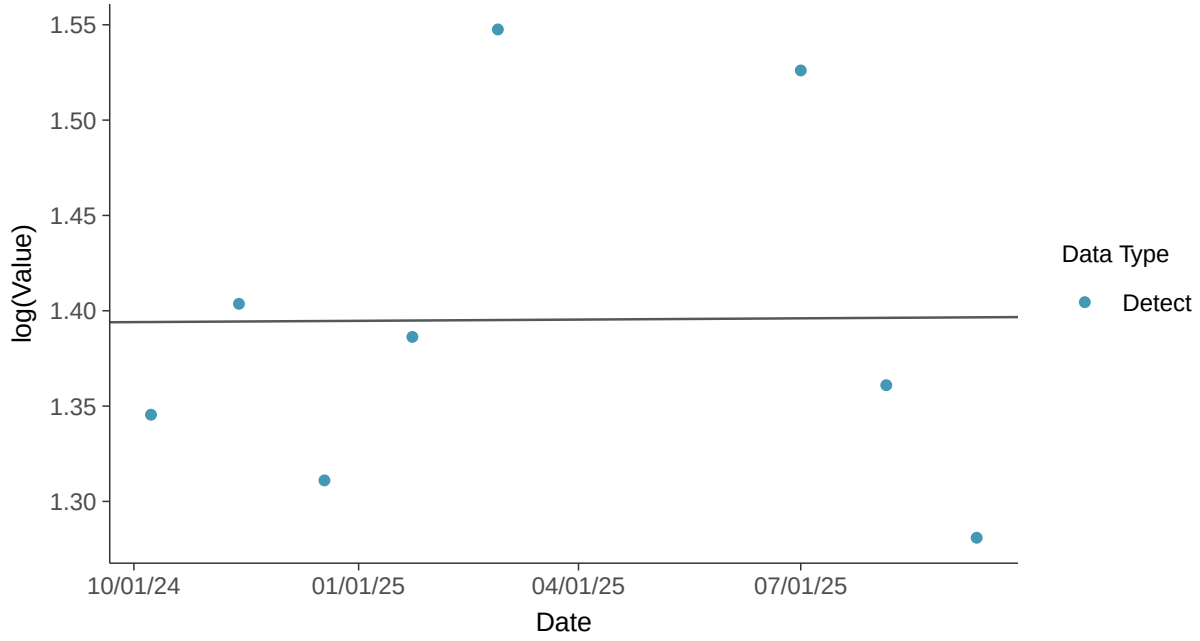
Gamma Q-Q plot

Boron, MW-17A (mg/l)



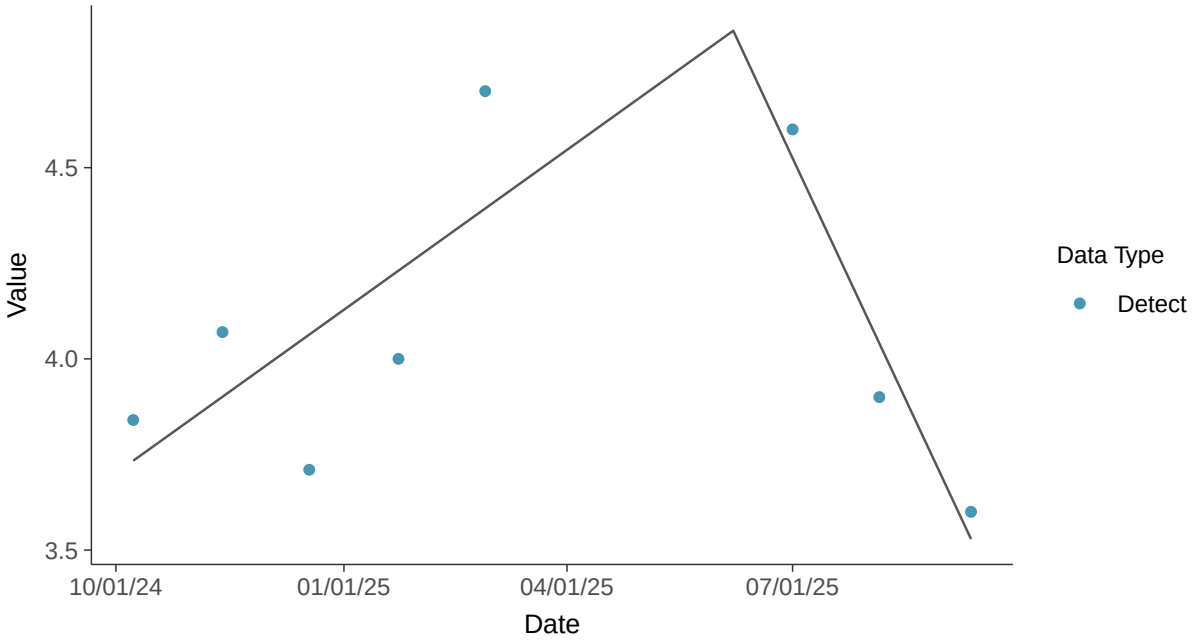
Trend Regression: Lognormal MLE

Boron, MW-17A (mg/l)



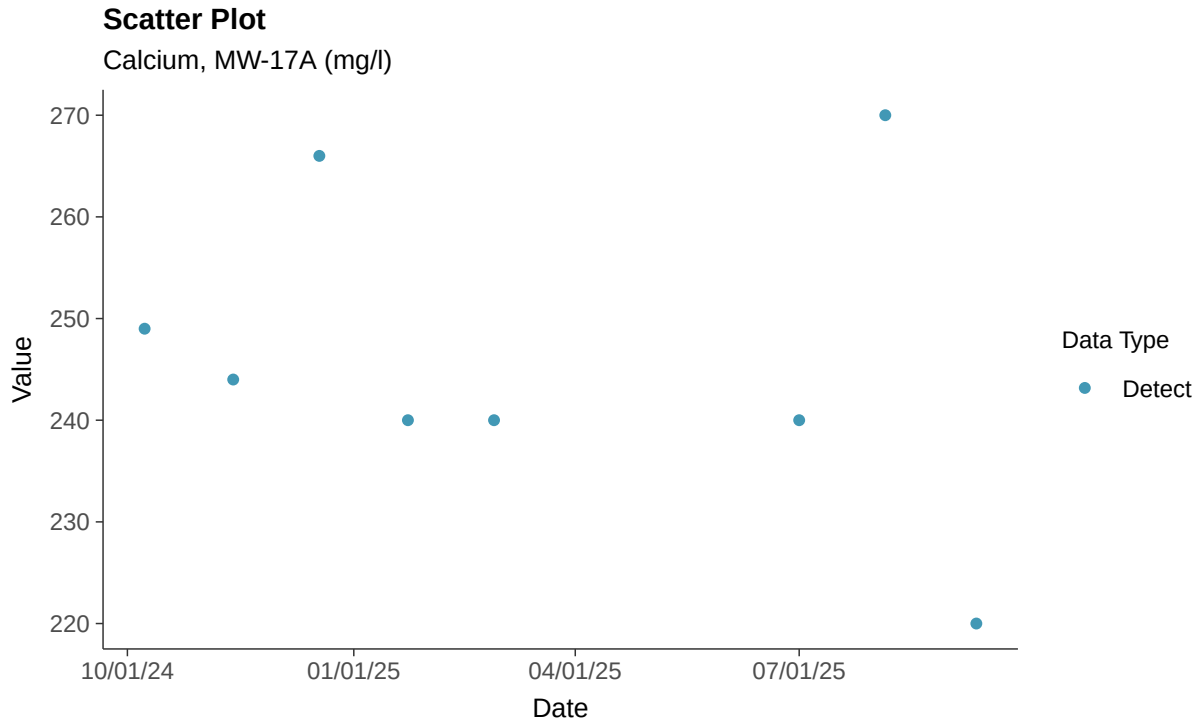
Trend Regression: Piecewise Linear-Linear

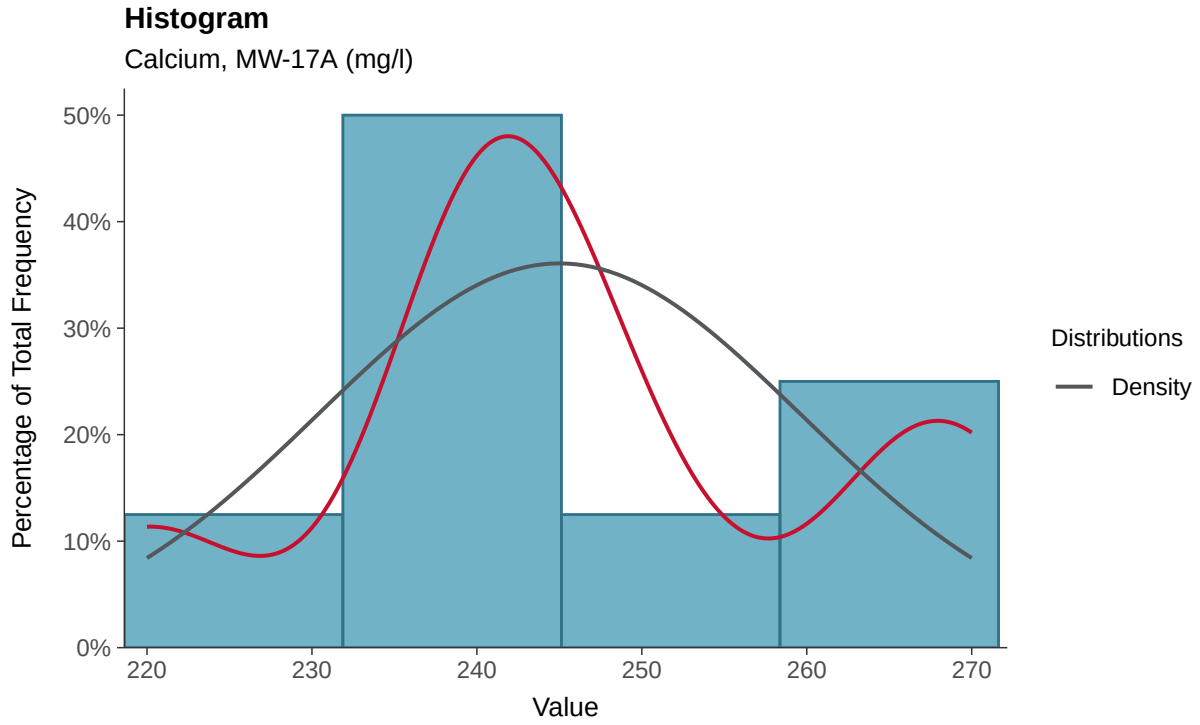
Boron, MW-17A (mg/l)



Appendix III: Calcium, MW-17A

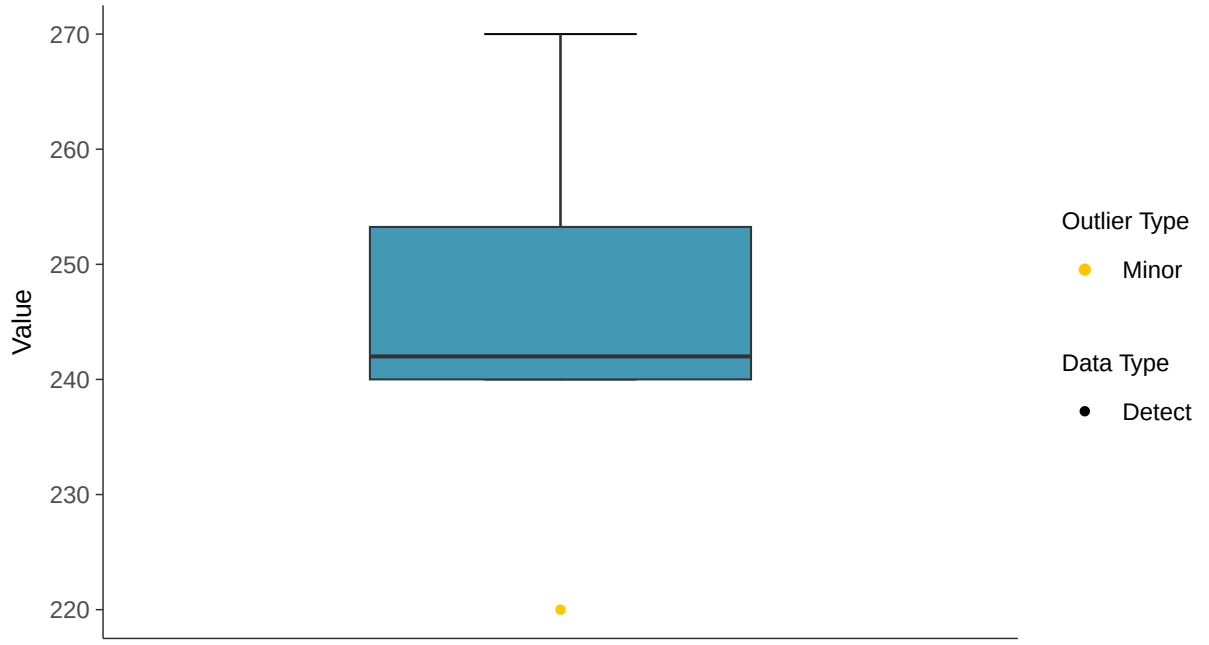
ID: 27_2_107





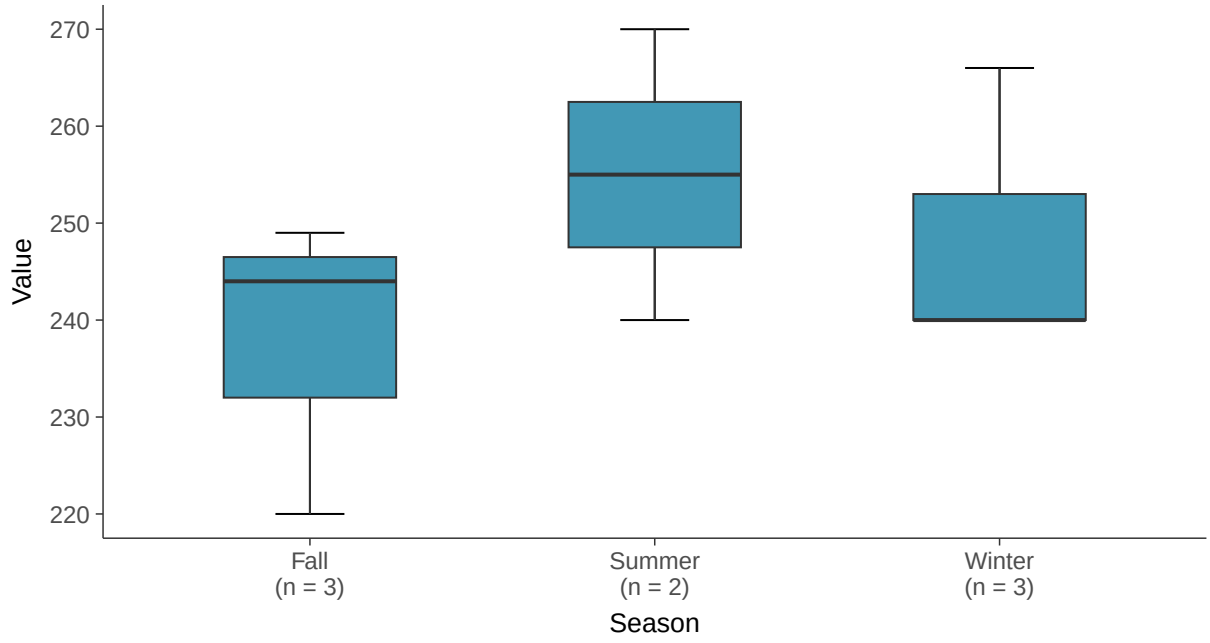
Boxplot

Calcium, MW-17A (mg/l)



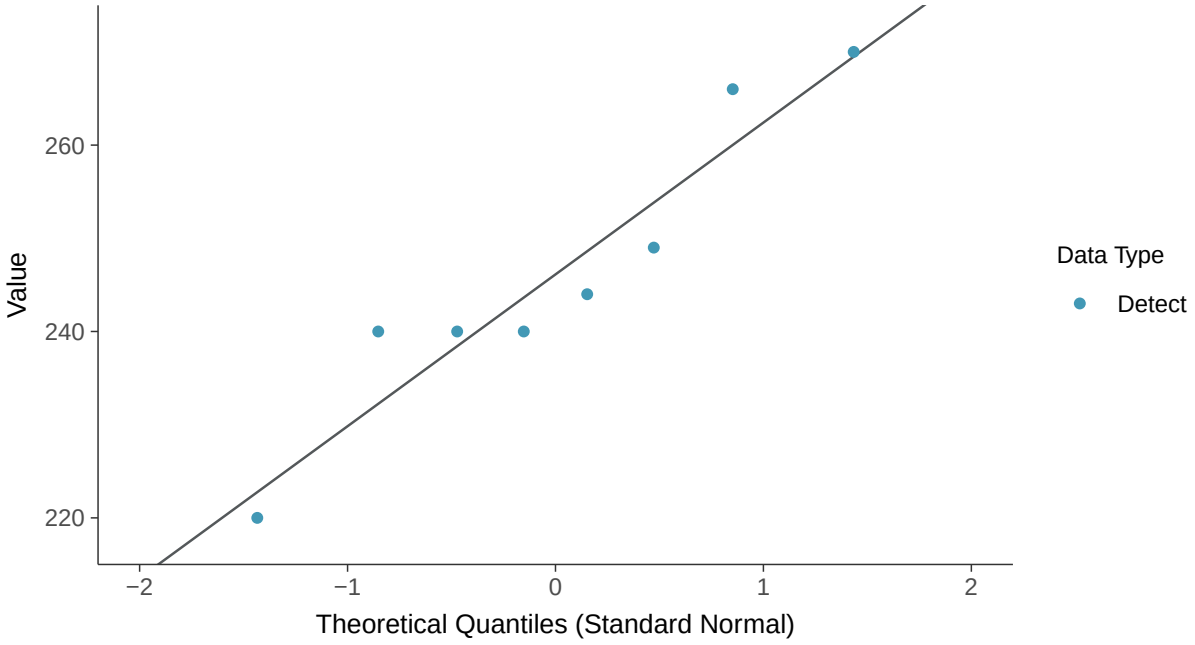
Boxplot by Season

Calcium, MW-17A (mg/l)



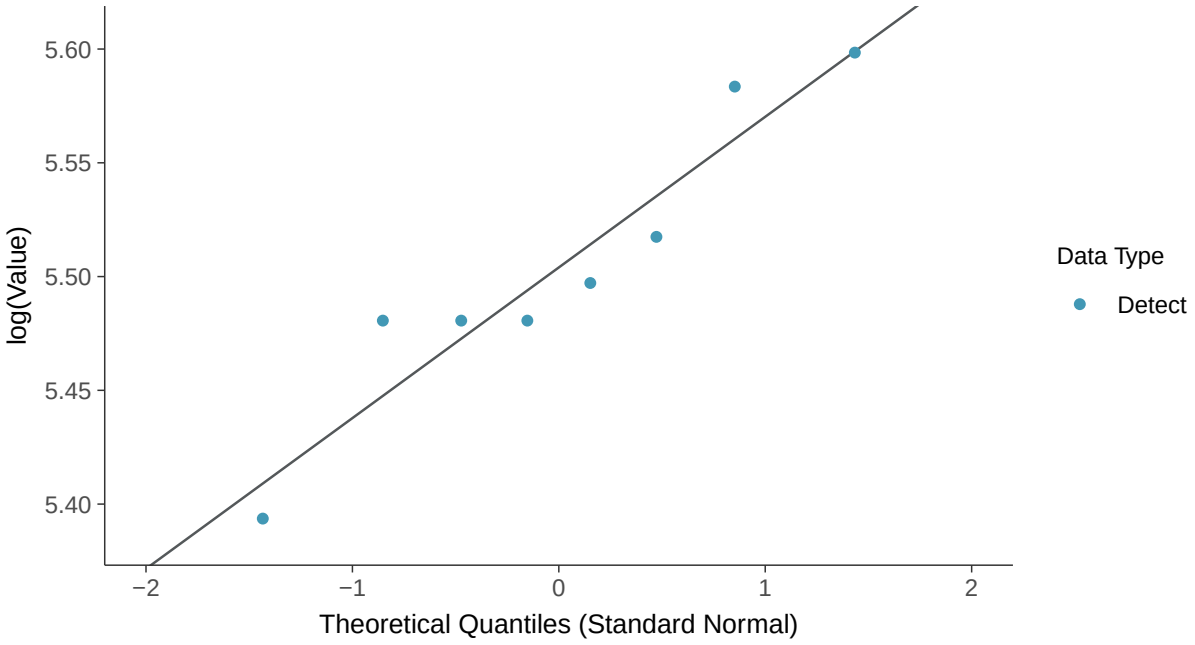
Normal Q-Q plot

Calcium, MW-17A (mg/l)



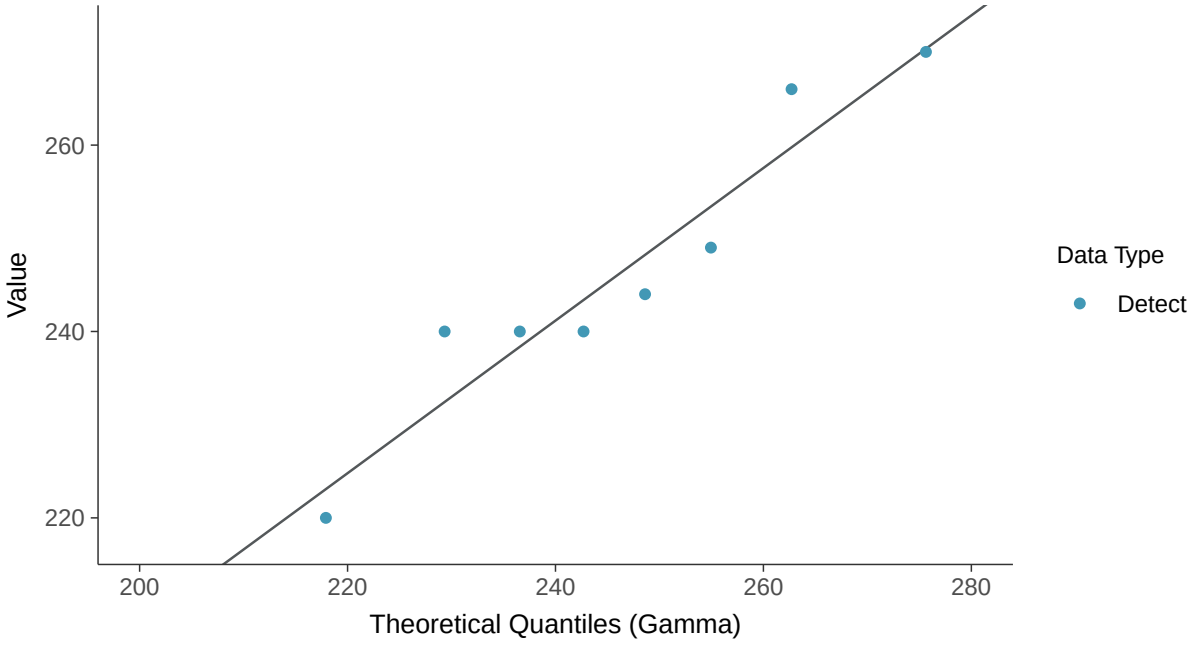
Lognormal Q-Q plot

Calcium, MW-17A (mg/l)



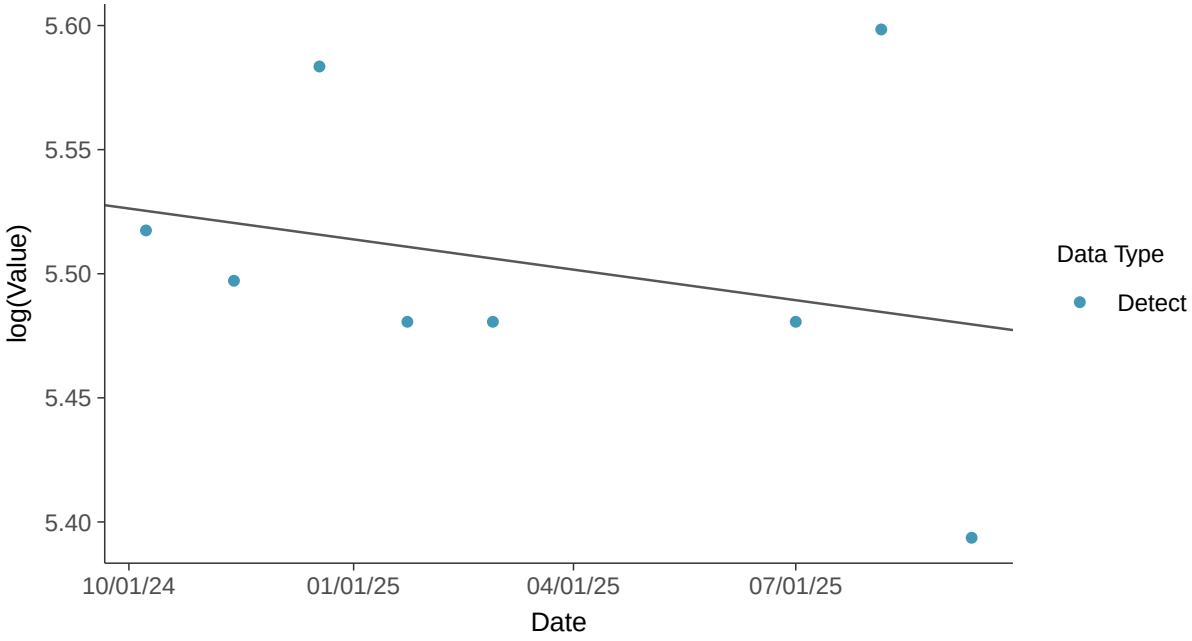
Gamma Q-Q plot

Calcium, MW-17A (mg/l)



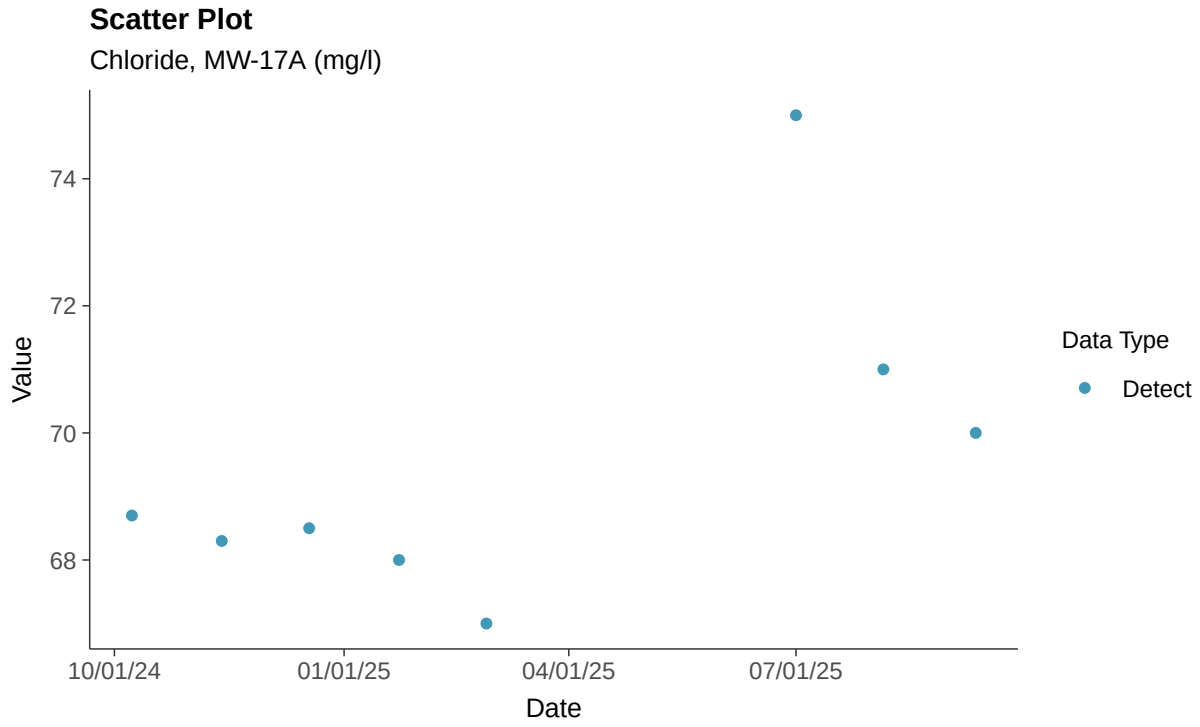
Trend Regression: Lognormal MLE

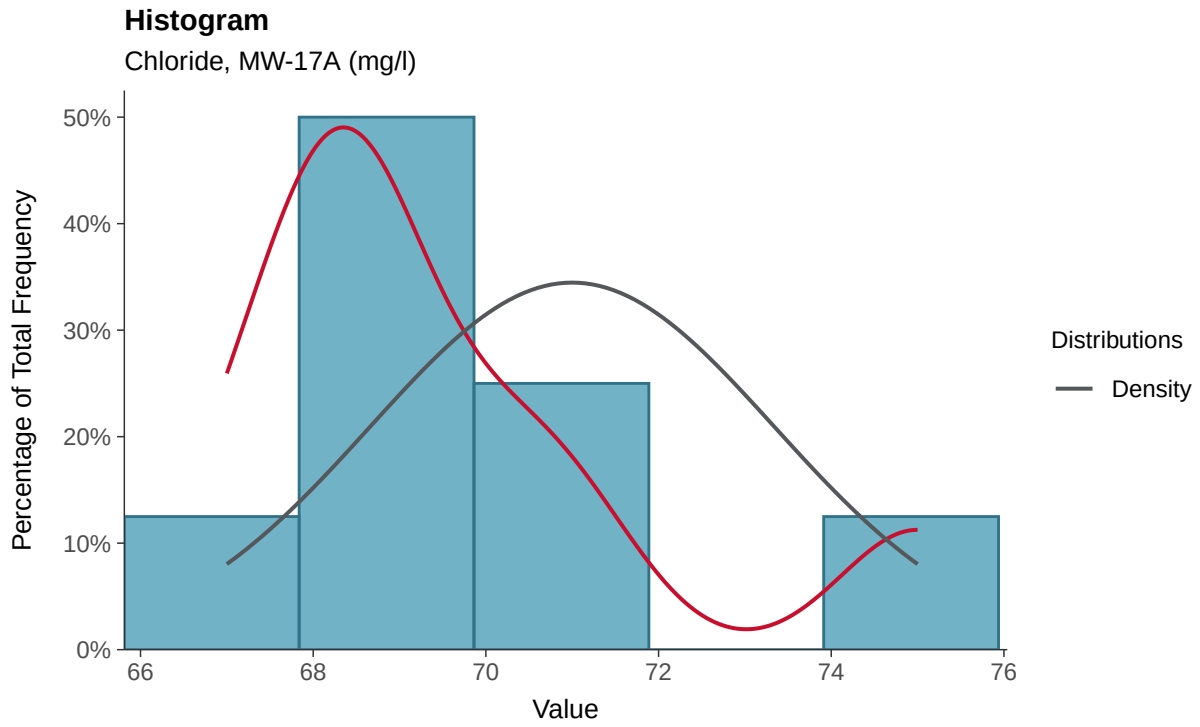
Calcium, MW-17A (mg/l)



Appendix III: Chloride, MW-17A

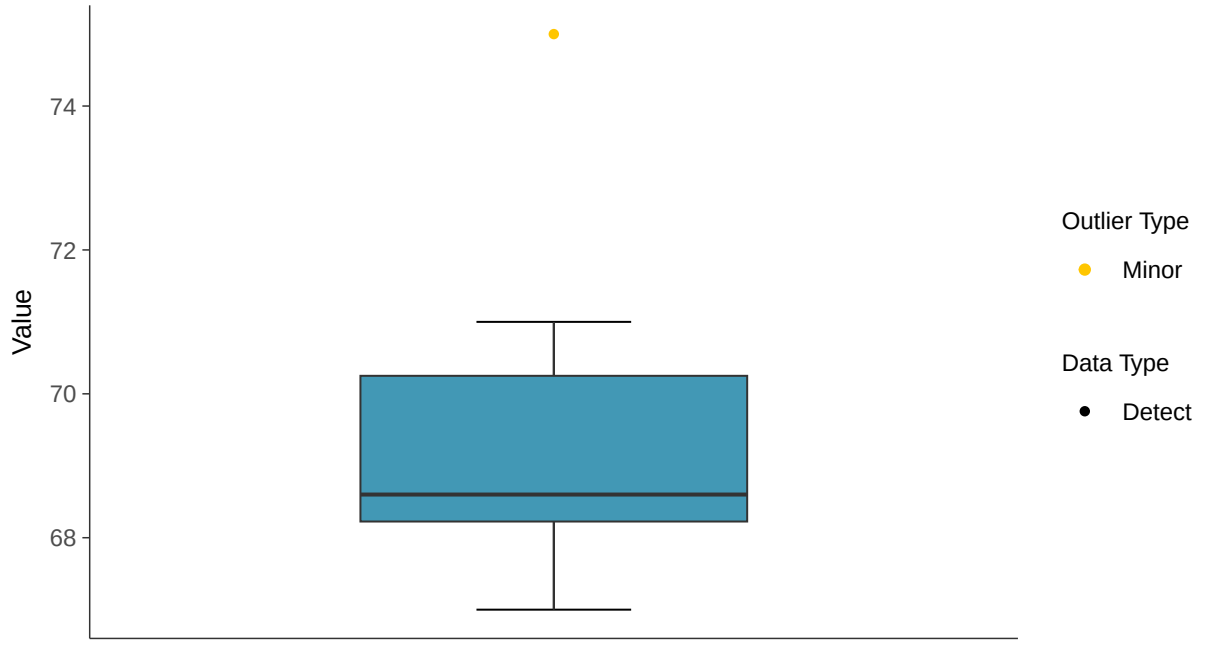
ID: 27_2_108





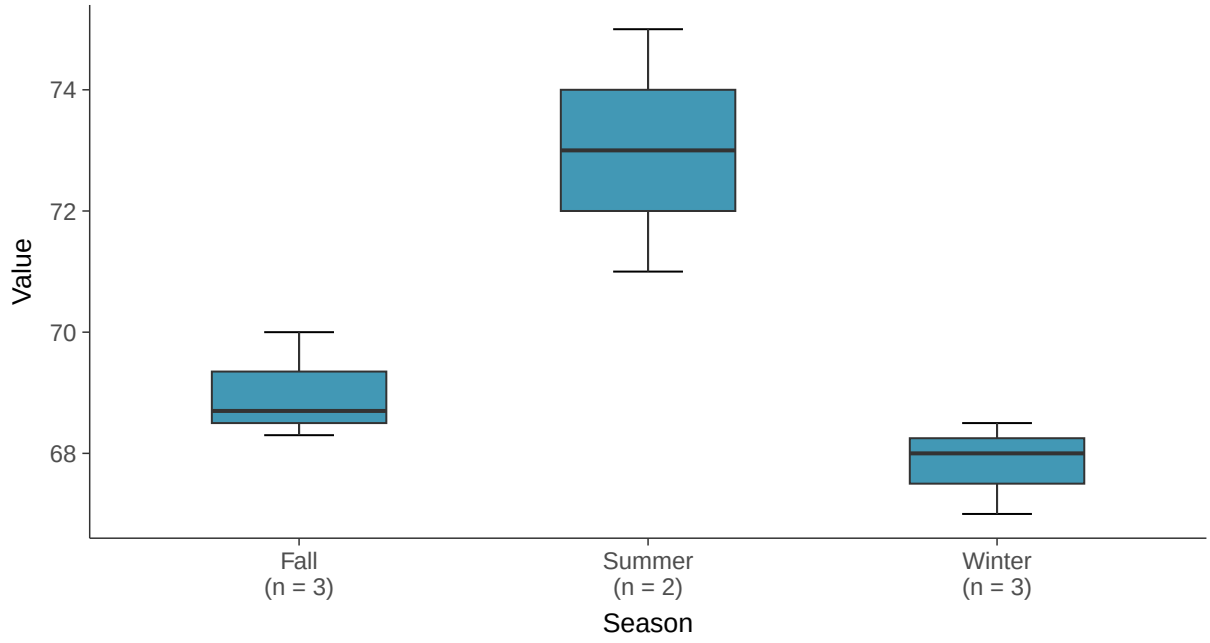
Boxplot

Chloride, MW-17A (mg/l)



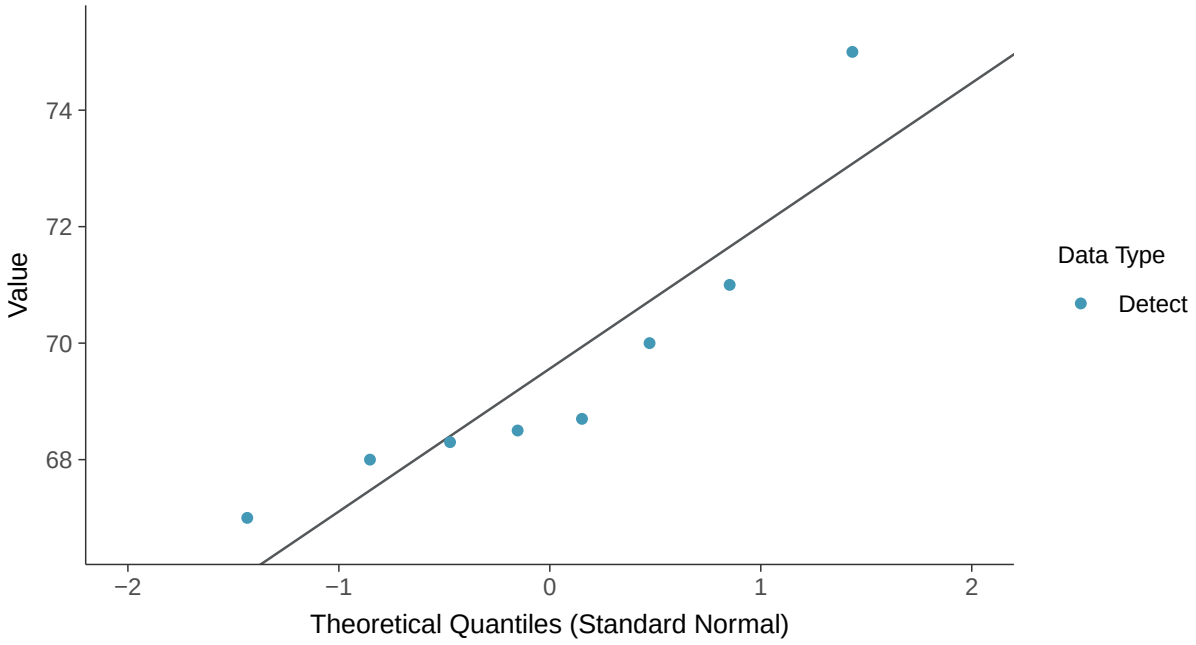
Boxplot by Season

Chloride, MW-17A (mg/l)



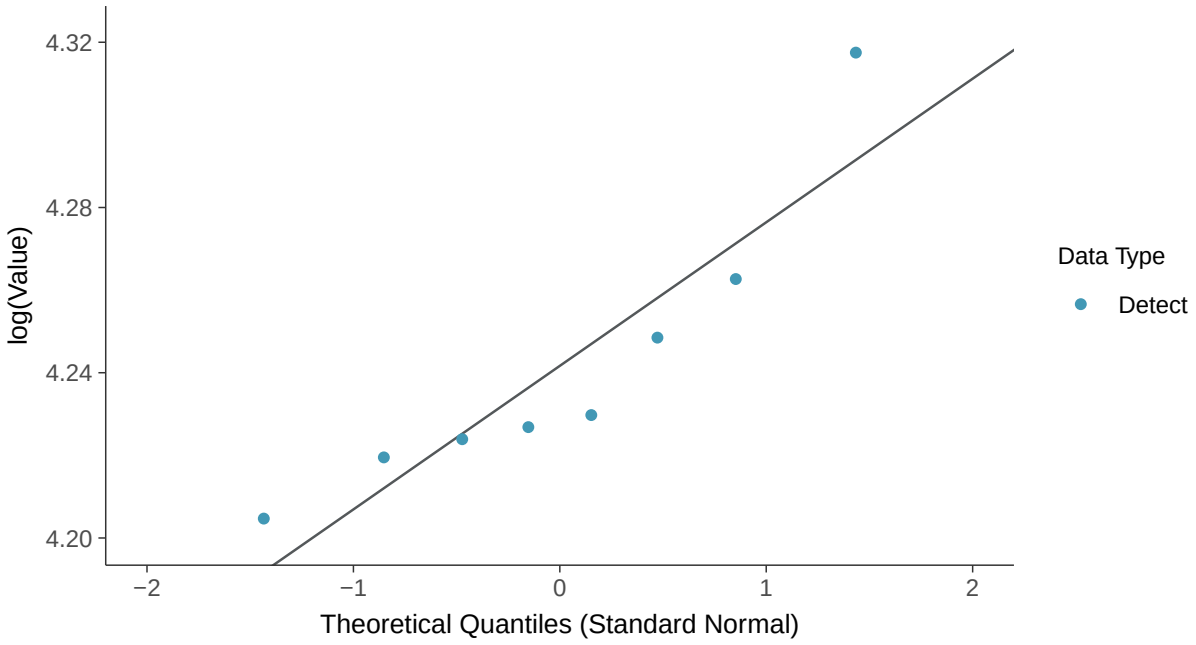
Normal Q-Q plot

Chloride, MW-17A (mg/l)



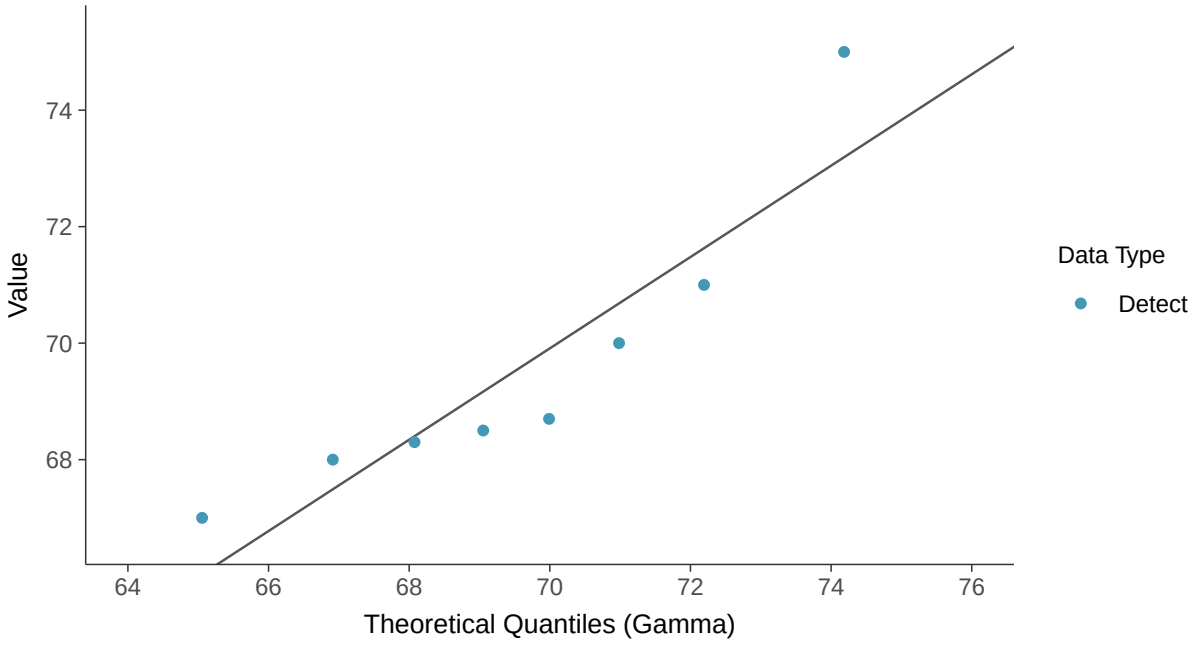
Lognormal Q-Q plot

Chloride, MW-17A (mg/l)



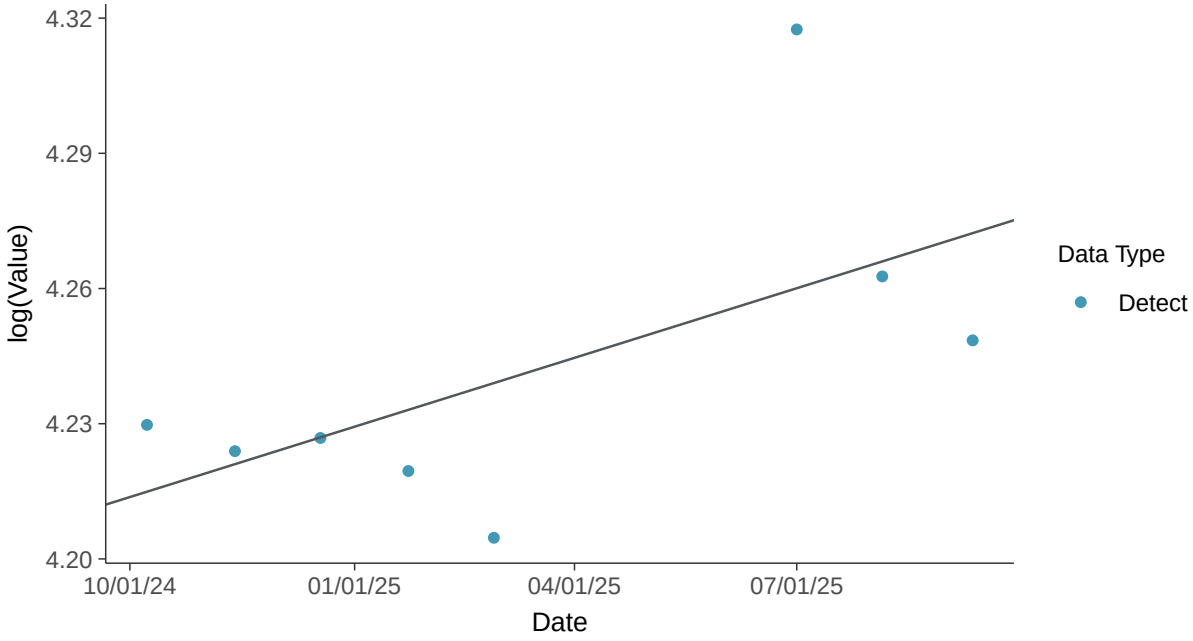
Gamma Q-Q plot

Chloride, MW-17A (mg/l)



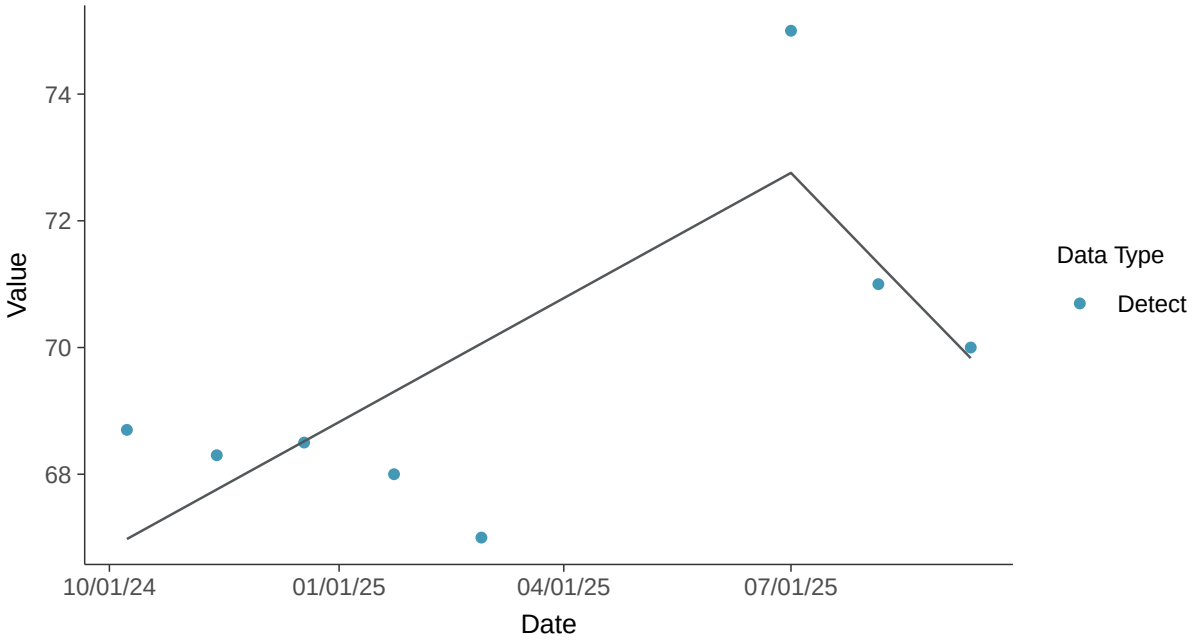
Trend Regression: Lognormal MLE

Chloride, MW-17A (mg/l)



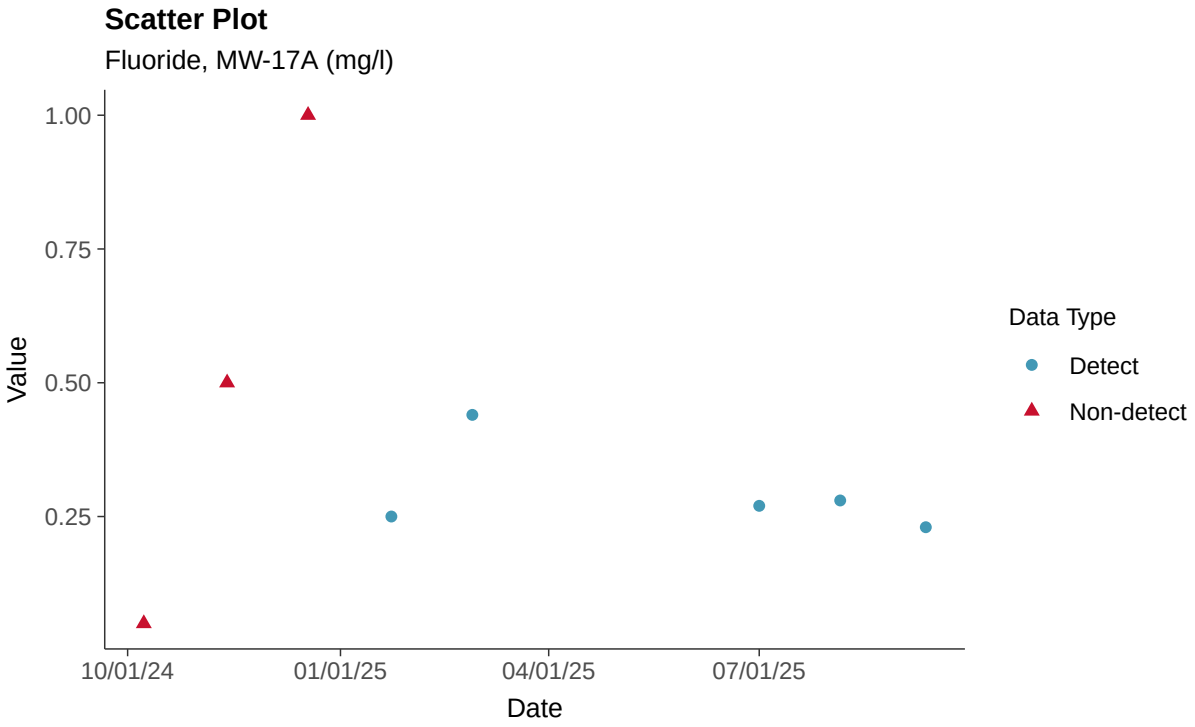
Trend Regression: Piecewise Linear-Linear

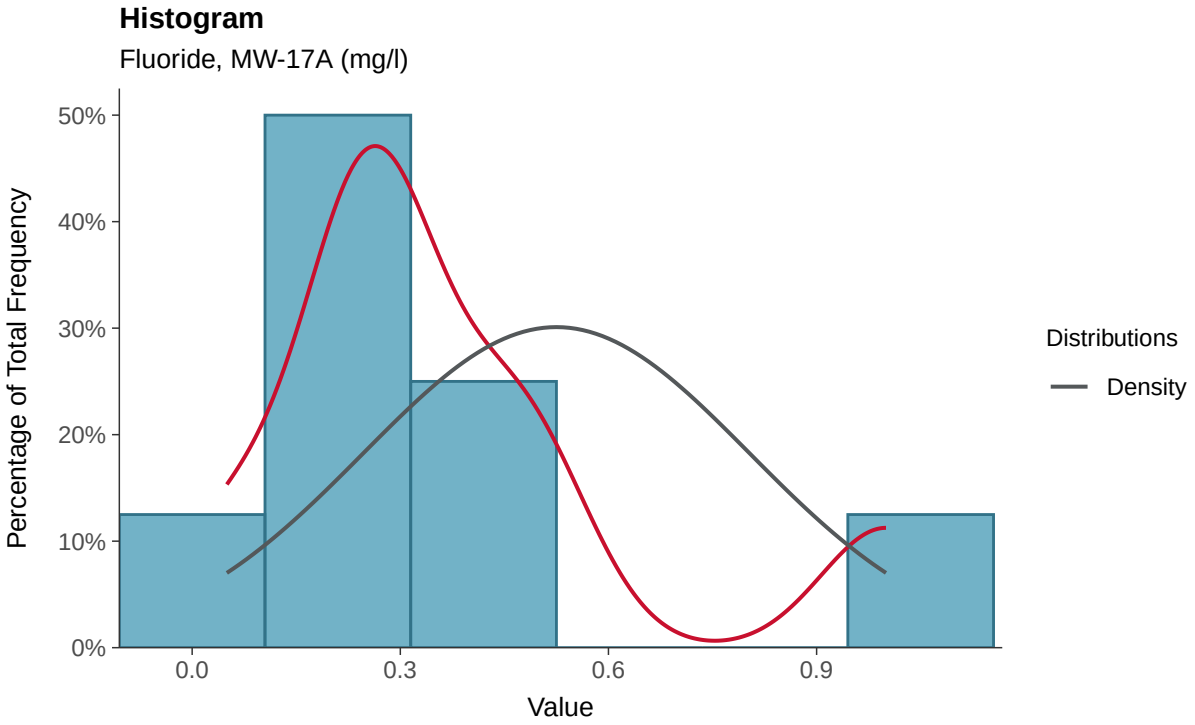
Chloride, MW-17A (mg/l)



Appendix III: Fluoride, MW-17A

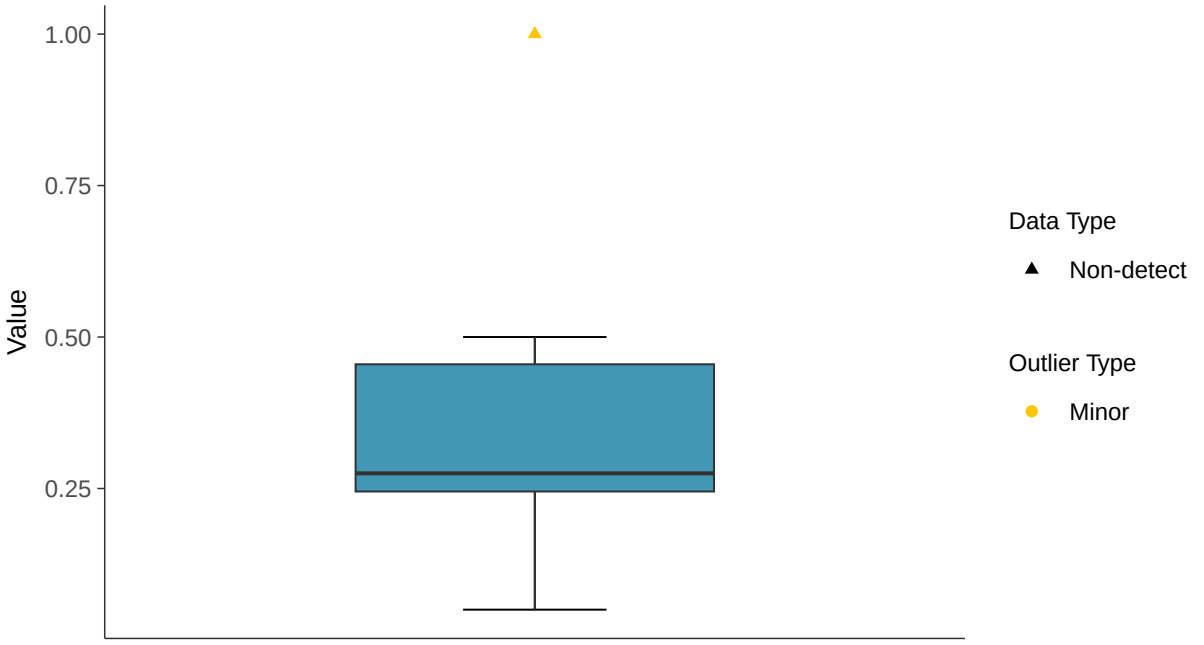
ID: 27_2_112





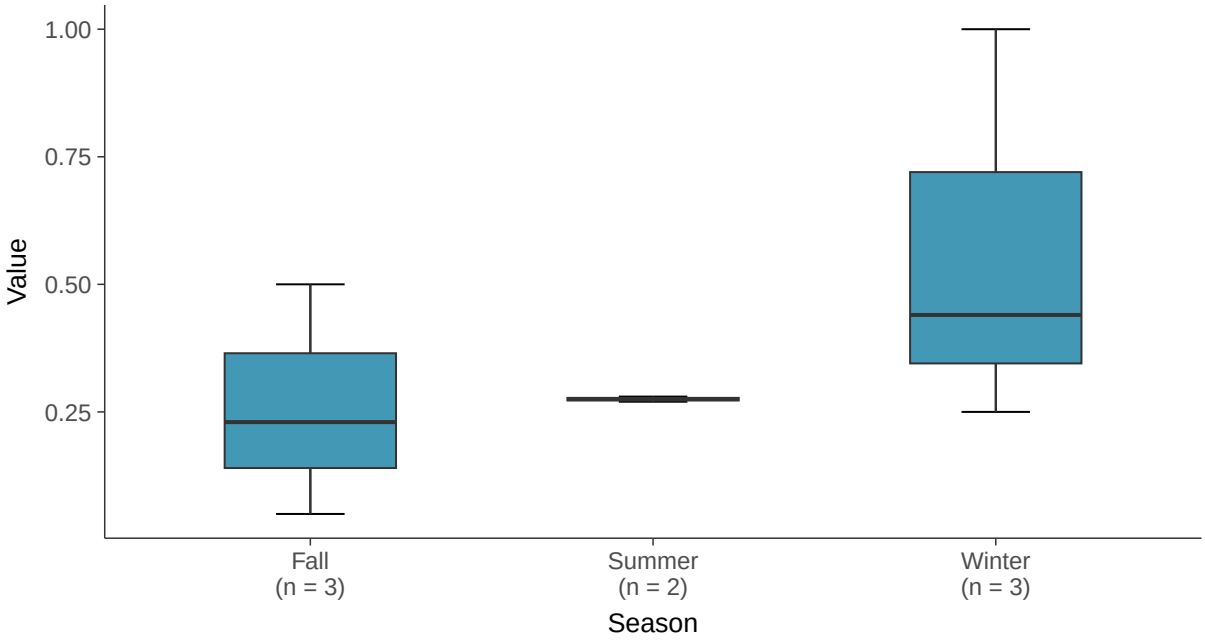
Boxplot

Fluoride, MW-17A (mg/l)



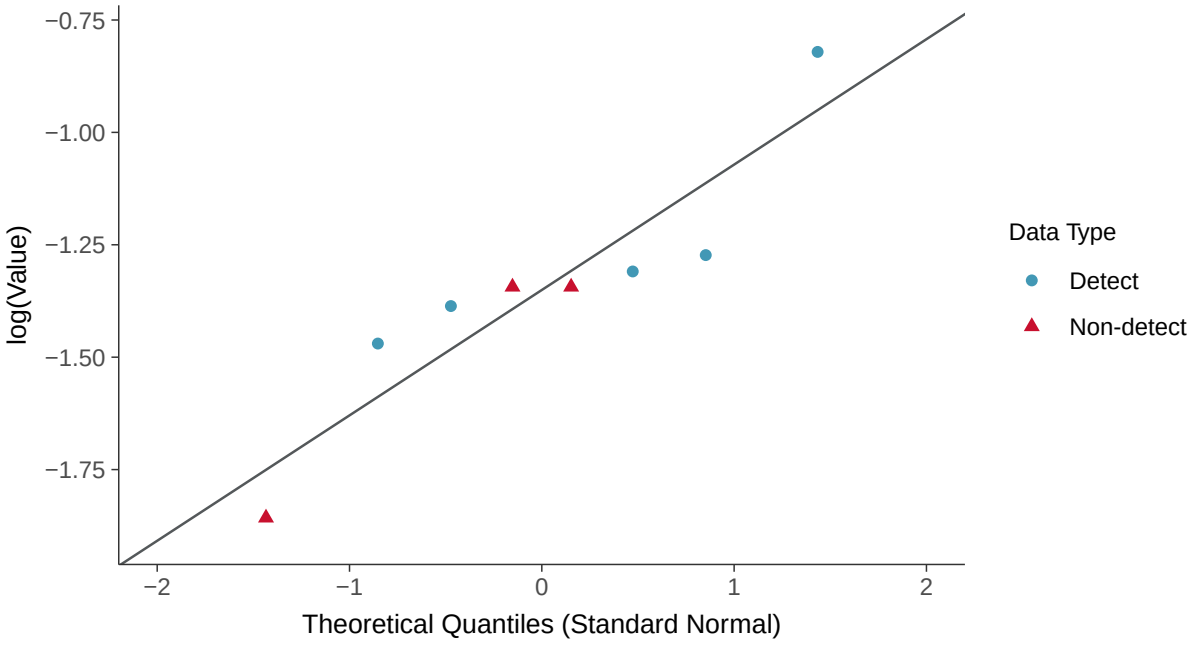
Boxplot by Season

Fluoride, MW-17A (mg/l)



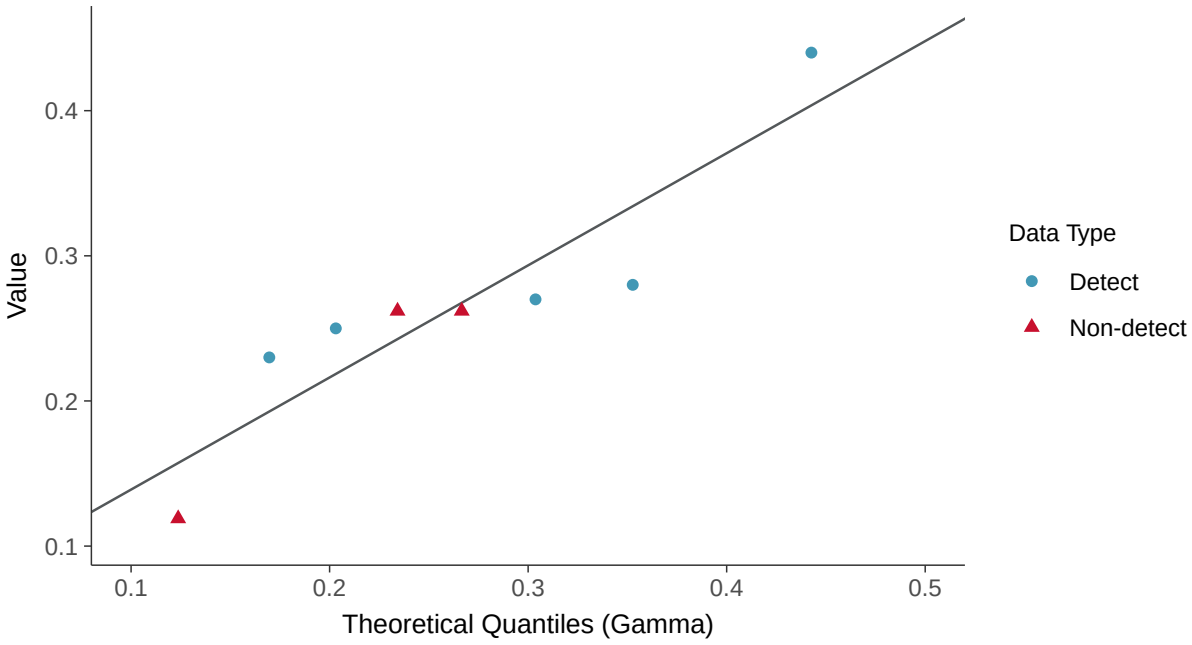
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17A (mg/l)



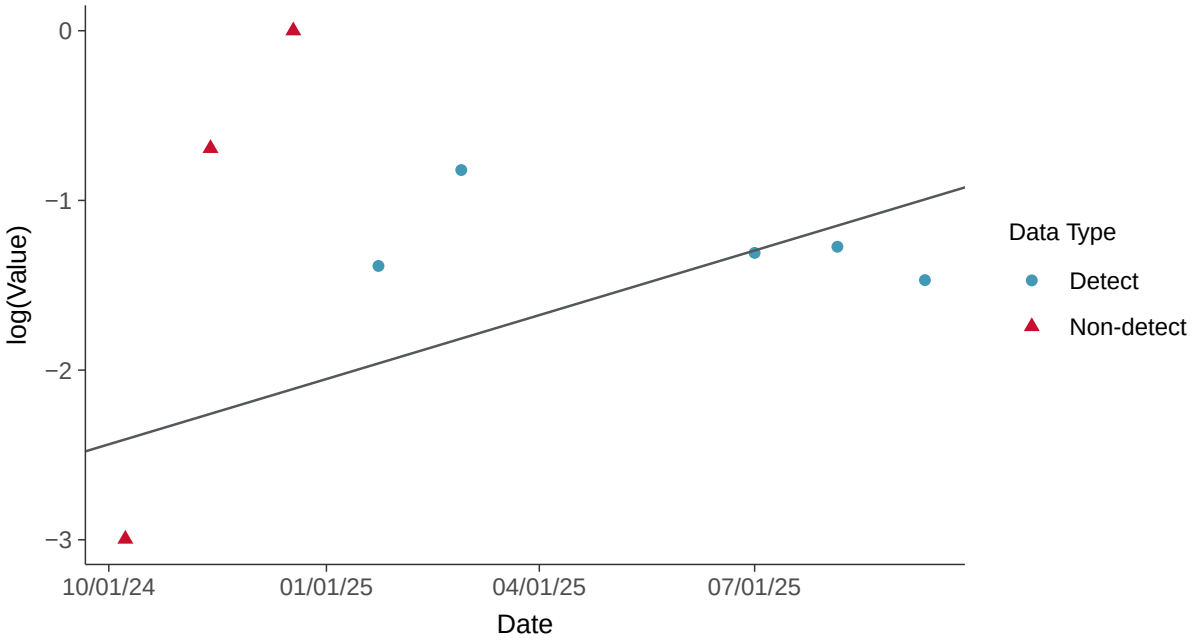
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17A (mg/l)



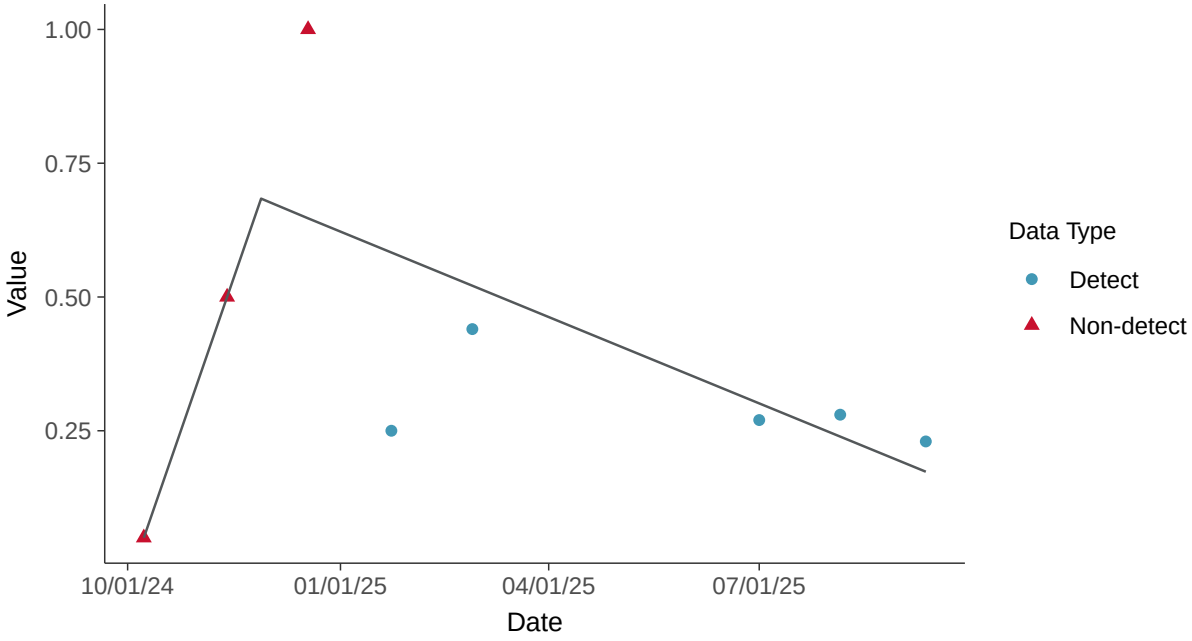
Trend Regression: Lognormal MLE

Fluoride, MW-17A (mg/l)



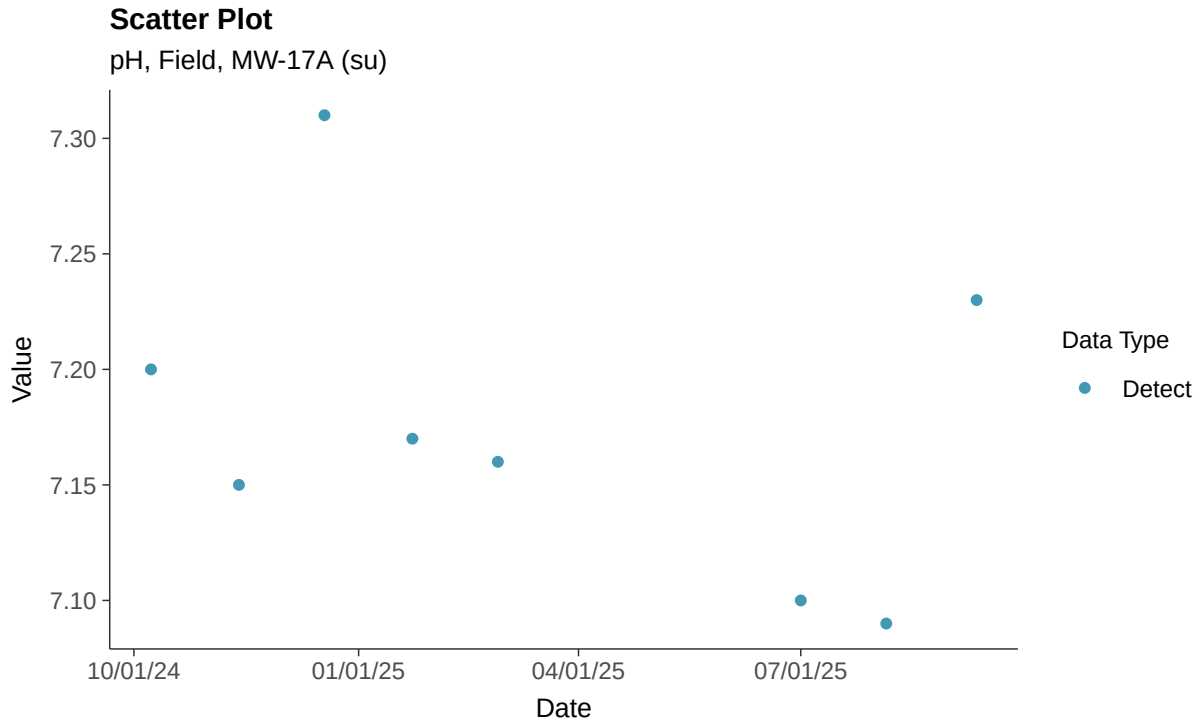
Trend Regression: Piecewise Linear-Linear

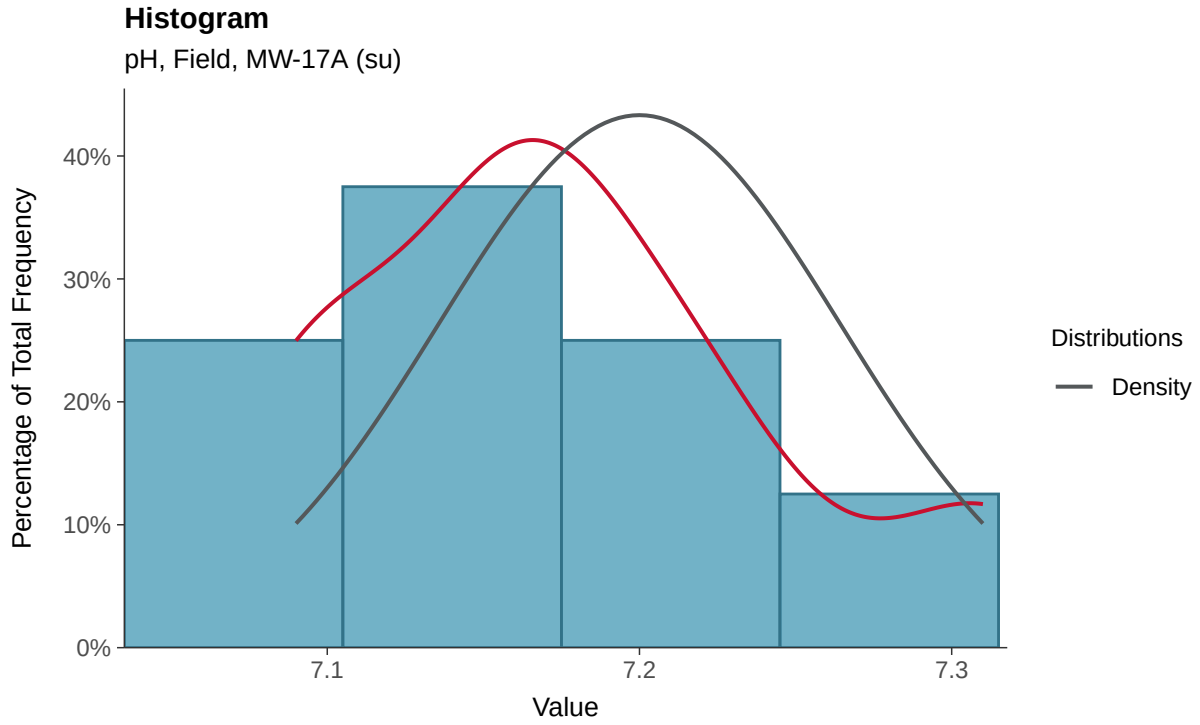
Fluoride, MW-17A (mg/l)



Appendix III: pH, Field, MW-17A

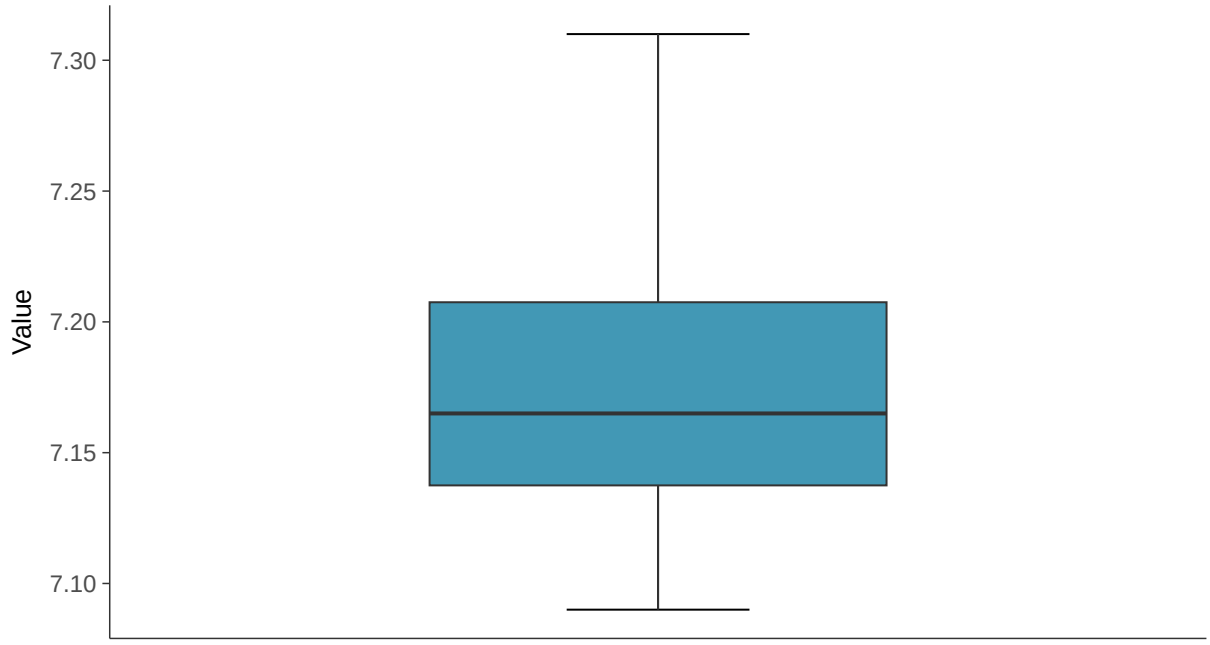
ID: 27_2_120





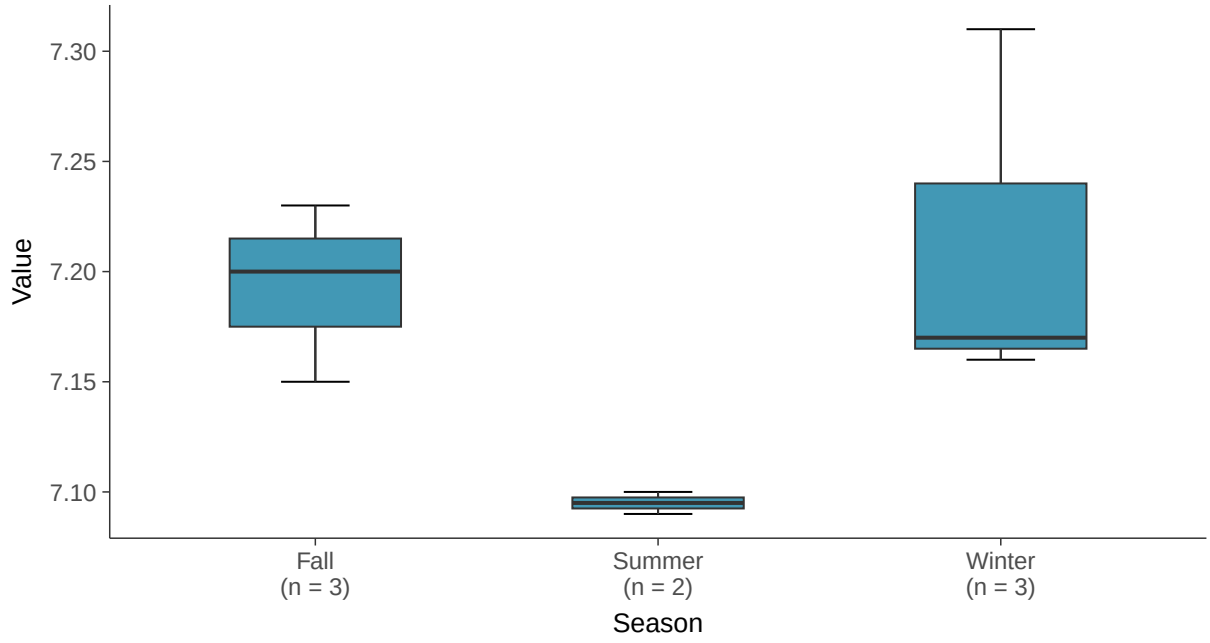
Boxplot

pH, Field, MW-17A (su)



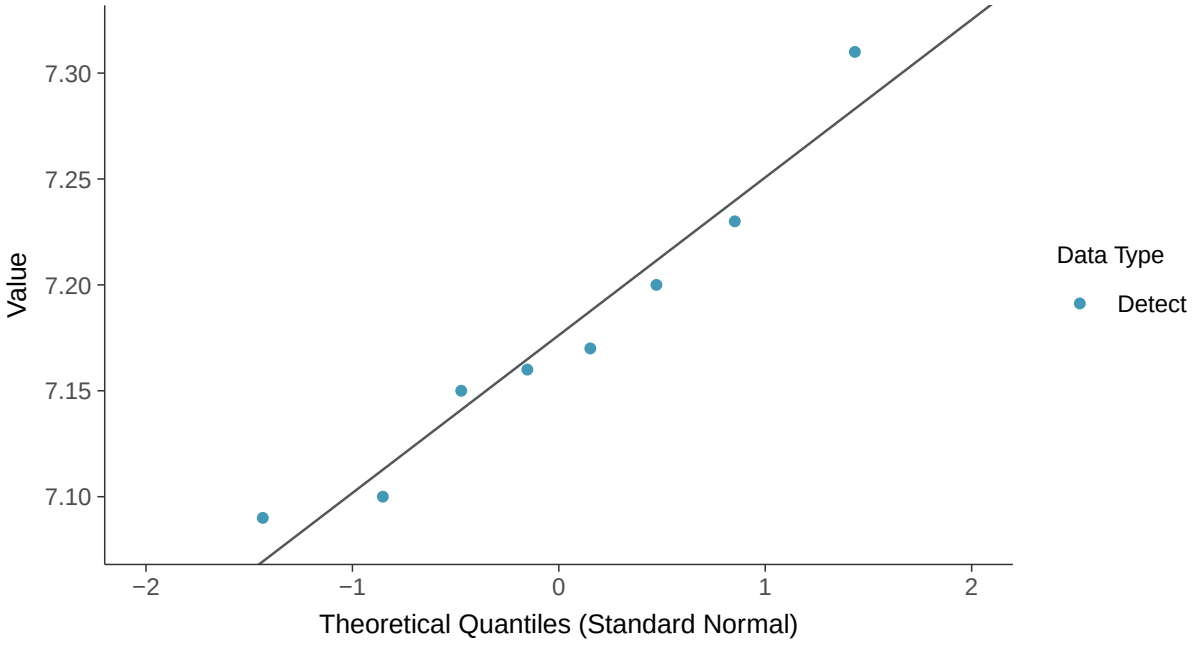
Boxplot by Season

pH, Field, MW-17A (su)



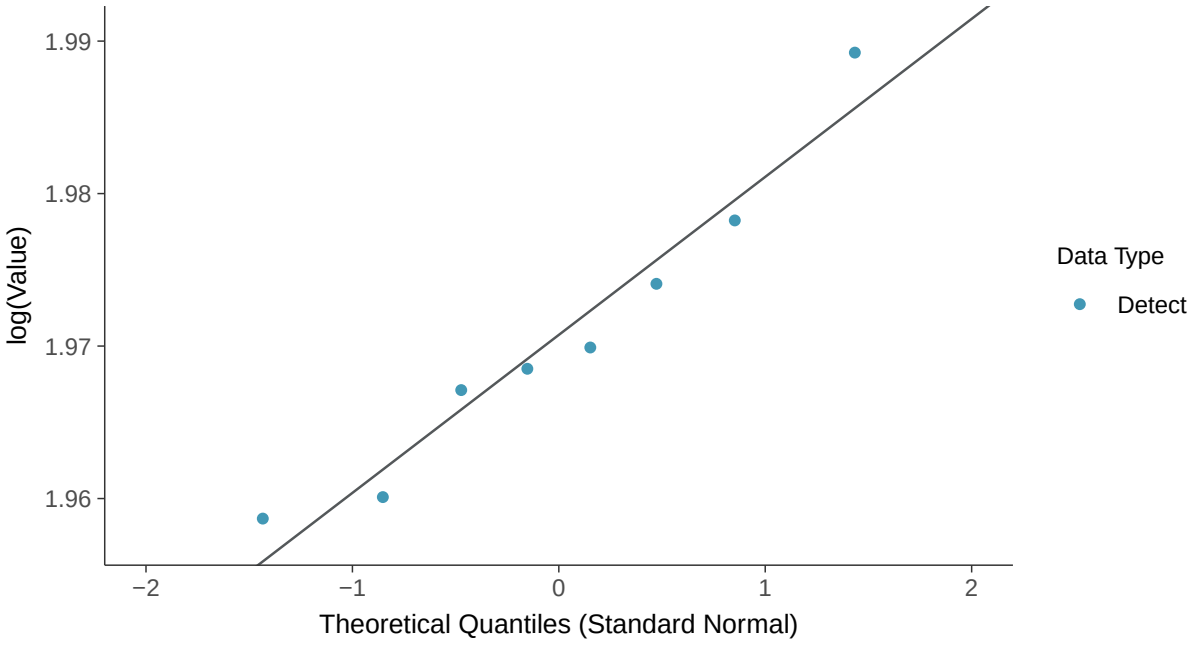
Normal Q-Q plot

pH, Field, MW-17A (su)



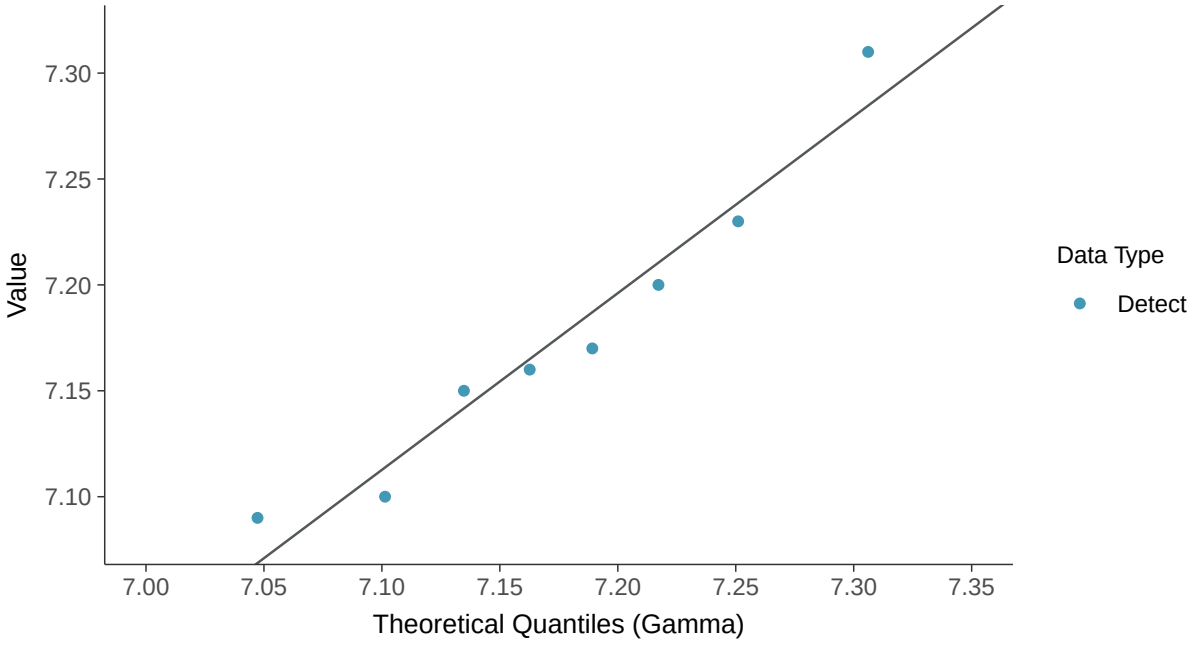
Lognormal Q-Q plot

pH, Field, MW-17A (su)



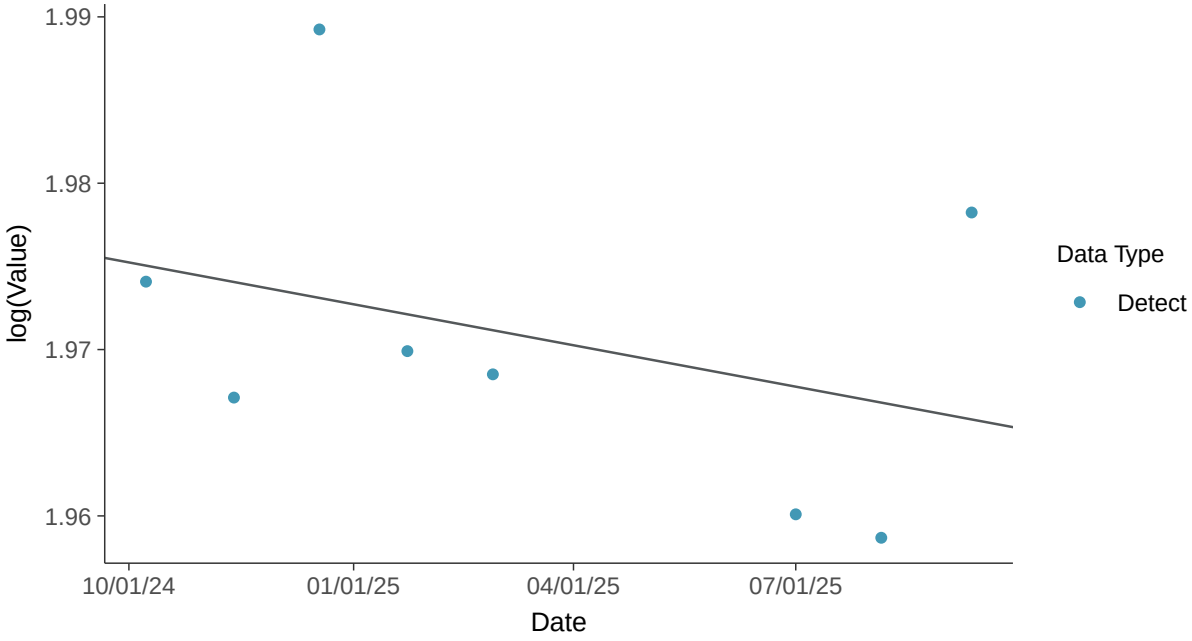
Gamma Q-Q plot

pH, Field, MW-17A (su)



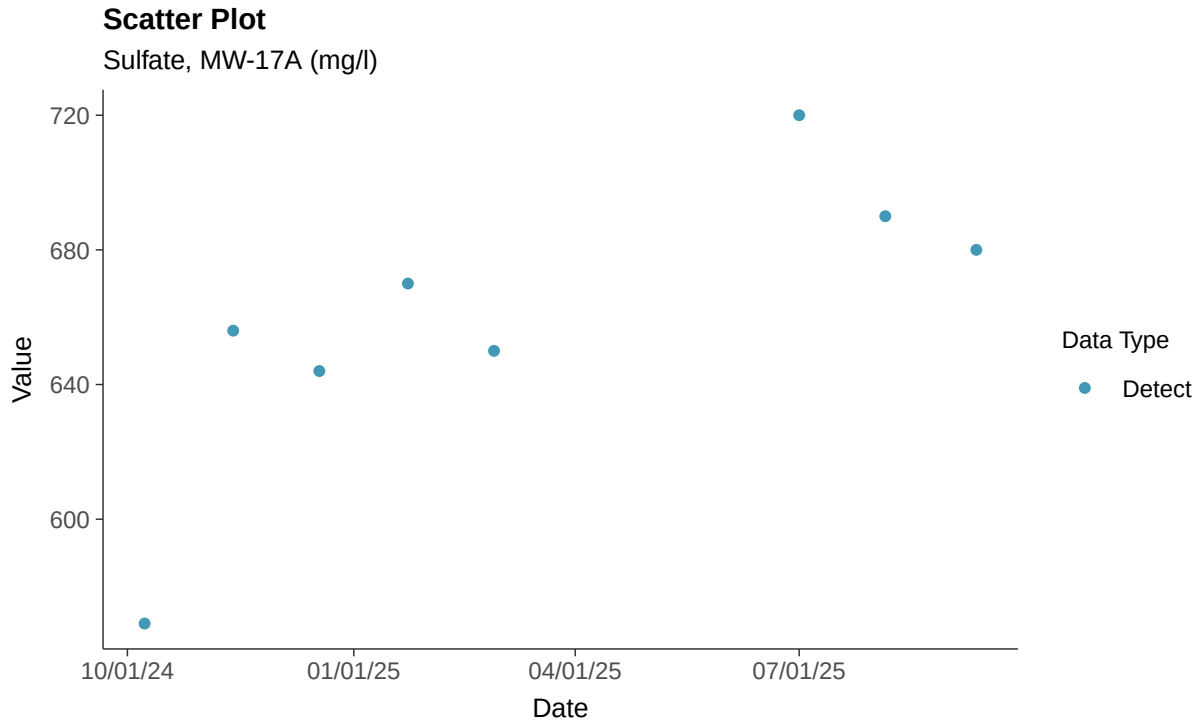
Trend Regression: Lognormal MLE

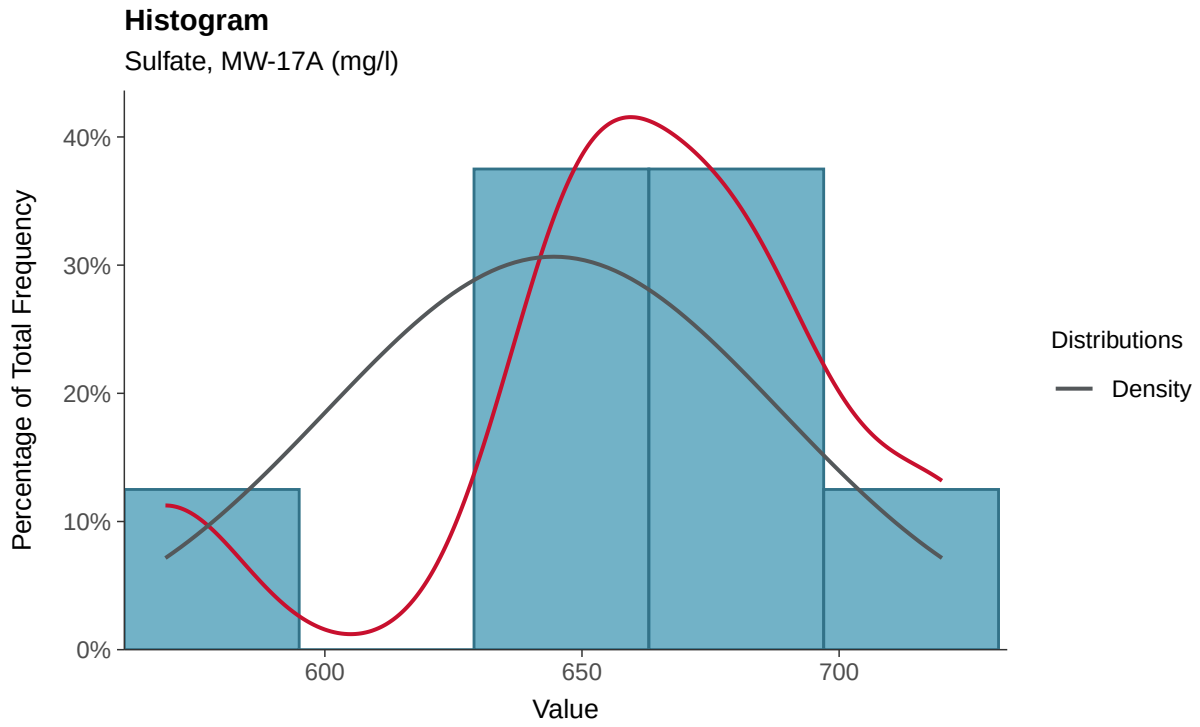
pH, Field, MW-17A (su)



Appendix III: Sulfate, MW-17A

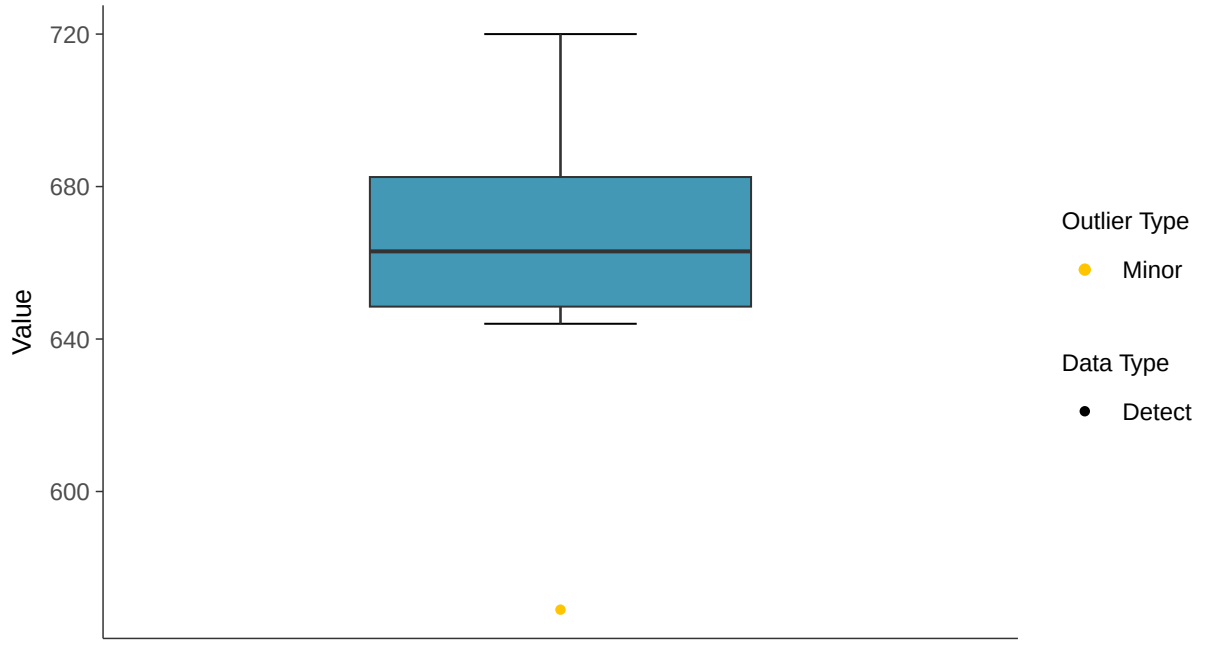
ID: 27_2_124





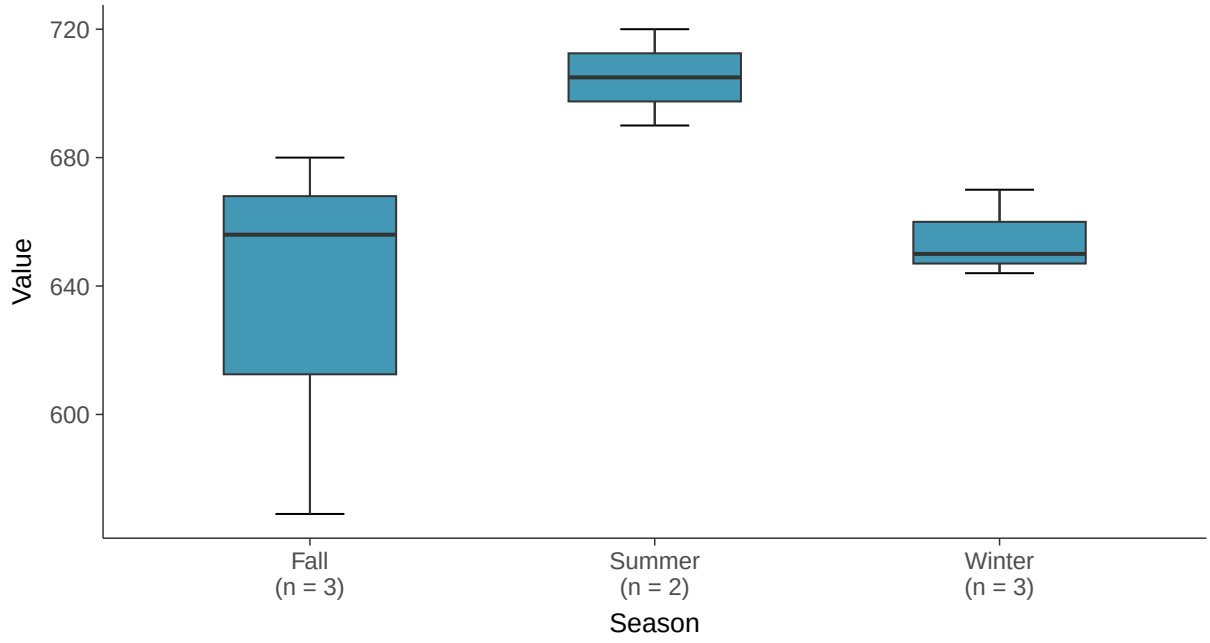
Boxplot

Sulfate, MW-17A (mg/l)



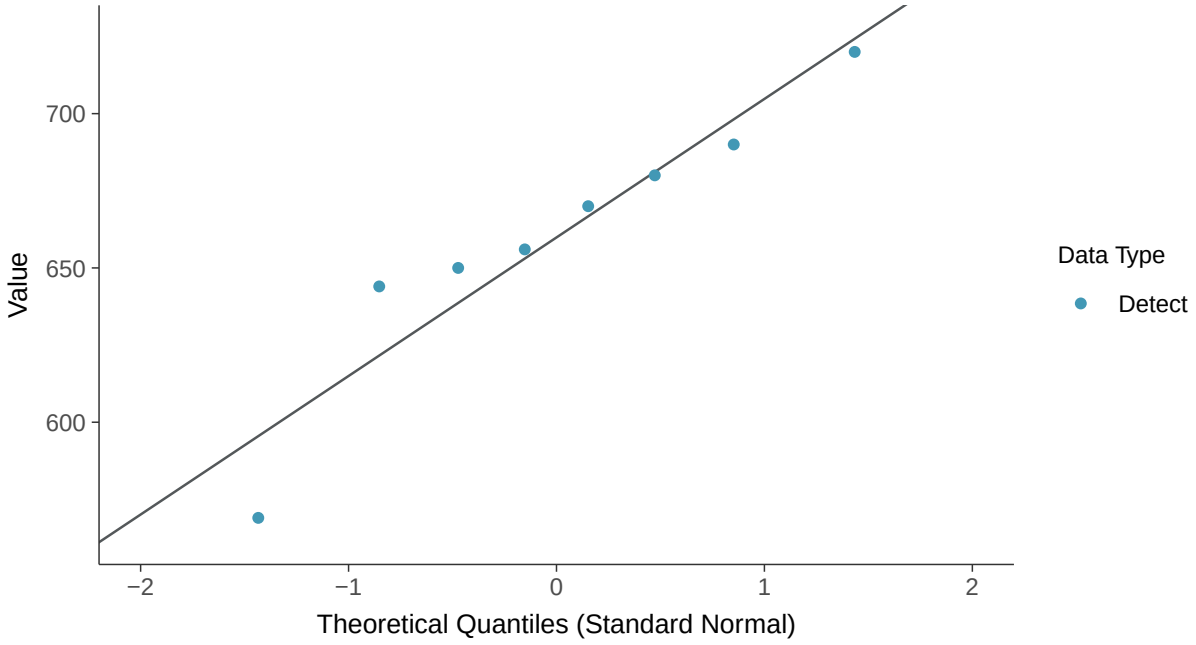
Boxplot by Season

Sulfate, MW-17A (mg/l)



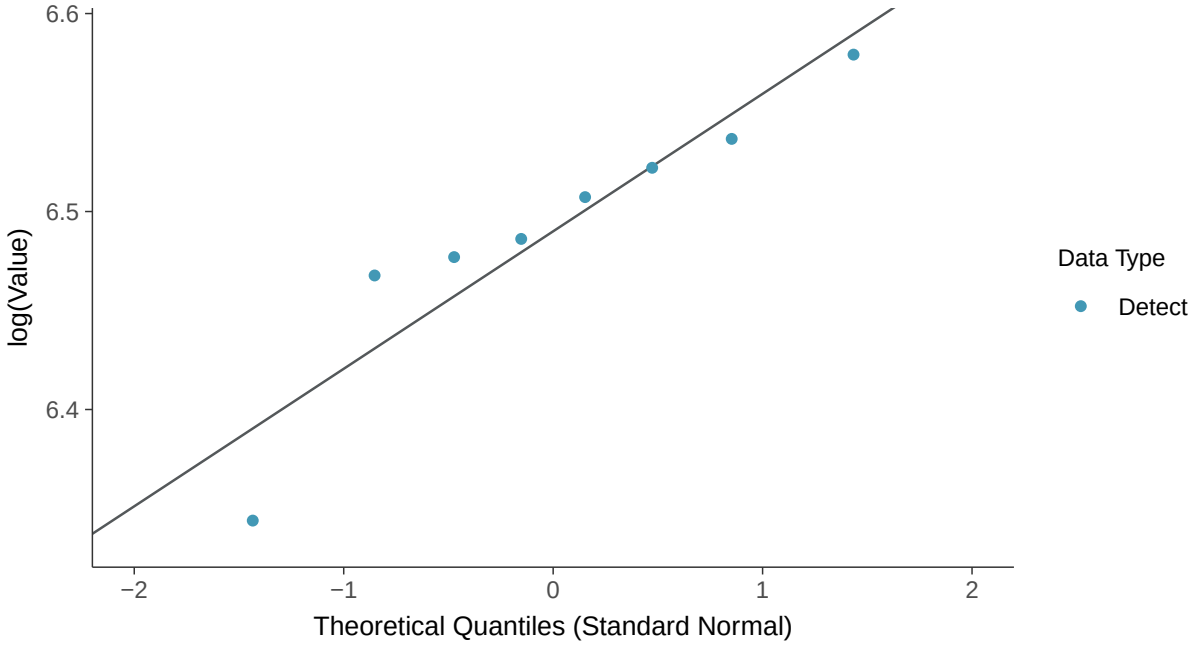
Normal Q-Q plot

Sulfate, MW-17A (mg/l)



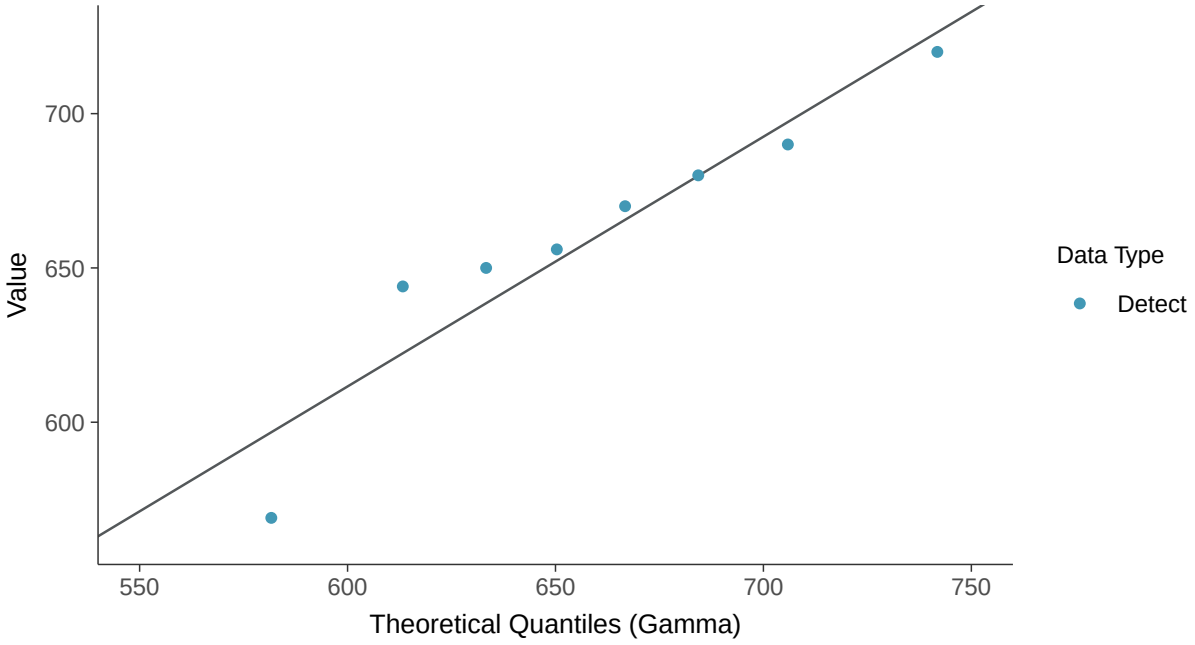
Lognormal Q-Q plot

Sulfate, MW-17A (mg/l)



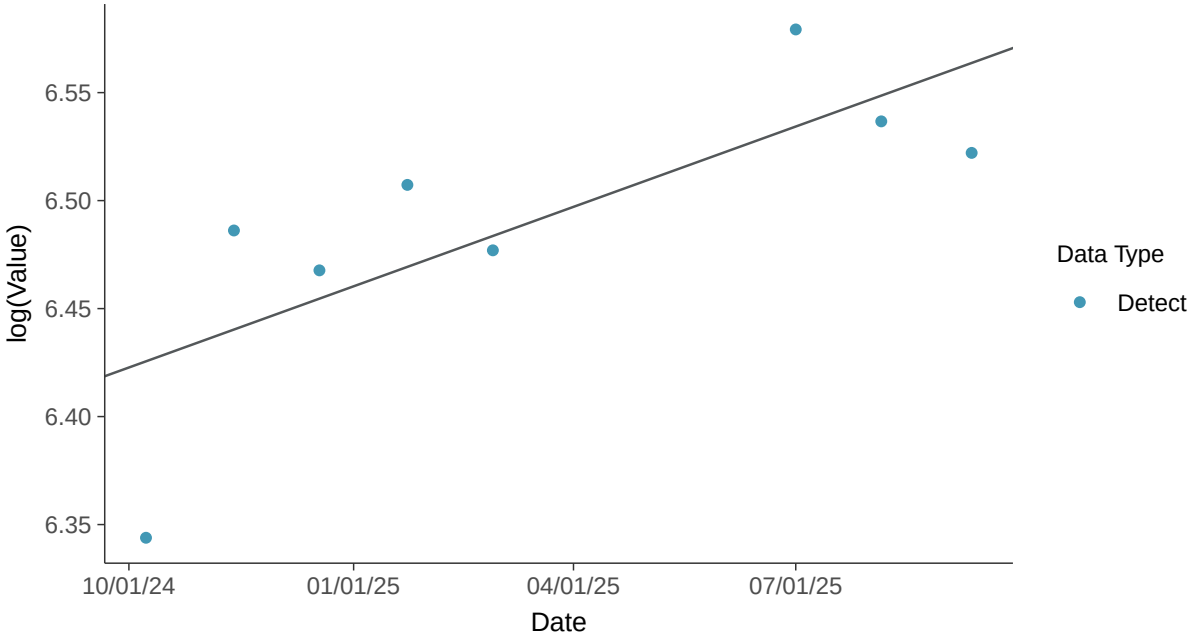
Gamma Q-Q plot

Sulfate, MW-17A (mg/l)



Trend Regression: Lognormal MLE

Sulfate, MW-17A (mg/l)

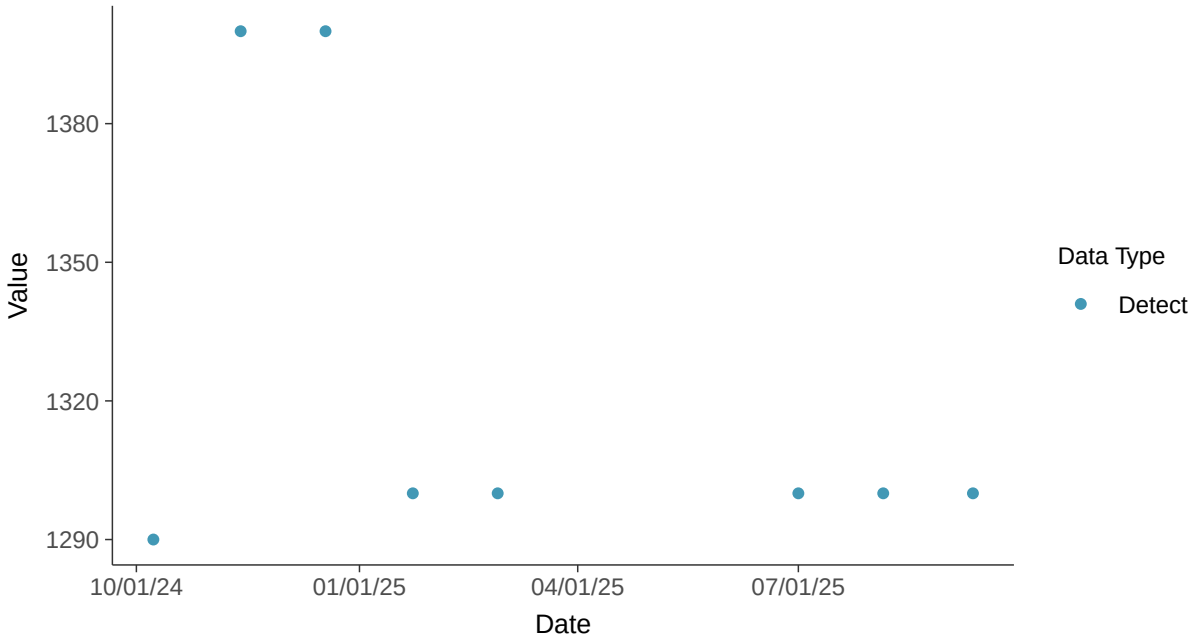


Appendix III: Total Dissolved Solids, MW-17A

ID: 27_2_126

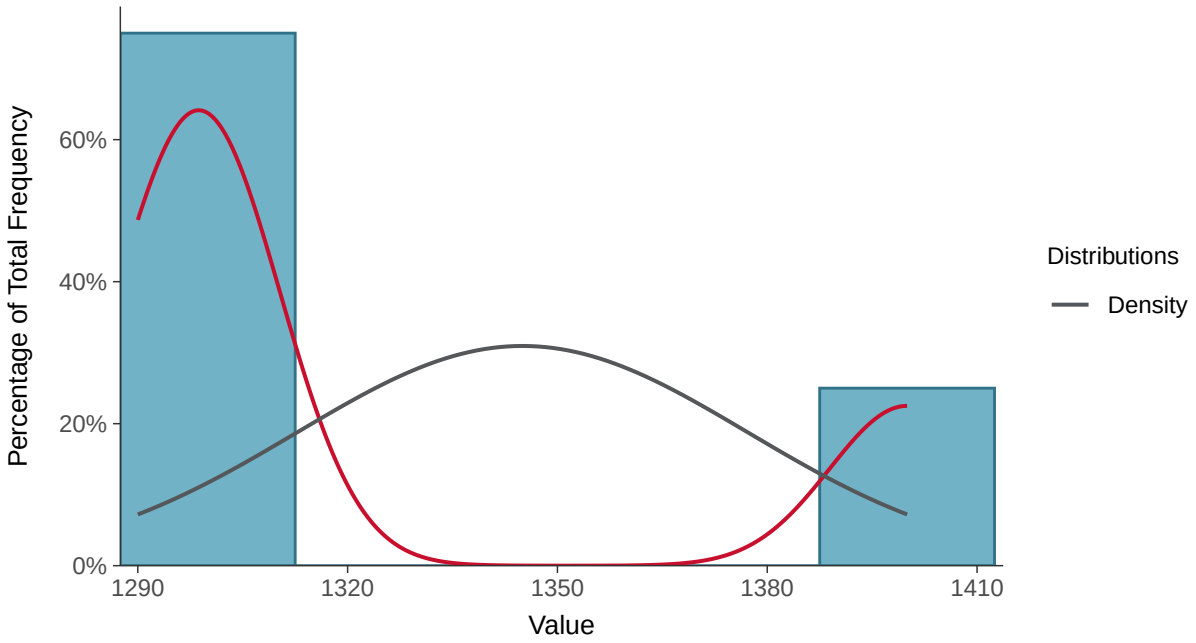
Scatter Plot

Total Dissolved Solids, MW-17A (mg/l)



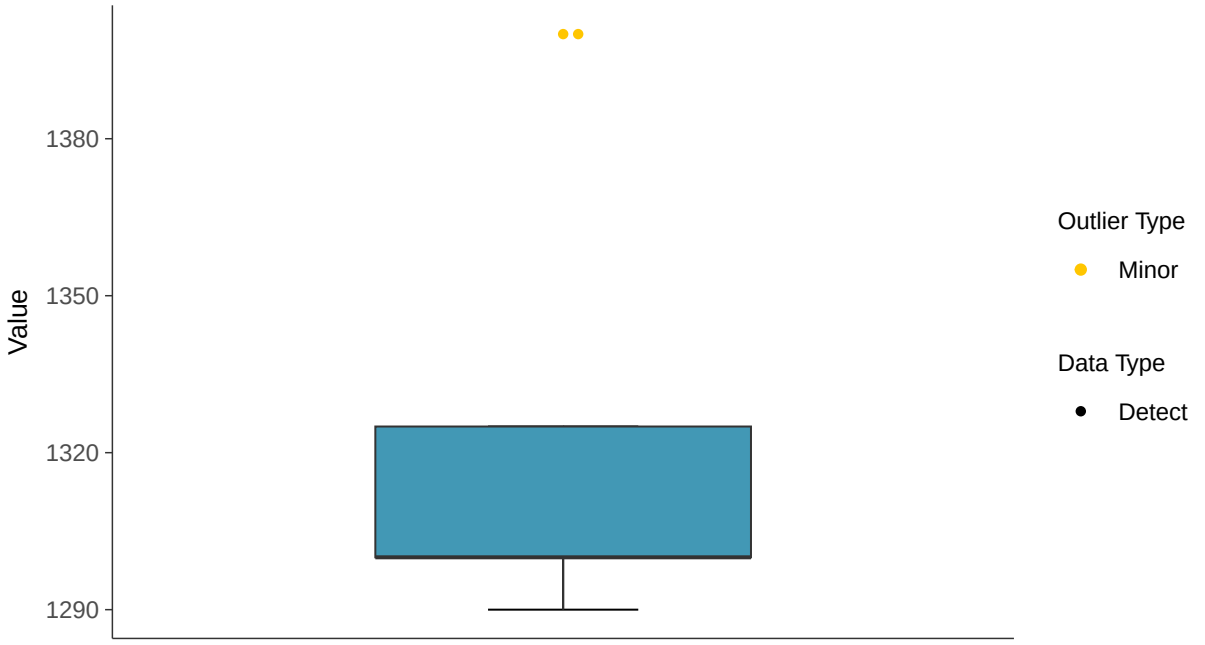
Histogram

Total Dissolved Solids, MW-17A (mg/l)



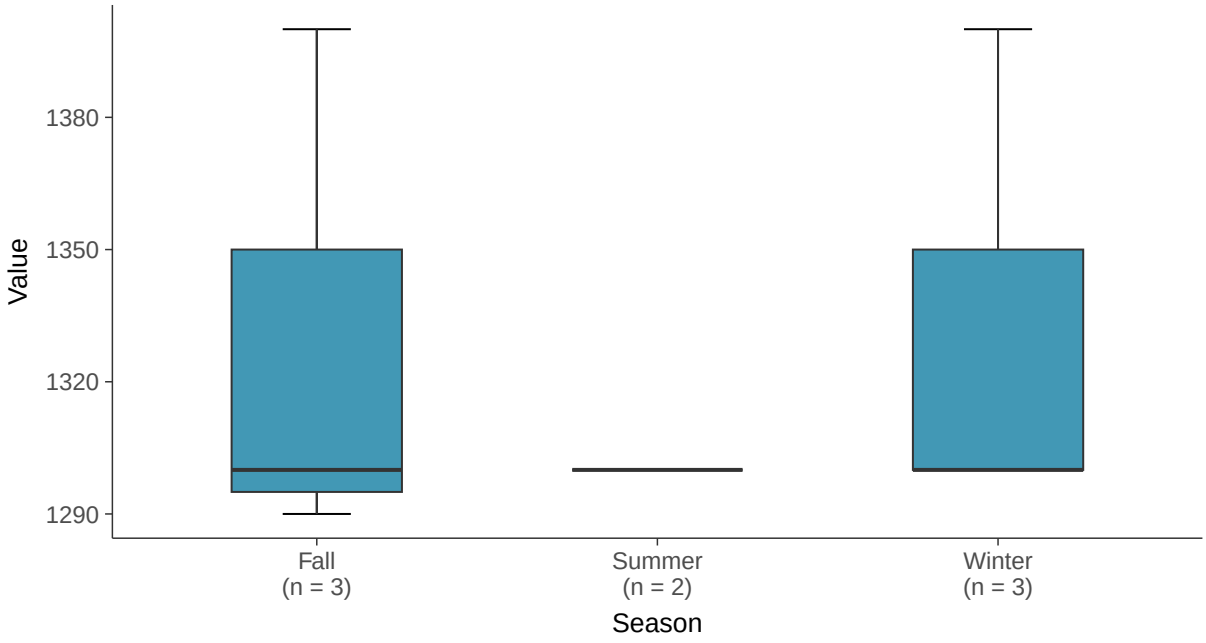
Boxplot

Total Dissolved Solids, MW-17A (mg/l)



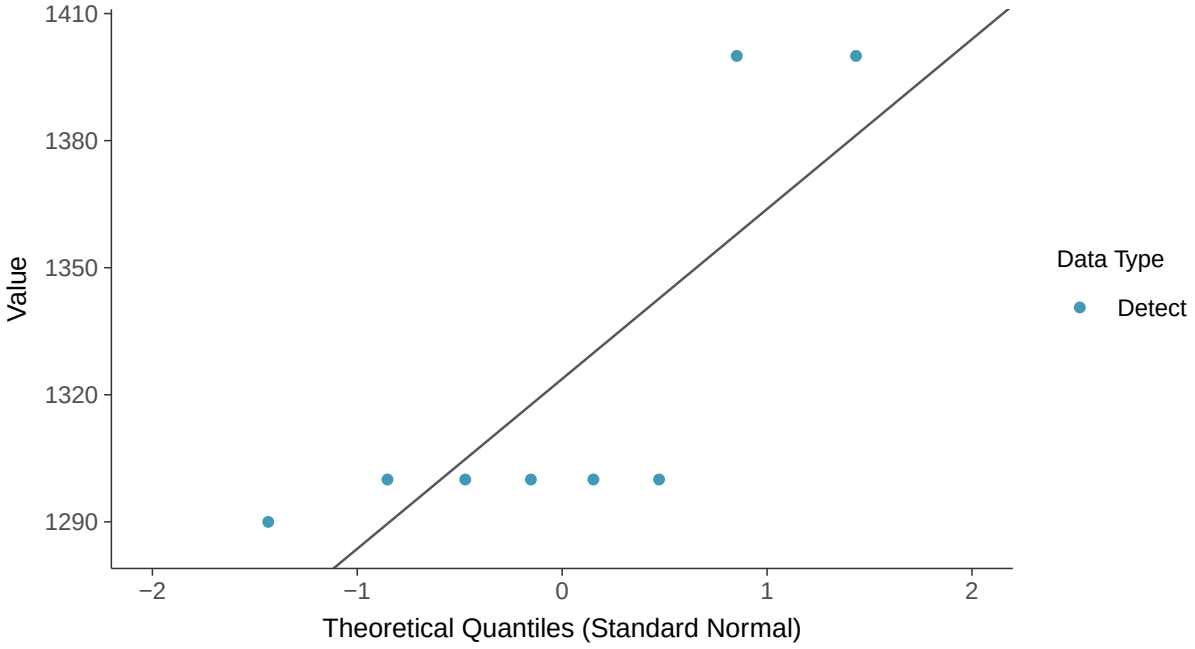
Boxplot by Season

Total Dissolved Solids, MW-17A (mg/l)



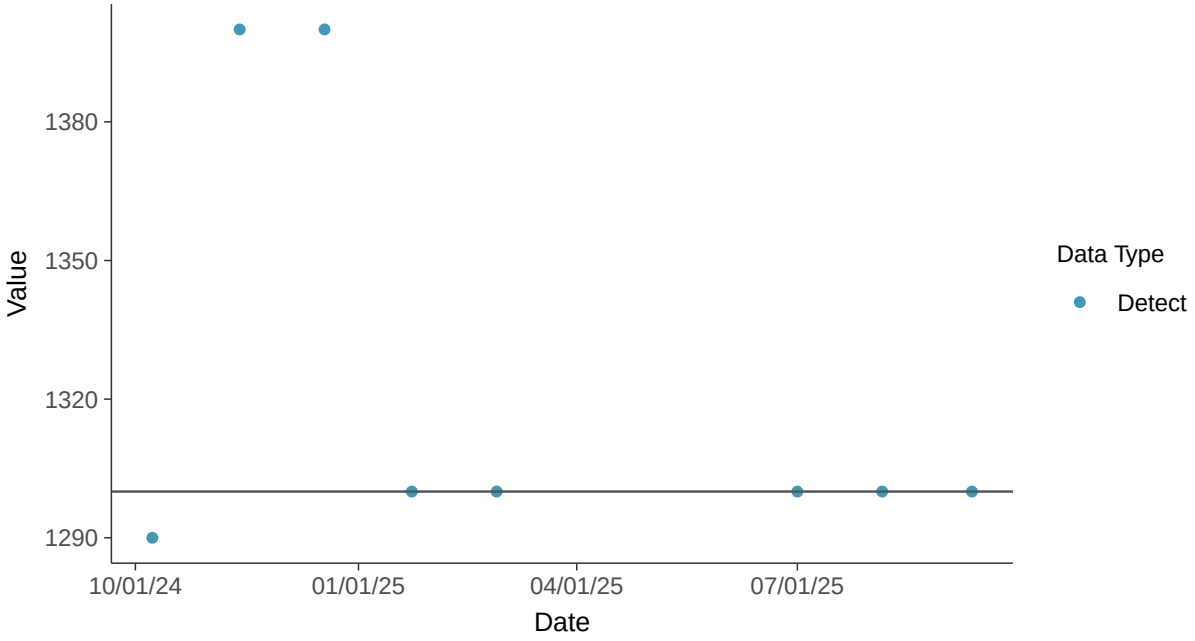
Normal Q-Q plot

Total Dissolved Solids, MW-17A (mg/l)



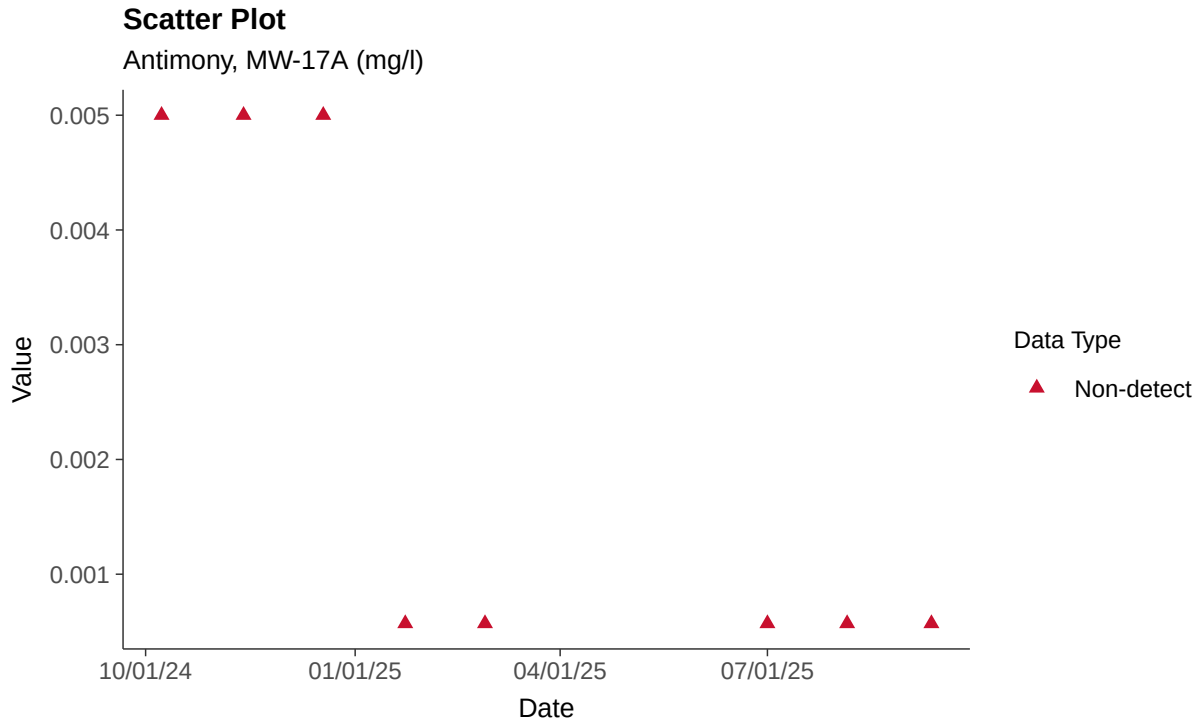
Trend Regression: Mann-Kendall/Theil-Sen Estimate

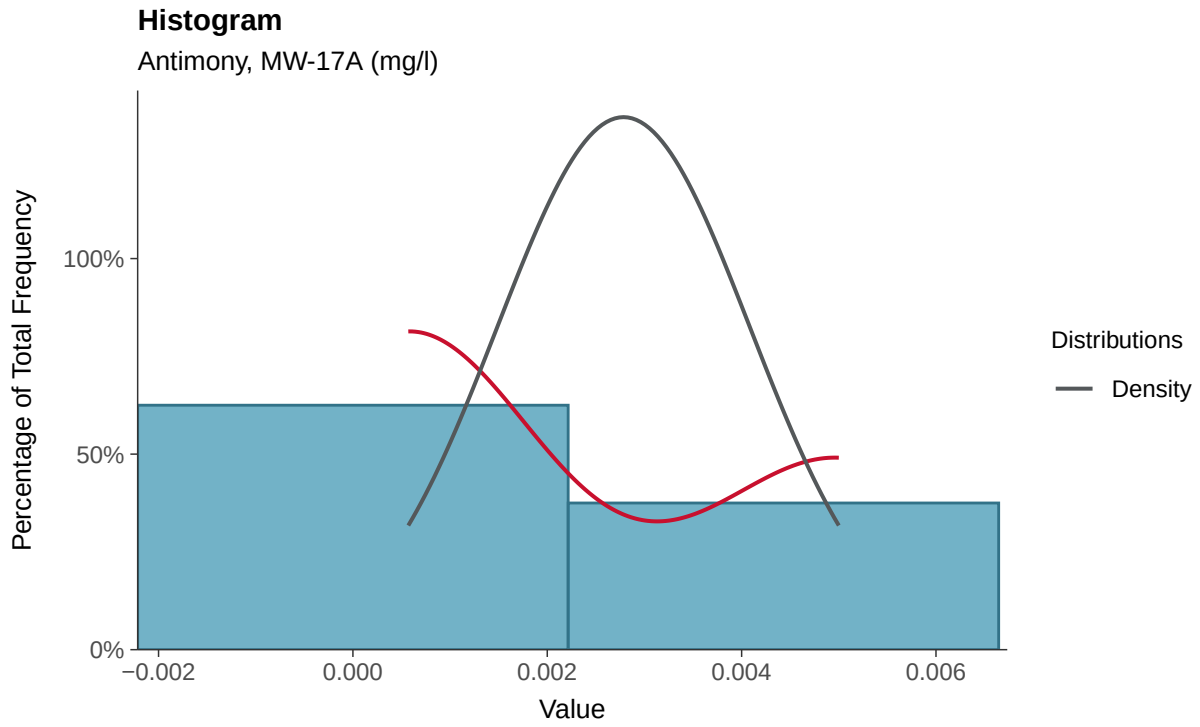
Total Dissolved Solids, MW-17A (mg/l)



Appendix IV: Antimony, MW-17A

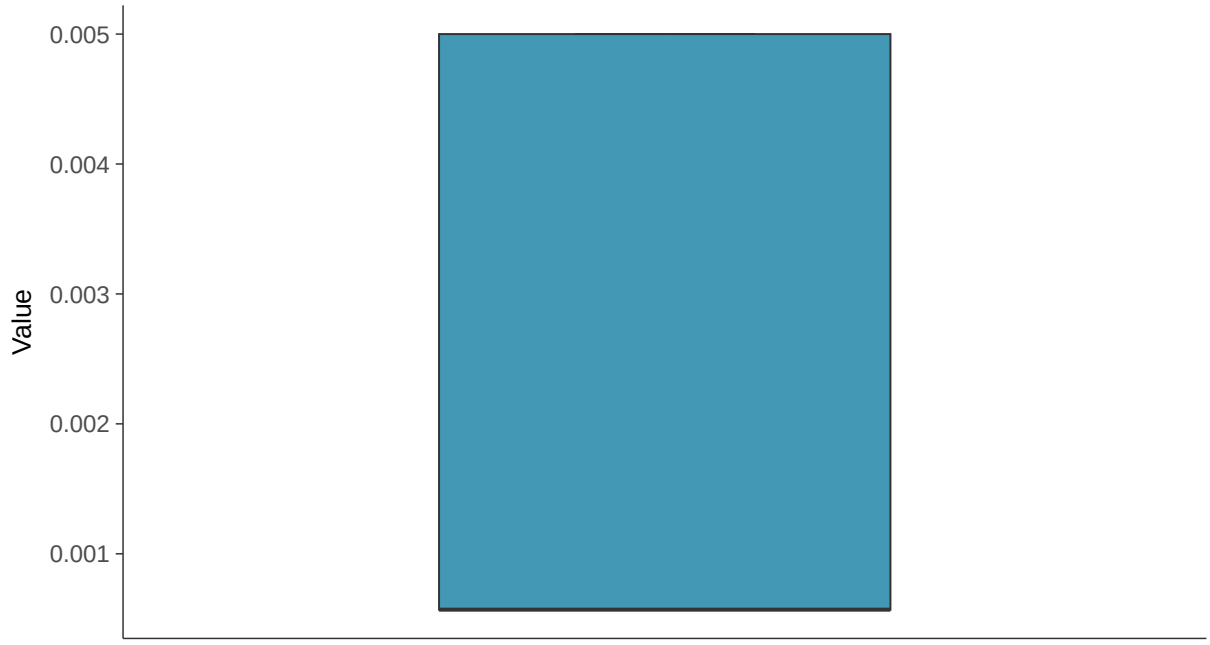
ID: 27_3_101





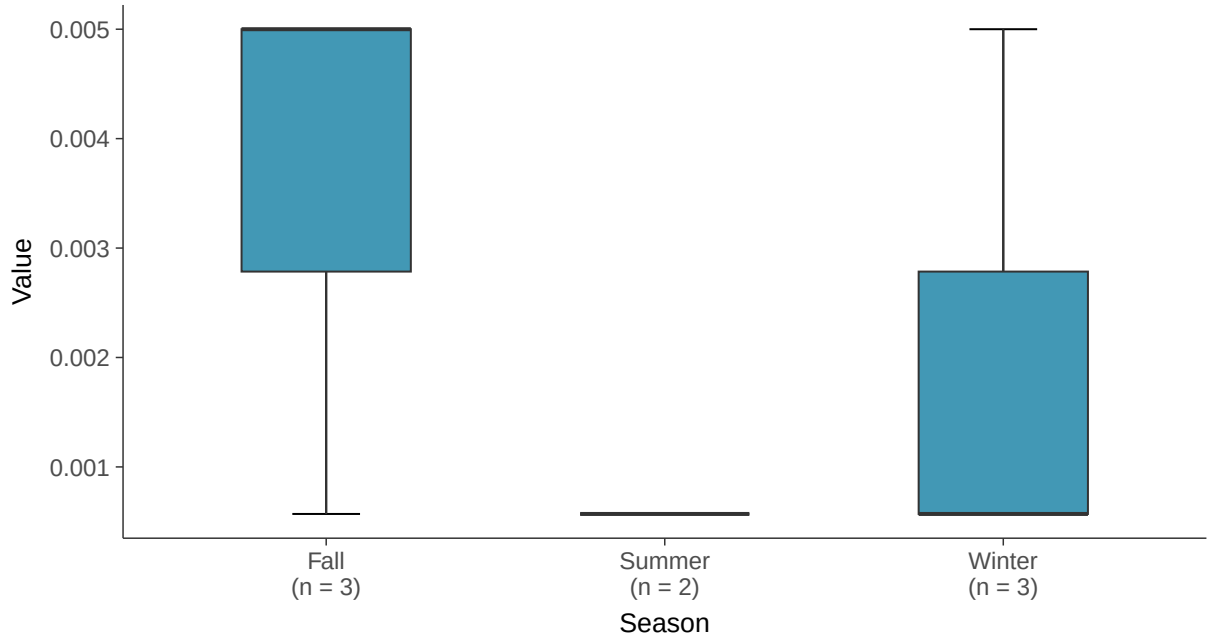
Boxplot

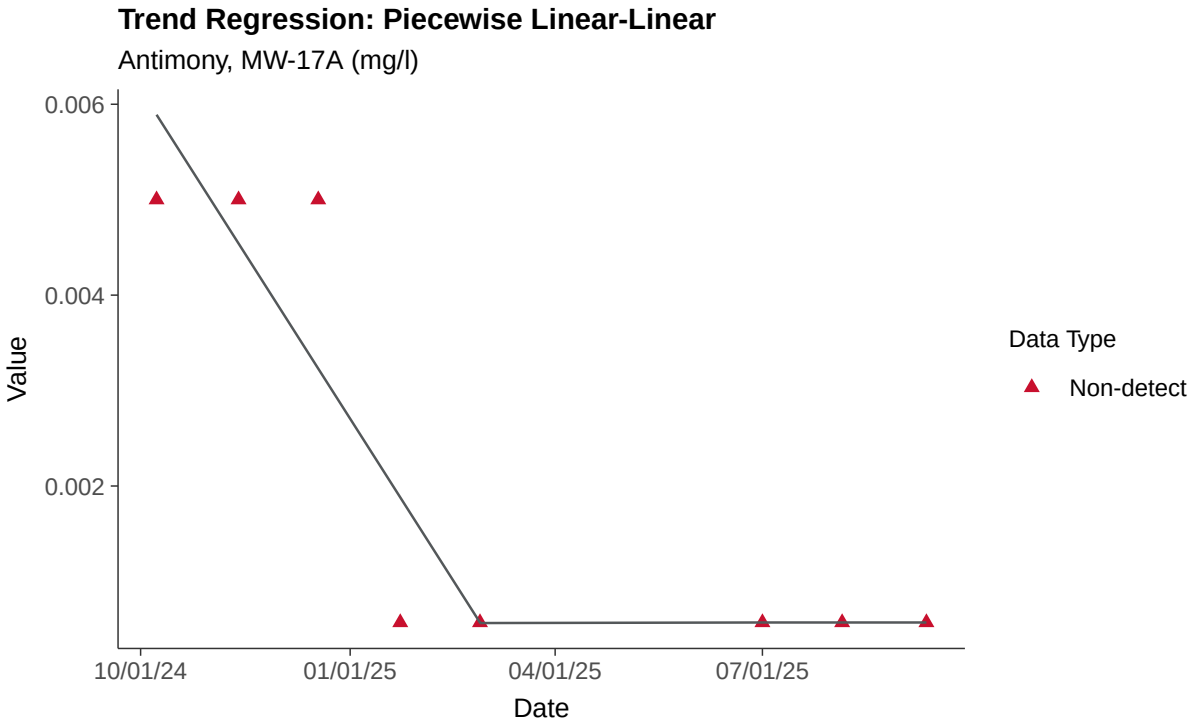
Antimony, MW-17A (mg/l)



Boxplot by Season

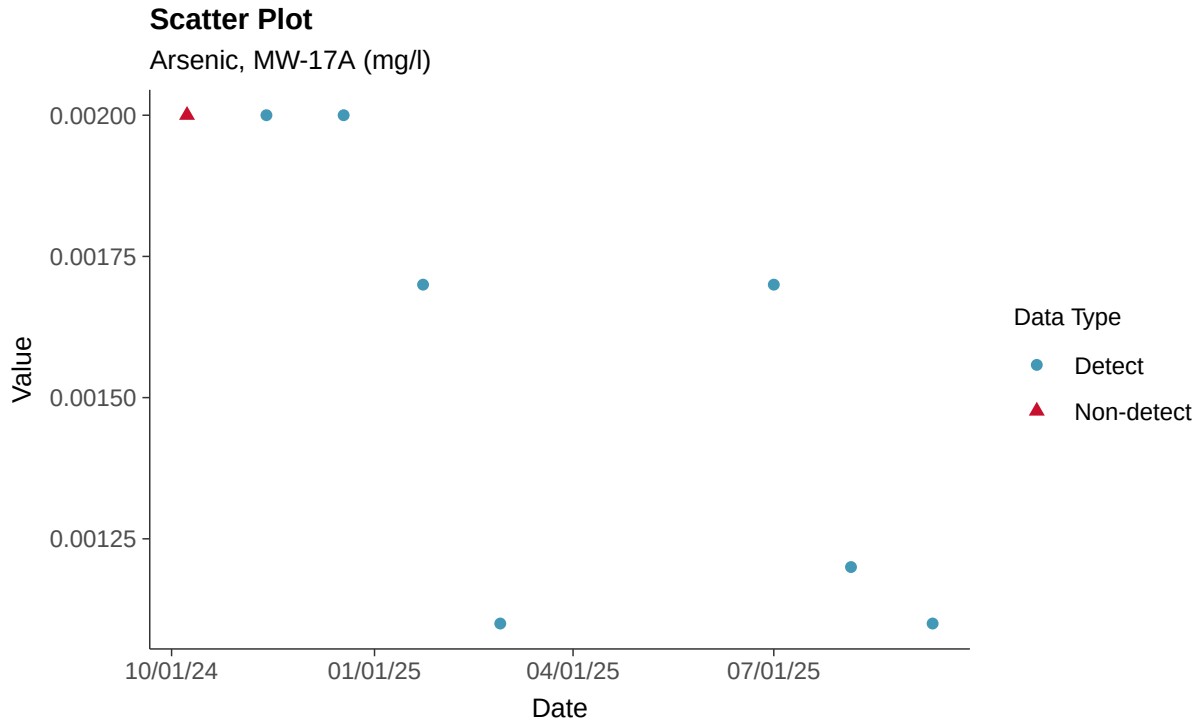
Antimony, MW-17A (mg/l)

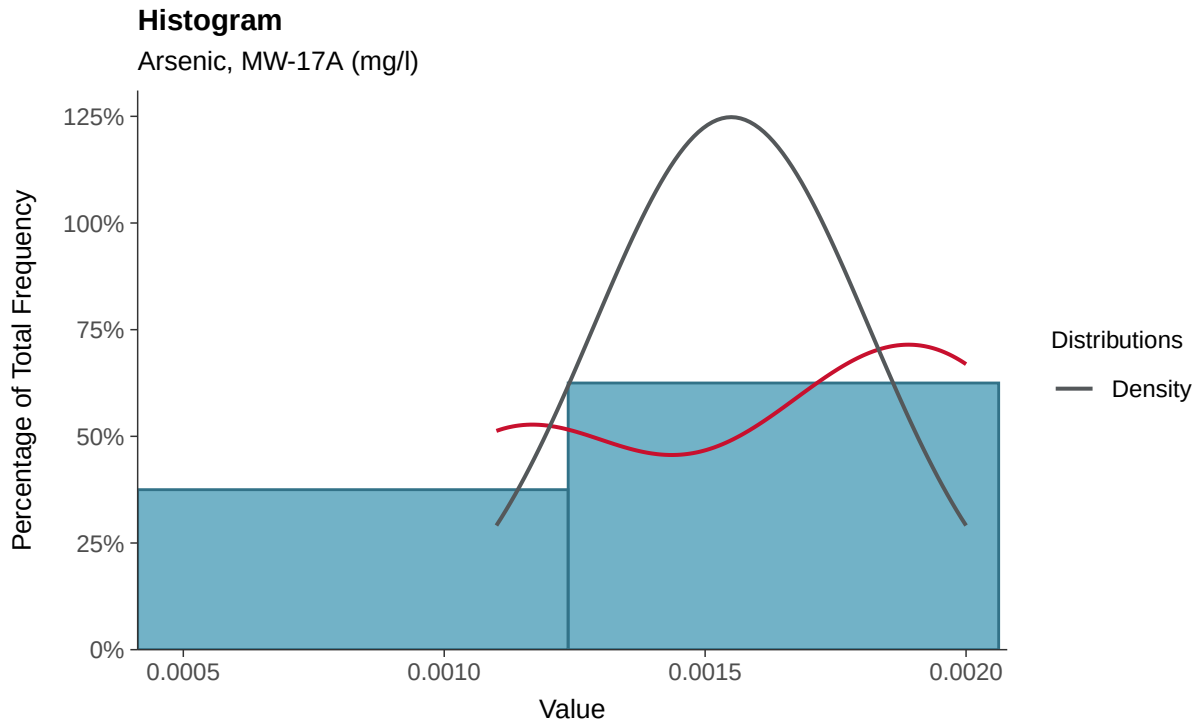



Trend Regression: Piecewise Linear-Linear
Antimony, MW-17A (mg/l)
0.006
0.004
0.002
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Arsenic, MW-17A

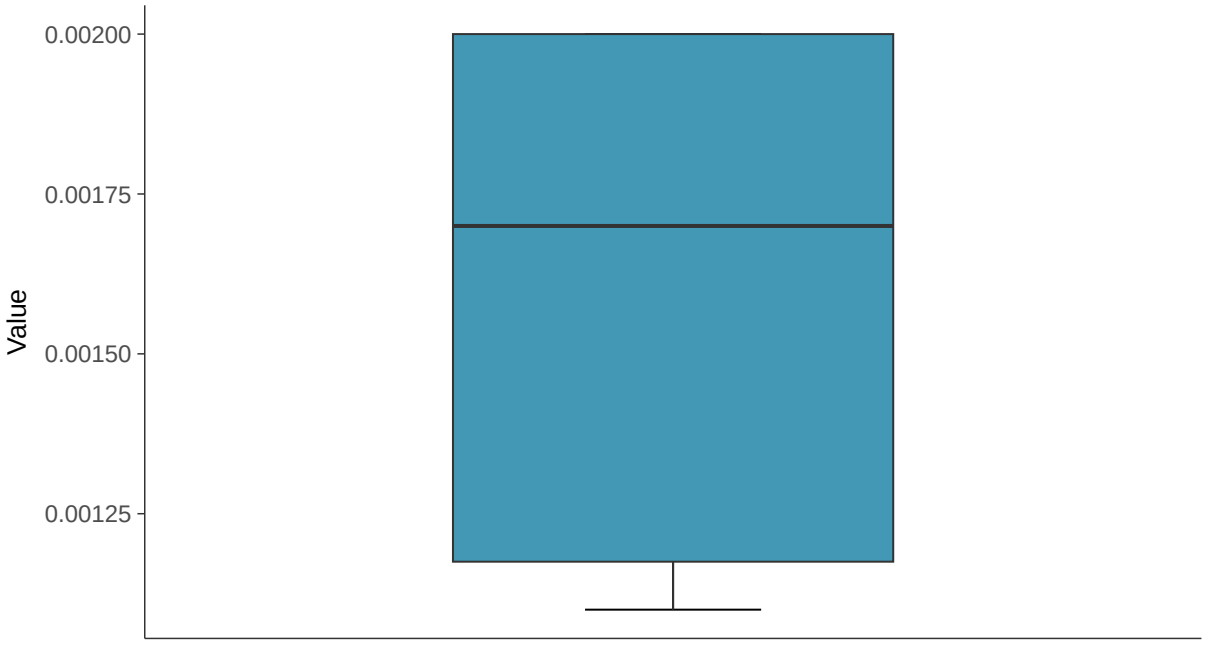
ID: 27_3_102





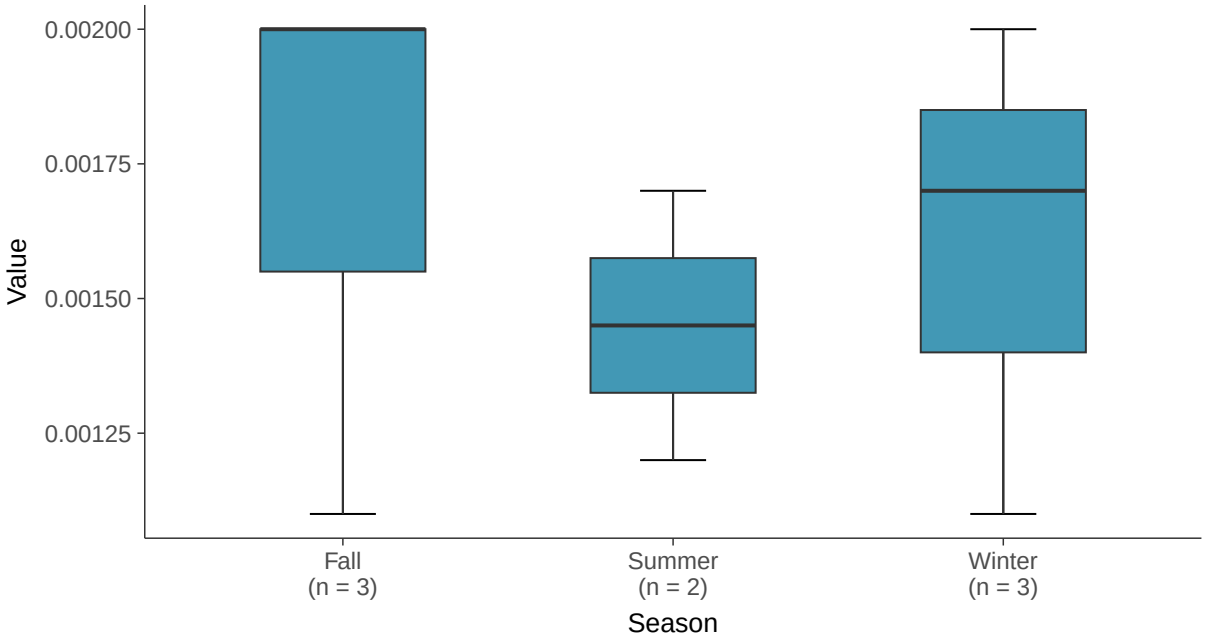
Boxplot

Arsenic, MW-17A (mg/l)



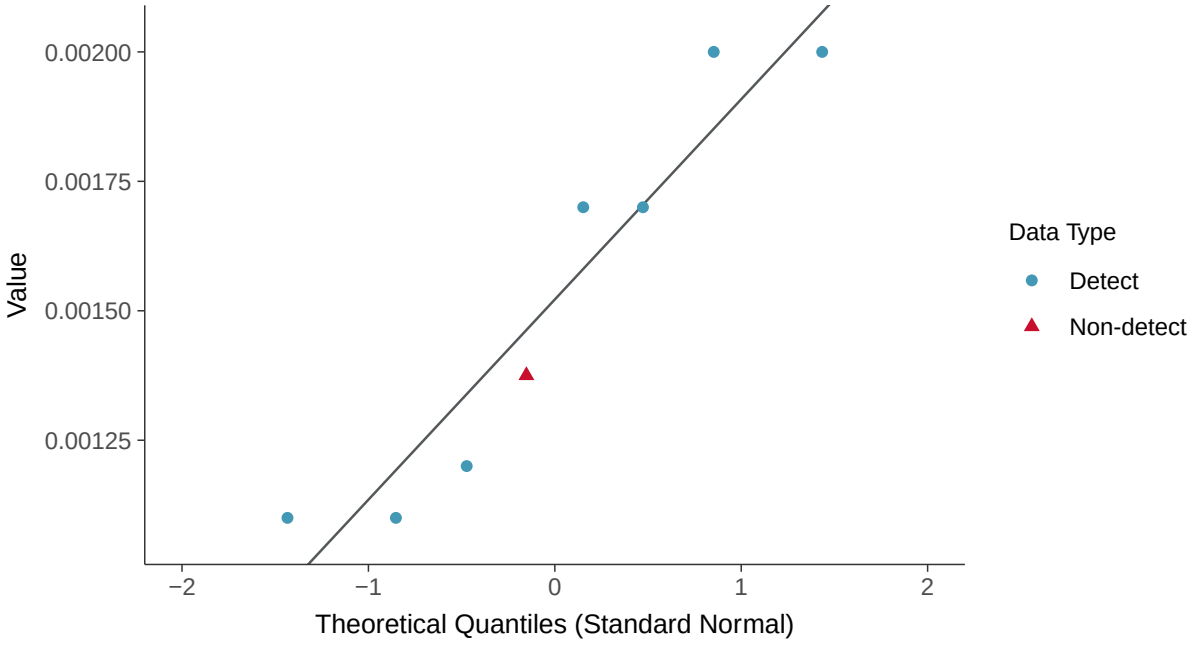
Boxplot by Season

Arsenic, MW-17A (mg/l)



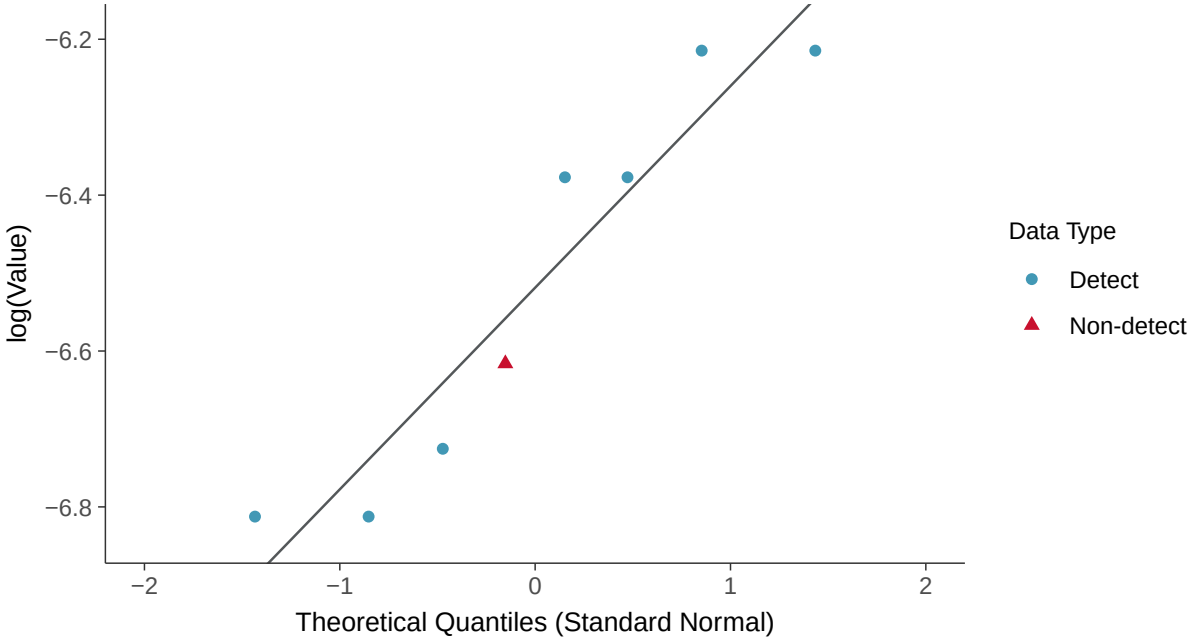
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17A (mg/l)



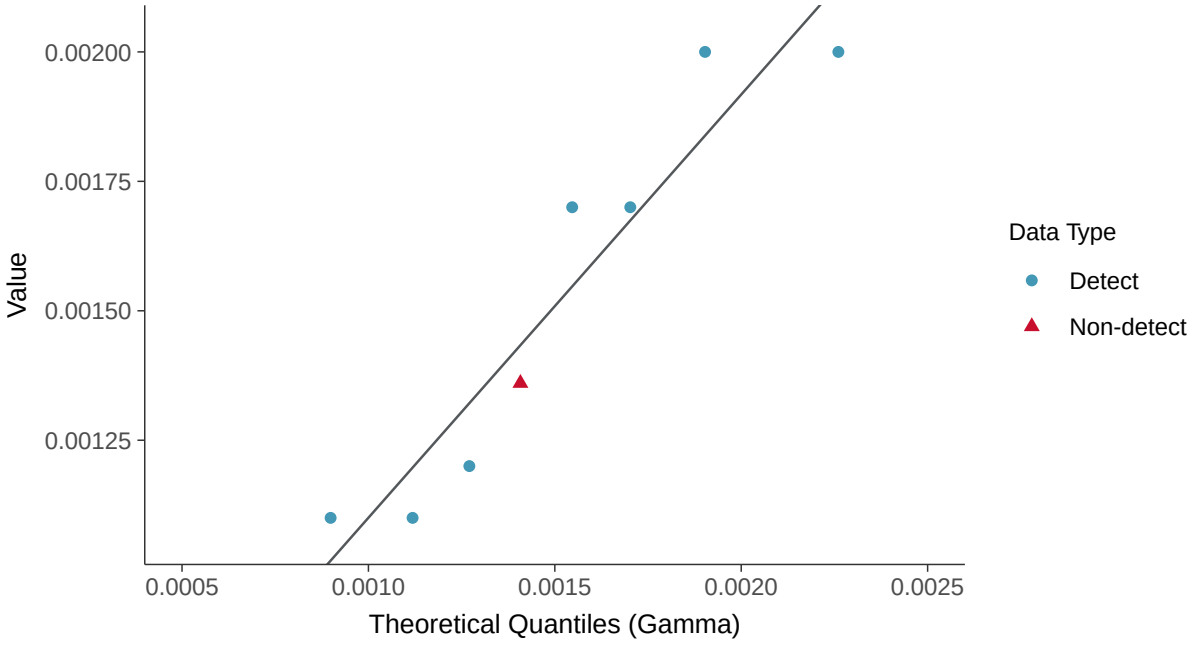
Lognormal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17A (mg/l)



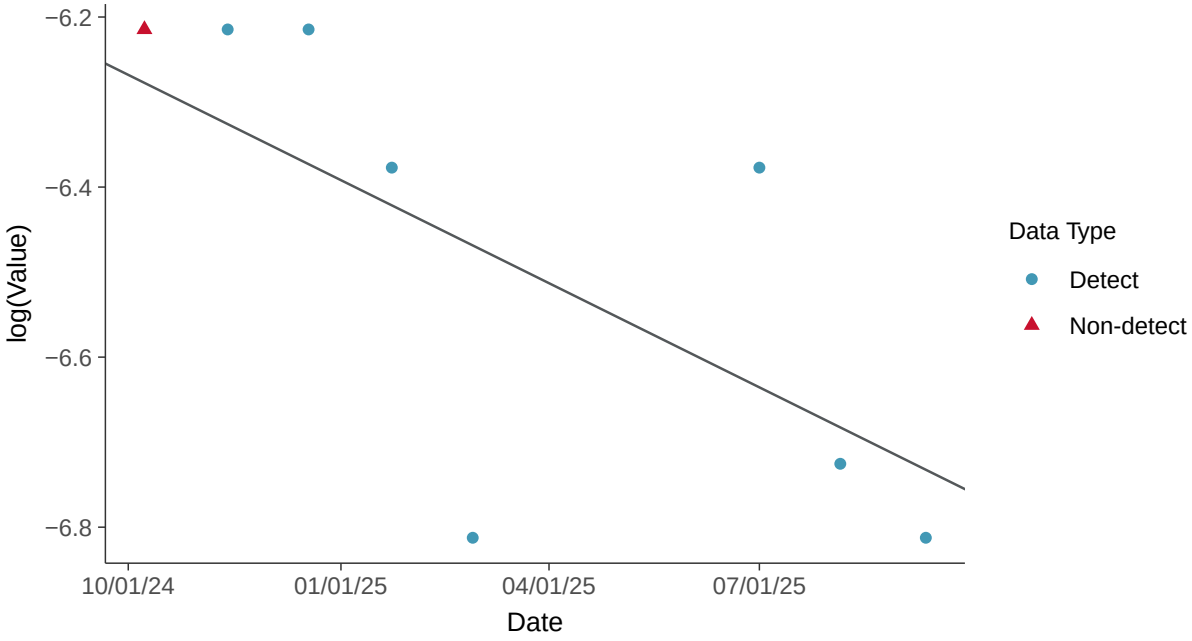
Gamma Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17A (mg/l)



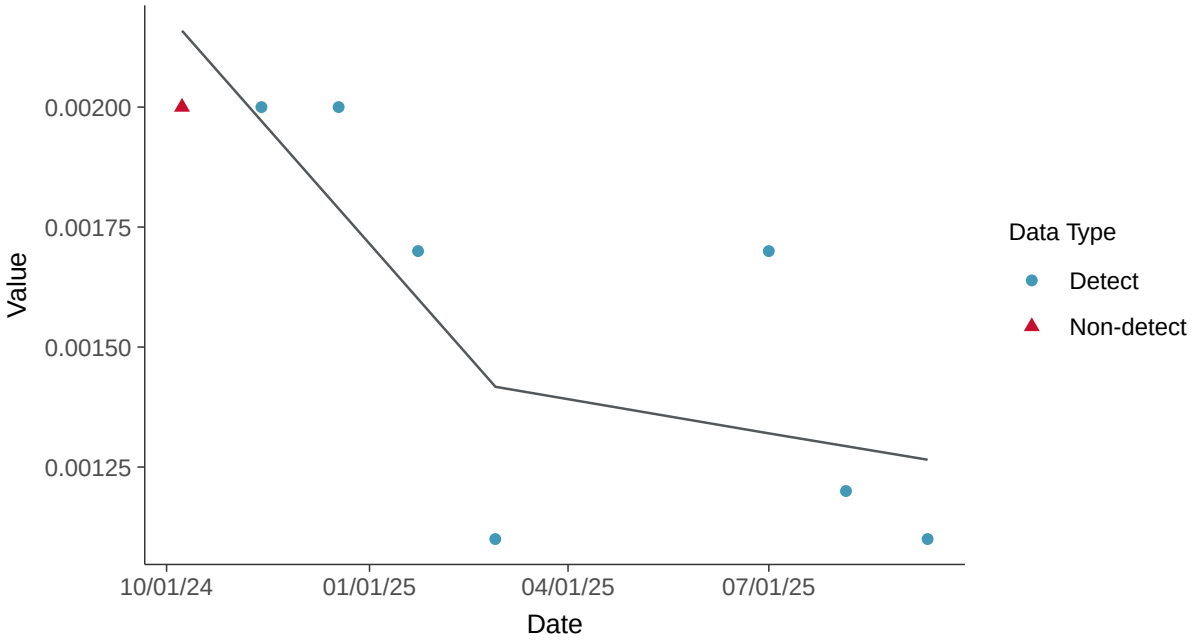
Trend Regression: Lognormal MLE

Arsenic, MW-17A (mg/l)



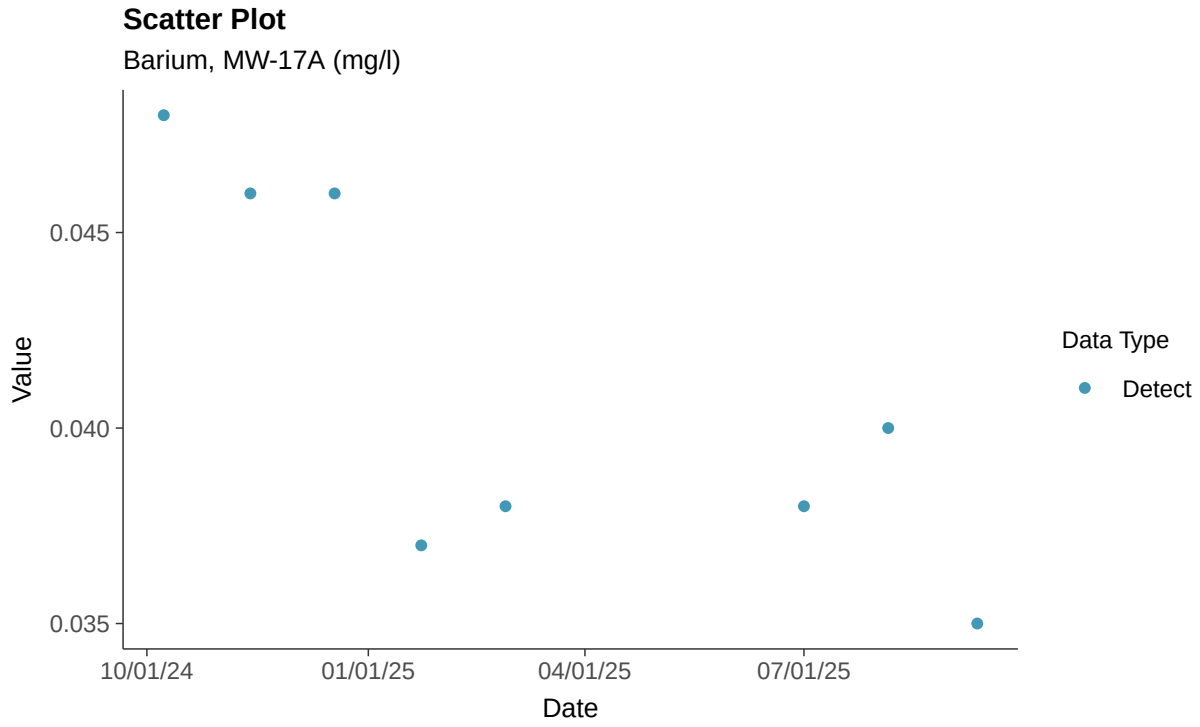
Trend Regression: Piecewise Linear-Linear

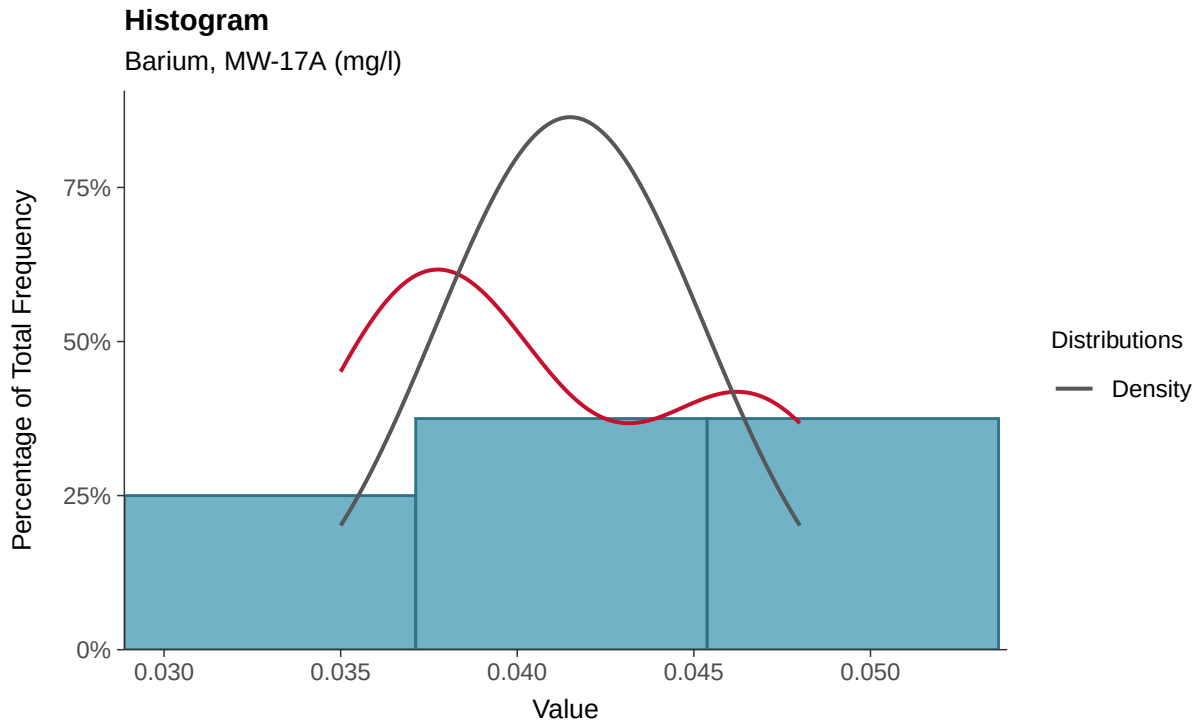
Arsenic, MW-17A (mg/l)



Appendix IV: Barium, MW-17A

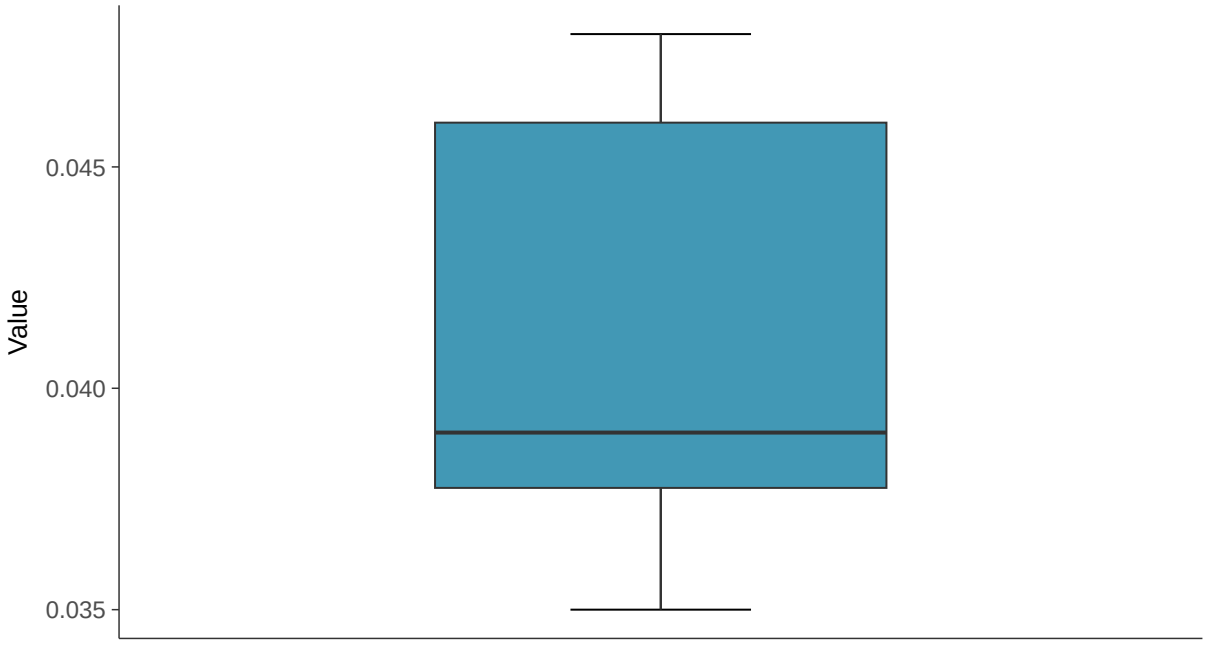
ID: 27_3_103





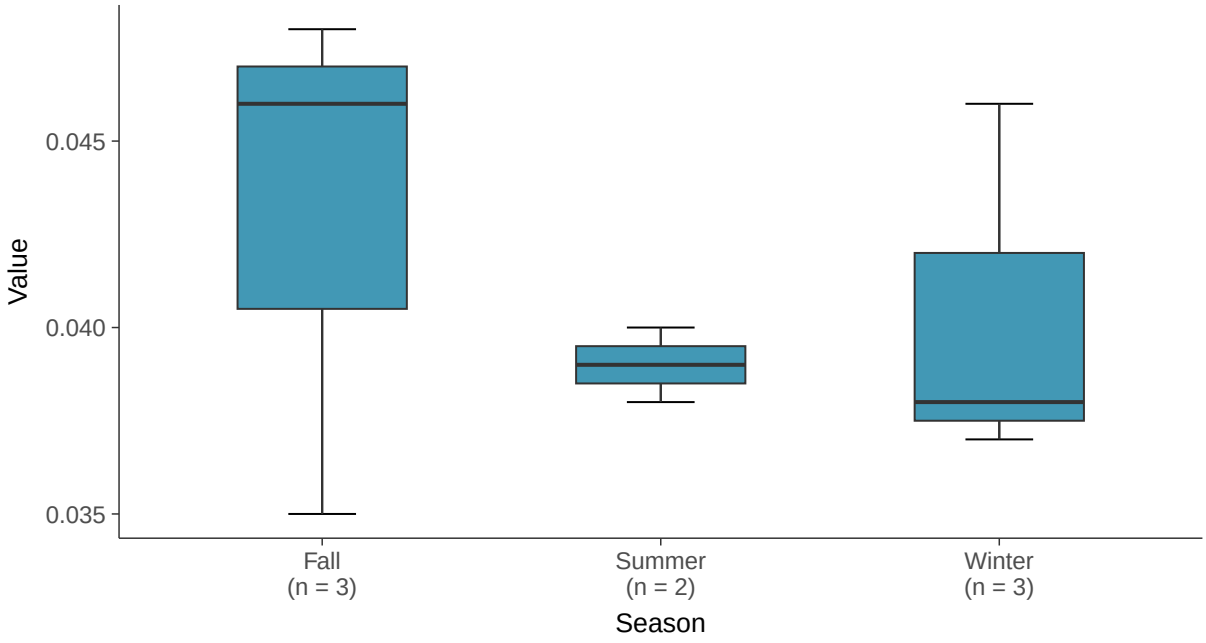
Boxplot

Barium, MW-17A (mg/l)



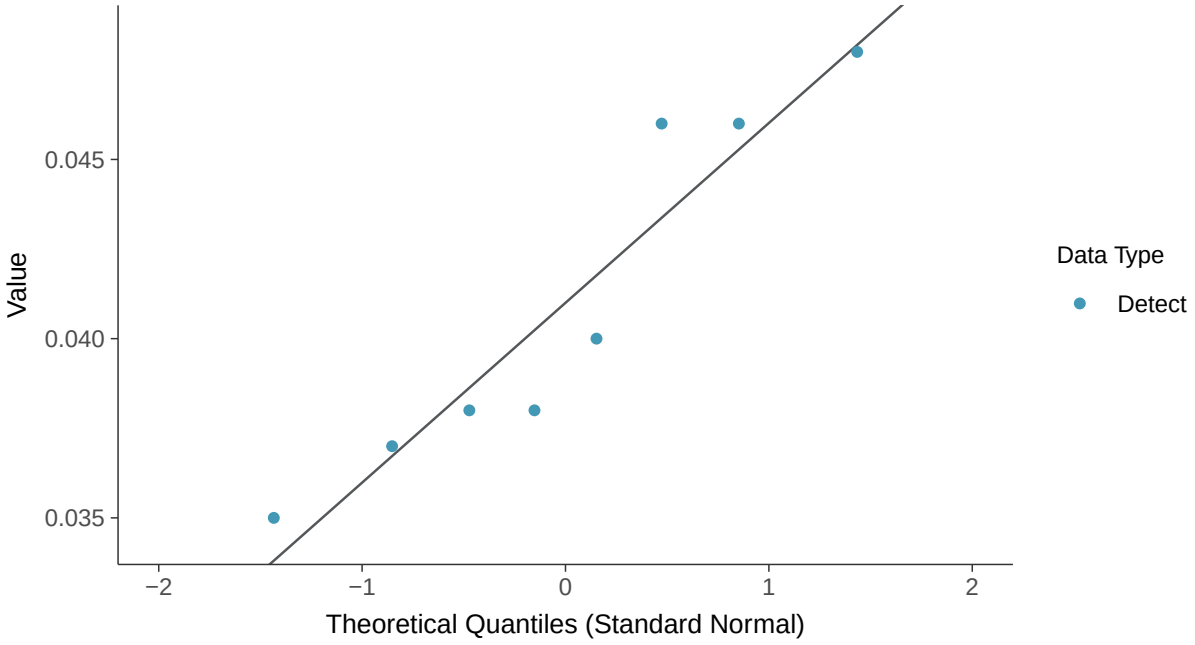
Boxplot by Season

Barium, MW-17A (mg/l)



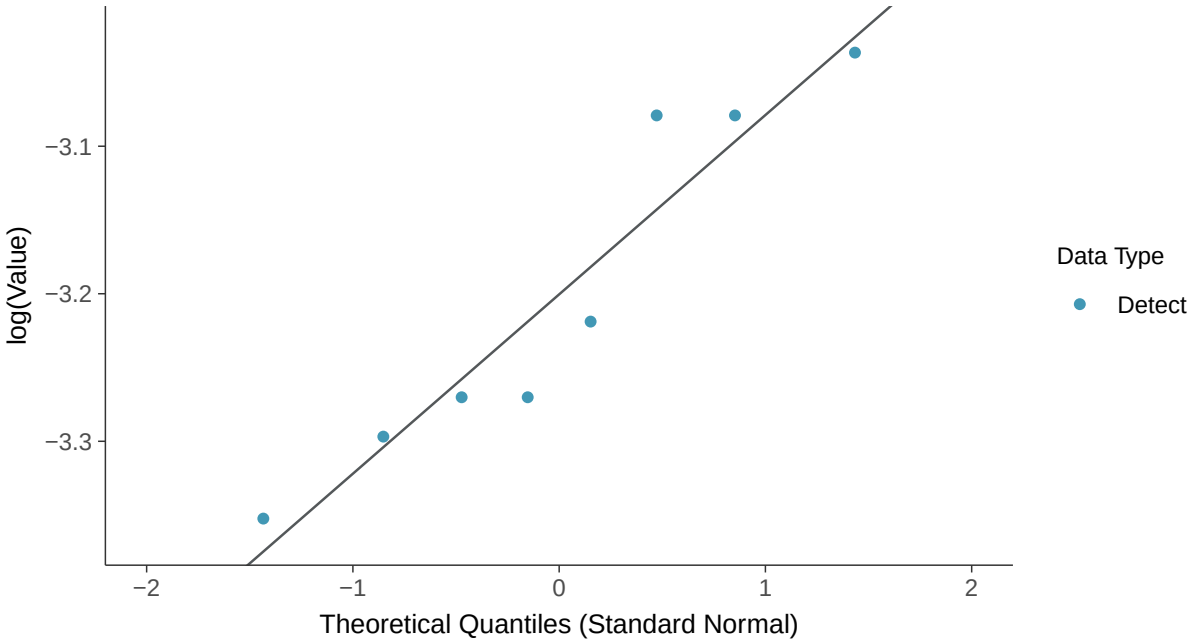
Normal Q-Q plot

Barium, MW-17A (mg/l)



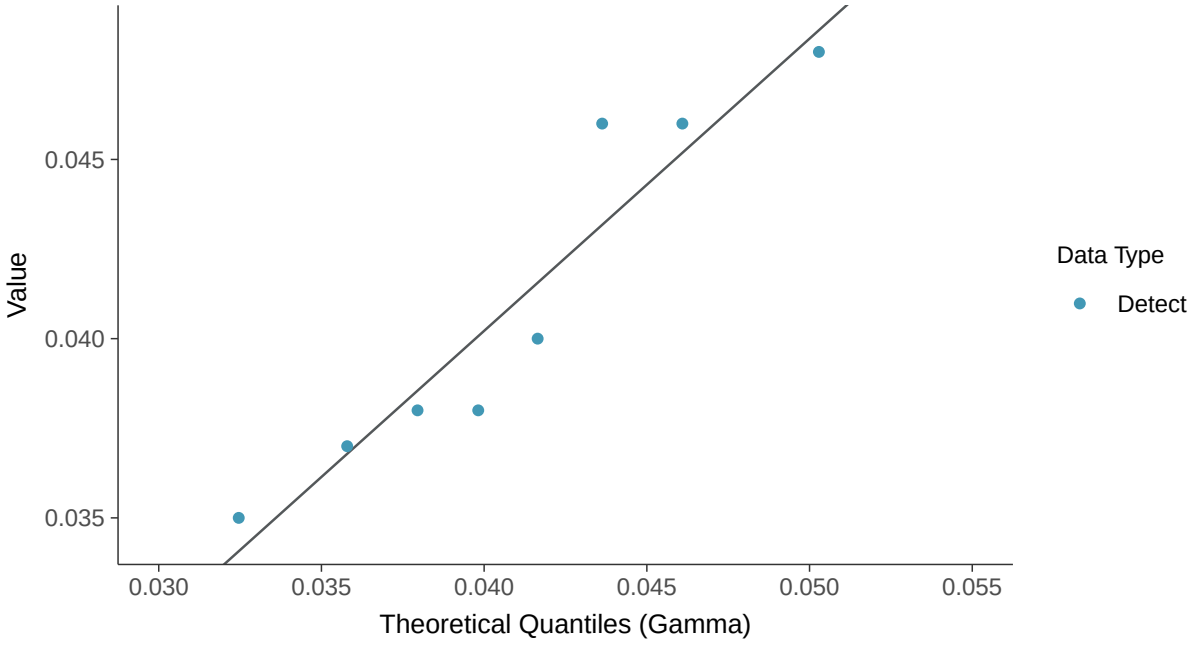
Lognormal Q-Q plot

Barium, MW-17A (mg/l)



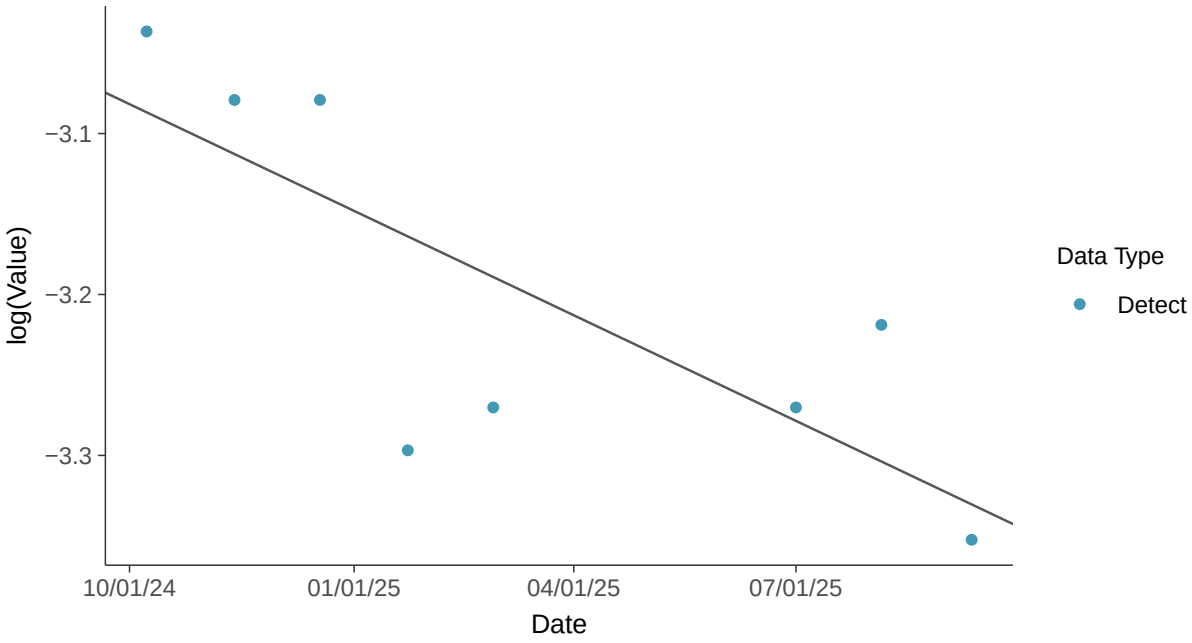
Gamma Q-Q plot

Barium, MW-17A (mg/l)



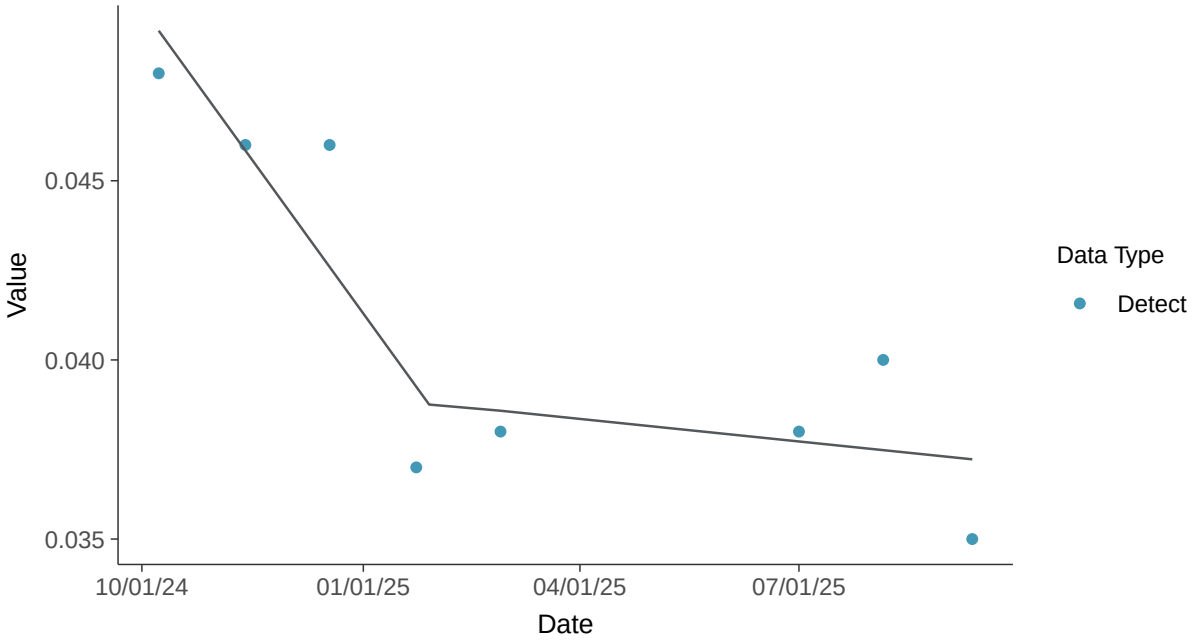
Trend Regression: Lognormal MLE

Barium, MW-17A (mg/l)



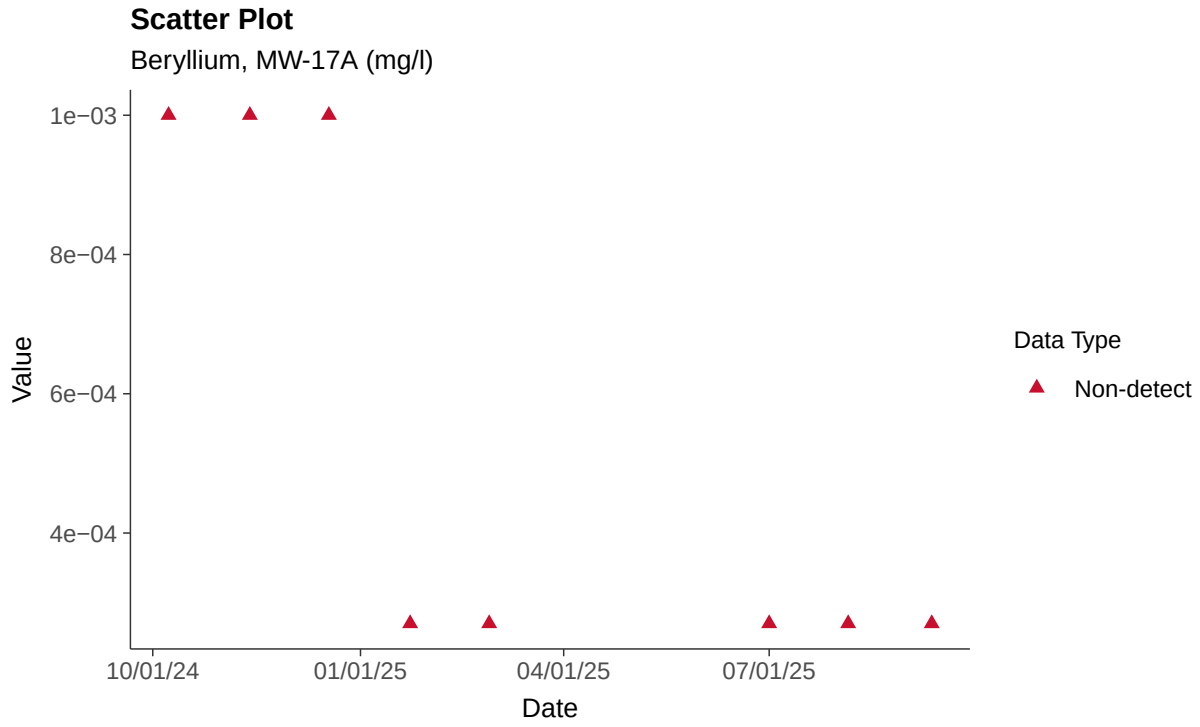
Trend Regression: Piecewise Linear-Linear

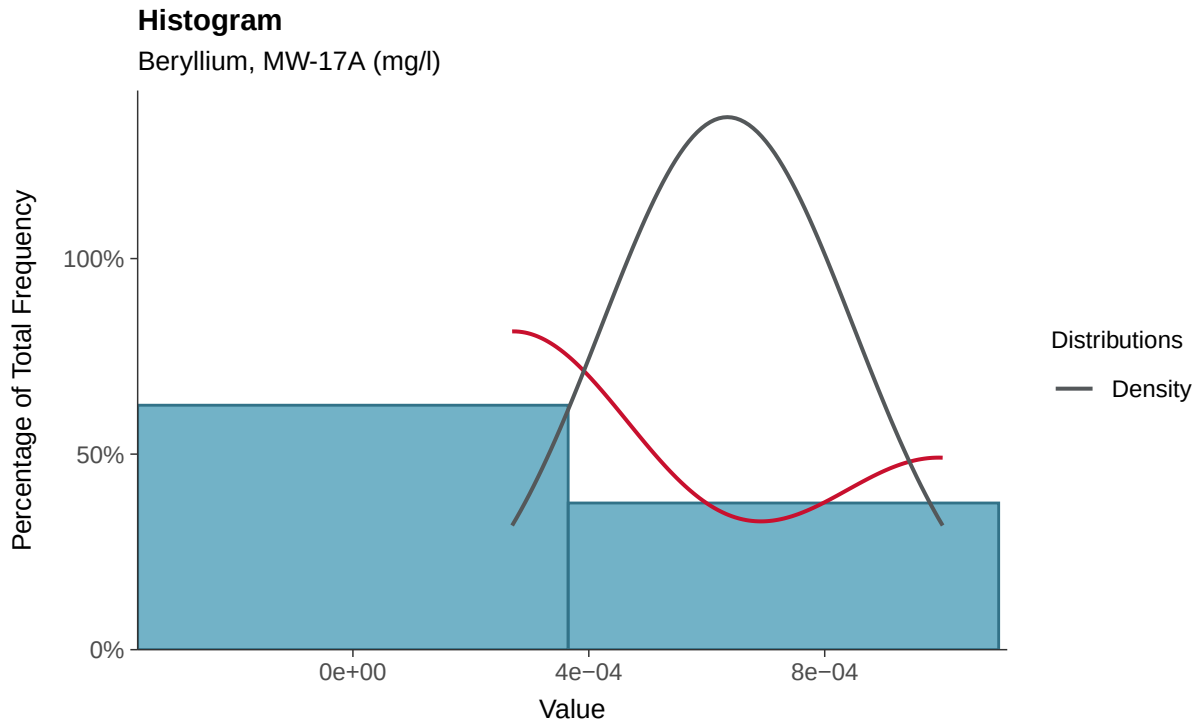
Barium, MW-17A (mg/l)



Appendix IV: Beryllium, MW-17A

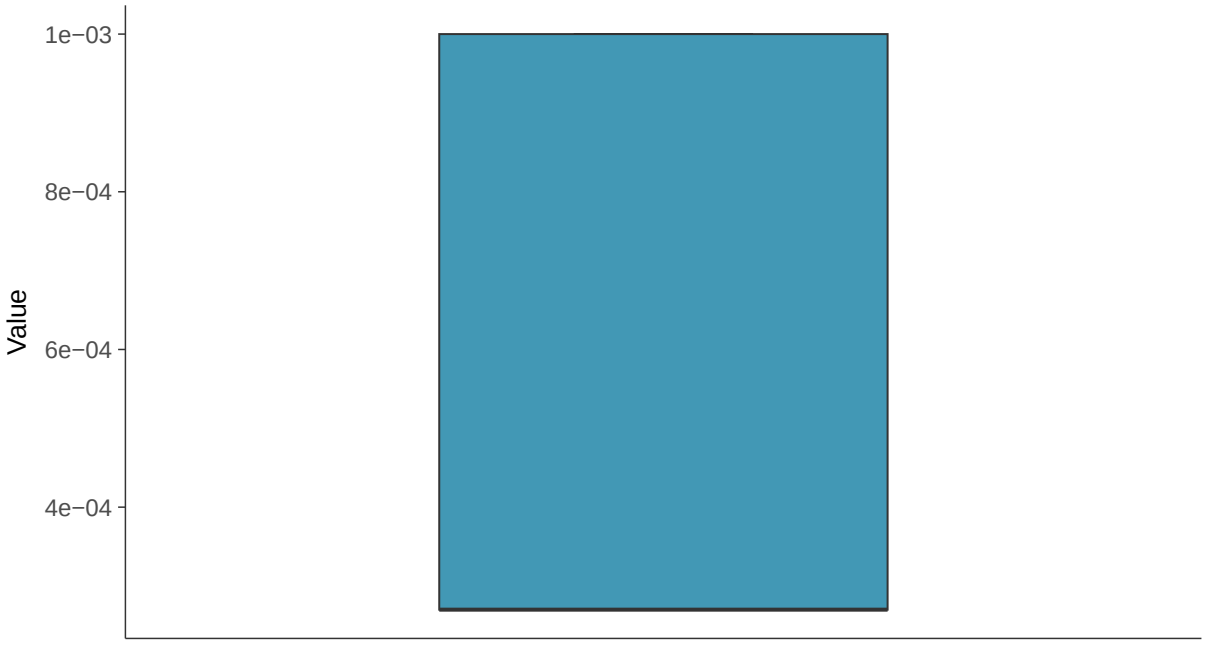
ID: 27_3_104





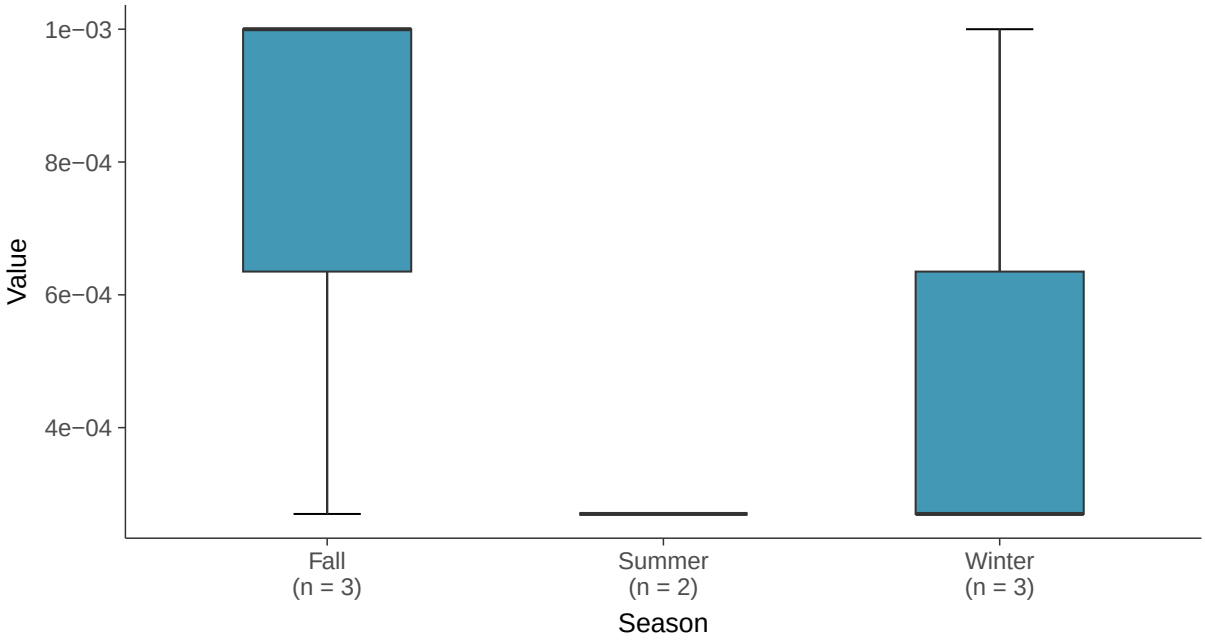
Boxplot

Beryllium, MW-17A (mg/l)



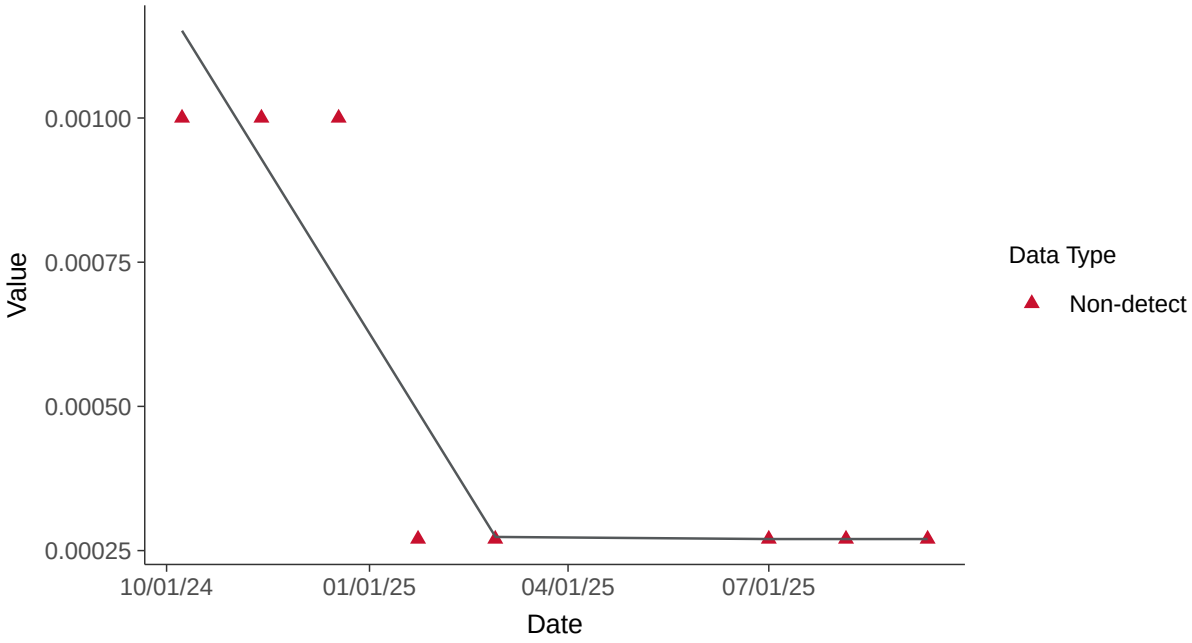
Boxplot by Season

Beryllium, MW-17A (mg/l)



Trend Regression: Piecewise Linear-Linear

Beryllium, MW-17A (mg/l)

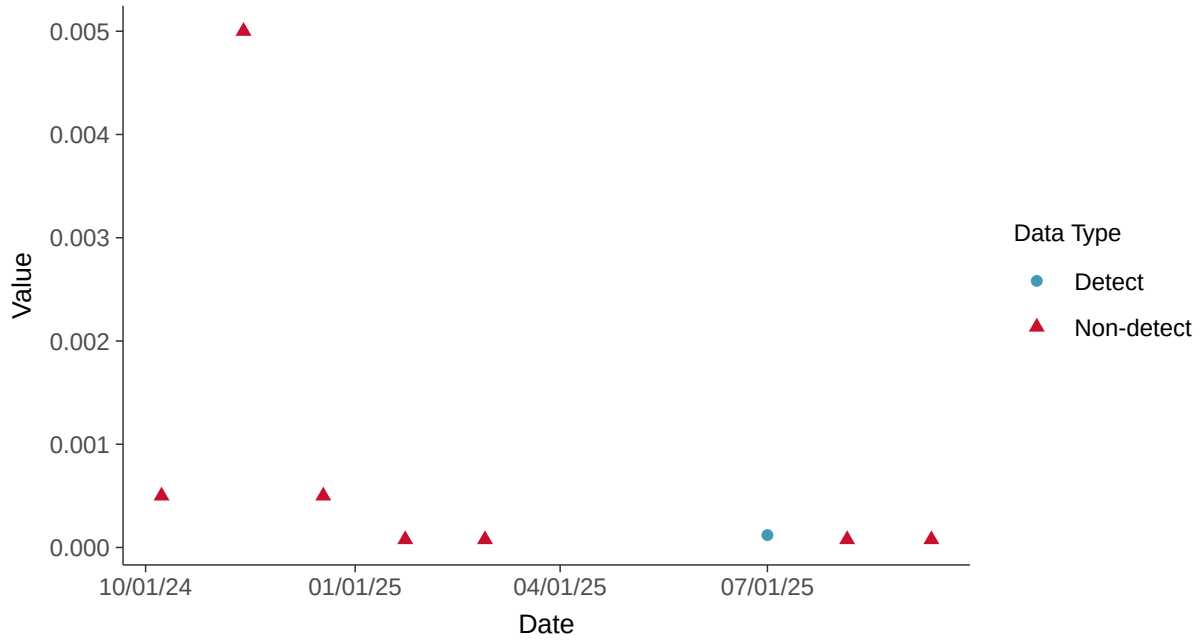


Appendix IV: Cadmium, MW-17A

ID: 27_3_106

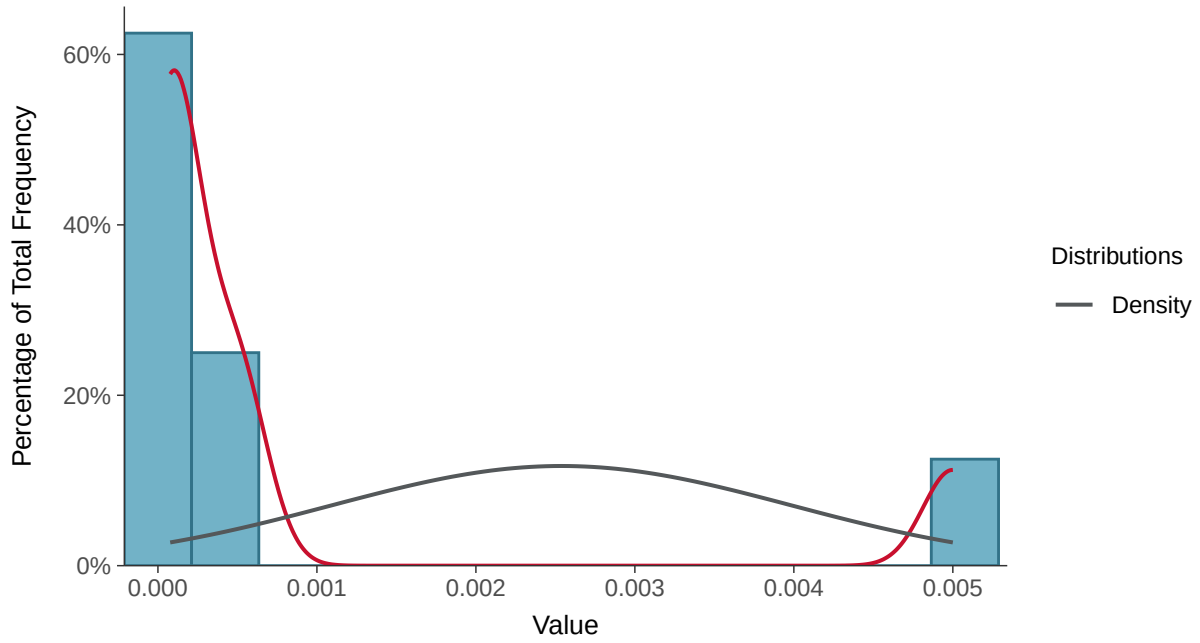
Scatter Plot

Cadmium, MW-17A (mg/l)



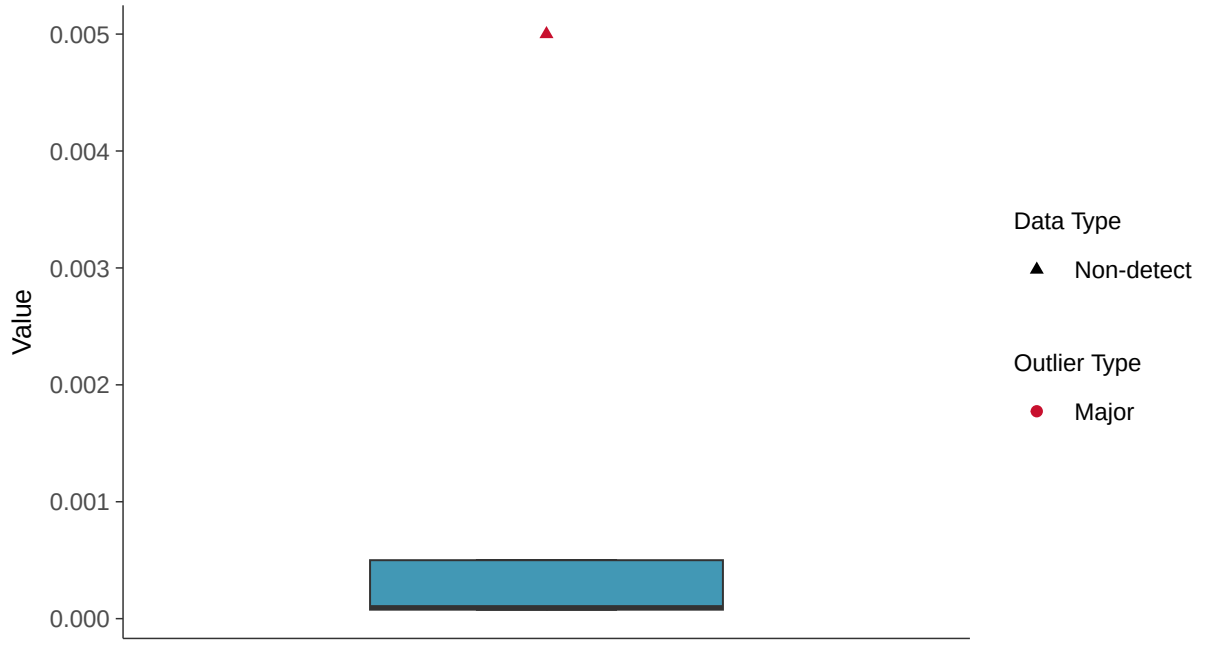
Histogram

Cadmium, MW-17A (mg/l)



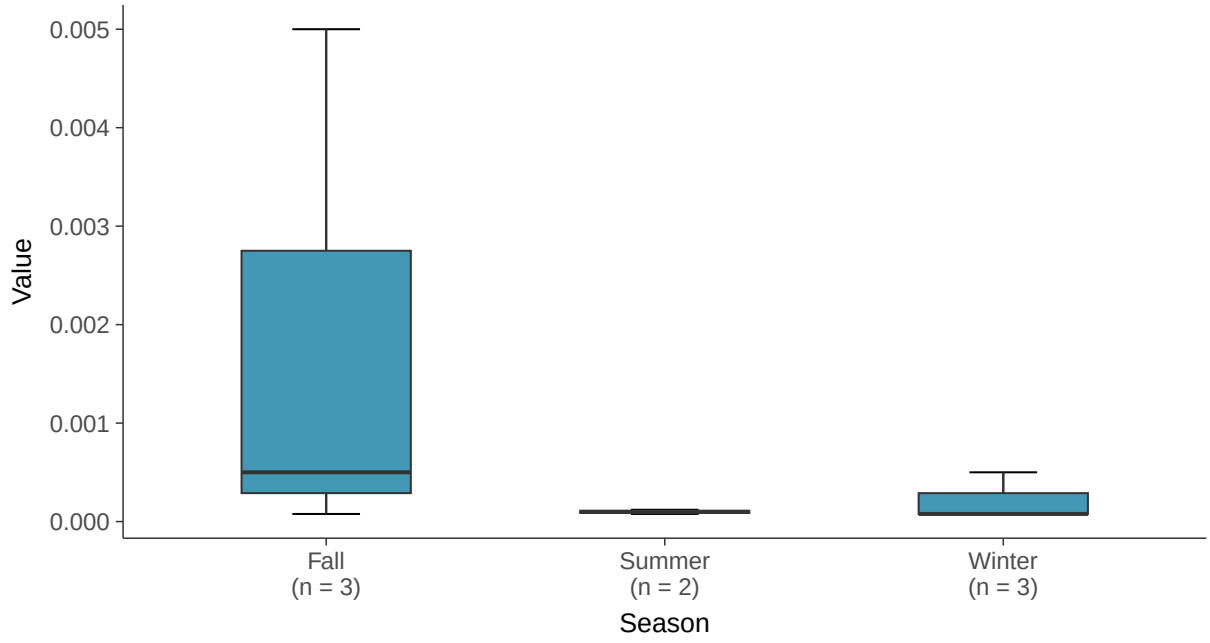
Boxplot

Cadmium, MW-17A (mg/l)



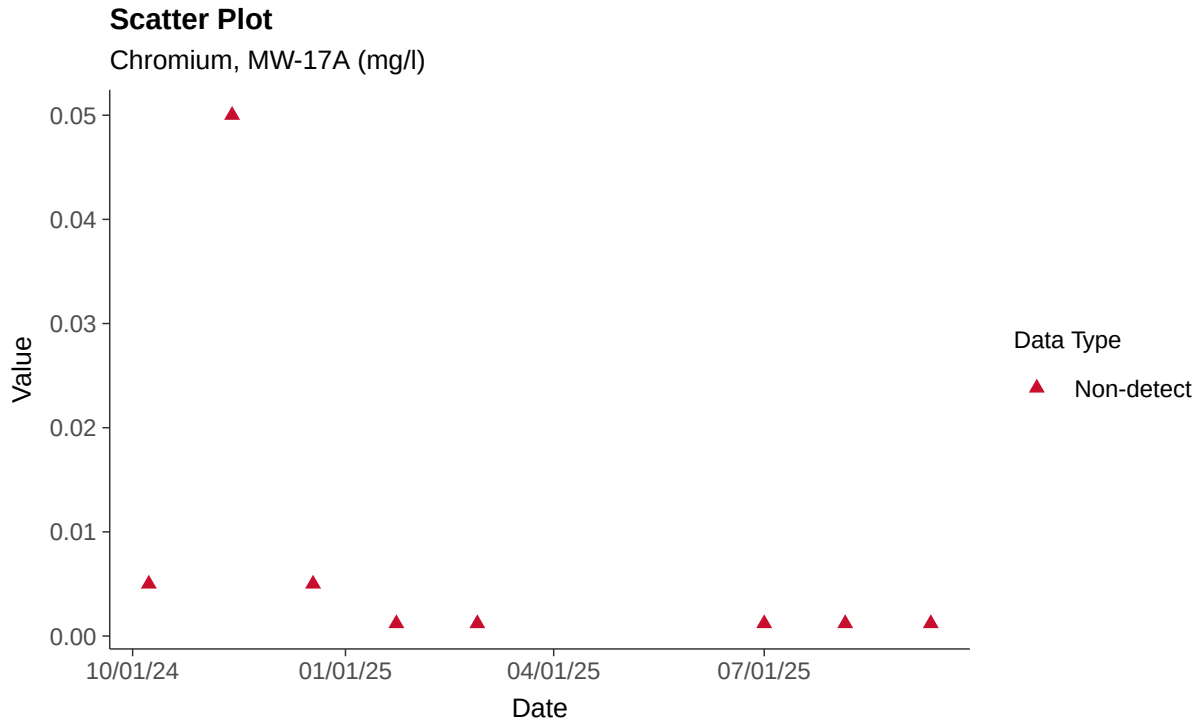
Boxplot by Season

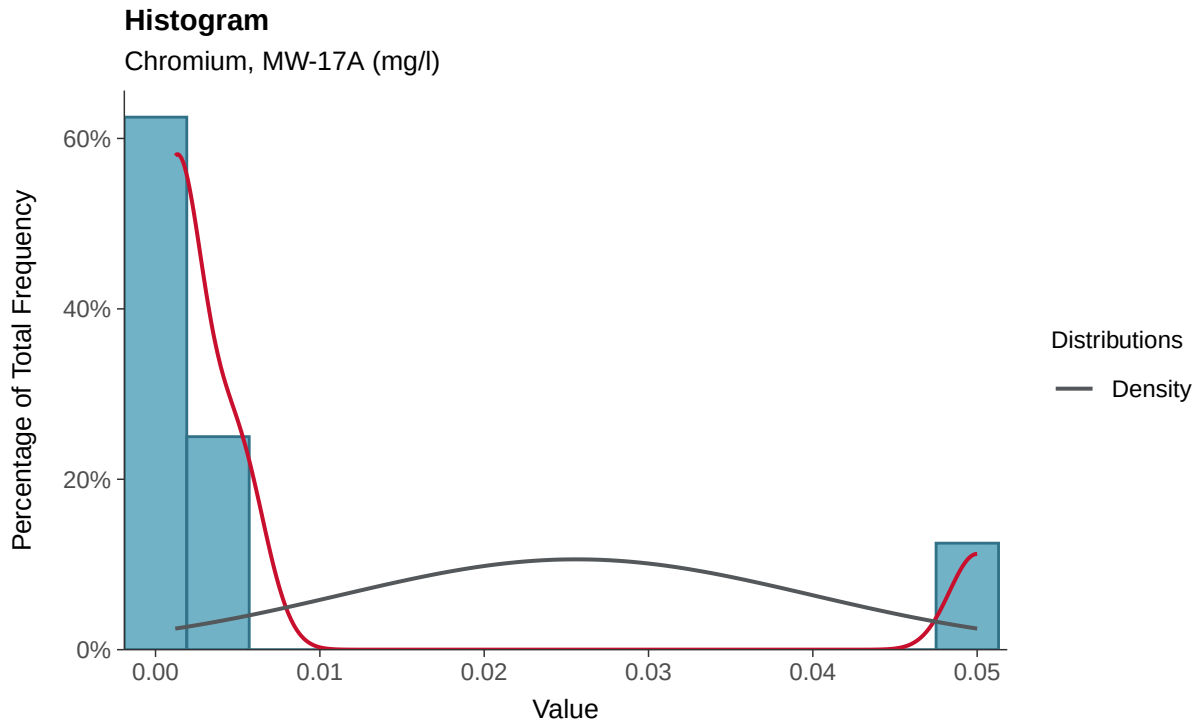
Cadmium, MW-17A (mg/l)

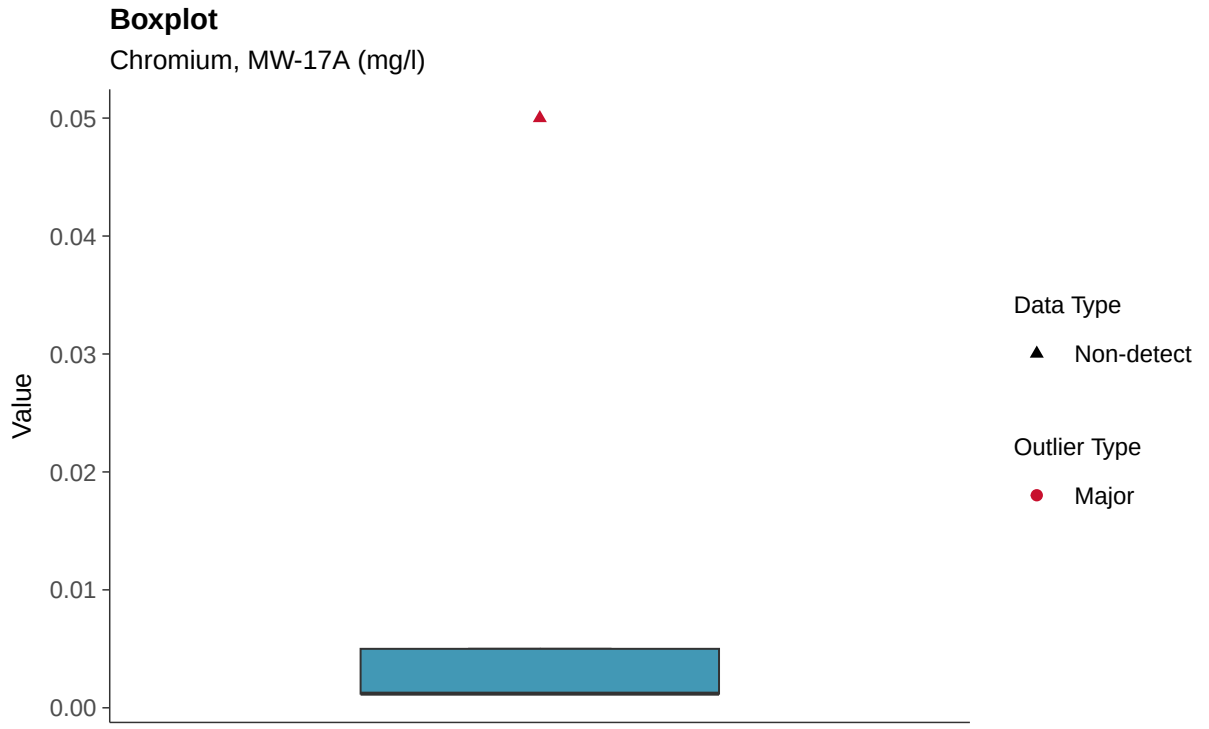


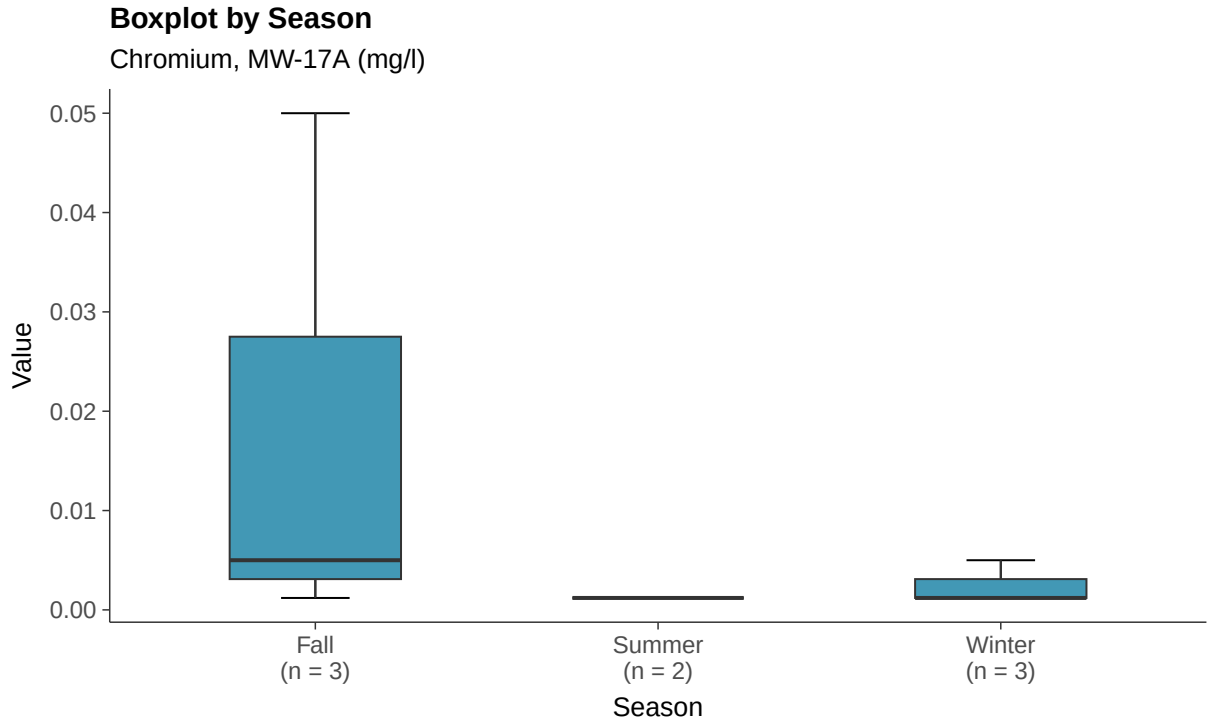
Appendix IV: Chromium, MW-17A

ID: 27_3_109



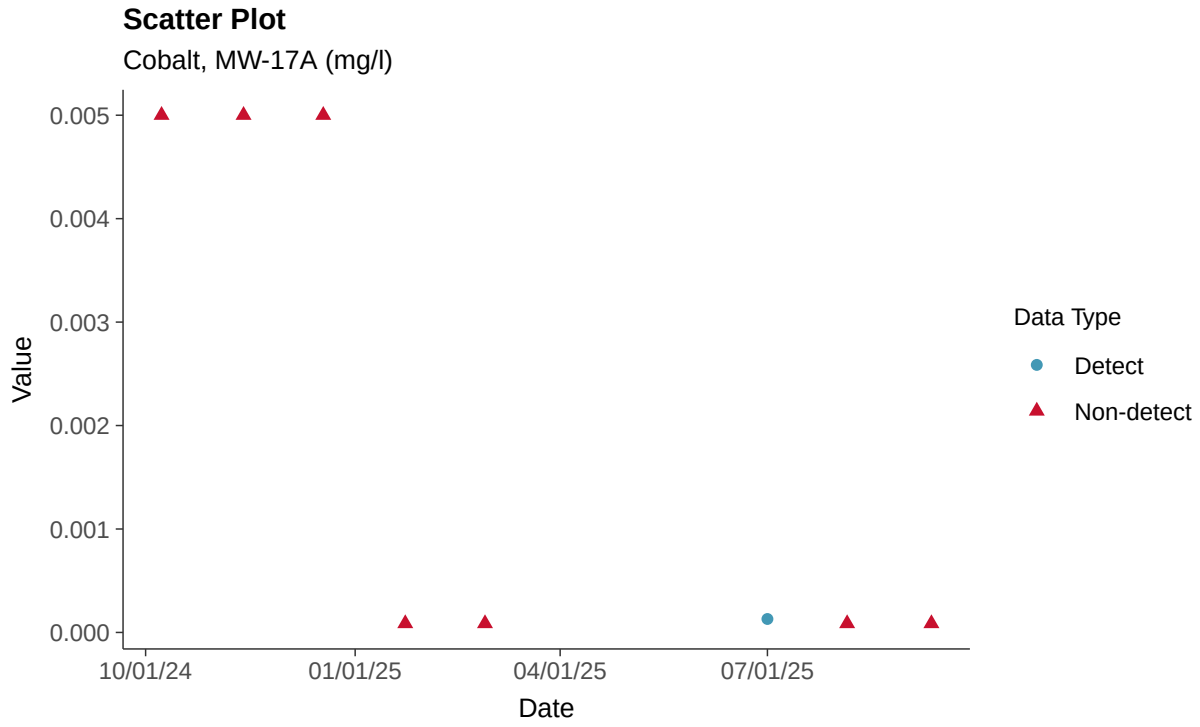


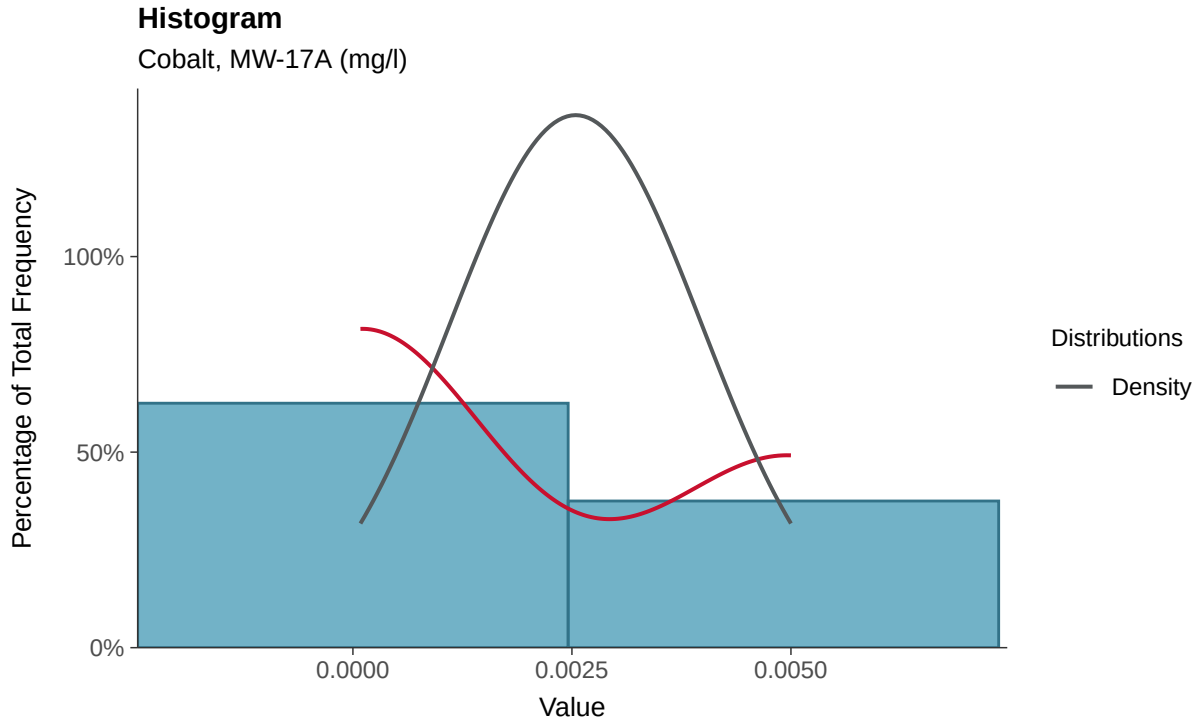

Boxplot
Chromium, MW-17A (mg/l)
Value
0.05
0.04
0.03
0.02
0.01
0.00
Data Type
Non-detect
Outlier Type
Major


Boxplot by Season
Chromium, MW-17A (mg/l)
Value
0.05
0.04
0.03
0.02
0.01
0.00
Fall
(n = 3)
Summer
(n = 2)
Winter
(n = 3)
Season

Appendix IV: Cobalt, MW-17A

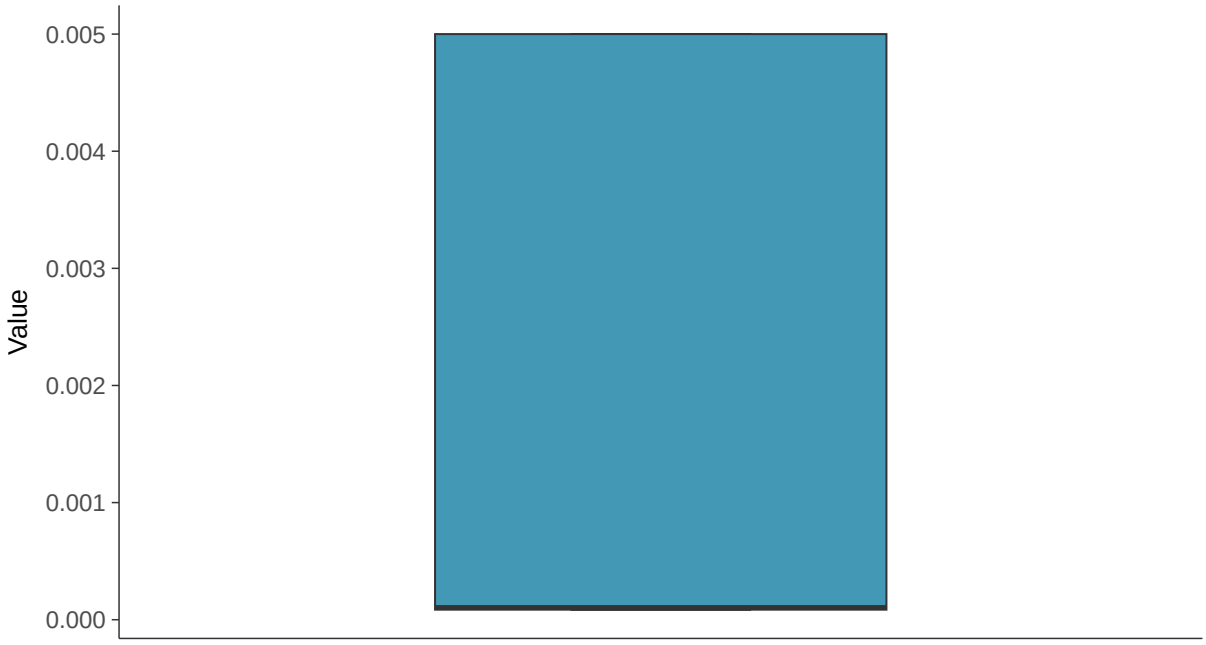
ID: 27_3_110





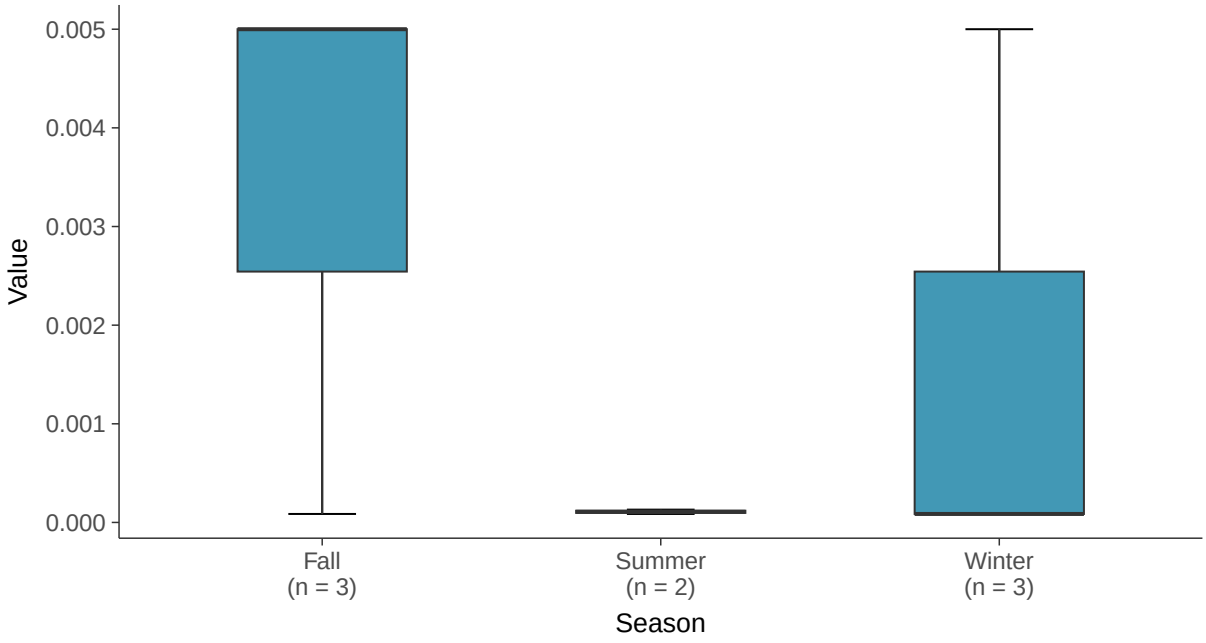
Boxplot

Cobalt, MW-17A (mg/l)



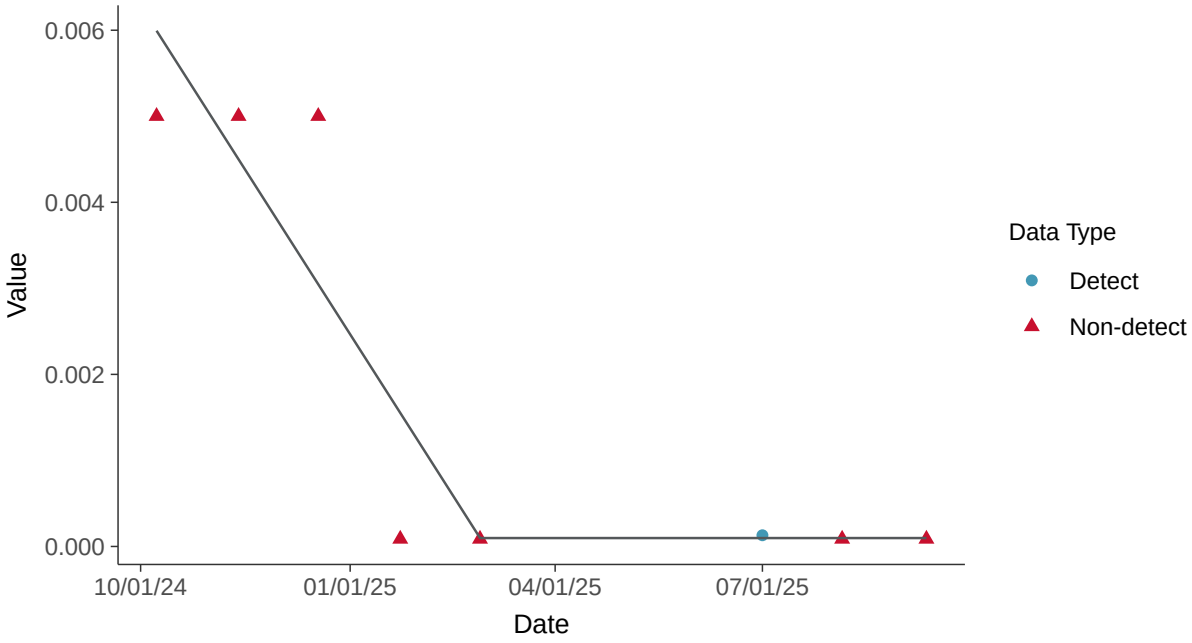
Boxplot by Season

Cobalt, MW-17A (mg/l)



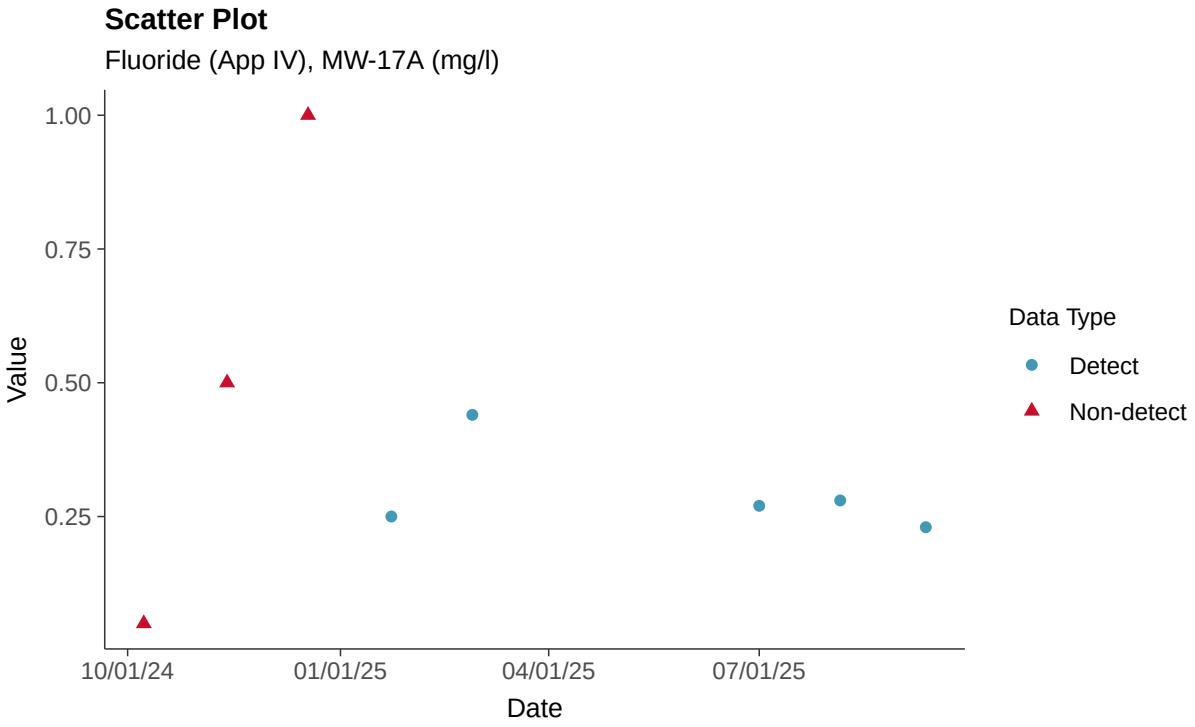
Trend Regression: Piecewise Linear-Linear

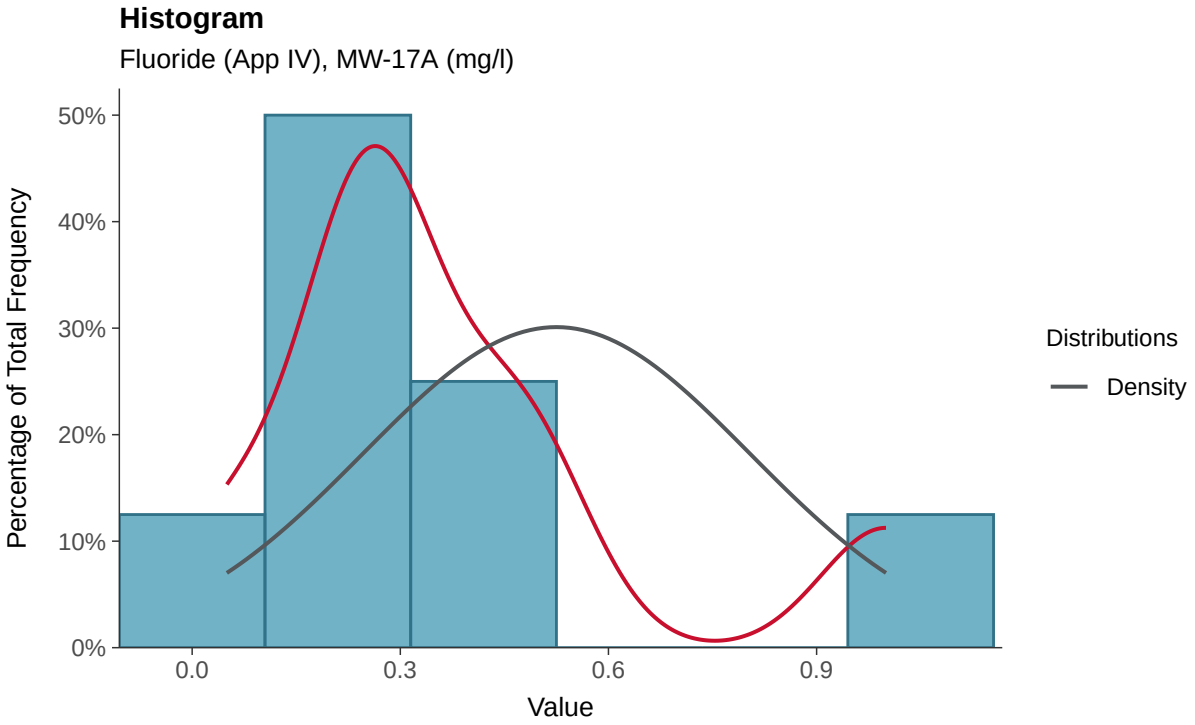
Cobalt, MW-17A (mg/l)



Appendix IV: Fluoride (App IV), MW-17A

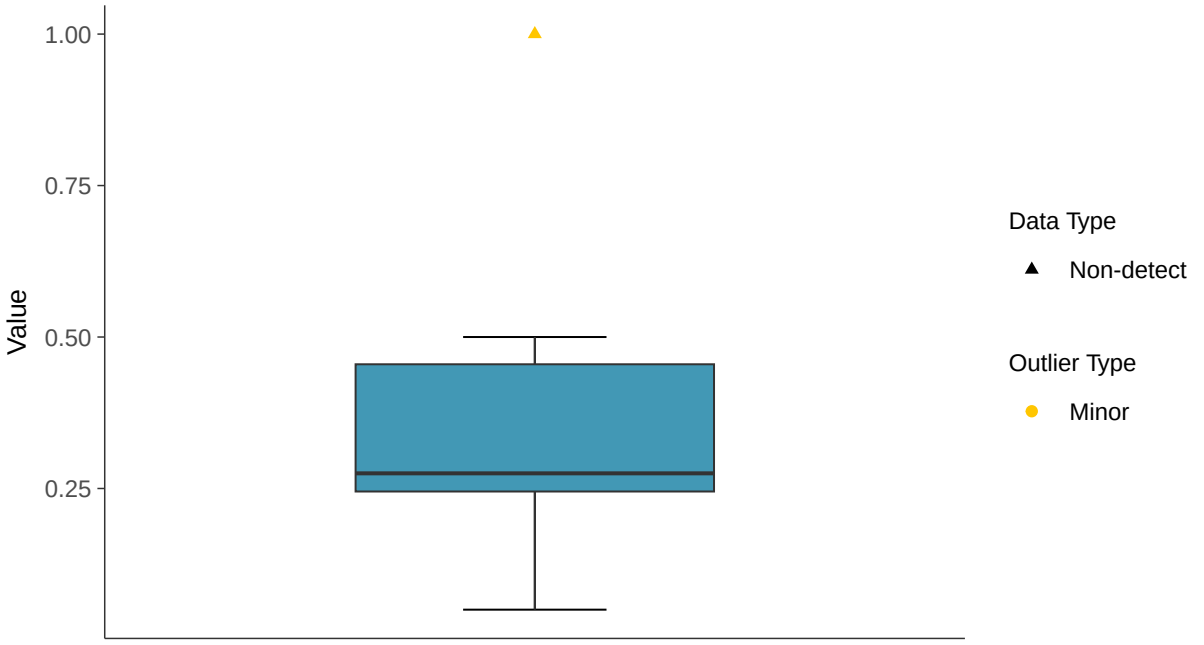
ID: 27_3_113





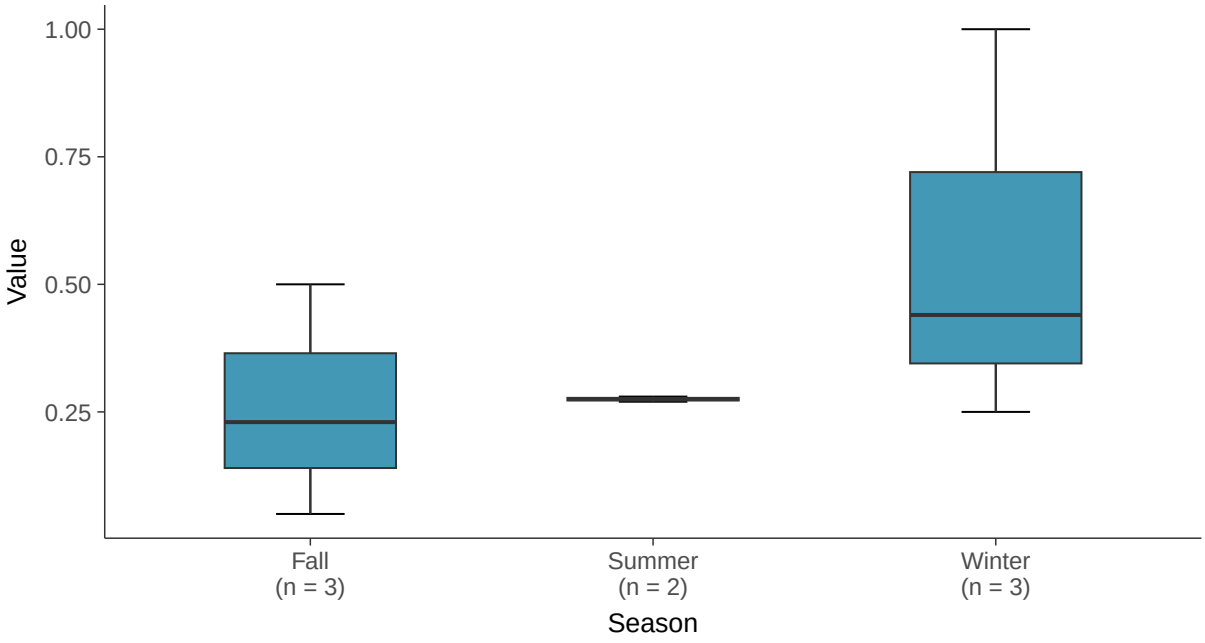
Boxplot

Fluoride (App IV), MW-17A (mg/l)



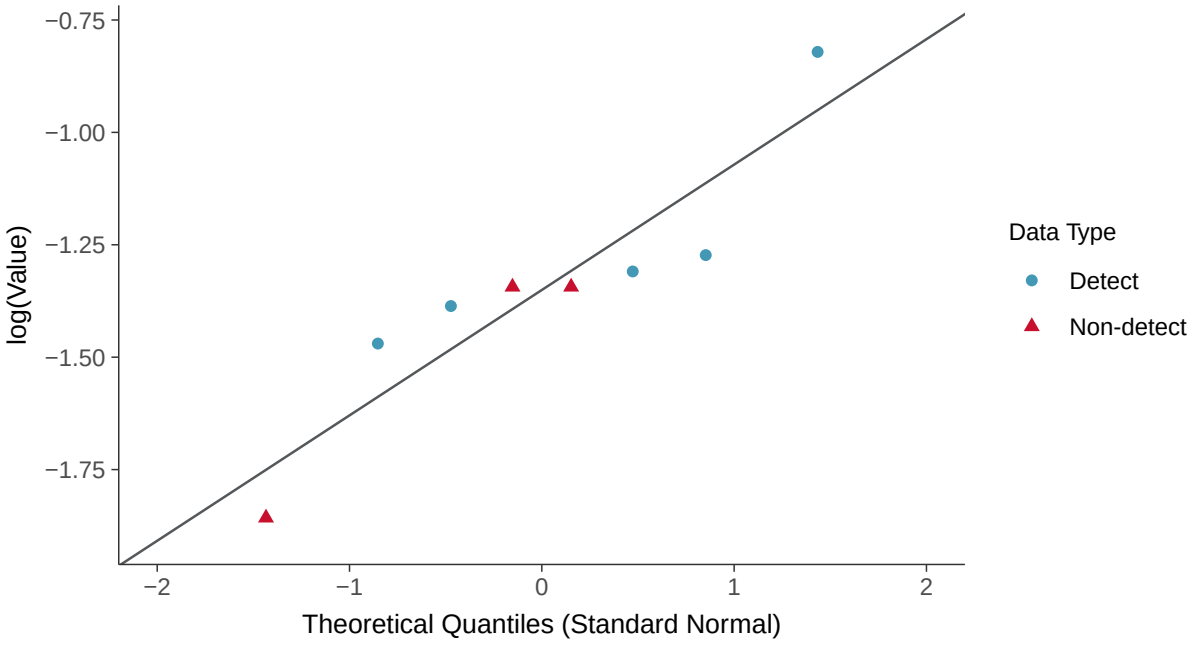
Boxplot by Season

Fluoride (App IV), MW-17A (mg/l)



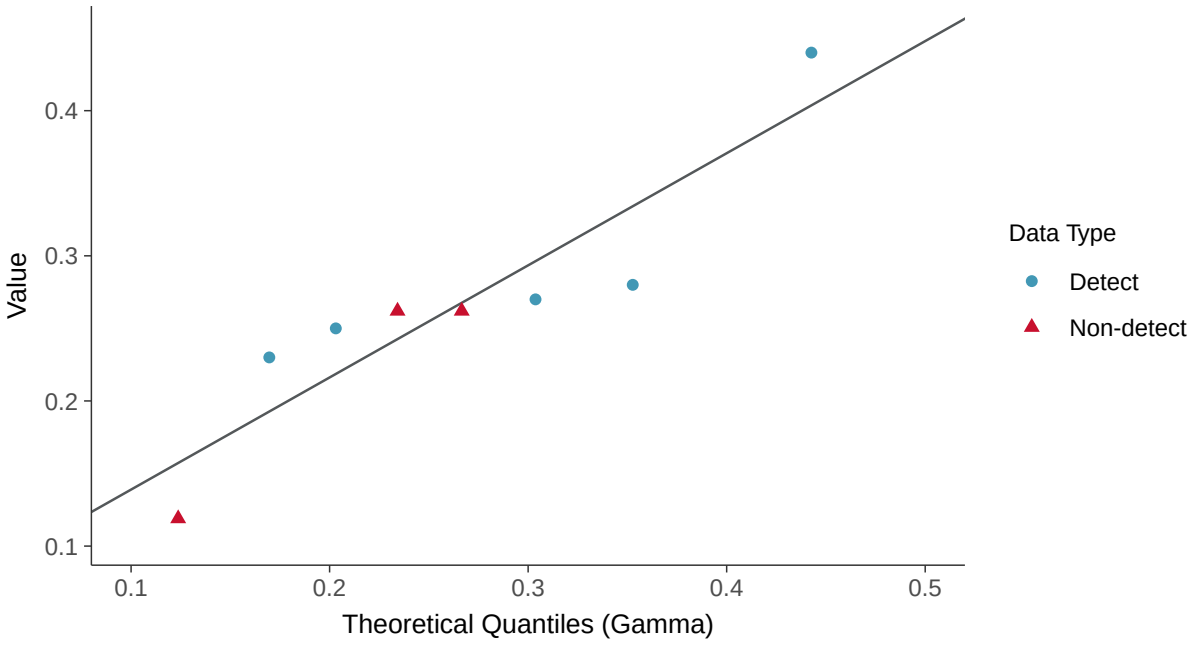
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-17A (mg/l)



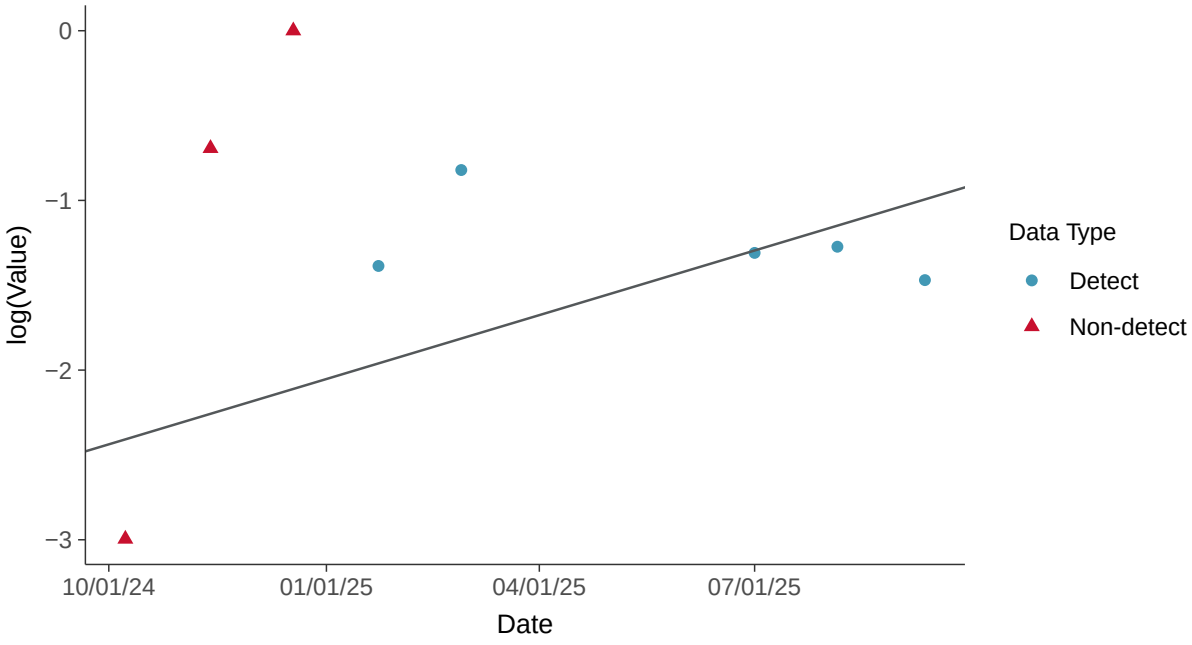
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-17A (mg/l)



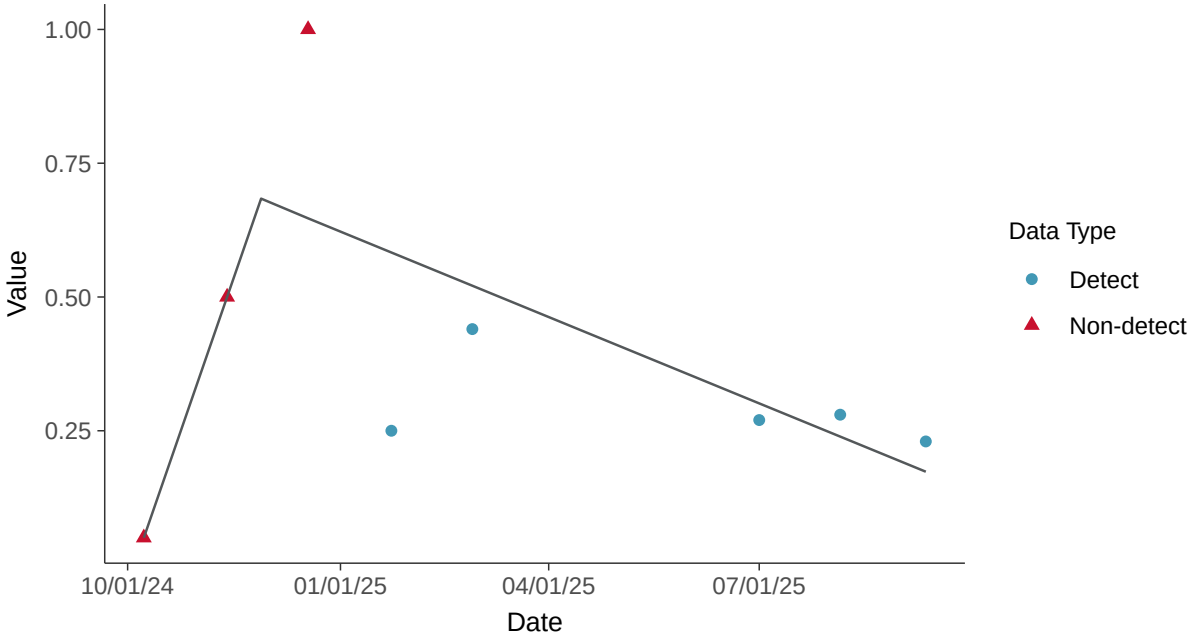
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-17A (mg/l)



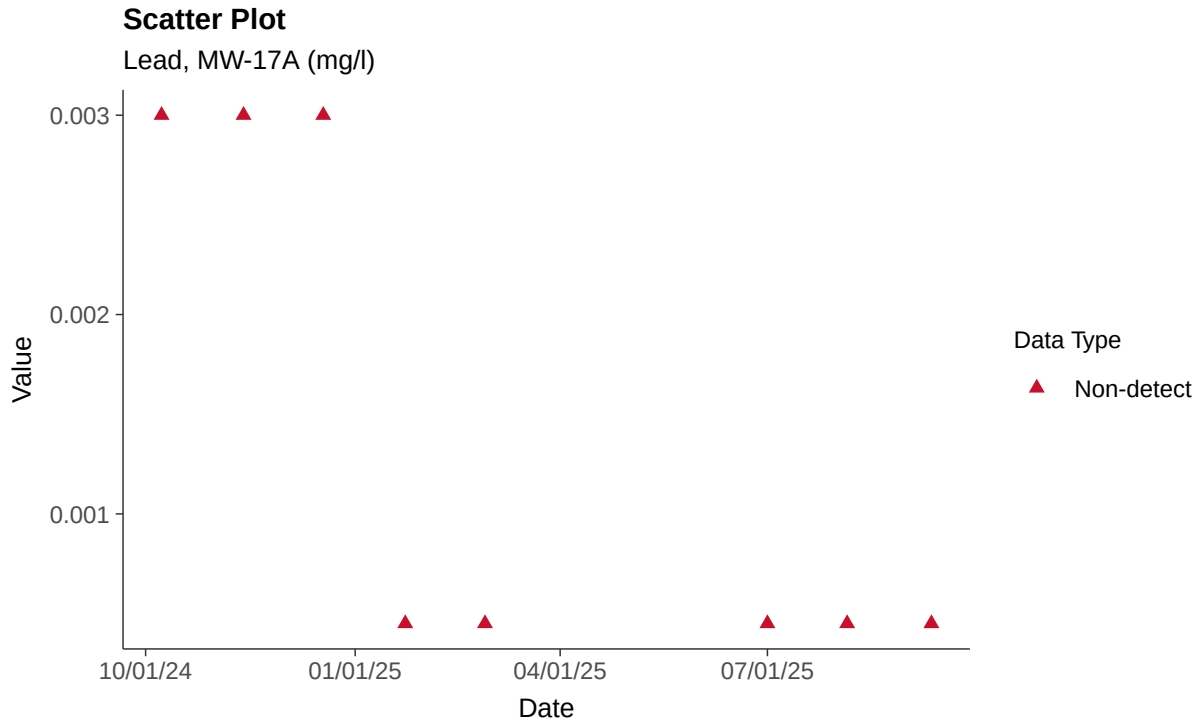
Trend Regression: Piecewise Linear-Linear

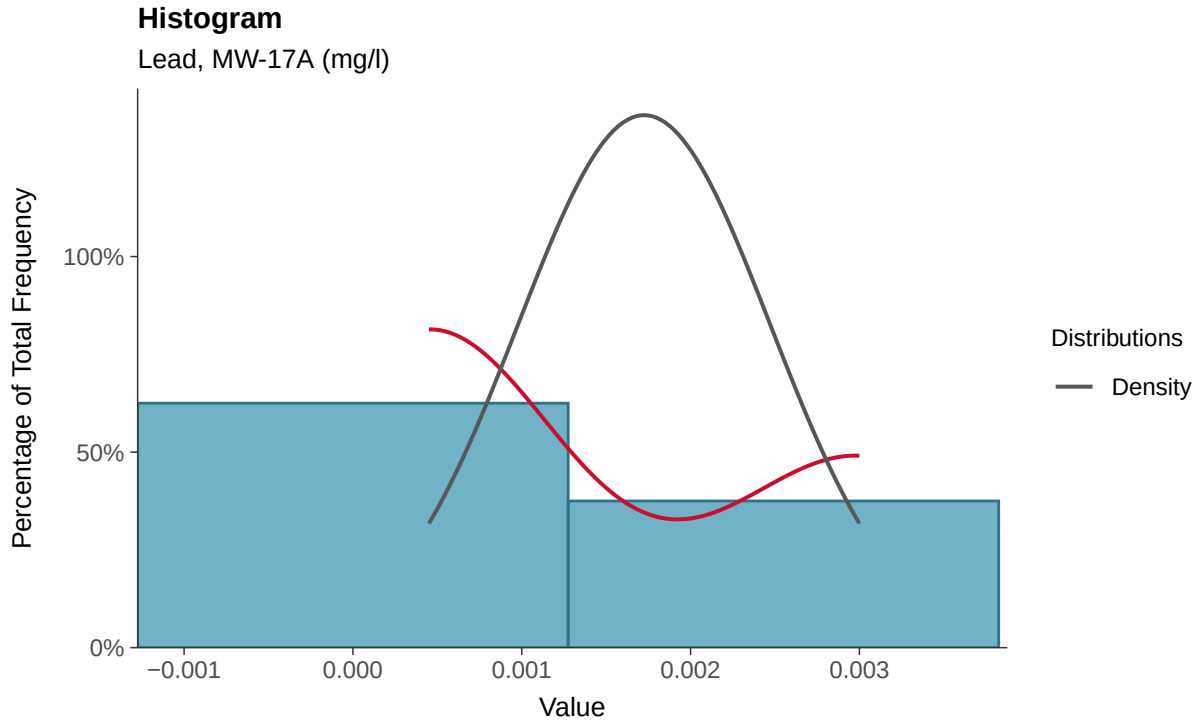
Fluoride (App IV), MW-17A (mg/l)



Appendix IV: Lead, MW-17A

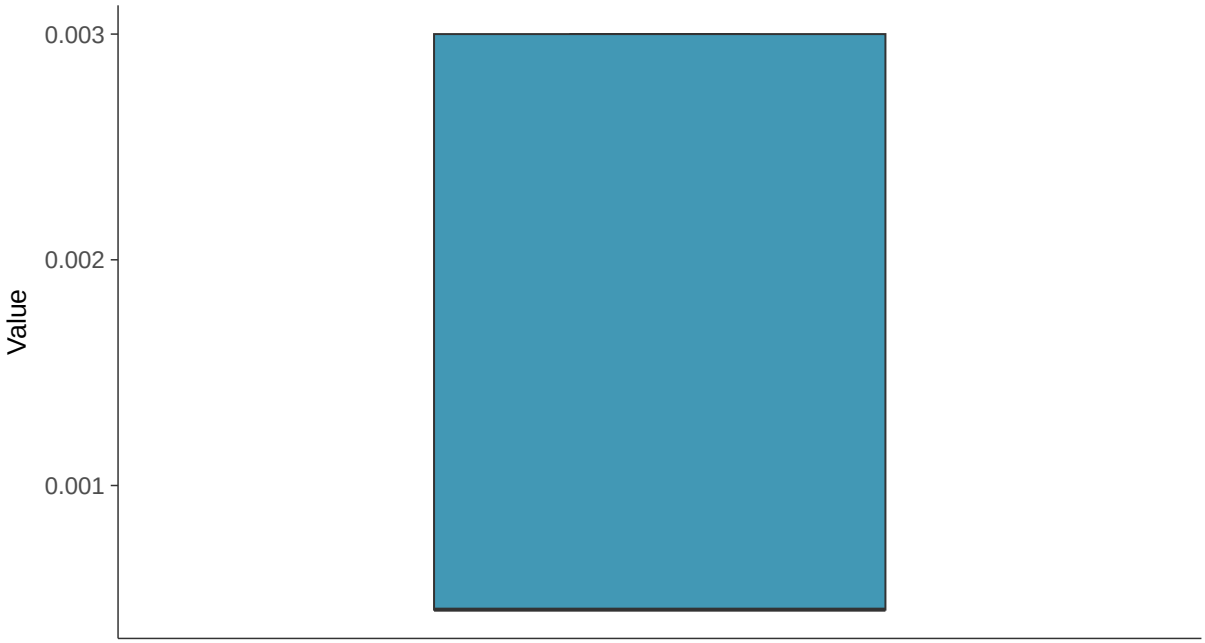
ID: 27_3_115





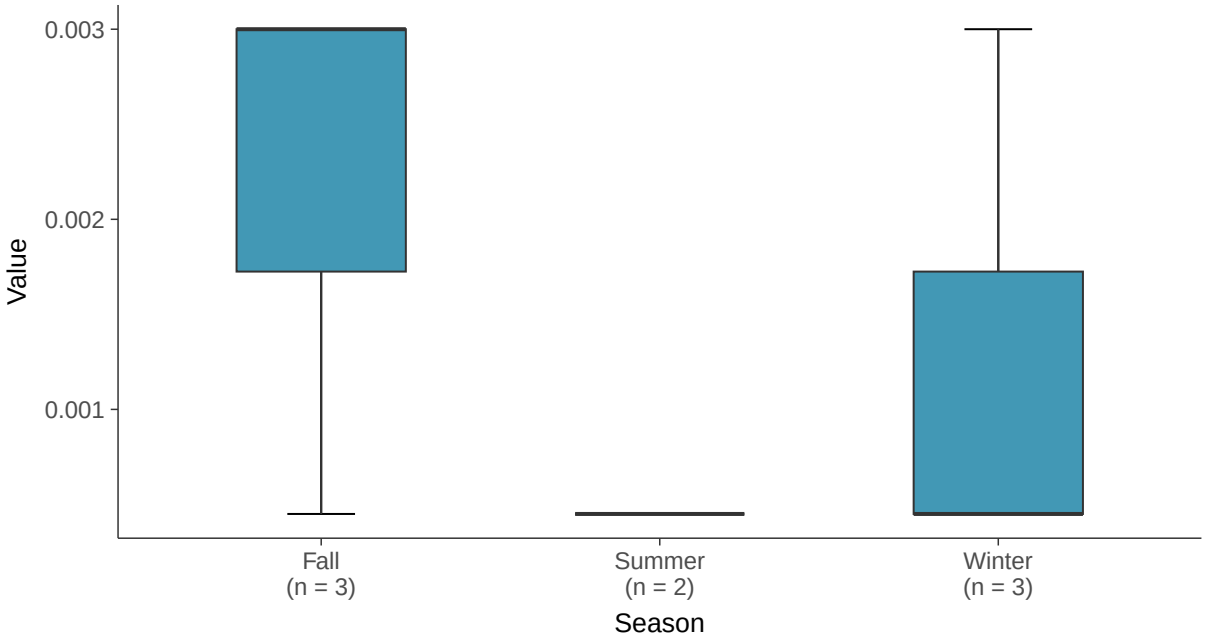
Boxplot

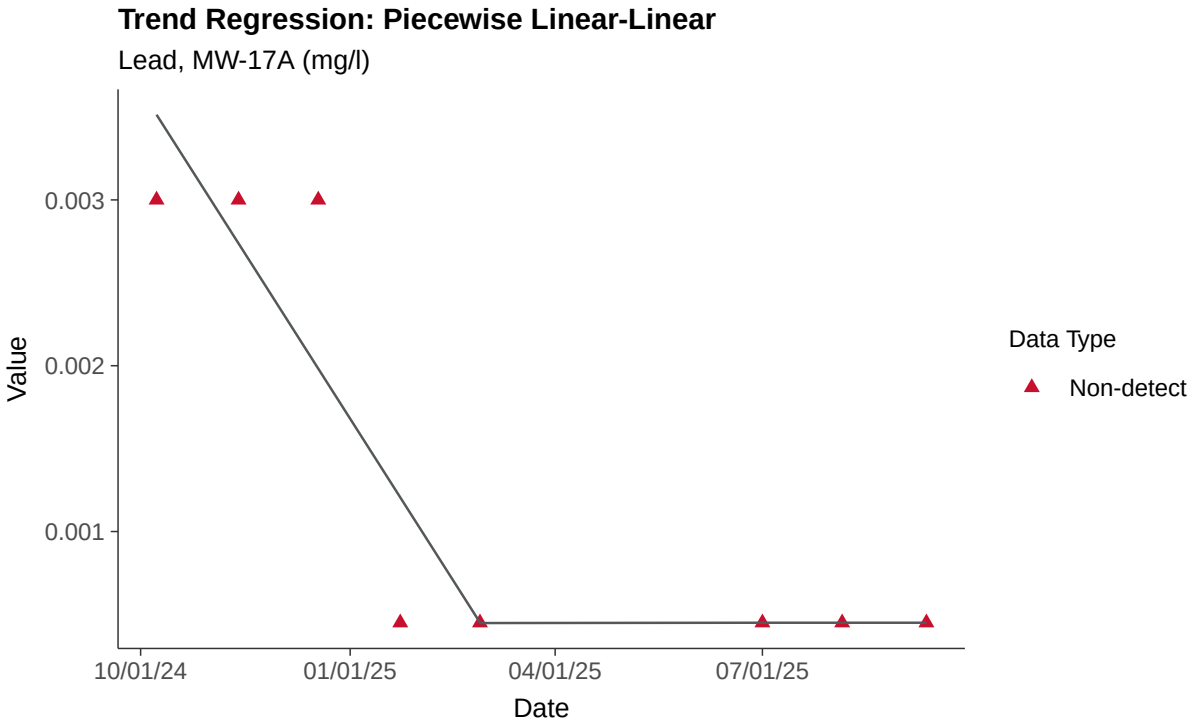
Lead, MW-17A (mg/l)



Boxplot by Season

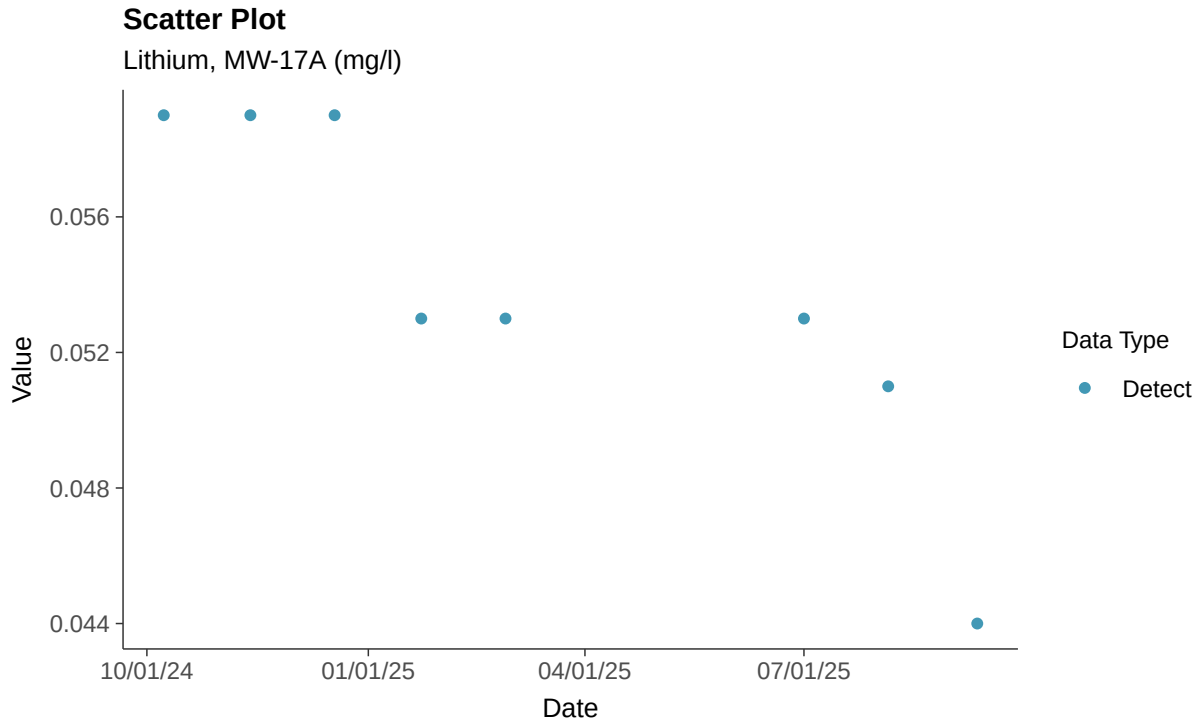
Lead, MW-17A (mg/l)

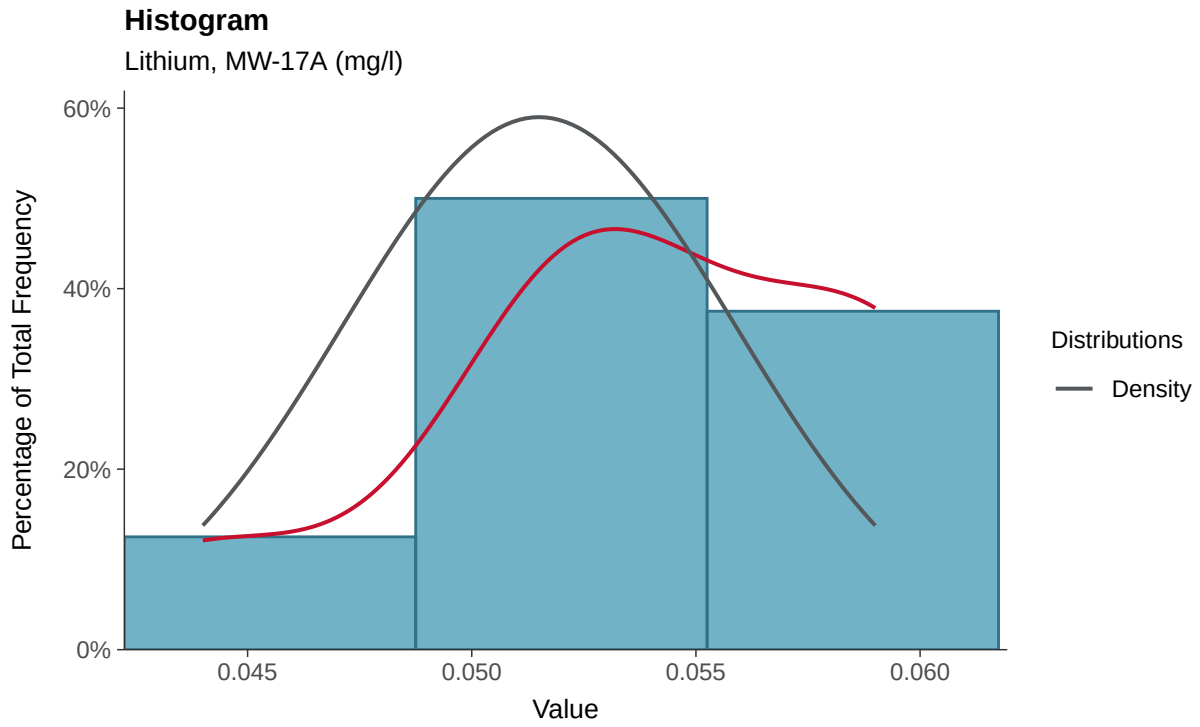



Trend Regression: Piecewise Linear-Linear
Lead, MW-17A (mg/l)
Value
0.003
0.002
0.001
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Lithium, MW-17A

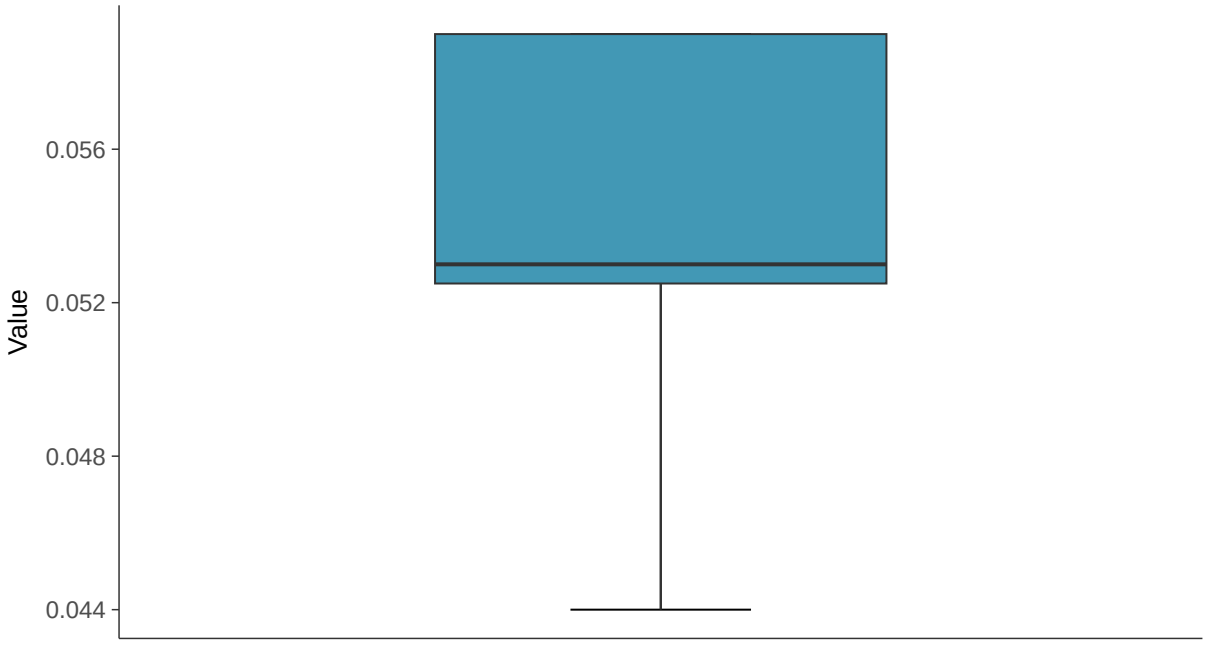
ID: 27_3_116





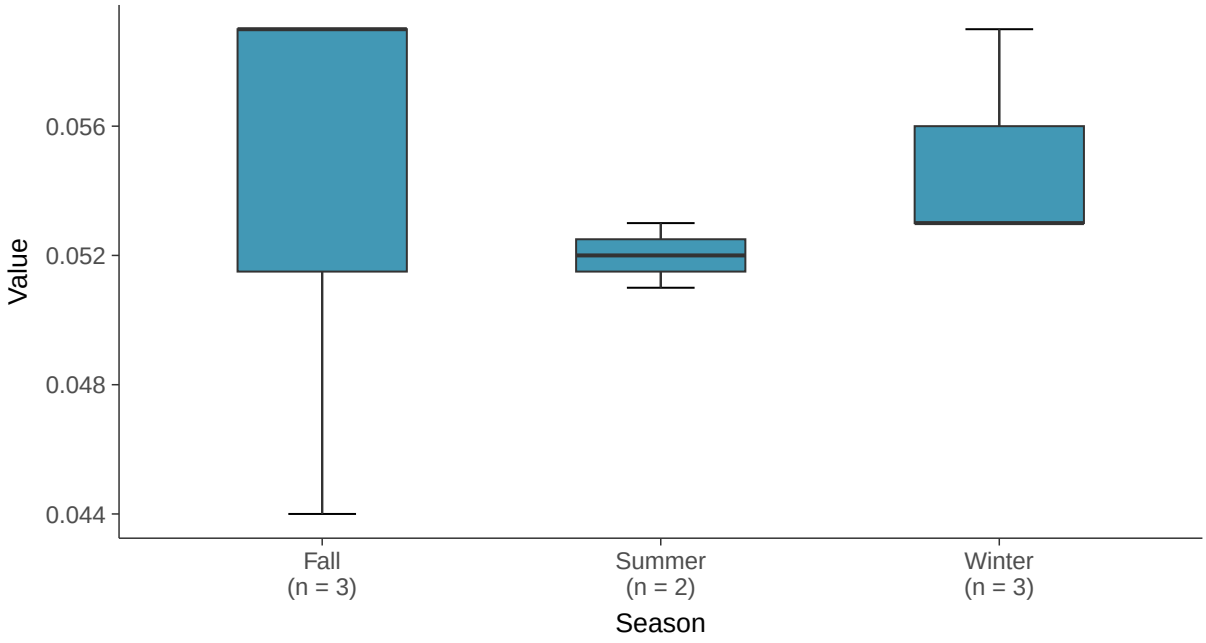
Boxplot

Lithium, MW-17A (mg/l)



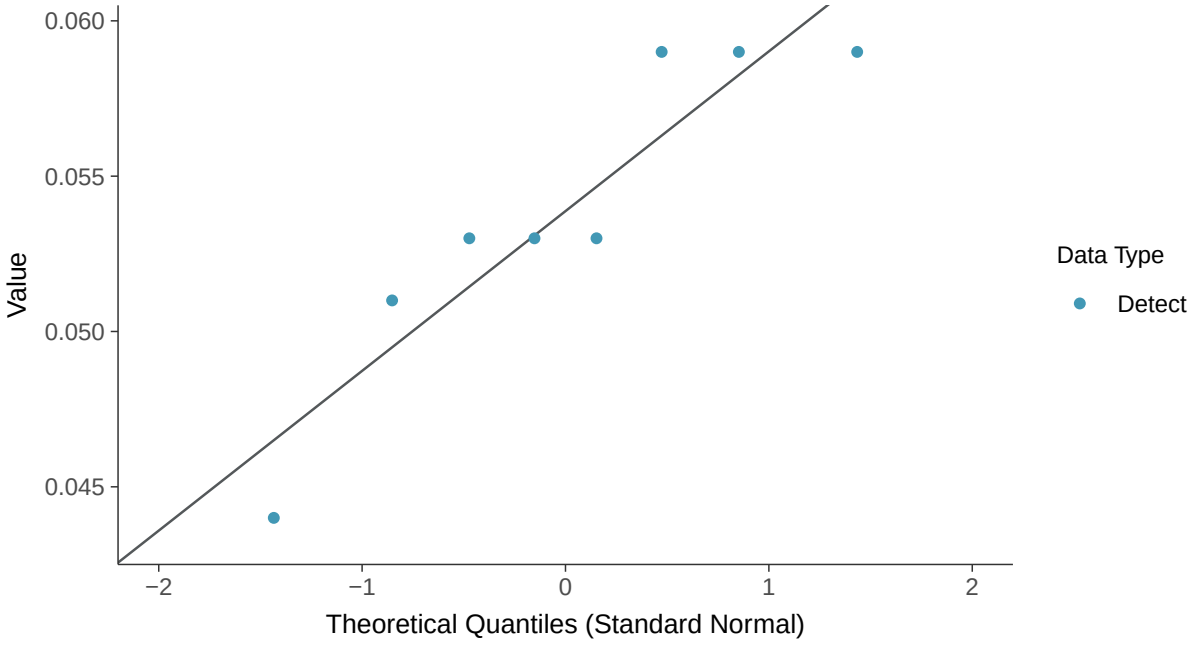
Boxplot by Season

Lithium, MW-17A (mg/l)



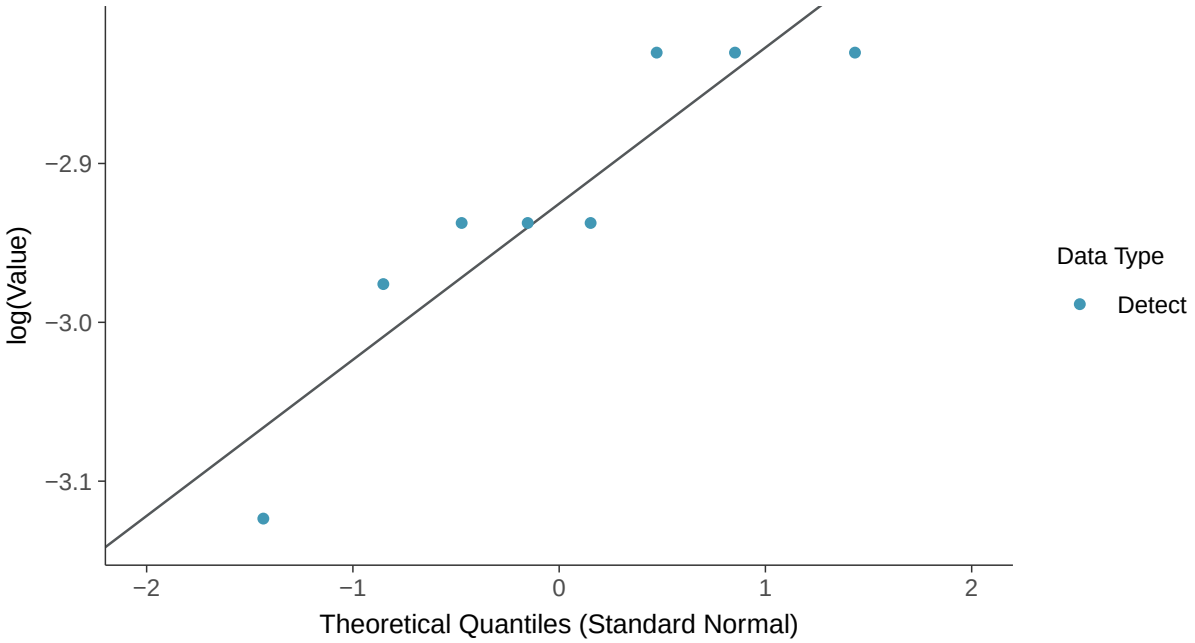
Normal Q-Q plot

Lithium, MW-17A (mg/l)



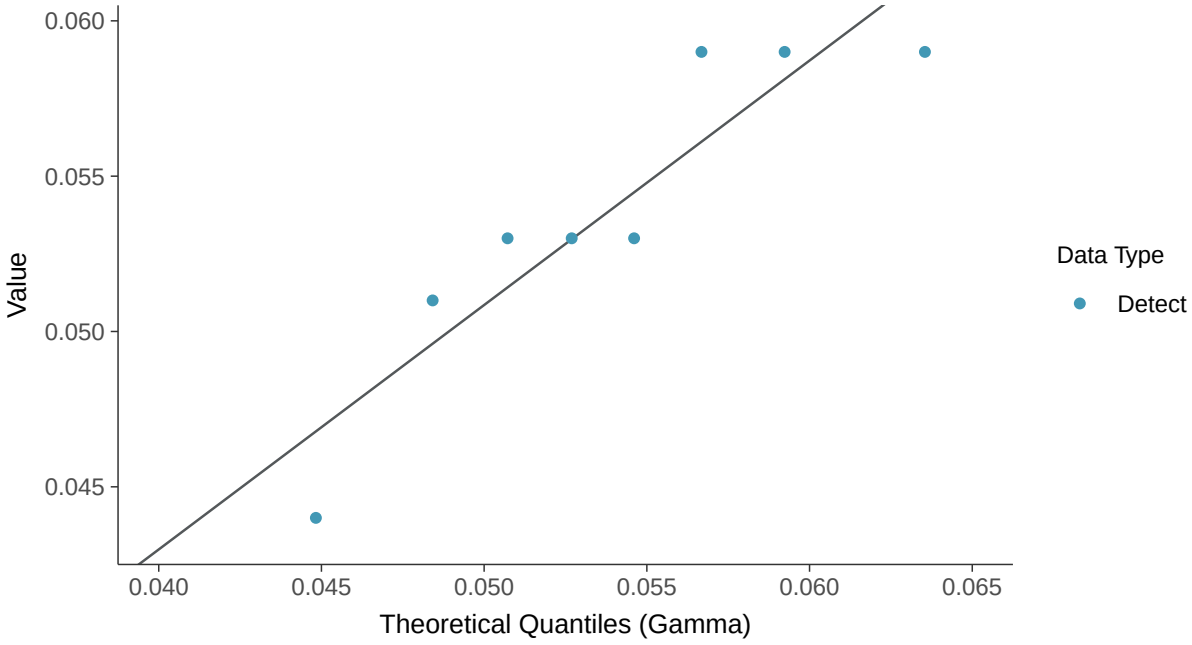
Lognormal Q-Q plot

Lithium, MW-17A (mg/l)



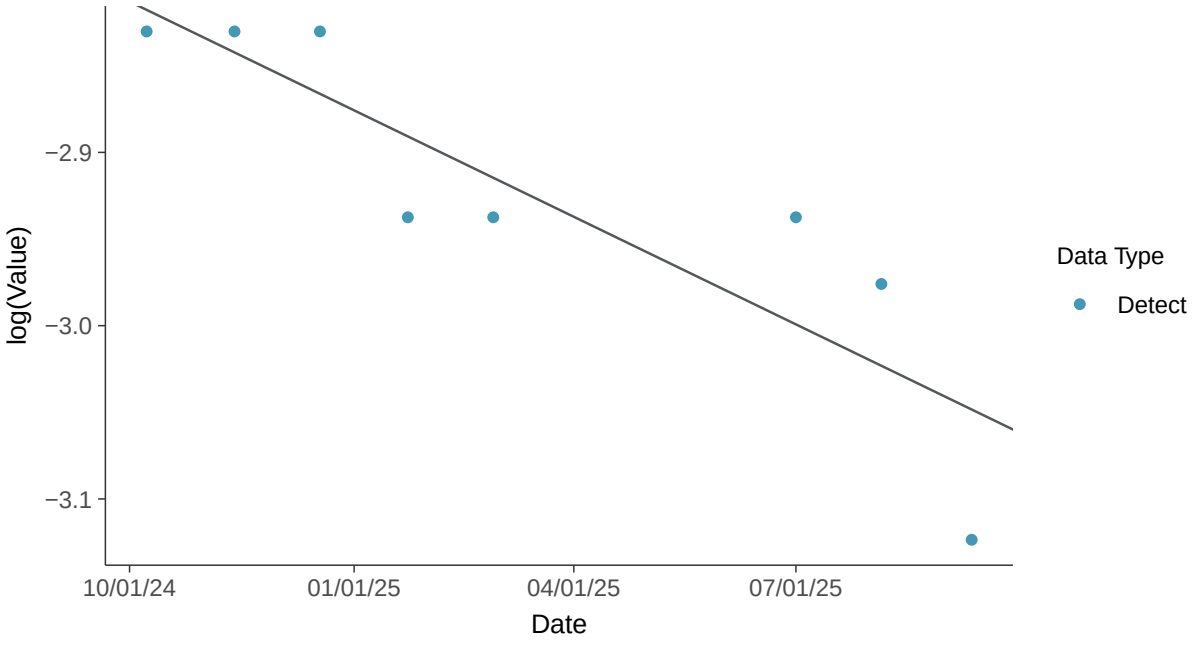
Gamma Q-Q plot

Lithium, MW-17A (mg/l)



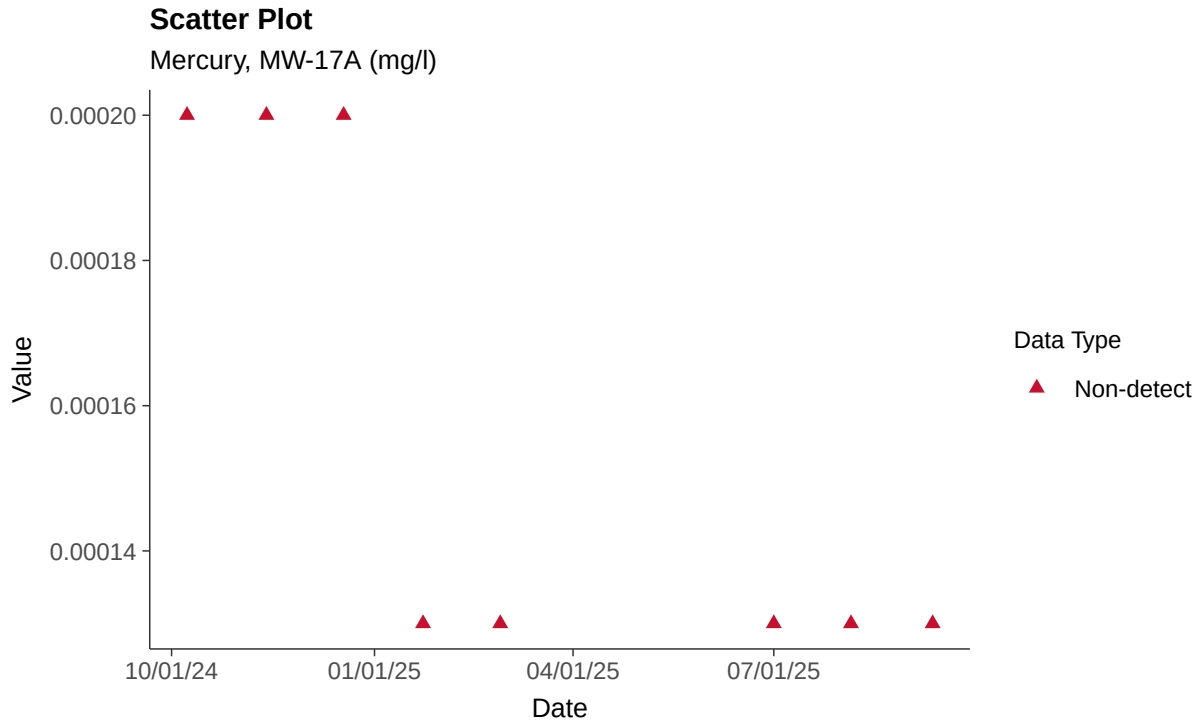
Trend Regression: Lognormal MLE

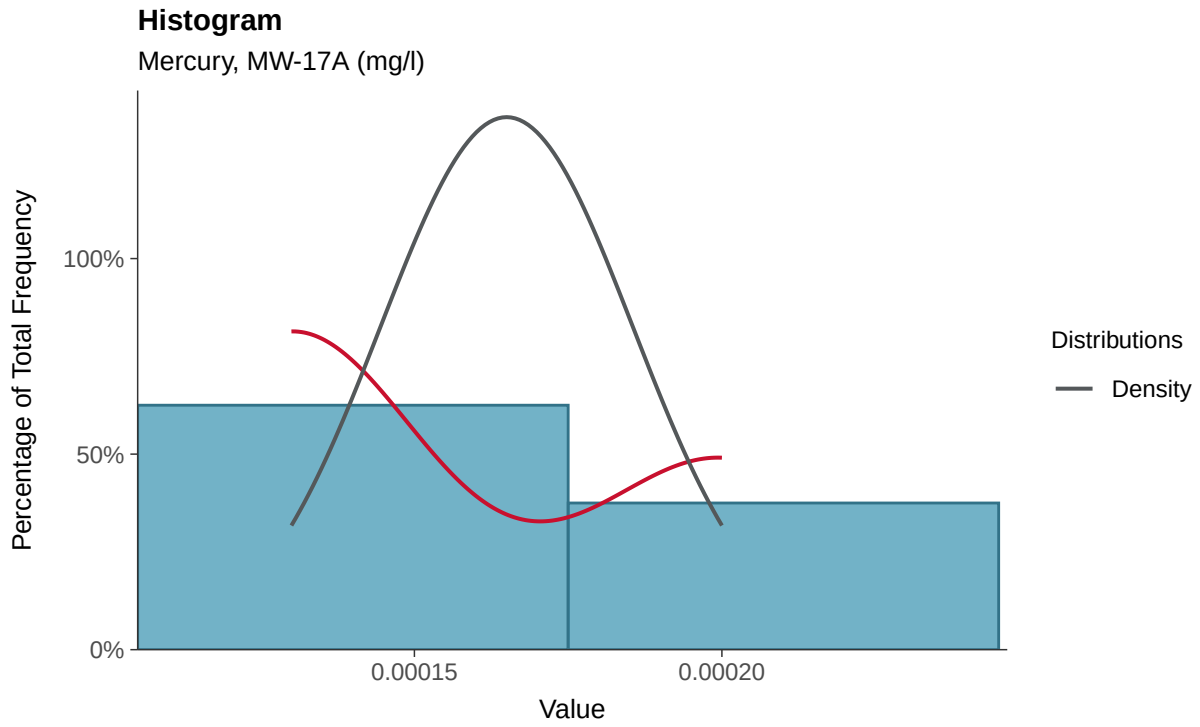
Lithium, MW-17A (mg/l)



Appendix IV: Mercury, MW-17A

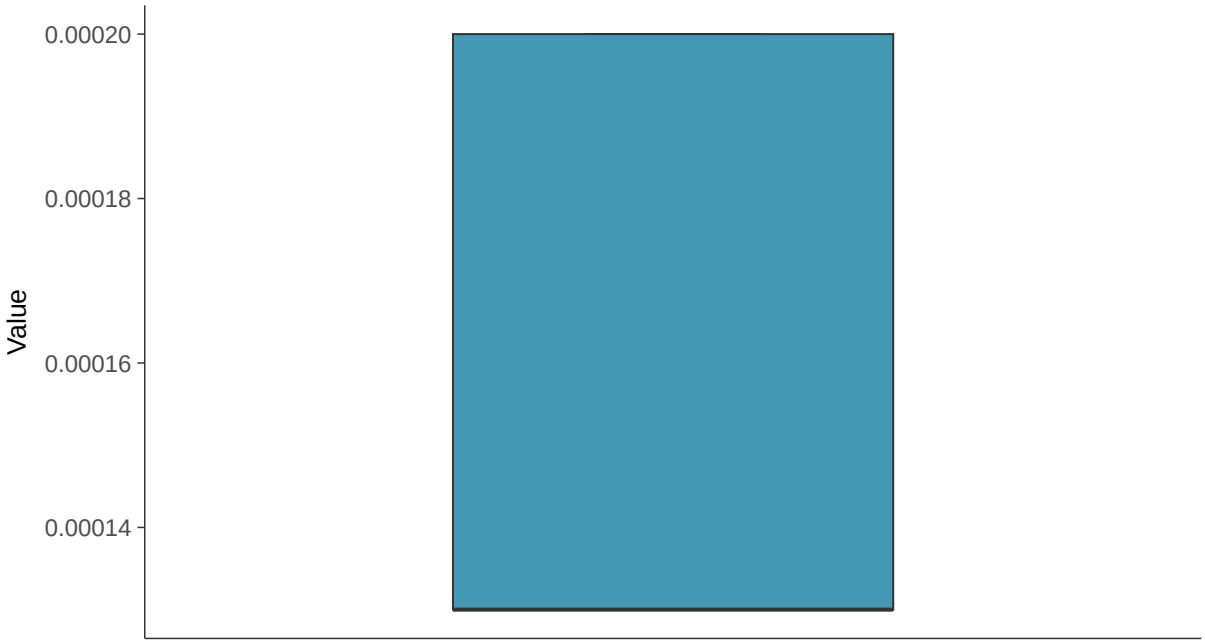
ID: 27_3_117





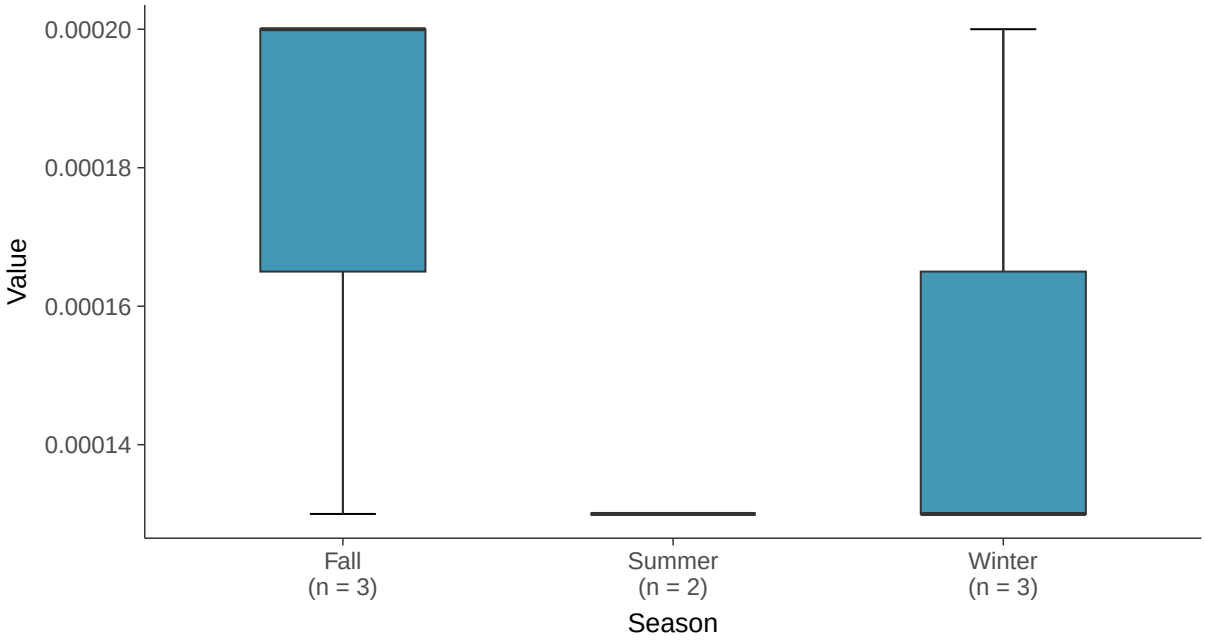
Boxplot

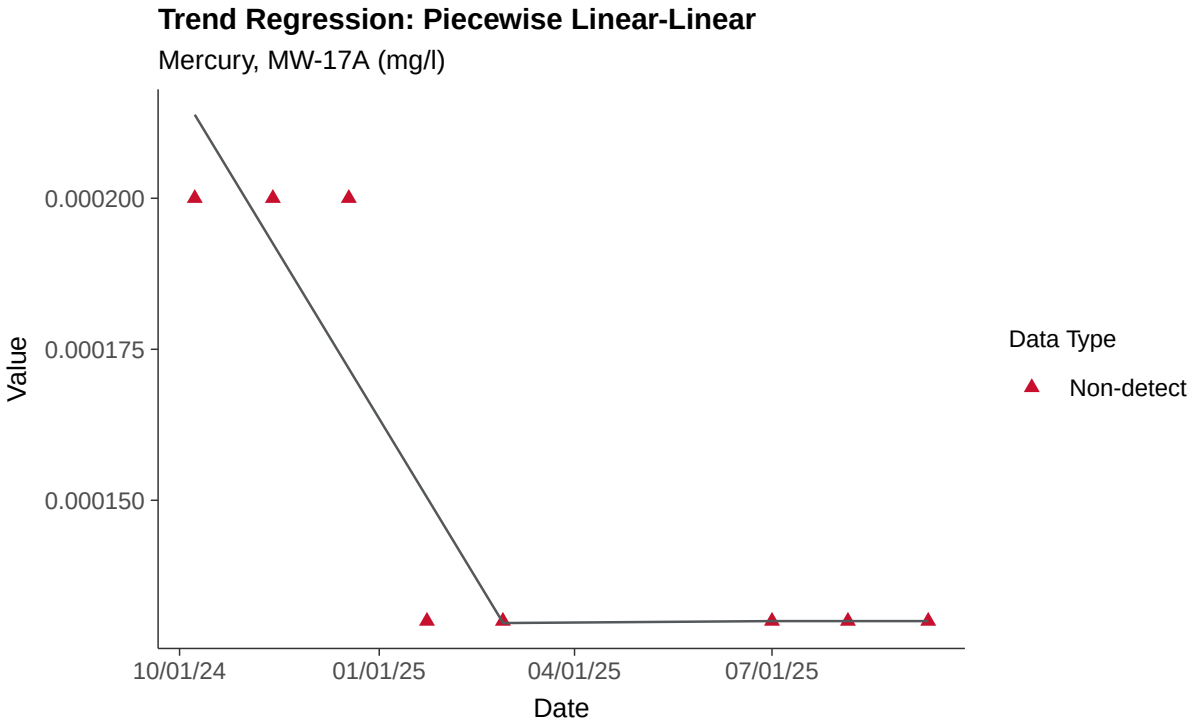
Mercury, MW-17A (mg/l)



Boxplot by Season

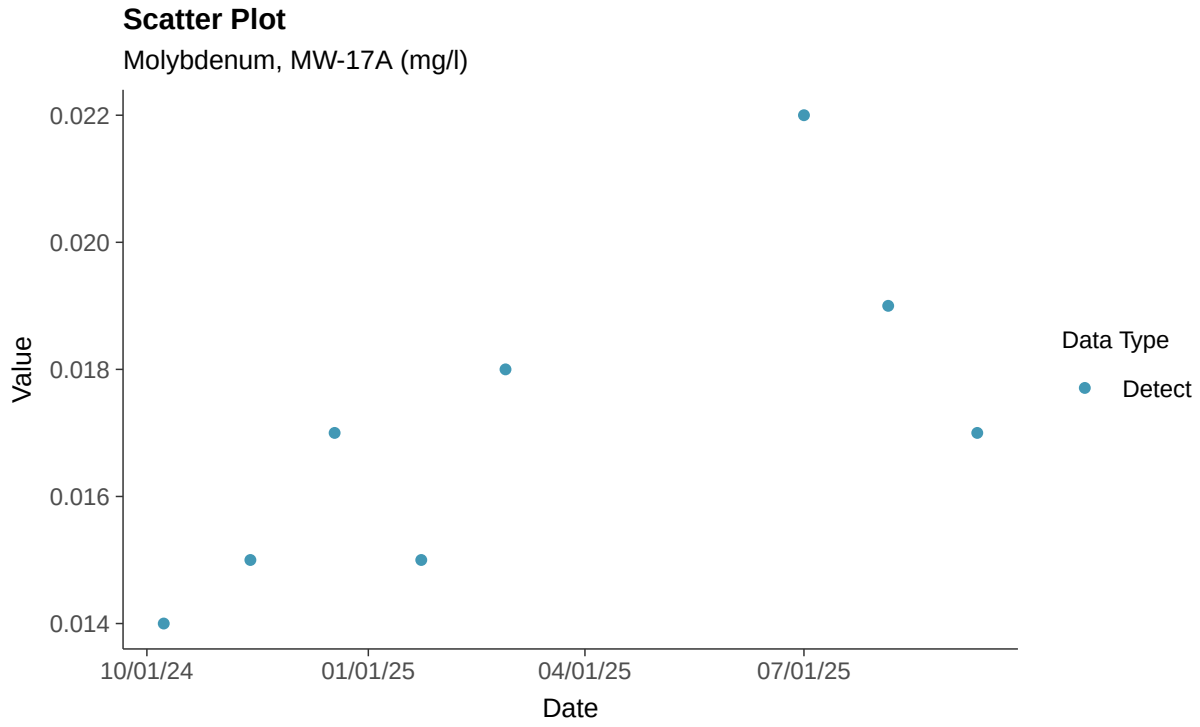
Mercury, MW-17A (mg/l)

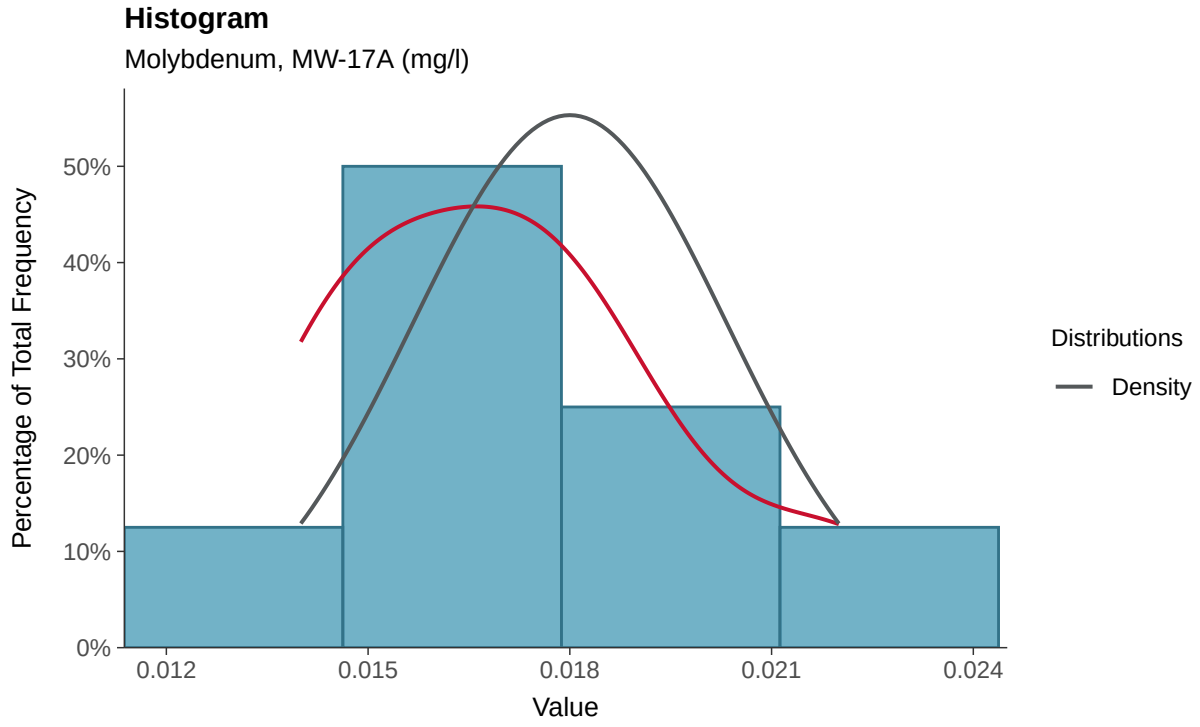



Trend Regression: Piecewise Linear-Linear
Mercury, MW-17A (mg/l)
Value
0.000200
0.000175
0.000150
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Molybdenum, MW-17A

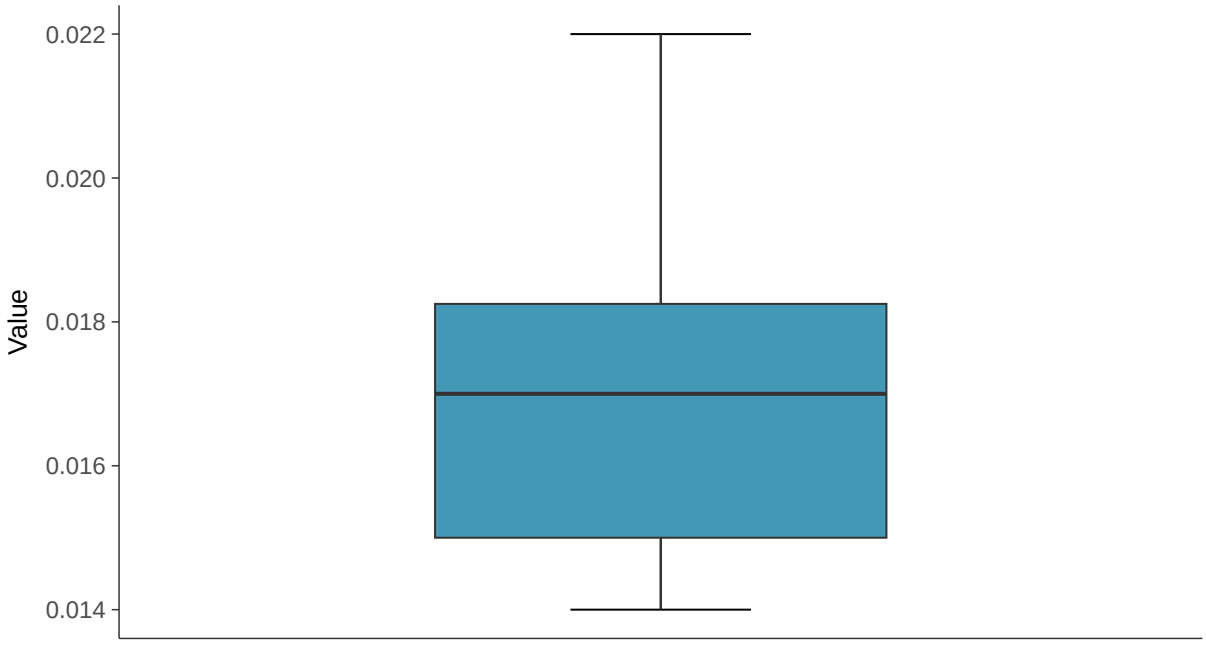
ID: 27_3_118





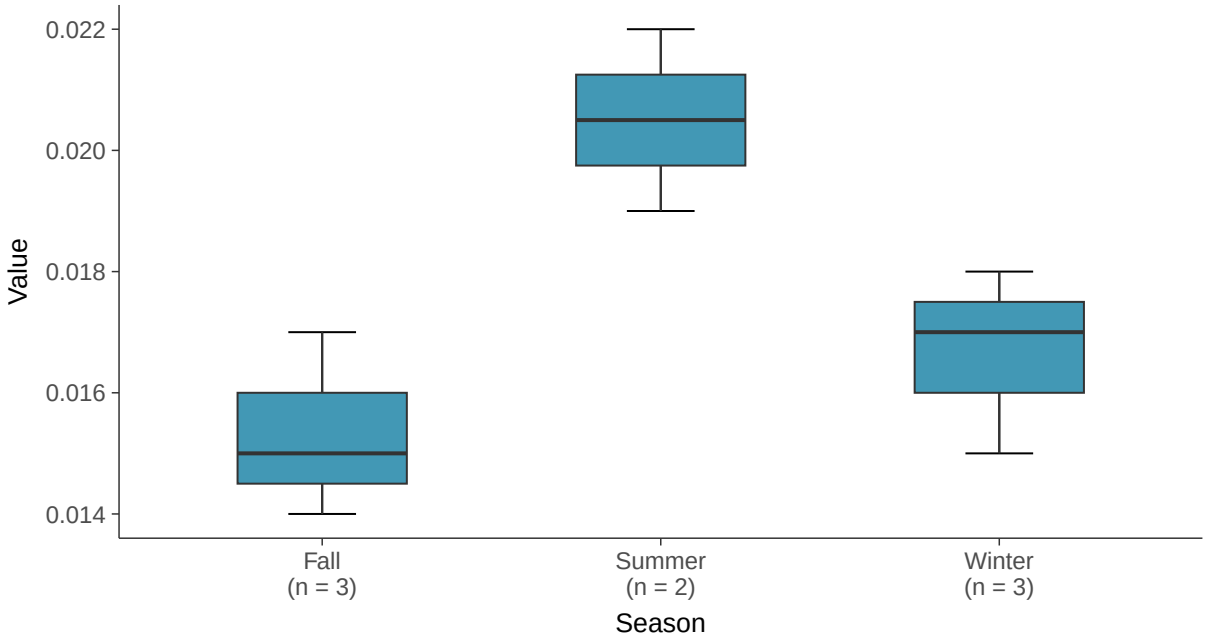
Boxplot

Molybdenum, MW-17A (mg/l)



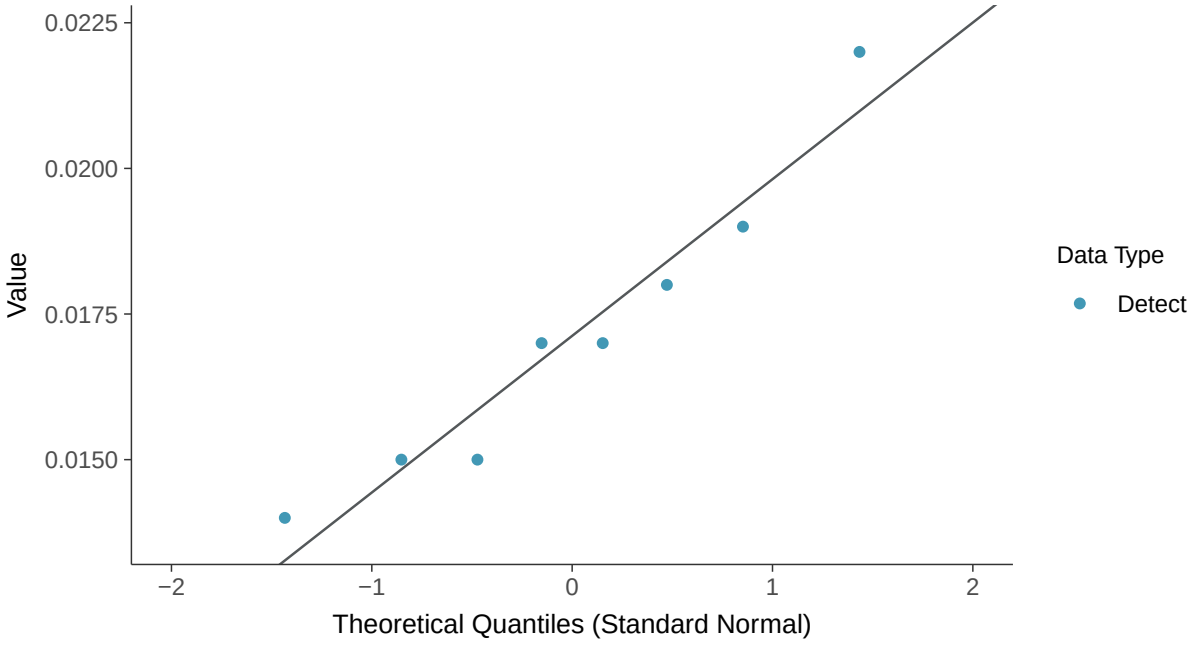
Boxplot by Season

Molybdenum, MW-17A (mg/l)



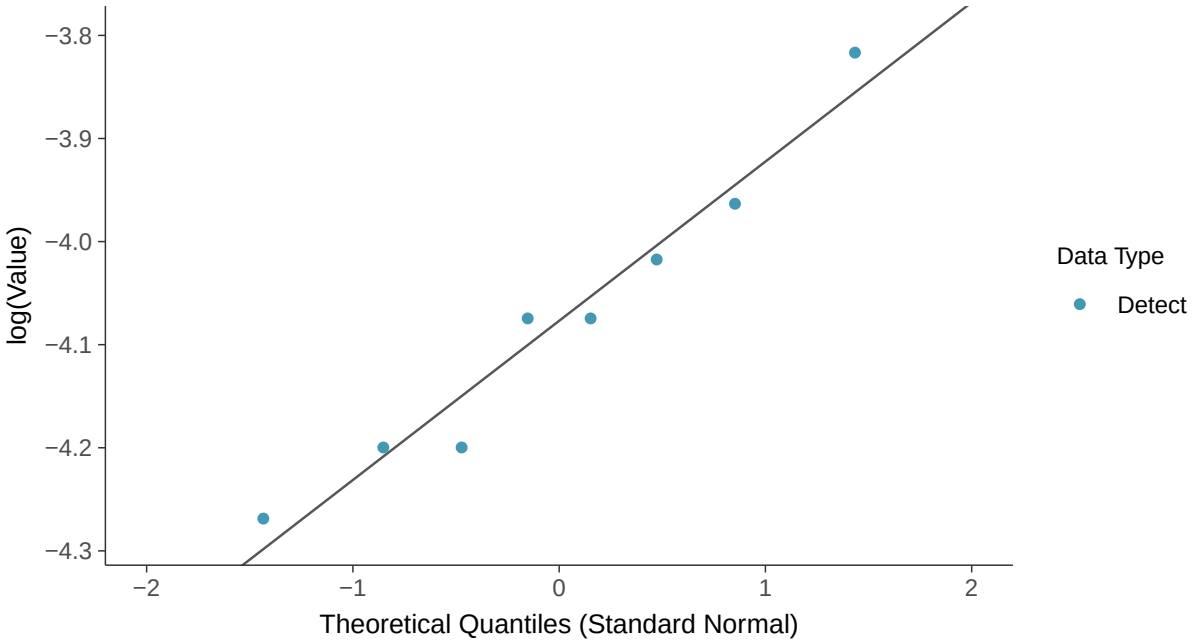
Normal Q-Q plot

Molybdenum, MW-17A (mg/l)



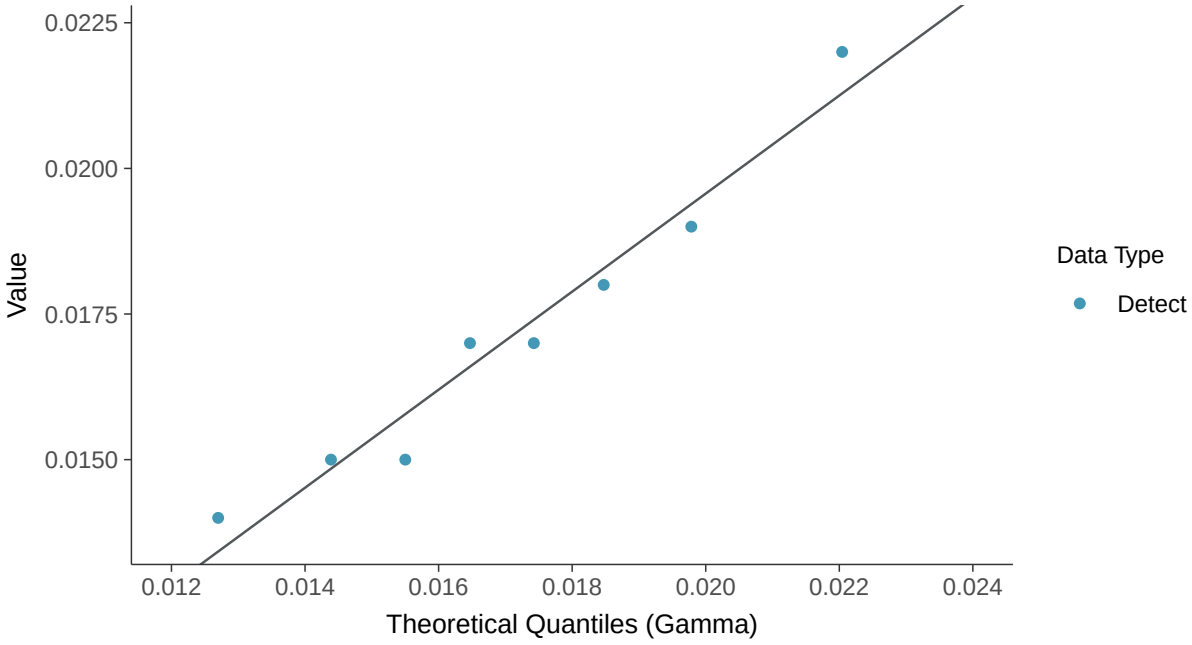
Lognormal Q-Q plot

Molybdenum, MW-17A (mg/l)



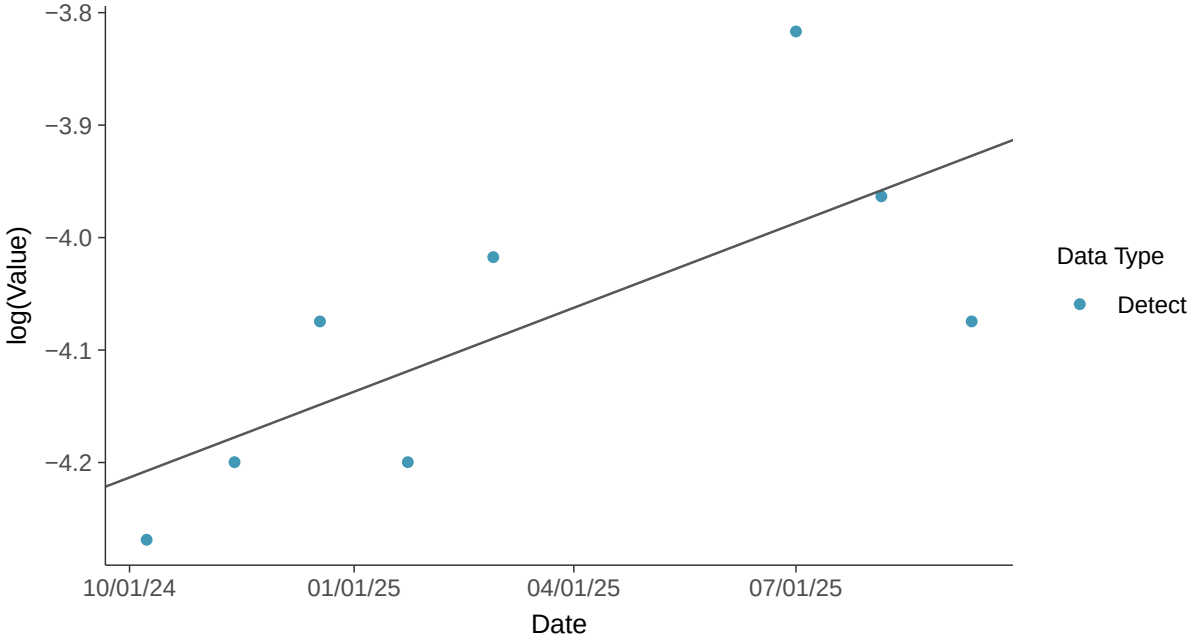
Gamma Q-Q plot

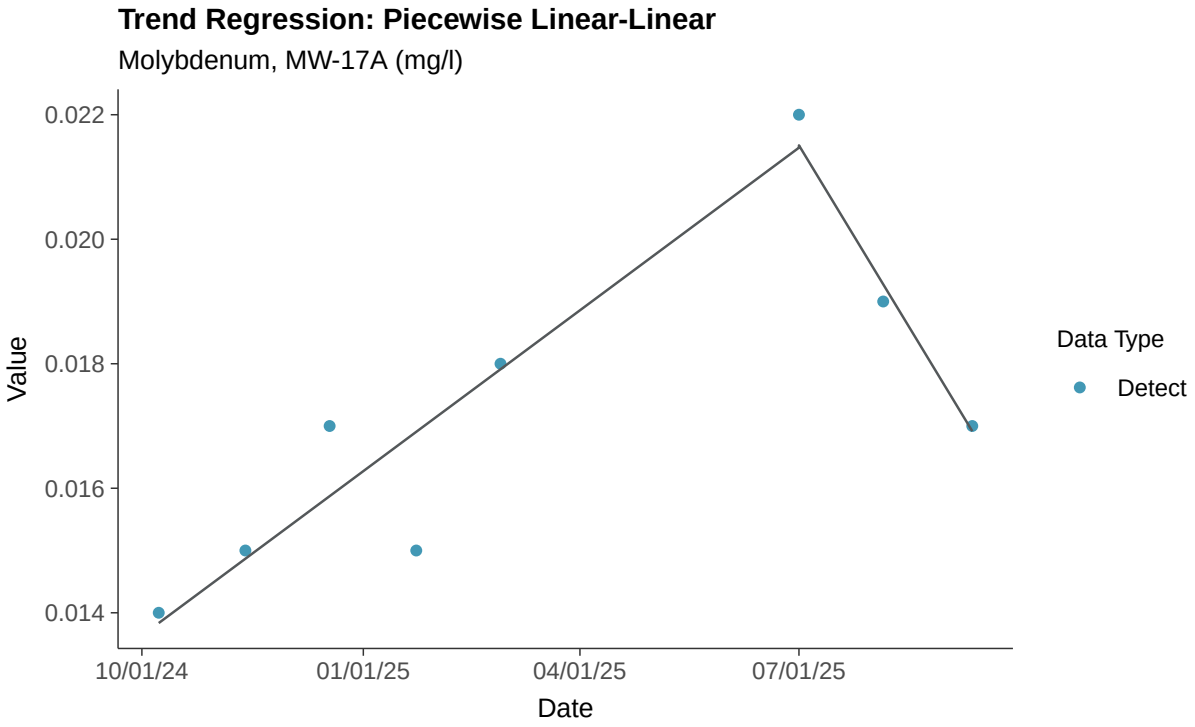
Molybdenum, MW-17A (mg/l)



Trend Regression: Lognormal MLE

Molybdenum, MW-17A (mg/l)



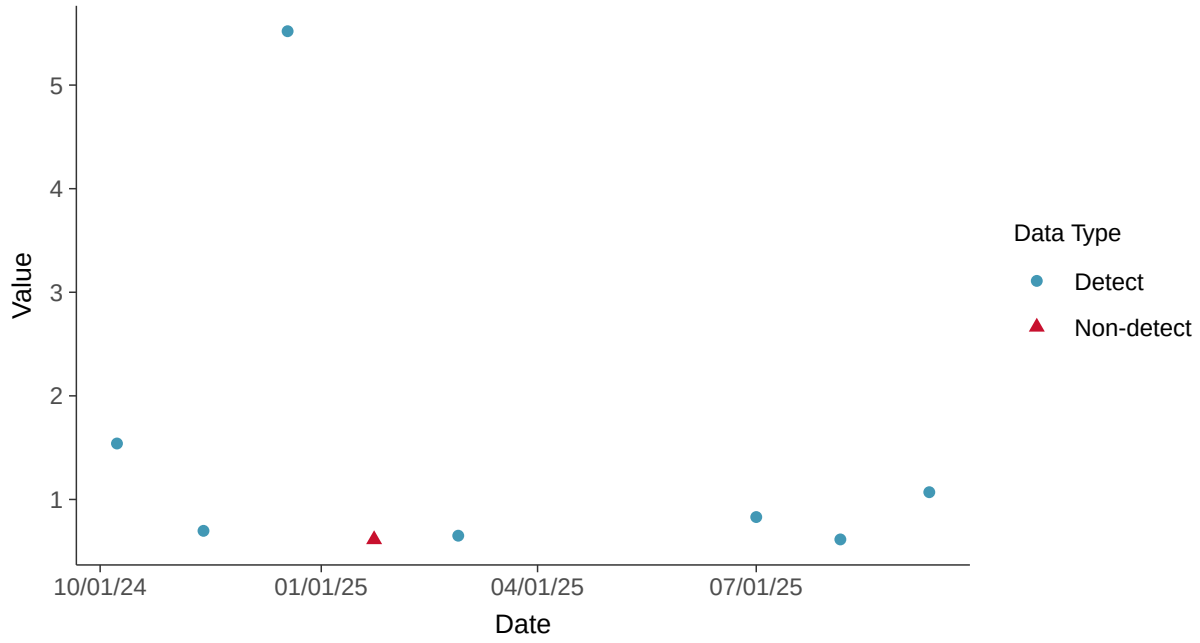

Trend Regression: Piecewise Linear-Linear
Molybdenum, MW-17A (mg/l)
Value
0.022
0.020
0.018
0.016
0.014
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix IV: Radium-226+228, MW-17A

ID: 27_3_121

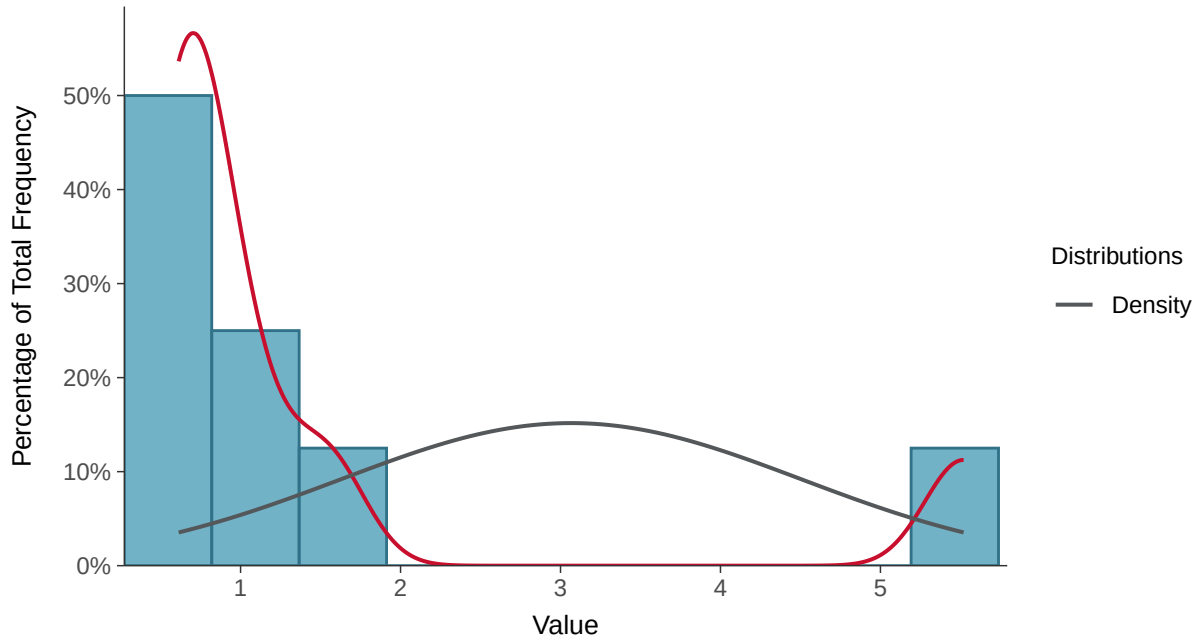
Scatter Plot

Radium-226+228, MW-17A (pci/l)



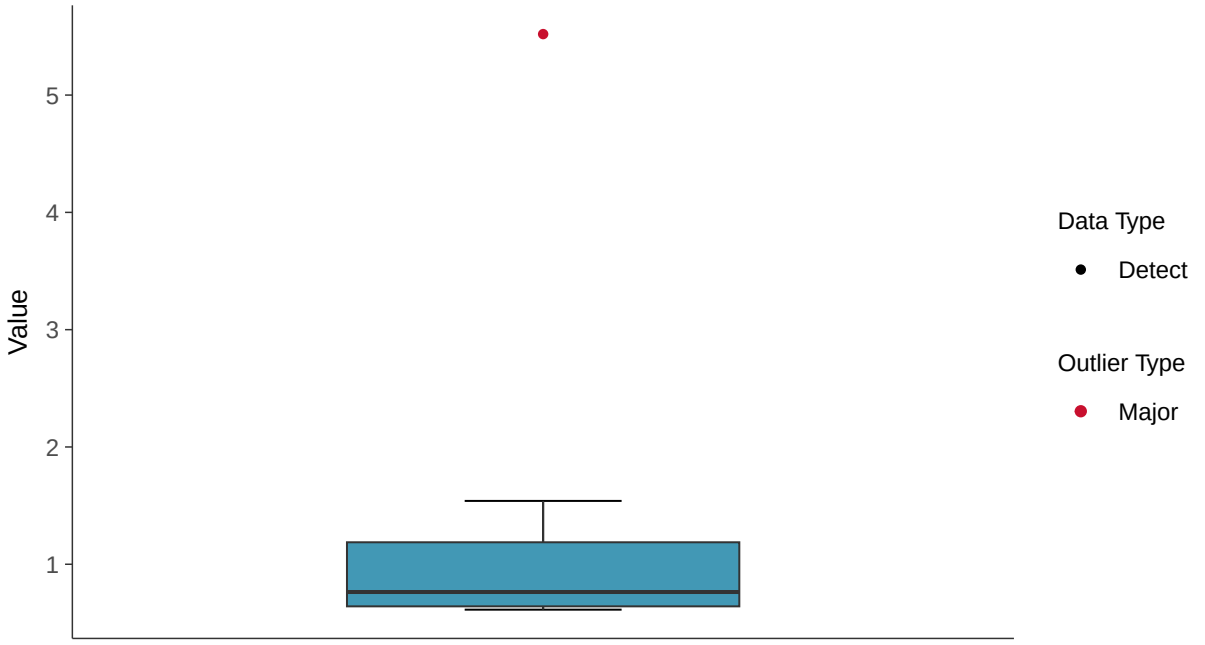
Histogram

Radium-226+228, MW-17A (pci/l)



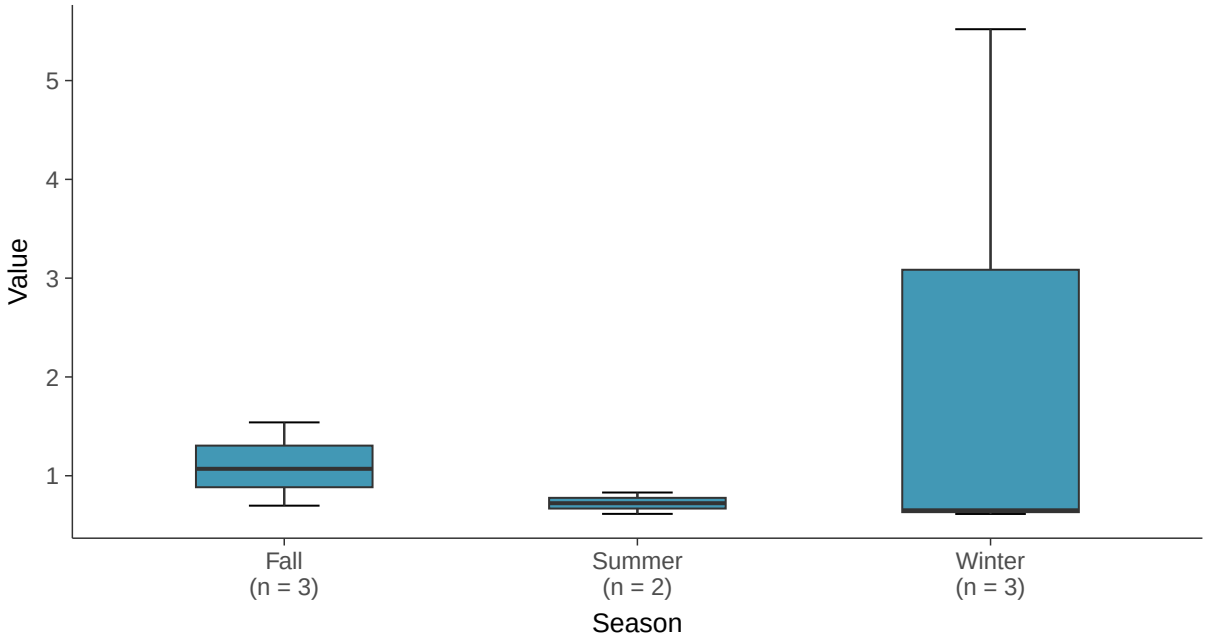
Boxplot

Radium-226+228, MW-17A (pci/l)



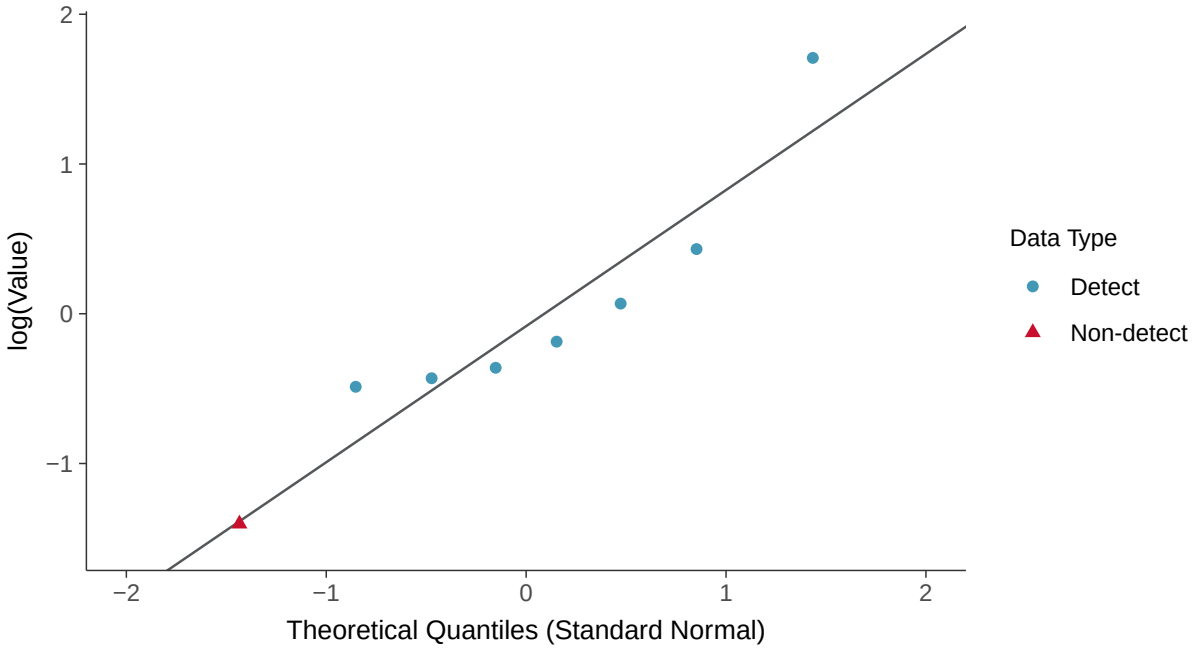
Boxplot by Season

Radium-226+228, MW-17A (pci/l)



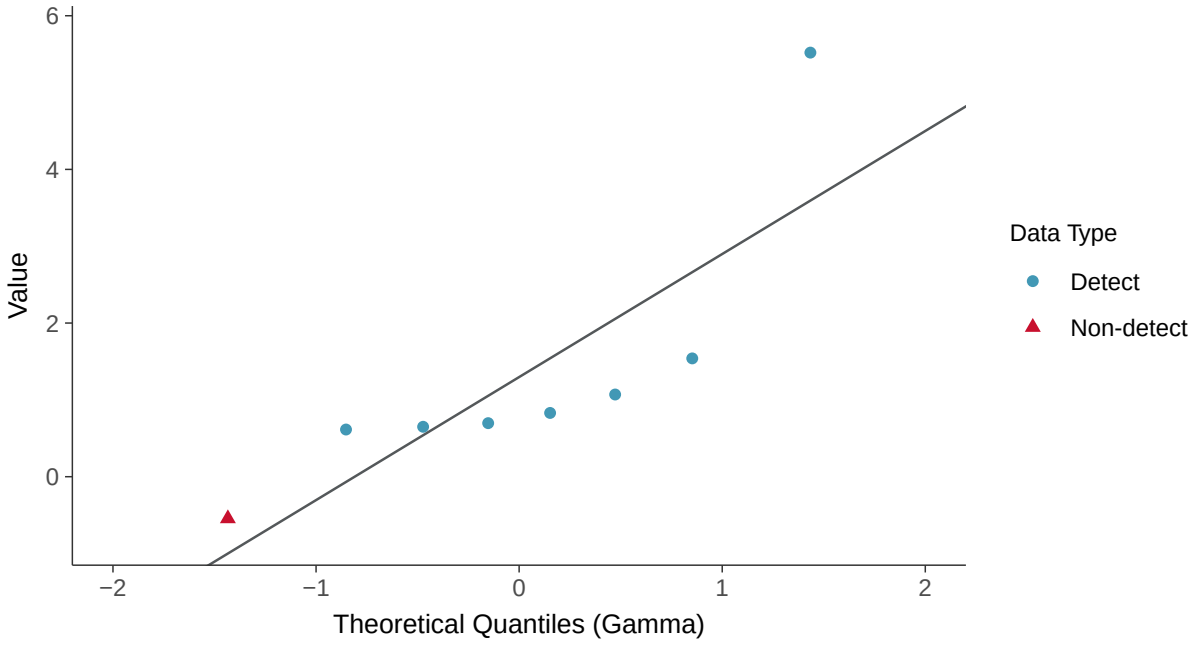
Lognormal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17A (pci/l)



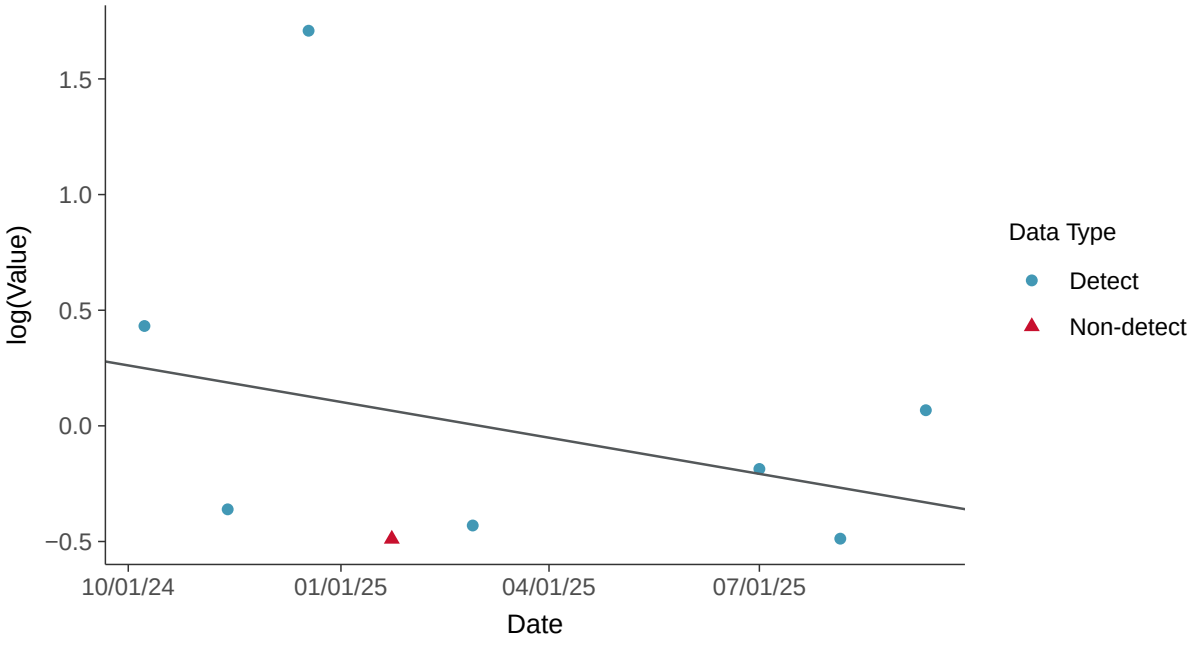
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17A (pci/l)



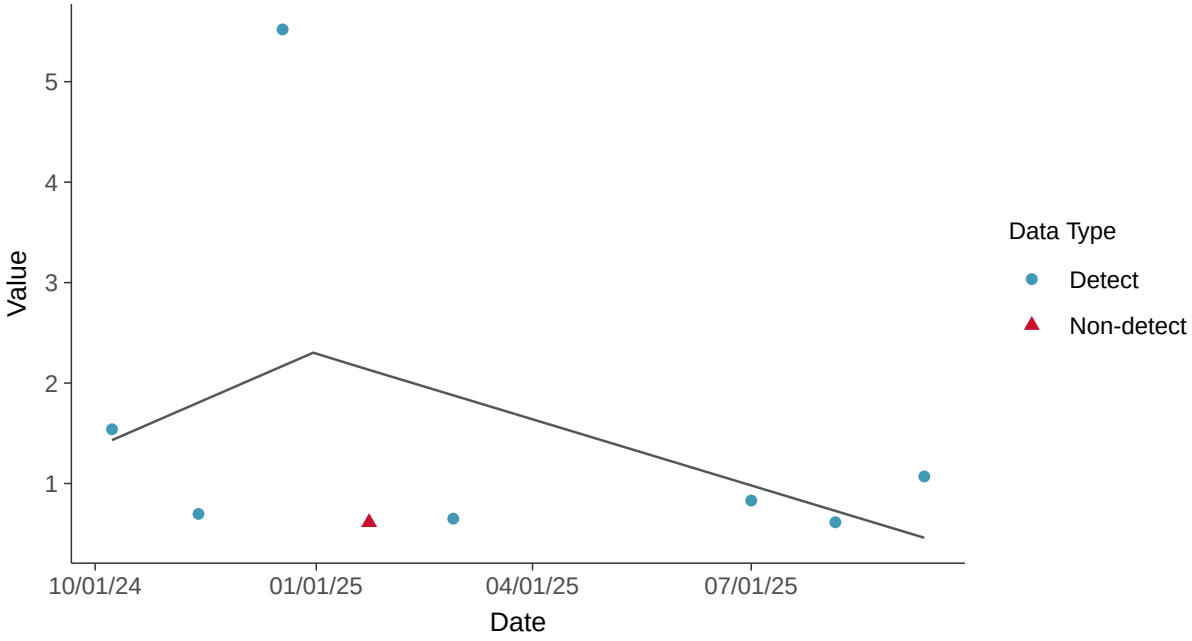
Trend Regression: Lognormal MLE

Radium-226+228, MW-17A (pci/l)



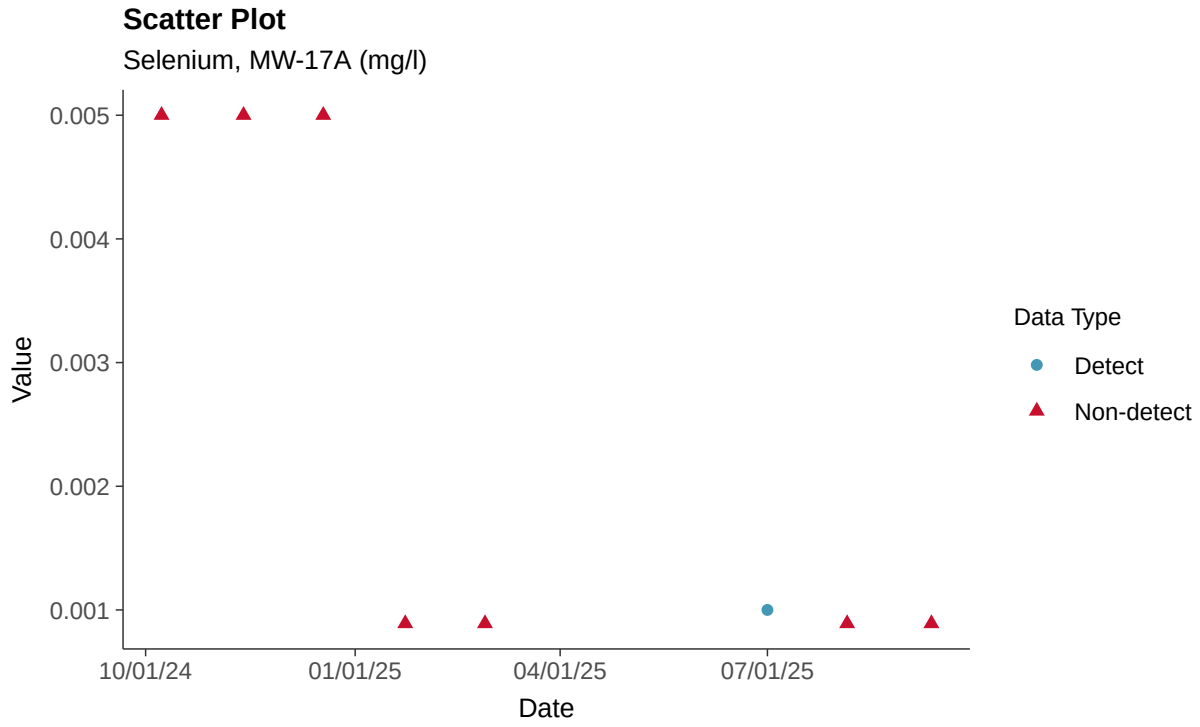
Trend Regression: Piecewise Linear-Linear

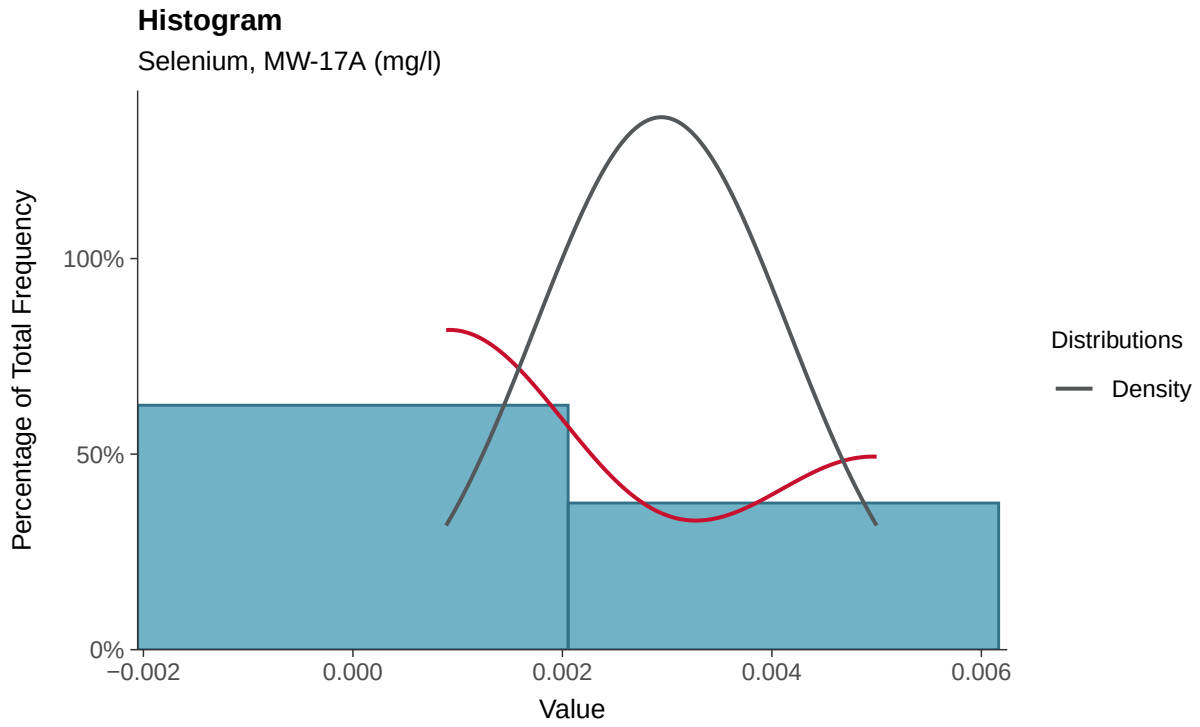
Radium-226+228, MW-17A (pci/l)



Appendix IV: Selenium, MW-17A

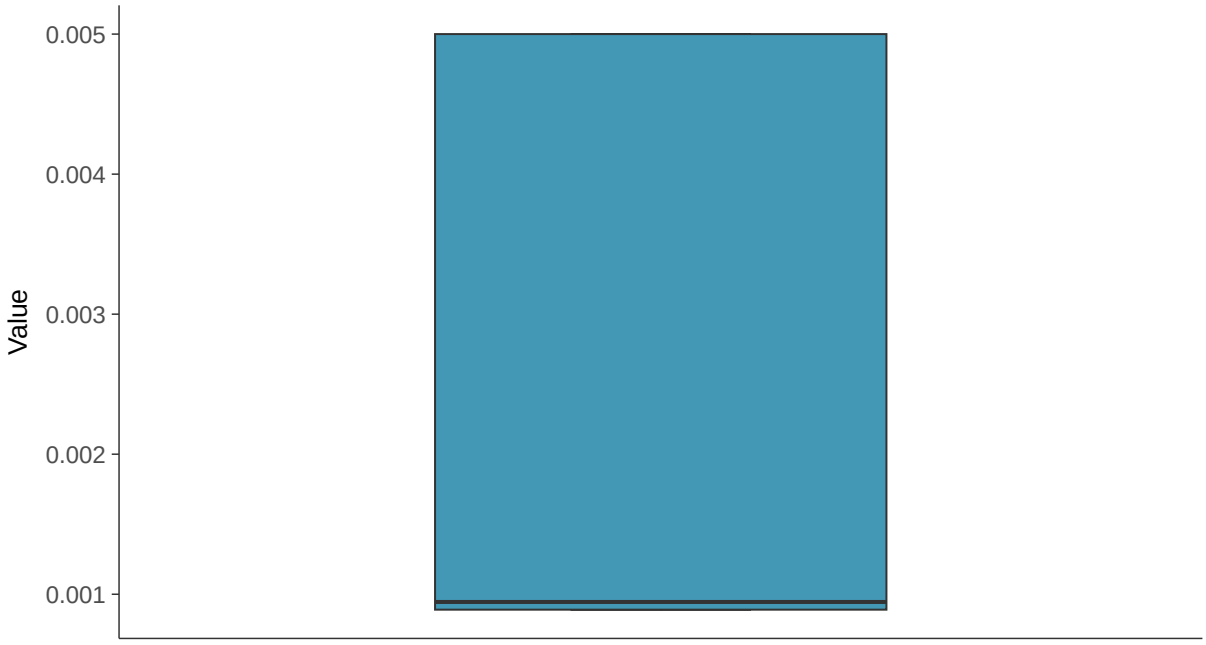
ID: 27_3_122





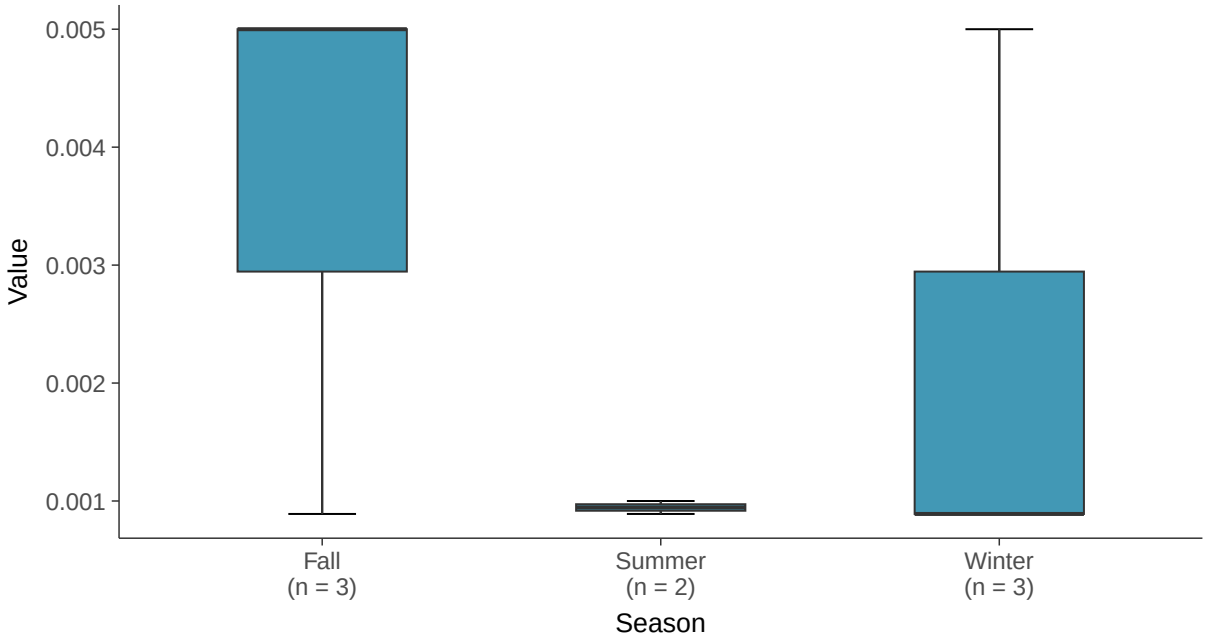
Boxplot

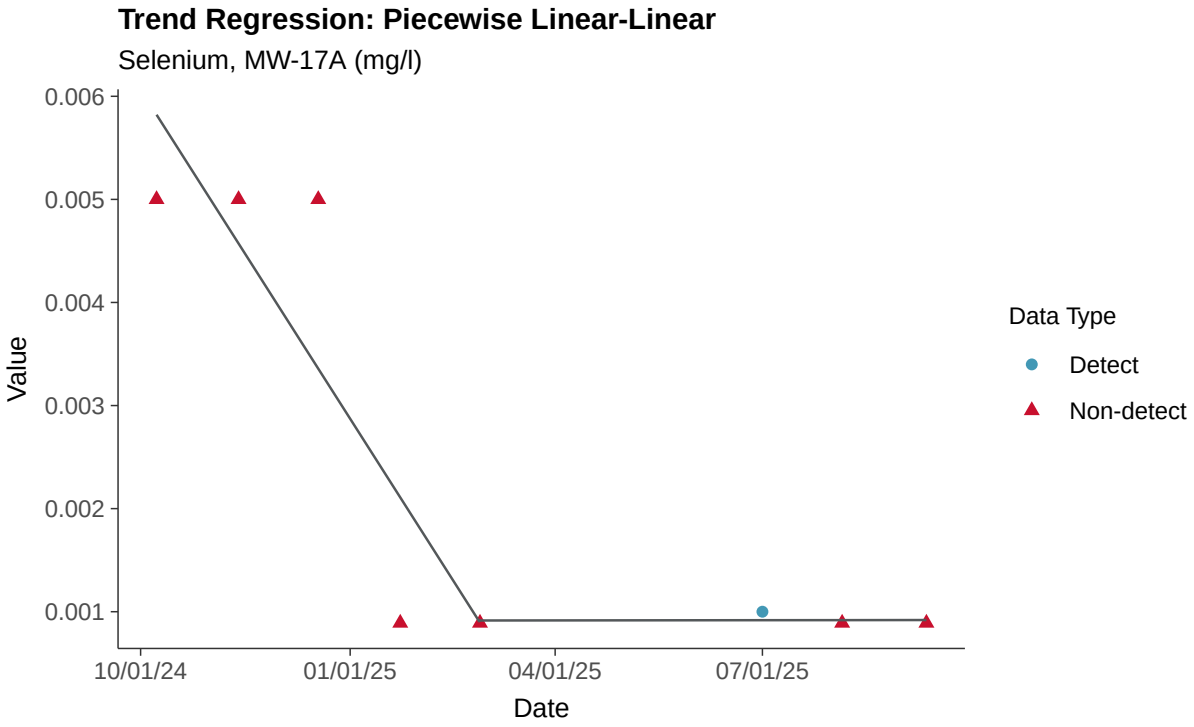
Selenium, MW-17A (mg/l)



Boxplot by Season

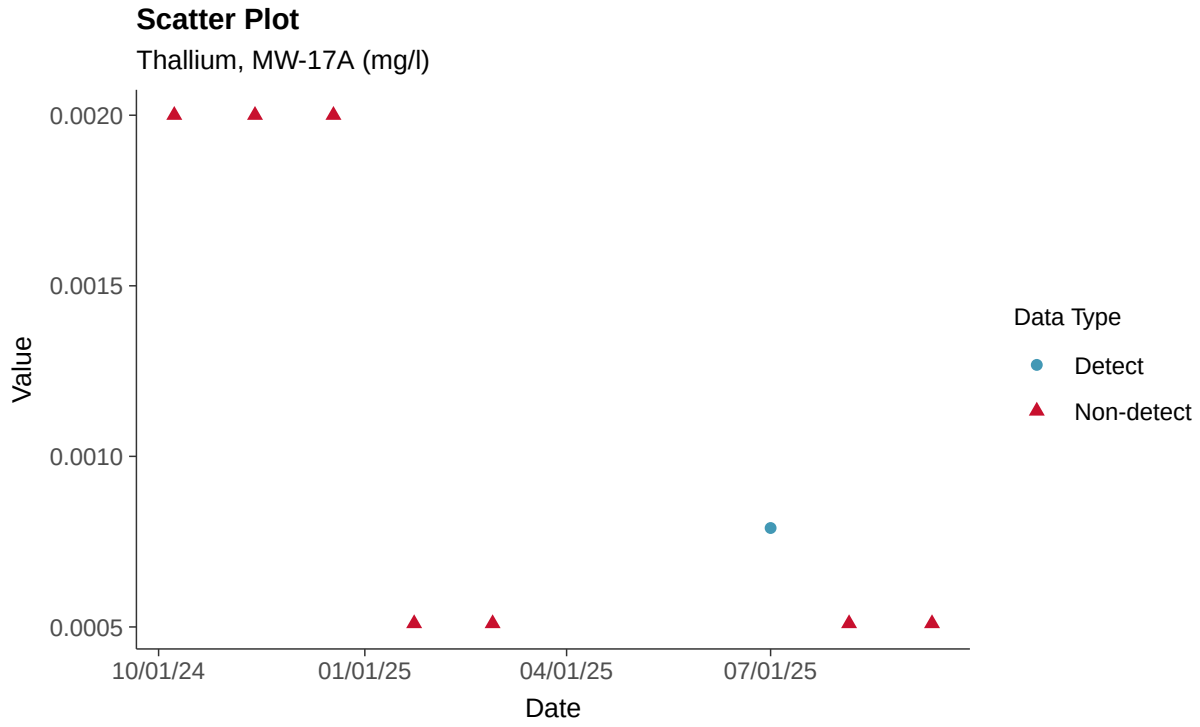
Selenium, MW-17A (mg/l)

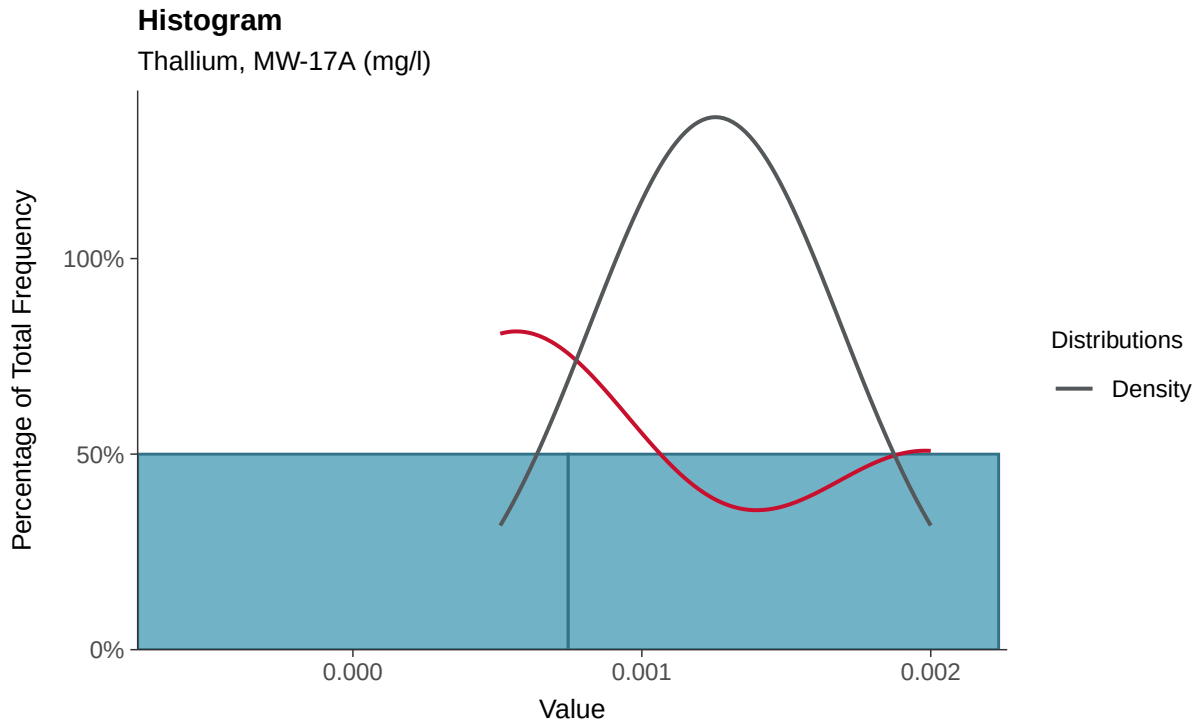



Trend Regression: Piecewise Linear-Linear
Selenium, MW-17A (mg/l)
0.006
0.005
0.004
0.003
0.002
0.001
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Thallium, MW-17A

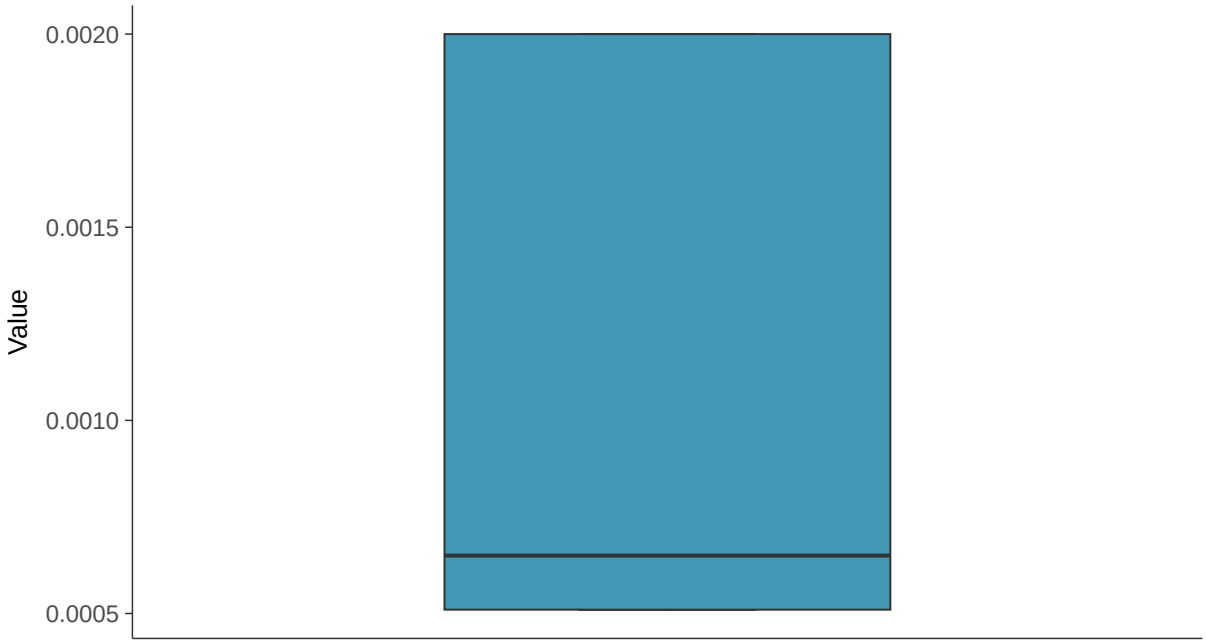
ID: 27_3_125





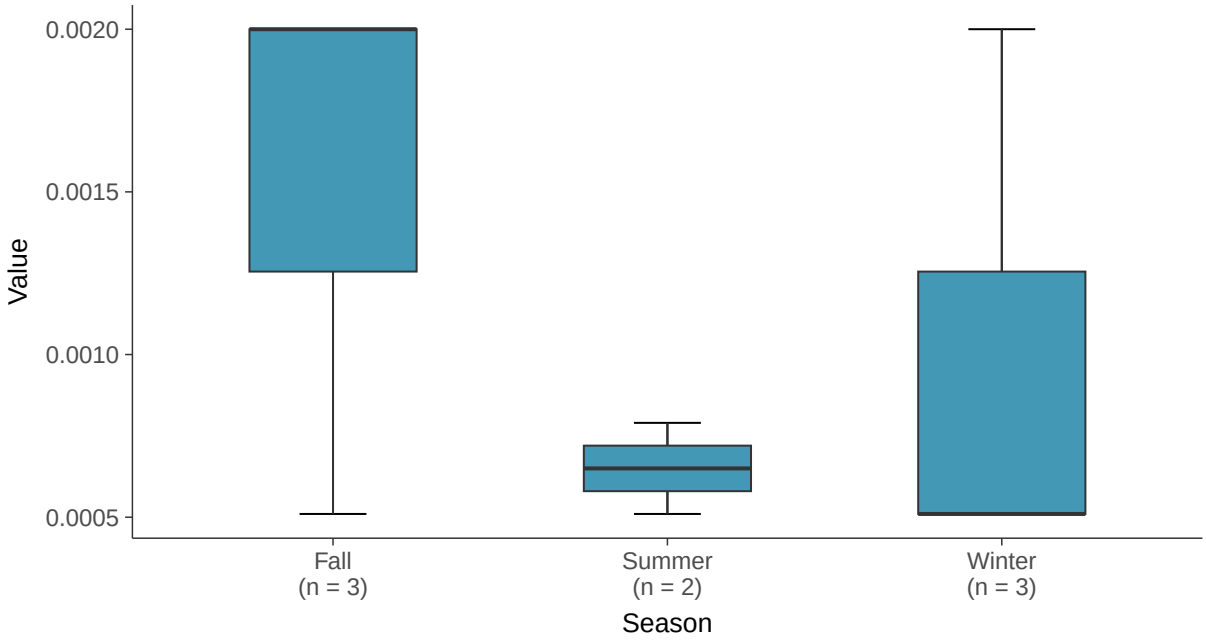
Boxplot

Thallium, MW-17A (mg/l)



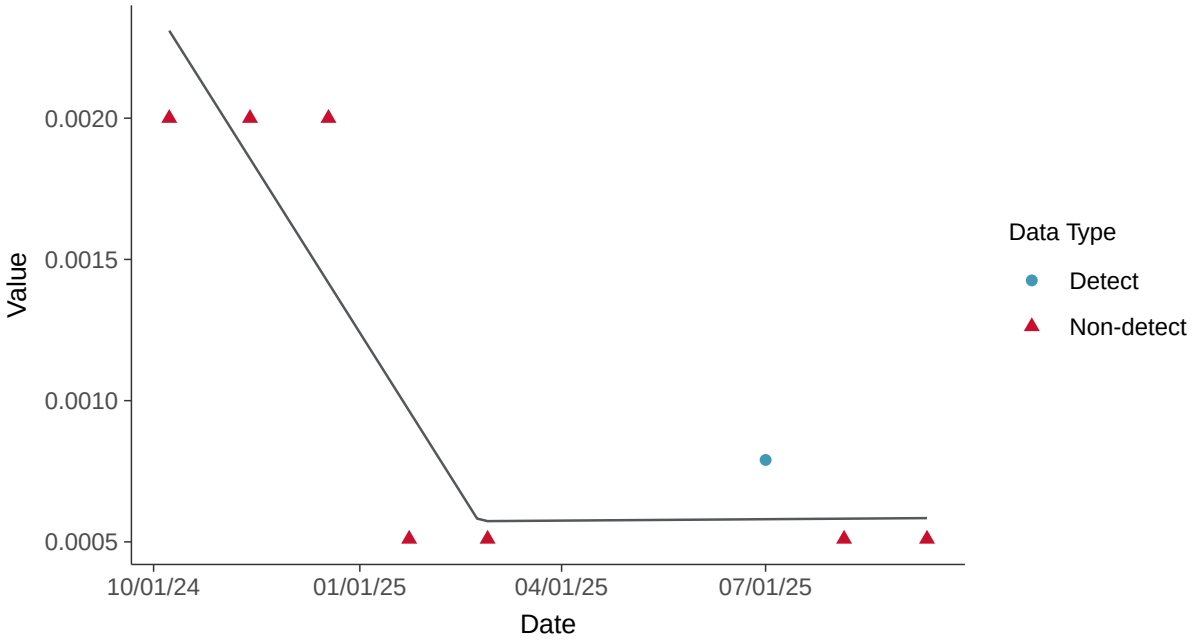
Boxplot by Season

Thallium, MW-17A (mg/l)



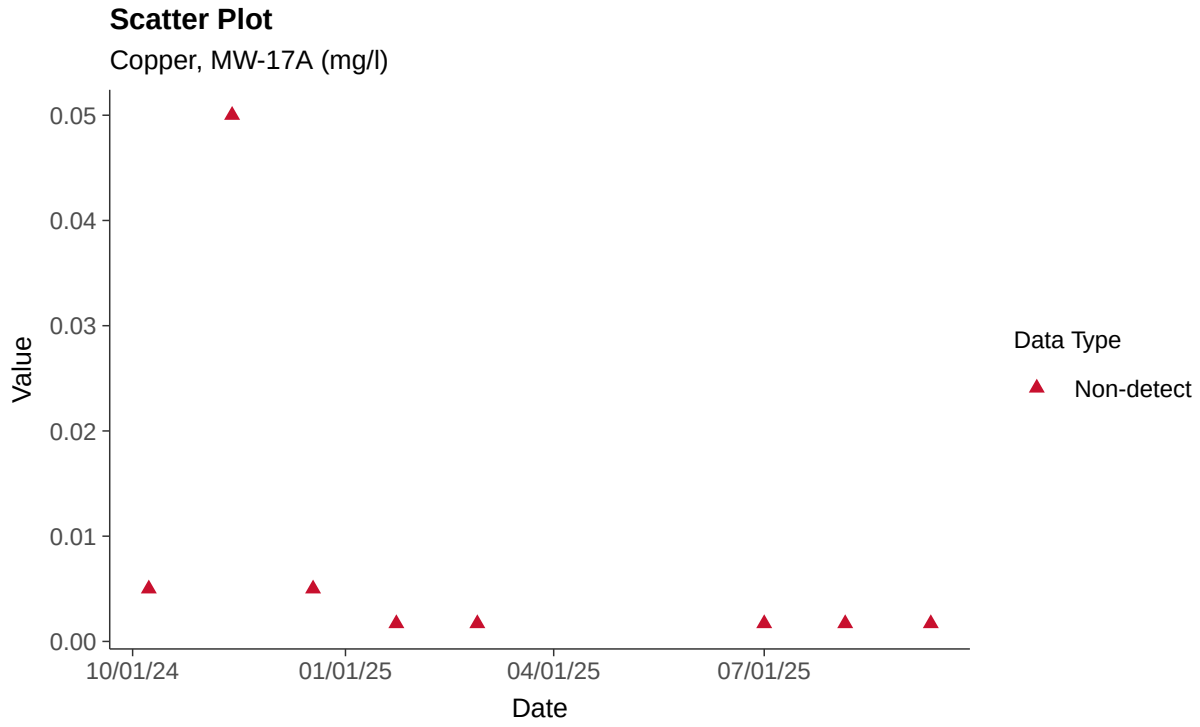
Trend Regression: Piecewise Linear-Linear

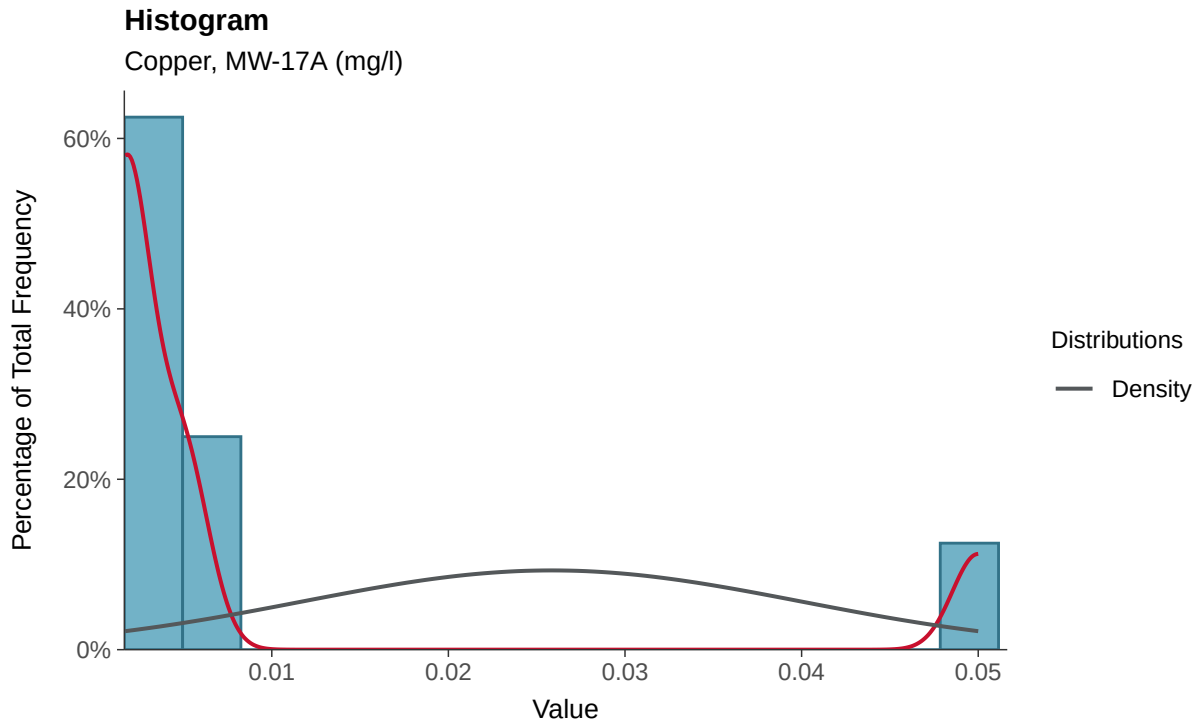
Thallium, MW-17A (mg/l)



Part 115: Copper, MW-17A

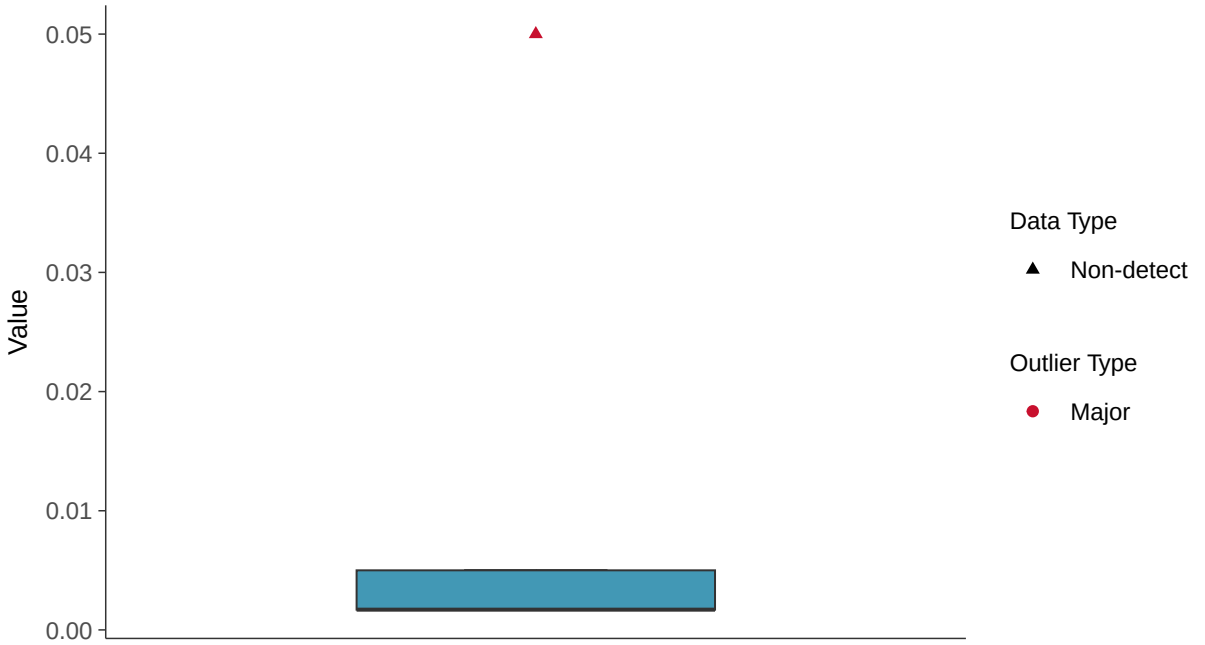
ID: 27_5_111





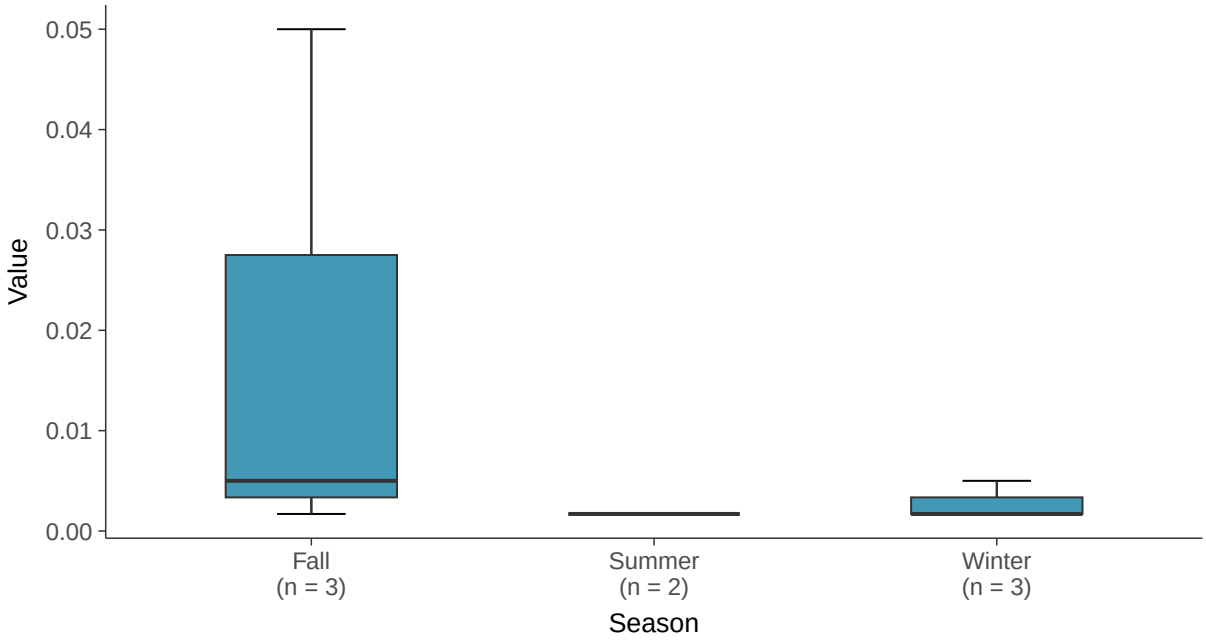
Boxplot

Copper, MW-17A (mg/l)



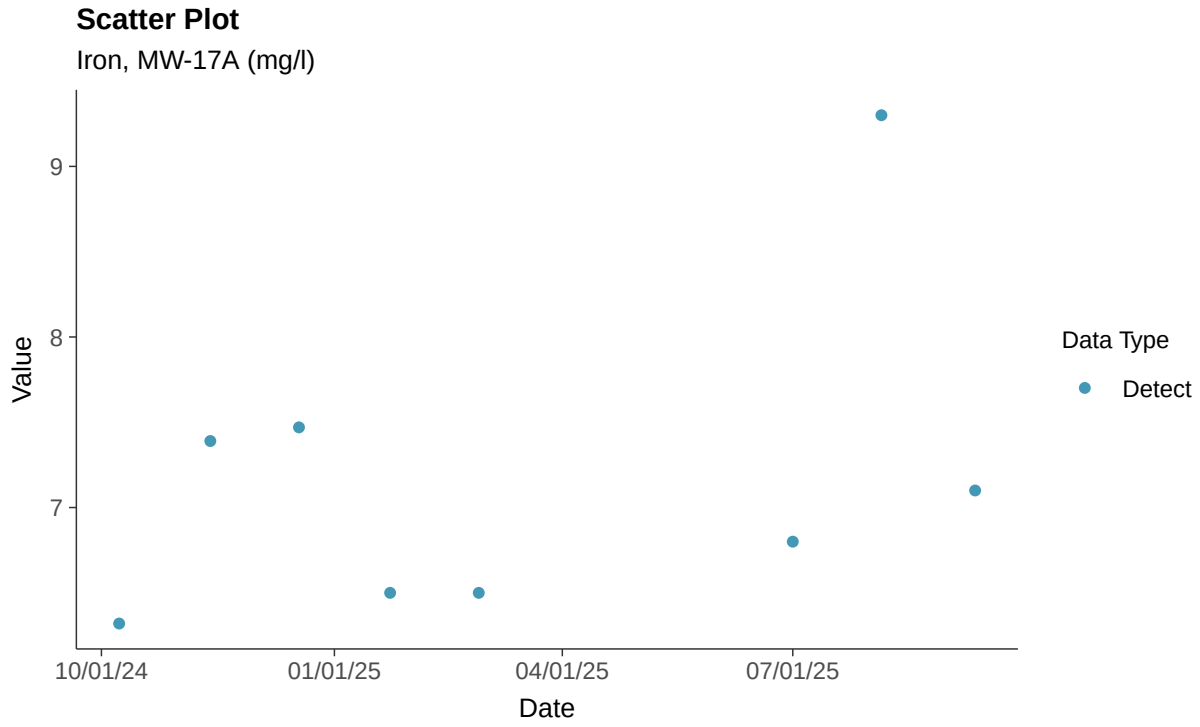
Boxplot by Season

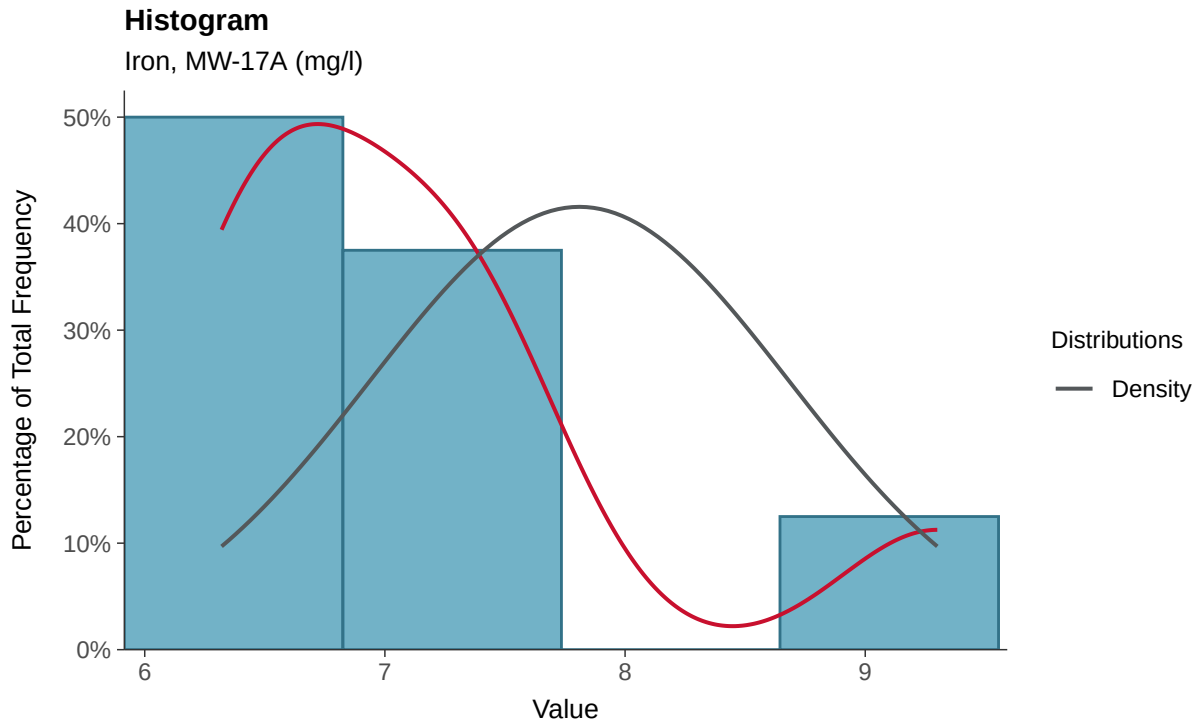
Copper, MW-17A (mg/l)



Part 115: Iron, MW-17A

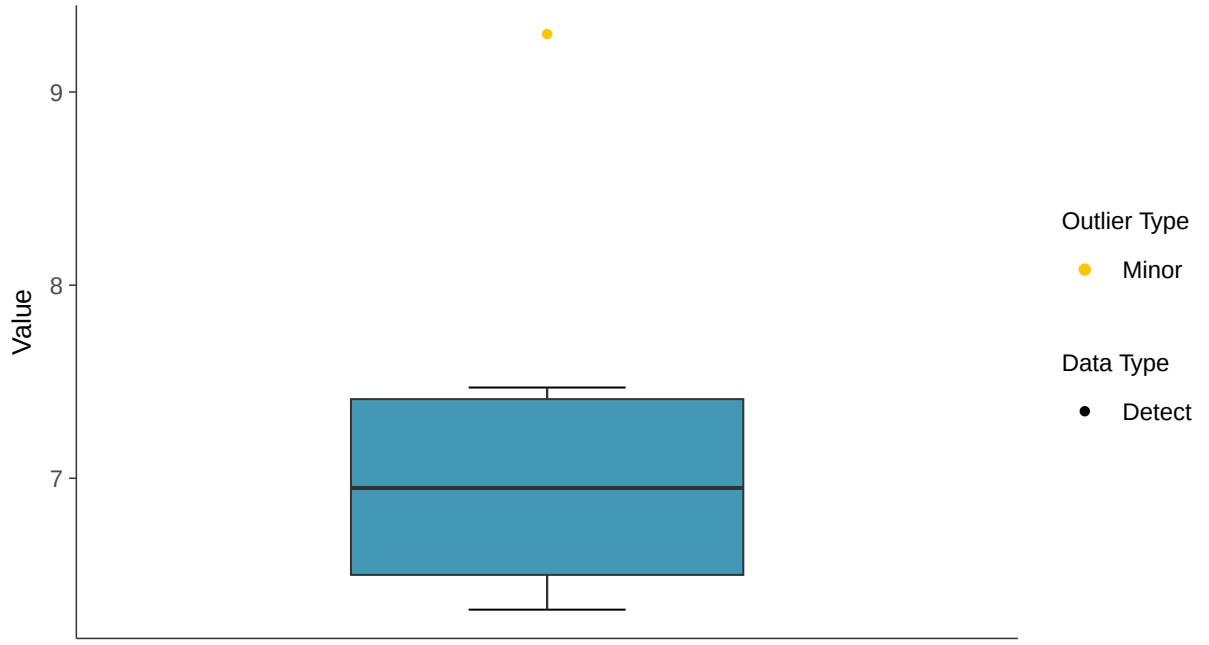
ID: 27_5_114





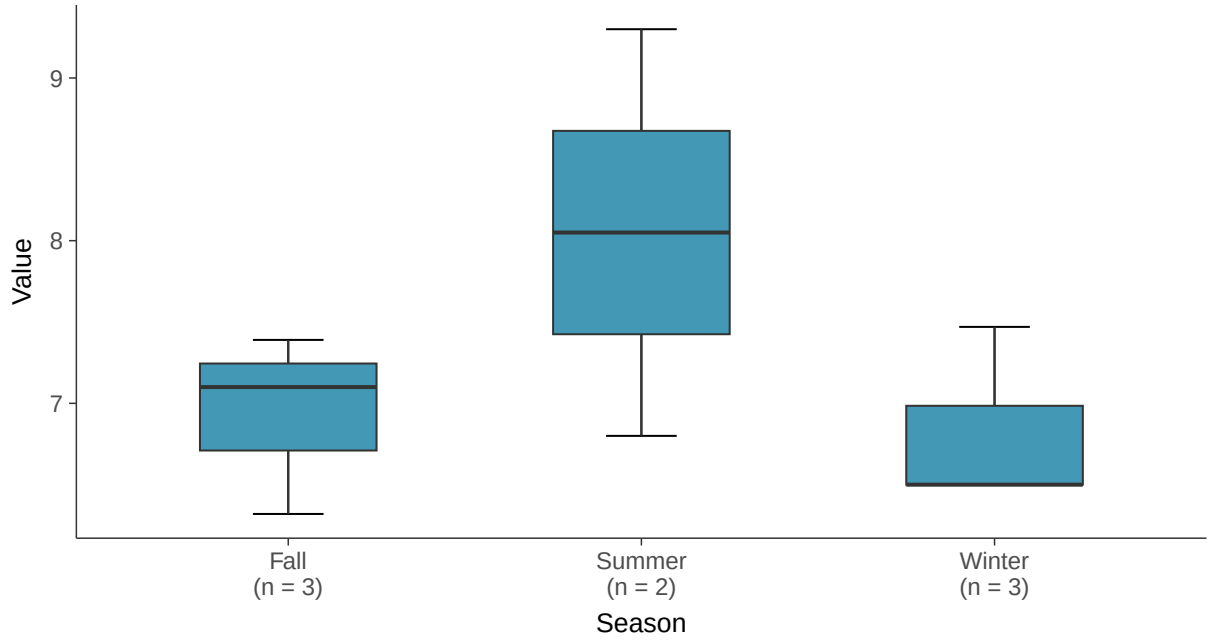
Boxplot

Iron, MW-17A (mg/l)



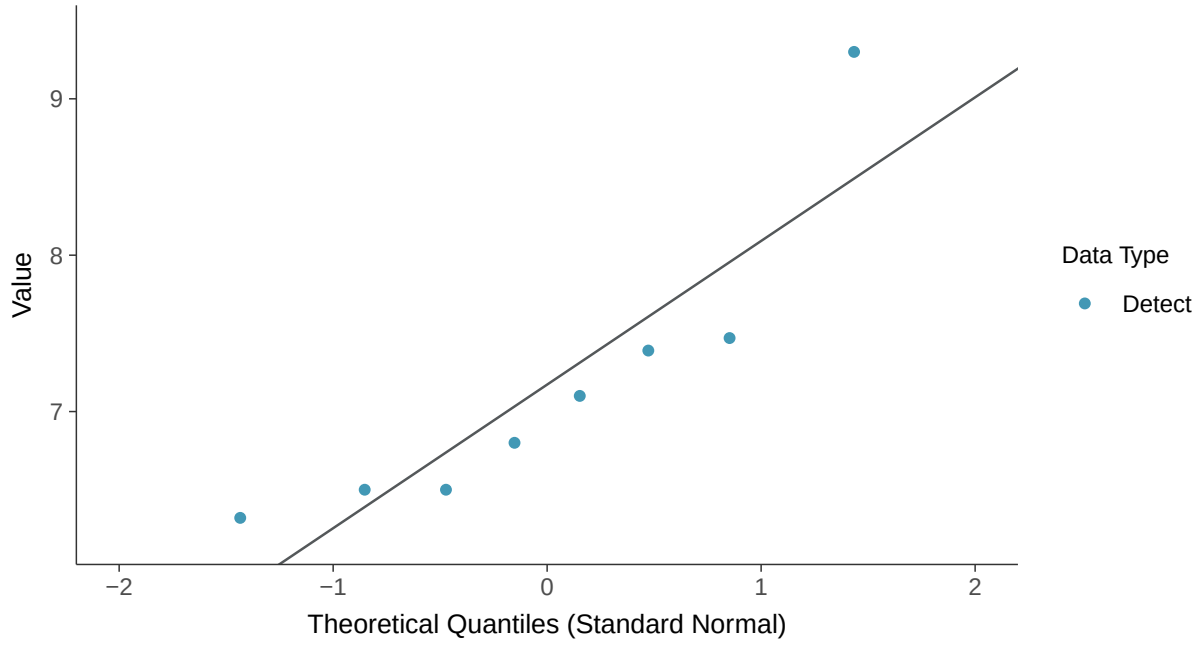
Boxplot by Season

Iron, MW-17A (mg/l)



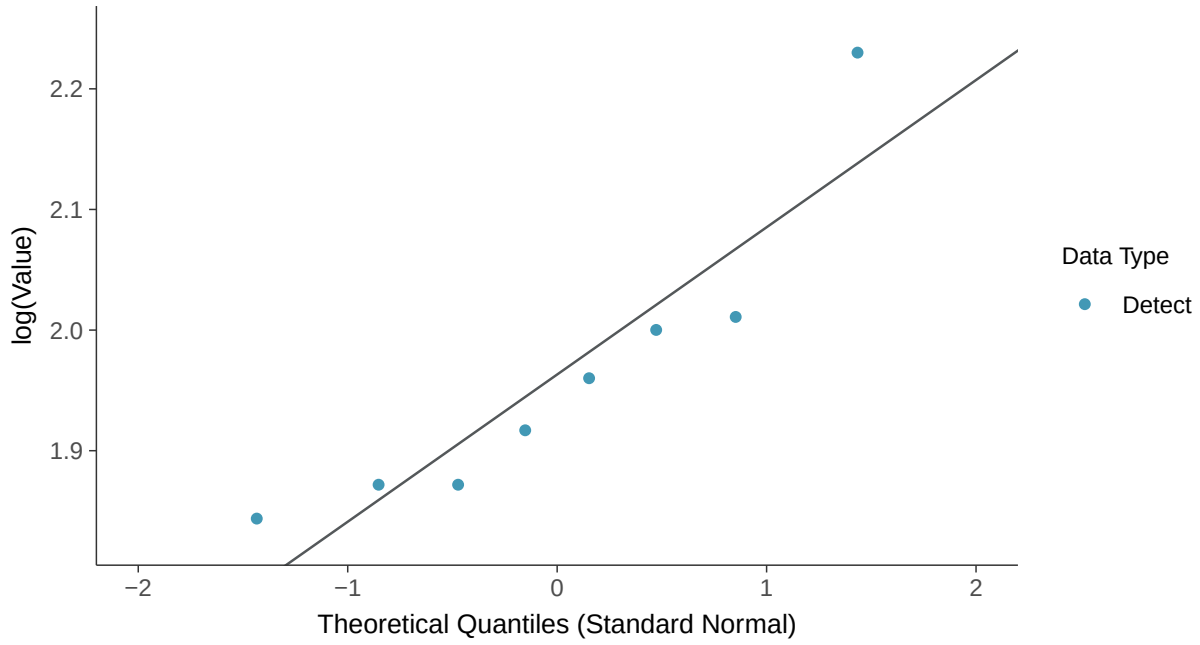
Normal Q-Q plot

Iron, MW-17A (mg/l)



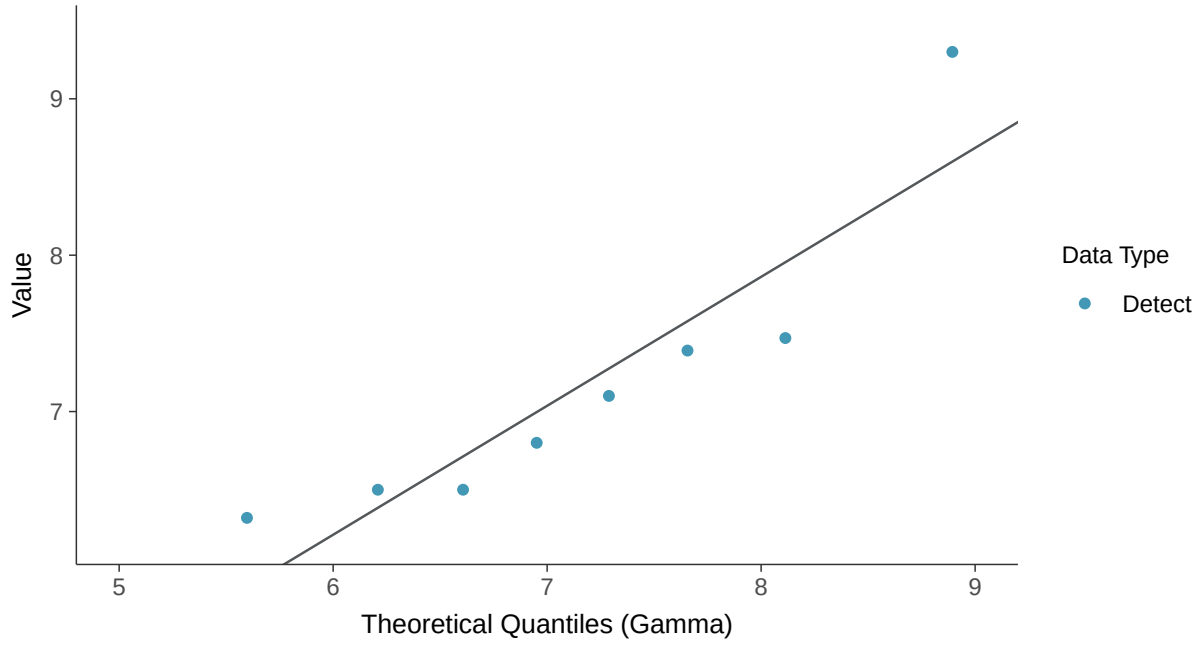
Lognormal Q-Q plot

Iron, MW-17A (mg/l)



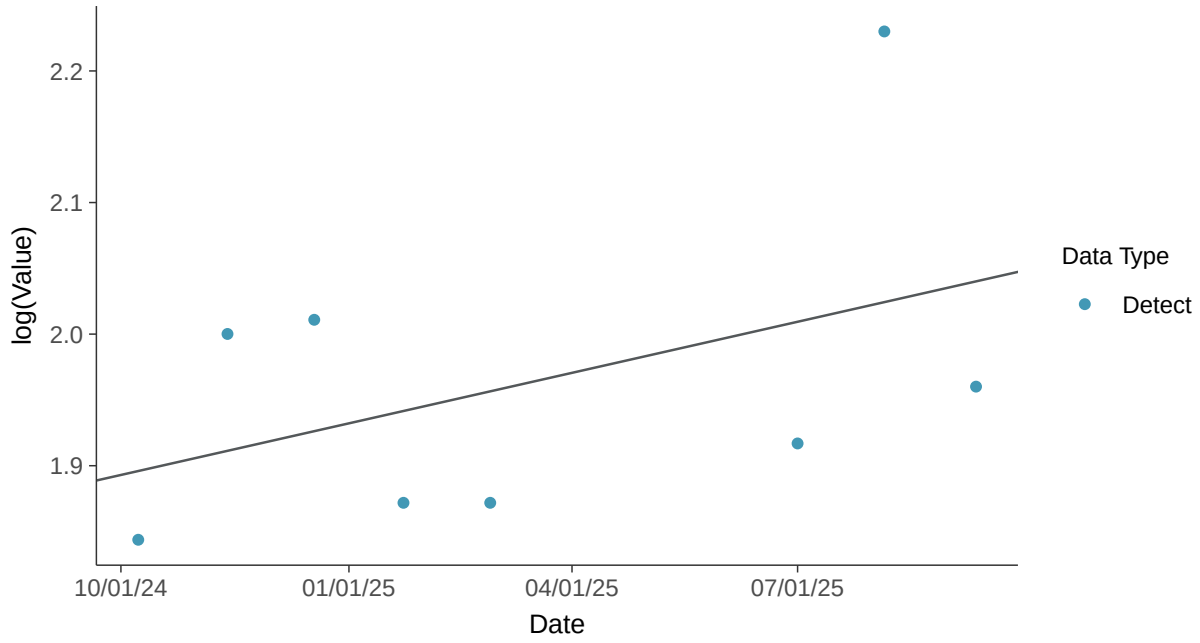
Gamma Q-Q plot

Iron, MW-17A (mg/l)



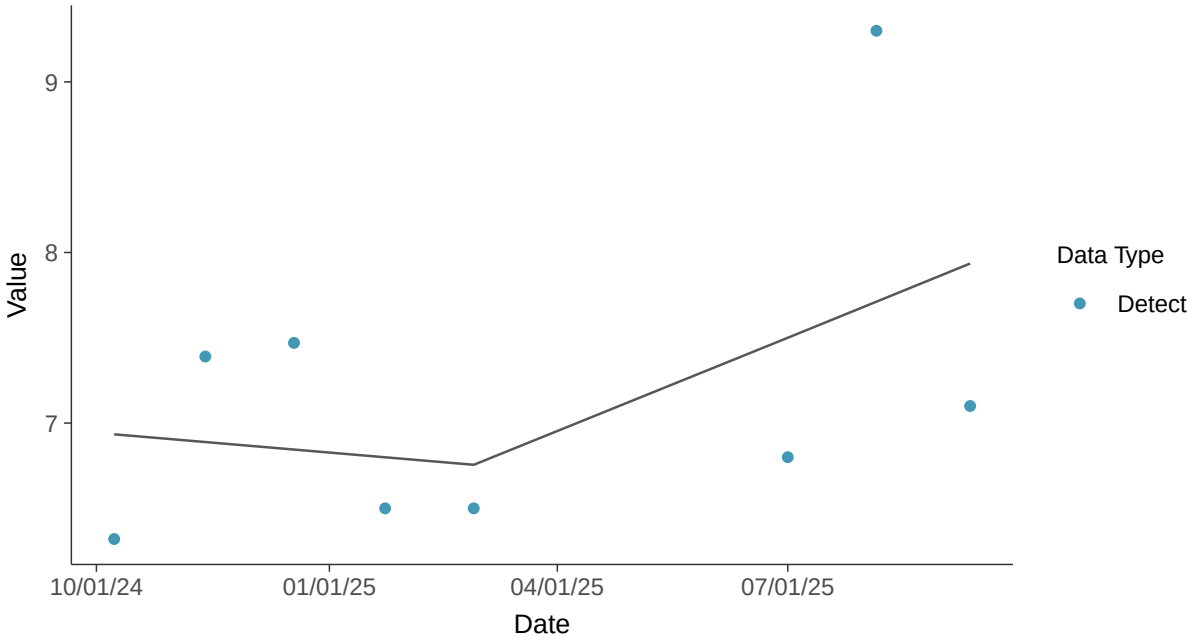
Trend Regression: Lognormal MLE

Iron, MW-17A (mg/l)



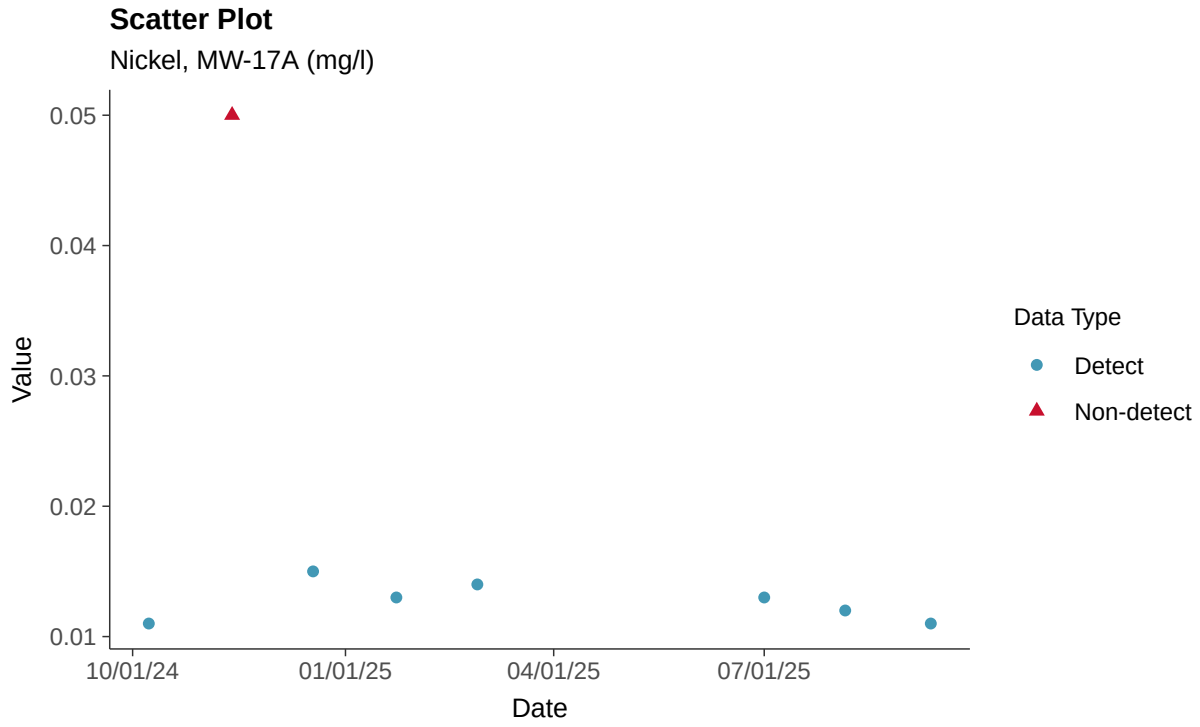
Trend Regression: Piecewise Linear-Linear

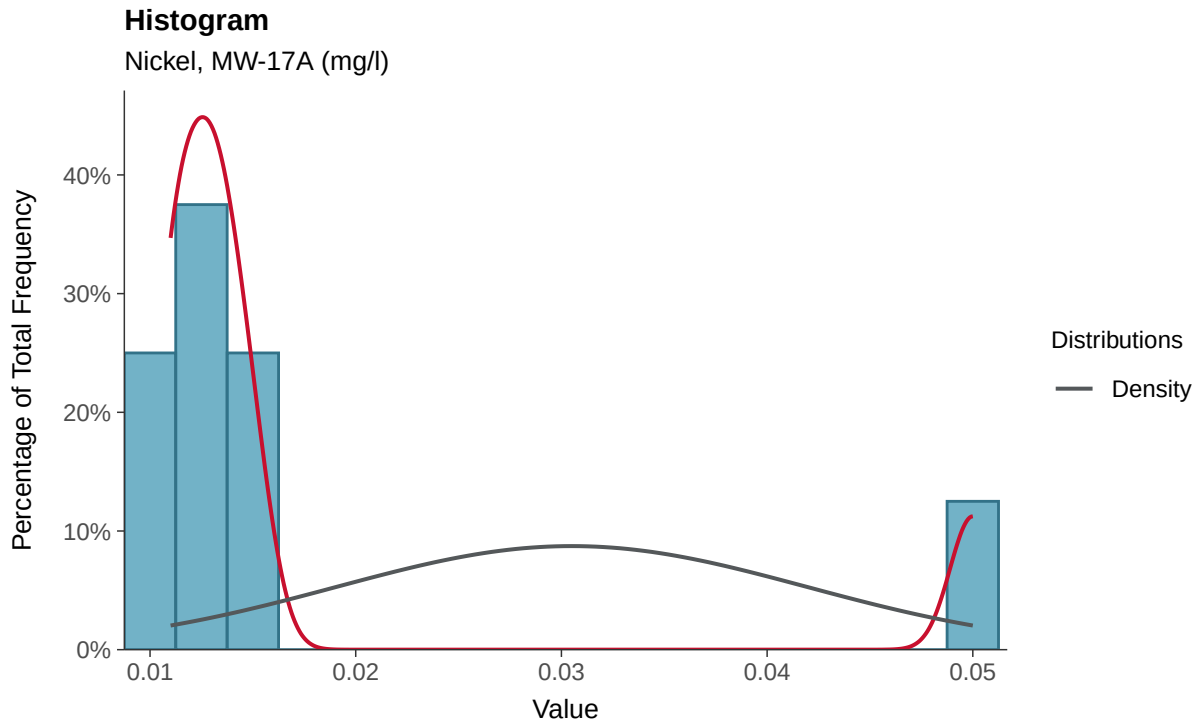
Iron, MW-17A (mg/l)



Part 115: Nickel, MW-17A

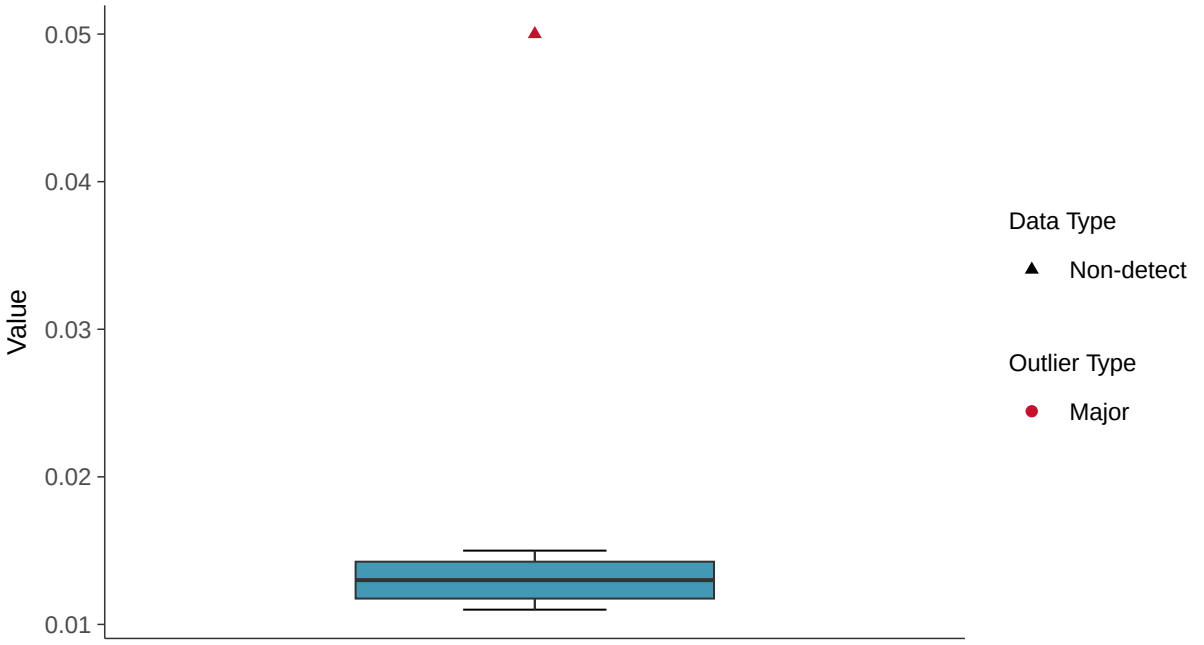
ID: 27_5_119





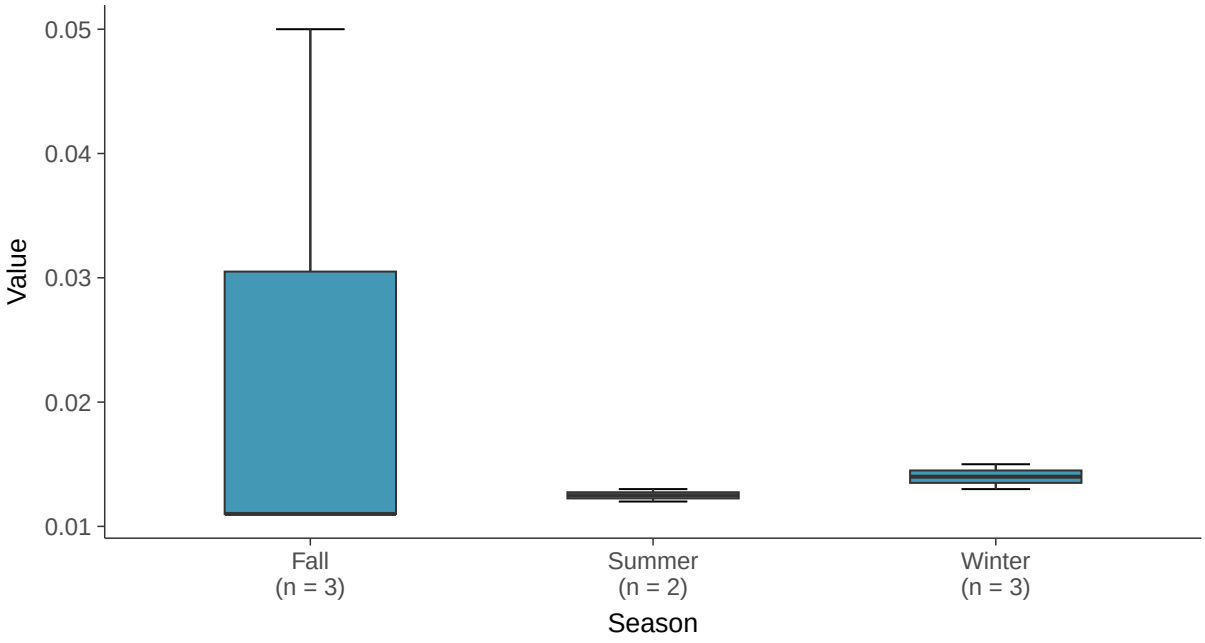
Boxplot

Nickel, MW-17A (mg/l)



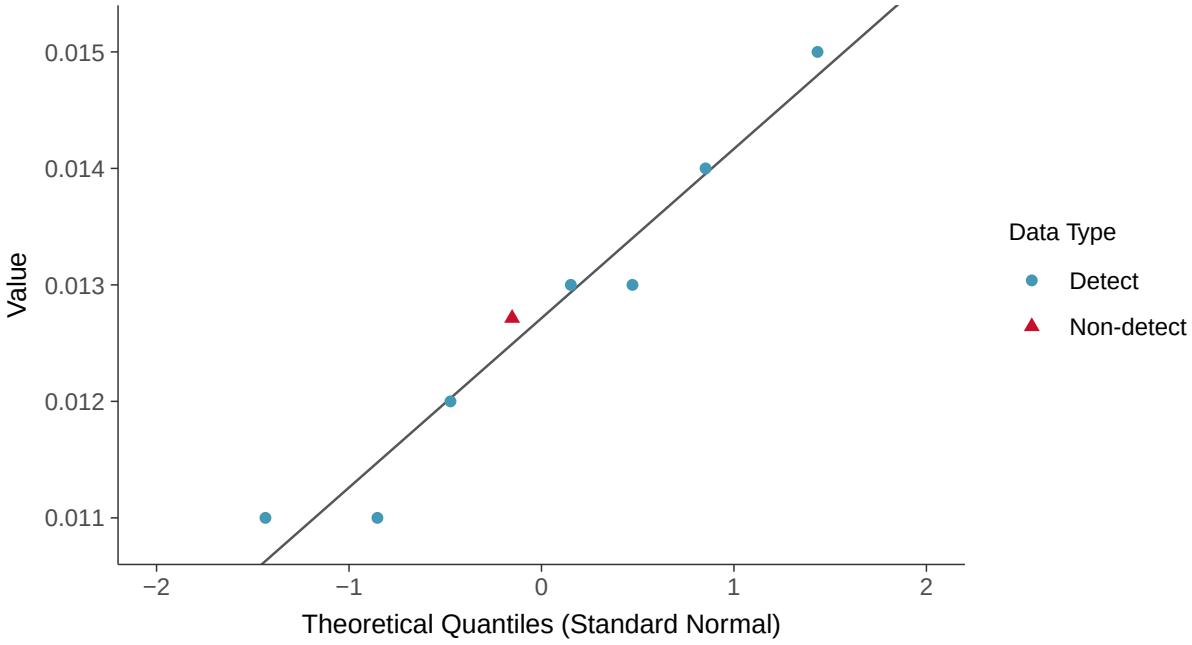
Boxplot by Season

Nickel, MW-17A (mg/l)



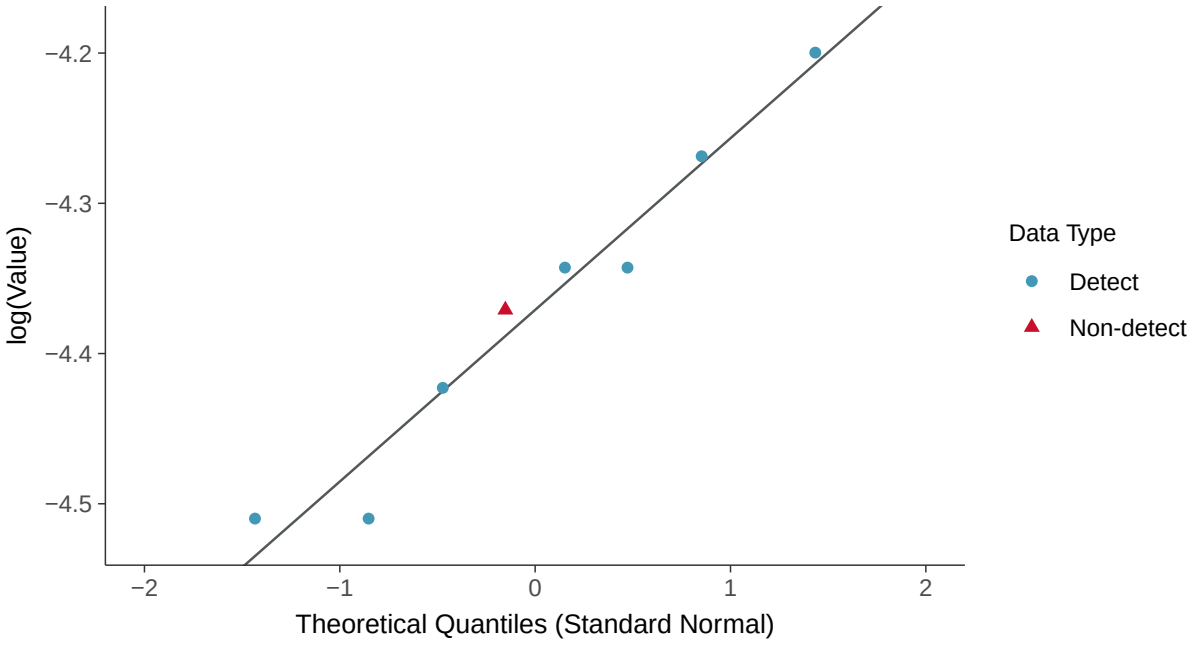
Normal Q-Q plot using ROS Imputed Estimates

Nickel, MW-17A (mg/l)



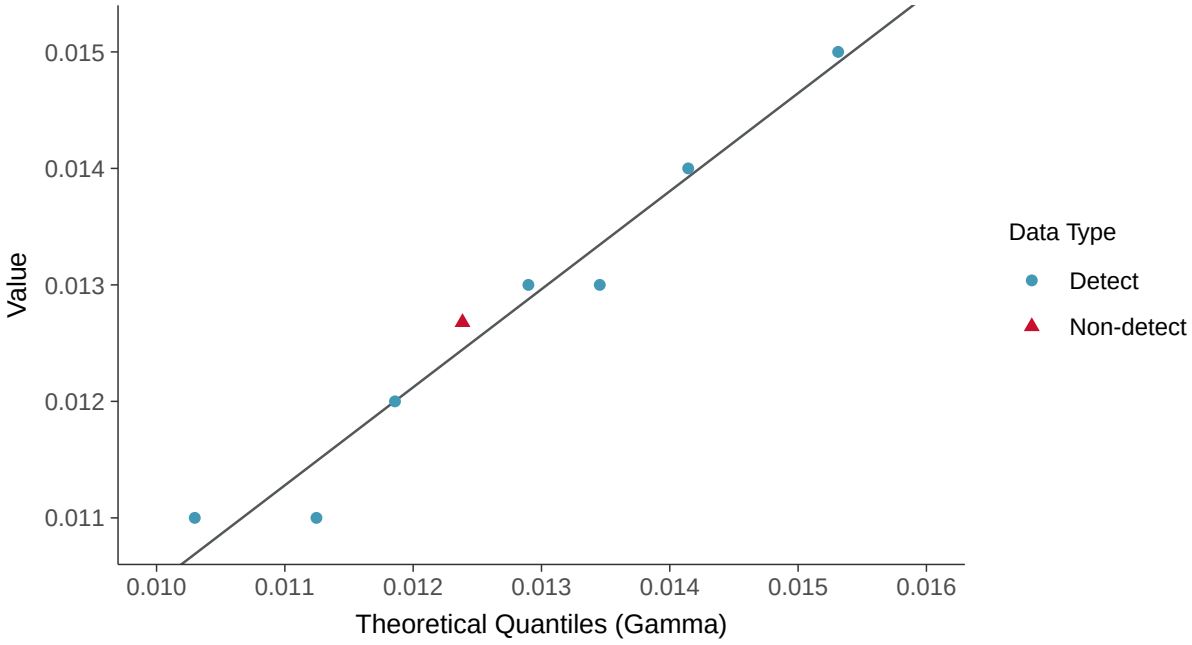
Lognormal Q-Q plot using ROS Imputed Estimates

Nickel, MW-17A (mg/l)



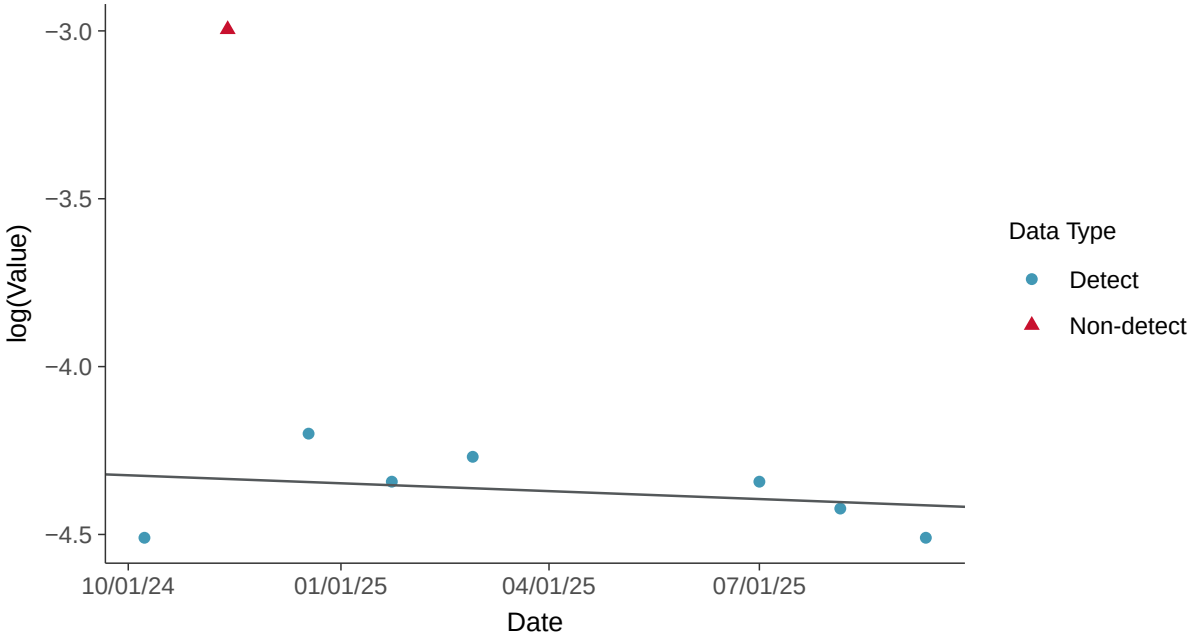
Gamma Q-Q plot using ROS Imputed Estimates

Nickel, MW-17A (mg/l)



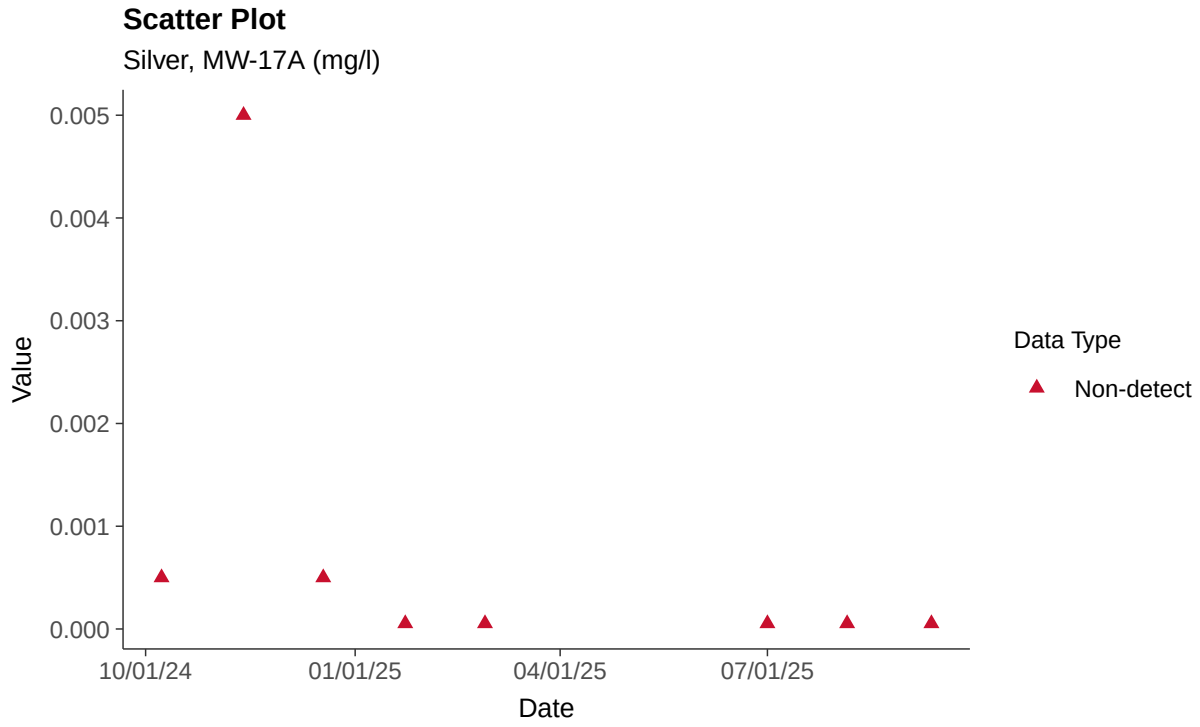
Trend Regression: Lognormal MLE

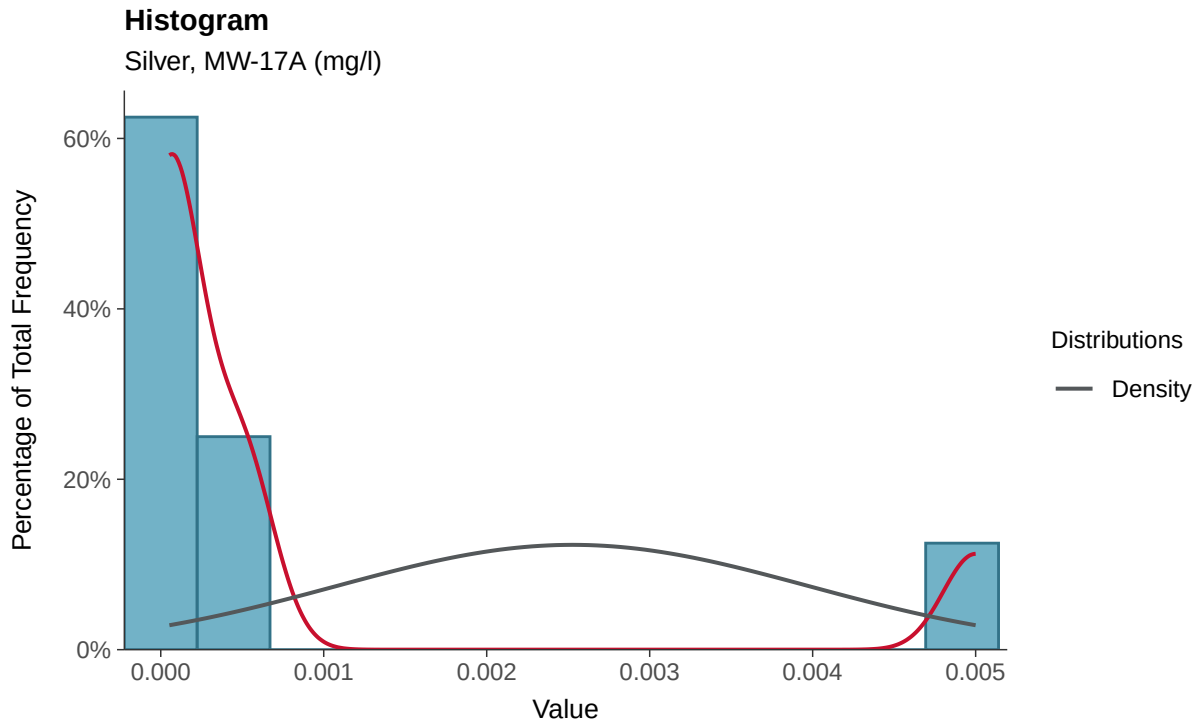
Nickel, MW-17A (mg/l)



Part 115: Silver, MW-17A

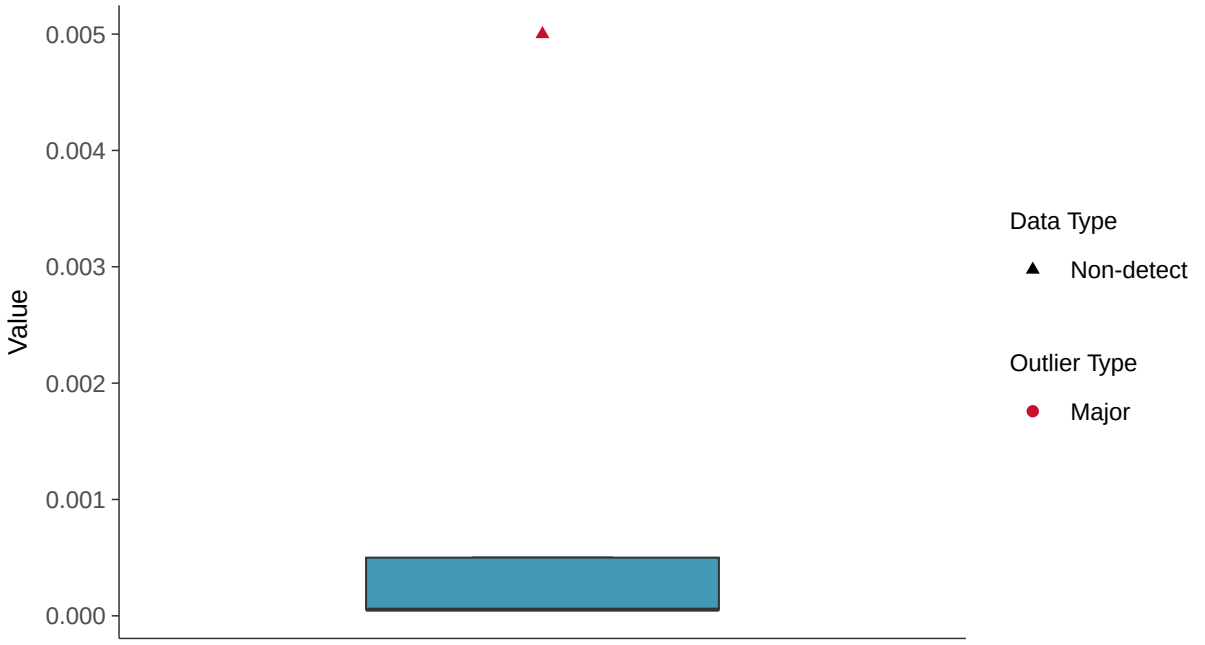
ID: 27_5_123





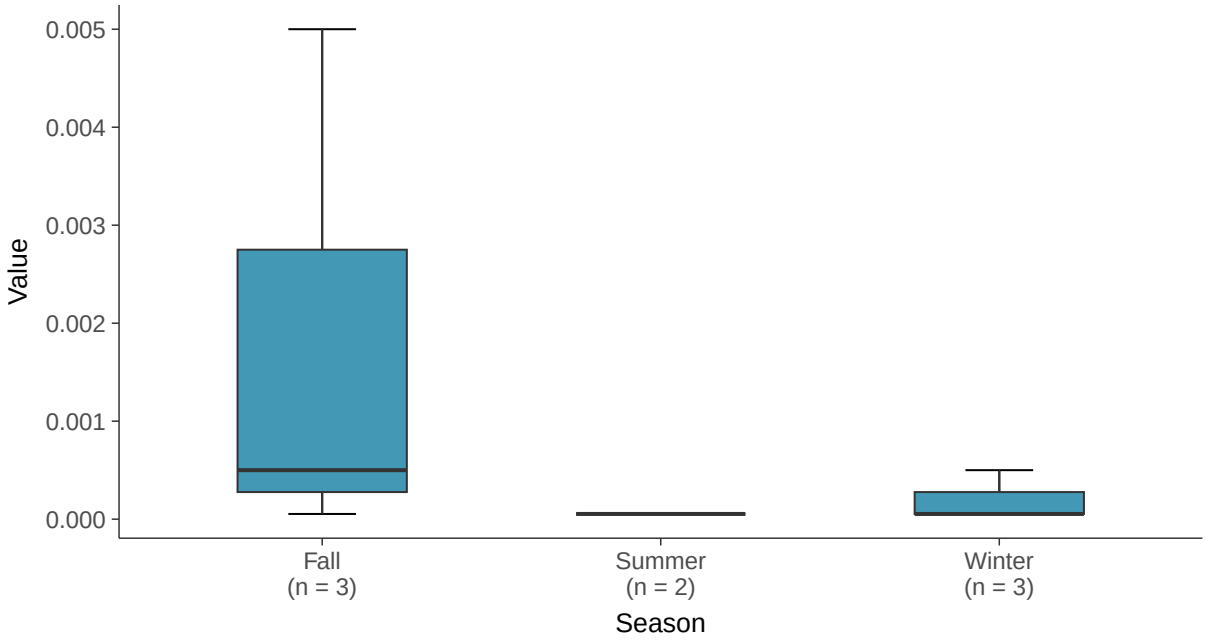
Boxplot

Silver, MW-17A (mg/l)



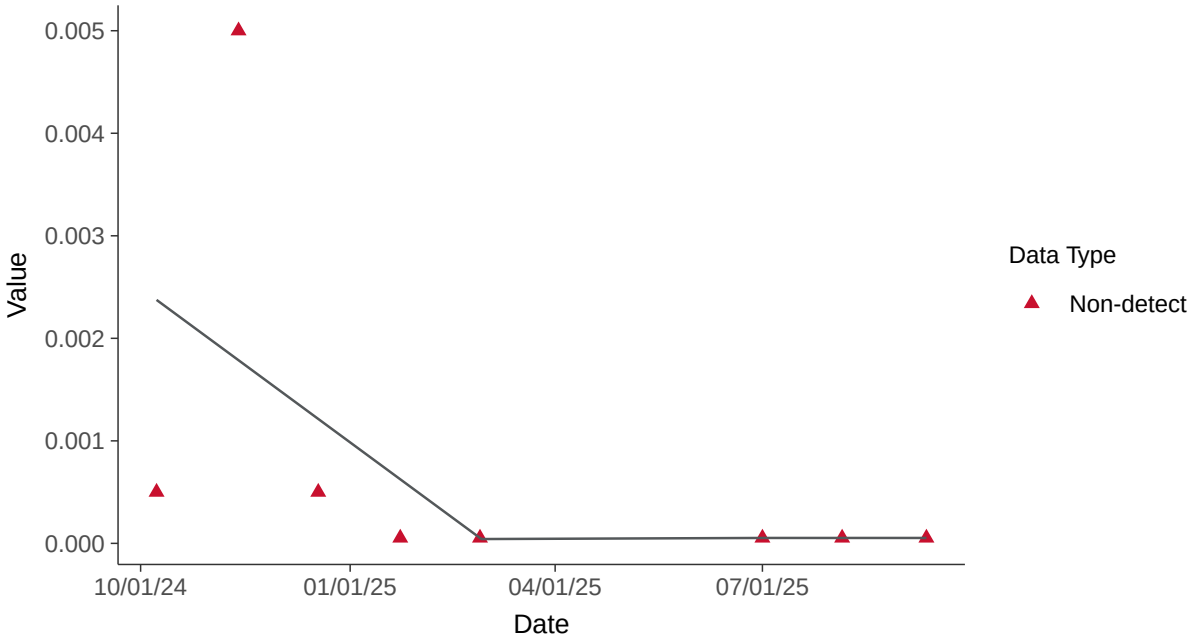
Boxplot by Season

Silver, MW-17A (mg/l)



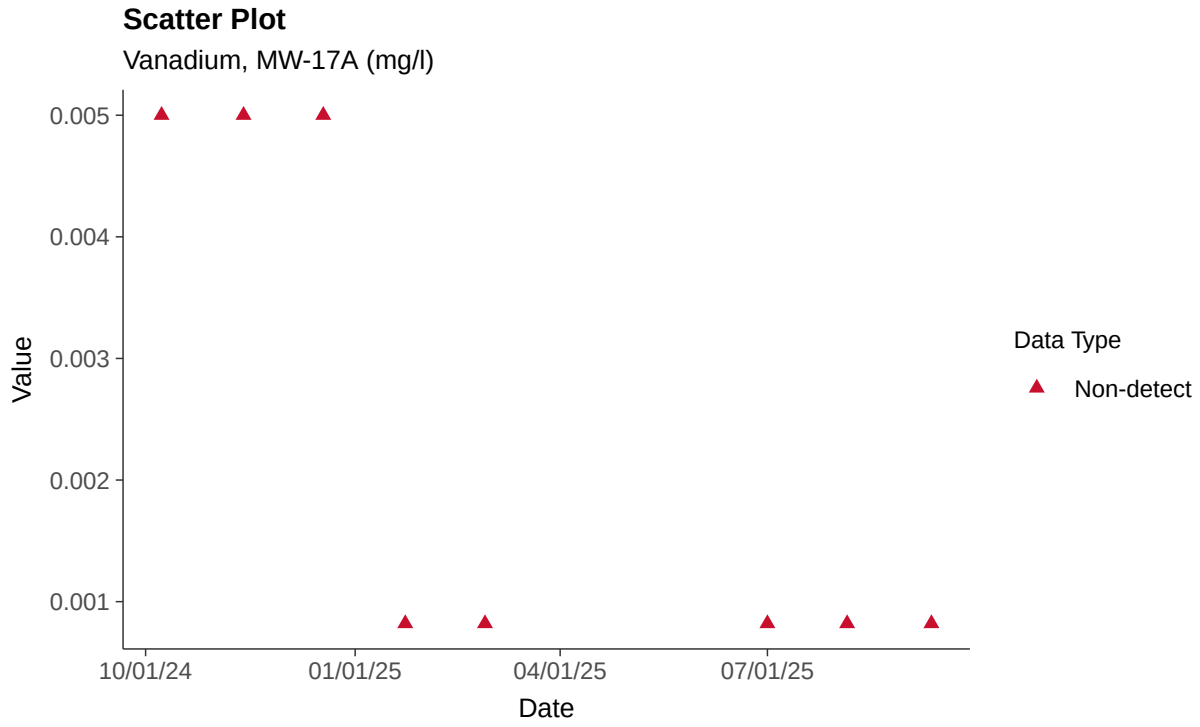
Trend Regression: Piecewise Linear-Linear

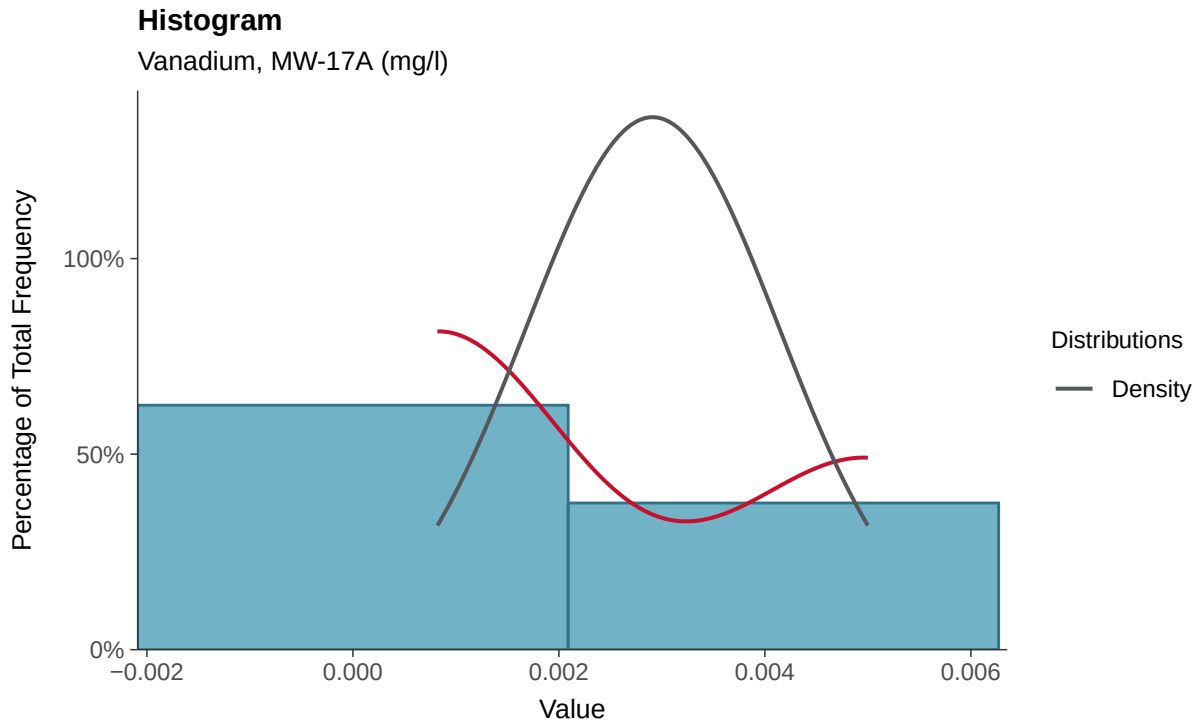
Silver, MW-17A (mg/l)



Part 115: Vanadium, MW-17A

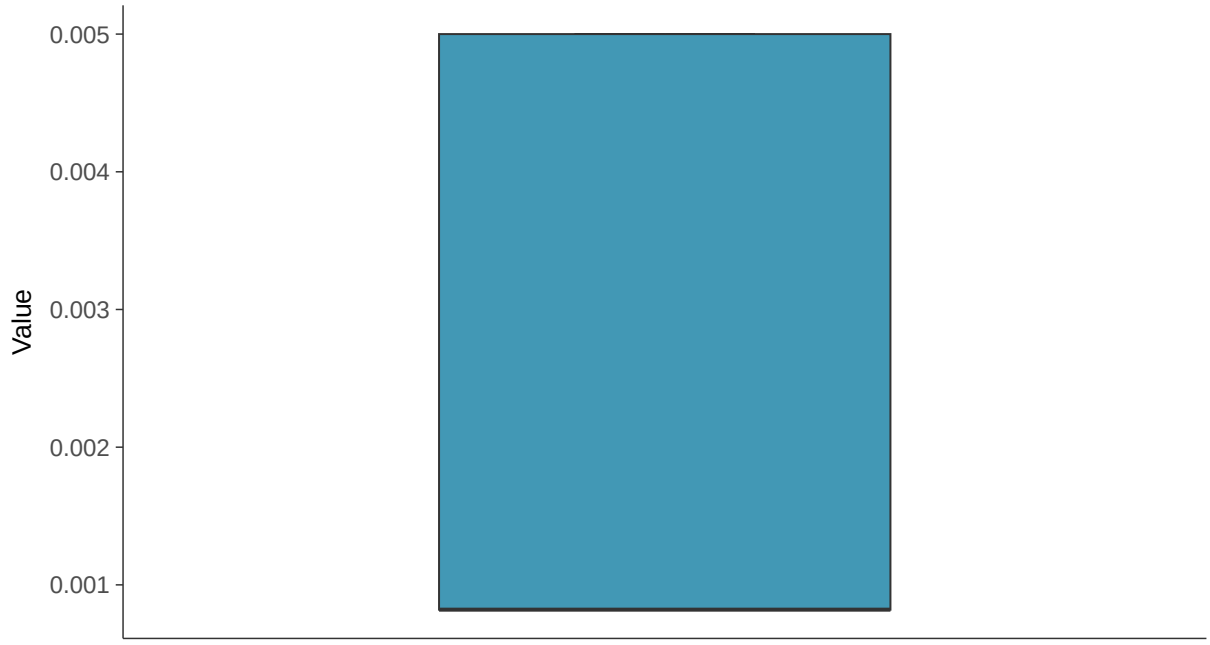
ID: 27_5_128





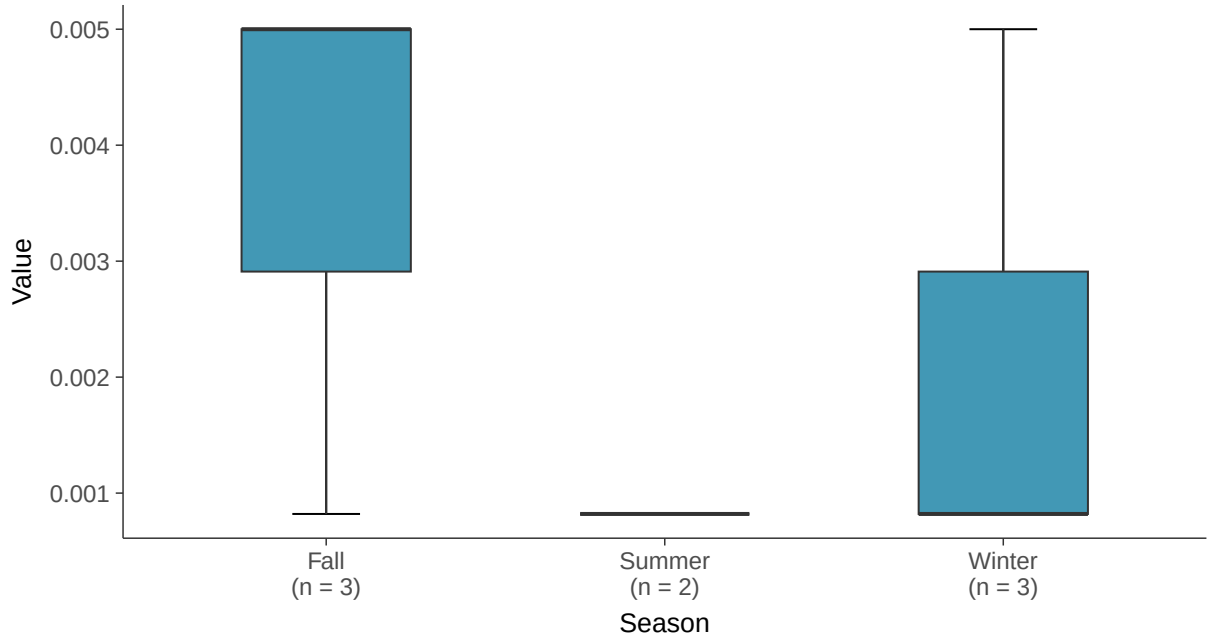
Boxplot

Vanadium, MW-17A (mg/l)



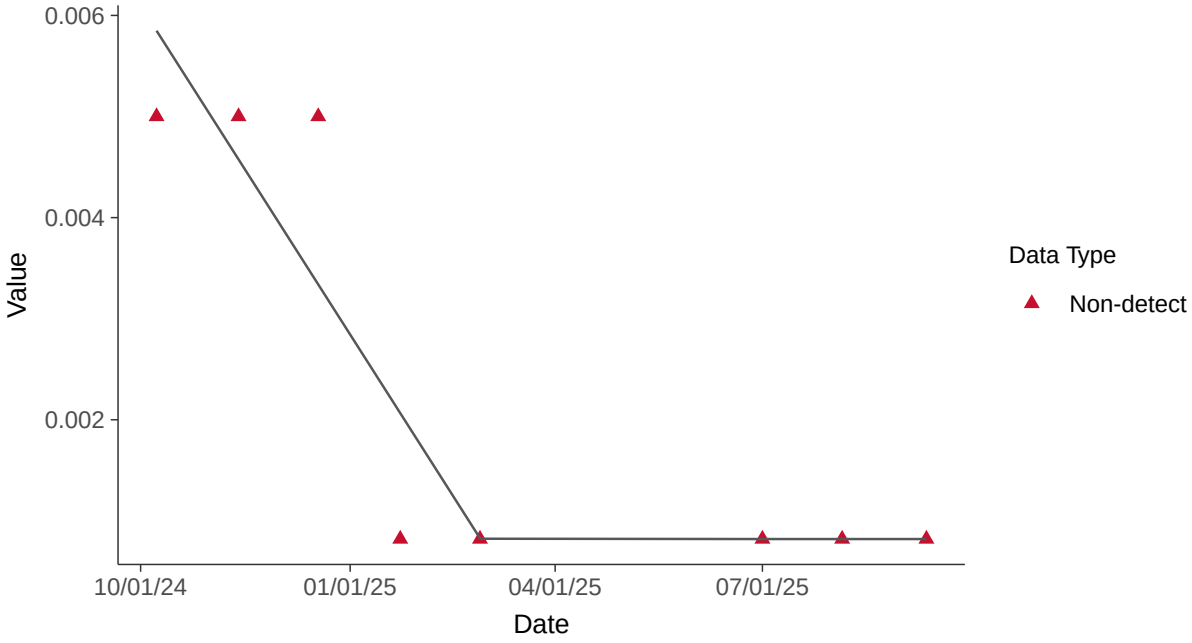
Boxplot by Season

Vanadium, MW-17A (mg/l)



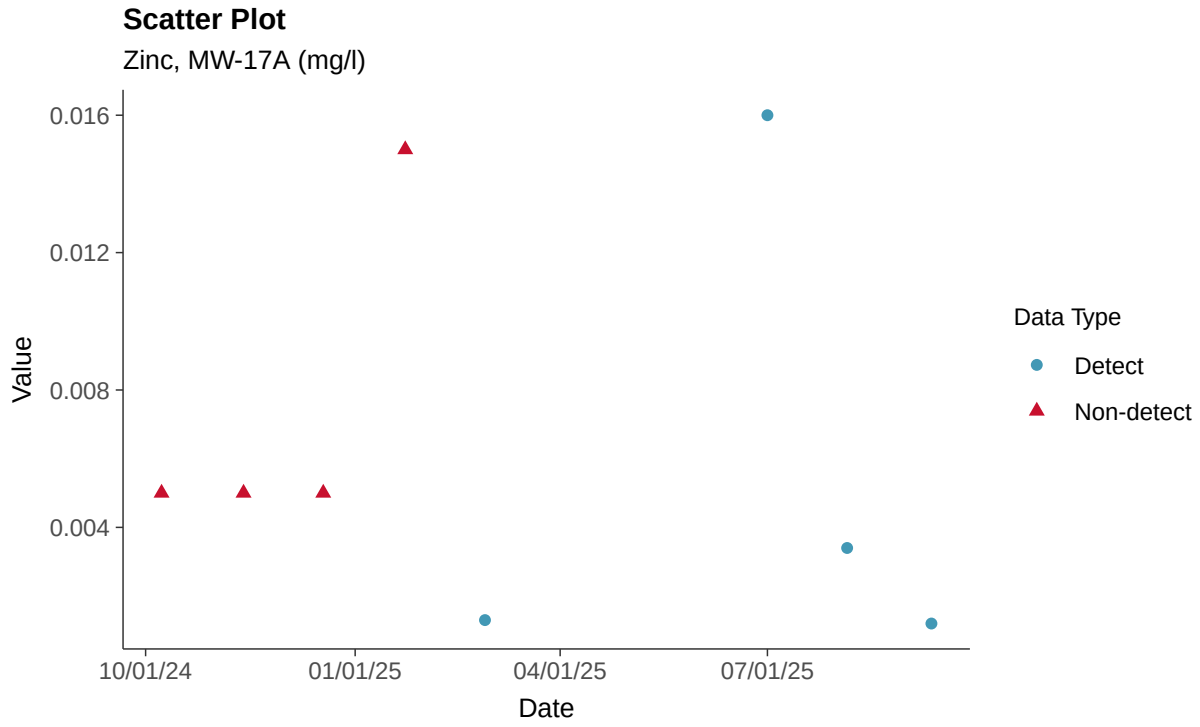
Trend Regression: Piecewise Linear-Linear

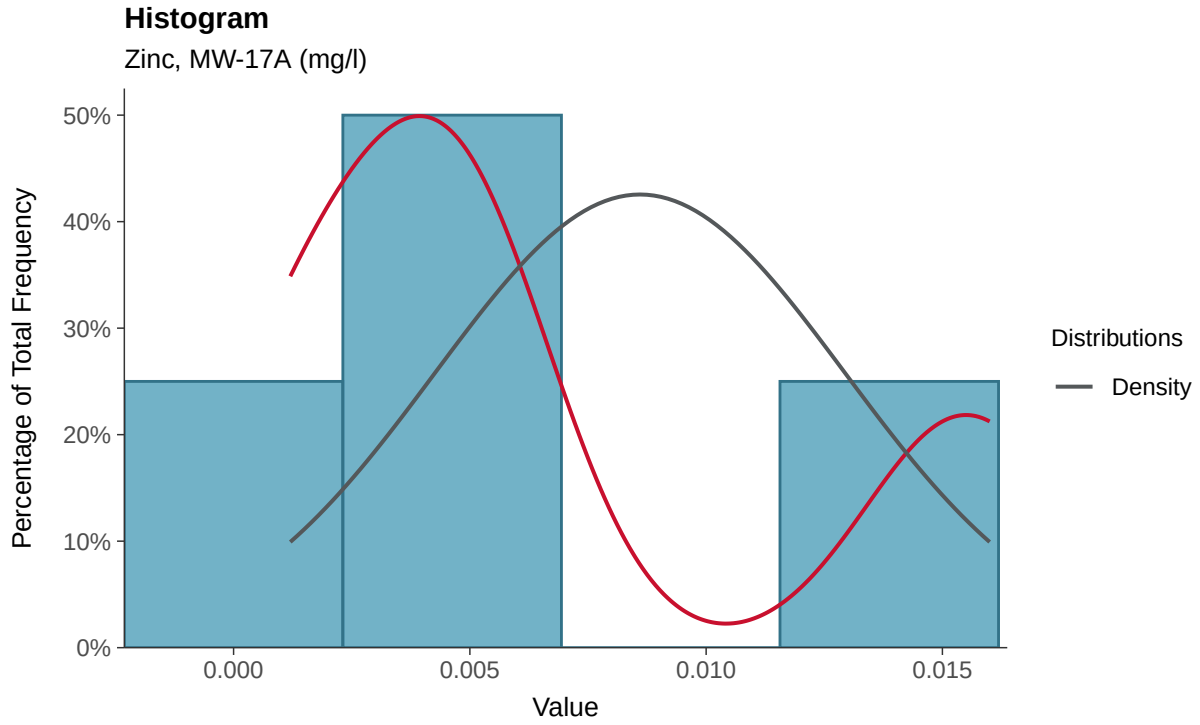
Vanadium, MW-17A (mg/l)



Part 115: Zinc, MW-17A

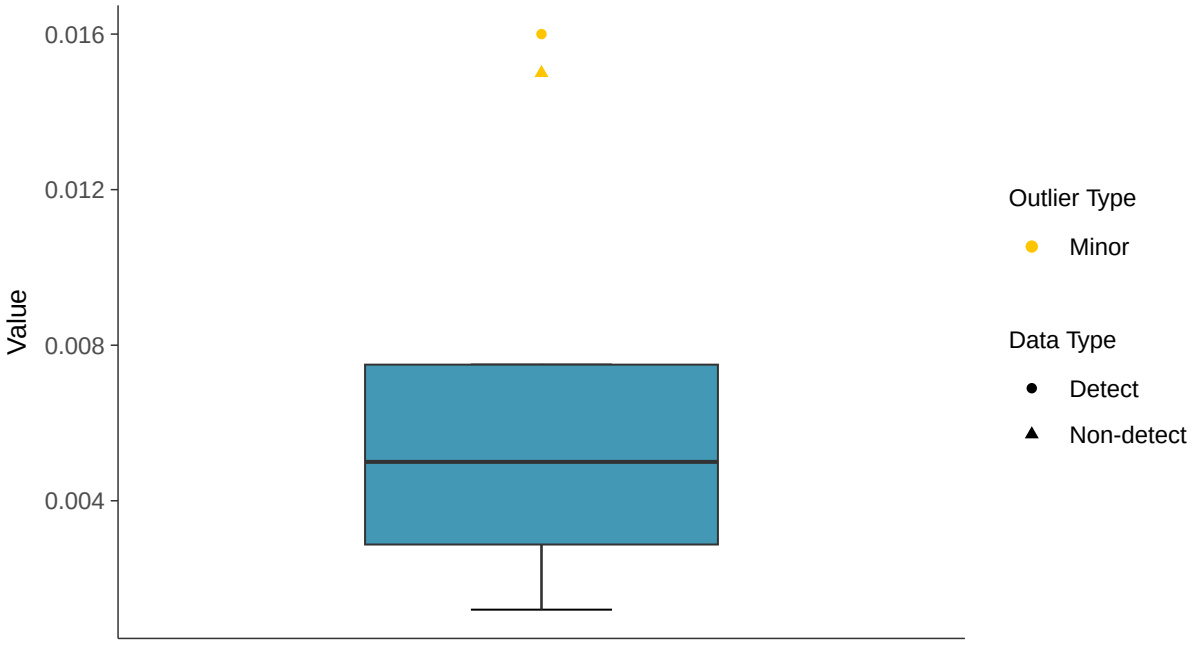
ID: 27_5_129





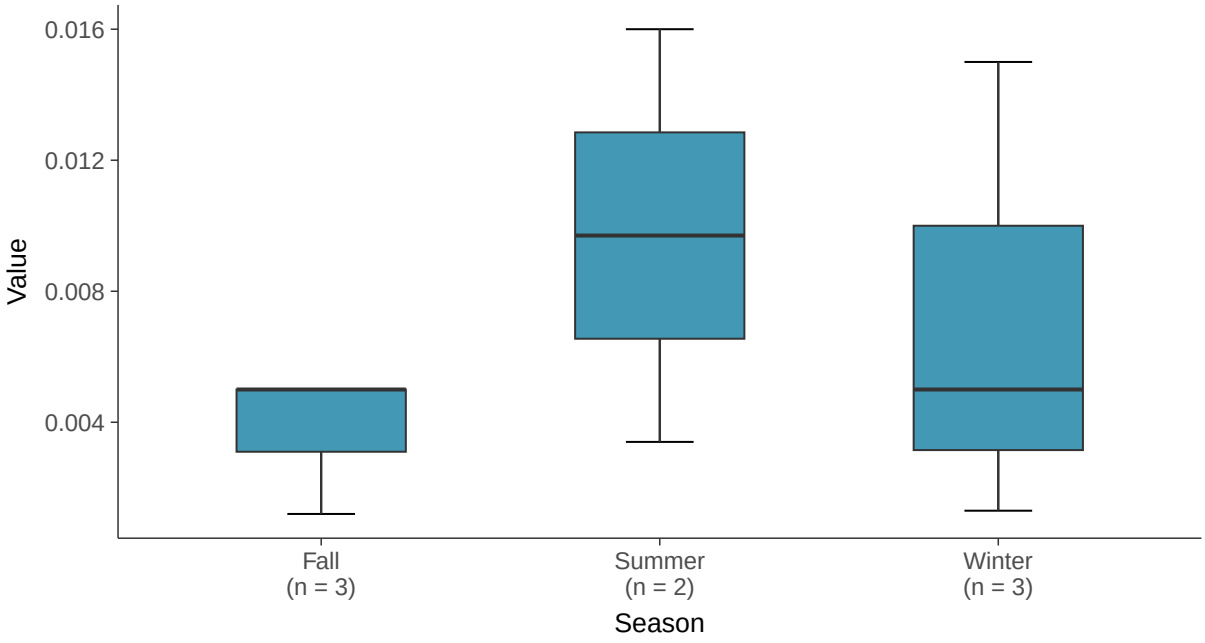
Boxplot

Zinc, MW-17A (mg/l)



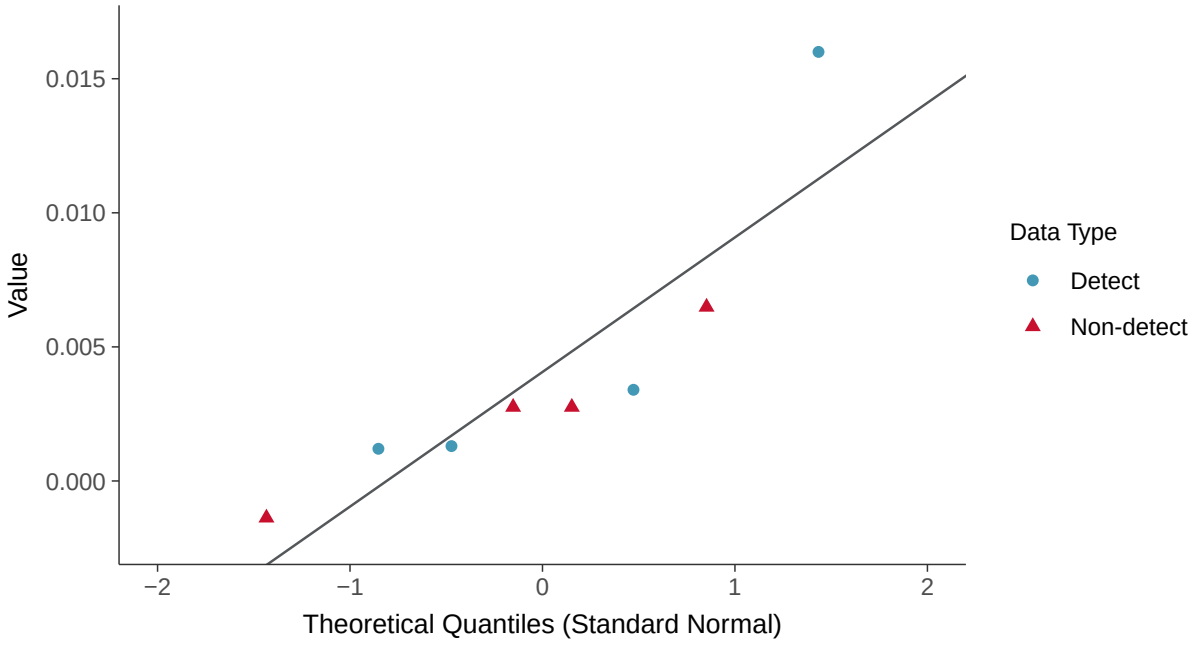
Boxplot by Season

Zinc, MW-17A (mg/l)



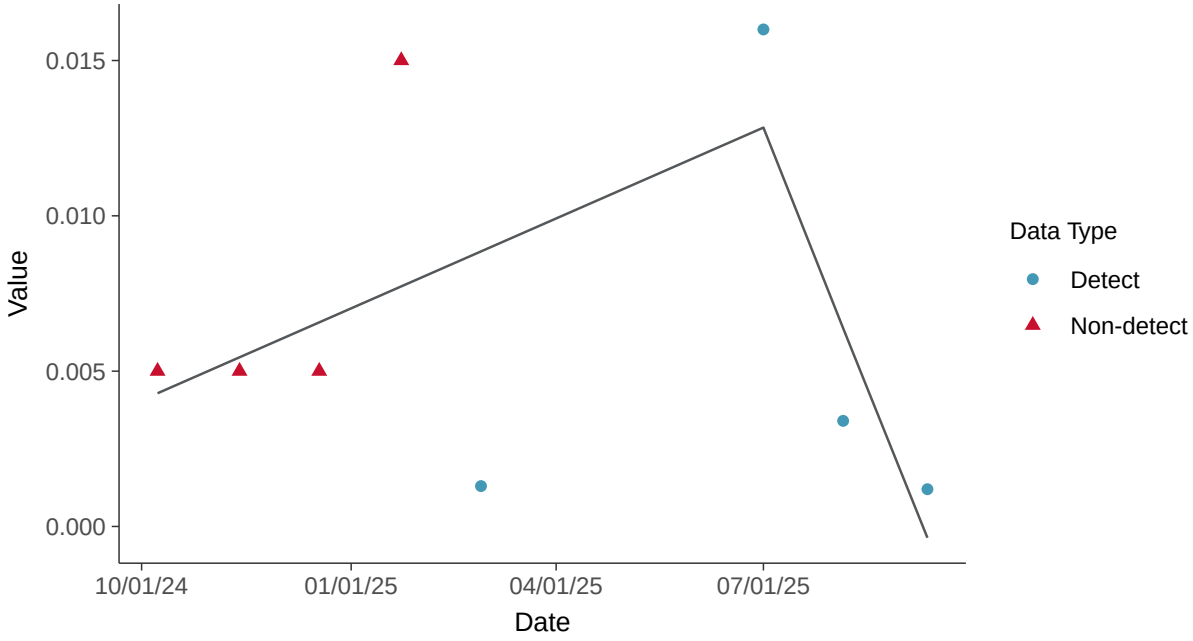
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-17A (mg/l)



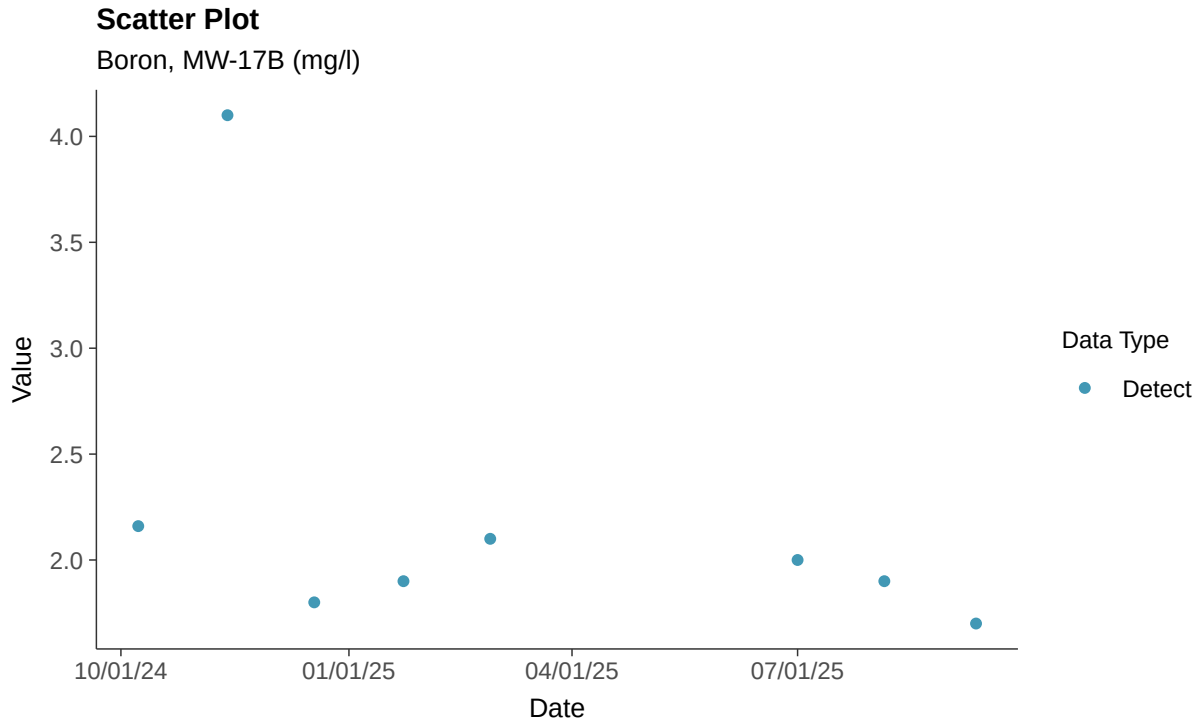
Trend Regression: Piecewise Linear-Linear

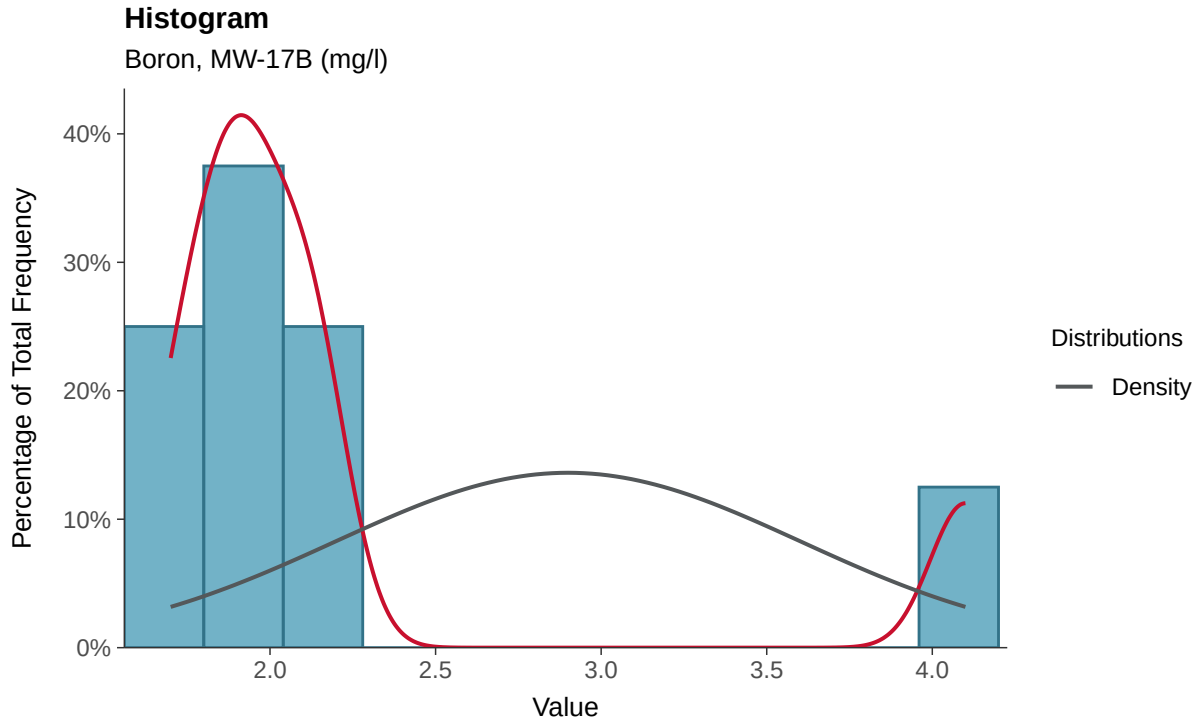
Zinc, MW-17A (mg/l)



Appendix III: Boron, MW-17B

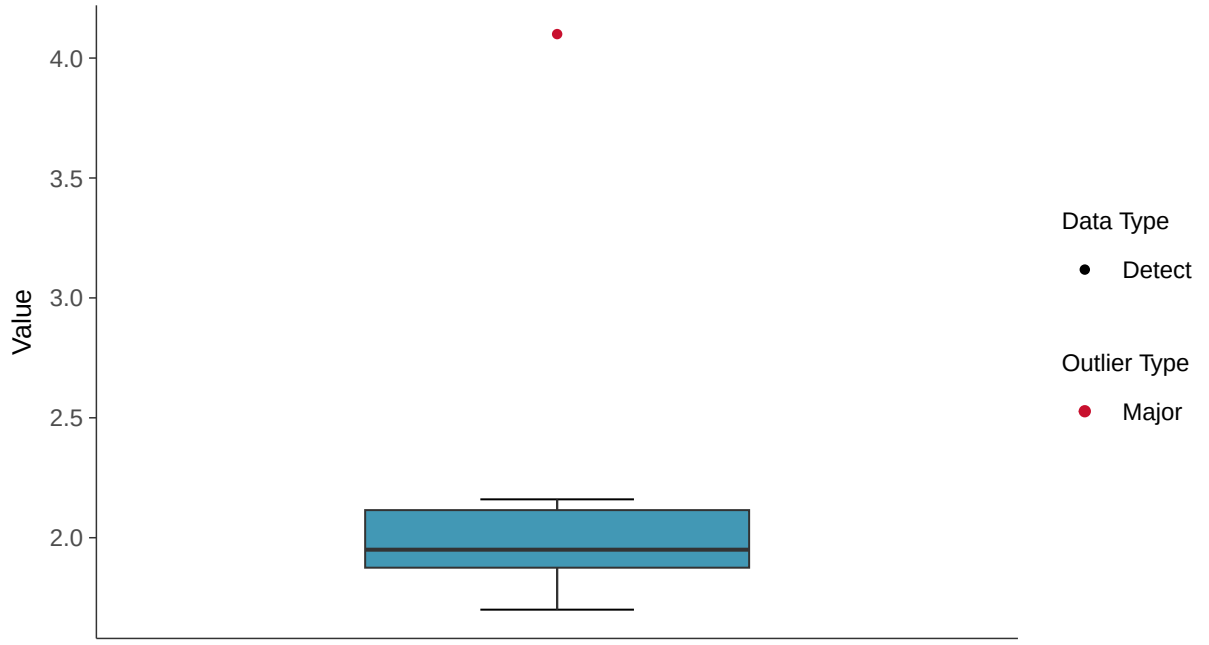
ID: 28_2_105





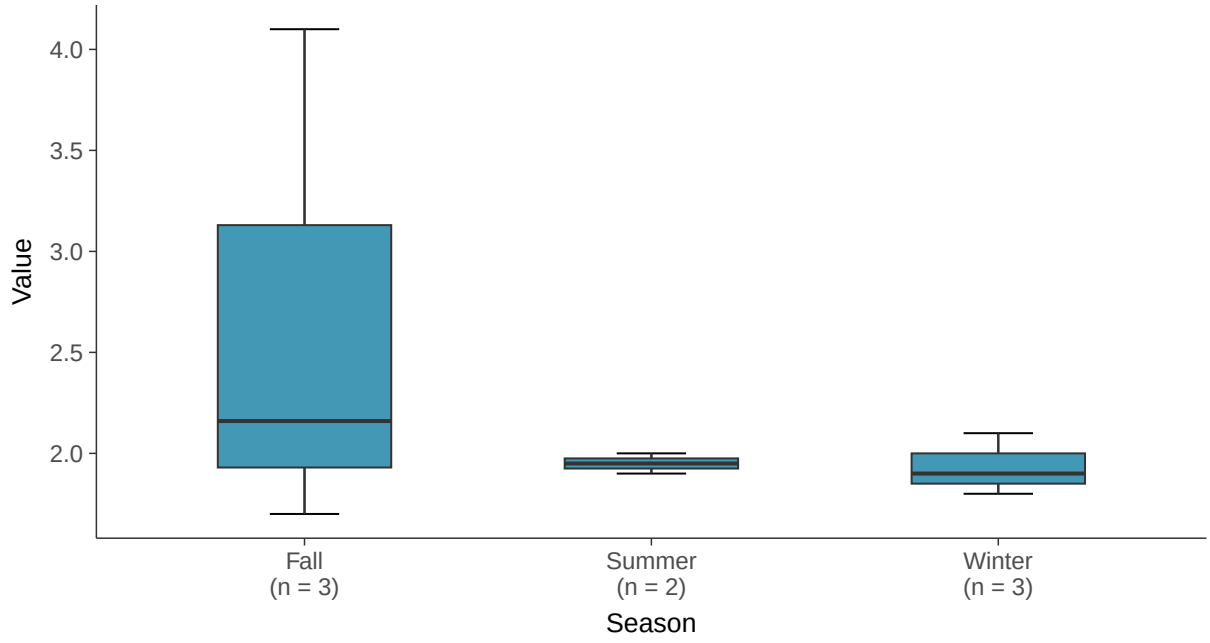
Boxplot

Boron, MW-17B (mg/l)



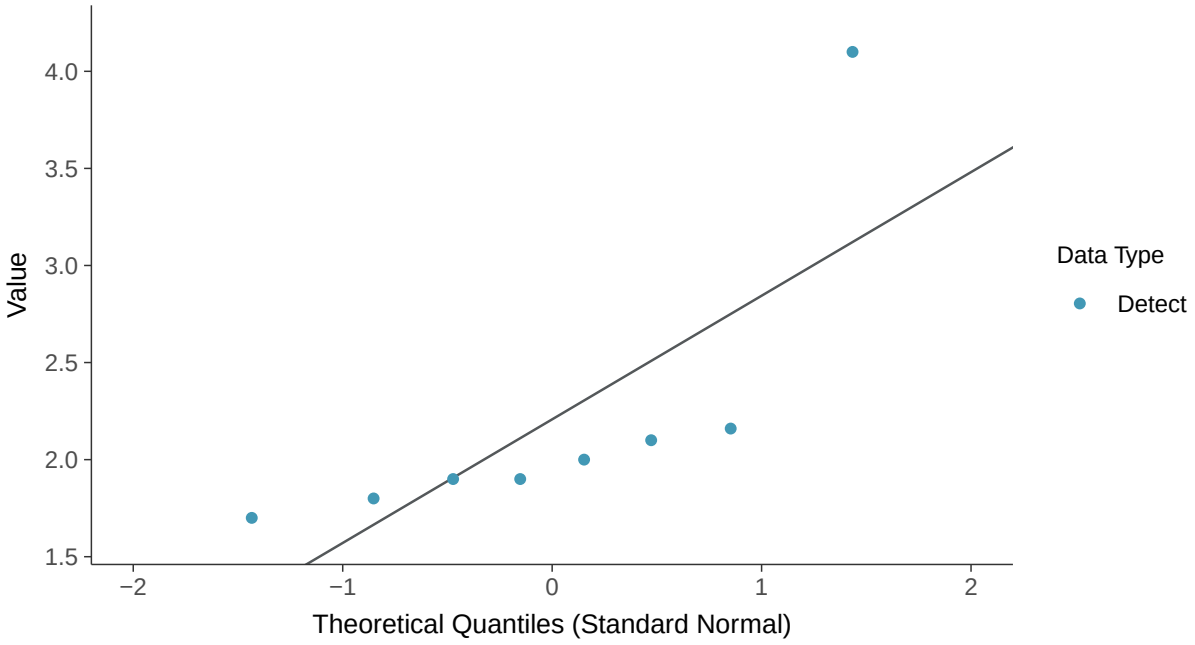
Boxplot by Season

Boron, MW-17B (mg/l)



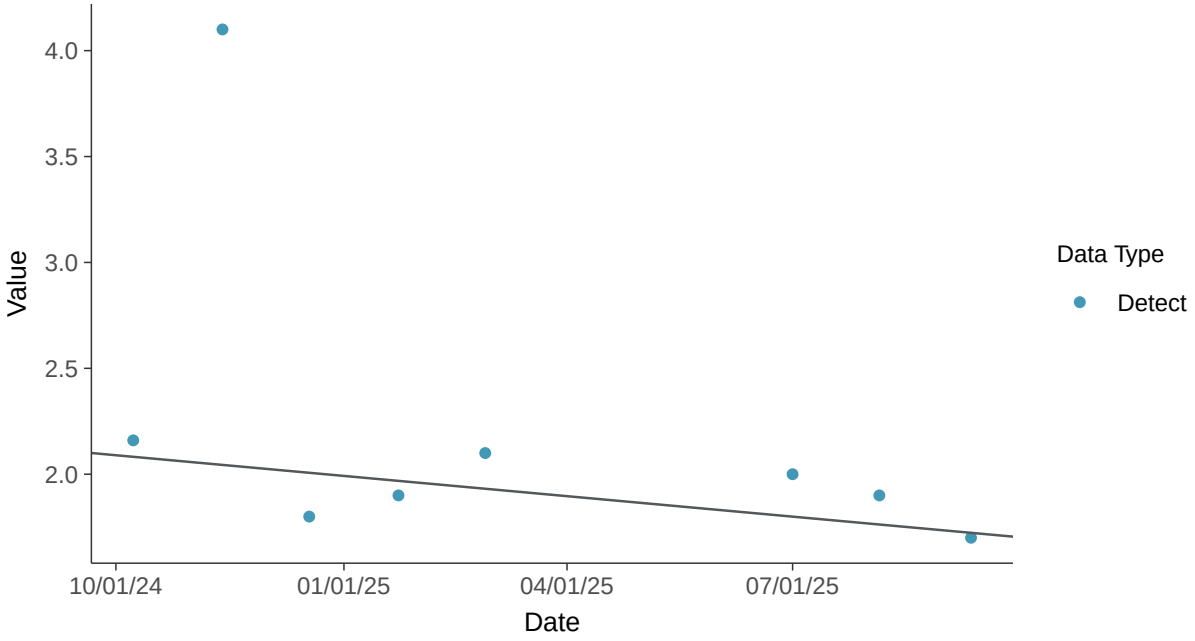
Normal Q-Q plot

Boron, MW-17B (mg/l)



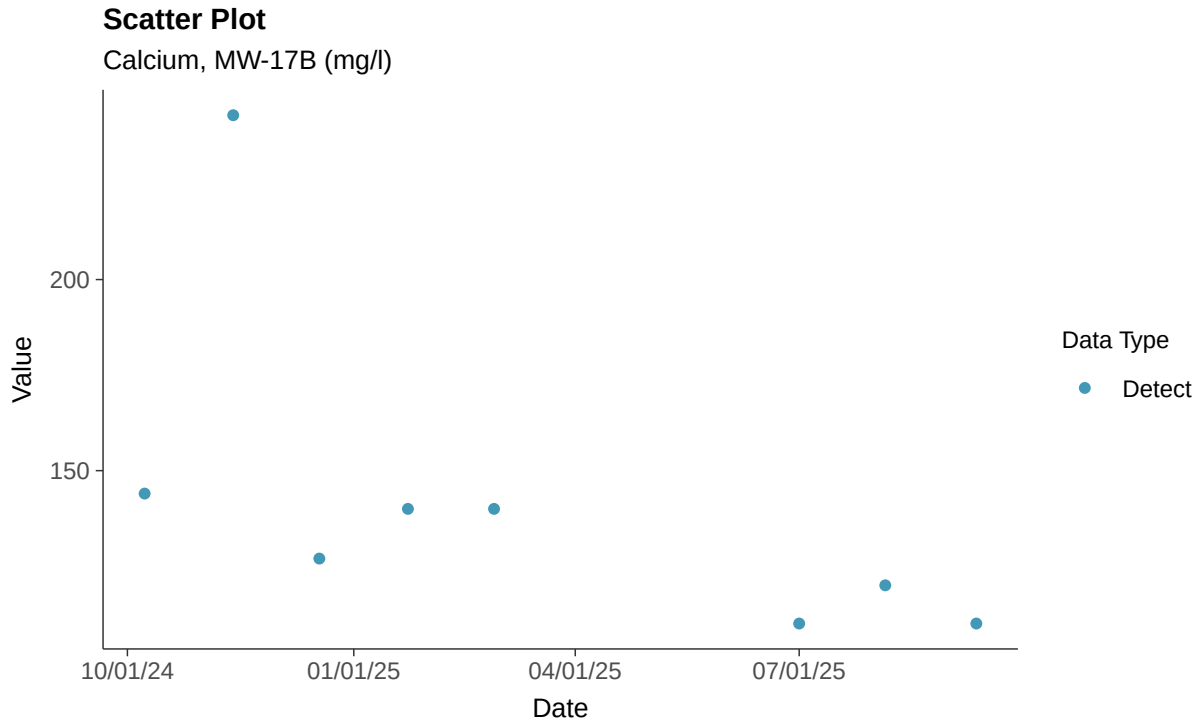
Trend Regression: Mann-Kendall/Theil-Sen Estimate

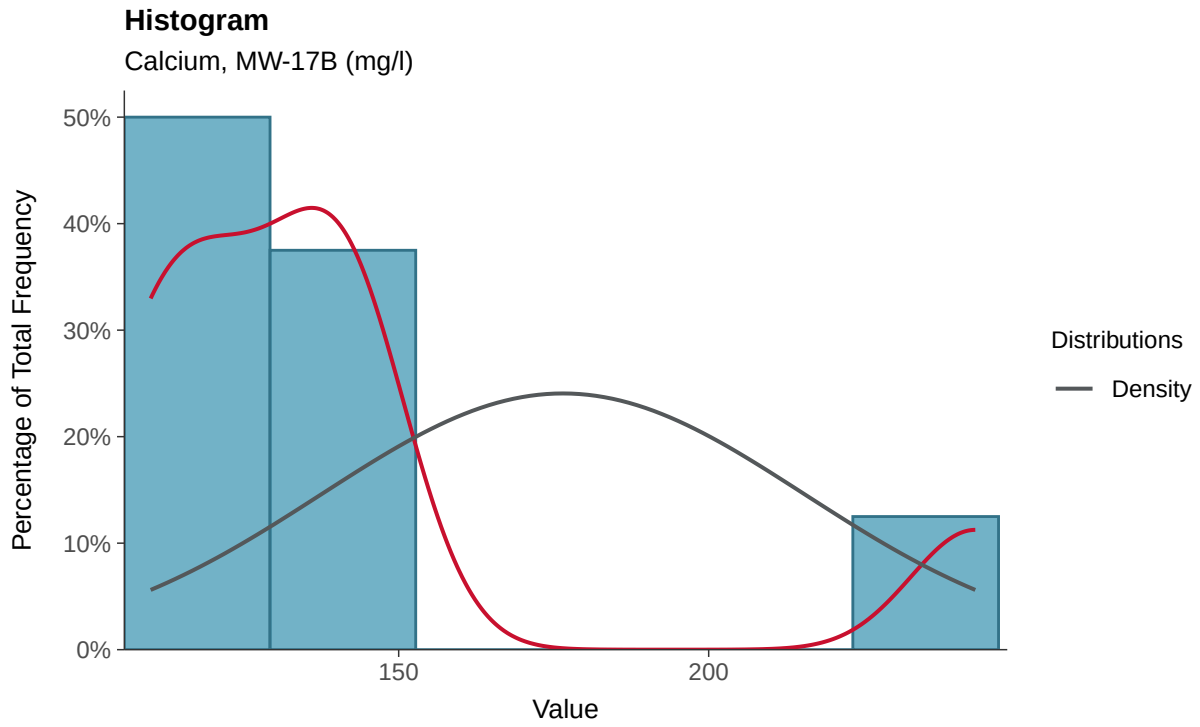
Boron, MW-17B (mg/l)



Appendix III: Calcium, MW-17B

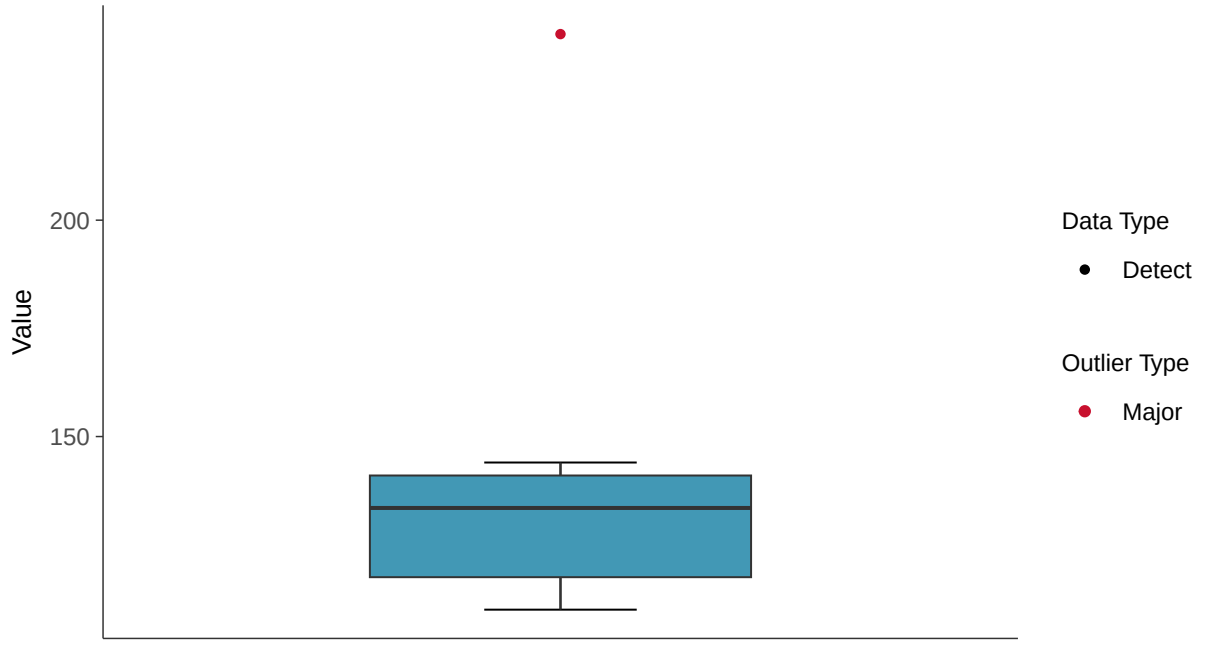
ID: 28_2_107





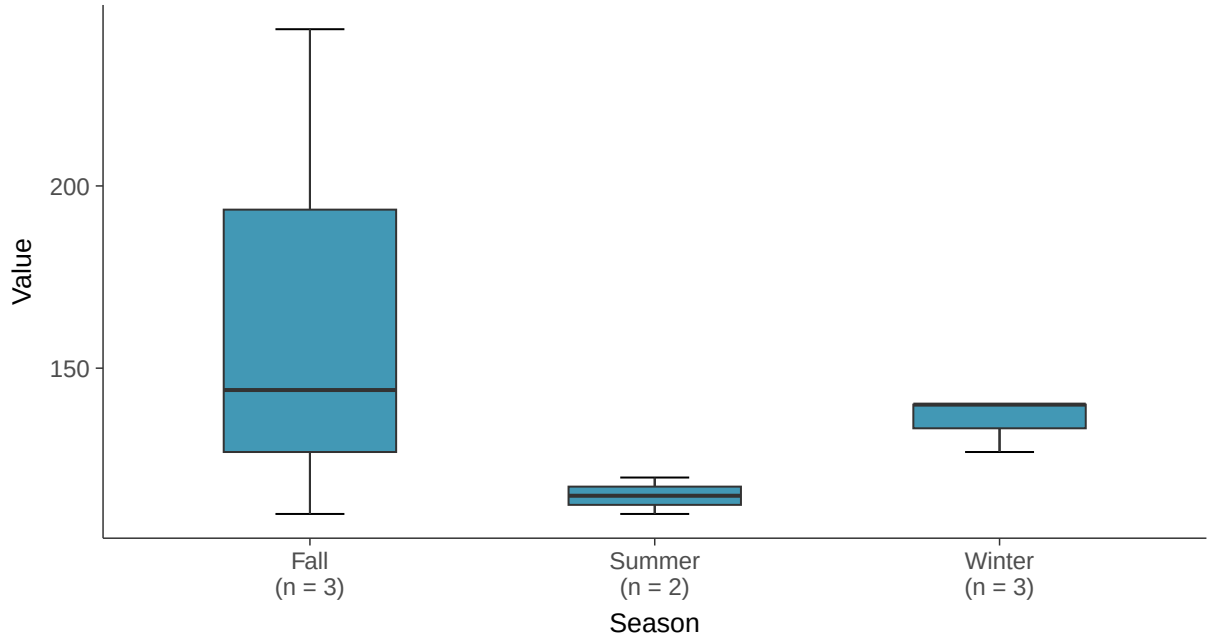
Boxplot

Calcium, MW-17B (mg/l)



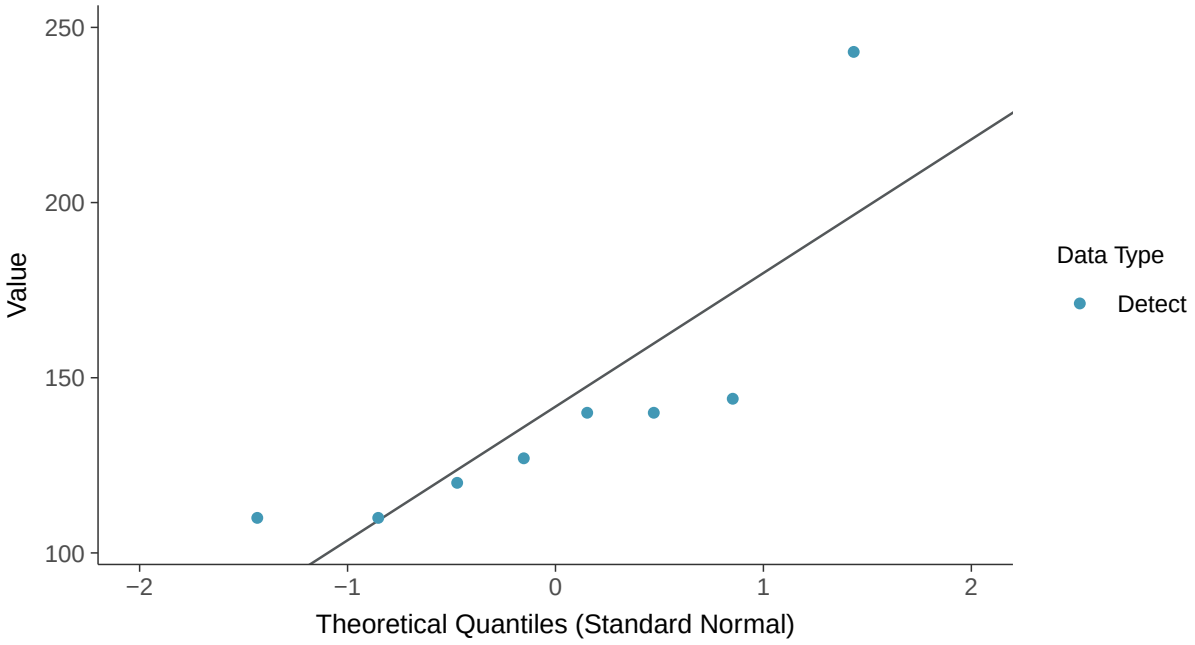
Boxplot by Season

Calcium, MW-17B (mg/l)



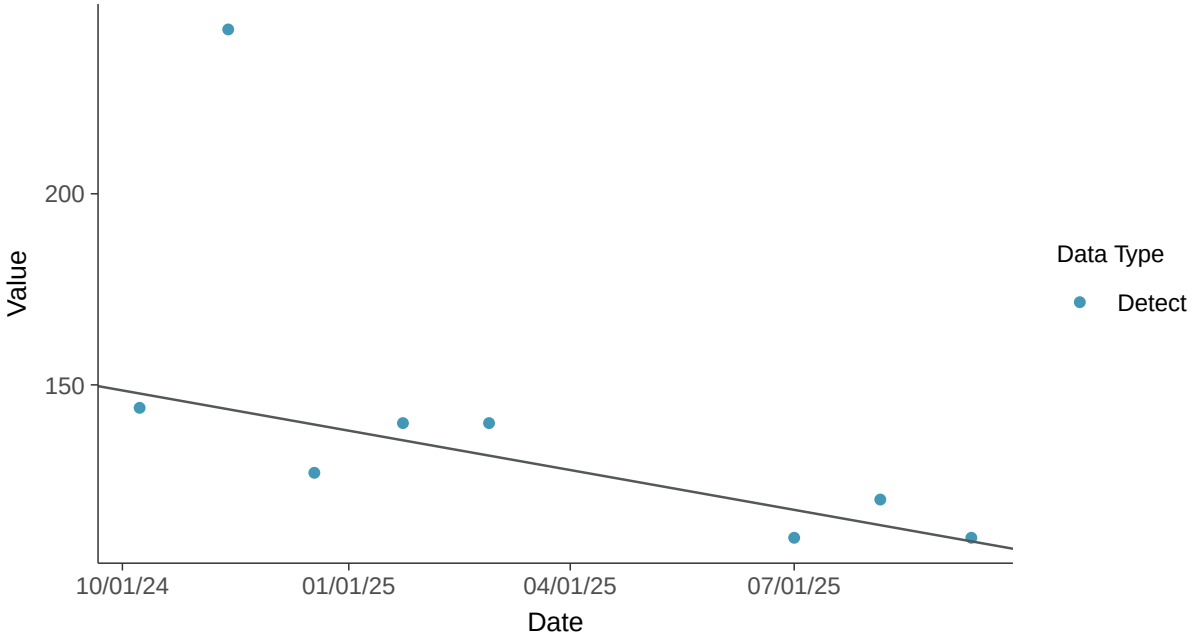
Normal Q-Q plot

Calcium, MW-17B (mg/l)



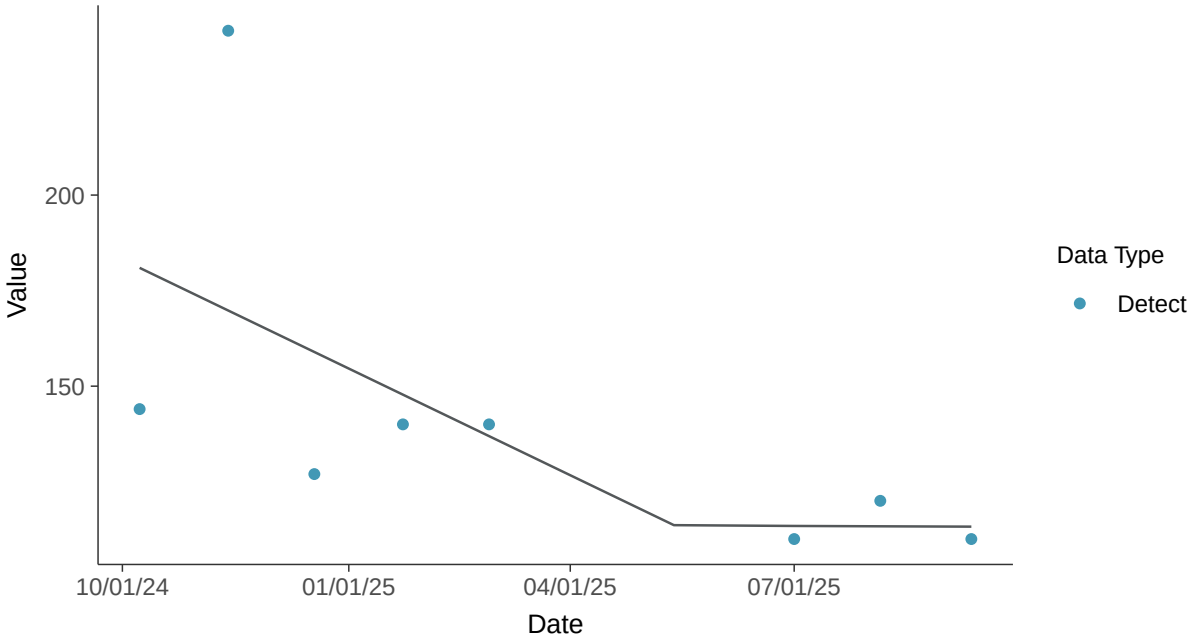
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Calcium, MW-17B (mg/l)



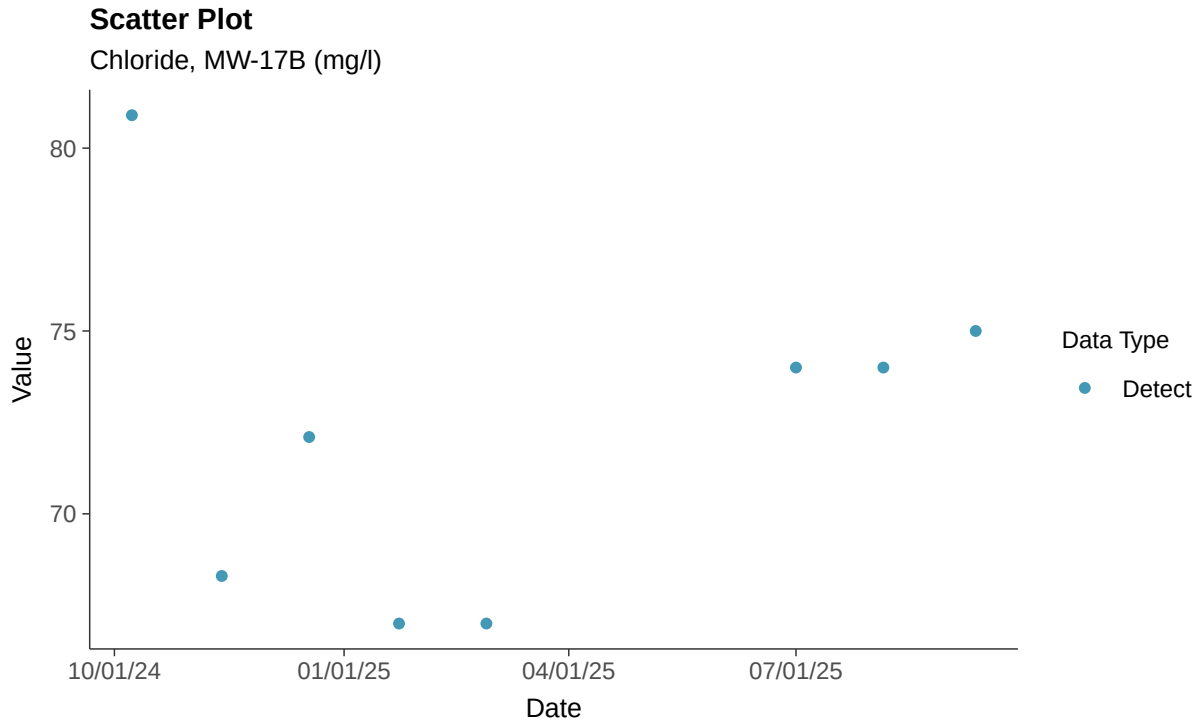
Trend Regression: Piecewise Linear-Linear

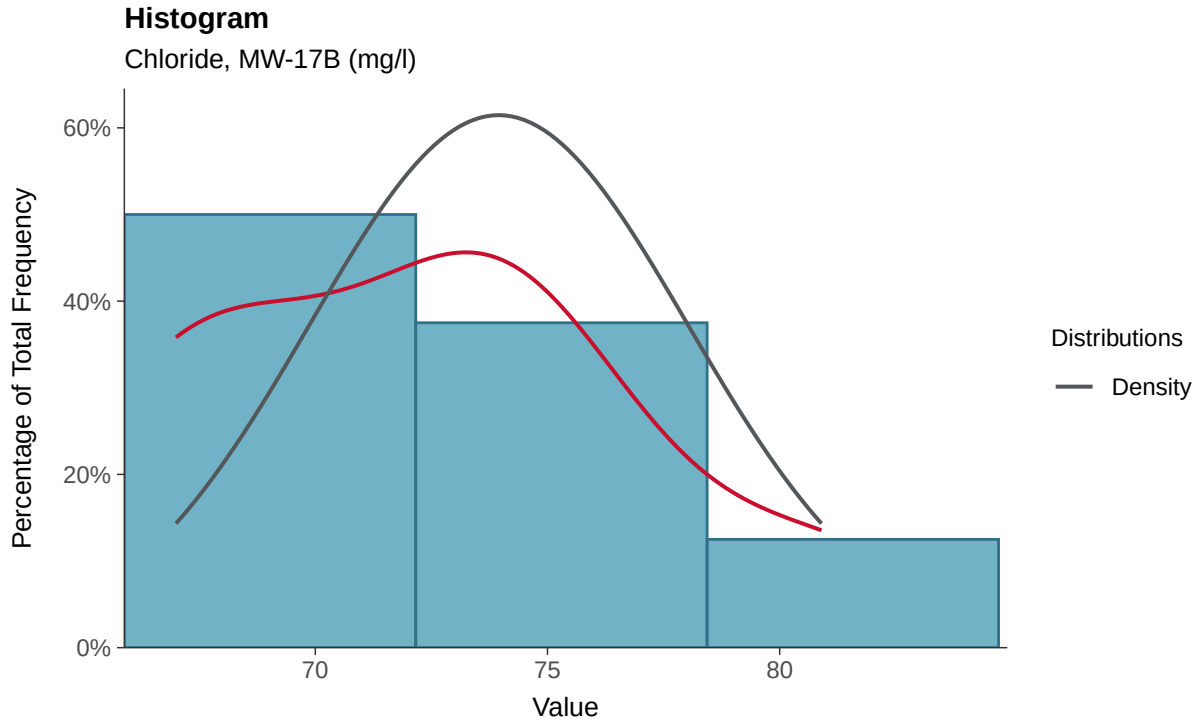
Calcium, MW-17B (mg/l)



Appendix III: Chloride, MW-17B

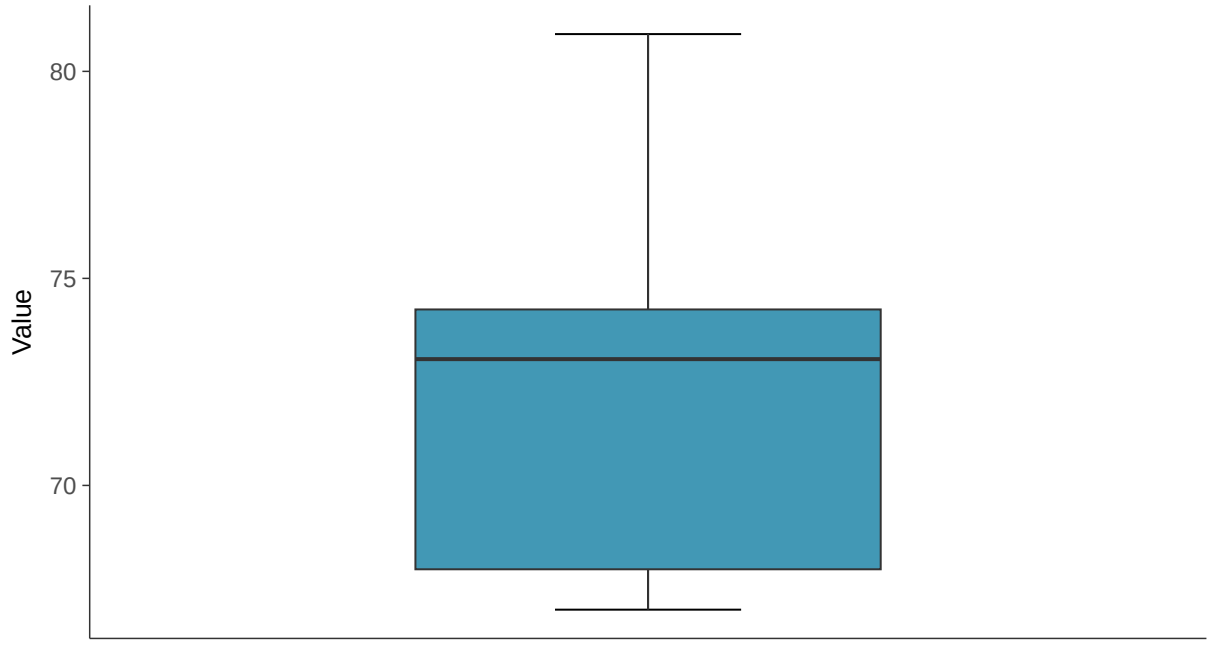
ID: 28_2_108





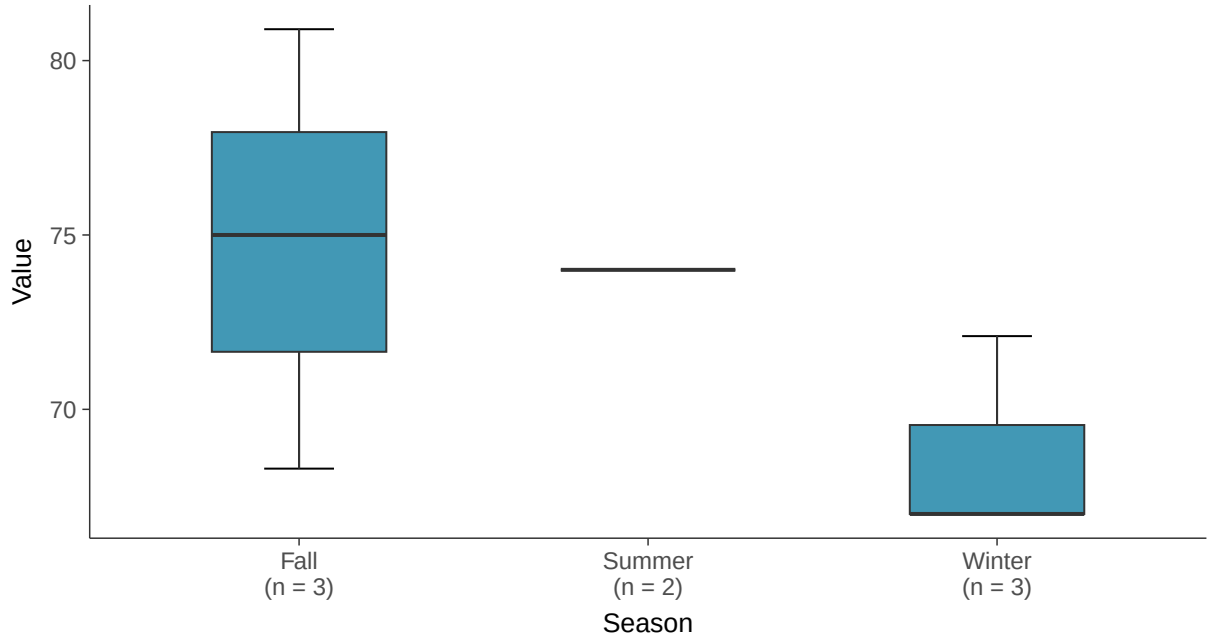
Boxplot

Chloride, MW-17B (mg/l)



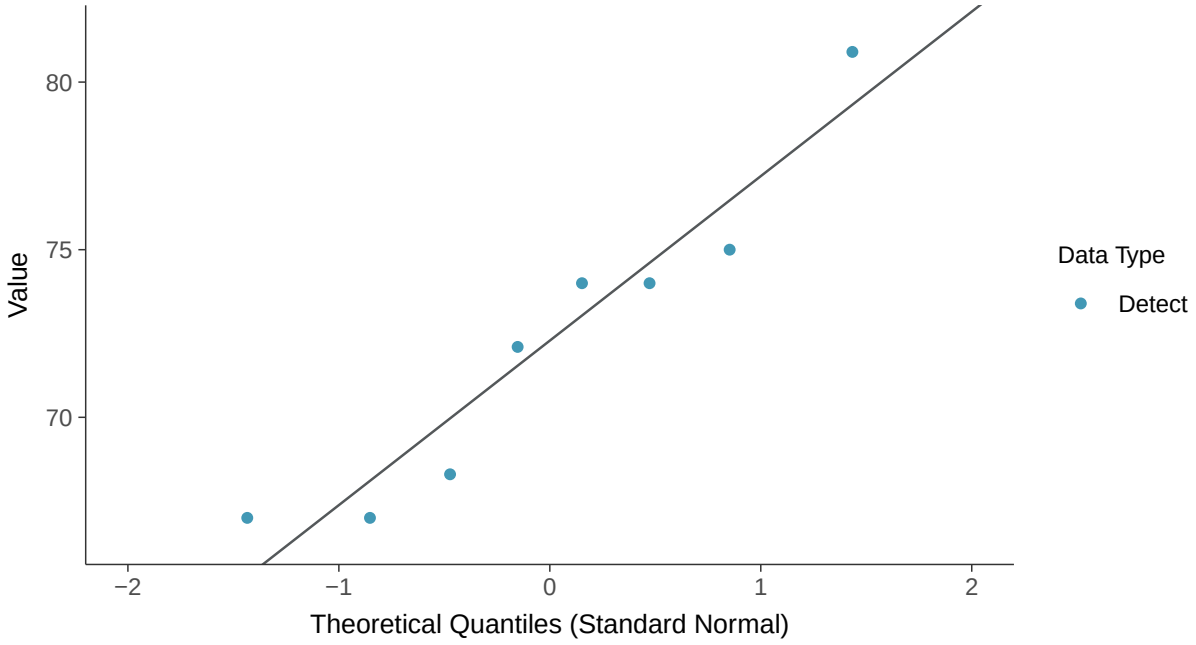
Boxplot by Season

Chloride, MW-17B (mg/l)



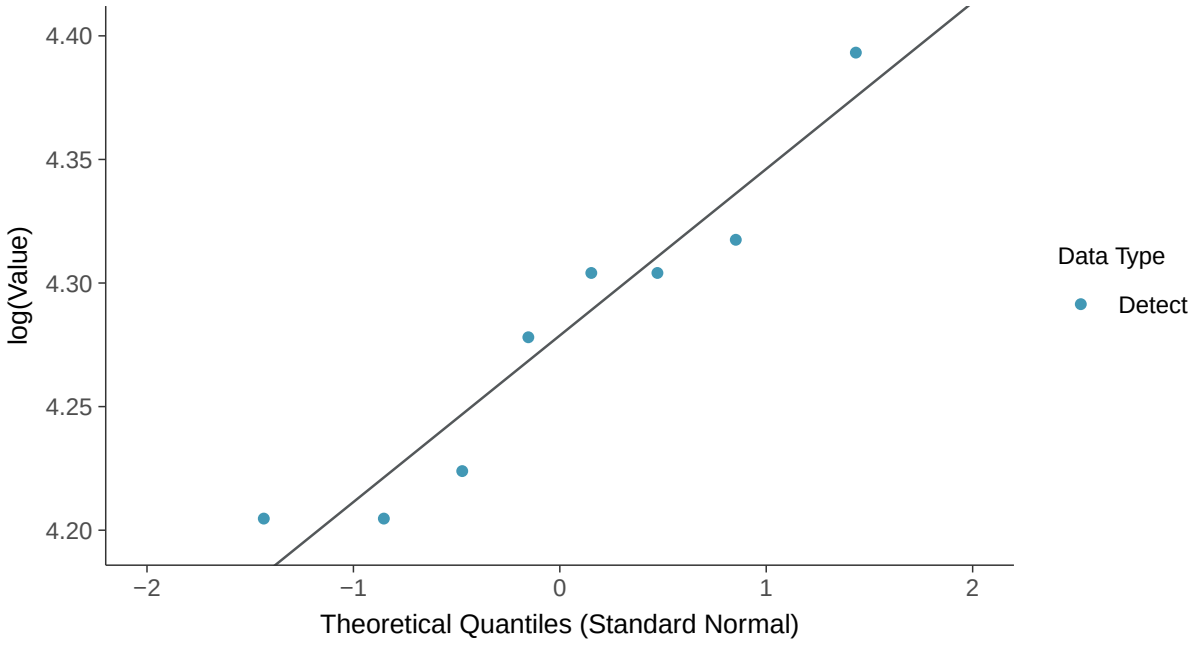
Normal Q-Q plot

Chloride, MW-17B (mg/l)



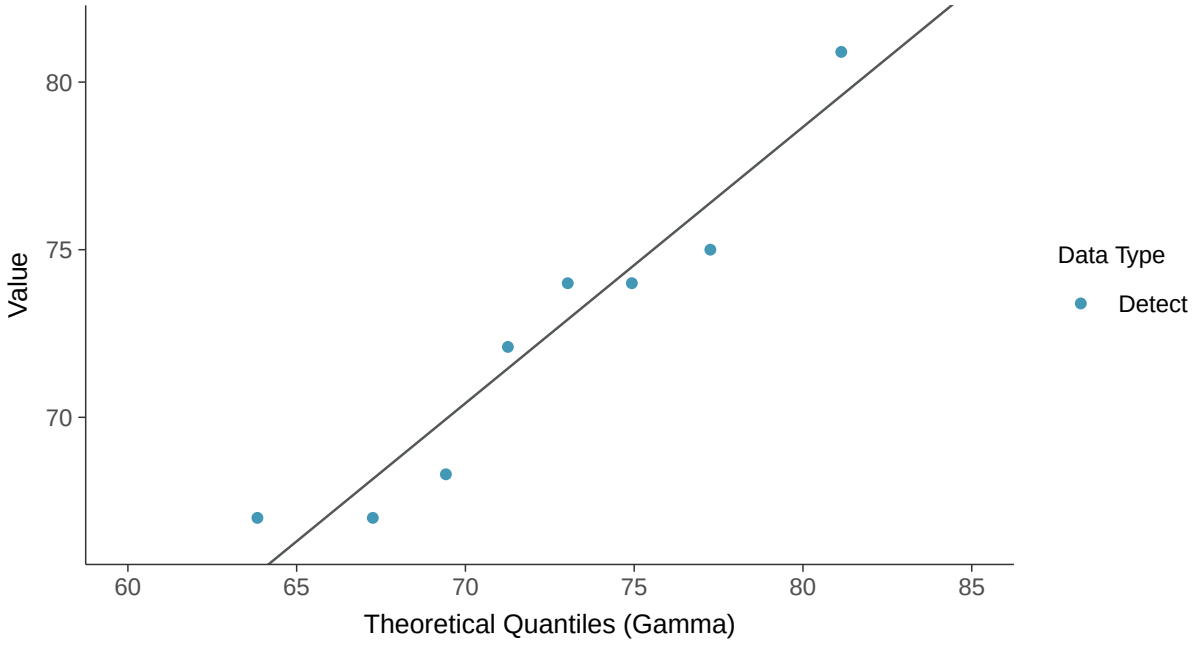
Lognormal Q-Q plot

Chloride, MW-17B (mg/l)



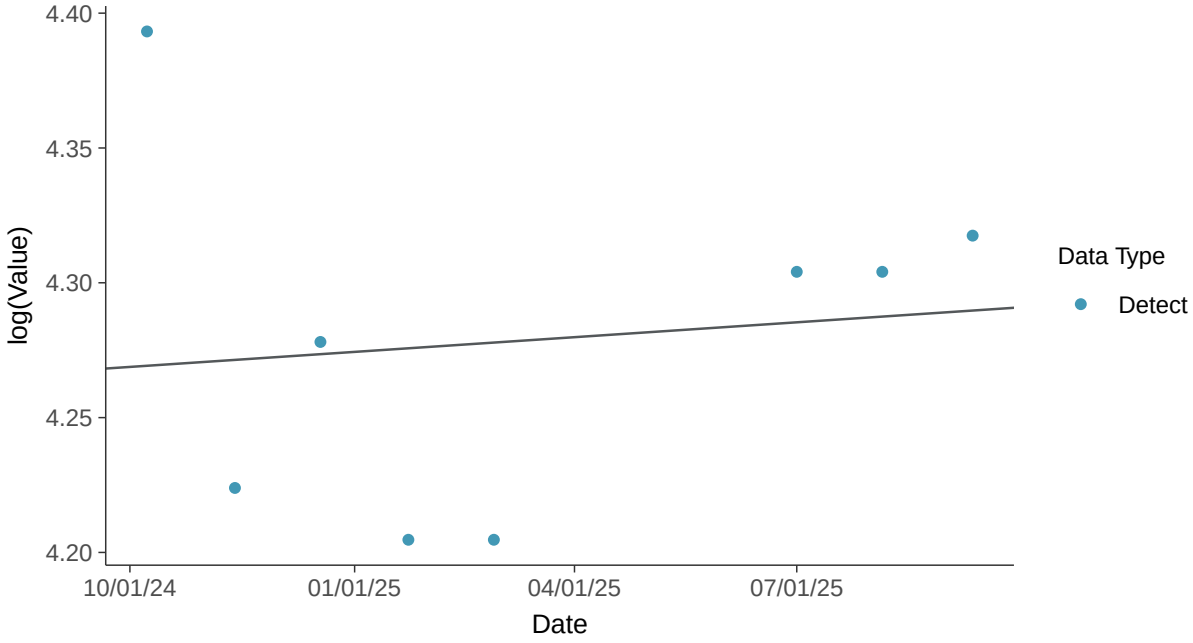
Gamma Q-Q plot

Chloride, MW-17B (mg/l)



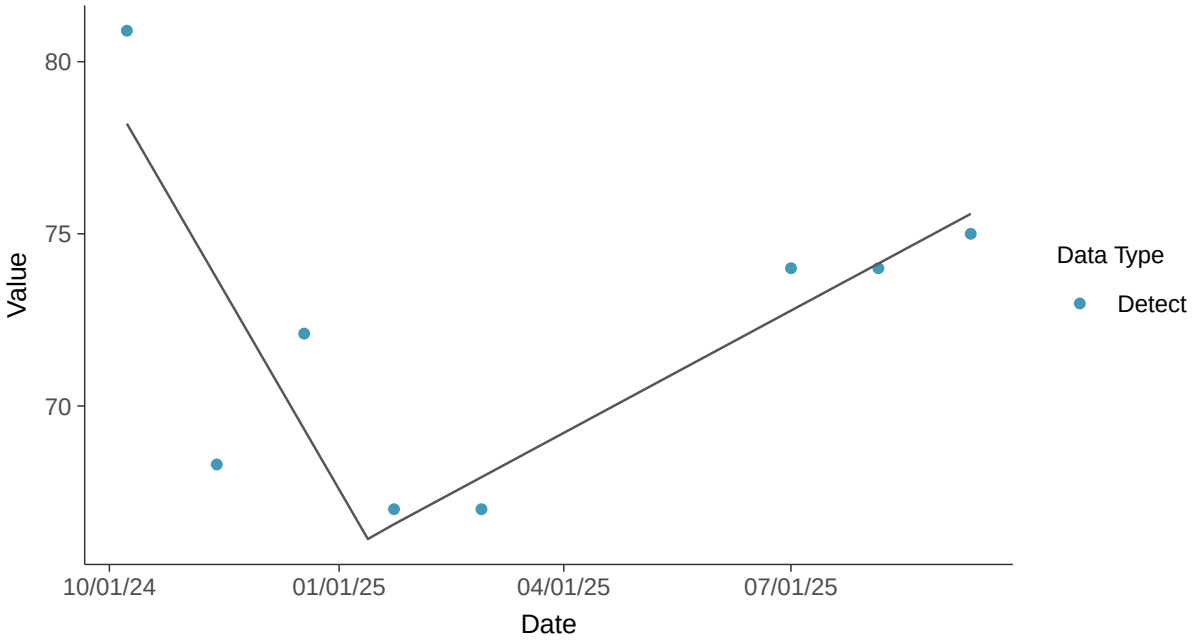
Trend Regression: Lognormal MLE

Chloride, MW-17B (mg/l)



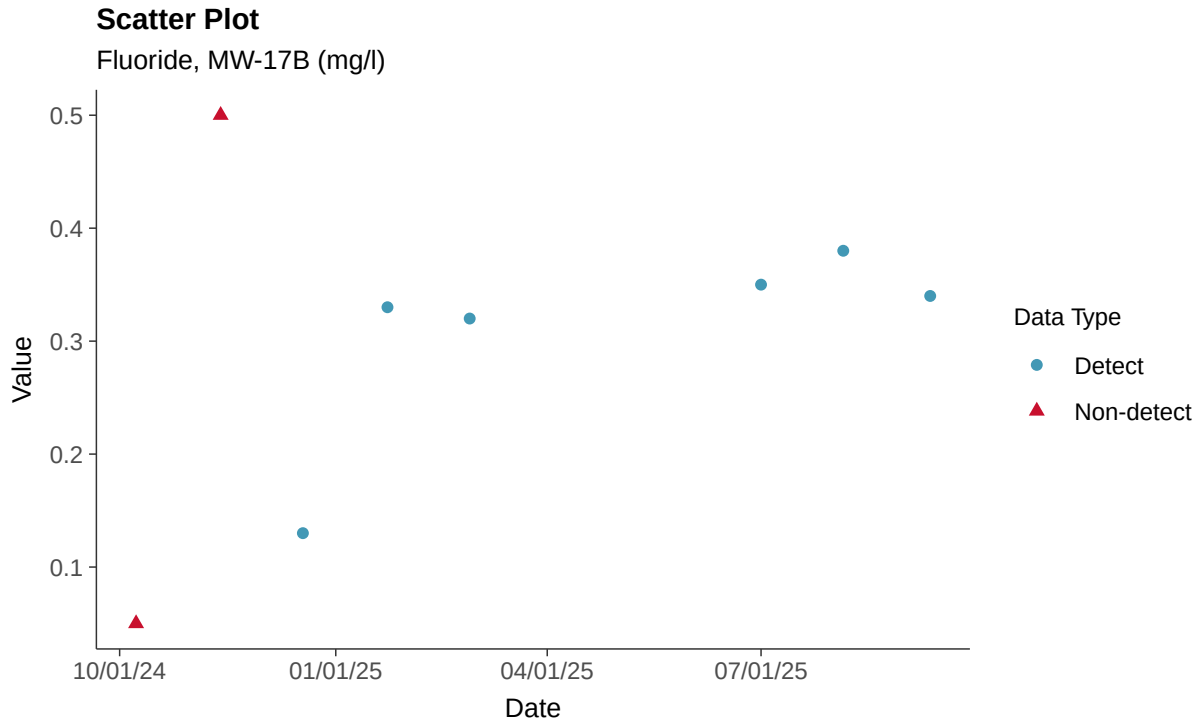
Trend Regression: Piecewise Linear-Linear

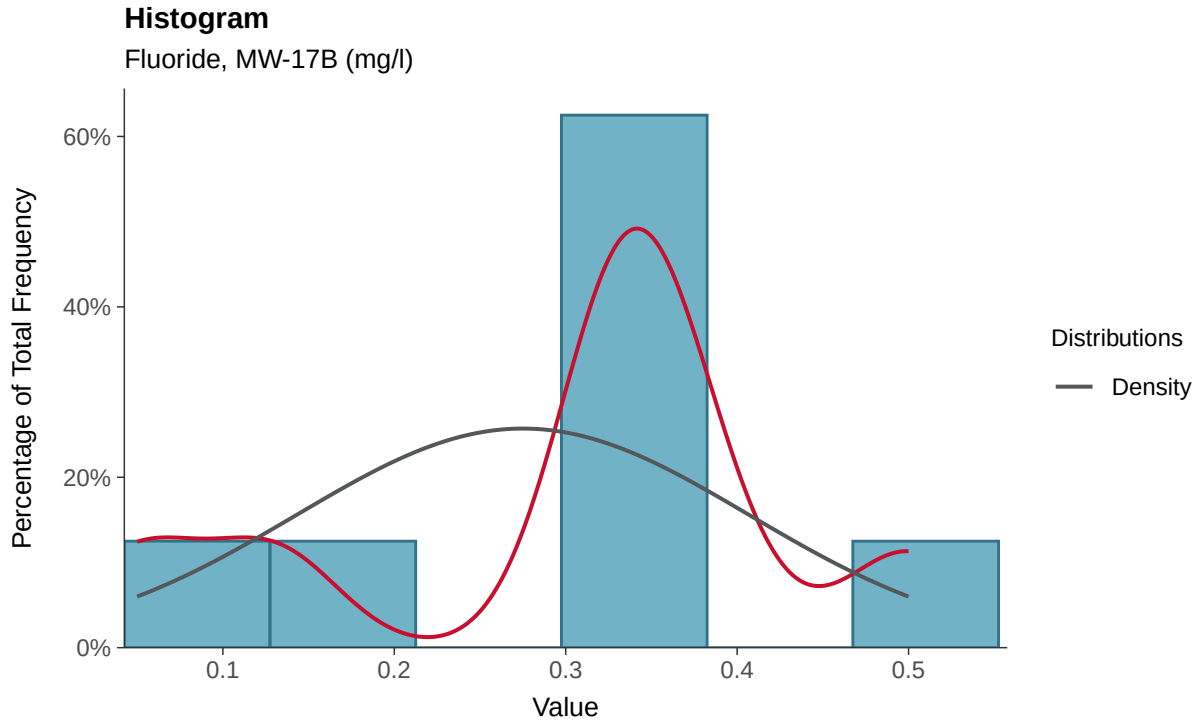
Chloride, MW-17B (mg/l)



Appendix III: Fluoride, MW-17B

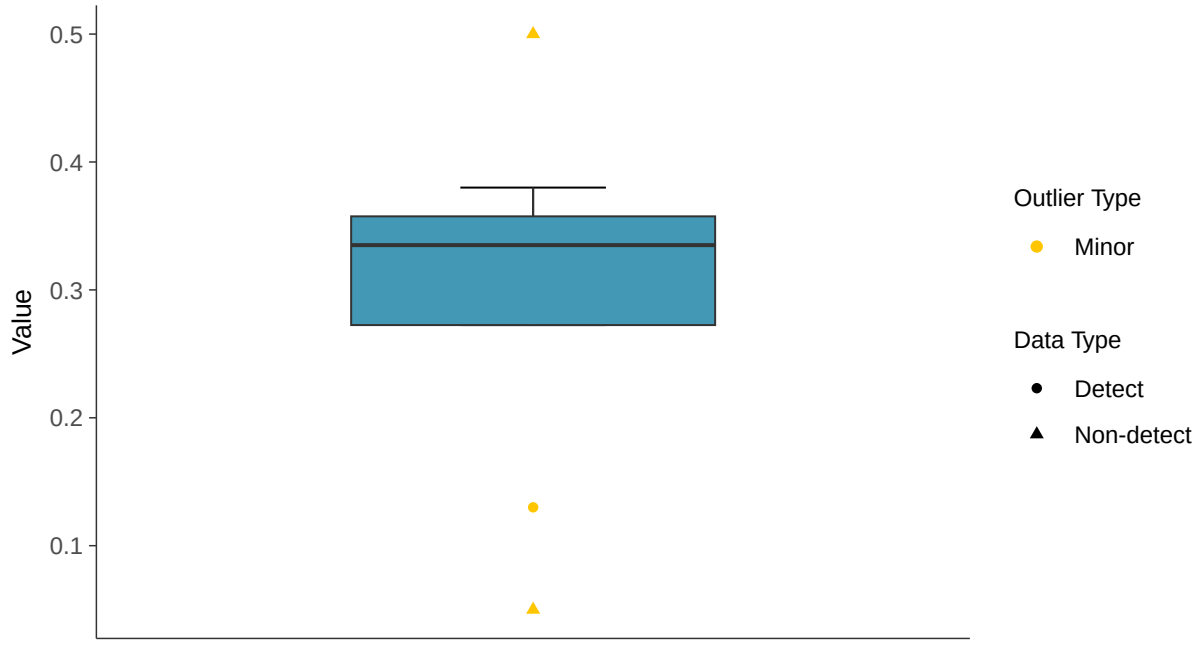
ID: 28_2_112





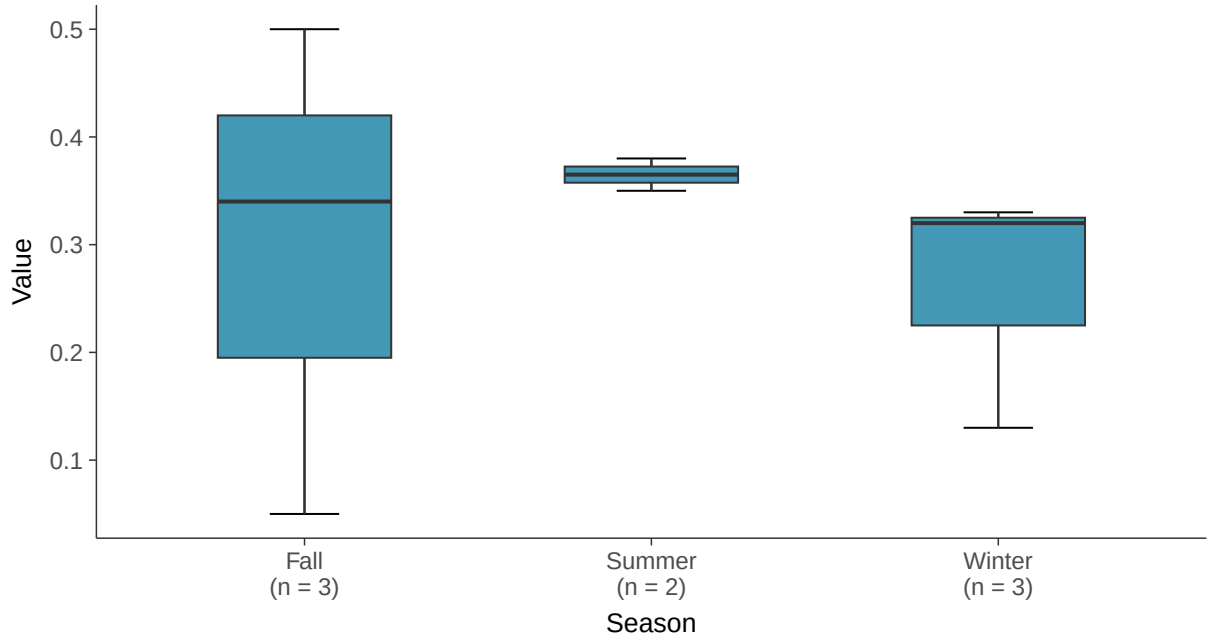
Boxplot

Fluoride, MW-17B (mg/l)



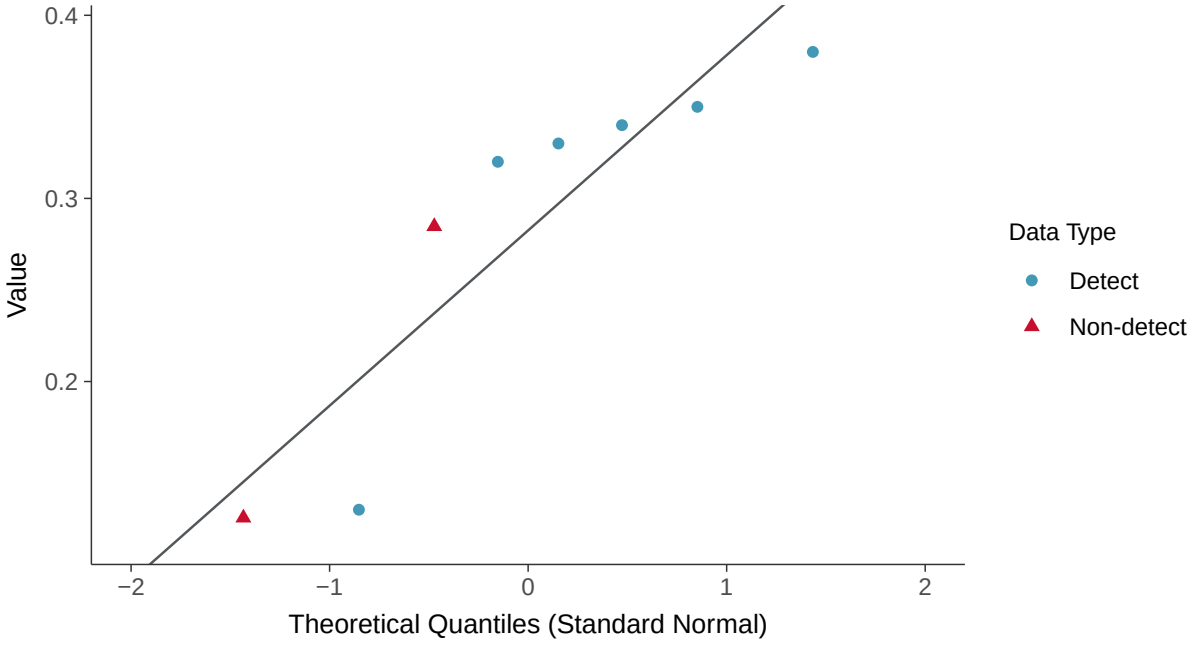
Boxplot by Season

Fluoride, MW-17B (mg/l)



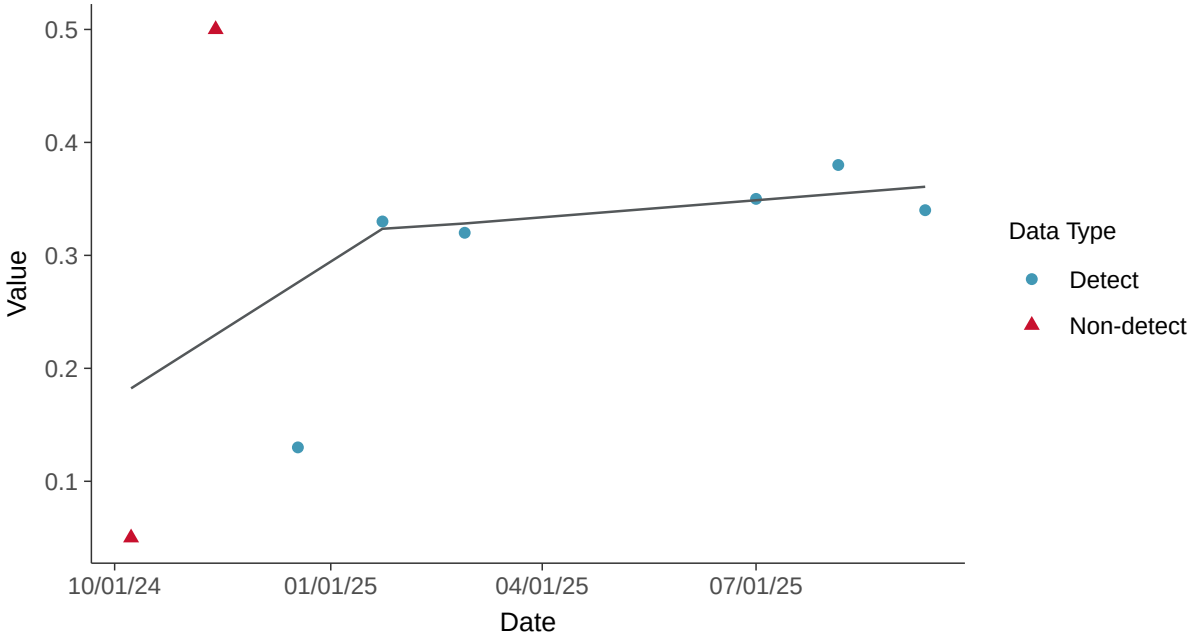
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17B (mg/l)



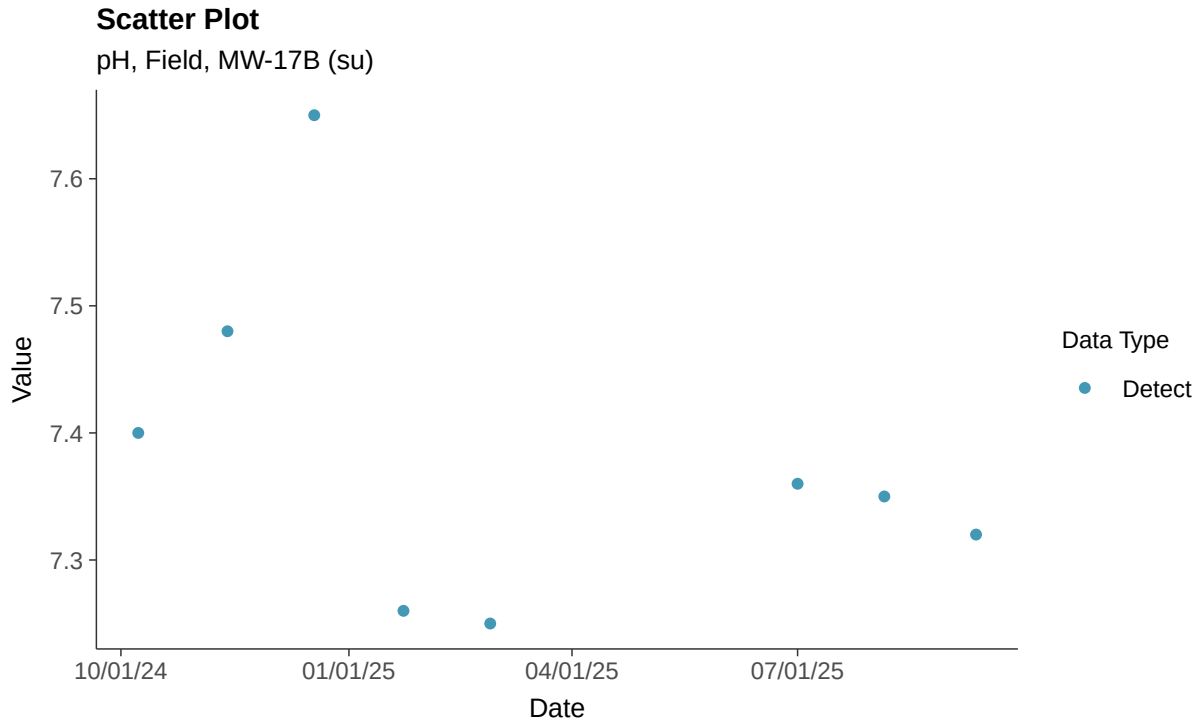
Trend Regression: Piecewise Linear-Linear

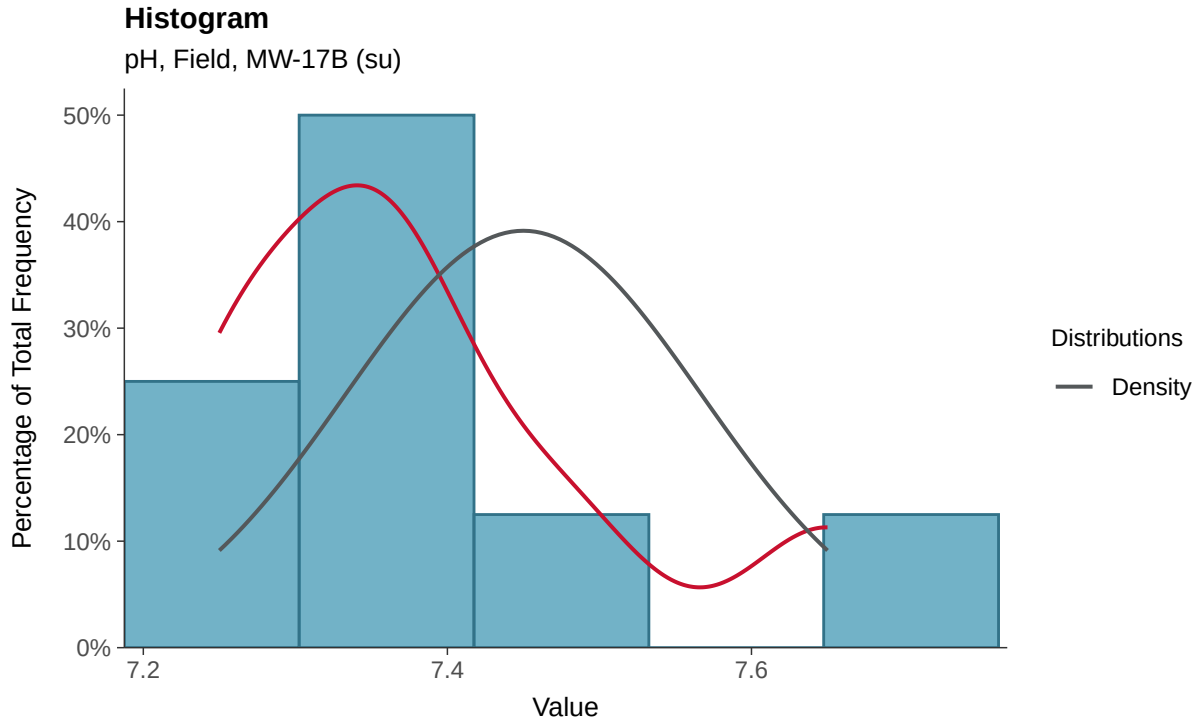
Fluoride, MW-17B (mg/l)



Appendix III: pH, Field, MW-17B

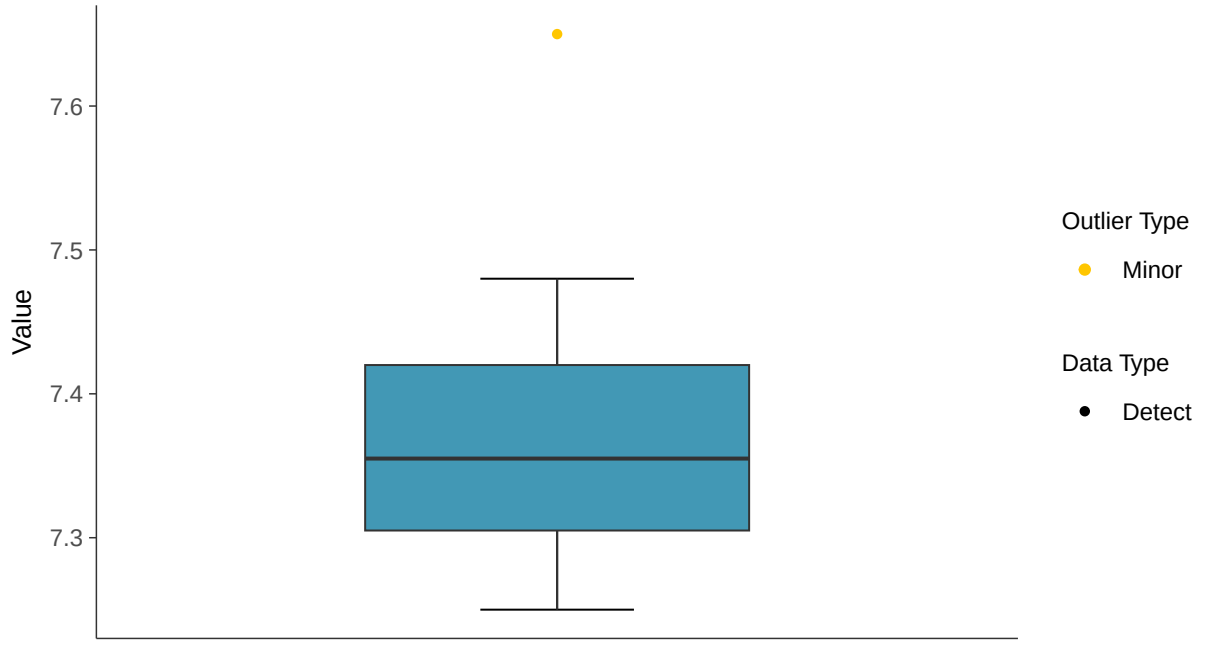
ID: 28_2_120





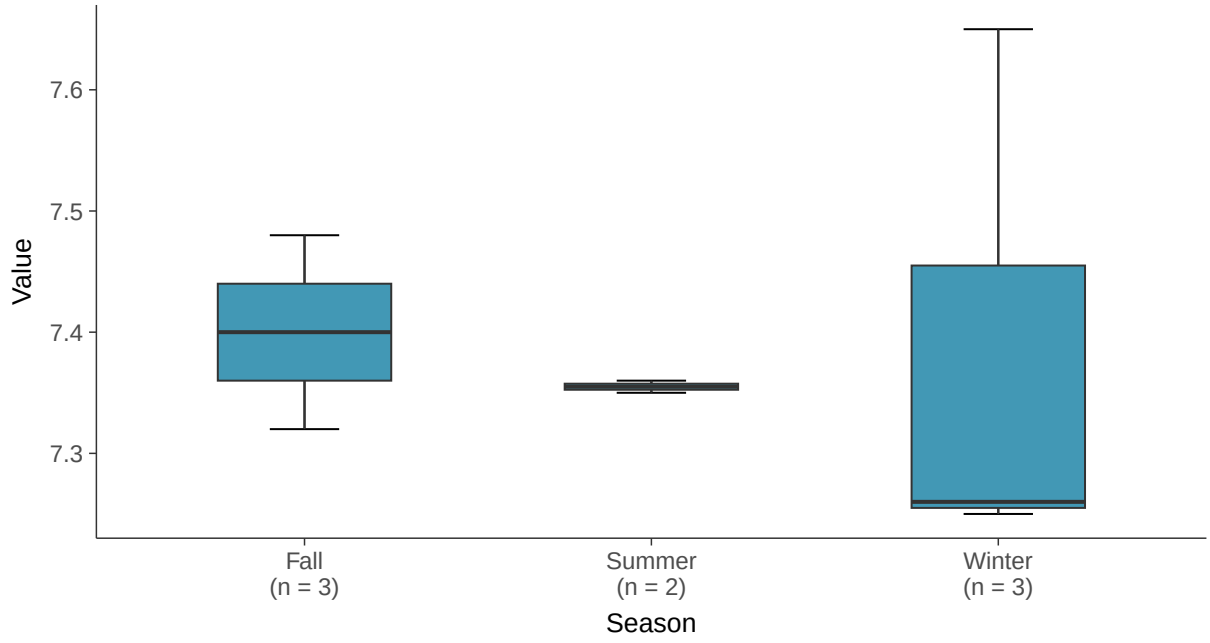
Boxplot

pH, Field, MW-17B (su)



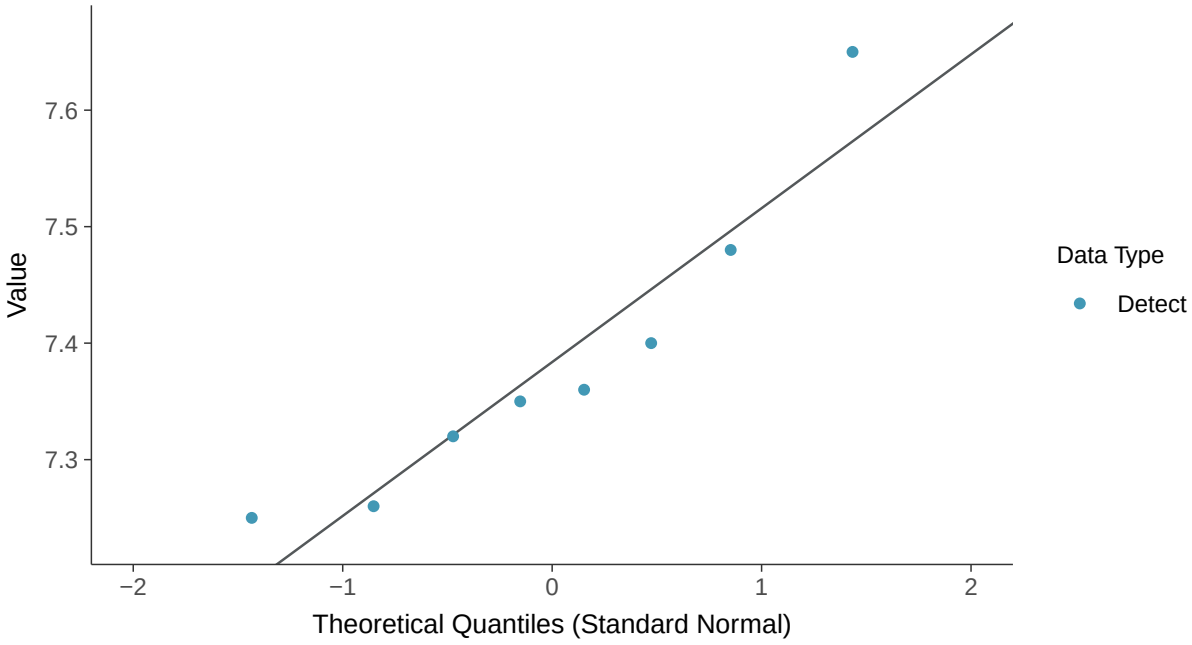
Boxplot by Season

pH, Field, MW-17B (su)



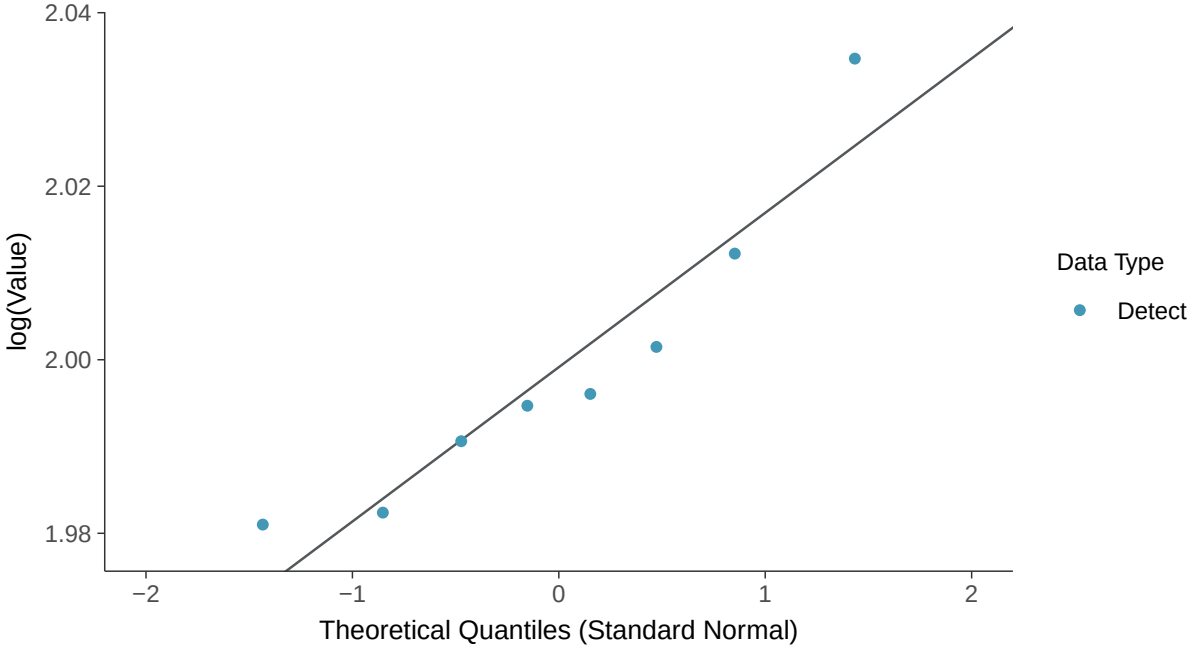
Normal Q-Q plot

pH, Field, MW-17B (su)



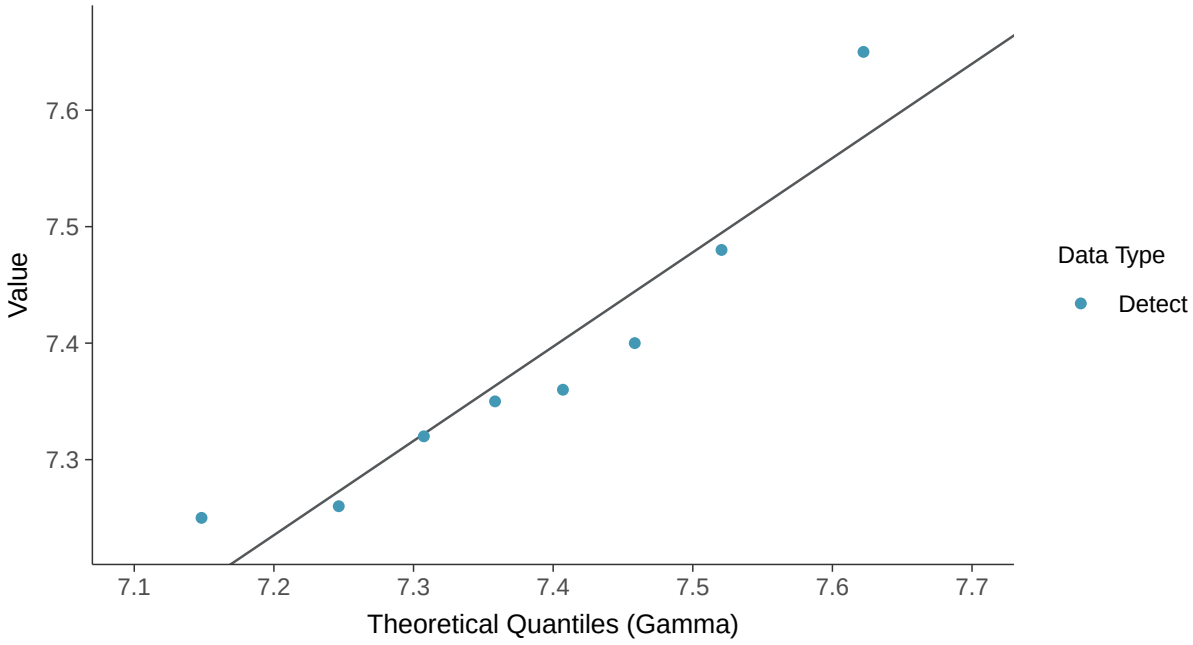
Lognormal Q-Q plot

pH, Field, MW-17B (su)



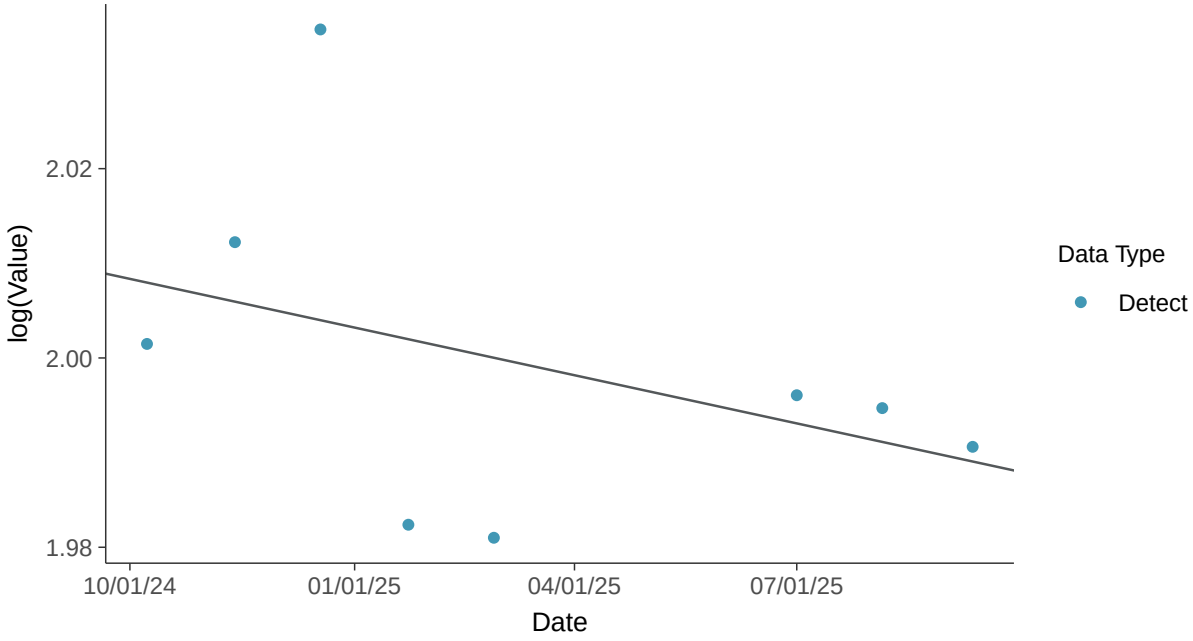
Gamma Q-Q plot

pH, Field, MW-17B (su)



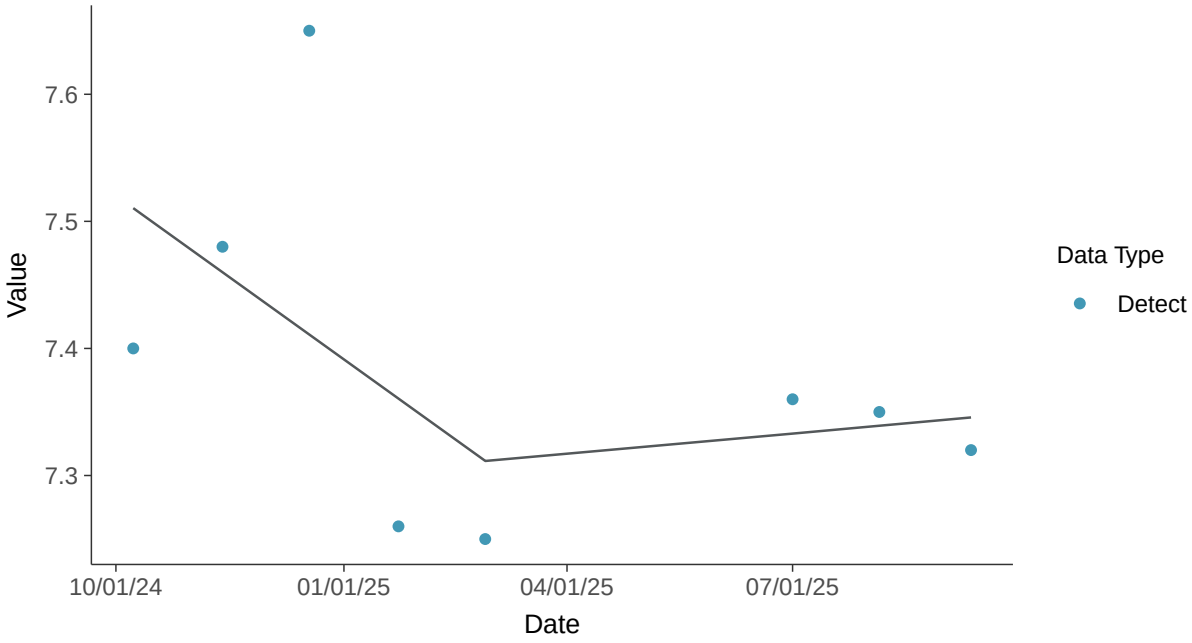
Trend Regression: Lognormal MLE

pH, Field, MW-17B (su)



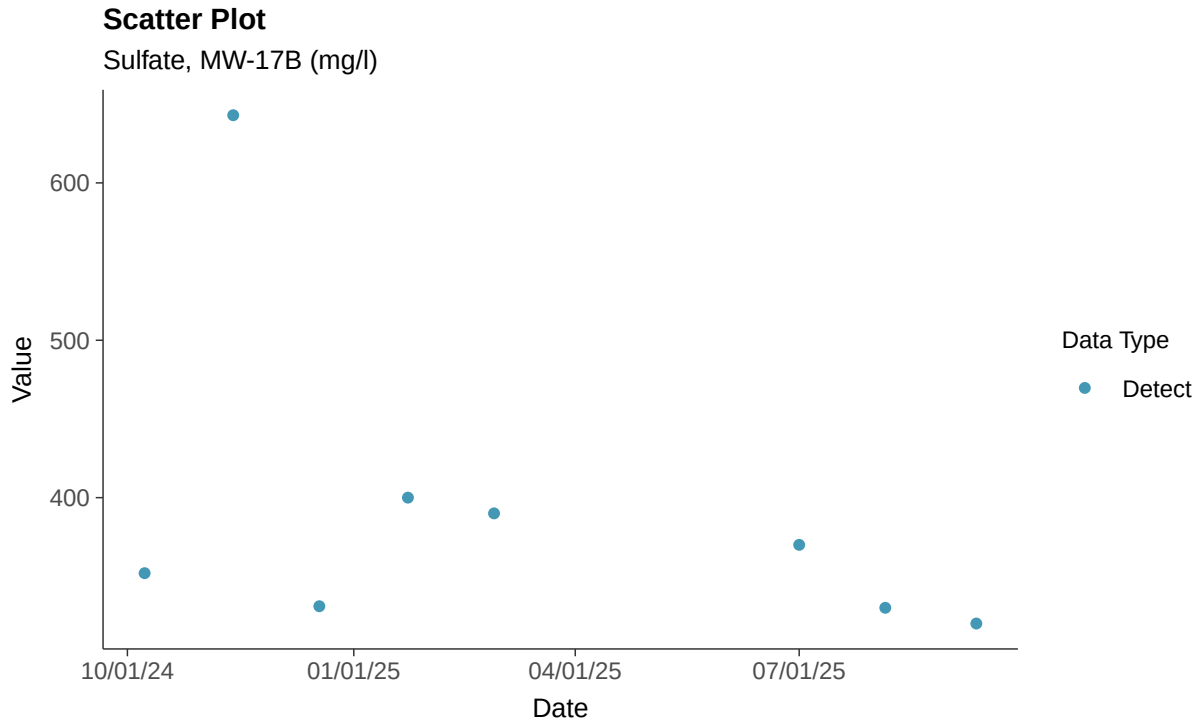
Trend Regression: Piecewise Linear-Linear

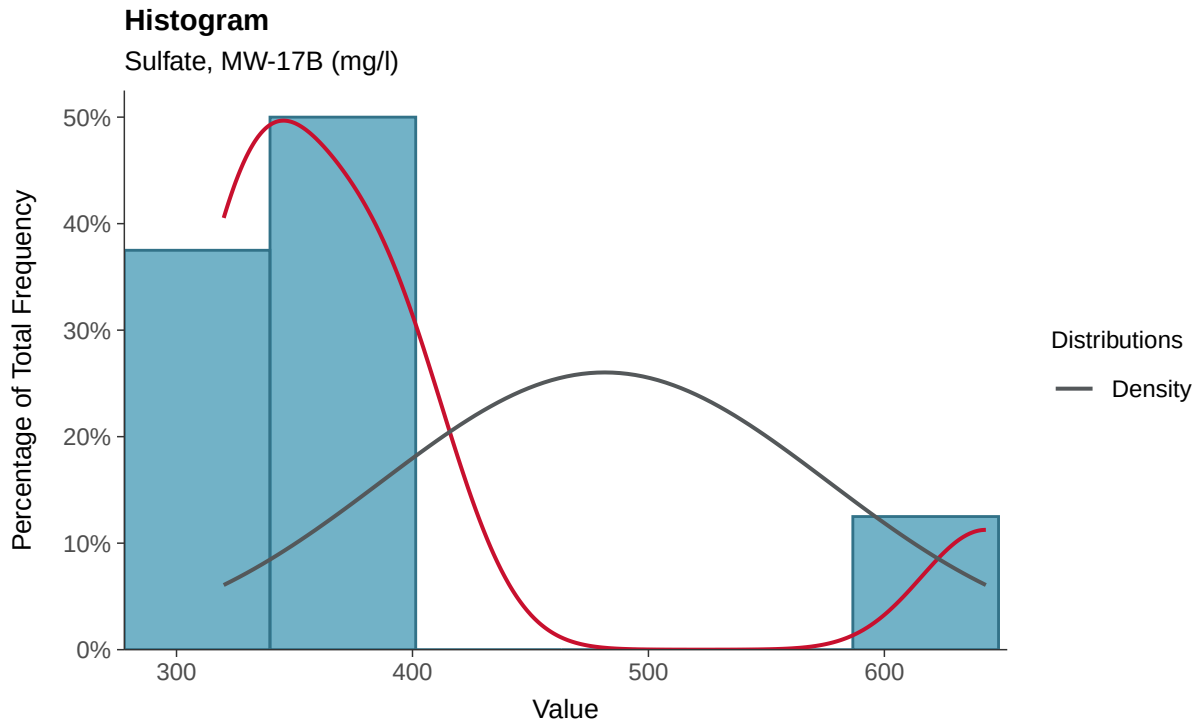
pH, Field, MW-17B (su)



Appendix III: Sulfate, MW-17B

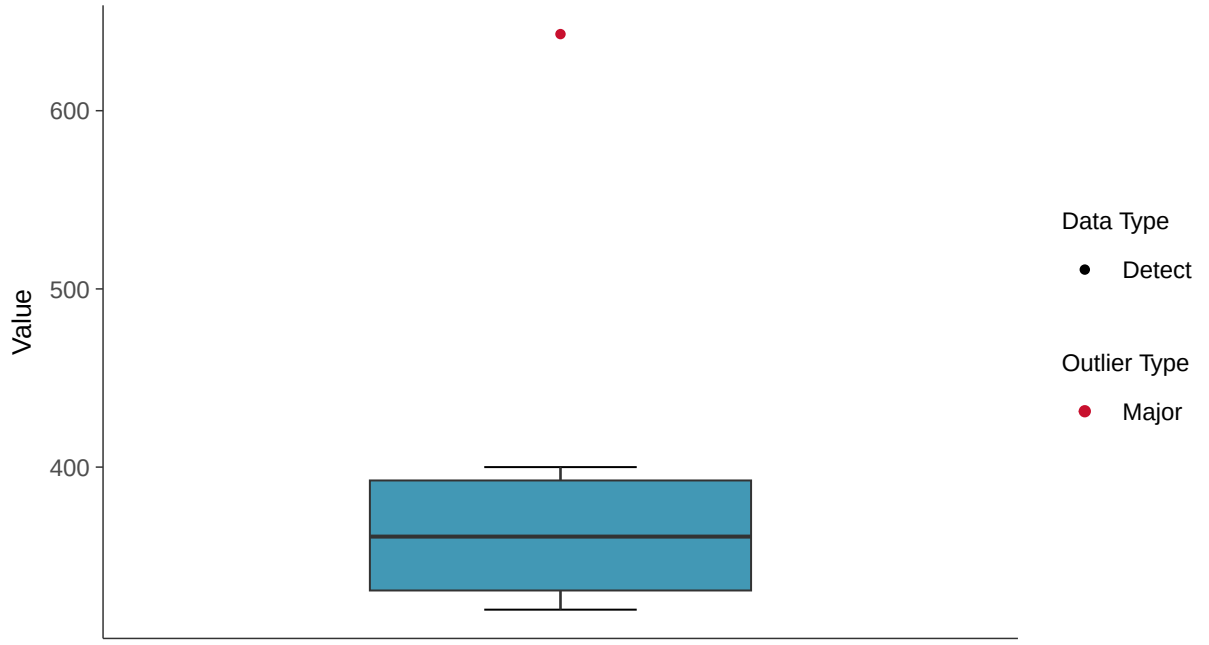
ID: 28_2_124





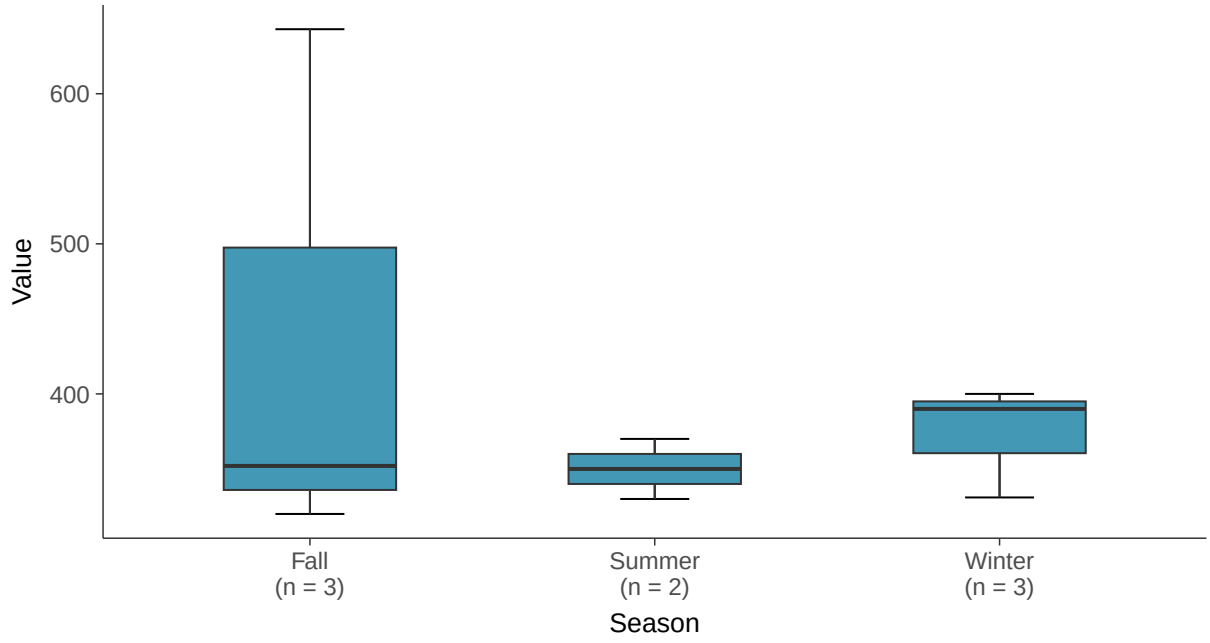
Boxplot

Sulfate, MW-17B (mg/l)



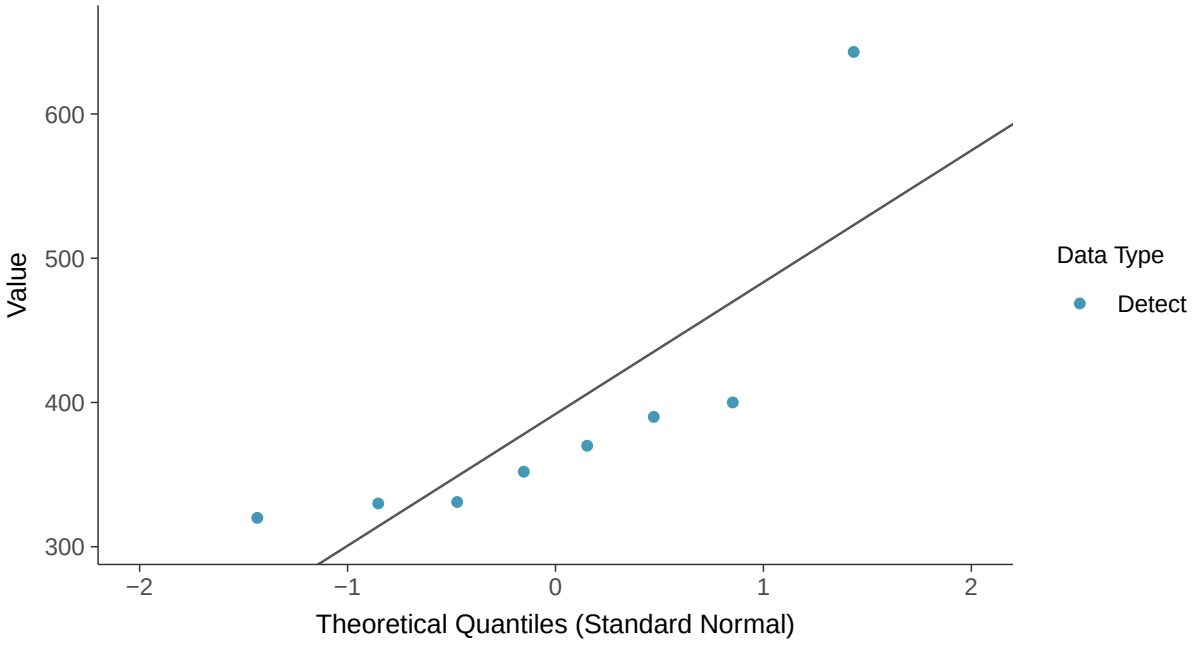
Boxplot by Season

Sulfate, MW-17B (mg/l)



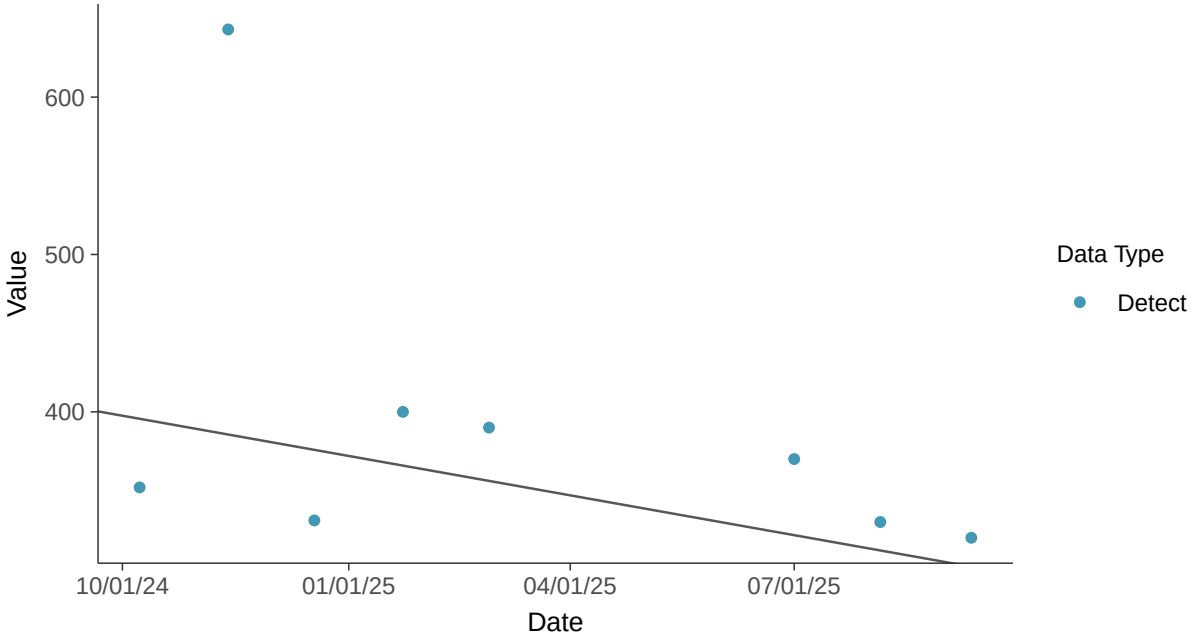
Normal Q-Q plot

Sulfate, MW-17B (mg/l)



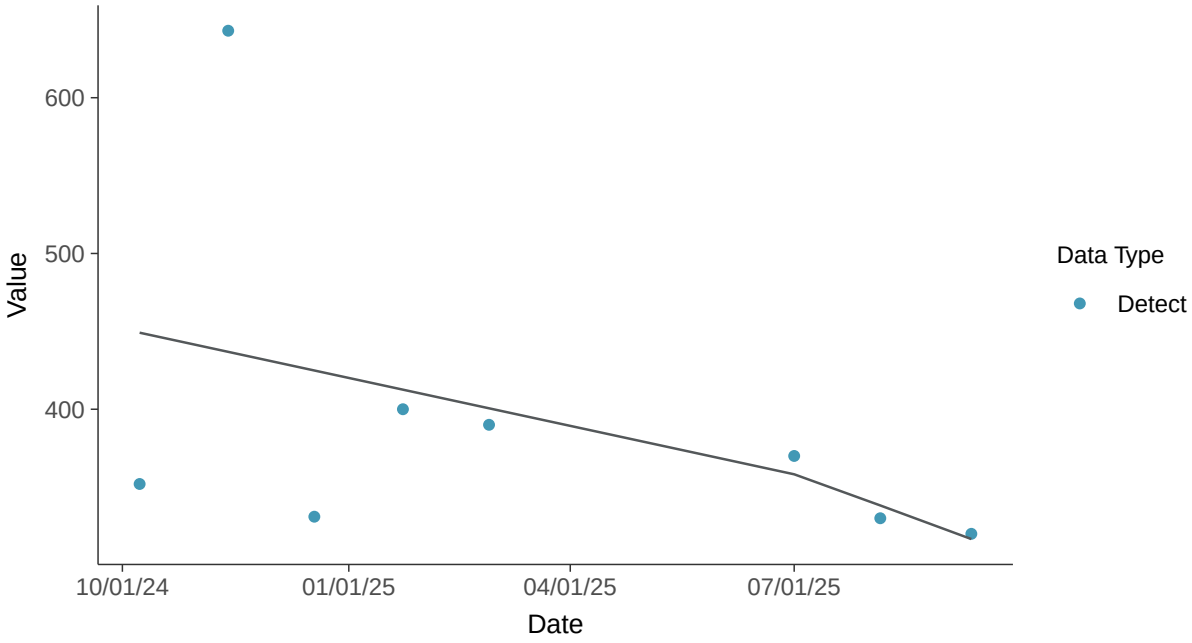
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Sulfate, MW-17B (mg/l)



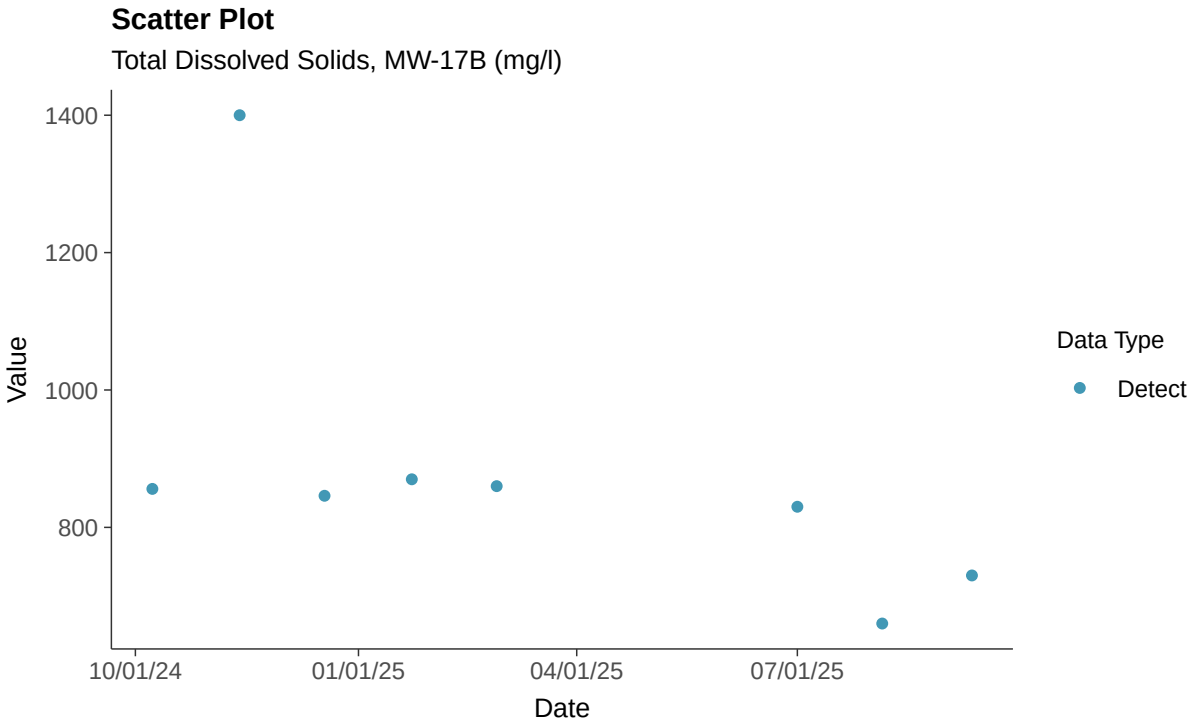
Trend Regression: Piecewise Linear-Linear

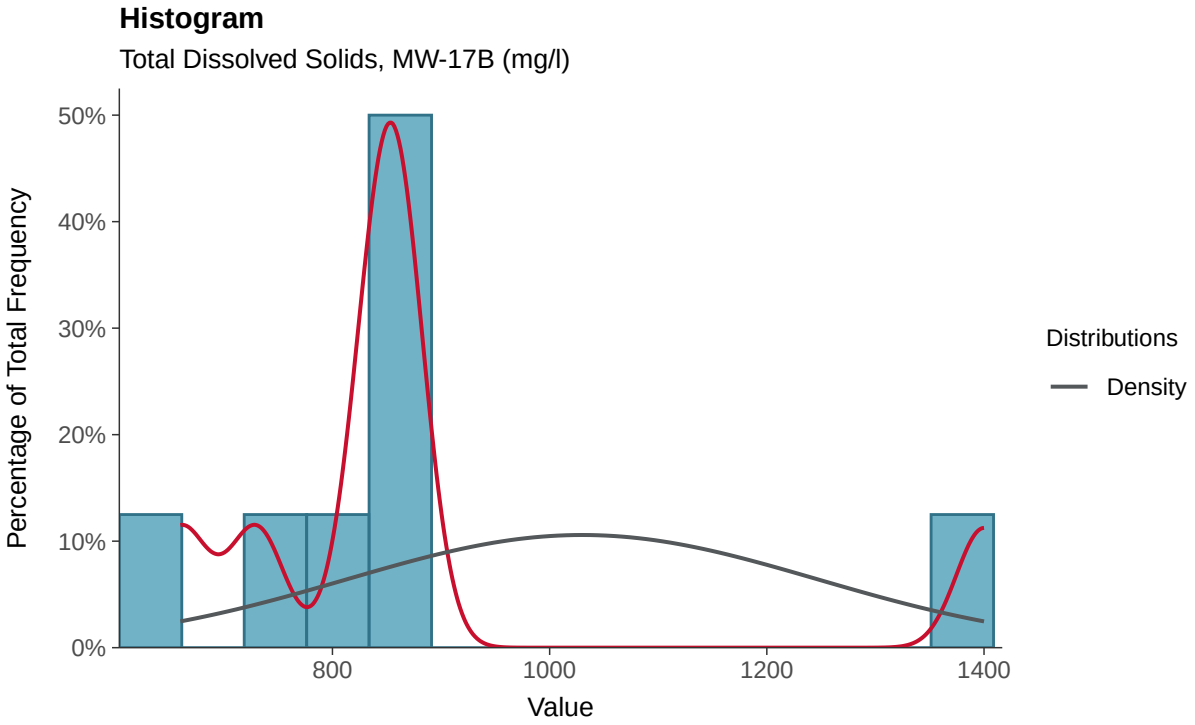
Sulfate, MW-17B (mg/l)



Appendix III: Total Dissolved Solids, MW-17B

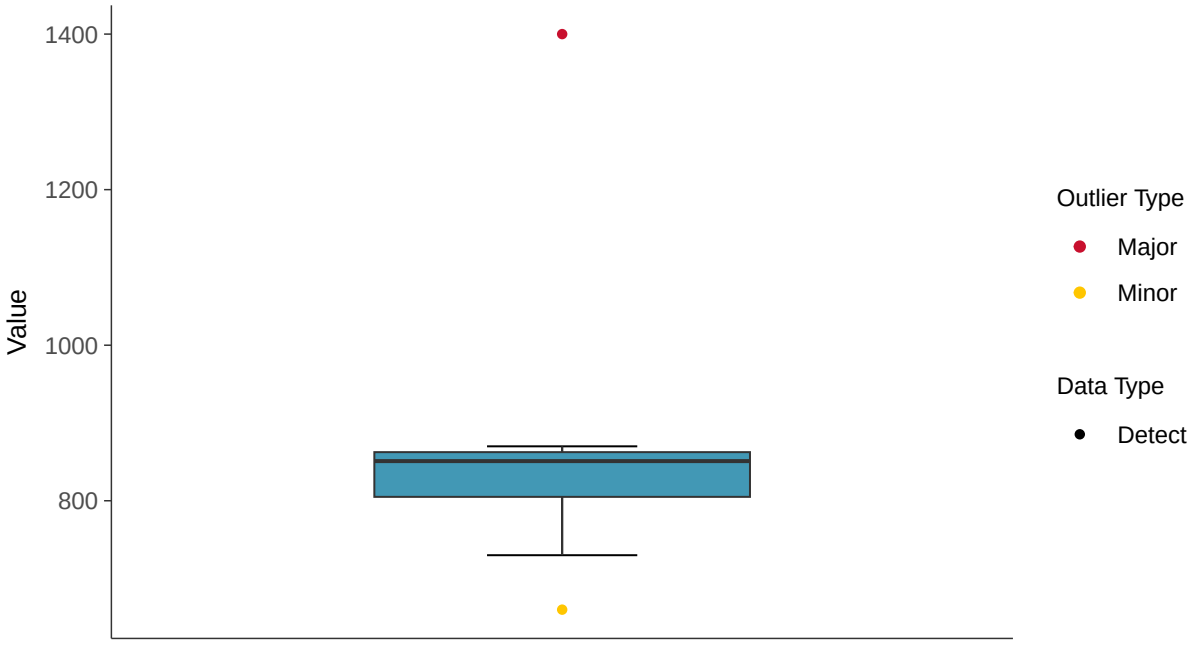
ID: 28_2_126





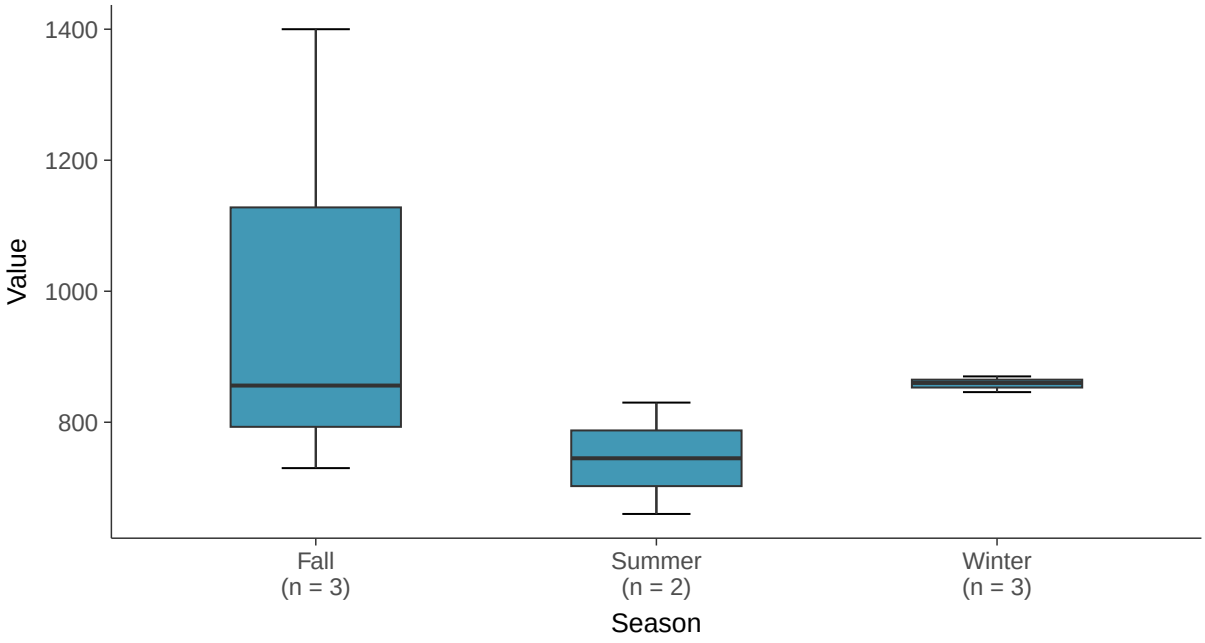
Boxplot

Total Dissolved Solids, MW-17B (mg/l)



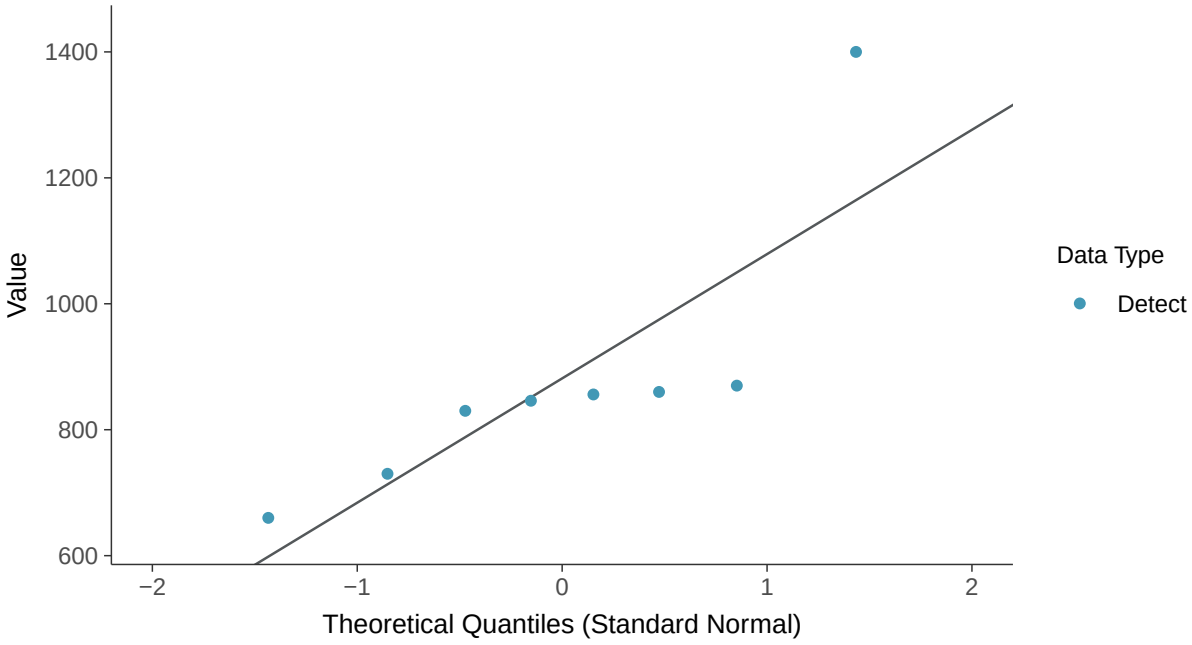
Boxplot by Season

Total Dissolved Solids, MW-17B (mg/l)



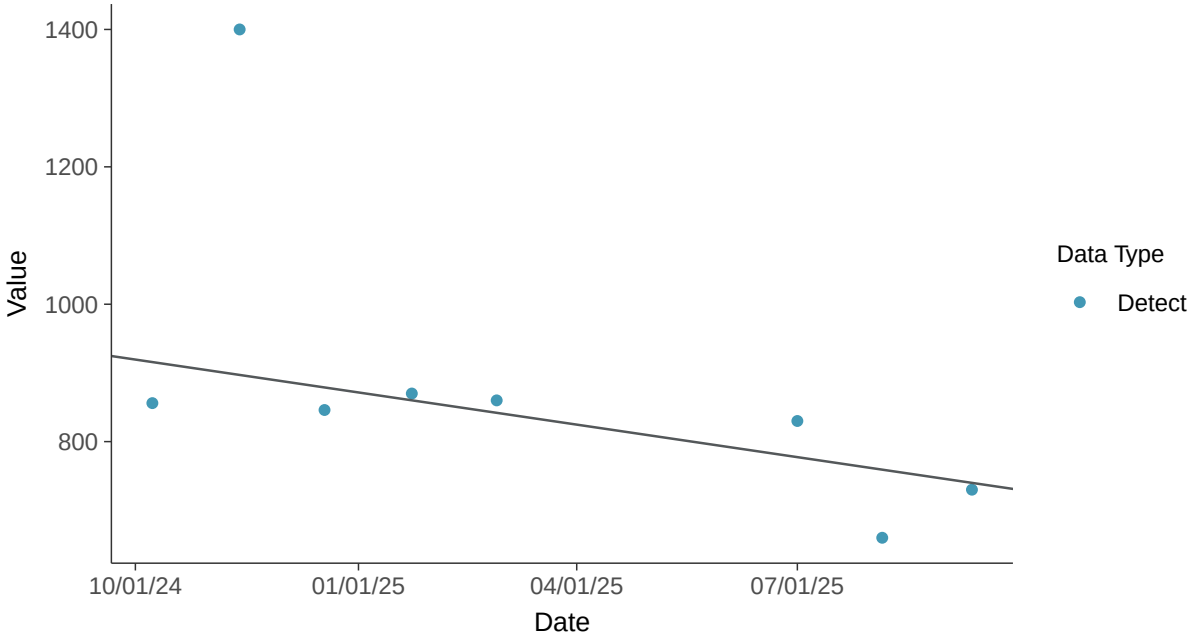
Normal Q-Q plot

Total Dissolved Solids, MW-17B (mg/l)



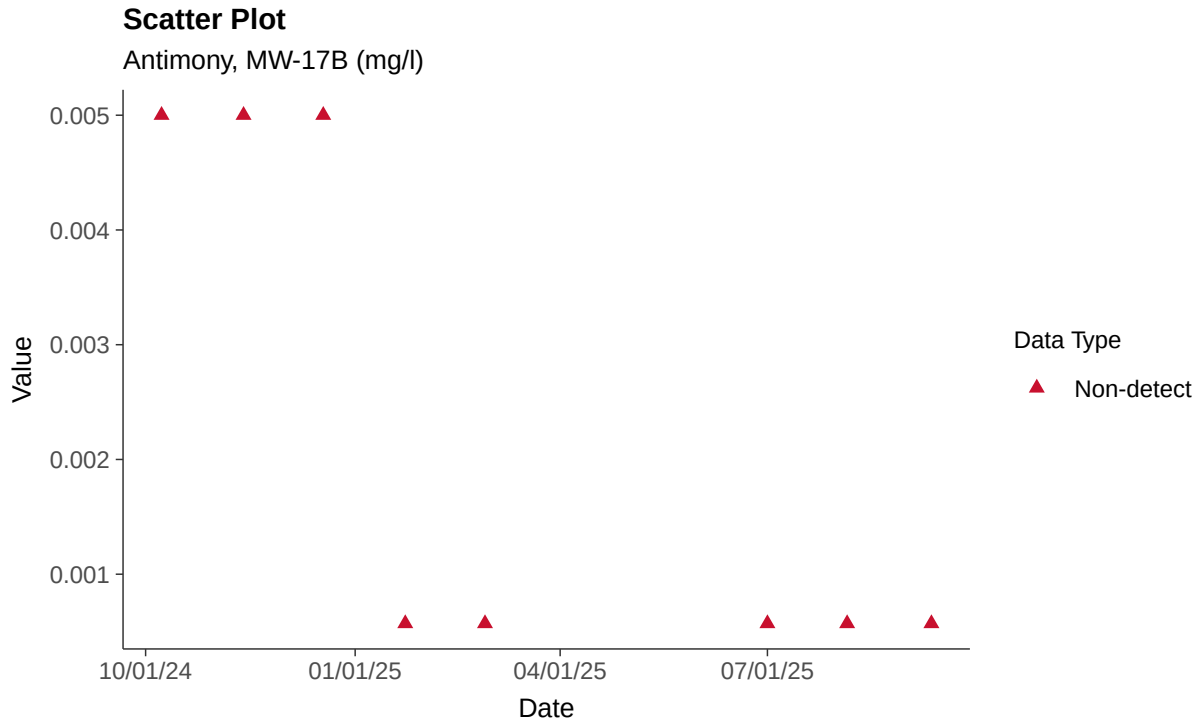
Trend Regression: Mann-Kendall/Theil-Sen Estimate

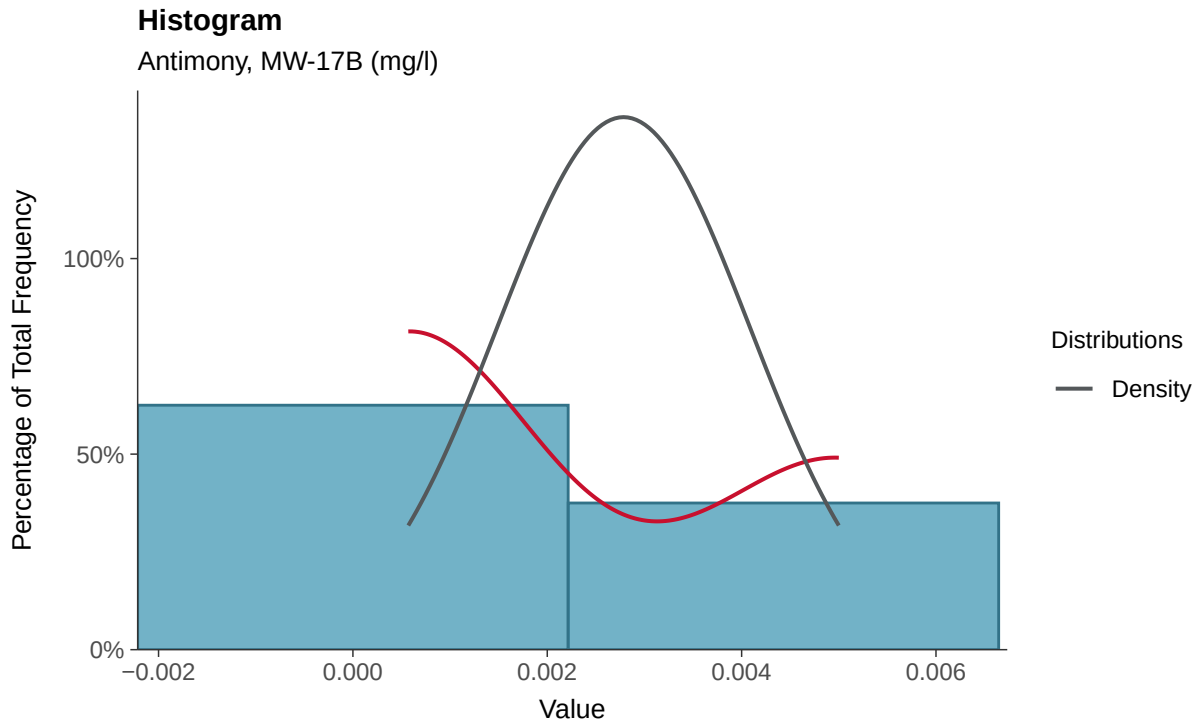
Total Dissolved Solids, MW-17B (mg/l)



Appendix IV: Antimony, MW-17B

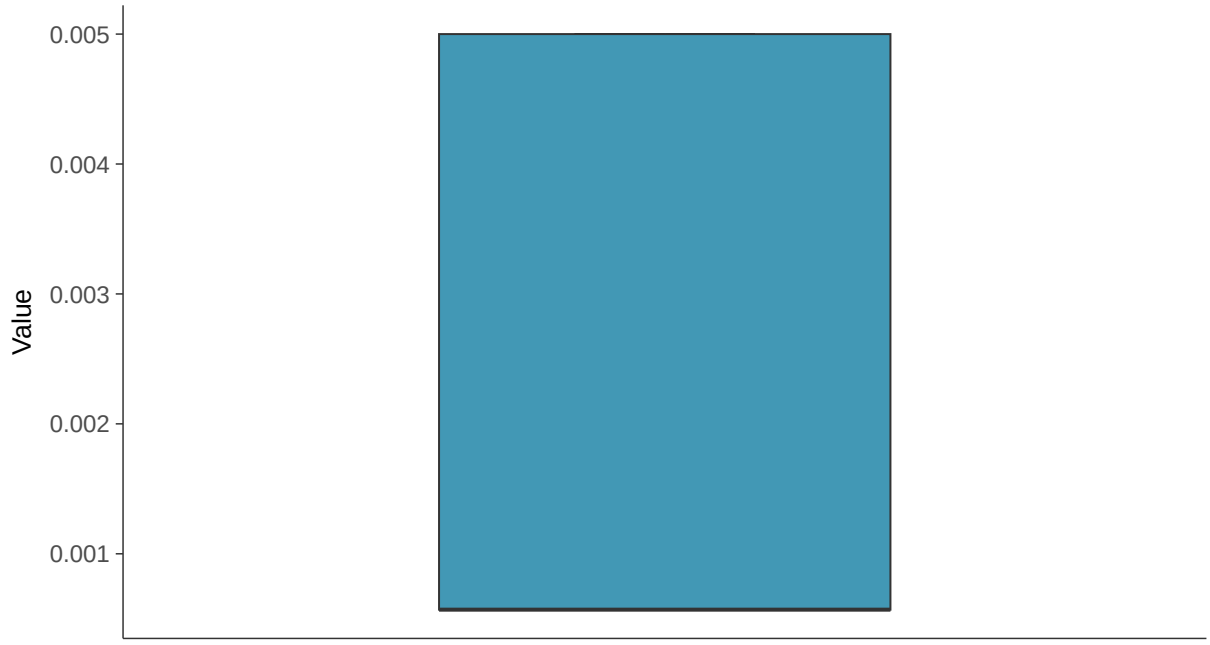
ID: 28_3_101





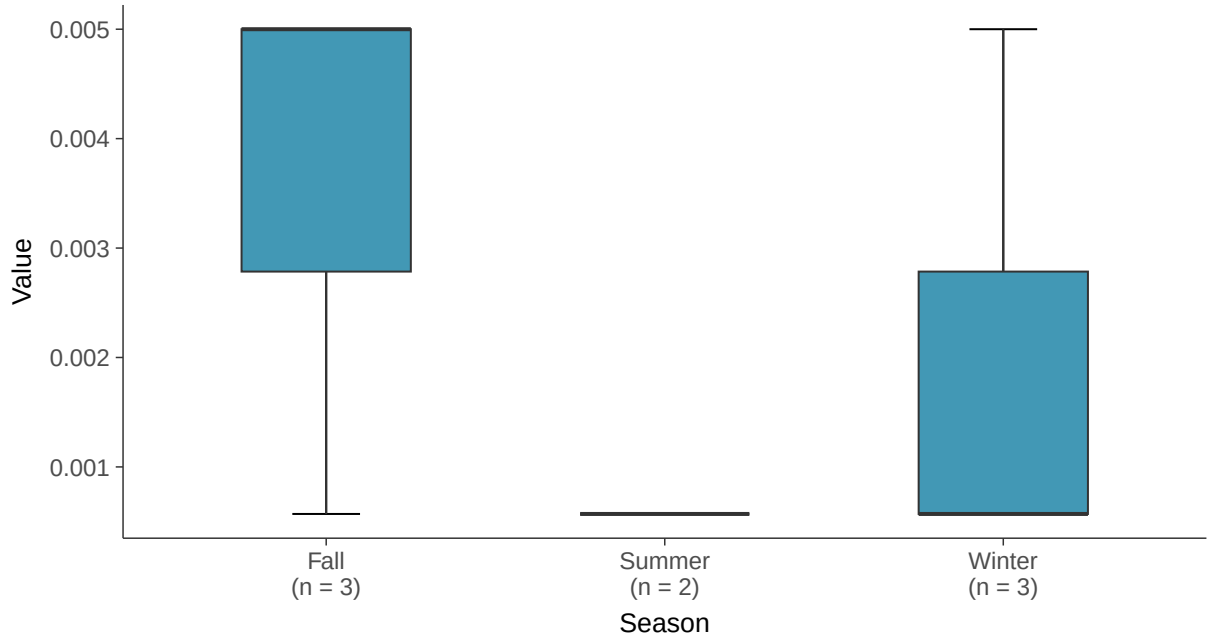
Boxplot

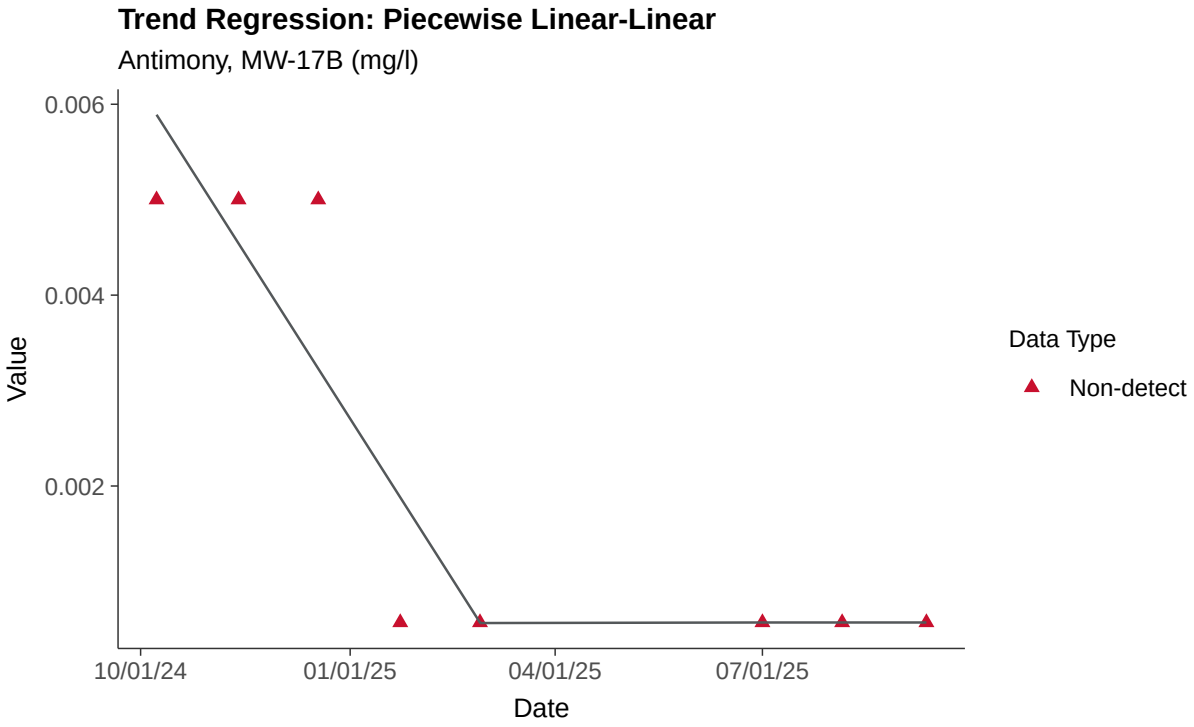
Antimony, MW-17B (mg/l)



Boxplot by Season

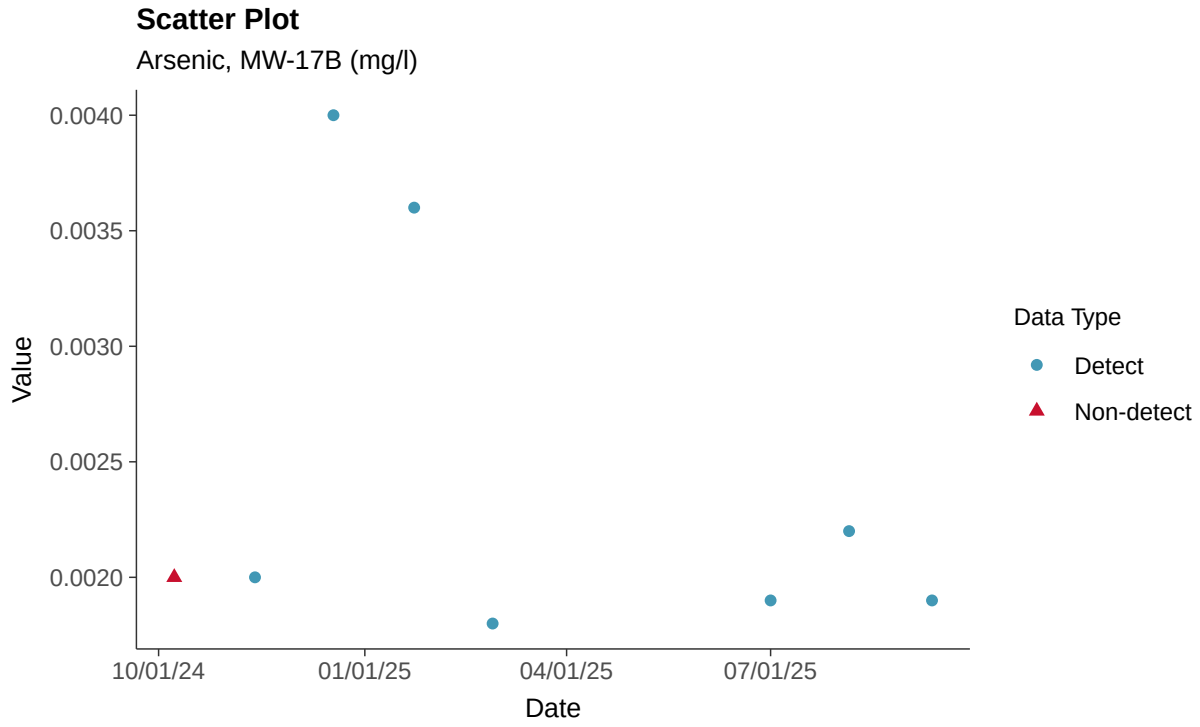
Antimony, MW-17B (mg/l)

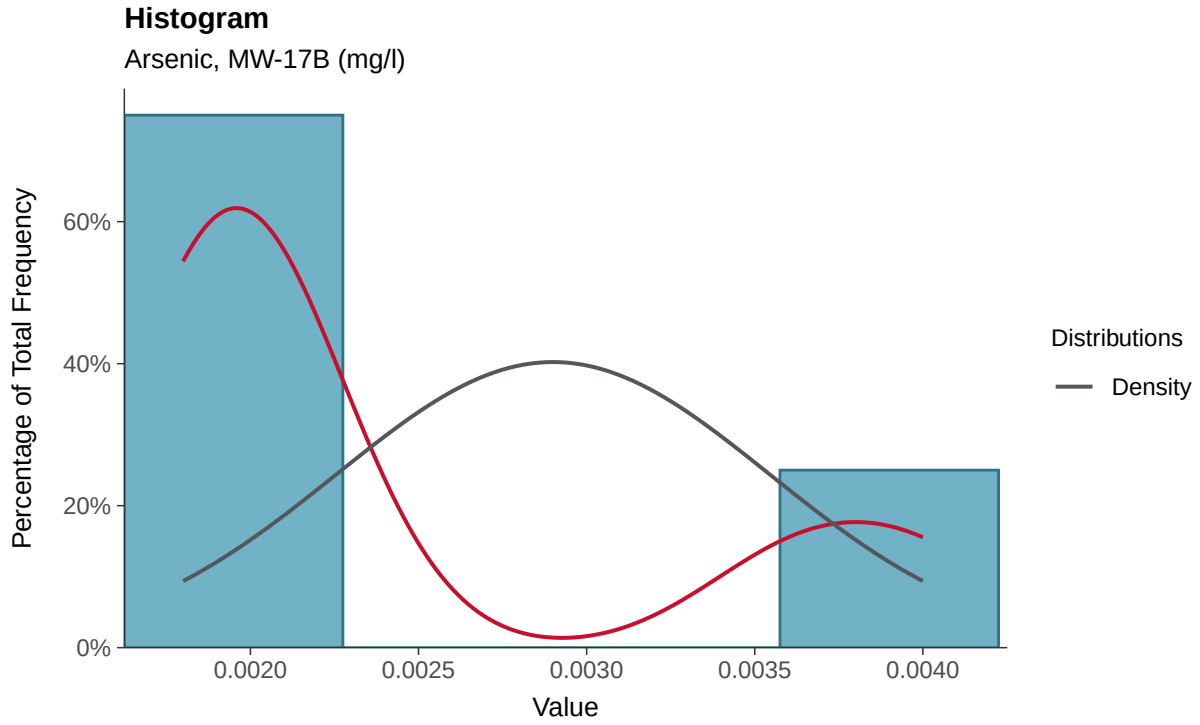



Trend Regression: Piecewise Linear-Linear
Antimony, MW-17B (mg/l)
0.006
0.004
0.002
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Arsenic, MW-17B

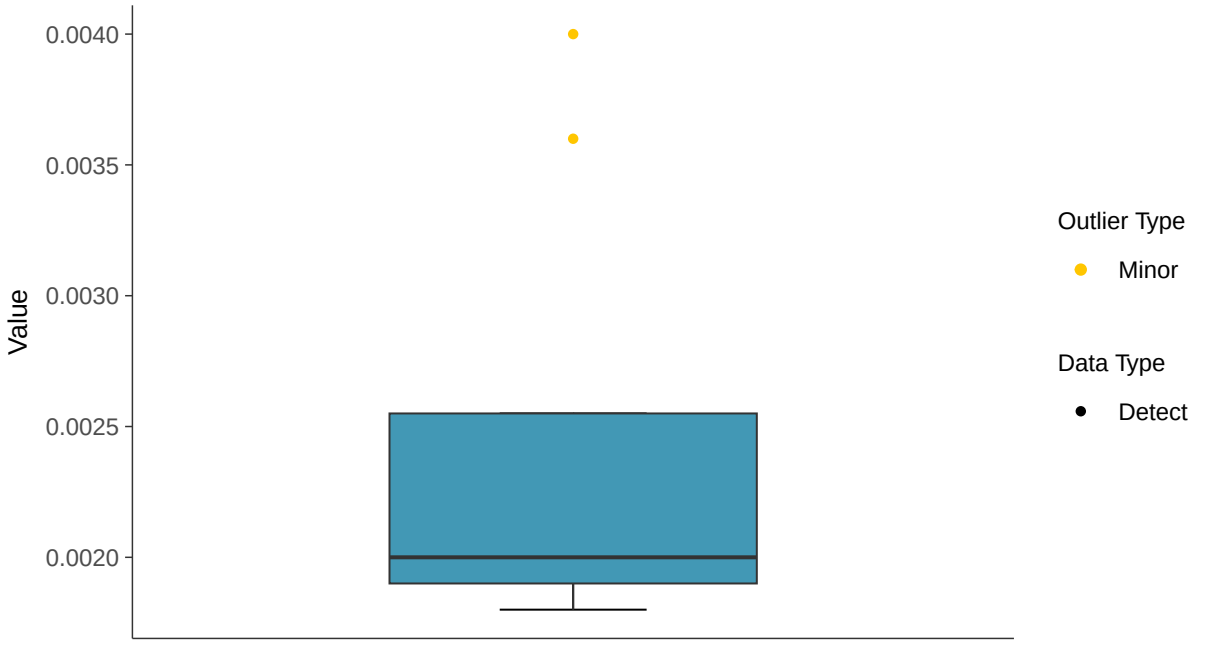
ID: 28_3_102





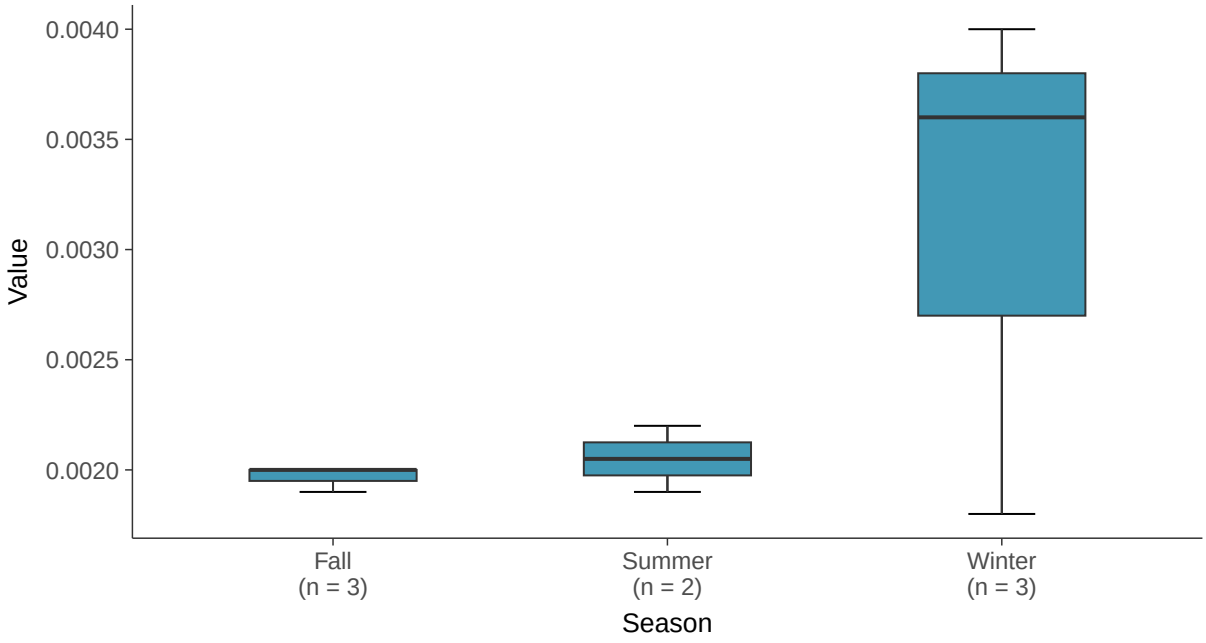
Boxplot

Arsenic, MW-17B (mg/l)



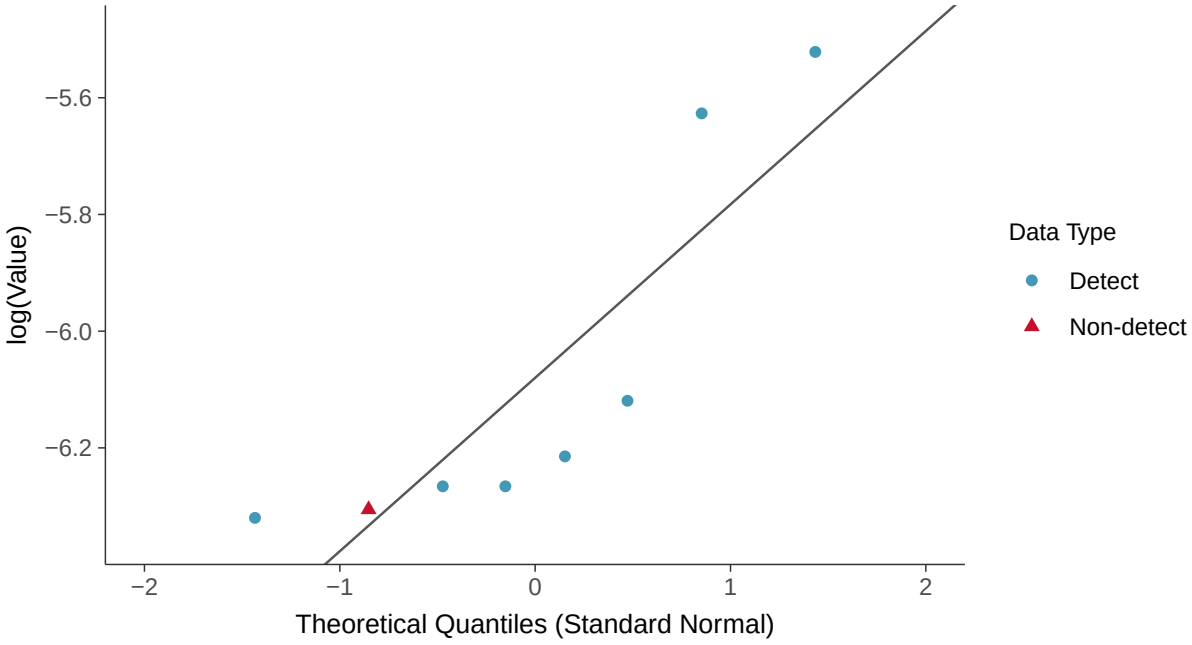
Boxplot by Season

Arsenic, MW-17B (mg/l)



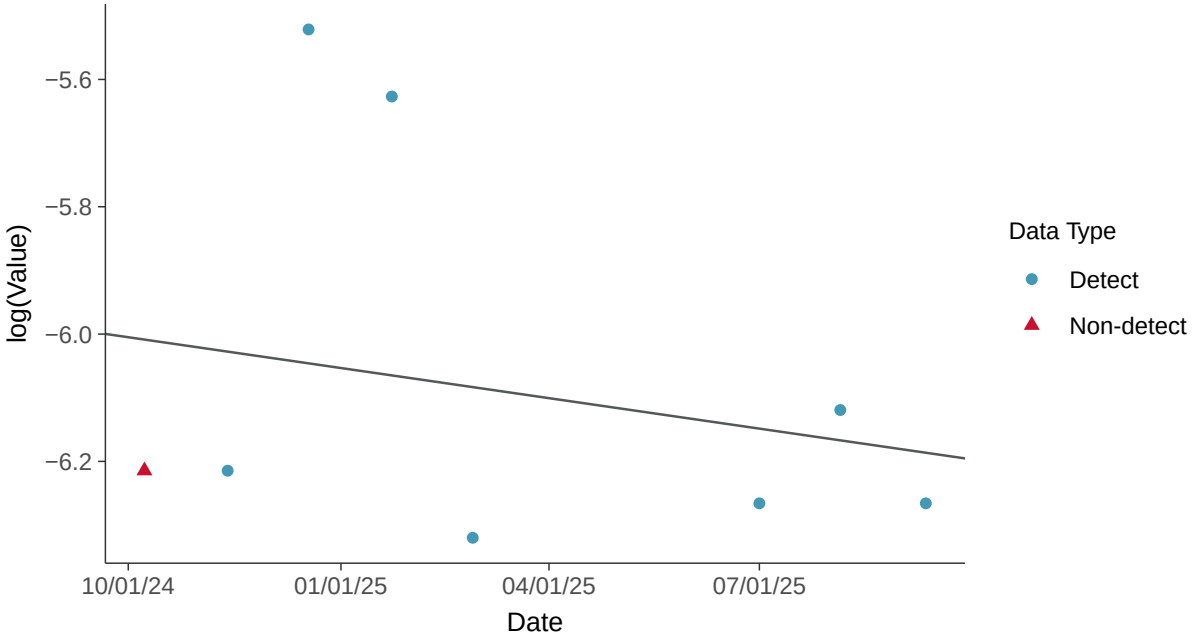
Lognormal Q-Q plot using ROS Imputed Estimates

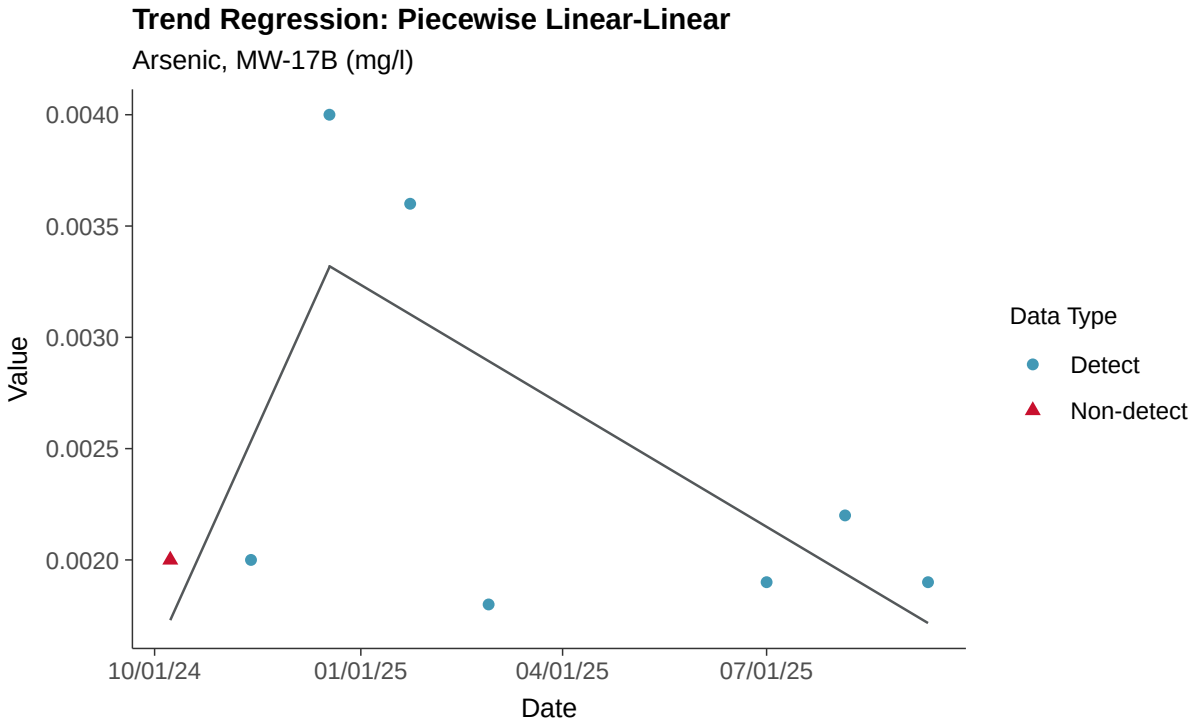
Arsenic, MW-17B (mg/l)



Trend Regression: Lognormal MLE

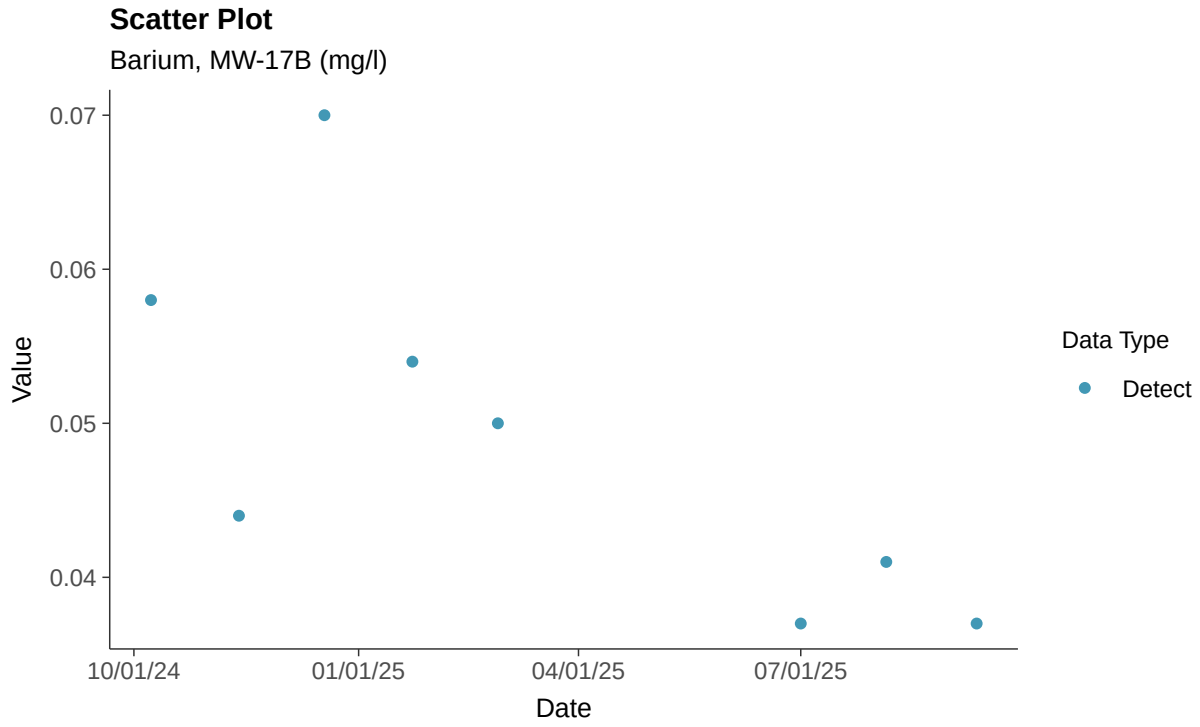
Arsenic, MW-17B (mg/l)

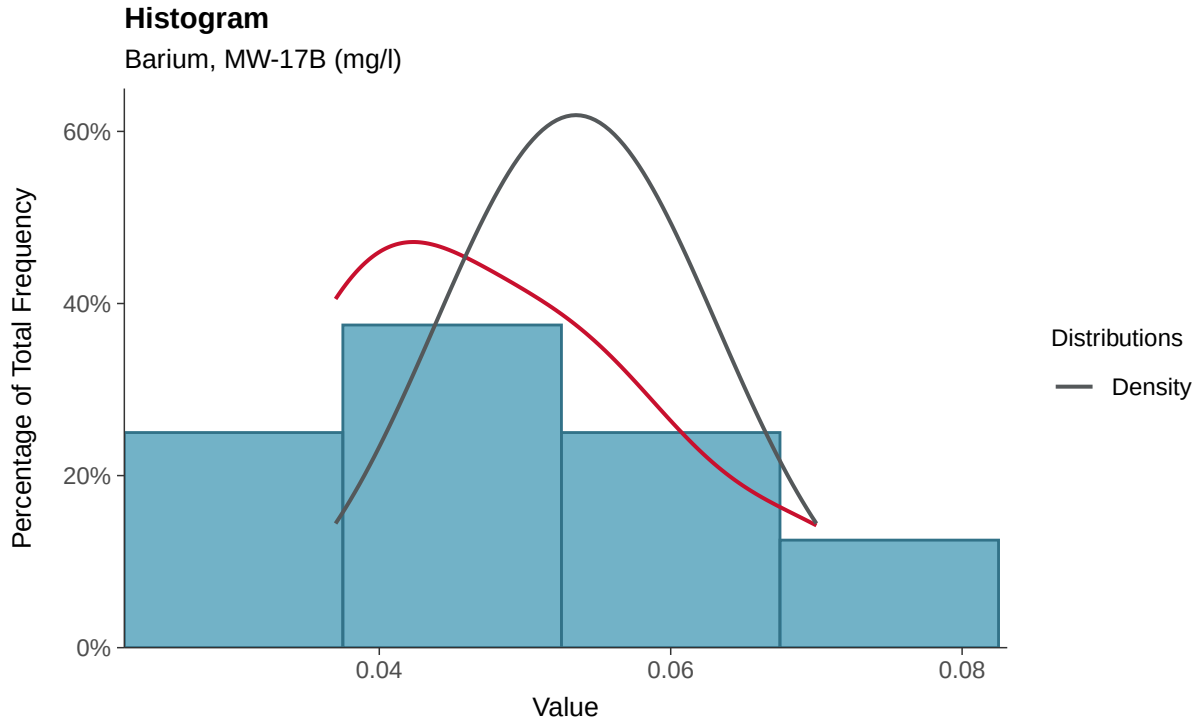



Trend Regression: Piecewise Linear-Linear
Arsenic, MW-17B (mg/l)
0.0040
0.0035
0.0030
0.0025
0.0020
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Barium, MW-17B

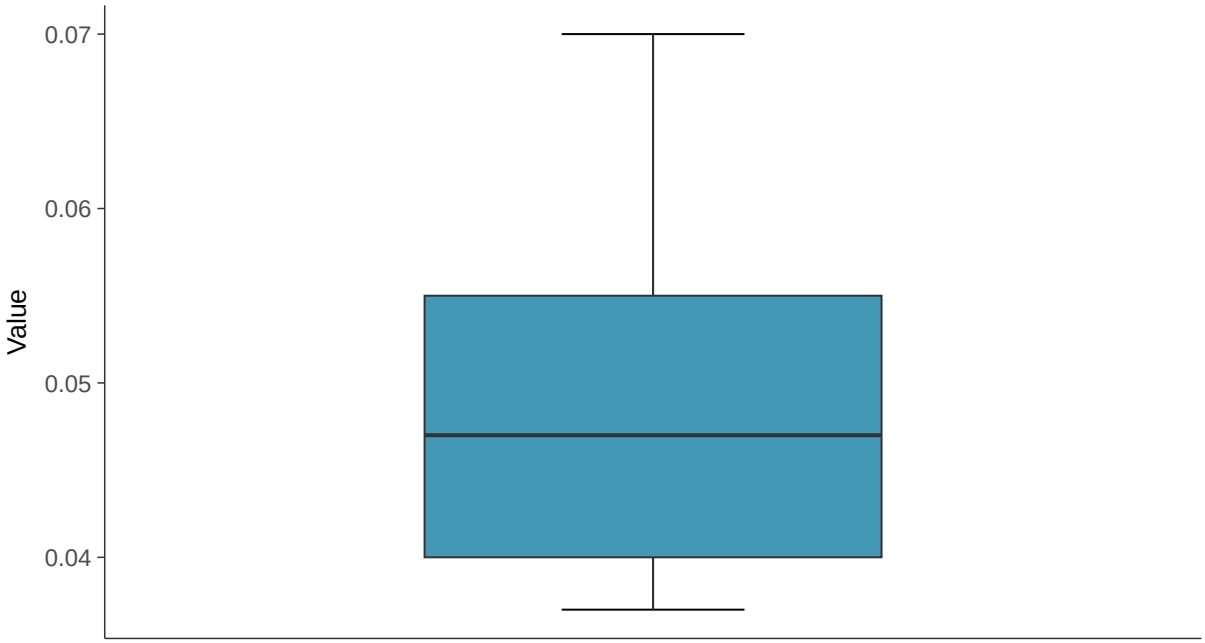
ID: 28_3_103





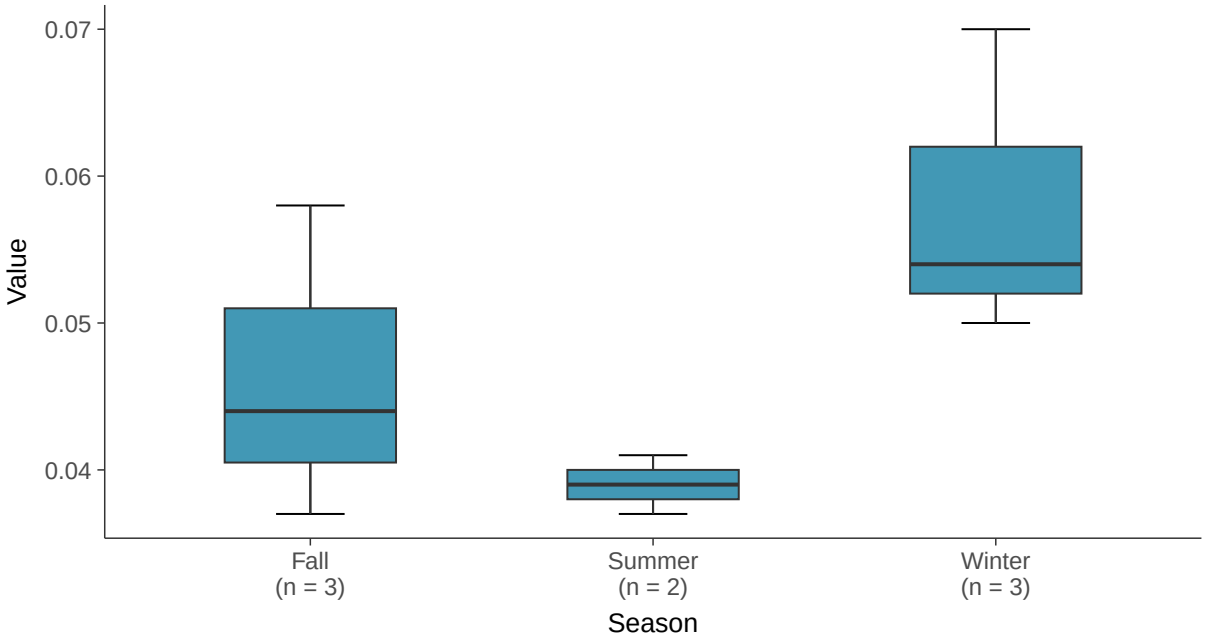
Boxplot

Barium, MW-17B (mg/l)



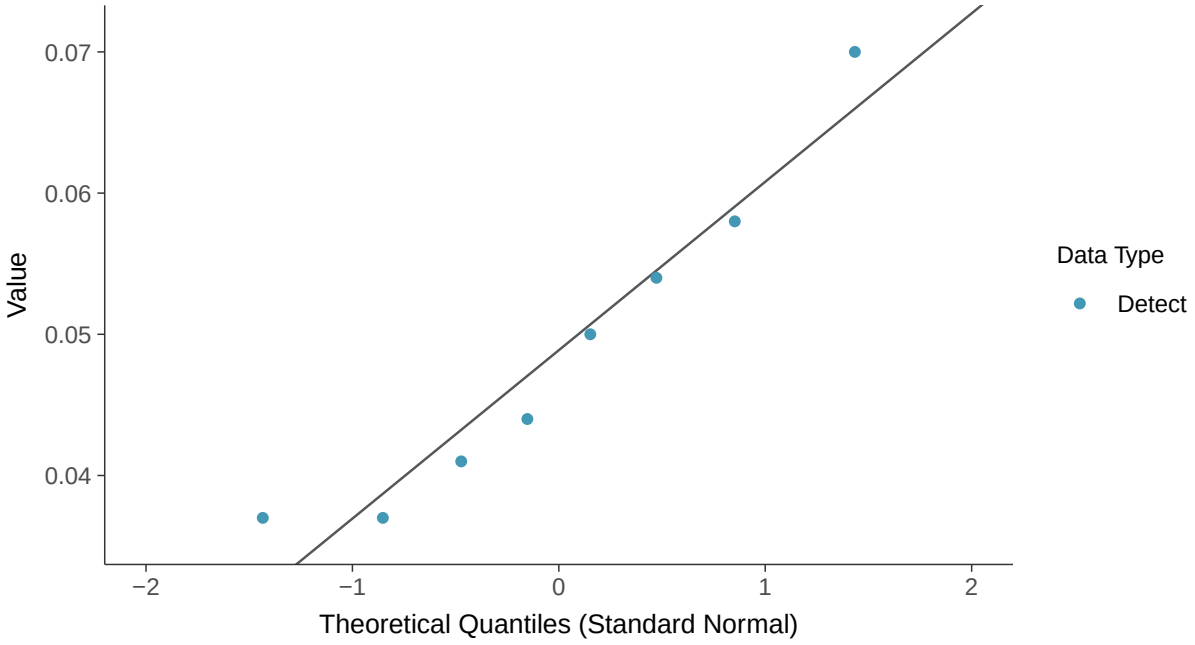
Boxplot by Season

Barium, MW-17B (mg/l)



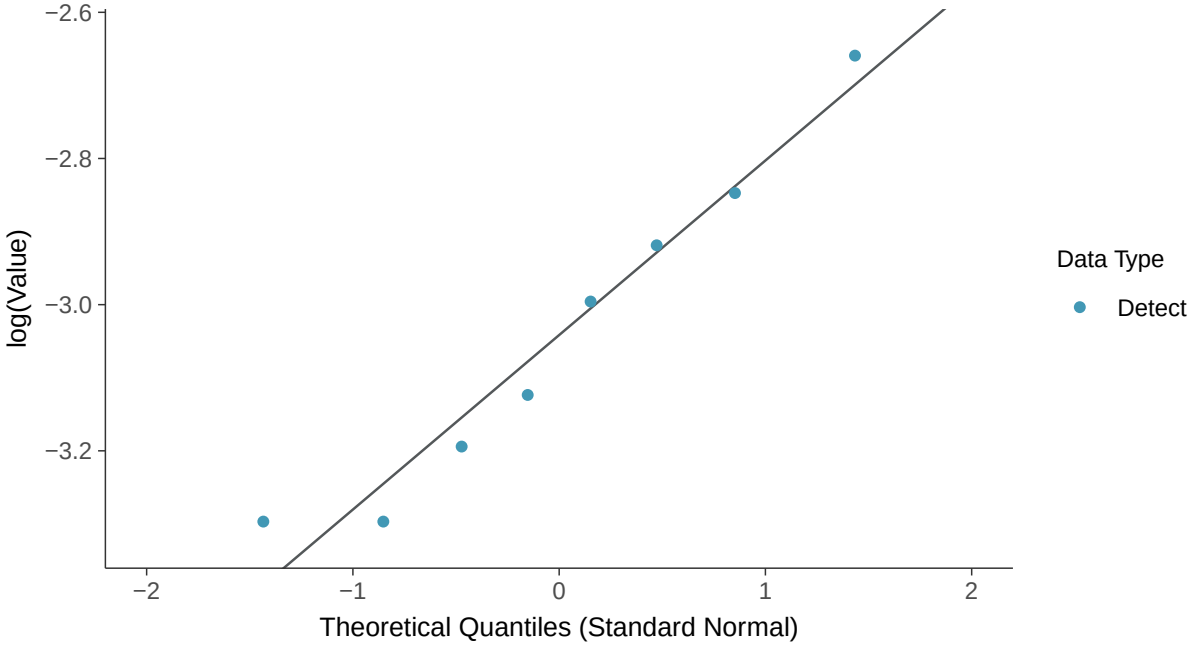
Normal Q-Q plot

Barium, MW-17B (mg/l)



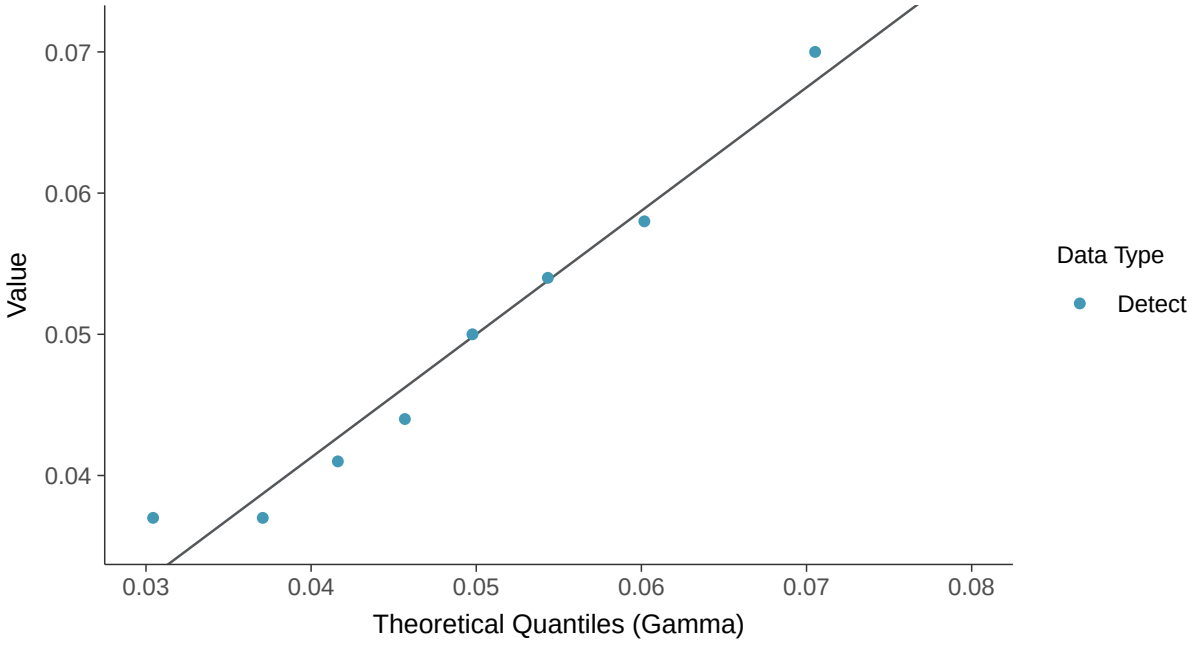
Lognormal Q-Q plot

Barium, MW-17B (mg/l)



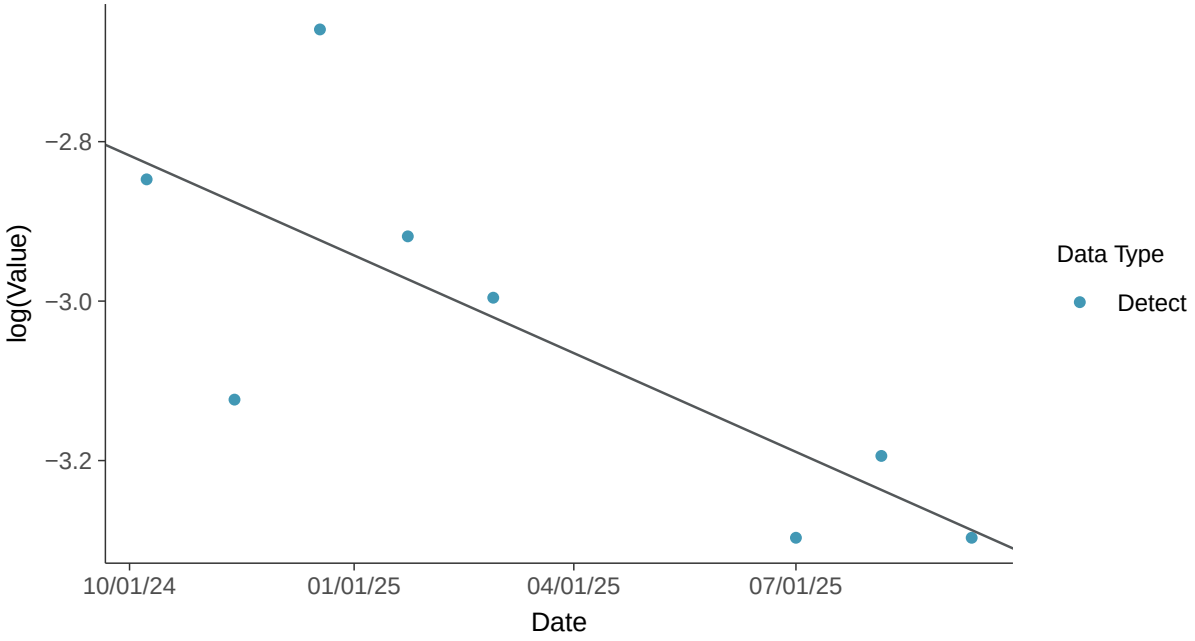
Gamma Q-Q plot

Barium, MW-17B (mg/l)



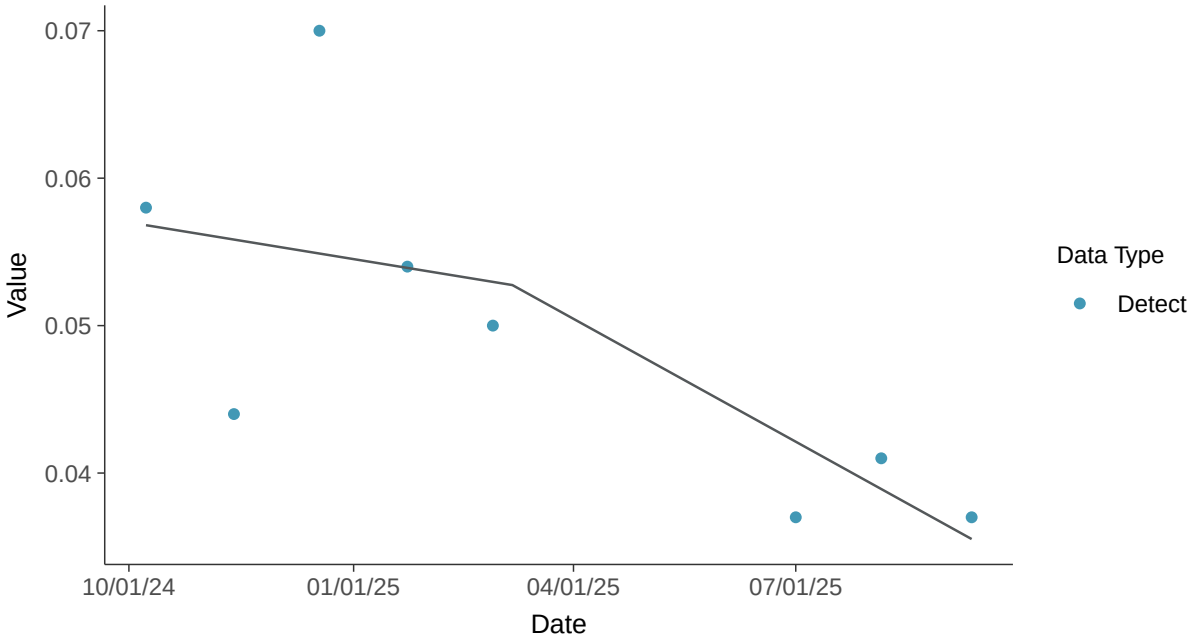
Trend Regression: Lognormal MLE

Barium, MW-17B (mg/l)



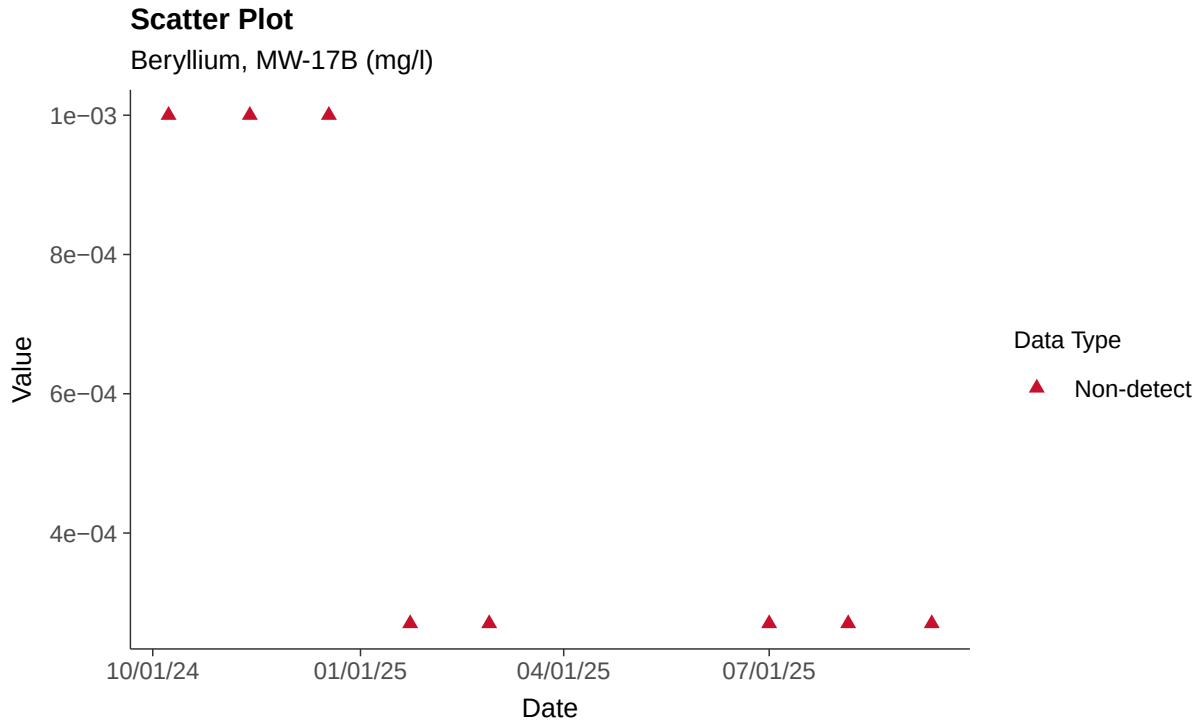
Trend Regression: Piecewise Linear-Linear

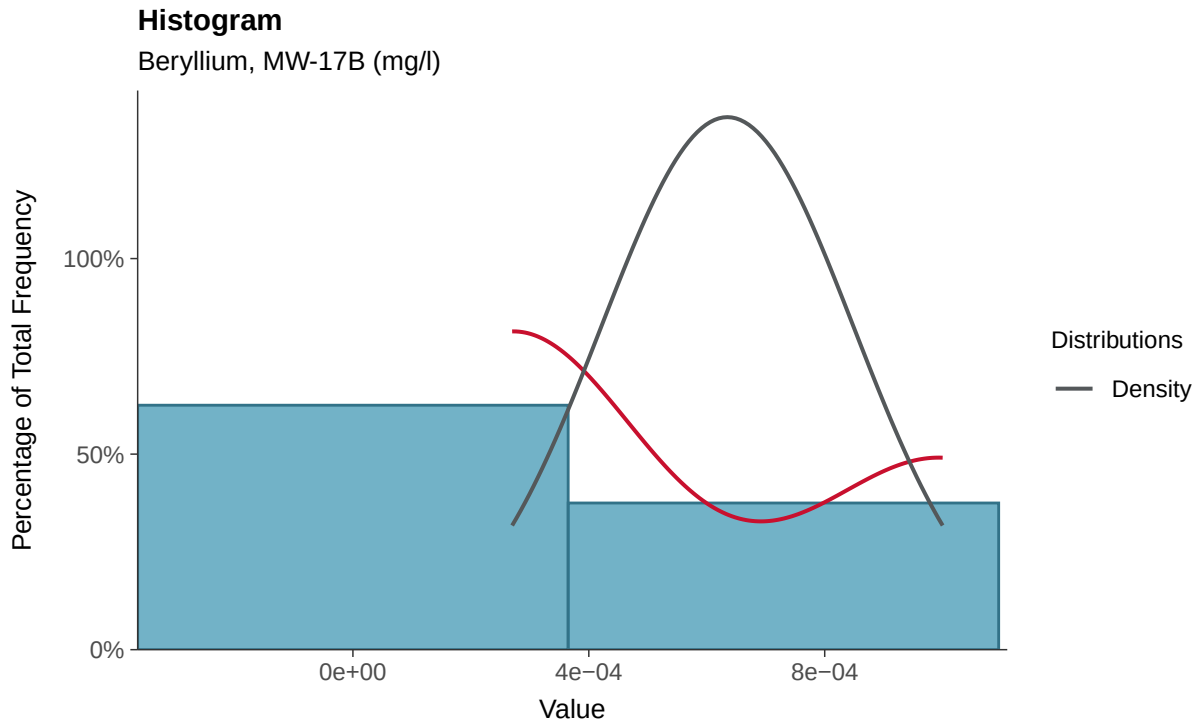
Barium, MW-17B (mg/l)



Appendix IV: Beryllium, MW-17B

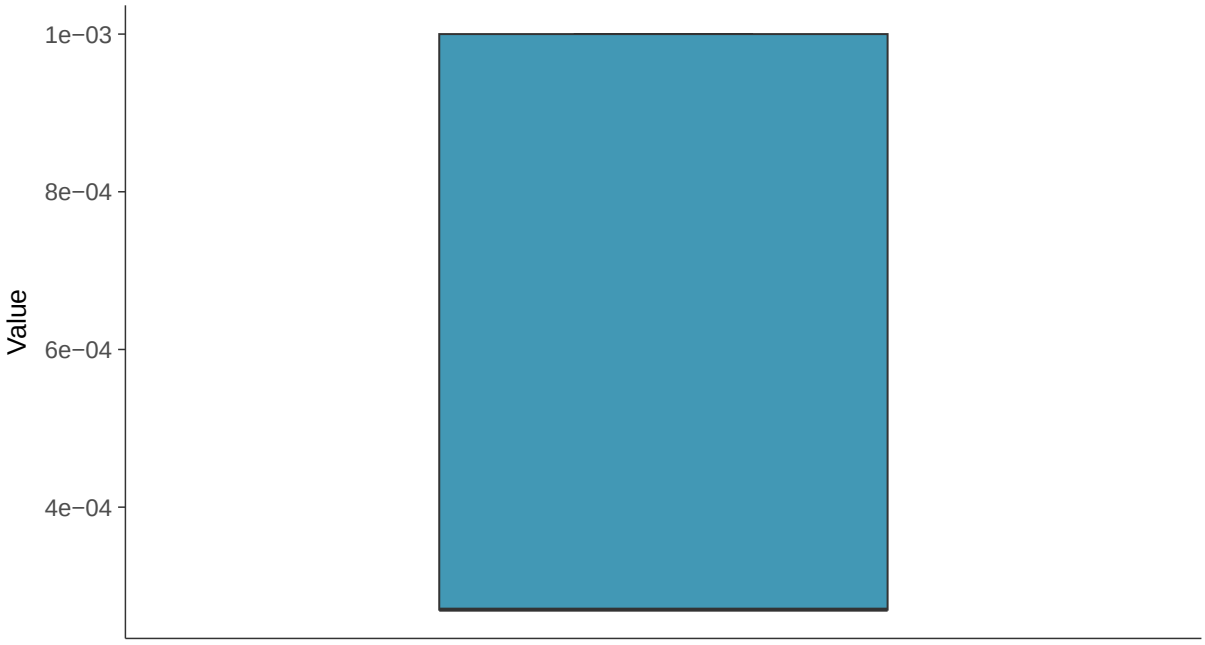
ID: 28_3_104





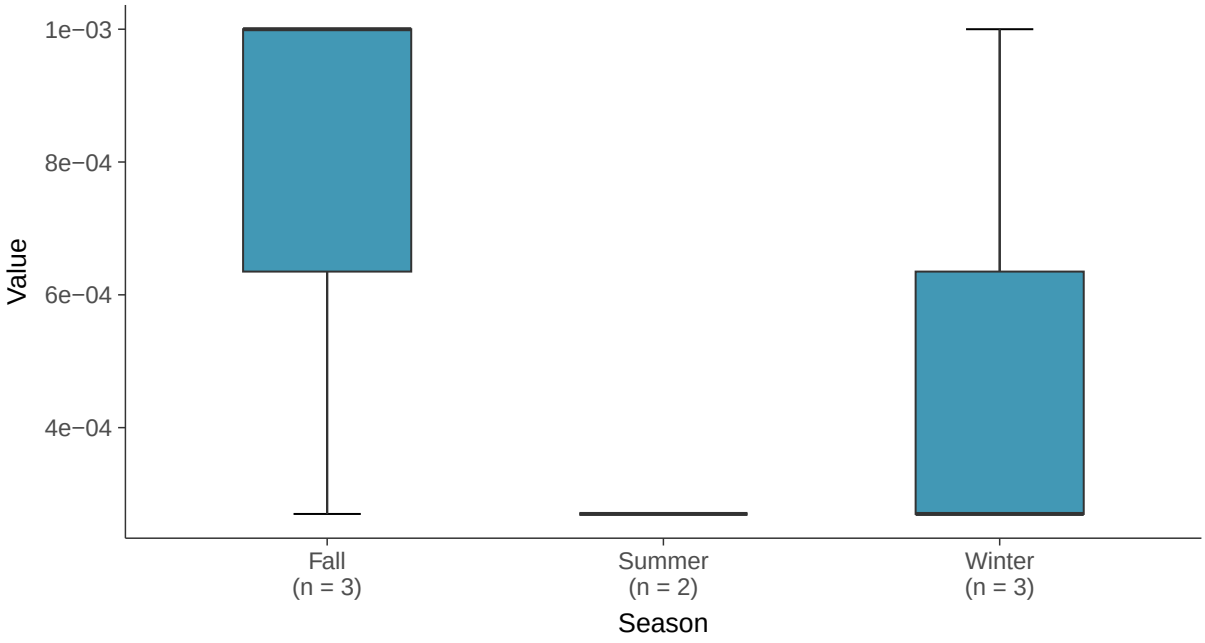
Boxplot

Beryllium, MW-17B (mg/l)



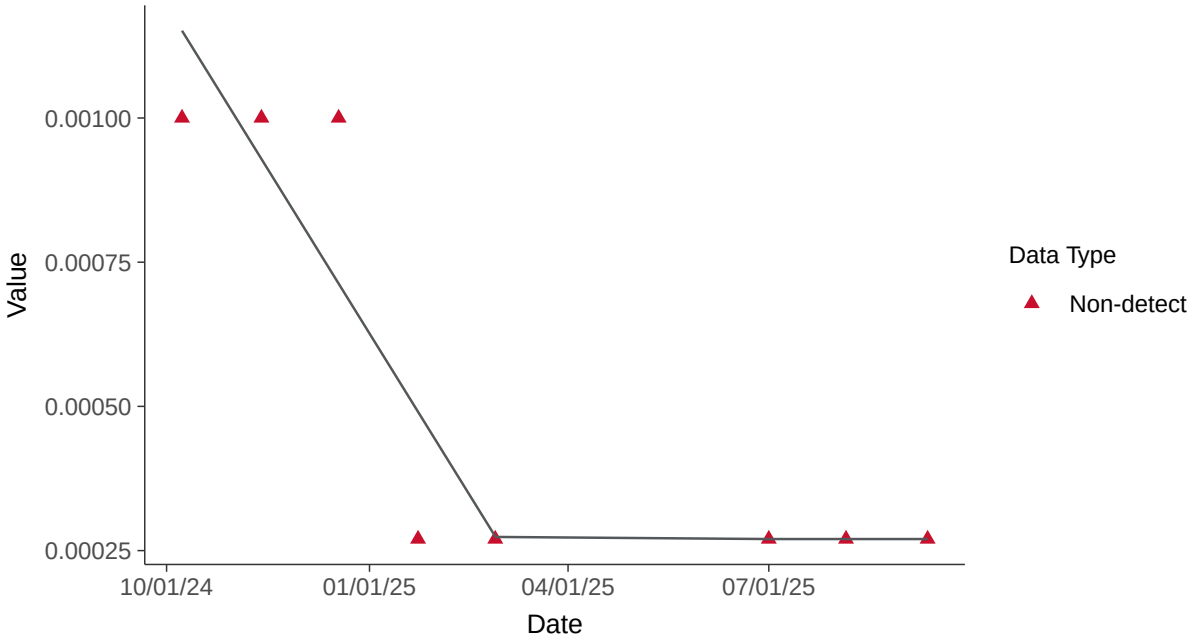
Boxplot by Season

Beryllium, MW-17B (mg/l)



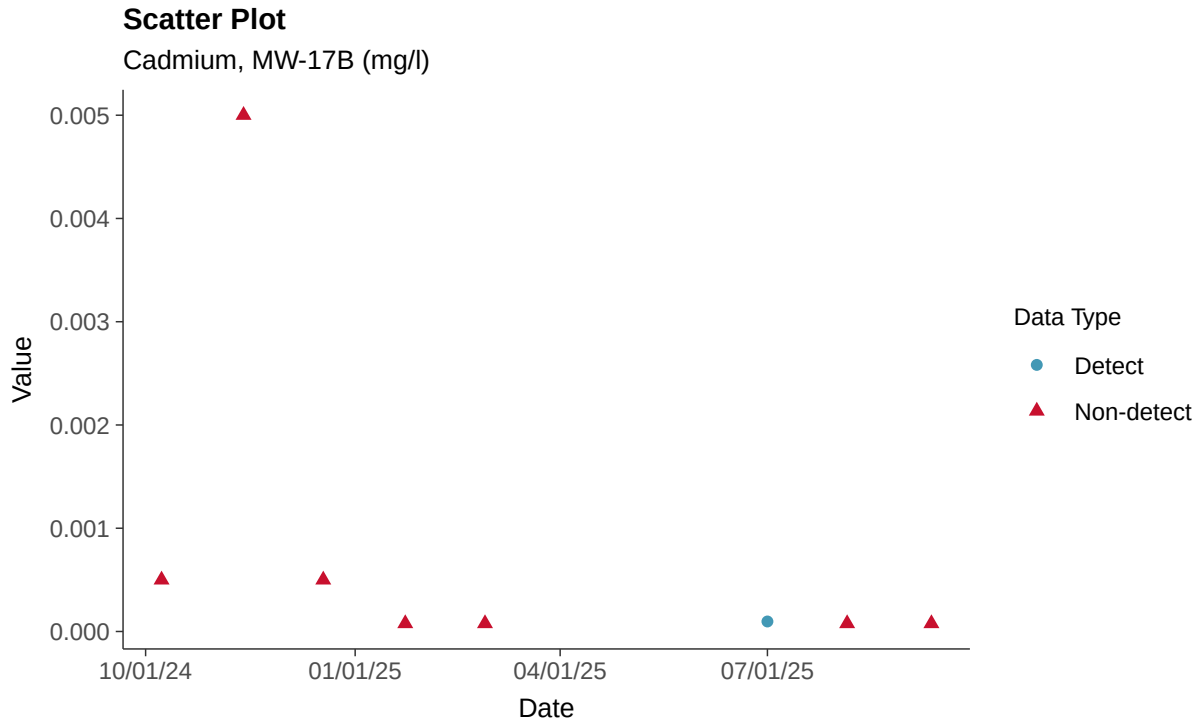
Trend Regression: Piecewise Linear-Linear

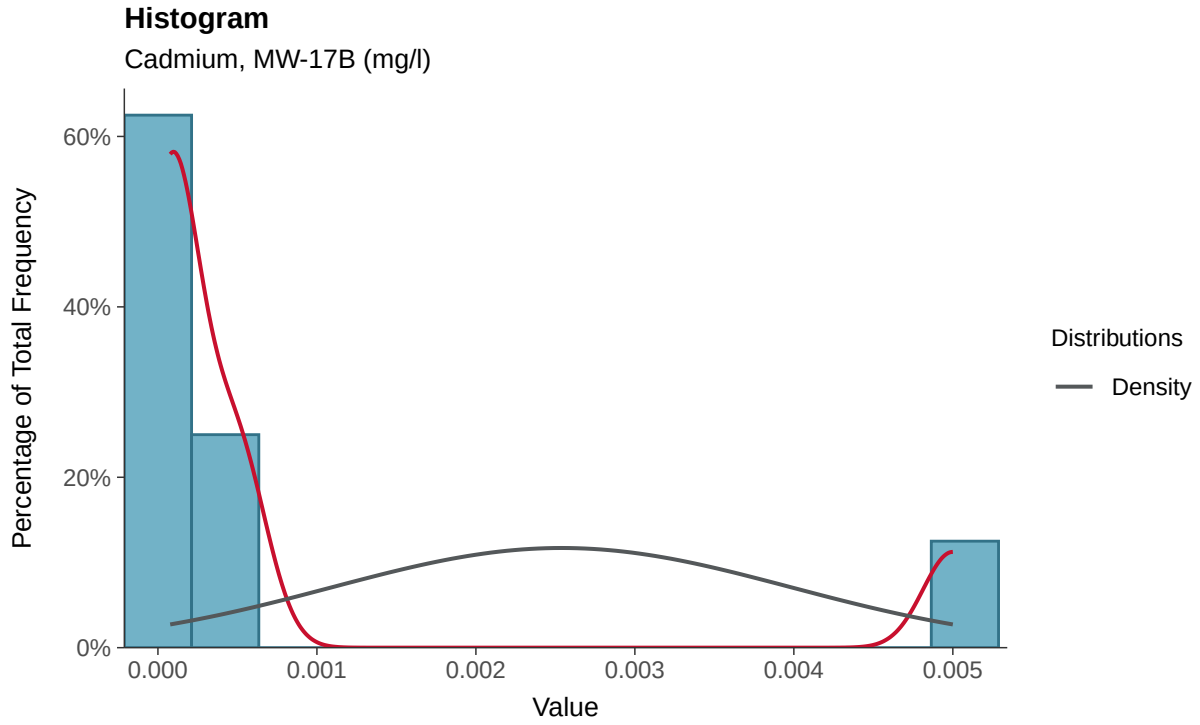
Beryllium, MW-17B (mg/l)



Appendix IV: Cadmium, MW-17B

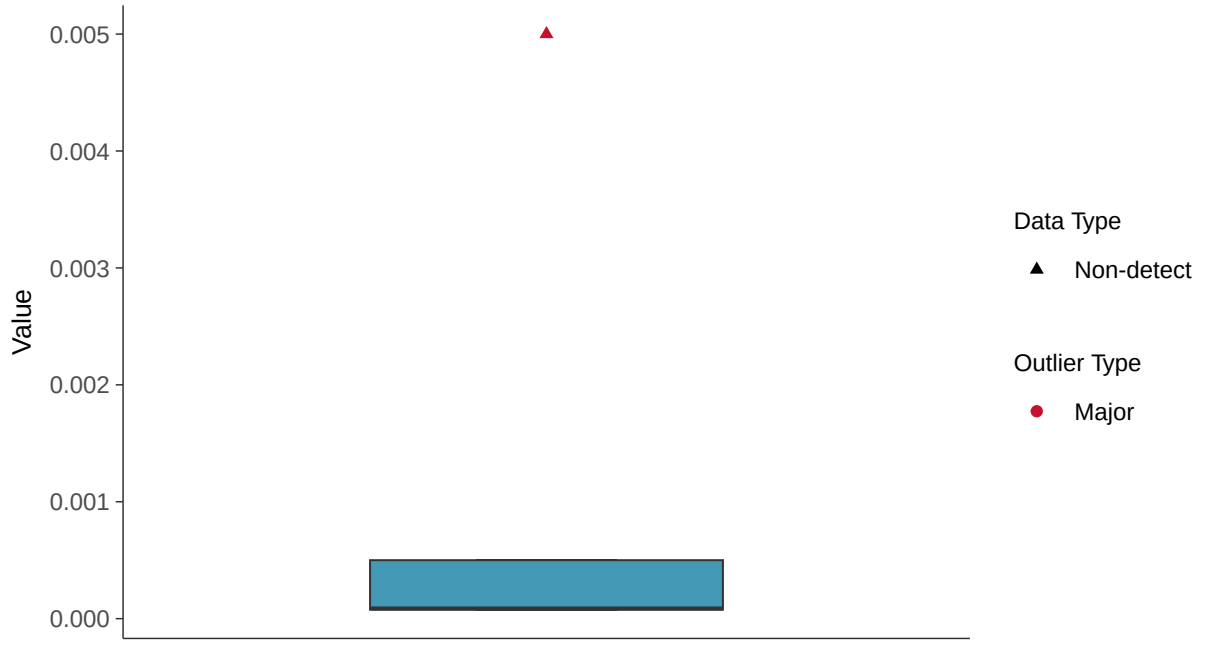
ID: 28_3_106





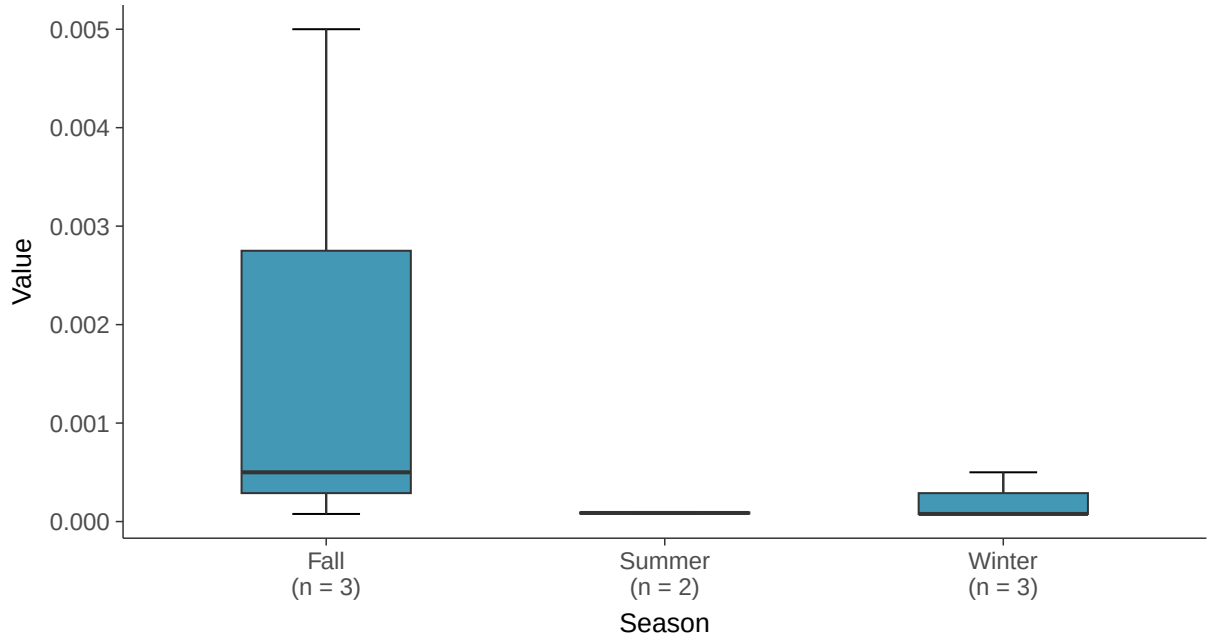
Boxplot

Cadmium, MW-17B (mg/l)



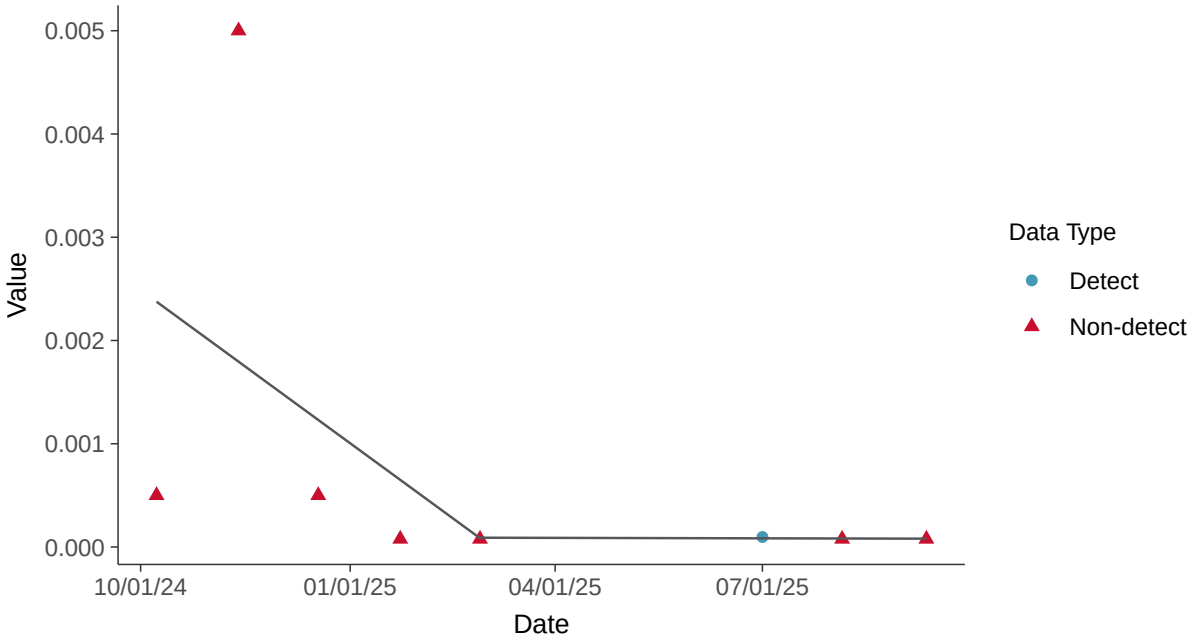
Boxplot by Season

Cadmium, MW-17B (mg/l)



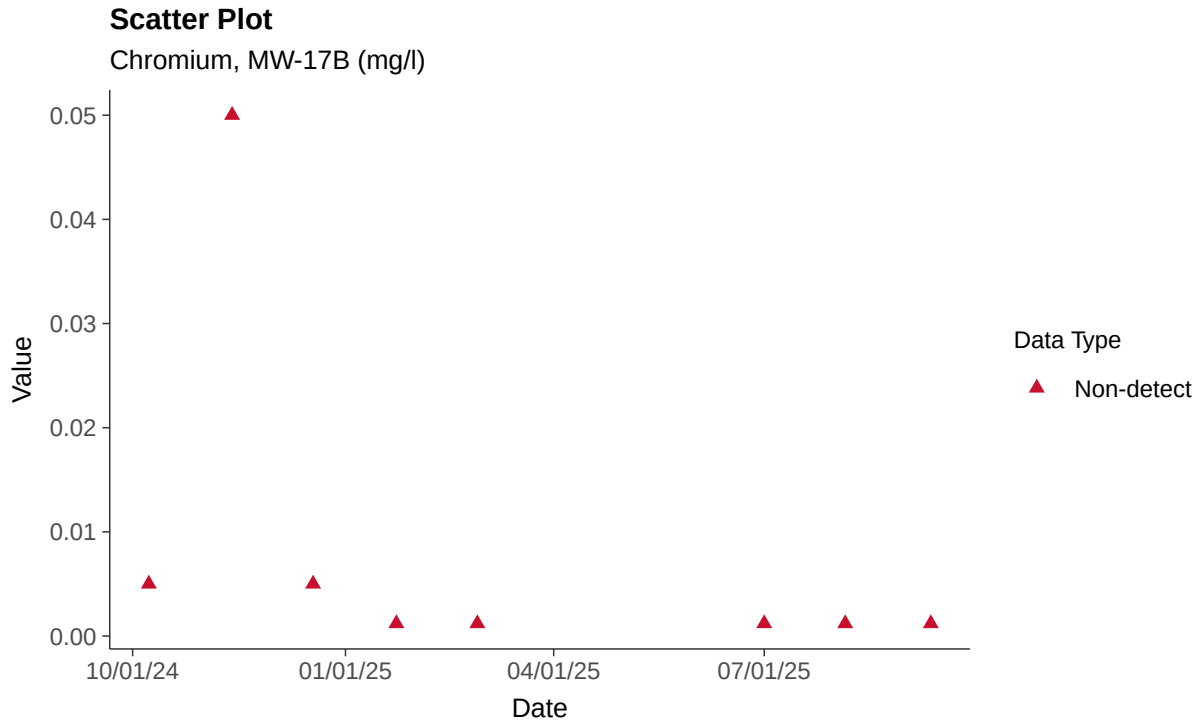
Trend Regression: Piecewise Linear-Linear

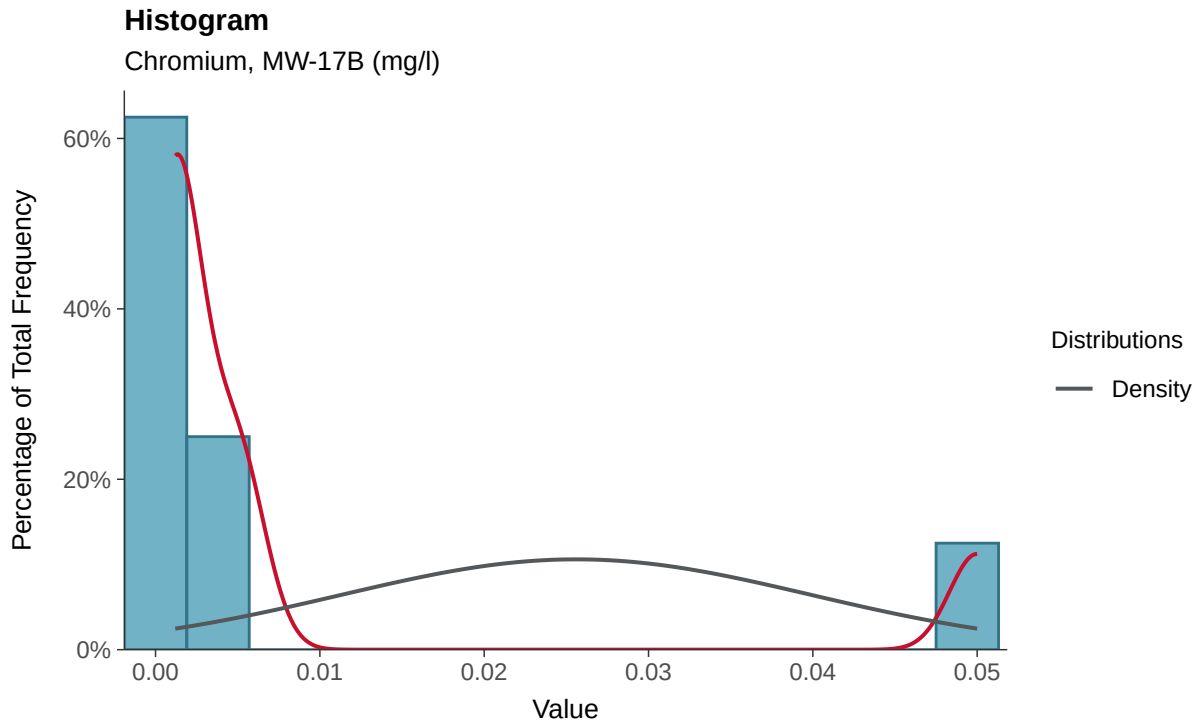
Cadmium, MW-17B (mg/l)



Appendix IV: Chromium, MW-17B

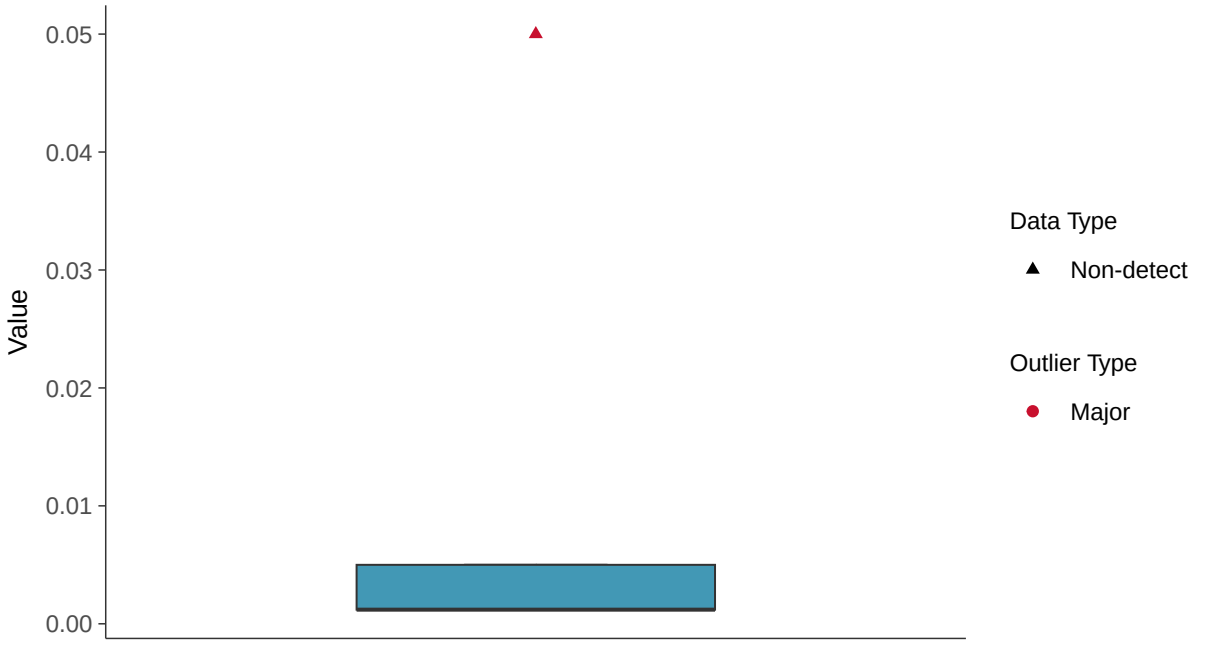
ID: 28_3_109





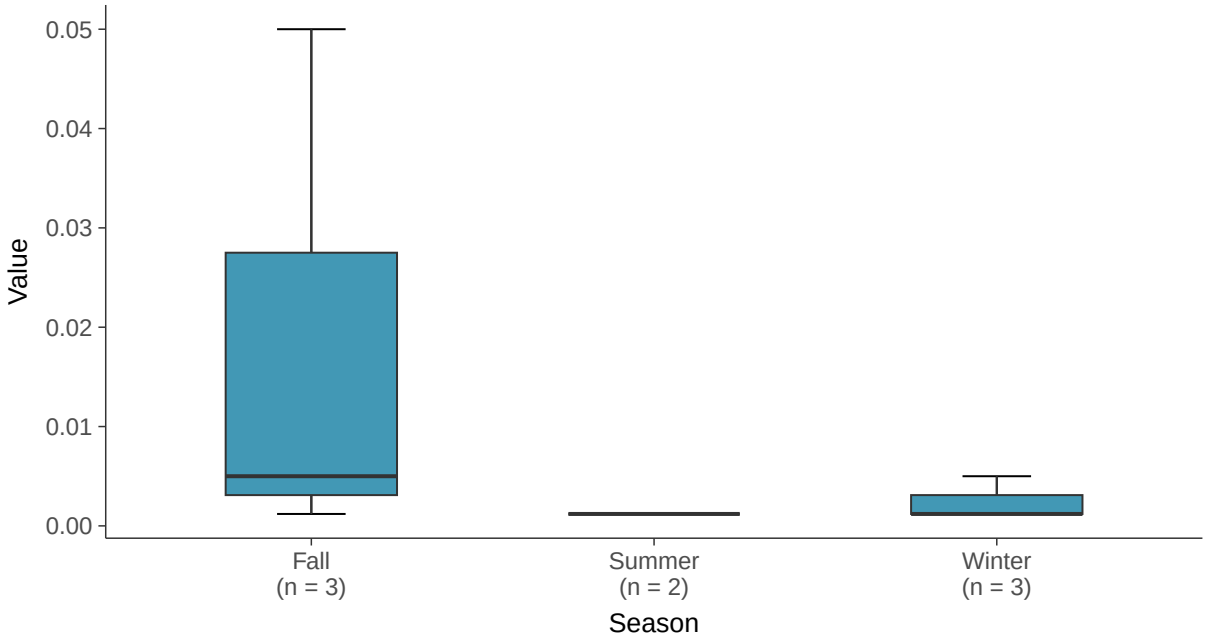
Boxplot

Chromium, MW-17B (mg/l)



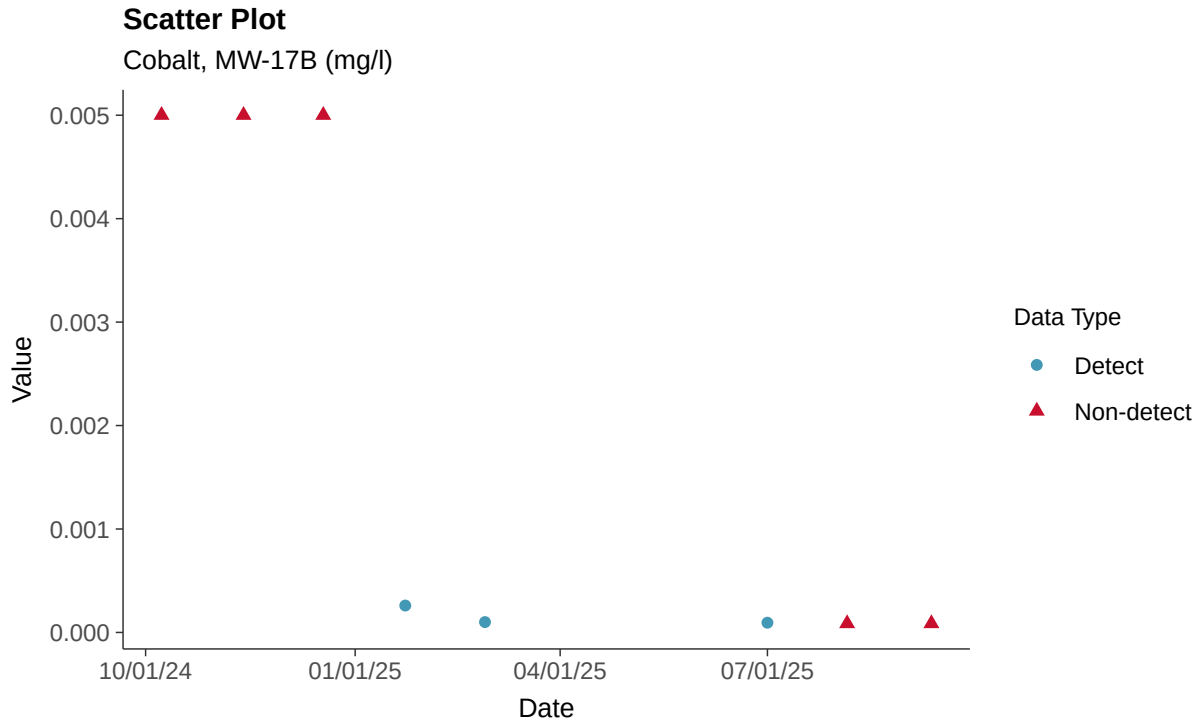
Boxplot by Season

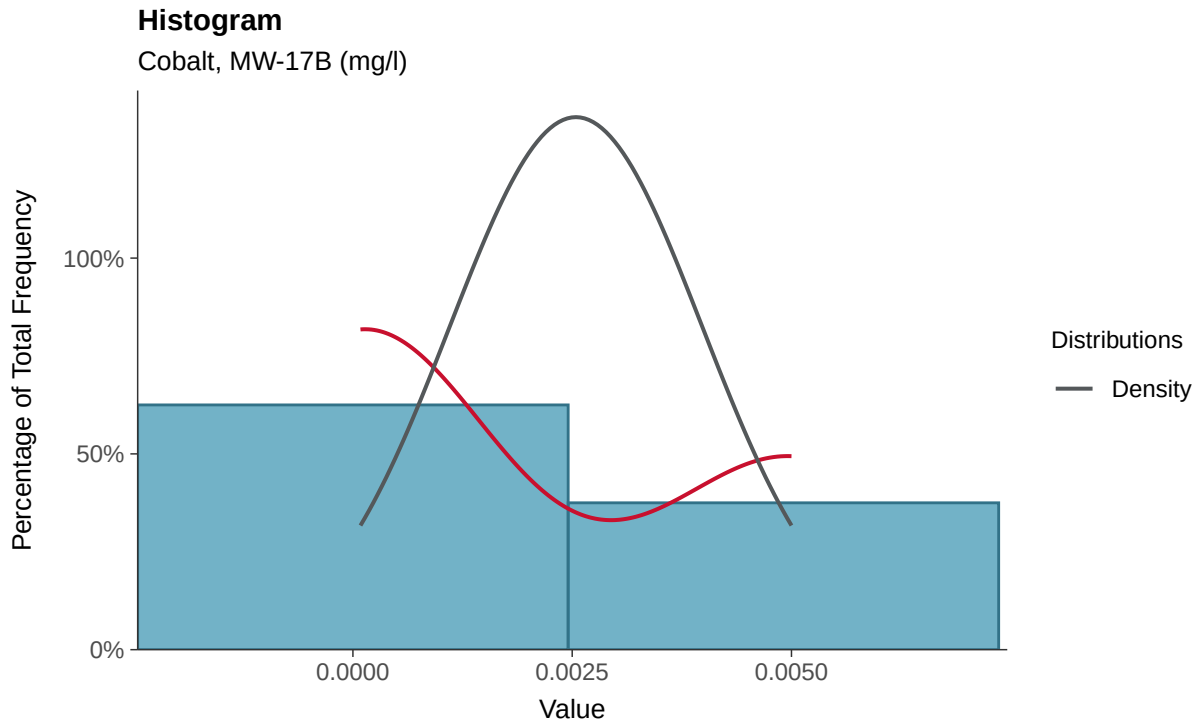
Chromium, MW-17B (mg/l)



Appendix IV: Cobalt, MW-17B

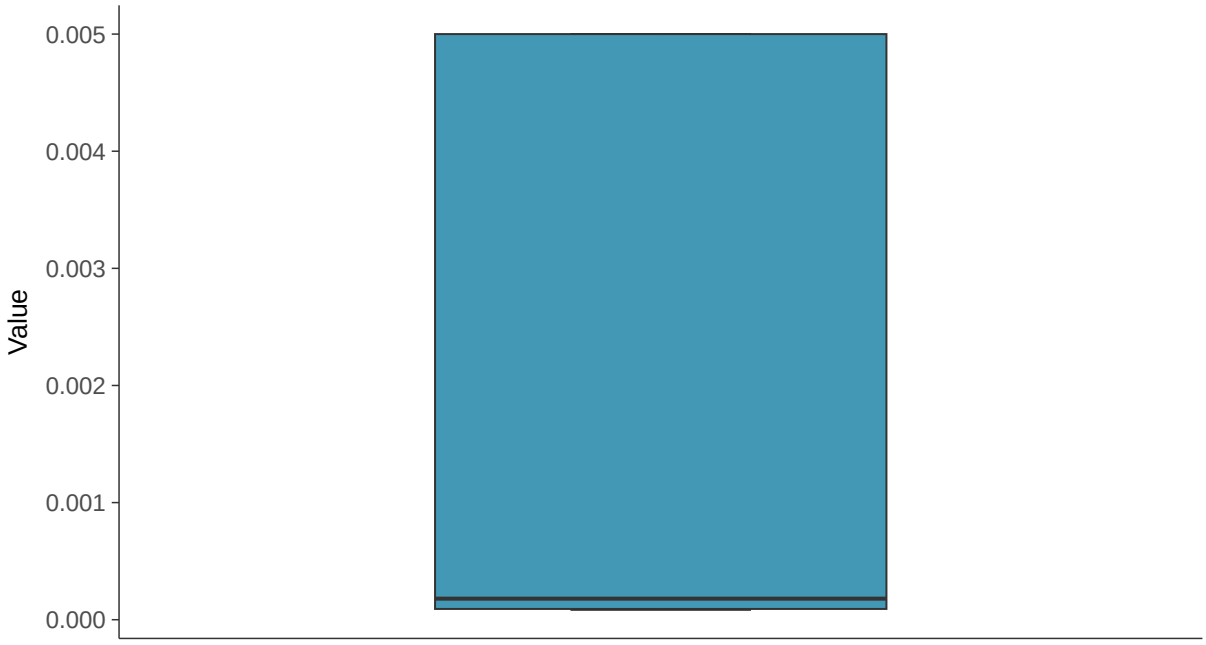
ID: 28_3_110





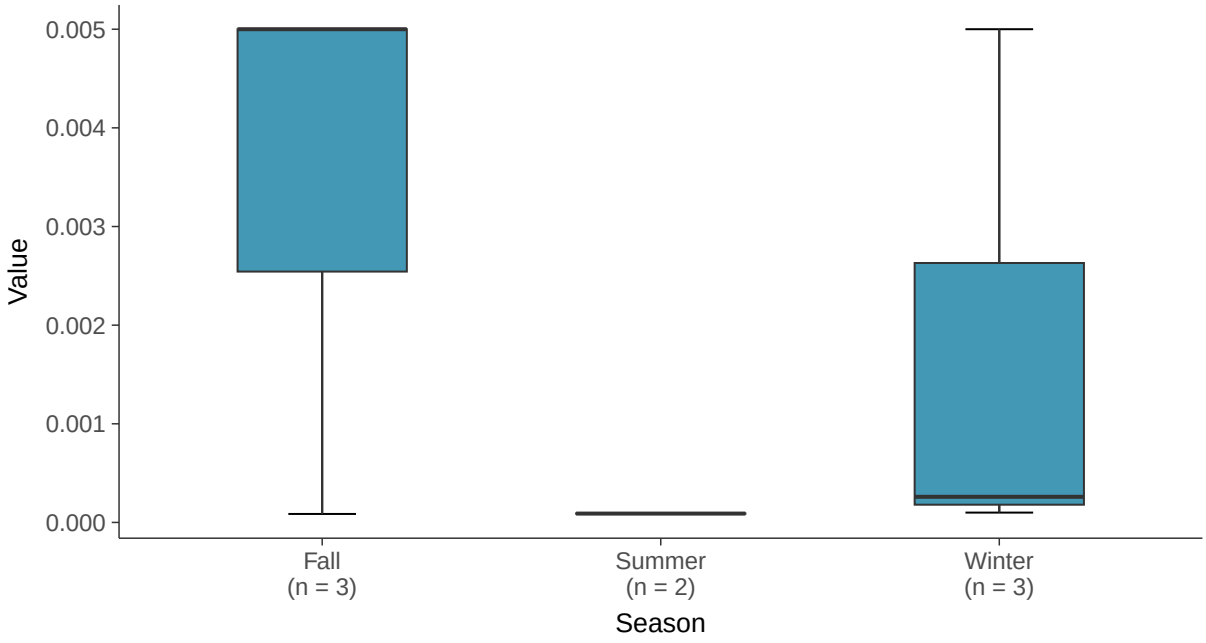
Boxplot

Cobalt, MW-17B (mg/l)



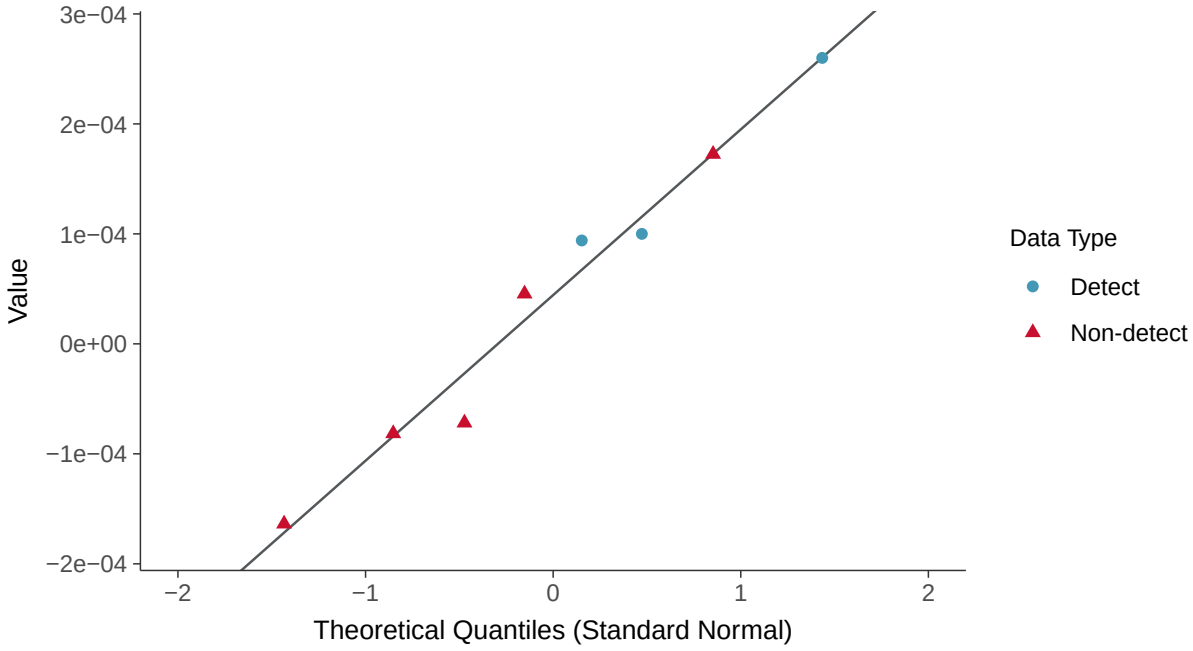
Boxplot by Season

Cobalt, MW-17B (mg/l)



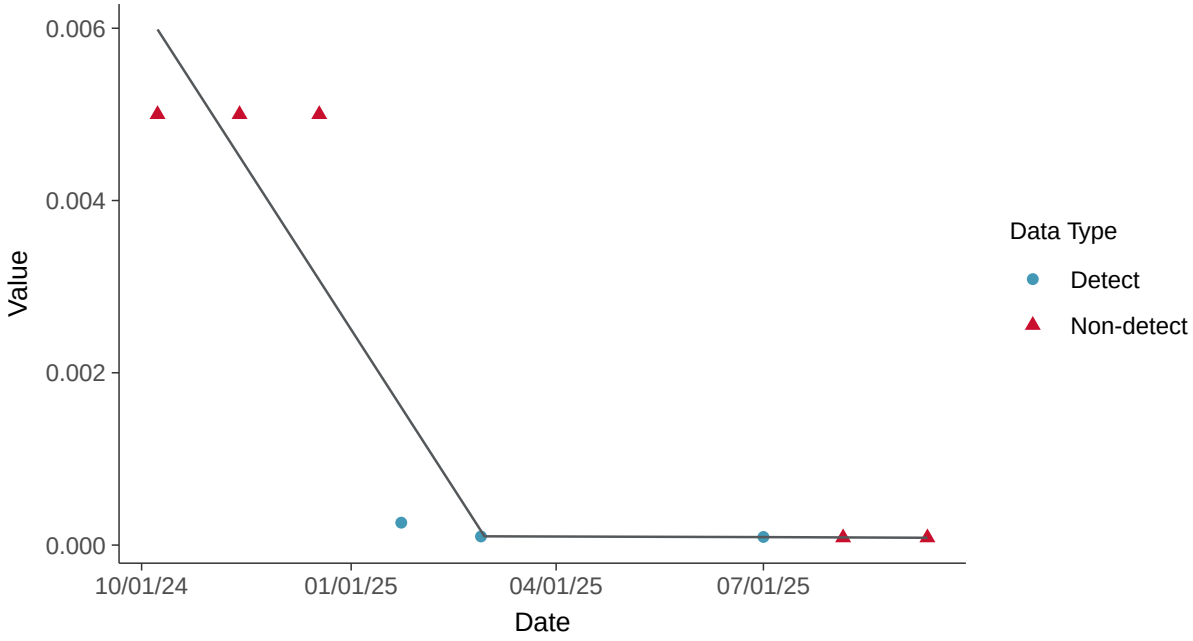
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-17B (mg/l)



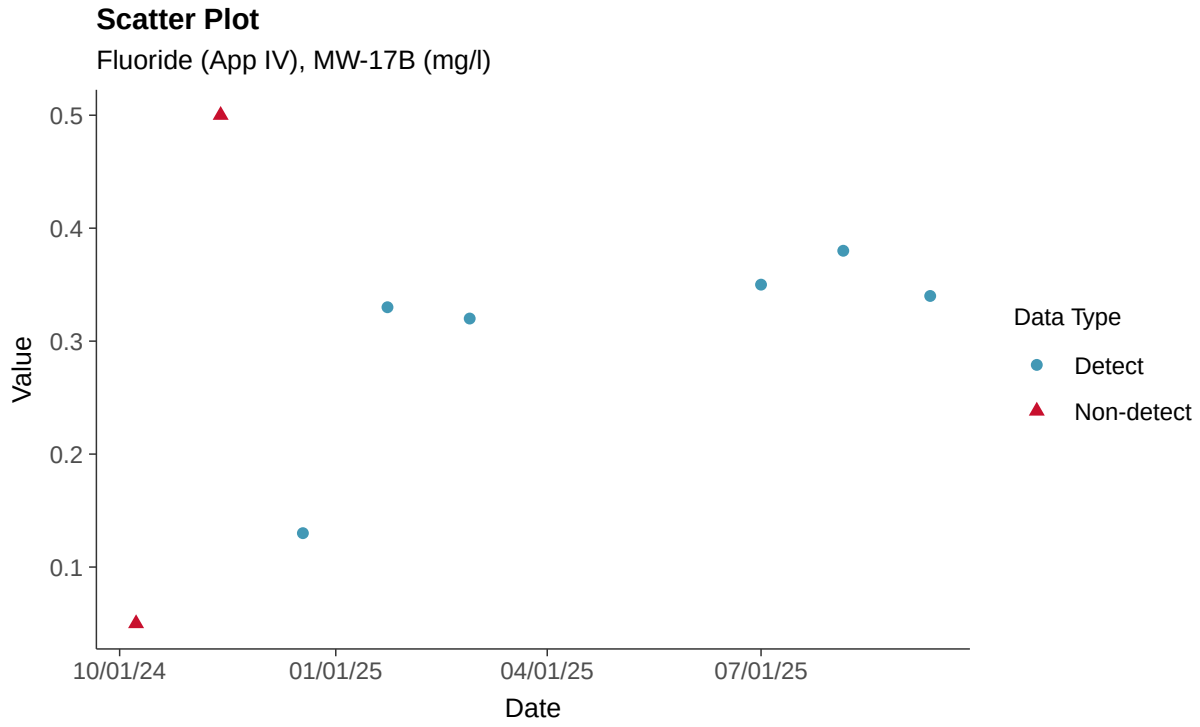
Trend Regression: Piecewise Linear-Linear

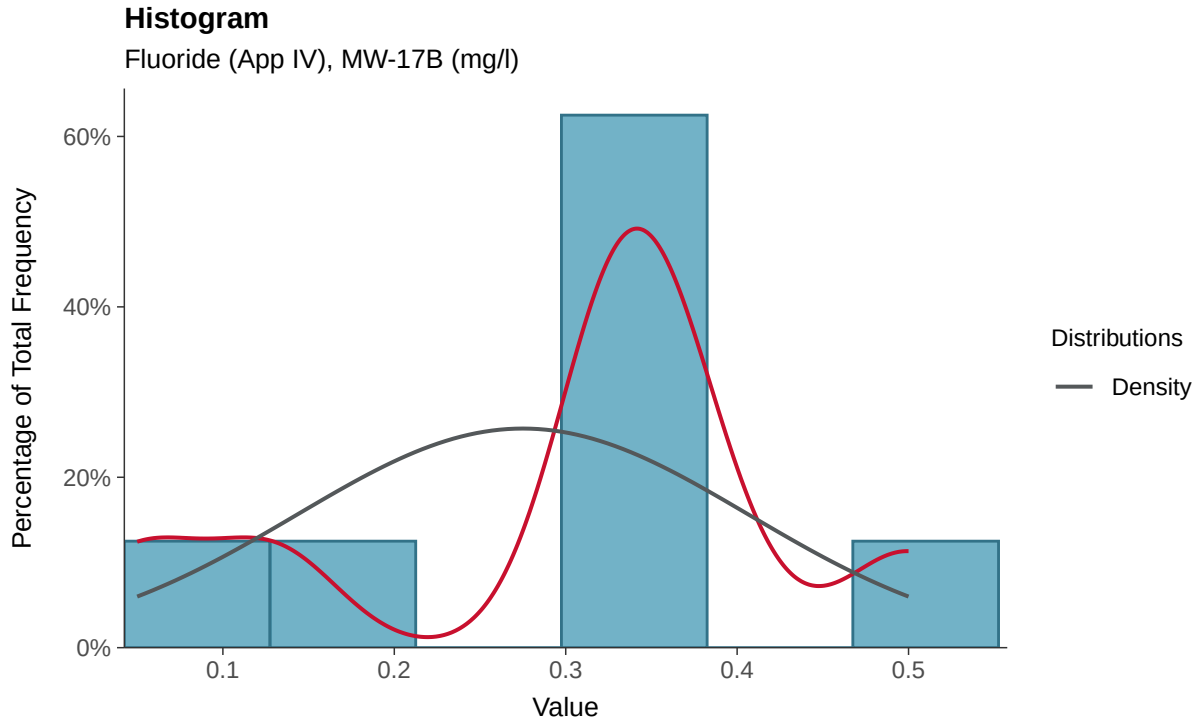
Cobalt, MW-17B (mg/l)



Appendix IV: Fluoride (App IV), MW-17B

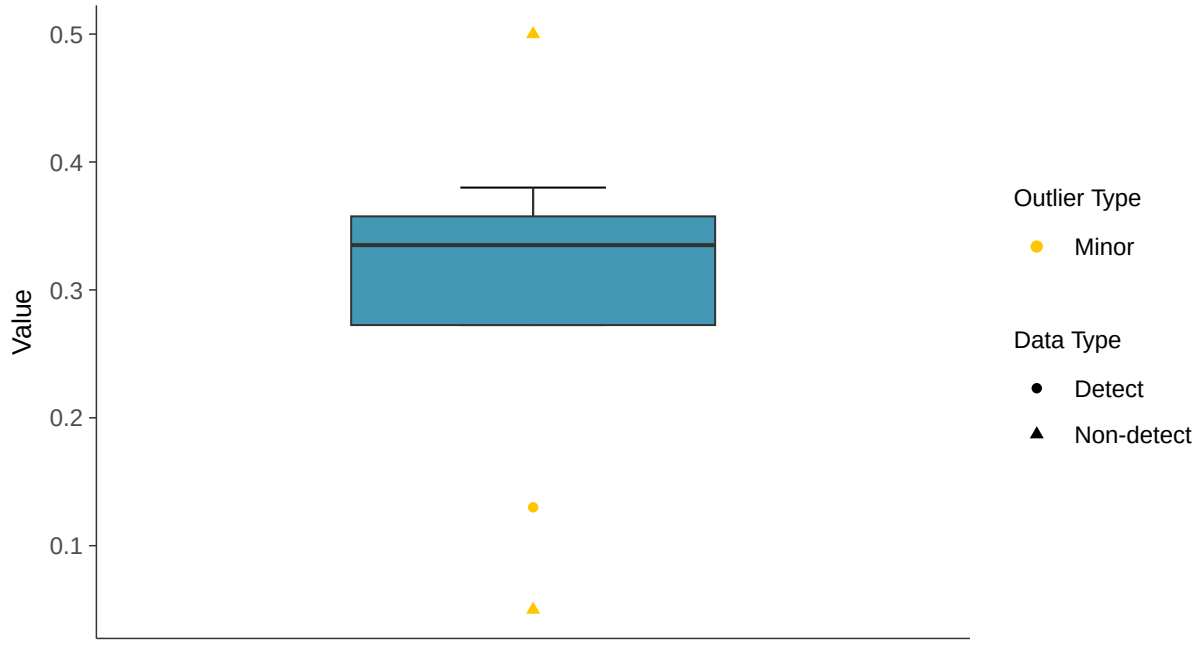
ID: 28_3_113





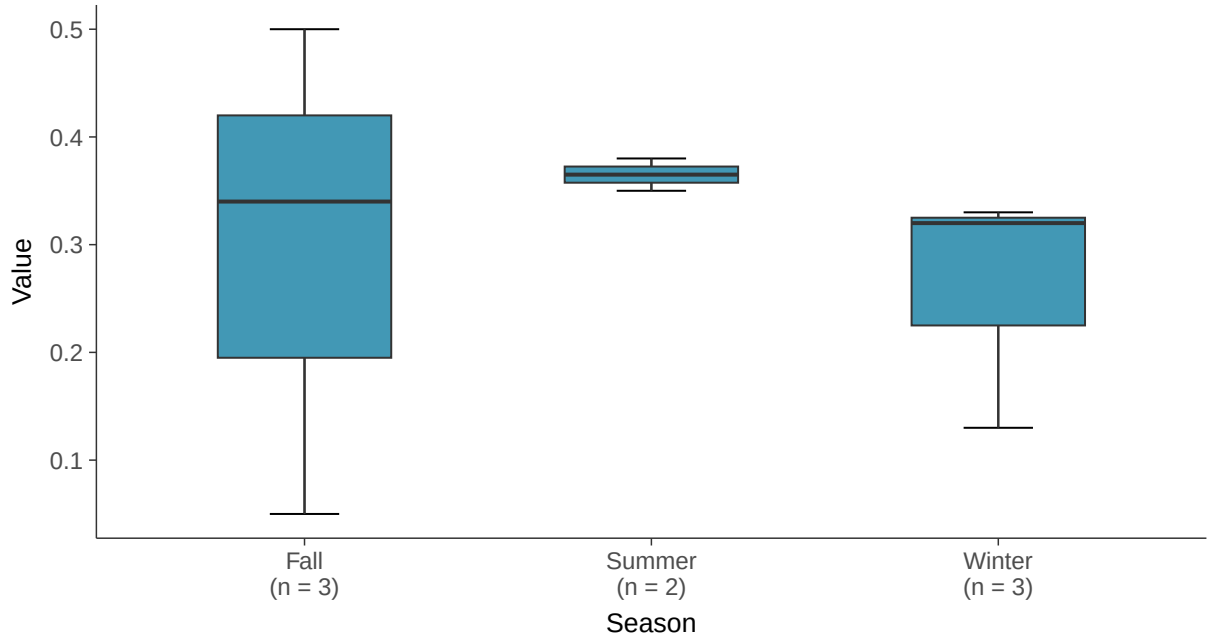
Boxplot

Fluoride (App IV), MW-17B (mg/l)



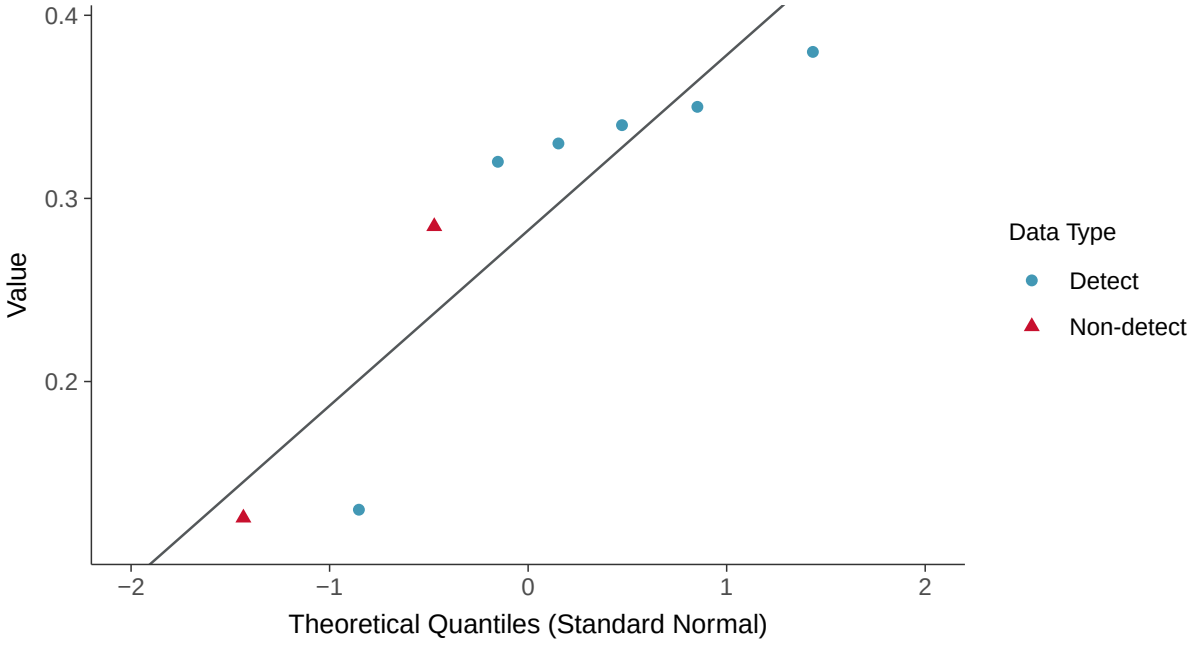
Boxplot by Season

Fluoride (App IV), MW-17B (mg/l)



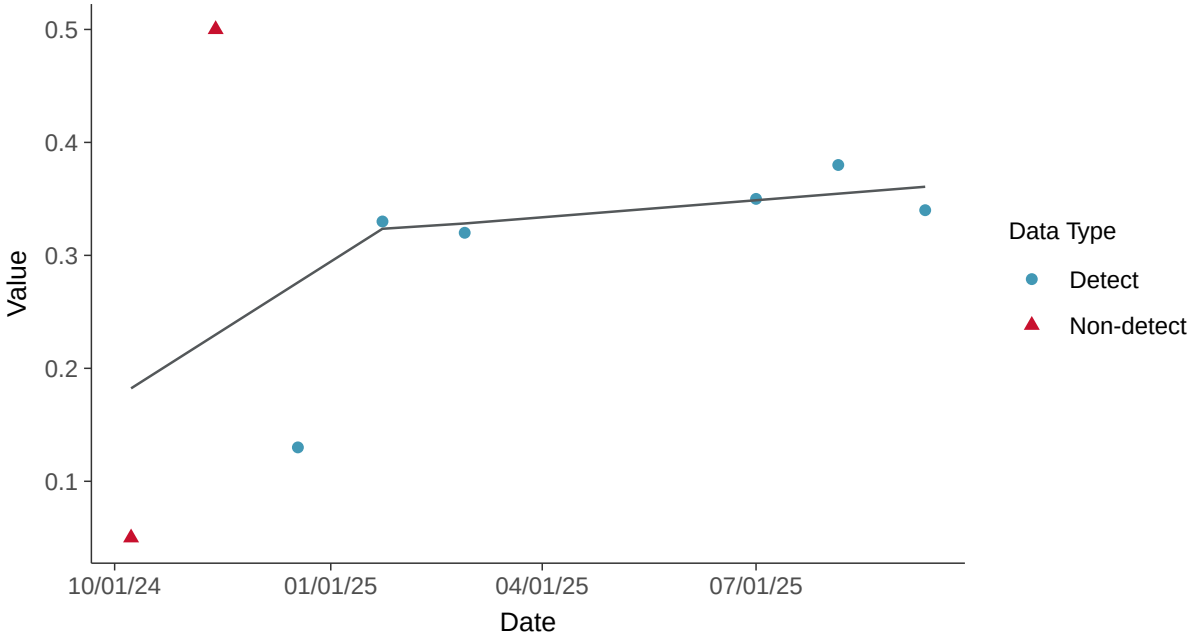
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-17B (mg/l)



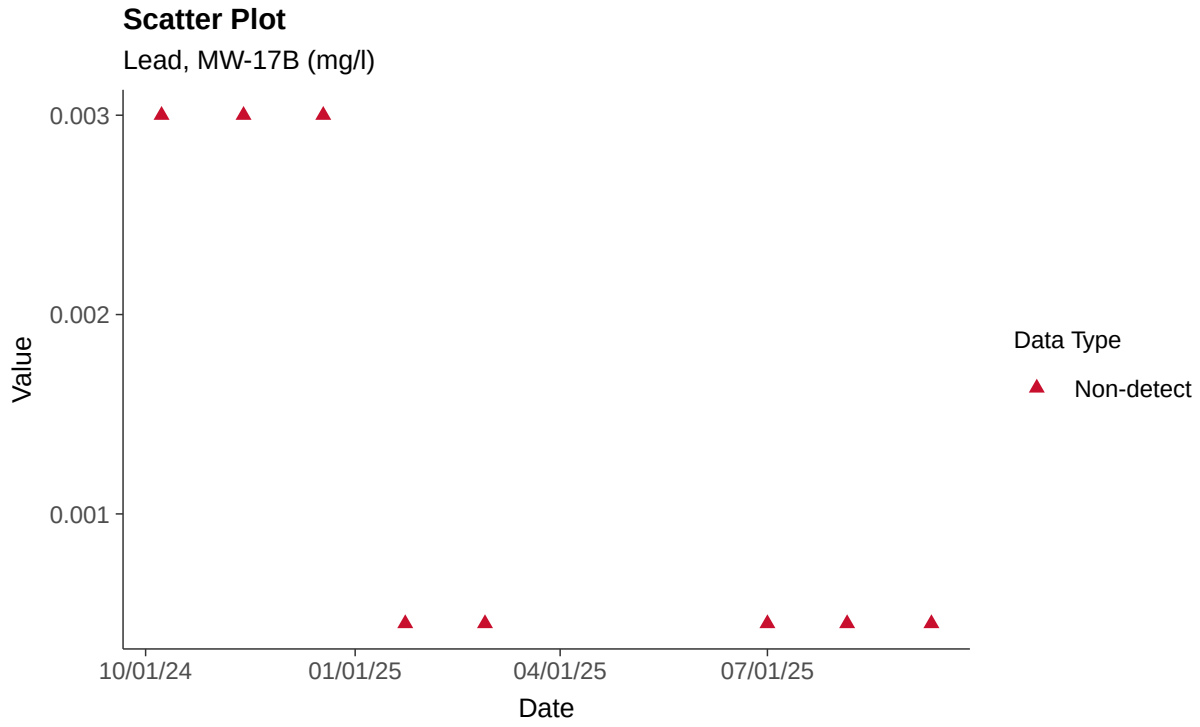
Trend Regression: Piecewise Linear-Linear

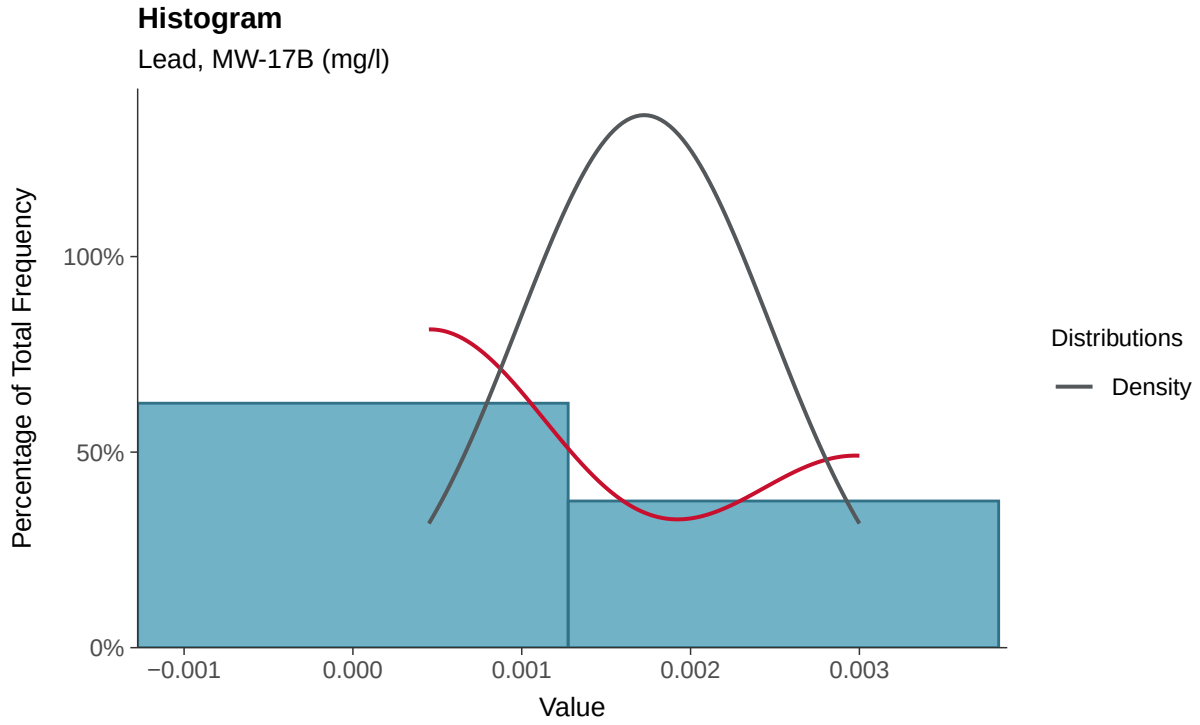
Fluoride (App IV), MW-17B (mg/l)



Appendix IV: Lead, MW-17B

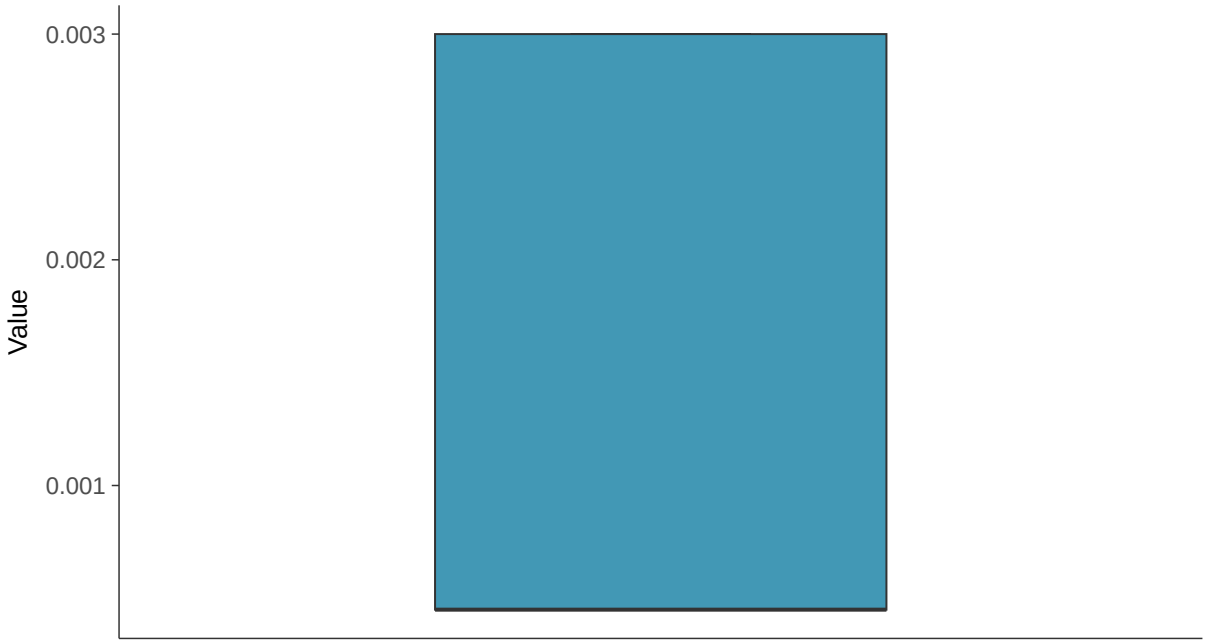
ID: 28_3_115





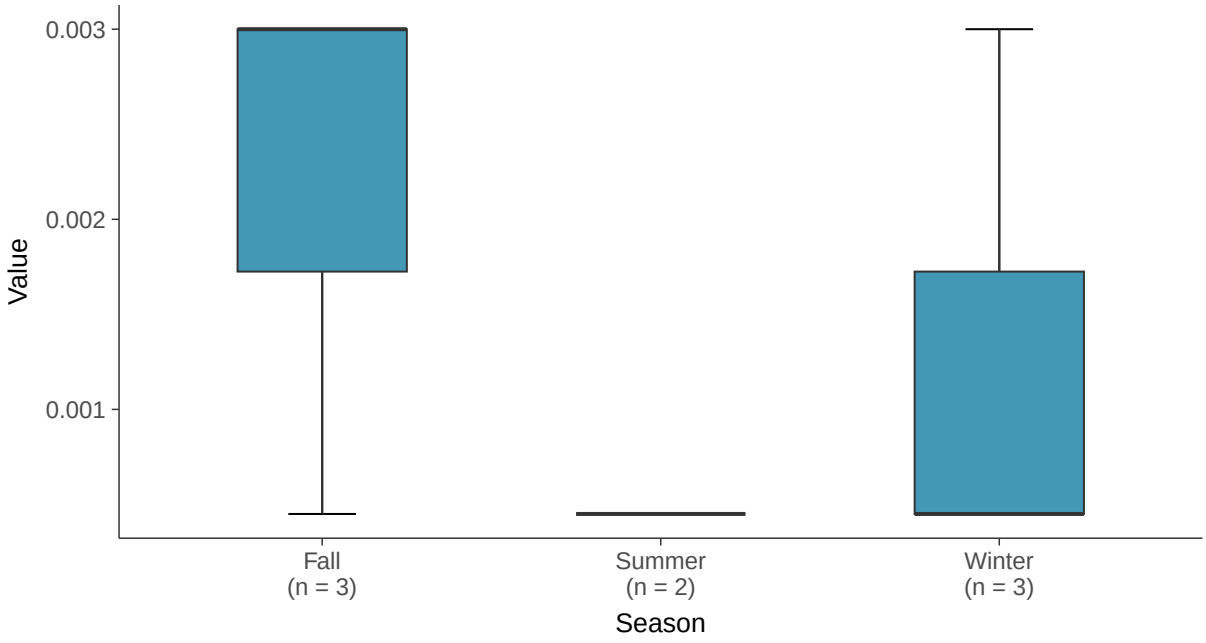
Boxplot

Lead, MW-17B (mg/l)



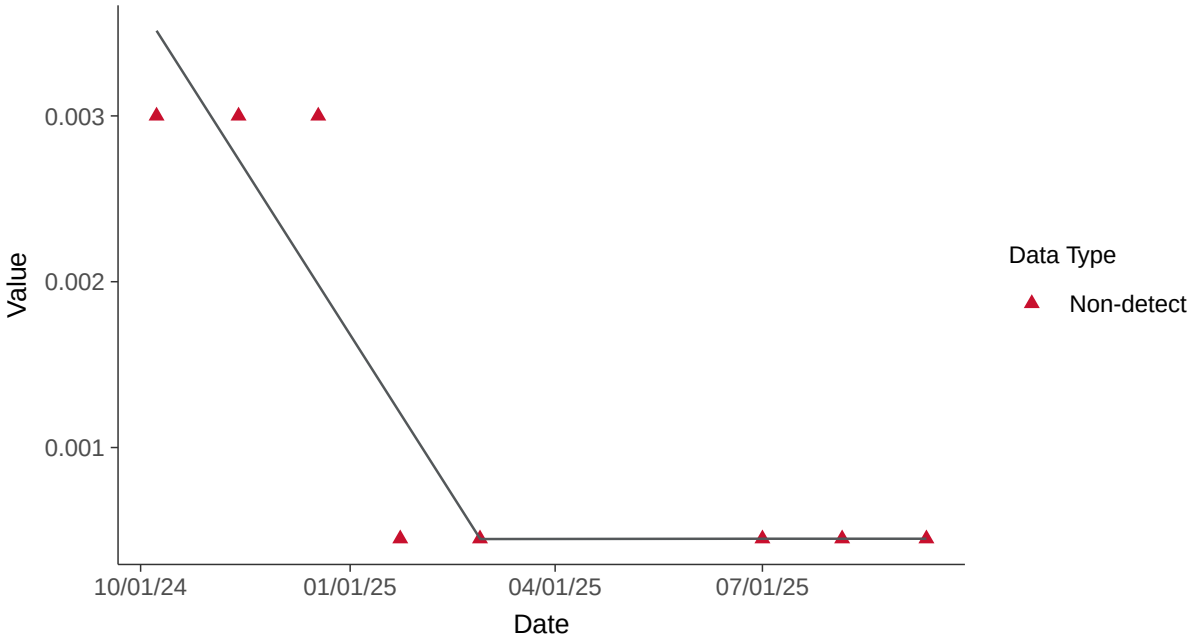
Boxplot by Season

Lead, MW-17B (mg/l)



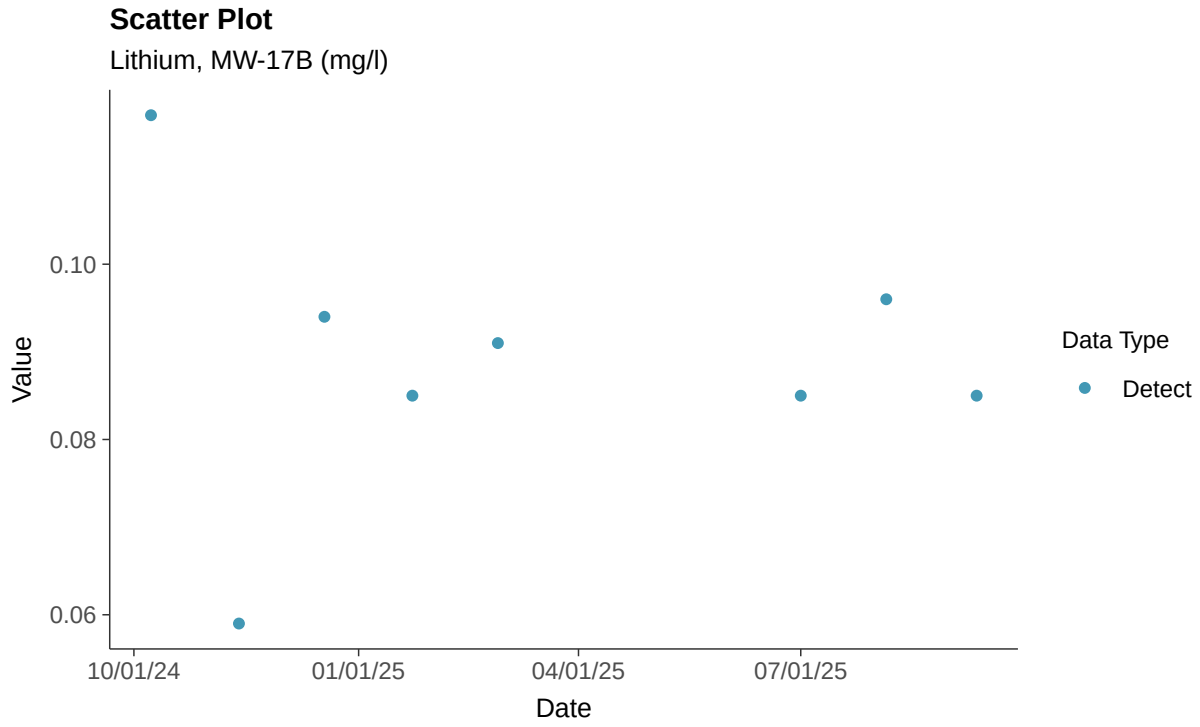
Trend Regression: Piecewise Linear-Linear

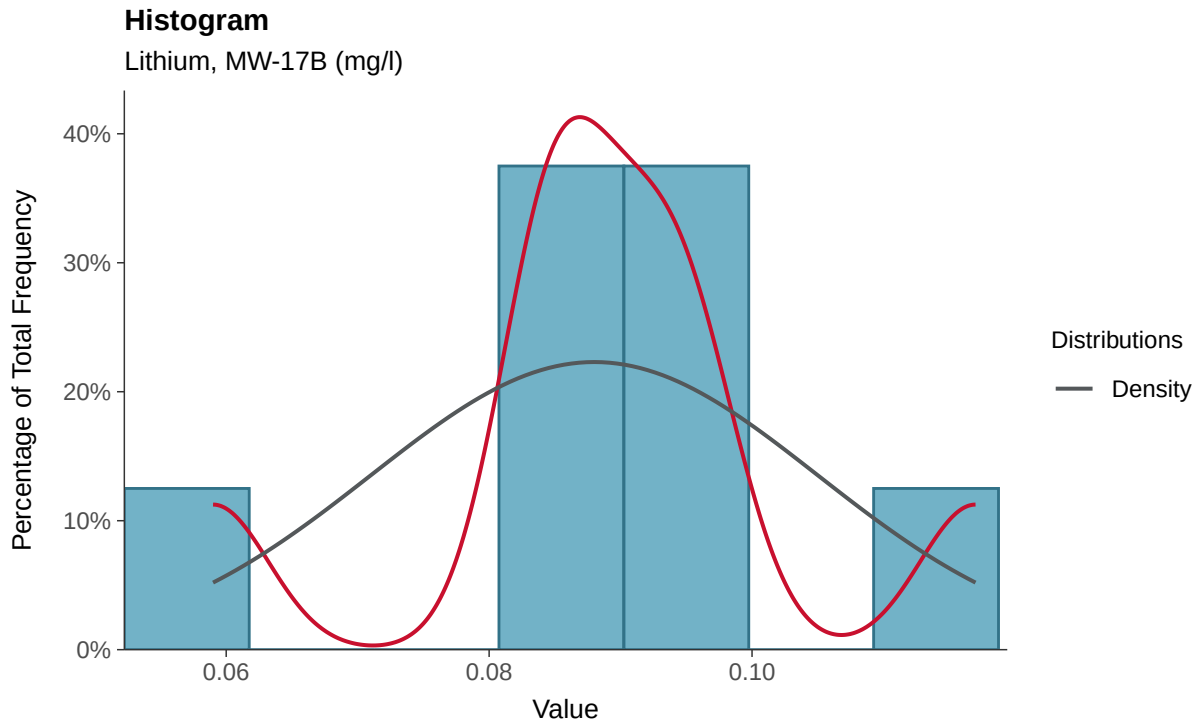
Lead, MW-17B (mg/l)



Appendix IV: Lithium, MW-17B

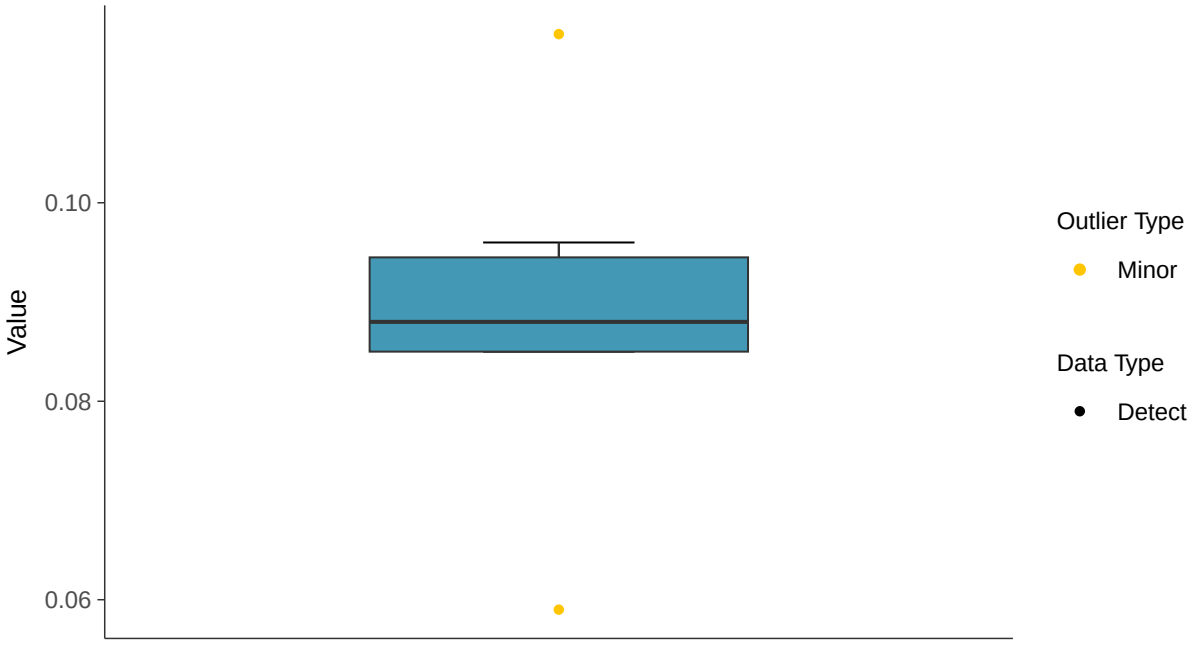
ID: 28_3_116





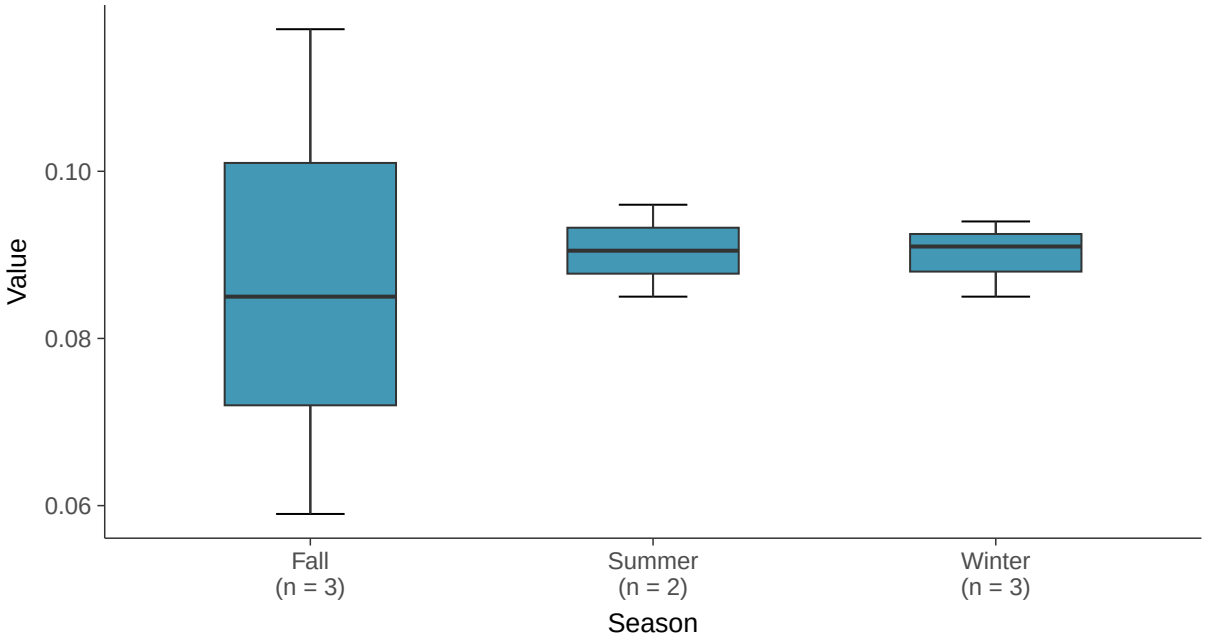
Boxplot

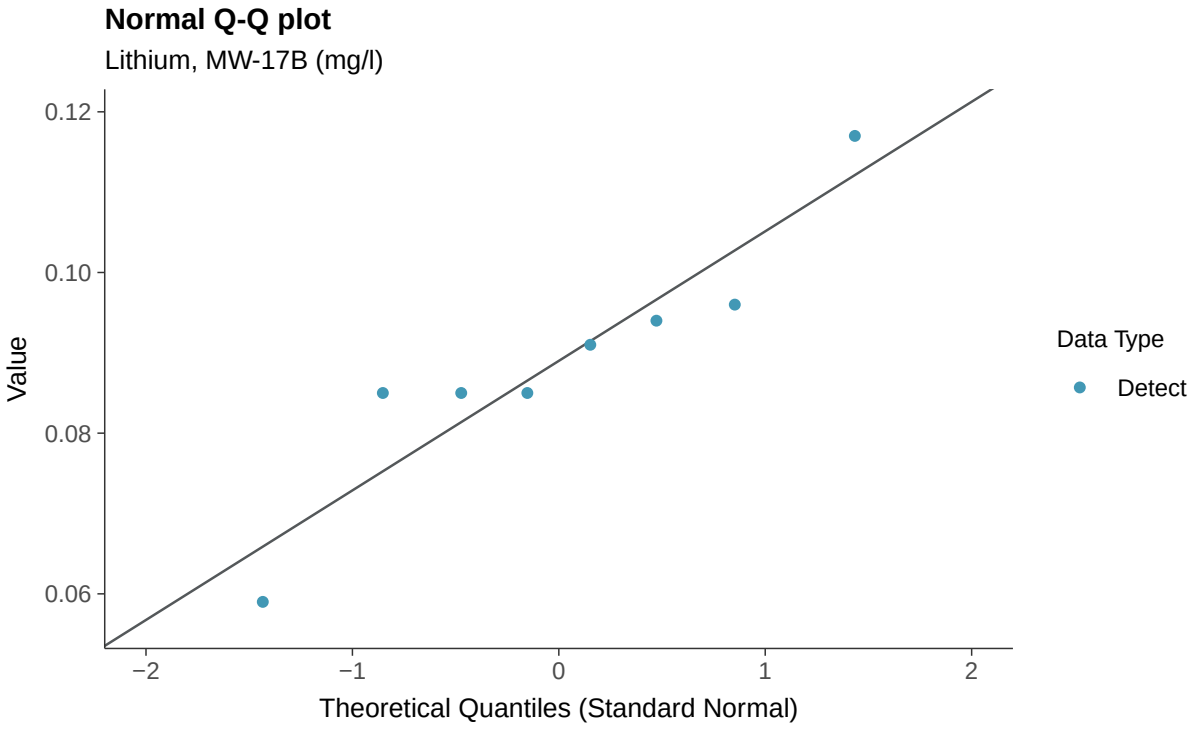
Lithium, MW-17B (mg/l)

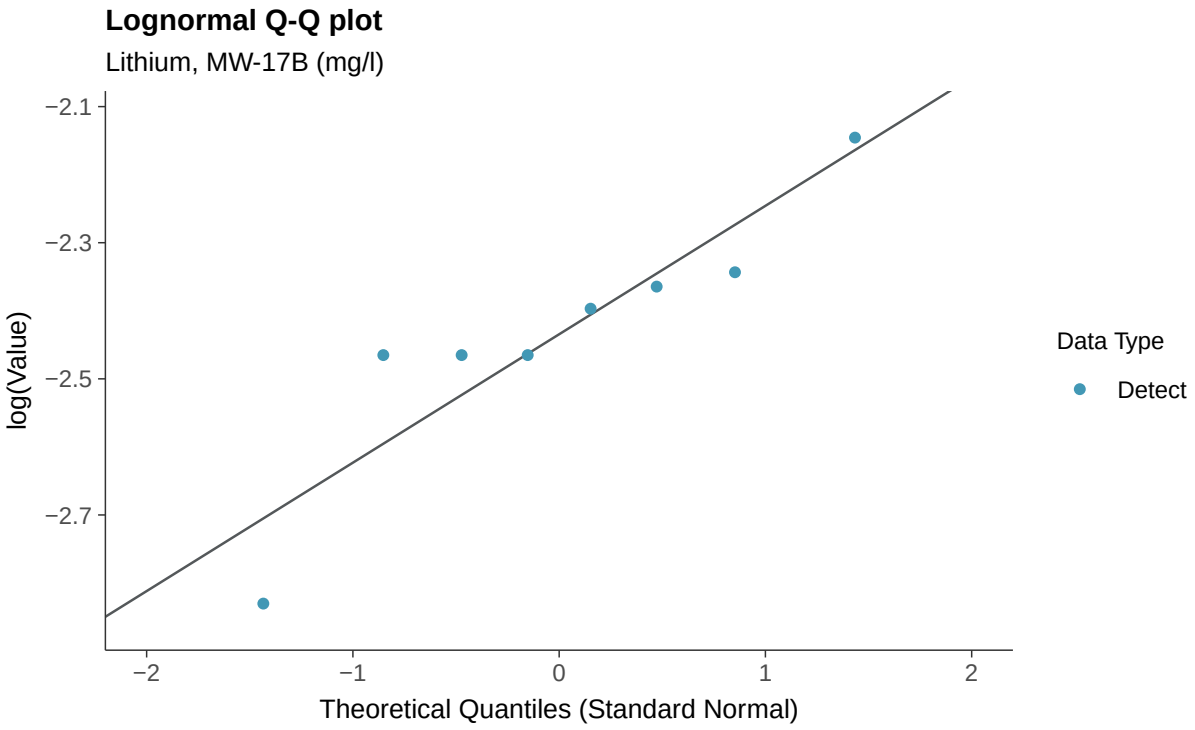


Boxplot by Season

Lithium, MW-17B (mg/l)

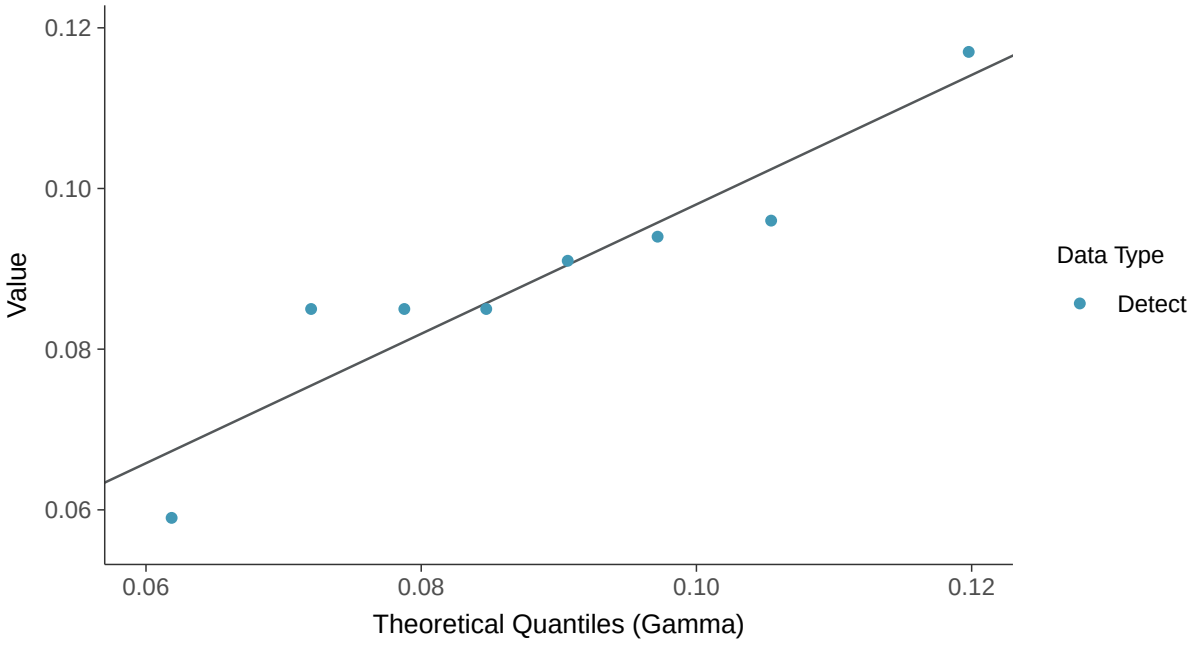



Normal Q-Q plot
Lithium, MW-17B (mg/l)
Value
0.12
0.10
0.08
0.06
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect


Lognormal Q-Q plot
Lithium, MW-17B (mg/l)
log(Value)
−2.1
−2.3
−2.5
−2.7
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect

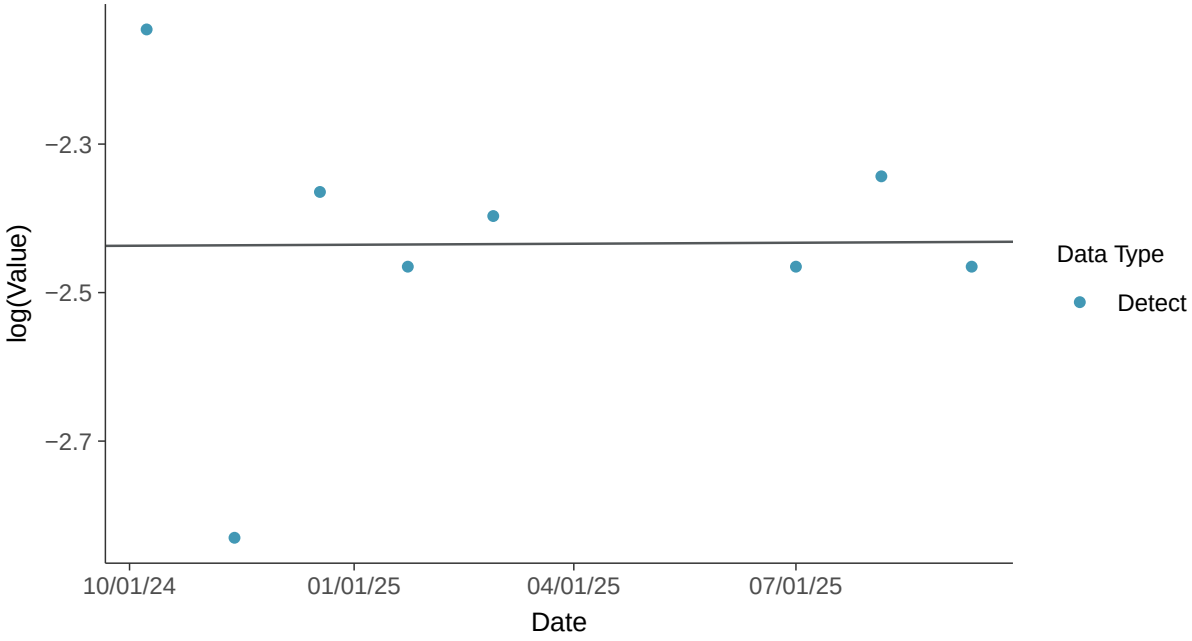
Gamma Q-Q plot

Lithium, MW-17B (mg/l)



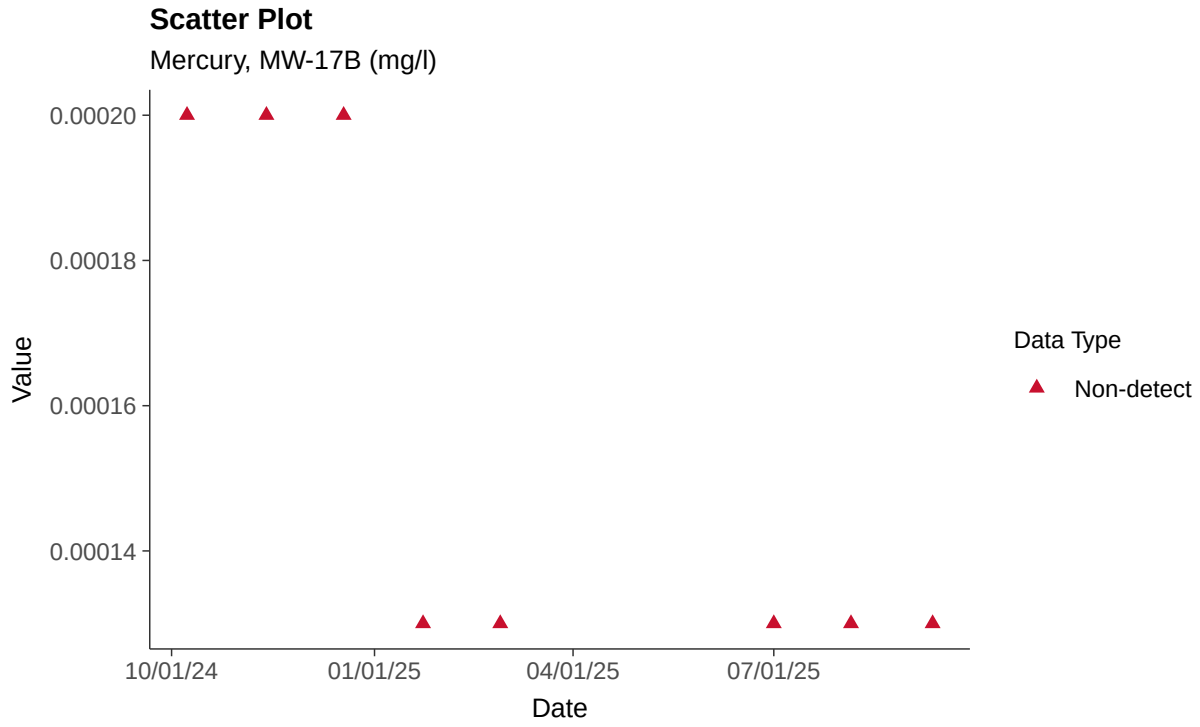
Trend Regression: Lognormal MLE

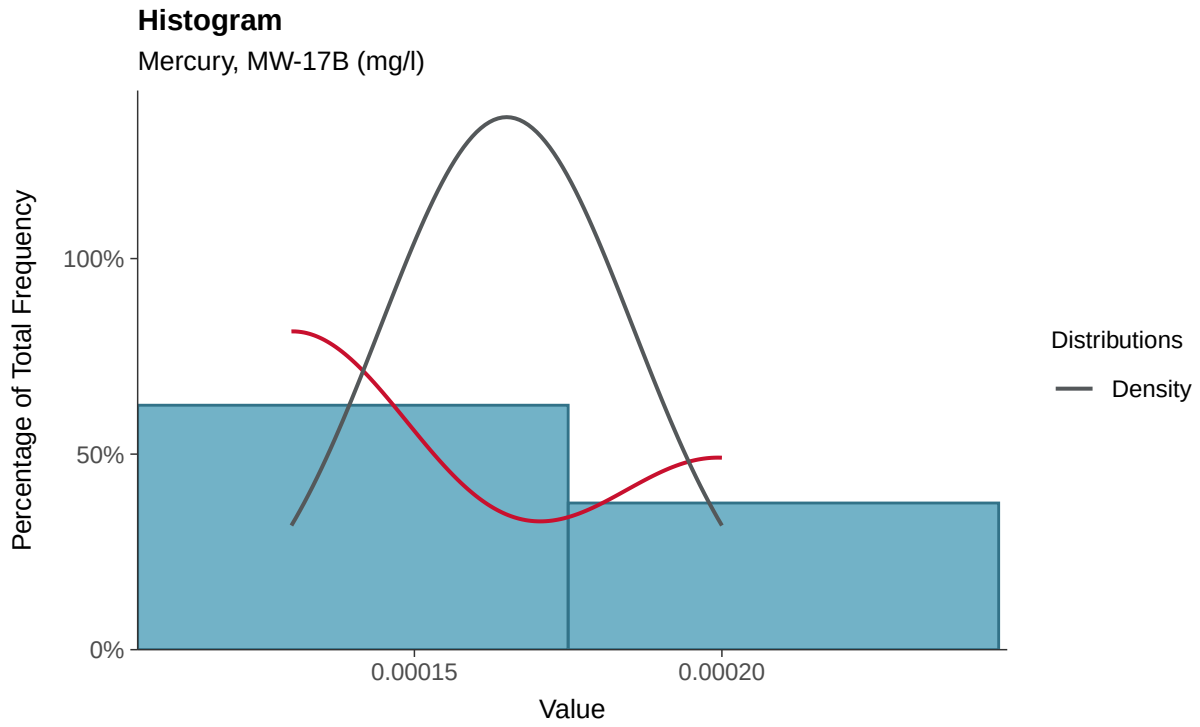
Lithium, MW-17B (mg/l)



Appendix IV: Mercury, MW-17B

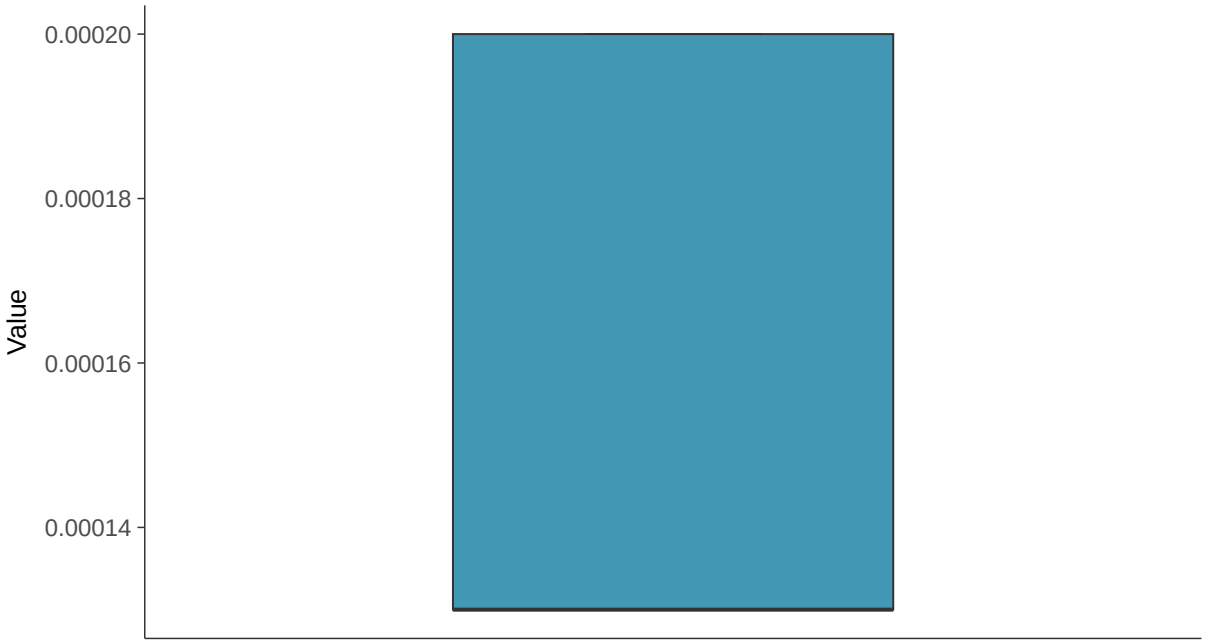
ID: 28_3_117





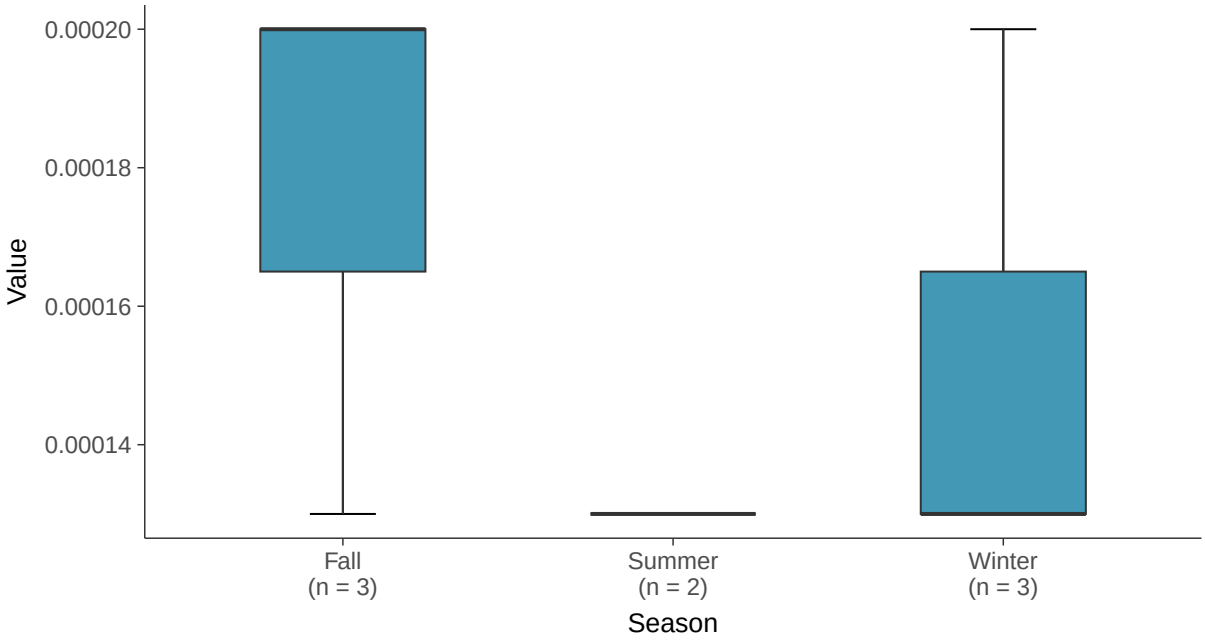
Boxplot

Mercury, MW-17B (mg/l)



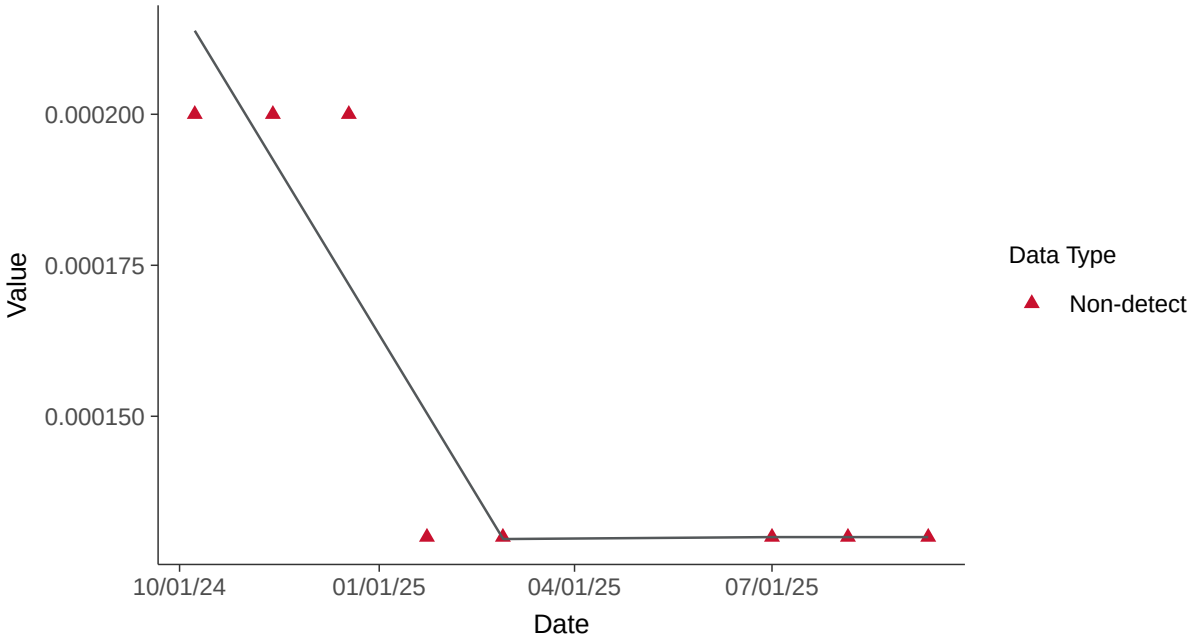
Boxplot by Season

Mercury, MW-17B (mg/l)



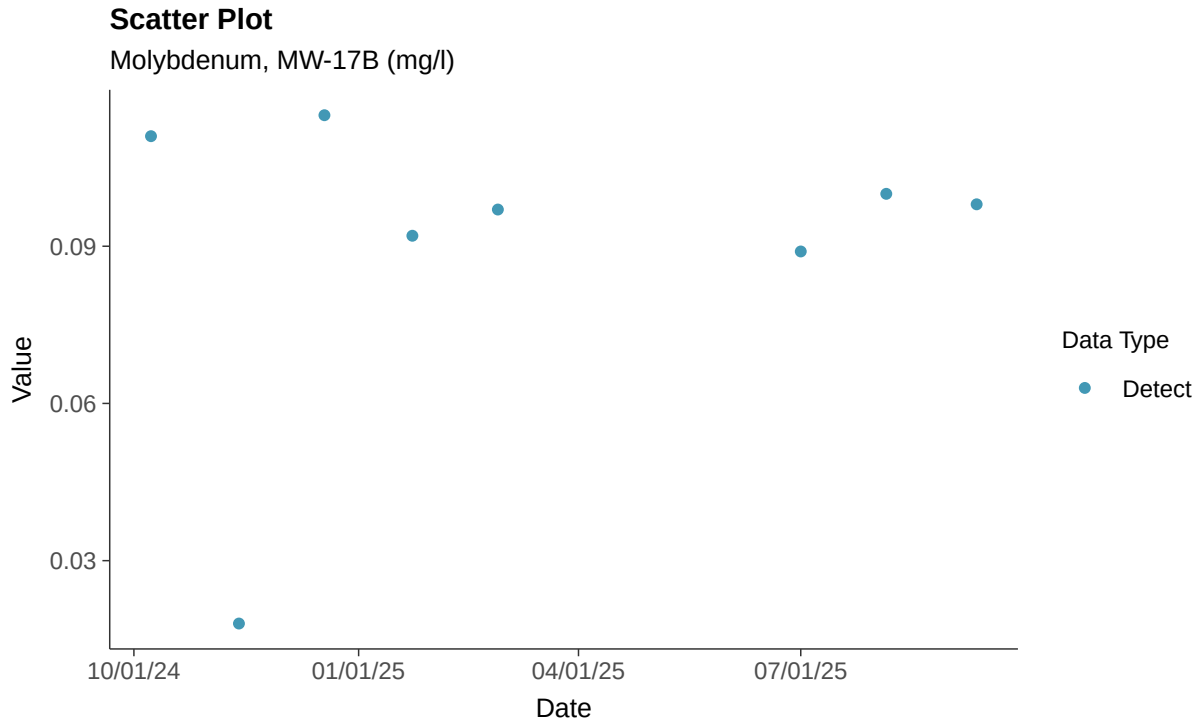
Trend Regression: Piecewise Linear-Linear

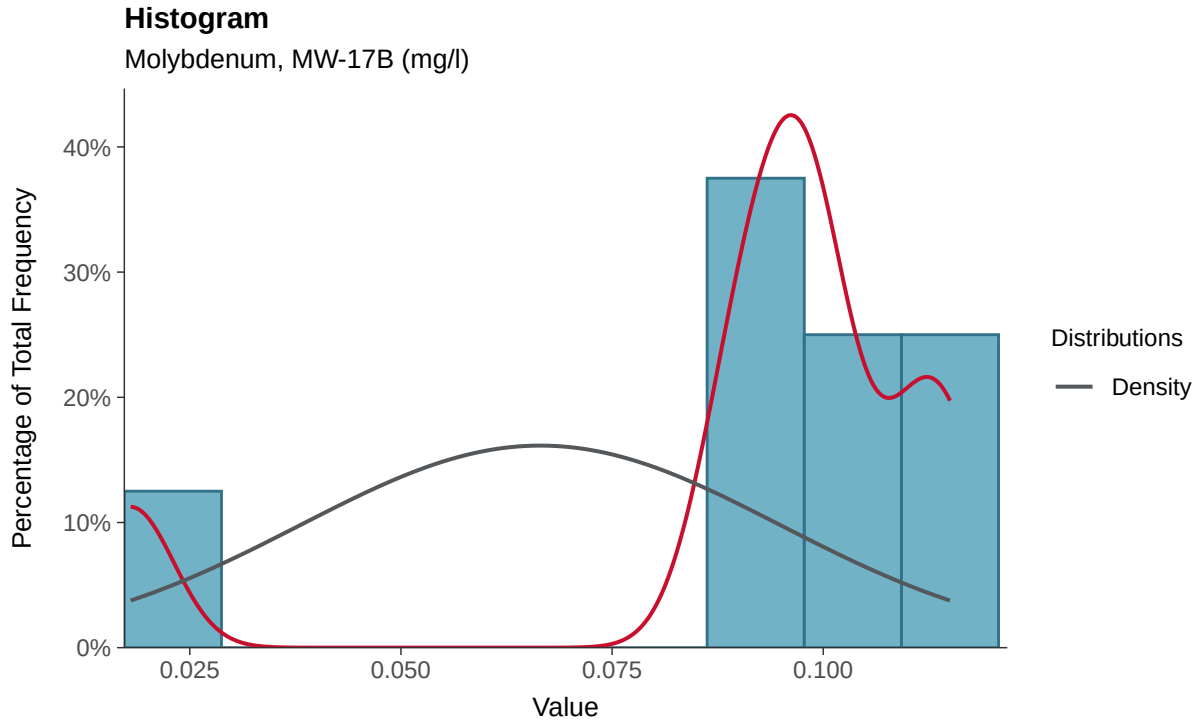
Mercury, MW-17B (mg/l)



Appendix IV: Molybdenum, MW-17B

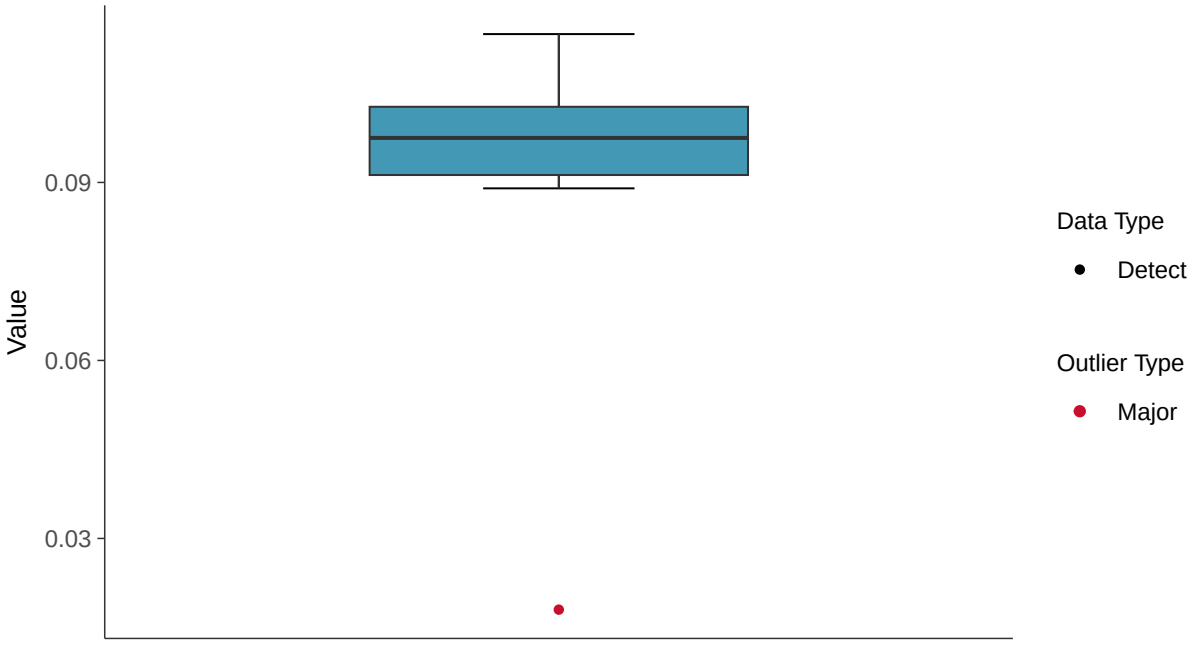
ID: 28_3_118





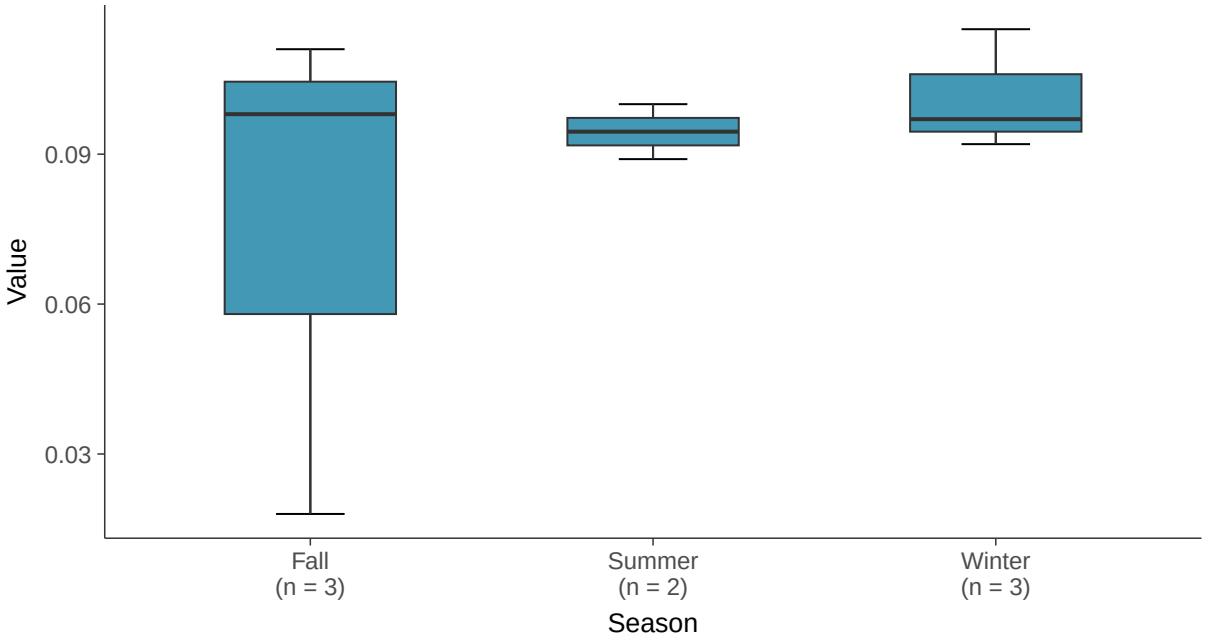
Boxplot

Molybdenum, MW-17B (mg/l)



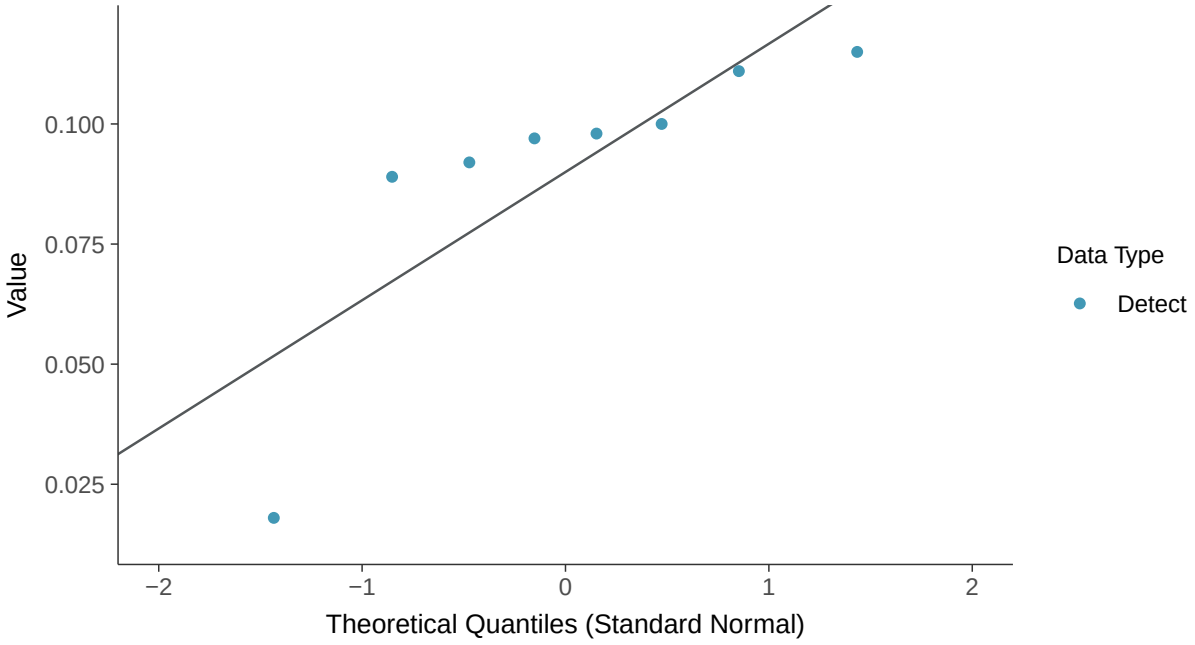
Boxplot by Season

Molybdenum, MW-17B (mg/l)



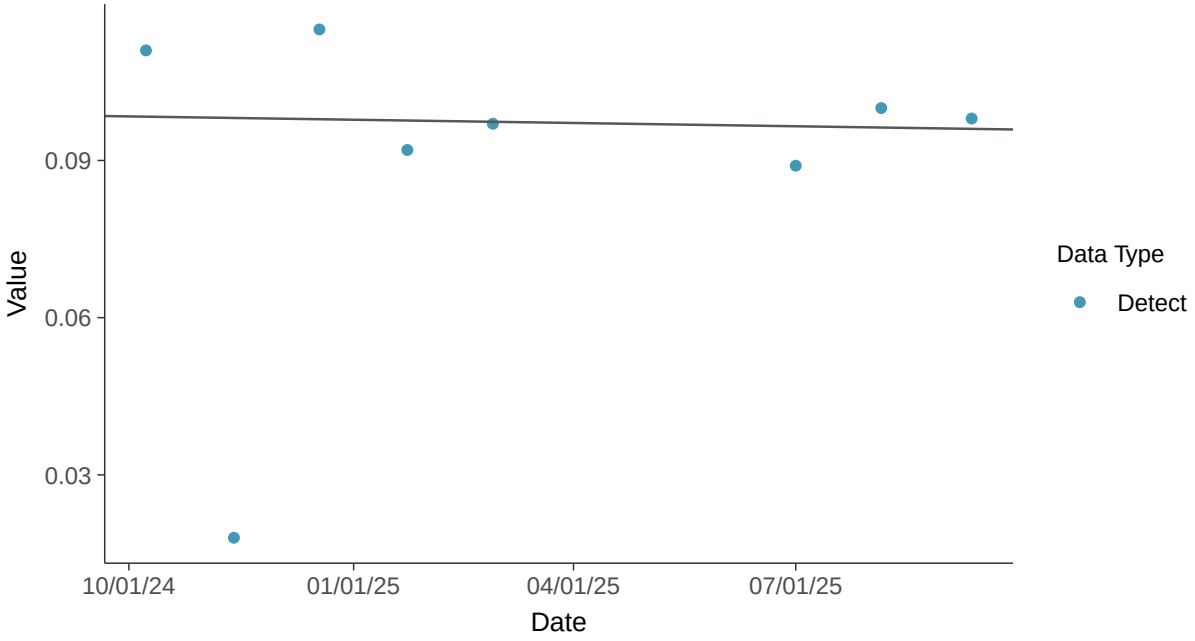
Normal Q-Q plot

Molybdenum, MW-17B (mg/l)



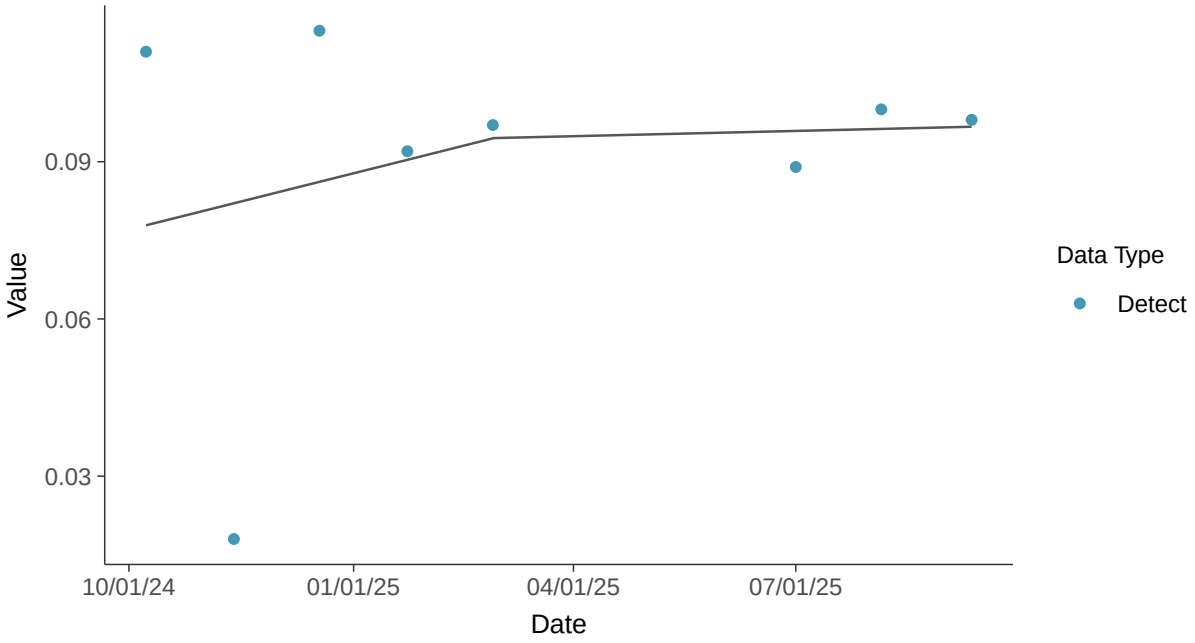
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Molybdenum, MW-17B (mg/l)



Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-17B (mg/l)

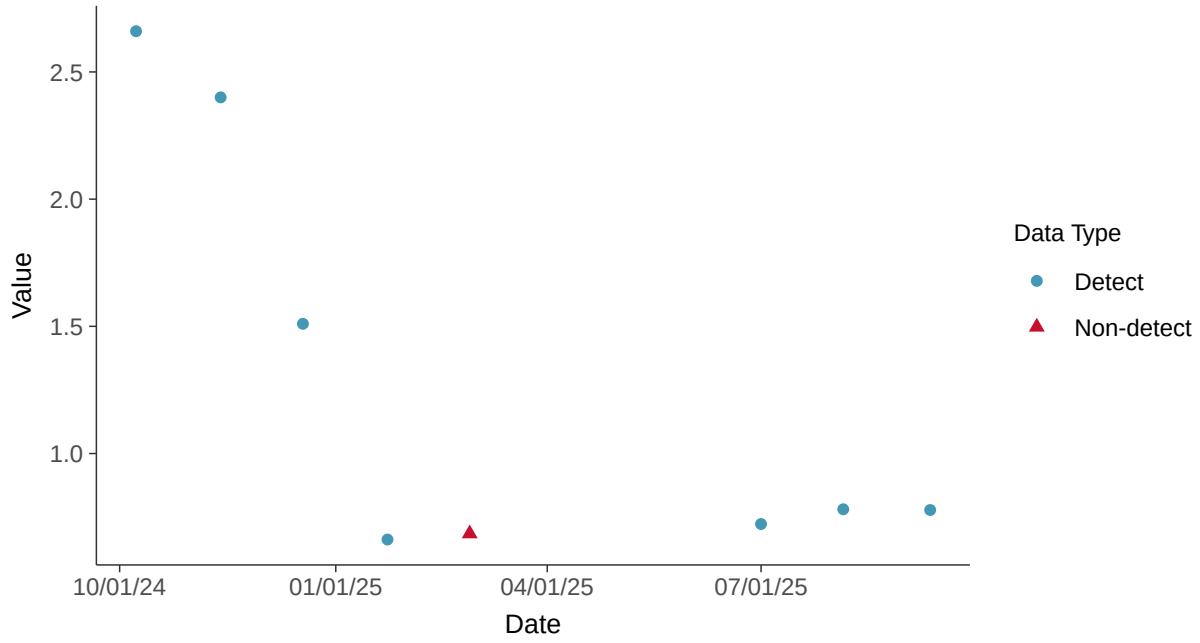


Appendix IV: Radium-226+228, MW-17B

ID: 28_3_121

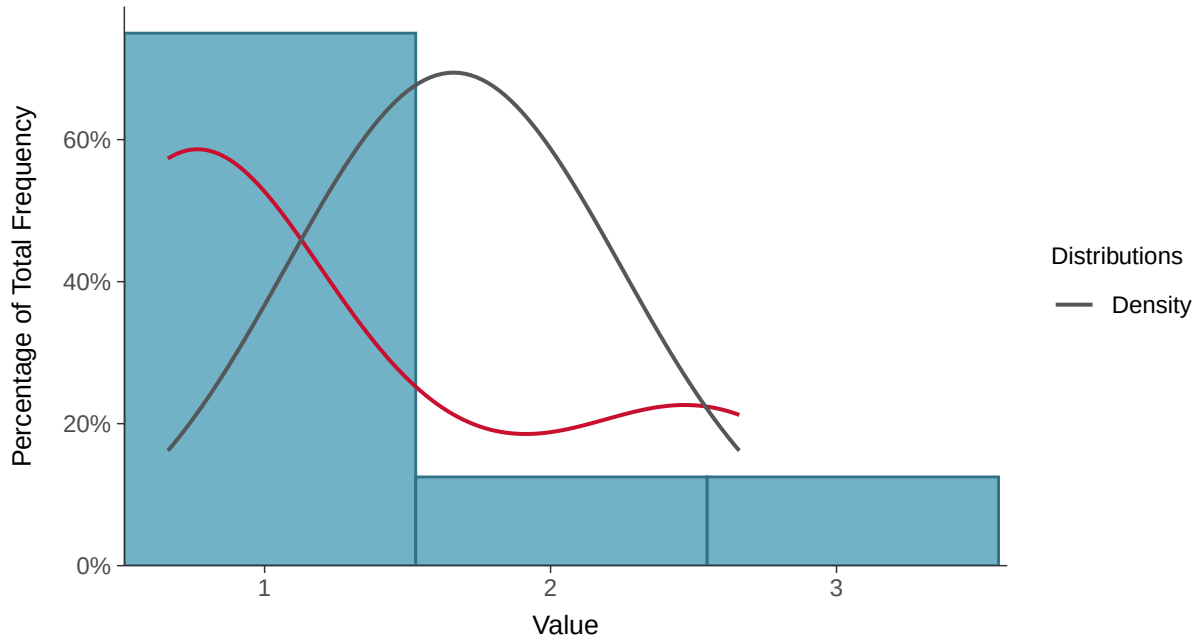
Scatter Plot

Radium-226+228, MW-17B (pci/l)



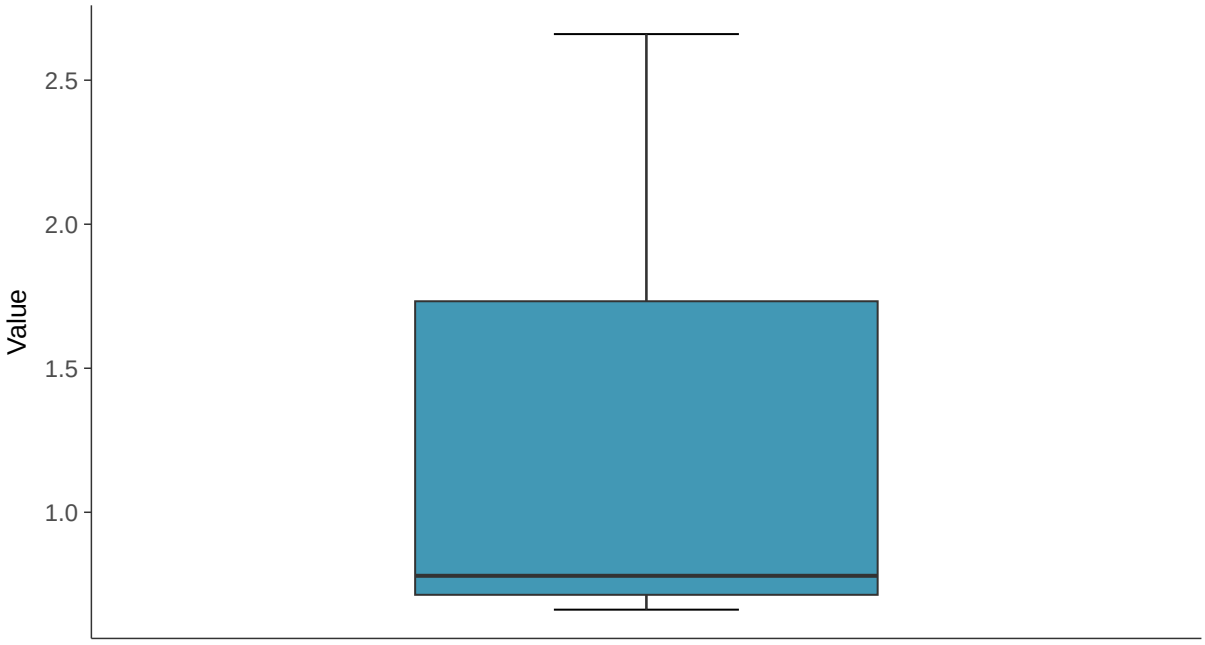
Histogram

Radium-226+228, MW-17B (pci/l)



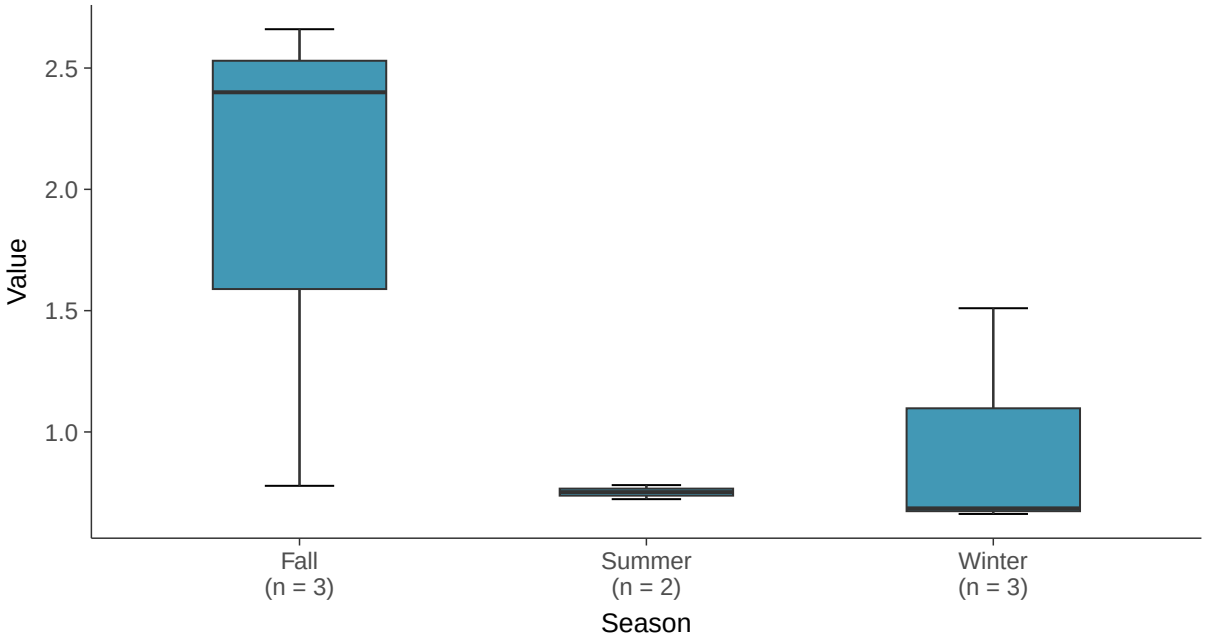
Boxplot

Radium-226+228, MW-17B (pci/l)



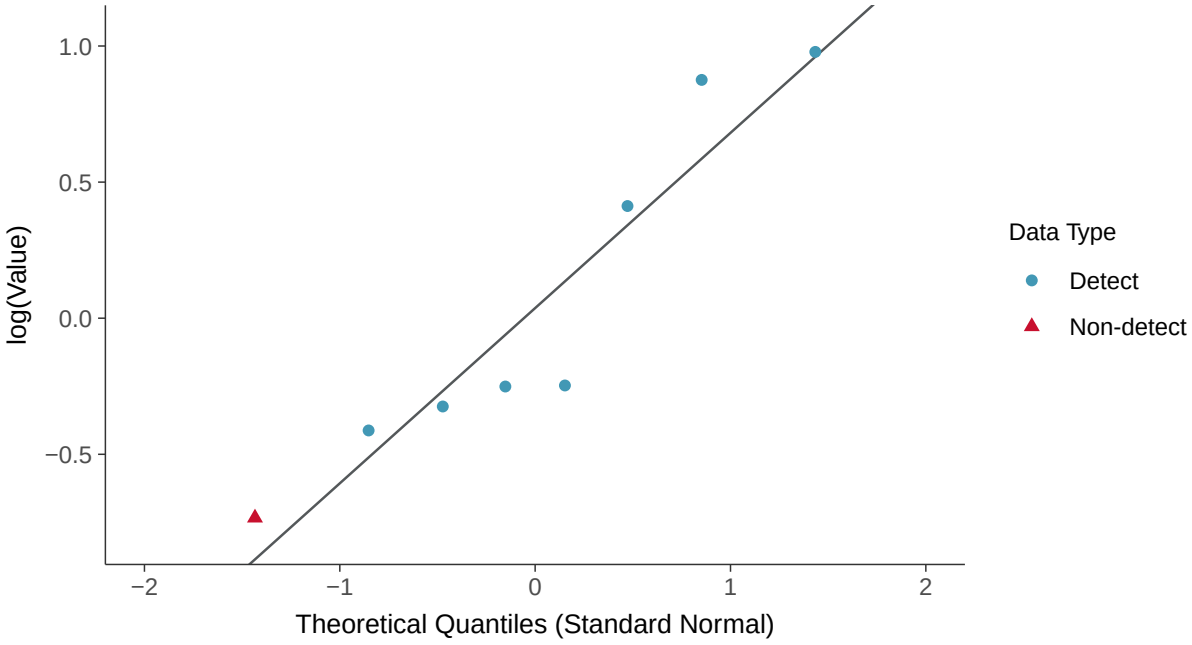
Boxplot by Season

Radium-226+228, MW-17B (pci/l)



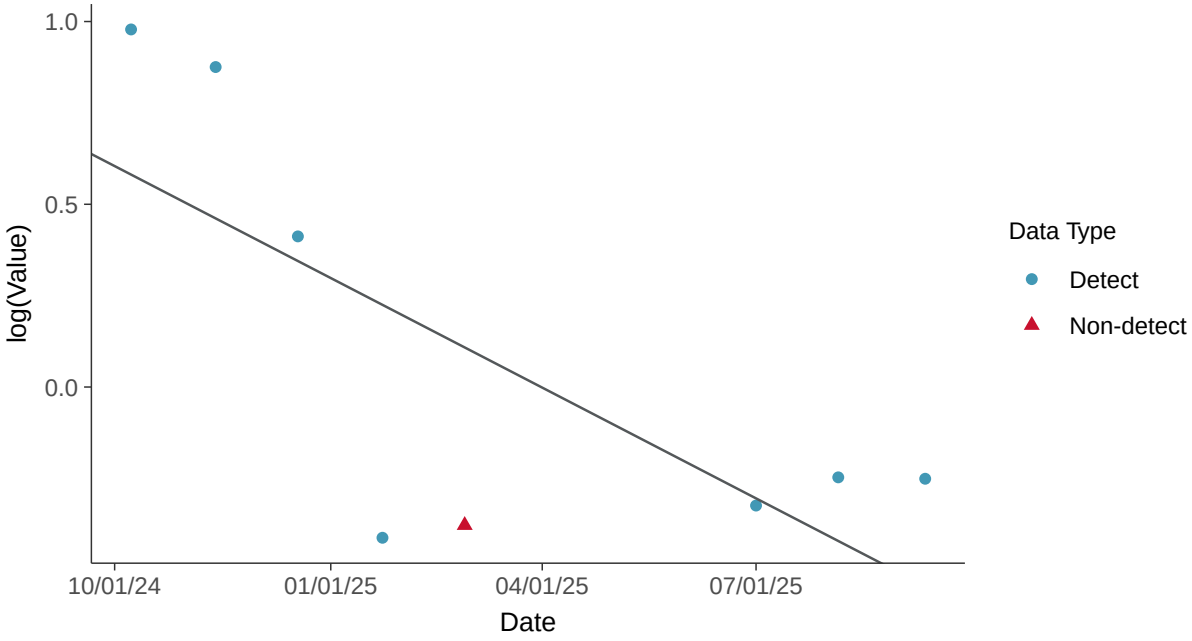
Lognormal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17B (pci/l)



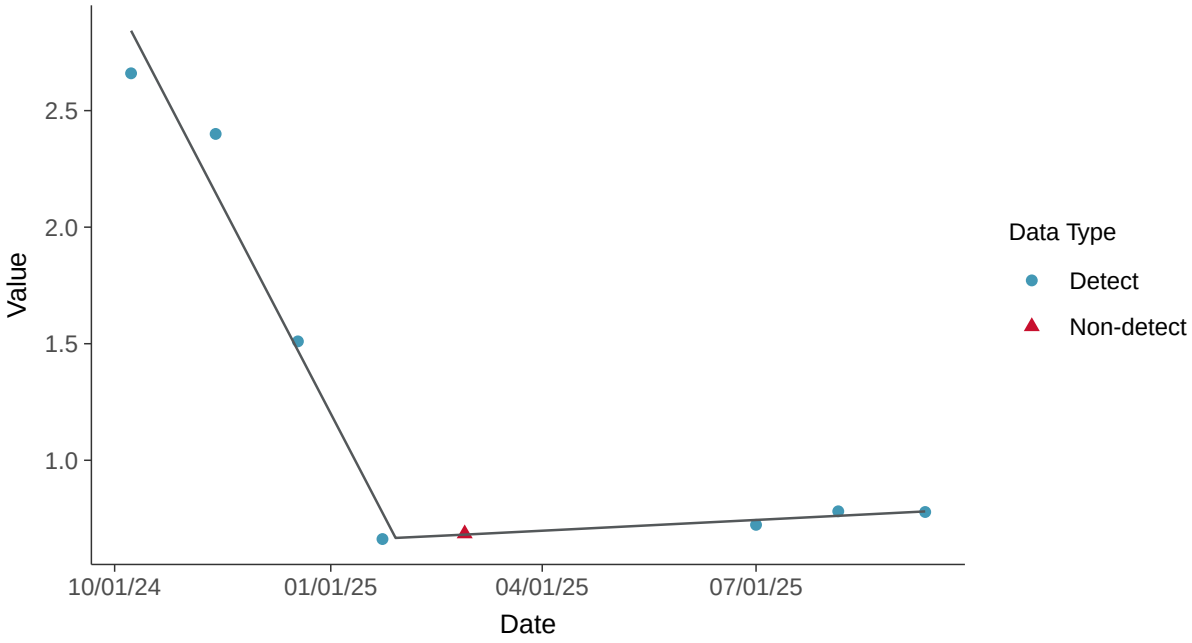
Trend Regression: Lognormal MLE

Radium-226+228, MW-17B (pci/l)



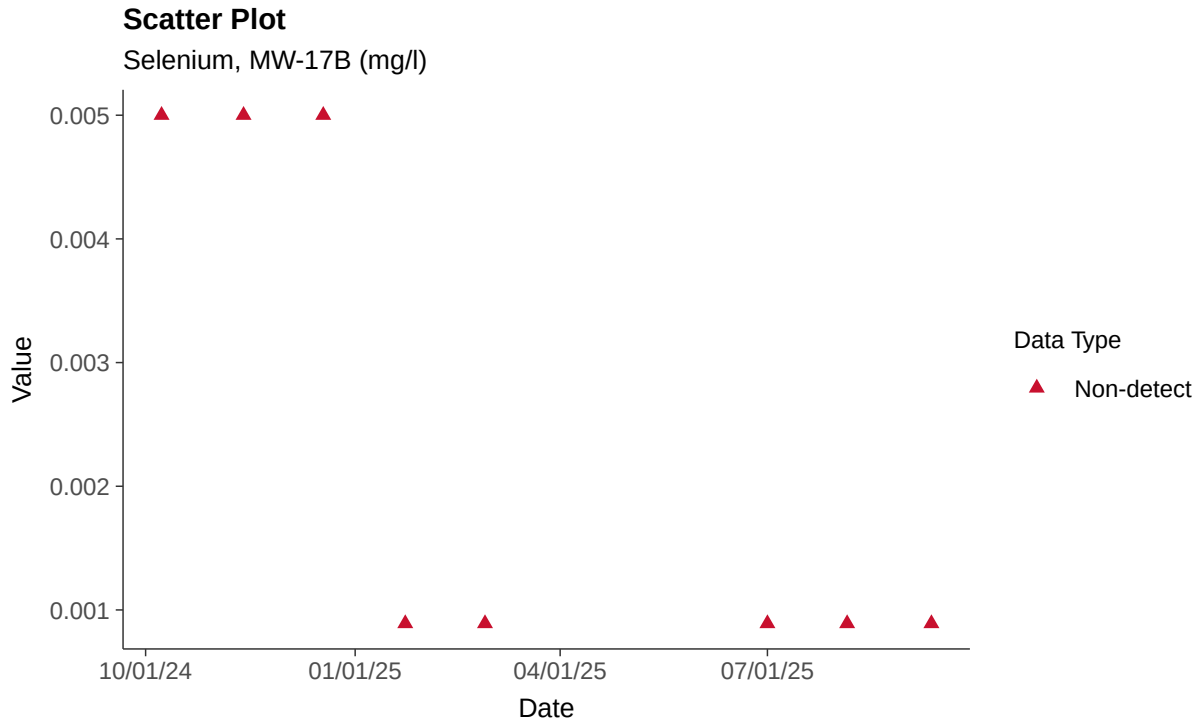
Trend Regression: Piecewise Linear-Linear

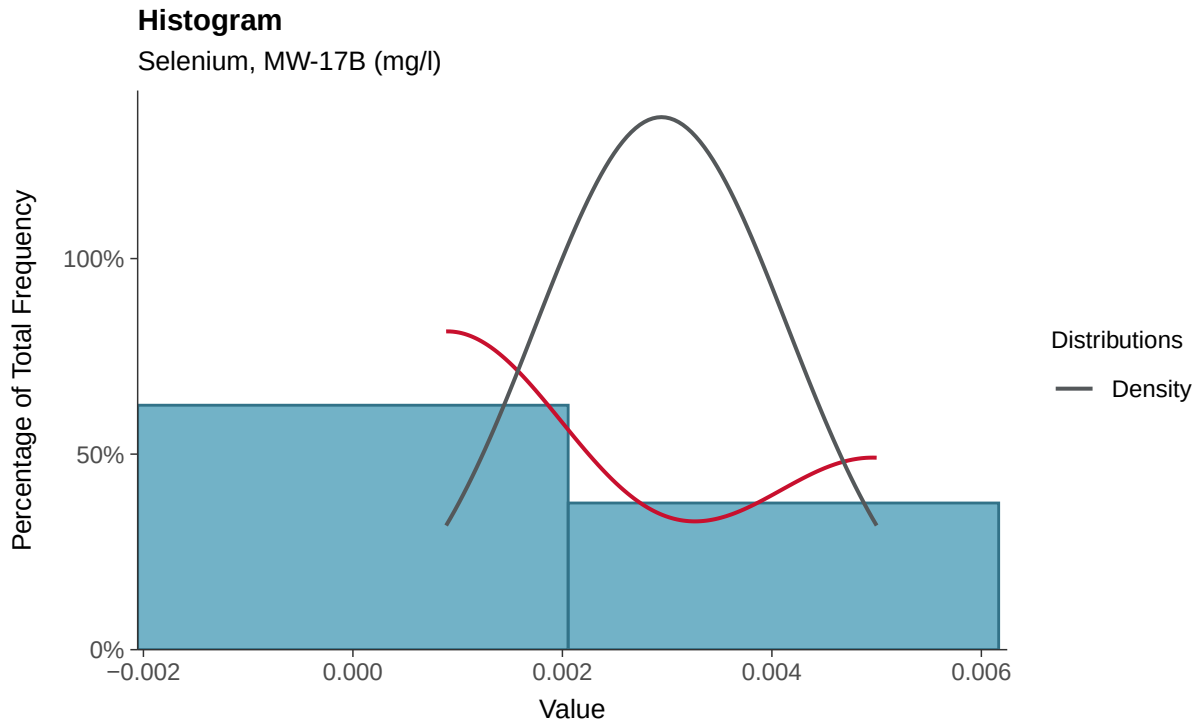
Radium-226+228, MW-17B (pci/l)



Appendix IV: Selenium, MW-17B

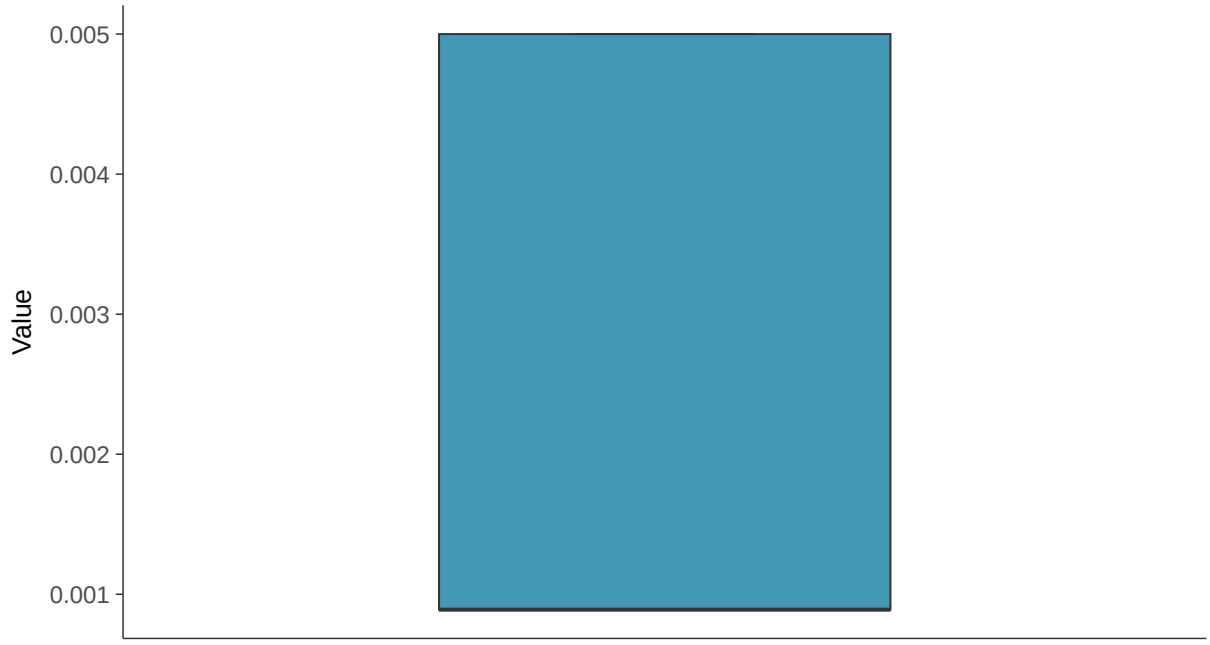
ID: 28_3_122





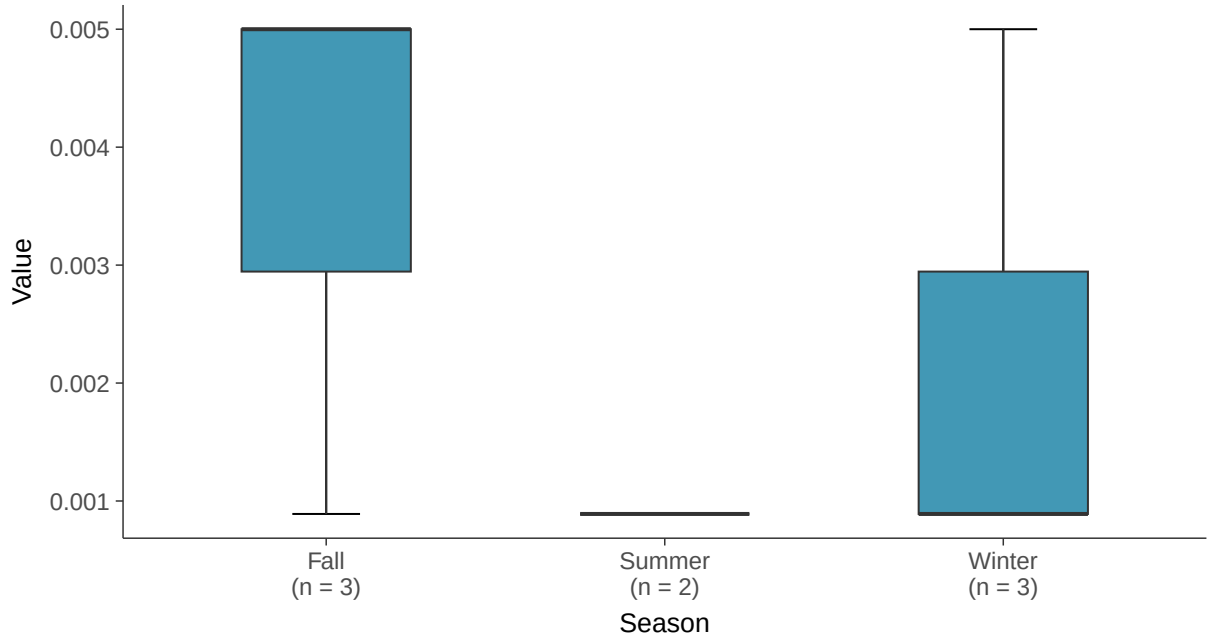
Boxplot

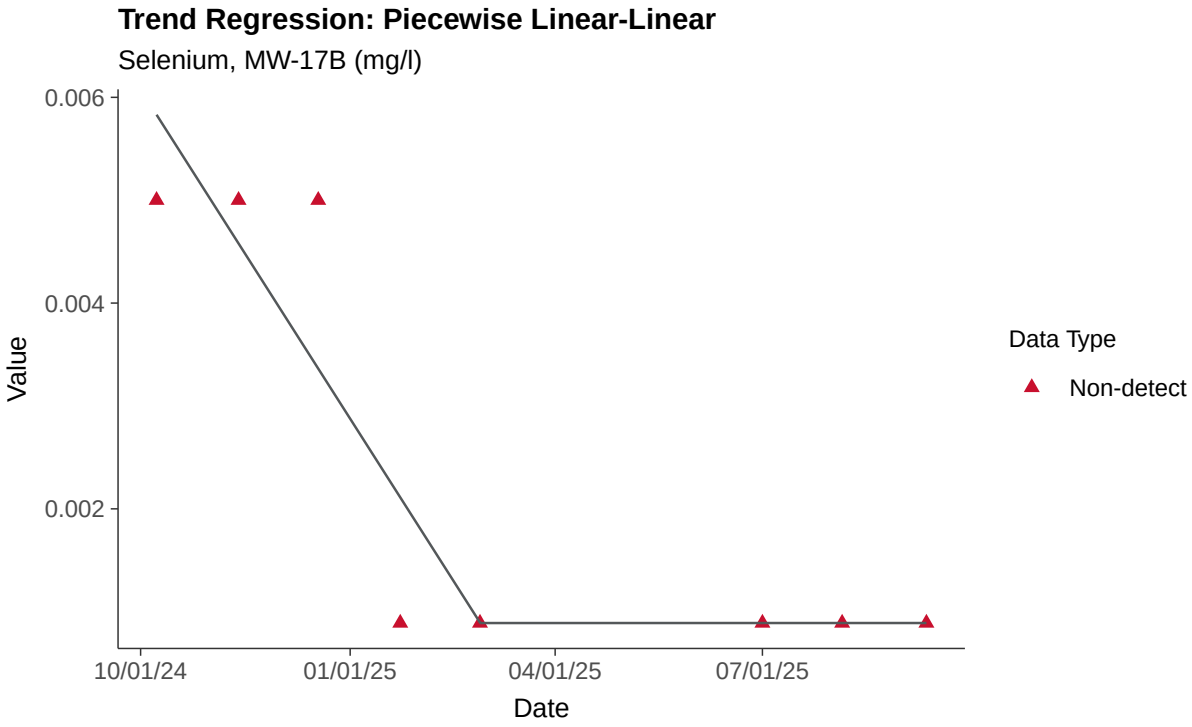
Selenium, MW-17B (mg/l)



Boxplot by Season

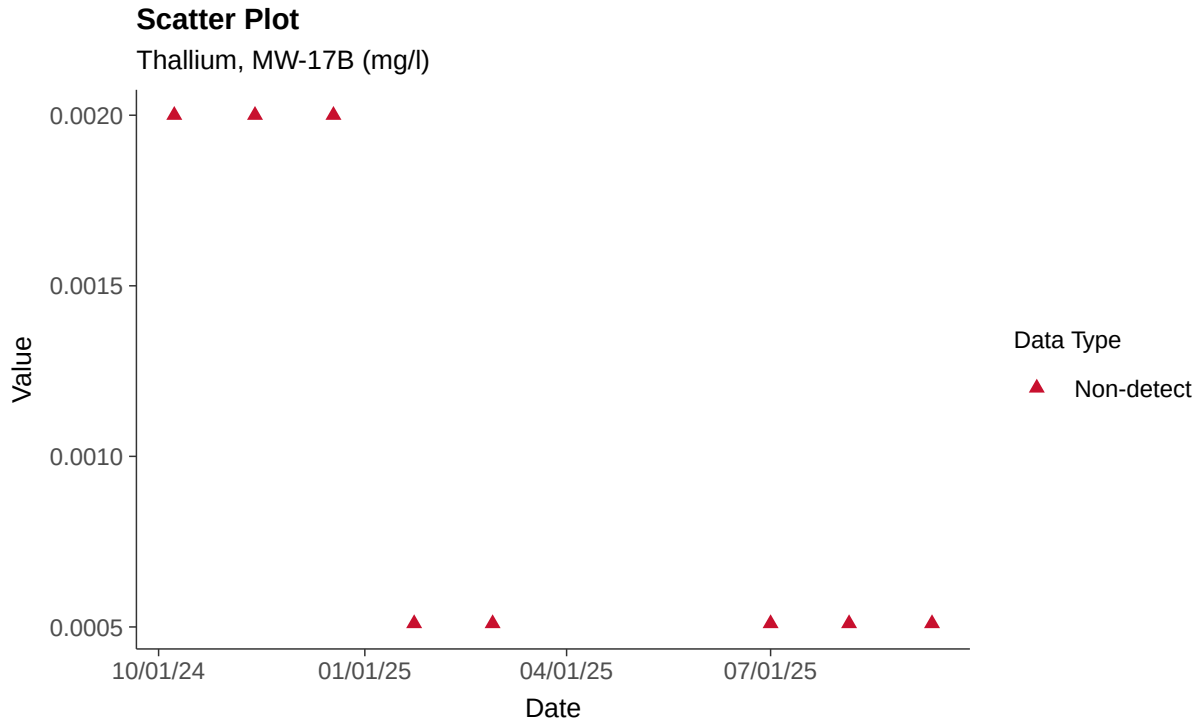
Selenium, MW-17B (mg/l)

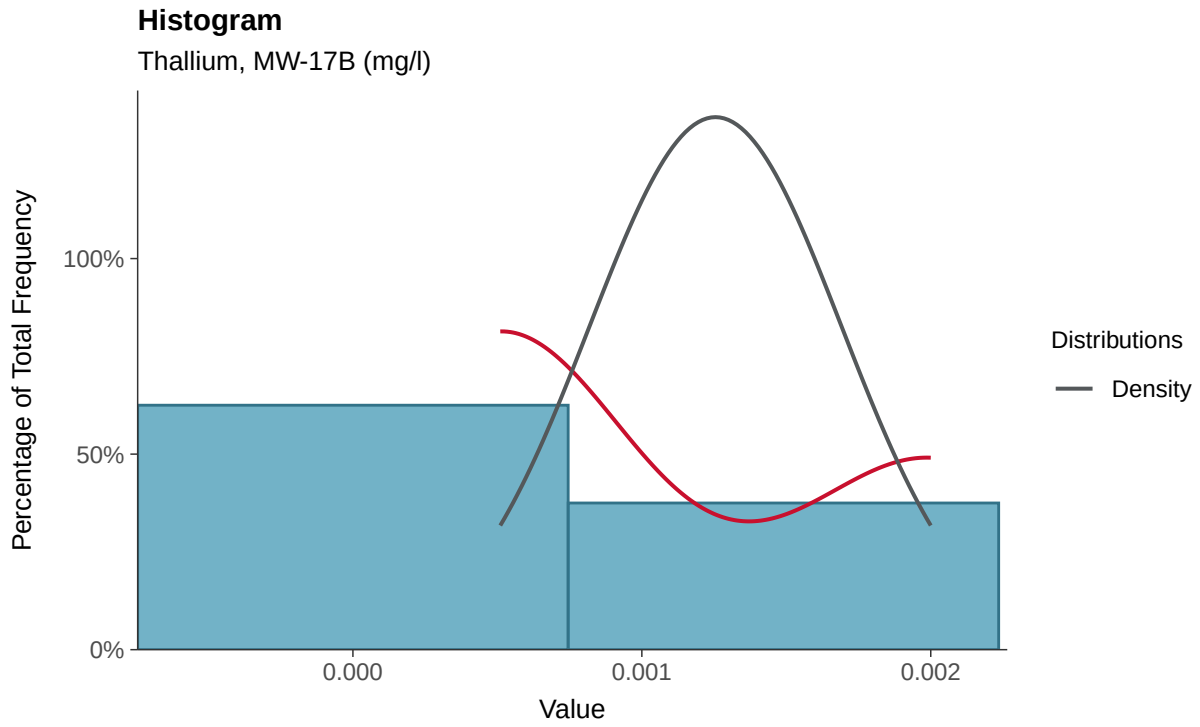



Trend Regression: Piecewise Linear-Linear
Selenium, MW-17B (mg/l)
0.006
0.004
0.002
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Thallium, MW-17B

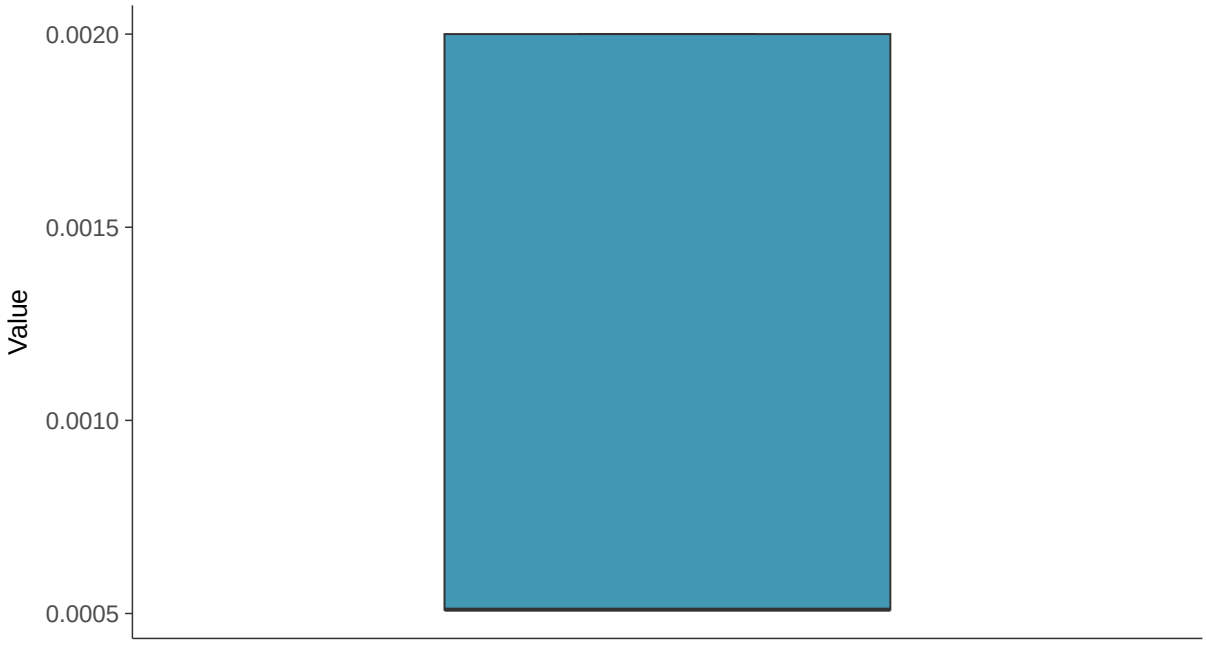
ID: 28_3_125





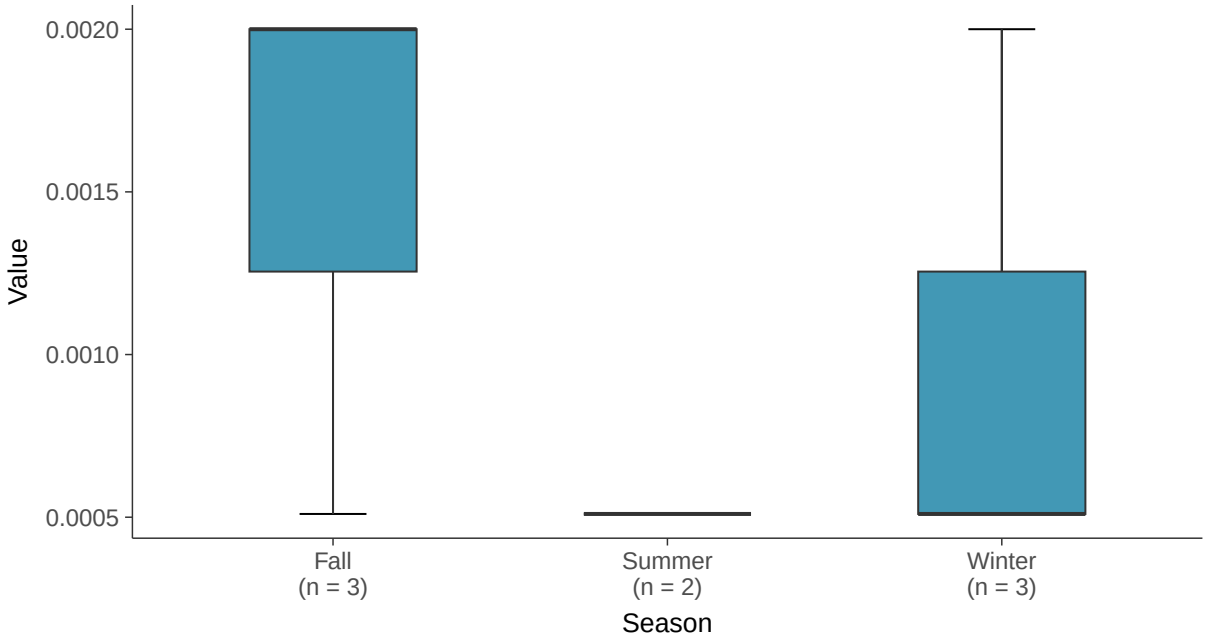
Boxplot

Thallium, MW-17B (mg/l)



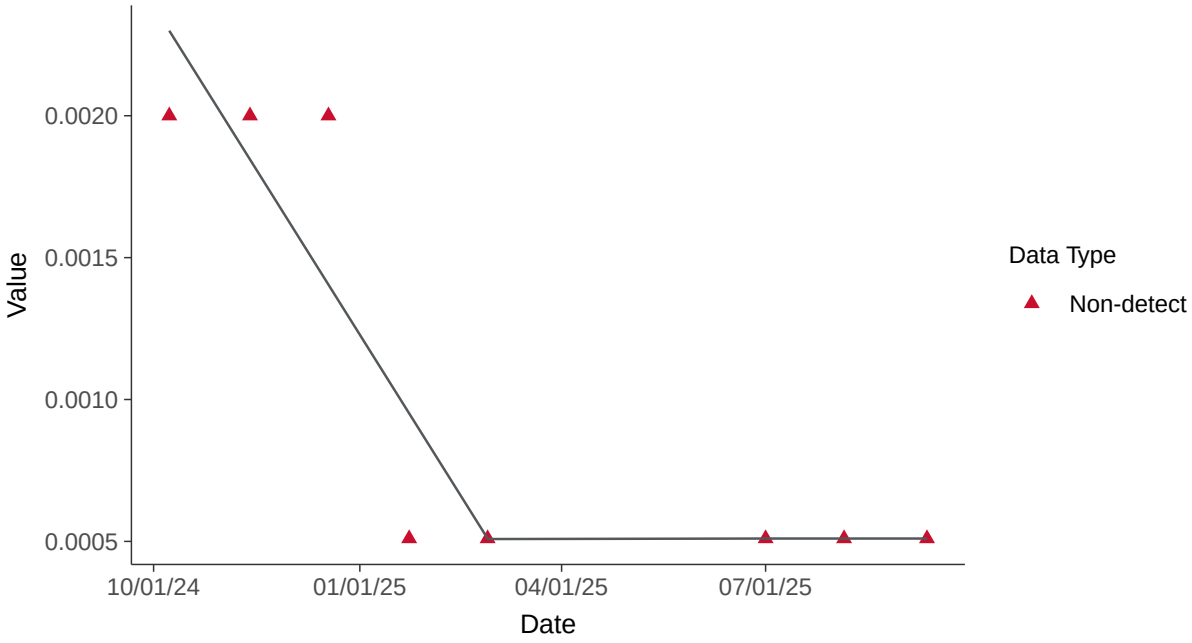
Boxplot by Season

Thallium, MW-17B (mg/l)



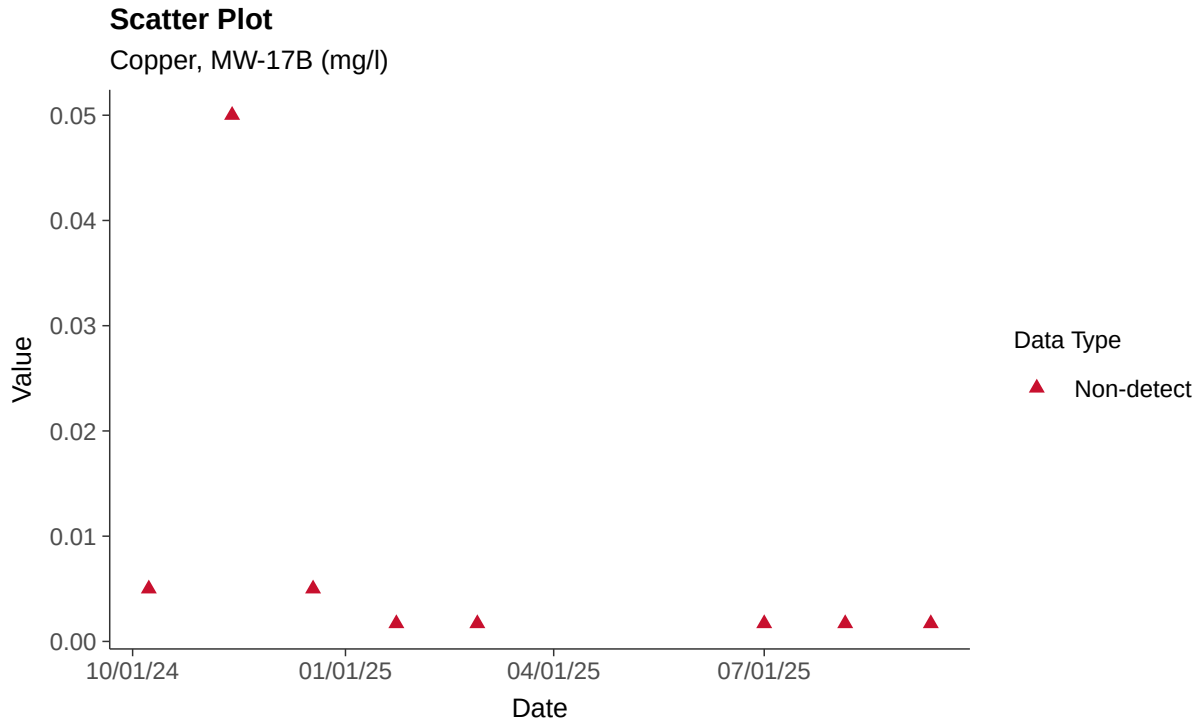
Trend Regression: Piecewise Linear-Linear

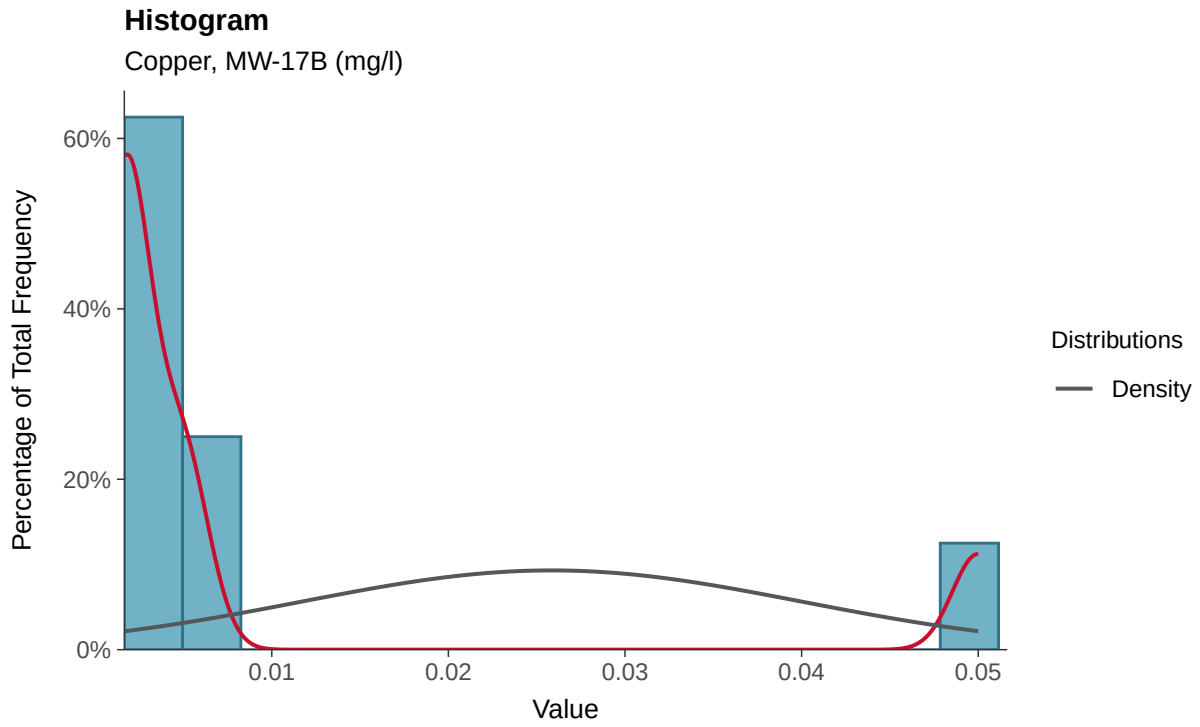
Thallium, MW-17B (mg/l)



Part 115: Copper, MW-17B

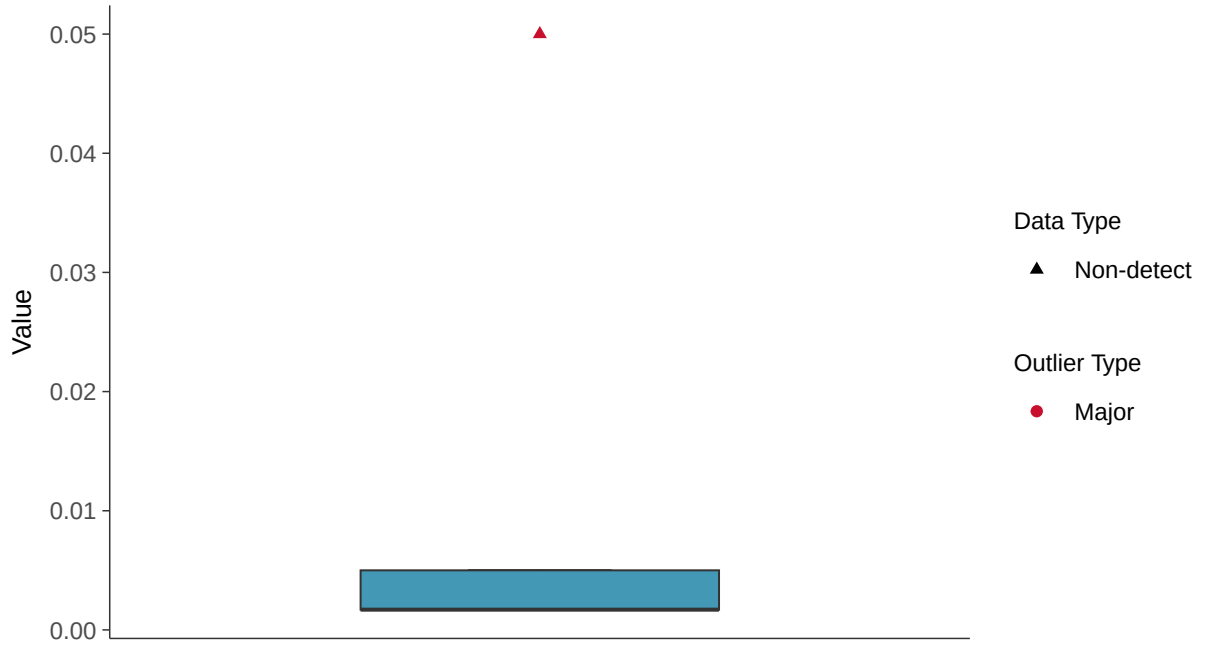
ID: 28_5_111





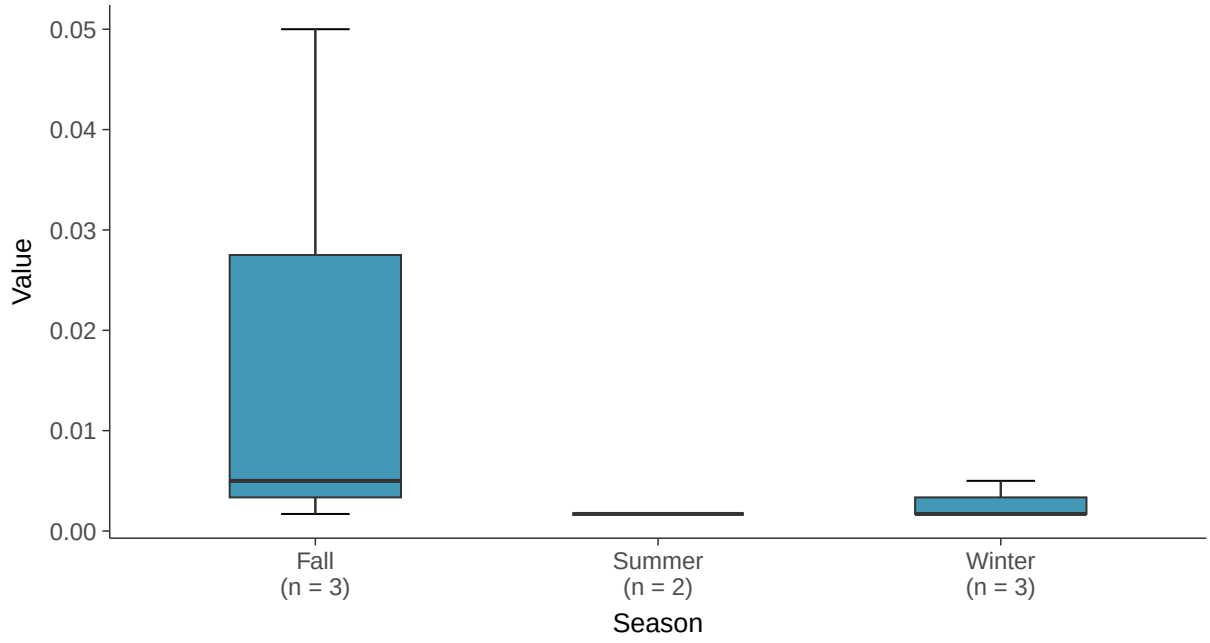
Boxplot

Copper, MW-17B (mg/l)



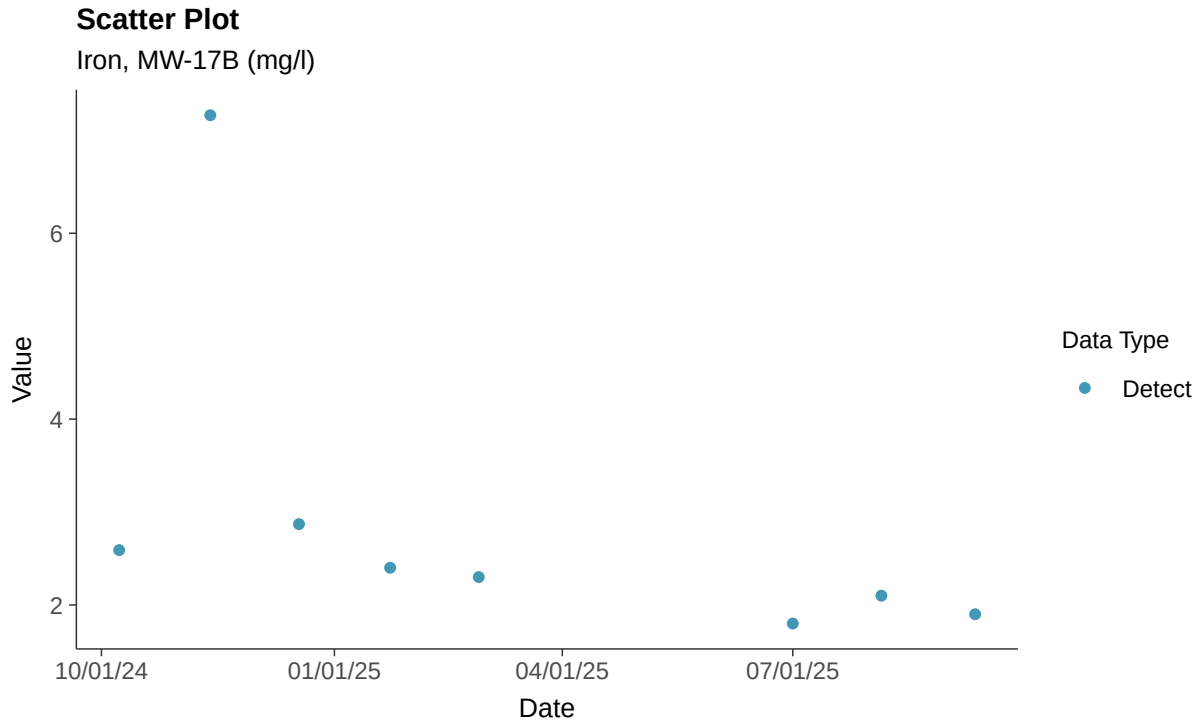
Boxplot by Season

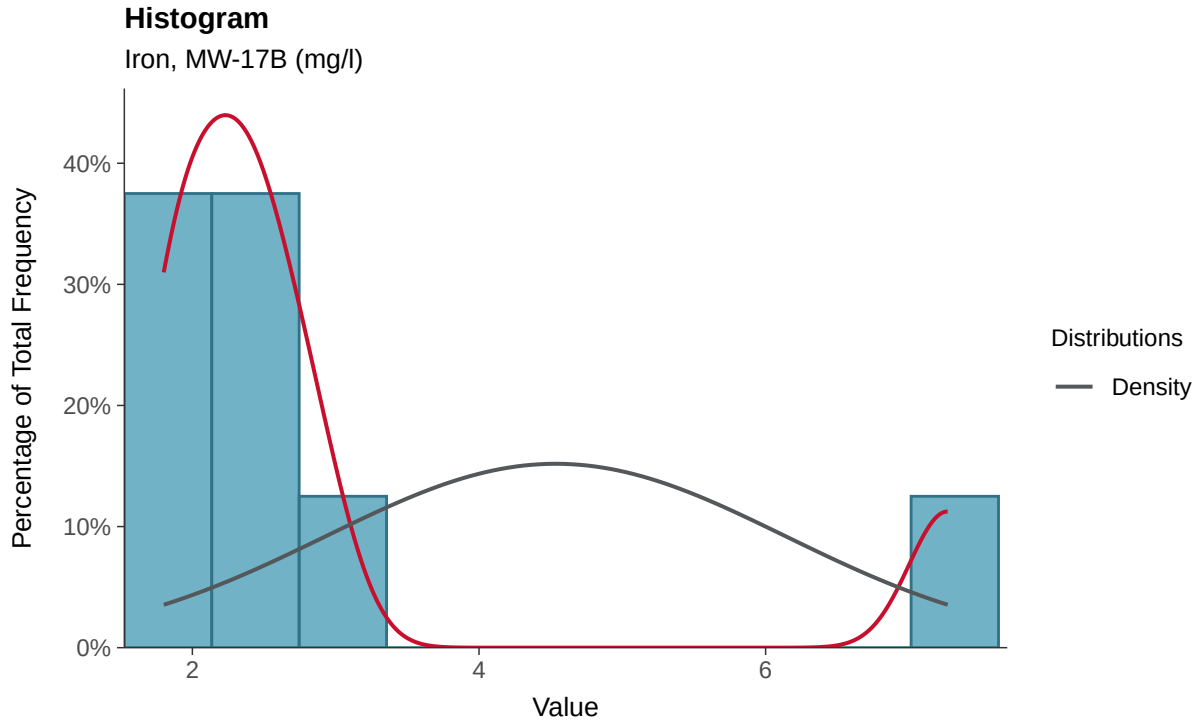
Copper, MW-17B (mg/l)



Part 115: Iron, MW-17B

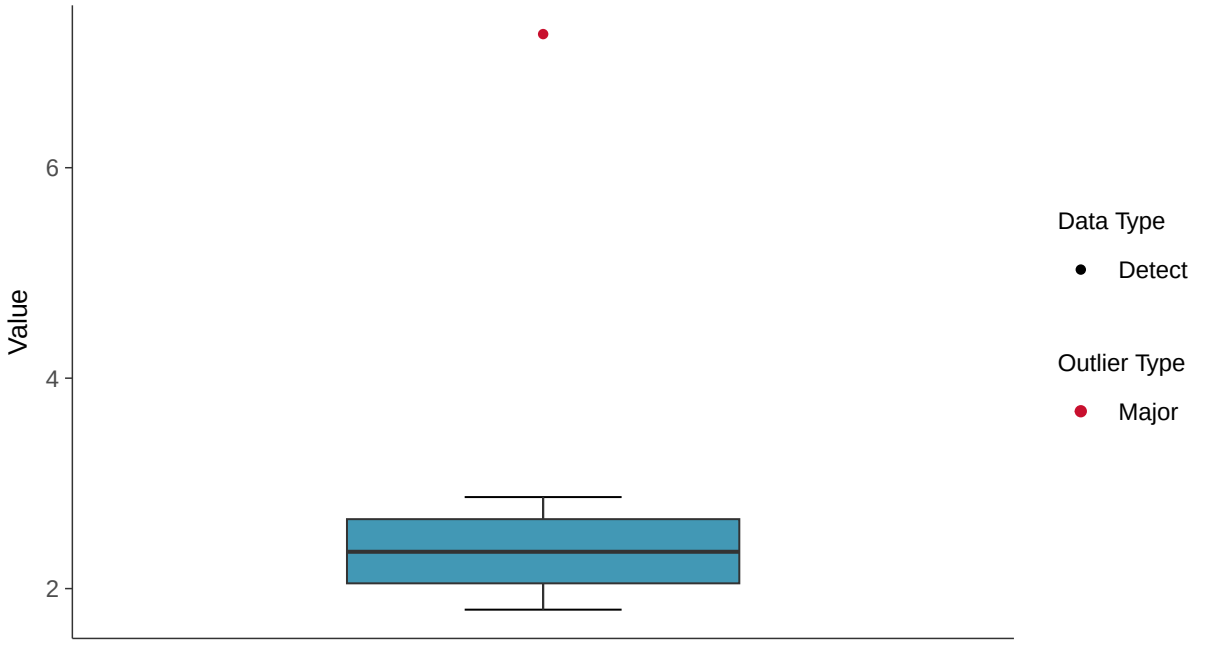
ID: 28_5_114





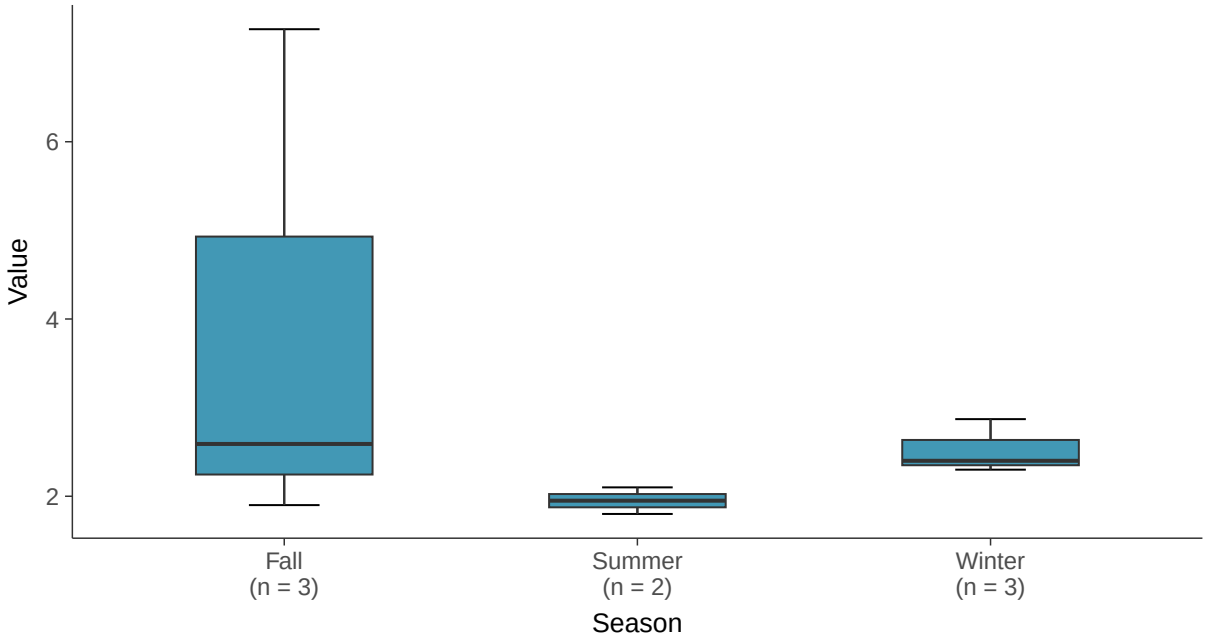
Boxplot

Iron, MW-17B (mg/l)



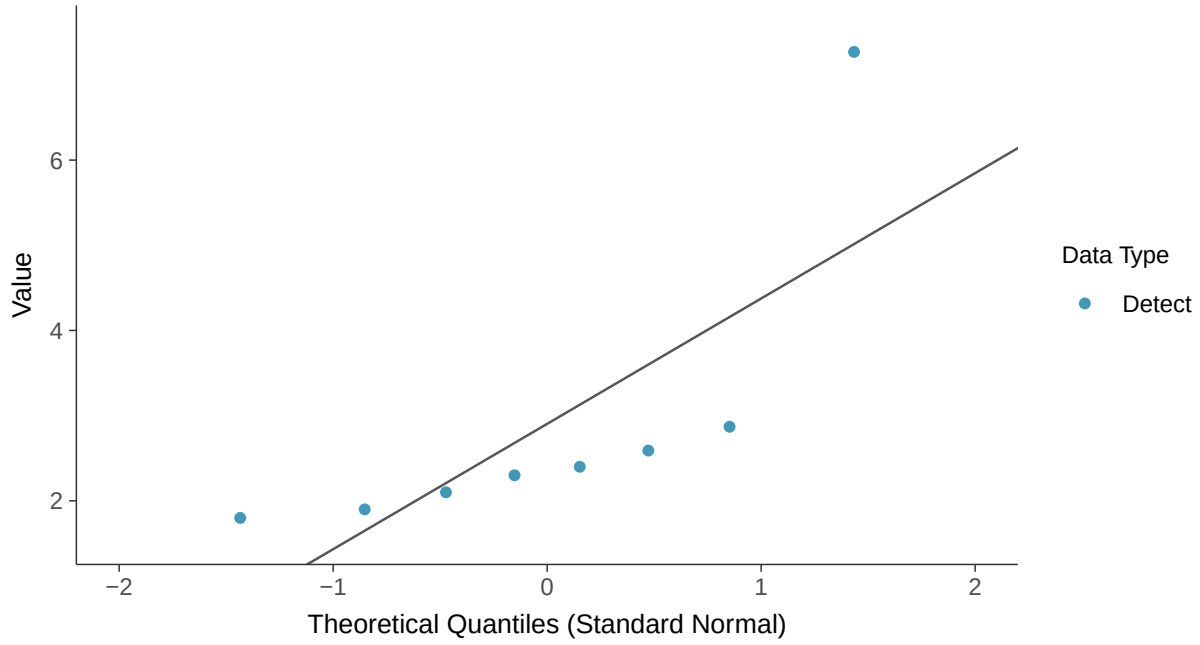
Boxplot by Season

Iron, MW-17B (mg/l)



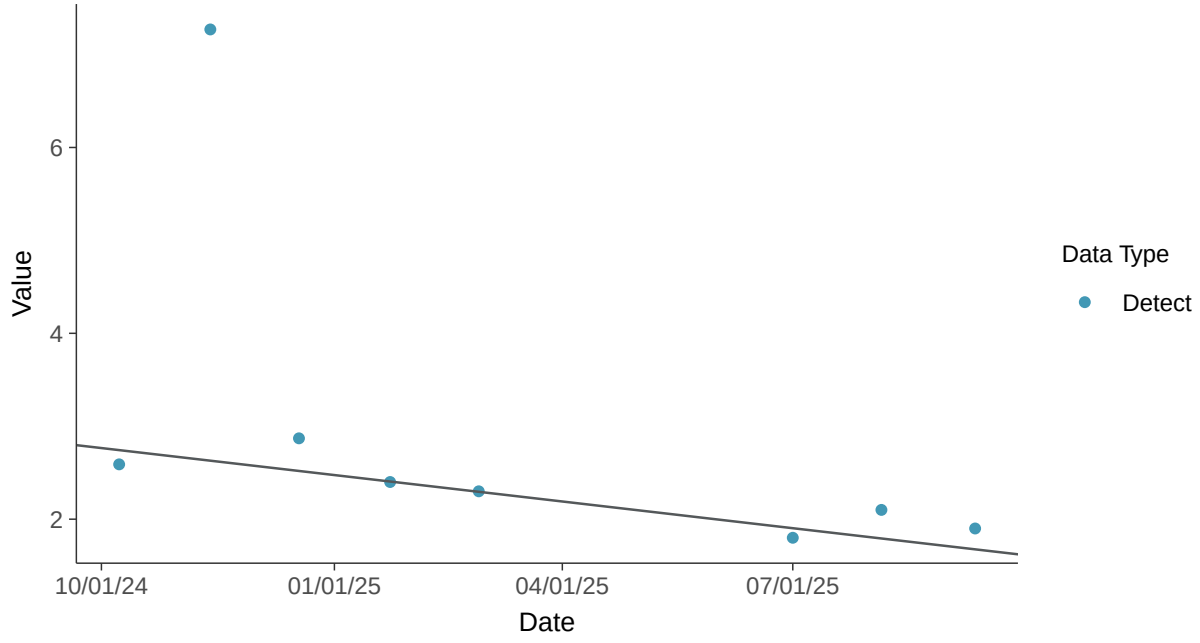
Normal Q-Q plot

Iron, MW-17B (mg/l)



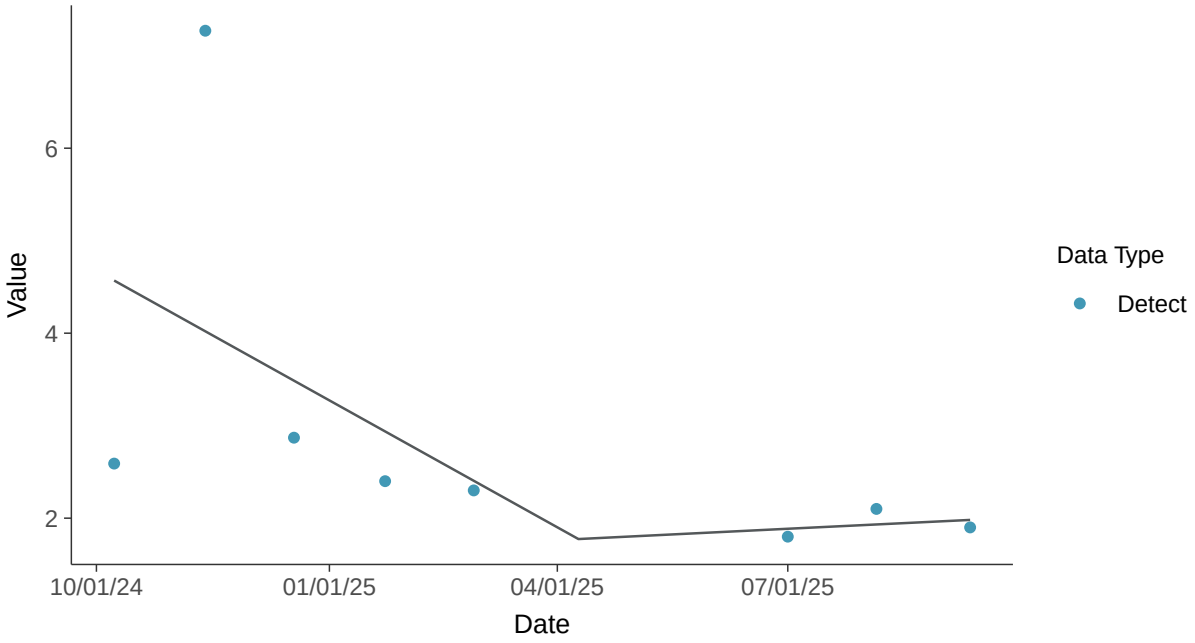
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Iron, MW-17B (mg/l)



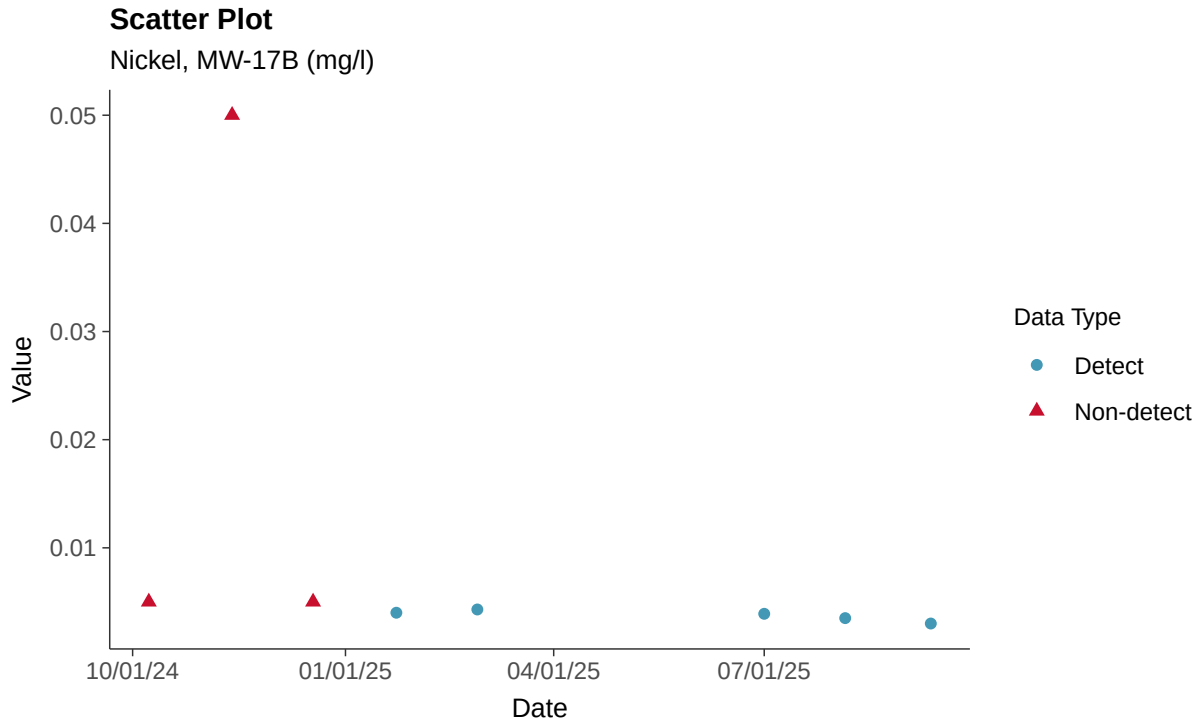
Trend Regression: Piecewise Linear-Linear

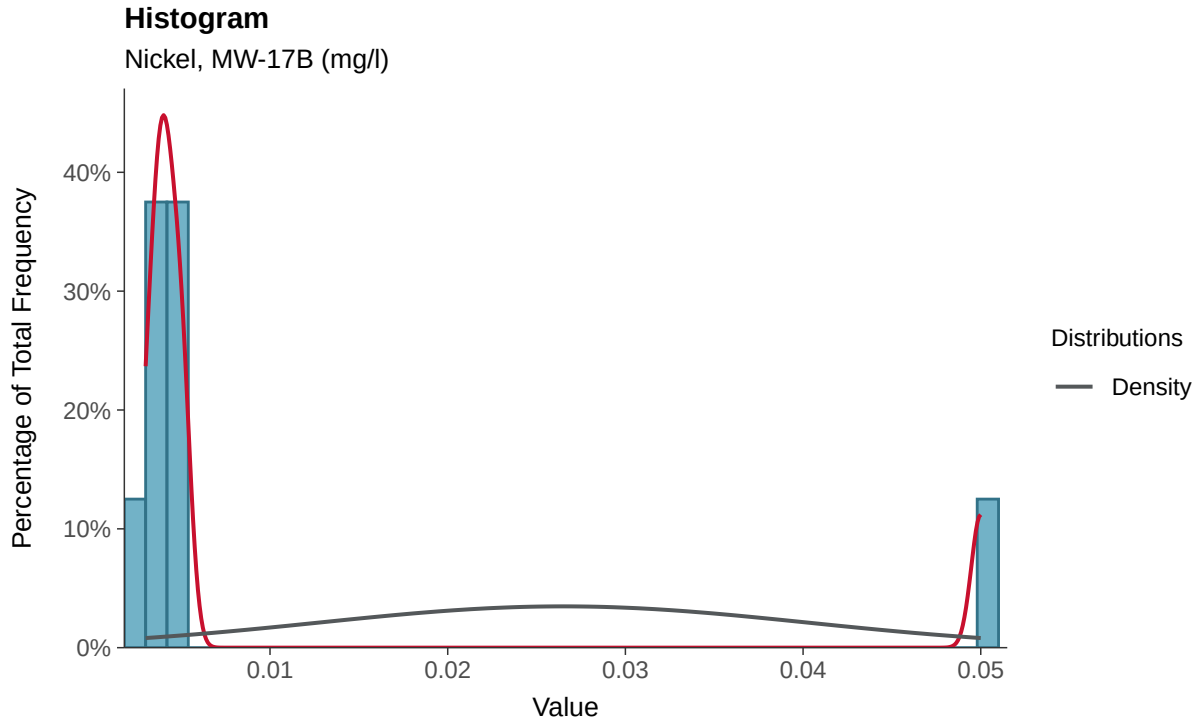
Iron, MW-17B (mg/l)



Part 115: Nickel, MW-17B

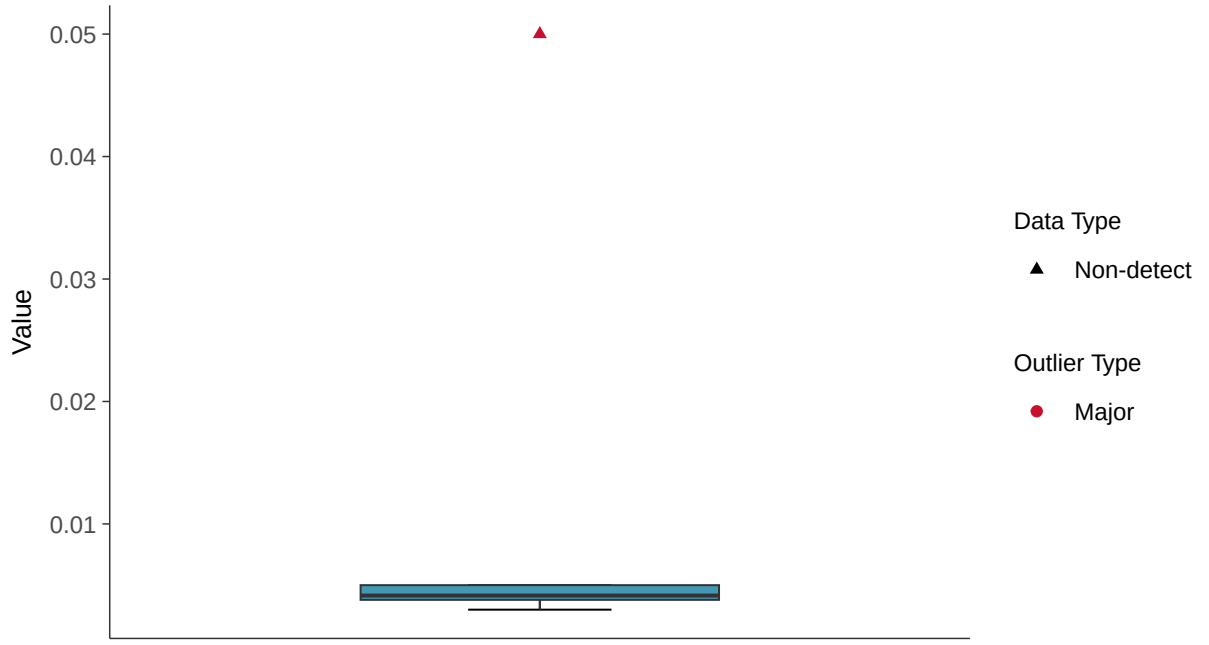
ID: 28_5_119





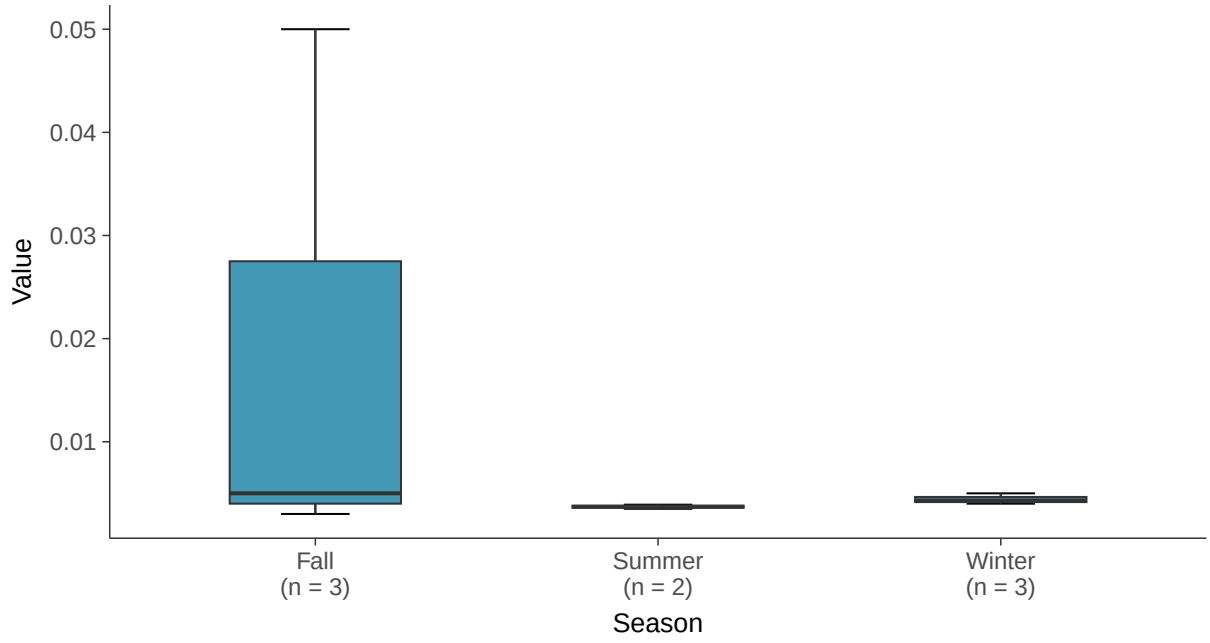
Boxplot

Nickel, MW-17B (mg/l)



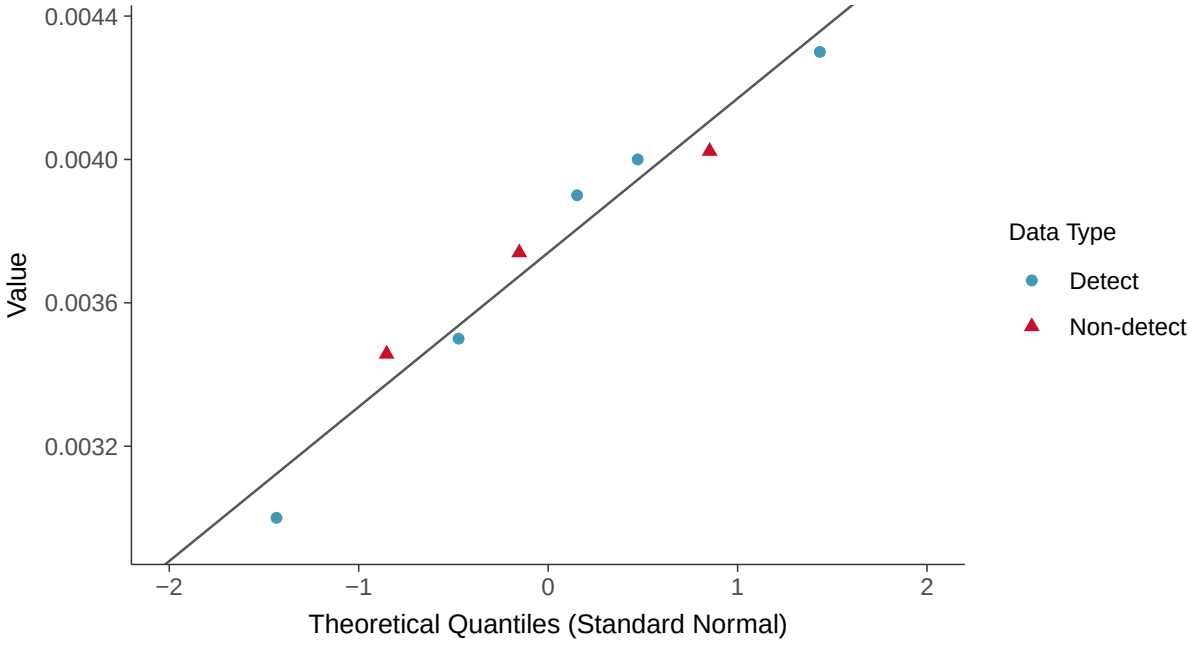
Boxplot by Season

Nickel, MW-17B (mg/l)



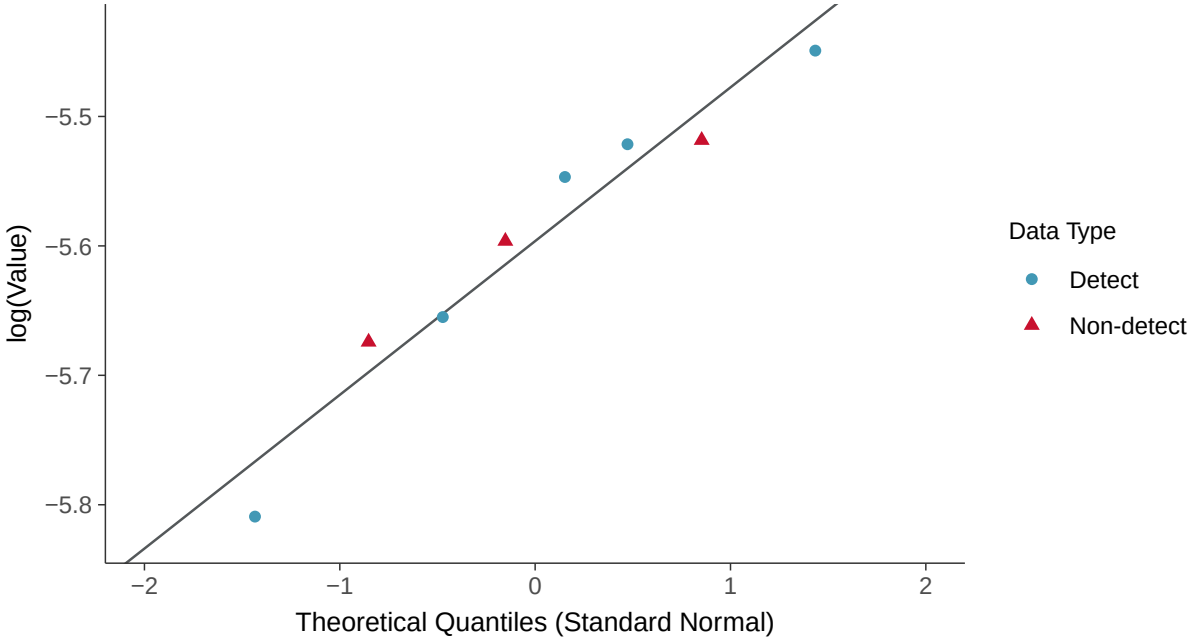
Normal Q-Q plot using ROS Imputed Estimates

Nickel, MW-17B (mg/l)



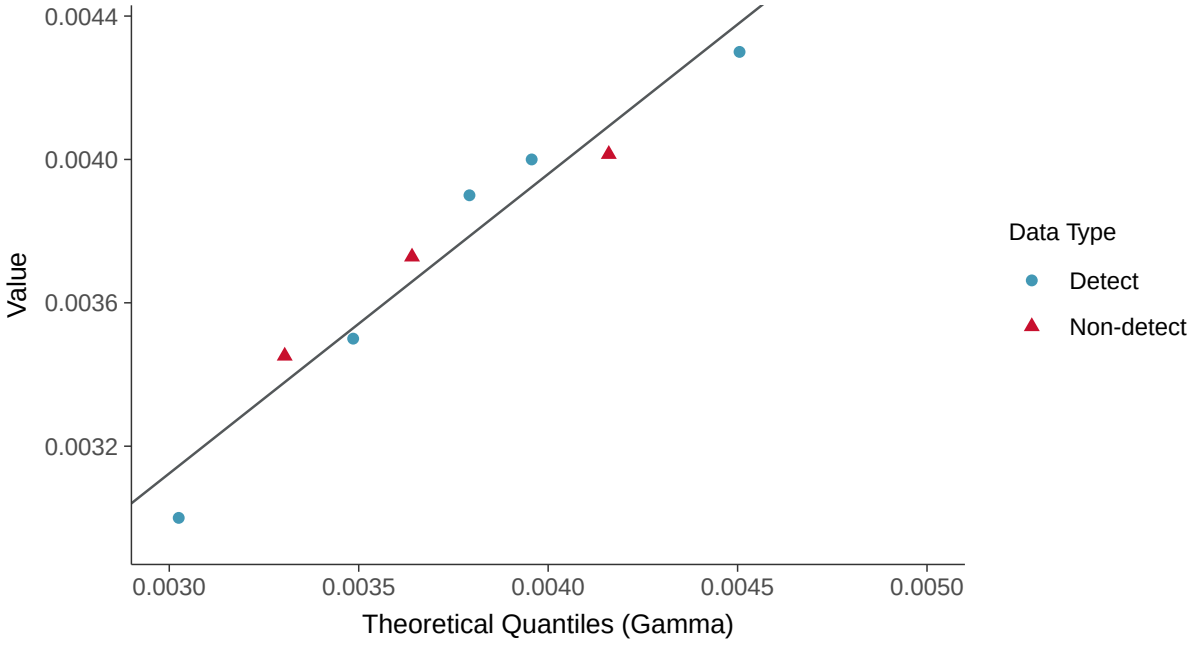
Lognormal Q-Q plot using ROS Imputed Estimates

Nickel, MW-17B (mg/l)



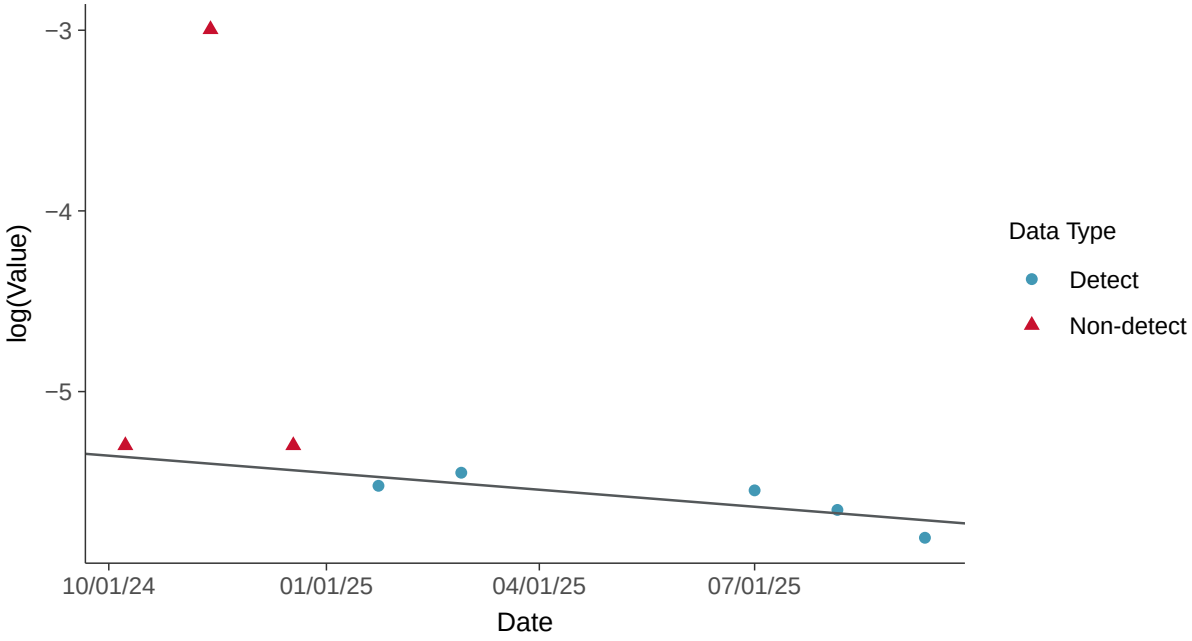
Gamma Q-Q plot using ROS Imputed Estimates

Nickel, MW-17B (mg/l)



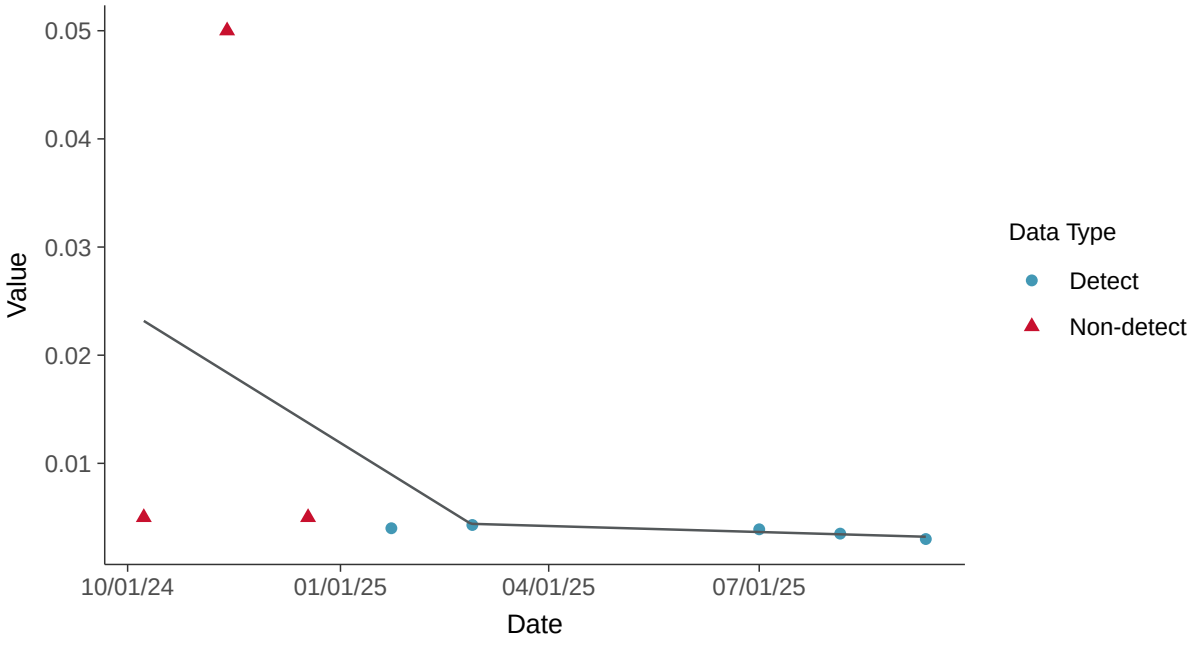
Trend Regression: Lognormal MLE

Nickel, MW-17B (mg/l)



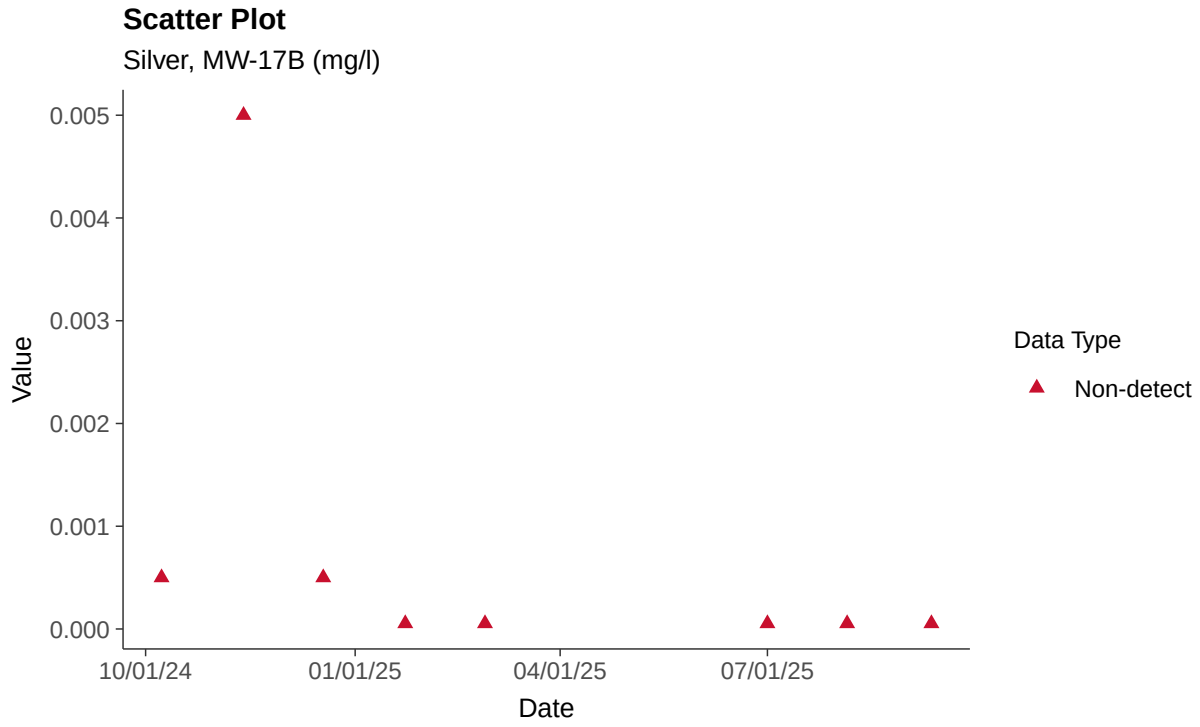
Trend Regression: Piecewise Linear-Linear

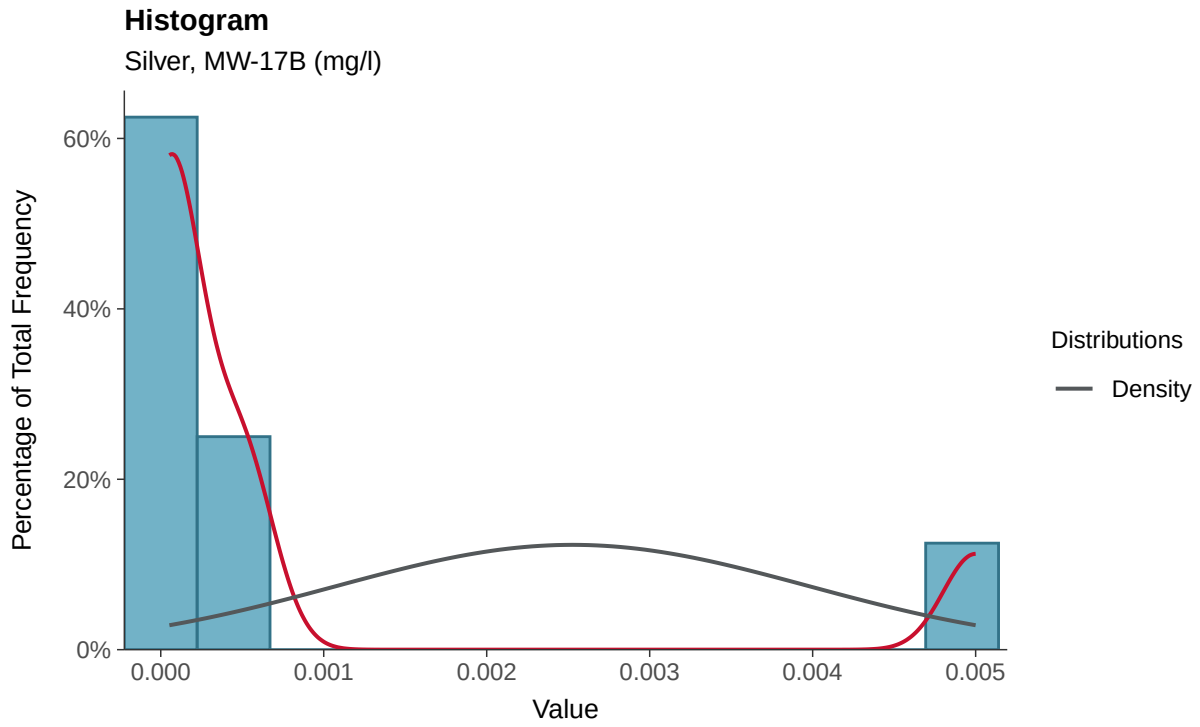
Nickel, MW-17B (mg/l)



Part 115: Silver, MW-17B

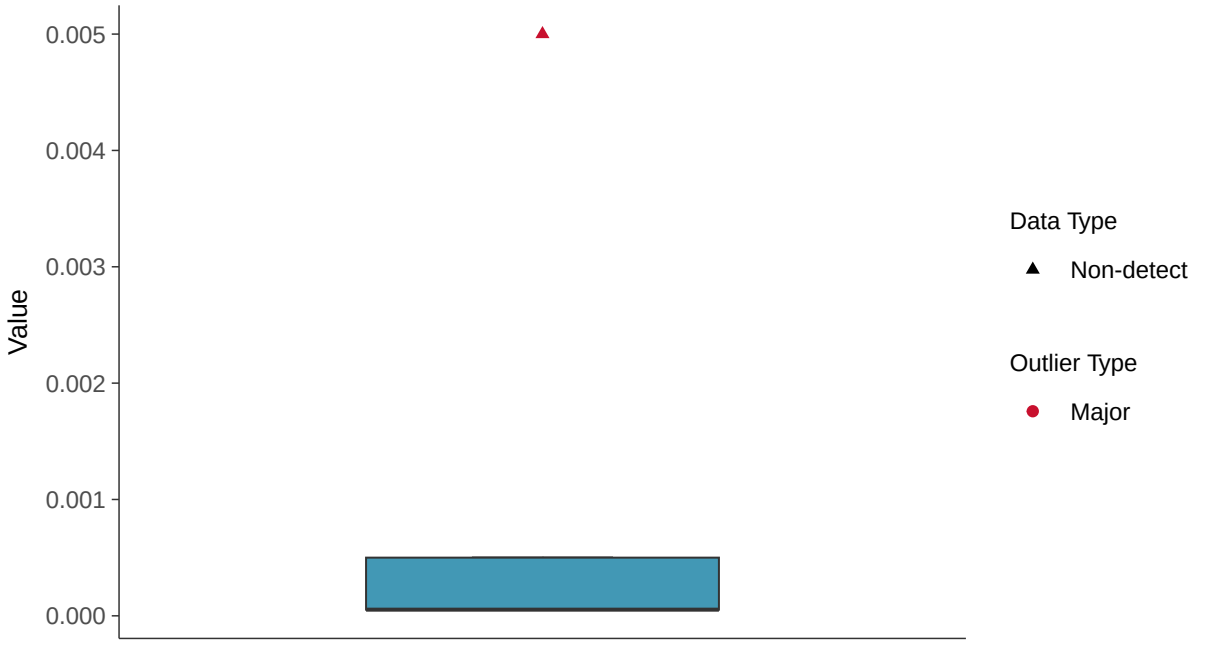
ID: 28_5_123





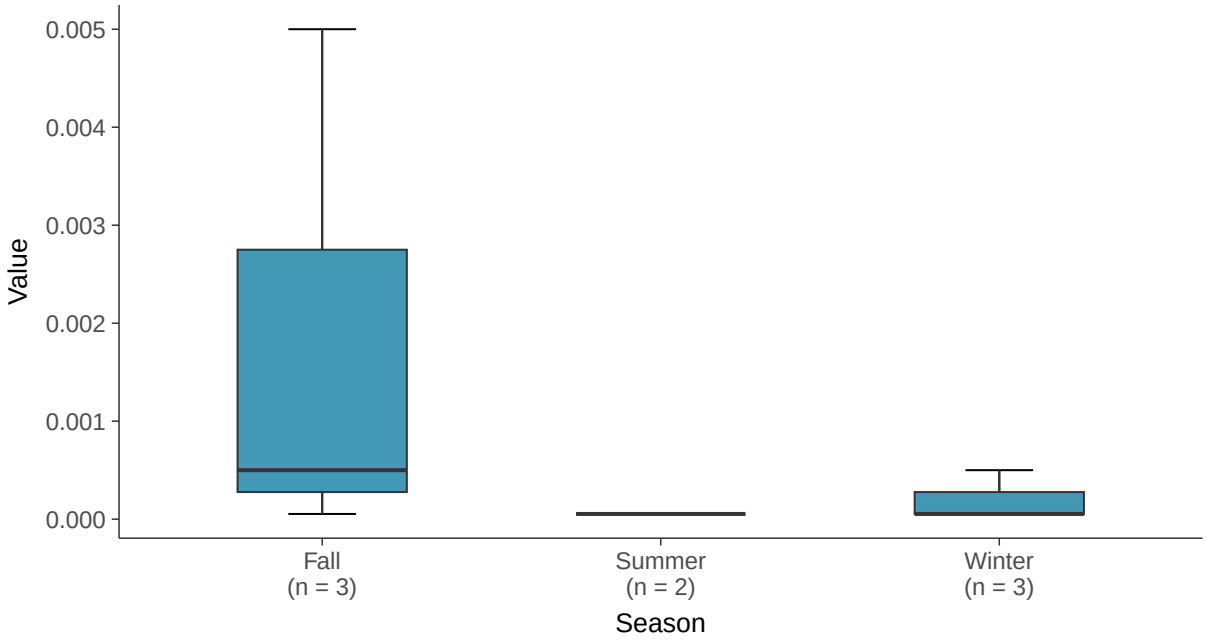
Boxplot

Silver, MW-17B (mg/l)



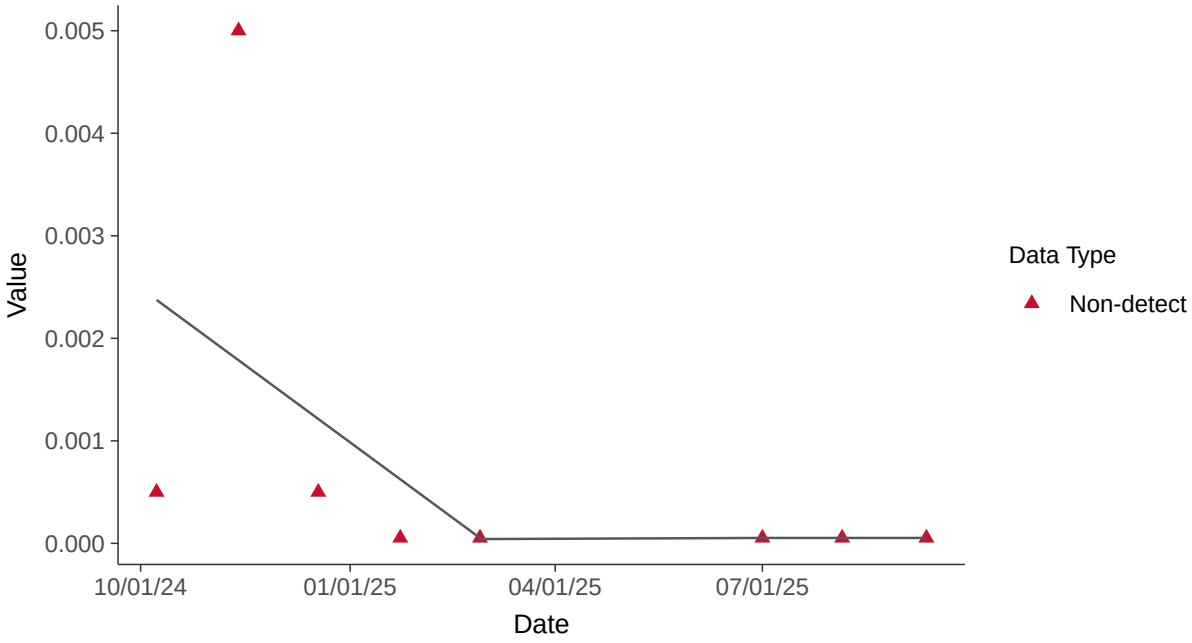
Boxplot by Season

Silver, MW-17B (mg/l)



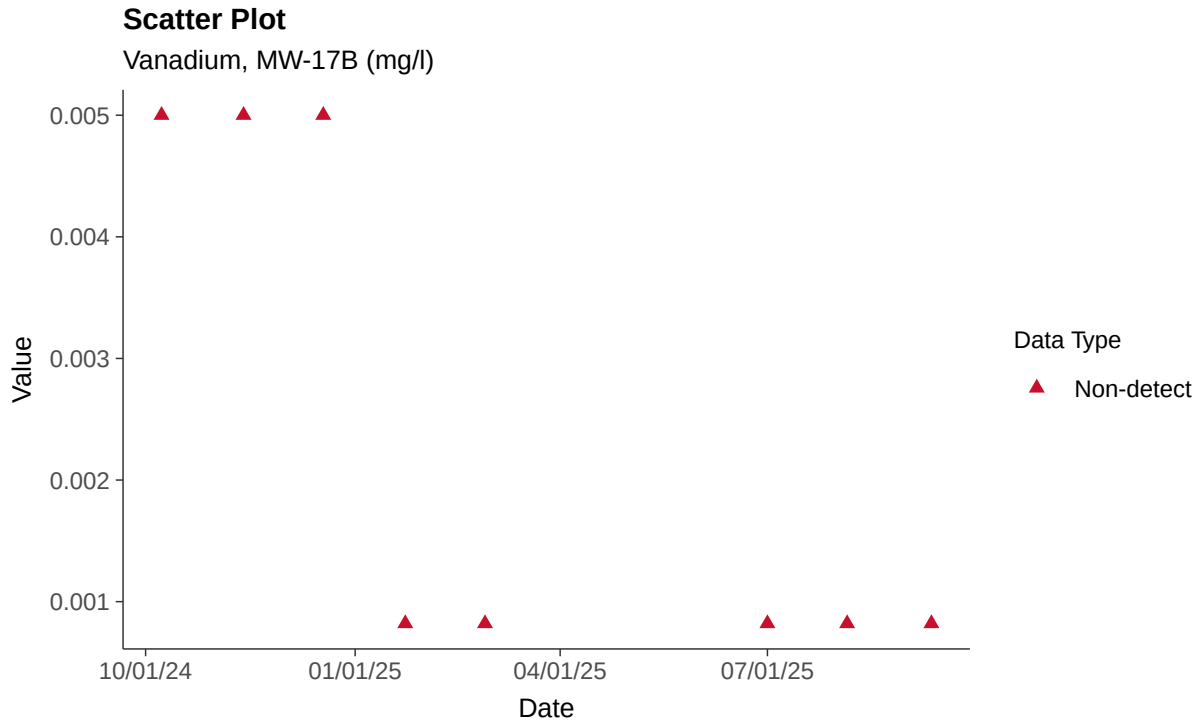
Trend Regression: Piecewise Linear-Linear

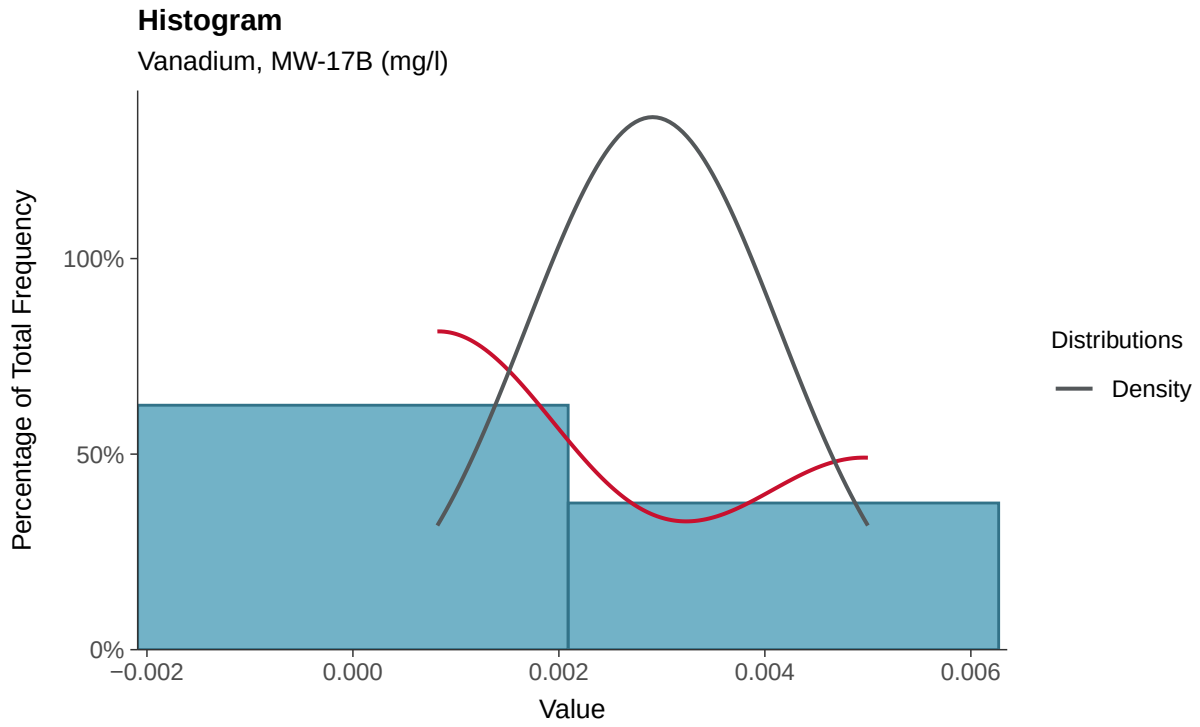
Silver, MW-17B (mg/l)



Part 115: Vanadium, MW-17B

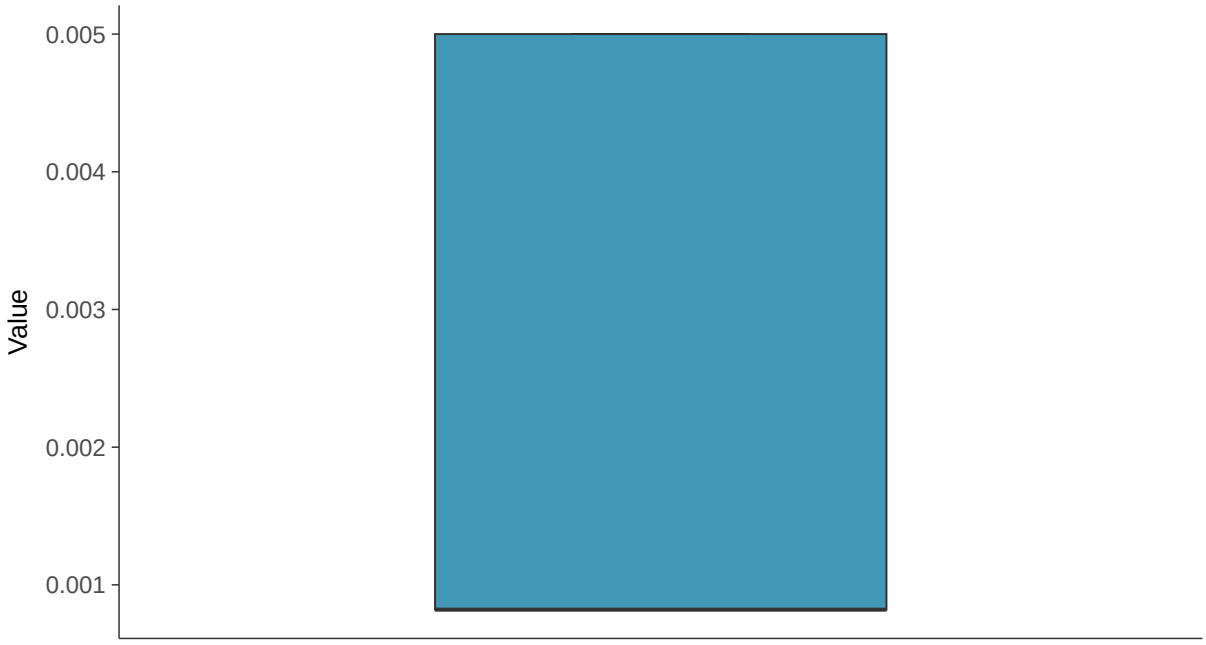
ID: 28_5_128





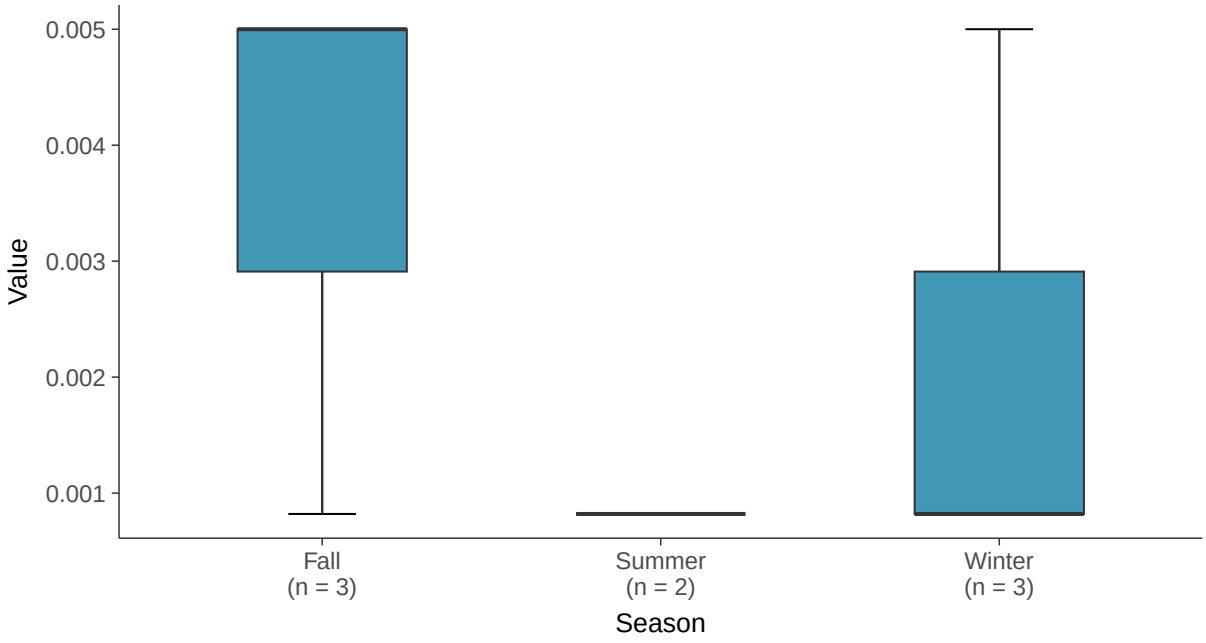
Boxplot

Vanadium, MW-17B (mg/l)



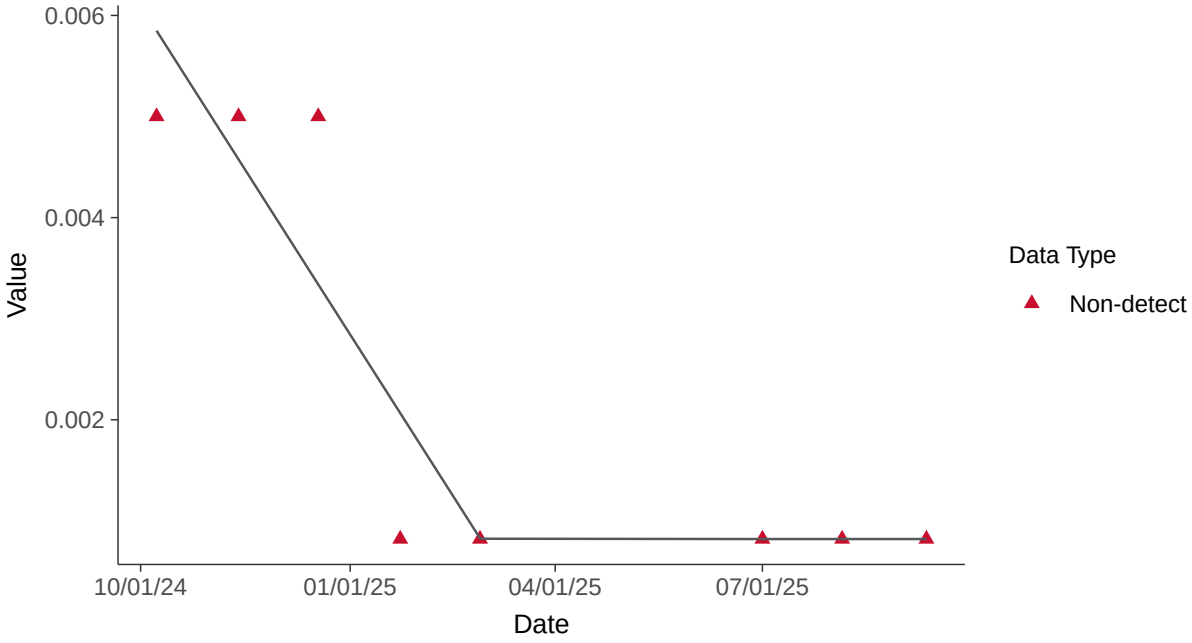
Boxplot by Season

Vanadium, MW-17B (mg/l)



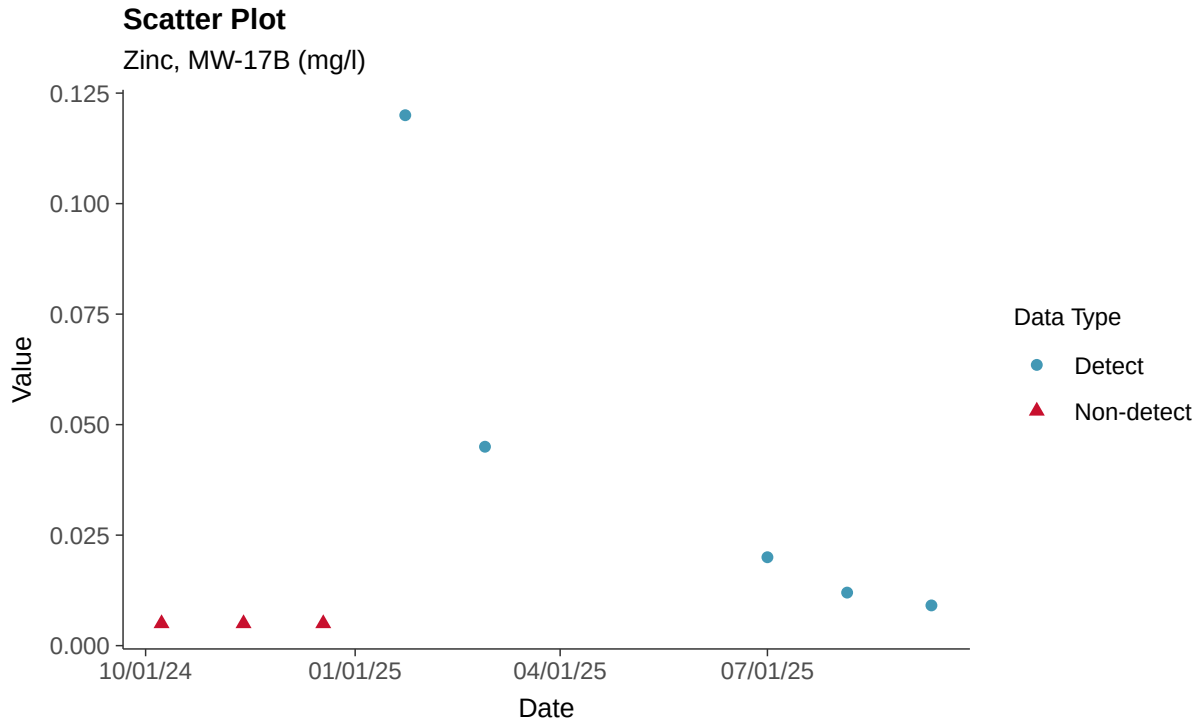
Trend Regression: Piecewise Linear-Linear

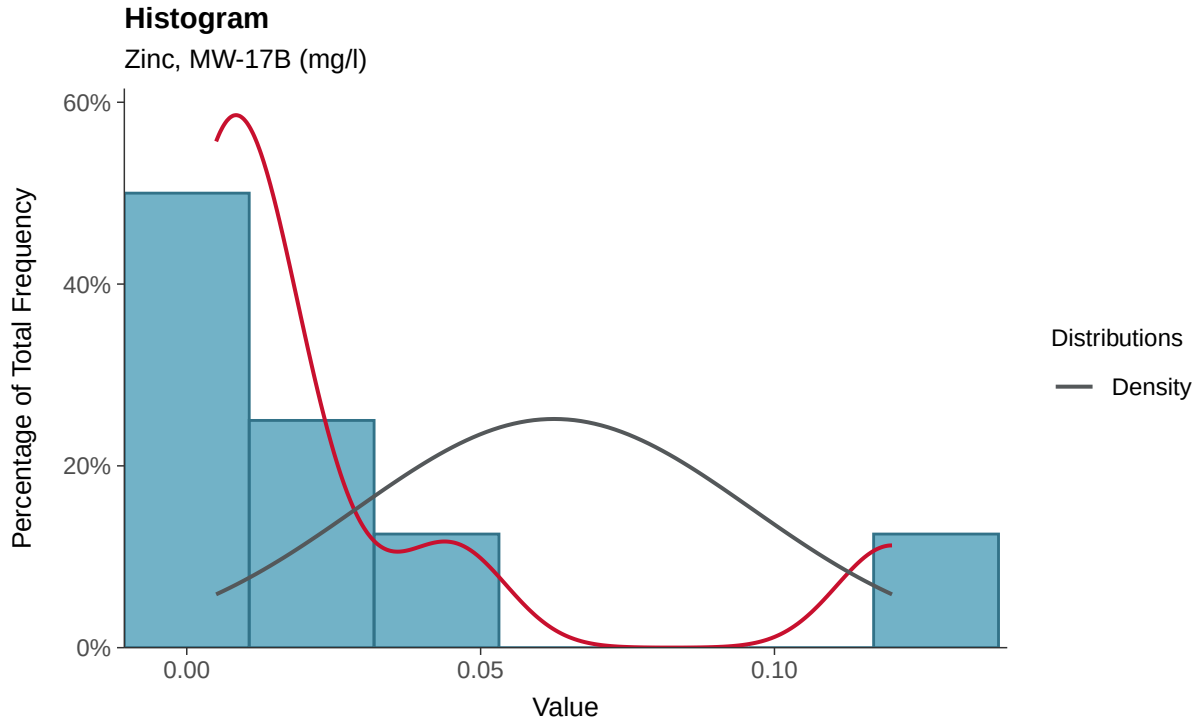
Vanadium, MW-17B (mg/l)



Part 115: Zinc, MW-17B

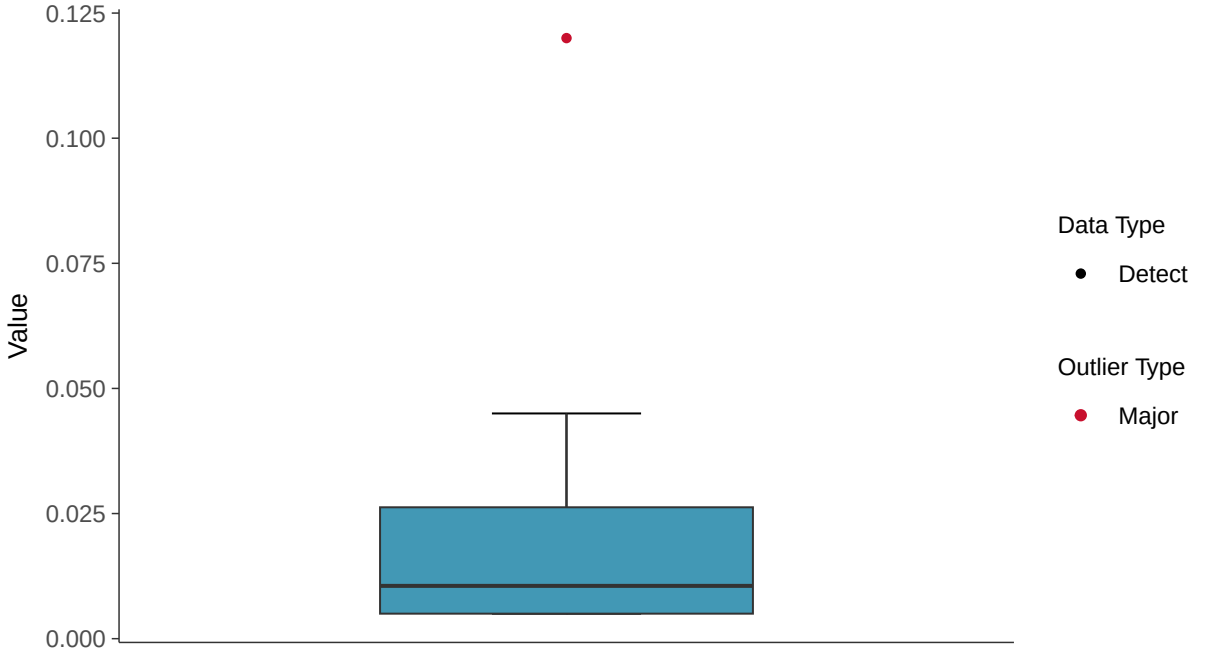
ID: 28_5_129





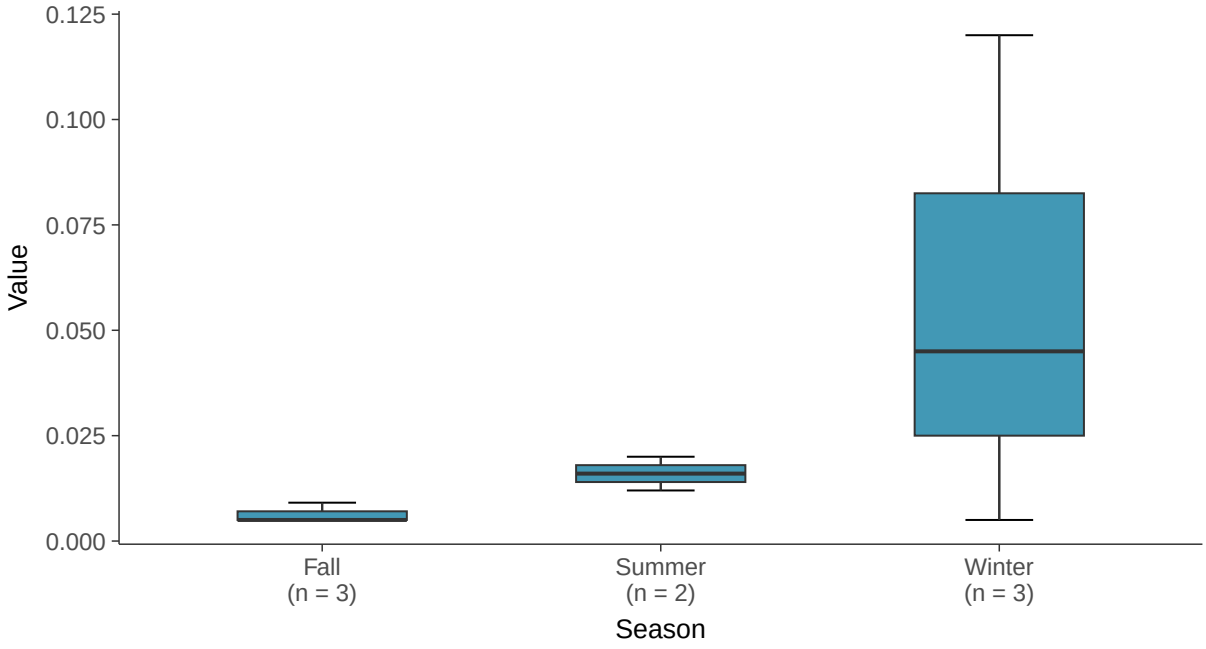
Boxplot

Zinc, MW-17B (mg/l)



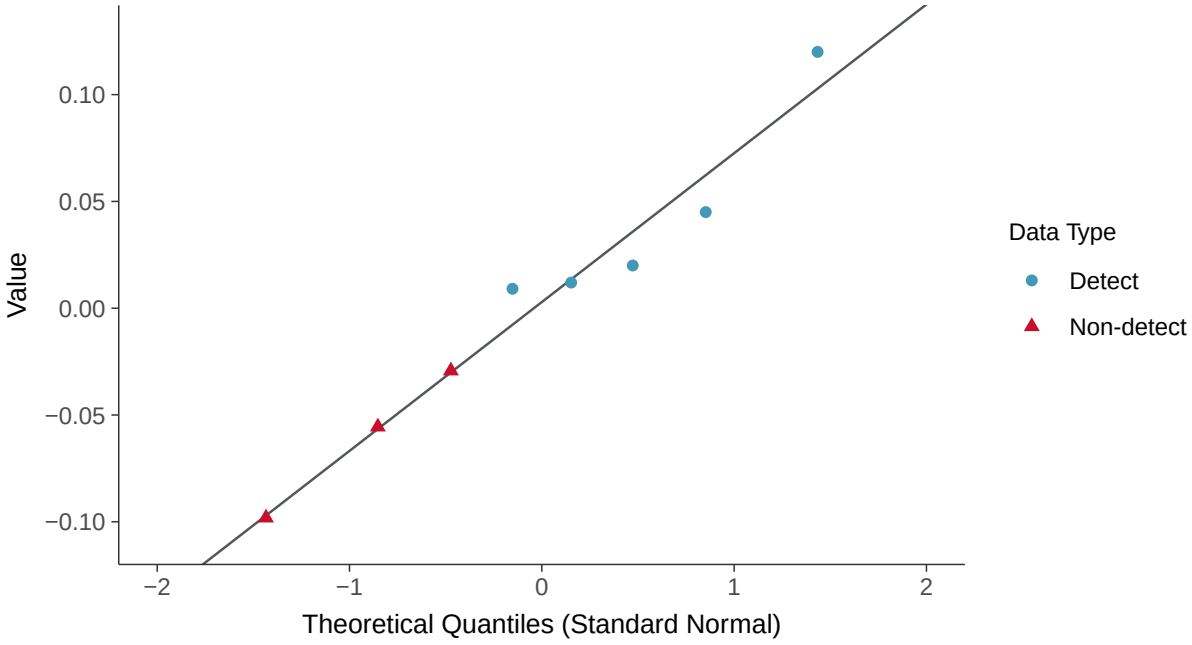
Boxplot by Season

Zinc, MW-17B (mg/l)



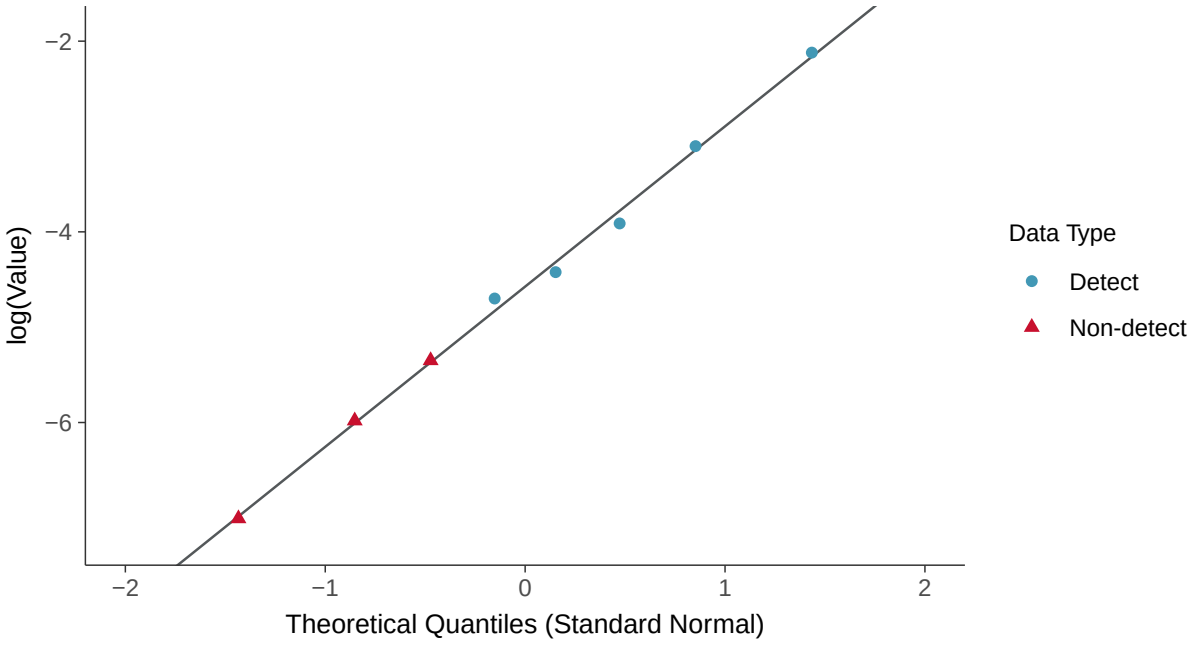
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-17B (mg/l)



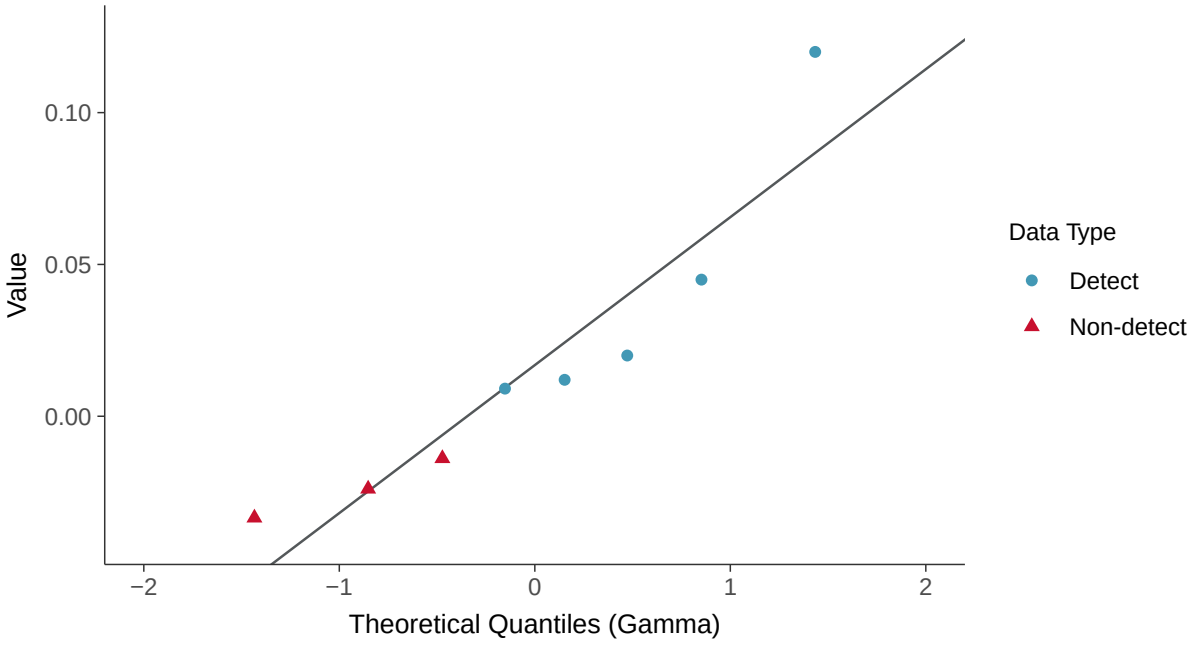
Lognormal Q-Q plot using ROS Imputed Estimates

Zinc, MW-17B (mg/l)



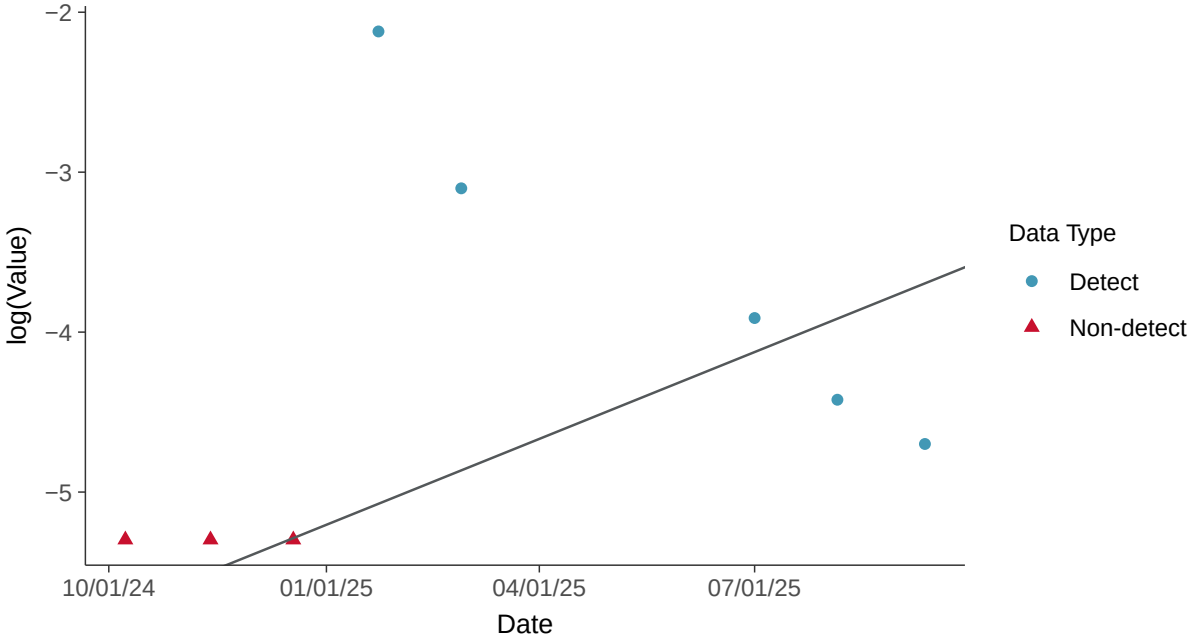
Gamma Q-Q plot using ROS Imputed Estimates

Zinc, MW-17B (mg/l)



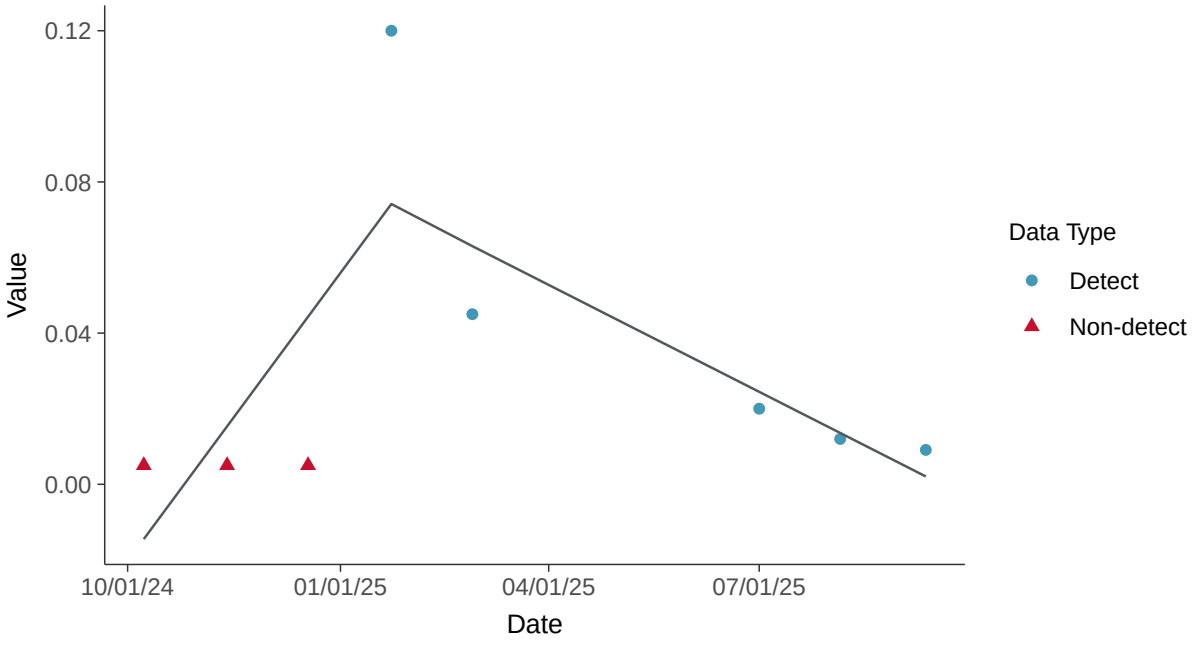
Trend Regression: Lognormal MLE

Zinc, MW-17B (mg/l)



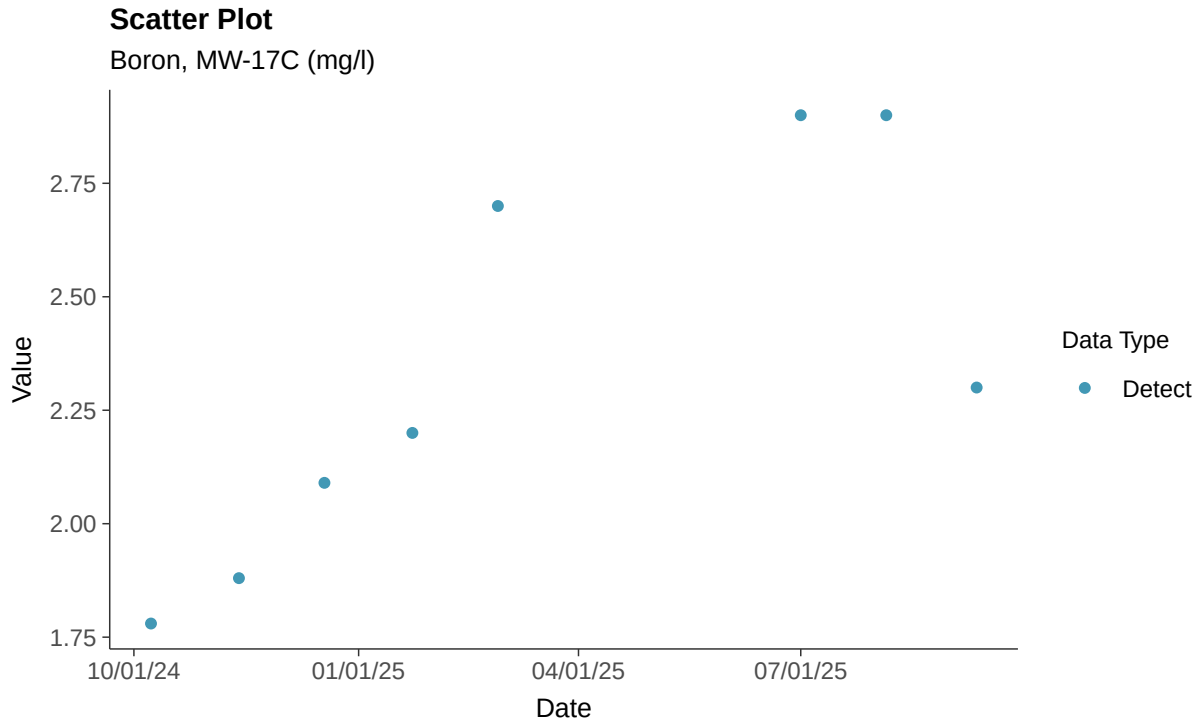
Trend Regression: Piecewise Linear-Linear

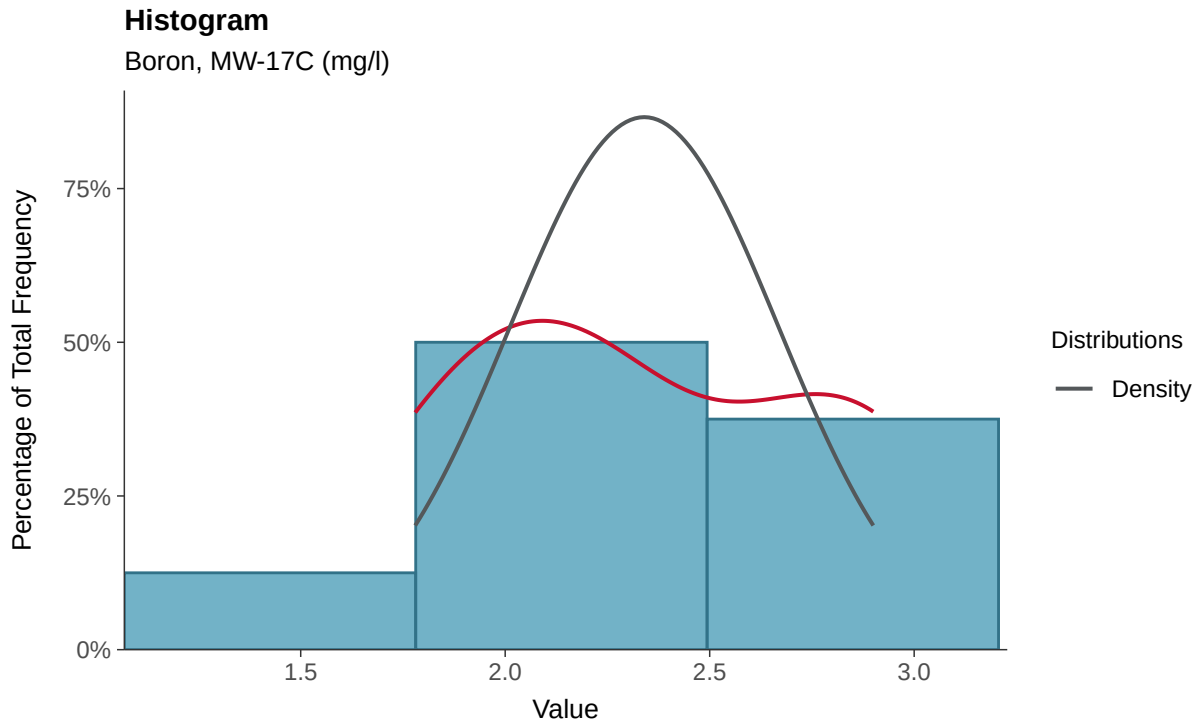
Zinc, MW-17B (mg/l)



Appendix III: Boron, MW-17C

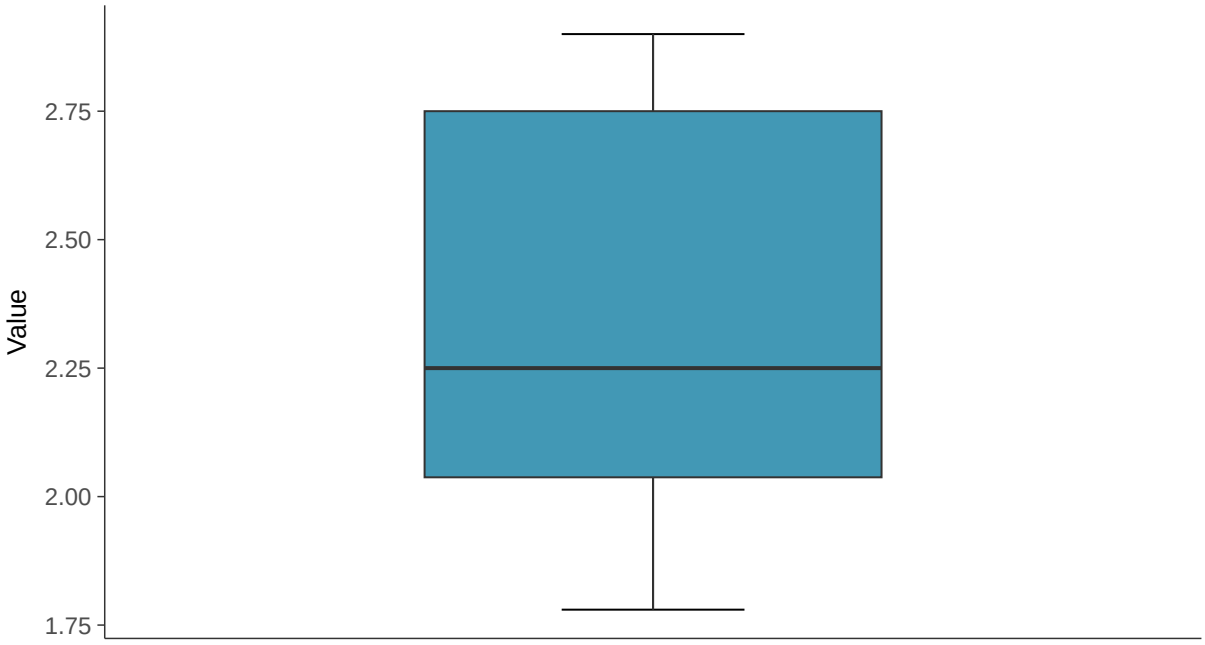
ID: 29_2_105





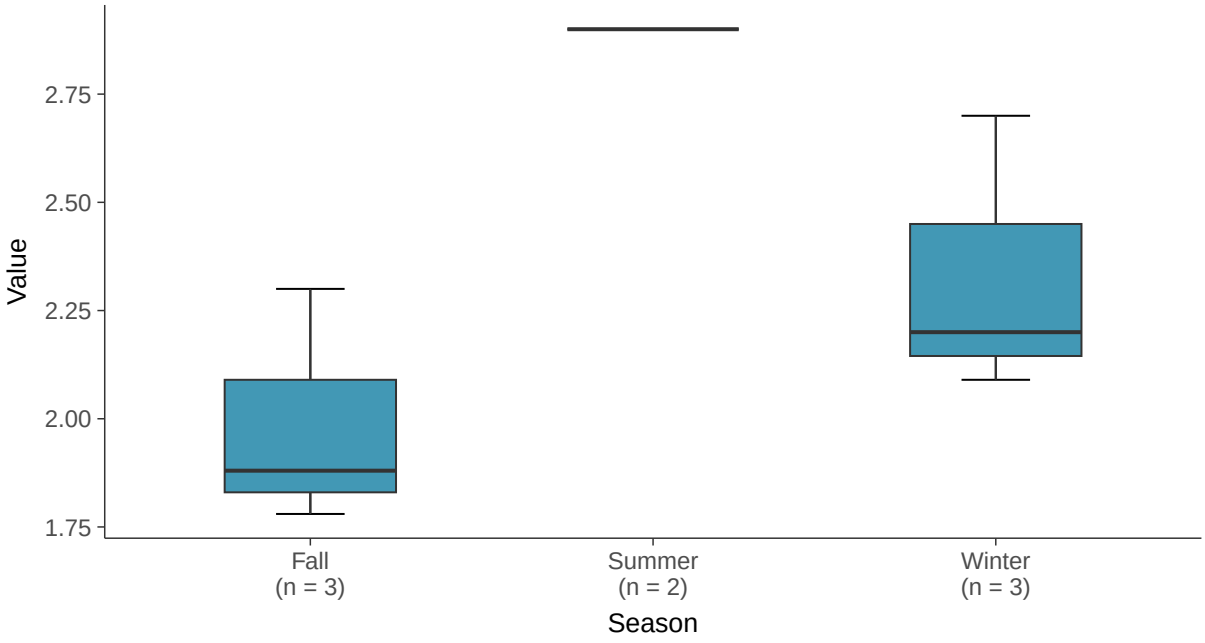
Boxplot

Boron, MW-17C (mg/l)



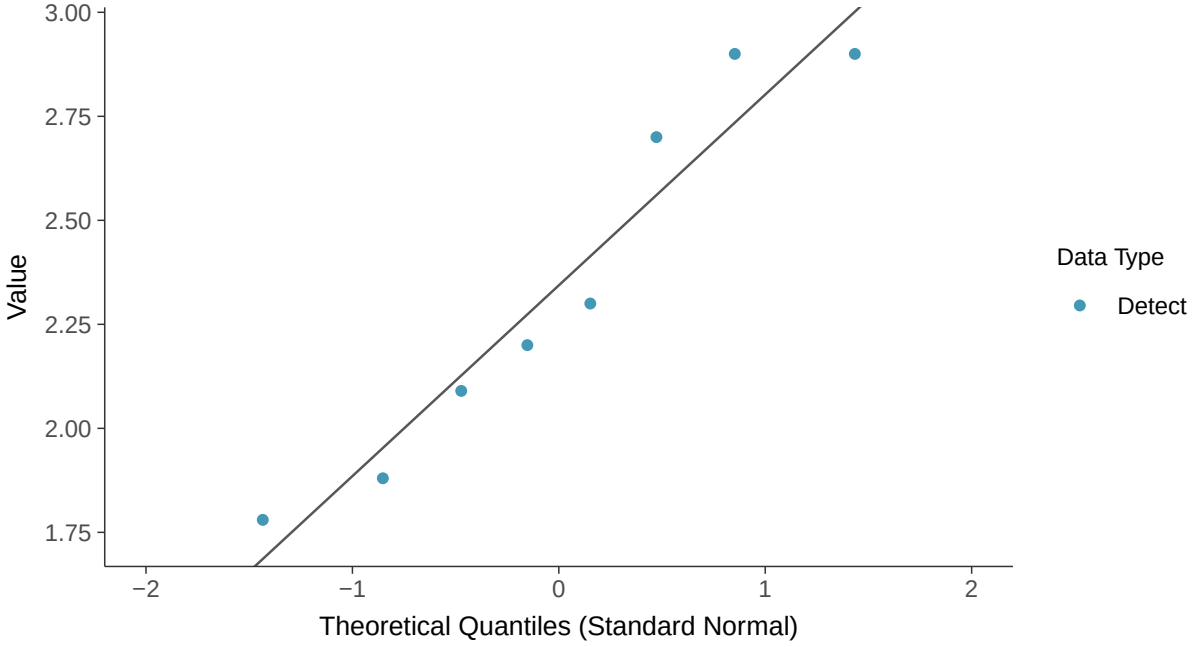
Boxplot by Season

Boron, MW-17C (mg/l)



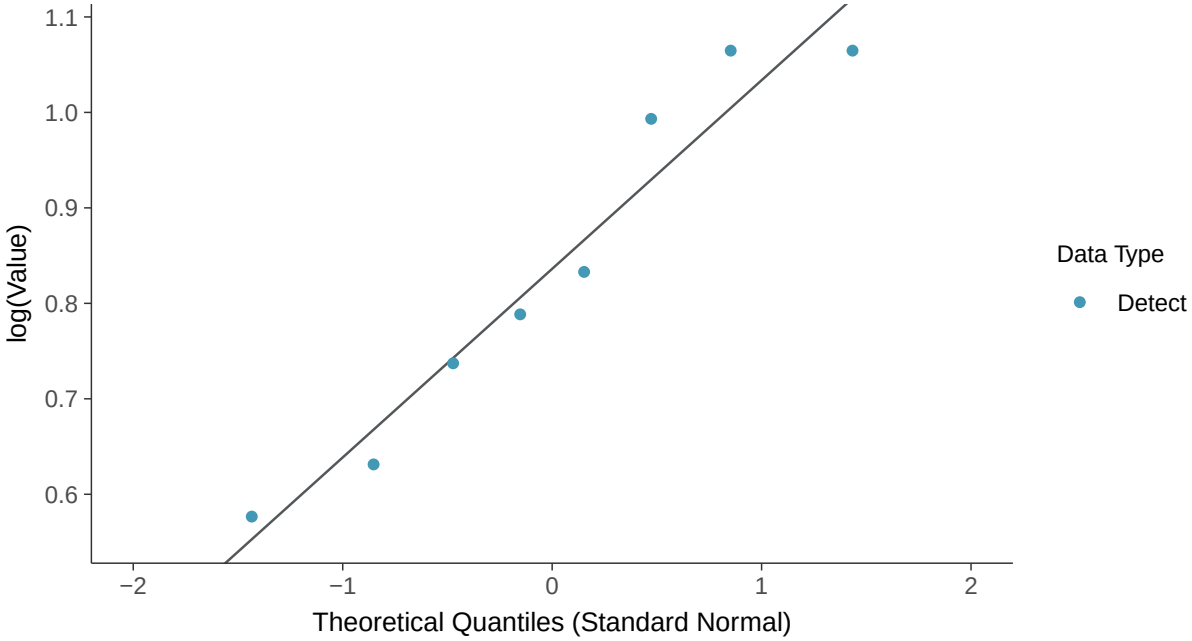
Normal Q-Q plot

Boron, MW-17C (mg/l)



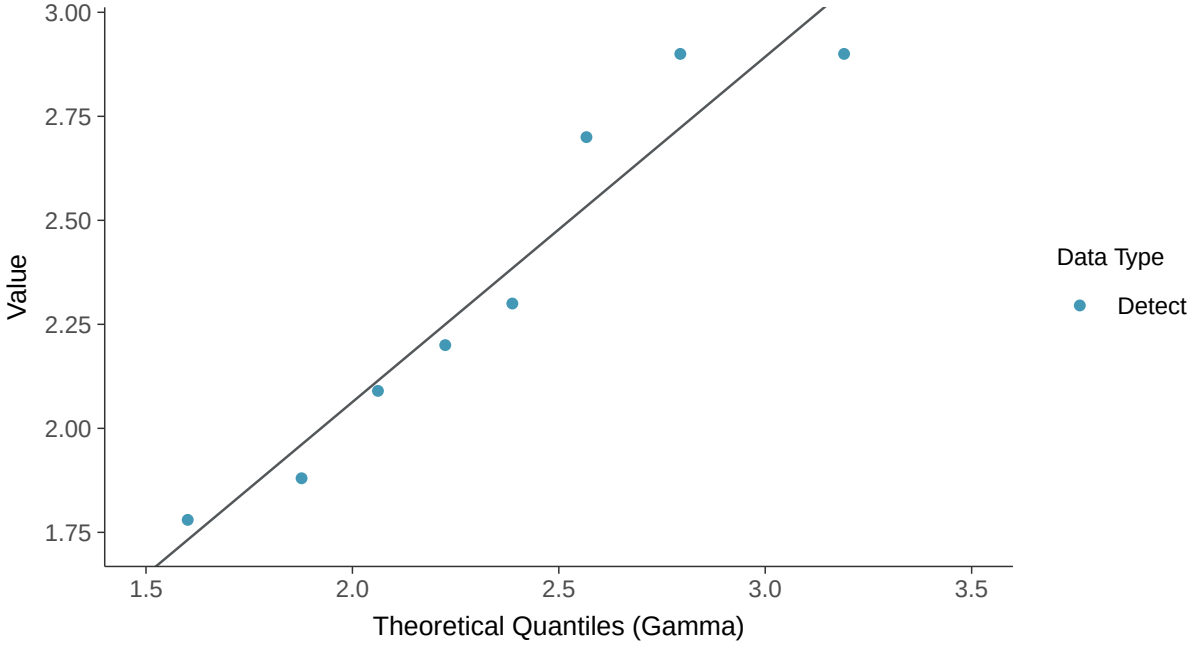
Lognormal Q-Q plot

Boron, MW-17C (mg/l)



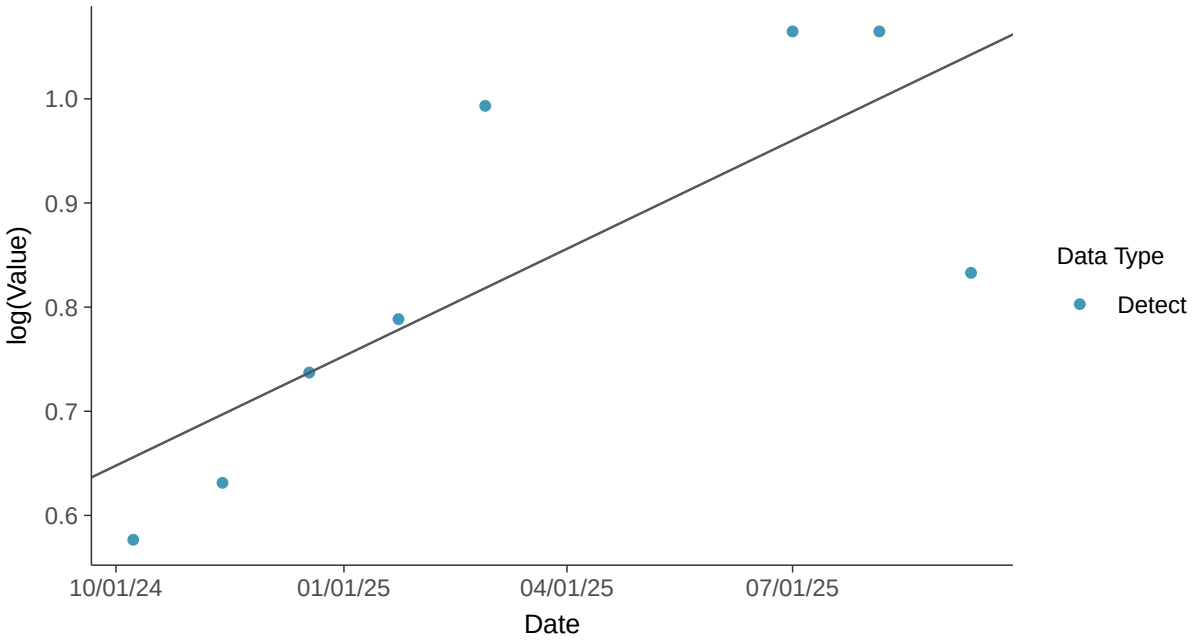
Gamma Q-Q plot

Boron, MW-17C (mg/l)



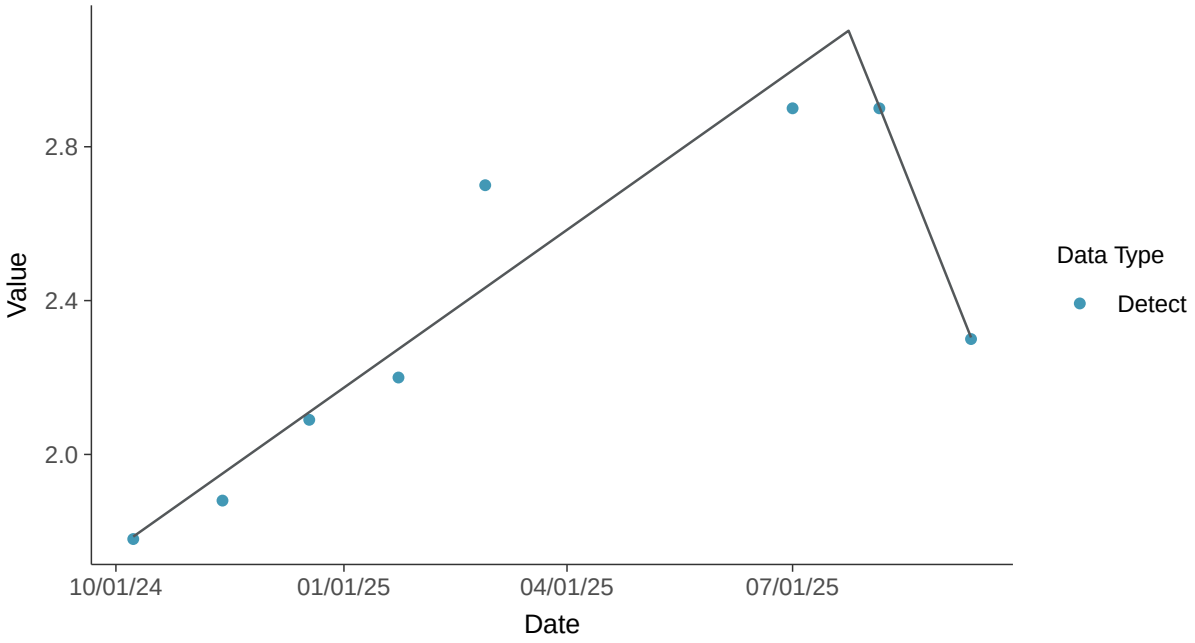
Trend Regression: Lognormal MLE

Boron, MW-17C (mg/l)



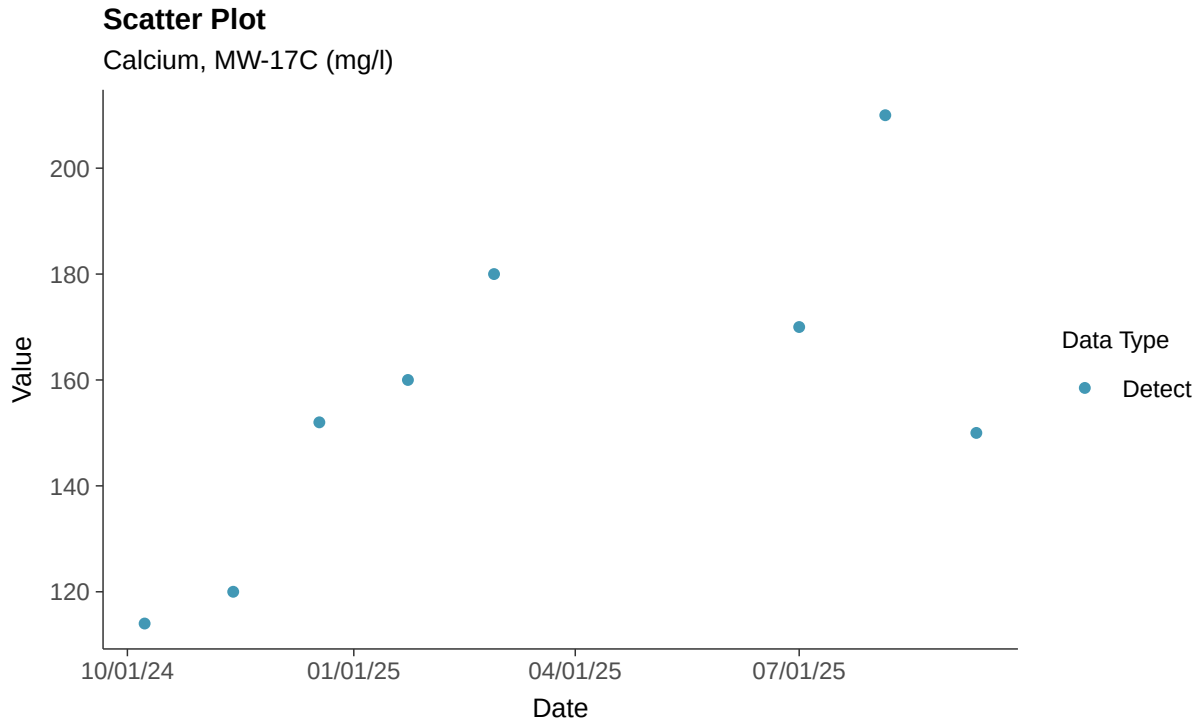
Trend Regression: Piecewise Linear-Linear

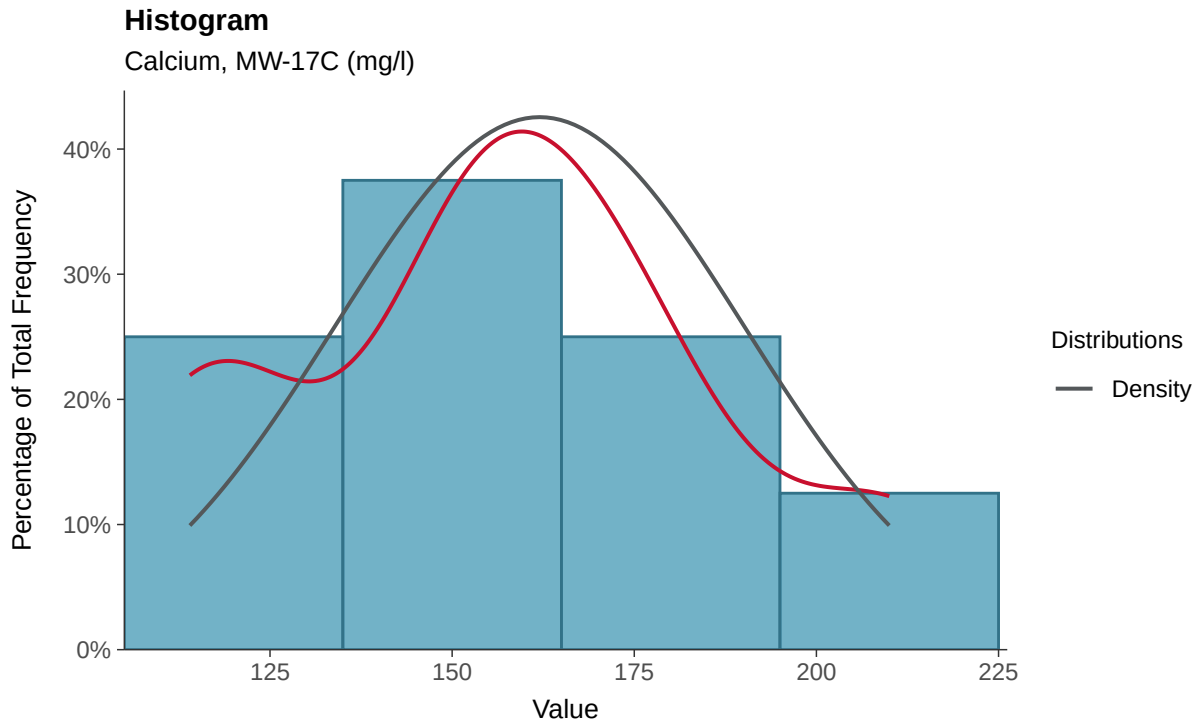
Boron, MW-17C (mg/l)



Appendix III: Calcium, MW-17C

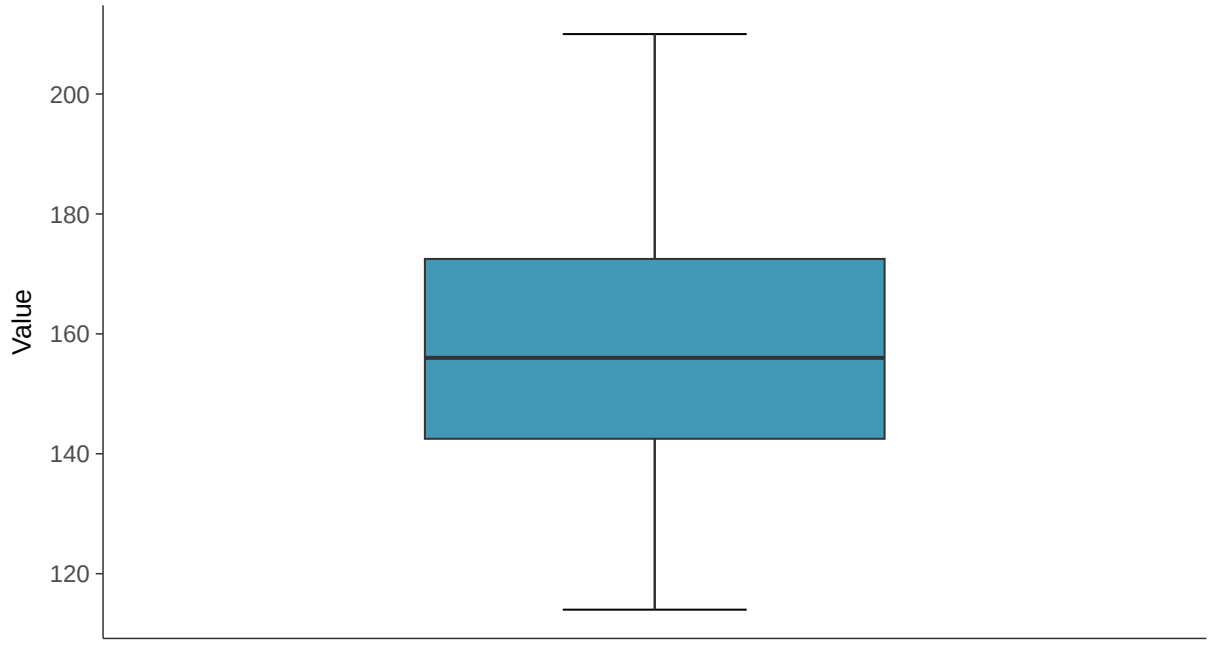
ID: 29_2_107





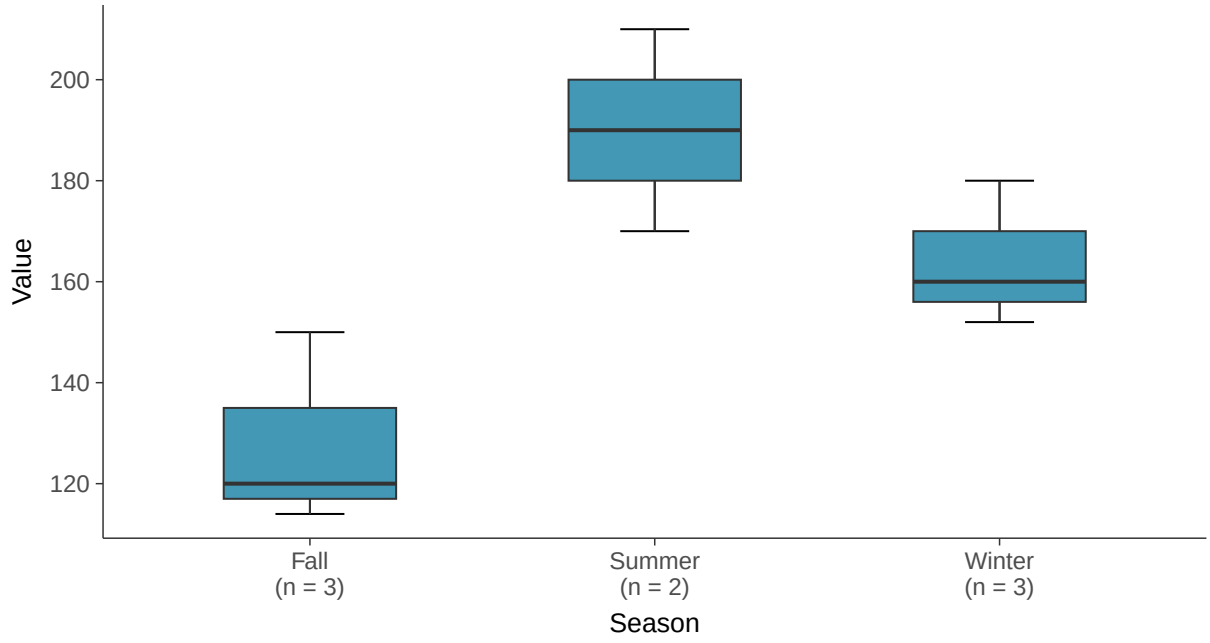
Boxplot

Calcium, MW-17C (mg/l)



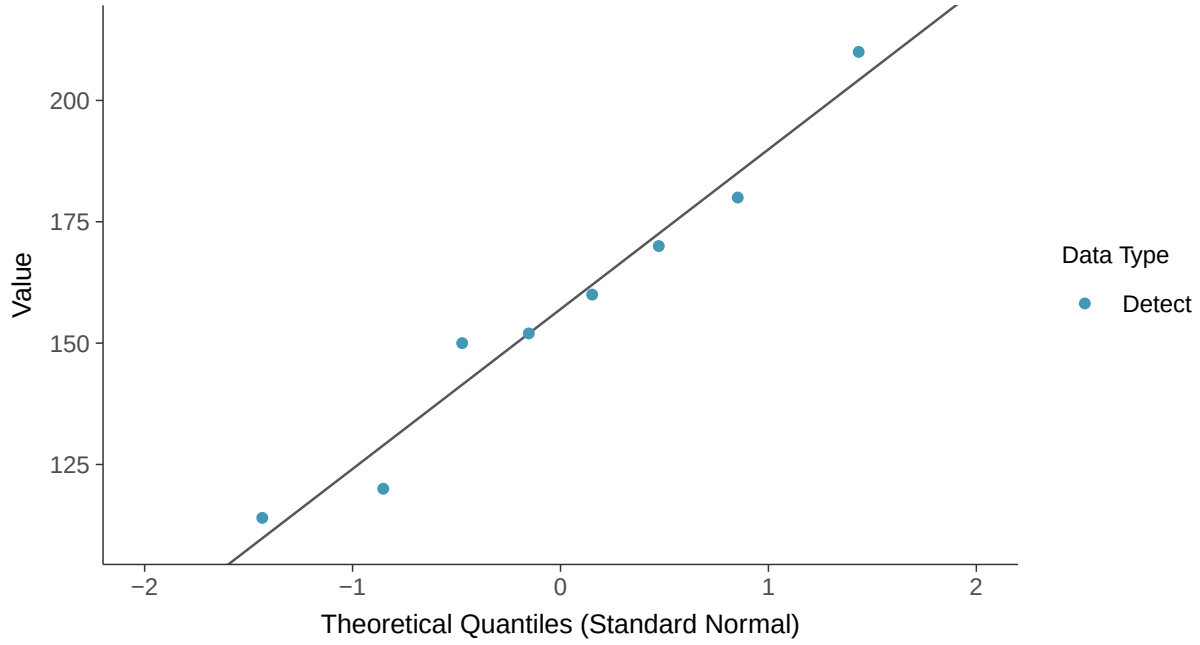
Boxplot by Season

Calcium, MW-17C (mg/l)



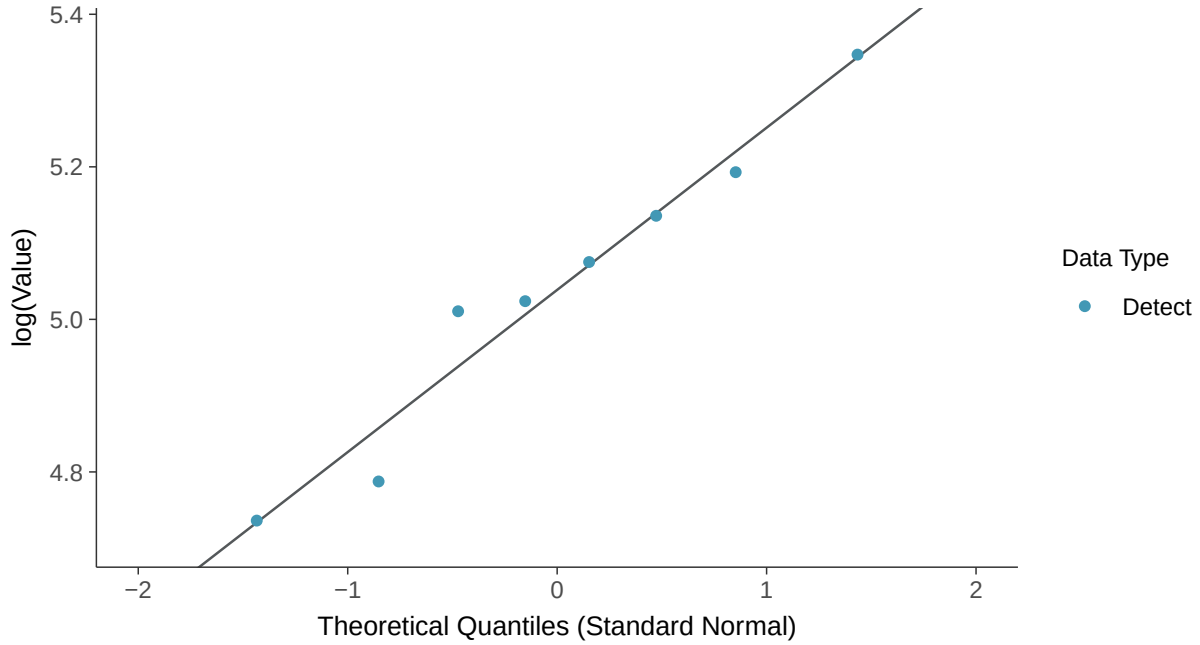
Normal Q-Q plot

Calcium, MW-17C (mg/l)



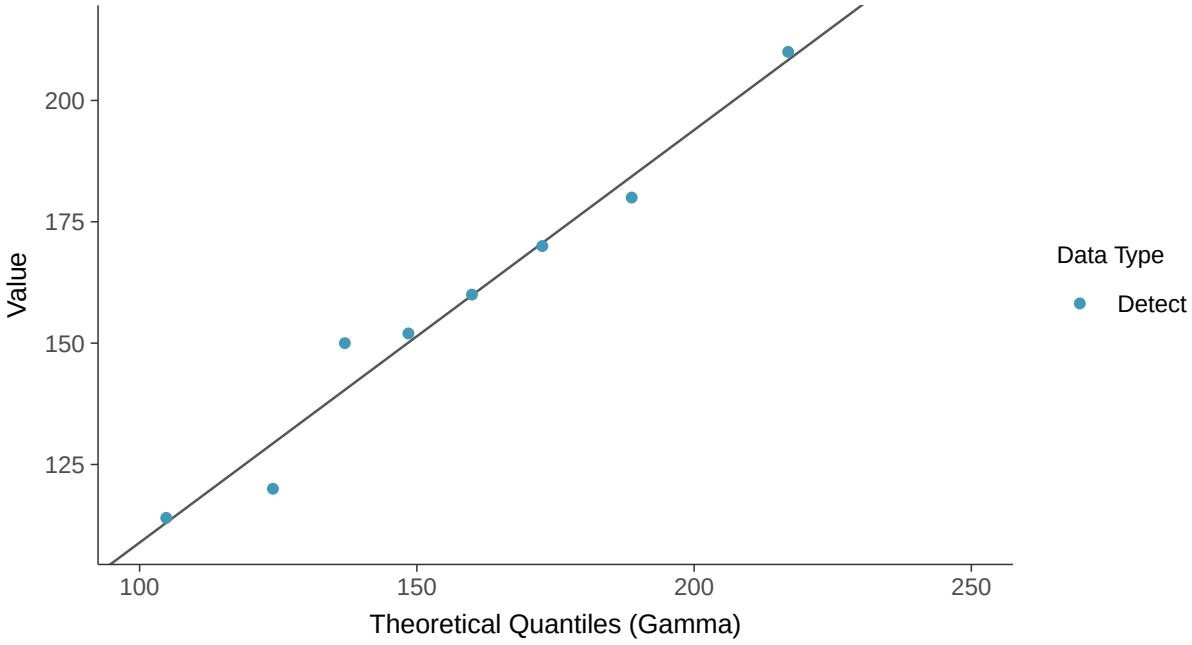
Lognormal Q-Q plot

Calcium, MW-17C (mg/l)



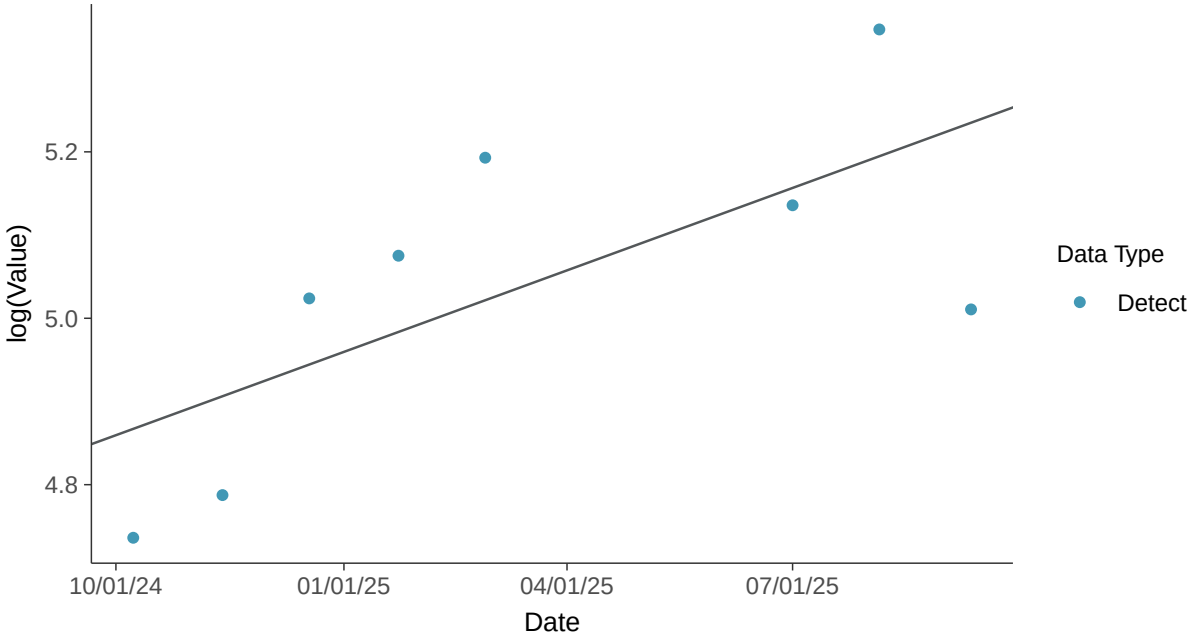
Gamma Q-Q plot

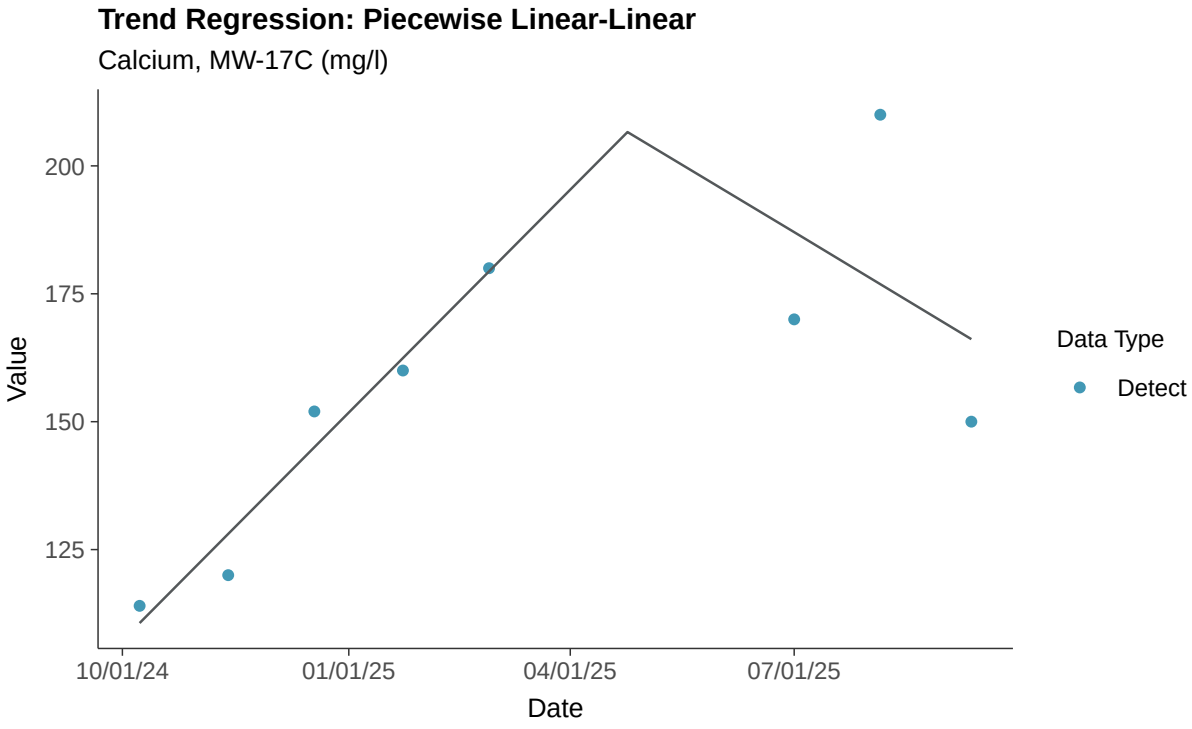
Calcium, MW-17C (mg/l)



Trend Regression: Lognormal MLE

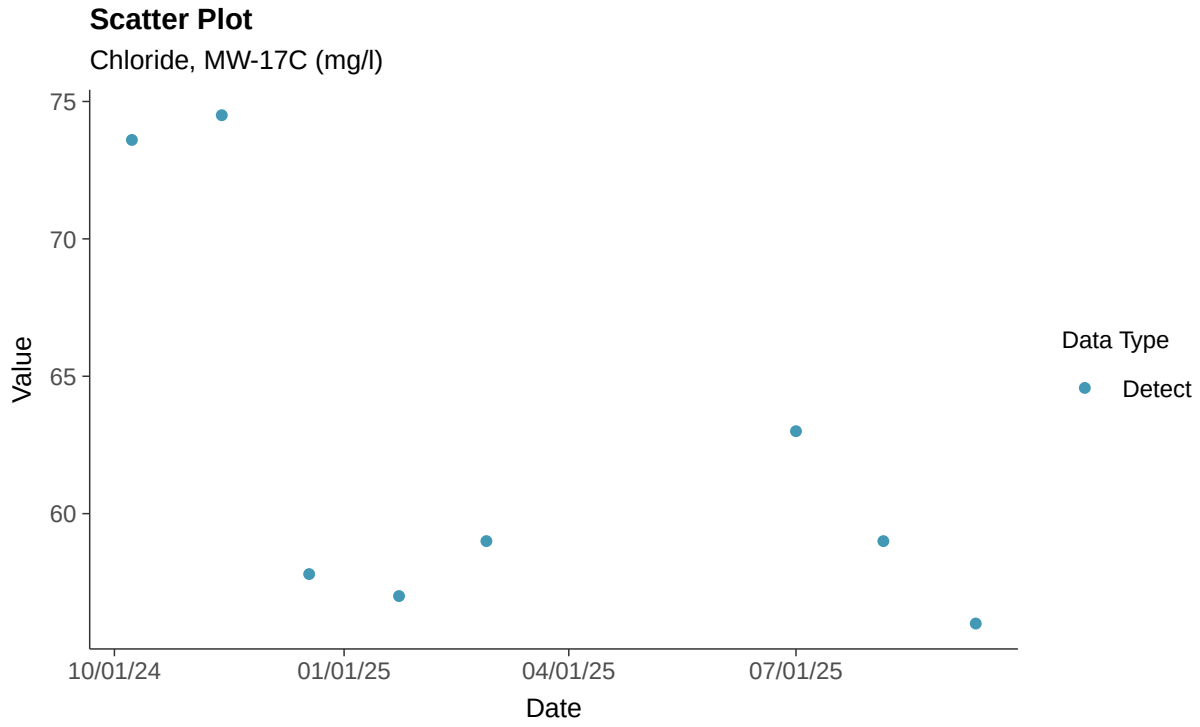
Calcium, MW-17C (mg/l)

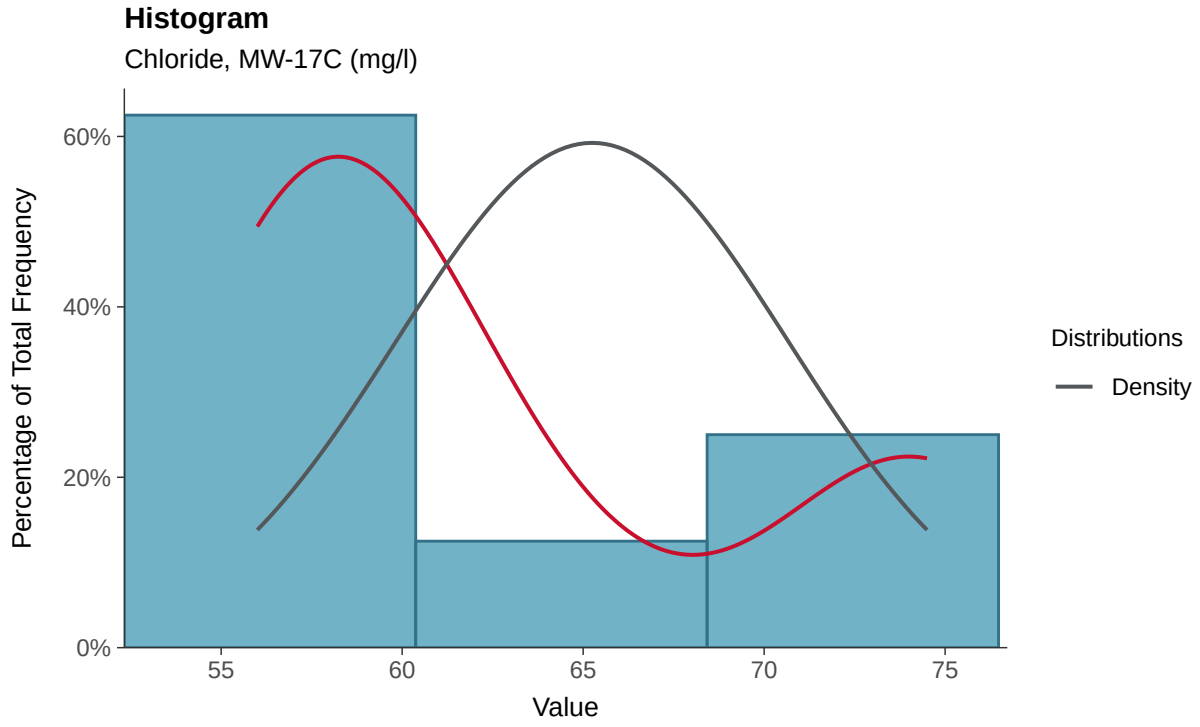



Trend Regression: Piecewise Linear-Linear
Calcium, MW-17C (mg/l)
Value
200
175
150
125
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix III: Chloride, MW-17C

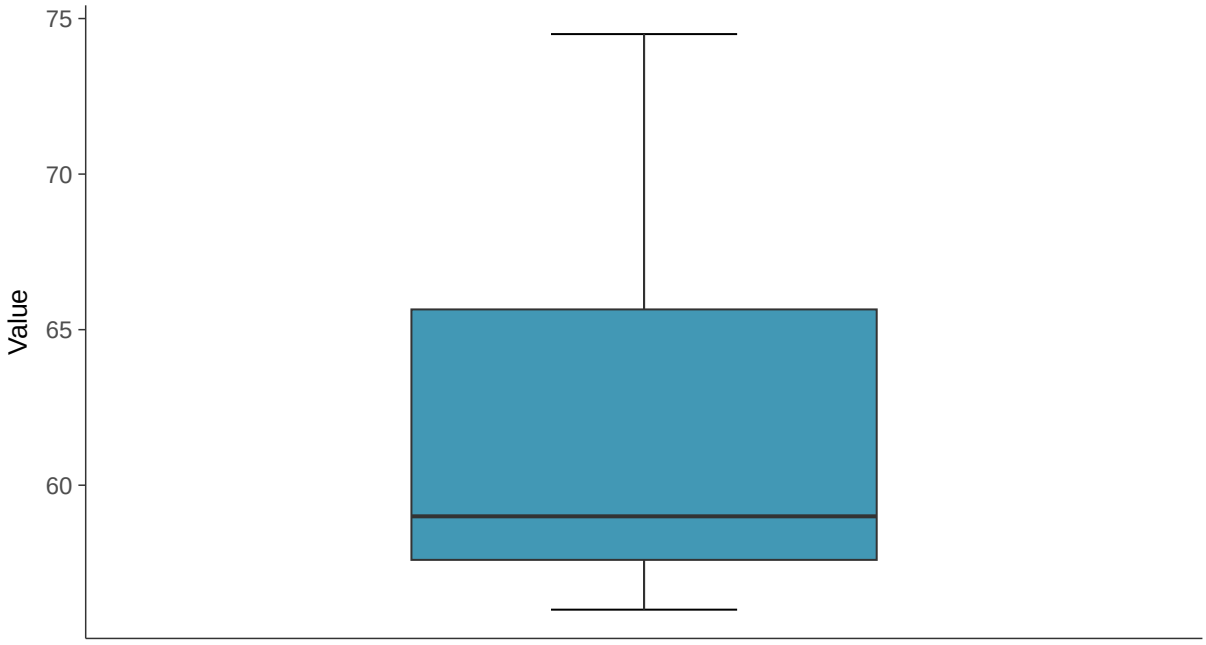
ID: 29_2_108





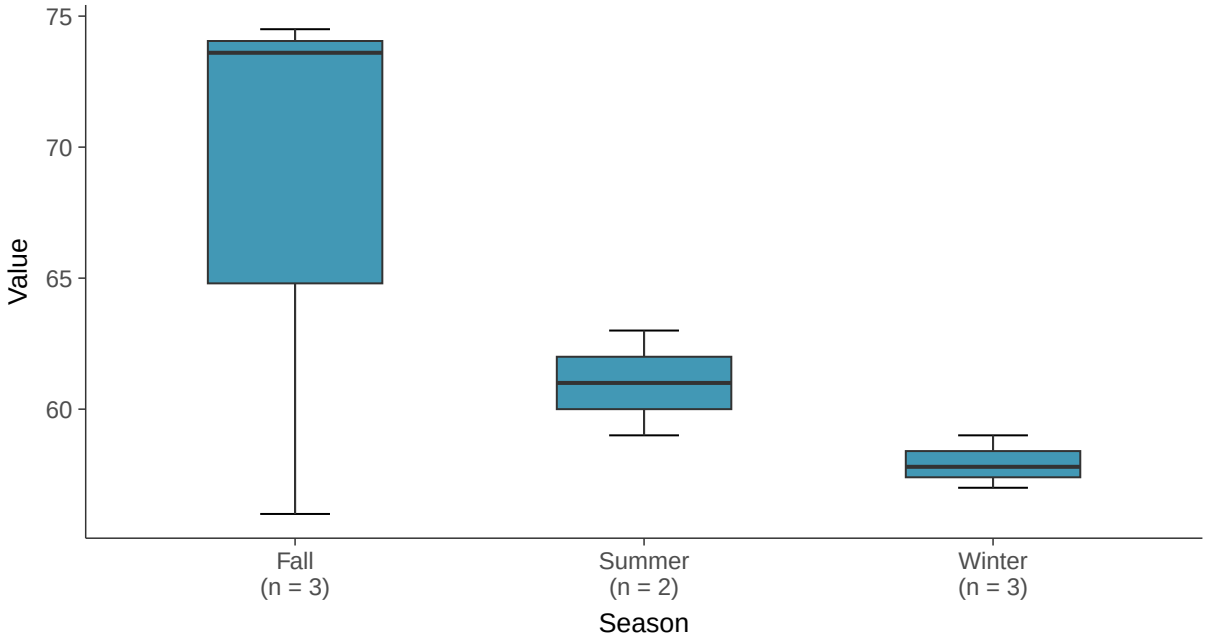
Boxplot

Chloride, MW-17C (mg/l)



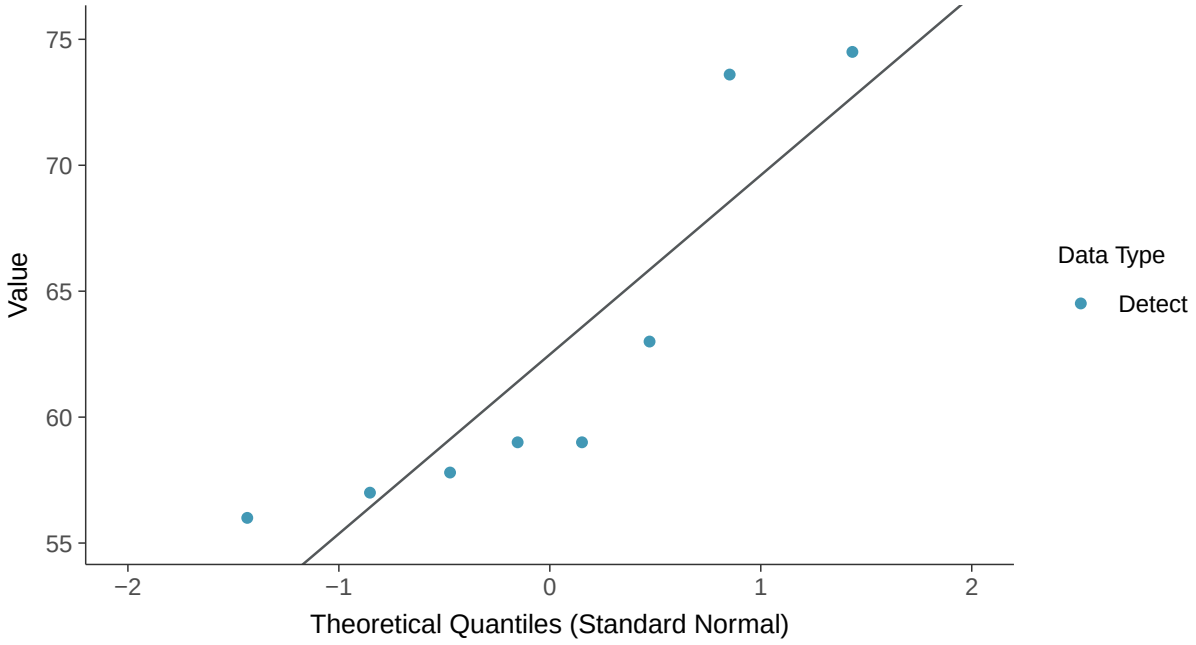
Boxplot by Season

Chloride, MW-17C (mg/l)



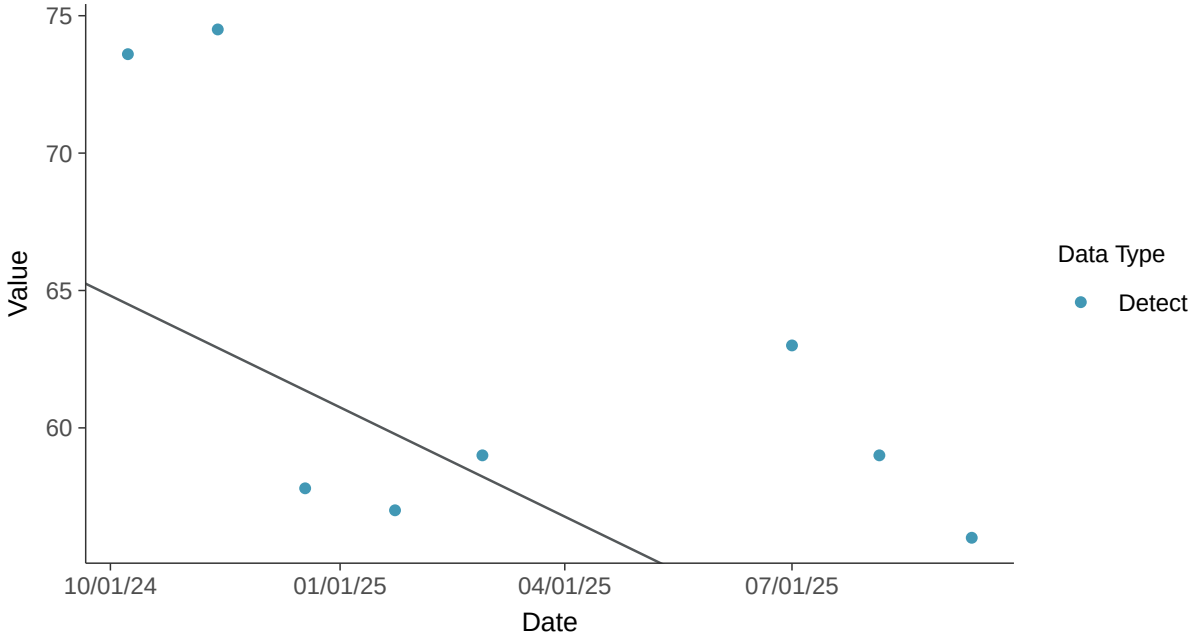
Normal Q-Q plot

Chloride, MW-17C (mg/l)



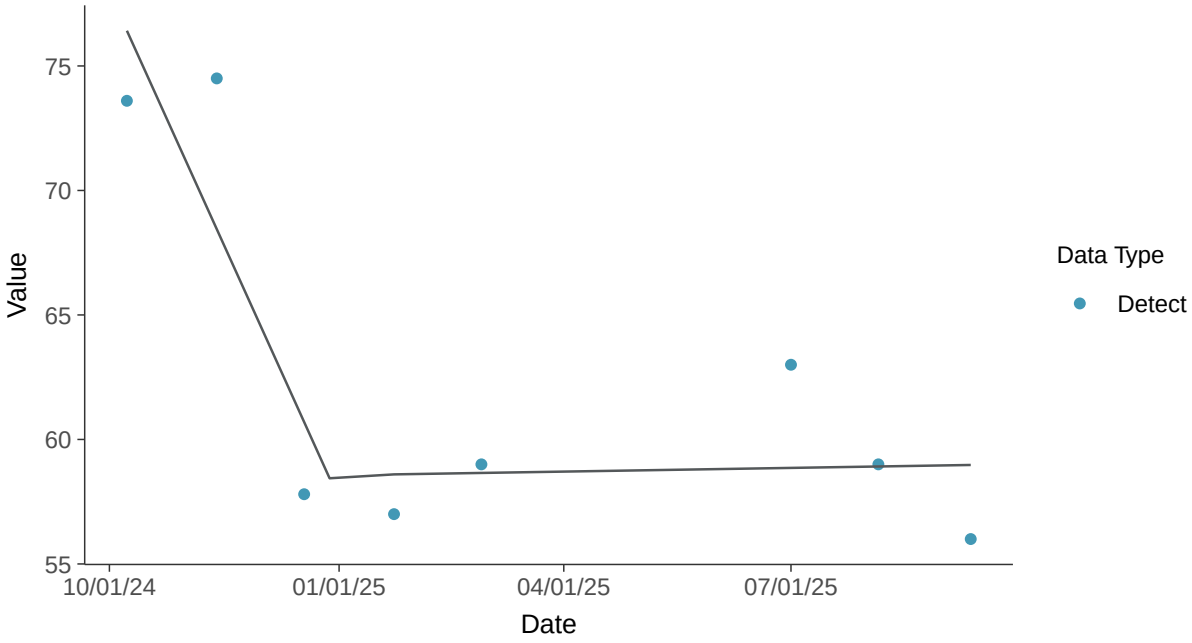
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Chloride, MW-17C (mg/l)



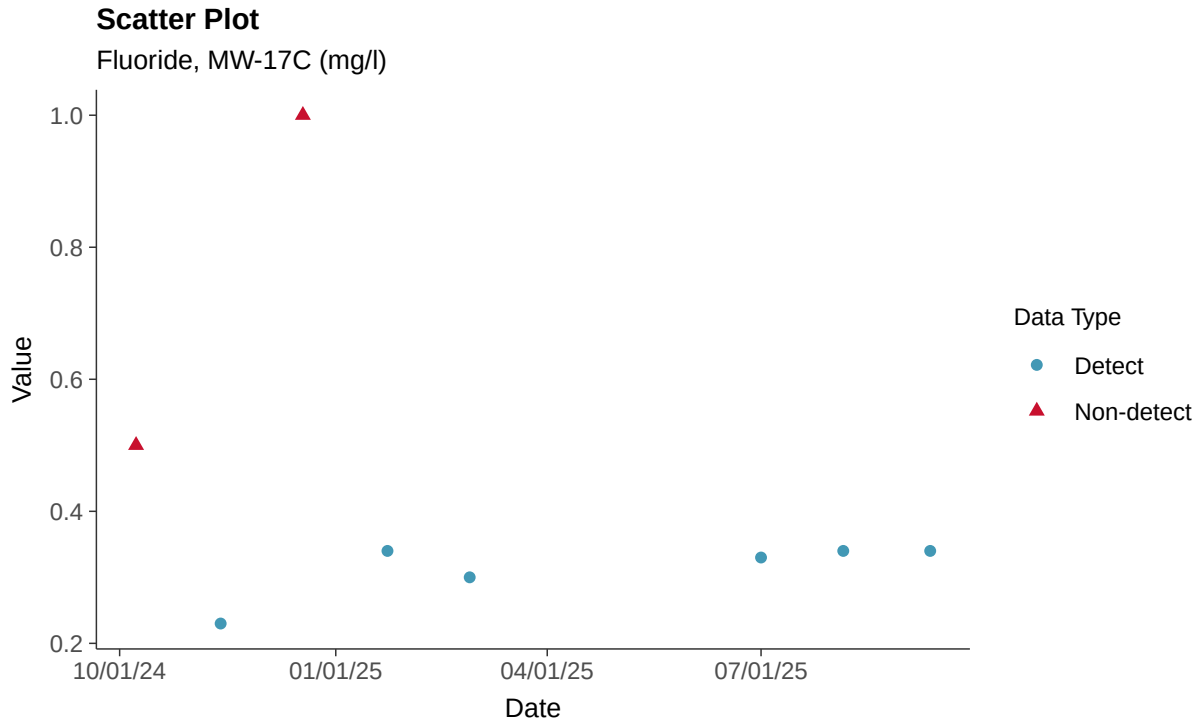
Trend Regression: Piecewise Linear-Linear

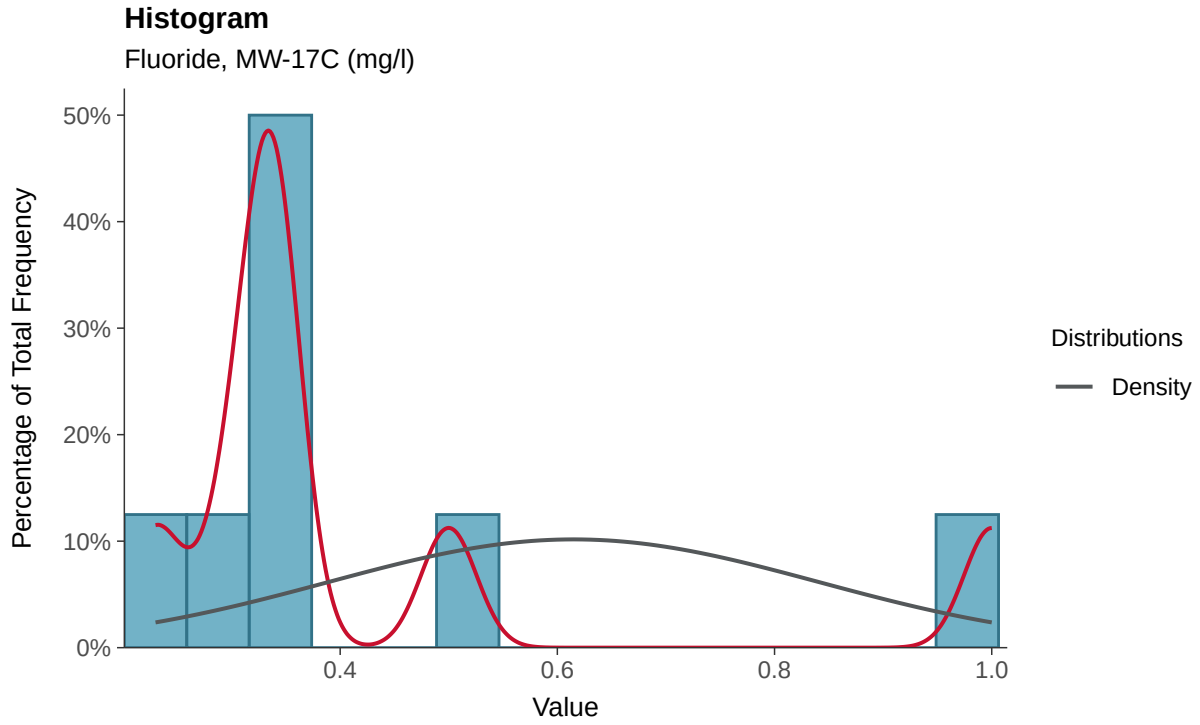
Chloride, MW-17C (mg/l)



Appendix III: Fluoride, MW-17C

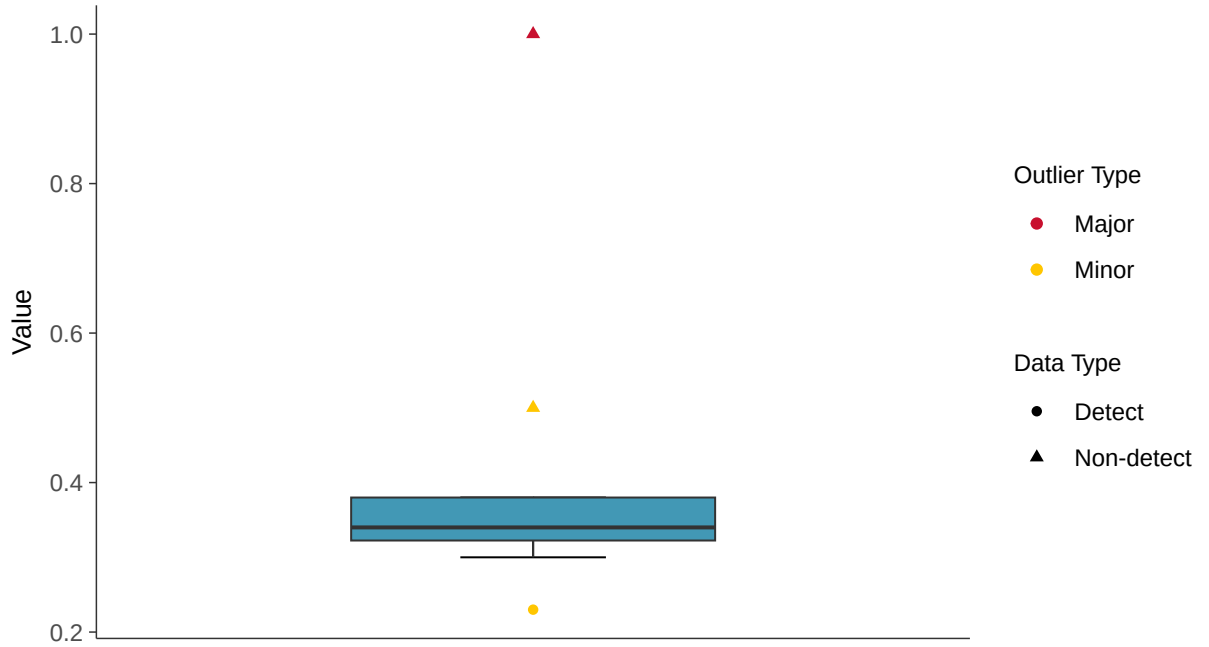
ID: 29_2_112





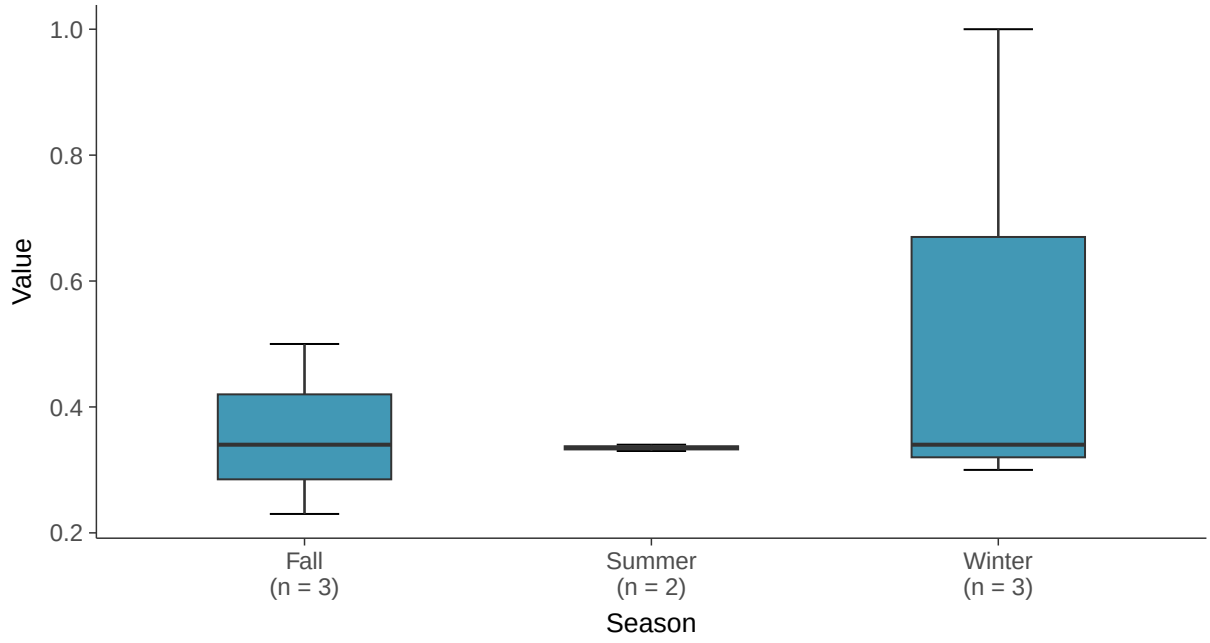
Boxplot

Fluoride, MW-17C (mg/l)



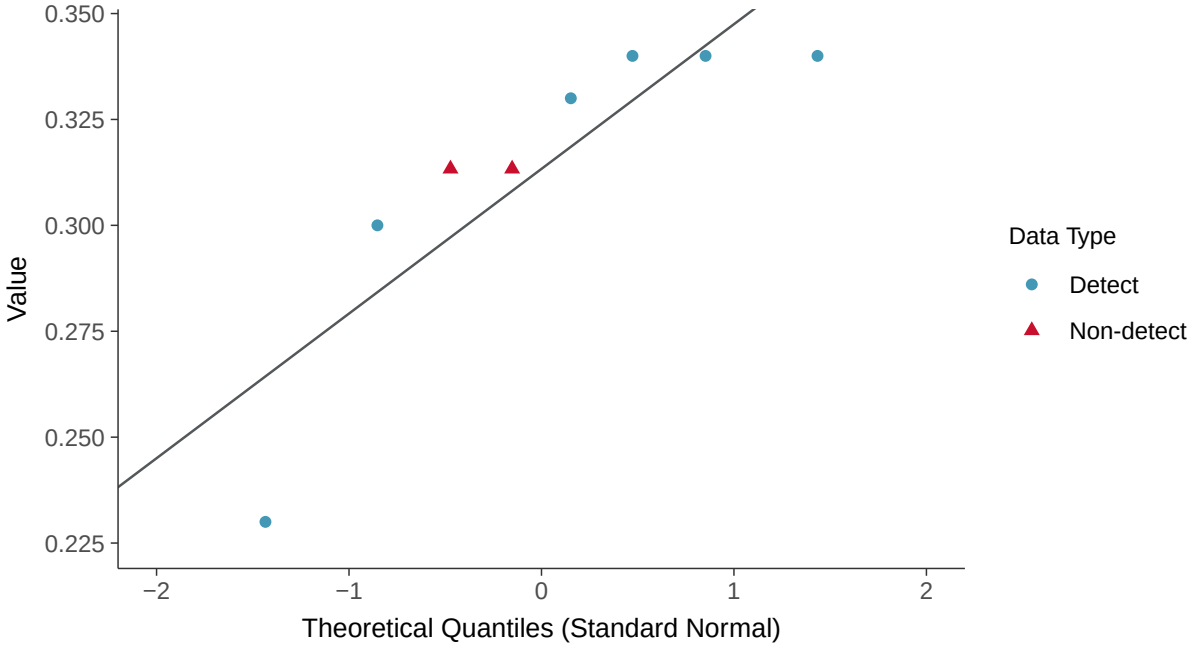
Boxplot by Season

Fluoride, MW-17C (mg/l)



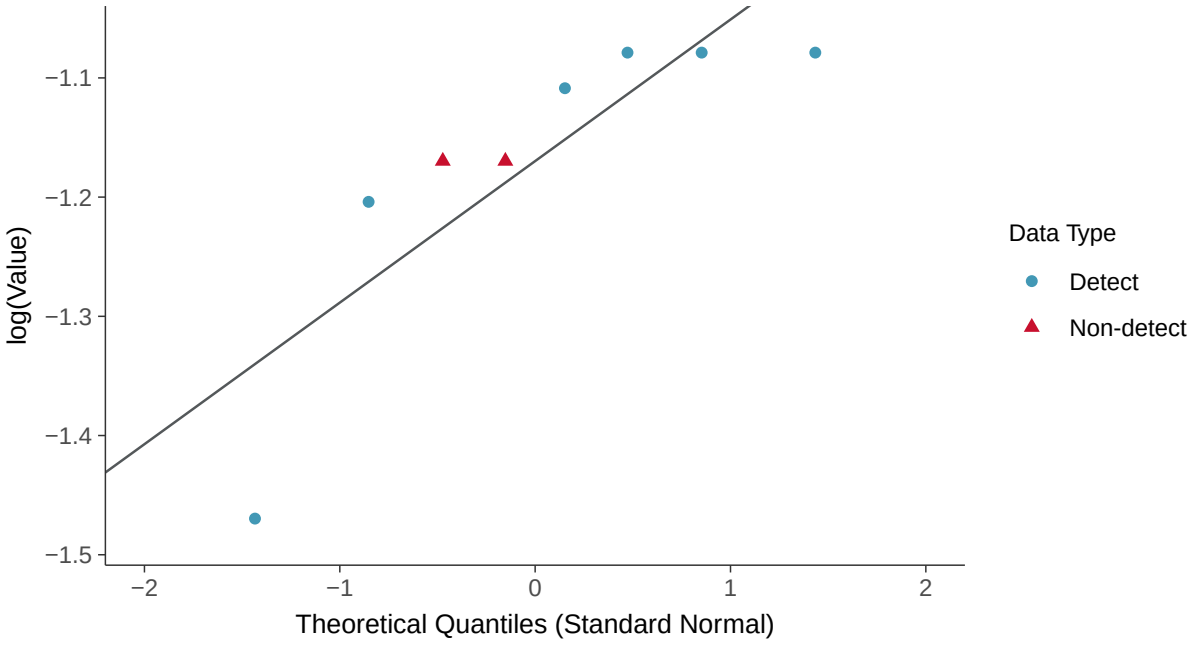
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17C (mg/l)



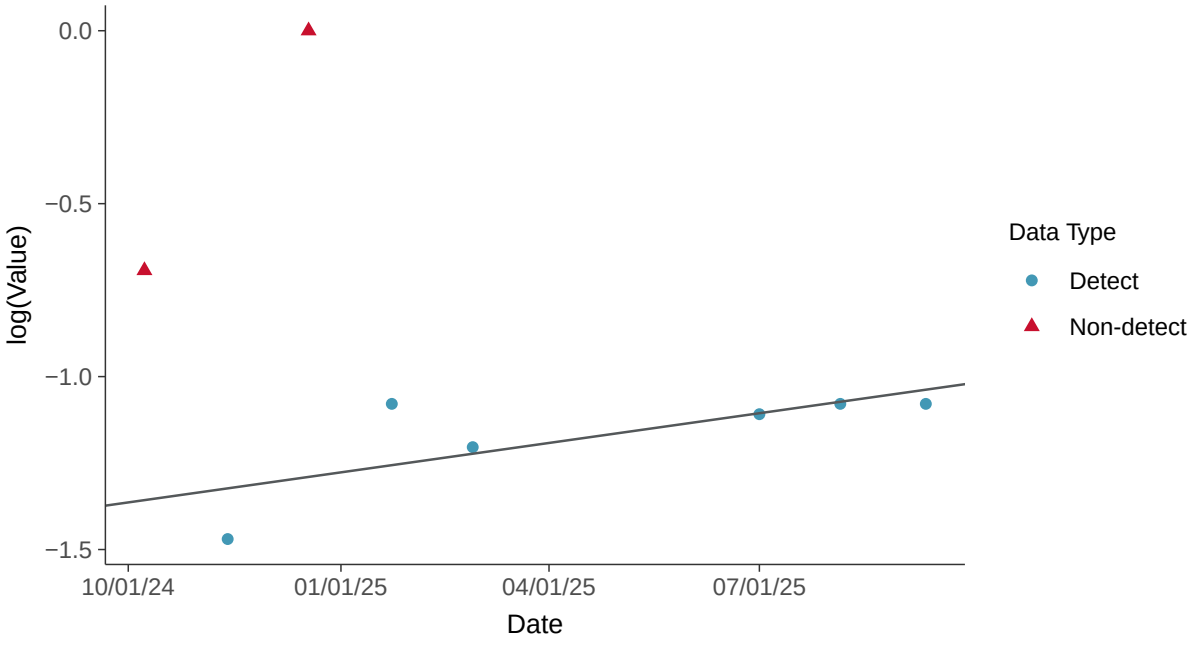
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-17C (mg/l)



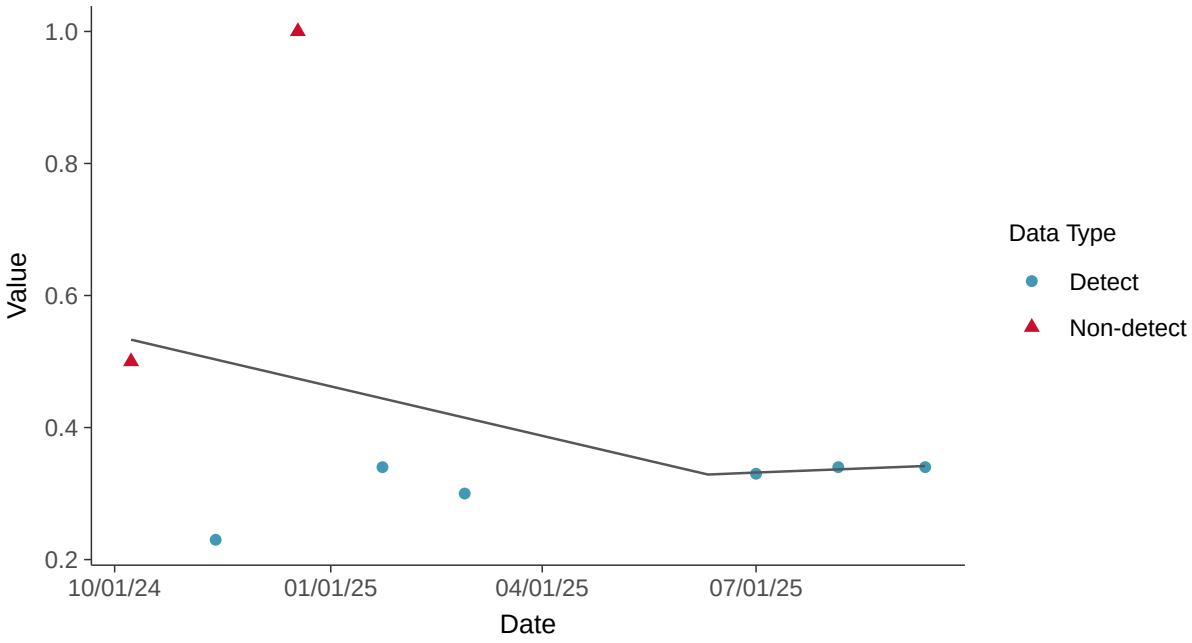
Trend Regression: Lognormal MLE

Fluoride, MW-17C (mg/l)



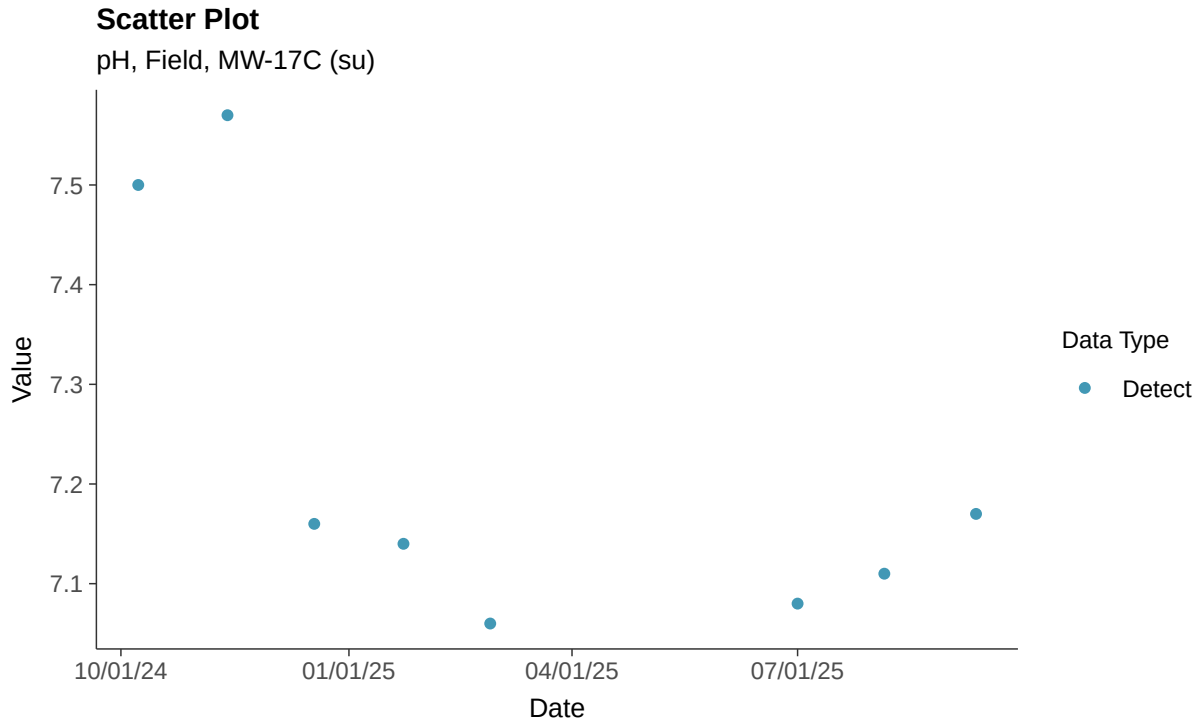
Trend Regression: Piecewise Linear-Linear

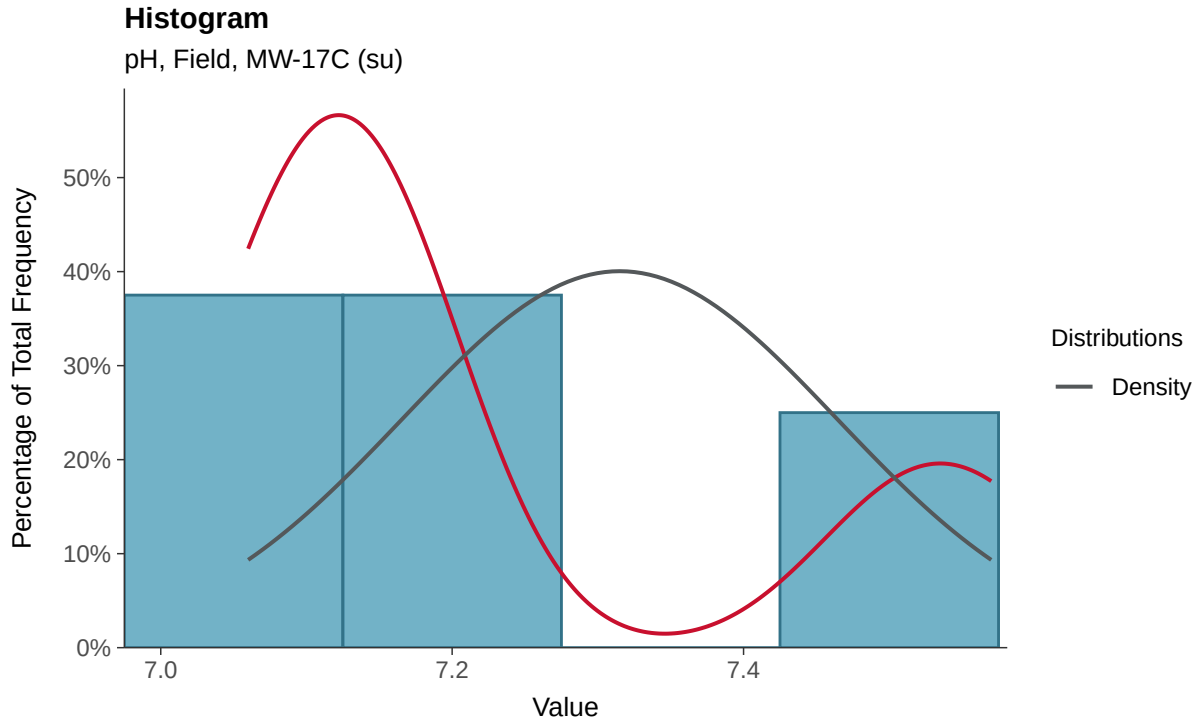
Fluoride, MW-17C (mg/l)



Appendix III: pH, Field, MW-17C

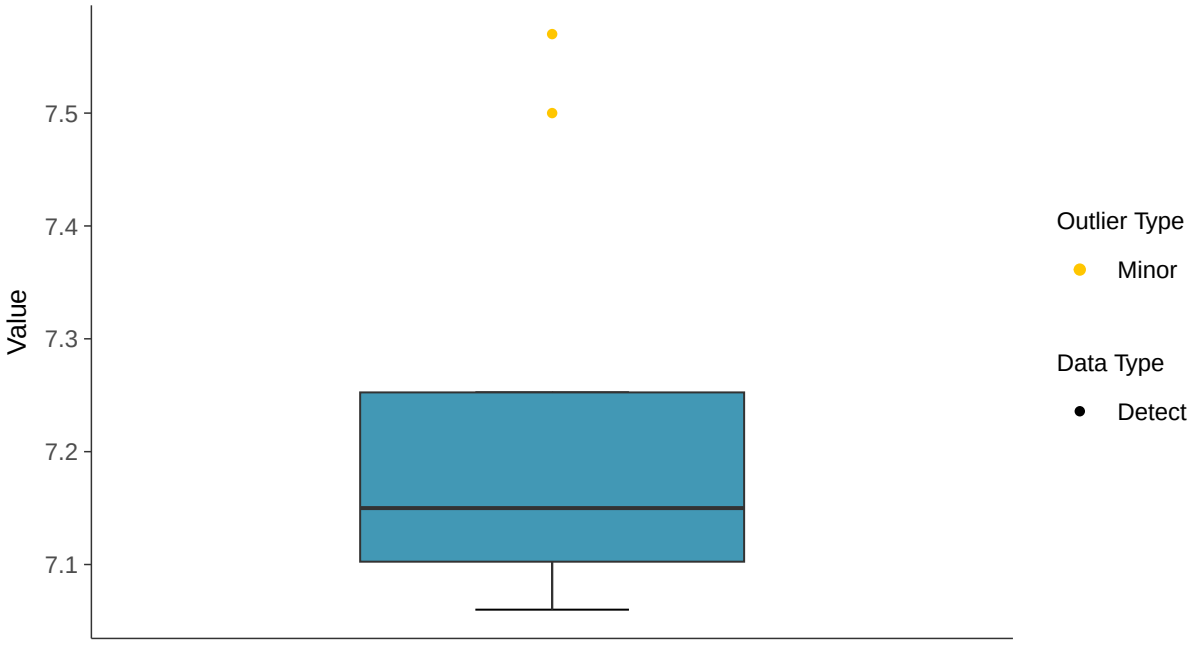
ID: 29_2_120





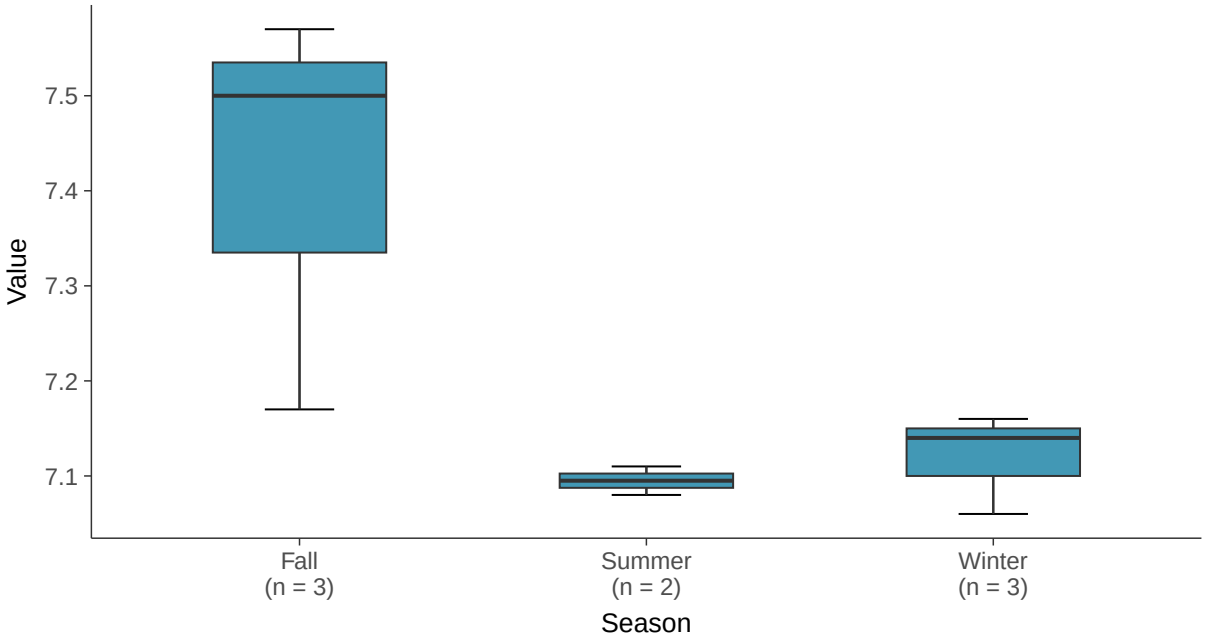
Boxplot

pH, Field, MW-17C (su)



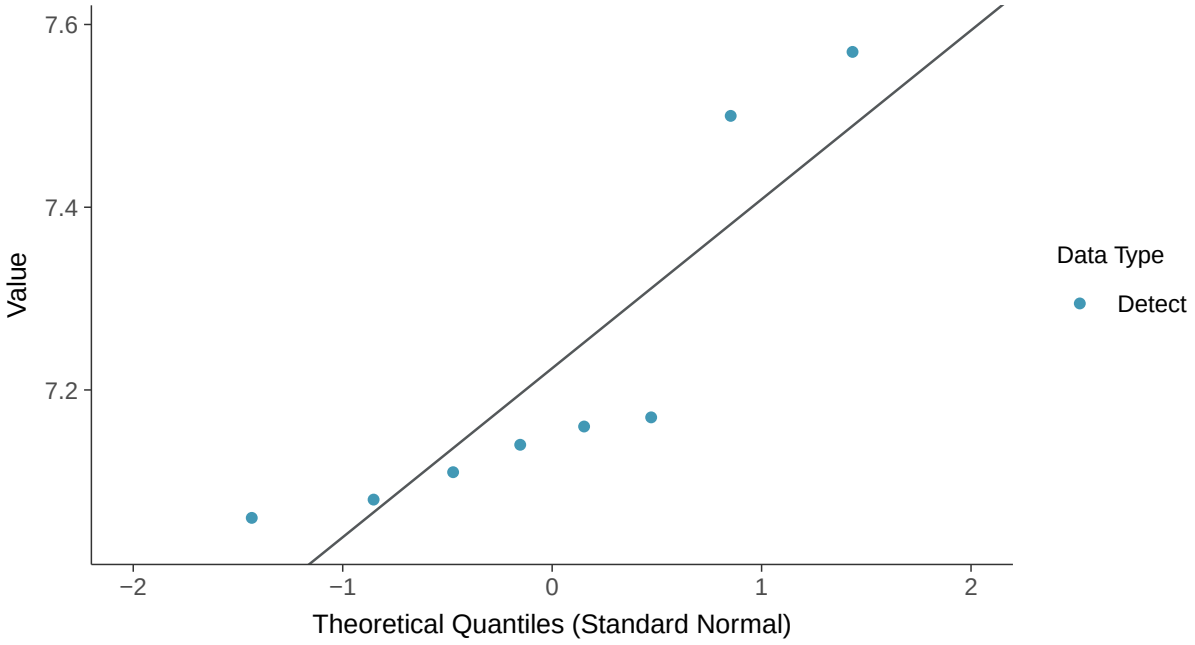
Boxplot by Season

pH, Field, MW-17C (su)



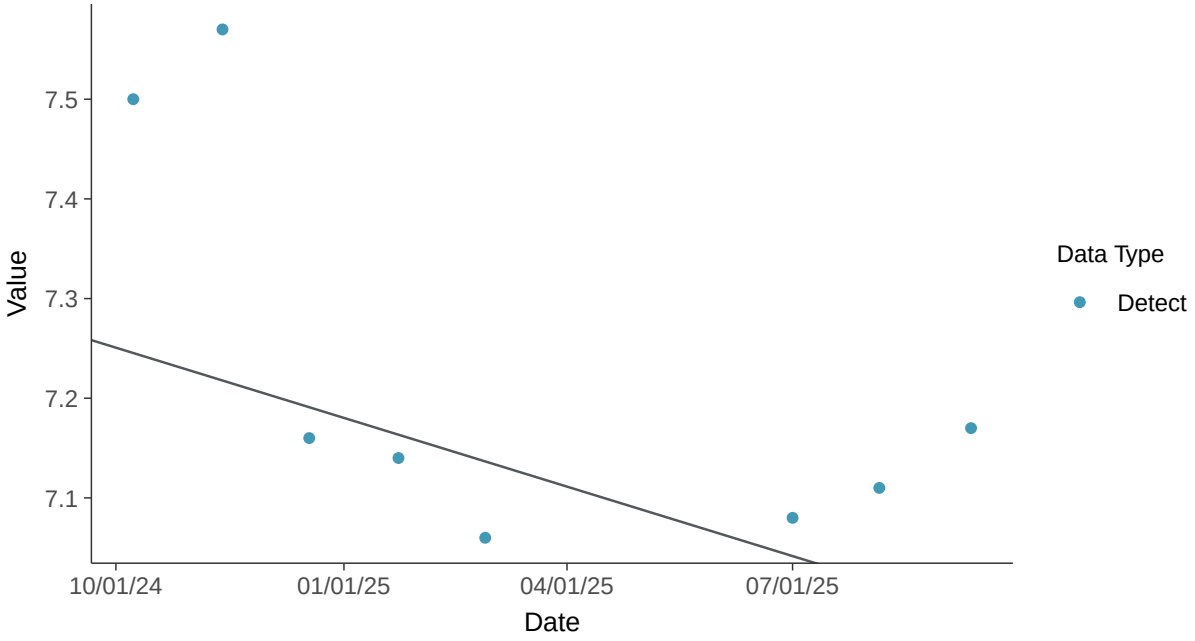
Normal Q-Q plot

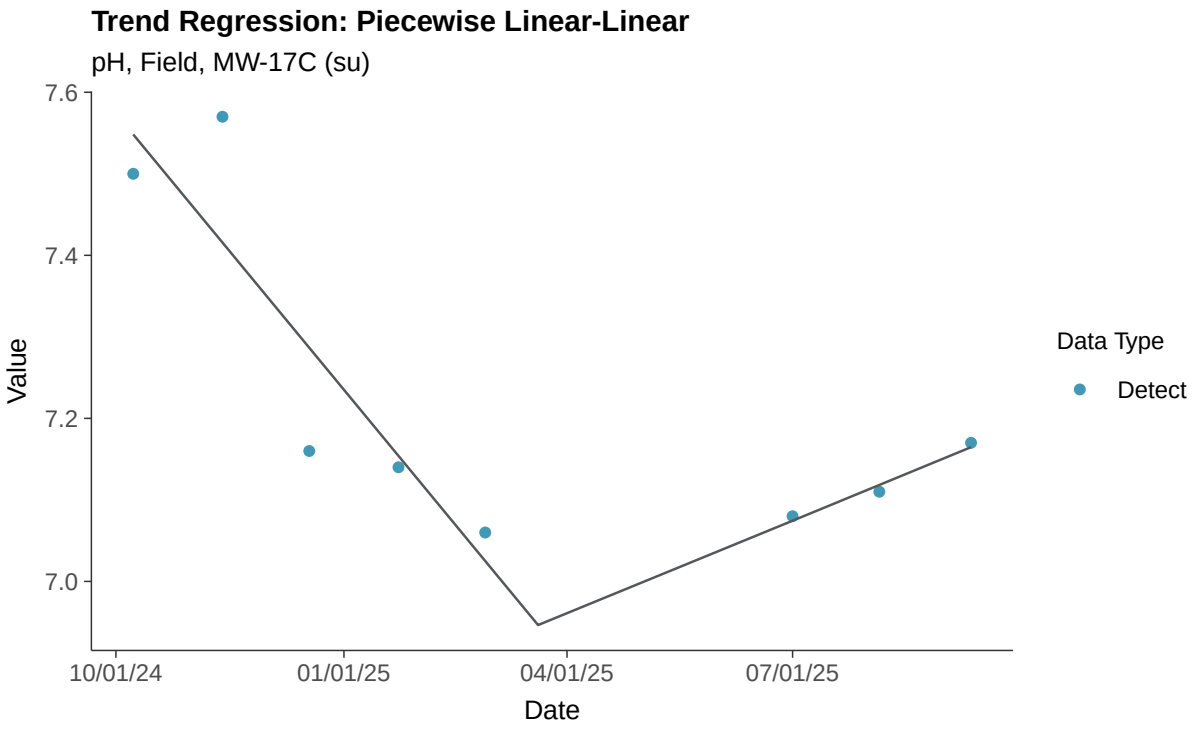
pH, Field, MW-17C (su)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

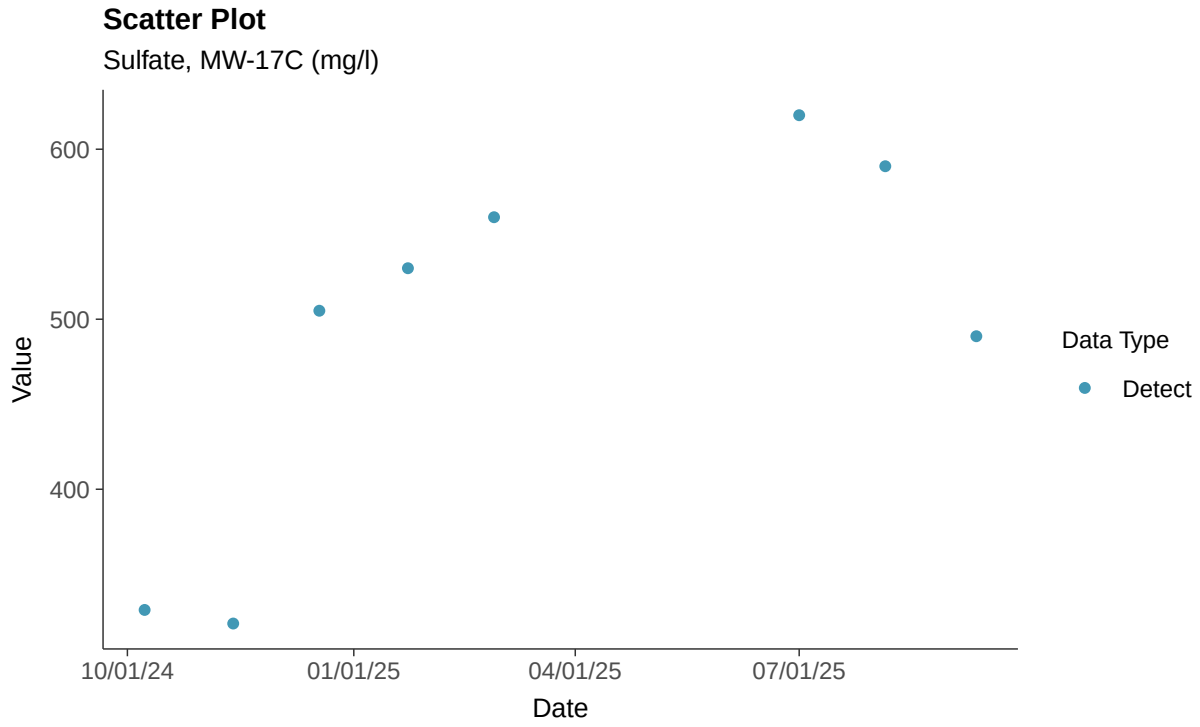
pH, Field, MW-17C (su)

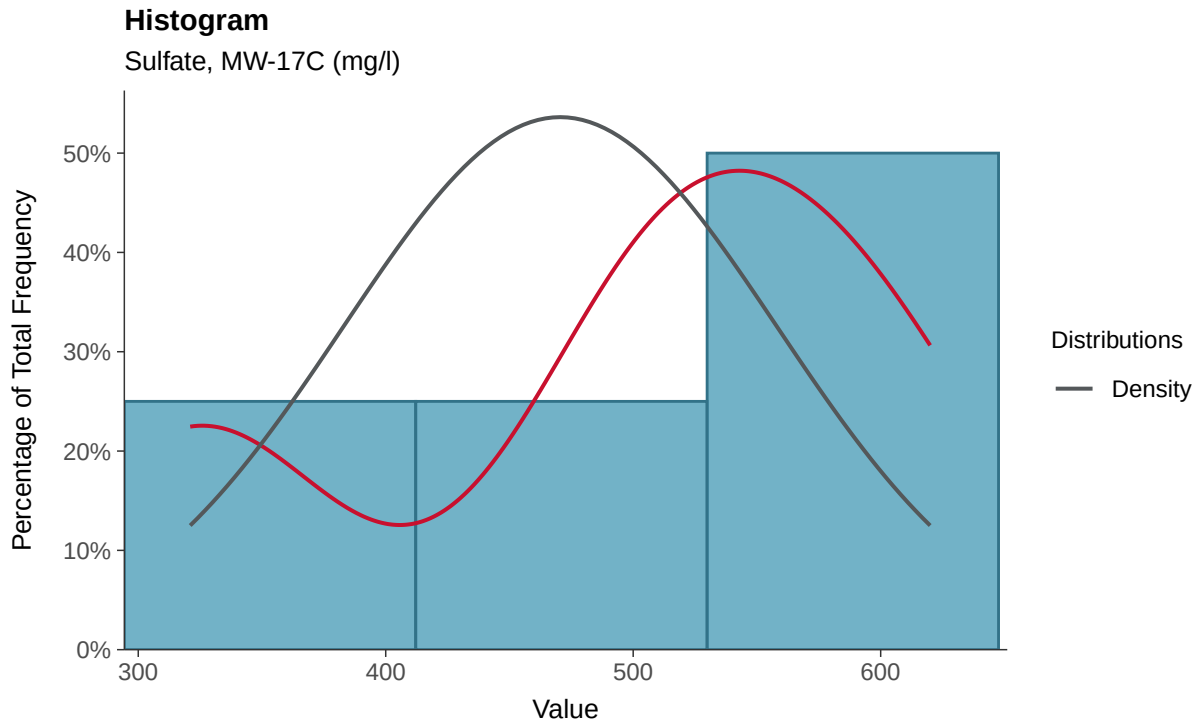



Trend Regression: Piecewise Linear-Linear
pH, Field, MW-17C (su)
7.6
7.4
7.2
7.0
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix III: Sulfate, MW-17C

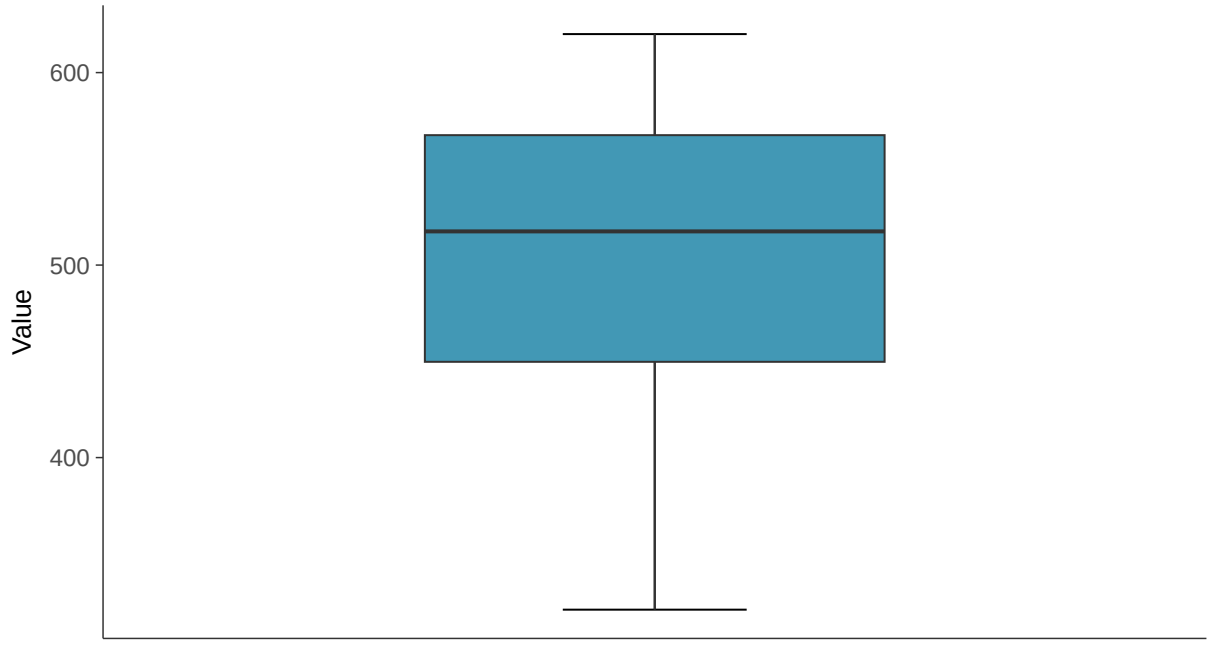
ID: 29_2_124





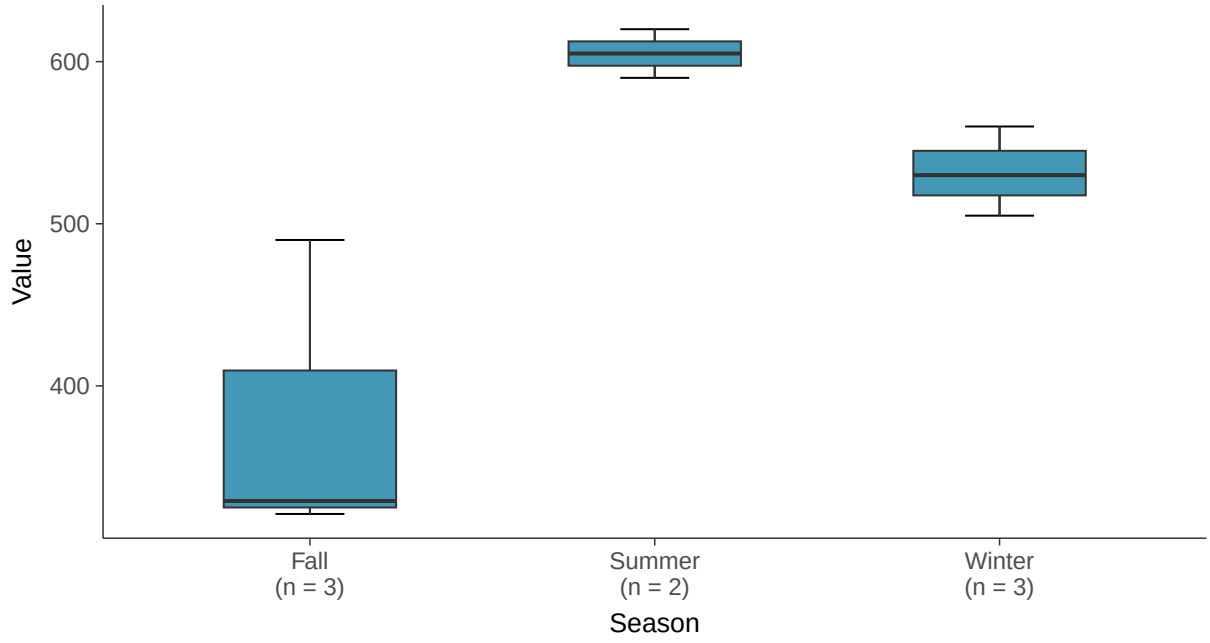
Boxplot

Sulfate, MW-17C (mg/l)



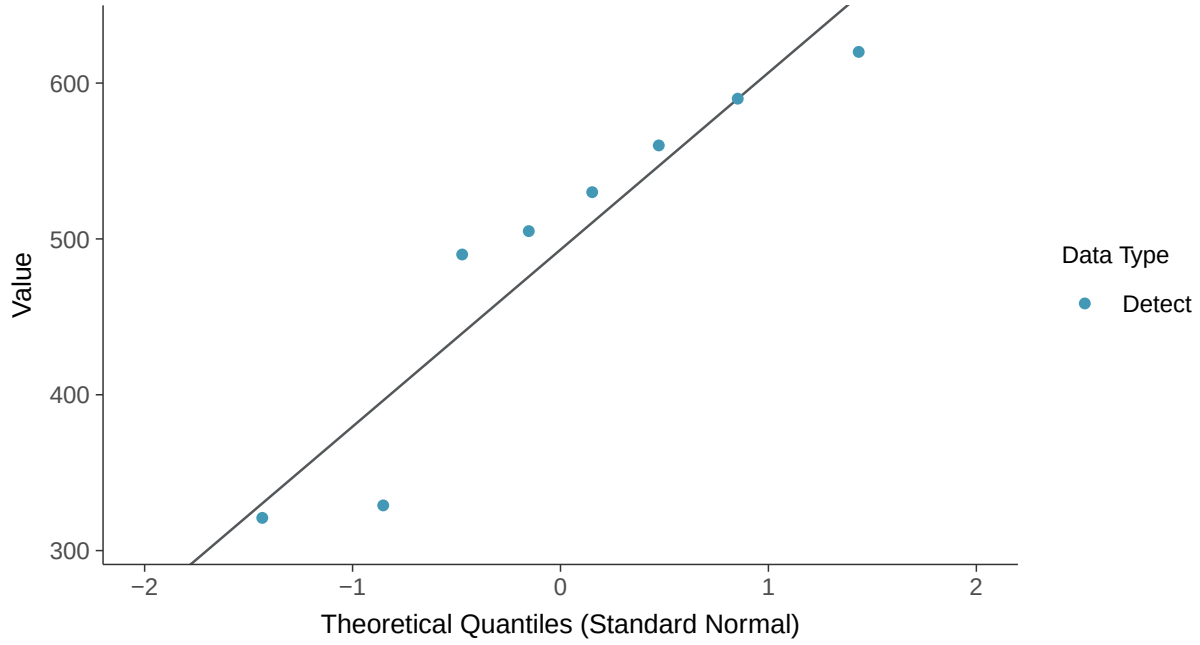
Boxplot by Season

Sulfate, MW-17C (mg/l)



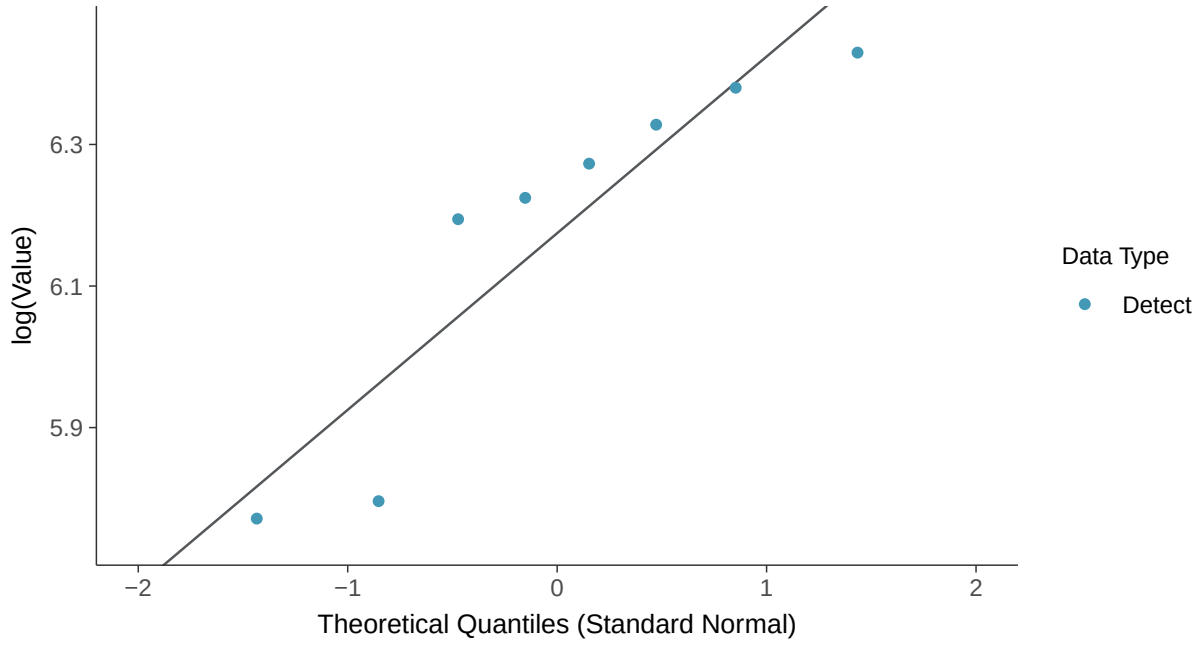
Normal Q-Q plot

Sulfate, MW-17C (mg/l)



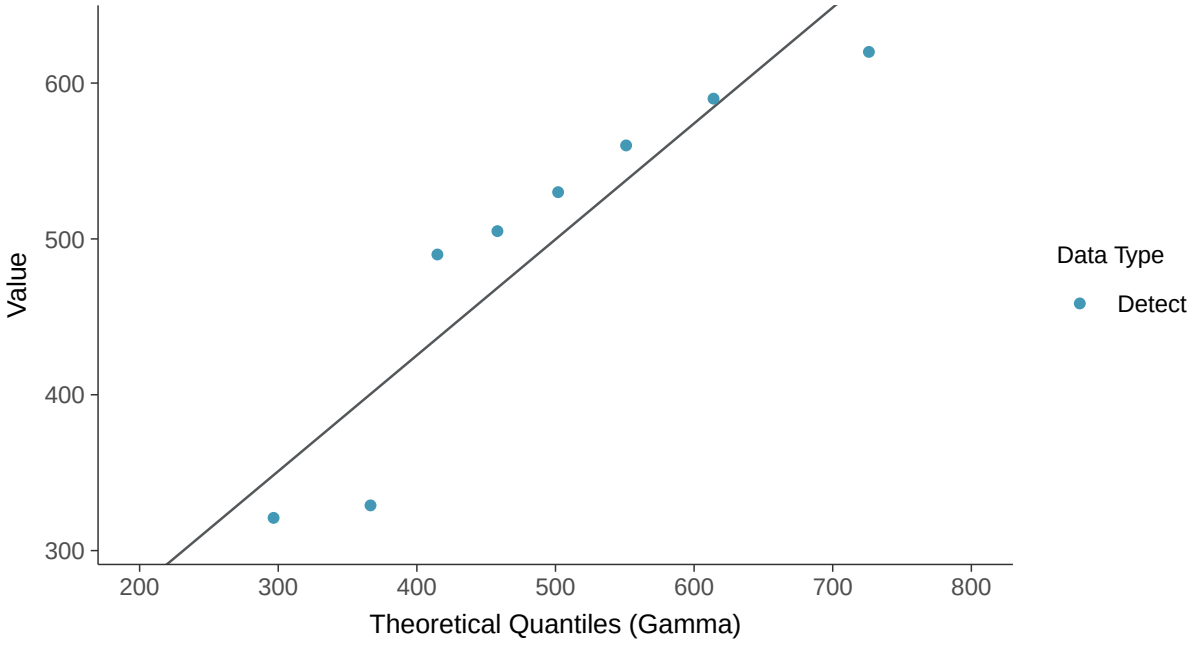
Lognormal Q-Q plot

Sulfate, MW-17C (mg/l)



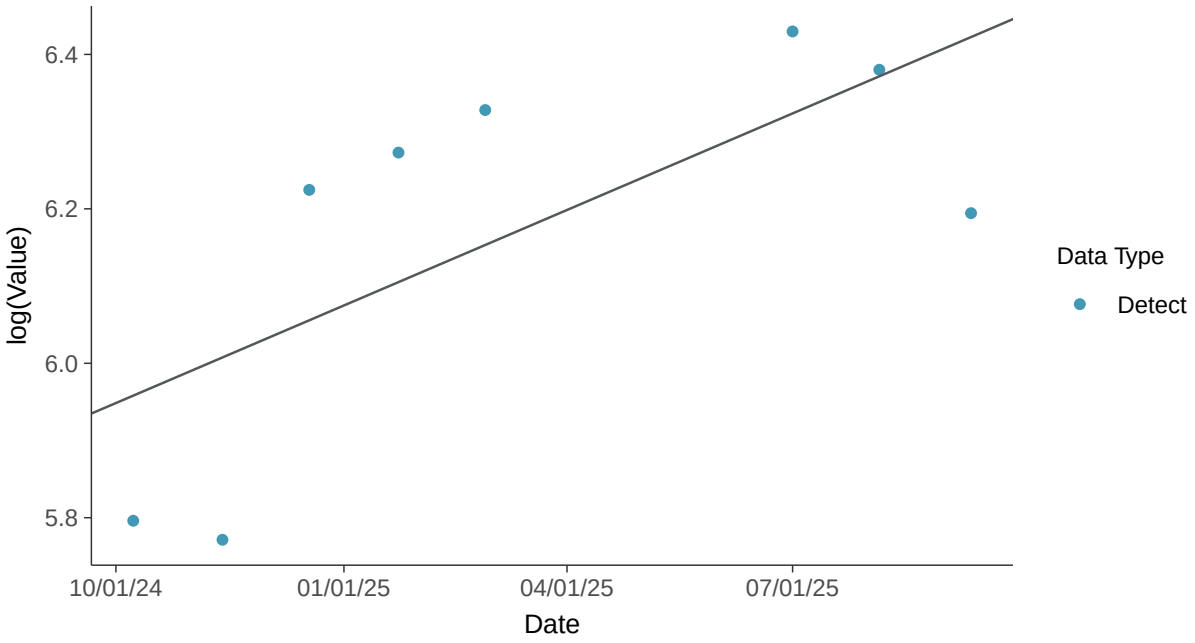
Gamma Q-Q plot

Sulfate, MW-17C (mg/l)



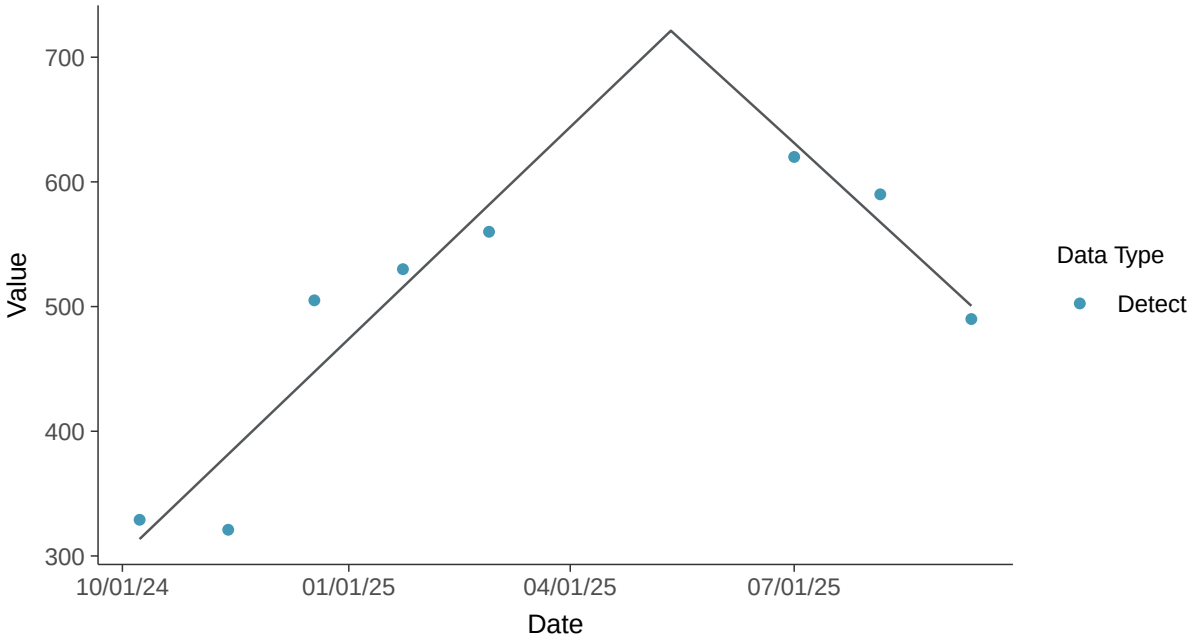
Trend Regression: Lognormal MLE

Sulfate, MW-17C (mg/l)



Trend Regression: Piecewise Linear-Linear

Sulfate, MW-17C (mg/l)

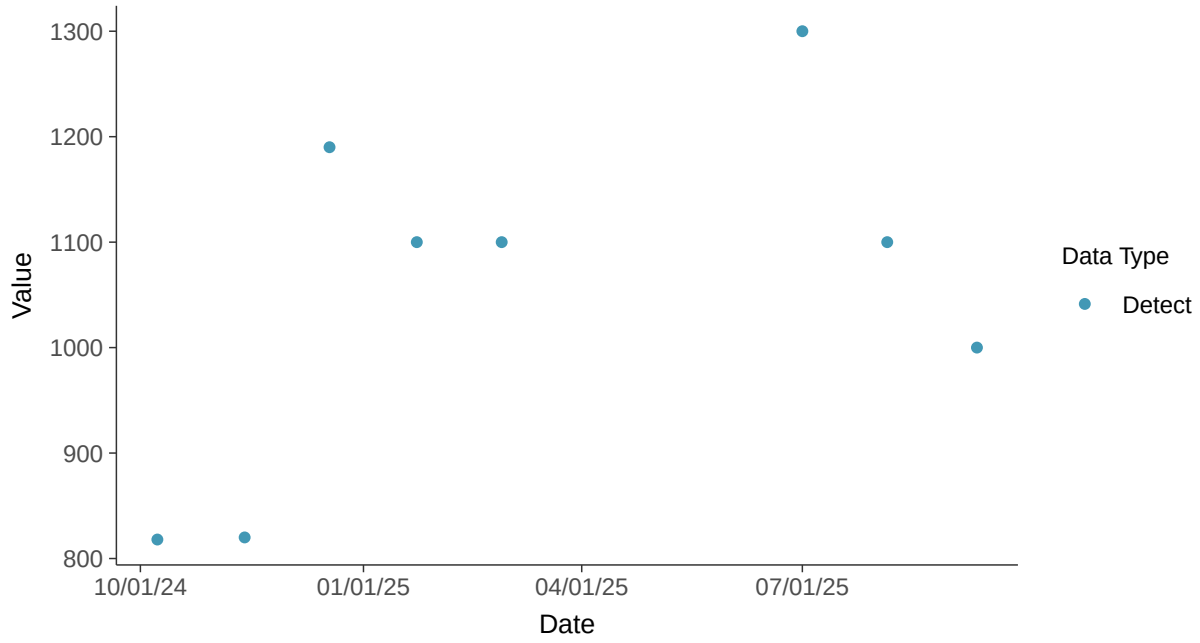


Appendix III: Total Dissolved Solids, MW-17C

ID: 29_2_126

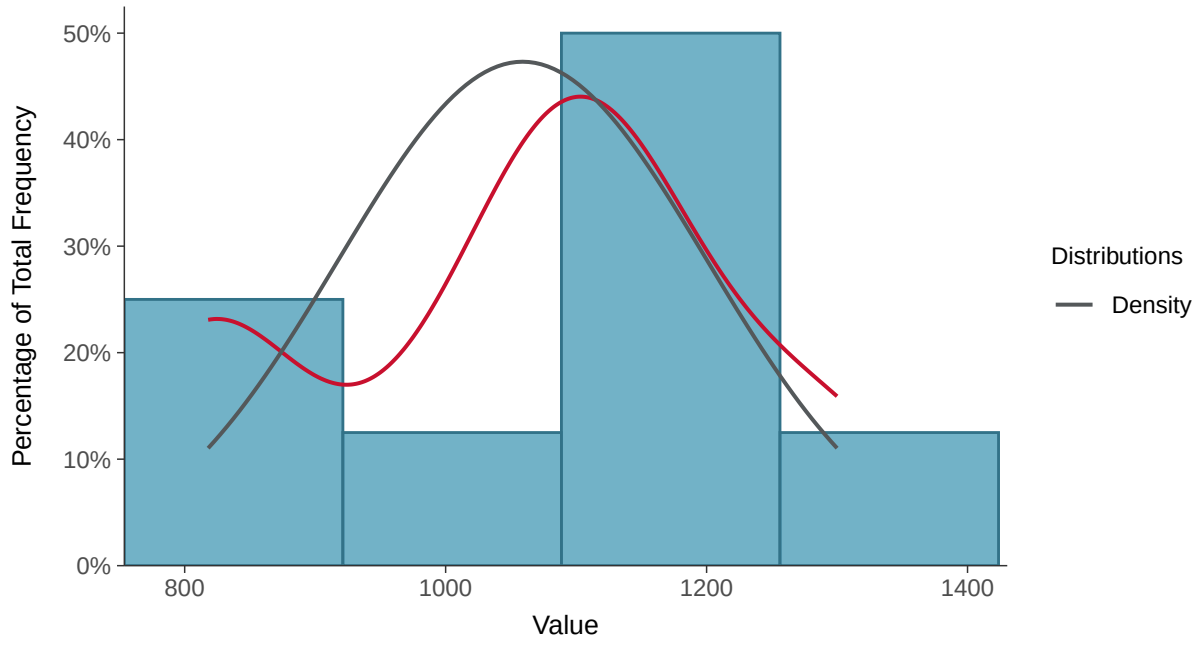
Scatter Plot

Total Dissolved Solids, MW-17C (mg/l)



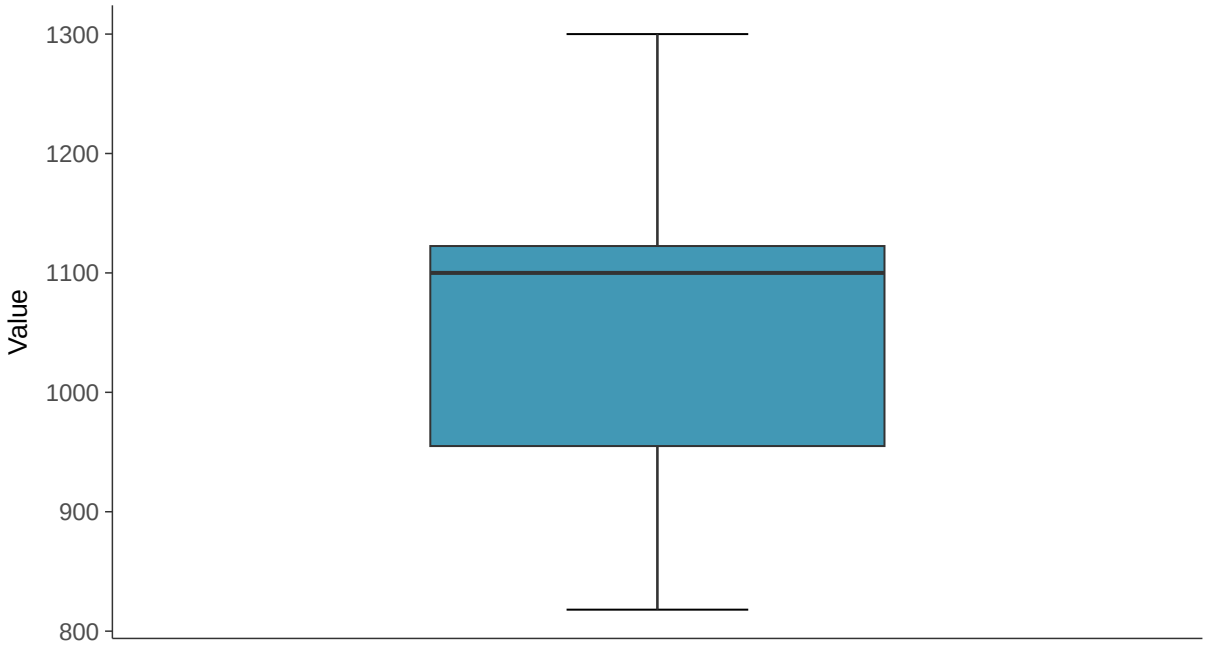
Histogram

Total Dissolved Solids, MW-17C (mg/l)



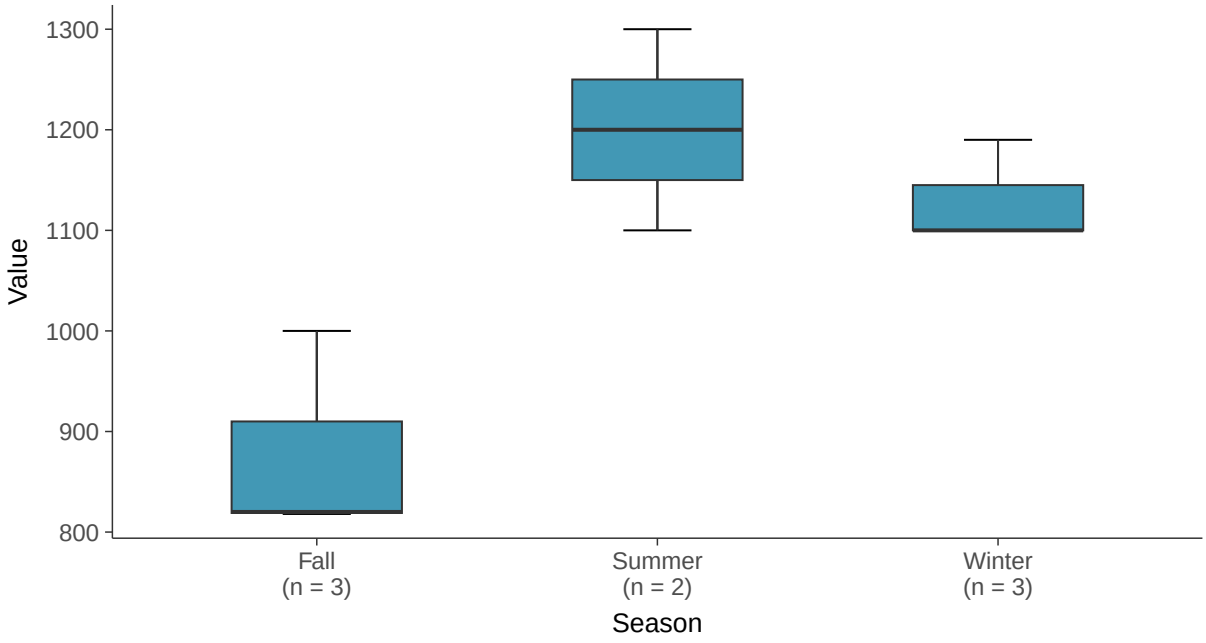
Boxplot

Total Dissolved Solids, MW-17C (mg/l)



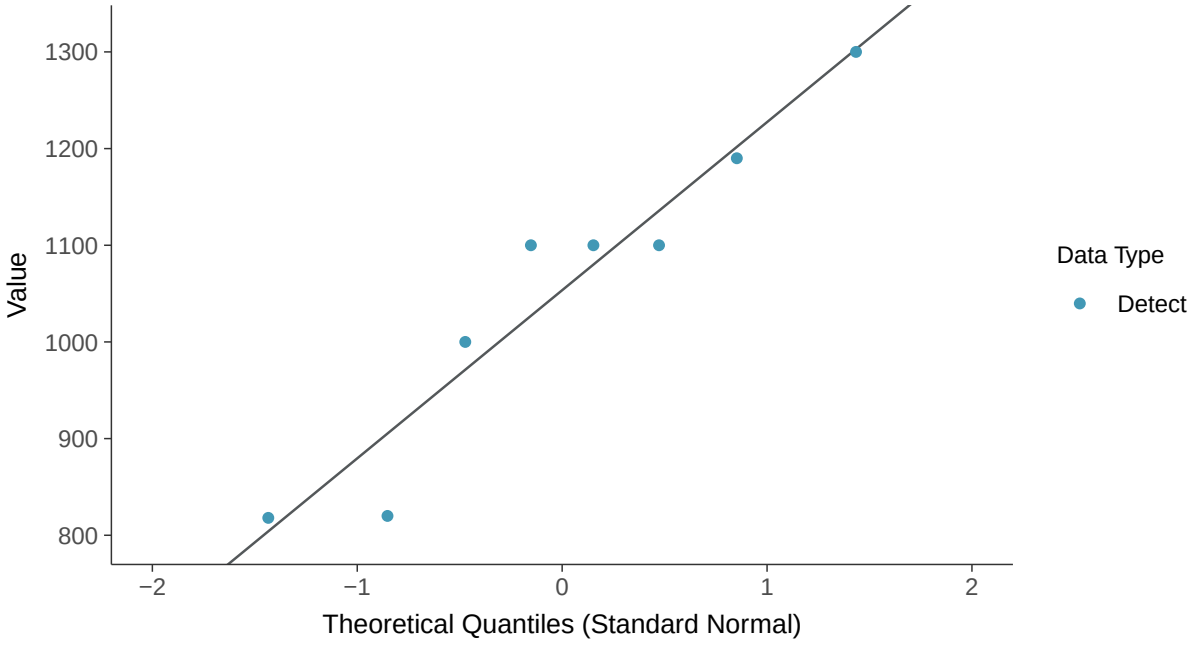
Boxplot by Season

Total Dissolved Solids, MW-17C (mg/l)



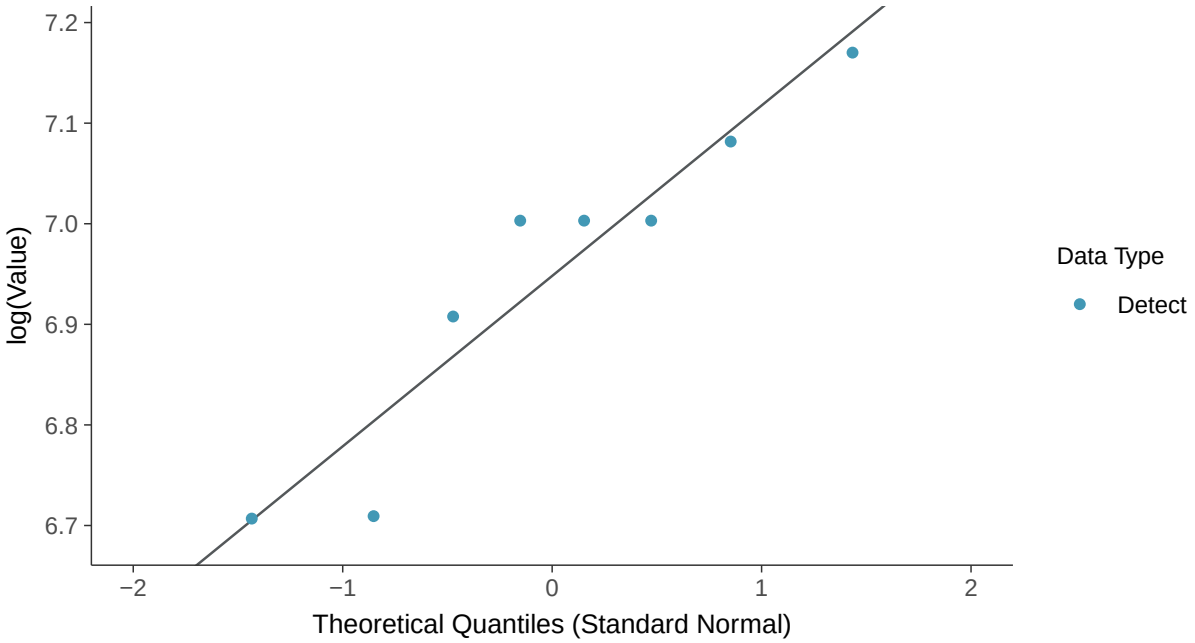
Normal Q-Q plot

Total Dissolved Solids, MW-17C (mg/l)



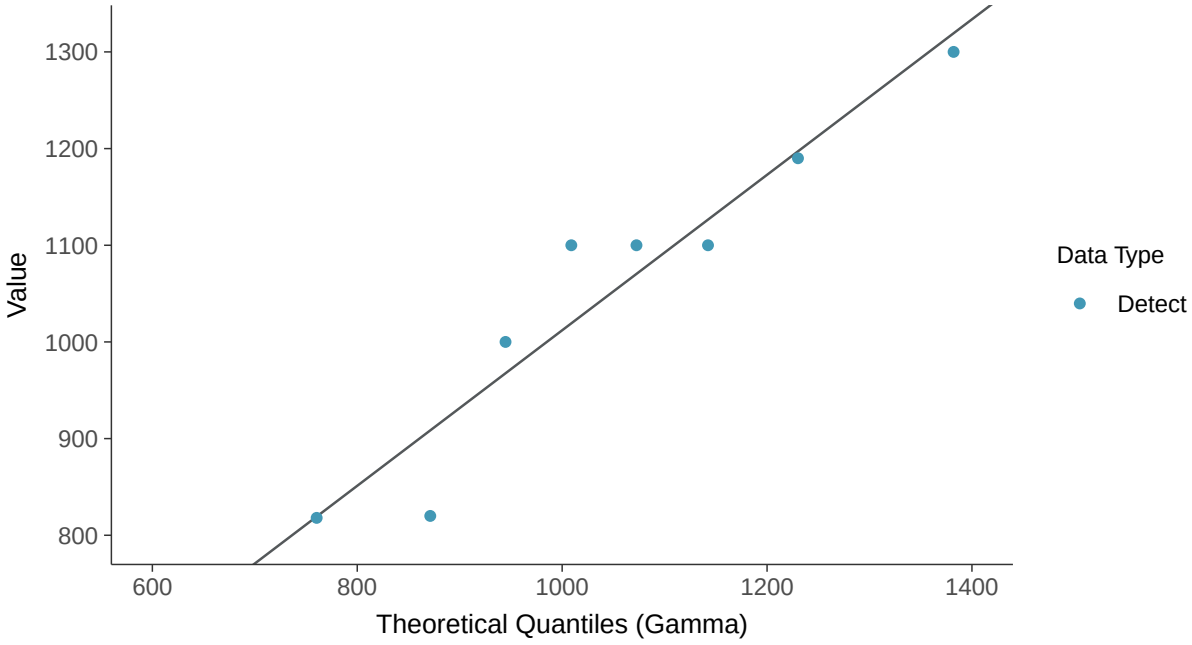
Lognormal Q-Q plot

Total Dissolved Solids, MW-17C (mg/l)



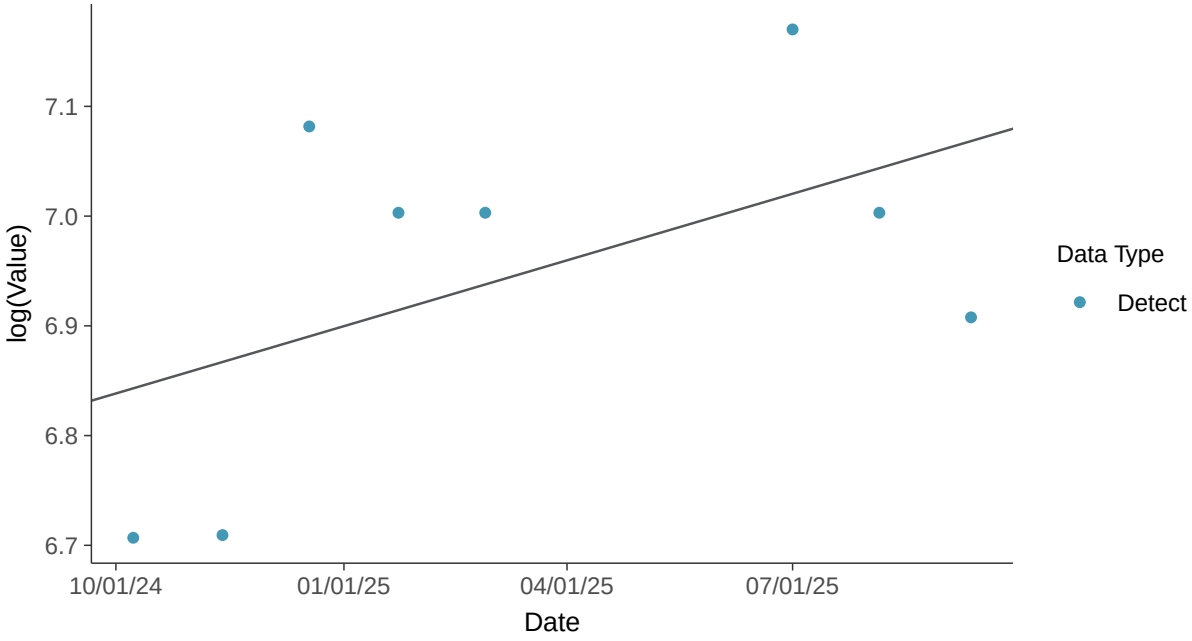
Gamma Q-Q plot

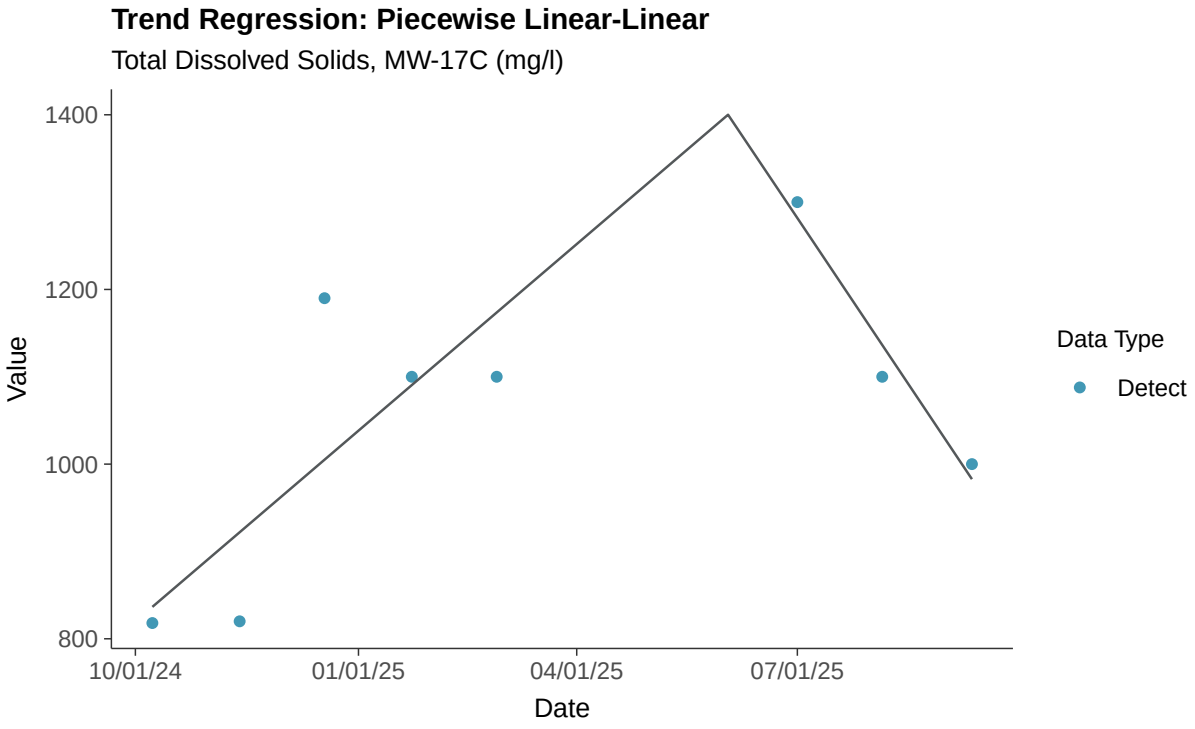
Total Dissolved Solids, MW-17C (mg/l)



Trend Regression: Lognormal MLE

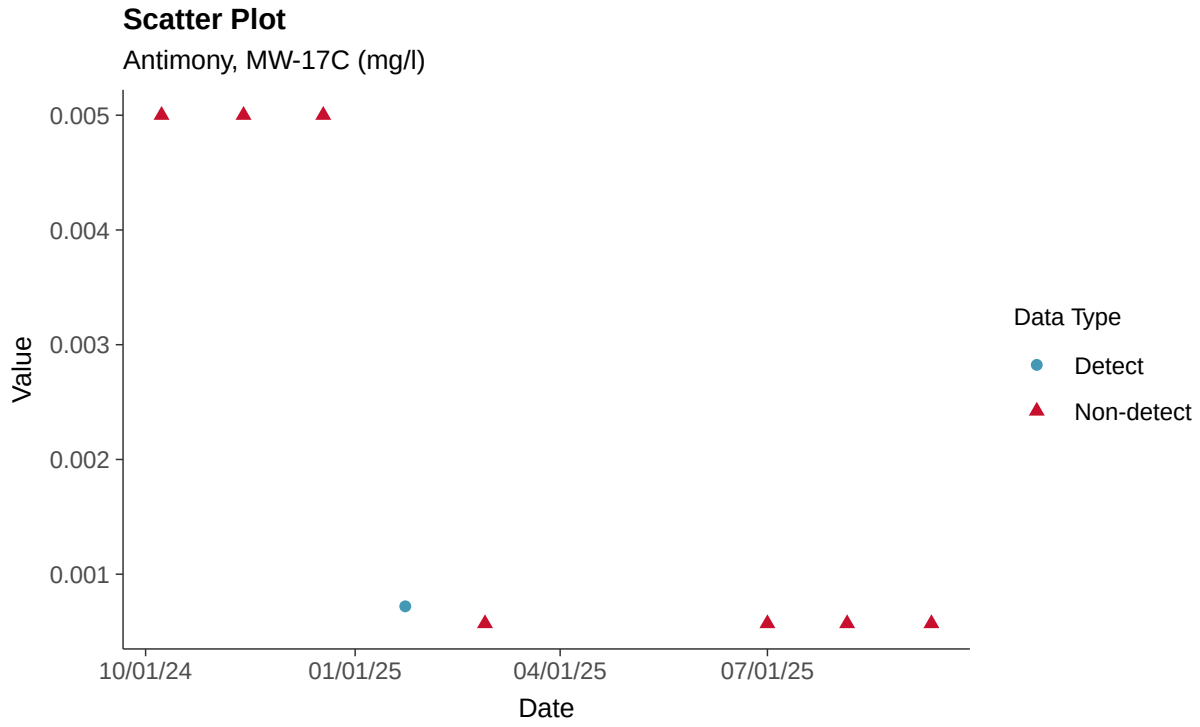
Total Dissolved Solids, MW-17C (mg/l)

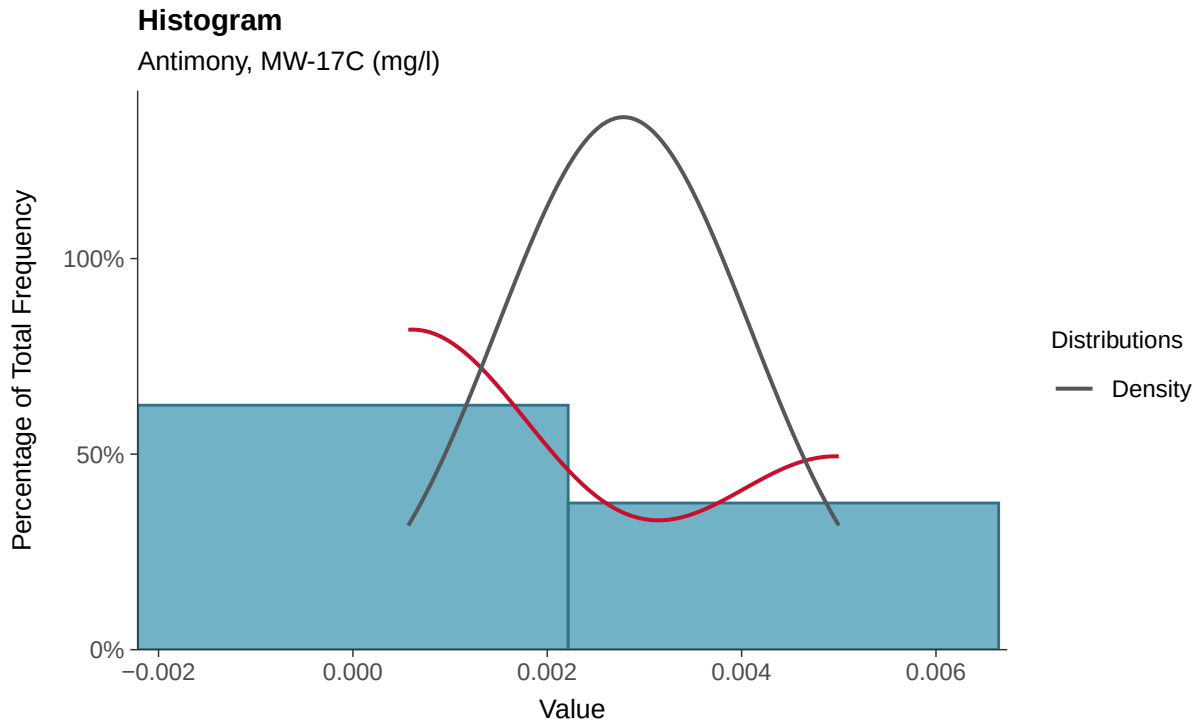



Trend Regression: Piecewise Linear-Linear
Total Dissolved Solids, MW-17C (mg/l)
Value
1400
1200
1000
800
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix IV: Antimony, MW-17C

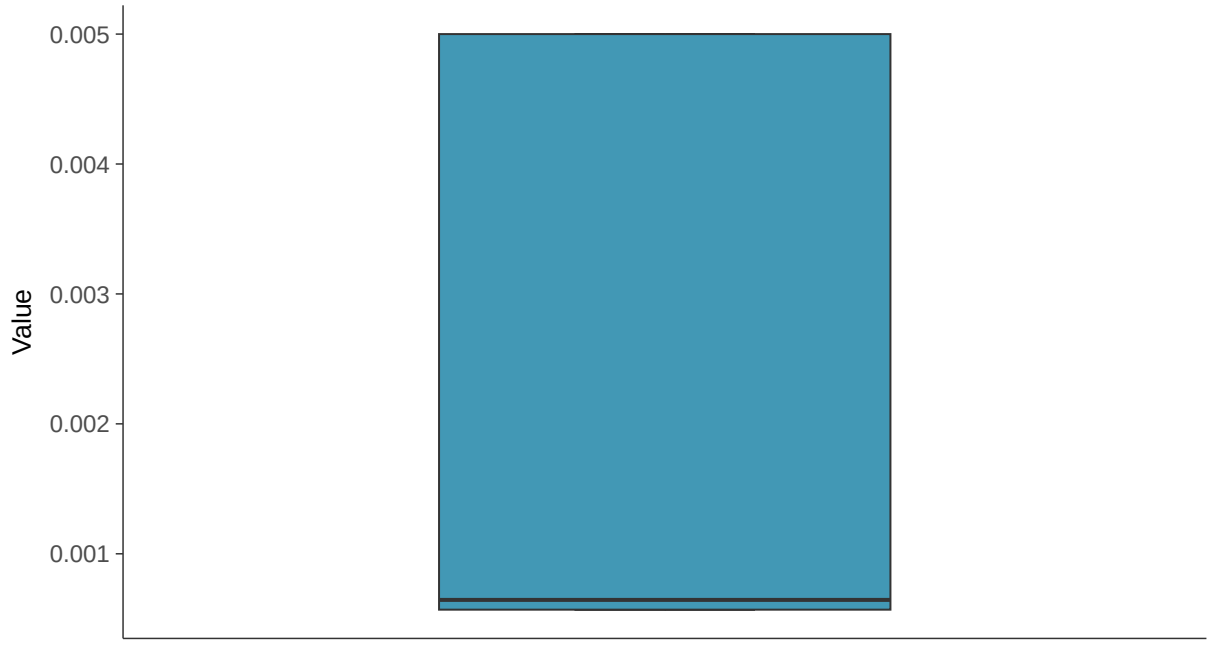
ID: 29_3_101





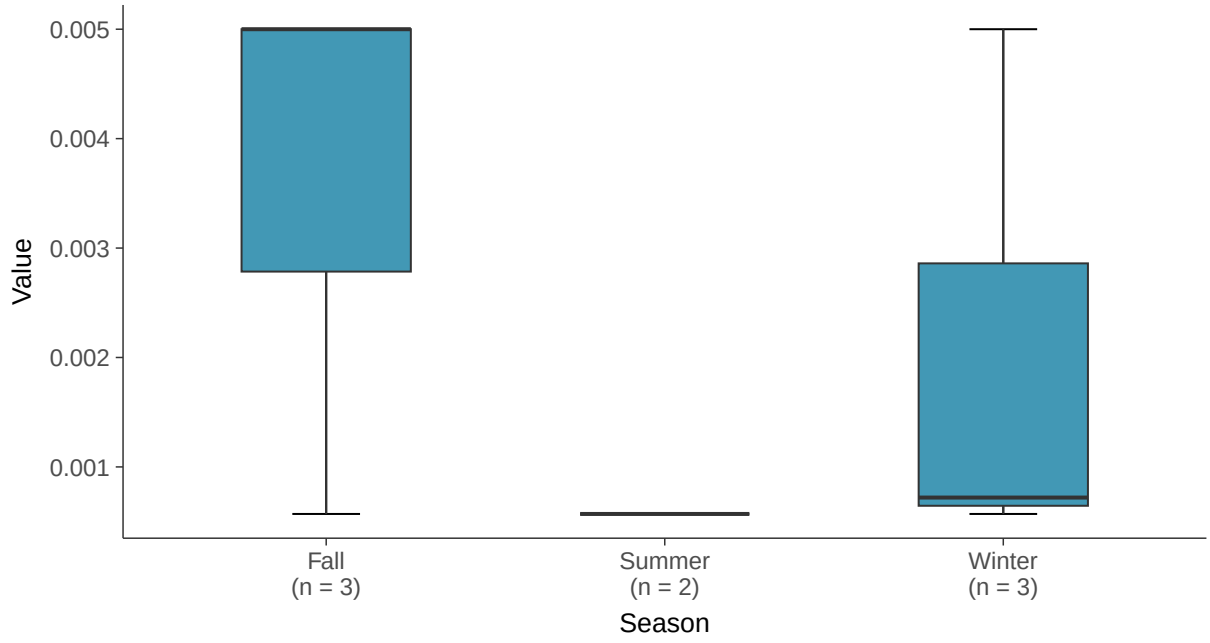
Boxplot

Antimony, MW-17C (mg/l)



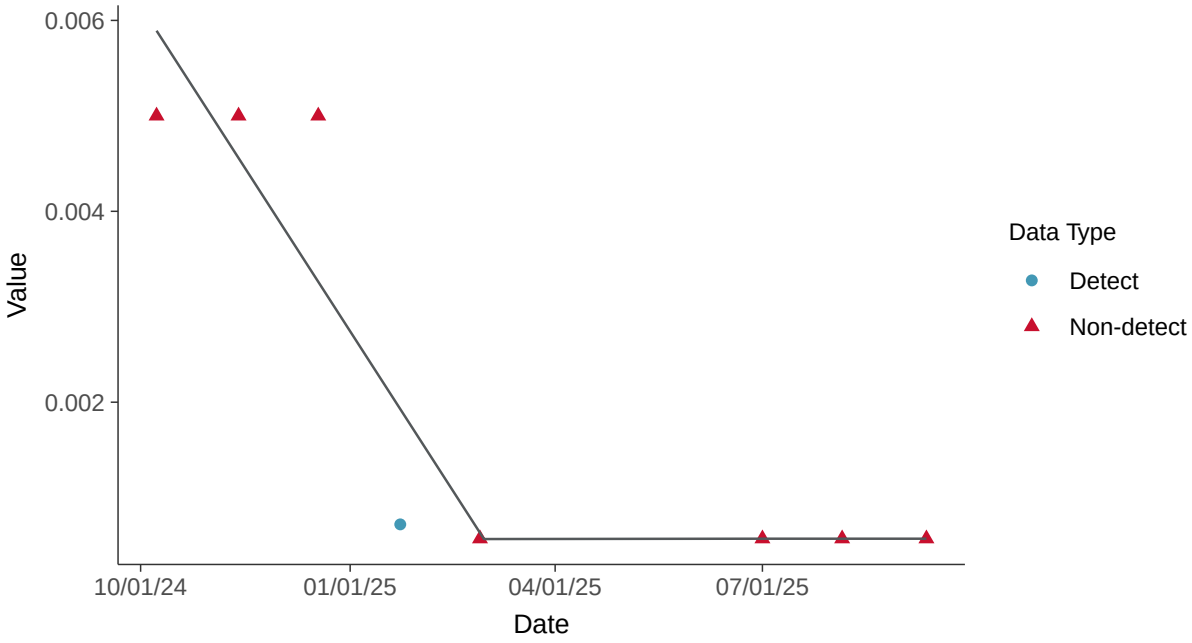
Boxplot by Season

Antimony, MW-17C (mg/l)



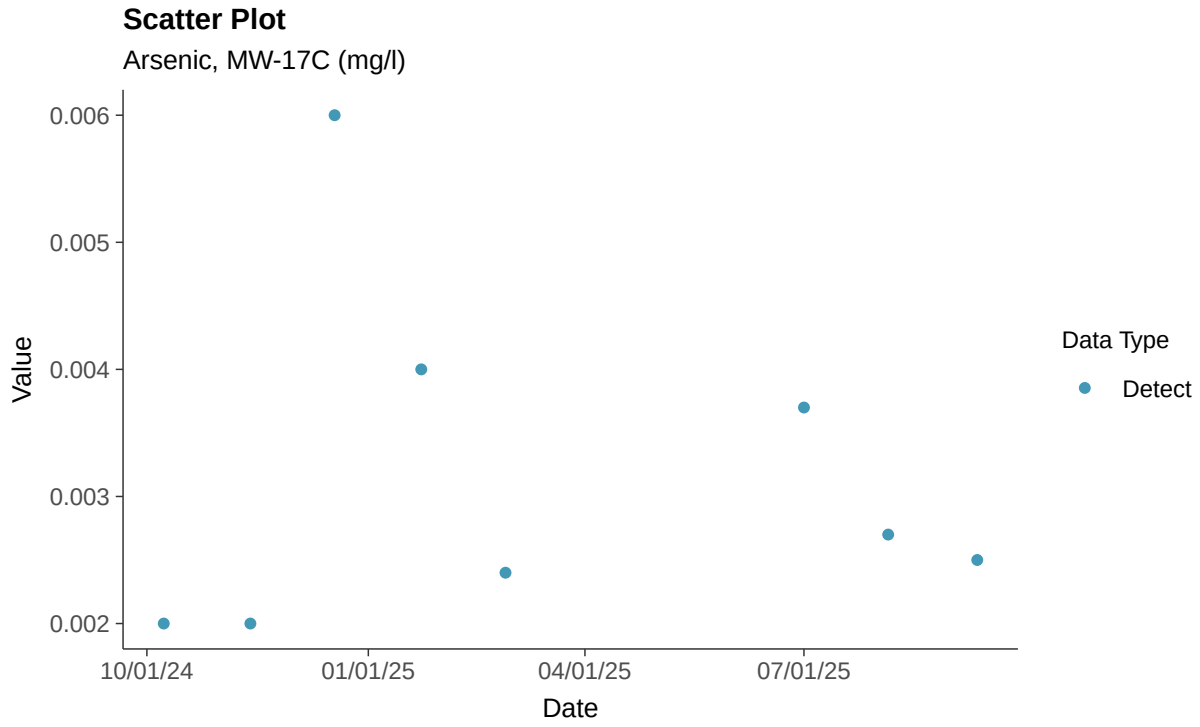
Trend Regression: Piecewise Linear-Linear

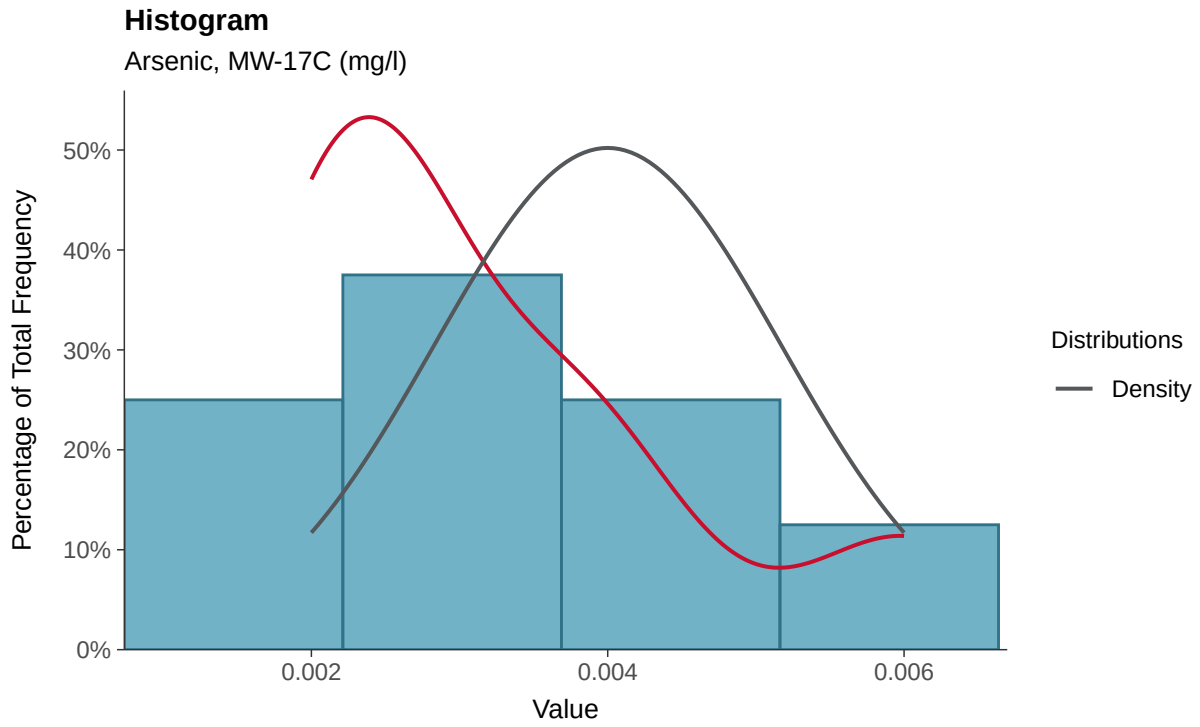
Antimony, MW-17C (mg/l)



Appendix IV: Arsenic, MW-17C

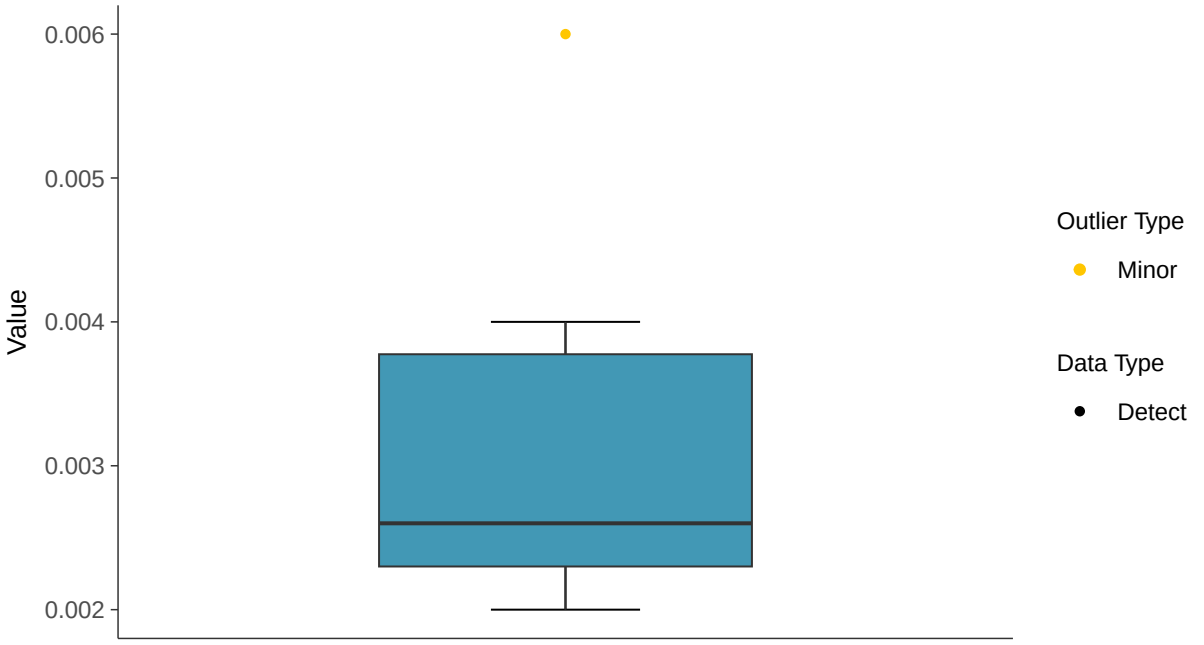
ID: 29_3_102





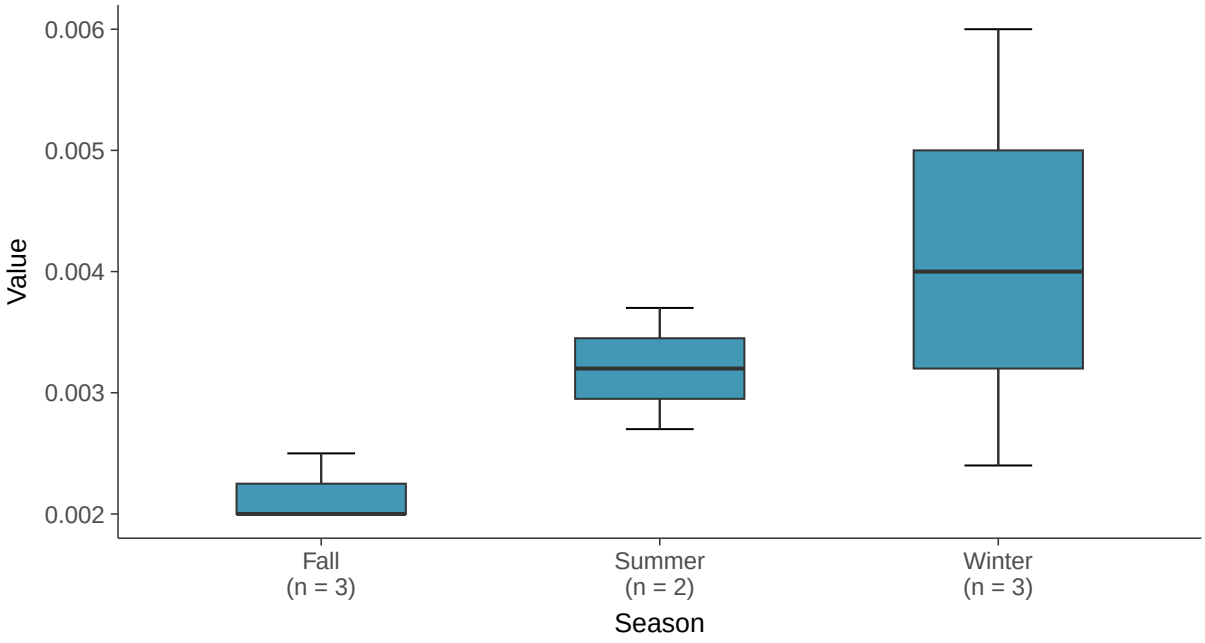
Boxplot

Arsenic, MW-17C (mg/l)



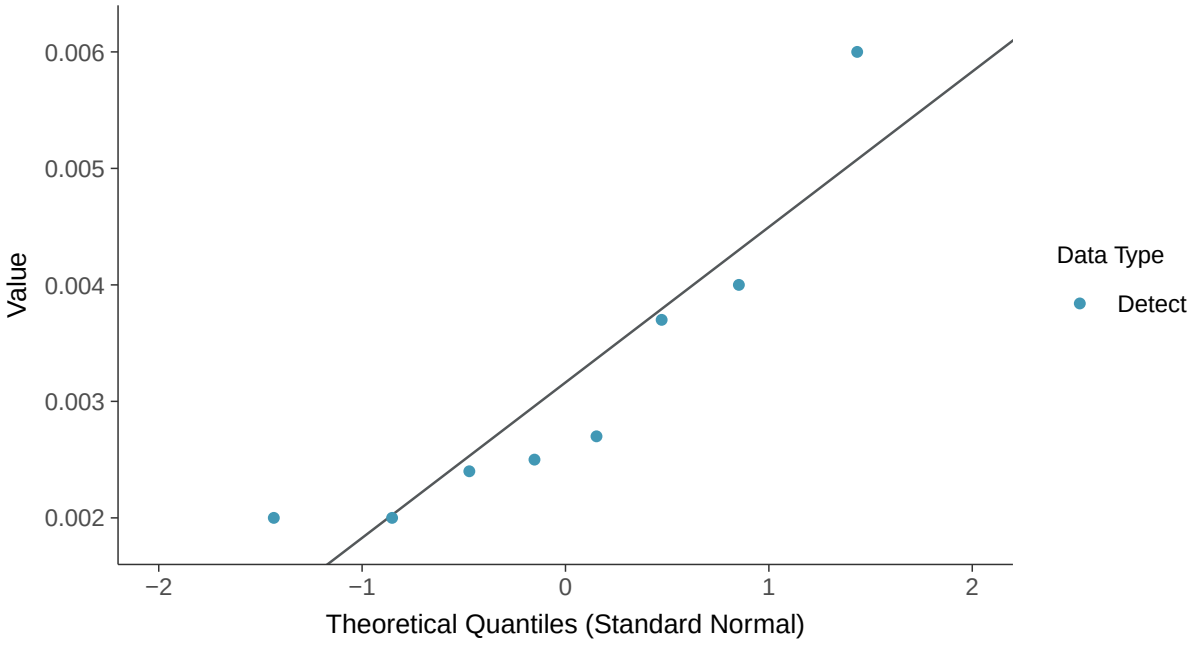
Boxplot by Season

Arsenic, MW-17C (mg/l)



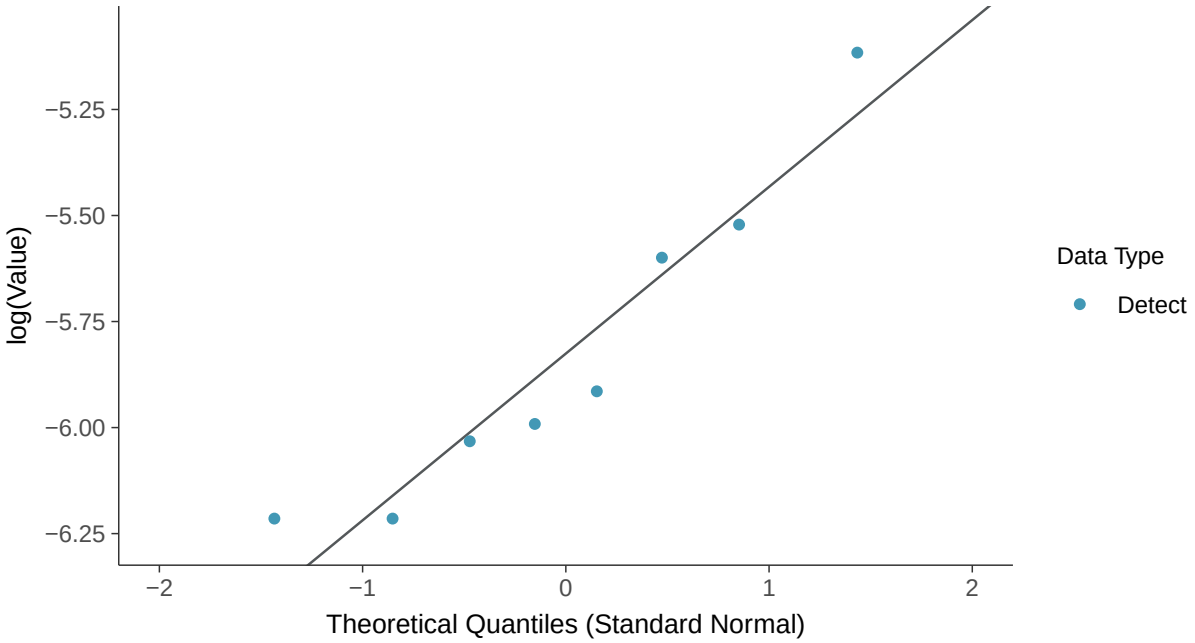
Normal Q-Q plot

Arsenic, MW-17C (mg/l)



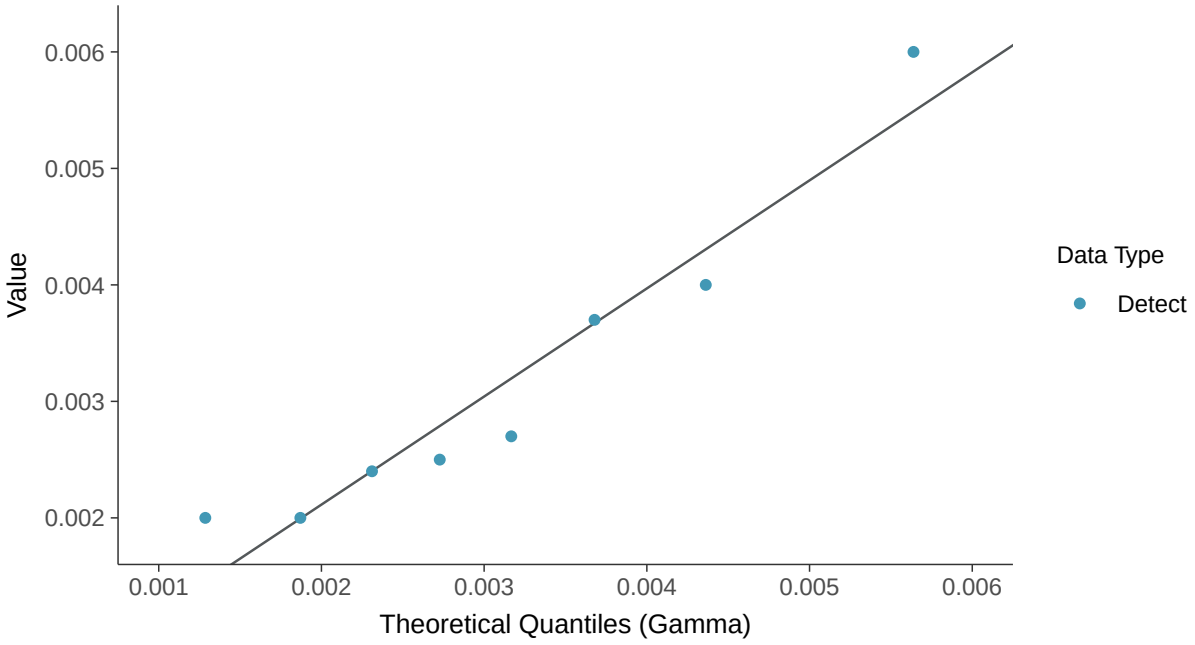
Lognormal Q-Q plot

Arsenic, MW-17C (mg/l)



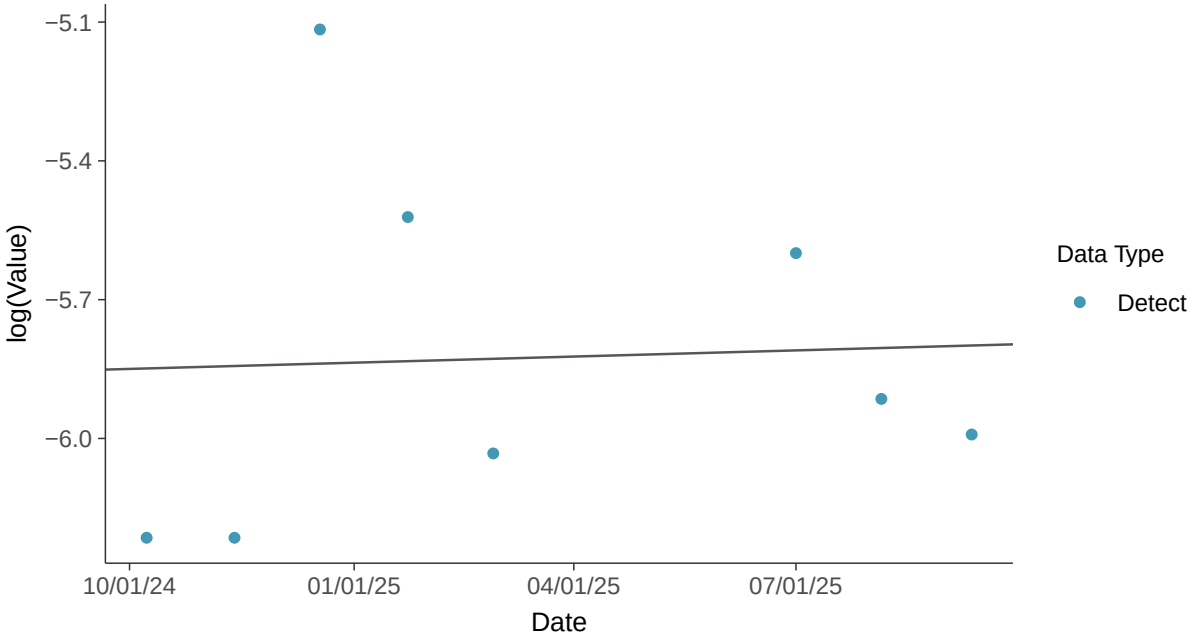
Gamma Q-Q plot

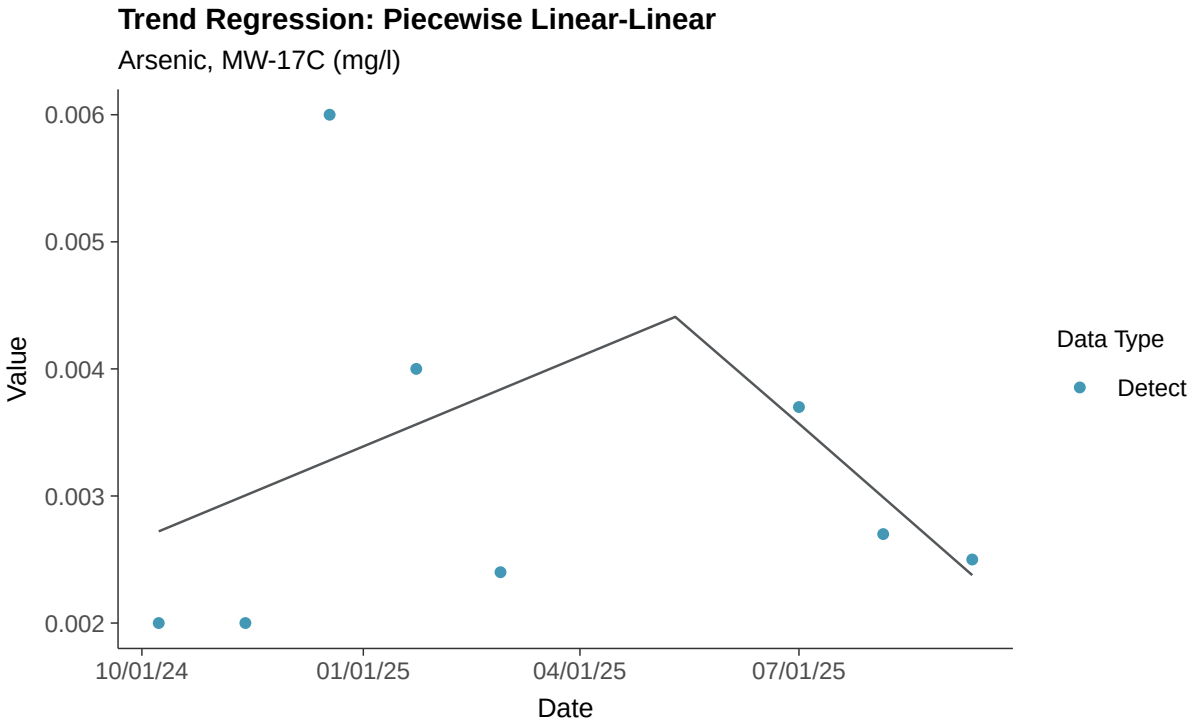
Arsenic, MW-17C (mg/l)



Trend Regression: Lognormal MLE

Arsenic, MW-17C (mg/l)



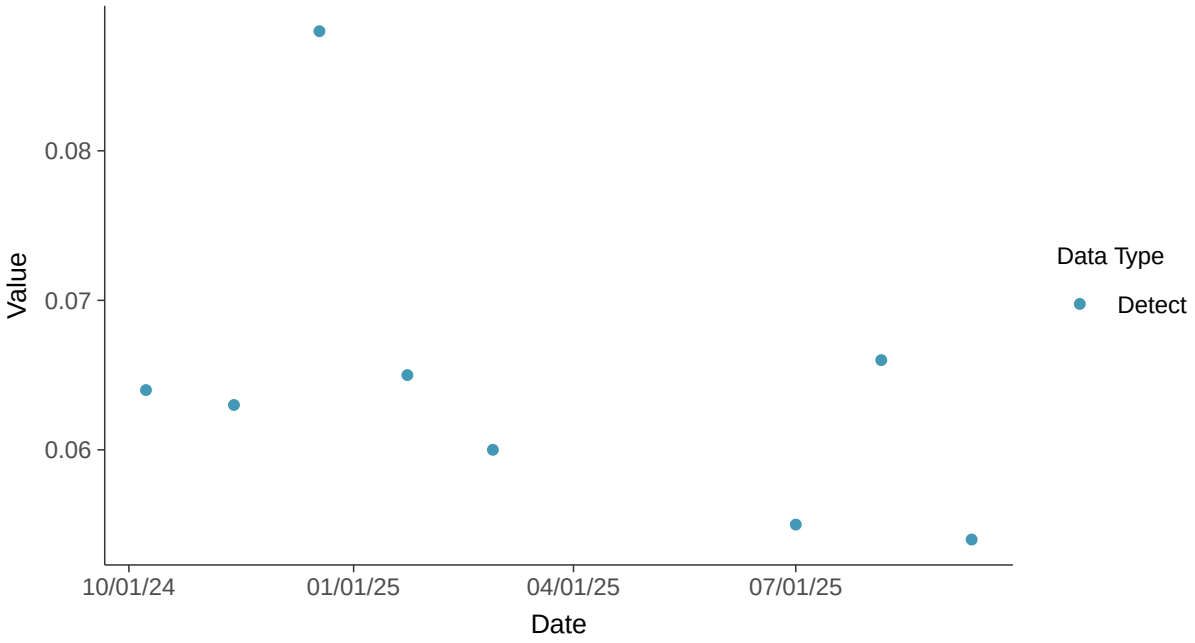

Trend Regression: Piecewise Linear-Linear
Arsenic, MW-17C (mg/l)
0.006
0.005
0.004
0.003
0.002
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix IV: Barium, MW-17C

ID: 29_3_103

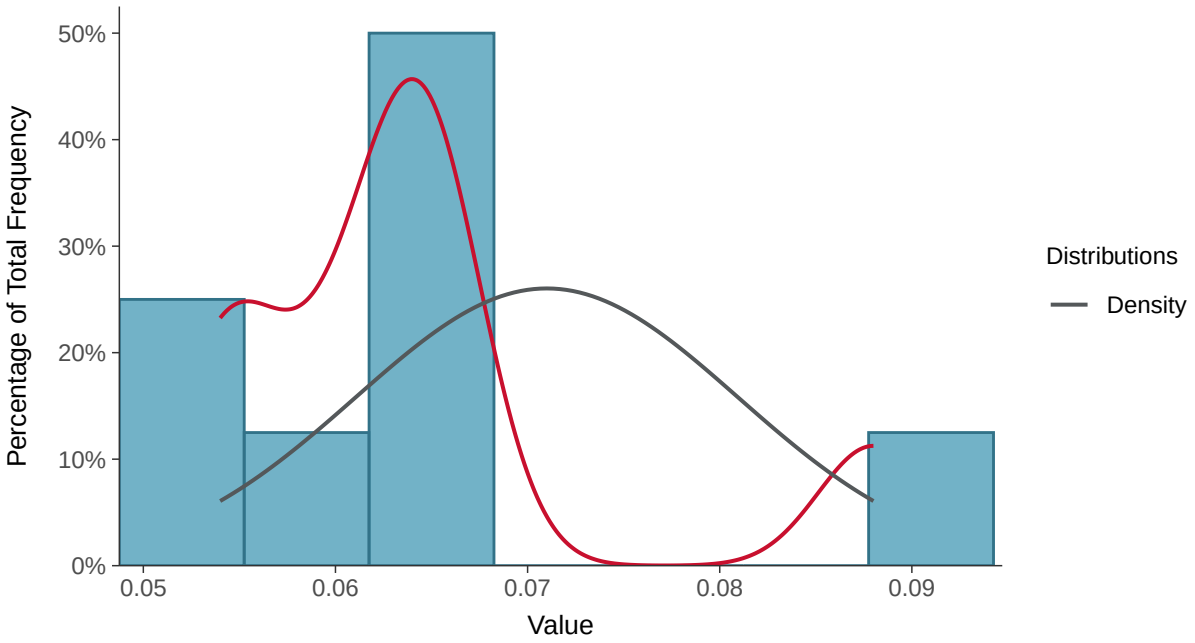
Scatter Plot

Barium, MW-17C (mg/l)



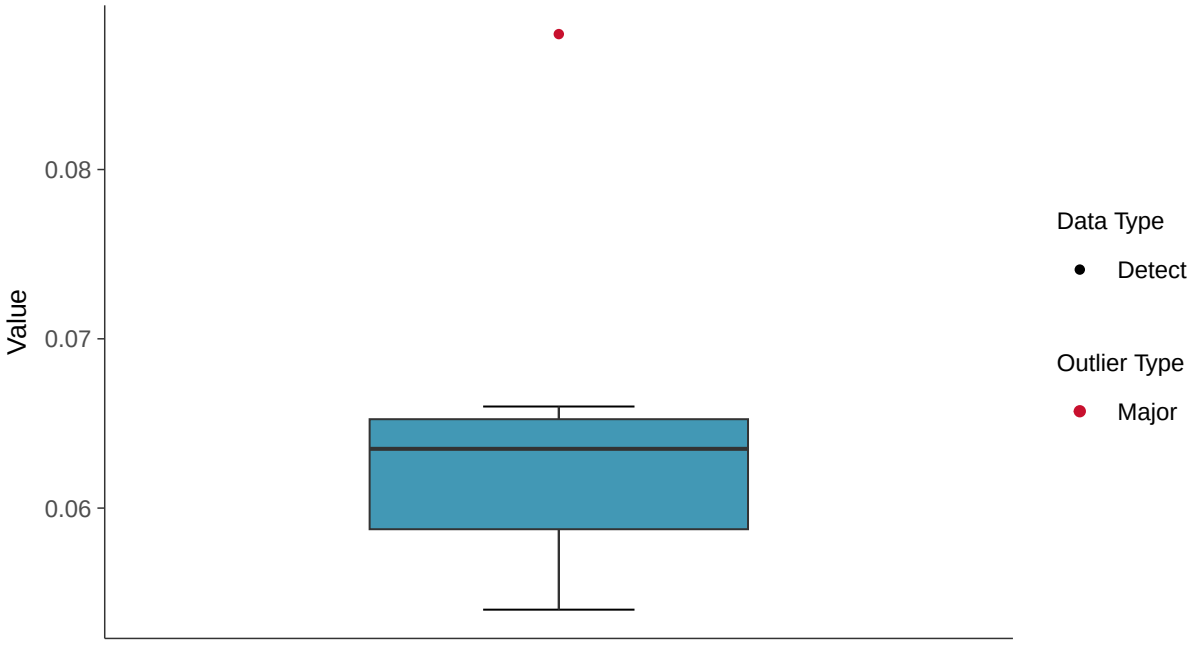
Histogram

Barium, MW-17C (mg/l)



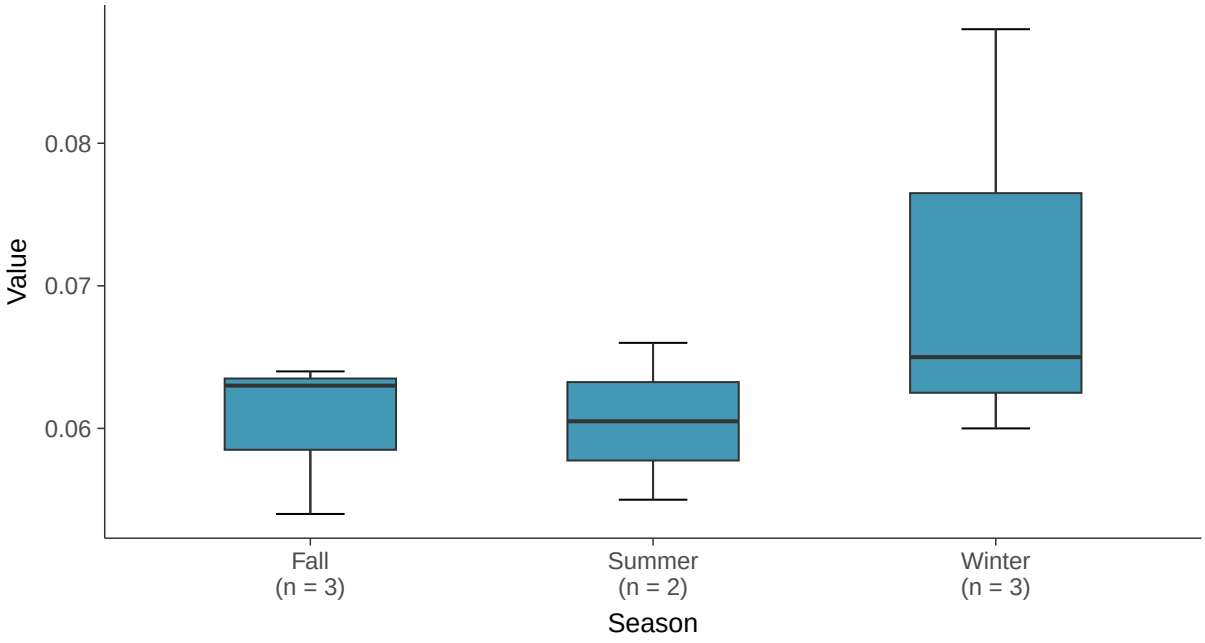
Boxplot

Barium, MW-17C (mg/l)



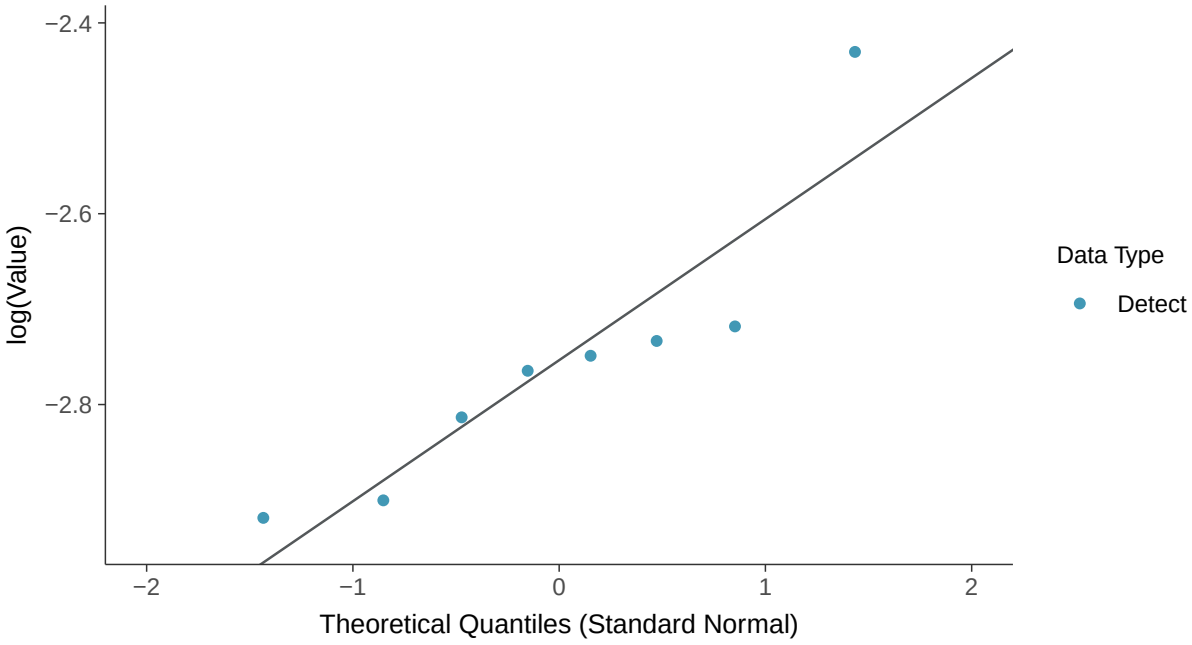
Boxplot by Season

Barium, MW-17C (mg/l)



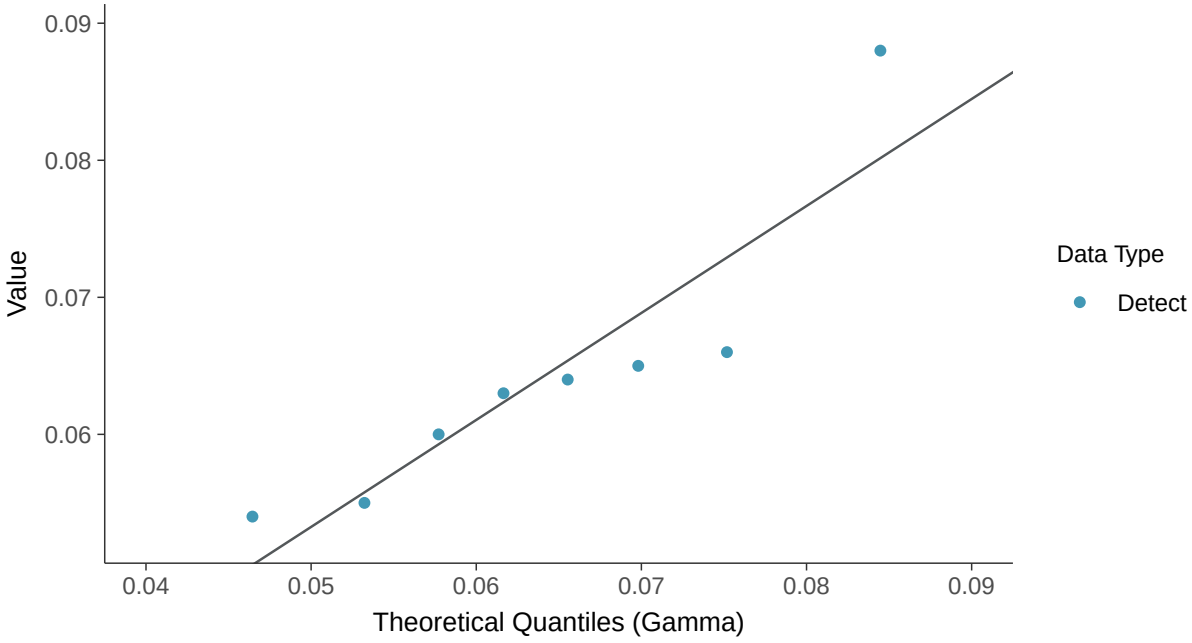
Lognormal Q-Q plot

Barium, MW-17C (mg/l)



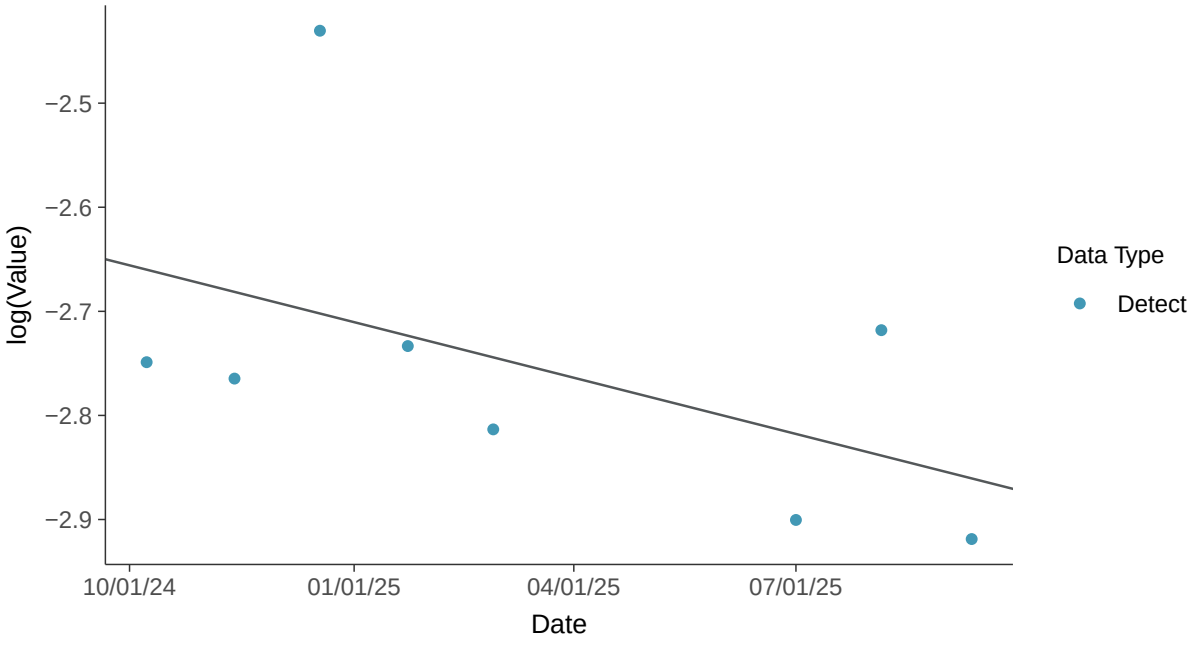
Gamma Q-Q plot

Barium, MW-17C (mg/l)



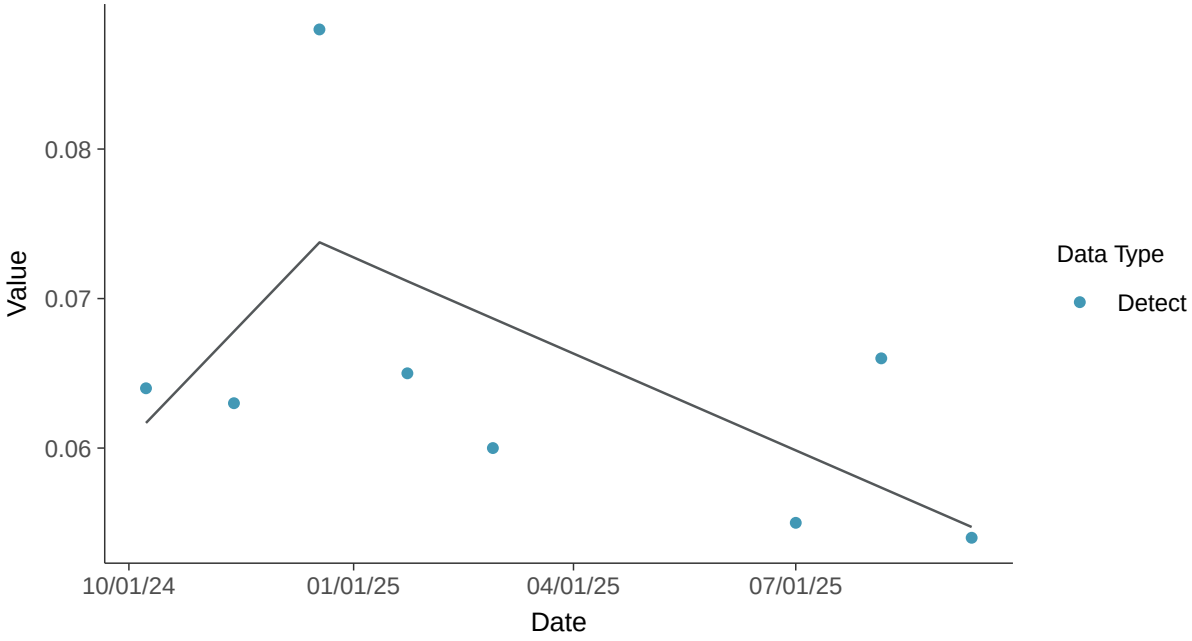
Trend Regression: Lognormal MLE

Barium, MW-17C (mg/l)



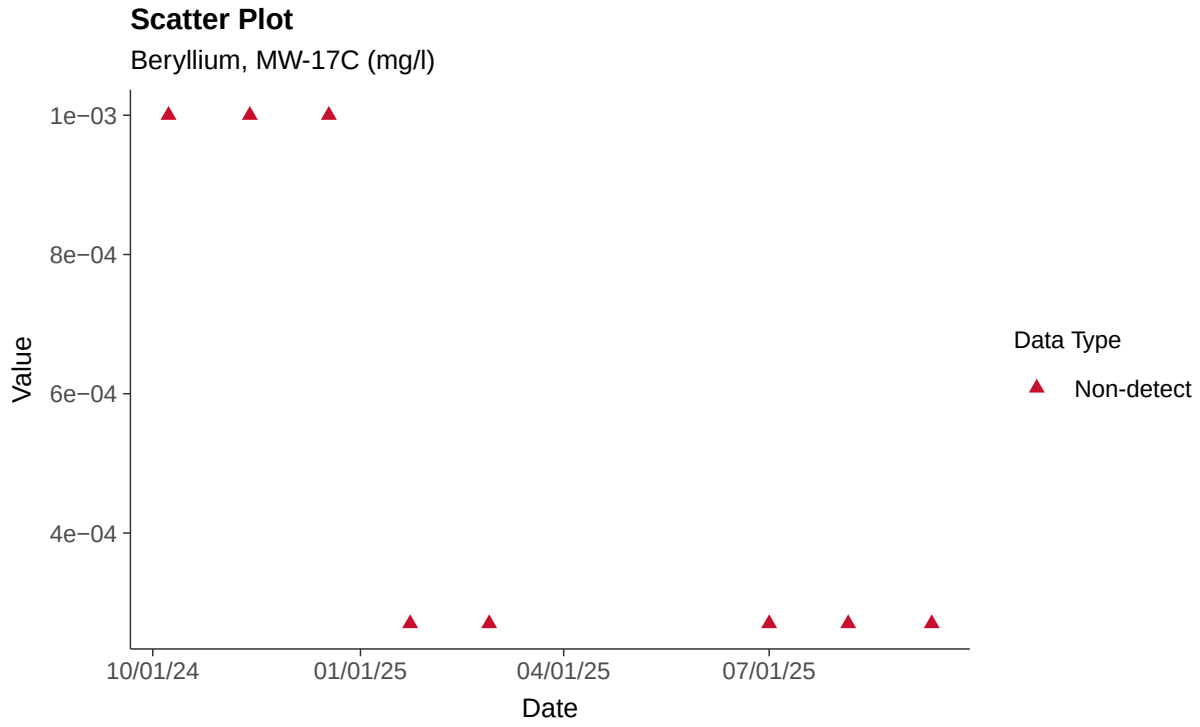
Trend Regression: Piecewise Linear-Linear

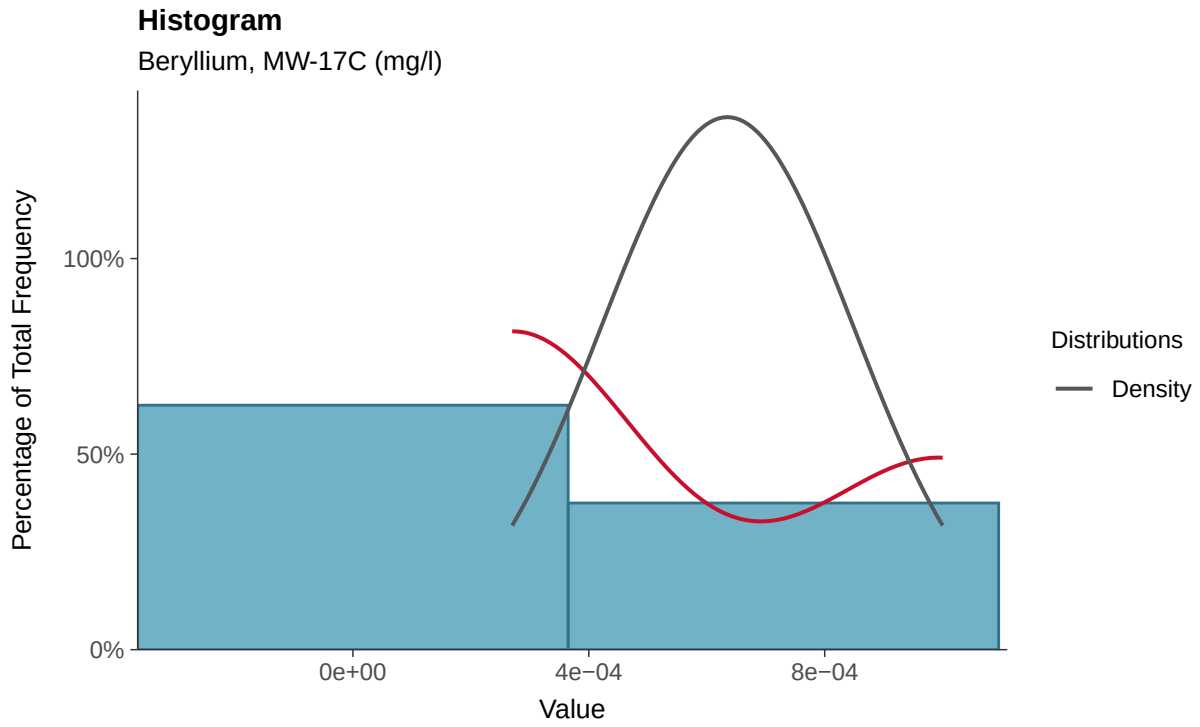
Barium, MW-17C (mg/l)



Appendix IV: Beryllium, MW-17C

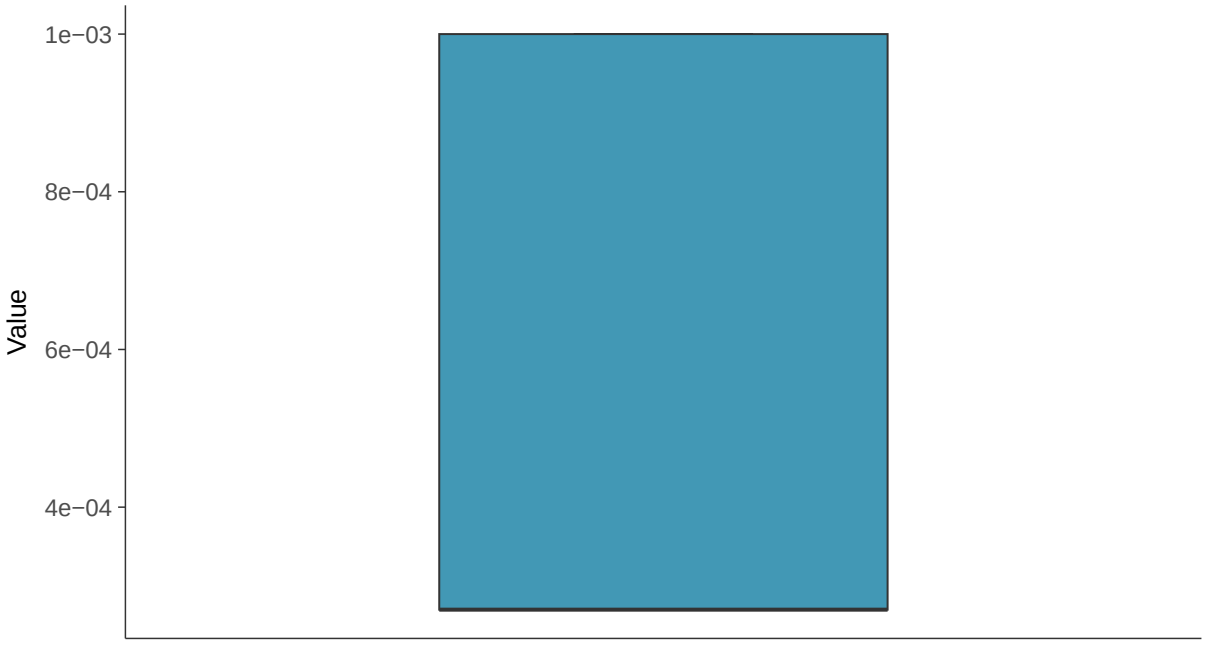
ID: 29_3_104





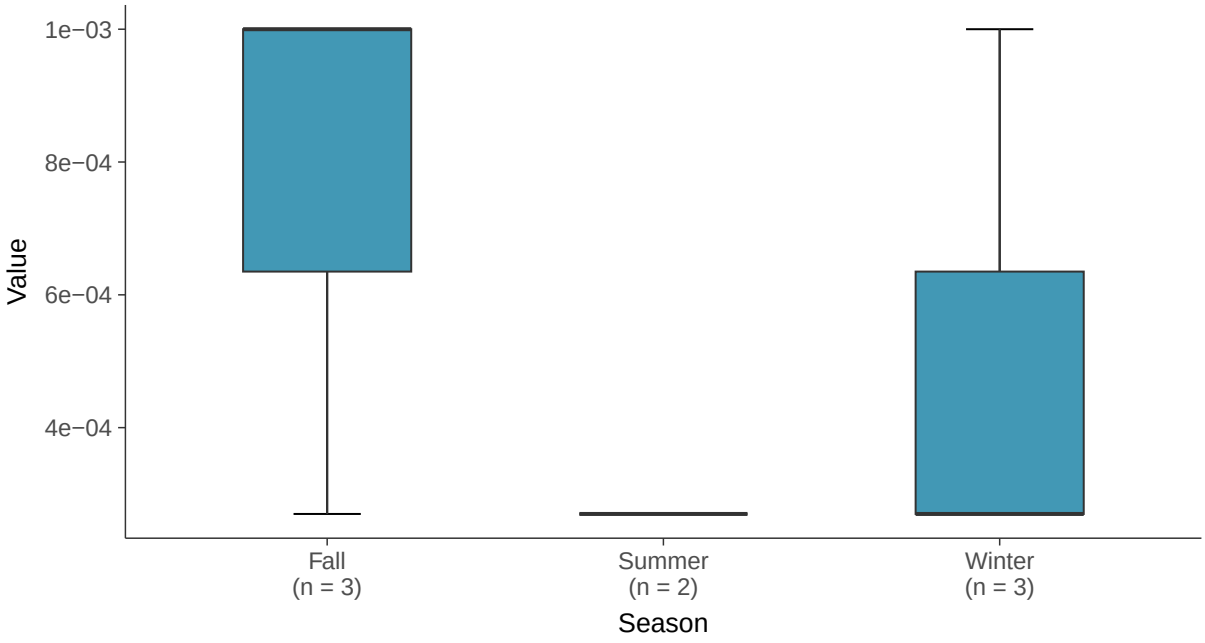
Boxplot

Beryllium, MW-17C (mg/l)



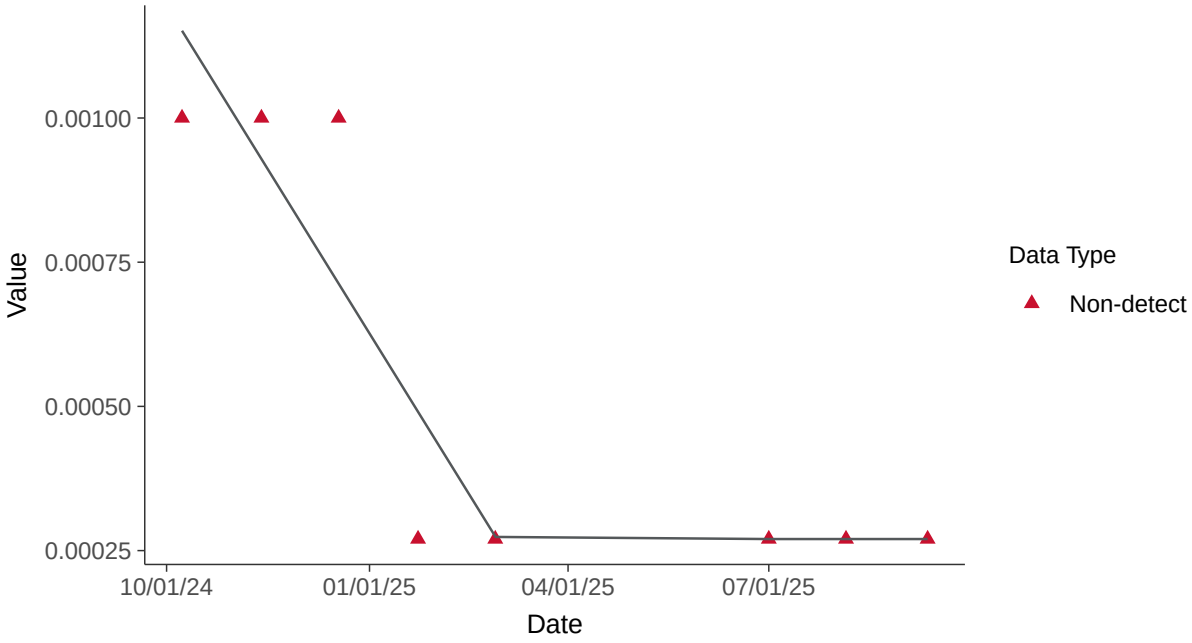
Boxplot by Season

Beryllium, MW-17C (mg/l)



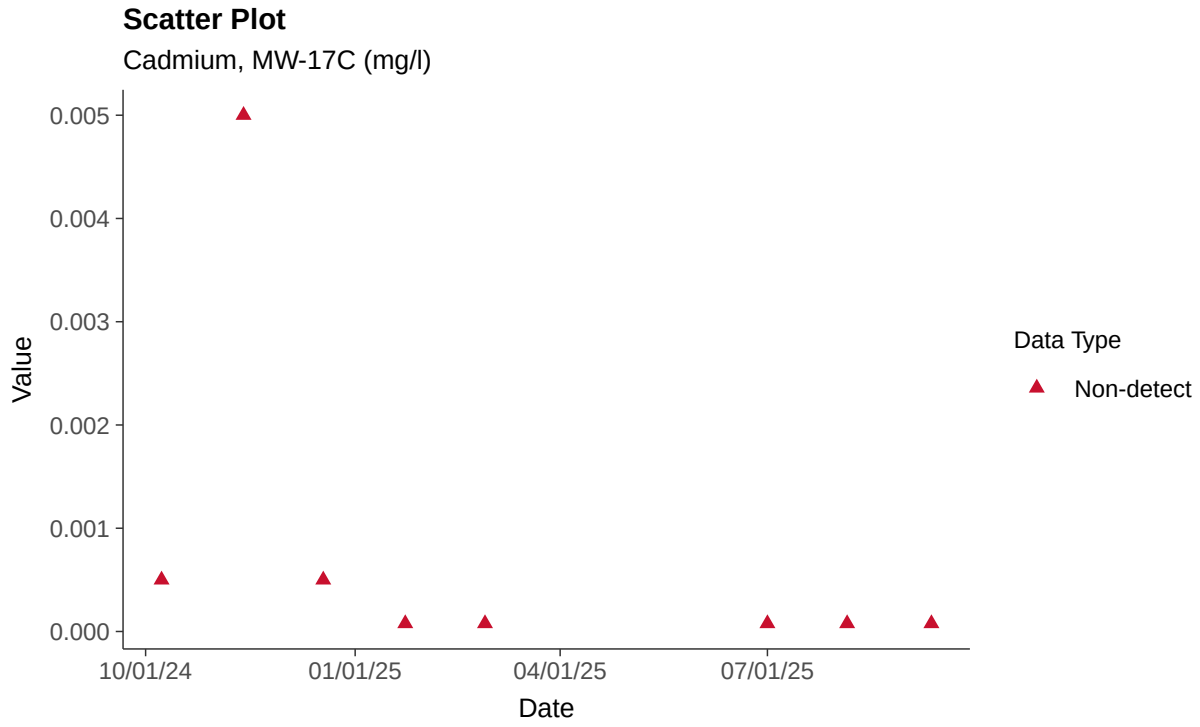
Trend Regression: Piecewise Linear-Linear

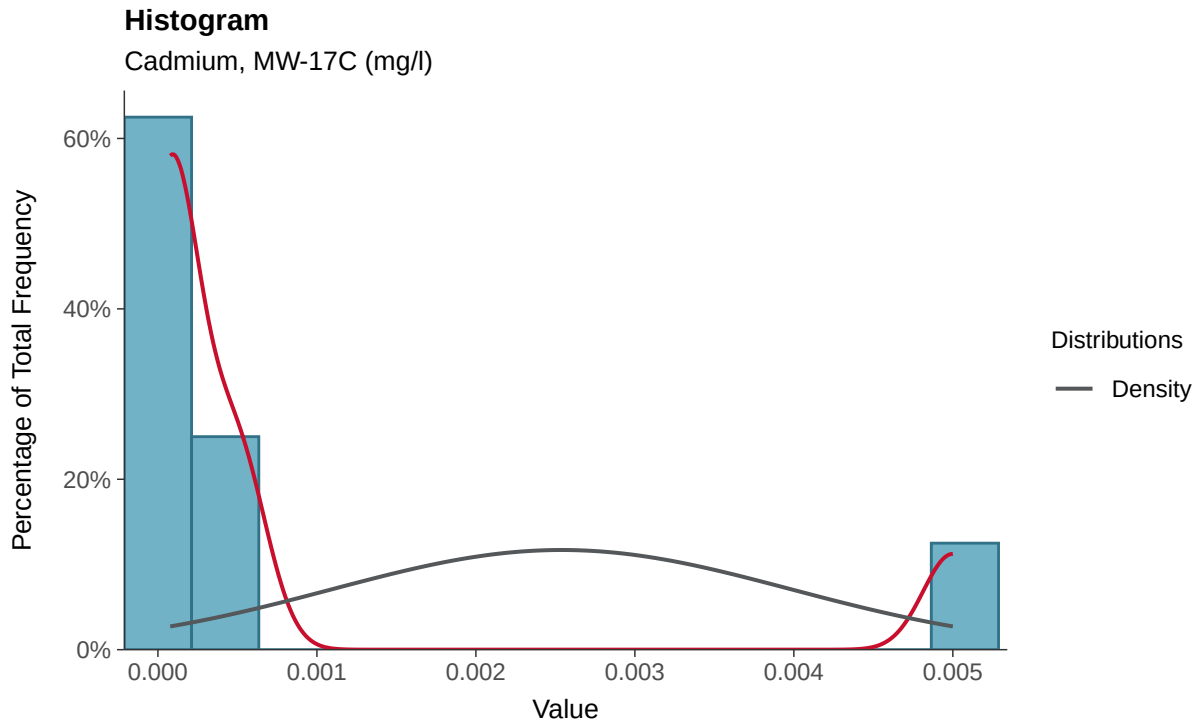
Beryllium, MW-17C (mg/l)



Appendix IV: Cadmium, MW-17C

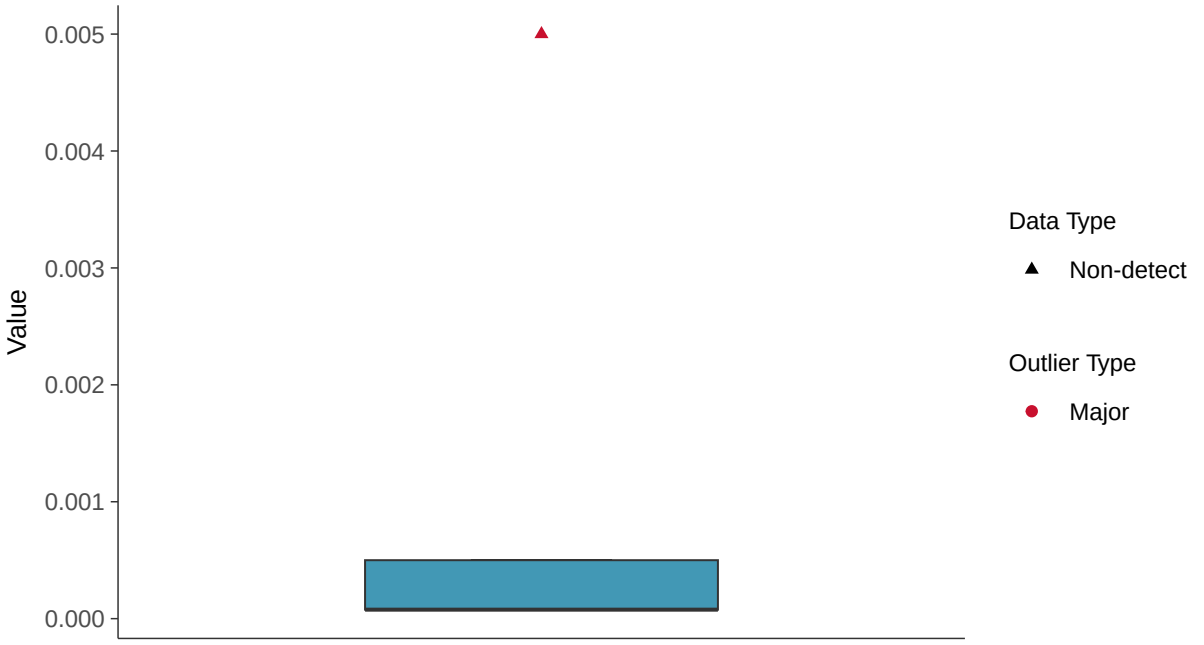
ID: 29_3_106





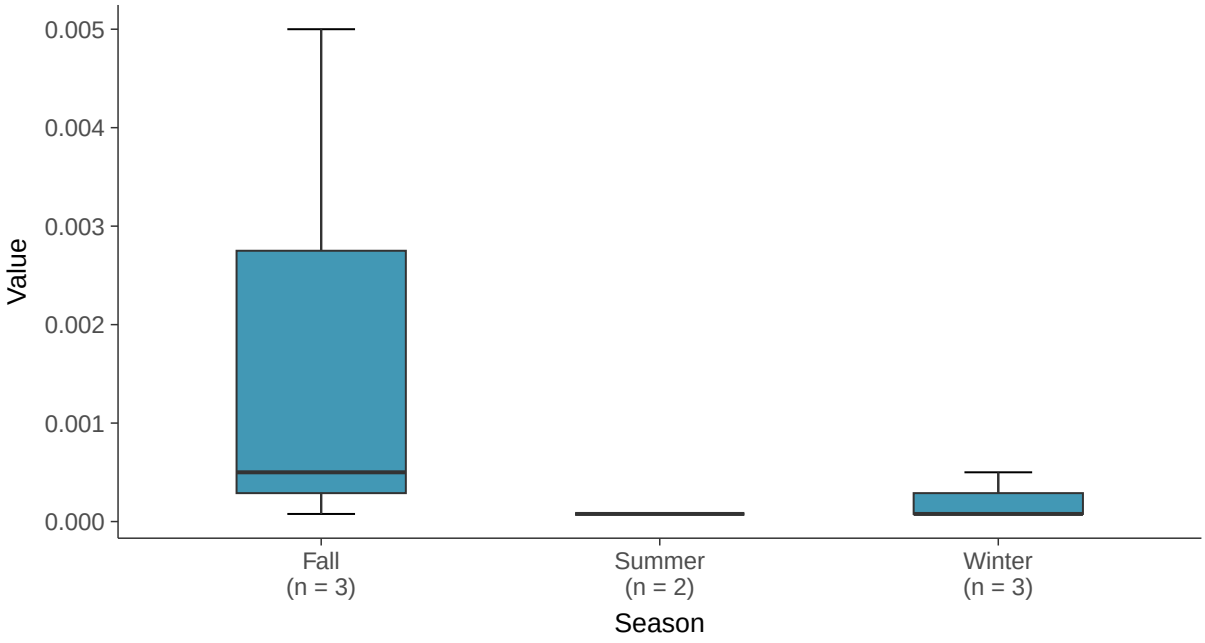
Boxplot

Cadmium, MW-17C (mg/l)



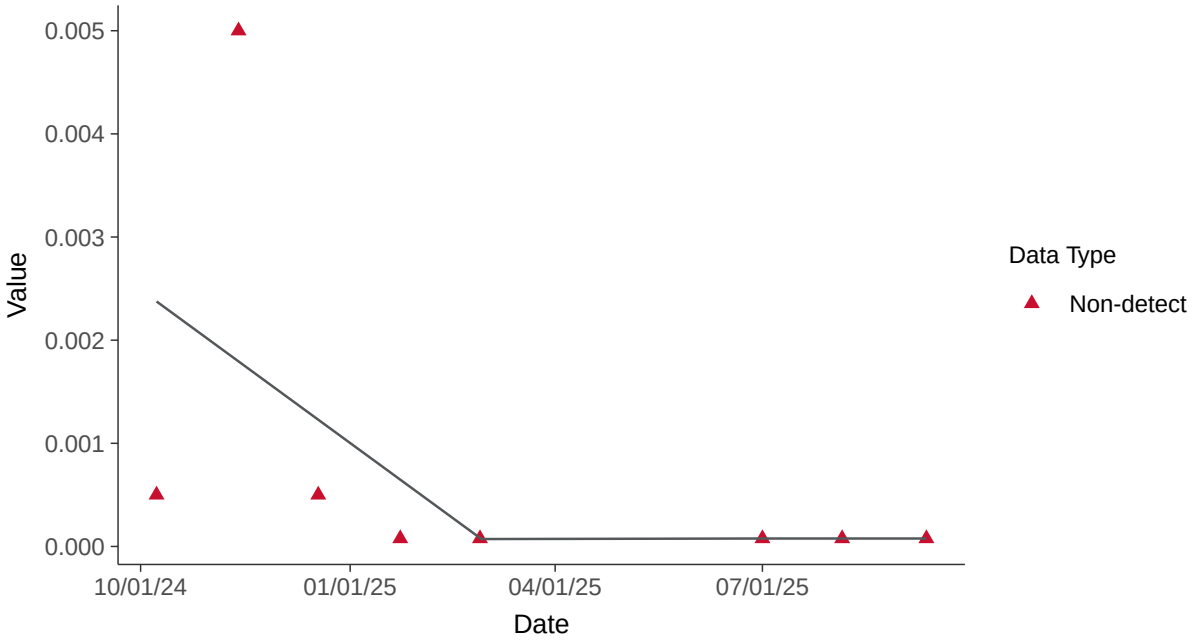
Boxplot by Season

Cadmium, MW-17C (mg/l)



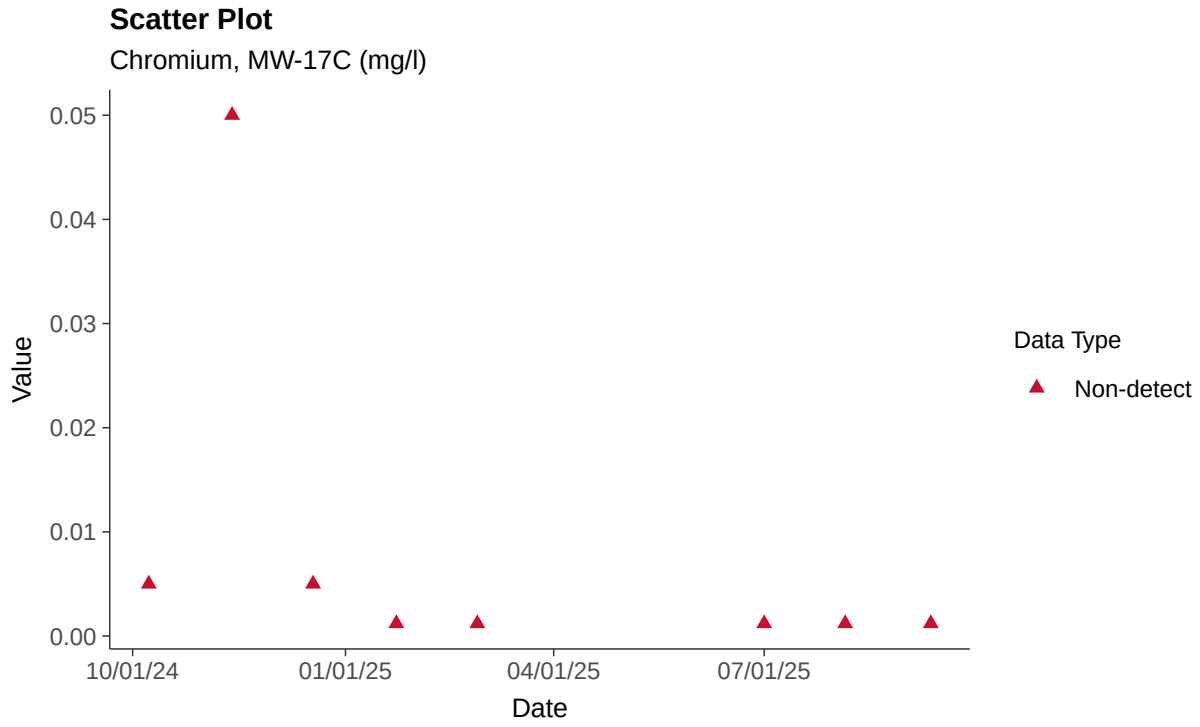
Trend Regression: Piecewise Linear-Linear

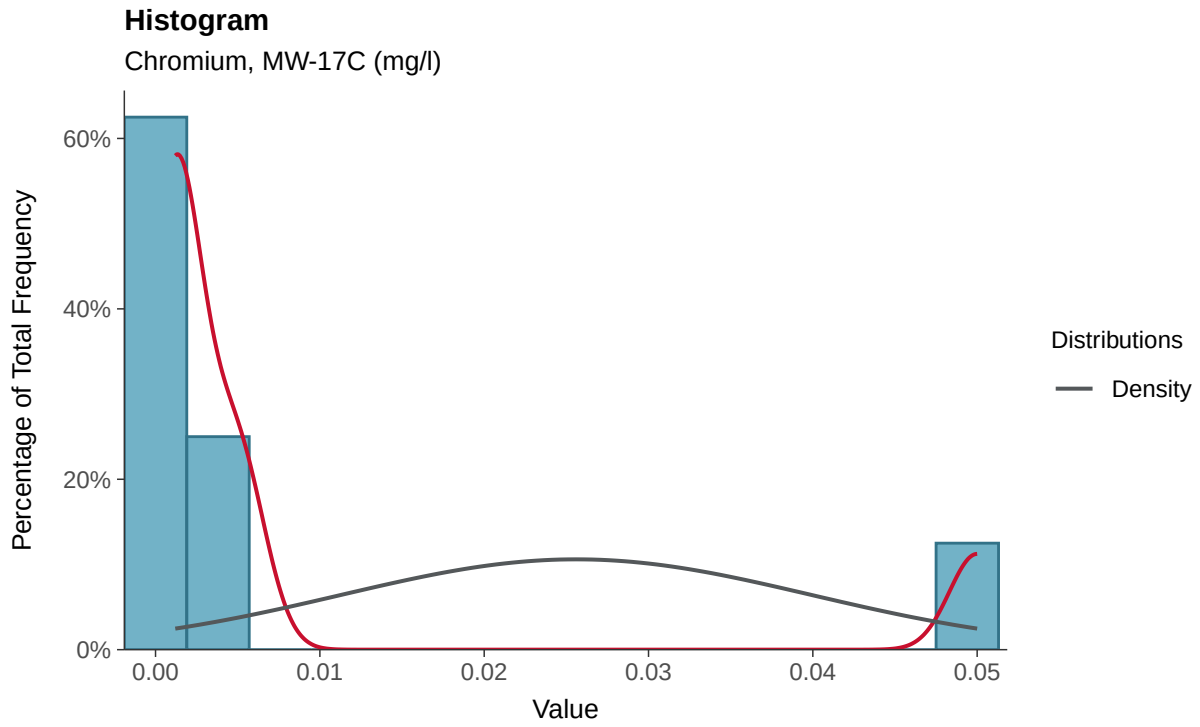
Cadmium, MW-17C (mg/l)



Appendix IV: Chromium, MW-17C

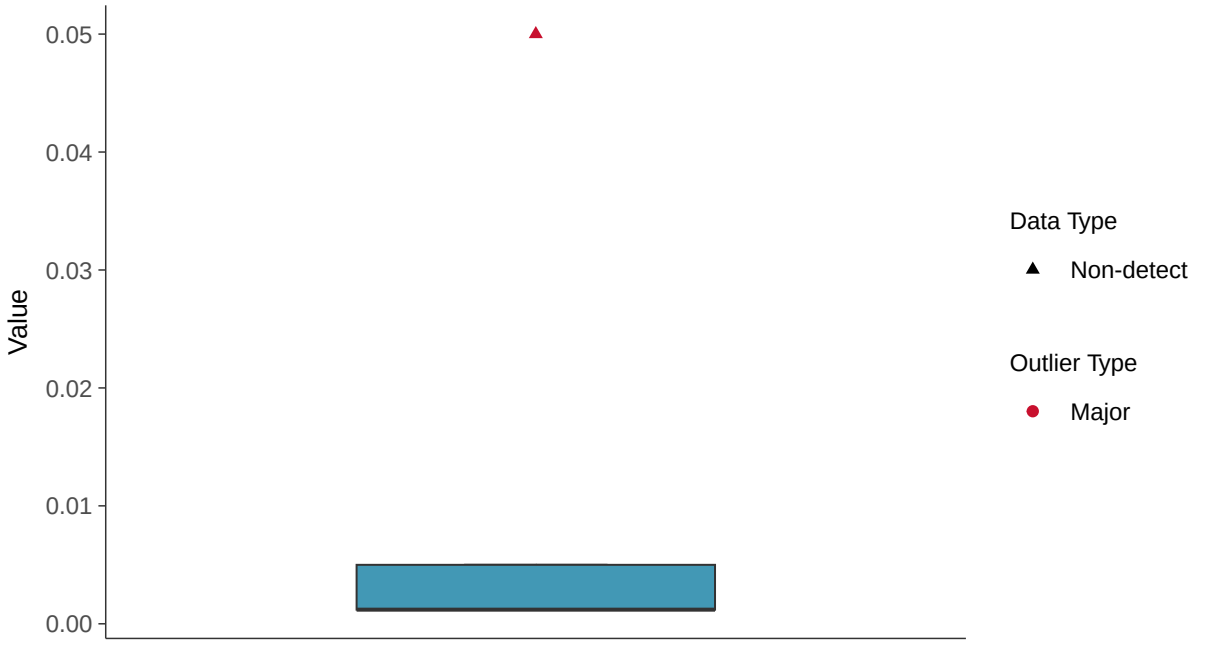
ID: 29_3_109





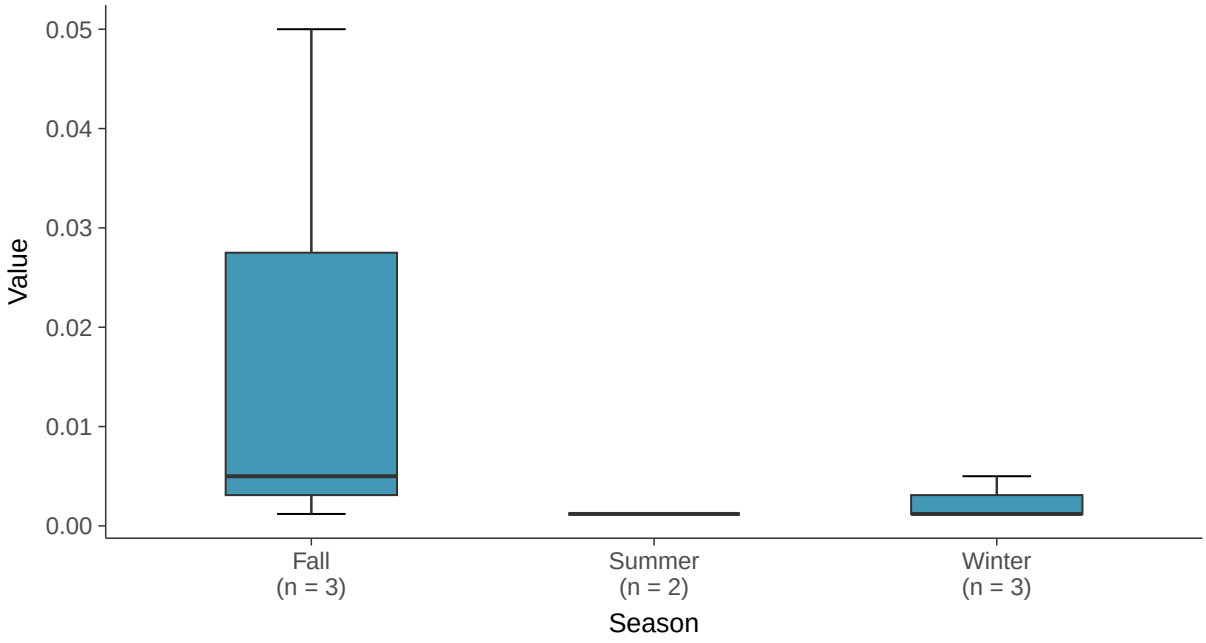
Boxplot

Chromium, MW-17C (mg/l)



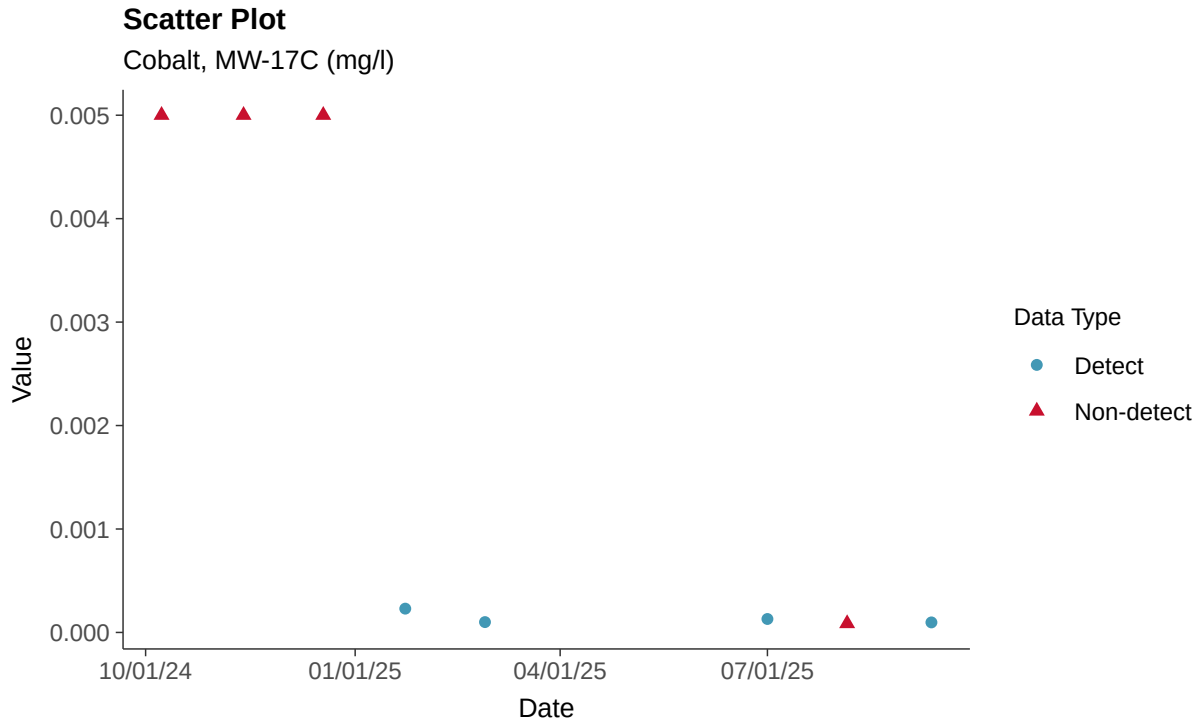
Boxplot by Season

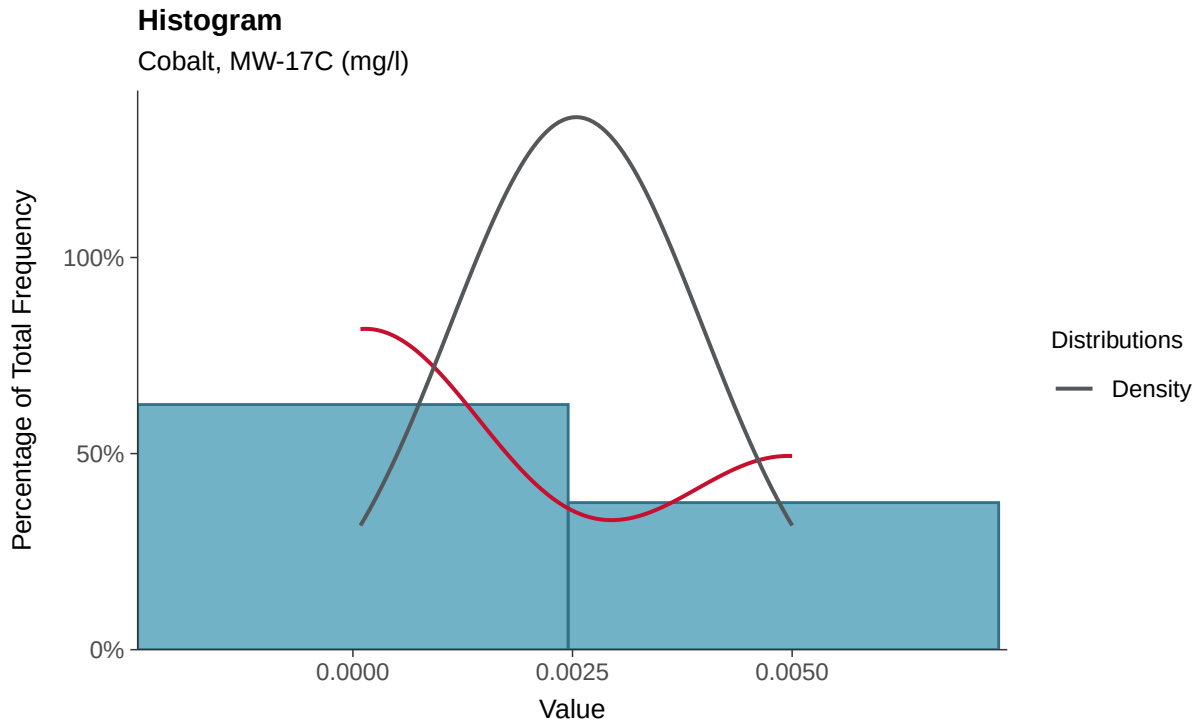
Chromium, MW-17C (mg/l)



Appendix IV: Cobalt, MW-17C

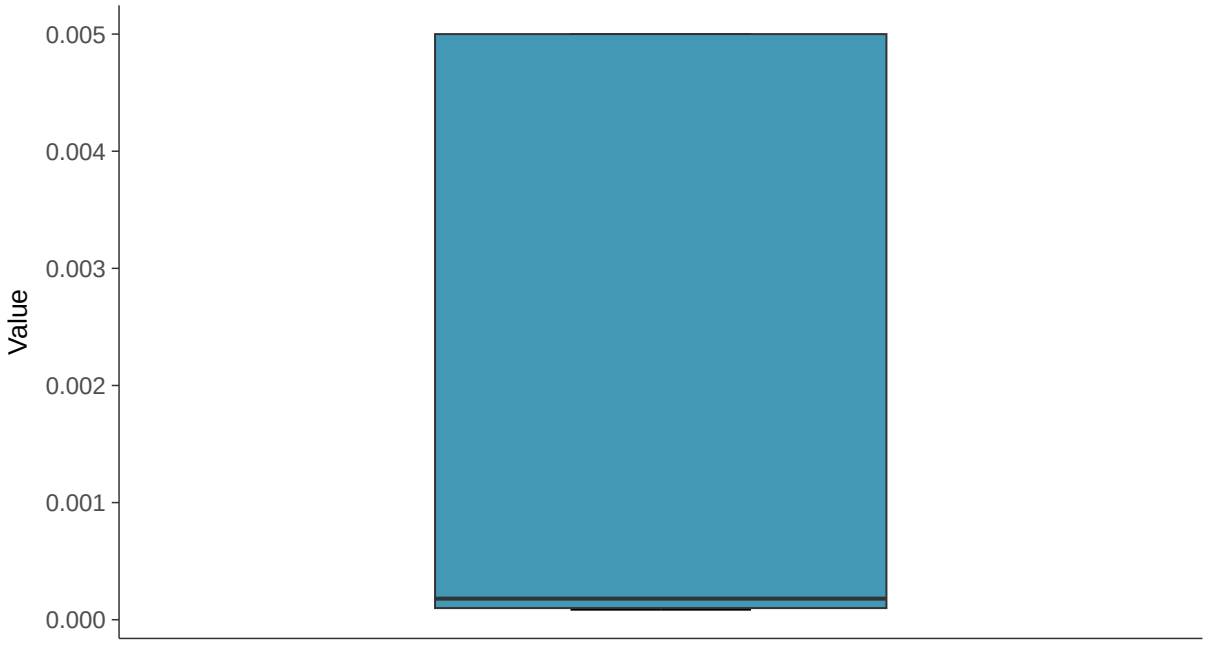
ID: 29_3_110





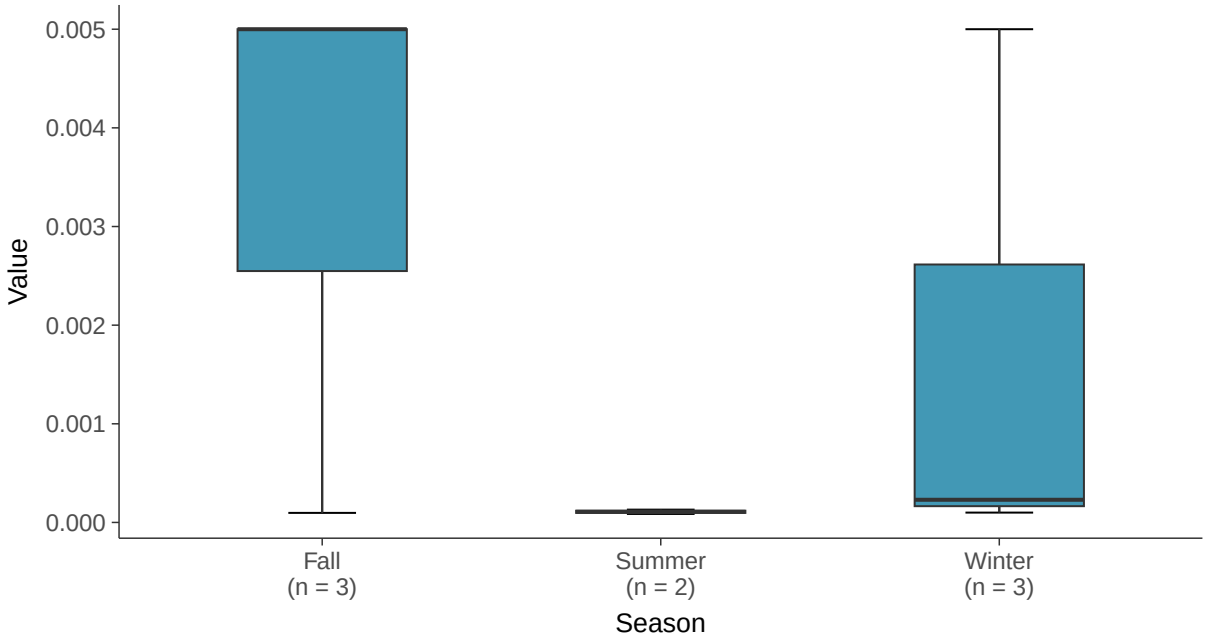
Boxplot

Cobalt, MW-17C (mg/l)



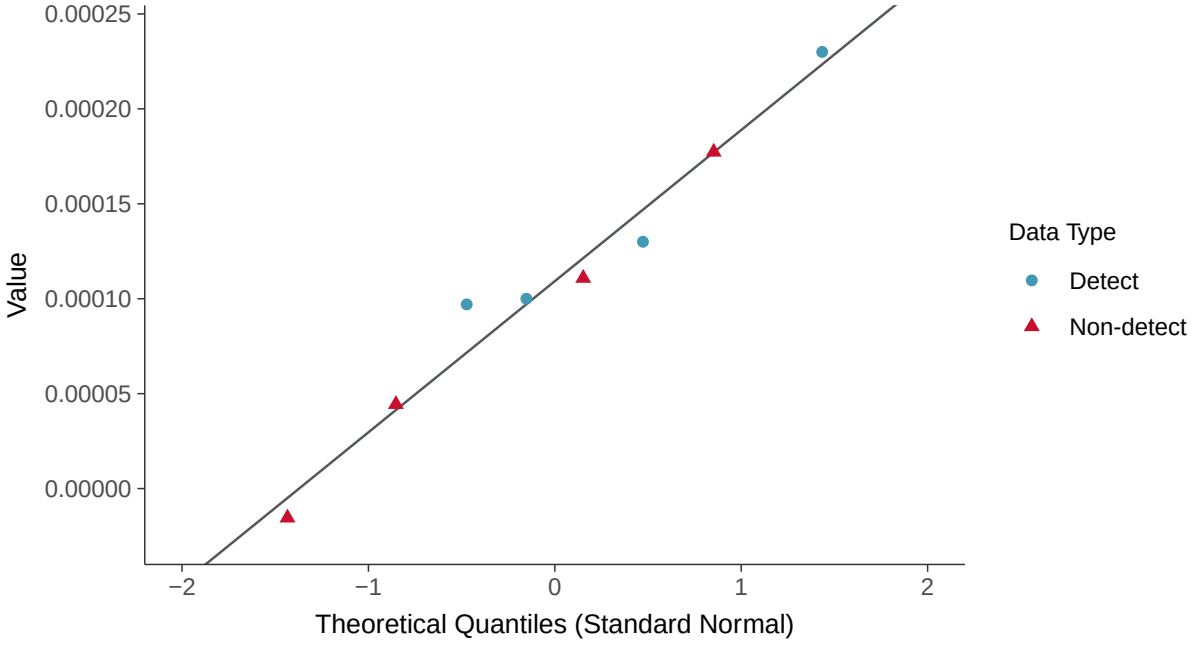
Boxplot by Season

Cobalt, MW-17C (mg/l)



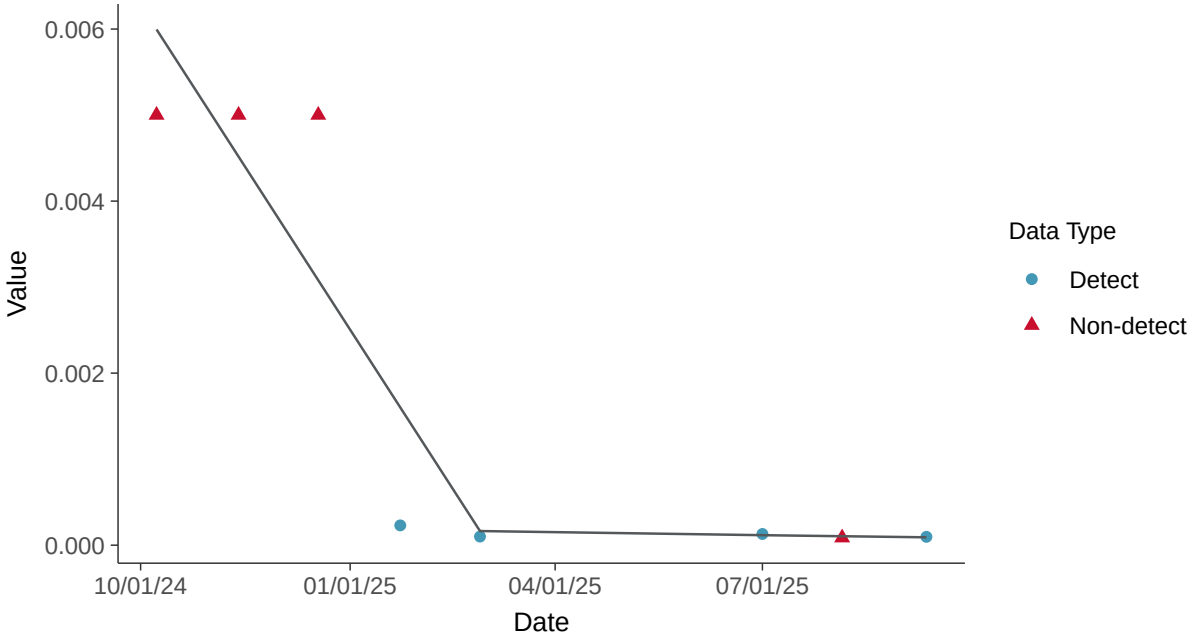
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-17C (mg/l)



Trend Regression: Piecewise Linear-Linear

Cobalt, MW-17C (mg/l)

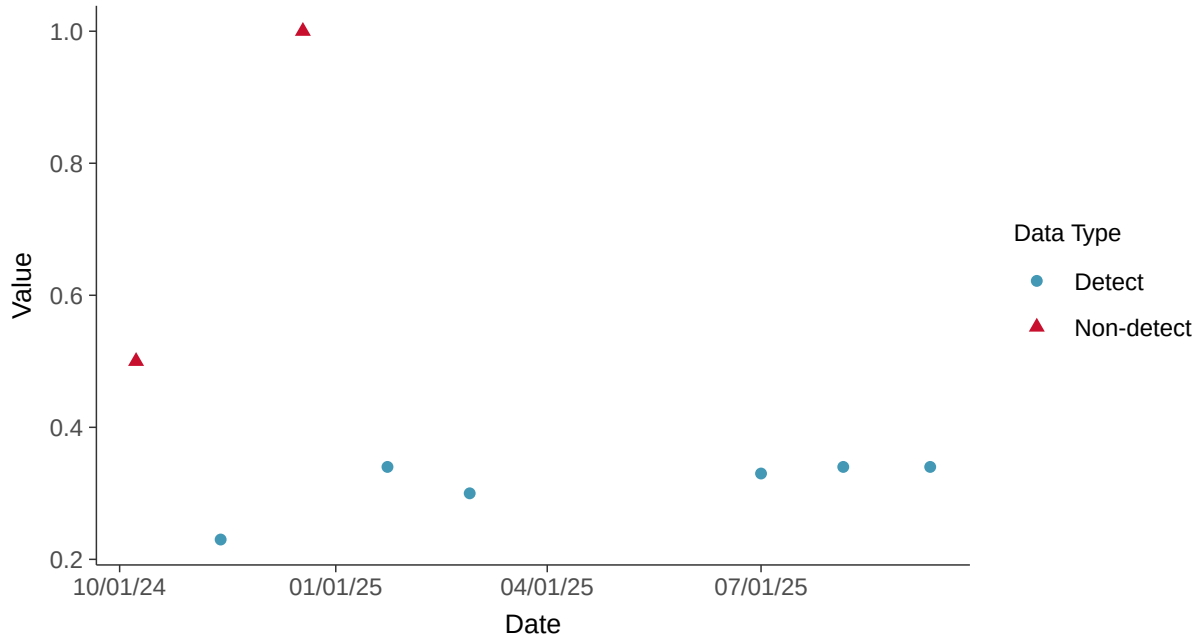


Appendix IV: Fluoride (App IV), MW-17C

ID: 29_3_113

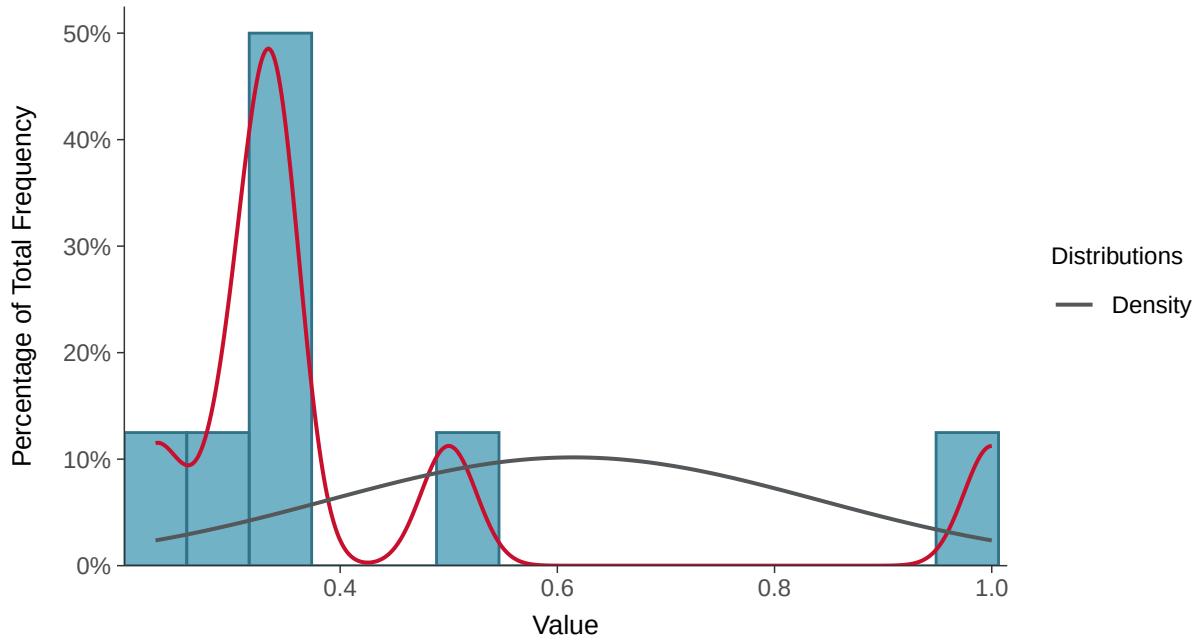
Scatter Plot

Fluoride (App IV), MW-17C (mg/l)



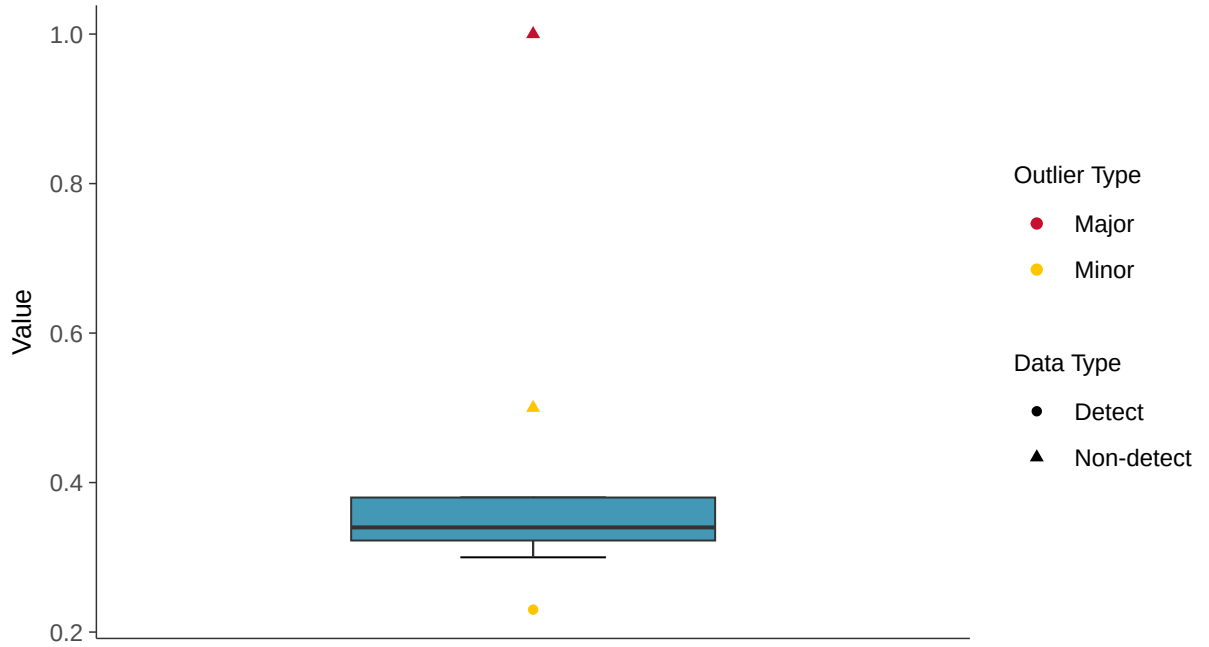
Histogram

Fluoride (App IV), MW-17C (mg/l)



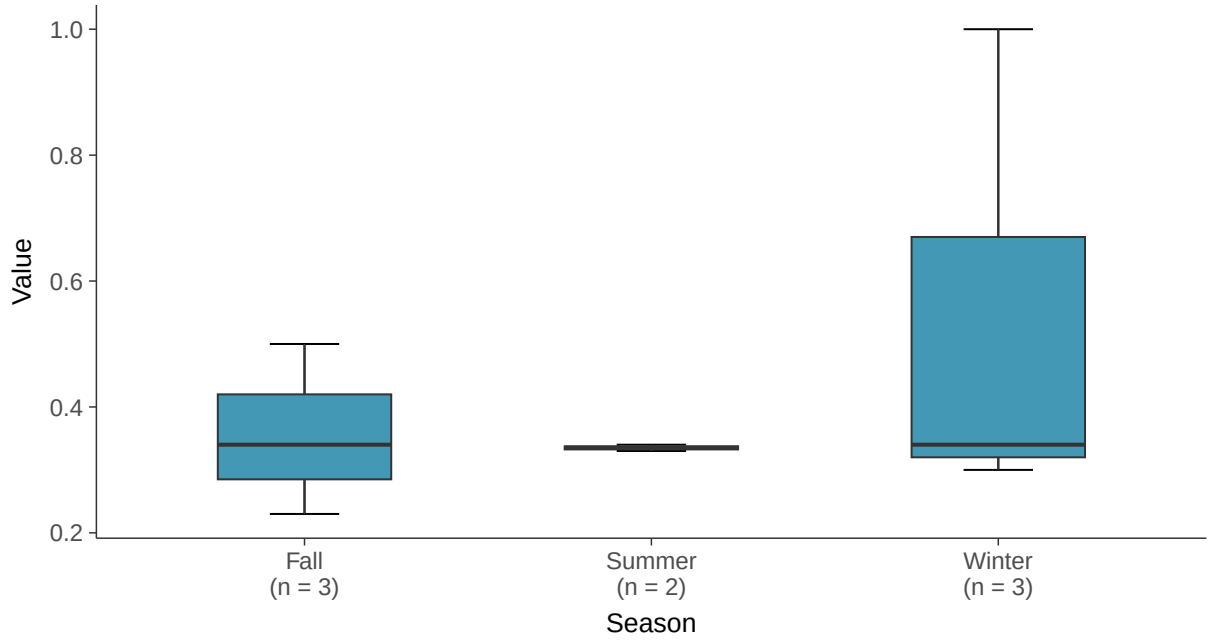
Boxplot

Fluoride (App IV), MW-17C (mg/l)



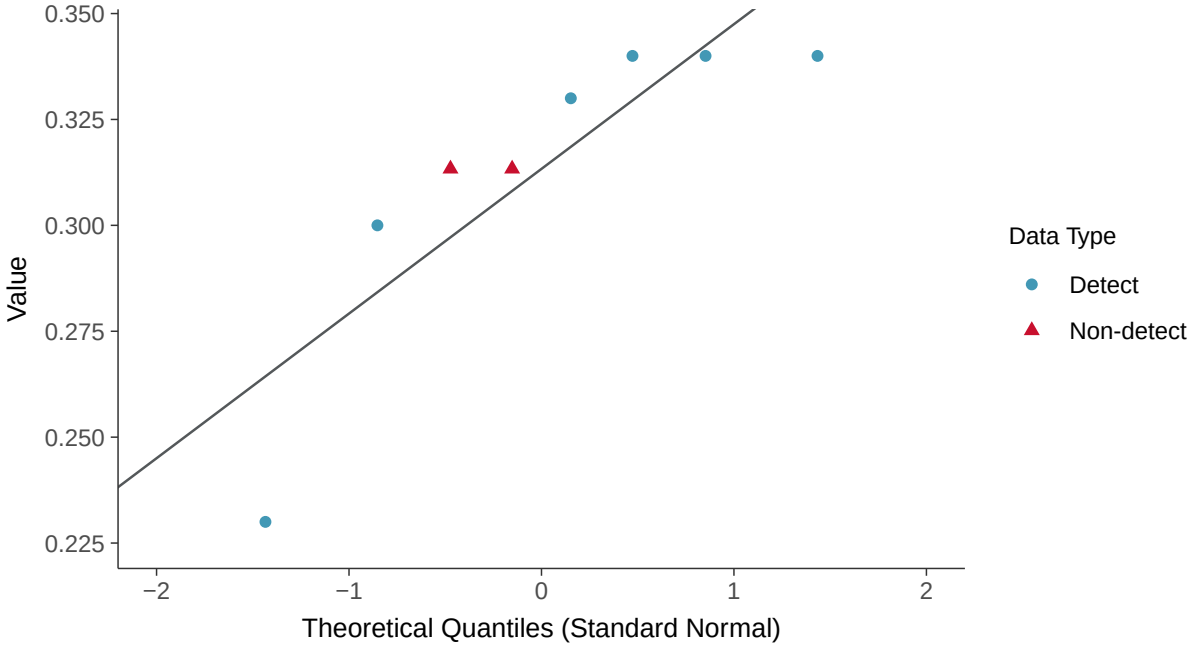
Boxplot by Season

Fluoride (App IV), MW-17C (mg/l)



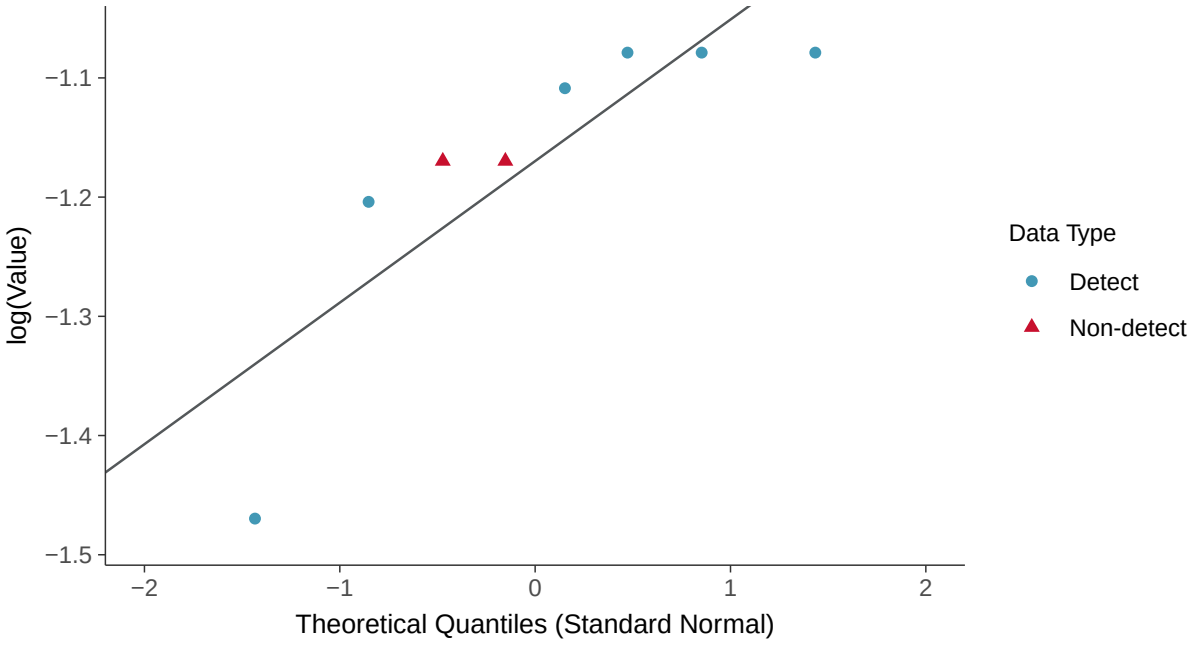
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-17C (mg/l)



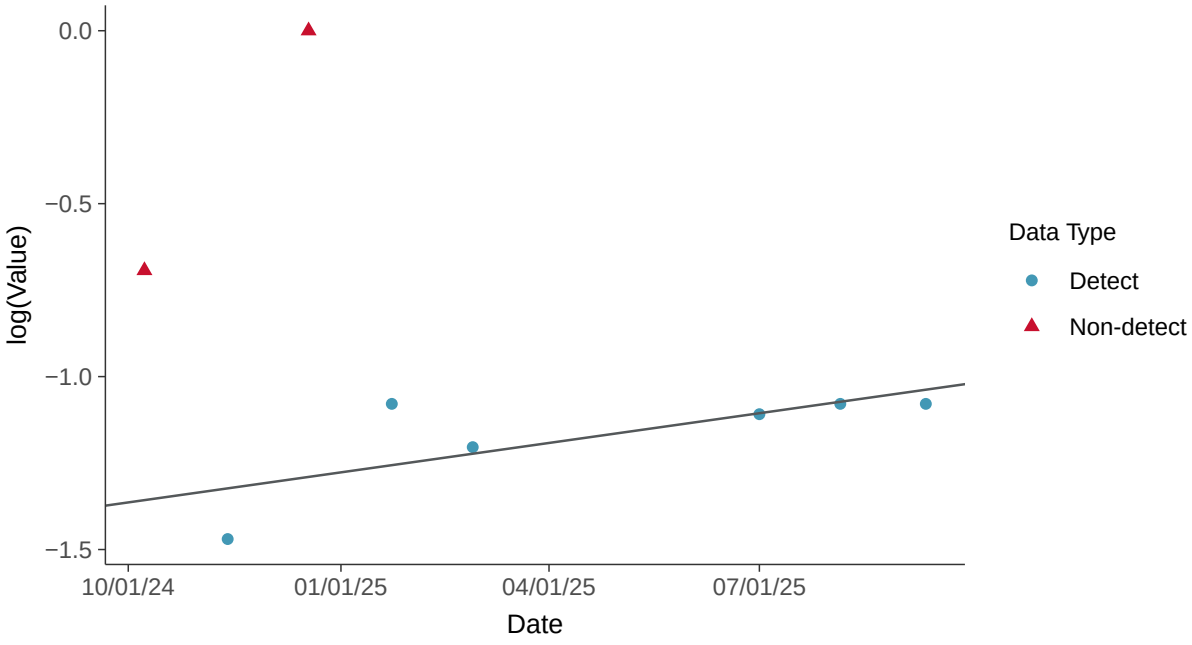
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-17C (mg/l)



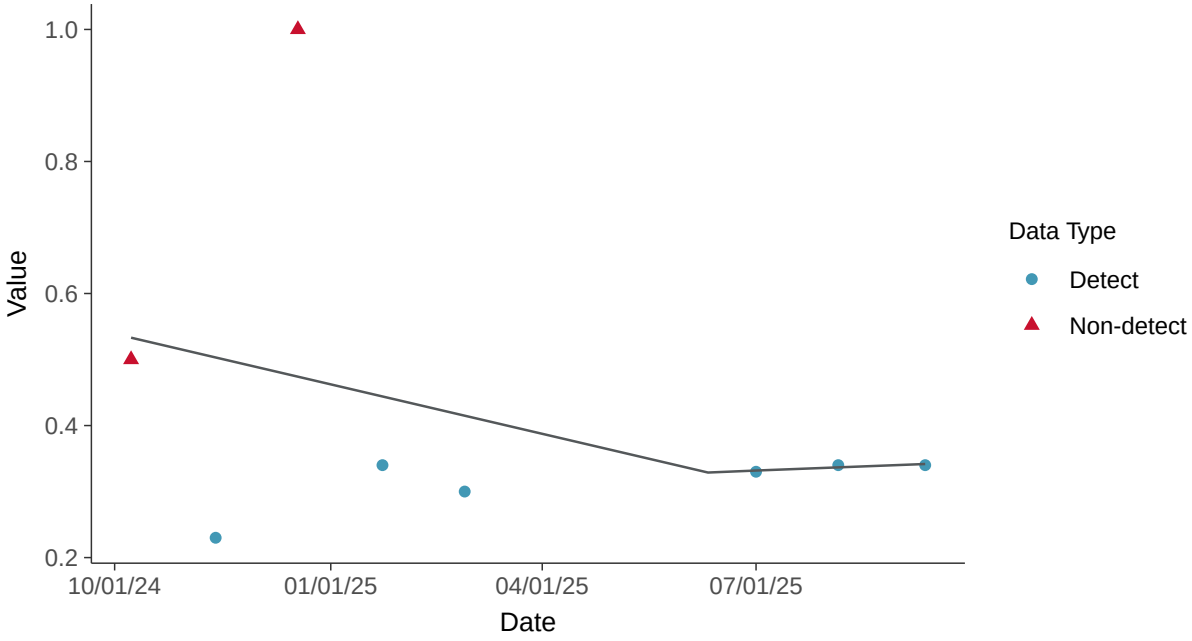
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-17C (mg/l)



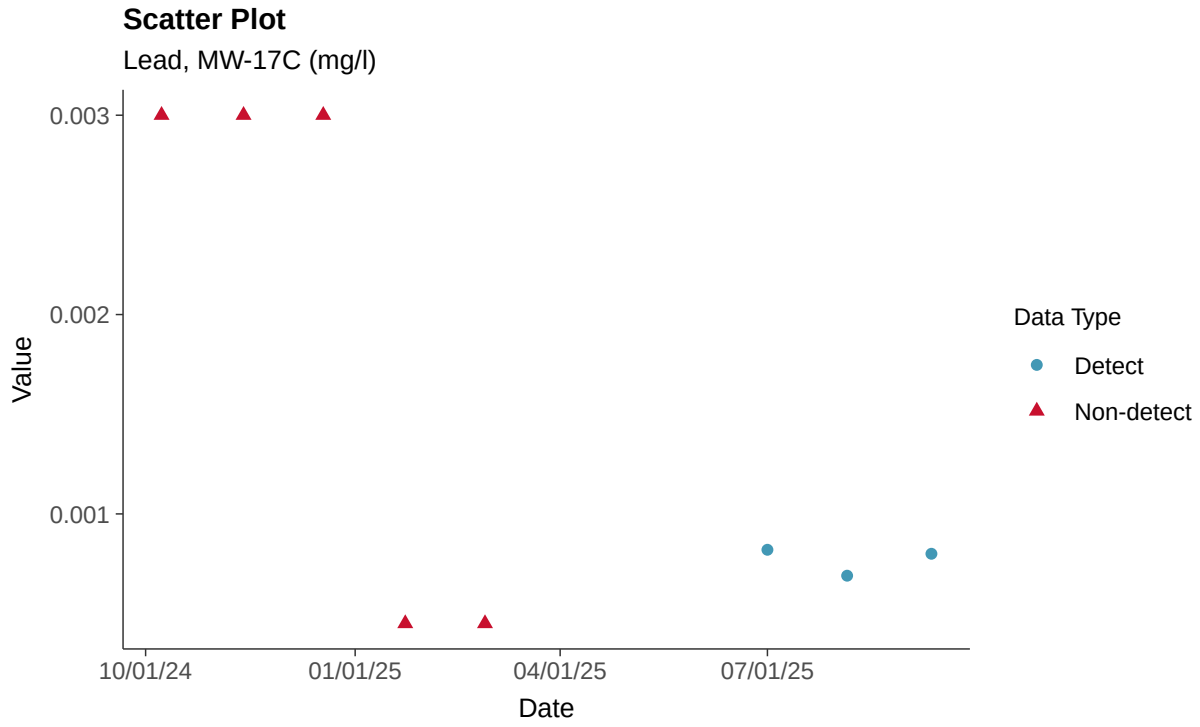
Trend Regression: Piecewise Linear-Linear

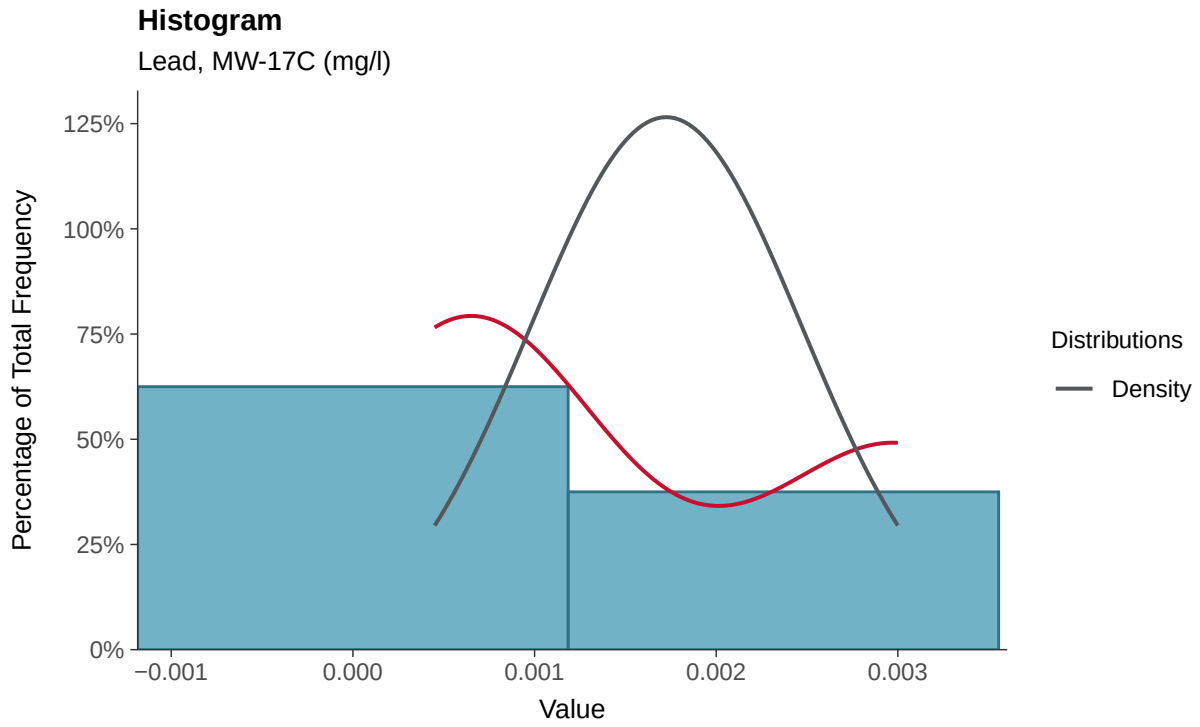
Fluoride (App IV), MW-17C (mg/l)



Appendix IV: Lead, MW-17C

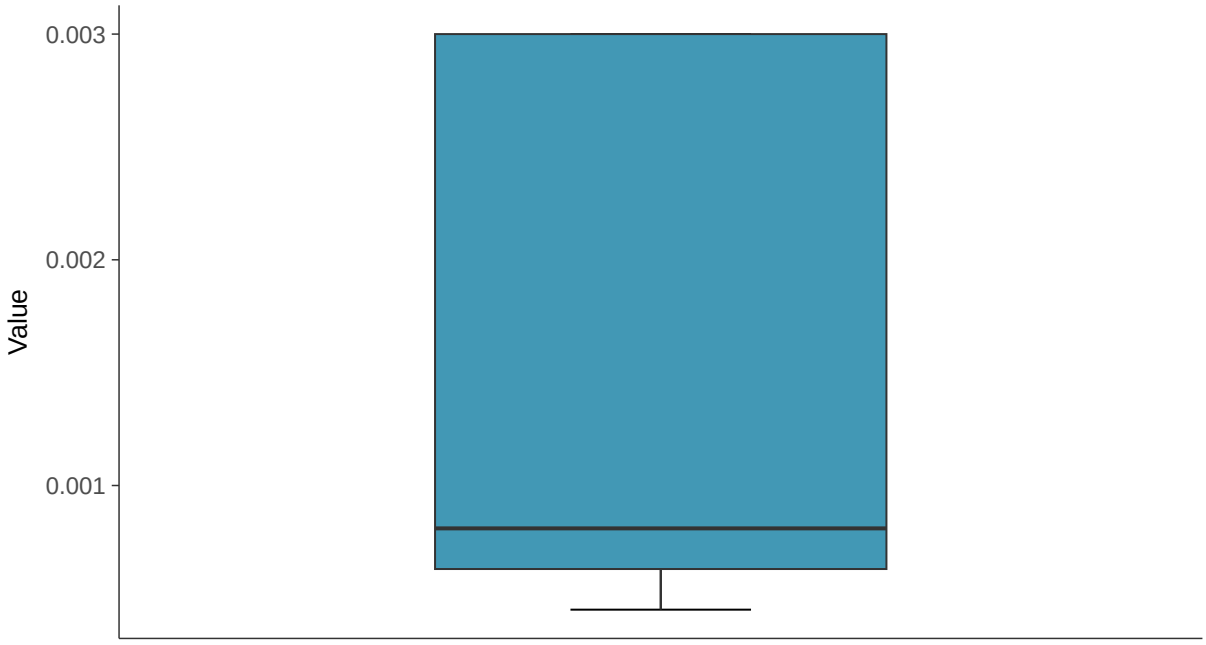
ID: 29_3_115





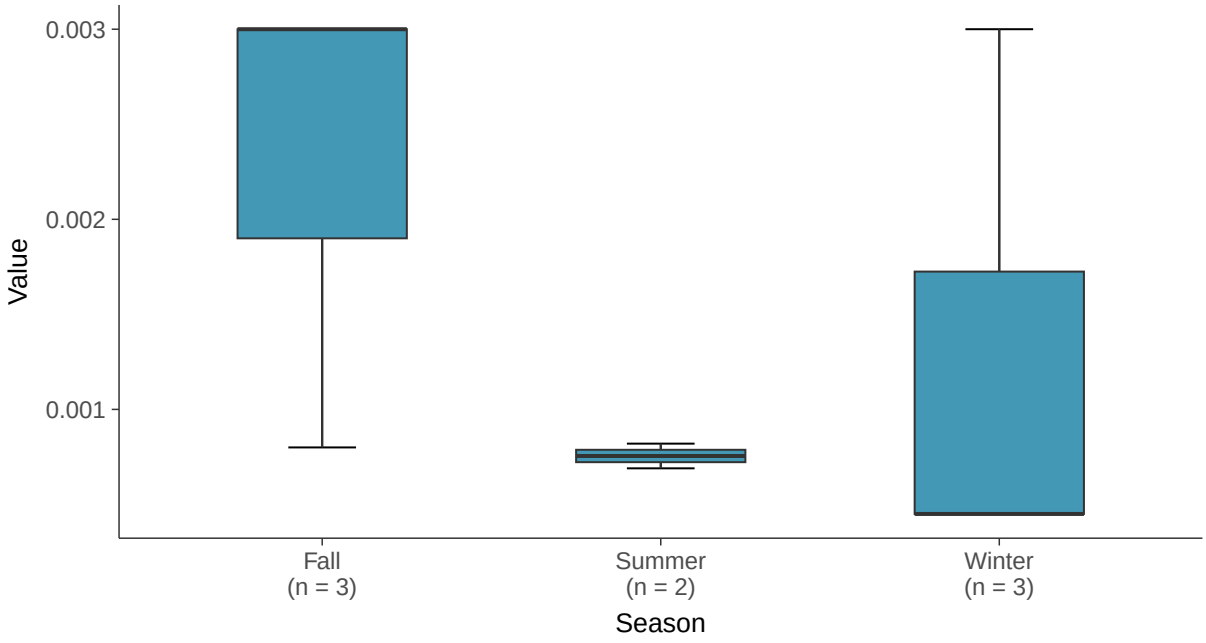
Boxplot

Lead, MW-17C (mg/l)



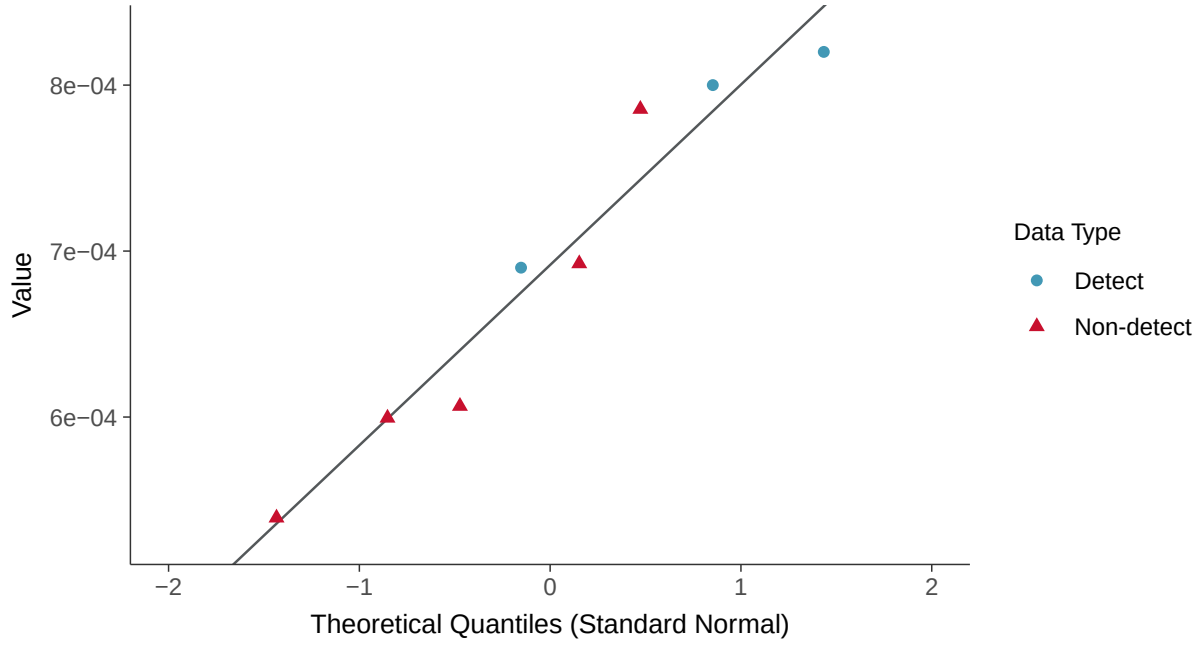
Boxplot by Season

Lead, MW-17C (mg/l)



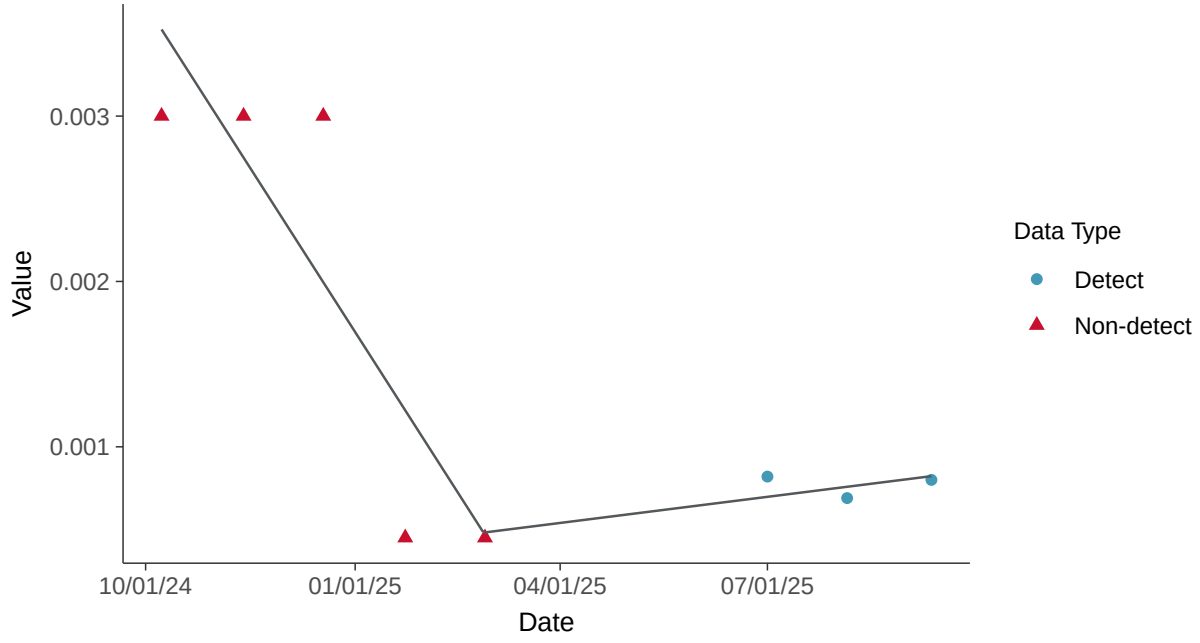
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-17C (mg/l)



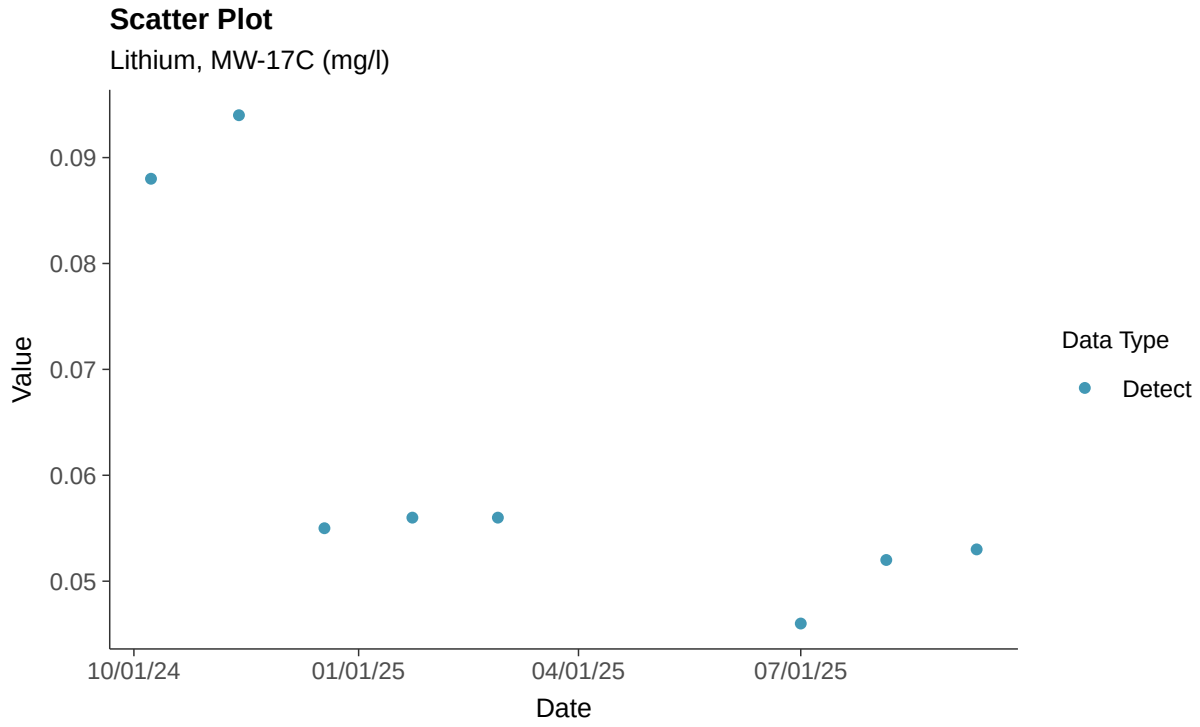
Trend Regression: Piecewise Linear-Linear

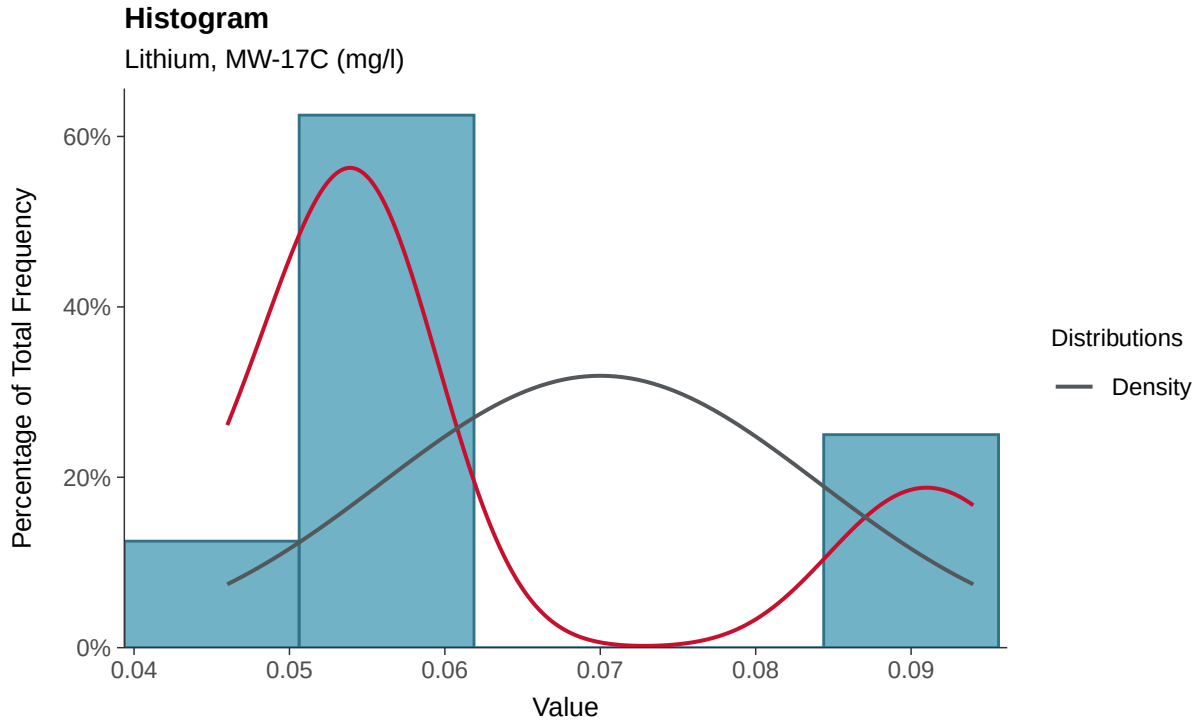
Lead, MW-17C (mg/l)



Appendix IV: Lithium, MW-17C

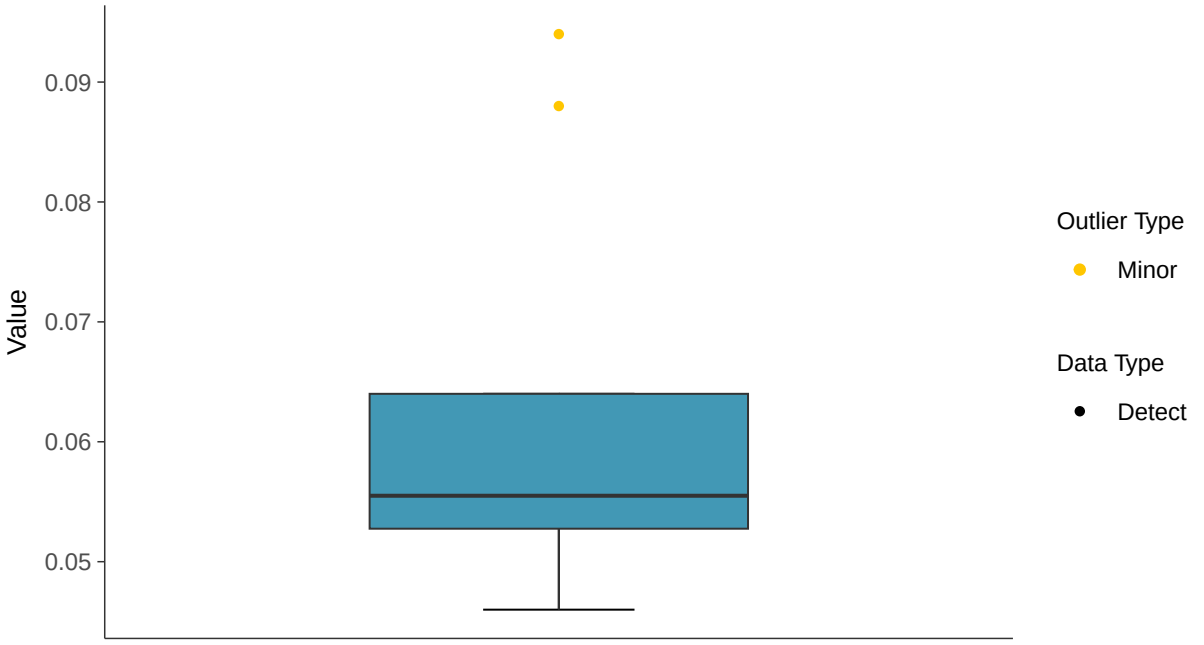
ID: 29_3_116





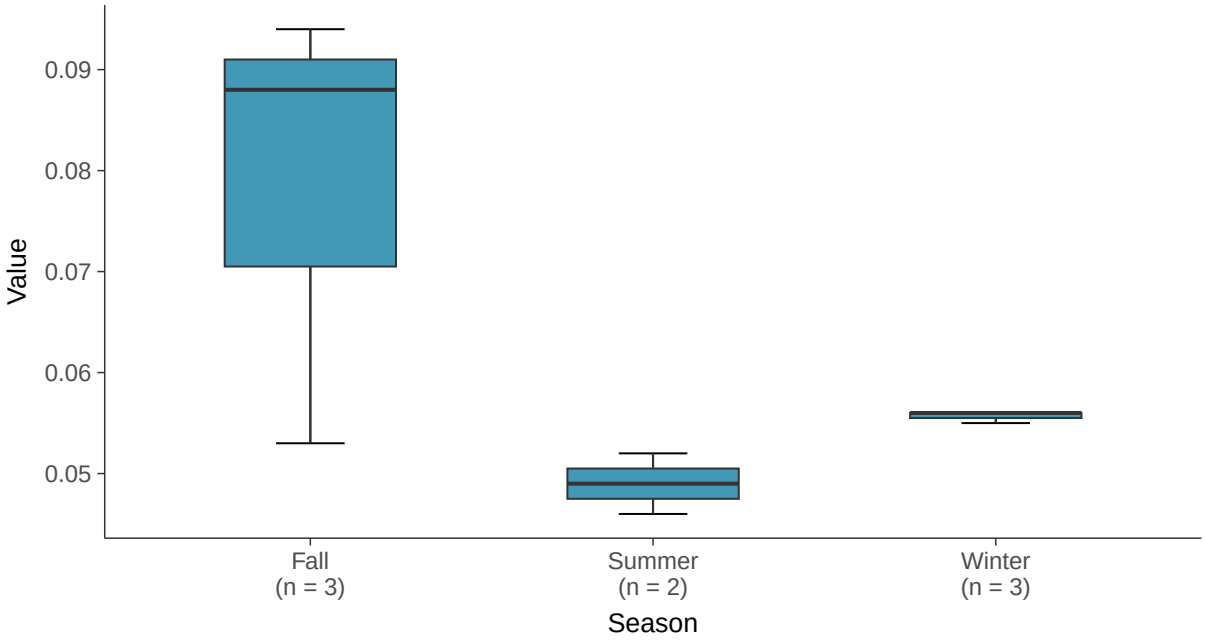
Boxplot

Lithium, MW-17C (mg/l)



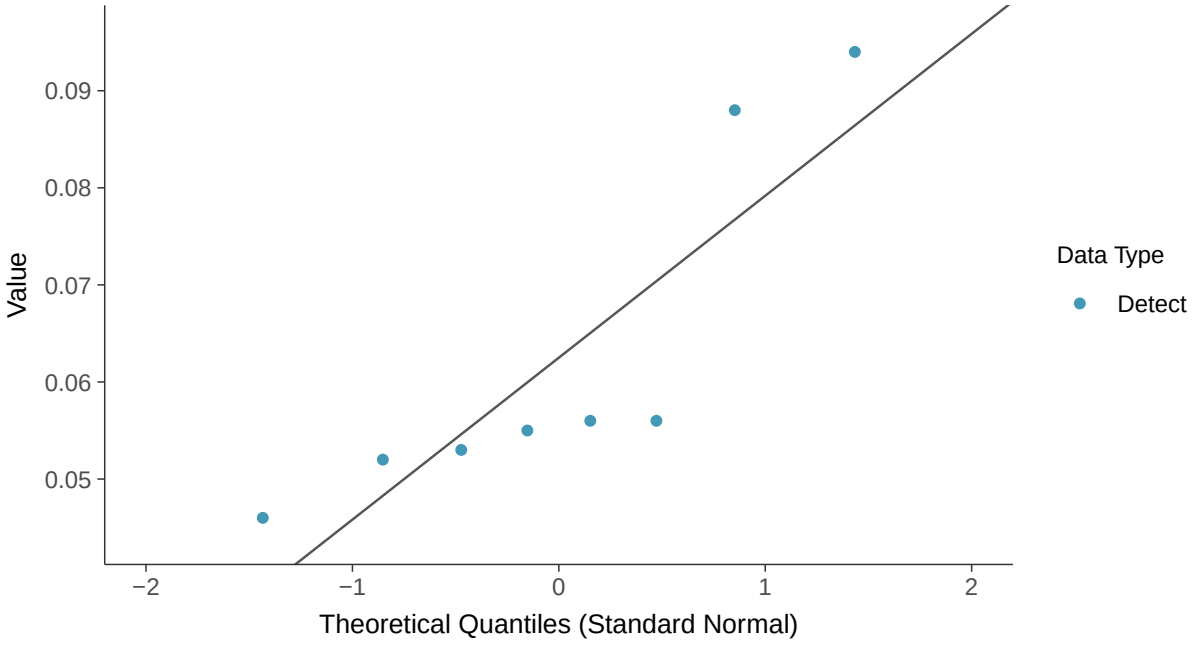
Boxplot by Season

Lithium, MW-17C (mg/l)



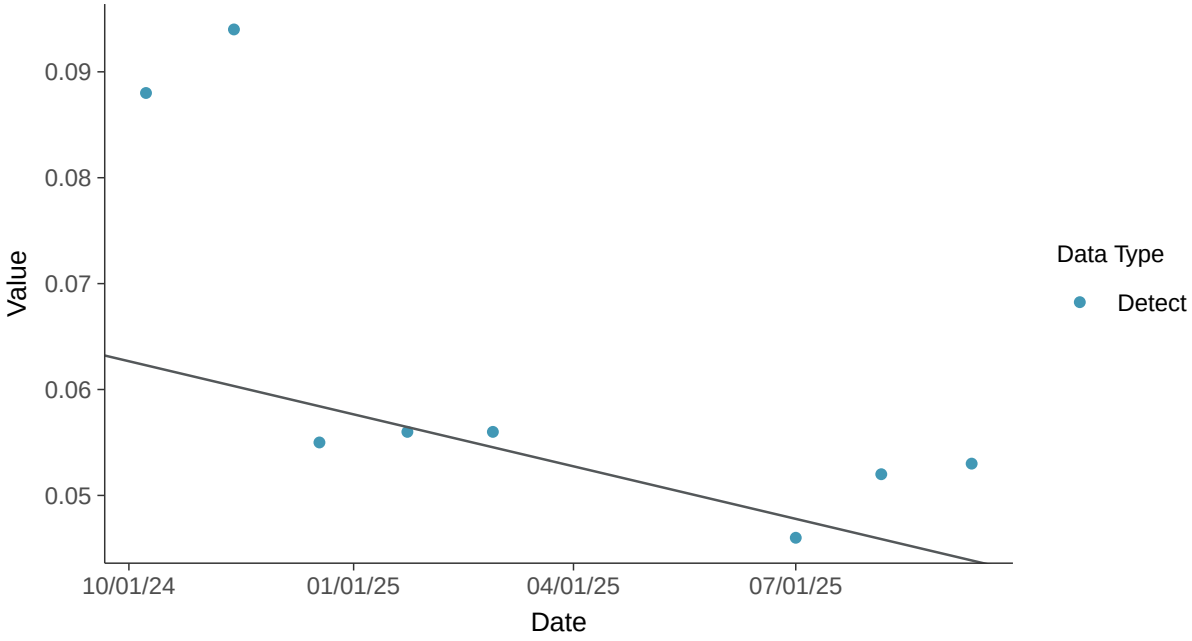
Normal Q-Q plot

Lithium, MW-17C (mg/l)



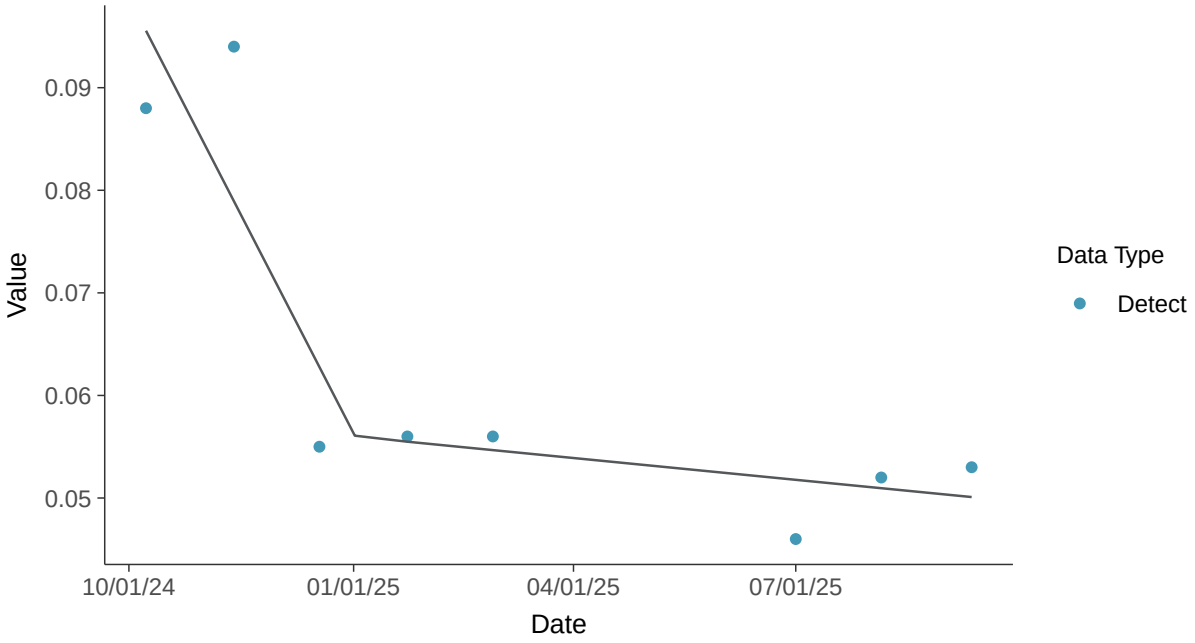
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Lithium, MW-17C (mg/l)



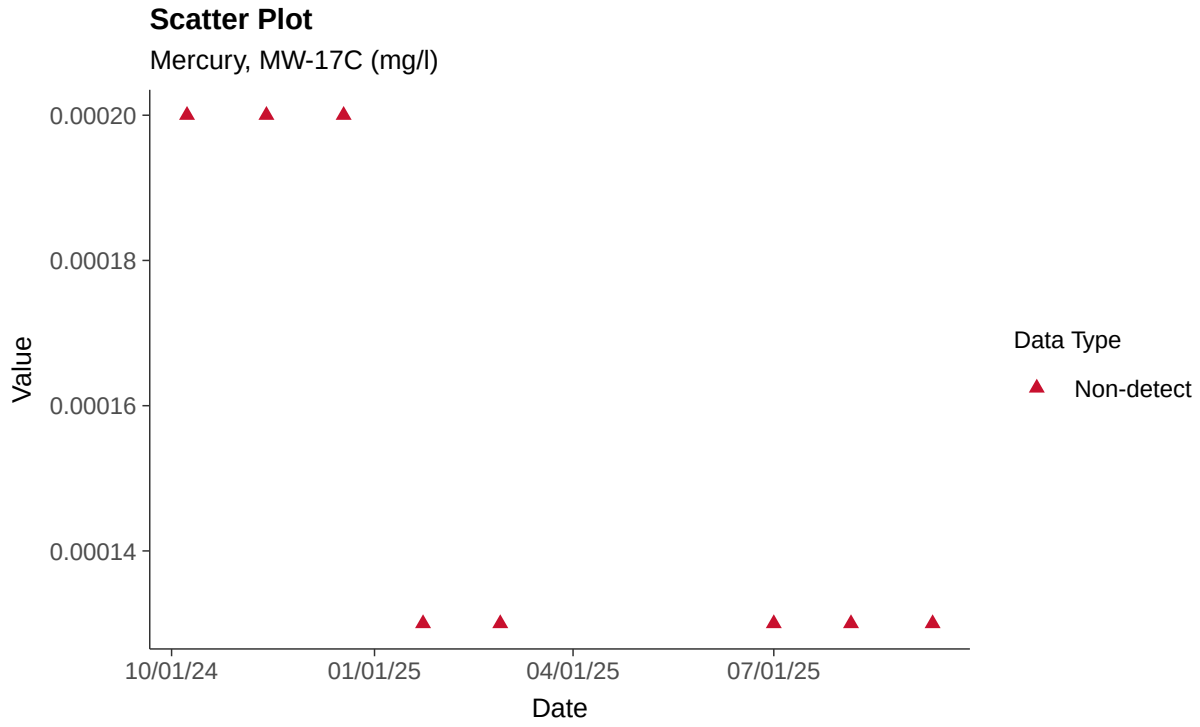
Trend Regression: Piecewise Linear-Linear

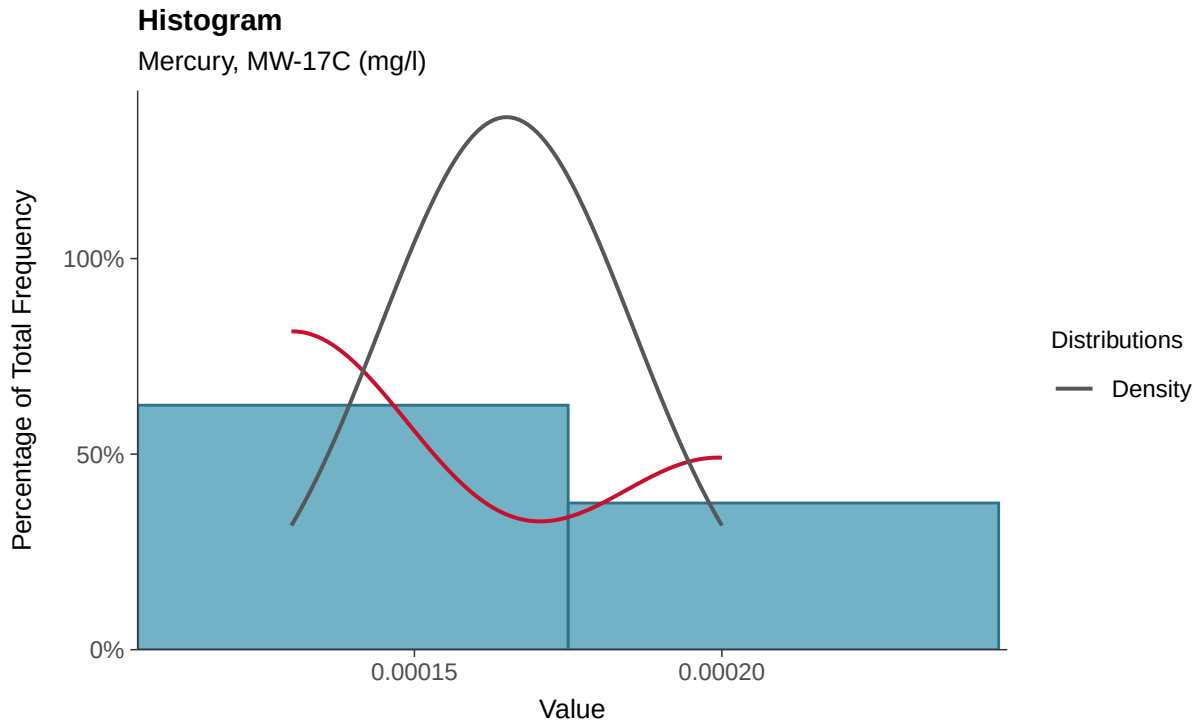
Lithium, MW-17C (mg/l)



Appendix IV: Mercury, MW-17C

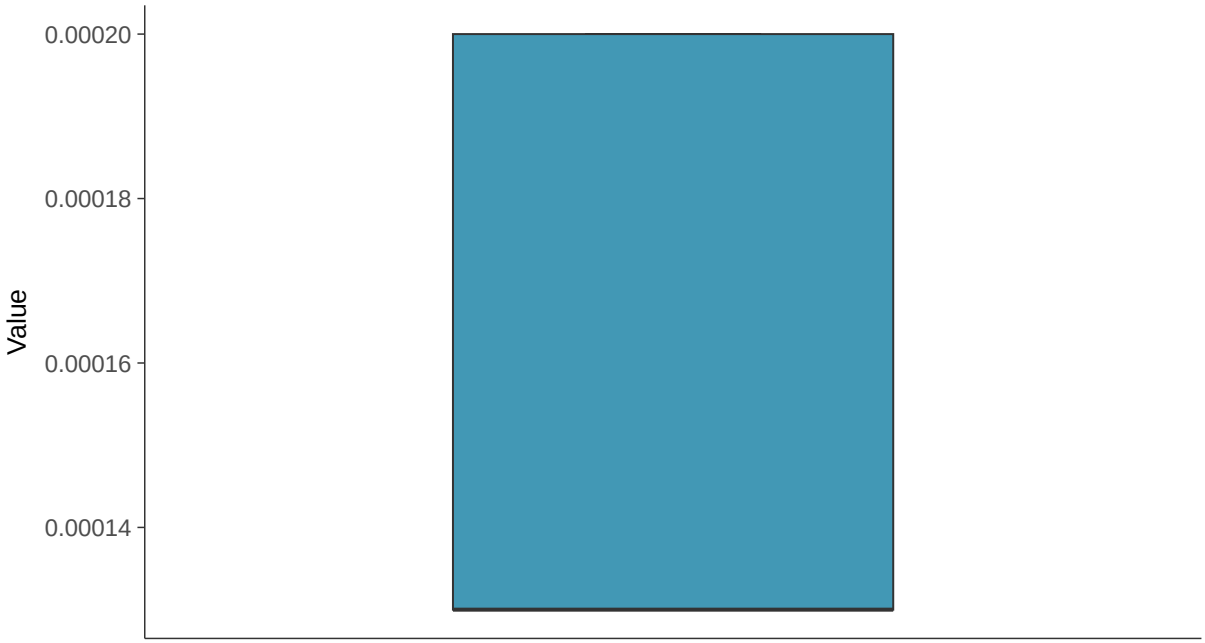
ID: 29_3_117





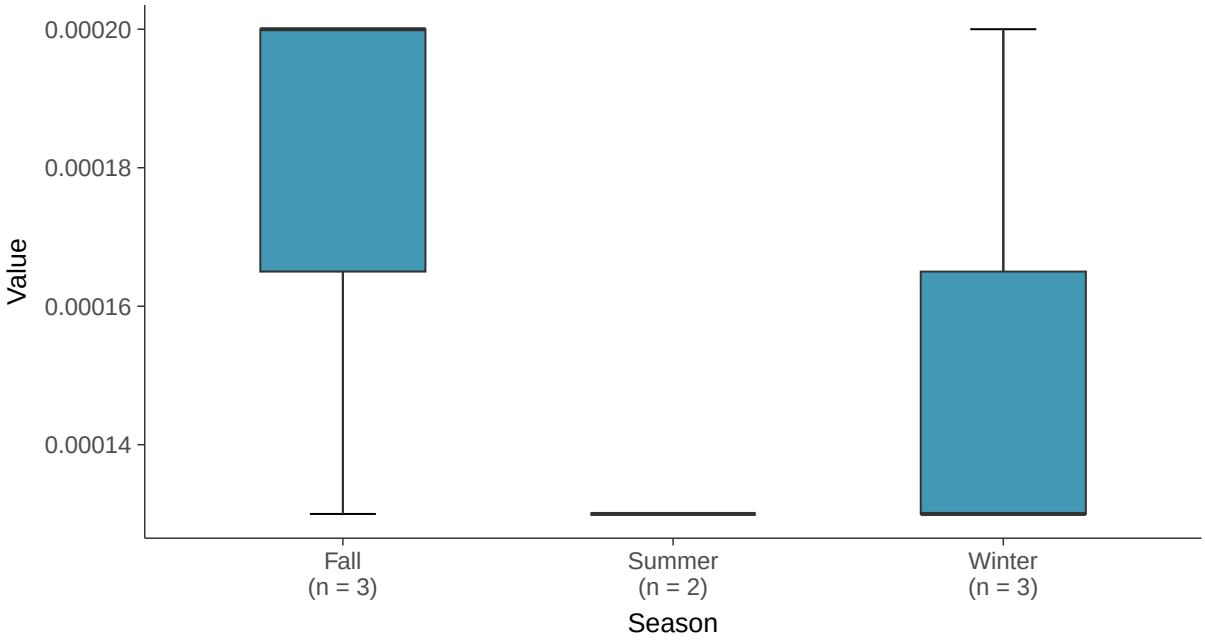
Boxplot

Mercury, MW-17C (mg/l)



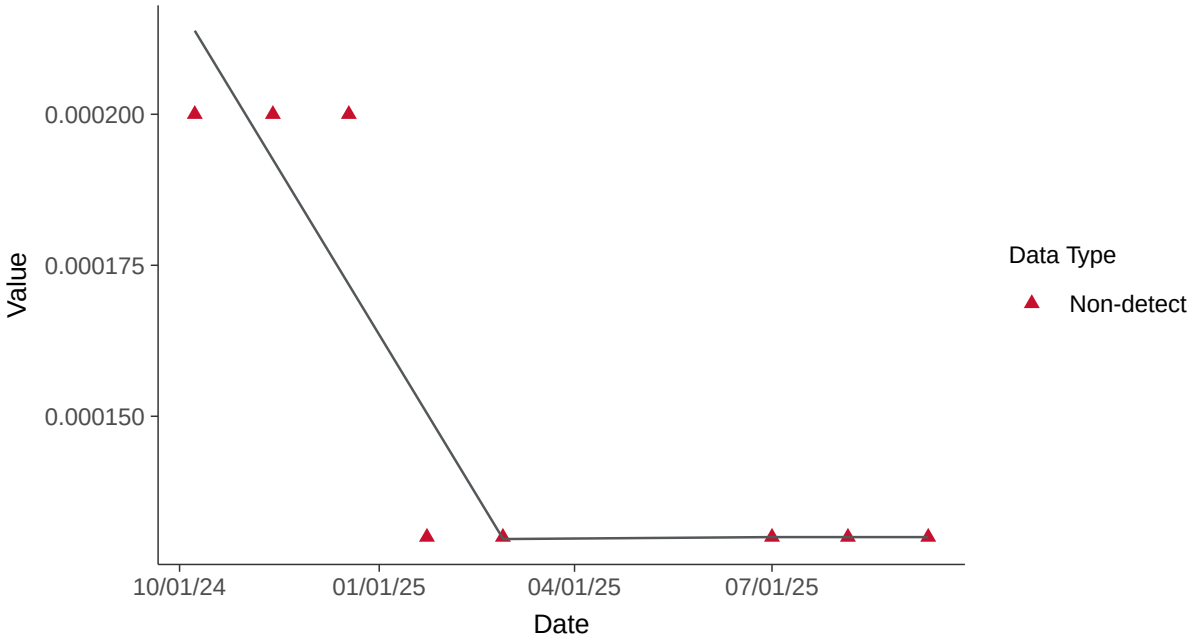
Boxplot by Season

Mercury, MW-17C (mg/l)



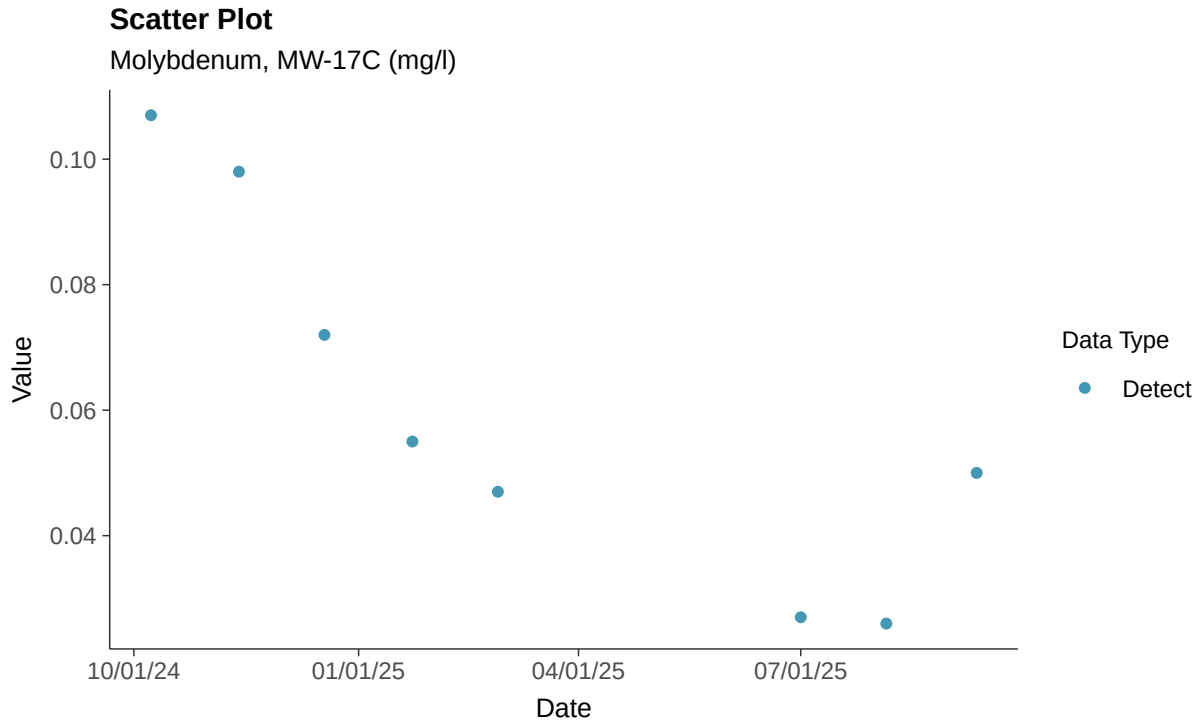
Trend Regression: Piecewise Linear-Linear

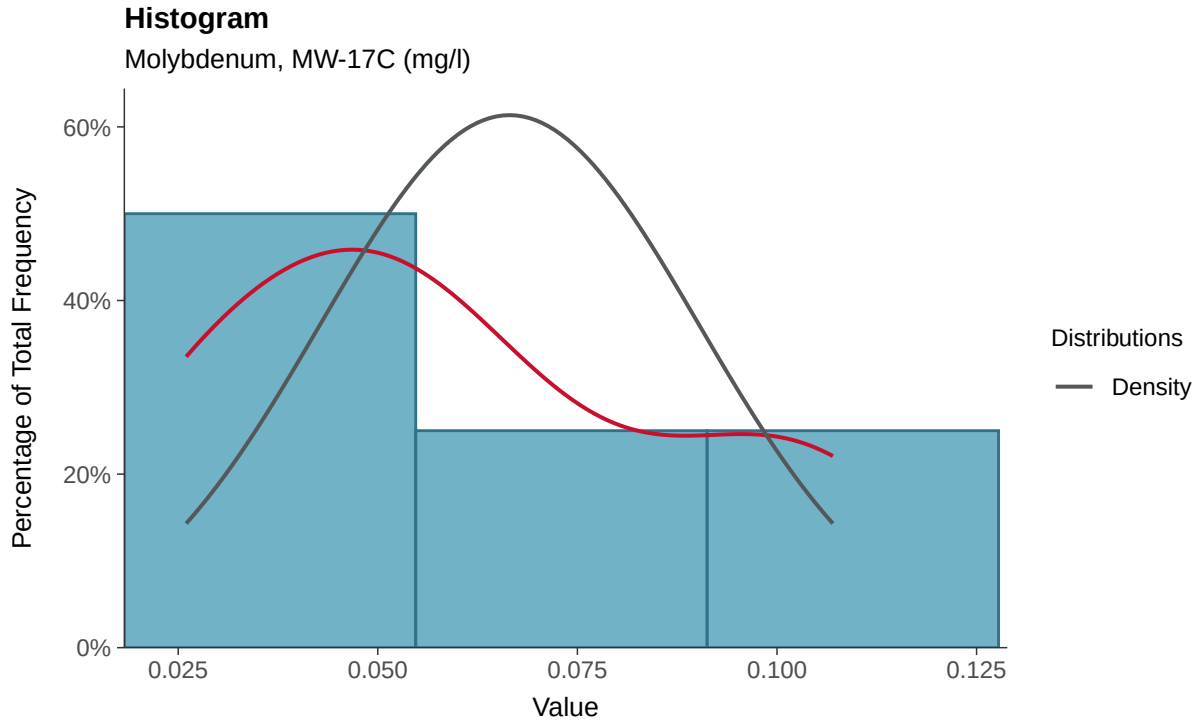
Mercury, MW-17C (mg/l)



Appendix IV: Molybdenum, MW-17C

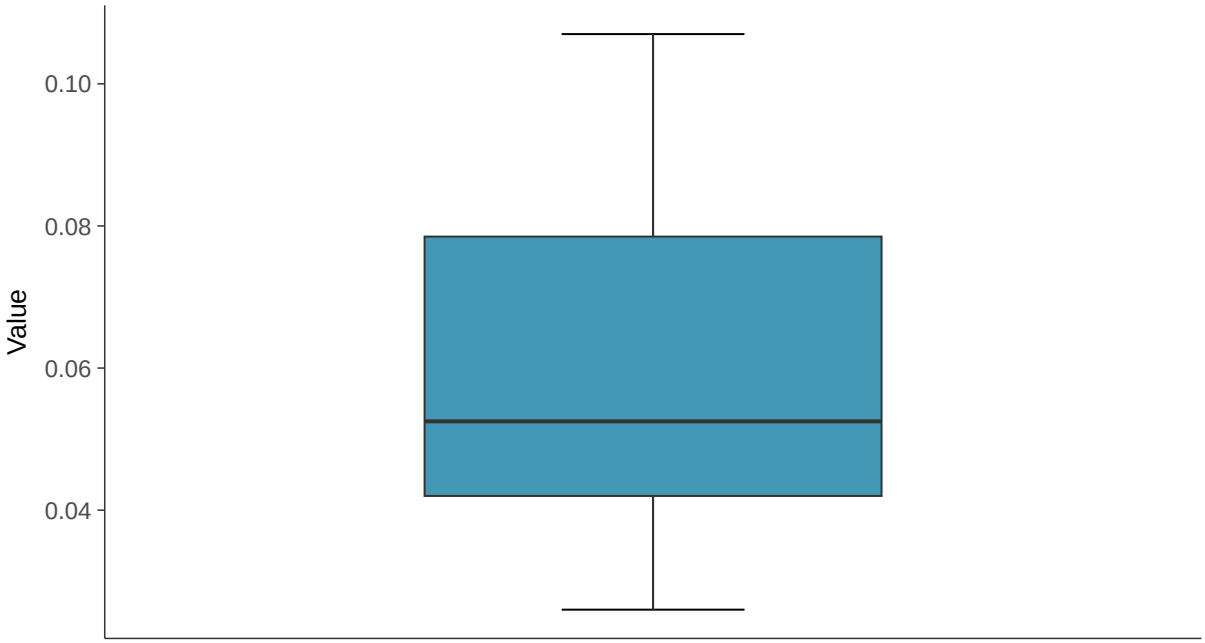
ID: 29_3_118





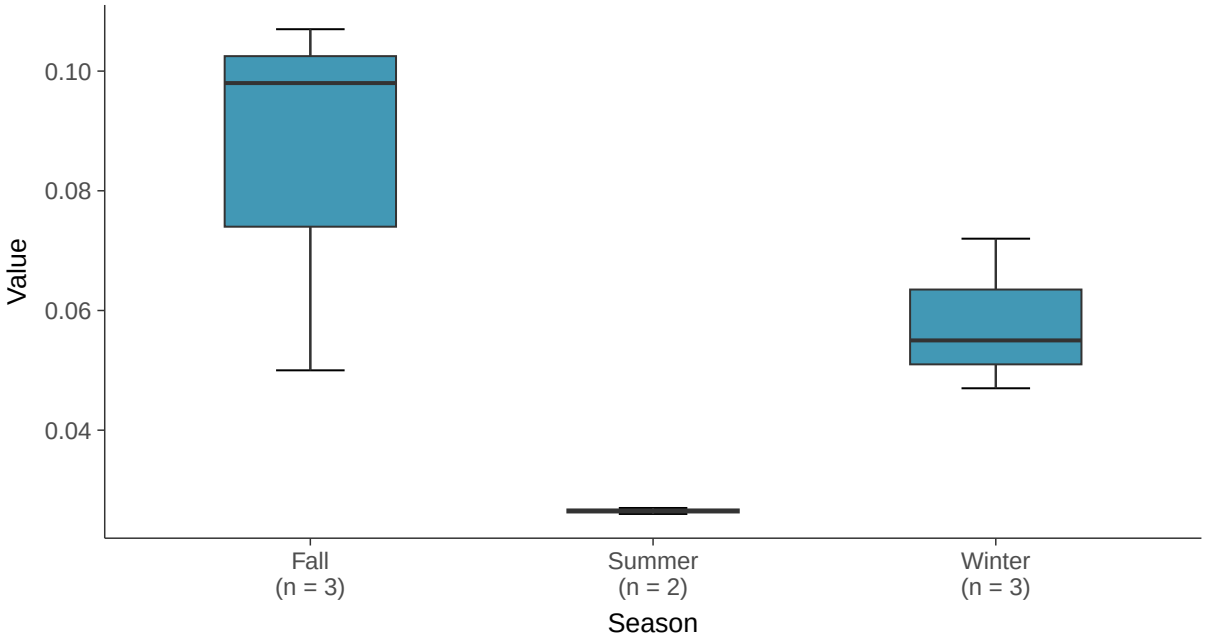
Boxplot

Molybdenum, MW-17C (mg/l)



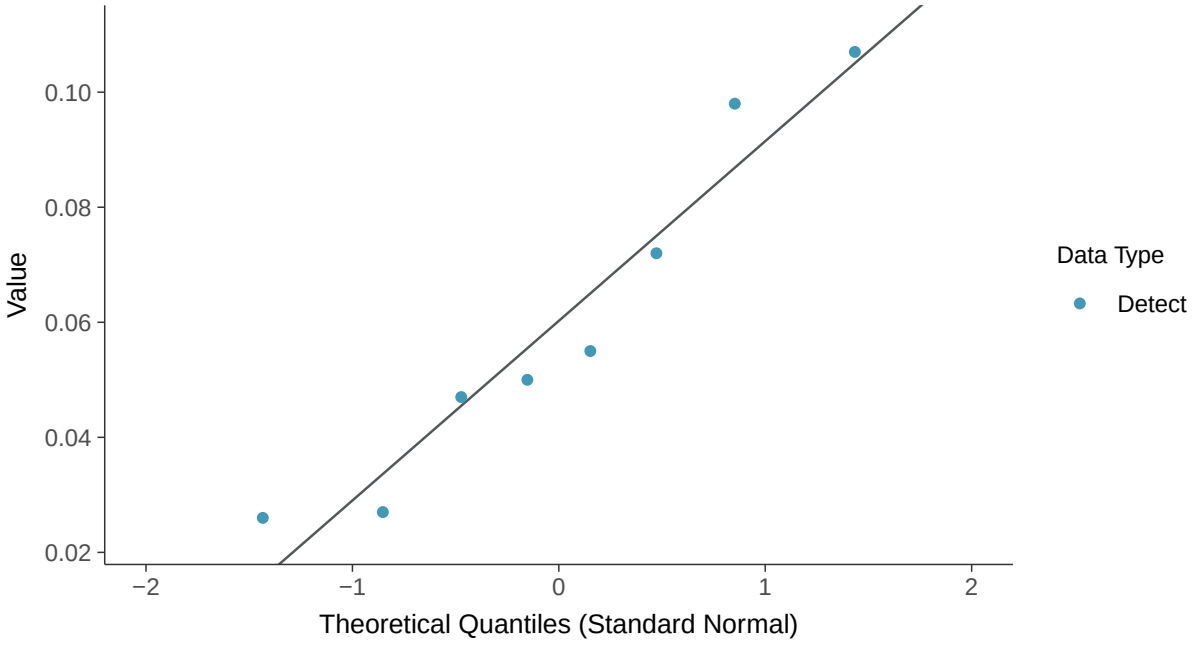
Boxplot by Season

Molybdenum, MW-17C (mg/l)



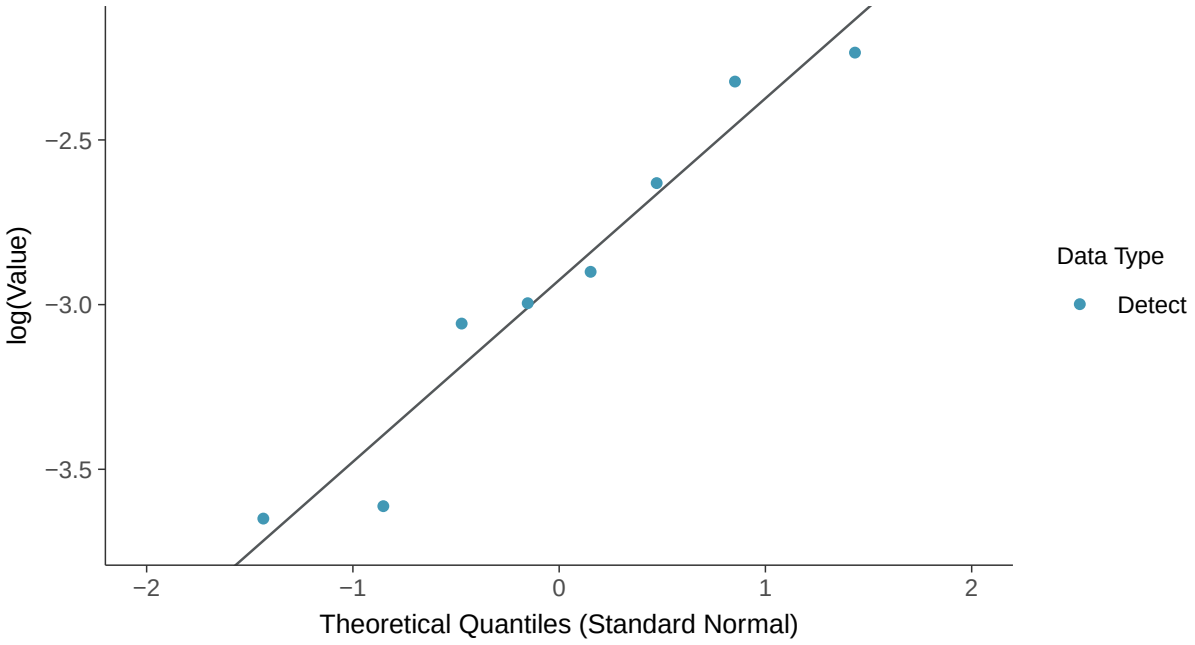
Normal Q-Q plot

Molybdenum, MW-17C (mg/l)



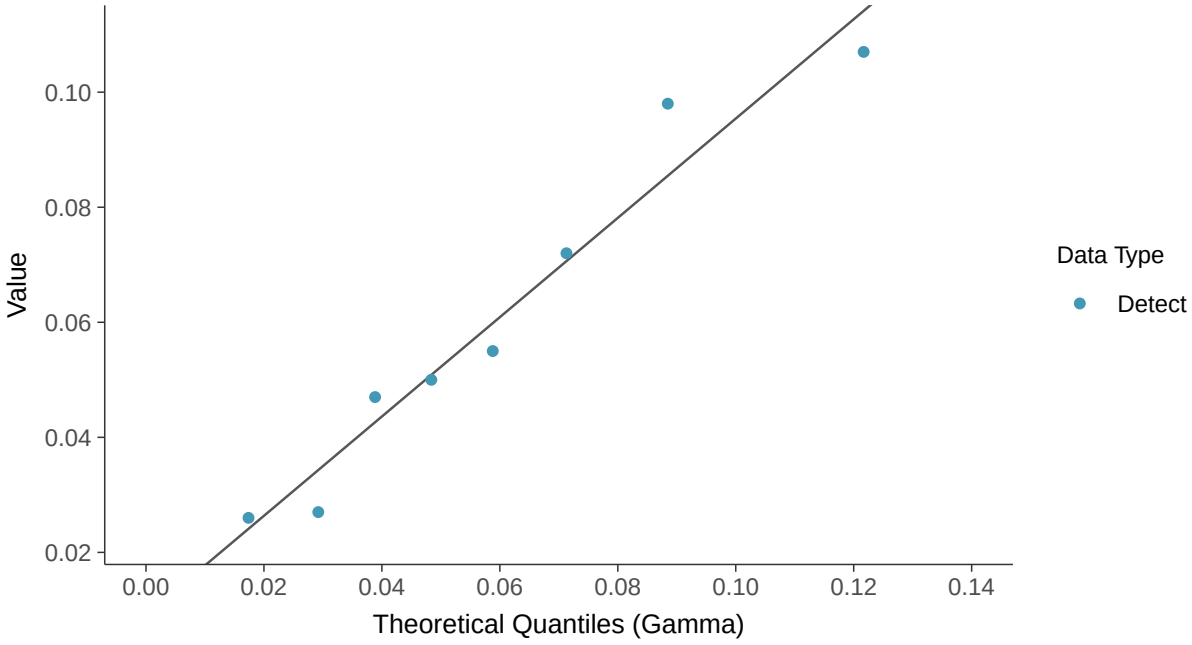
Lognormal Q-Q plot

Molybdenum, MW-17C (mg/l)



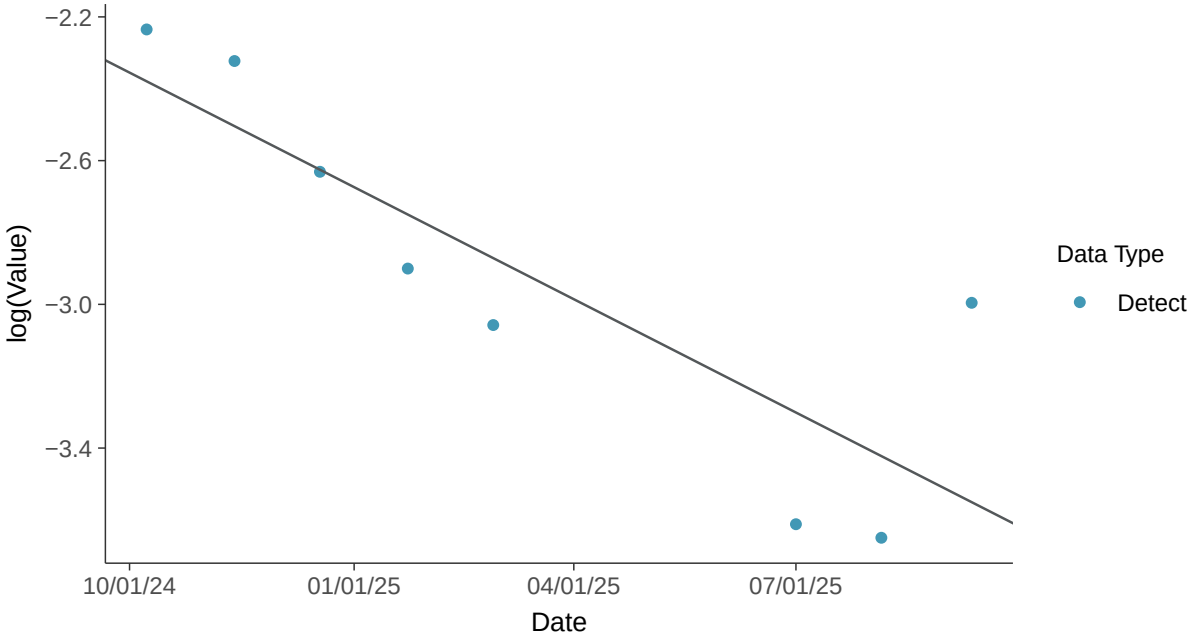
Gamma Q-Q plot

Molybdenum, MW-17C (mg/l)



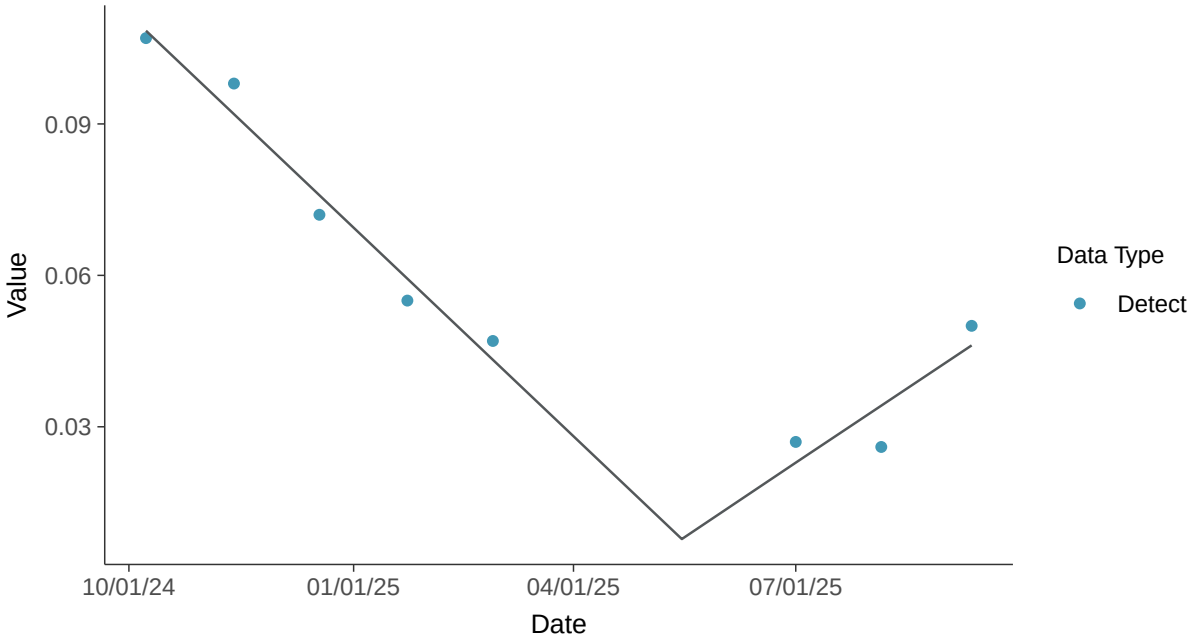
Trend Regression: Lognormal MLE

Molybdenum, MW-17C (mg/l)



Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-17C (mg/l)

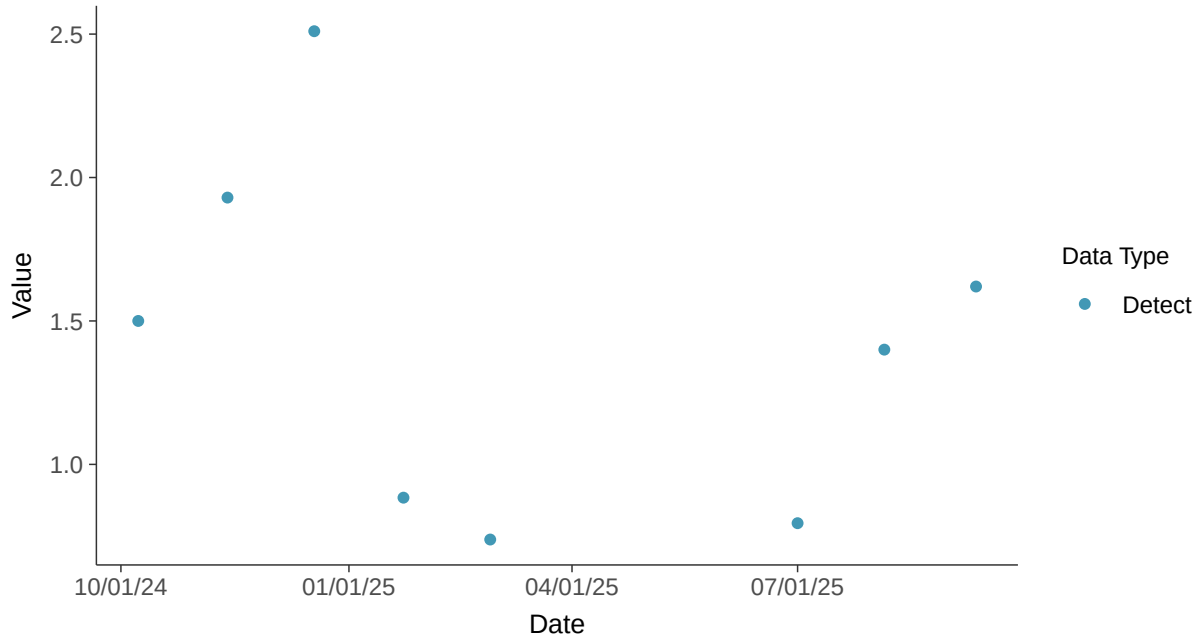


Appendix IV: Radium-226+228, MW-17C

ID: 29_3_121

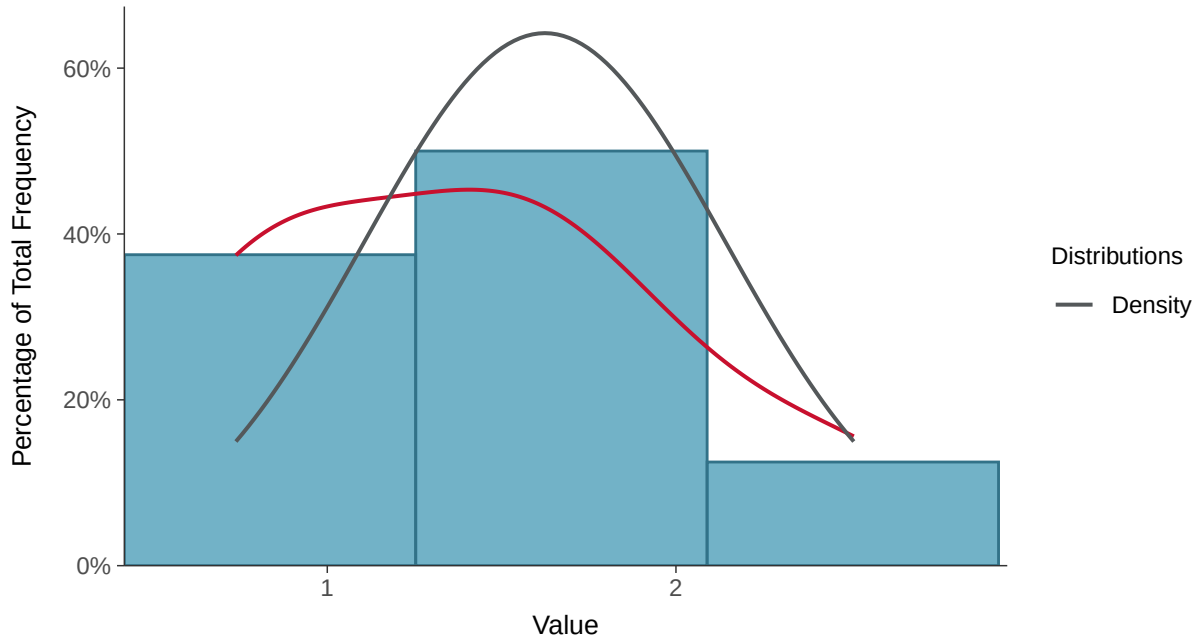
Scatter Plot

Radium-226+228, MW-17C (pci/l)



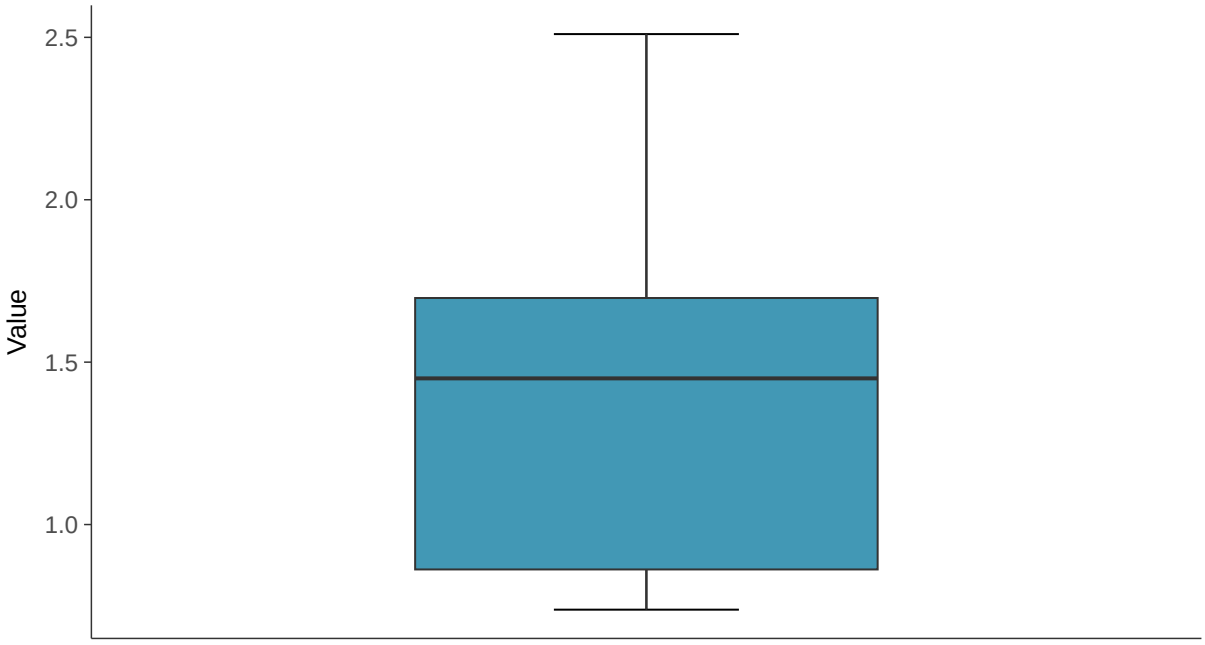
Histogram

Radium-226+228, MW-17C (pci/l)



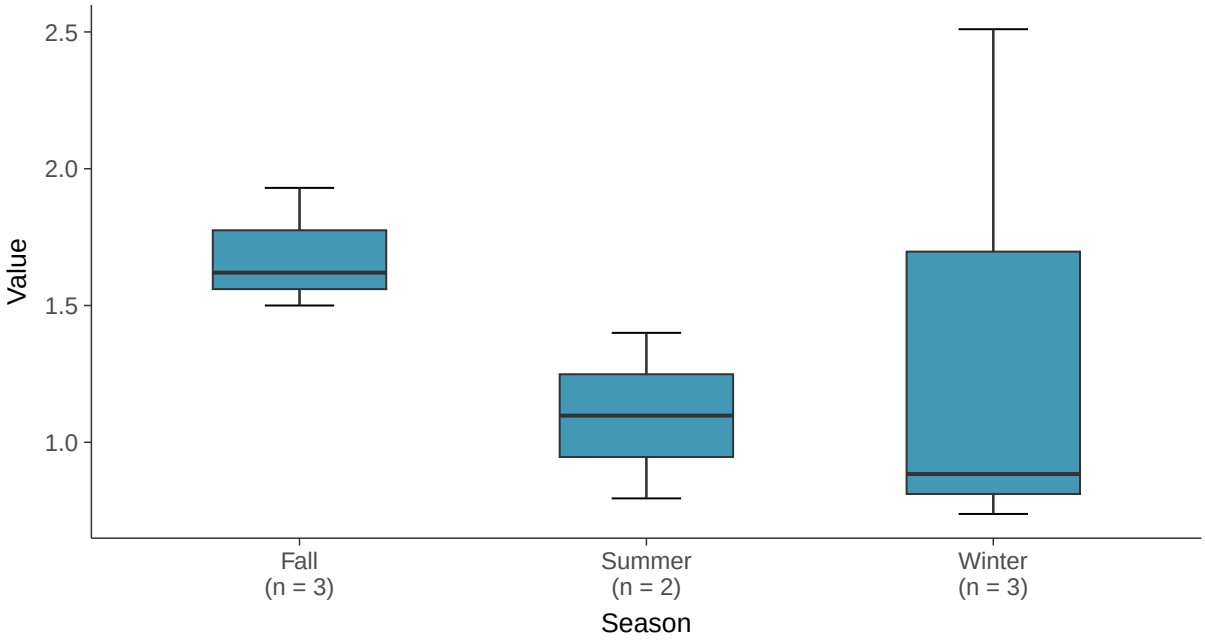
Boxplot

Radium-226+228, MW-17C (pci/l)



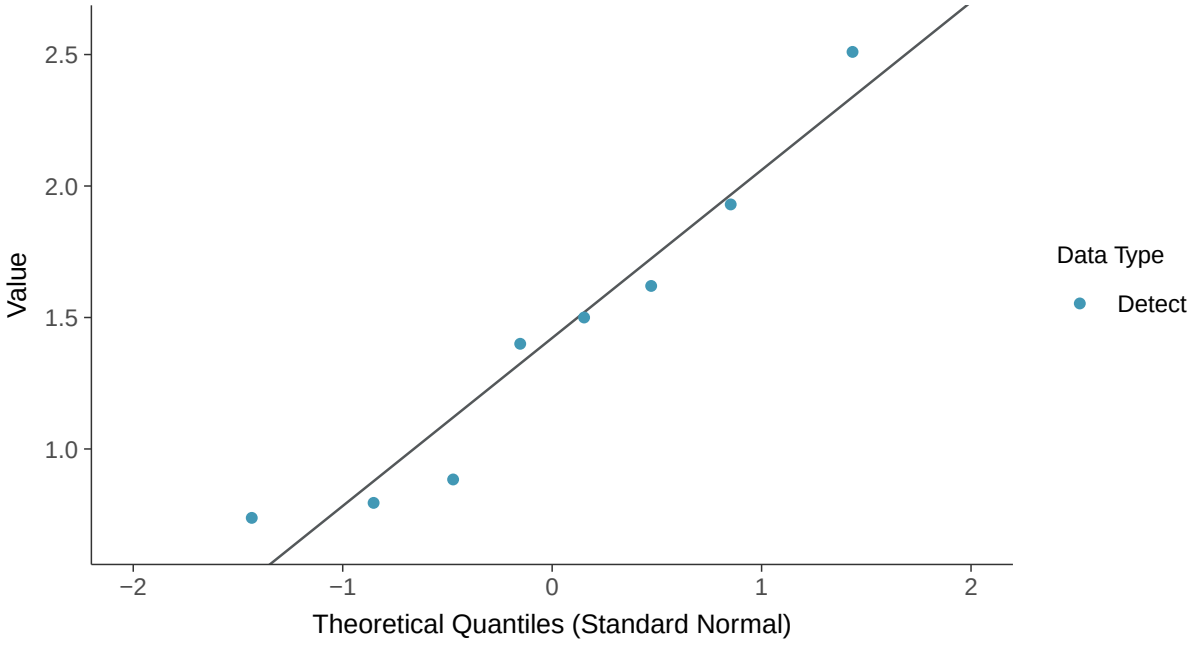
Boxplot by Season

Radium-226+228, MW-17C (pci/l)



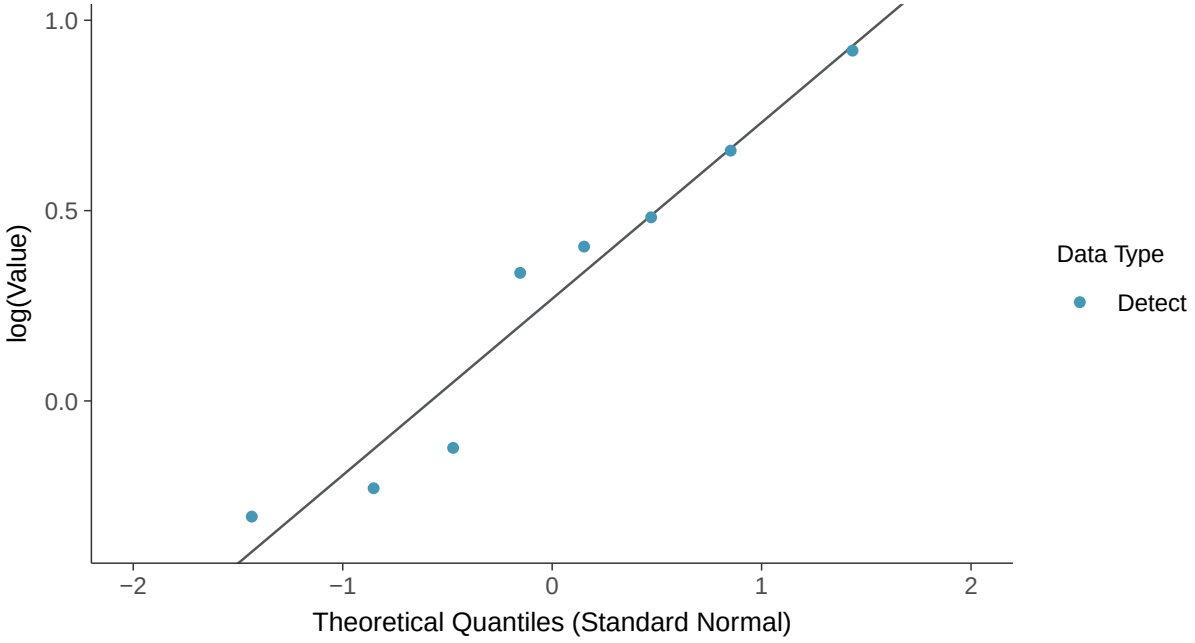
Normal Q-Q plot

Radium-226+228, MW-17C (pci/l)



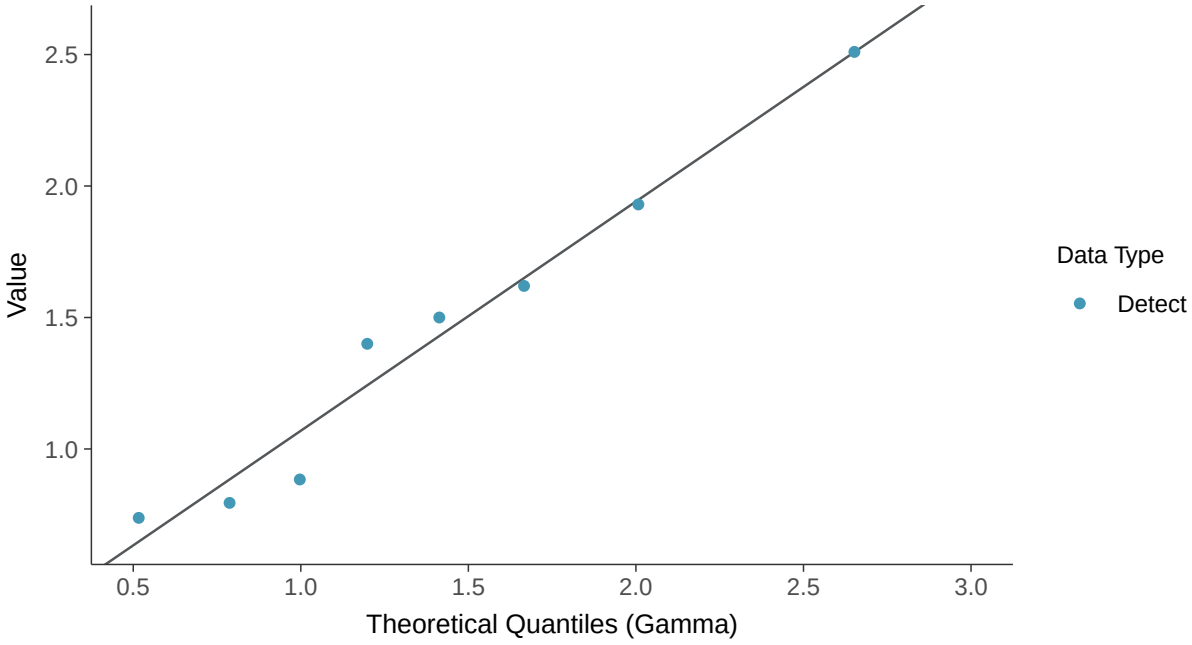
Lognormal Q-Q plot

Radium-226+228, MW-17C (pci/l)



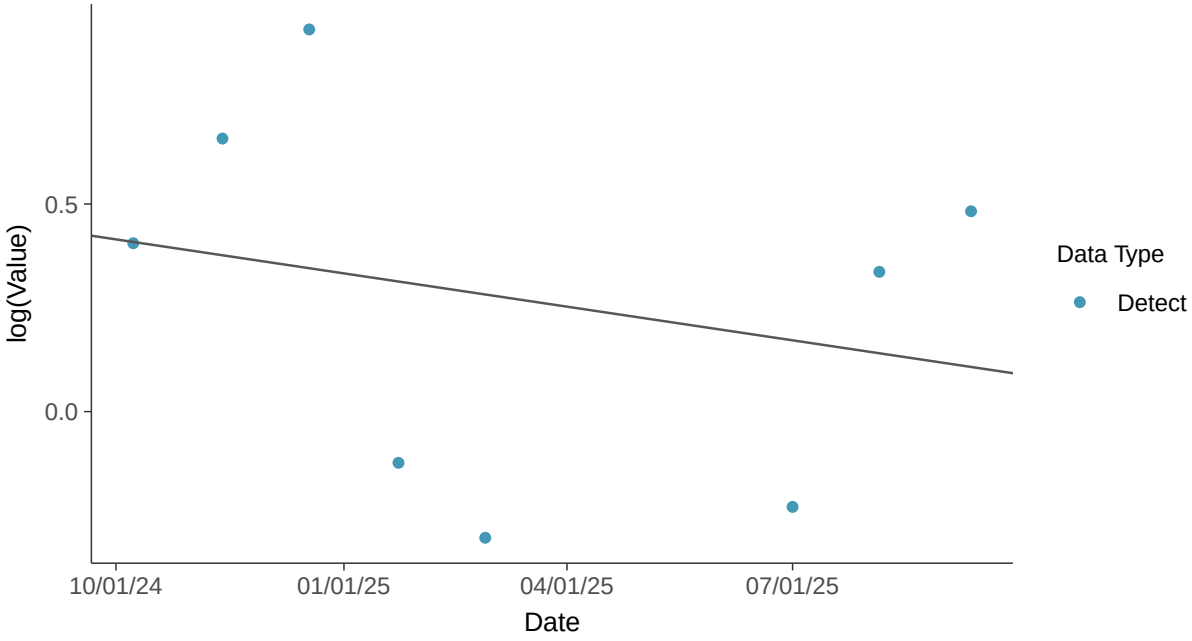
Gamma Q-Q plot

Radium-226+228, MW-17C (pci/l)



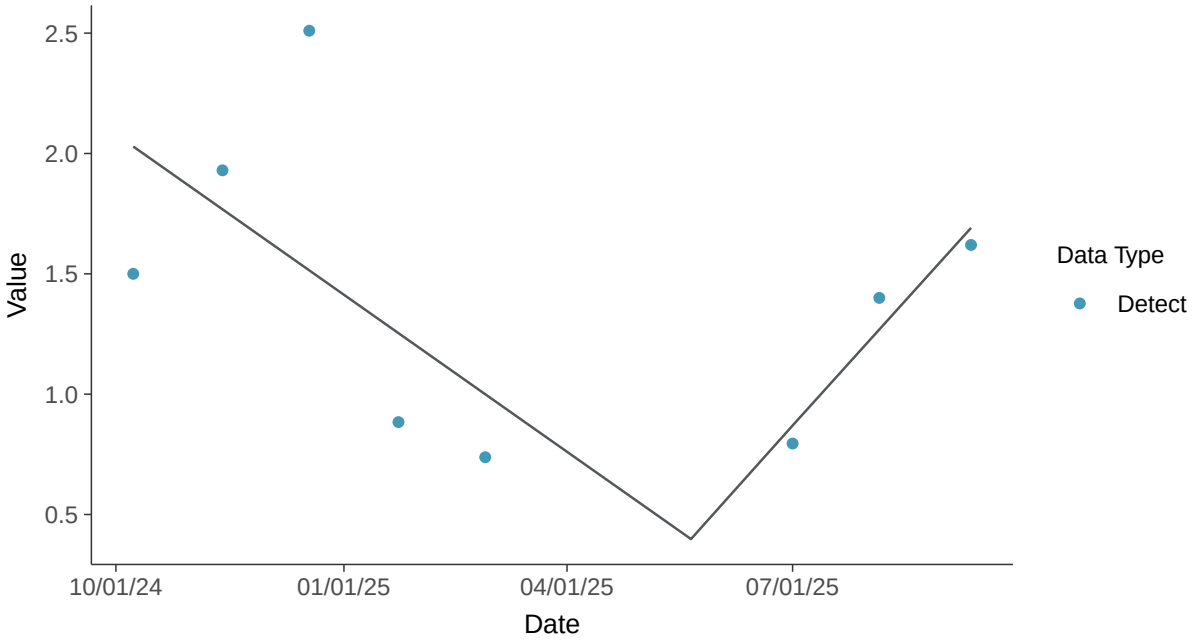
Trend Regression: Lognormal MLE

Radium-226+228, MW-17C (pci/l)



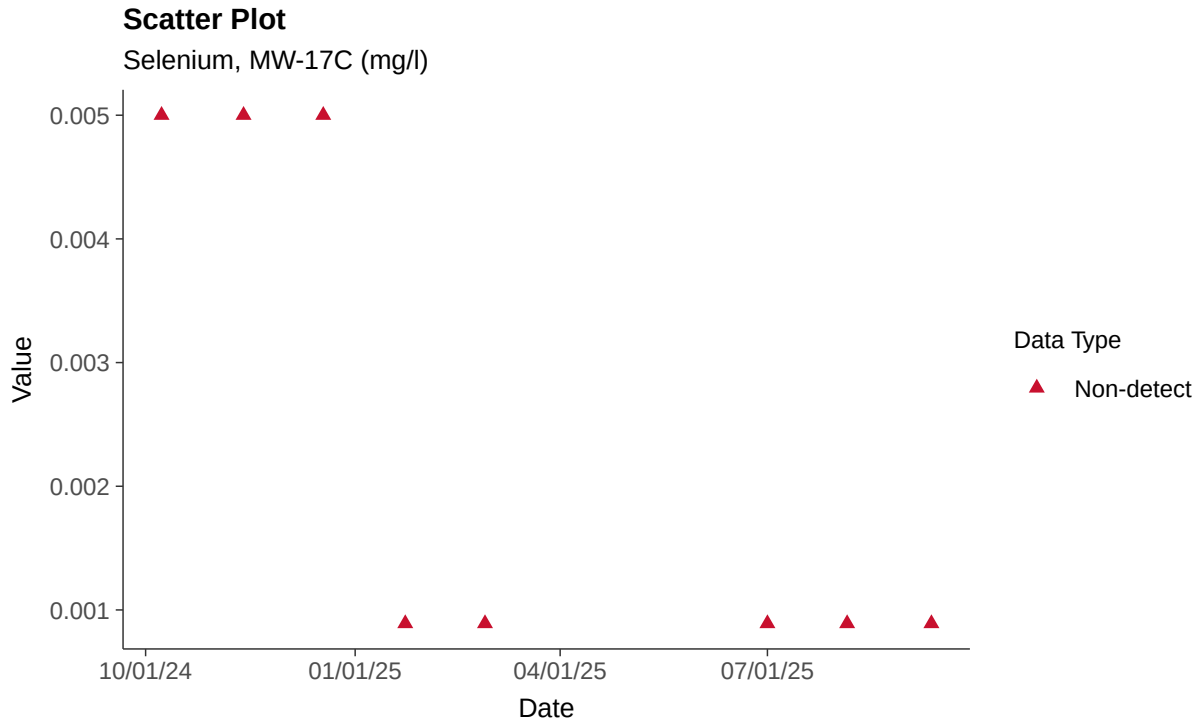
Trend Regression: Piecewise Linear-Linear

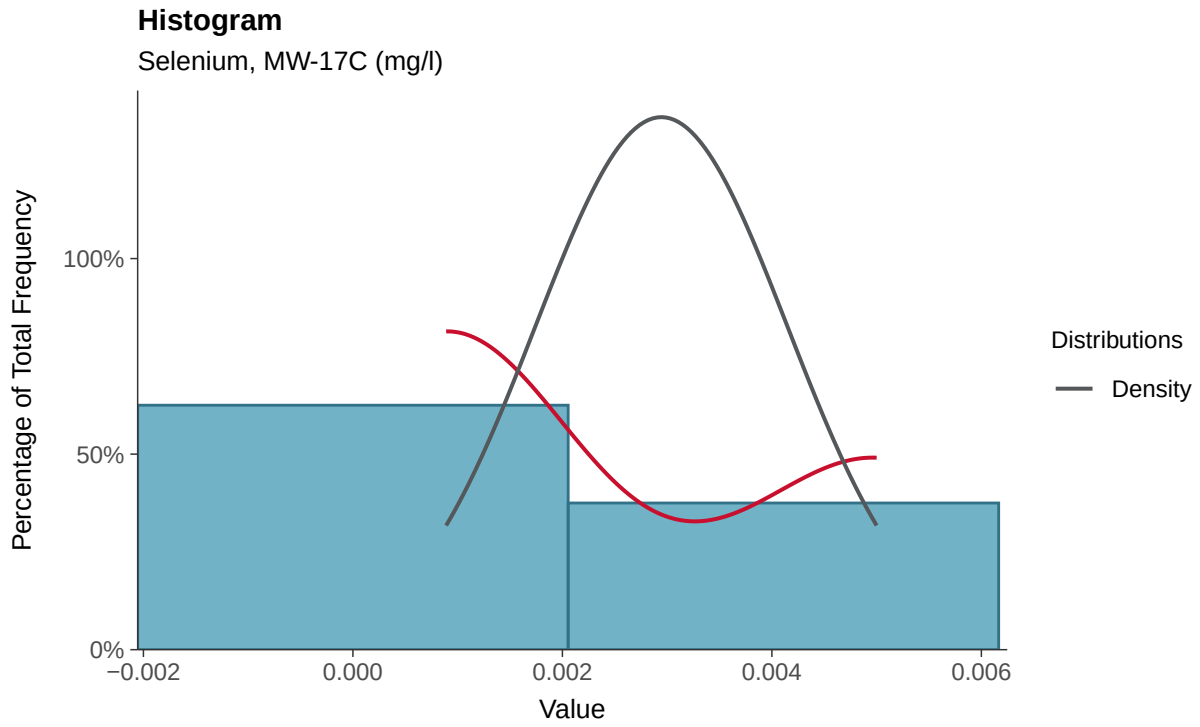
Radium-226+228, MW-17C (pci/l)



Appendix IV: Selenium, MW-17C

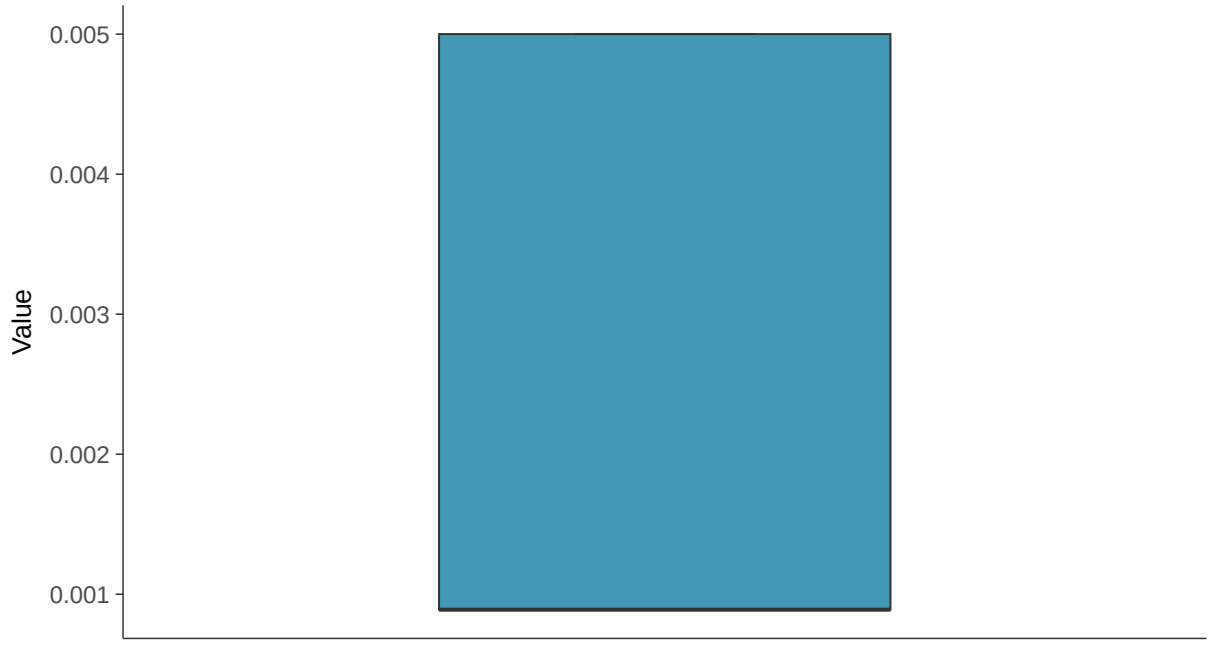
ID: 29_3_122





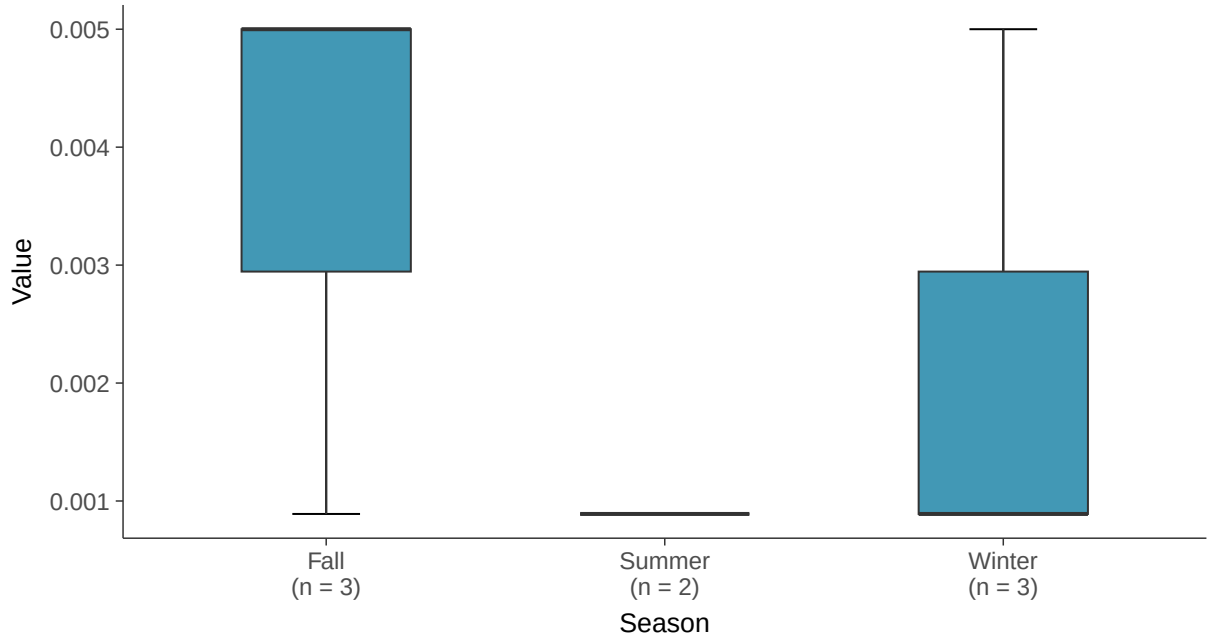
Boxplot

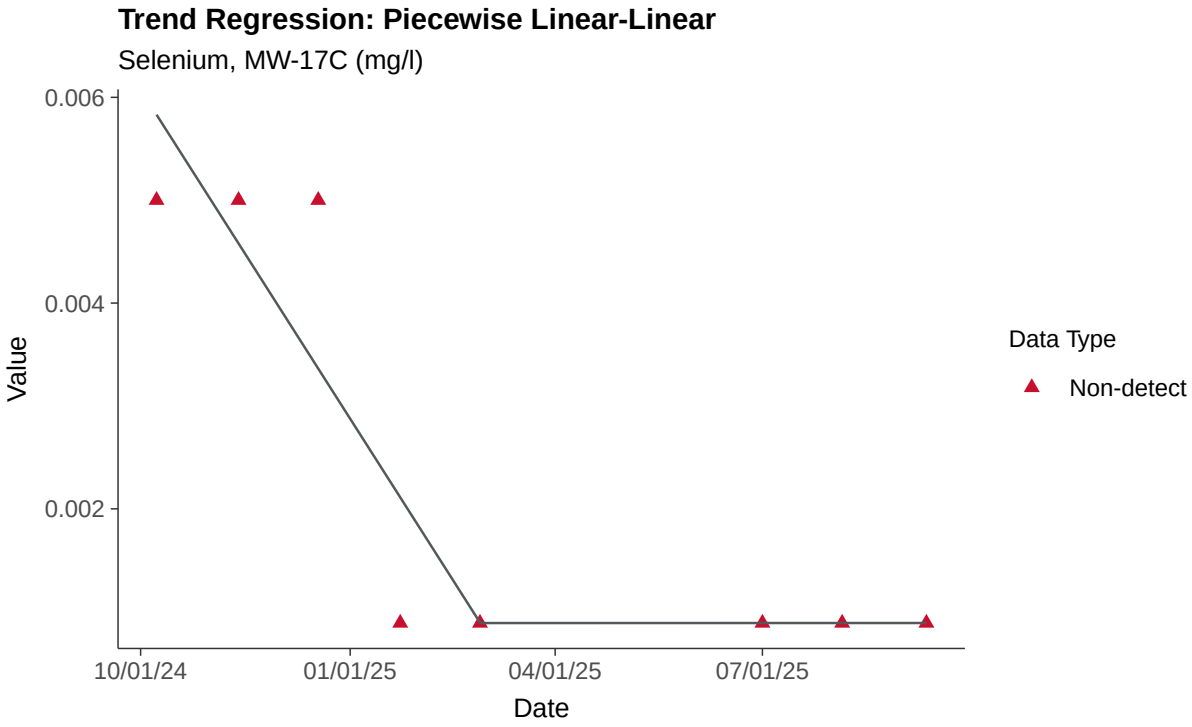
Selenium, MW-17C (mg/l)



Boxplot by Season

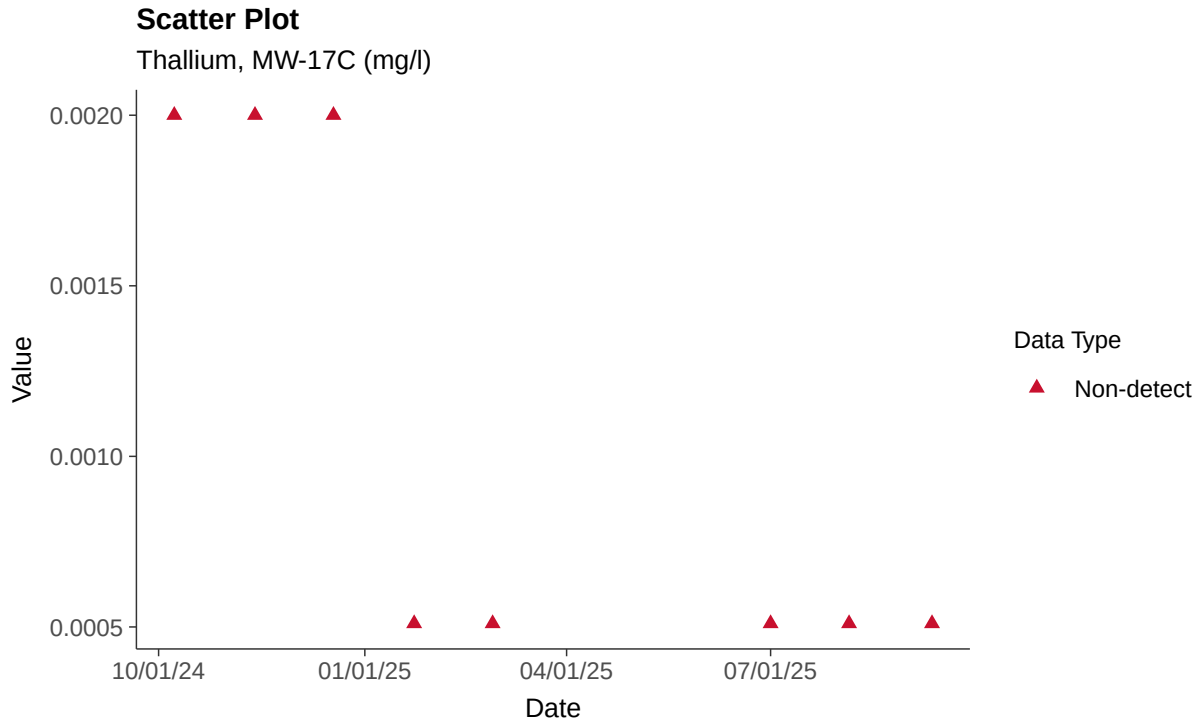
Selenium, MW-17C (mg/l)

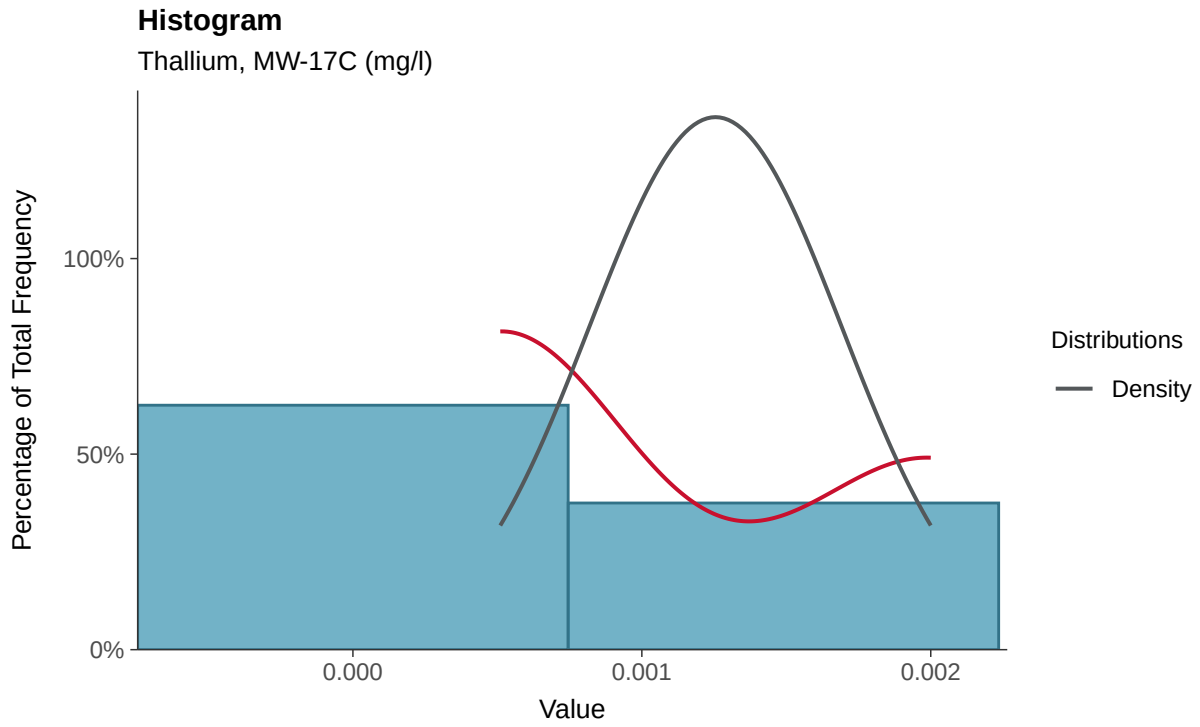



Trend Regression: Piecewise Linear-Linear
Selenium, MW-17C (mg/l)
0.006
0.004
0.002
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Thallium, MW-17C

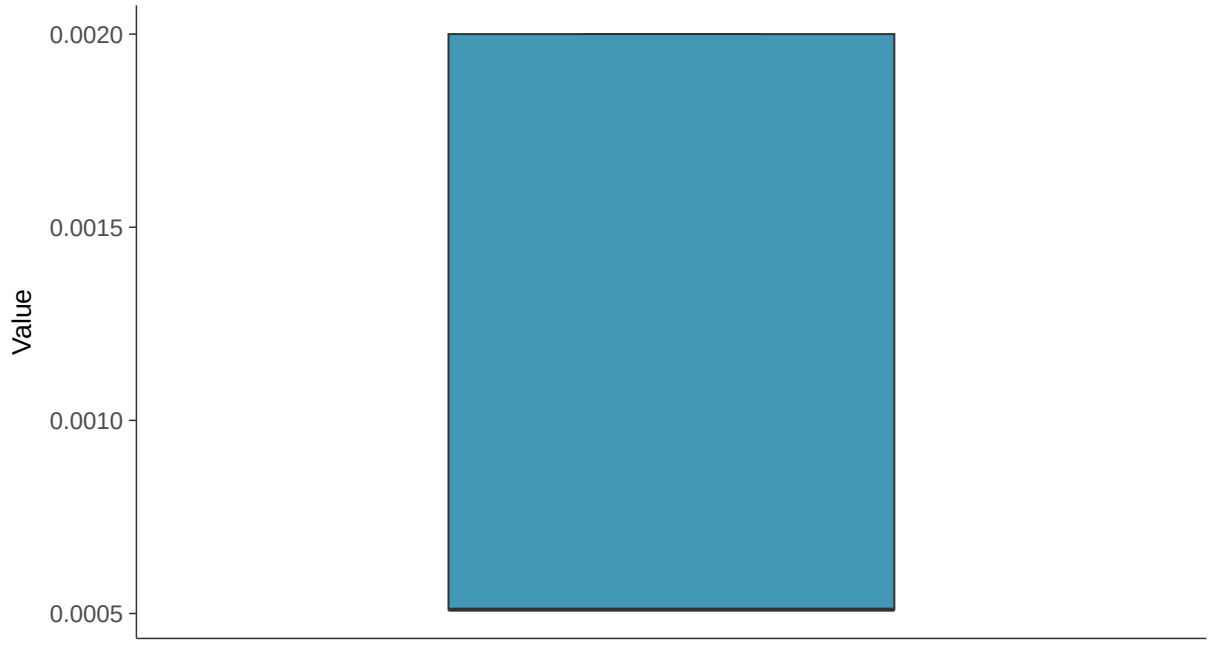
ID: 29_3_125





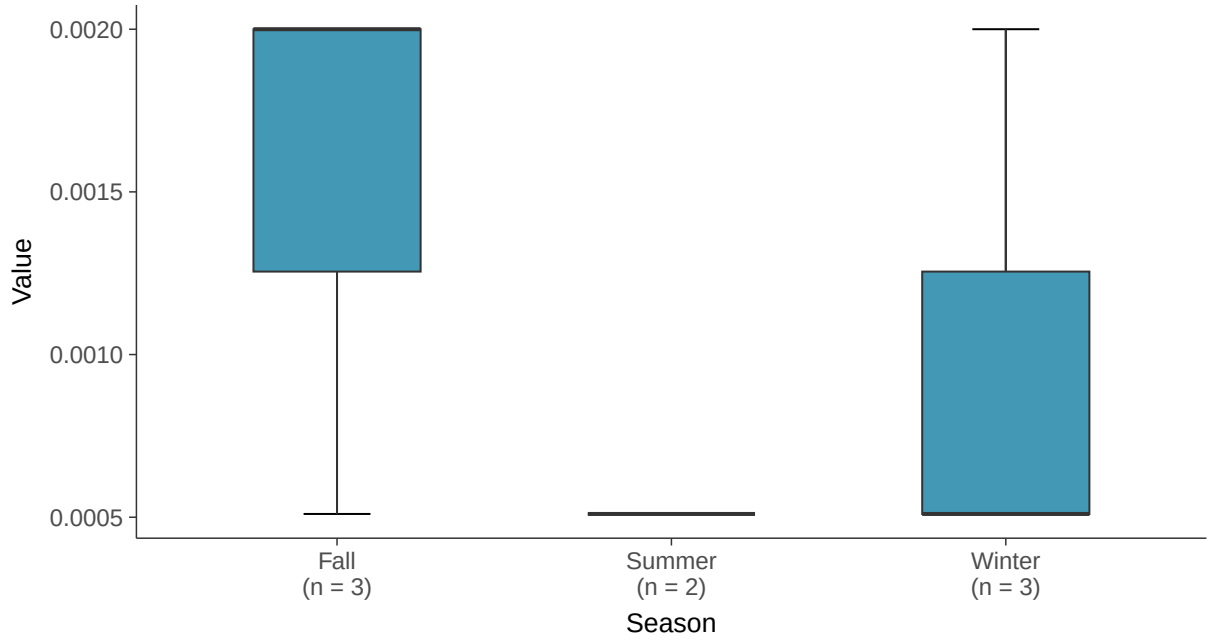
Boxplot

Thallium, MW-17C (mg/l)



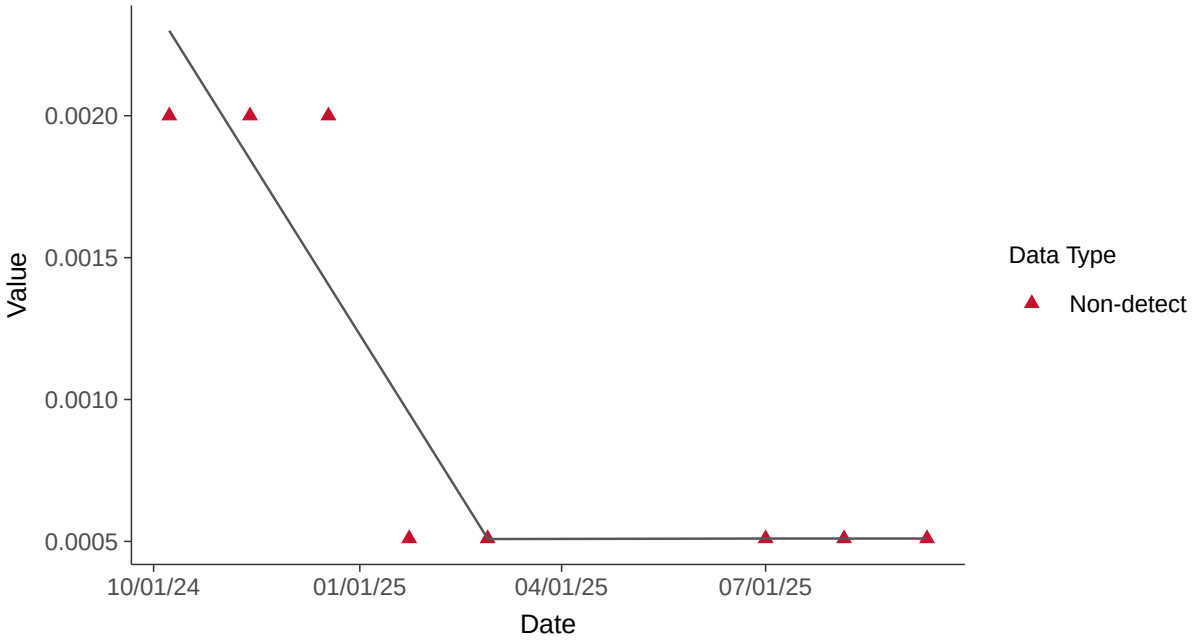
Boxplot by Season

Thallium, MW-17C (mg/l)



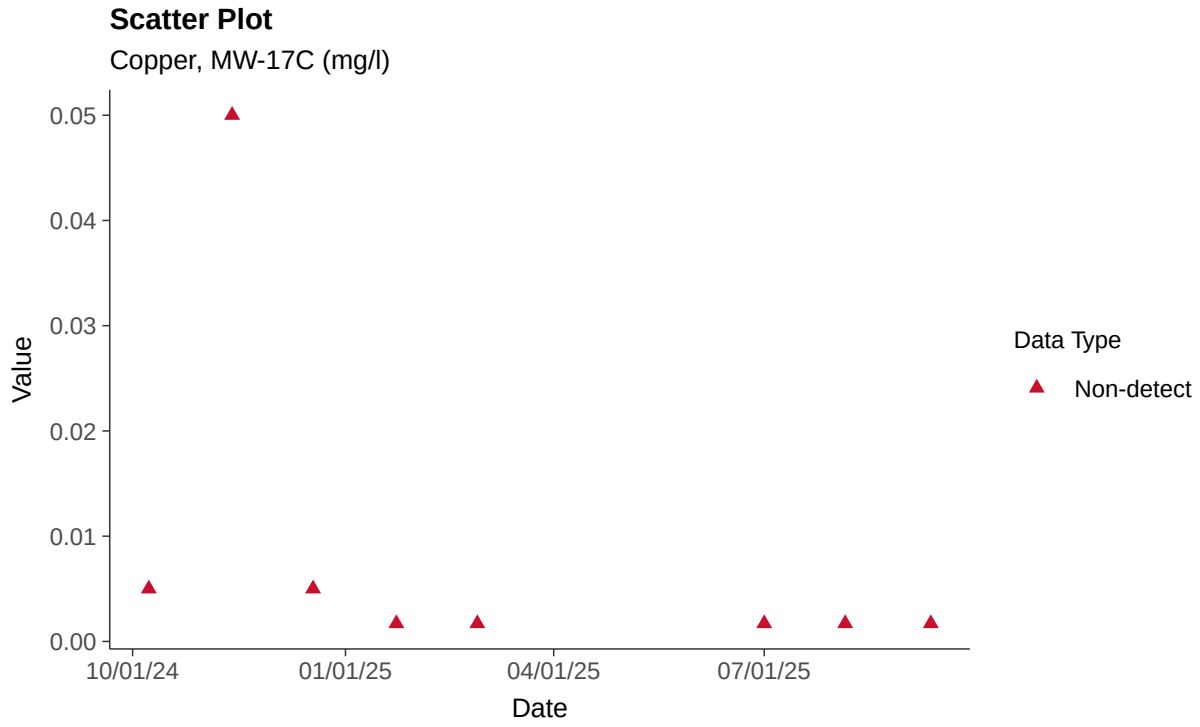
Trend Regression: Piecewise Linear-Linear

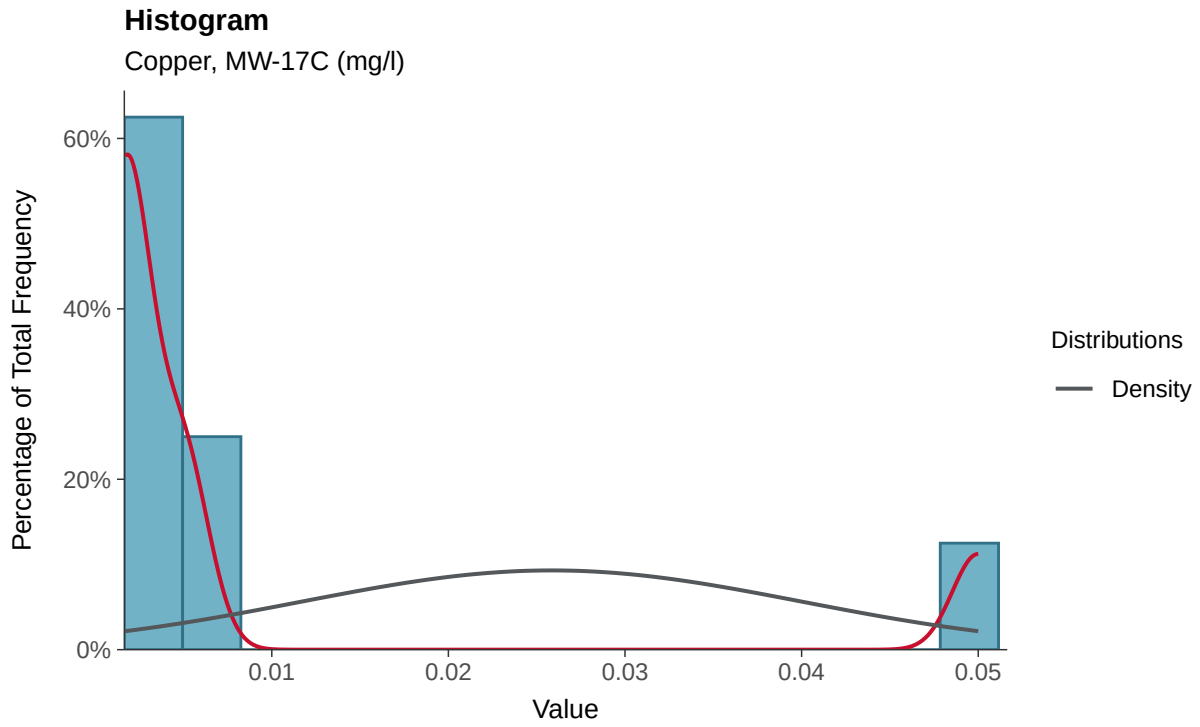
Thallium, MW-17C (mg/l)



Part 115: Copper, MW-17C

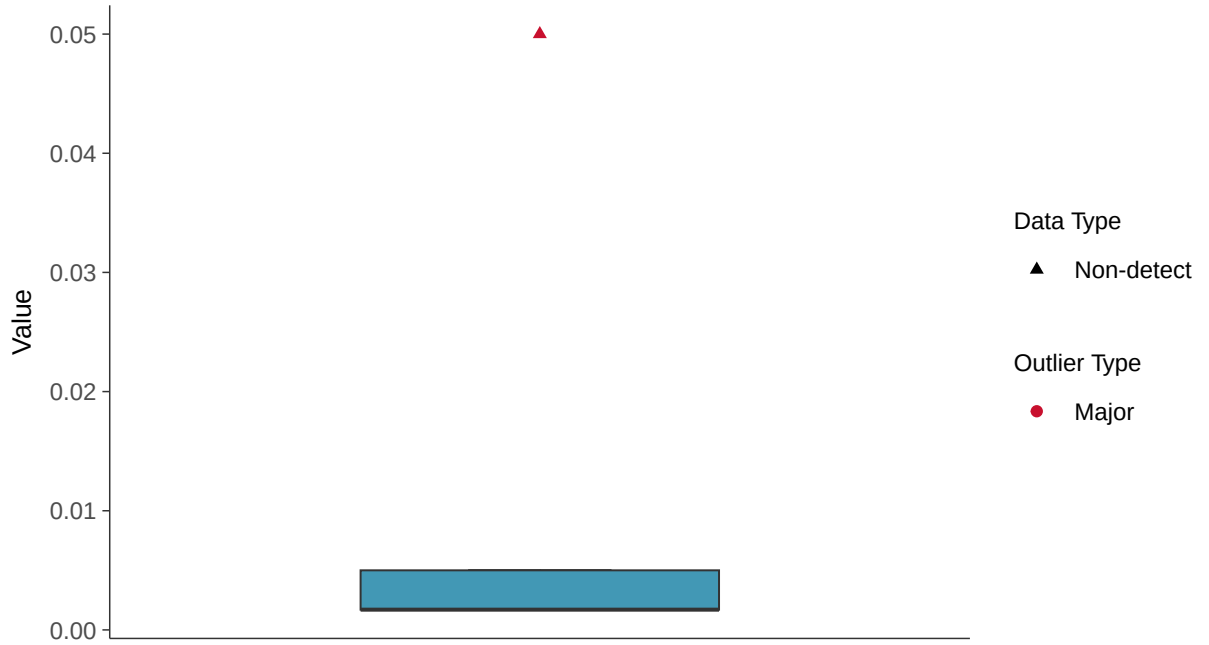
ID: 29_5_111





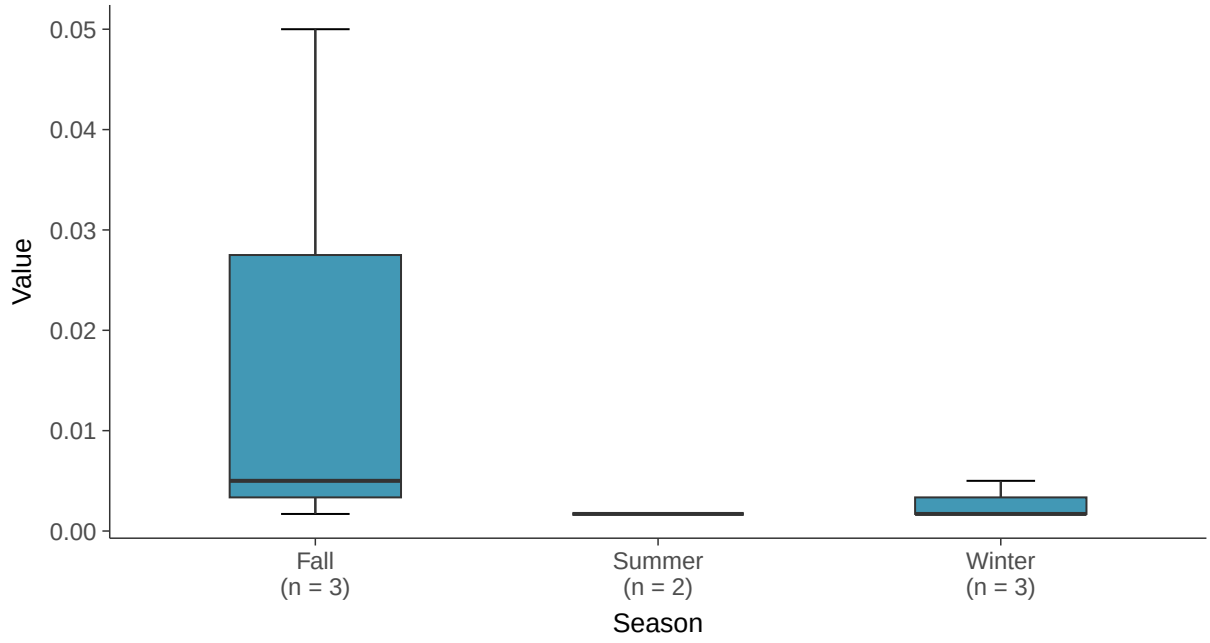
Boxplot

Copper, MW-17C (mg/l)



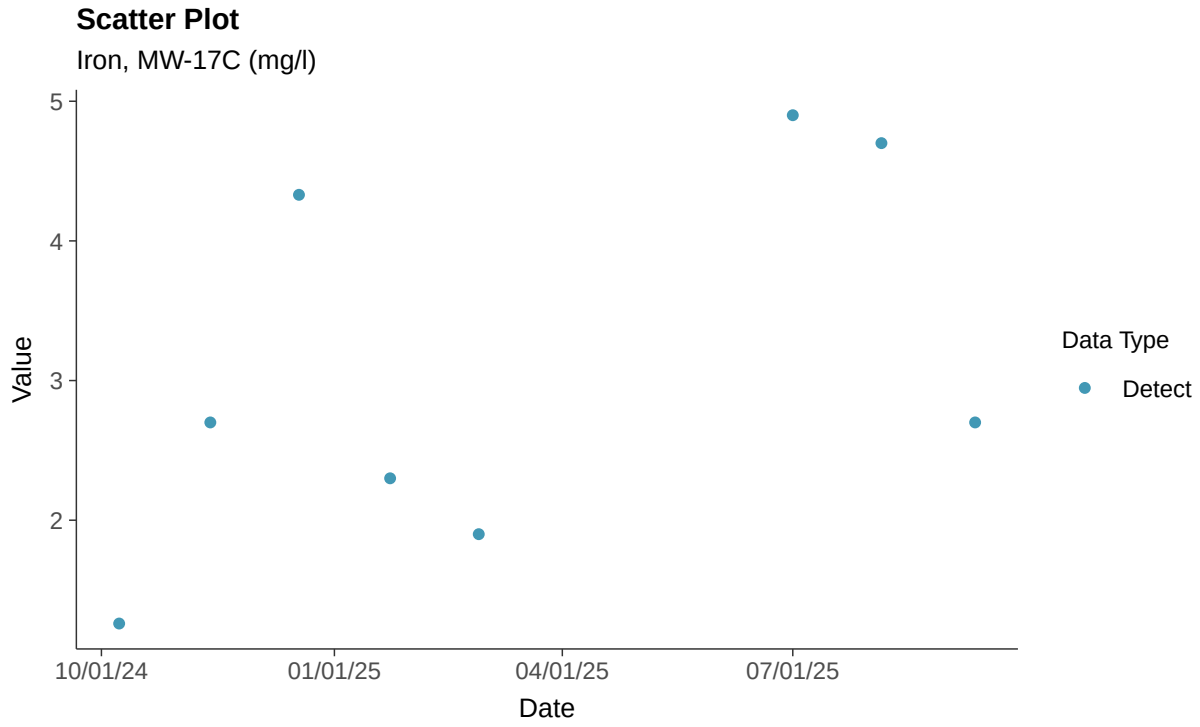
Boxplot by Season

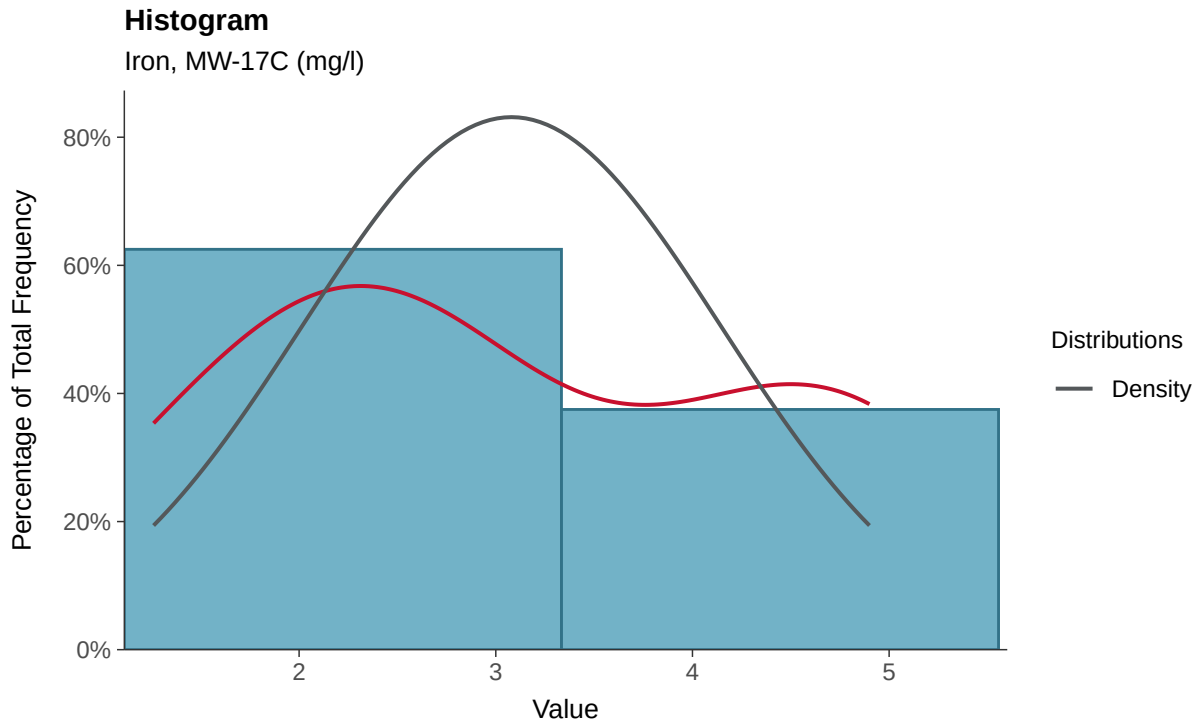
Copper, MW-17C (mg/l)



Part 115: Iron, MW-17C

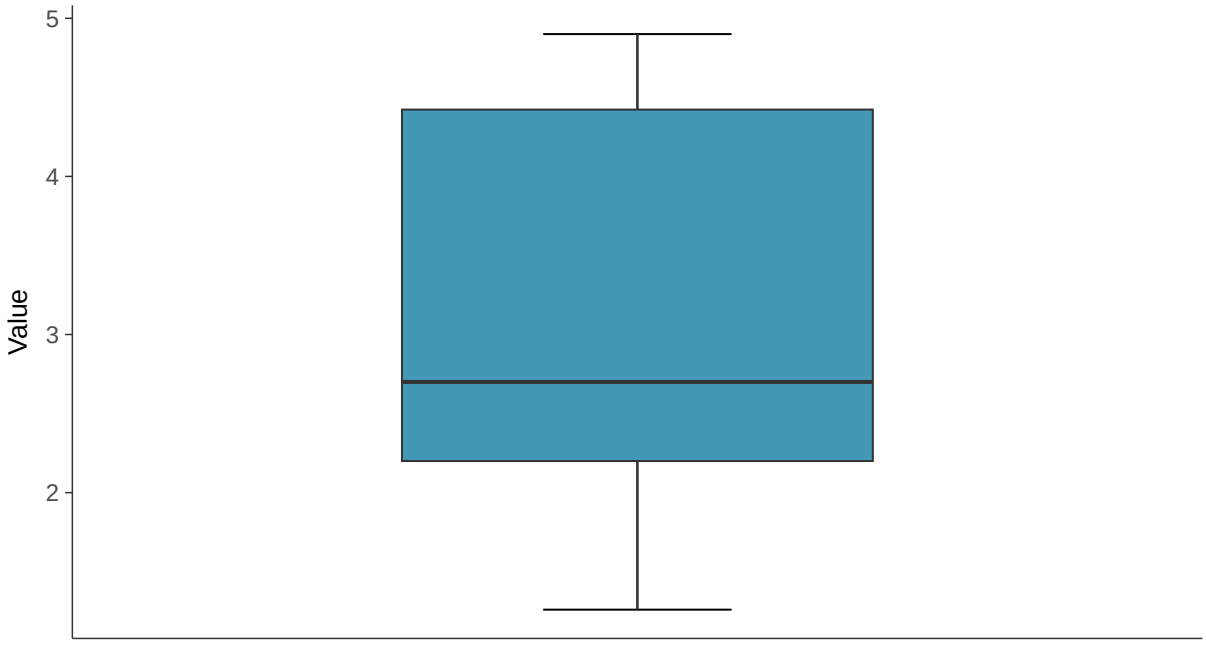
ID: 29_5_114





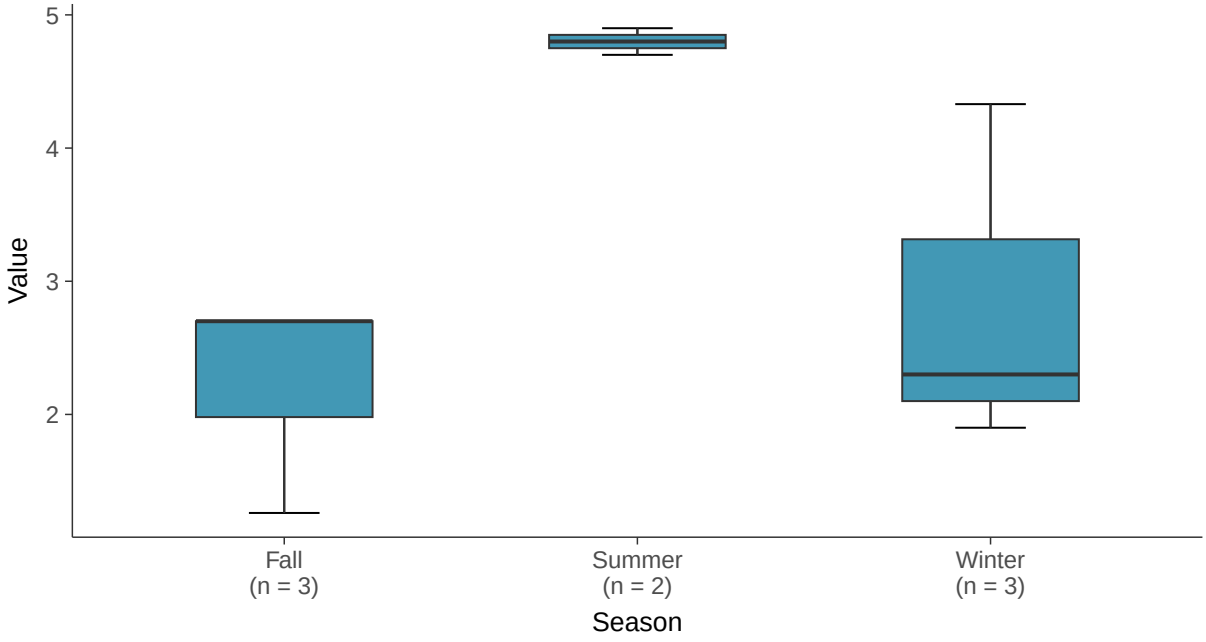
Boxplot

Iron, MW-17C (mg/l)



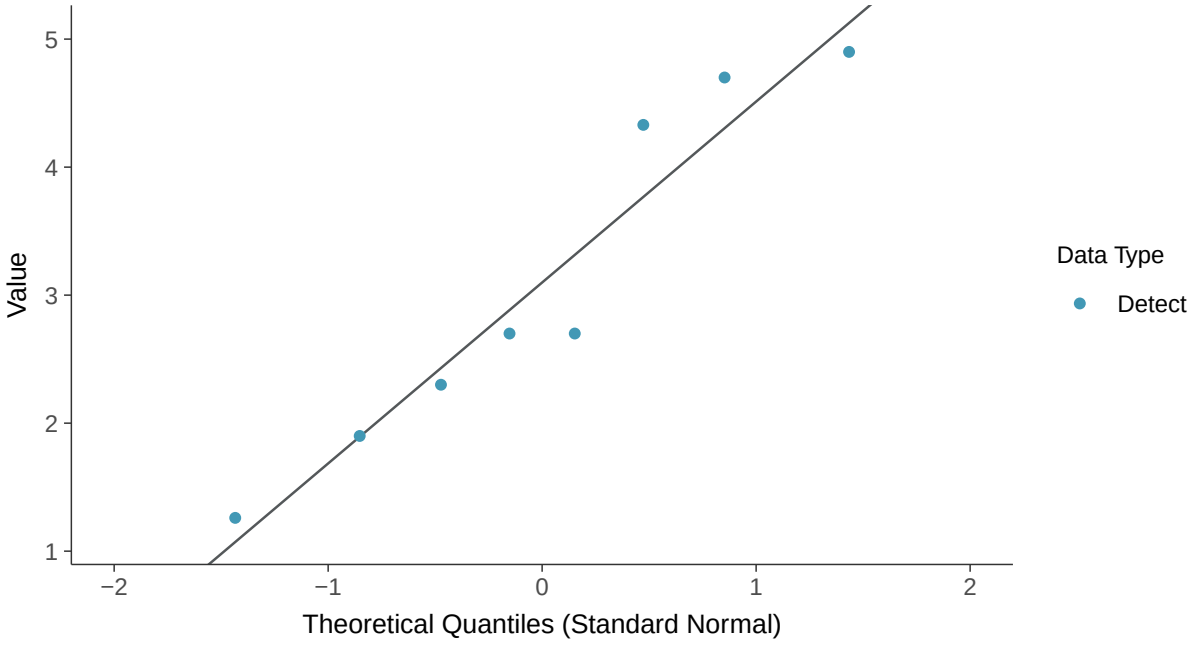
Boxplot by Season

Iron, MW-17C (mg/l)



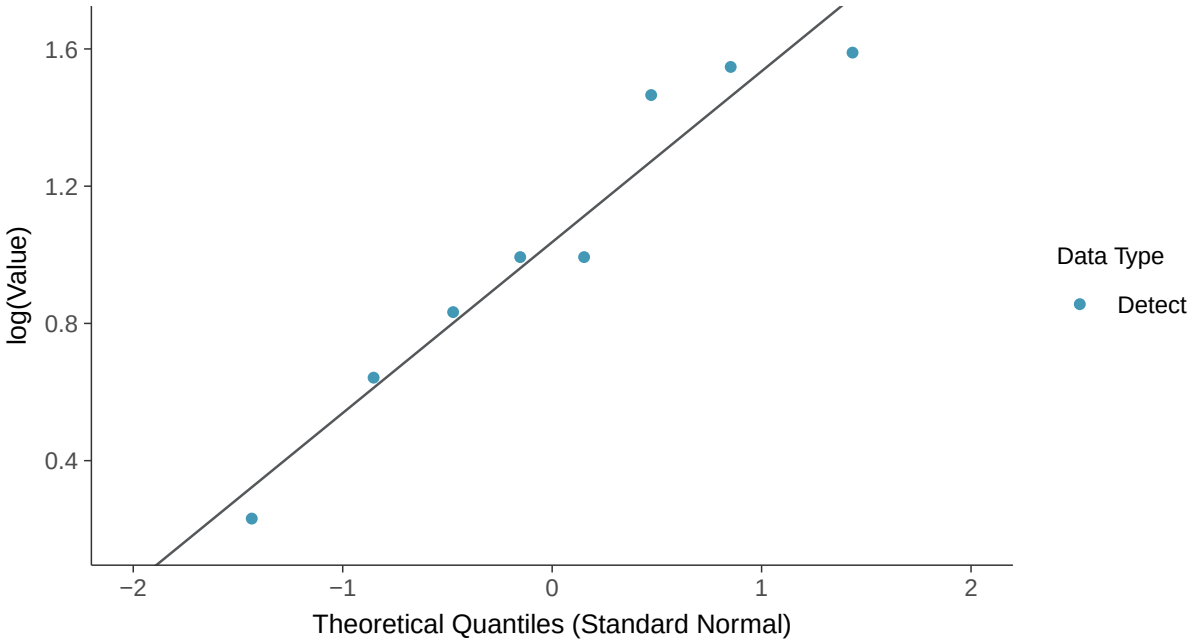
Normal Q-Q plot

Iron, MW-17C (mg/l)



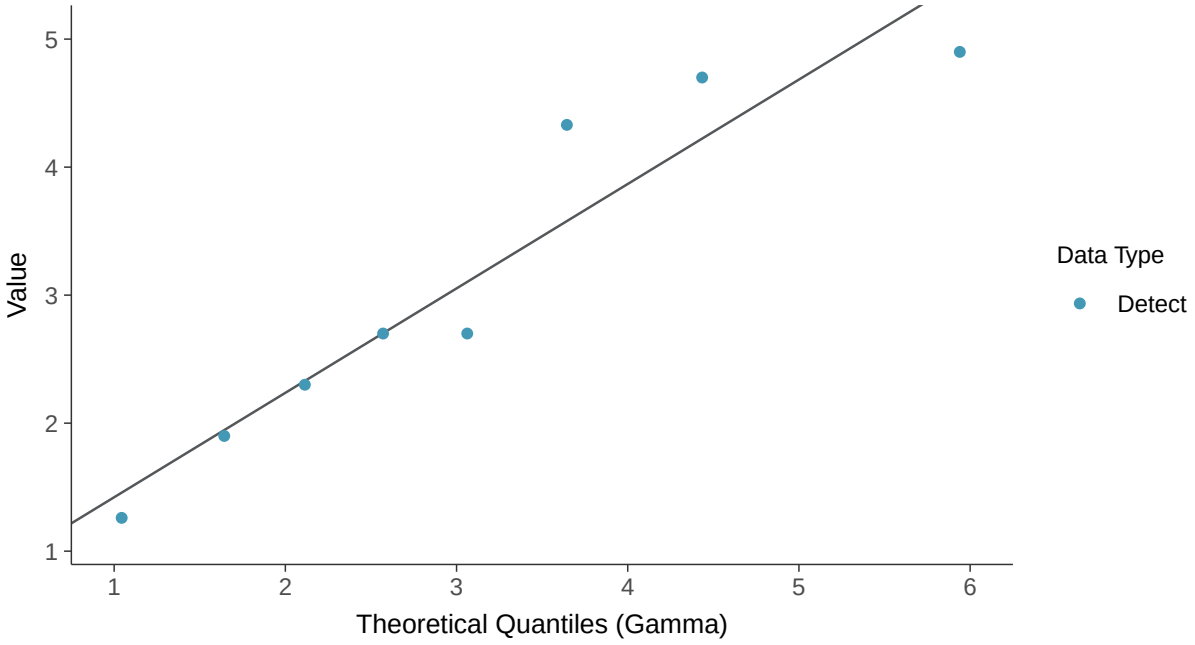
Lognormal Q-Q plot

Iron, MW-17C (mg/l)



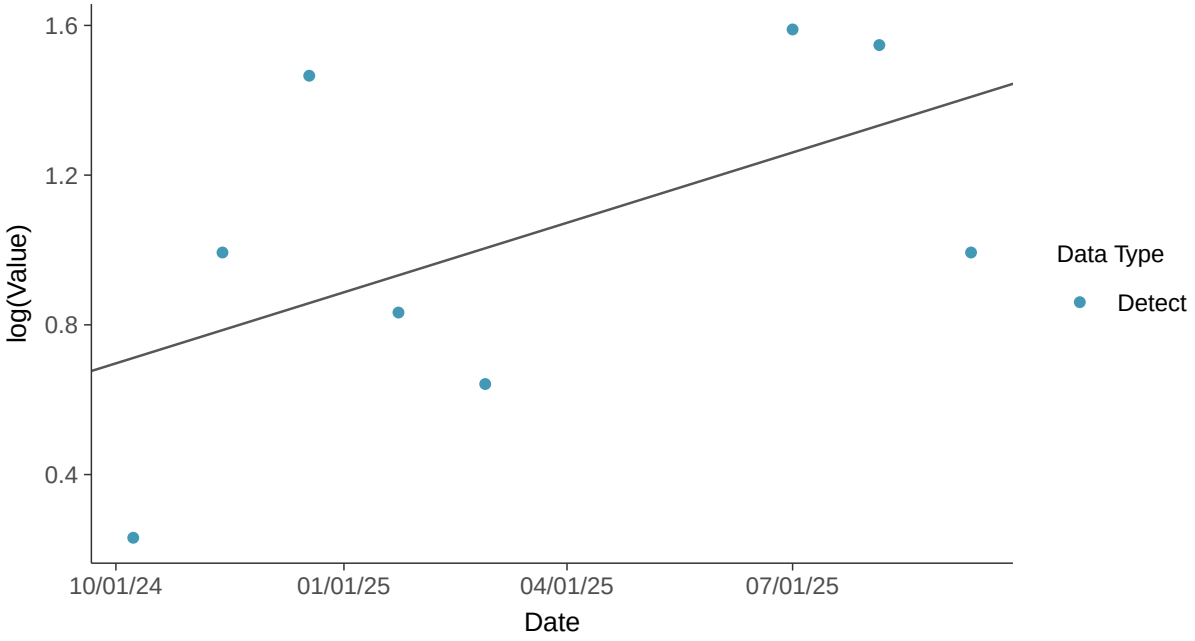
Gamma Q-Q plot

Iron, MW-17C (mg/l)



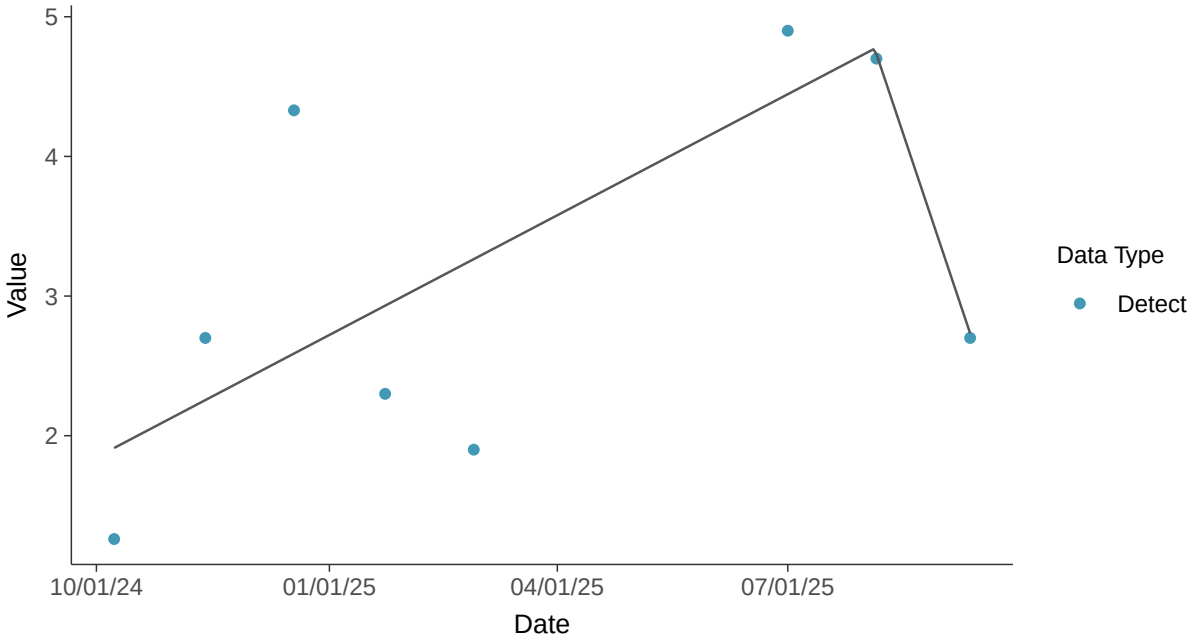
Trend Regression: Lognormal MLE

Iron, MW-17C (mg/l)



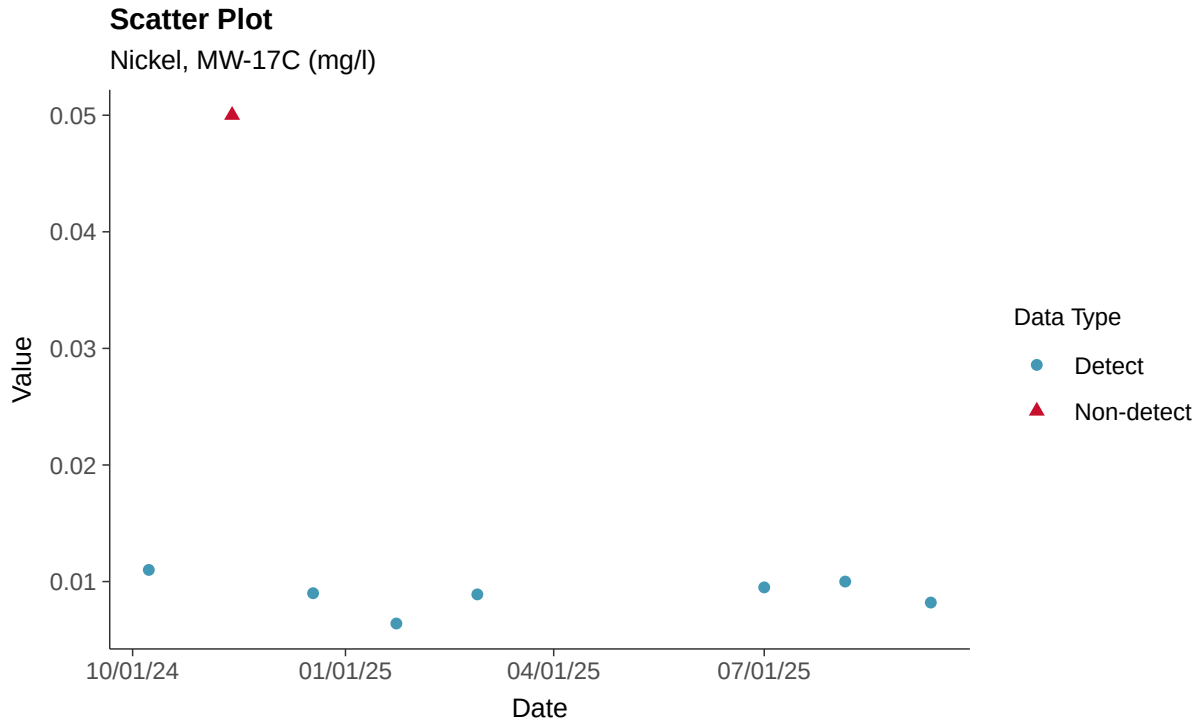
Trend Regression: Piecewise Linear-Linear

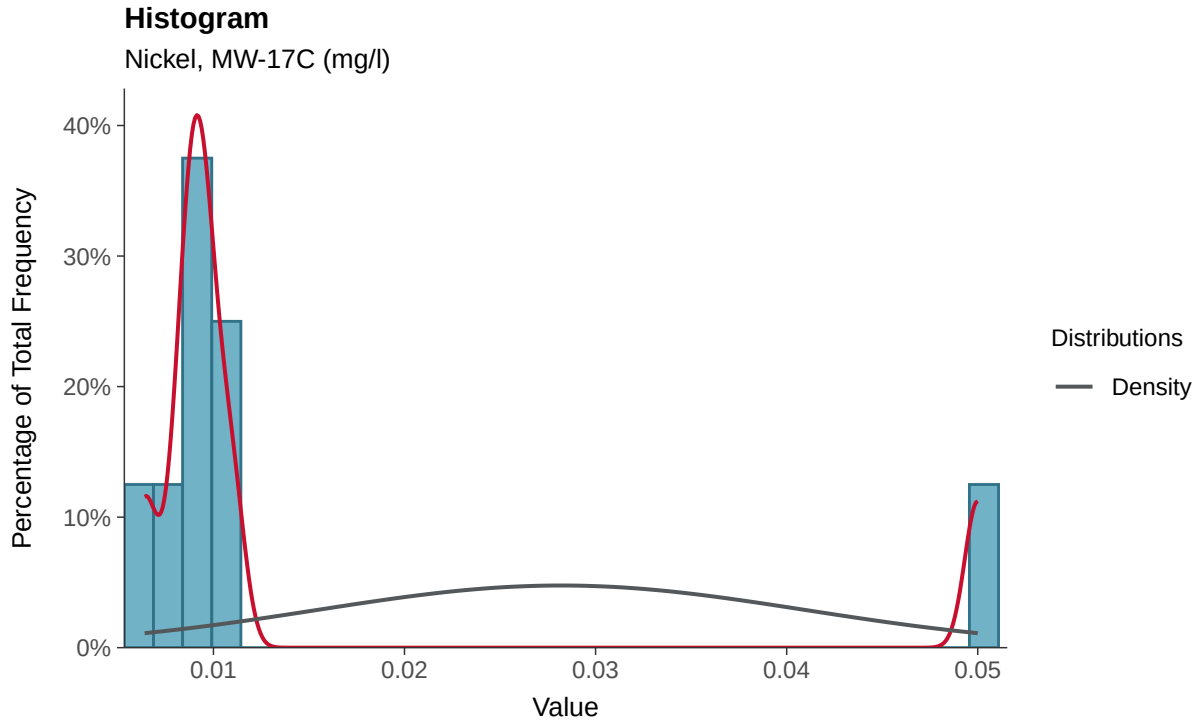
Iron, MW-17C (mg/l)



Part 115: Nickel, MW-17C

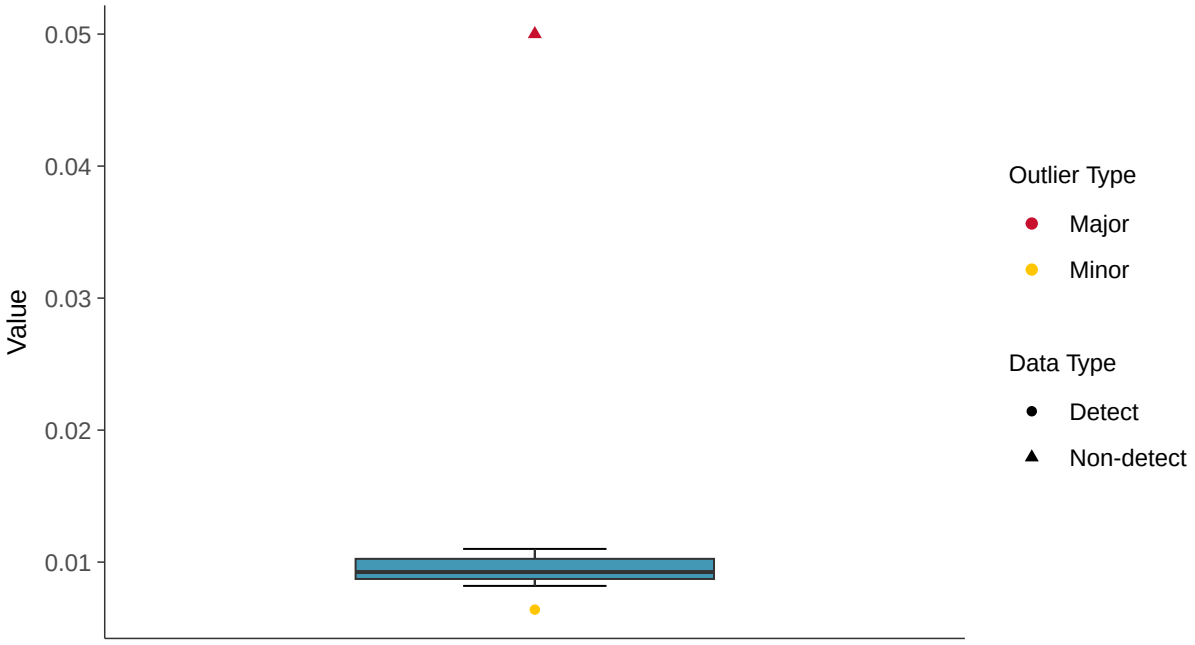
ID: 29_5_119





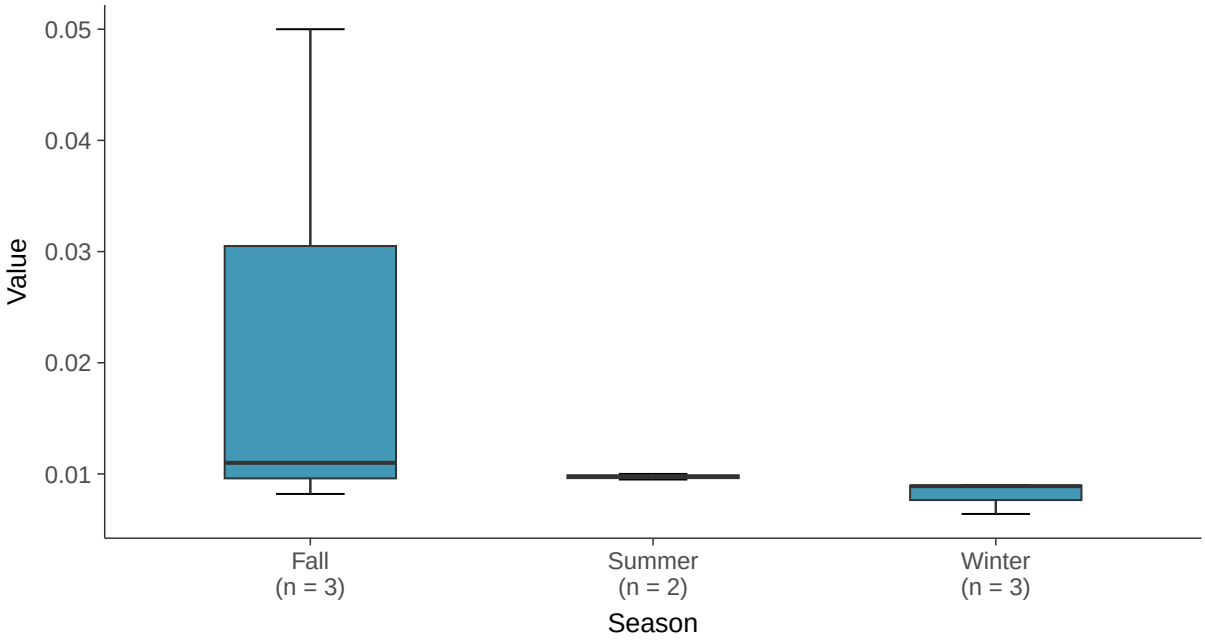
Boxplot

Nickel, MW-17C (mg/l)



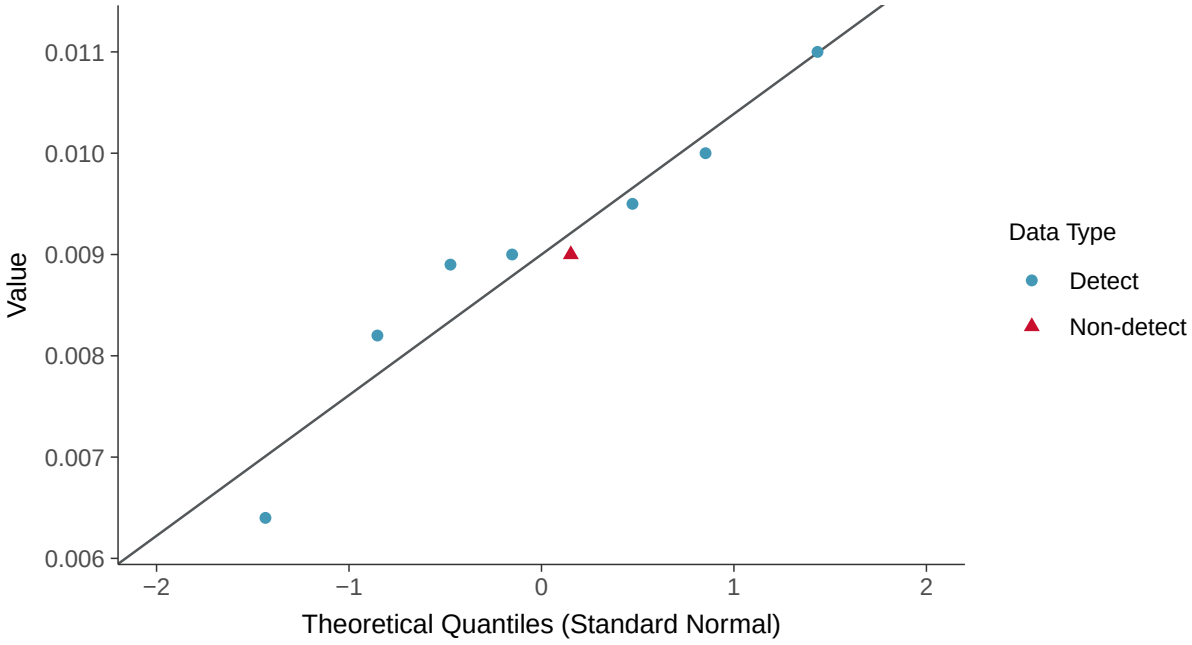
Boxplot by Season

Nickel, MW-17C (mg/l)



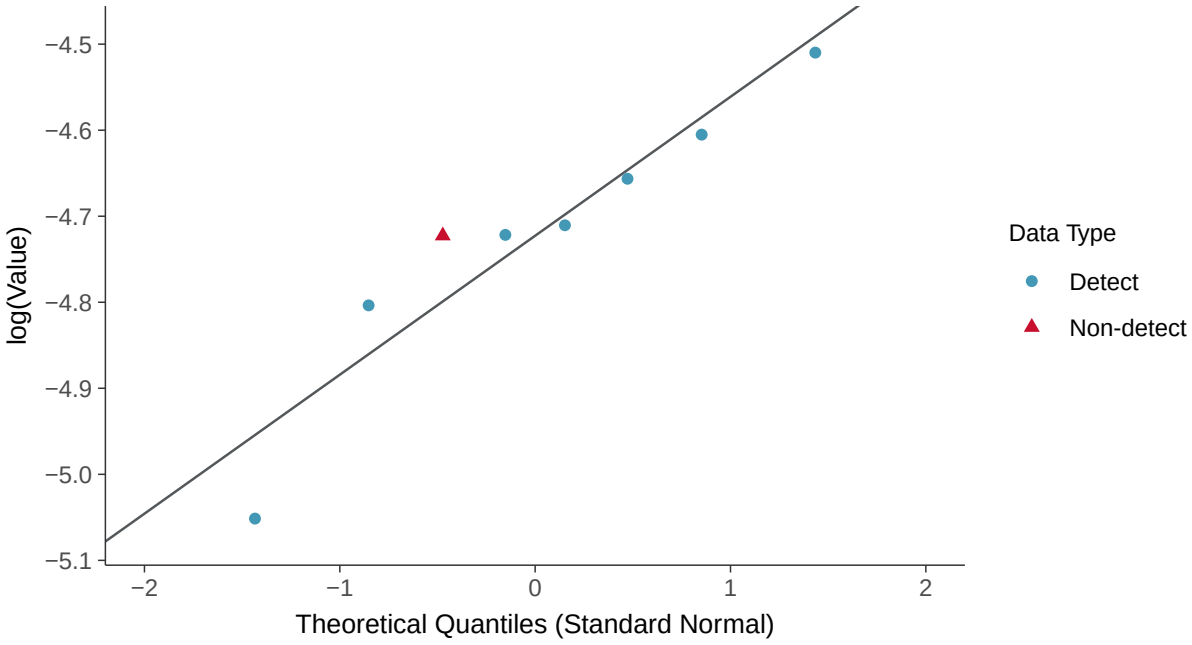
Normal Q-Q plot using ROS Imputed Estimates

Nickel, MW-17C (mg/l)



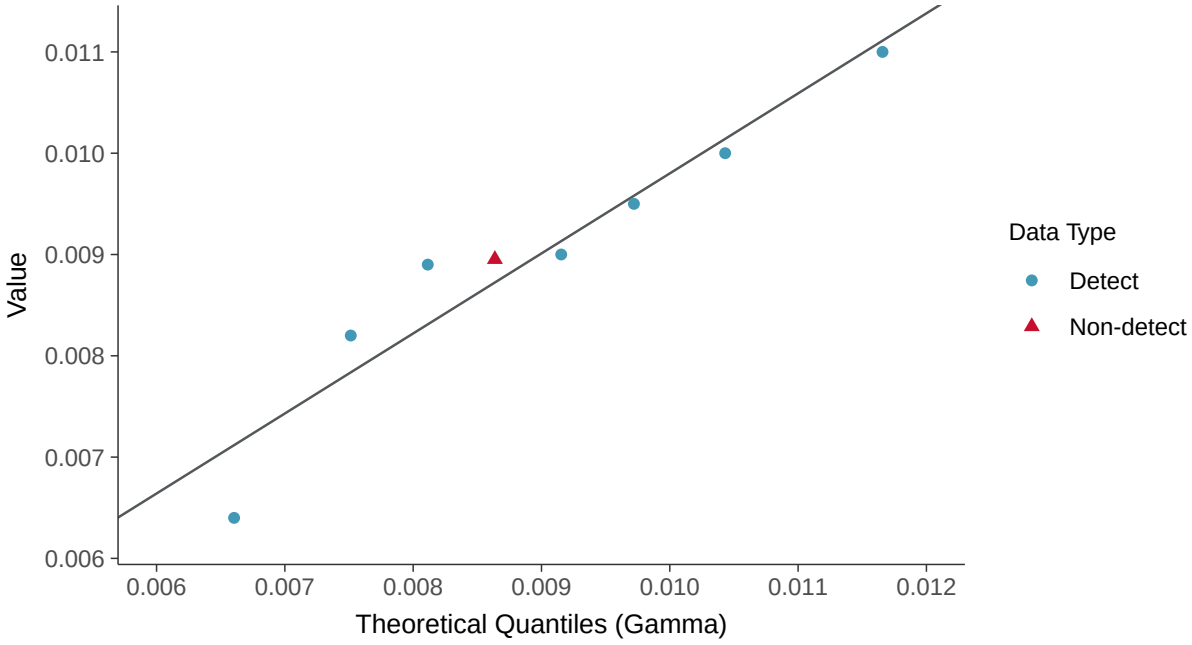
Lognormal Q-Q plot using ROS Imputed Estimates

Nickel, MW-17C (mg/l)



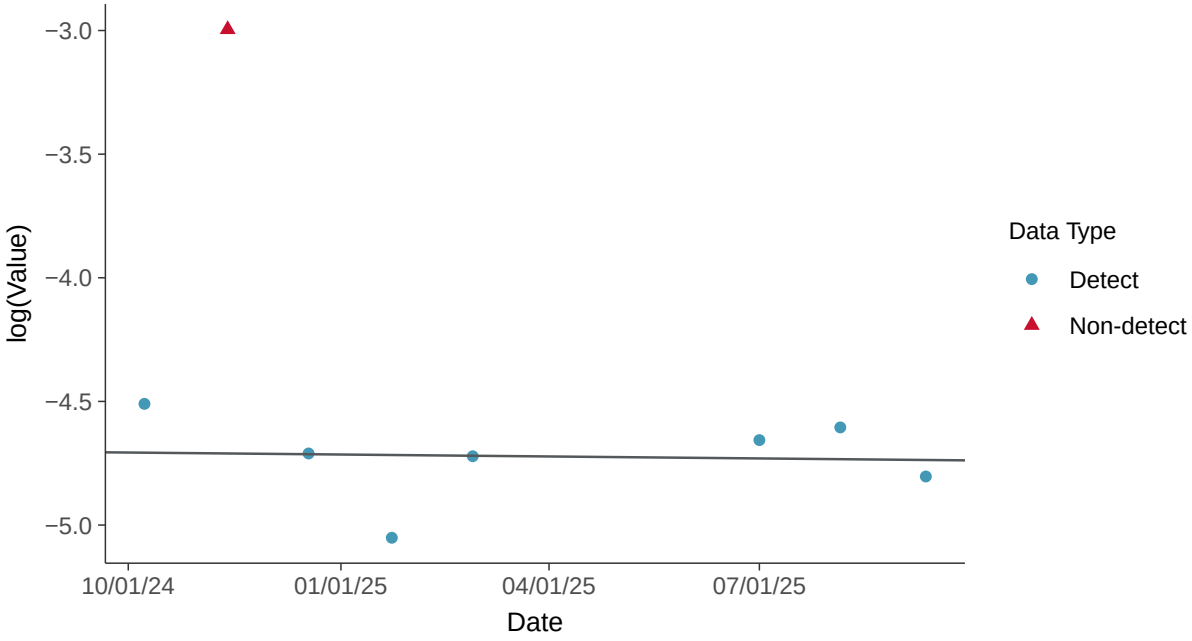
Gamma Q-Q plot using ROS Imputed Estimates

Nickel, MW-17C (mg/l)



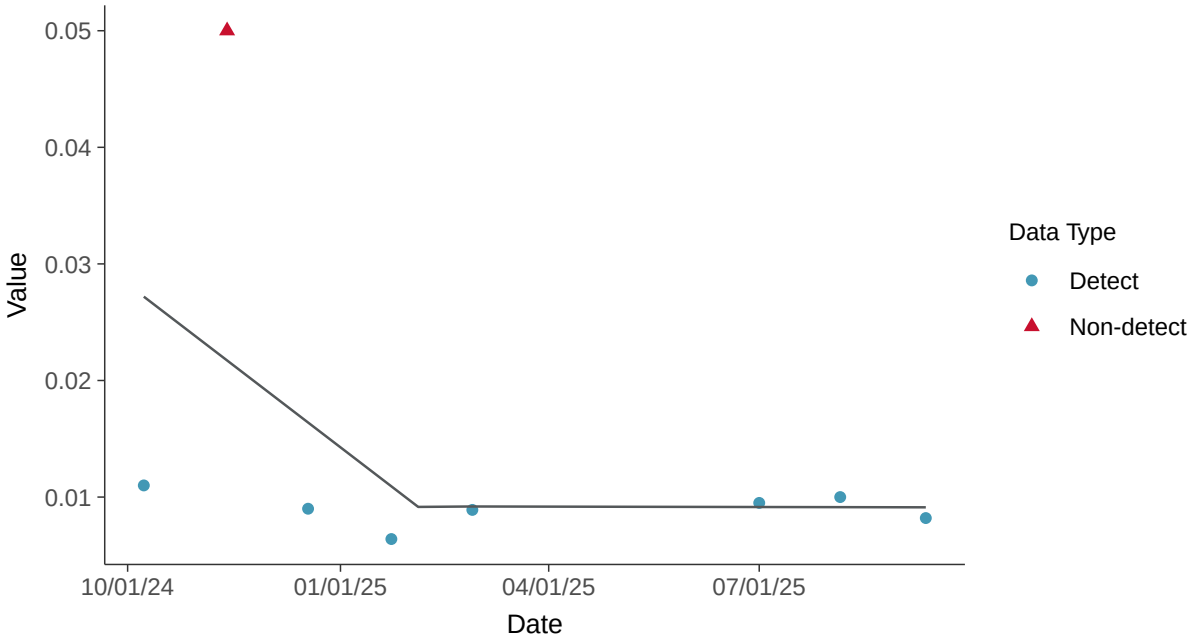
Trend Regression: Lognormal MLE

Nickel, MW-17C (mg/l)



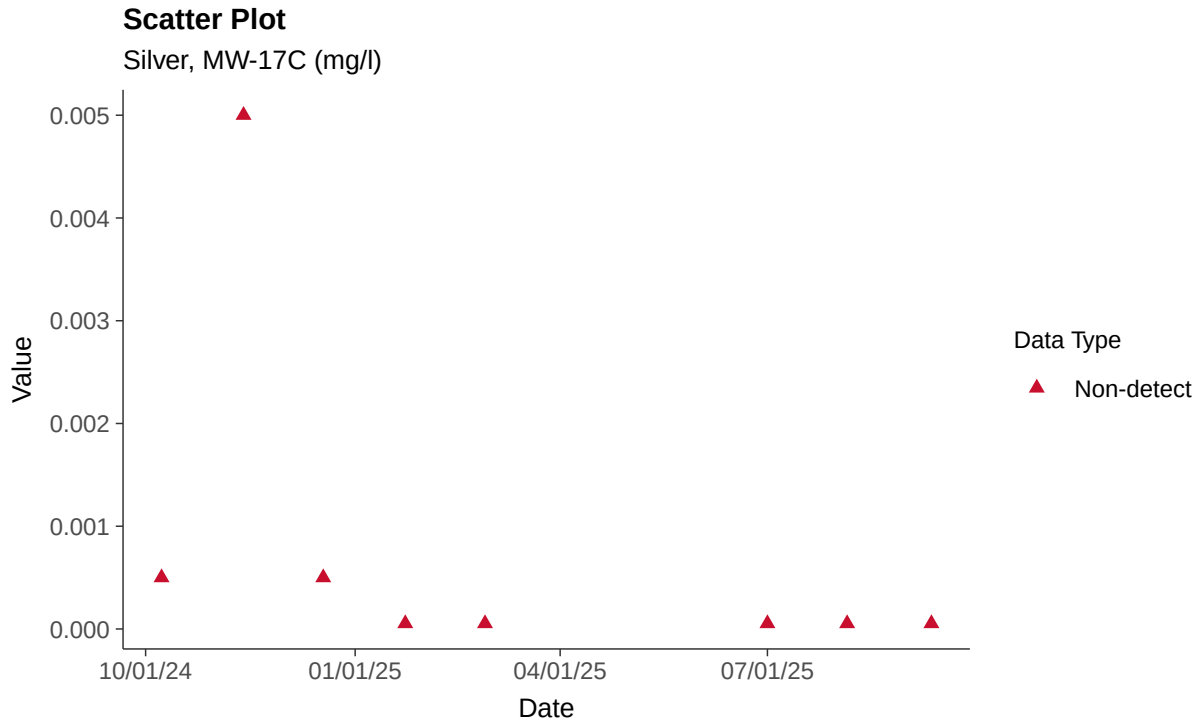
Trend Regression: Piecewise Linear-Linear

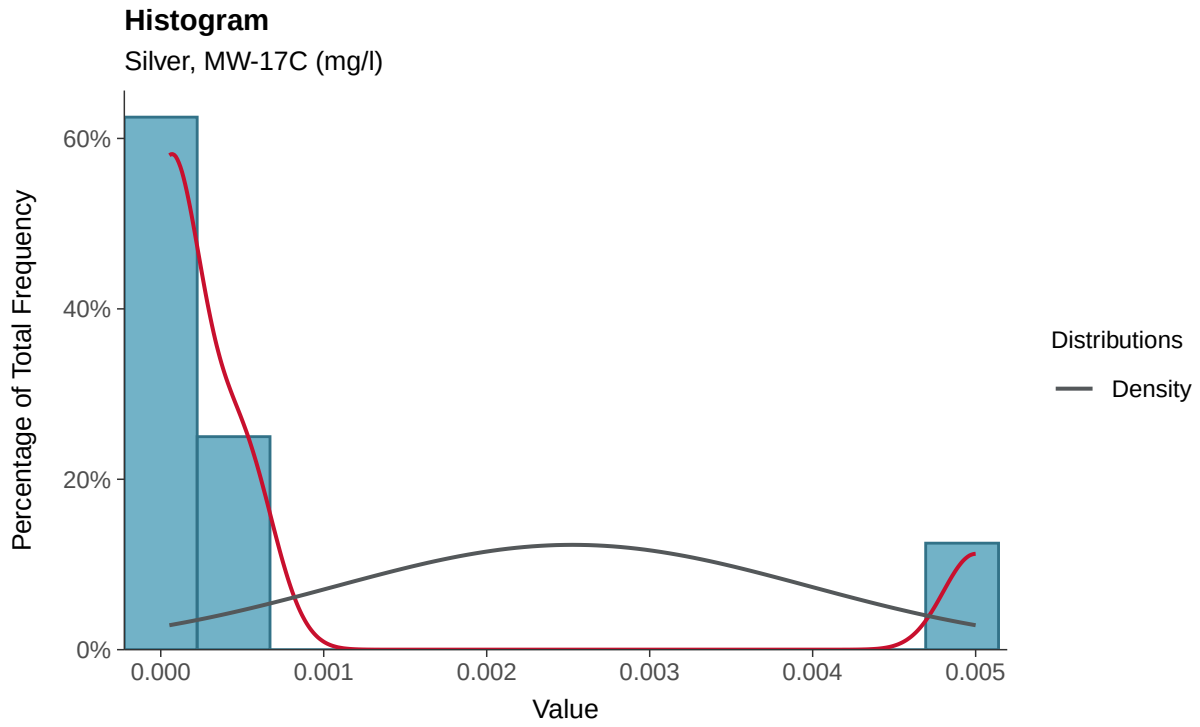
Nickel, MW-17C (mg/l)



Part 115: Silver, MW-17C

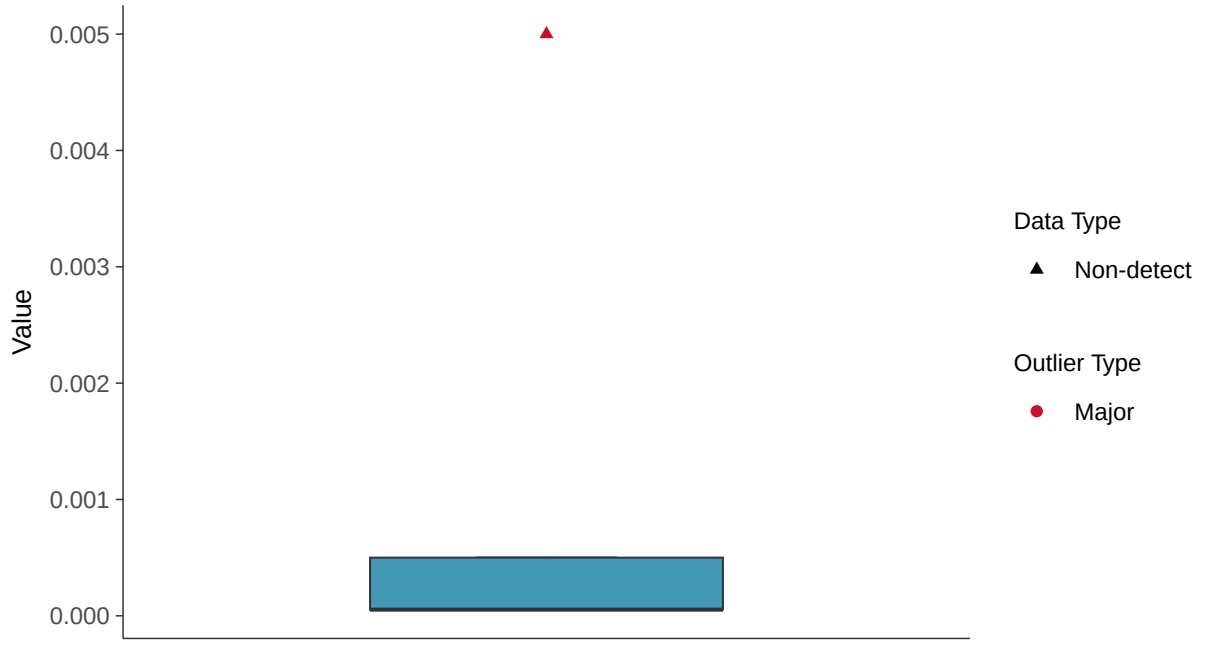
ID: 29_5_123





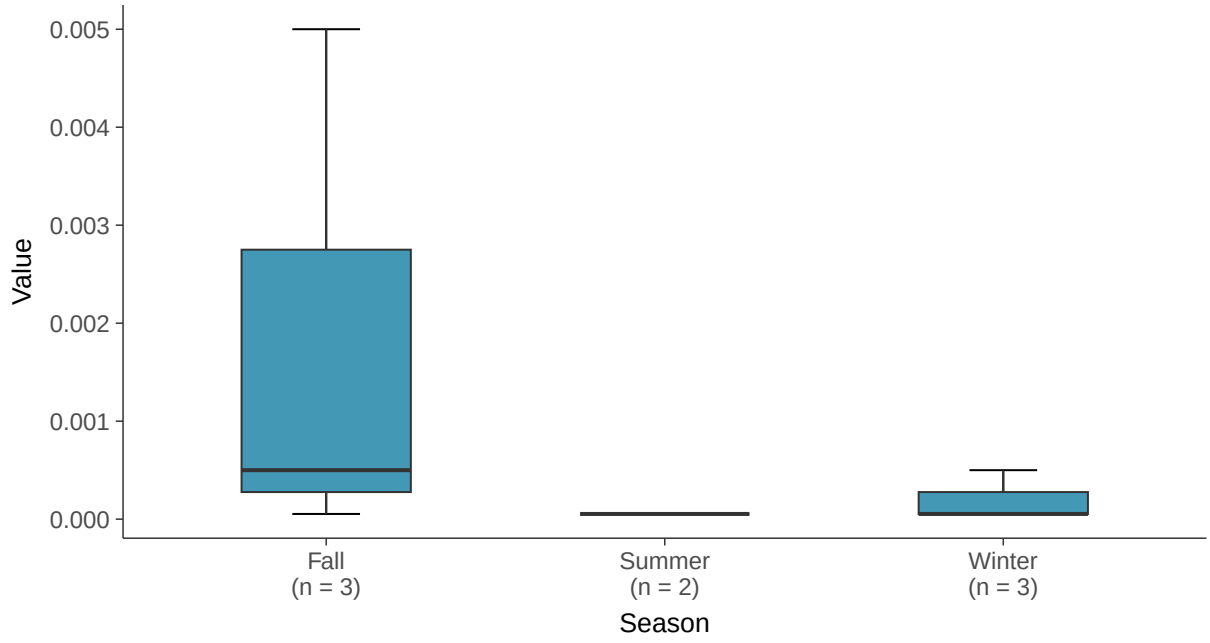
Boxplot

Silver, MW-17C (mg/l)



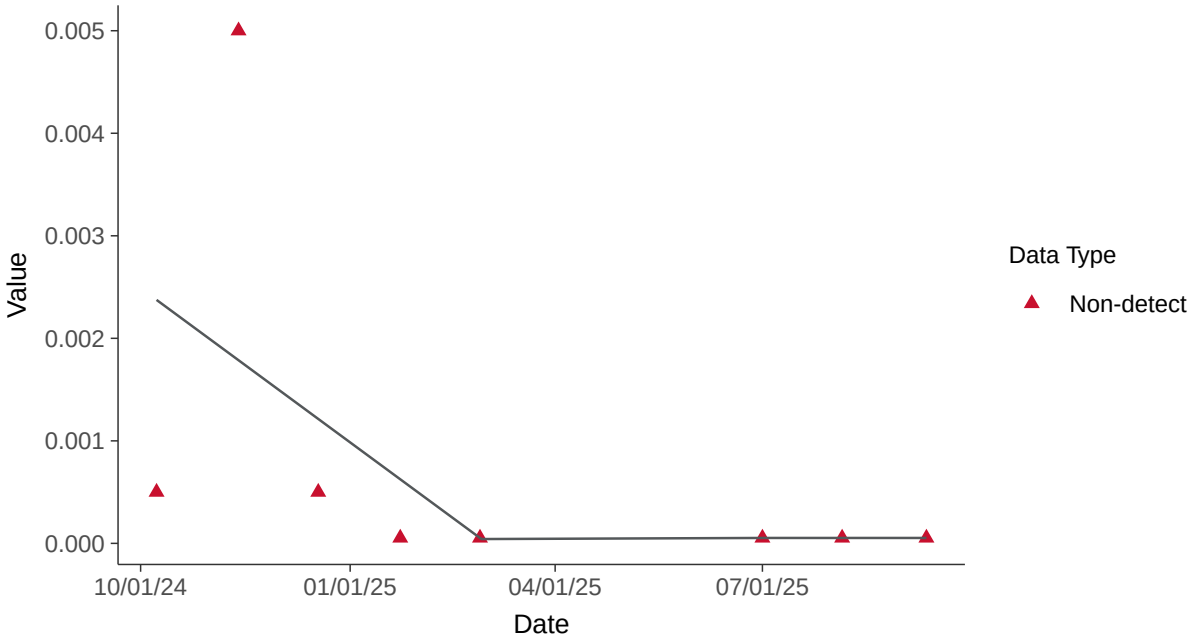
Boxplot by Season

Silver, MW-17C (mg/l)



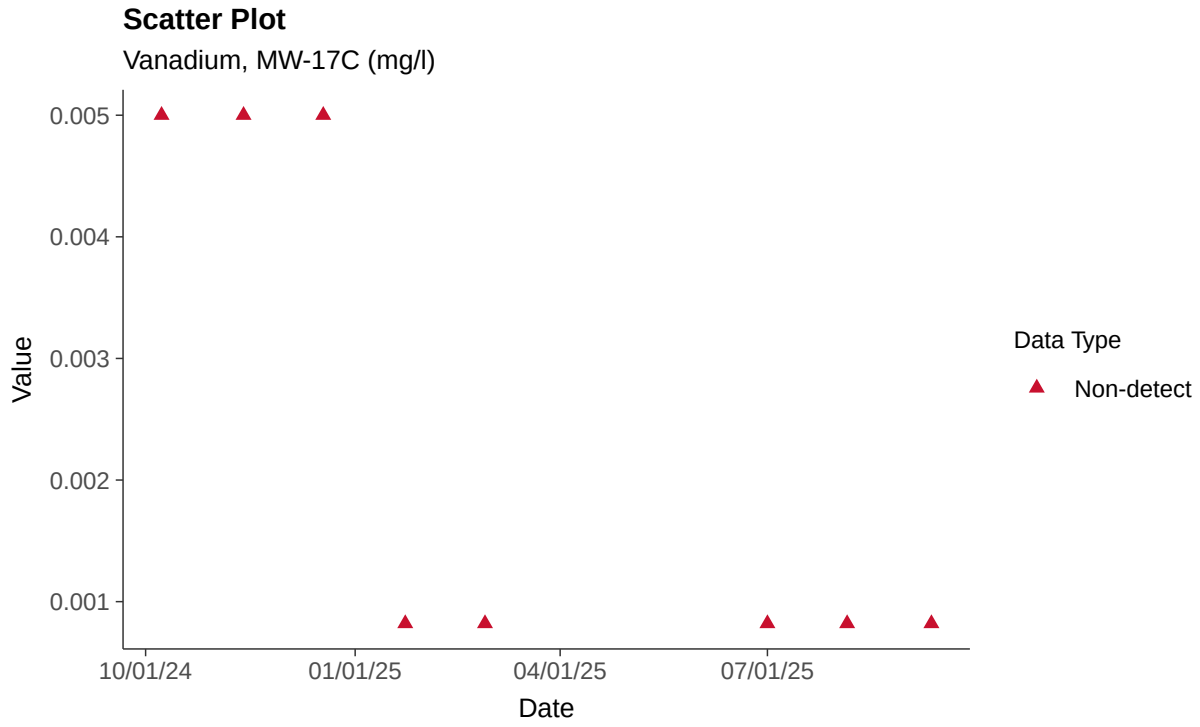
Trend Regression: Piecewise Linear-Linear

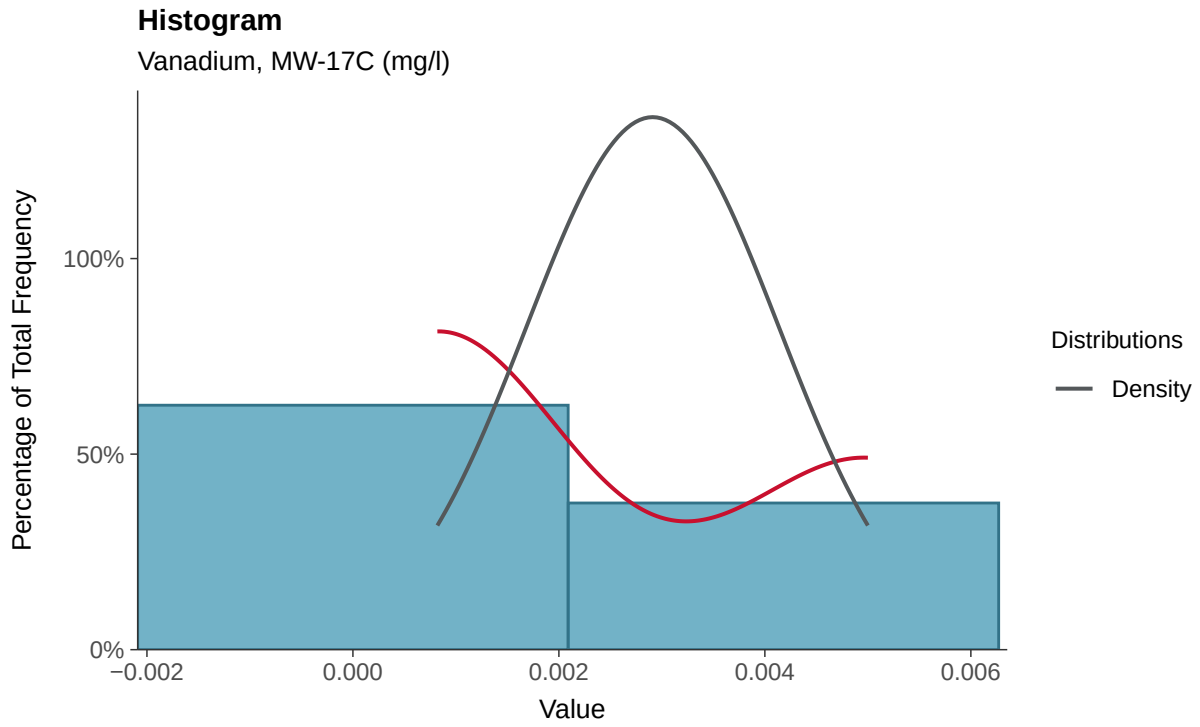
Silver, MW-17C (mg/l)



Part 115: Vanadium, MW-17C

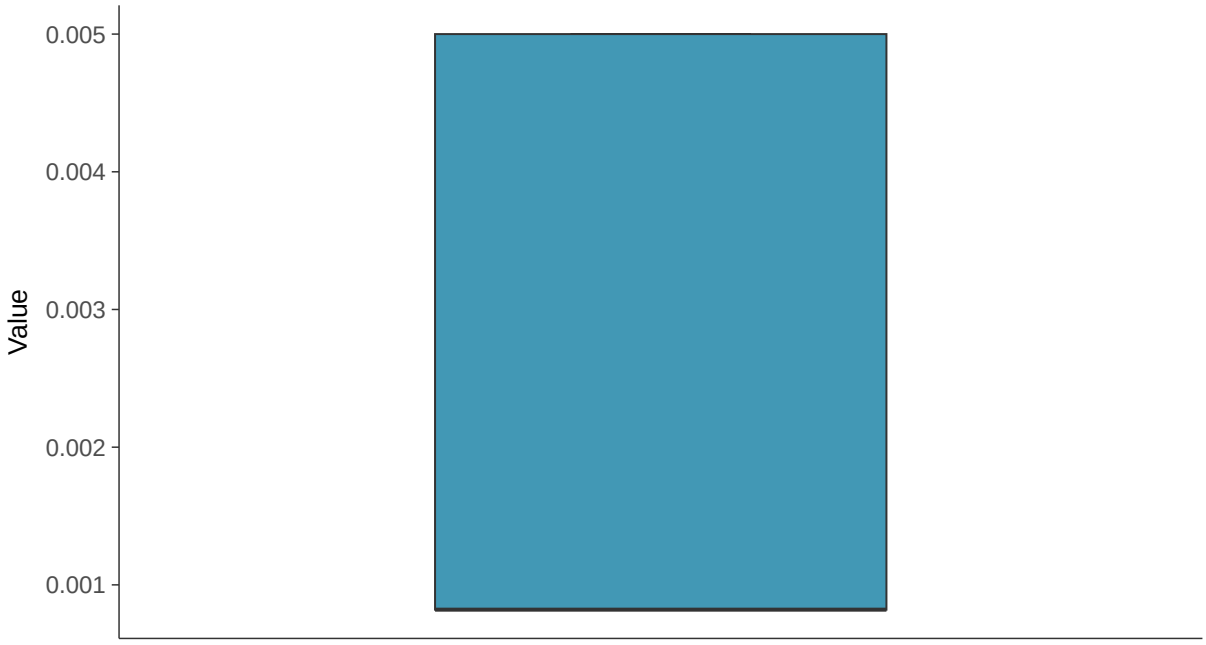
ID: 29_5_128





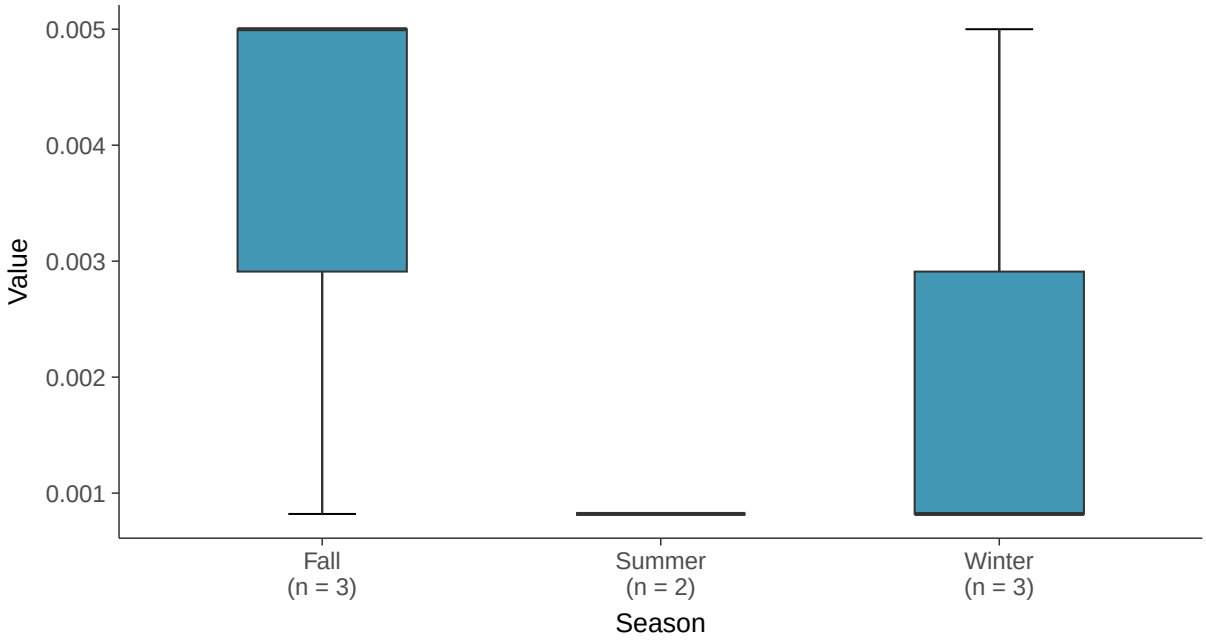
Boxplot

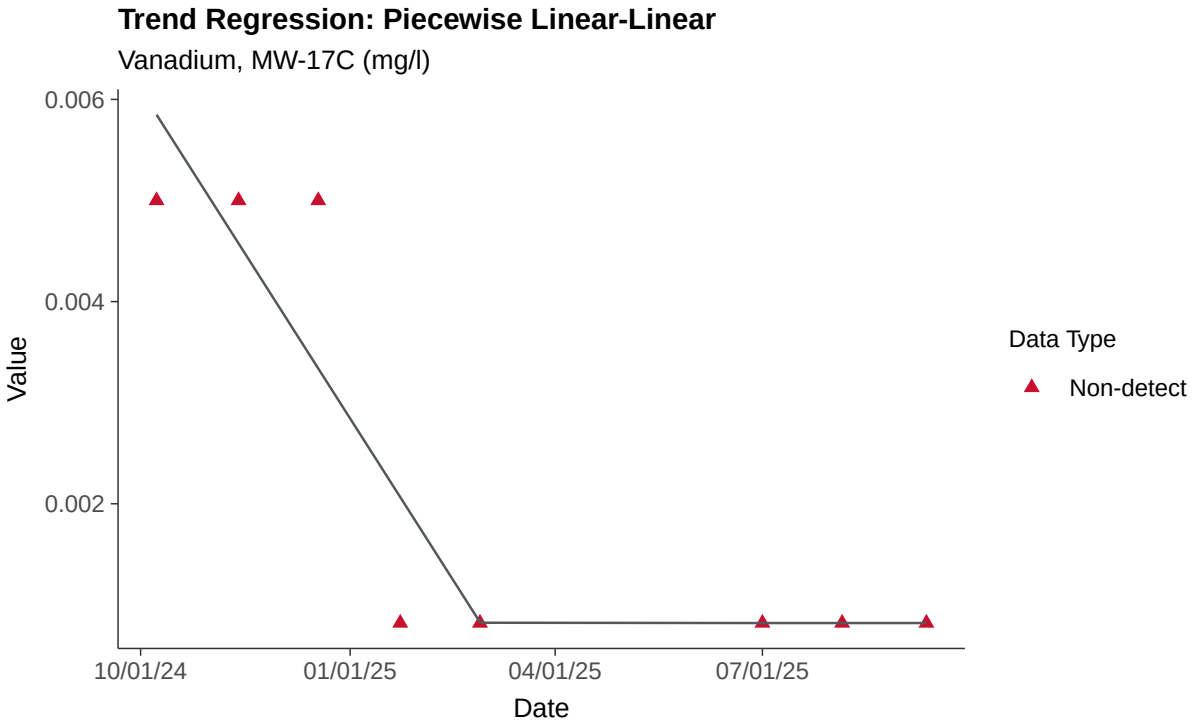
Vanadium, MW-17C (mg/l)



Boxplot by Season

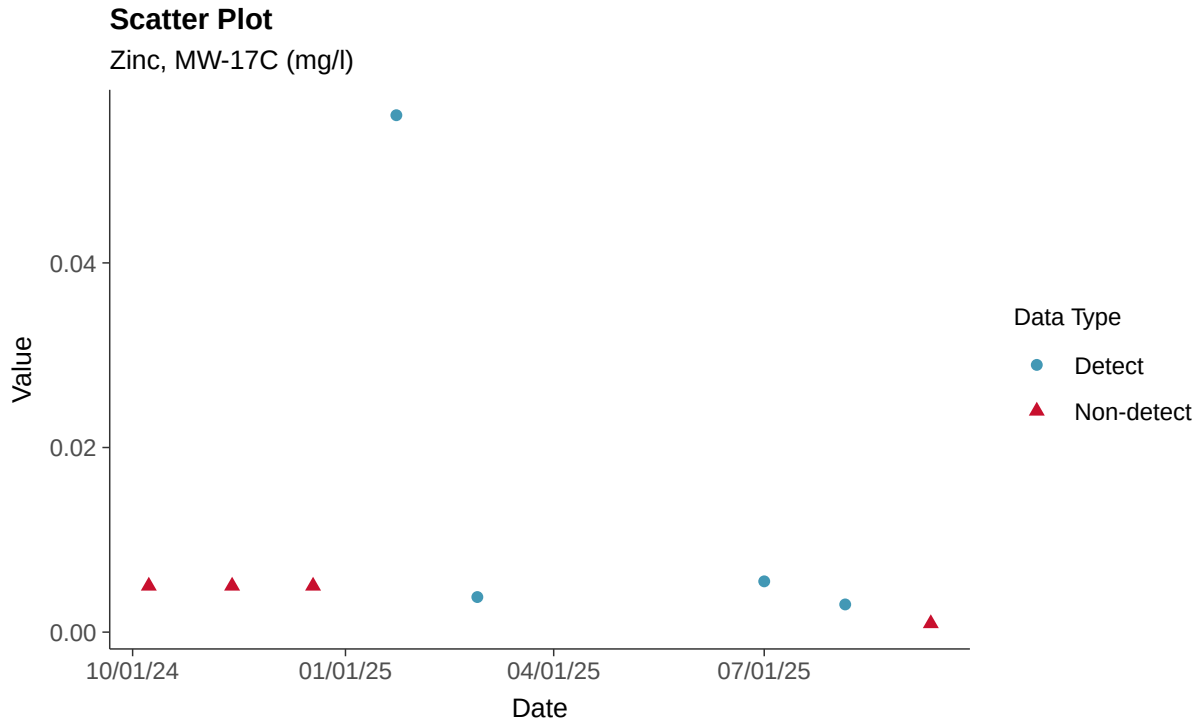
Vanadium, MW-17C (mg/l)

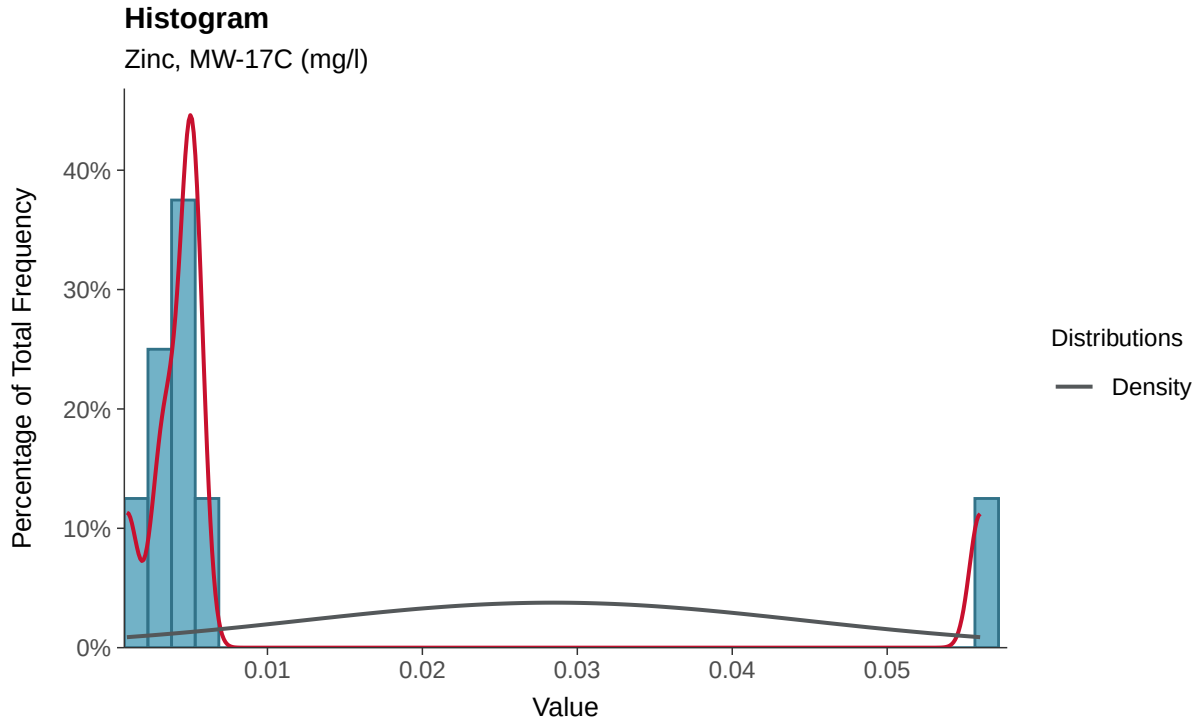



Trend Regression: Piecewise Linear-Linear
Vanadium, MW-17C (mg/l)
0.006
0.004
0.002
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Zinc, MW-17C

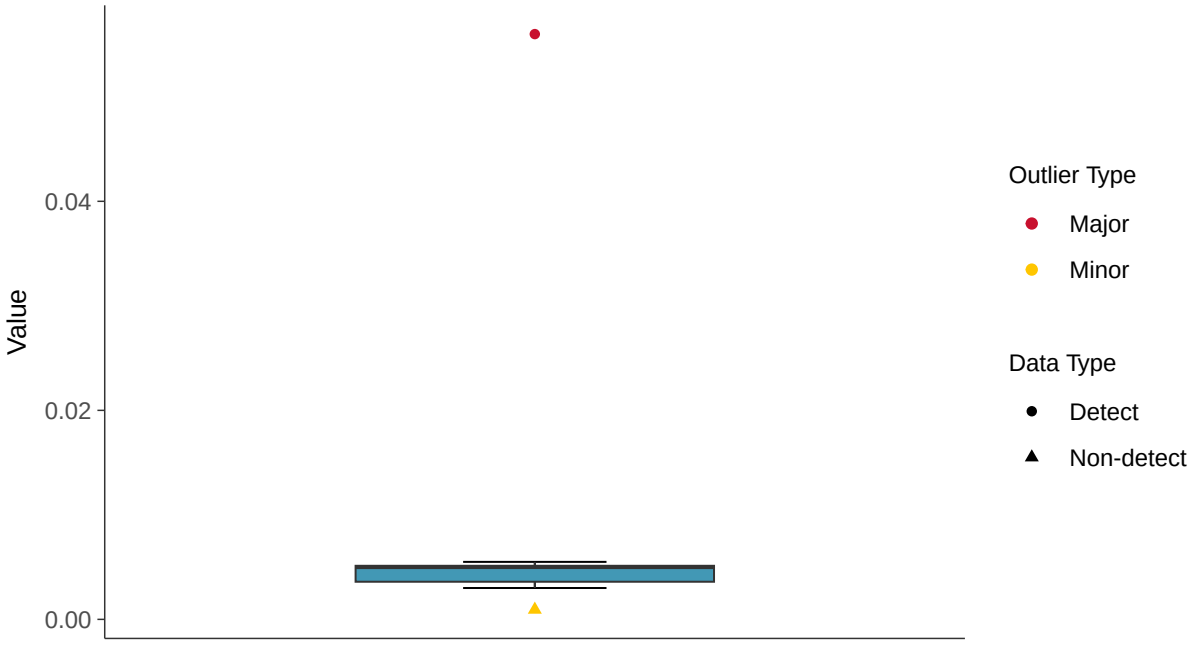
ID: 29_5_129





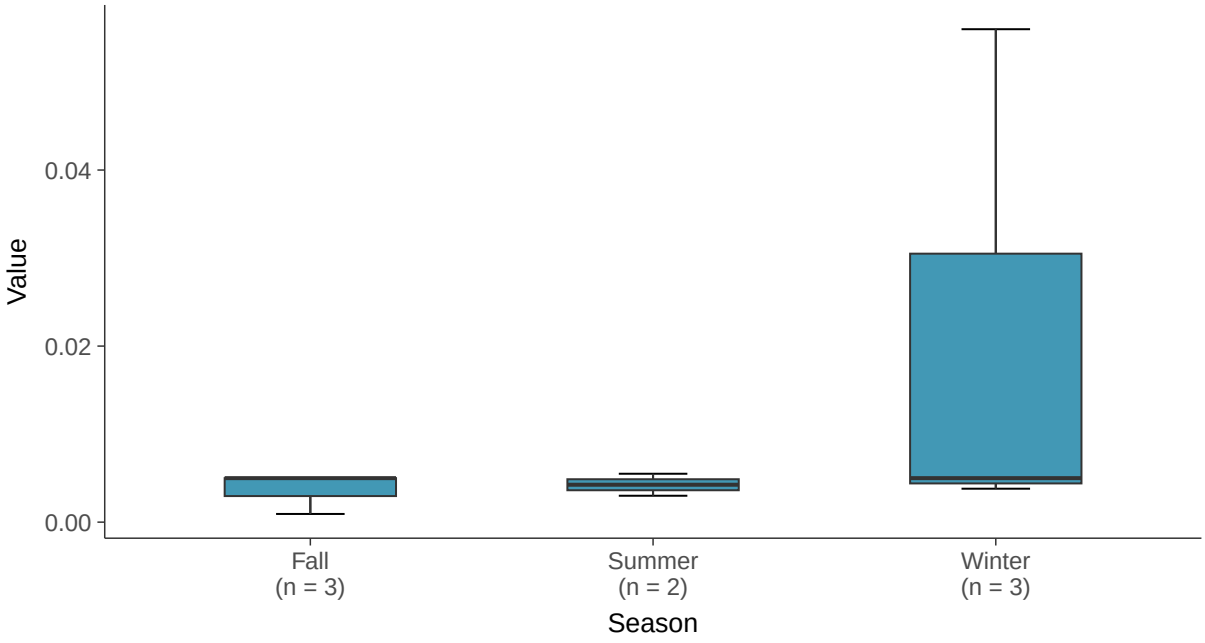
Boxplot

Zinc, MW-17C (mg/l)



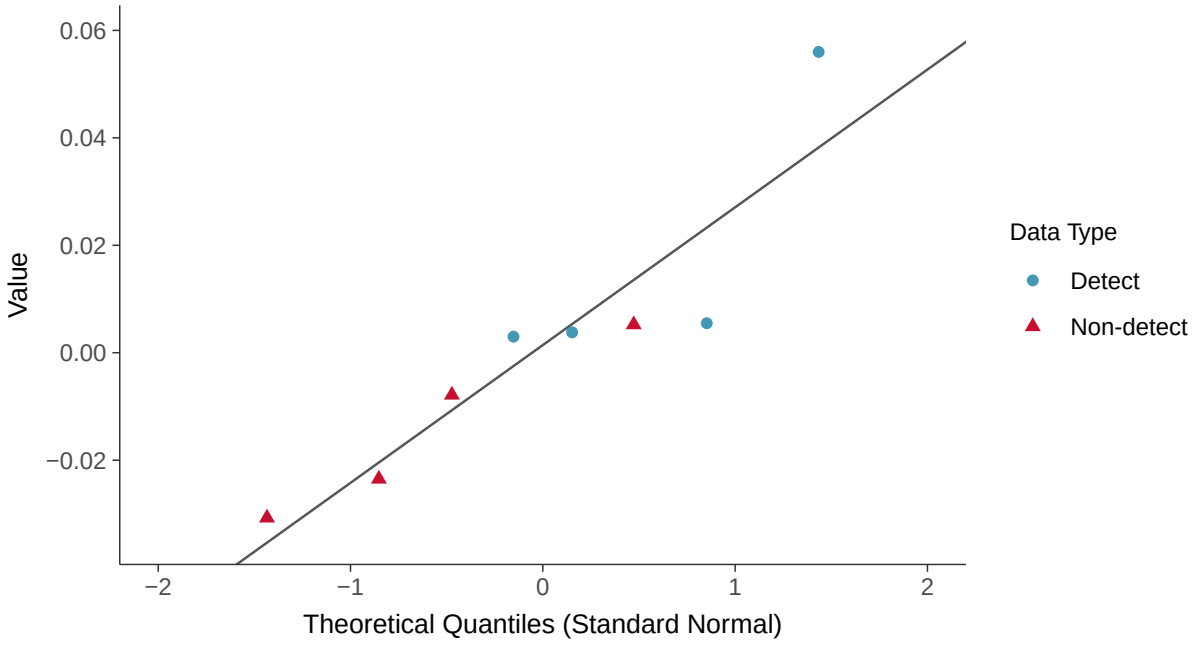
Boxplot by Season

Zinc, MW-17C (mg/l)



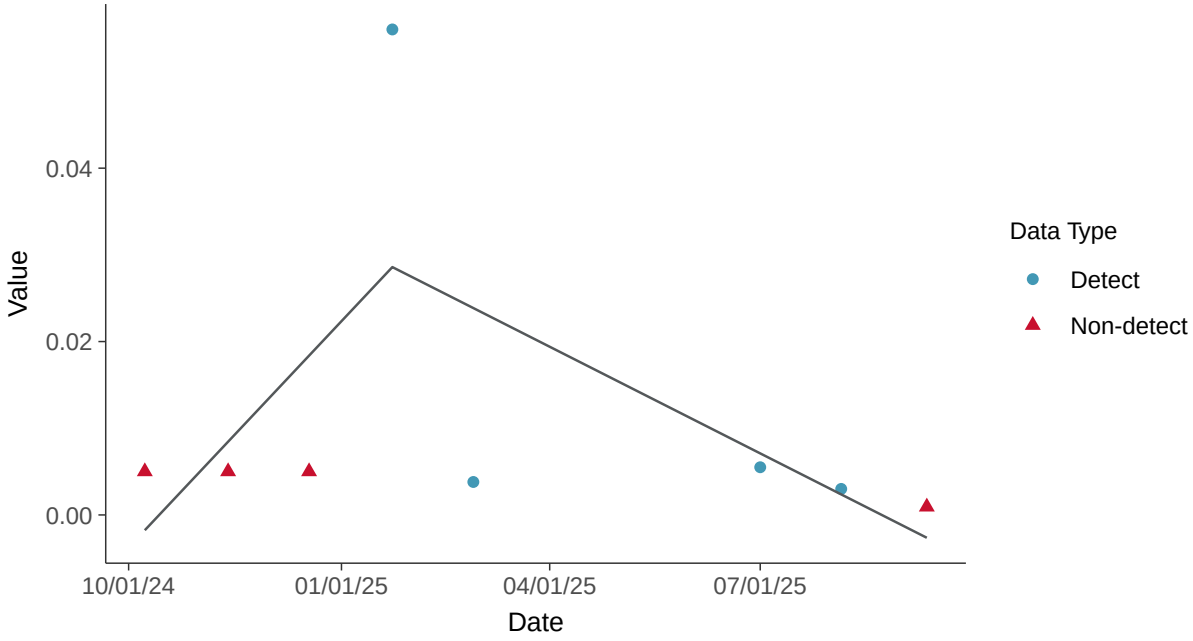
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-17C (mg/l)



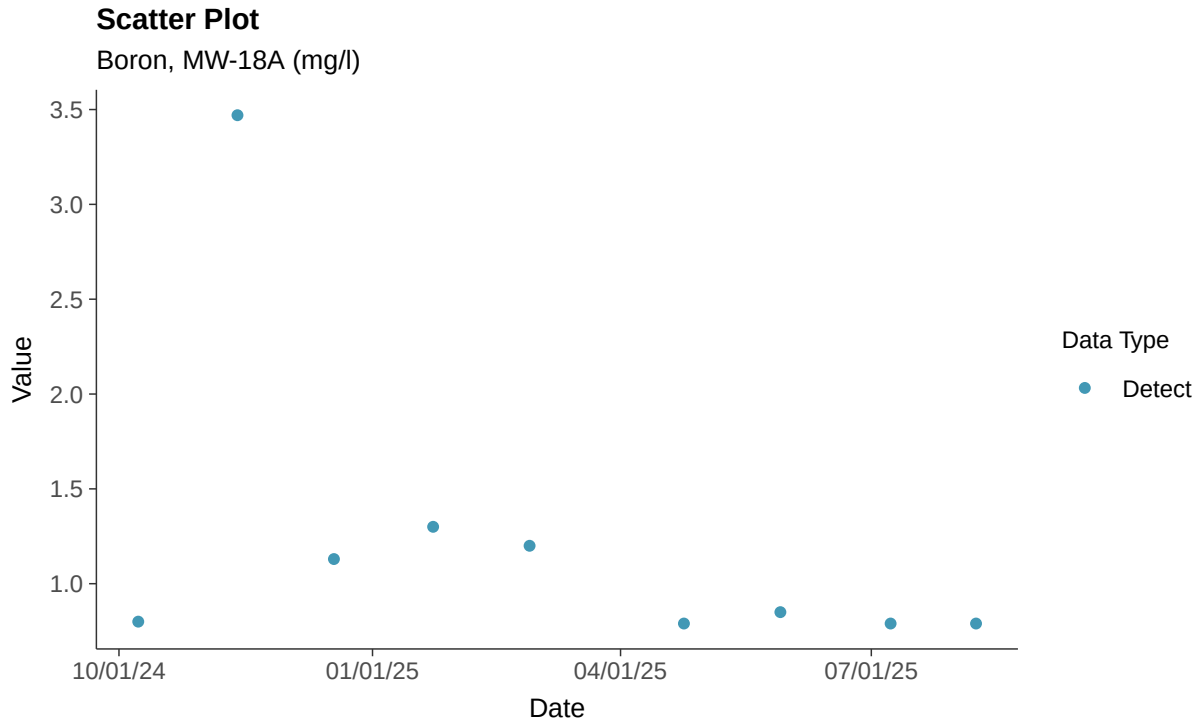
Trend Regression: Piecewise Linear-Linear

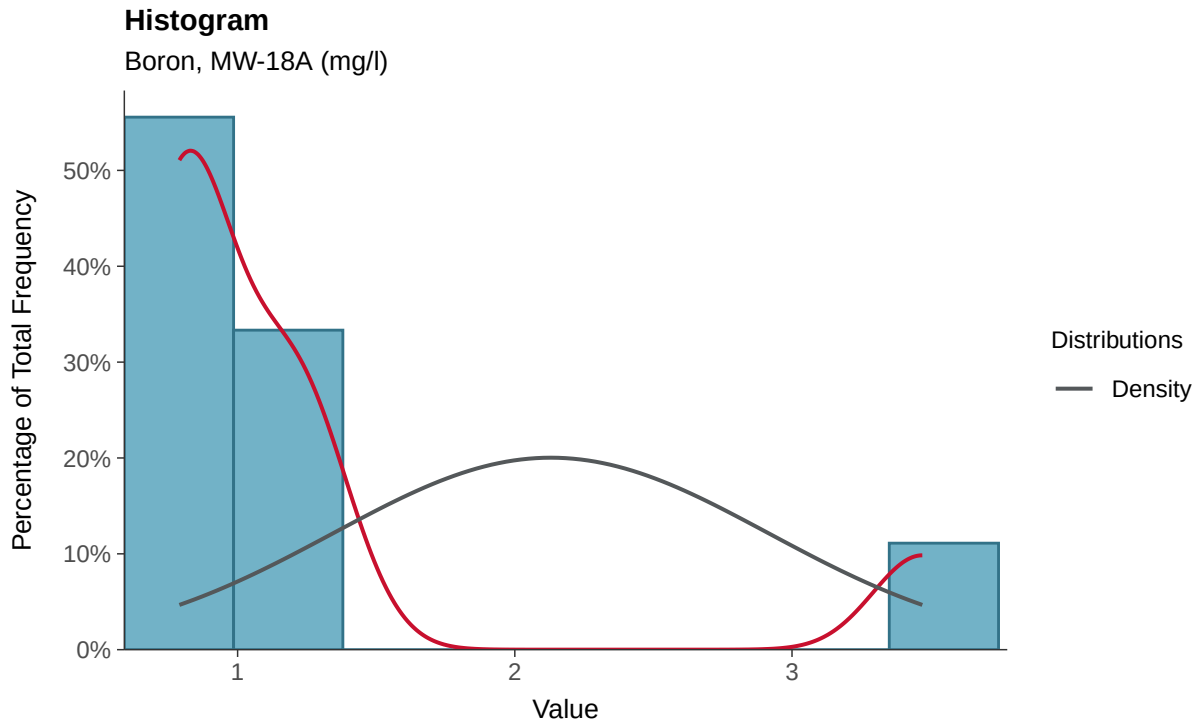
Zinc, MW-17C (mg/l)



Appendix III: Boron, MW-18A

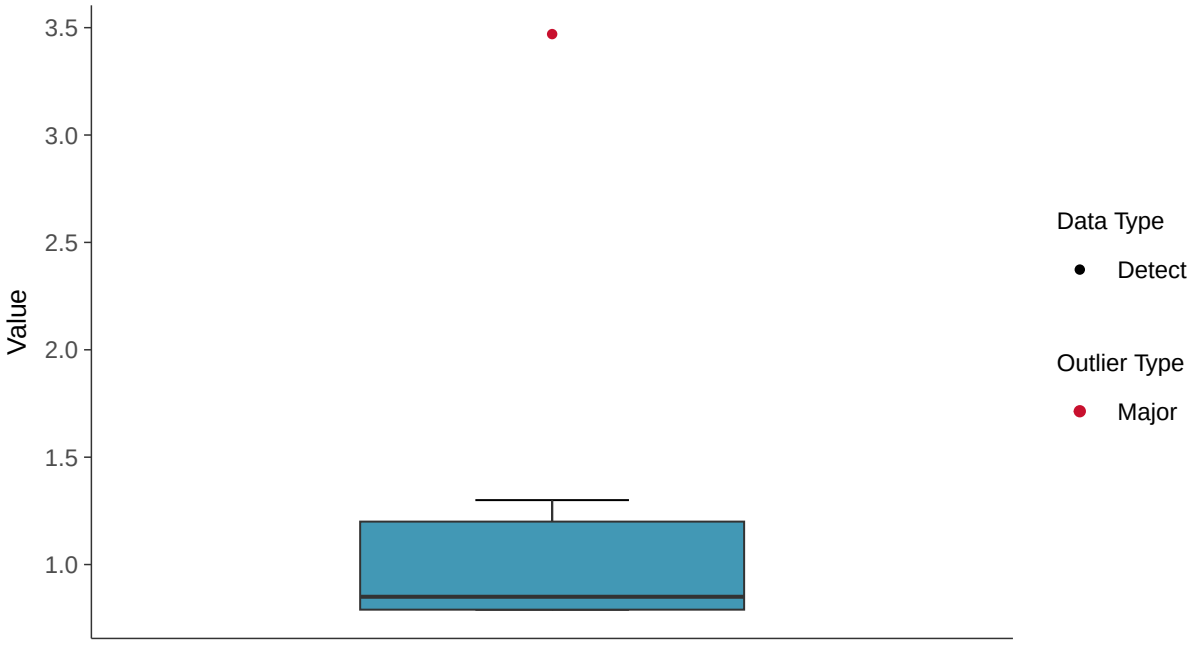
ID: 30_2_105





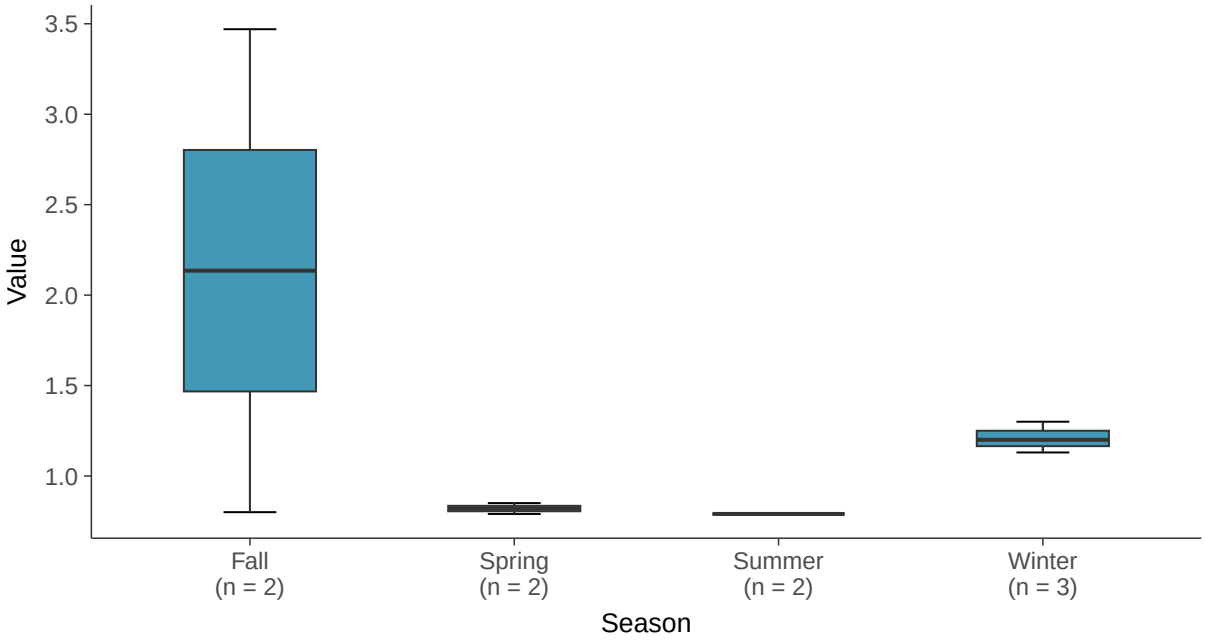
Boxplot

Boron, MW-18A (mg/l)



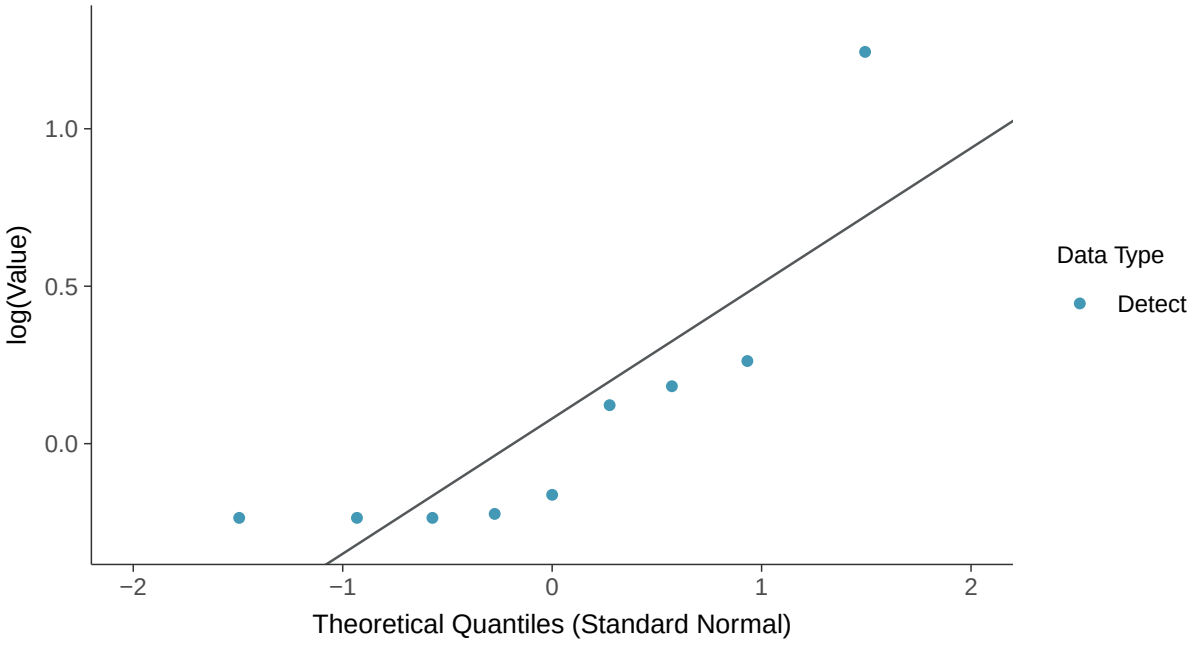
Boxplot by Season

Boron, MW-18A (mg/l)



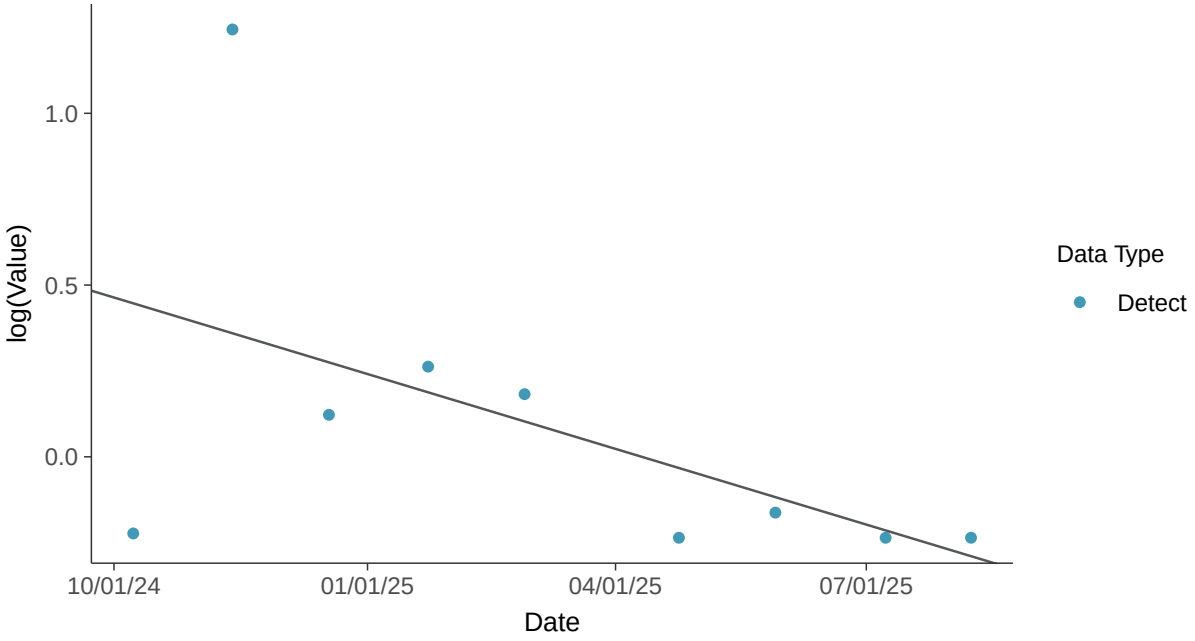
Lognormal Q-Q plot

Boron, MW-18A (mg/l)



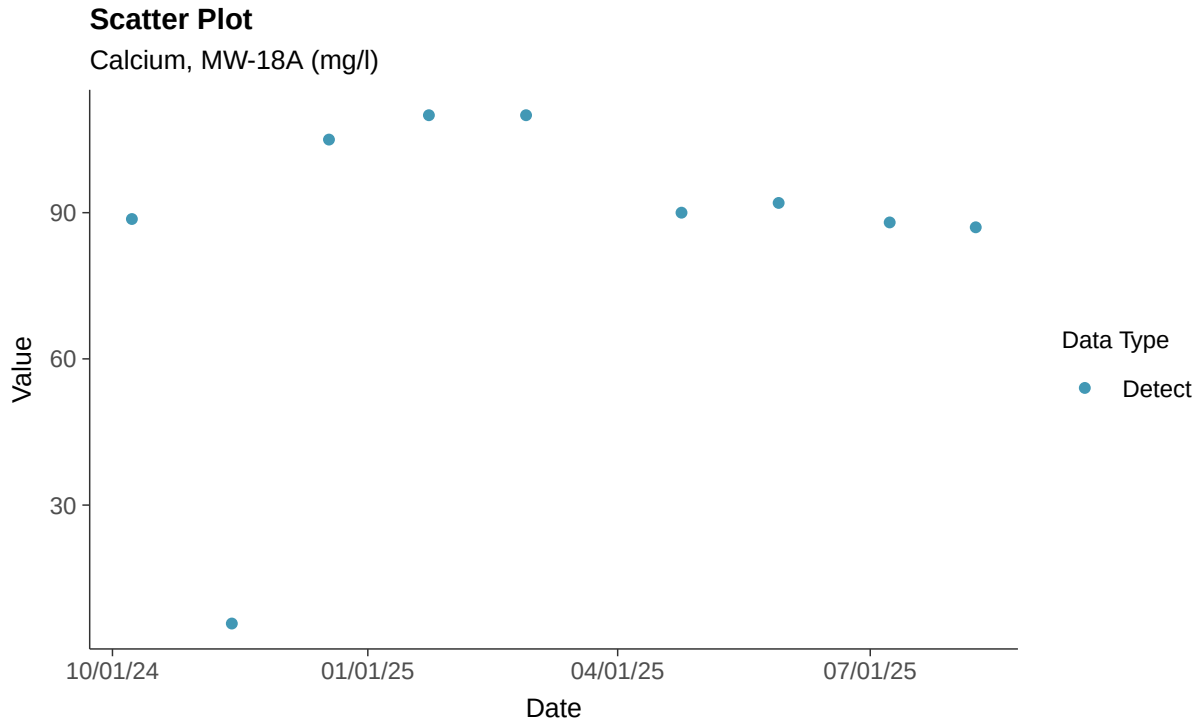
Trend Regression: Lognormal MLE

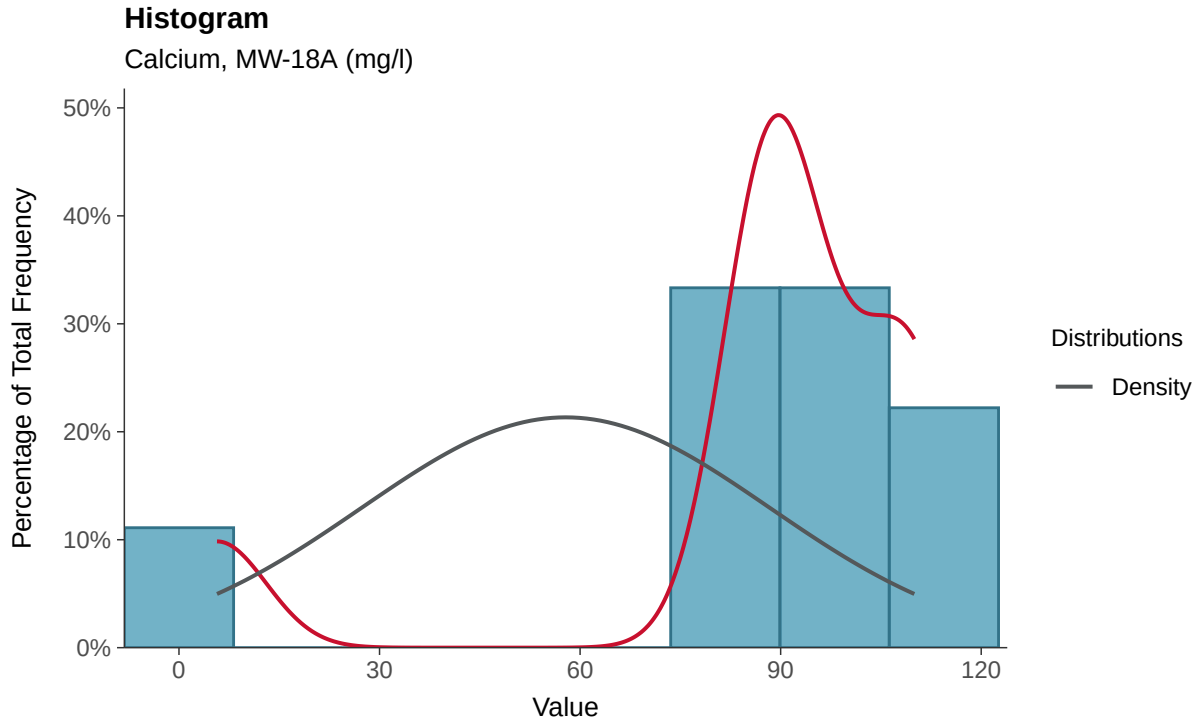
Boron, MW-18A (mg/l)



Appendix III: Calcium, MW-18A

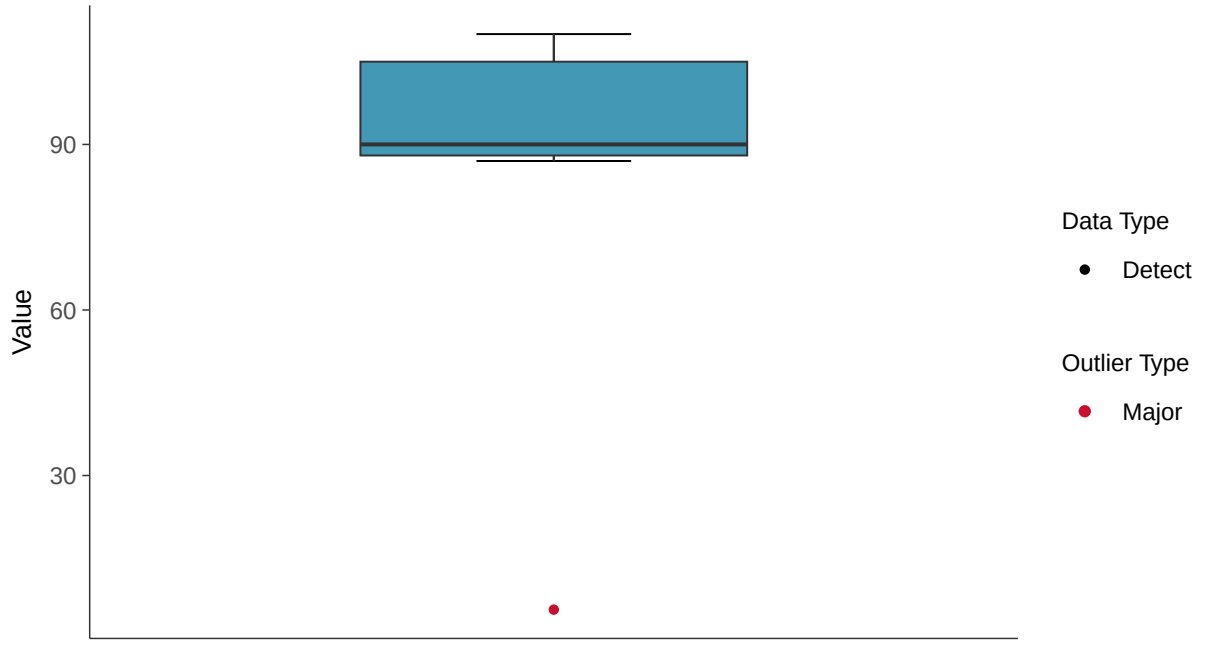
ID: 30_2_107





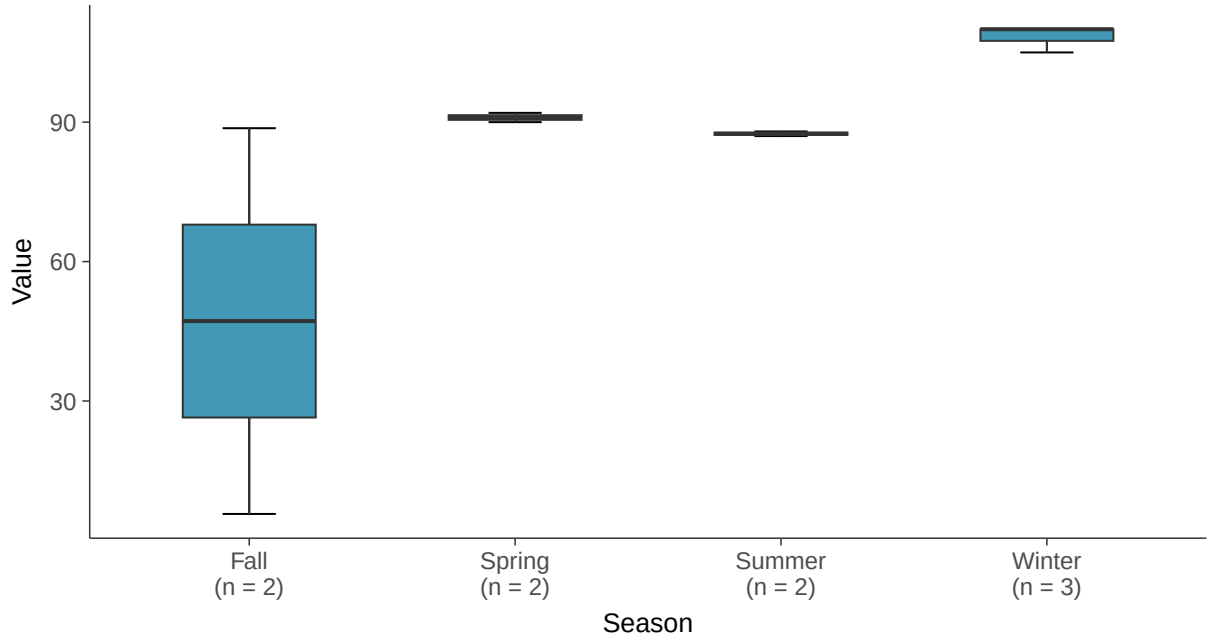
Boxplot

Calcium, MW-18A (mg/l)



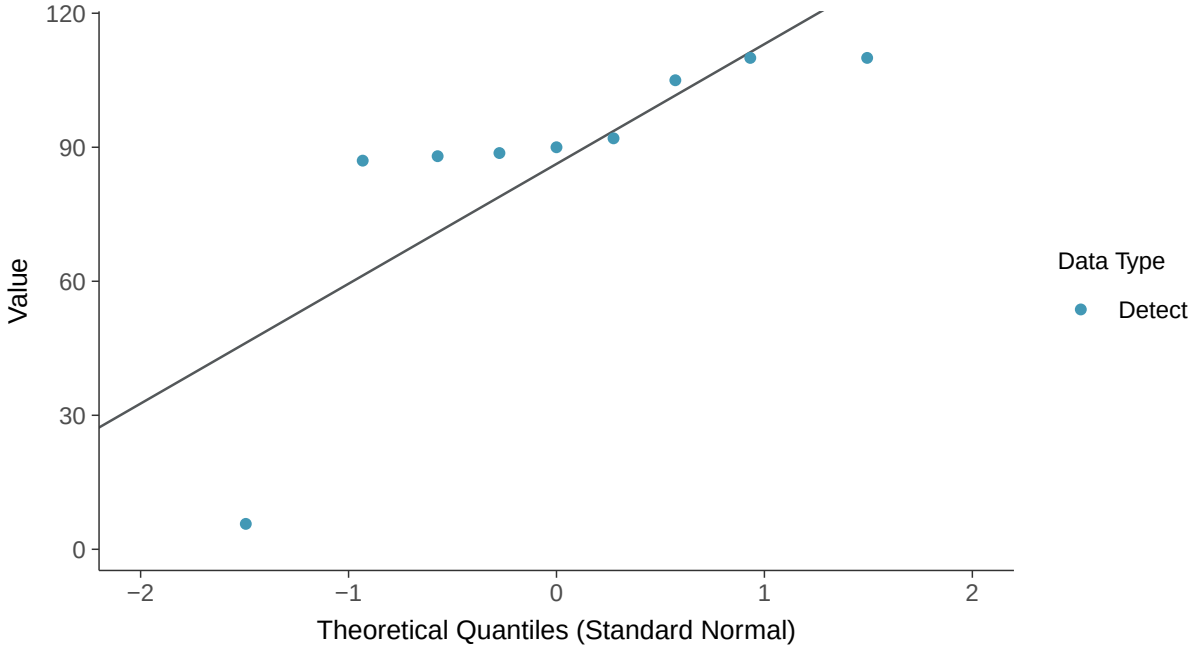
Boxplot by Season

Calcium, MW-18A (mg/l)



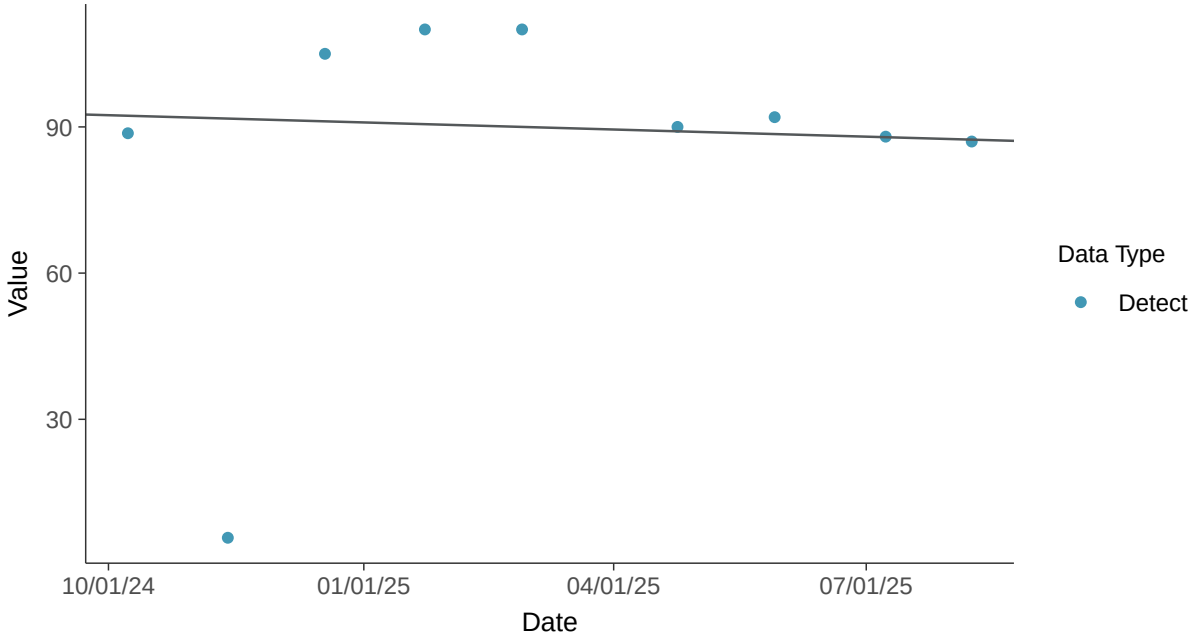
Normal Q-Q plot

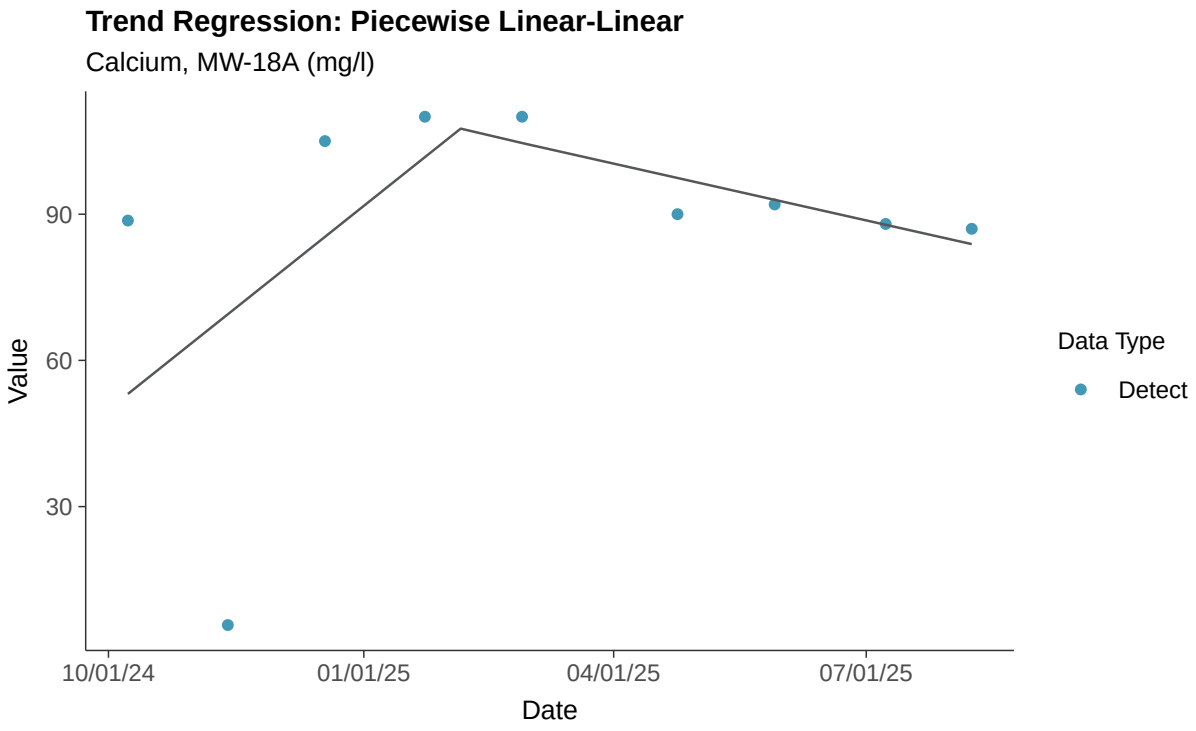
Calcium, MW-18A (mg/l)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

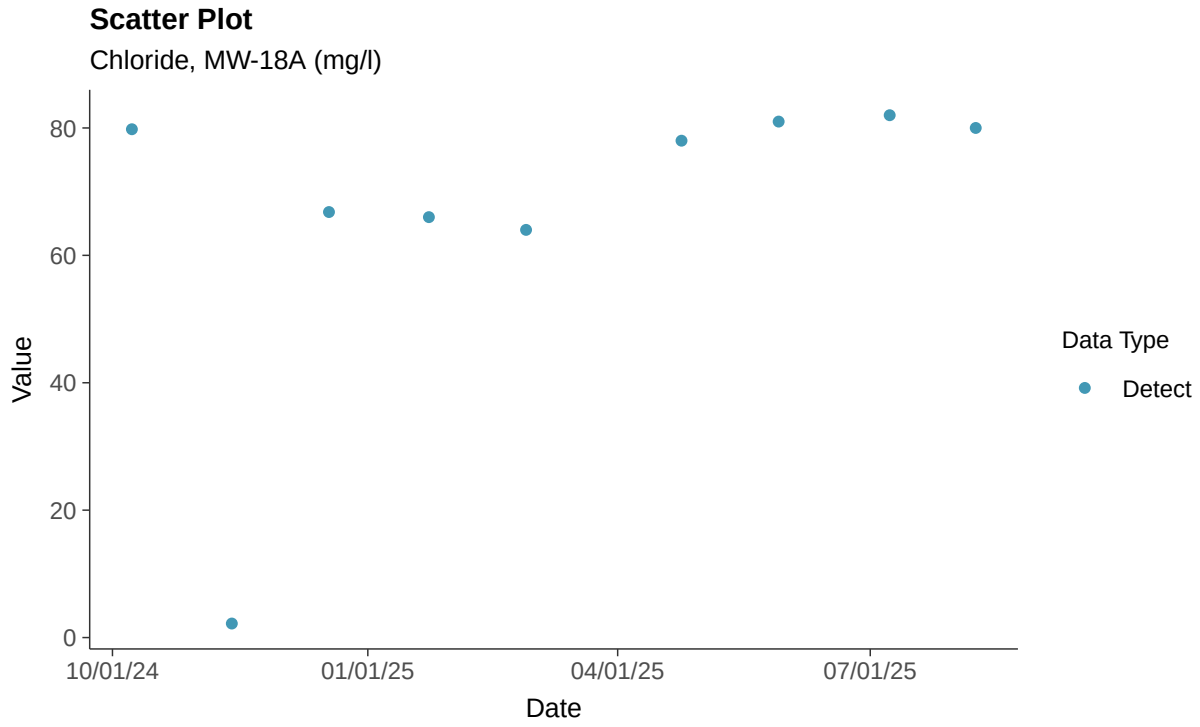
Calcium, MW-18A (mg/l)

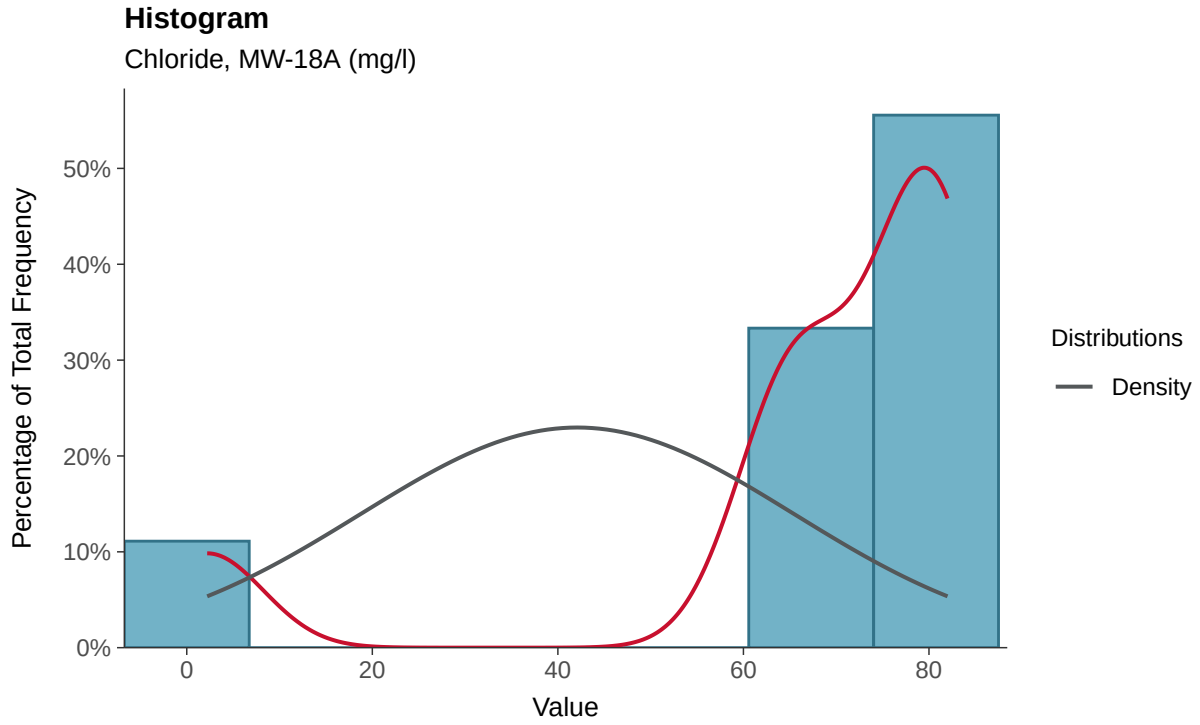



Trend Regression: Piecewise Linear-Linear
Calcium, MW-18A (mg/l)
Value
90
60
30
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix III: Chloride, MW-18A

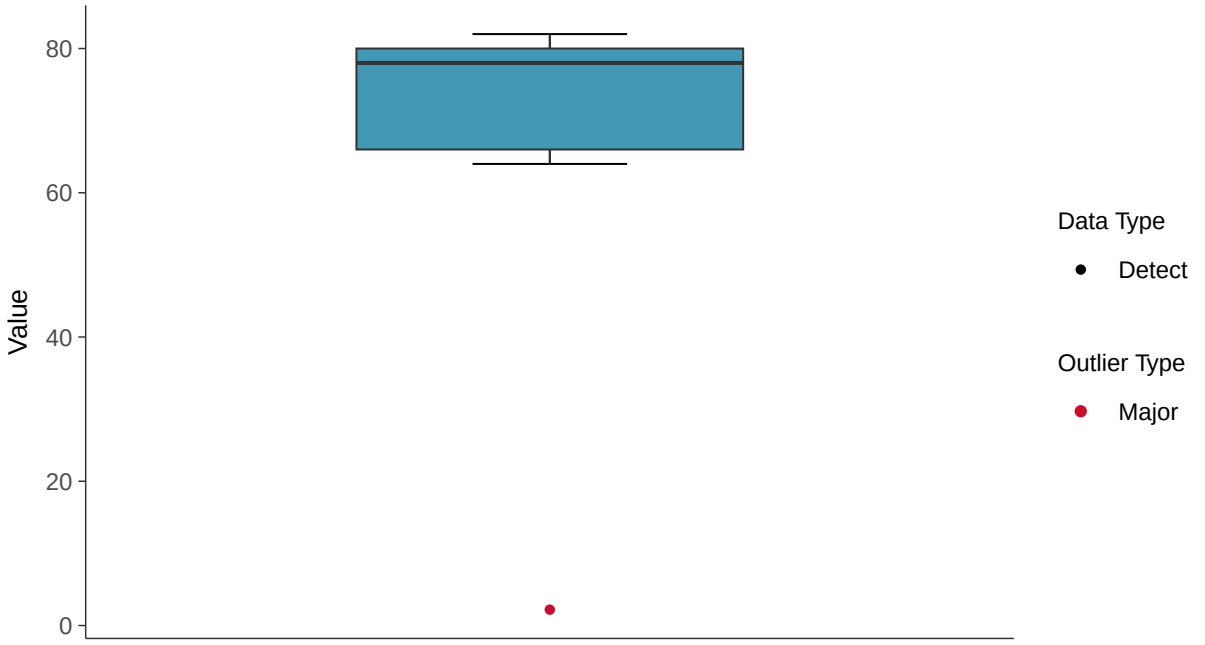
ID: 30_2_108





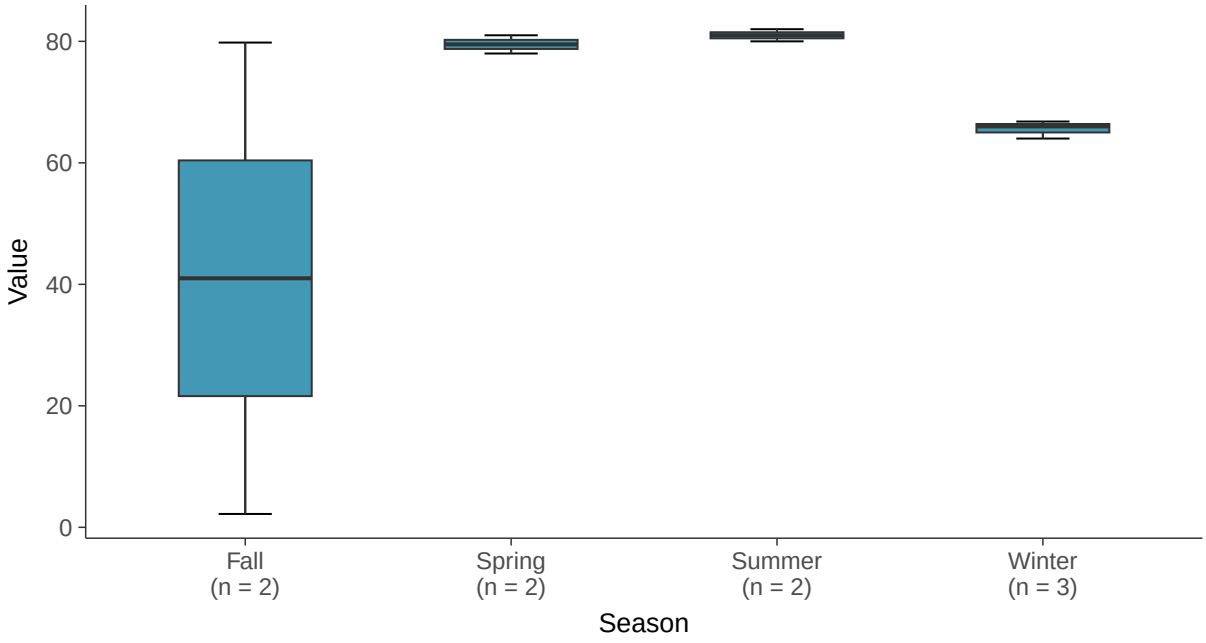
Boxplot

Chloride, MW-18A (mg/l)



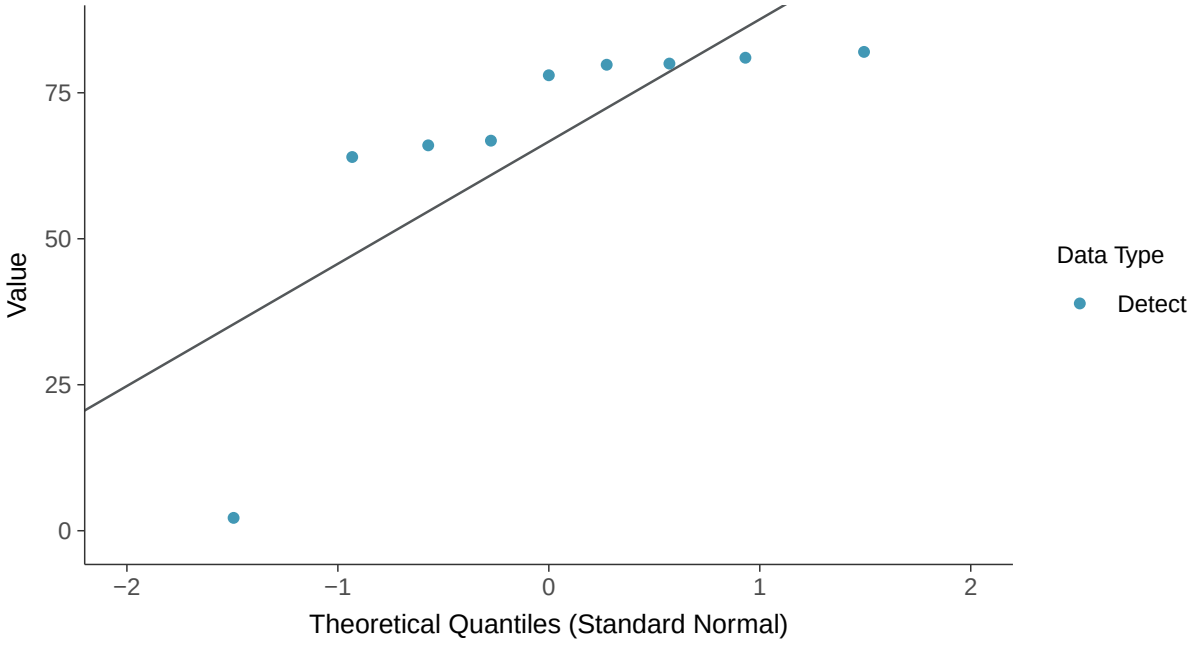
Boxplot by Season

Chloride, MW-18A (mg/l)



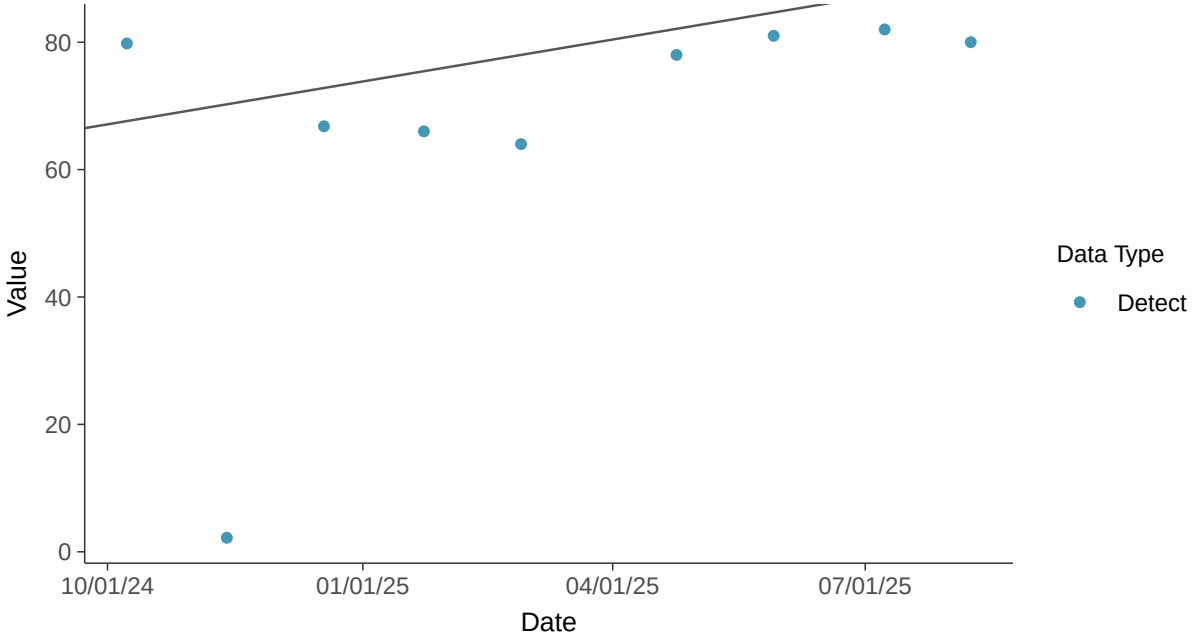
Normal Q-Q plot

Chloride, MW-18A (mg/l)



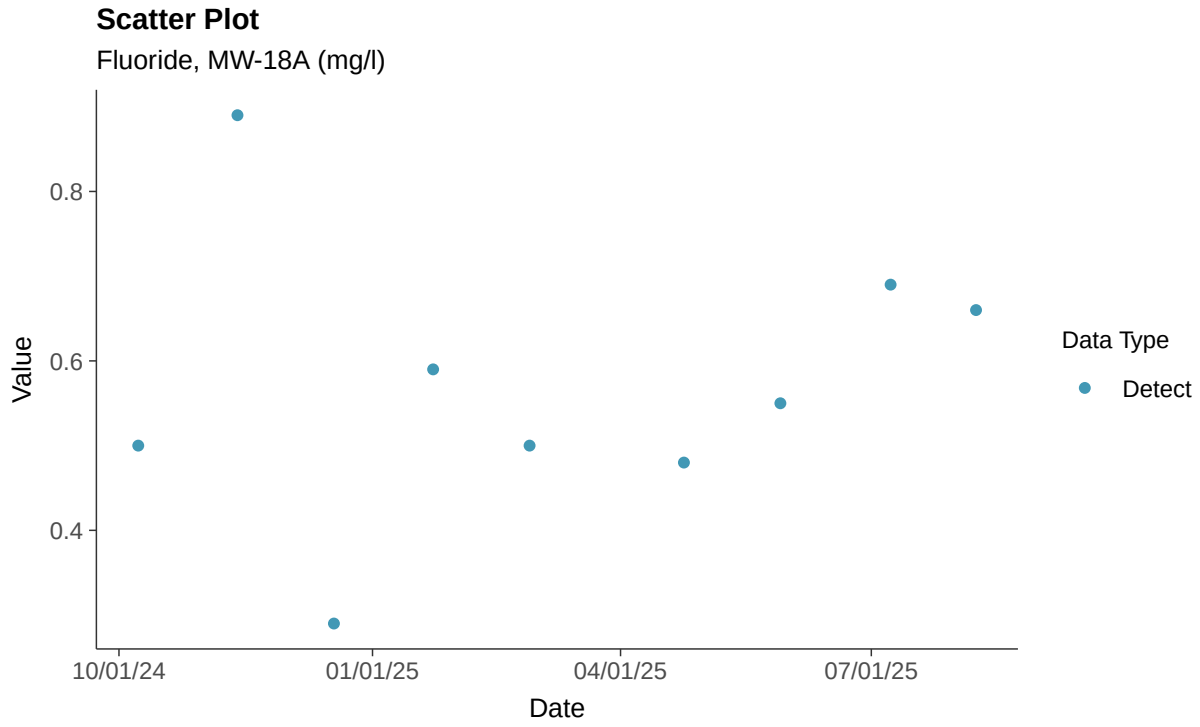
Trend Regression: Mann-Kendall/Theil-Sen Estimate

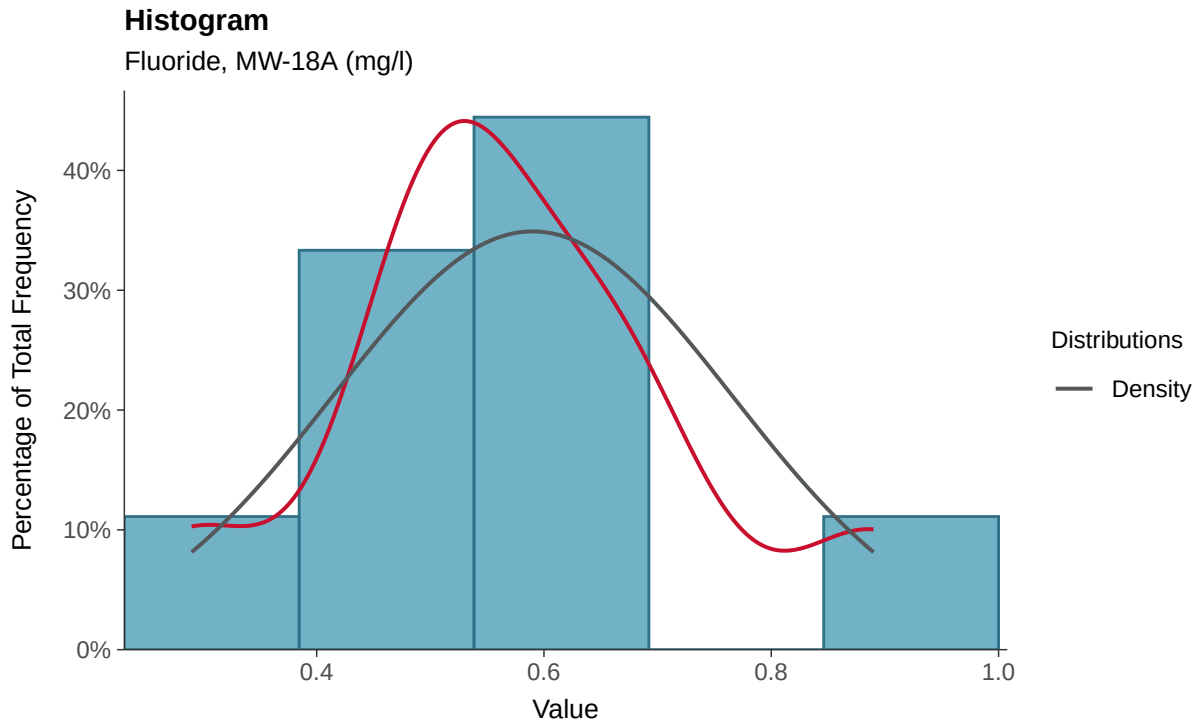
Chloride, MW-18A (mg/l)



Appendix III: Fluoride, MW-18A

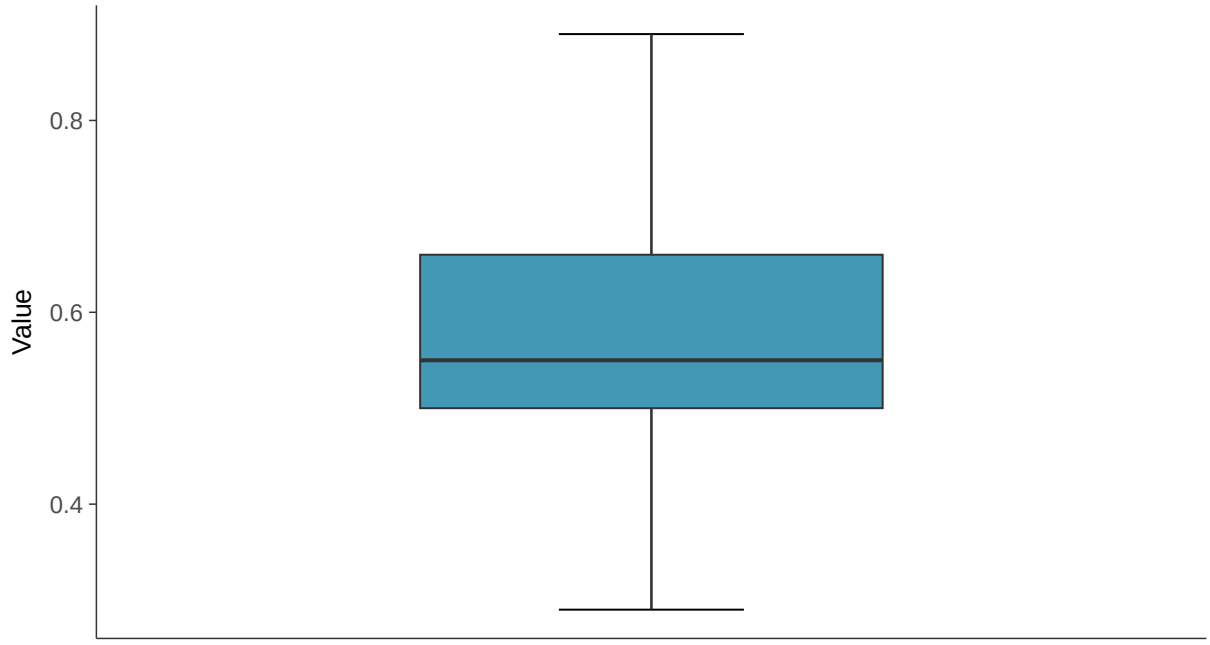
ID: 30_2_112





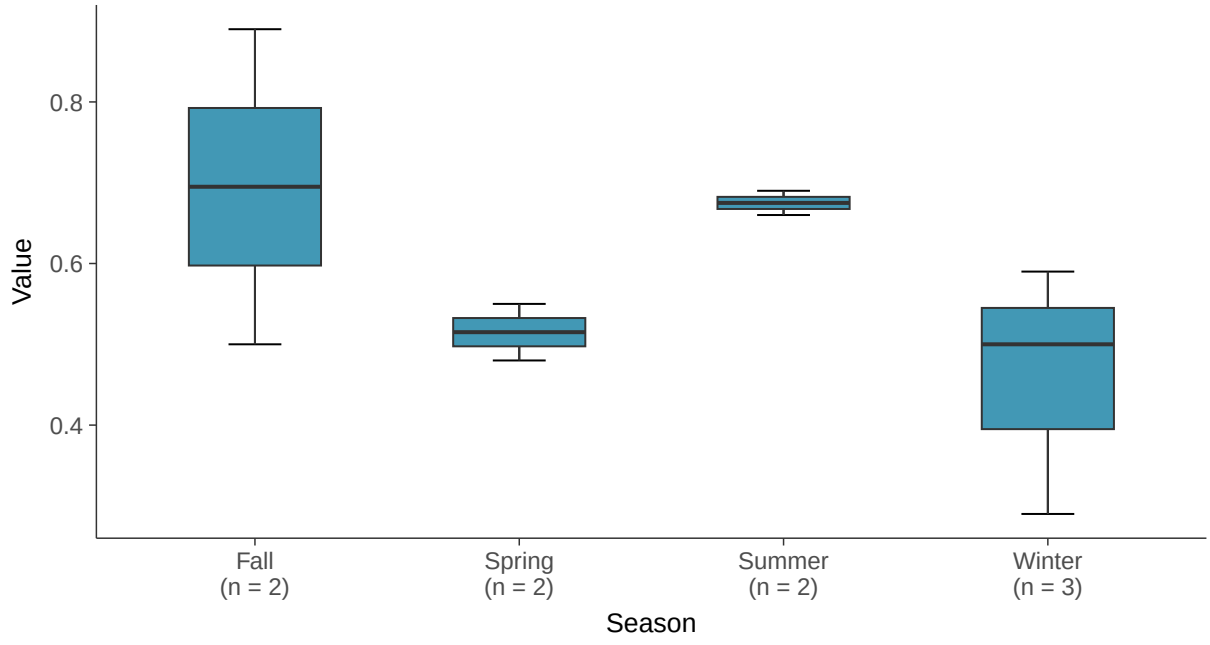
Boxplot

Fluoride, MW-18A (mg/l)



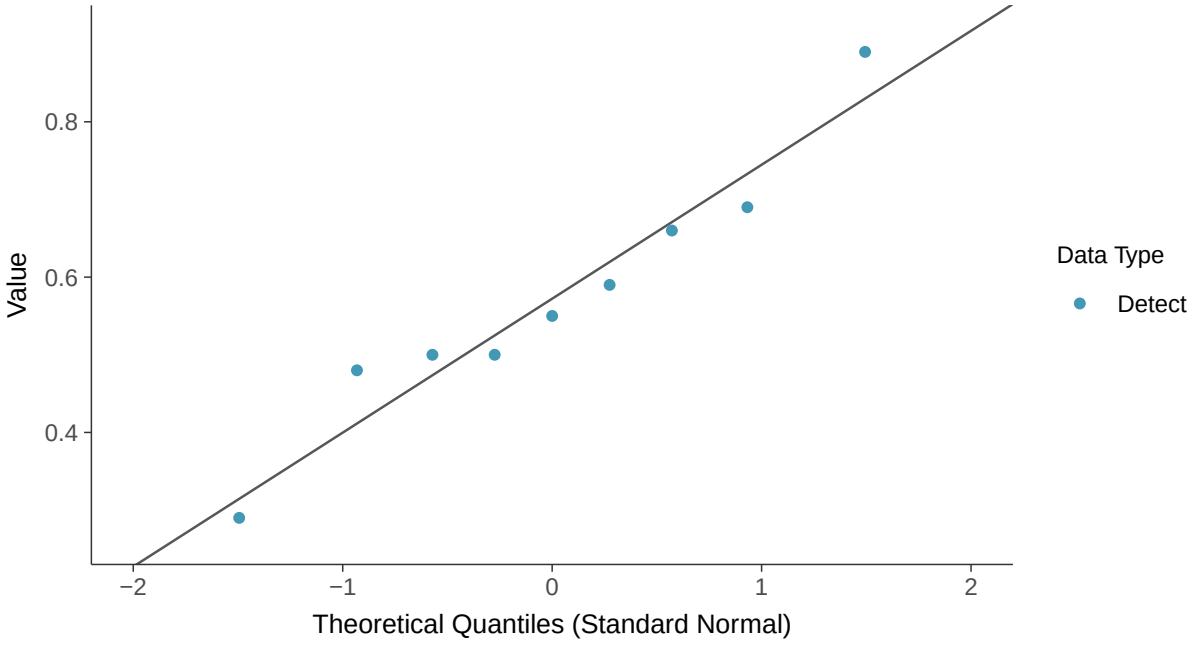
Boxplot by Season

Fluoride, MW-18A (mg/l)



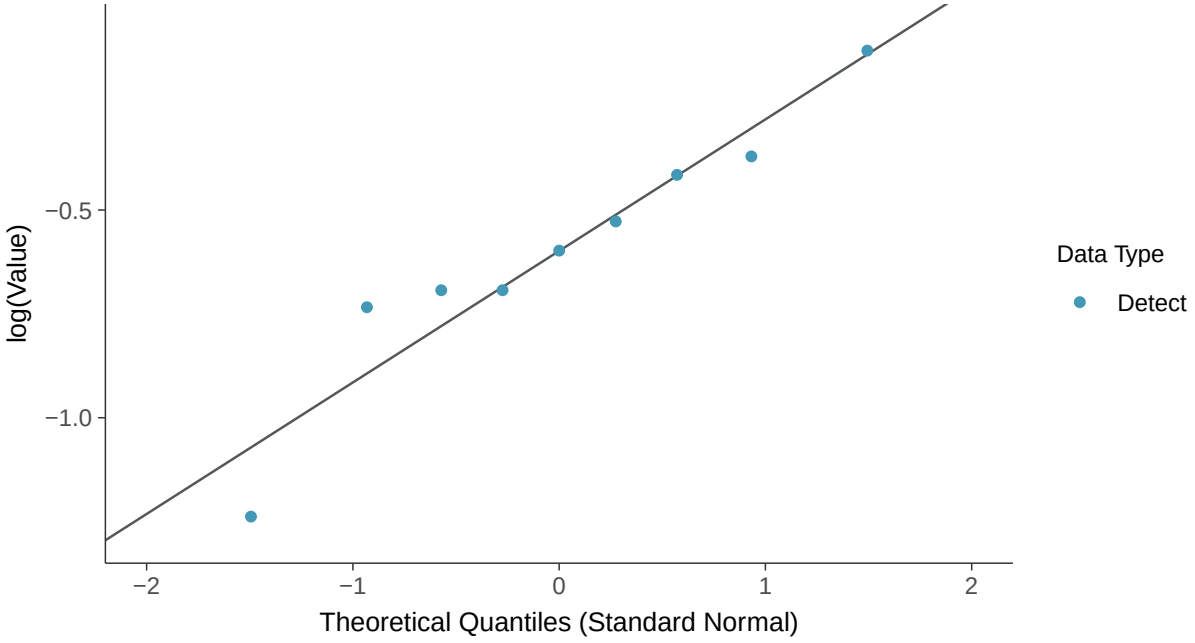
Normal Q-Q plot

Fluoride, MW-18A (mg/l)



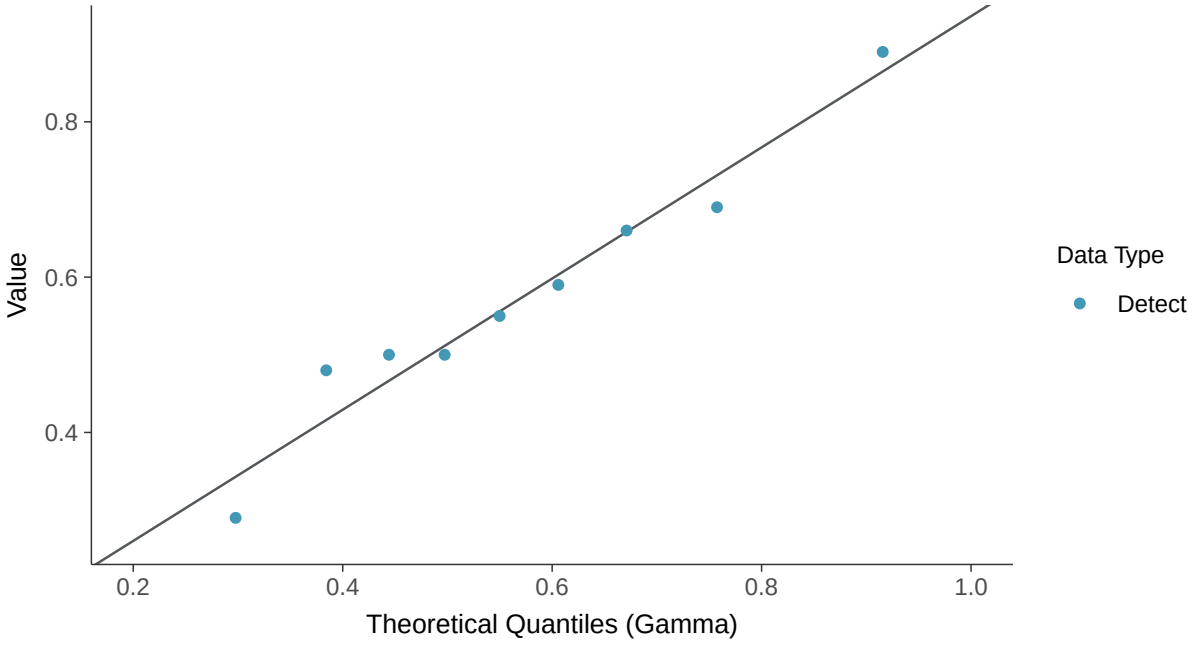
Lognormal Q-Q plot

Fluoride, MW-18A (mg/l)



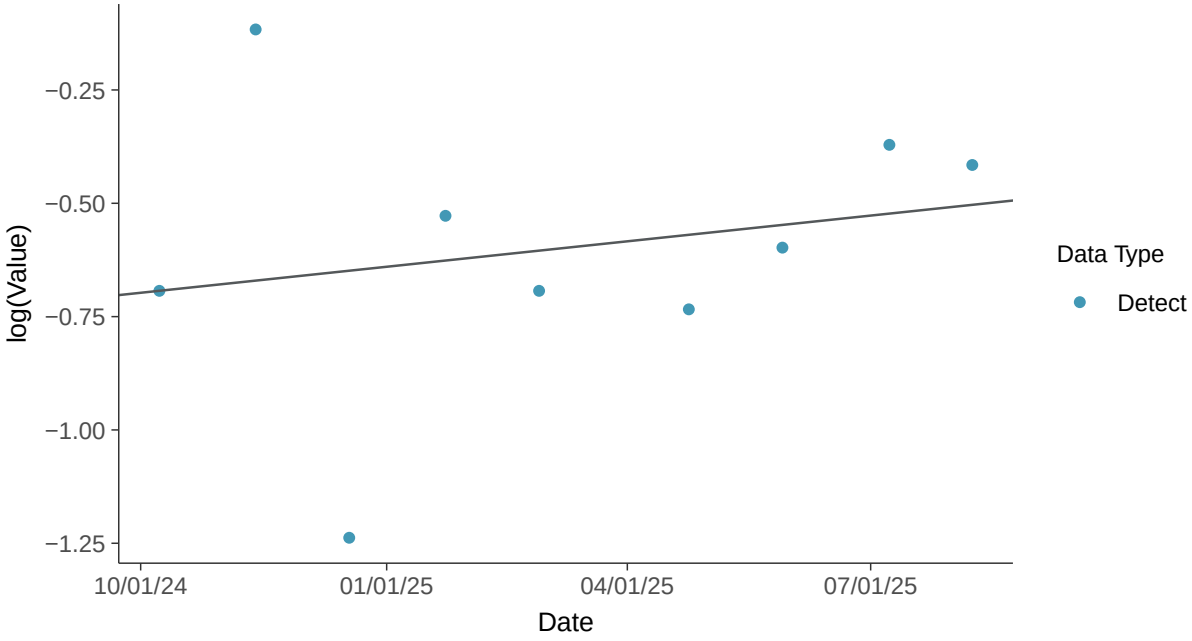
Gamma Q-Q plot

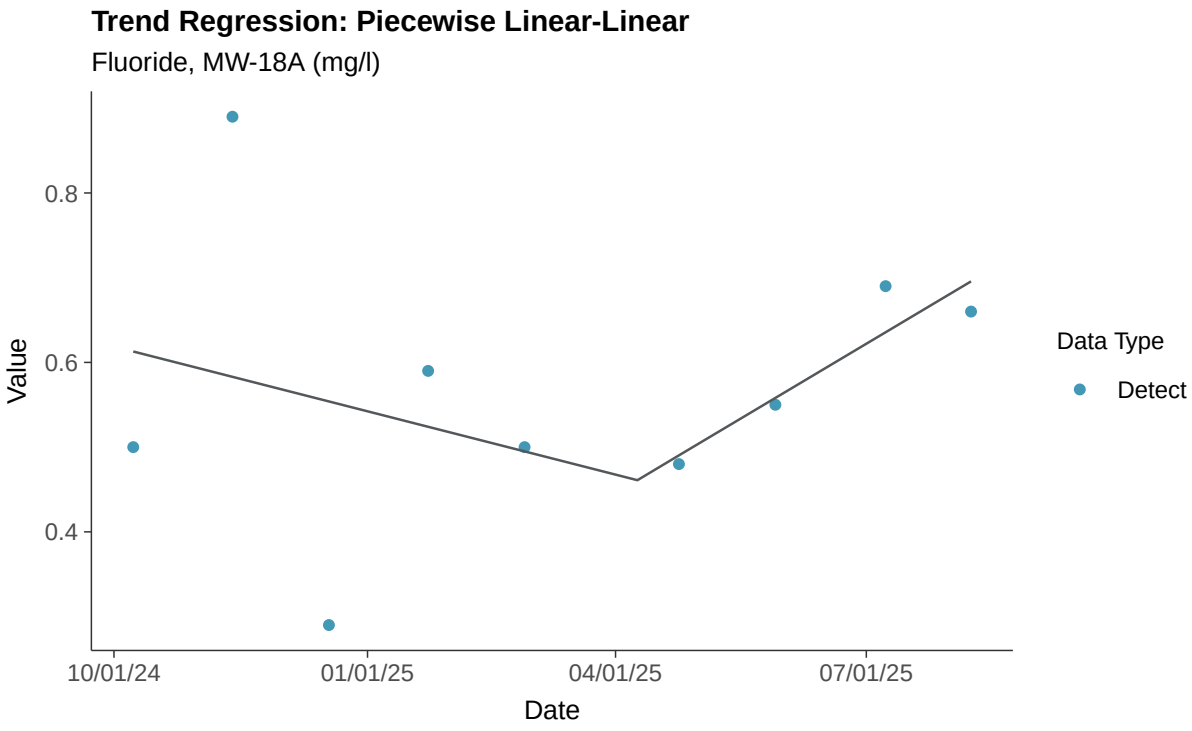
Fluoride, MW-18A (mg/l)



Trend Regression: Lognormal MLE

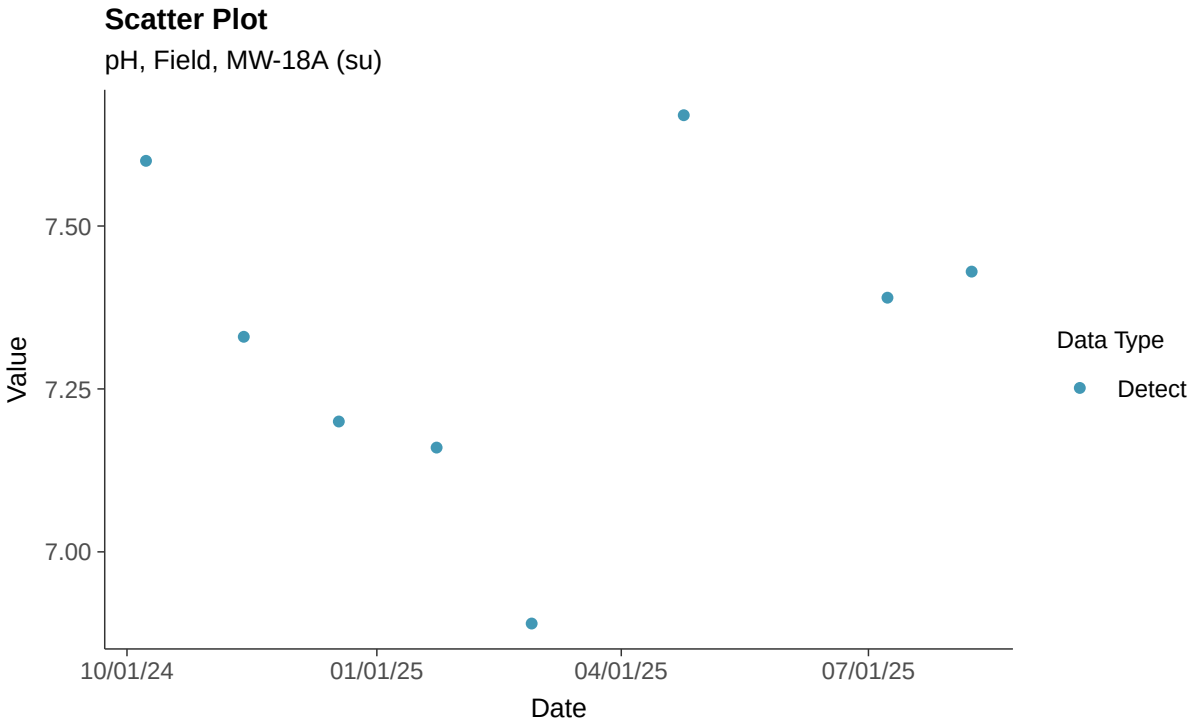
Fluoride, MW-18A (mg/l)

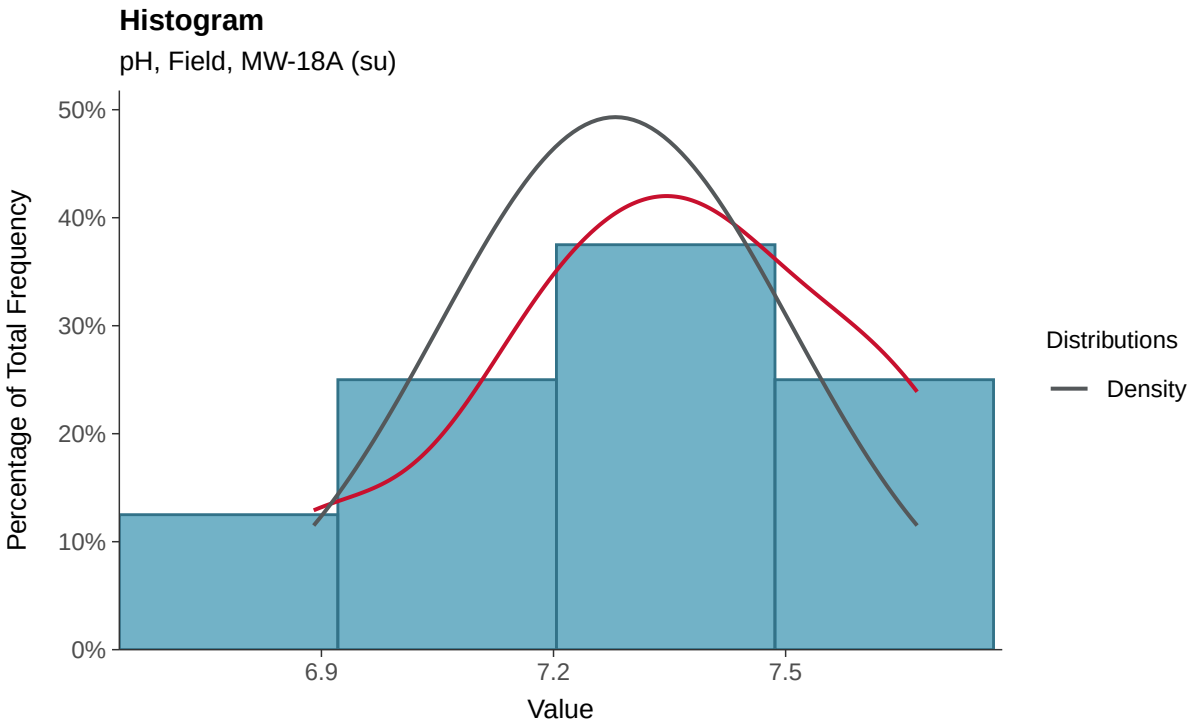



Trend Regression: Piecewise Linear-Linear
Fluoride, MW-18A (mg/l)
Value
0.8
0.6
0.4
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix III: pH, Field, MW-18A

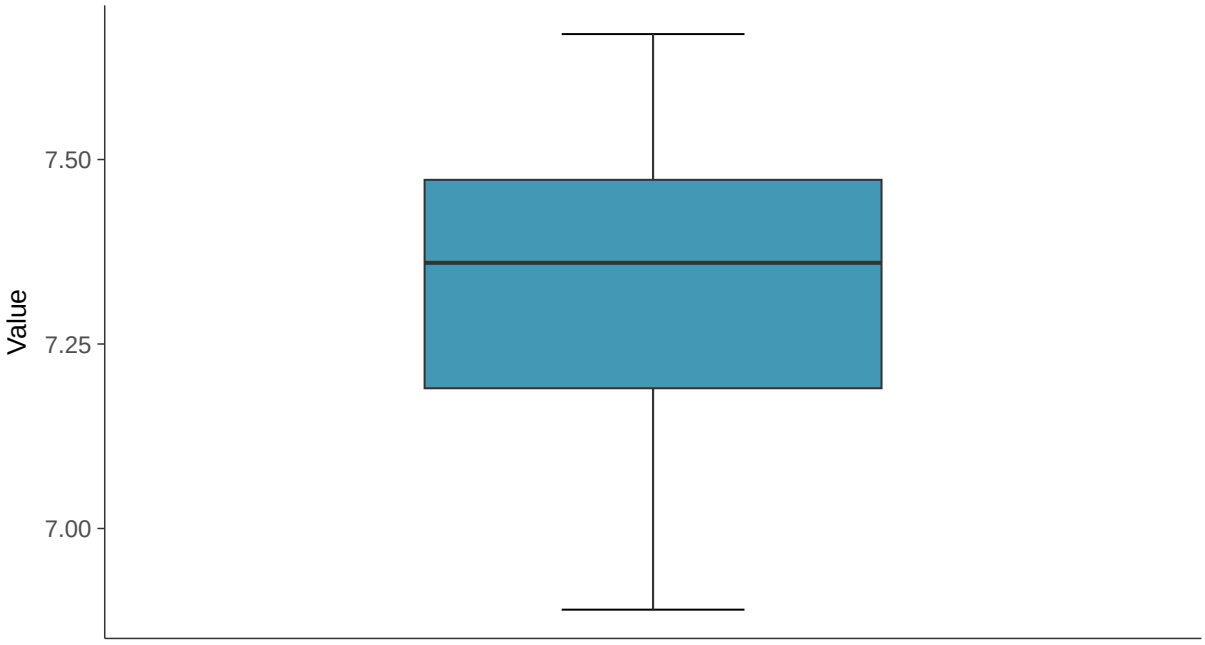
ID: 30_2_120





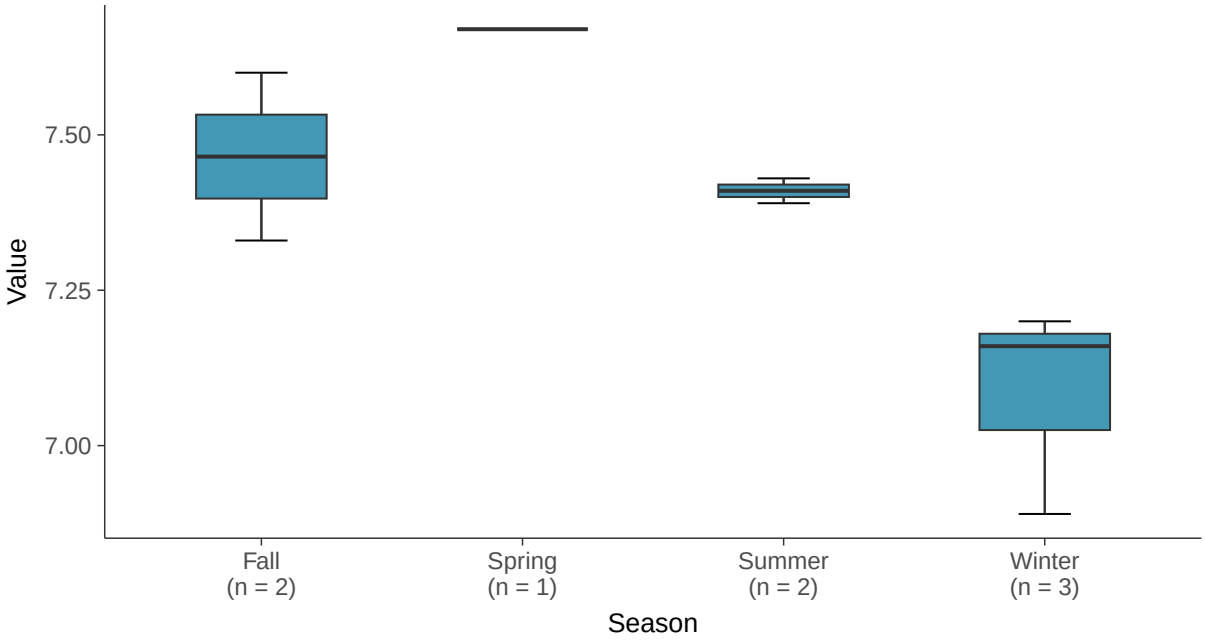
Boxplot

pH, Field, MW-18A (su)



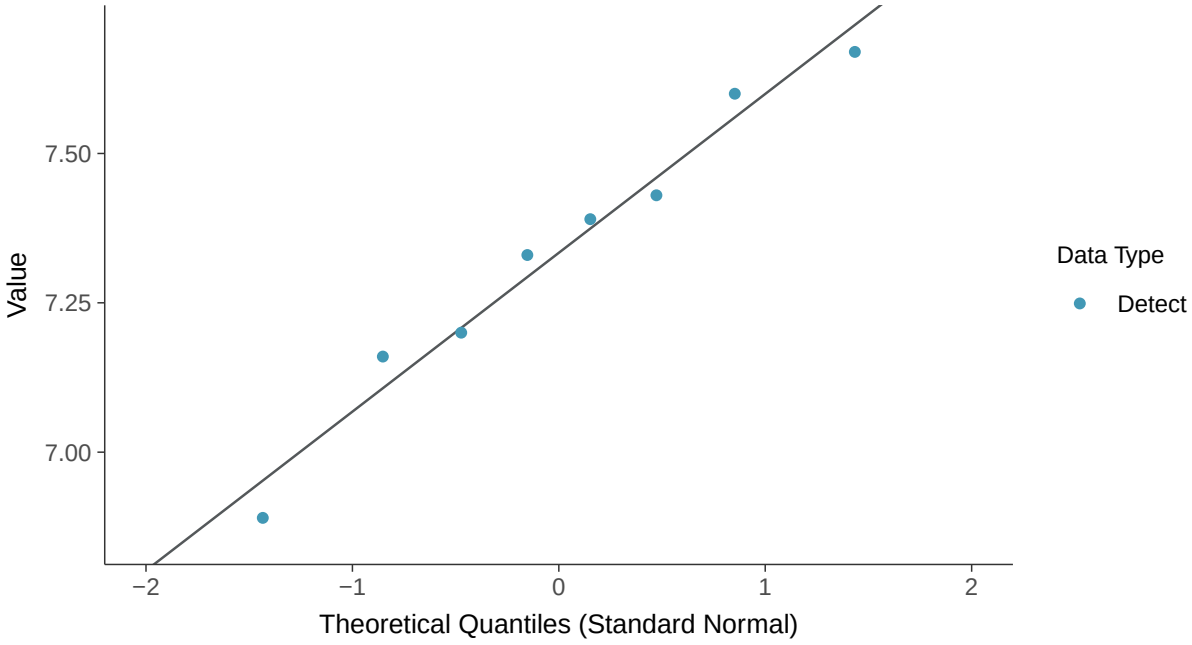
Boxplot by Season

pH, Field, MW-18A (su)



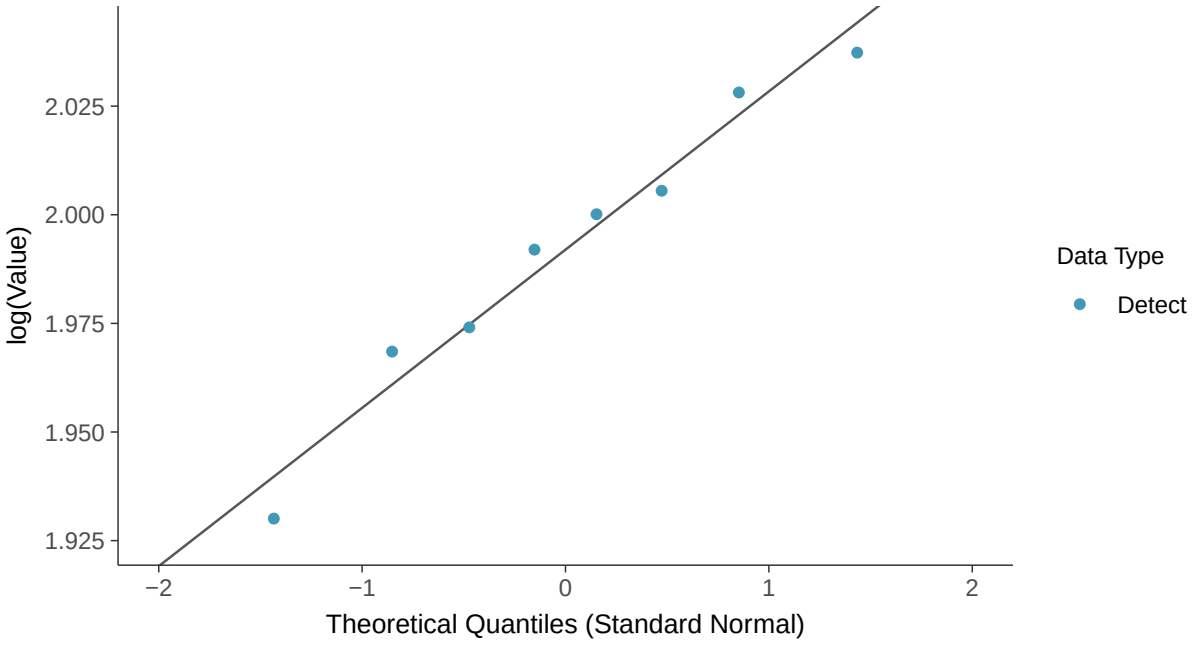
Normal Q-Q plot

pH, Field, MW-18A (su)



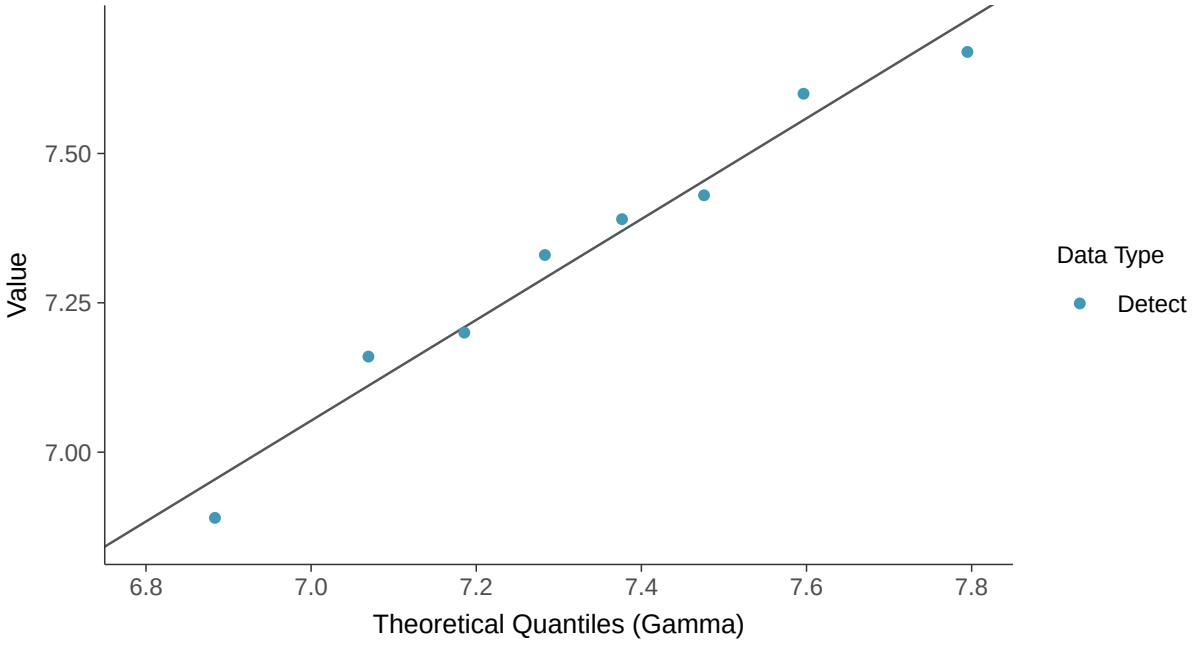
Lognormal Q-Q plot

pH, Field, MW-18A (su)



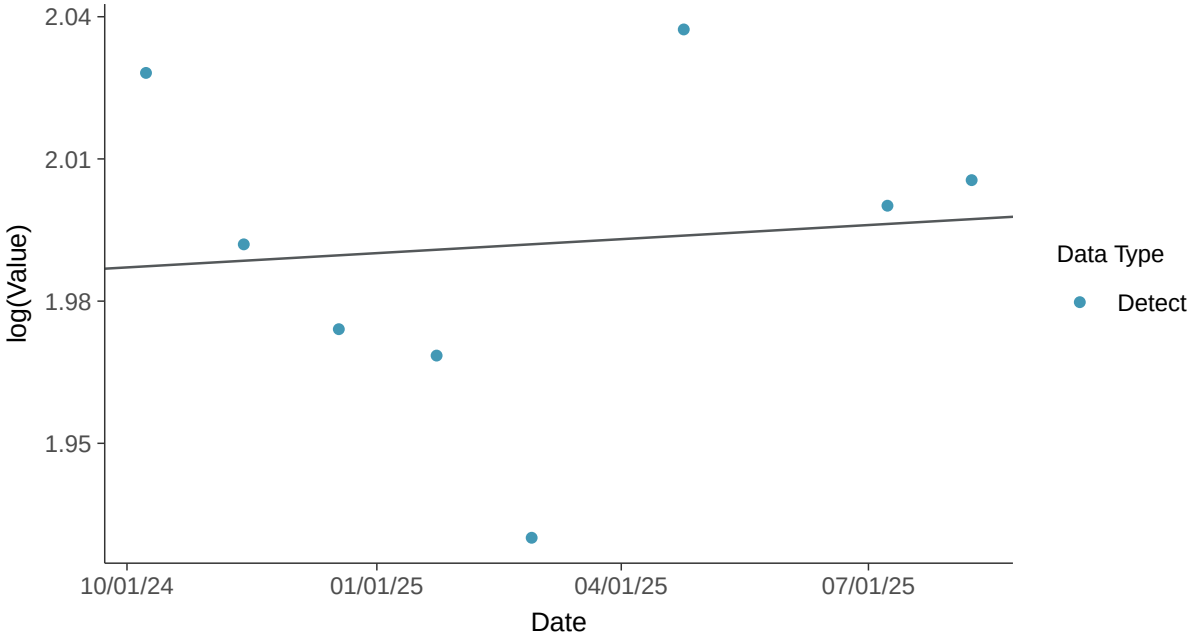
Gamma Q-Q plot

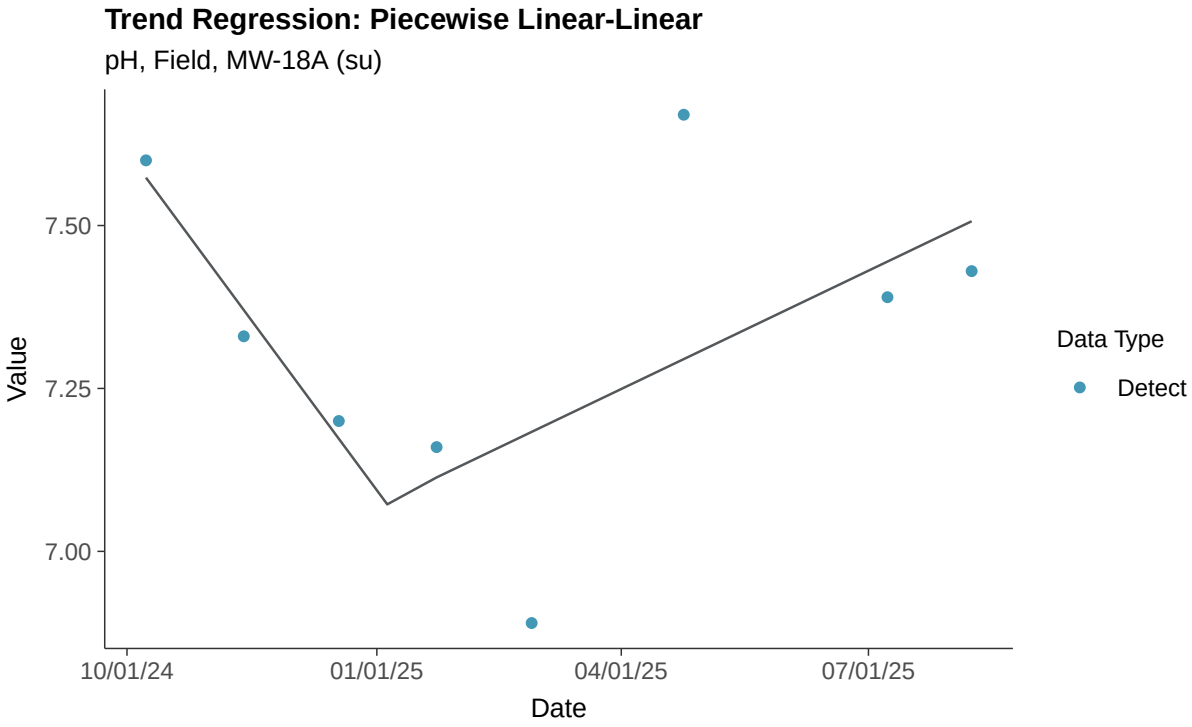
pH, Field, MW-18A (su)



Trend Regression: Lognormal MLE

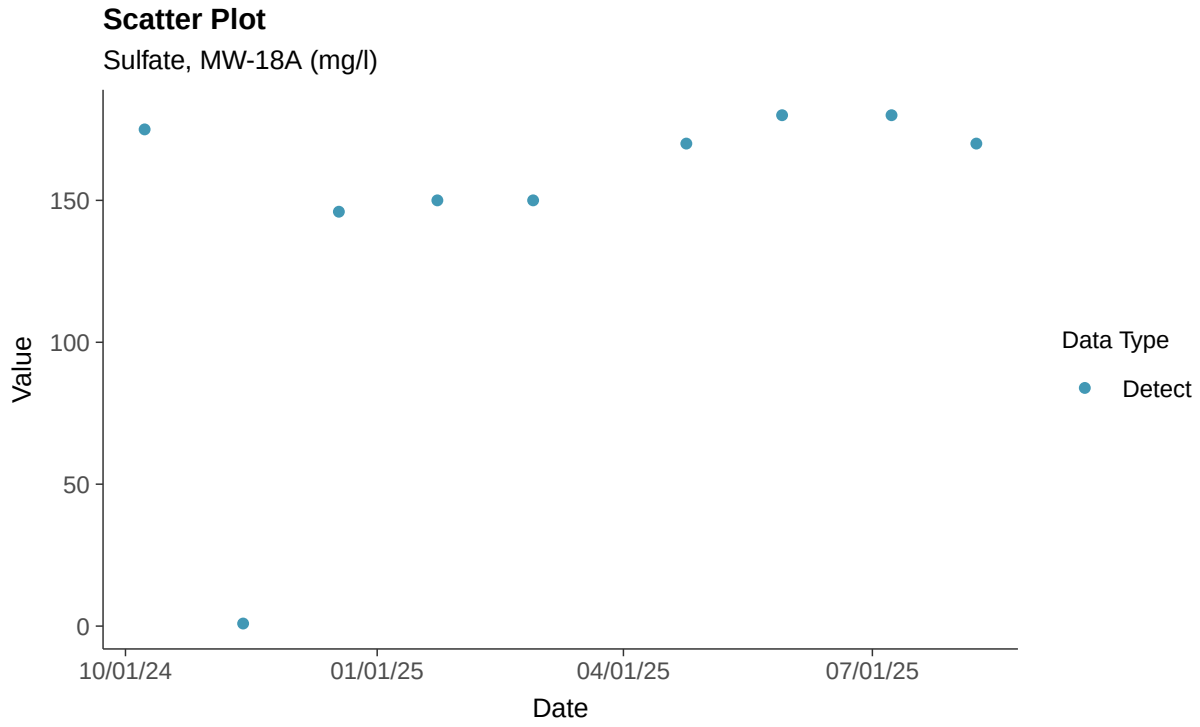
pH, Field, MW-18A (su)

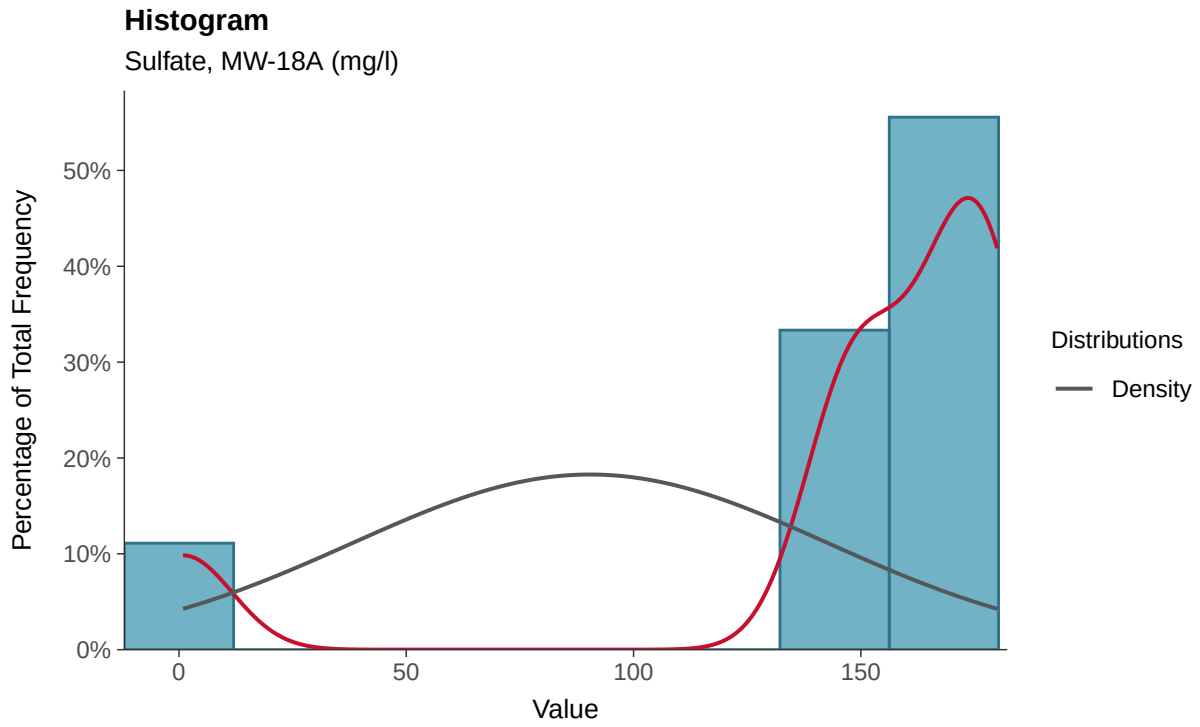



Trend Regression: Piecewise Linear-Linear
pH, Field, MW-18A (su)
Value
7.50
7.25
7.00
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix III: Sulfate, MW-18A

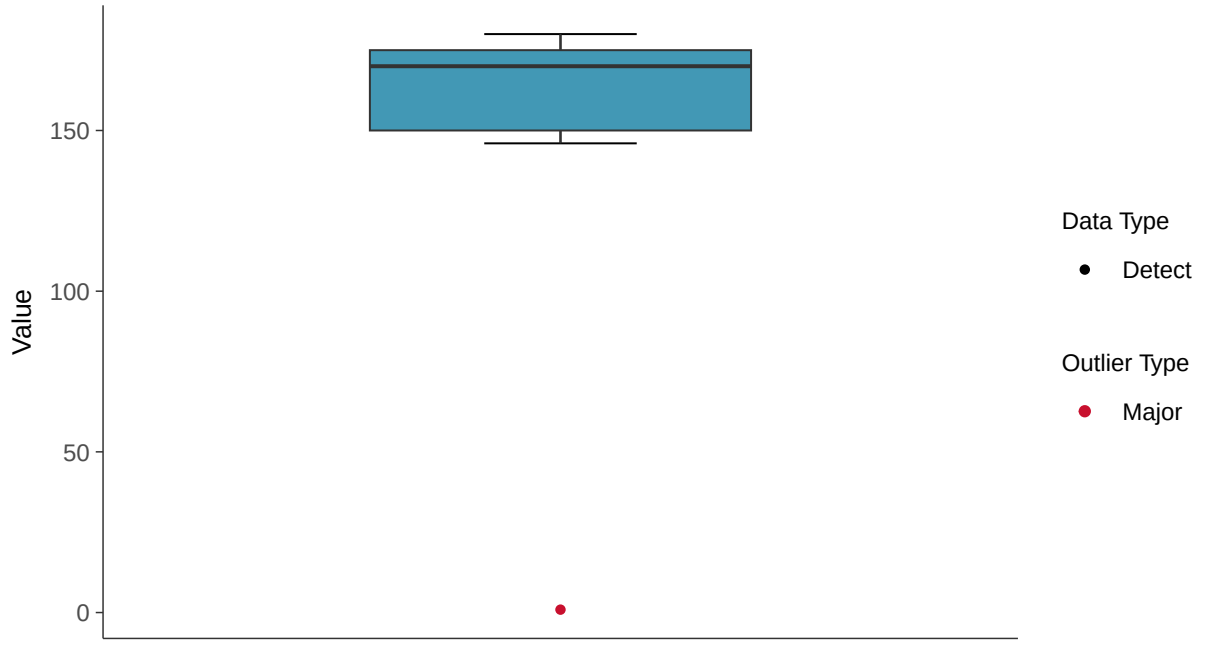
ID: 30_2_124





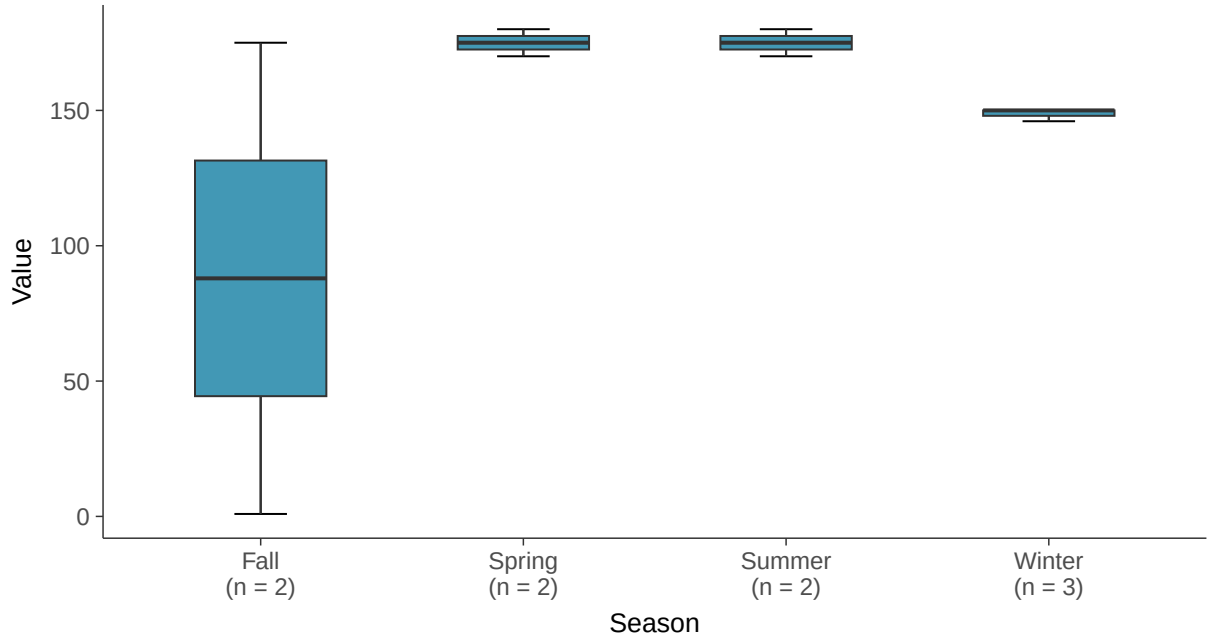
Boxplot

Sulfate, MW-18A (mg/l)



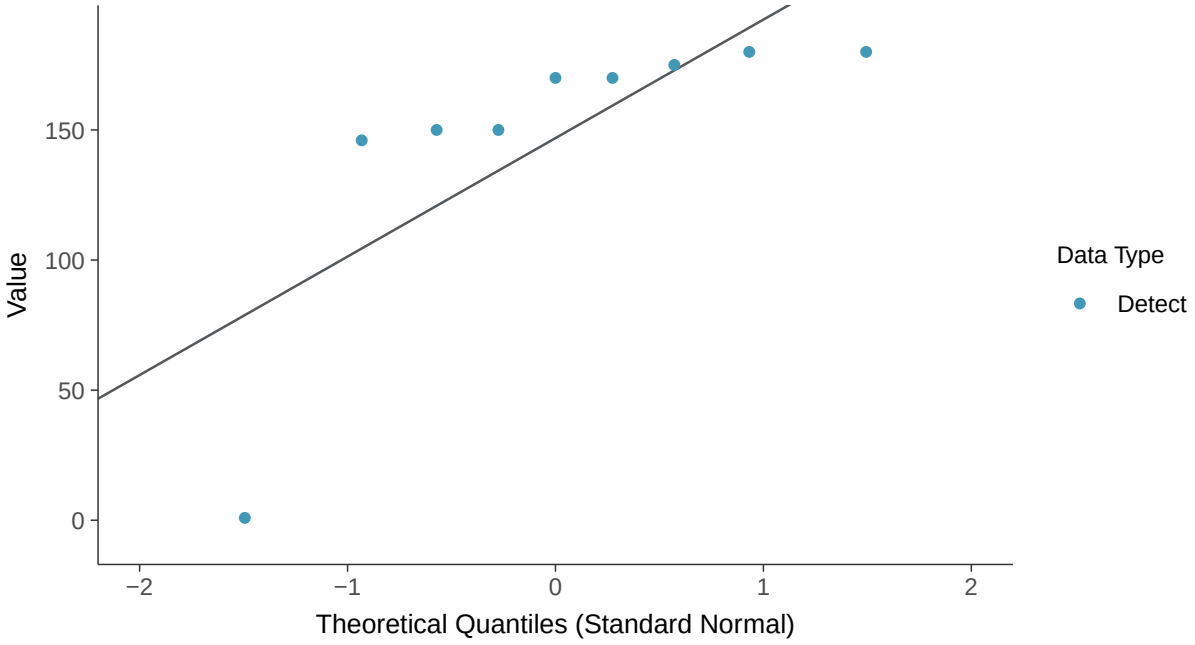
Boxplot by Season

Sulfate, MW-18A (mg/l)



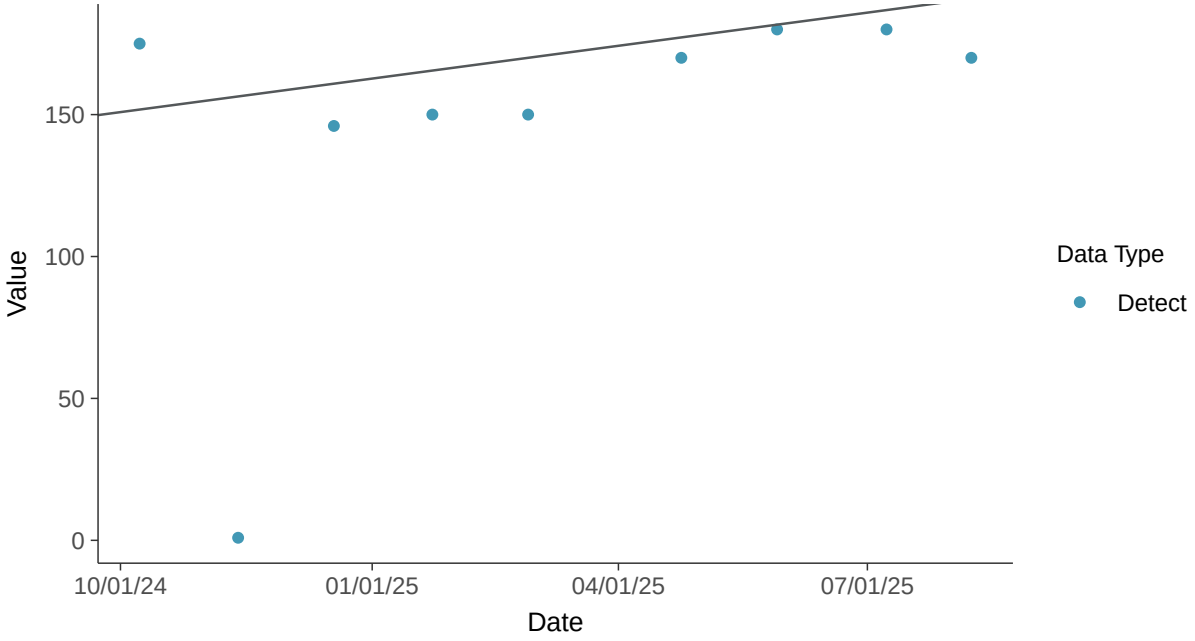
Normal Q-Q plot

Sulfate, MW-18A (mg/l)



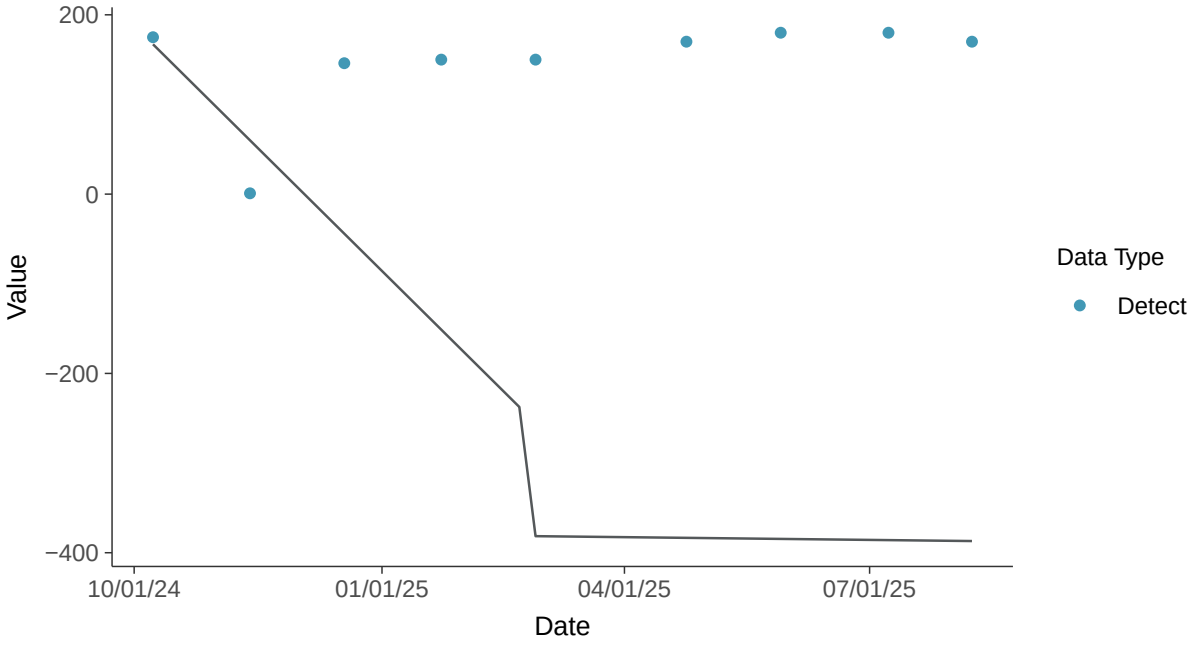
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Sulfate, MW-18A (mg/l)



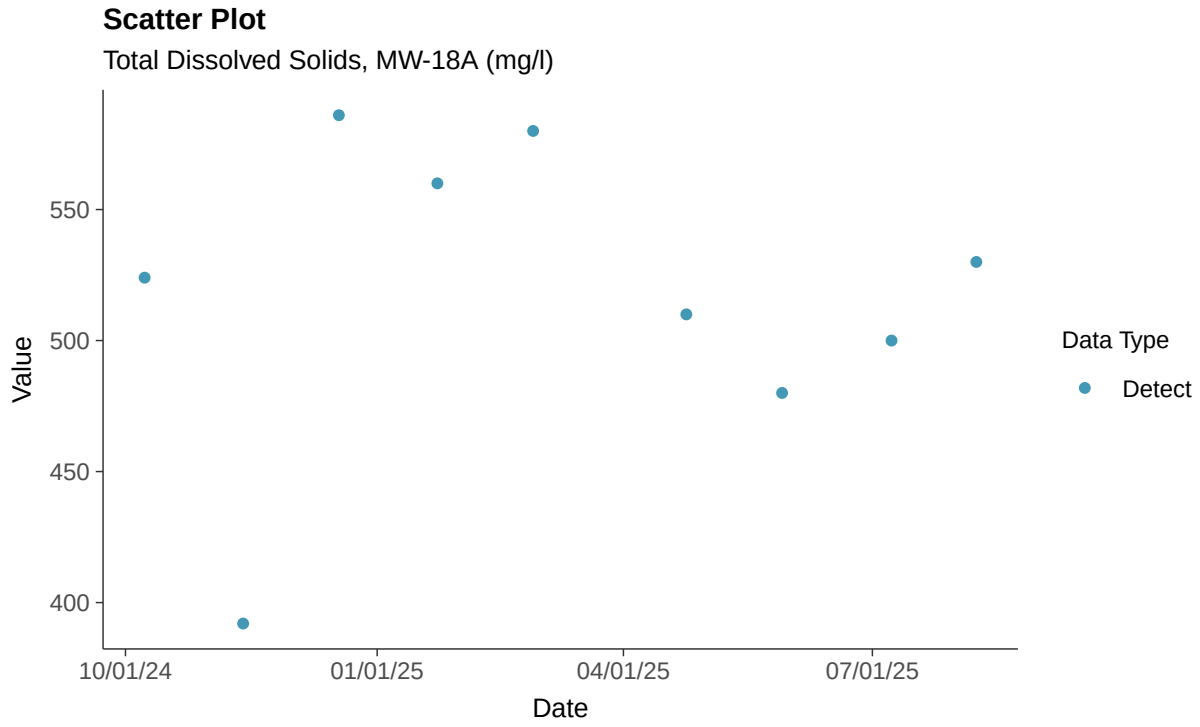
Trend Regression: Piecewise Linear-Linear-Linear

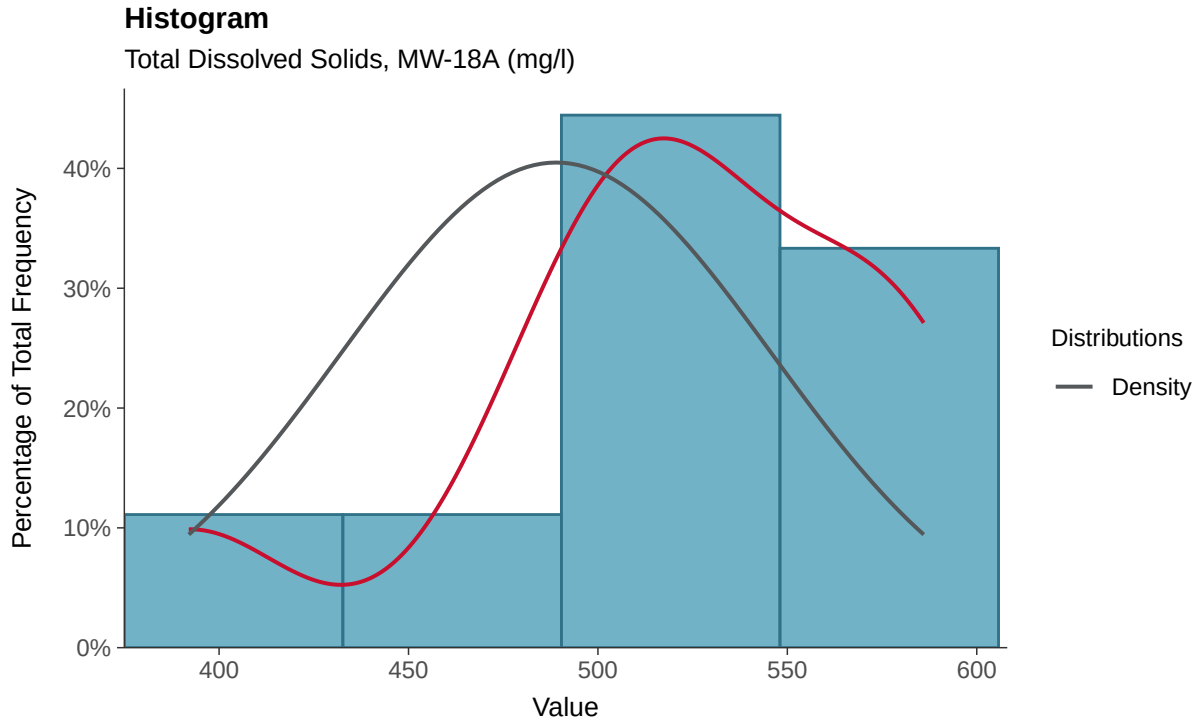
Sulfate, MW-18A (mg/l)



Appendix III: Total Dissolved Solids, MW-18A

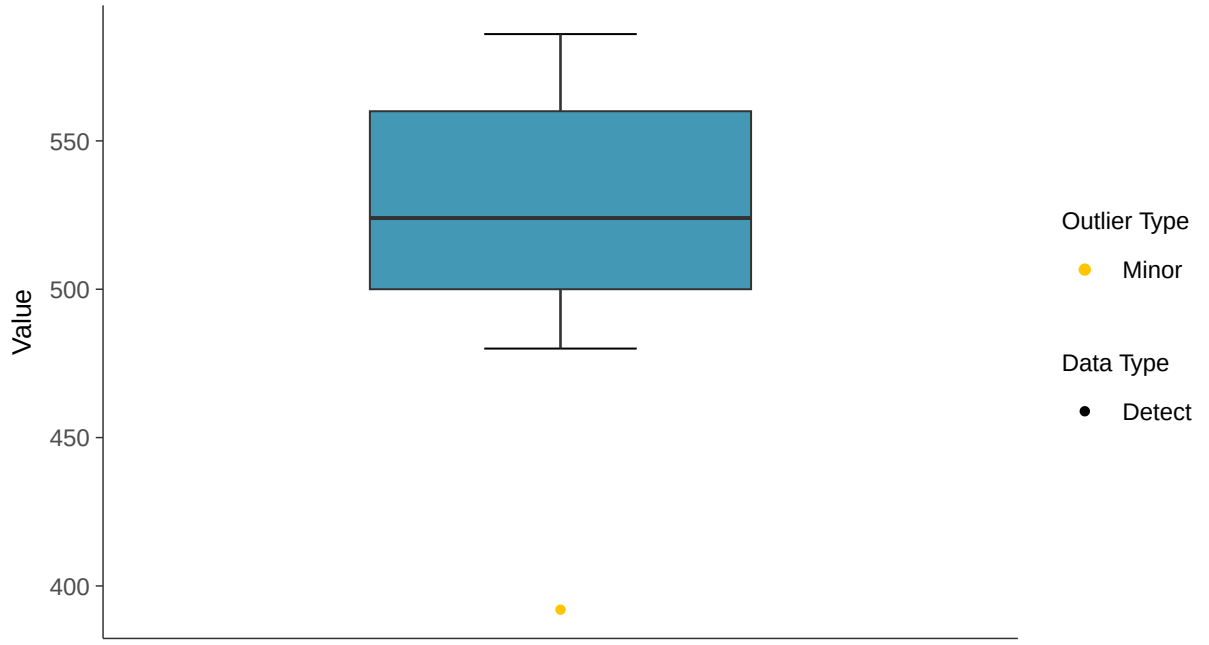
ID: 30_2_126





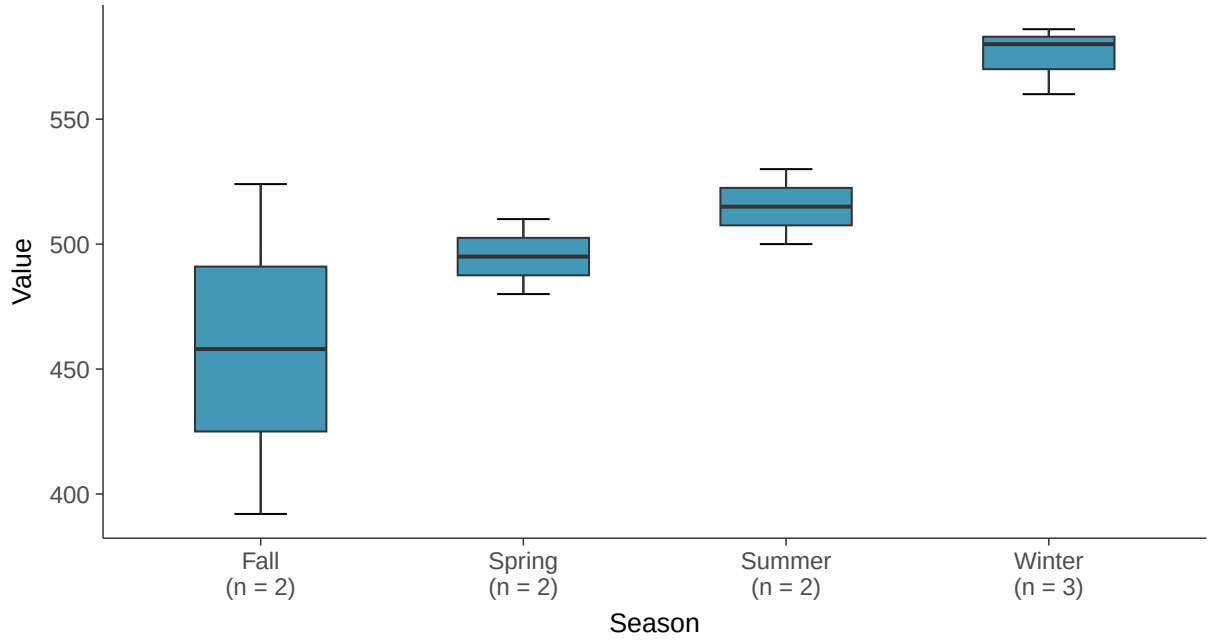
Boxplot

Total Dissolved Solids, MW-18A (mg/l)



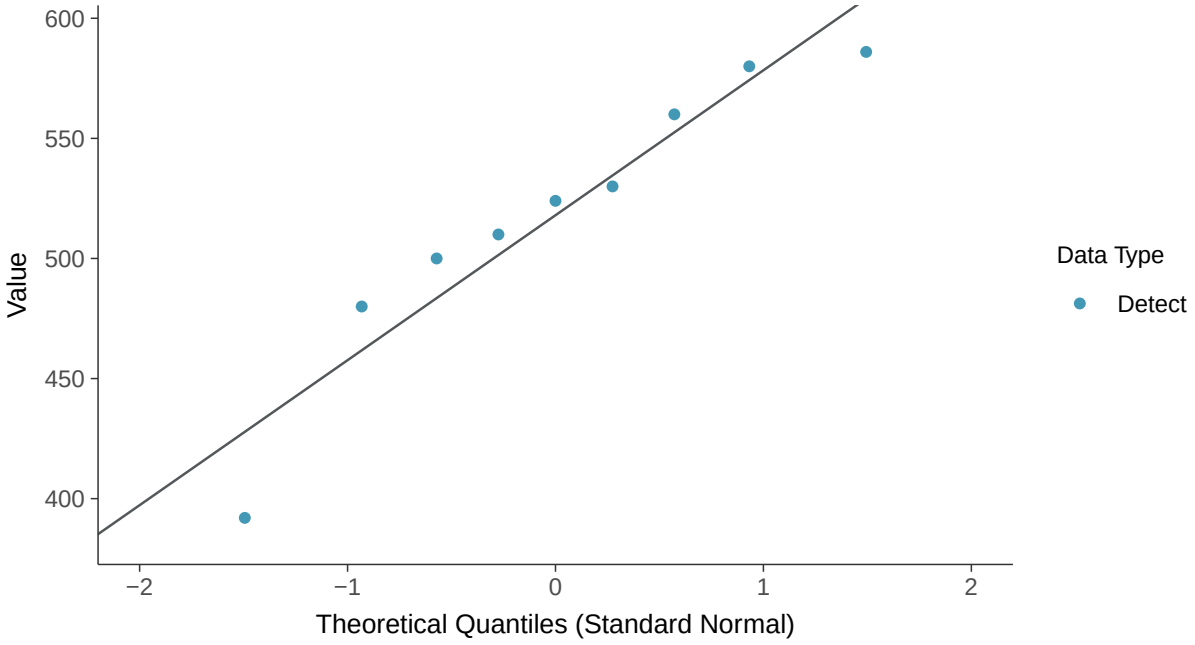
Boxplot by Season

Total Dissolved Solids, MW-18A (mg/l)



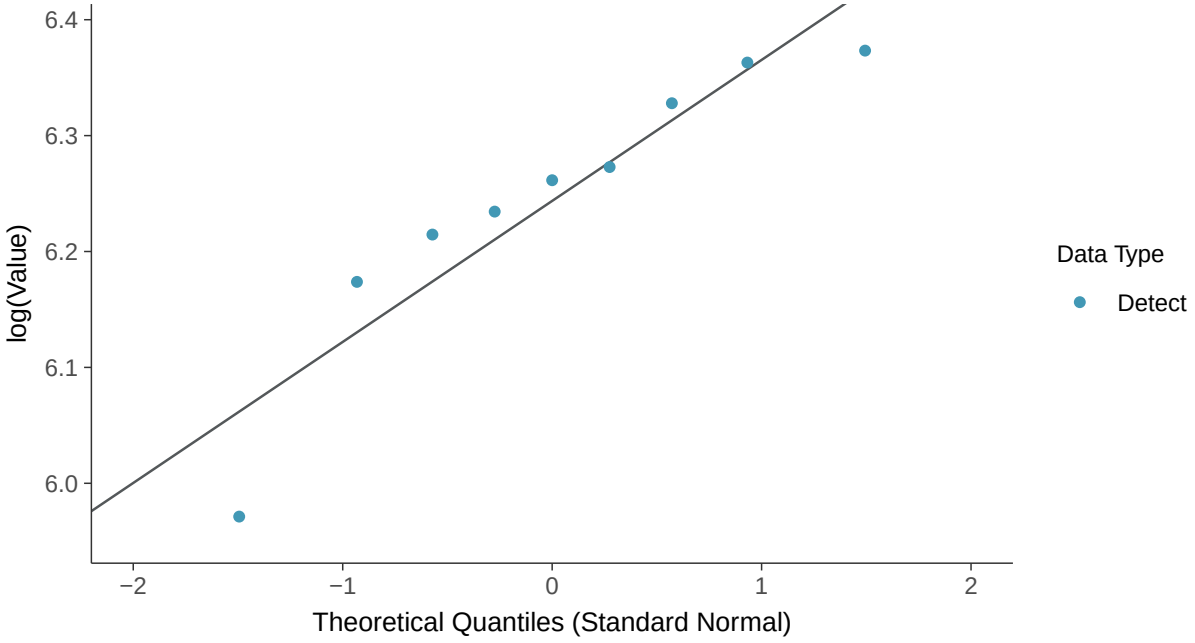
Normal Q-Q plot

Total Dissolved Solids, MW-18A (mg/l)



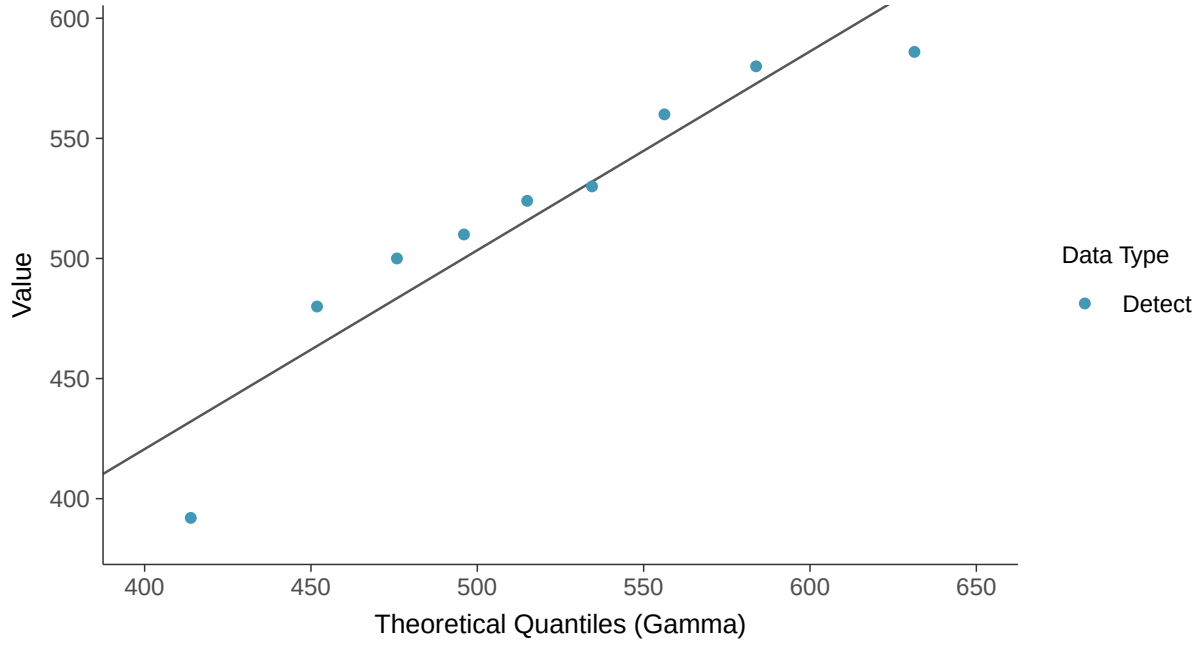
Lognormal Q-Q plot

Total Dissolved Solids, MW-18A (mg/l)



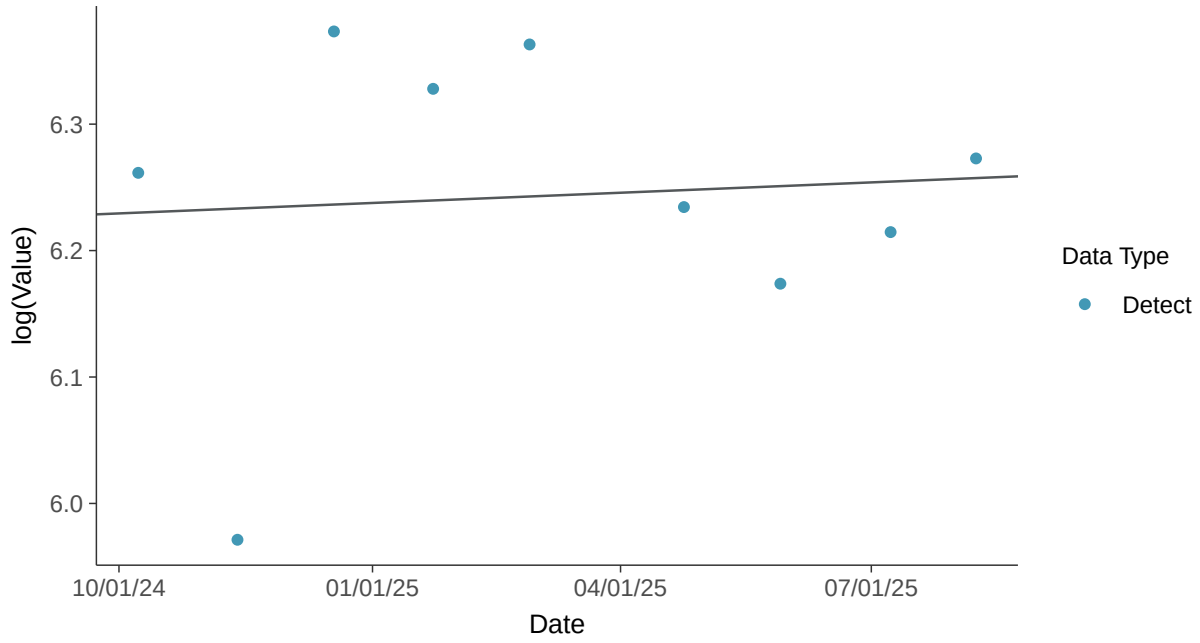
Gamma Q-Q plot

Total Dissolved Solids, MW-18A (mg/l)



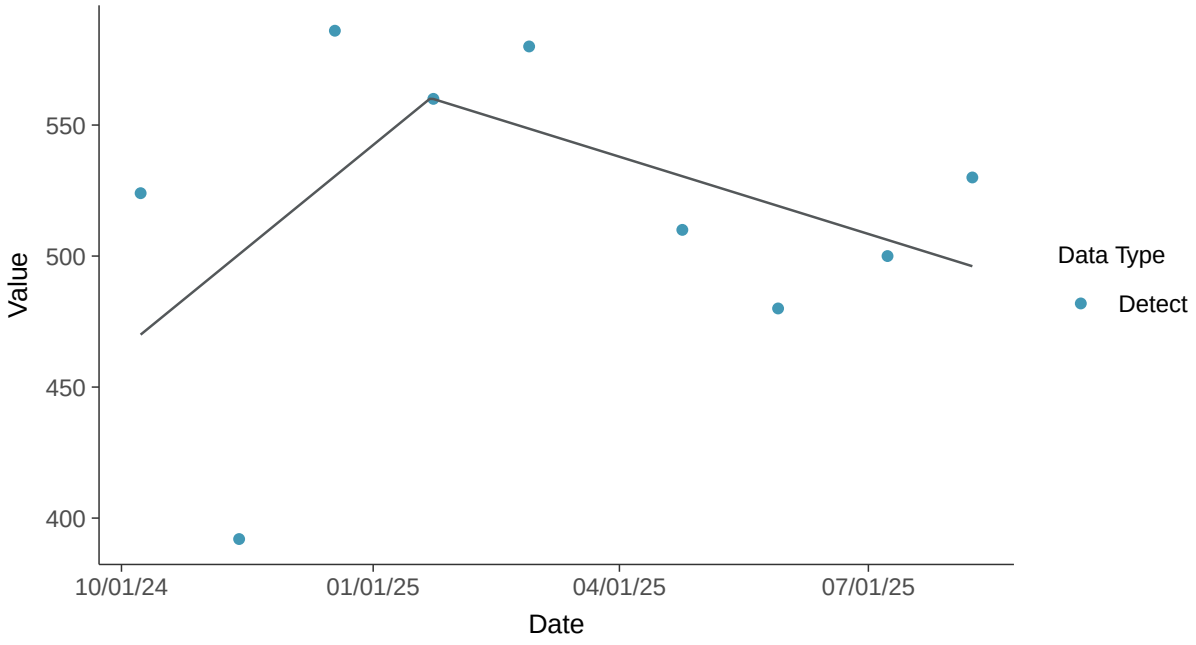
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-18A (mg/l)



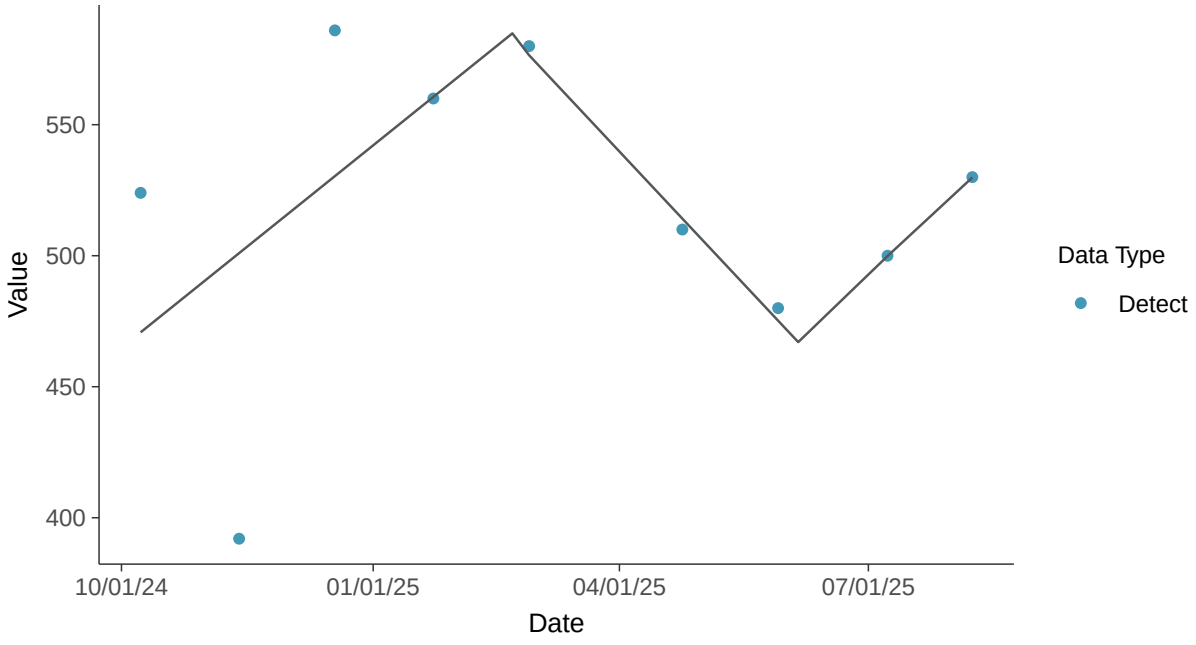
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-18A (mg/l)



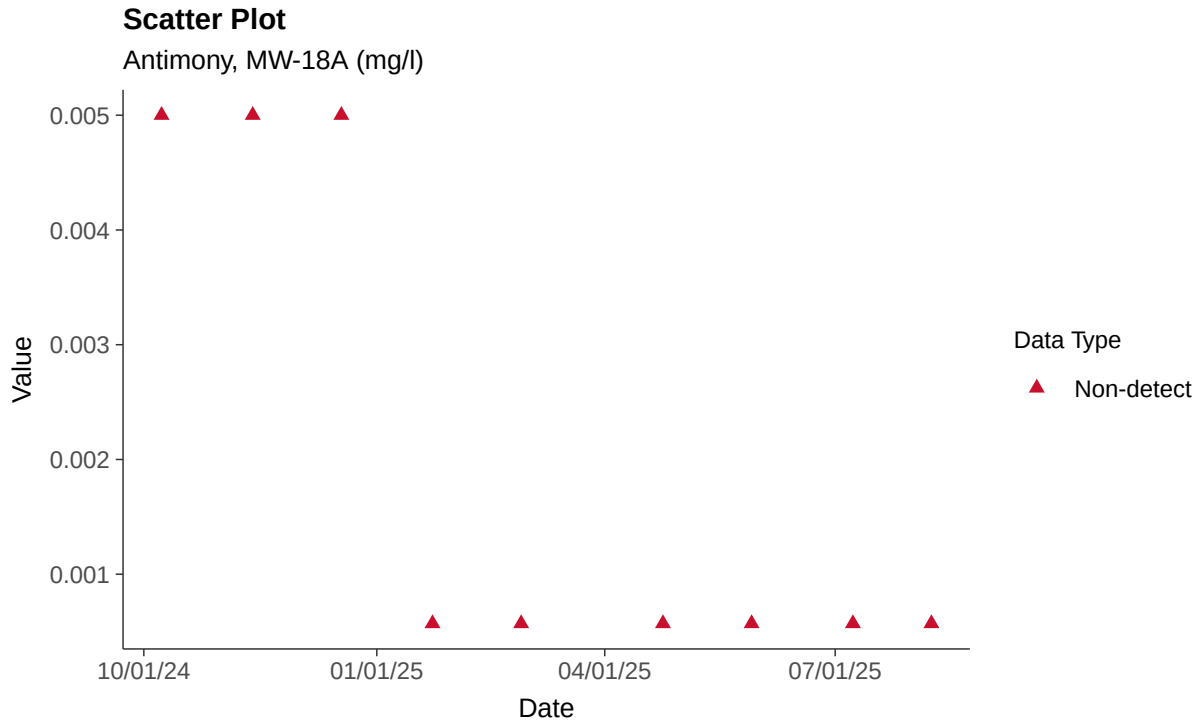
Trend Regression: Piecewise Linear-Linear-Linear

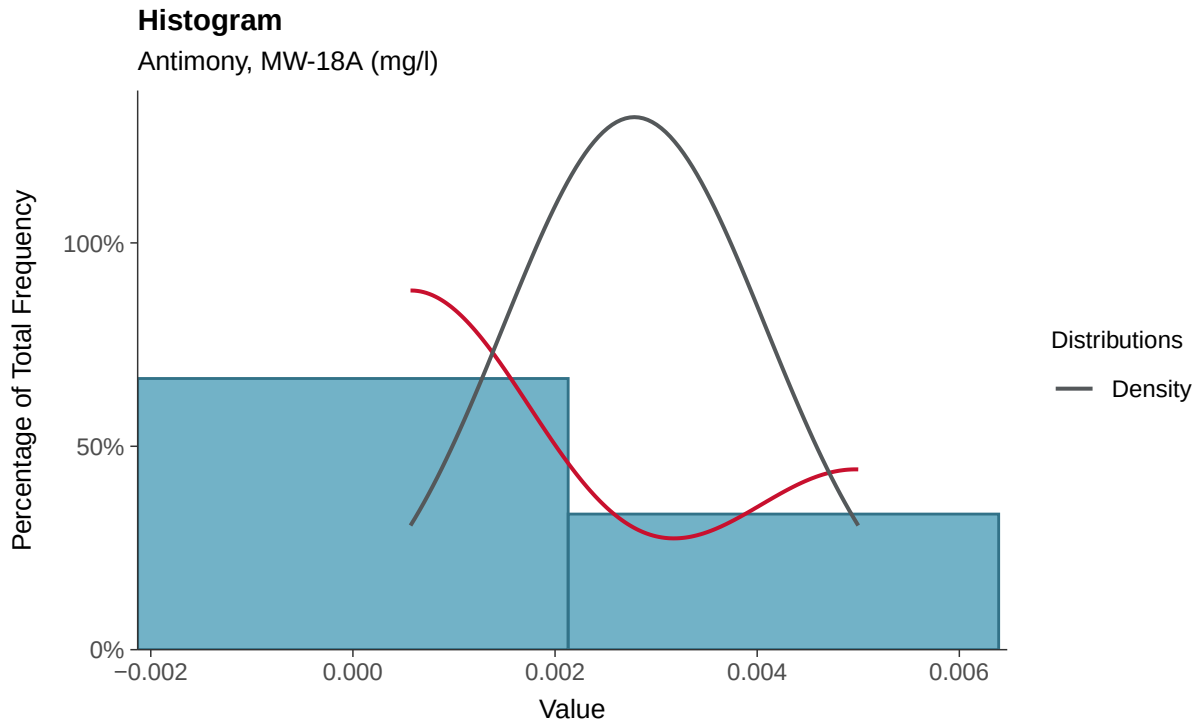
Total Dissolved Solids, MW-18A (mg/l)



Appendix IV: Antimony, MW-18A

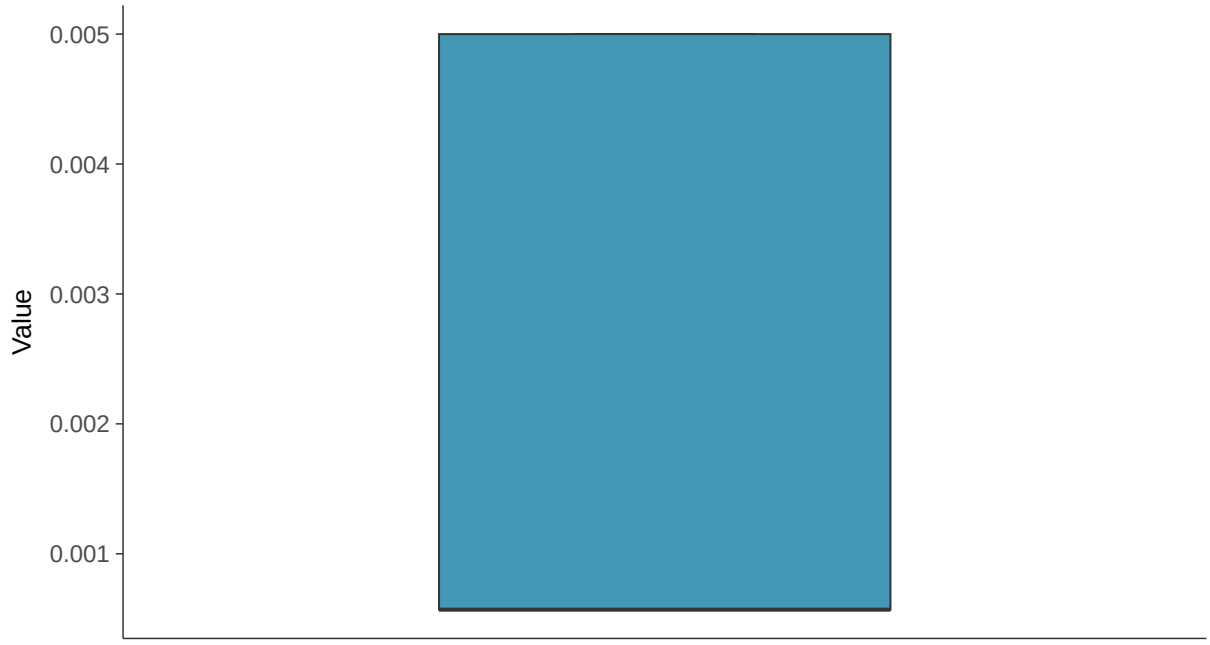
ID: 30_3_101





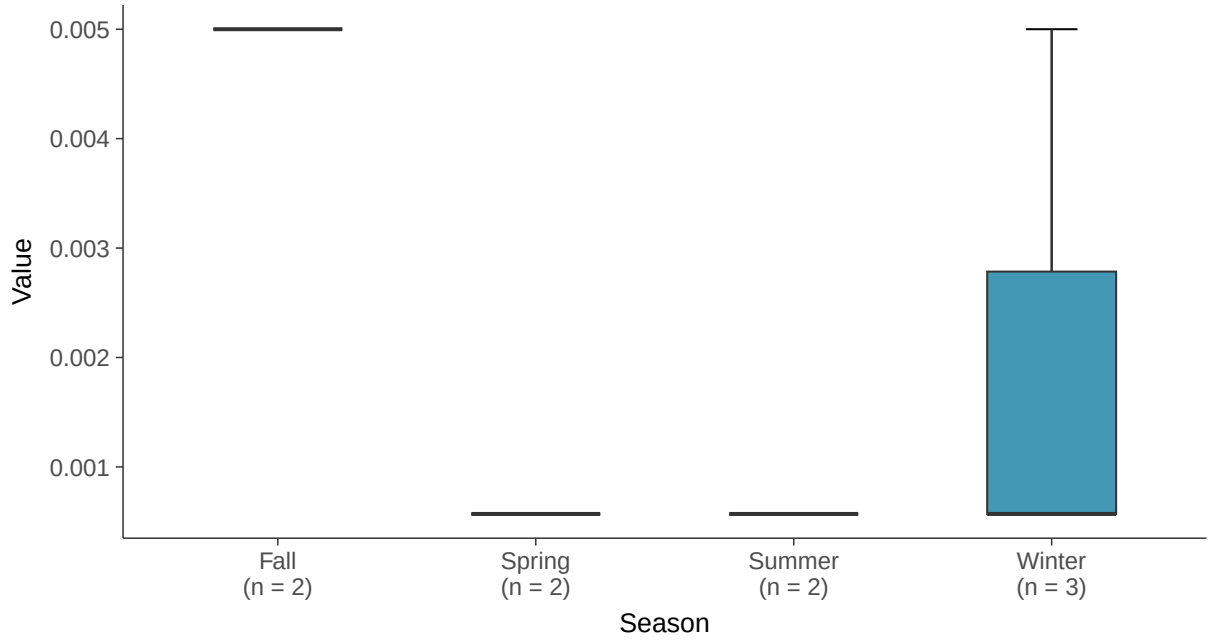
Boxplot

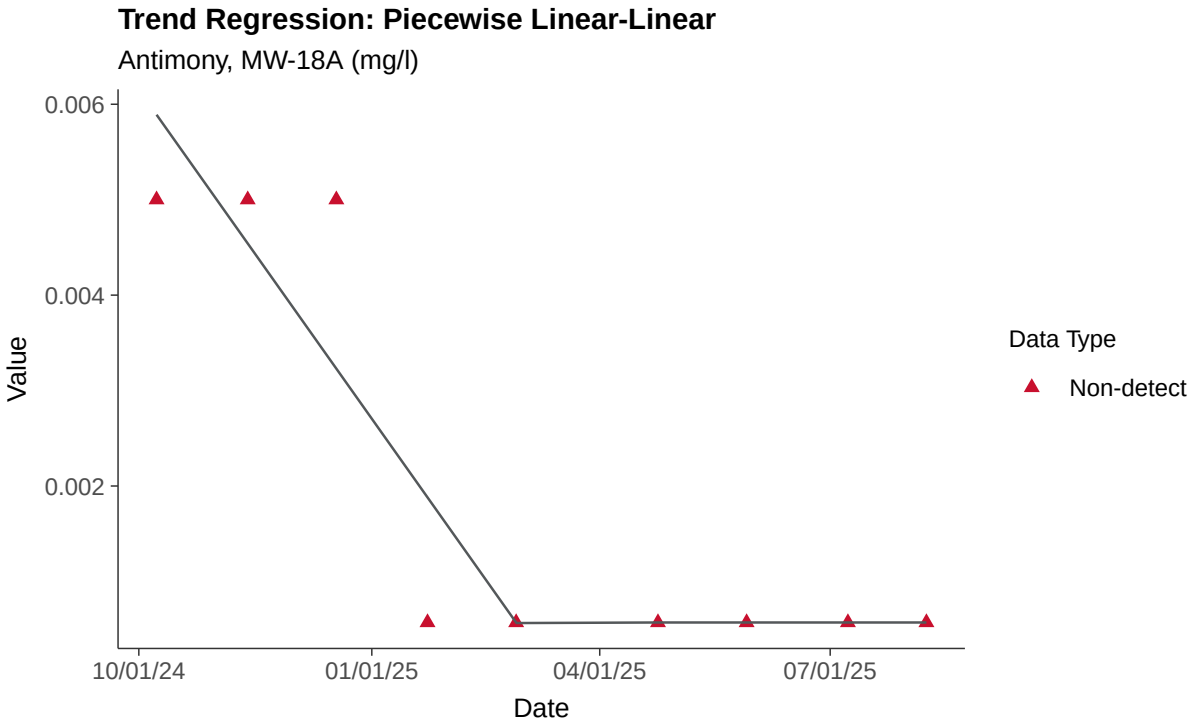
Antimony, MW-18A (mg/l)



Boxplot by Season

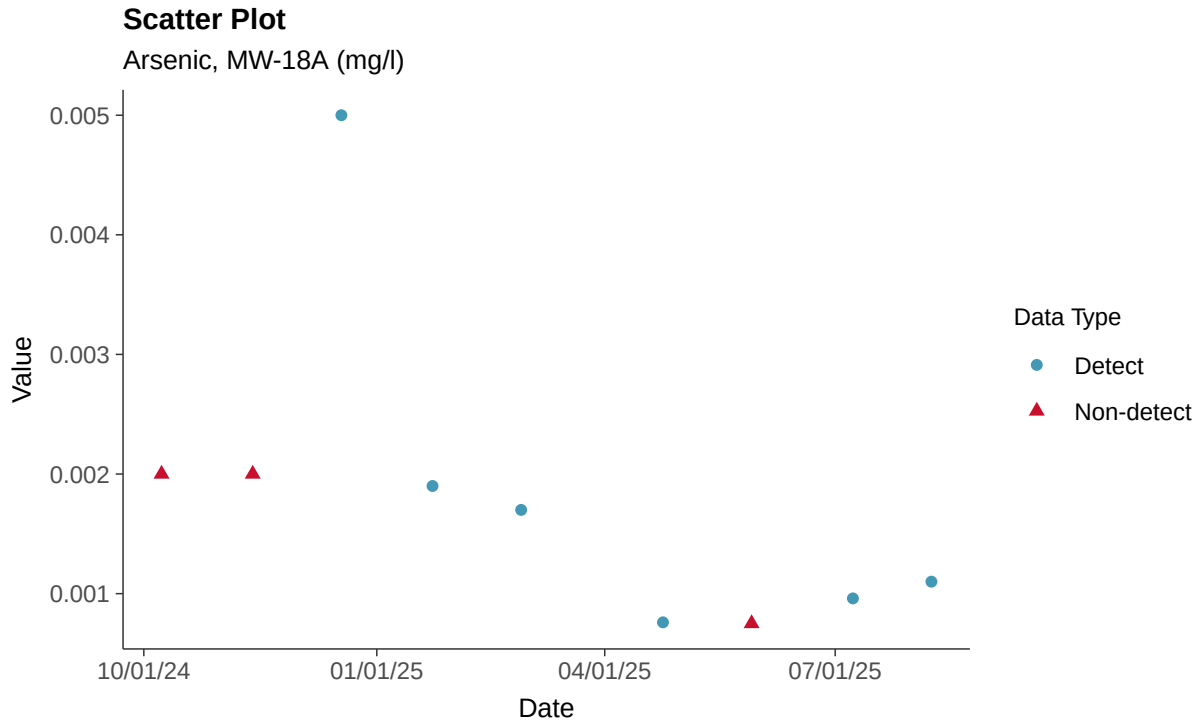
Antimony, MW-18A (mg/l)

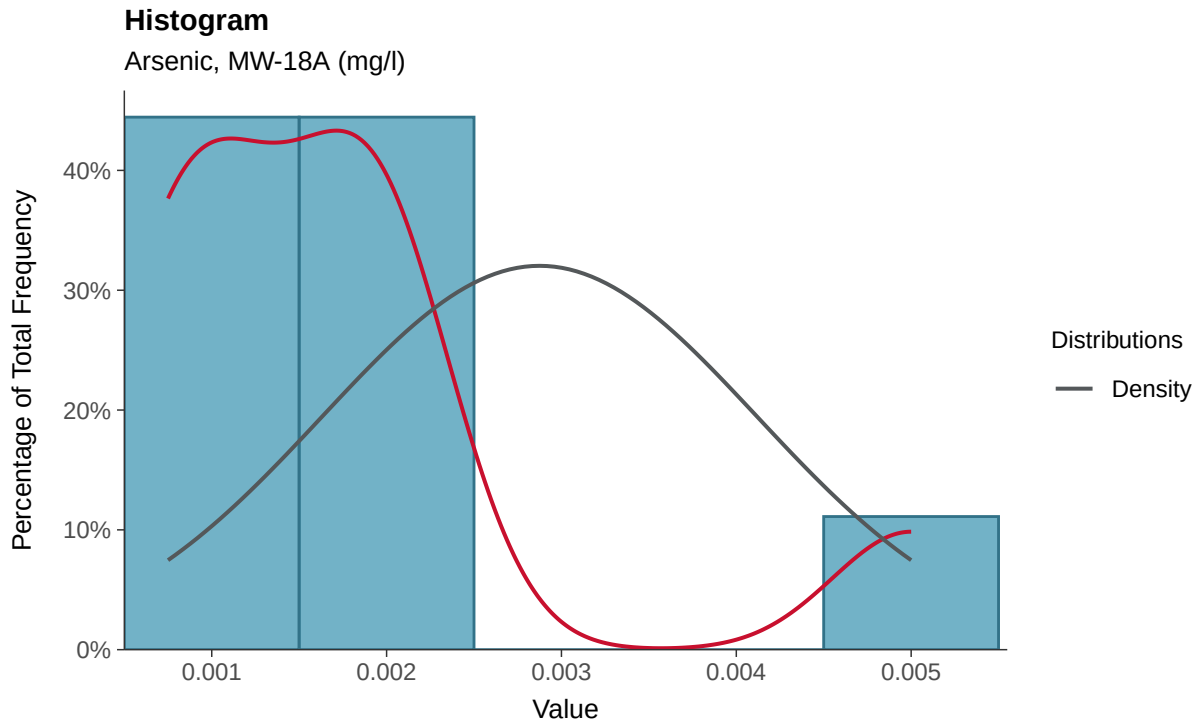



Trend Regression: Piecewise Linear-Linear
Antimony, MW-18A (mg/l)
0.006
0.004
0.002
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Arsenic, MW-18A

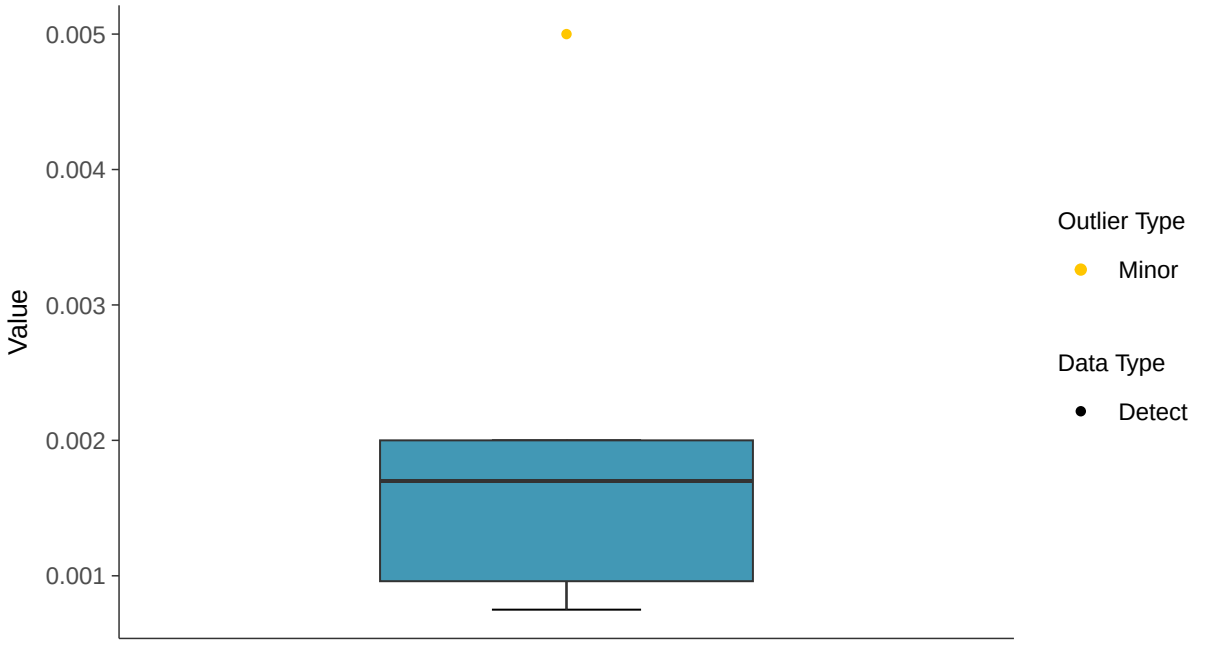
ID: 30_3_102





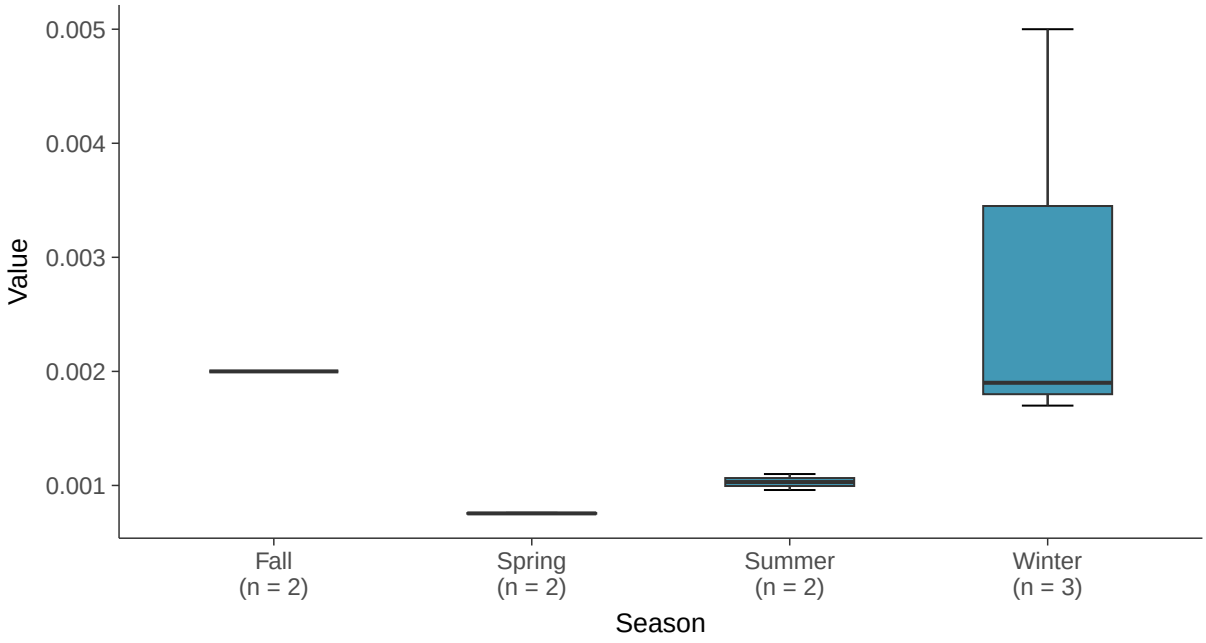
Boxplot

Arsenic, MW-18A (mg/l)



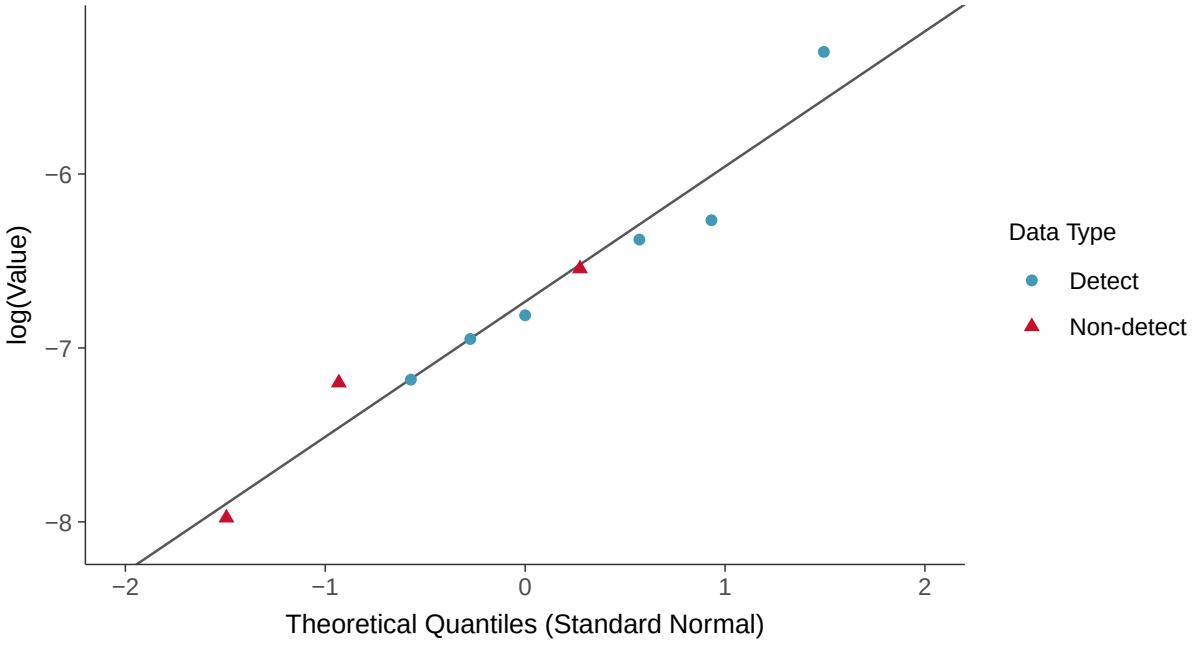
Boxplot by Season

Arsenic, MW-18A (mg/l)



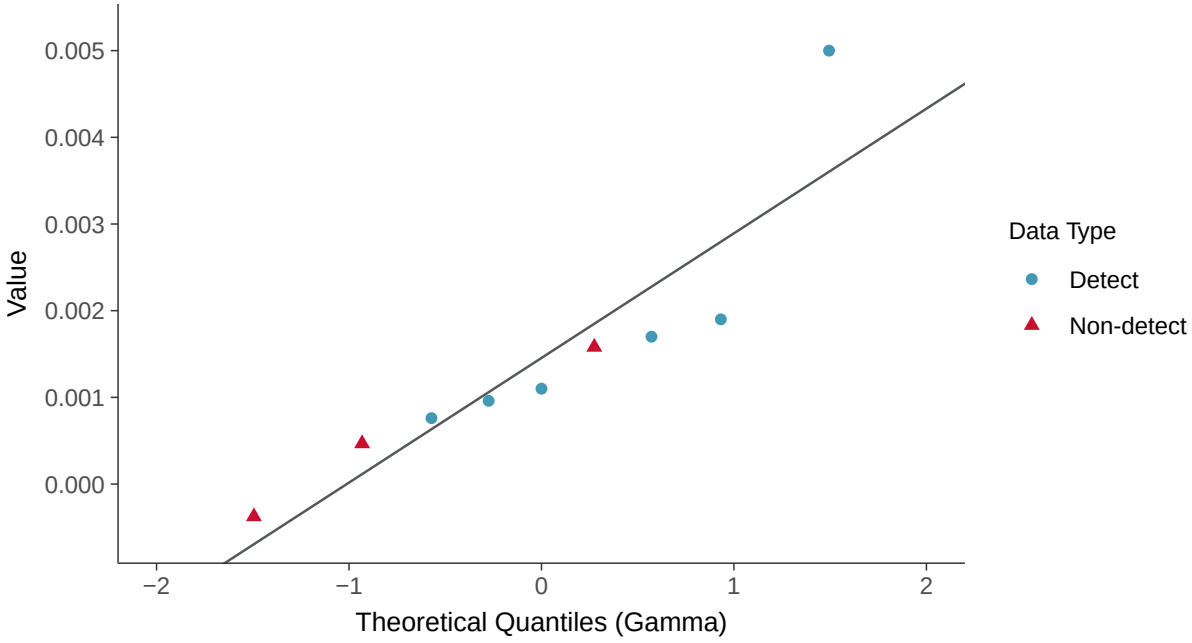
Lognormal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-18A (mg/l)



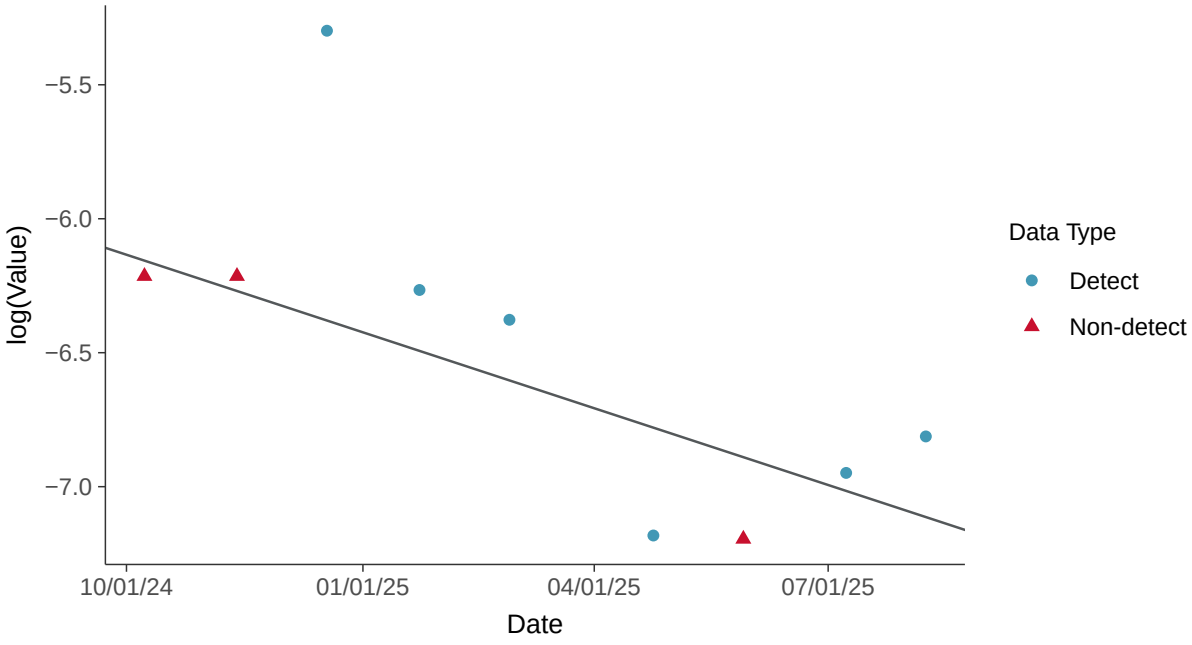
Gamma Q-Q plot using ROS Imputed Estimates

Arsenic, MW-18A (mg/l)



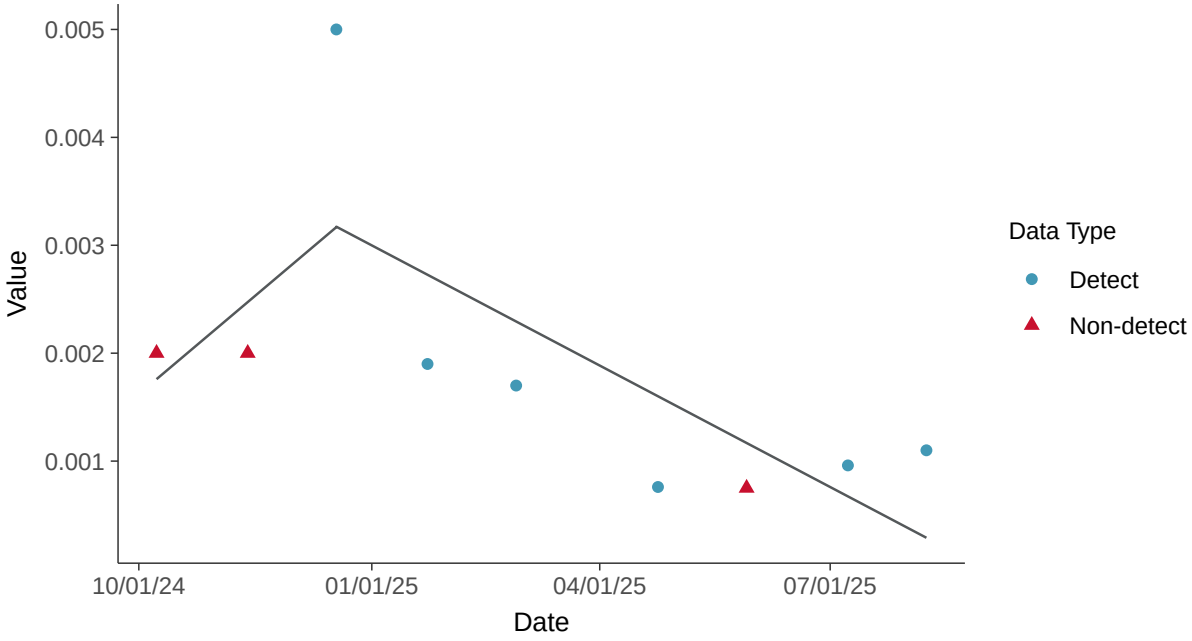
Trend Regression: Lognormal MLE

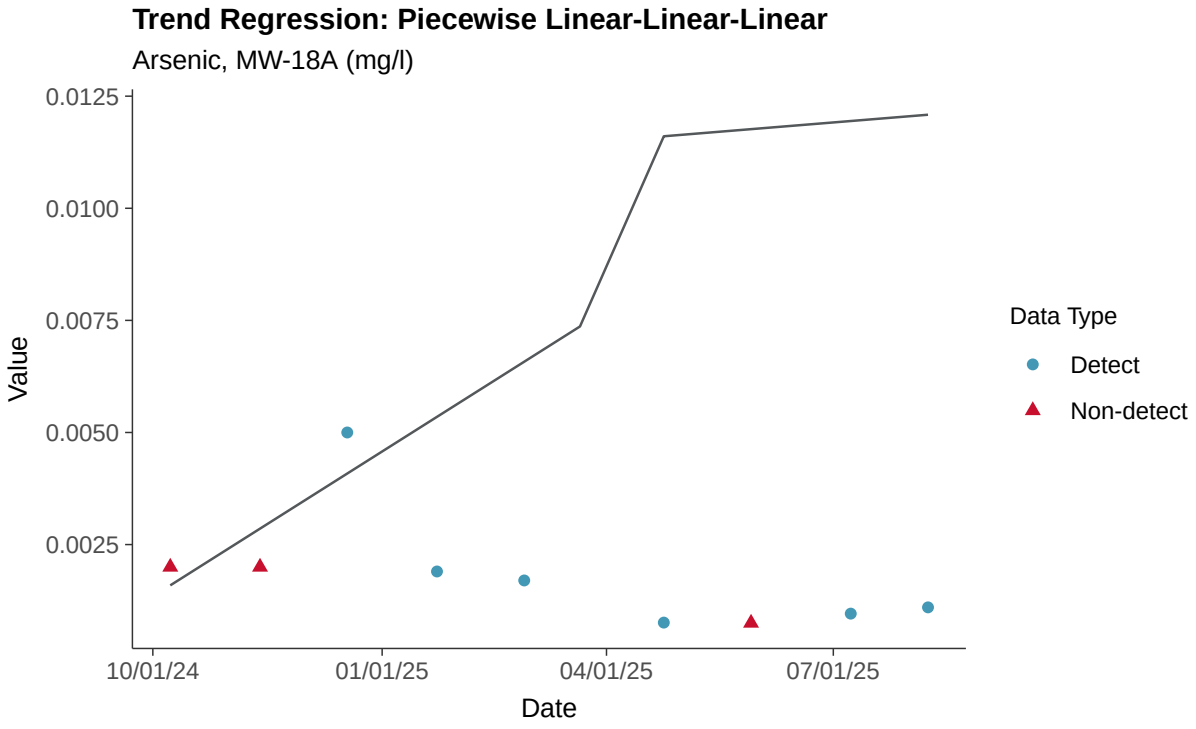
Arsenic, MW-18A (mg/l)



Trend Regression: Piecewise Linear-Linear

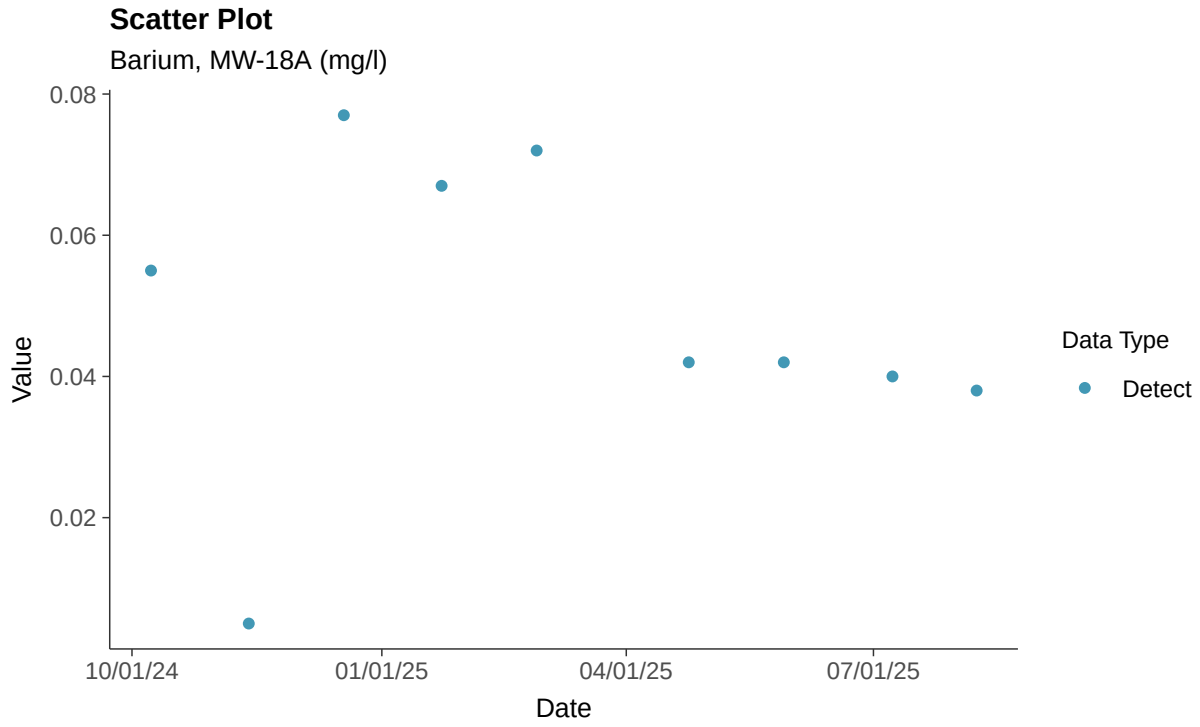
Arsenic, MW-18A (mg/l)

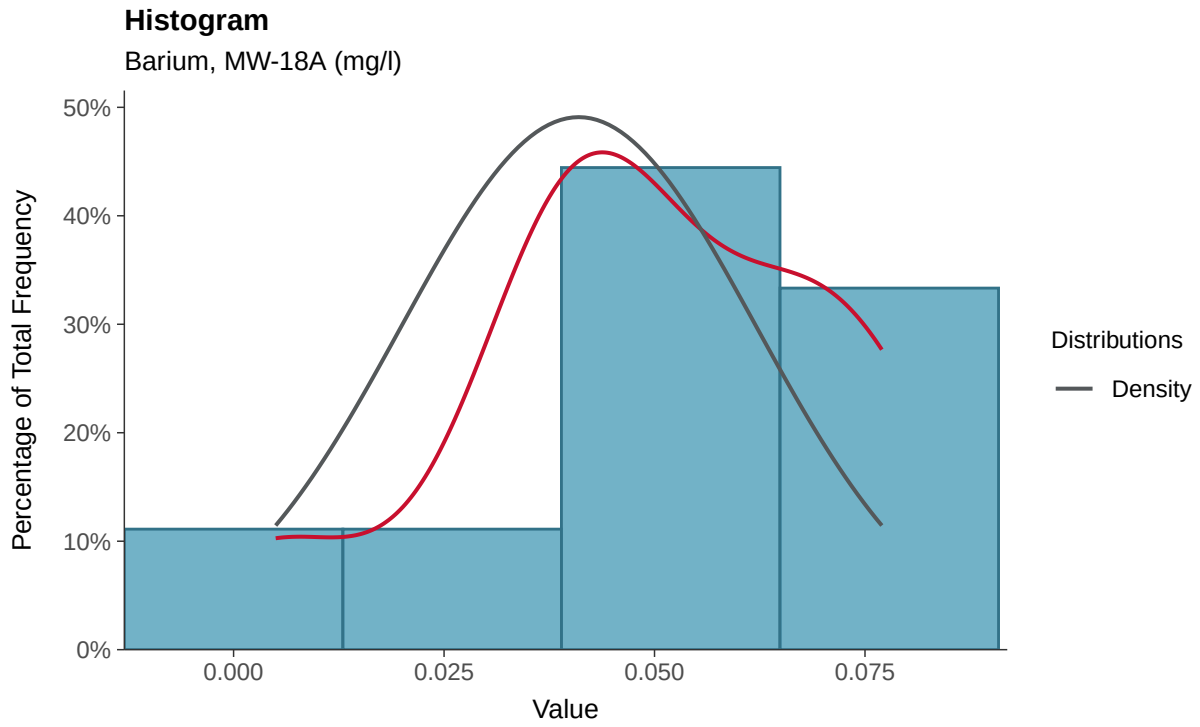



Trend Regression: Piecewise Linear-Linear-Linear
Arsenic, MW-18A (mg/l)
0.0125
0.0100
0.0075
0.0050
0.0025
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Barium, MW-18A

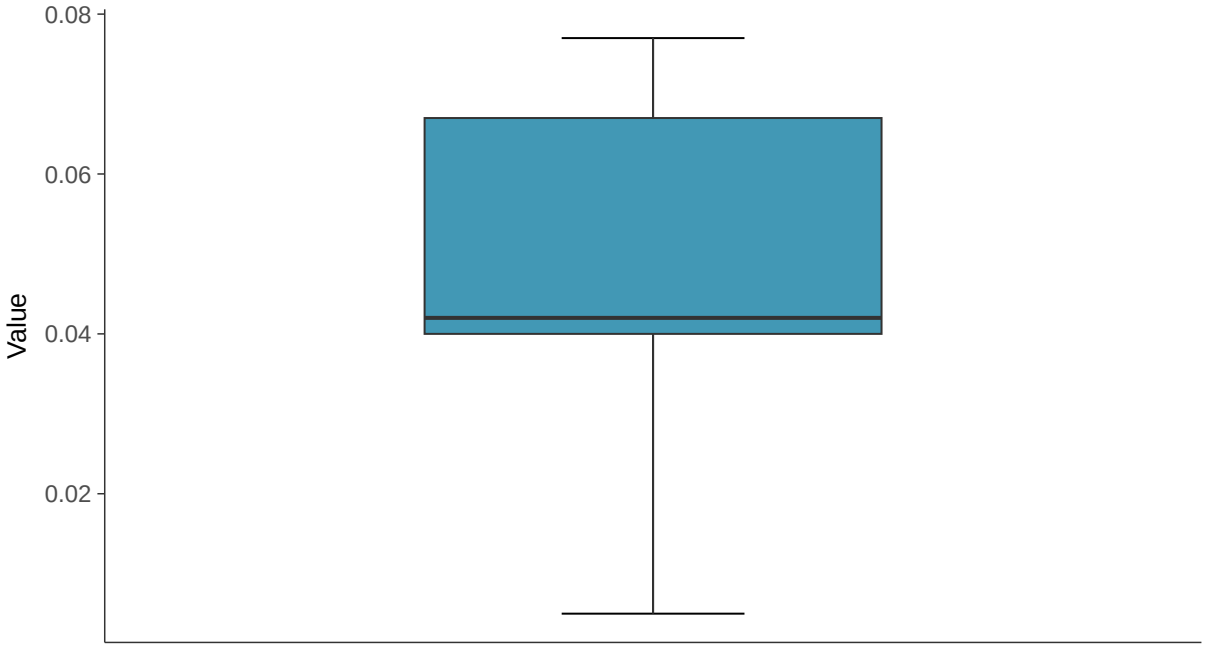
ID: 30_3_103





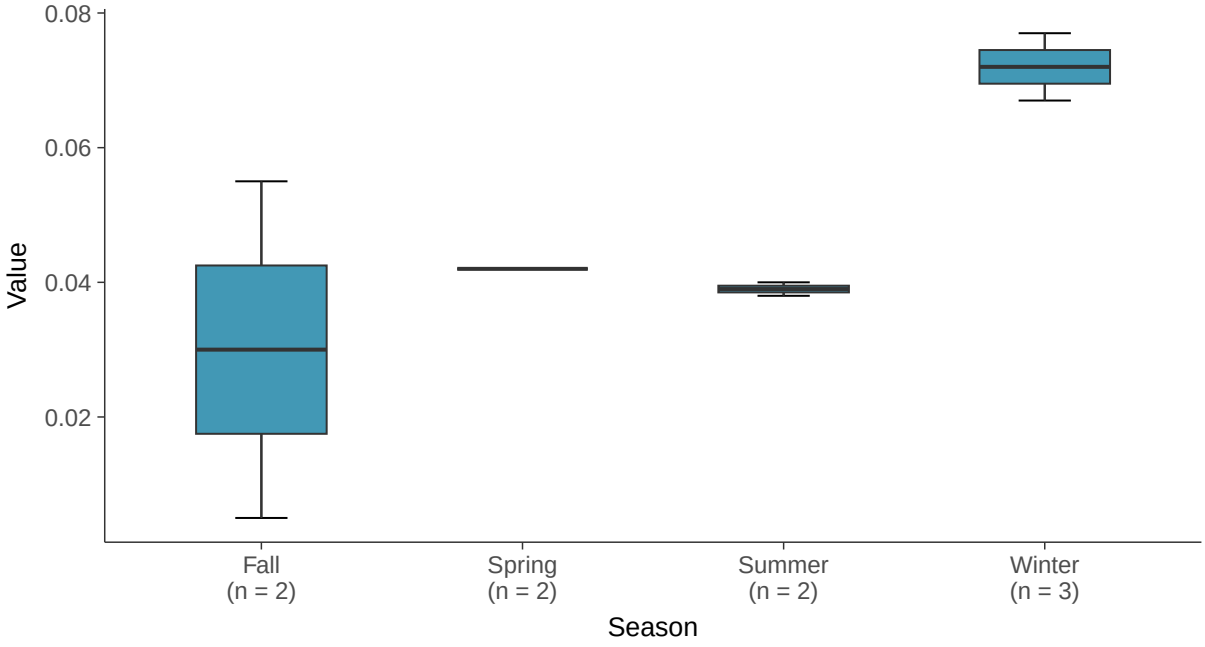
Boxplot

Barium, MW-18A (mg/l)



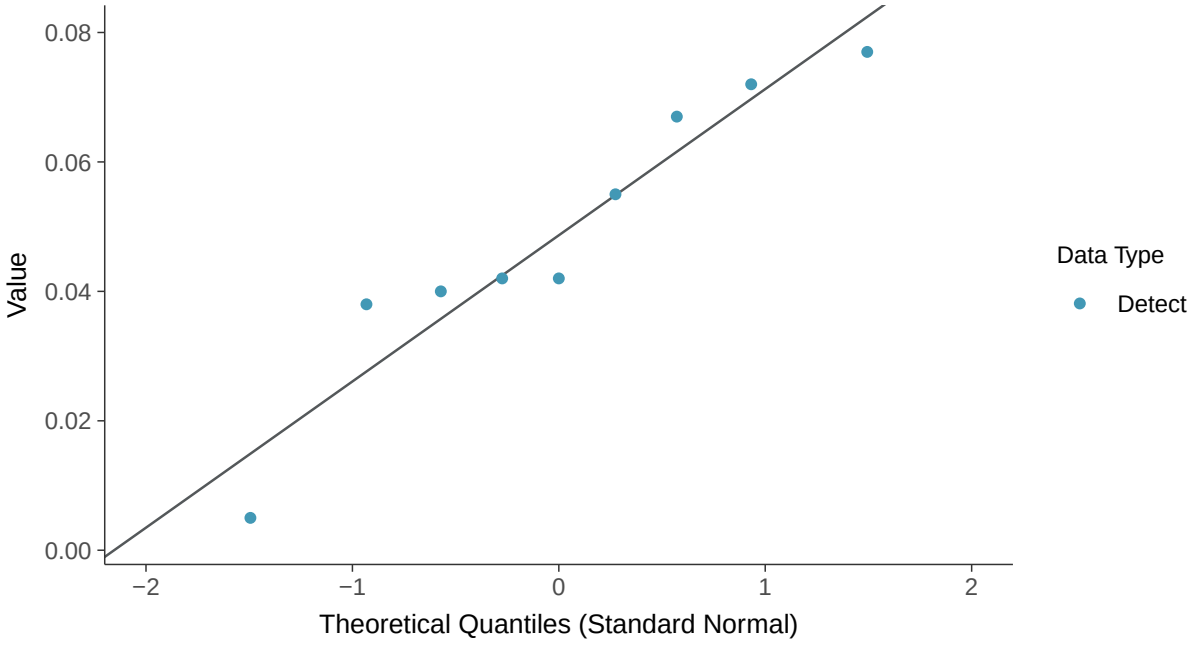
Boxplot by Season

Barium, MW-18A (mg/l)



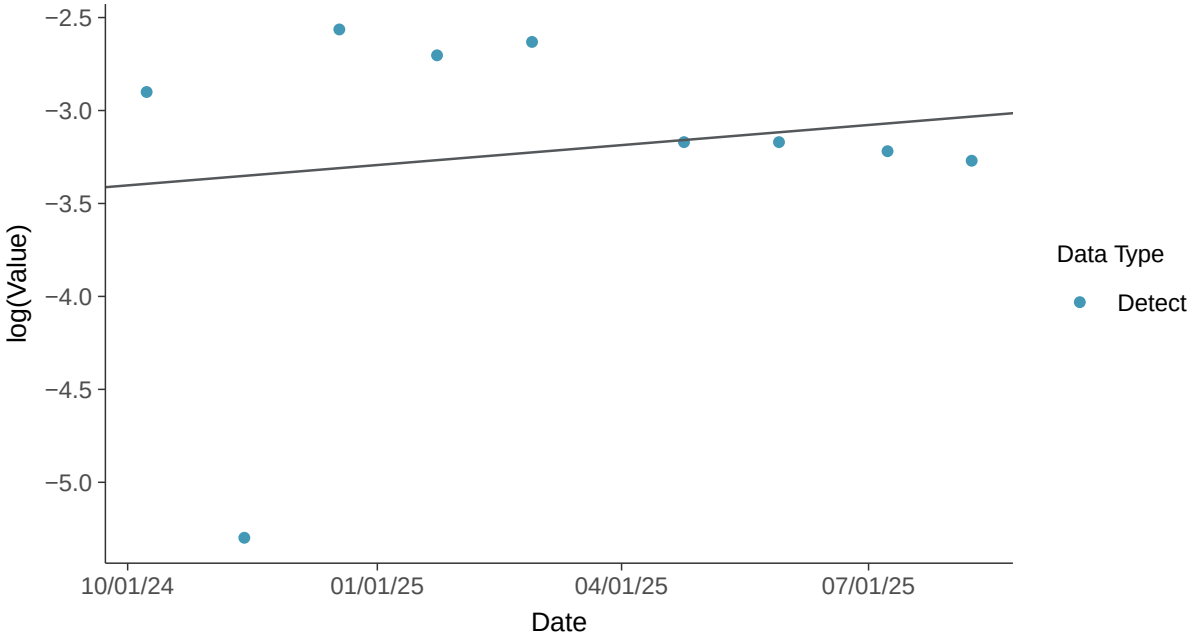
Normal Q-Q plot

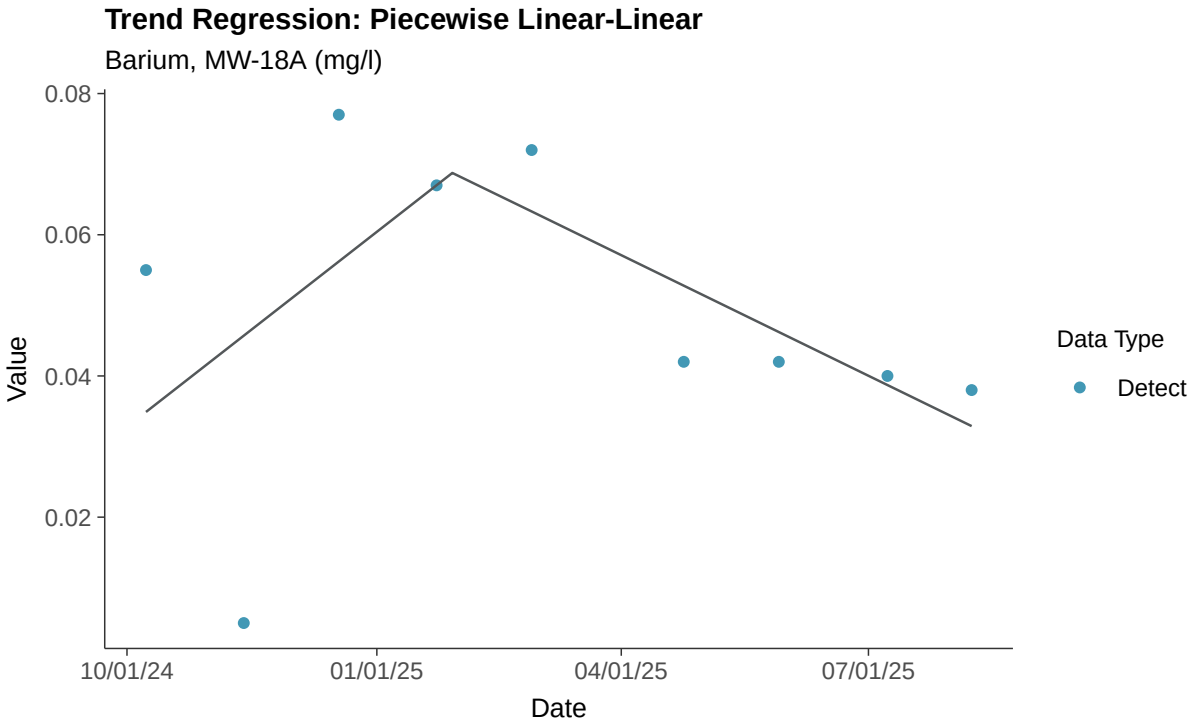
Barium, MW-18A (mg/l)



Trend Regression: Lognormal MLE

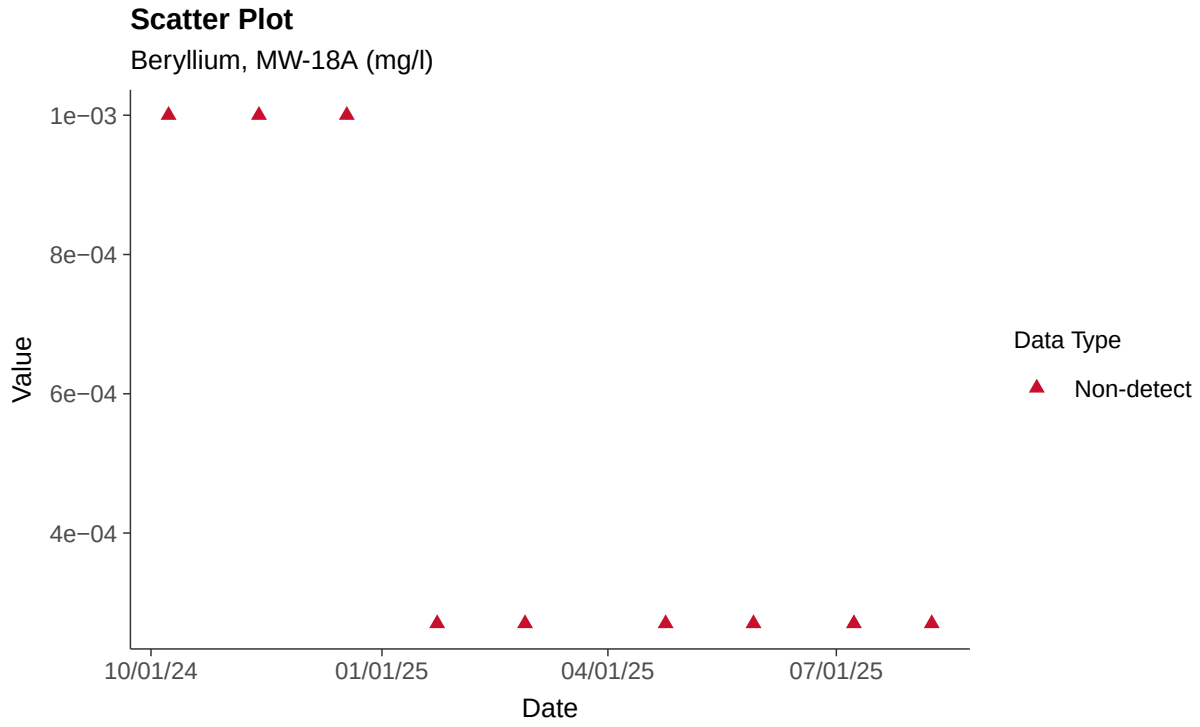
Barium, MW-18A (mg/l)

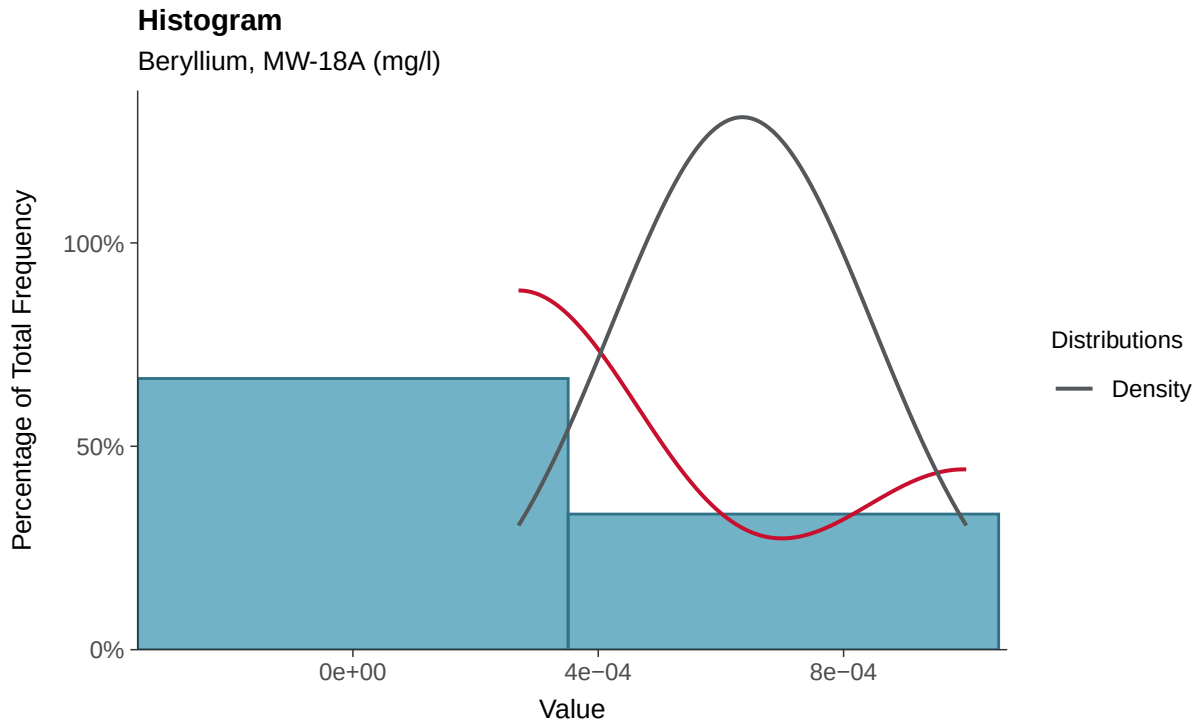



Trend Regression: Piecewise Linear-Linear
Barium, MW-18A (mg/l)
0.08
0.06
0.04
0.02
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix IV: Beryllium, MW-18A

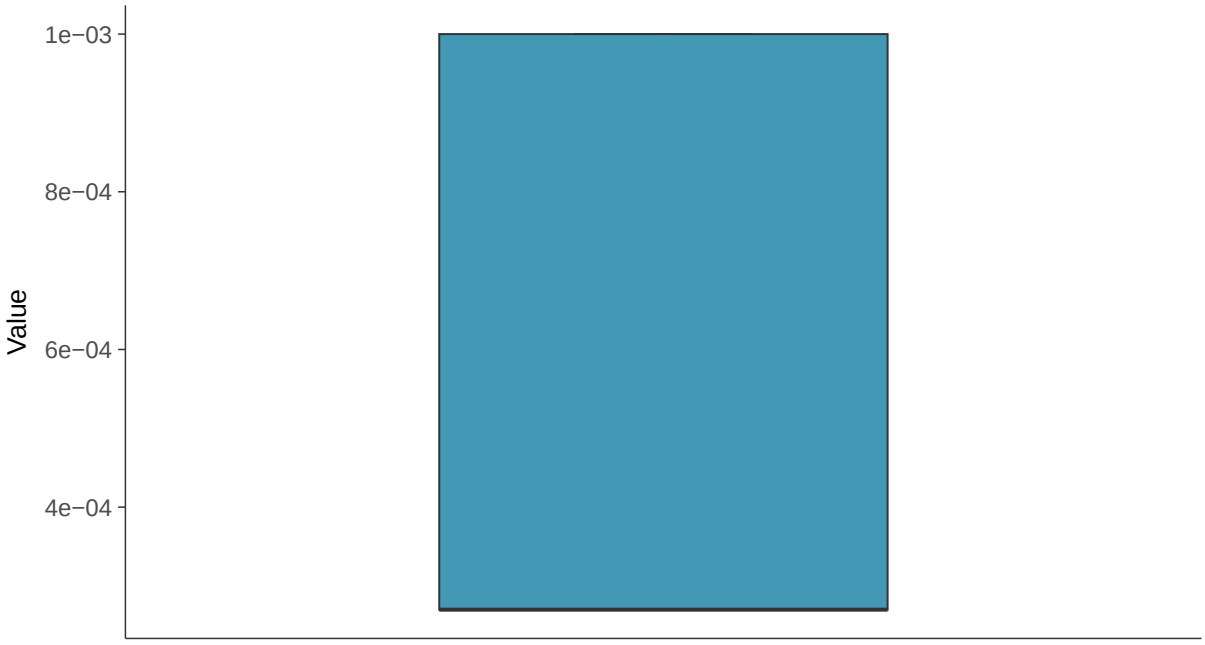
ID: 30_3_104





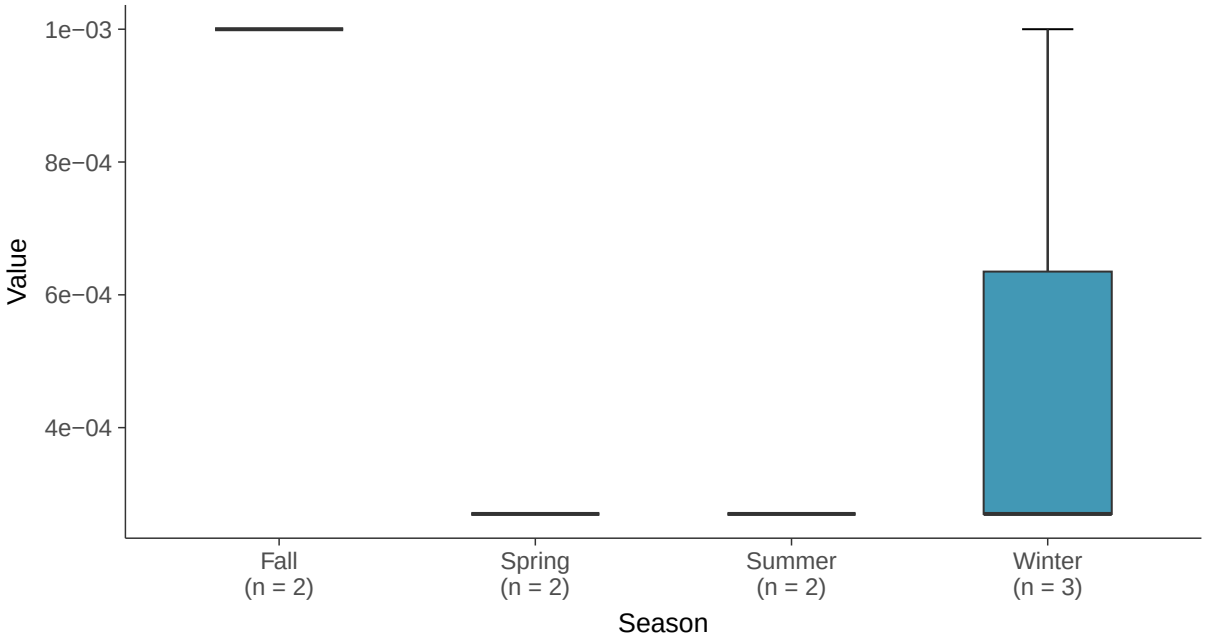
Boxplot

Beryllium, MW-18A (mg/l)



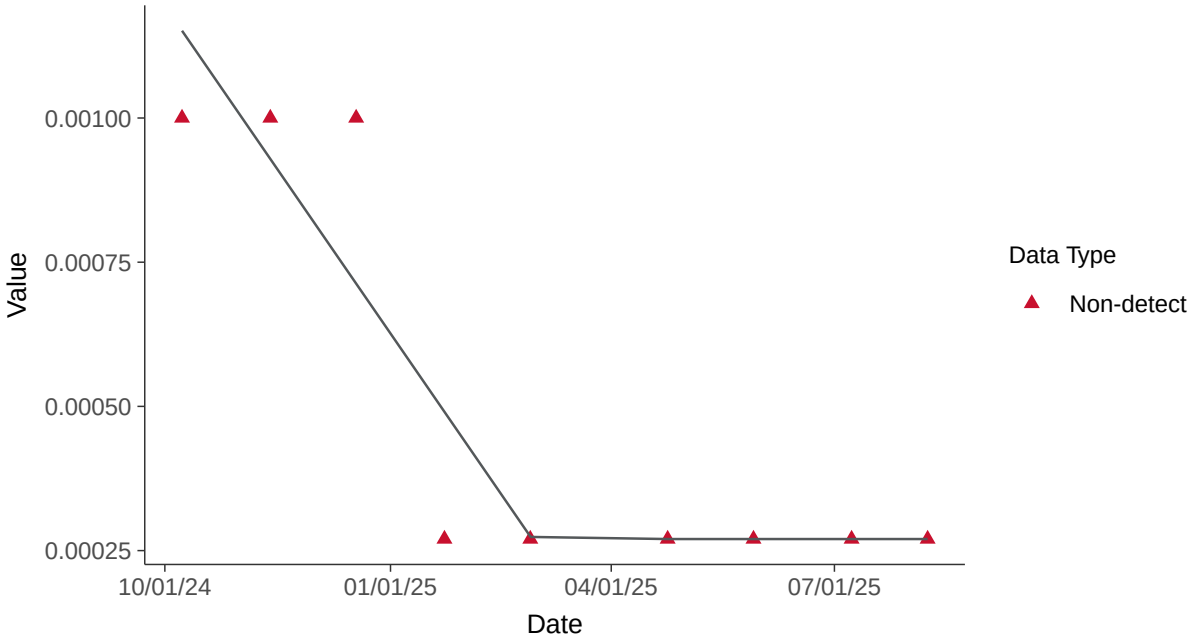
Boxplot by Season

Beryllium, MW-18A (mg/l)



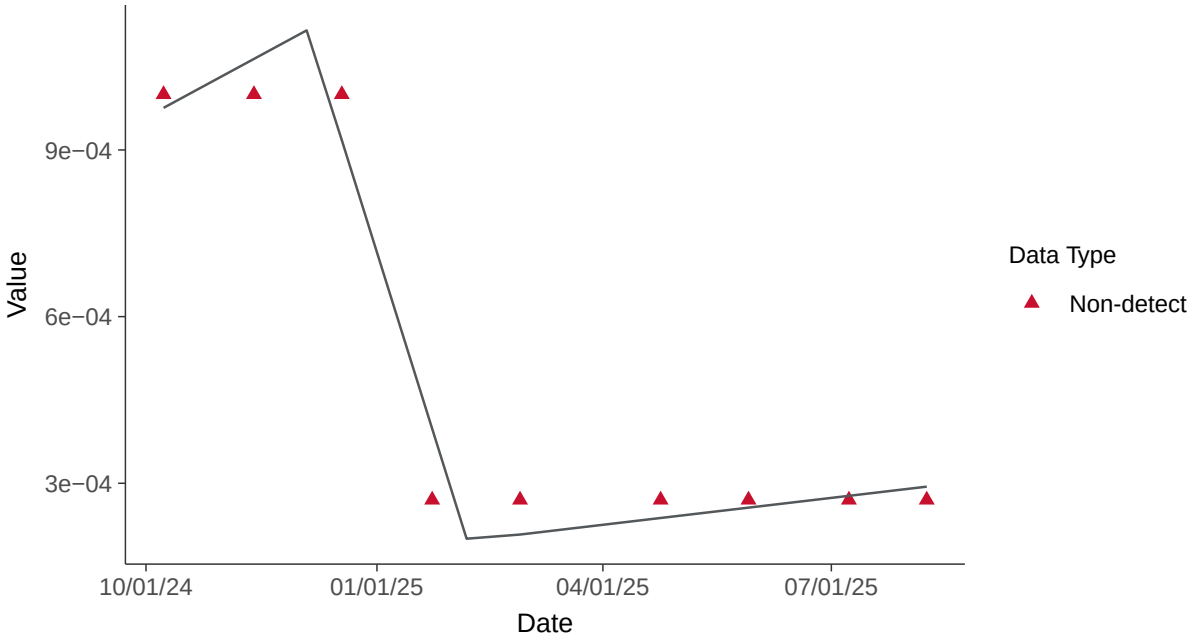
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-18A (mg/l)



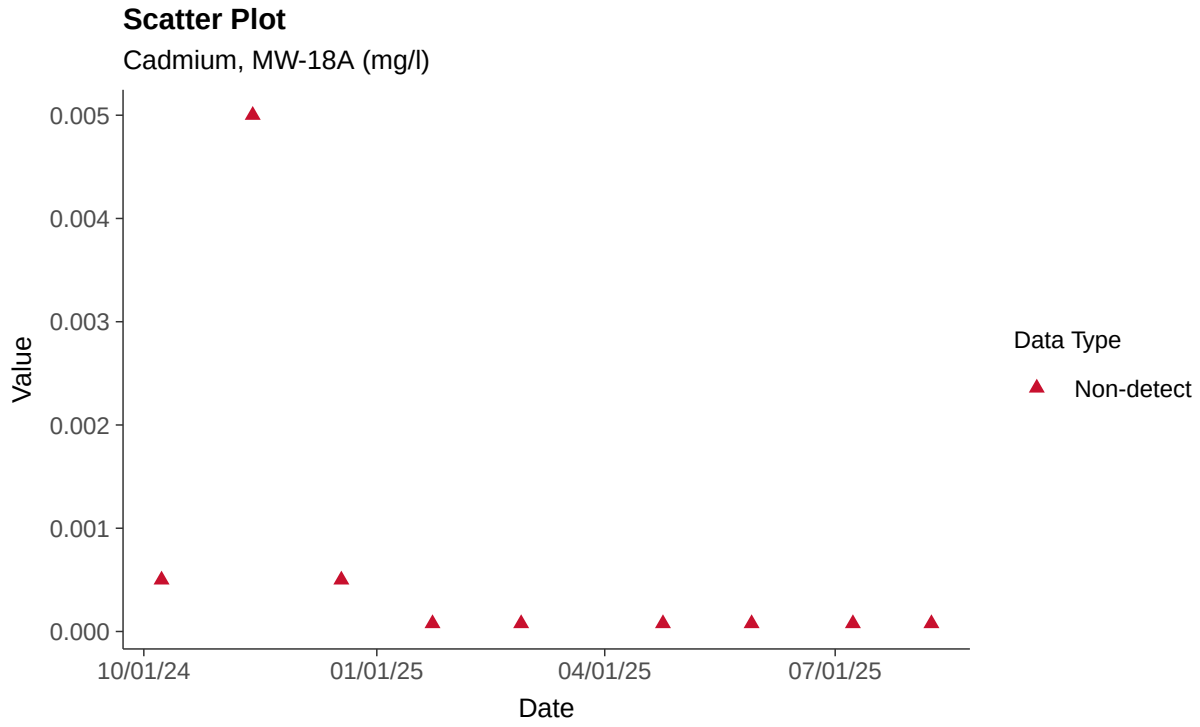
Trend Regression: Piecewise Linear-Linear-Linear

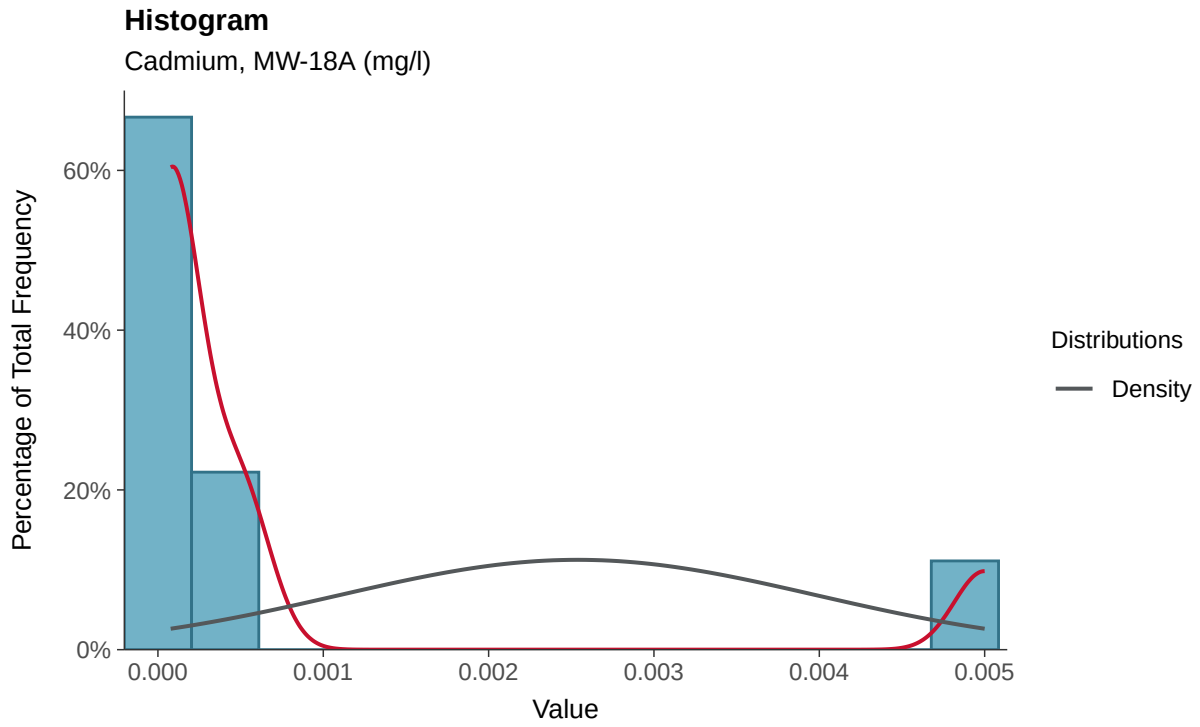
Beryllium, MW-18A (mg/l)



Appendix IV: Cadmium, MW-18A

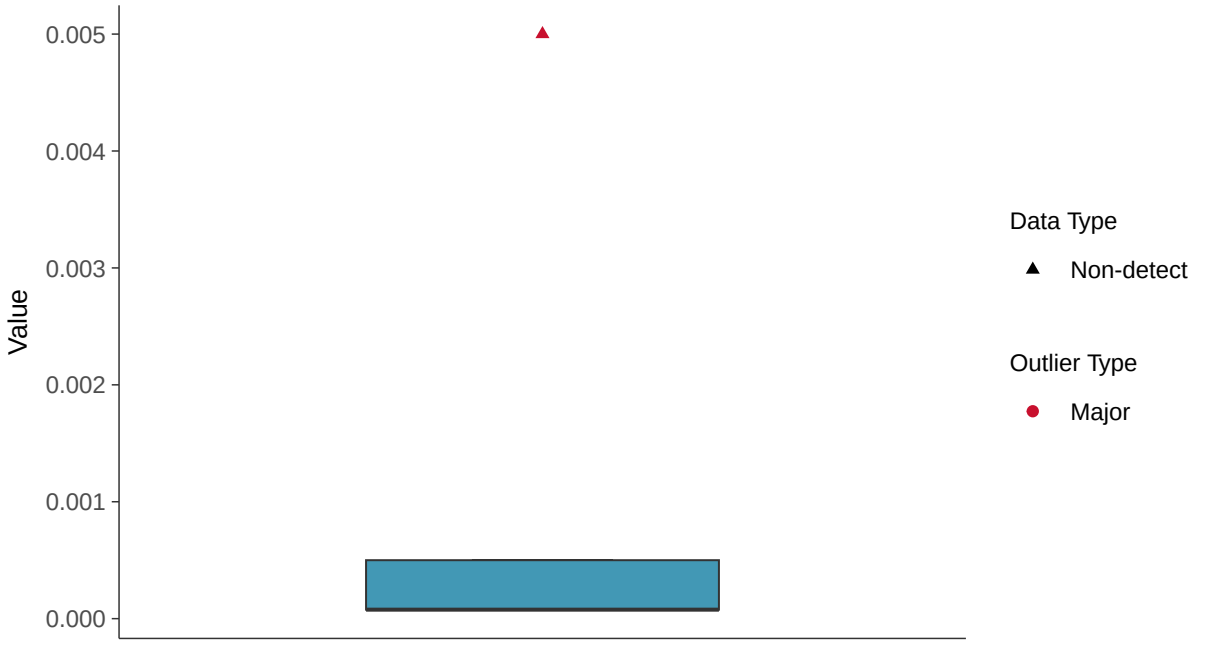
ID: 30_3_106





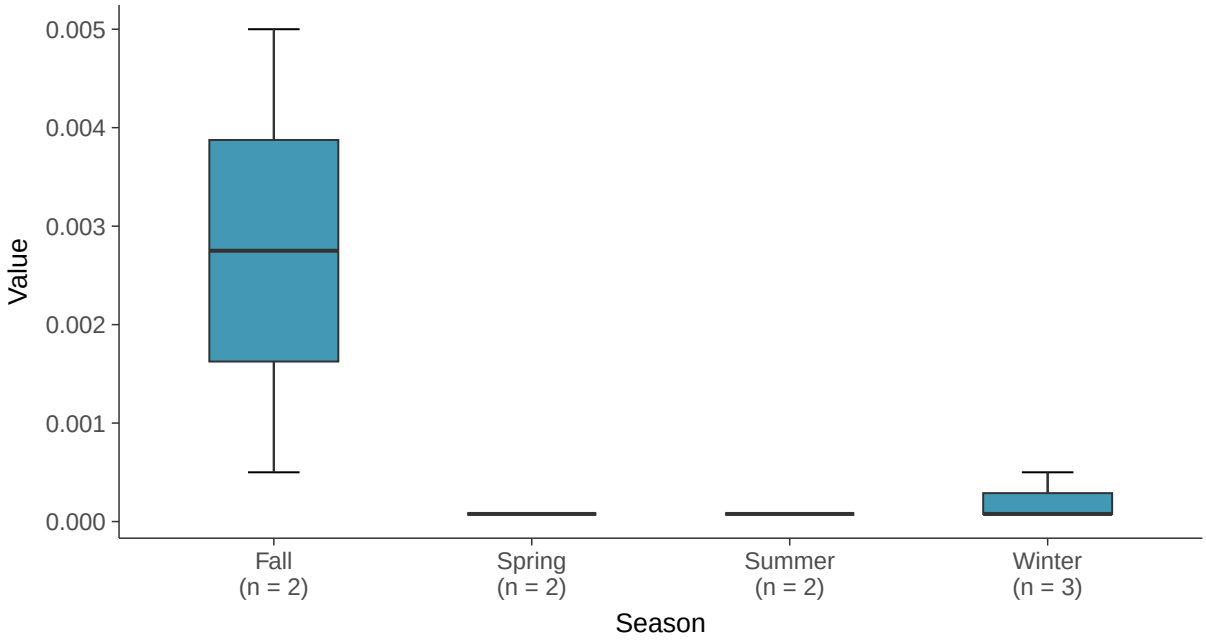
Boxplot

Cadmium, MW-18A (mg/l)



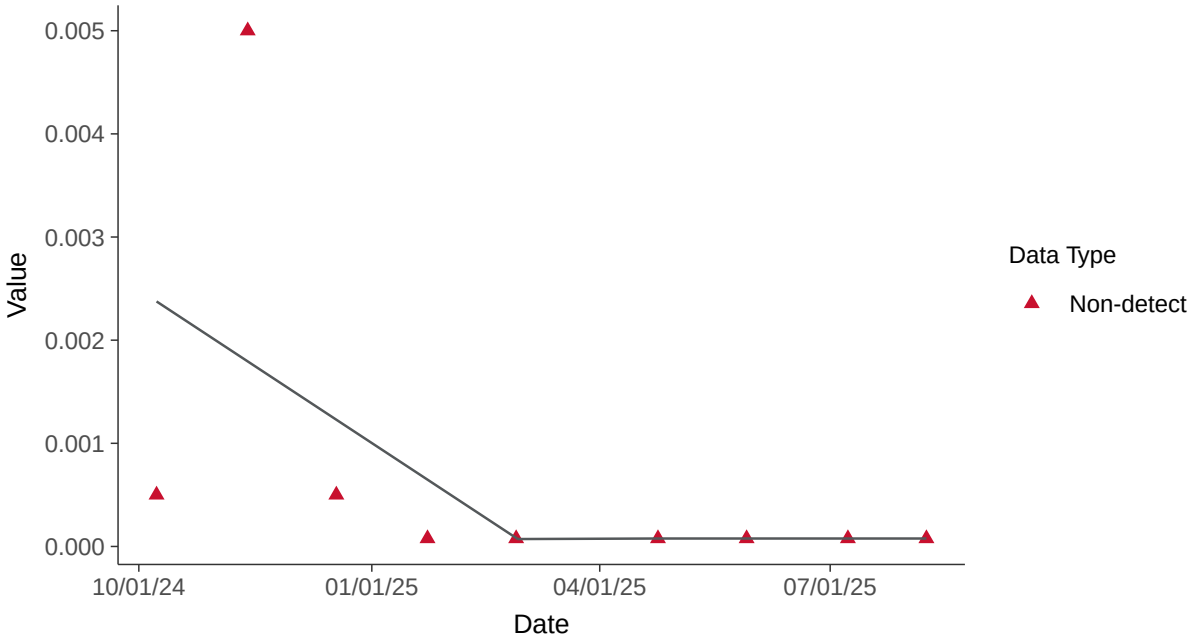
Boxplot by Season

Cadmium, MW-18A (mg/l)



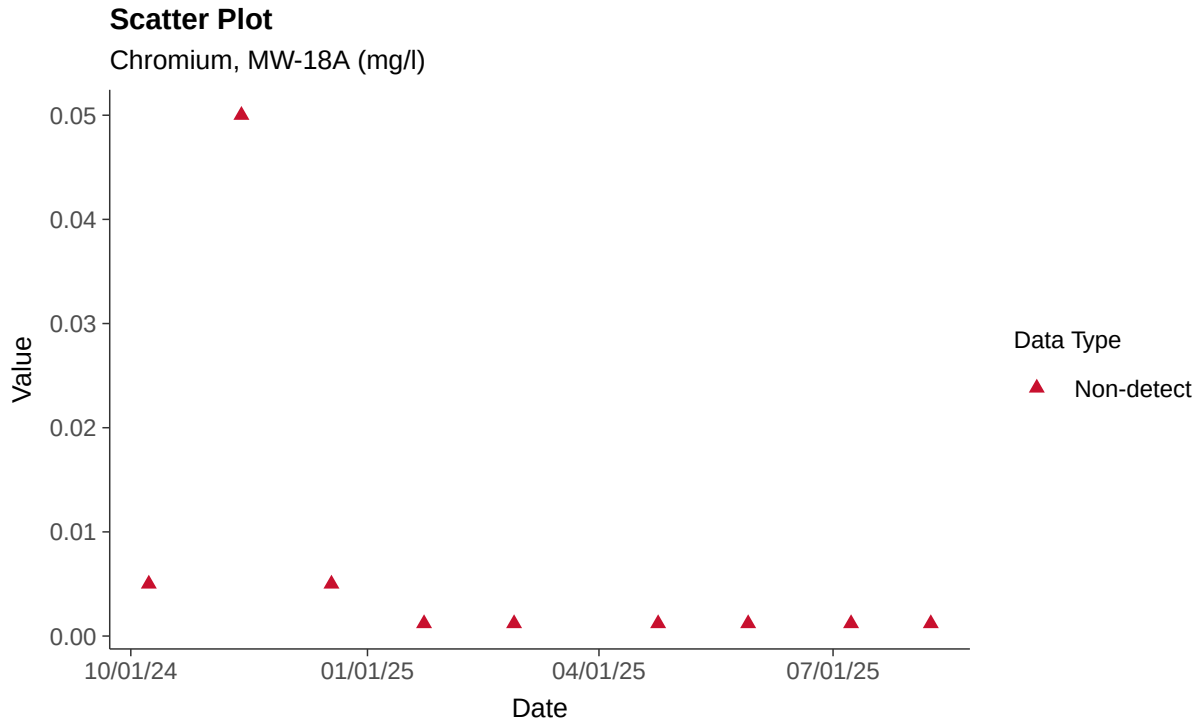
Trend Regression: Piecewise Linear-Linear

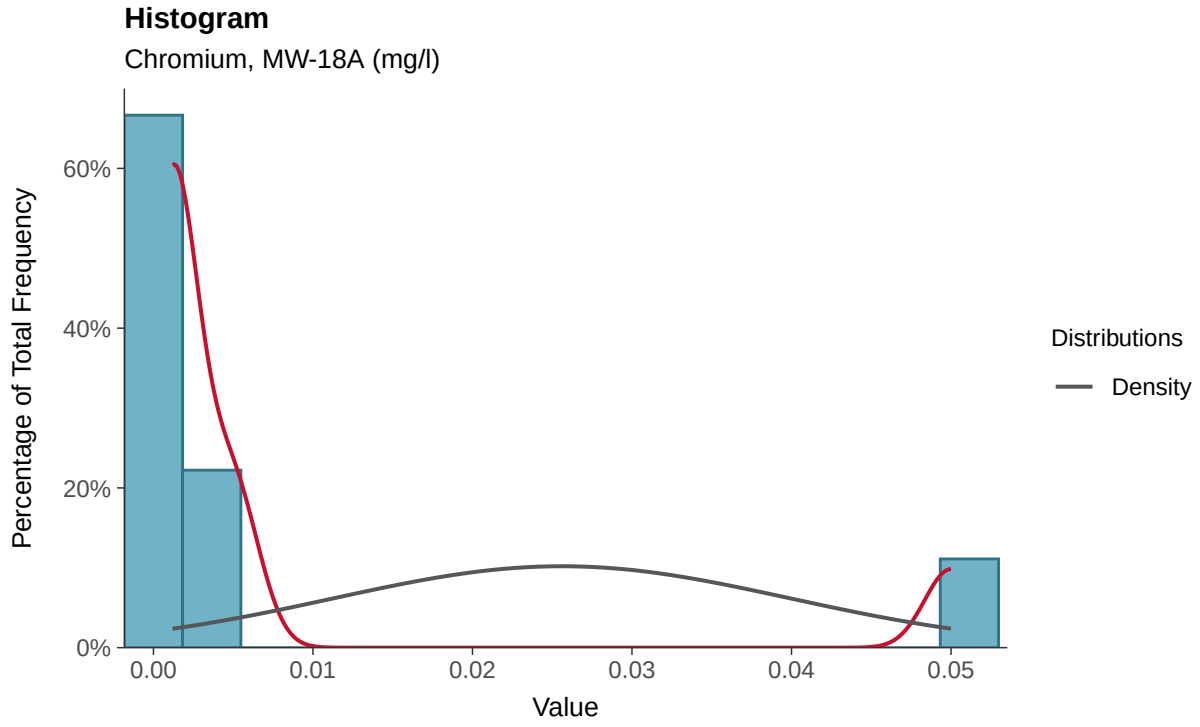
Cadmium, MW-18A (mg/l)



Appendix IV: Chromium, MW-18A

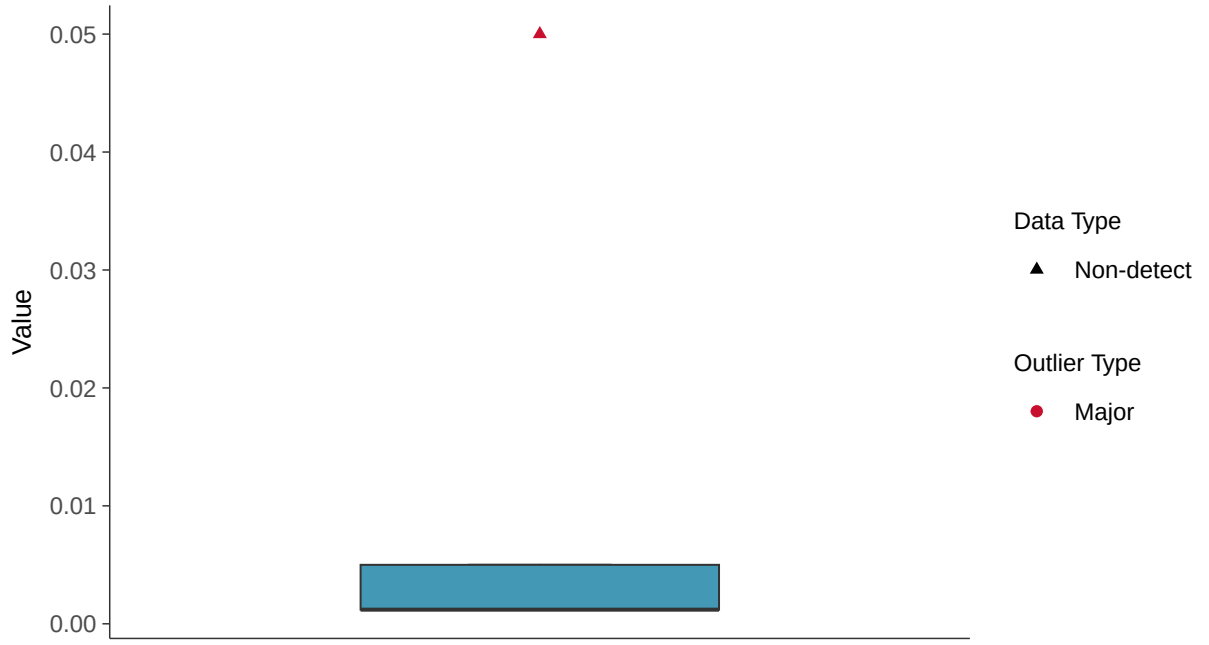
ID: 30_3_109





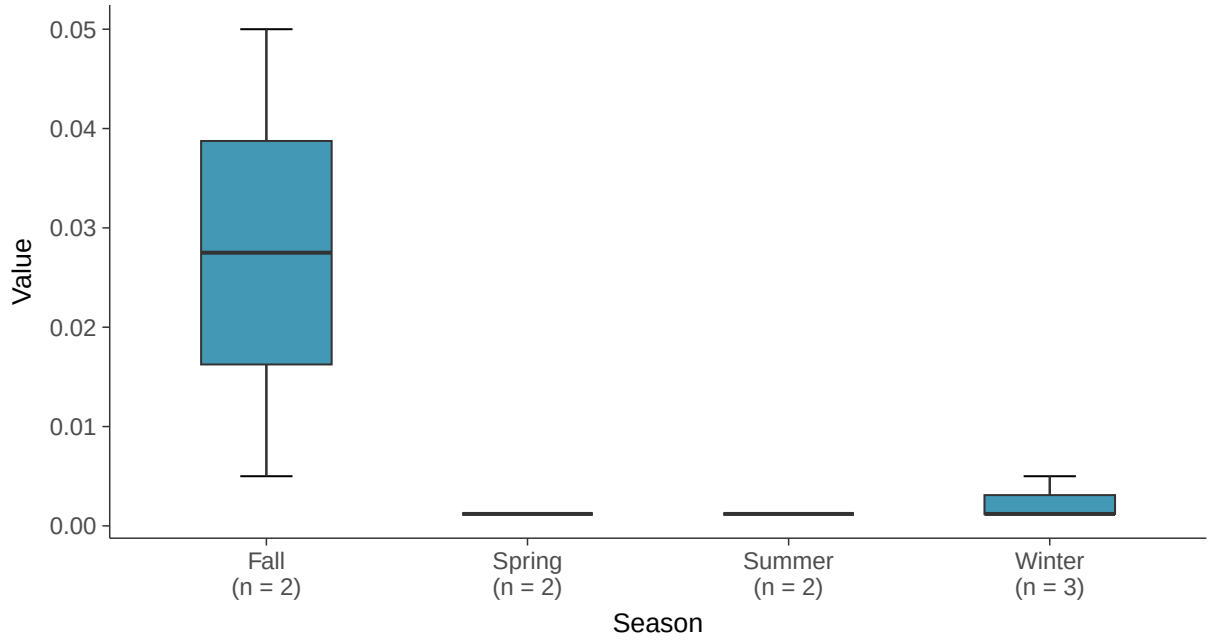
Boxplot

Chromium, MW-18A (mg/l)



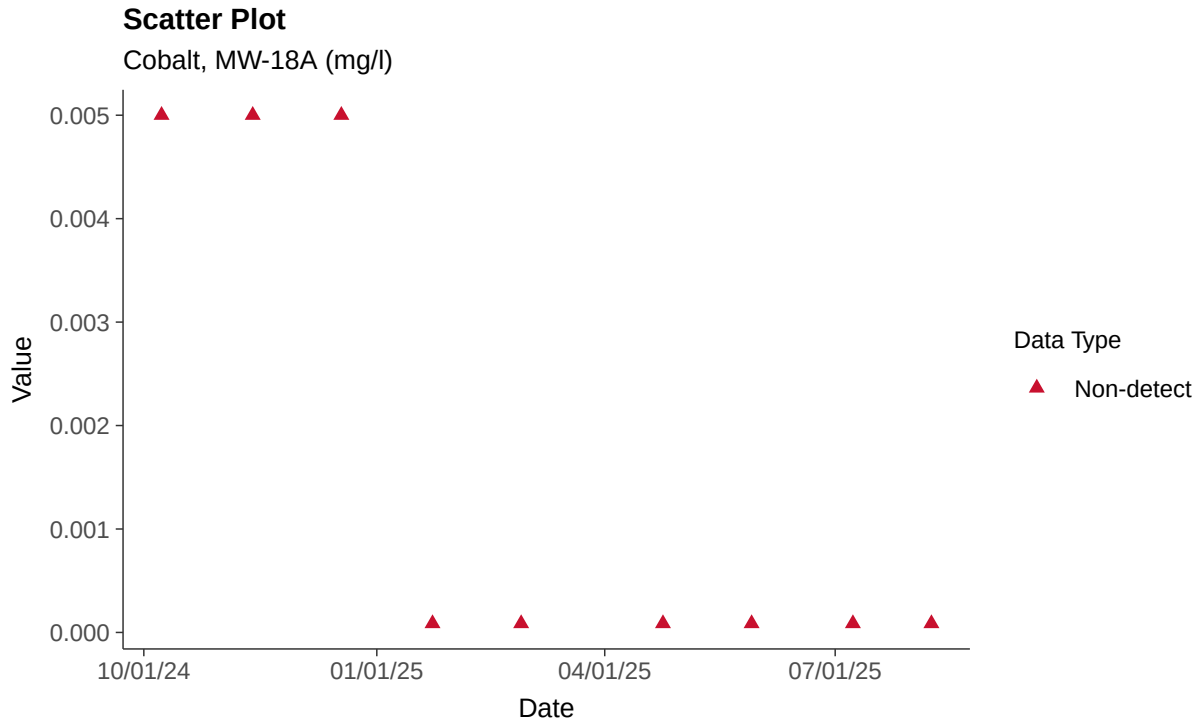
Boxplot by Season

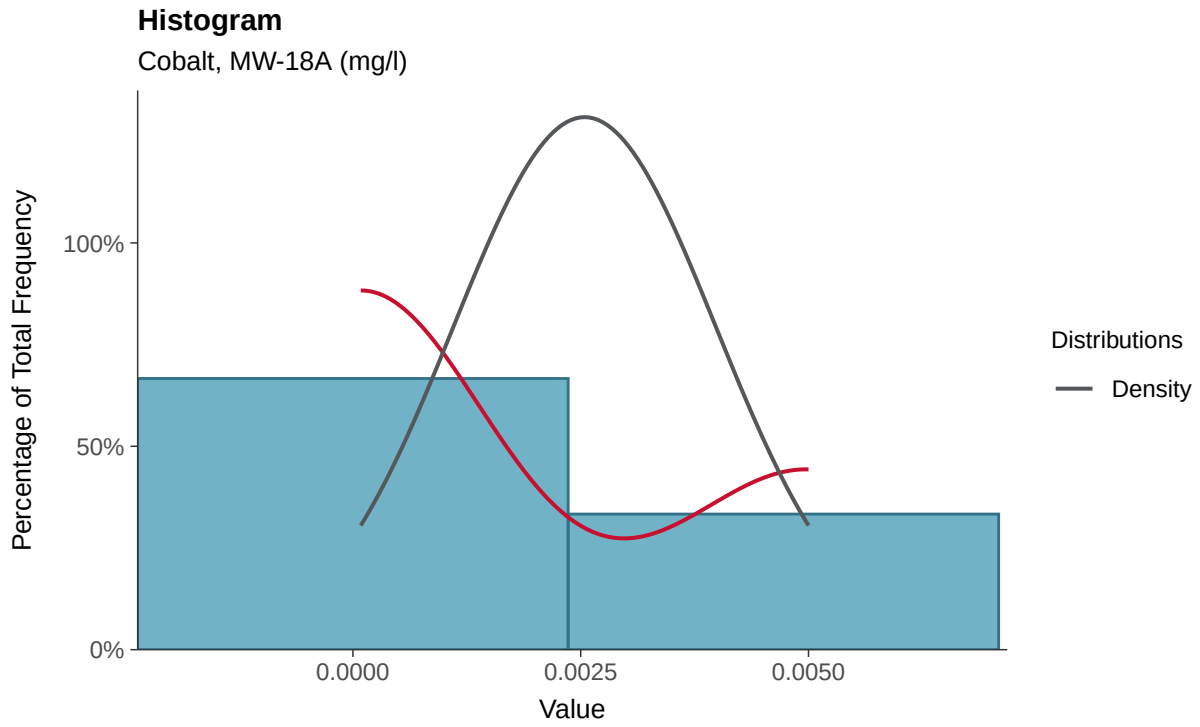
Chromium, MW-18A (mg/l)



Appendix IV: Cobalt, MW-18A

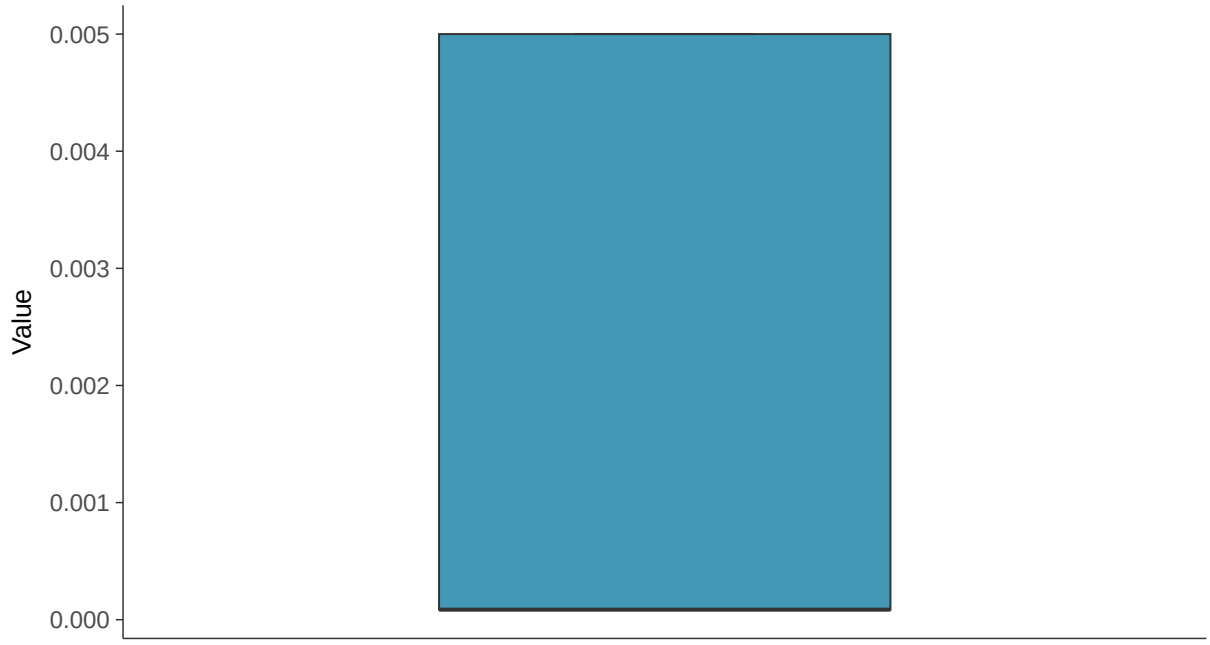
ID: 30_3_110





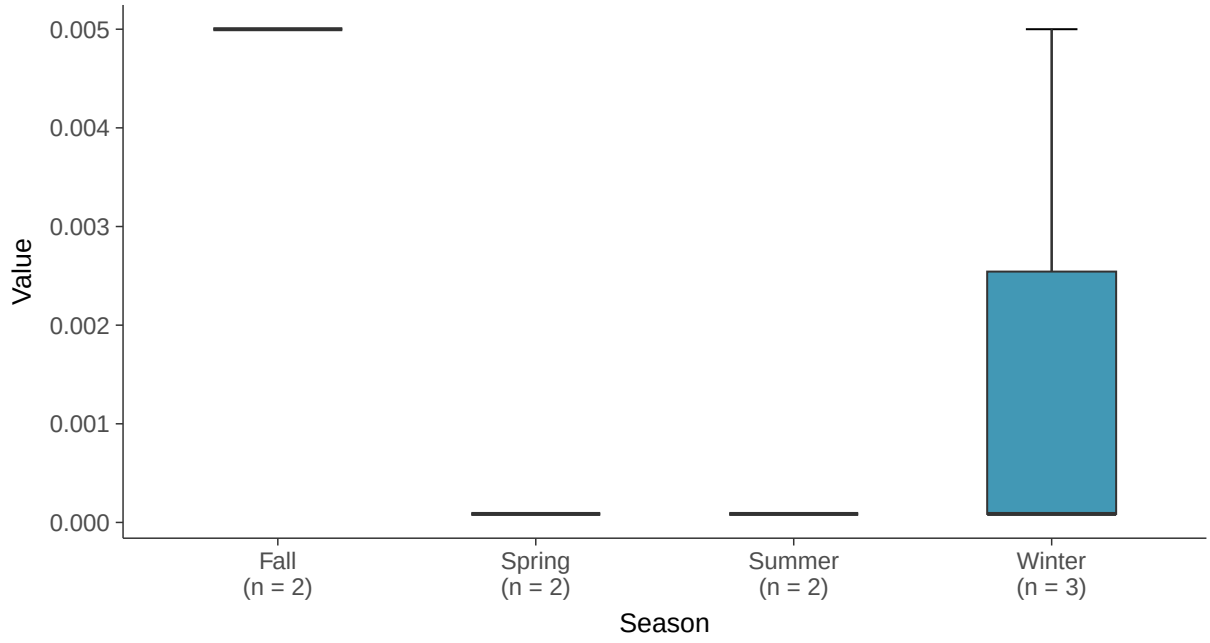
Boxplot

Cobalt, MW-18A (mg/l)



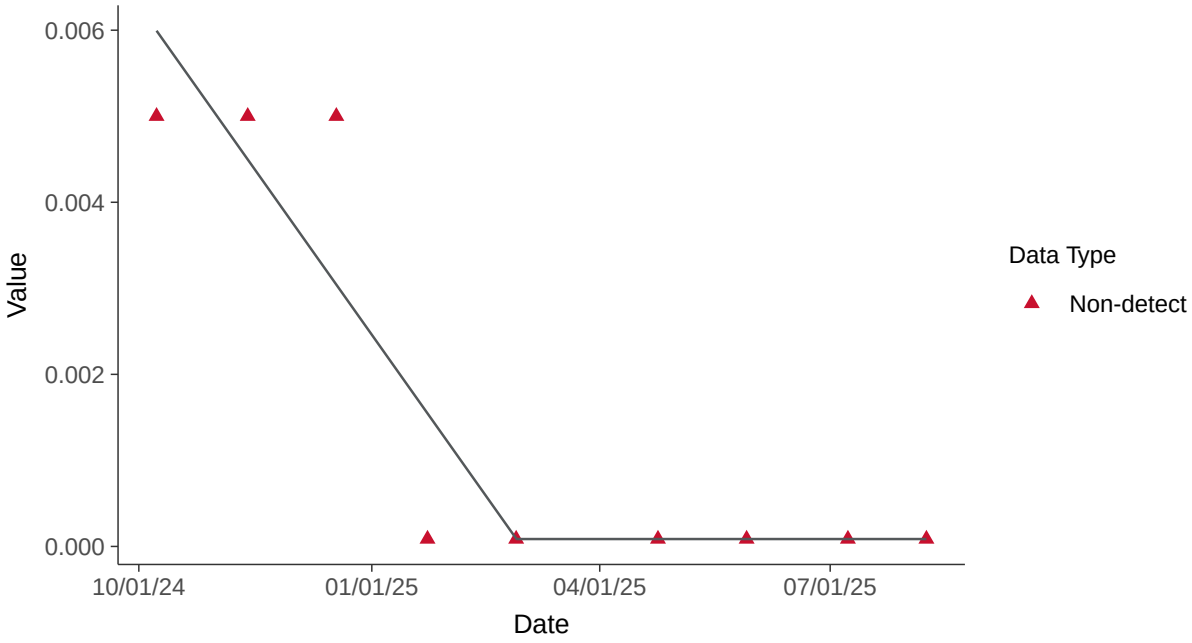
Boxplot by Season

Cobalt, MW-18A (mg/l)



Trend Regression: Piecewise Linear-Linear

Cobalt, MW-18A (mg/l)

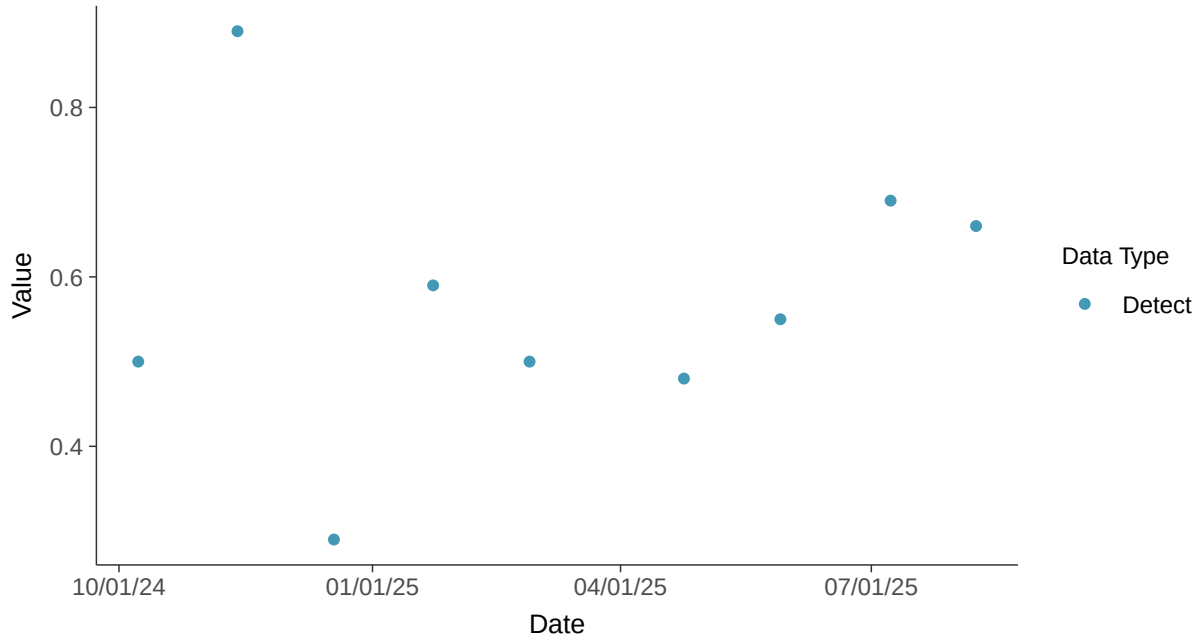


Appendix IV: Fluoride (App IV), MW-18A

ID: 30_3_113

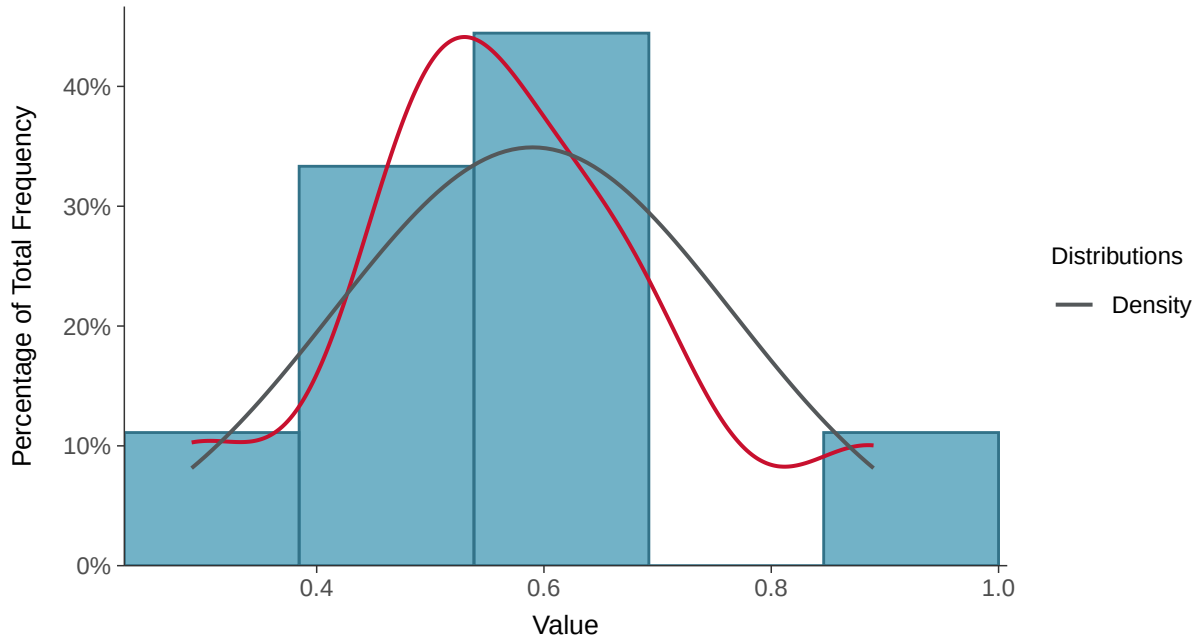
Scatter Plot

Fluoride (App IV), MW-18A (mg/l)



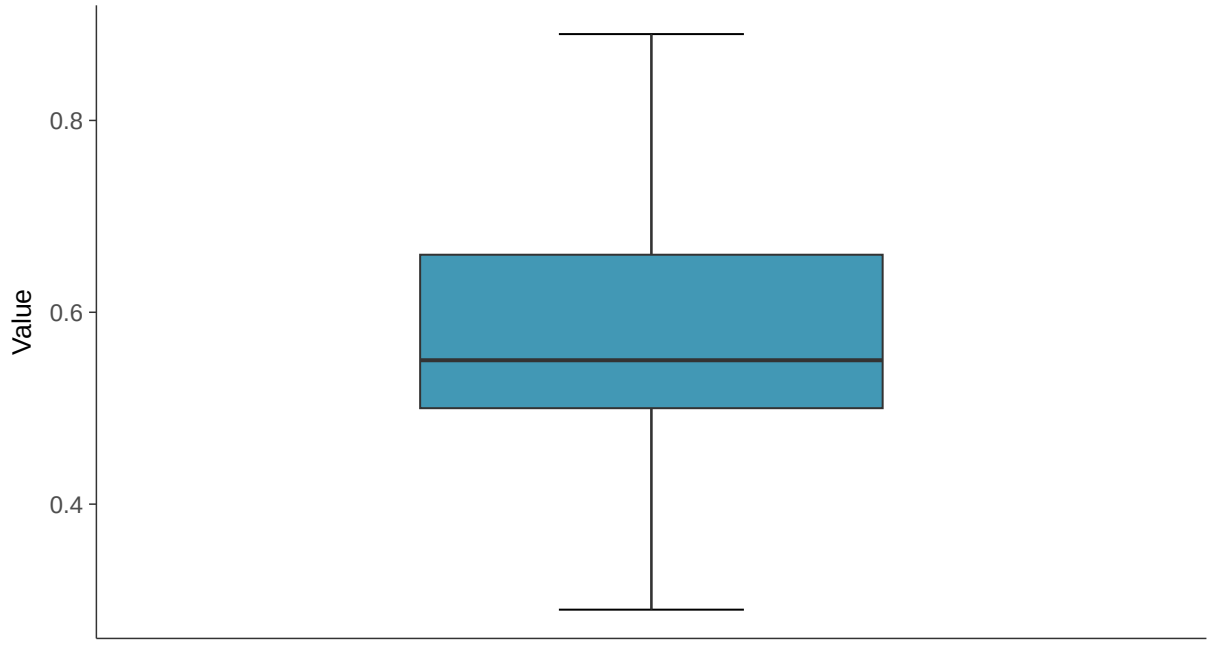
Histogram

Fluoride (App IV), MW-18A (mg/l)



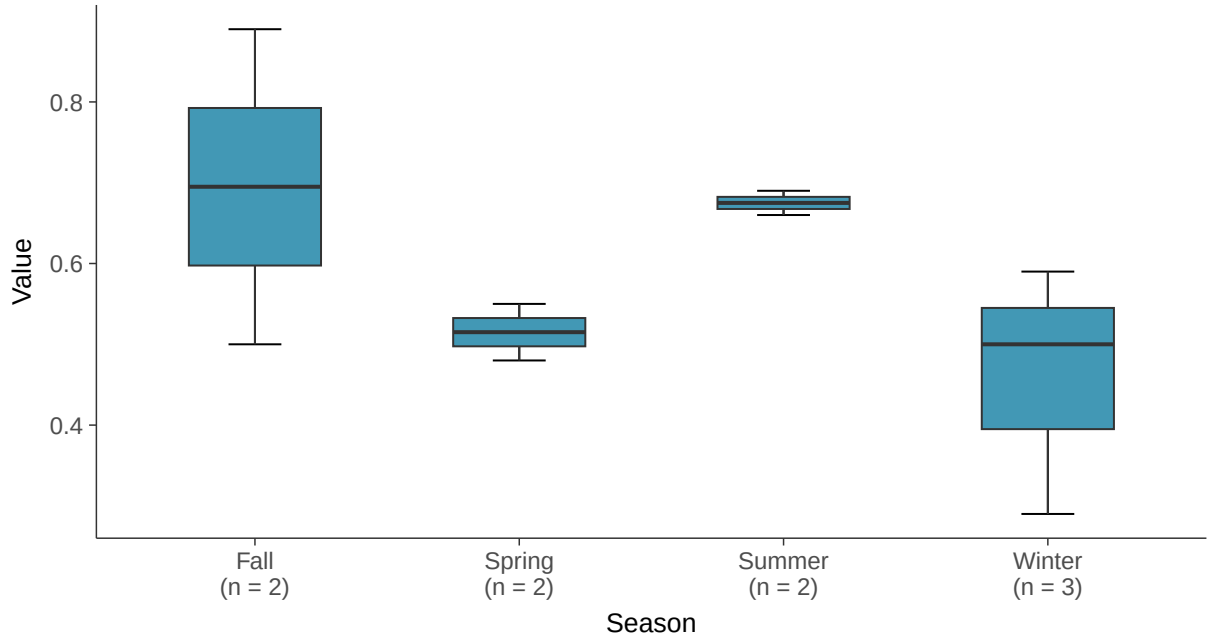
Boxplot

Fluoride (App IV), MW-18A (mg/l)



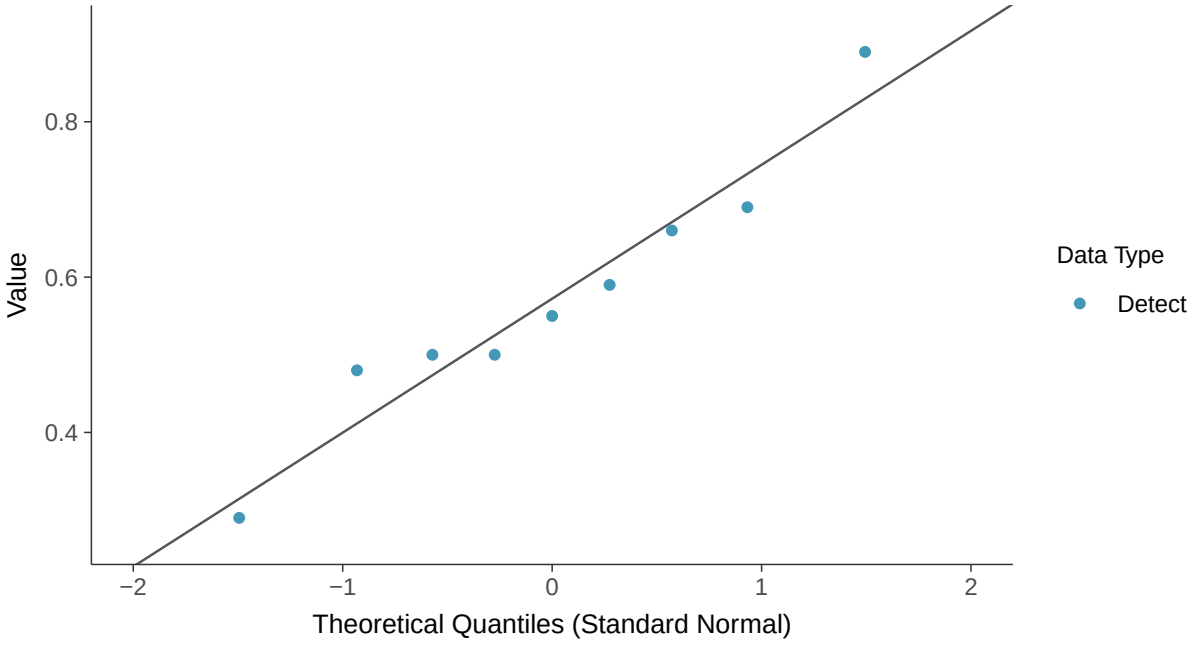
Boxplot by Season

Fluoride (App IV), MW-18A (mg/l)



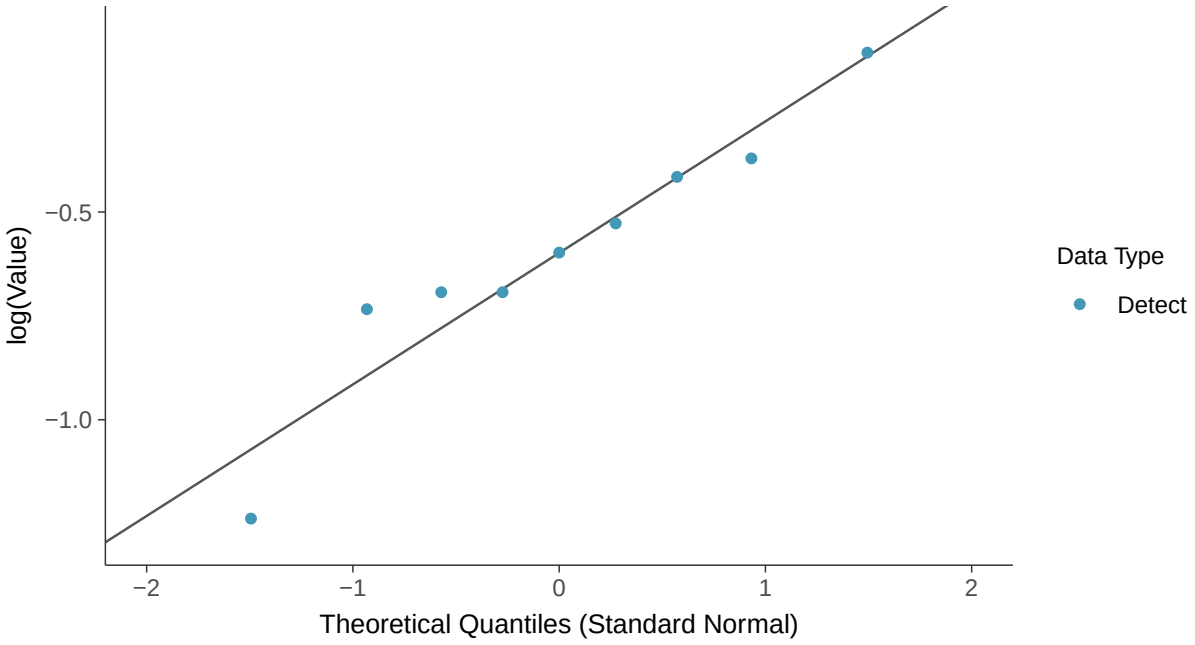
Normal Q-Q plot

Fluoride (App IV), MW-18A (mg/l)



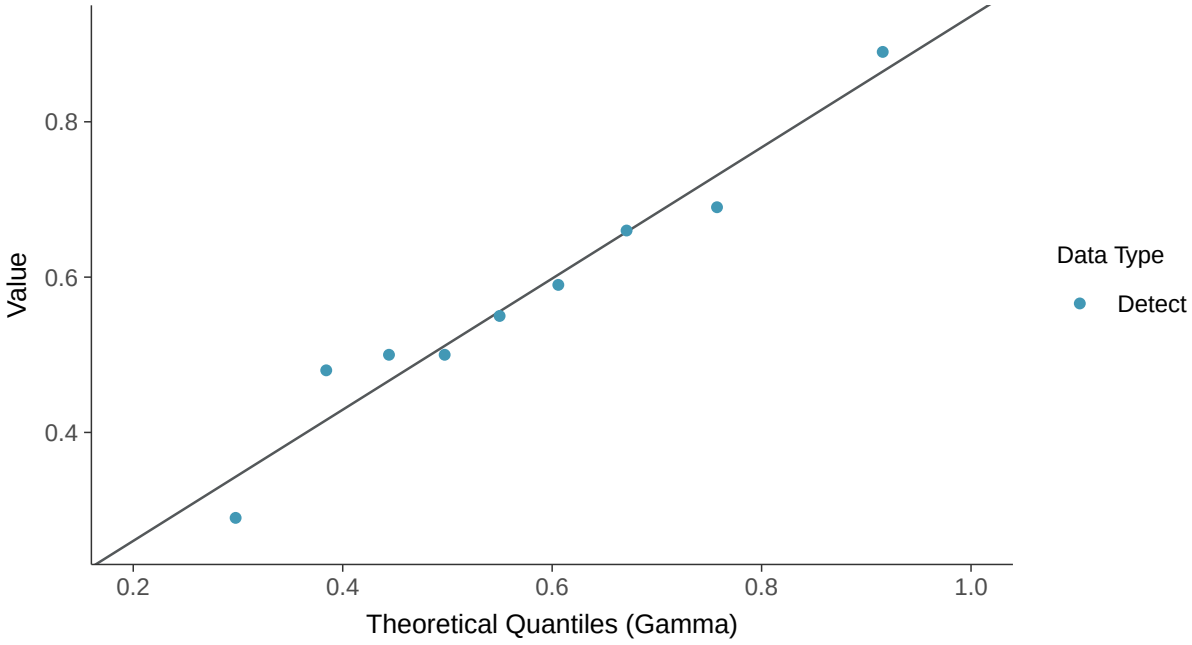
Lognormal Q-Q plot

Fluoride (App IV), MW-18A (mg/l)



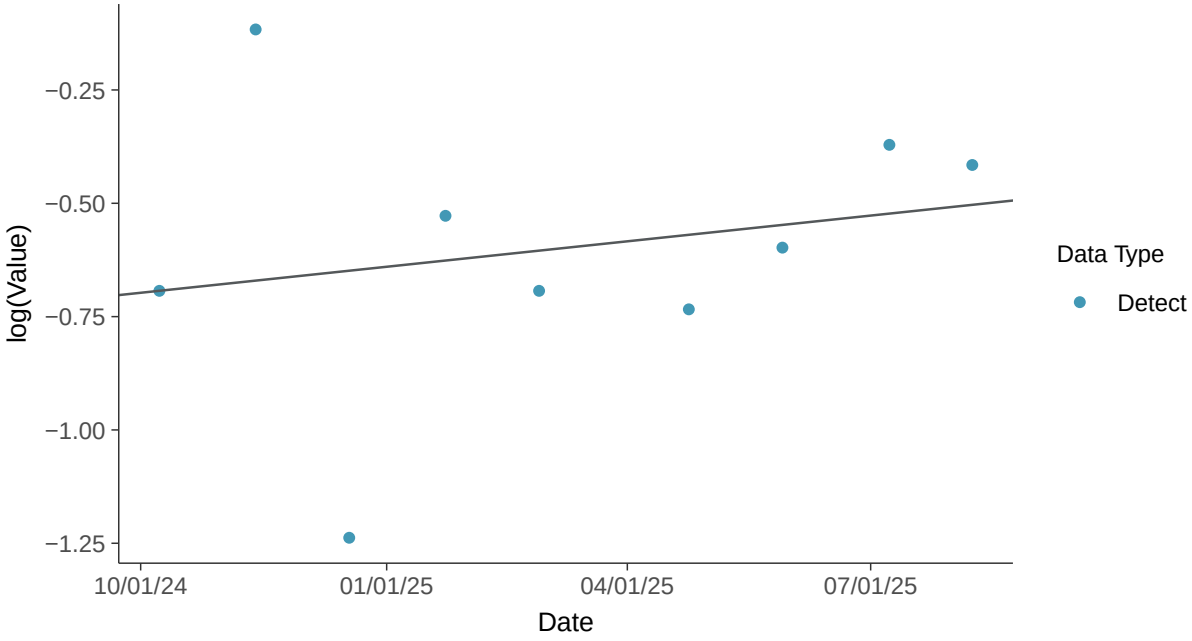
Gamma Q-Q plot

Fluoride (App IV), MW-18A (mg/l)



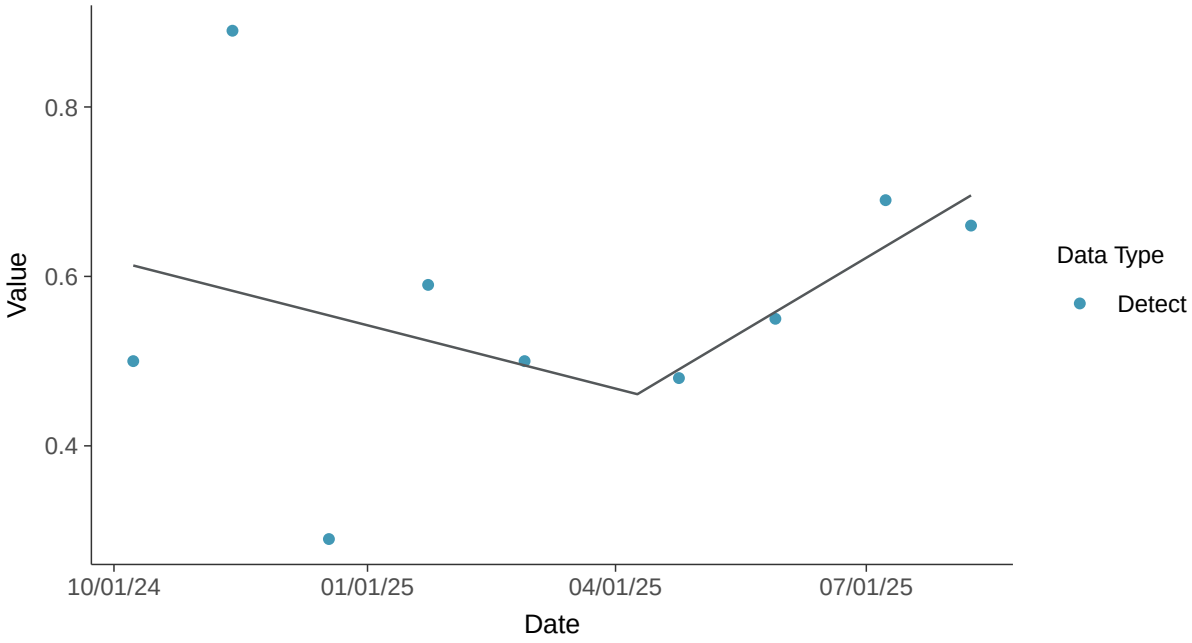
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-18A (mg/l)



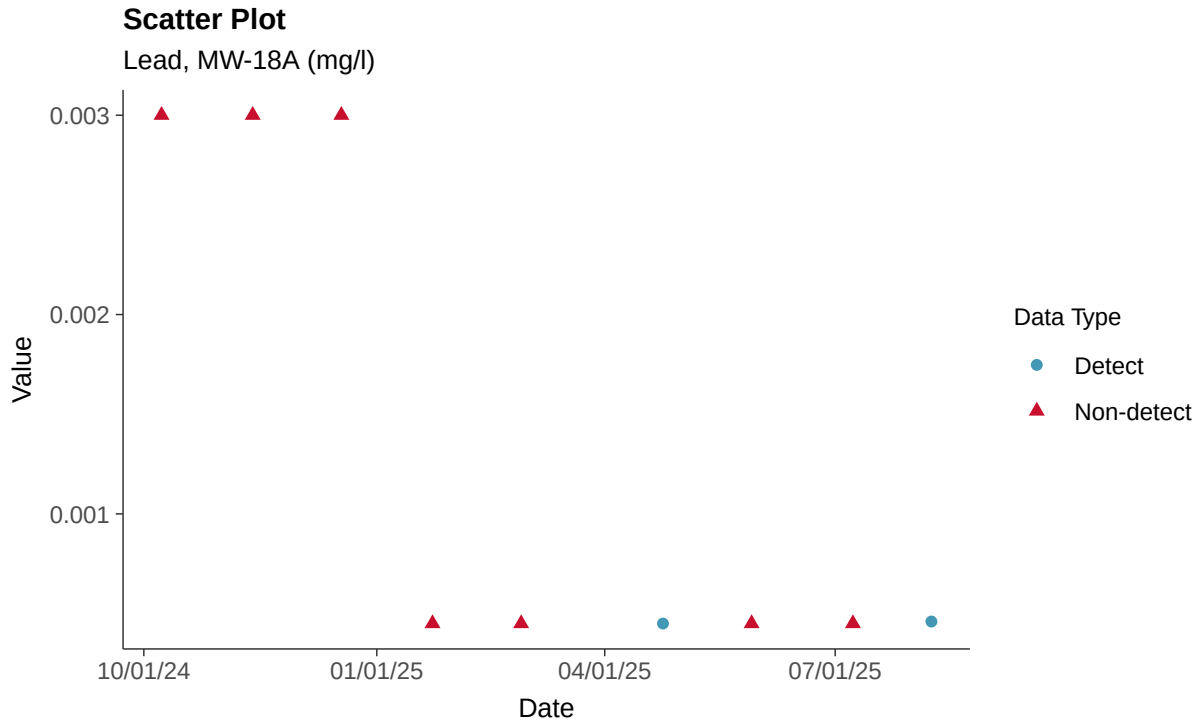
Trend Regression: Piecewise Linear-Linear

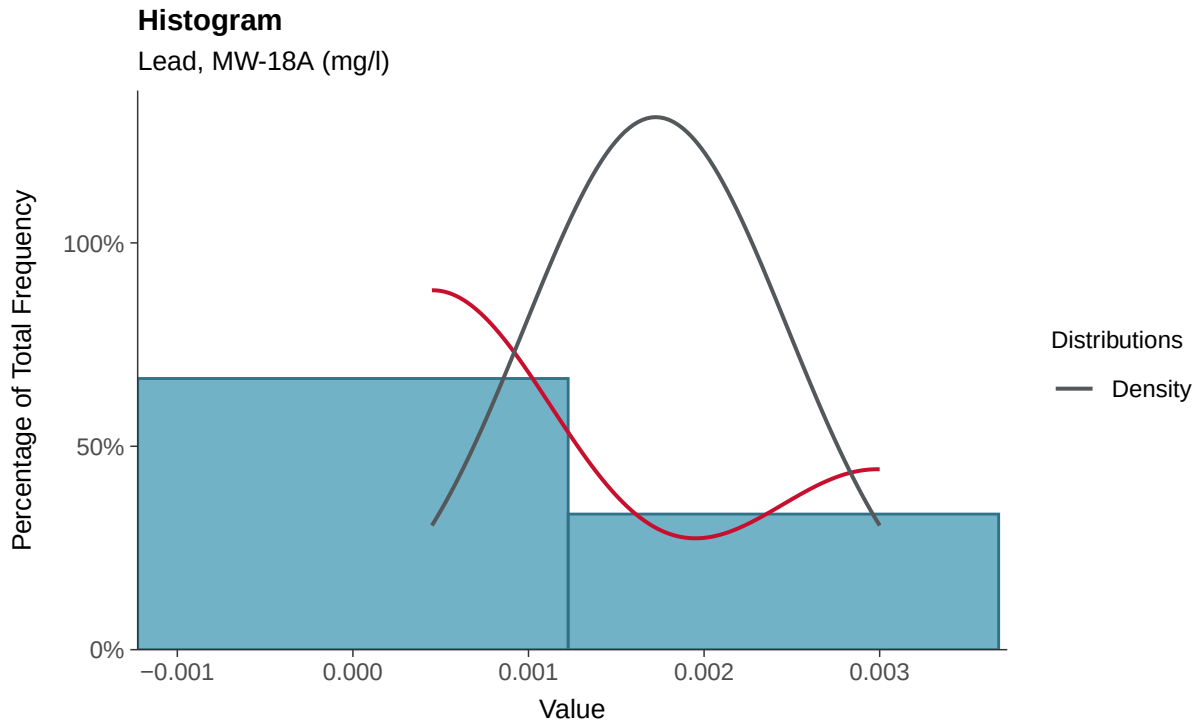
Fluoride (App IV), MW-18A (mg/l)



Appendix IV: Lead, MW-18A

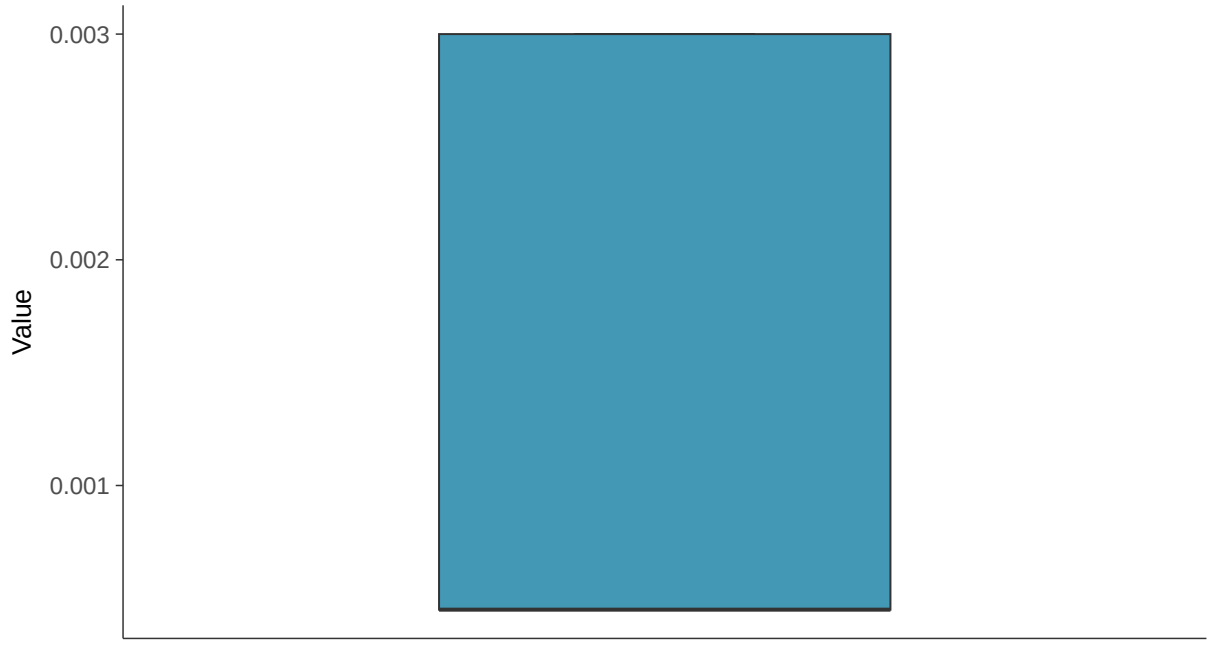
ID: 30_3_115





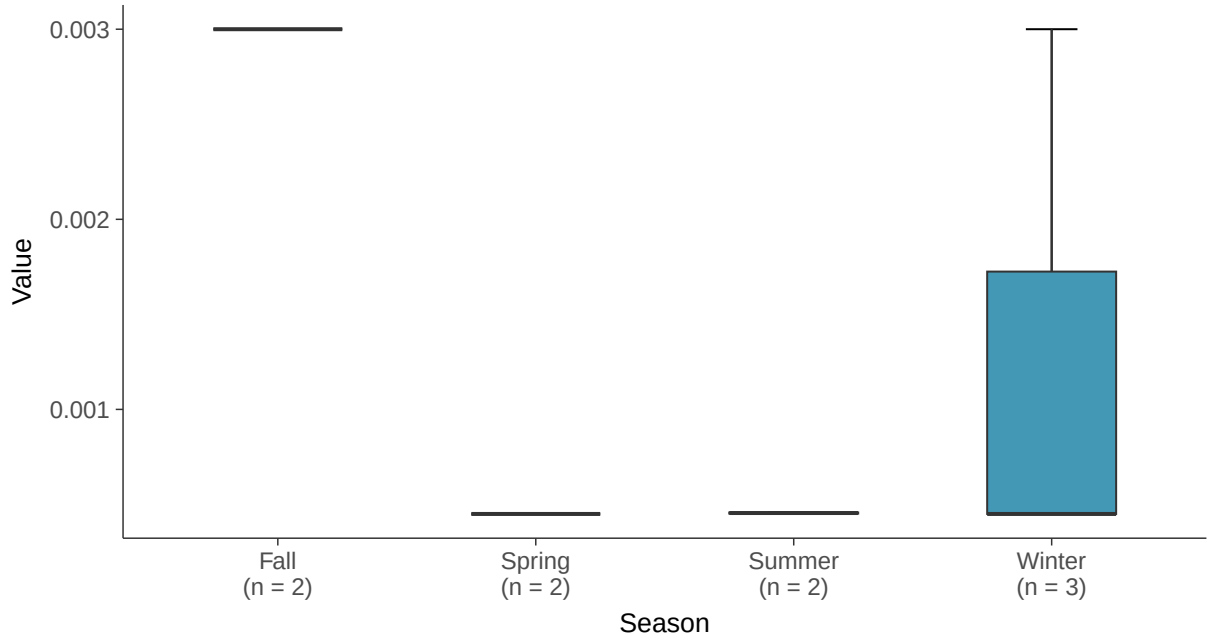
Boxplot

Lead, MW-18A (mg/l)



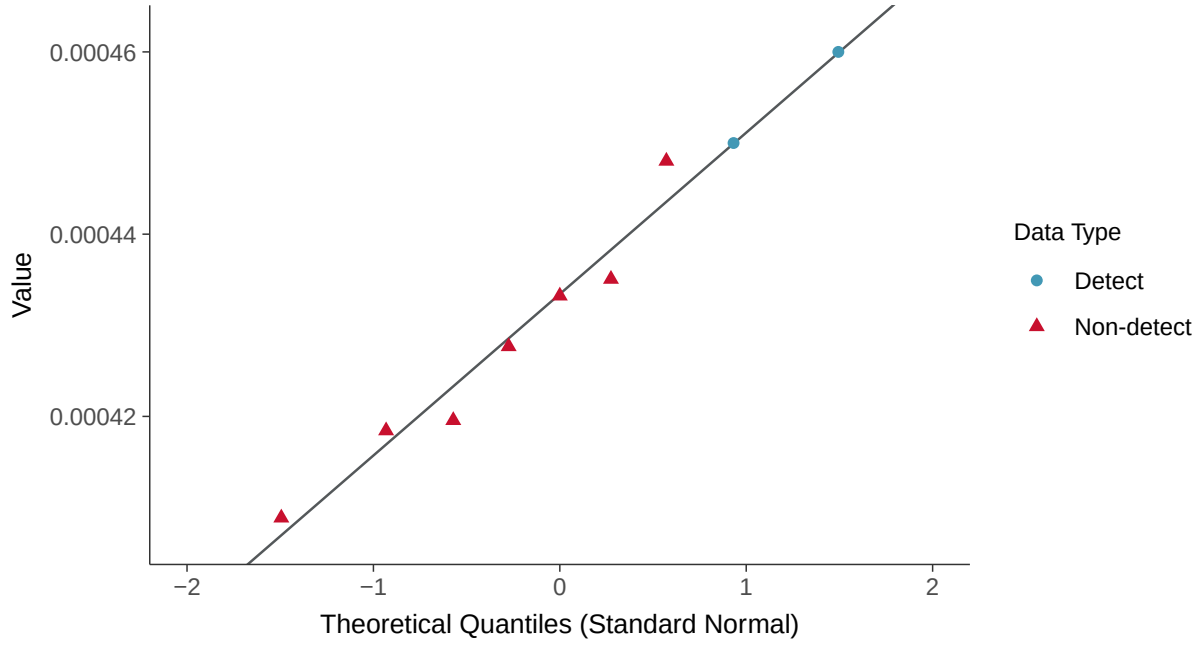
Boxplot by Season

Lead, MW-18A (mg/l)



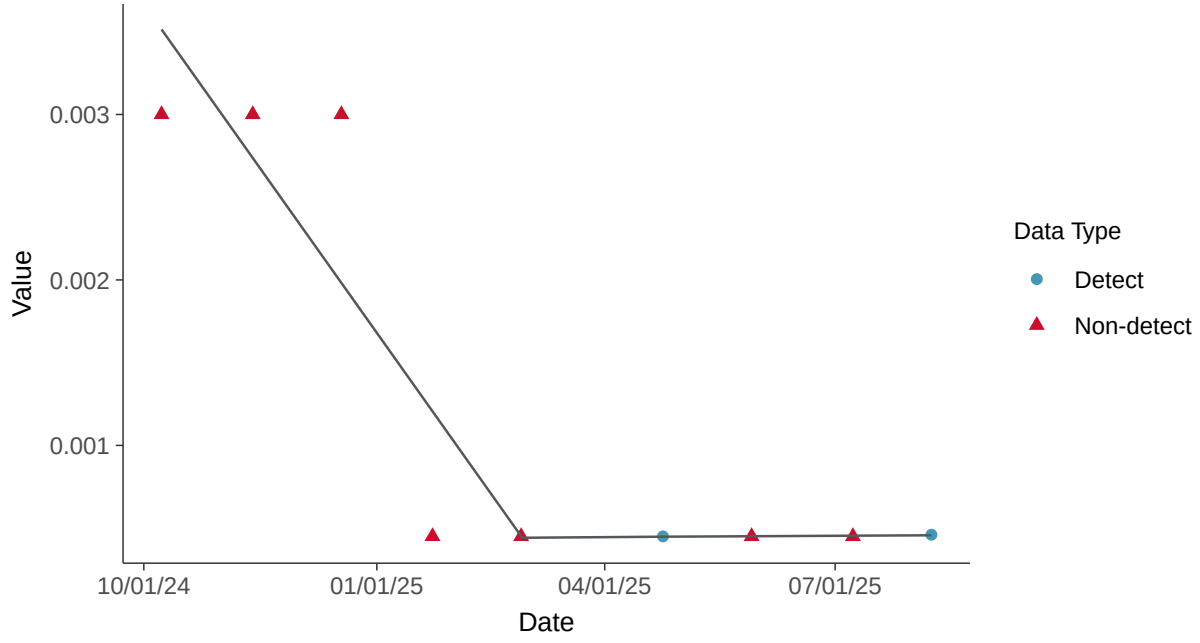
Normal Q-Q plot using ROS Imputed Estimates

Lead, MW-18A (mg/l)



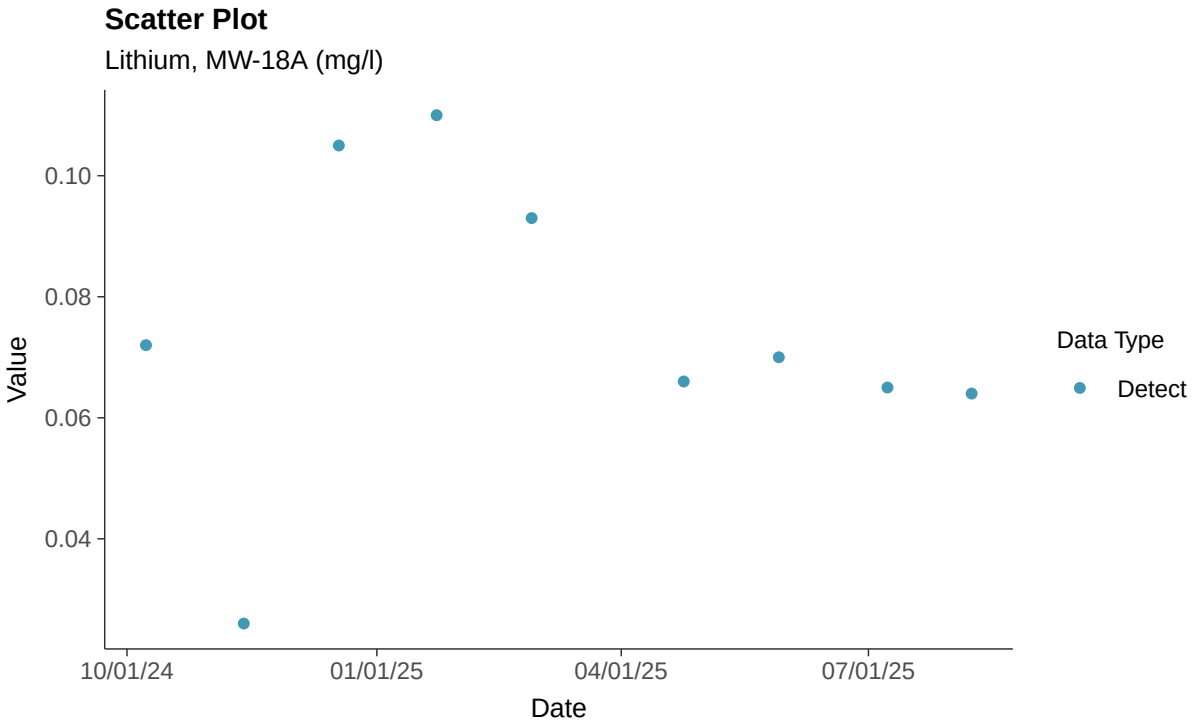
Trend Regression: Piecewise Linear-Linear

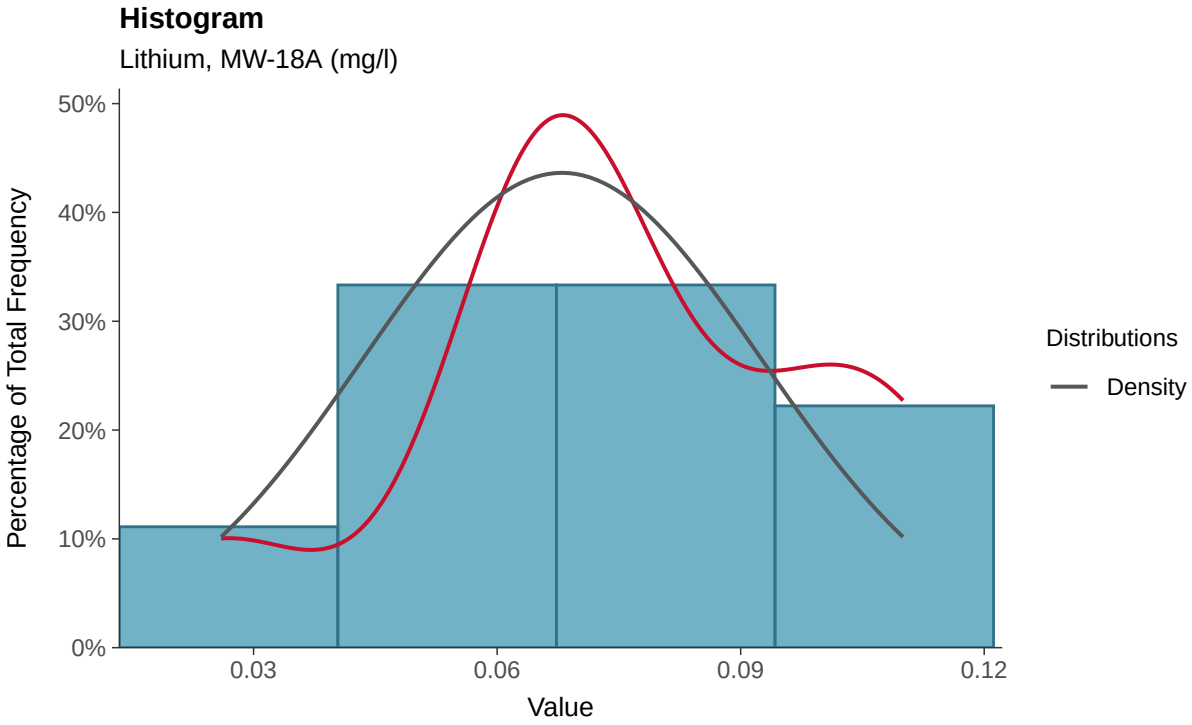
Lead, MW-18A (mg/l)



Appendix IV: Lithium, MW-18A

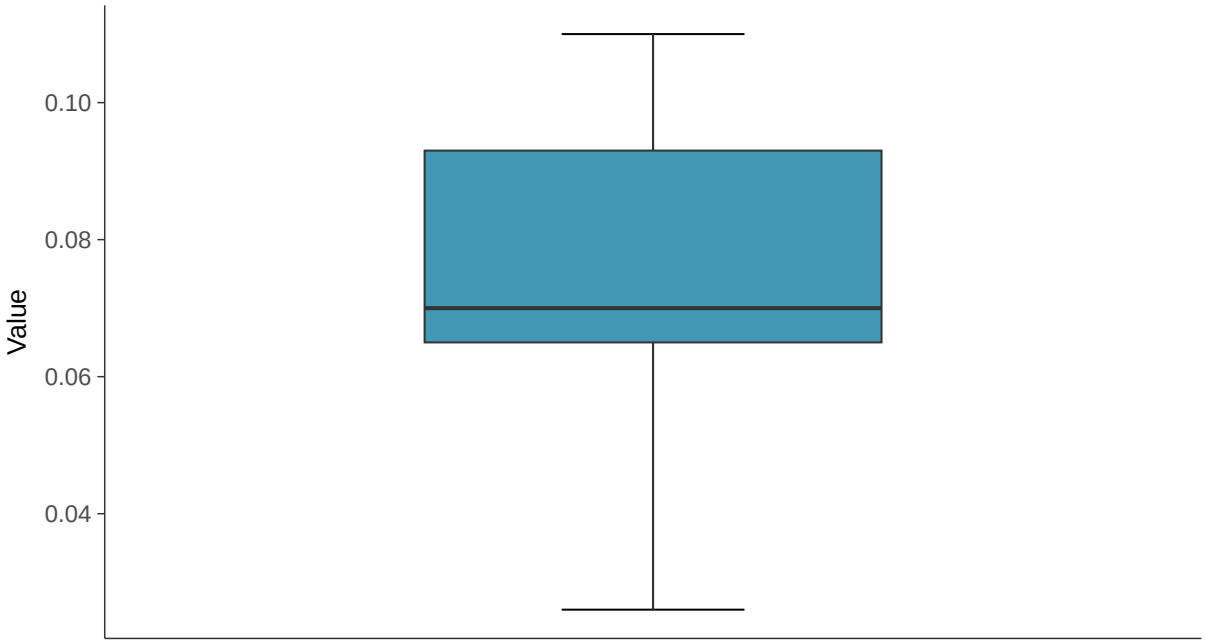
ID: 30_3_116





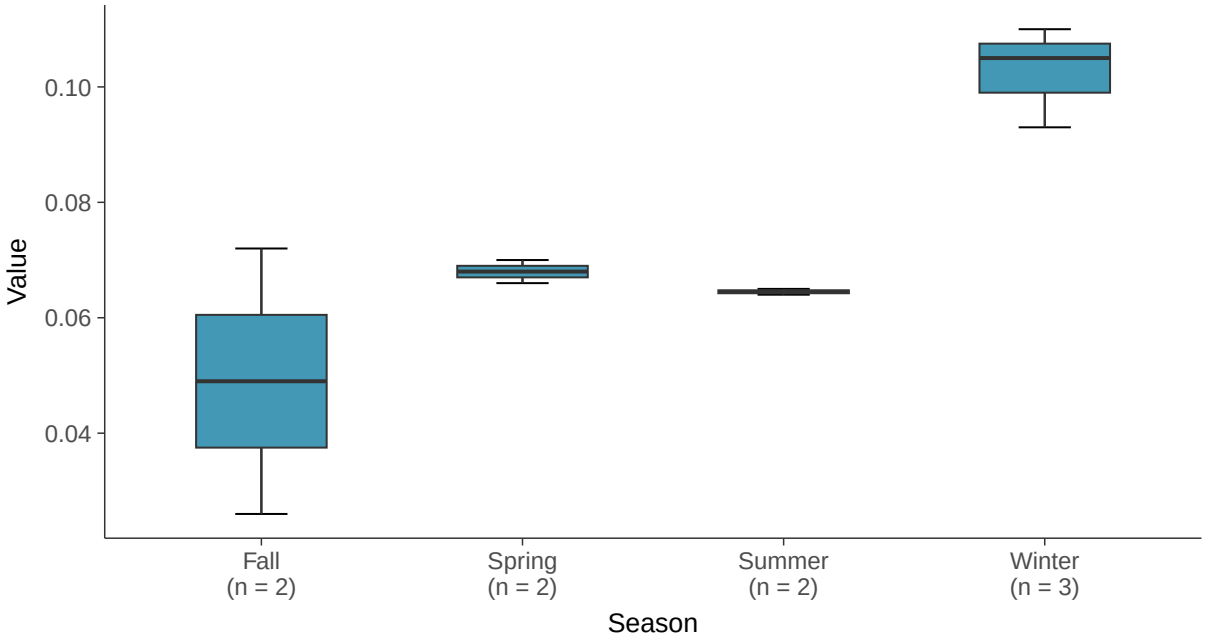
Boxplot

Lithium, MW-18A (mg/l)



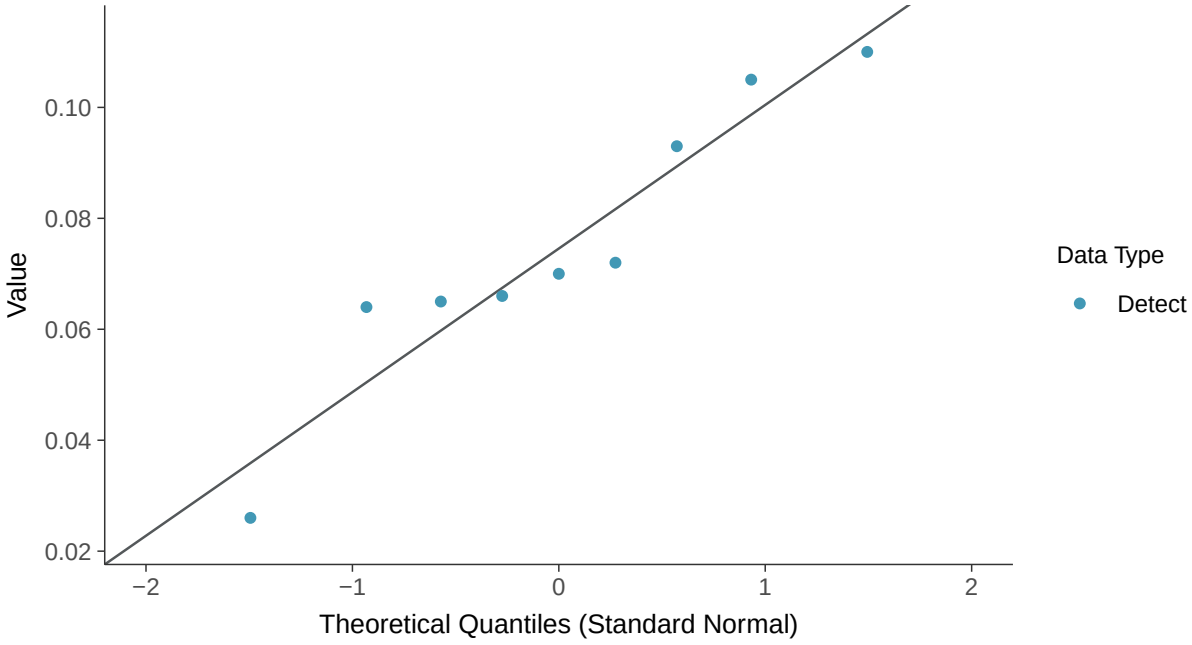
Boxplot by Season

Lithium, MW-18A (mg/l)



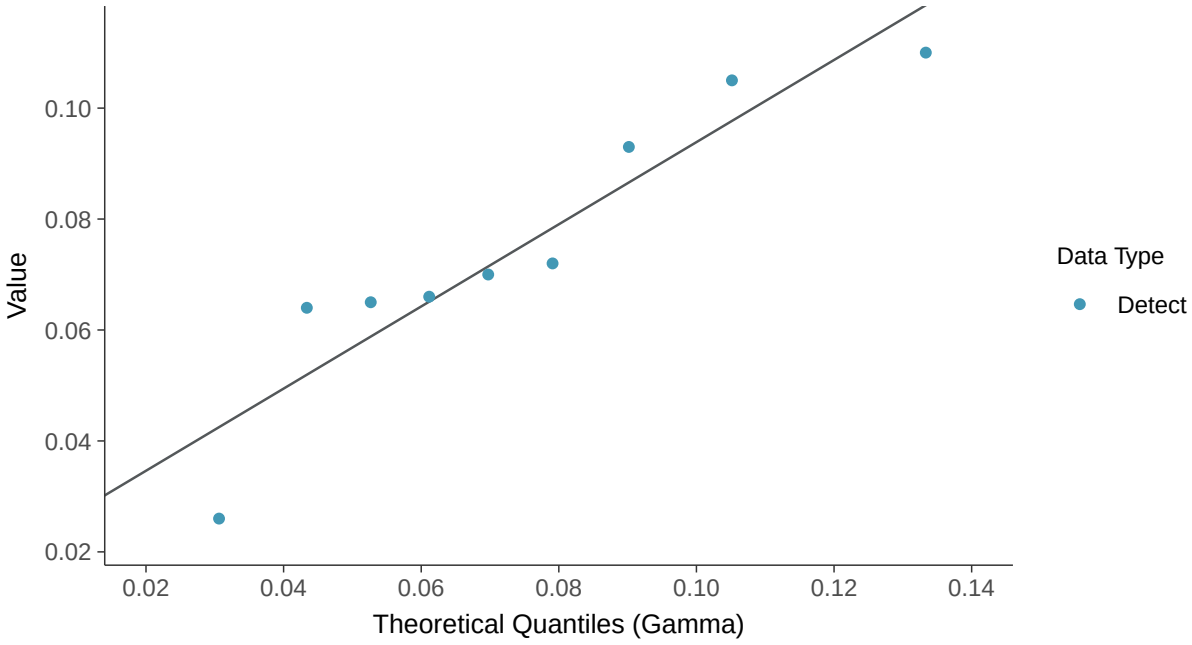
Normal Q-Q plot

Lithium, MW-18A (mg/l)



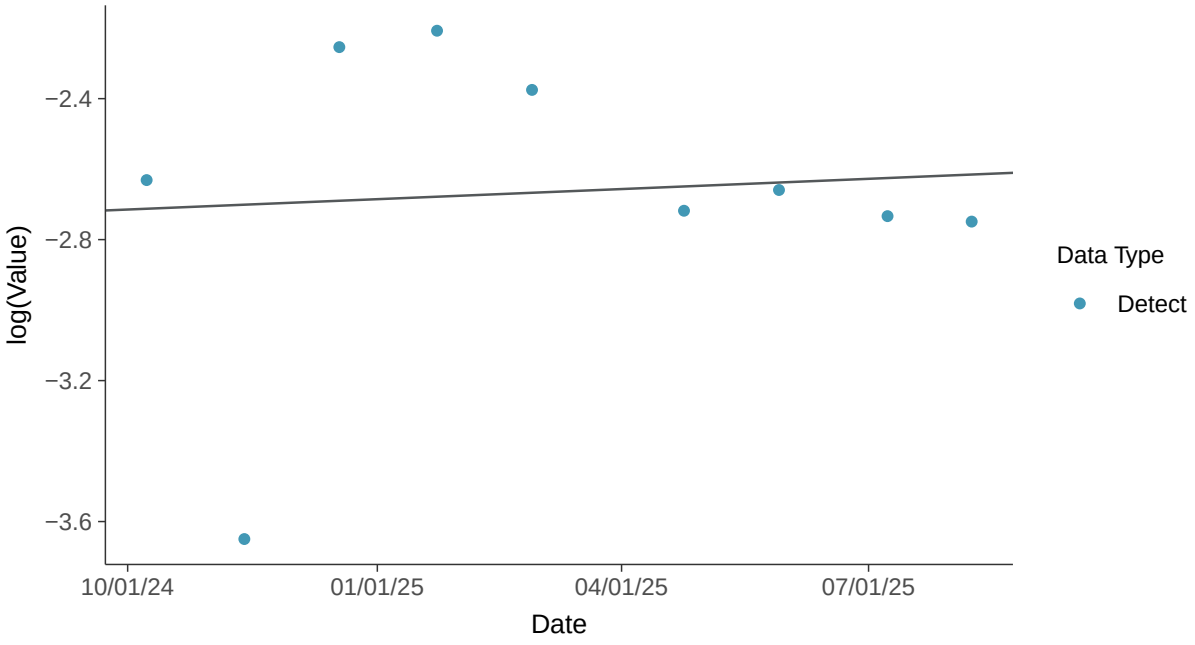
Gamma Q-Q plot

Lithium, MW-18A (mg/l)



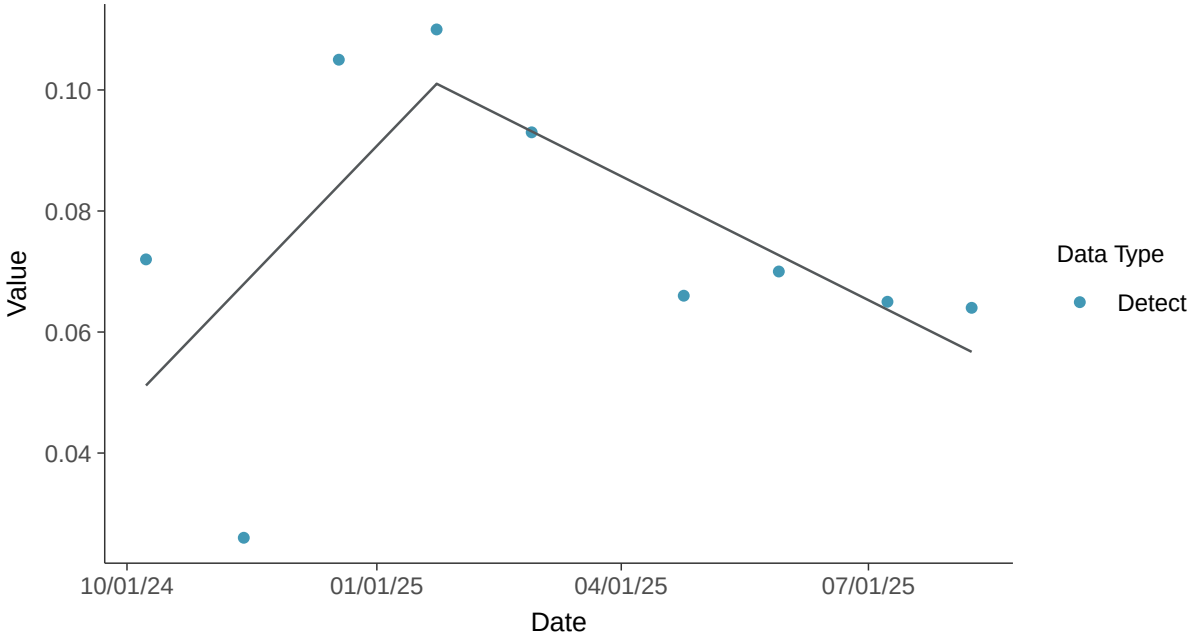
Trend Regression: Lognormal MLE

Lithium, MW-18A (mg/l)



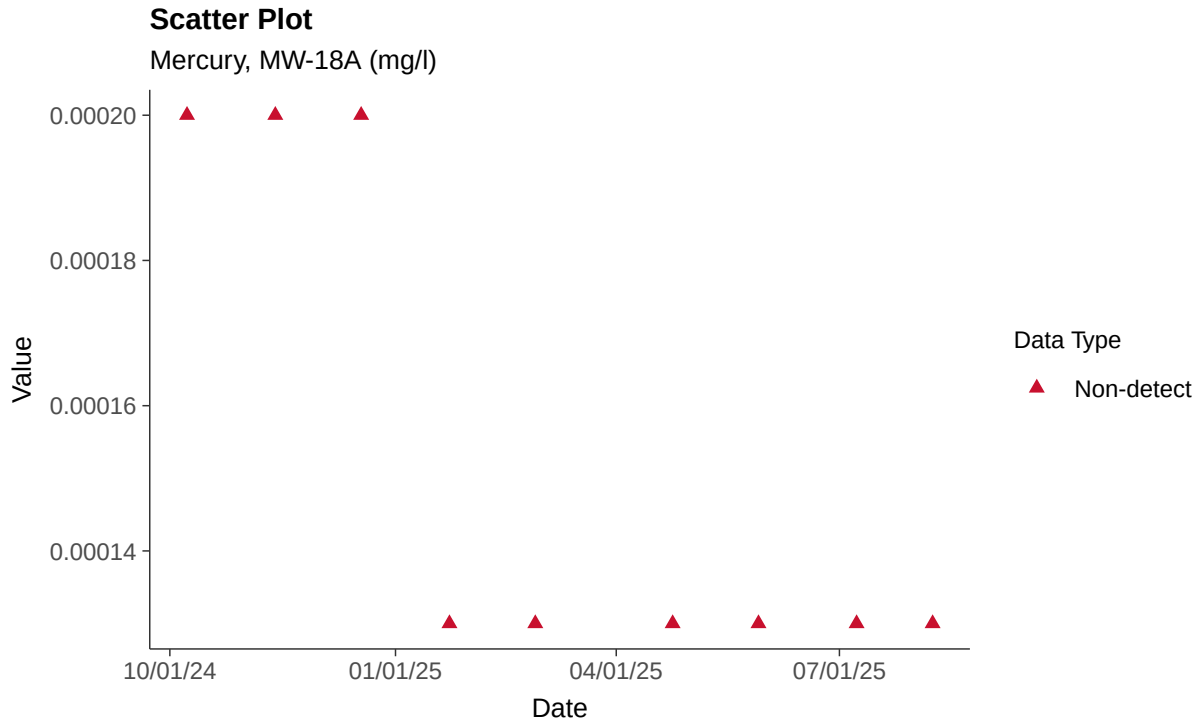
Trend Regression: Piecewise Linear-Linear

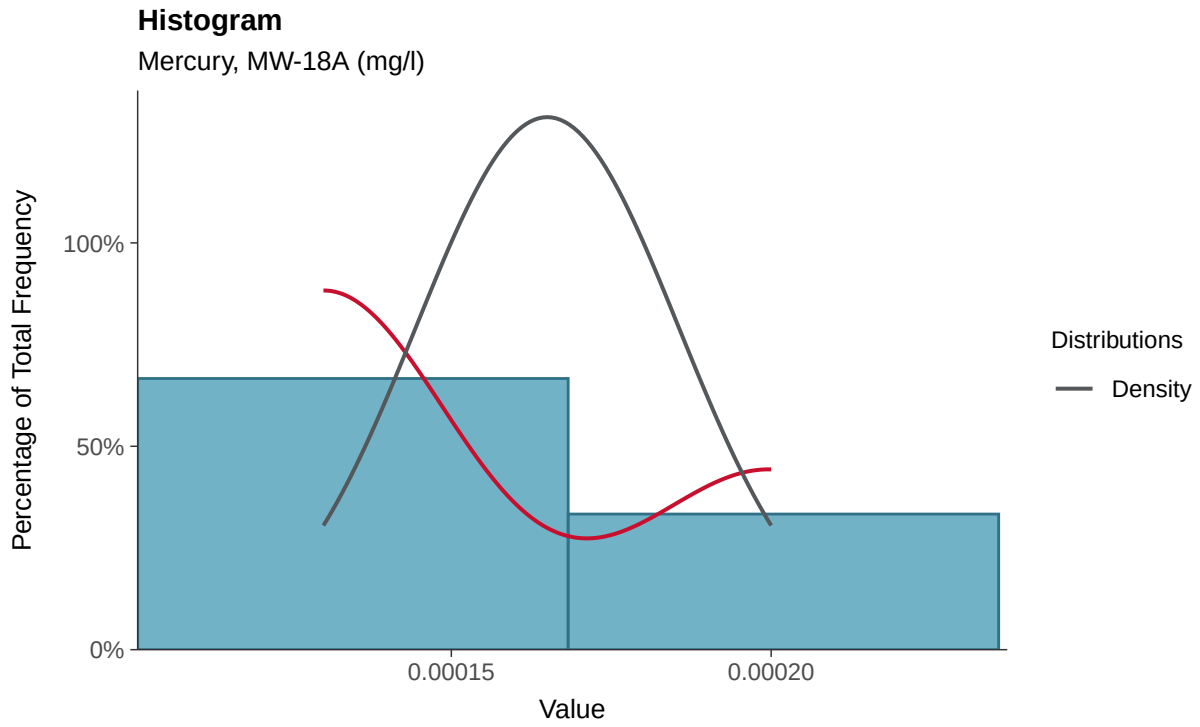
Lithium, MW-18A (mg/l)



Appendix IV: Mercury, MW-18A

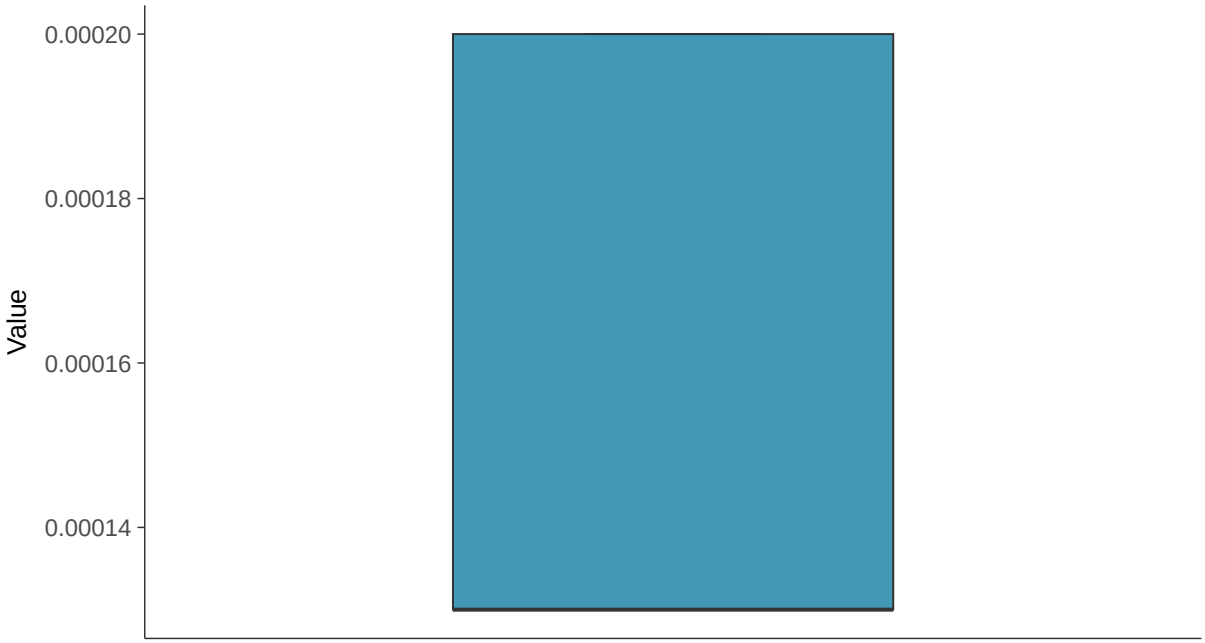
ID: 30_3_117





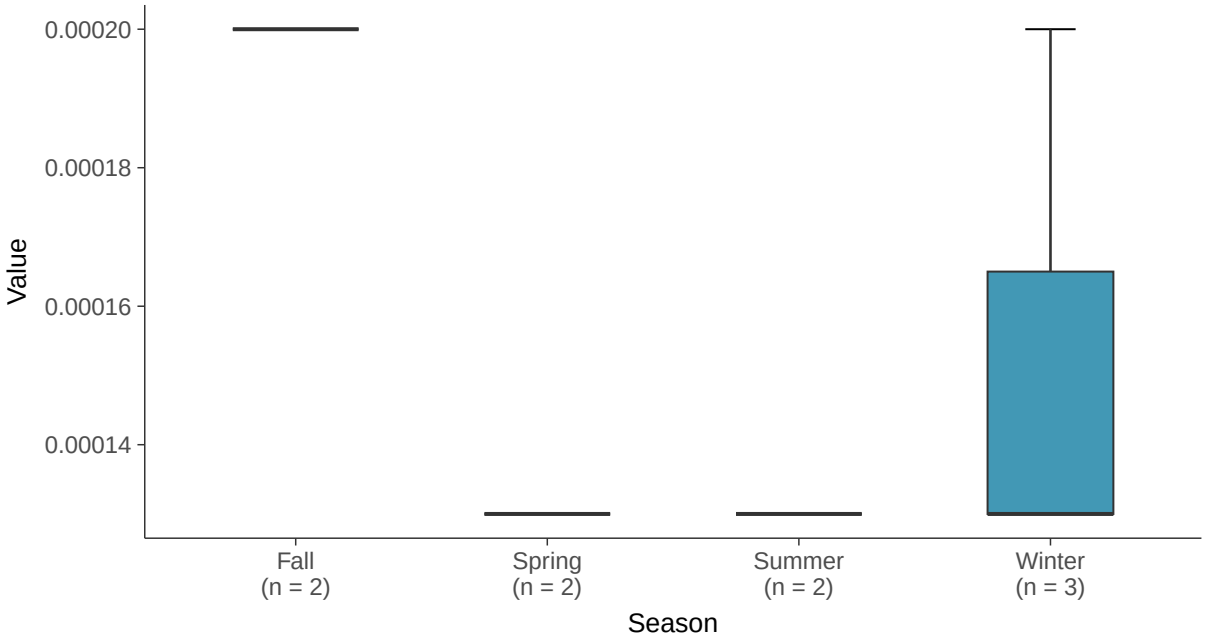
Boxplot

Mercury, MW-18A (mg/l)



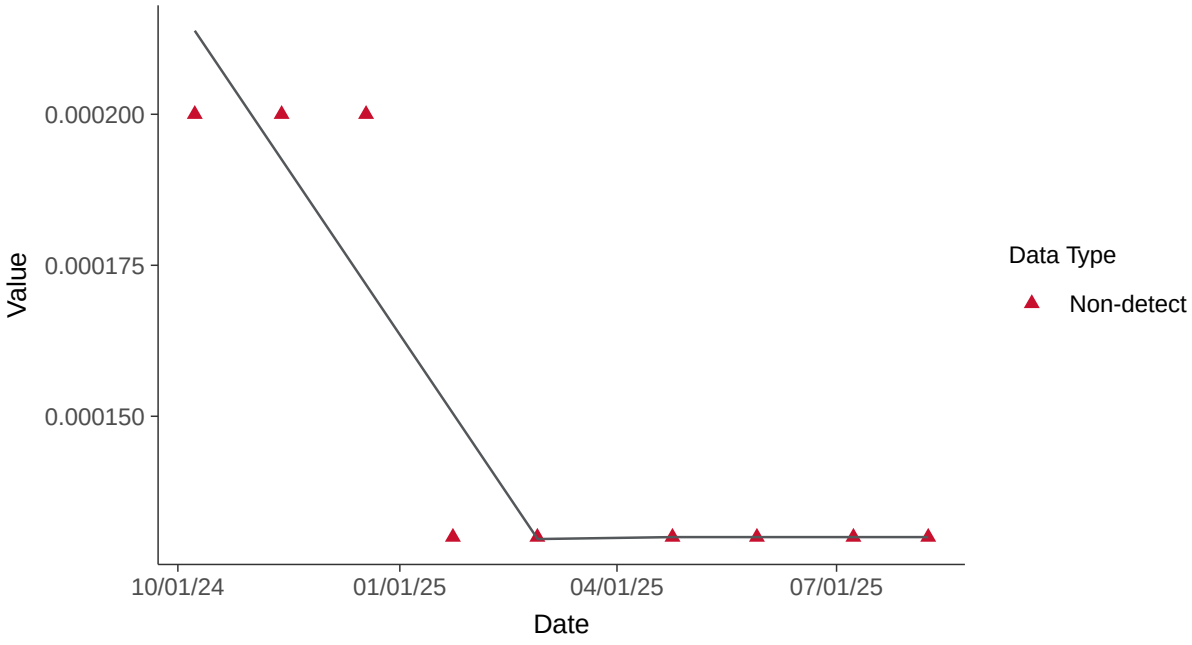
Boxplot by Season

Mercury, MW-18A (mg/l)



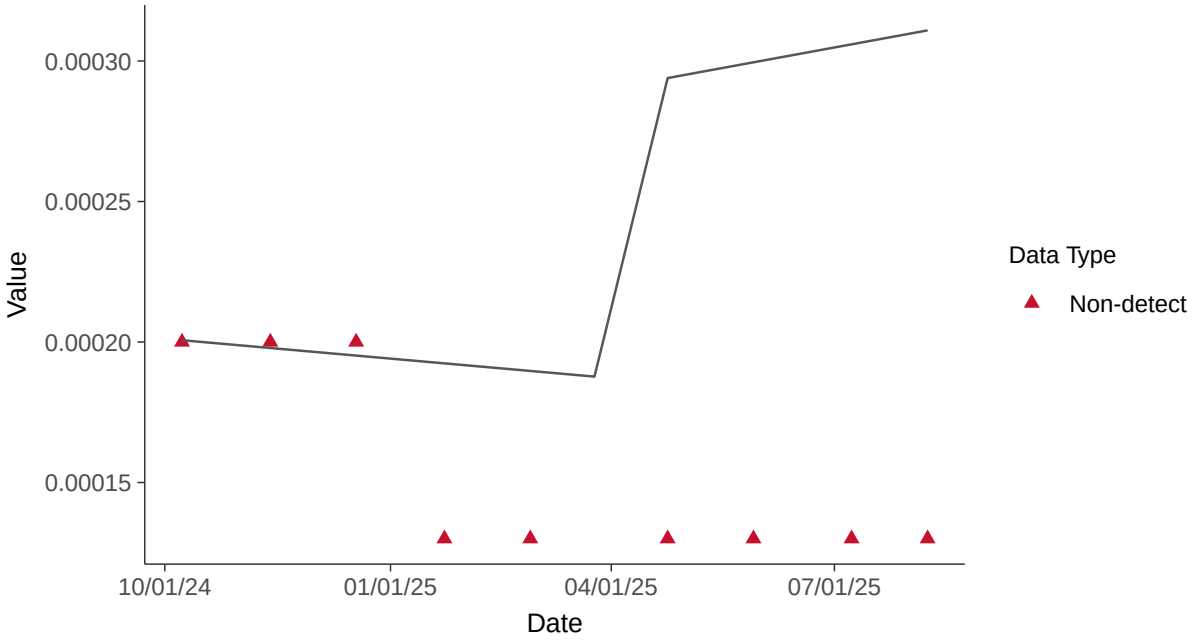
Trend Regression: Piecewise Linear-Linear

Mercury, MW-18A (mg/l)



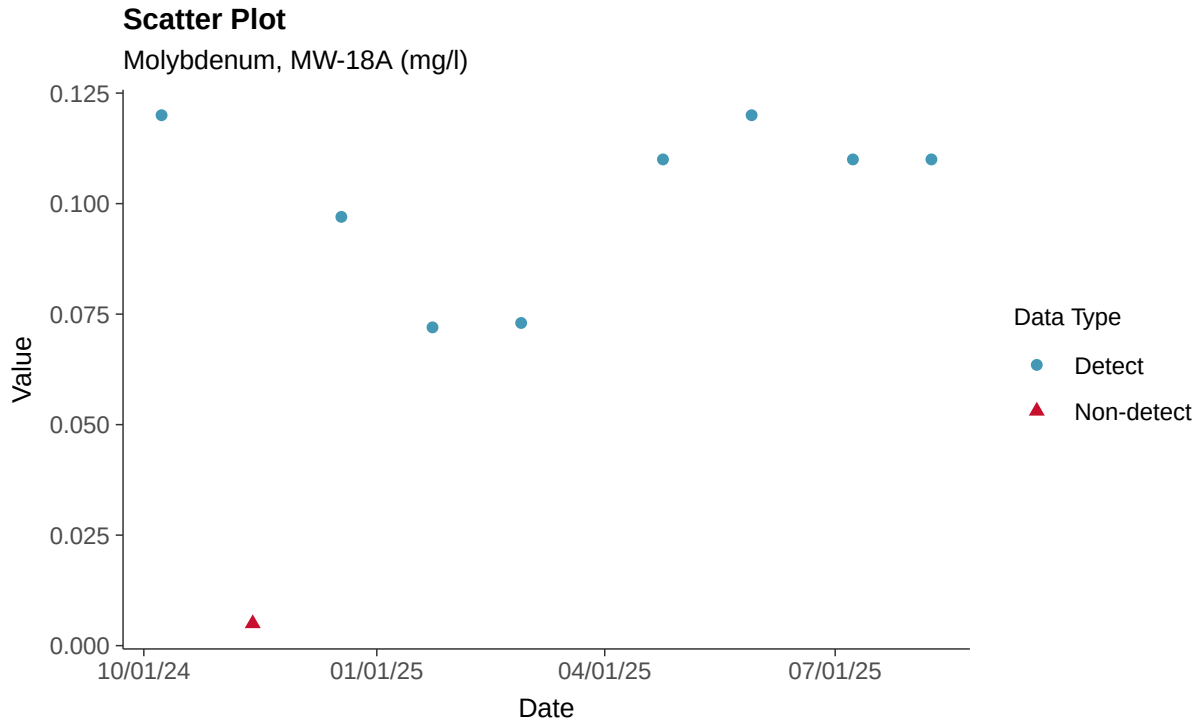
Trend Regression: Piecewise Linear-Linear-Linear

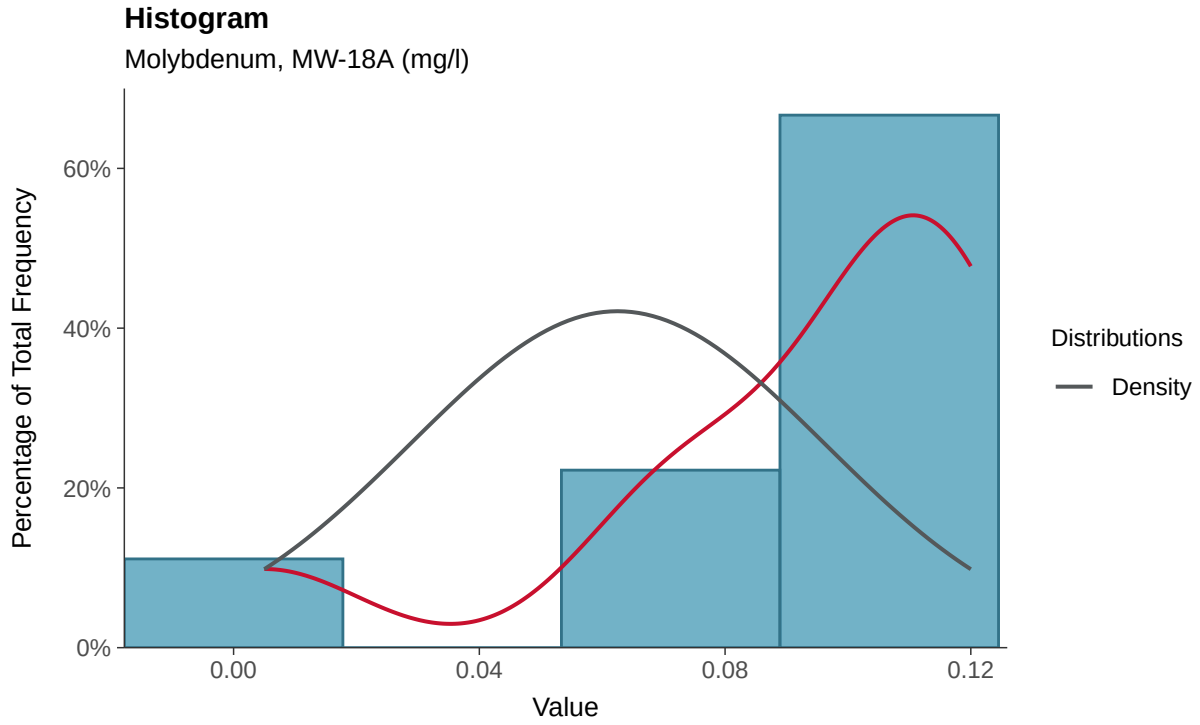
Mercury, MW-18A (mg/l)



Appendix IV: Molybdenum, MW-18A

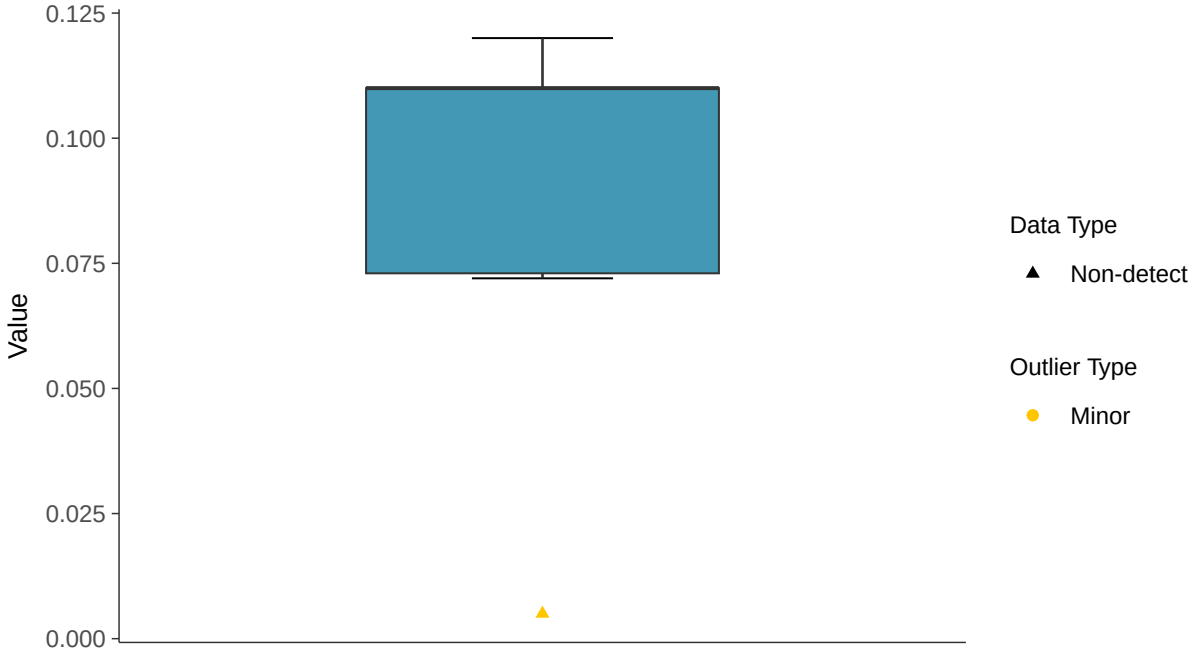
ID: 30_3_118





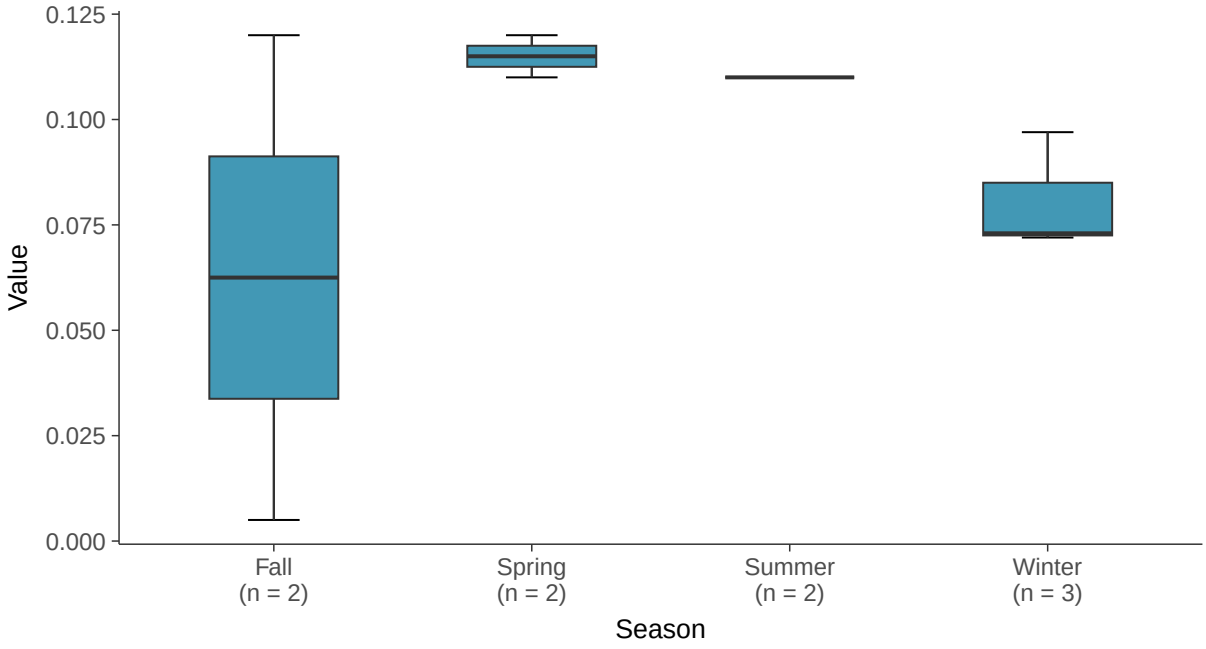
Boxplot

Molybdenum, MW-18A (mg/l)



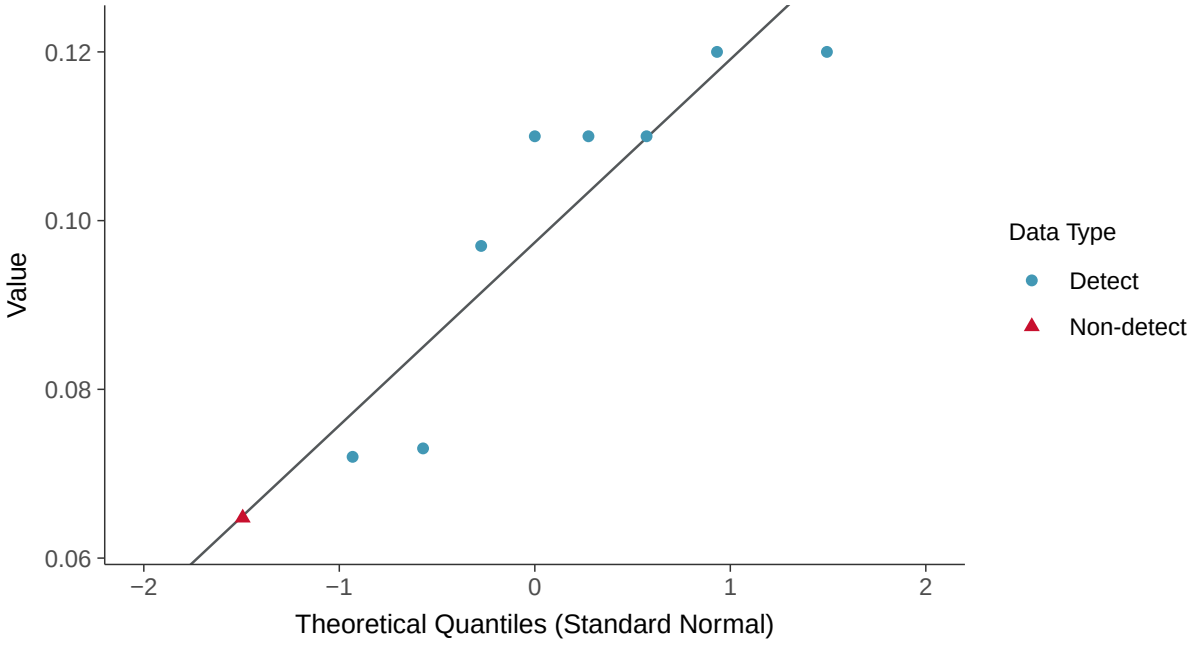
Boxplot by Season

Molybdenum, MW-18A (mg/l)



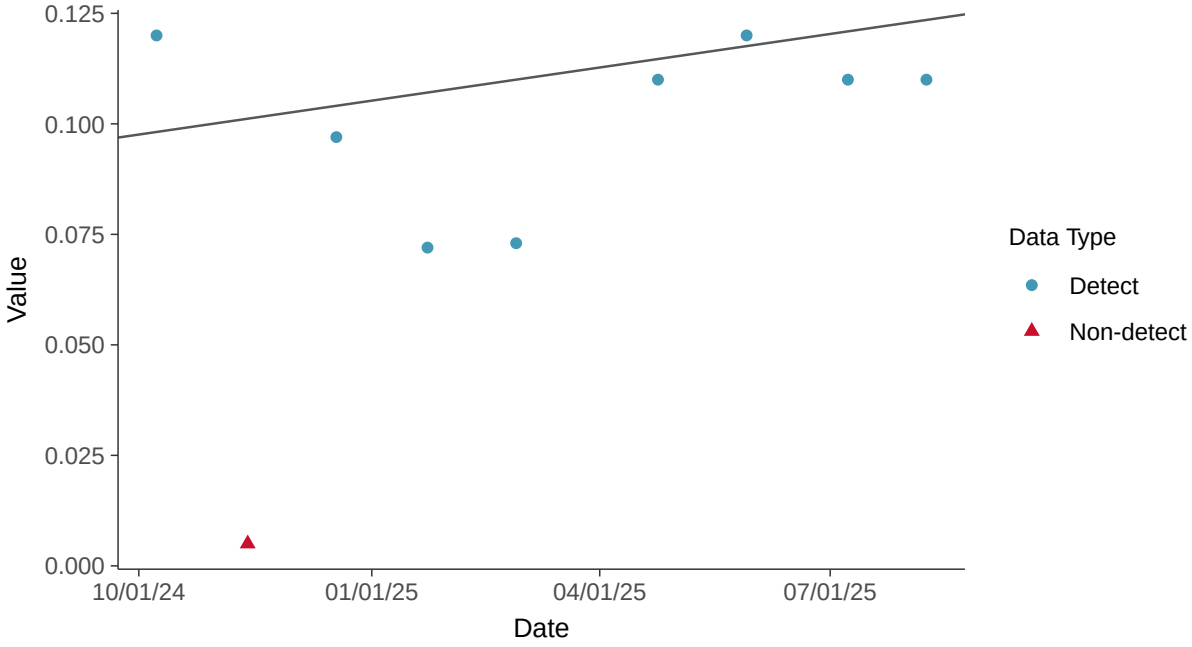
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-18A (mg/l)



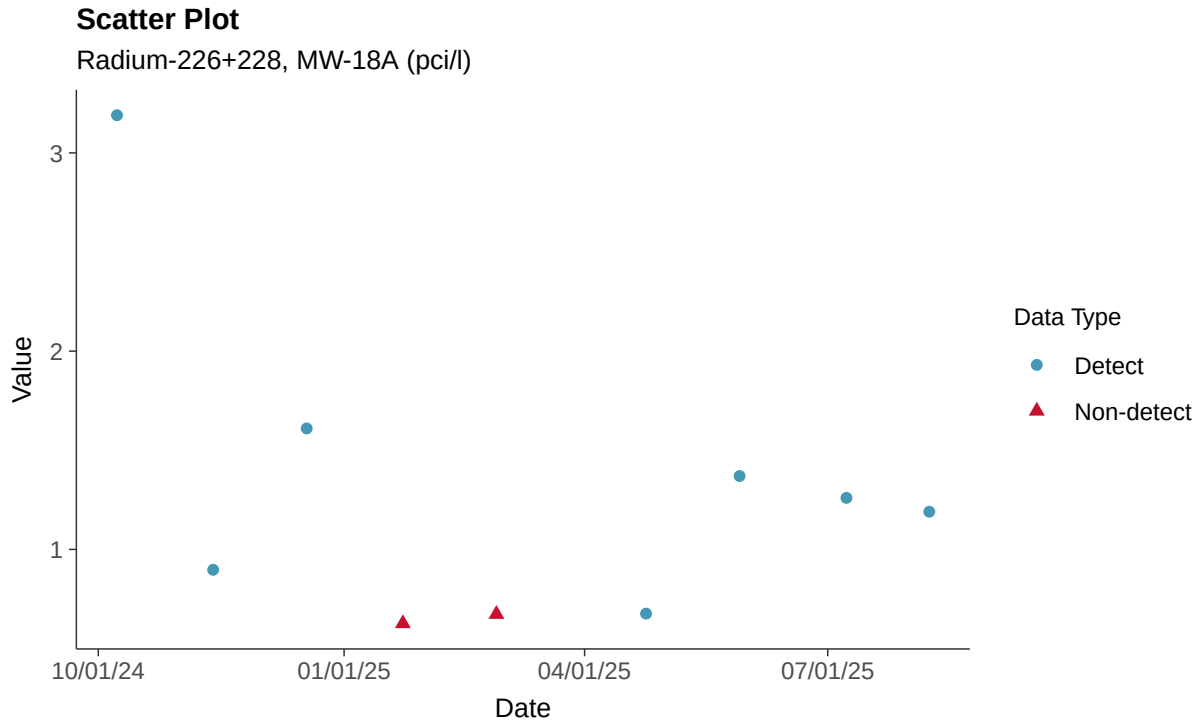
Trend Regression: Mann-Kendall/Theil-Sen Estimate

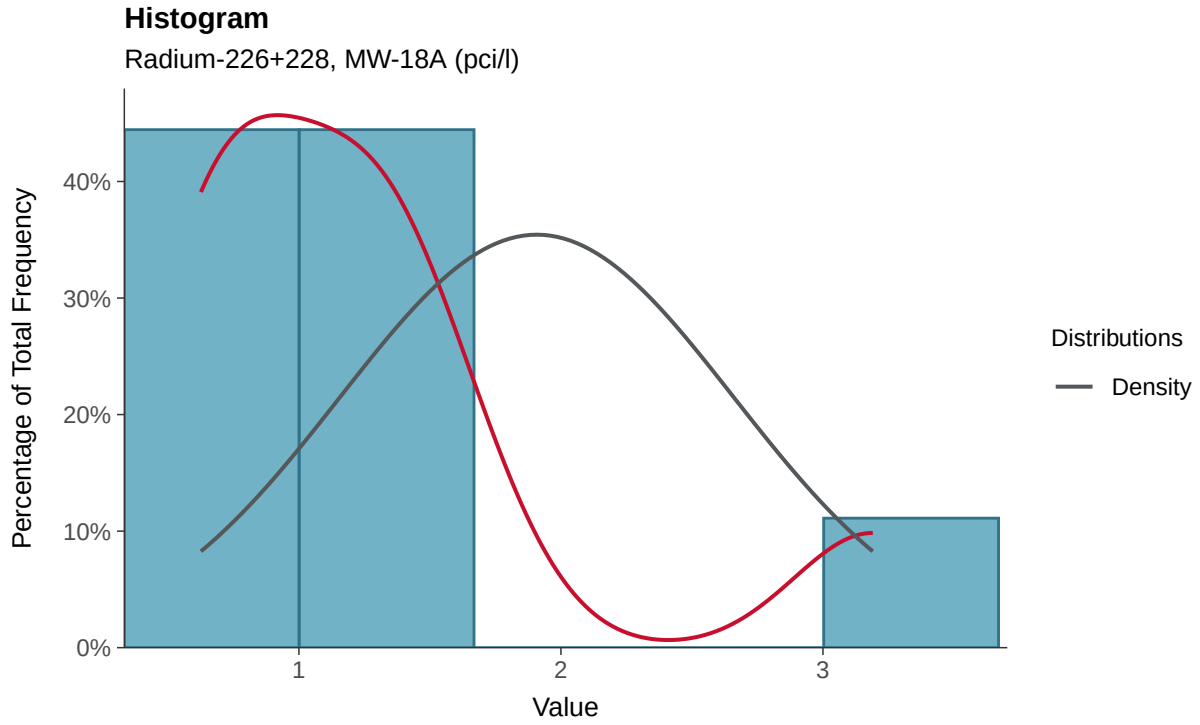
Molybdenum, MW-18A (mg/l)



Appendix IV: Radium-226+228, MW-18A

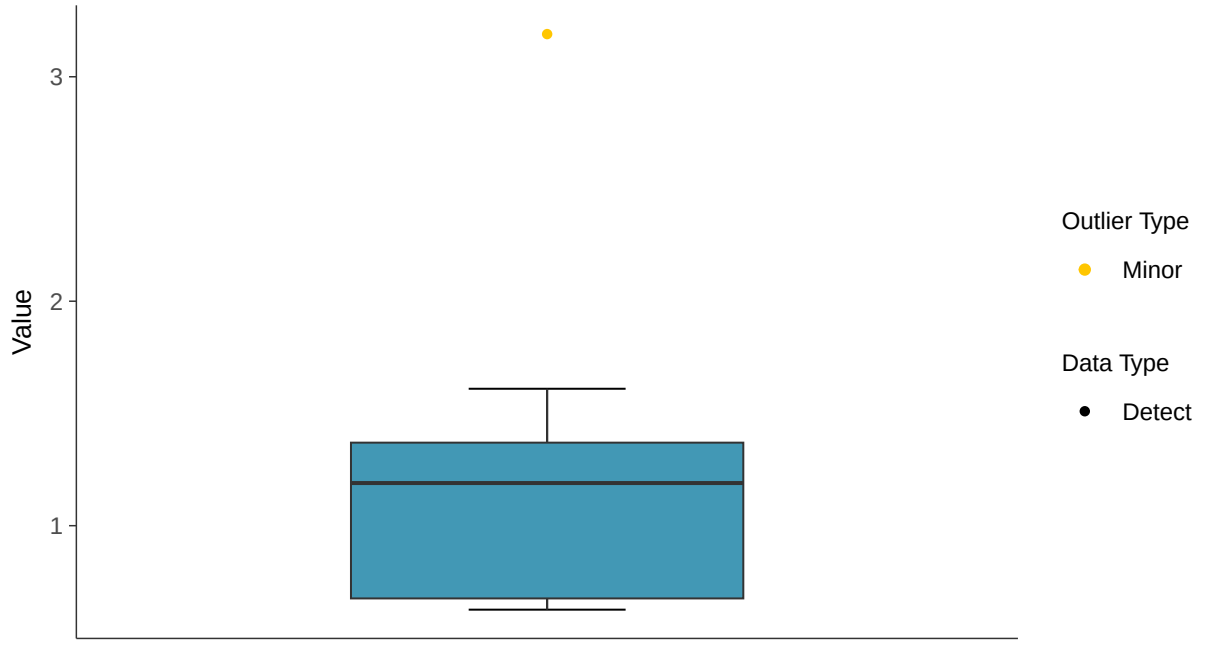
ID: 30_3_121





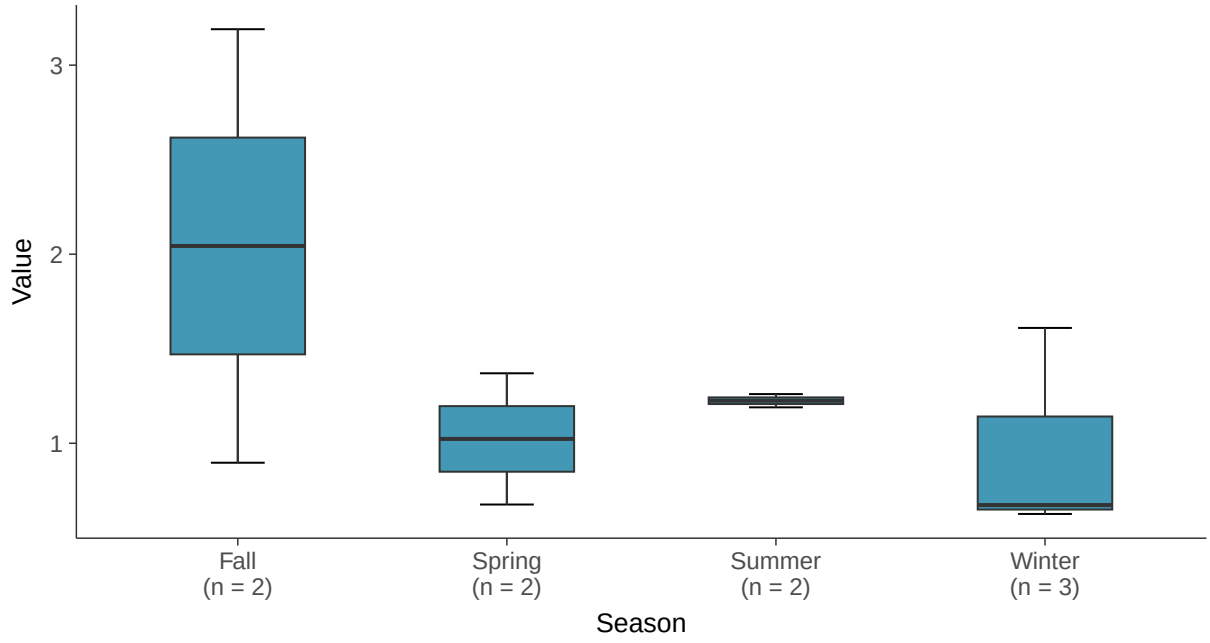
Boxplot

Radium-226+228, MW-18A (pci/l)



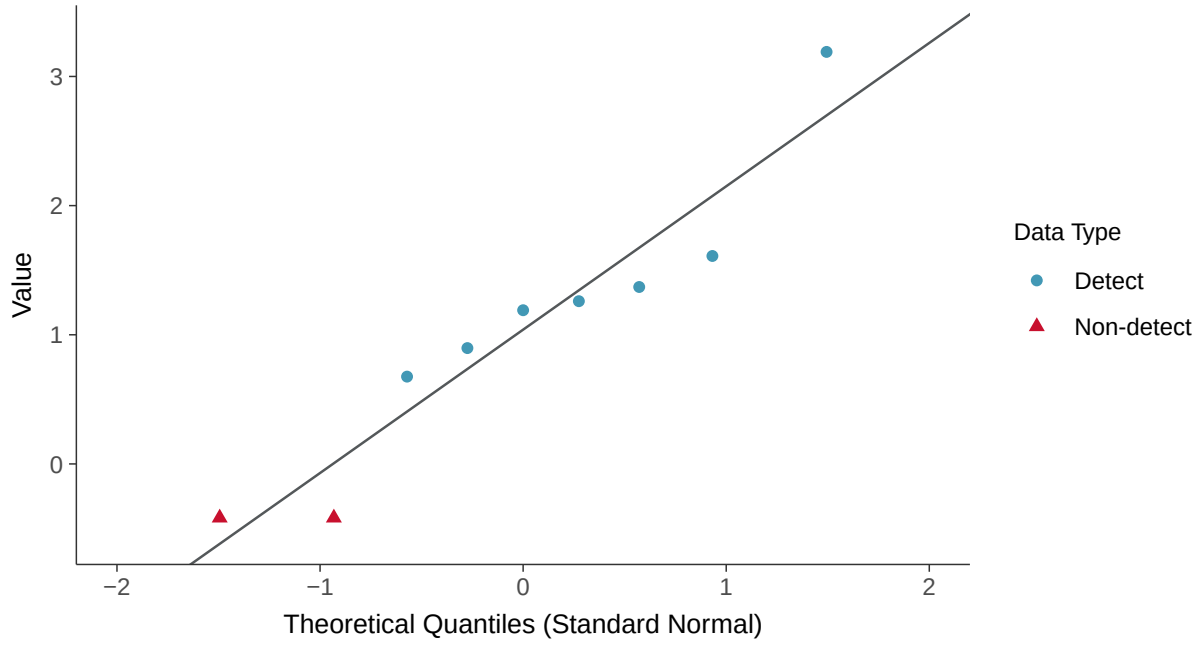
Boxplot by Season

Radium-226+228, MW-18A (pci/l)



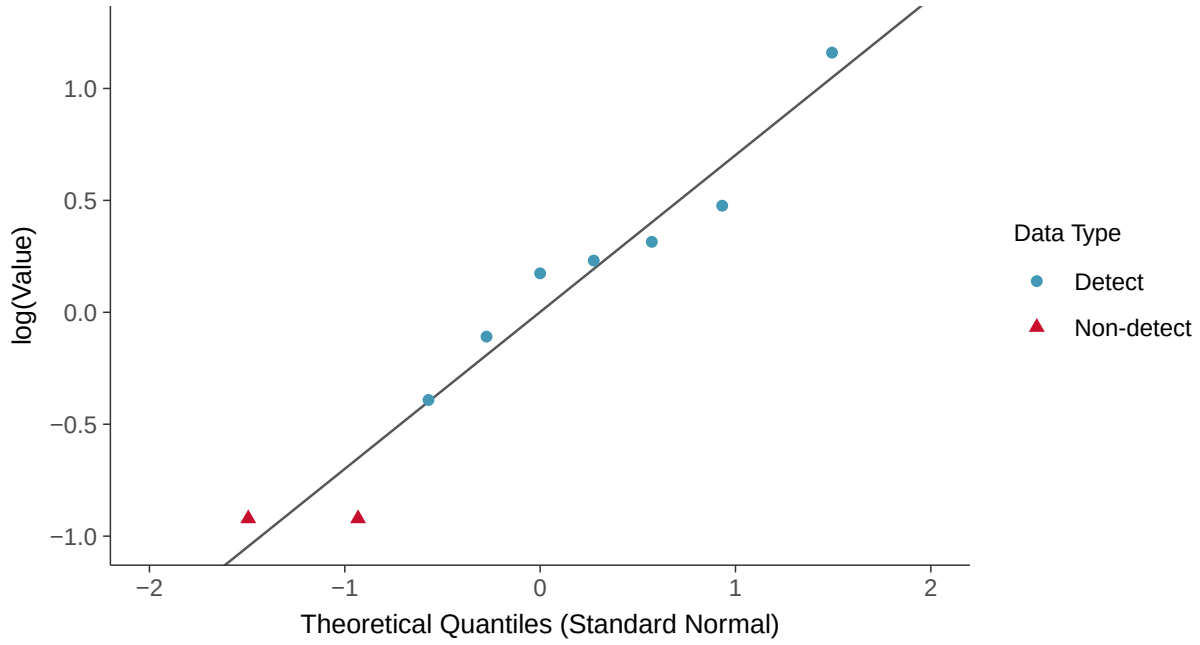
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-18A (pci/l)



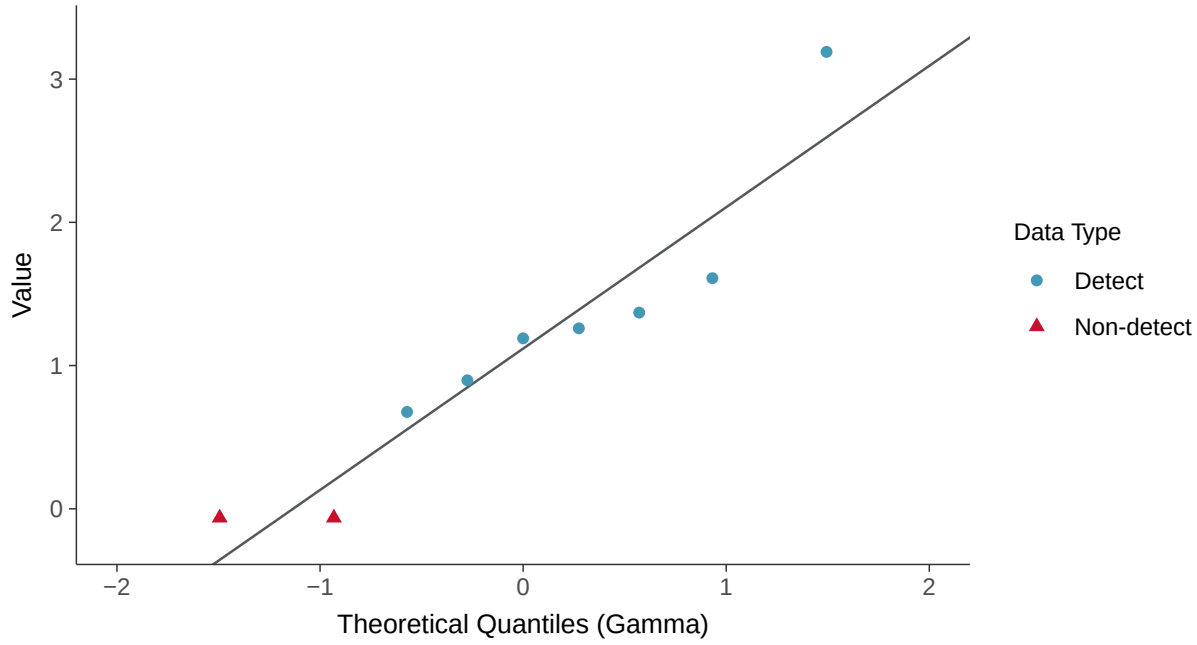
Lognormal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-18A (pci/l)



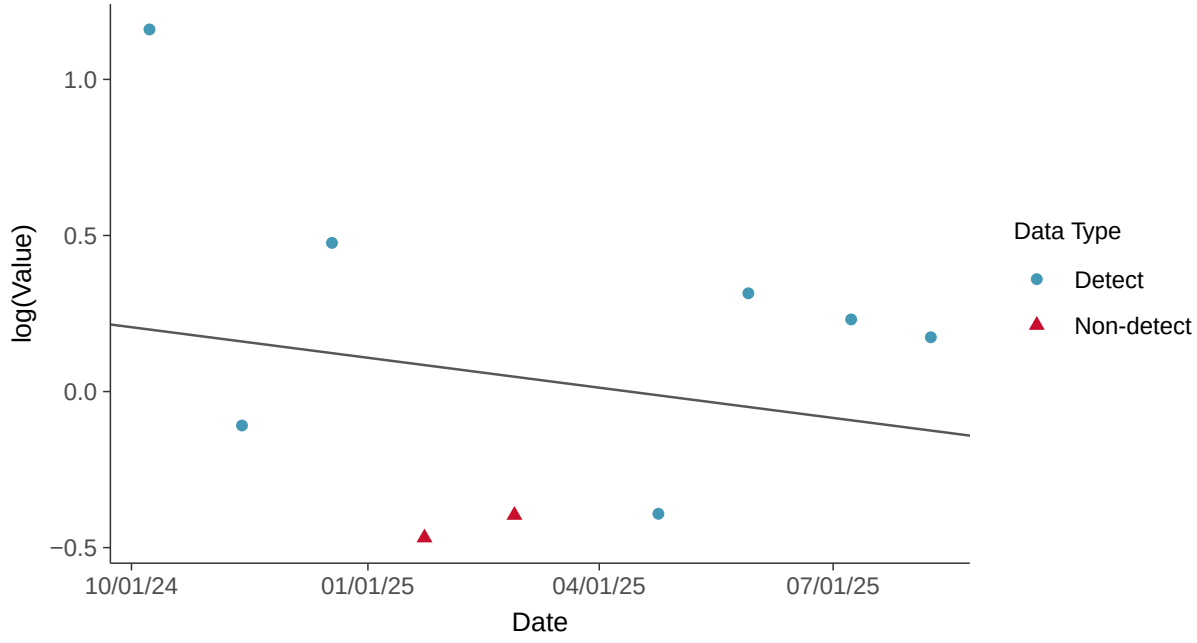
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-18A (pci/l)



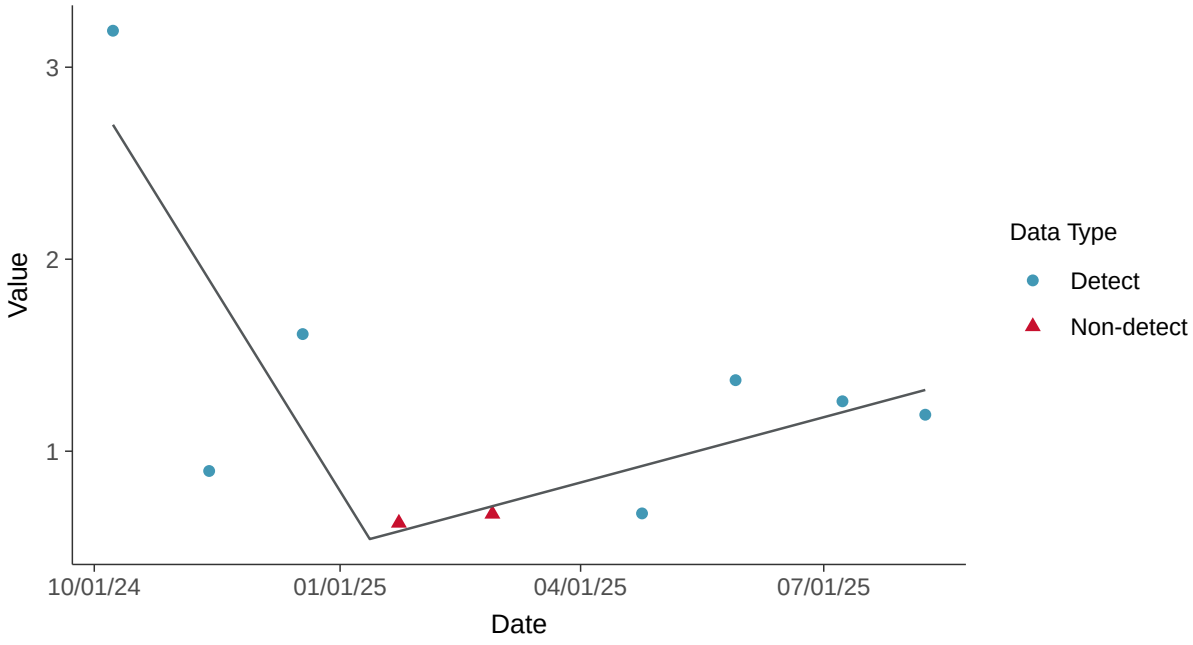
Trend Regression: Lognormal MLE

Radium-226+228, MW-18A (pci/l)



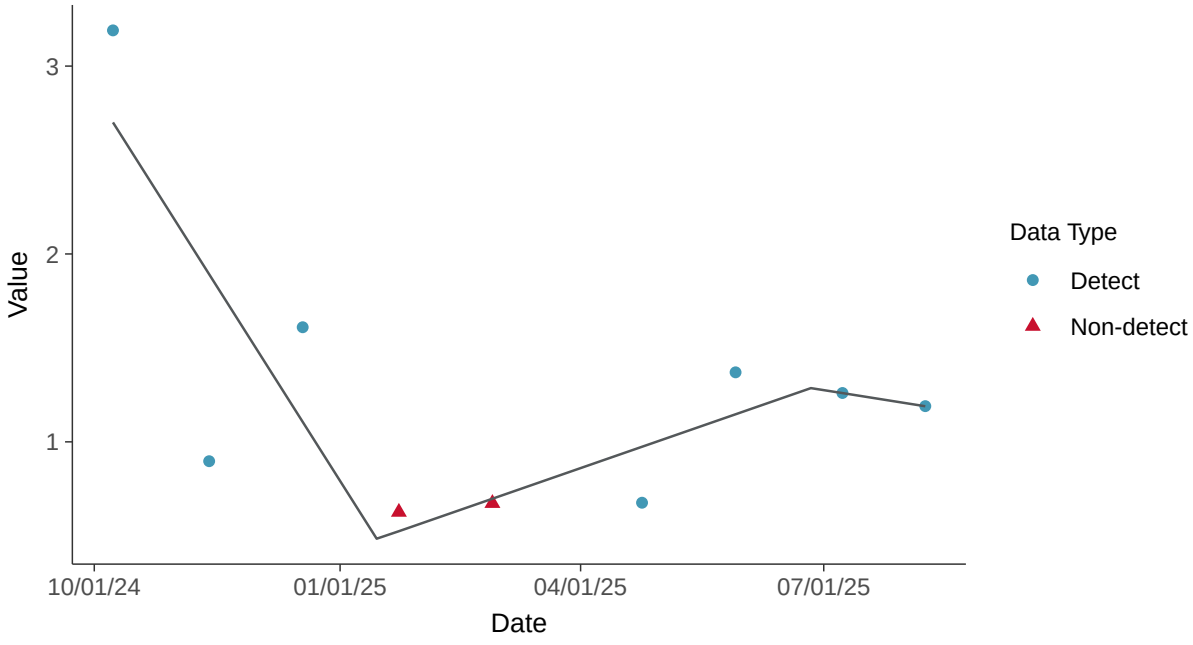
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-18A (pci/l)



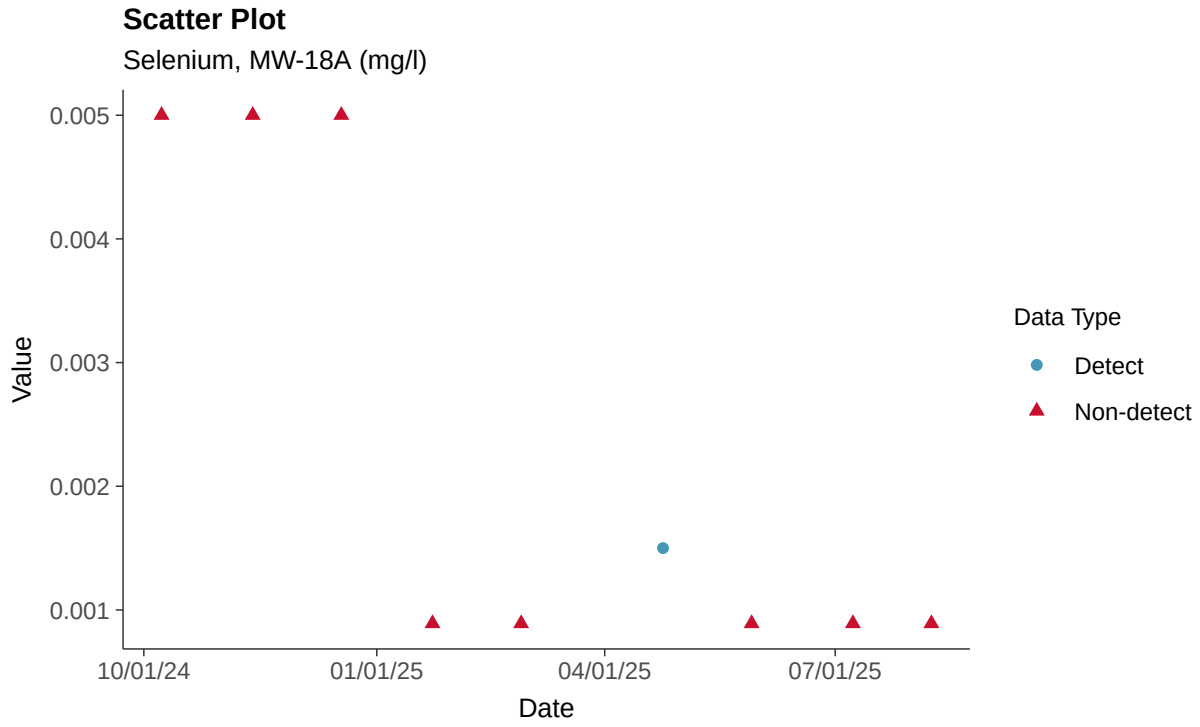
Trend Regression: Piecewise Linear-Linear-Linear

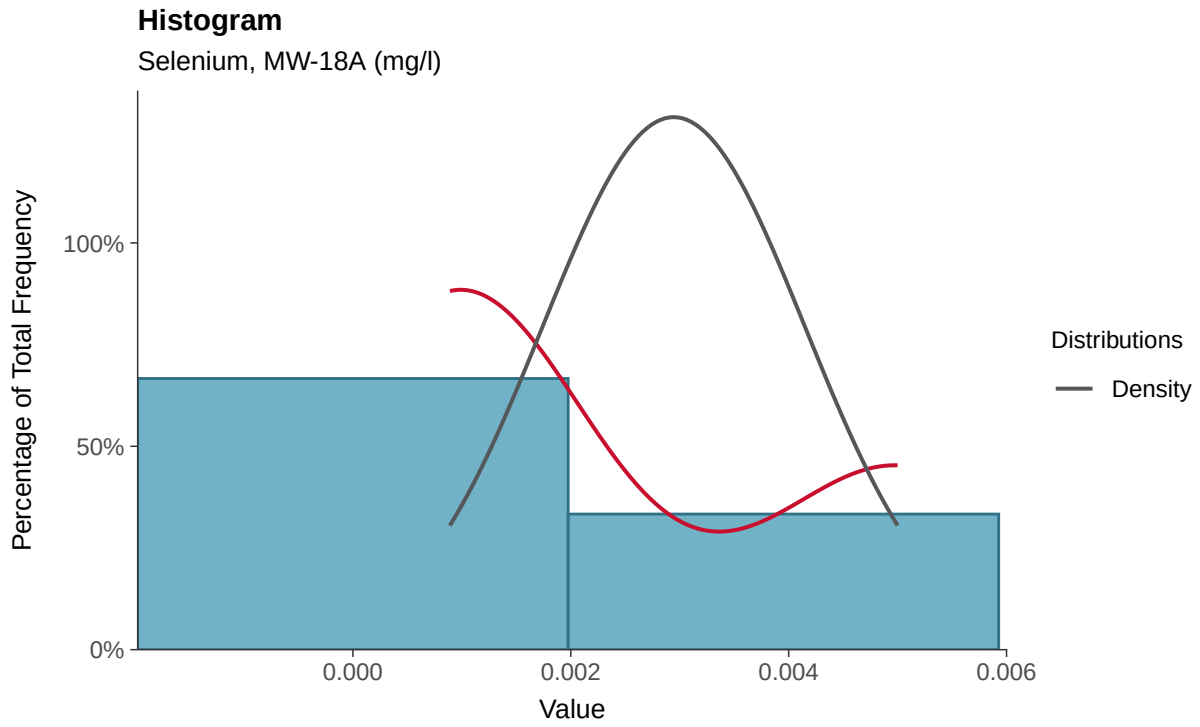
Radium-226+228, MW-18A (pci/l)



Appendix IV: Selenium, MW-18A

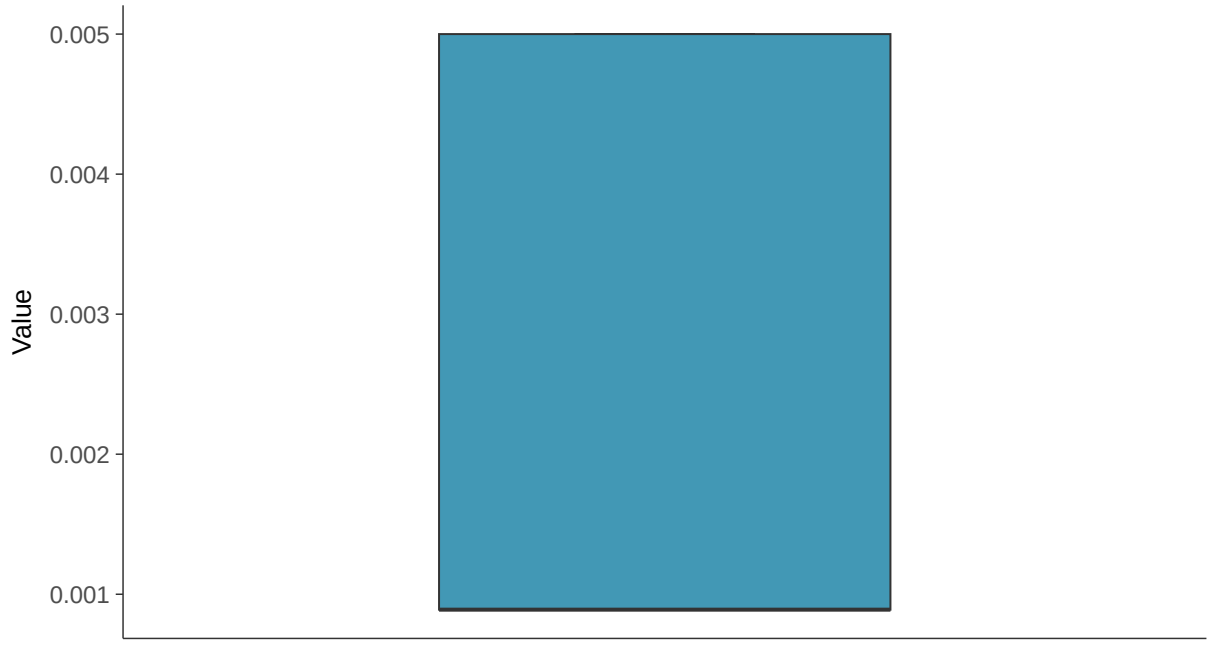
ID: 30_3_122





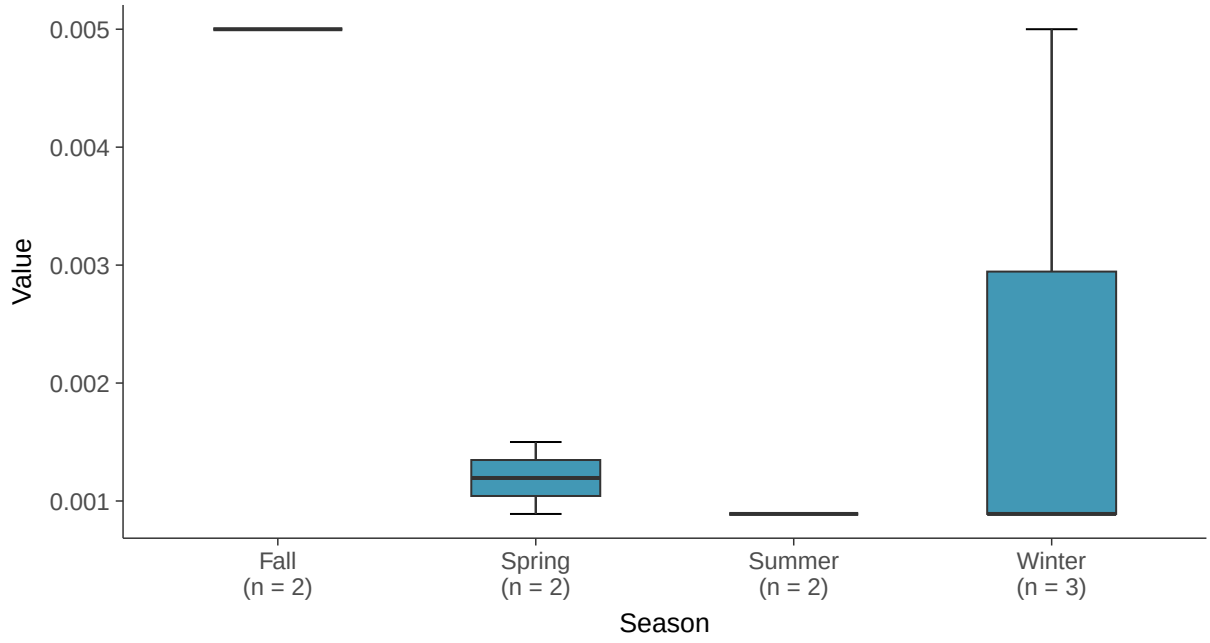
Boxplot

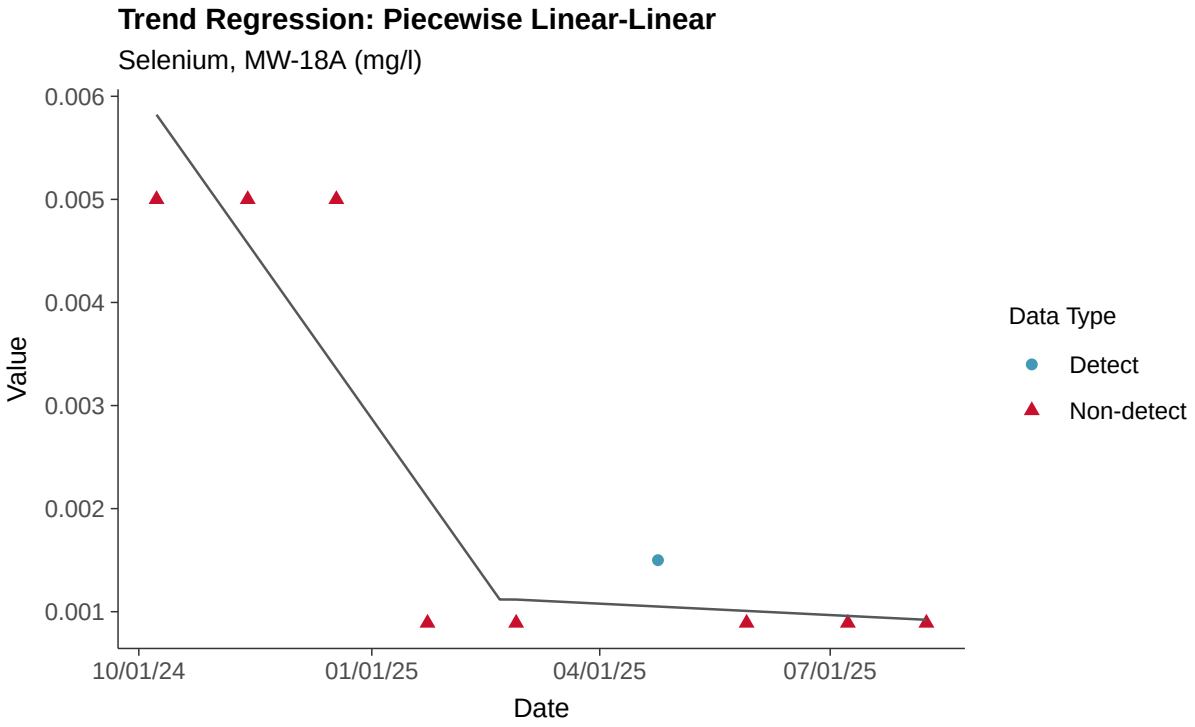
Selenium, MW-18A (mg/l)



Boxplot by Season

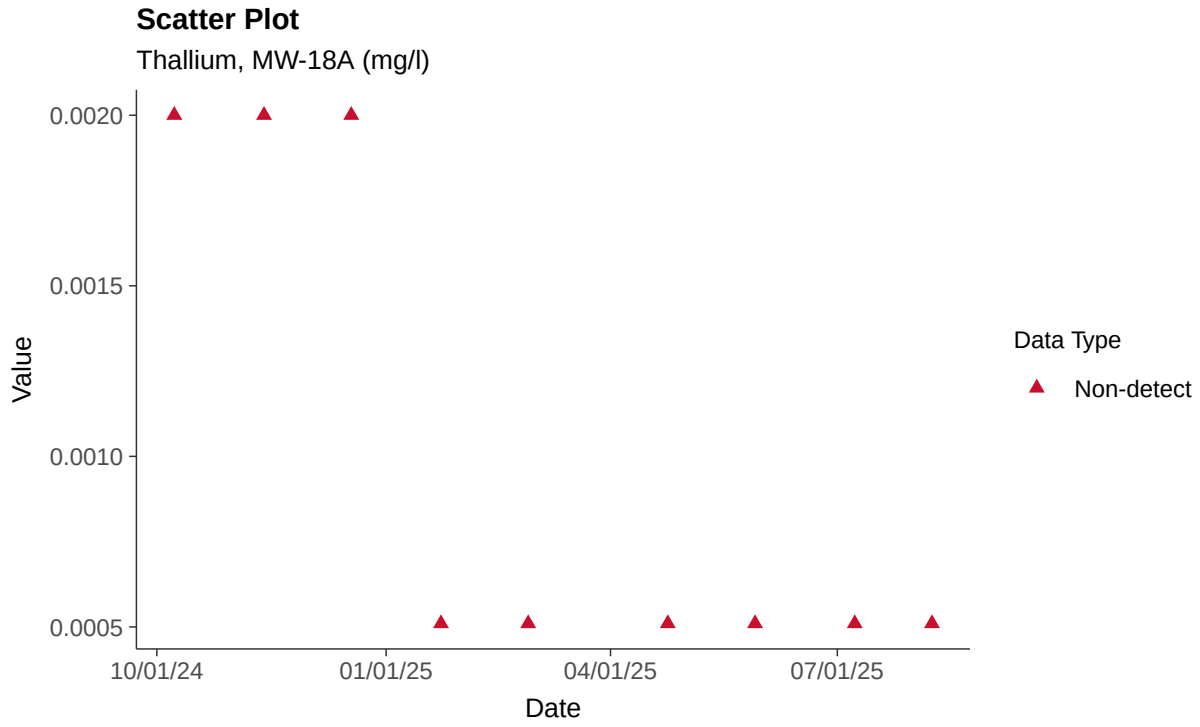
Selenium, MW-18A (mg/l)

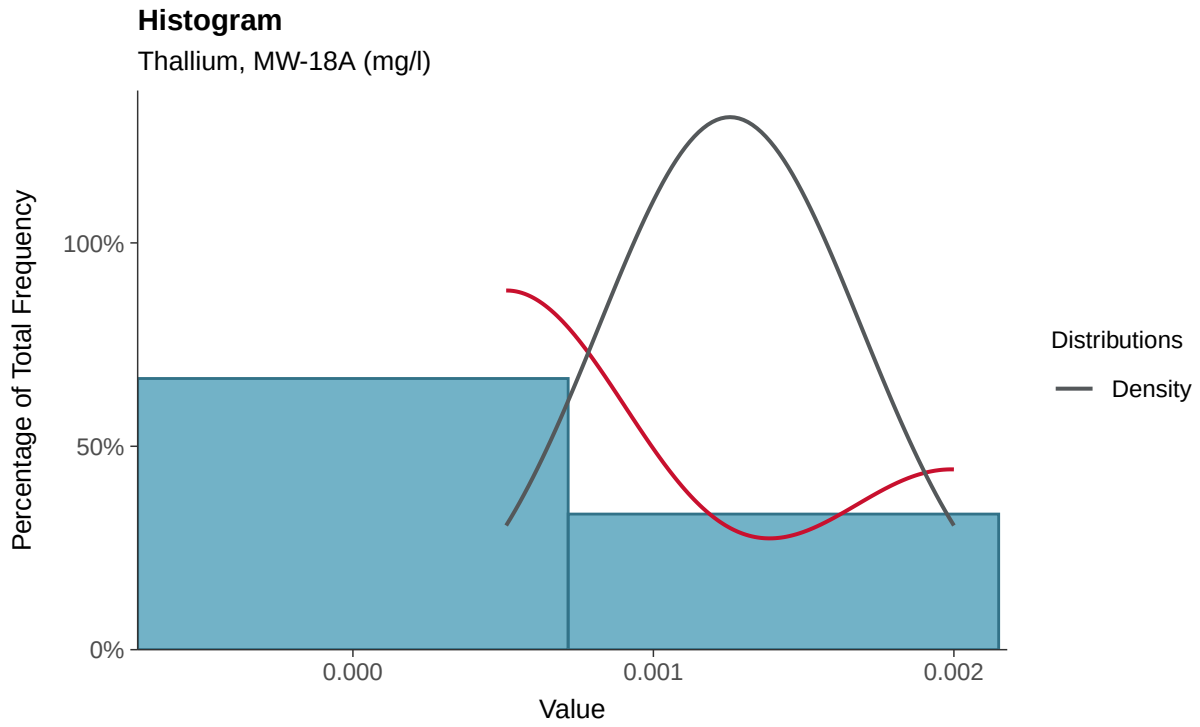



Trend Regression: Piecewise Linear-Linear
Selenium, MW-18A (mg/l)
0.006
0.005
0.004
0.003
0.002
0.001
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Thallium, MW-18A

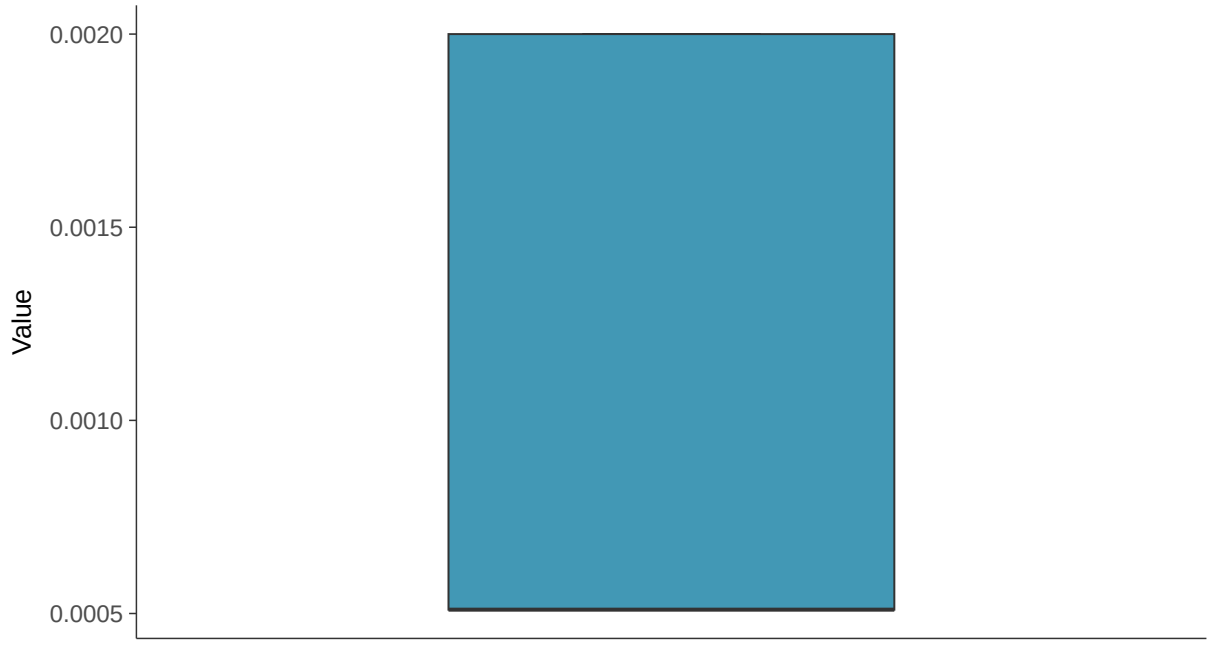
ID: 30_3_125





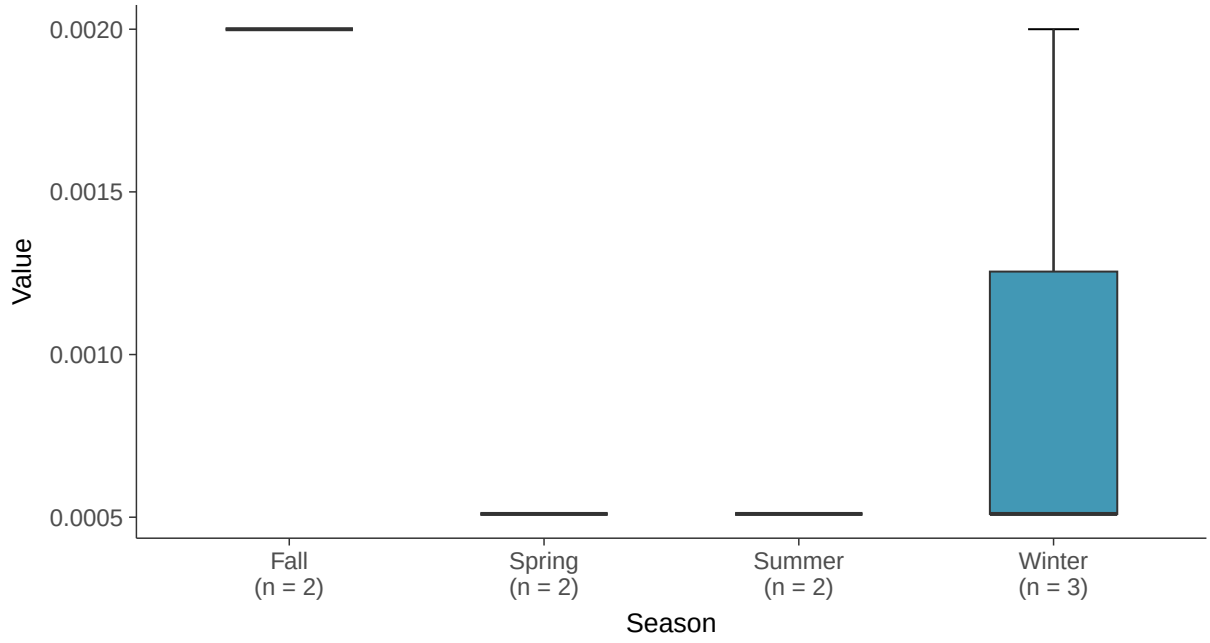
Boxplot

Thallium, MW-18A (mg/l)



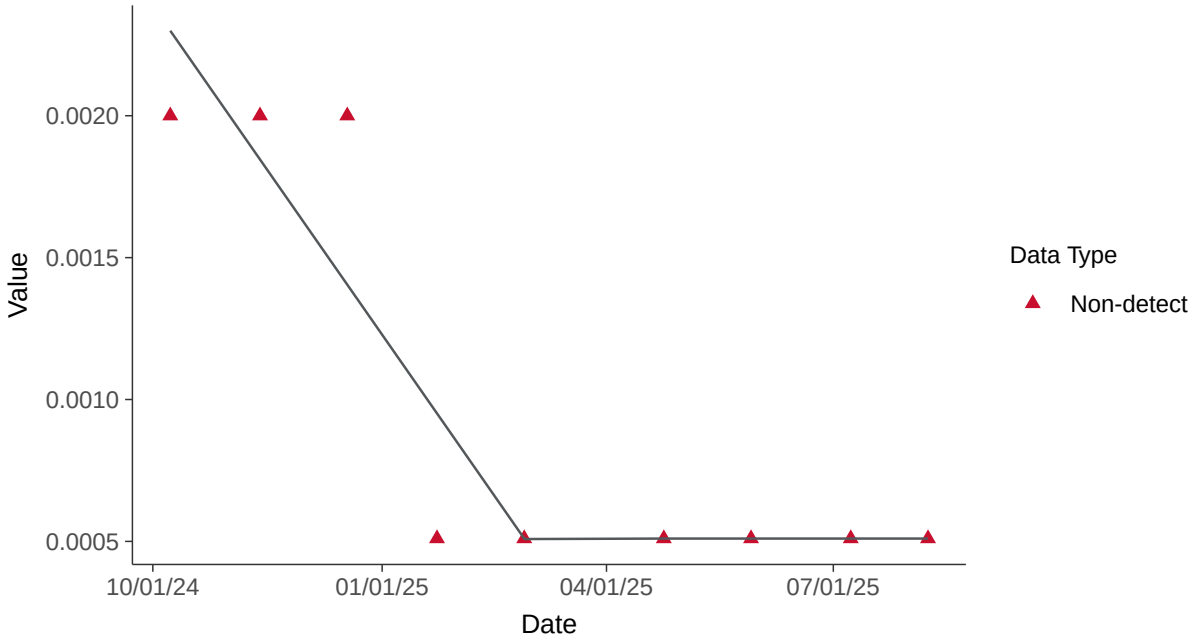
Boxplot by Season

Thallium, MW-18A (mg/l)



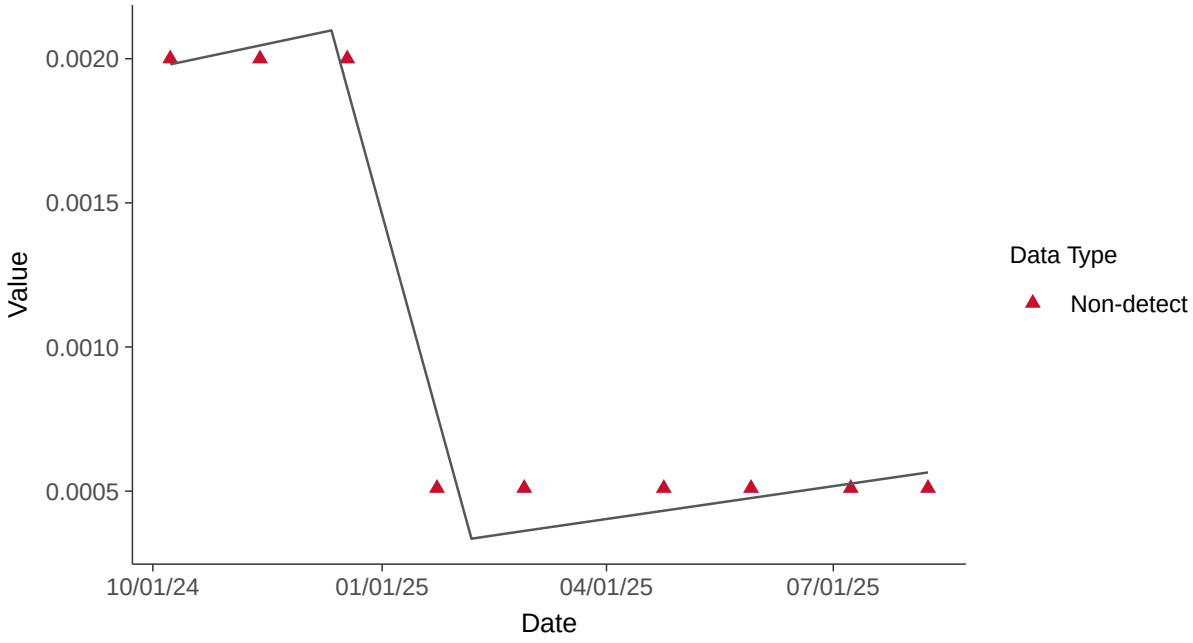
Trend Regression: Piecewise Linear-Linear

Thallium, MW-18A (mg/l)



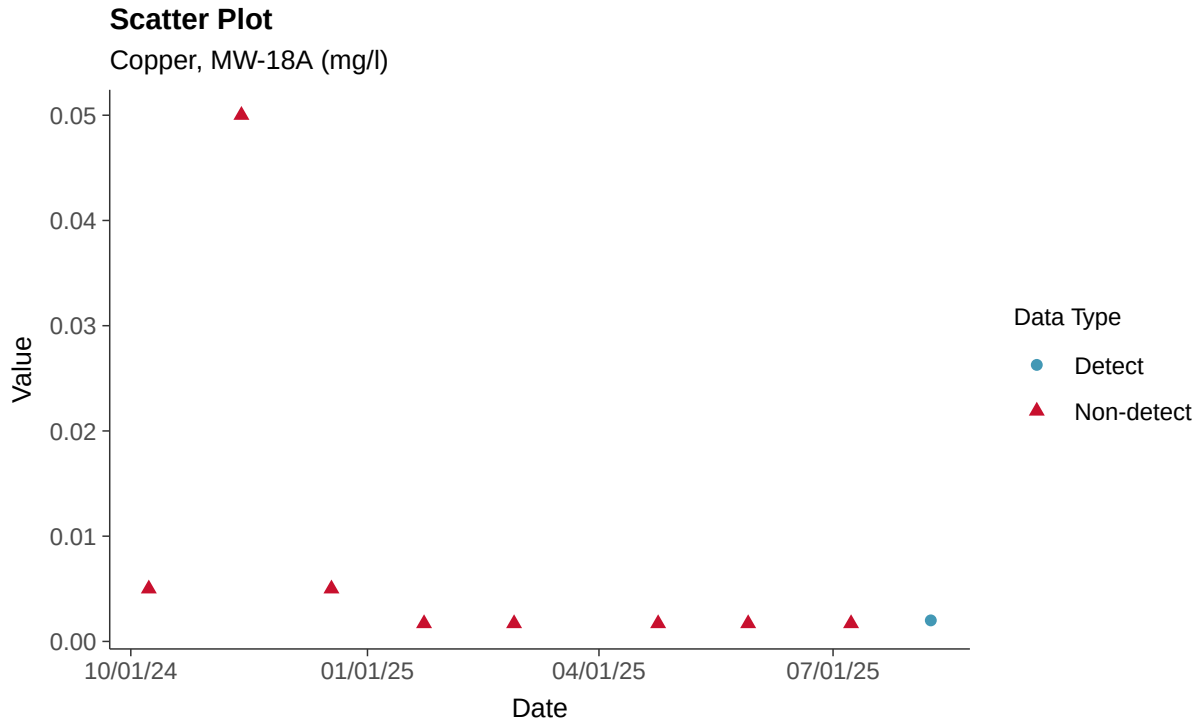
Trend Regression: Piecewise Linear-Linear-Linear

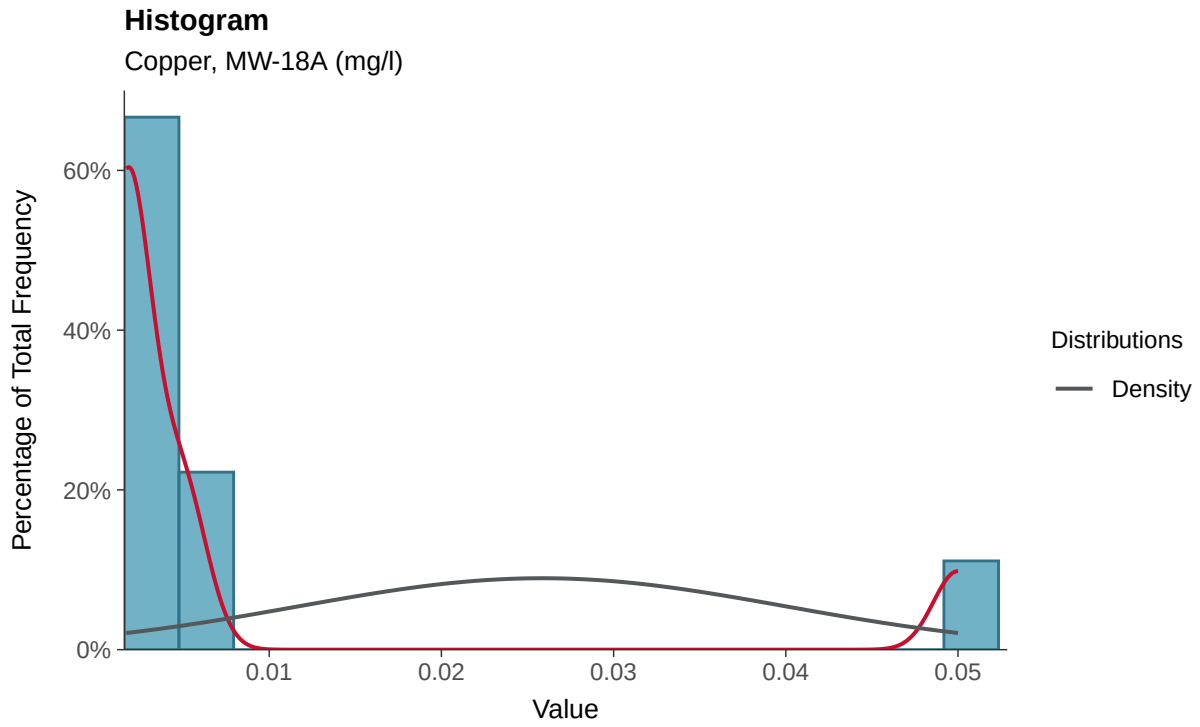
Thallium, MW-18A (mg/l)



Part 115: Copper, MW-18A

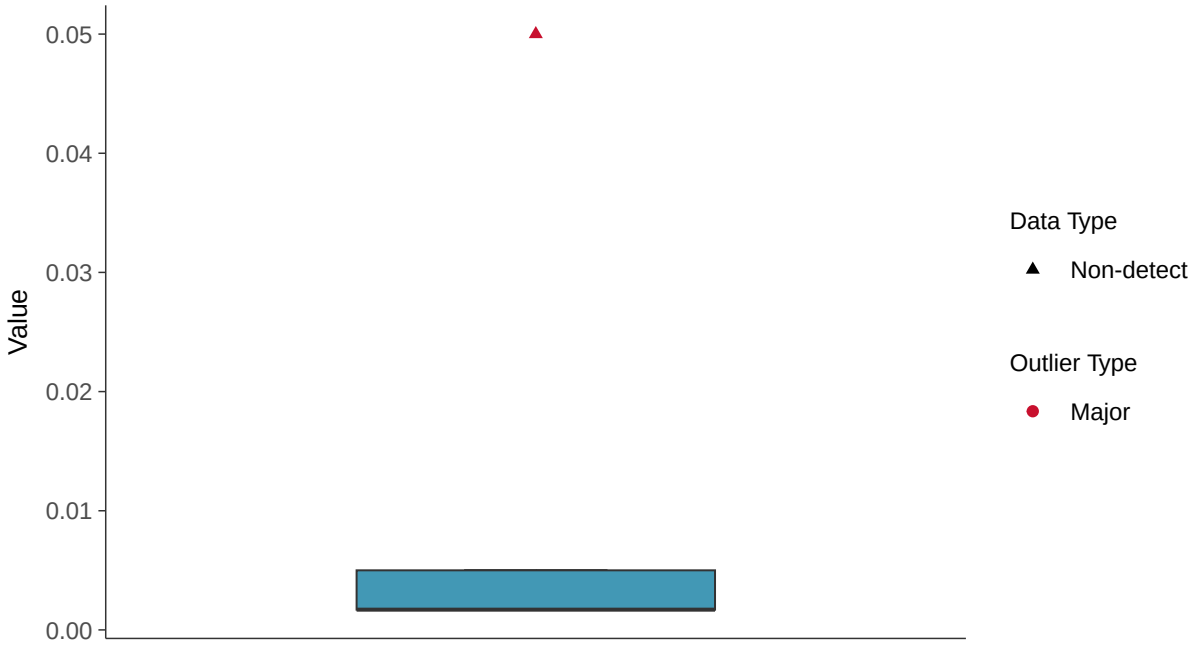
ID: 30_5_111





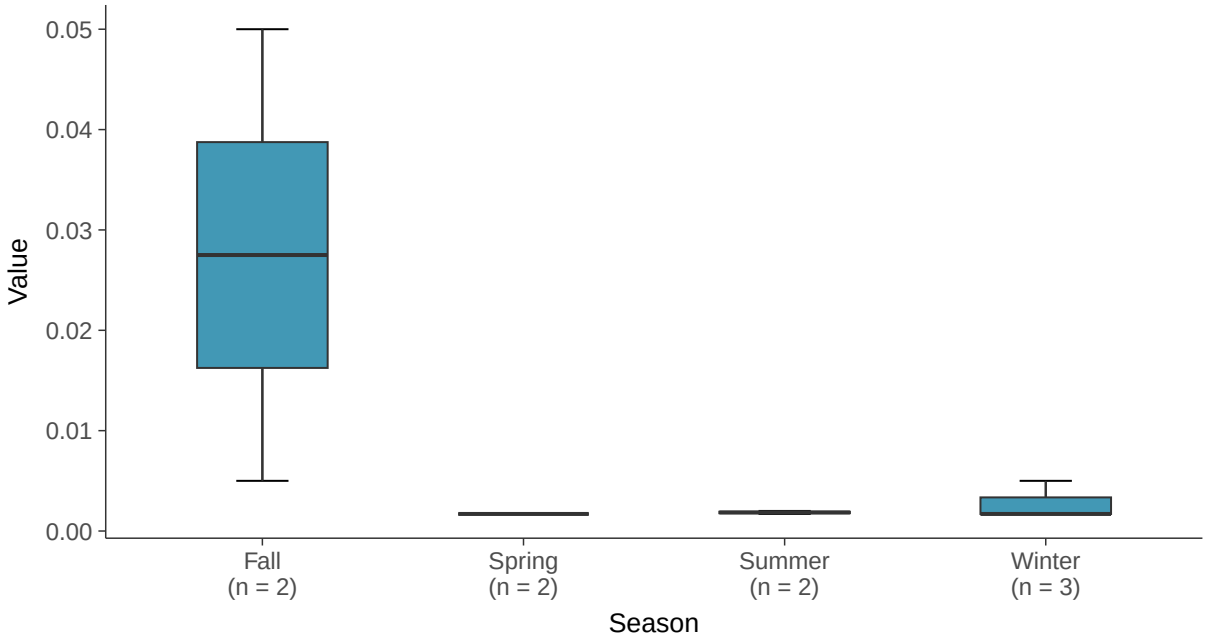
Boxplot

Copper, MW-18A (mg/l)



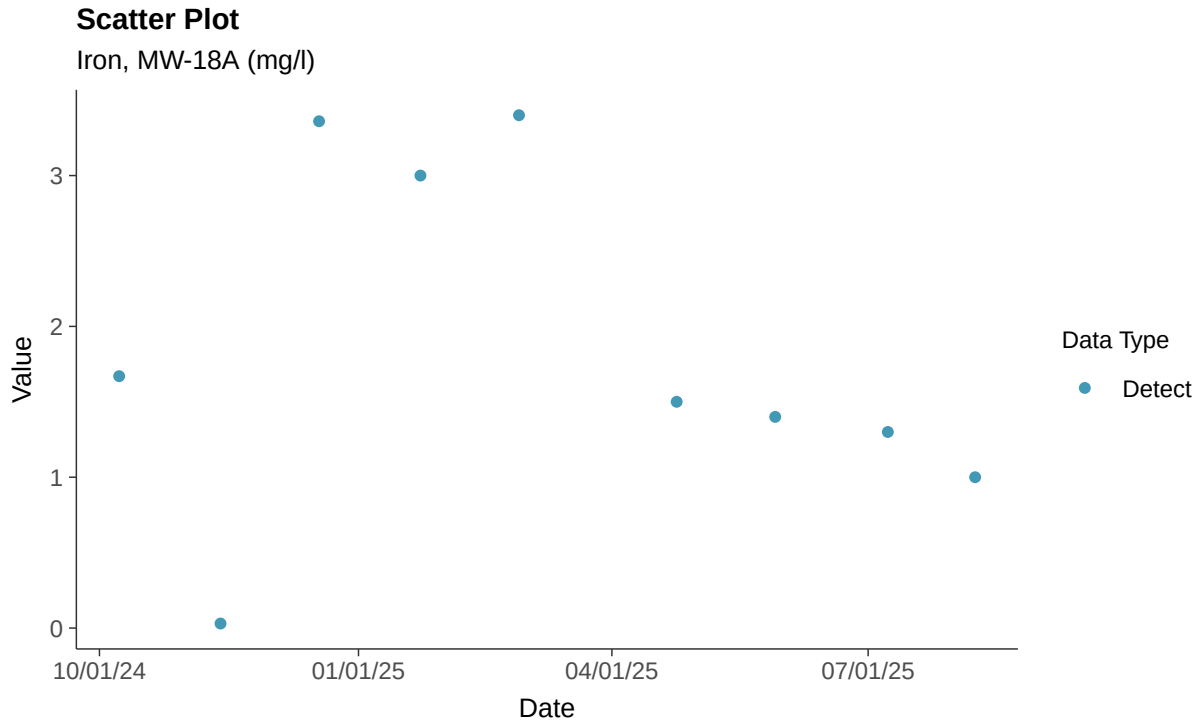
Boxplot by Season

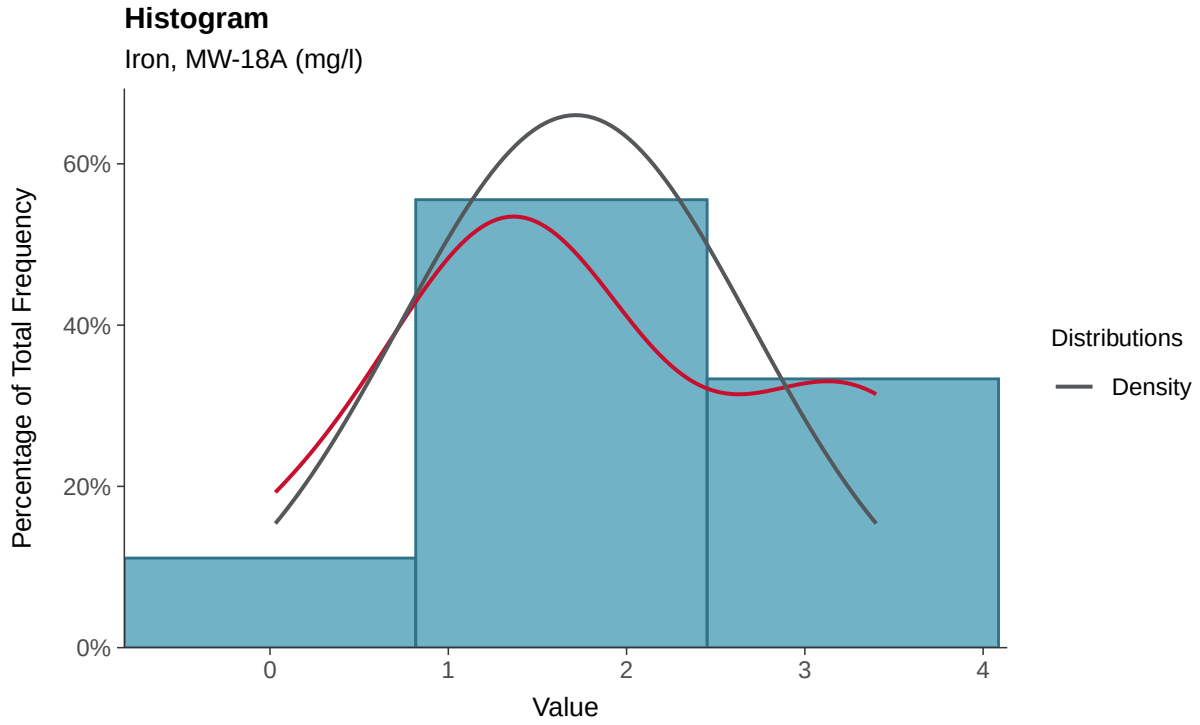
Copper, MW-18A (mg/l)



Part 115: Iron, MW-18A

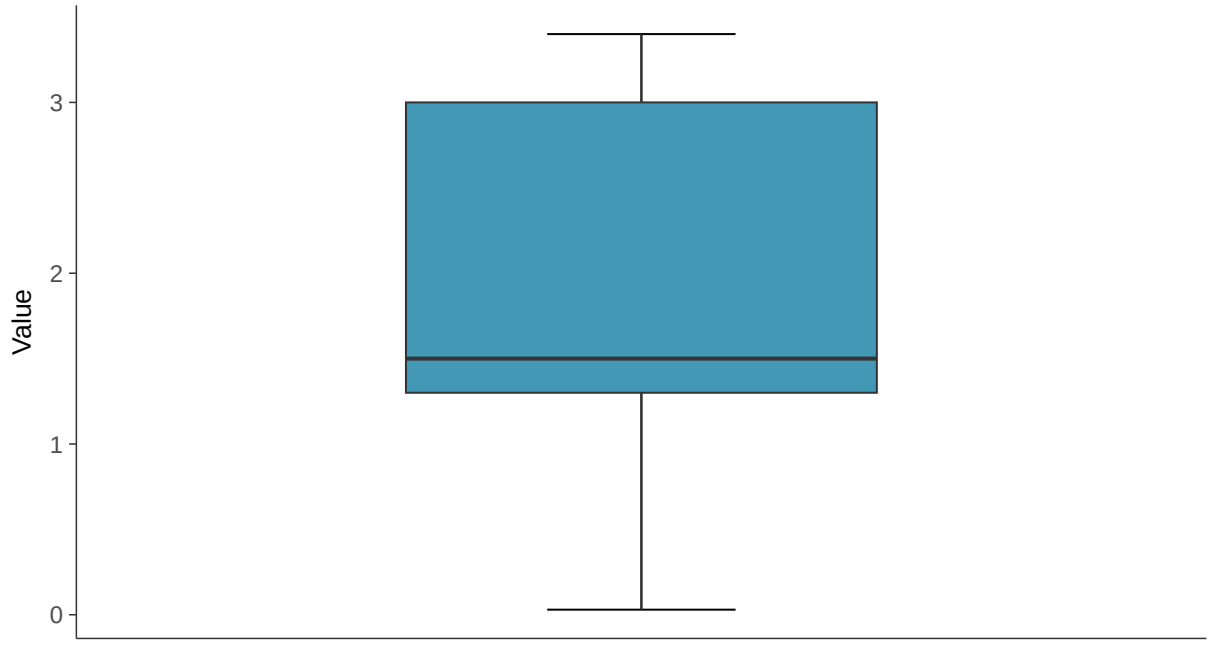
ID: 30_5_114





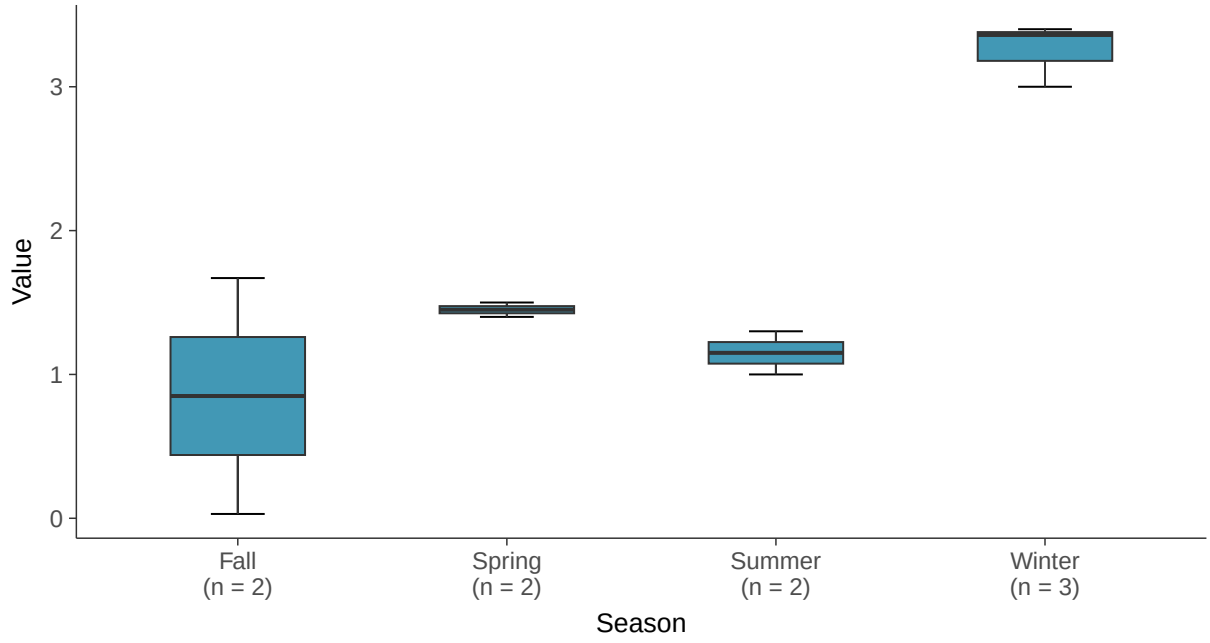
Boxplot

Iron, MW-18A (mg/l)



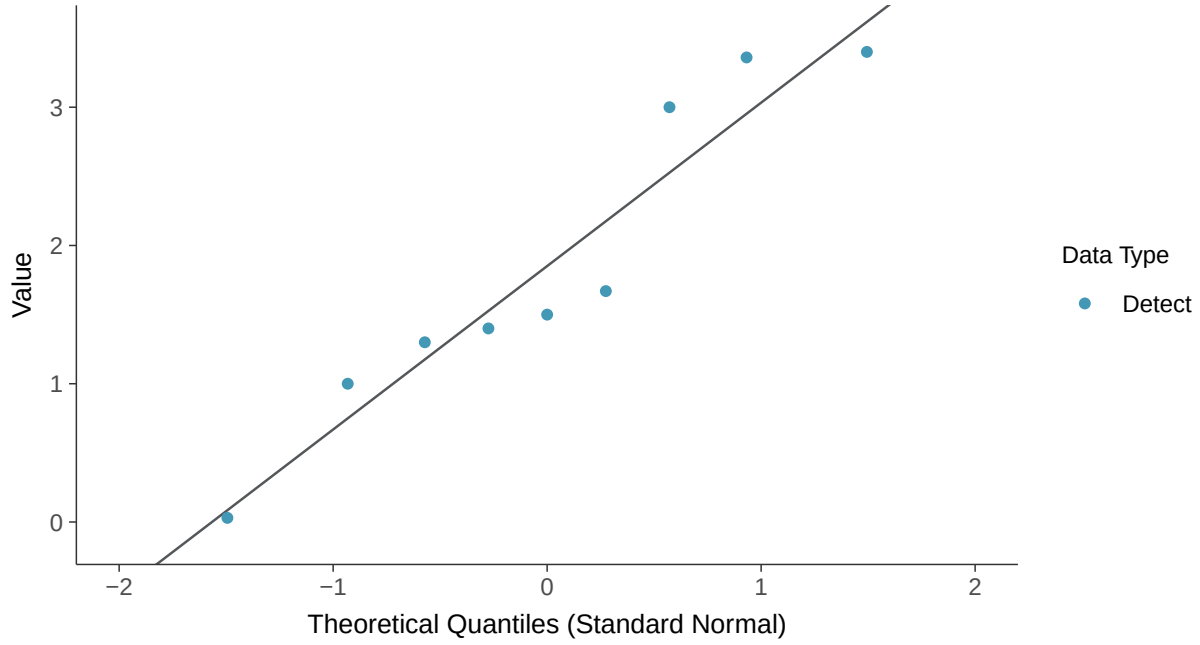
Boxplot by Season

Iron, MW-18A (mg/l)



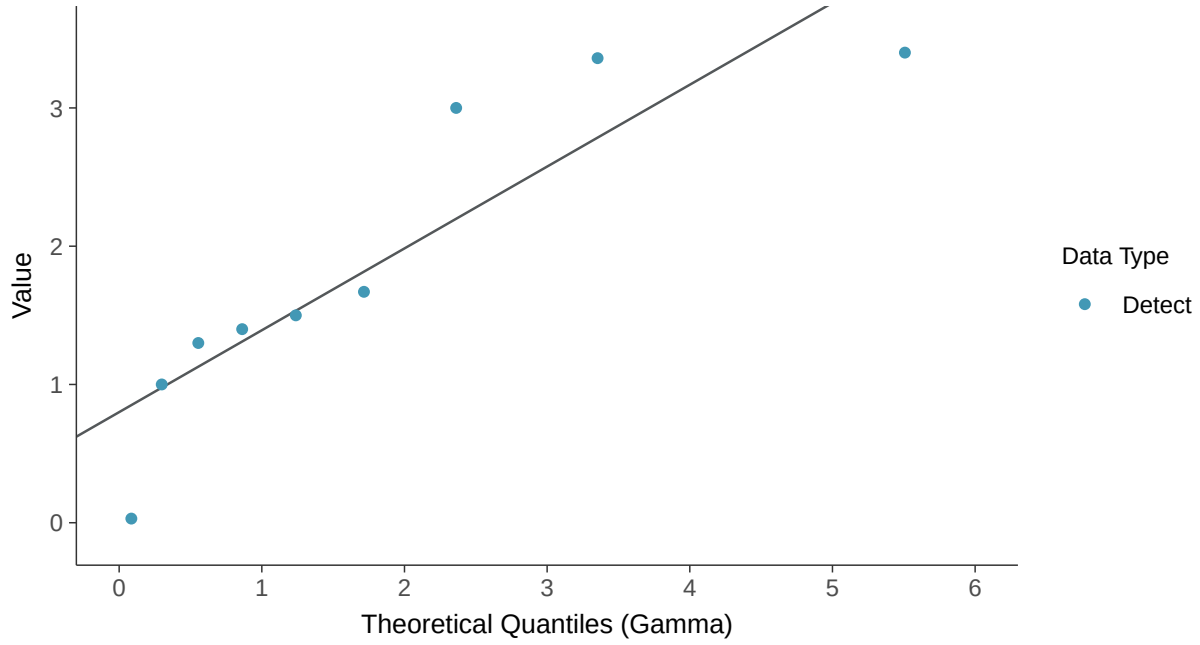
Normal Q-Q plot

Iron, MW-18A (mg/l)



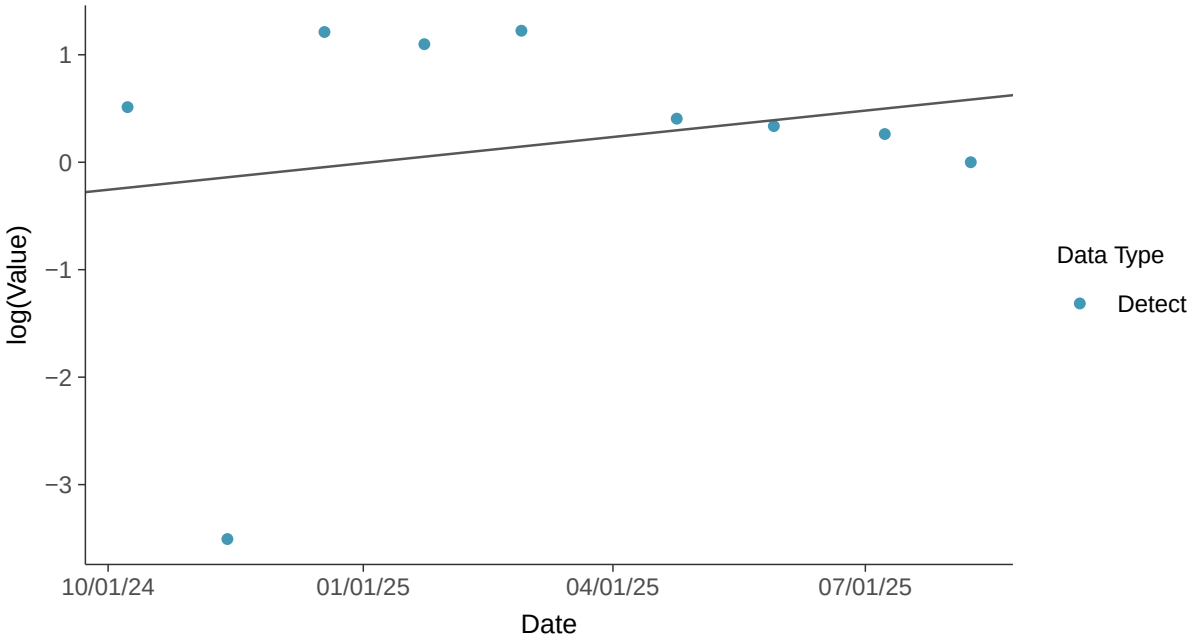
Gamma Q-Q plot

Iron, MW-18A (mg/l)



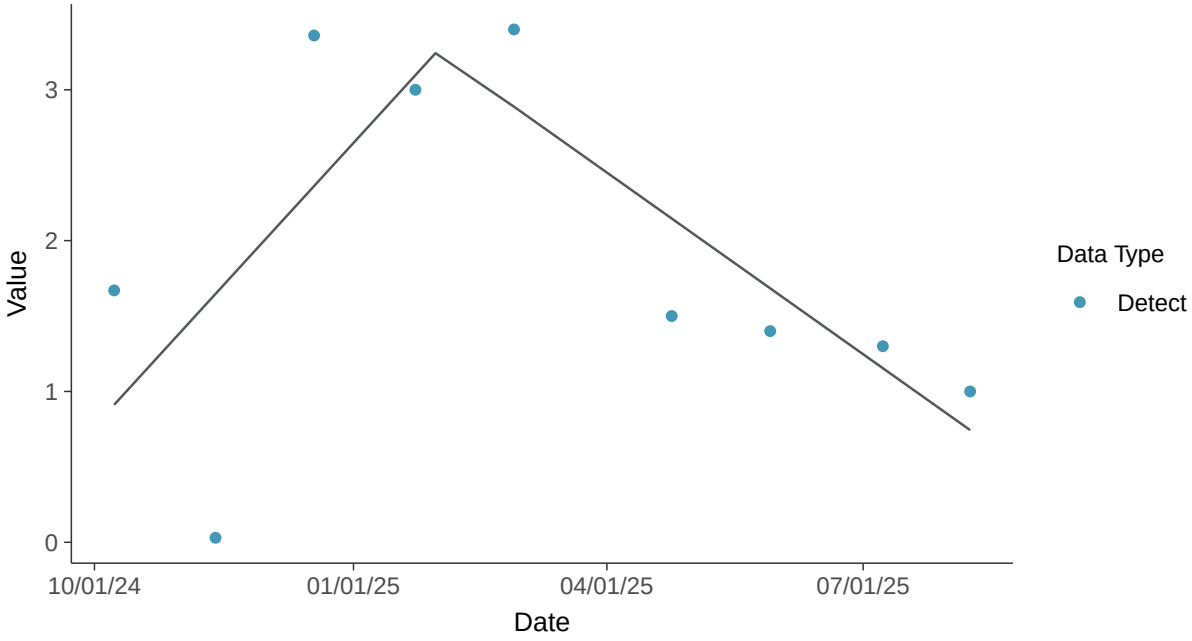
Trend Regression: Lognormal MLE

Iron, MW-18A (mg/l)



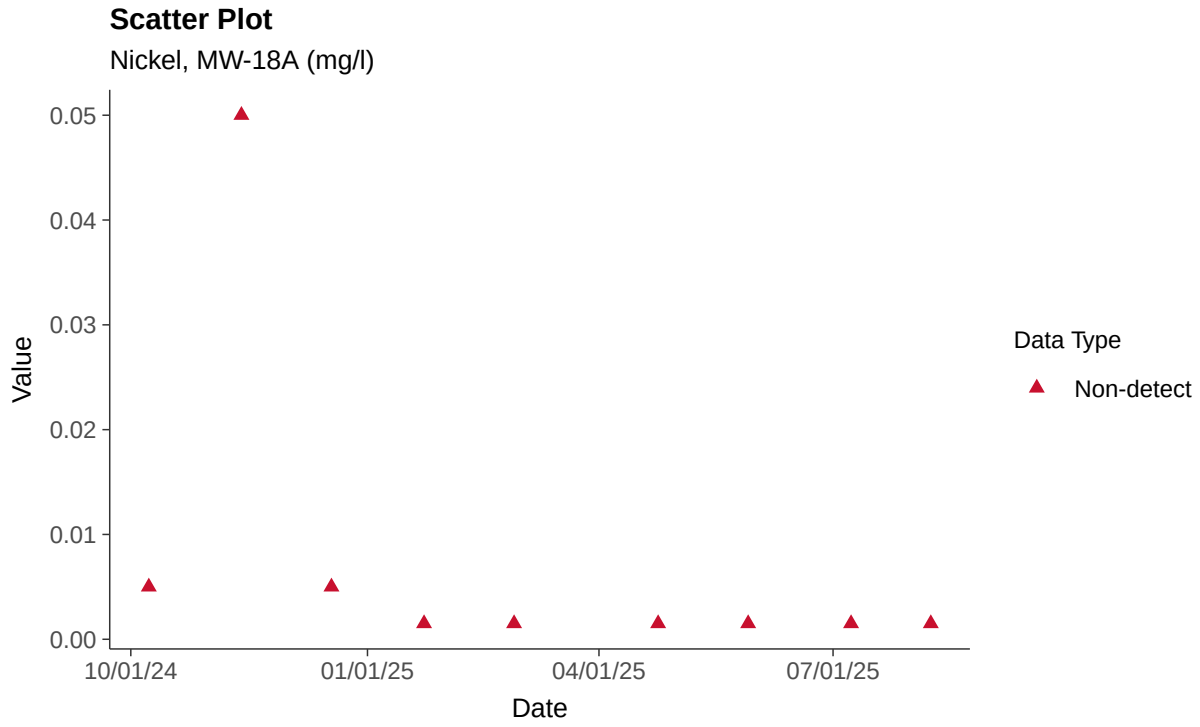
Trend Regression: Piecewise Linear-Linear

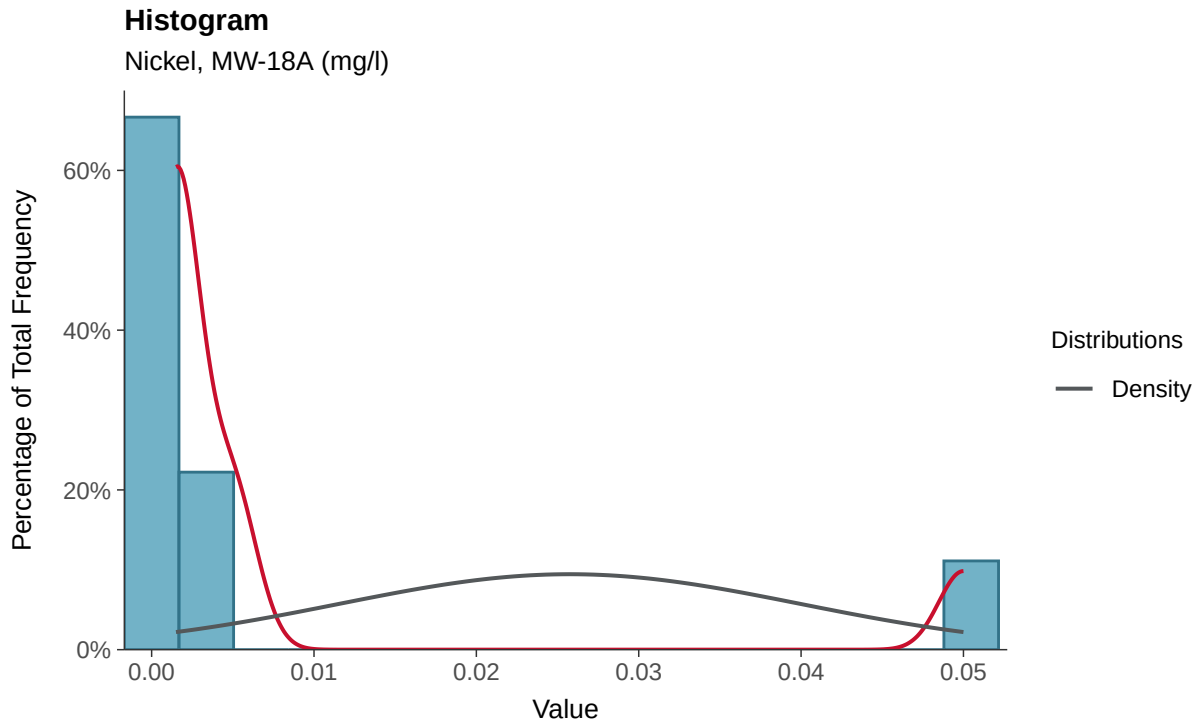
Iron, MW-18A (mg/l)



Part 115: Nickel, MW-18A

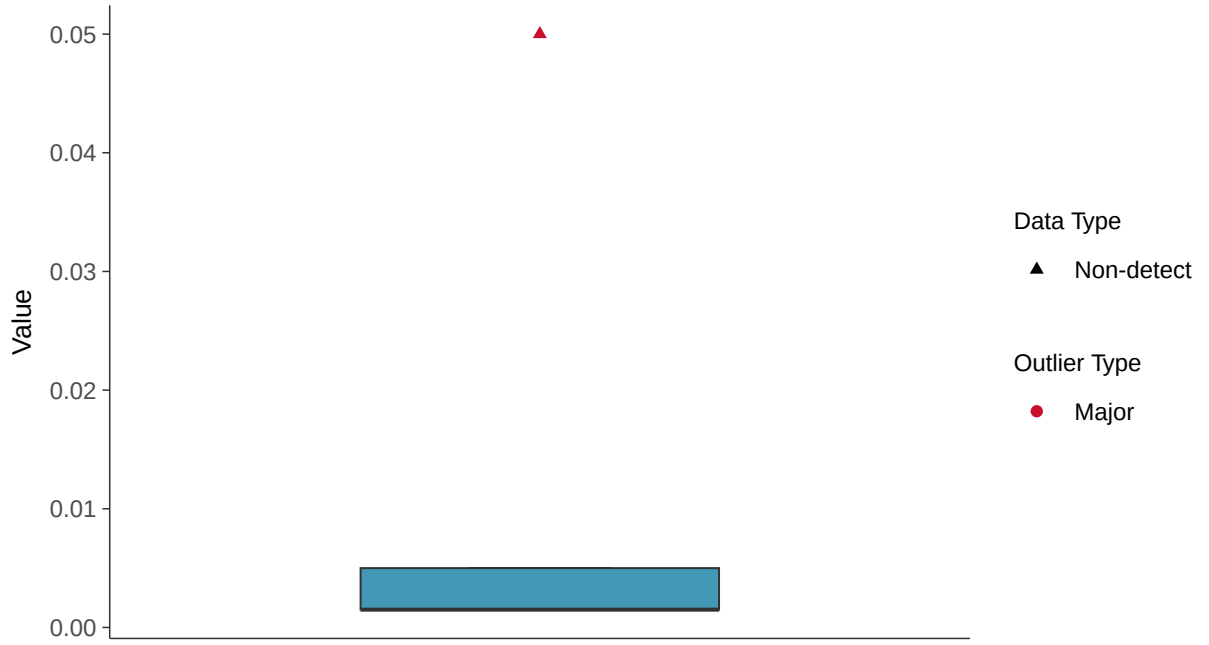
ID: 30_5_119





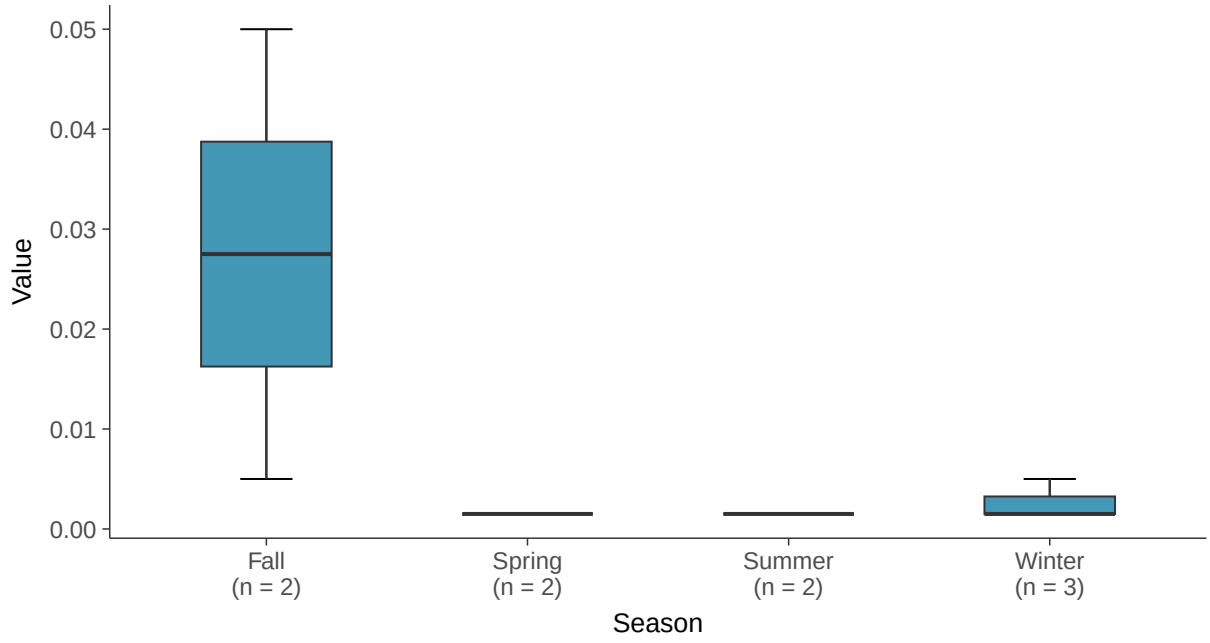
Boxplot

Nickel, MW-18A (mg/l)



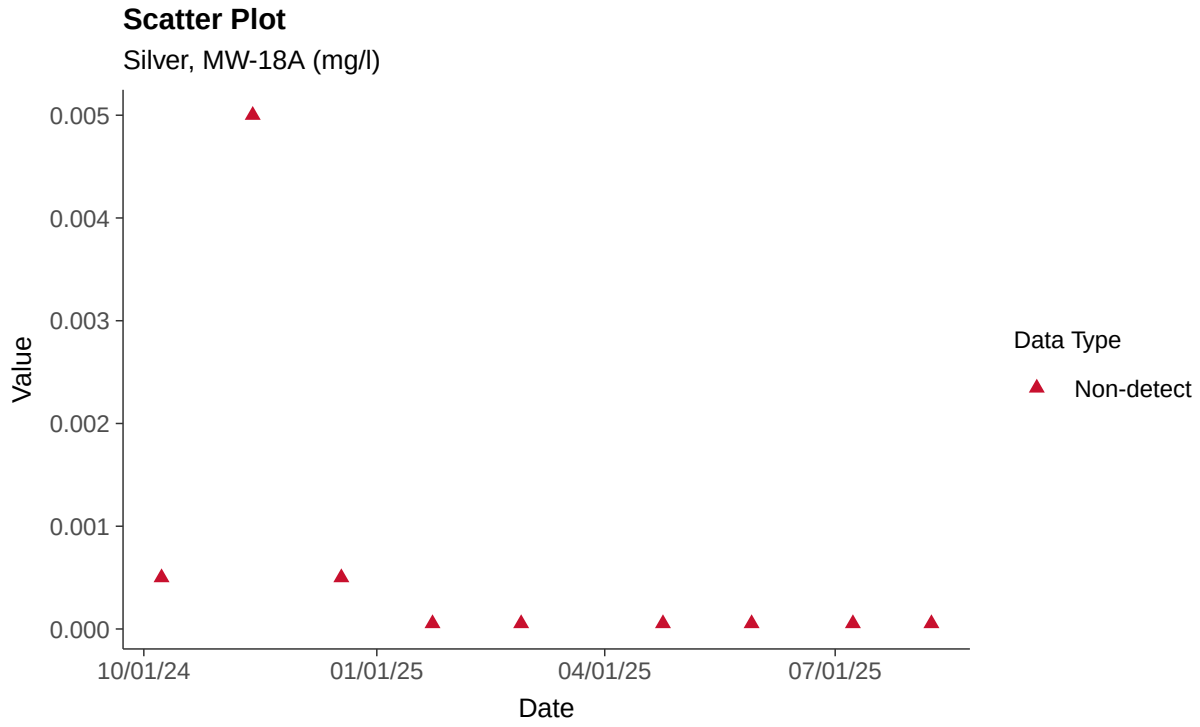
Boxplot by Season

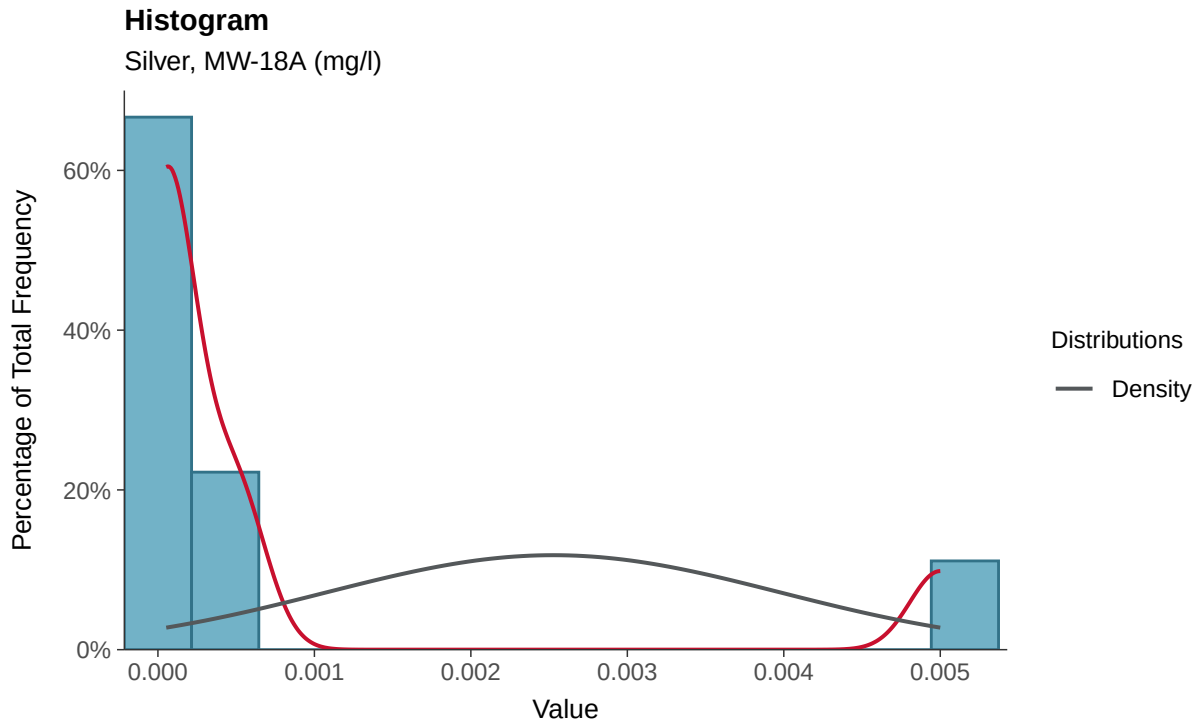
Nickel, MW-18A (mg/l)



Part 115: Silver, MW-18A

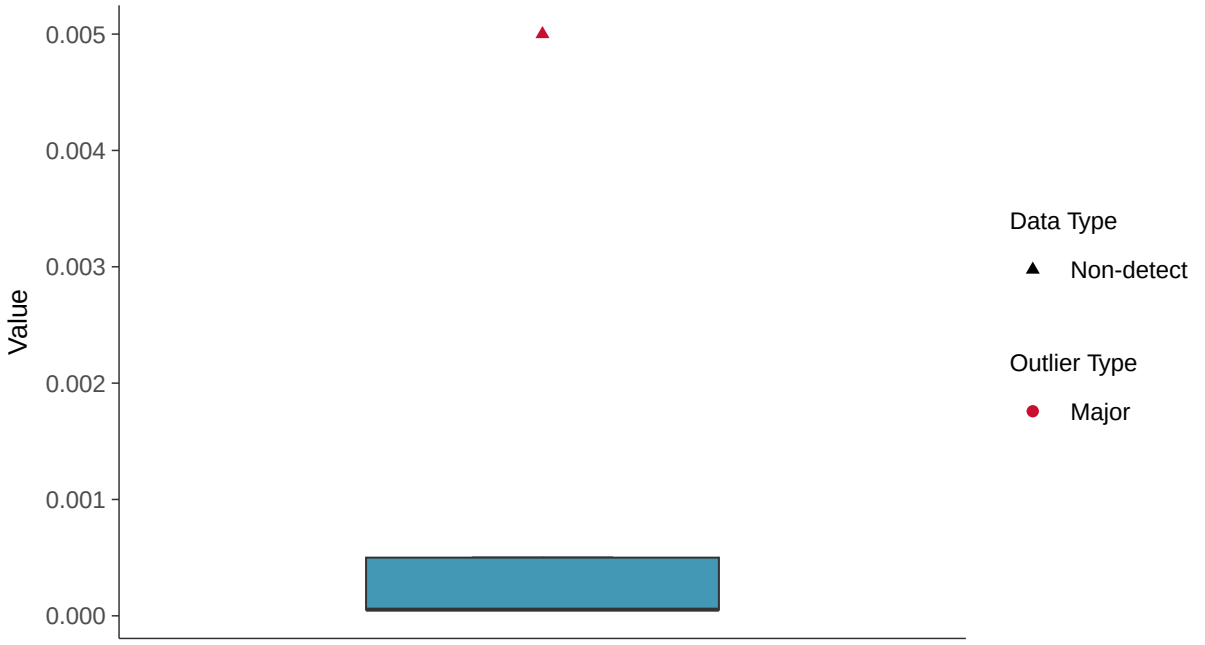
ID: 30_5_123





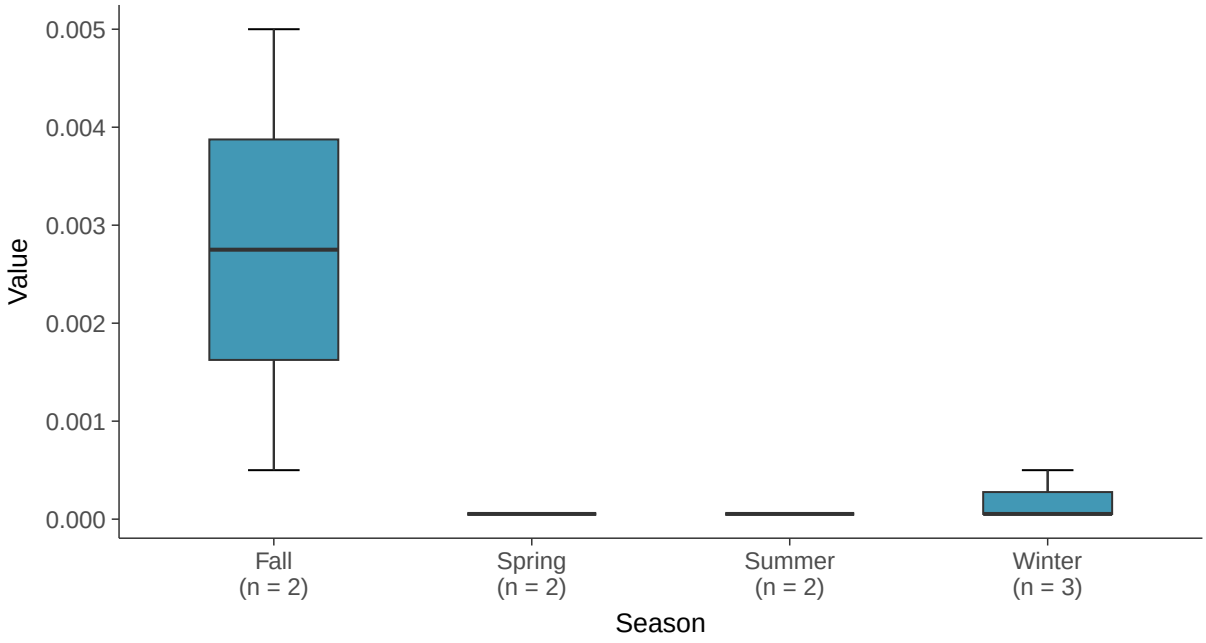
Boxplot

Silver, MW-18A (mg/l)



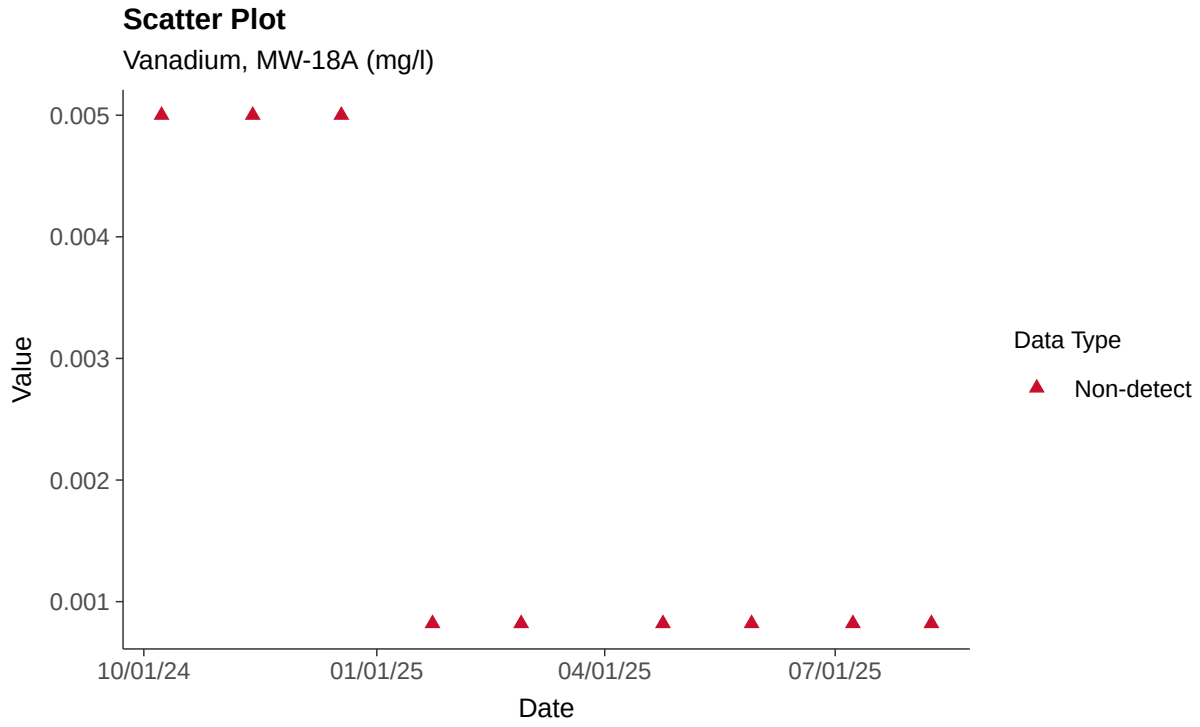
Boxplot by Season

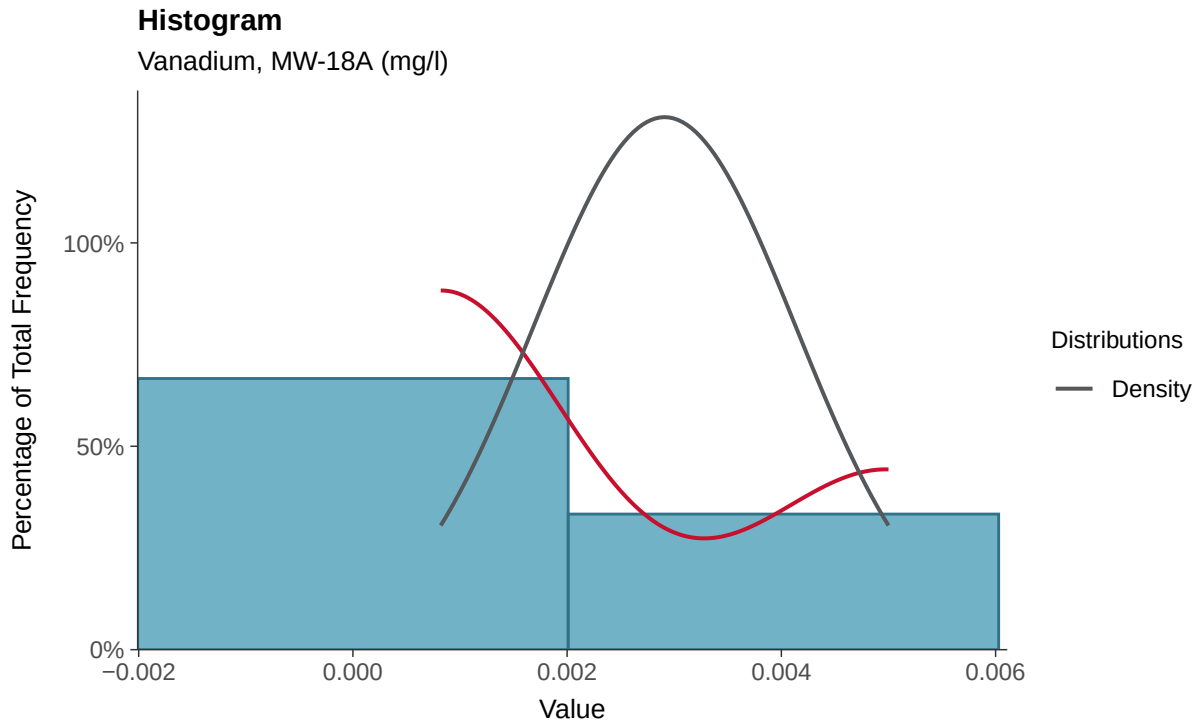
Silver, MW-18A (mg/l)



Part 115: Vanadium, MW-18A

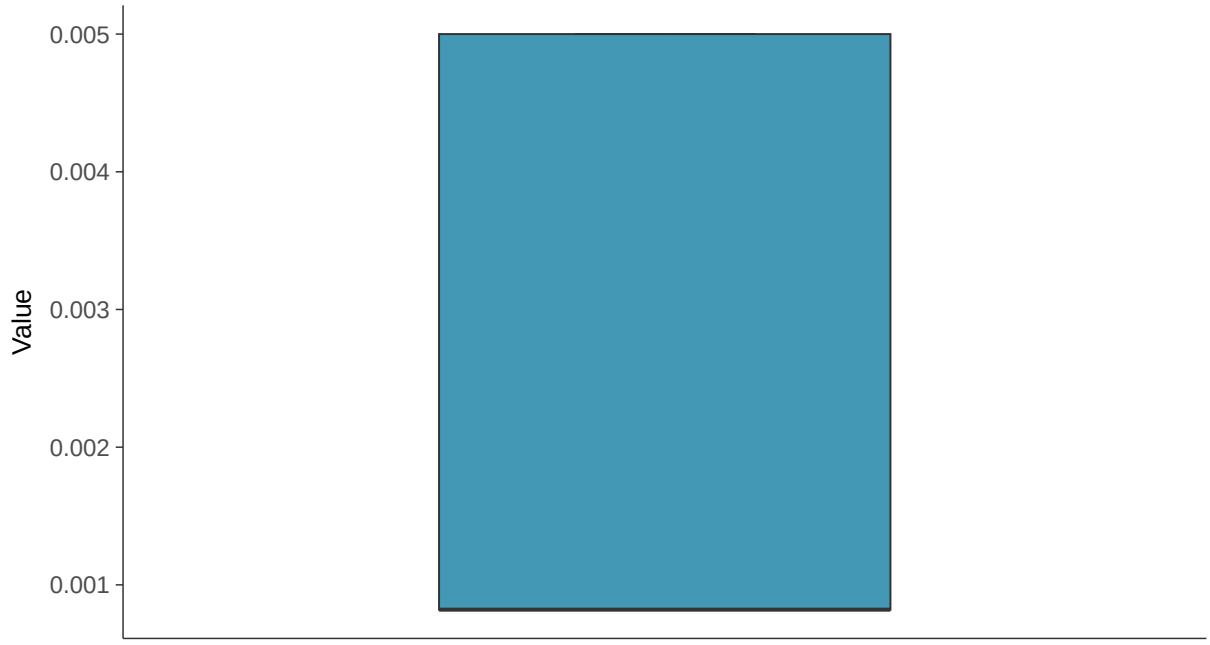
ID: 30_5_128





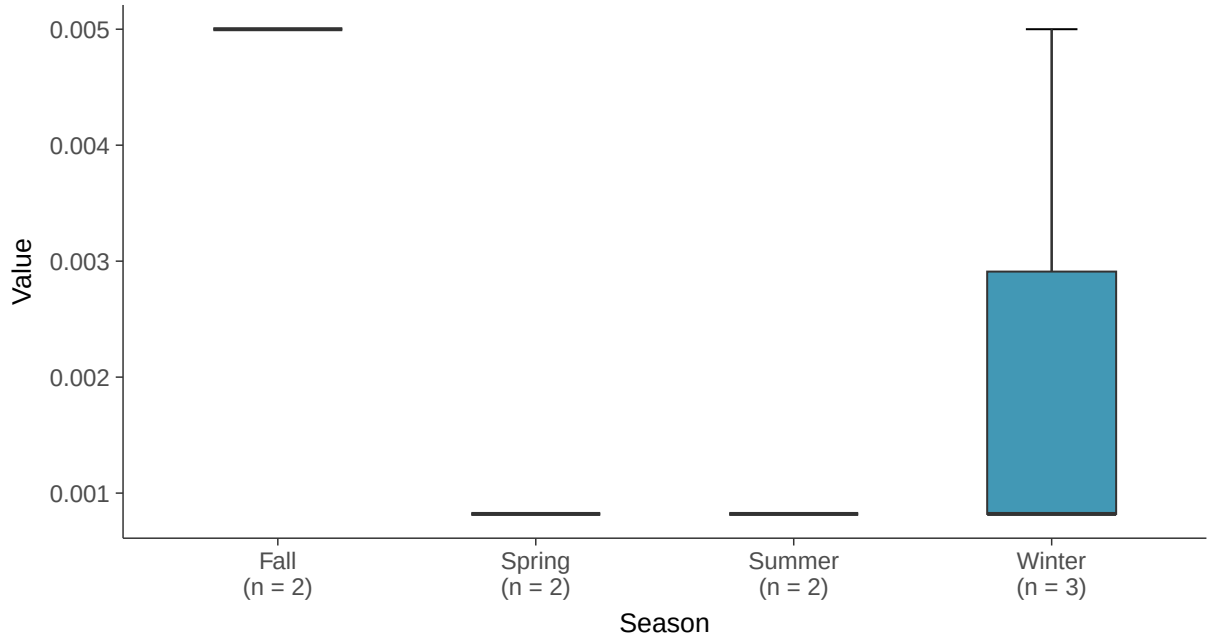
Boxplot

Vanadium, MW-18A (mg/l)



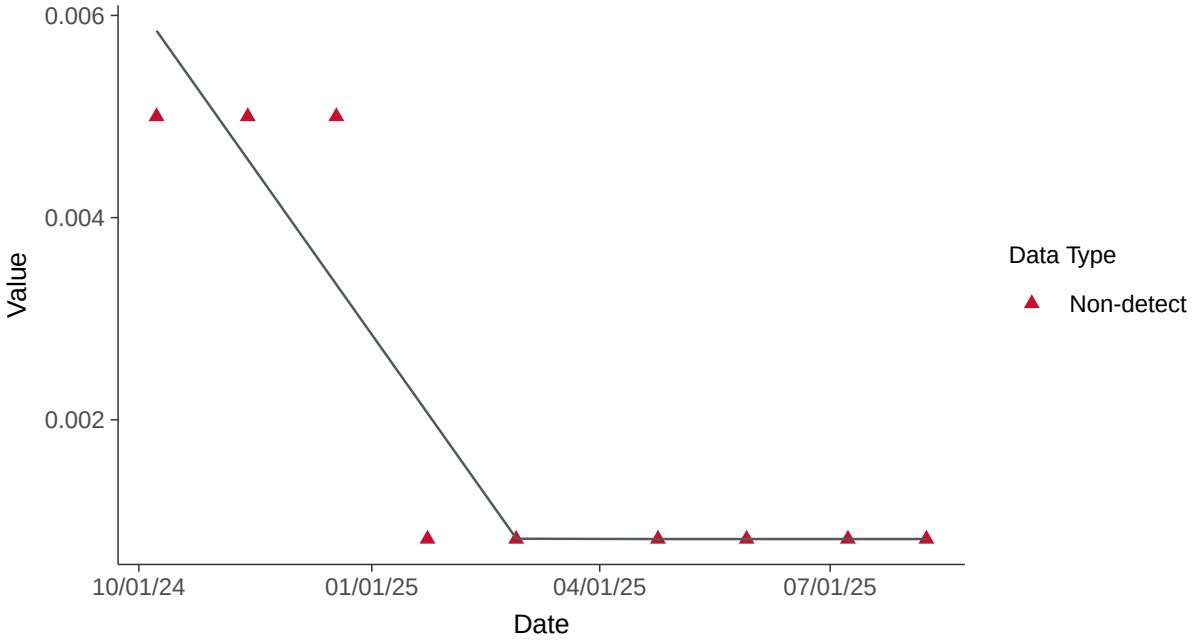
Boxplot by Season

Vanadium, MW-18A (mg/l)



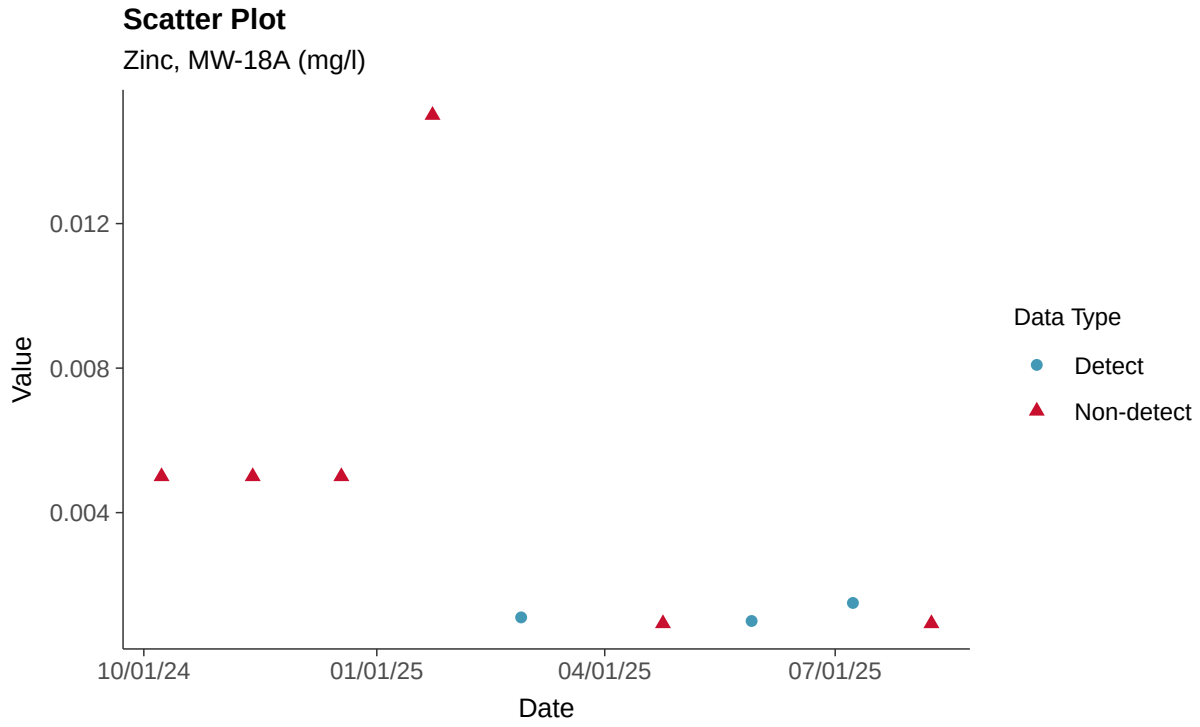
Trend Regression: Piecewise Linear-Linear

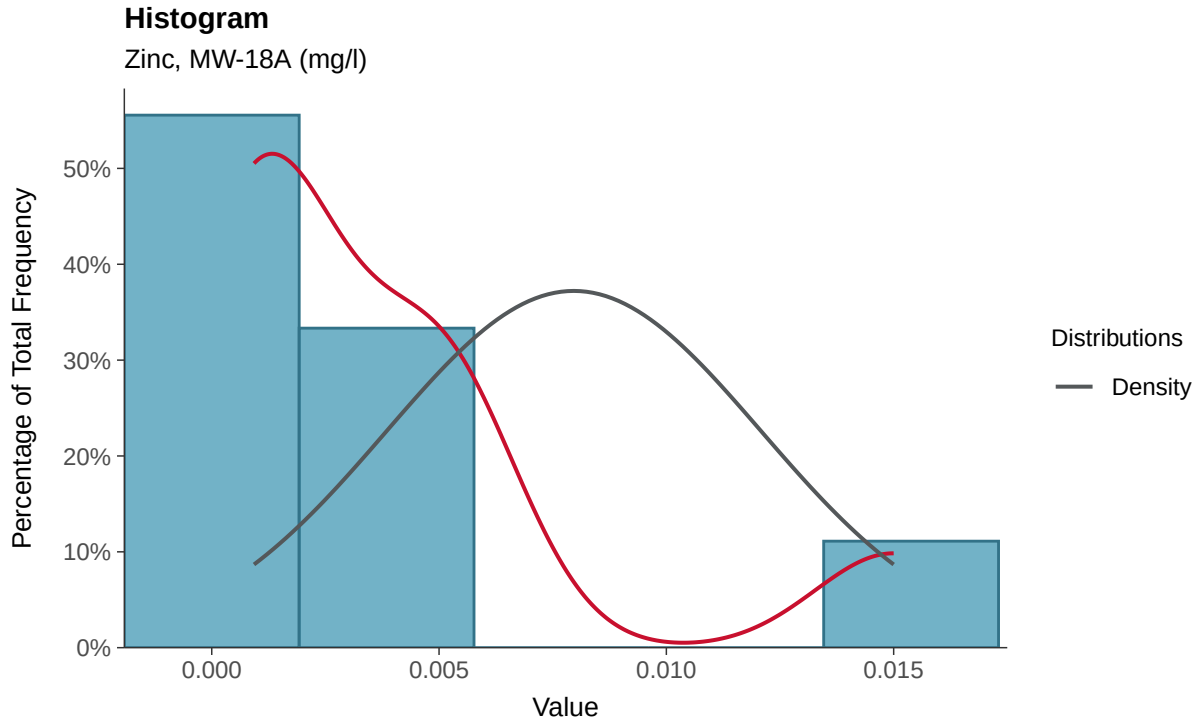
Vanadium, MW-18A (mg/l)



Part 115: Zinc, MW-18A

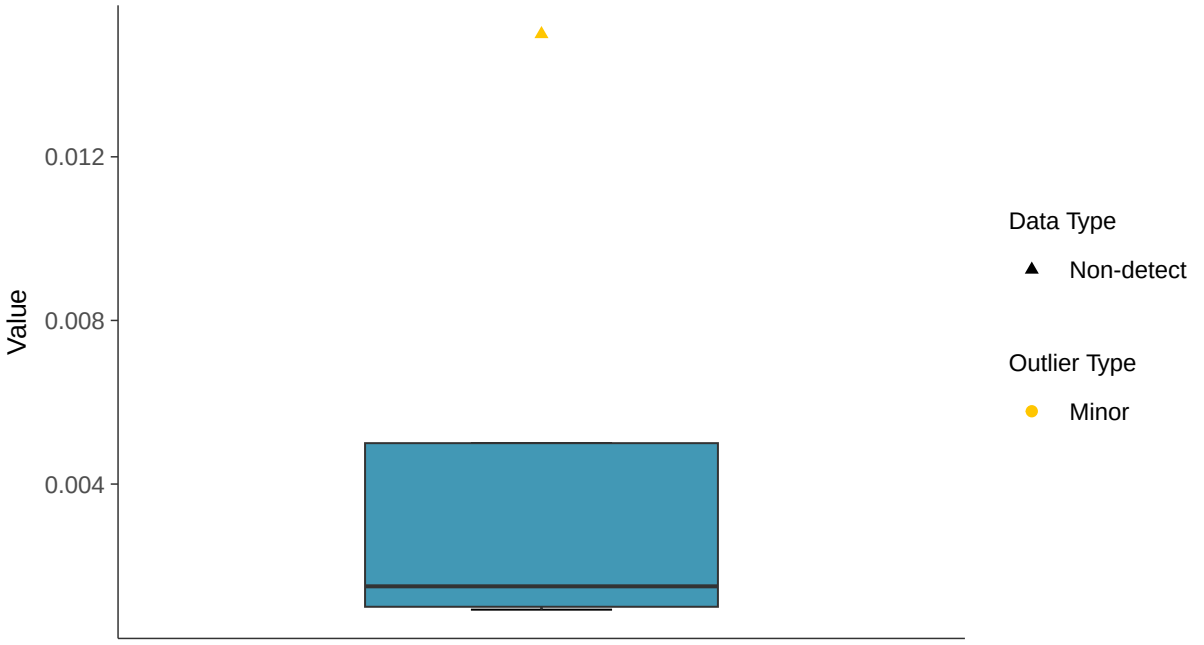
ID: 30_5_129





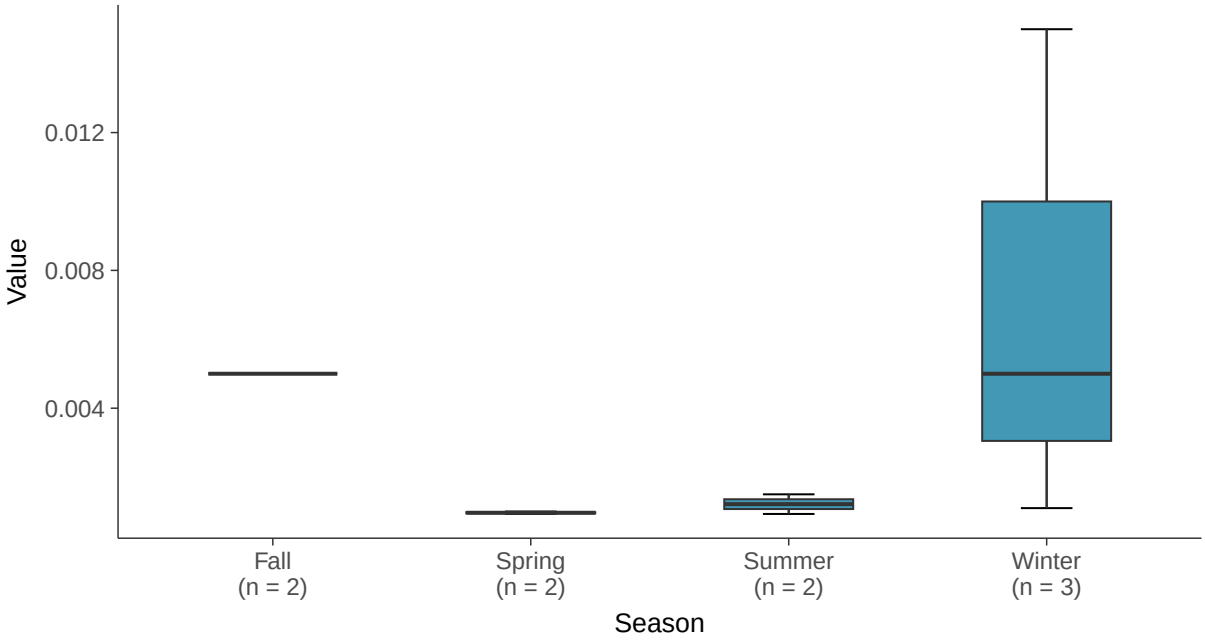
Boxplot

Zinc, MW-18A (mg/l)



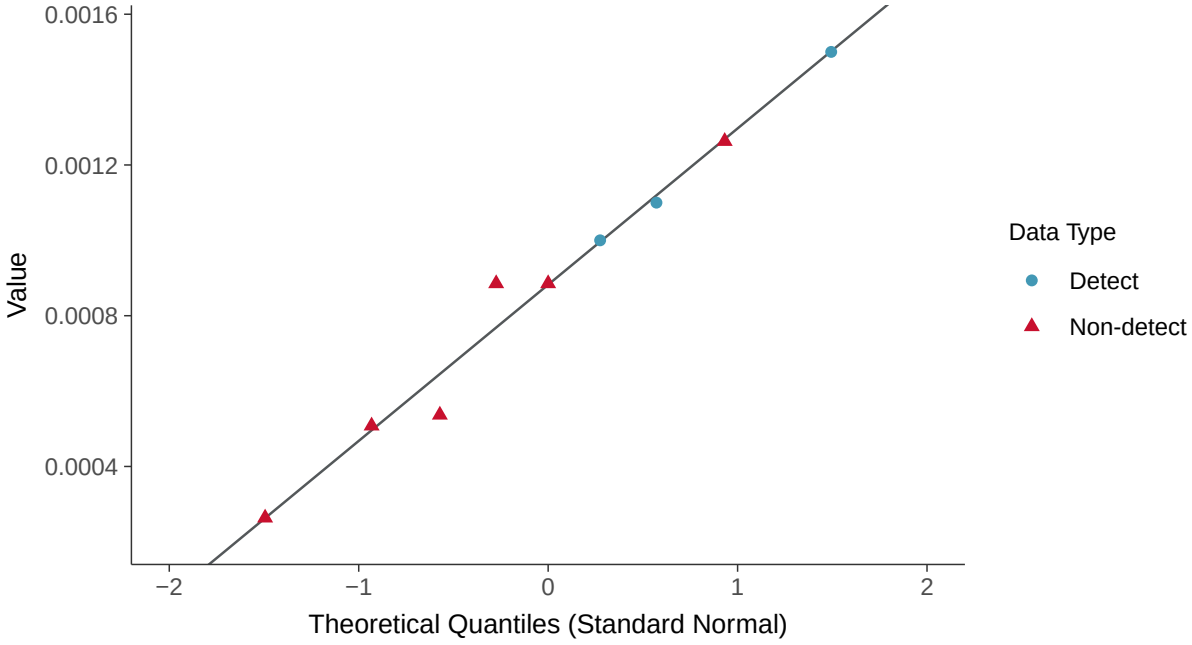
Boxplot by Season

Zinc, MW-18A (mg/l)



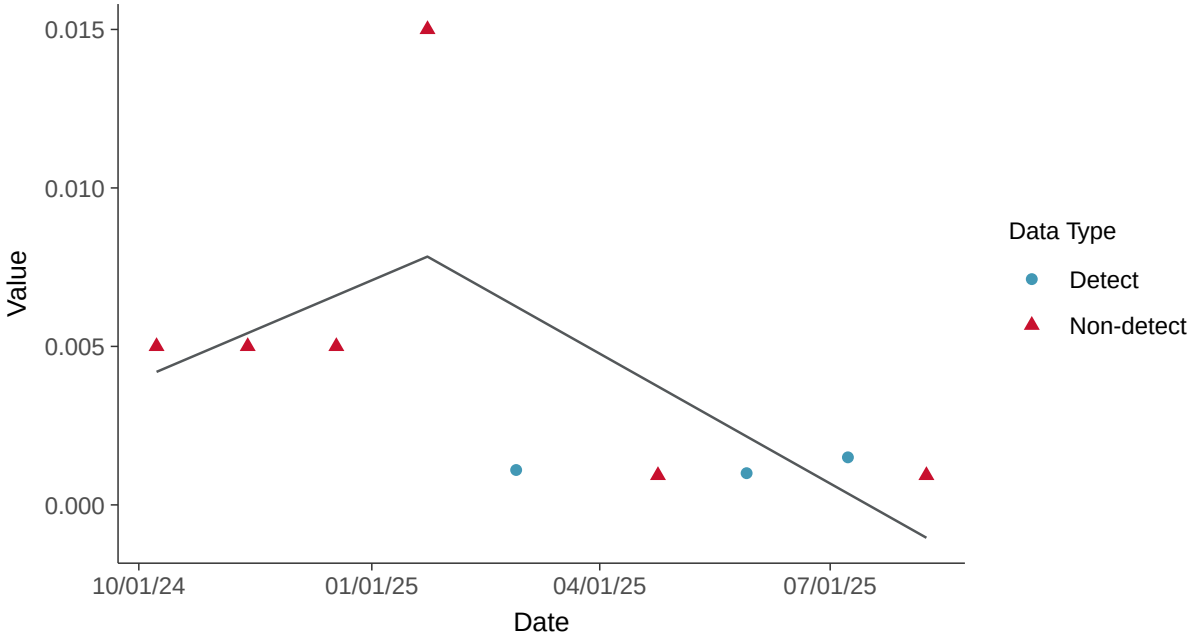
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-18A (mg/l)



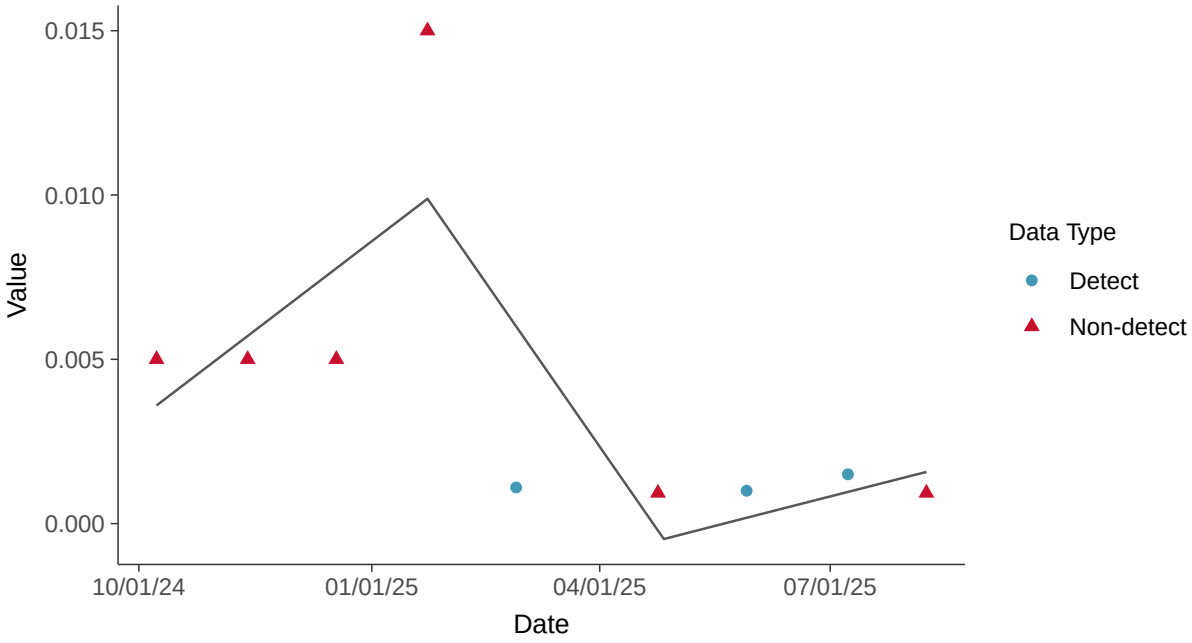
Trend Regression: Piecewise Linear-Linear

Zinc, MW-18A (mg/l)



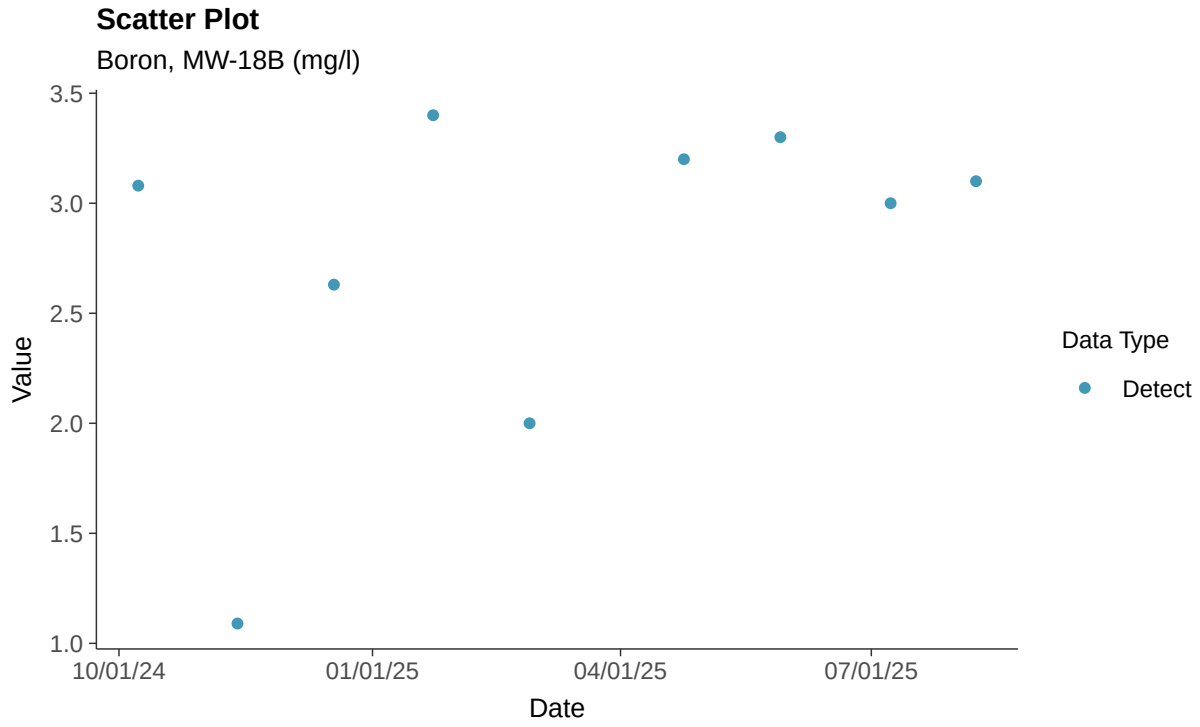
Trend Regression: Piecewise Linear-Linear-Linear

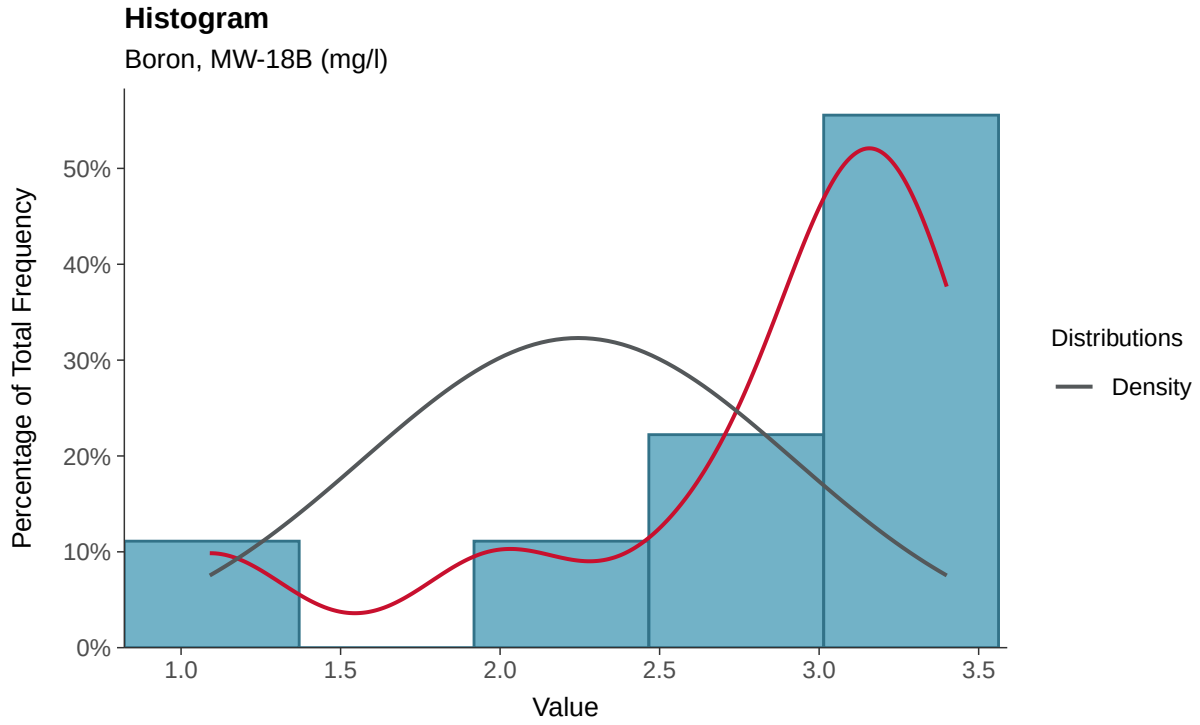
Zinc, MW-18A (mg/l)



Appendix III: Boron, MW-18B

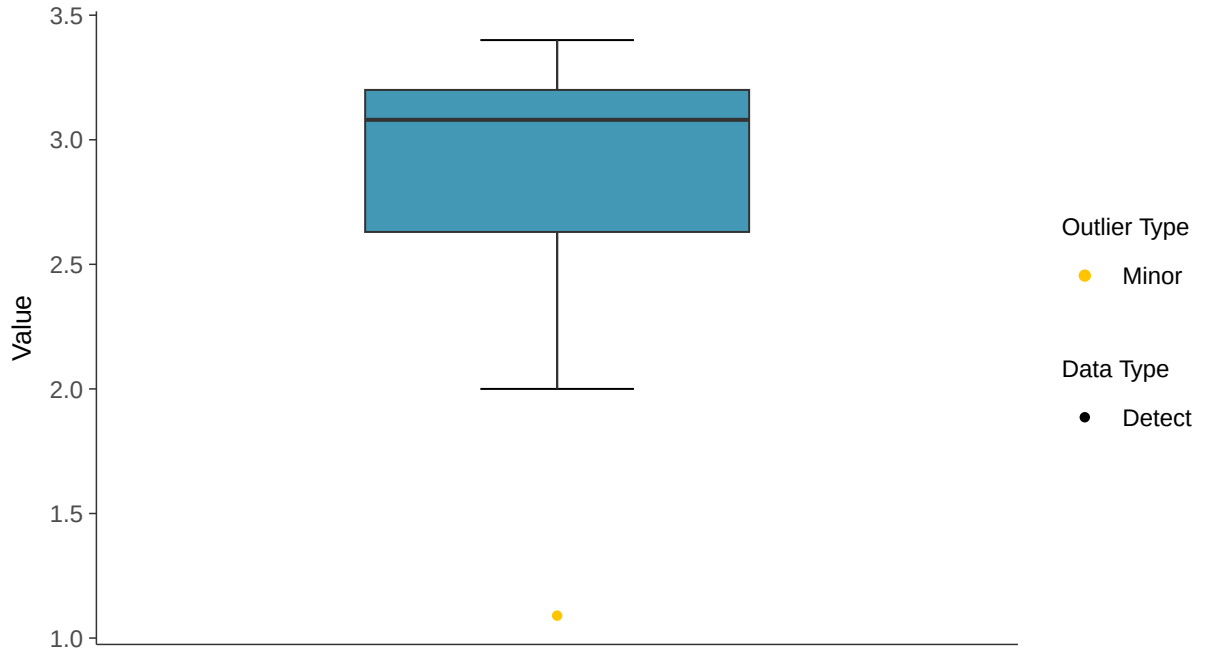
ID: 31_2_105





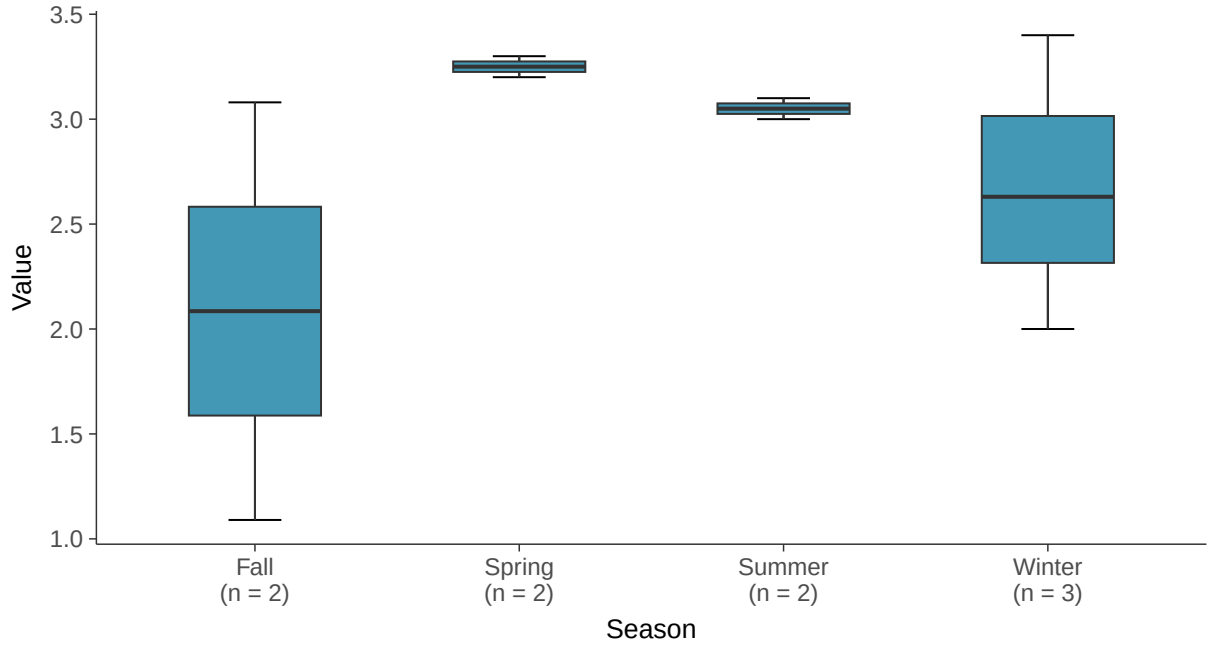
Boxplot

Boron, MW-18B (mg/l)



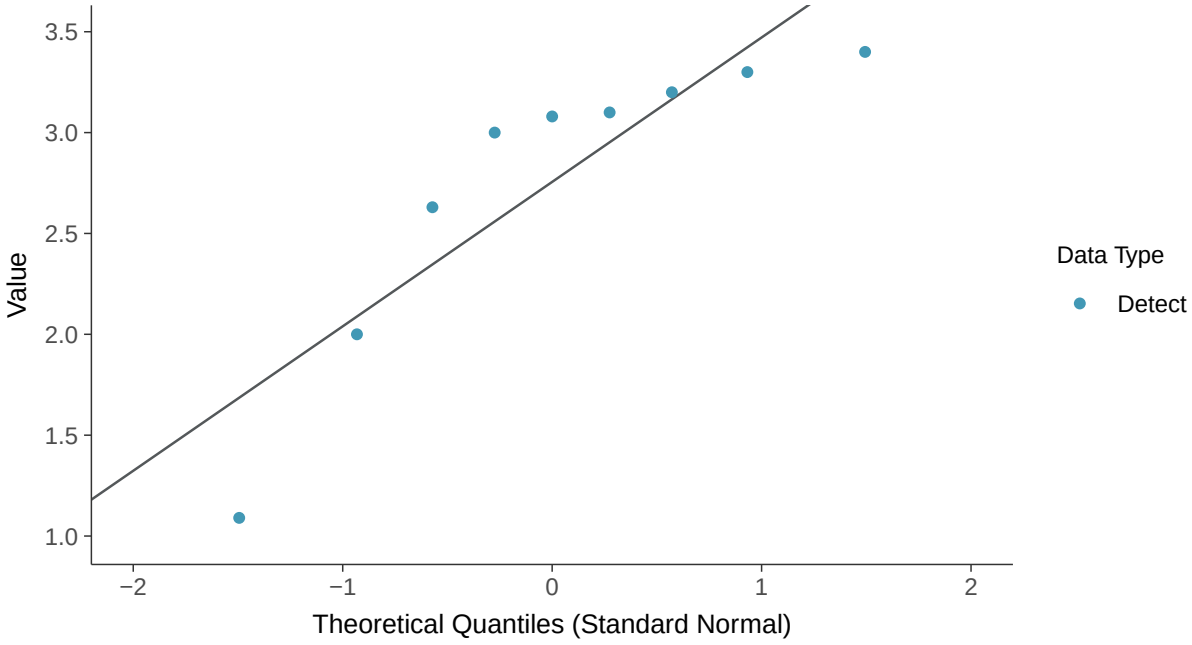
Boxplot by Season

Boron, MW-18B (mg/l)



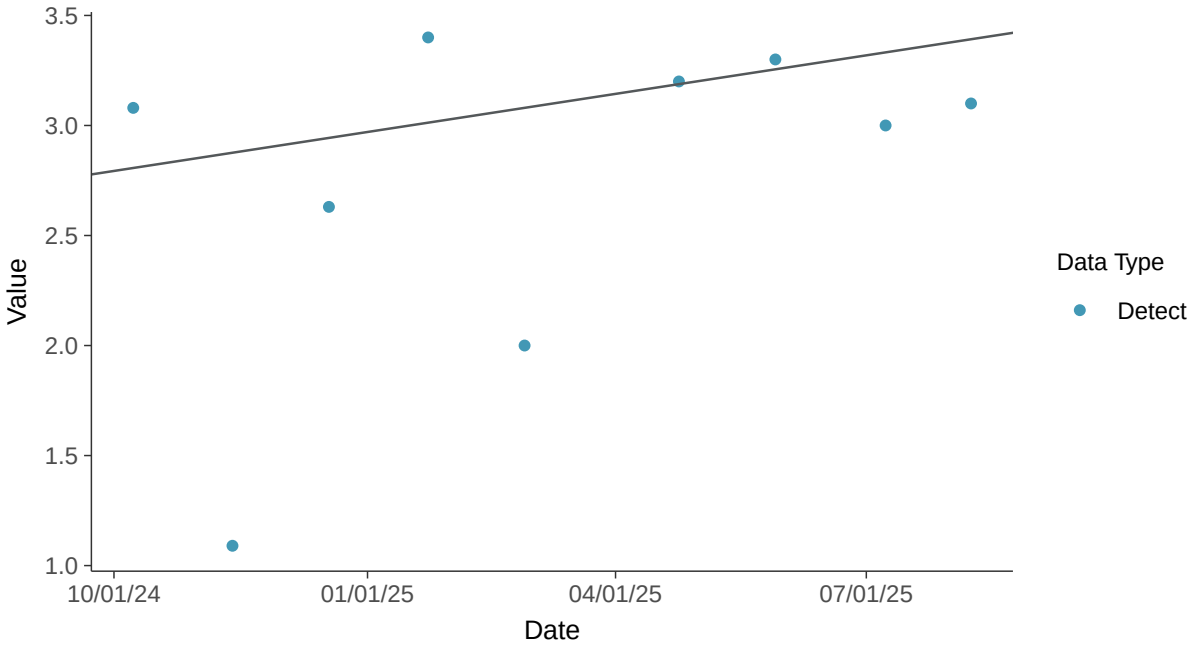
Normal Q-Q plot

Boron, MW-18B (mg/l)



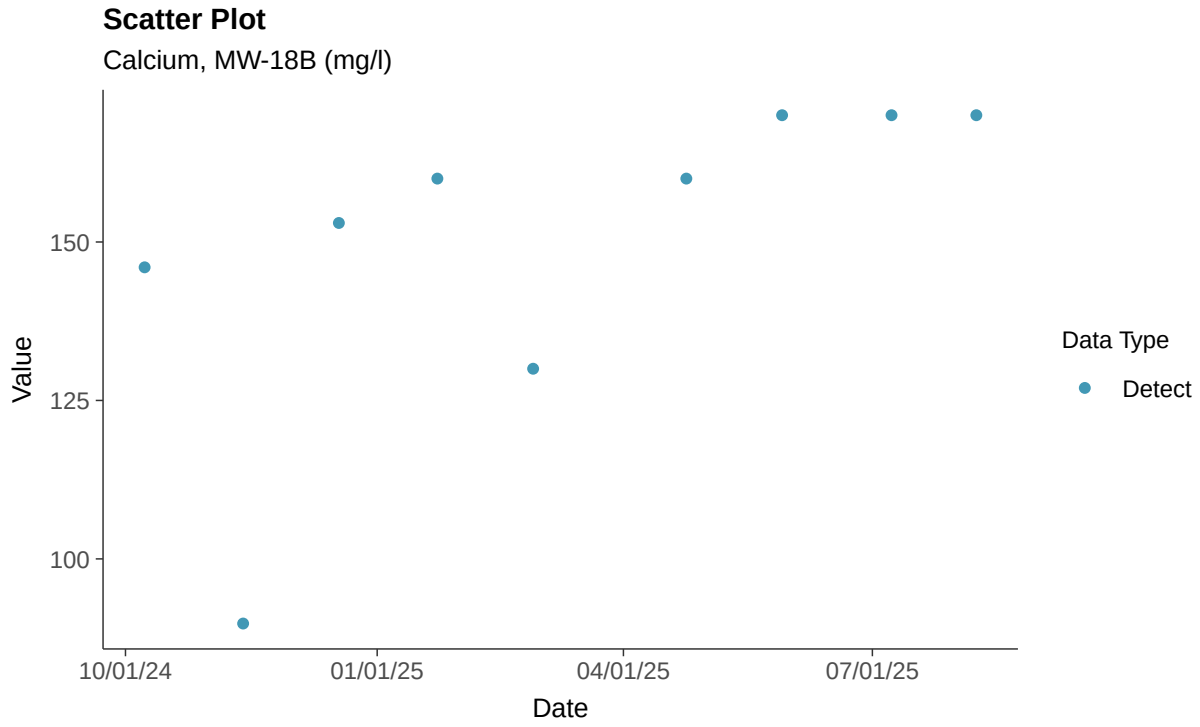
Trend Regression: Mann-Kendall/Theil-Sen Estimate

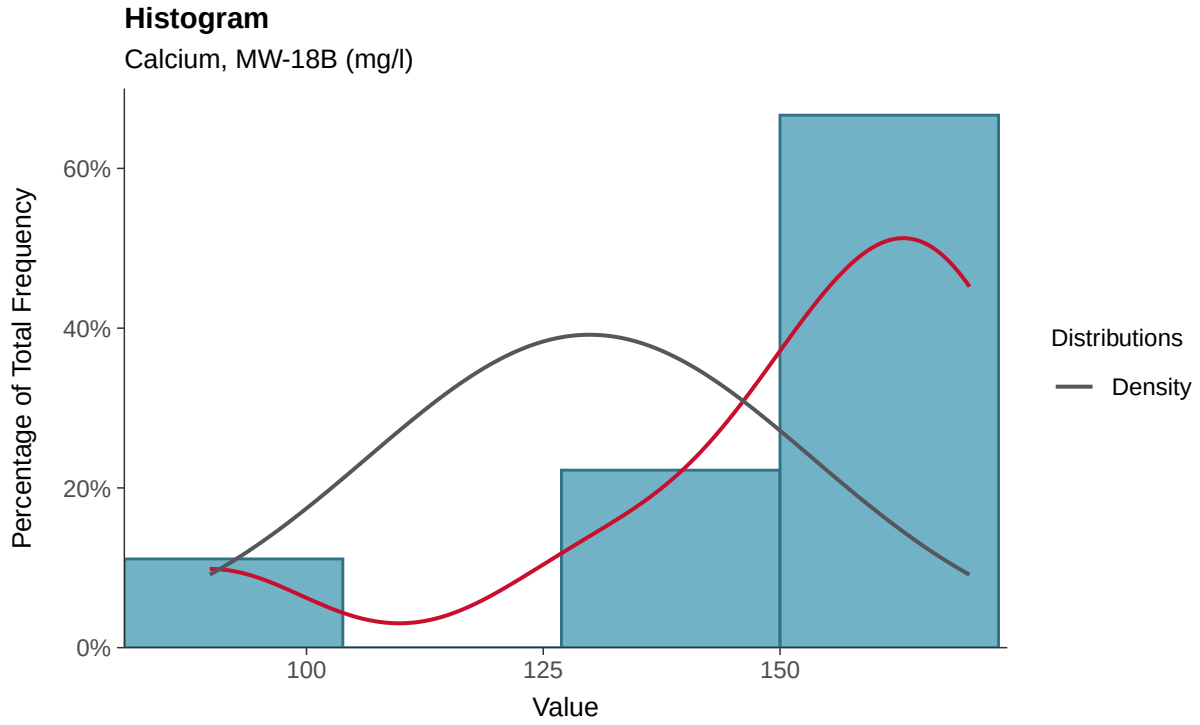
Boron, MW-18B (mg/l)



Appendix III: Calcium, MW-18B

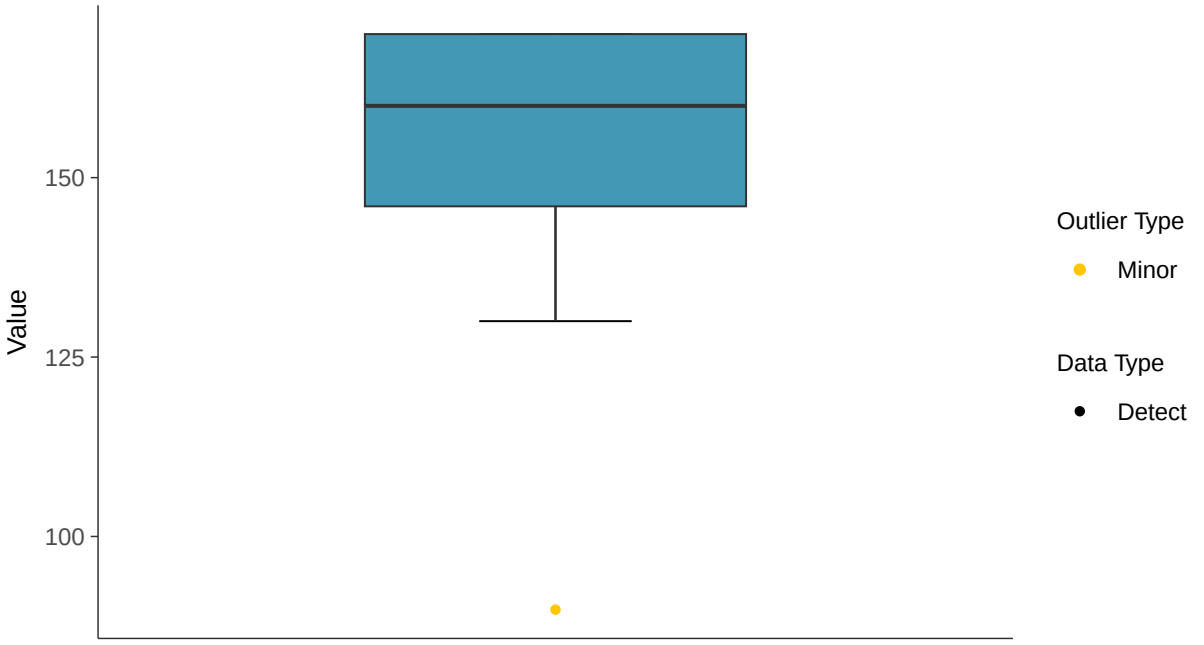
ID: 31_2_107





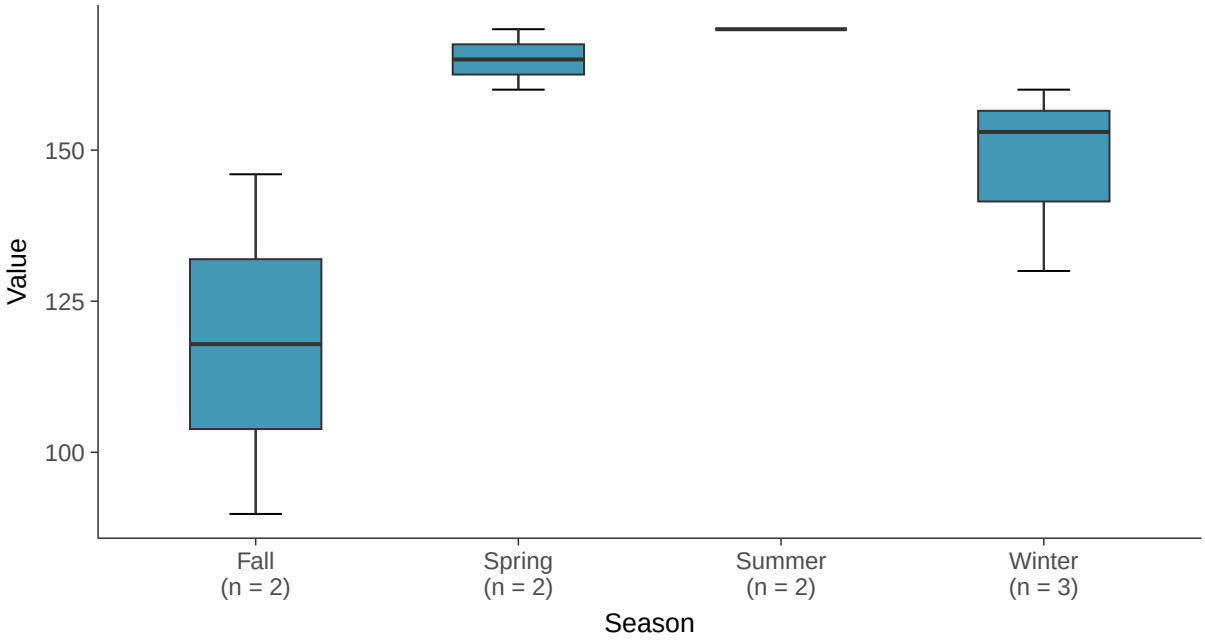
Boxplot

Calcium, MW-18B (mg/l)



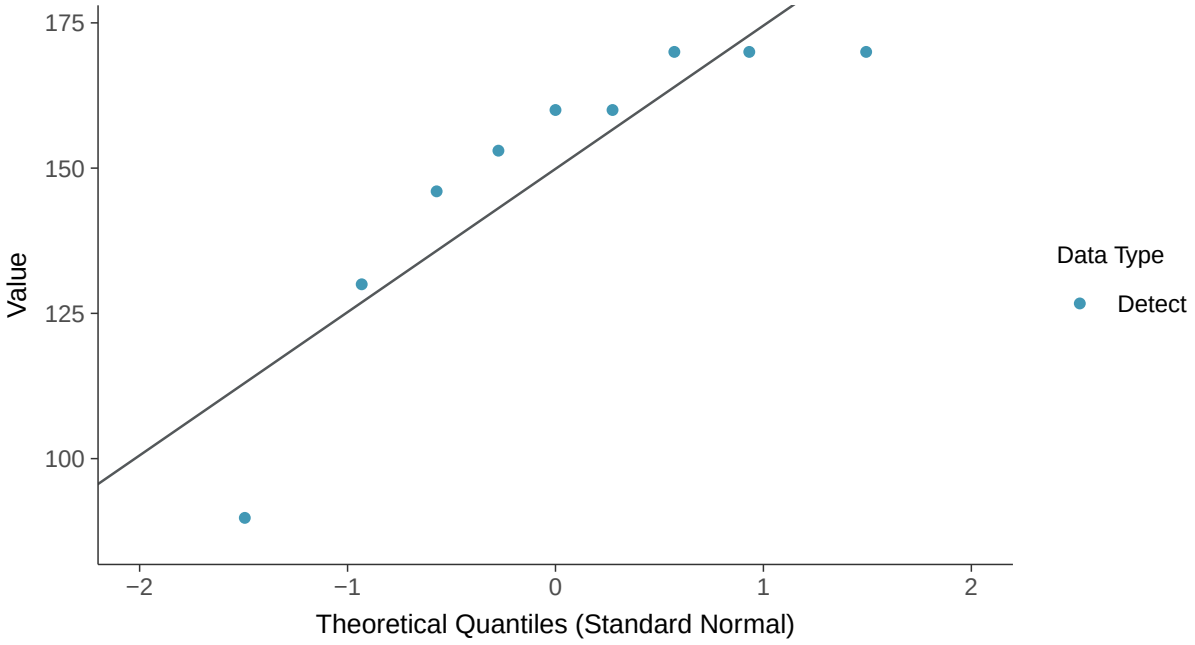
Boxplot by Season

Calcium, MW-18B (mg/l)



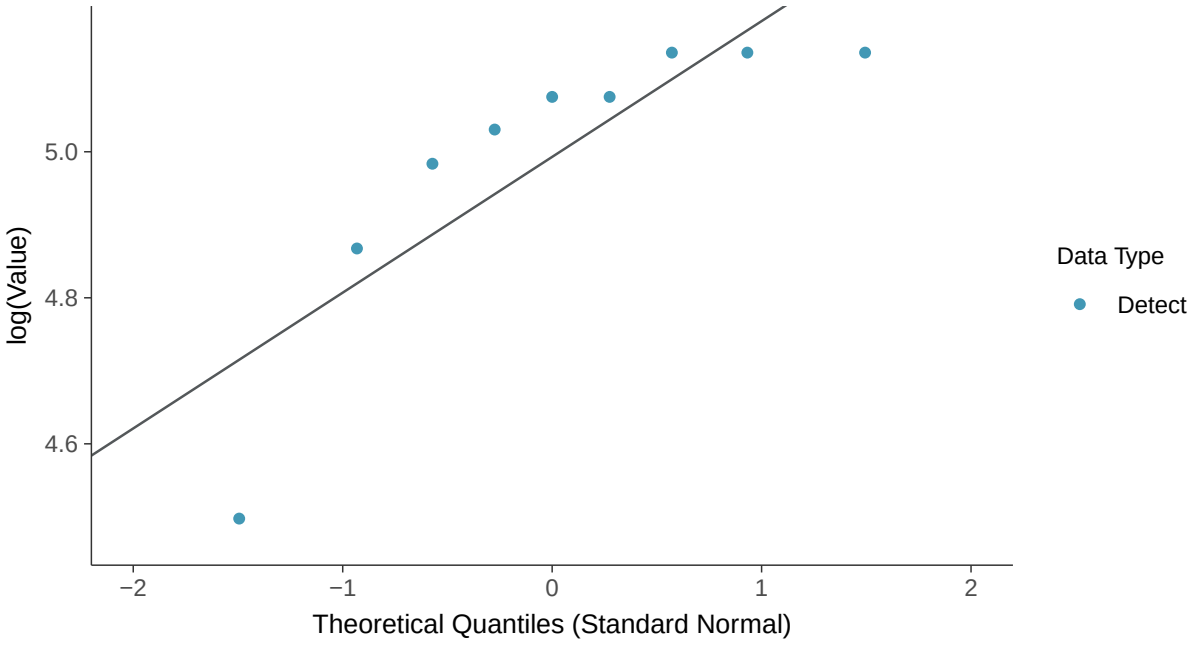
Normal Q-Q plot

Calcium, MW-18B (mg/l)



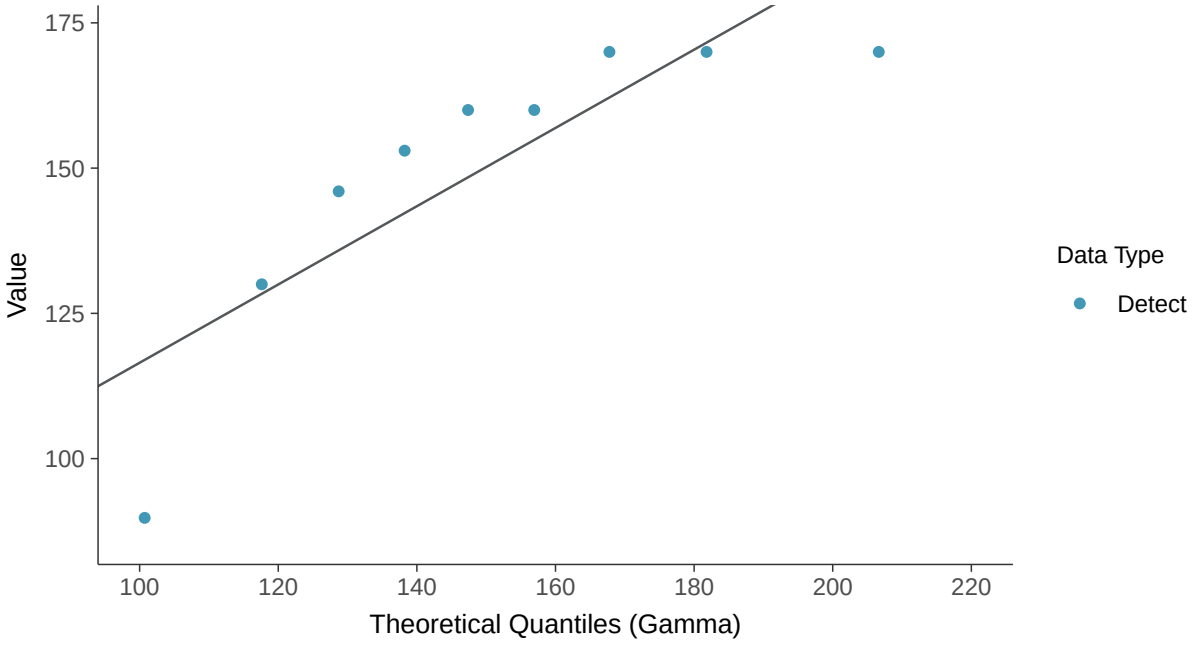
Lognormal Q-Q plot

Calcium, MW-18B (mg/l)



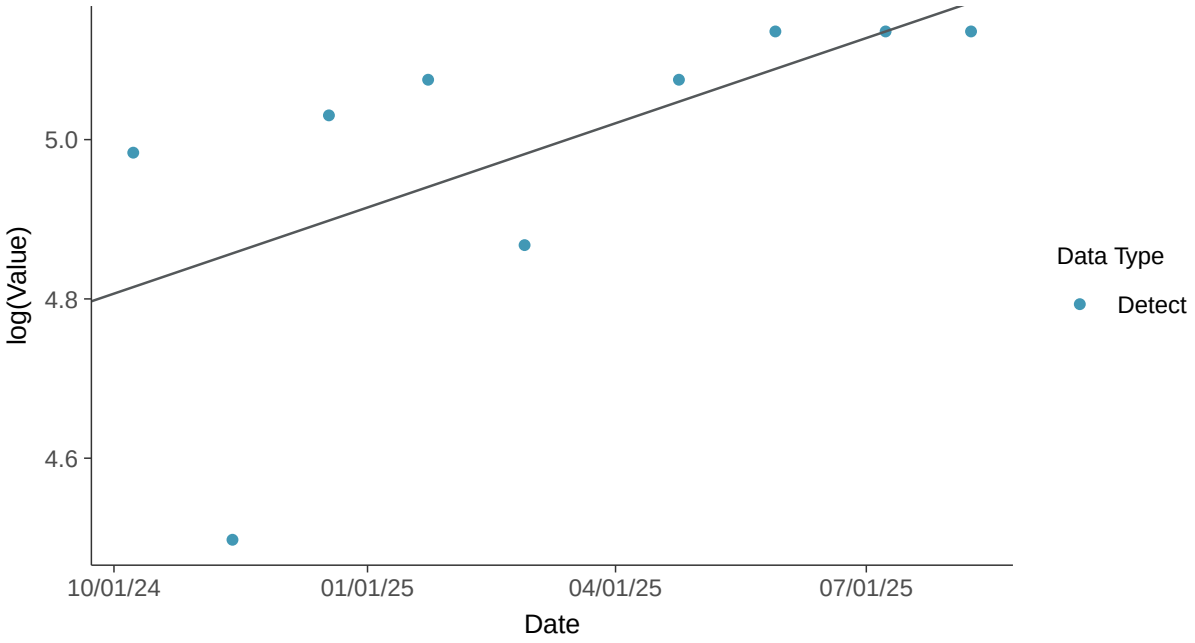
Gamma Q-Q plot

Calcium, MW-18B (mg/l)



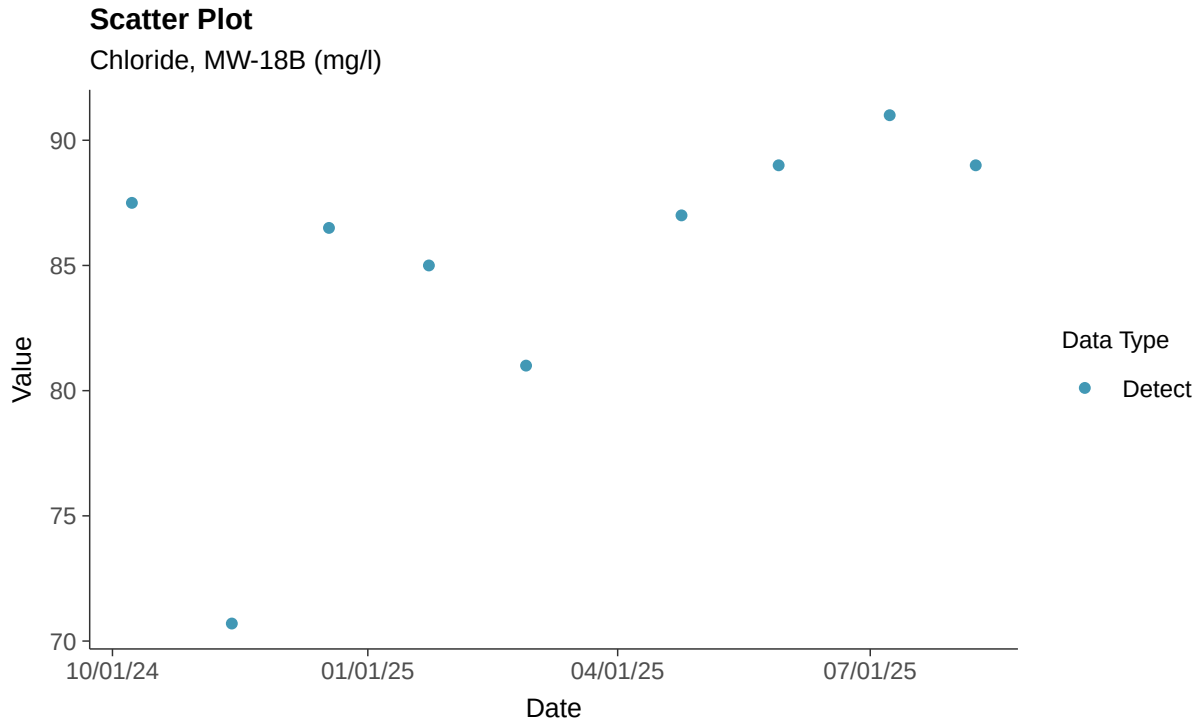
Trend Regression: Lognormal MLE

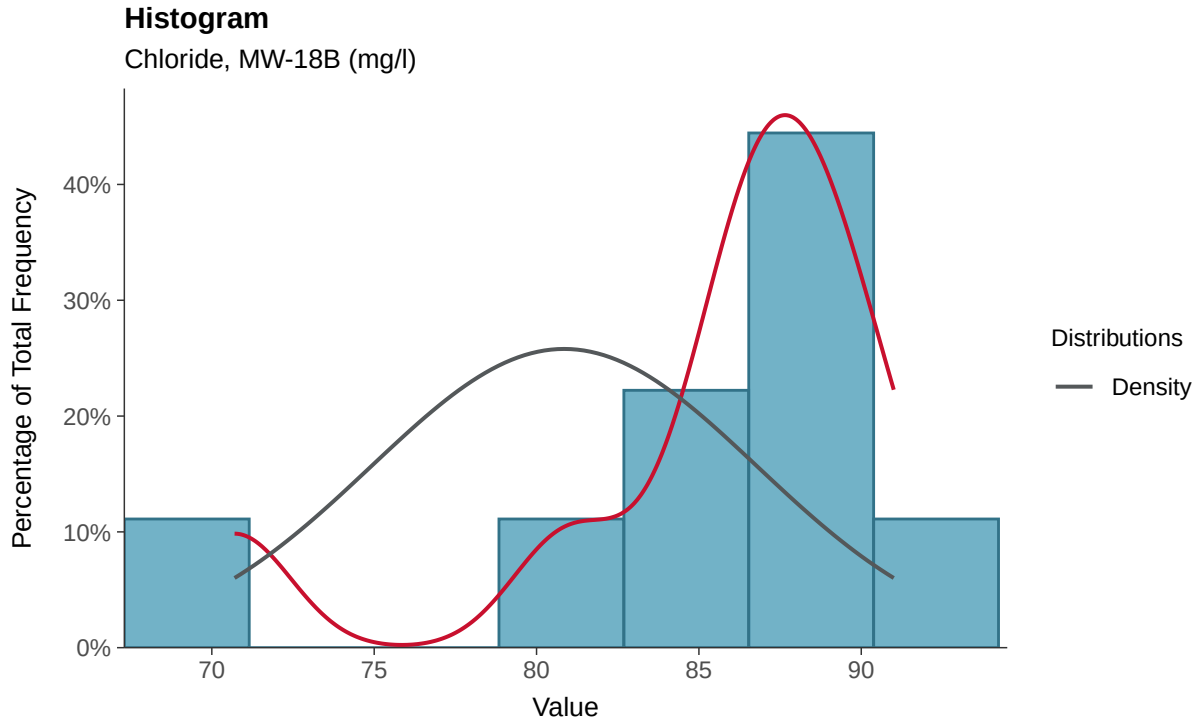
Calcium, MW-18B (mg/l)



Appendix III: Chloride, MW-18B

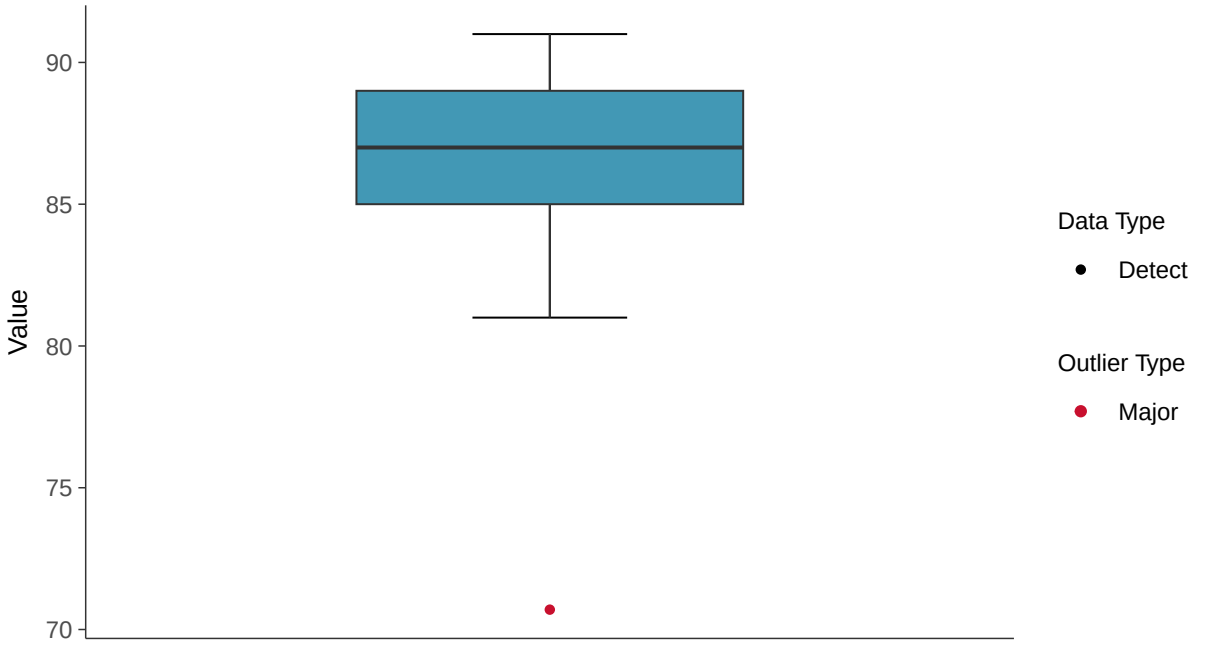
ID: 31_2_108





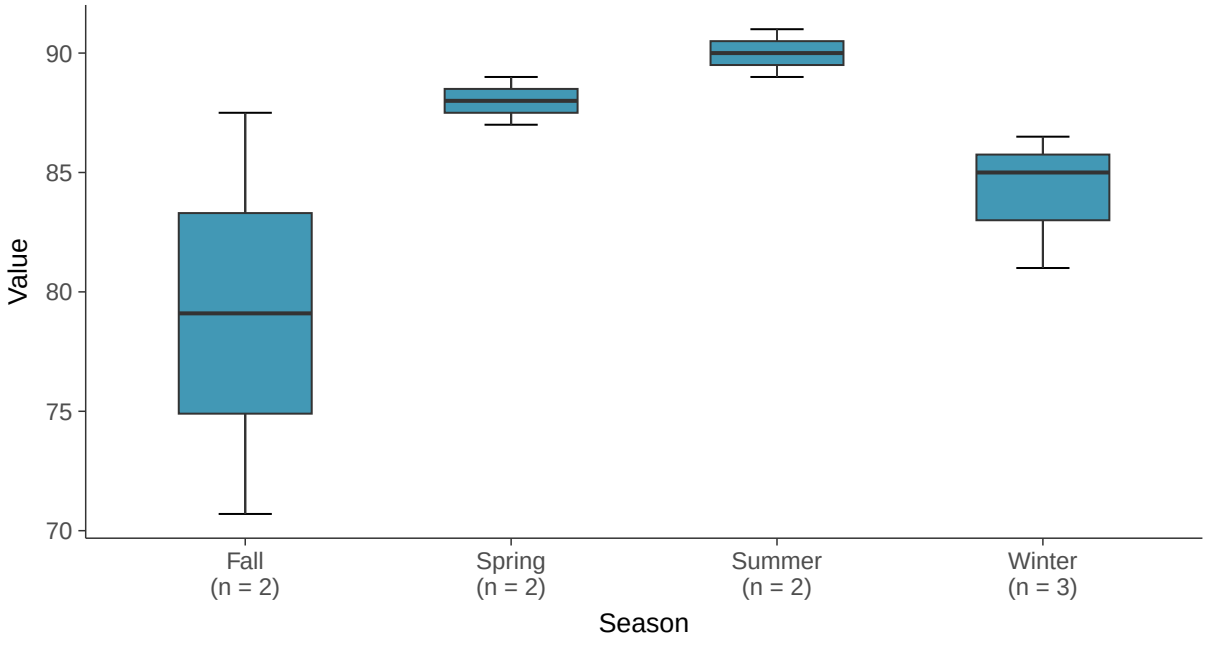
Boxplot

Chloride, MW-18B (mg/l)



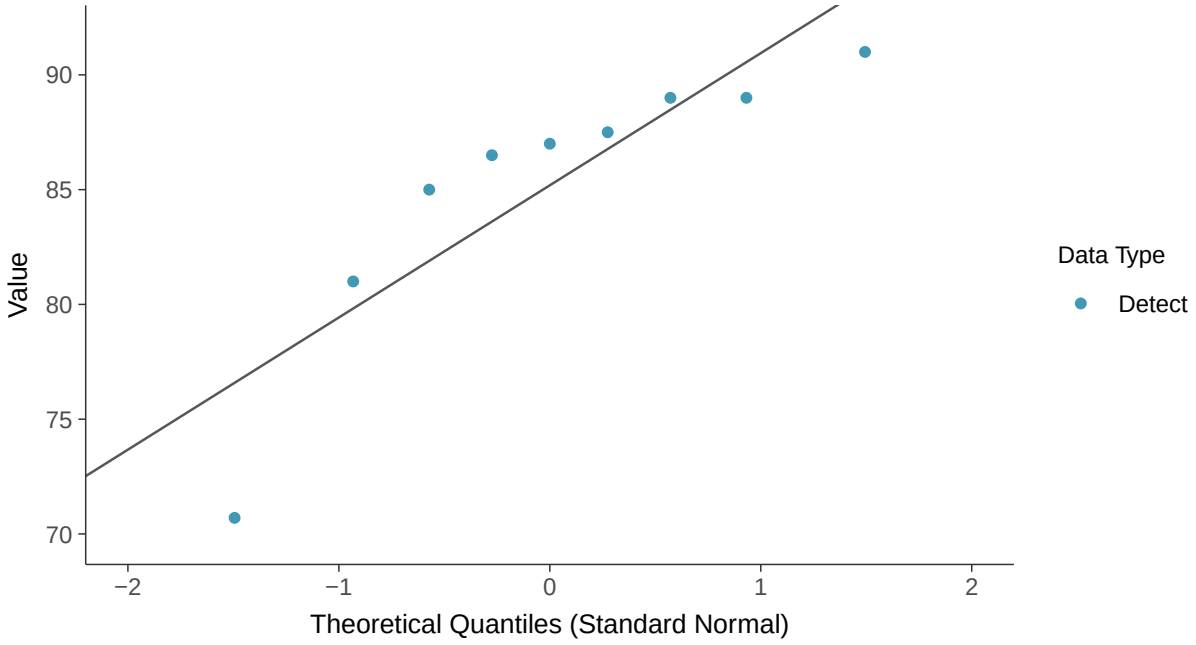
Boxplot by Season

Chloride, MW-18B (mg/l)



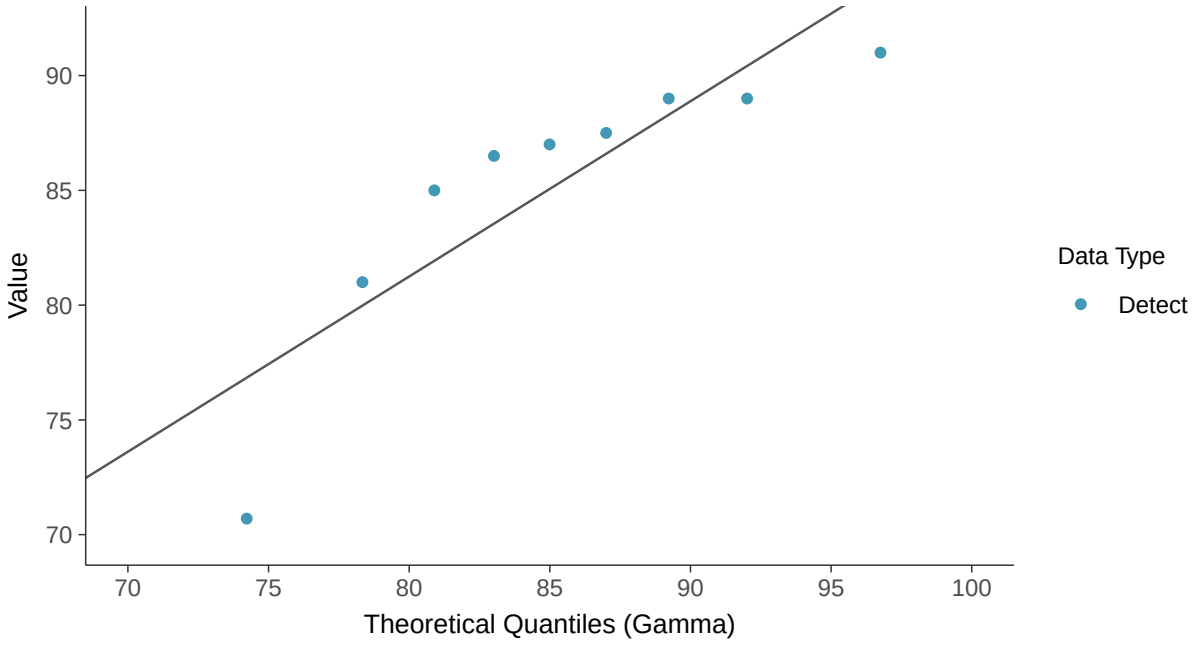
Normal Q-Q plot

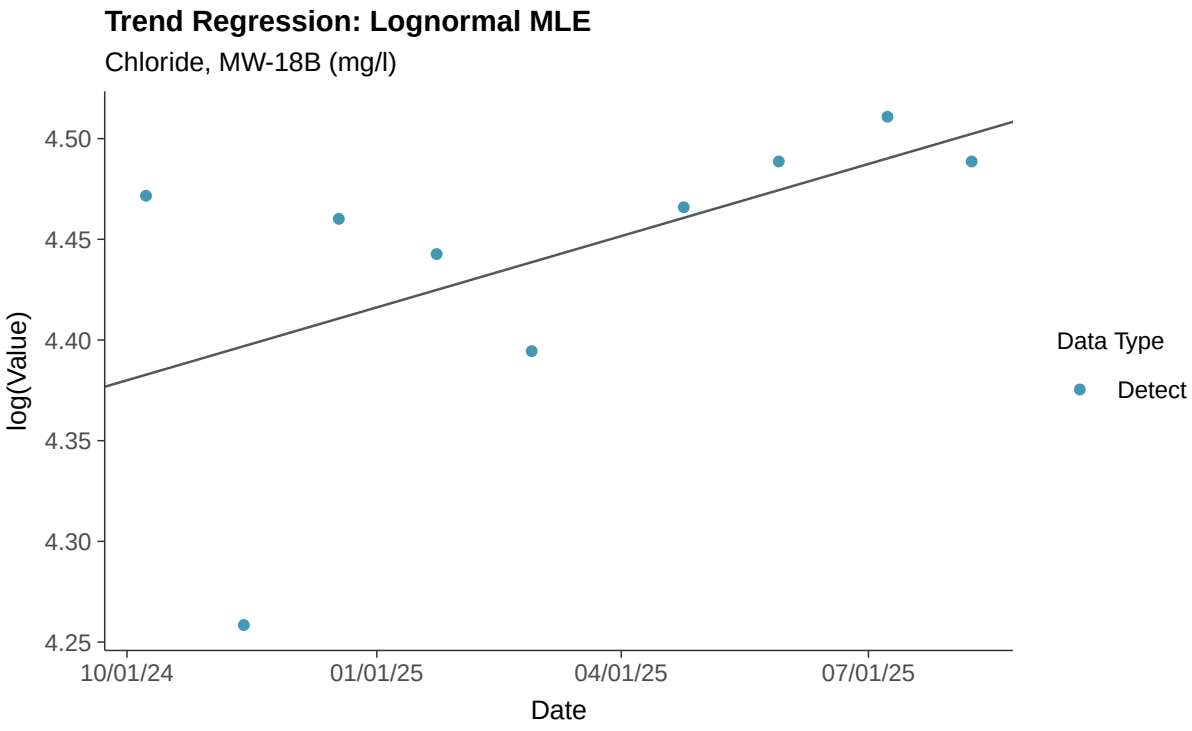
Chloride, MW-18B (mg/l)



Gamma Q-Q plot

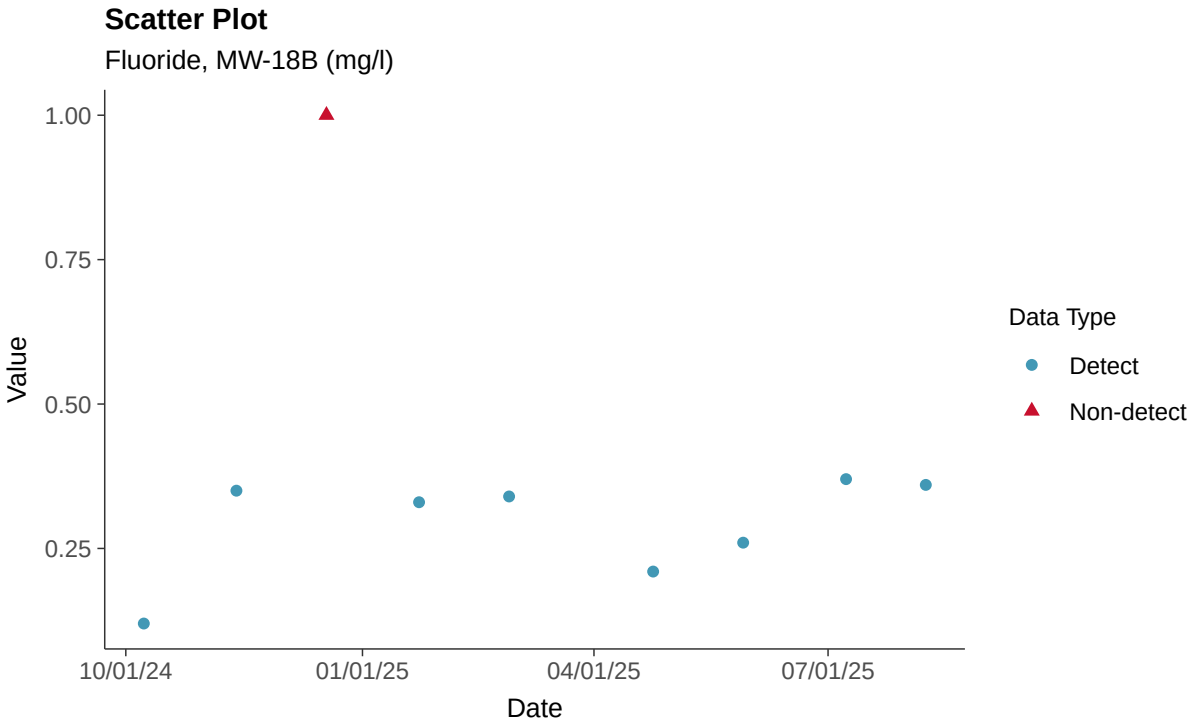
Chloride, MW-18B (mg/l)

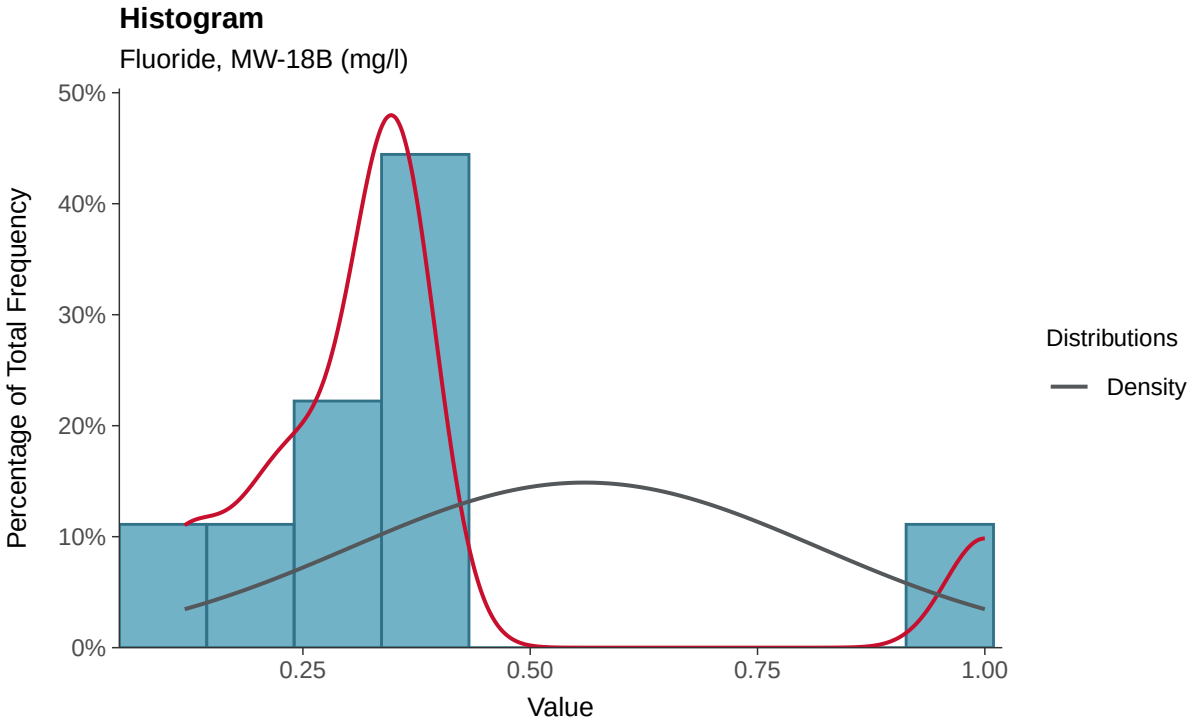



Trend Regression: Lognormal MLE
Chloride, MW-18B (mg/l)
log(Value)
4.50
4.45
4.40
4.35
4.30
4.25
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix III: Fluoride, MW-18B

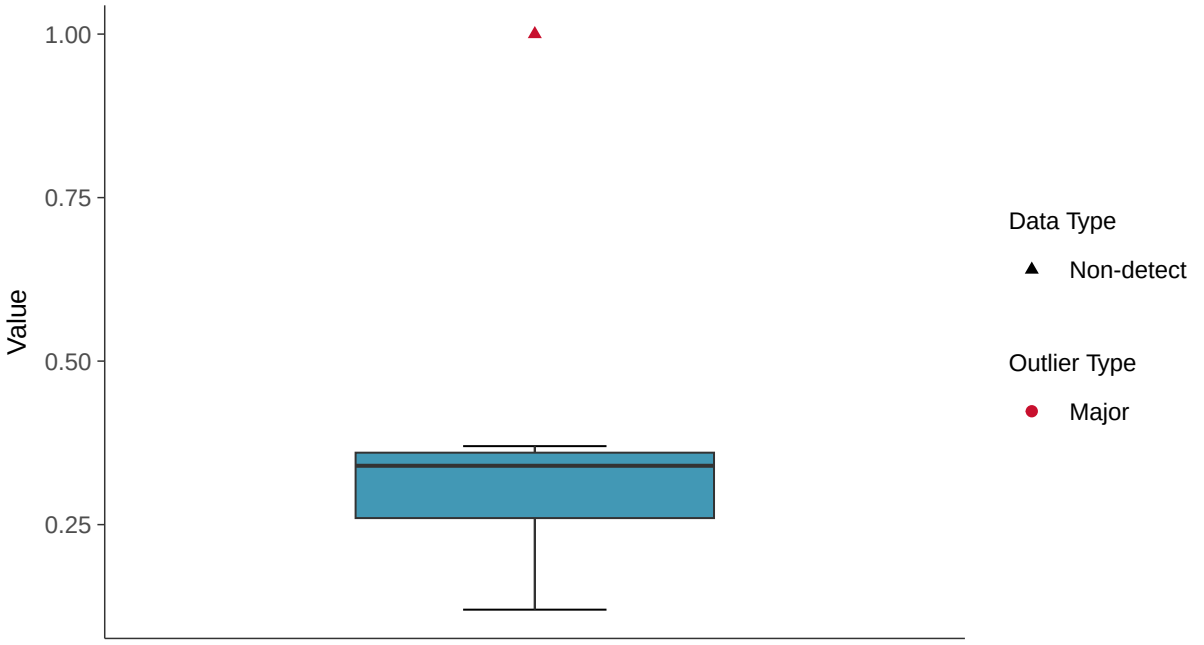
ID: 31_2_112





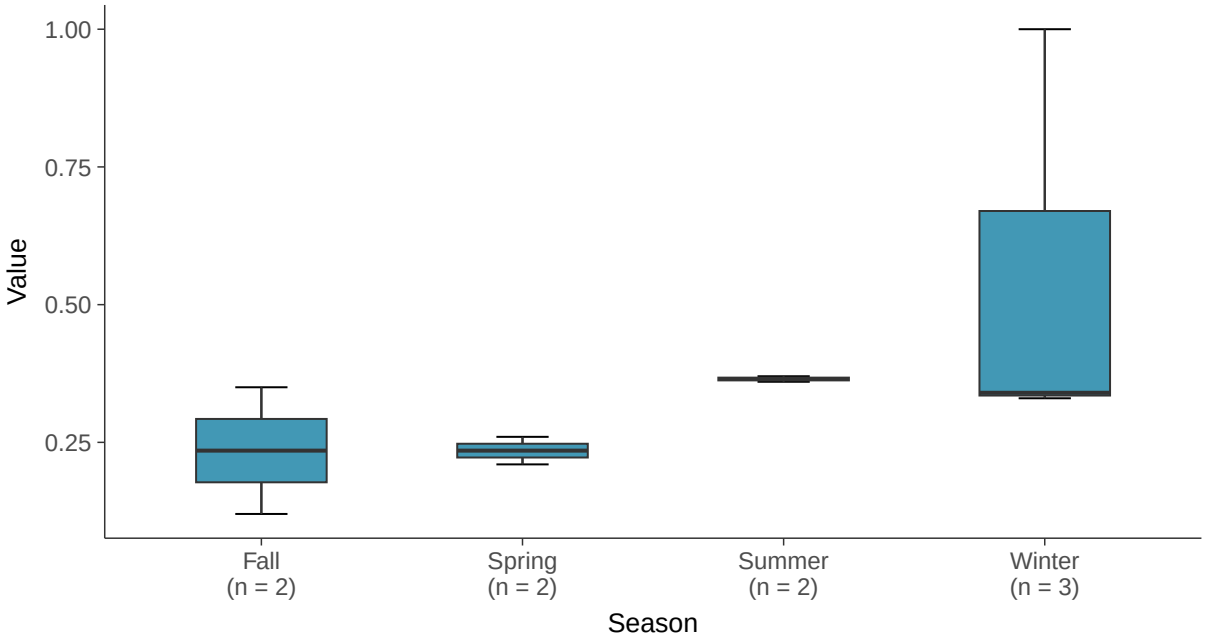
Boxplot

Fluoride, MW-18B (mg/l)



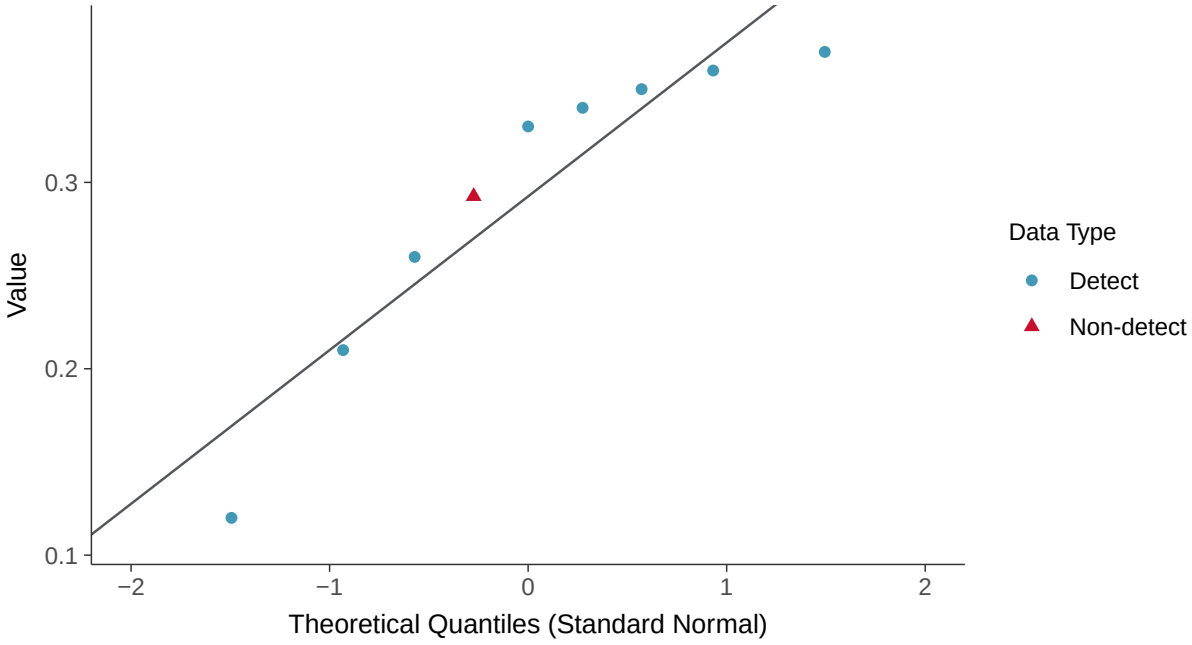
Boxplot by Season

Fluoride, MW-18B (mg/l)



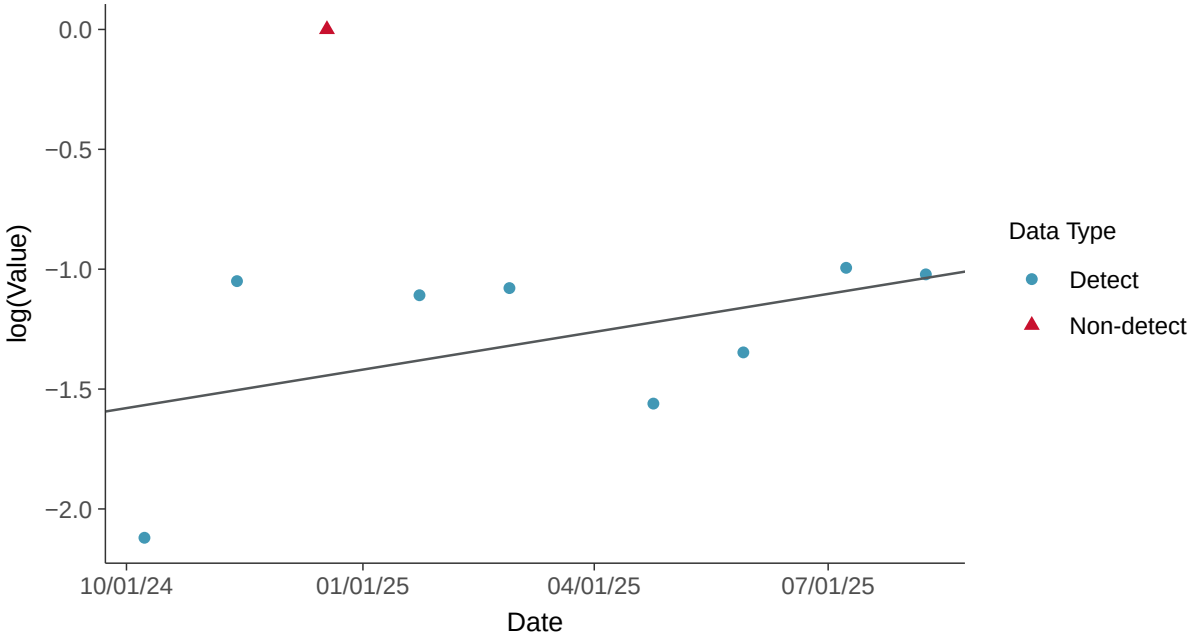
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-18B (mg/l)



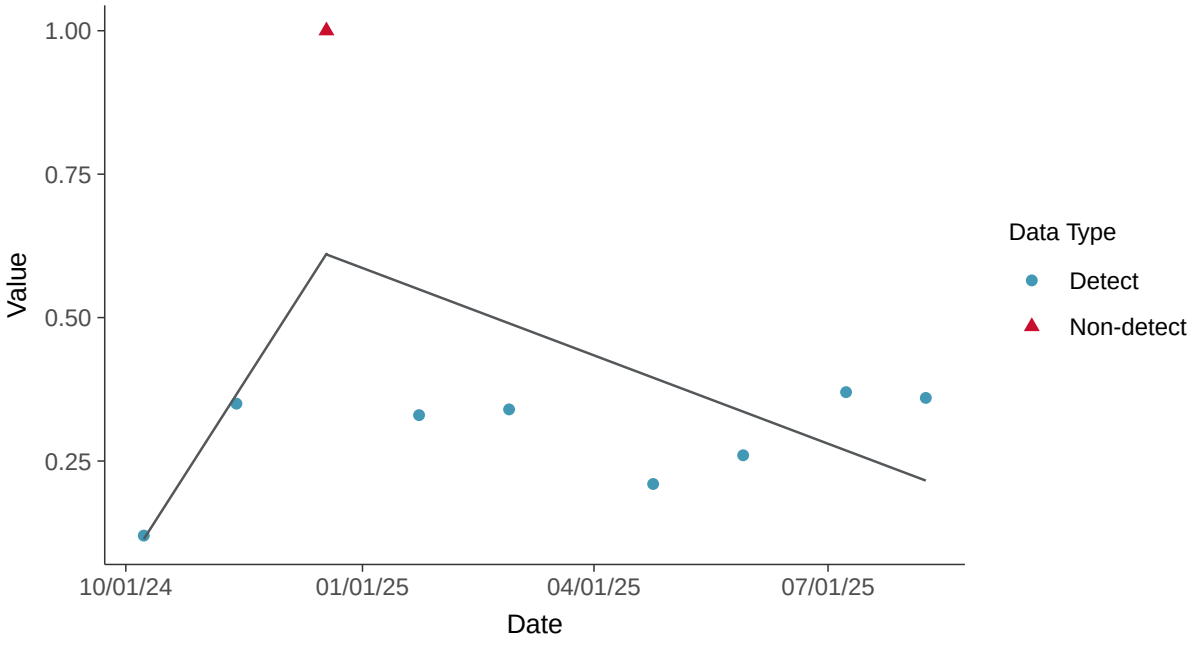
Trend Regression: Lognormal MLE

Fluoride, MW-18B (mg/l)



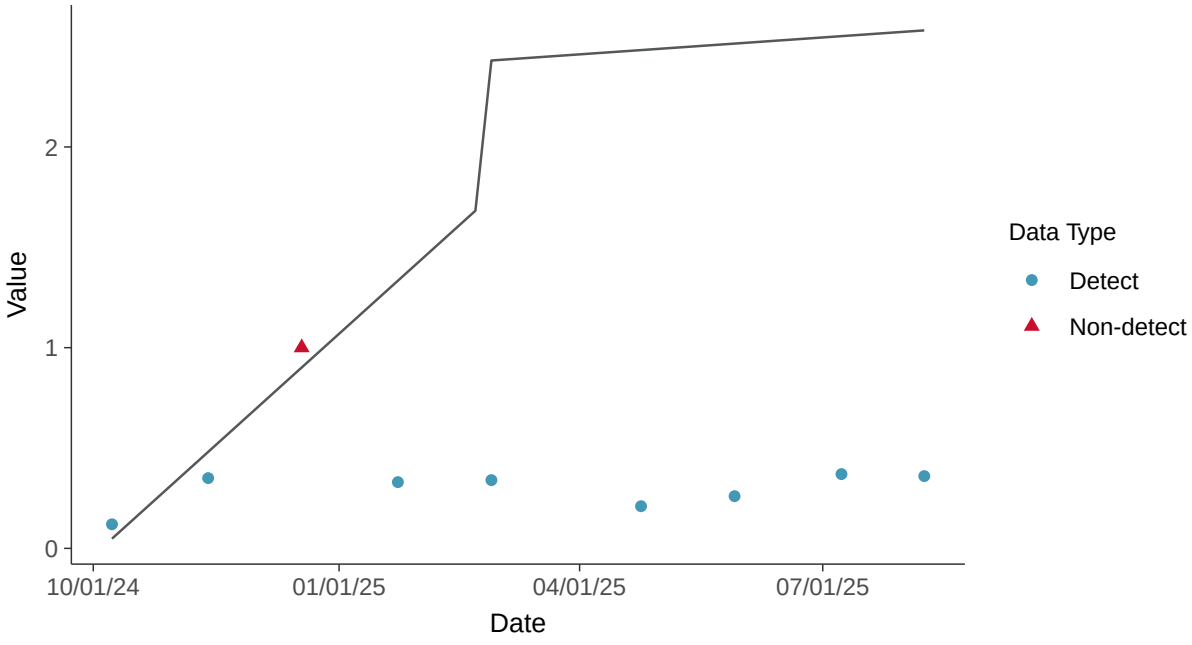
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-18B (mg/l)



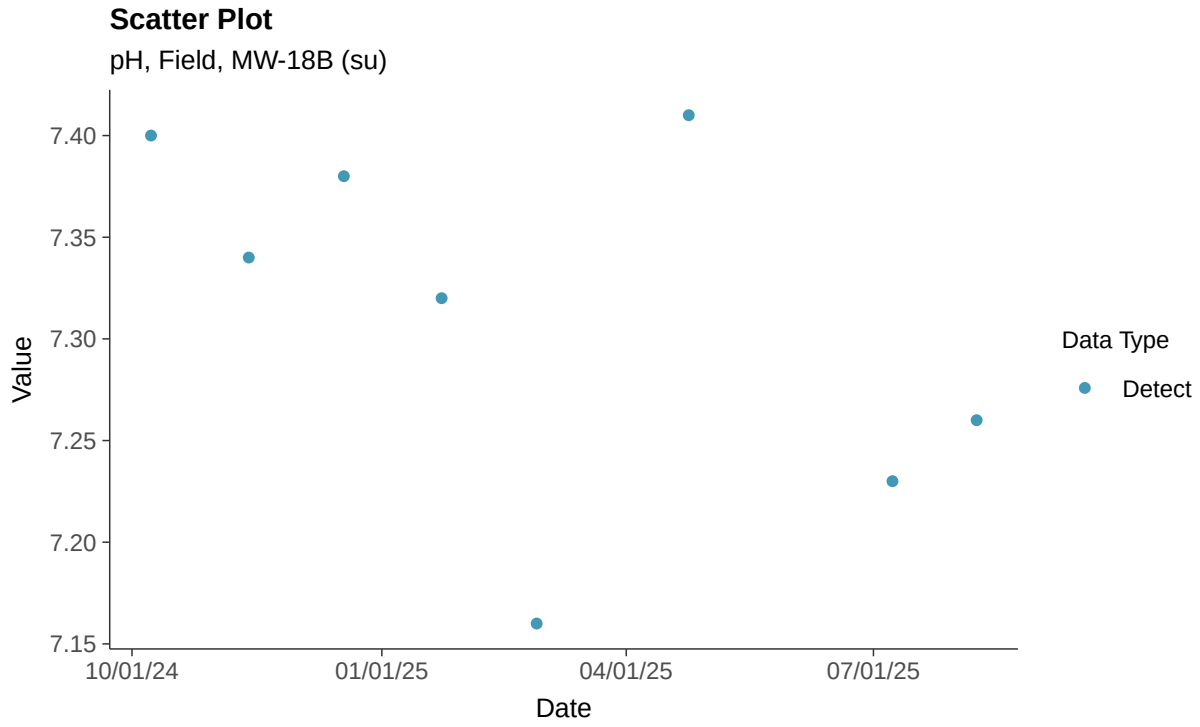
Trend Regression: Piecewise Linear-Linear-Linear

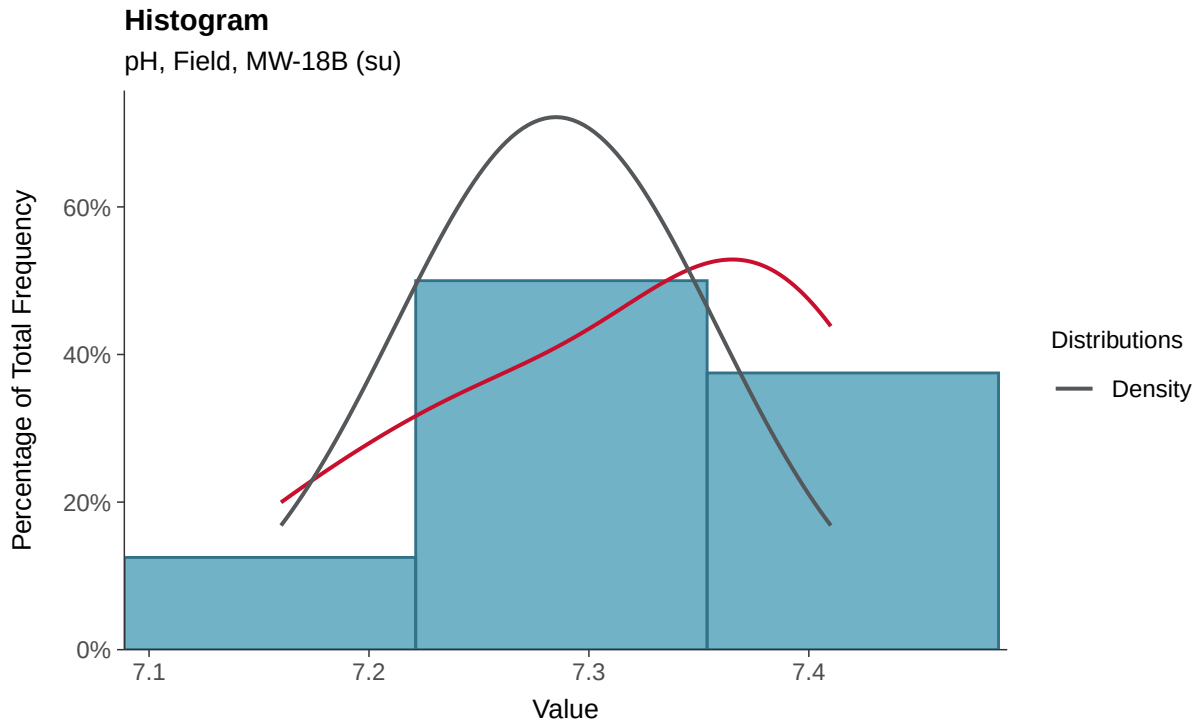
Fluoride, MW-18B (mg/l)



Appendix III: pH, Field, MW-18B

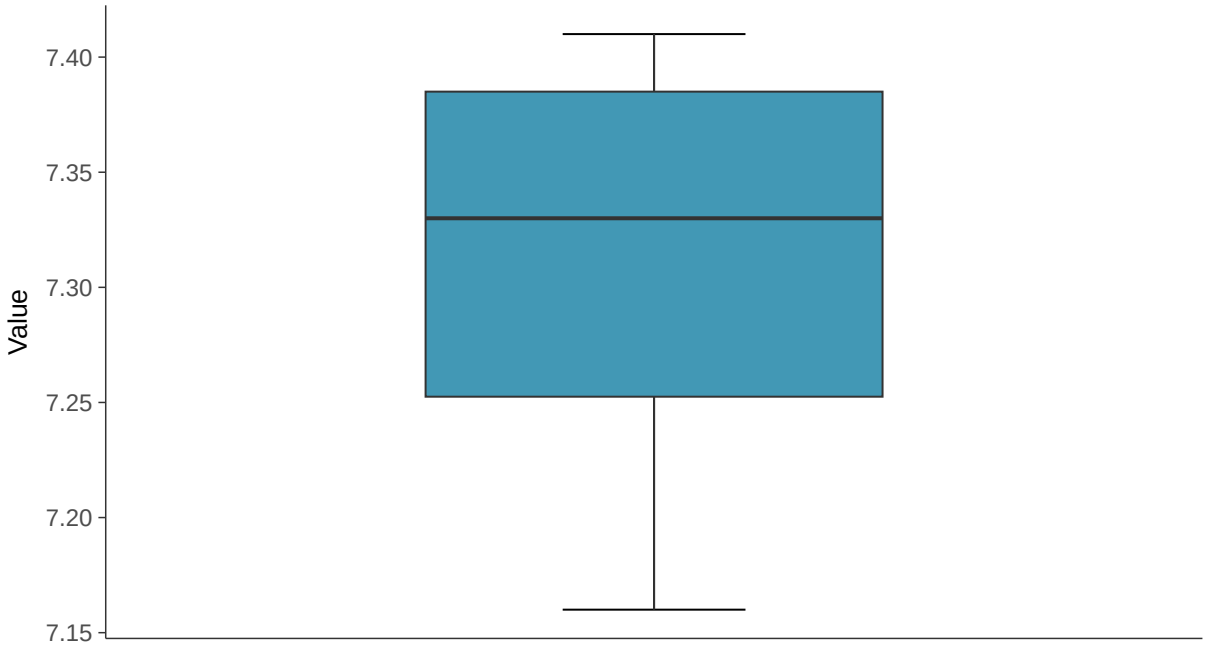
ID: 31_2_120





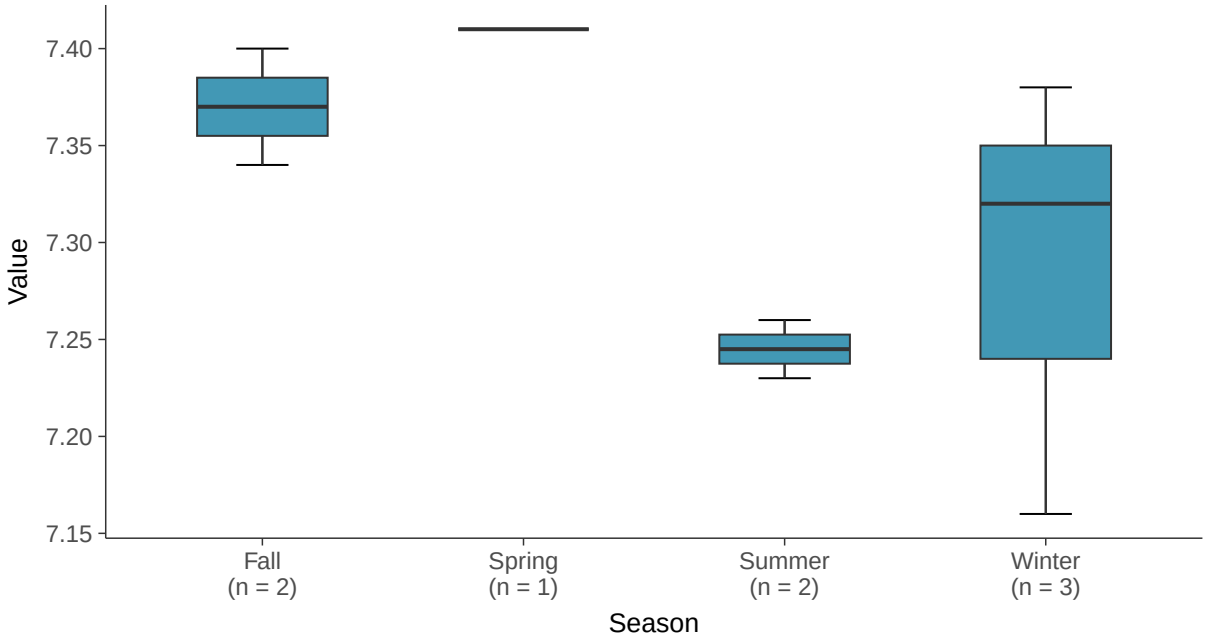
Boxplot

pH, Field, MW-18B (su)



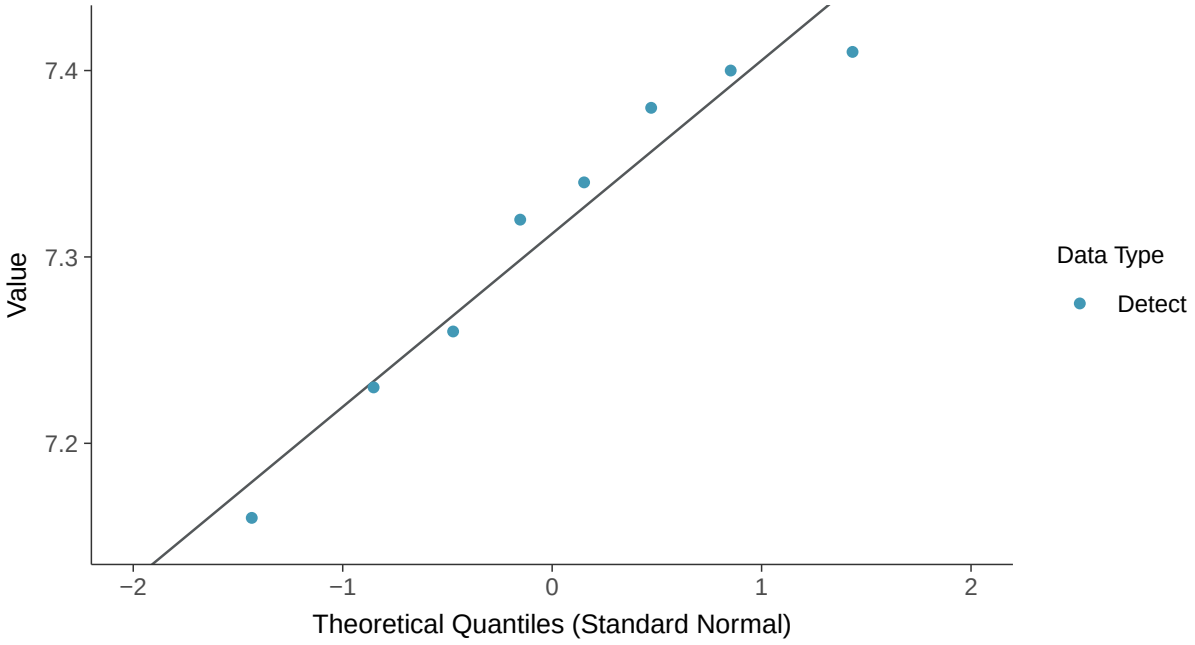
Boxplot by Season

pH, Field, MW-18B (su)



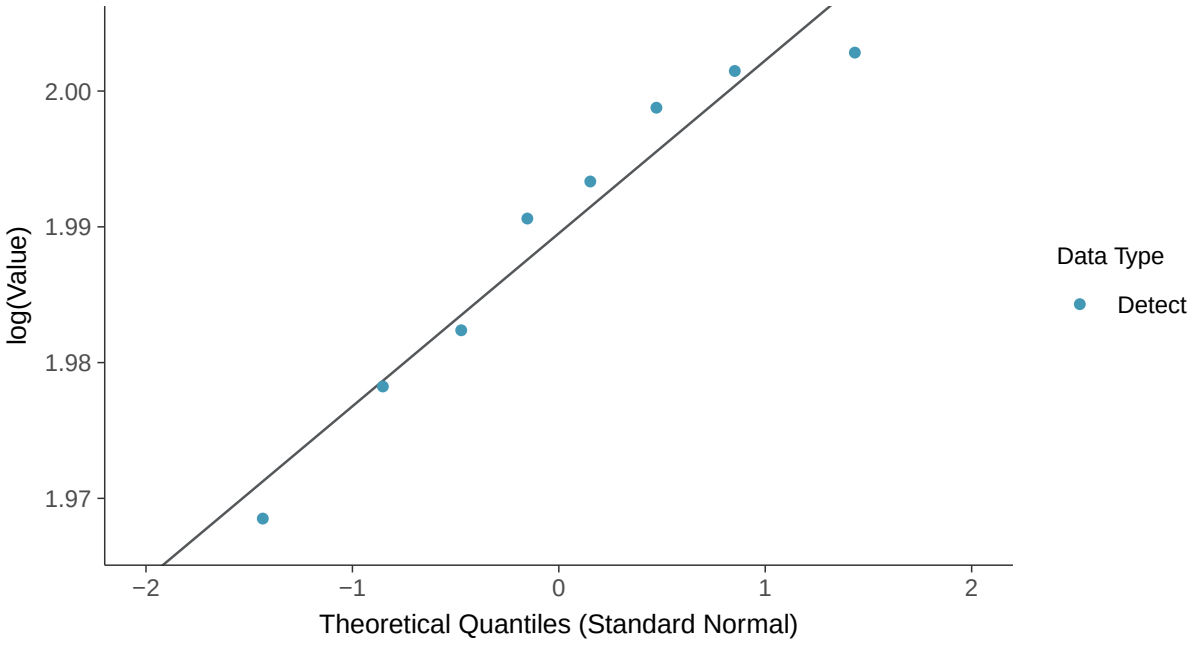
Normal Q-Q plot

pH, Field, MW-18B (su)



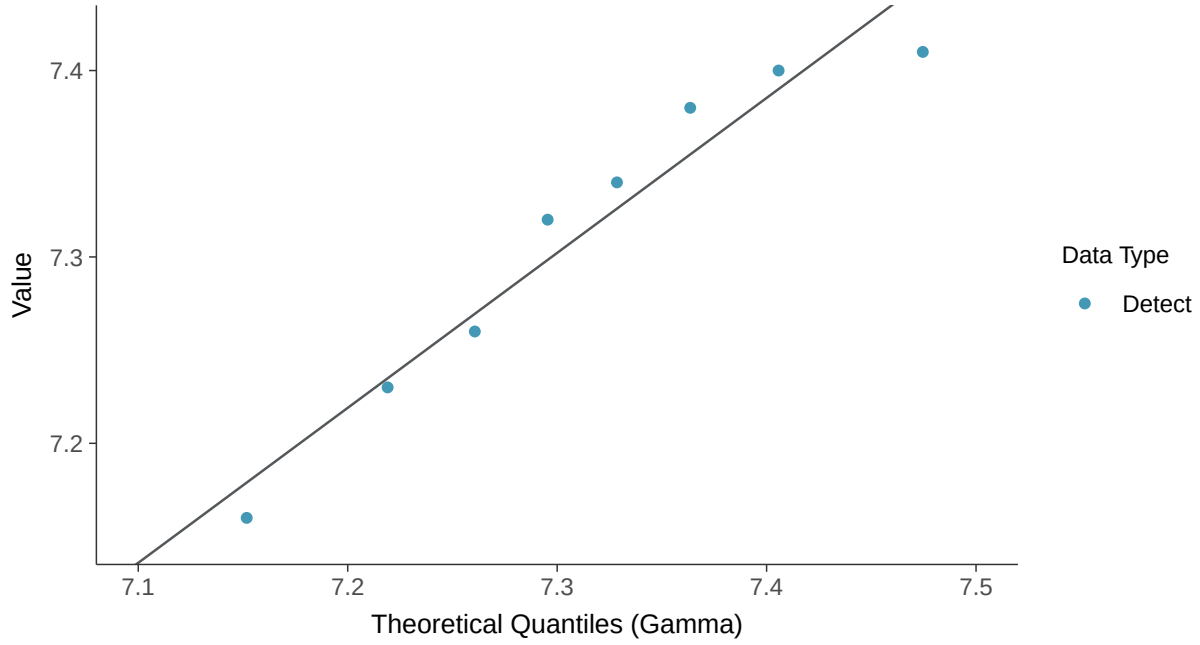
Lognormal Q-Q plot

pH, Field, MW-18B (su)



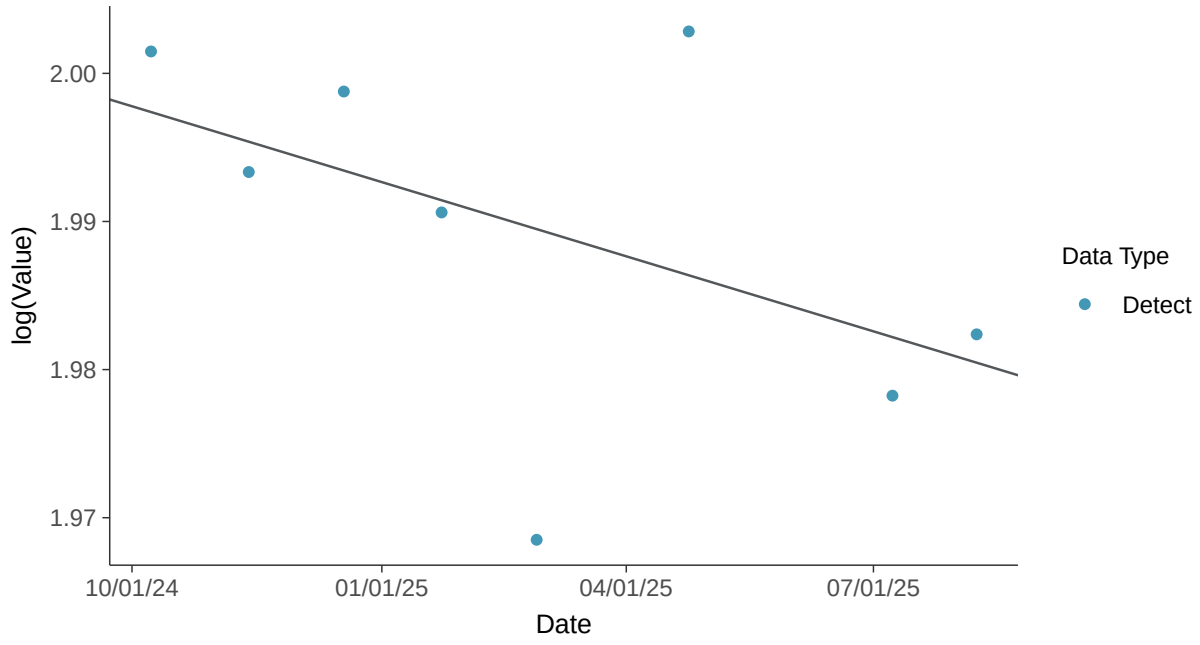
Gamma Q-Q plot

pH, Field, MW-18B (su)



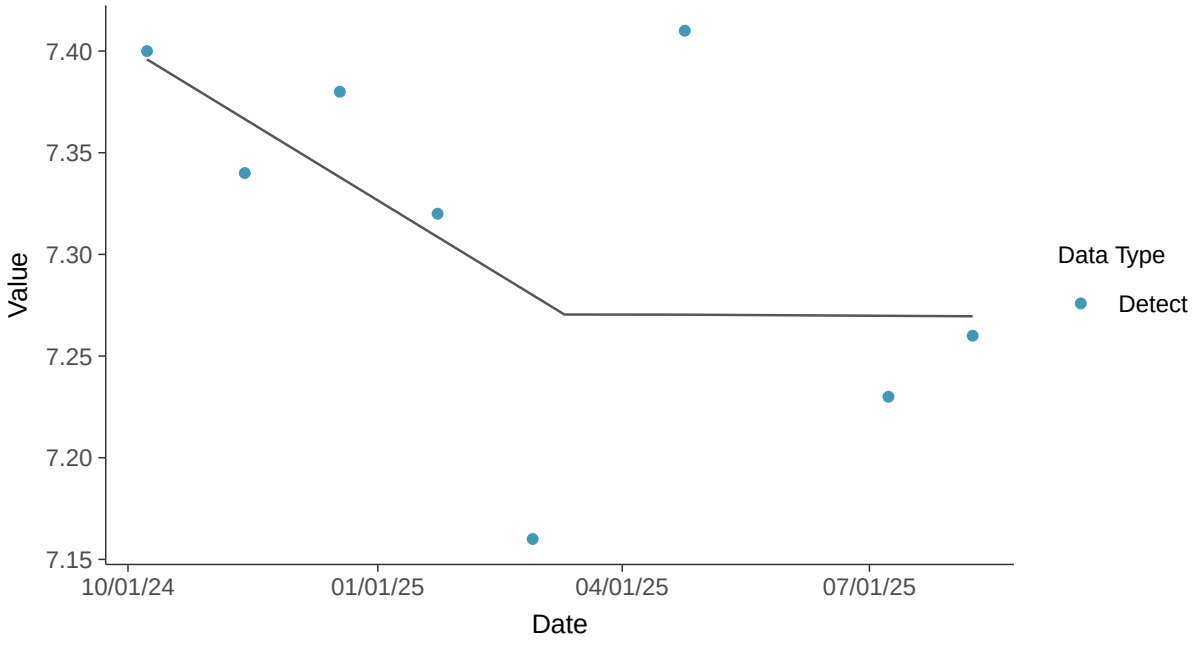
Trend Regression: Lognormal MLE

pH, Field, MW-18B (su)



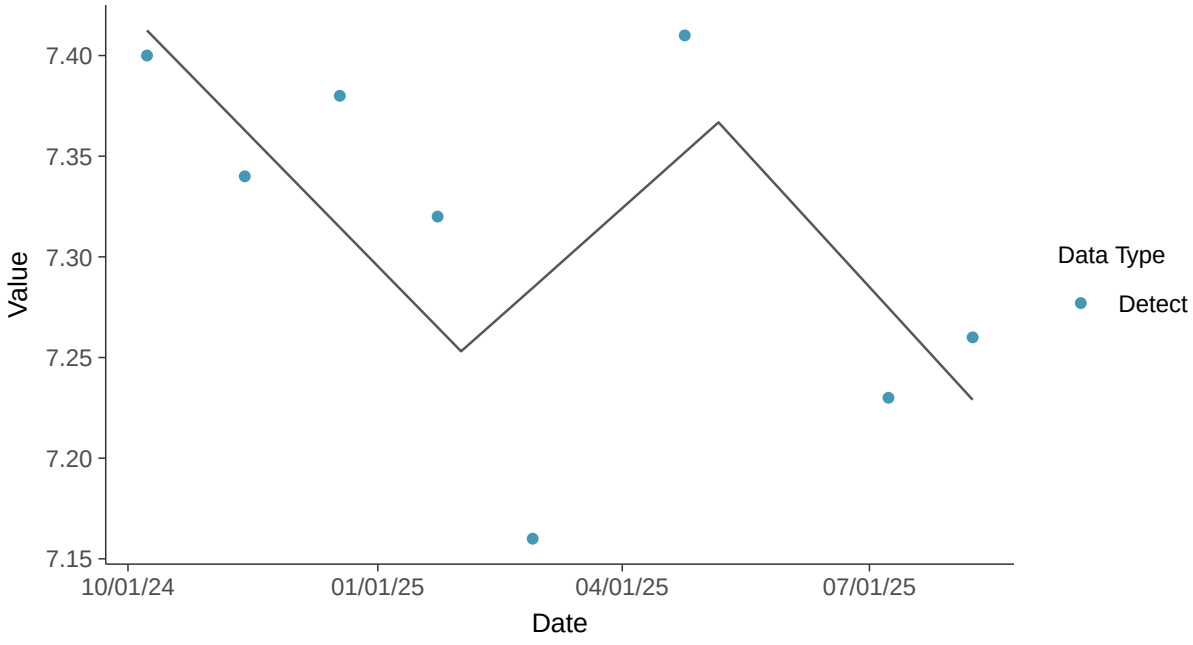
Trend Regression: Piecewise Linear-Linear

pH, Field, MW-18B (su)



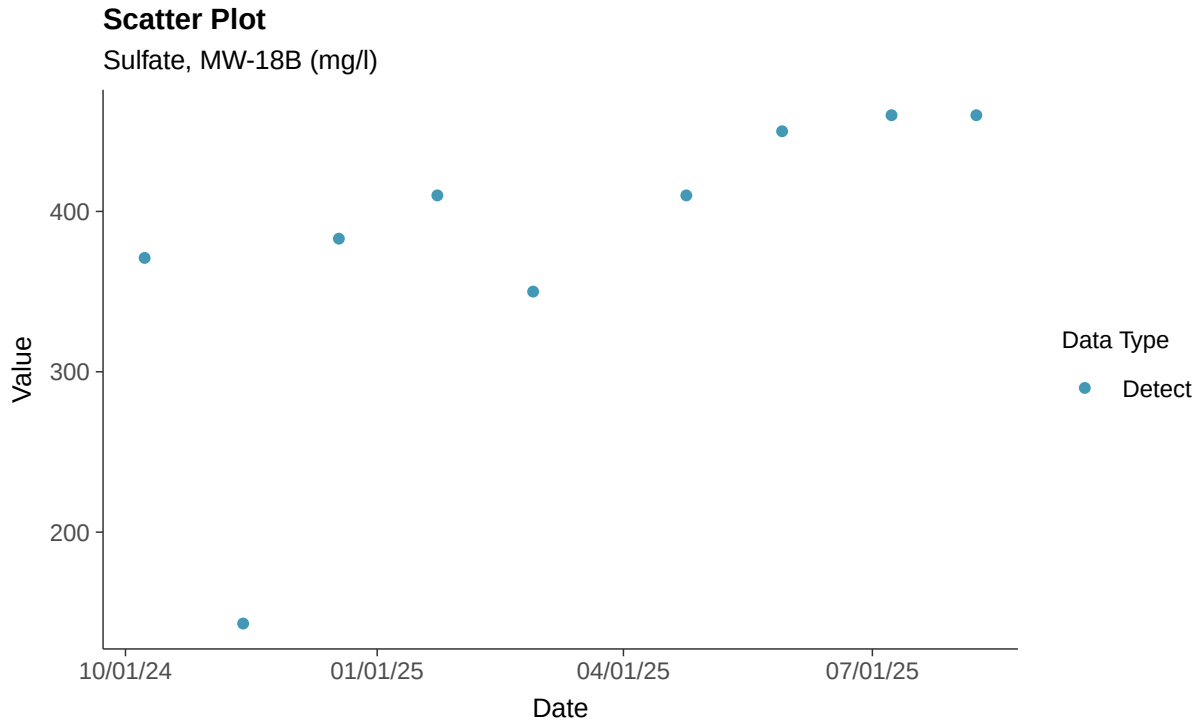
Trend Regression: Piecewise Linear-Linear-Linear

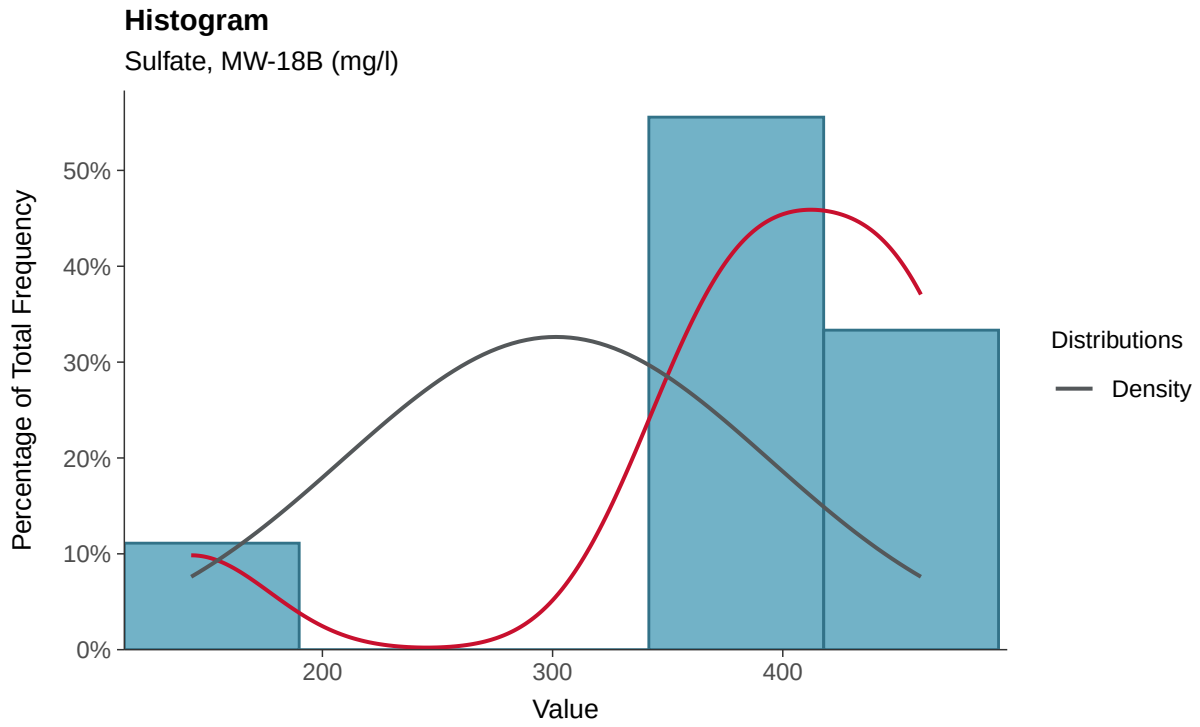
pH, Field, MW-18B (su)



Appendix III: Sulfate, MW-18B

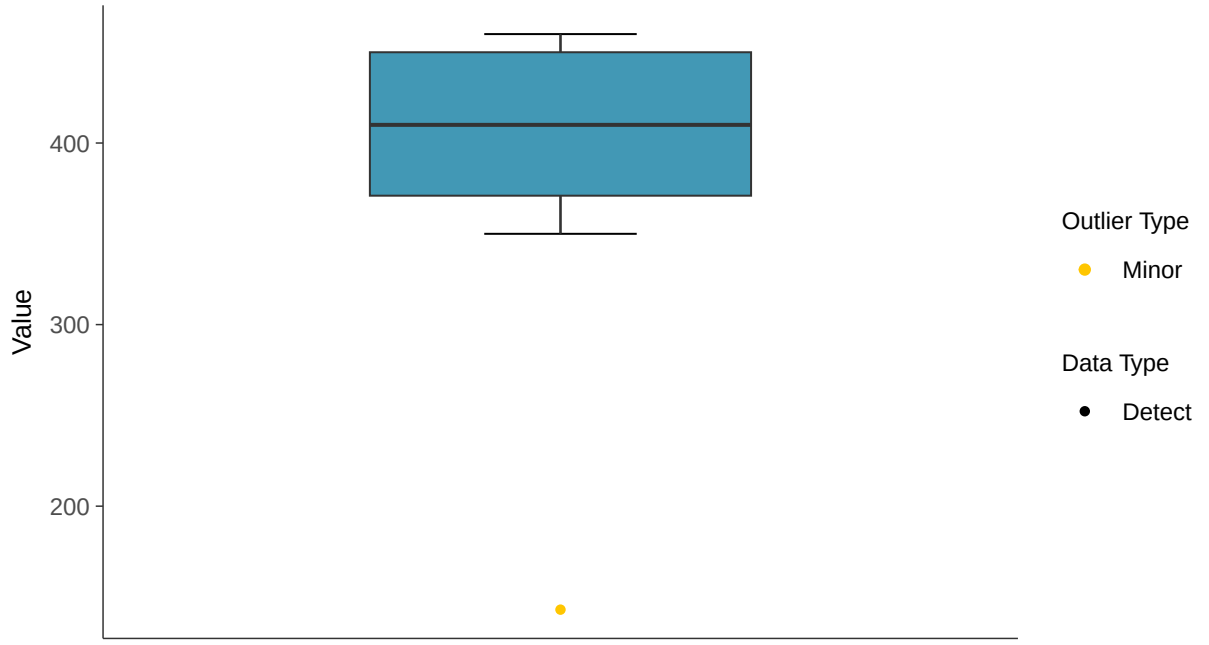
ID: 31_2_124





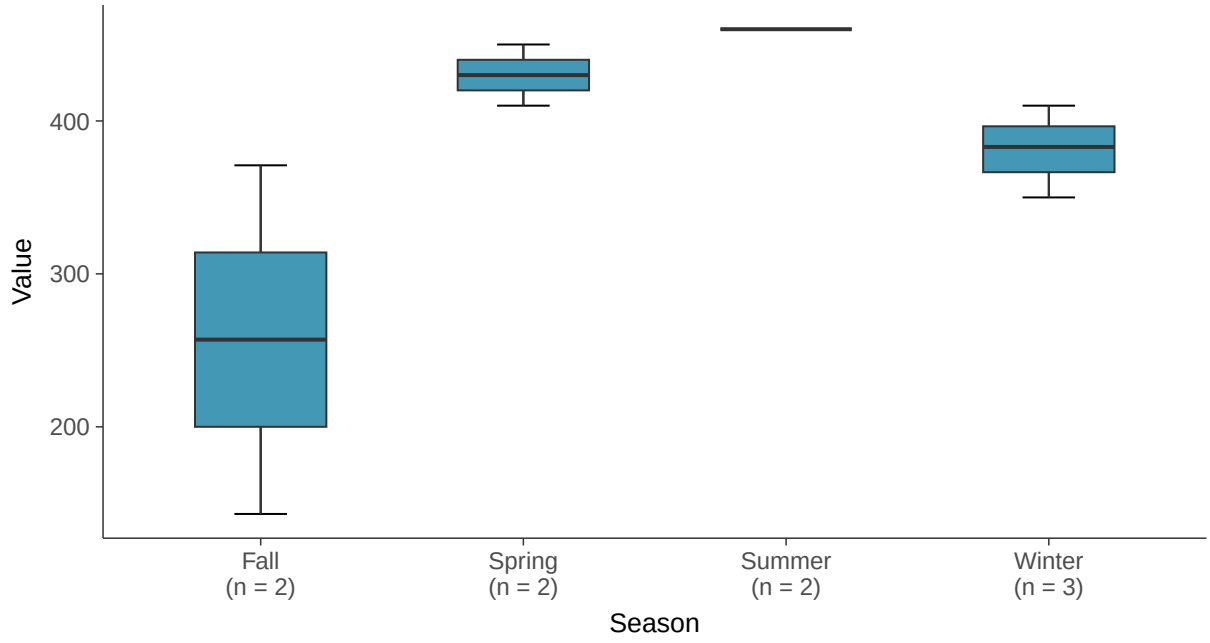
Boxplot

Sulfate, MW-18B (mg/l)



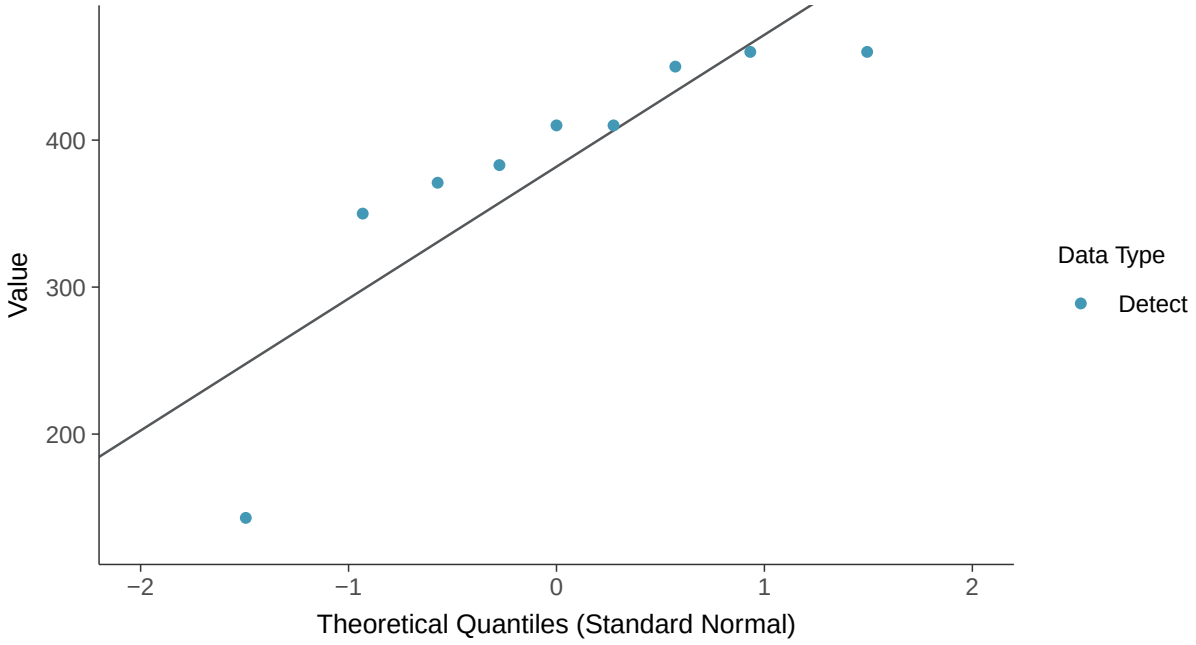
Boxplot by Season

Sulfate, MW-18B (mg/l)



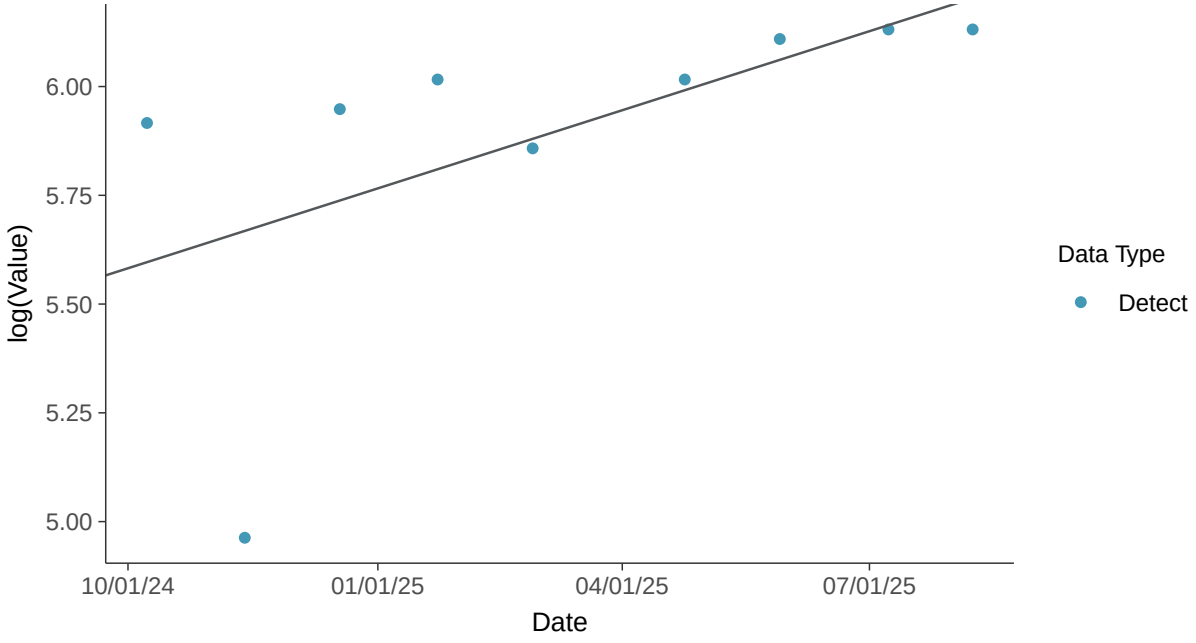
Normal Q-Q plot

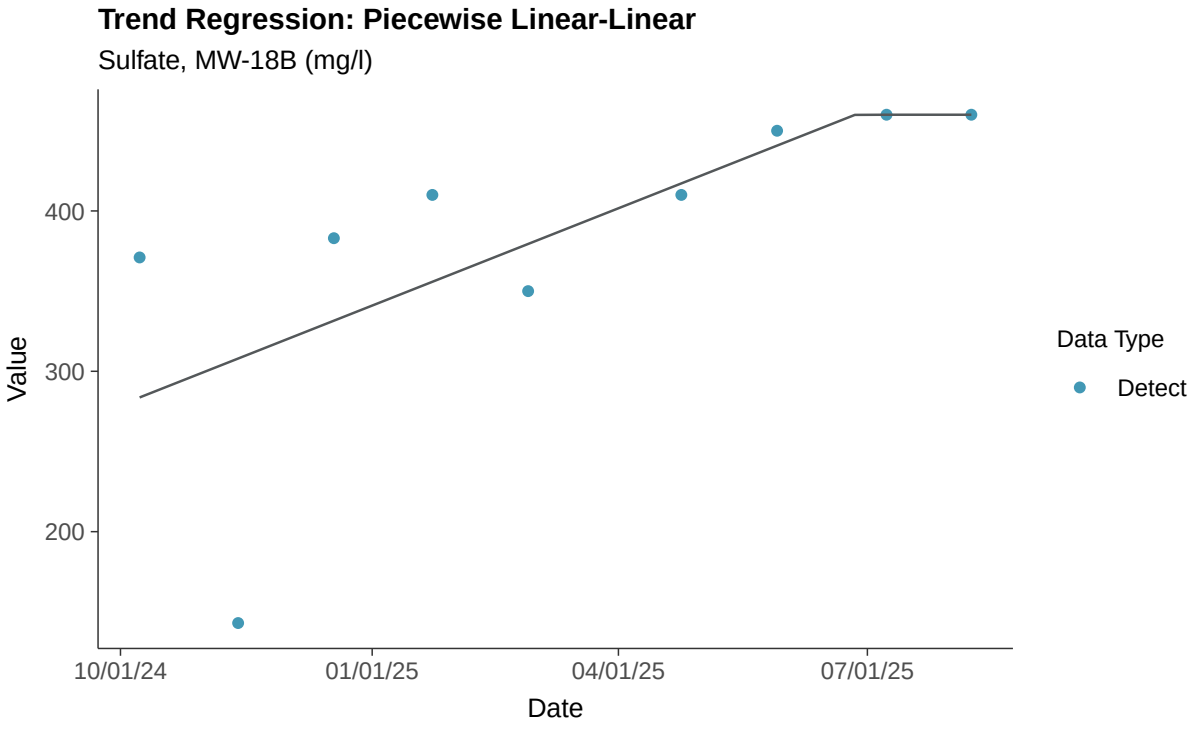
Sulfate, MW-18B (mg/l)



Trend Regression: Lognormal MLE

Sulfate, MW-18B (mg/l)



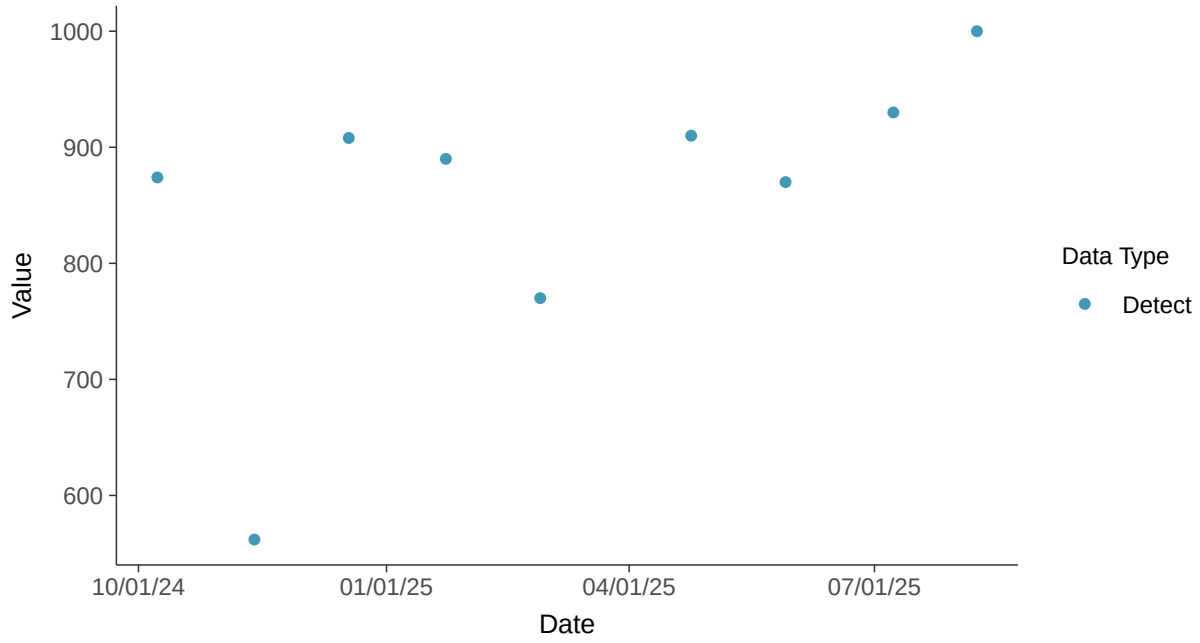

Trend Regression: Piecewise Linear-Linear
Sulfate, MW-18B (mg/l)
Value
400
300
200
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix III: Total Dissolved Solids, MW-18B

ID: 31_2_126

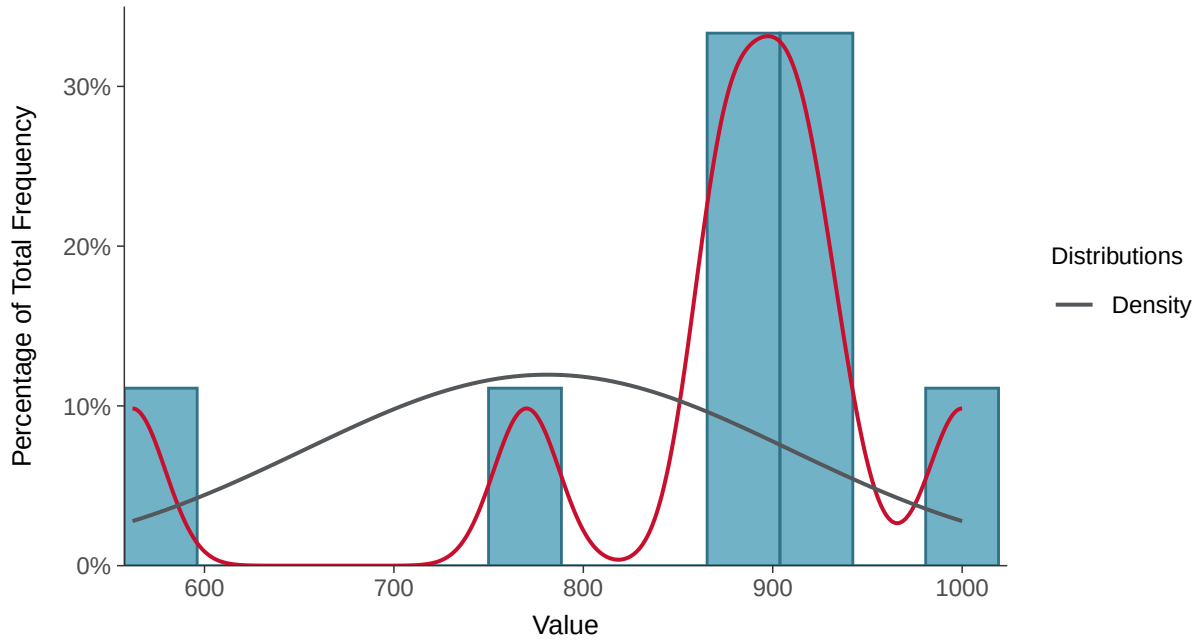
Scatter Plot

Total Dissolved Solids, MW-18B (mg/l)



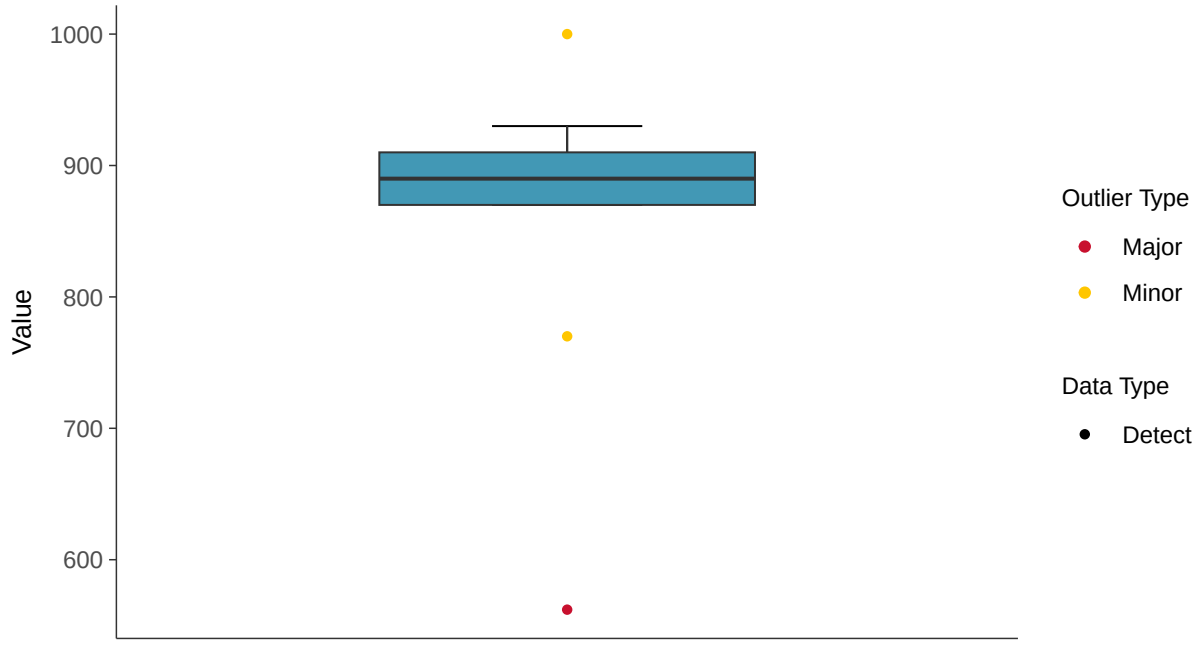
Histogram

Total Dissolved Solids, MW-18B (mg/l)



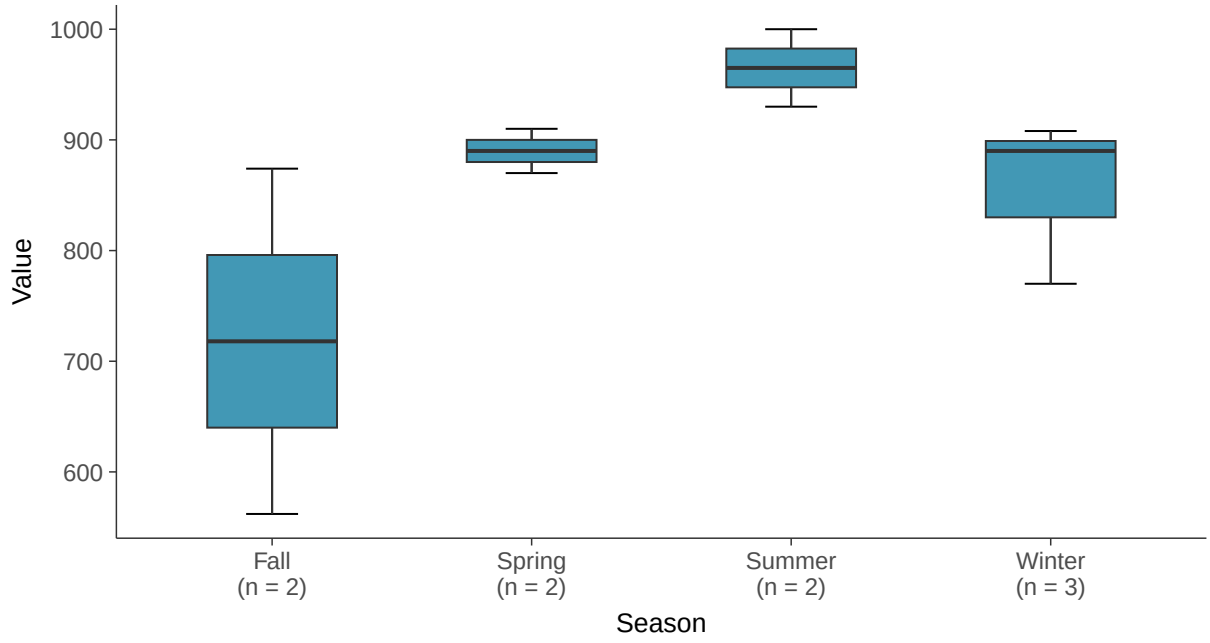
Boxplot

Total Dissolved Solids, MW-18B (mg/l)



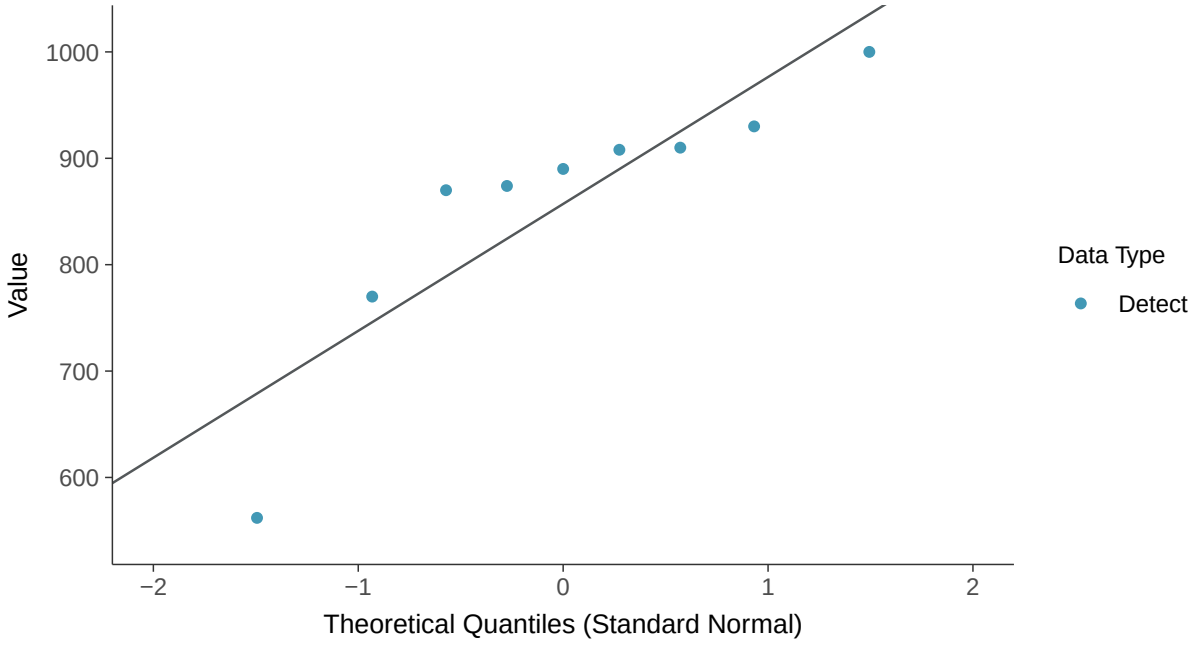
Boxplot by Season

Total Dissolved Solids, MW-18B (mg/l)



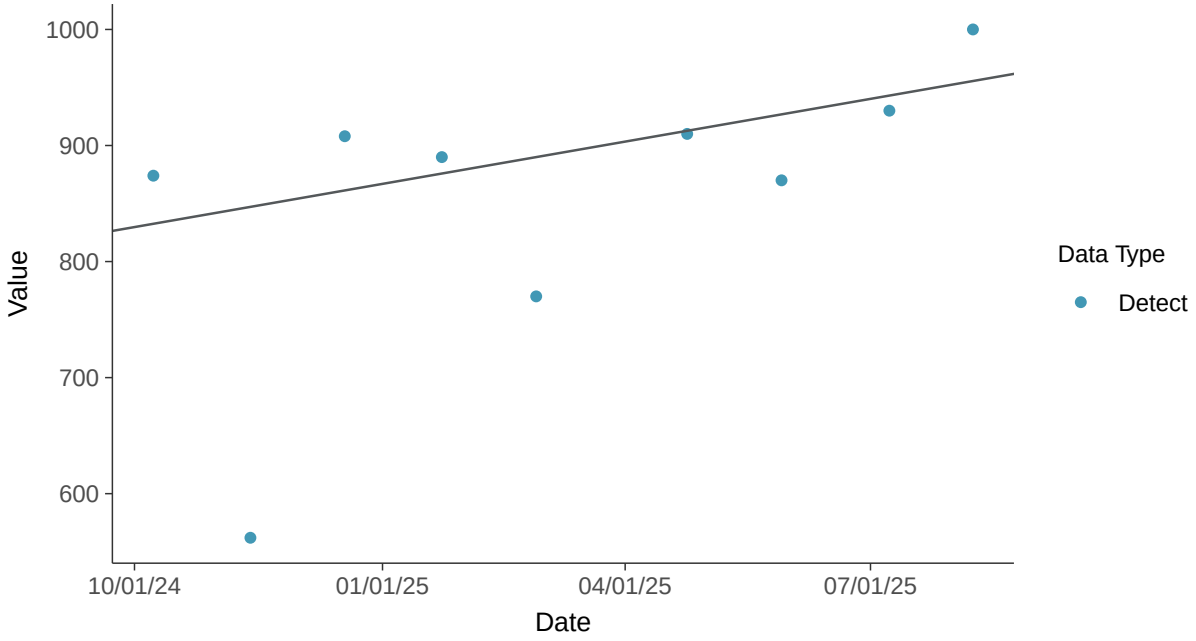
Normal Q-Q plot

Total Dissolved Solids, MW-18B (mg/l)



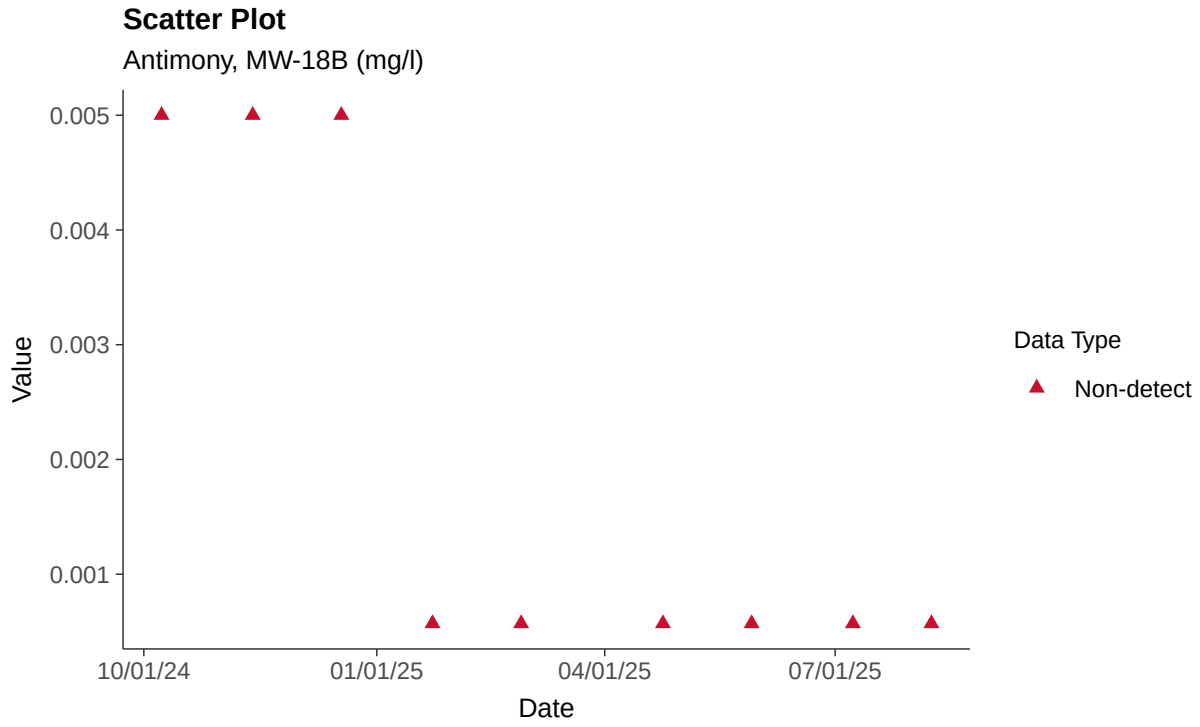
Trend Regression: Mann-Kendall/Theil-Sen Estimate

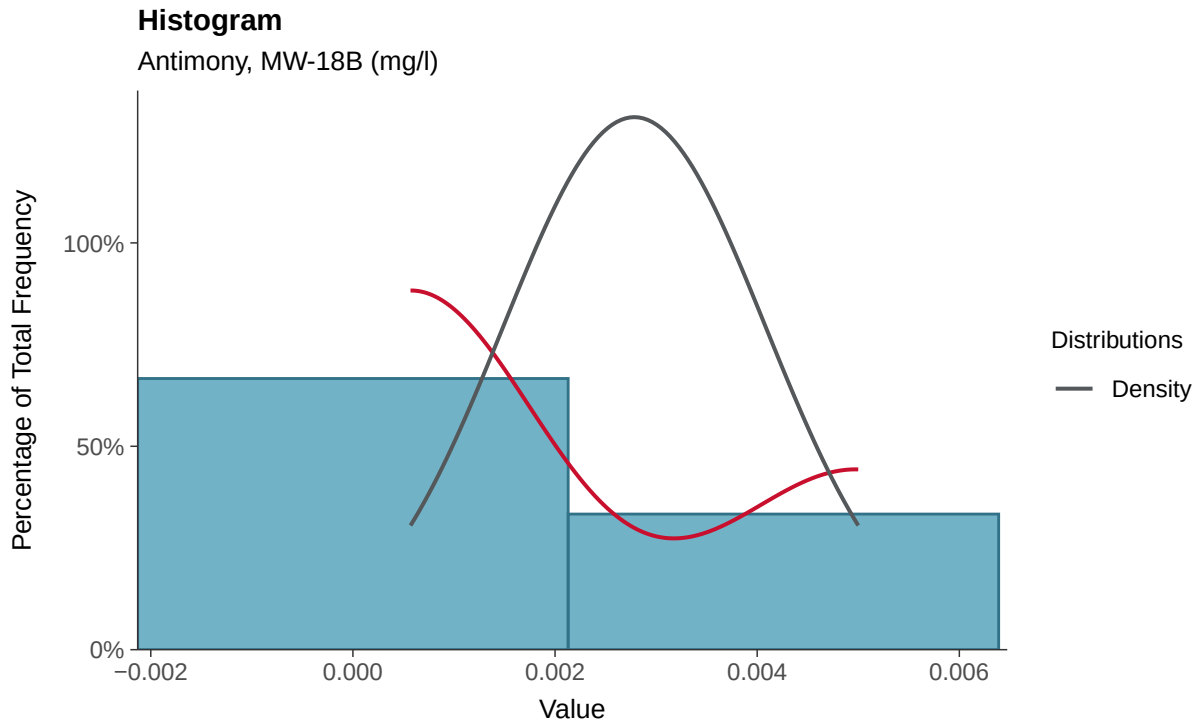
Total Dissolved Solids, MW-18B (mg/l)



Appendix IV: Antimony, MW-18B

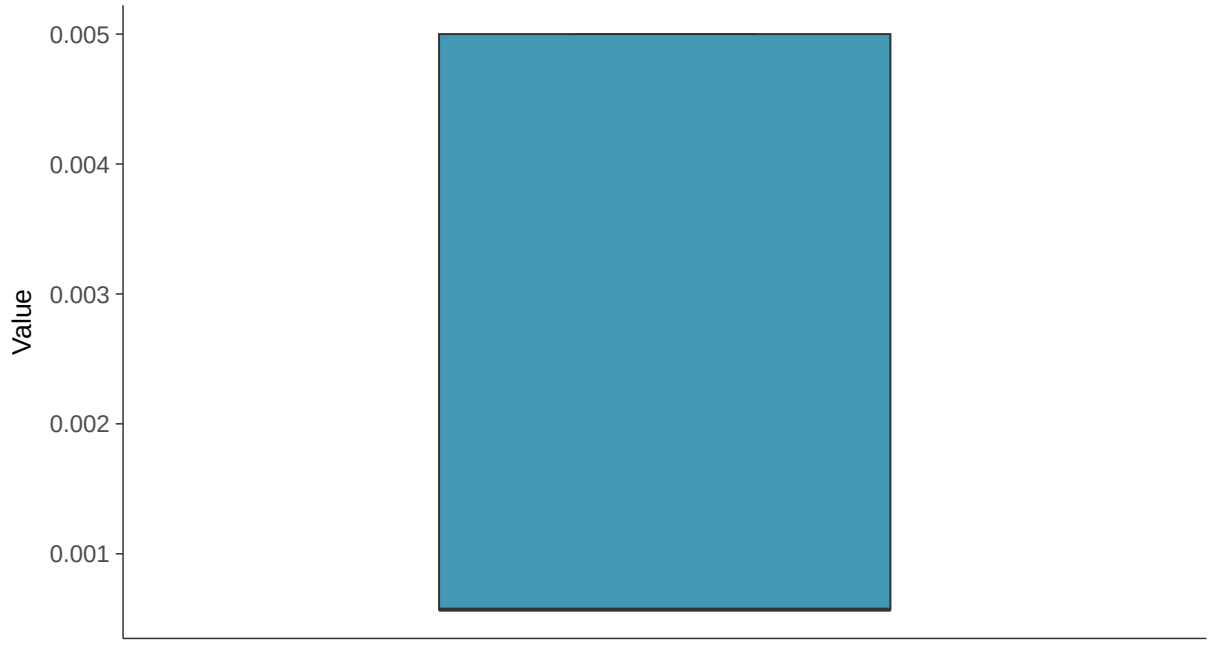
ID: 31_3_101





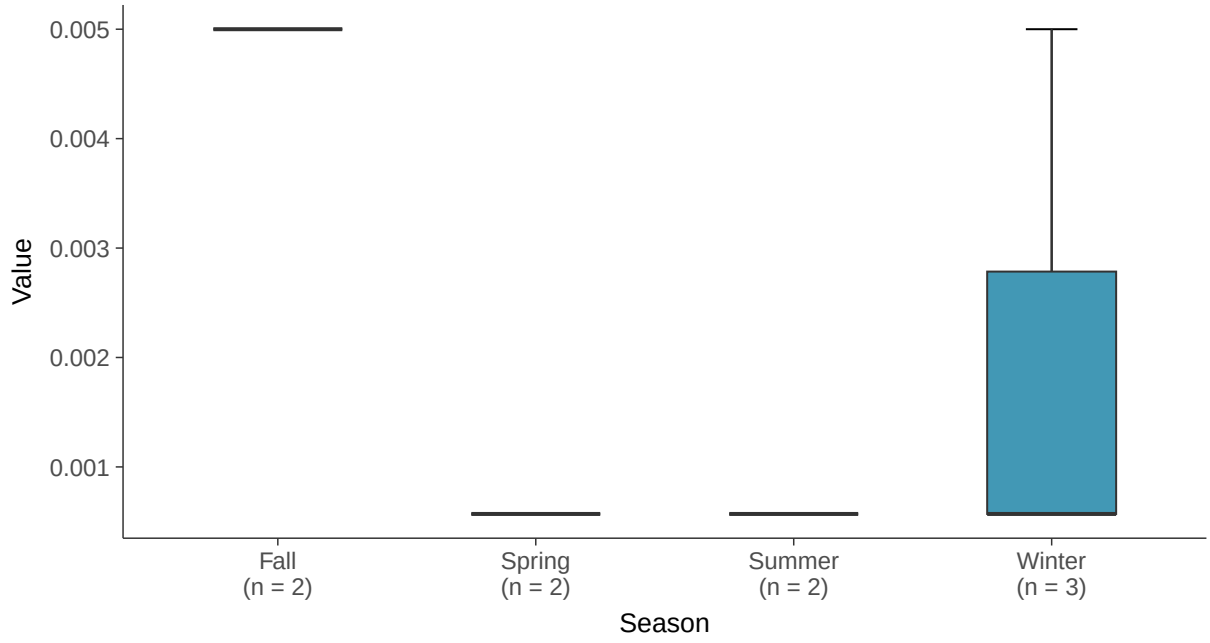
Boxplot

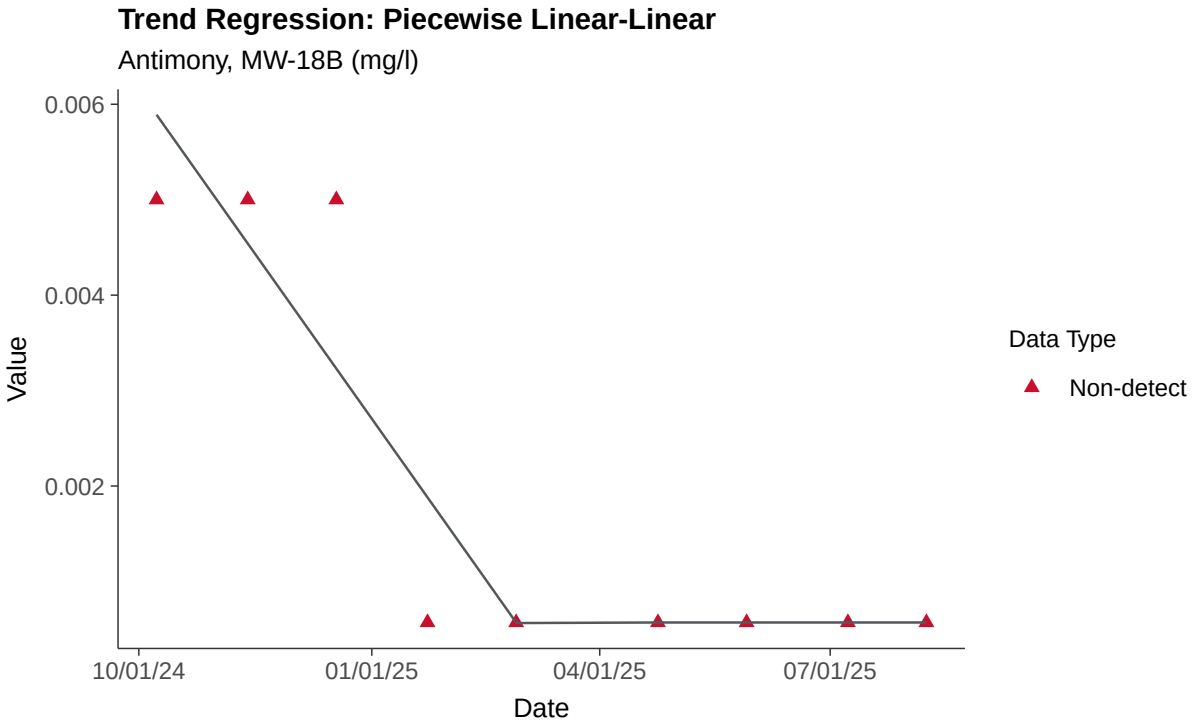
Antimony, MW-18B (mg/l)



Boxplot by Season

Antimony, MW-18B (mg/l)



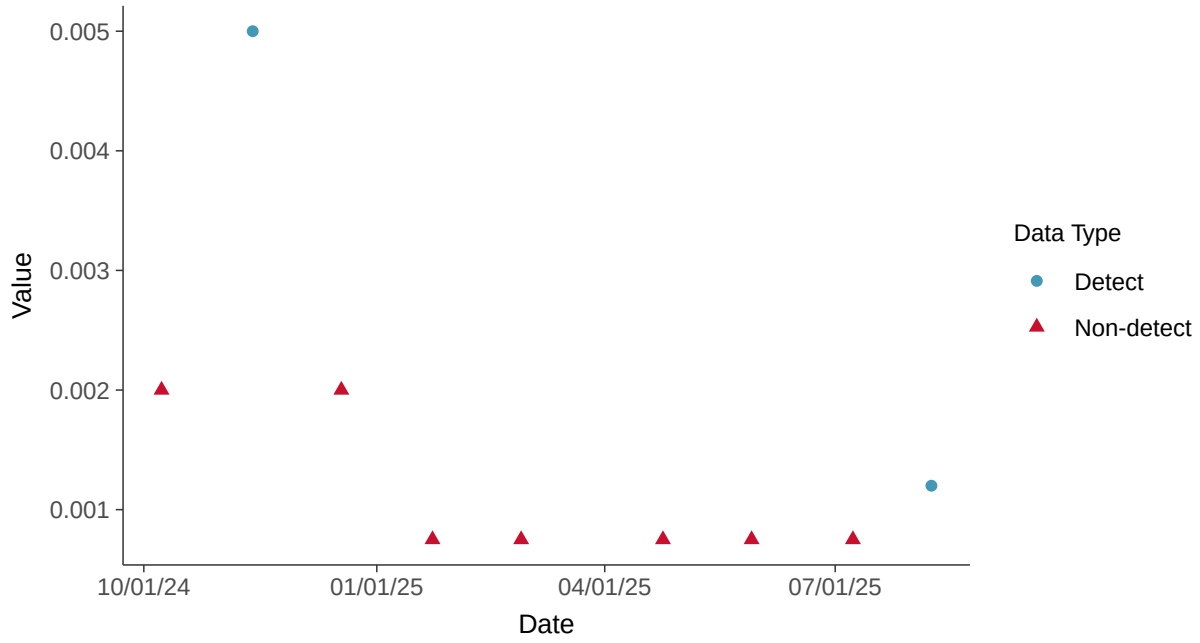

Trend Regression: Piecewise Linear-Linear
Antimony, MW-18B (mg/l)
0.006
0.004
0.002
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Arsenic, MW-18B

ID: 31_3_102

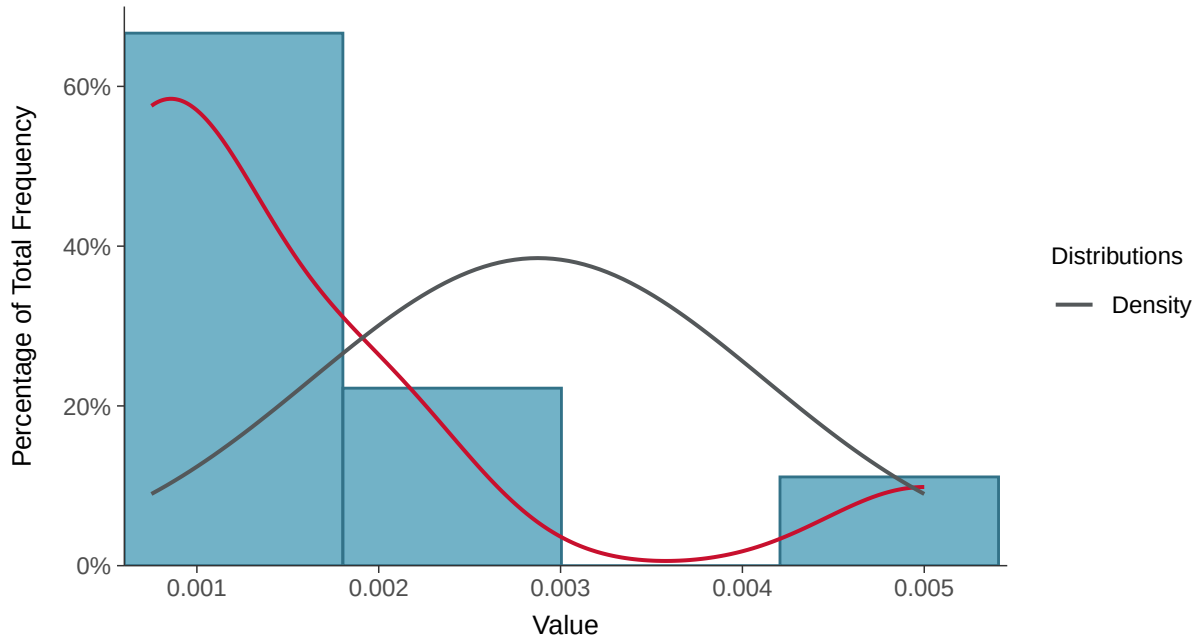
Scatter Plot

Arsenic, MW-18B (mg/l)



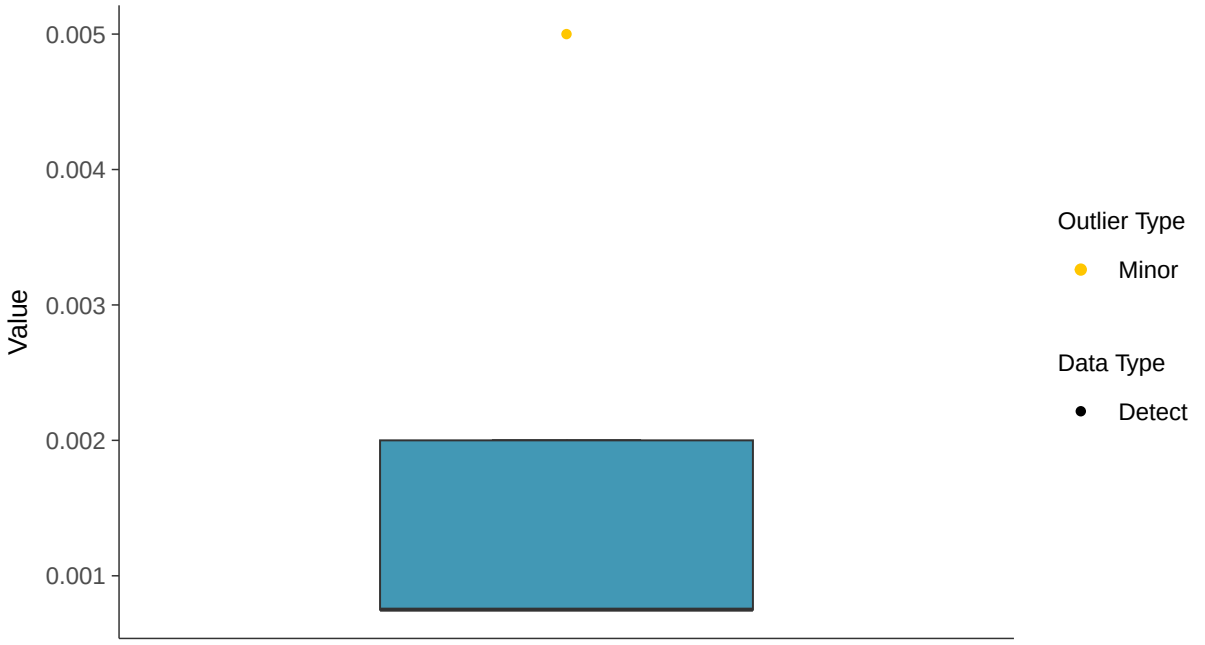
Histogram

Arsenic, MW-18B (mg/l)



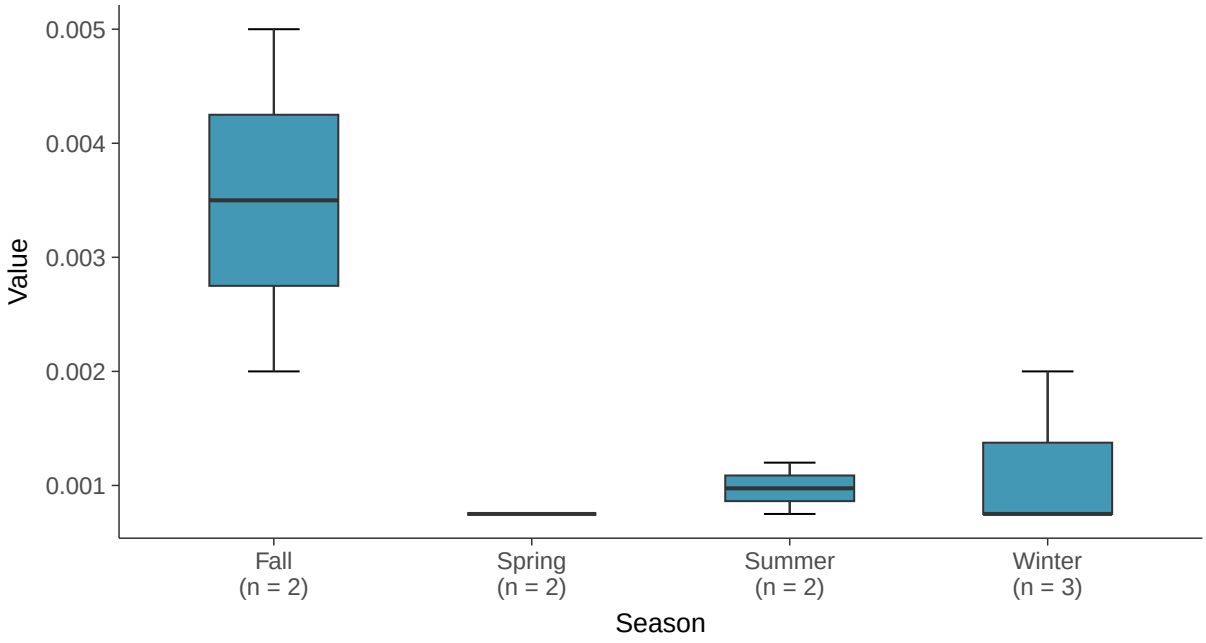
Boxplot

Arsenic, MW-18B (mg/l)



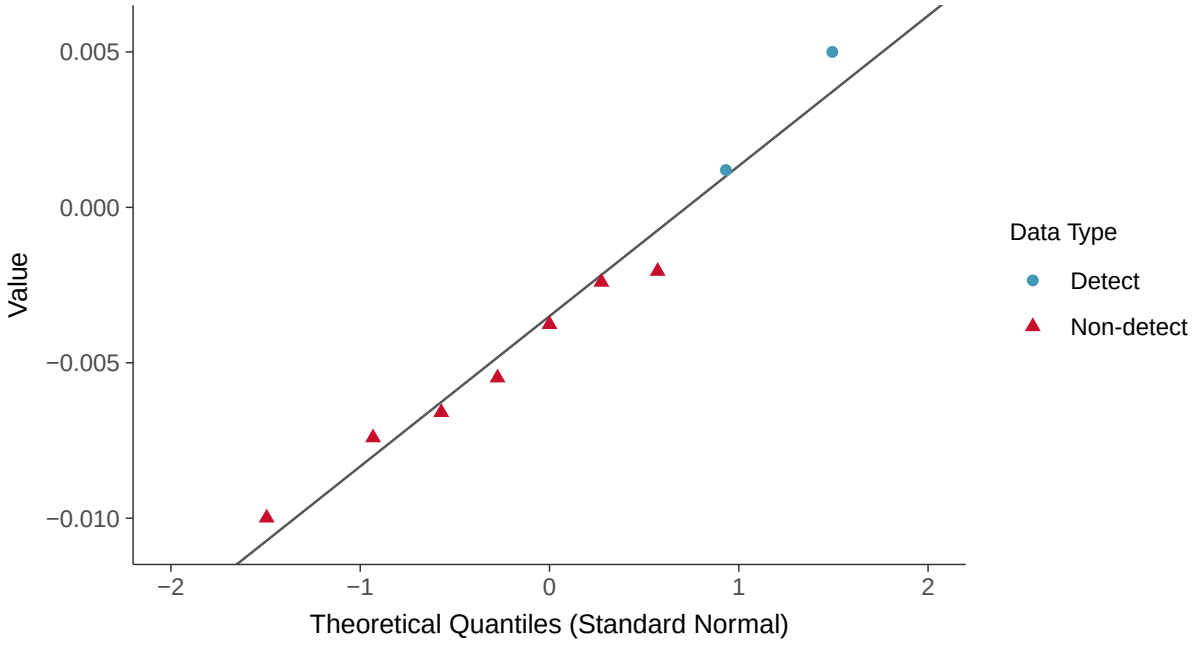
Boxplot by Season

Arsenic, MW-18B (mg/l)



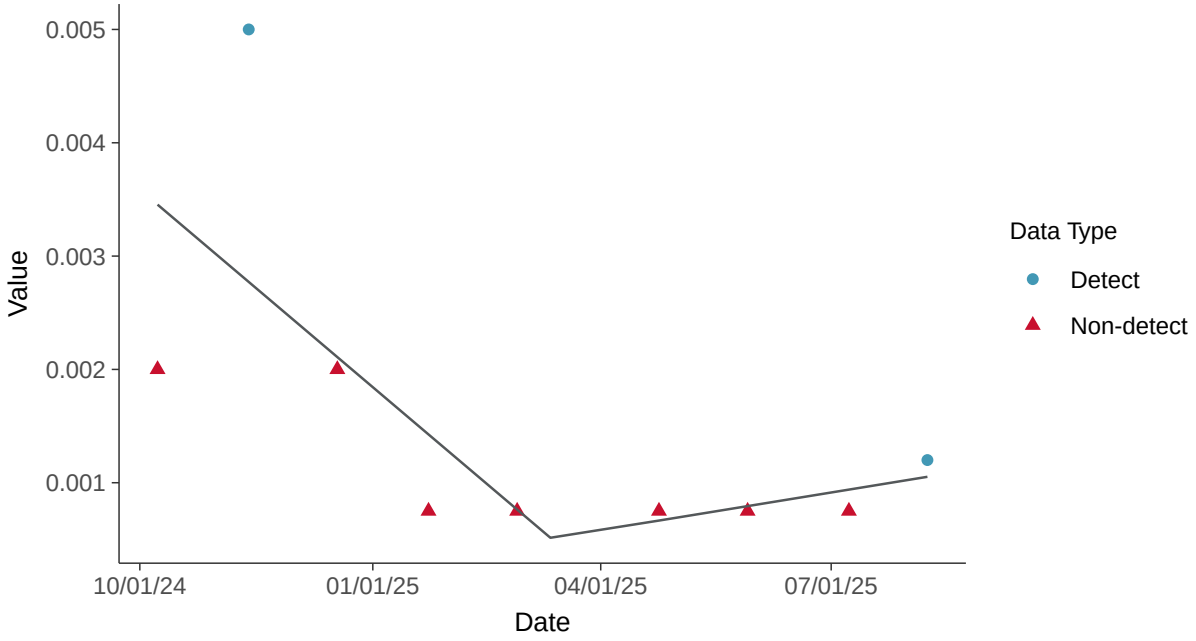
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-18B (mg/l)



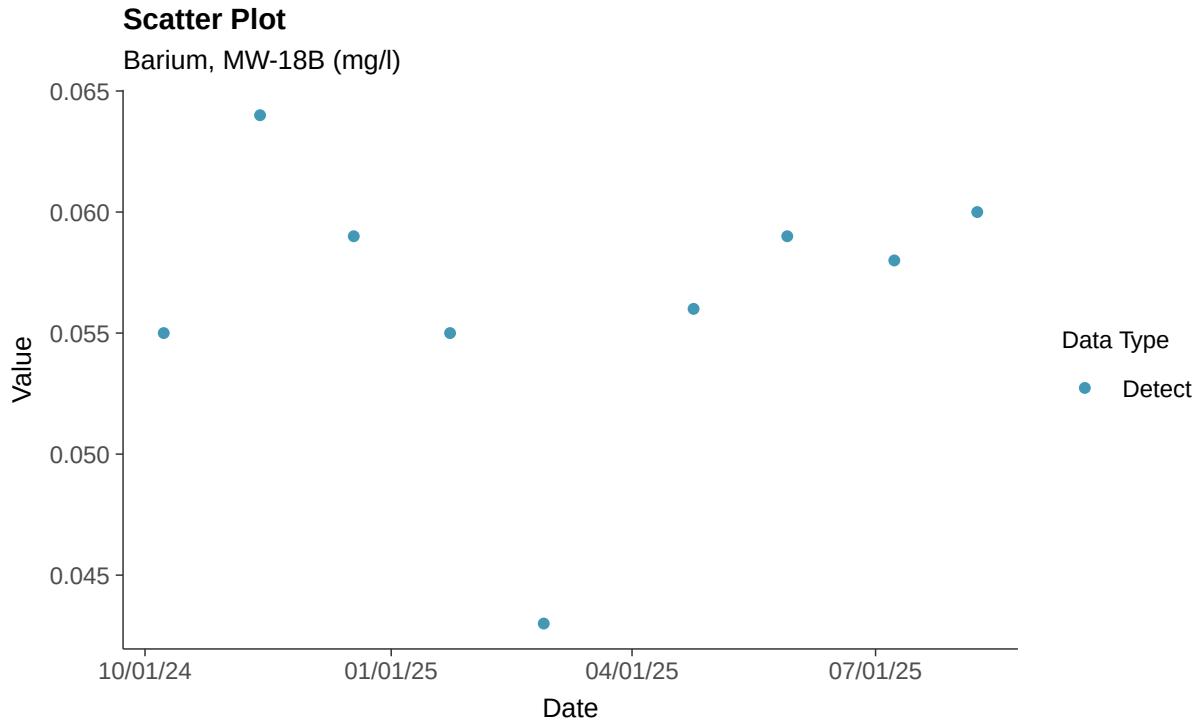
Trend Regression: Piecewise Linear-Linear

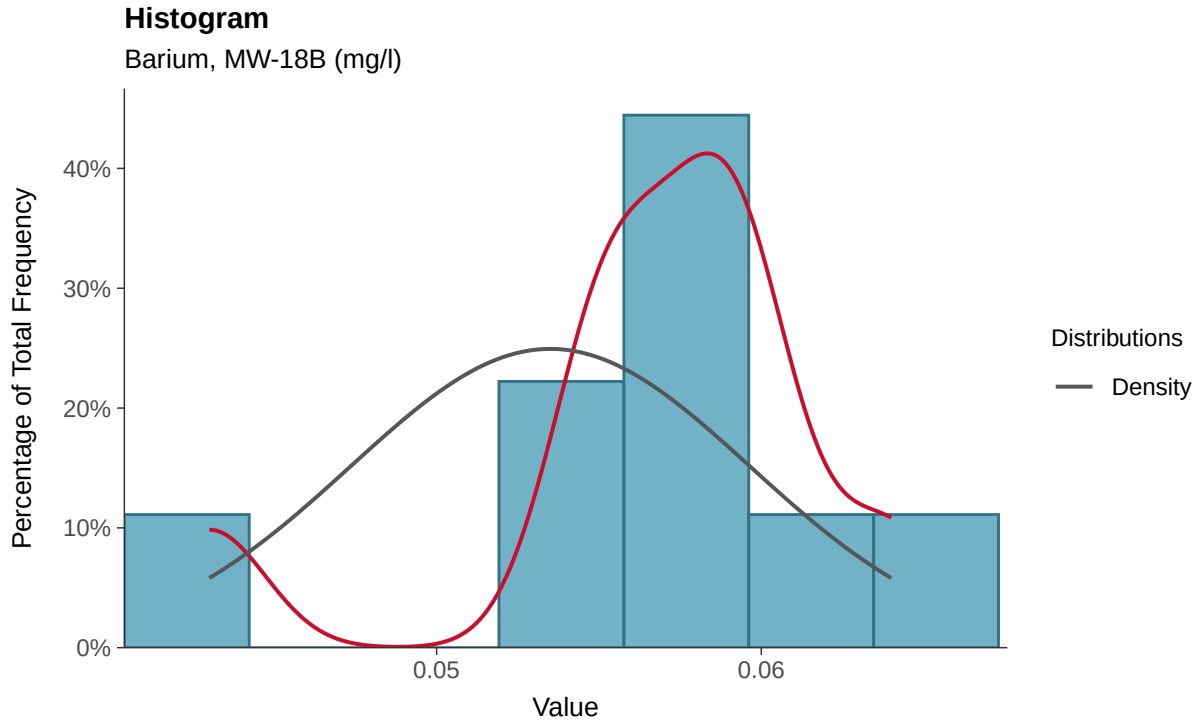
Arsenic, MW-18B (mg/l)



Appendix IV: Barium, MW-18B

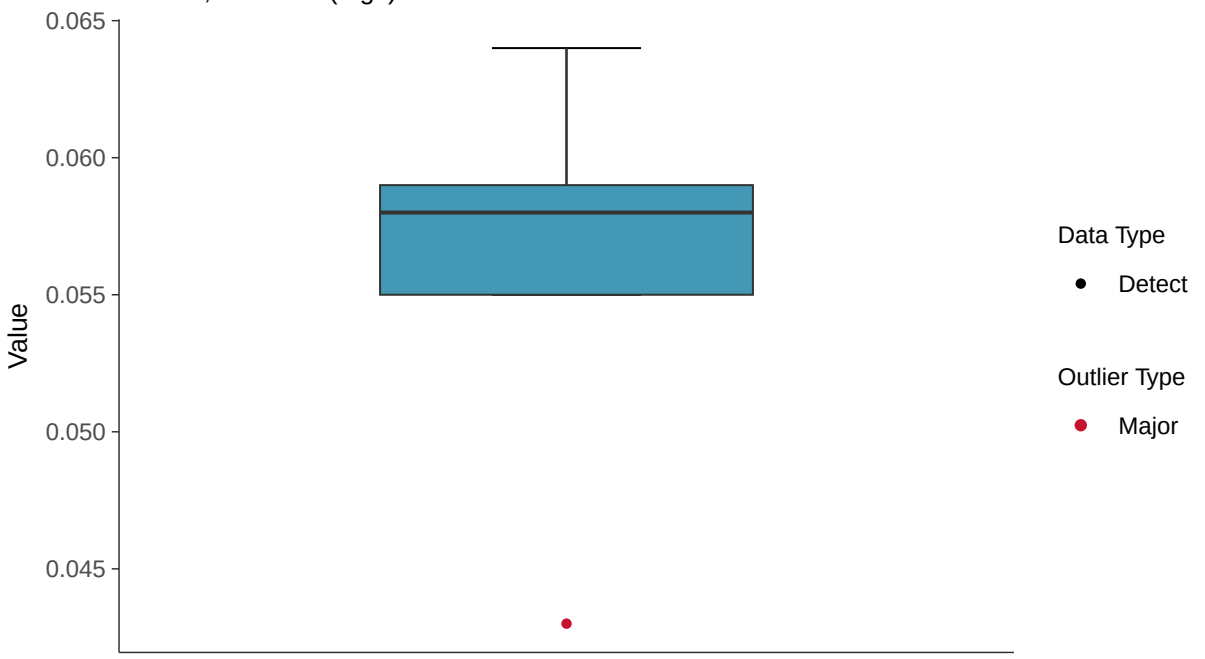
ID: 31_3_103





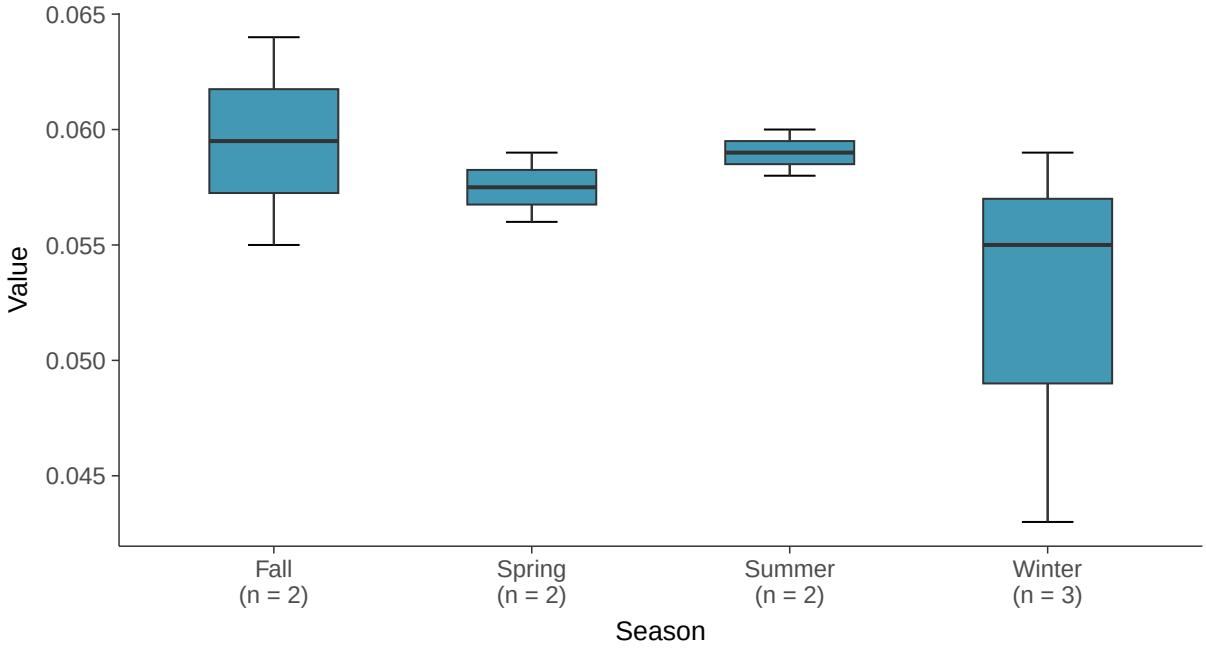
Boxplot

Barium, MW-18B (mg/l)



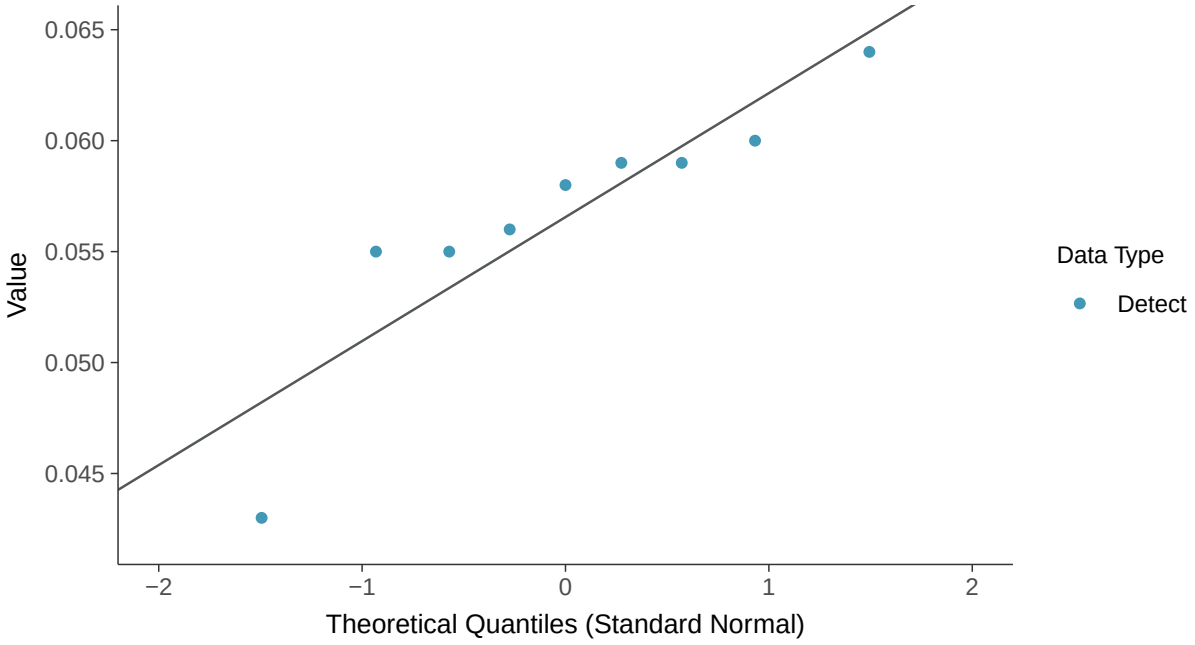
Boxplot by Season

Barium, MW-18B (mg/l)



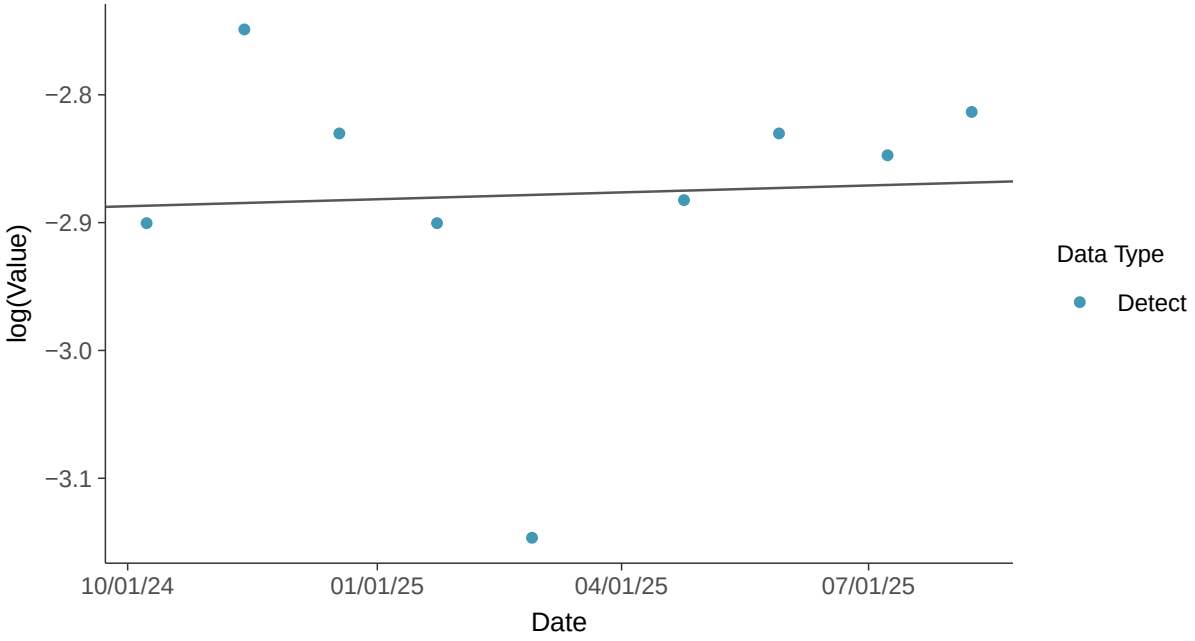
Normal Q-Q plot

Barium, MW-18B (mg/l)



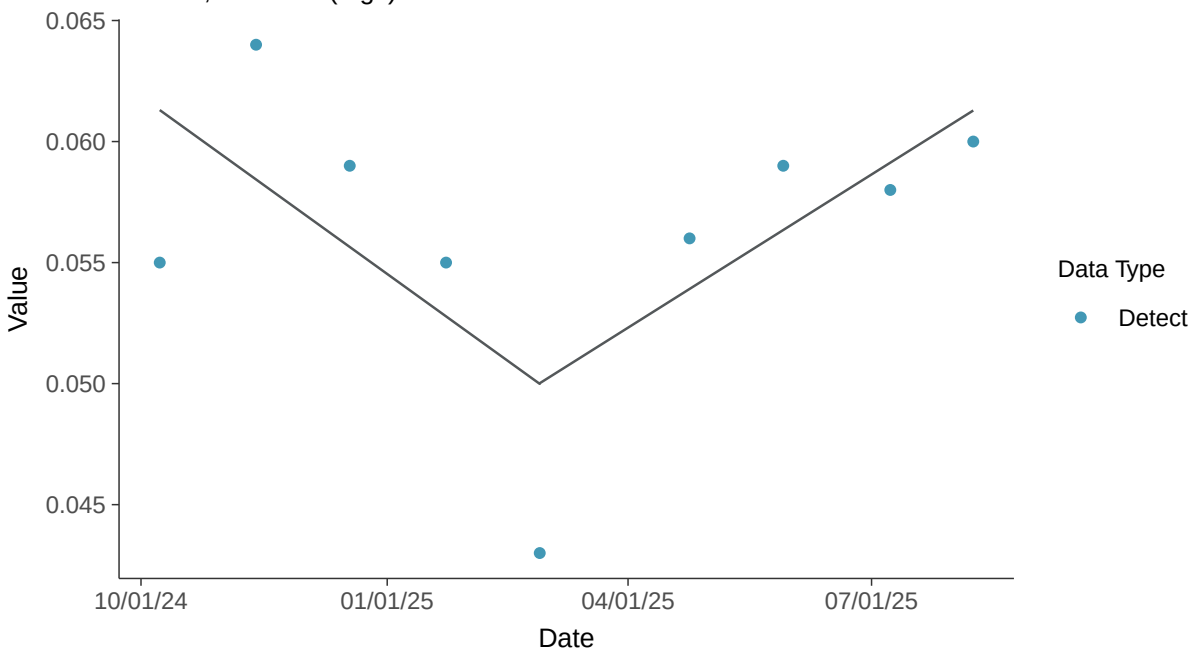
Trend Regression: Lognormal MLE

Barium, MW-18B (mg/l)



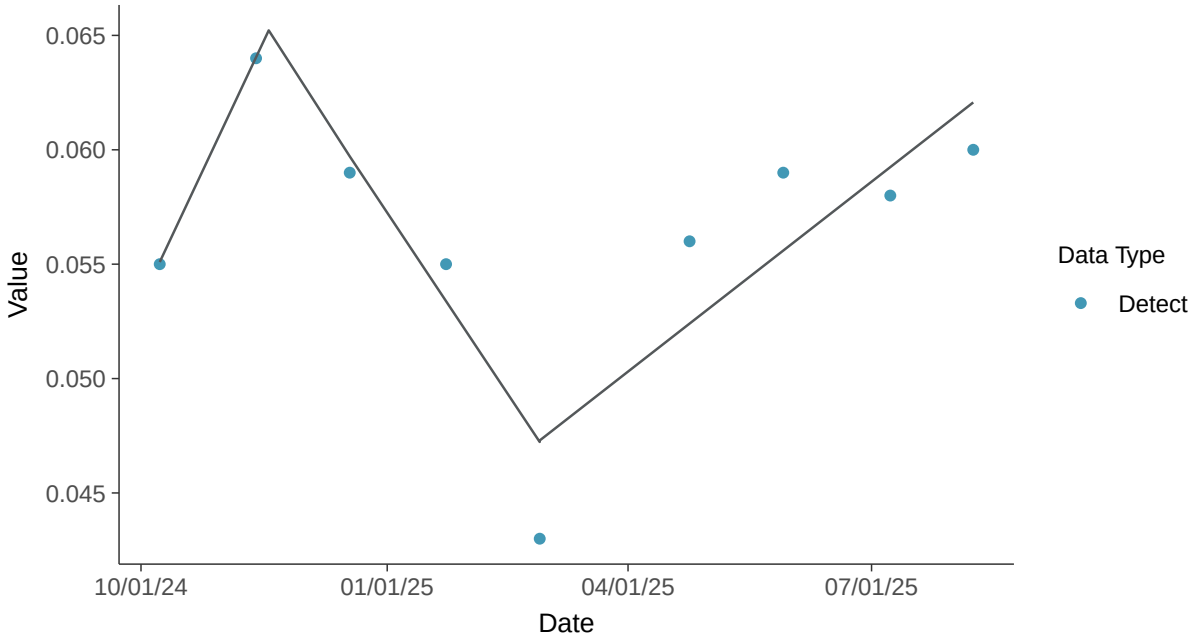
Trend Regression: Piecewise Linear-Linear

Barium, MW-18B (mg/l)



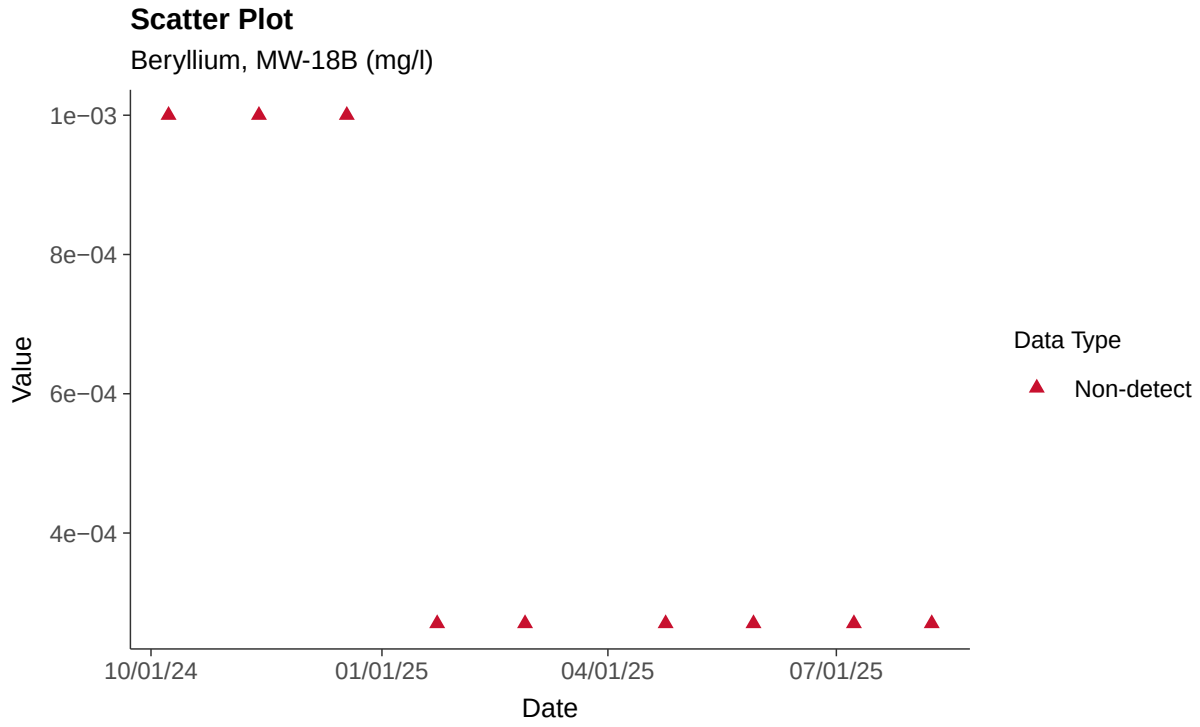
Trend Regression: Piecewise Linear-Linear-Linear

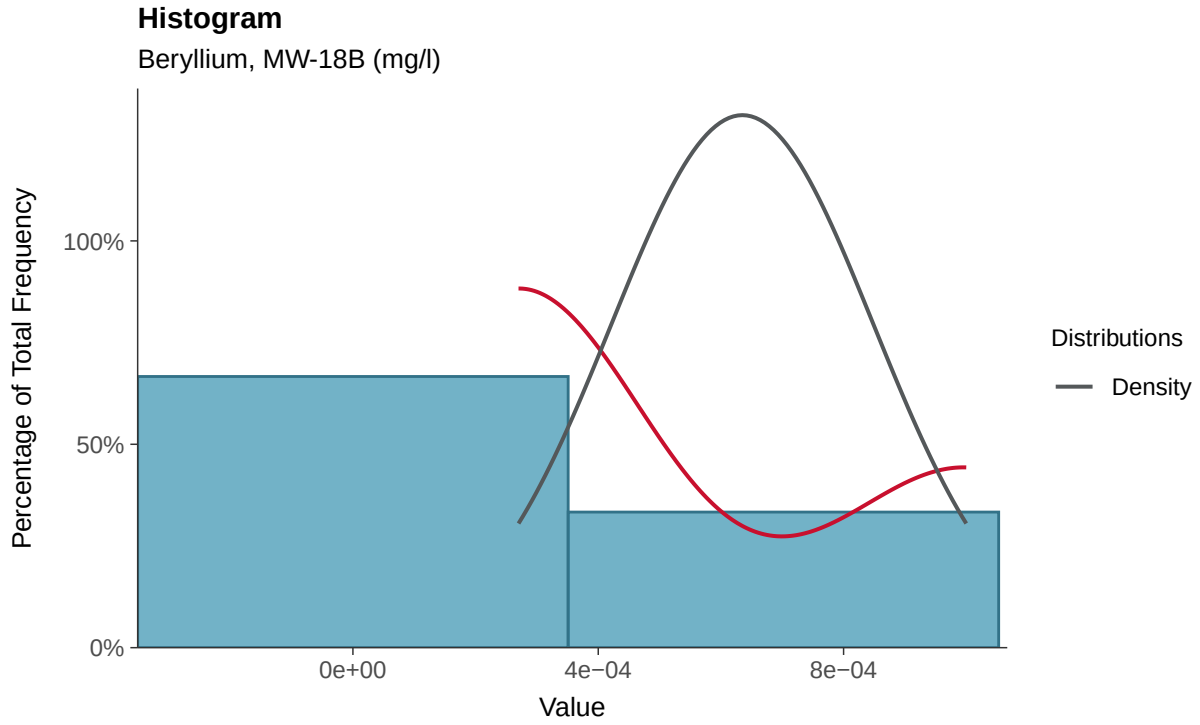
Barium, MW-18B (mg/l)



Appendix IV: Beryllium, MW-18B

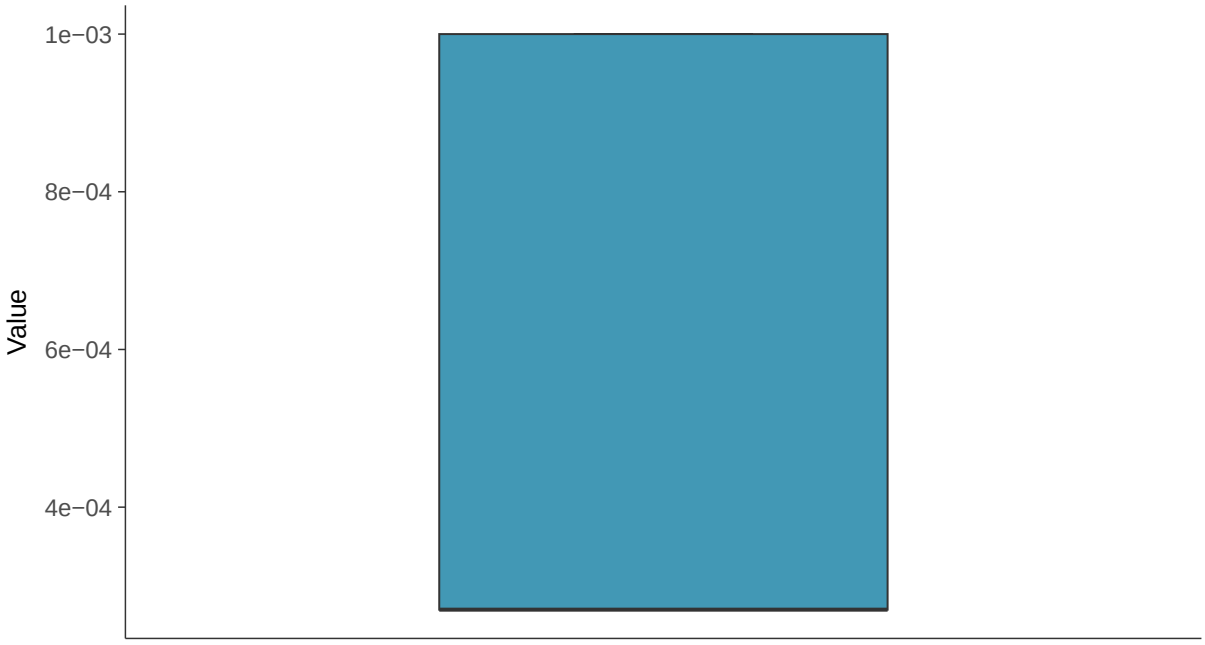
ID: 31_3_104





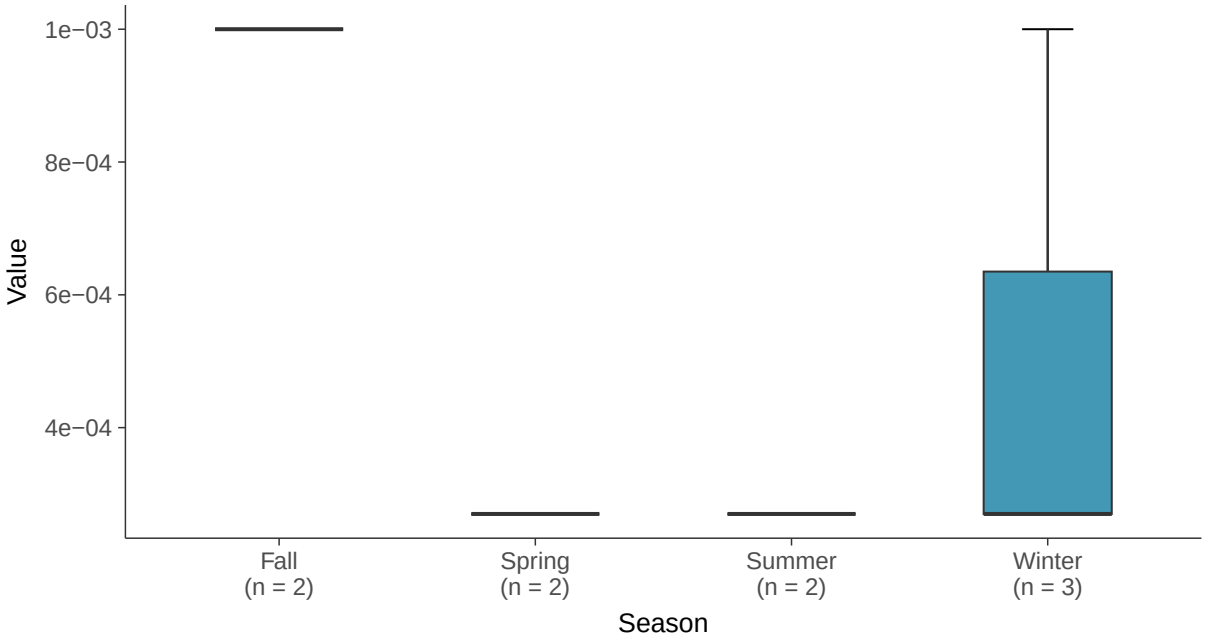
Boxplot

Beryllium, MW-18B (mg/l)



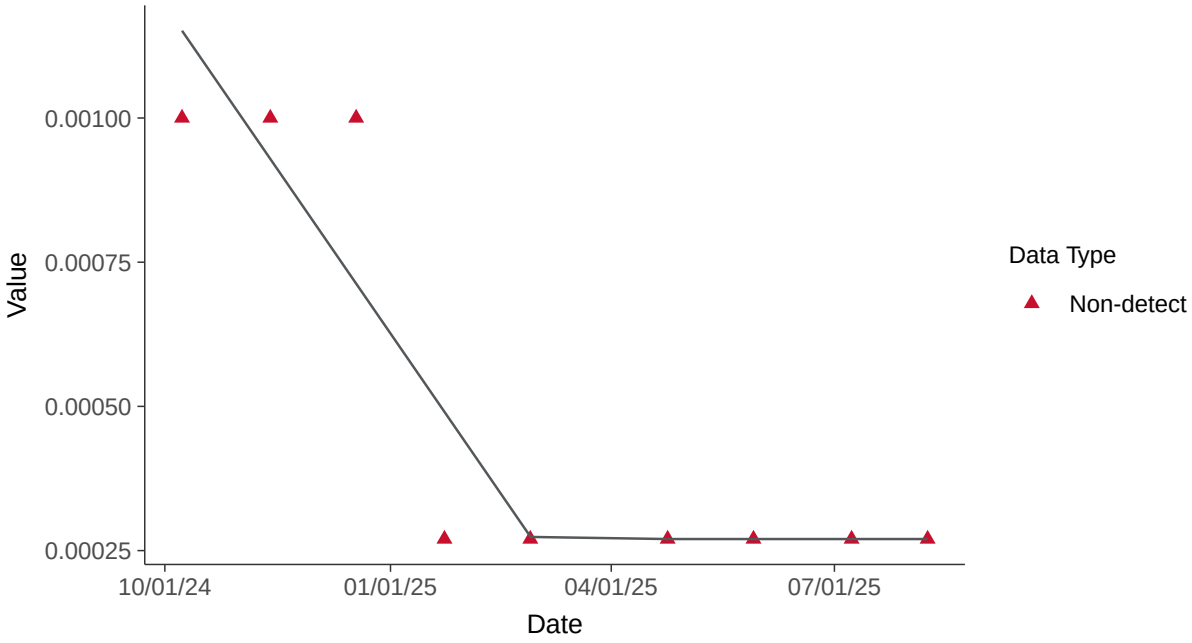
Boxplot by Season

Beryllium, MW-18B (mg/l)



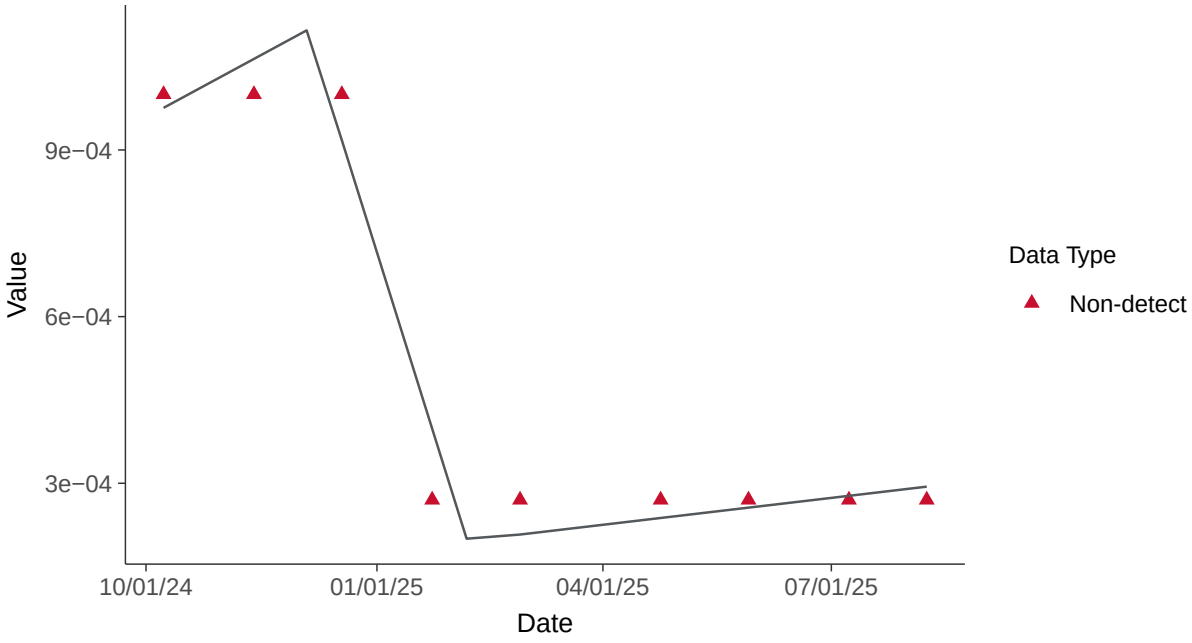
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-18B (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Beryllium, MW-18B (mg/l)

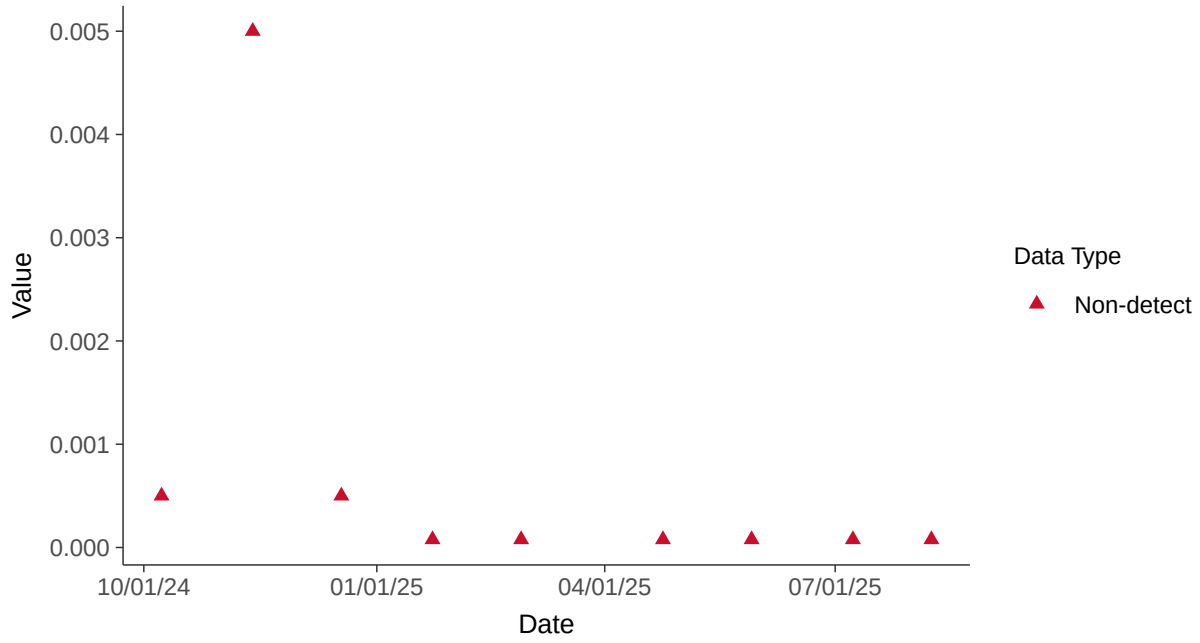


Appendix IV: Cadmium, MW-18B

ID: 31_3_106

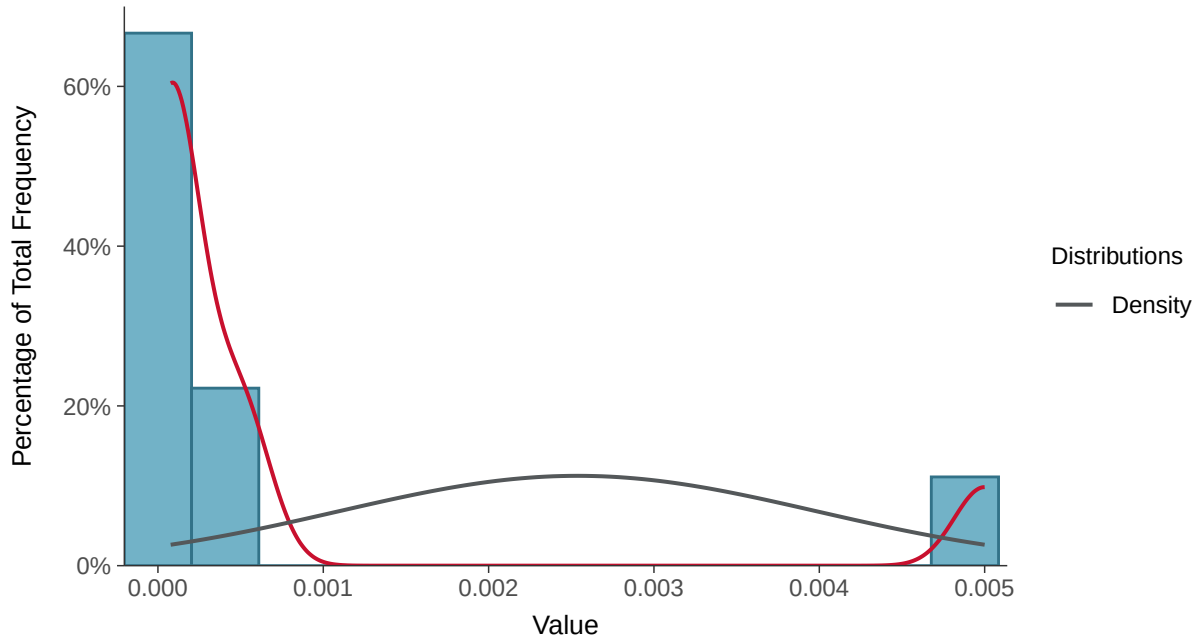
Scatter Plot

Cadmium, MW-18B (mg/l)



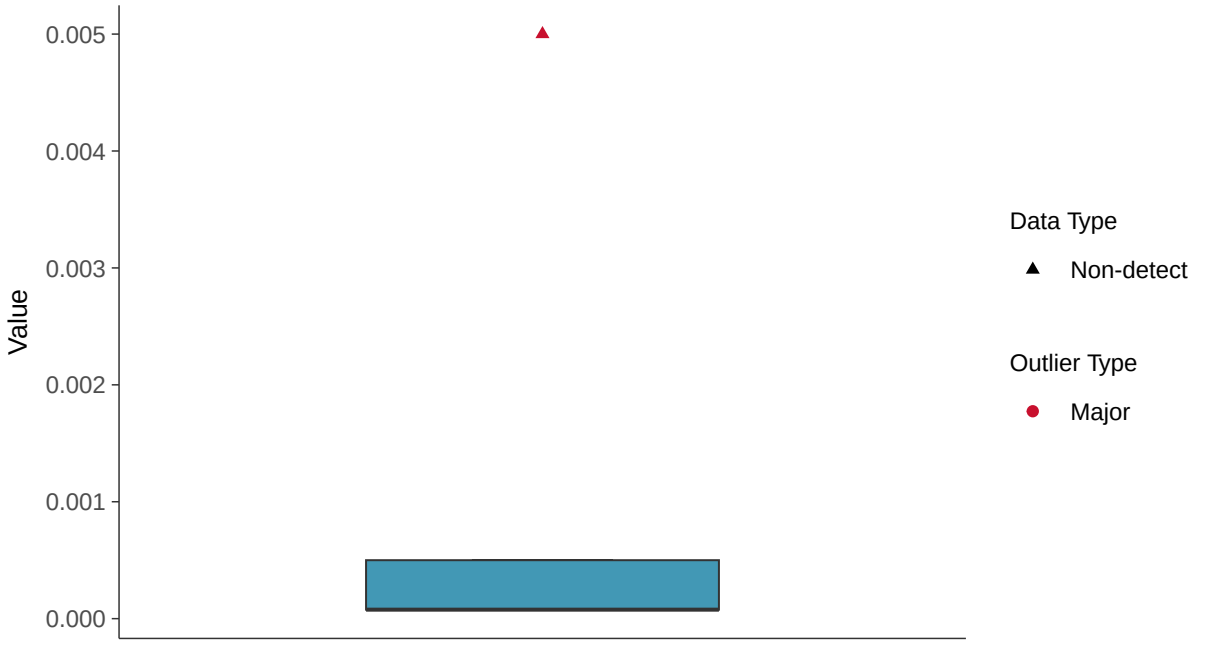
Histogram

Cadmium, MW-18B (mg/l)



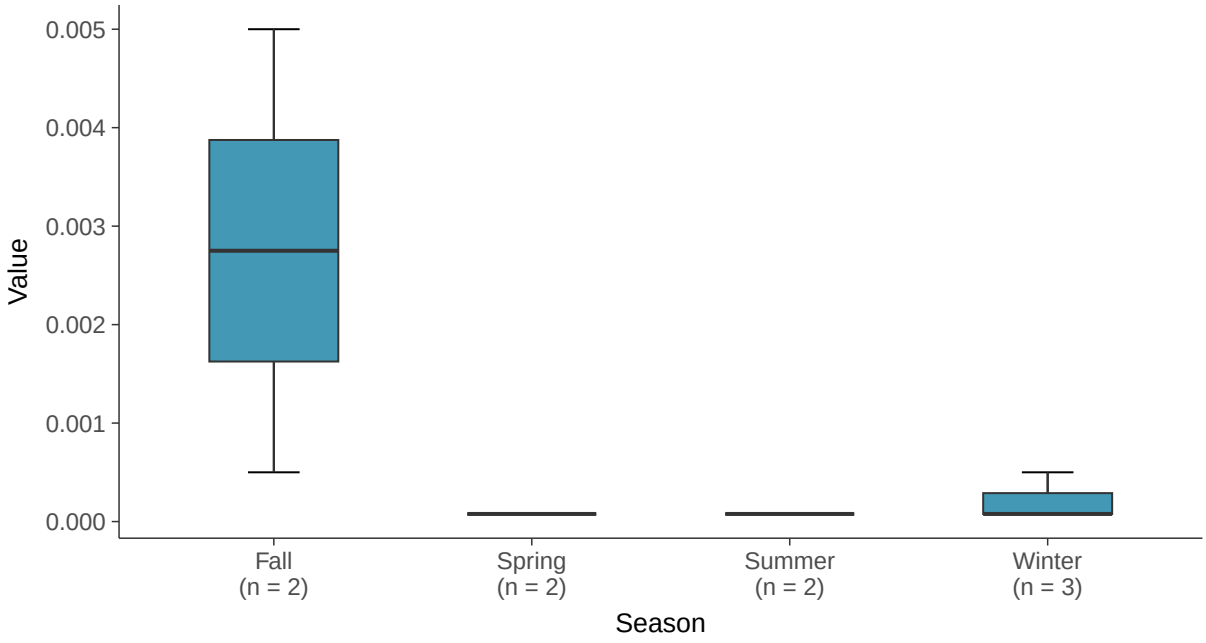
Boxplot

Cadmium, MW-18B (mg/l)



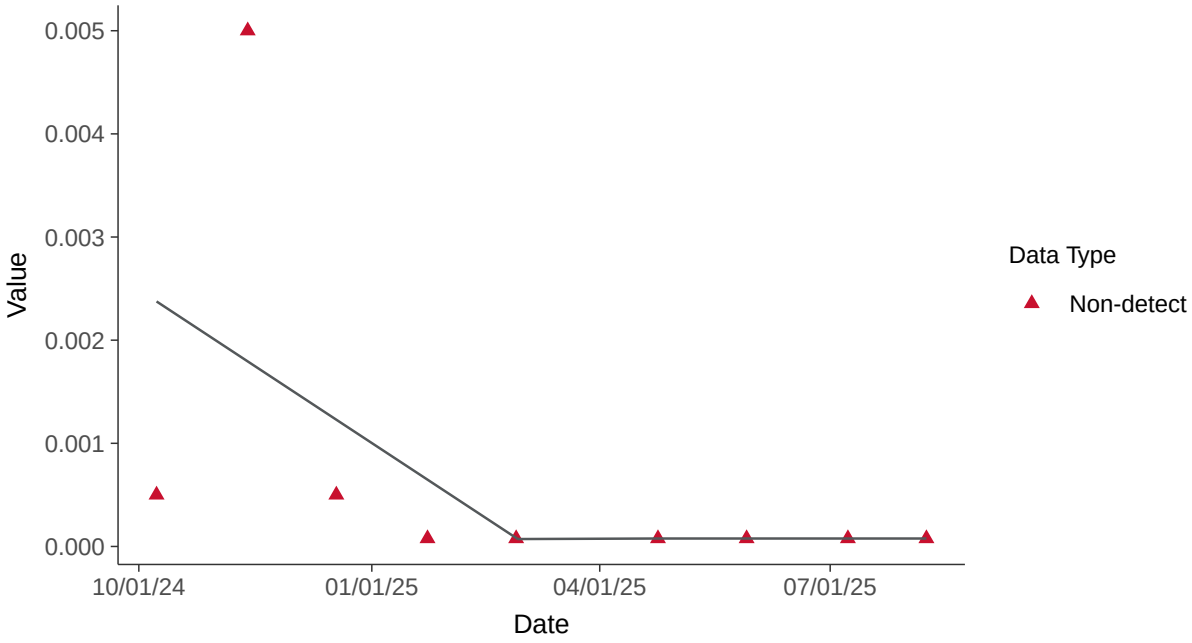
Boxplot by Season

Cadmium, MW-18B (mg/l)



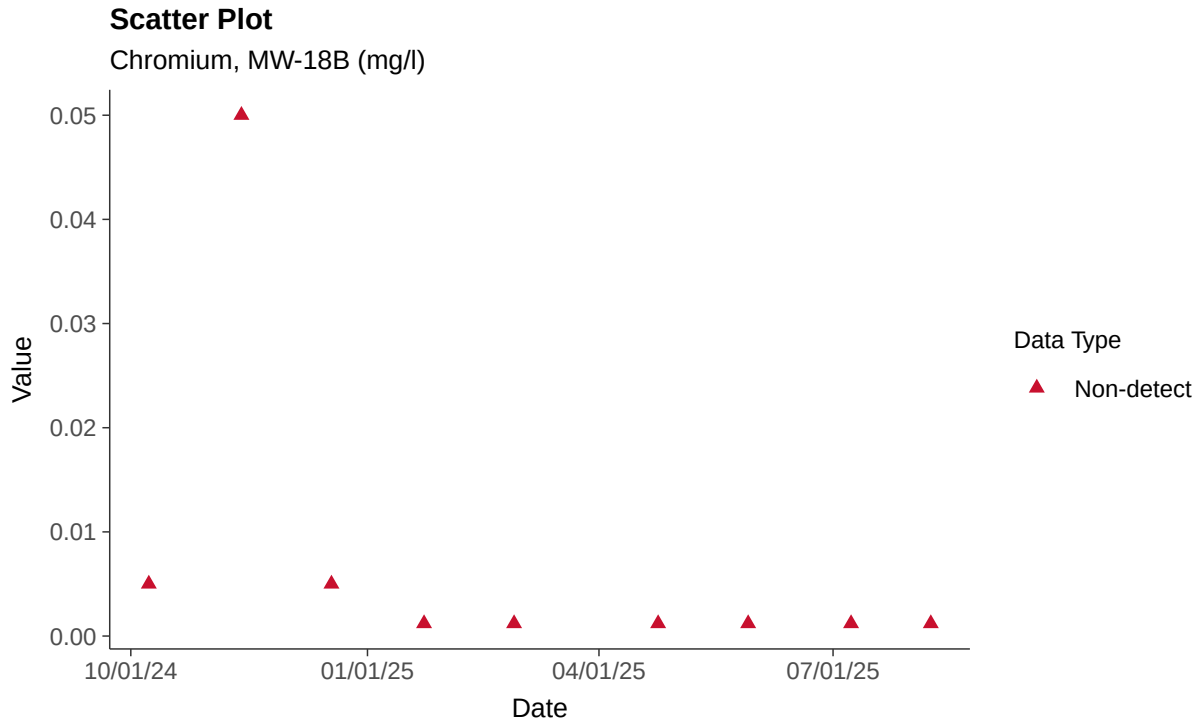
Trend Regression: Piecewise Linear-Linear

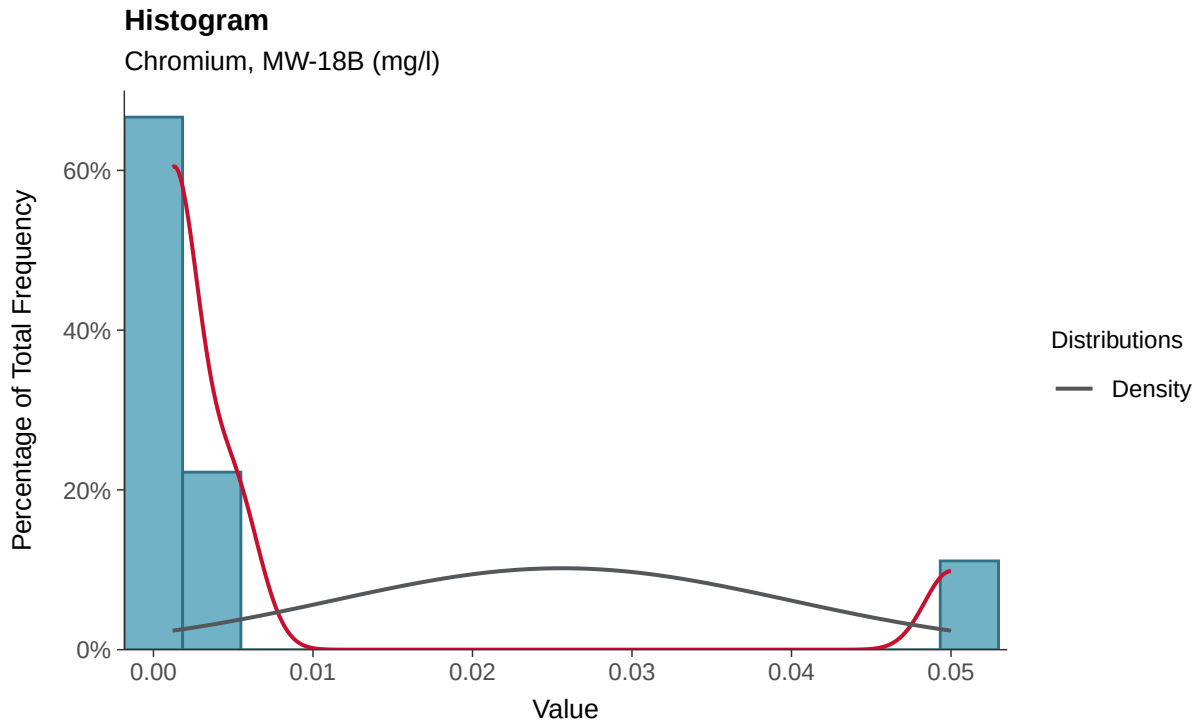
Cadmium, MW-18B (mg/l)



Appendix IV: Chromium, MW-18B

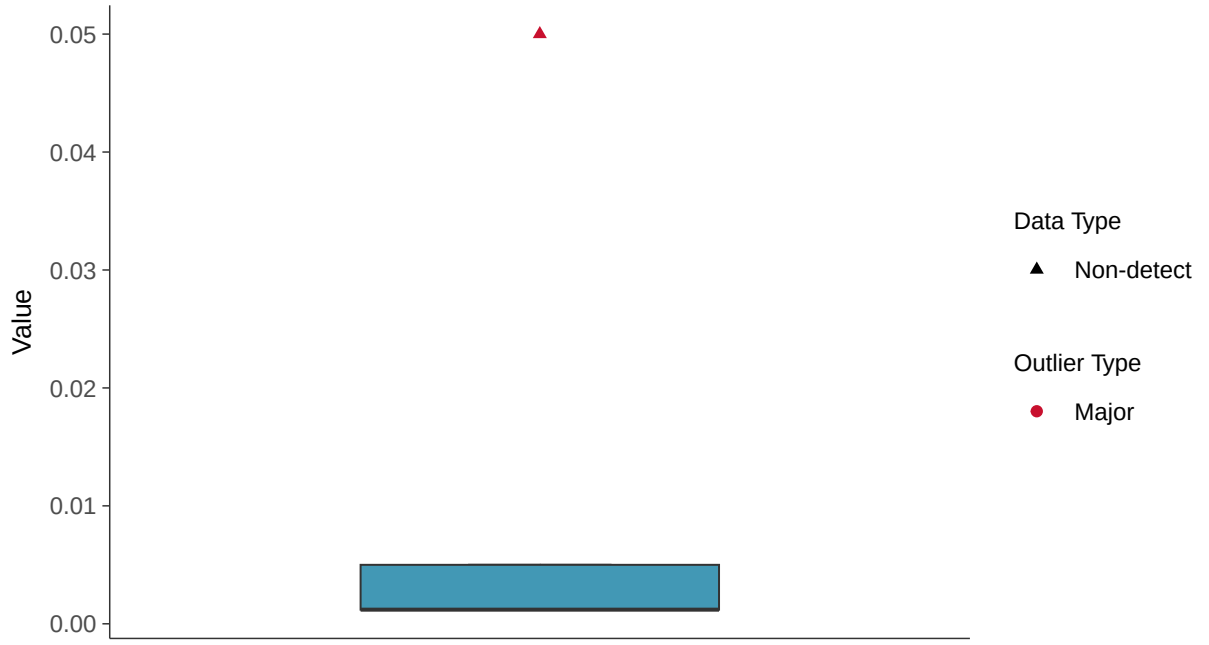
ID: 31_3_109





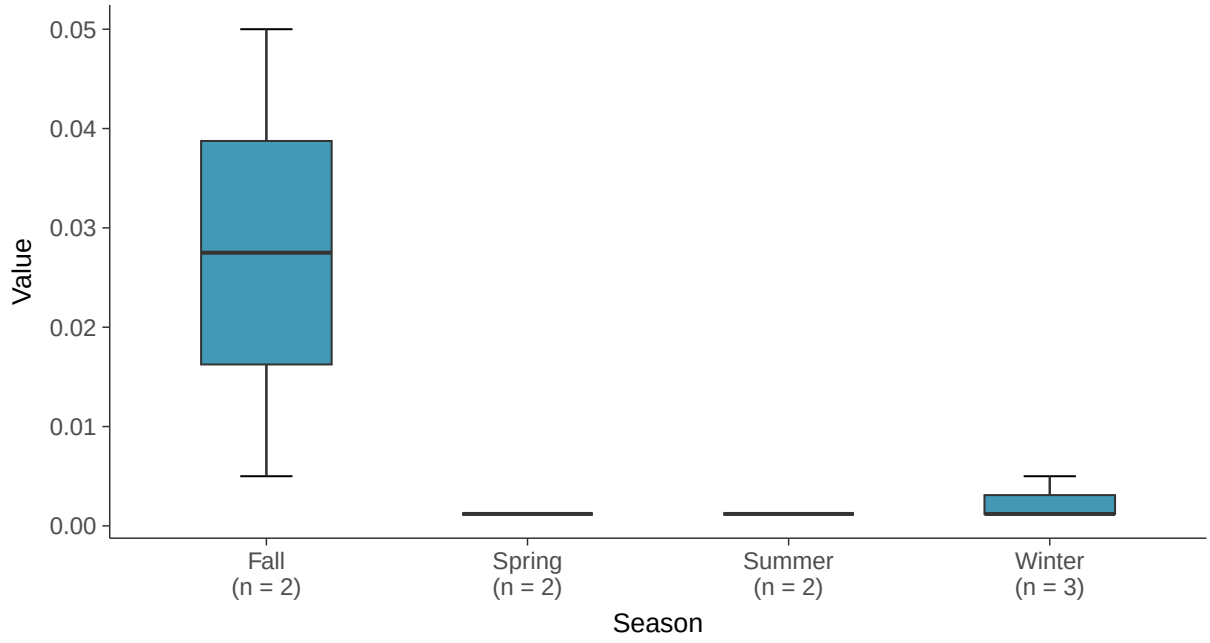
Boxplot

Chromium, MW-18B (mg/l)



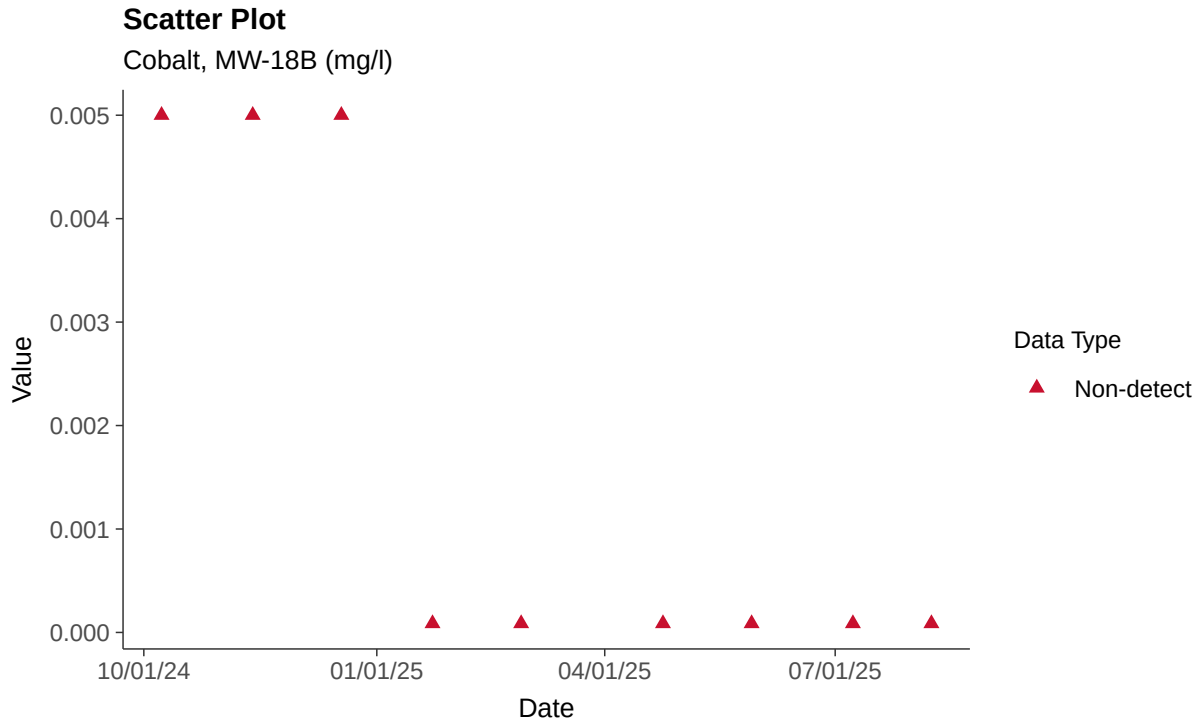
Boxplot by Season

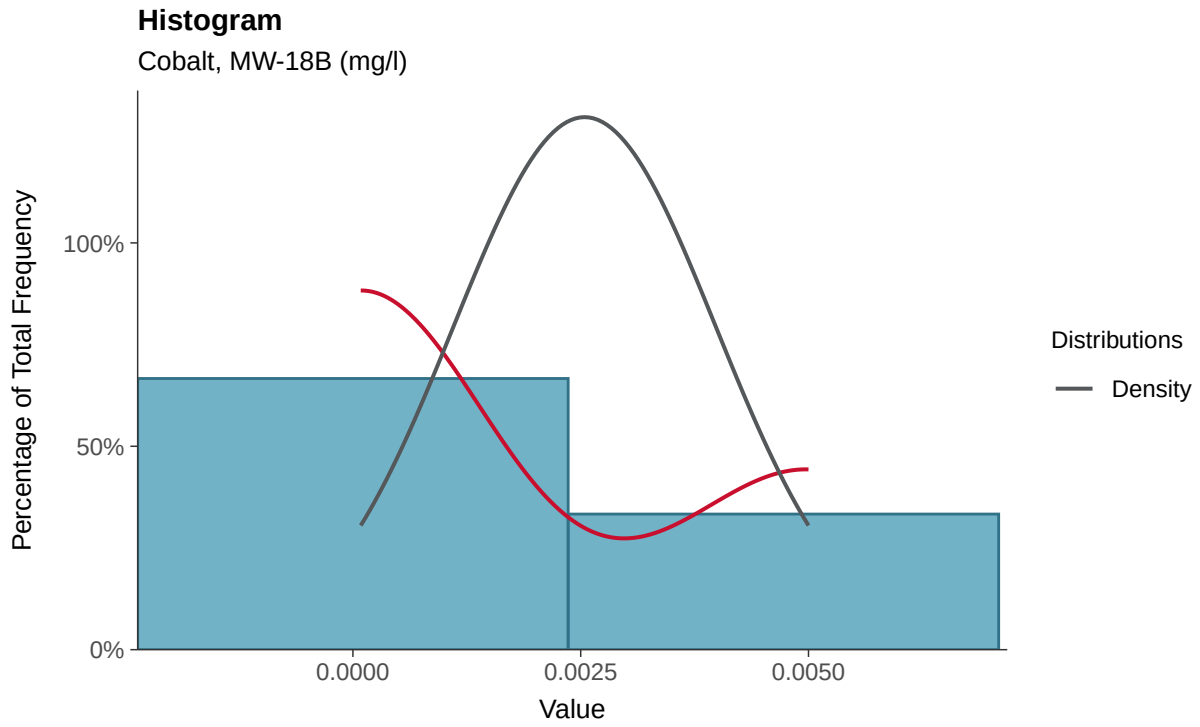
Chromium, MW-18B (mg/l)



Appendix IV: Cobalt, MW-18B

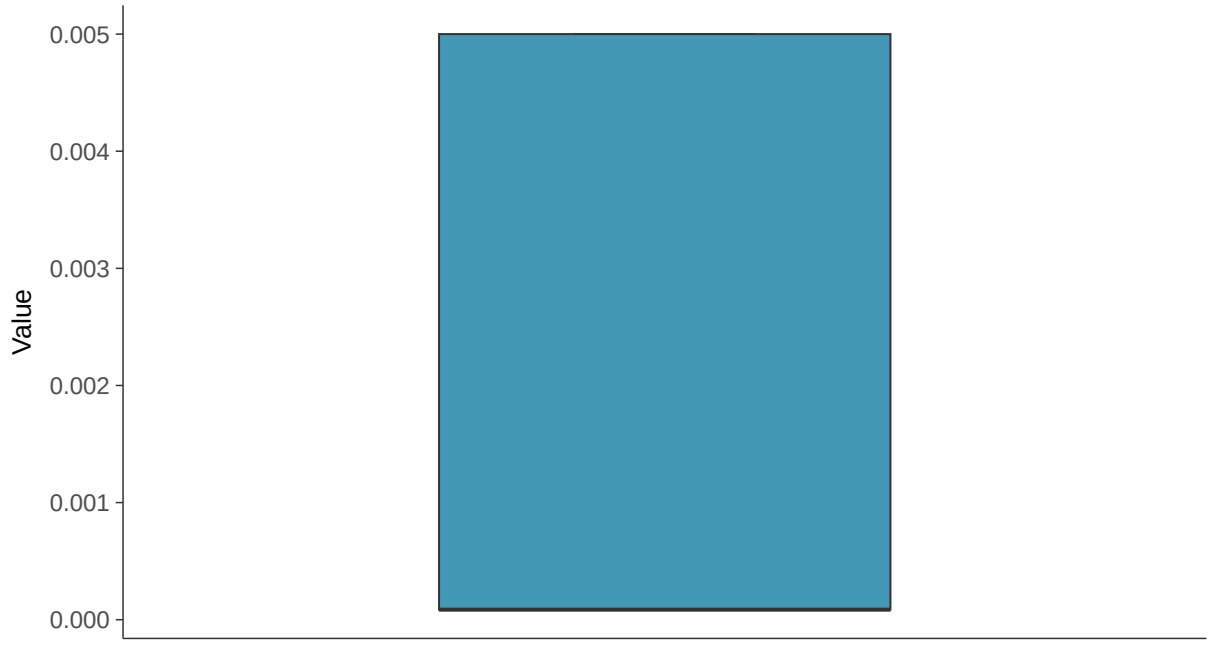
ID: 31_3_110





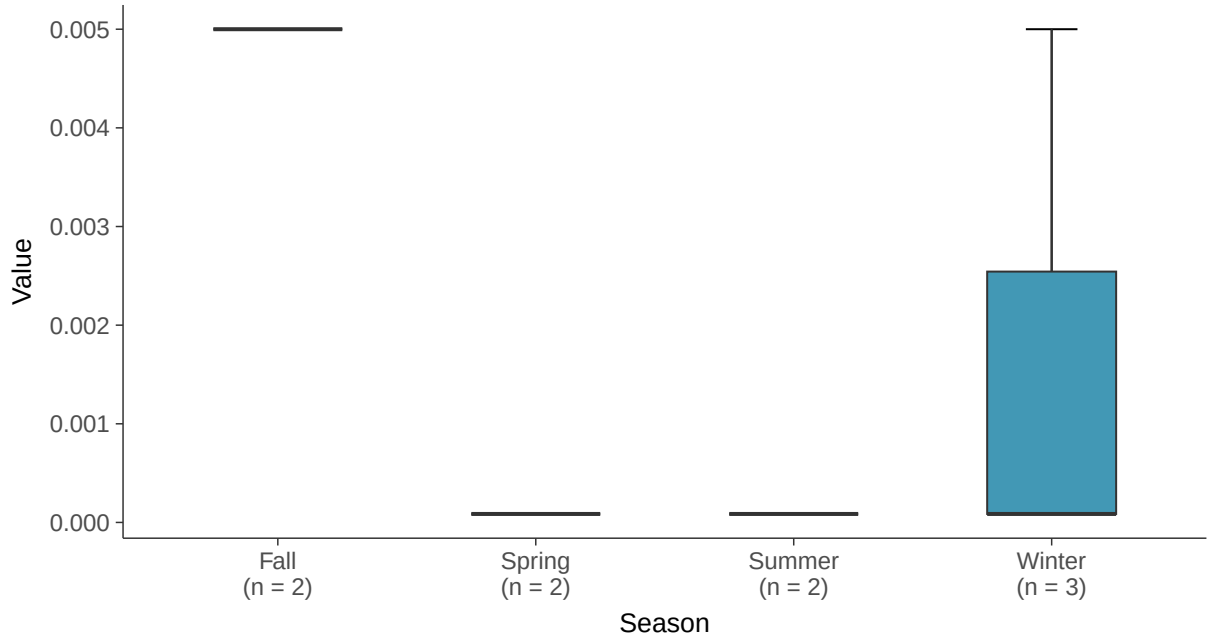
Boxplot

Cobalt, MW-18B (mg/l)



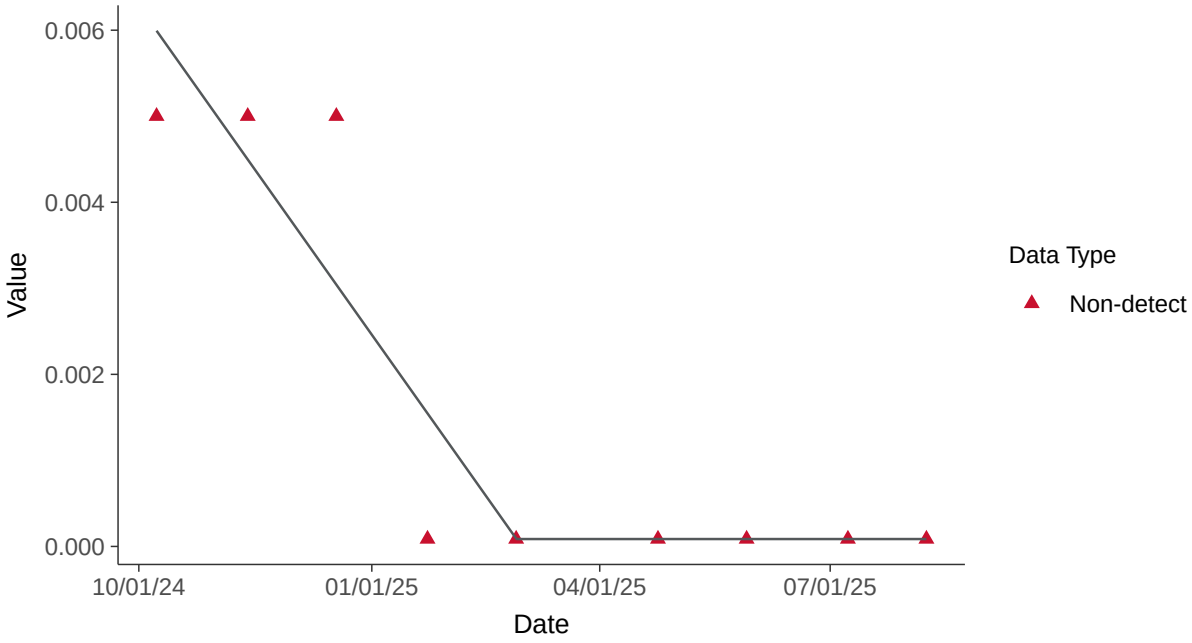
Boxplot by Season

Cobalt, MW-18B (mg/l)



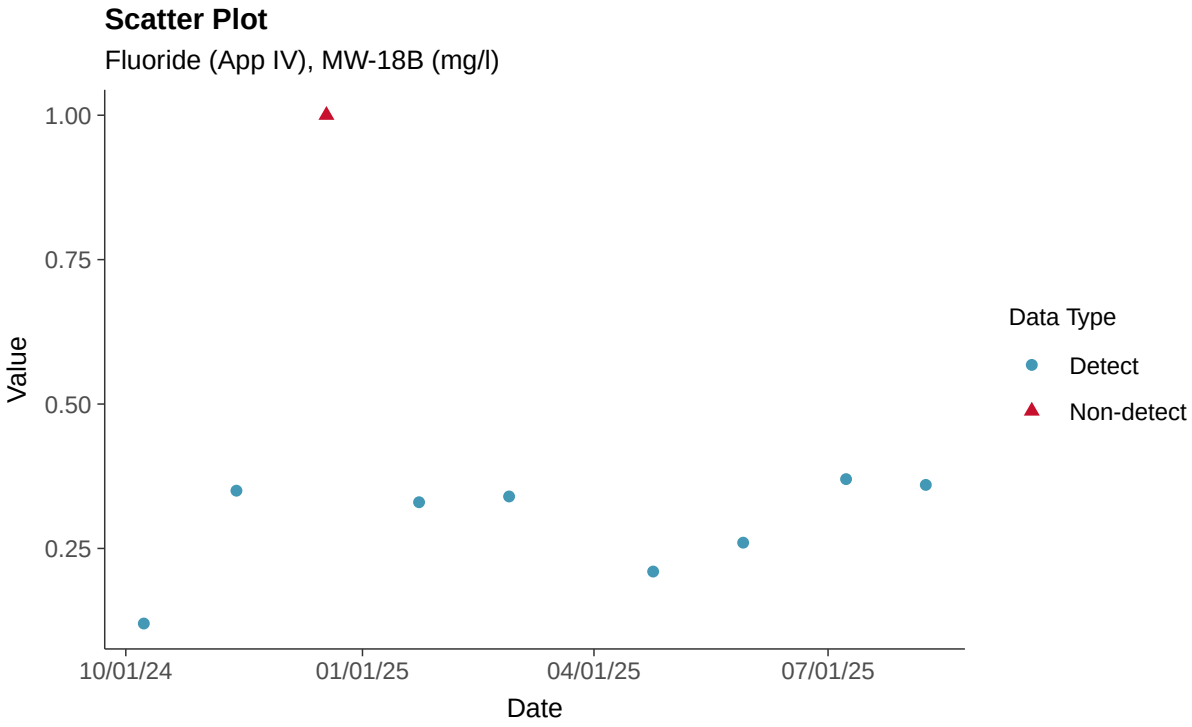
Trend Regression: Piecewise Linear-Linear

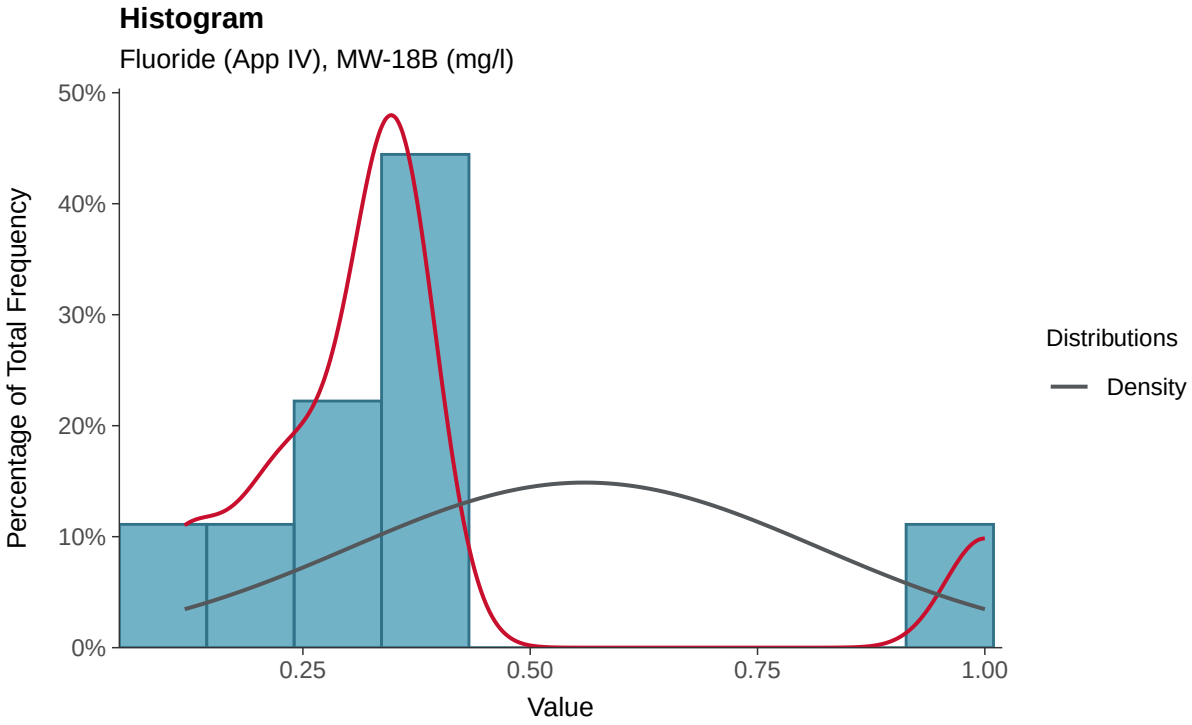
Cobalt, MW-18B (mg/l)



Appendix IV: Fluoride (App IV), MW-18B

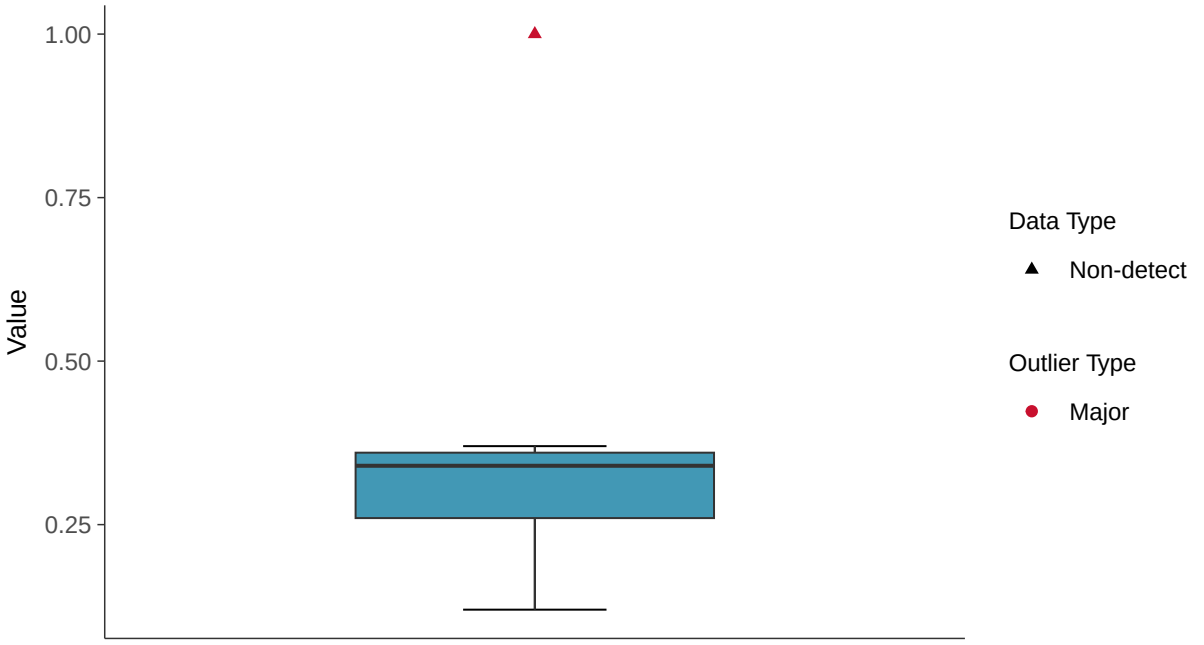
ID: 31_3_113





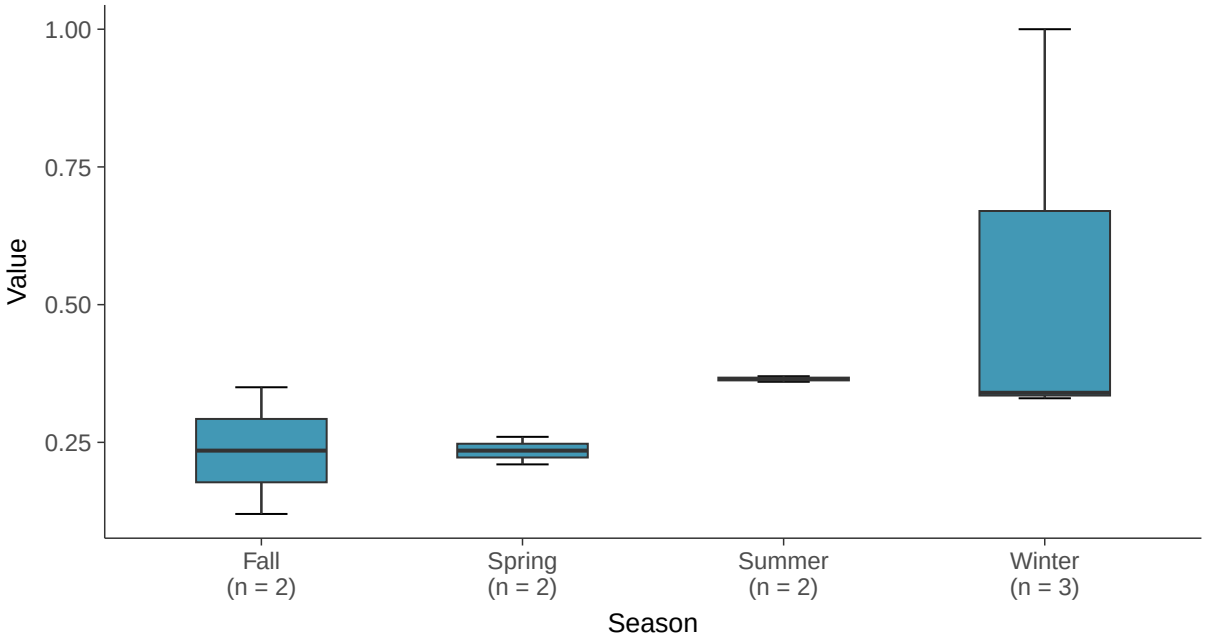
Boxplot

Fluoride (App IV), MW-18B (mg/l)



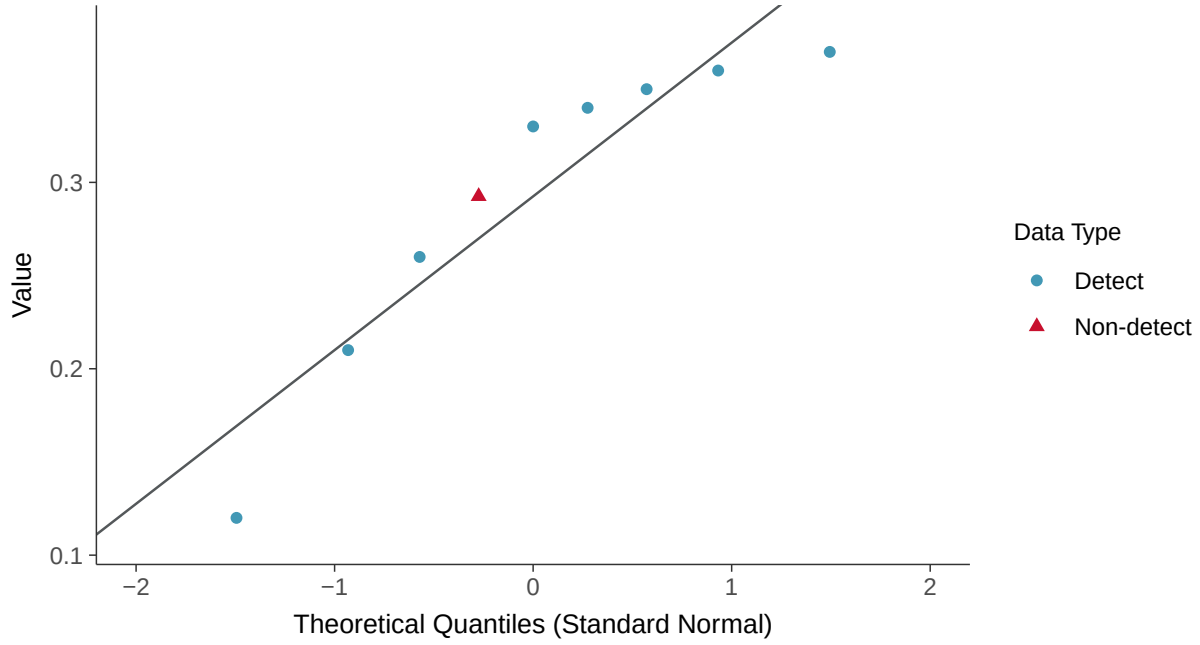
Boxplot by Season

Fluoride (App IV), MW-18B (mg/l)



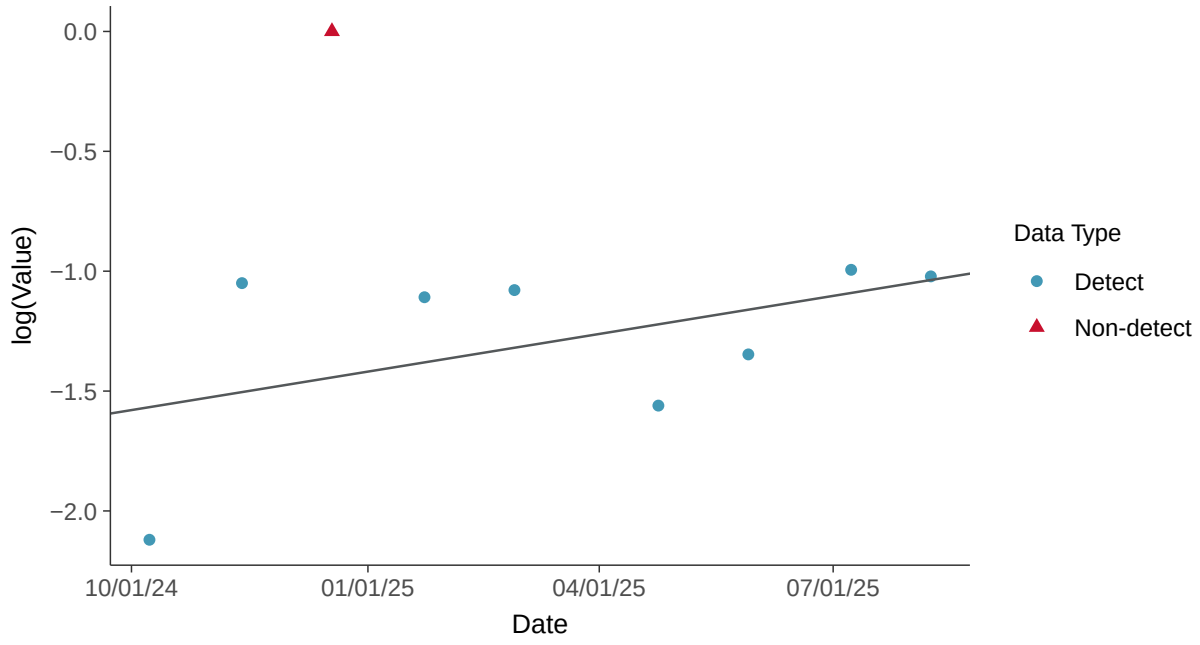
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-18B (mg/l)



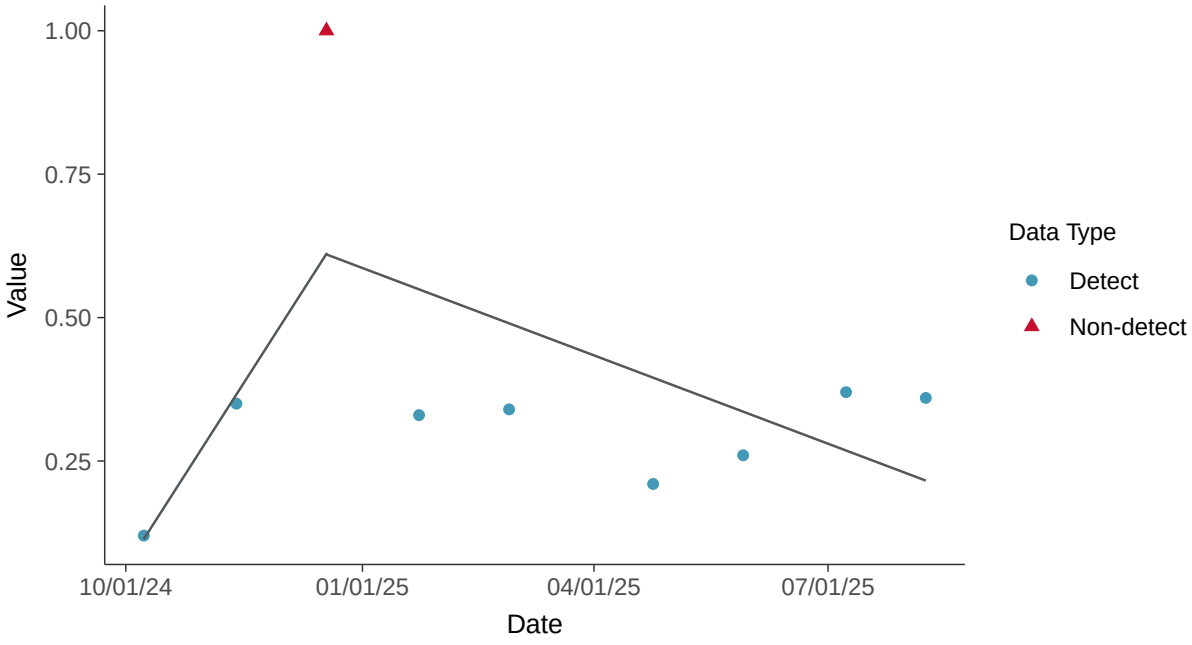
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-18B (mg/l)



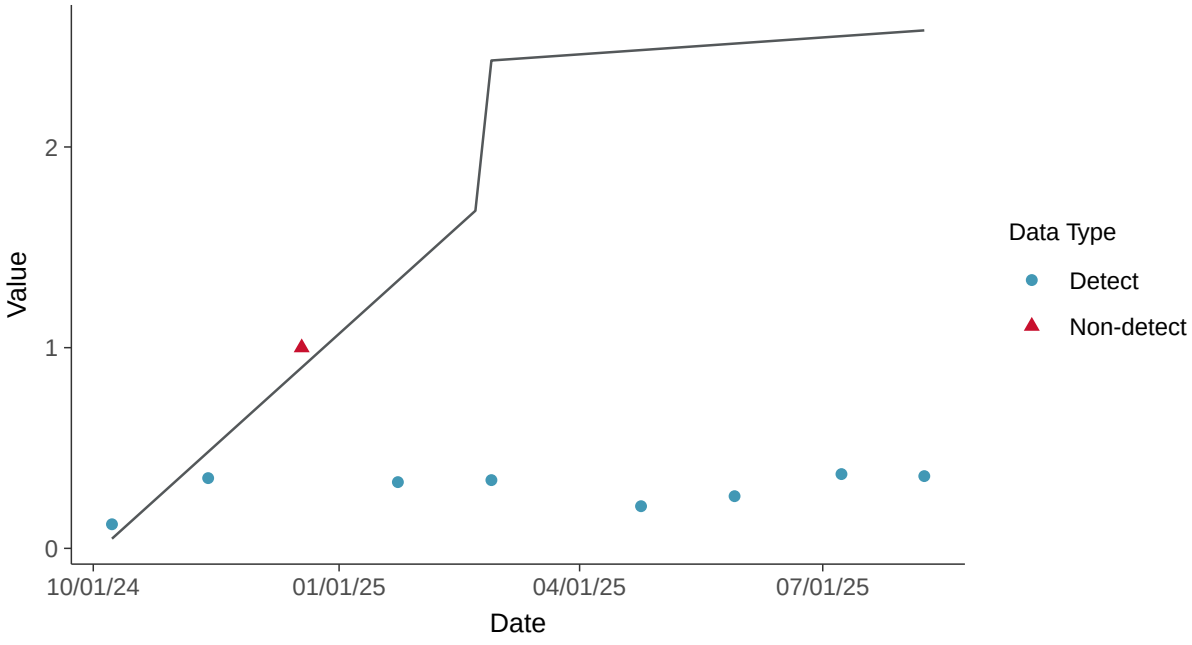
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-18B (mg/l)



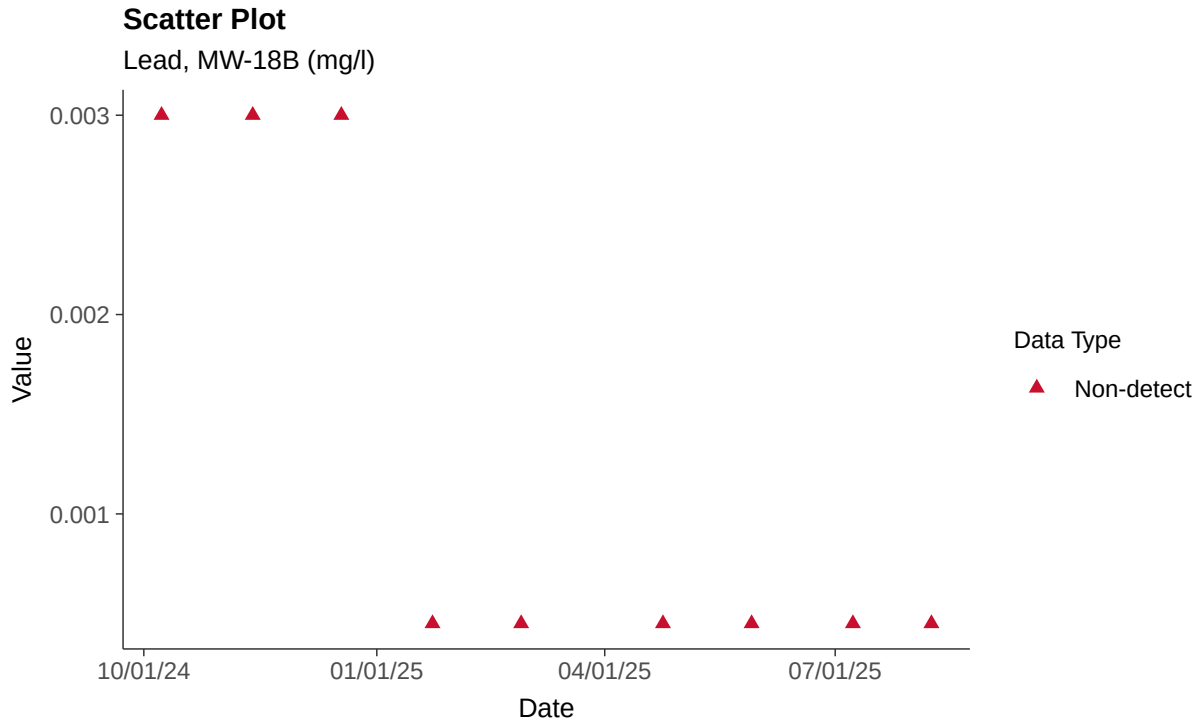
Trend Regression: Piecewise Linear-Linear-Linear

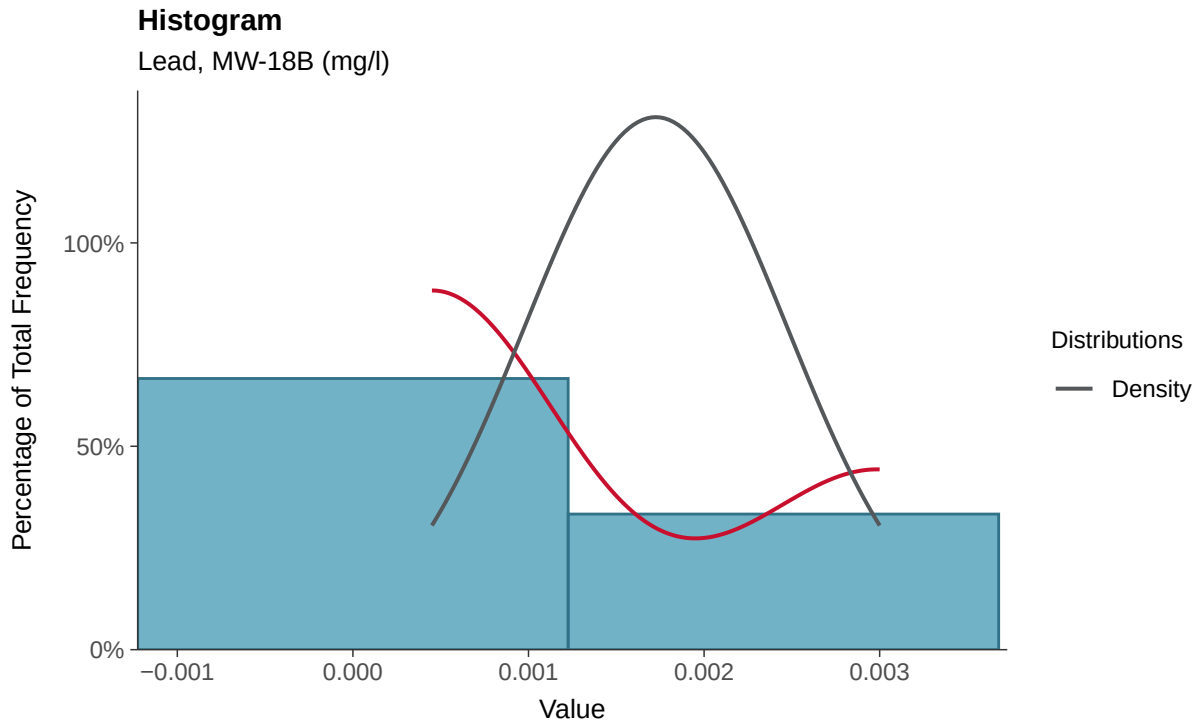
Fluoride (App IV), MW-18B (mg/l)



Appendix IV: Lead, MW-18B

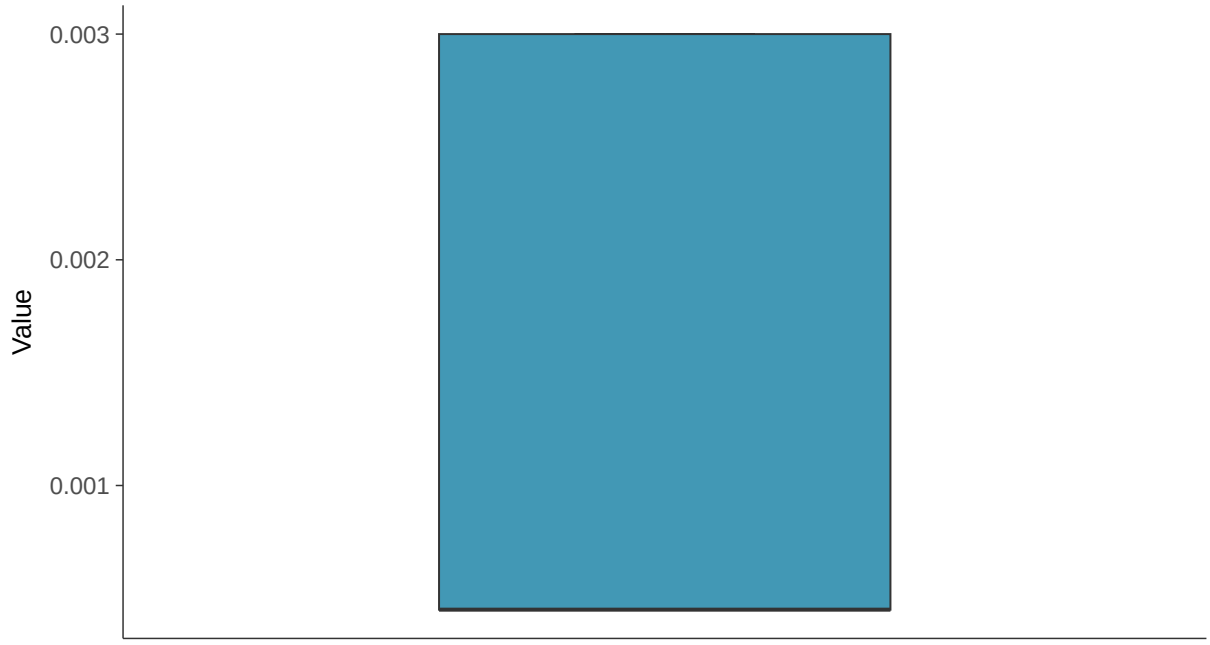
ID: 31_3_115





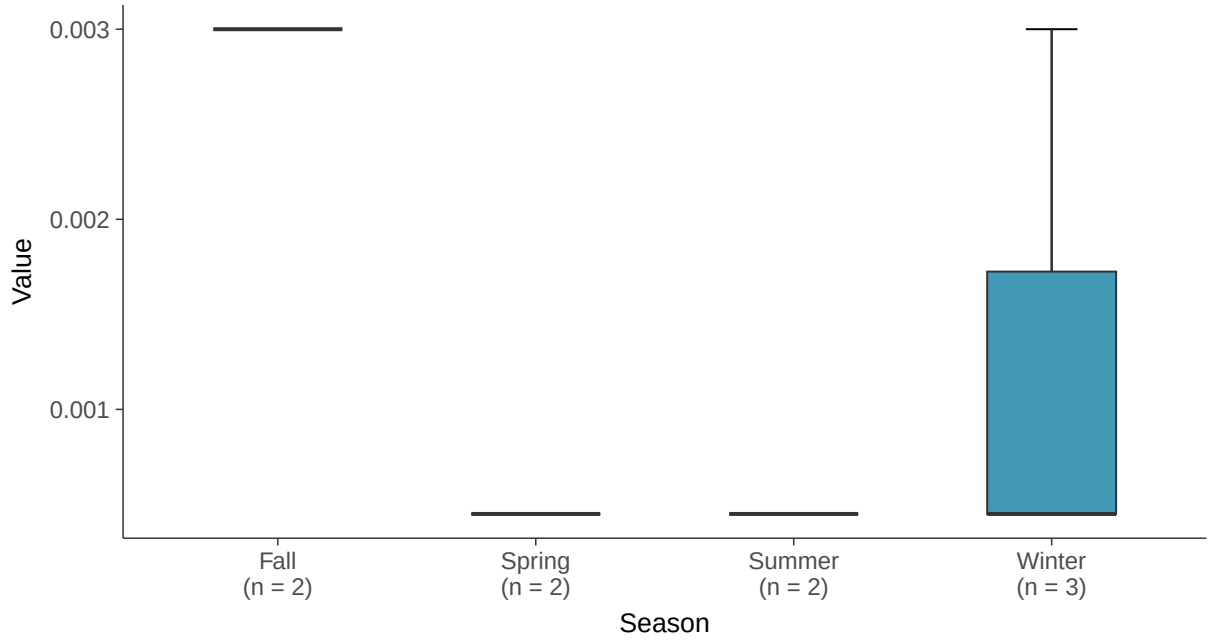
Boxplot

Lead, MW-18B (mg/l)



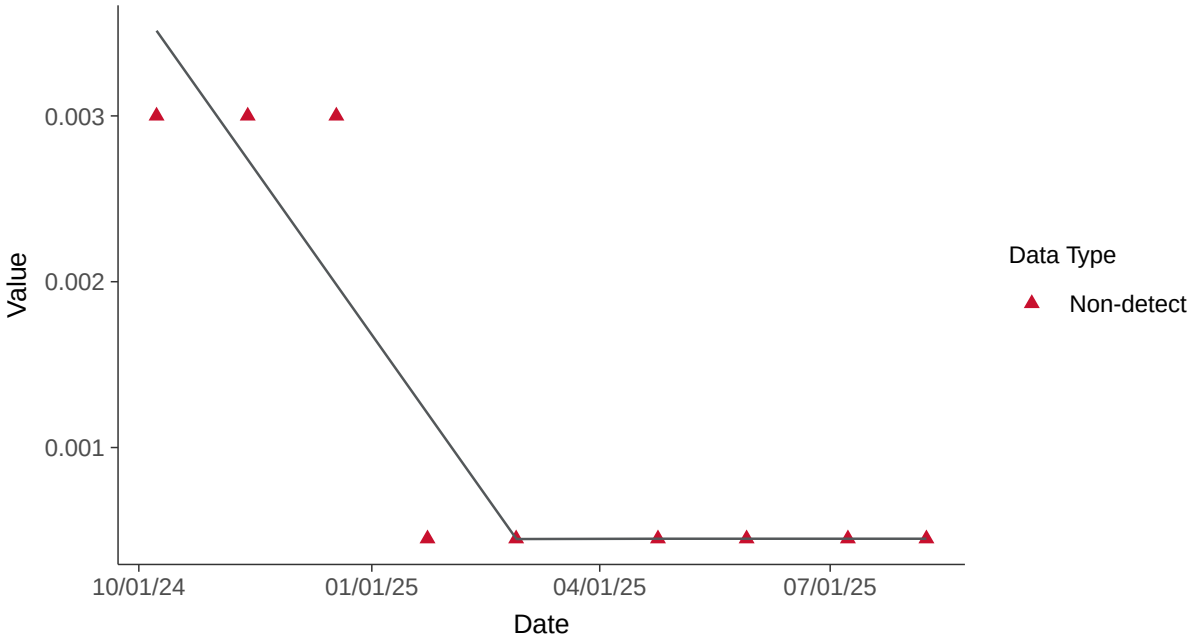
Boxplot by Season

Lead, MW-18B (mg/l)



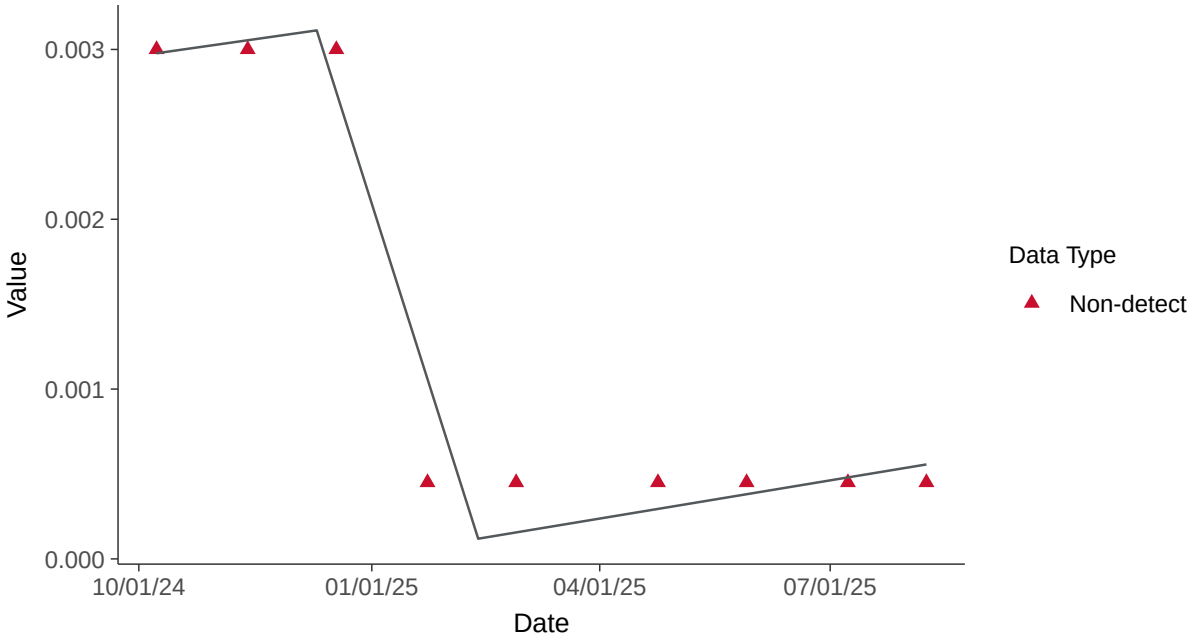
Trend Regression: Piecewise Linear-Linear

Lead, MW-18B (mg/l)



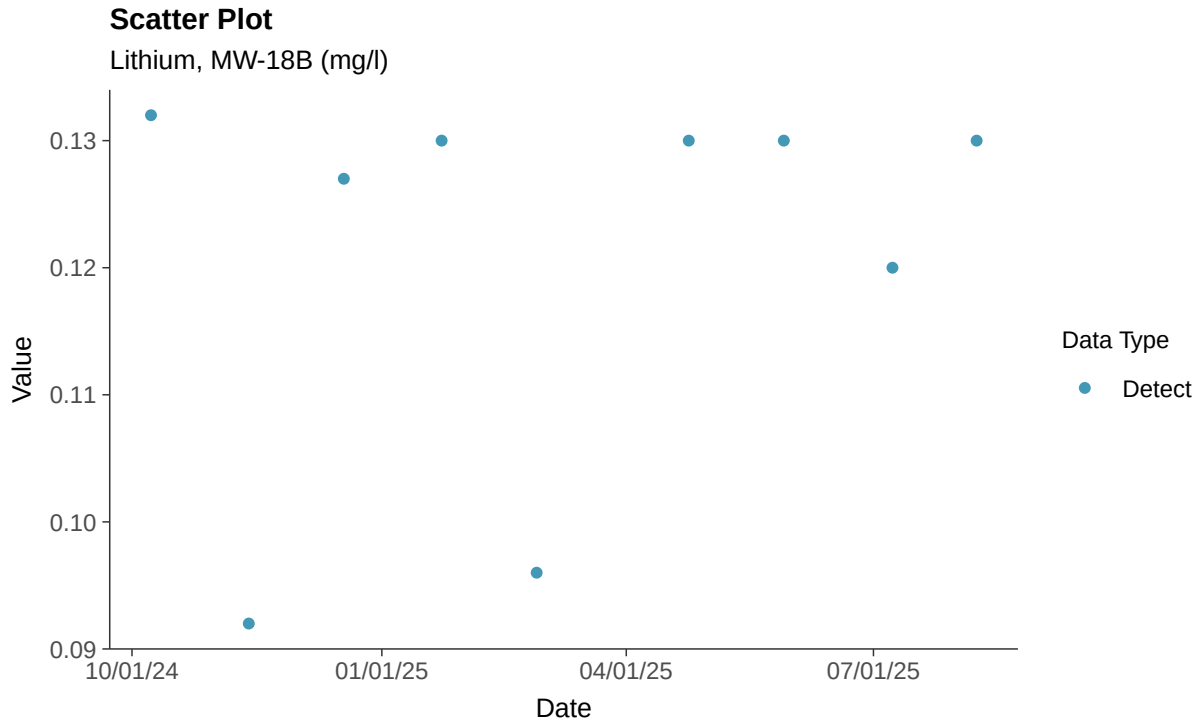
Trend Regression: Piecewise Linear-Linear-Linear

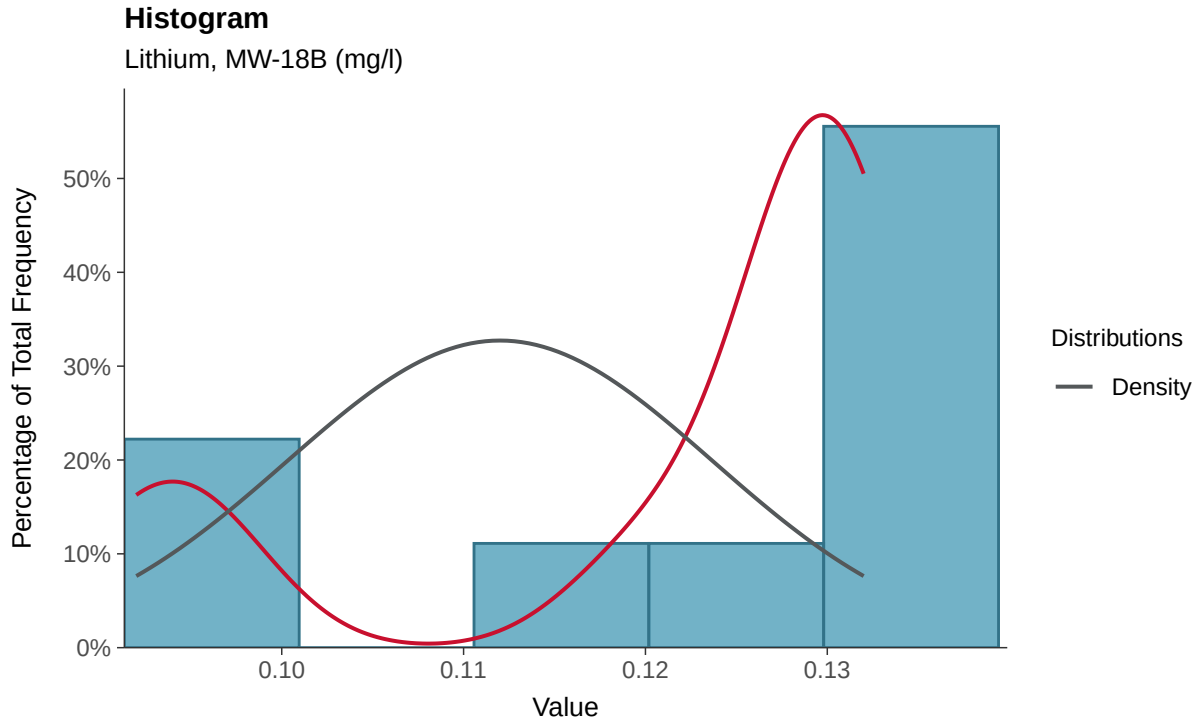
Lead, MW-18B (mg/l)



Appendix IV: Lithium, MW-18B

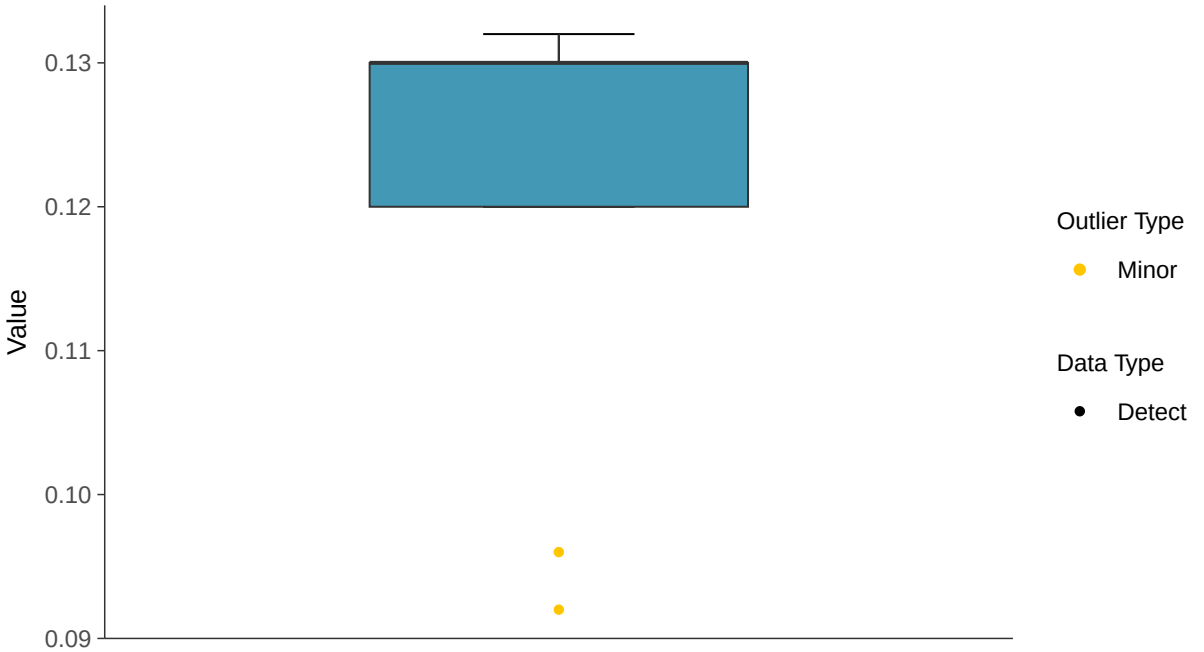
ID: 31_3_116





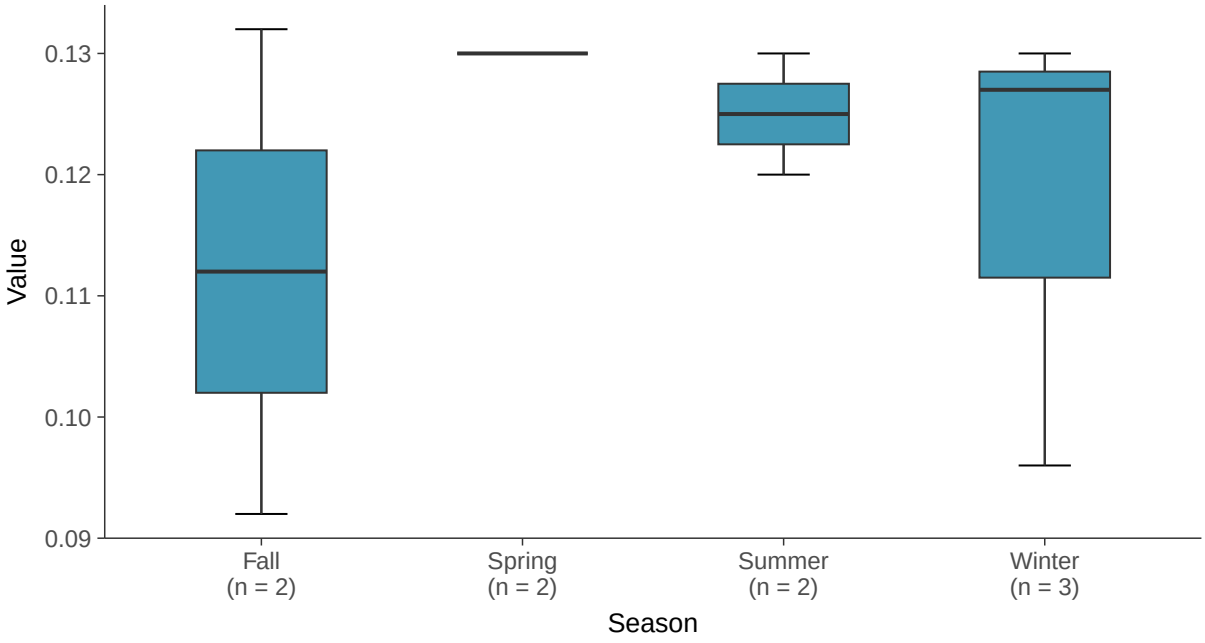
Boxplot

Lithium, MW-18B (mg/l)



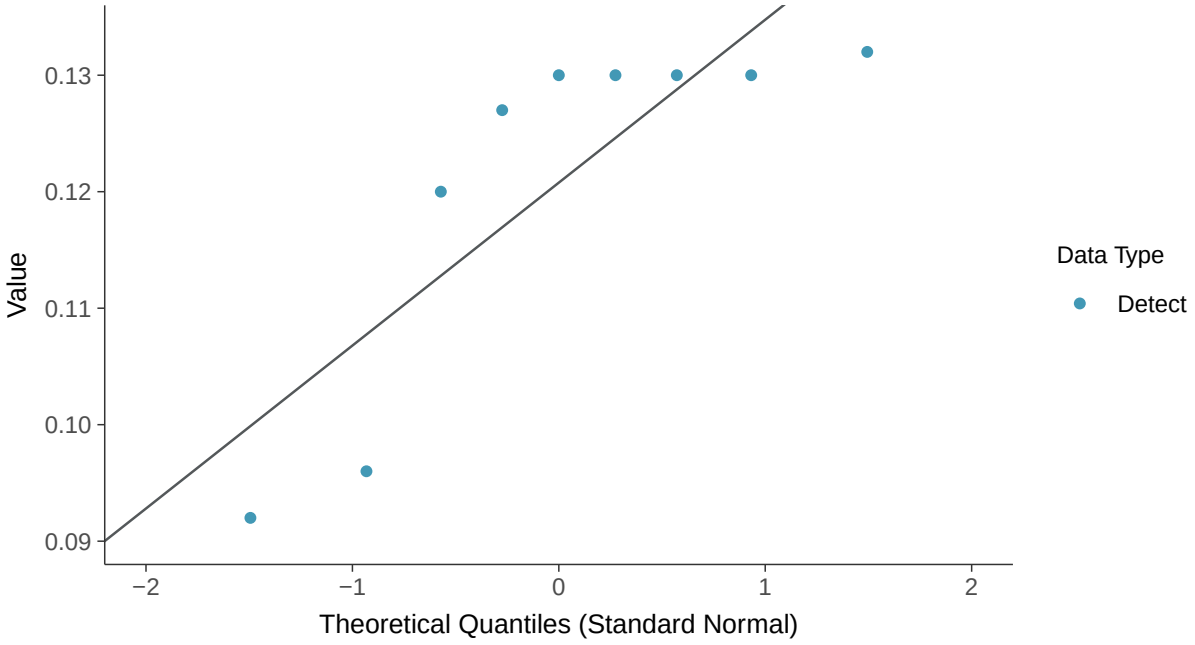
Boxplot by Season

Lithium, MW-18B (mg/l)



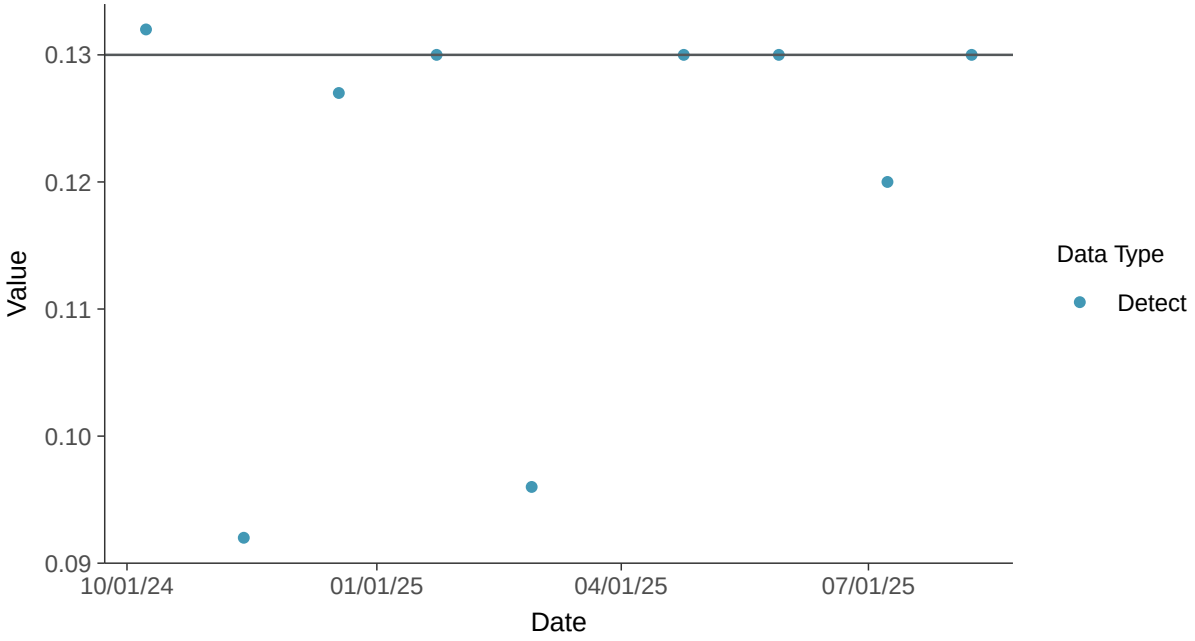
Normal Q-Q plot

Lithium, MW-18B (mg/l)



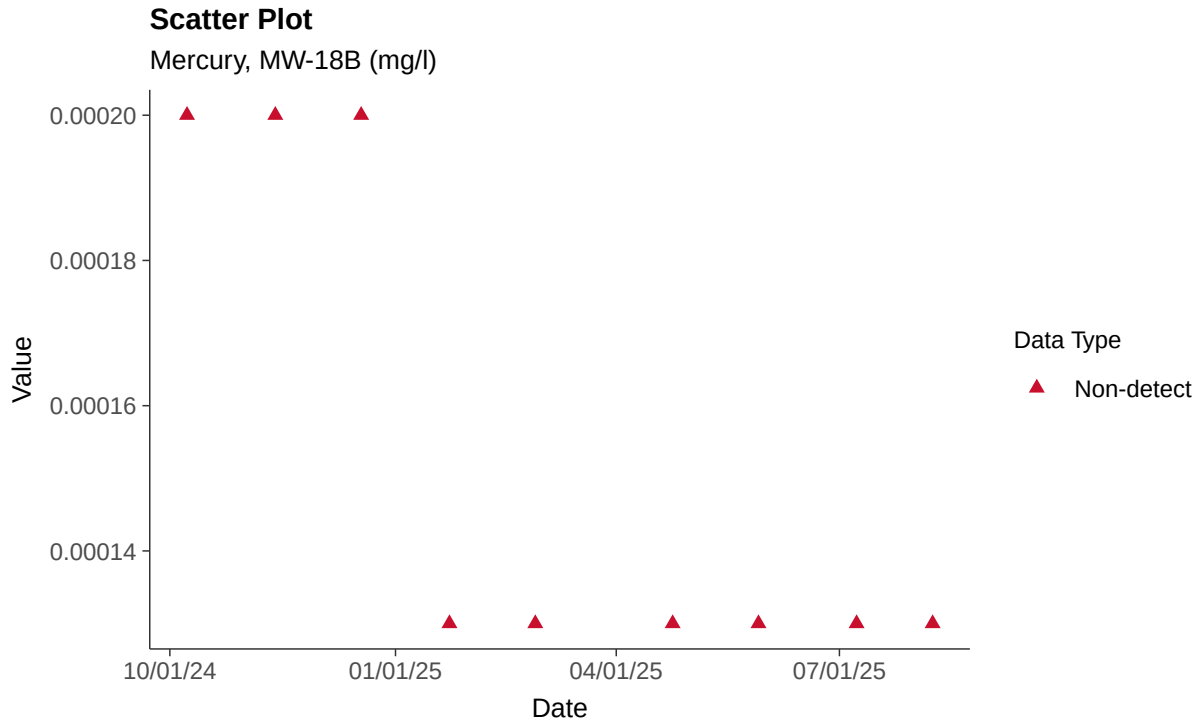
Trend Regression: Mann-Kendall/Theil-Sen Estimate

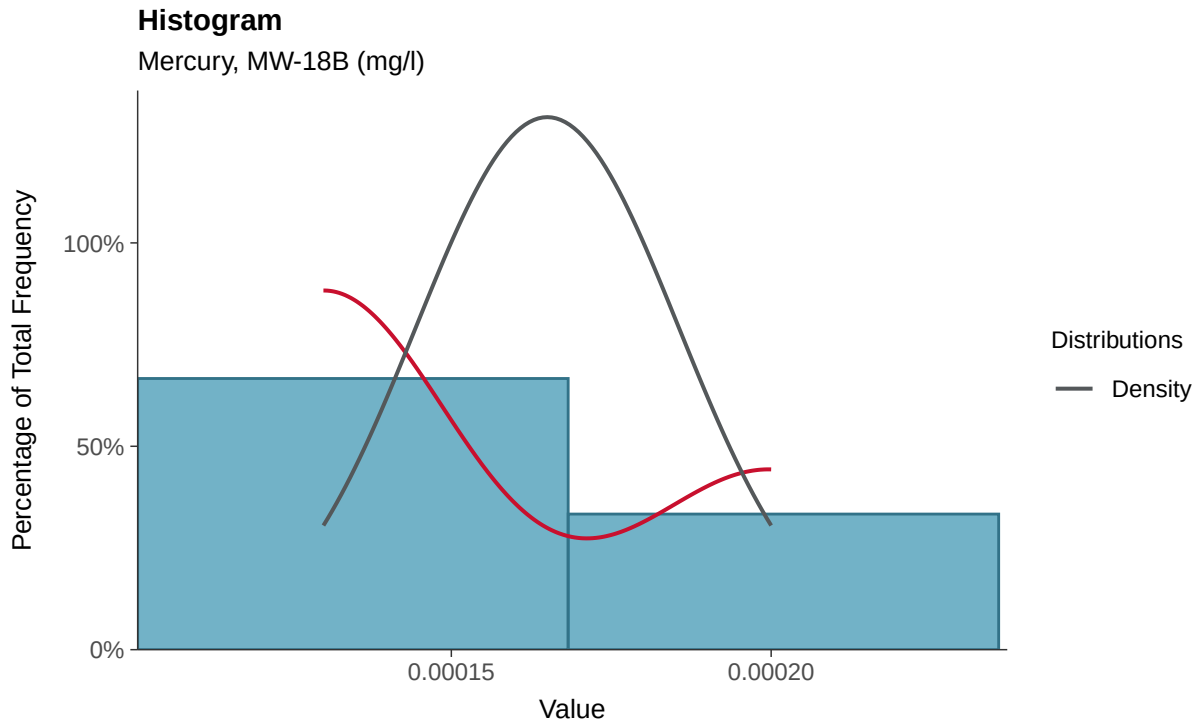
Lithium, MW-18B (mg/l)



Appendix IV: Mercury, MW-18B

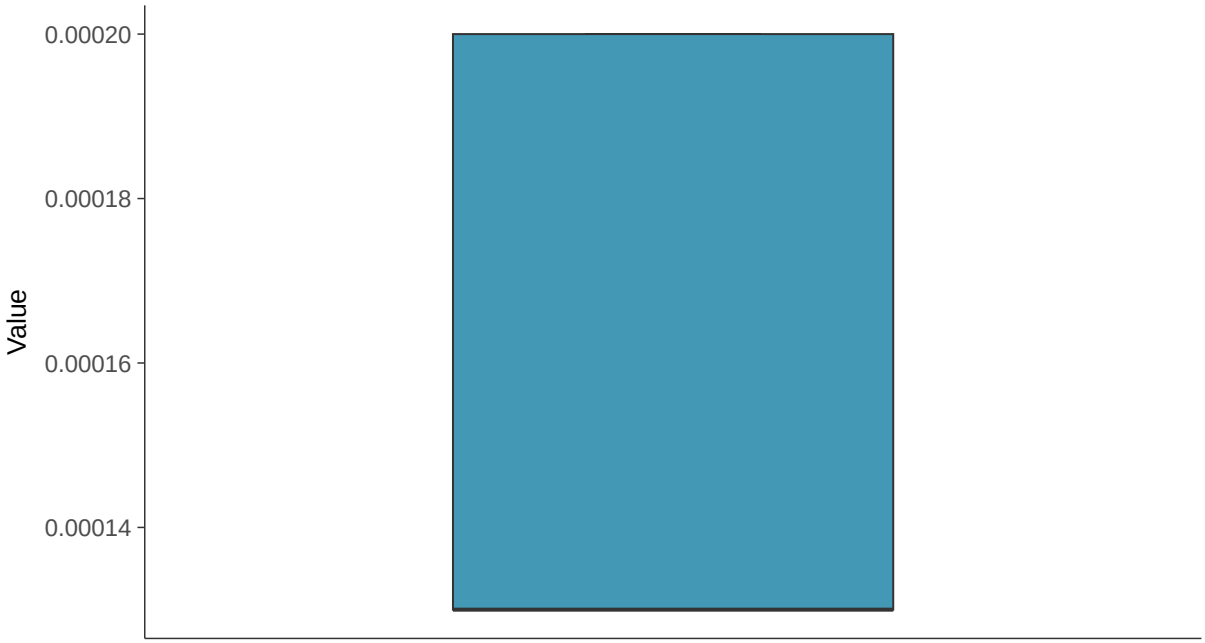
ID: 31_3_117





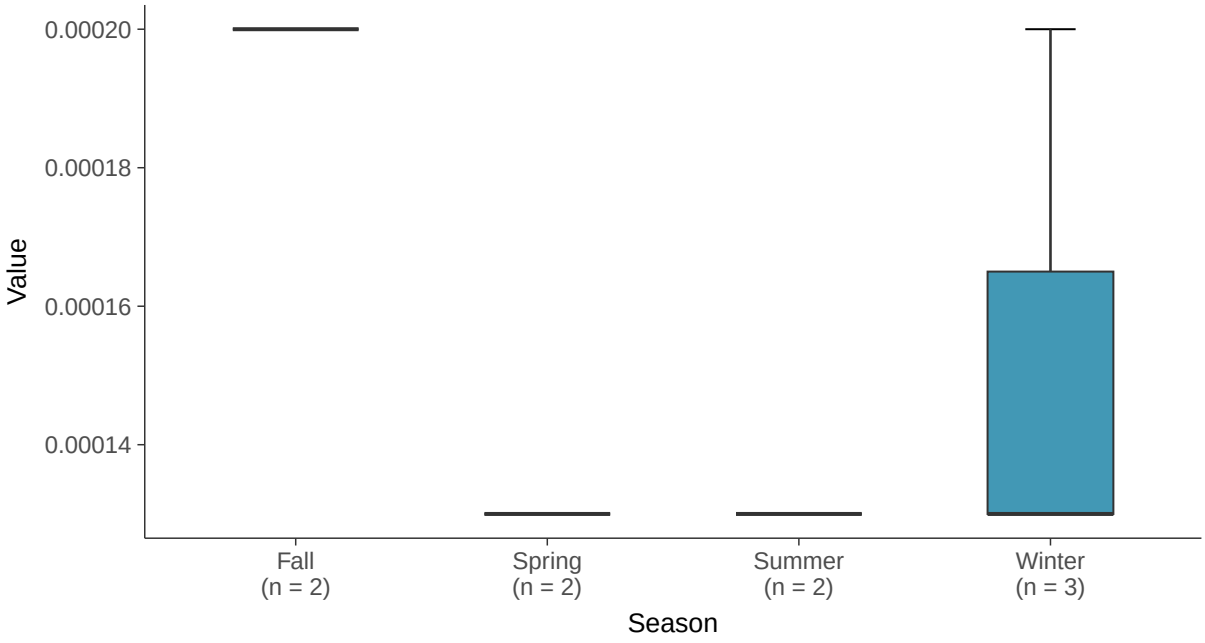
Boxplot

Mercury, MW-18B (mg/l)



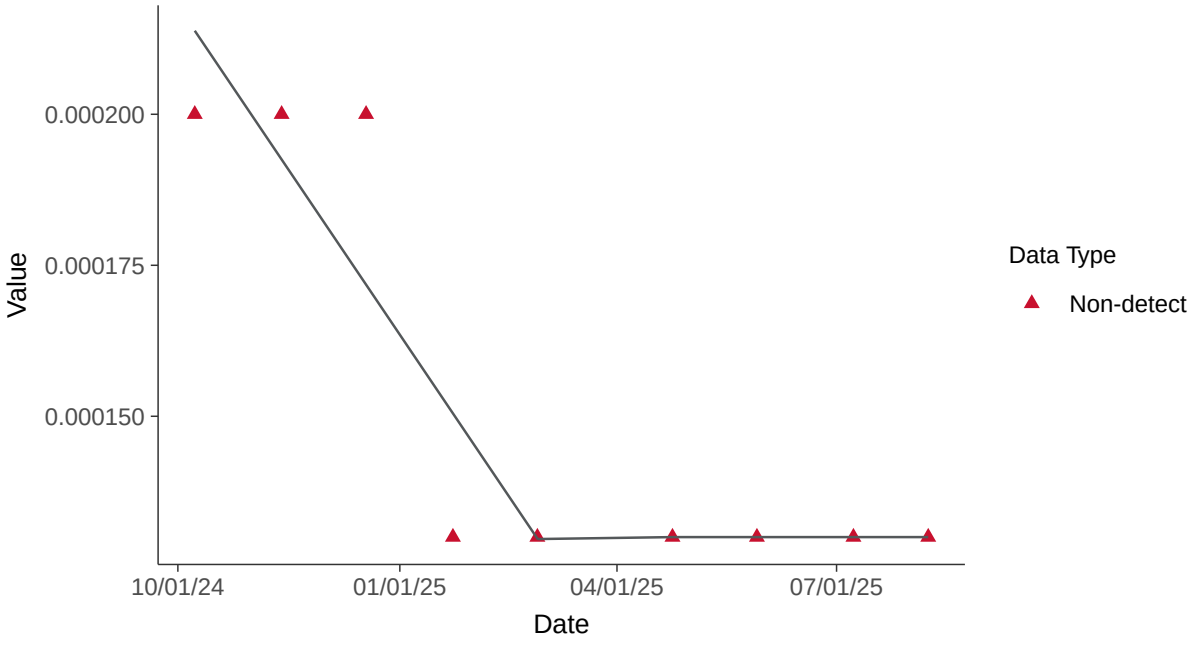
Boxplot by Season

Mercury, MW-18B (mg/l)



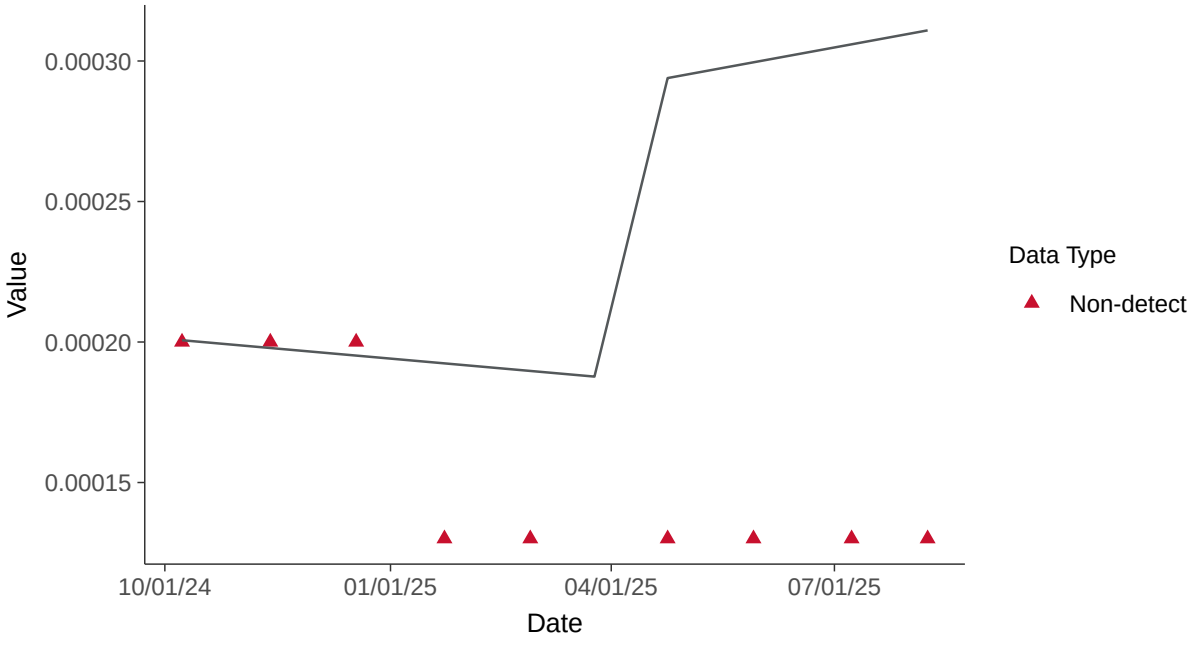
Trend Regression: Piecewise Linear-Linear

Mercury, MW-18B (mg/l)



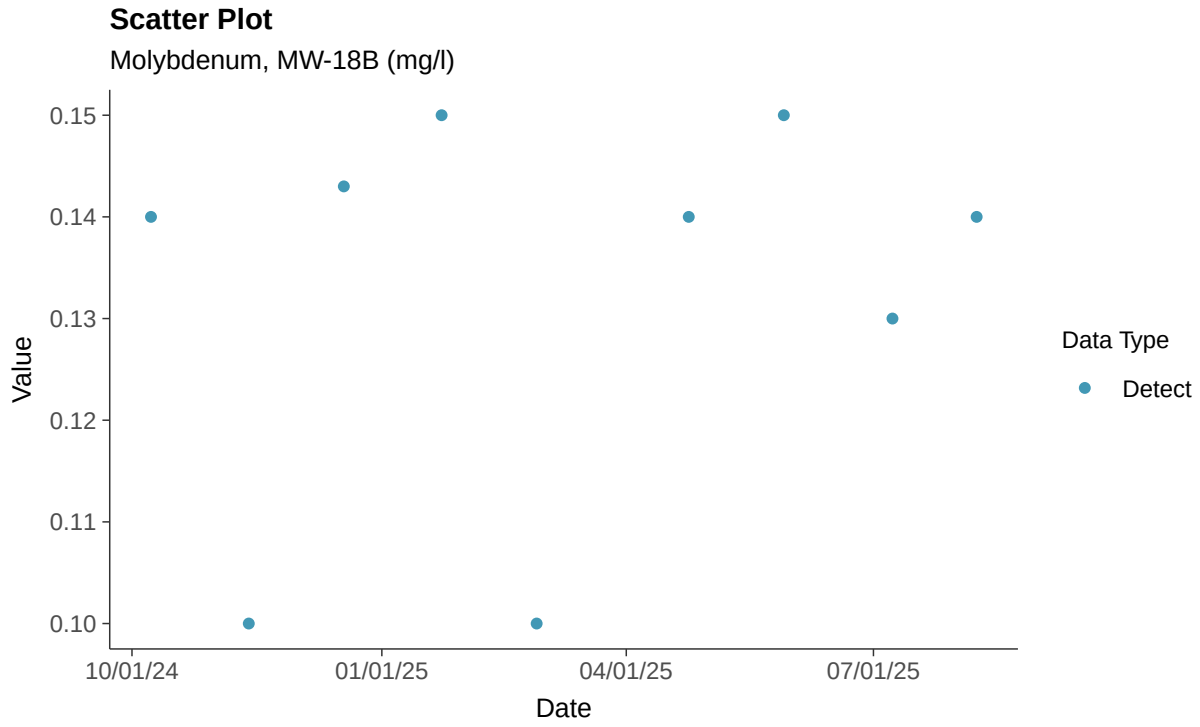
Trend Regression: Piecewise Linear-Linear-Linear

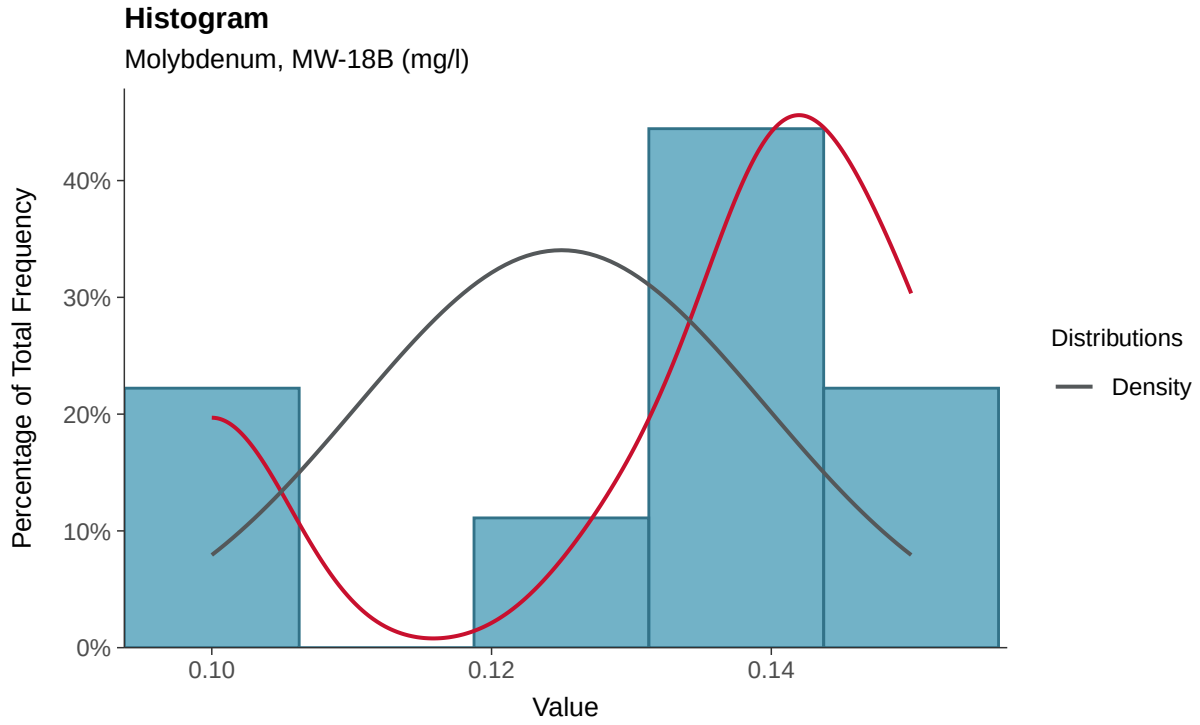
Mercury, MW-18B (mg/l)



Appendix IV: Molybdenum, MW-18B

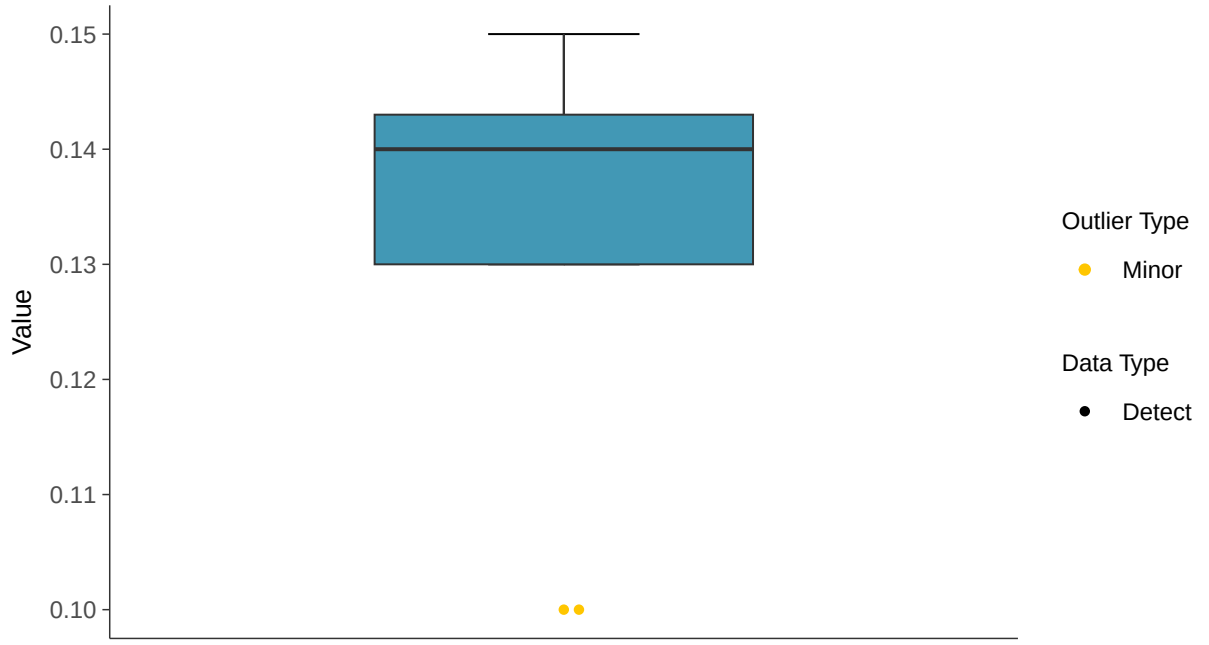
ID: 31_3_118





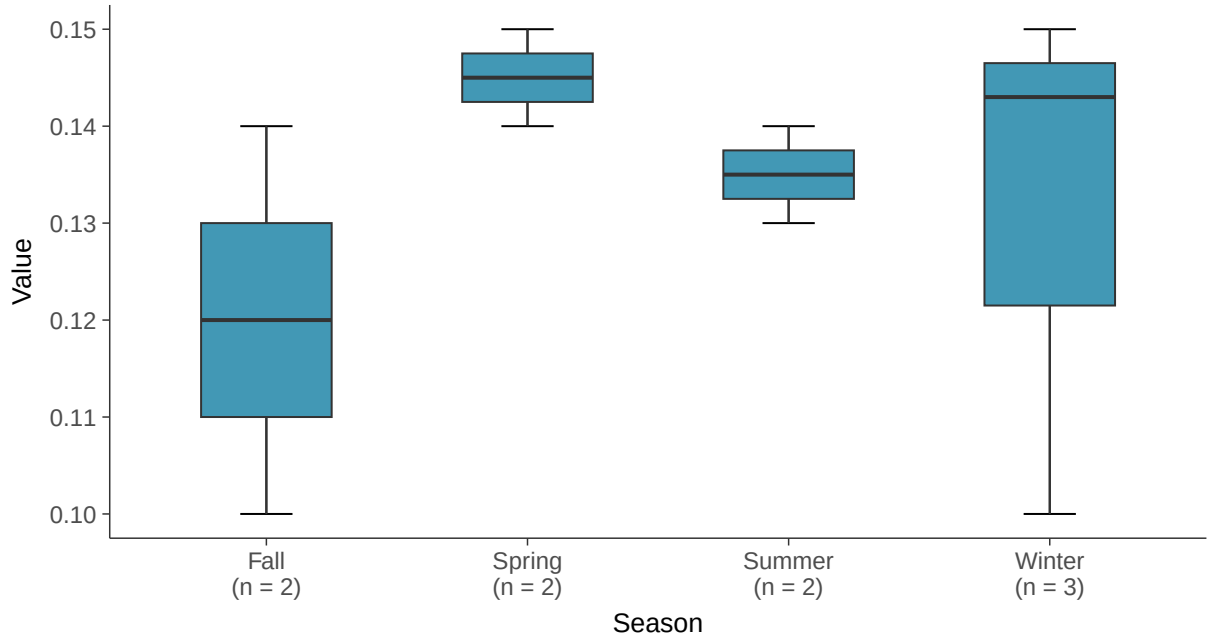
Boxplot

Molybdenum, MW-18B (mg/l)



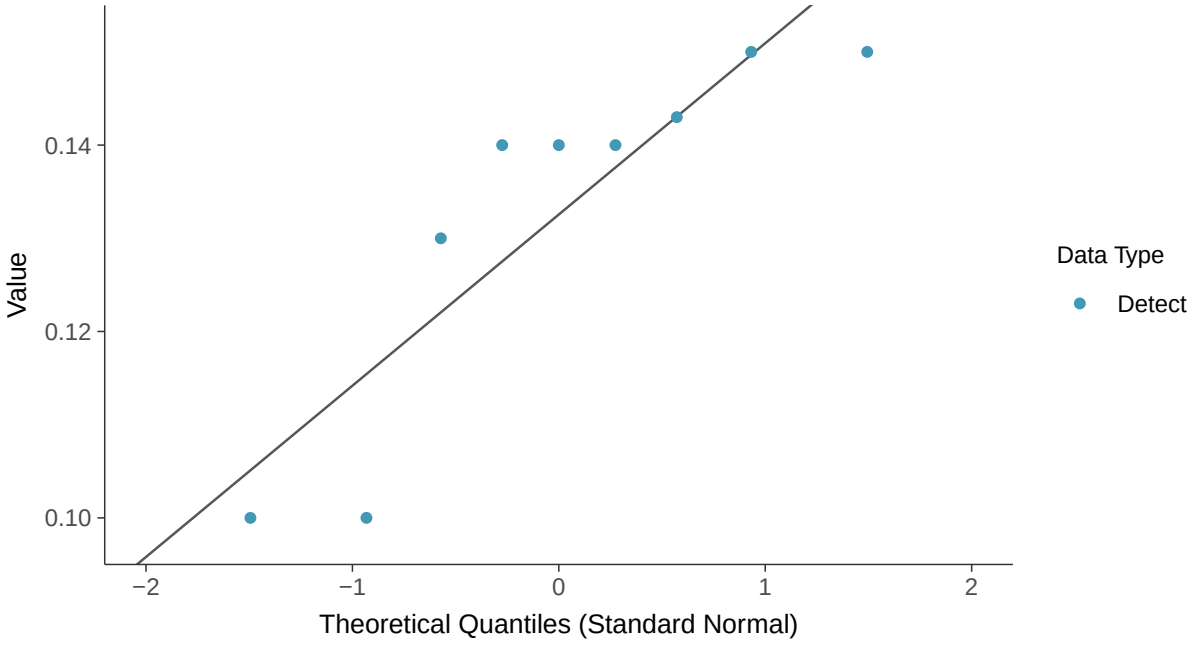
Boxplot by Season

Molybdenum, MW-18B (mg/l)



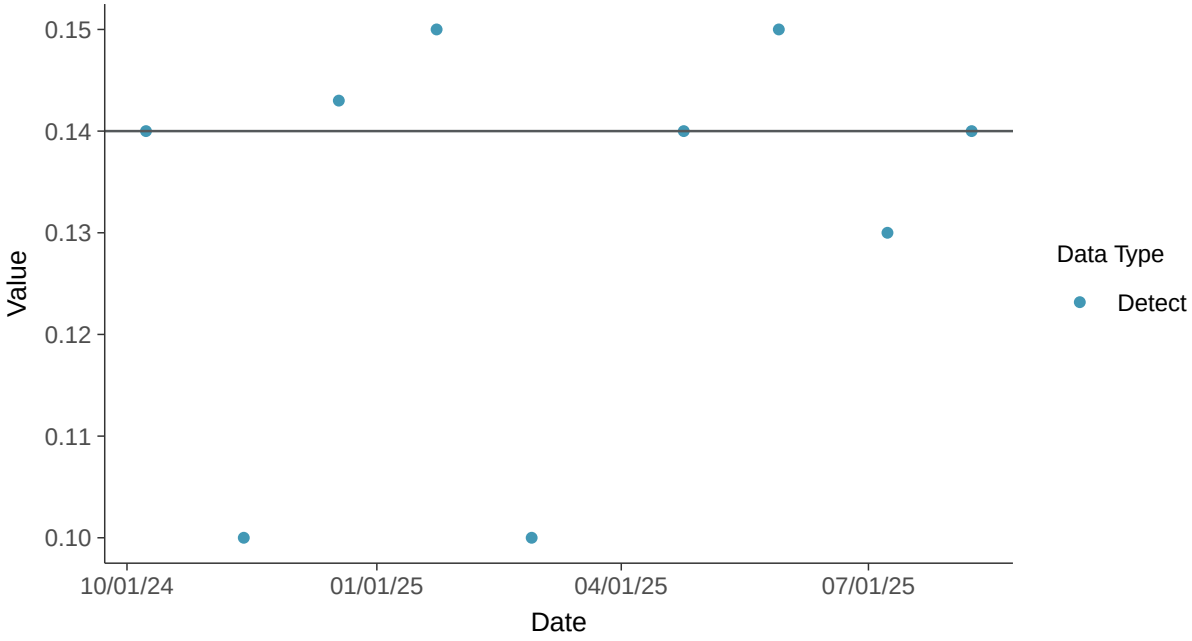
Normal Q-Q plot

Molybdenum, MW-18B (mg/l)



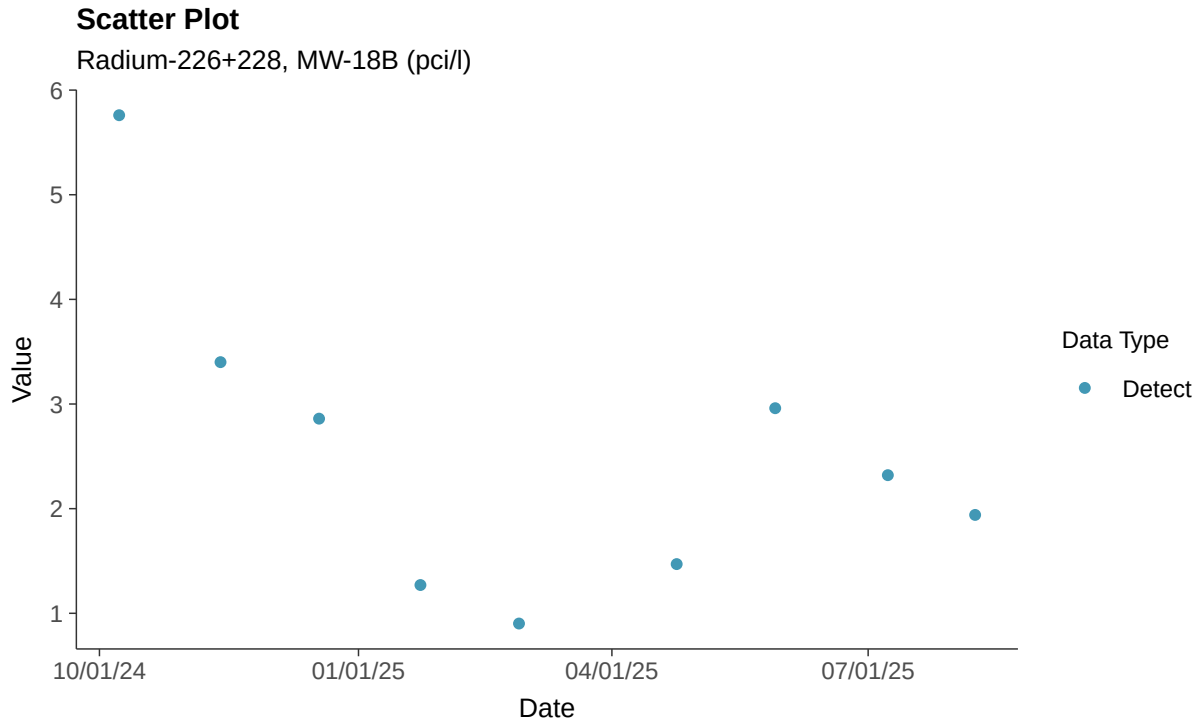
Trend Regression: Mann-Kendall/Theil-Sen Estimate

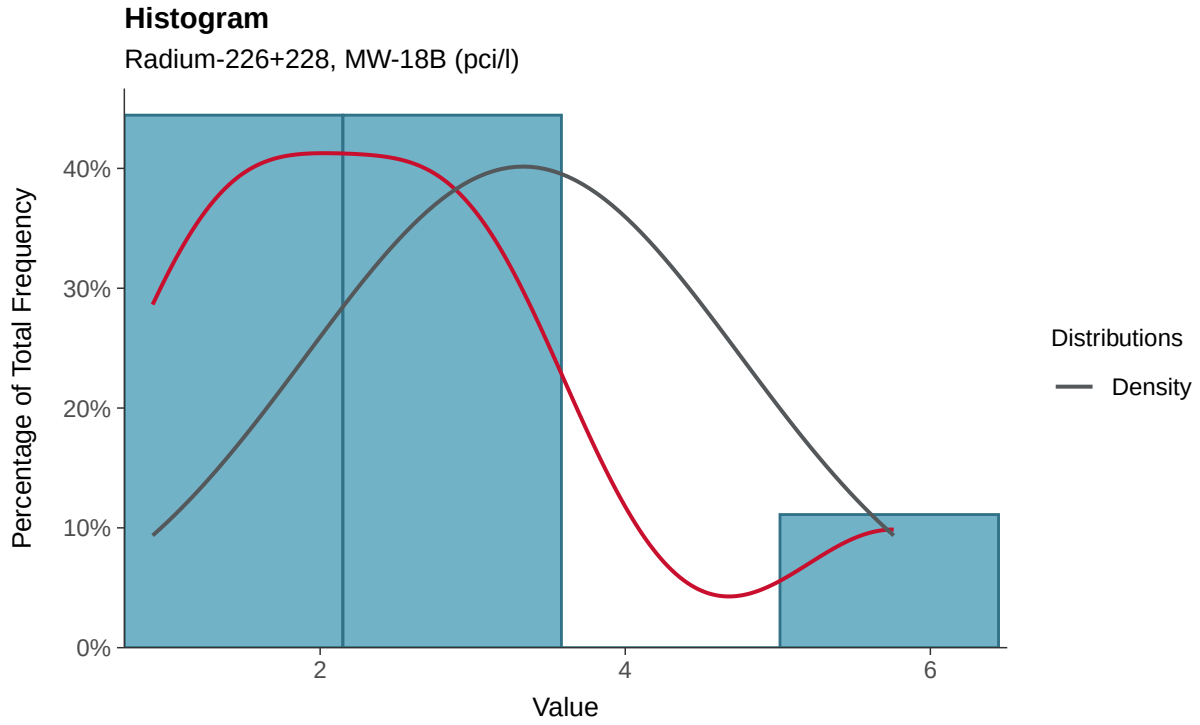
Molybdenum, MW-18B (mg/l)



Appendix IV: Radium-226+228, MW-18B

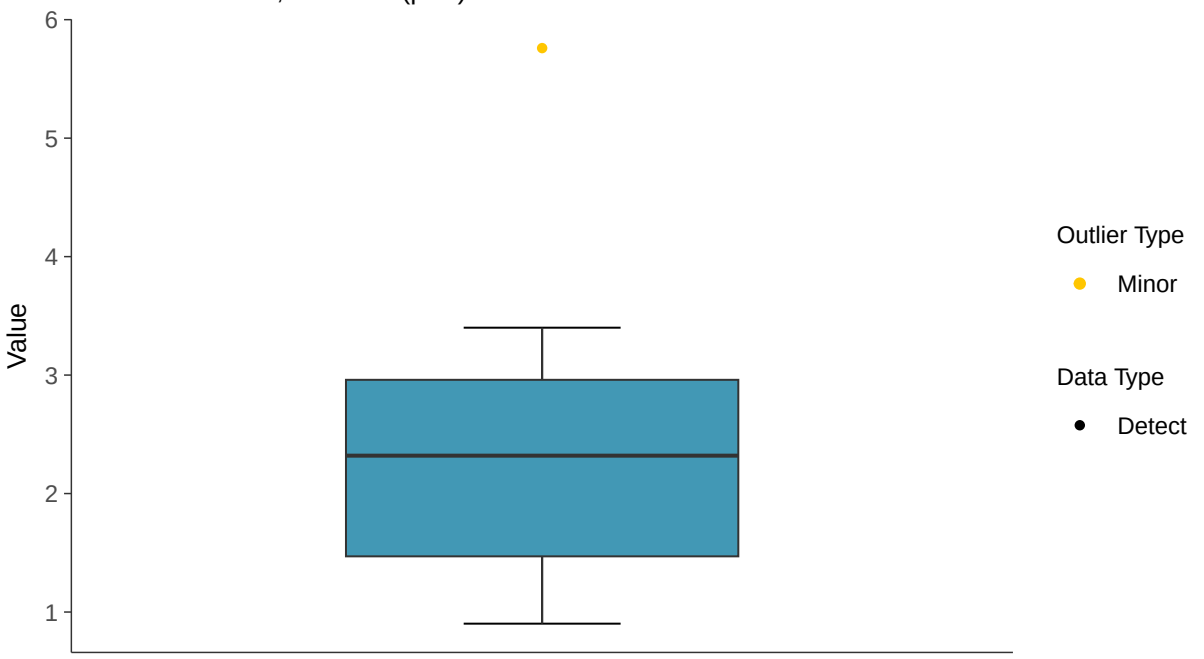
ID: 31_3_121





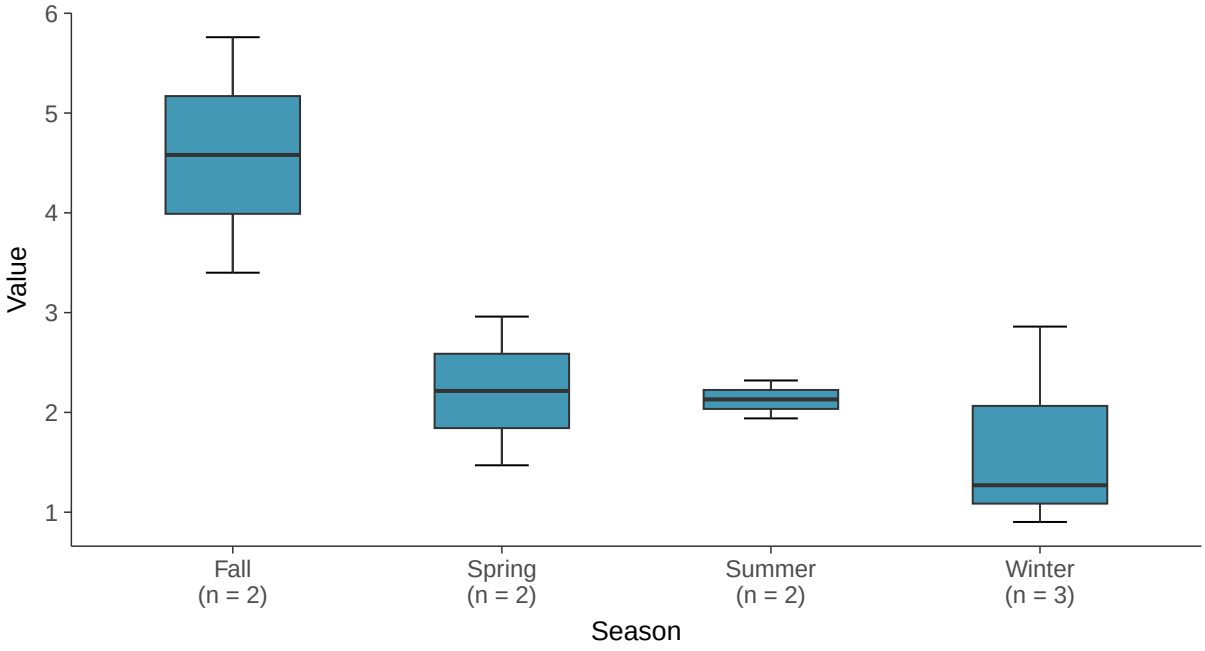
Boxplot

Radium-226+228, MW-18B (pci/l)



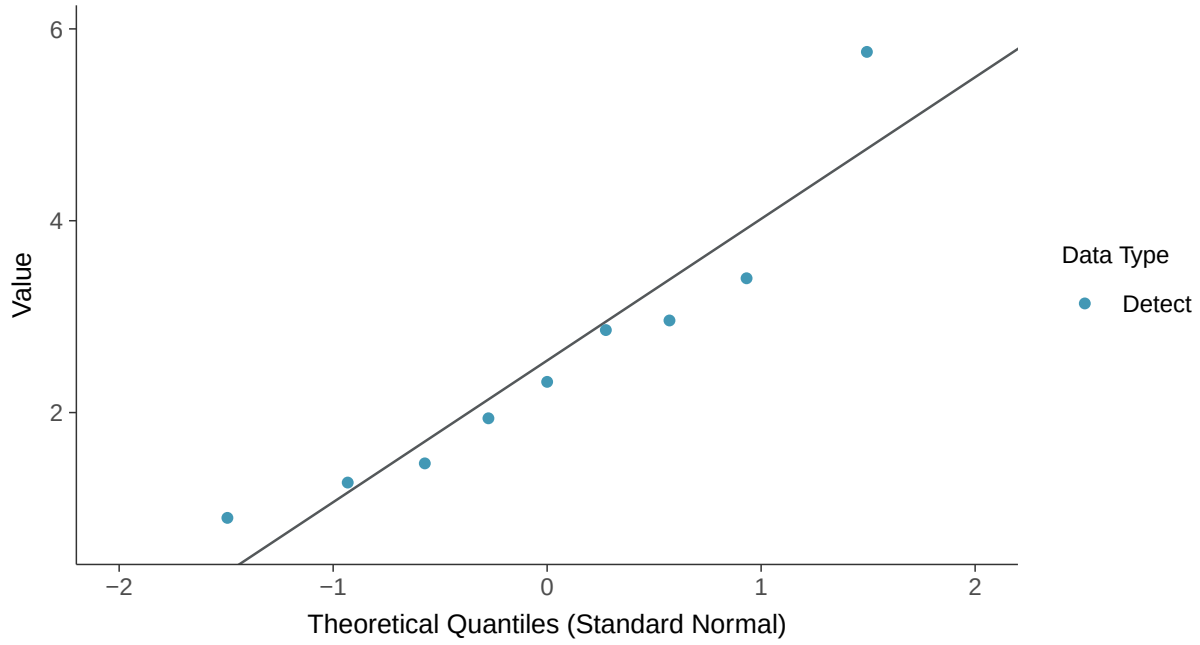
Boxplot by Season

Radium-226+228, MW-18B (pci/l)



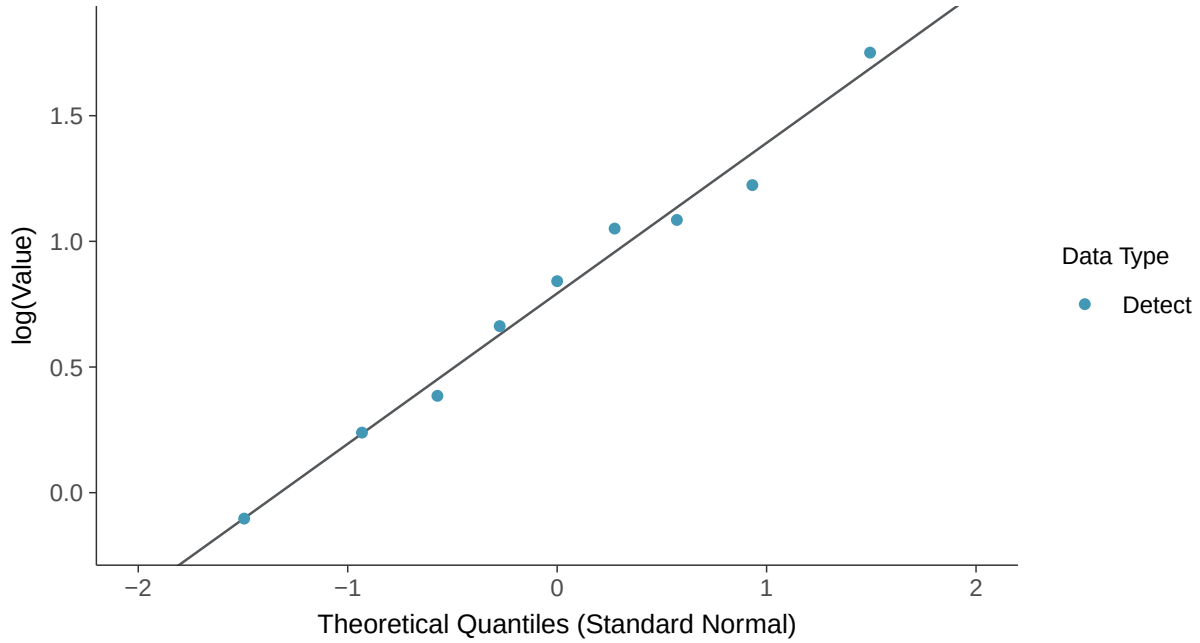
Normal Q-Q plot

Radium-226+228, MW-18B (pci/l)



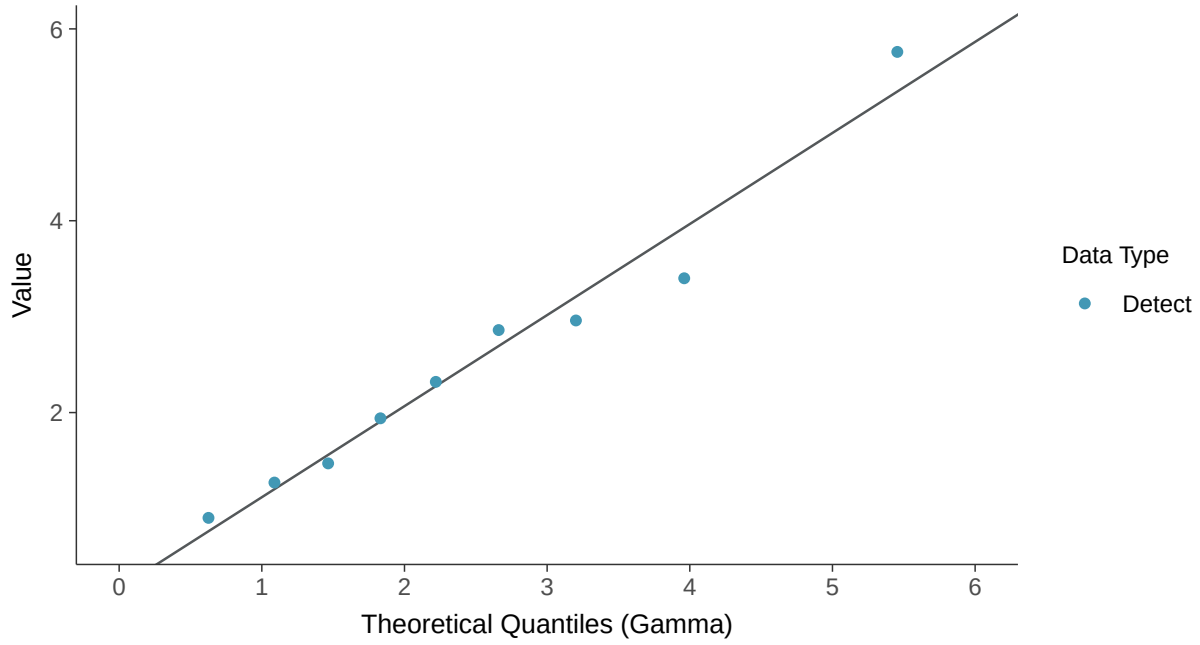
Lognormal Q-Q plot

Radium-226+228, MW-18B (pci/l)



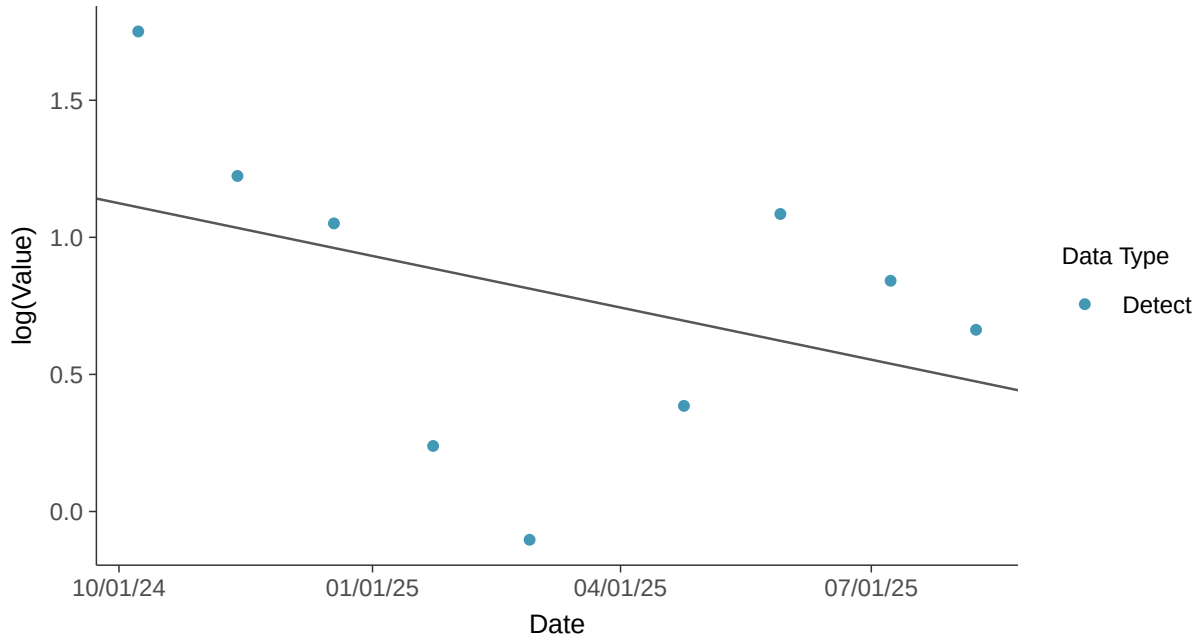
Gamma Q-Q plot

Radium-226+228, MW-18B (pci/l)



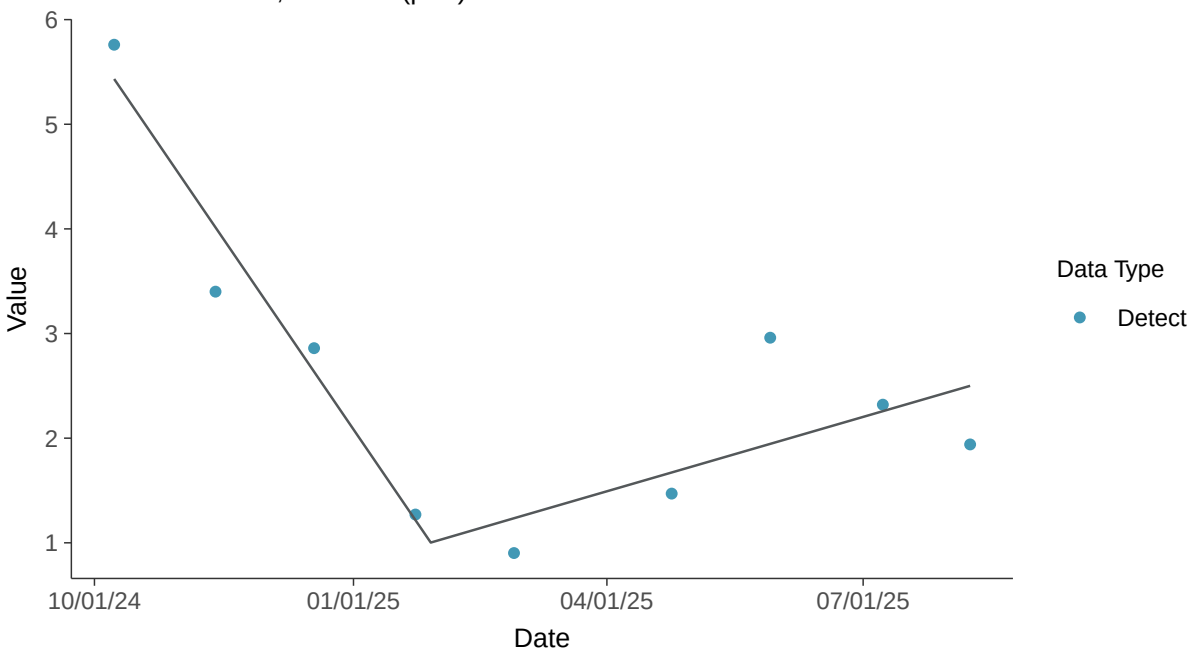
Trend Regression: Lognormal MLE

Radium-226+228, MW-18B (pci/l)



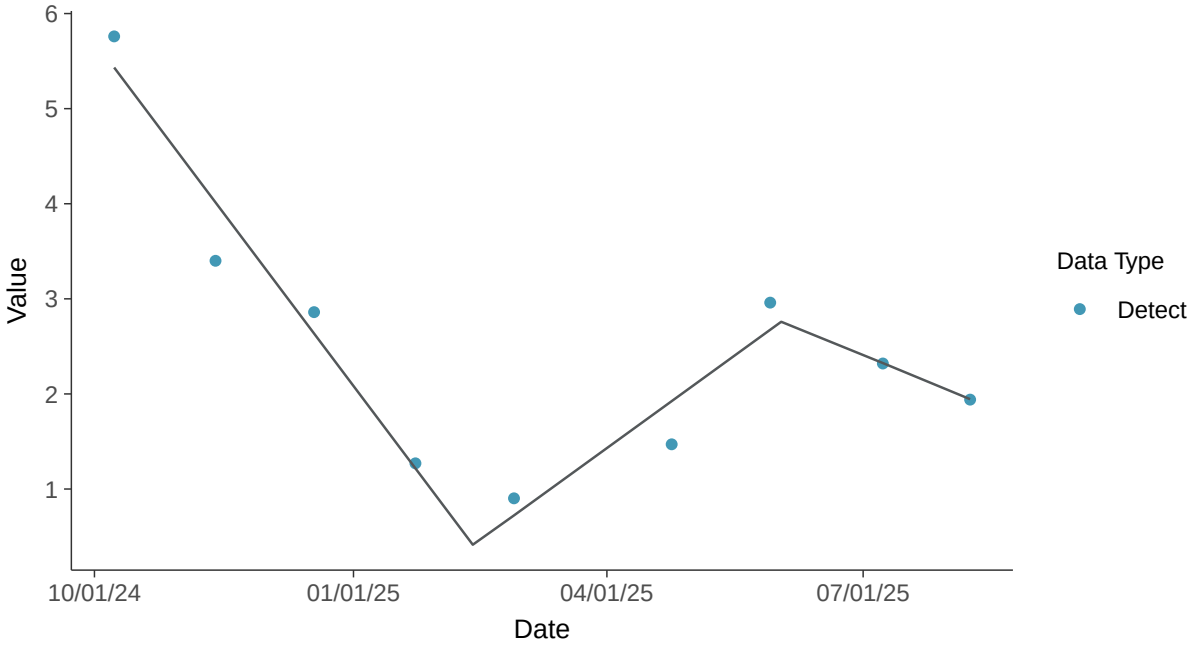
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-18B (pci/l)



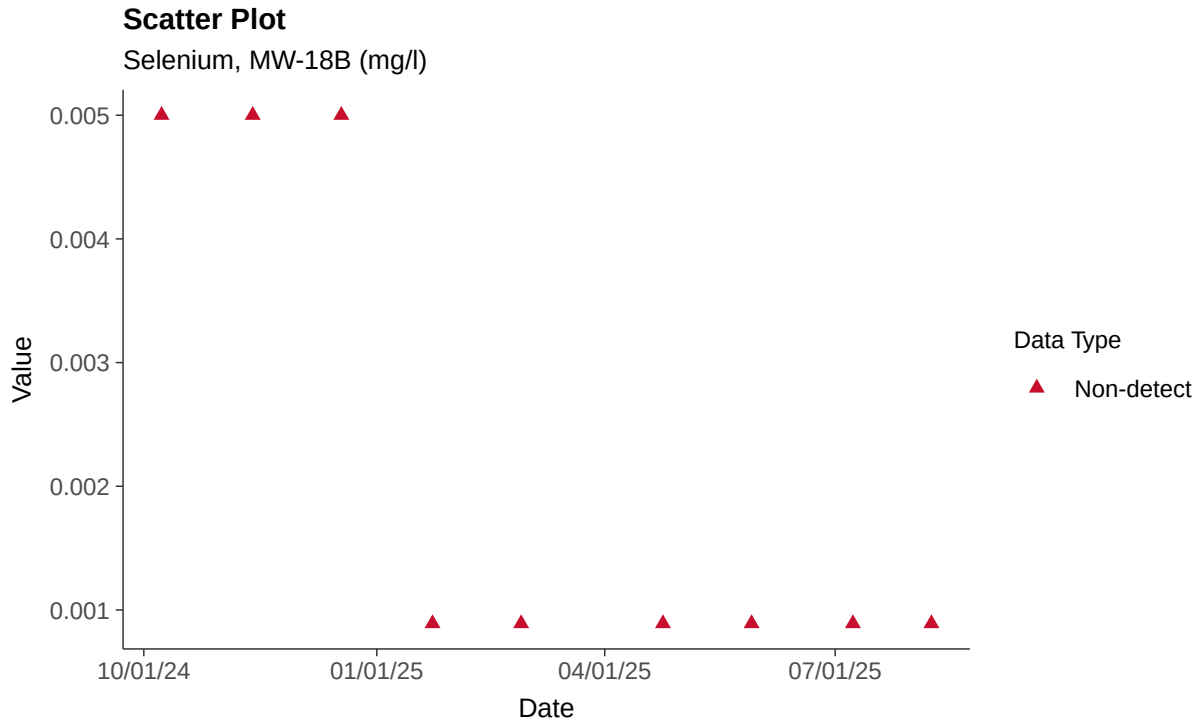
Trend Regression: Piecewise Linear-Linear-Linear

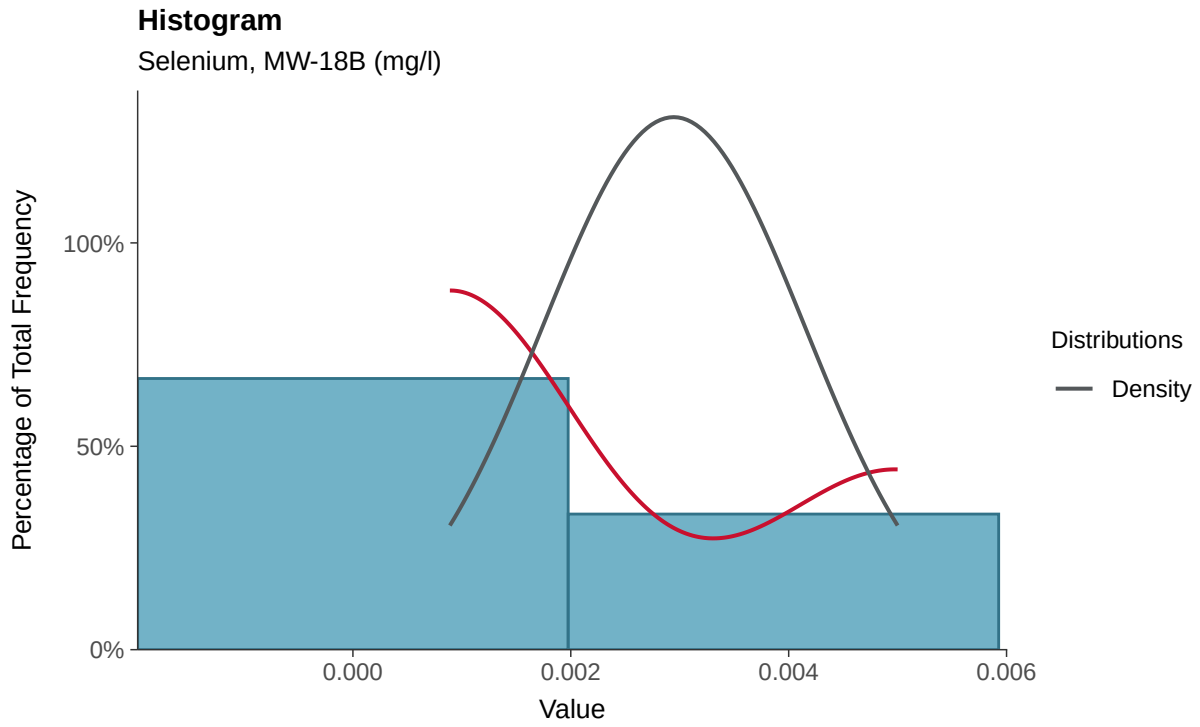
Radium-226+228, MW-18B (pci/l)



Appendix IV: Selenium, MW-18B

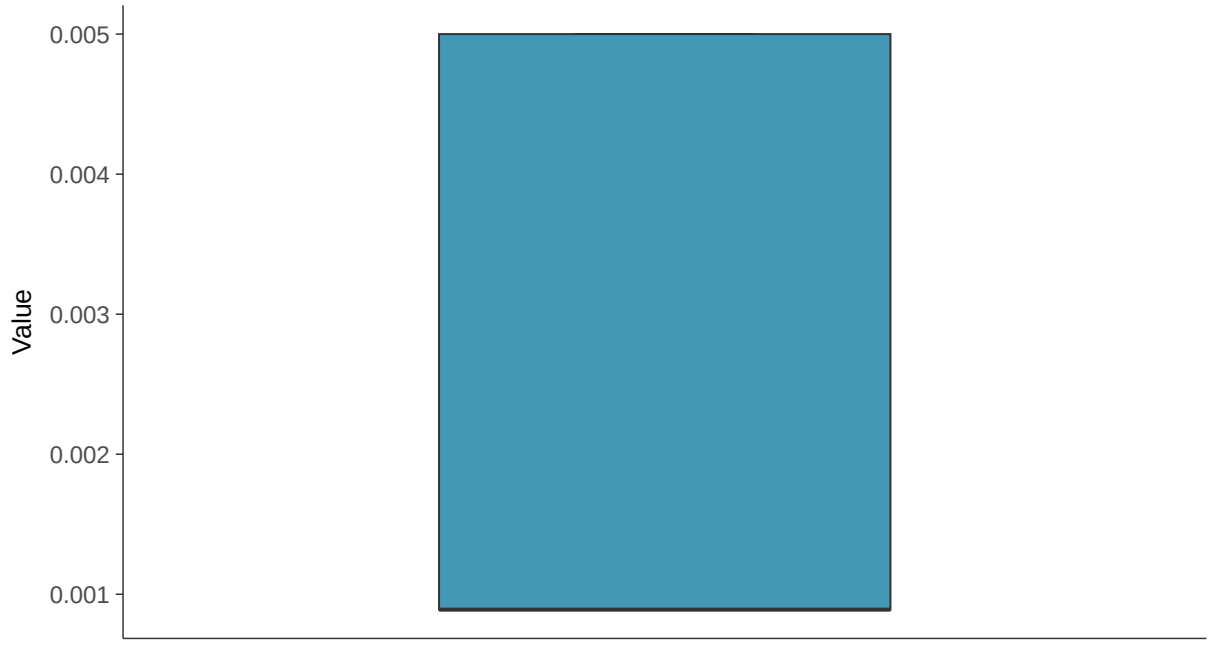
ID: 31_3_122





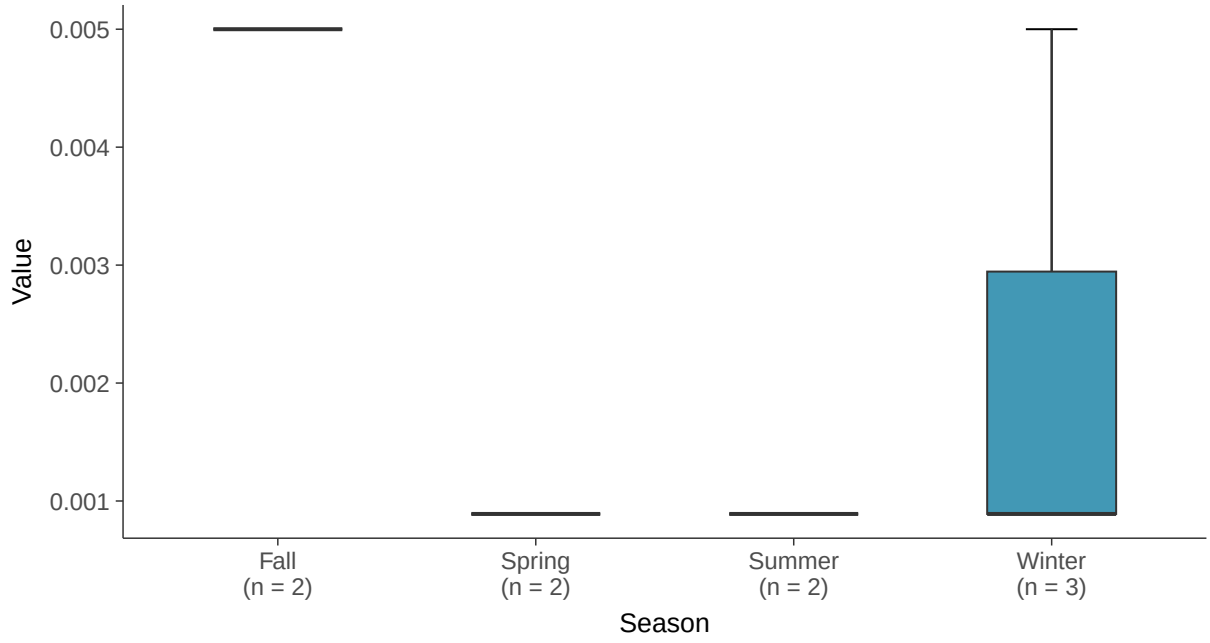
Boxplot

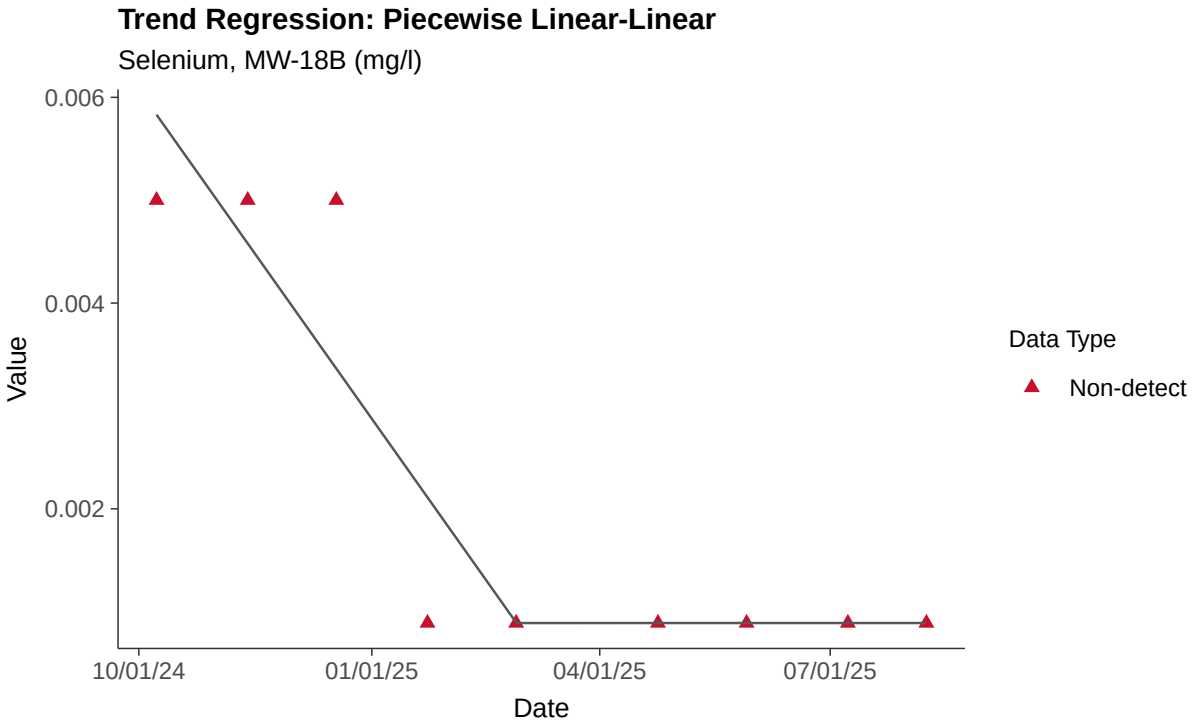
Selenium, MW-18B (mg/l)



Boxplot by Season

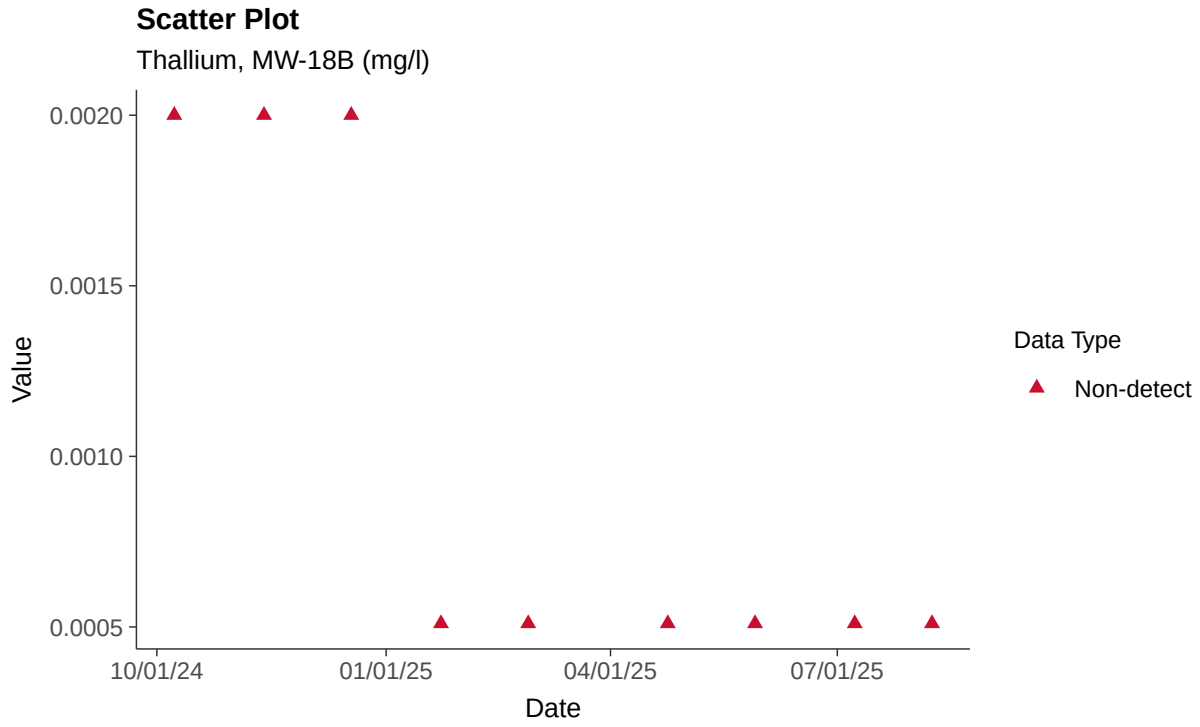
Selenium, MW-18B (mg/l)

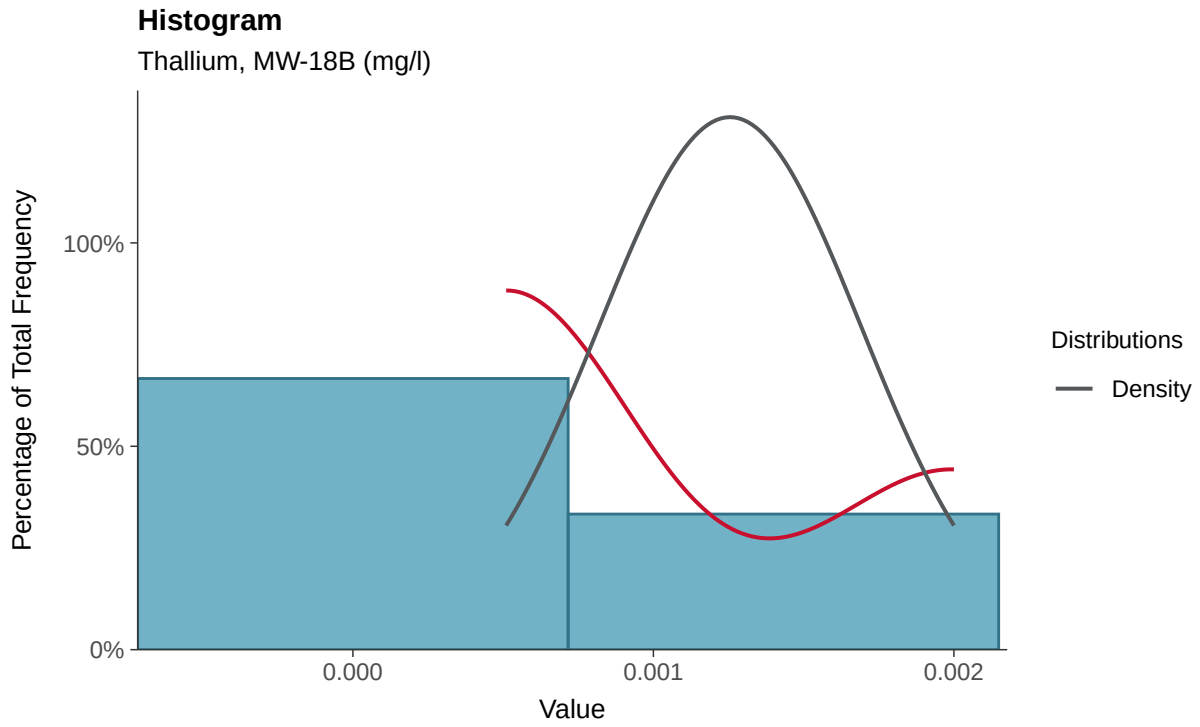



Trend Regression: Piecewise Linear-Linear
Selenium, MW-18B (mg/l)
0.006
0.004
0.002
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Thallium, MW-18B

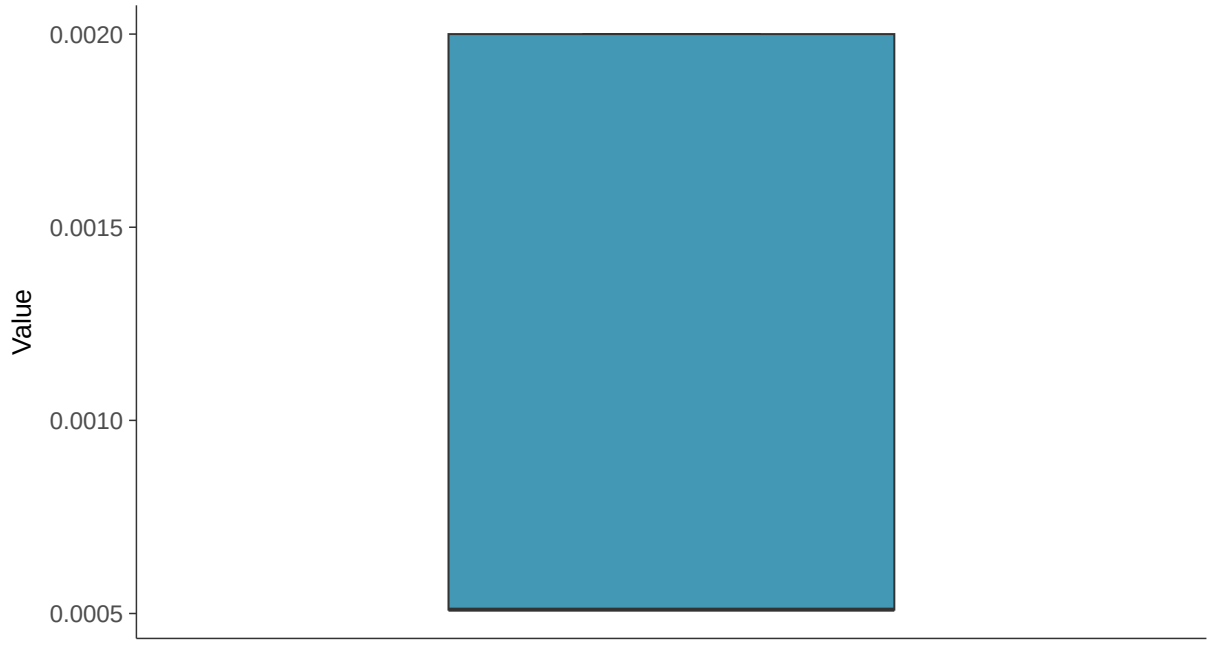
ID: 31_3_125





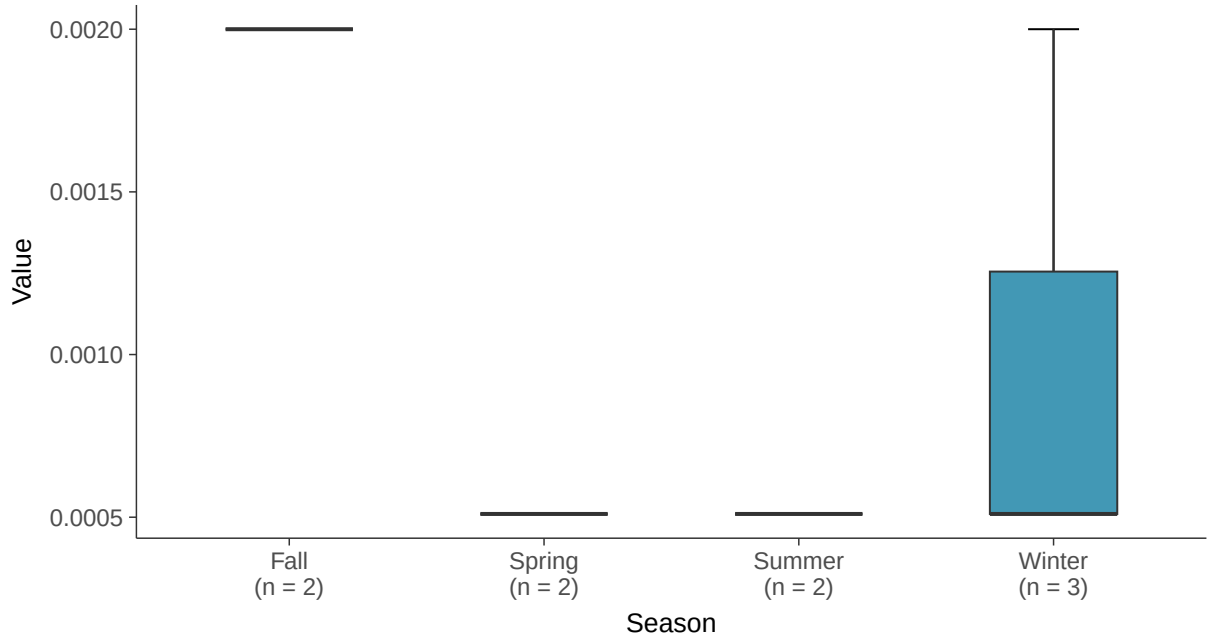
Boxplot

Thallium, MW-18B (mg/l)



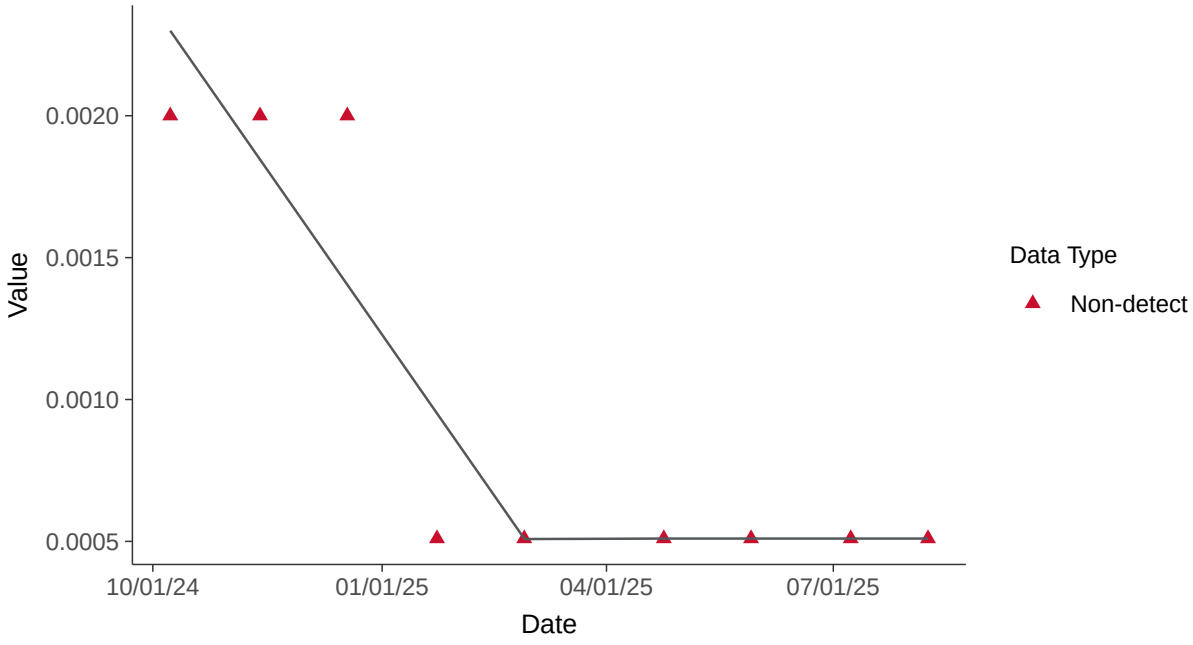
Boxplot by Season

Thallium, MW-18B (mg/l)



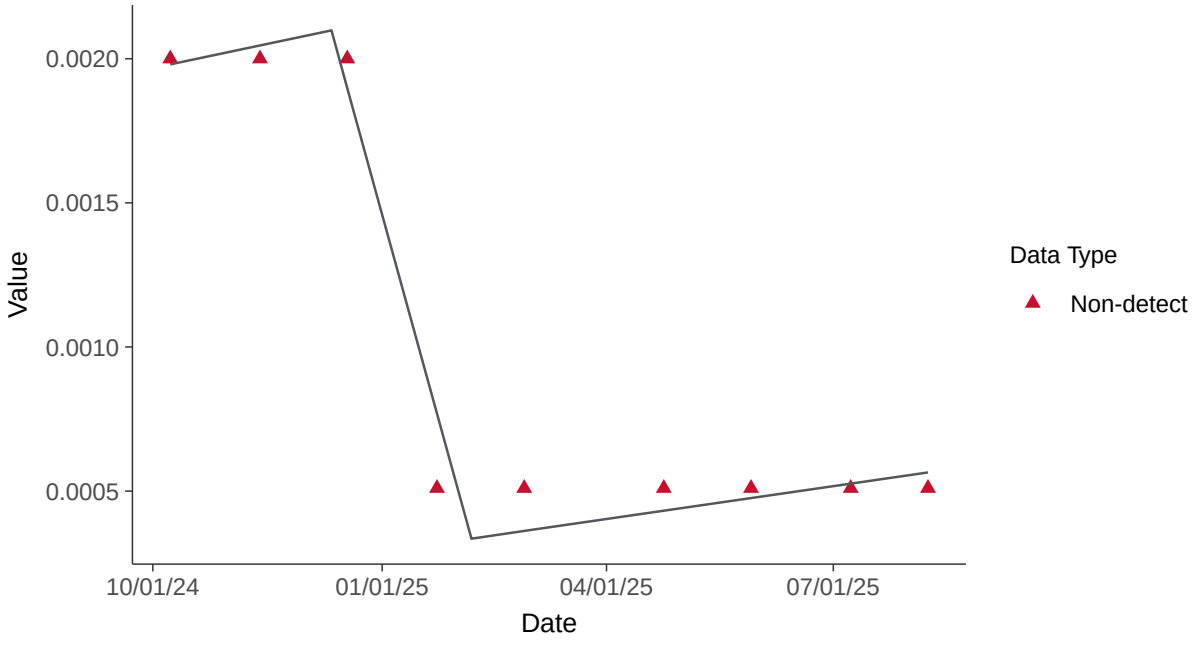
Trend Regression: Piecewise Linear-Linear

Thallium, MW-18B (mg/l)



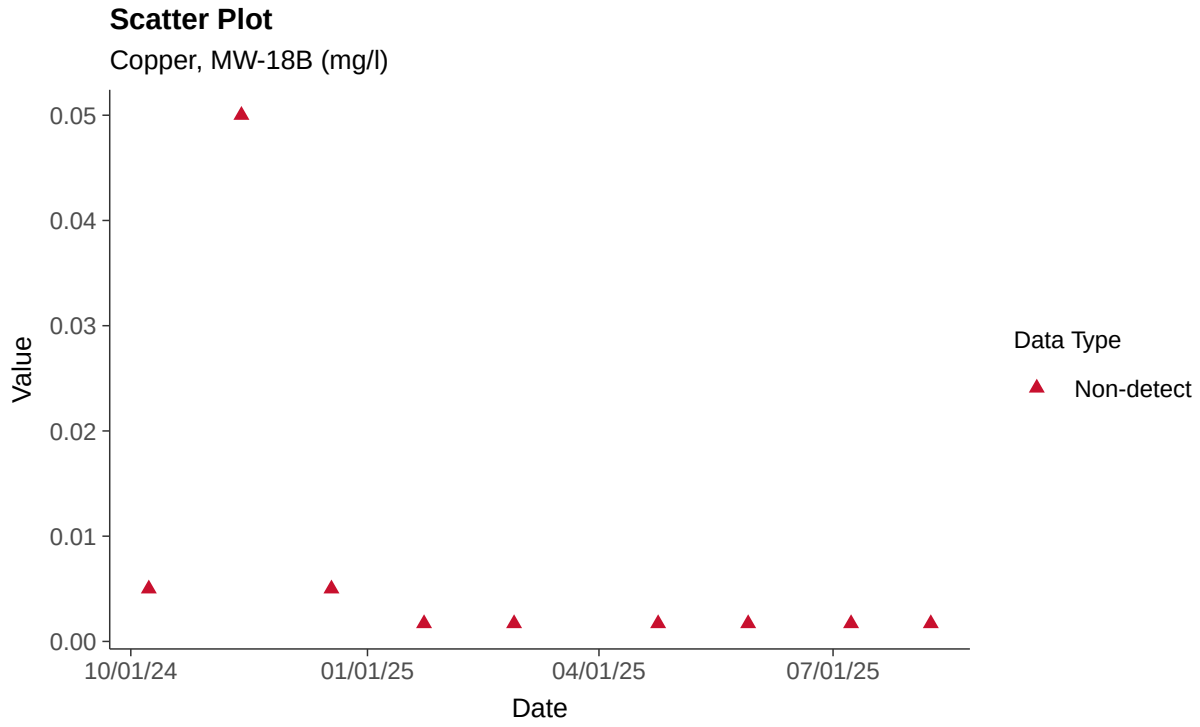
Trend Regression: Piecewise Linear-Linear-Linear

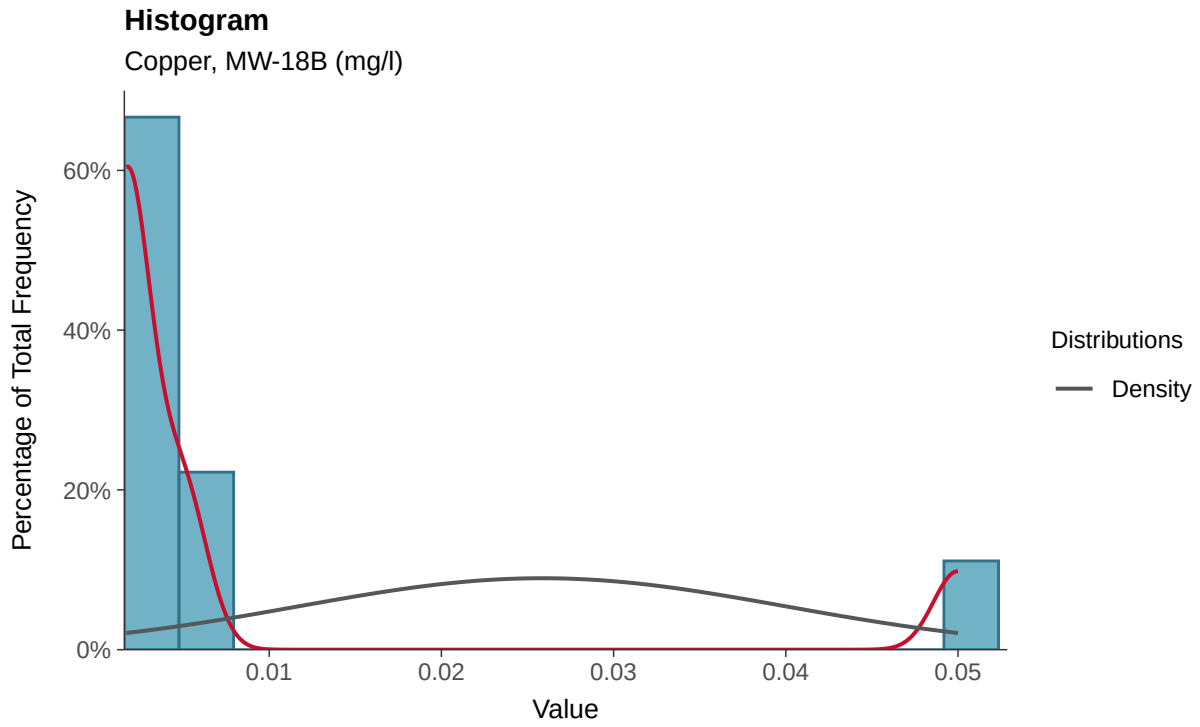
Thallium, MW-18B (mg/l)



Part 115: Copper, MW-18B

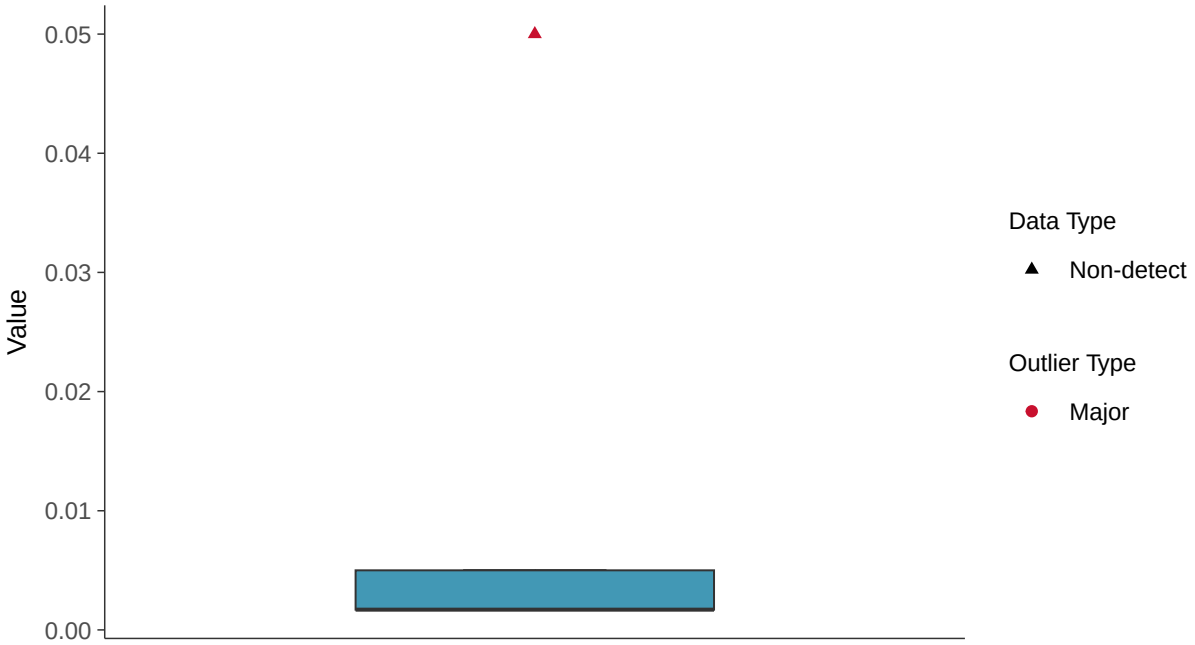
ID: 31_5_111





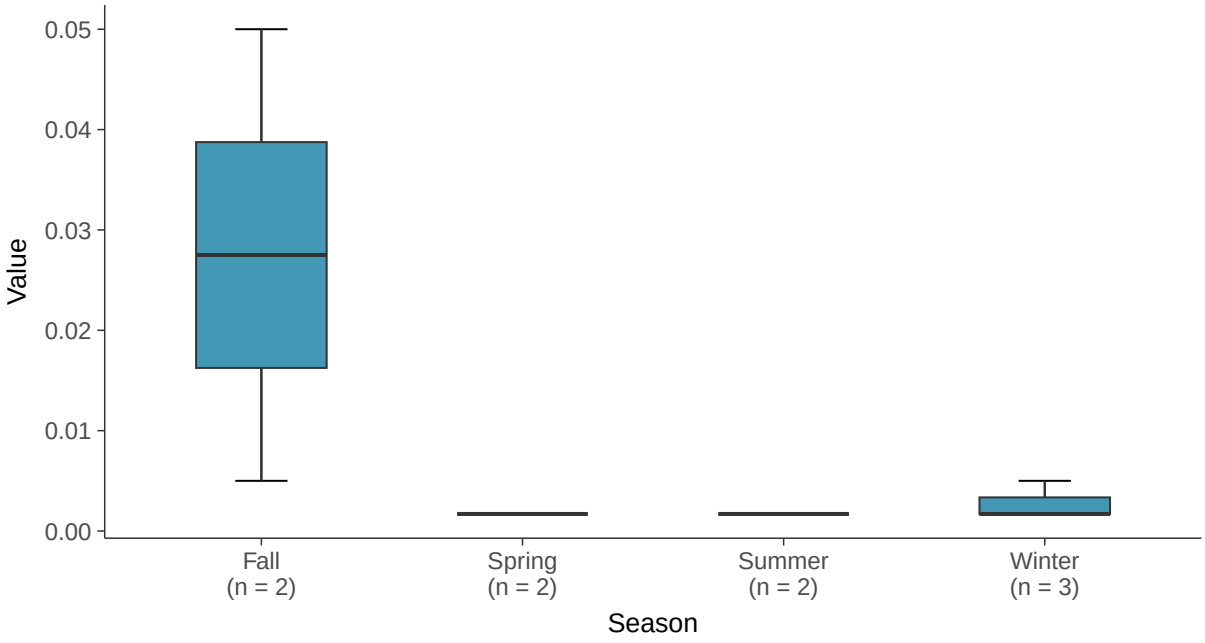
Boxplot

Copper, MW-18B (mg/l)



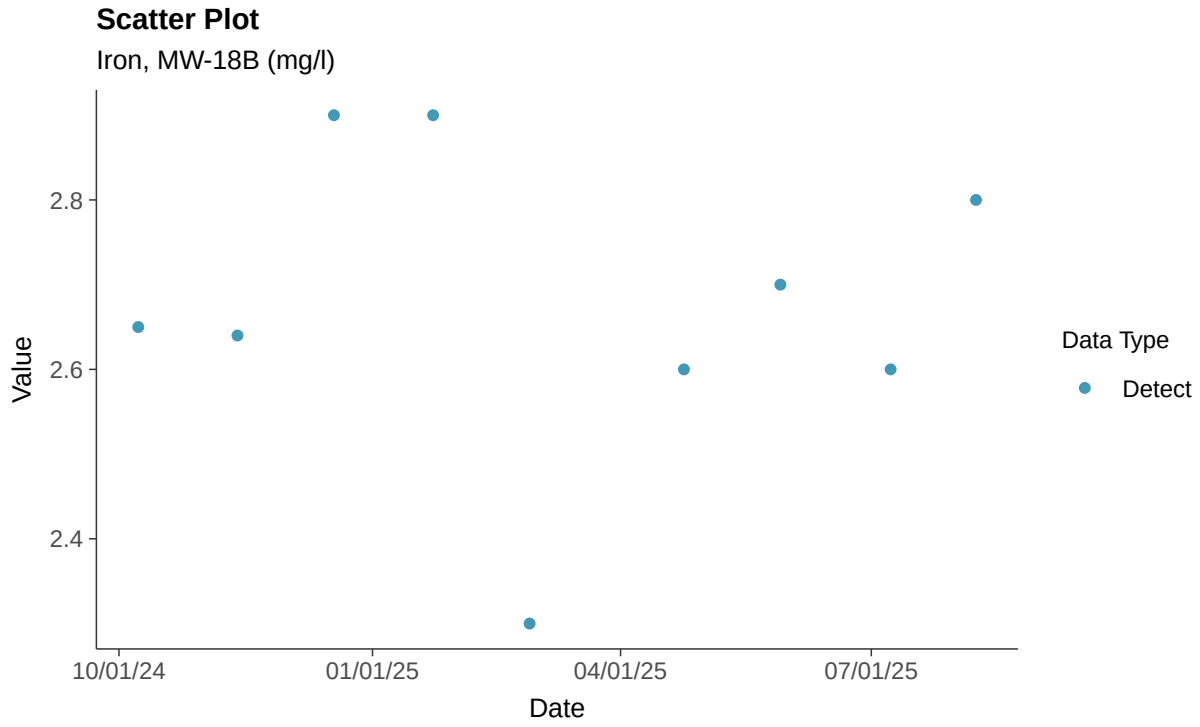
Boxplot by Season

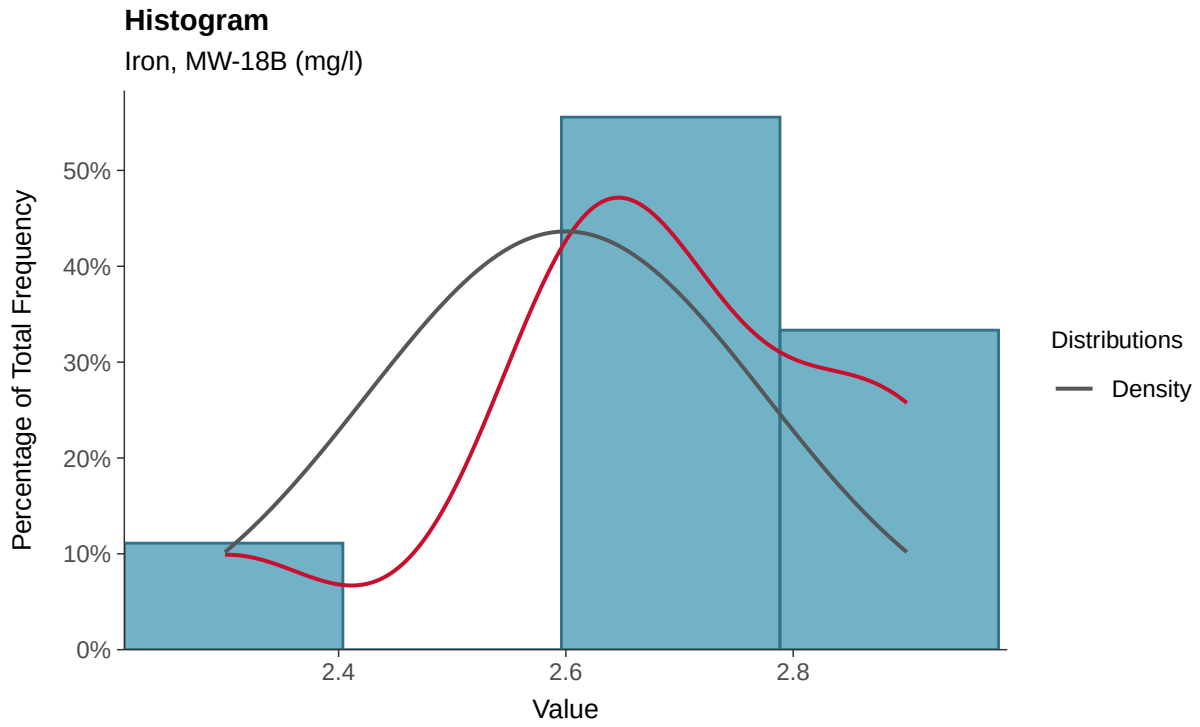
Copper, MW-18B (mg/l)



Part 115: Iron, MW-18B

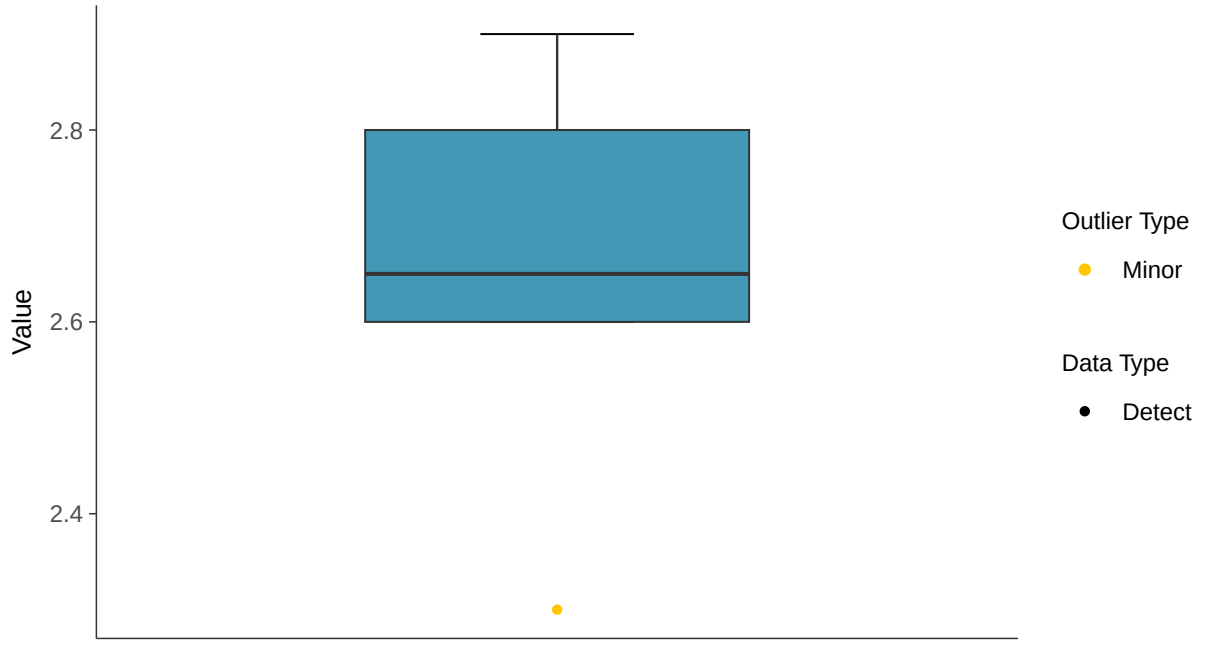
ID: 31_5_114





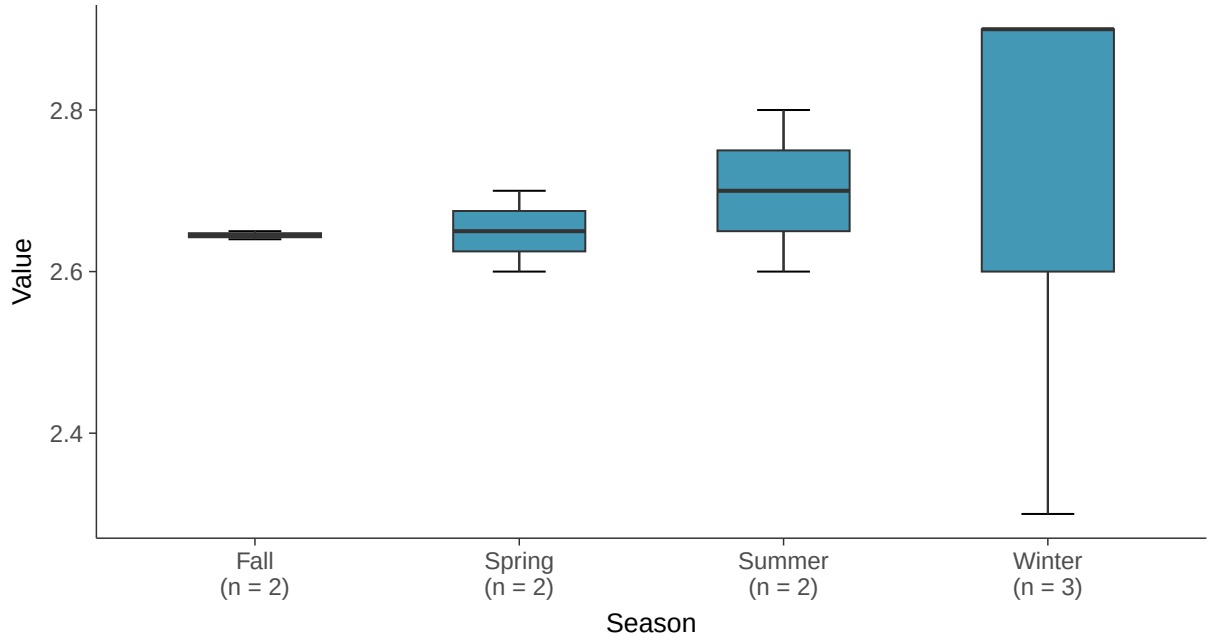
Boxplot

Iron, MW-18B (mg/l)



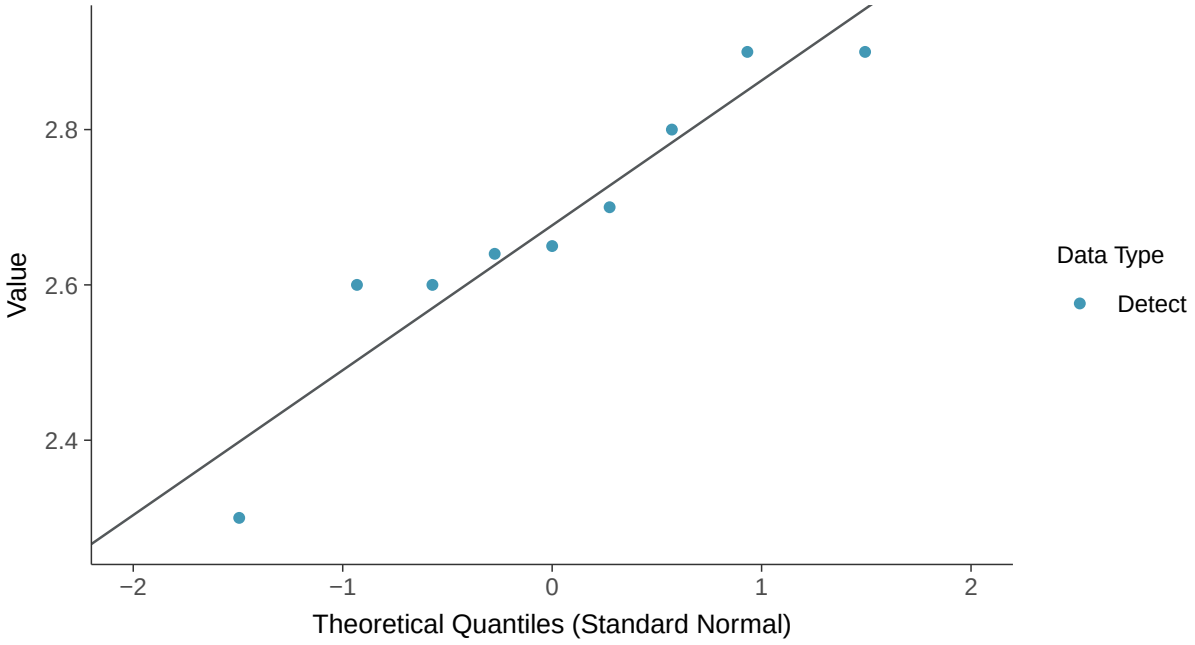
Boxplot by Season

Iron, MW-18B (mg/l)



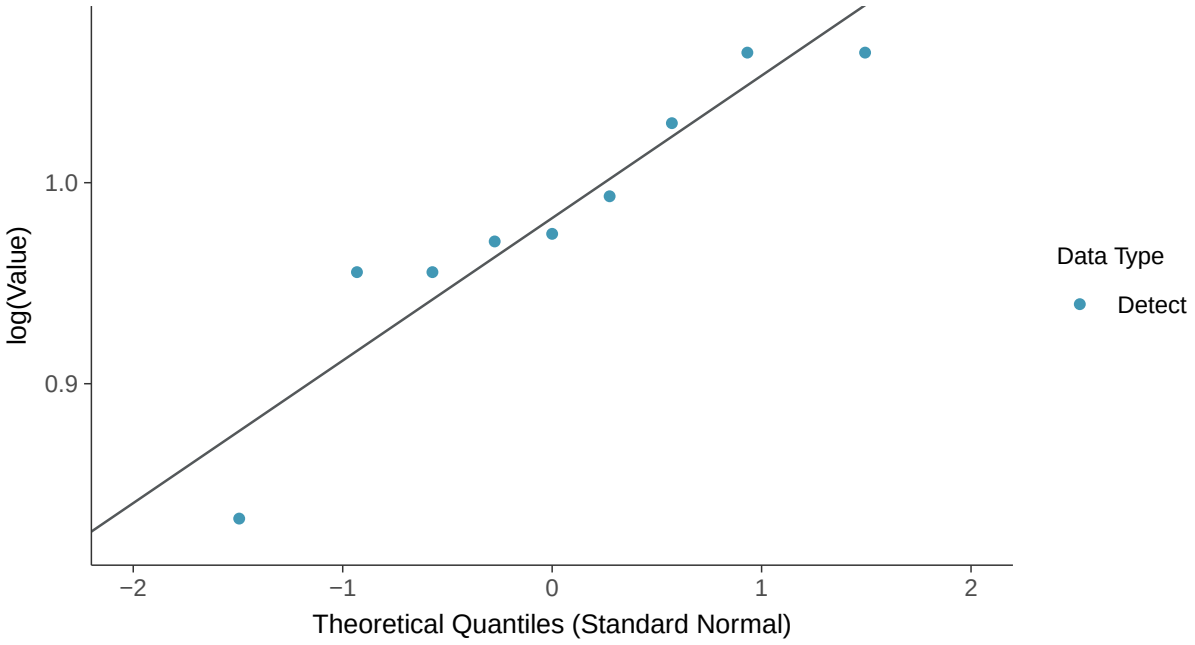
Normal Q-Q plot

Iron, MW-18B (mg/l)



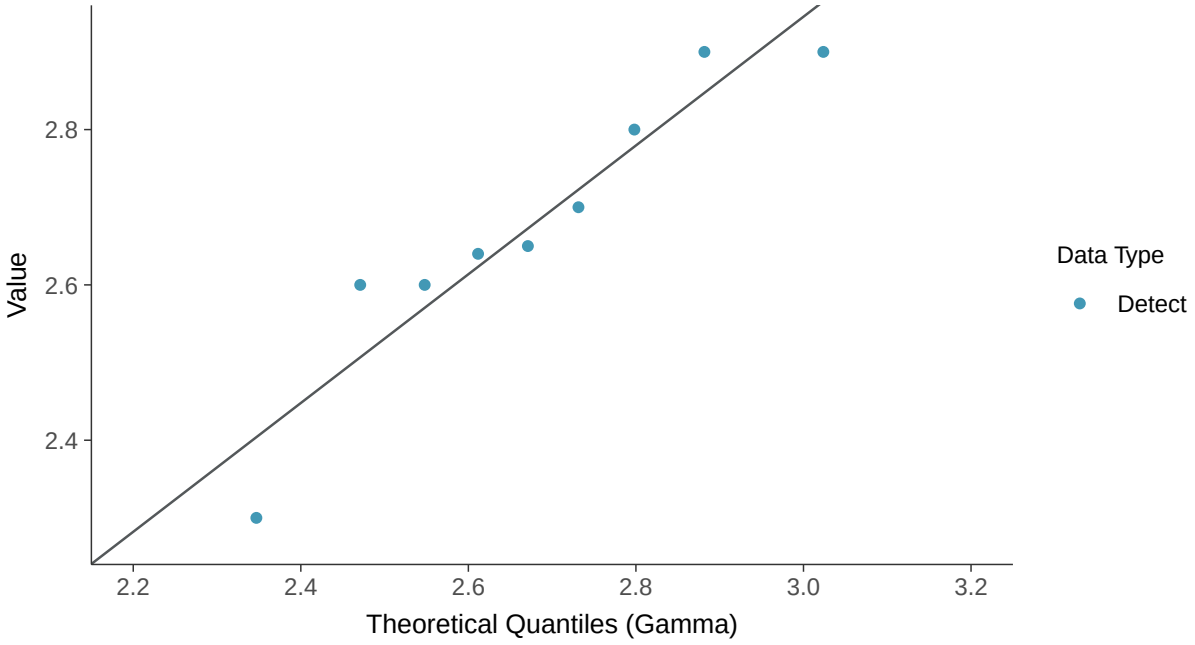
Lognormal Q-Q plot

Iron, MW-18B (mg/l)



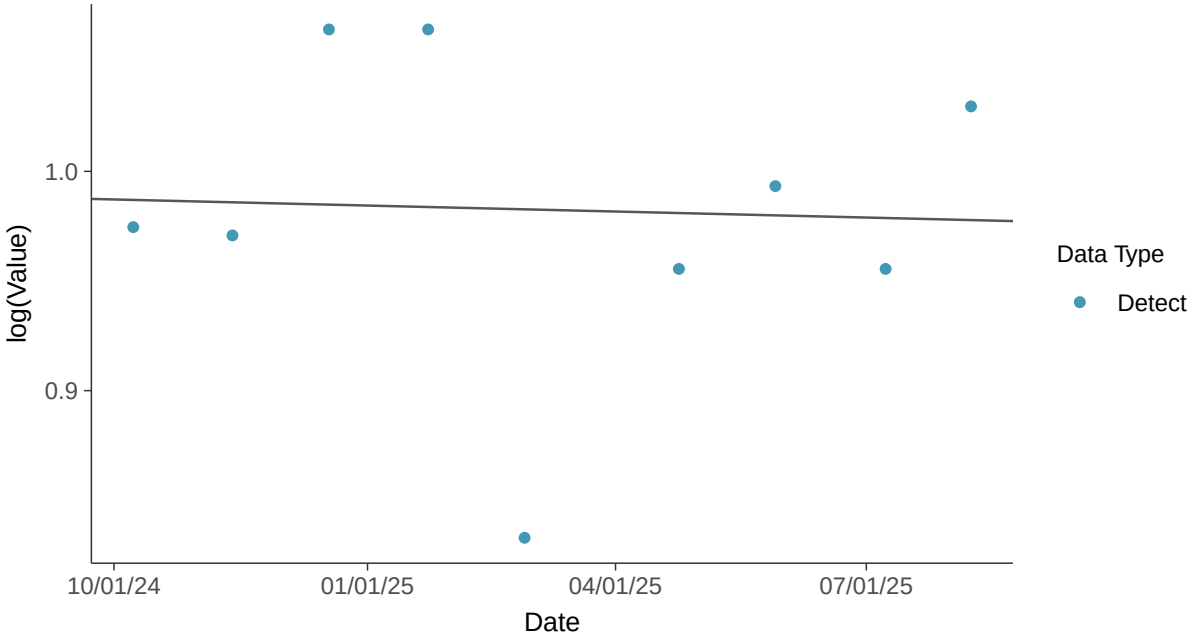
Gamma Q-Q plot

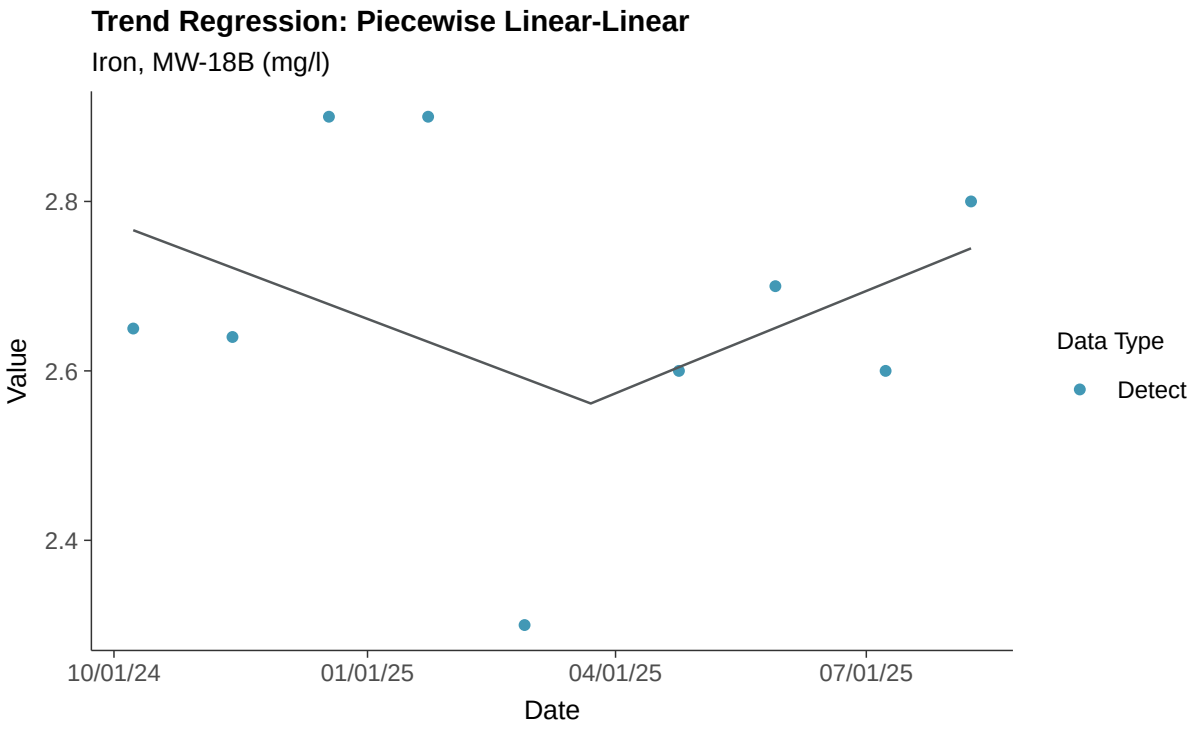
Iron, MW-18B (mg/l)



Trend Regression: Lognormal MLE

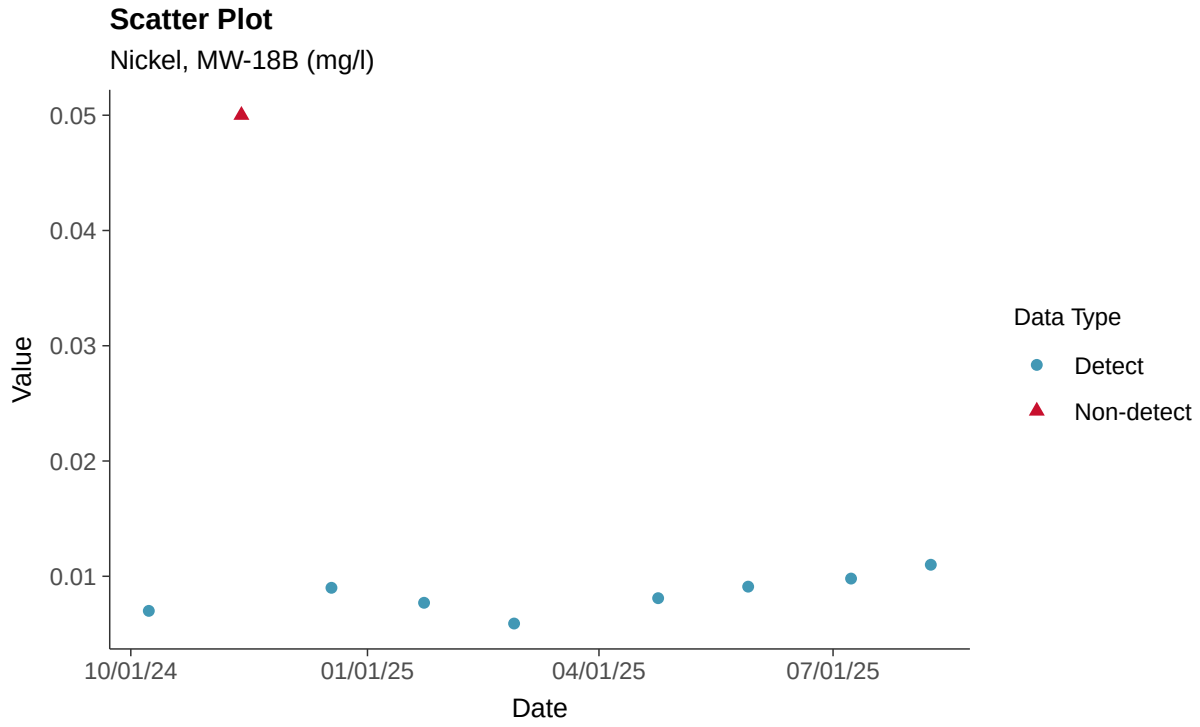
Iron, MW-18B (mg/l)

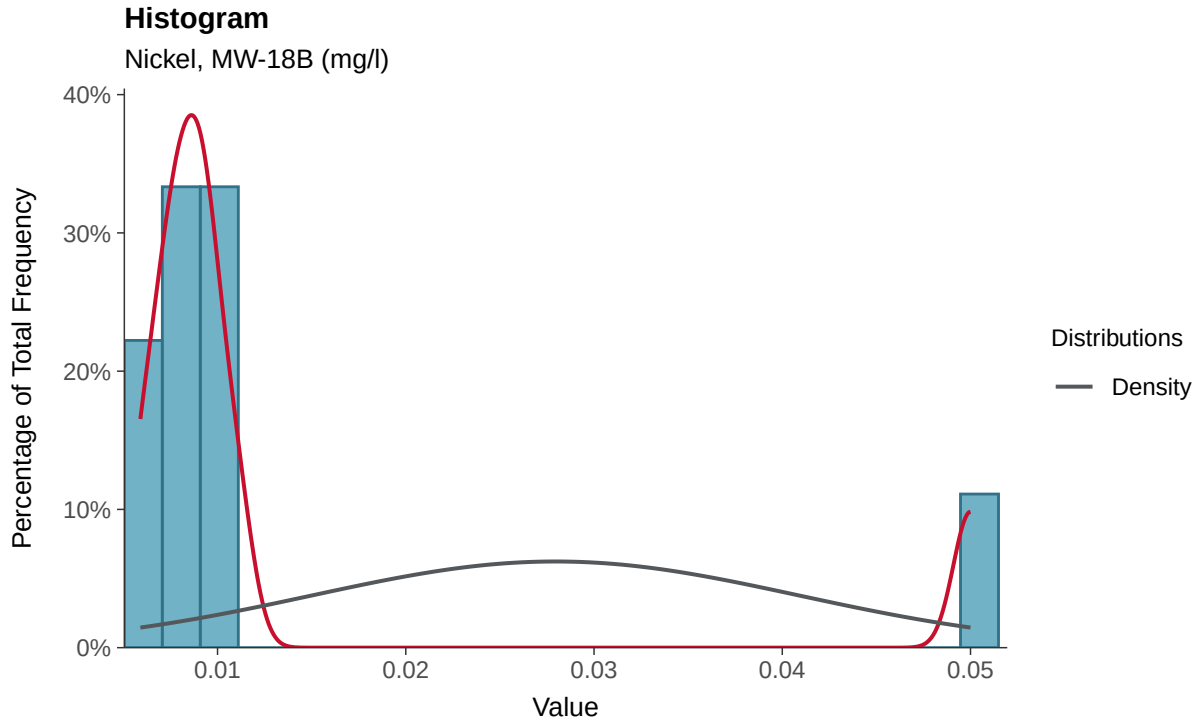



Trend Regression: Piecewise Linear-Linear
Iron, MW-18B (mg/l)
Value
2.8
2.6
2.4
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Part 115: Nickel, MW-18B

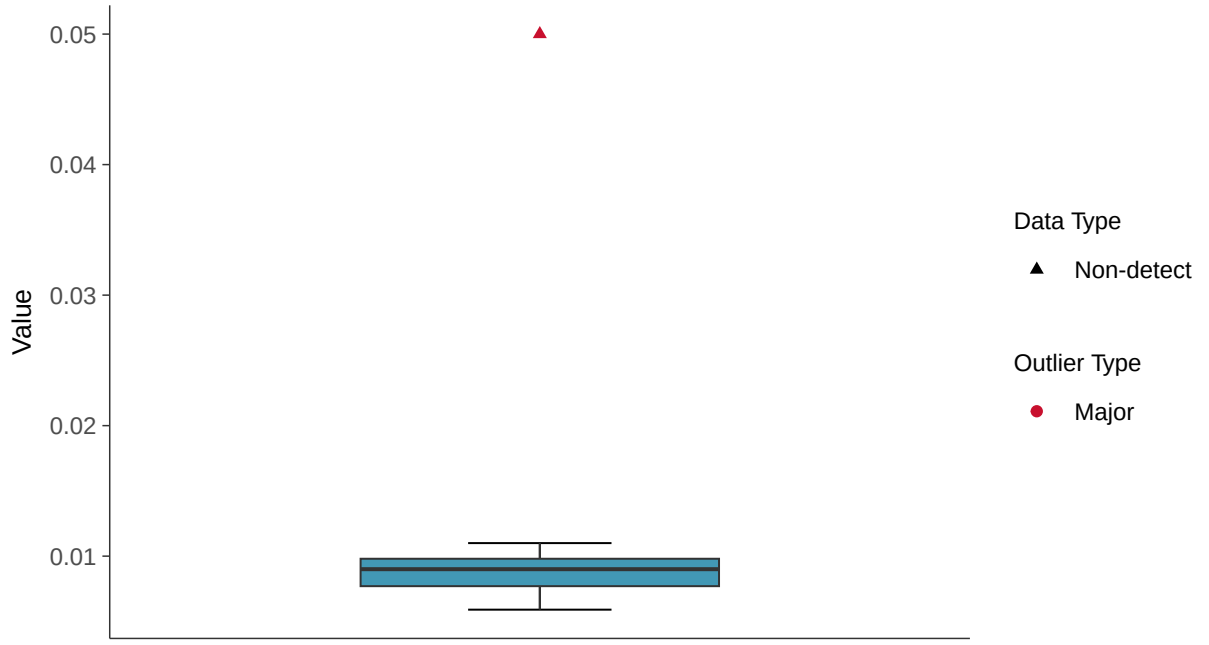
ID: 31_5_119





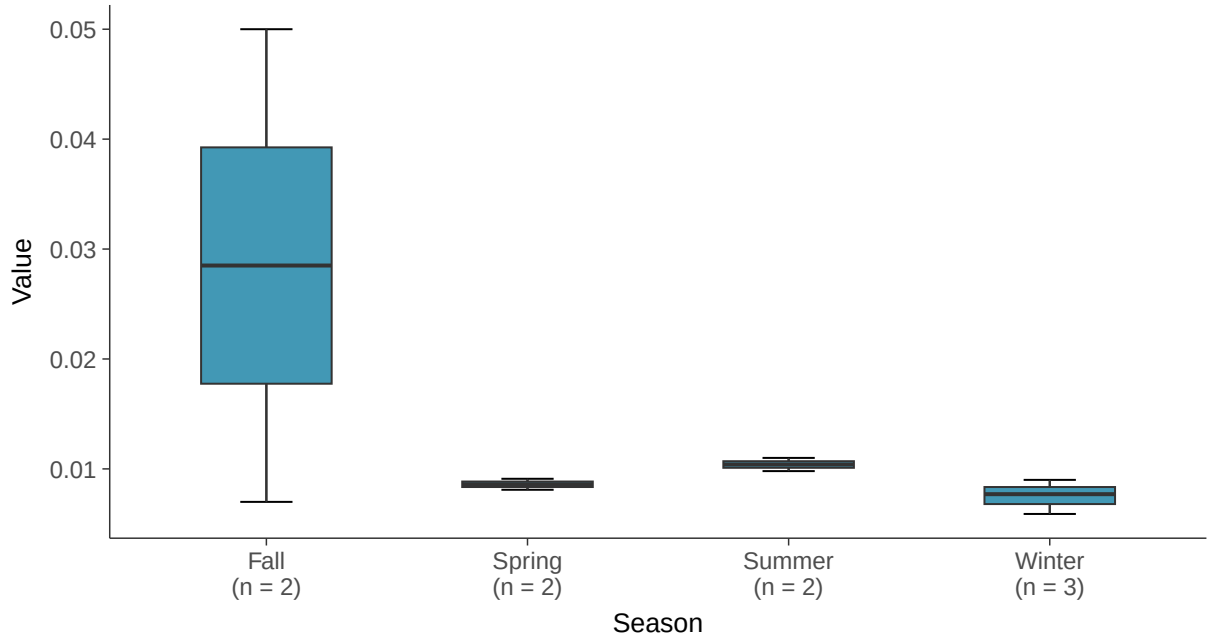
Boxplot

Nickel, MW-18B (mg/l)



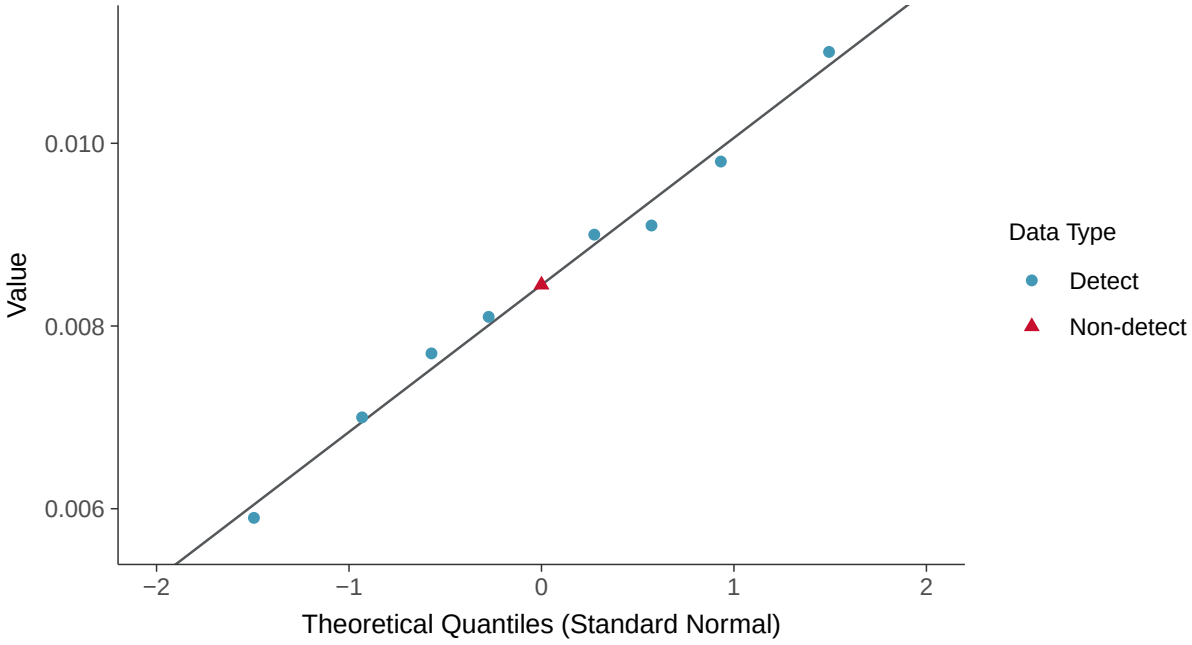
Boxplot by Season

Nickel, MW-18B (mg/l)



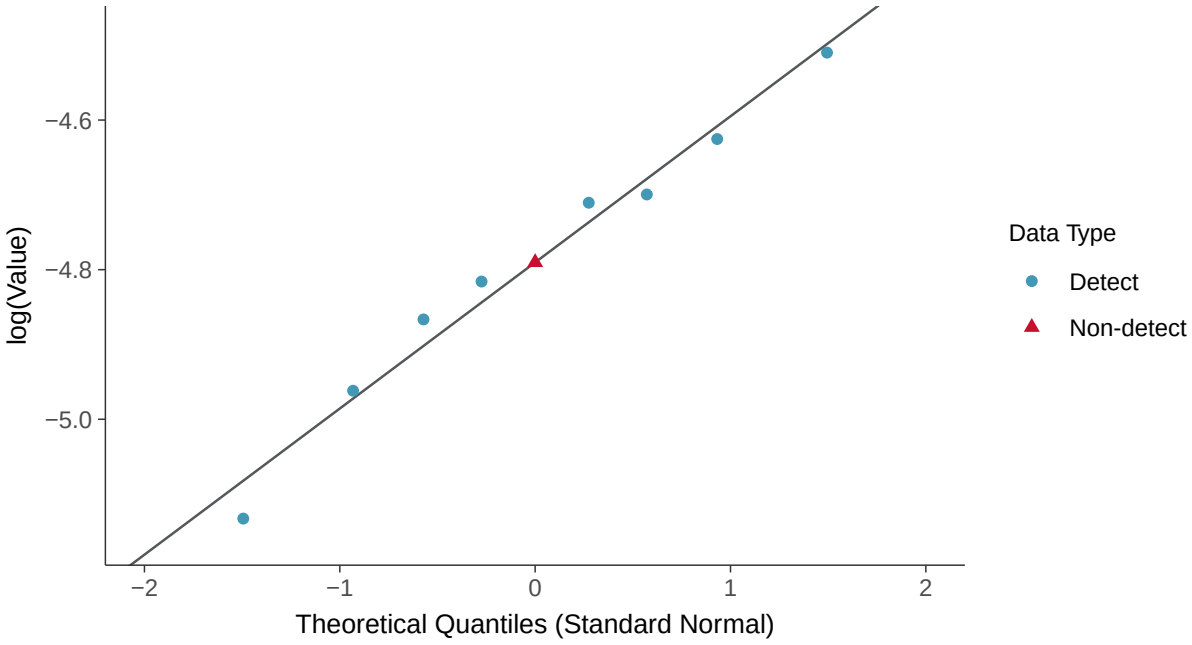
Normal Q-Q plot using ROS Imputed Estimates

Nickel, MW-18B (mg/l)



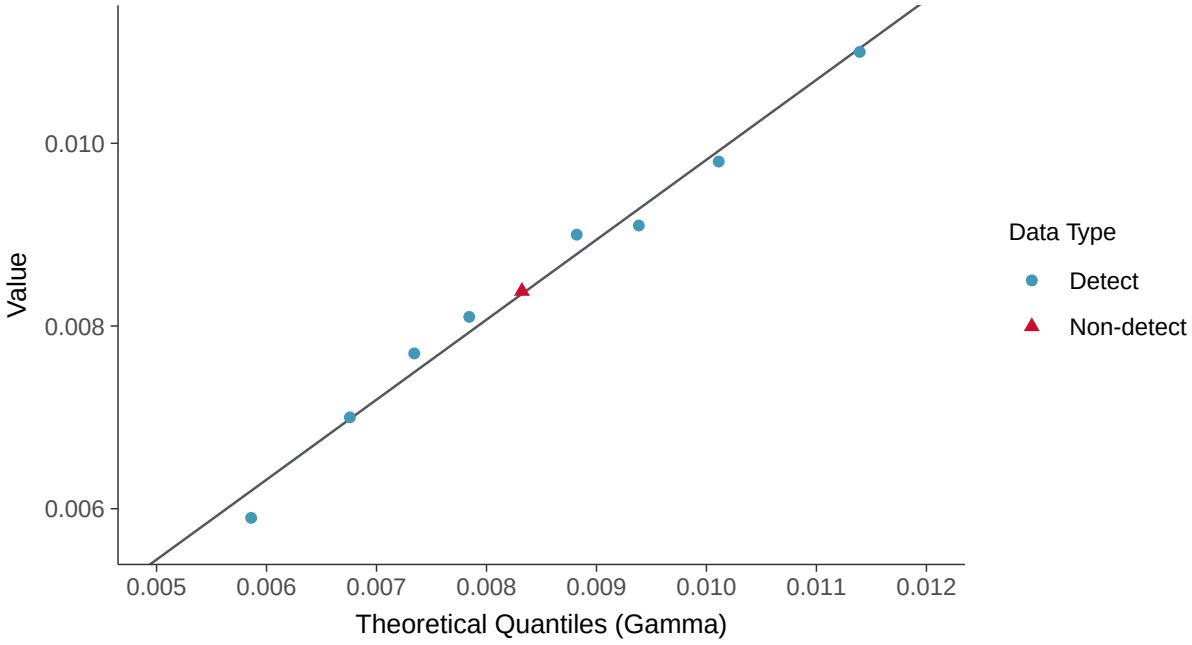
Lognormal Q-Q plot using ROS Imputed Estimates

Nickel, MW-18B (mg/l)



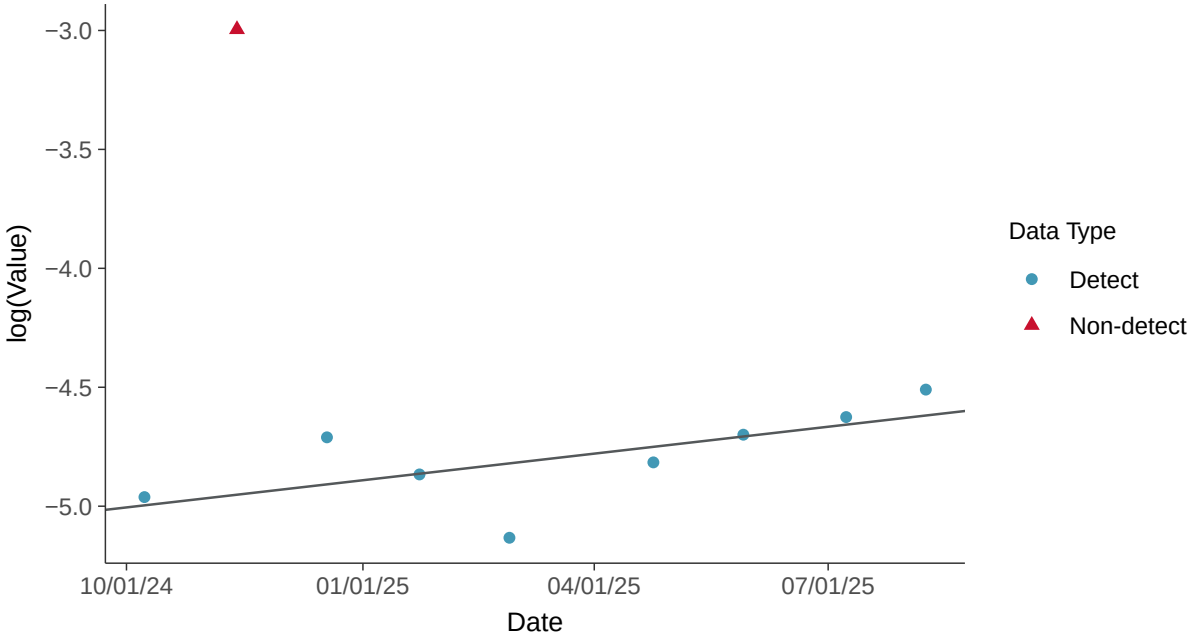
Gamma Q-Q plot using ROS Imputed Estimates

Nickel, MW-18B (mg/l)



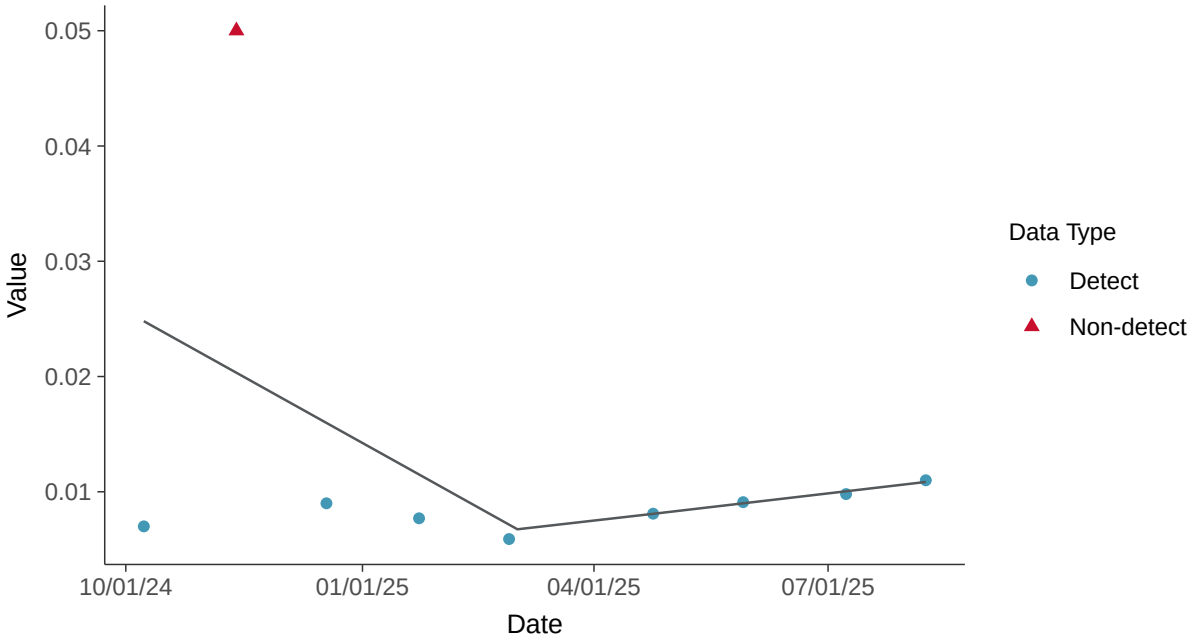
Trend Regression: Lognormal MLE

Nickel, MW-18B (mg/l)



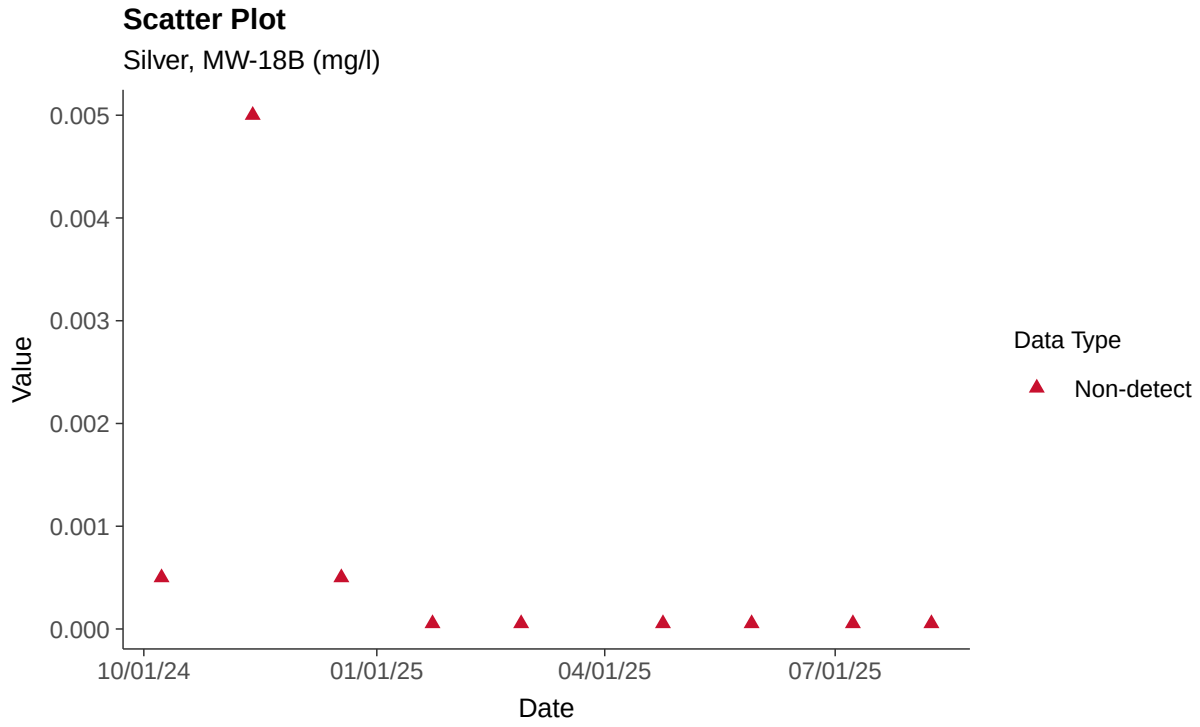
Trend Regression: Piecewise Linear-Linear

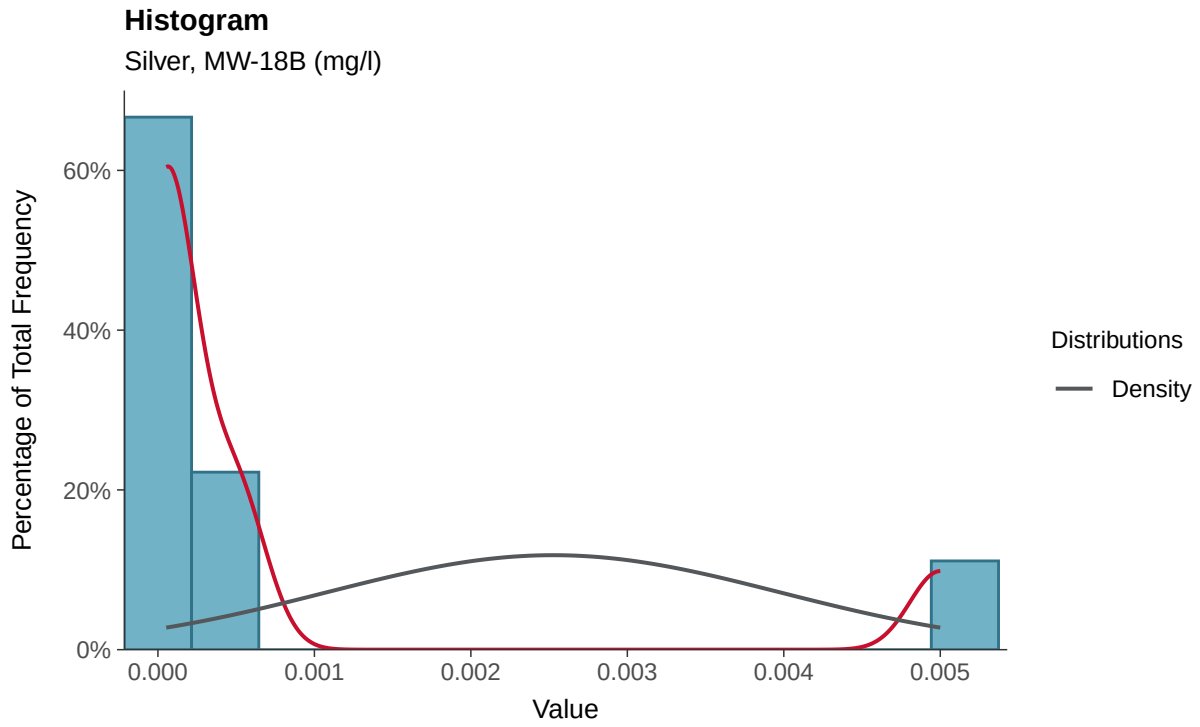
Nickel, MW-18B (mg/l)



Part 115: Silver, MW-18B

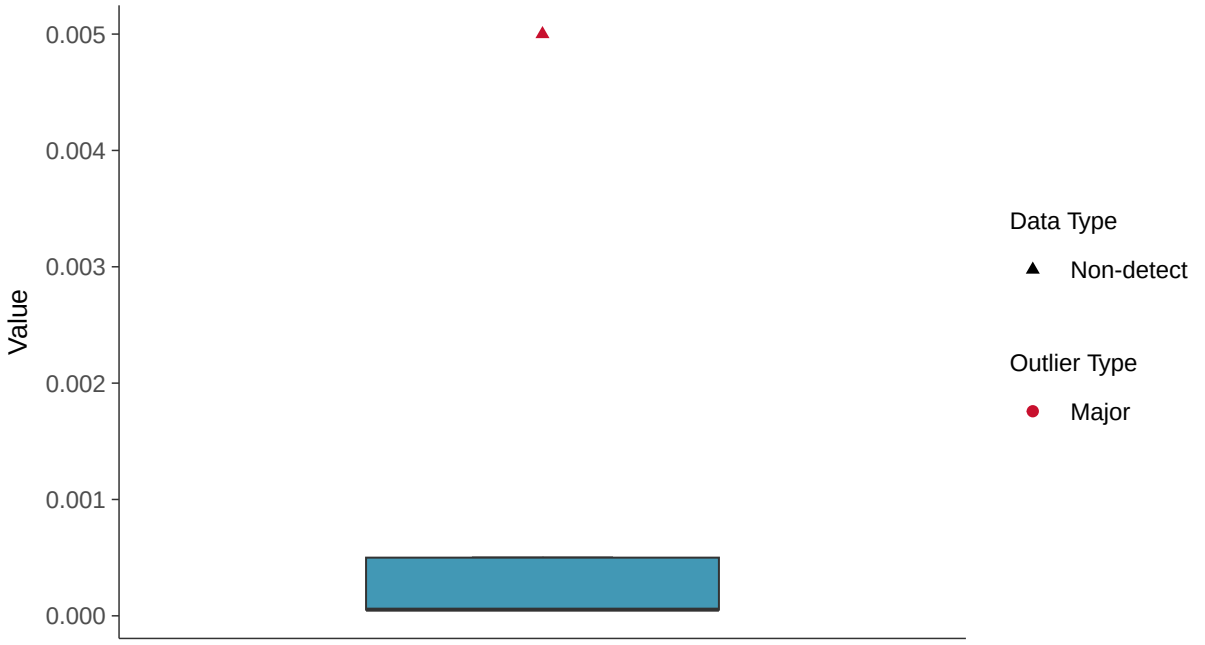
ID: 31_5_123





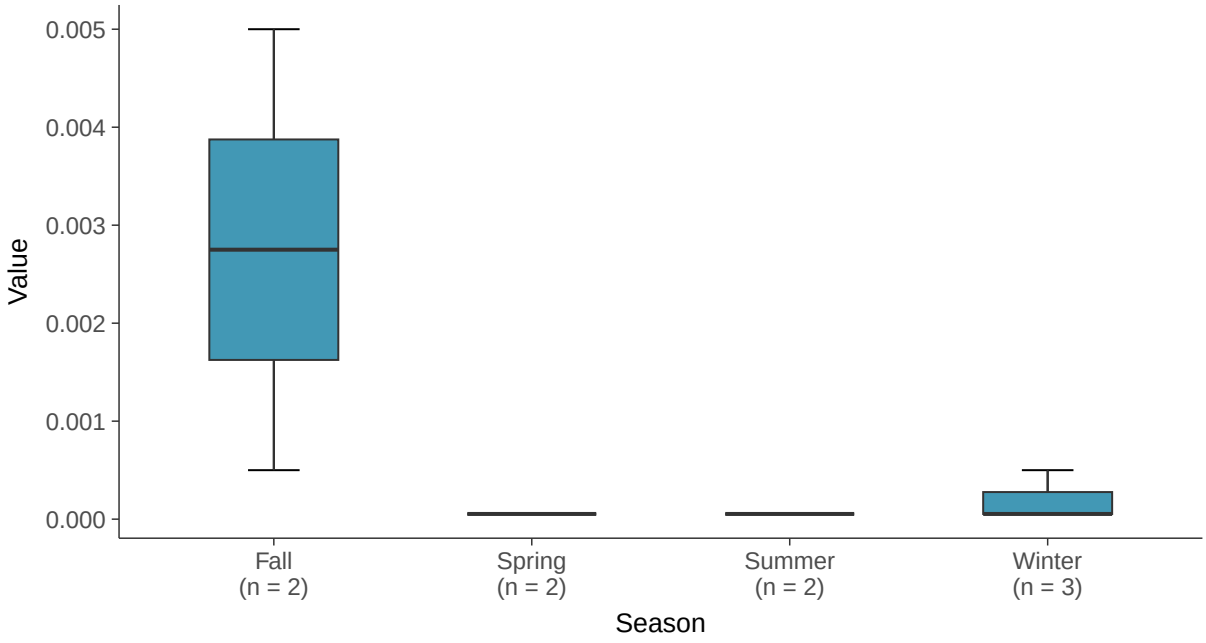
Boxplot

Silver, MW-18B (mg/l)



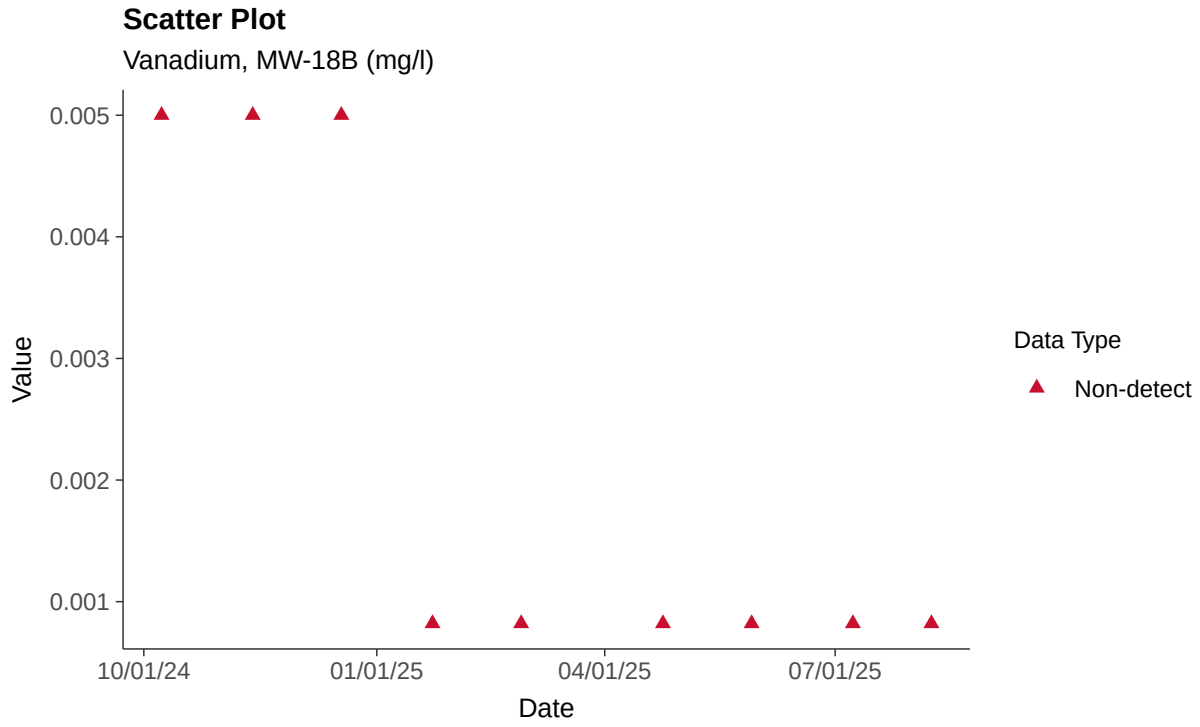
Boxplot by Season

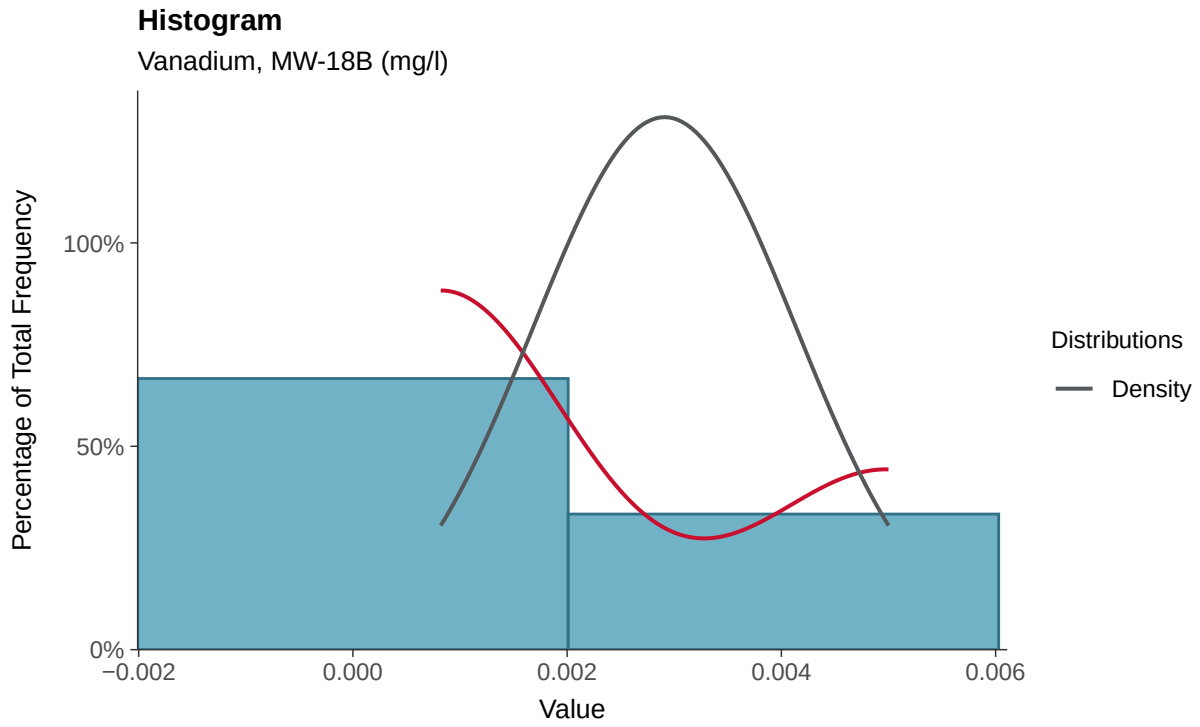
Silver, MW-18B (mg/l)



Part 115: Vanadium, MW-18B

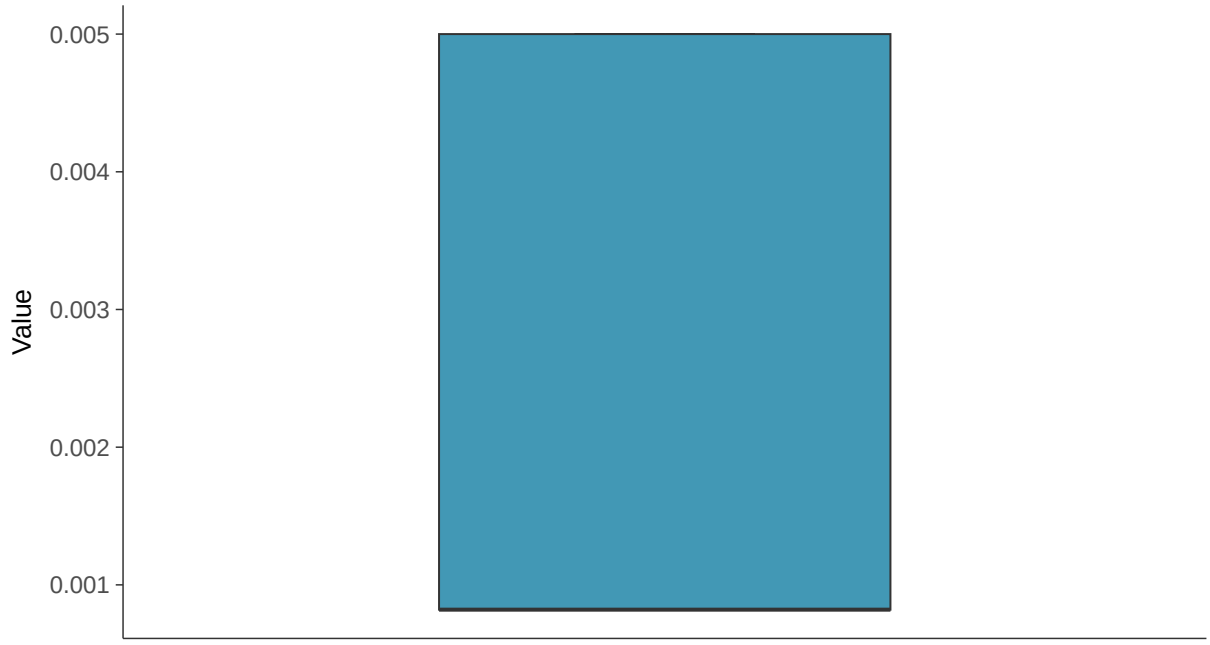
ID: 31_5_128





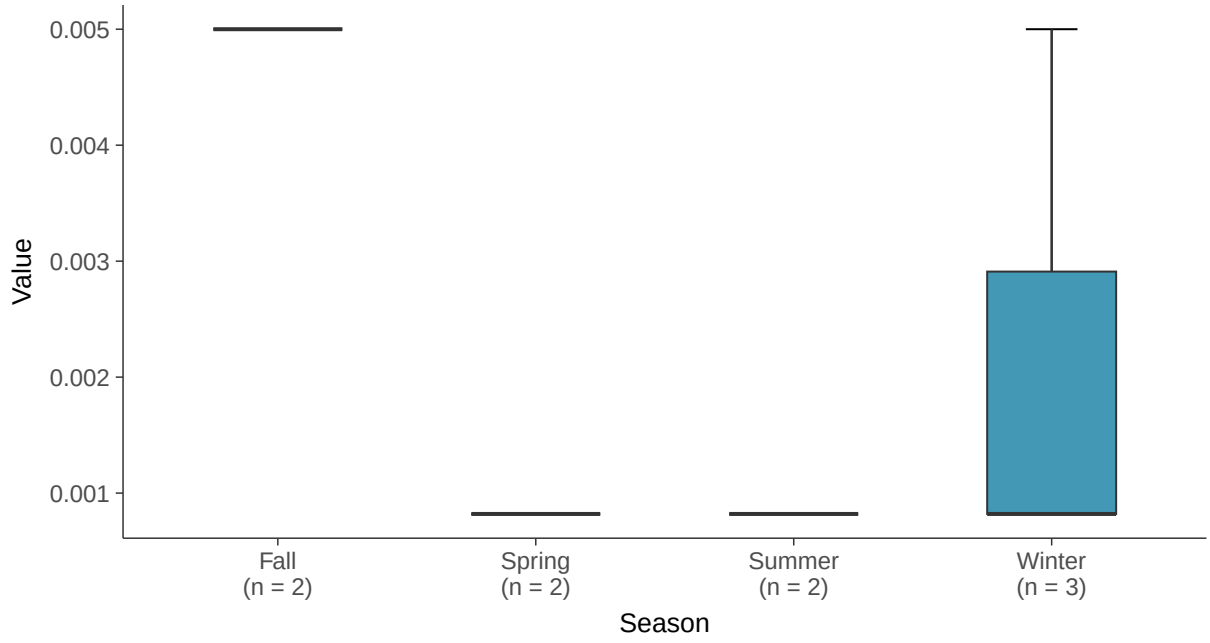
Boxplot

Vanadium, MW-18B (mg/l)



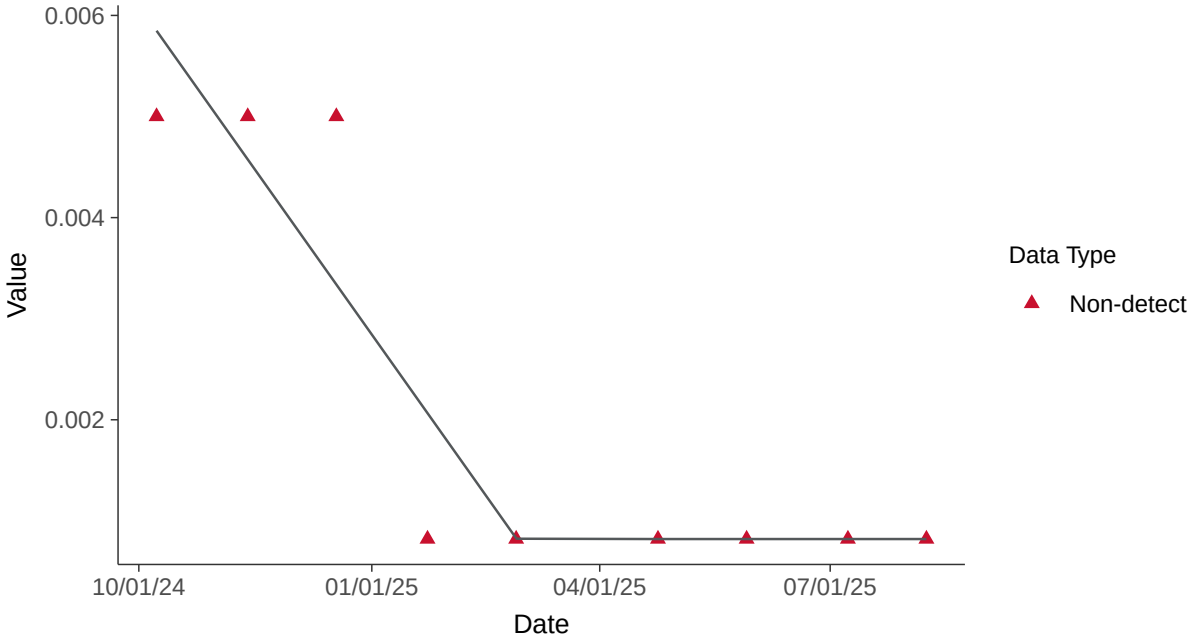
Boxplot by Season

Vanadium, MW-18B (mg/l)



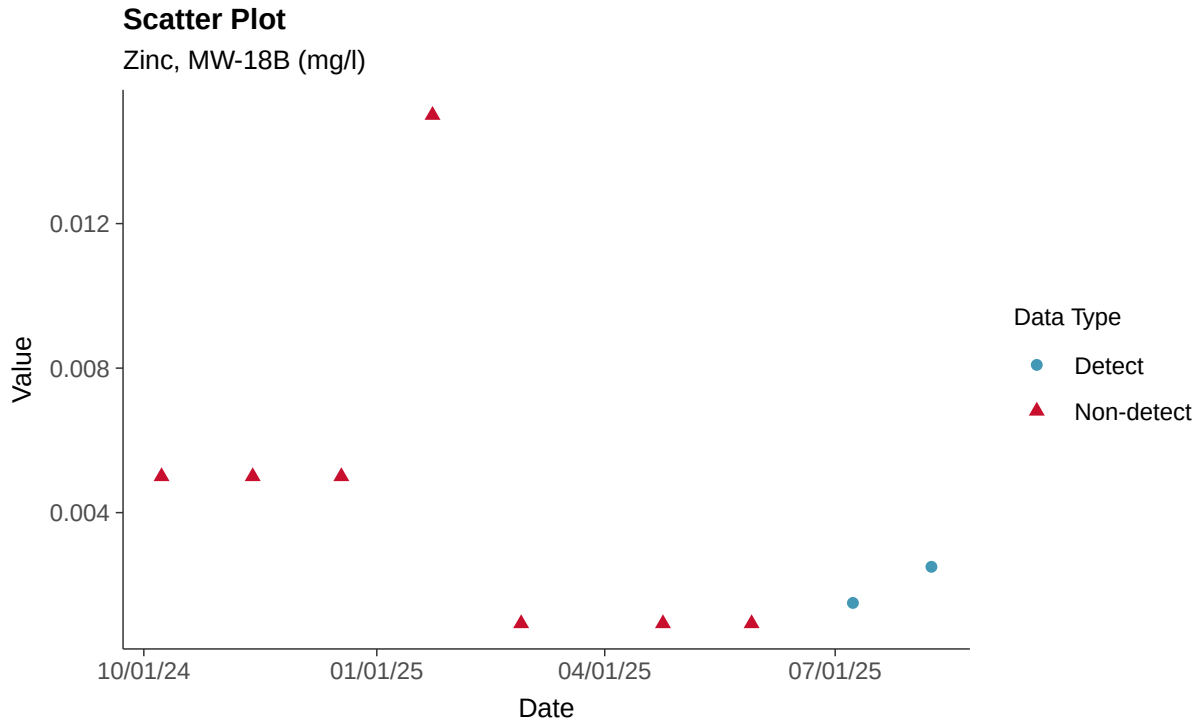
Trend Regression: Piecewise Linear-Linear

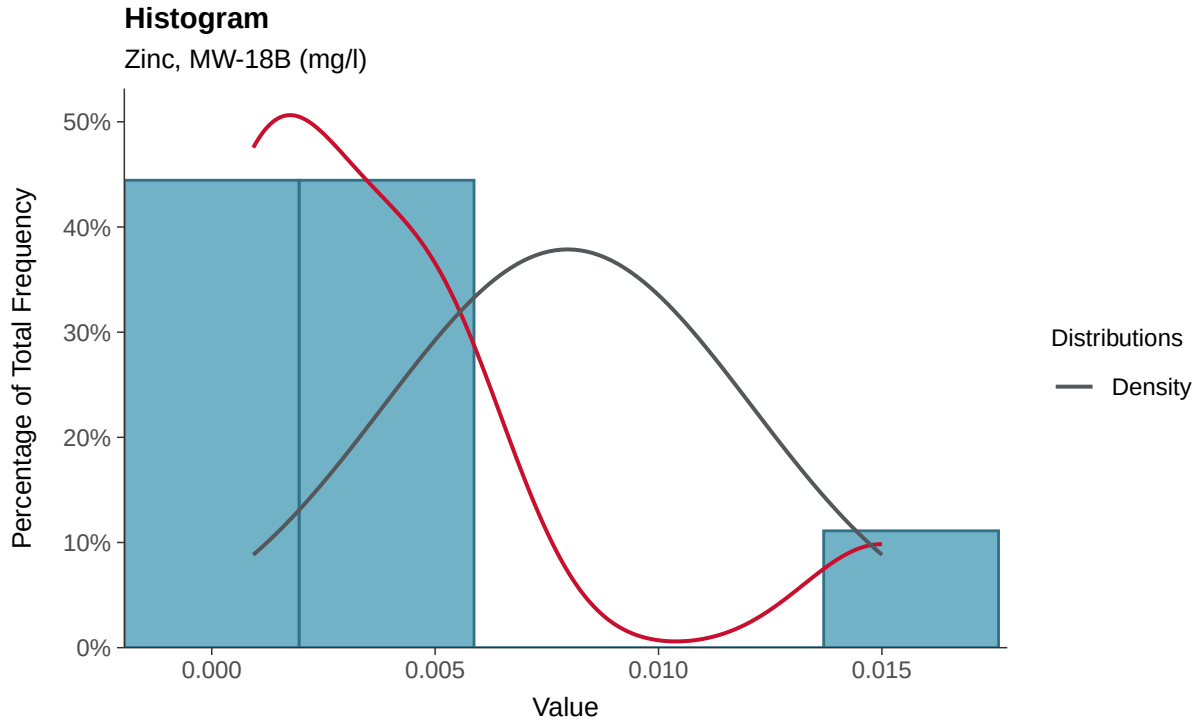
Vanadium, MW-18B (mg/l)



Part 115: Zinc, MW-18B

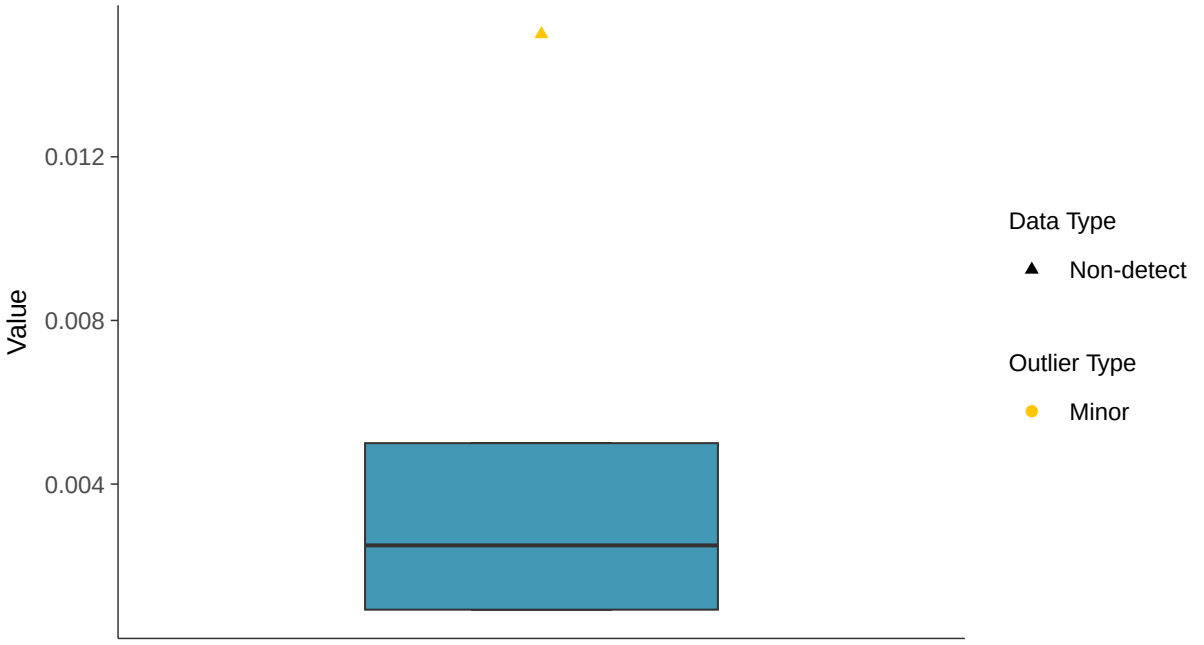
ID: 31_5_129





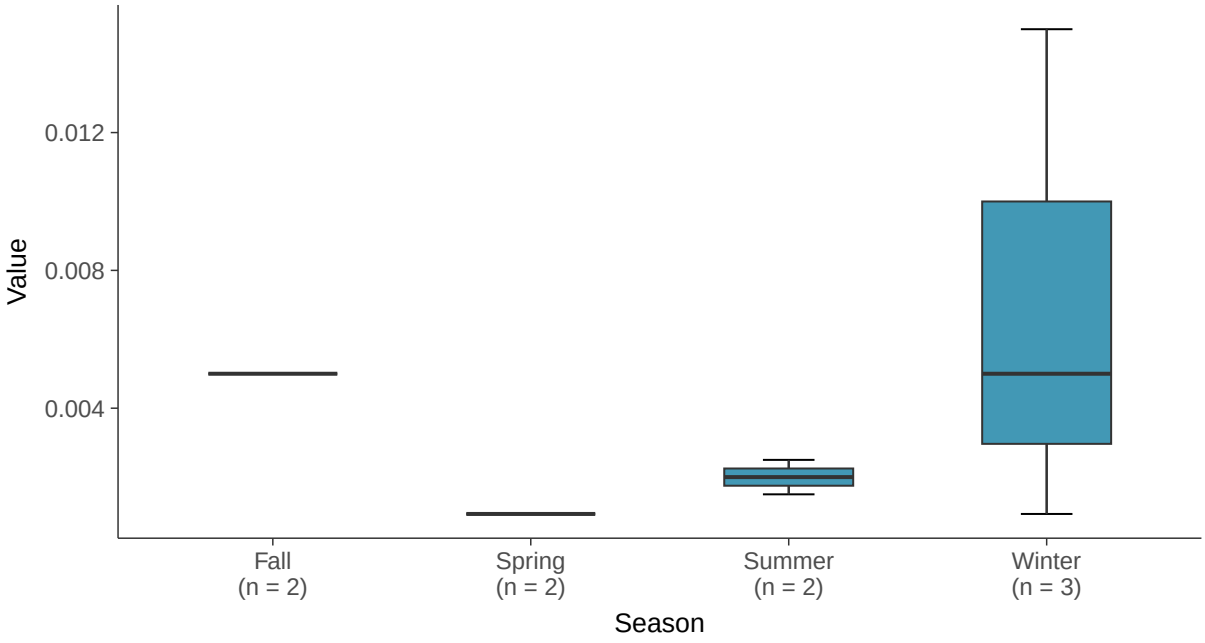
Boxplot

Zinc, MW-18B (mg/l)



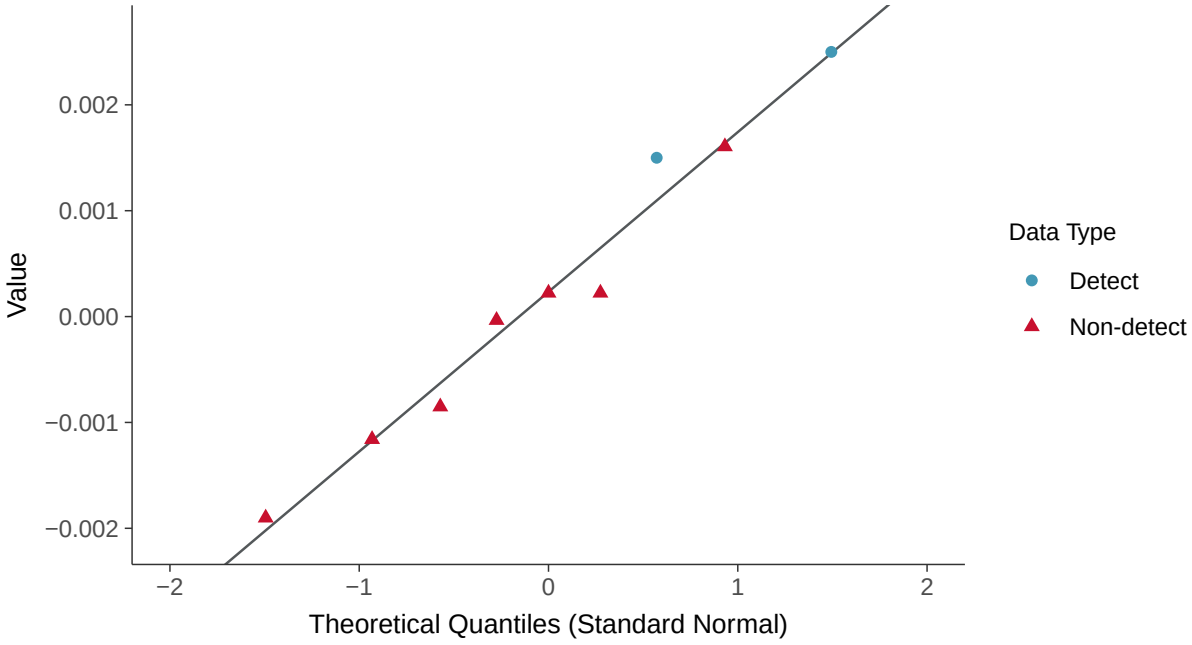
Boxplot by Season

Zinc, MW-18B (mg/l)



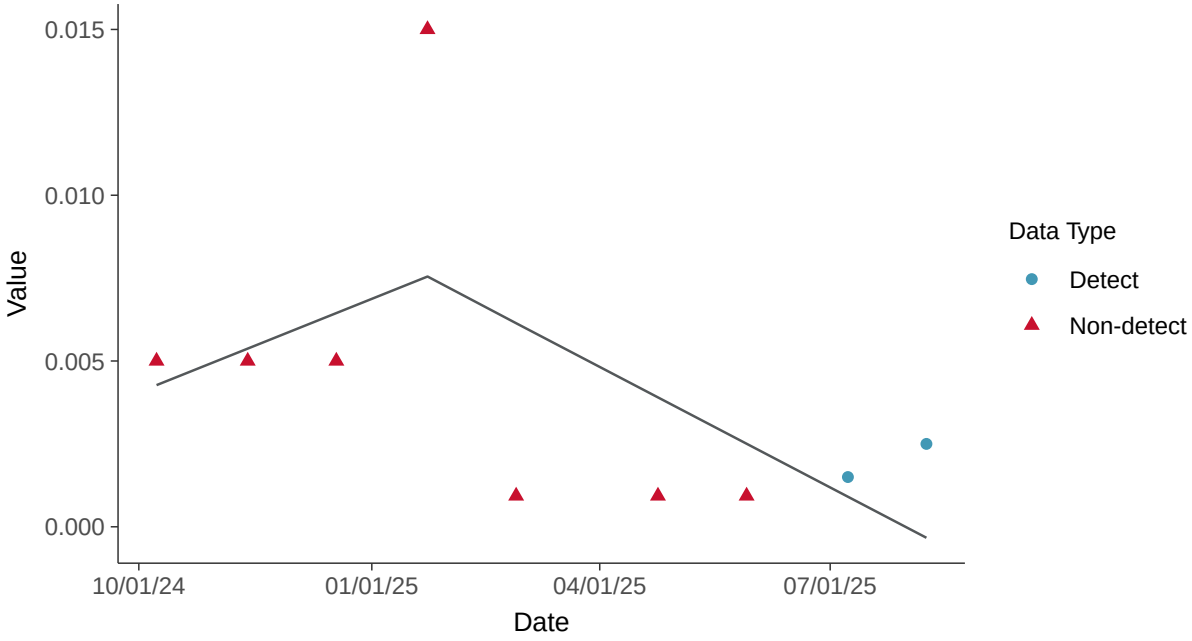
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-18B (mg/l)



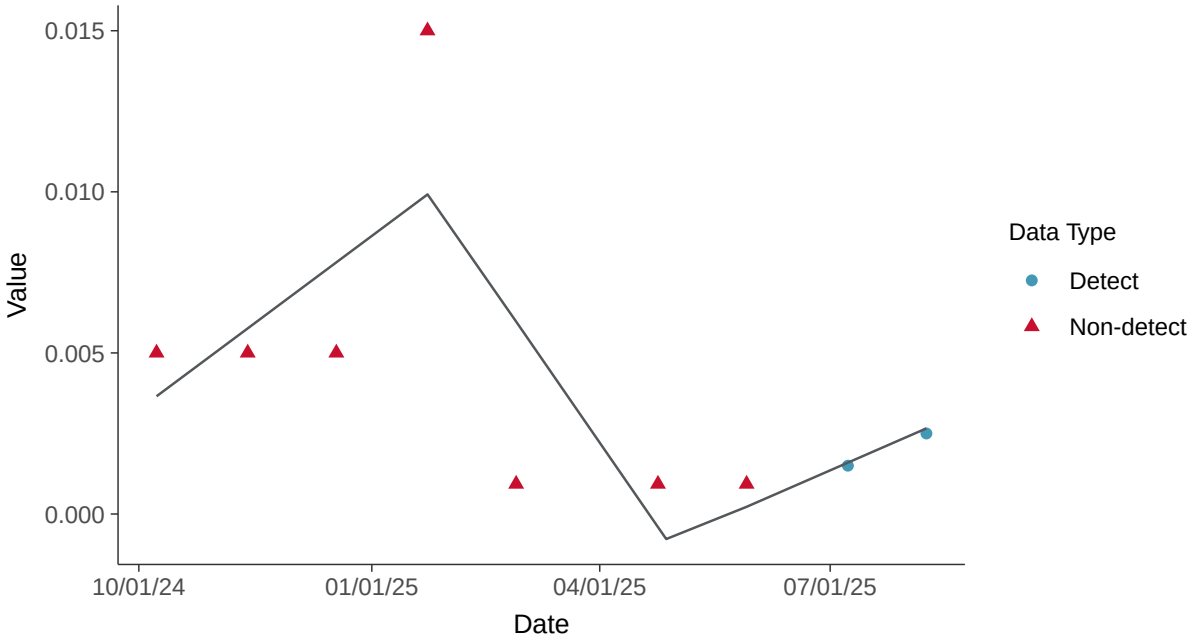
Trend Regression: Piecewise Linear-Linear

Zinc, MW-18B (mg/l)



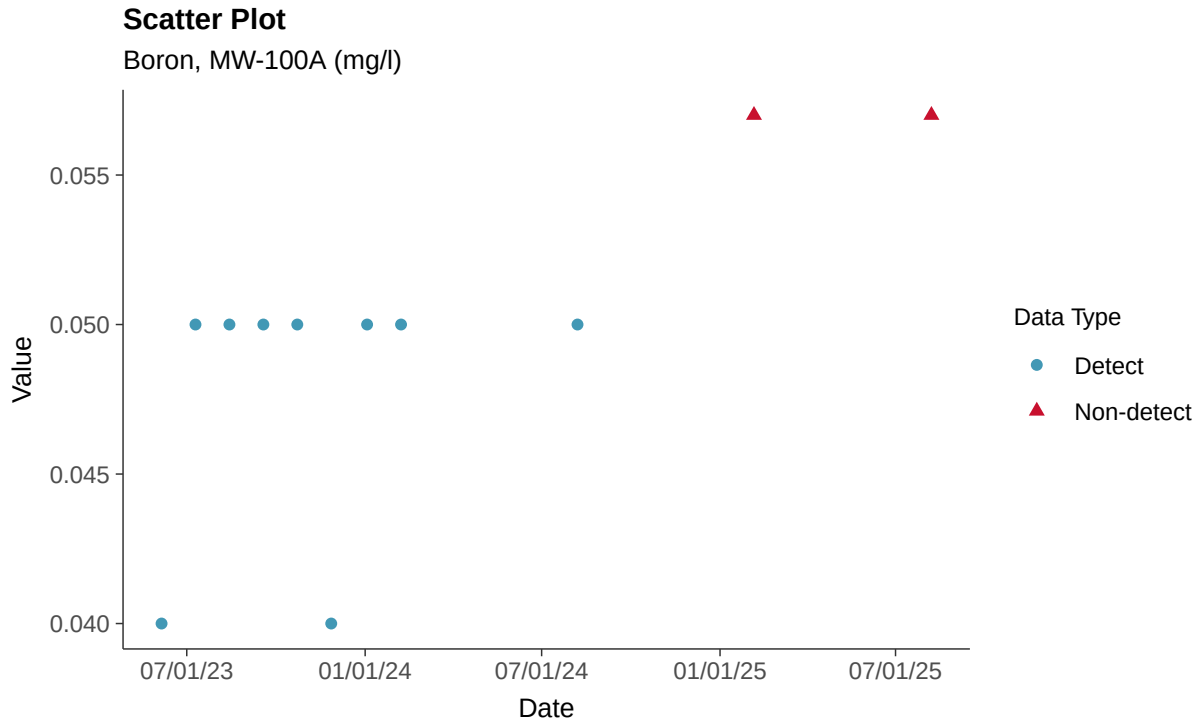
Trend Regression: Piecewise Linear-Linear-Linear

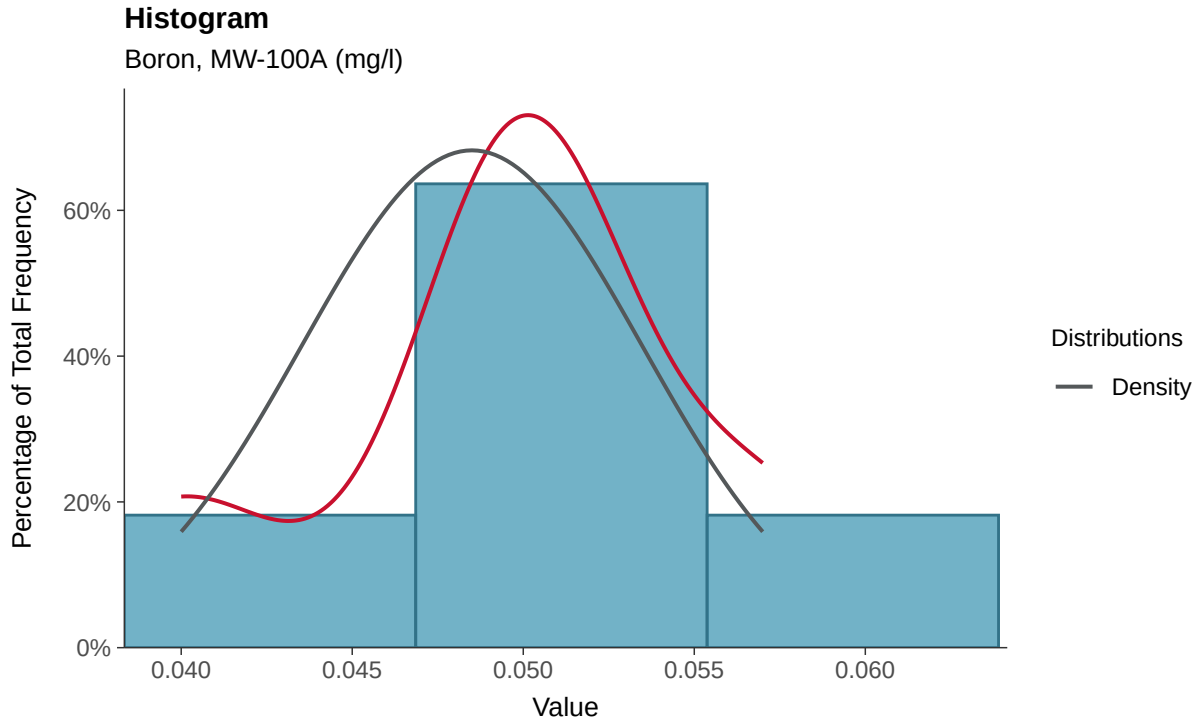
Zinc, MW-18B (mg/l)



Appendix III: Boron, MW-100A

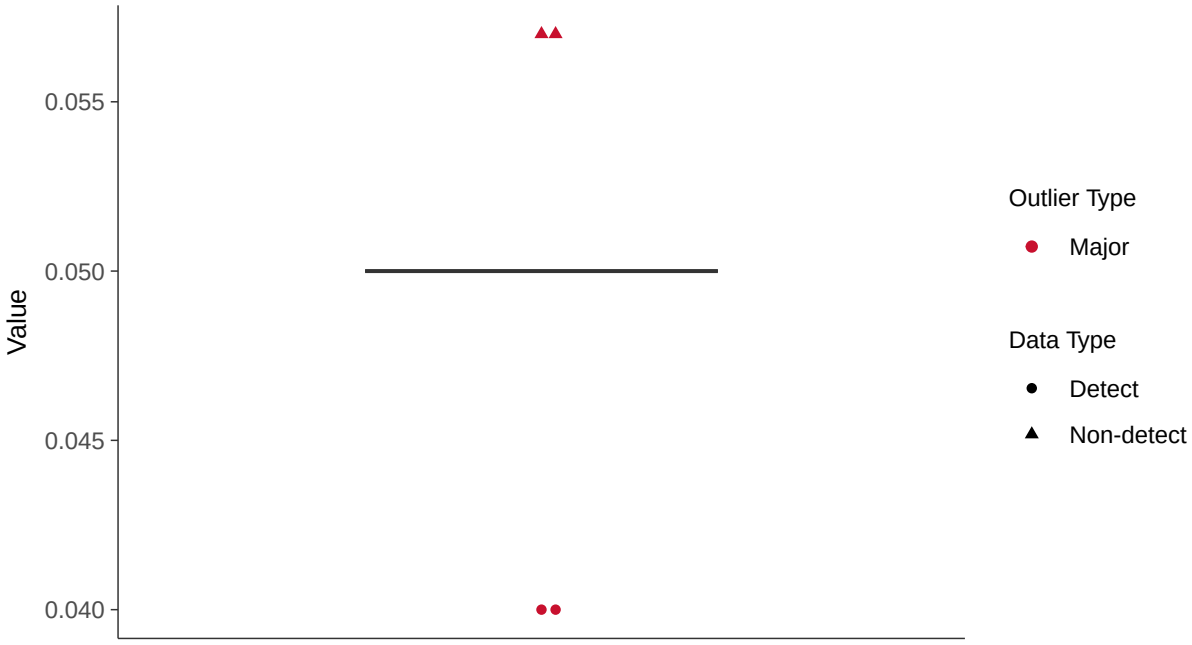
ID: 32_2_105





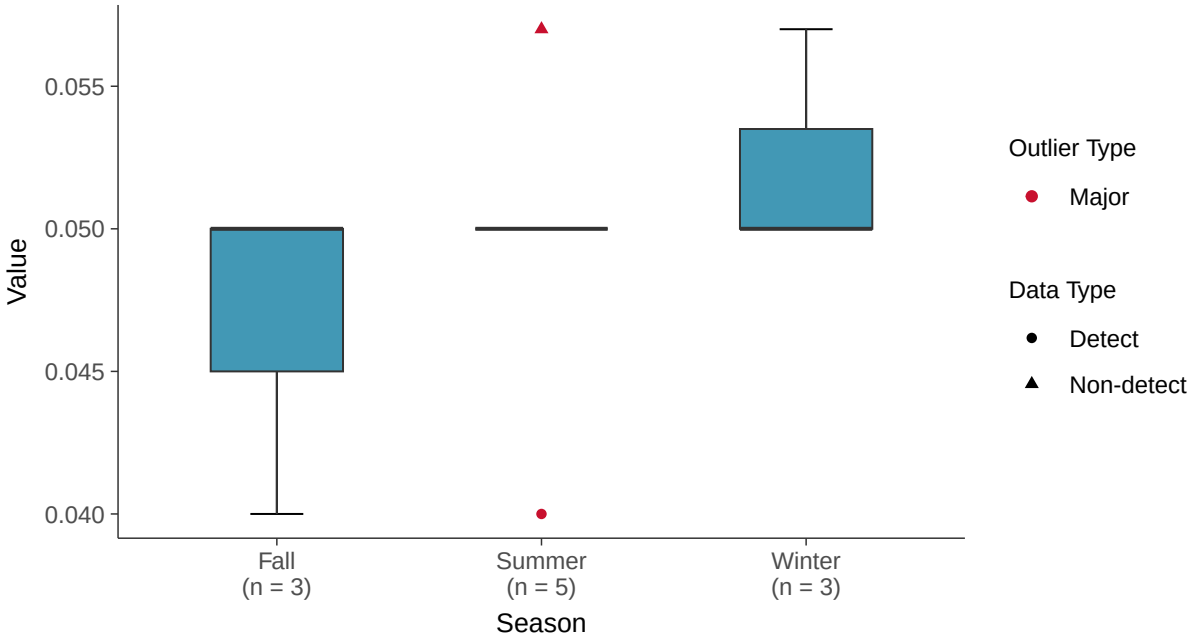
Boxplot

Boron, MW-100A (mg/l)



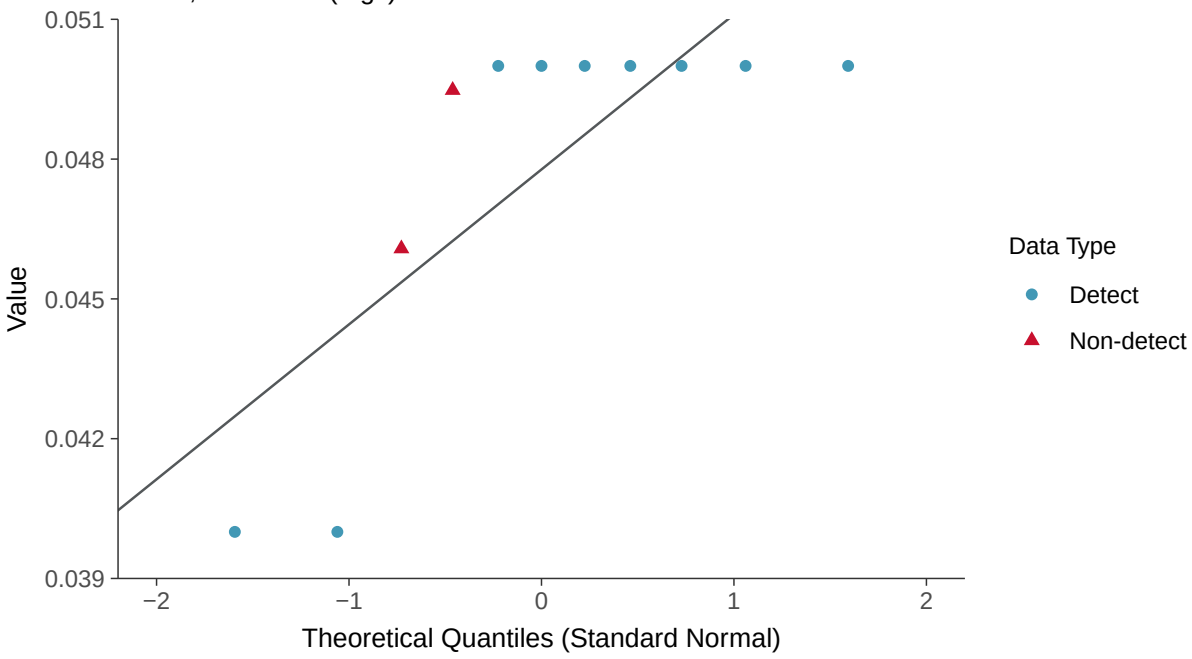
Boxplot by Season

Boron, MW-100A (mg/l)



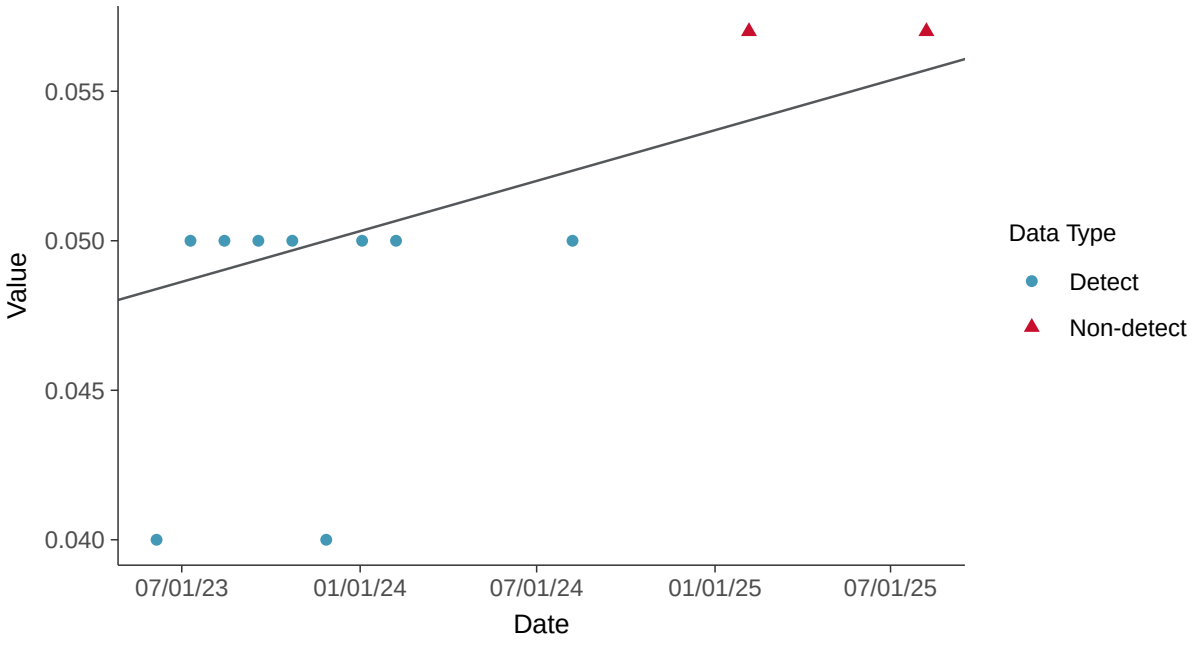
Normal Q-Q plot using ROS Imputed Estimates

Boron, MW-100A (mg/l)



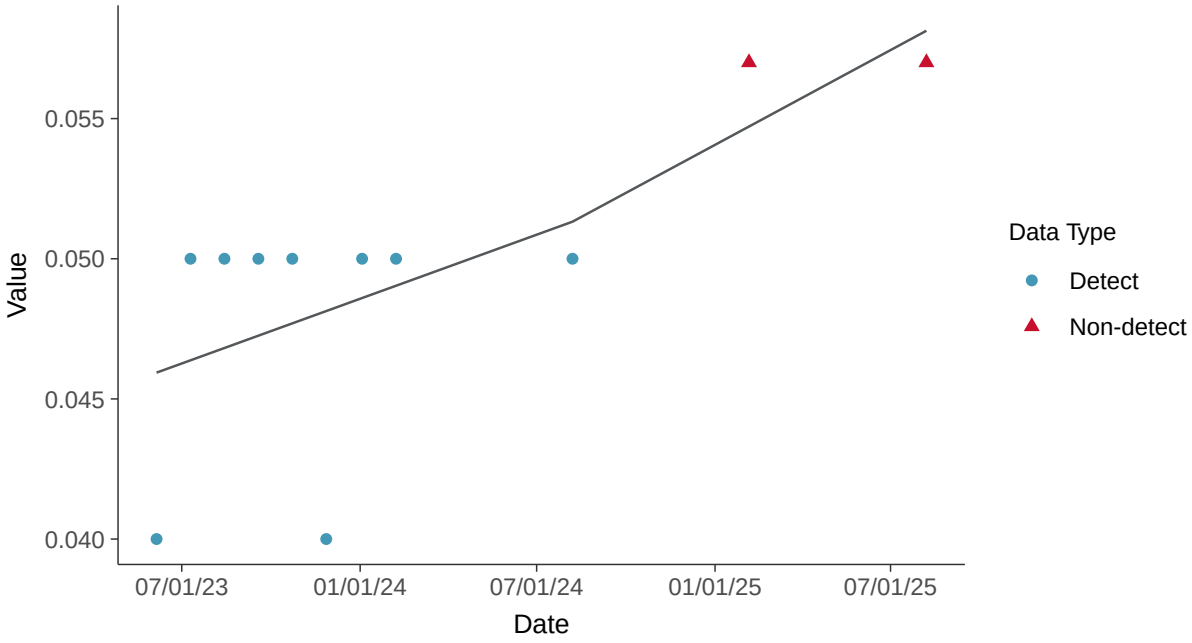
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Boron, MW-100A (mg/l)



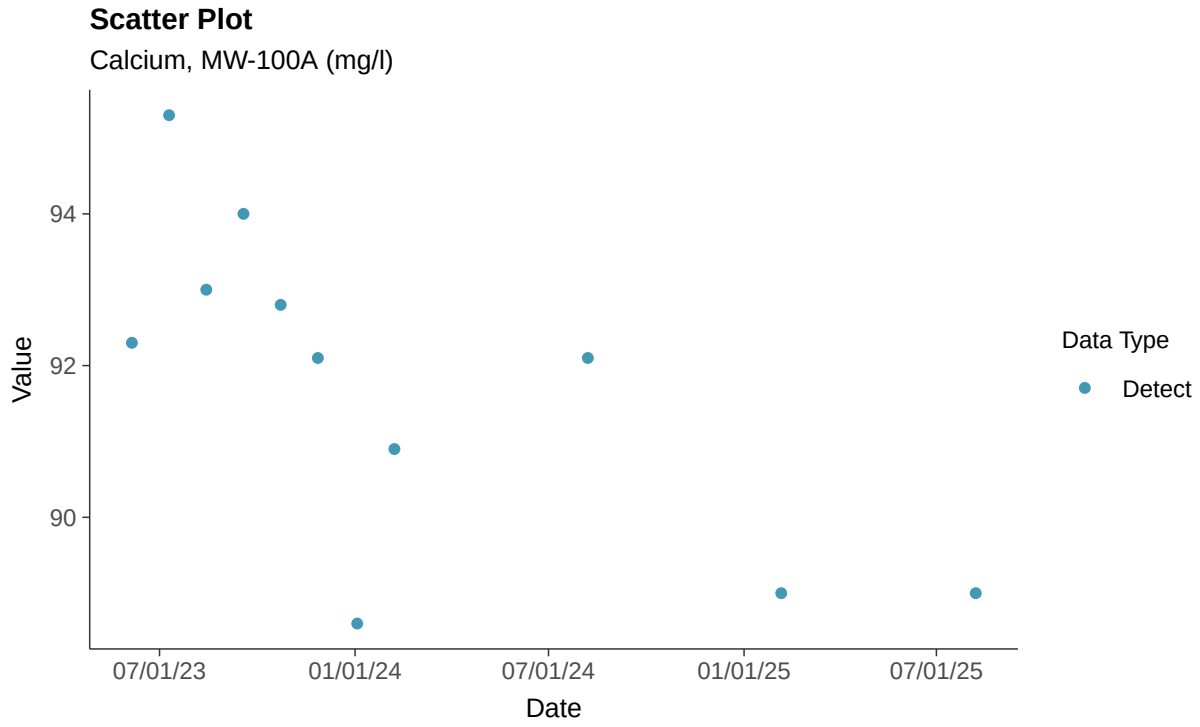
Trend Regression: Piecewise Linear-Linear

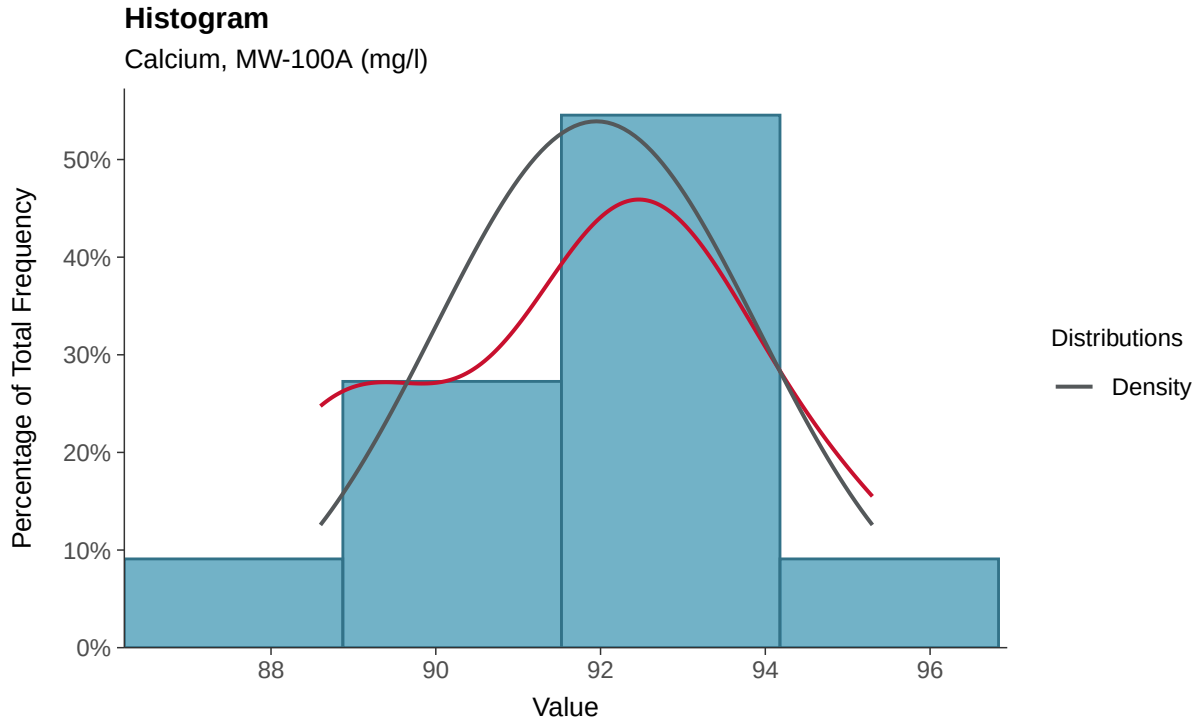
Boron, MW-100A (mg/l)



Appendix III: Calcium, MW-100A

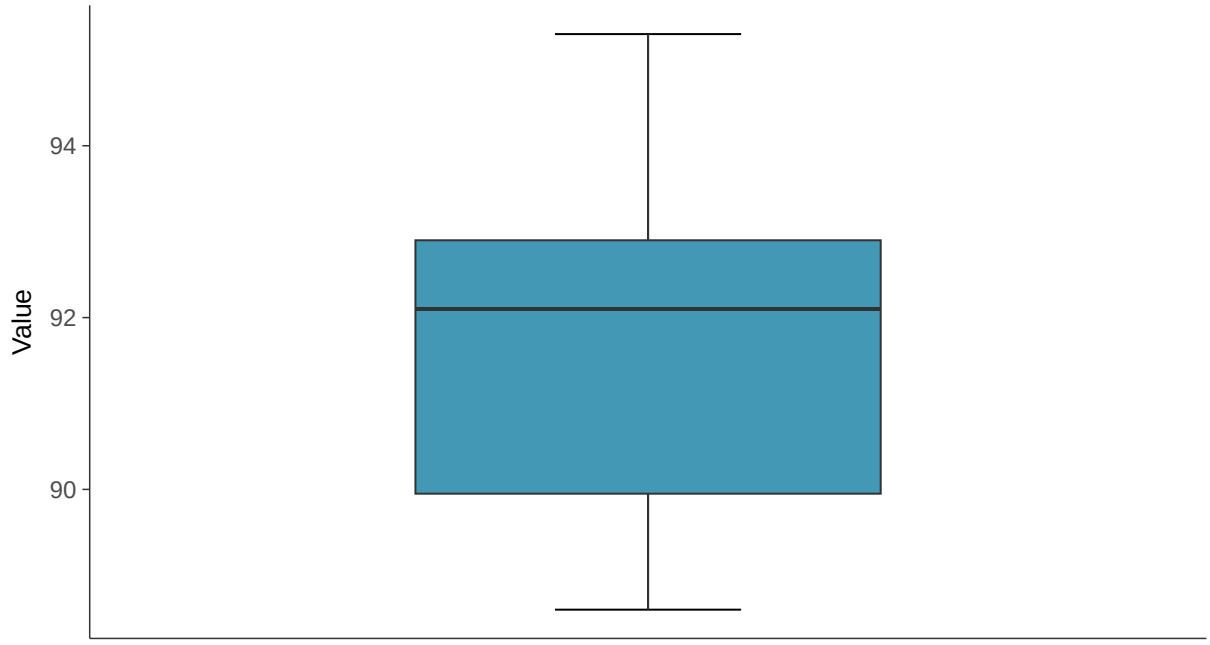
ID: 32_2_107





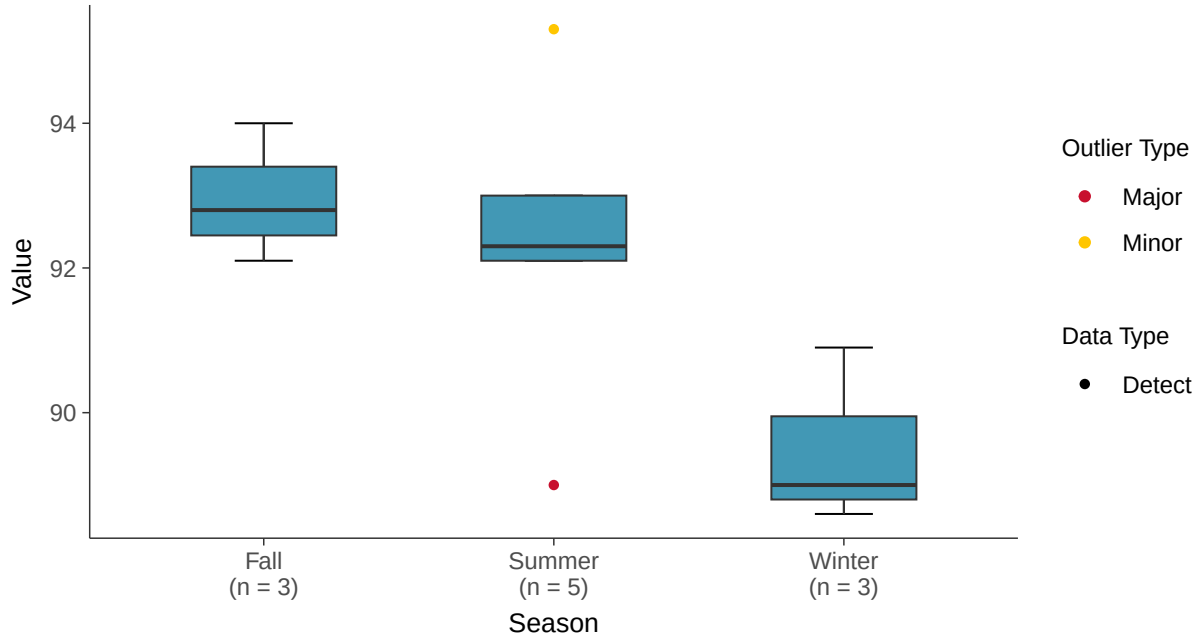
Boxplot

Calcium, MW-100A (mg/l)



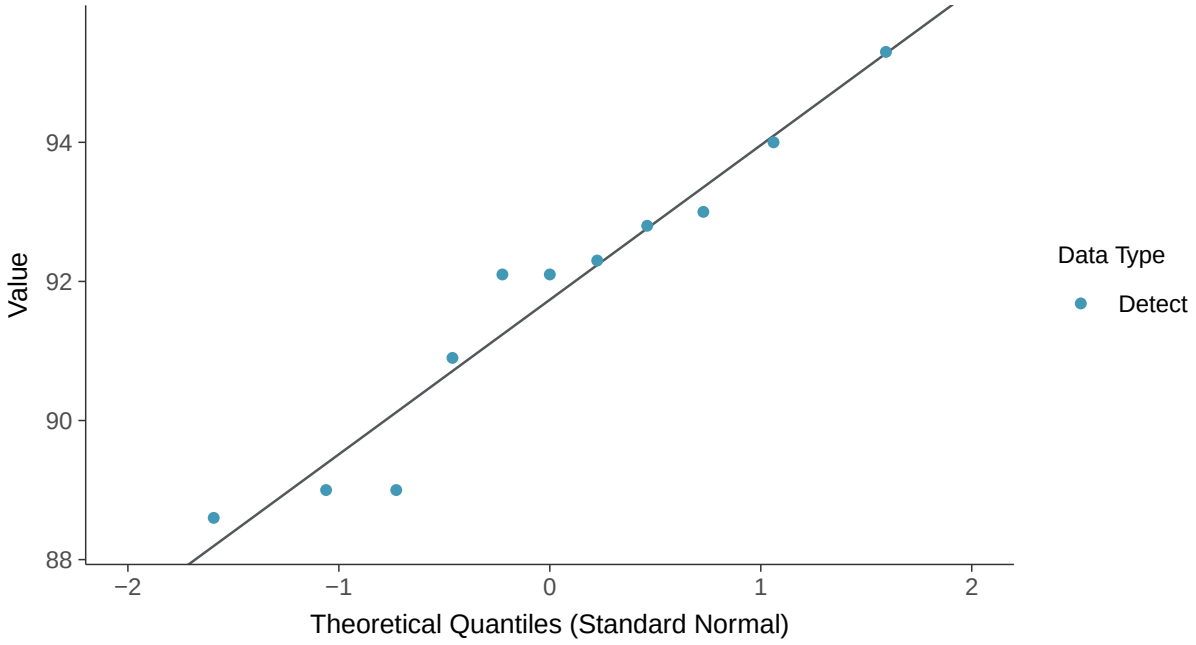
Boxplot by Season

Calcium, MW-100A (mg/l)



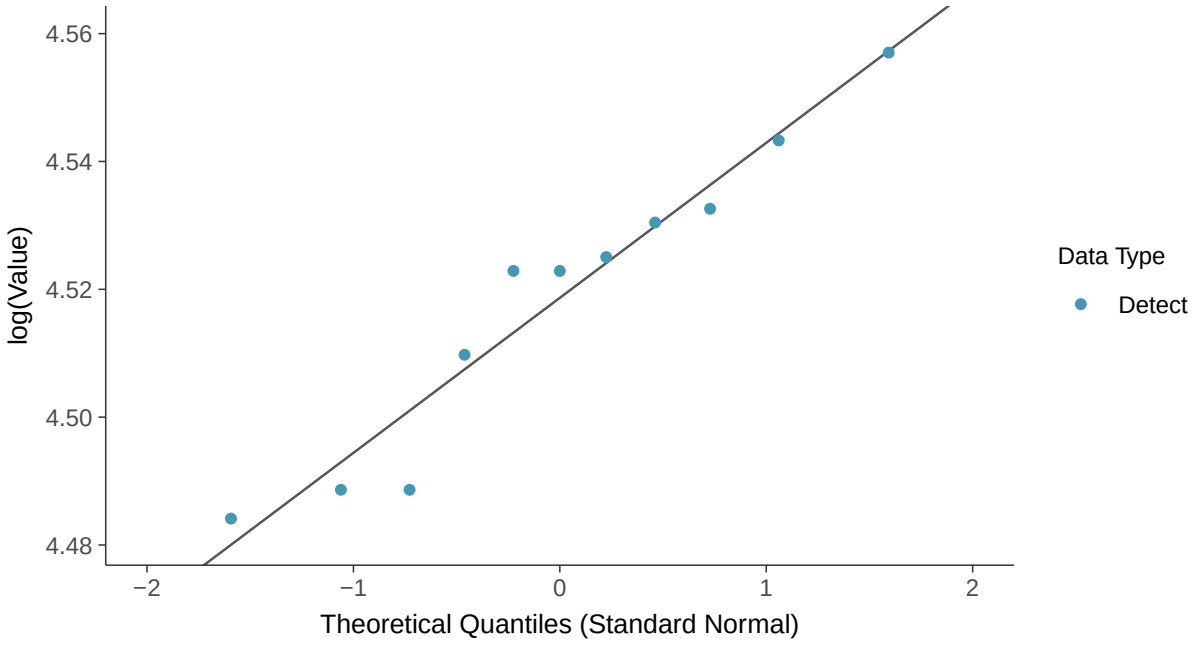
Normal Q-Q plot

Calcium, MW-100A (mg/l)



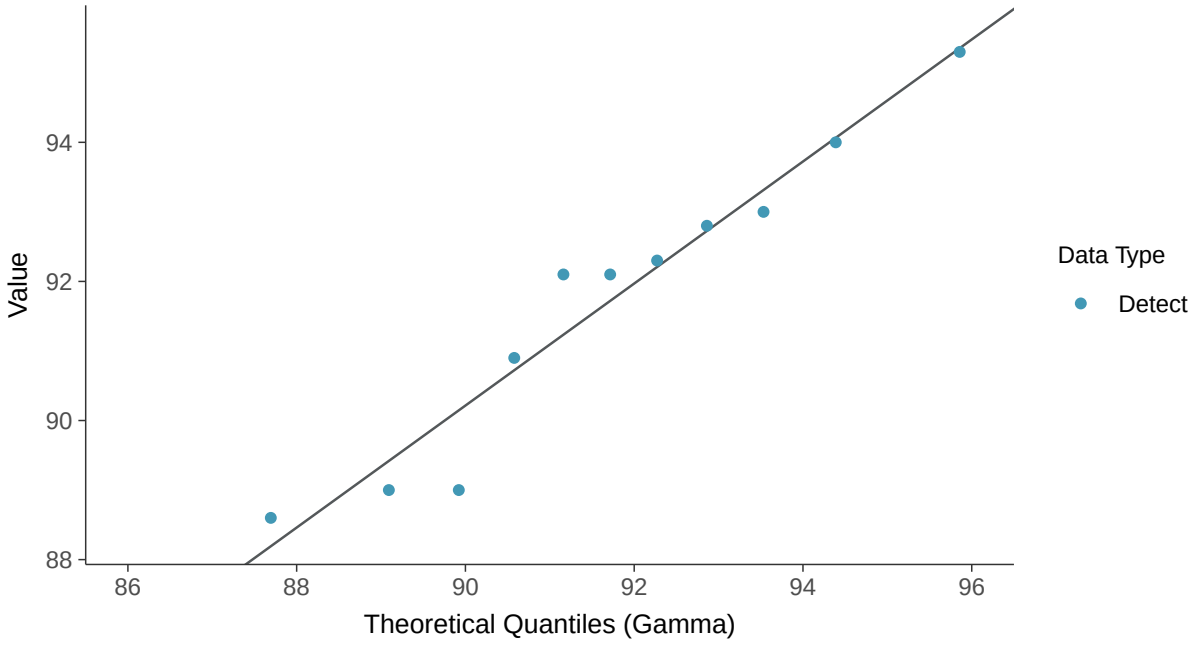
Lognormal Q-Q plot

Calcium, MW-100A (mg/l)



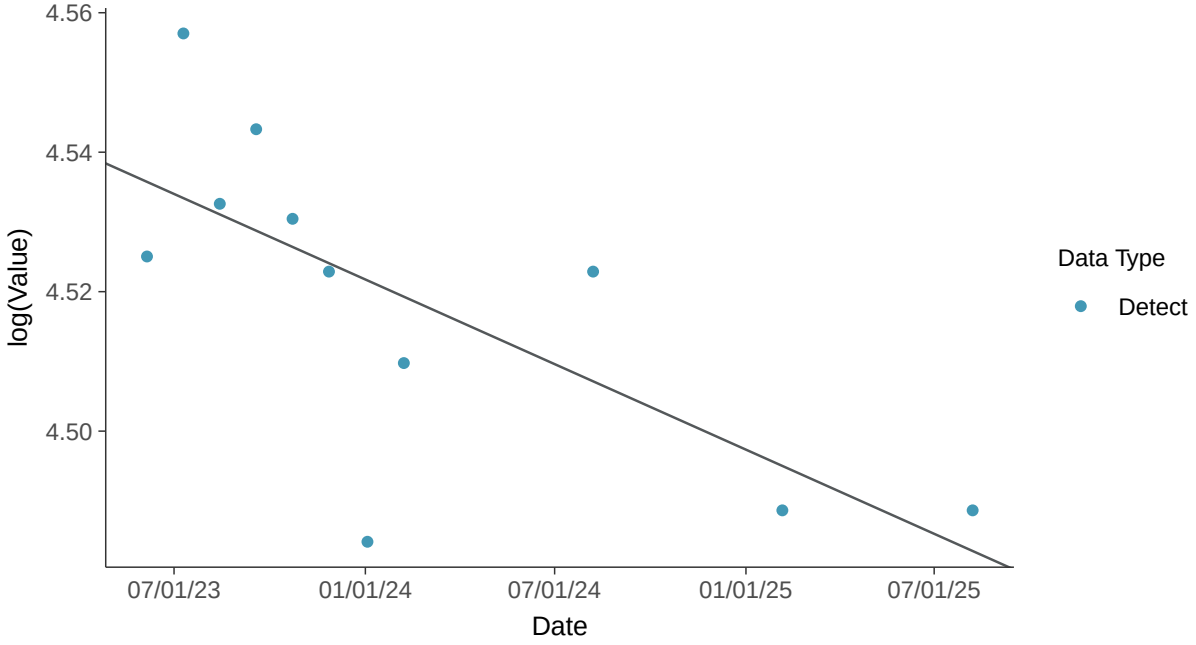
Gamma Q-Q plot

Calcium, MW-100A (mg/l)



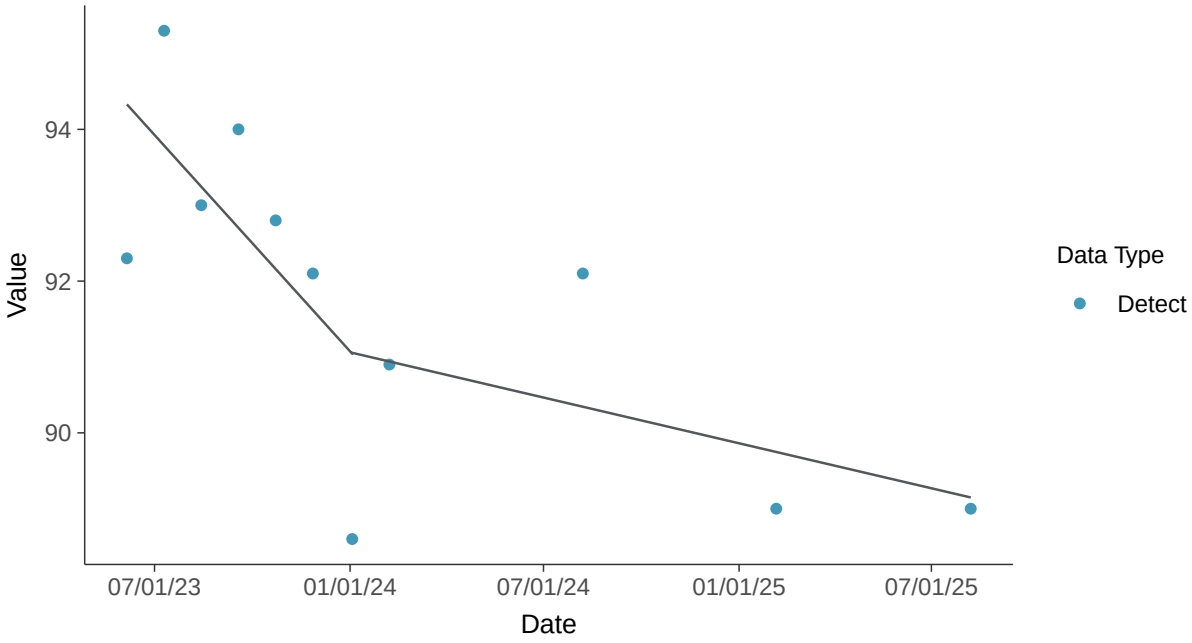
Trend Regression: Lognormal MLE

Calcium, MW-100A (mg/l)



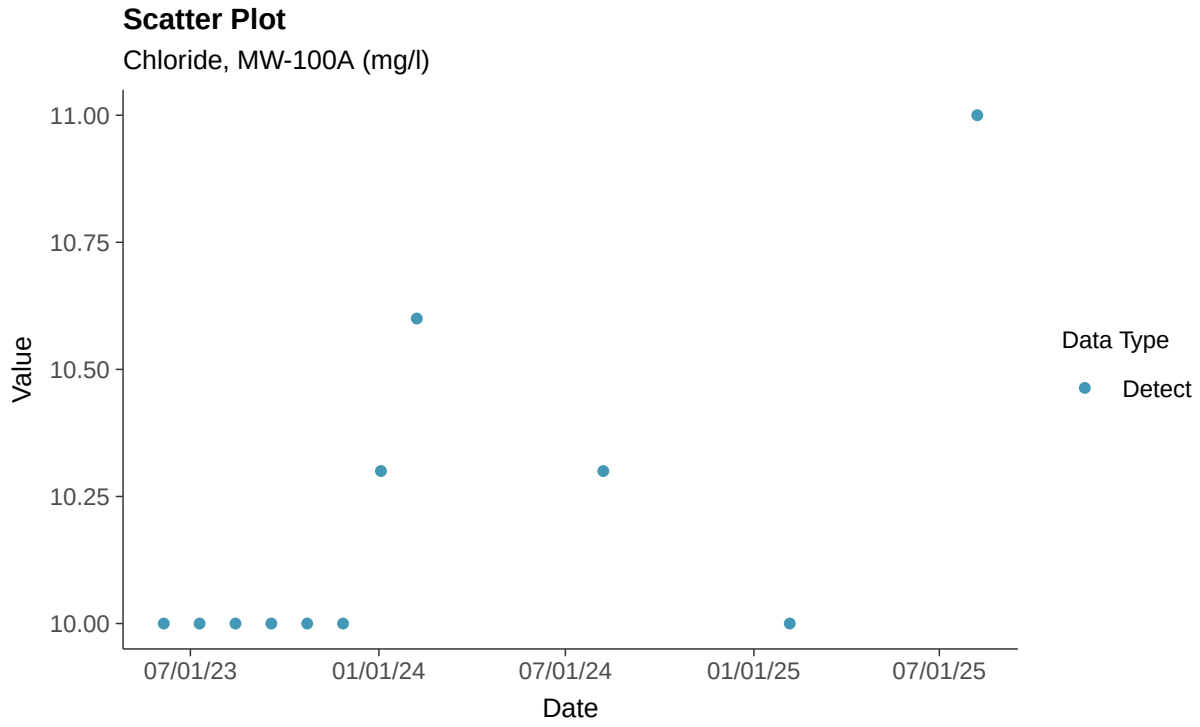
Trend Regression: Piecewise Linear-Linear

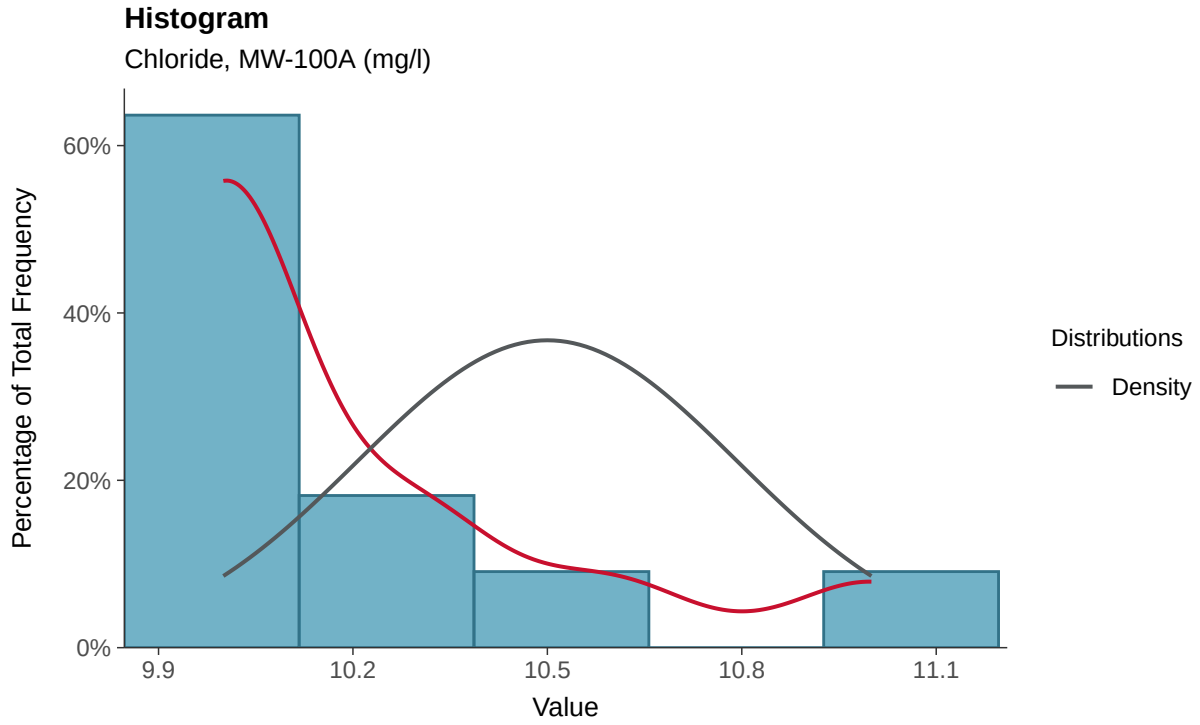
Calcium, MW-100A (mg/l)



Appendix III: Chloride, MW-100A

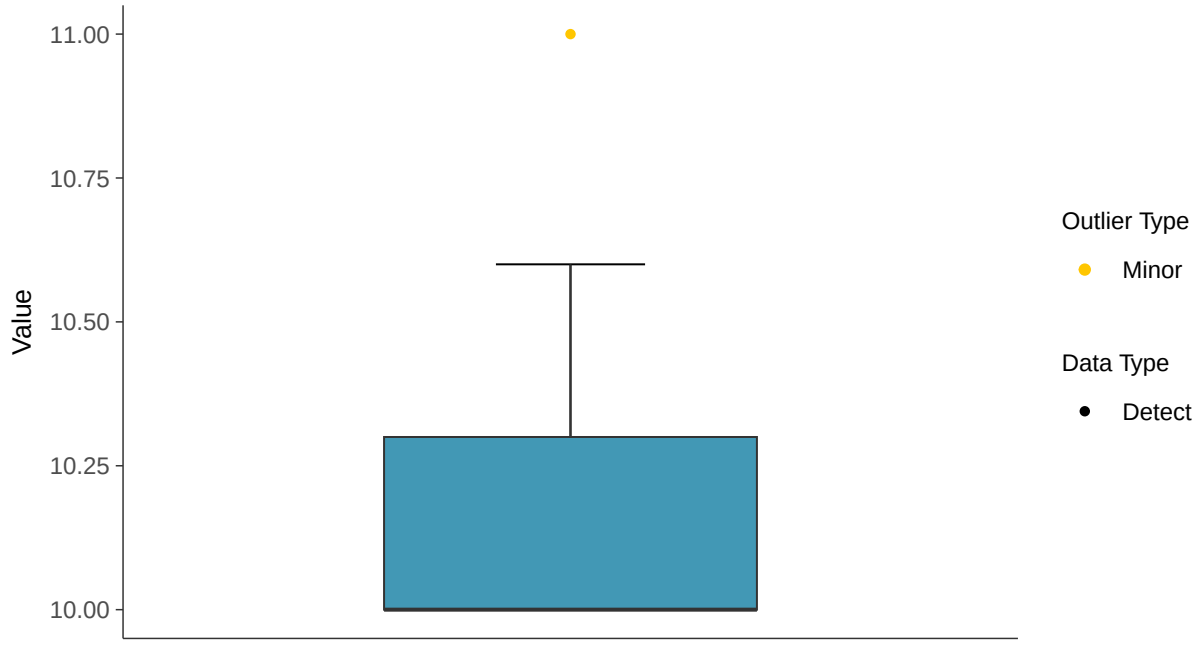
ID: 32_2_108





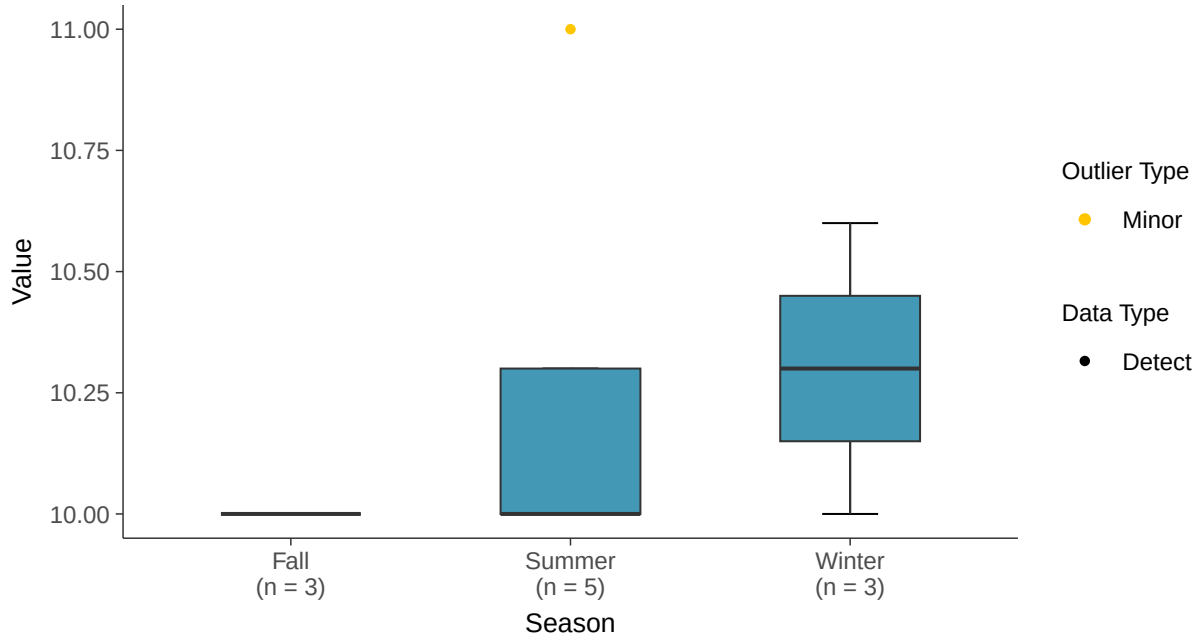
Boxplot

Chloride, MW-100A (mg/l)



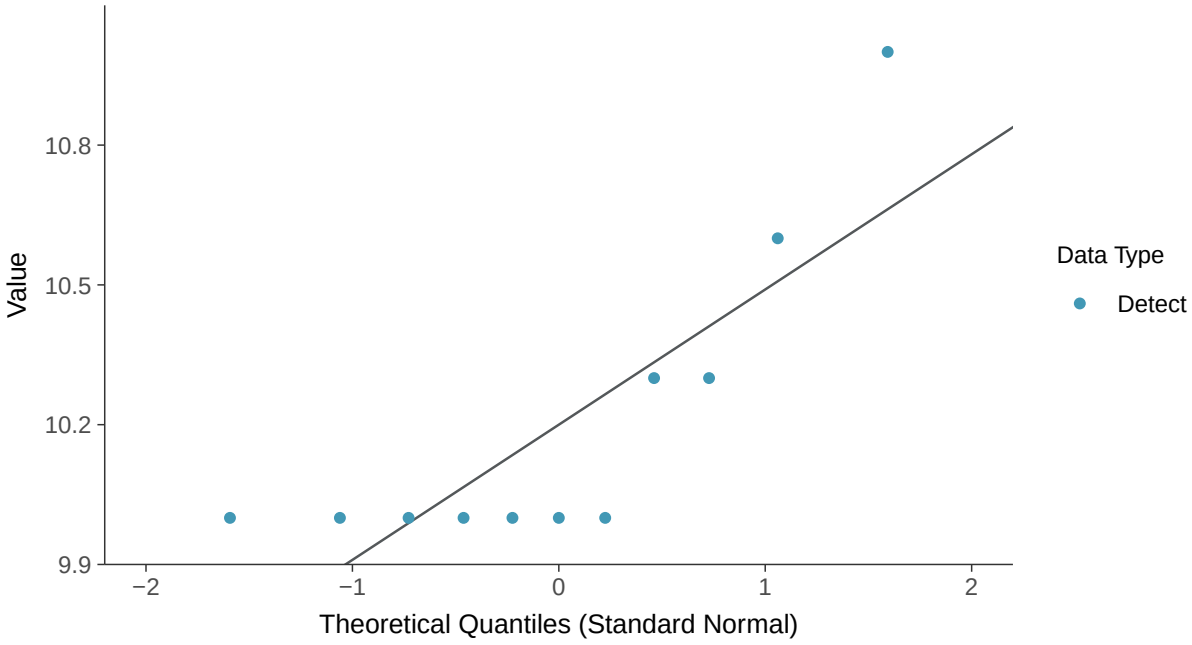
Boxplot by Season

Chloride, MW-100A (mg/l)



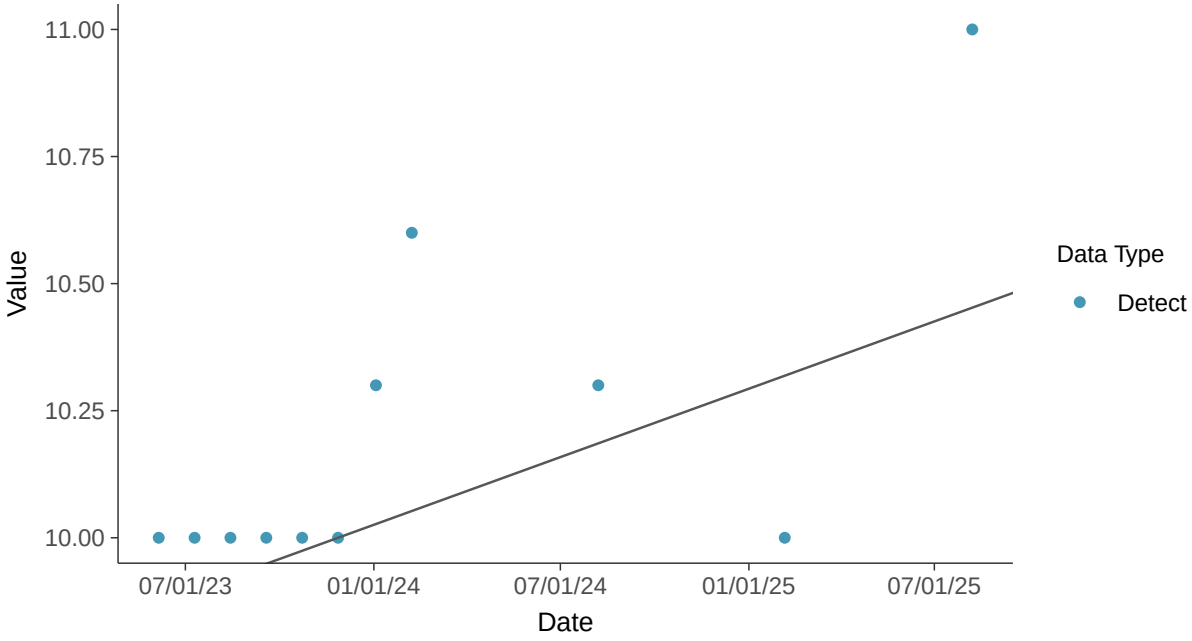
Normal Q-Q plot

Chloride, MW-100A (mg/l)



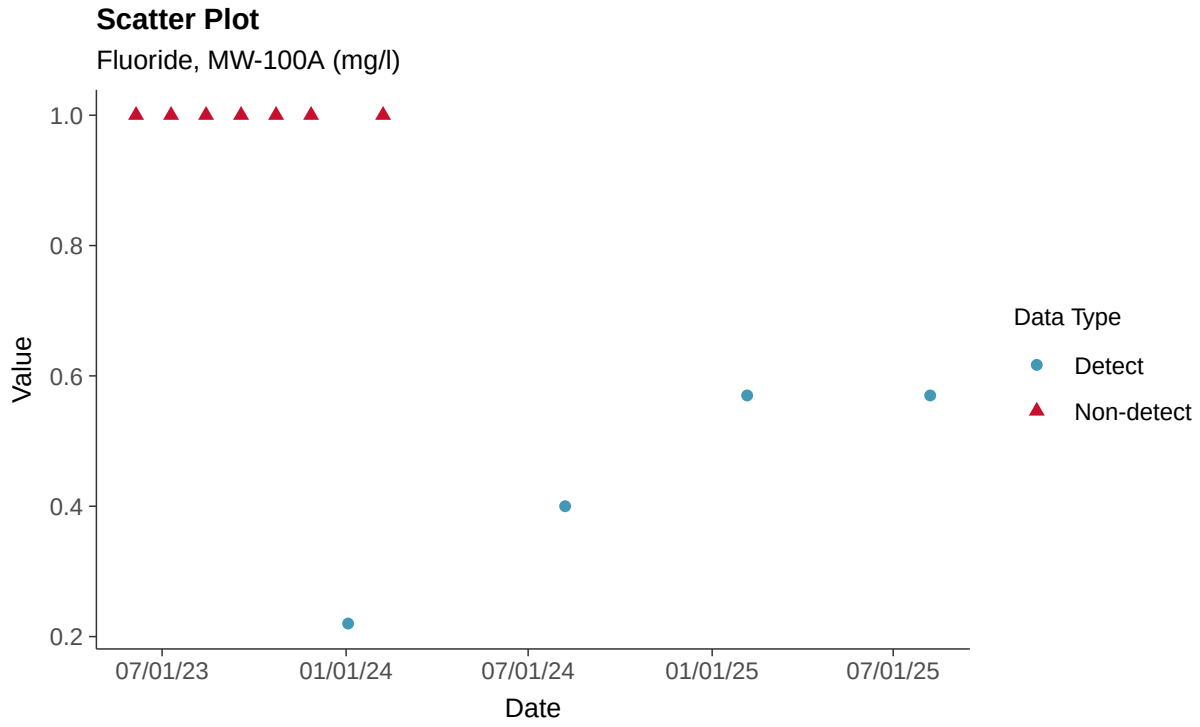
Trend Regression: Mann-Kendall/Theil-Sen Estimate

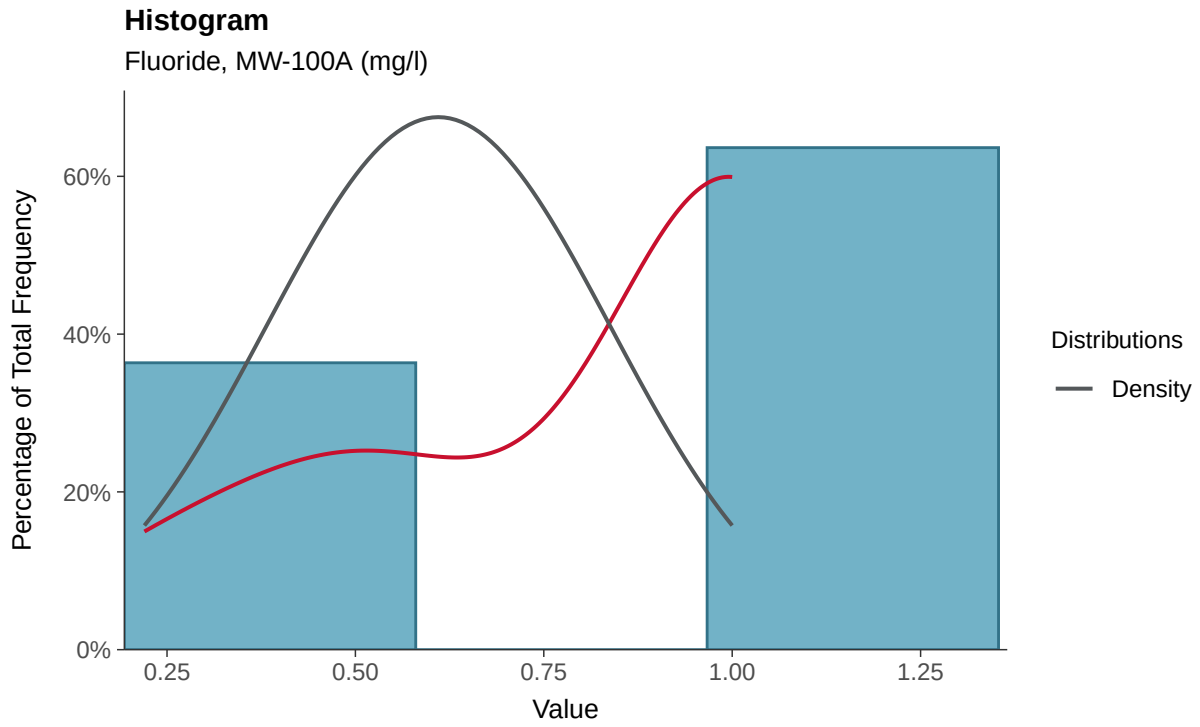
Chloride, MW-100A (mg/l)



Appendix III: Fluoride, MW-100A

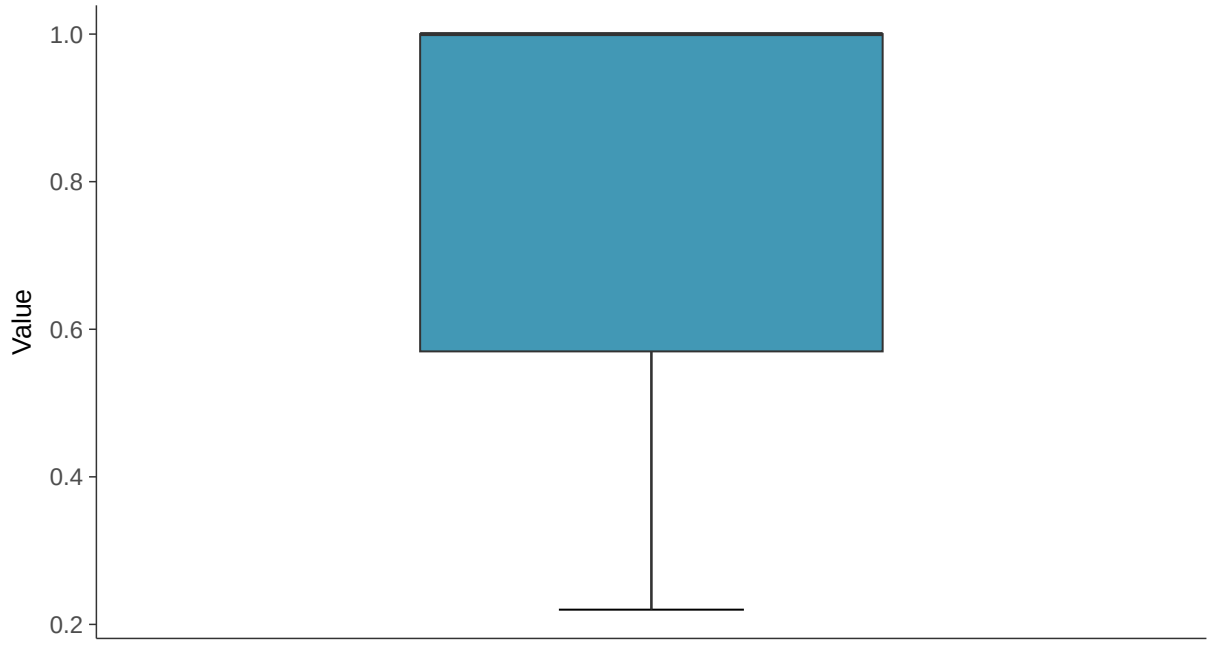
ID: 32_2_112





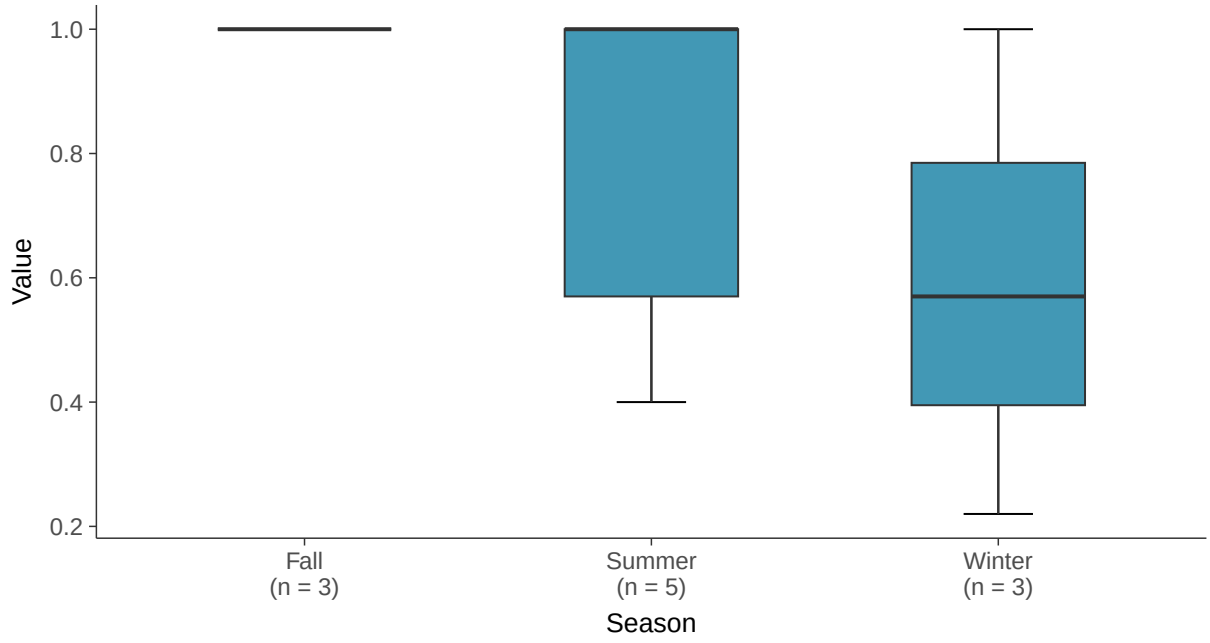
Boxplot

Fluoride, MW-100A (mg/l)



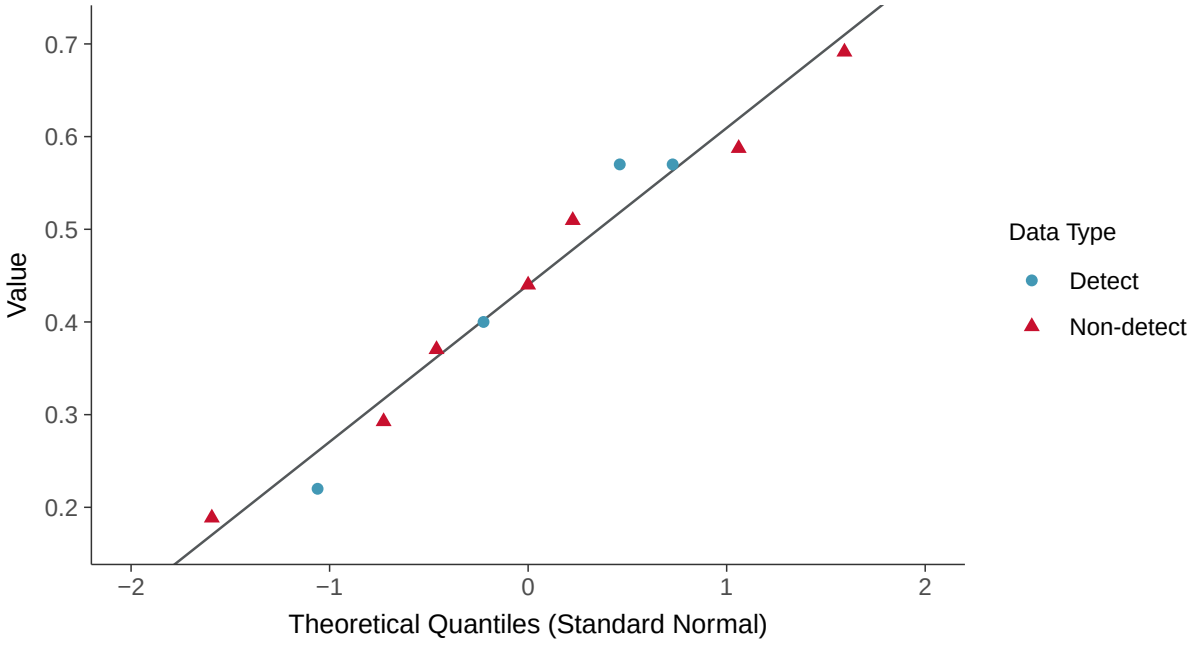
Boxplot by Season

Fluoride, MW-100A (mg/l)



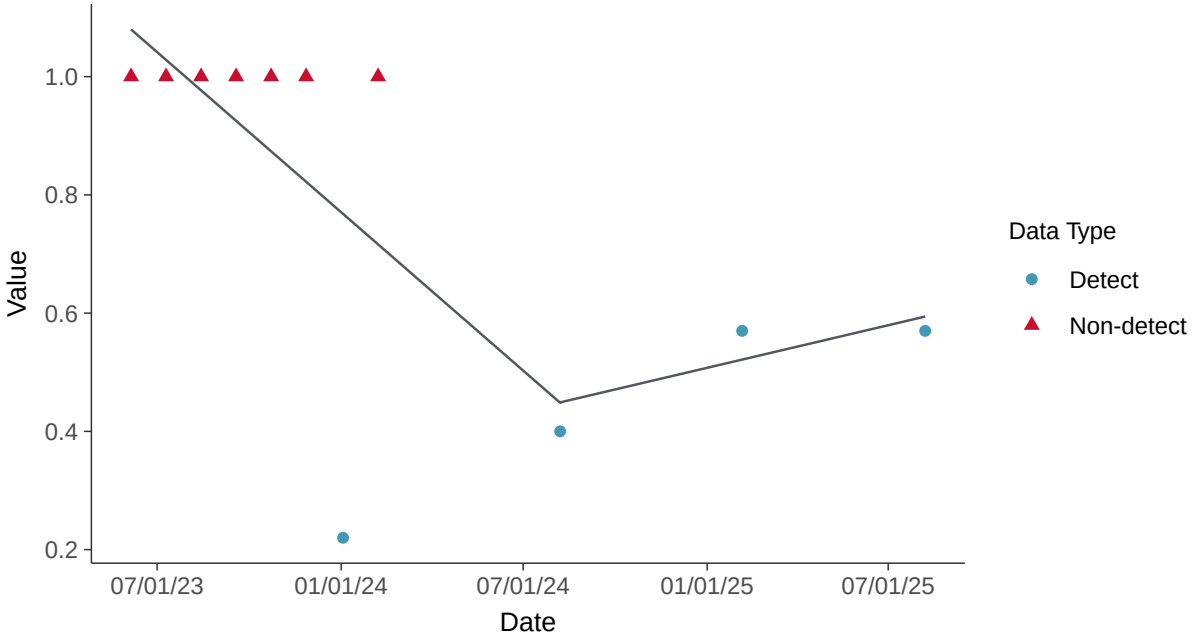
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-100A (mg/l)



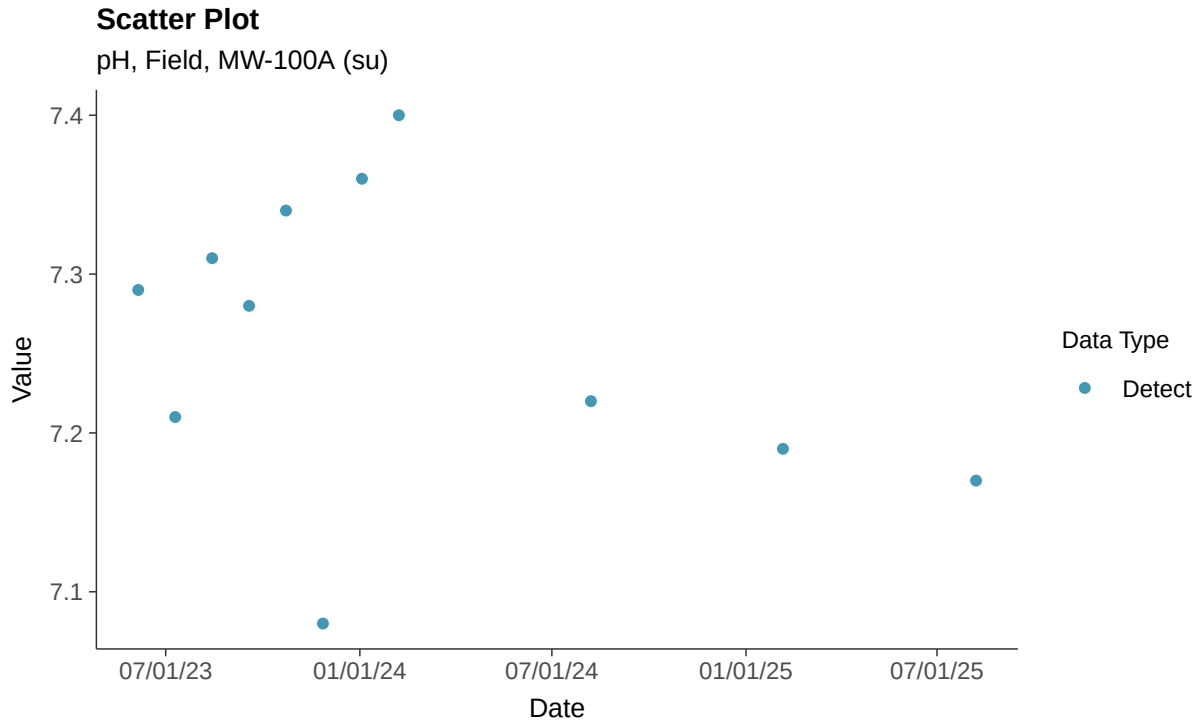
Trend Regression: Piecewise Linear-Linear

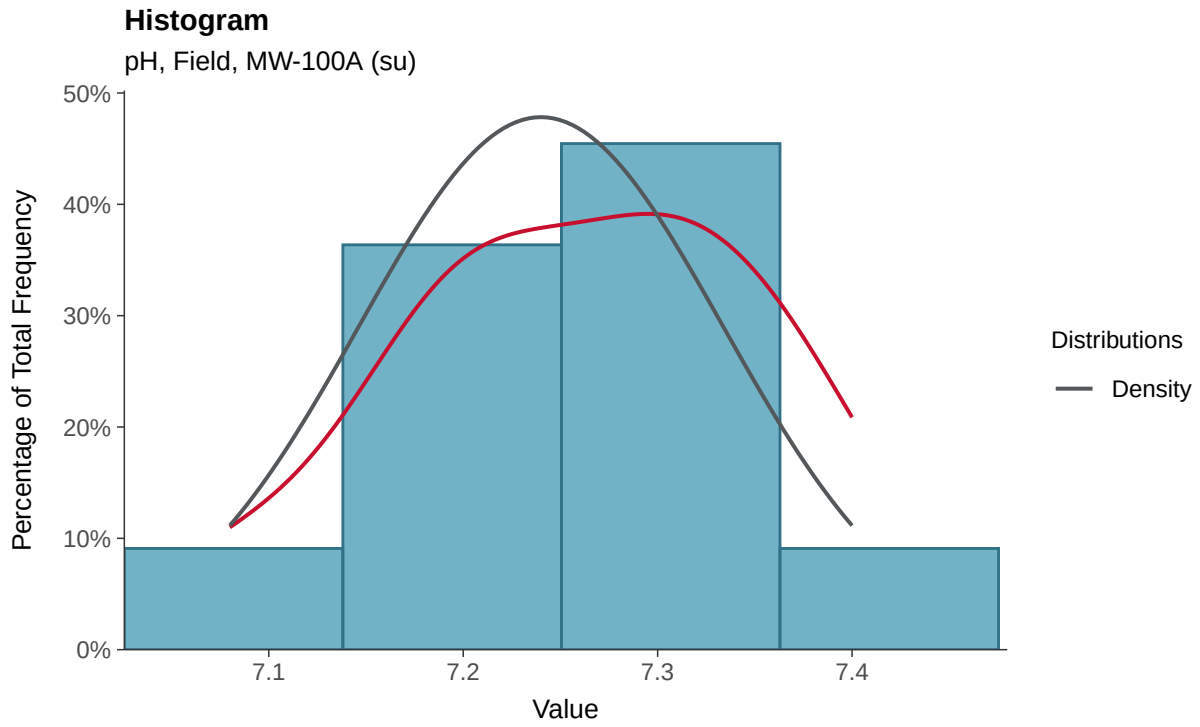
Fluoride, MW-100A (mg/l)



Appendix III: pH, Field, MW-100A

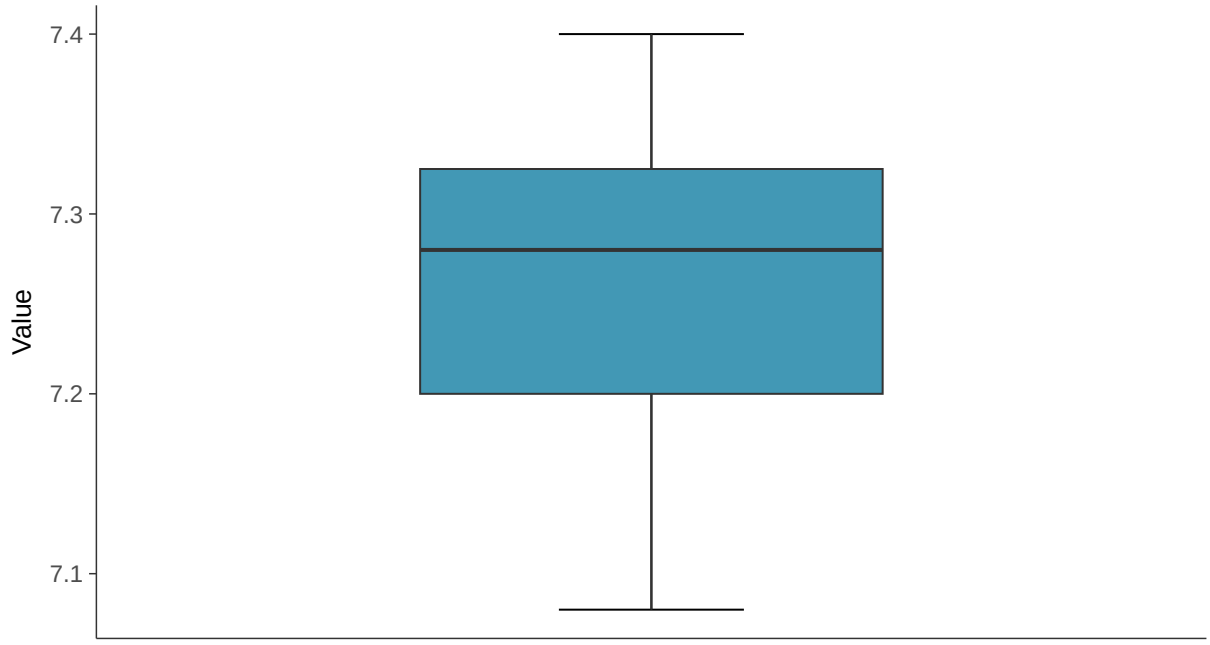
ID: 32_2_120





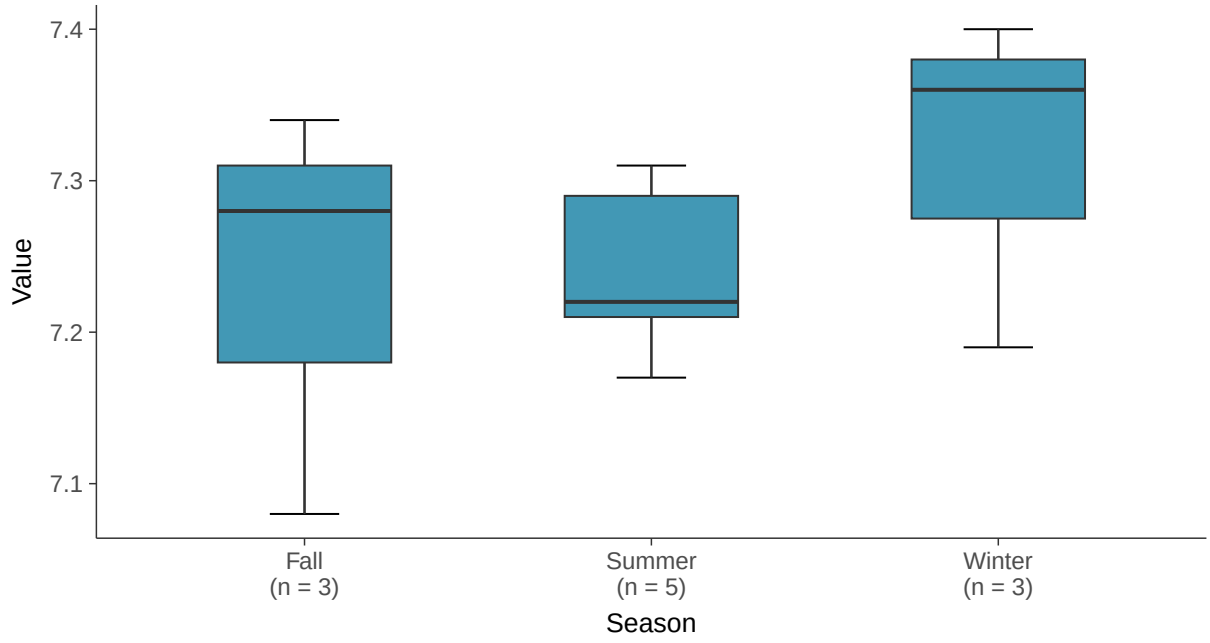
Boxplot

pH, Field, MW-100A (su)



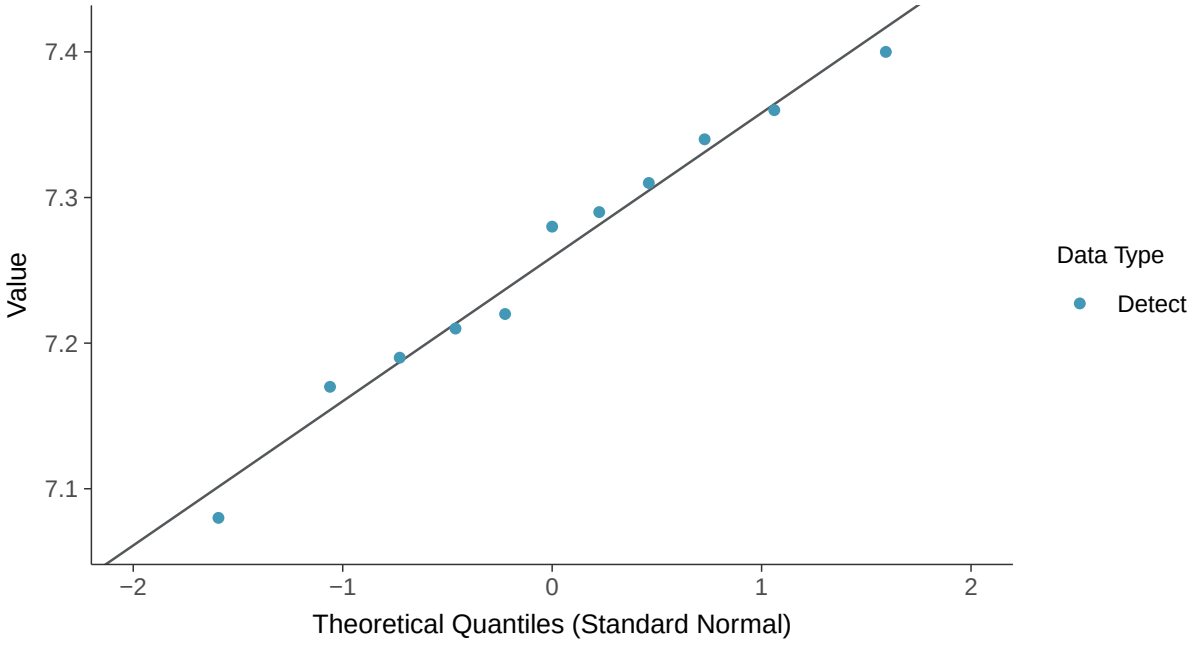
Boxplot by Season

pH, Field, MW-100A (su)



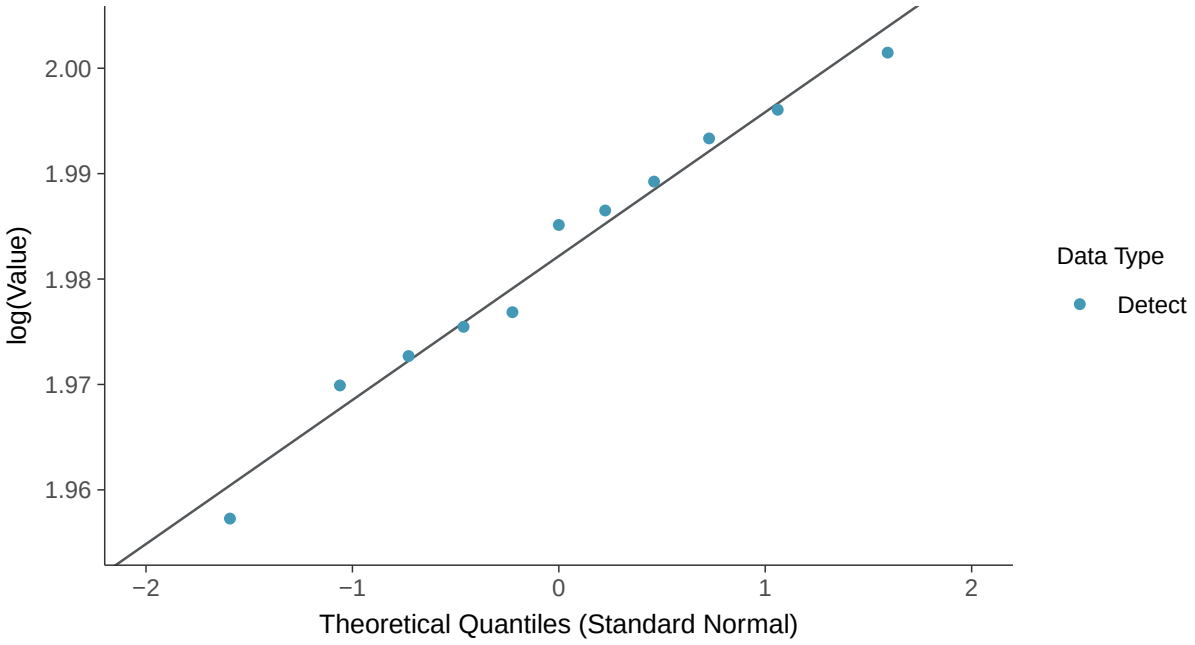
Normal Q-Q plot

pH, Field, MW-100A (su)



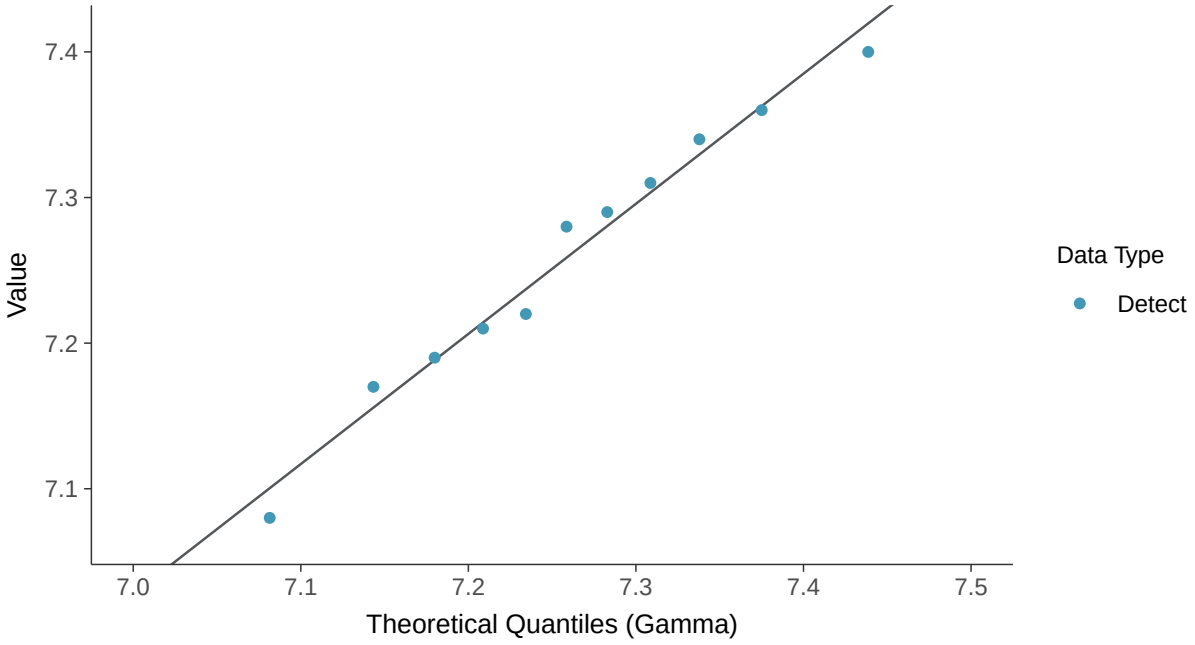
Lognormal Q-Q plot

pH, Field, MW-100A (su)



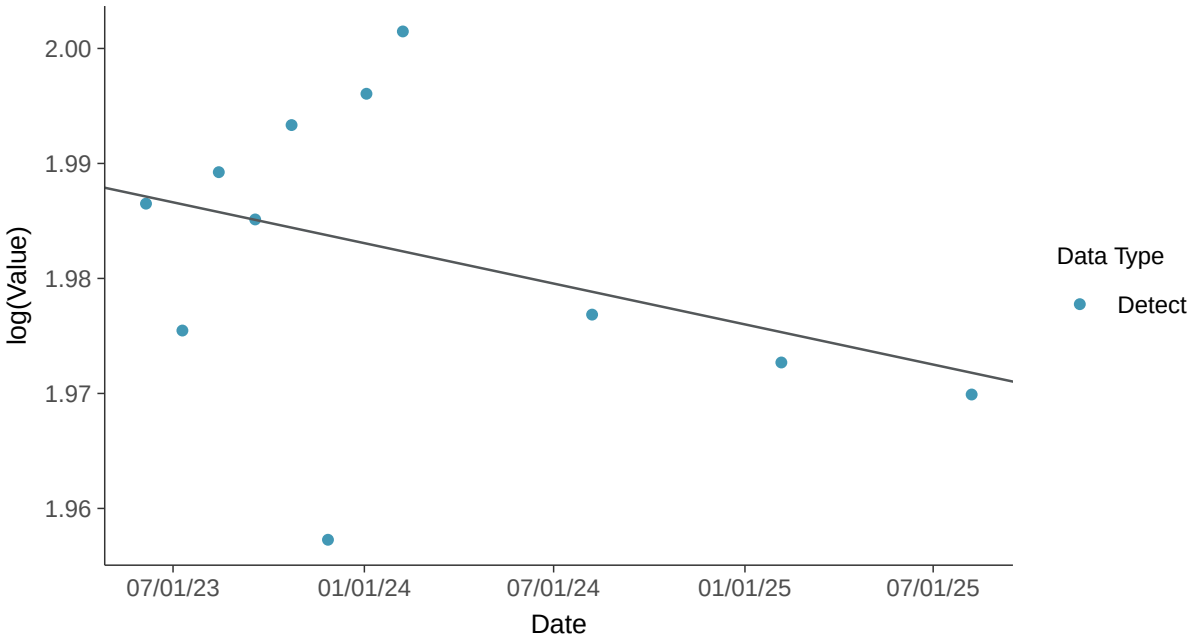
Gamma Q-Q plot

pH, Field, MW-100A (su)



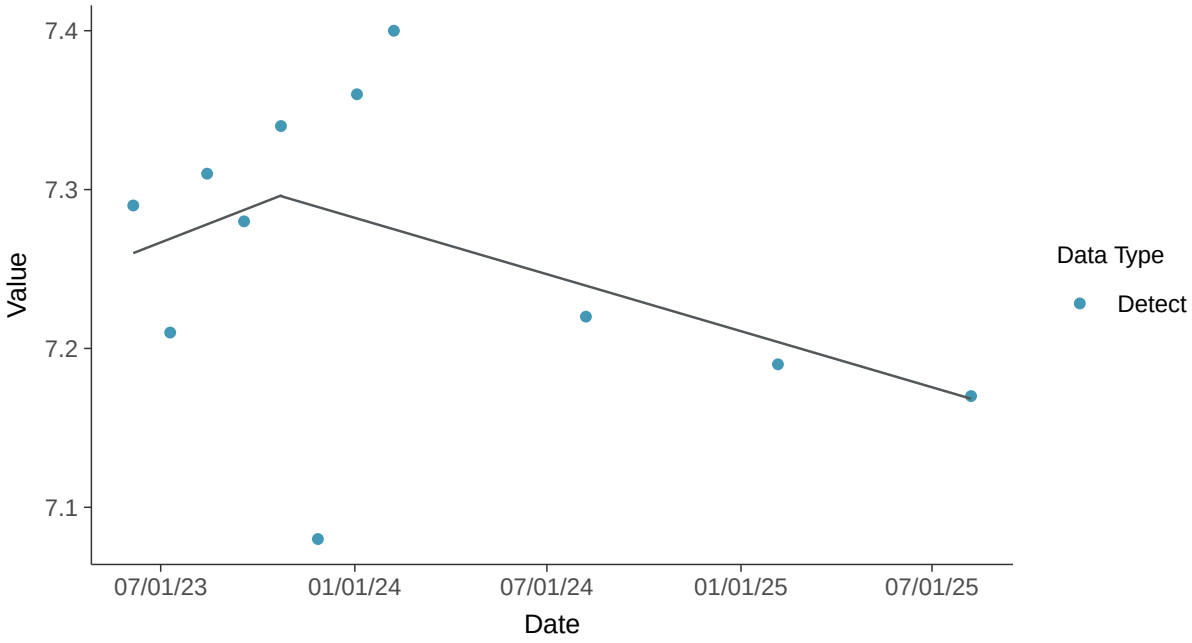
Trend Regression: Lognormal MLE

pH, Field, MW-100A (su)



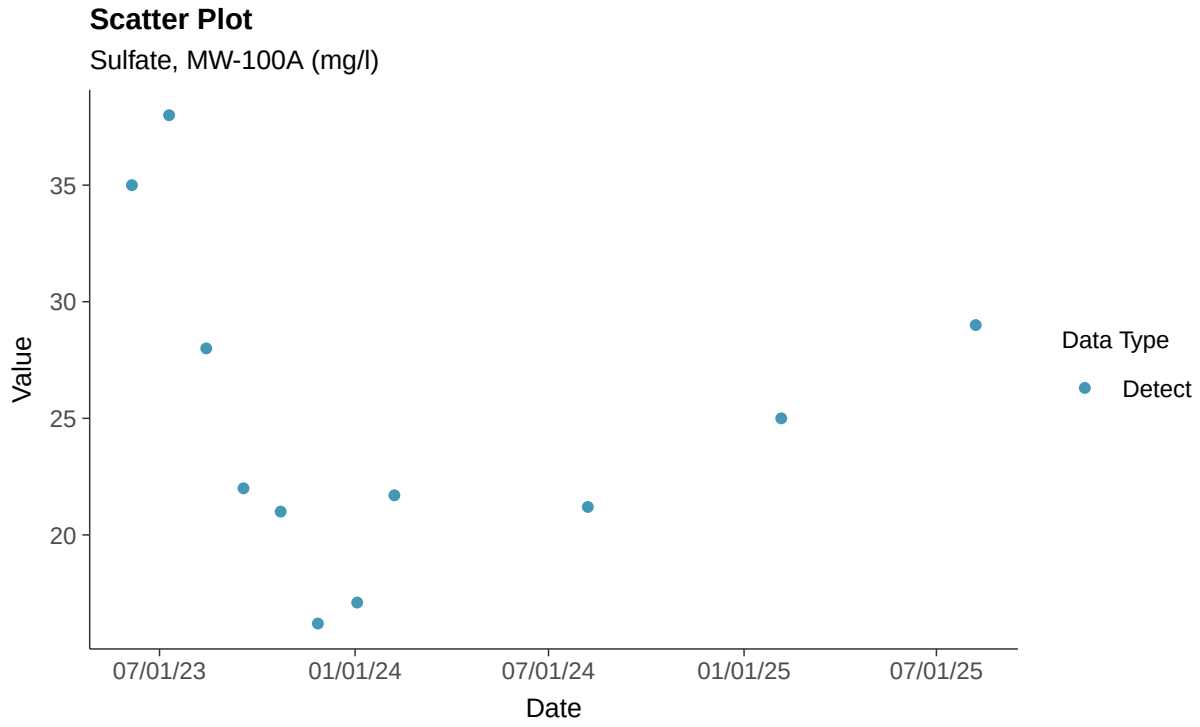
Trend Regression: Piecewise Linear-Linear

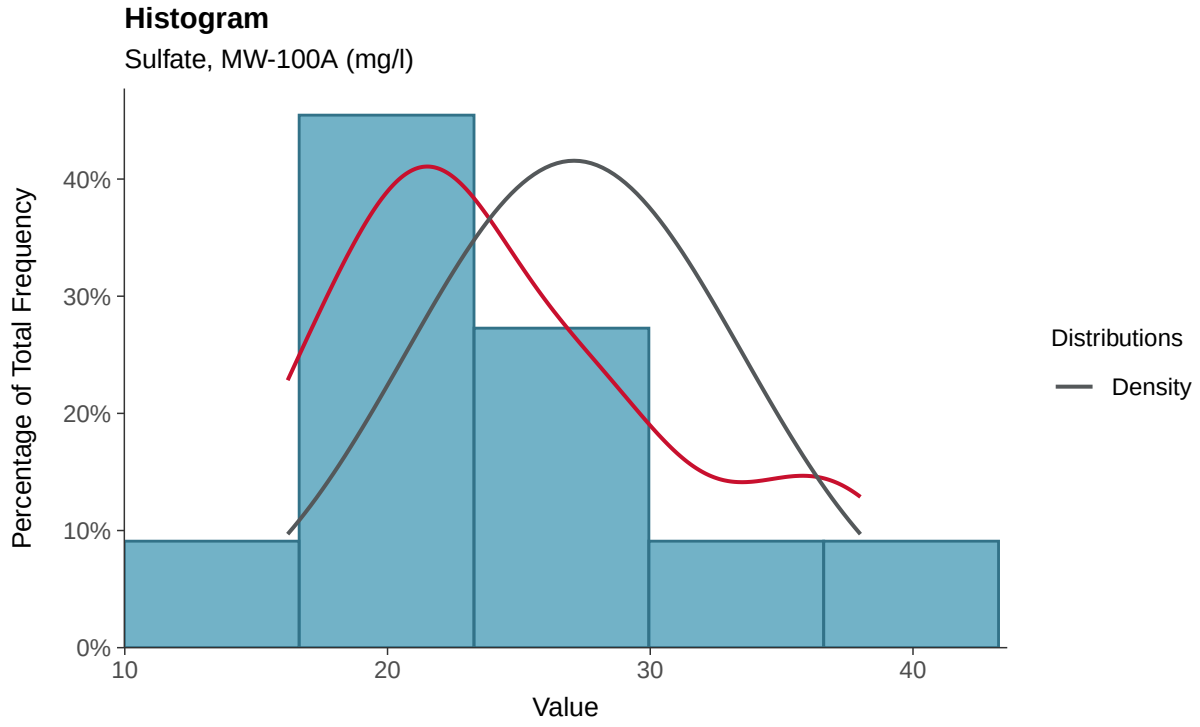
pH, Field, MW-100A (su)



Appendix III: Sulfate, MW-100A

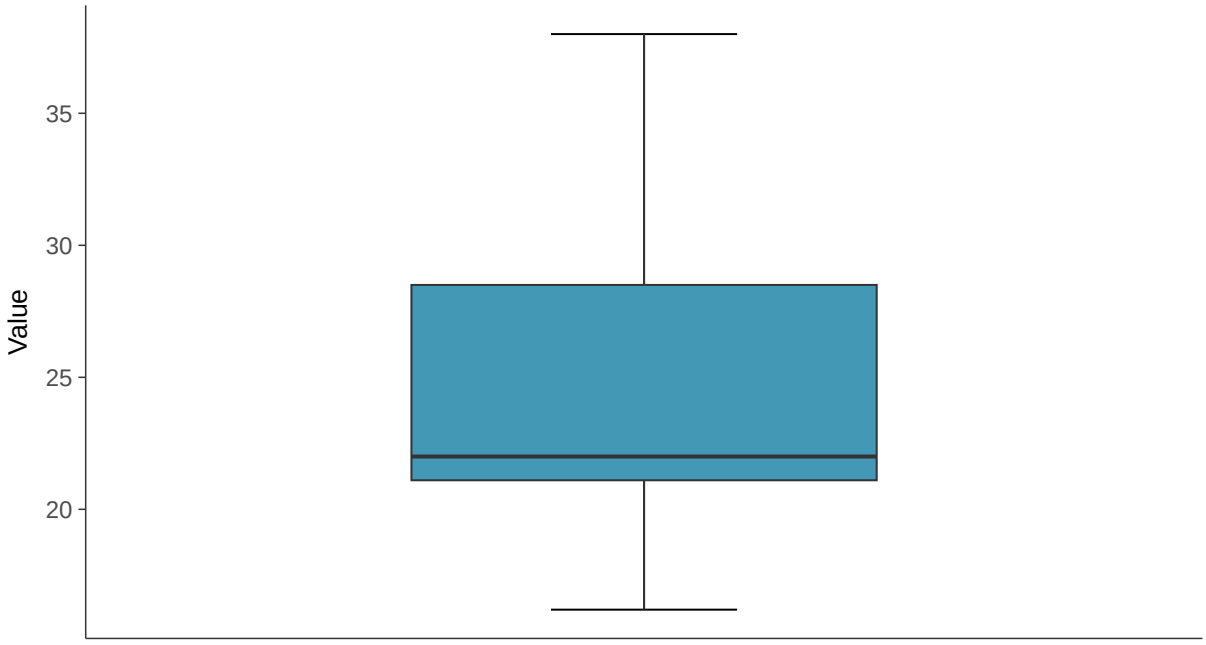
ID: 32_2_124





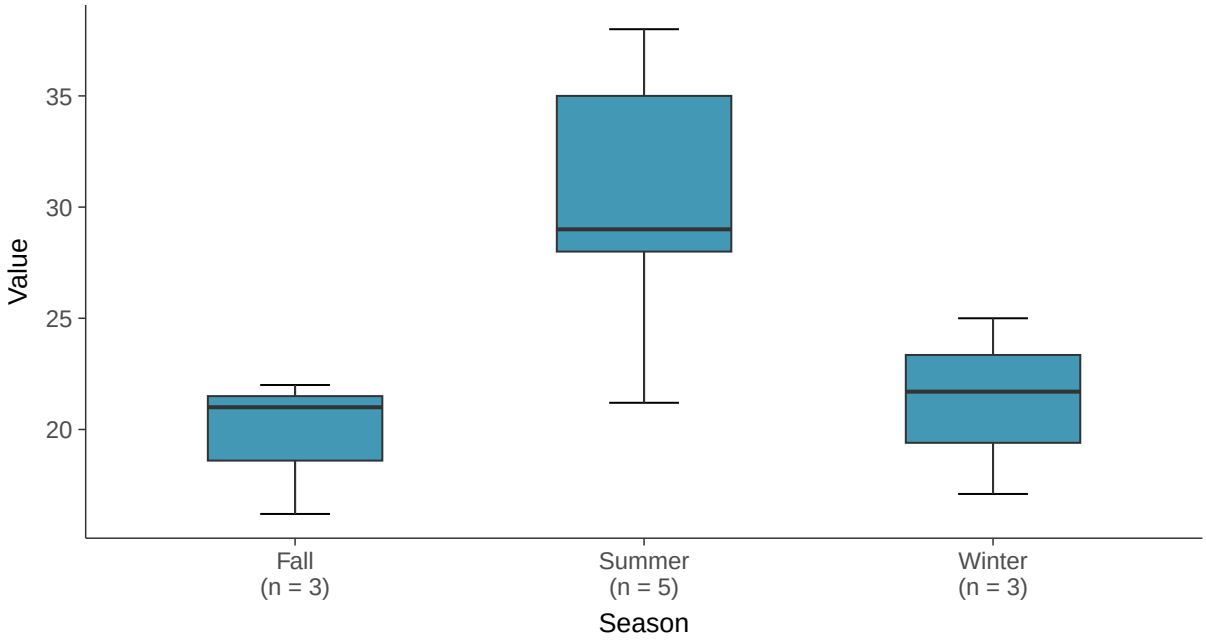
Boxplot

Sulfate, MW-100A (mg/l)



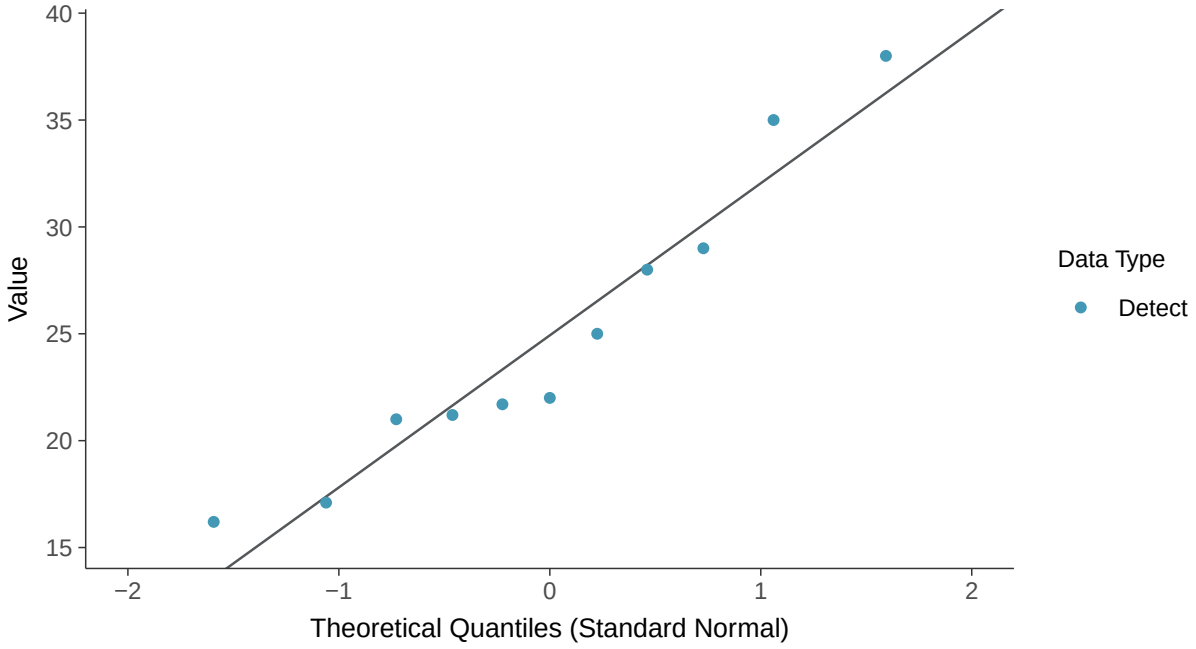
Boxplot by Season

Sulfate, MW-100A (mg/l)



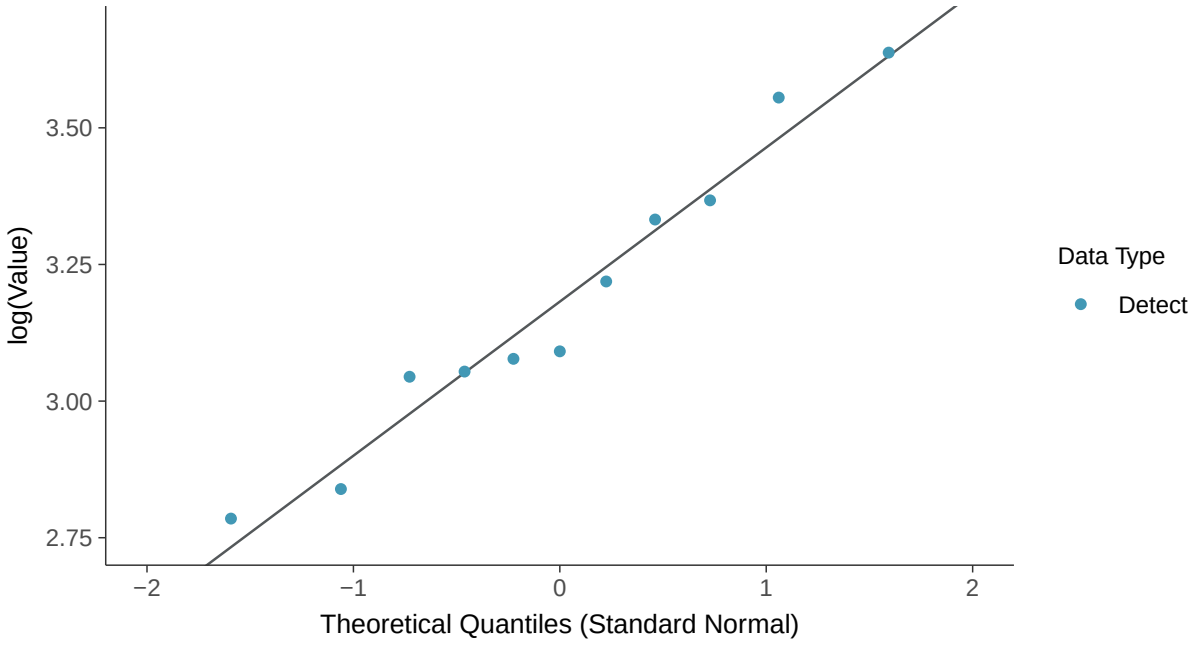
Normal Q-Q plot

Sulfate, MW-100A (mg/l)



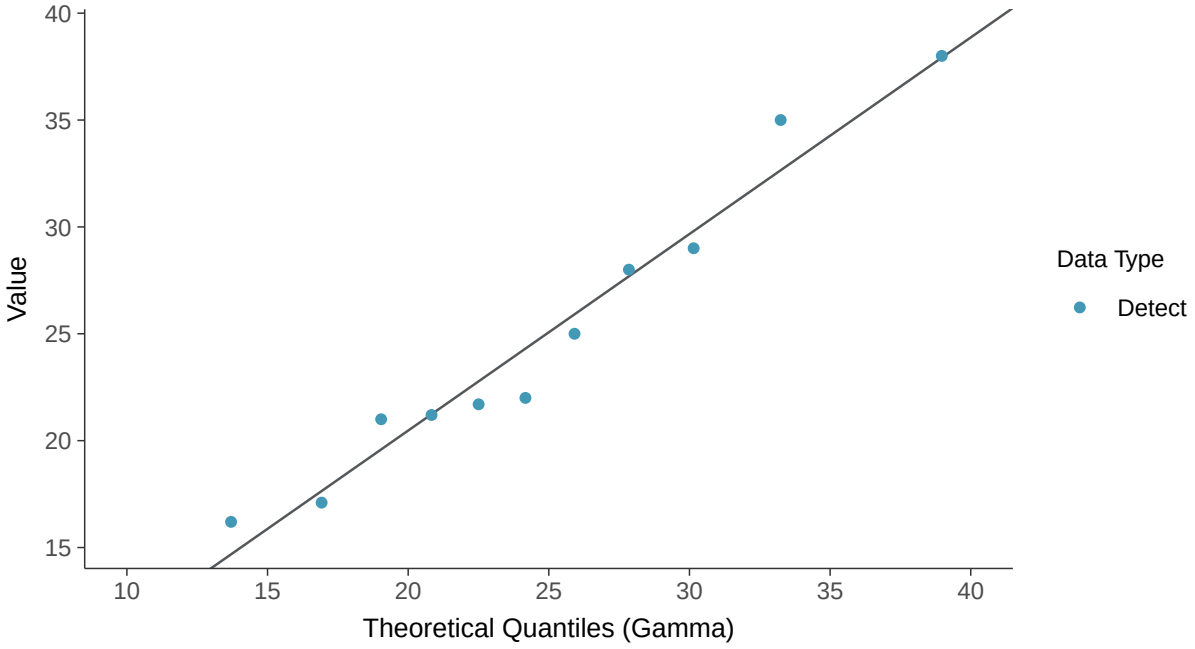
Lognormal Q-Q plot

Sulfate, MW-100A (mg/l)



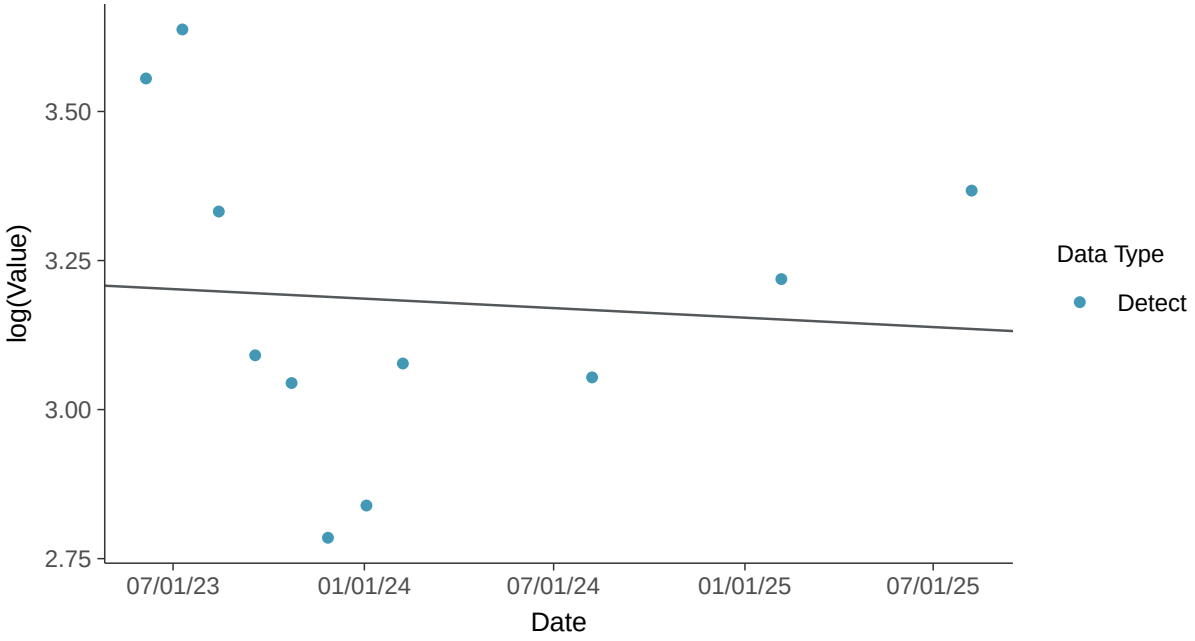
Gamma Q-Q plot

Sulfate, MW-100A (mg/l)



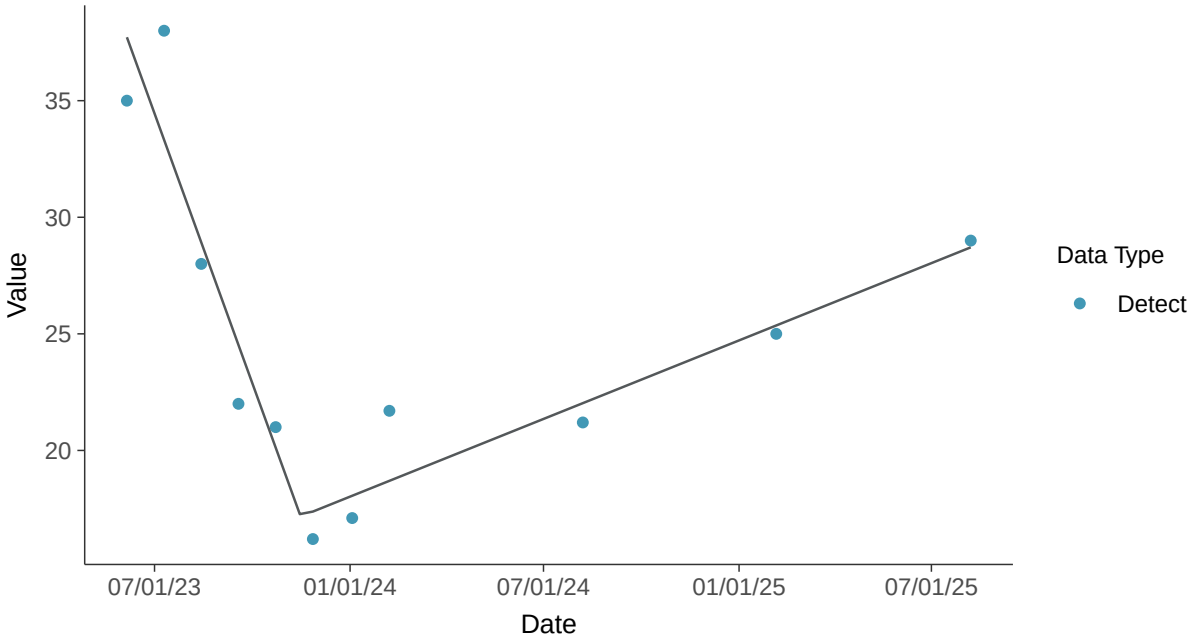
Trend Regression: Lognormal MLE

Sulfate, MW-100A (mg/l)



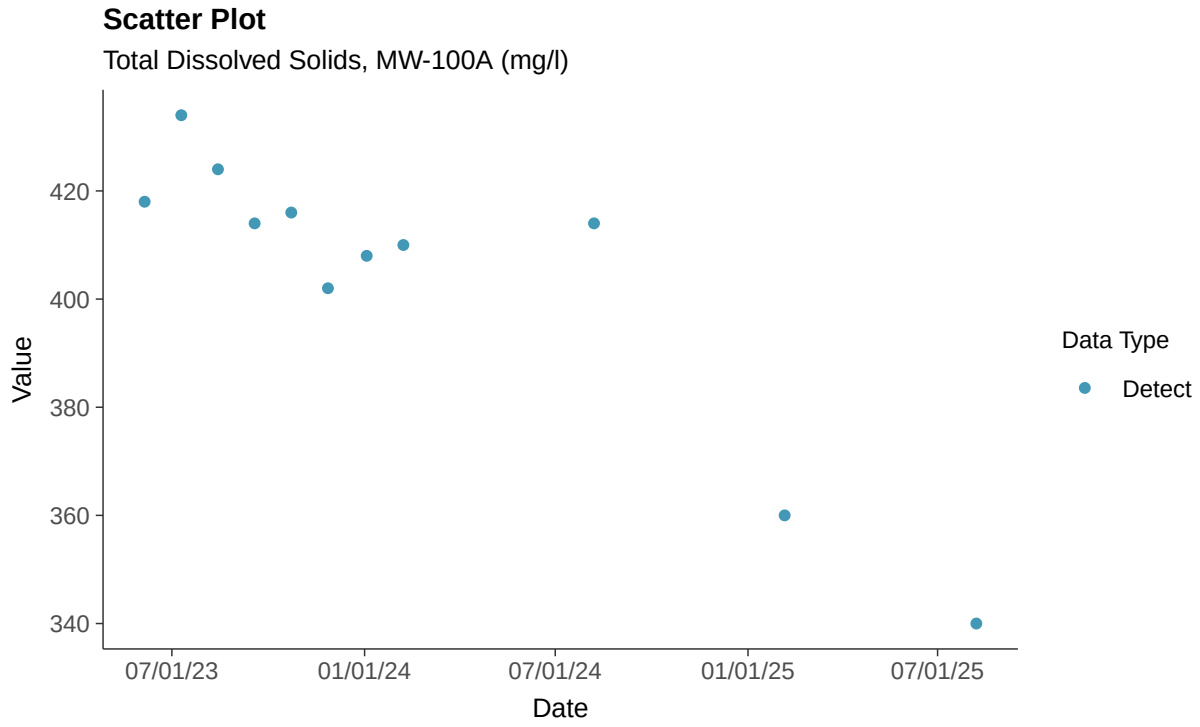
Trend Regression: Piecewise Linear-Linear

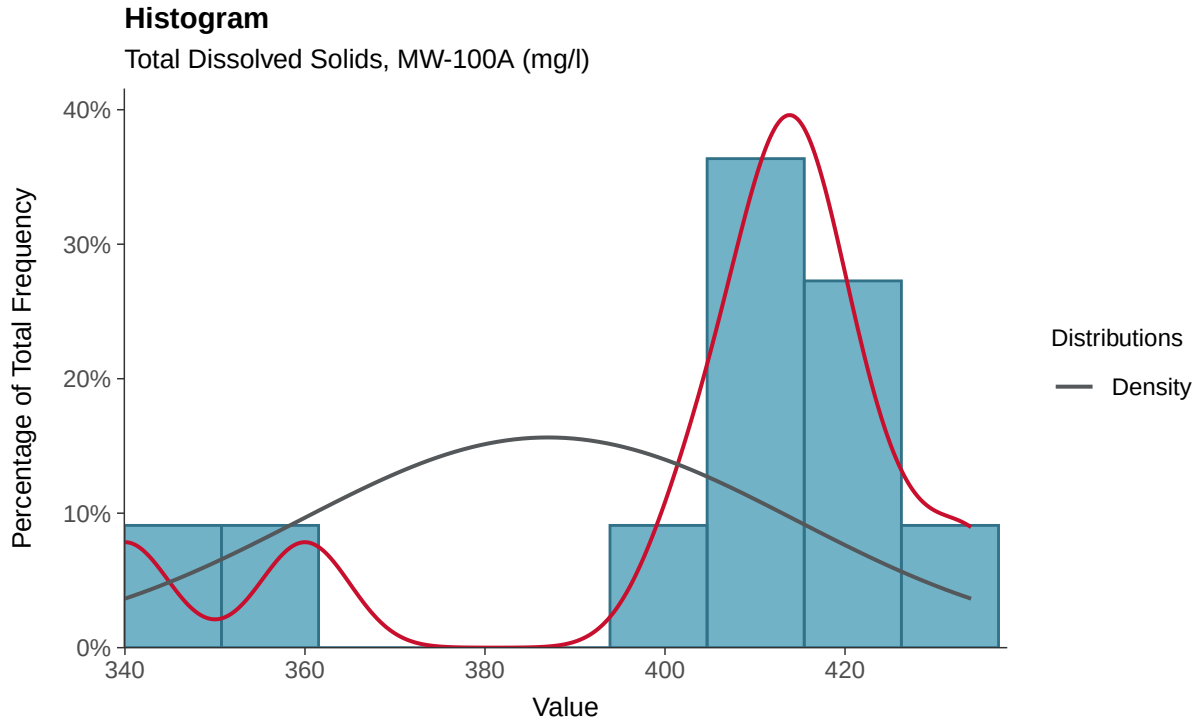
Sulfate, MW-100A (mg/l)



Appendix III: Total Dissolved Solids, MW-100A

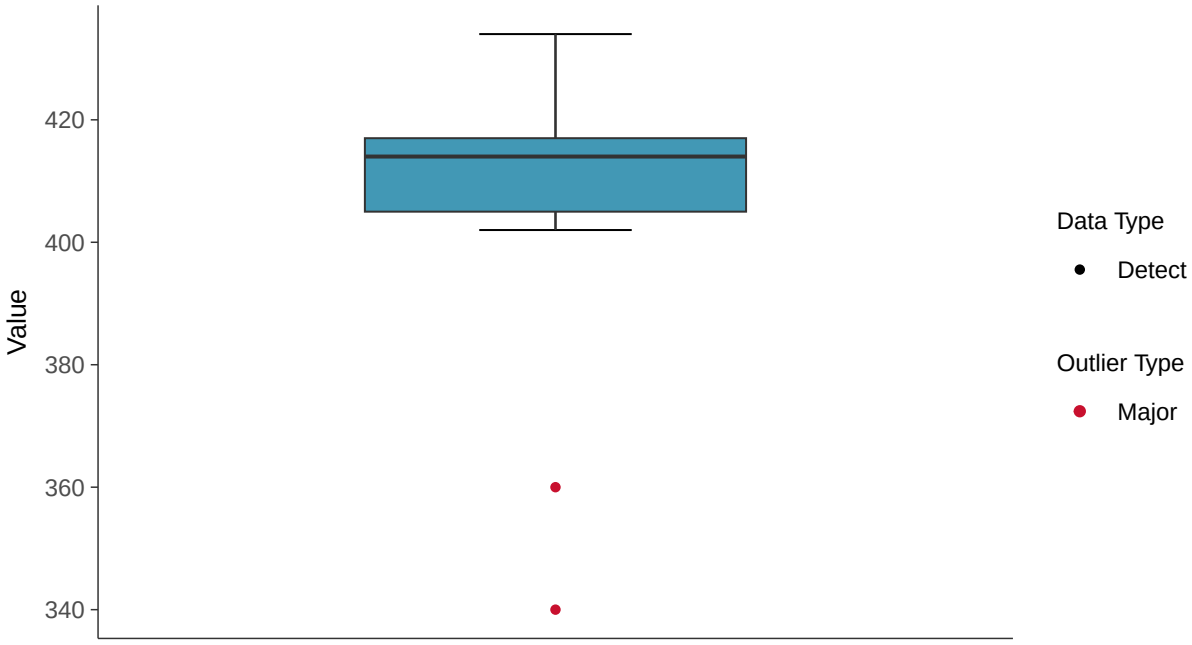
ID: 32_2_126





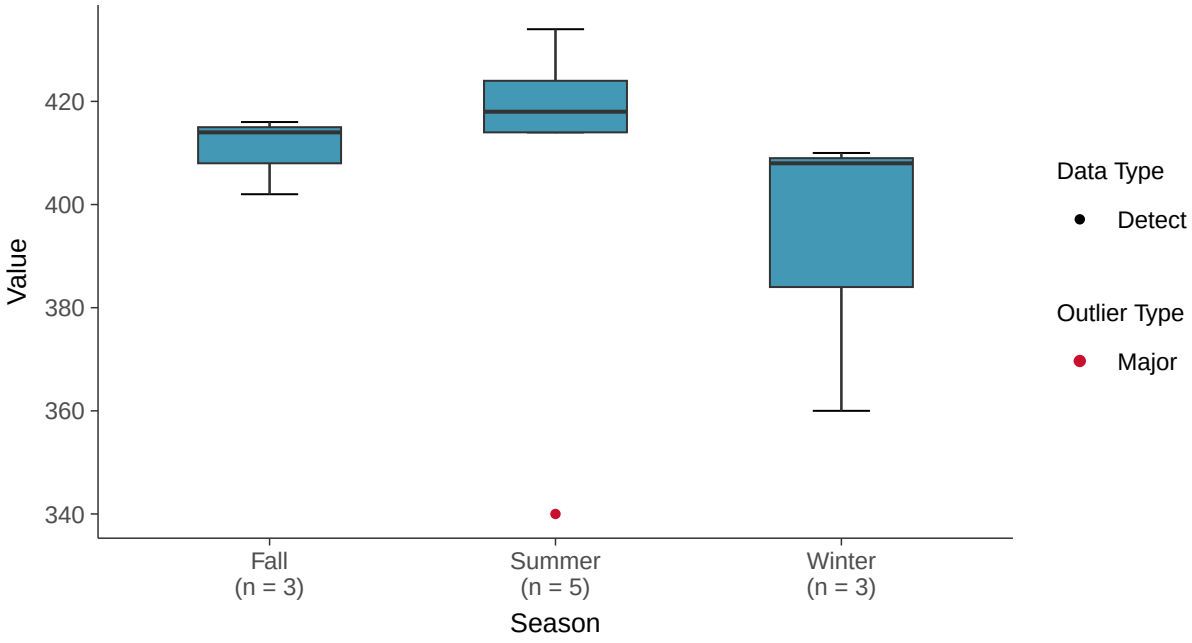
Boxplot

Total Dissolved Solids, MW-100A (mg/l)



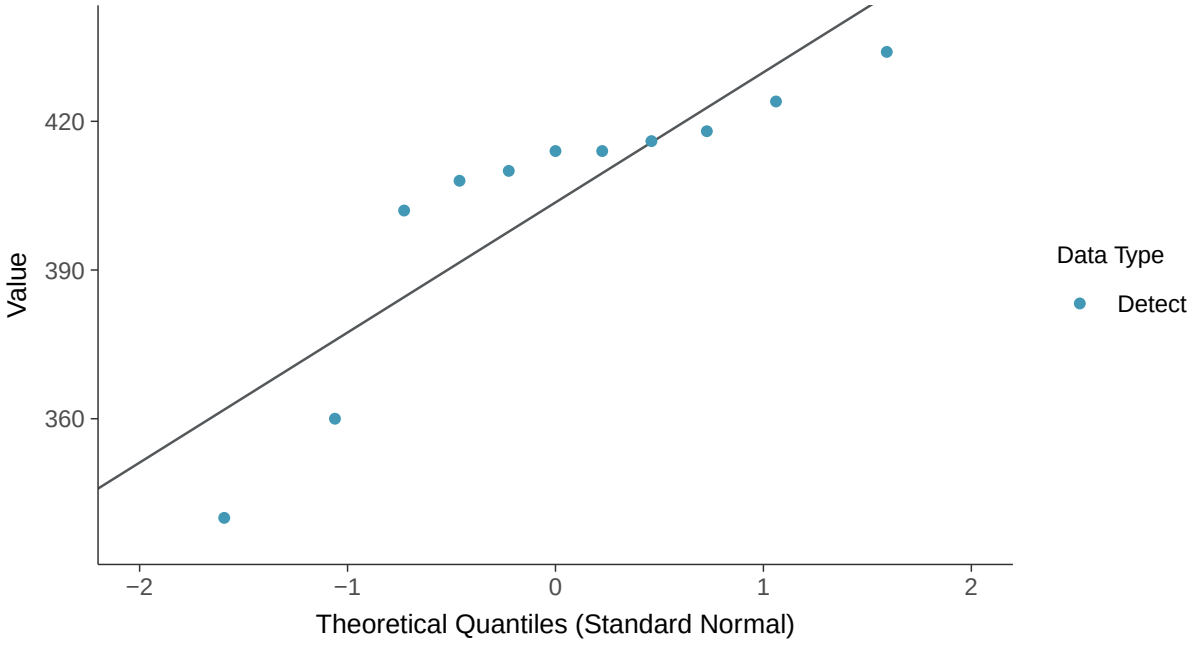
Boxplot by Season

Total Dissolved Solids, MW-100A (mg/l)



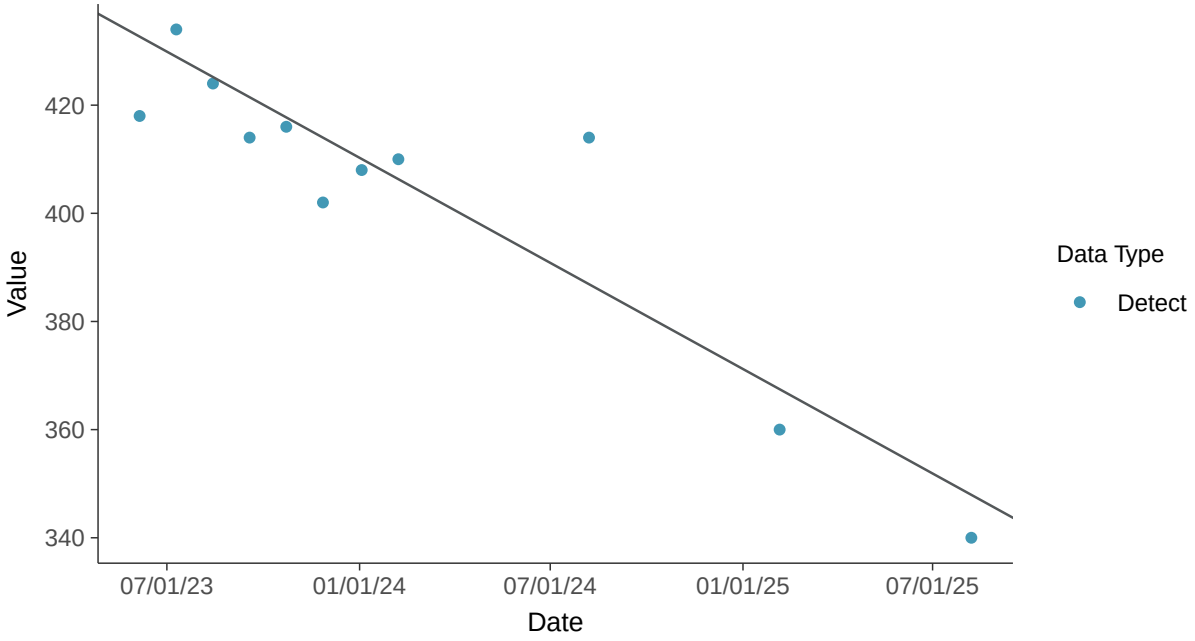
Normal Q-Q plot

Total Dissolved Solids, MW-100A (mg/l)



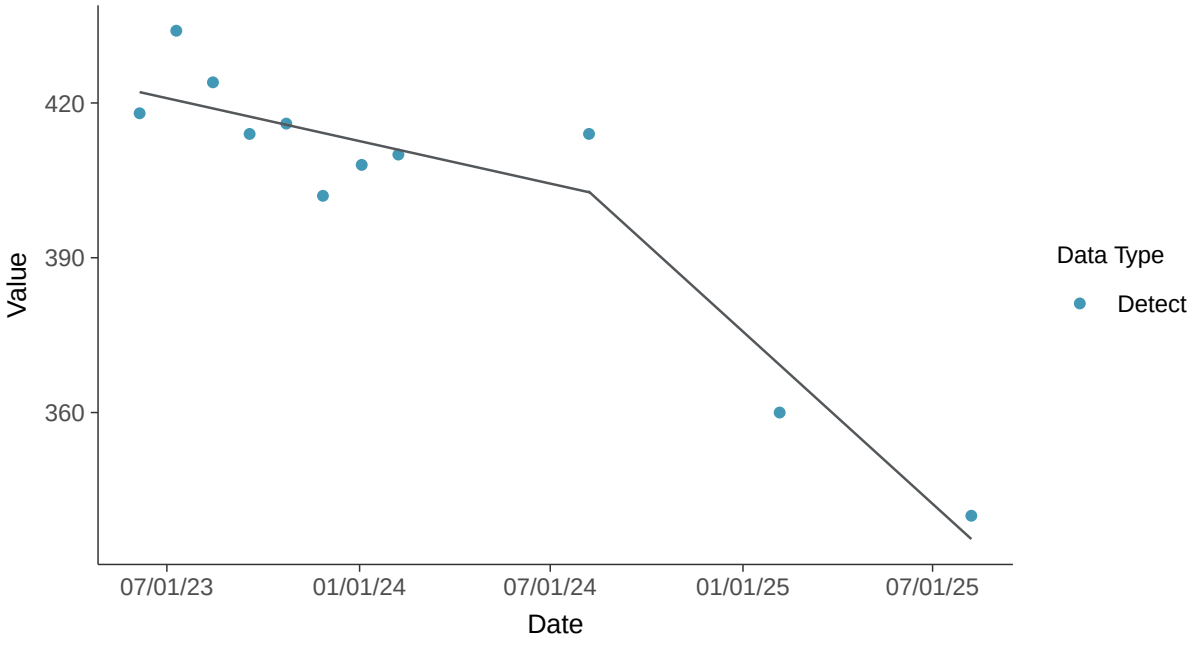
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Total Dissolved Solids, MW-100A (mg/l)



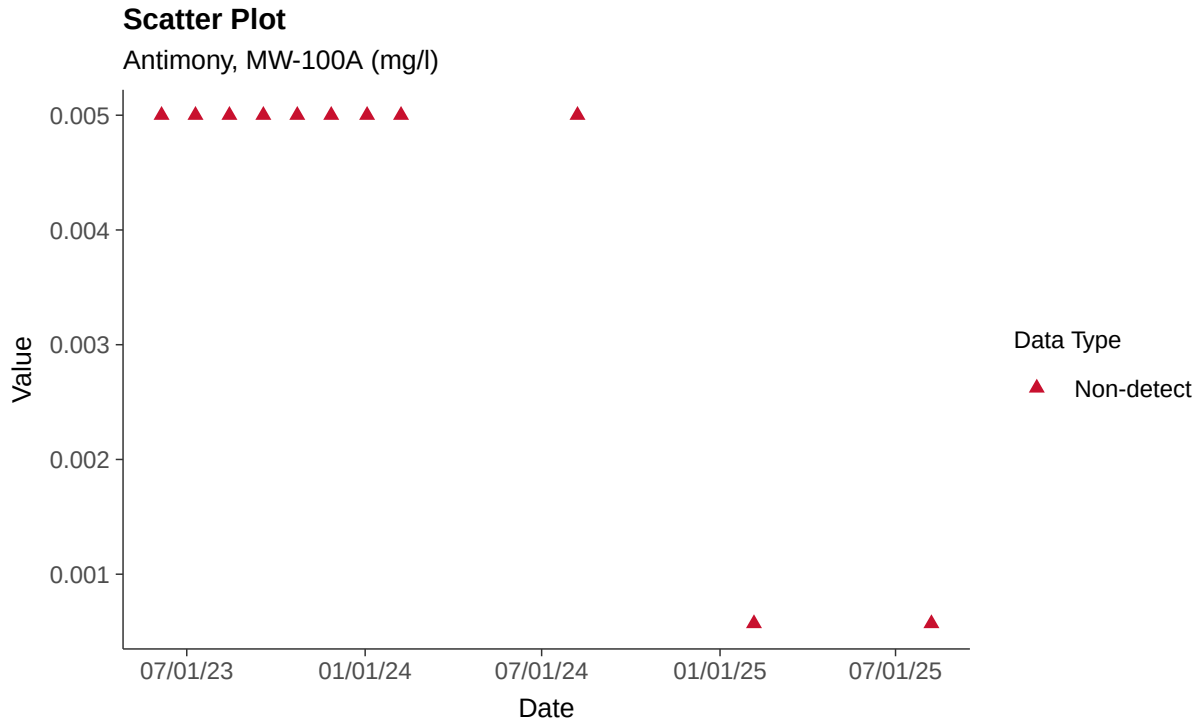
Trend Regression: Piecewise Linear-Linear

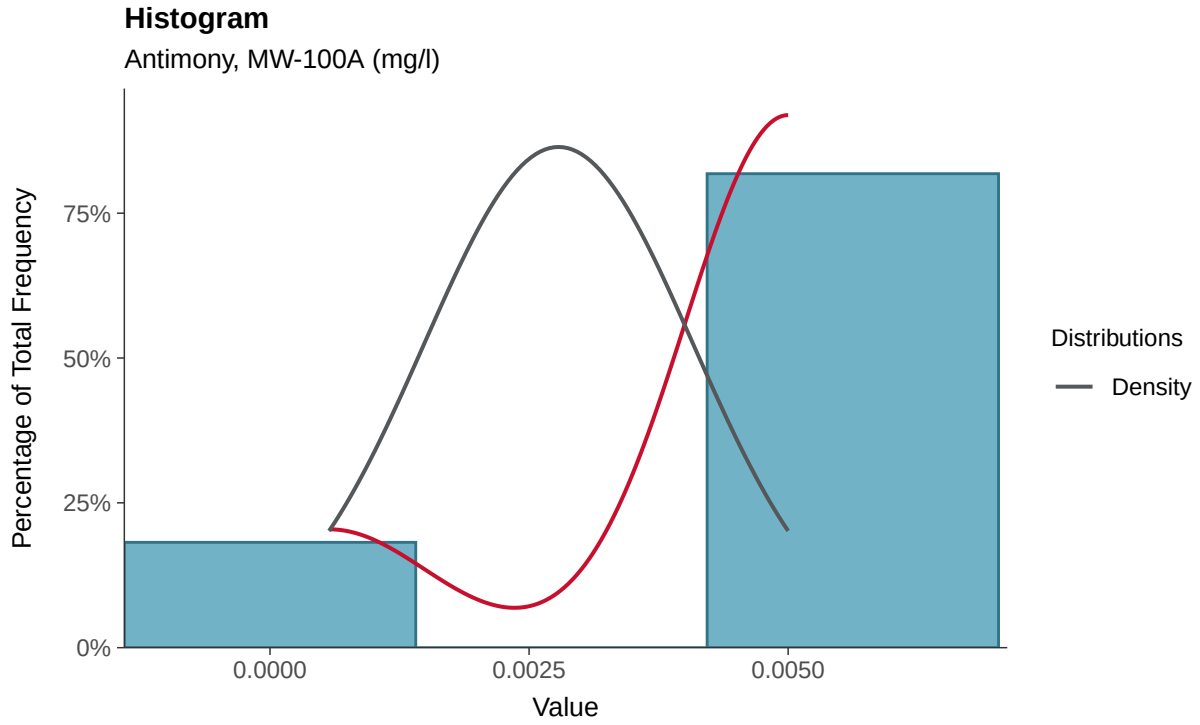
Total Dissolved Solids, MW-100A (mg/l)



Appendix IV: Antimony, MW-100A

ID: 32_3_101



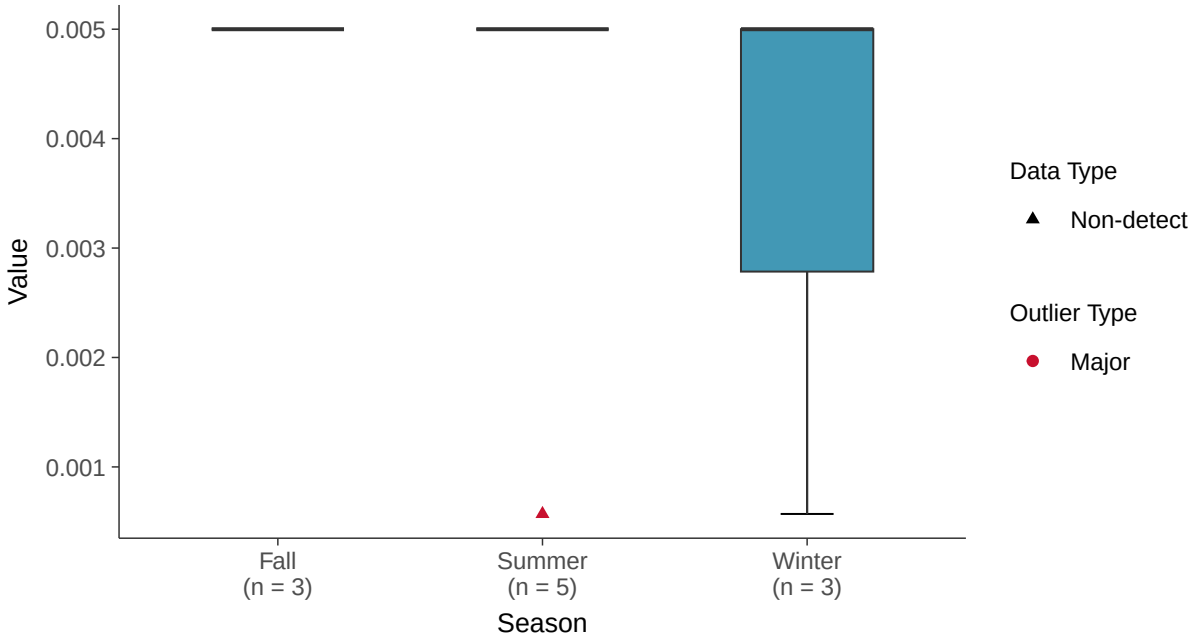


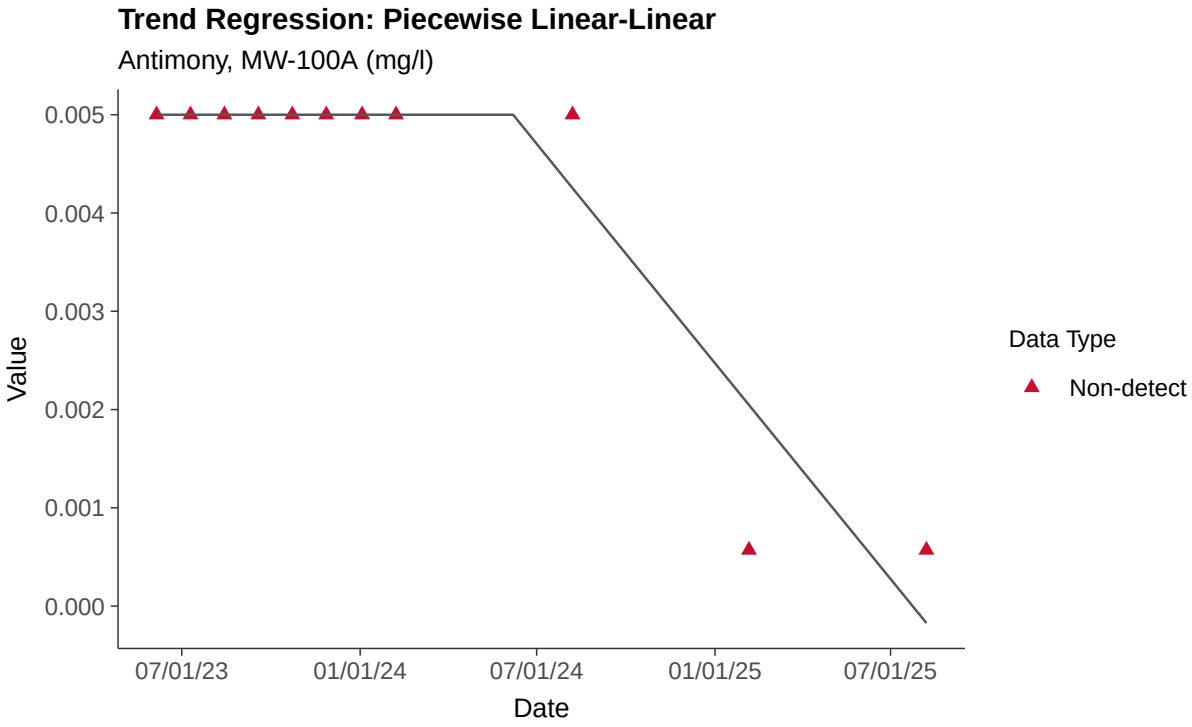
Boxplot

Antimony, MW-100A (mg/l)

Boxplot by Season

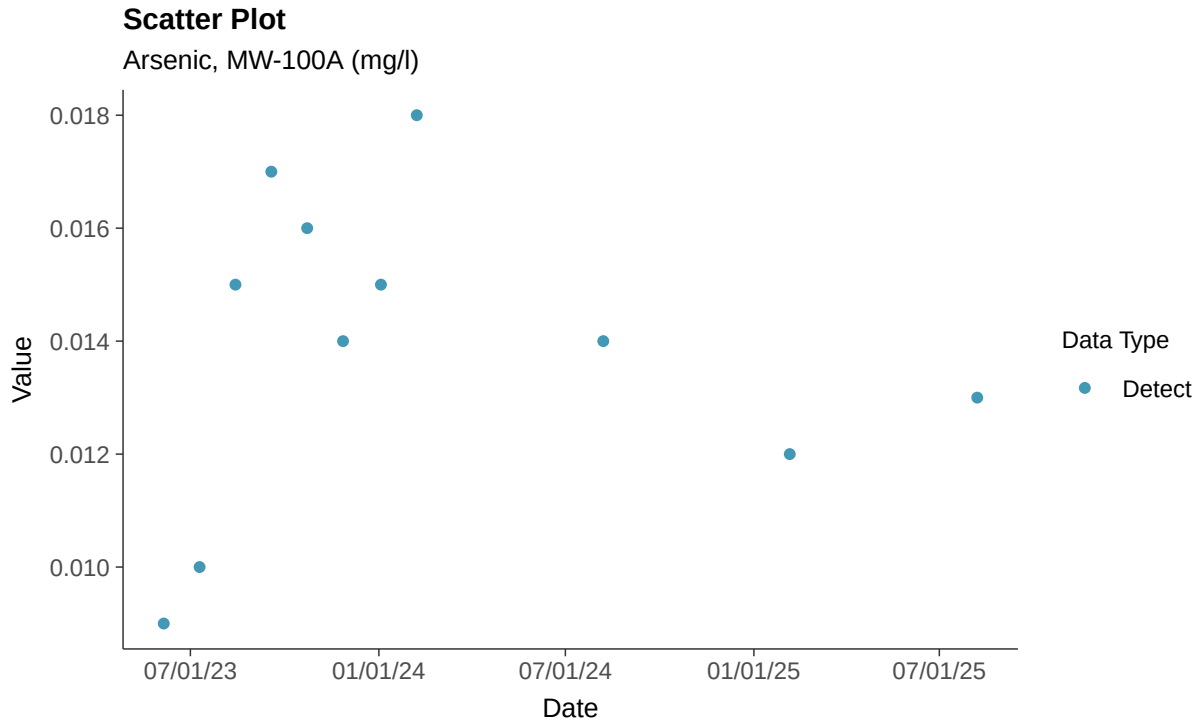
Antimony, MW-100A (mg/l)

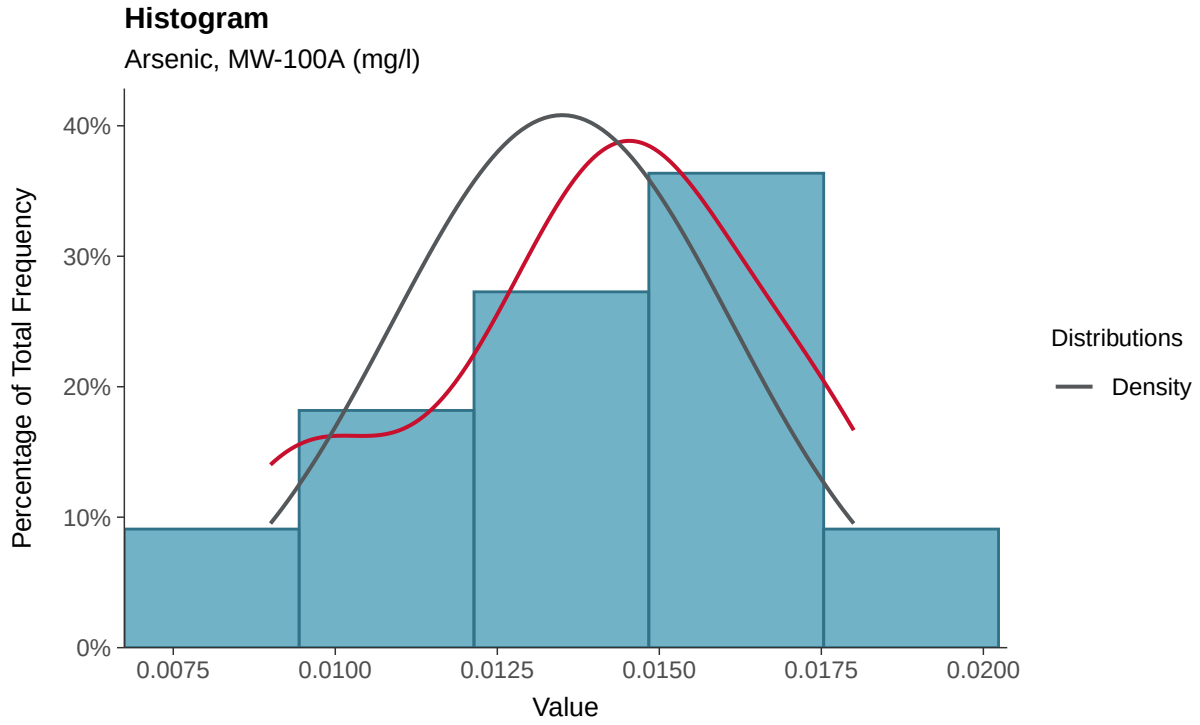



Trend Regression: Piecewise Linear-Linear
Antimony, MW-100A (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Arsenic, MW-100A

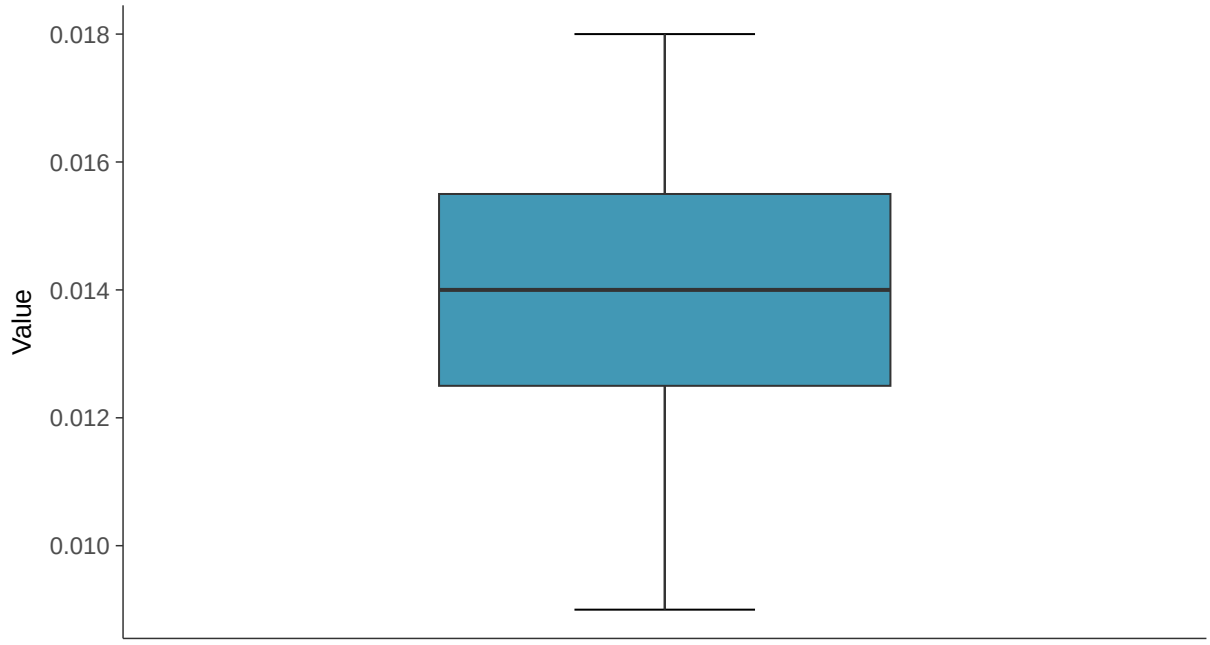
ID: 32_3_102





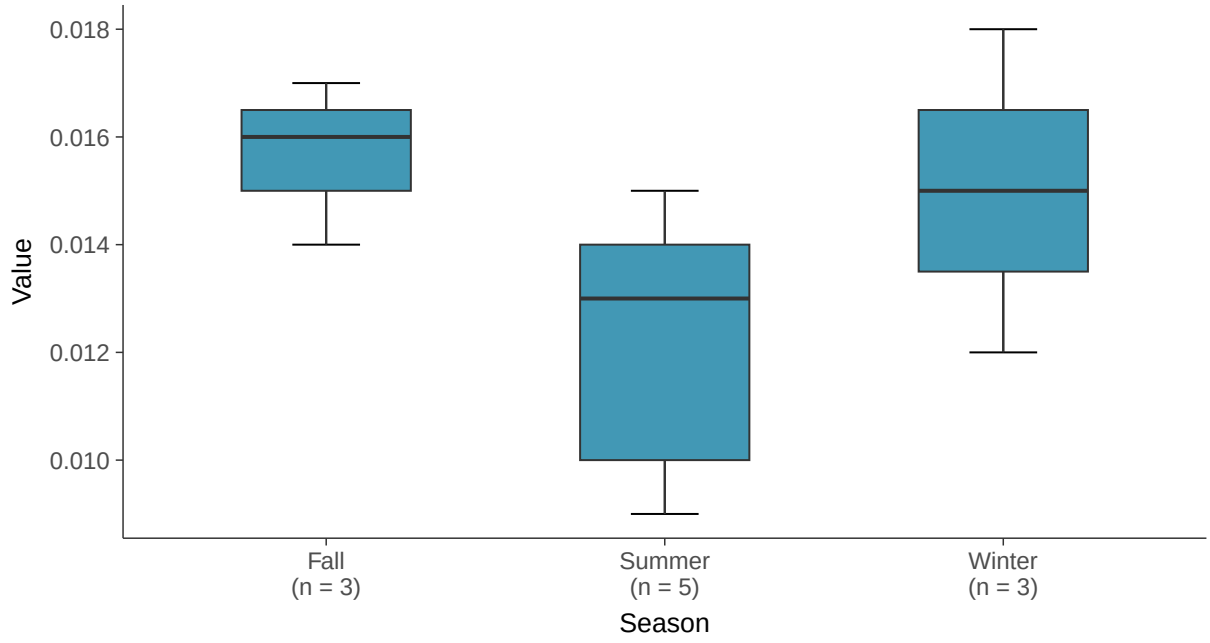
Boxplot

Arsenic, MW-100A (mg/l)



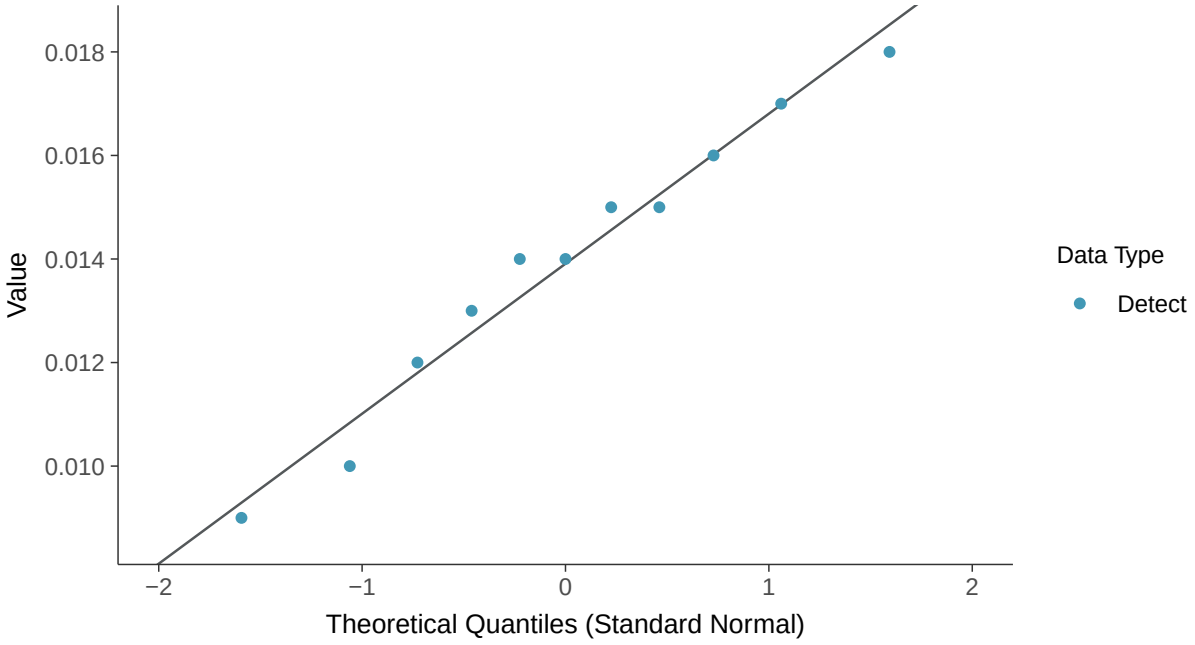
Boxplot by Season

Arsenic, MW-100A (mg/l)



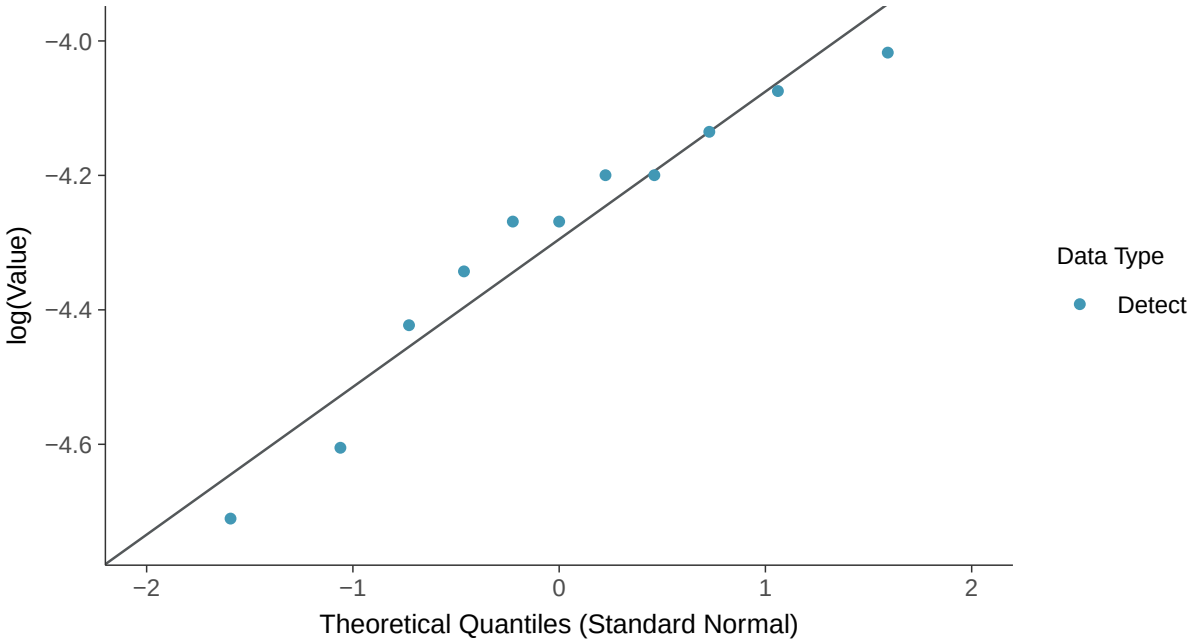
Normal Q-Q plot

Arsenic, MW-100A (mg/l)



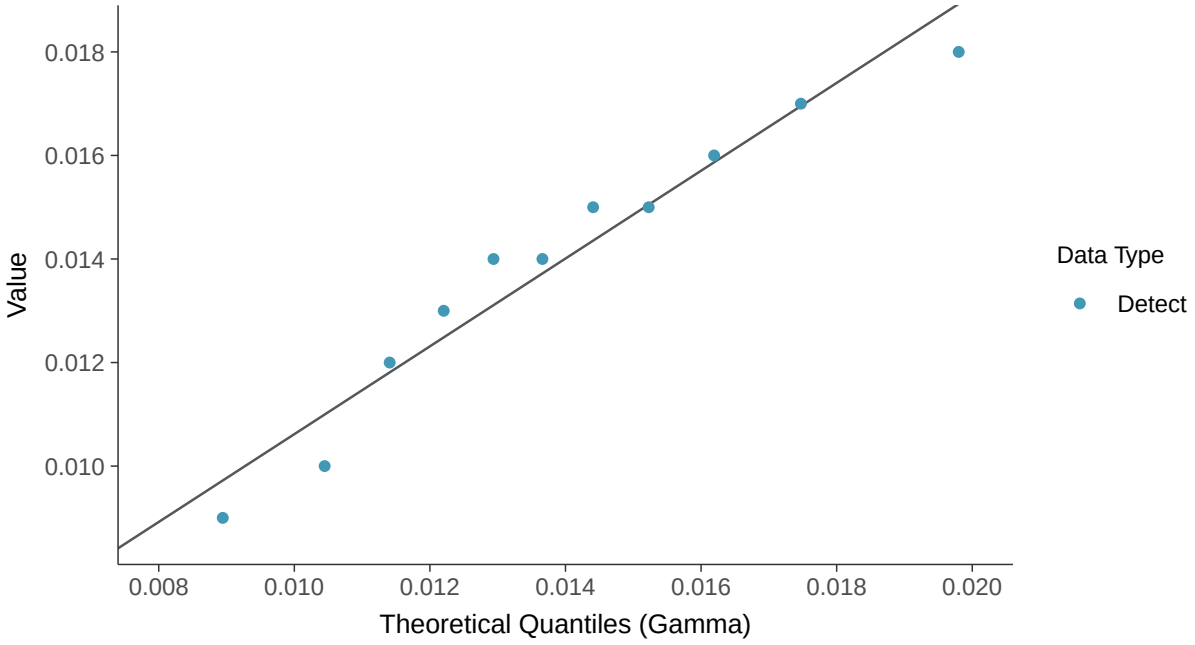
Lognormal Q-Q plot

Arsenic, MW-100A (mg/l)



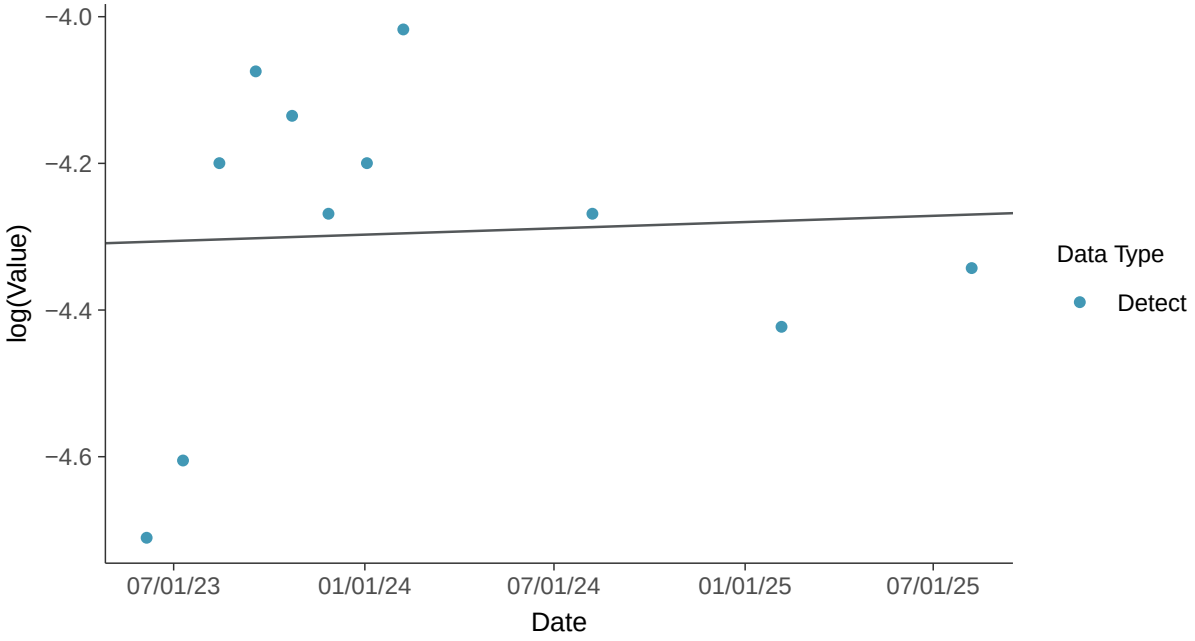
Gamma Q-Q plot

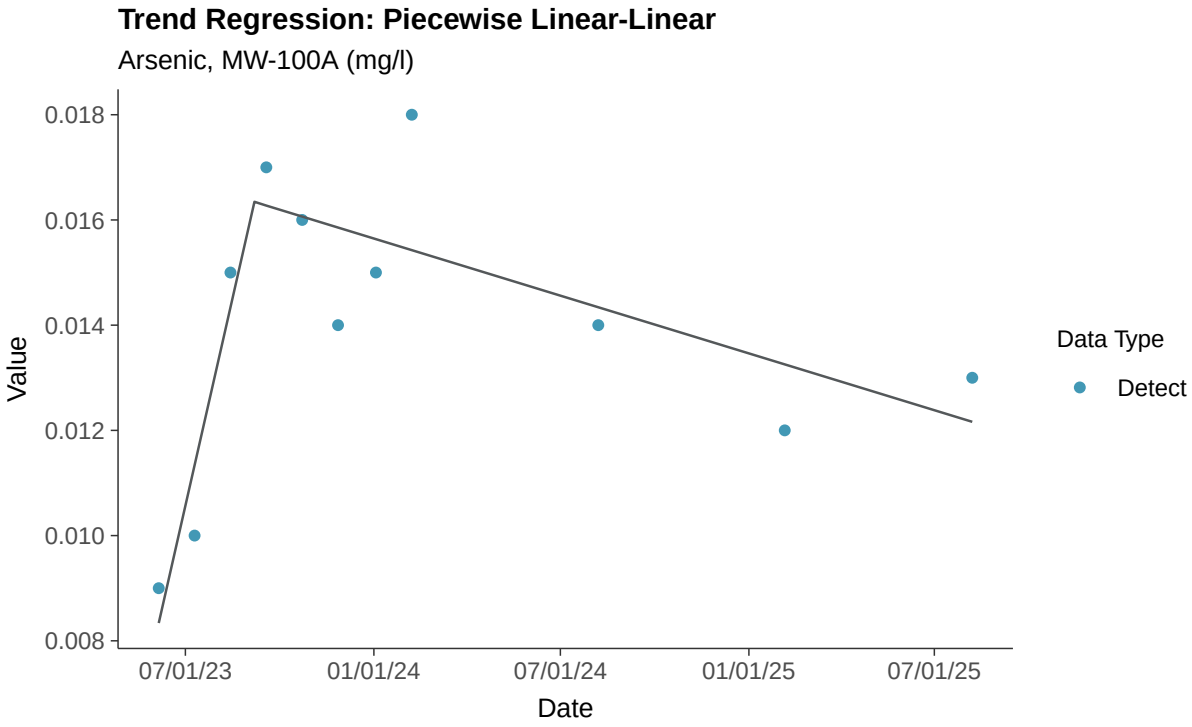
Arsenic, MW-100A (mg/l)



Trend Regression: Lognormal MLE

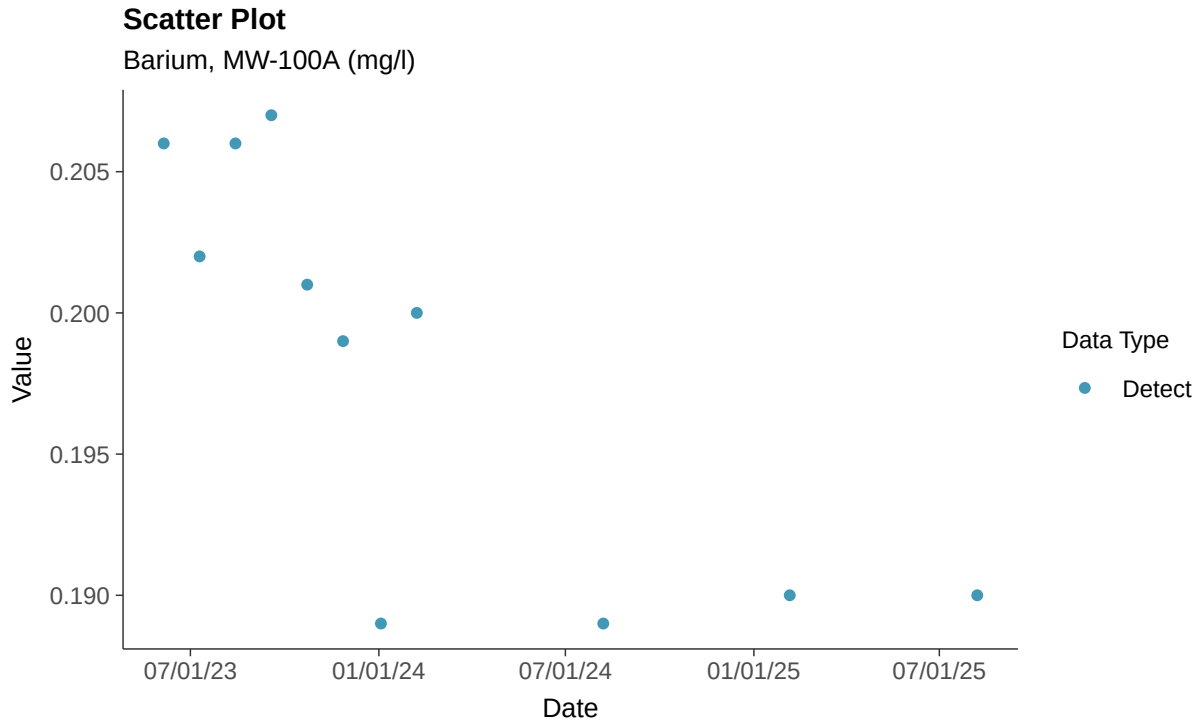
Arsenic, MW-100A (mg/l)

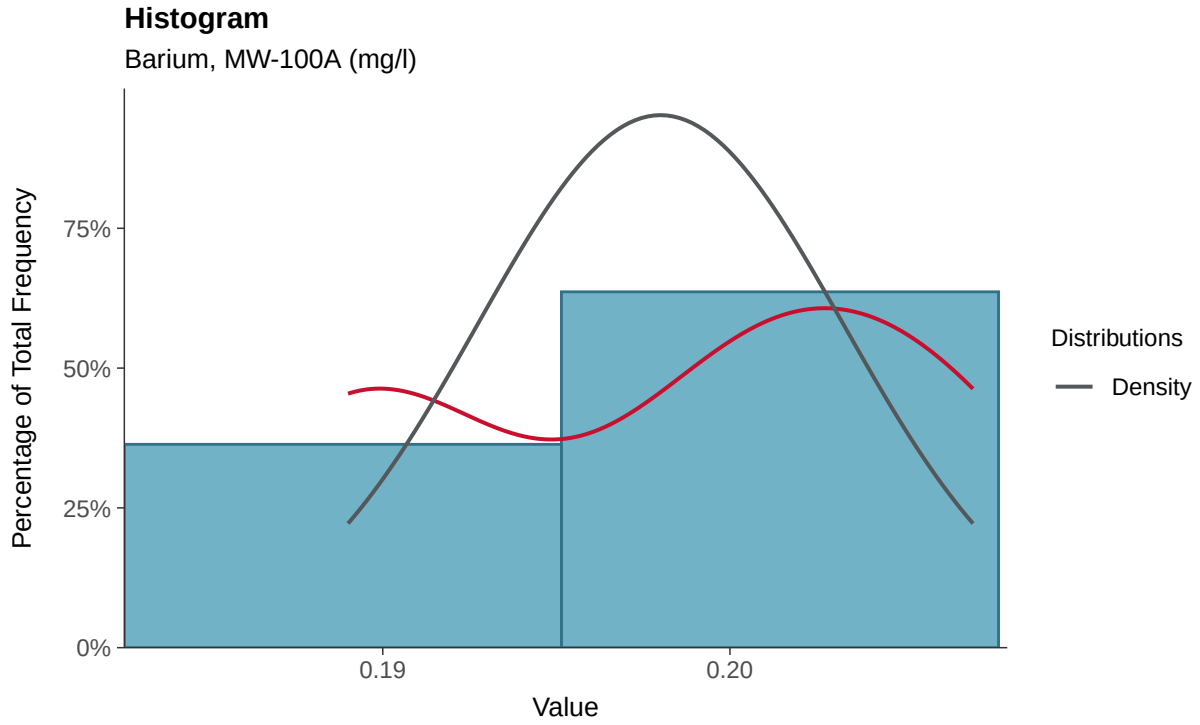



Trend Regression: Piecewise Linear-Linear
Arsenic, MW-100A (mg/l)
0.018
0.016
0.014
0.012
0.010
0.008
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect

Appendix IV: Barium, MW-100A

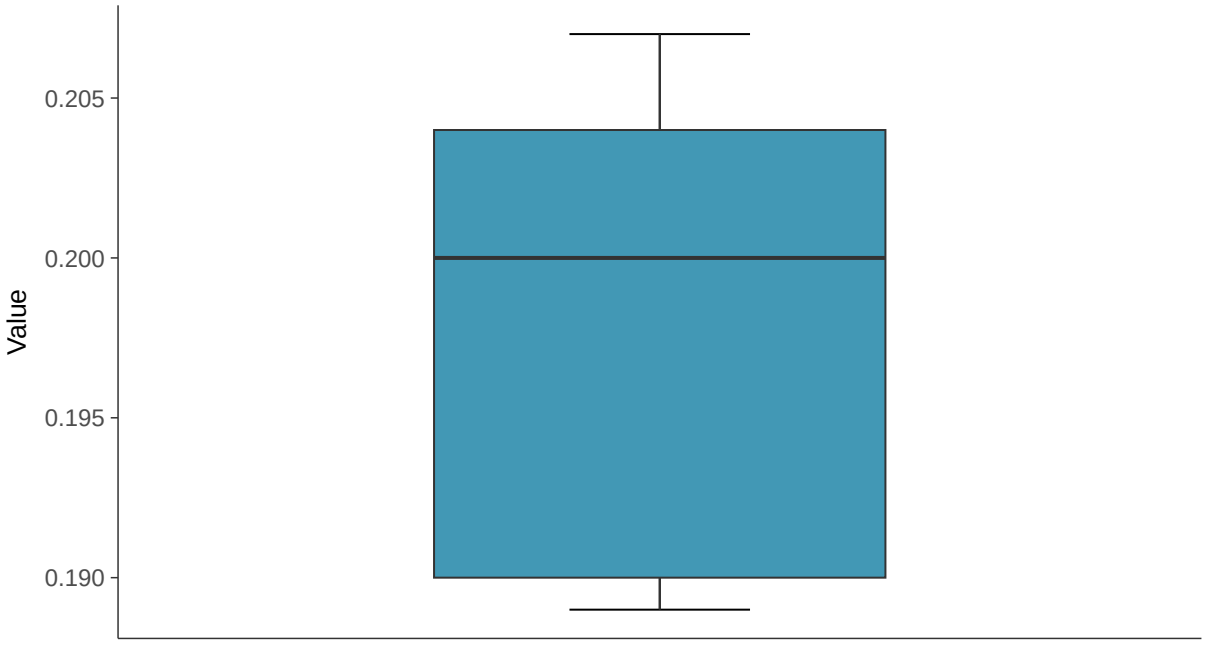
ID: 32_3_103





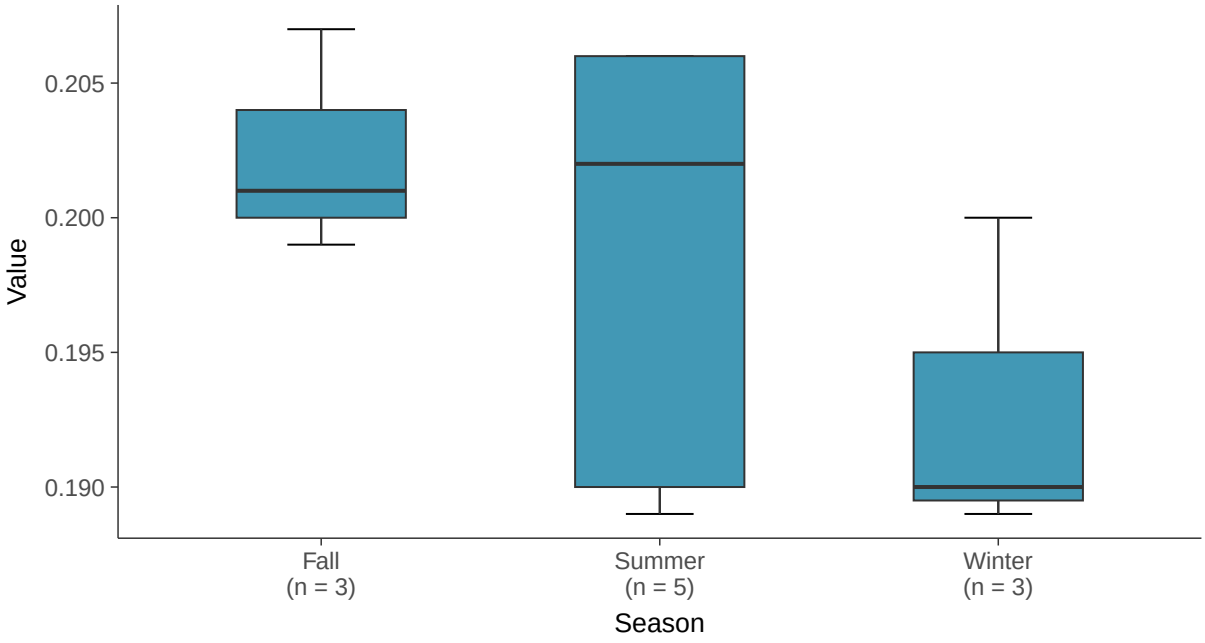
Boxplot

Barium, MW-100A (mg/l)



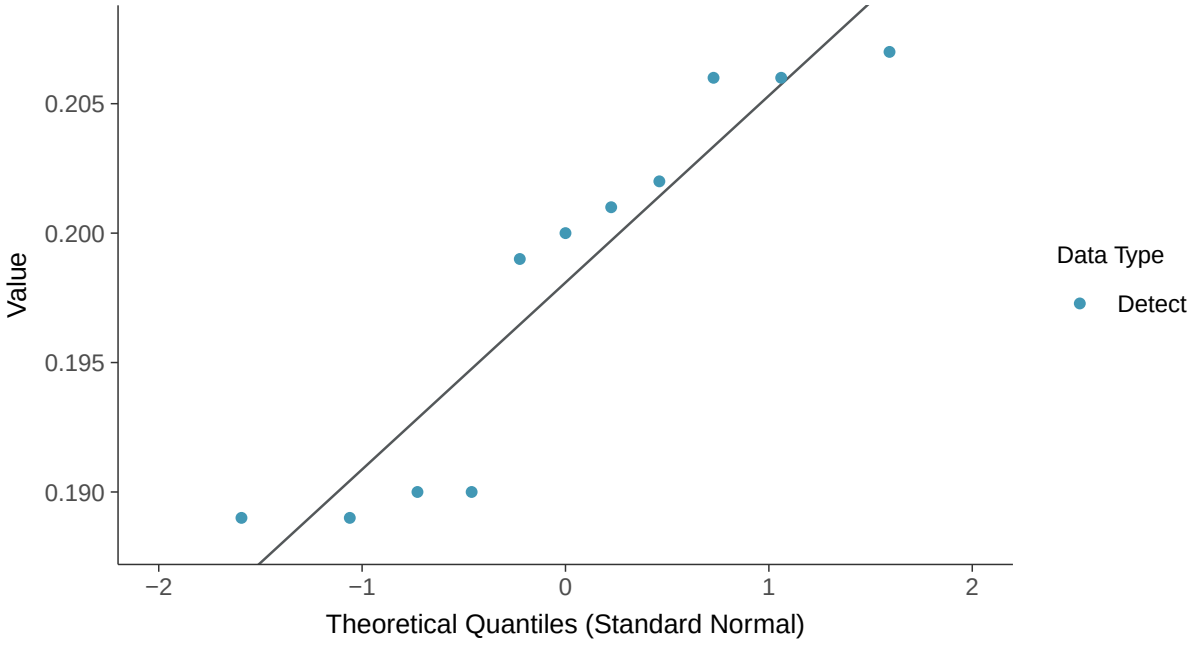
Boxplot by Season

Barium, MW-100A (mg/l)



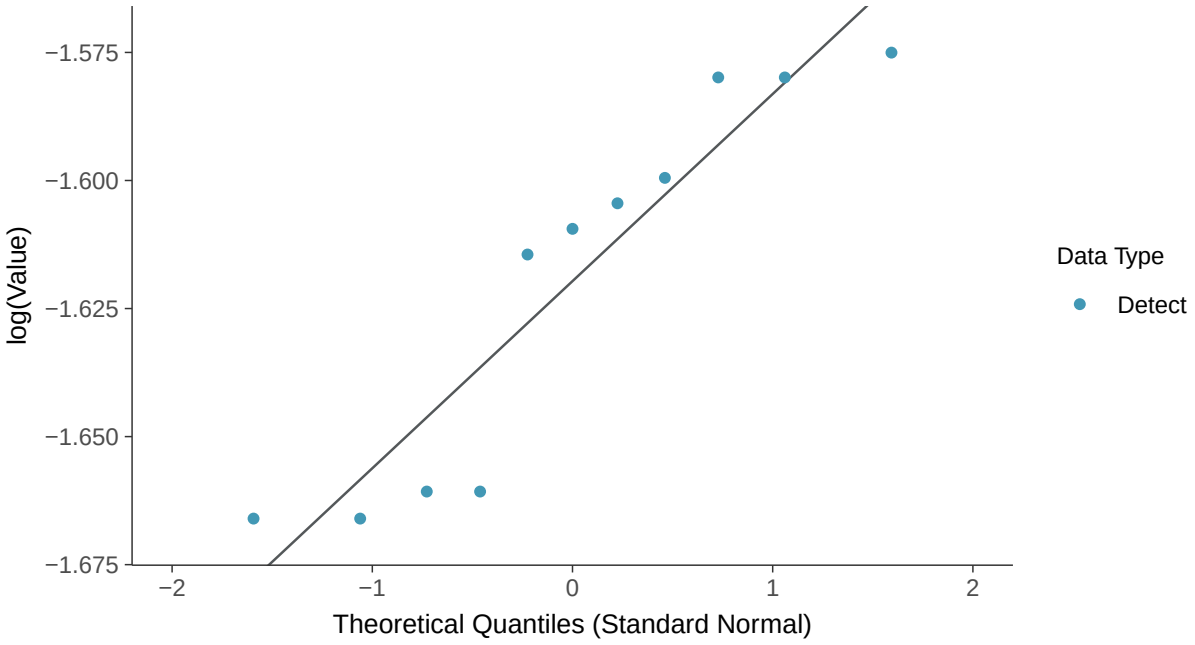
Normal Q-Q plot

Barium, MW-100A (mg/l)



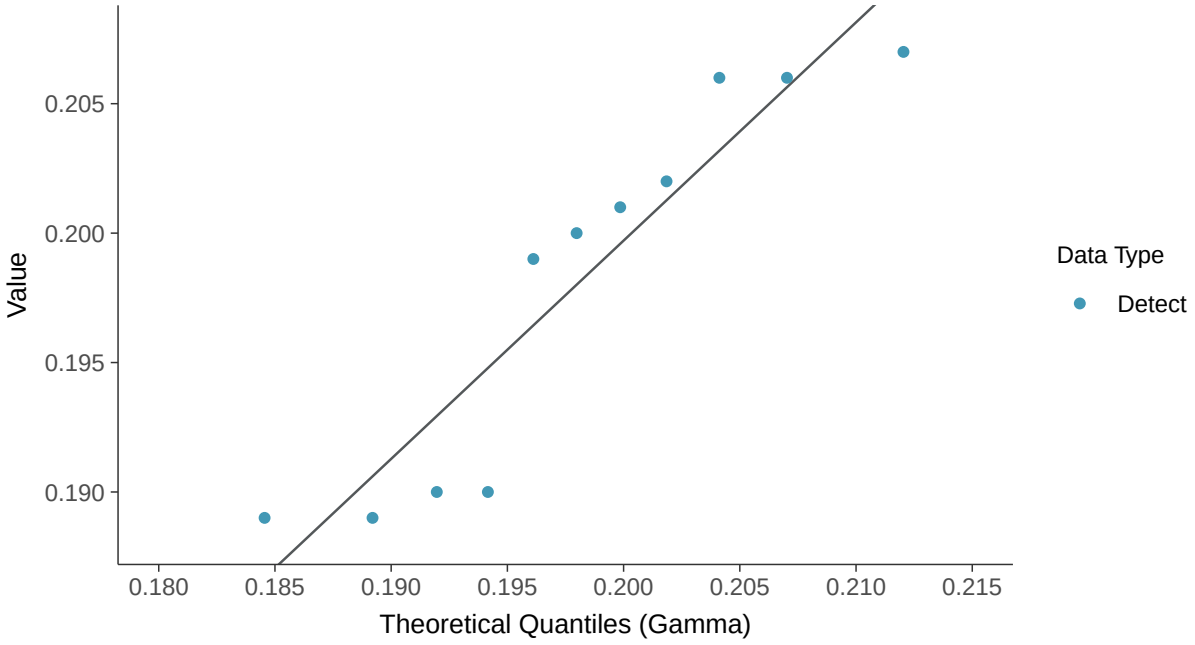
Lognormal Q-Q plot

Barium, MW-100A (mg/l)



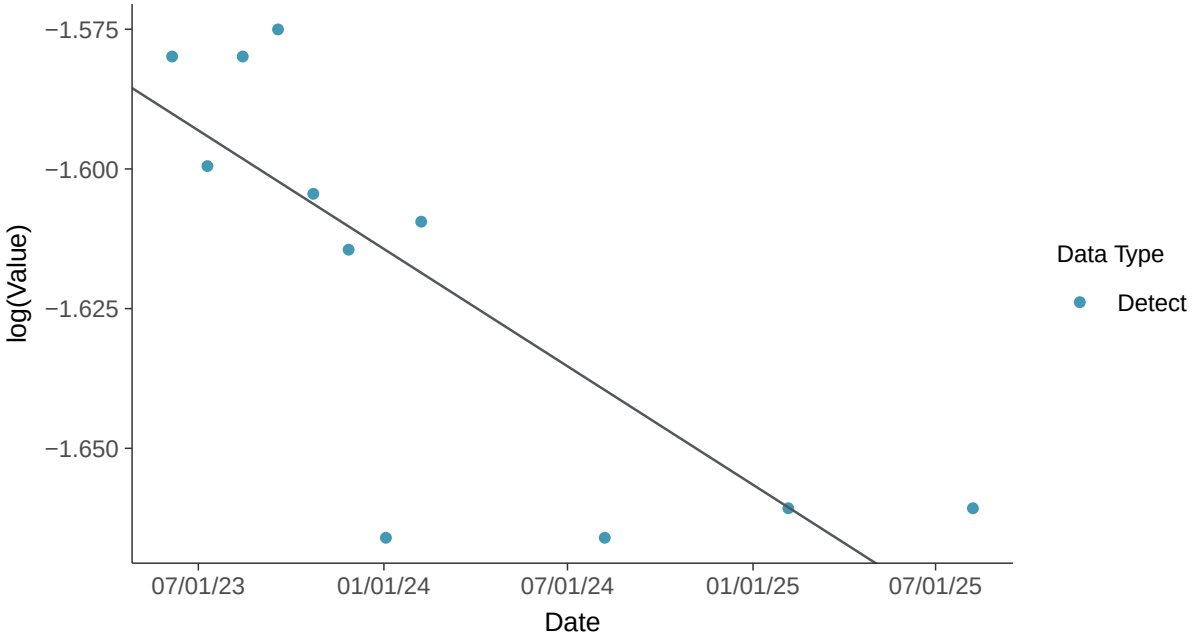
Gamma Q-Q plot

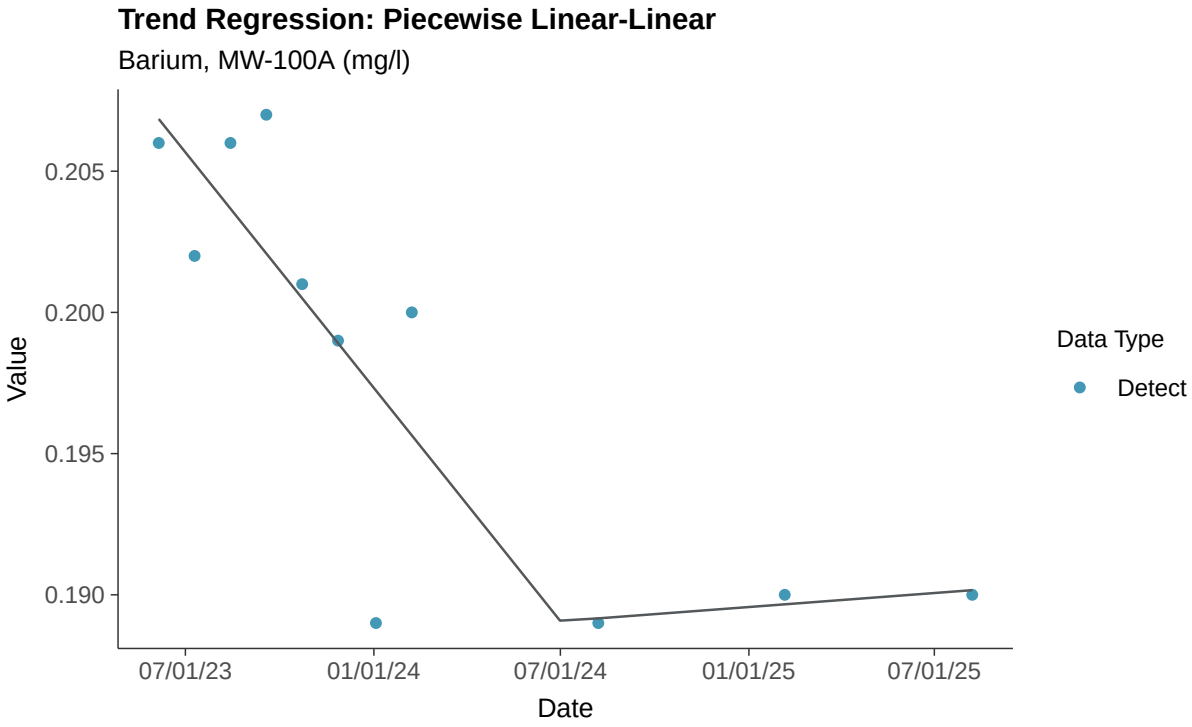
Barium, MW-100A (mg/l)



Trend Regression: Lognormal MLE

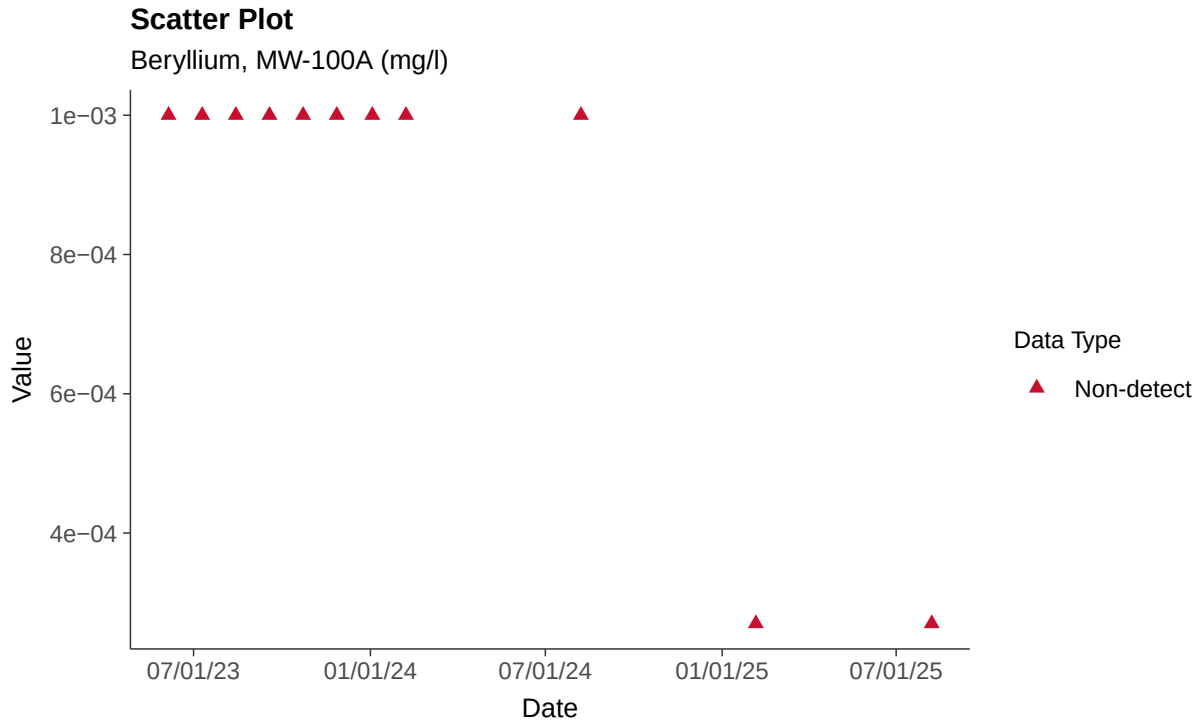
Barium, MW-100A (mg/l)

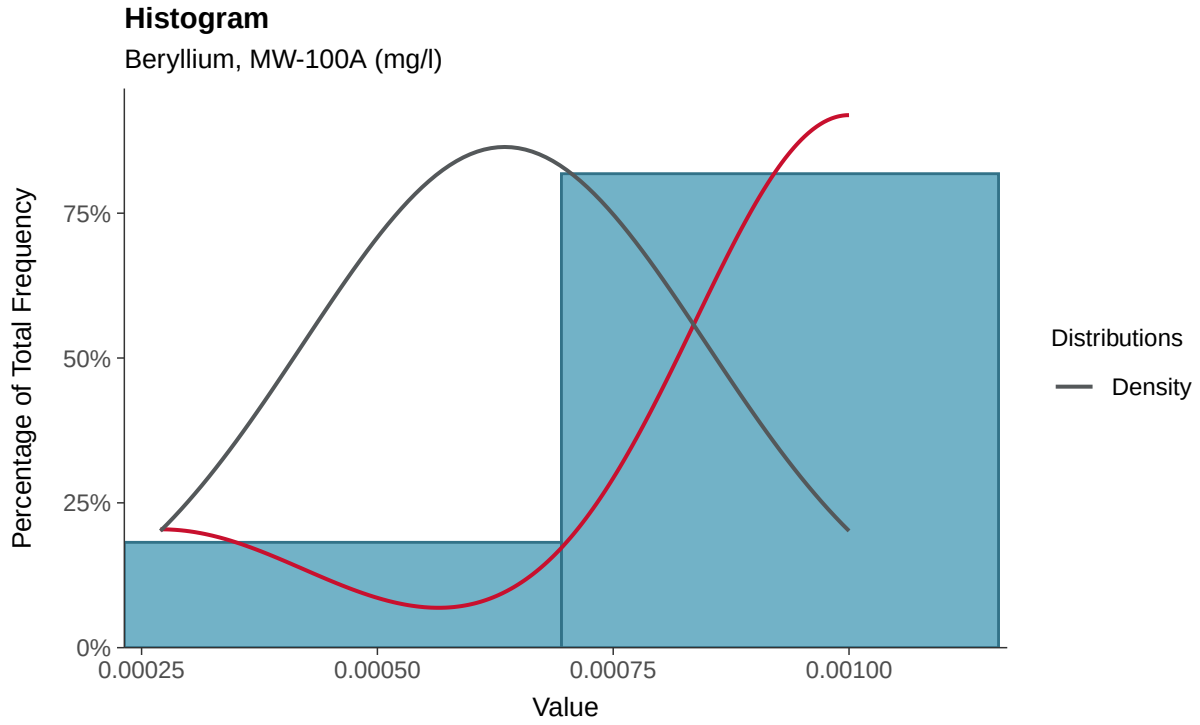



Trend Regression: Piecewise Linear-Linear
Barium, MW-100A (mg/l)
0.205
0.200
0.195
0.190
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect

Appendix IV: Beryllium, MW-100A

ID: 32_3_104



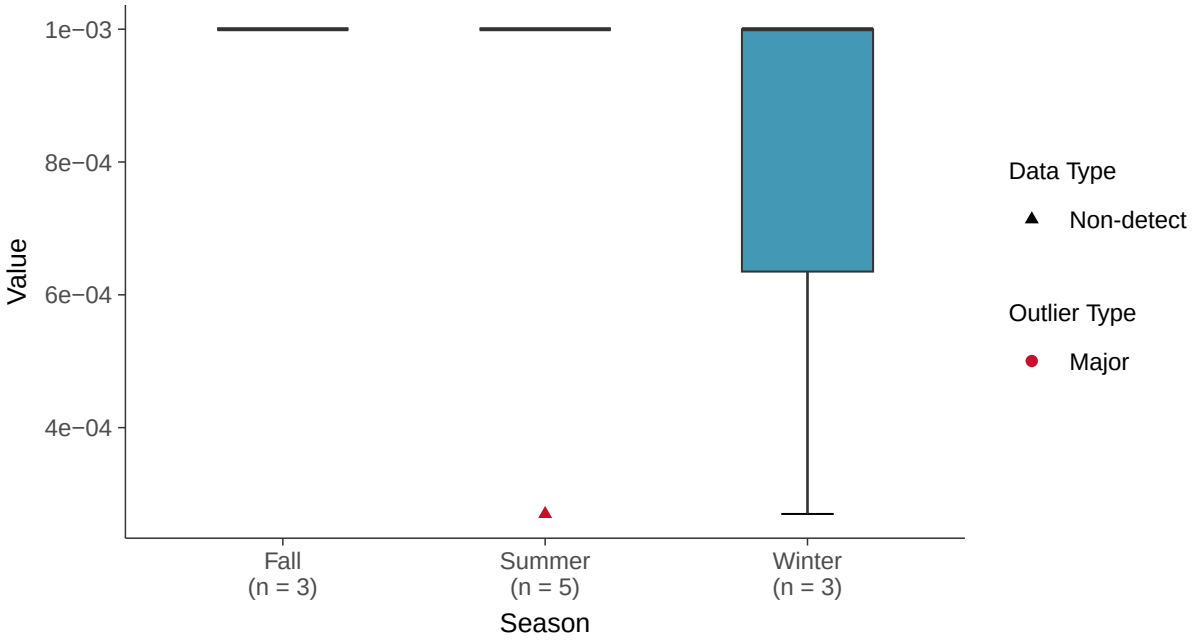


Boxplot

Beryllium, MW-100A (mg/l)

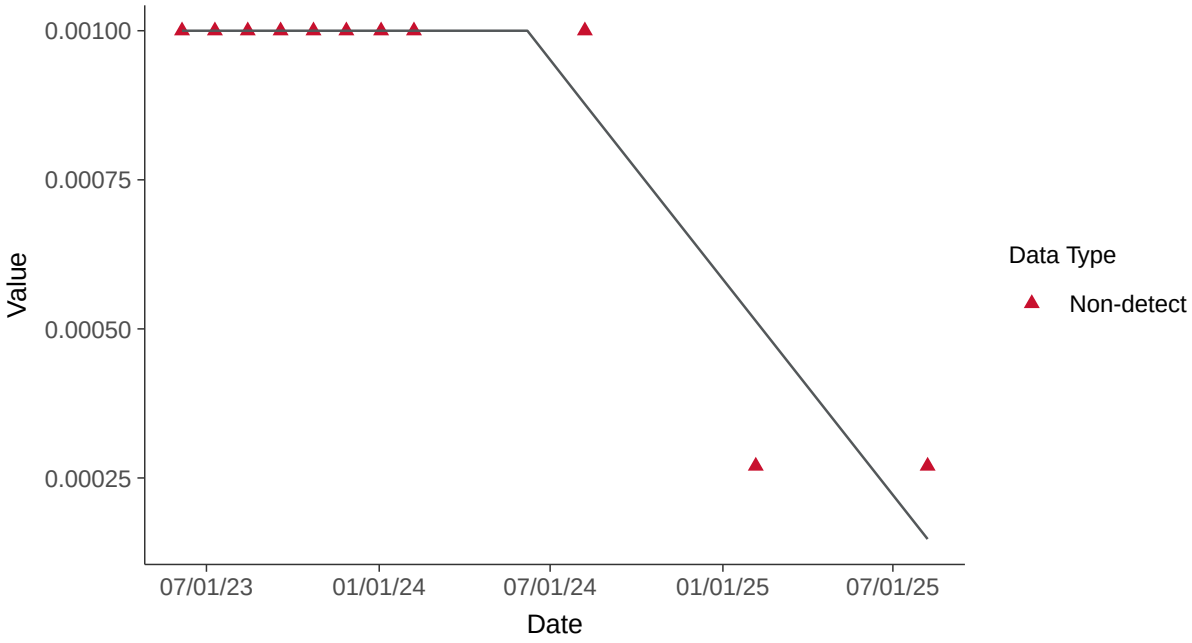
Boxplot by Season

Beryllium, MW-100A (mg/l)



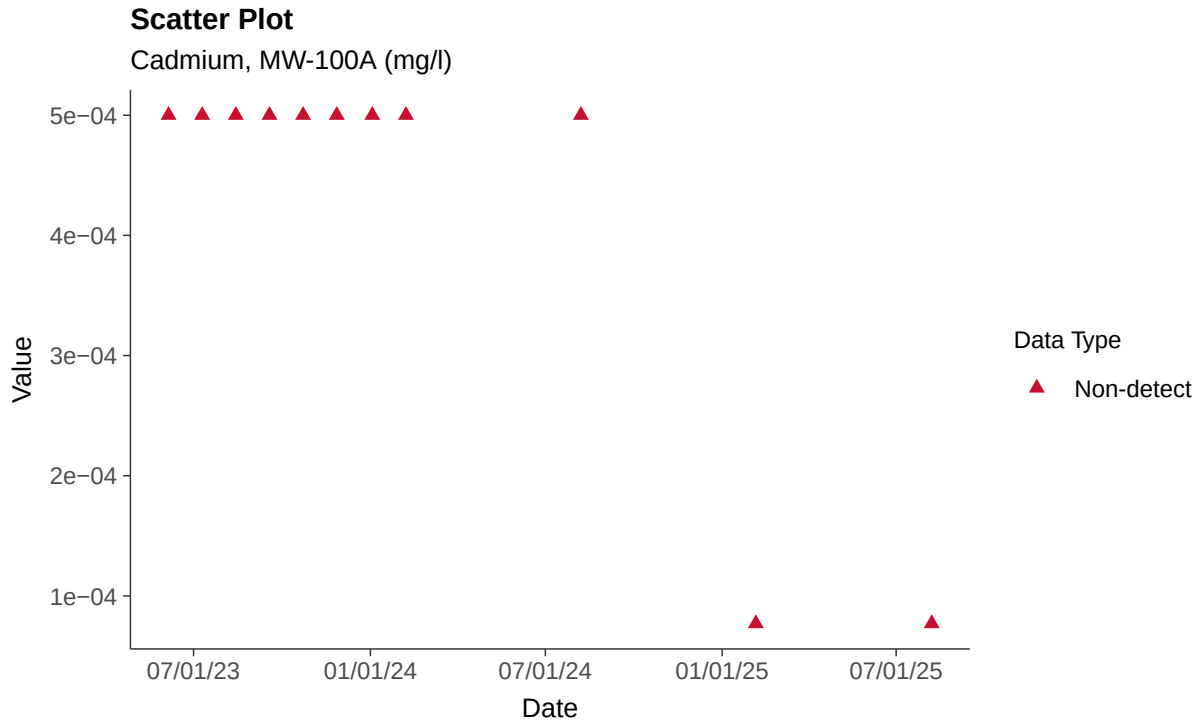
Trend Regression: Piecewise Linear-Linear

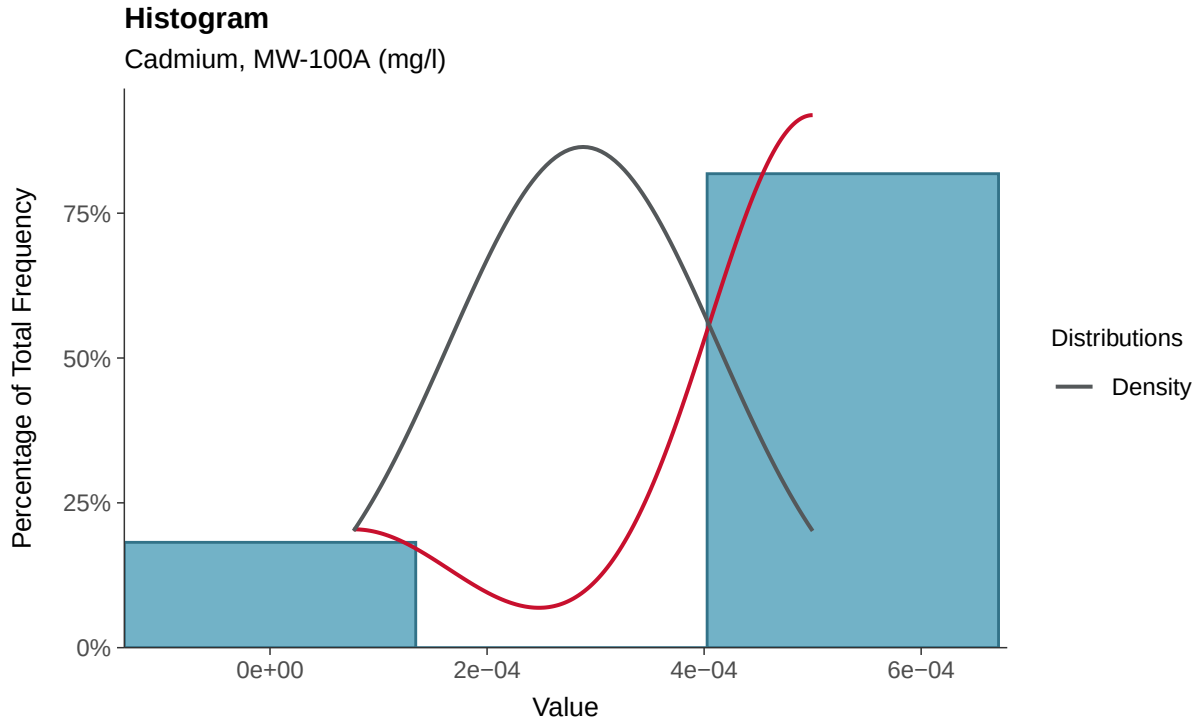
Beryllium, MW-100A (mg/l)



Appendix IV: Cadmium, MW-100A

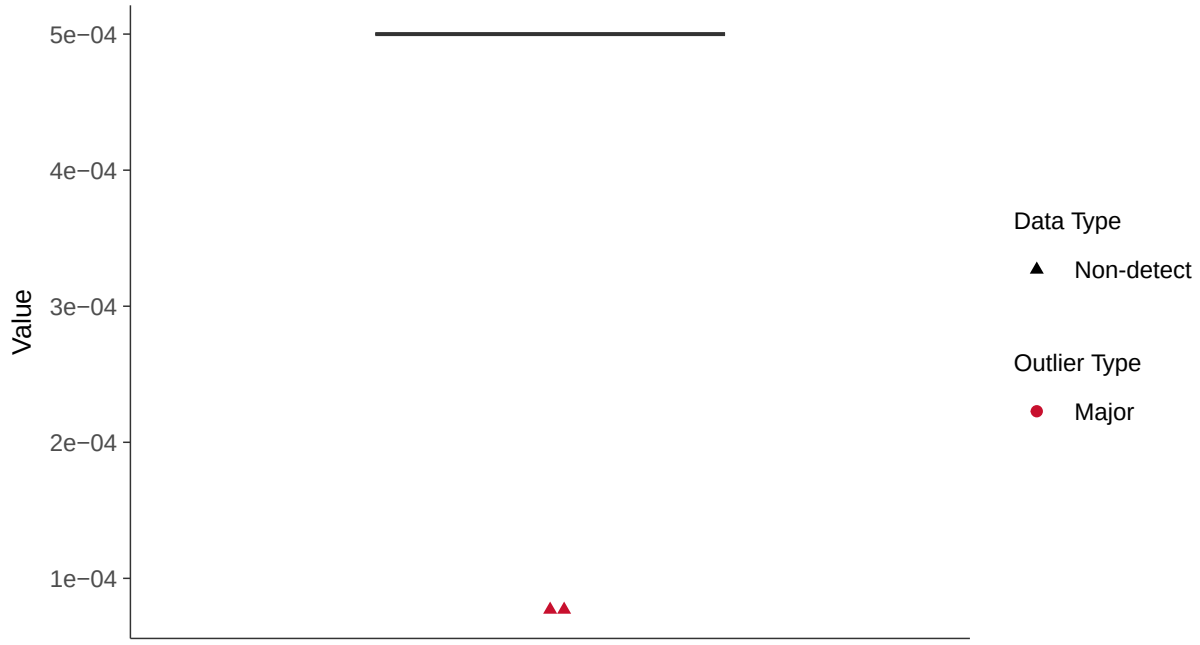
ID: 32_3_106





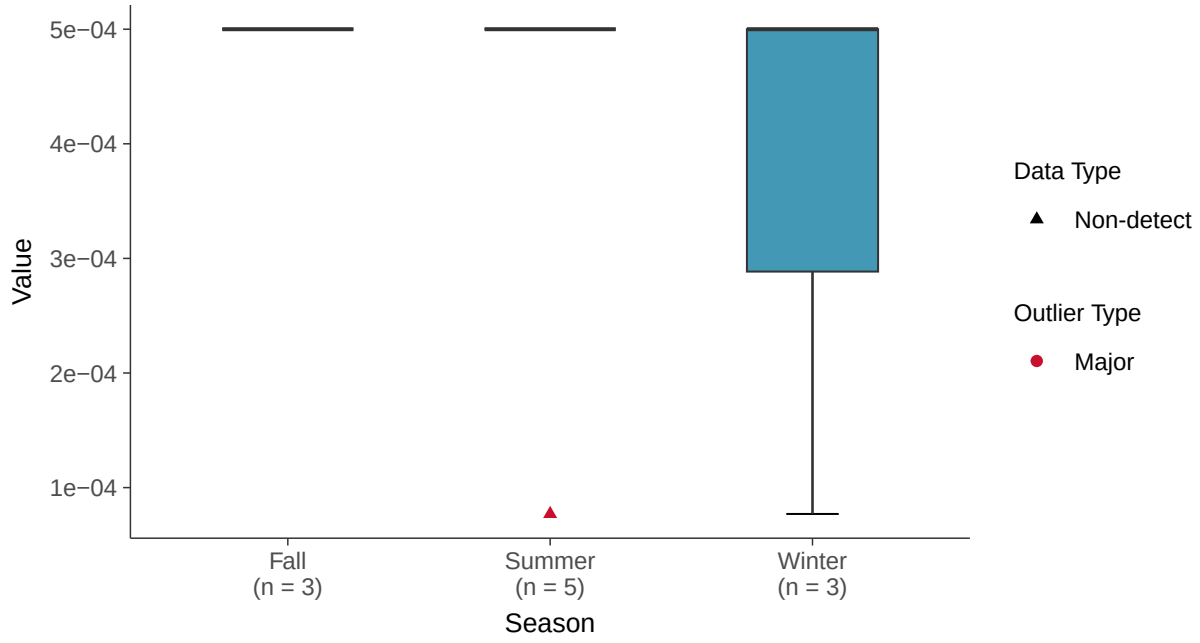
Boxplot

Cadmium, MW-100A (mg/l)



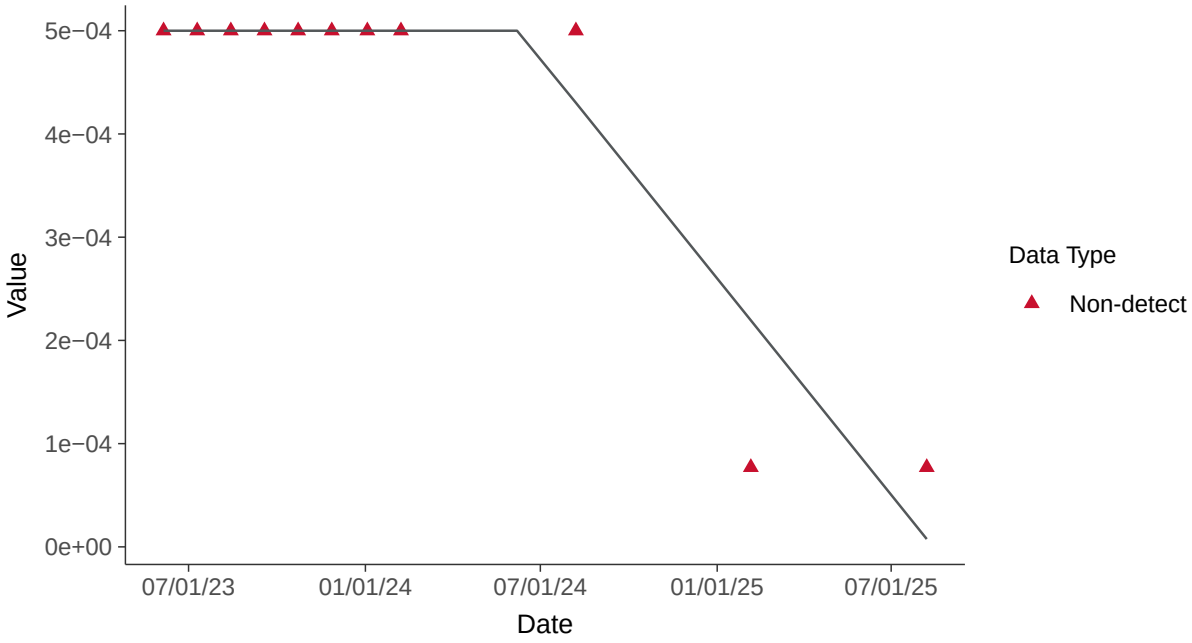
Boxplot by Season

Cadmium, MW-100A (mg/l)



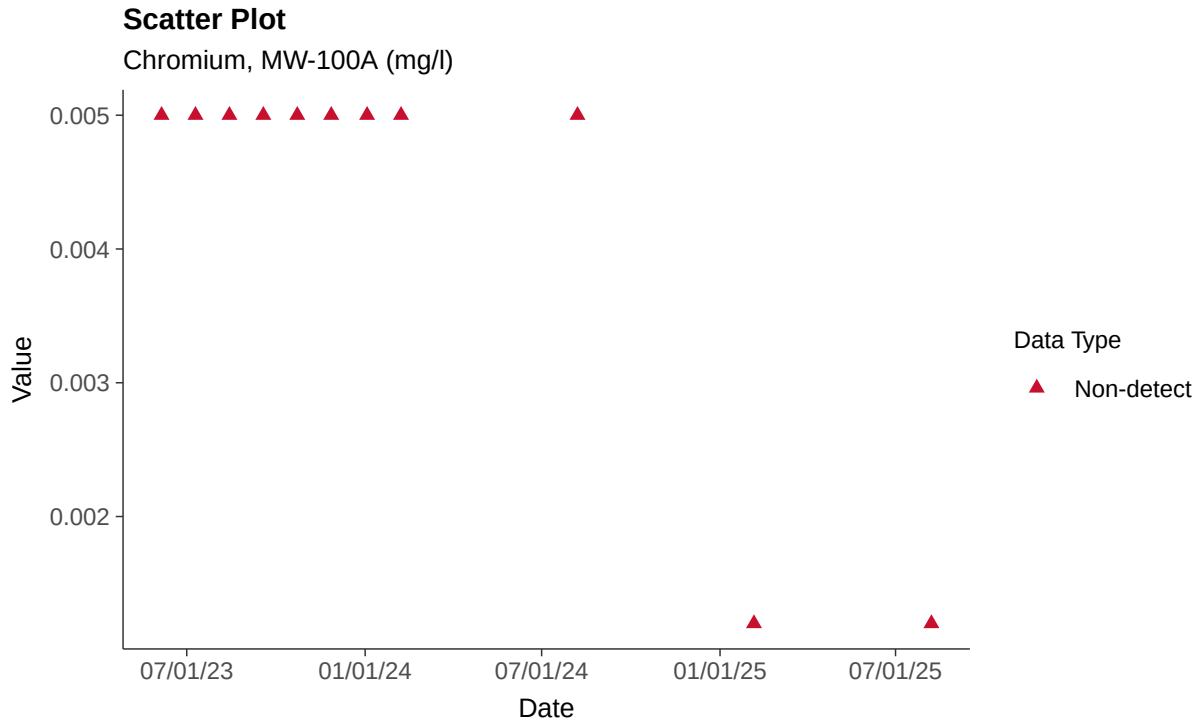
Trend Regression: Piecewise Linear-Linear

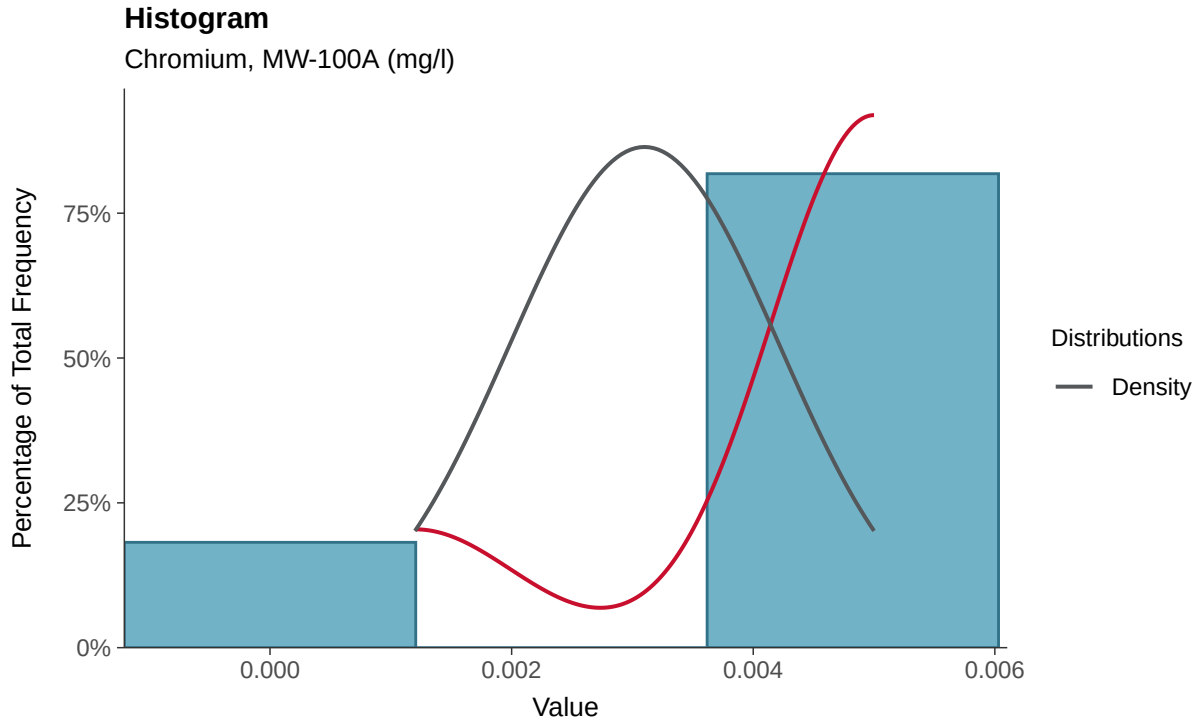
Cadmium, MW-100A (mg/l)



Appendix IV: Chromium, MW-100A

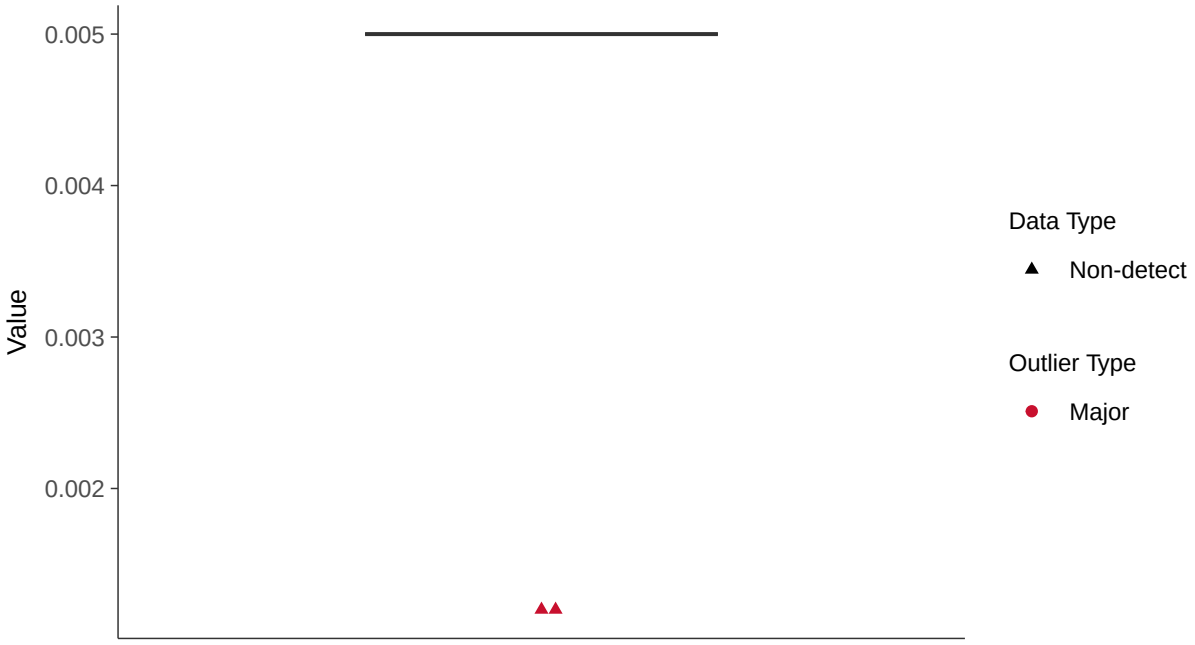
ID: 32_3_109





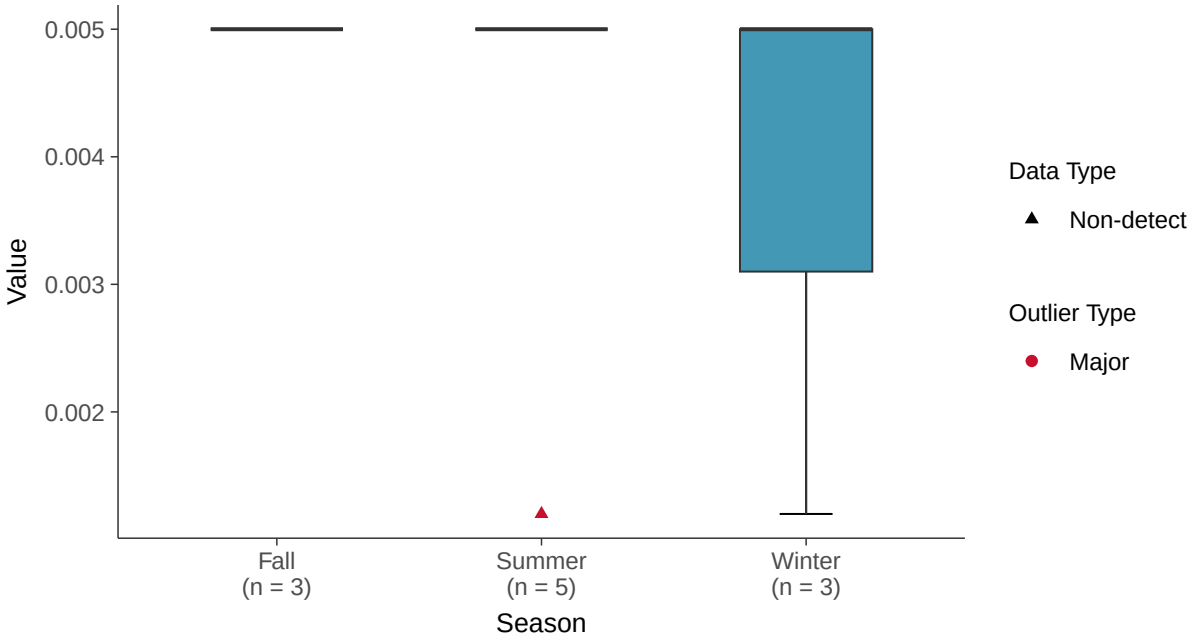
Boxplot

Chromium, MW-100A (mg/l)



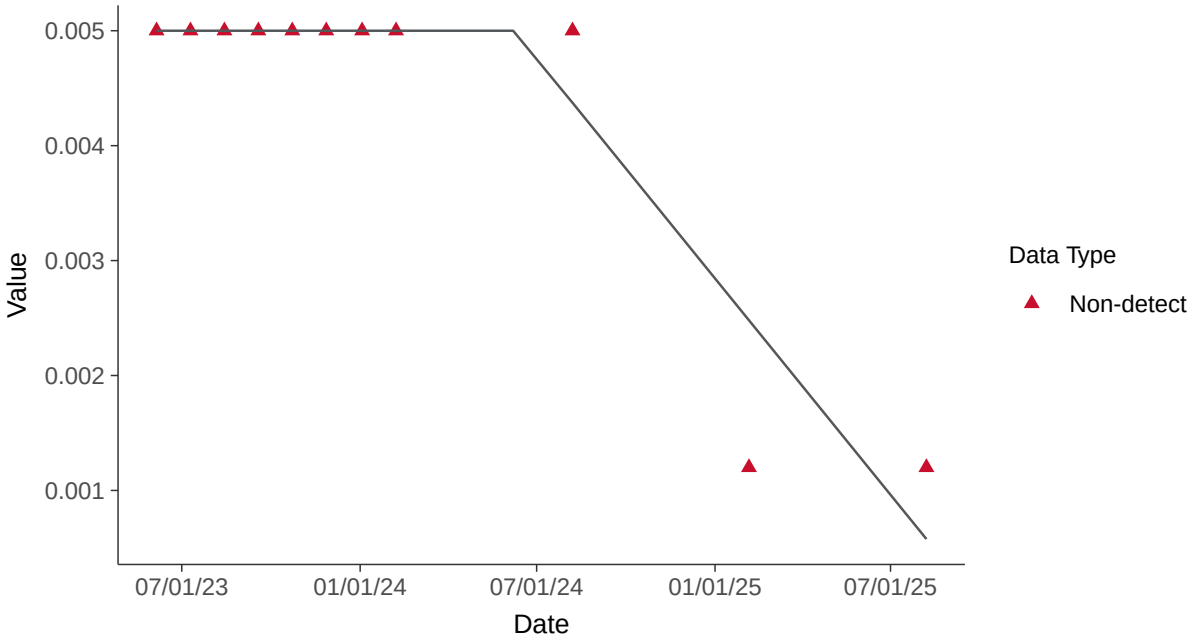
Boxplot by Season

Chromium, MW-100A (mg/l)



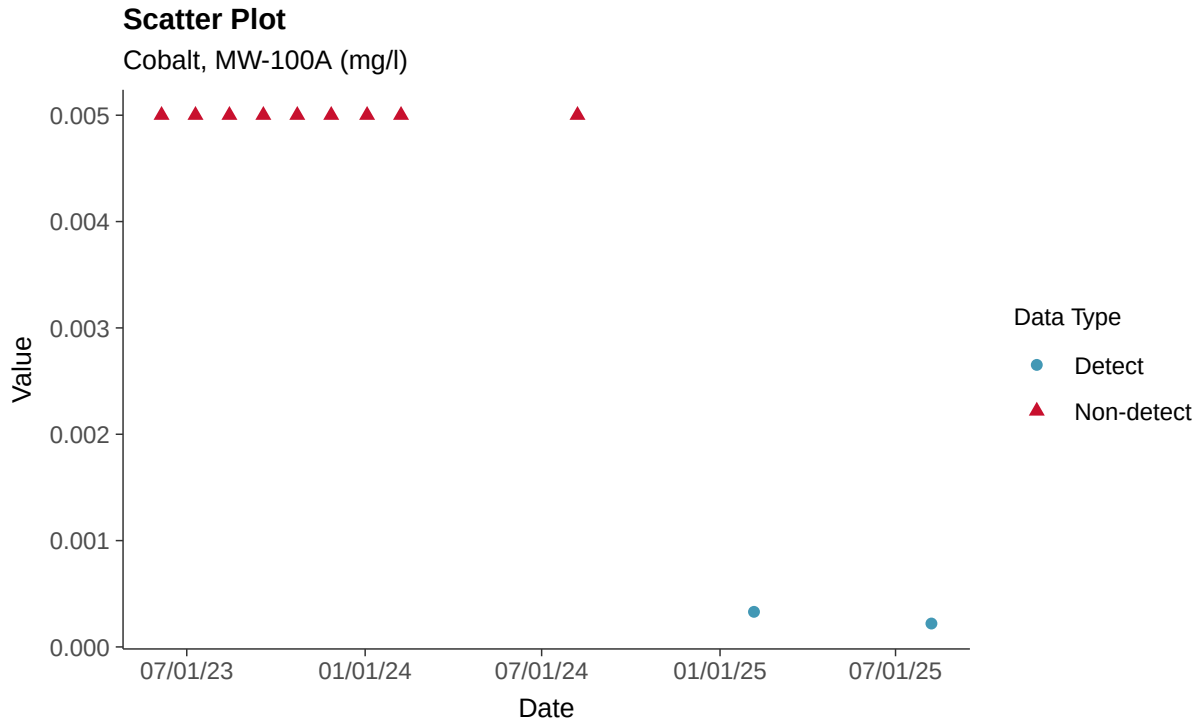
Trend Regression: Piecewise Linear-Linear

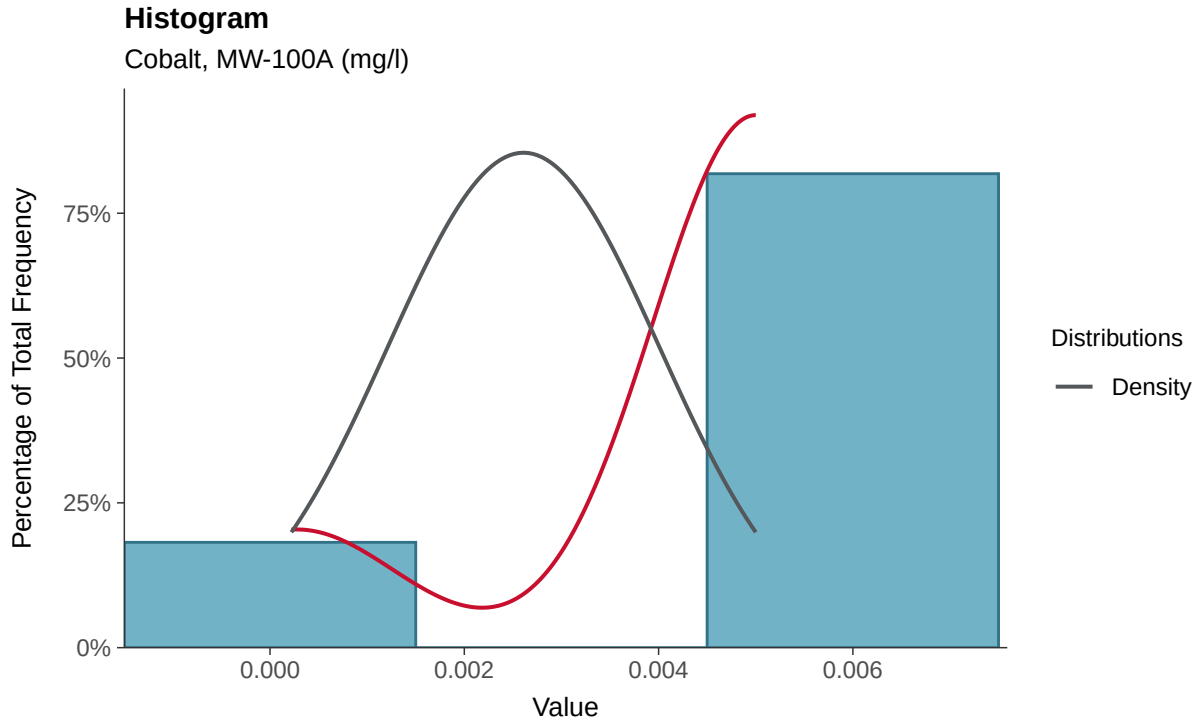
Chromium, MW-100A (mg/l)



Appendix IV: Cobalt, MW-100A

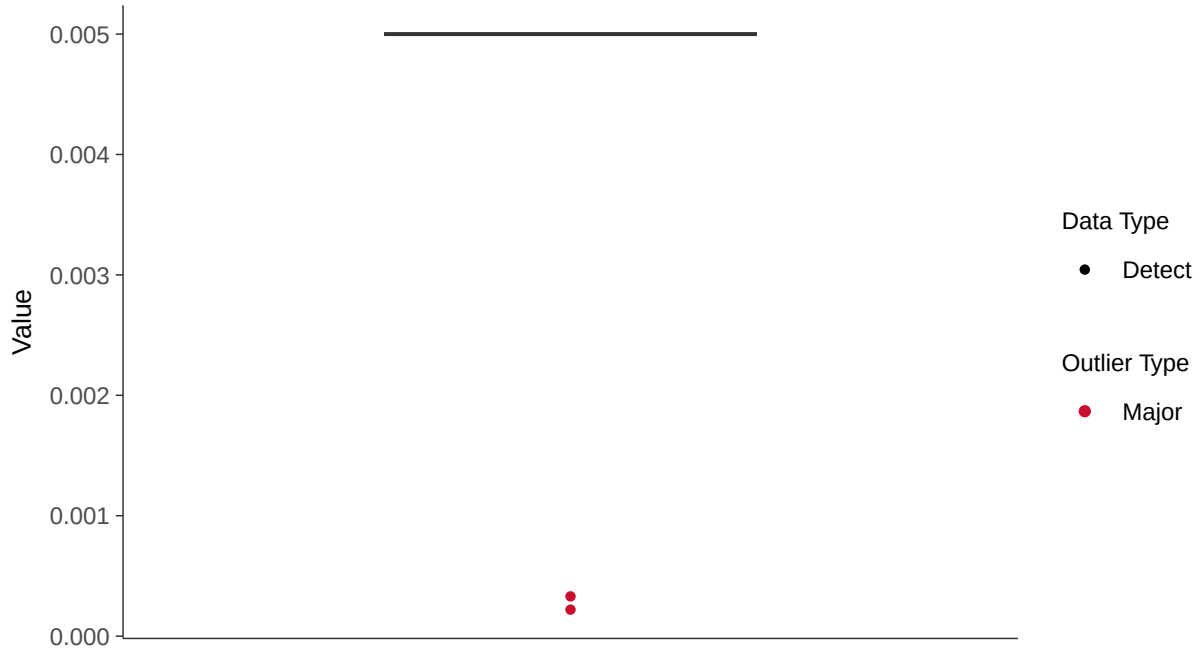
ID: 32_3_110





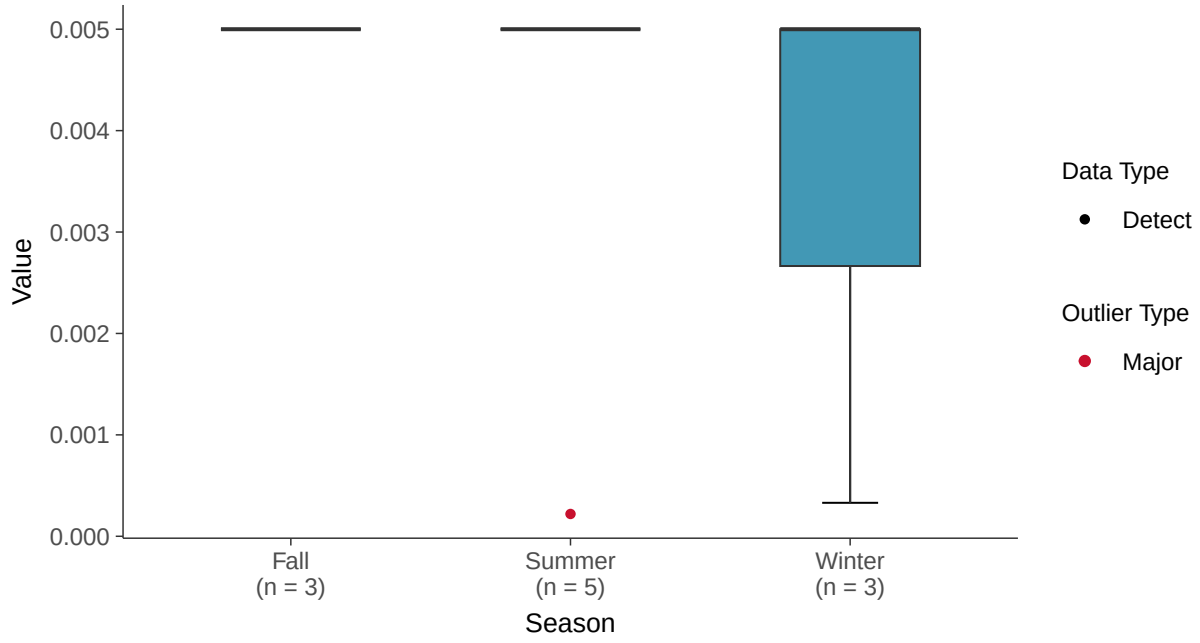
Boxplot

Cobalt, MW-100A (mg/l)



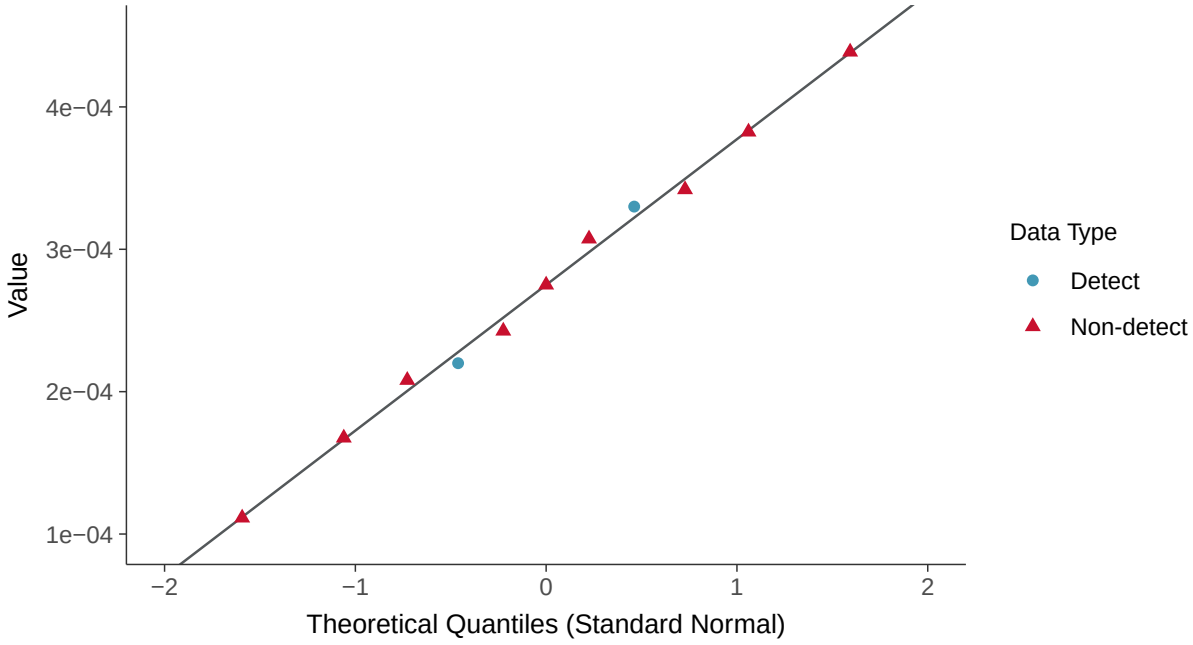
Boxplot by Season

Cobalt, MW-100A (mg/l)



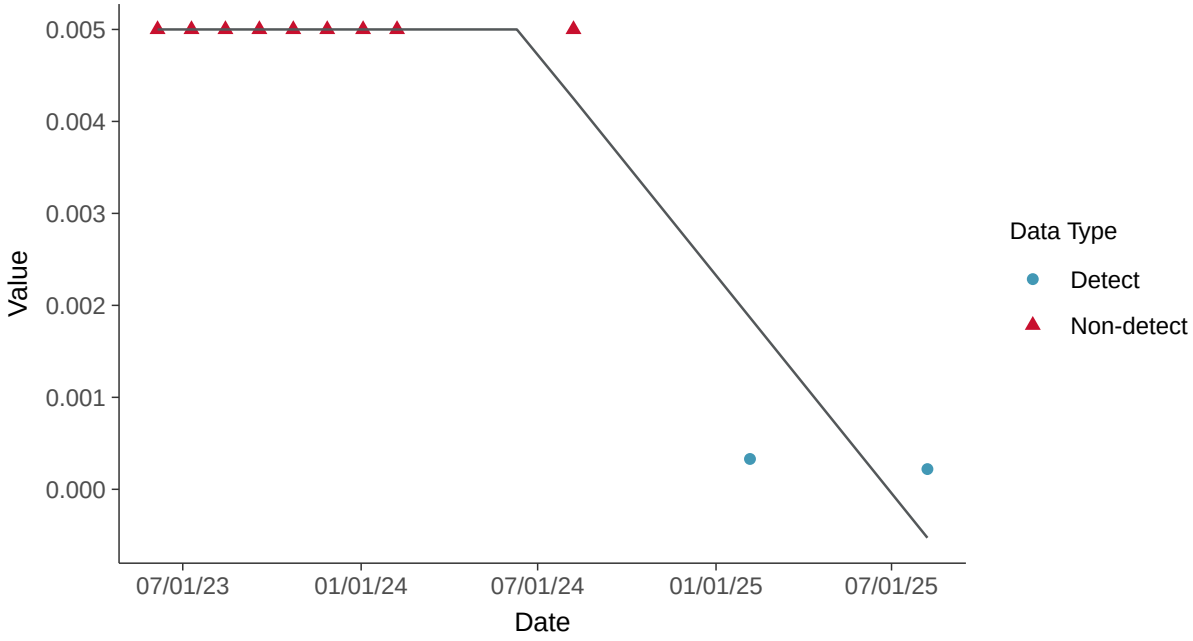
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-100A (mg/l)



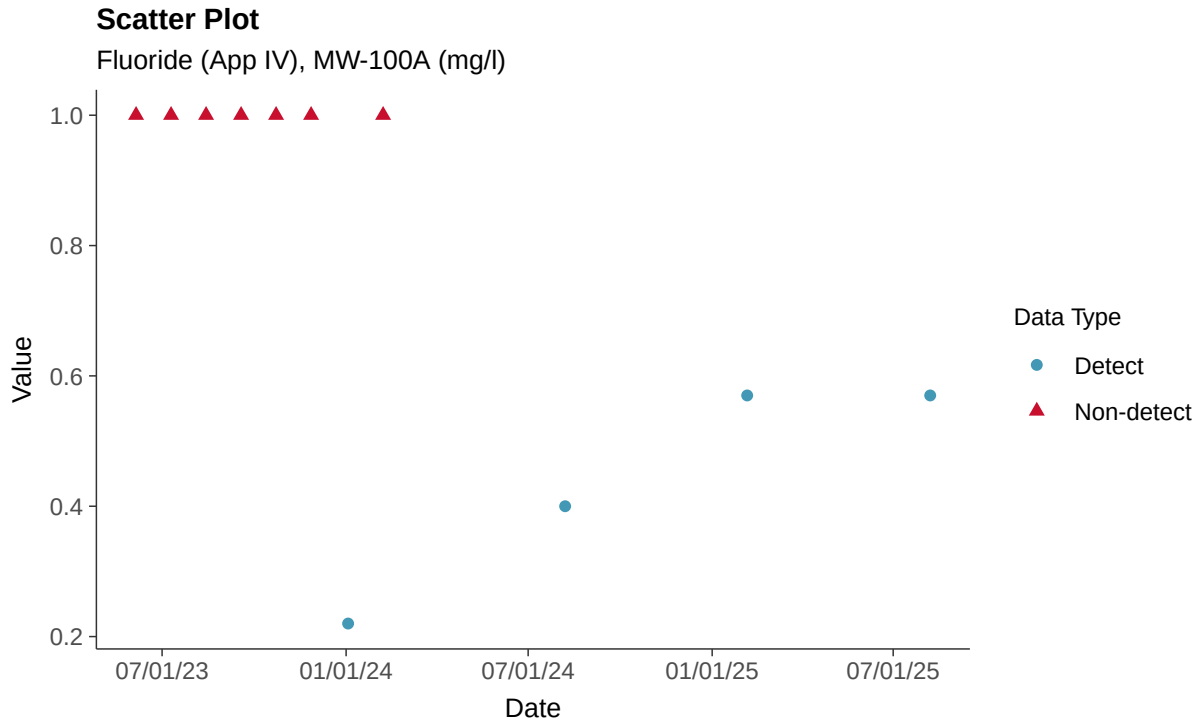
Trend Regression: Piecewise Linear-Linear

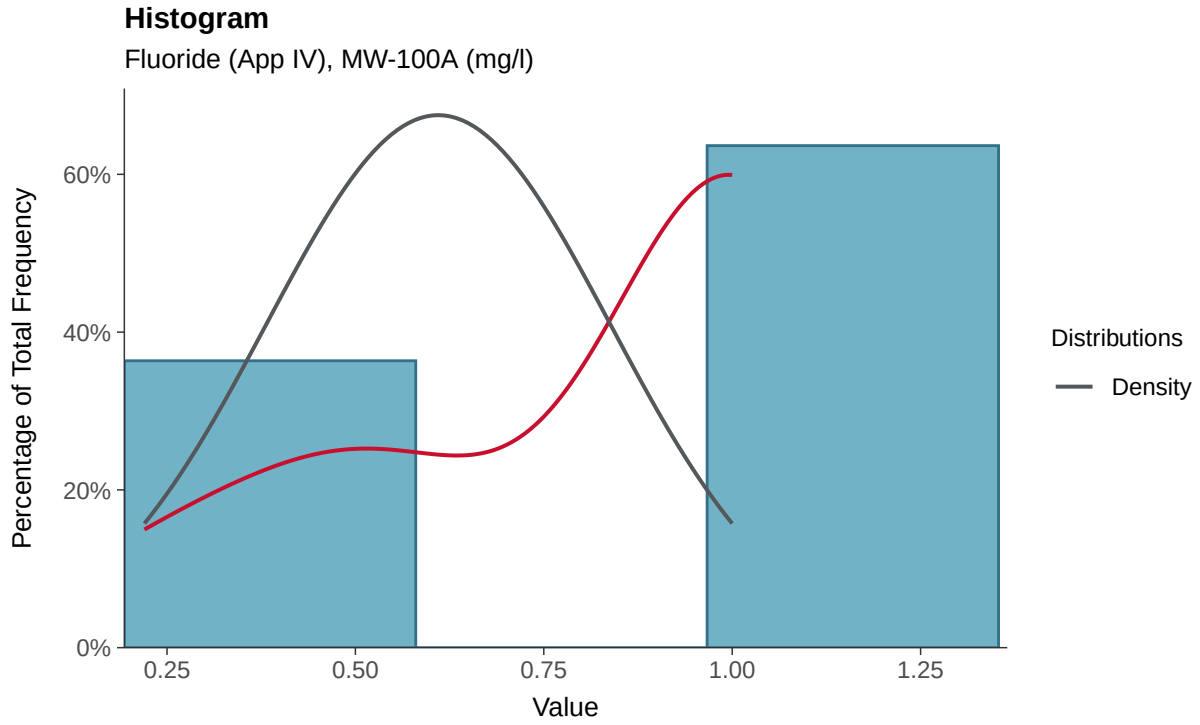
Cobalt, MW-100A (mg/l)



Appendix IV: Fluoride (App IV), MW-100A

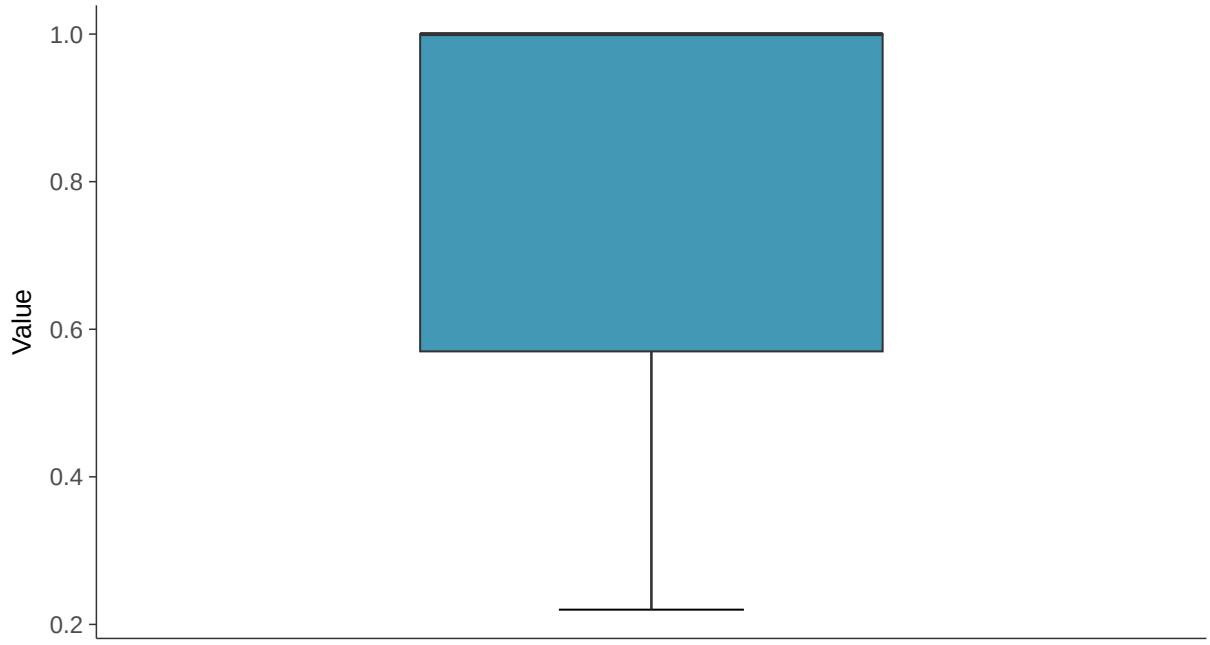
ID: 32_3_113





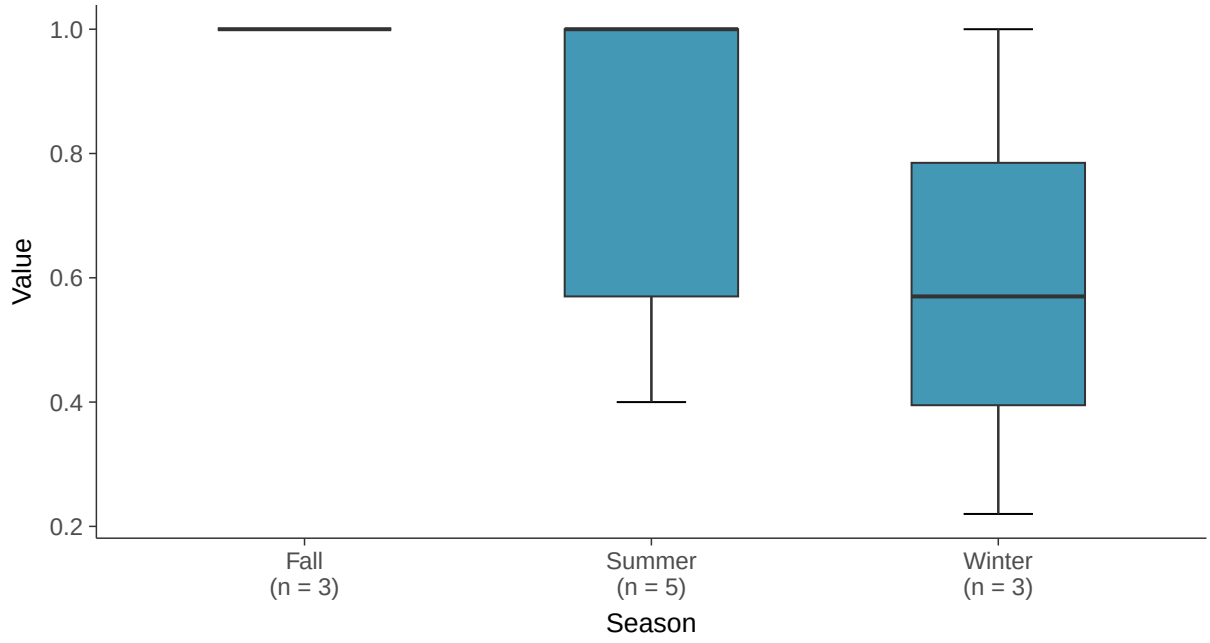
Boxplot

Fluoride (App IV), MW-100A (mg/l)



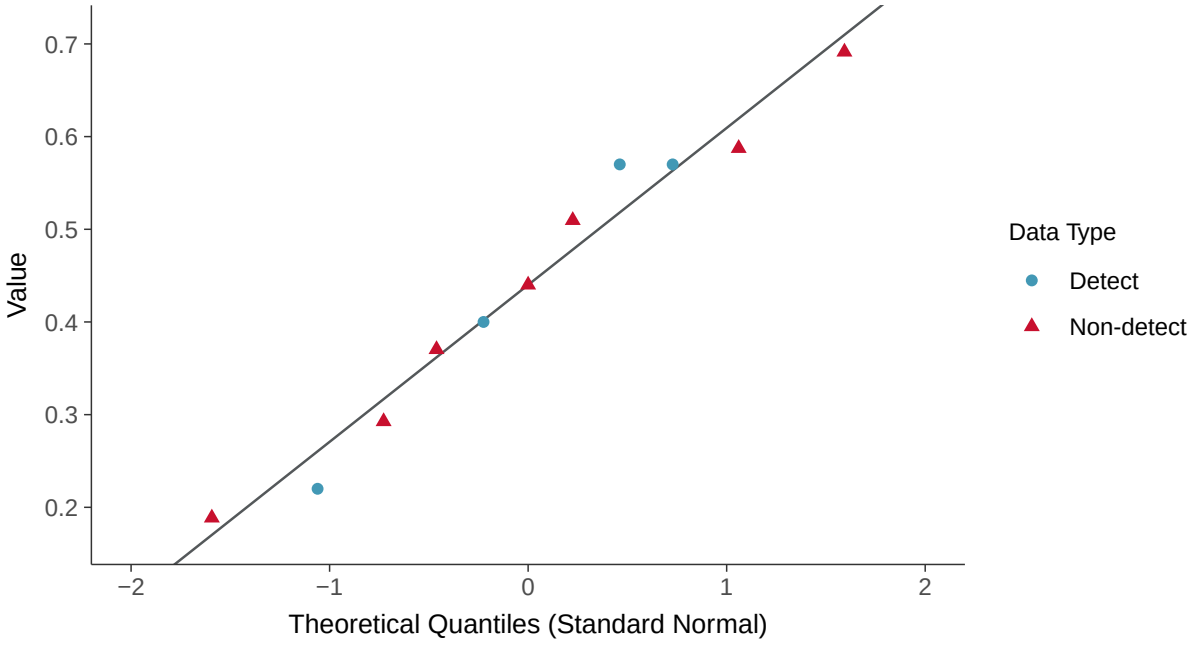
Boxplot by Season

Fluoride (App IV), MW-100A (mg/l)



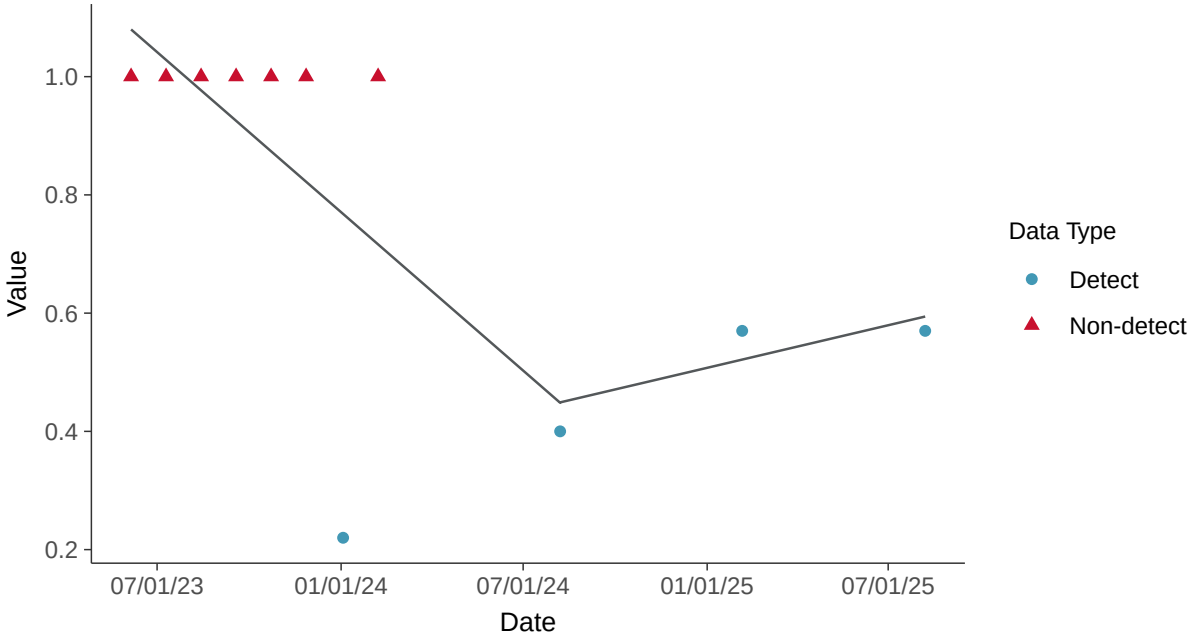
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-100A (mg/l)



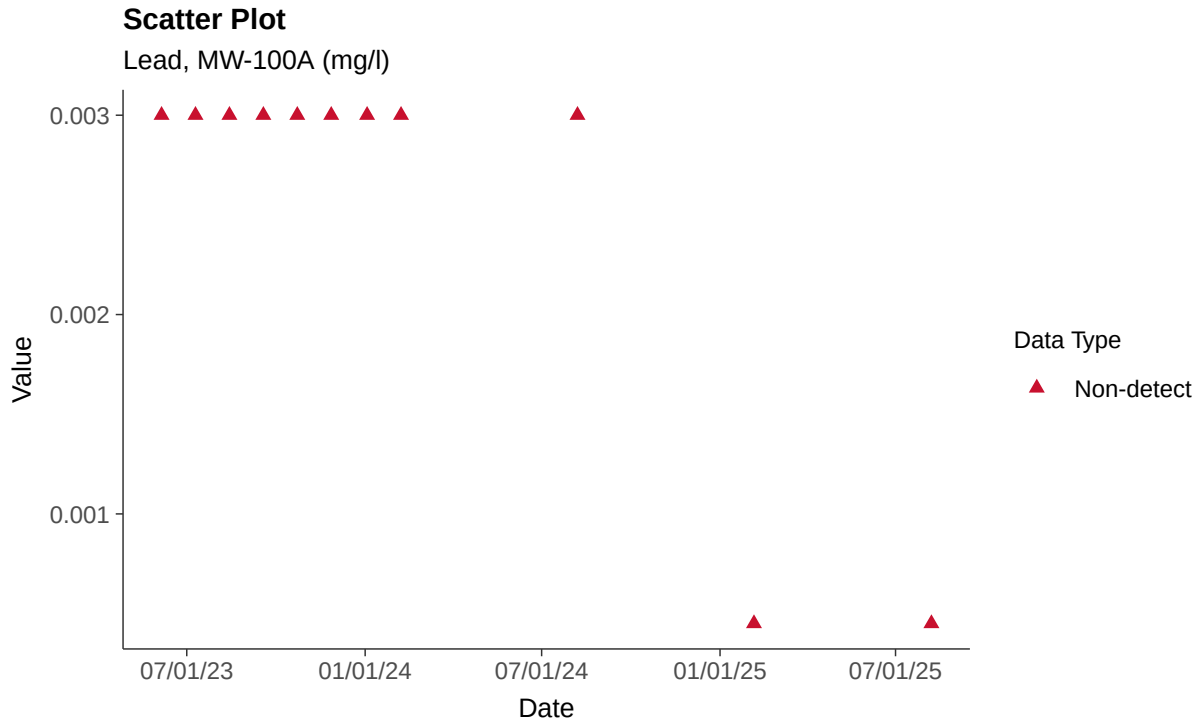
Trend Regression: Piecewise Linear-Linear

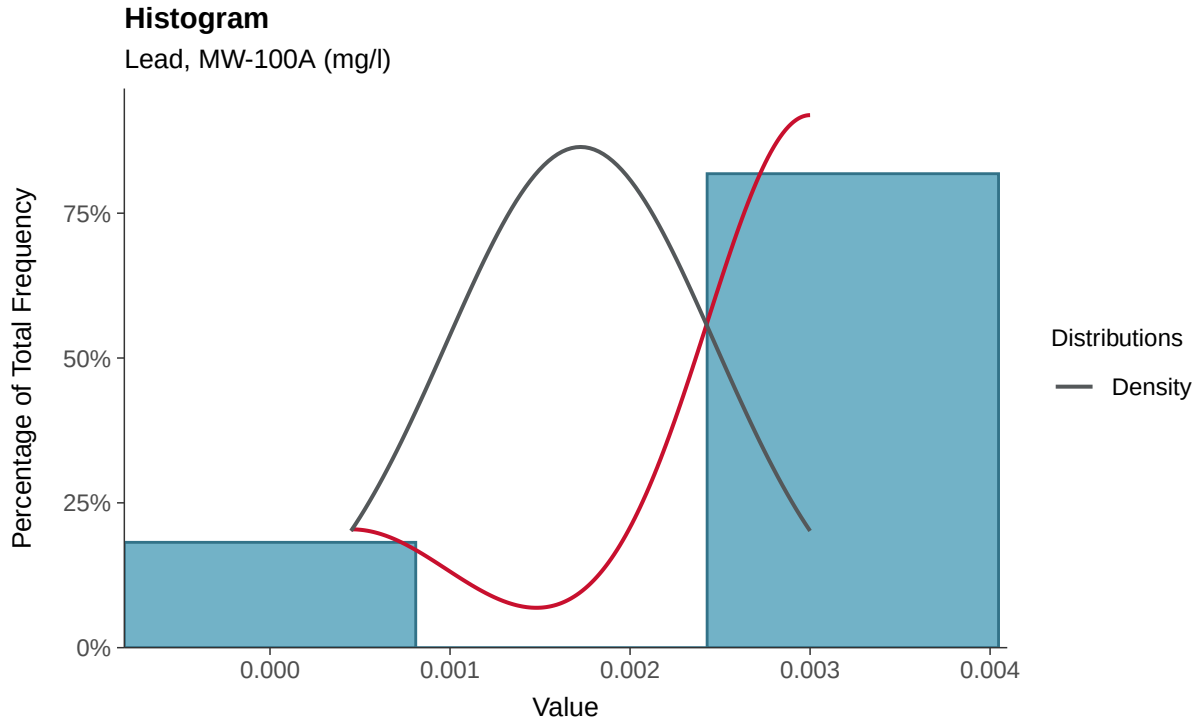
Fluoride (App IV), MW-100A (mg/l)



Appendix IV: Lead, MW-100A

ID: 32_3_115



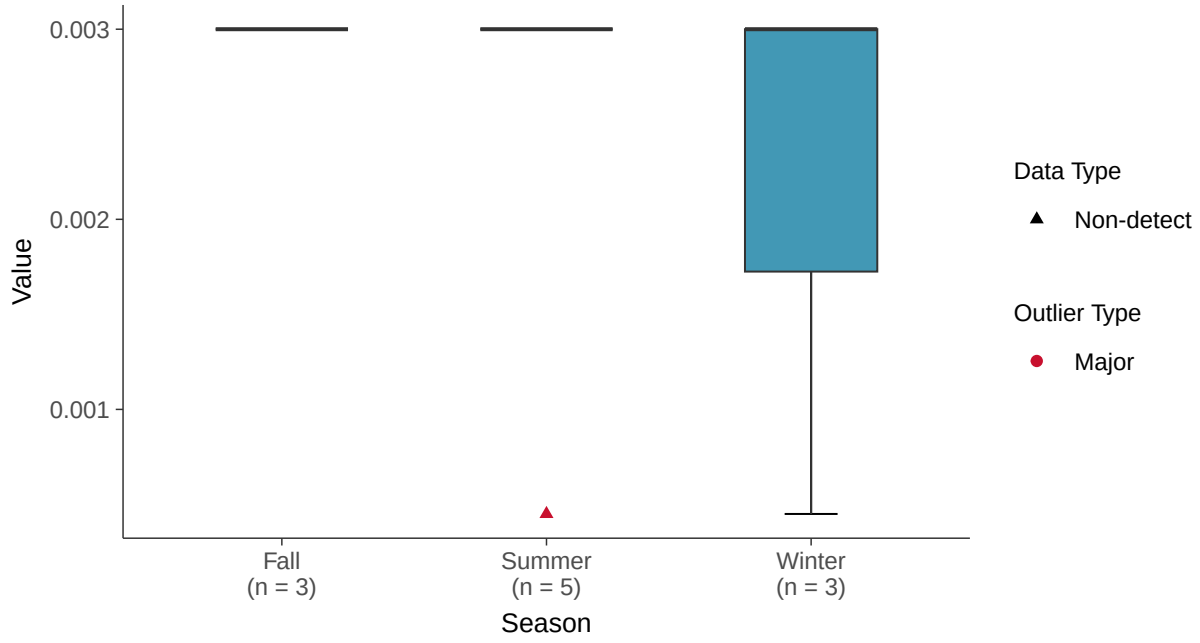


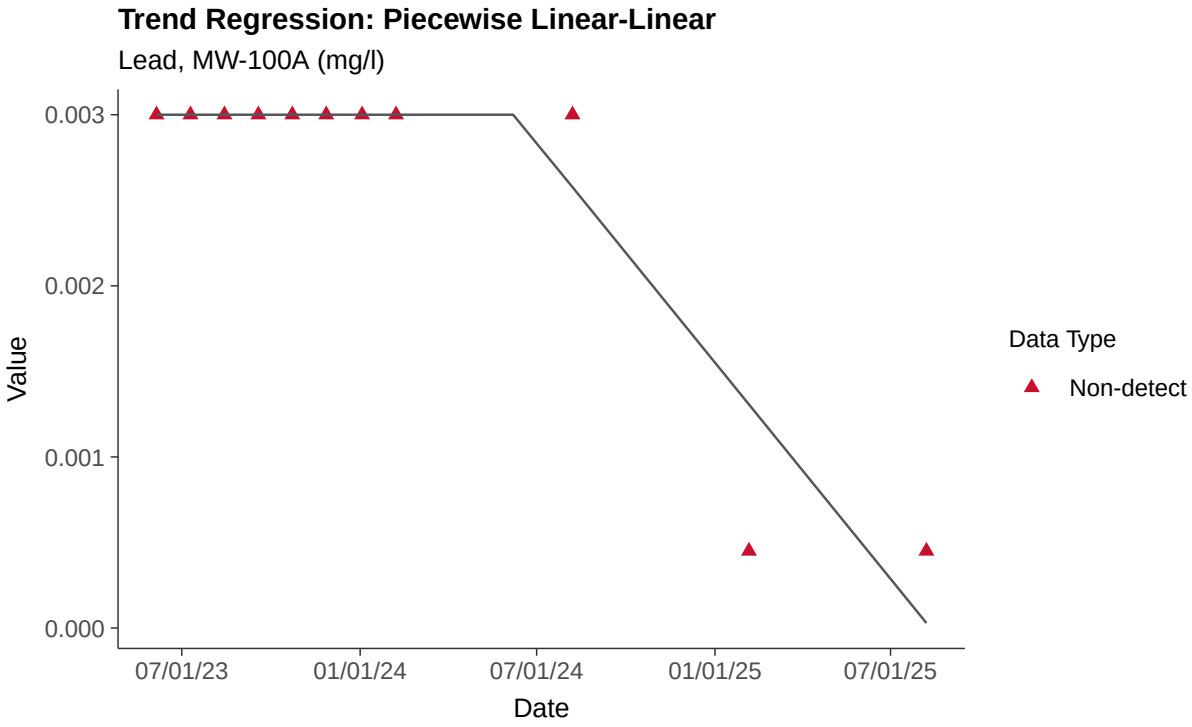
Boxplot

Lead, MW-100A (mg/l)

Boxplot by Season

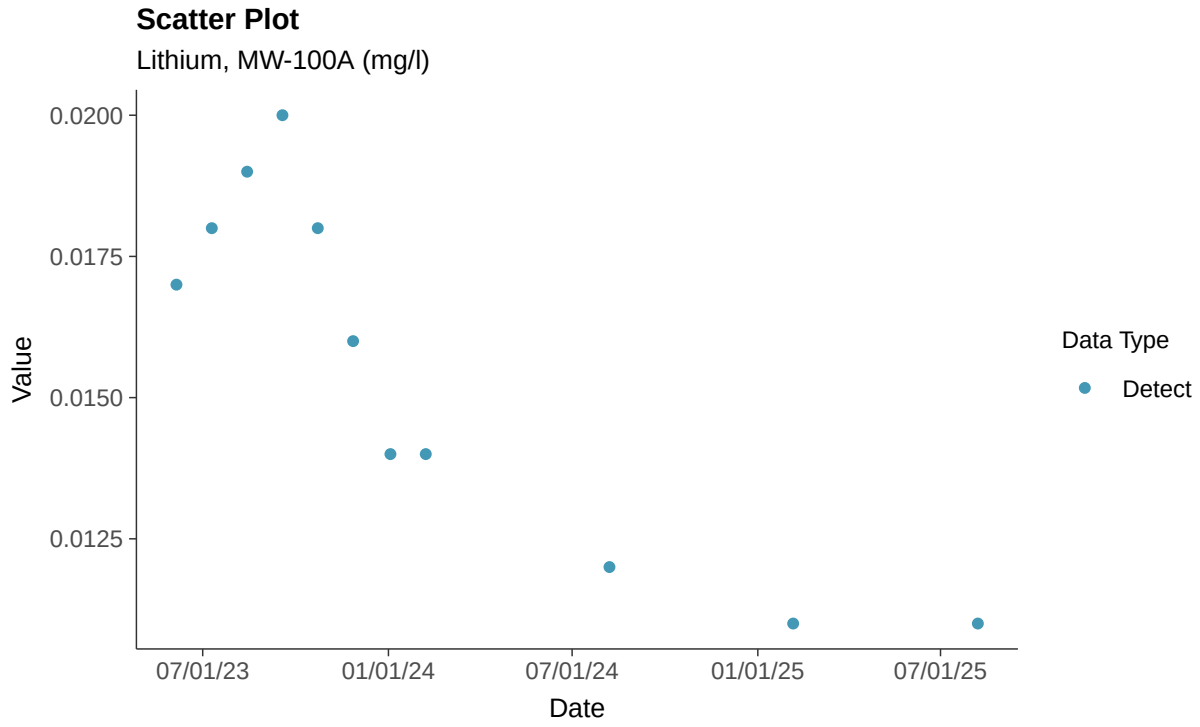
Lead, MW-100A (mg/l)

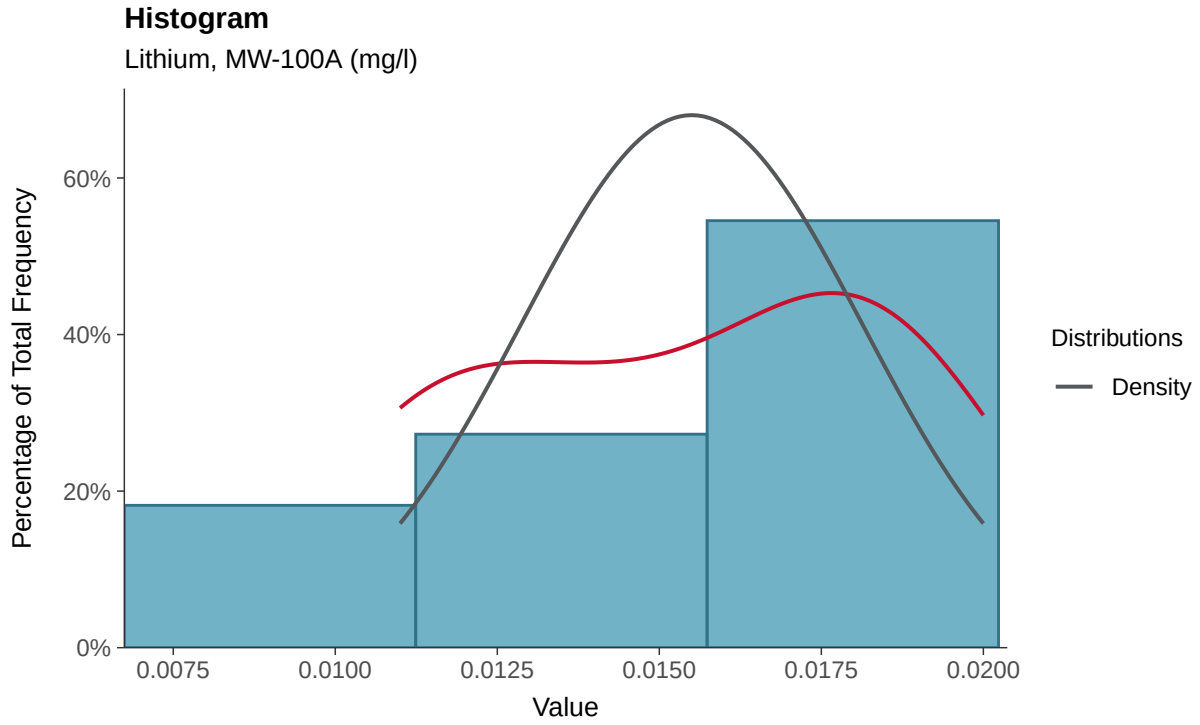



Trend Regression: Piecewise Linear-Linear
Lead, MW-100A (mg/l)
0.003
0.002
0.001
0.000
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Lithium, MW-100A

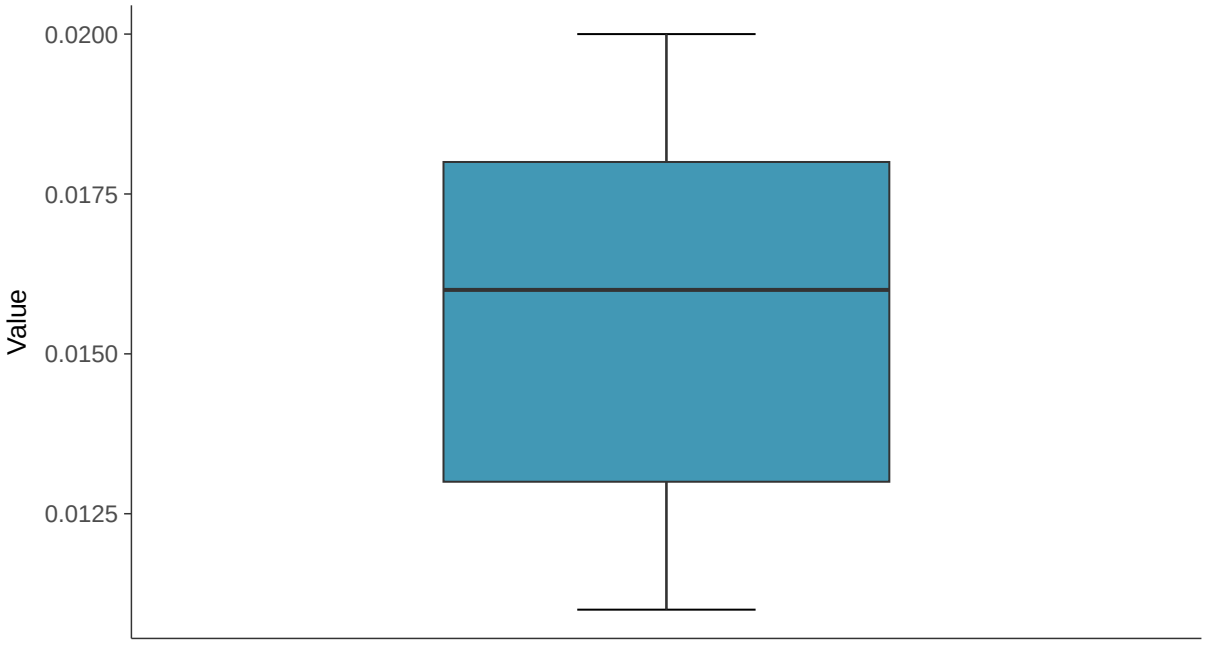
ID: 32_3_116





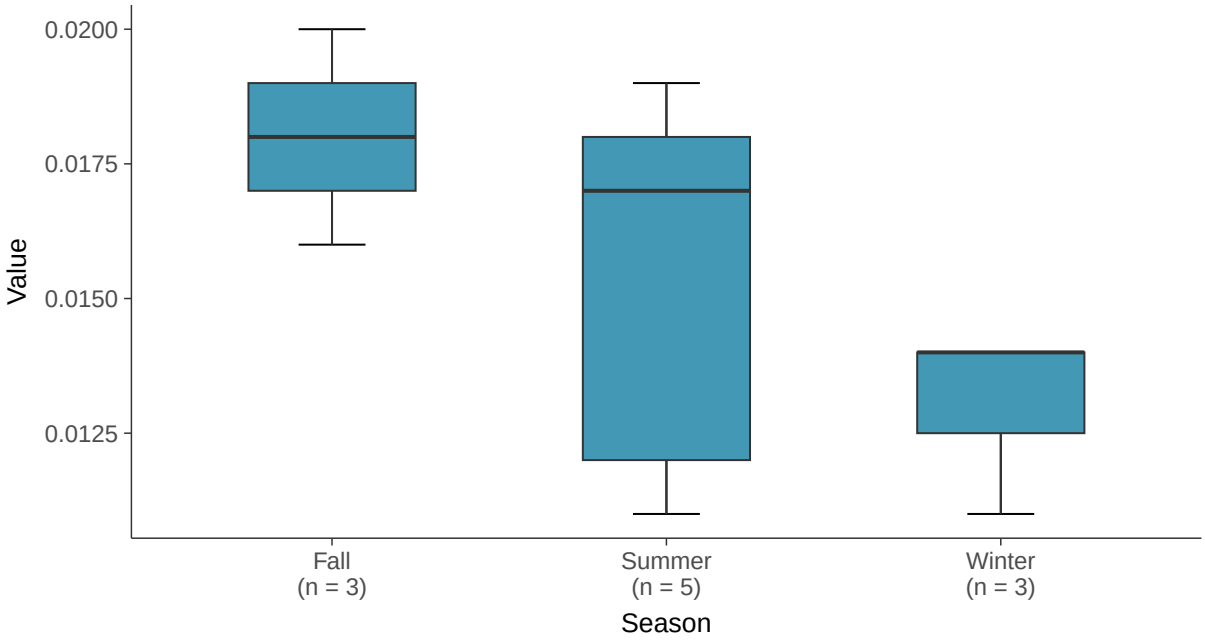
Boxplot

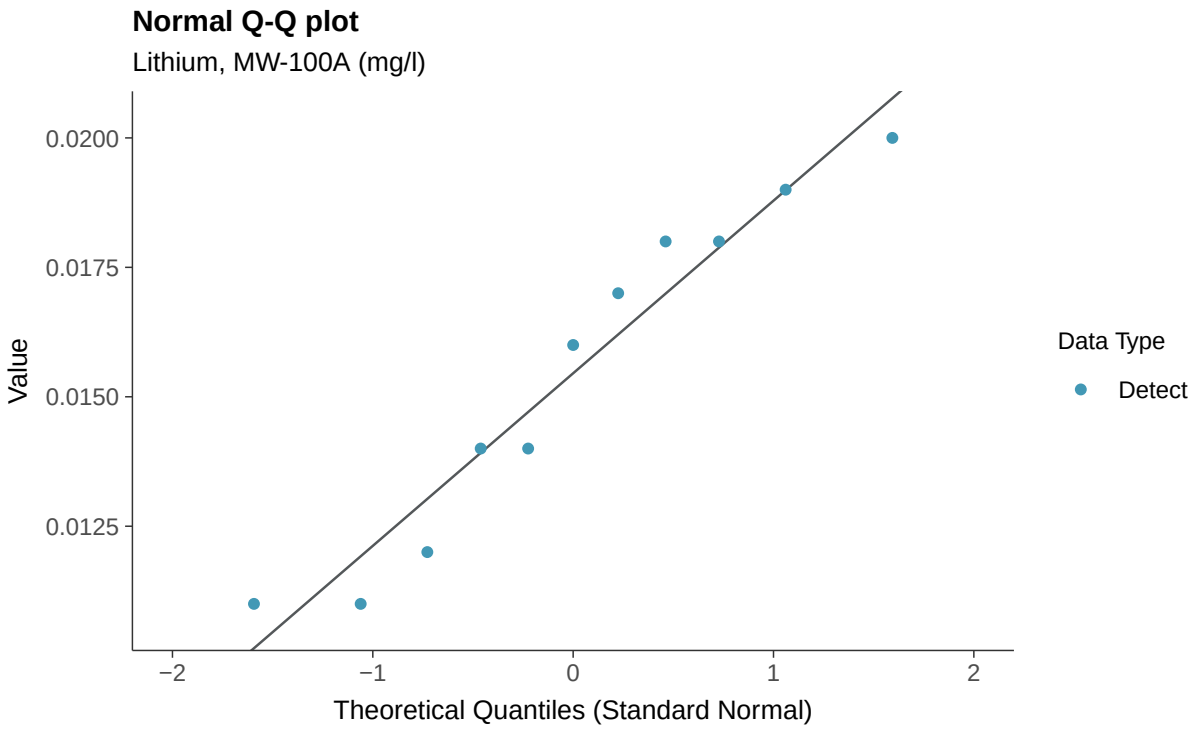
Lithium, MW-100A (mg/l)

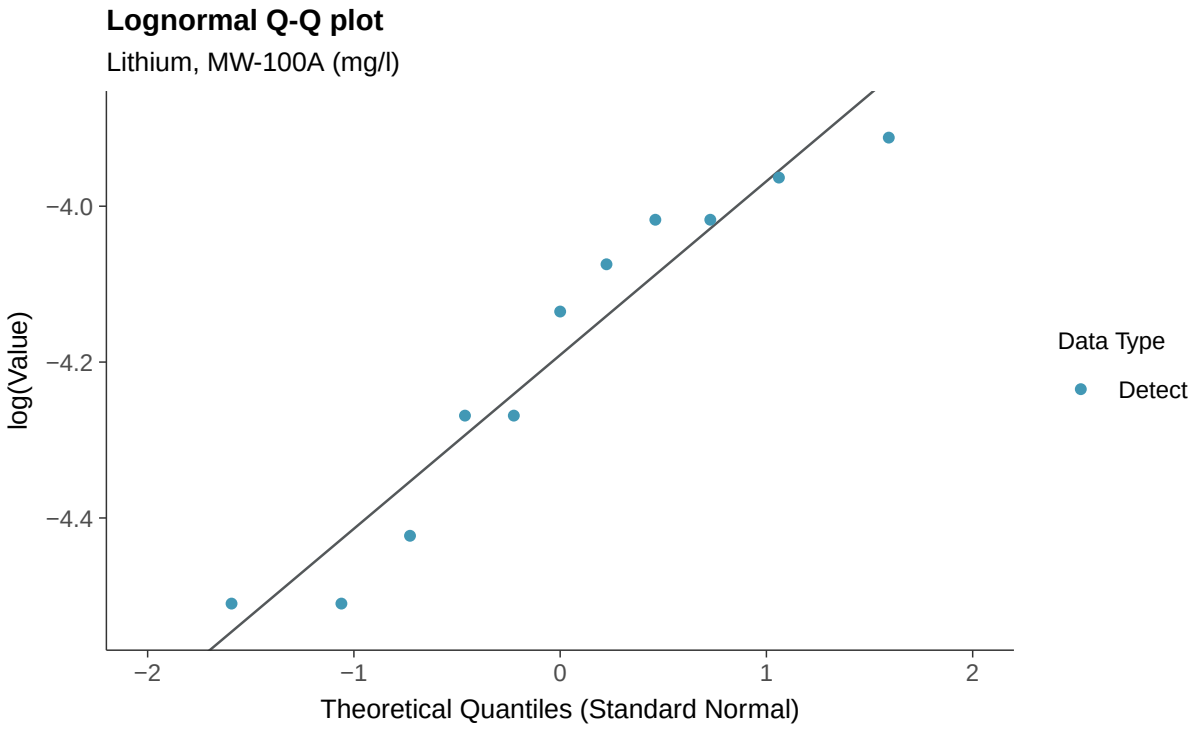


Boxplot by Season

Lithium, MW-100A (mg/l)

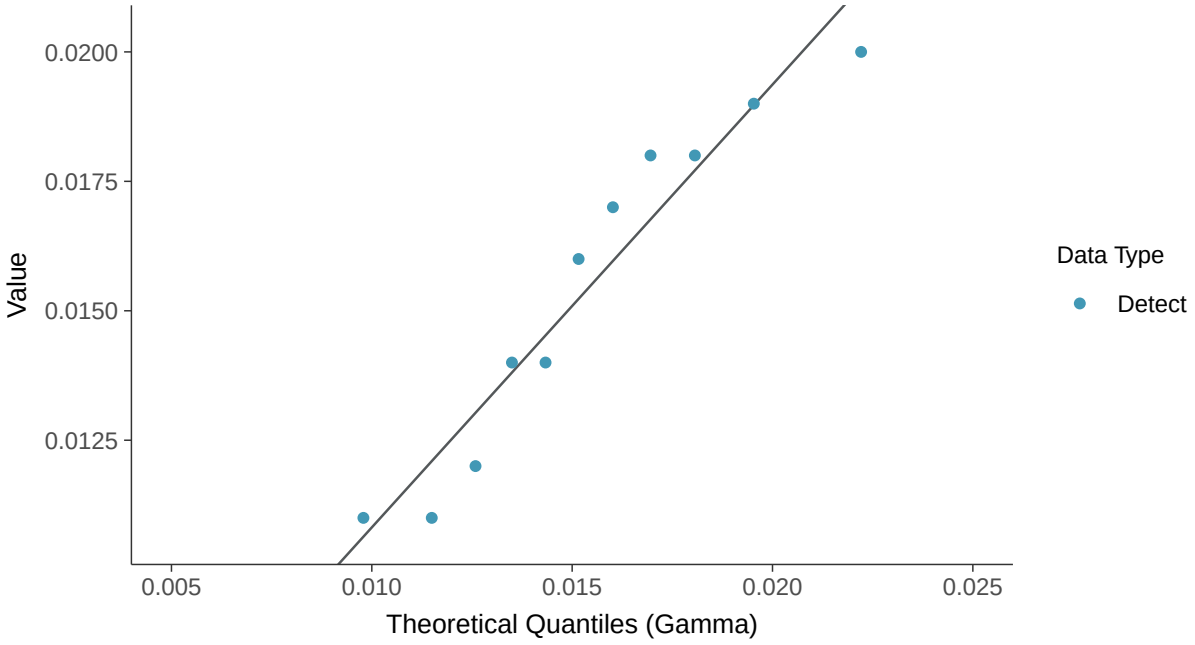



Normal Q-Q plot
Lithium, MW-100A (mg/l)
Value
0.0200
0.0175
0.0150
0.0125
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect


Lognormal Q-Q plot
Lithium, MW-100A (mg/l)
log(Value)
−4.0
−4.2
−4.4
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect

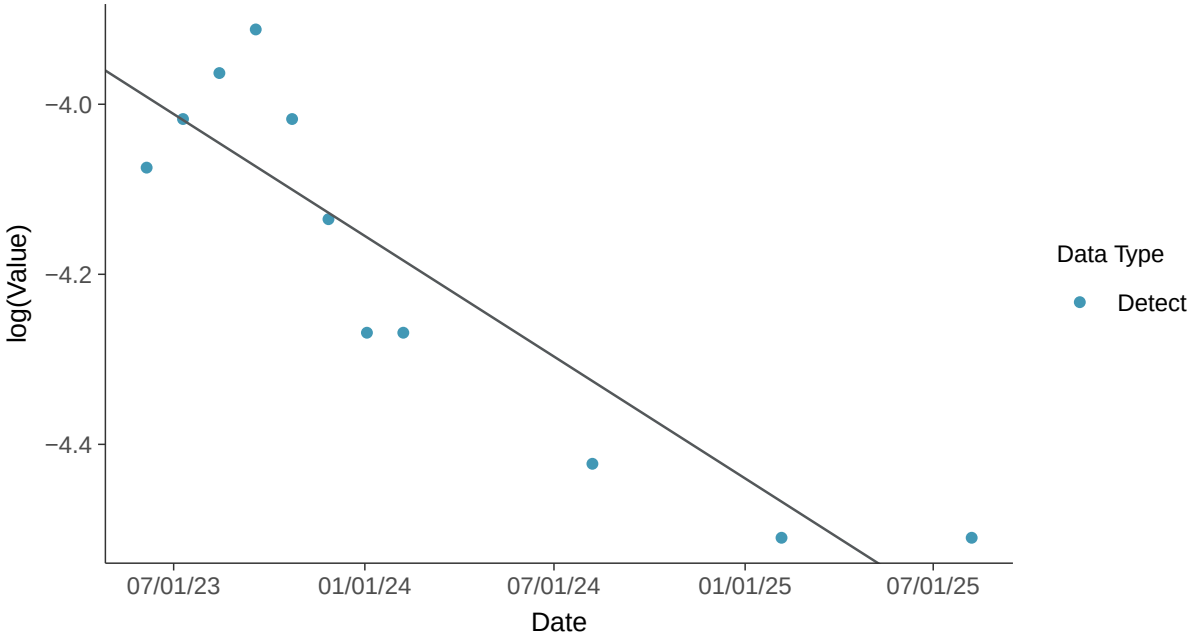
Gamma Q-Q plot

Lithium, MW-100A (mg/l)



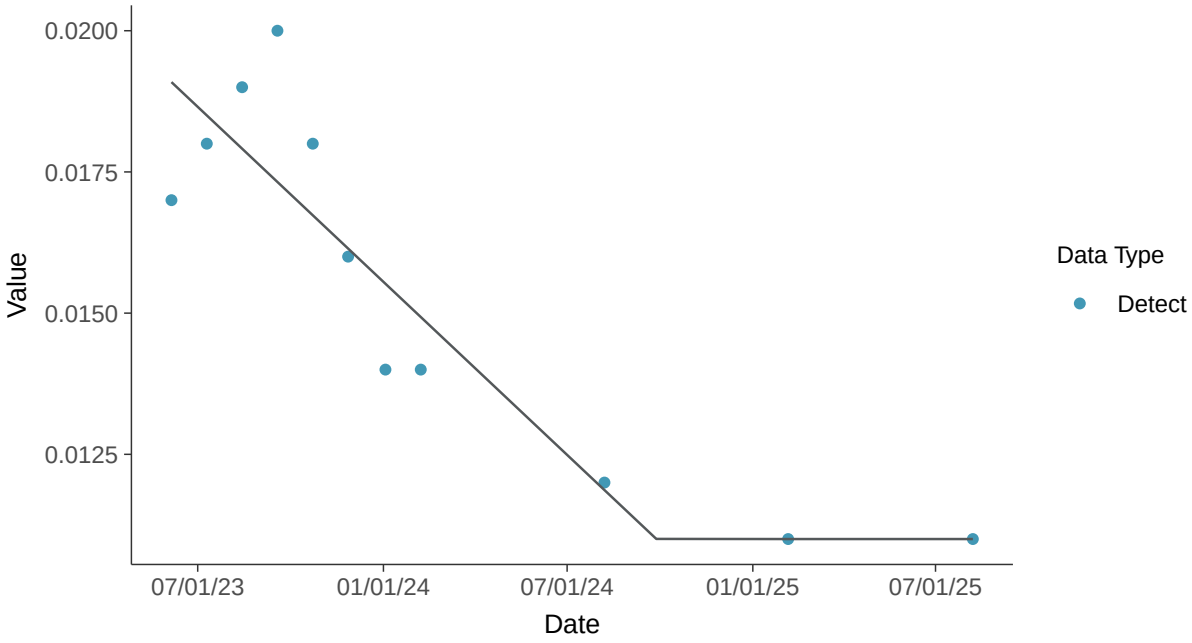
Trend Regression: Lognormal MLE

Lithium, MW-100A (mg/l)



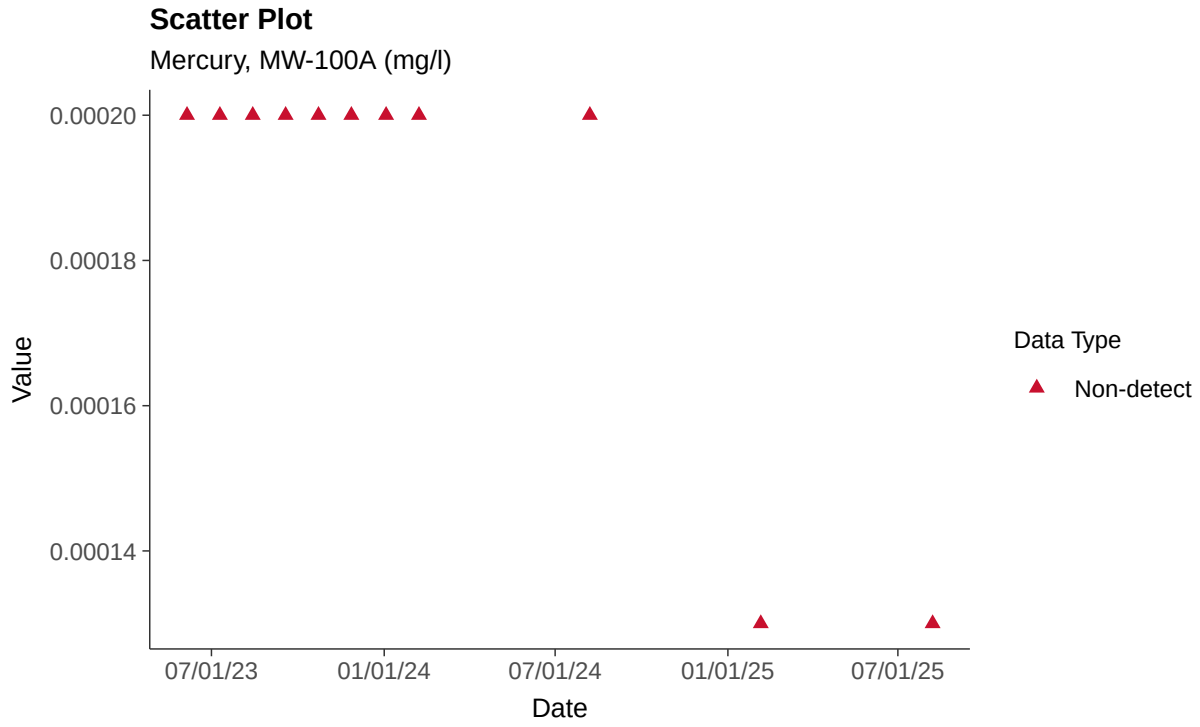
Trend Regression: Piecewise Linear-Linear

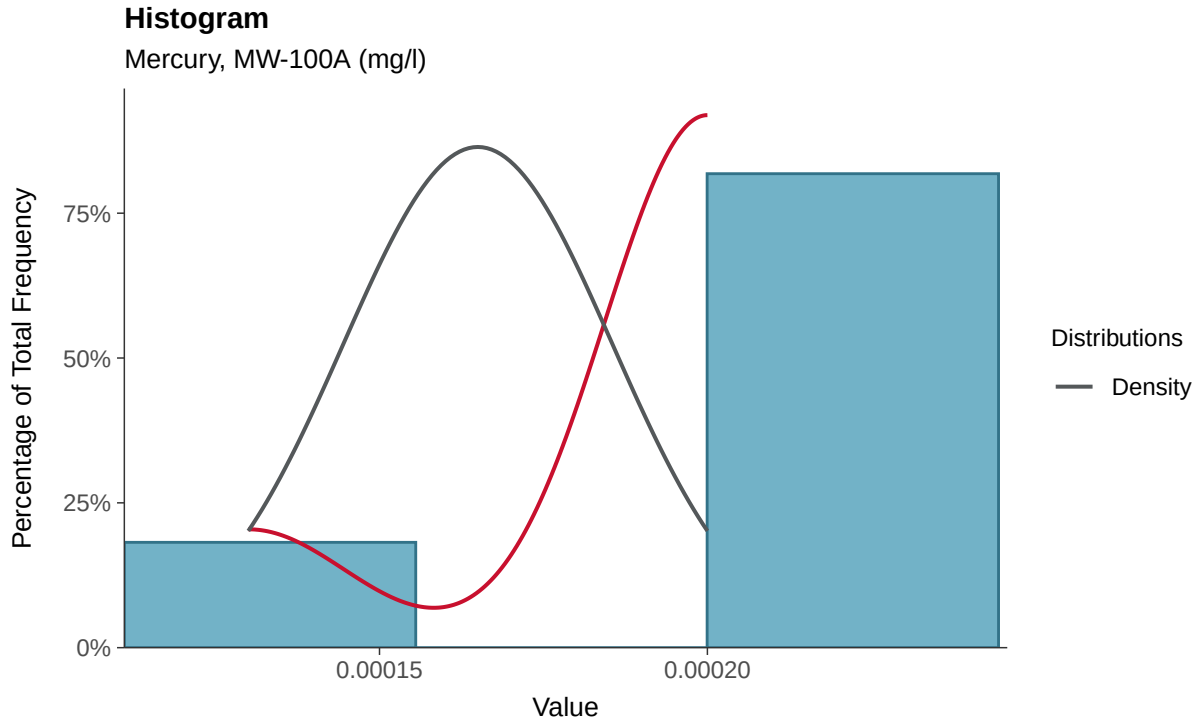
Lithium, MW-100A (mg/l)



Appendix IV: Mercury, MW-100A

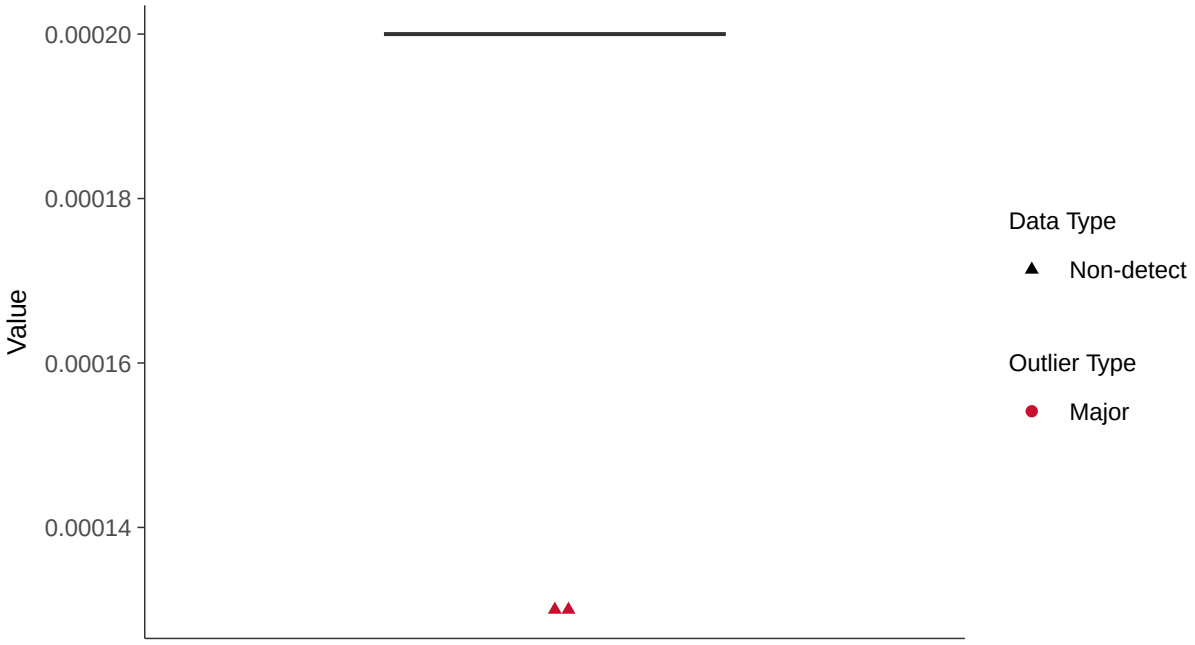
ID: 32_3_117





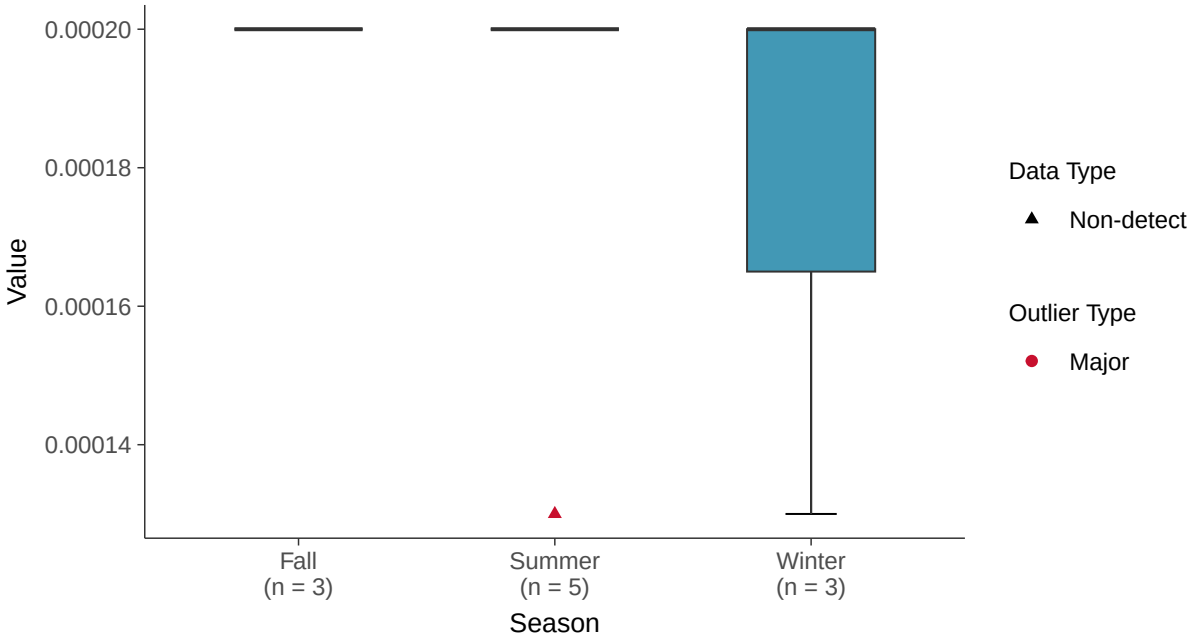
Boxplot

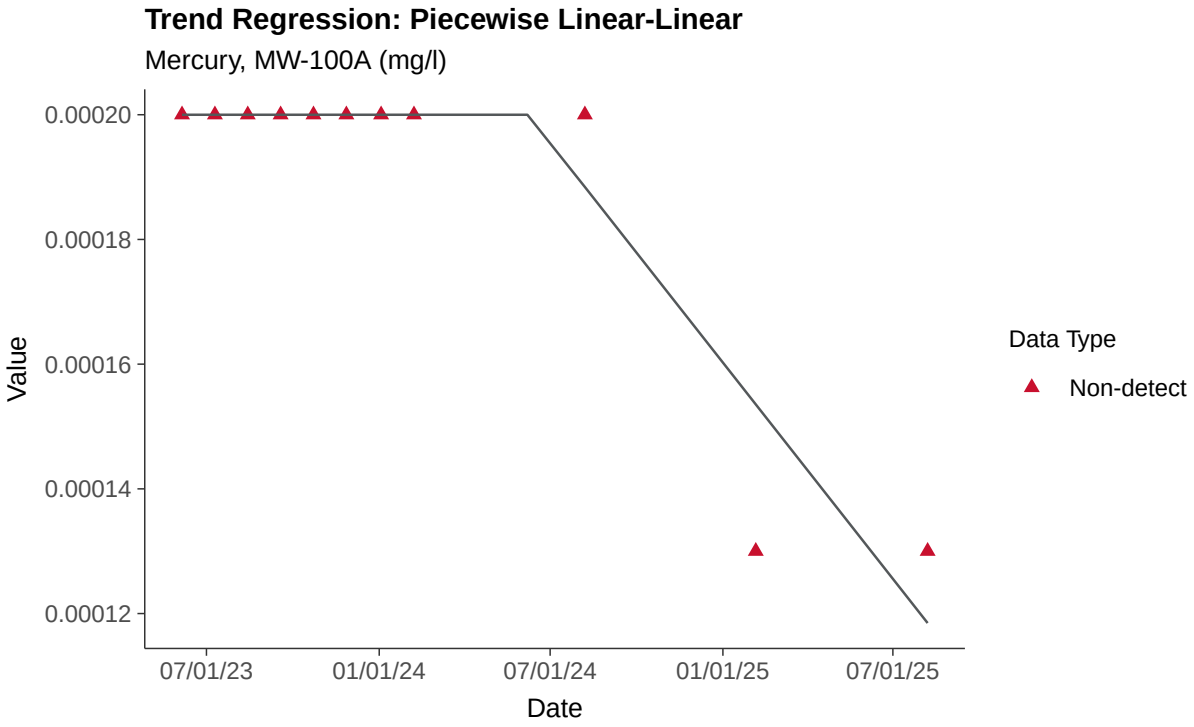
Mercury, MW-100A (mg/l)



Boxplot by Season

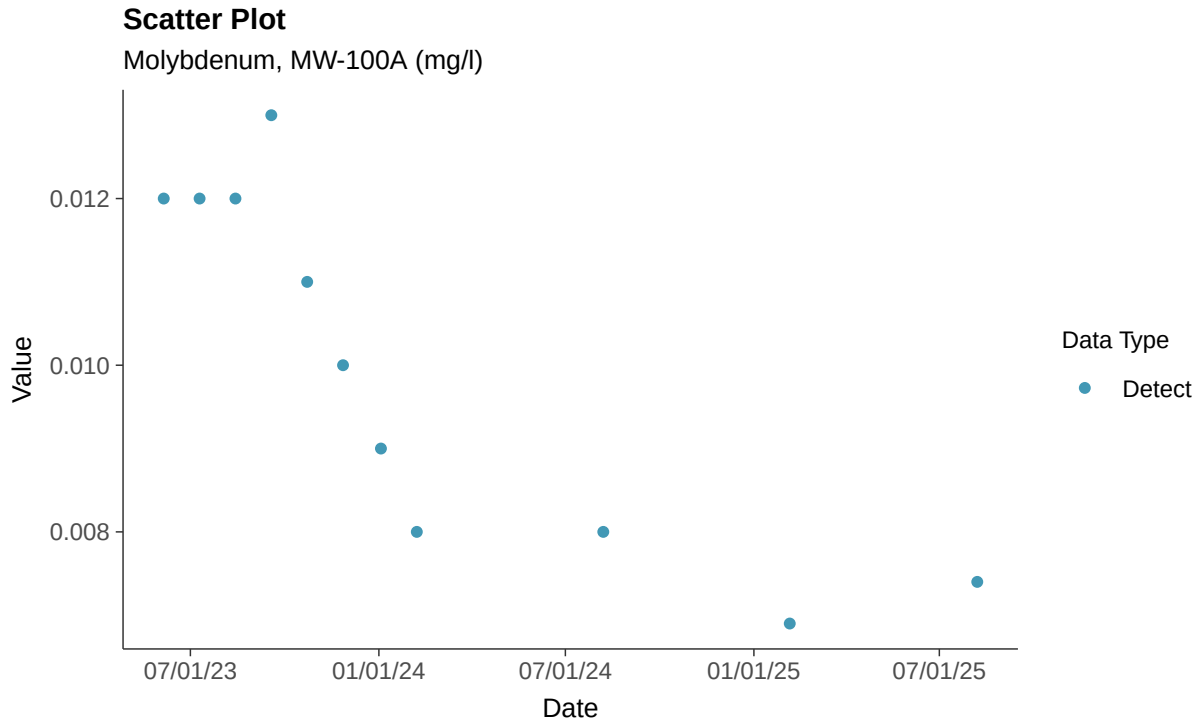
Mercury, MW-100A (mg/l)

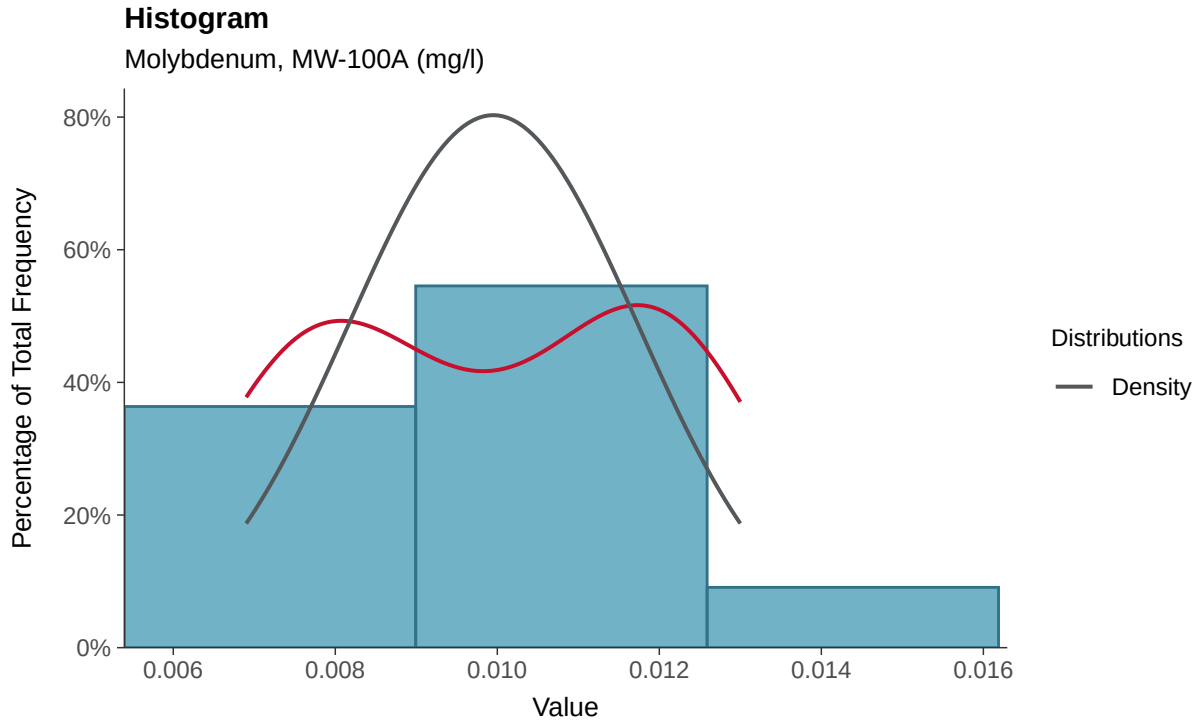



Trend Regression: Piecewise Linear-Linear
Mercury, MW-100A (mg/l)
Value
0.00020
0.00018
0.00016
0.00014
0.00012
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Molybdenum, MW-100A

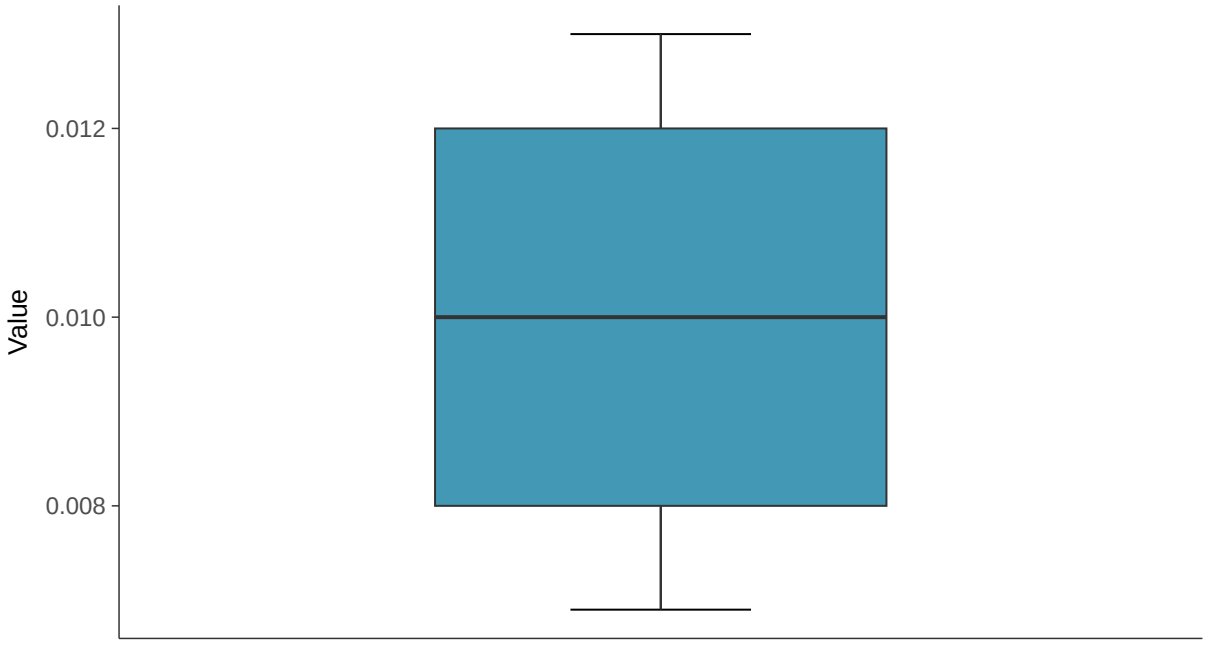
ID: 32_3_118





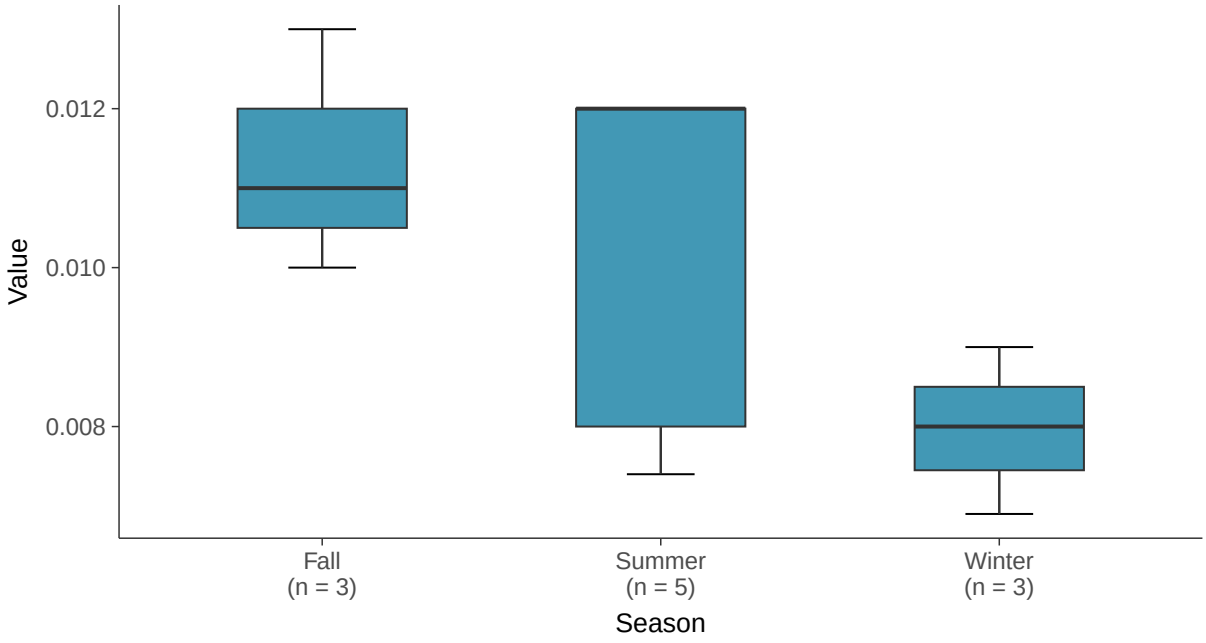
Boxplot

Molybdenum, MW-100A (mg/l)



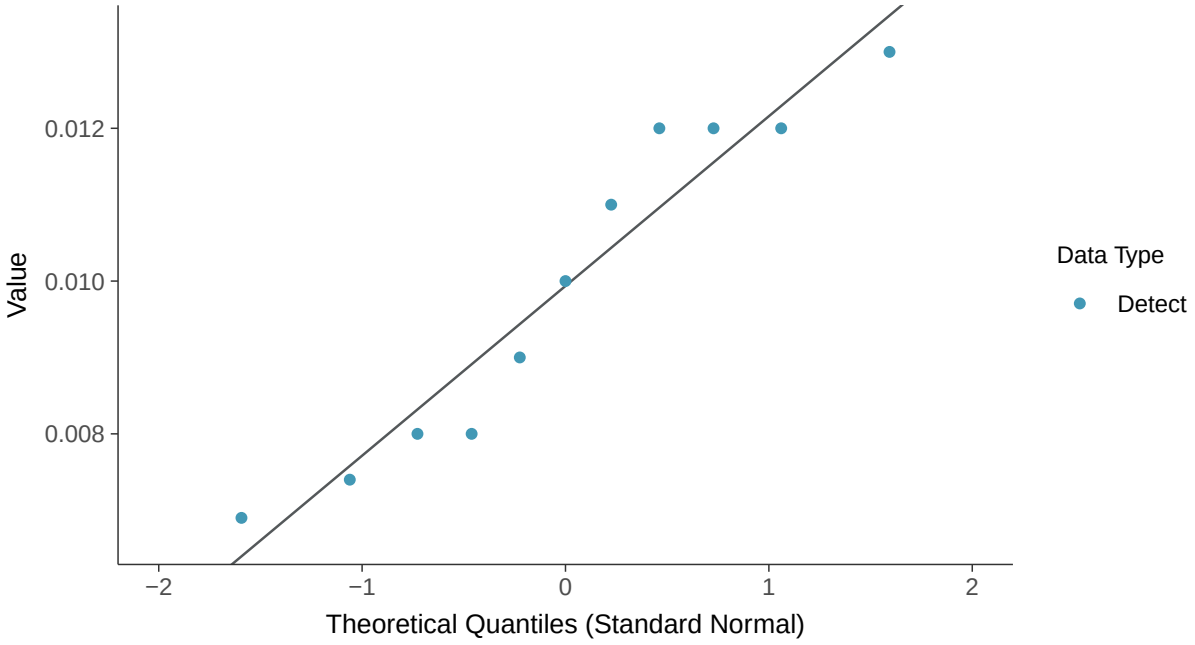
Boxplot by Season

Molybdenum, MW-100A (mg/l)



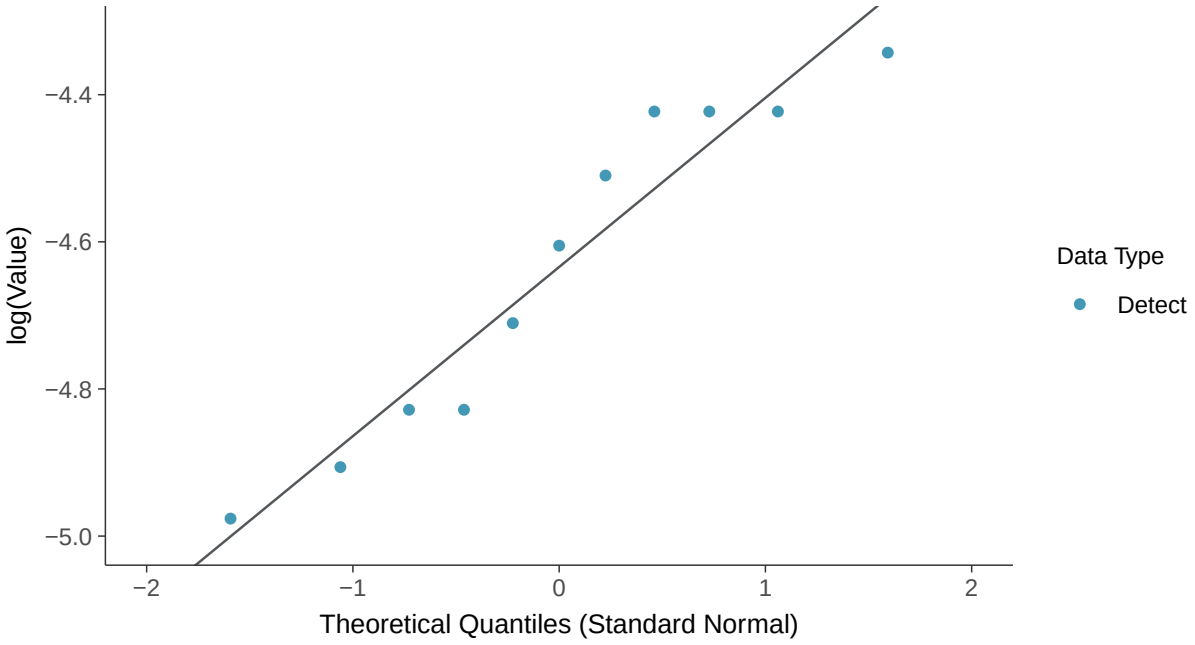
Normal Q-Q plot

Molybdenum, MW-100A (mg/l)



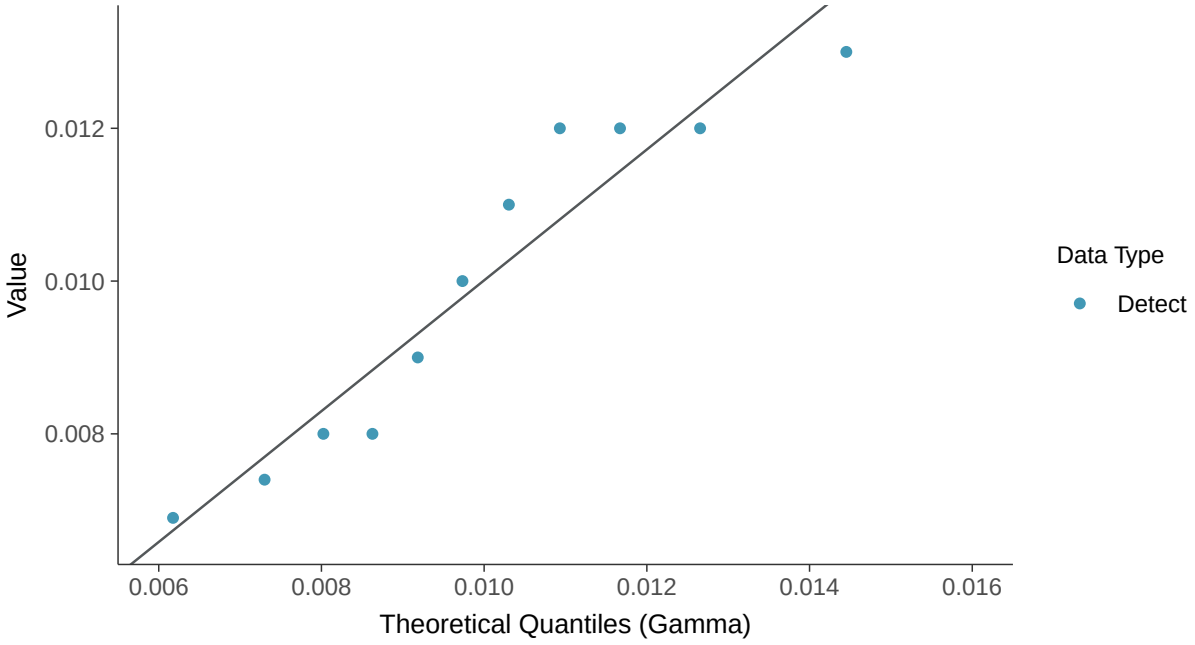
Lognormal Q-Q plot

Molybdenum, MW-100A (mg/l)



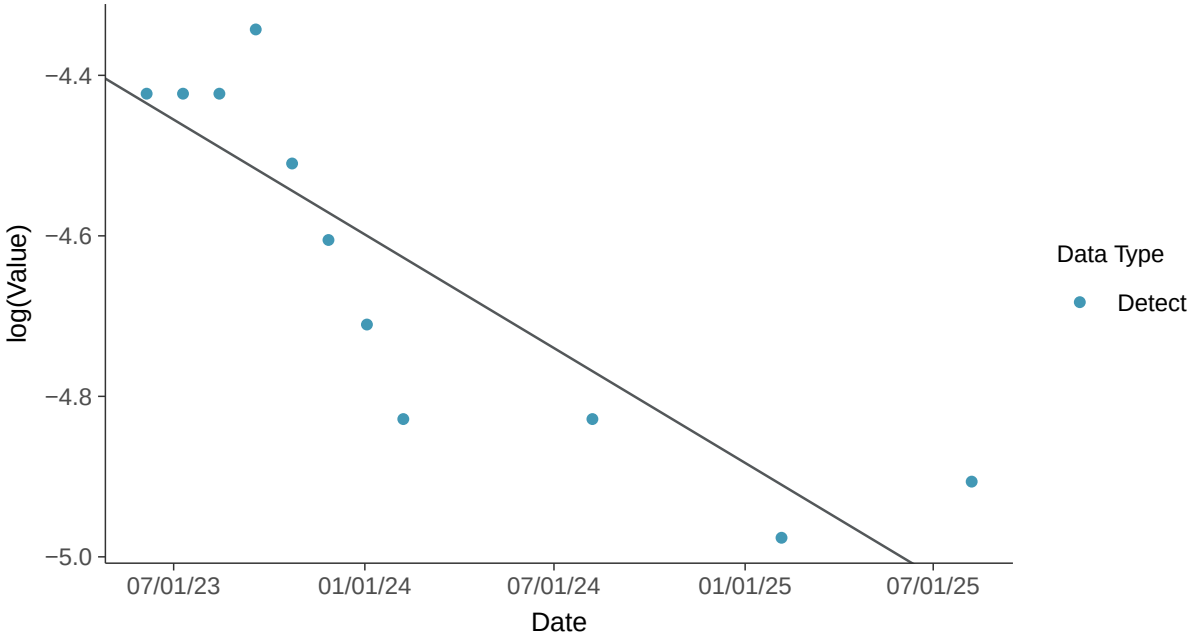
Gamma Q-Q plot

Molybdenum, MW-100A (mg/l)



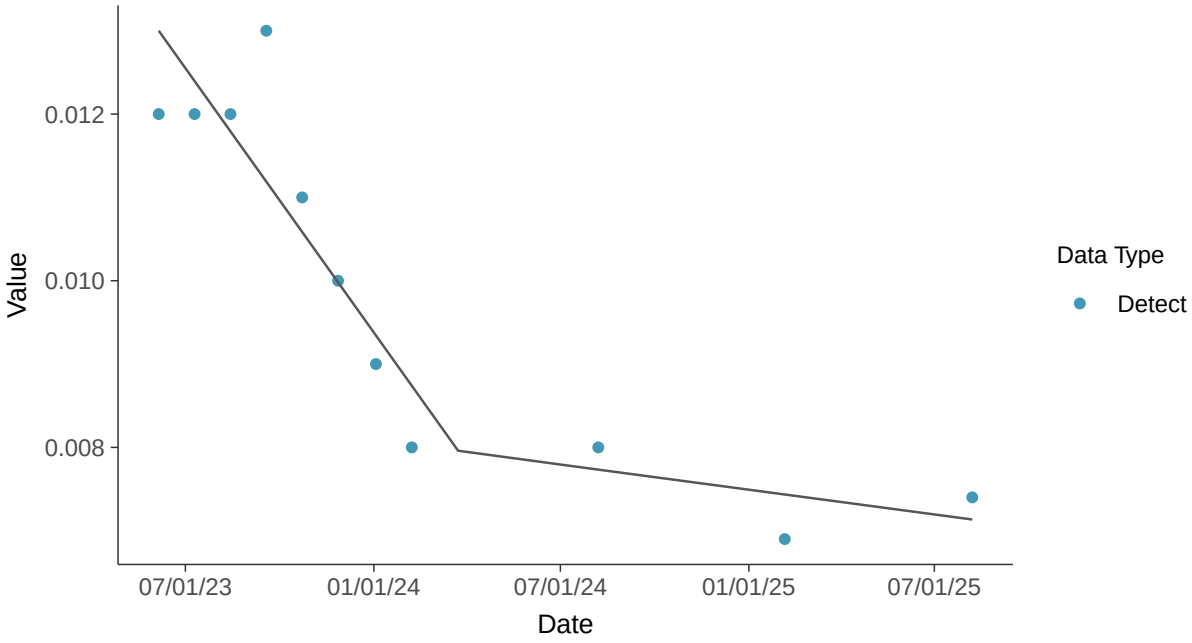
Trend Regression: Lognormal MLE

Molybdenum, MW-100A (mg/l)



Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-100A (mg/l)

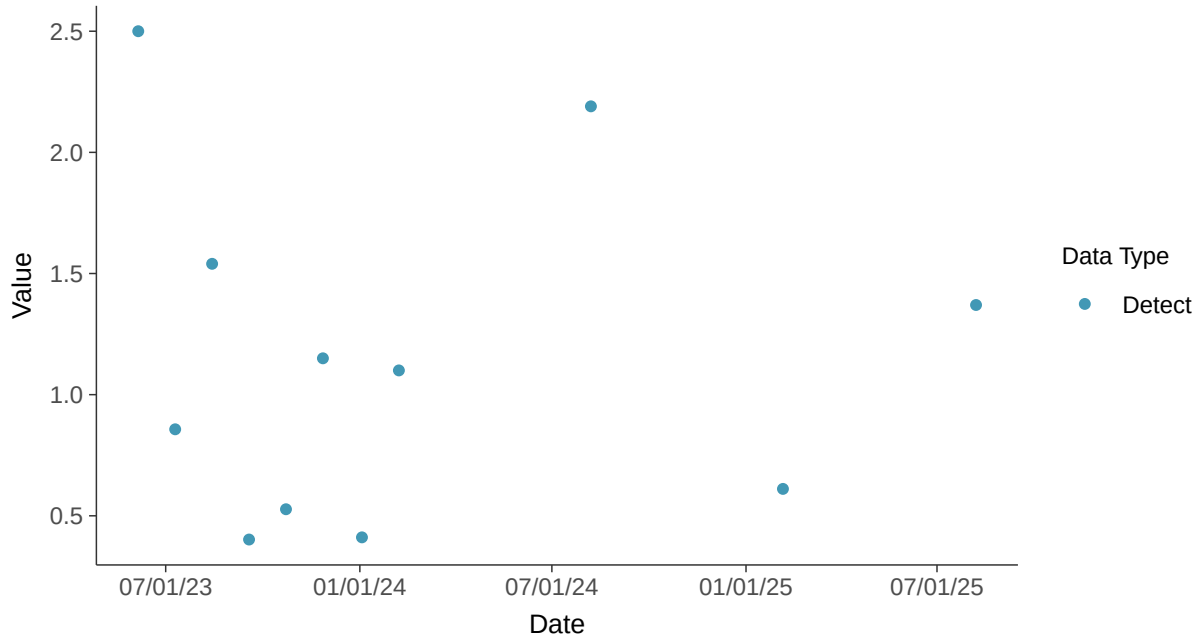


Appendix IV: Radium-226+228, MW-100A

ID: 32_3_121

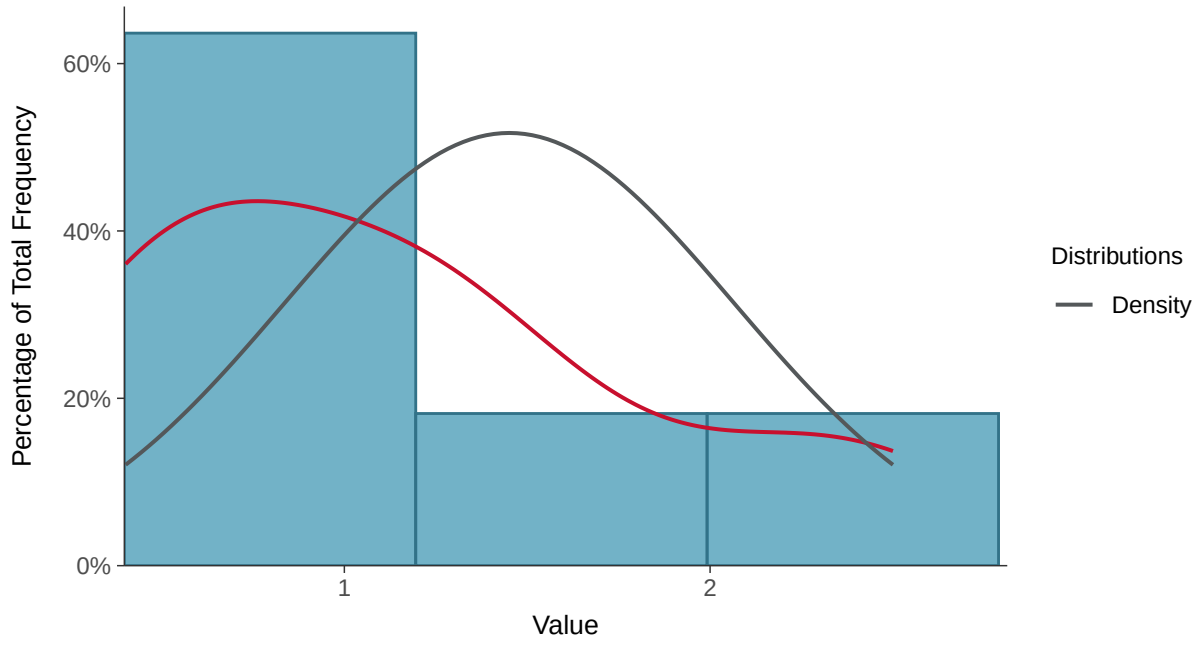
Scatter Plot

Radium-226+228, MW-100A (pci/l)



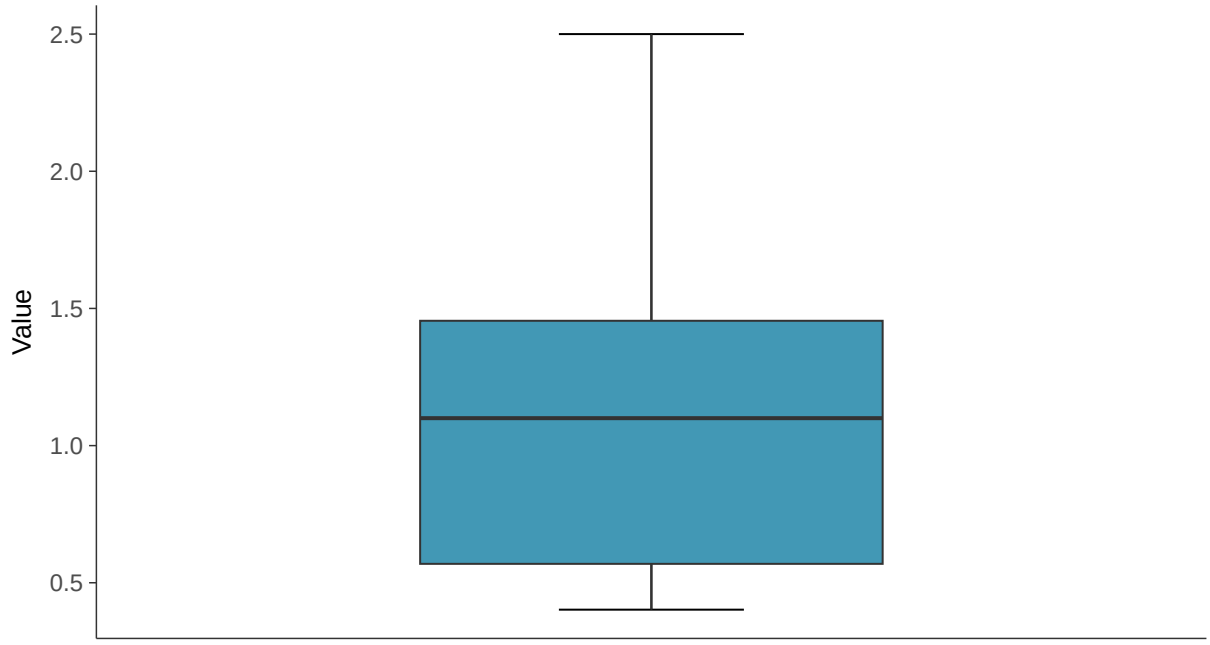
Histogram

Radium-226+228, MW-100A (pci/l)



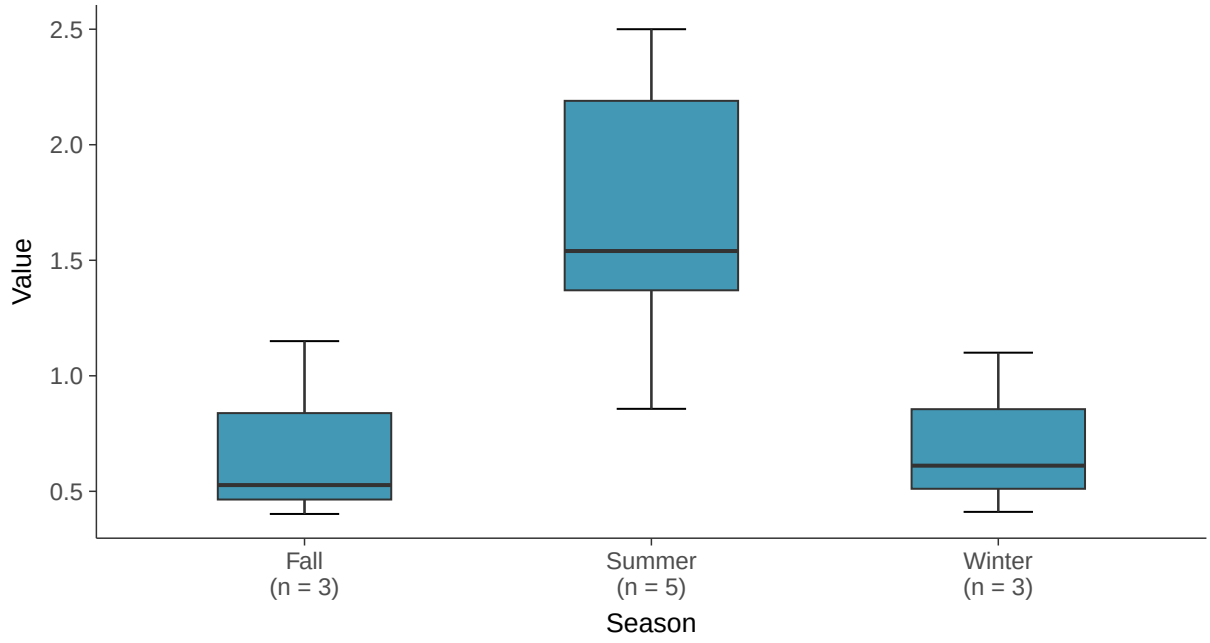
Boxplot

Radium-226+228, MW-100A (pci/l)



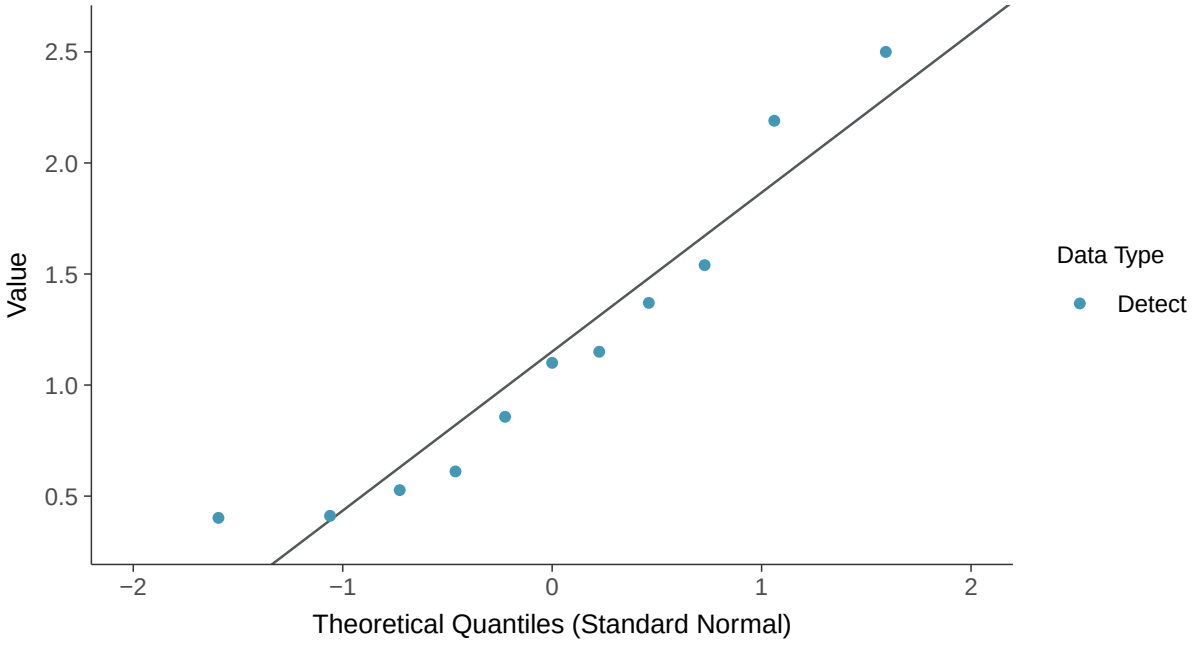
Boxplot by Season

Radium-226+228, MW-100A (pci/l)



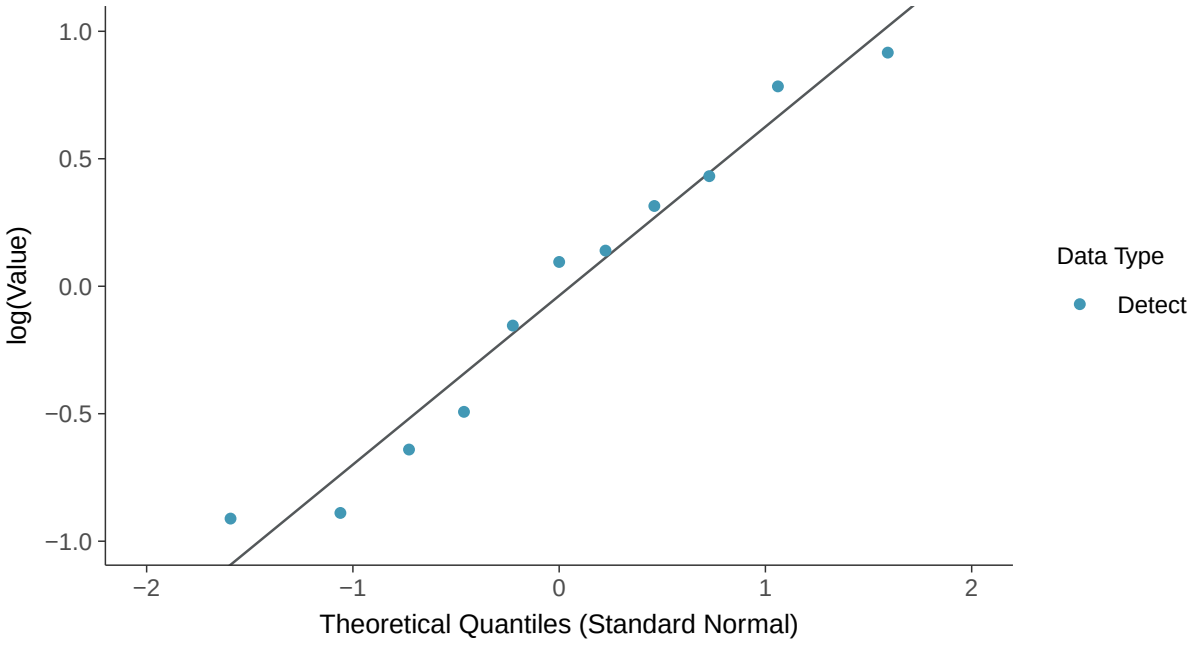
Normal Q-Q plot

Radium-226+228, MW-100A (pci/l)



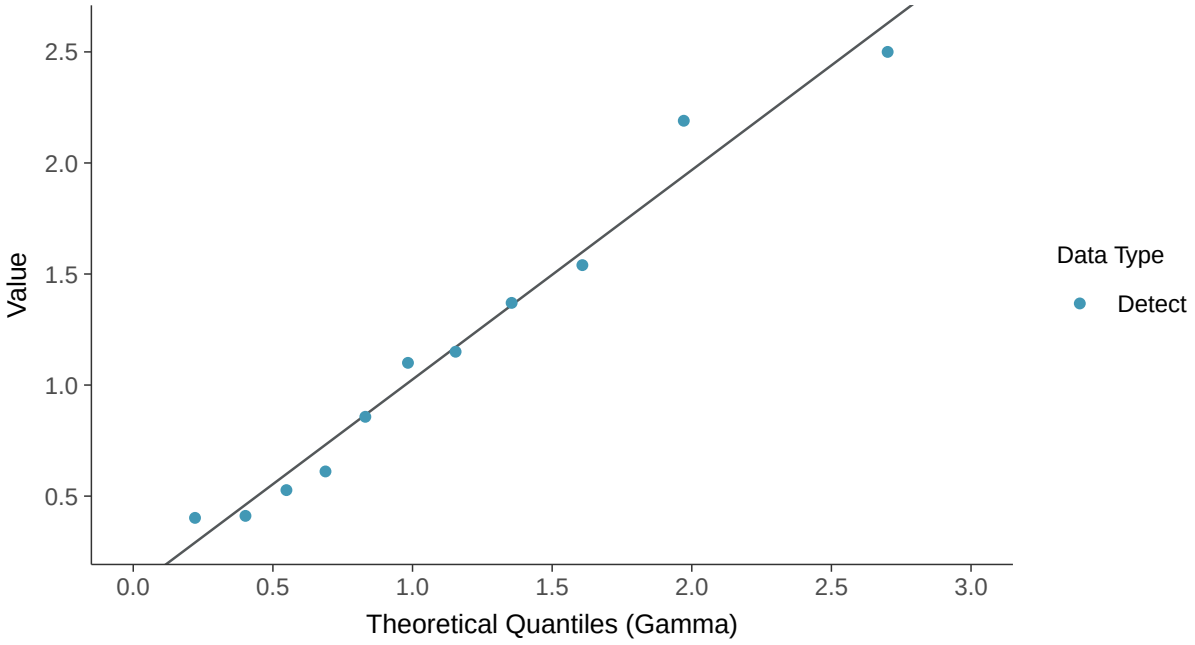
Lognormal Q-Q plot

Radium-226+228, MW-100A (pci/l)



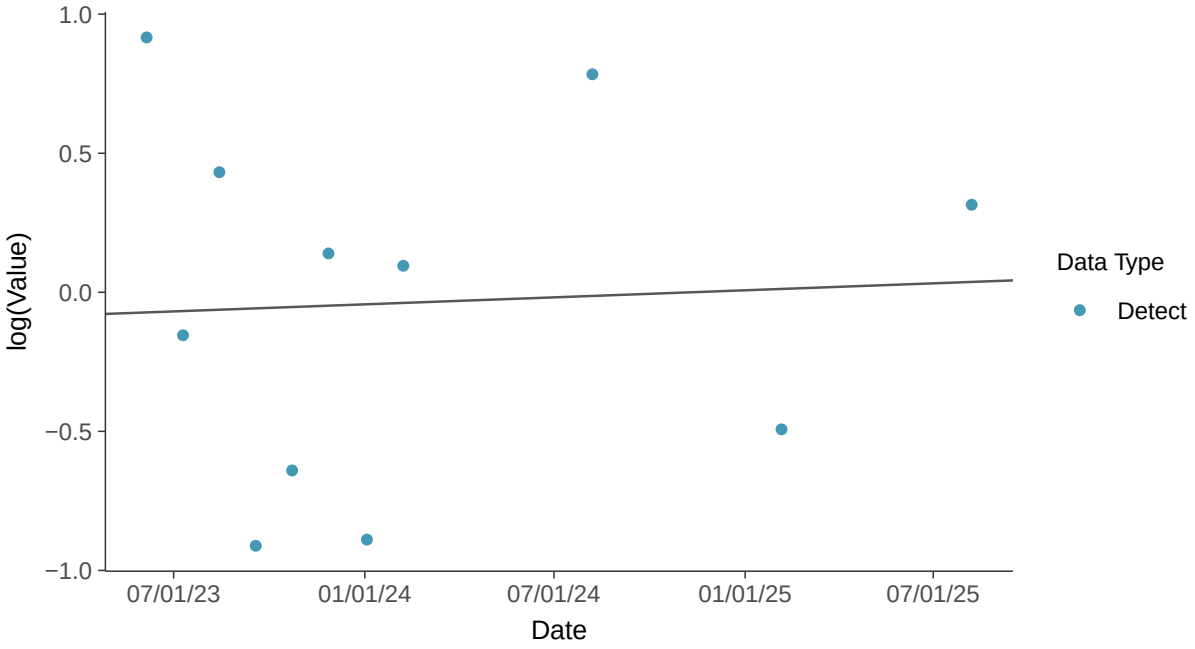
Gamma Q-Q plot

Radium-226+228, MW-100A (pci/l)



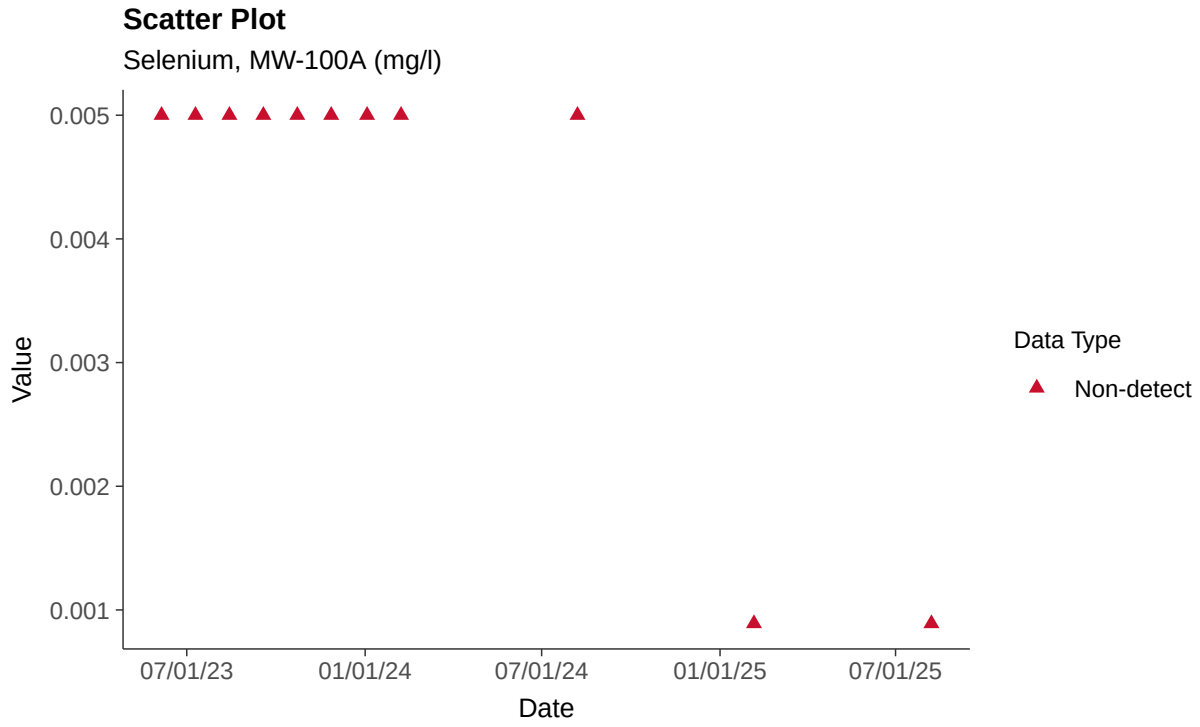
Trend Regression: Lognormal MLE

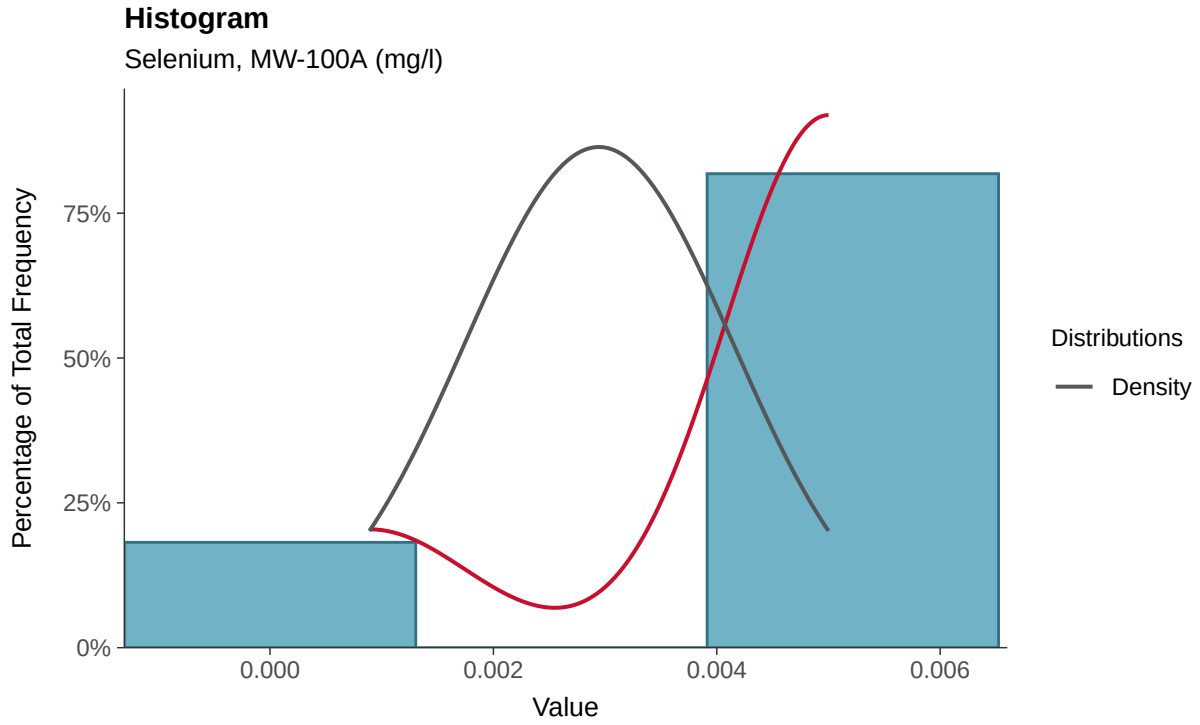
Radium-226+228, MW-100A (pci/l)



Appendix IV: Selenium, MW-100A

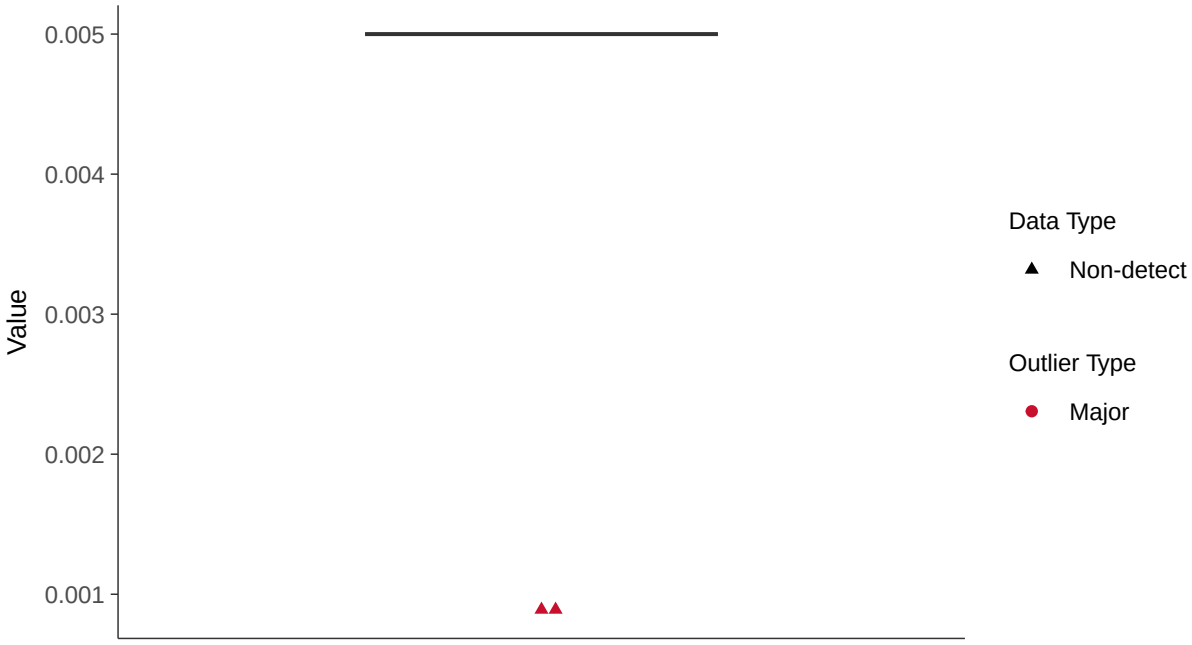
ID: 32_3_122





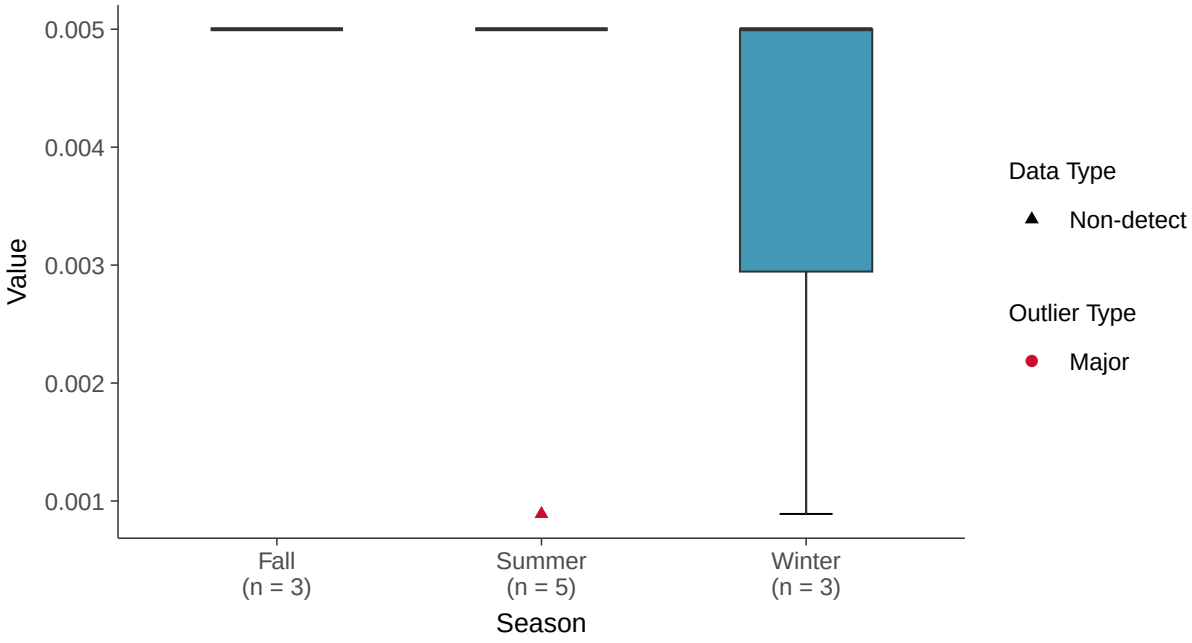
Boxplot

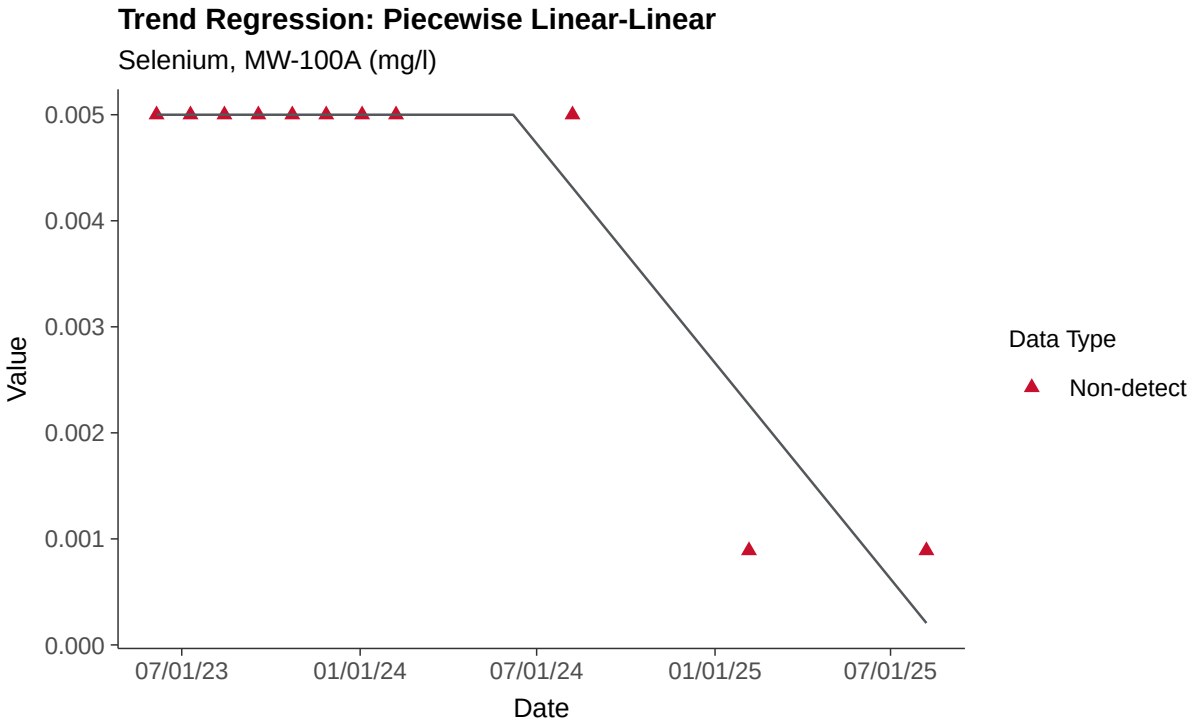
Selenium, MW-100A (mg/l)



Boxplot by Season

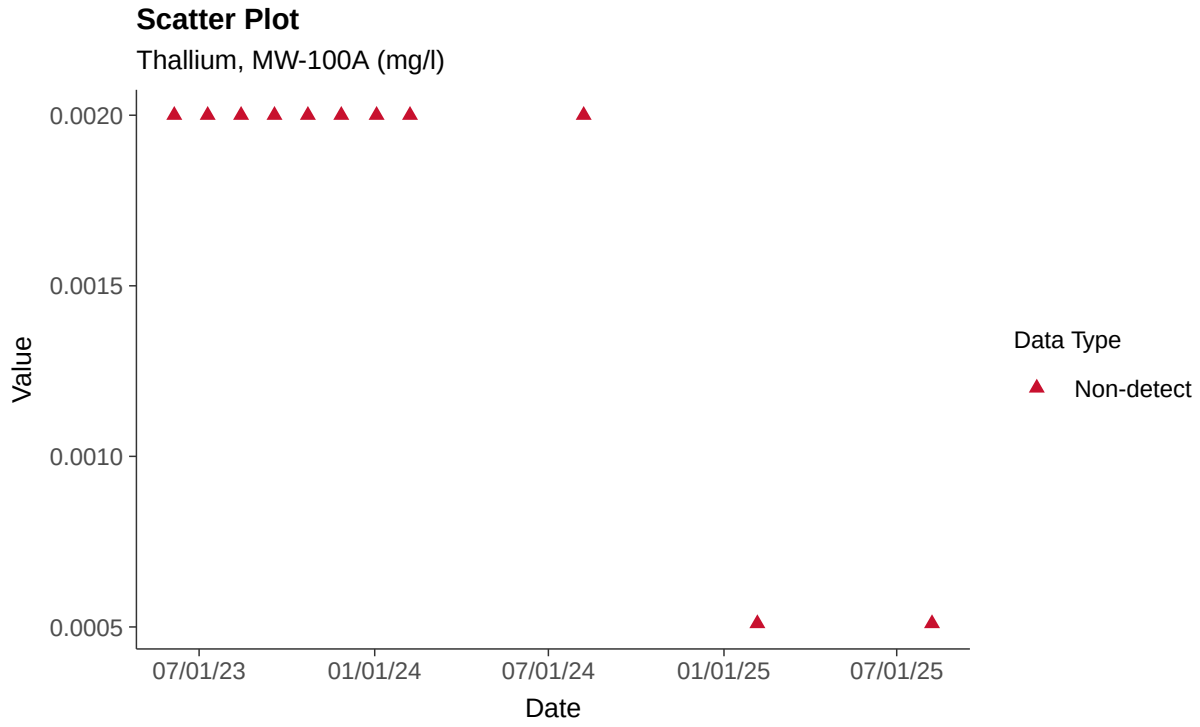
Selenium, MW-100A (mg/l)

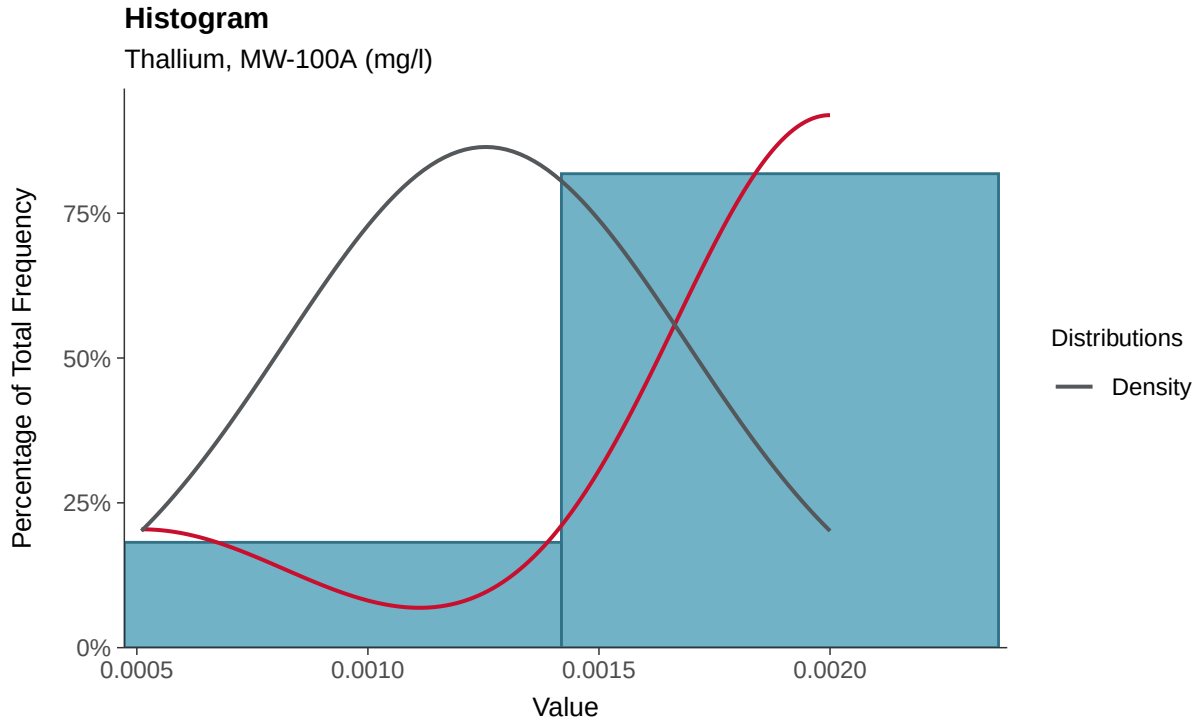



Trend Regression: Piecewise Linear-Linear
Selenium, MW-100A (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Thallium, MW-100A

ID: 32_3_125



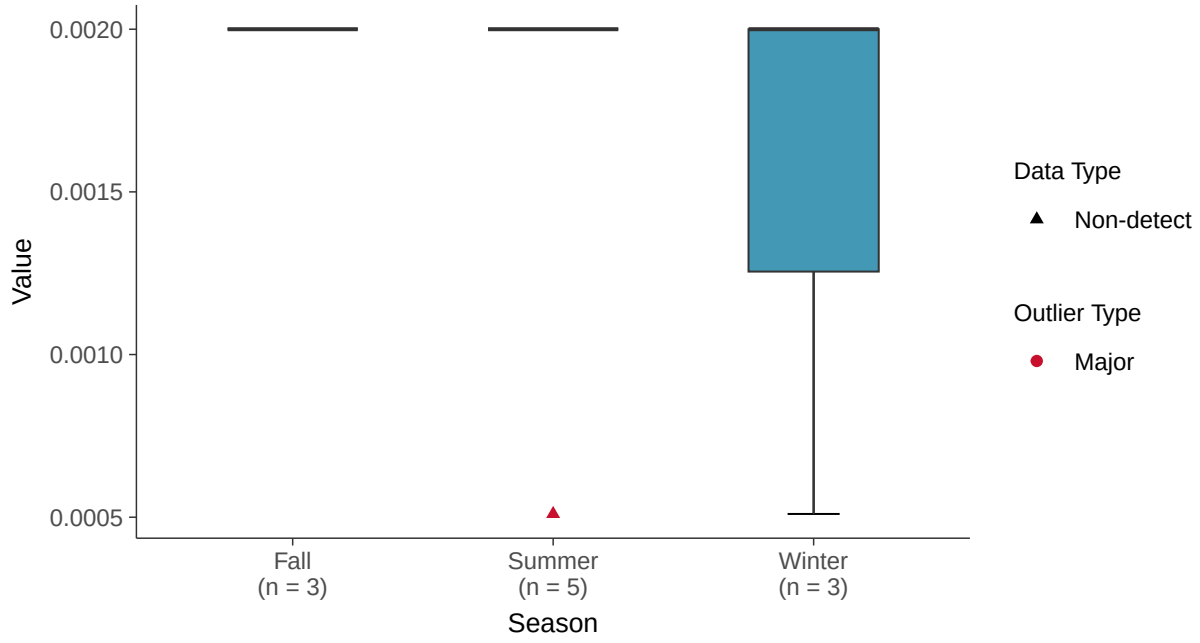


Boxplot

Thallium, MW-100A (mg/l)

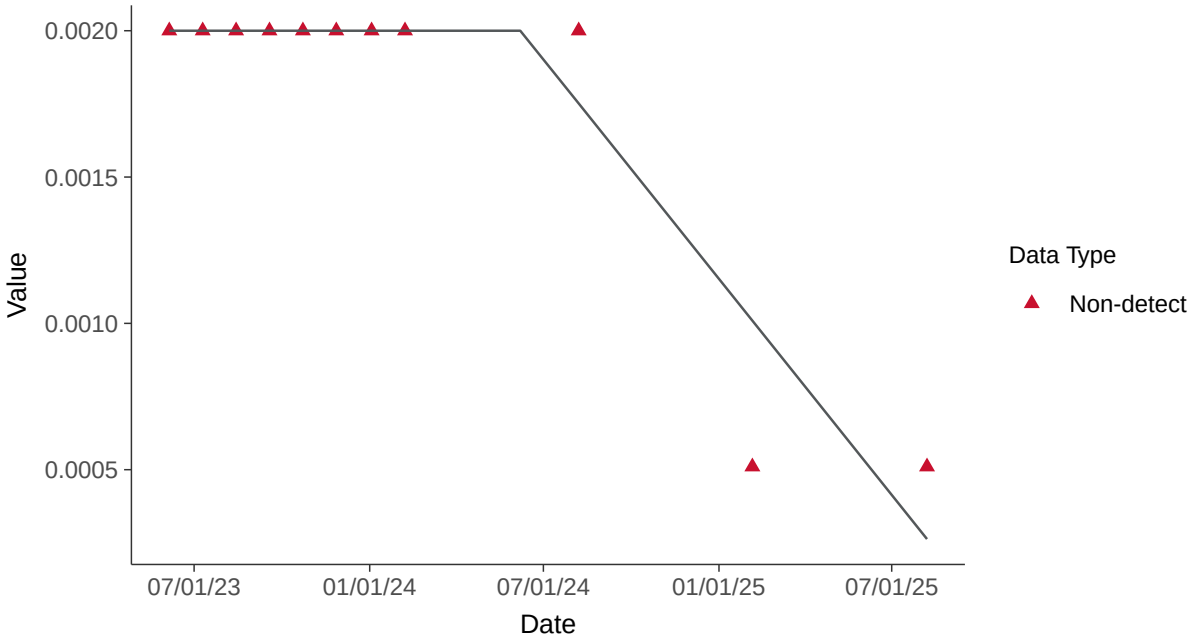
Boxplot by Season

Thallium, MW-100A (mg/l)



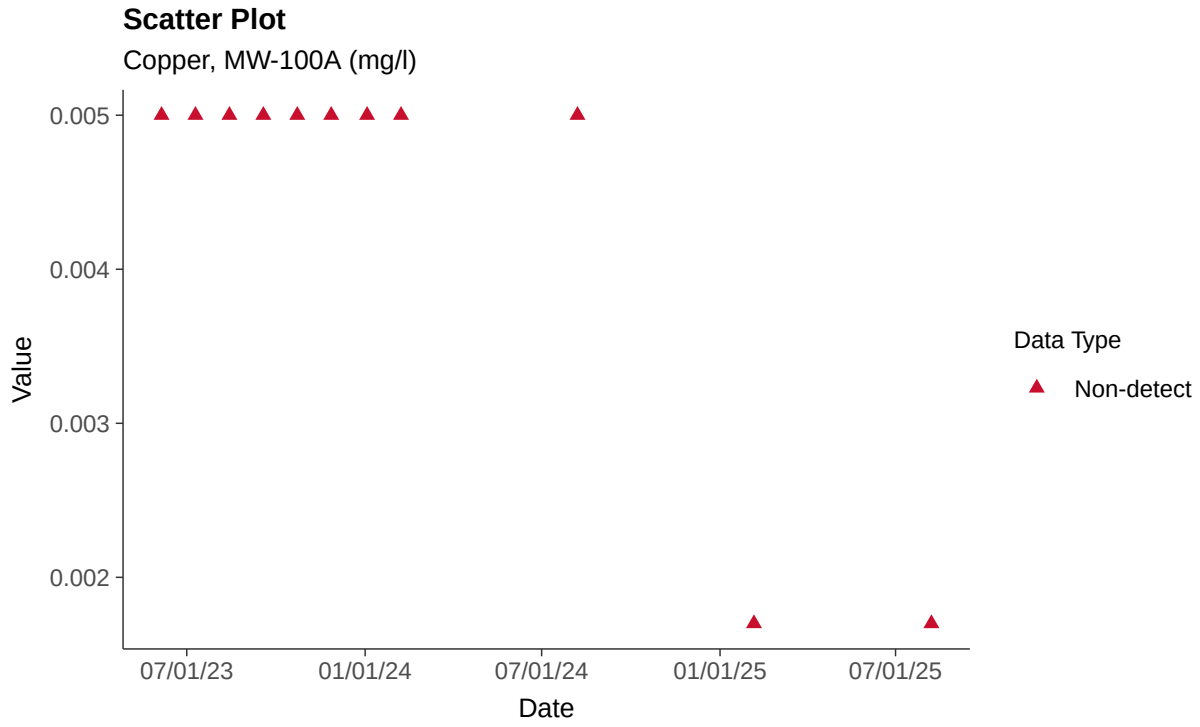
Trend Regression: Piecewise Linear-Linear

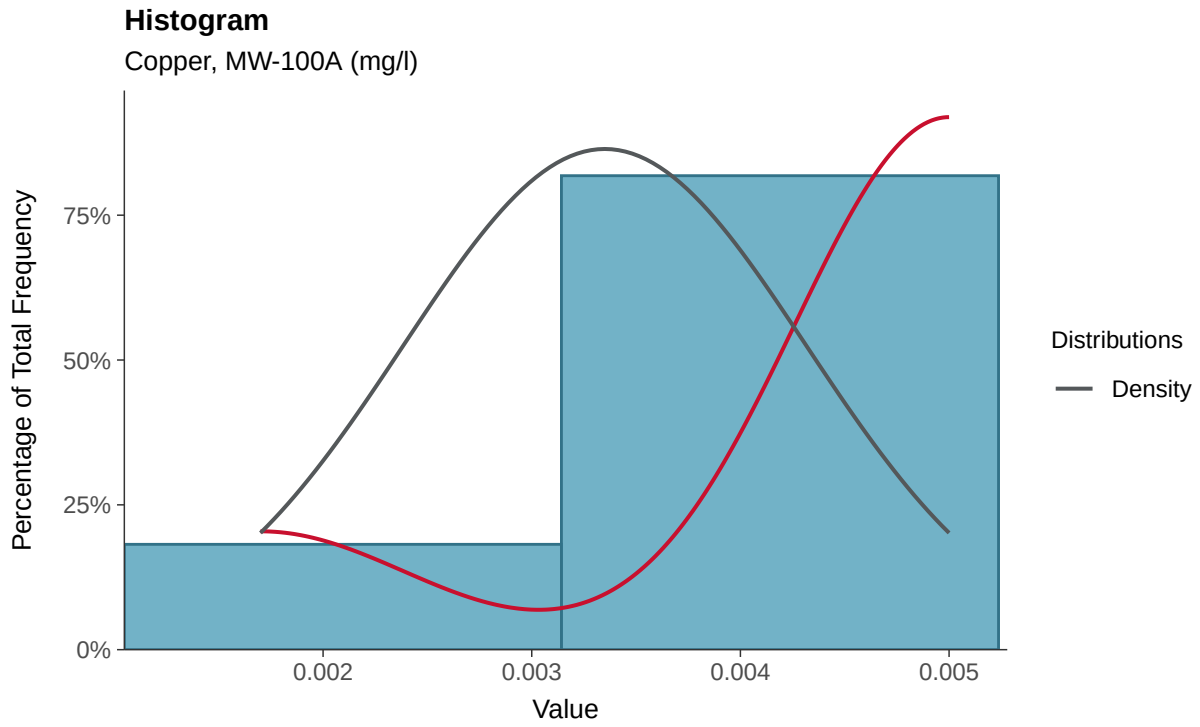
Thallium, MW-100A (mg/l)



Part 115: Copper, MW-100A

ID: 32_5_111



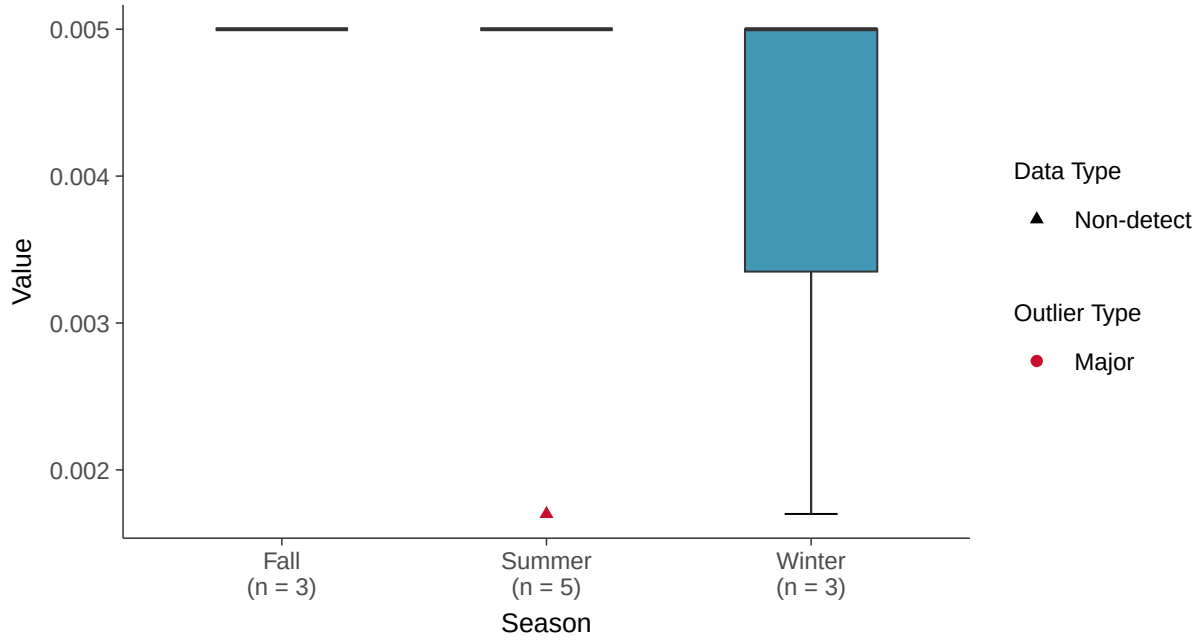


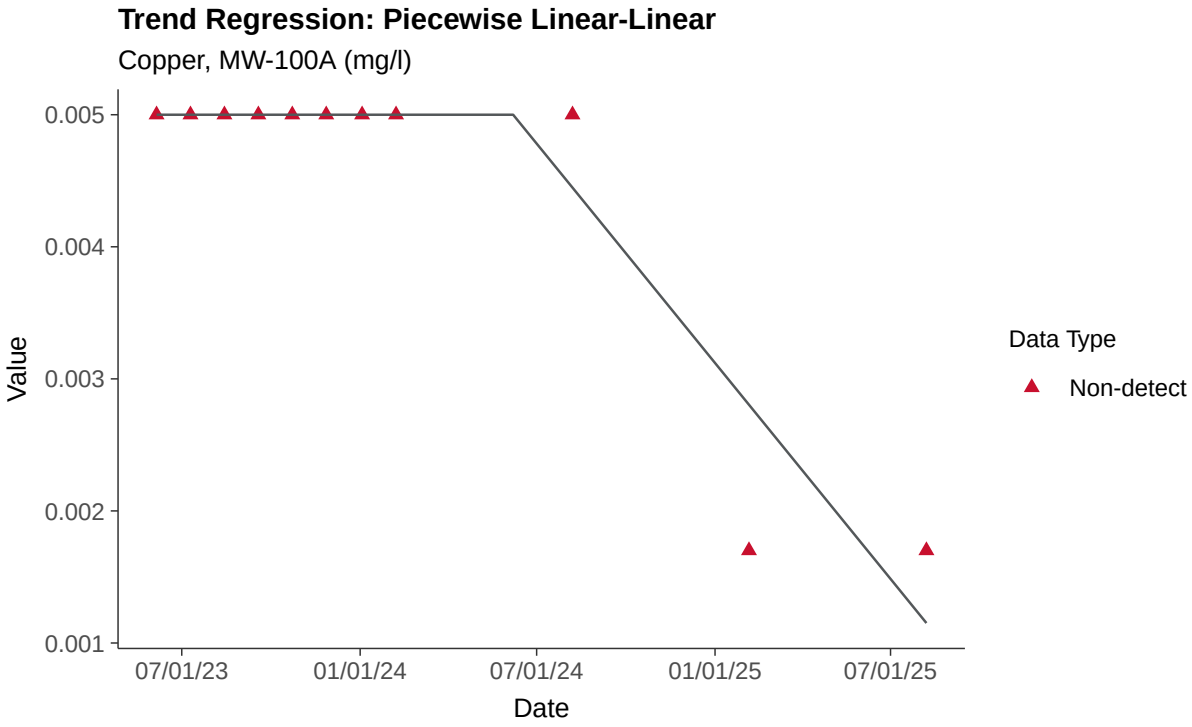
Boxplot

Copper, MW-100A (mg/l)

Boxplot by Season

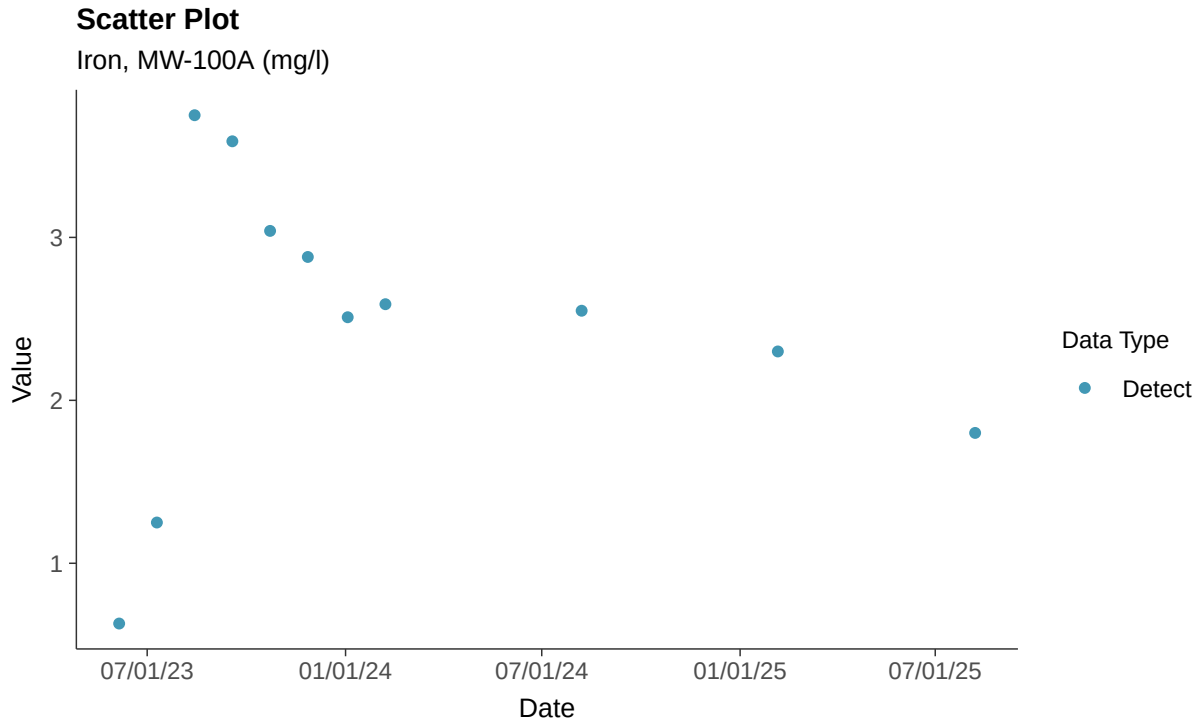
Copper, MW-100A (mg/l)

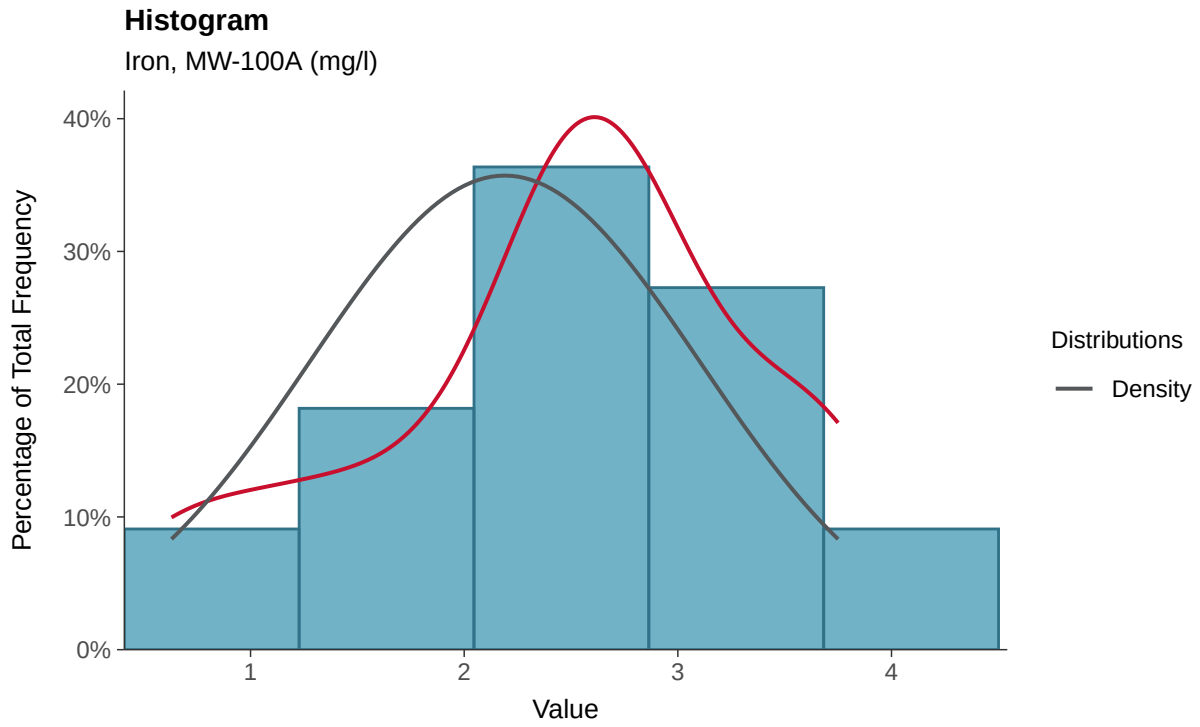



Trend Regression: Piecewise Linear-Linear
Copper, MW-100A (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Iron, MW-100A

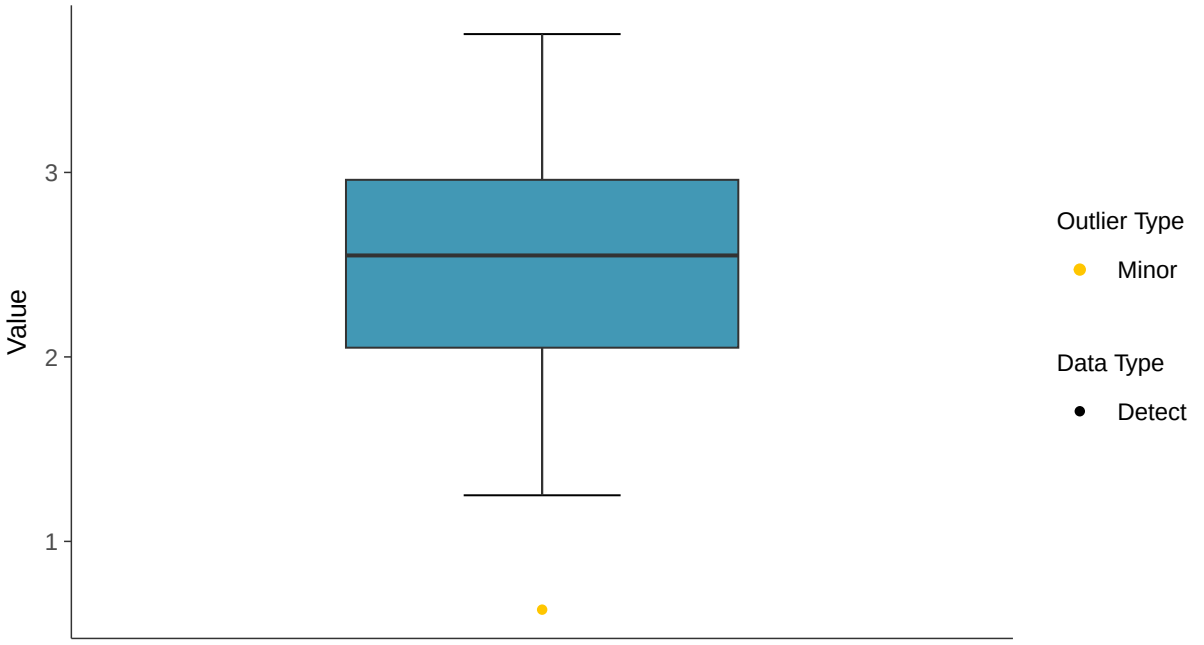
ID: 32_5_114





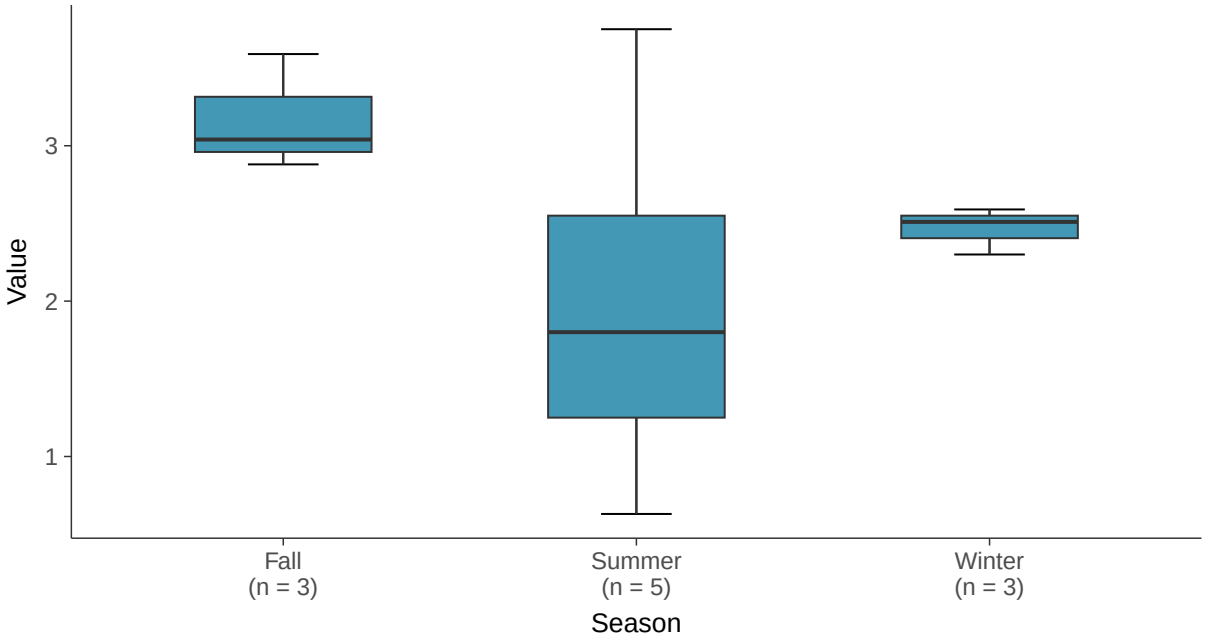
Boxplot

Iron, MW-100A (mg/l)



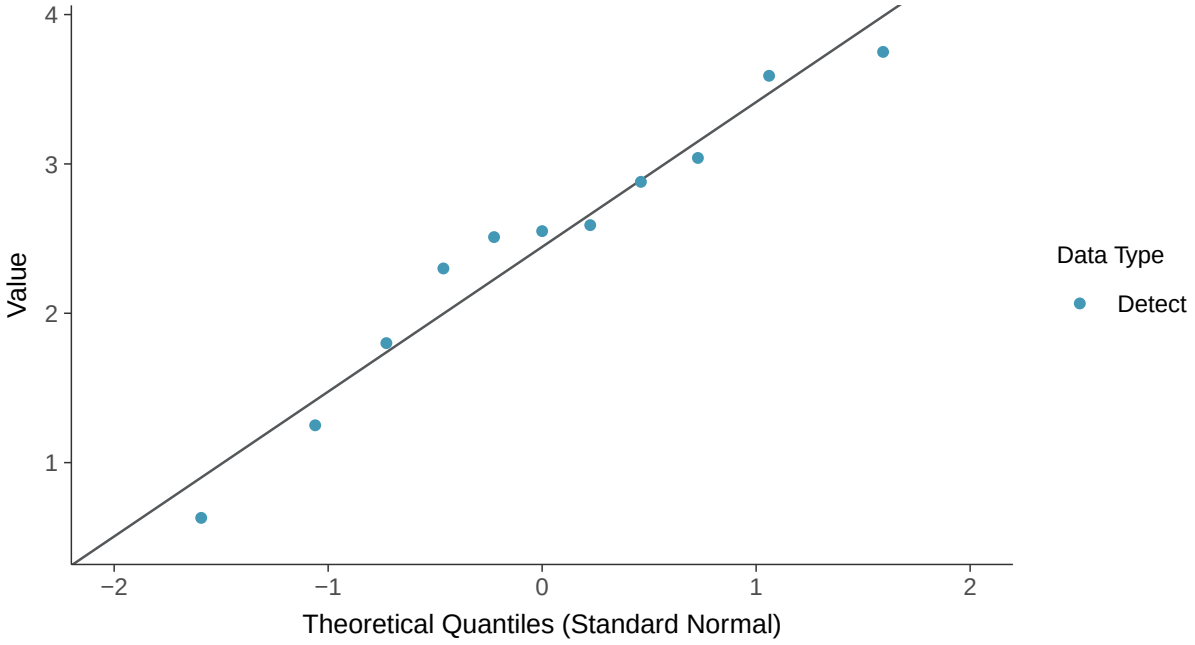
Boxplot by Season

Iron, MW-100A (mg/l)



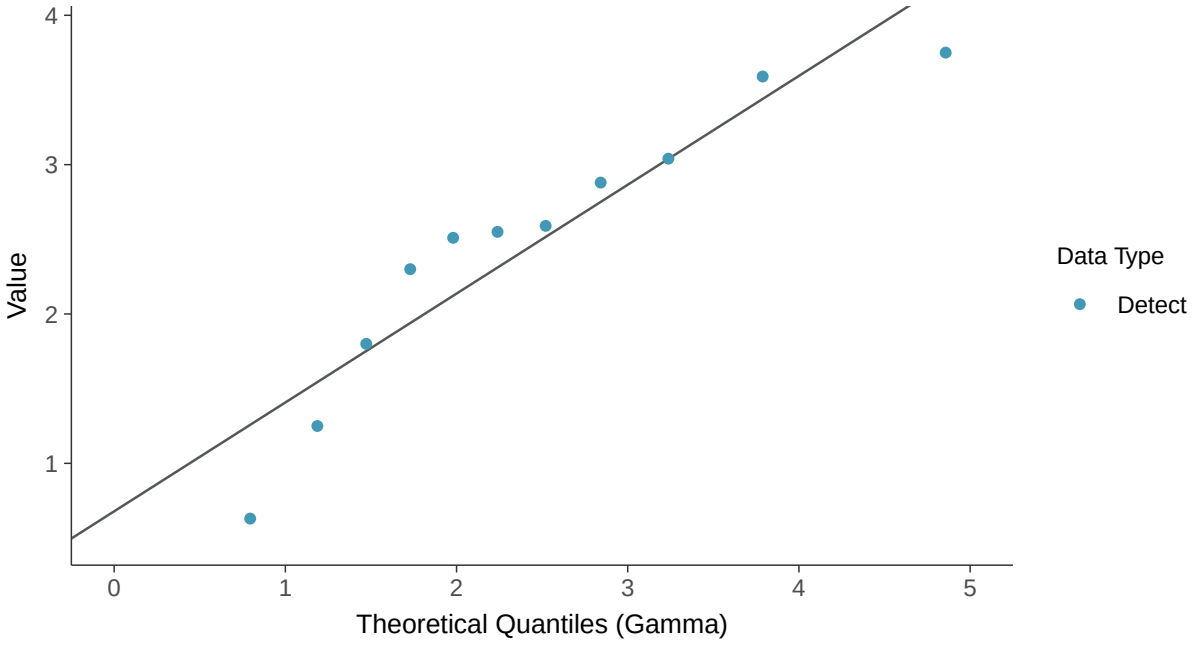
Normal Q-Q plot

Iron, MW-100A (mg/l)



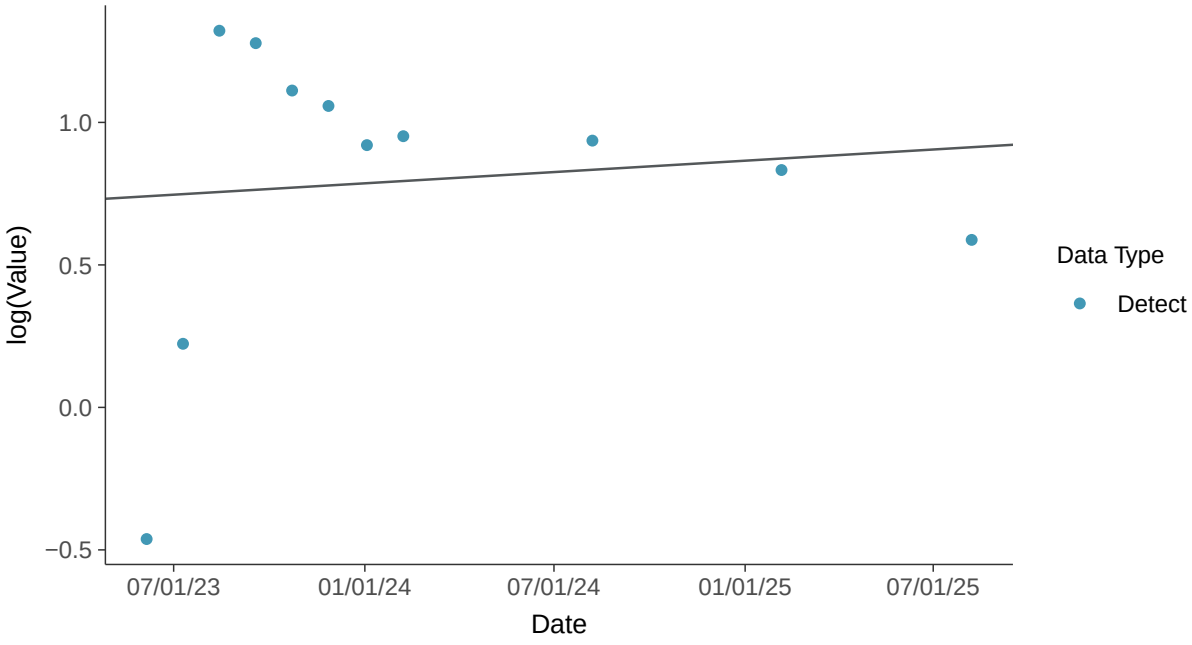
Gamma Q-Q plot

Iron, MW-100A (mg/l)



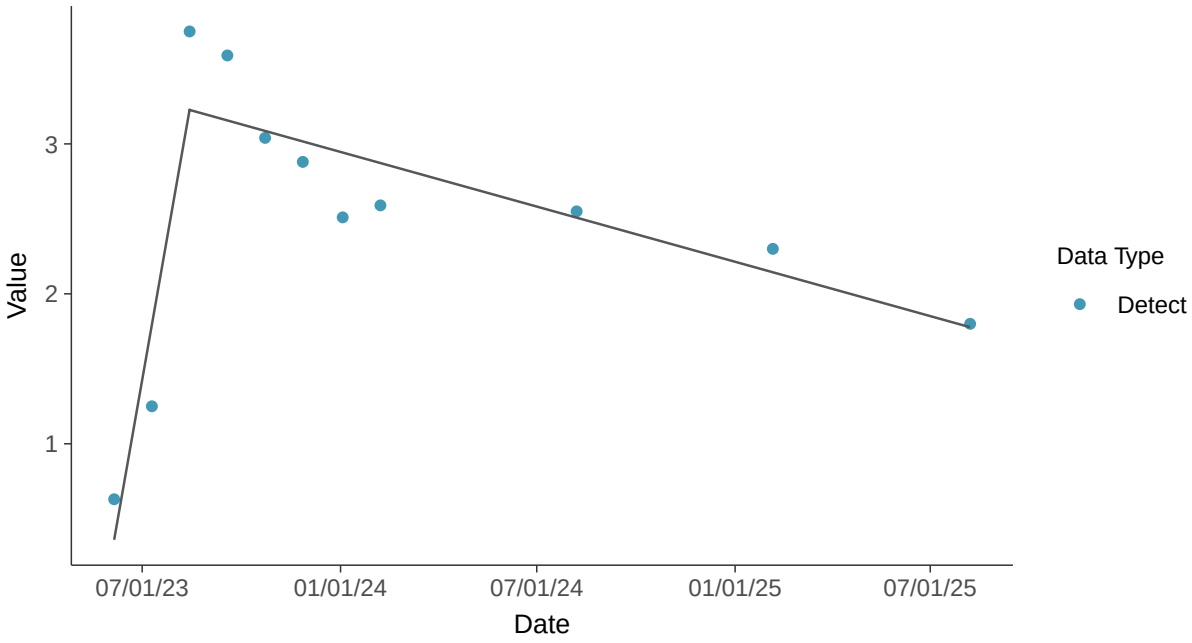
Trend Regression: Lognormal MLE

Iron, MW-100A (mg/l)



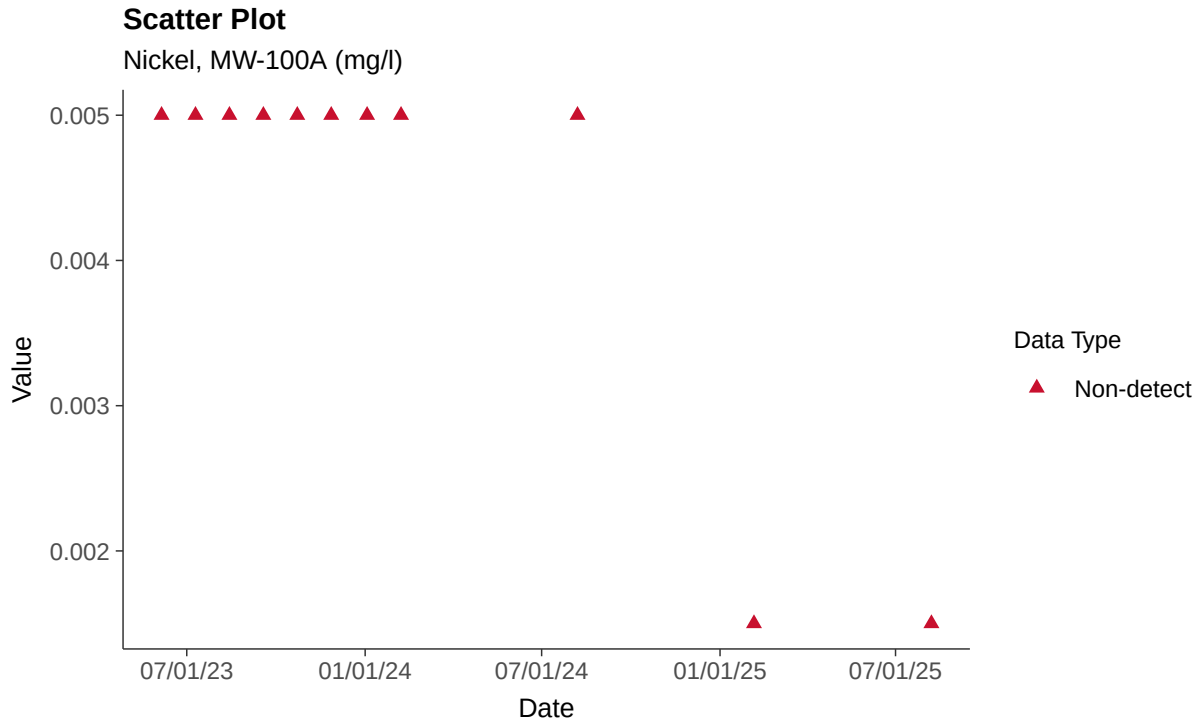
Trend Regression: Piecewise Linear-Linear

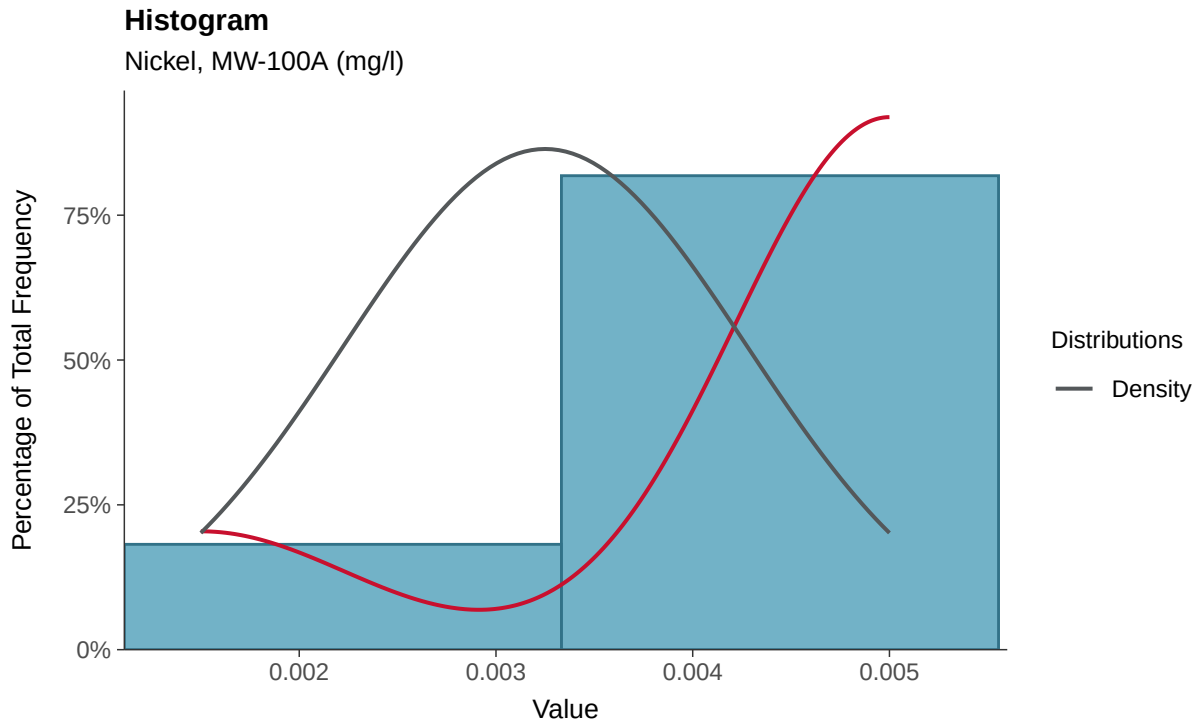
Iron, MW-100A (mg/l)



Part 115: Nickel, MW-100A

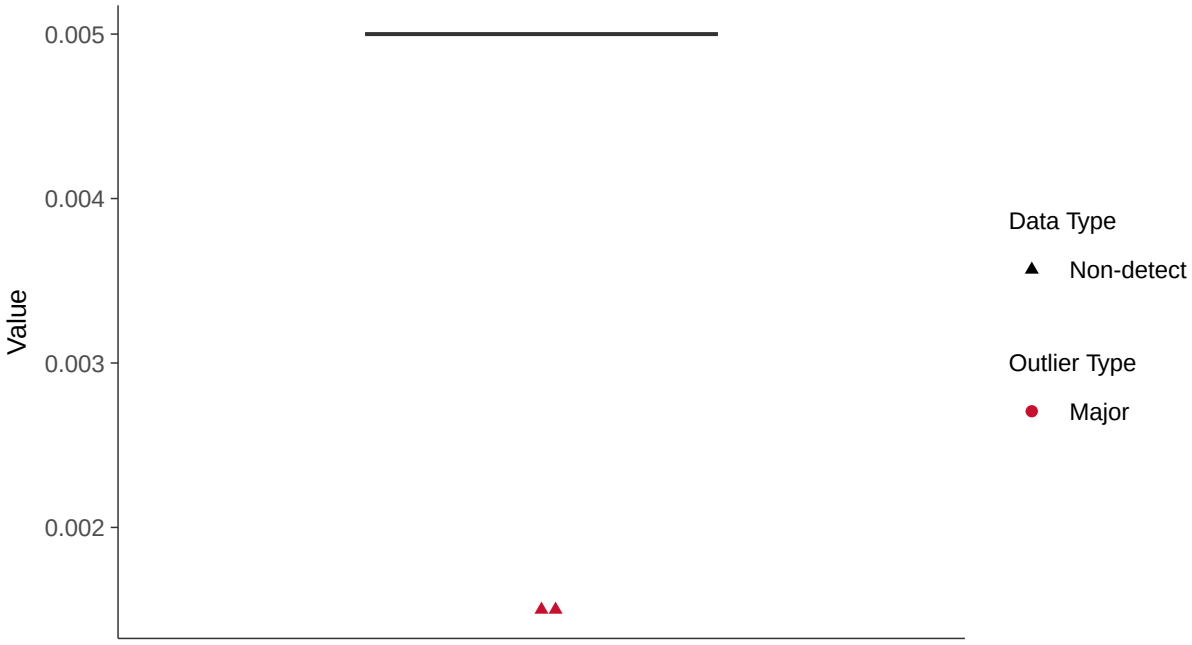
ID: 32_5_119





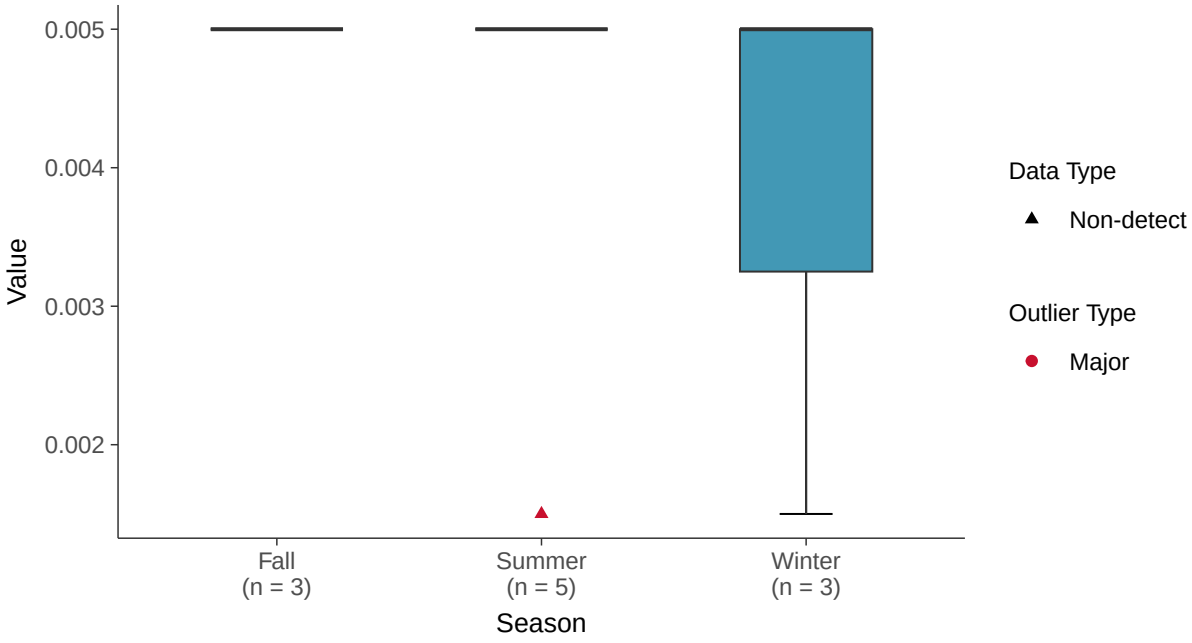
Boxplot

Nickel, MW-100A (mg/l)



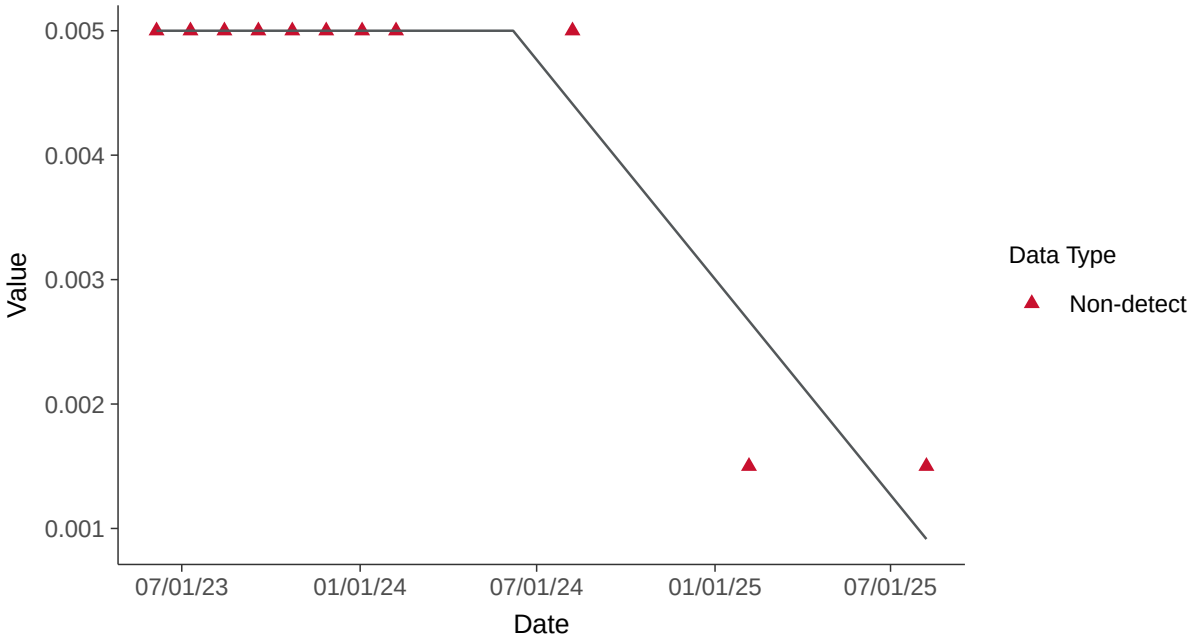
Boxplot by Season

Nickel, MW-100A (mg/l)



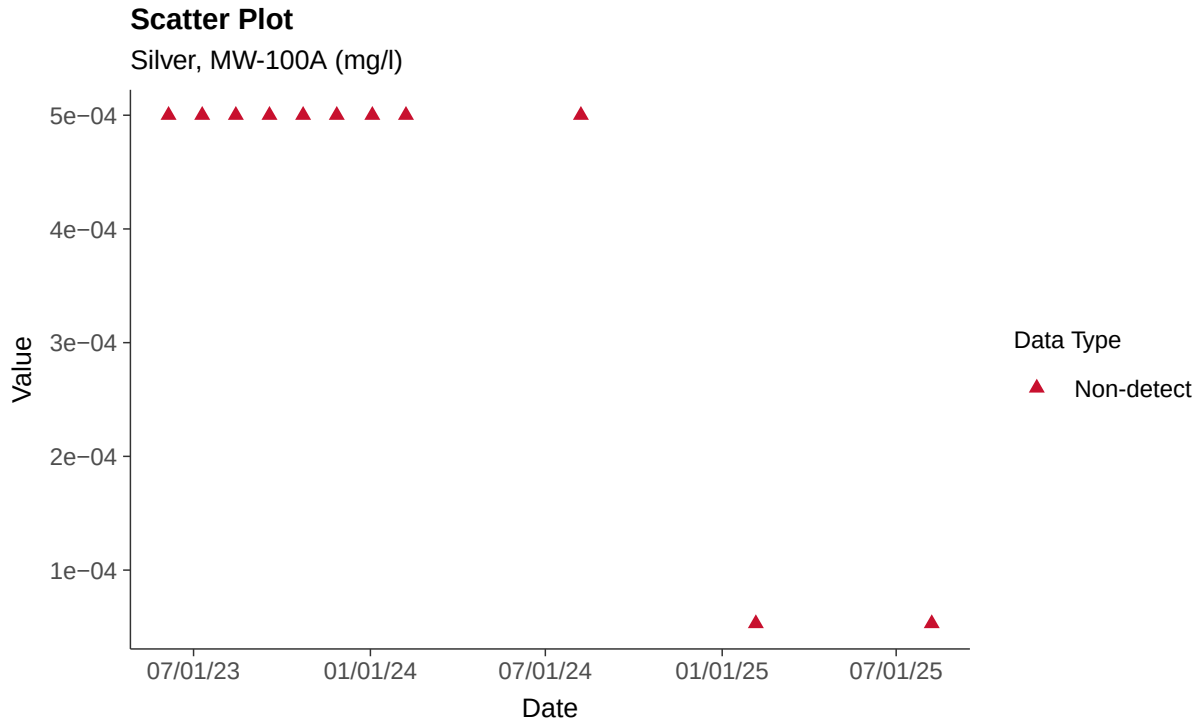
Trend Regression: Piecewise Linear-Linear

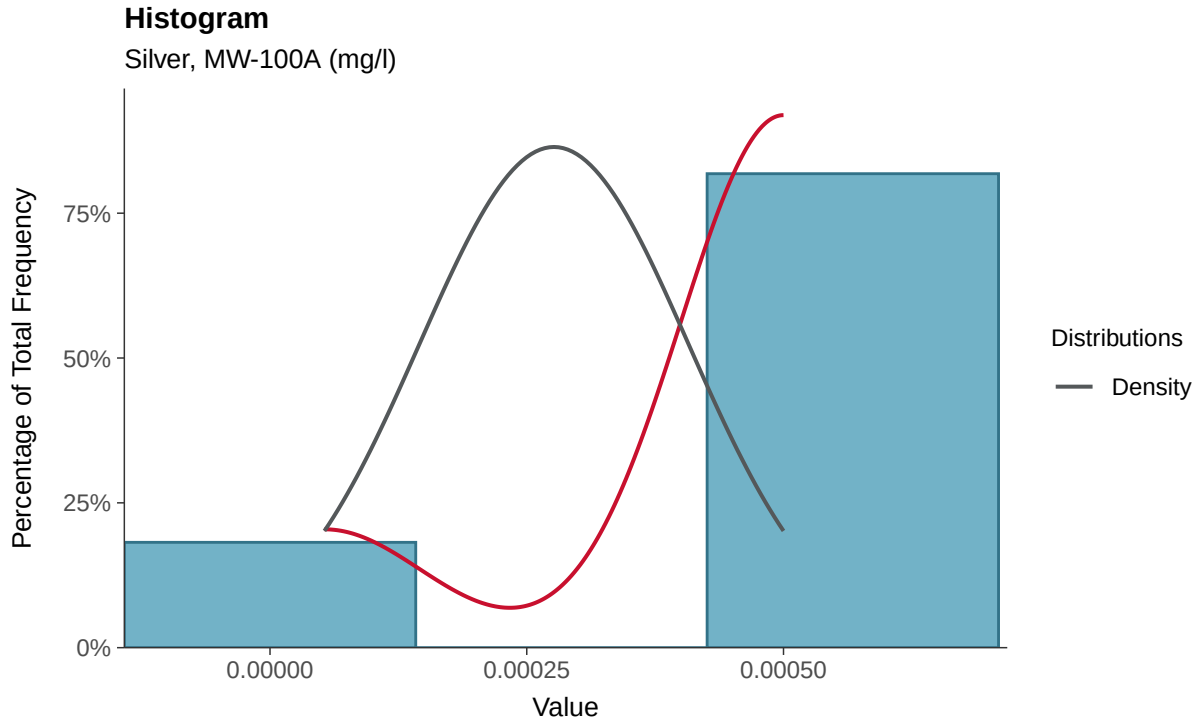
Nickel, MW-100A (mg/l)



Part 115: Silver, MW-100A

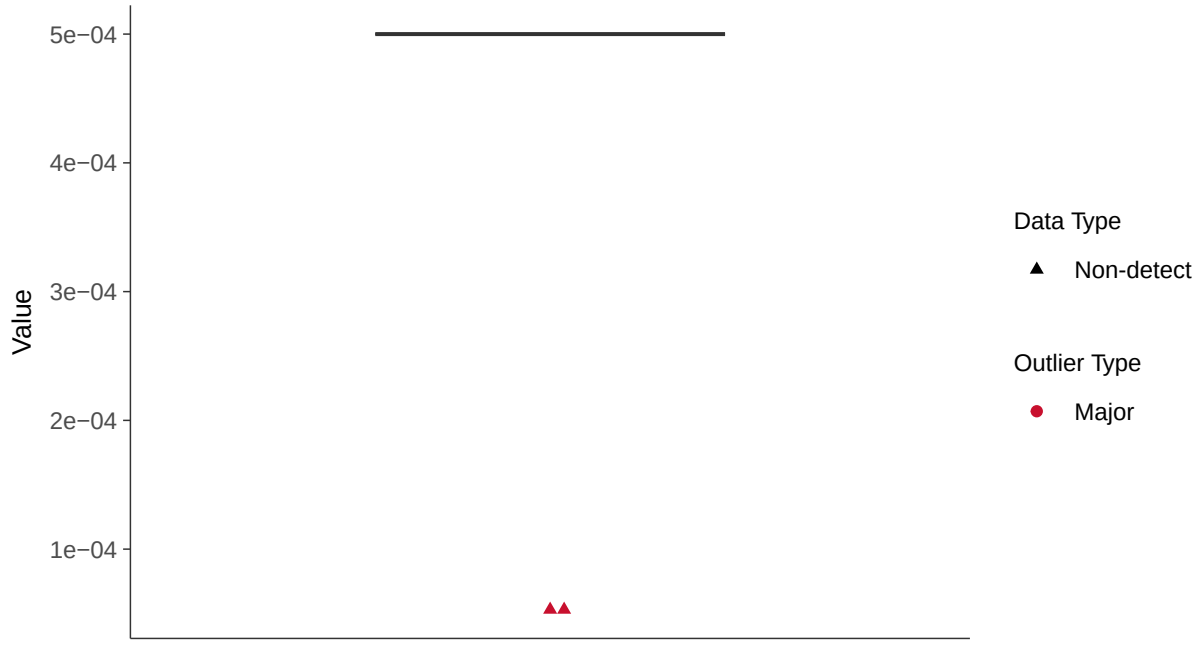
ID: 32_5_123





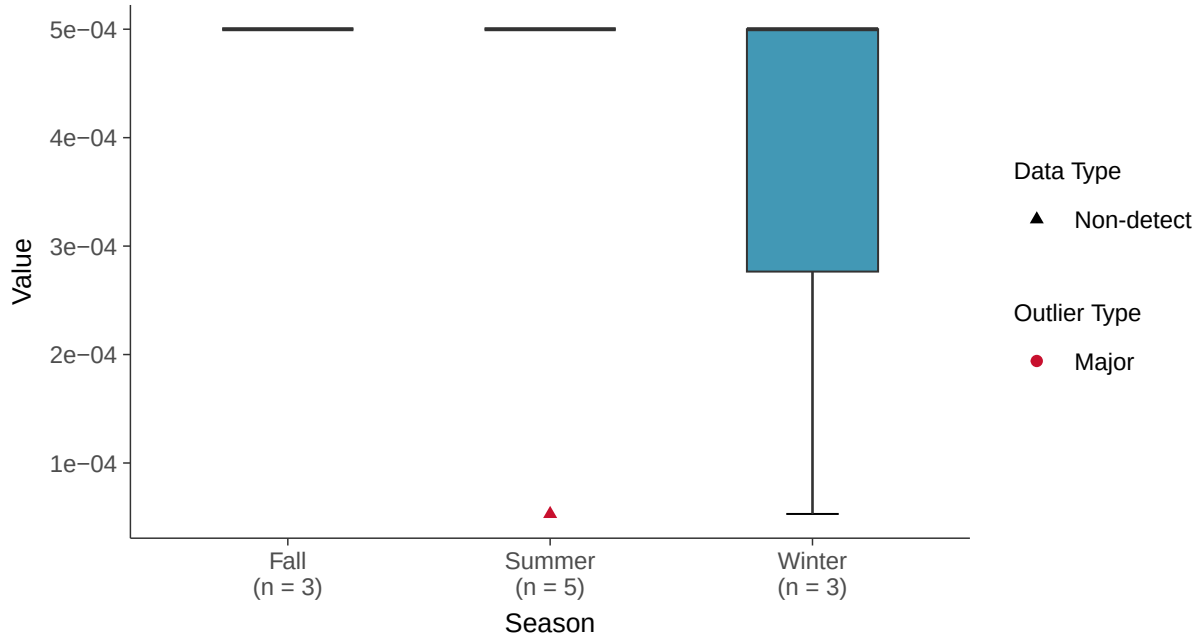
Boxplot

Silver, MW-100A (mg/l)



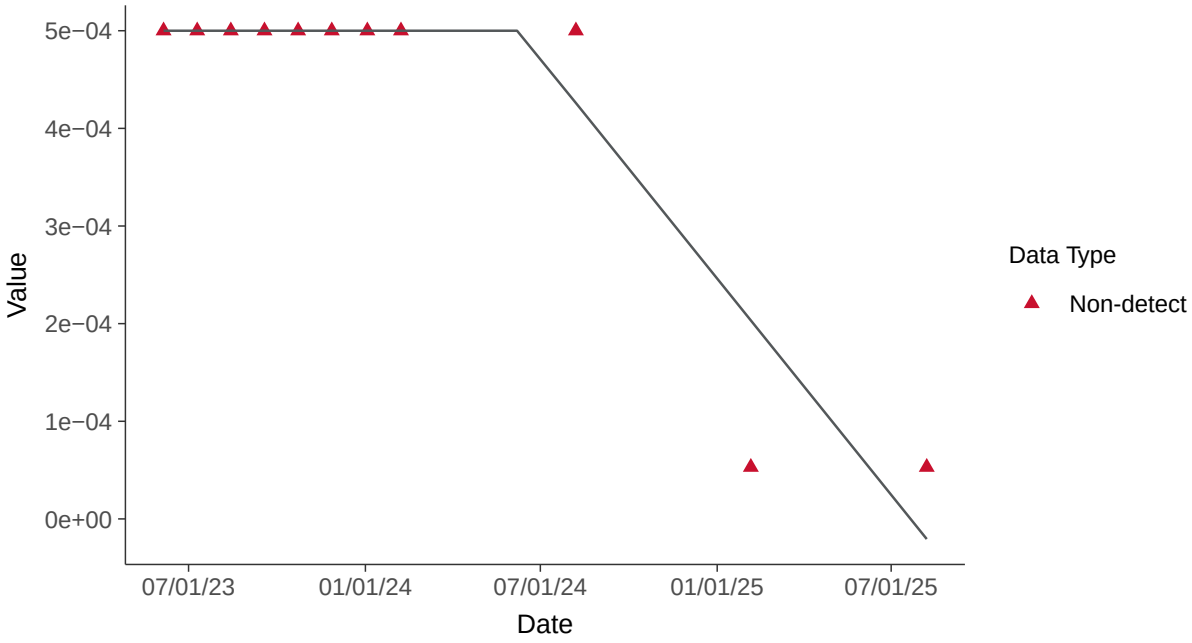
Boxplot by Season

Silver, MW-100A (mg/l)



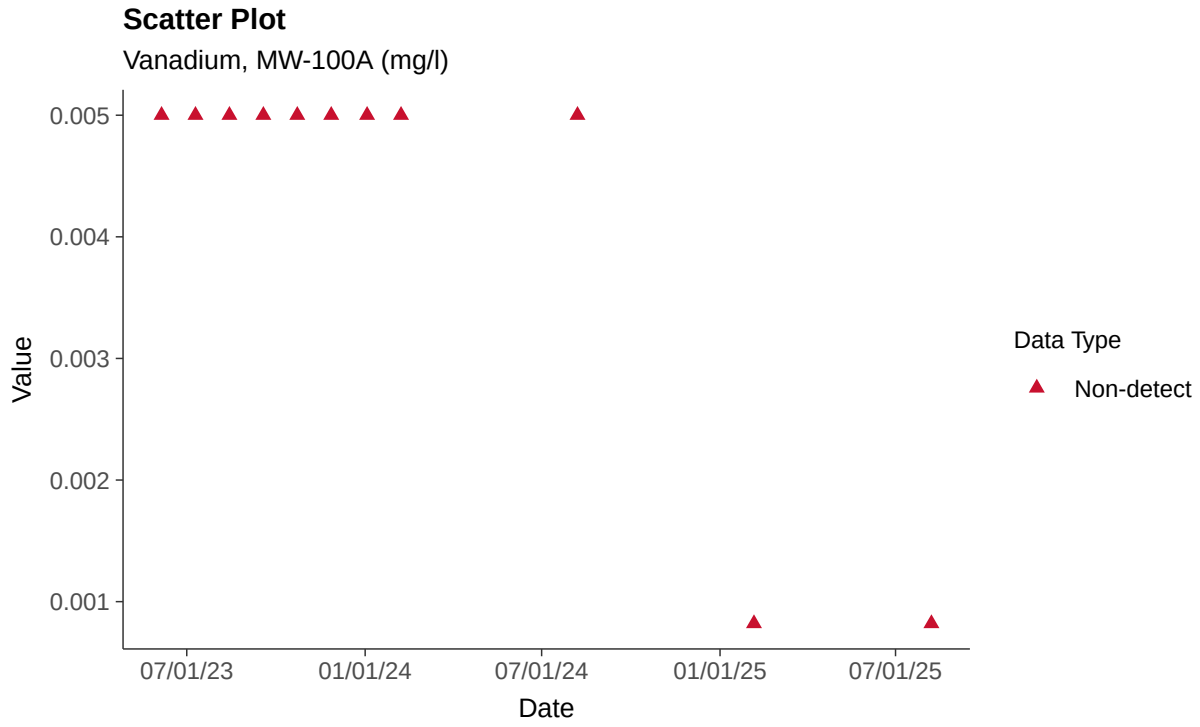
Trend Regression: Piecewise Linear-Linear

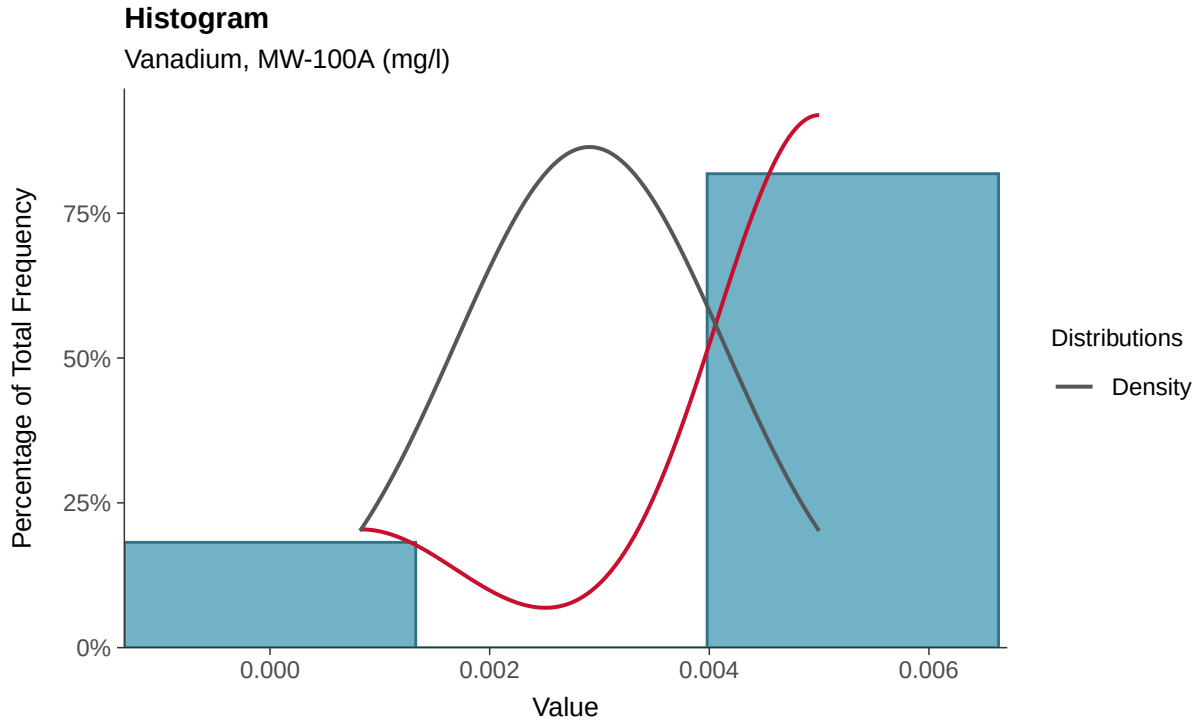
Silver, MW-100A (mg/l)



Part 115: Vanadium, MW-100A

ID: 32_5_128



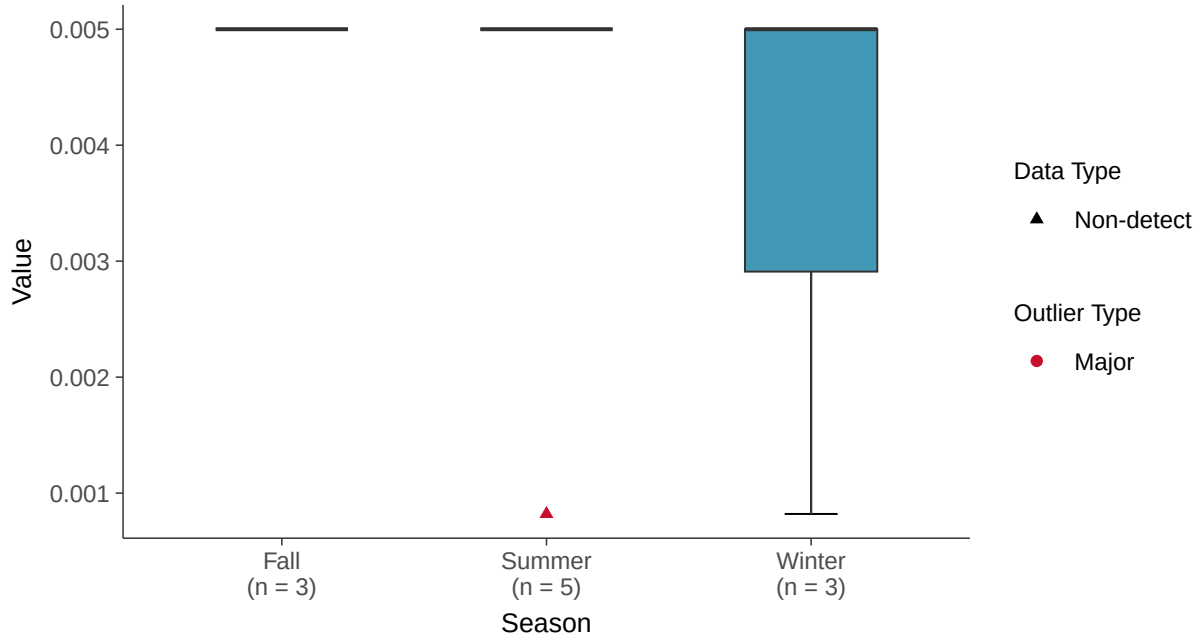


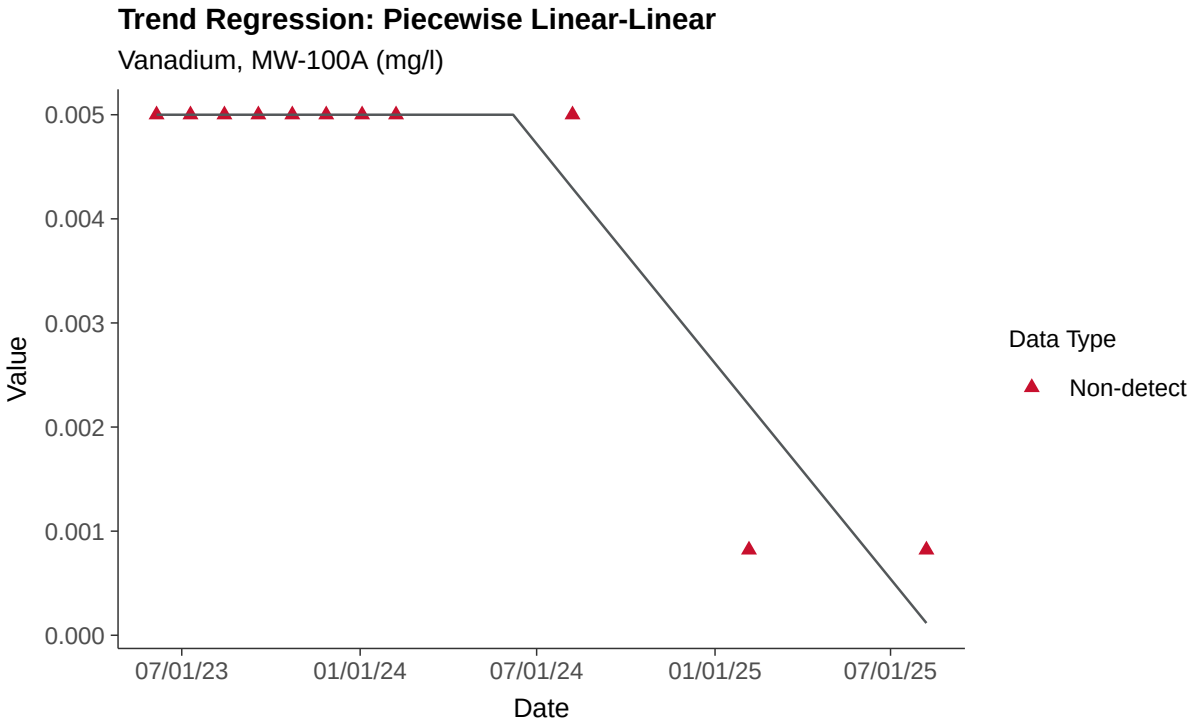
Boxplot

Vanadium, MW-100A (mg/l)

Boxplot by Season

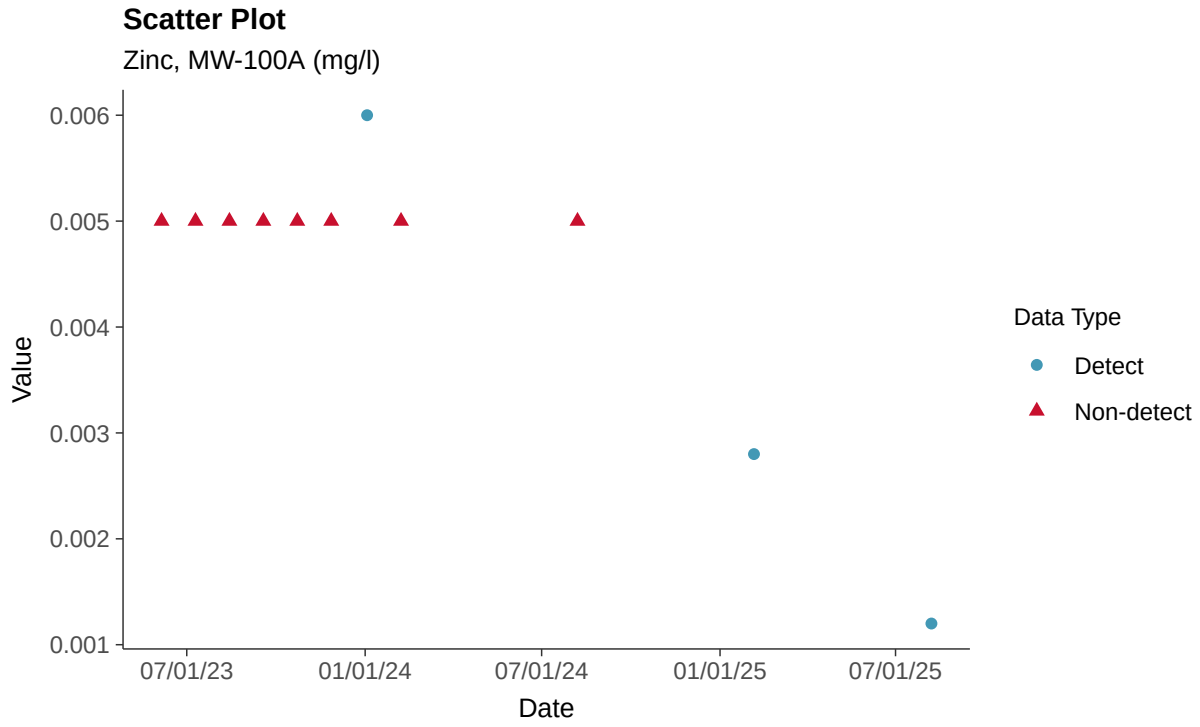
Vanadium, MW-100A (mg/l)

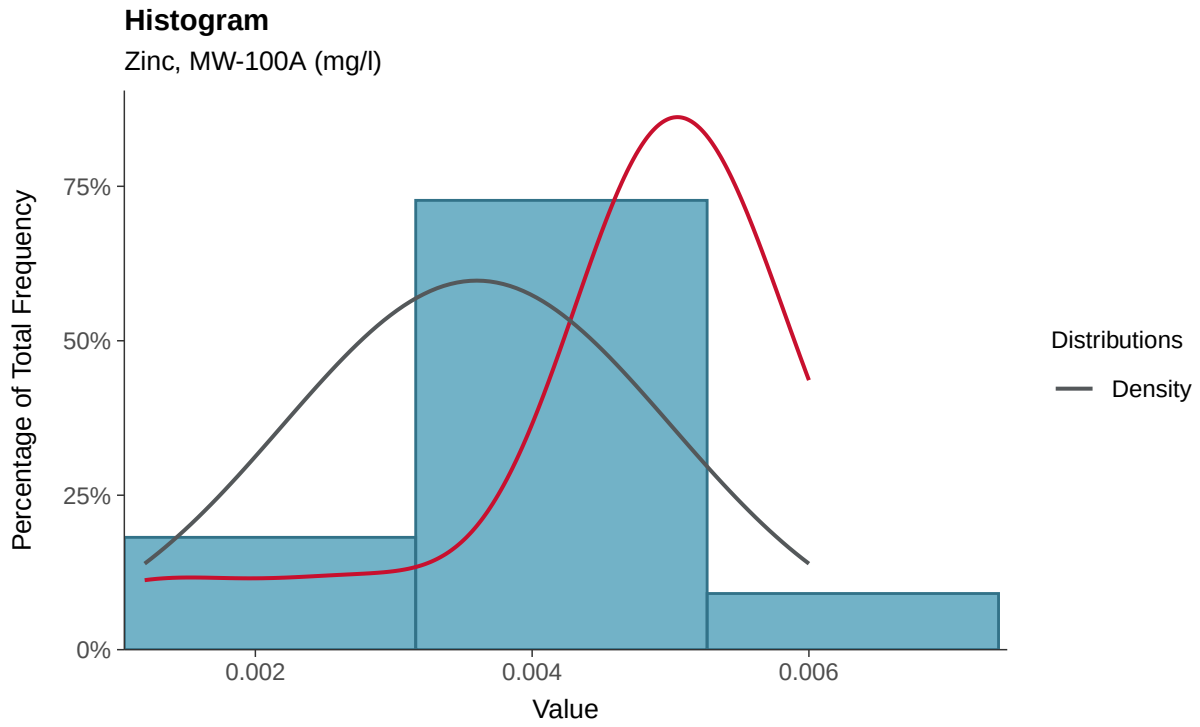



Trend Regression: Piecewise Linear-Linear
Vanadium, MW-100A (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Zinc, MW-100A

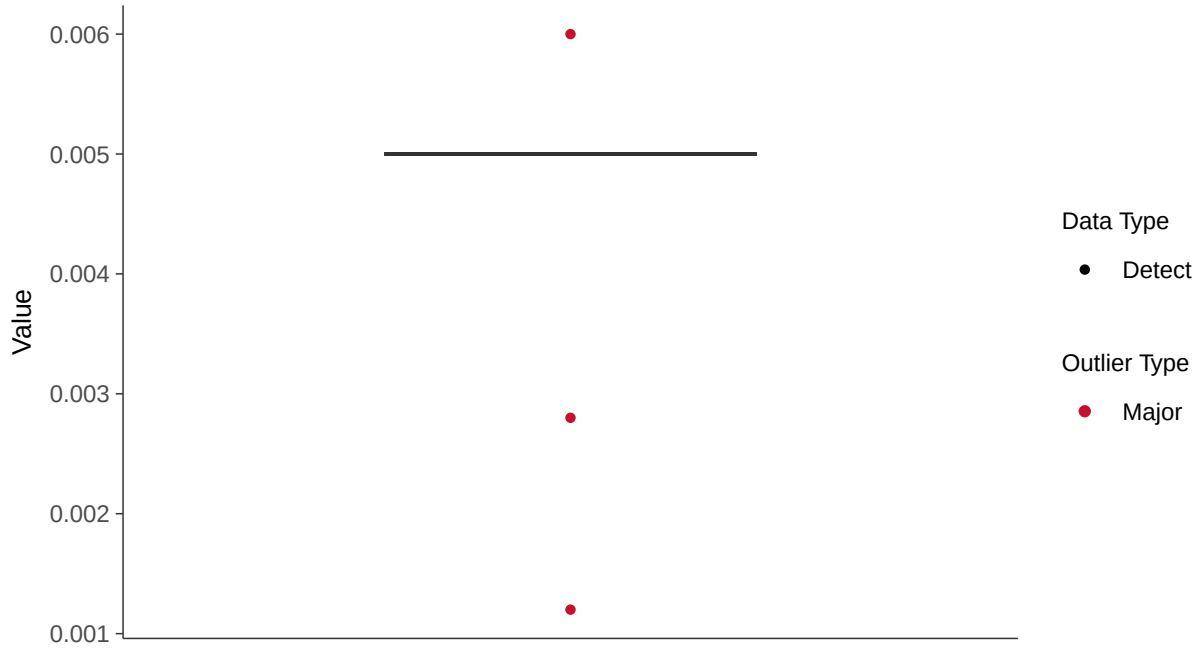
ID: 32_5_129





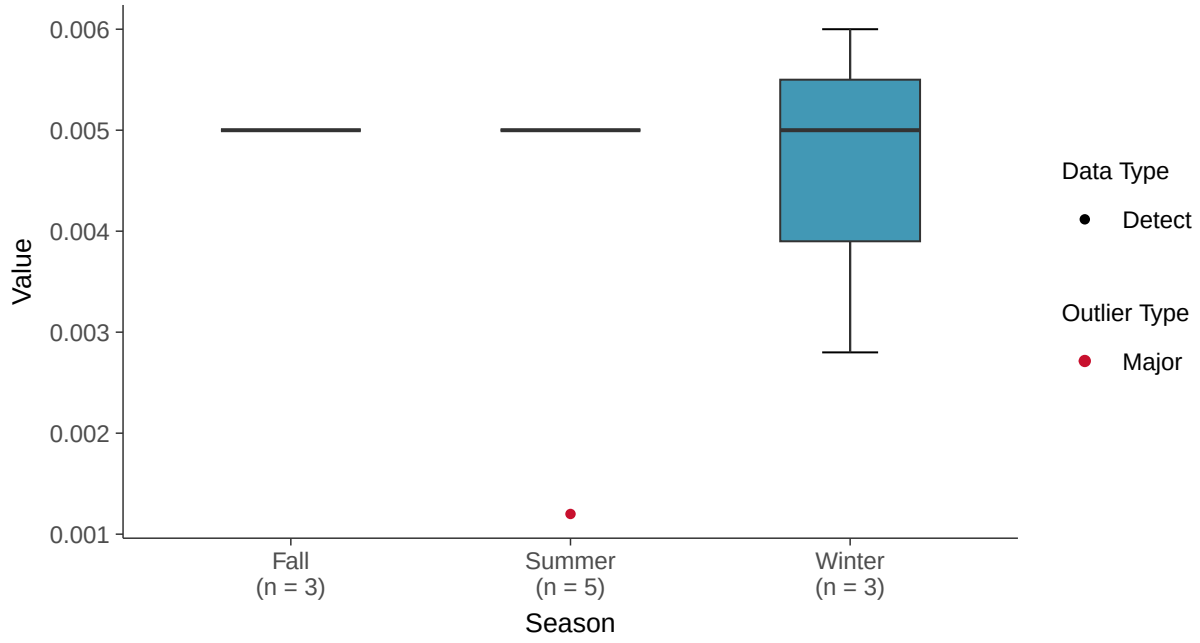
Boxplot

Zinc, MW-100A (mg/l)



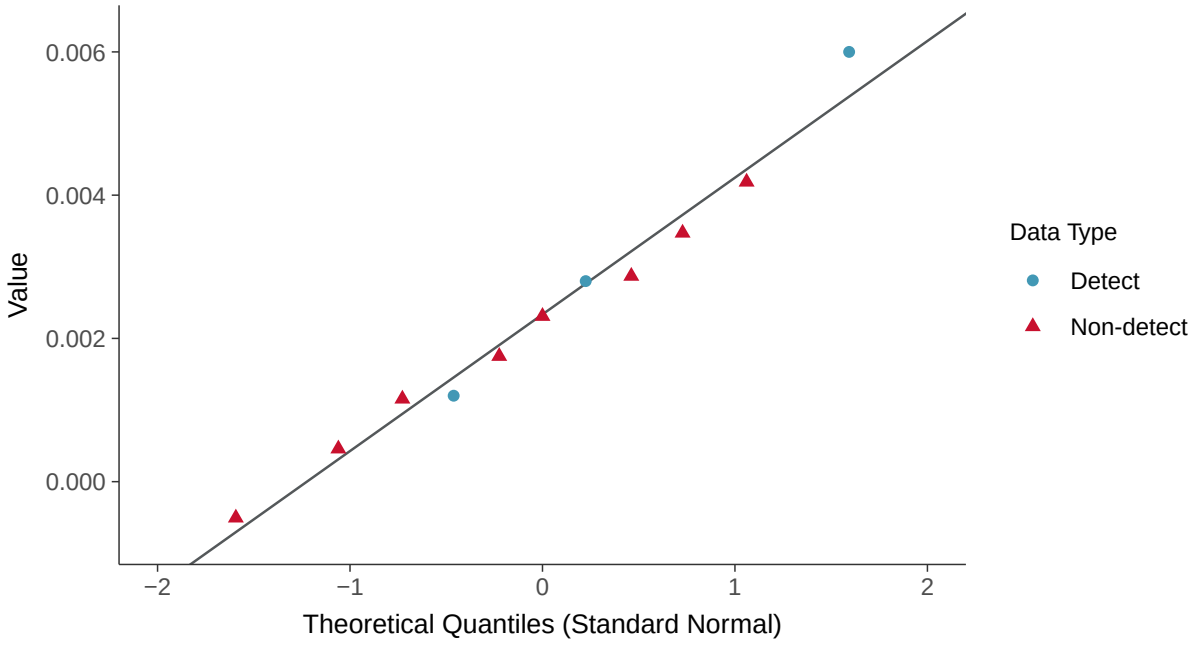
Boxplot by Season

Zinc, MW-100A (mg/l)



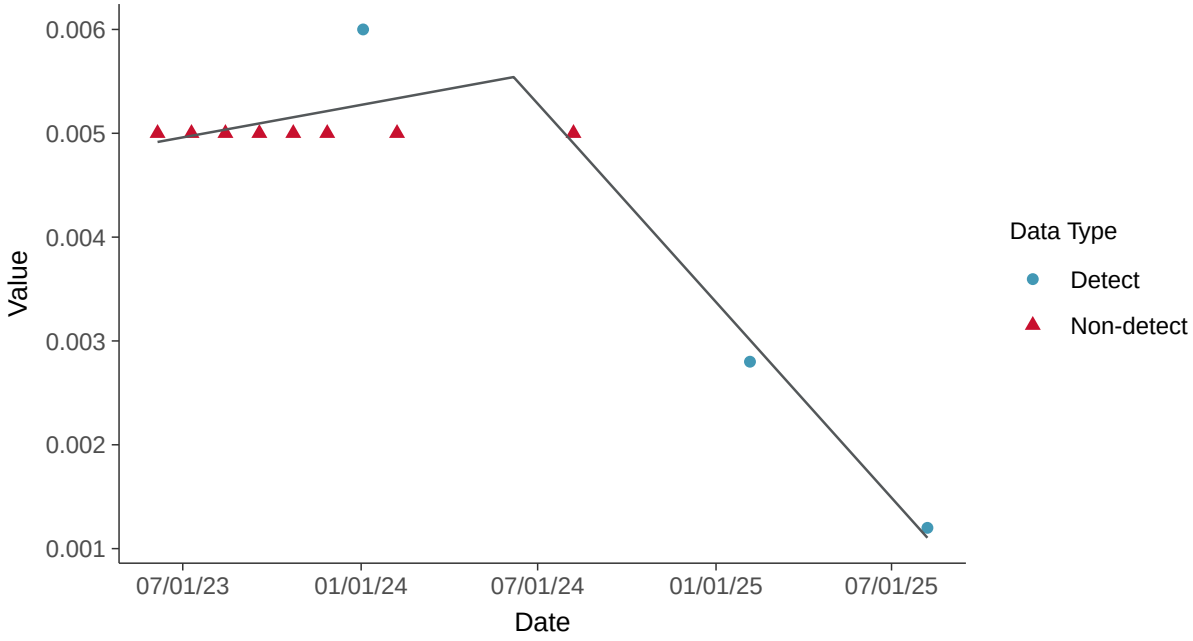
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-100A (mg/l)



Trend Regression: Piecewise Linear-Linear

Zinc, MW-100A (mg/l)

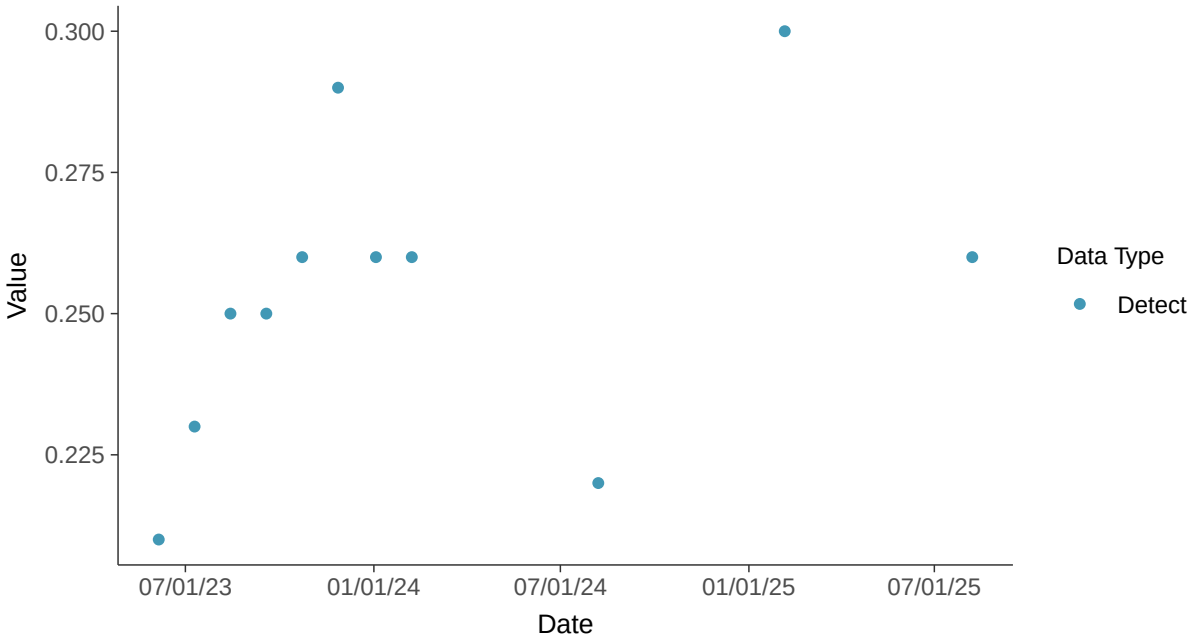


Appendix III: Boron, MW-100B

ID: 33_2_105

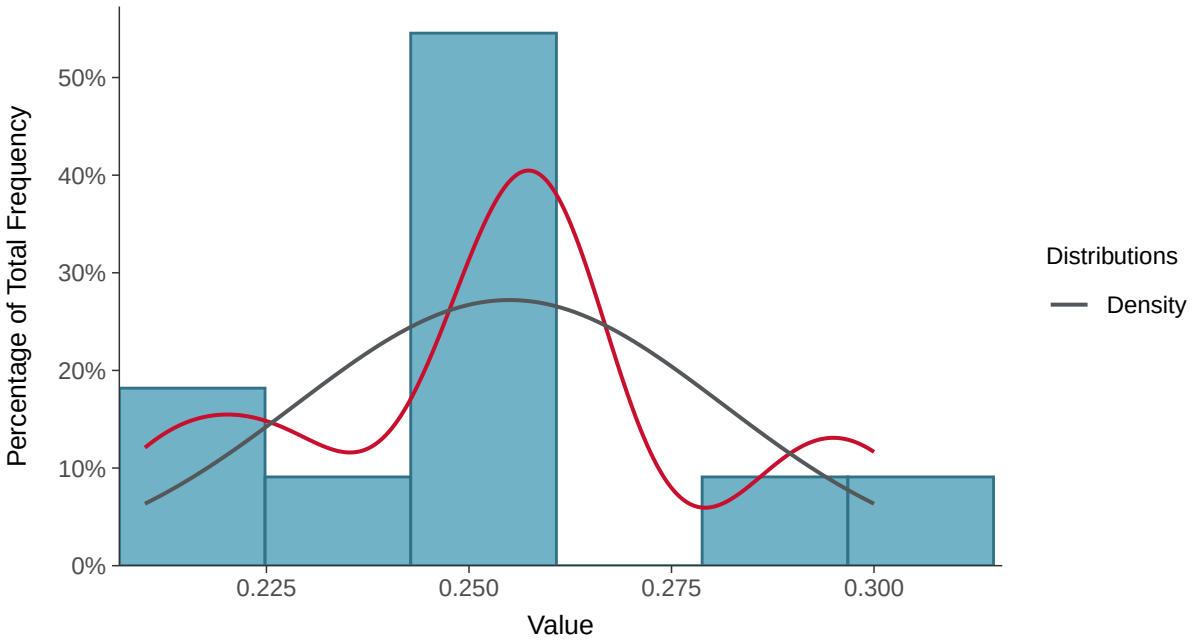
Scatter Plot

Boron, MW-100B (mg/l)



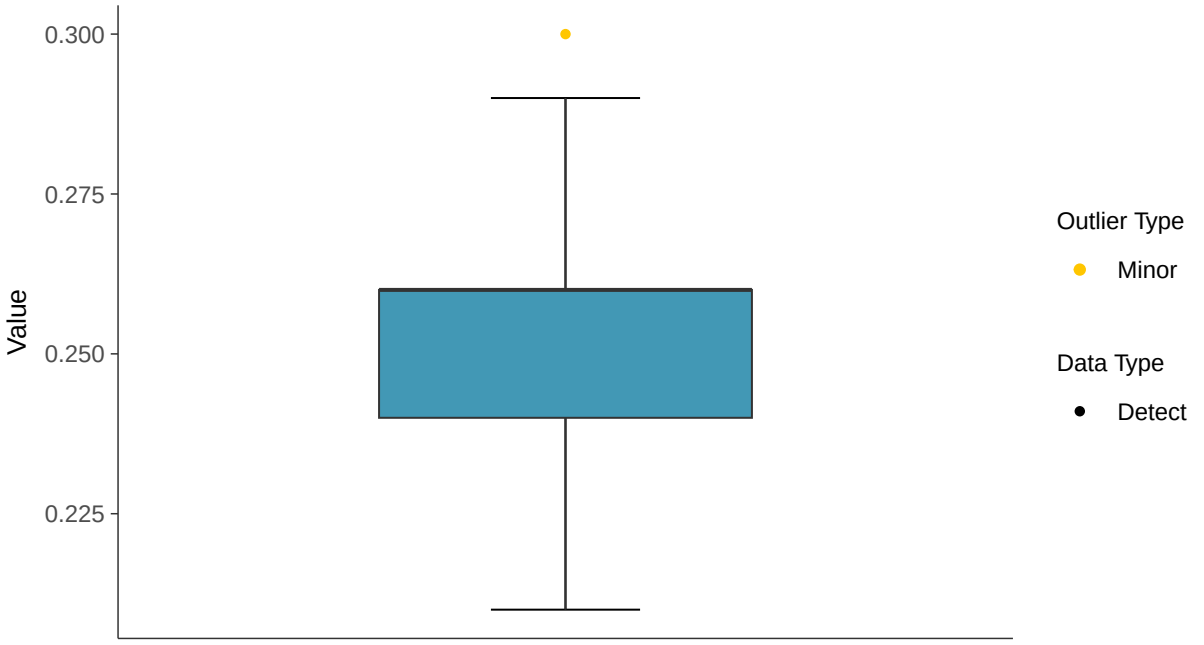
Histogram

Boron, MW-100B (mg/l)



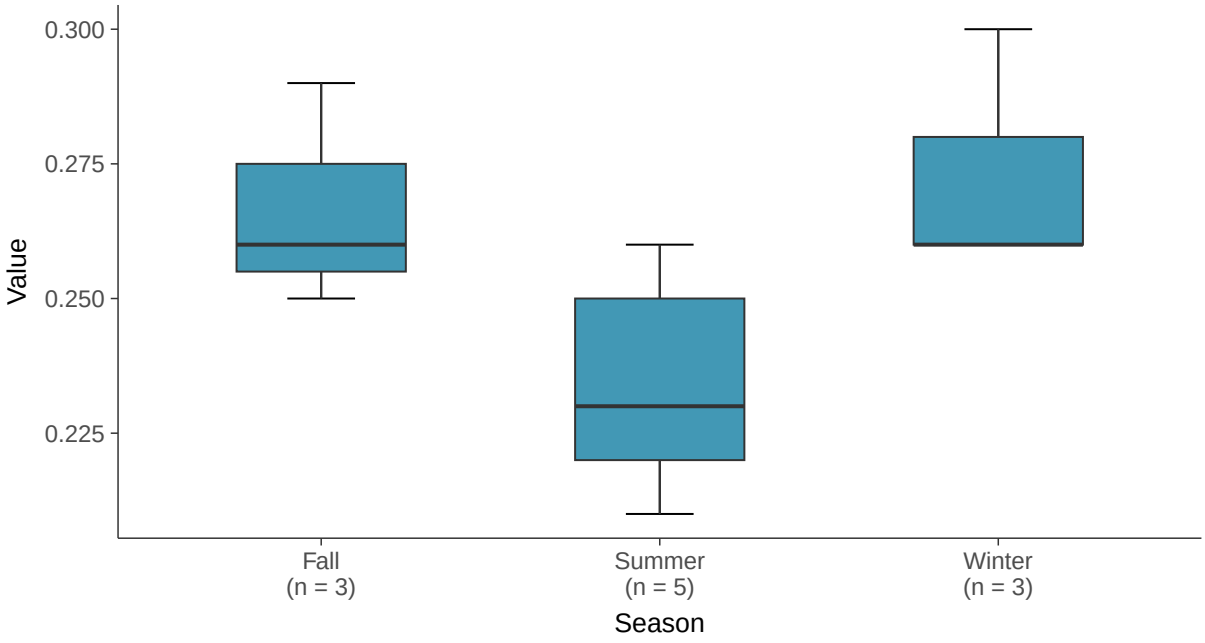
Boxplot

Boron, MW-100B (mg/l)



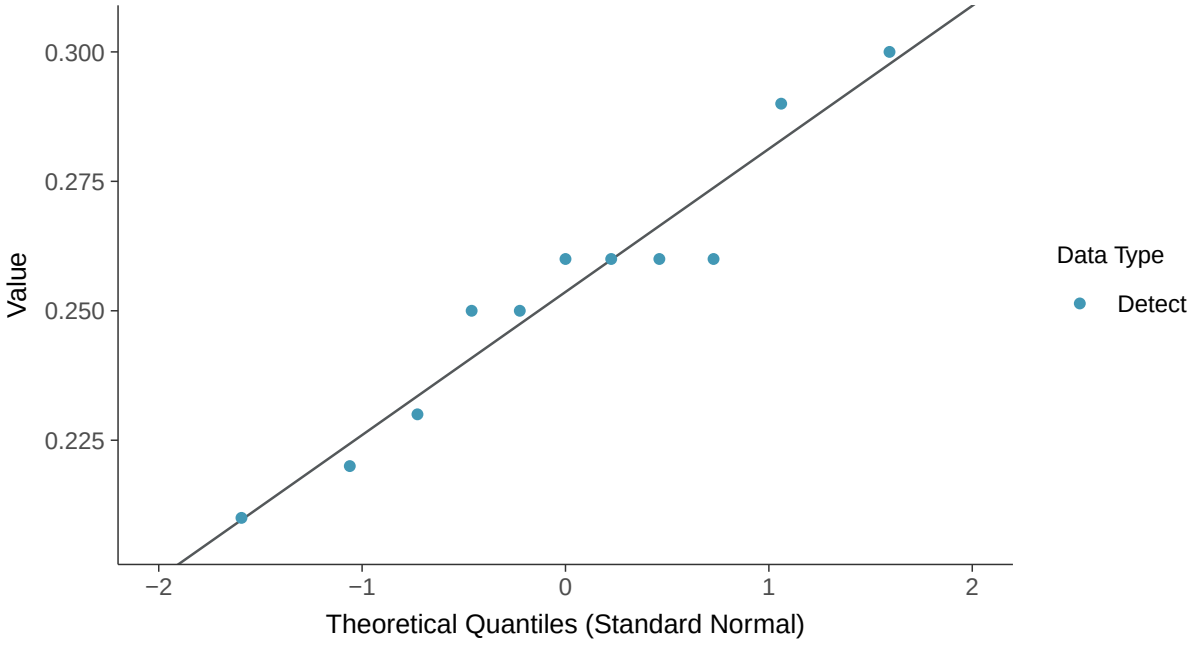
Boxplot by Season

Boron, MW-100B (mg/l)



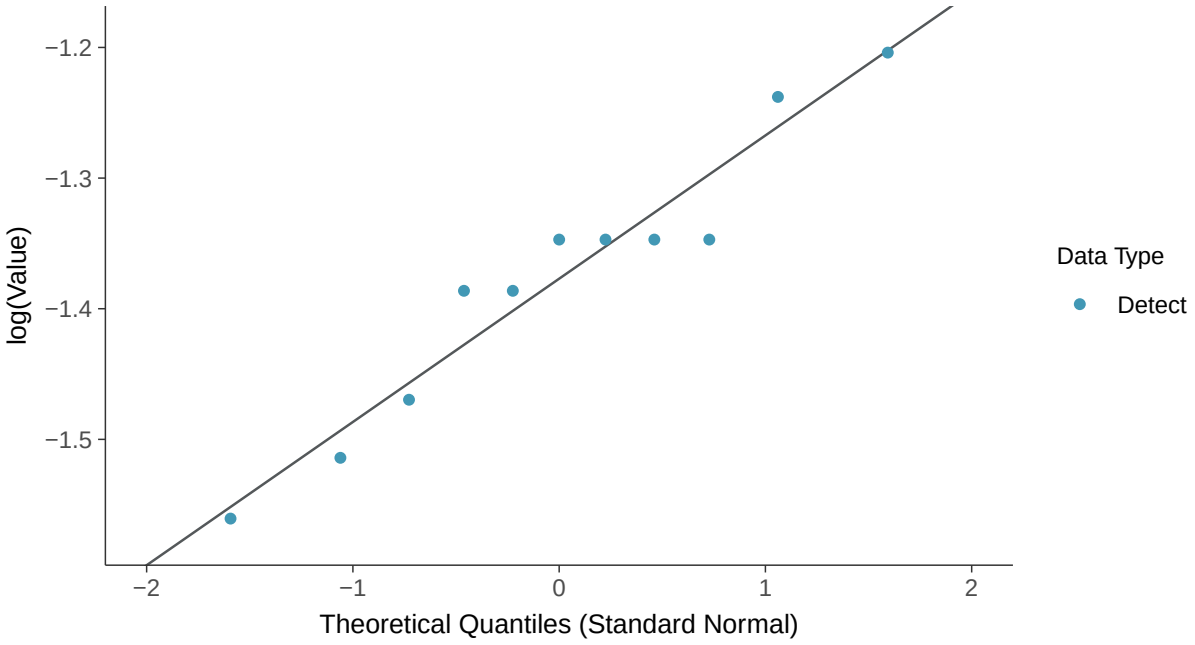
Normal Q-Q plot

Boron, MW-100B (mg/l)



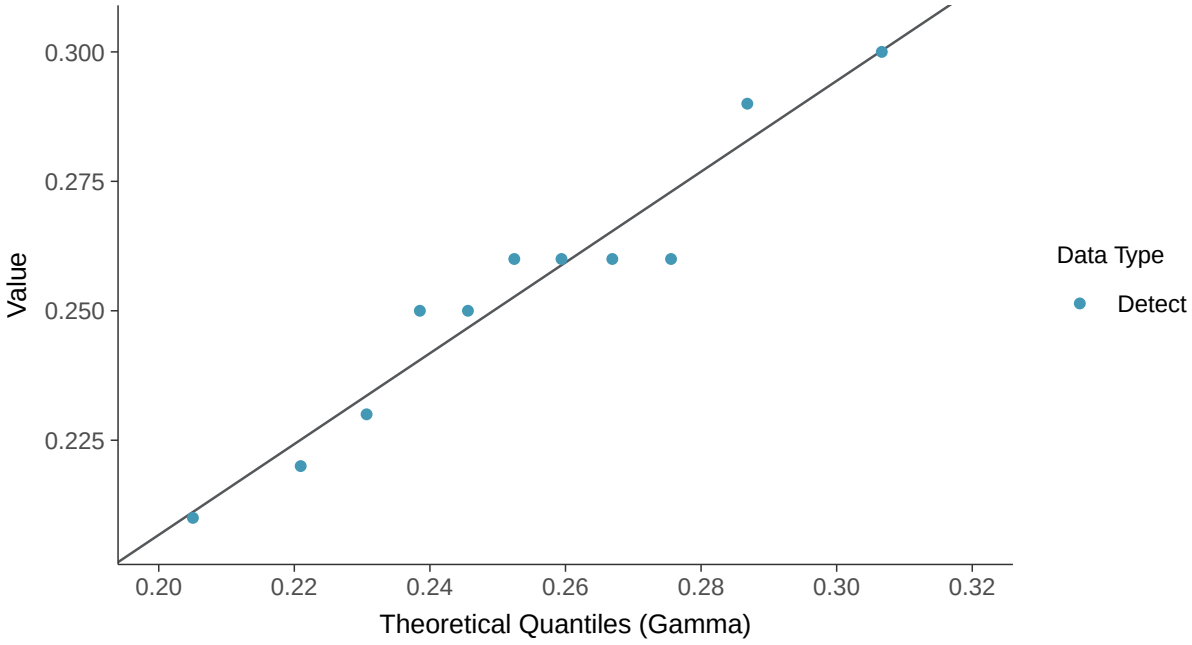
Lognormal Q-Q plot

Boron, MW-100B (mg/l)



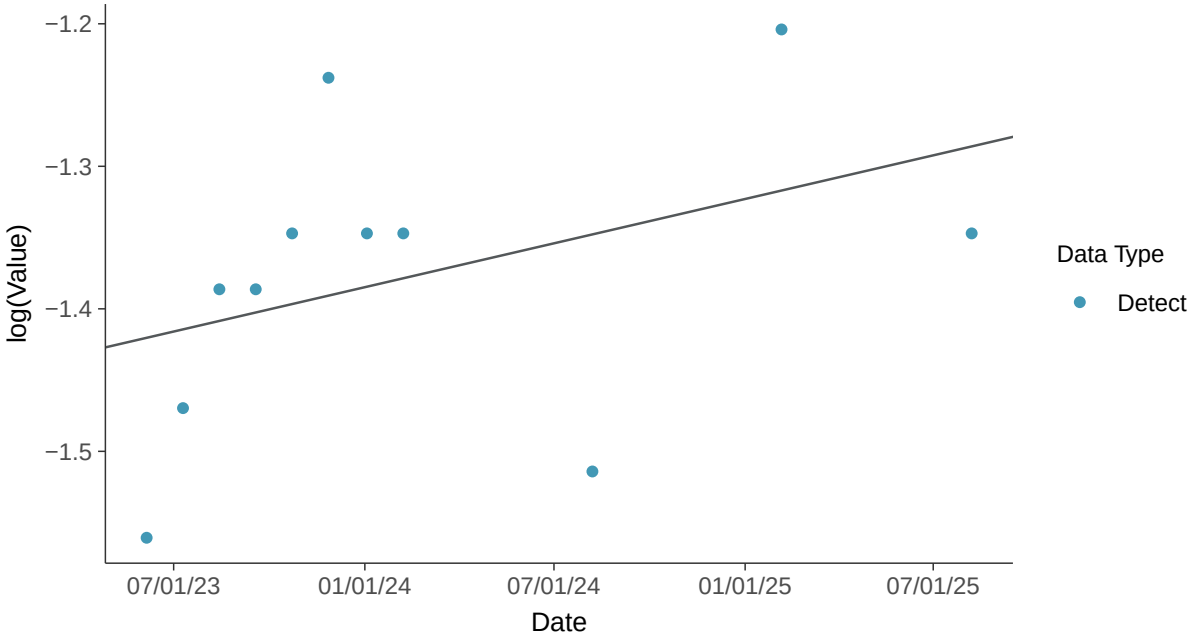
Gamma Q-Q plot

Boron, MW-100B (mg/l)



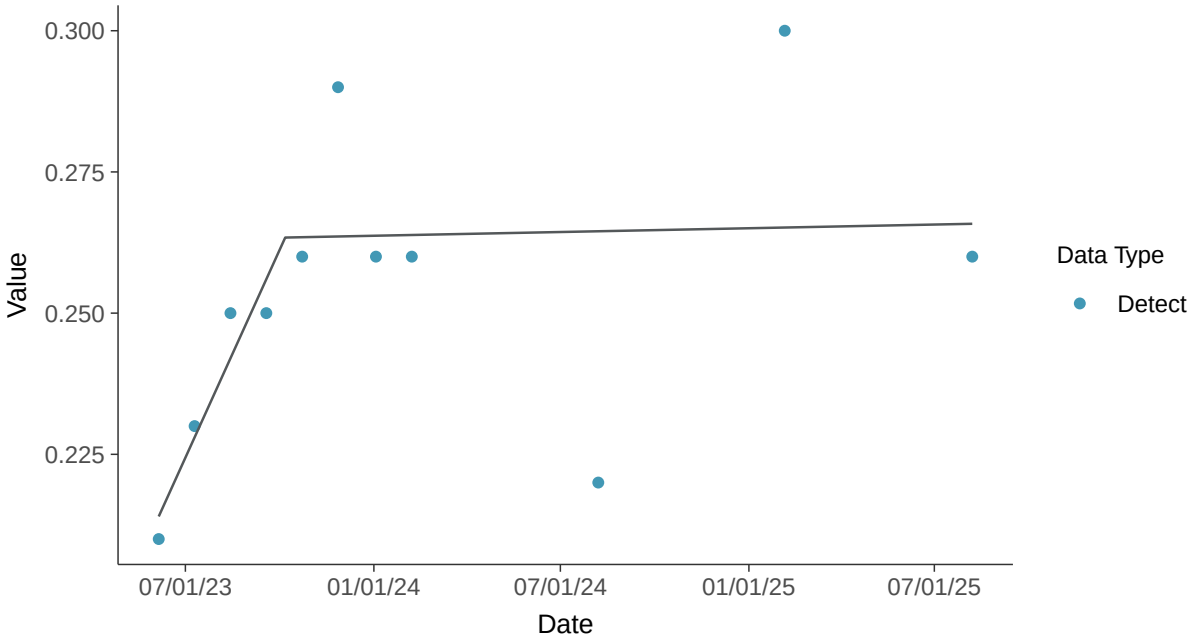
Trend Regression: Lognormal MLE

Boron, MW-100B (mg/l)



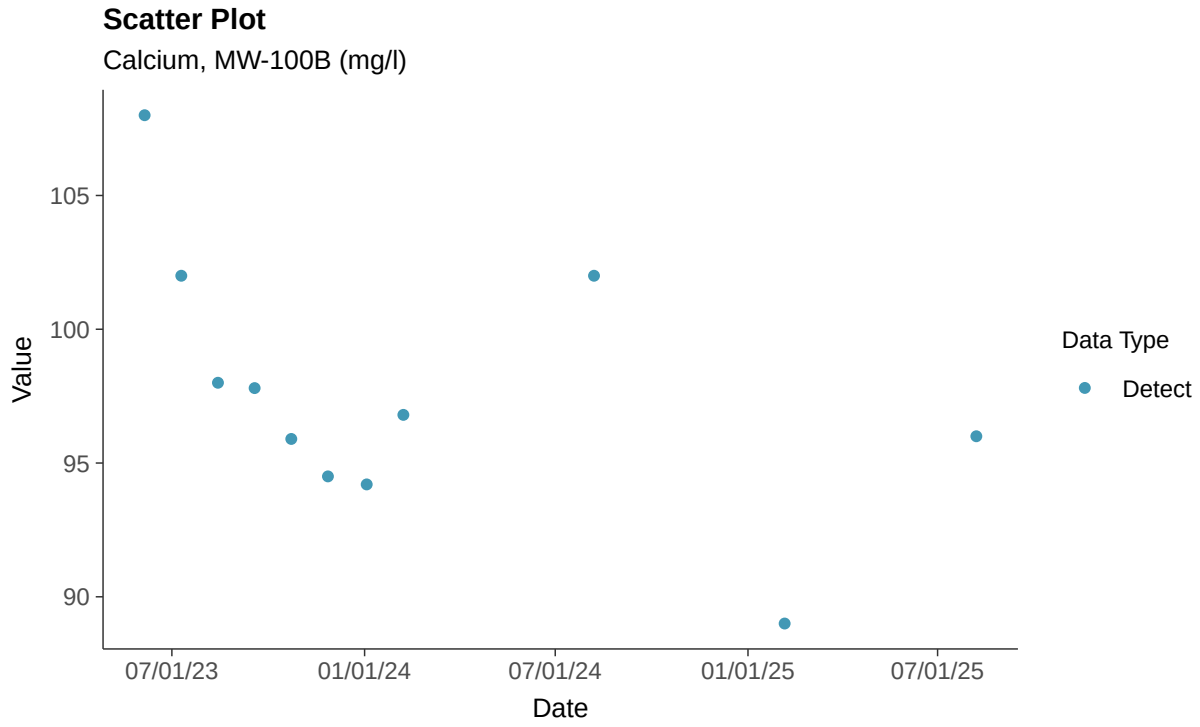
Trend Regression: Piecewise Linear-Linear

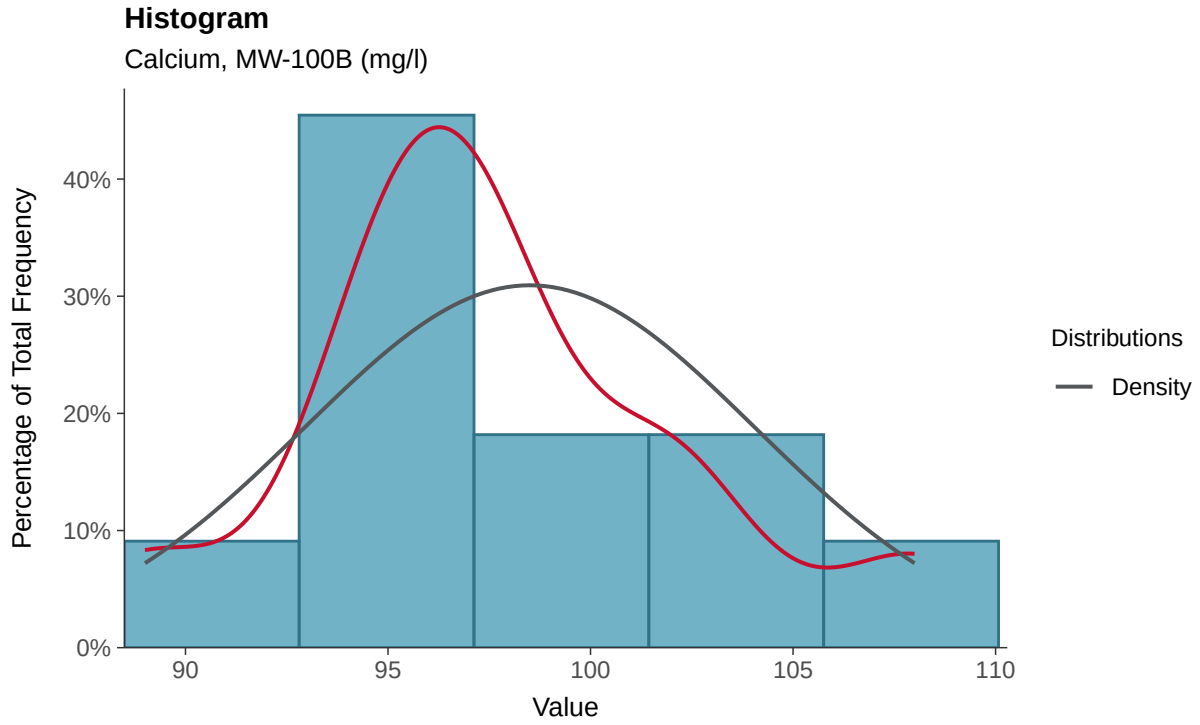
Boron, MW-100B (mg/l)



Appendix III: Calcium, MW-100B

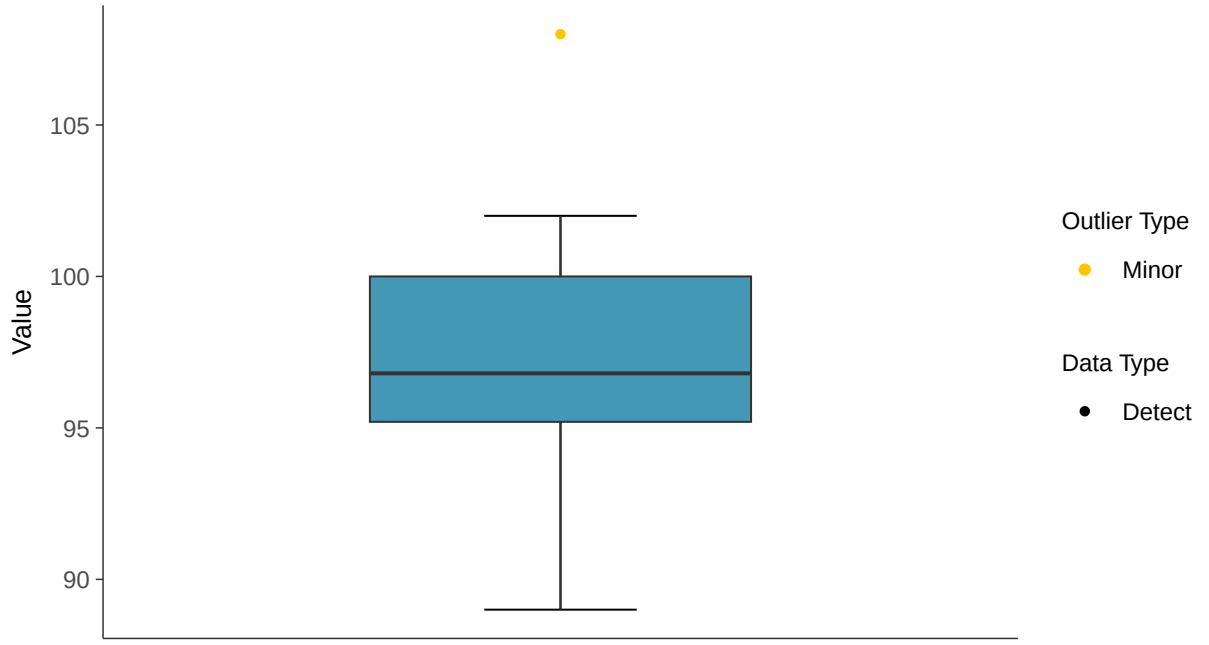
ID: 33_2_107





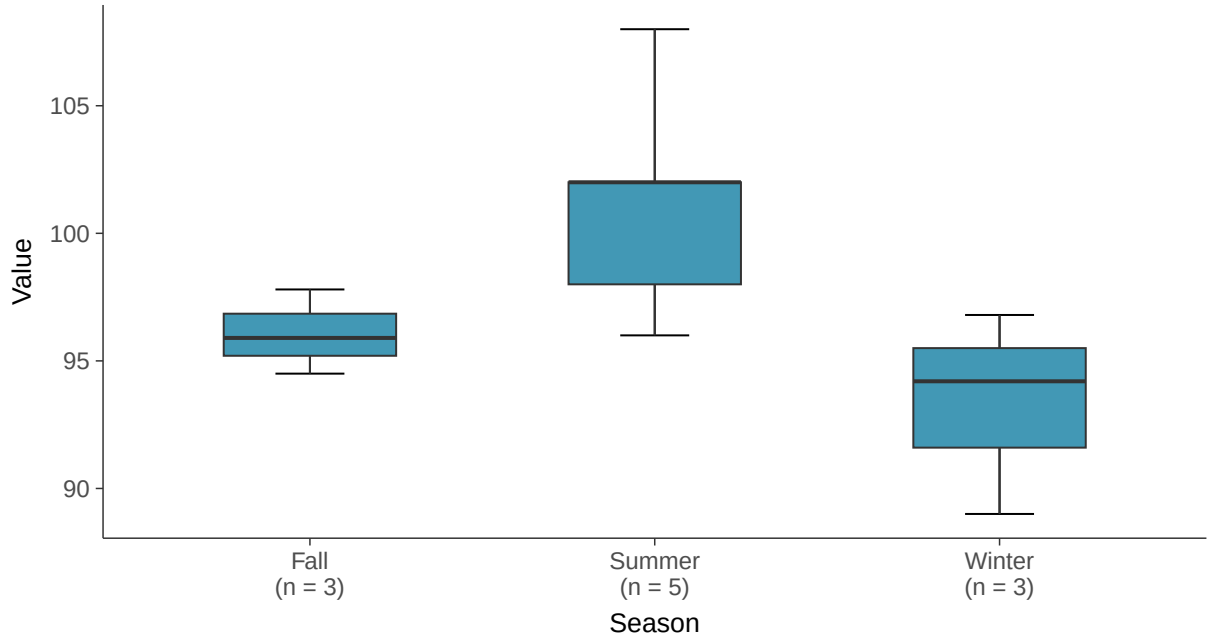
Boxplot

Calcium, MW-100B (mg/l)



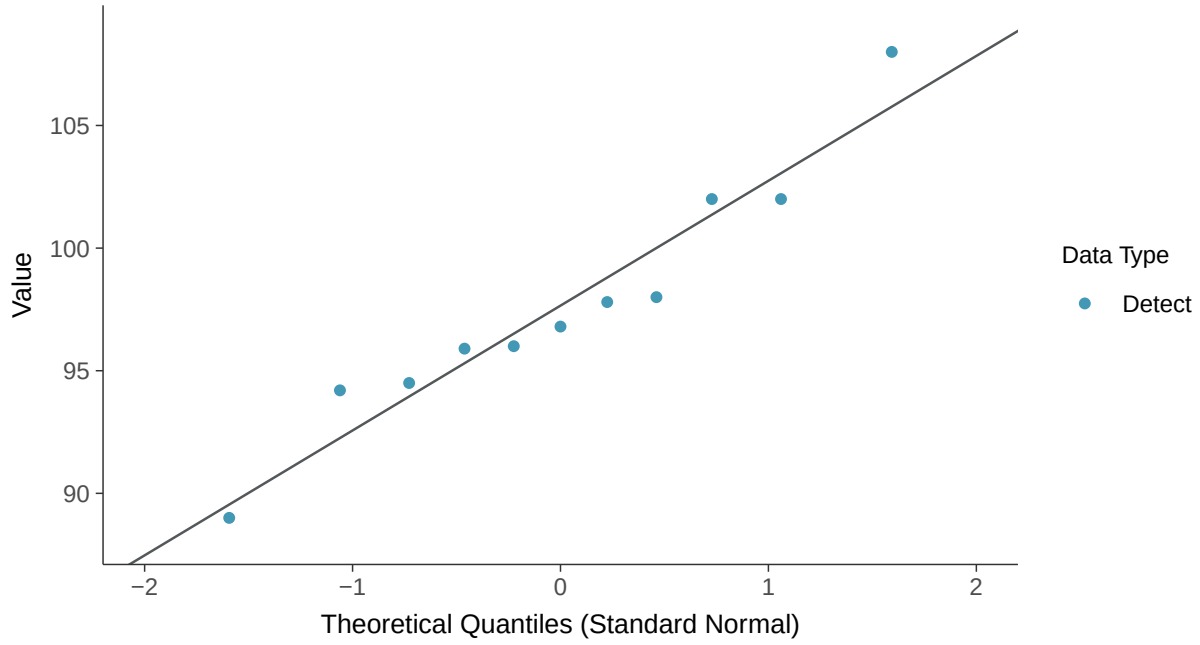
Boxplot by Season

Calcium, MW-100B (mg/l)



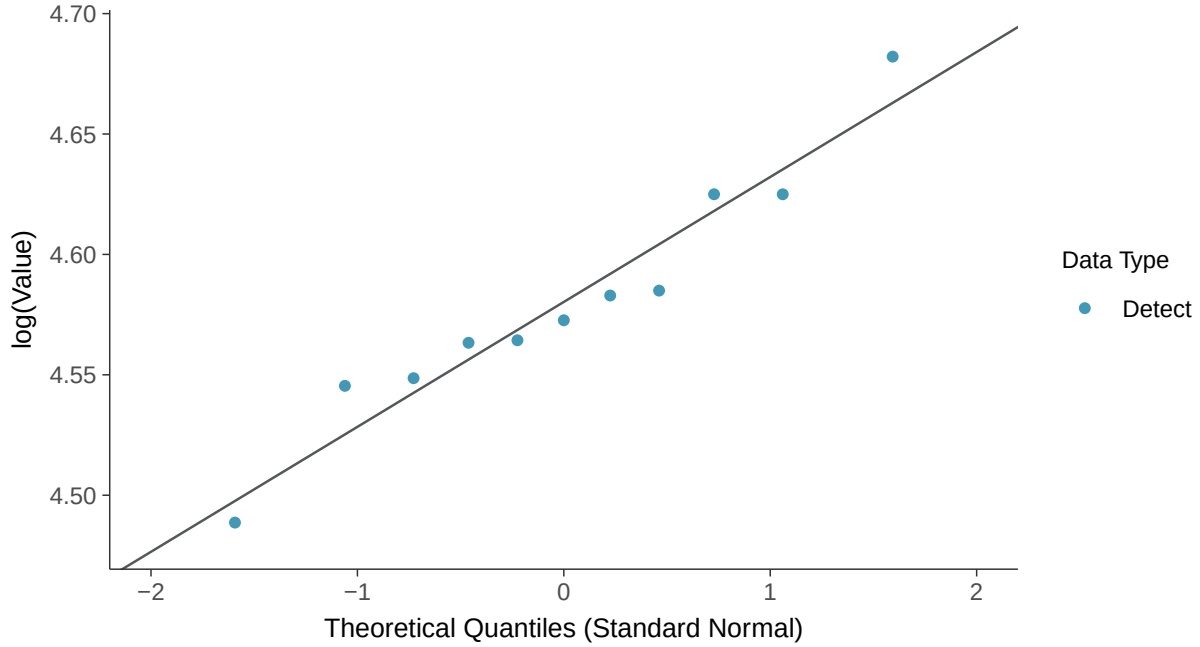
Normal Q-Q plot

Calcium, MW-100B (mg/l)



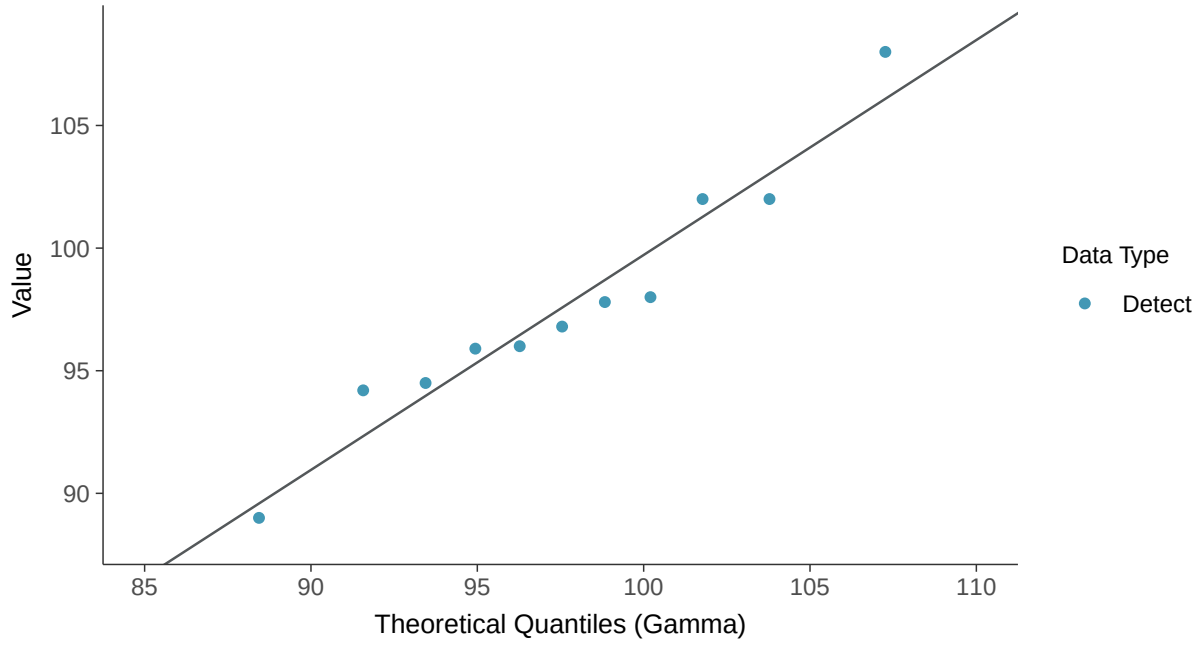
Lognormal Q-Q plot

Calcium, MW-100B (mg/l)



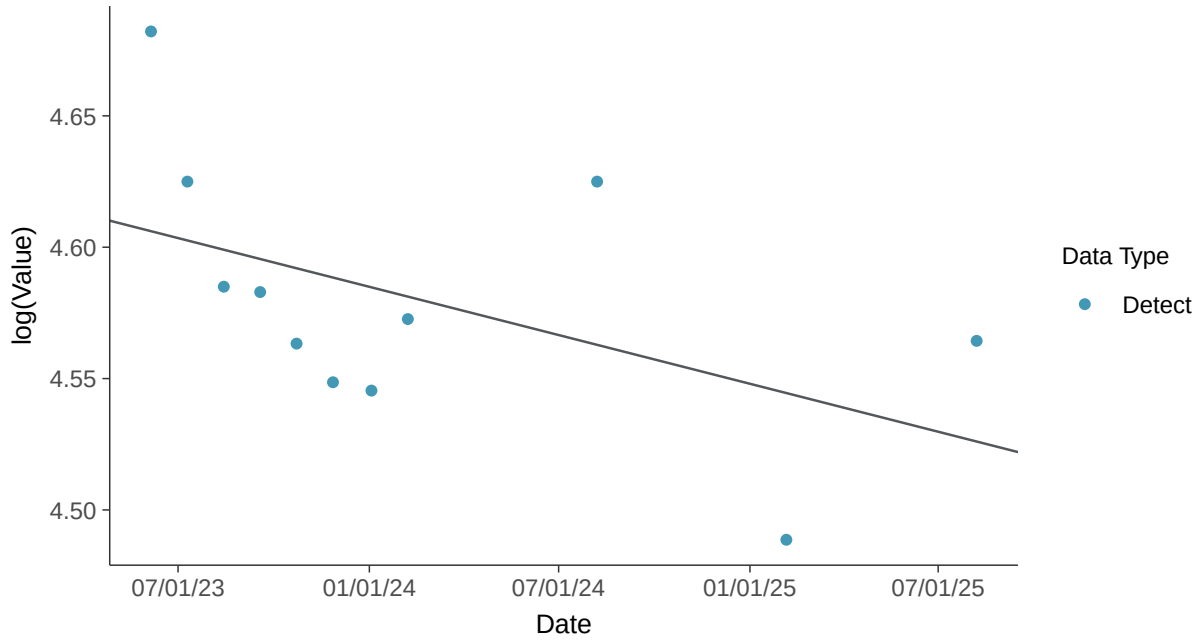
Gamma Q-Q plot

Calcium, MW-100B (mg/l)



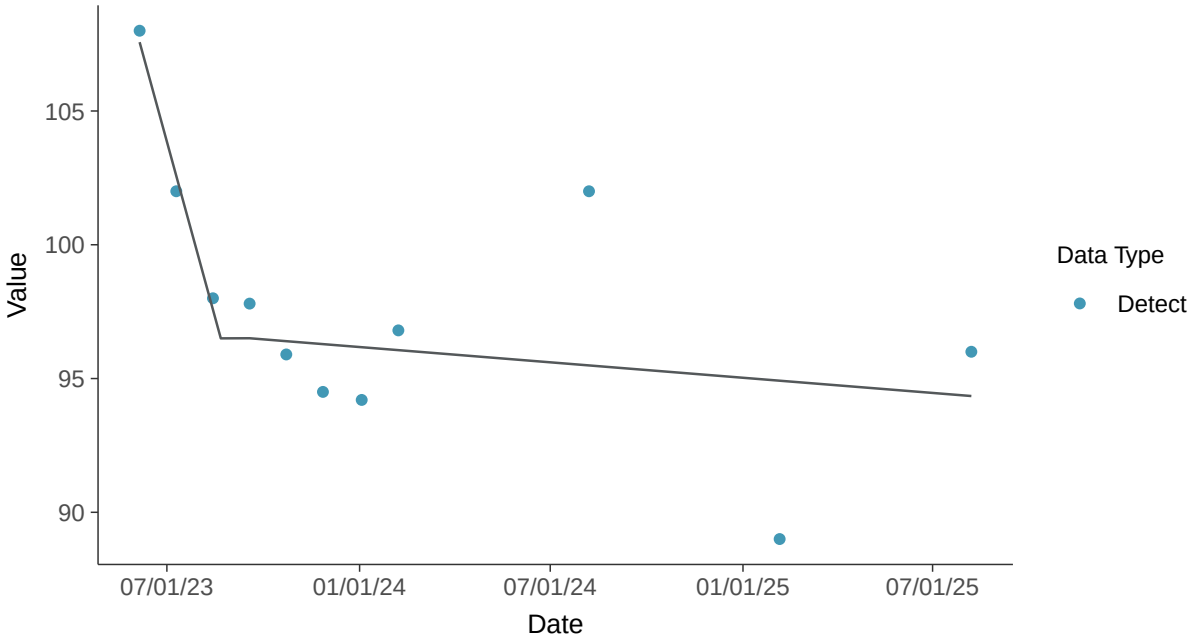
Trend Regression: Lognormal MLE

Calcium, MW-100B (mg/l)



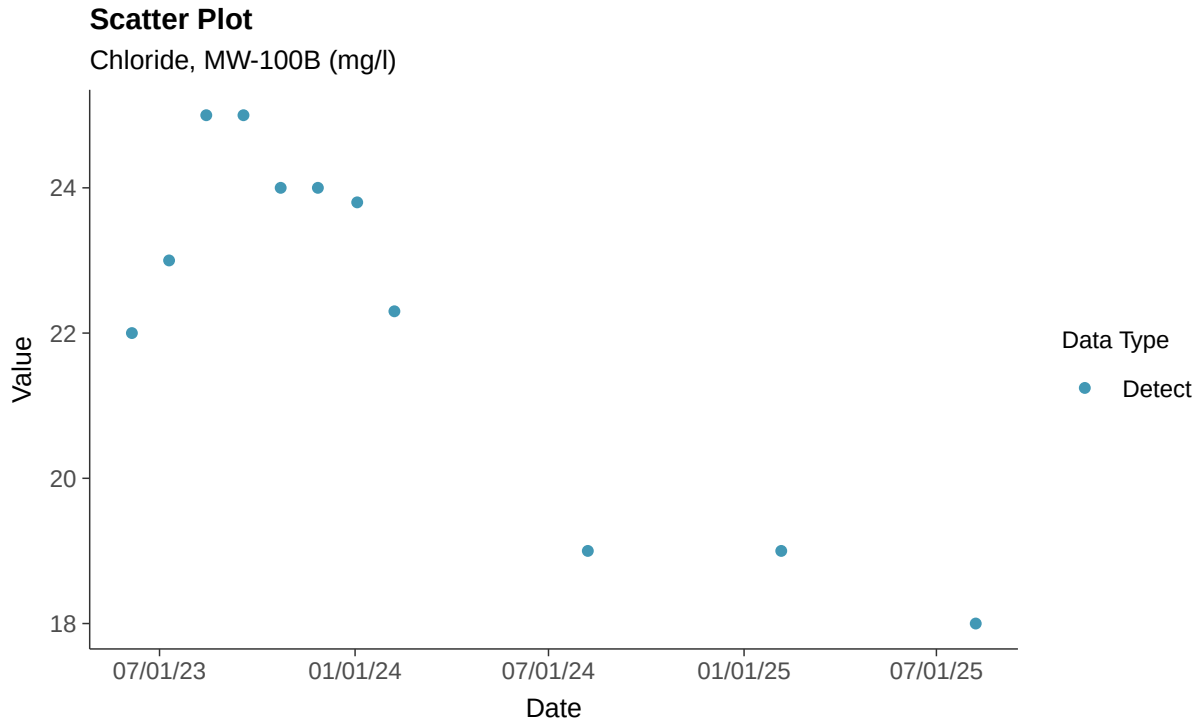
Trend Regression: Piecewise Linear-Linear

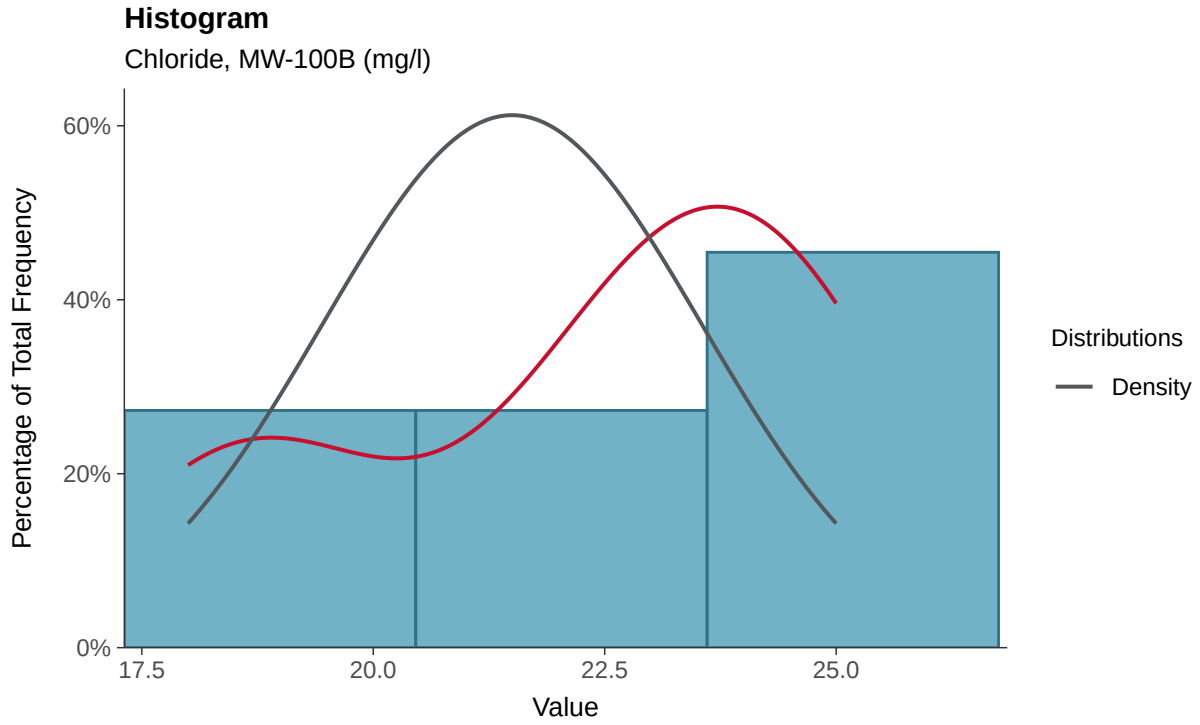
Calcium, MW-100B (mg/l)



Appendix III: Chloride, MW-100B

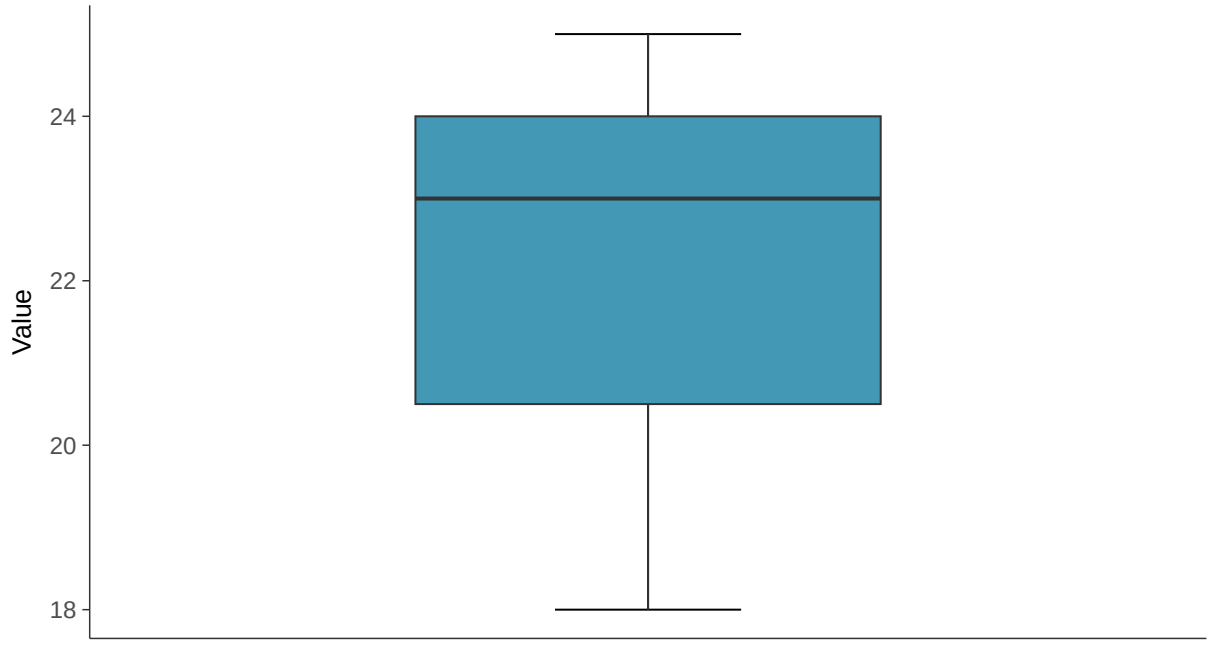
ID: 33_2_108





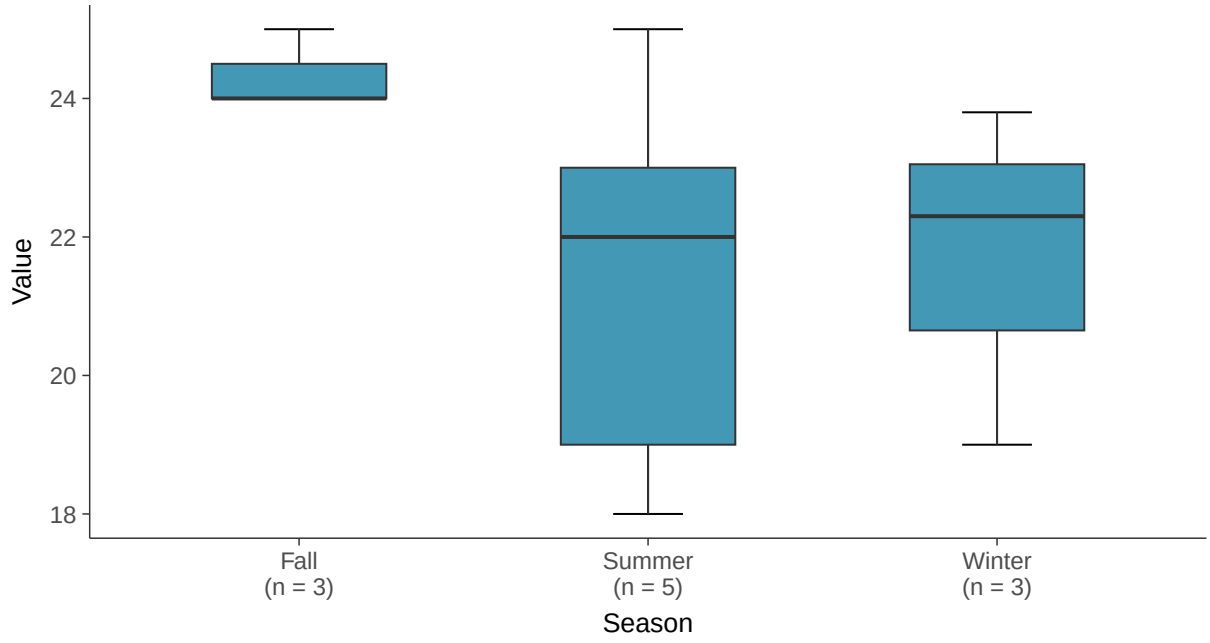
Boxplot

Chloride, MW-100B (mg/l)



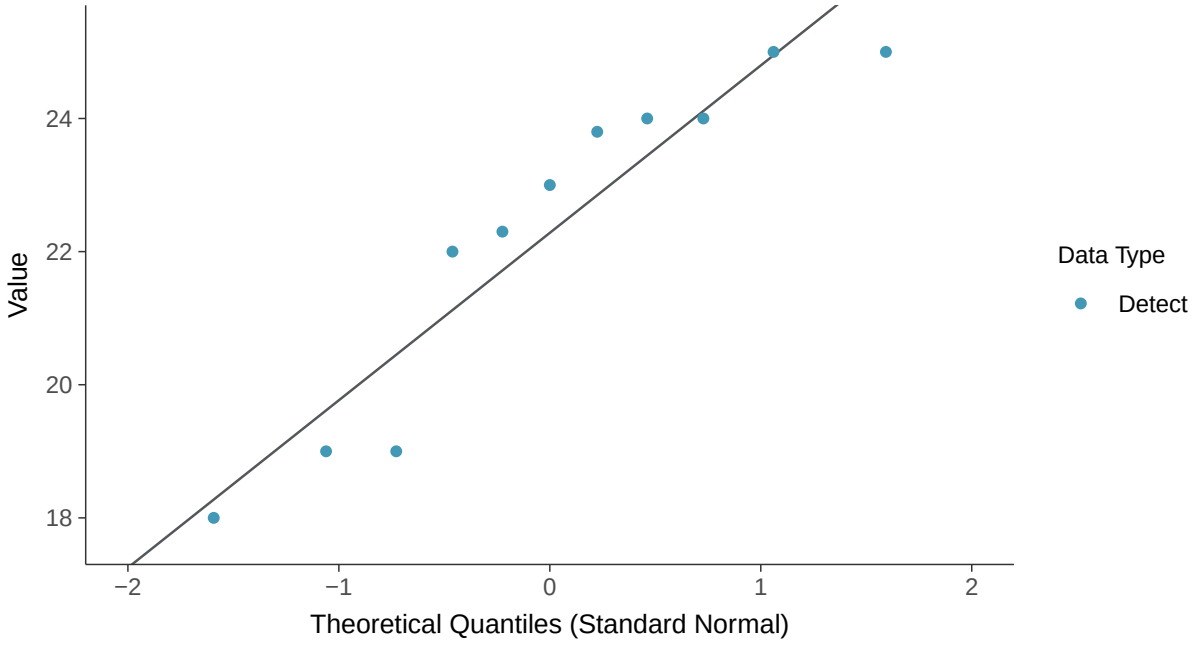
Boxplot by Season

Chloride, MW-100B (mg/l)



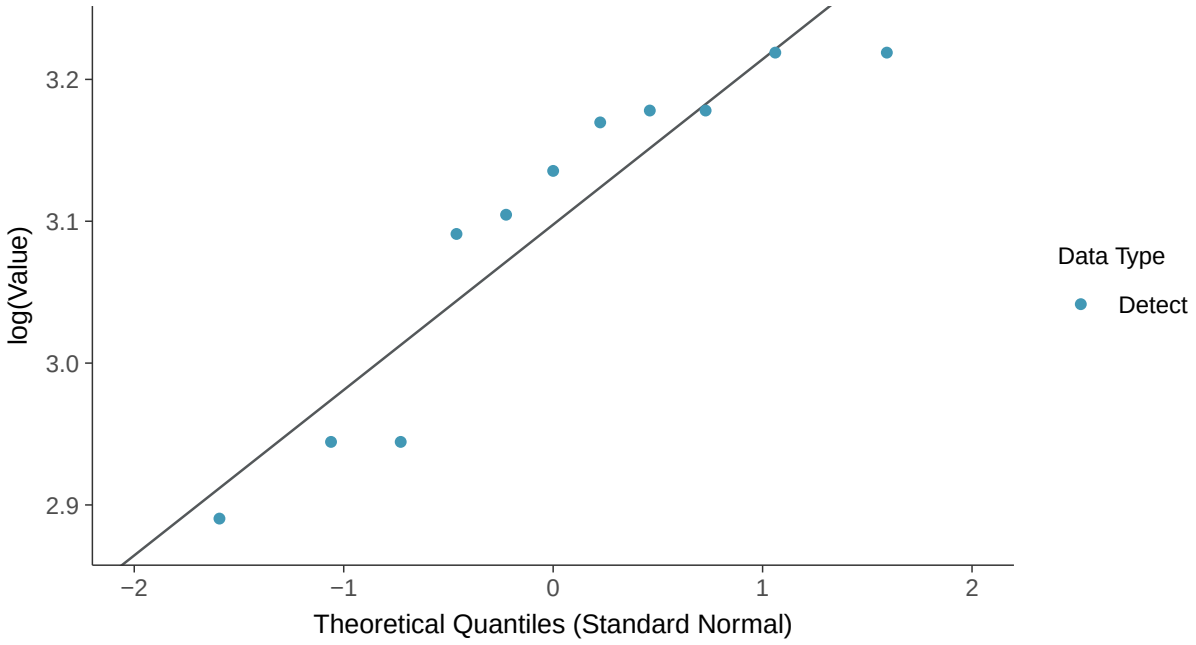
Normal Q-Q plot

Chloride, MW-100B (mg/l)



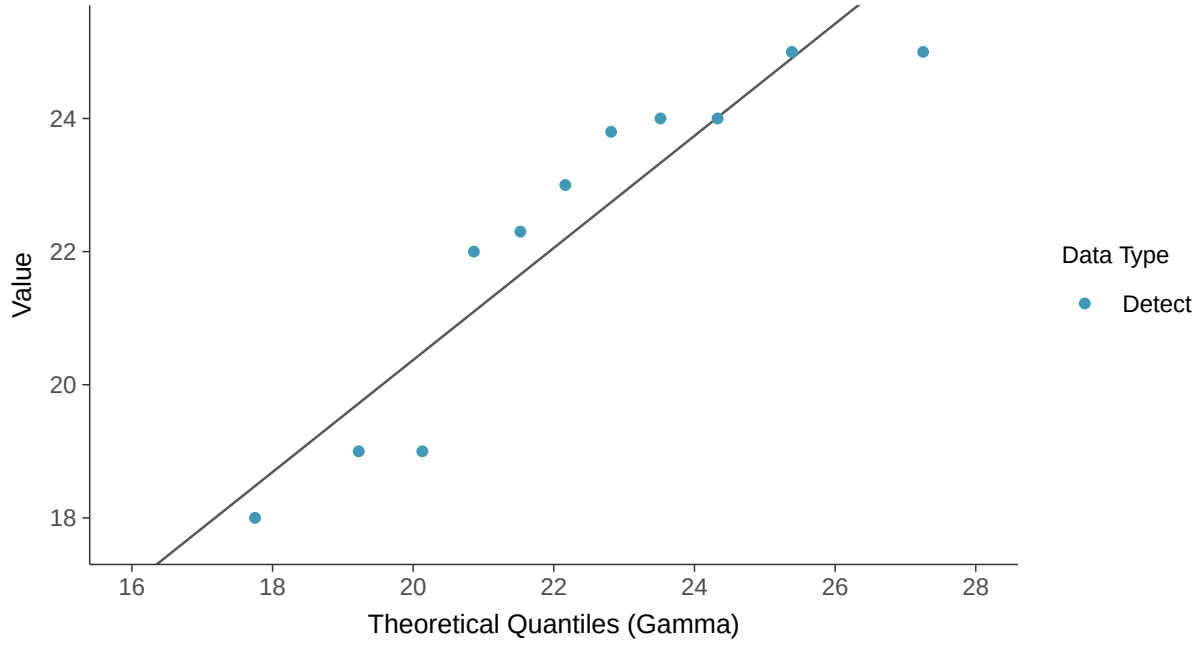
Lognormal Q-Q plot

Chloride, MW-100B (mg/l)



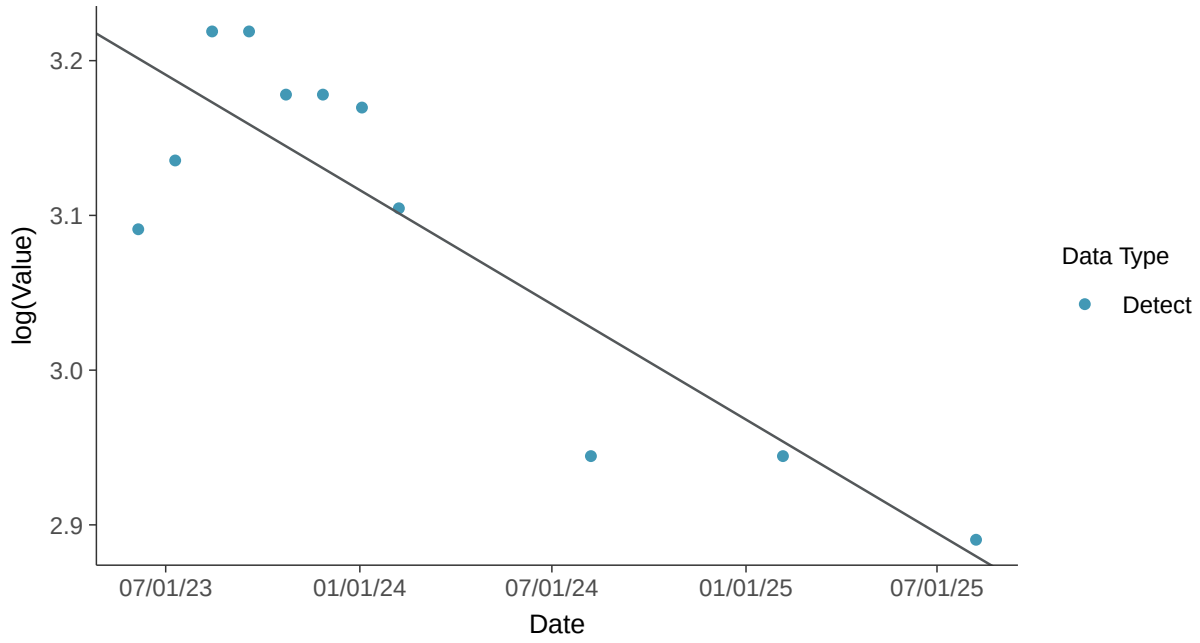
Gamma Q-Q plot

Chloride, MW-100B (mg/l)



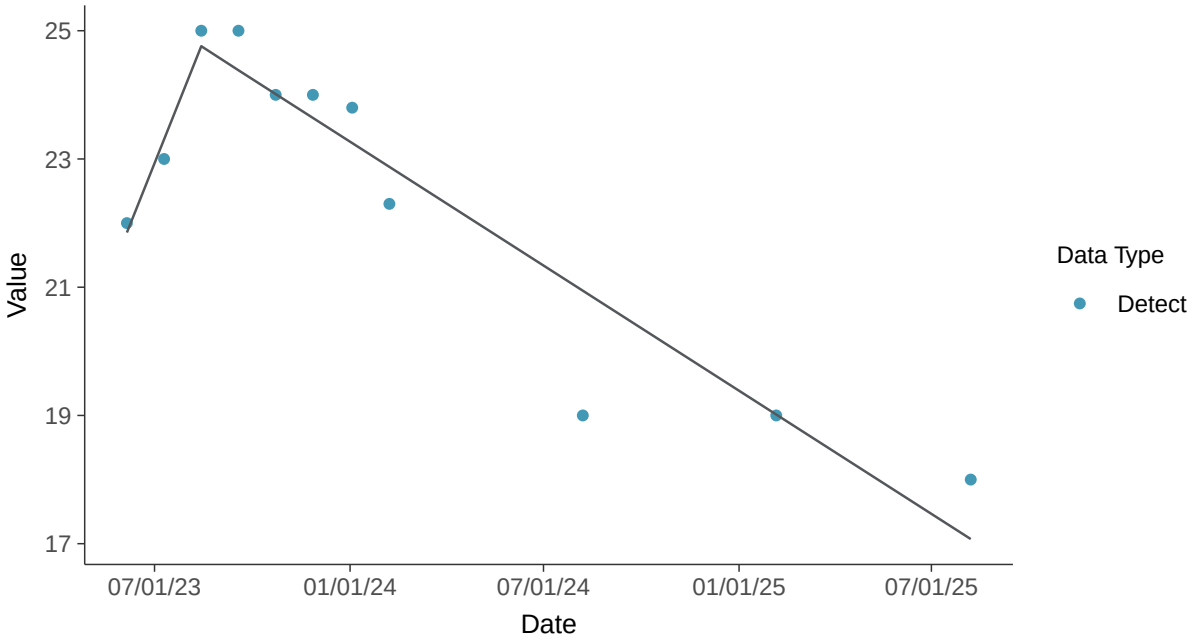
Trend Regression: Lognormal MLE

Chloride, MW-100B (mg/l)



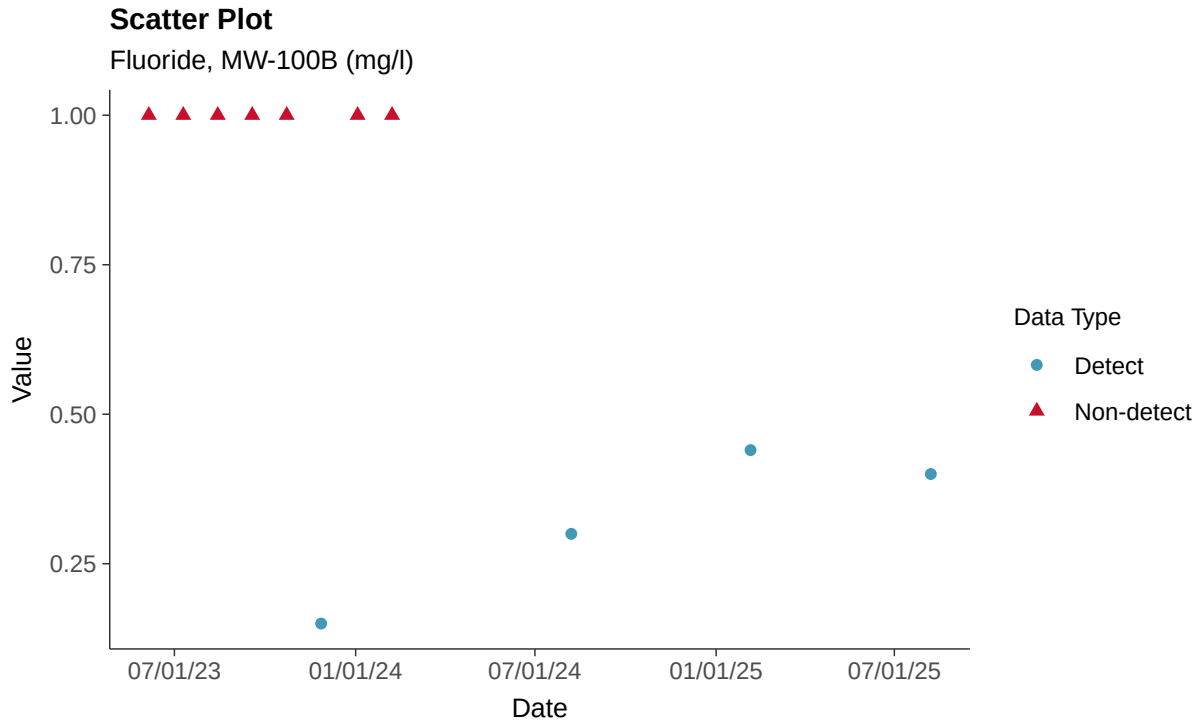
Trend Regression: Piecewise Linear-Linear

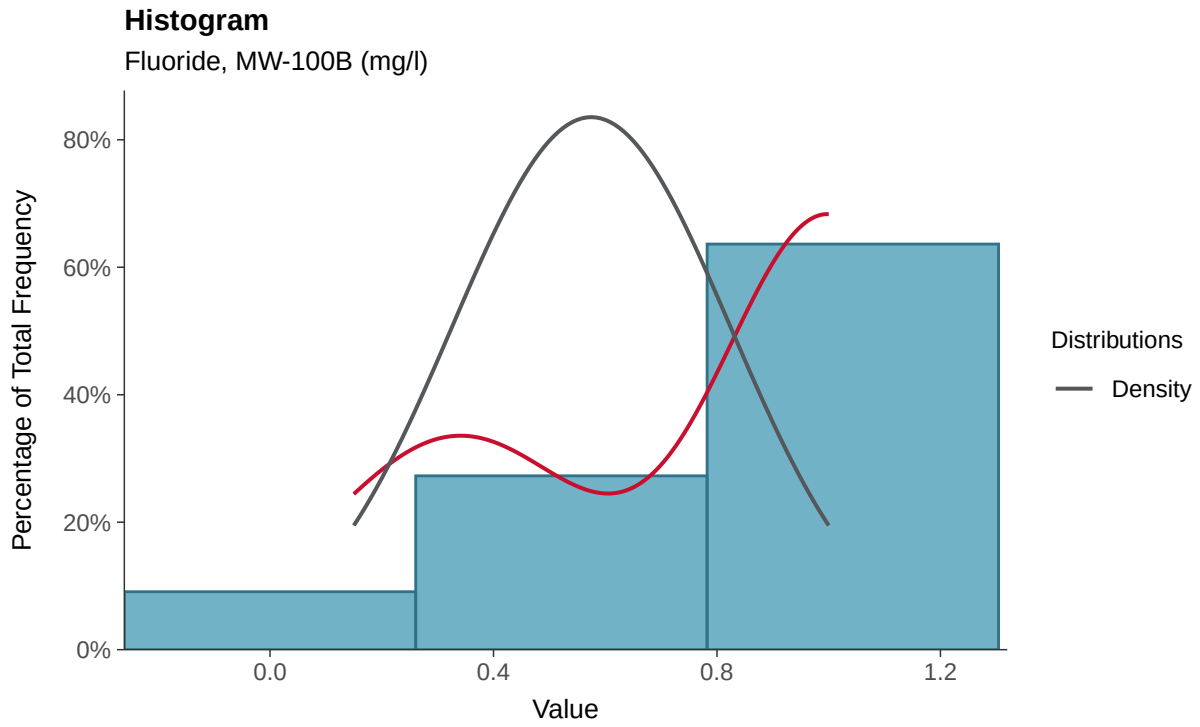
Chloride, MW-100B (mg/l)



Appendix III: Fluoride, MW-100B

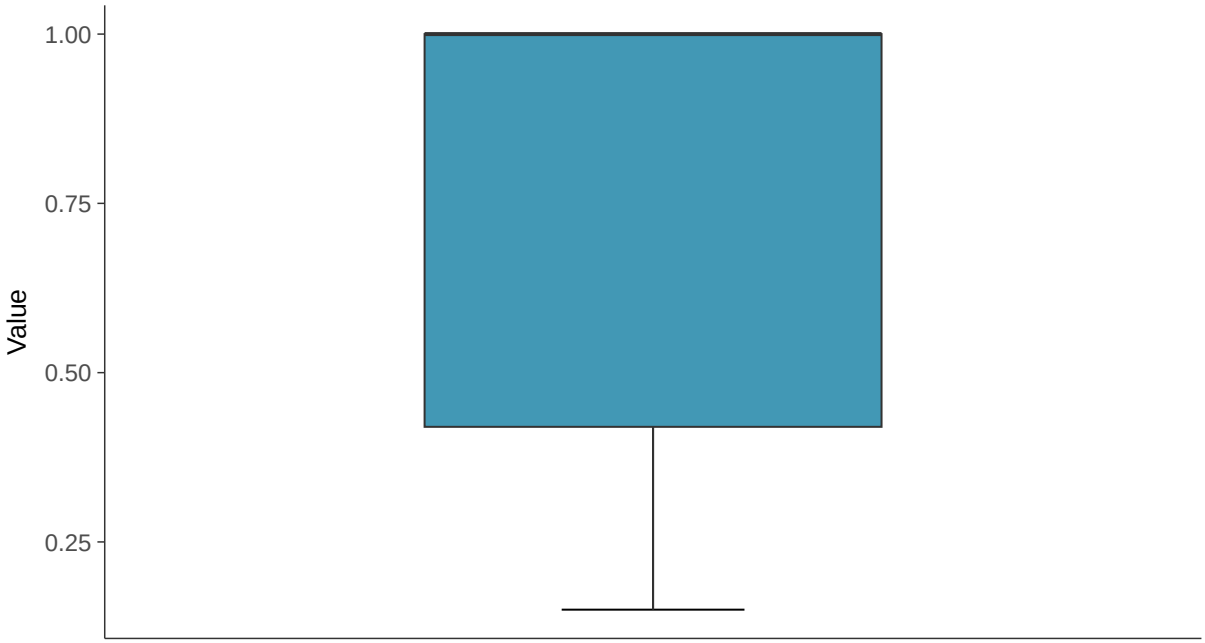
ID: 33_2_112





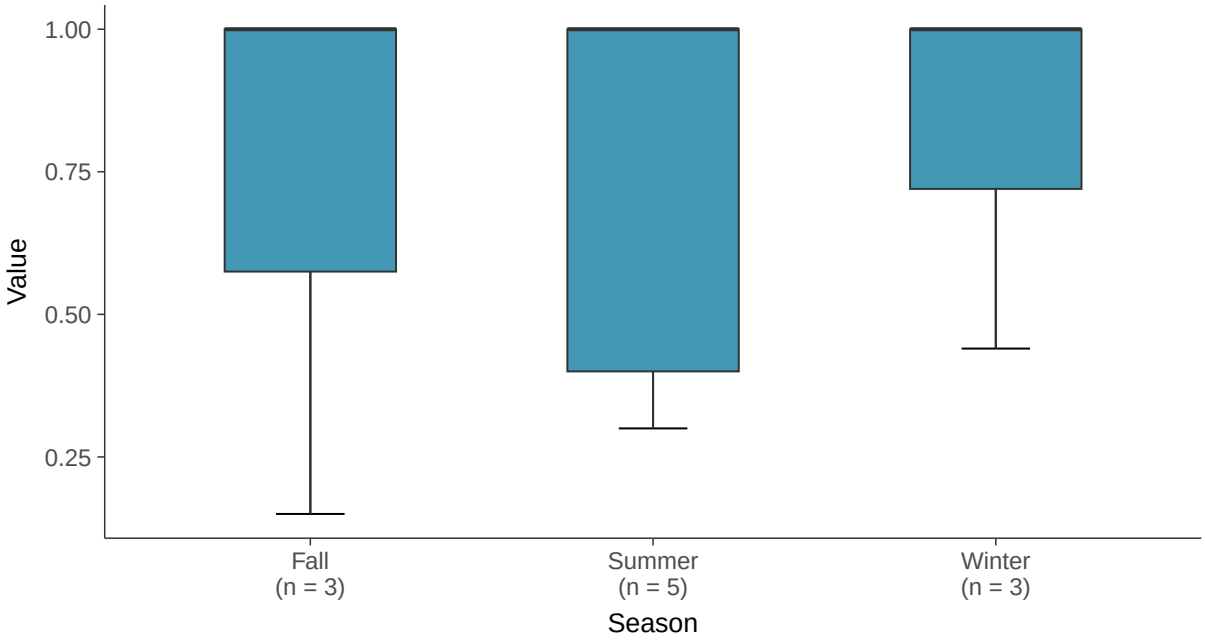
Boxplot

Fluoride, MW-100B (mg/l)



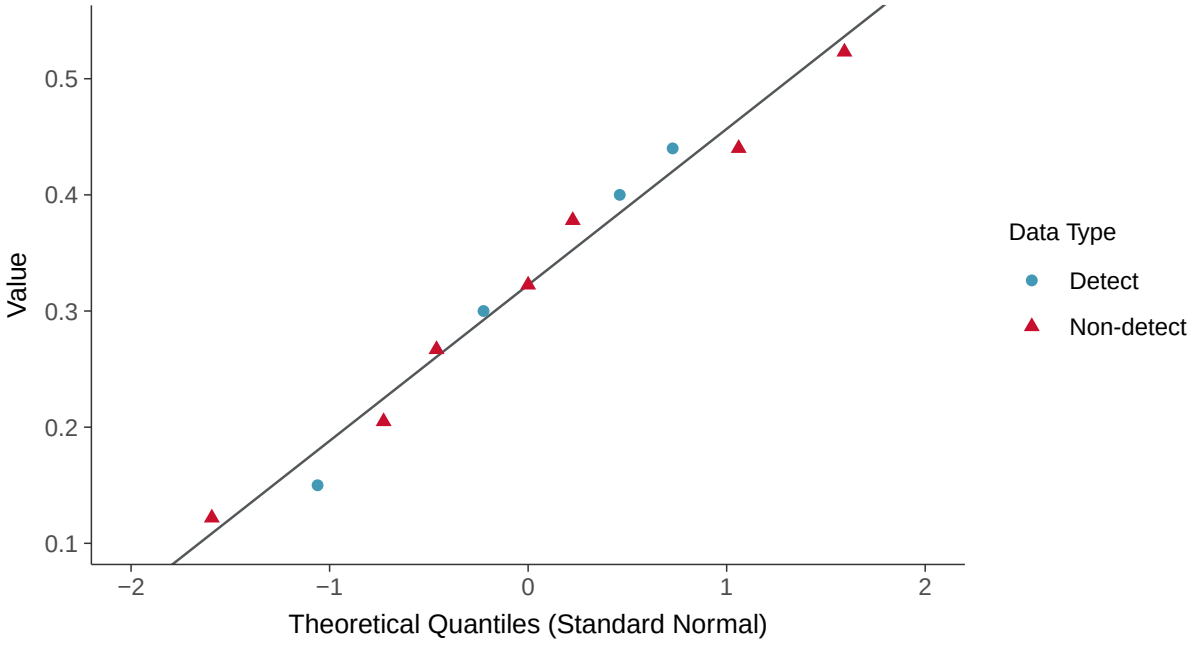
Boxplot by Season

Fluoride, MW-100B (mg/l)



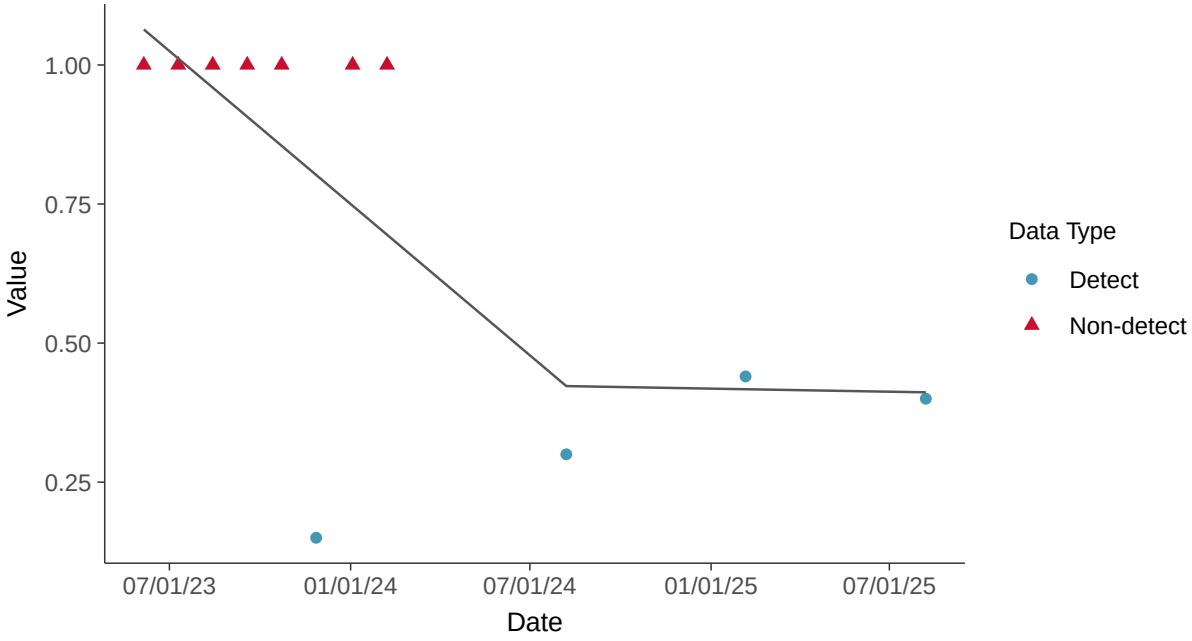
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-100B (mg/l)



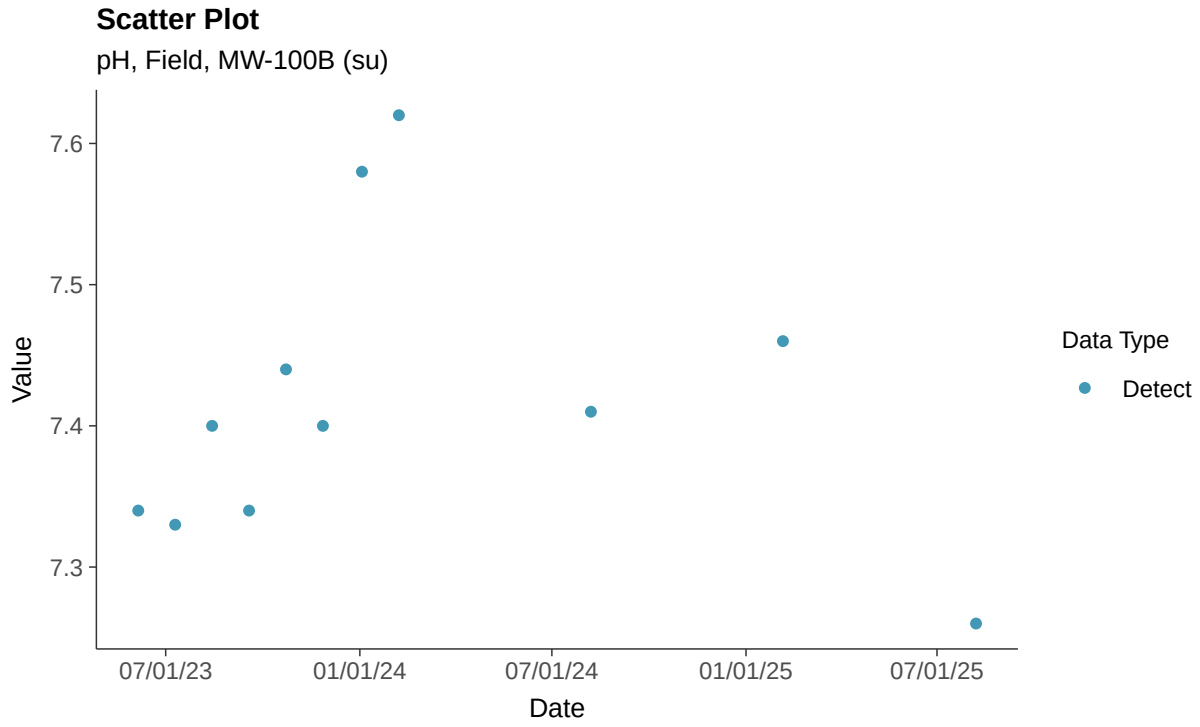
Trend Regression: Piecewise Linear-Linear

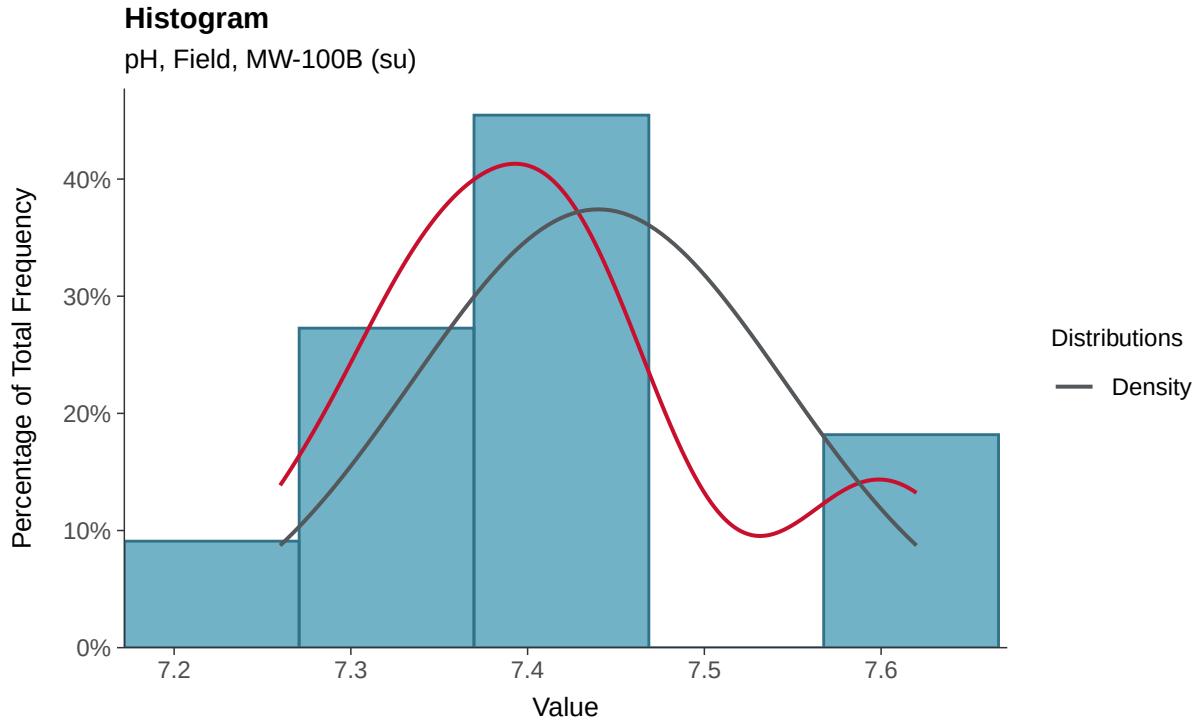
Fluoride, MW-100B (mg/l)



Appendix III: pH, Field, MW-100B

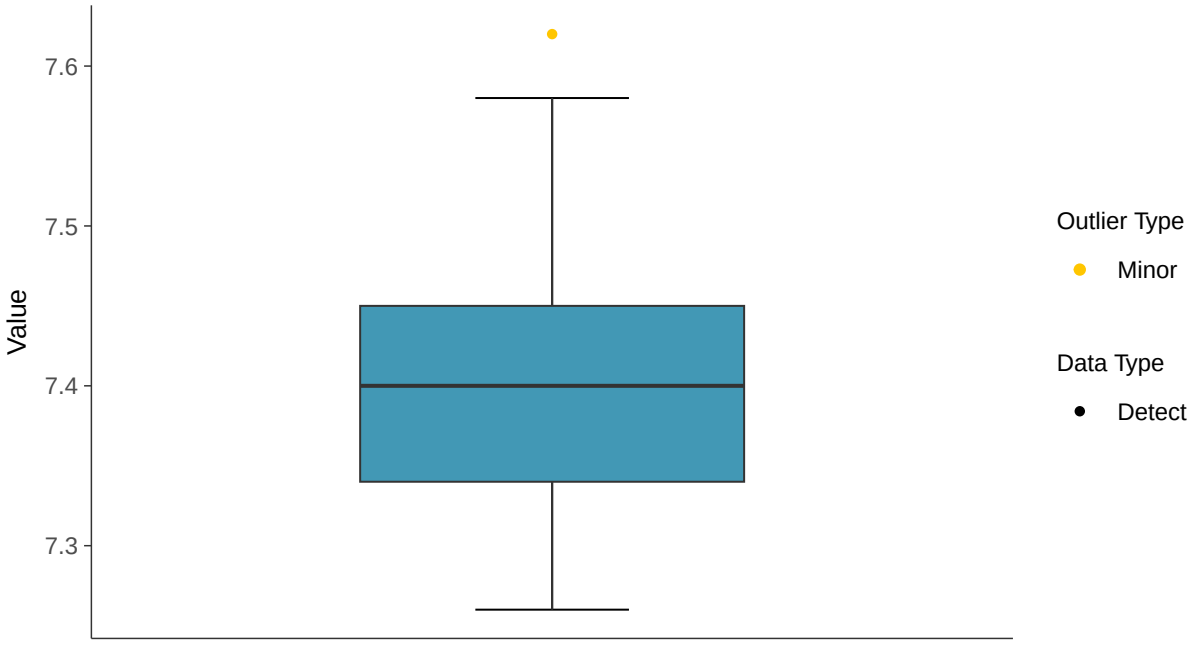
ID: 33_2_120





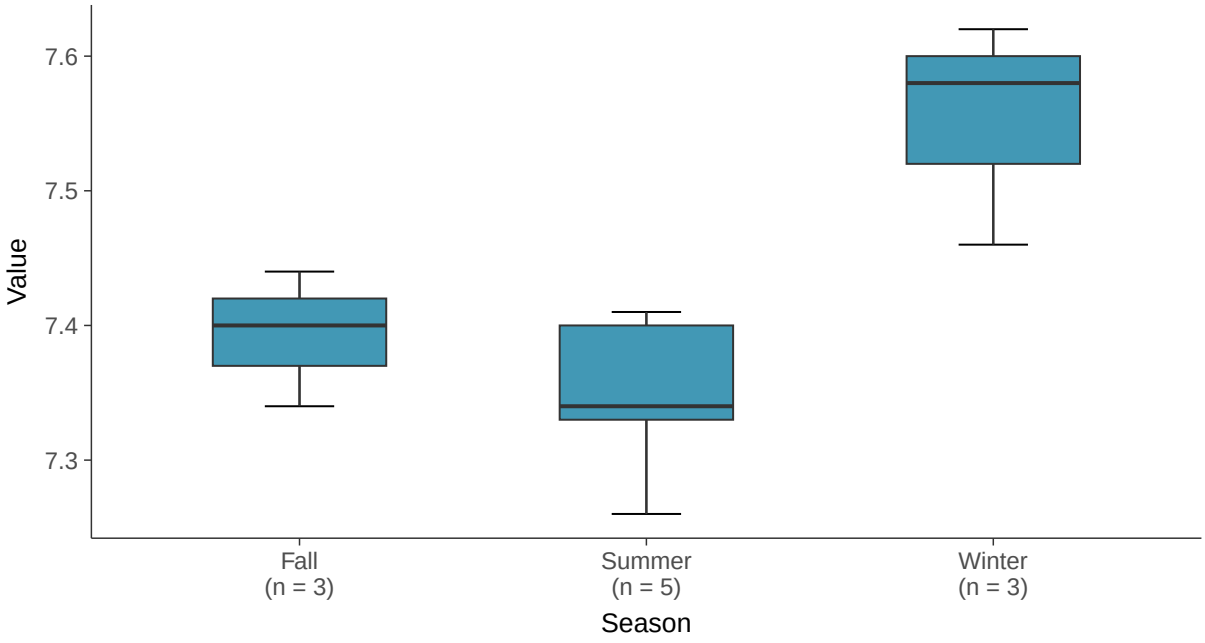
Boxplot

pH, Field, MW-100B (su)



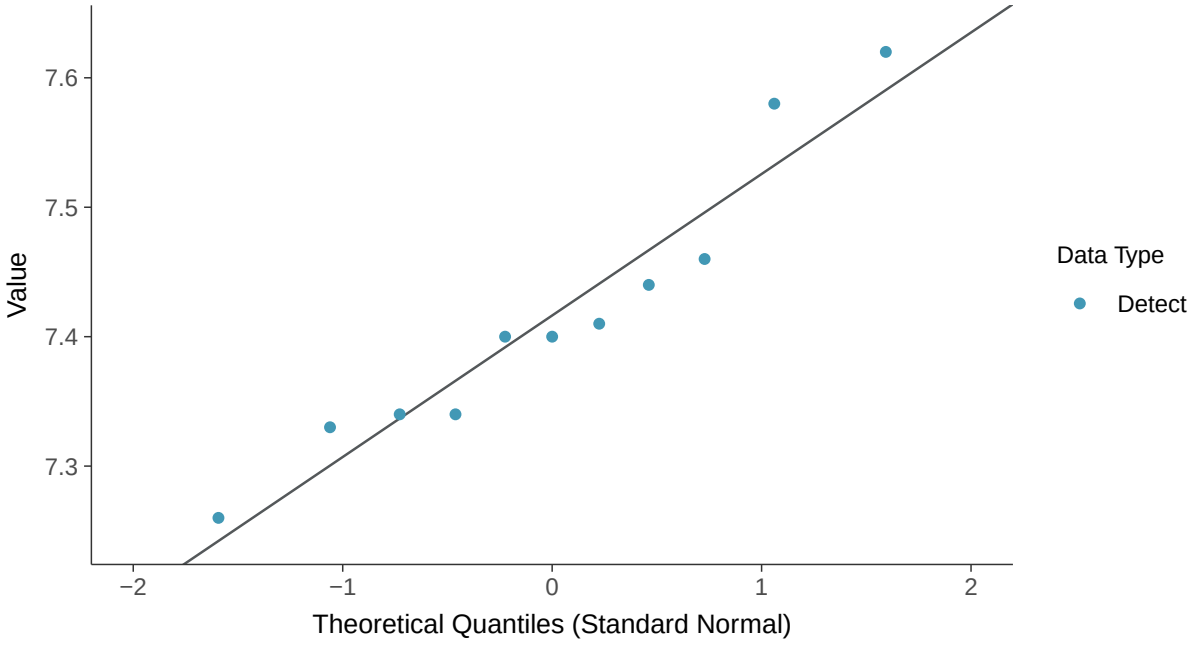
Boxplot by Season

pH, Field, MW-100B (su)



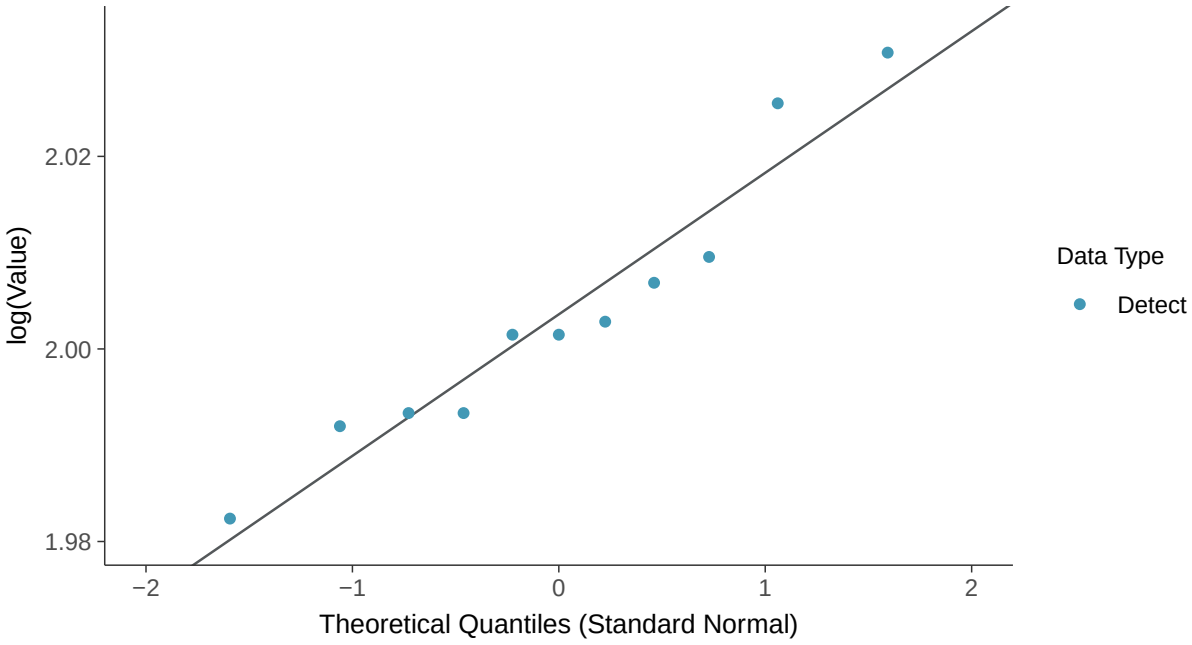
Normal Q-Q plot

pH, Field, MW-100B (su)



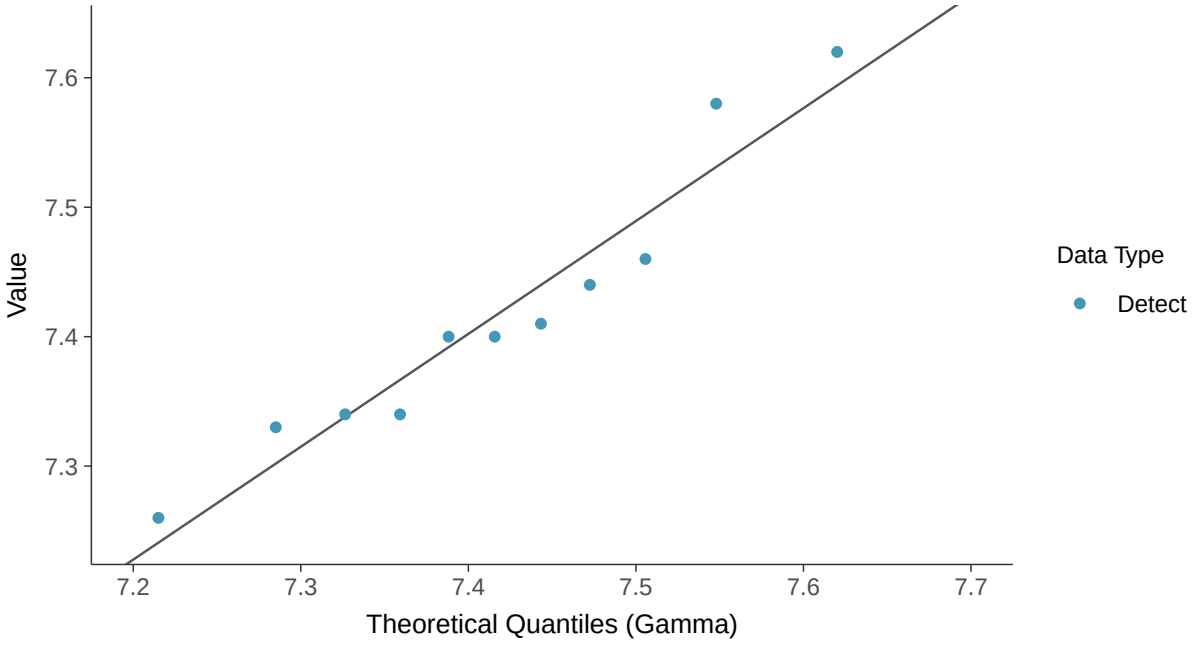
Lognormal Q-Q plot

pH, Field, MW-100B (su)



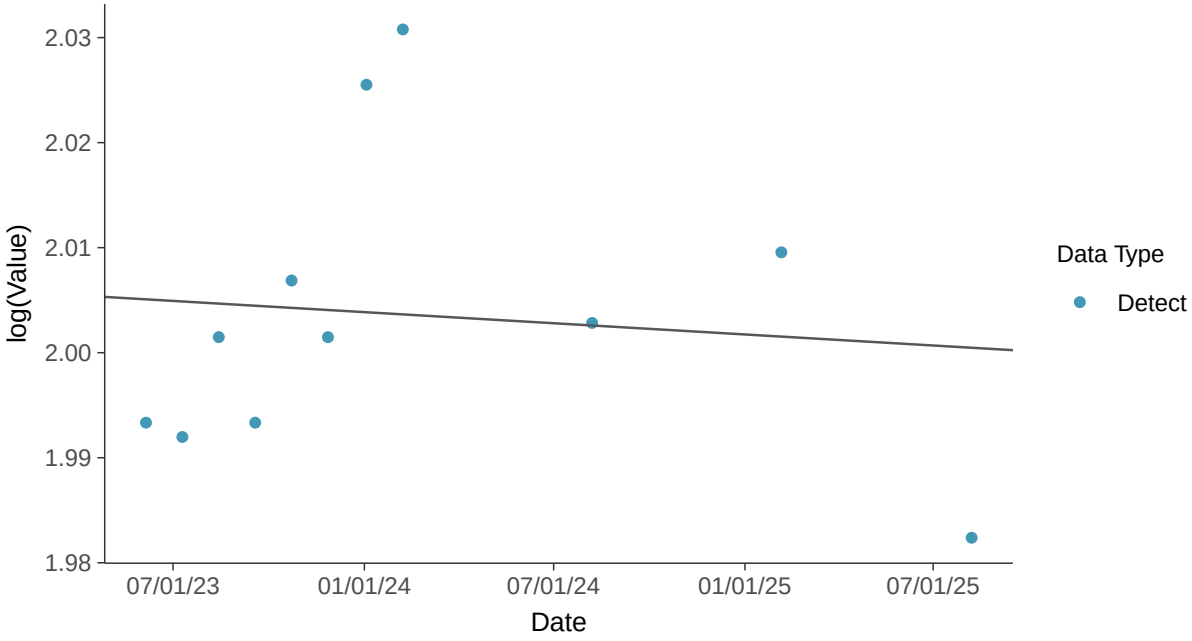
Gamma Q-Q plot

pH, Field, MW-100B (su)



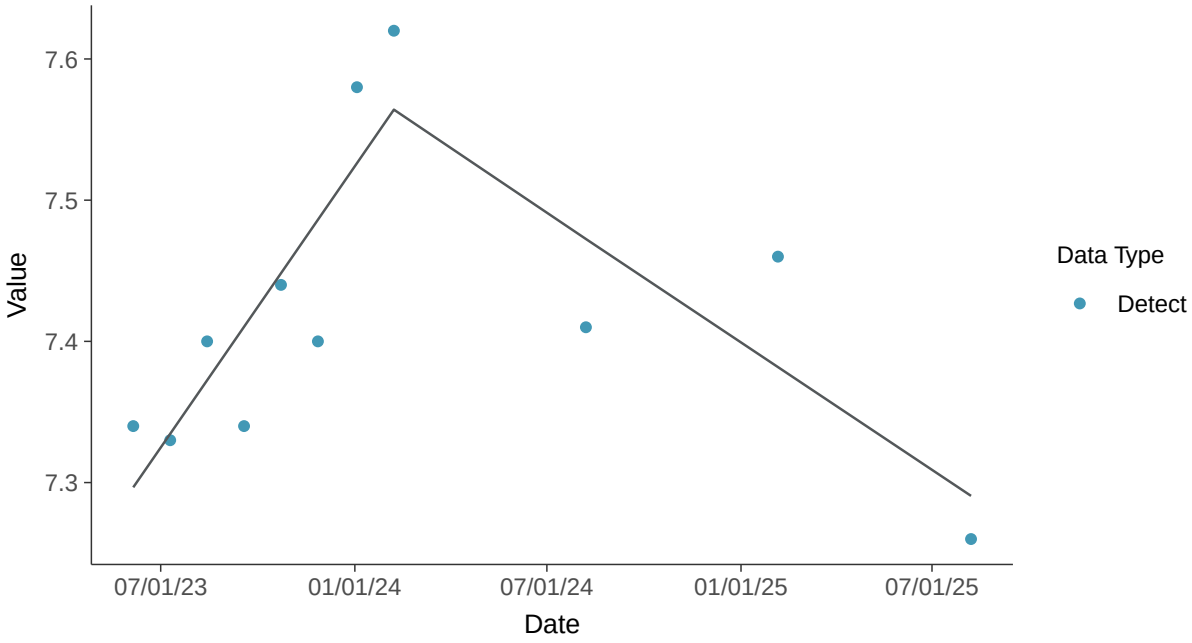
Trend Regression: Lognormal MLE

pH, Field, MW-100B (su)



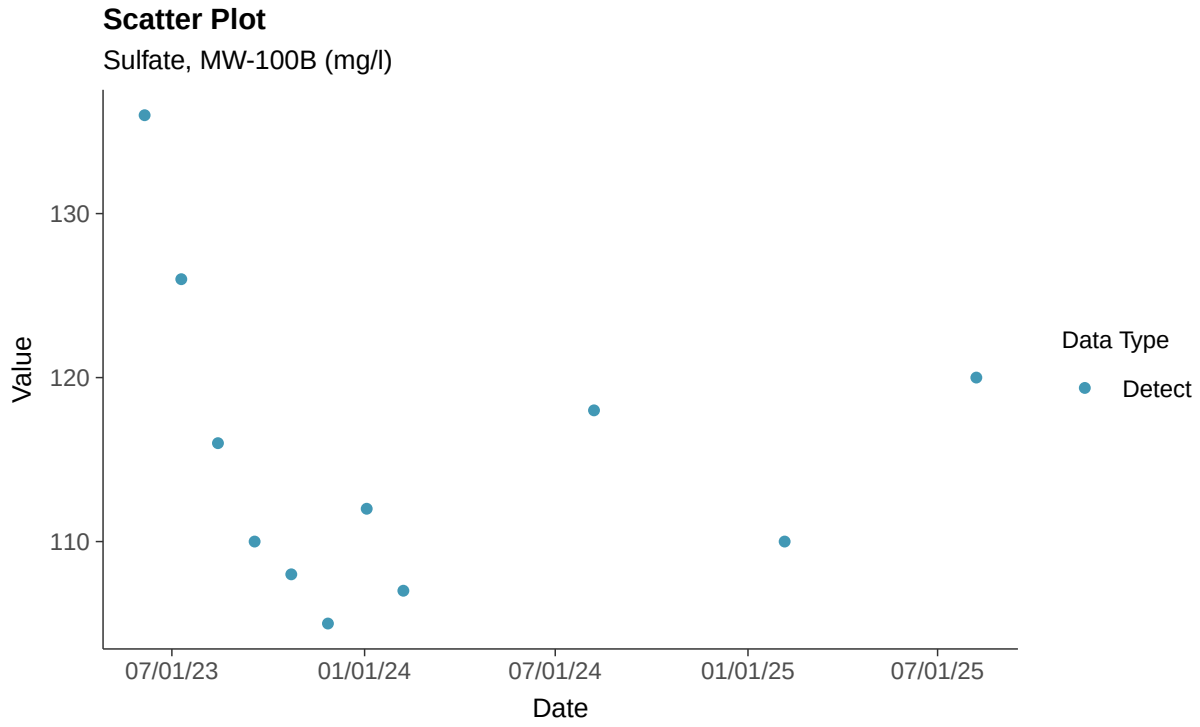
Trend Regression: Piecewise Linear-Linear

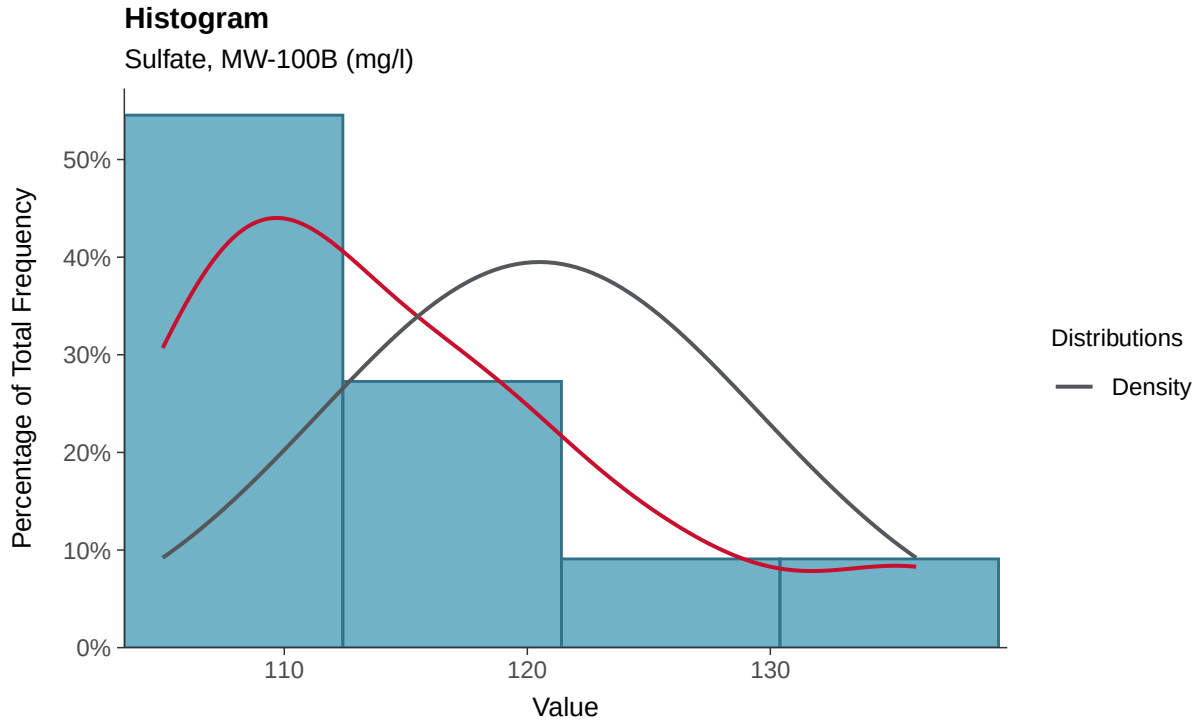
pH, Field, MW-100B (su)



Appendix III: Sulfate, MW-100B

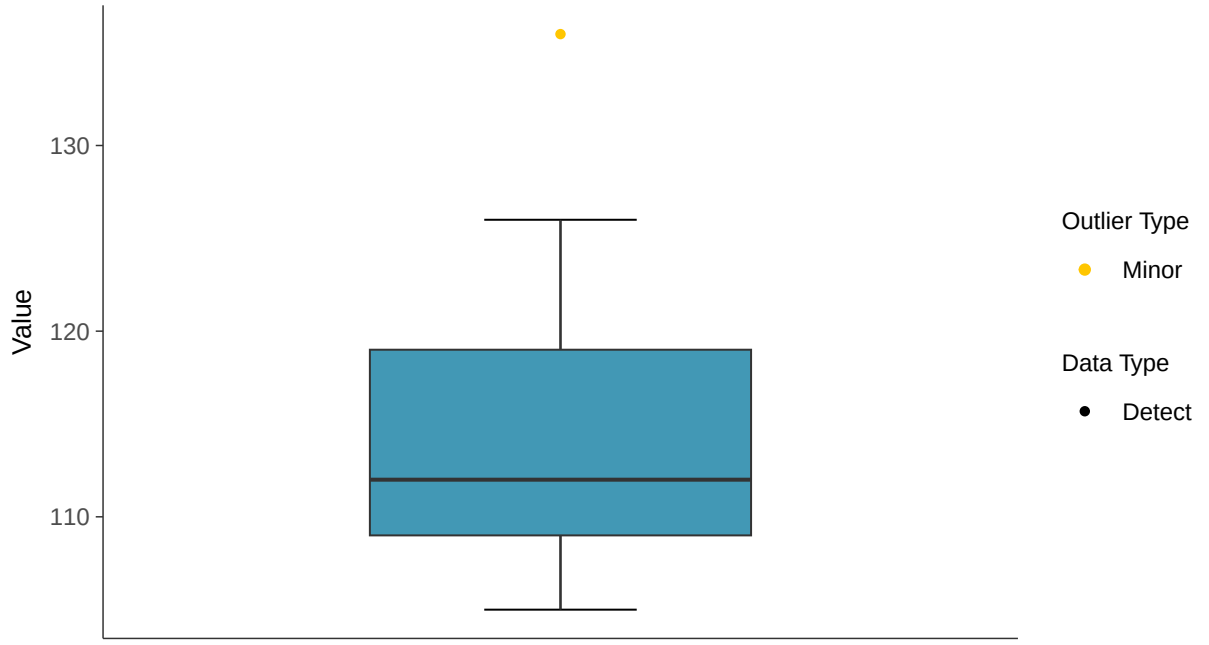
ID: 33_2_124





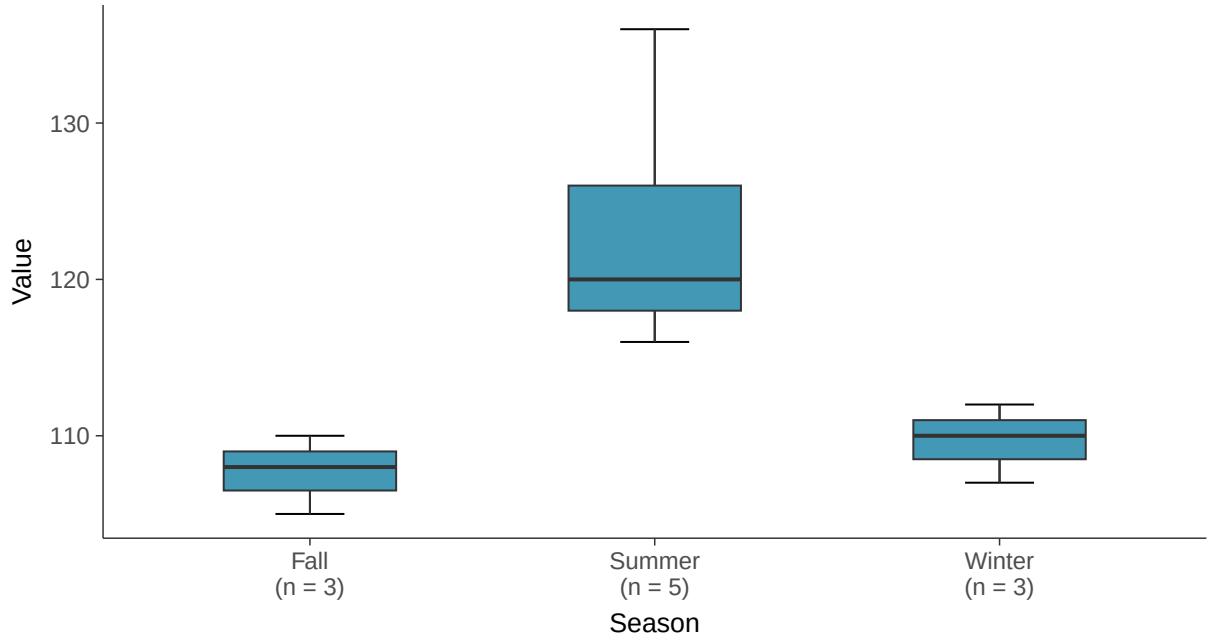
Boxplot

Sulfate, MW-100B (mg/l)



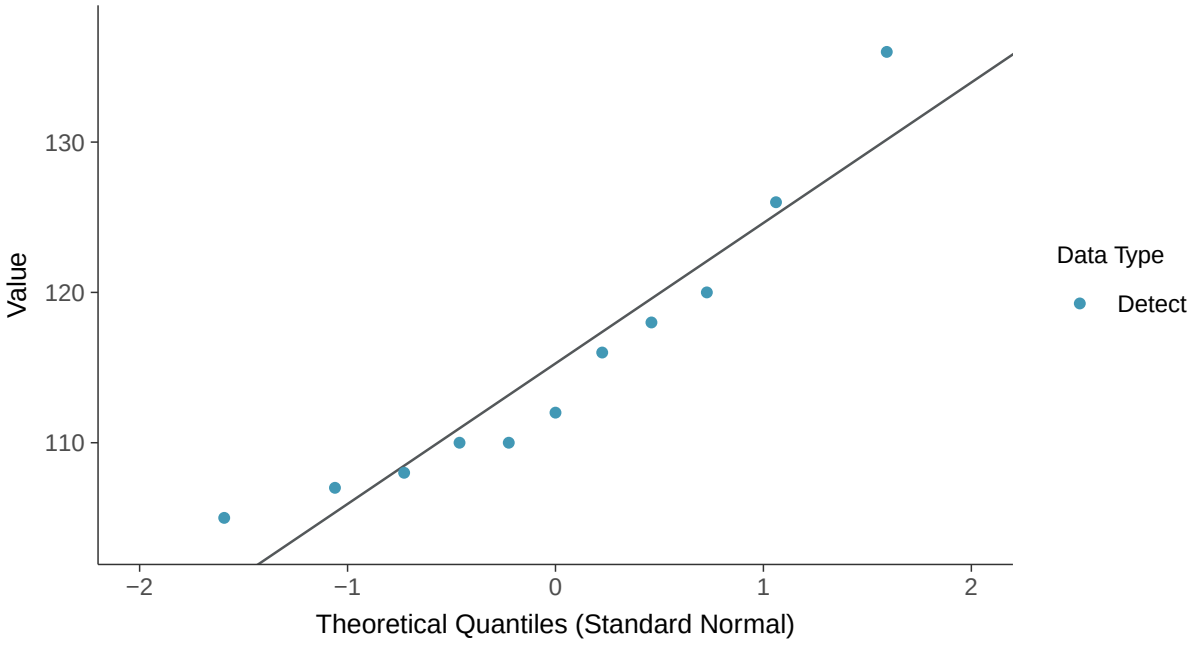
Boxplot by Season

Sulfate, MW-100B (mg/l)



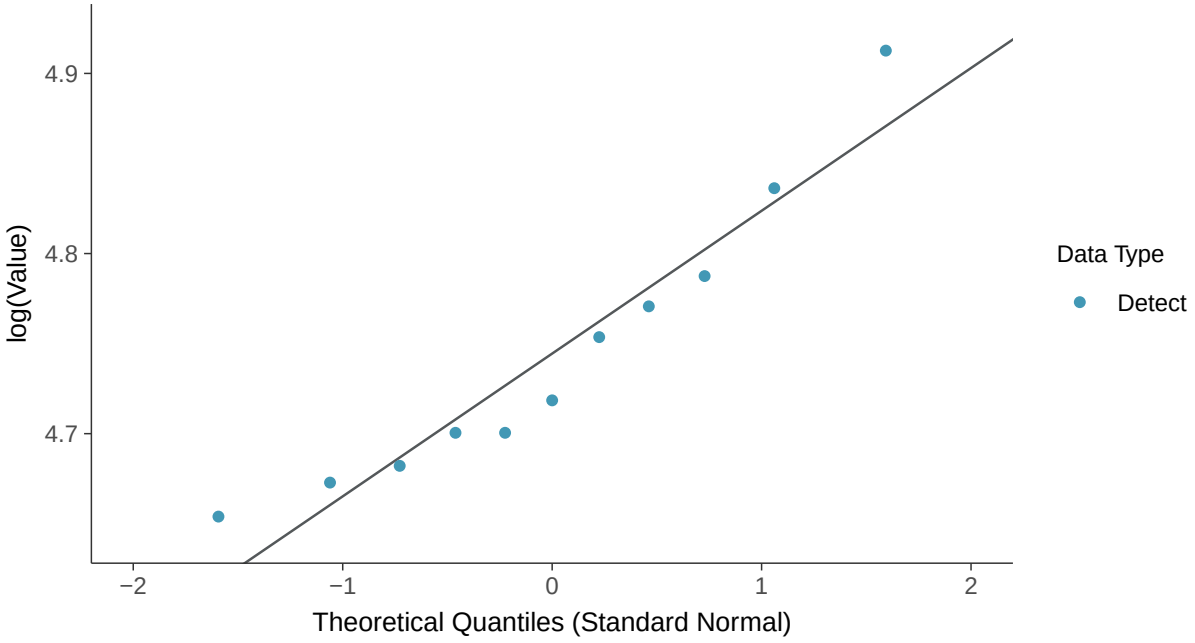
Normal Q-Q plot

Sulfate, MW-100B (mg/l)



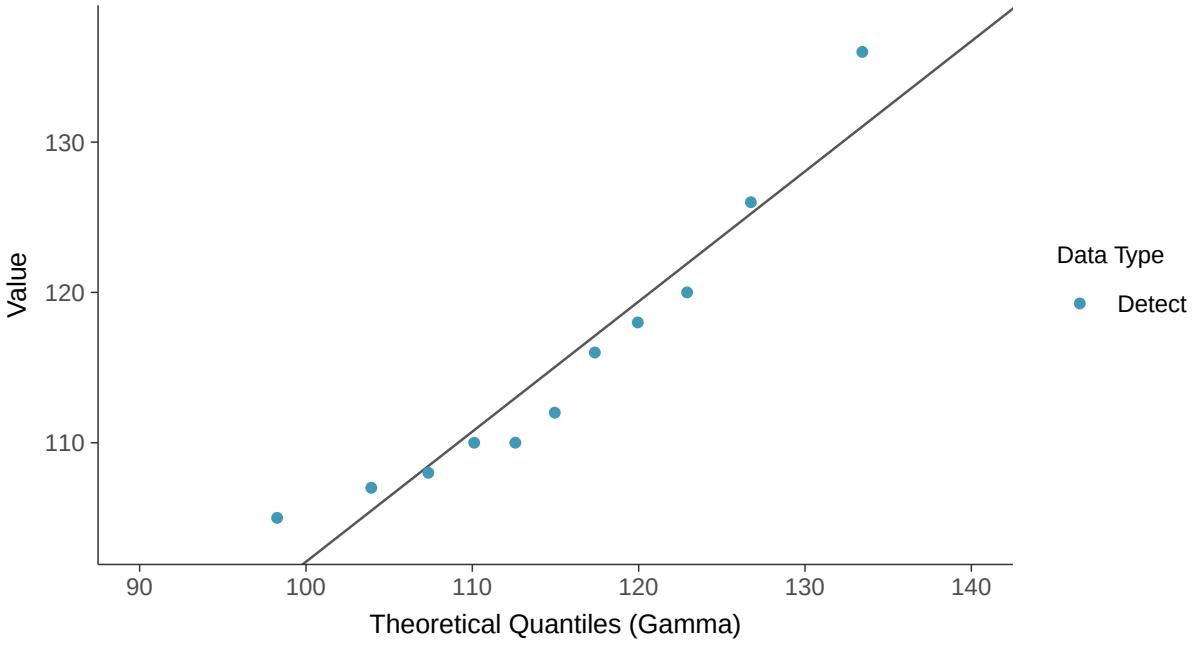
Lognormal Q-Q plot

Sulfate, MW-100B (mg/l)



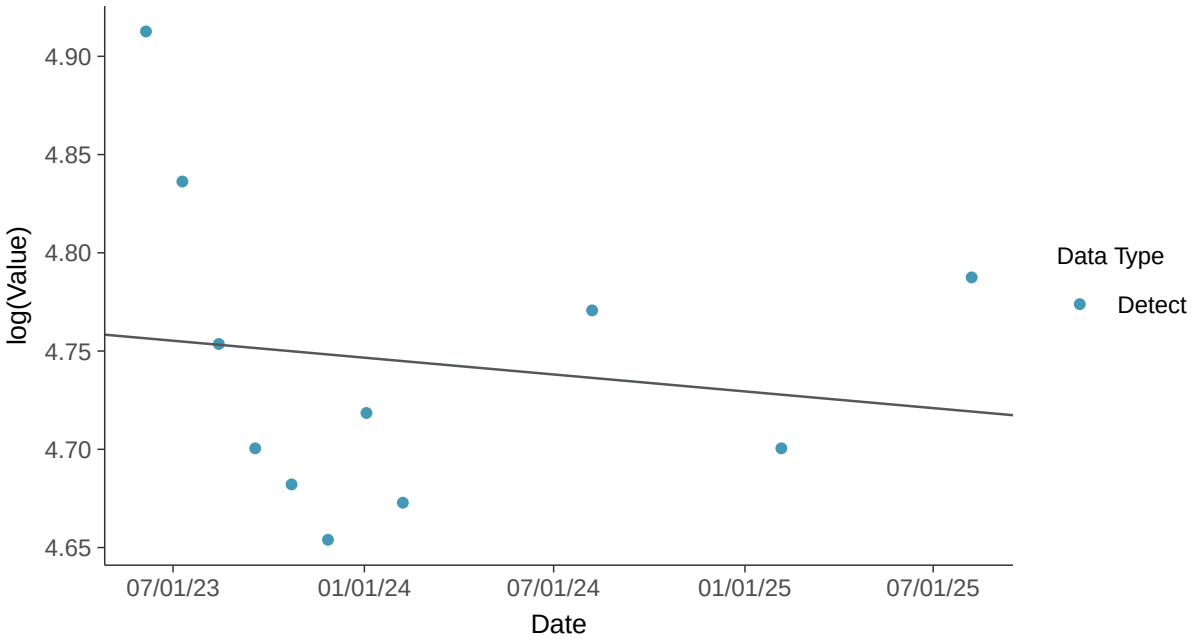
Gamma Q-Q plot

Sulfate, MW-100B (mg/l)



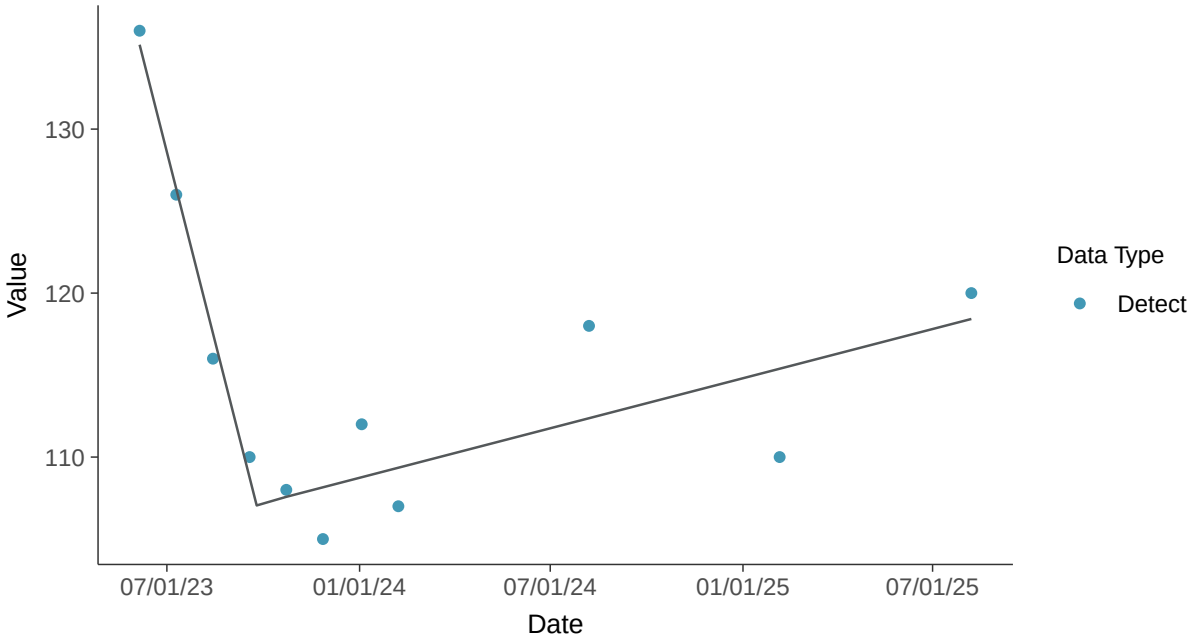
Trend Regression: Lognormal MLE

Sulfate, MW-100B (mg/l)



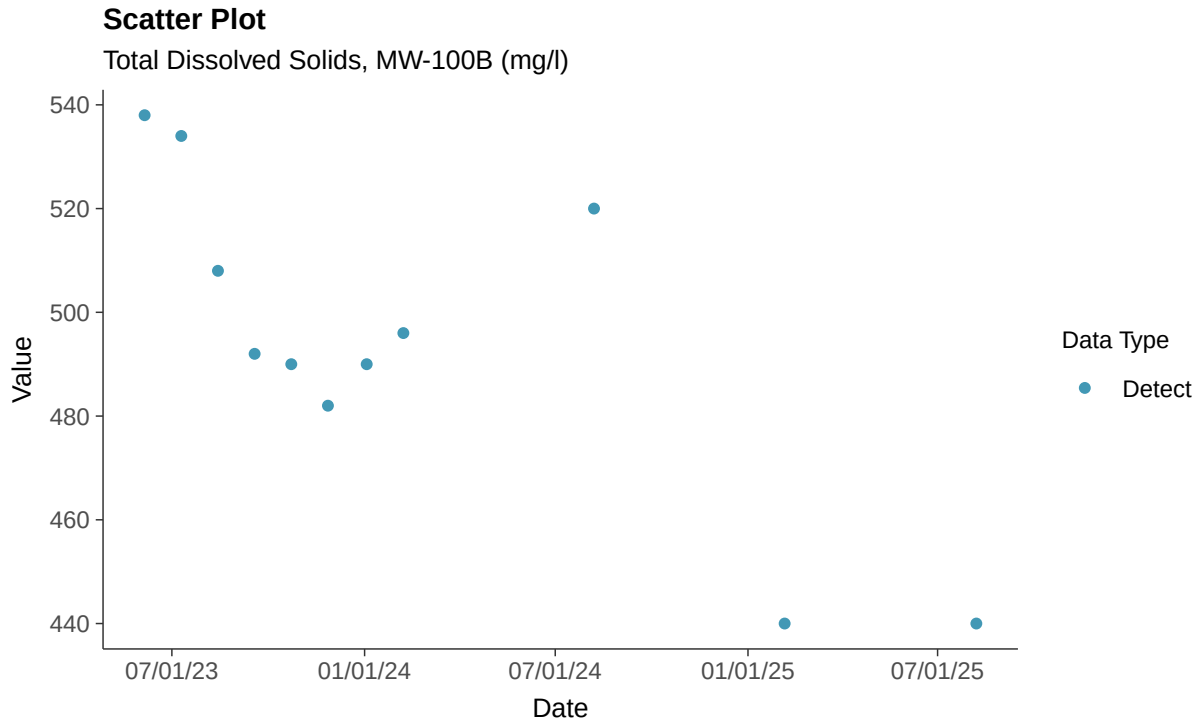
Trend Regression: Piecewise Linear-Linear

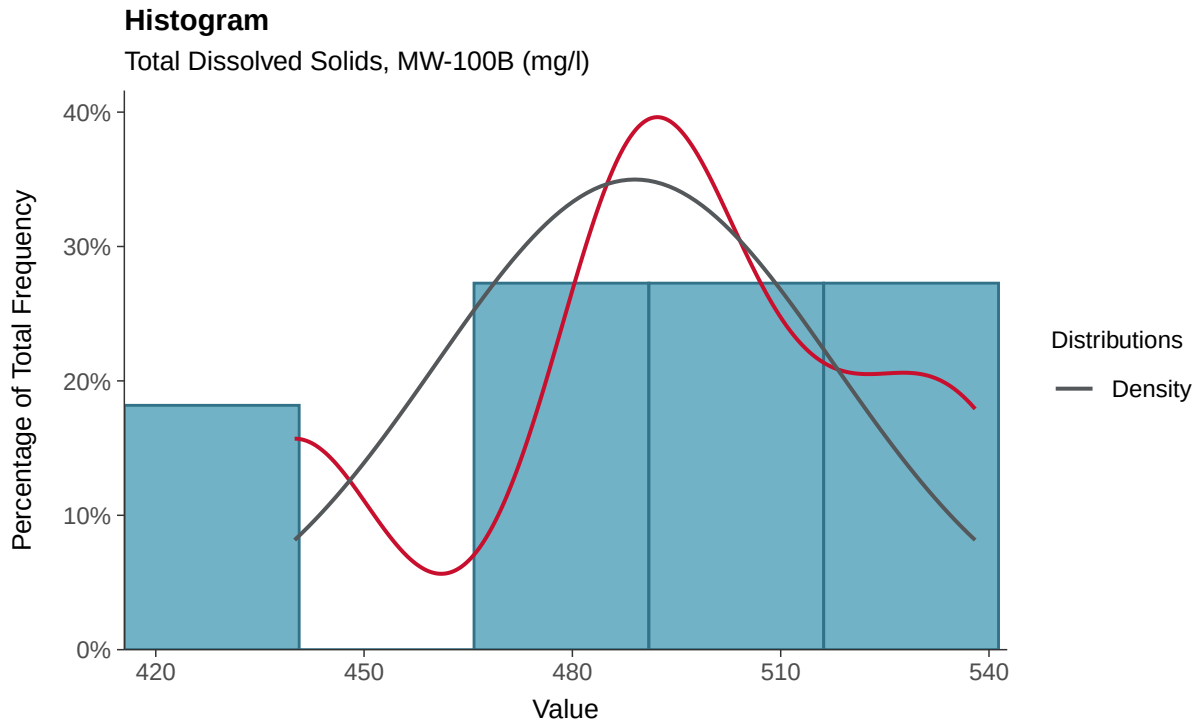
Sulfate, MW-100B (mg/l)



Appendix III: Total Dissolved Solids, MW-100B

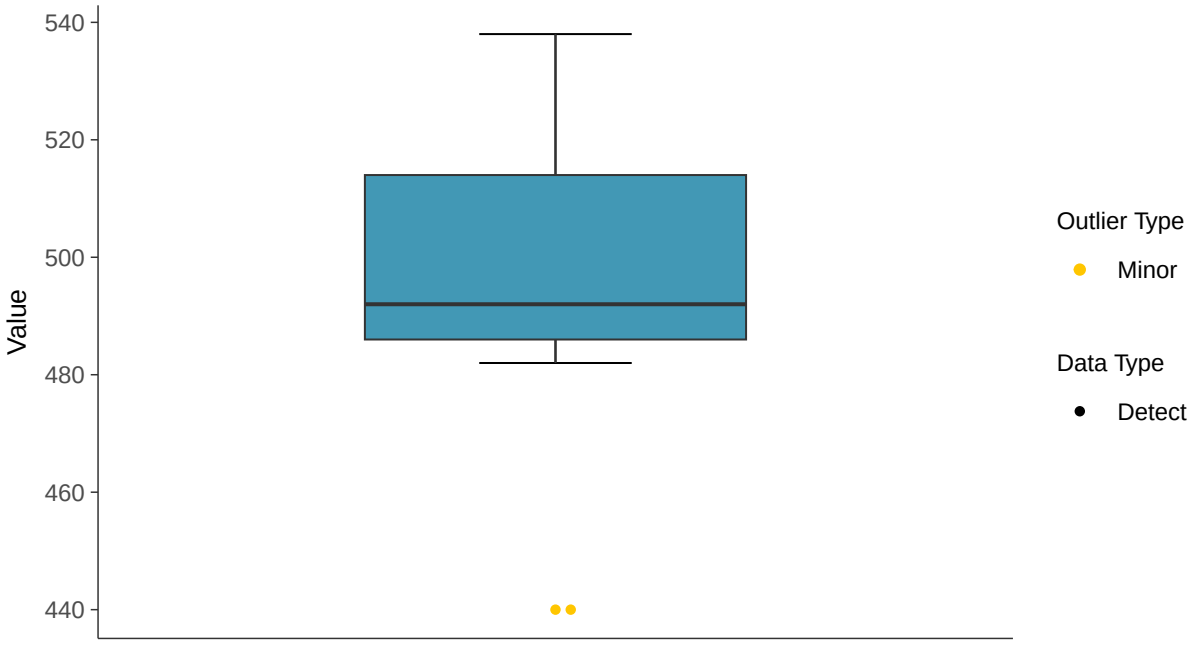
ID: 33_2_126





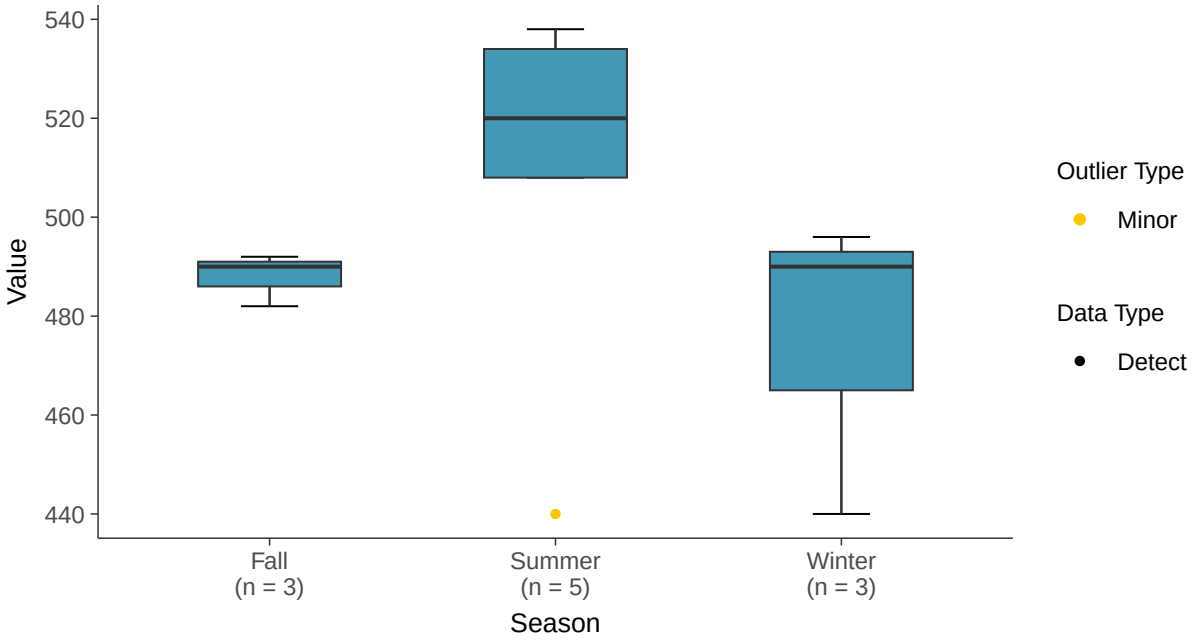
Boxplot

Total Dissolved Solids, MW-100B (mg/l)



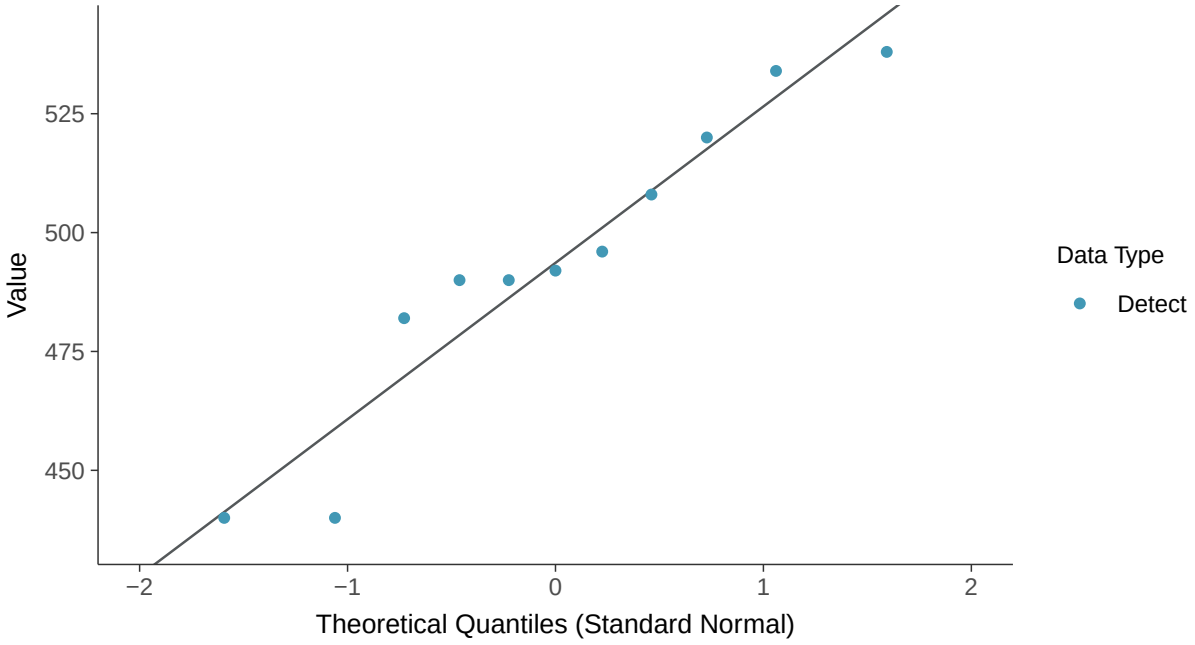
Boxplot by Season

Total Dissolved Solids, MW-100B (mg/l)



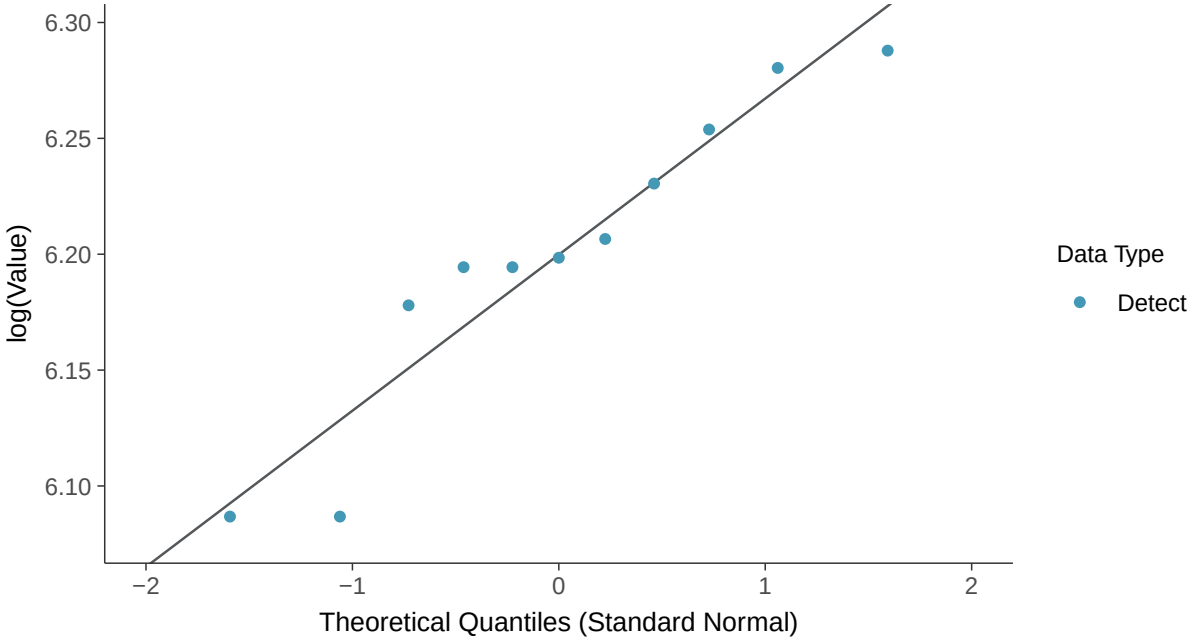
Normal Q-Q plot

Total Dissolved Solids, MW-100B (mg/l)



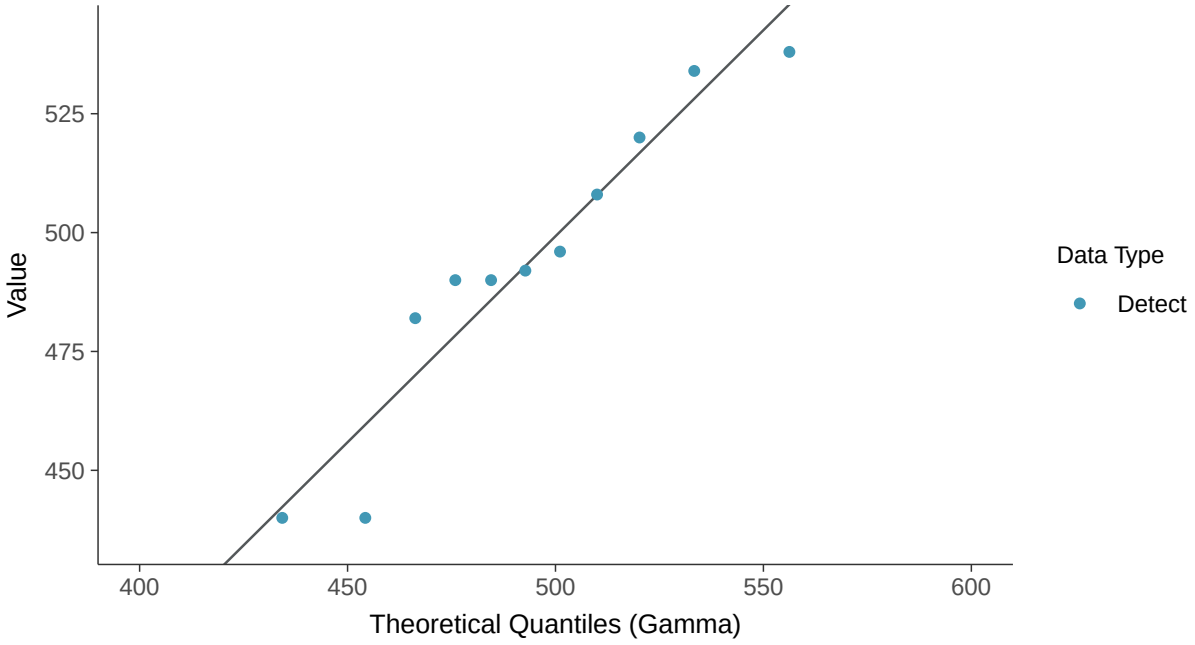
Lognormal Q-Q plot

Total Dissolved Solids, MW-100B (mg/l)



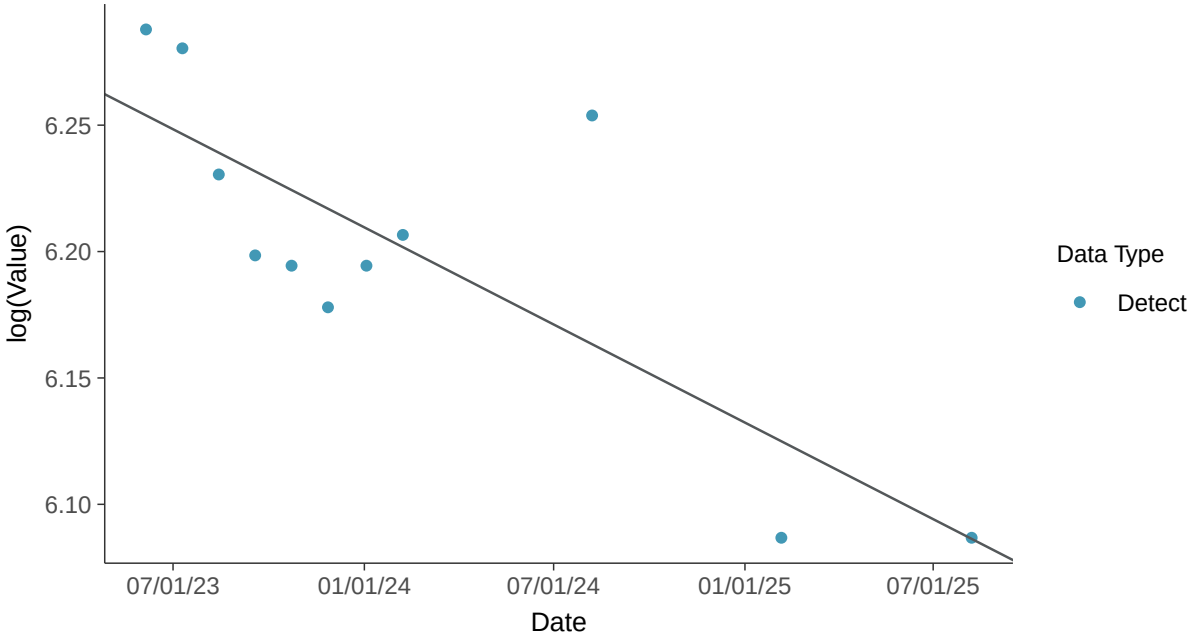
Gamma Q-Q plot

Total Dissolved Solids, MW-100B (mg/l)



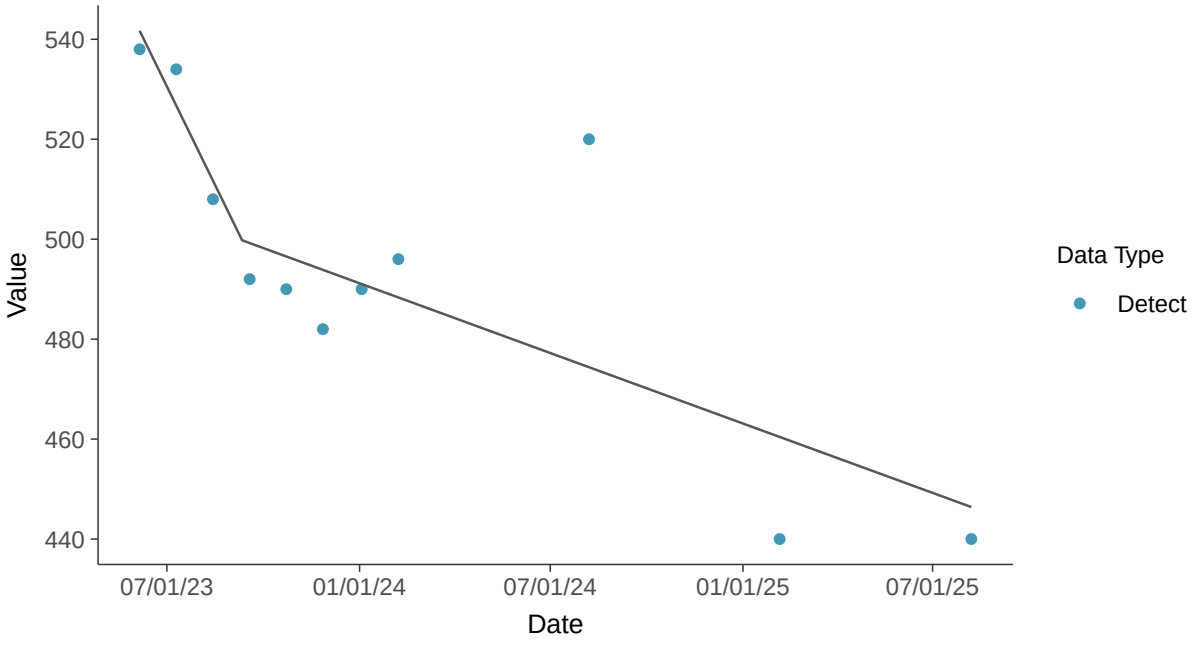
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-100B (mg/l)



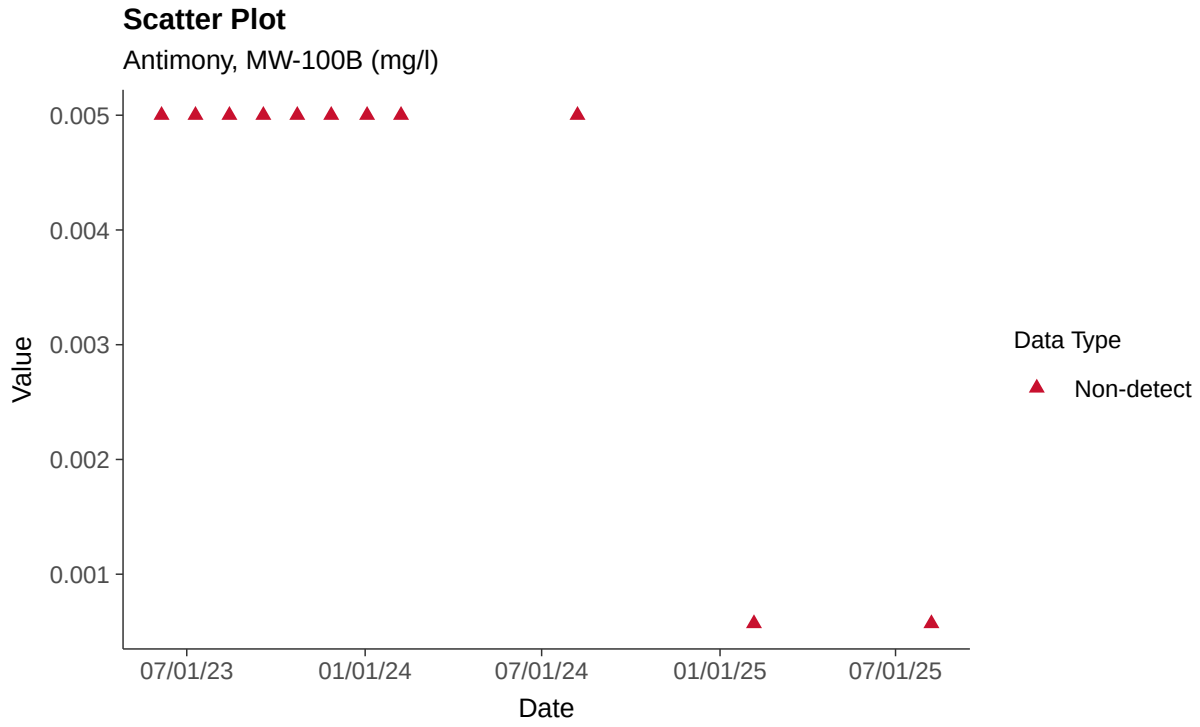
Trend Regression: Piecewise Linear-Linear

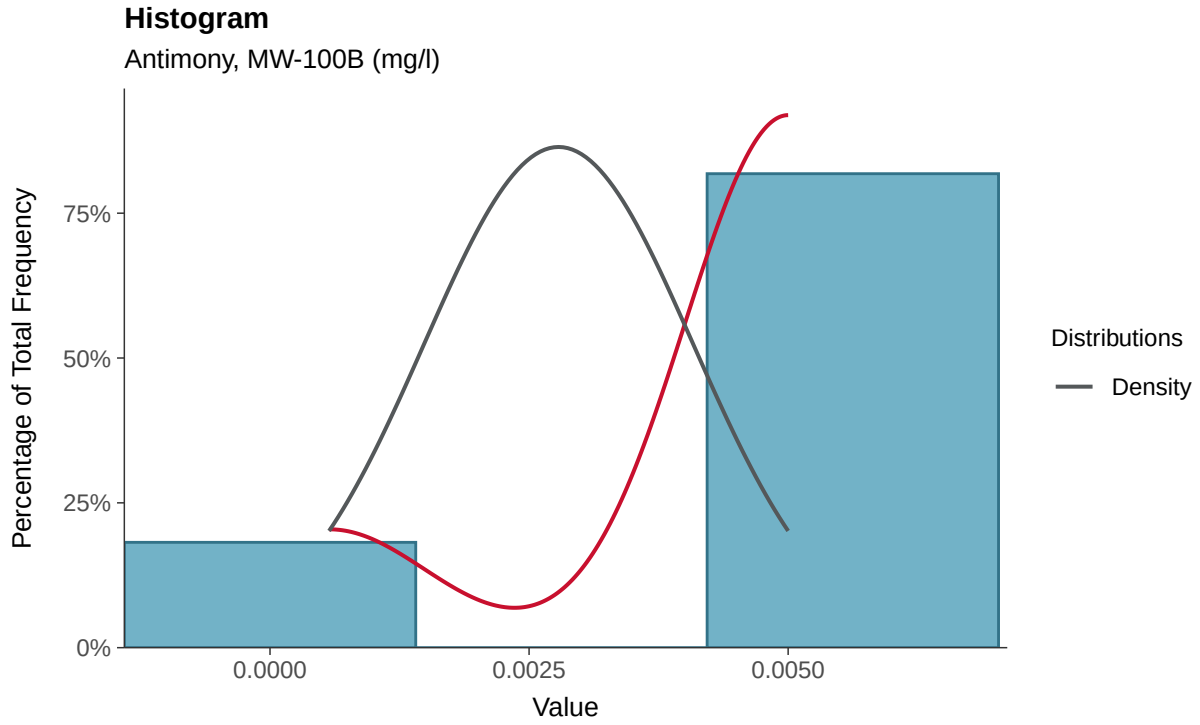
Total Dissolved Solids, MW-100B (mg/l)



Appendix IV: Antimony, MW-100B

ID: 33_3_101



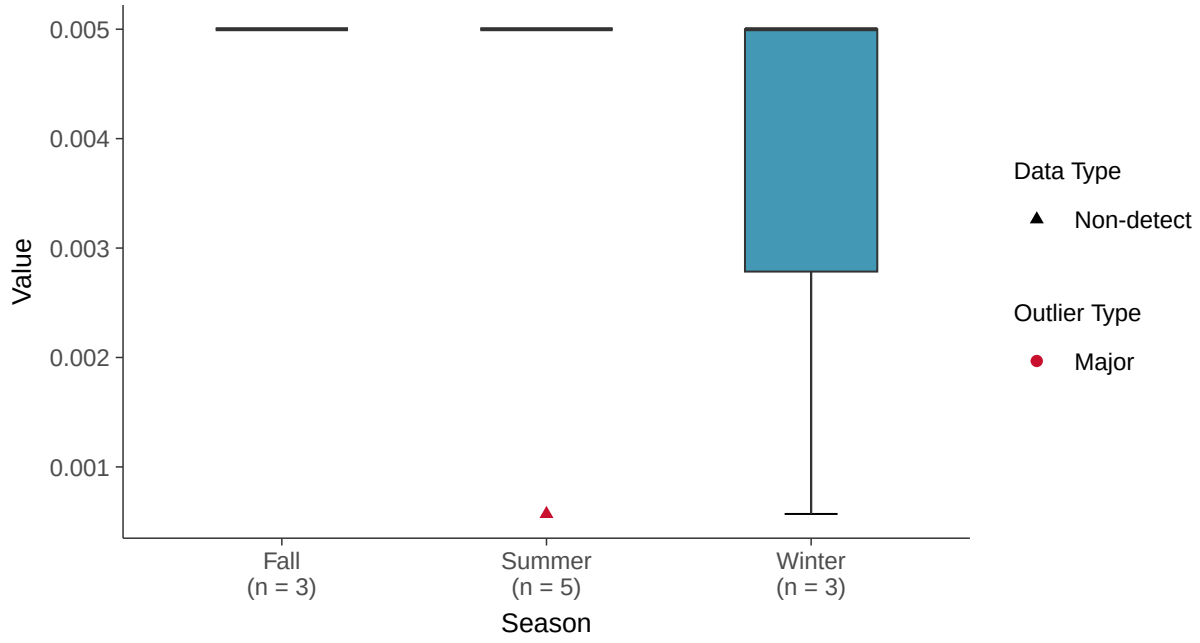


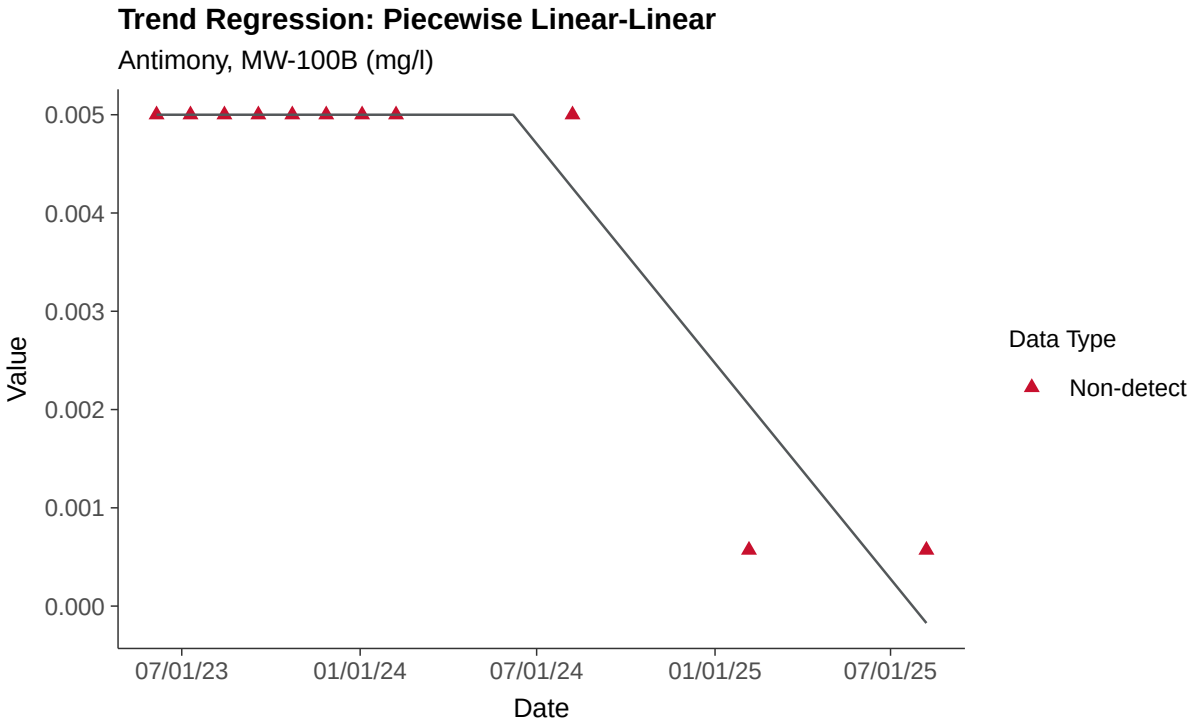
Boxplot

Antimony, MW-100B (mg/l)

Boxplot by Season

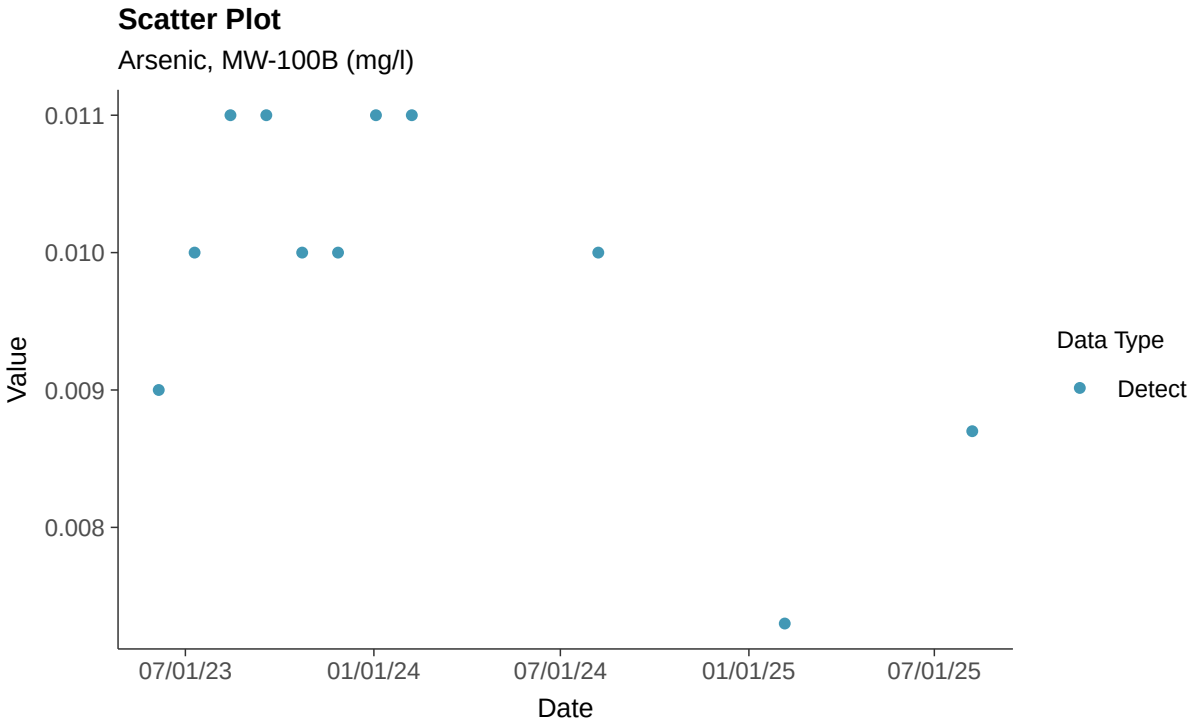
Antimony, MW-100B (mg/l)

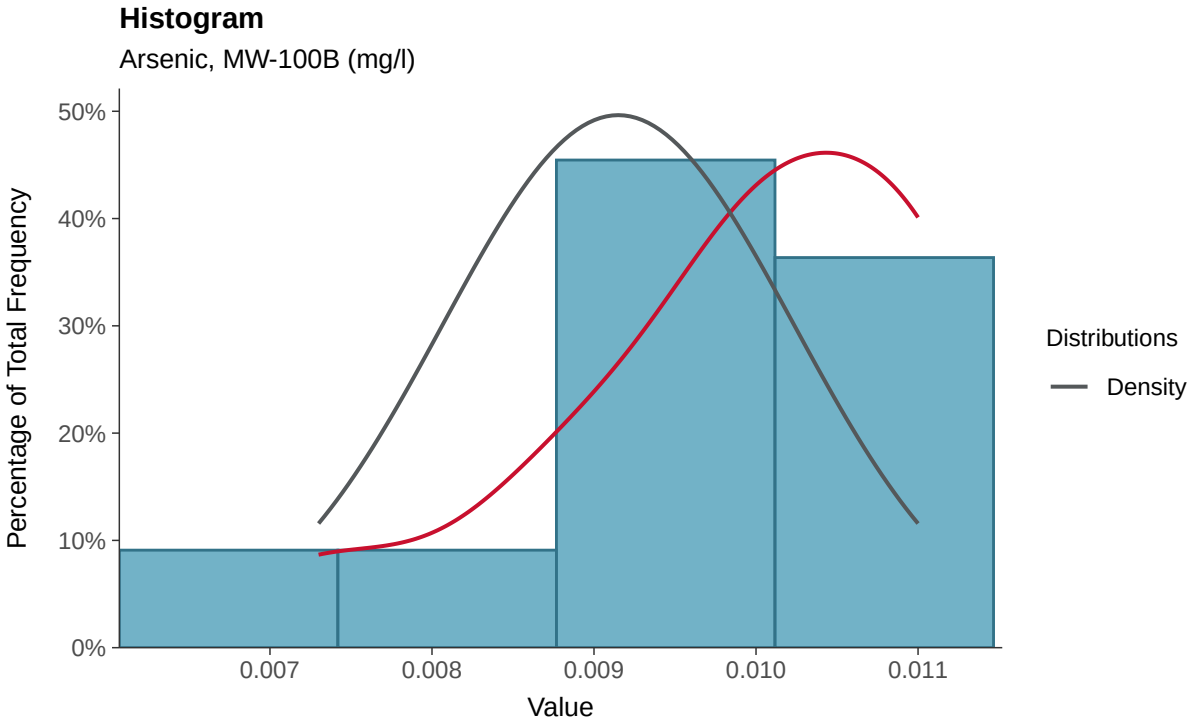



Trend Regression: Piecewise Linear-Linear
Antimony, MW-100B (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Arsenic, MW-100B

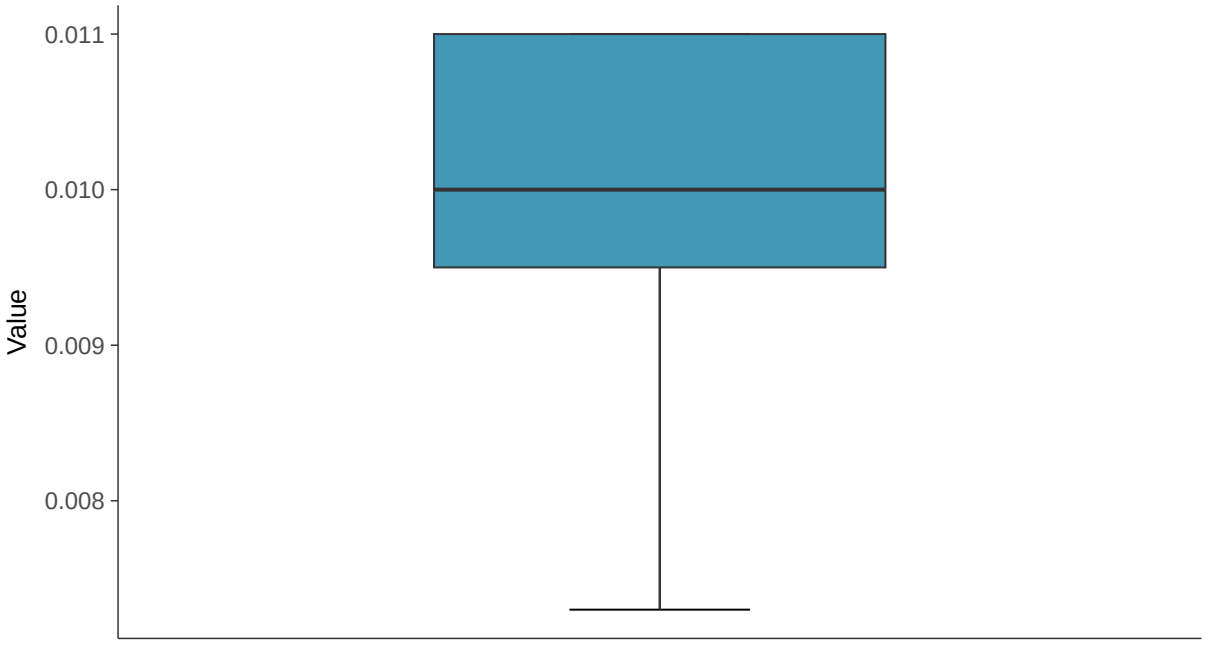
ID: 33_3_102





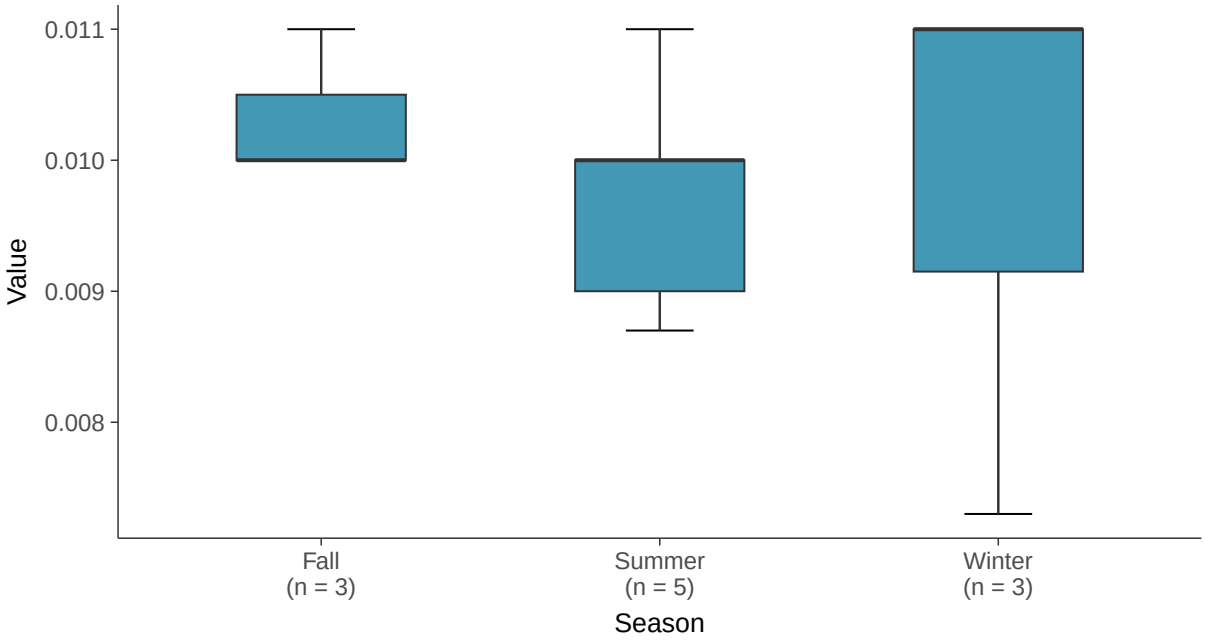
Boxplot

Arsenic, MW-100B (mg/l)



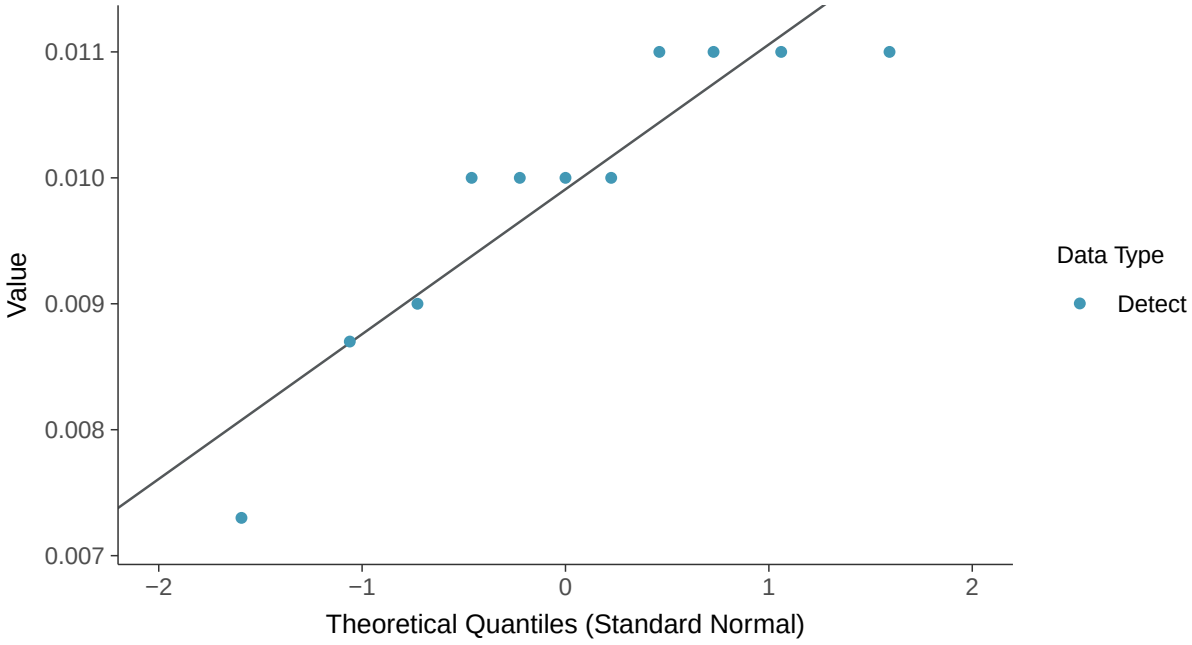
Boxplot by Season

Arsenic, MW-100B (mg/l)



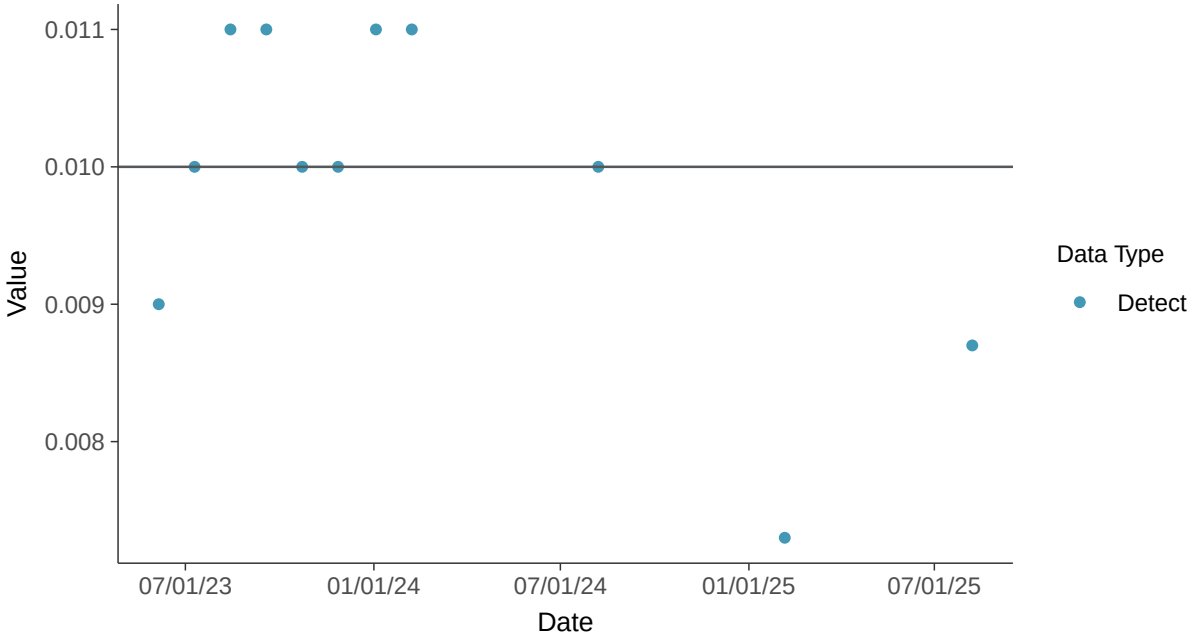
Normal Q-Q plot

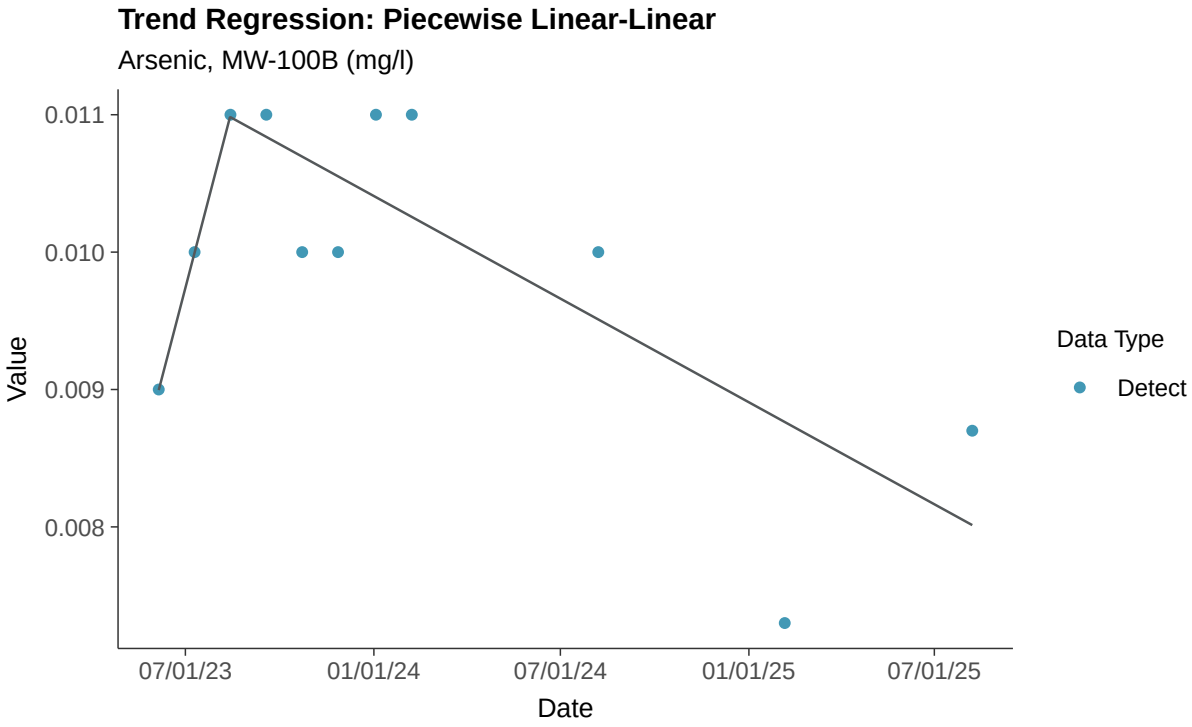
Arsenic, MW-100B (mg/l)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

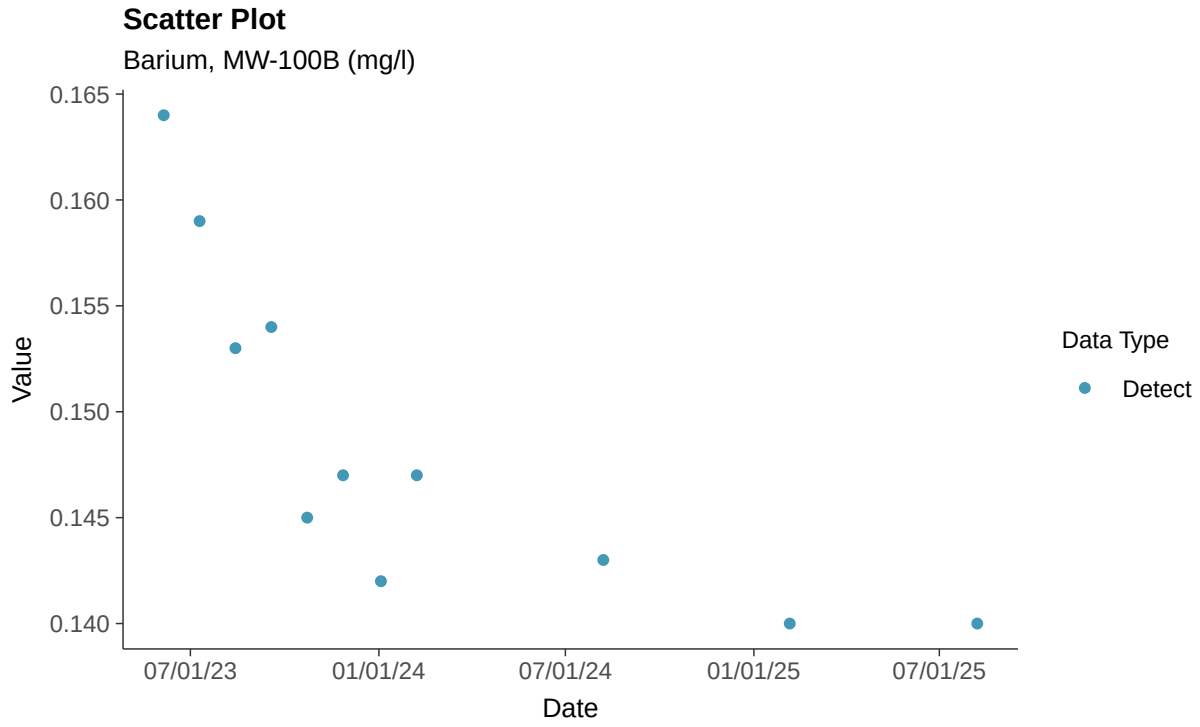
Arsenic, MW-100B (mg/l)

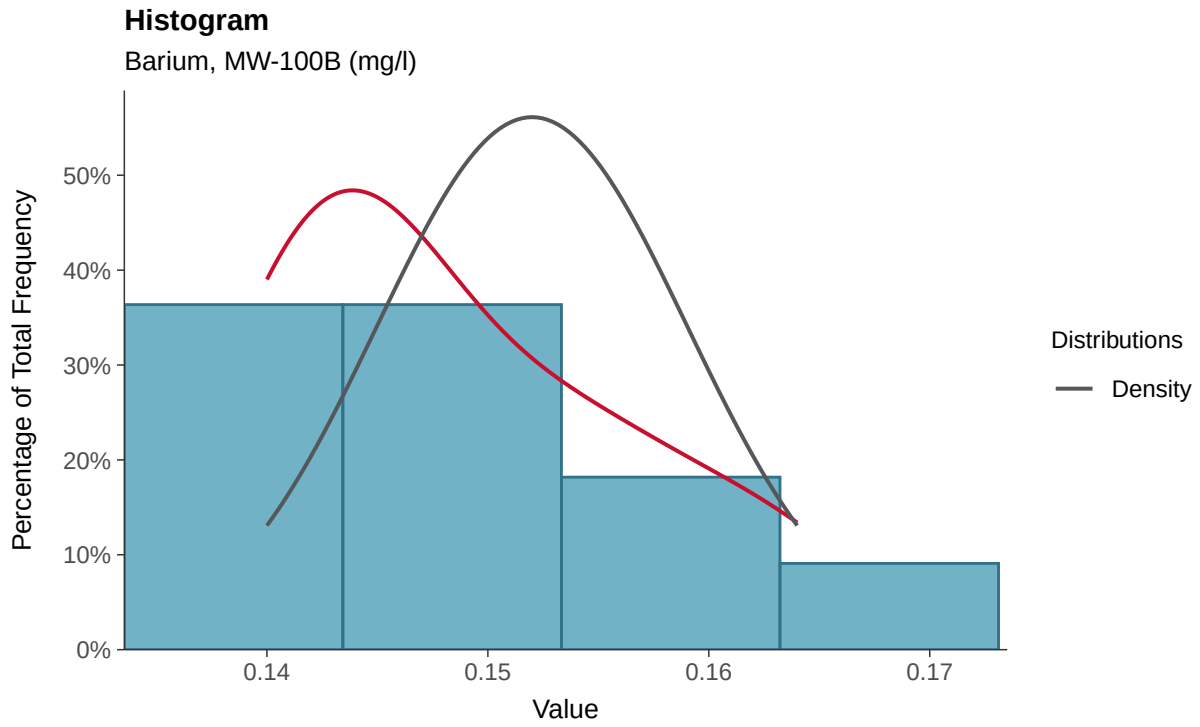



Trend Regression: Piecewise Linear-Linear
Arsenic, MW-100B (mg/l)
0.011
0.010
0.009
0.008
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect

Appendix IV: Barium, MW-100B

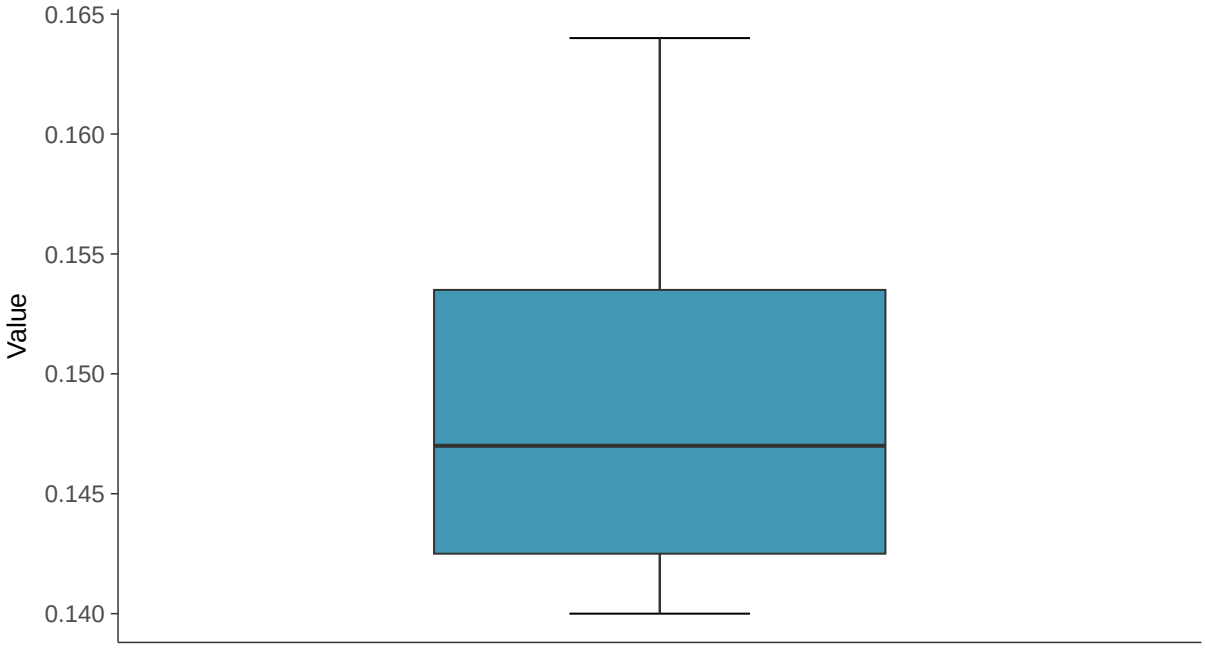
ID: 33_3_103





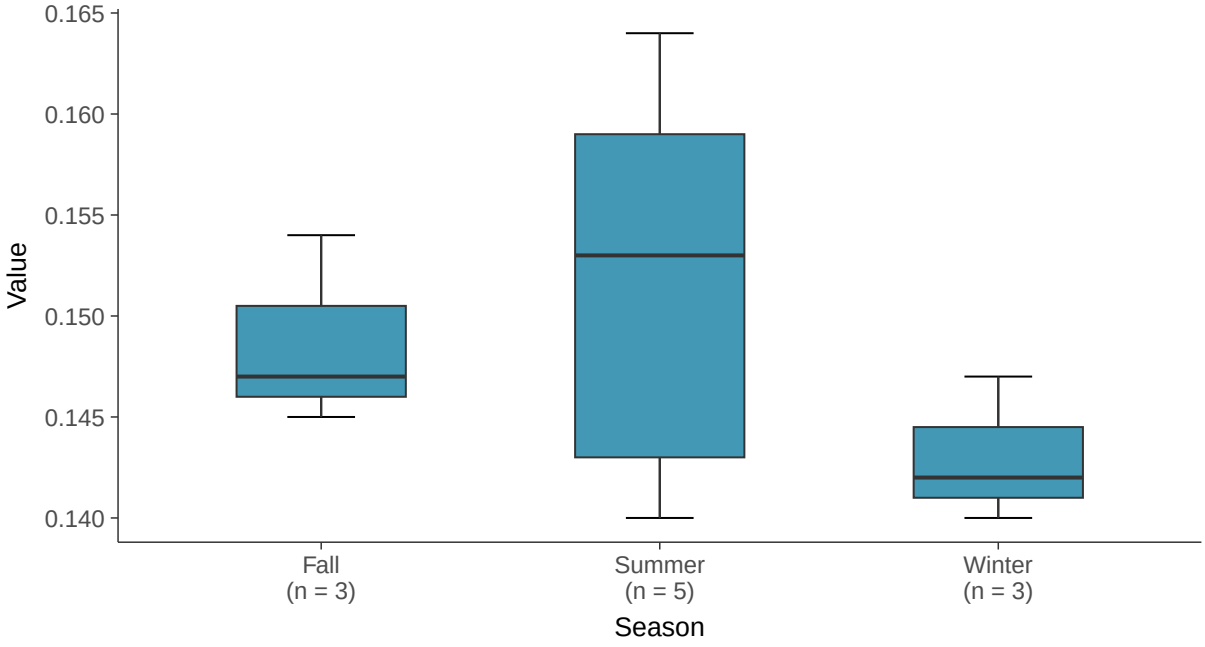
Boxplot

Barium, MW-100B (mg/l)



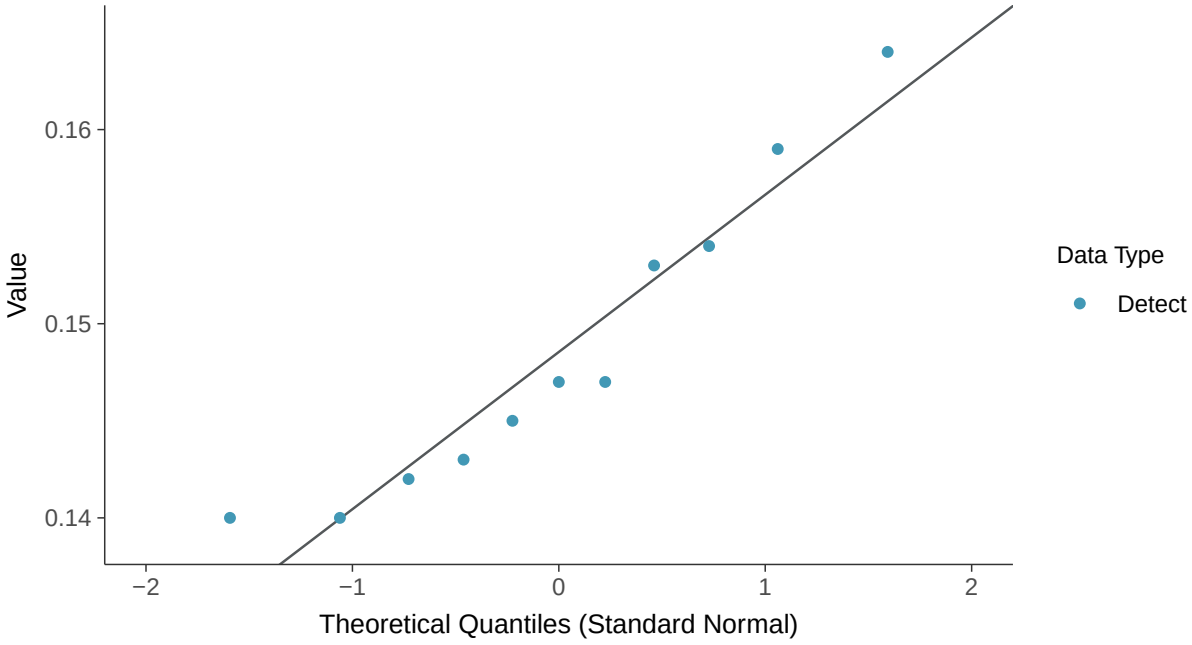
Boxplot by Season

Barium, MW-100B (mg/l)



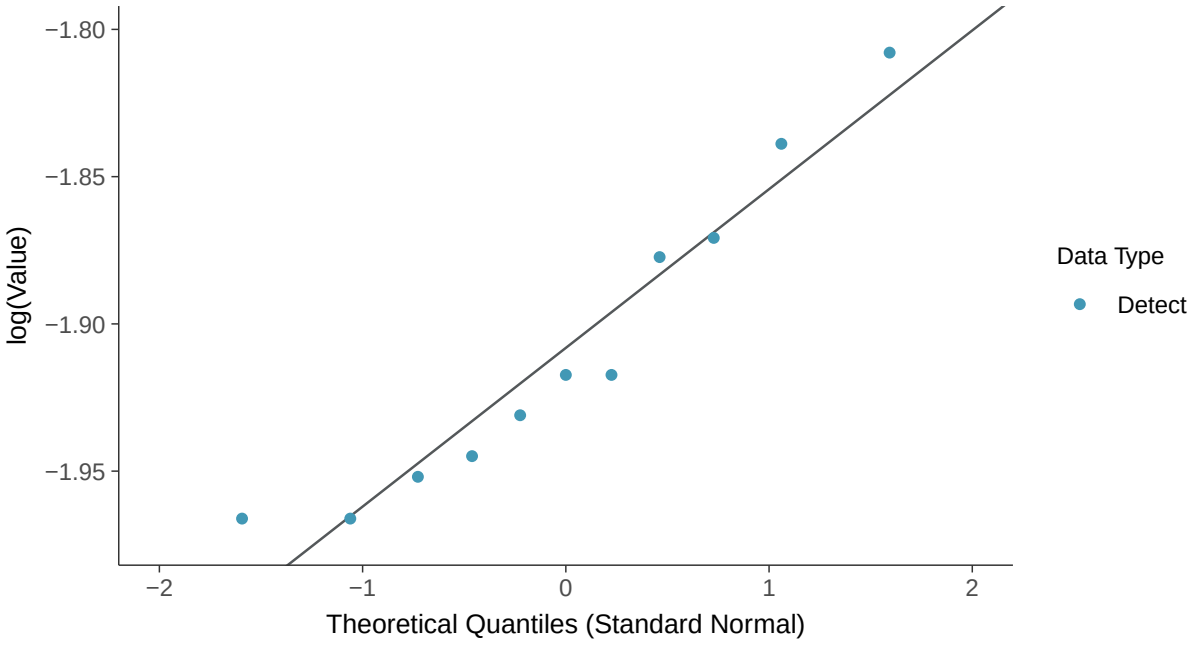
Normal Q-Q plot

Barium, MW-100B (mg/l)



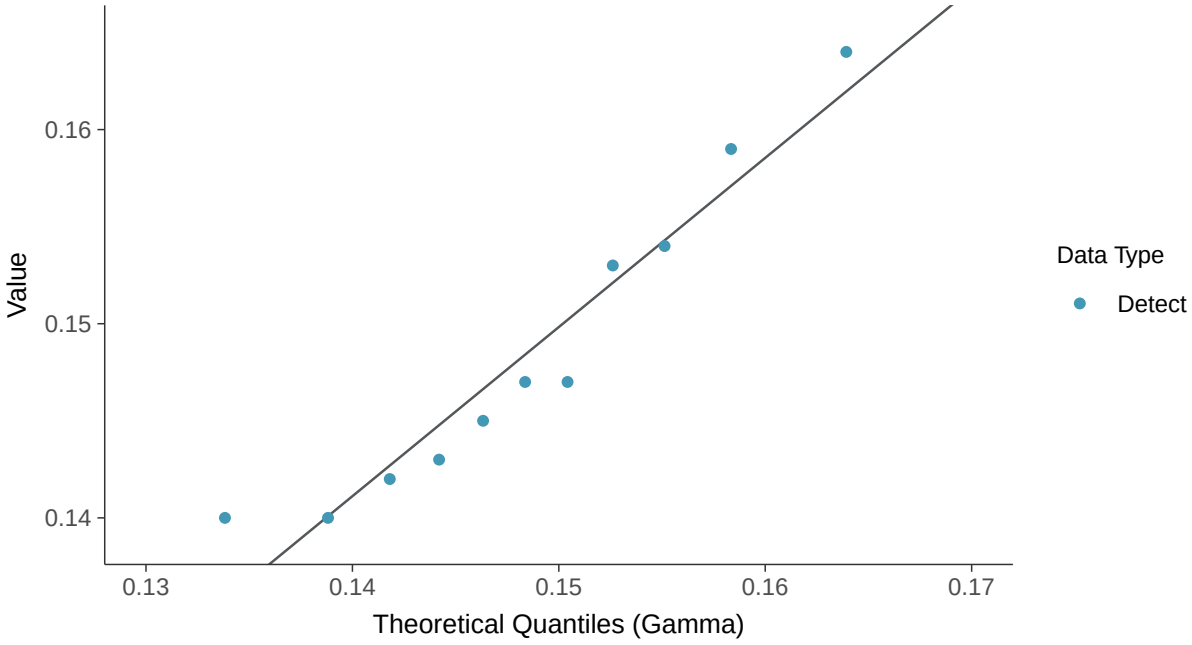
Lognormal Q-Q plot

Barium, MW-100B (mg/l)



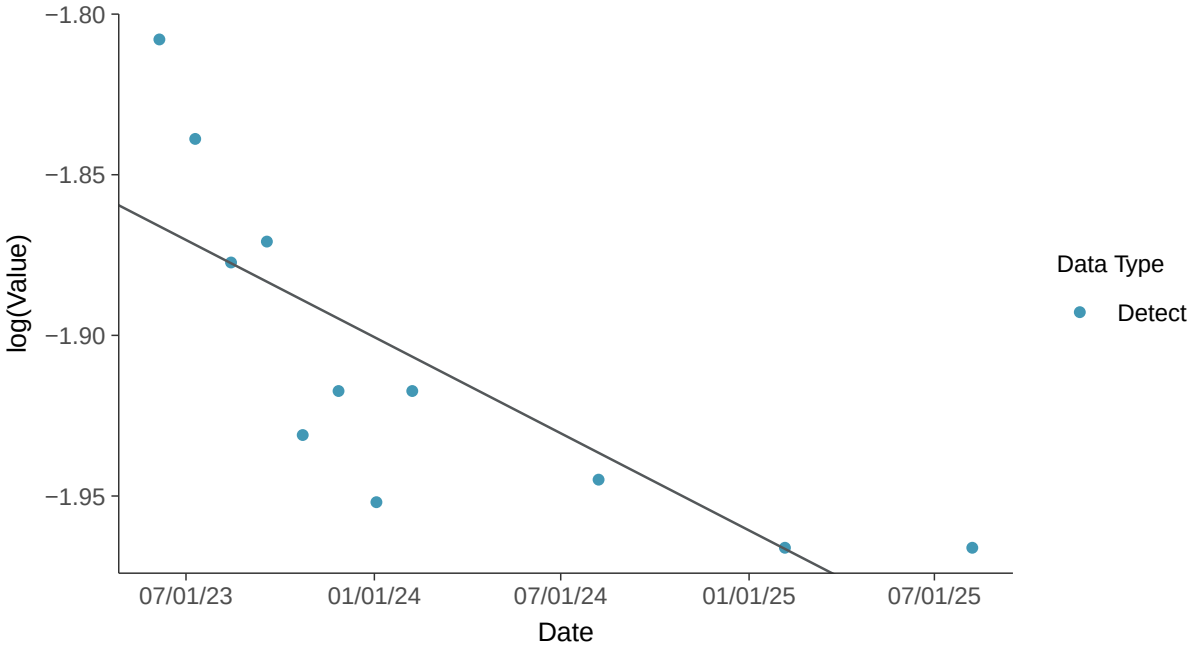
Gamma Q-Q plot

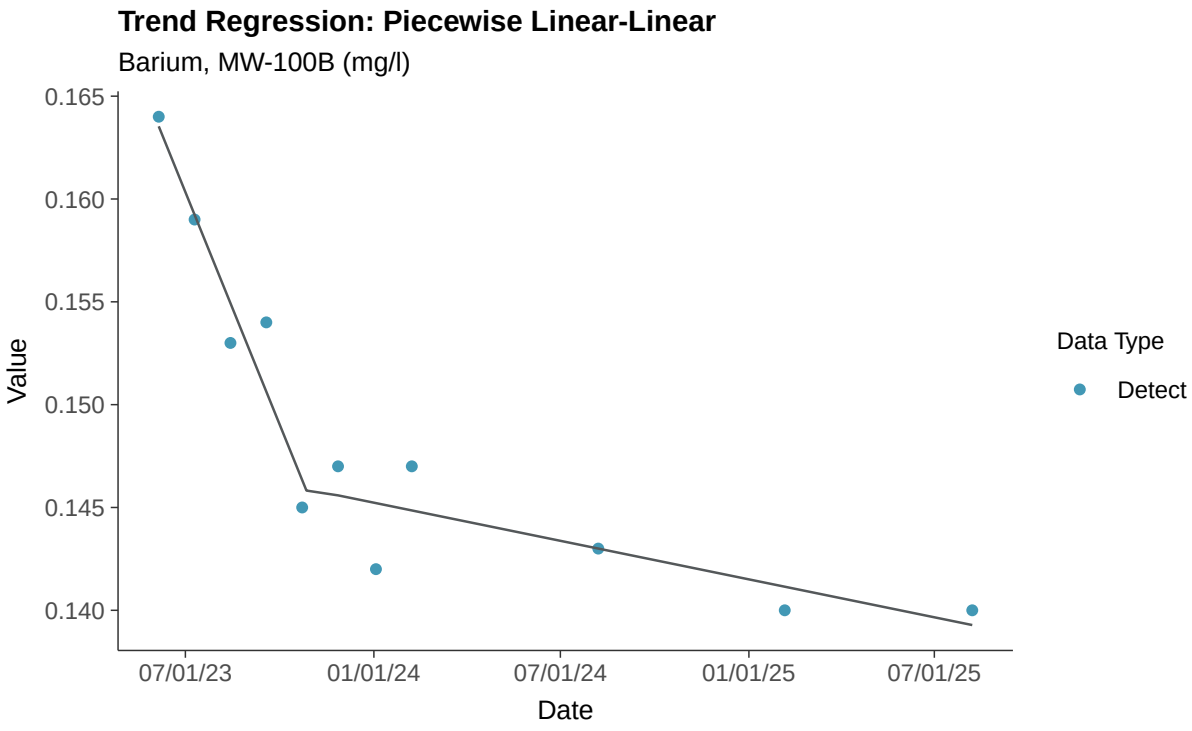
Barium, MW-100B (mg/l)



Trend Regression: Lognormal MLE

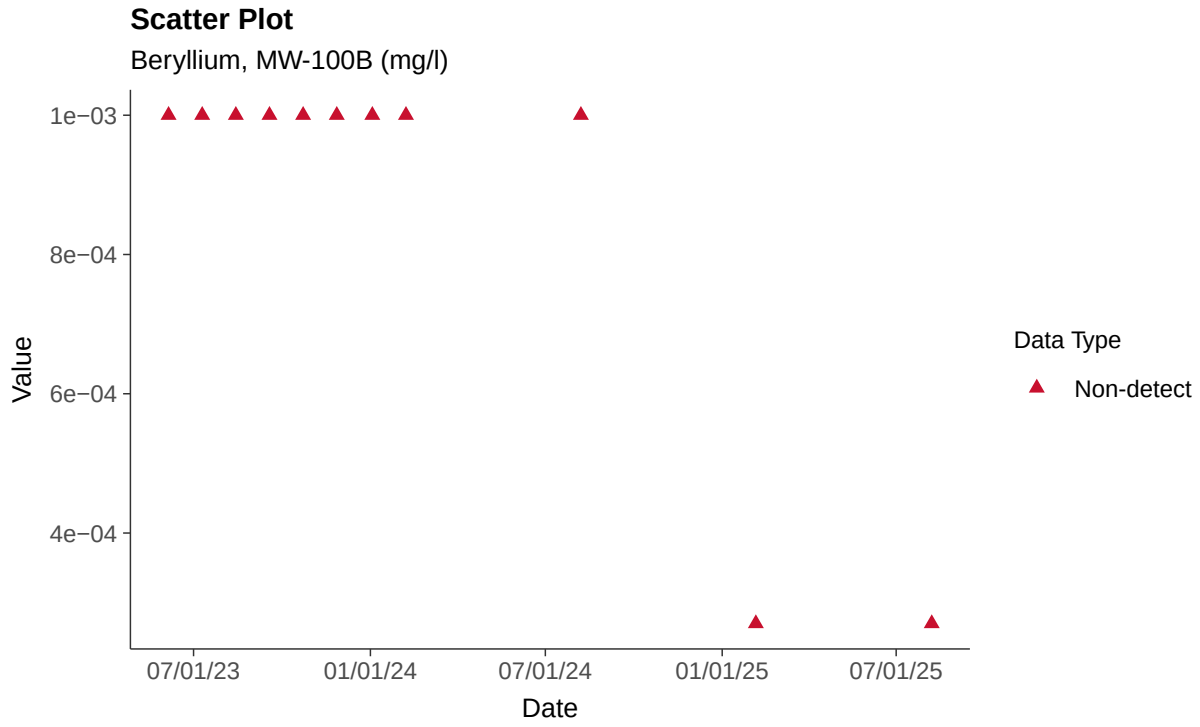
Barium, MW-100B (mg/l)

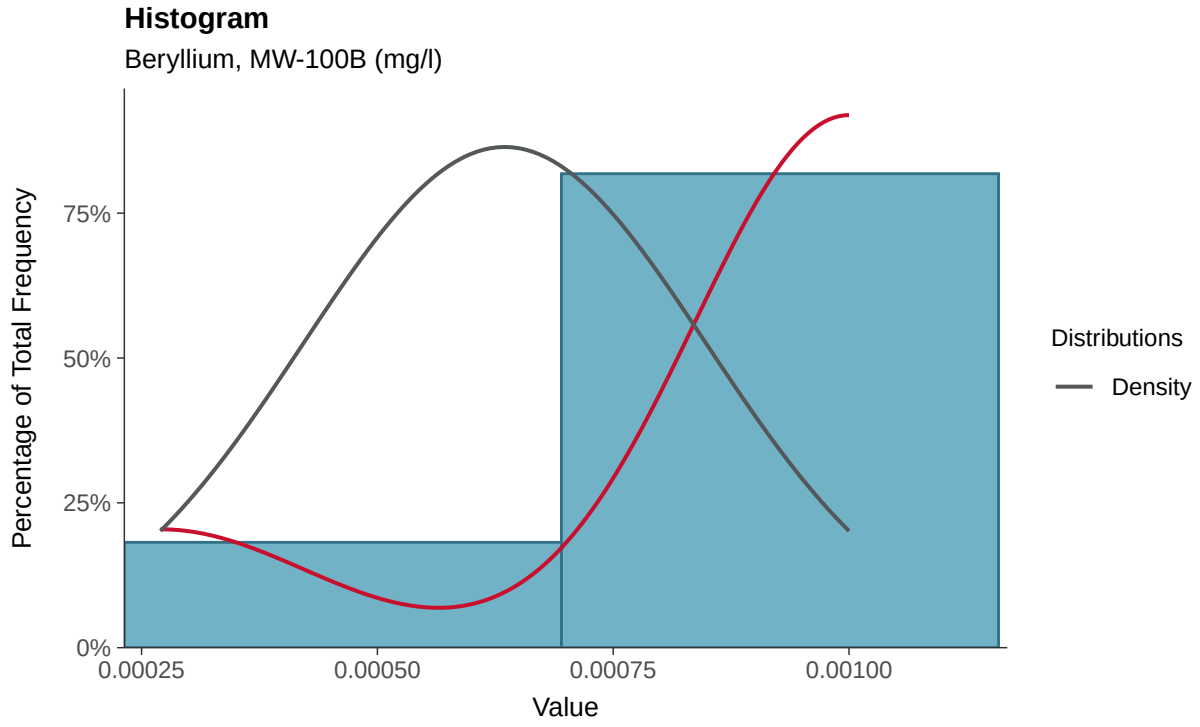



Trend Regression: Piecewise Linear-Linear
Barium, MW-100B (mg/l)
Value
0.165
0.160
0.155
0.150
0.145
0.140
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect

Appendix IV: Beryllium, MW-100B

ID: 33_3_104



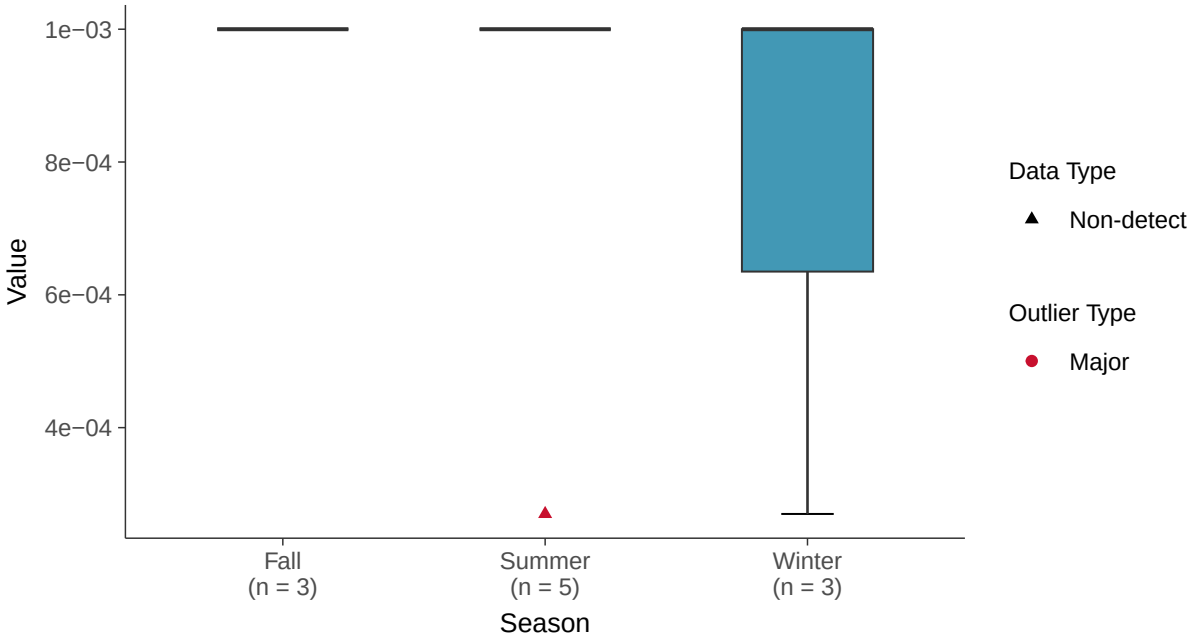


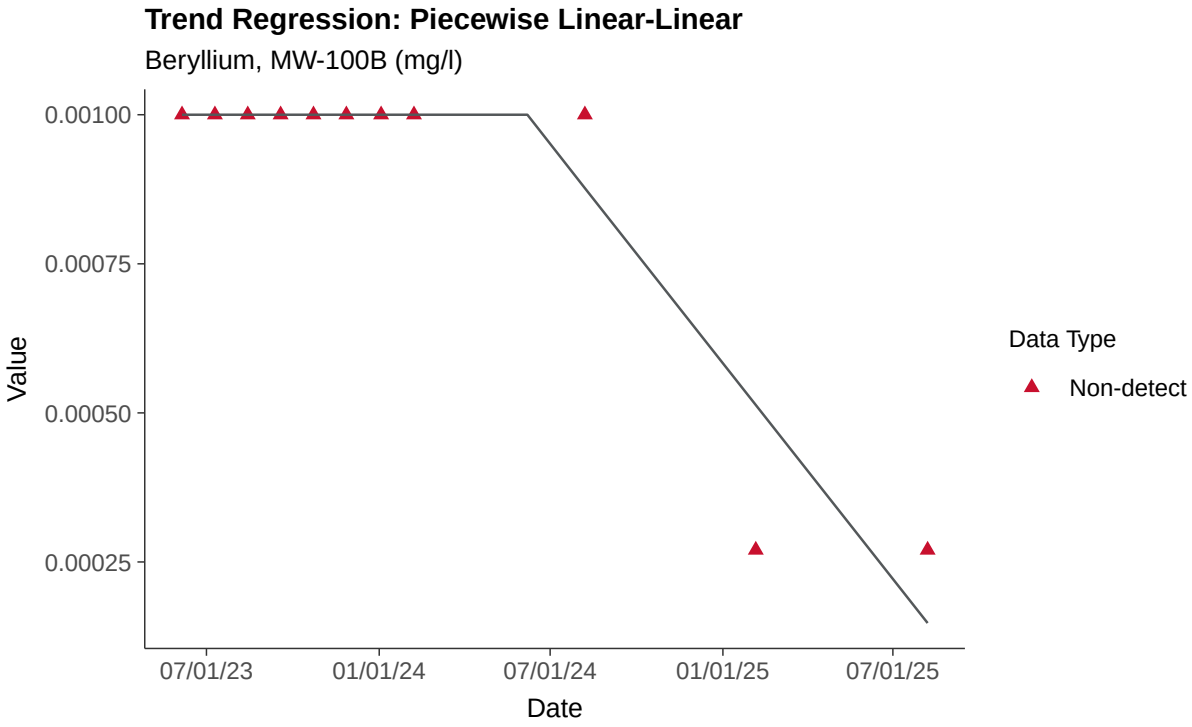
Boxplot

Beryllium, MW-100B (mg/l)

Boxplot by Season

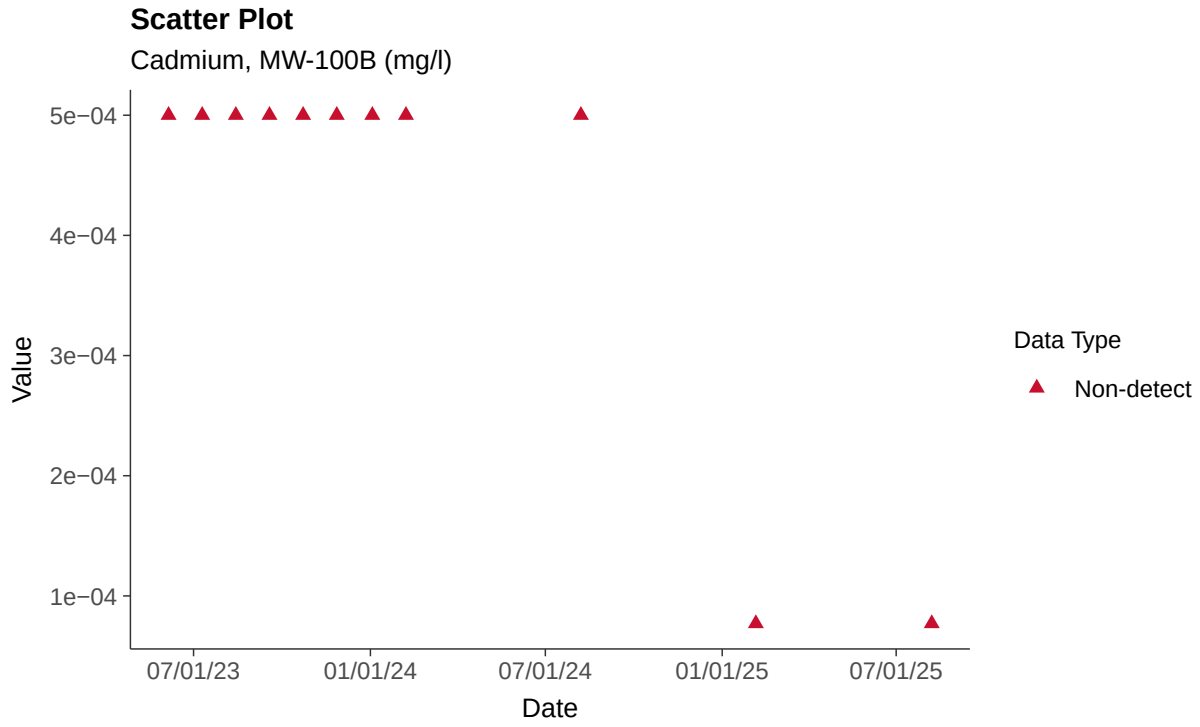
Beryllium, MW-100B (mg/l)

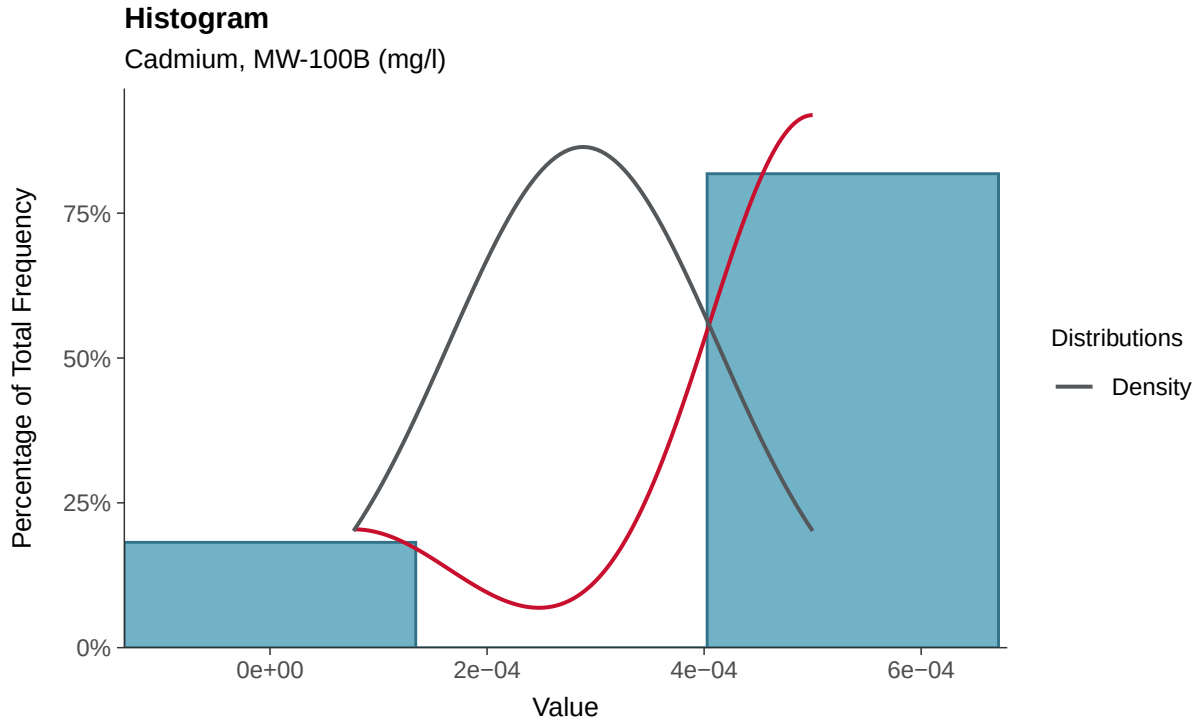



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-100B (mg/l)
0.00100
0.00075
0.00050
0.00025
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Cadmium, MW-100B

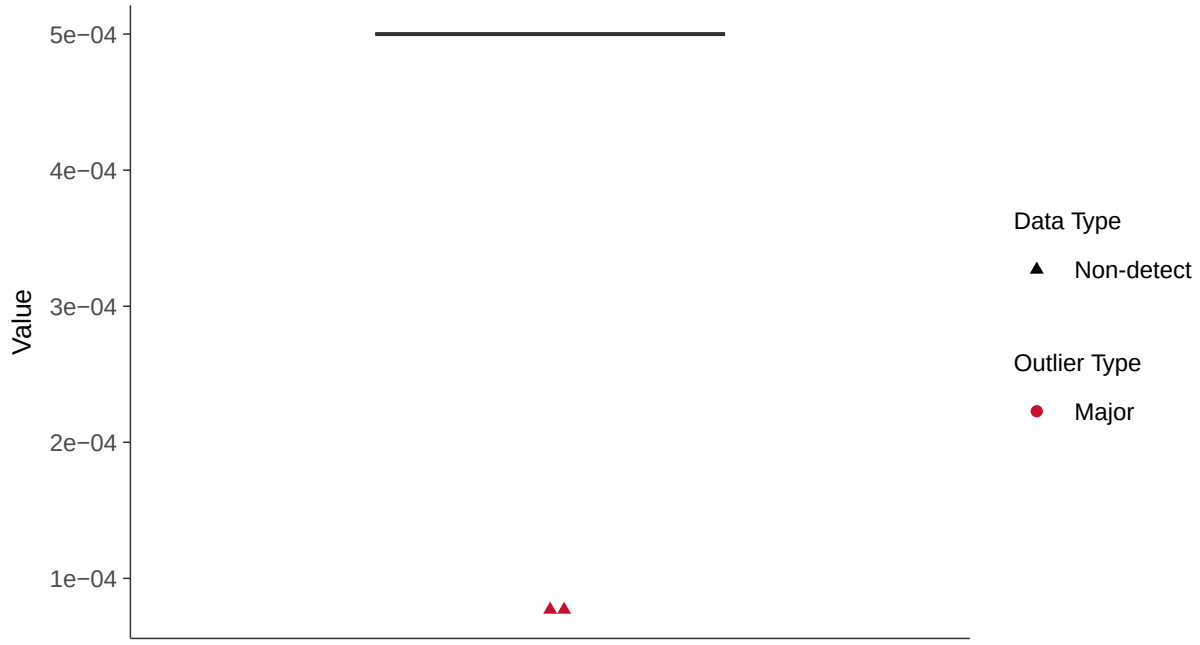
ID: 33_3_106





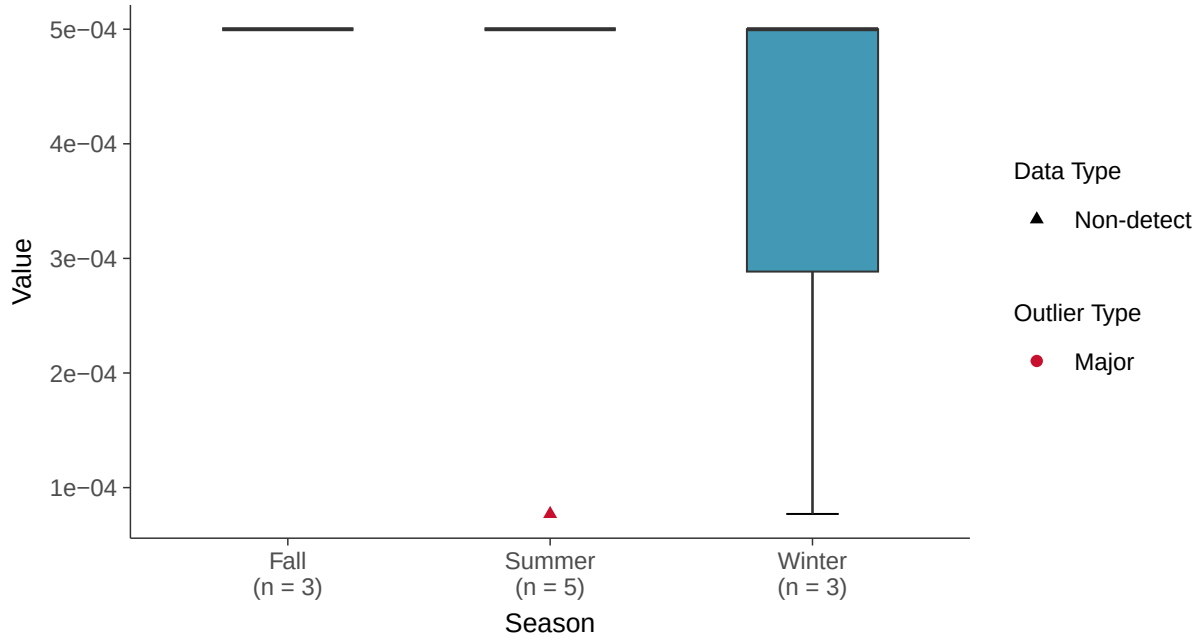
Boxplot

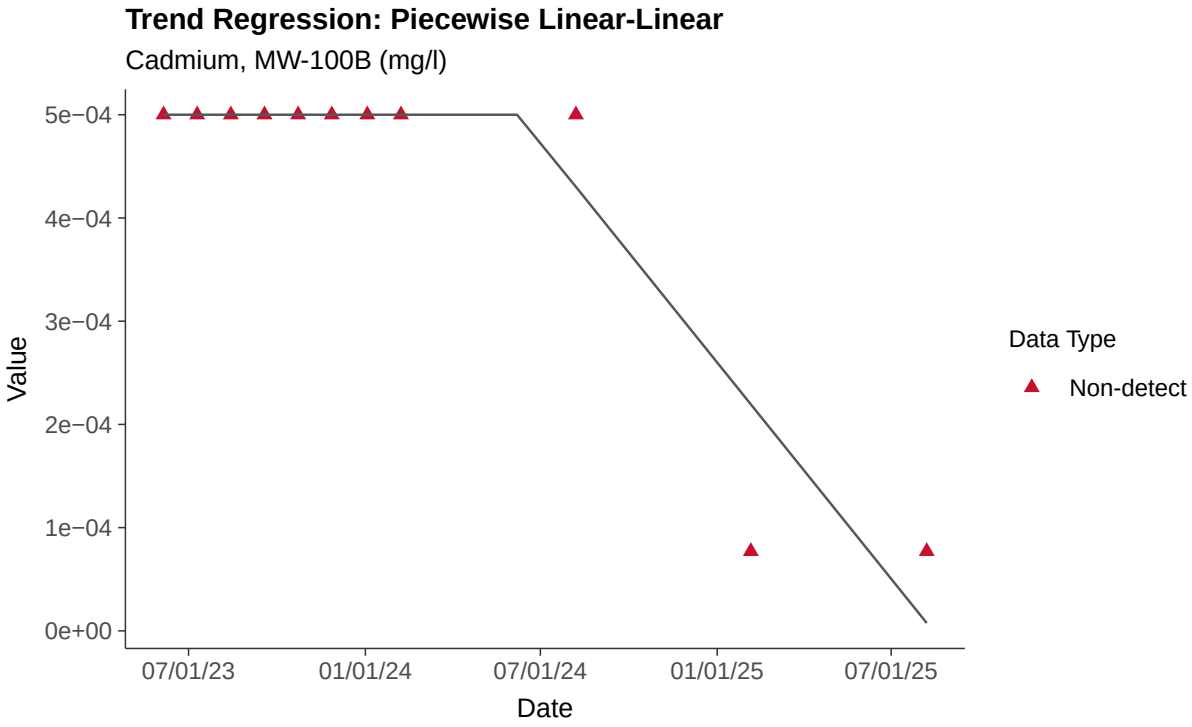
Cadmium, MW-100B (mg/l)



Boxplot by Season

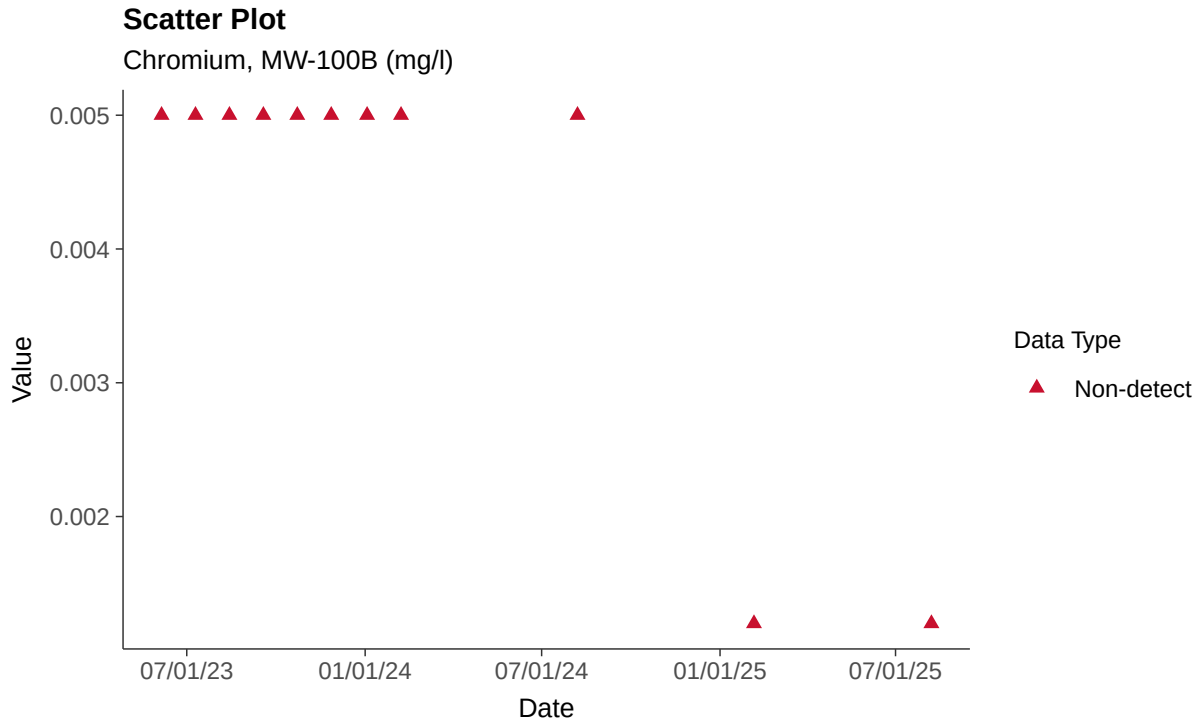
Cadmium, MW-100B (mg/l)

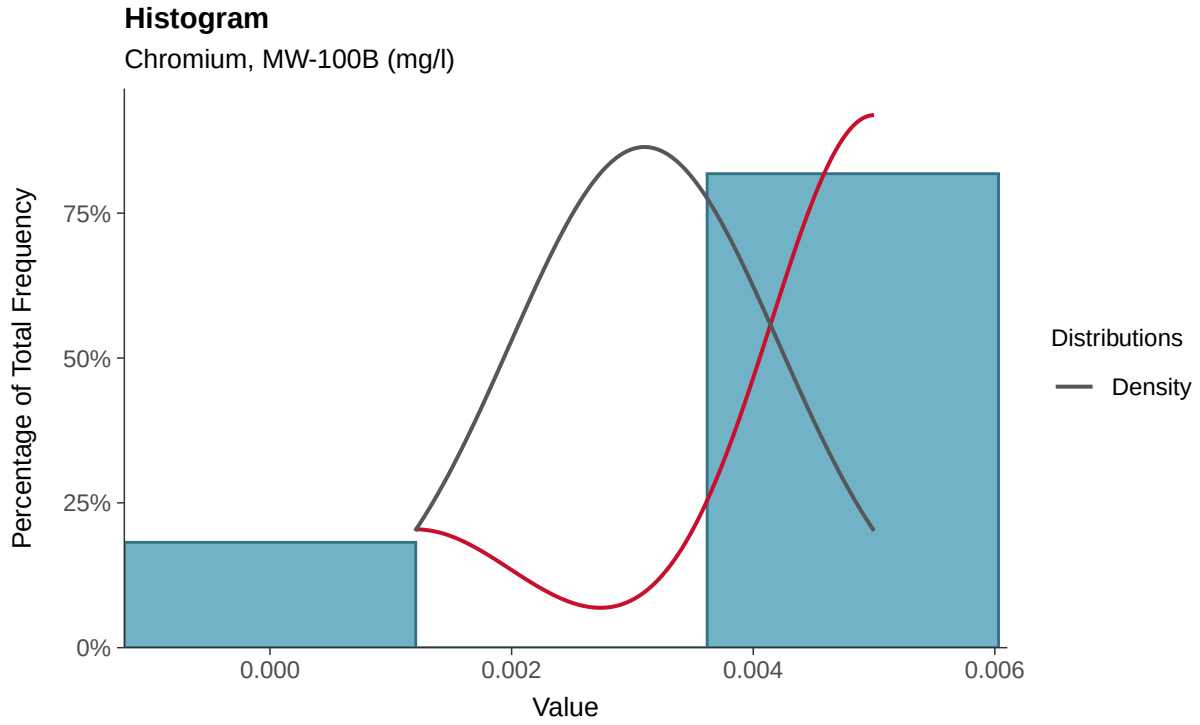



Trend Regression: Piecewise Linear-Linear
Cadmium, MW-100B (mg/l)
5e−04
4e−04
3e−04
2e−04
1e−04
0e+00
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Chromium, MW-100B

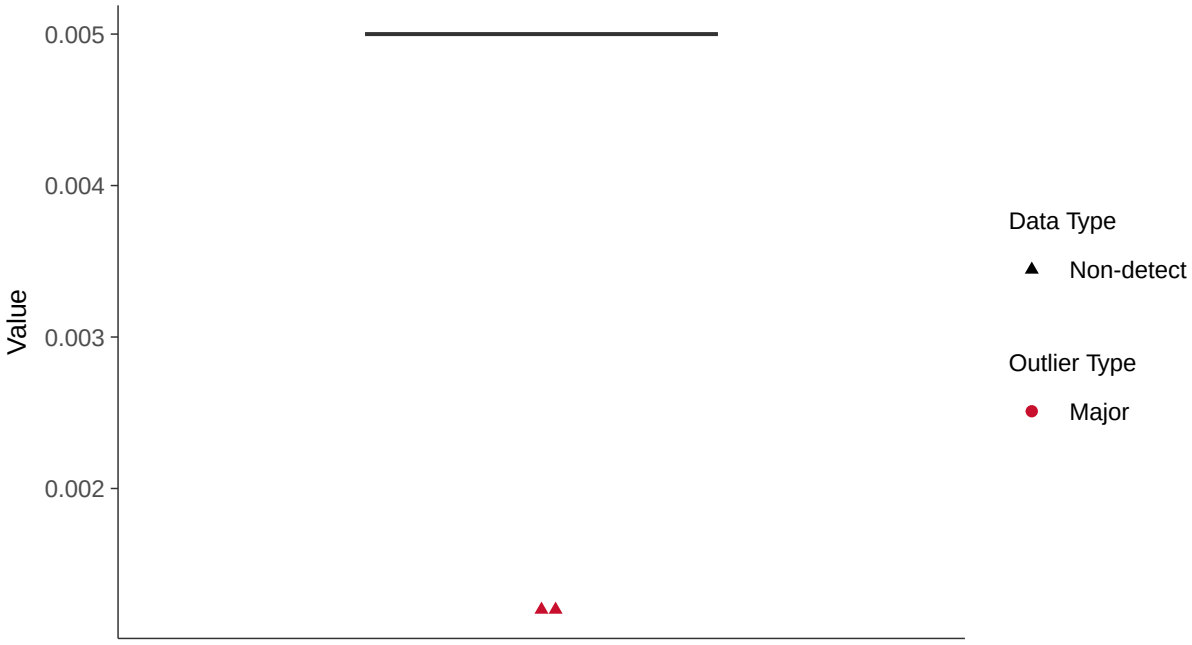
ID: 33_3_109





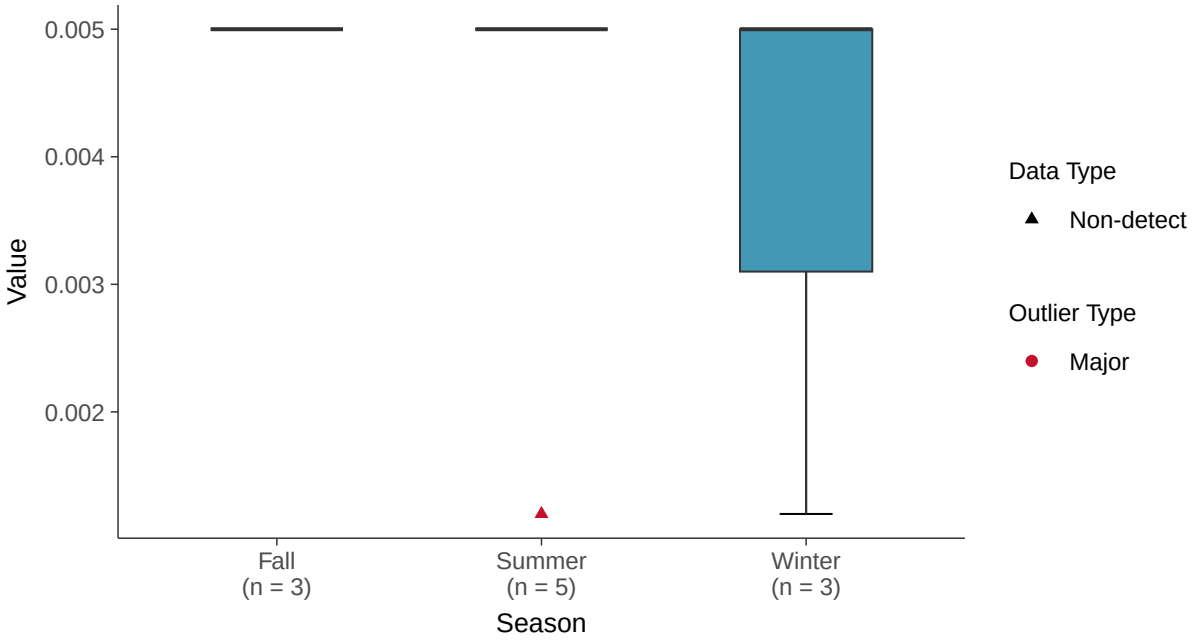
Boxplot

Chromium, MW-100B (mg/l)



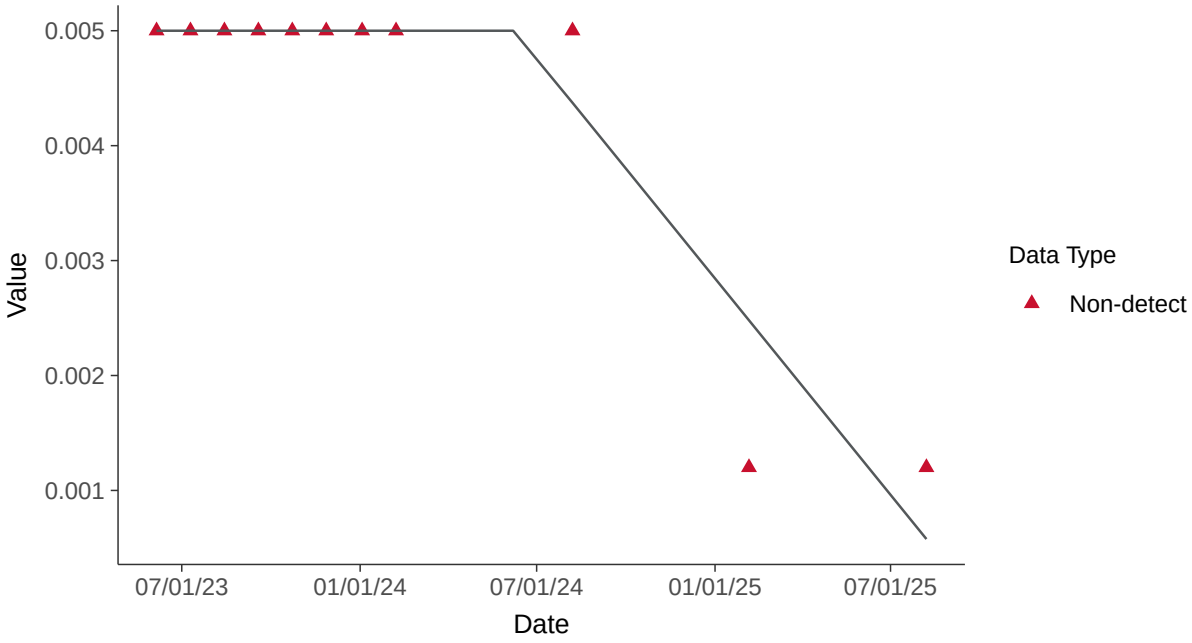
Boxplot by Season

Chromium, MW-100B (mg/l)



Trend Regression: Piecewise Linear-Linear

Chromium, MW-100B (mg/l)

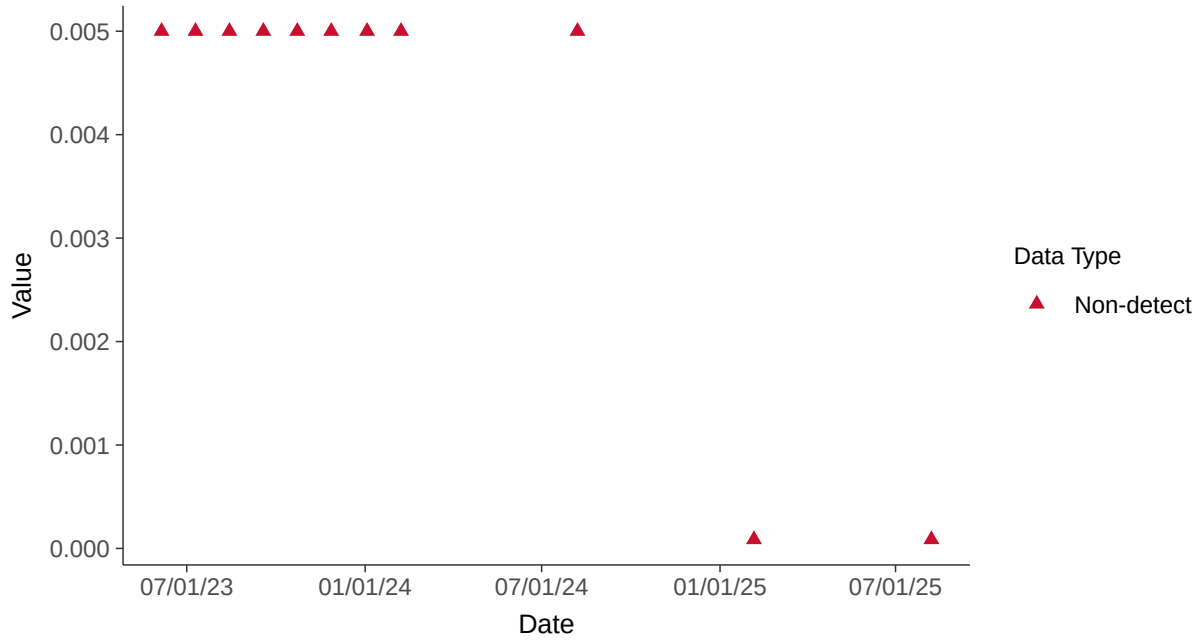


Appendix IV: Cobalt, MW-100B

ID: 33_3_110

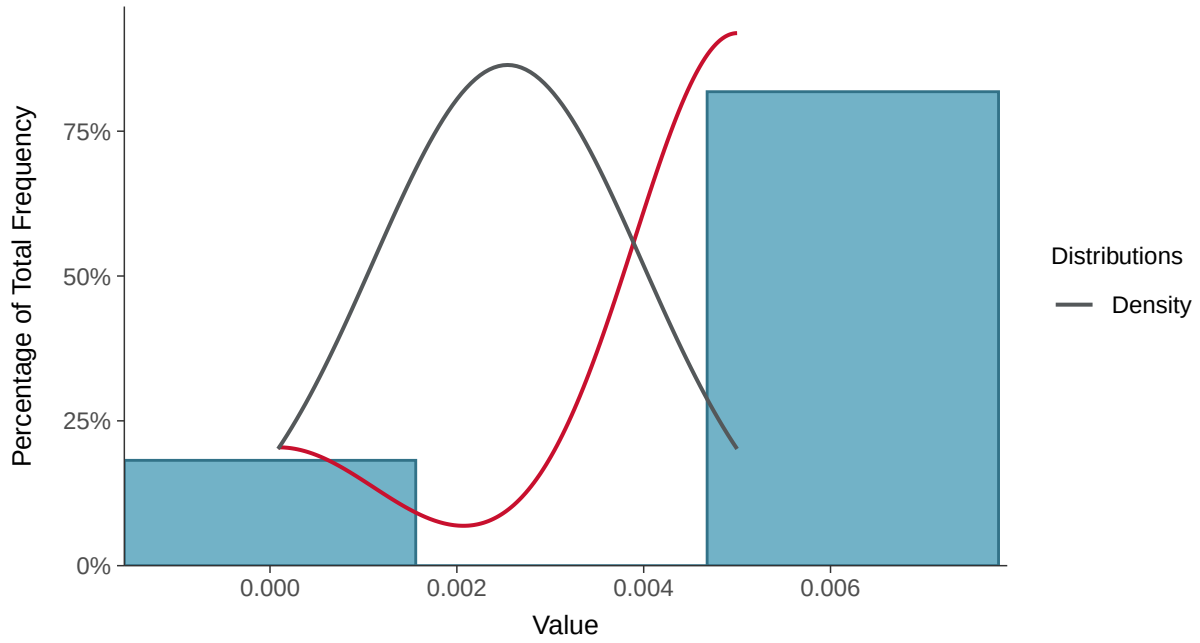
Scatter Plot

Cobalt, MW-100B (mg/l)



Histogram

Cobalt, MW-100B (mg/l)

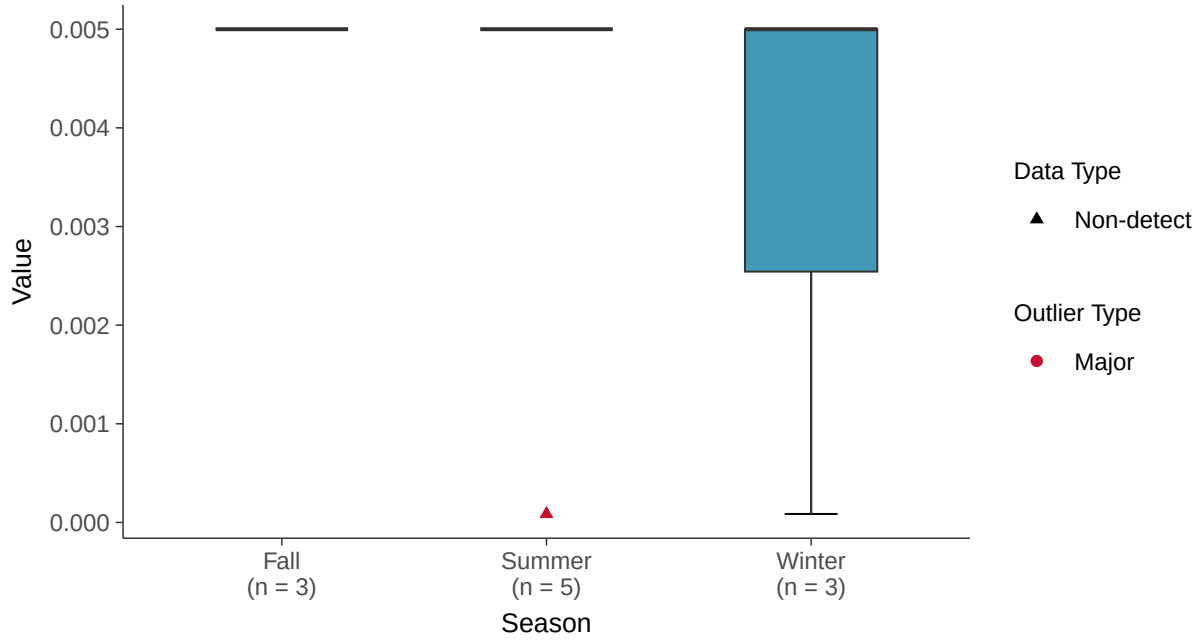


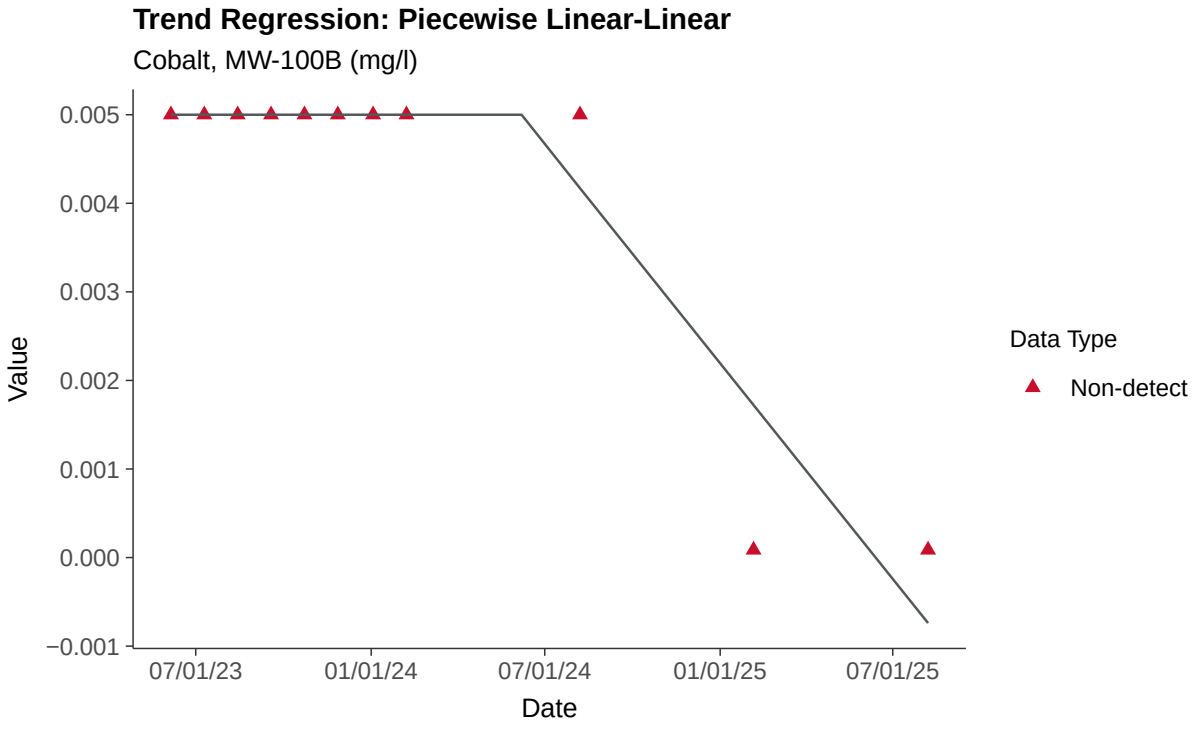
Boxplot

Cobalt, MW-100B (mg/l)

Boxplot by Season

Cobalt, MW-100B (mg/l)



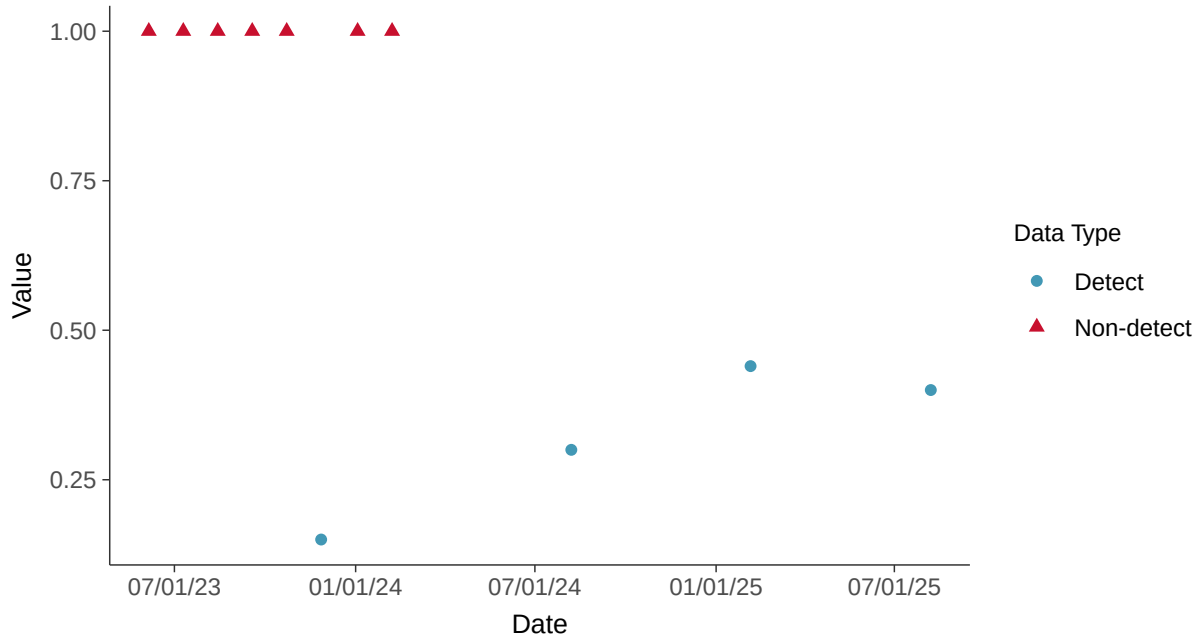

Trend Regression: Piecewise Linear-Linear
Cobalt, MW-100B (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
−0.001
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Fluoride (App IV), MW-100B

ID: 33_3_113

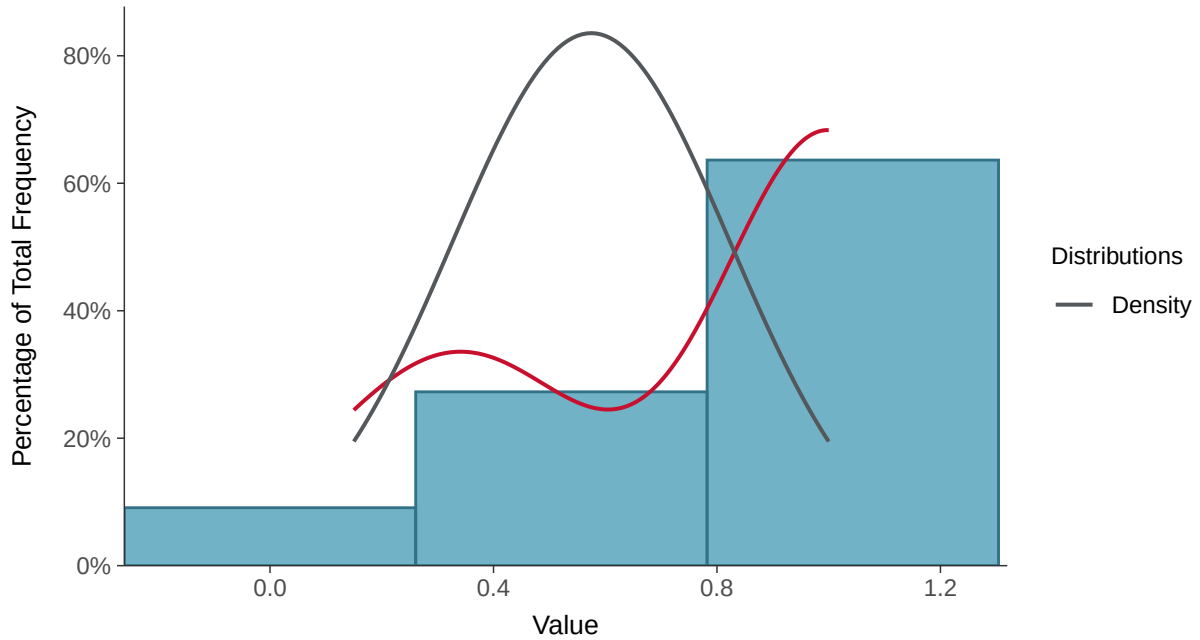
Scatter Plot

Fluoride (App IV), MW-100B (mg/l)



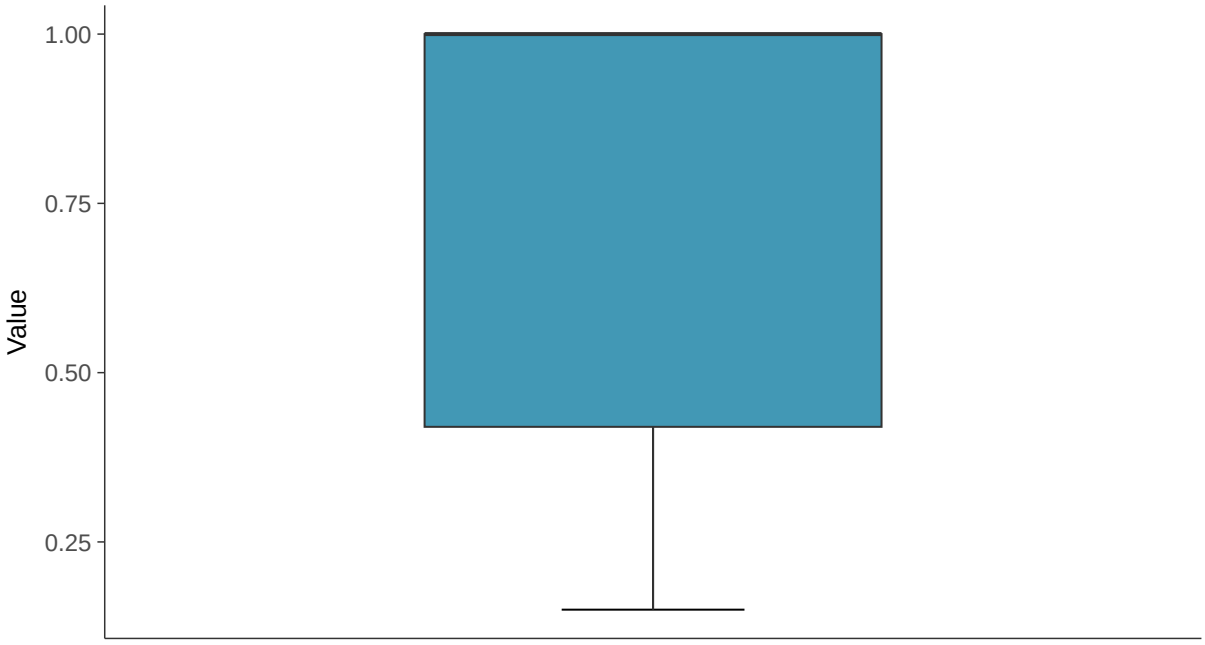
Histogram

Fluoride (App IV), MW-100B (mg/l)



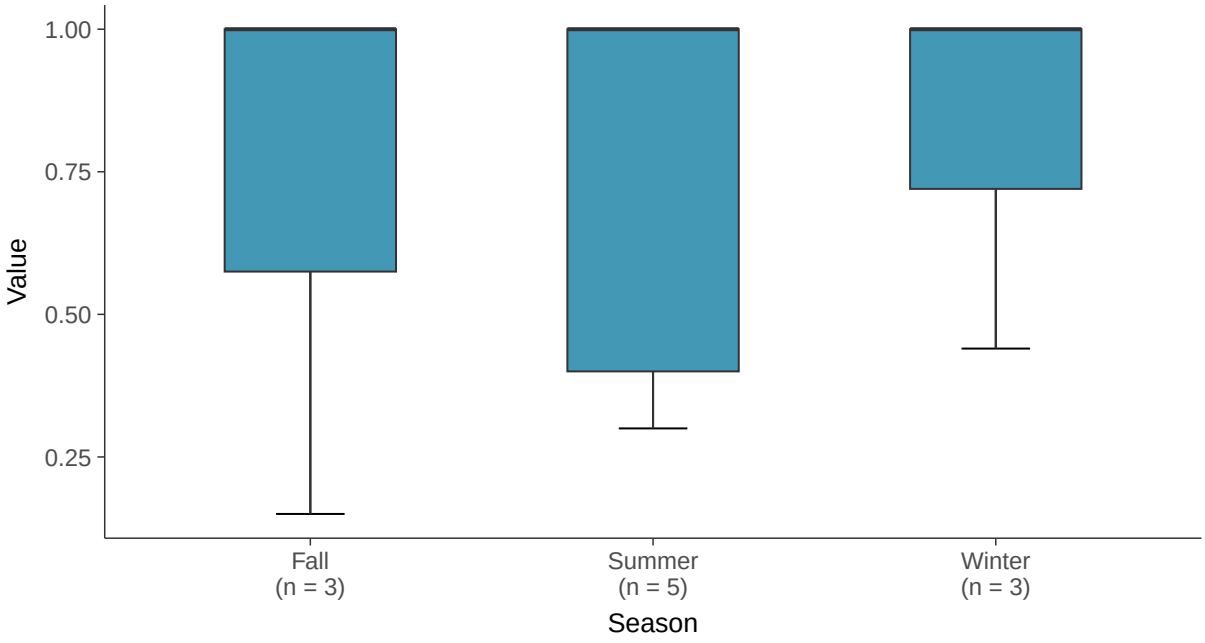
Boxplot

Fluoride (App IV), MW-100B (mg/l)



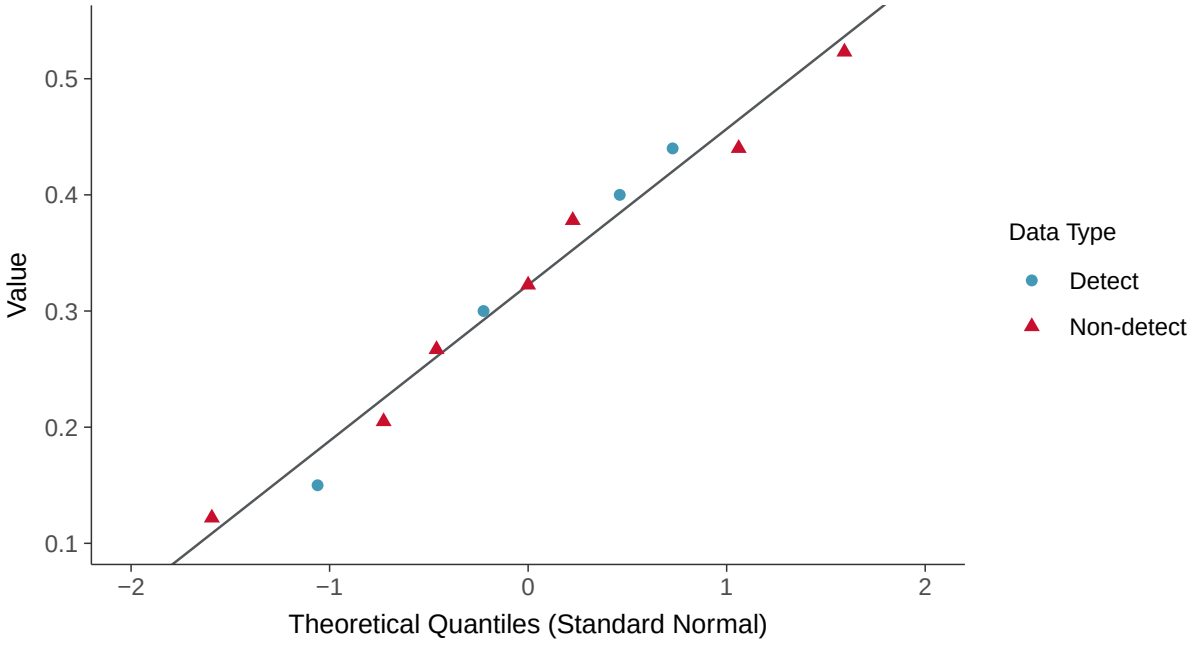
Boxplot by Season

Fluoride (App IV), MW-100B (mg/l)



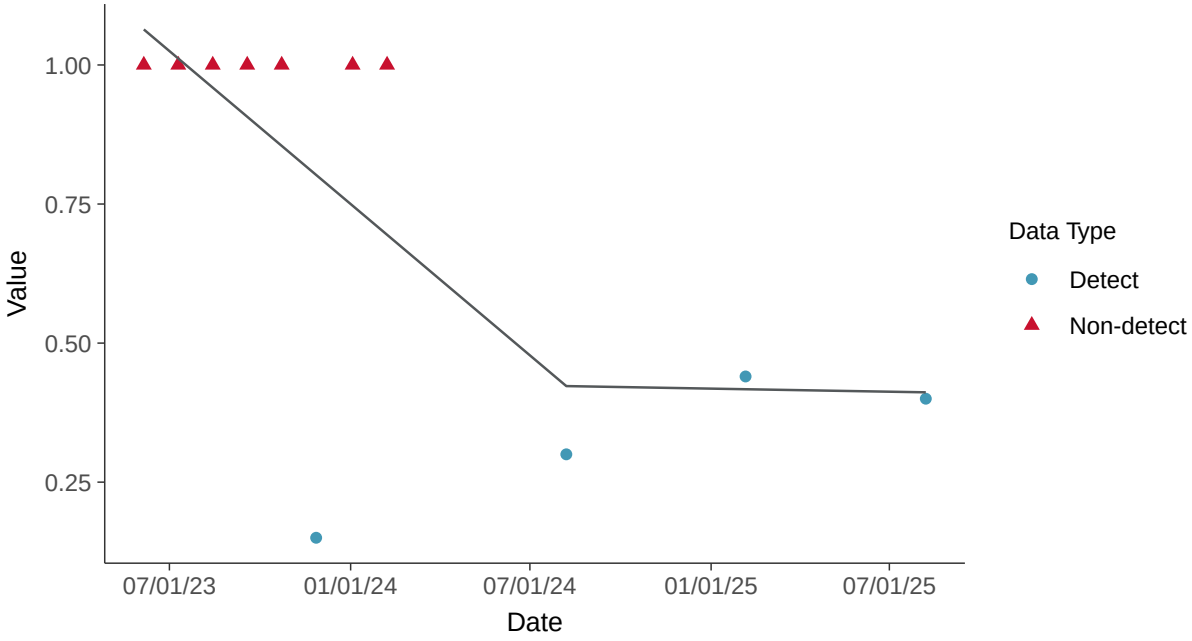
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-100B (mg/l)



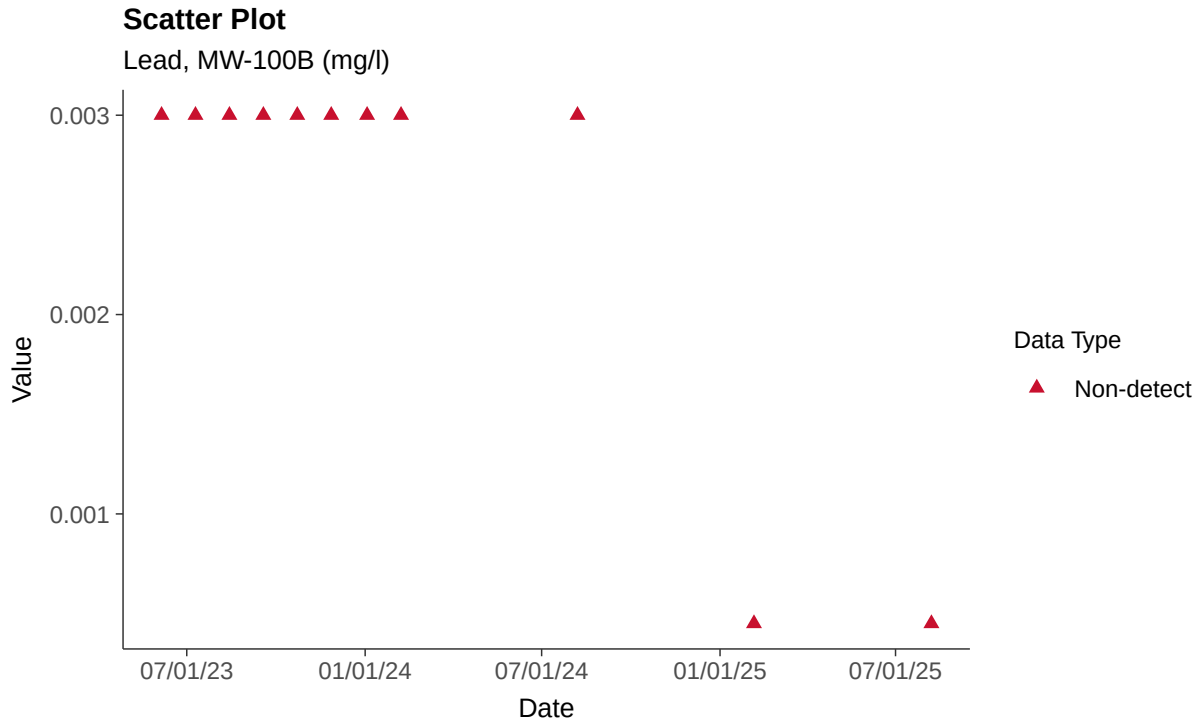
Trend Regression: Piecewise Linear-Linear

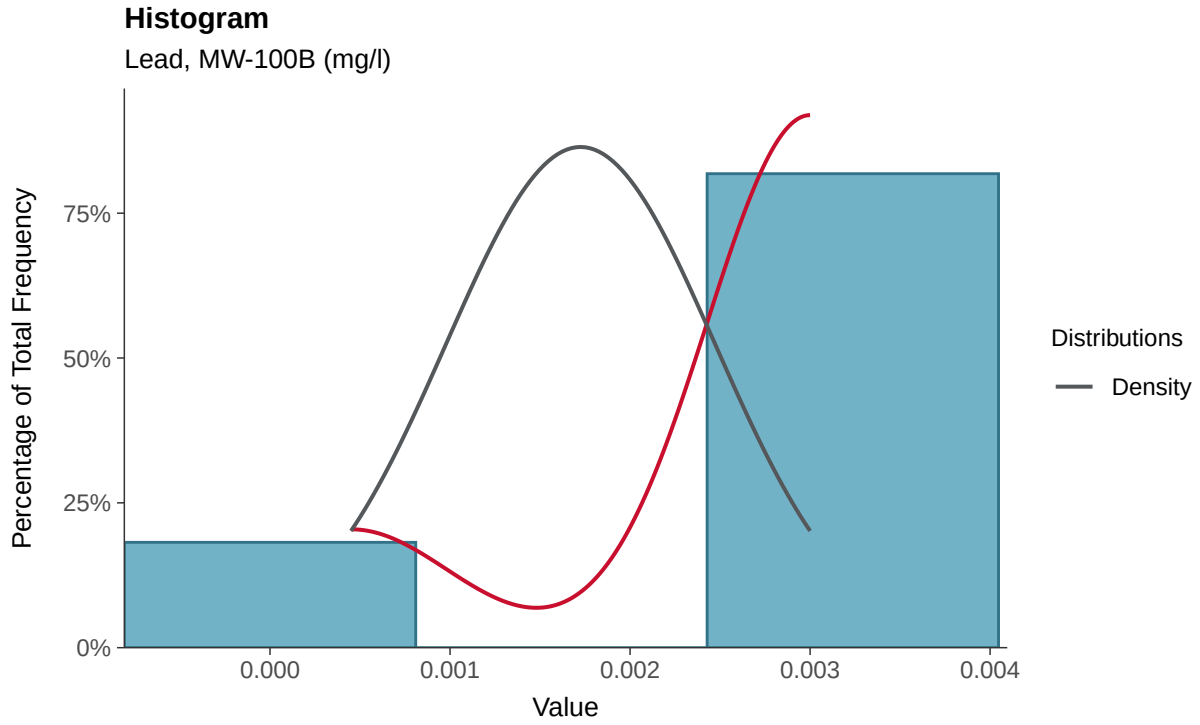
Fluoride (App IV), MW-100B (mg/l)



Appendix IV: Lead, MW-100B

ID: 33_3_115



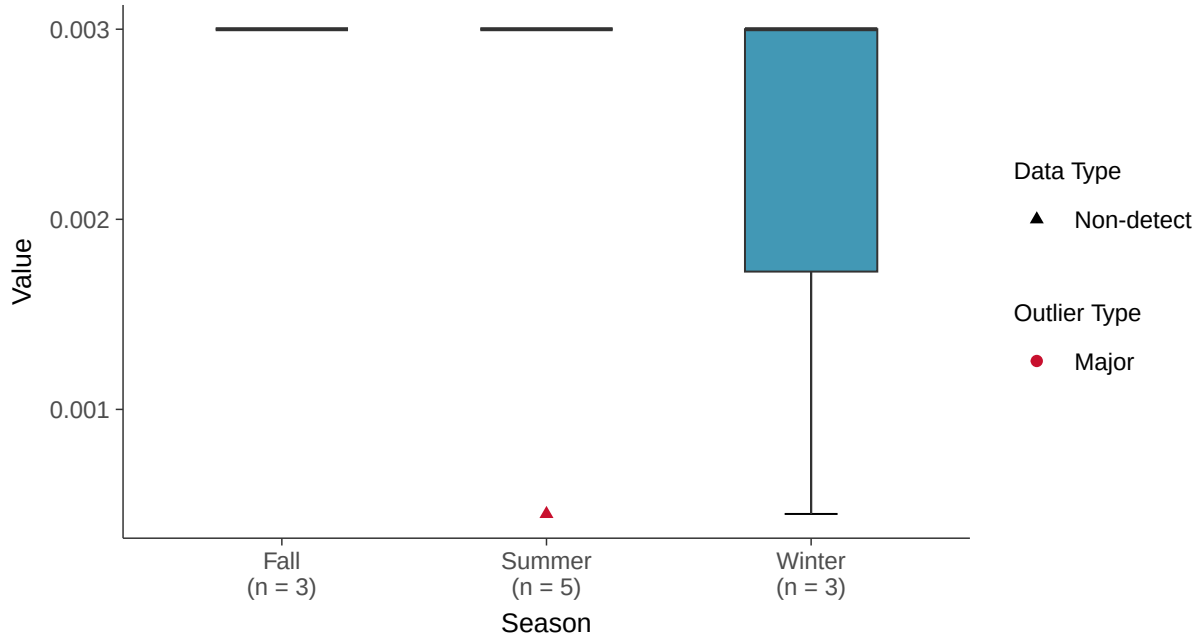


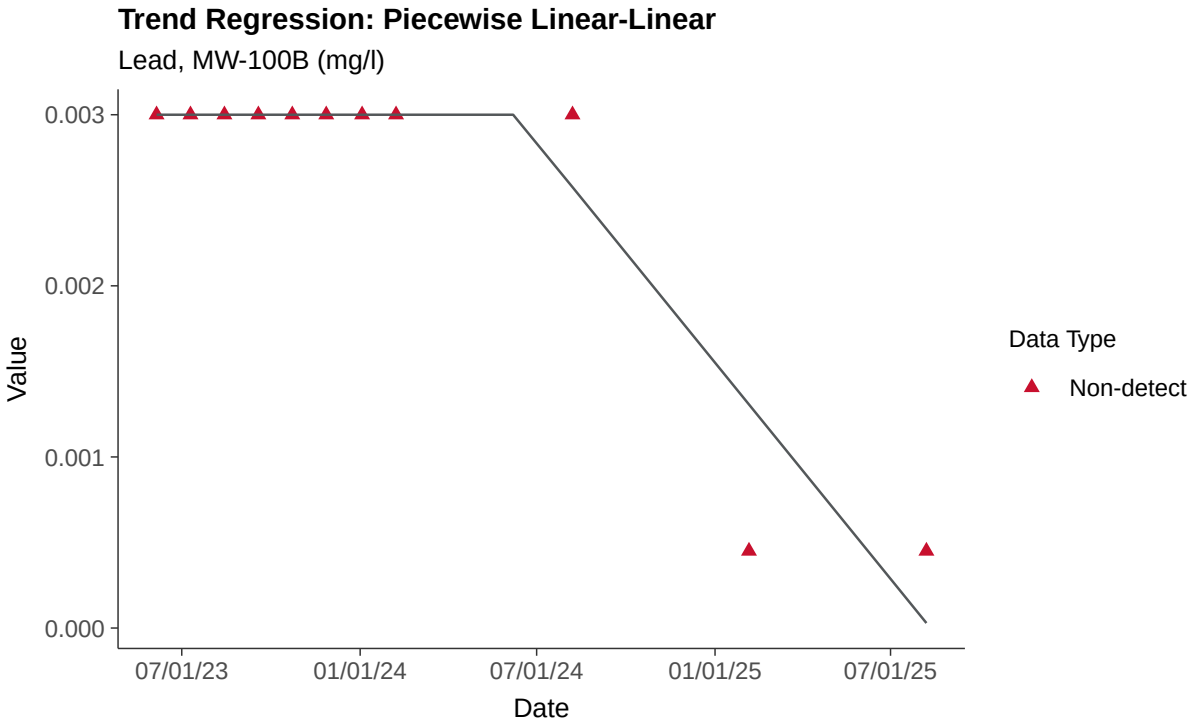
Boxplot

Lead, MW-100B (mg/l)

Boxplot by Season

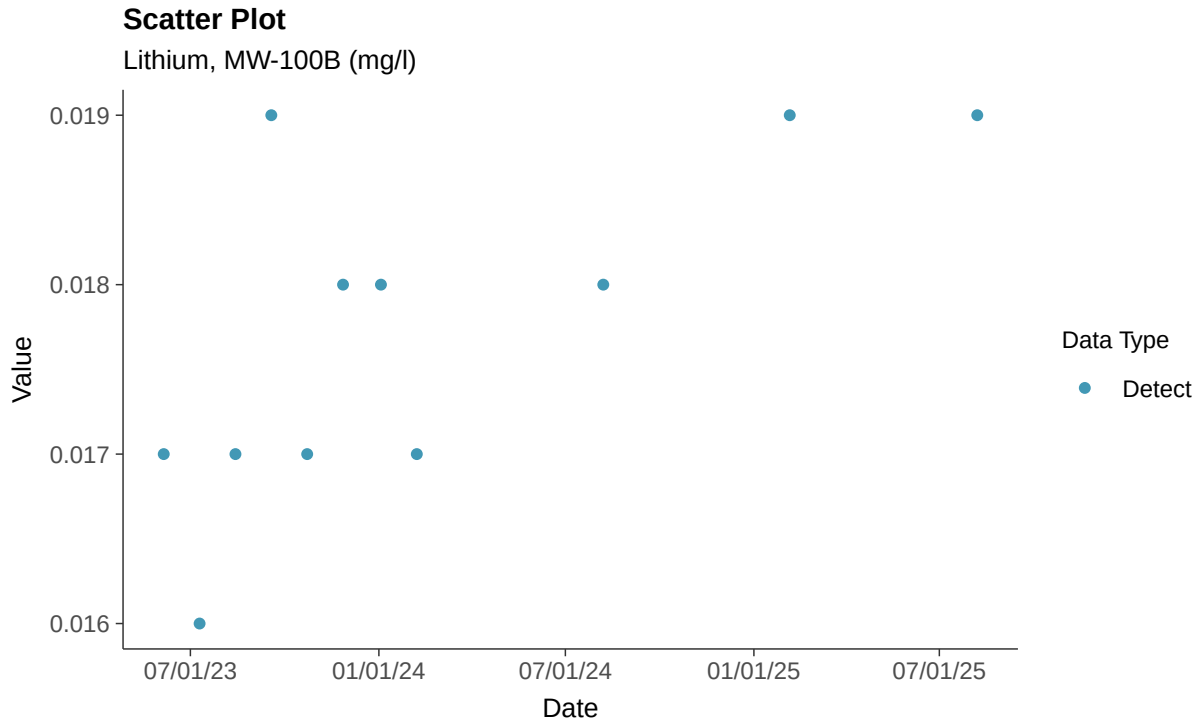
Lead, MW-100B (mg/l)

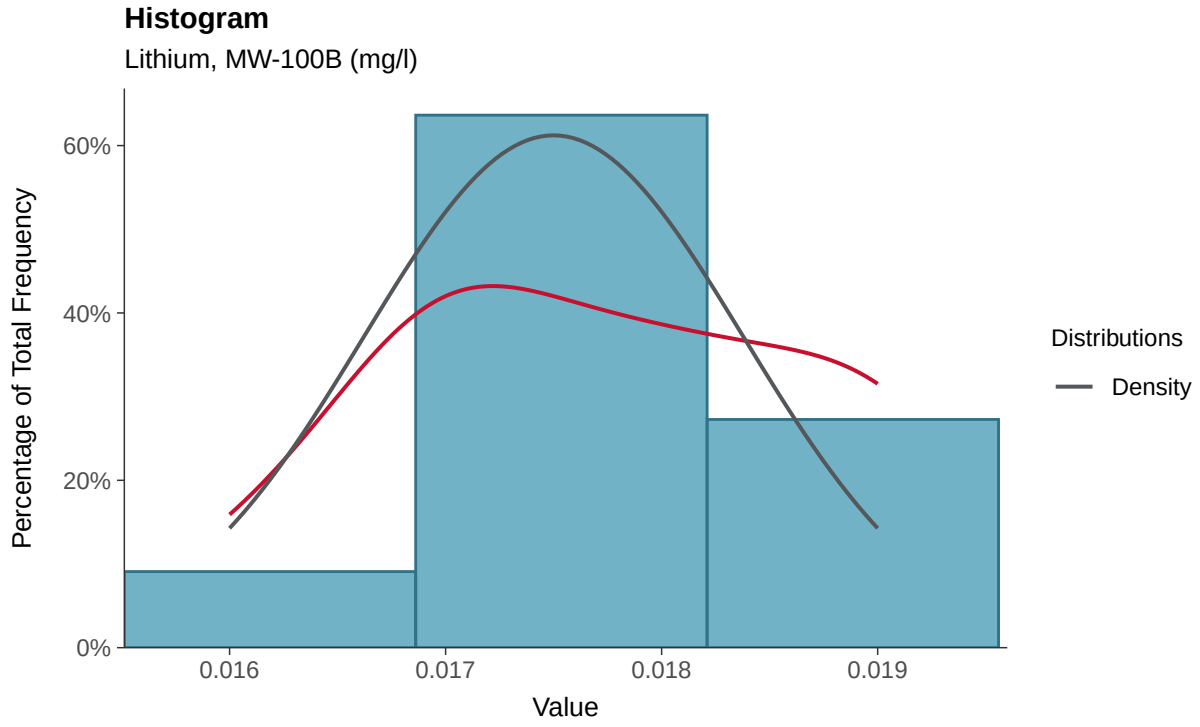



Trend Regression: Piecewise Linear-Linear
Lead, MW-100B (mg/l)
0.003
0.002
0.001
0.000
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Lithium, MW-100B

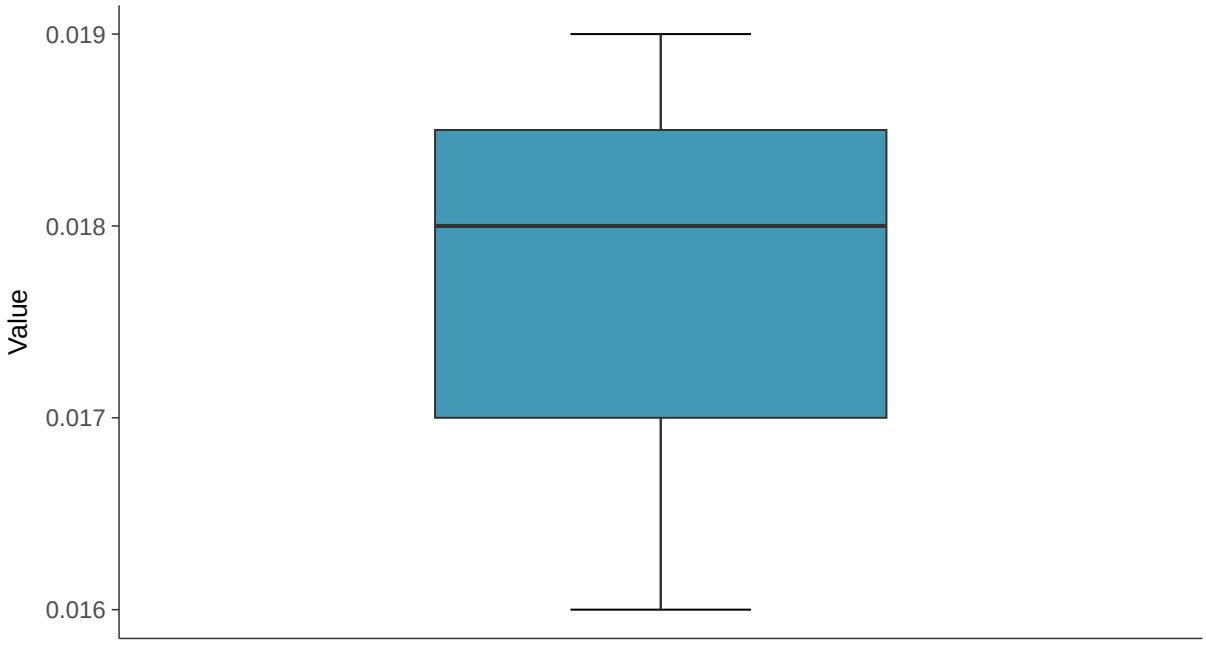
ID: 33_3_116





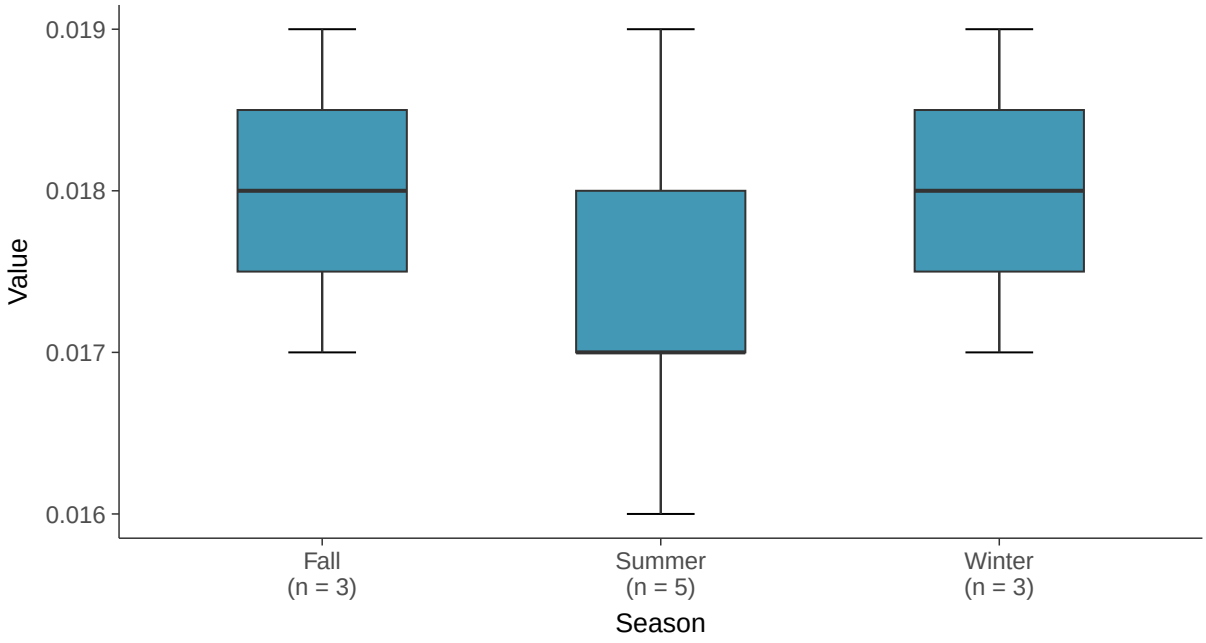
Boxplot

Lithium, MW-100B (mg/l)



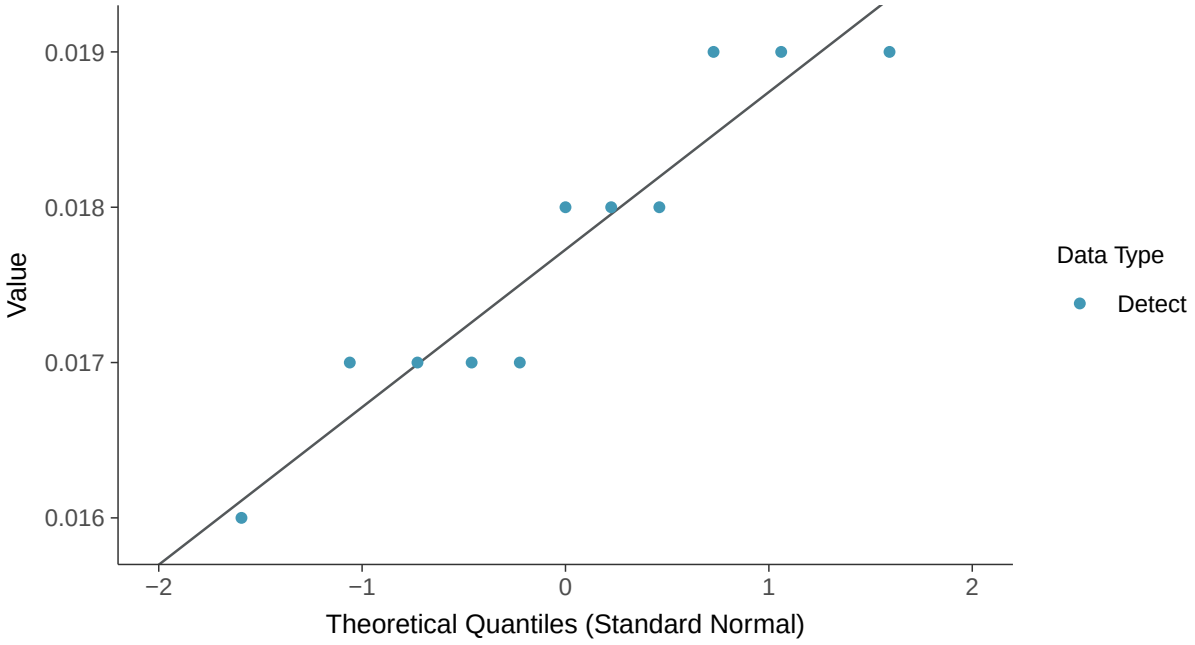
Boxplot by Season

Lithium, MW-100B (mg/l)



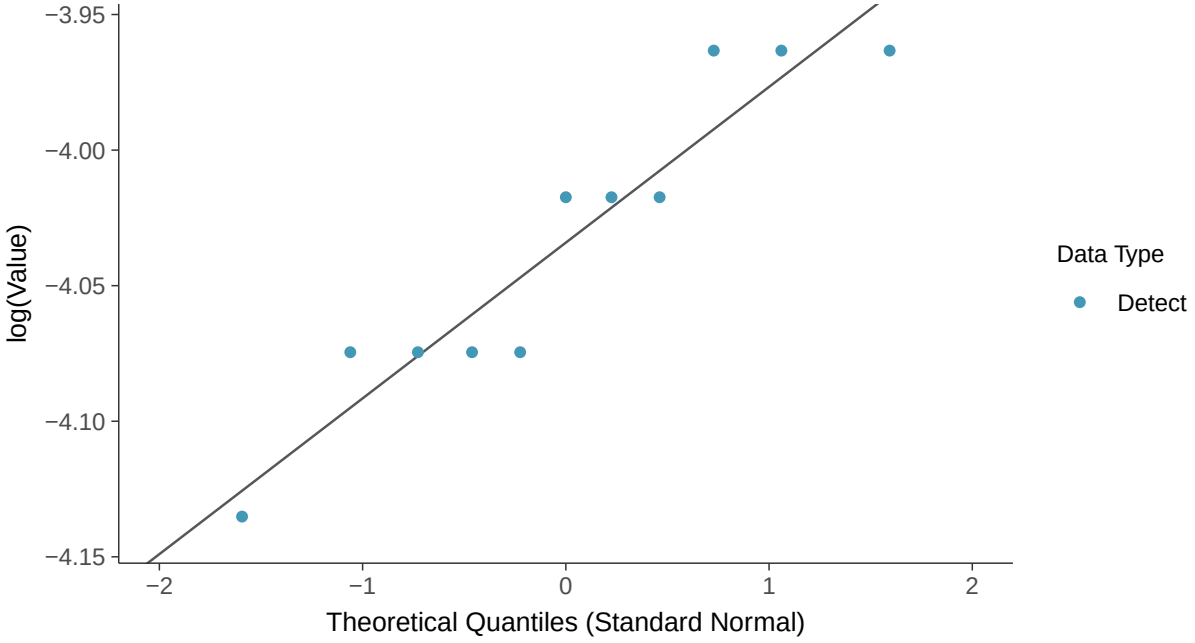
Normal Q-Q plot

Lithium, MW-100B (mg/l)



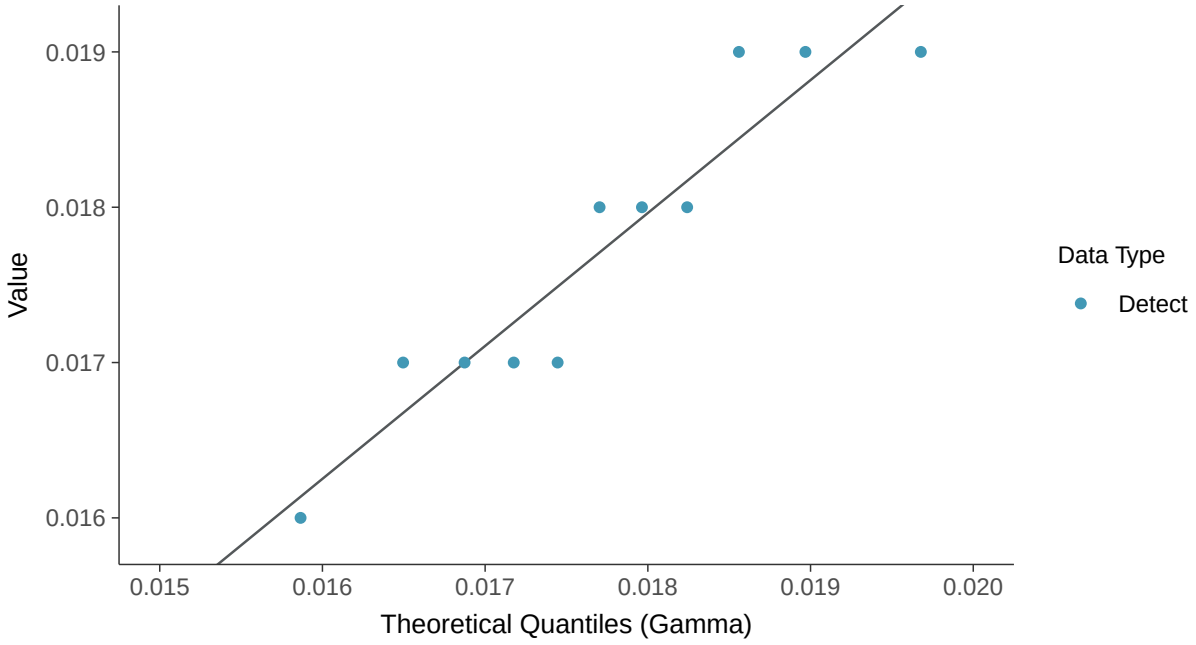
Lognormal Q-Q plot

Lithium, MW-100B (mg/l)



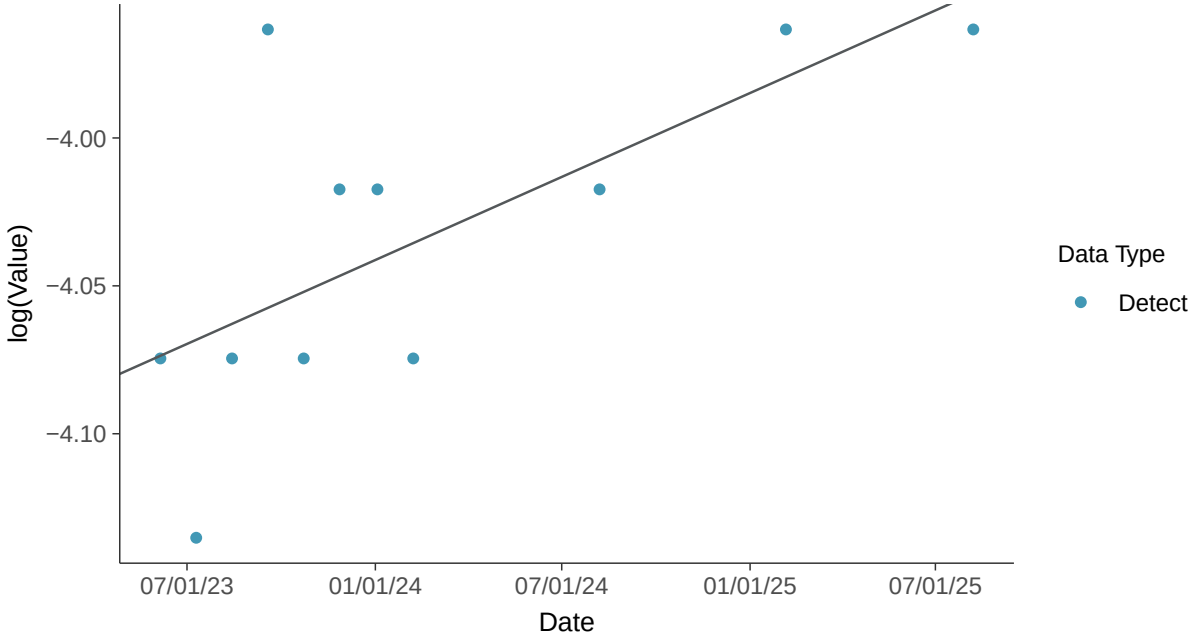
Gamma Q-Q plot

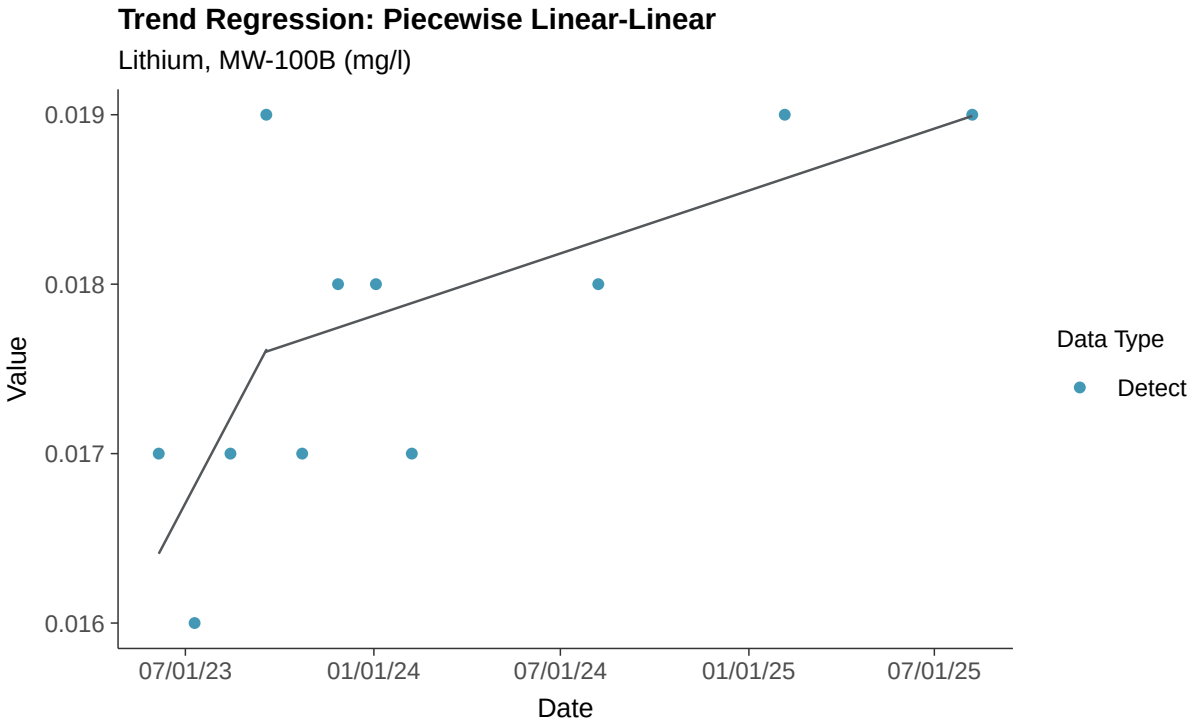
Lithium, MW-100B (mg/l)



Trend Regression: Lognormal MLE

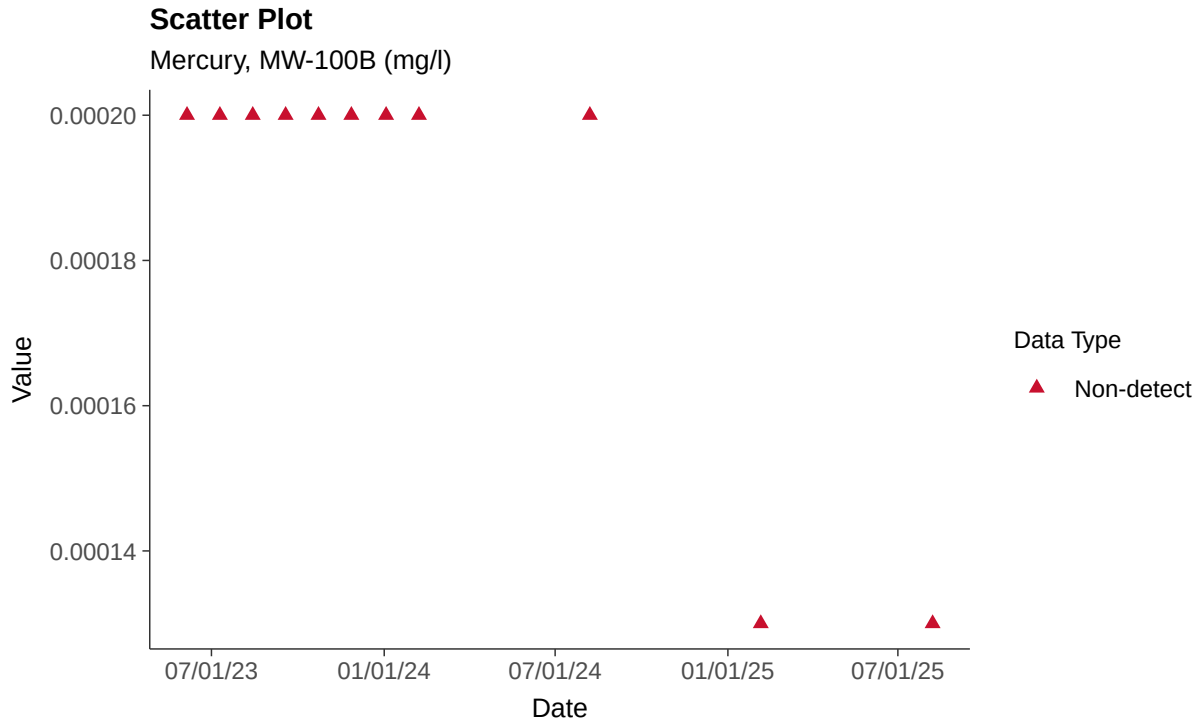
Lithium, MW-100B (mg/l)

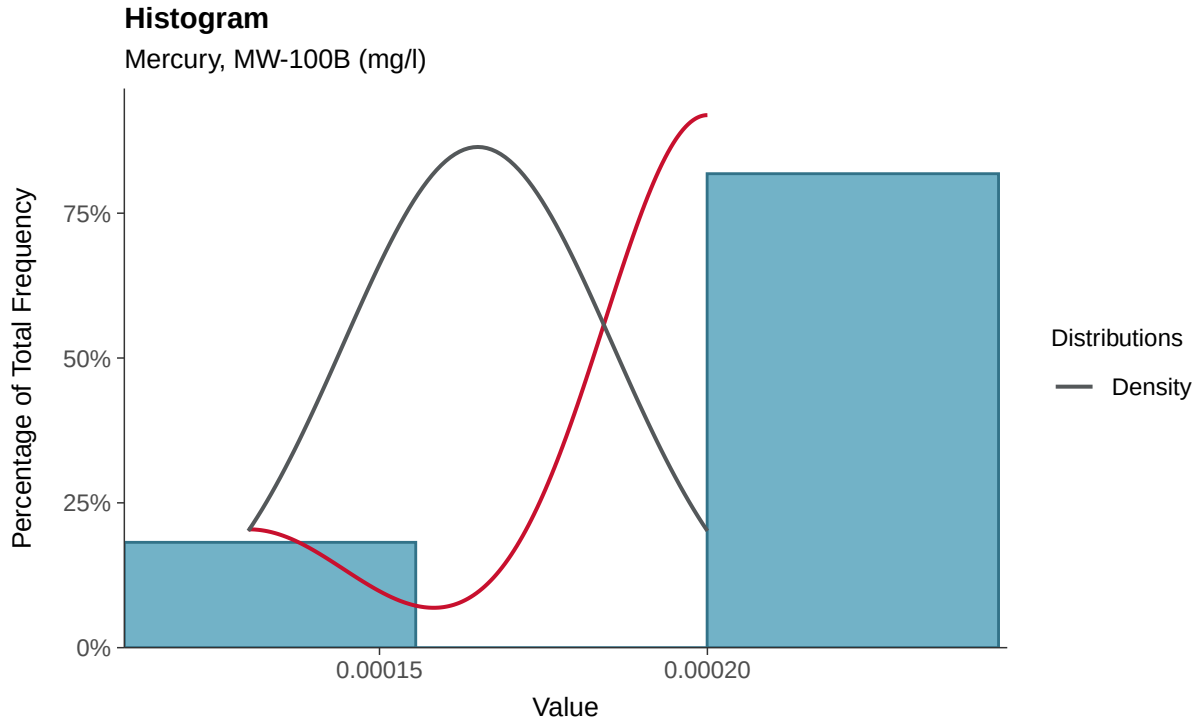



Trend Regression: Piecewise Linear-Linear
Lithium, MW-100B (mg/l)
0.019
0.018
0.017
0.016
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect

Appendix IV: Mercury, MW-100B

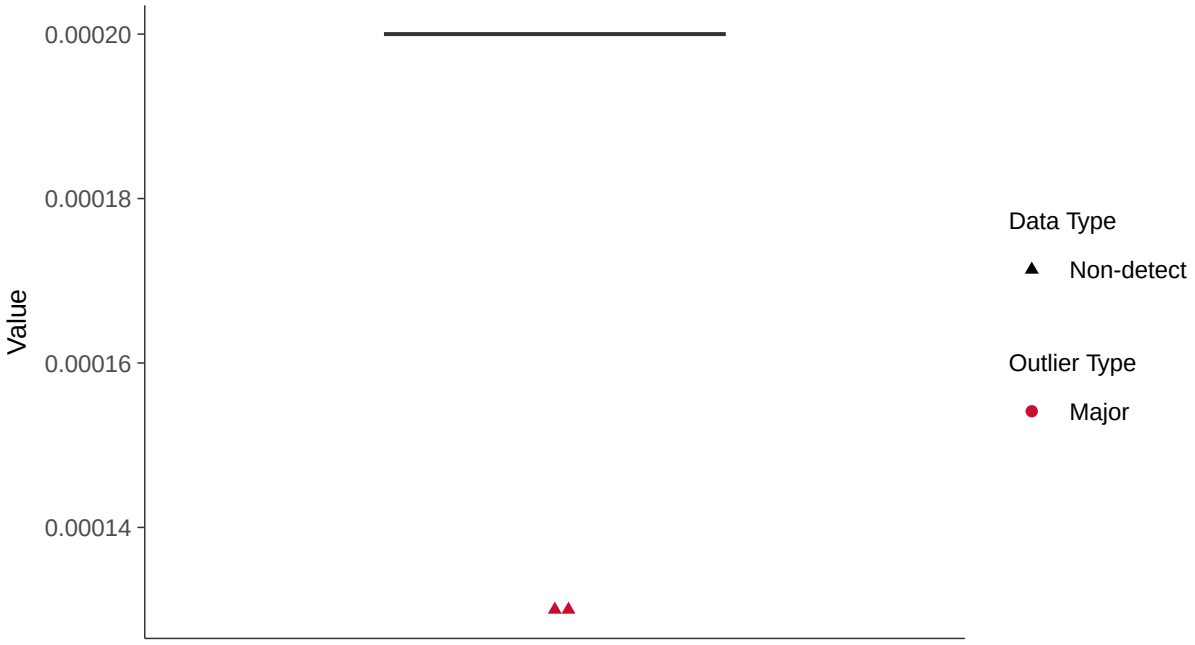
ID: 33_3_117





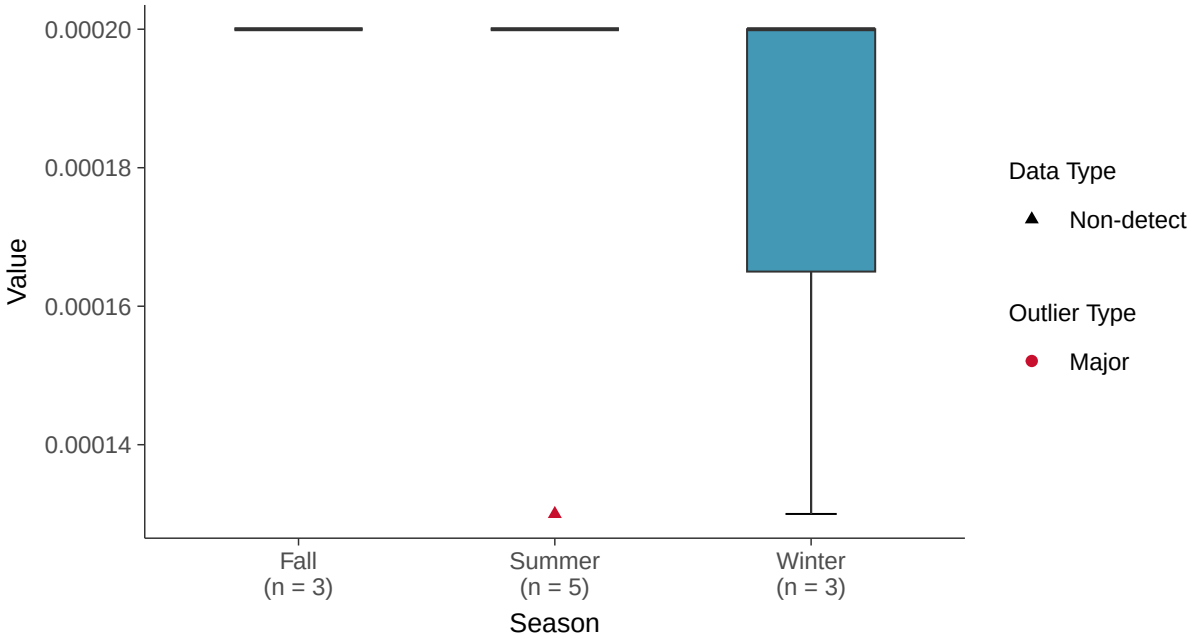
Boxplot

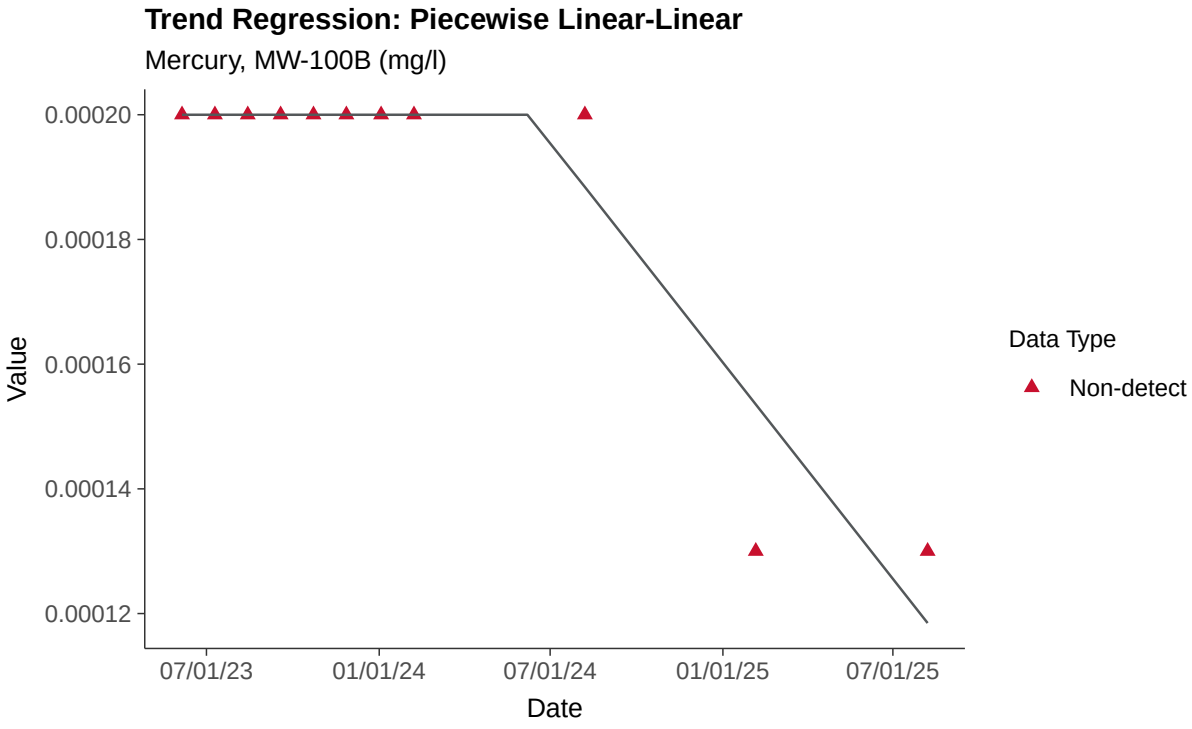
Mercury, MW-100B (mg/l)



Boxplot by Season

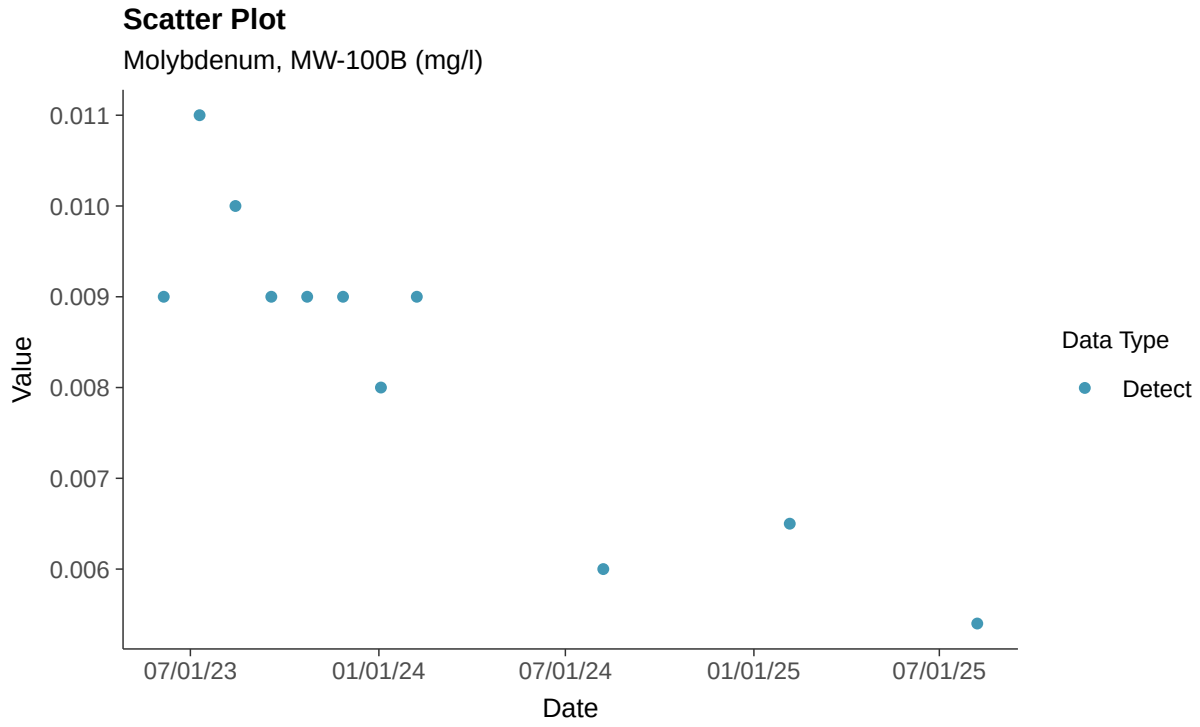
Mercury, MW-100B (mg/l)

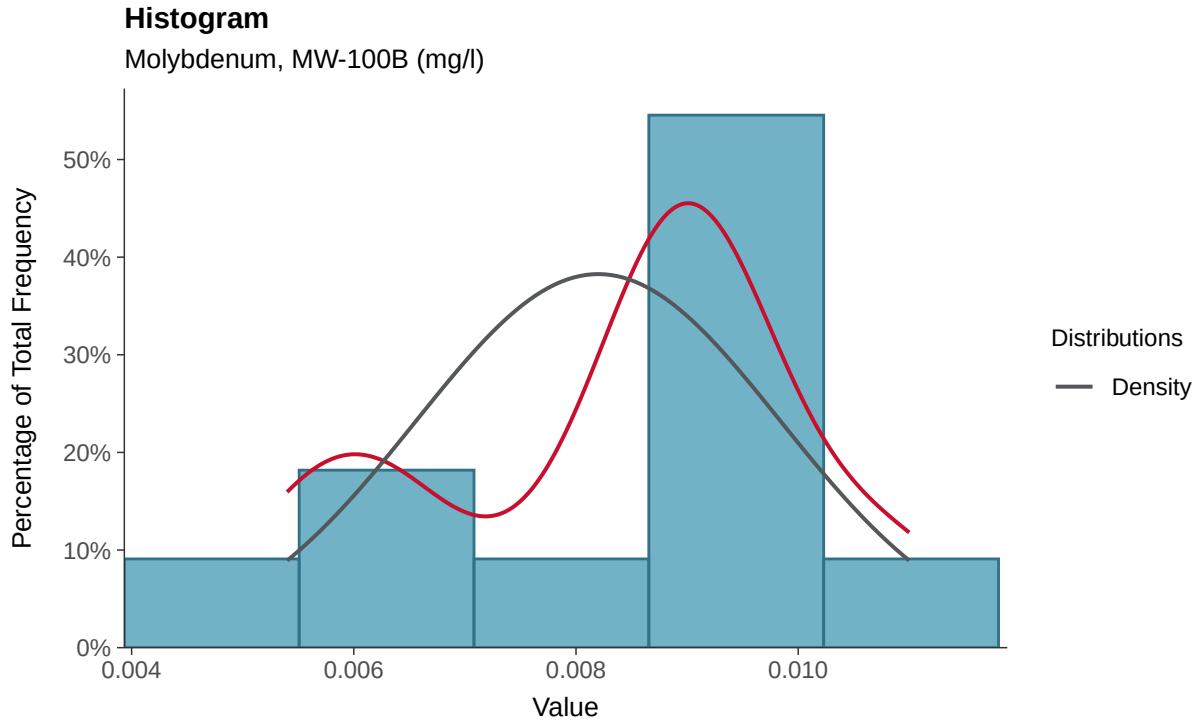



Trend Regression: Piecewise Linear-Linear
Mercury, MW-100B (mg/l)
Value
0.00020
0.00018
0.00016
0.00014
0.00012
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Molybdenum, MW-100B

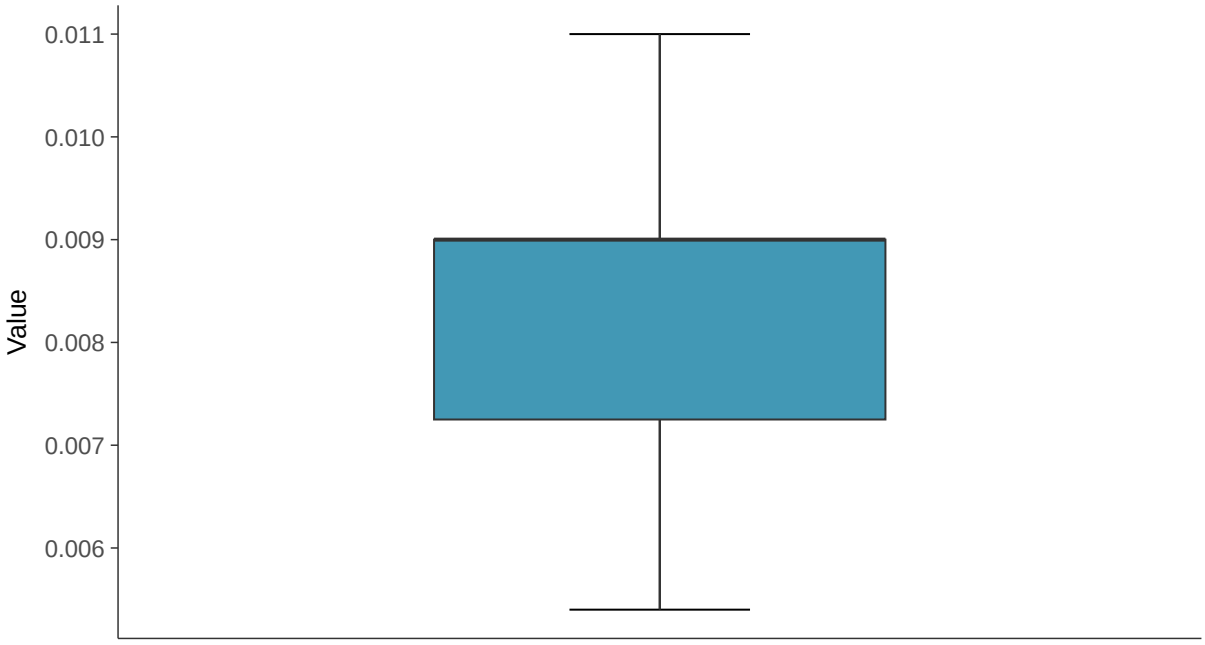
ID: 33_3_118





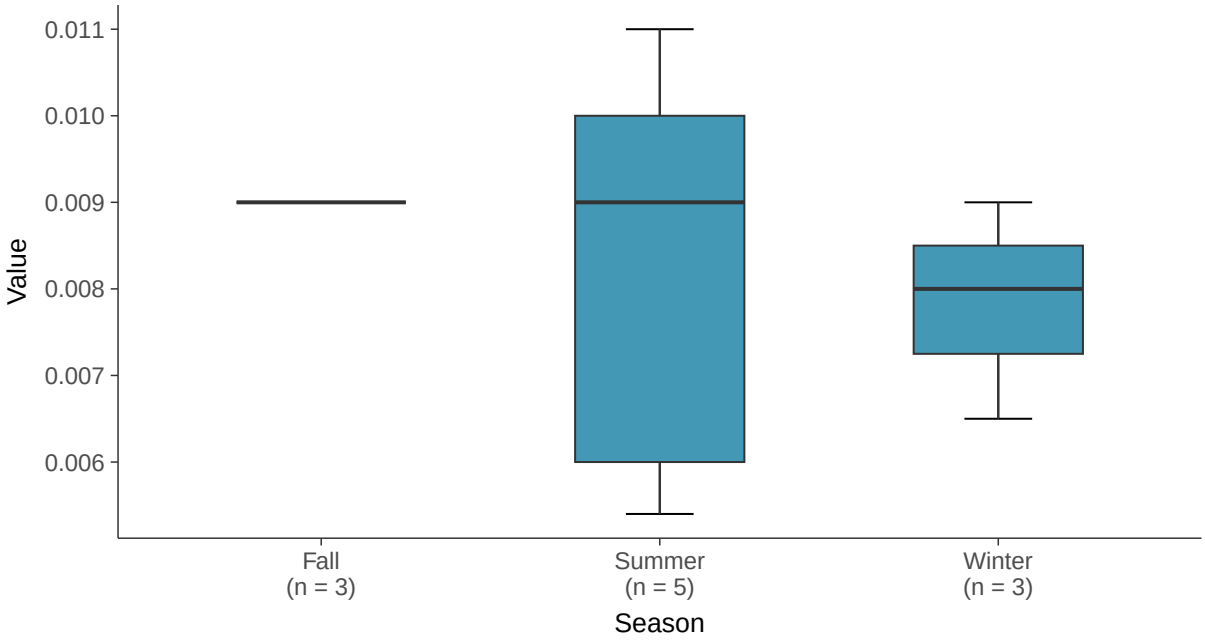
Boxplot

Molybdenum, MW-100B (mg/l)



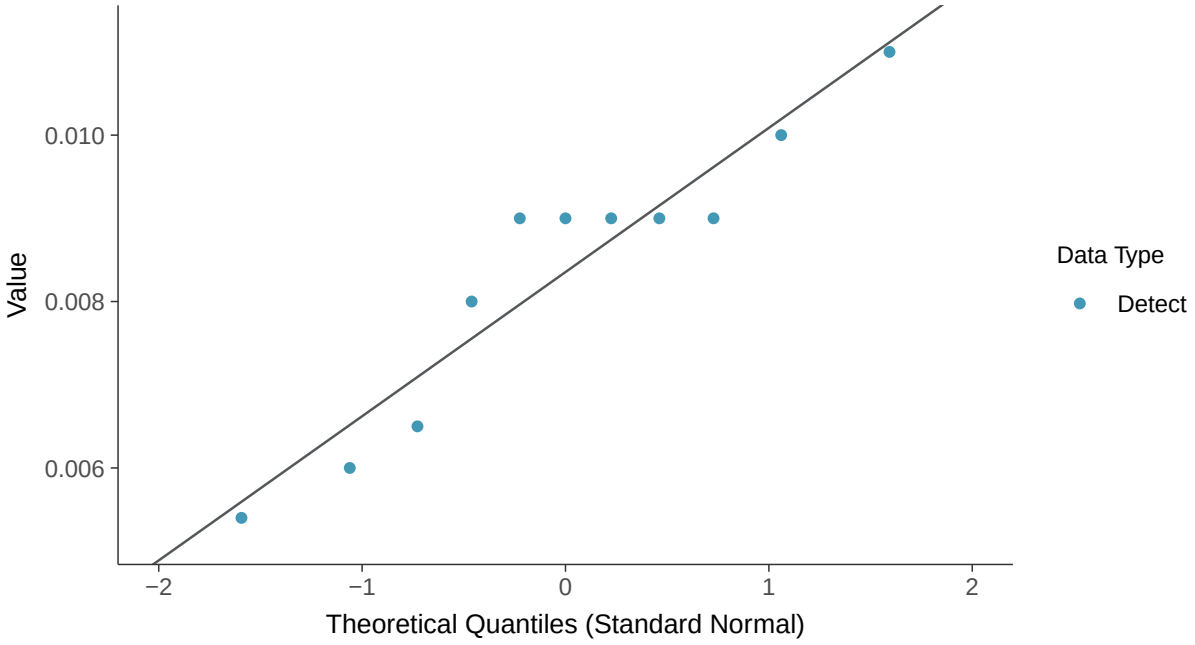
Boxplot by Season

Molybdenum, MW-100B (mg/l)



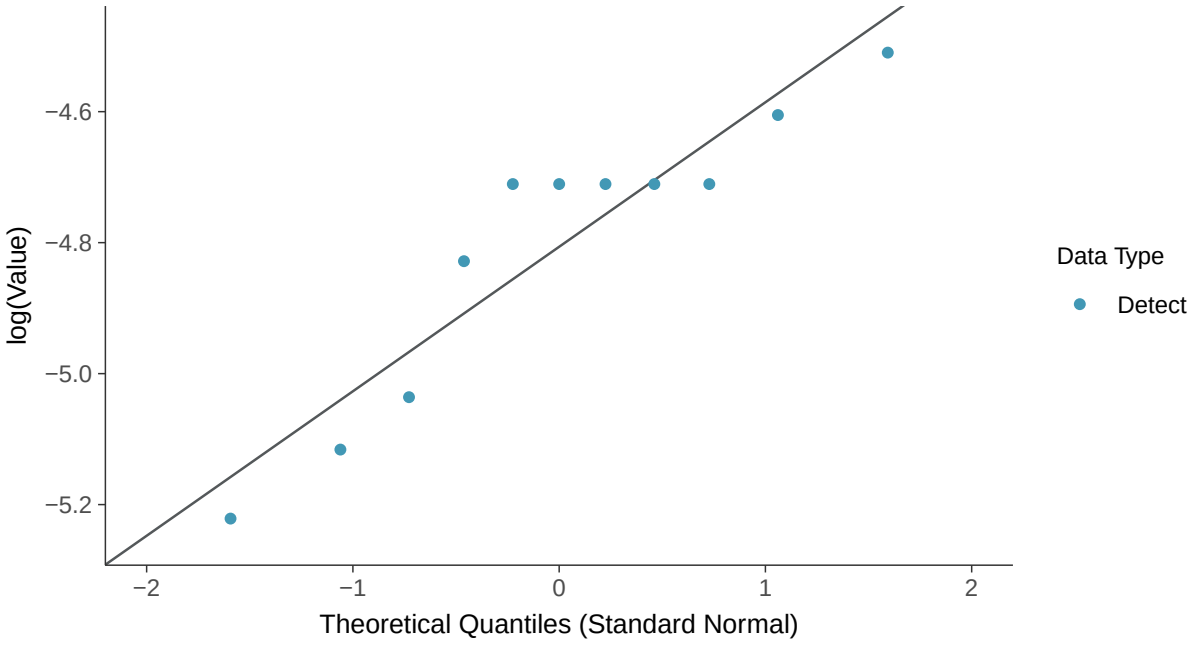
Normal Q-Q plot

Molybdenum, MW-100B (mg/l)



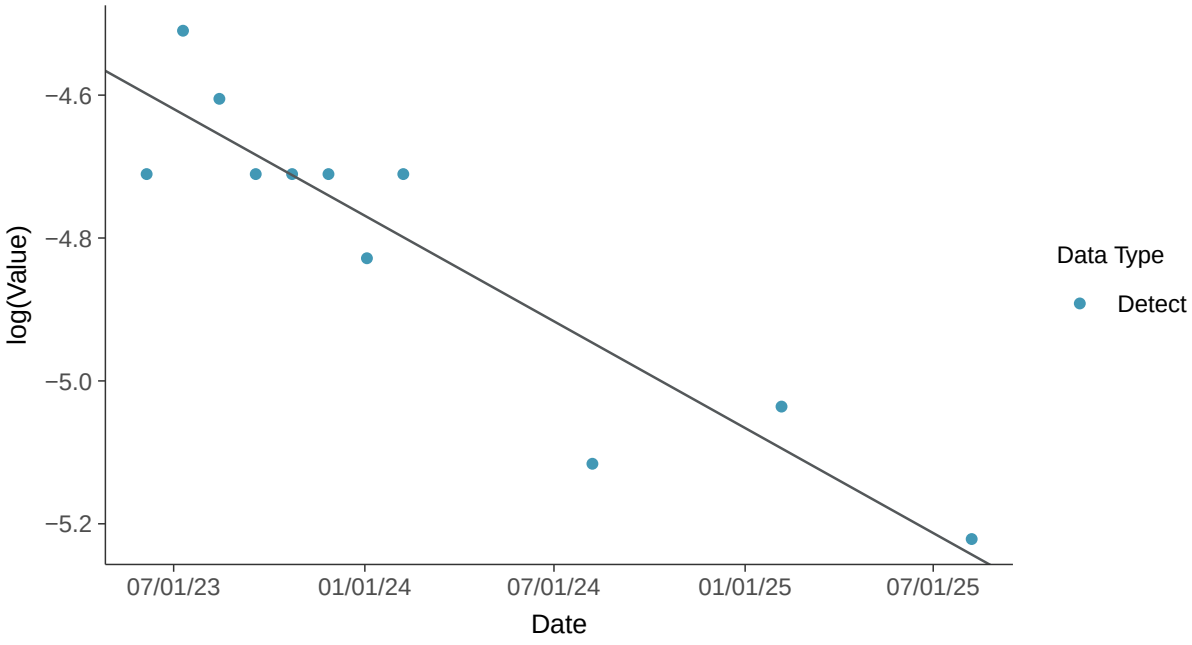
Lognormal Q-Q plot

Molybdenum, MW-100B (mg/l)



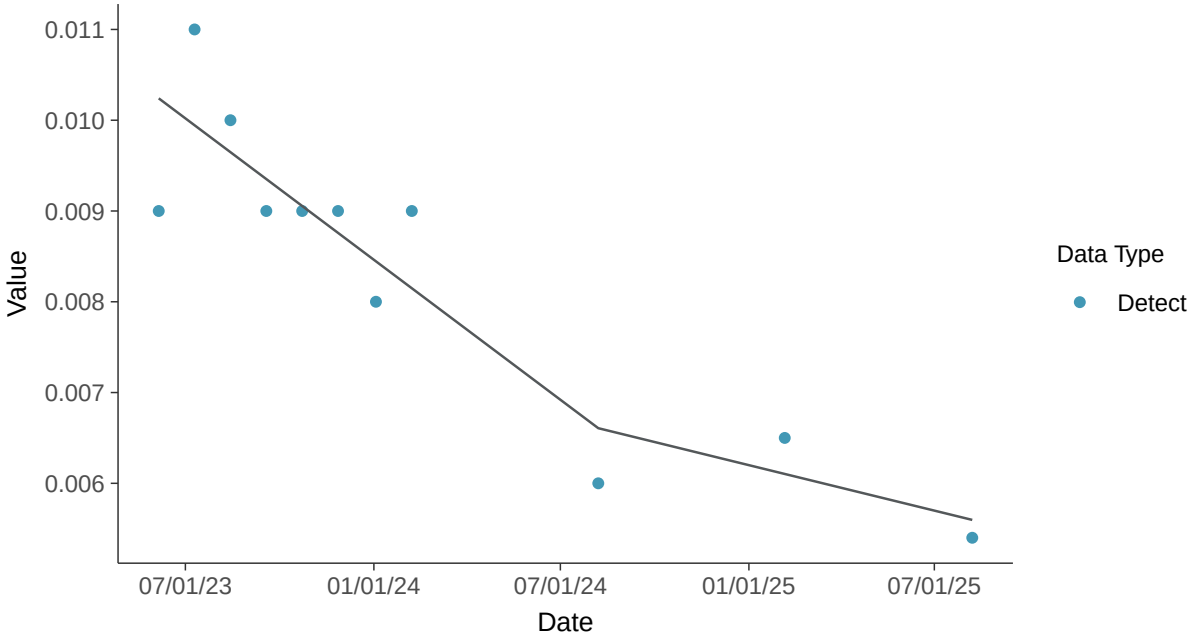
Trend Regression: Lognormal MLE

Molybdenum, MW-100B (mg/l)



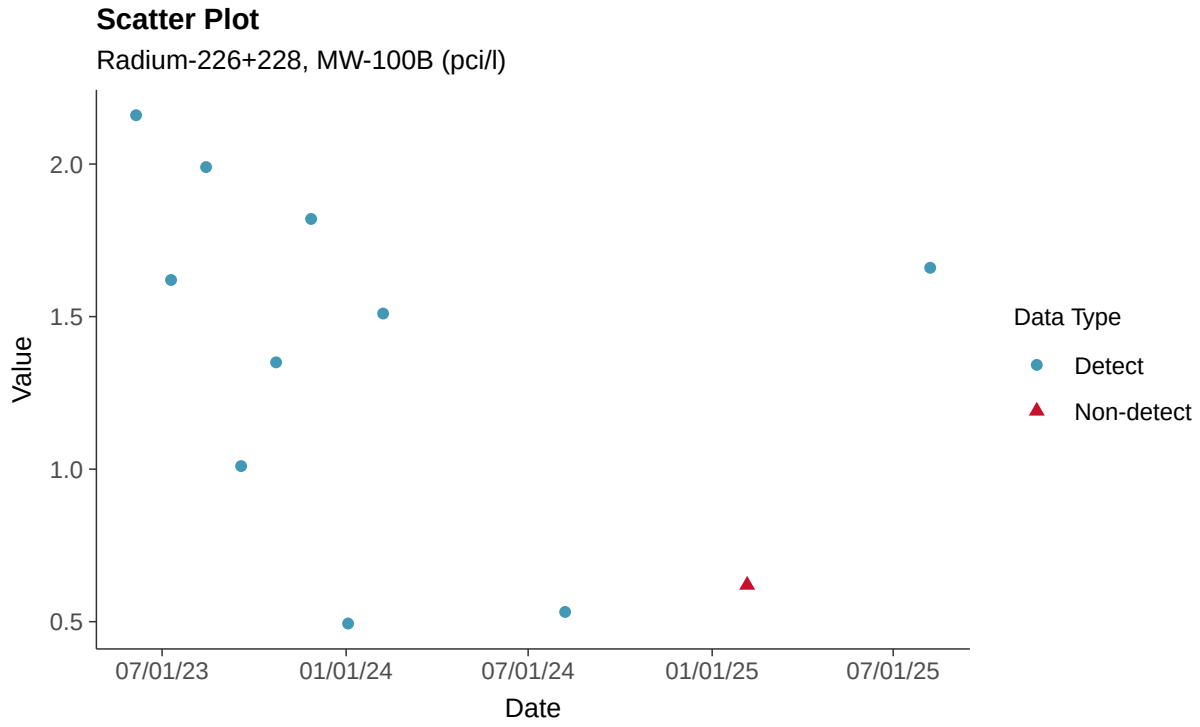
Trend Regression: Piecewise Linear-Linear

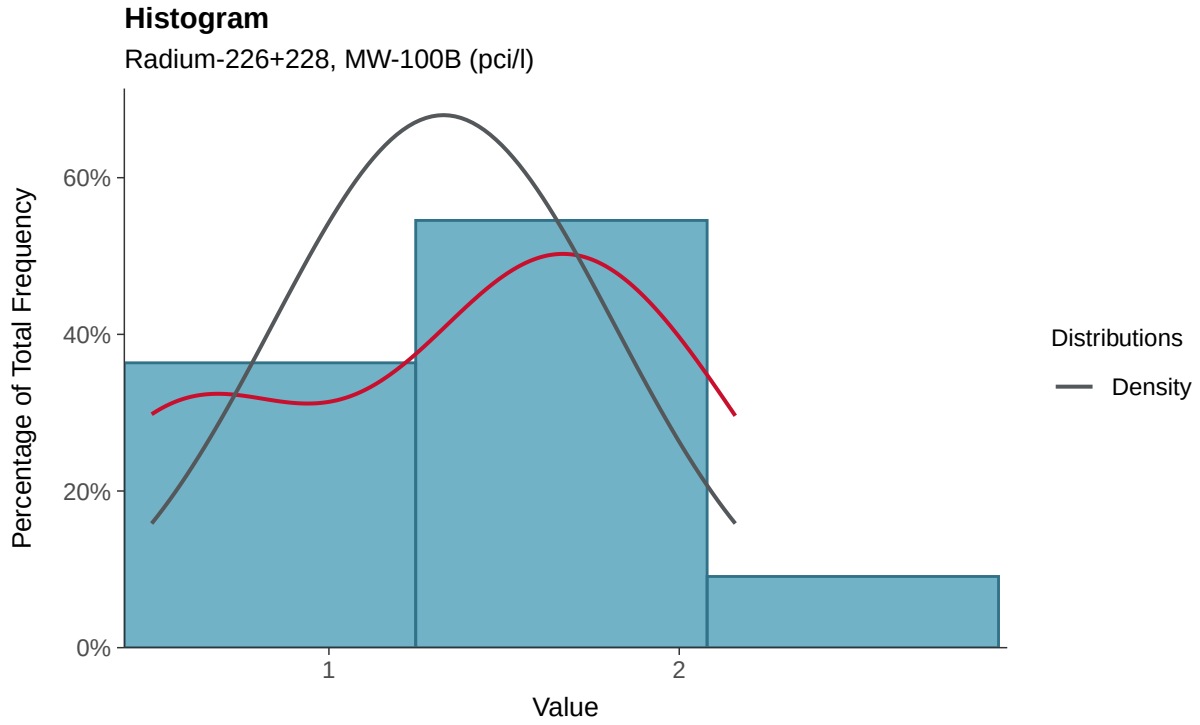
Molybdenum, MW-100B (mg/l)



Appendix IV: Radium-226+228, MW-100B

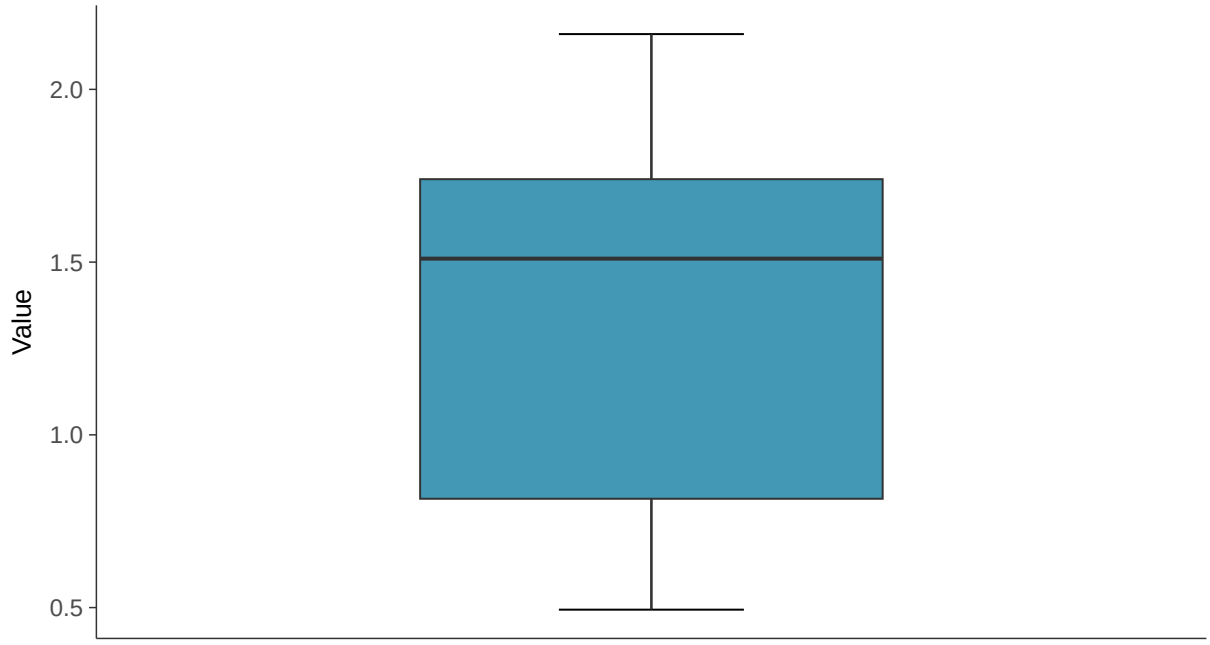
ID: 33_3_121





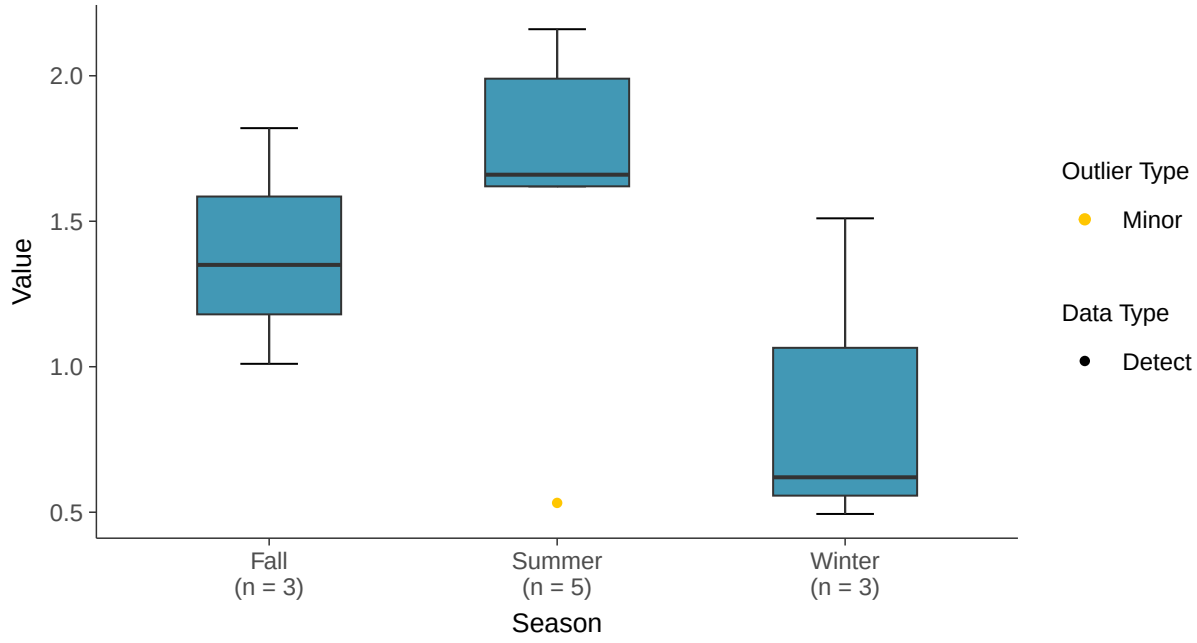
Boxplot

Radium-226+228, MW-100B (pci/l)



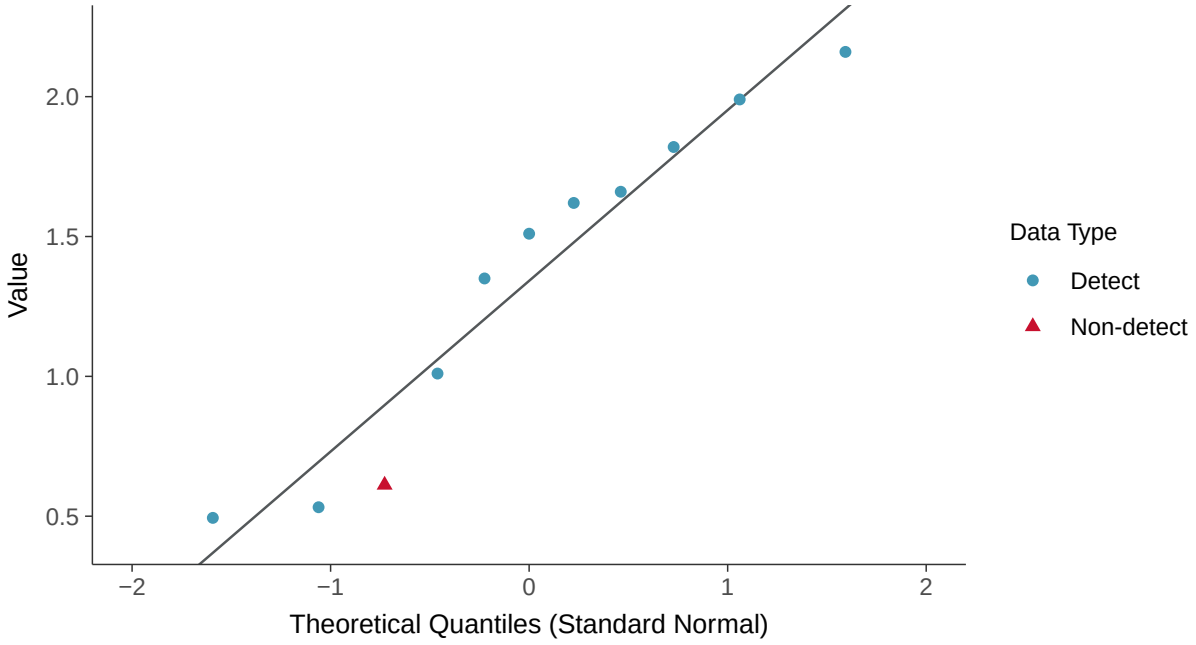
Boxplot by Season

Radium-226+228, MW-100B (pci/l)



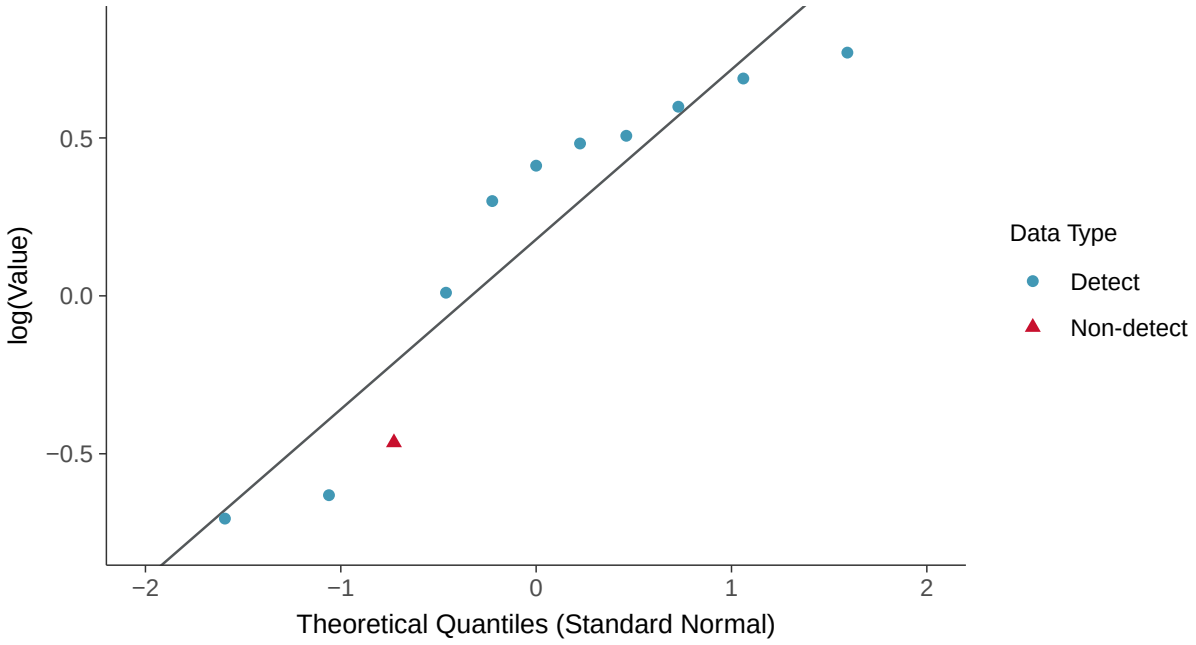
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-100B (pci/l)



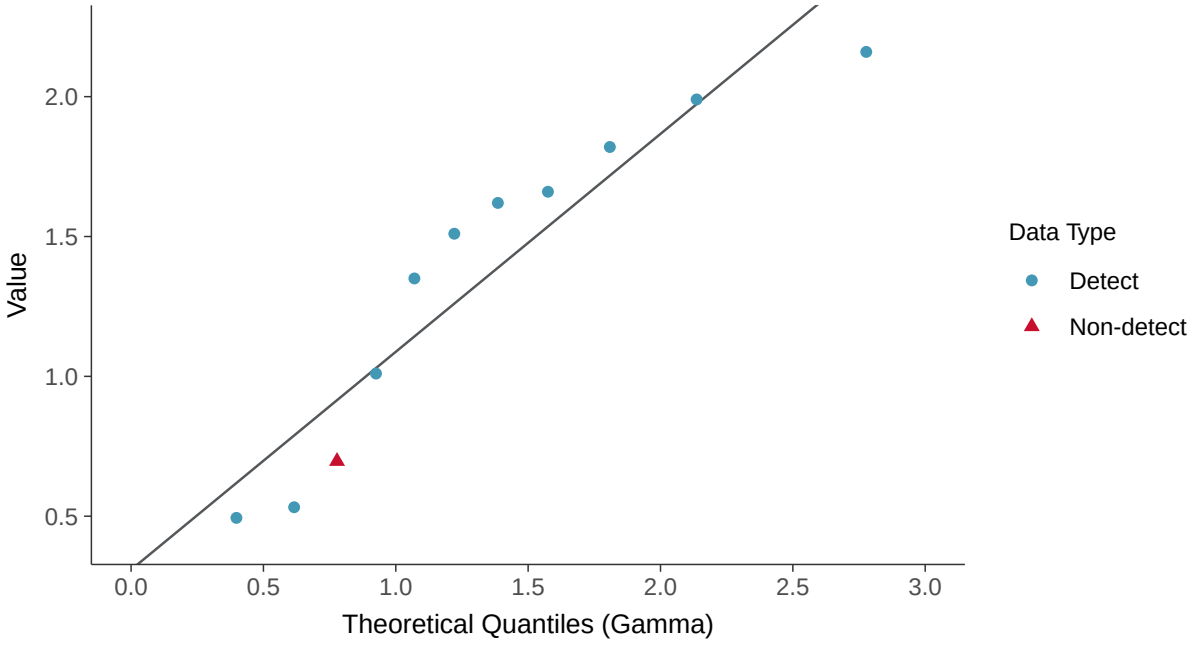
Lognormal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-100B (pci/l)



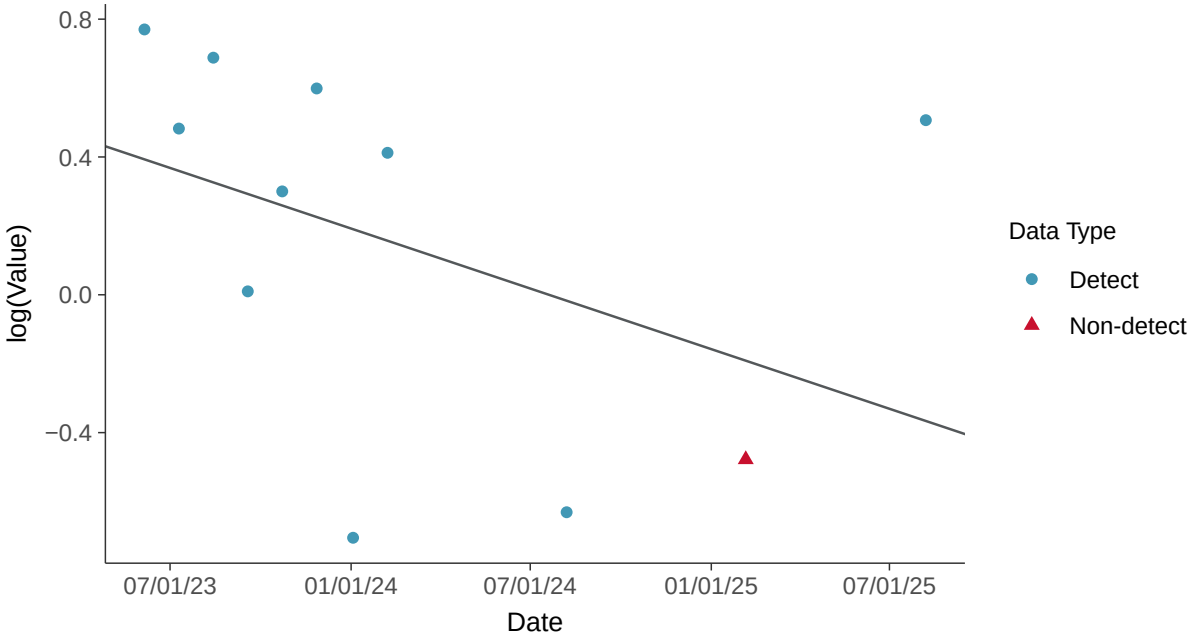
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-100B (pci/l)



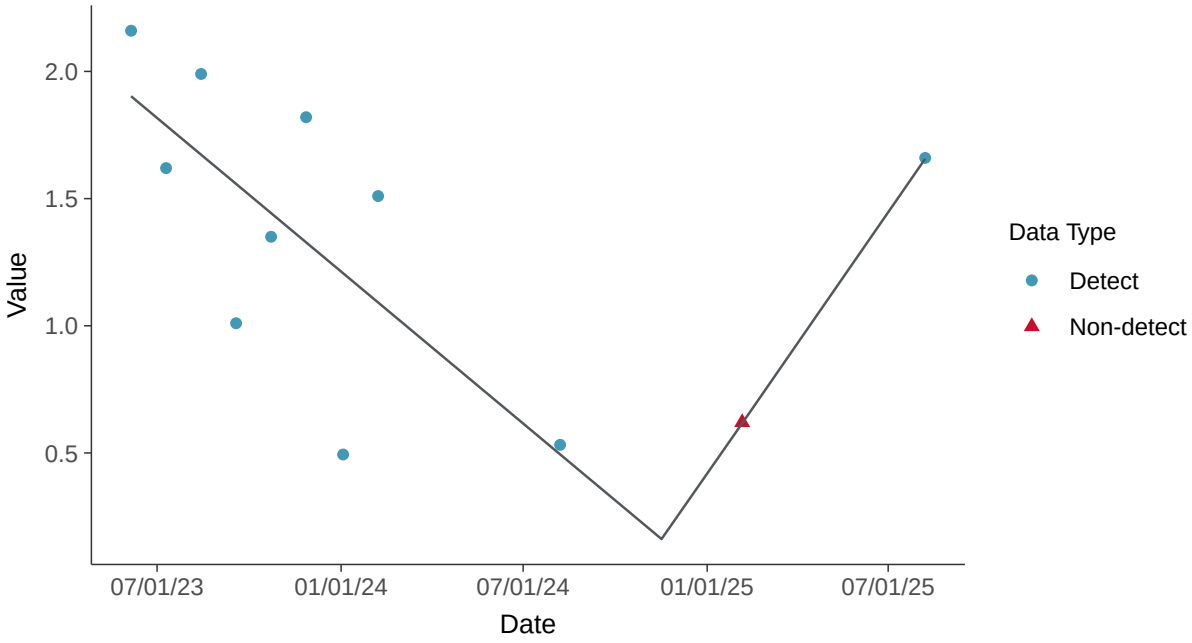
Trend Regression: Lognormal MLE

Radium-226+228, MW-100B (pci/l)



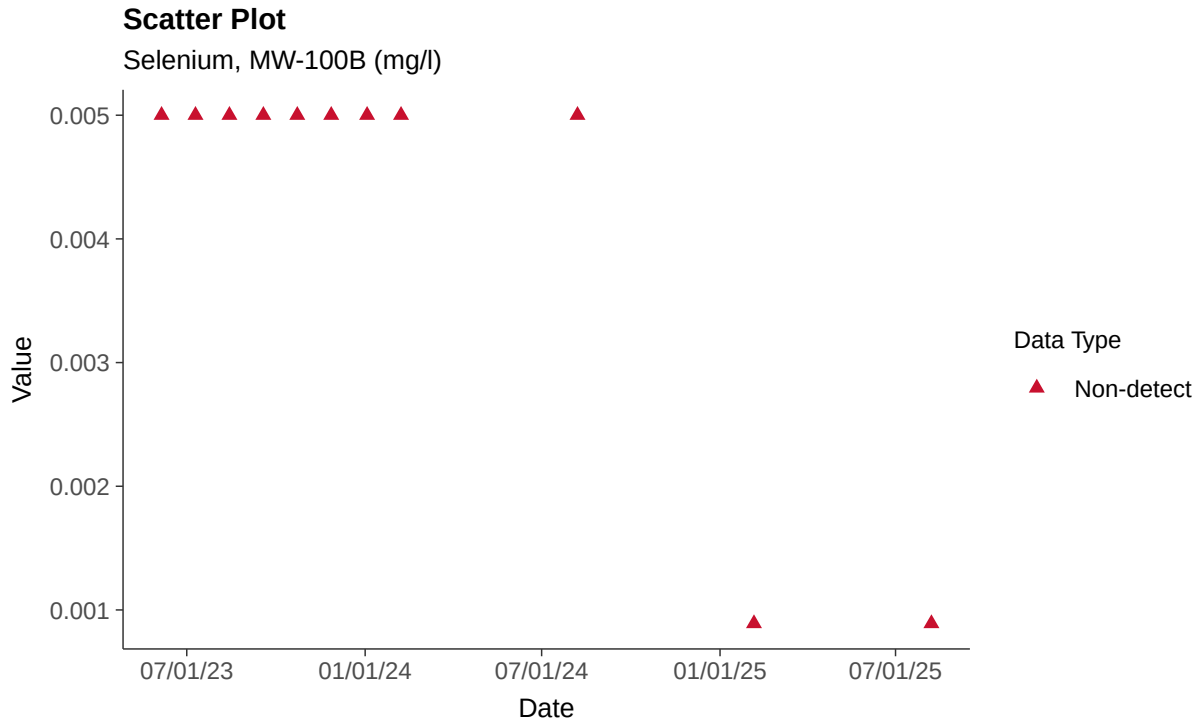
Trend Regression: Piecewise Linear-Linear

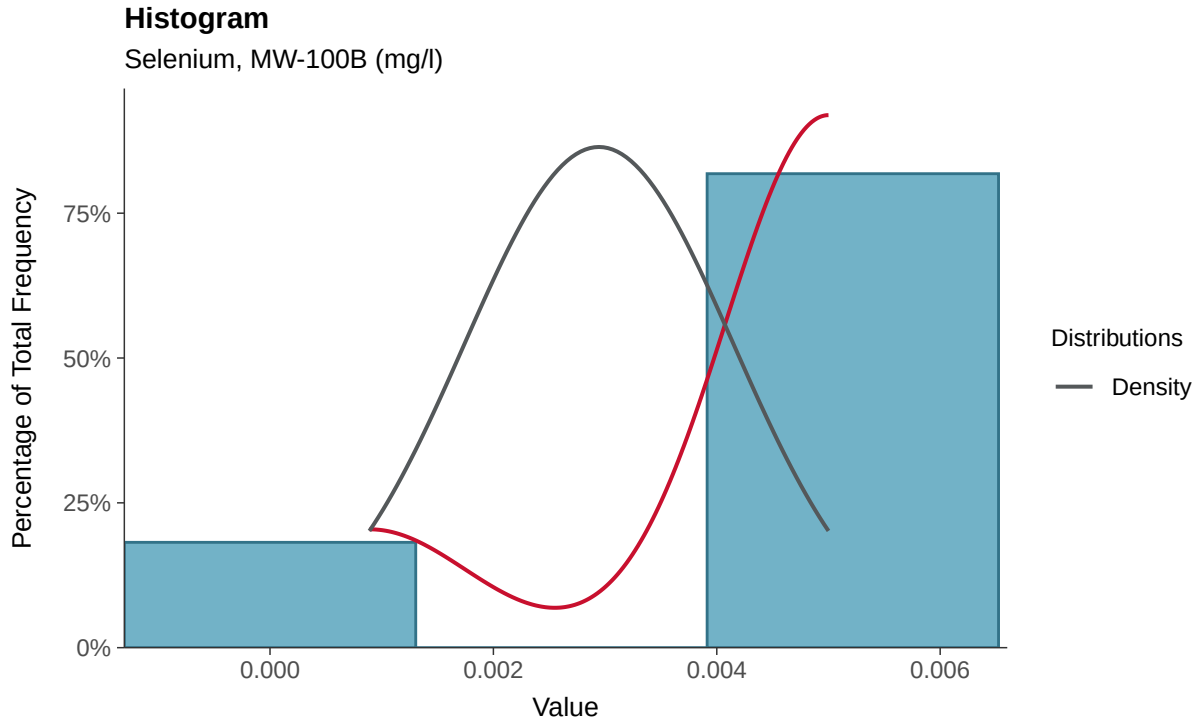
Radium-226+228, MW-100B (pci/l)



Appendix IV: Selenium, MW-100B

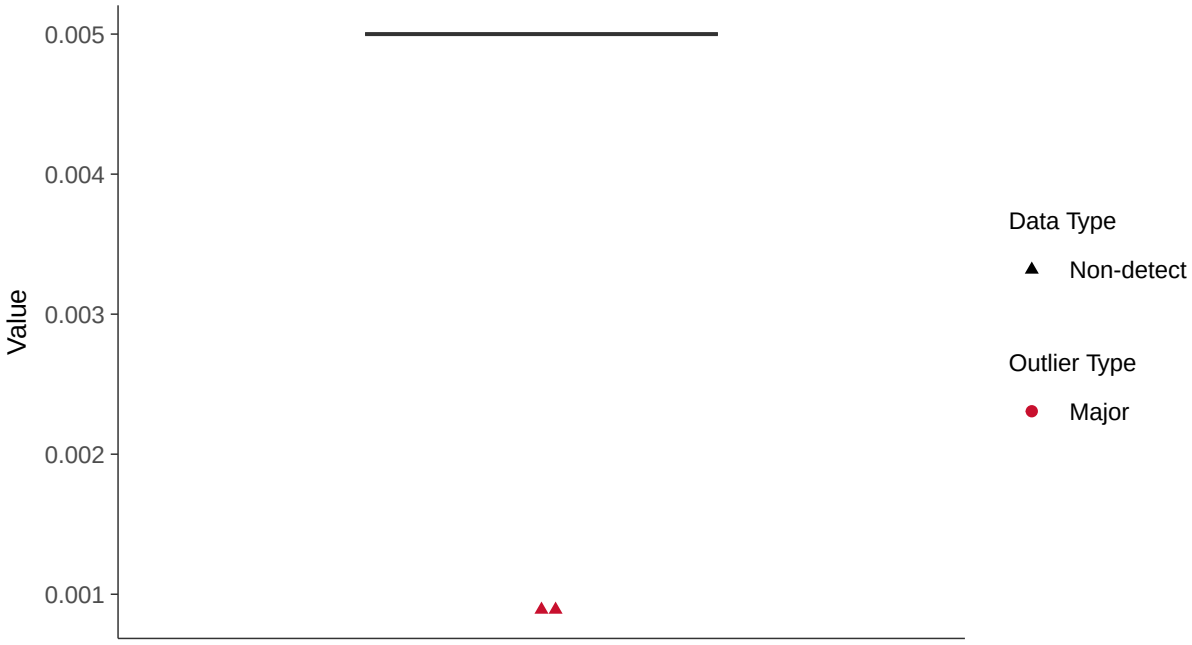
ID: 33_3_122





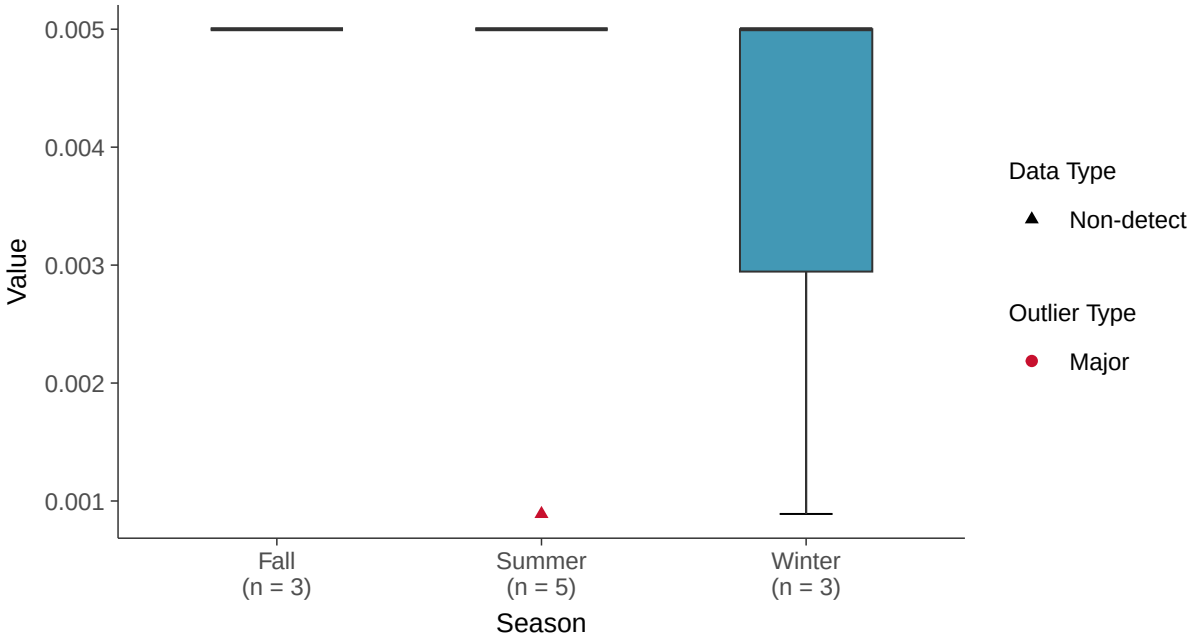
Boxplot

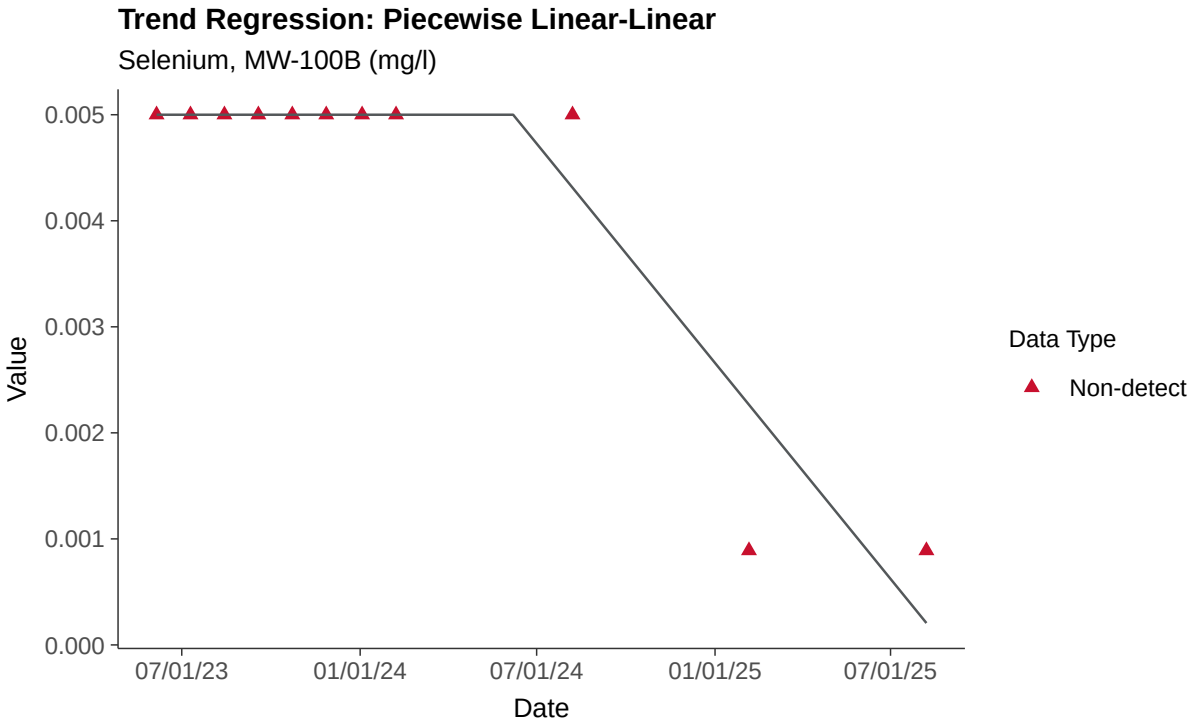
Selenium, MW-100B (mg/l)



Boxplot by Season

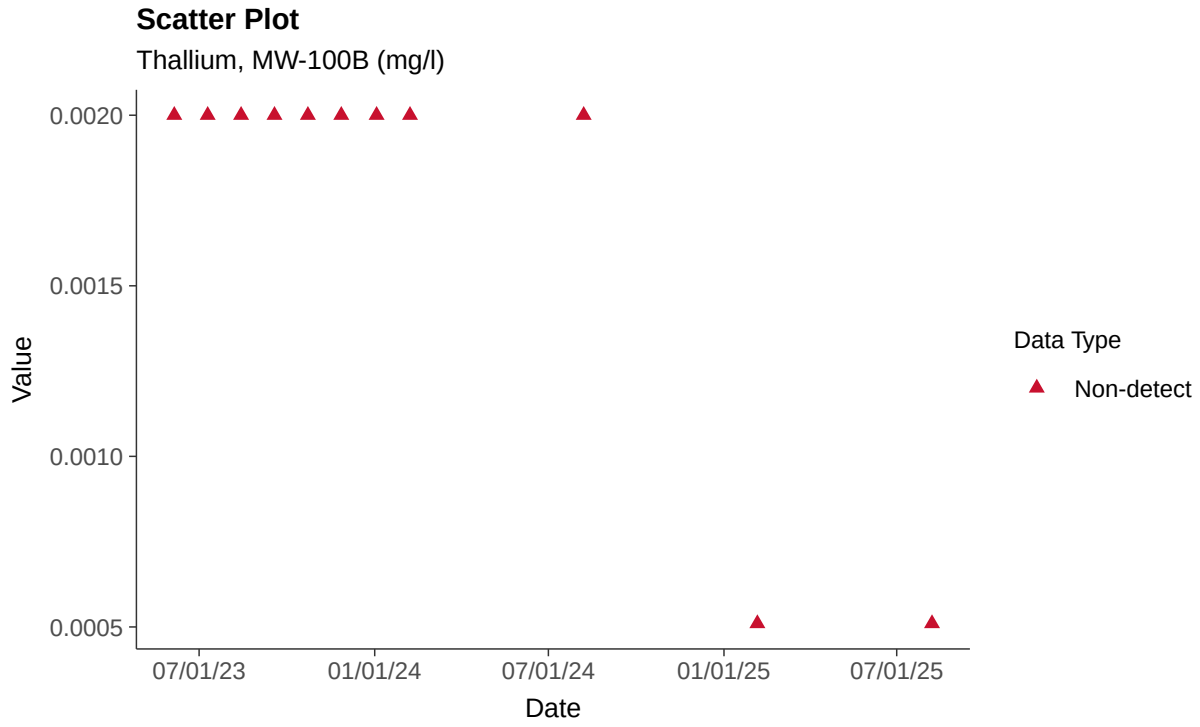
Selenium, MW-100B (mg/l)

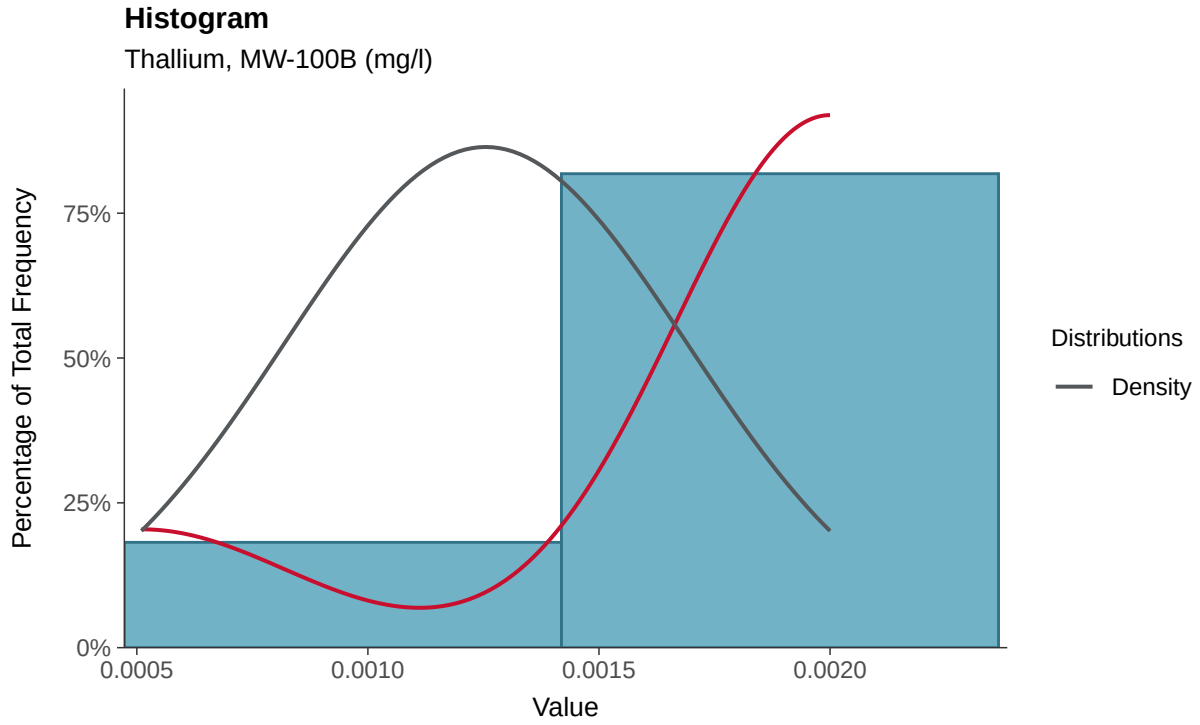



Trend Regression: Piecewise Linear-Linear
Selenium, MW-100B (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Thallium, MW-100B

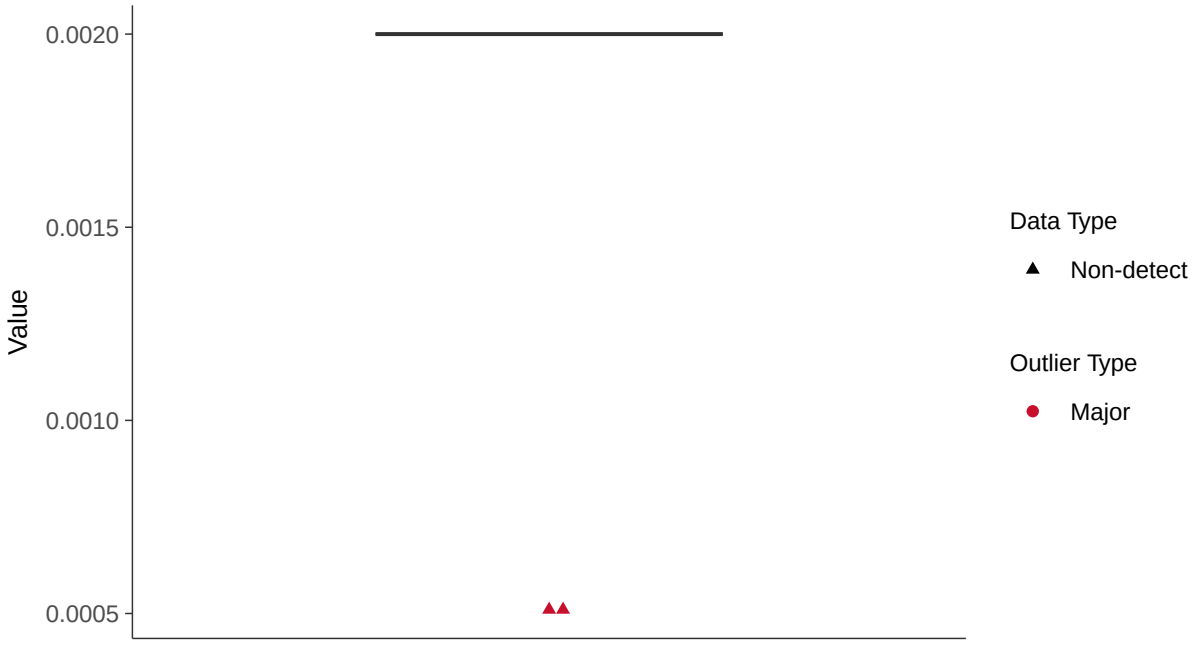
ID: 33_3_125





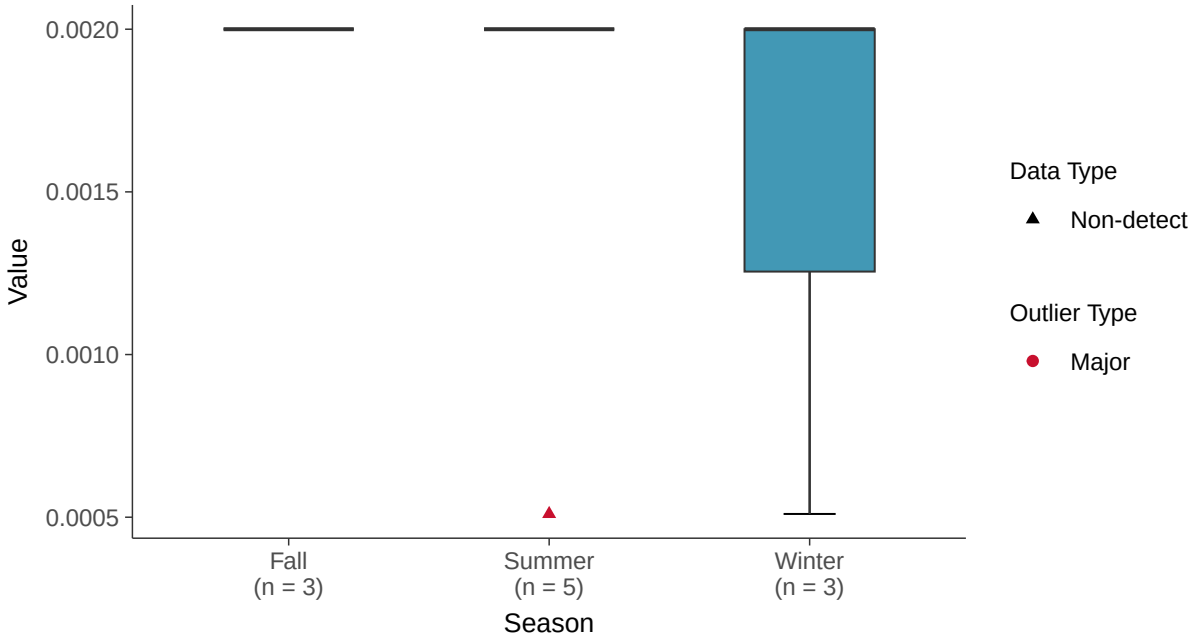
Boxplot

Thallium, MW-100B (mg/l)



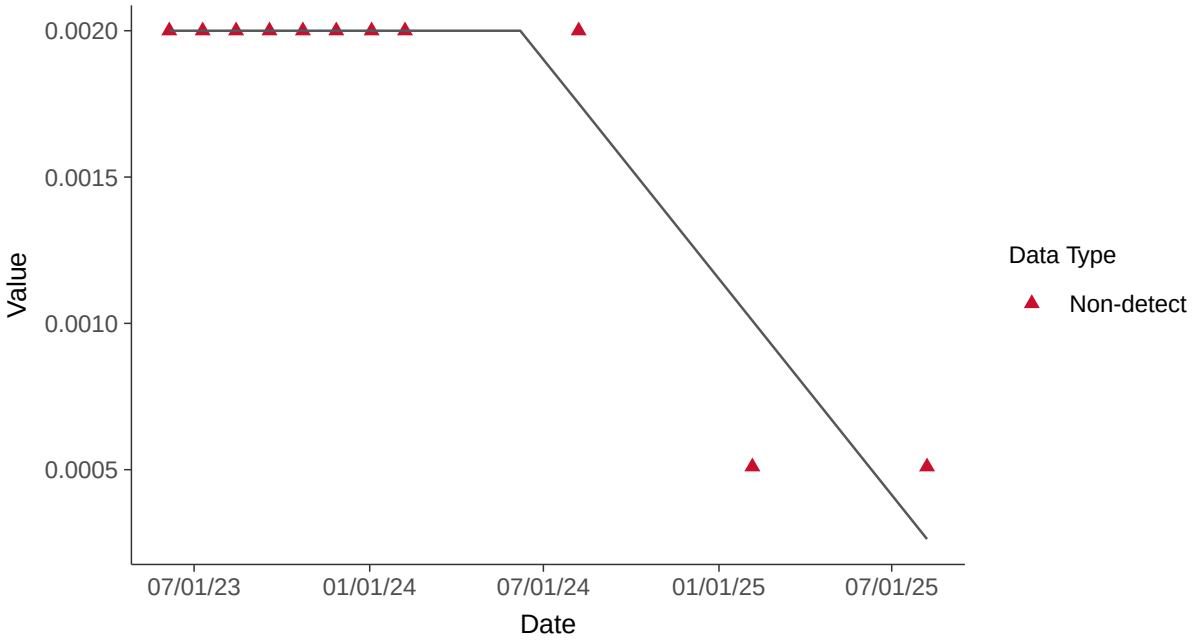
Boxplot by Season

Thallium, MW-100B (mg/l)



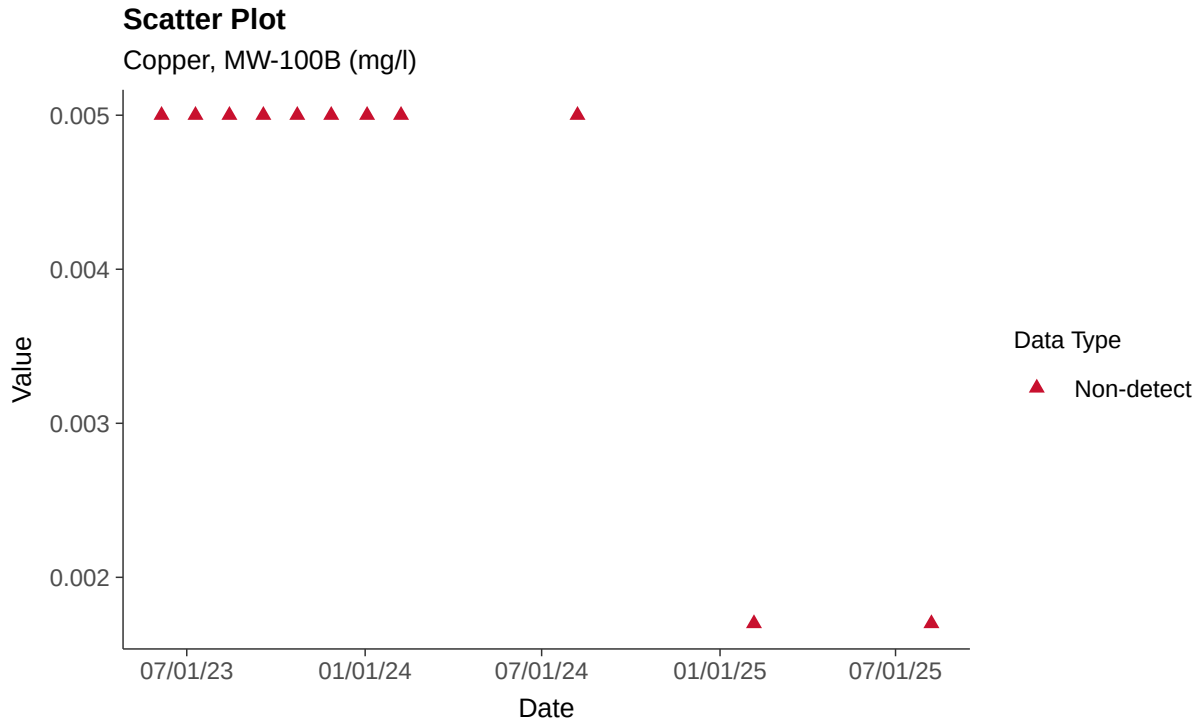
Trend Regression: Piecewise Linear-Linear

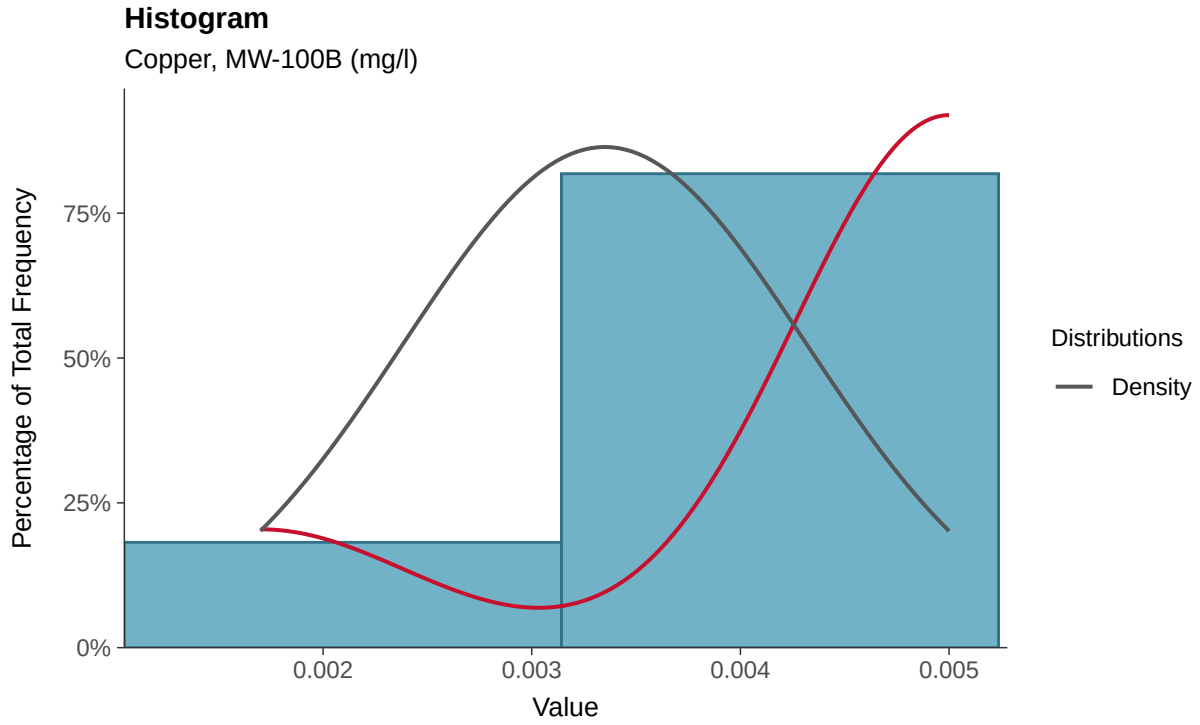
Thallium, MW-100B (mg/l)



Part 115: Copper, MW-100B

ID: 33_5_111



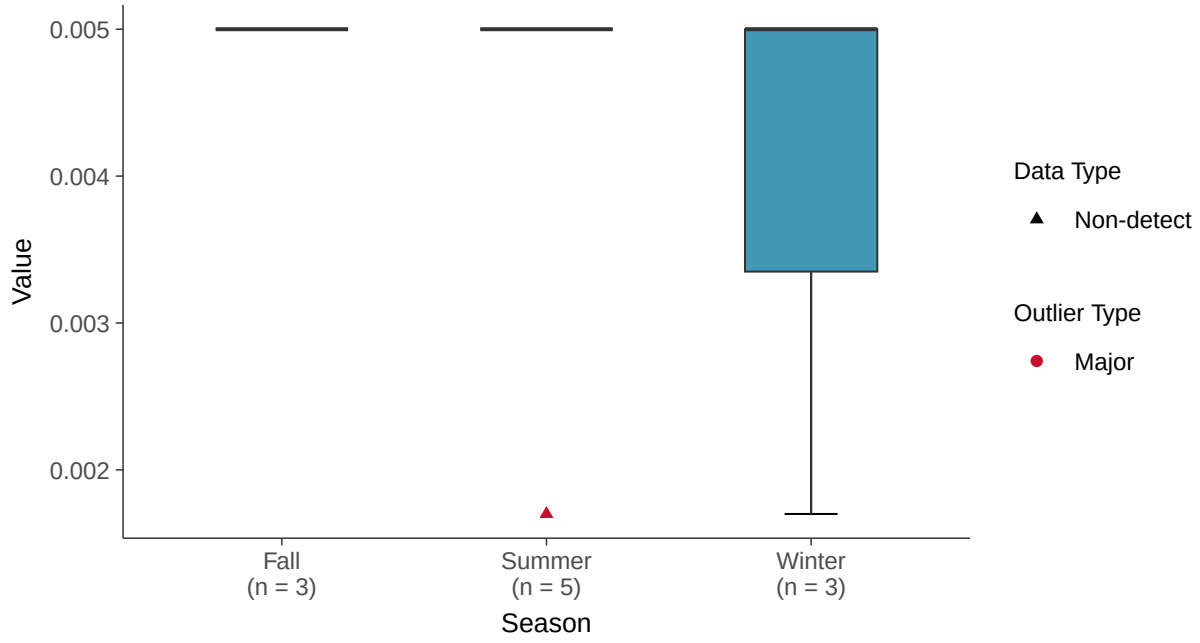


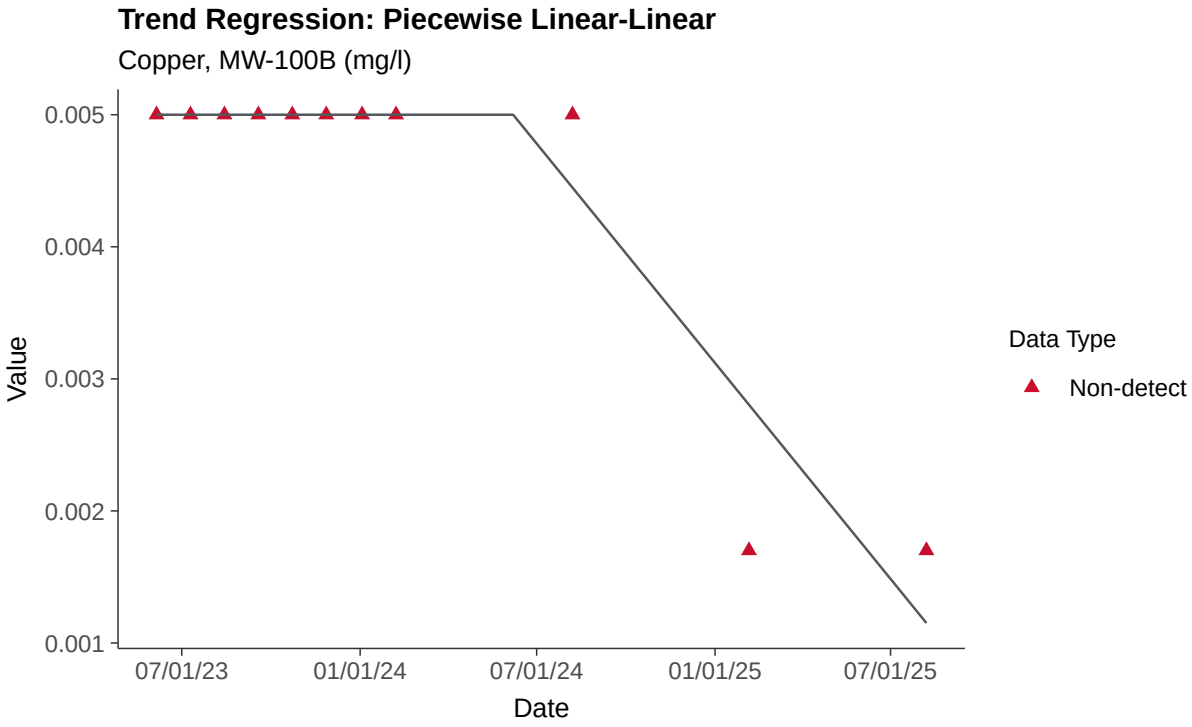
Boxplot

Copper, MW-100B (mg/l)

Boxplot by Season

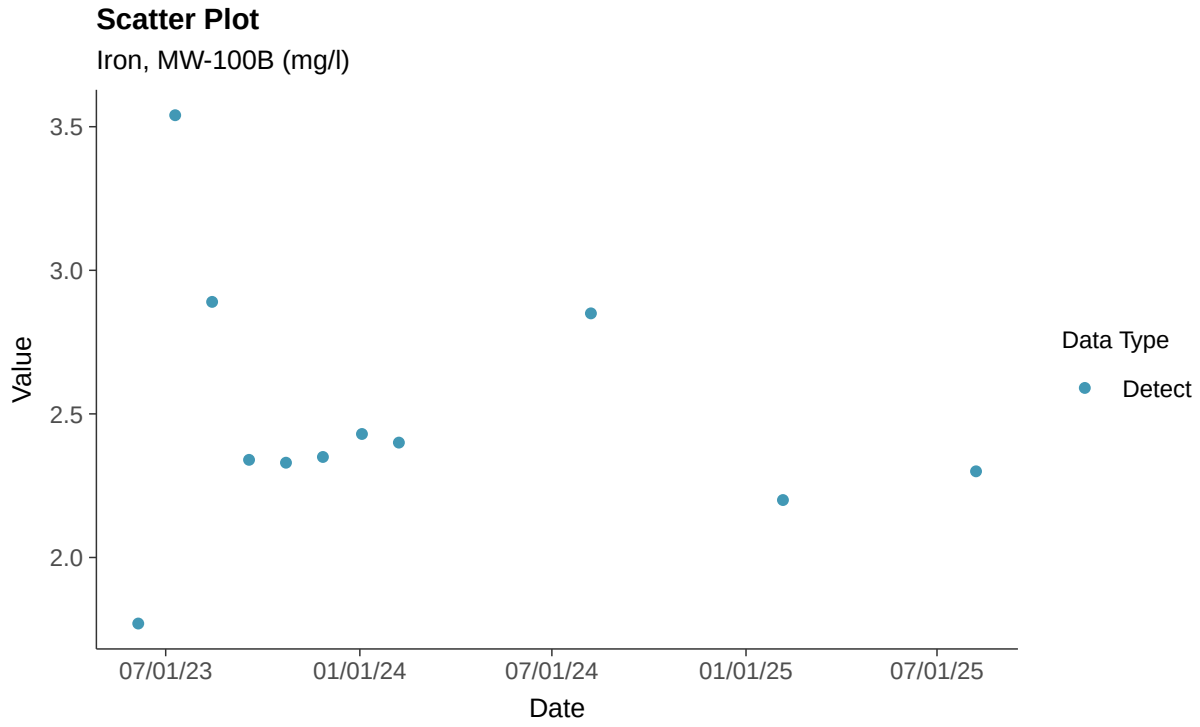
Copper, MW-100B (mg/l)

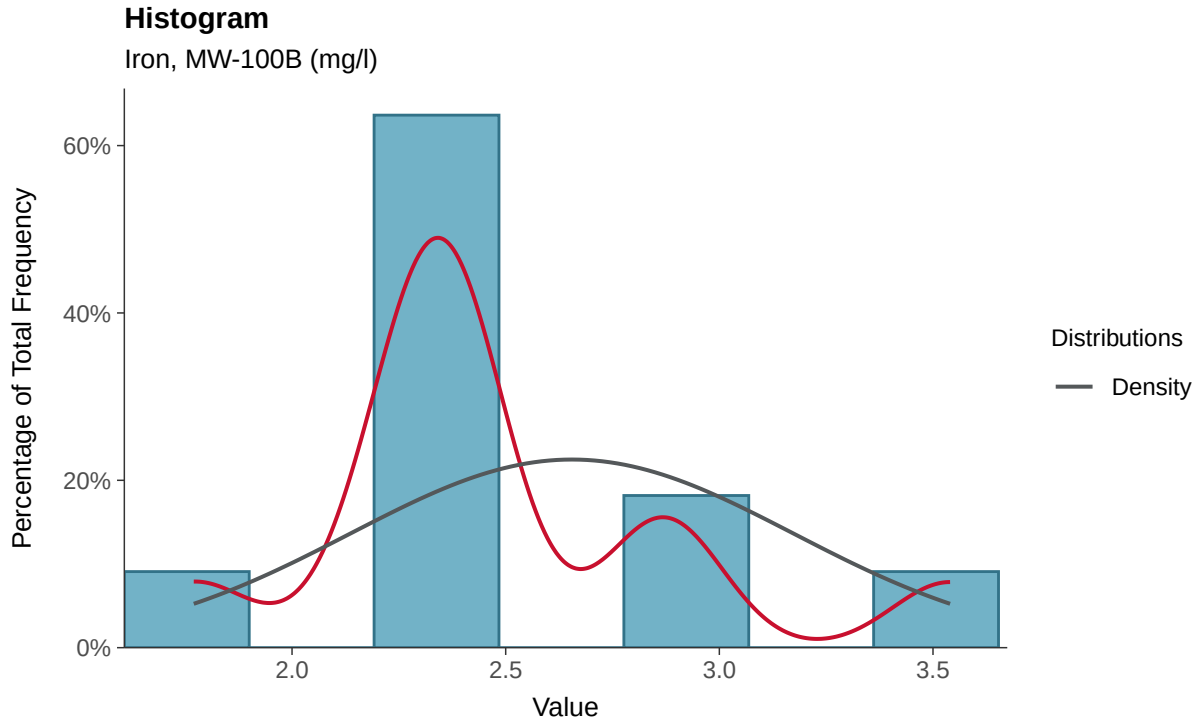



Trend Regression: Piecewise Linear-Linear
Copper, MW-100B (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Iron, MW-100B

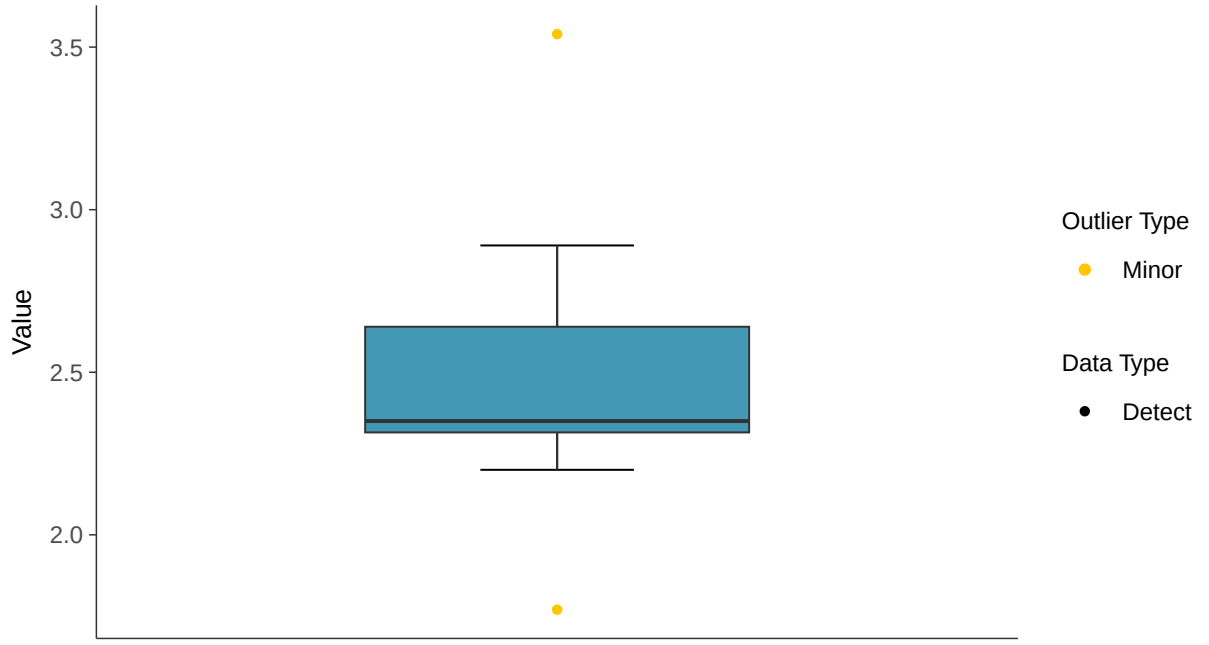
ID: 33_5_114





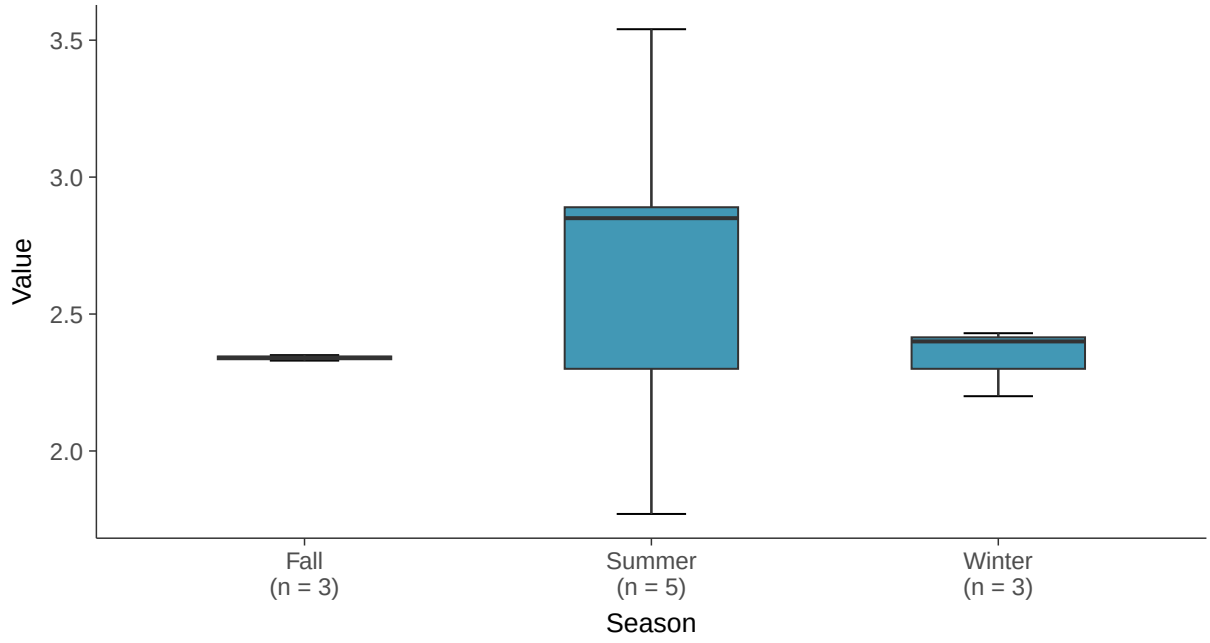
Boxplot

Iron, MW-100B (mg/l)



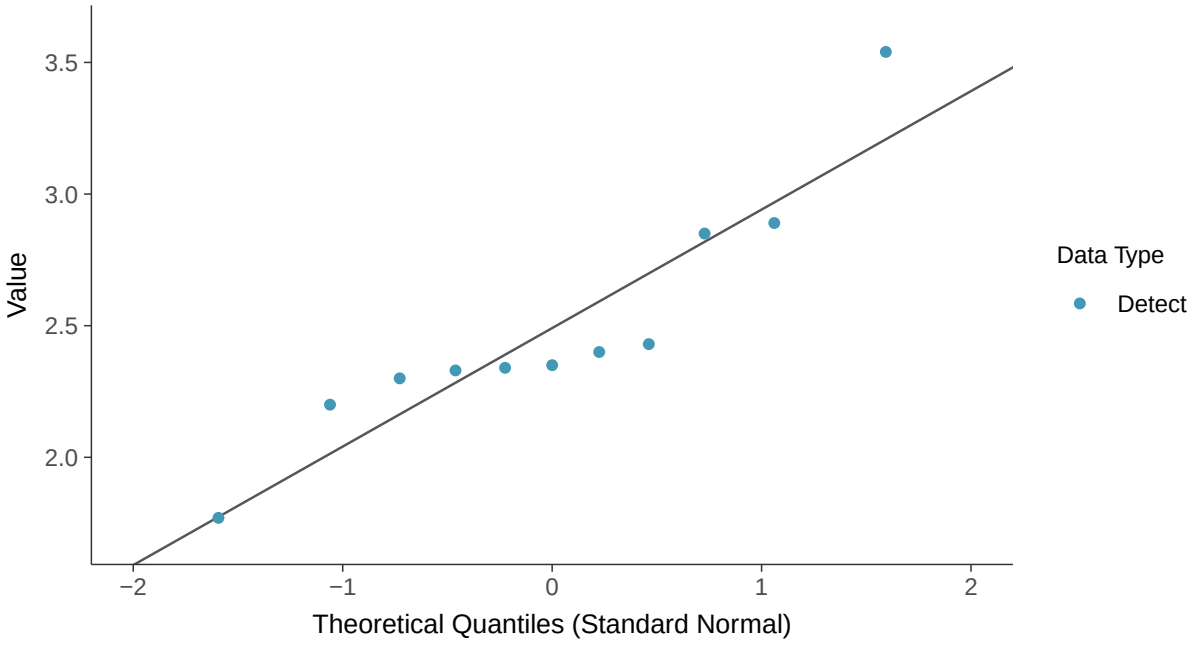
Boxplot by Season

Iron, MW-100B (mg/l)



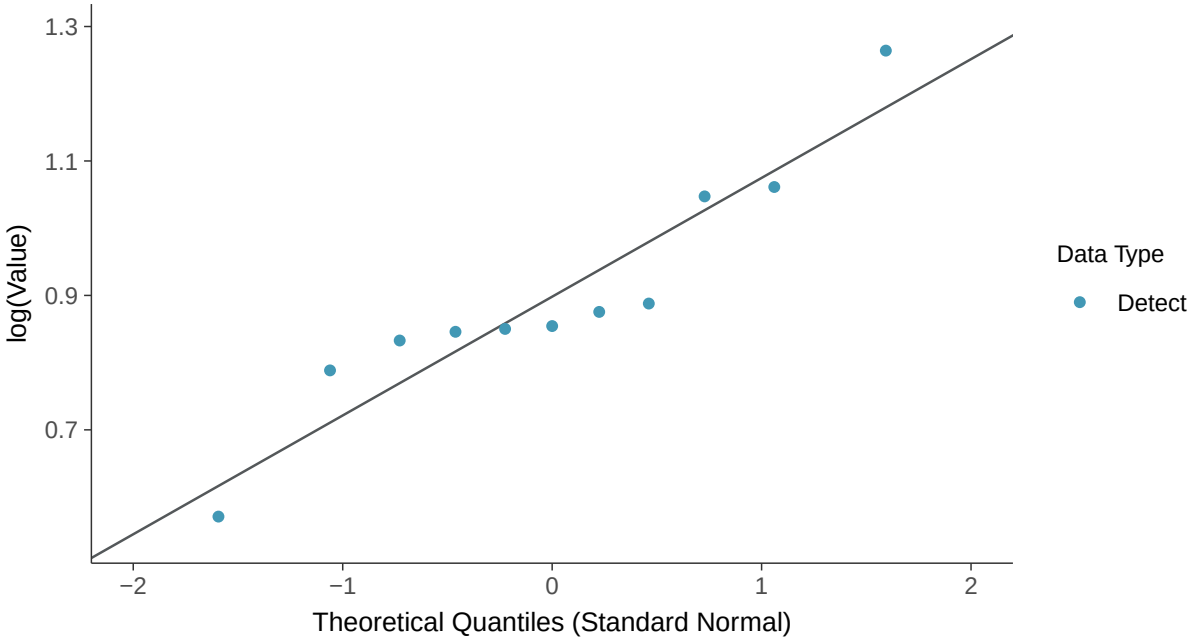
Normal Q-Q plot

Iron, MW-100B (mg/l)



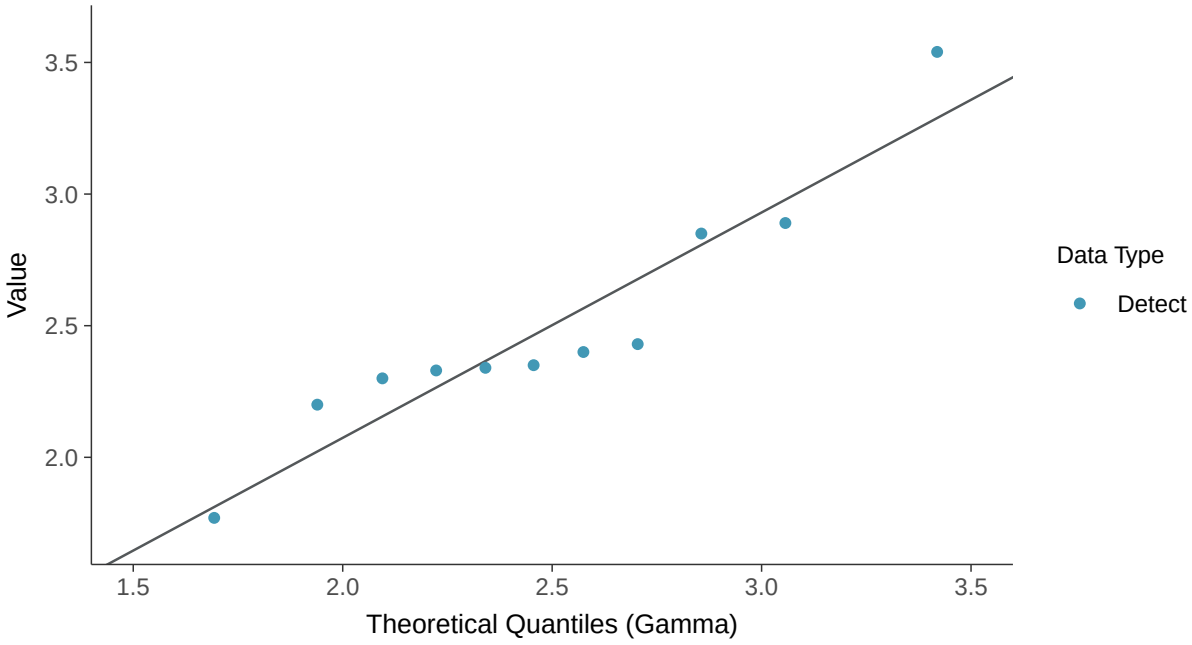
Lognormal Q-Q plot

Iron, MW-100B (mg/l)



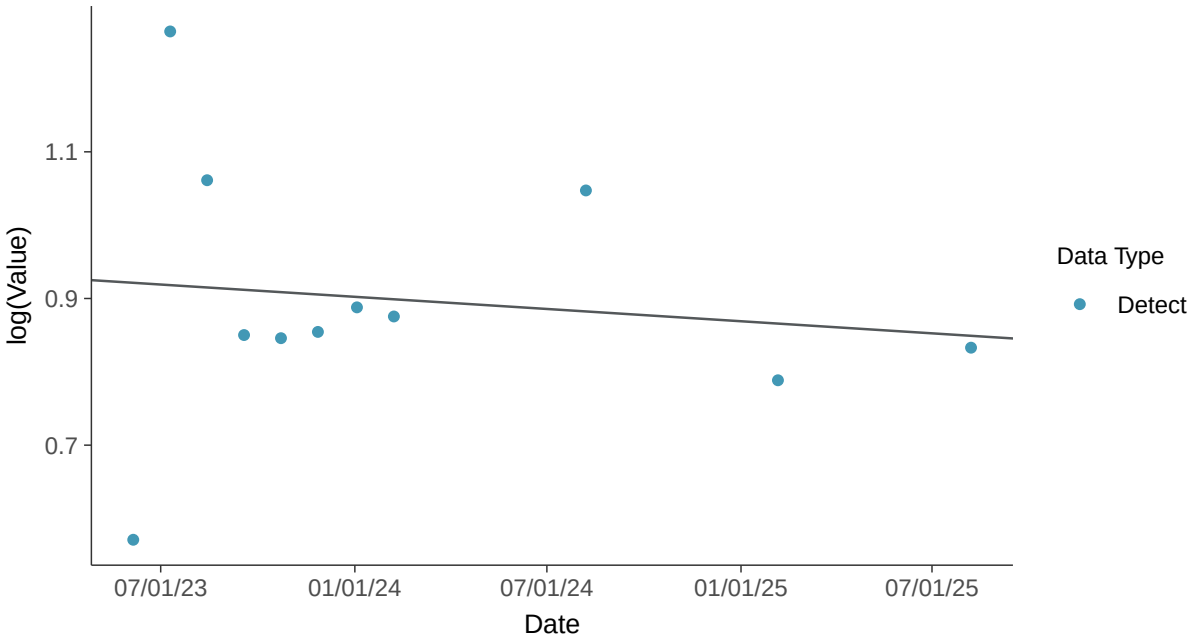
Gamma Q-Q plot

Iron, MW-100B (mg/l)



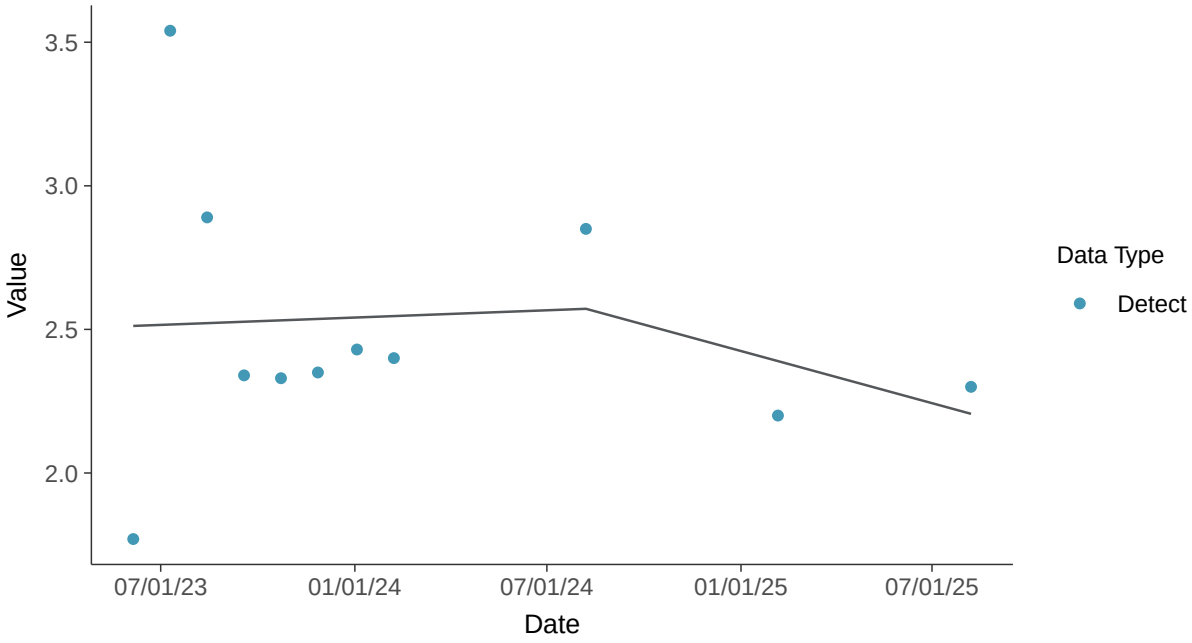
Trend Regression: Lognormal MLE

Iron, MW-100B (mg/l)



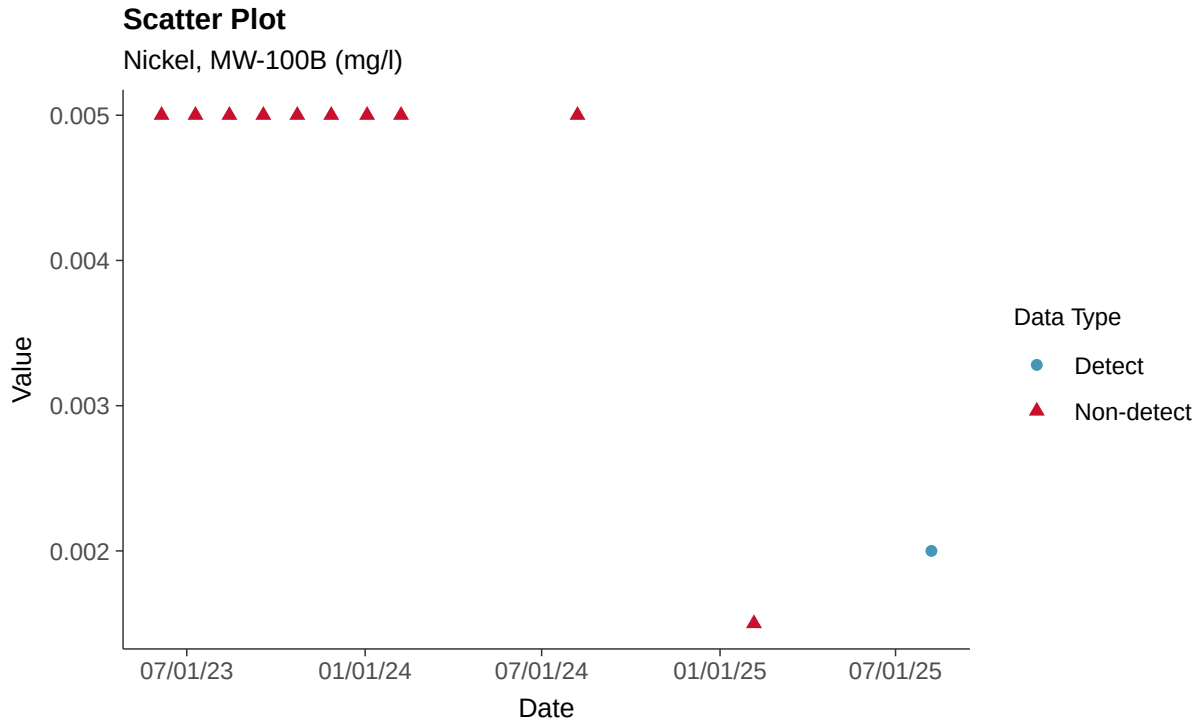
Trend Regression: Piecewise Linear-Linear

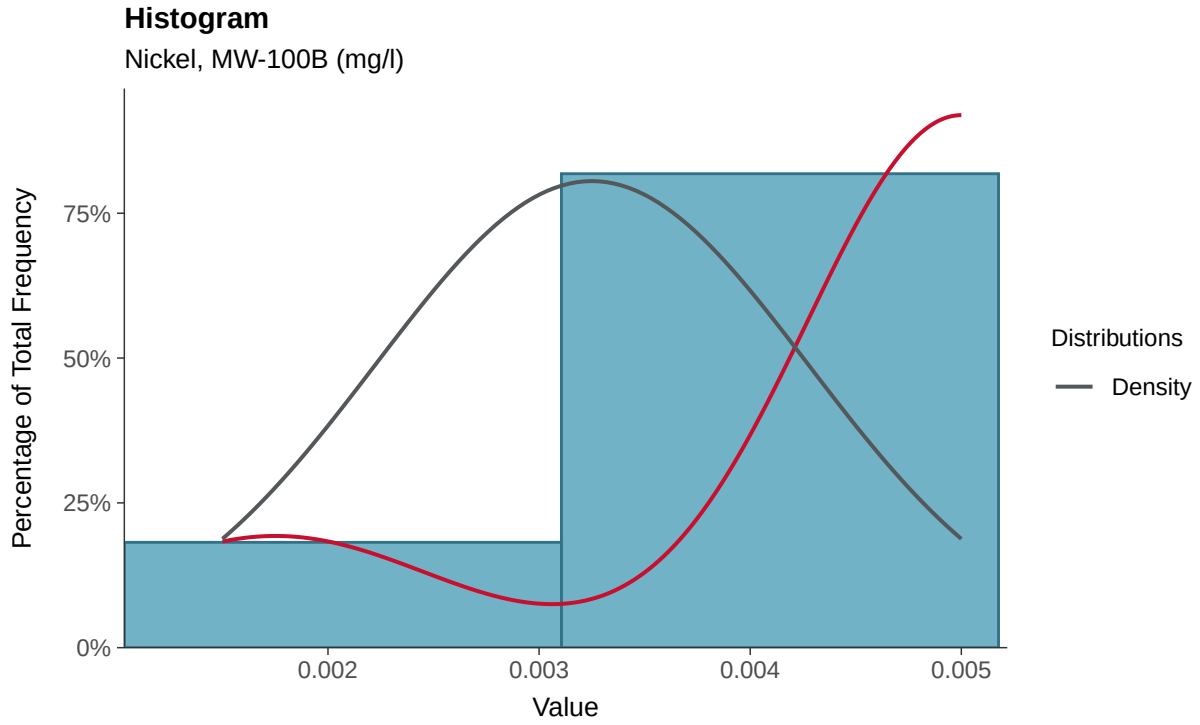
Iron, MW-100B (mg/l)



Part 115: Nickel, MW-100B

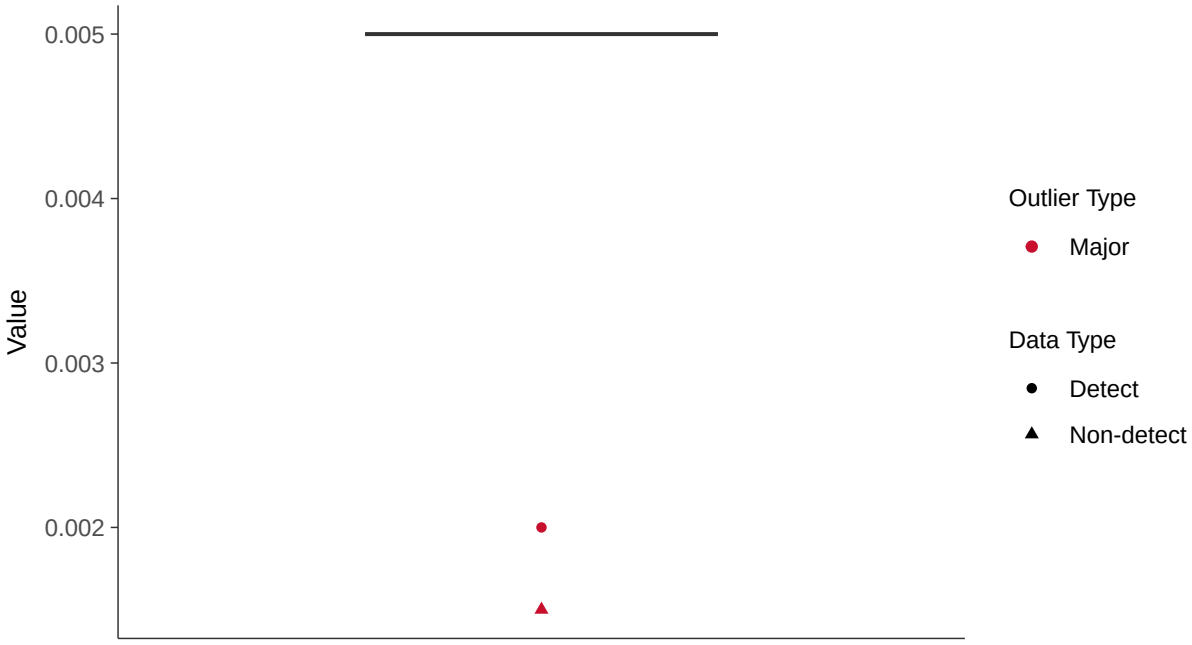
ID: 33_5_119





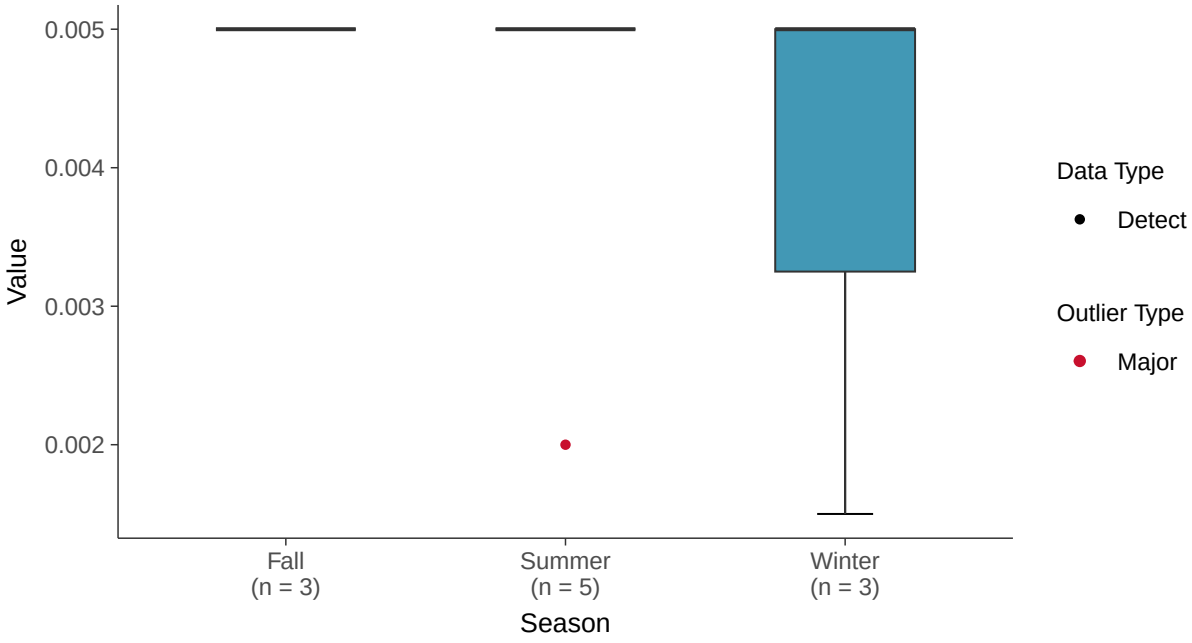
Boxplot

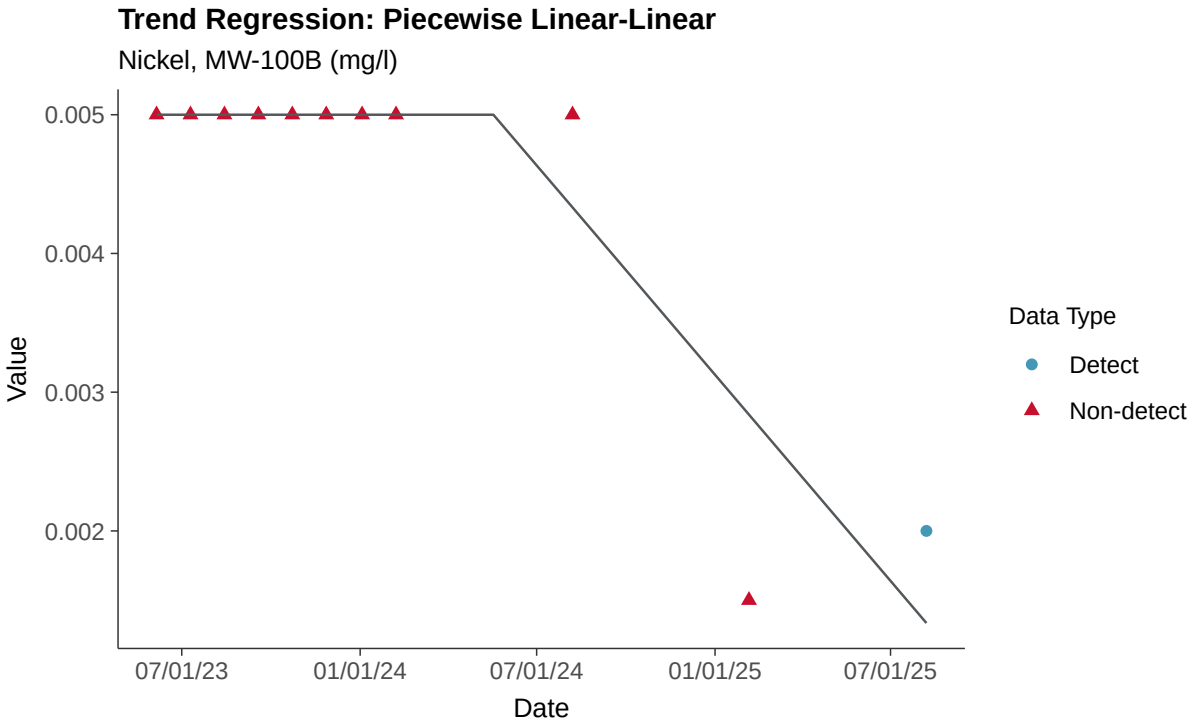
Nickel, MW-100B (mg/l)



Boxplot by Season

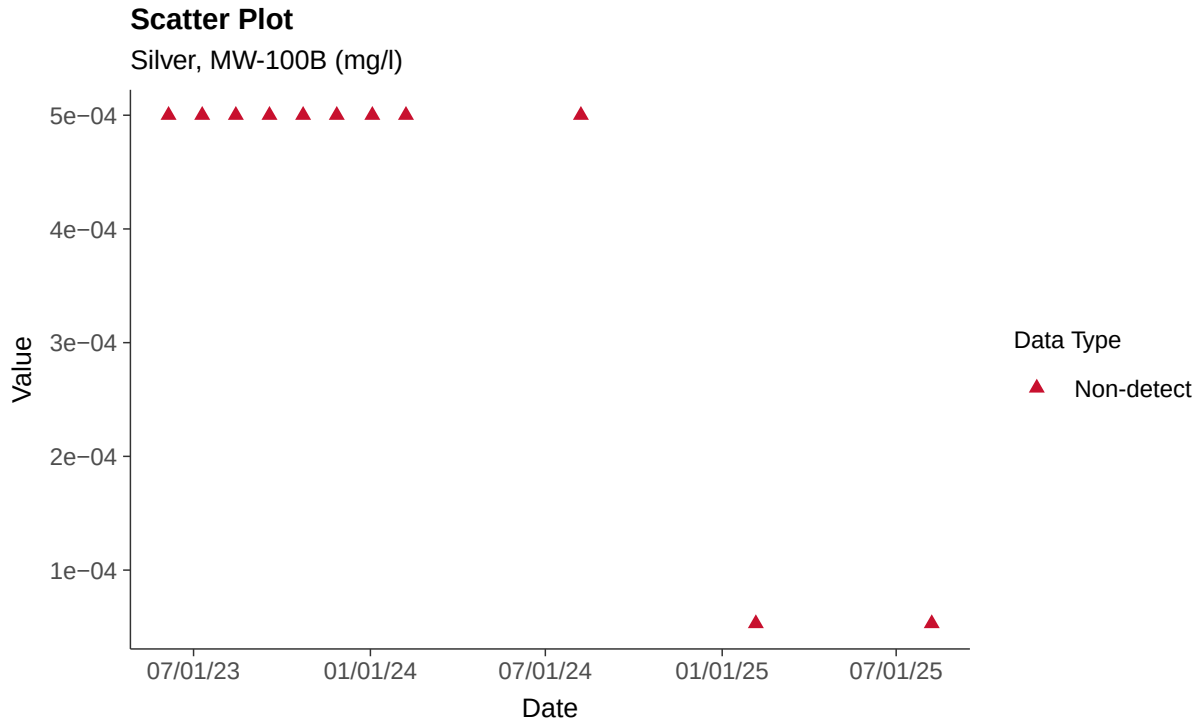
Nickel, MW-100B (mg/l)

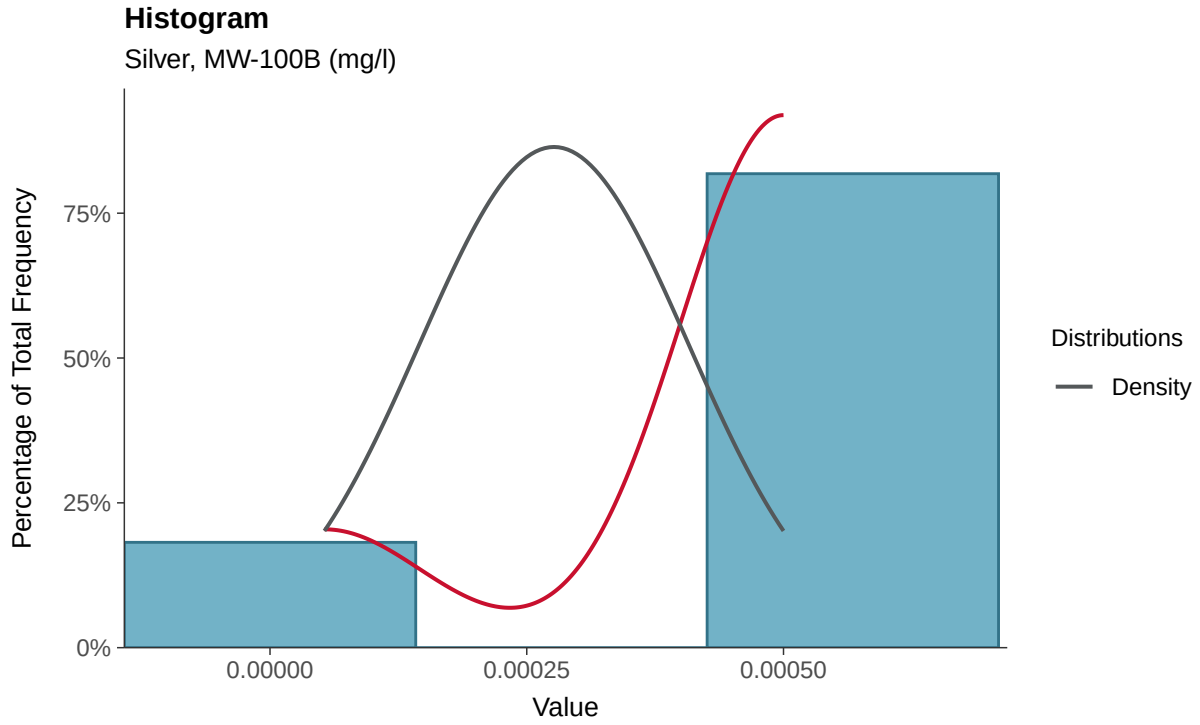



Trend Regression: Piecewise Linear-Linear
Nickel, MW-100B (mg/l)
0.005
0.004
0.003
0.002
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Part 115: Silver, MW-100B

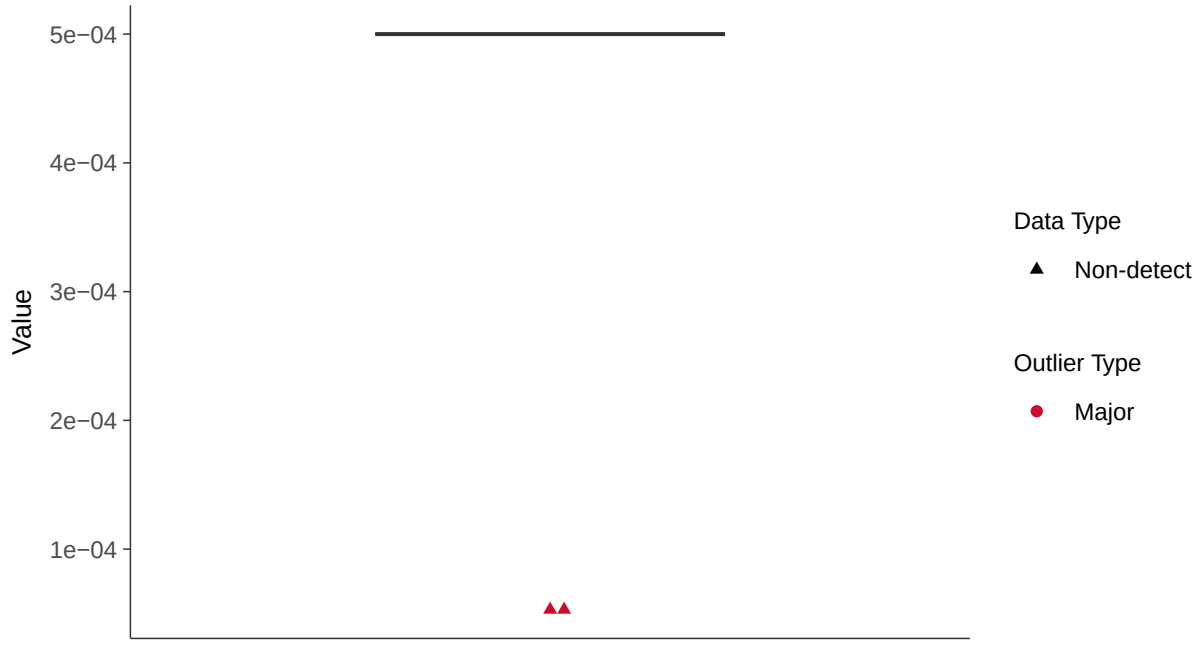
ID: 33_5_123





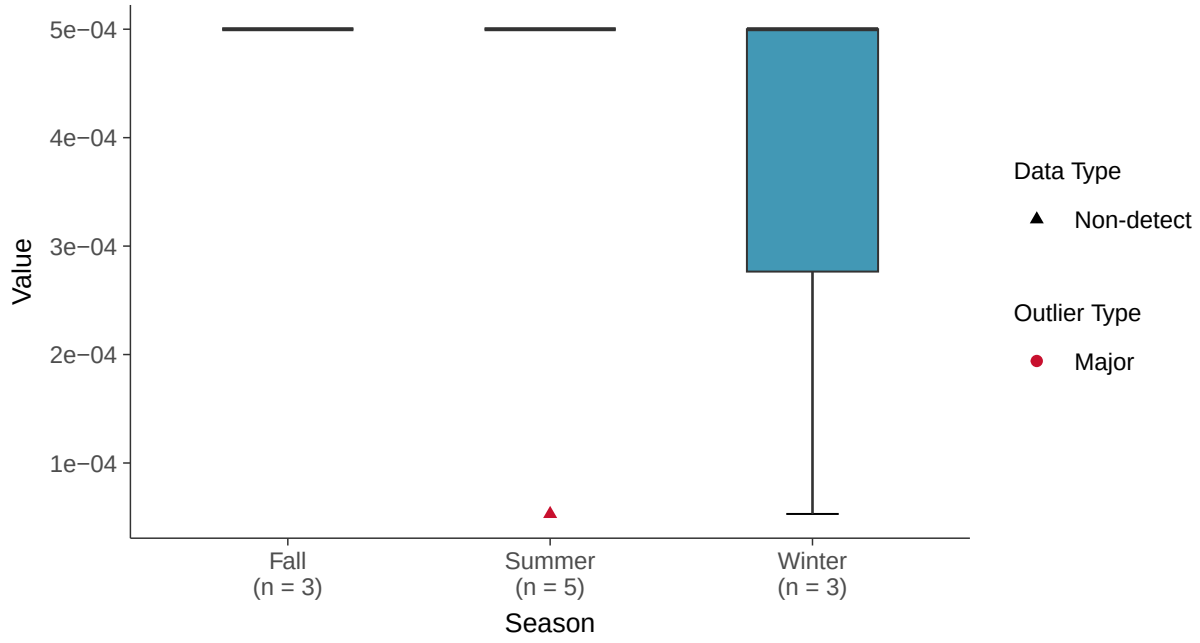
Boxplot

Silver, MW-100B (mg/l)



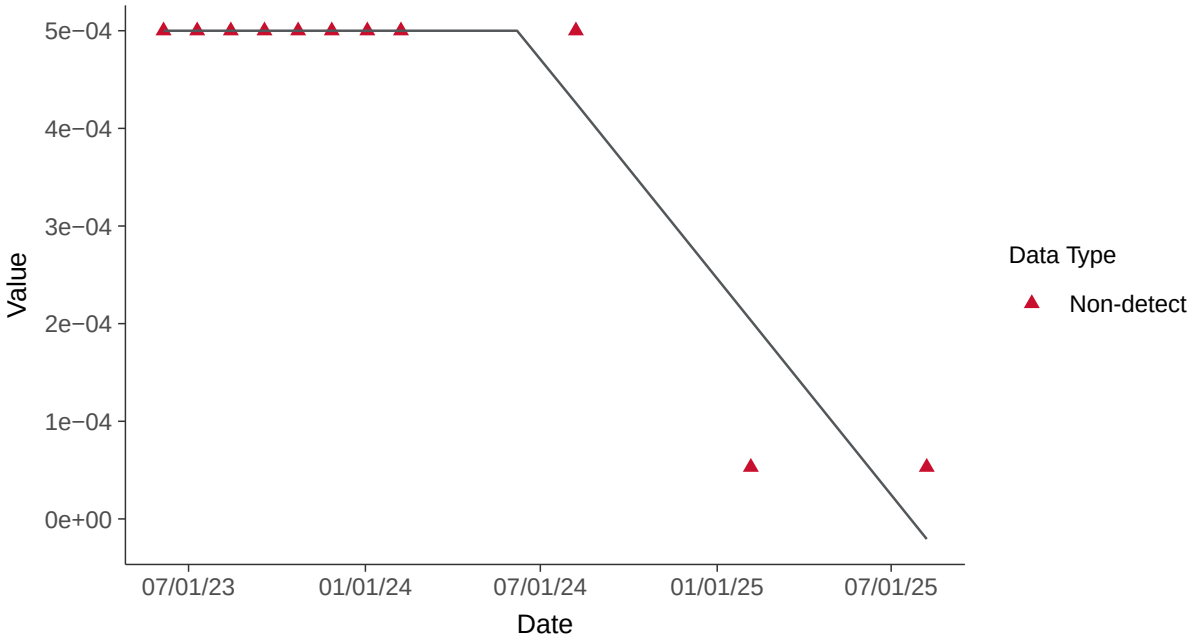
Boxplot by Season

Silver, MW-100B (mg/l)



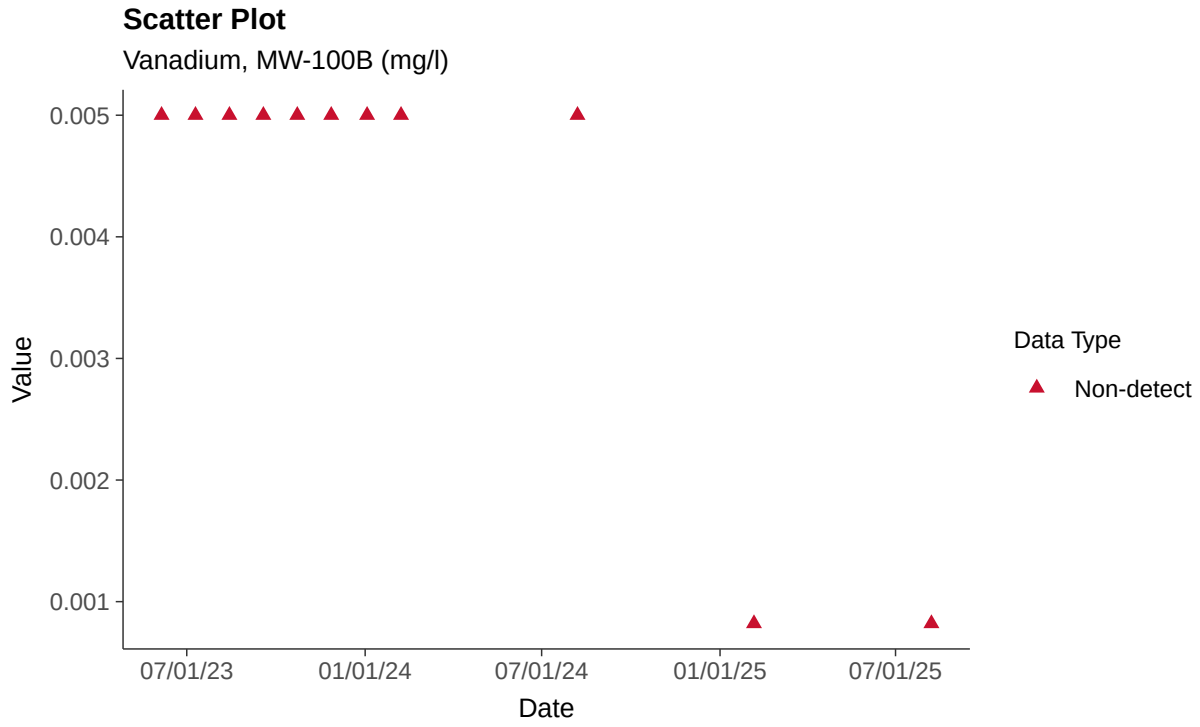
Trend Regression: Piecewise Linear-Linear

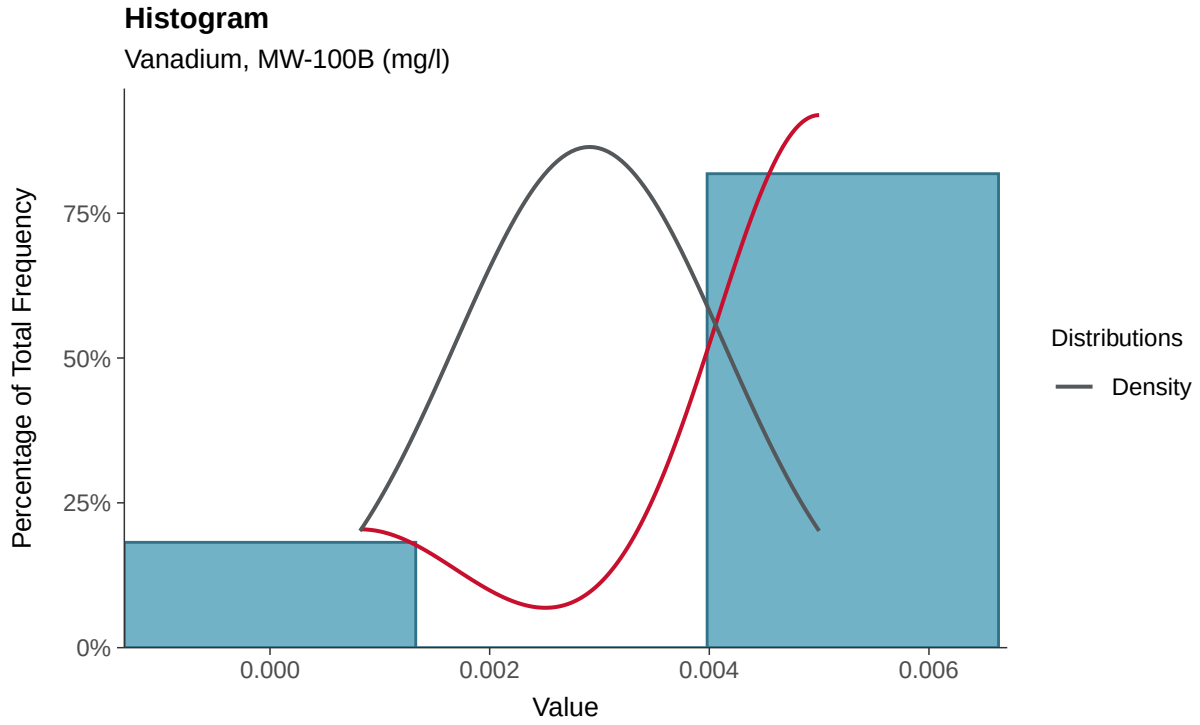
Silver, MW-100B (mg/l)



Part 115: Vanadium, MW-100B

ID: 33_5_128



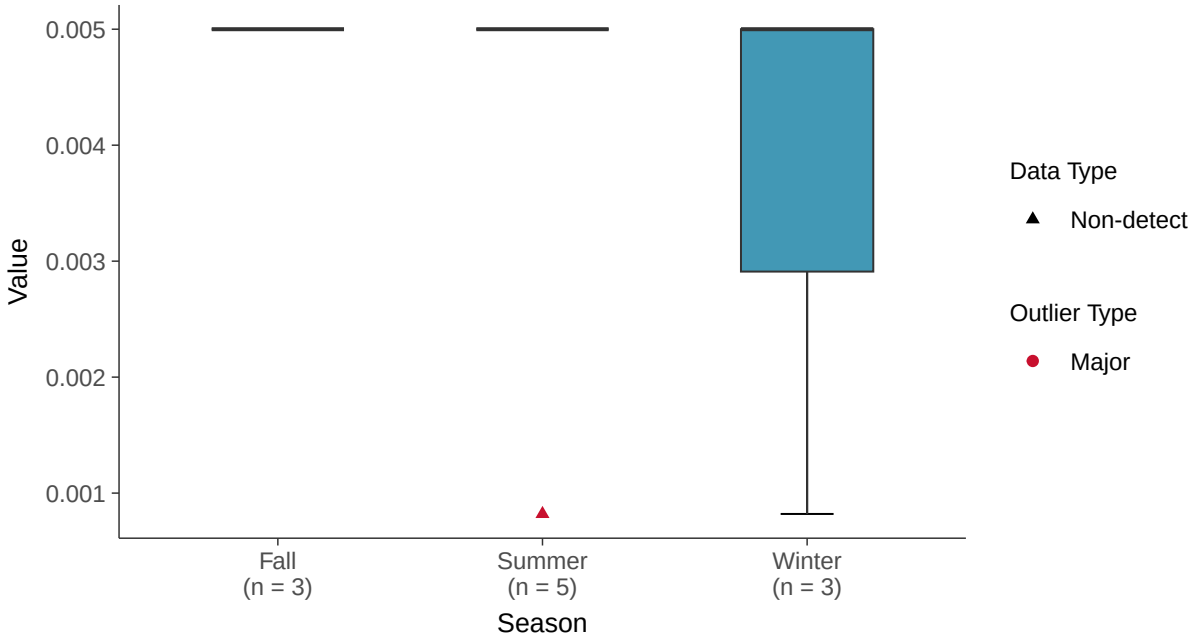


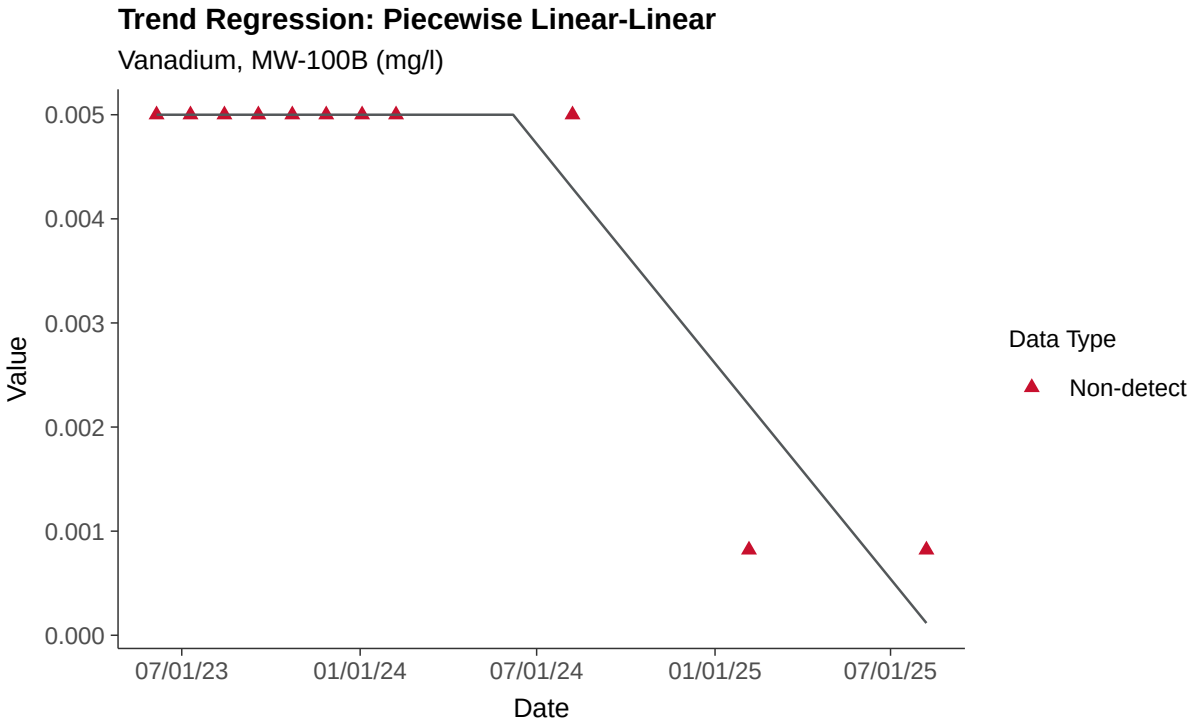
Boxplot

Vanadium, MW-100B (mg/l)

Boxplot by Season

Vanadium, MW-100B (mg/l)



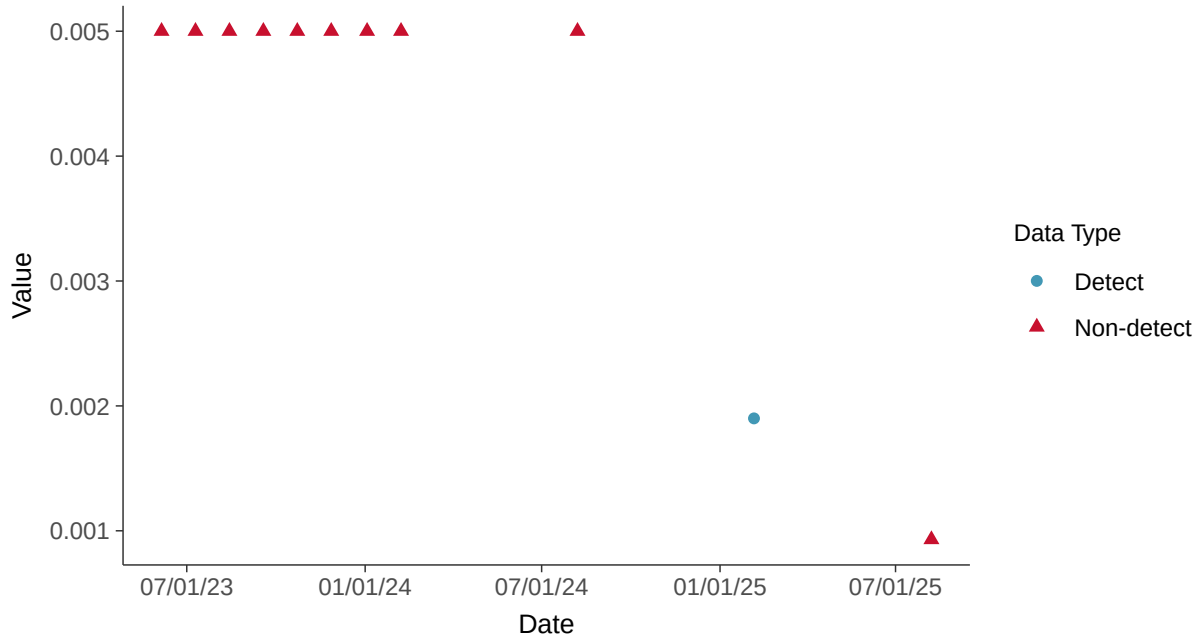

Trend Regression: Piecewise Linear-Linear
Vanadium, MW-100B (mg/l)
0.005
0.004
0.003
0.002
0.001
0.000
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Zinc, MW-100B

ID: 33_5_129

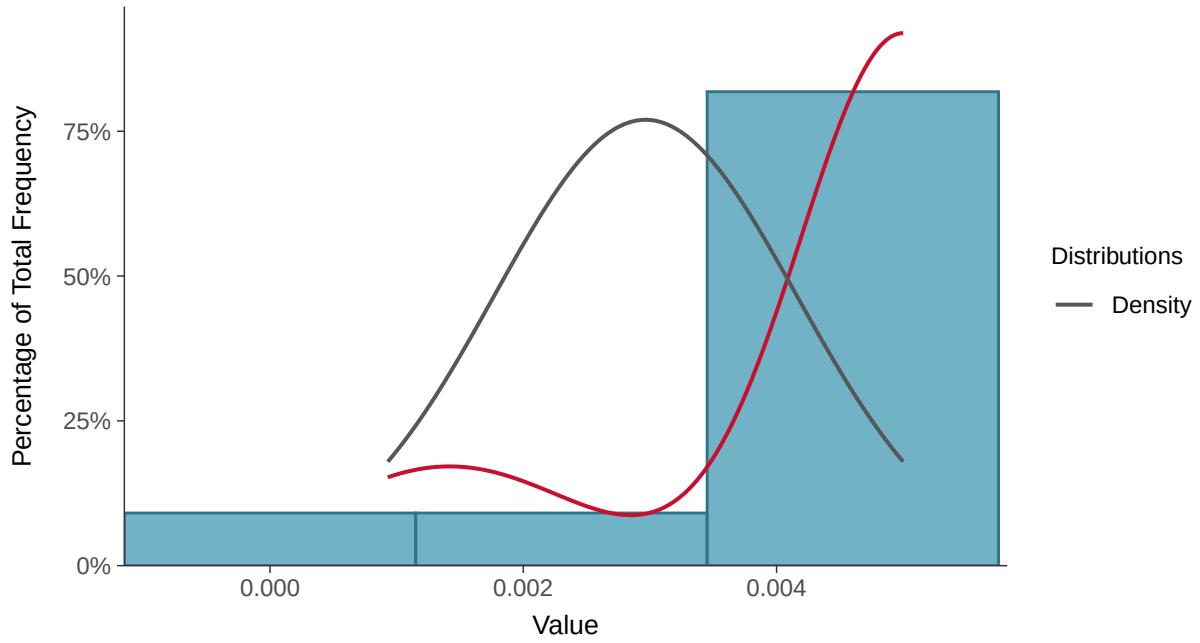
Scatter Plot

Zinc, MW-100B (mg/l)



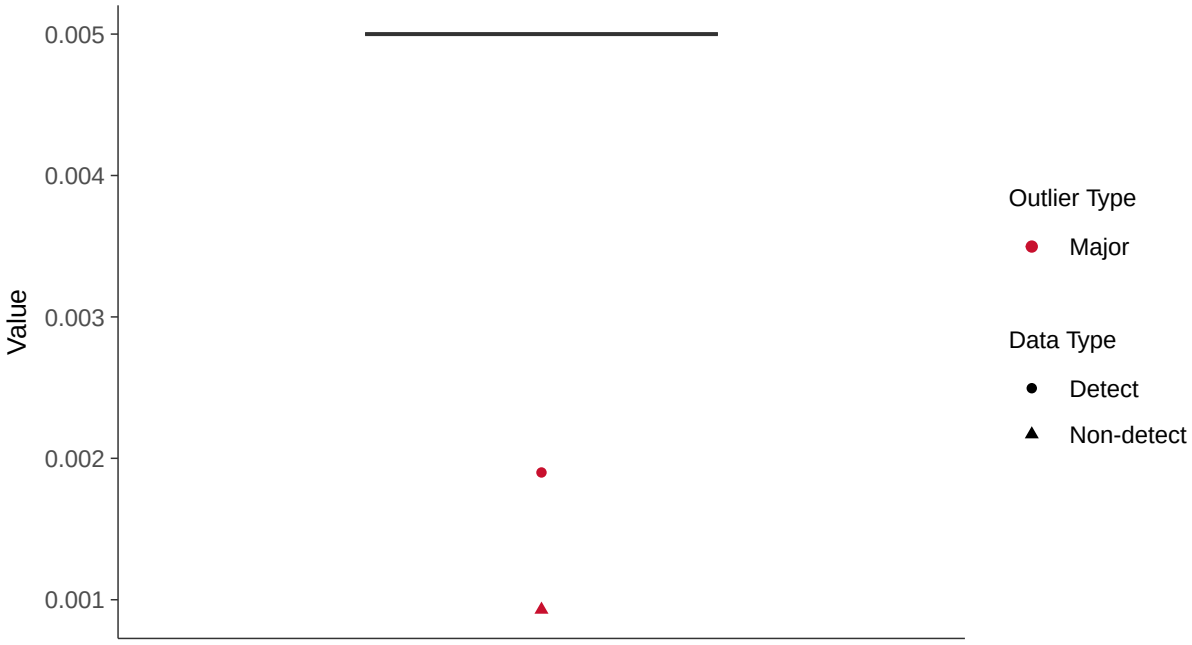
Histogram

Zinc, MW-100B (mg/l)



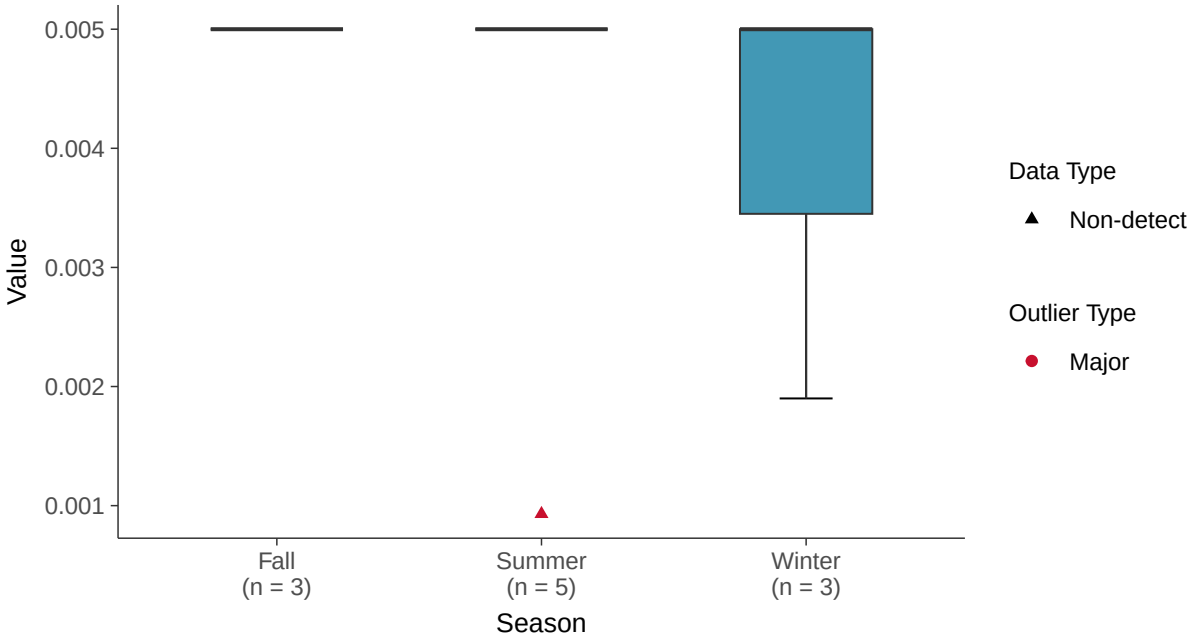
Boxplot

Zinc, MW-100B (mg/l)



Boxplot by Season

Zinc, MW-100B (mg/l)



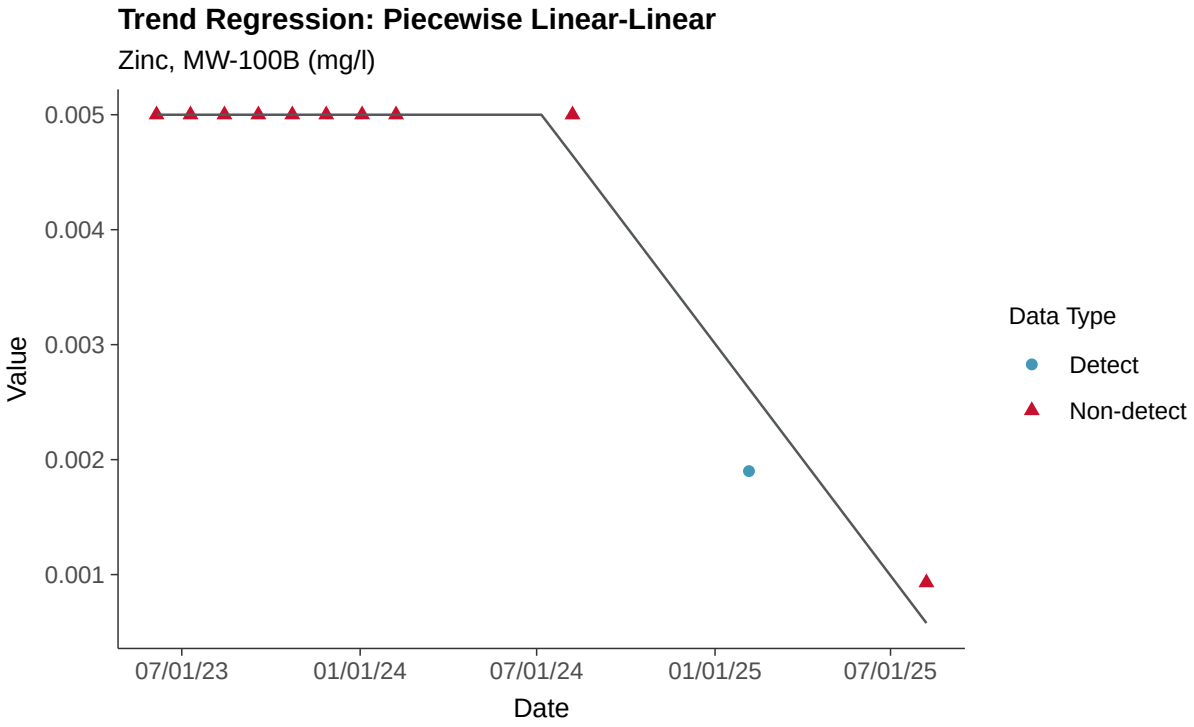

Trend Regression: Piecewise Linear-Linear
Zinc, MW-100B (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Table 1: Summary Statistics, Non-Detects Included

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
13_2_105	MW-2	Appendix III	Boron	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	4.63	4.68	3.30	6.17	0.996	0.215	0.0222
13_2_107	MW-2	Appendix III	Calcium	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Nonparametric	Nonparametric	234	244	190	272	32	0.137	-0.193
13_2_108	MW-2	Appendix III	Chloride	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	79.3	81.3	59.0	94.0	9.39	0.118	-0.552
13_2_112	MW-2	Appendix III	Fluoride	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.901	1.00	0.0520	1.00	0.297	0.330	-2.80
13_2_120	MW-2	Appendix III	pH, Field	su	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	6.77	6.76	6.54	7.08	0.113	0.0166	0.644
13_2_124	MW-2	Appendix III	Sulfate	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	406	392	220	580	128	0.314	-0.120
13_2_126	MW-2	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	1174	1180	860	1430	187	0.159	-0.165
13_3_101	MW-2	Appendix IV	Antimony	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.00453	0.00500	0.000570	0.00500	0.00140	0.308	-2.80
13_3_102	MW-2	Appendix IV	Arsenic	mg/l	19	14	74%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Nonparametric	0.00204	0.00200	0.000750	0.00400	0.000638	0.312	1.27
13_3_103	MW-2	Appendix IV	Barium	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0404	0.0410	0.0340	0.0480	0.00377	0.0935	-0.0431
13_3_104	MW-2	Appendix IV	Beryllium	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.000923	0.00100	0.000270	0.00100	0.000230	0.249	-2.80
13_3_106	MW-2	Appendix IV	Cadmium	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.000459	0.000500	0.0000990	0.000500	0.000122	0.265	-2.81
13_3_109	MW-2	Appendix IV	Chromium	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.00460	0.00500	0.00120	0.00500	0.00120	0.260	-2.80
13_3_110	MW-2	Appendix IV	Cobalt	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.00487	0.00500	0.00360	0.00500	0.000397	0.0816	-2.88
13_3_113	MW-2	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.901	1.00	0.0520	1.00	0.297	0.330	-2.80
13_3_115	MW-2	Appendix IV	Lead	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.00273	0.00300	0.000450	0.00300	0.000804	0.294	-2.80
13_3_116	MW-2	Appendix IV	Lithium	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0534	0.0550	0.0380	0.0670	0.00918	0.172	-0.245
13_3_117	MW-2	Appendix IV	Mercury	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.000193	0.000200	0.000130	0.000200	0.0000221	0.115	-2.80
13_3_118	MW-2	Appendix IV	Molybdenum	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0108	0.0110	0.00640	0.0150	0.00221	0.206	-0.190
13_3_121	MW-2	Appendix IV	Radium-226+228	pci/l	19	2	11%	2020-04-28 to 2025-08-06	Normal	Normal	0.925	0.745	0	3.25	0.822	0.888	1.41
13_3_122	MW-2	Appendix IV	Selenium	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.00457	0.00500	0.000890	0.00500	0.00130	0.284	-2.80
13_3_125	MW-2	Appendix IV	Thallium	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.00184	0.00200	0.000510	0.00200	0.000470	0.255	-2.80
13_5_111	MW-2	Part 115	Copper	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.00465	0.00500	0.00170	0.00500	0.00104	0.224	-2.80
13_5_114	MW-2	Part 115	Iron	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal	Gamma	0.677	0.550	0.220	1.93	0.393	0.581	2.05
13_5_119	MW-2	Part 115	Nickel	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Lognormal; Normal	Normal	0.0213	0.0220	0.0120	0.0270	0.00504	0.237	-0.382
13_5_123	MW-2	Part 115	Silver	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.000453	0.000500	0.0000530	0.000500	0.000141	0.311	-2.80
13_5_128	MW-2	Part 115	Vanadium	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.00456	0.00500	0.000820	0.00500	0.00132	0.289	-2.80
13_5_129	MW-2	Part 115	Zinc	mg/l	19	14	74%	2020-04-28 to 2025-08-06	Gamma; Lognormal	Nonparametric	0.00679	0.00500	0.00190	0.0410	0.00837	1.23	4.21
14_2_105	MW-3	Appendix III	Boron	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	5.69	5.65	5.34	6.16	0.241	0.0424	0.545
14_2_107	MW-3	Appendix III	Calcium	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	242	246	220	257	13.5	0.0558	-0.682
14_2_108	MW-3	Appendix III	Chloride	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	96.5	97.0	89.0	103	5.11	0.0530	-0.204
14_2_112	MW-3	Appendix III	Fluoride	mg/l	10	8	80%	2021-05-04 to 2025-08-06		Nonparametric	0.835	1.00	0.160	1.00	0.348	0.417	-1.78
14_2_120	MW-3	Appendix III	pH, Field	su	10	0	0%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	7.24	7.24	7.15	7.38	0.0733	0.0101	0.625
14_2_124	MW-3	Appendix III	Sulfate	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	696	694	640	732	28.2	0.0405	-0.559
14_2_126	MW-3	Appendix III	Total Dissolved Solids	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Nonparametric	Nonparametric	1396	1440	1100	1500	134	0.0961	-1.76
14_3_101	MW-3	Appendix IV	Antimony	mg/l	10	10	100%	2021-05-04 to 2025-08-06		Nonparametric	0.00411	0.00500	0.000570	0.00500	0.00187	0.454	-1.78
14_3_102	MW-3	Appendix IV	Arsenic	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Nonparametric	Nonparametric	0.00337	0.00300	0.00260	0.00600	0.000989	0.293	2.54
14_3_103	MW-3	Appendix IV	Barium	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0185	0.0190	0.0160	0.0210	0.00190	0.103	-0.0607
14_3_104	MW-3	Appendix IV	Beryllium	mg/l	10	10	100%	2021-05-04 to 2025-08-06		Nonparametric	0.000854	0.00100	0.000270	0.00100	0.000308	0.360	-1.78
14_3_106	MW-3	Appendix IV	Cadmium	mg/l	10	10	100%	2021-05-04 to 2025-08-06		Nonparametric	0.000415	0.000500	0.0000770	0.000500	0.000178	0.429	-1.78
14_3_109	MW-3	Appendix IV	Chromium	mg/l	10	10	100%	2021-05-04 to 2025-08-06		Nonparametric	0.00424	0.00500	0.00120	0.00500	0.00160	0.378	-1.78
14_3_110	MW-3	Appendix IV	Cobalt	mg/l	10	8	80%	2021-05-04 to 2025-08-06		Nonparametric	0.00412	0.00500	0.000490	0.00500	0.00186	0.452	-1.78

(Table continues on next page)

[a] Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
14_3_113	MW-3	Appendix IV	Fluoride (App IV)	mg/l	10	8	80%	2021-05-04 to 2025-08-06		Nonparametric	0.835	1.00	0.160	1.00	0.348	0.417	-1.78
14_3_115	MW-3	Appendix IV	Lead	mg/l	10	9	90%	2021-05-04 to 2025-08-06		Nonparametric	0.00251	0.00300	0.000450	0.00300	0.00103	0.410	-1.79
14_3_116	MW-3	Appendix IV	Lithium	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0814	0.0810	0.0750	0.0910	0.00523	0.0643	0.444
14_3_117	MW-3	Appendix IV	Mercury	mg/l	10	10	100%	2021-05-04 to 2025-08-06		Nonparametric	0.000186	0.000200	0.000130	0.000200	0.0000295	0.159	-1.78
14_3_118	MW-3	Appendix IV	Molybdenum	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.162	0.162	0.150	0.182	0.0107	0.0657	0.702
14_3_121	MW-3	Appendix IV	Radium-226+228	pci/l	10	2	20%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	1.35	1.07	0.412	2.92	0.853	0.630	0.919
14_3_122	MW-3	Appendix IV	Selenium	mg/l	10	10	100%	2021-05-04 to 2025-08-06		Nonparametric	0.00418	0.00500	0.000890	0.00500	0.00173	0.415	-1.78
14_3_125	MW-3	Appendix IV	Thallium	mg/l	10	10	100%	2021-05-04 to 2025-08-06		Nonparametric	0.00170	0.00200	0.000510	0.00200	0.000628	0.369	-1.78
14_5_111	MW-3	Part 115	Copper	mg/l	10	9	90%	2021-05-04 to 2025-08-06		Nonparametric	0.00446	0.00500	0.00170	0.00500	0.00117	0.263	-2.03
14_5_114	MW-3	Part 115	Iron	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	1.79	1.82	1.40	2.05	0.228	0.127	-0.464
14_5_119	MW-3	Part 115	Nickel	mg/l	10	8	80%	2021-05-04 to 2025-08-06		Nonparametric	0.00454	0.00500	0.00220	0.00500	0.000998	0.220	-2.02
14_5_123	MW-3	Part 115	Silver	mg/l	10	10	100%	2021-05-04 to 2025-08-06		Nonparametric	0.000411	0.000500	0.0000530	0.000500	0.000188	0.459	-1.78
14_5_128	MW-3	Part 115	Vanadium	mg/l	10	10	100%	2021-05-04 to 2025-08-06		Nonparametric	0.00416	0.00500	0.000820	0.00500	0.00176	0.423	-1.78
14_5_129	MW-3	Part 115	Zinc	mg/l	10	8	80%	2021-05-04 to 2025-08-06		Nonparametric	0.00441	0.00500	0.00180	0.00500	0.00125	0.283	-1.82
15_2_105	MW-5	Appendix III	Boron	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Normal	Normal	3.96	4.38	0.370	5.75	1.26	0.318	-1.32
15_2_107	MW-5	Appendix III	Calcium	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	217	226	70.1	320	69.3	0.319	-0.378
15_2_108	MW-5	Appendix III	Chloride	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Nonparametric	Nonparametric	61.4	66.0	34.0	82.0	17.3	0.281	-0.483
15_2_112	MW-5	Appendix III	Fluoride	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.908	1.00	0.110	1.00	0.276	0.304	-2.80
15_2_120	MW-5	Appendix III	pH, Field	su	19	0	0%	2020-04-28 to 2025-08-06	Nonparametric	Nonparametric	7.19	7.27	6.40	7.40	0.246	0.0342	-2.42
15_2_124	MW-5	Appendix III	Sulfate	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	583	586	186	1080	278	0.477	0.169
15_2_126	MW-5	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	1218	1225	540	2020	443	0.364	0.0856
15_3_101	MW-5	Appendix IV	Antimony	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.00453	0.00500	0.000570	0.00500	0.00140	0.308	-2.80
15_3_102	MW-5	Appendix IV	Arsenic	mg/l	19	12	63%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Nonparametric	0.00245	0.00200	0.000750	0.00700	0.00145	0.592	2.12
15_3_103	MW-5	Appendix IV	Barium	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0449	0.0430	0.0330	0.0640	0.00785	0.175	1.00
15_3_104	MW-5	Appendix IV	Beryllium	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.000923	0.00100	0.000270	0.00100	0.000230	0.249	-2.80
15_3_106	MW-5	Appendix IV	Cadmium	mg/l	19	18	95%	2020-04-28 to 2025-08-06		Nonparametric	0.000456	0.000500	0.0000770	0.000500	0.000131	0.287	-2.80
15_3_109	MW-5	Appendix IV	Chromium	mg/l	19	16	84%	2020-04-28 to 2025-08-06		Nonparametric	0.00498	0.00500	0.00120	0.0100	0.00177	0.355	0.392
15_3_110	MW-5	Appendix IV	Cobalt	mg/l	19	16	84%	2020-04-28 to 2025-08-06		Nonparametric	0.00458	0.00500	0.000310	0.00600	0.00147	0.321	-2.66
15_3_113	MW-5	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.908	1.00	0.110	1.00	0.276	0.304	-2.80
15_3_115	MW-5	Appendix IV	Lead	mg/l	19	14	74%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Nonparametric	0.00343	0.00300	0.000450	0.0140	0.00272	0.794	3.50
15_3_116	MW-5	Appendix IV	Lithium	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Normal	Normal	0.0688	0.0730	0.0160	0.0910	0.0179	0.260	-1.35
15_3_117	MW-5	Appendix IV	Mercury	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.000193	0.000200	0.000130	0.000200	0.0000221	0.115	-2.80
15_3_118	MW-5	Appendix IV	Molybdenum	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Normal	Normal	0.0567	0.0540	0.0100	0.0960	0.0202	0.356	-0.215
15_3_121	MW-5	Appendix IV	Radium-226+228	pci/l	19	2	11%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	1.65	1.53	0.524	4.22	1.07	0.646	1.28
15_3_122	MW-5	Appendix IV	Selenium	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.00457	0.00500	0.000890	0.00500	0.00130	0.284	-2.80
15_3_125	MW-5	Appendix IV	Thallium	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.00184	0.00200	0.000510	0.00200	0.000470	0.255	-2.80
15_5_111	MW-5	Part 115	Copper	mg/l	19	12	63%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Nonparametric	0.00707	0.00500	0.00180	0.0260	0.00588	0.832	2.50
15_5_114	MW-5	Part 115	Iron	mg/l	19	1	5%	2020-04-28 to 2025-08-06	Gamma; Lognormal	Gamma	1.35	0.630	0.0200	8.00	1.95	1.45	2.69
15_5_119	MW-5	Part 115	Nickel	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0102	0.0100	0.00350	0.0190	0.00463	0.453	0.460
15_5_123	MW-5	Part 115	Silver	mg/l	19	18	95%	2020-04-28 to 2025-08-06		Nonparametric	0.000455	0.000500	0.0000530	0.000500	0.000136	0.298	-2.81
15_5_128	MW-5	Part 115	Vanadium	mg/l	19	15	79%	2020-04-28 to 2025-08-06		Nonparametric	0.00517	0.00500	0.000820	0.0120	0.00229	0.442	1.25
15_5_129	MW-5	Part 115	Zinc	mg/l	19	3	16%	2020-04-28 to 2025-08-06	Gamma; Lognormal	Gamma	0.0169	0.00700	0.00370	0.0980	0.0230	1.36	2.82

(Table continues on next page)

[a] Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
16_2_105	MW-6	Appendix III	Boron	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.783	0.780	0.490	1.05	0.166	0.212	-0.0359
16_2_107	MW-6	Appendix III	Calcium	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	170	170	142	200	19.1	0.112	-0.0175
16_2_108	MW-6	Appendix III	Chloride	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	34.6	36.0	24.0	49.0	7.38	0.213	0.143
16_2_112	MW-6	Appendix III	Fluoride	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.918	1.00	0.200	1.00	0.246	0.268	-2.80
16_2_120	MW-6	Appendix III	pH, Field	su	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	6.74	6.74	6.35	7.11	0.158	0.0235	-0.0243
16_2_124	MW-6	Appendix III	Sulfate	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	178	176	118	263	44.8	0.252	0.420
16_2_126	MW-6	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	759	759	598	900	93.7	0.123	0.0277
16_3_101	MW-6	Appendix IV	Antimony	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.00453	0.00500	0.000570	0.00500	0.00140	0.308	-2.80
16_3_102	MW-6	Appendix IV	Arsenic	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.00192	0.00200	0.000750	0.00300	0.000472	0.246	-1.15
16_3_103	MW-6	Appendix IV	Barium	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0485	0.0500	0.0380	0.0620	0.00581	0.120	0.273
16_3_104	MW-6	Appendix IV	Beryllium	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.000923	0.00100	0.000270	0.00100	0.000230	0.249	-2.80
16_3_106	MW-6	Appendix IV	Cadmium	mg/l	19	18	95%	2020-04-28 to 2025-08-06		Nonparametric	0.000459	0.000500	0.0000770	0.000500	0.000122	0.267	-2.85
16_3_109	MW-6	Appendix IV	Chromium	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.00460	0.00500	0.00120	0.00500	0.00120	0.260	-2.80
16_3_110	MW-6	Appendix IV	Cobalt	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.00452	0.00500	0.000340	0.00500	0.00144	0.319	-2.80
16_3_113	MW-6	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.918	1.00	0.200	1.00	0.246	0.268	-2.80
16_3_115	MW-6	Appendix IV	Lead	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.00273	0.00300	0.000450	0.00300	0.000804	0.294	-2.80
16_3_116	MW-6	Appendix IV	Lithium	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0471	0.0470	0.0320	0.0670	0.00828	0.176	0.413
16_3_117	MW-6	Appendix IV	Mercury	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.000193	0.000200	0.000130	0.000200	0.0000221	0.115	-2.80
16_3_118	MW-6	Appendix IV	Molybdenum	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0242	0.0250	0.0120	0.0360	0.00645	0.267	-0.430
16_3_121	MW-6	Appendix IV	Radium-226+228	pci/l	19	2	11%	2020-04-28 to 2025-08-06	Normal	Normal	1.15	0.663	0	4.29	1.00	0.874	1.90
16_3_122	MW-6	Appendix IV	Selenium	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.00457	0.00500	0.000890	0.00500	0.00130	0.284	-2.80
16_3_125	MW-6	Appendix IV	Thallium	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.00184	0.00200	0.000510	0.00200	0.000470	0.255	-2.80
16_5_111	MW-6	Part 115	Copper	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.00465	0.00500	0.00170	0.00500	0.00104	0.224	-2.80
16_5_114	MW-6	Part 115	Iron	mg/l	19	9	47%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Nonparametric	0.0390	0.0200	0.0130	0.200	0.0430	1.10	3.27
16_5_119	MW-6	Part 115	Nickel	mg/l	19	5	26%	2020-04-28 to 2025-08-06	Nonparametric	Nonparametric	0.00585	0.00600	0.00190	0.00800	0.00156	0.266	-0.874
16_5_123	MW-6	Part 115	Silver	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.000453	0.000500	0.0000530	0.000500	0.000141	0.311	-2.80
16_5_128	MW-6	Part 115	Vanadium	mg/l	19	19	100%	2020-04-28 to 2025-08-06		Nonparametric	0.00456	0.00500	0.000820	0.00500	0.00132	0.289	-2.80
16_5_129	MW-6	Part 115	Zinc	mg/l	19	16	84%	2020-04-28 to 2025-08-06		Nonparametric	0.00617	0.00500	0.00120	0.0340	0.00683	1.11	4.17
17_2_105	MW-7	Appendix III	Boron	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Gamma; Lognormal; Normal	Normal	1.87	1.89	1.08	2.75	0.394	0.210	0.0374
17_2_107	MW-7	Appendix III	Calcium	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Nonparametric	Nonparametric	117	111	97.2	165	18.3	0.156	1.71
17_2_108	MW-7	Appendix III	Chloride	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Gamma; Lognormal; Normal	Normal	79	78.0	72.2	98.0	6.91	0.0876	1.62
17_2_112	MW-7	Appendix III	Fluoride	mg/l	15	11	73%	2021-06-15 to 2025-08-08		Nonparametric	0.829	1.00	0.300	1.00	0.295	0.356	-1.20
17_2_120	MW-7	Appendix III	pH, Field	su	15	0	0%	2021-06-15 to 2025-08-08	Nonparametric	Nonparametric	7.45	7.42	7.09	8.18	0.244	0.0327	1.82
17_2_124	MW-7	Appendix III	Sulfate	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Gamma; Lognormal; Normal	Normal	201	191	171	270	29.3	0.146	1.52
17_2_126	MW-7	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Nonparametric	Nonparametric	625	610	548	864	81.5	0.130	2.28
17_3_101	MW-7	Appendix IV	Antimony	mg/l	15	15	100%	2021-06-15 to 2025-08-08		Nonparametric	0.00441	0.00500	0.000570	0.00500	0.00156	0.354	-2.40
17_3_102	MW-7	Appendix IV	Arsenic	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Nonparametric	Nonparametric	0.00533	0.00600	0.00270	0.00700	0.00109	0.205	-1.04
17_3_103	MW-7	Appendix IV	Barium	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.0528	0.0540	0.0360	0.0620	0.00649	0.123	-1.05
17_3_104	MW-7	Appendix IV	Beryllium	mg/l	15	15	100%	2021-06-15 to 2025-08-08		Nonparametric	0.000903	0.00100	0.000270	0.00100	0.000257	0.285	-2.40
17_3_106	MW-7	Appendix IV	Cadmium	mg/l	15	15	100%	2021-06-15 to 2025-08-08		Nonparametric	0.000444	0.000500	0.0000770	0.000500	0.000149	0.336	-2.40
17_3_109	MW-7	Appendix IV	Chromium	mg/l	15	14	93%	2021-06-15 to 2025-08-08		Nonparametric	0.00463	0.00500	0.00120	0.00700	0.00148	0.321	-1.68
17_3_110	MW-7	Appendix IV	Cobalt	mg/l	15	13	87%	2021-06-15 to 2025-08-08		Nonparametric	0.00436	0.00500	0.000160	0.00500	0.00169	0.386	-2.41

(Table continues on next page)

[a] Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
17_3_113	MW-7	Appendix IV	Fluoride (App IV)	mg/l	15	11	73%	2021-06-15 to 2025-08-08		Nonparametric	0.829	1.00	0.300	1.00	0.295	0.356	-1.20
17_3_115	MW-7	Appendix IV	Lead	mg/l	15	15	100%	2021-06-15 to 2025-08-08		Nonparametric	0.00266	0.00300	0.000450	0.00300	0.000897	0.337	-2.40
17_3_116	MW-7	Appendix IV	Lithium	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.0883	0.0890	0.0630	0.112	0.0130	0.148	-0.173
17_3_117	MW-7	Appendix IV	Mercury	mg/l	15	14	93%	2021-06-15 to 2025-08-08		Nonparametric	0.000191	0.000200	0.000130	0.000200	0.0000246	0.129	-2.40
17_3_118	MW-7	Appendix IV	Molybdenum	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Nonparametric	Nonparametric	0.228	0.259	0.146	0.296	0.0589	0.258	-0.169
17_3_121	MW-7	Appendix IV	Radium-226+228	pci/l	15	0	0%	2021-06-15 to 2025-08-08	Gamma; Lognormal; Normal	Normal	2.10	1.82	0.514	5.44	1.47	0.698	1.22
17_3_122	MW-7	Appendix IV	Selenium	mg/l	15	15	100%	2021-06-15 to 2025-08-08		Nonparametric	0.00445	0.00500	0.000890	0.00500	0.00145	0.325	-2.40
17_3_125	MW-7	Appendix IV	Thallium	mg/l	15	15	100%	2021-06-15 to 2025-08-08		Nonparametric	0.00180	0.00200	0.000510	0.00200	0.000524	0.291	-2.40
17_5_111	MW-7	Part 115	Copper	mg/l	15	15	100%	2021-06-15 to 2025-08-08		Nonparametric	0.00456	0.00500	0.00170	0.00500	0.00116	0.255	-2.40
17_5_114	MW-7	Part 115	Iron	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Gamma; Lognormal	Gamma	1.42	1.34	0.900	2.81	0.458	0.324	2.19
17_5_119	MW-7	Part 115	Nickel	mg/l	15	15	100%	2021-06-15 to 2025-08-08		Nonparametric	0.00453	0.00500	0.00150	0.00500	0.00123	0.272	-2.40
17_5_123	MW-7	Part 115	Silver	mg/l	15	15	100%	2021-06-15 to 2025-08-08		Nonparametric	0.000440	0.000500	0.0000530	0.000500	0.000157	0.357	-2.40
17_5_128	MW-7	Part 115	Vanadium	mg/l	15	14	93%	2021-06-15 to 2025-08-08		Nonparametric	0.00451	0.00500	0.000820	0.00600	0.00152	0.337	-2.25
17_5_129	MW-7	Part 115	Zinc	mg/l	15	11	73%	2021-06-15 to 2025-08-08		Nonparametric	0.00535	0.00500	0.000930	0.0140	0.00290	0.541	1.71
18_2_105	MW-7C	Appendix III	Boron	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal; Normal	Normal	6.56	6.52	6.20	7.24	0.249	0.0380	1.41
18_2_107	MW-7C	Appendix III	Calcium	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Normal	Normal	238	241	183	277	21.0	0.0885	-1.00
18_2_108	MW-7C	Appendix III	Chloride	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal; Normal	Normal	92.9	93.0	83.0	105	5.47	0.0589	0.561
18_2_112	MW-7C	Appendix III	Fluoride	mg/l	14	12	86%	2022-03-10 to 2025-08-07		Nonparametric	0.896	1.00	0.240	1.00	0.265	0.296	-2.30
18_2_120	MW-7C	Appendix III	pH, Field	su	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal; Normal	Normal	7.34	7.31	7.23	7.51	0.0923	0.0126	0.599
18_2_124	MW-7C	Appendix III	Sulfate	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal; Normal	Normal	680	672	630	751	36.2	0.0532	0.671
18_2_126	MW-7C	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Nonparametric	Nonparametric	1345	1360	1100	1500	98.0	0.0729	-1.19
18_3_101	MW-7C	Appendix IV	Antimony	mg/l	14	14	100%	2022-03-10 to 2025-08-07		Nonparametric	0.00437	0.00500	0.000570	0.00500	0.00161	0.368	-2.29
18_3_102	MW-7C	Appendix IV	Arsenic	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal	Gamma	0.00648	0.00600	0.00500	0.0100	0.00119	0.184	2.06
18_3_103	MW-7C	Appendix IV	Barium	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0423	0.0420	0.0380	0.0470	0.00270	0.0639	0.138
18_3_104	MW-7C	Appendix IV	Beryllium	mg/l	14	14	100%	2022-03-10 to 2025-08-07		Nonparametric	0.000896	0.00100	0.000270	0.00100	0.000265	0.296	-2.29
18_3_106	MW-7C	Appendix IV	Cadmium	mg/l	14	10	71%	2022-03-10 to 2025-08-07		Nonparametric	0.000510	0.000500	0.0000770	0.000900	0.000212	0.415	-0.313
18_3_109	MW-7C	Appendix IV	Chromium	mg/l	14	14	100%	2022-03-10 to 2025-08-07		Nonparametric	0.00446	0.00500	0.00120	0.00500	0.00138	0.310	-2.29
18_3_110	MW-7C	Appendix IV	Cobalt	mg/l	14	13	93%	2022-03-10 to 2025-08-07		Nonparametric	0.00431	0.00500	0.0000860	0.00500	0.00176	0.410	-2.30
18_3_113	MW-7C	Appendix IV	Fluoride (App IV)	mg/l	14	12	86%	2022-03-10 to 2025-08-07		Nonparametric	0.896	1.00	0.240	1.00	0.265	0.296	-2.30
18_3_115	MW-7C	Appendix IV	Lead	mg/l	14	14	100%	2022-03-10 to 2025-08-07		Nonparametric	0.00264	0.00300	0.000450	0.00300	0.000926	0.351	-2.29
18_3_116	MW-7C	Appendix IV	Lithium	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.125	0.126	0.110	0.138	0.00833	0.0665	-0.523
18_3_117	MW-7C	Appendix IV	Mercury	mg/l	14	14	100%	2022-03-10 to 2025-08-07		Nonparametric	0.000190	0.000200	0.000130	0.000200	0.0000254	0.134	-2.29
18_3_118	MW-7C	Appendix IV	Molybdenum	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.392	0.394	0.350	0.422	0.0206	0.0526	-0.628
18_3_121	MW-7C	Appendix IV	Radium-226+228	pci/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal; Normal	Normal	1.98	1.72	0.773	3.66	1.07	0.540	0.600
18_3_122	MW-7C	Appendix IV	Selenium	mg/l	14	14	100%	2022-03-10 to 2025-08-07		Nonparametric	0.00441	0.00500	0.000890	0.00500	0.00149	0.338	-2.29
18_3_125	MW-7C	Appendix IV	Thallium	mg/l	14	14	100%	2022-03-10 to 2025-08-07		Nonparametric	0.00179	0.00200	0.000510	0.00200	0.000541	0.303	-2.29
18_5_111	MW-7C	Part 115	Copper	mg/l	14	14	100%	2022-03-10 to 2025-08-07		Nonparametric	0.00453	0.00500	0.00170	0.00500	0.00120	0.265	-2.29
18_5_114	MW-7C	Part 115	Iron	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal; Normal	Normal	3.96	4.07	2.80	4.41	0.407	0.103	-1.86
18_5_119	MW-7C	Part 115	Nickel	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal	Gamma	0.00753	0.00725	0.00590	0.0100	0.000943	0.125	1.12
18_5_123	MW-7C	Part 115	Silver	mg/l	14	14	100%	2022-03-10 to 2025-08-07		Nonparametric	0.000436	0.000500	0.0000530	0.000500	0.000162	0.372	-2.29
18_5_128	MW-7C	Part 115	Vanadium	mg/l	14	14	100%	2022-03-10 to 2025-08-07		Nonparametric	0.00440	0.00500	0.000820	0.00500	0.00152	0.345	-2.29
18_5_129	MW-7C	Part 115	Zinc	mg/l	14	11	79%	2022-03-10 to 2025-08-07		Nonparametric	0.00461	0.00500	0.00120	0.00600	0.00126	0.273	-2.19

(Table continues on next page)

[a] Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
19_2_105	MW-8	Appendix III	Boron	mg/l	15	1	7%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0879	0.0800	0.0400	0.210	0.0432	0.491	1.69
19_2_107	MW-8	Appendix III	Calcium	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	93.7	93.3	86.5	104	5.26	0.0562	0.265
19_2_108	MW-8	Appendix III	Chloride	mg/l	15	2	13%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	21.6	15.0	4.45	66.0	19.2	0.890	1.44
19_2_112	MW-8	Appendix III	Fluoride	mg/l	15	12	80%	2021-06-15 to 2025-08-07		Nonparametric	0.811	1.00	0.0540	1.00	0.391	0.482	-1.67
19_2_120	MW-8	Appendix III	pH, Field	su	15	0	0%	2021-06-15 to 2025-08-07	Nonparametric	Nonparametric	7.15	7.12	6.99	7.78	0.196	0.0274	2.57
19_2_124	MW-8	Appendix III	Sulfate	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	24.8	22.0	11.0	52.0	12.5	0.506	1.07
19_2_126	MW-8	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	387	382	340	460	30.2	0.0780	0.979
19_3_101	MW-8	Appendix IV	Antimony	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00441	0.00500	0.000570	0.00500	0.00156	0.354	-2.40
19_3_102	MW-8	Appendix IV	Arsenic	mg/l	15	13	87%	2021-06-15 to 2025-08-07		Nonparametric	0.00188	0.00200	0.000750	0.00200	0.000339	0.180	-3.16
19_3_103	MW-8	Appendix IV	Barium	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0219	0.0210	0.0170	0.0280	0.00297	0.136	0.544
19_3_104	MW-8	Appendix IV	Beryllium	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.000905	0.00100	0.000270	0.00100	0.000250	0.276	-2.41
19_3_106	MW-8	Appendix IV	Cadmium	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.000452	0.000500	0.0000770	0.000500	0.000128	0.283	-2.59
19_3_109	MW-8	Appendix IV	Chromium	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00449	0.00500	0.00120	0.00500	0.00134	0.298	-2.40
19_3_110	MW-8	Appendix IV	Cobalt	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.00436	0.00500	0.0000860	0.00500	0.00168	0.385	-2.41
19_3_113	MW-8	Appendix IV	Fluoride (App IV)	mg/l	15	12	80%	2021-06-15 to 2025-08-07		Nonparametric	0.811	1.00	0.0540	1.00	0.391	0.482	-1.67
19_3_115	MW-8	Appendix IV	Lead	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00266	0.00300	0.000450	0.00300	0.000897	0.337	-2.40
19_3_116	MW-8	Appendix IV	Lithium	mg/l	15	6	40%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.00708	0.00600	0.00500	0.0130	0.00255	0.360	1.03
19_3_117	MW-8	Appendix IV	Mercury	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.000191	0.000200	0.000130	0.000200	0.0000246	0.129	-2.40
19_3_118	MW-8	Appendix IV	Molybdenum	mg/l	15	11	73%	2021-06-15 to 2025-08-07		Nonparametric	0.00595	0.00500	0.00380	0.0130	0.00252	0.424	2.37
19_3_121	MW-8	Appendix IV	Radium-226+228	pci/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Gamma	1.89	1.50	0.118	6.21	1.72	0.907	1.38
19_3_122	MW-8	Appendix IV	Selenium	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00445	0.00500	0.000890	0.00500	0.00145	0.325	-2.40
19_3_125	MW-8	Appendix IV	Thallium	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.00180	0.00200	0.000510	0.00200	0.000516	0.286	-2.41
19_5_111	MW-8	Part 115	Copper	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.00489	0.00500	0.00170	0.0100	0.00182	0.373	0.923
19_5_114	MW-8	Part 115	Iron	mg/l	15	13	87%	2021-06-15 to 2025-08-07		Nonparametric	0.0212	0.0200	0.0130	0.0450	0.00683	0.322	3.34
19_5_119	MW-8	Part 115	Nickel	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00453	0.00500	0.00150	0.00500	0.00123	0.272	-2.40
19_5_123	MW-8	Part 115	Silver	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.000440	0.000500	0.0000530	0.000500	0.000157	0.357	-2.40
19_5_128	MW-8	Part 115	Vanadium	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.00444	0.00500	0.000820	0.00500	0.00147	0.331	-2.40
19_5_129	MW-8	Part 115	Zinc	mg/l	15	13	87%	2021-06-15 to 2025-08-07		Nonparametric	0.00465	0.00500	0.000930	0.00700	0.00144	0.309	-1.69
20_2_105	MW-9	Appendix III	Boron	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.0423	0.0400	0.0400	0.0570	0.00598	0.142	2.40
20_2_107	MW-9	Appendix III	Calcium	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	78.2	76.9	61.8	100	12.2	0.156	0.625
20_2_108	MW-9	Appendix III	Chloride	mg/l	15	10	67%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Nonparametric	4.65	5.00	1.11	6.10	1.23	0.264	-2.23
20_2_112	MW-9	Appendix III	Fluoride	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.805	1.00	0.0240	1.00	0.403	0.500	-1.67
20_2_120	MW-9	Appendix III	pH, Field	su	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	7.28	7.27	7.05	7.74	0.181	0.0249	1.10
20_2_124	MW-9	Appendix III	Sulfate	mg/l	15	8	53%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Nonparametric	6.89	5.00	3.58	16.0	3.65	0.530	1.66
20_2_126	MW-9	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal	Gamma	274	260	232	360	41.9	0.153	1.23
20_3_101	MW-9	Appendix IV	Antimony	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00441	0.00500	0.000570	0.00500	0.00156	0.354	-2.40
20_3_102	MW-9	Appendix IV	Arsenic	mg/l	15	13	87%	2021-06-15 to 2025-08-07		Nonparametric	0.00192	0.00200	0.000750	0.00300	0.000484	0.252	-0.667
20_3_103	MW-9	Appendix IV	Barium	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0151	0.0150	0.0130	0.0200	0.00202	0.134	1.04
20_3_104	MW-9	Appendix IV	Beryllium	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.000903	0.00100	0.000270	0.00100	0.000255	0.282	-2.41
20_3_106	MW-9	Appendix IV	Cadmium	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.000449	0.000500	0.0000770	0.000500	0.000135	0.301	-2.47
20_3_109	MW-9	Appendix IV	Chromium	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00449	0.00500	0.00120	0.00500	0.00134	0.298	-2.40
20_3_110	MW-9	Appendix IV	Cobalt	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.00435	0.00500	0.0000860	0.00500	0.00172	0.395	-2.41

(Table continues on next page)

[a] Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
20_3_113	MW-9	Appendix IV	Fluoride (App IV)	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.805	1.00	0.0240	1.00	0.403	0.500	-1.67
20_3_115	MW-9	Appendix IV	Lead	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00266	0.00300	0.000450	0.00300	0.000897	0.337	-2.40
20_3_116	MW-9	Appendix IV	Lithium	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00512	0.00500	0.00340	0.0100	0.00146	0.285	2.80
20_3_117	MW-9	Appendix IV	Mercury	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.000191	0.000200	0.000130	0.000200	0.0000246	0.129	-2.40
20_3_118	MW-9	Appendix IV	Molybdenum	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00448	0.00500	0.00110	0.00500	0.00137	0.306	-2.40
20_3_121	MW-9	Appendix IV	Radium-226+228	pci/l	15	0	0%	2021-06-15 to 2025-08-07	Normal	Normal	1.08	0.844	0	2.37	0.807	0.746	0.342
20_3_122	MW-9	Appendix IV	Selenium	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00445	0.00500	0.000890	0.00500	0.00145	0.325	-2.40
20_3_125	MW-9	Appendix IV	Thallium	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00180	0.00200	0.000510	0.00200	0.000524	0.291	-2.40
20_5_111	MW-9	Part 115	Copper	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00456	0.00500	0.00170	0.00500	0.00116	0.255	-2.40
20_5_114	MW-9	Part 115	Iron	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.0191	0.0200	0.0130	0.0200	0.00246	0.129	-2.40
20_5_119	MW-9	Part 115	Nickel	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00453	0.00500	0.00150	0.00500	0.00123	0.272	-2.40
20_5_123	MW-9	Part 115	Silver	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.000440	0.000500	0.0000530	0.000500	0.000157	0.357	-2.40
20_5_128	MW-9	Part 115	Vanadium	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00444	0.00500	0.000820	0.00500	0.00147	0.331	-2.40
20_5_129	MW-9	Part 115	Zinc	mg/l	15	13	87%	2021-06-15 to 2025-08-07		Nonparametric	0.00474	0.00500	0.000930	0.00900	0.00181	0.382	-0.310
21_2_105	MW-10	Appendix III	Boron	mg/l	15	1	7%	2021-06-15 to 2025-08-07	Lognormal; Normal	Normal	0.0531	0.0500	0.0400	0.0700	0.00797	0.150	0.238
21_2_107	MW-10	Appendix III	Calcium	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	127	128	110	142	10.1	0.0797	-0.0843
21_2_108	MW-10	Appendix III	Chloride	mg/l	15	9	60%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Nonparametric	4.44	5.00	1.03	9.30	2.12	0.478	0.168
21_2_112	MW-10	Appendix III	Fluoride	mg/l	15	12	80%	2021-06-15 to 2025-08-07		Nonparametric	0.813	1.00	0.0500	1.00	0.387	0.475	-1.67
21_2_120	MW-10	Appendix III	pH, Field	su	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	6.75	6.73	6.49	7.30	0.198	0.0293	1.37
21_2_124	MW-10	Appendix III	Sulfate	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	14.5	14.0	8.90	27.8	4.75	0.327	1.48
21_2_126	MW-10	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	424	432	340	494	45.5	0.107	-0.309
21_3_101	MW-10	Appendix IV	Antimony	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00441	0.00500	0.000570	0.00500	0.00156	0.354	-2.40
21_3_102	MW-10	Appendix IV	Arsenic	mg/l	15	13	87%	2021-06-15 to 2025-08-07		Nonparametric	0.00185	0.00200	0.000750	0.00200	0.000406	0.220	-2.45
21_3_103	MW-10	Appendix IV	Barium	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0390	0.0400	0.0300	0.0470	0.00474	0.121	-0.275
21_3_104	MW-10	Appendix IV	Beryllium	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.000903	0.00100	0.000270	0.00100	0.000257	0.285	-2.40
21_3_106	MW-10	Appendix IV	Cadmium	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.000445	0.000500	0.0000770	0.000500	0.000145	0.326	-2.41
21_3_109	MW-10	Appendix IV	Chromium	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00449	0.00500	0.00120	0.00500	0.00134	0.298	-2.40
21_3_110	MW-10	Appendix IV	Cobalt	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.00434	0.00500	0.0000860	0.00500	0.00173	0.398	-2.40
21_3_113	MW-10	Appendix IV	Fluoride (App IV)	mg/l	15	12	80%	2021-06-15 to 2025-08-07		Nonparametric	0.813	1.00	0.0500	1.00	0.387	0.475	-1.67
21_3_115	MW-10	Appendix IV	Lead	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00266	0.00300	0.000450	0.00300	0.000897	0.337	-2.40
21_3_116	MW-10	Appendix IV	Lithium	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00512	0.00500	0.00340	0.0100	0.00146	0.285	2.80
21_3_117	MW-10	Appendix IV	Mercury	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.000191	0.000200	0.000130	0.000200	0.0000246	0.129	-2.40
21_3_118	MW-10	Appendix IV	Molybdenum	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00448	0.00500	0.00110	0.00500	0.00137	0.306	-2.40
21_3_121	MW-10	Appendix IV	Radium-226+228	pci/l	15	0	0%	2021-06-15 to 2025-08-07	Lognormal	Lognormal	1.25	0.701	0.262	3.30	1.03	0.821	0.993
21_3_122	MW-10	Appendix IV	Selenium	mg/l	15	13	87%	2021-06-15 to 2025-08-07		Nonparametric	0.00452	0.00500	0.00130	0.00500	0.00127	0.280	-2.41
21_3_125	MW-10	Appendix IV	Thallium	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00180	0.00200	0.000510	0.00200	0.000524	0.291	-2.40
21_5_111	MW-10	Part 115	Copper	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00456	0.00500	0.00170	0.00500	0.00116	0.255	-2.40
21_5_114	MW-10	Part 115	Iron	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.0191	0.0200	0.0130	0.0200	0.00246	0.129	-2.40
21_5_119	MW-10	Part 115	Nickel	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00453	0.00500	0.00150	0.00500	0.00123	0.272	-2.40
21_5_123	MW-10	Part 115	Silver	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.000440	0.000500	0.0000530	0.000500	0.000157	0.357	-2.40
21_5_128	MW-10	Part 115	Vanadium	mg/l	15	15	100%	2021-06-15 to 2025-08-07		Nonparametric	0.00444	0.00500	0.000820	0.00500	0.00147	0.331	-2.40
21_5_129	MW-10	Part 115	Zinc	mg/l	15	12	80%	2021-06-15 to 2025-08-07		Nonparametric	0.00577	0.00500	0.000930	0.0200	0.00431	0.747	2.80

(Table continues on next page)

[a] Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
22_2_105	MW-13	Appendix III	Boron	mg/l	14	0	0%	2022-02-23 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.174	0.175	0.140	0.220	0.0228	0.131	0.245
22_2_107	MW-13	Appendix III	Calcium	mg/l	14	0	0%	2022-02-23 to 2025-08-08	Gamma; Lognormal; Normal	Normal	124	126	94.1	160	24.7	0.200	0.215
22_2_108	MW-13	Appendix III	Chloride	mg/l	14	2	14%	2022-02-23 to 2025-08-08	Gamma; Lognormal; Normal	Normal	19.9	17.0	5.00	45.0	12.6	0.632	0.934
22_2_112	MW-13	Appendix III	Fluoride	mg/l	14	12	86%	2022-02-23 to 2025-08-08		Nonparametric	0.879	1.00	0.140	1.00	0.307	0.349	-2.30
22_2_120	MW-13	Appendix III	pH, Field	su	14	0	0%	2022-02-23 to 2025-08-08	Gamma; Lognormal; Normal	Normal	6.95	7.03	6.39	7.25	0.229	0.0329	-1.13
22_2_124	MW-13	Appendix III	Sulfate	mg/l	14	0	0%	2022-02-23 to 2025-08-08	Gamma; Lognormal	Gamma	70.7	41.0	16.0	210	61.6	0.872	1.28
22_2_126	MW-13	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	2022-02-23 to 2025-08-08	Gamma; Lognormal; Normal	Normal	472	453	336	700	116	0.245	0.837
22_3_101	MW-13	Appendix IV	Antimony	mg/l	14	14	100%	2022-02-23 to 2025-08-08		Nonparametric	0.00437	0.00500	0.000570	0.00500	0.00161	0.368	-2.29
22_3_102	MW-13	Appendix IV	Arsenic	mg/l	14	9	64%	2022-02-23 to 2025-08-08	Gamma; Lognormal; Normal	Nonparametric	0.00319	0.00200	0.00190	0.00800	0.00213	0.669	1.54
22_3_103	MW-13	Appendix IV	Barium	mg/l	14	0	0%	2022-02-23 to 2025-08-08	Gamma; Lognormal	Gamma	0.0321	0.0285	0.0200	0.0600	0.0102	0.316	1.74
22_3_104	MW-13	Appendix IV	Beryllium	mg/l	14	14	100%	2022-02-23 to 2025-08-08		Nonparametric	0.000896	0.00100	0.000270	0.00100	0.000265	0.296	-2.29
22_3_106	MW-13	Appendix IV	Cadmium	mg/l	14	14	100%	2022-02-23 to 2025-08-08		Nonparametric	0.000440	0.000500	0.0000770	0.000500	0.000154	0.349	-2.29
22_3_109	MW-13	Appendix IV	Chromium	mg/l	14	14	100%	2022-02-23 to 2025-08-08		Nonparametric	0.00446	0.00500	0.00120	0.00500	0.00138	0.310	-2.29
22_3_110	MW-13	Appendix IV	Cobalt	mg/l	14	12	86%	2022-02-23 to 2025-08-08		Nonparametric	0.00438	0.00500	0.000450	0.00500	0.00157	0.359	-2.31
22_3_113	MW-13	Appendix IV	Fluoride (App IV)	mg/l	14	12	86%	2022-02-23 to 2025-08-08		Nonparametric	0.879	1.00	0.140	1.00	0.307	0.349	-2.30
22_3_115	MW-13	Appendix IV	Lead	mg/l	14	14	100%	2022-02-23 to 2025-08-08		Nonparametric	0.00264	0.00300	0.000450	0.00300	0.000926	0.351	-2.29
22_3_116	MW-13	Appendix IV	Lithium	mg/l	14	14	100%	2022-02-23 to 2025-08-08		Nonparametric	0.00477	0.00500	0.00340	0.00500	0.000581	0.122	-2.29
22_3_117	MW-13	Appendix IV	Mercury	mg/l	14	14	100%	2022-02-23 to 2025-08-08		Nonparametric	0.000190	0.000200	0.000130	0.000200	0.0000254	0.134	-2.29
22_3_118	MW-13	Appendix IV	Molybdenum	mg/l	14	14	100%	2022-02-23 to 2025-08-08		Nonparametric	0.00444	0.00500	0.00110	0.00500	0.00142	0.319	-2.29
22_3_121	MW-13	Appendix IV	Radium-226+228	pci/l	14	1	7%	2022-02-23 to 2025-08-08	Gamma; Lognormal	Gamma	0.979	0.681	0.0699	2.31	0.823	0.841	0.593
22_3_122	MW-13	Appendix IV	Selenium	mg/l	14	13	93%	2022-02-23 to 2025-08-08		Nonparametric	0.00478	0.00500	0.000890	0.00600	0.00115	0.241	-3.35
22_3_125	MW-13	Appendix IV	Thallium	mg/l	14	14	100%	2022-02-23 to 2025-08-08		Nonparametric	0.00179	0.00200	0.000510	0.00200	0.000541	0.303	-2.29
22_5_111	MW-13	Part 115	Copper	mg/l	14	14	100%	2022-02-23 to 2025-08-08		Nonparametric	0.00453	0.00500	0.00170	0.00500	0.00120	0.265	-2.29
22_5_114	MW-13	Part 115	Iron	mg/l	14	1	7%	2022-02-23 to 2025-08-08	Lognormal	Nonparametric	0.264	0.0400	0.0200	1.20	0.434	1.64	1.60
22_5_119	MW-13	Part 115	Nickel	mg/l	14	14	100%	2022-02-23 to 2025-08-08		Nonparametric	0.00450	0.00500	0.00150	0.00500	0.00127	0.282	-2.29
22_5_123	MW-13	Part 115	Silver	mg/l	14	14	100%	2022-02-23 to 2025-08-08		Nonparametric	0.000436	0.000500	0.0000530	0.000500	0.000162	0.372	-2.29
22_5_128	MW-13	Part 115	Vanadium	mg/l	14	13	93%	2022-02-23 to 2025-08-08		Nonparametric	0.00445	0.00500	0.000820	0.00500	0.00140	0.315	-2.34
22_5_129	MW-13	Part 115	Zinc	mg/l	14	12	86%	2022-02-23 to 2025-08-08		Nonparametric	0.00494	0.00500	0.000930	0.0100	0.00185	0.374	0.853
23_2_105	MW-14	Appendix III	Boron	mg/l	12	0	0%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Normal	2.11	2.12	1.90	2.29	0.118	0.0561	-0.227
23_2_107	MW-14	Appendix III	Calcium	mg/l	12	0	0%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Normal	152	148	141	173	9.77	0.0643	0.954
23_2_108	MW-14	Appendix III	Chloride	mg/l	12	0	0%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Normal	112	114	100	119	5.02	0.0446	-1.25
23_2_112	MW-14	Appendix III	Fluoride	mg/l	12	10	83%	2023-01-12 to 2025-08-06		Nonparametric	0.862	1.00	0.150	1.00	0.323	0.375	-2.06
23_2_120	MW-14	Appendix III	pH, Field	su	12	0	0%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Normal	7.01	7.02	6.92	7.13	0.0689	0.00983	0.280
23_2_124	MW-14	Appendix III	Sulfate	mg/l	12	0	0%	2023-01-12 to 2025-08-06	Nonparametric	Nonparametric	76.2	16.5	5.00	748	212	2.78	3.46
23_2_126	MW-14	Appendix III	Total Dissolved Solids	mg/l	12	1	8%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Nonparametric	721	788	0.00500	866	230	0.319	-3.29
23_3_101	MW-14	Appendix IV	Antimony	mg/l	12	12	100%	2023-01-12 to 2025-08-06		Nonparametric	0.00426	0.00500	0.000570	0.00500	0.00172	0.405	-2.06
23_3_102	MW-14	Appendix IV	Arsenic	mg/l	12	0	0%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.00626	0.00620	0.00400	0.00800	0.00120	0.192	-0.258
23_3_103	MW-14	Appendix IV	Barium	mg/l	12	0	0%	2023-01-12 to 2025-08-06	Nonparametric	Nonparametric	0.132	0.130	0.119	0.177	0.0157	0.119	2.48
23_3_104	MW-14	Appendix IV	Beryllium	mg/l	12	12	100%	2023-01-12 to 2025-08-06		Nonparametric	0.000878	0.00100	0.000270	0.00100	0.000284	0.324	-2.06
23_3_106	MW-14	Appendix IV	Cadmium	mg/l	12	12	100%	2023-01-12 to 2025-08-06		Nonparametric	0.000429	0.000500	0.0000770	0.000500	0.000165	0.383	-2.06
23_3_109	MW-14	Appendix IV	Chromium	mg/l	12	12	100%	2023-01-12 to 2025-08-06		Nonparametric	0.00437	0.00500	0.00120	0.00500	0.00148	0.339	-2.06
23_3_110	MW-14	Appendix IV	Cobalt	mg/l	12	10	83%	2023-01-12 to 2025-08-06		Nonparametric	0.00427	0.00500	0.000530	0.00500	0.00171	0.400	-2.06

(Table continues on next page)

[a] Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
23_3_113	MW-14	Appendix IV	Fluoride (App IV)	mg/l	12	10	83%	2023-01-12 to 2025-08-06		Nonparametric	0.862	1.00	0.150	1.00	0.323	0.375	-2.06
23_3_115	MW-14	Appendix IV	Lead	mg/l	12	12	100%	2023-01-12 to 2025-08-06		Nonparametric	0.00258	0.00300	0.000450	0.00300	0.000993	0.385	-2.06
23_3_116	MW-14	Appendix IV	Lithium	mg/l	12	0	0%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.109	0.109	0.0920	0.125	0.00903	0.0829	0.0464
23_3_117	MW-14	Appendix IV	Mercury	mg/l	12	12	100%	2023-01-12 to 2025-08-06		Nonparametric	0.000188	0.000200	0.000130	0.000200	0.0000272	0.145	-2.06
23_3_118	MW-14	Appendix IV	Molybdenum	mg/l	12	0	0%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0131	0.0130	0.0100	0.0160	0.00162	0.124	-0.00604
23_3_121	MW-14	Appendix IV	Radium-226+228	pci/l	12	2	17%	2023-01-12 to 2025-08-06	Lognormal	Lognormal	1.78	0.973	0.464	6.88	1.92	1.07	2.23
23_3_122	MW-14	Appendix IV	Selenium	mg/l	12	10	83%	2023-01-12 to 2025-08-06		Nonparametric	0.00532	0.00500	0.000890	0.0130	0.00320	0.602	1.10
23_3_125	MW-14	Appendix IV	Thallium	mg/l	12	12	100%	2023-01-12 to 2025-08-06		Nonparametric	0.00175	0.00200	0.000510	0.00200	0.000580	0.331	-2.06
23_5_111	MW-14	Part 115	Copper	mg/l	12	12	100%	2023-01-12 to 2025-08-06		Nonparametric	0.00445	0.00500	0.00170	0.00500	0.00128	0.289	-2.06
23_5_114	MW-14	Part 115	Iron	mg/l	12	0	0%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Normal	12.0	11.7	6.58	15.0	2.56	0.213	-0.639
23_5_119	MW-14	Part 115	Nickel	mg/l	12	6	50%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Nonparametric	0.00491	0.00500	0.00380	0.00600	0.000535	0.109	-0.414
23_5_123	MW-14	Part 115	Silver	mg/l	12	12	100%	2023-01-12 to 2025-08-06		Nonparametric	0.000425	0.000500	0.0000530	0.000500	0.000174	0.409	-2.06
23_5_128	MW-14	Part 115	Vanadium	mg/l	12	10	83%	2023-01-12 to 2025-08-06		Nonparametric	0.00445	0.00500	0.00150	0.00500	0.00129	0.289	-2.08
23_5_129	MW-14	Part 115	Zinc	mg/l	12	10	83%	2023-01-12 to 2025-08-06		Nonparametric	0.00733	0.00500	0.000930	0.0240	0.00662	0.903	2.06
24_2_105	MW-15	Appendix III	Boron	mg/l	12	0	0%	2023-01-12 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.375	0.380	0.300	0.440	0.0430	0.115	-0.198
24_2_107	MW-15	Appendix III	Calcium	mg/l	12	0	0%	2023-01-12 to 2025-08-07	Gamma; Lognormal; Normal	Normal	135	132	104	183	19.9	0.147	0.996
24_2_108	MW-15	Appendix III	Chloride	mg/l	12	0	0%	2023-01-12 to 2025-08-07	Gamma; Lognormal; Normal	Normal	76.2	73.8	59.0	100	12.7	0.167	0.418
24_2_112	MW-15	Appendix III	Fluoride	mg/l	12	10	83%	2023-01-12 to 2025-08-07		Nonparametric	0.841	1.00	0.0470	1.00	0.371	0.441	-2.06
24_2_120	MW-15	Appendix III	pH, Field	su	12	0	0%	2023-01-12 to 2025-08-07	Gamma; Lognormal; Normal	Normal	6.80	6.79	6.65	6.99	0.119	0.0176	0.442
24_2_124	MW-15	Appendix III	Sulfate	mg/l	12	0	0%	2023-01-12 to 2025-08-07	Gamma; Lognormal	Gamma	117	110	49.7	238	43.7	0.375	1.89
24_2_126	MW-15	Appendix III	Total Dissolved Solids	mg/l	12	0	0%	2023-01-12 to 2025-08-07	Gamma; Lognormal; Normal	Normal	638	622	528	878	91.2	0.143	1.68
24_3_101	MW-15	Appendix IV	Antimony	mg/l	12	12	100%	2023-01-12 to 2025-08-07		Nonparametric	0.00426	0.00500	0.000570	0.00500	0.00172	0.405	-2.06
24_3_102	MW-15	Appendix IV	Arsenic	mg/l	12	9	75%	2023-01-12 to 2025-08-07		Nonparametric	0.00183	0.00200	0.000970	0.00200	0.000397	0.217	-2.06
24_3_103	MW-15	Appendix IV	Barium	mg/l	12	0	0%	2023-01-12 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0578	0.0585	0.0420	0.0770	0.0100	0.173	0.334
24_3_104	MW-15	Appendix IV	Beryllium	mg/l	12	12	100%	2023-01-12 to 2025-08-07		Nonparametric	0.000878	0.00100	0.000270	0.00100	0.000284	0.324	-2.06
24_3_106	MW-15	Appendix IV	Cadmium	mg/l	12	11	92%	2023-01-12 to 2025-08-07		Nonparametric	0.000430	0.000500	0.0000770	0.000500	0.000164	0.382	-2.06
24_3_109	MW-15	Appendix IV	Chromium	mg/l	12	12	100%	2023-01-12 to 2025-08-07		Nonparametric	0.00437	0.00500	0.00120	0.00500	0.00148	0.339	-2.06
24_3_110	MW-15	Appendix IV	Cobalt	mg/l	12	11	92%	2023-01-12 to 2025-08-07		Nonparametric	0.00422	0.00500	0.0000860	0.00500	0.00182	0.431	-2.07
24_3_113	MW-15	Appendix IV	Fluoride (App IV)	mg/l	12	10	83%	2023-01-12 to 2025-08-07		Nonparametric	0.841	1.00	0.0470	1.00	0.371	0.441	-2.06
24_3_115	MW-15	Appendix IV	Lead	mg/l	12	12	100%	2023-01-12 to 2025-08-07		Nonparametric	0.00258	0.00300	0.000450	0.00300	0.000993	0.385	-2.06
24_3_116	MW-15	Appendix IV	Lithium	mg/l	12	11	92%	2023-01-12 to 2025-08-07		Nonparametric	0.00548	0.00500	0.00340	0.0140	0.00275	0.502	3.13
24_3_117	MW-15	Appendix IV	Mercury	mg/l	12	12	100%	2023-01-12 to 2025-08-07		Nonparametric	0.000188	0.000200	0.000130	0.000200	0.0000272	0.145	-2.06
24_3_118	MW-15	Appendix IV	Molybdenum	mg/l	12	12	100%	2023-01-12 to 2025-08-07		Nonparametric	0.00435	0.00500	0.00110	0.00500	0.00152	0.349	-2.06
24_3_121	MW-15	Appendix IV	Radium-226+228	pci/l	12	0	0%	2023-01-12 to 2025-08-07	Gamma; Lognormal; Normal	Normal	1.10	0.898	0.316	2.06	0.615	0.561	0.484
24_3_122	MW-15	Appendix IV	Selenium	mg/l	12	5	42%	2023-01-12 to 2025-08-07	Gamma; Lognormal; Normal	Nonparametric	0.0126	0.00950	0.000890	0.0340	0.0102	0.809	1.01
24_3_125	MW-15	Appendix IV	Thallium	mg/l	12	12	100%	2023-01-12 to 2025-08-07		Nonparametric	0.00175	0.00200	0.000510	0.00200	0.000580	0.331	-2.06
24_5_111	MW-15	Part 115	Copper	mg/l	12	12	100%	2023-01-12 to 2025-08-07		Nonparametric	0.00445	0.00500	0.00170	0.00500	0.00128	0.289	-2.06
24_5_114	MW-15	Part 115	Iron	mg/l	12	1	8%	2023-01-12 to 2025-08-07	Gamma; Lognormal	Gamma	0.0935	0.0605	0.0200	0.380	0.0998	1.07	2.43
24_5_119	MW-15	Part 115	Nickel	mg/l	12	11	92%	2023-01-12 to 2025-08-07		Nonparametric	0.00445	0.00500	0.00150	0.00500	0.00129	0.289	-2.08
24_5_123	MW-15	Part 115	Silver	mg/l	12	12	100%	2023-01-12 to 2025-08-07		Nonparametric	0.000425	0.000500	0.0000530	0.000500	0.000174	0.409	-2.06
24_5_128	MW-15	Part 115	Vanadium	mg/l	12	12	100%	2023-01-12 to 2025-08-07		Nonparametric	0.00430	0.00500	0.000820	0.00500	0.00163	0.378	-2.06
24_5_129	MW-15	Part 115	Zinc	mg/l	12	10	83%	2023-01-12 to 2025-08-07		Nonparametric	0.00574	0.00500	0.000930	0.0210	0.00501	0.873	2.94

(Table continues on next page)

[a] Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
25_2_105	MW-16A	Appendix III	Boron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.175	0.190	0.100	0.250	0.0555	0.316	-0.258
25_2_107	MW-16A	Appendix III	Calcium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	186	179	145	226	26.1	0.140	-0.0489
25_2_108	MW-16A	Appendix III	Chloride	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	437	436	370	505	45.0	0.103	0.0656
25_2_112	MW-16A	Appendix III	Fluoride	mg/l	13	11	85%	2023-02-02 to 2025-08-11		Nonparametric	1.25	1.00	0.0980	5.00	1.22	0.974	2.75
25_2_120	MW-16A	Appendix III	pH, Field	su	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	6.83	6.81	6.67	7.00	0.104	0.0153	0.421
25_2_124	MW-16A	Appendix III	Sulfate	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	193	190	86.0	341	76.6	0.398	0.291
25_2_126	MW-16A	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	1432	1390	1170	1720	179	0.125	0.00117
25_3_101	MW-16A	Appendix IV	Antimony	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.00433	0.00500	0.000570	0.00500	0.00164	0.378	-2.18
25_3_102	MW-16A	Appendix IV	Arsenic	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.00325	0.00300	0.00180	0.00500	0.000857	0.264	0.256
25_3_103	MW-16A	Appendix IV	Barium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.146	0.146	0.108	0.178	0.0223	0.153	-0.0856
25_3_104	MW-16A	Appendix IV	Beryllium	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.000888	0.00100	0.000270	0.00100	0.000274	0.309	-2.18
25_3_106	MW-16A	Appendix IV	Cadmium	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.000447	0.000500	0.0000770	0.000500	0.000132	0.296	-2.46
25_3_109	MW-16A	Appendix IV	Chromium	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00442	0.00500	0.00120	0.00500	0.00143	0.323	-2.18
25_3_110	MW-16A	Appendix IV	Cobalt	mg/l	13	11	85%	2023-02-02 to 2025-08-11		Nonparametric	0.00441	0.00500	0.00110	0.00500	0.00145	0.328	-2.18
25_3_113	MW-16A	Appendix IV	Fluoride (App IV)	mg/l	13	11	85%	2023-02-02 to 2025-08-11		Nonparametric	1.25	1.00	0.0980	5.00	1.22	0.974	2.75
25_3_115	MW-16A	Appendix IV	Lead	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00261	0.00300	0.000450	0.00300	0.000958	0.367	-2.18
25_3_116	MW-16A	Appendix IV	Lithium	mg/l	13	10	77%	2023-02-02 to 2025-08-11		Nonparametric	0.00480	0.00500	0.00350	0.00500	0.000495	0.103	-2.30
25_3_117	MW-16A	Appendix IV	Mercury	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.000189	0.000200	0.000130	0.000200	0.0000263	0.139	-2.18
25_3_118	MW-16A	Appendix IV	Molybdenum	mg/l	13	11	85%	2023-02-02 to 2025-08-11		Nonparametric	0.00458	0.00500	0.00170	0.00500	0.00104	0.228	-2.43
25_3_121	MW-16A	Appendix IV	Radium-226+228	pci/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal	Gamma	2.00	1.18	0.562	7.46	1.97	0.983	1.99
25_3_122	MW-16A	Appendix IV	Selenium	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.00437	0.00500	0.000890	0.00500	0.00154	0.353	-2.18
25_3_125	MW-16A	Appendix IV	Thallium	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.00178	0.00200	0.000510	0.00200	0.000539	0.303	-2.19
25_5_111	MW-16A	Part 115	Copper	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00449	0.00500	0.00170	0.00500	0.00124	0.276	-2.18
25_5_114	MW-16A	Part 115	Iron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	3.20	3.08	2.30	4.38	0.627	0.196	0.574
25_5_119	MW-16A	Part 115	Nickel	mg/l	13	11	85%	2023-02-02 to 2025-08-11		Nonparametric	0.00452	0.00500	0.00150	0.00500	0.00119	0.264	-2.25
25_5_123	MW-16A	Part 115	Silver	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.000431	0.000500	0.0000530	0.000500	0.000168	0.389	-2.18
25_5_128	MW-16A	Part 115	Vanadium	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00436	0.00500	0.000820	0.00500	0.00157	0.360	-2.18
25_5_129	MW-16A	Part 115	Zinc	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00437	0.00500	0.000930	0.00500	0.00153	0.349	-2.18
26_2_105	MW-16B	Appendix III	Boron	mg/l	13	0	0%	2023-02-02 to 2025-08-11		Nonparametric	0.116	0.110	0.110	0.130	0.00768	0.0661	0.849
26_2_107	MW-16B	Appendix III	Calcium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	81	81.7	74.5	85.4	3.09	0.0382	-0.639
26_2_108	MW-16B	Appendix III	Chloride	mg/l	13	5	38%	2023-02-02 to 2025-08-11	Lognormal	Lognormal	4.76	5.00	2.80	11.0	2.04	0.429	2.61
26_2_112	MW-16B	Appendix III	Fluoride	mg/l	13	8	62%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Nonparametric	0.908	1.00	0.310	1.00	0.203	0.224	-2.54
26_2_120	MW-16B	Appendix III	pH, Field	su	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	7.42	7.43	7.25	7.56	0.0892	0.0120	-0.418
26_2_124	MW-16B	Appendix III	Sulfate	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	17.9	17.8	15.0	22.0	2.0	0.111	0.772
26_2_126	MW-16B	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	364	366	350	378	9.21	0.0253	-0.292
26_3_101	MW-16B	Appendix IV	Antimony	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00432	0.00500	0.000570	0.00500	0.00166	0.385	-2.18
26_3_102	MW-16B	Appendix IV	Arsenic	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00181	0.00200	0.000750	0.00200	0.000469	0.260	-2.18
26_3_103	MW-16B	Appendix IV	Barium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.0866	0.0860	0.0820	0.0910	0.00269	0.0311	0.152
26_3_104	MW-16B	Appendix IV	Beryllium	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.000888	0.00100	0.000270	0.00100	0.000274	0.309	-2.18
26_3_106	MW-16B	Appendix IV	Cadmium	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.000435	0.000500	0.0000770	0.000500	0.000159	0.365	-2.18
26_3_109	MW-16B	Appendix IV	Chromium	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00442	0.00500	0.00120	0.00500	0.00143	0.323	-2.18
26_3_110	MW-16B	Appendix IV	Cobalt	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00424	0.00500	0.0000860	0.00500	0.00185	0.435	-2.18

(Table continues on next page)

[a] Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
26_3_113	MW-16B	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Nonparametric	0.908	1.00	0.310	1.00	0.203	0.224	-2.54
26_3_115	MW-16B	Appendix IV	Lead	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00261	0.00300	0.000450	0.00300	0.000958	0.367	-2.18
26_3_116	MW-16B	Appendix IV	Lithium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.0212	0.0210	0.0190	0.0230	0.00121	0.0574	-0.0117
26_3_117	MW-16B	Appendix IV	Mercury	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.000189	0.000200	0.000130	0.000200	0.0000263	0.139	-2.18
26_3_118	MW-16B	Appendix IV	Molybdenum	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Nonparametric	Nonparametric	0.00619	0.00600	0.00500	0.00800	0.000686	0.111	1.43
26_3_121	MW-16B	Appendix IV	Radium-226+228	pci/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal	Gamma	2.32	1.91	1.04	6.43	1.46	0.629	2.20
26_3_122	MW-16B	Appendix IV	Selenium	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.00444	0.00500	0.000890	0.00600	0.00160	0.360	-2.02
26_3_125	MW-16B	Appendix IV	Thallium	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00177	0.00200	0.000510	0.00200	0.000560	0.316	-2.18
26_5_111	MW-16B	Part 115	Copper	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00449	0.00500	0.00170	0.00500	0.00124	0.276	-2.18
26_5_114	MW-16B	Part 115	Iron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Lognormal	Lognormal	0.482	0.420	0.320	0.930	0.169	0.350	1.81
26_5_119	MW-16B	Part 115	Nickel	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00446	0.00500	0.00150	0.00500	0.00131	0.295	-2.18
26_5_123	MW-16B	Part 115	Silver	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.000431	0.000500	0.0000530	0.000500	0.000168	0.389	-2.18
26_5_128	MW-16B	Part 115	Vanadium	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00436	0.00500	0.000820	0.00500	0.00157	0.360	-2.18
26_5_129	MW-16B	Part 115	Zinc	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.00449	0.00500	0.000930	0.00500	0.00127	0.284	-2.46
27_2_105	MW-17A	Appendix III	Boron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	4.05	3.95	3.60	4.70	0.399	0.0984	0.870
27_2_107	MW-17A	Appendix III	Calcium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	246	242	220	270	15.9	0.0647	0.140
27_2_108	MW-17A	Appendix III	Chloride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	69.6	68.6	67.0	75.0	2.52	0.0362	1.67
27_2_112	MW-17A	Appendix III	Fluoride	mg/l	8	3	38%	2024-10-08 to 2025-09-11	Gamma; Lognormal	Gamma	0.378	0.275	0.0500	1.00	0.286	0.758	1.63
27_2_120	MW-17A	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	7.18	7.16	7.09	7.31	0.0713	0.00994	0.764
27_2_124	MW-17A	Appendix III	Sulfate	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	660	663	569	720	44.2	0.0669	-1.11
27_2_126	MW-17A	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	2024-10-08 to 2025-09-11		Nonparametric	1324	1300	1290	1400	47.2	0.0356	1.42
27_3_101	MW-17A	Appendix IV	Antimony	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00223	0.000570	0.000570	0.00500	0.00229	1.03	0.644
27_3_102	MW-17A	Appendix IV	Arsenic	mg/l	8	1	12%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.00160	0.00170	0.00110	0.00200	0.000407	0.254	-0.339
27_3_103	MW-17A	Appendix IV	Barium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.0410	0.0390	0.0350	0.0480	0.00493	0.120	0.411
27_3_104	MW-17A	Appendix IV	Beryllium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.000544	0.000270	0.000270	0.00100	0.000378	0.695	0.644
27_3_106	MW-17A	Appendix IV	Cadmium	mg/l	8	7	88%	2024-10-08 to 2025-09-11		Nonparametric	0.000803	0.0000985	0.0000770	0.00500	0.00171	2.12	2.76
27_3_109	MW-17A	Appendix IV	Chromium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00825	0.00120	0.00120	0.0500	0.0170	2.06	2.77
27_3_110	MW-17A	Appendix IV	Cobalt	mg/l	8	7	88%	2024-10-08 to 2025-09-11		Nonparametric	0.00193	0.000108	0.0000860	0.00500	0.00254	1.31	0.644
27_3_113	MW-17A	Appendix IV	Fluoride (App IV)	mg/l	8	3	38%	2024-10-08 to 2025-09-11	Gamma; Lognormal	Gamma	0.378	0.275	0.0500	1.00	0.286	0.758	1.63
27_3_115	MW-17A	Appendix IV	Lead	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00141	0.000450	0.000450	0.00300	0.00132	0.938	0.644
27_3_116	MW-17A	Appendix IV	Lithium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.0539	0.0530	0.0440	0.0590	0.00517	0.0959	-0.808
27_3_117	MW-17A	Appendix IV	Mercury	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.000156	0.000130	0.000130	0.000200	0.0000362	0.232	0.644
27_3_118	MW-17A	Appendix IV	Molybdenum	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.0171	0.0170	0.0140	0.0220	0.00259	0.151	0.807
27_3_121	MW-17A	Appendix IV	Radium-226+228	pci/l	8	1	12%	2024-10-08 to 2025-09-11	Gamma; Lognormal	Gamma	1.44	0.763	0.613	5.52	1.68	1.16	2.64
27_3_122	MW-17A	Appendix IV	Selenium	mg/l	8	7	88%	2024-10-08 to 2025-09-11		Nonparametric	0.00245	0.000945	0.000890	0.00500	0.00212	0.865	0.643
27_3_125	MW-17A	Appendix IV	Thallium	mg/l	8	7	88%	2024-10-08 to 2025-09-11		Nonparametric	0.00110	0.000650	0.000510	0.00200	0.000748	0.678	0.587
27_5_111	MW-17A	Part 115	Copper	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00856	0.00170	0.00170	0.0500	0.0168	1.96	2.78
27_5_114	MW-17A	Part 115	Iron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	7.17	6.95	6.32	9.30	0.959	0.134	1.81
27_5_119	MW-17A	Part 115	Nickel	mg/l	8	1	12%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.0174	0.0130	0.0110	0.0500	0.0133	0.763	2.77
27_5_123	MW-17A	Part 115	Silver	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.000783	0.0000530	0.0000530	0.00500	0.00172	2.19	2.75
27_5_128	MW-17A	Part 115	Vanadium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00239	0.000820	0.000820	0.00500	0.00216	0.906	0.644
27_5_129	MW-17A	Part 115	Zinc	mg/l	8	4	50%	2024-10-08 to 2025-09-11		Nonparametric	0.00649	0.00500	0.00120	0.0160	0.00578	0.891	1.13

(Table continues on next page)

[a] Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
28_2_105	MW-17B	Appendix III	Boron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	2.21	1.95	1.70	4.10	0.779	0.353	2.62
28_2_107	MW-17B	Appendix III	Calcium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	142	134	110	243	43.0	0.304	2.29
28_2_108	MW-17B	Appendix III	Chloride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	72.3	73.0	67.0	80.9	4.77	0.0660	0.544
28_2_112	MW-17B	Appendix III	Fluoride	mg/l	8	2	25%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.300	0.335	0.0500	0.500	0.143	0.477	-0.768
28_2_120	MW-17B	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	7.38	7.36	7.25	7.65	0.131	0.0177	1.30
28_2_124	MW-17B	Appendix III	Sulfate	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	392	361	320	643	105	0.269	2.42
28_2_126	MW-17B	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	882	851	660	1400	222	0.252	2.16
28_3_101	MW-17B	Appendix IV	Antimony	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00223	0.000570	0.000570	0.00500	0.00229	1.03	0.644
28_3_102	MW-17B	Appendix IV	Arsenic	mg/l	8	1	12%	2024-10-08 to 2025-09-11	Lognormal	Lognormal	0.00243	0.00200	0.00180	0.00400	0.000863	0.356	1.43
28_3_103	MW-17B	Appendix IV	Barium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.0489	0.0470	0.0370	0.0700	0.0115	0.235	0.799
28_3_104	MW-17B	Appendix IV	Beryllium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.000544	0.000270	0.000270	0.00100	0.000378	0.695	0.644
28_3_106	MW-17B	Appendix IV	Cadmium	mg/l	8	7	88%	2024-10-08 to 2025-09-11		Nonparametric	0.000801	0.0000870	0.0000770	0.00500	0.00171	2.13	2.76
28_3_109	MW-17B	Appendix IV	Chromium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00825	0.00120	0.00120	0.0500	0.0170	2.06	2.77
28_3_110	MW-17B	Appendix IV	Cobalt	mg/l	8	5	62%	2024-10-08 to 2025-09-11		Nonparametric	0.00195	0.000180	0.0000860	0.00500	0.00252	1.29	0.642
28_3_113	MW-17B	Appendix IV	Fluoride (App IV)	mg/l	8	2	25%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.300	0.335	0.0500	0.500	0.143	0.477	-0.768
28_3_115	MW-17B	Appendix IV	Lead	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00141	0.000450	0.000450	0.00300	0.00132	0.938	0.644
28_3_116	MW-17B	Appendix IV	Lithium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.0890	0.0880	0.0590	0.117	0.0161	0.181	-0.218
28_3_117	MW-17B	Appendix IV	Mercury	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.000156	0.000130	0.000130	0.000200	0.0000362	0.232	0.644
28_3_118	MW-17B	Appendix IV	Molybdenum	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.0900	0.0975	0.0180	0.115	0.0304	0.338	-2.35
28_3_121	MW-17B	Appendix IV	Radium-226+228	pci/l	8	1	12%	2024-10-08 to 2025-09-11	Lognormal	Lognormal	1.27	0.779	0.662	2.66	0.825	0.647	1.10
28_3_122	MW-17B	Appendix IV	Selenium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00243	0.000890	0.000890	0.00500	0.00213	0.875	0.644
28_3_125	MW-17B	Appendix IV	Thallium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00107	0.000510	0.000510	0.00200	0.000771	0.722	0.644
28_5_111	MW-17B	Part 115	Copper	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00856	0.00170	0.00170	0.0500	0.0168	1.96	2.78
28_5_114	MW-17B	Part 115	Iron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	2.90	2.35	1.80	7.27	1.80	0.620	2.62
28_5_119	MW-17B	Part 115	Nickel	mg/l	8	3	38%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.00984	0.00415	0.00300	0.0500	0.0162	1.65	2.82
28_5_123	MW-17B	Part 115	Silver	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.000783	0.0000530	0.0000530	0.00500	0.00172	2.19	2.75
28_5_128	MW-17B	Part 115	Vanadium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00239	0.000820	0.000820	0.00500	0.00216	0.906	0.644
28_5_129	MW-17B	Part 115	Zinc	mg/l	8	3	38%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Gamma	0.0276	0.0106	0.00500	0.120	0.0397	1.44	2.28
29_2_105	MW-17C	Appendix III	Boron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	2.34	2.25	1.78	2.90	0.442	0.188	0.201
29_2_107	MW-17C	Appendix III	Calcium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	157	156	114	210	31.2	0.199	0.205
29_2_108	MW-17C	Appendix III	Chloride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	62.5	59.0	56.0	74.5	7.43	0.119	1.15
29_2_112	MW-17C	Appendix III	Fluoride	mg/l	8	2	25%	2024-10-08 to 2025-09-11	Lognormal; Normal	Normal	0.422	0.340	0.230	1.00	0.245	0.580	2.35
29_2_120	MW-17C	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	7.22	7.15	7.06	7.57	0.197	0.0272	1.32
29_2_124	MW-17C	Appendix III	Sulfate	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	493	518	321	620	112	0.227	-0.840
29_2_126	MW-17C	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	1054	1100	818	1300	168	0.160	-0.323
29_3_101	MW-17C	Appendix IV	Antimony	mg/l	8	7	88%	2024-10-08 to 2025-09-11		Nonparametric	0.00225	0.000645	0.000570	0.00500	0.00228	1.01	0.642
29_3_102	MW-17C	Appendix IV	Arsenic	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.00316	0.00260	0.00200	0.00600	0.00136	0.431	1.48
29_3_103	MW-17C	Appendix IV	Barium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal	Gamma	0.0644	0.0635	0.0540	0.0880	0.0105	0.164	1.82
29_3_104	MW-17C	Appendix IV	Beryllium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.000544	0.000270	0.000270	0.00100	0.000378	0.695	0.644
29_3_106	MW-17C	Appendix IV	Cadmium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.000798	0.0000770	0.0000770	0.00500	0.00171	2.14	2.76
29_3_109	MW-17C	Appendix IV	Chromium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00825	0.00120	0.00120	0.0500	0.0170	2.06	2.77
29_3_110	MW-17C	Appendix IV	Cobalt	mg/l	8	4	50%	2024-10-08 to 2025-09-11		Nonparametric	0.00196	0.000180	0.0000860	0.00500	0.00252	1.29	0.643

(Table continues on next page)

[a] Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
29_3_113	MW-17C	Appendix IV	Fluoride (App IV)	mg/l	8	2	25%	2024-10-08 to 2025-09-11	Lognormal; Normal	Normal	0.422	0.340	0.230	1.00	0.245	0.580	2.35
29_3_115	MW-17C	Appendix IV	Lead	mg/l	8	5	62%	2024-10-08 to 2025-09-11		Nonparametric	0.00153	0.000810	0.000450	0.00300	0.00123	0.805	0.595
29_3_116	MW-17C	Appendix IV	Lithium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.0625	0.0555	0.0460	0.0940	0.0180	0.287	1.33
29_3_117	MW-17C	Appendix IV	Mercury	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.000156	0.000130	0.000130	0.000200	0.0000362	0.232	0.644
29_3_118	MW-17C	Appendix IV	Molybdenum	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.0602	0.0525	0.0260	0.107	0.0301	0.499	0.539
29_3_121	MW-17C	Appendix IV	Radium-226+228	pci/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	1.42	1.45	0.738	2.51	0.614	0.432	0.580
29_3_122	MW-17C	Appendix IV	Selenium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00243	0.000890	0.000890	0.00500	0.00213	0.875	0.644
29_3_125	MW-17C	Appendix IV	Thallium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00107	0.000510	0.000510	0.00200	0.000771	0.722	0.644
29_5_111	MW-17C	Part 115	Copper	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00856	0.00170	0.00170	0.0500	0.0168	1.96	2.78
29_5_114	MW-17C	Part 115	Iron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	3.10	2.70	1.26	4.90	1.37	0.441	0.241
29_5_119	MW-17C	Part 115	Nickel	mg/l	8	1	12%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.0141	0.00925	0.00640	0.0500	0.0146	1.03	2.78
29_5_123	MW-17C	Part 115	Silver	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.000783	0.0000530	0.0000530	0.00500	0.00172	2.19	2.75
29_5_128	MW-17C	Part 115	Vanadium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00239	0.000820	0.000820	0.00500	0.00216	0.906	0.644
29_5_129	MW-17C	Part 115	Zinc	mg/l	8	4	50%	2024-10-08 to 2025-09-11		Nonparametric	0.0105	0.00500	0.000930	0.0560	0.0184	1.75	2.79
30_2_105	MW-18A	Appendix III	Boron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Lognormal	Lognormal	1.24	0.850	0.790	3.47	0.862	0.698	2.70
30_2_107	MW-18A	Appendix III	Calcium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Nonparametric	Nonparametric	86.3	90.0	5.69	110	31.7	0.367	-2.48
30_2_108	MW-18A	Appendix III	Chloride	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Nonparametric	Nonparametric	66.6	78.0	2.20	82.0	25.2	0.378	-2.56
30_2_112	MW-18A	Appendix III	Fluoride	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.572	0.550	0.290	0.890	0.167	0.291	0.361
30_2_120	MW-18A	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	7.33	7.36	6.89	7.67	0.251	0.0342	-0.446
30_2_124	MW-18A	Appendix III	Sulfate	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Nonparametric	Nonparametric	147	170	0.900	180	56.3	0.384	-2.69
30_2_126	MW-18A	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	518	524	392	586	59.3	0.114	-1.10
30_3_101	MW-18A	Appendix IV	Antimony	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00205	0.000570	0.000570	0.00500	0.00221	1.08	0.857
30_3_102	MW-18A	Appendix IV	Arsenic	mg/l	9	3	33%	2024-10-08 to 2025-08-08	Gamma; Lognormal	Gamma	0.00180	0.00170	0.000750	0.00500	0.00131	0.729	2.13
30_3_103	MW-18A	Appendix IV	Barium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Normal	Normal	0.0487	0.0420	0.00500	0.0770	0.0221	0.454	-0.653
30_3_104	MW-18A	Appendix IV	Beryllium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.000513	0.000270	0.000270	0.00100	0.000365	0.711	0.857
30_3_106	MW-18A	Appendix IV	Cadmium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.000718	0.0000770	0.0000770	0.00500	0.00162	2.25	2.93
30_3_109	MW-18A	Appendix IV	Chromium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00747	0.00120	0.00120	0.0500	0.0160	2.15	2.94
30_3_110	MW-18A	Appendix IV	Cobalt	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00172	0.0000860	0.0000860	0.00500	0.00246	1.43	0.857
30_3_113	MW-18A	Appendix IV	Fluoride (App IV)	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.572	0.550	0.290	0.890	0.167	0.291	0.361
30_3_115	MW-18A	Appendix IV	Lead	mg/l	9	7	78%	2024-10-08 to 2025-08-08		Nonparametric	0.00130	0.000450	0.000450	0.00300	0.00127	0.979	0.857
30_3_116	MW-18A	Appendix IV	Lithium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Normal	Normal	0.0746	0.0700	0.0260	0.110	0.0255	0.341	-0.373
30_3_117	MW-18A	Appendix IV	Mercury	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.000153	0.000130	0.000130	0.000200	0.0000350	0.228	0.857
30_3_118	MW-18A	Appendix IV	Molybdenum	mg/l	9	1	11%	2024-10-08 to 2025-08-08	Nonparametric	Nonparametric	0.0908	0.110	0.00500	0.120	0.0369	0.406	-1.83
30_3_121	MW-18A	Appendix IV	Radium-226+228	pci/l	9	2	22%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	1.28	1.19	0.626	3.19	0.797	0.624	1.99
30_3_122	MW-18A	Appendix IV	Selenium	mg/l	9	8	89%	2024-10-08 to 2025-08-08		Nonparametric	0.00233	0.000890	0.000890	0.00500	0.00201	0.865	0.823
30_3_125	MW-18A	Appendix IV	Thallium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00101	0.000510	0.000510	0.00200	0.000745	0.740	0.857
30_5_111	MW-18A	Part 115	Copper	mg/l	9	8	89%	2024-10-08 to 2025-08-08		Nonparametric	0.00783	0.00170	0.00170	0.0500	0.0159	2.03	2.96
30_5_114	MW-18A	Part 115	Iron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Normal	Gamma	1.85	1.50	0.0300	3.40	1.16	0.625	0.177
30_5_119	MW-18A	Part 115	Nickel	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00767	0.00150	0.00150	0.0500	0.0159	2.08	2.95
30_5_123	MW-18A	Part 115	Silver	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.000702	0.0000530	0.0000530	0.00500	0.00162	2.31	2.92
30_5_128	MW-18A	Part 115	Vanadium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00221	0.000820	0.000820	0.00500	0.00209	0.944	0.857
30_5_129	MW-18A	Part 115	Zinc	mg/l	9	6	67%	2024-10-08 to 2025-08-08		Nonparametric	0.00394	0.00150	0.000930	0.0150	0.00456	1.16	2.10

(Table continues on next page)

[a] Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
31_2_105	MW-18B	Appendix III	Boron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Nonparametric	Nonparametric	2.76	3.08	1.09	3.40	0.754	0.274	-1.66
31_2_107	MW-18B	Appendix III	Calcium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	150	160	89.8	170	26.1	0.174	-1.79
31_2_108	MW-18B	Appendix III	Chloride	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Normal	Normal	85.2	87.0	70.7	91.0	6.13	0.0720	-1.94
31_2_112	MW-18B	Appendix III	Fluoride	mg/l	9	1	11%	2024-10-08 to 2025-08-08	Normal	Normal	0.371	0.340	0.120	1.00	0.250	0.674	2.34
31_2_120	MW-18B	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	7.31	7.33	7.16	7.41	0.0889	0.0122	-0.630
31_2_124	MW-18B	Appendix III	Sulfate	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Normal	Normal	382	410	143	460	97.9	0.256	-2.12
31_2_126	MW-18B	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Nonparametric	Nonparametric	857	890	562	1000	126	0.147	-1.82
31_3_101	MW-18B	Appendix IV	Antimony	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00205	0.000570	0.000570	0.00500	0.00221	1.08	0.857
31_3_102	MW-18B	Appendix IV	Arsenic	mg/l	9	7	78%	2024-10-08 to 2025-08-08		Nonparametric	0.00155	0.000750	0.000750	0.00500	0.00140	0.902	2.27
31_3_103	MW-18B	Appendix IV	Barium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Normal	Normal	0.0566	0.0580	0.0430	0.0640	0.00581	0.103	-1.65
31_3_104	MW-18B	Appendix IV	Beryllium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.000513	0.000270	0.000270	0.00100	0.000365	0.711	0.857
31_3_106	MW-18B	Appendix IV	Cadmium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.000718	0.0000770	0.0000770	0.00500	0.00162	2.25	2.93
31_3_109	MW-18B	Appendix IV	Chromium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00747	0.00120	0.00120	0.0500	0.0160	2.15	2.94
31_3_110	MW-18B	Appendix IV	Cobalt	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00172	0.0000860	0.0000860	0.00500	0.00246	1.43	0.857
31_3_113	MW-18B	Appendix IV	Fluoride (App IV)	mg/l	9	1	11%	2024-10-08 to 2025-08-08	Normal	Normal	0.371	0.340	0.120	1.00	0.250	0.674	2.34
31_3_115	MW-18B	Appendix IV	Lead	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00130	0.000450	0.000450	0.00300	0.00128	0.981	0.857
31_3_116	MW-18B	Appendix IV	Lithium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Nonparametric	Nonparametric	0.121	0.130	0.0920	0.132	0.0156	0.129	-1.45
31_3_117	MW-18B	Appendix IV	Mercury	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.000153	0.000130	0.000130	0.000200	0.0000350	0.228	0.857
31_3_118	MW-18B	Appendix IV	Molybdenum	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Nonparametric	Nonparametric	0.133	0.140	0.100	0.150	0.0194	0.146	-1.23
31_3_121	MW-18B	Appendix IV	Radium-226+228	pci/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	2.54	2.32	0.902	5.76	1.47	0.577	1.33
31_3_122	MW-18B	Appendix IV	Selenium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00226	0.000890	0.000890	0.00500	0.00205	0.909	0.857
31_3_125	MW-18B	Appendix IV	Thallium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00101	0.000510	0.000510	0.00200	0.000745	0.740	0.857
31_5_111	MW-18B	Part 115	Copper	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00780	0.00170	0.00170	0.0500	0.0159	2.04	2.95
31_5_114	MW-18B	Part 115	Iron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	2.68	2.65	2.30	2.90	0.184	0.0688	-0.779
31_5_119	MW-18B	Part 115	Nickel	mg/l	9	1	11%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.0131	0.00900	0.00590	0.0500	0.0139	1.07	2.93
31_5_123	MW-18B	Part 115	Silver	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.000702	0.0000530	0.0000530	0.00500	0.00162	2.31	2.92
31_5_128	MW-18B	Part 115	Vanadium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00221	0.000820	0.000820	0.00500	0.00209	0.944	0.857
31_5_129	MW-18B	Part 115	Zinc	mg/l	9	7	78%	2024-10-08 to 2025-08-08		Nonparametric	0.00409	0.00250	0.000930	0.0150	0.00448	1.10	2.12
32_2_105	MW-100A	Appendix III	Boron	mg/l	11	2	18%	2023-06-05 to 2025-08-07		Nonparametric	0.0495	0.0500	0.0400	0.0570	0.00543	0.110	-0.634
32_2_107	MW-100A	Appendix III	Calcium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	91.7	92.1	88.6	95.3	2.16	0.0235	-0.146
32_2_108	MW-100A	Appendix III	Chloride	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Nonparametric	Nonparametric	10.2	10.0	10.0	11.0	0.332	0.0325	1.75
32_2_112	MW-100A	Appendix III	Fluoride	mg/l	11	7	64%	2023-06-05 to 2025-08-07		Nonparametric	0.796	1.00	0.220	1.00	0.297	0.373	-1.02
32_2_120	MW-100A	Appendix III	pH, Field	su	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	7.26	7.28	7.08	7.40	0.0945	0.0130	-0.353
32_2_124	MW-100A	Appendix III	Sulfate	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	24.9	22.0	16.2	38.0	6.96	0.279	0.739
32_2_126	MW-100A	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Nonparametric	Nonparametric	404	414	340	434	28.2	0.0698	-1.63
32_3_101	MW-100A	Appendix IV	Antimony	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00419	0.00500	0.000570	0.00500	0.00179	0.427	-1.92
32_3_102	MW-100A	Appendix IV	Arsenic	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0139	0.0140	0.00900	0.0180	0.00277	0.199	-0.436
32_3_103	MW-100A	Appendix IV	Barium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.198	0.200	0.189	0.207	0.00727	0.0367	-0.246
32_3_104	MW-100A	Appendix IV	Beryllium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.000867	0.00100	0.000270	0.00100	0.000295	0.340	-1.92
32_3_106	MW-100A	Appendix IV	Cadmium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.000423	0.000500	0.0000770	0.000500	0.000171	0.404	-1.92
32_3_109	MW-100A	Appendix IV	Chromium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00431	0.00500	0.00120	0.00500	0.00154	0.357	-1.92
32_3_110	MW-100A	Appendix IV	Cobalt	mg/l	11	9	82%	2023-06-05 to 2025-08-07		Nonparametric	0.00414	0.00500	0.000220	0.00500	0.00191	0.462	-1.92

(Table continues on next page)

[a] Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
32_3_113	MW-100A	Appendix IV	Fluoride (App IV)	mg/l	11	7	64%	2023-06-05 to 2025-08-07		Nonparametric	0.796	1.00	0.220	1.00	0.297	0.373	-1.02
32_3_115	MW-100A	Appendix IV	Lead	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00254	0.00300	0.000450	0.00300	0.00103	0.407	-1.92
32_3_116	MW-100A	Appendix IV	Lithium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0155	0.0160	0.0110	0.0200	0.00324	0.209	-0.176
32_3_117	MW-100A	Appendix IV	Mercury	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.000187	0.000200	0.000130	0.000200	0.0000283	0.151	-1.92
32_3_118	MW-100A	Appendix IV	Molybdenum	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.00994	0.0100	0.00690	0.0130	0.00218	0.219	-0.0395
32_3_121	MW-100A	Appendix IV	Radium-226+228	pci/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	1.15	1.10	0.402	2.50	0.705	0.613	0.835
32_3_122	MW-100A	Appendix IV	Selenium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00425	0.00500	0.000890	0.00500	0.00166	0.391	-1.92
32_3_125	MW-100A	Appendix IV	Thallium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00173	0.00200	0.000510	0.00200	0.000603	0.349	-1.92
32_5_111	MW-100A	Part 115	Copper	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00440	0.00500	0.00170	0.00500	0.00133	0.303	-1.92
32_5_114	MW-100A	Part 115	Iron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Normal	Normal	2.44	2.55	0.630	3.75	0.936	0.383	-0.586
32_5_119	MW-100A	Part 115	Nickel	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00436	0.00500	0.00150	0.00500	0.00142	0.324	-1.92
32_5_123	MW-100A	Part 115	Silver	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.000419	0.000500	0.0000530	0.000500	0.000181	0.432	-1.92
32_5_128	MW-100A	Part 115	Vanadium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00424	0.00500	0.000820	0.00500	0.00169	0.399	-1.92
32_5_129	MW-100A	Part 115	Zinc	mg/l	11	8	73%	2023-06-05 to 2025-08-07		Nonparametric	0.00455	0.00500	0.00120	0.00600	0.00134	0.295	-1.97
33_2_105	MW-100B	Appendix III	Boron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.254	0.260	0.210	0.300	0.0269	0.106	0.0896
33_2_107	MW-100B	Appendix III	Calcium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	97.7	96.8	89.0	108	4.98	0.0510	0.534
33_2_108	MW-100B	Appendix III	Chloride	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	22.3	23.0	18.0	25.0	2.52	0.113	-0.727
33_2_112	MW-100B	Appendix III	Fluoride	mg/l	11	7	64%	2023-06-05 to 2025-08-07		Nonparametric	0.754	1.00	0.150	1.00	0.349	0.463	-0.815
33_2_120	MW-100B	Appendix III	pH, Field	su	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	7.42	7.40	7.26	7.62	0.107	0.0145	0.750
33_2_124	MW-100B	Appendix III	Sulfate	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	115	112	105	136	9.32	0.0808	1.19
33_2_126	MW-100B	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	494	492	440	538	32.3	0.0654	-0.494
33_3_101	MW-100B	Appendix IV	Antimony	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00419	0.00500	0.000570	0.00500	0.00179	0.427	-1.92
33_3_102	MW-100B	Appendix IV	Arsenic	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Nonparametric	Nonparametric	0.00991	0.0100	0.00730	0.0110	0.00118	0.119	-1.13
33_3_103	MW-100B	Appendix IV	Barium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.149	0.147	0.140	0.164	0.00797	0.0536	0.806
33_3_104	MW-100B	Appendix IV	Beryllium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.000867	0.00100	0.000270	0.00100	0.000295	0.340	-1.92
33_3_106	MW-100B	Appendix IV	Cadmium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.000423	0.000500	0.0000770	0.000500	0.000171	0.404	-1.92
33_3_109	MW-100B	Appendix IV	Chromium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00431	0.00500	0.00120	0.00500	0.00154	0.357	-1.92
33_3_110	MW-100B	Appendix IV	Cobalt	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00411	0.00500	0.0000860	0.00500	0.00199	0.484	-1.92
33_3_113	MW-100B	Appendix IV	Fluoride (App IV)	mg/l	11	7	64%	2023-06-05 to 2025-08-07		Nonparametric	0.754	1.00	0.150	1.00	0.349	0.463	-0.815
33_3_115	MW-100B	Appendix IV	Lead	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00254	0.00300	0.000450	0.00300	0.00103	0.407	-1.92
33_3_116	MW-100B	Appendix IV	Lithium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0177	0.0180	0.0160	0.0190	0.00101	0.0569	-0.0531
33_3_117	MW-100B	Appendix IV	Mercury	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.000187	0.000200	0.000130	0.000200	0.0000283	0.151	-1.92
33_3_118	MW-100B	Appendix IV	Molybdenum	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Lognormal; Normal	Normal	0.00835	0.00900	0.00540	0.0110	0.00172	0.206	-0.502
33_3_121	MW-100B	Appendix IV	Radium-226+228	pci/l	11	1	9%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	1.34	1.51	0.494	2.16	0.594	0.443	-0.333
33_3_122	MW-100B	Appendix IV	Selenium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00425	0.00500	0.000890	0.00500	0.00166	0.391	-1.92
33_3_125	MW-100B	Appendix IV	Thallium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00173	0.00200	0.000510	0.00200	0.000603	0.349	-1.92
33_5_111	MW-100B	Part 115	Copper	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00440	0.00500	0.00170	0.00500	0.00133	0.303	-1.92
33_5_114	MW-100B	Part 115	Iron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	2.49	2.35	1.77	3.54	0.459	0.184	1.07
33_5_119	MW-100B	Part 115	Nickel	mg/l	11	10	91%	2023-06-05 to 2025-08-07		Nonparametric	0.00441	0.00500	0.00150	0.00500	0.00132	0.299	-1.96
33_5_123	MW-100B	Part 115	Silver	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.000419	0.000500	0.0000530	0.000500	0.000181	0.432	-1.92
33_5_128	MW-100B	Part 115	Vanadium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00424	0.00500	0.000820	0.00500	0.00169	0.399	-1.92
33_5_129	MW-100B	Part 115	Zinc	mg/l	11	10	91%	2023-06-05 to 2025-08-07		Nonparametric	0.00435	0.00500	0.000930	0.00500	0.00147	0.337	-2.02

[a] Non-detects are excluded from goodness-of-fit tests.

Table 2: Summary Statistics, Non-Detects Excluded

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
13_2_105	MW-2	Appendix III	Boron	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	4.63	4.68	3.30	6.17	0.996	0.215	0.0222
13_2_107	MW-2	Appendix III	Calcium	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Nonparametric	Nonparametric	234	244	190	272	32	0.137	-0.193
13_2_108	MW-2	Appendix III	Chloride	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	79.3	81.3	59.0	94.0	9.39	0.118	-0.552
13_2_112	MW-2	Appendix III	Fluoride	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.0570	0.0570	0.0520	0.0620	0.00707	0.124	NA
13_2_120	MW-2	Appendix III	pH, Field	su	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	6.77	6.76	6.54	7.08	0.113	0.0166	0.644
13_2_124	MW-2	Appendix III	Sulfate	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	406	392	220	580	128	0.314	-0.120
13_2_126	MW-2	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	1174	1180	860	1430	187	0.159	-0.165
13_3_102	MW-2	Appendix IV	Arsenic	mg/l	19	14	74%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Nonparametric	0.00242	0.00200	0.00110	0.00400	0.00111	0.459	0.515
13_3_103	MW-2	Appendix IV	Barium	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0404	0.0410	0.0340	0.0480	0.00377	0.0935	-0.0431
13_3_106	MW-2	Appendix IV	Cadmium	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.000114	0.000114	0.0000990	0.000130	0.0000219	0.191	NA
13_3_110	MW-2	Appendix IV	Cobalt	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.00375	0.00375	0.00360	0.00390	0.000212	0.0566	NA
13_3_113	MW-2	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.0570	0.0570	0.0520	0.0620	0.00707	0.124	NA
13_3_116	MW-2	Appendix IV	Lithium	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0534	0.0550	0.0380	0.0670	0.00918	0.172	-0.245
13_3_118	MW-2	Appendix IV	Molybdenum	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0108	0.0110	0.00640	0.0150	0.00221	0.206	-0.190
13_3_121	MW-2	Appendix IV	Radium-226+228	pci/l	19	2	11%	2020-04-28 to 2025-08-06	Normal	Normal	0.971	0.754	0	3.25	0.859	0.884	1.24
13_5_114	MW-2	Part 115	Iron	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal	Gamma	0.677	0.550	0.220	1.93	0.393	0.581	2.05
13_5_119	MW-2	Part 115	Nickel	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Lognormal; Normal	Normal	0.0213	0.0220	0.0120	0.0270	0.00504	0.237	-0.382
13_5_129	MW-2	Part 115	Zinc	mg/l	19	14	74%	2020-04-28 to 2025-08-06	Gamma; Lognormal	Nonparametric	0.0118	0.00700	0.00190	0.0410	0.0165	1.40	2.11
14_2_105	MW-3	Appendix III	Boron	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	5.69	5.65	5.34	6.16	0.241	0.0424	0.545
14_2_107	MW-3	Appendix III	Calcium	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	242	246	220	257	13.5	0.0558	-0.682
14_2_108	MW-3	Appendix III	Chloride	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	96.5	97.0	89.0	103	5.11	0.0530	-0.204
14_2_112	MW-3	Appendix III	Fluoride	mg/l	10	8	80%	2021-05-04 to 2025-08-06		Nonparametric	0.175	0.175	0.160	0.190	0.0212	0.121	NA
14_2_120	MW-3	Appendix III	pH, Field	su	10	0	0%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	7.24	7.24	7.15	7.38	0.0733	0.0101	0.625
14_2_124	MW-3	Appendix III	Sulfate	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	696	694	640	732	28.2	0.0405	-0.559
14_2_126	MW-3	Appendix III	Total Dissolved Solids	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Nonparametric	Nonparametric	1396	1440	1100	1500	134	0.0961	-1.76
14_3_102	MW-3	Appendix IV	Arsenic	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Nonparametric	Nonparametric	0.00337	0.00300	0.00260	0.00600	0.000989	0.293	2.54
14_3_103	MW-3	Appendix IV	Barium	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0185	0.0190	0.0160	0.0210	0.00190	0.103	-0.0607
14_3_110	MW-3	Appendix IV	Cobalt	mg/l	10	8	80%	2021-05-04 to 2025-08-06		Nonparametric	0.000585	0.000585	0.000490	0.000680	0.000134	0.230	NA
14_3_113	MW-3	Appendix IV	Fluoride (App IV)	mg/l	10	8	80%	2021-05-04 to 2025-08-06		Nonparametric	0.175	0.175	0.160	0.190	0.0212	0.121	NA
14_3_115	MW-3	Appendix IV	Lead	mg/l	10	9	90%	2021-05-04 to 2025-08-06		Nonparametric	0.000670	0.000670	0.000670	0.000670	NA	NA	NA
14_3_116	MW-3	Appendix IV	Lithium	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0814	0.0810	0.0750	0.0910	0.00523	0.0643	0.444
14_3_118	MW-3	Appendix IV	Molybdenum	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.162	0.162	0.150	0.182	0.0107	0.0657	0.702
14_3_121	MW-3	Appendix IV	Radium-226+228	pci/l	10	2	20%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	1.52	1.16	0.412	2.92	0.879	0.577	0.545
14_5_111	MW-3	Part 115	Copper	mg/l	10	9	90%	2021-05-04 to 2025-08-06		Nonparametric	0.00290	0.00290	0.00290	0.00290	NA	NA	NA
14_5_114	MW-3	Part 115	Iron	mg/l	10	0	0%	2021-05-04 to 2025-08-06	Gamma; Lognormal; Normal	Normal	1.79	1.82	1.40	2.05	0.228	0.127	-0.464
14_5_119	MW-3	Part 115	Nickel	mg/l	10	8	80%	2021-05-04 to 2025-08-06		Nonparametric	0.00270	0.00270	0.00220	0.00320	0.000707	0.262	NA
14_5_129	MW-3	Part 115	Zinc	mg/l	10	8	80%	2021-05-04 to 2025-08-06		Nonparametric	0.00205	0.00205	0.00180	0.00230	0.000354	0.172	NA
15_2_105	MW-5	Appendix III	Boron	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Normal	Normal	3.96	4.38	0.370	5.75	1.26	0.318	-1.32
15_2_107	MW-5	Appendix III	Calcium	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	217	226	70.1	320	69.3	0.319	-0.378
15_2_108	MW-5	Appendix III	Chloride	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Nonparametric	Nonparametric	61.4	66.0	34.0	82.0	17.3	0.281	-0.483
15_2_112	MW-5	Appendix III	Fluoride	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.125	0.125	0.110	0.140	0.0212	0.170	NA
15_2_120	MW-5	Appendix III	pH, Field	su	19	0	0%	2020-04-28 to 2025-08-06	Nonparametric	Nonparametric	7.19	7.27	6.40	7.40	0.246	0.0342	-2.42
15_2_124	MW-5	Appendix III	Sulfate	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	583	586	186	1080	278	0.477	0.169

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
15_2_126	MW-5	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	1218	1225	540	2020	443	0.364	0.0856
15_3_102	MW-5	Appendix IV	Arsenic	mg/l	19	12	63%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Nonparametric	0.00341	0.00300	0.000870	0.00700	0.00210	0.615	0.720
15_3_103	MW-5	Appendix IV	Barium	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0449	0.0430	0.0330	0.0640	0.00785	0.175	1.00
15_3_106	MW-5	Appendix IV	Cadmium	mg/l	19	18	95%	2020-04-28 to 2025-08-06		Nonparametric	0.0000920	0.0000920	0.0000920	0.0000920	NA	NA	NA
15_3_109	MW-5	Appendix IV	Chromium	mg/l	19	16	84%	2020-04-28 to 2025-08-06		Nonparametric	0.00613	0.00700	0.00140	0.0100	0.00437	0.712	-0.858
15_3_110	MW-5	Appendix IV	Cobalt	mg/l	19	16	84%	2020-04-28 to 2025-08-06		Nonparametric	0.00231	0.000620	0.000310	0.00600	0.00320	1.39	1.71
15_3_113	MW-5	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.125	0.125	0.110	0.140	0.0212	0.170	NA
15_3_115	MW-5	Appendix IV	Lead	mg/l	19	14	74%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Nonparametric	0.00463	0.00300	0.000450	0.0140	0.00556	1.20	1.66
15_3_116	MW-5	Appendix IV	Lithium	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Normal	Normal	0.0688	0.0730	0.0160	0.0910	0.0179	0.260	-1.35
15_3_118	MW-5	Appendix IV	Molybdenum	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Normal	Normal	0.0567	0.0540	0.0100	0.0960	0.0202	0.356	-0.215
15_3_121	MW-5	Appendix IV	Radium-226+228	pci/l	19	2	11%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	1.77	1.65	0.524	4.22	1.07	0.605	1.19
15_5_111	MW-5	Part 115	Copper	mg/l	19	12	63%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Nonparametric	0.0106	0.00900	0.00180	0.0260	0.00897	0.844	0.914
15_5_114	MW-5	Part 115	Iron	mg/l	19	1	5%	2020-04-28 to 2025-08-06	Gamma; Lognormal	Gamma	1.42	0.690	0.160	8.00	1.98	1.39	2.64
15_5_119	MW-5	Part 115	Nickel	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0102	0.0100	0.00350	0.0190	0.00463	0.453	0.460
15_5_123	MW-5	Part 115	Silver	mg/l	19	18	95%	2020-04-28 to 2025-08-06		Nonparametric	0.0000880	0.0000880	0.0000880	0.0000880	NA	NA	NA
15_5_128	MW-5	Part 115	Vanadium	mg/l	19	15	79%	2020-04-28 to 2025-08-06		Nonparametric	0.00688	0.00700	0.00150	0.0120	0.00459	0.668	-0.122
15_5_129	MW-5	Part 115	Zinc	mg/l	19	3	16%	2020-04-28 to 2025-08-06	Gamma; Lognormal	Gamma	0.0192	0.00850	0.00370	0.0980	0.0245	1.28	2.57
16_2_105	MW-6	Appendix III	Boron	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.783	0.780	0.490	1.05	0.166	0.212	-0.0359
16_2_107	MW-6	Appendix III	Calcium	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	170	170	142	200	19.1	0.112	-0.0175
16_2_108	MW-6	Appendix III	Chloride	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	34.6	36.0	24.0	49.0	7.38	0.213	0.143
16_2_112	MW-6	Appendix III	Fluoride	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.220	0.220	0.200	0.240	0.0283	0.129	NA
16_2_120	MW-6	Appendix III	pH, Field	su	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	6.74	6.74	6.35	7.11	0.158	0.0235	-0.0243
16_2_124	MW-6	Appendix III	Sulfate	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	178	176	118	263	44.8	0.252	0.420
16_2_126	MW-6	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	759	759	598	900	93.7	0.123	0.0277
16_3_102	MW-6	Appendix IV	Arsenic	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.00187	0.00187	0.000750	0.00300	0.00159	0.849	NA
16_3_103	MW-6	Appendix IV	Barium	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0485	0.0500	0.0380	0.0620	0.00581	0.120	0.273
16_3_106	MW-6	Appendix IV	Cadmium	mg/l	19	18	95%	2020-04-28 to 2025-08-06		Nonparametric	0.000150	0.000150	0.000150	0.000150	NA	NA	NA
16_3_110	MW-6	Appendix IV	Cobalt	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.000435	0.000435	0.000340	0.000530	0.000134	0.309	NA
16_3_113	MW-6	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	2020-04-28 to 2025-08-06		Nonparametric	0.220	0.220	0.200	0.240	0.0283	0.129	NA
16_3_116	MW-6	Appendix IV	Lithium	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0471	0.0470	0.0320	0.0670	0.00828	0.176	0.413
16_3_118	MW-6	Appendix IV	Molybdenum	mg/l	19	0	0%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0242	0.0250	0.0120	0.0360	0.00645	0.267	-0.430
16_3_121	MW-6	Appendix IV	Radium-226+228	pci/l	19	2	11%	2020-04-28 to 2025-08-06	Normal	Normal	1.22	0.961	0	4.29	1.04	0.859	1.74
16_5_114	MW-6	Part 115	Iron	mg/l	19	9	47%	2020-04-28 to 2025-08-06	Gamma; Lognormal; Normal	Nonparametric	0.0568	0.0350	0.0200	0.200	0.0543	0.956	2.42
16_5_119	MW-6	Part 115	Nickel	mg/l	19	5	26%	2020-04-28 to 2025-08-06	Nonparametric	Nonparametric	0.00616	0.00700	0.00190	0.00800	0.00173	0.280	-1.50
16_5_129	MW-6	Part 115	Zinc	mg/l	19	16	84%	2020-04-28 to 2025-08-06		Nonparametric	0.0124	0.00200	0.00120	0.0340	0.0187	1.51	1.73
17_2_105	MW-7	Appendix III	Boron	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Gamma; Lognormal; Normal	Normal	1.87	1.89	1.08	2.75	0.394	0.210	0.0374
17_2_107	MW-7	Appendix III	Calcium	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Nonparametric	Nonparametric	117	111	97.2	165	18.3	0.156	1.71
17_2_108	MW-7	Appendix III	Chloride	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Gamma; Lognormal; Normal	Normal	79	78.0	72.2	98.0	6.91	0.0876	1.62
17_2_112	MW-7	Appendix III	Fluoride	mg/l	15	11	73%	2021-06-15 to 2025-08-08		Nonparametric	0.357	0.354	0.300	0.420	0.0508	0.142	0.306
17_2_120	MW-7	Appendix III	pH, Field	su	15	0	0%	2021-06-15 to 2025-08-08	Nonparametric	Nonparametric	7.45	7.42	7.09	8.18	0.244	0.0327	1.82
17_2_124	MW-7	Appendix III	Sulfate	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Gamma; Lognormal; Normal	Normal	201	191	171	270	29.3	0.146	1.52
17_2_126	MW-7	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Nonparametric	Nonparametric	625	610	548	864	81.5	0.130	2.28
17_3_102	MW-7	Appendix IV	Arsenic	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Nonparametric	Nonparametric	0.00533	0.00600	0.00270	0.00700	0.00109	0.205	-1.04

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
17_3_103	MW-7	Appendix IV	Barium	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.0528	0.0540	0.0360	0.0620	0.00649	0.123	-1.05
17_3_109	MW-7	Appendix IV	Chromium	mg/l	15	14	93%	2021-06-15 to 2025-08-08		Nonparametric	0.00700	0.00700	0.00700	0.00700	NA	NA	NA
17_3_110	MW-7	Appendix IV	Cobalt	mg/l	15	13	87%	2021-06-15 to 2025-08-08		Nonparametric	0.000210	0.000210	0.000160	0.000260	0.0000707	0.337	NA
17_3_113	MW-7	Appendix IV	Fluoride (App IV)	mg/l	15	11	73%	2021-06-15 to 2025-08-08		Nonparametric	0.357	0.354	0.300	0.420	0.0508	0.142	0.306
17_3_116	MW-7	Appendix IV	Lithium	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.0883	0.0890	0.0630	0.112	0.0130	0.148	-0.173
17_3_117	MW-7	Appendix IV	Mercury	mg/l	15	14	93%	2021-06-15 to 2025-08-08		Nonparametric	0.000200	0.000200	0.000200	0.000200	NA	NA	NA
17_3_118	MW-7	Appendix IV	Molybdenum	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Nonparametric	Nonparametric	0.228	0.259	0.146	0.296	0.0589	0.258	-0.169
17_3_121	MW-7	Appendix IV	Radium-226+228	pci/l	15	0	0%	2021-06-15 to 2025-08-08	Gamma; Lognormal; Normal	Normal	2.10	1.82	0.514	5.44	1.47	0.698	1.22
17_5_114	MW-7	Part 115	Iron	mg/l	15	0	0%	2021-06-15 to 2025-08-08	Gamma; Lognormal	Gamma	1.42	1.34	0.900	2.81	0.458	0.324	2.19
17_5_128	MW-7	Part 115	Vanadium	mg/l	15	14	93%	2021-06-15 to 2025-08-08		Nonparametric	0.00600	0.00600	0.00600	0.00600	NA	NA	NA
17_5_129	MW-7	Part 115	Zinc	mg/l	15	11	73%	2021-06-15 to 2025-08-08		Nonparametric	0.00732	0.00700	0.00130	0.0140	0.00520	0.710	0.373
18_2_105	MW-7C	Appendix III	Boron	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal; Normal	Normal	6.56	6.52	6.20	7.24	0.249	0.0380	1.41
18_2_107	MW-7C	Appendix III	Calcium	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Normal	Normal	238	241	183	277	21.0	0.0885	-1.00
18_2_108	MW-7C	Appendix III	Chloride	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal; Normal	Normal	92.9	93.0	83.0	105	5.47	0.0589	0.561
18_2_112	MW-7C	Appendix III	Fluoride	mg/l	14	12	86%	2022-03-10 to 2025-08-07		Nonparametric	0.270	0.270	0.240	0.300	0.0424	0.157	NA
18_2_120	MW-7C	Appendix III	pH, Field	su	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal; Normal	Normal	7.34	7.31	7.23	7.51	0.0923	0.0126	0.599
18_2_124	MW-7C	Appendix III	Sulfate	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal; Normal	Normal	680	672	630	751	36.2	0.0532	0.671
18_2_126	MW-7C	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Nonparametric	Nonparametric	1345	1360	1100	1500	98.0	0.0729	-1.19
18_3_102	MW-7C	Appendix IV	Arsenic	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal	Gamma	0.00648	0.00600	0.00500	0.0100	0.00119	0.184	2.06
18_3_103	MW-7C	Appendix IV	Barium	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0423	0.0420	0.0380	0.0470	0.00270	0.0639	0.138
18_3_106	MW-7C	Appendix IV	Cadmium	mg/l	14	10	71%	2022-03-10 to 2025-08-07		Nonparametric	0.000640	0.000750	0.000160	0.000900	0.000330	0.516	-1.64
18_3_110	MW-7C	Appendix IV	Cobalt	mg/l	14	13	93%	2022-03-10 to 2025-08-07		Nonparametric	0.000200	0.000200	0.000200	0.000200	NA	NA	NA
18_3_113	MW-7C	Appendix IV	Fluoride (App IV)	mg/l	14	12	86%	2022-03-10 to 2025-08-07		Nonparametric	0.270	0.270	0.240	0.300	0.0424	0.157	NA
18_3_116	MW-7C	Appendix IV	Lithium	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.125	0.126	0.110	0.138	0.00833	0.0665	-0.523
18_3_118	MW-7C	Appendix IV	Molybdenum	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.392	0.394	0.350	0.422	0.0206	0.0526	-0.628
18_3_121	MW-7C	Appendix IV	Radium-226+228	pci/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal; Normal	Normal	1.98	1.72	0.773	3.66	1.07	0.540	0.600
18_5_114	MW-7C	Part 115	Iron	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal; Normal	Normal	3.96	4.07	2.80	4.41	0.407	0.103	-1.86
18_5_119	MW-7C	Part 115	Nickel	mg/l	14	0	0%	2022-03-10 to 2025-08-07	Gamma; Lognormal	Gamma	0.00753	0.00725	0.00590	0.0100	0.000943	0.125	1.12
18_5_129	MW-7C	Part 115	Zinc	mg/l	14	11	79%	2022-03-10 to 2025-08-07		Nonparametric	0.00317	0.00230	0.00120	0.00600	0.00251	0.794	1.37
19_2_105	MW-8	Appendix III	Boron	mg/l	15	1	7%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0913	0.0800	0.0400	0.210	0.0426	0.467	1.75
19_2_107	MW-8	Appendix III	Calcium	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	93.7	93.3	86.5	104	5.26	0.0562	0.265
19_2_108	MW-8	Appendix III	Chloride	mg/l	15	2	13%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	24.1	17.0	4.45	66.0	19.4	0.805	1.32
19_2_112	MW-8	Appendix III	Fluoride	mg/l	15	12	80%	2021-06-15 to 2025-08-07		Nonparametric	0.0562	0.0560	0.0540	0.0587	0.00236	0.0419	0.441
19_2_120	MW-8	Appendix III	pH, Field	su	15	0	0%	2021-06-15 to 2025-08-07	Nonparametric	Nonparametric	7.15	7.12	6.99	7.78	0.196	0.0274	2.57
19_2_124	MW-8	Appendix III	Sulfate	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	24.8	22.0	11.0	52.0	12.5	0.506	1.07
19_2_126	MW-8	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	387	382	340	460	30.2	0.0780	0.979
19_3_102	MW-8	Appendix IV	Arsenic	mg/l	15	13	87%	2021-06-15 to 2025-08-07		Nonparametric	0.00175	0.00175	0.00150	0.00200	0.000354	0.202	NA
19_3_103	MW-8	Appendix IV	Barium	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0219	0.0210	0.0170	0.0280	0.00297	0.136	0.544
19_3_104	MW-8	Appendix IV	Beryllium	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.000310	0.000310	0.000310	0.000310	NA	NA	NA
19_3_106	MW-8	Appendix IV	Cadmium	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.000210	0.000210	0.000210	0.000210	NA	NA	NA
19_3_110	MW-8	Appendix IV	Cobalt	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.000370	0.000370	0.000370	0.000370	NA	NA	NA
19_3_113	MW-8	Appendix IV	Fluoride (App IV)	mg/l	15	12	80%	2021-06-15 to 2025-08-07		Nonparametric	0.0562	0.0560	0.0540	0.0587	0.00236	0.0419	0.441
19_3_116	MW-8	Appendix IV	Lithium	mg/l	15	6	40%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.00791	0.00720	0.00500	0.0130	0.00261	0.330	0.776

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
19_3_118	MW-8	Appendix IV	Molybdenum	mg/l	15	11	73%	2021-06-15 to 2025-08-07		Nonparametric	0.00705	0.00570	0.00380	0.0130	0.00407	0.578	1.68
19_3_121	MW-8	Appendix IV	Radium-226+228	pci/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Gamma	1.89	1.50	0.118	6.21	1.72	0.907	1.38
19_3_125	MW-8	Appendix IV	Thallium	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.000560	0.000560	0.000560	0.000560	NA	NA	NA
19_5_111	MW-8	Part 115	Copper	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.0100	0.0100	0.0100	0.0100	NA	NA	NA
19_5_114	MW-8	Part 115	Iron	mg/l	15	13	87%	2021-06-15 to 2025-08-07		Nonparametric	0.0325	0.0325	0.0200	0.0450	0.0177	0.544	NA
19_5_128	MW-8	Part 115	Vanadium	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.00500	0.00500	0.00500	0.00500	NA	NA	NA
19_5_129	MW-8	Part 115	Zinc	mg/l	15	13	87%	2021-06-15 to 2025-08-07		Nonparametric	0.00440	0.00440	0.00180	0.00700	0.00368	0.836	NA
20_2_105	MW-9	Appendix III	Boron	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.0400	0.0400	0.0400	0.0400	NA	NA	NA
20_2_107	MW-9	Appendix III	Calcium	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	78.2	76.9	61.8	100	12.2	0.156	0.625
20_2_108	MW-9	Appendix III	Chloride	mg/l	15	10	67%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Nonparametric	3.96	4.60	1.11	6.10	2.10	0.530	-0.570
20_2_112	MW-9	Appendix III	Fluoride	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.0330	0.0330	0.0330	0.0330	NA	NA	NA
20_2_120	MW-9	Appendix III	pH, Field	su	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	7.28	7.27	7.05	7.74	0.181	0.0249	1.10
20_2_124	MW-9	Appendix III	Sulfate	mg/l	15	8	53%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Nonparametric	9.04	8.20	3.58	16.0	4.57	0.506	0.362
20_2_126	MW-9	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal	Gamma	274	260	232	360	41.9	0.153	1.23
20_3_102	MW-9	Appendix IV	Arsenic	mg/l	15	13	87%	2021-06-15 to 2025-08-07		Nonparametric	0.00205	0.00205	0.00110	0.00300	0.00134	0.655	NA
20_3_103	MW-9	Appendix IV	Barium	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0151	0.0150	0.0130	0.0200	0.00202	0.134	1.04
20_3_104	MW-9	Appendix IV	Beryllium	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.000280	0.000280	0.000280	0.000280	NA	NA	NA
20_3_106	MW-9	Appendix IV	Cadmium	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.000160	0.000160	0.000160	0.000160	NA	NA	NA
20_3_110	MW-9	Appendix IV	Cobalt	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.000160	0.000160	0.000160	0.000160	NA	NA	NA
20_3_113	MW-9	Appendix IV	Fluoride (App IV)	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.0330	0.0330	0.0330	0.0330	NA	NA	NA
20_3_121	MW-9	Appendix IV	Radium-226+228	pci/l	15	0	0%	2021-06-15 to 2025-08-07	Normal	Normal	1.08	0.844	0	2.37	0.807	0.746	0.342
20_5_129	MW-9	Part 115	Zinc	mg/l	15	13	87%	2021-06-15 to 2025-08-07		Nonparametric	0.00510	0.00510	0.00120	0.00900	0.00552	1.08	NA
21_2_105	MW-10	Appendix III	Boron	mg/l	15	1	7%	2021-06-15 to 2025-08-07	Lognormal; Normal	Normal	0.0528	0.0500	0.0400	0.0700	0.00819	0.155	0.349
21_2_107	MW-10	Appendix III	Calcium	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	127	128	110	142	10.1	0.0797	-0.0843
21_2_108	MW-10	Appendix III	Chloride	mg/l	15	9	60%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Nonparametric	3.59	1.85	1.03	9.30	3.34	0.930	1.32
21_2_112	MW-10	Appendix III	Fluoride	mg/l	15	12	80%	2021-06-15 to 2025-08-07		Nonparametric	0.0663	0.0660	0.0500	0.0830	0.0165	0.249	0.0909
21_2_120	MW-10	Appendix III	pH, Field	su	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	6.75	6.73	6.49	7.30	0.198	0.0293	1.37
21_2_124	MW-10	Appendix III	Sulfate	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	14.5	14.0	8.90	27.8	4.75	0.327	1.48
21_2_126	MW-10	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	424	432	340	494	45.5	0.107	-0.309
21_3_102	MW-10	Appendix IV	Arsenic	mg/l	15	13	87%	2021-06-15 to 2025-08-07		Nonparametric	0.00147	0.00147	0.000950	0.00200	0.000742	0.503	NA
21_3_103	MW-10	Appendix IV	Barium	mg/l	15	0	0%	2021-06-15 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0390	0.0400	0.0300	0.0470	0.00474	0.121	-0.275
21_3_106	MW-10	Appendix IV	Cadmium	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.0000990	0.0000990	0.0000990	0.0000990	NA	NA	NA
21_3_110	MW-10	Appendix IV	Cobalt	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.0000860	0.0000860	0.0000860	0.0000860	NA	NA	NA
21_3_113	MW-10	Appendix IV	Fluoride (App IV)	mg/l	15	12	80%	2021-06-15 to 2025-08-07		Nonparametric	0.0663	0.0660	0.0500	0.0830	0.0165	0.249	0.0909
21_3_117	MW-10	Appendix IV	Mercury	mg/l	15	14	93%	2021-06-15 to 2025-08-07		Nonparametric	0.000200	0.000200	0.000200	0.000200	NA	NA	NA
21_3_121	MW-10	Appendix IV	Radium-226+228	pci/l	15	0	0%	2021-06-15 to 2025-08-07	Lognormal	Lognormal	1.25	0.701	0.262	3.30	1.03	0.821	0.993
21_3_122	MW-10	Appendix IV	Selenium	mg/l	15	13	87%	2021-06-15 to 2025-08-07		Nonparametric	0.00140	0.00140	0.00130	0.00150	0.000141	0.101	NA
21_5_129	MW-10	Part 115	Zinc	mg/l	15	12	80%	2021-06-15 to 2025-08-07		Nonparametric	0.0102	0.00900	0.00160	0.0200	0.00926	0.908	0.573
22_2_105	MW-13	Appendix III	Boron	mg/l	14	0	0%	2022-02-23 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.174	0.175	0.140	0.220	0.0228	0.131	0.245
22_2_107	MW-13	Appendix III	Calcium	mg/l	14	0	0%	2022-02-23 to 2025-08-08	Gamma; Lognormal; Normal	Normal	124	126	94.1	160	24.7	0.200	0.215
22_2_108	MW-13	Appendix III	Chloride	mg/l	14	2	14%	2022-02-23 to 2025-08-08	Gamma; Lognormal; Normal	Normal	22.4	19.0	9.00	45.0	11.8	0.528	1.04
22_2_112	MW-13	Appendix III	Fluoride	mg/l	14	12	86%	2022-02-23 to 2025-08-08		Nonparametric	0.155	0.155	0.140	0.170	0.0212	0.137	NA
22_2_120	MW-13	Appendix III	pH, Field	su	14	0	0%	2022-02-23 to 2025-08-08	Gamma; Lognormal; Normal	Normal	6.95	7.03	6.39	7.25	0.229	0.0329	-1.13

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
22_2_124	MW-13	Appendix III	Sulfate	mg/l	14	0	0%	2022-02-23 to 2025-08-08	Gamma; Lognormal	Gamma	70.7	41.0	16.0	210	61.6	0.872	1.28
22_2_126	MW-13	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	2022-02-23 to 2025-08-08	Gamma; Lognormal; Normal	Normal	472	453	336	700	116	0.245	0.837
22_3_102	MW-13	Appendix IV	Arsenic	mg/l	14	9	64%	2022-02-23 to 2025-08-08	Gamma; Lognormal; Normal	Nonparametric	0.00532	0.00570	0.00190	0.00800	0.00243	0.456	-0.531
22_3_103	MW-13	Appendix IV	Barium	mg/l	14	0	0%	2022-02-23 to 2025-08-08	Gamma; Lognormal	Gamma	0.0321	0.0285	0.0200	0.0600	0.0102	0.316	1.74
22_3_110	MW-13	Appendix IV	Cobalt	mg/l	14	12	86%	2022-02-23 to 2025-08-08		Nonparametric	0.000680	0.000680	0.000450	0.000910	0.000325	0.478	NA
22_3_113	MW-13	Appendix IV	Fluoride (App IV)	mg/l	14	12	86%	2022-02-23 to 2025-08-08		Nonparametric	0.155	0.155	0.140	0.170	0.0212	0.137	NA
22_3_121	MW-13	Appendix IV	Radium-226+228	pci/l	14	1	7%	2022-02-23 to 2025-08-08	Gamma; Lognormal	Gamma	1.00	0.680	0.0699	2.31	0.852	0.852	0.500
22_3_122	MW-13	Appendix IV	Selenium	mg/l	14	13	93%	2022-02-23 to 2025-08-08		Nonparametric	0.00600	0.00600	0.00600	0.00600	NA	NA	NA
22_5_114	MW-13	Part 115	Iron	mg/l	14	1	7%	2022-02-23 to 2025-08-08	Lognormal	Nonparametric	0.283	0.0400	0.0200	1.20	0.446	1.57	1.48
22_5_128	MW-13	Part 115	Vanadium	mg/l	14	13	93%	2022-02-23 to 2025-08-08		Nonparametric	0.00150	0.00150	0.00150	0.00150	NA	NA	NA
22_5_129	MW-13	Part 115	Zinc	mg/l	14	12	86%	2022-02-23 to 2025-08-08		Nonparametric	0.00665	0.00665	0.00330	0.0100	0.00474	0.712	NA
23_2_105	MW-14	Appendix III	Boron	mg/l	12	0	0%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Normal	2.11	2.12	1.90	2.29	0.118	0.0561	-0.227
23_2_107	MW-14	Appendix III	Calcium	mg/l	12	0	0%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Normal	152	148	141	173	9.77	0.0643	0.954
23_2_108	MW-14	Appendix III	Chloride	mg/l	12	0	0%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Normal	112	114	100	119	5.02	0.0446	-1.25
23_2_112	MW-14	Appendix III	Fluoride	mg/l	12	10	83%	2023-01-12 to 2025-08-06		Nonparametric	0.170	0.170	0.150	0.190	0.0283	0.166	NA
23_2_120	MW-14	Appendix III	pH, Field	su	12	0	0%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Normal	7.01	7.02	6.92	7.13	0.0689	0.00983	0.280
23_2_124	MW-14	Appendix III	Sulfate	mg/l	12	0	0%	2023-01-12 to 2025-08-06	Nonparametric	Nonparametric	76.2	16.5	5.00	748	212	2.78	3.46
23_2_126	MW-14	Appendix III	Total Dissolved Solids	mg/l	12	1	8%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Nonparametric	787	792	730	866	39.8	0.0506	0.283
23_3_102	MW-14	Appendix IV	Arsenic	mg/l	12	0	0%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.00626	0.00620	0.00400	0.00800	0.00120	0.192	-0.258
23_3_103	MW-14	Appendix IV	Barium	mg/l	12	0	0%	2023-01-12 to 2025-08-06	Nonparametric	Nonparametric	0.132	0.130	0.119	0.177	0.0157	0.119	2.48
23_3_110	MW-14	Appendix IV	Cobalt	mg/l	12	10	83%	2023-01-12 to 2025-08-06		Nonparametric	0.000610	0.000610	0.000530	0.000690	0.000113	0.185	NA
23_3_113	MW-14	Appendix IV	Fluoride (App IV)	mg/l	12	10	83%	2023-01-12 to 2025-08-06		Nonparametric	0.170	0.170	0.150	0.190	0.0283	0.166	NA
23_3_116	MW-14	Appendix IV	Lithium	mg/l	12	0	0%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.109	0.109	0.0920	0.125	0.00903	0.0829	0.0464
23_3_118	MW-14	Appendix IV	Molybdenum	mg/l	12	0	0%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Normal	0.0131	0.0130	0.0100	0.0160	0.00162	0.124	-0.00604
23_3_121	MW-14	Appendix IV	Radium-226+228	pci/l	12	2	17%	2023-01-12 to 2025-08-06	Lognormal	Lognormal	1.95	0.973	0.464	6.88	2.07	1.06	1.96
23_3_122	MW-14	Appendix IV	Selenium	mg/l	12	10	83%	2023-01-12 to 2025-08-06		Nonparametric	0.0110	0.0110	0.00900	0.0130	0.00283	0.257	NA
23_5_114	MW-14	Part 115	Iron	mg/l	12	0	0%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Normal	12.0	11.7	6.58	15.0	2.56	0.213	-0.639
23_5_119	MW-14	Part 115	Nickel	mg/l	12	6	50%	2023-01-12 to 2025-08-06	Gamma; Lognormal; Normal	Nonparametric	0.00482	0.00500	0.00380	0.00600	0.000781	0.162	0.162
23_5_128	MW-14	Part 115	Vanadium	mg/l	12	10	83%	2023-01-12 to 2025-08-06		Nonparametric	0.00170	0.00170	0.00150	0.00190	0.000283	0.166	NA
23_5_129	MW-14	Part 115	Zinc	mg/l	12	10	83%	2023-01-12 to 2025-08-06		Nonparametric	0.0210	0.0210	0.0180	0.0240	0.00424	0.202	NA
24_2_105	MW-15	Appendix III	Boron	mg/l	12	0	0%	2023-01-12 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.375	0.380	0.300	0.440	0.0430	0.115	-0.198
24_2_107	MW-15	Appendix III	Calcium	mg/l	12	0	0%	2023-01-12 to 2025-08-07	Gamma; Lognormal; Normal	Normal	135	132	104	183	19.9	0.147	0.996
24_2_108	MW-15	Appendix III	Chloride	mg/l	12	0	0%	2023-01-12 to 2025-08-07	Gamma; Lognormal; Normal	Normal	76.2	73.8	59.0	100	12.7	0.167	0.418
24_2_112	MW-15	Appendix III	Fluoride	mg/l	12	10	83%	2023-01-12 to 2025-08-07		Nonparametric	0.0475	0.0475	0.0470	0.0480	0.000707	0.0149	NA
24_2_120	MW-15	Appendix III	pH, Field	su	12	0	0%	2023-01-12 to 2025-08-07	Gamma; Lognormal; Normal	Normal	6.80	6.79	6.65	6.99	0.119	0.0176	0.442
24_2_124	MW-15	Appendix III	Sulfate	mg/l	12	0	0%	2023-01-12 to 2025-08-07	Gamma; Lognormal	Gamma	117	110	49.7	238	43.7	0.375	1.89
24_2_126	MW-15	Appendix III	Total Dissolved Solids	mg/l	12	0	0%	2023-01-12 to 2025-08-07	Gamma; Lognormal; Normal	Normal	638	622	528	878	91.2	0.143	1.68
24_3_102	MW-15	Appendix IV	Arsenic	mg/l	12	9	75%	2023-01-12 to 2025-08-07		Nonparametric	0.00132	0.000990	0.000970	0.00200	0.000589	0.446	1.73
24_3_103	MW-15	Appendix IV	Barium	mg/l	12	0	0%	2023-01-12 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0578	0.0585	0.0420	0.0770	0.0100	0.173	0.334
24_3_106	MW-15	Appendix IV	Cadmium	mg/l	12	11	92%	2023-01-12 to 2025-08-07		Nonparametric	0.0000800	0.0000800	0.0000800	0.0000800	NA	NA	NA
24_3_110	MW-15	Appendix IV	Cobalt	mg/l	12	11	92%	2023-01-12 to 2025-08-07		Nonparametric	0.000570	0.000570	0.000570	0.000570	NA	NA	NA
24_3_113	MW-15	Appendix IV	Fluoride (App IV)	mg/l	12	10	83%	2023-01-12 to 2025-08-07		Nonparametric	0.0475	0.0475	0.0470	0.0480	0.000707	0.0149	NA
24_3_116	MW-15	Appendix IV	Lithium	mg/l	12	11	92%	2023-01-12 to 2025-08-07		Nonparametric	0.0140	0.0140	0.0140	0.0140	NA	NA	NA

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
24_3_121	MW-15	Appendix IV	Radium-226+228	pci/l	12	0	0%	2023-01-12 to 2025-08-07	Gamma; Lognormal; Normal	Normal	1.10	0.898	0.316	2.06	0.615	0.561	0.484
24_3_122	MW-15	Appendix IV	Selenium	mg/l	12	5	42%	2023-01-12 to 2025-08-07	Gamma; Lognormal; Normal	Nonparametric	0.0186	0.0190	0.00900	0.0340	0.00932	0.502	0.621
24_5_114	MW-15	Part 115	Iron	mg/l	12	1	8%	2023-01-12 to 2025-08-07	Gamma; Lognormal	Gamma	0.100	0.0710	0.0200	0.380	0.102	1.02	2.37
24_5_119	MW-15	Part 115	Nickel	mg/l	12	11	92%	2023-01-12 to 2025-08-07		Nonparametric	0.00190	0.00190	0.00190	0.00190	NA	NA	NA
24_5_129	MW-15	Part 115	Zinc	mg/l	12	10	83%	2023-01-12 to 2025-08-07		Nonparametric	0.0114	0.0114	0.00190	0.0210	0.0135	1.18	NA
25_2_105	MW-16A	Appendix III	Boron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.175	0.190	0.100	0.250	0.0555	0.316	-0.258
25_2_107	MW-16A	Appendix III	Calcium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	186	179	145	226	26.1	0.140	-0.0489
25_2_108	MW-16A	Appendix III	Chloride	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	437	436	370	505	45.0	0.103	0.0656
25_2_112	MW-16A	Appendix III	Fluoride	mg/l	13	11	85%	2023-02-02 to 2025-08-11		Nonparametric	0.119	0.119	0.0980	0.140	0.0297	0.250	NA
25_2_120	MW-16A	Appendix III	pH, Field	su	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	6.83	6.81	6.67	7.00	0.104	0.0153	0.421
25_2_124	MW-16A	Appendix III	Sulfate	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	193	190	86.0	341	76.6	0.398	0.291
25_2_126	MW-16A	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	1432	1390	1170	1720	179	0.125	0.00117
25_3_101	MW-16A	Appendix IV	Antimony	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.000710	0.000710	0.000710	0.000710	NA	NA	NA
25_3_102	MW-16A	Appendix IV	Arsenic	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.00325	0.00300	0.00180	0.00500	0.000857	0.264	0.256
25_3_103	MW-16A	Appendix IV	Barium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.146	0.146	0.108	0.178	0.0223	0.153	-0.0856
25_3_106	MW-16A	Appendix IV	Cadmium	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.000240	0.000240	0.000240	0.000240	NA	NA	NA
25_3_110	MW-16A	Appendix IV	Cobalt	mg/l	13	11	85%	2023-02-02 to 2025-08-11		Nonparametric	0.00115	0.00115	0.00110	0.00120	0.0000707	0.0615	NA
25_3_113	MW-16A	Appendix IV	Fluoride (App IV)	mg/l	13	11	85%	2023-02-02 to 2025-08-11		Nonparametric	0.119	0.119	0.0980	0.140	0.0297	0.250	NA
25_3_116	MW-16A	Appendix IV	Lithium	mg/l	13	10	77%	2023-02-02 to 2025-08-11		Nonparametric	0.00413	0.00390	0.00350	0.00500	0.000777	0.188	1.23
25_3_118	MW-16A	Appendix IV	Molybdenum	mg/l	13	11	85%	2023-02-02 to 2025-08-11		Nonparametric	0.00230	0.00230	0.00170	0.00290	0.000849	0.369	NA
25_3_121	MW-16A	Appendix IV	Radium-226+228	pci/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal	Gamma	2.00	1.18	0.562	7.46	1.97	0.983	1.99
25_3_122	MW-16A	Appendix IV	Selenium	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.00500	0.00500	0.00500	0.00500	NA	NA	NA
25_3_125	MW-16A	Appendix IV	Thallium	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.000620	0.000620	0.000620	0.000620	NA	NA	NA
25_5_114	MW-16A	Part 115	Iron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	3.20	3.08	2.30	4.38	0.627	0.196	0.574
25_5_119	MW-16A	Part 115	Nickel	mg/l	13	11	85%	2023-02-02 to 2025-08-11		Nonparametric	0.00185	0.00185	0.00150	0.00220	0.000495	0.268	NA
26_2_105	MW-16B	Appendix III	Boron	mg/l	13	0	0%	2023-02-02 to 2025-08-11		Nonparametric	0.116	0.110	0.110	0.130	0.00768	0.0661	0.849
26_2_107	MW-16B	Appendix III	Calcium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	81	81.7	74.5	85.4	3.09	0.0382	-0.639
26_2_108	MW-16B	Appendix III	Chloride	mg/l	13	5	38%	2023-02-02 to 2025-08-11	Lognormal	Lognormal	4.61	3.70	2.80	11.0	2.66	0.578	2.50
26_2_112	MW-16B	Appendix III	Fluoride	mg/l	13	8	62%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Nonparametric	0.760	0.800	0.310	1.00	0.282	0.371	-1.21
26_2_120	MW-16B	Appendix III	pH, Field	su	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	7.42	7.43	7.25	7.56	0.0892	0.0120	-0.418
26_2_124	MW-16B	Appendix III	Sulfate	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	17.9	17.8	15.0	22.0	2.0	0.111	0.772
26_2_126	MW-16B	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	364	366	350	378	9.21	0.0253	-0.292
26_3_103	MW-16B	Appendix IV	Barium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.0866	0.0860	0.0820	0.0910	0.00269	0.0311	0.152
26_3_113	MW-16B	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Nonparametric	0.760	0.800	0.310	1.00	0.282	0.371	-1.21
26_3_116	MW-16B	Appendix IV	Lithium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.0212	0.0210	0.0190	0.0230	0.00121	0.0574	-0.0117
26_3_118	MW-16B	Appendix IV	Molybdenum	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Nonparametric	Nonparametric	0.00619	0.00600	0.00500	0.00800	0.000686	0.111	1.43
26_3_121	MW-16B	Appendix IV	Radium-226+228	pci/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal	Gamma	2.32	1.91	1.04	6.43	1.46	0.629	2.20
26_3_122	MW-16B	Appendix IV	Selenium	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.00600	0.00600	0.00600	0.00600	NA	NA	NA
26_5_114	MW-16B	Part 115	Iron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Lognormal	Lognormal	0.482	0.420	0.320	0.930	0.169	0.350	1.81
26_5_129	MW-16B	Part 115	Zinc	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.00250	0.00250	0.00250	0.00250	NA	NA	NA
27_2_105	MW-17A	Appendix III	Boron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	4.05	3.95	3.60	4.70	0.399	0.0984	0.870
27_2_107	MW-17A	Appendix III	Calcium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	246	242	220	270	15.9	0.0647	0.140
27_2_108	MW-17A	Appendix III	Chloride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	69.6	68.6	67.0	75.0	2.52	0.0362	1.67

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
27_2_112	MW-17A	Appendix III	Fluoride	mg/l	8	3	38%	2024-10-08 to 2025-09-11	Gamma; Lognormal	Gamma	0.294	0.270	0.230	0.440	0.0838	0.285	1.94
27_2_120	MW-17A	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	7.18	7.16	7.09	7.31	0.0713	0.00994	0.764
27_2_124	MW-17A	Appendix III	Sulfate	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	660	663	569	720	44.2	0.0669	-1.11
27_2_126	MW-17A	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	2024-10-08 to 2025-09-11		Nonparametric	1324	1300	1290	1400	47.2	0.0356	1.42
27_3_102	MW-17A	Appendix IV	Arsenic	mg/l	8	1	12%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.00154	0.00170	0.00110	0.00200	0.000404	0.262	-0.0539
27_3_103	MW-17A	Appendix IV	Barium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.0410	0.0390	0.0350	0.0480	0.00493	0.120	0.411
27_3_106	MW-17A	Appendix IV	Cadmium	mg/l	8	7	88%	2024-10-08 to 2025-09-11		Nonparametric	0.000120	0.000120	0.000120	0.000120	NA	NA	NA
27_3_110	MW-17A	Appendix IV	Cobalt	mg/l	8	7	88%	2024-10-08 to 2025-09-11		Nonparametric	0.000130	0.000130	0.000130	0.000130	NA	NA	NA
27_3_113	MW-17A	Appendix IV	Fluoride (App IV)	mg/l	8	3	38%	2024-10-08 to 2025-09-11	Gamma; Lognormal	Gamma	0.294	0.270	0.230	0.440	0.0838	0.285	1.94
27_3_116	MW-17A	Appendix IV	Lithium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.0539	0.0530	0.0440	0.0590	0.00517	0.0959	-0.808
27_3_118	MW-17A	Appendix IV	Molybdenum	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.0171	0.0170	0.0140	0.0220	0.00259	0.151	0.807
27_3_121	MW-17A	Appendix IV	Radium-226+228	pci/l	8	1	12%	2024-10-08 to 2025-09-11	Gamma; Lognormal	Gamma	1.56	0.830	0.614	5.52	1.78	1.14	2.47
27_3_122	MW-17A	Appendix IV	Selenium	mg/l	8	7	88%	2024-10-08 to 2025-09-11		Nonparametric	0.00100	0.00100	0.00100	0.00100	NA	NA	NA
27_3_125	MW-17A	Appendix IV	Thallium	mg/l	8	7	88%	2024-10-08 to 2025-09-11		Nonparametric	0.000790	0.000790	0.000790	0.000790	NA	NA	NA
27_5_114	MW-17A	Part 115	Iron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	7.17	6.95	6.32	9.30	0.959	0.134	1.81
27_5_119	MW-17A	Part 115	Nickel	mg/l	8	1	12%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.0127	0.0130	0.0110	0.0150	0.00150	0.118	0.256
27_5_129	MW-17A	Part 115	Zinc	mg/l	8	4	50%	2024-10-08 to 2025-09-11		Nonparametric	0.00547	0.00235	0.00120	0.0160	0.00709	1.29	1.88
28_2_105	MW-17B	Appendix III	Boron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	2.21	1.95	1.70	4.10	0.779	0.353	2.62
28_2_107	MW-17B	Appendix III	Calcium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	142	134	110	243	43.0	0.304	2.29
28_2_108	MW-17B	Appendix III	Chloride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	72.3	73.0	67.0	80.9	4.77	0.0660	0.544
28_2_112	MW-17B	Appendix III	Fluoride	mg/l	8	2	25%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.308	0.335	0.130	0.380	0.0898	0.291	-2.15
28_2_120	MW-17B	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	7.38	7.36	7.25	7.65	0.131	0.0177	1.30
28_2_124	MW-17B	Appendix III	Sulfate	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	392	361	320	643	105	0.269	2.42
28_2_126	MW-17B	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	882	851	660	1400	222	0.252	2.16
28_3_102	MW-17B	Appendix IV	Arsenic	mg/l	8	1	12%	2024-10-08 to 2025-09-11	Lognormal	Lognormal	0.00249	0.00200	0.00180	0.00400	0.000914	0.368	1.22
28_3_103	MW-17B	Appendix IV	Barium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.0489	0.0470	0.0370	0.0700	0.0115	0.235	0.799
28_3_106	MW-17B	Appendix IV	Cadmium	mg/l	8	7	88%	2024-10-08 to 2025-09-11		Nonparametric	0.0000970	0.0000970	0.0000970	0.0000970	NA	NA	NA
28_3_110	MW-17B	Appendix IV	Cobalt	mg/l	8	5	62%	2024-10-08 to 2025-09-11		Nonparametric	0.000151	0.000100	0.0000940	0.000260	0.0000942	0.622	1.72
28_3_113	MW-17B	Appendix IV	Fluoride (App IV)	mg/l	8	2	25%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.308	0.335	0.130	0.380	0.0898	0.291	-2.15
28_3_116	MW-17B	Appendix IV	Lithium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.0890	0.0880	0.0590	0.117	0.0161	0.181	-0.218
28_3_118	MW-17B	Appendix IV	Molybdenum	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.0900	0.0975	0.0180	0.115	0.0304	0.338	-2.35
28_3_121	MW-17B	Appendix IV	Radium-226+228	pci/l	8	1	12%	2024-10-08 to 2025-09-11	Lognormal	Lognormal	1.36	0.781	0.662	2.66	0.853	0.627	0.884
28_5_114	MW-17B	Part 115	Iron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	2.90	2.35	1.80	7.27	1.80	0.620	2.62
28_5_119	MW-17B	Part 115	Nickel	mg/l	8	3	38%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.00374	0.00390	0.00300	0.00430	0.000503	0.134	-0.726
28_5_129	MW-17B	Part 115	Zinc	mg/l	8	3	38%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Gamma	0.0412	0.0200	0.00910	0.120	0.0463	1.12	1.77
29_2_105	MW-17C	Appendix III	Boron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	2.34	2.25	1.78	2.90	0.442	0.188	0.201
29_2_107	MW-17C	Appendix III	Calcium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	157	156	114	210	31.2	0.199	0.205
29_2_108	MW-17C	Appendix III	Chloride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	62.5	59.0	56.0	74.5	7.43	0.119	1.15
29_2_112	MW-17C	Appendix III	Fluoride	mg/l	8	2	25%	2024-10-08 to 2025-09-11	Lognormal; Normal	Normal	0.313	0.335	0.230	0.340	0.0437	0.139	-1.87
29_2_120	MW-17C	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	7.22	7.15	7.06	7.57	0.197	0.0272	1.32
29_2_124	MW-17C	Appendix III	Sulfate	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	493	518	321	620	112	0.227	-0.840
29_2_126	MW-17C	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	1054	1100	818	1300	168	0.160	-0.323
29_3_101	MW-17C	Appendix IV	Antimony	mg/l	8	7	88%	2024-10-08 to 2025-09-11		Nonparametric	0.000720	0.000720	0.000720	0.000720	NA	NA	NA

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
29_3_102	MW-17C	Appendix IV	Arsenic	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.00316	0.00260	0.00200	0.00600	0.00136	0.431	1.48
29_3_103	MW-17C	Appendix IV	Barium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal	Gamma	0.0644	0.0635	0.0540	0.0880	0.0105	0.164	1.82
29_3_110	MW-17C	Appendix IV	Cobalt	mg/l	8	4	50%	2024-10-08 to 2025-09-11		Nonparametric	0.000139	0.000115	0.0000970	0.000230	0.0000623	0.447	1.68
29_3_113	MW-17C	Appendix IV	Fluoride (App IV)	mg/l	8	2	25%	2024-10-08 to 2025-09-11	Lognormal; Normal	Normal	0.313	0.335	0.230	0.340	0.0437	0.139	-1.87
29_3_115	MW-17C	Appendix IV	Lead	mg/l	8	5	62%	2024-10-08 to 2025-09-11		Nonparametric	0.000770	0.000800	0.000690	0.000820	0.0000700	0.0909	-1.57
29_3_116	MW-17C	Appendix IV	Lithium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.0625	0.0555	0.0460	0.0940	0.0180	0.287	1.33
29_3_118	MW-17C	Appendix IV	Molybdenum	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.0602	0.0525	0.0260	0.107	0.0301	0.499	0.539
29_3_121	MW-17C	Appendix IV	Radium-226+228	pci/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	1.42	1.45	0.738	2.51	0.614	0.432	0.580
29_5_114	MW-17C	Part 115	Iron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	3.10	2.70	1.26	4.90	1.37	0.441	0.241
29_5_119	MW-17C	Part 115	Nickel	mg/l	8	1	12%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.00900	0.00900	0.00640	0.0110	0.00145	0.161	-0.682
29_5_129	MW-17C	Part 115	Zinc	mg/l	8	4	50%	2024-10-08 to 2025-09-11		Nonparametric	0.0171	0.00465	0.00300	0.0560	0.0260	1.52	1.99
30_2_105	MW-18A	Appendix III	Boron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Lognormal	Lognormal	1.24	0.850	0.790	3.47	0.862	0.698	2.70
30_2_107	MW-18A	Appendix III	Calcium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Nonparametric	Nonparametric	86.3	90.0	5.69	110	31.7	0.367	-2.48
30_2_108	MW-18A	Appendix III	Chloride	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Nonparametric	Nonparametric	66.6	78.0	2.20	82.0	25.2	0.378	-2.56
30_2_112	MW-18A	Appendix III	Fluoride	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.572	0.550	0.290	0.890	0.167	0.291	0.361
30_2_120	MW-18A	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	7.33	7.36	6.89	7.67	0.251	0.0342	-0.446
30_2_124	MW-18A	Appendix III	Sulfate	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Nonparametric	Nonparametric	147	170	0.900	180	56.3	0.384	-2.69
30_2_126	MW-18A	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	518	524	392	586	59.3	0.114	-1.10
30_3_102	MW-18A	Appendix IV	Arsenic	mg/l	9	3	33%	2024-10-08 to 2025-08-08	Gamma; Lognormal	Gamma	0.00190	0.00140	0.000760	0.00500	0.00158	0.830	2.04
30_3_103	MW-18A	Appendix IV	Barium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Normal	Normal	0.0487	0.0420	0.00500	0.0770	0.0221	0.454	-0.653
30_3_113	MW-18A	Appendix IV	Fluoride (App IV)	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.572	0.550	0.290	0.890	0.167	0.291	0.361
30_3_115	MW-18A	Appendix IV	Lead	mg/l	9	7	78%	2024-10-08 to 2025-08-08		Nonparametric	0.000455	0.000455	0.000450	0.000460	0.00000707	0.0155	NA
30_3_116	MW-18A	Appendix IV	Lithium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Normal	Normal	0.0746	0.0700	0.0260	0.110	0.0255	0.341	-0.373
30_3_118	MW-18A	Appendix IV	Molybdenum	mg/l	9	1	11%	2024-10-08 to 2025-08-08	Nonparametric	Nonparametric	0.102	0.110	0.0720	0.120	0.0193	0.190	-0.913
30_3_121	MW-18A	Appendix IV	Radium-226+228	pci/l	9	2	22%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	1.46	1.26	0.676	3.19	0.823	0.565	1.90
30_3_122	MW-18A	Appendix IV	Selenium	mg/l	9	8	89%	2024-10-08 to 2025-08-08		Nonparametric	0.00150	0.00150	0.00150	0.00150	NA	NA	NA
30_5_111	MW-18A	Part 115	Copper	mg/l	9	8	89%	2024-10-08 to 2025-08-08		Nonparametric	0.00200	0.00200	0.00200	0.00200	NA	NA	NA
30_5_114	MW-18A	Part 115	Iron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Normal	Gamma	1.85	1.50	0.0300	3.40	1.16	0.625	0.177
30_5_129	MW-18A	Part 115	Zinc	mg/l	9	6	67%	2024-10-08 to 2025-08-08		Nonparametric	0.00120	0.00110	0.00100	0.00150	0.000265	0.220	1.46
31_2_105	MW-18B	Appendix III	Boron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Nonparametric	Nonparametric	2.76	3.08	1.09	3.40	0.754	0.274	-1.66
31_2_107	MW-18B	Appendix III	Calcium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	150	160	89.8	170	26.1	0.174	-1.79
31_2_108	MW-18B	Appendix III	Chloride	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Normal	Normal	85.2	87.0	70.7	91.0	6.13	0.0720	-1.94
31_2_112	MW-18B	Appendix III	Fluoride	mg/l	9	1	11%	2024-10-08 to 2025-08-08	Normal	Normal	0.292	0.335	0.120	0.370	0.0888	0.303	-1.25
31_2_120	MW-18B	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	7.31	7.33	7.16	7.41	0.0889	0.0122	-0.630
31_2_124	MW-18B	Appendix III	Sulfate	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Normal	Normal	382	410	143	460	97.9	0.256	-2.12
31_2_126	MW-18B	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Nonparametric	Nonparametric	857	890	562	1000	126	0.147	-1.82
31_3_102	MW-18B	Appendix IV	Arsenic	mg/l	9	7	78%	2024-10-08 to 2025-08-08		Nonparametric	0.00310	0.00310	0.00120	0.00500	0.00269	0.867	NA
31_3_103	MW-18B	Appendix IV	Barium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Normal	Normal	0.0566	0.0580	0.0430	0.0640	0.00581	0.103	-1.65
31_3_113	MW-18B	Appendix IV	Fluoride (App IV)	mg/l	9	1	11%	2024-10-08 to 2025-08-08	Normal	Normal	0.292	0.335	0.120	0.370	0.0888	0.303	-1.25
31_3_116	MW-18B	Appendix IV	Lithium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Nonparametric	Nonparametric	0.121	0.130	0.0920	0.132	0.0156	0.129	-1.45
31_3_118	MW-18B	Appendix IV	Molybdenum	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Nonparametric	Nonparametric	0.133	0.140	0.100	0.150	0.0194	0.146	-1.23
31_3_121	MW-18B	Appendix IV	Radium-226+228	pci/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	2.54	2.32	0.902	5.76	1.47	0.577	1.33
31_5_114	MW-18B	Part 115	Iron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	2.68	2.65	2.30	2.90	0.184	0.0688	-0.779

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
31_5_119	MW-18B	Part 115	Nickel	mg/l	9	1	11%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.00845	0.00855	0.00590	0.0110	0.00162	0.192	-0.0275
31_5_129	MW-18B	Part 115	Zinc	mg/l	9	7	78%	2024-10-08 to 2025-08-08		Nonparametric	0.00200	0.00200	0.00150	0.00250	0.000707	0.354	NA
32_2_105	MW-100A	Appendix III	Boron	mg/l	11	2	18%	2023-06-05 to 2025-08-07		Nonparametric	0.0478	0.0500	0.0400	0.0500	0.00441	0.0923	-1.62
32_2_107	MW-100A	Appendix III	Calcium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	91.7	92.1	88.6	95.3	2.16	0.0235	-0.146
32_2_108	MW-100A	Appendix III	Chloride	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Nonparametric	Nonparametric	10.2	10.0	10.0	11.0	0.332	0.0325	1.75
32_2_112	MW-100A	Appendix III	Fluoride	mg/l	11	7	64%	2023-06-05 to 2025-08-07		Nonparametric	0.440	0.485	0.220	0.570	0.167	0.380	-0.902
32_2_120	MW-100A	Appendix III	pH, Field	su	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	7.26	7.28	7.08	7.40	0.0945	0.0130	-0.353
32_2_124	MW-100A	Appendix III	Sulfate	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	24.9	22.0	16.2	38.0	6.96	0.279	0.739
32_2_126	MW-100A	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Nonparametric	Nonparametric	404	414	340	434	28.2	0.0698	-1.63
32_3_102	MW-100A	Appendix IV	Arsenic	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0139	0.0140	0.00900	0.0180	0.00277	0.199	-0.436
32_3_103	MW-100A	Appendix IV	Barium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.198	0.200	0.189	0.207	0.00727	0.0367	-0.246
32_3_110	MW-100A	Appendix IV	Cobalt	mg/l	11	9	82%	2023-06-05 to 2025-08-07		Nonparametric	0.000275	0.000275	0.000220	0.000330	0.0000778	0.283	NA
32_3_113	MW-100A	Appendix IV	Fluoride (App IV)	mg/l	11	7	64%	2023-06-05 to 2025-08-07		Nonparametric	0.440	0.485	0.220	0.570	0.167	0.380	-0.902
32_3_116	MW-100A	Appendix IV	Lithium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0155	0.0160	0.0110	0.0200	0.00324	0.209	-0.176
32_3_118	MW-100A	Appendix IV	Molybdenum	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.00994	0.0100	0.00690	0.0130	0.00218	0.219	-0.0395
32_3_121	MW-100A	Appendix IV	Radium-226+228	pci/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	1.15	1.10	0.402	2.50	0.705	0.613	0.835
32_5_114	MW-100A	Part 115	Iron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Normal	Normal	2.44	2.55	0.630	3.75	0.936	0.383	-0.586
32_5_129	MW-100A	Part 115	Zinc	mg/l	11	8	73%	2023-06-05 to 2025-08-07		Nonparametric	0.00333	0.00280	0.00120	0.00600	0.00244	0.733	0.935
33_2_105	MW-100B	Appendix III	Boron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.254	0.260	0.210	0.300	0.0269	0.106	0.0896
33_2_107	MW-100B	Appendix III	Calcium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	97.7	96.8	89.0	108	4.98	0.0510	0.534
33_2_108	MW-100B	Appendix III	Chloride	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	22.3	23.0	18.0	25.0	2.52	0.113	-0.727
33_2_112	MW-100B	Appendix III	Fluoride	mg/l	11	7	64%	2023-06-05 to 2025-08-07		Nonparametric	0.323	0.350	0.150	0.440	0.129	0.401	-0.945
33_2_120	MW-100B	Appendix III	pH, Field	su	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	7.42	7.40	7.26	7.62	0.107	0.0145	0.750
33_2_124	MW-100B	Appendix III	Sulfate	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	115	112	105	136	9.32	0.0808	1.19
33_2_126	MW-100B	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	494	492	440	538	32.3	0.0654	-0.494
33_3_102	MW-100B	Appendix IV	Arsenic	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Nonparametric	Nonparametric	0.00991	0.0100	0.00730	0.0110	0.00118	0.119	-1.13
33_3_103	MW-100B	Appendix IV	Barium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.149	0.147	0.140	0.164	0.00797	0.0536	0.806
33_3_113	MW-100B	Appendix IV	Fluoride (App IV)	mg/l	11	7	64%	2023-06-05 to 2025-08-07		Nonparametric	0.323	0.350	0.150	0.440	0.129	0.401	-0.945
33_3_116	MW-100B	Appendix IV	Lithium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0177	0.0180	0.0160	0.0190	0.00101	0.0569	-0.0531
33_3_118	MW-100B	Appendix IV	Molybdenum	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Lognormal; Normal	Normal	0.00835	0.00900	0.00540	0.0110	0.00172	0.206	-0.502
33_3_121	MW-100B	Appendix IV	Radium-226+228	pci/l	11	1	9%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	1.41	1.56	0.494	2.16	0.573	0.405	-0.619
33_5_114	MW-100B	Part 115	Iron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	2.49	2.35	1.77	3.54	0.459	0.184	1.07
33_5_119	MW-100B	Part 115	Nickel	mg/l	11	10	91%	2023-06-05 to 2025-08-07		Nonparametric	0.00200	0.00200	0.00200	0.00200	NA	NA	NA
33_5_129	MW-100B	Part 115	Zinc	mg/l	11	10	91%	2023-06-05 to 2025-08-07		Nonparametric	0.00190	0.00190	0.00190	0.00190	NA	NA	NA

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
13_2_105	MW-2	Appendix III	Boron	mg/l	18	0	0%	0.921	0.134	0.138	0.490	0.912	0.092	0.141	0.452	0.147	>= 0.10	0.519	>= 0.10	0.221	Gamma; Lognormal; Normal	Normal
13_2_107	MW-2	Appendix III	Calcium	mg/l	18	0	0%	0.846	0.007	0.217	0.025	0.842	0.006	0.213	0.031	0.224	0.01 <= p < 0.05	1.228	< 0.01	0.139	Nonparametric	Nonparametric
13_2_108	MW-2	Appendix III	Chloride	mg/l	18	0	0%	0.946	0.367	0.129	0.595	0.929	0.186	0.147	0.379	0.146	>= 0.10	0.543	>= 0.10	0.124	Gamma; Lognormal; Normal	Normal
13_2_112	MW-2	Appendix III	Fluoride	mg/l	19	17	89%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.124		Nonparametric
13_2_120	MW-2	Appendix III	pH, Field	su	19	0	0%	0.945	0.322	0.117	0.711	0.949	0.375	0.115	0.725	0.110	>= 0.10	0.359	>= 0.10	0.017	Gamma; Lognormal; Normal	Normal
13_2_124	MW-2	Appendix III	Sulfate	mg/l	18	0	0%	0.906	0.074	0.174	0.159	0.897	0.050	0.193	0.076	0.194	0.05 <= p < 0.10	0.655	0.05 <= p < 0.10	0.340	Gamma; Lognormal; Normal	Normal
13_2_126	MW-2	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	0.932	0.209	0.139	0.472	0.928	0.178	0.147	0.386	0.151	>= 0.10	0.499	>= 0.10	0.164	Gamma; Lognormal; Normal	Normal
13_3_101	MW-2	Appendix IV	Antimony	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_3_102	MW-2	Appendix IV	Arsenic	mg/l	19	14	74%	0.954	0.769	0.247	0.400	0.960	0.806	0.219	0.600	0.217	>= 0.10	0.255	>= 0.10	0.488	Gamma; Lognormal; Normal	Nonparametric
13_3_103	MW-2	Appendix IV	Barium	mg/l	19	0	0%	0.966	0.693	0.145	0.362	0.960	0.571	0.162	0.213	0.158	>= 0.10	0.339	>= 0.10	0.094	Gamma; Lognormal; Normal	Normal
13_3_104	MW-2	Appendix IV	Beryllium	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_3_106	MW-2	Appendix IV	Cadmium	mg/l	19	17	89%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.193		Nonparametric
13_3_109	MW-2	Appendix IV	Chromium	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_3_110	MW-2	Appendix IV	Cobalt	mg/l	19	17	89%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.057		Nonparametric
13_3_113	MW-2	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.124		Nonparametric
13_3_115	MW-2	Appendix IV	Lead	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_3_116	MW-2	Appendix IV	Lithium	mg/l	19	0	0%	0.949	0.377	0.121	0.650	0.932	0.191	0.128	0.571	0.132	>= 0.10	0.392	>= 0.10	0.179	Gamma; Lognormal; Normal	Normal
13_3_117	MW-2	Appendix IV	Mercury	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_3_118	MW-2	Appendix IV	Molybdenum	mg/l	19	0	0%	0.965	0.672	0.155	0.264	0.936	0.221	0.197	0.050	0.180	>= 0.10	0.478	>= 0.10	0.220	Gamma; Lognormal; Normal	Normal
13_3_121	MW-2	Appendix IV	Radium-226+228	pci/l	19	2	11%	0.896	0.058	0.129	0.633	NA	NA	NA	NA	NA		NA		NA	Normal	Normal
13_3_122	MW-2	Appendix IV	Selenium	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_3_125	MW-2	Appendix IV	Thallium	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_5_111	MW-2	Part 115	Copper	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_5_114	MW-2	Part 115	Iron	mg/l	19	0	0%	0.805	0.001	0.244	0.004	0.971	0.794	0.145	0.362	0.179	>= 0.10	0.487	>= 0.10	0.504	Gamma; Lognormal	Gamma
13_5_119	MW-2	Part 115	Nickel	mg/l	19	0	0%	0.894	0.038	0.192	0.064	0.885	0.026	0.195	0.056	0.199	0.01 <= p < 0.05	0.819	0.01 <= p < 0.05	0.257	Lognormal; Normal	Normal
13_5_123	MW-2	Part 115	Silver	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_5_128	MW-2	Part 115	Vanadium	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_5_129	MW-2	Part 115	Zinc	mg/l	19	14	74%	0.677	0.005	0.414	0.005	0.882	0.320	0.253	0.368	0.331	>= 0.10	0.543	>= 0.10	1.241	Gamma; Lognormal	Nonparametric
14_2_105	MW-3	Appendix III	Boron	mg/l	10	0	0%	0.944	0.602	0.217	0.203	0.949	0.658	0.209	0.247	0.212	>= 0.10	0.343	>= 0.10	0.042	Gamma; Lognormal; Normal	Normal
14_2_107	MW-3	Appendix III	Calcium	mg/l	10	0	0%	0.891	0.172	0.166	0.604	0.884	0.146	0.175	0.519	0.180	>= 0.10	0.540	>= 0.10	0.057	Gamma; Lognormal; Normal	Normal
14_2_108	MW-3	Appendix III	Chloride	mg/l	10	0	0%	0.924	0.394	0.191	0.379	0.923	0.379	0.196	0.338	0.205	>= 0.10	0.379	>= 0.10	0.053	Gamma; Lognormal; Normal	Normal
14_2_112	MW-3	Appendix III	Fluoride	mg/l	10	8	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.122		Nonparametric
14_2_120	MW-3	Appendix III	pH, Field	su	10	0	0%	0.955	0.728	0.121	0.946	0.956	0.743	0.121	0.948	0.131	>= 0.10	0.228	>= 0.10	0.010	Gamma; Lognormal; Normal	Normal
14_2_124	MW-3	Appendix III	Sulfate	mg/l	10	0	0%	0.934	0.493	0.161	0.651	0.930	0.446	0.158	0.685	0.173	>= 0.10	0.327	>= 0.10	0.041	Gamma; Lognormal; Normal	Normal
14_2_126	MW-3	Appendix III	Total Dissolved Solids	mg/l	10	0	0%	0.706	0.001	0.400	0.000	0.689	0.001	0.409	0.000	0.416	< 0.01	1.585	< 0.01	0.104	Nonparametric	Nonparametric
14_3_101	MW-3	Appendix IV	Antimony	mg/l	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_3_102	MW-3	Appendix IV	Arsenic	mg/l	10	0	0%	0.602	0.000	0.408	0.000	0.664	0.000	0.390	0.000	0.403	< 0.01	1.768	< 0.01	0.238	Nonparametric	Nonparametric
14_3_103	MW-3	Appendix IV	Barium	mg/l	10	0	0%	0.898	0.208	0.204	0.282	0.895	0.192	0.219	0.188	0.221	>= 0.10	0.492	>= 0.10	0.104	Gamma; Lognormal; Normal	Normal
14_3_104	MW-3	Appendix IV	Beryllium	mg/l	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
14_3_106	MW-3	Appendix IV	Cadmium	mg/l	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_3_109	MW-3	Appendix IV	Chromium	mg/l	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_3_110	MW-3	Appendix IV	Cobalt	mg/l	10	8	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.232		Nonparametric
14_3_113	MW-3	Appendix IV	Fluoride (App IV)	mg/l	10	8	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.122		Nonparametric
14_3_115	MW-3	Appendix IV	Lead	mg/l	10	9	90%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_3_116	MW-3	Appendix IV	Lithium	mg/l	10	0	0%	0.950	0.667	0.111	0.979	0.953	0.708	0.114	0.972	0.124	>= 0.10	0.226	>= 0.10	0.064	Gamma; Lognormal; Normal	Normal
14_3_117	MW-3	Appendix IV	Mercury	mg/l	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_3_118	MW-3	Appendix IV	Molybdenum	mg/l	10	0	0%	0.922	0.374	0.157	0.690	0.929	0.441	0.146	0.791	0.143	>= 0.10	0.326	>= 0.10	0.065	Gamma; Lognormal; Normal	Normal
14_3_121	MW-3	Appendix IV	Radium-226+228	pci/l	10	2	20%	0.912	0.370	0.268	0.093	0.939	0.599	0.171	0.703	0.212	>= 0.10	0.329	>= 0.10	0.642	Gamma; Lognormal; Normal	Normal
14_3_122	MW-3	Appendix IV	Selenium	mg/l	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_3_125	MW-3	Appendix IV	Thallium	mg/l	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_5_111	MW-3	Part 115	Copper	mg/l	10	9	90%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_5_114	MW-3	Part 115	Iron	mg/l	10	0	0%	0.930	0.448	0.146	0.789	0.922	0.372	0.149	0.762	0.164	>= 0.10	0.360	>= 0.10	0.132	Gamma; Lognormal; Normal	Normal
14_5_119	MW-3	Part 115	Nickel	mg/l	10	8	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.265		Nonparametric
14_5_123	MW-3	Part 115	Silver	mg/l	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_5_128	MW-3	Part 115	Vanadium	mg/l	10	10	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_5_129	MW-3	Part 115	Zinc	mg/l	10	8	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.173		Nonparametric
15_2_105	MW-5	Appendix III	Boron	mg/l	18	0	0%	0.895	0.048	0.160	0.257	0.593	0.000	0.284	0.000	0.222	0.01 <= p < 0.05	1.629	< 0.01	0.608	Normal	Normal
15_2_107	MW-5	Appendix III	Calcium	mg/l	18	0	0%	0.968	0.765	0.135	0.524	0.895	0.047	0.193	0.076	0.179	>= 0.10	0.421	>= 0.10	0.386	Gamma; Lognormal; Normal	Normal
15_2_108	MW-5	Appendix III	Chloride	mg/l	18	0	0%	0.876	0.022	0.217	0.025	0.845	0.007	0.255	0.003	0.247	< 0.01	1.067	< 0.01	0.315	Nonparametric	Nonparametric
15_2_112	MW-5	Appendix III	Fluoride	mg/l	19	17	89%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.171		Nonparametric
15_2_120	MW-5	Appendix III	pH, Field	su	19	0	0%	0.699	0.000	0.242	0.005	0.683	0.000	0.252	0.003	0.244	< 0.01	2.146	< 0.01	0.036	Nonparametric	Nonparametric
15_2_124	MW-5	Appendix III	Sulfate	mg/l	18	0	0%	0.939	0.279	0.147	0.380	0.925	0.161	0.197	0.064	0.170	>= 0.10	0.467	>= 0.10	0.546	Gamma; Lognormal; Normal	Normal
15_2_126	MW-5	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	0.953	0.472	0.151	0.339	0.939	0.274	0.174	0.159	0.153	>= 0.10	0.416	>= 0.10	0.396	Gamma; Lognormal; Normal	Normal
15_3_101	MW-5	Appendix IV	Antimony	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_3_102	MW-5	Appendix IV	Arsenic	mg/l	19	12	63%	0.953	0.753	0.178	0.721	0.967	0.879	0.166	0.813	0.161	>= 0.10	0.179	>= 0.10	0.695	Gamma; Lognormal; Normal	Nonparametric
15_3_103	MW-5	Appendix IV	Barium	mg/l	19	0	0%	0.904	0.057	0.179	0.113	0.939	0.248	0.150	0.319	0.156	>= 0.10	0.643	0.05 <= p < 0.10	0.166	Gamma; Lognormal; Normal	Normal
15_3_104	MW-5	Appendix IV	Beryllium	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_3_106	MW-5	Appendix IV	Cadmium	mg/l	19	18	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_3_109	MW-5	Appendix IV	Chromium	mg/l	19	16	84%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.047		Nonparametric
15_3_110	MW-5	Appendix IV	Cobalt	mg/l	19	16	84%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.550		Nonparametric
15_3_113	MW-5	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.171		Nonparametric
15_3_115	MW-5	Appendix IV	Lead	mg/l	19	14	74%	0.817	0.110	0.273	0.252	0.949	0.727	0.203	0.717	0.226	>= 0.10	0.264	>= 0.10	1.418	Gamma; Lognormal; Normal	Nonparametric
15_3_116	MW-5	Appendix IV	Lithium	mg/l	19	0	0%	0.895	0.040	0.119	0.676	0.686	0.000	0.208	0.030	0.165	>= 0.10	1.149	< 0.01	0.385	Gamma; Normal	Normal
15_3_117	MW-5	Appendix IV	Mercury	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_3_118	MW-5	Appendix IV	Molybdenum	mg/l	19	0	0%	0.974	0.850	0.159	0.234	0.804	0.001	0.258	0.002	0.226	0.01 <= p < 0.05	0.652	0.05 <= p < 0.10	0.492	Gamma; Normal	Normal
15_3_121	MW-5	Appendix IV	Radium-226+228	pci/l	19	2	11%	0.881	0.033	0.197	0.078	0.959	0.606	0.113	0.821	0.121	>= 0.10	0.274	>= 0.10	0.613	Gamma; Lognormal; Normal	Normal
15_3_122	MW-5	Appendix IV	Selenium	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_3_125	MW-5	Appendix IV	Thallium	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
15_5_111	MW-5	Part 115	Copper	mg/l	19	12	63%	0.904	0.353	0.198	0.559	0.957	0.791	0.153	0.889	0.150	>= 0.10	0.204	>= 0.10	0.992	Gamma; Lognormal; Normal	Nonparametric
15_5_114	MW-5	Part 115	Iron	mg/l	19	1	5%	0.640	0.000	0.312	0.000	0.965	0.700	0.104	0.872	0.187	>= 0.10	0.691	0.05 <= p < 0.10	1.096	Gamma; Lognormal	Gamma
15_5_119	MW-5	Part 115	Nickel	mg/l	19	0	0%	0.946	0.336	0.125	0.603	0.965	0.675	0.147	0.346	0.120	>= 0.10	0.248	>= 0.10	0.483	Gamma; Lognormal; Normal	Normal
15_5_123	MW-5	Part 115	Silver	mg/l	19	18	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_5_128	MW-5	Part 115	Vanadium	mg/l	19	15	79%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.921		Nonparametric
15_5_129	MW-5	Part 115	Zinc	mg/l	19	3	16%	0.657	0.000	0.271	0.003	0.914	0.137	0.163	0.305	0.210	0.05 <= p < 0.10	0.936	0.01 <= p < 0.05	0.966	Gamma; Lognormal	Gamma
16_2_105	MW-6	Appendix III	Boron	mg/l	18	0	0%	0.967	0.739	0.116	0.753	0.961	0.623	0.100	0.904	0.113	>= 0.10	0.226	>= 0.10	0.221	Gamma; Lognormal; Normal	Normal
16_2_107	MW-6	Appendix III	Calcium	mg/l	18	0	0%	0.929	0.185	0.171	0.176	0.928	0.179	0.170	0.185	0.178	>= 0.10	0.499	>= 0.10	0.113	Gamma; Lognormal; Normal	Normal
16_2_108	MW-6	Appendix III	Chloride	mg/l	18	0	0%	0.927	0.169	0.182	0.119	0.920	0.128	0.185	0.106	0.193	0.05 <= p < 0.10	0.692	0.05 <= p < 0.10	0.217	Gamma; Lognormal; Normal	Normal
16_2_112	MW-6	Appendix III	Fluoride	mg/l	19	17	89%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.129		Nonparametric
16_2_120	MW-6	Appendix III	pH, Field	su	19	0	0%	0.908	0.068	0.198	0.048	0.907	0.066	0.202	0.040	0.197	0.05 <= p < 0.10	0.856	0.01 <= p < 0.05	0.024	Gamma; Lognormal; Normal	Normal
16_2_124	MW-6	Appendix III	Sulfate	mg/l	18	0	0%	0.943	0.328	0.141	0.447	0.953	0.473	0.141	0.456	0.148	>= 0.10	0.324	>= 0.10	0.251	Gamma; Lognormal; Normal	Normal
16_2_126	MW-6	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	0.953	0.481	0.104	0.875	0.955	0.514	0.108	0.833	0.105	>= 0.10	0.312	>= 0.10	0.125	Gamma; Lognormal; Normal	Normal
16_3_101	MW-6	Appendix IV	Antimony	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_3_102	MW-6	Appendix IV	Arsenic	mg/l	19	17	89%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.980		Nonparametric
16_3_103	MW-6	Appendix IV	Barium	mg/l	19	0	0%	0.954	0.465	0.151	0.308	0.959	0.548	0.147	0.347	0.153	>= 0.10	0.444	>= 0.10	0.120	Gamma; Lognormal; Normal	Normal
16_3_104	MW-6	Appendix IV	Beryllium	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_3_106	MW-6	Appendix IV	Cadmium	mg/l	19	18	95%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_3_109	MW-6	Appendix IV	Chromium	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_3_110	MW-6	Appendix IV	Cobalt	mg/l	19	17	89%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.314		Nonparametric
16_3_113	MW-6	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.129		Nonparametric
16_3_115	MW-6	Appendix IV	Lead	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_3_116	MW-6	Appendix IV	Lithium	mg/l	19	0	0%	0.975	0.872	0.098	0.903	0.981	0.958	0.120	0.665	0.108	>= 0.10	0.220	>= 0.10	0.177	Gamma; Lognormal; Normal	Normal
16_3_117	MW-6	Appendix IV	Mercury	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_3_118	MW-6	Appendix IV	Molybdenum	mg/l	19	0	0%	0.956	0.505	0.122	0.646	0.896	0.042	0.175	0.130	0.160	>= 0.10	0.606	>= 0.10	0.305	Gamma; Lognormal; Normal	Normal
16_3_121	MW-6	Appendix IV	Radium-226+228	pci/l	19	2	11%	0.842	0.008	0.172	0.198	NA	NA	NA	NA	NA		NA		NA	Normal	Normal
16_3_122	MW-6	Appendix IV	Selenium	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_3_125	MW-6	Appendix IV	Thallium	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_5_111	MW-6	Part 115	Copper	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_5_114	MW-6	Part 115	Iron	mg/l	19	9	47%	0.686	0.001	0.250	0.077	0.906	0.254	0.194	0.352	0.213	>= 0.10	0.629	0.05 <= p < 0.10	0.717	Gamma; Lognormal; Normal	Nonparametric
16_5_119	MW-6	Part 115	Nickel	mg/l	19	5	26%	0.818	0.008	0.259	0.012	0.705	0.000	0.317	0.000	0.299	< 0.01	1.512	< 0.01	0.393	Nonparametric	Nonparametric
16_5_123	MW-6	Part 115	Silver	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_5_128	MW-6	Part 115	Vanadium	mg/l	19	19	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_5_129	MW-6	Part 115	Zinc	mg/l	19	16	84%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.801		Nonparametric
17_2_105	MW-7	Appendix III	Boron	mg/l	15	0	0%	0.954	0.587	0.150	0.487	0.930	0.274	0.190	0.155	0.172	>= 0.10	0.476	>= 0.10	0.223	Gamma; Lognormal; Normal	Normal
17_2_107	MW-7	Appendix III	Calcium	mg/l	15	0	0%	0.806	0.004	0.275	0.003	0.855	0.020	0.260	0.008	0.269	< 0.01	1.028	< 0.01	0.143	Nonparametric	Nonparametric
17_2_108	MW-7	Appendix III	Chloride	mg/l	15	0	0%	0.839	0.012	0.184	0.186	0.865	0.029	0.186	0.173	0.185	>= 0.10	0.704	0.05 <= p < 0.10	0.083	Gamma; Lognormal; Normal	Normal
17_2_112	MW-7	Appendix III	Fluoride	mg/l	15	11	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.142		Nonparametric
17_2_120	MW-7	Appendix III	pH, Field	su	15	0	0%	0.824	0.007	0.232	0.029	0.841	0.013	0.224	0.041	0.223	0.01 <= p < 0.05	0.868	0.01 <= p < 0.05	0.032	Nonparametric	Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
17_2_124	MW-7	Appendix III	Sulfate	mg/l	15	0	0%	0.824	0.008	0.202	0.103	0.867	0.031	0.173	0.264	0.182	>= 0.10	0.793	0.01 <= p < 0.05	0.135	Gamma; Lognormal; Normal	Normal
17_2_126	MW-7	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	0.708	0.000	0.324	0.000	0.756	0.001	0.296	0.001	0.306	< 0.01	1.580	< 0.01	0.117	Nonparametric	Nonparametric
17_3_101	MW-7	Appendix IV	Antimony	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_3_102	MW-7	Appendix IV	Arsenic	mg/l	15	0	0%	0.871	0.035	0.262	0.007	0.808	0.005	0.256	0.009	0.267	< 0.01	1.117	< 0.01	0.240	Nonparametric	Nonparametric
17_3_103	MW-7	Appendix IV	Barium	mg/l	15	0	0%	0.926	0.235	0.119	0.819	0.876	0.041	0.141	0.580	0.125	>= 0.10	0.474	>= 0.10	0.133	Gamma; Lognormal; Normal	Normal
17_3_104	MW-7	Appendix IV	Beryllium	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_3_106	MW-7	Appendix IV	Cadmium	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_3_109	MW-7	Appendix IV	Chromium	mg/l	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_3_110	MW-7	Appendix IV	Cobalt	mg/l	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.343		Nonparametric
17_3_113	MW-7	Appendix IV	Fluoride (App IV)	mg/l	15	11	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.142		Nonparametric
17_3_115	MW-7	Appendix IV	Lead	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_3_116	MW-7	Appendix IV	Lithium	mg/l	15	0	0%	0.975	0.921	0.122	0.796	0.964	0.756	0.131	0.699	0.139	>= 0.10	0.282	>= 0.10	0.152	Gamma; Lognormal; Normal	Normal
17_3_117	MW-7	Appendix IV	Mercury	mg/l	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_3_118	MW-7	Appendix IV	Molybdenum	mg/l	15	0	0%	0.838	0.012	0.234	0.027	0.840	0.012	0.256	0.009	0.256	0.01 <= p < 0.05	1.096	< 0.01	0.271	Nonparametric	Nonparametric
17_3_121	MW-7	Appendix IV	Radium-226+228	pci/l	15	0	0%	0.874	0.038	0.172	0.268	0.975	0.923	0.137	0.634	0.115	>= 0.10	0.237	>= 0.10	0.698	Gamma; Lognormal; Normal	Normal
17_3_122	MW-7	Appendix IV	Selenium	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_3_125	MW-7	Appendix IV	Thallium	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_5_111	MW-7	Part 115	Copper	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_5_114	MW-7	Part 115	Iron	mg/l	15	0	0%	0.784	0.002	0.276	0.003	0.912	0.146	0.211	0.072	0.229	0.01 <= p < 0.05	0.657	0.05 <= p < 0.10	0.274	Gamma; Lognormal	Gamma
17_5_119	MW-7	Part 115	Nickel	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_5_123	MW-7	Part 115	Silver	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_5_128	MW-7	Part 115	Vanadium	mg/l	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_5_129	MW-7	Part 115	Zinc	mg/l	15	11	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.012		Nonparametric
18_2_105	MW-7C	Appendix III	Boron	mg/l	14	0	0%	0.892	0.087	0.167	0.365	0.908	0.146	0.160	0.433	0.157	>= 0.10	0.466	>= 0.10	0.037	Gamma; Lognormal; Normal	Normal
18_2_107	MW-7C	Appendix III	Calcium	mg/l	14	0	0%	0.887	0.074	0.220	0.066	0.853	0.025	0.239	0.029	0.228	0.05 <= p < 0.10	0.809	0.01 <= p < 0.05	0.093	Gamma; Normal	Normal
18_2_108	MW-7C	Appendix III	Chloride	mg/l	14	0	0%	0.930	0.310	0.204	0.116	0.938	0.397	0.193	0.166	0.196	>= 0.10	0.534	>= 0.10	0.058	Gamma; Lognormal; Normal	Normal
18_2_112	MW-7C	Appendix III	Fluoride	mg/l	14	12	86%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.158		Nonparametric
18_2_120	MW-7C	Appendix III	pH, Field	su	14	0	0%	0.920	0.223	0.176	0.282	0.922	0.233	0.175	0.291	0.181	>= 0.10	0.444	>= 0.10	0.013	Gamma; Lognormal; Normal	Normal
18_2_124	MW-7C	Appendix III	Sulfate	mg/l	14	0	0%	0.944	0.477	0.143	0.610	0.952	0.597	0.133	0.722	0.134	>= 0.10	0.323	>= 0.10	0.053	Gamma; Lognormal; Normal	Normal
18_2_126	MW-7C	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	0.864	0.034	0.235	0.035	0.838	0.015	0.247	0.020	0.245	0.01 <= p < 0.05	1.053	< 0.01	0.076	Nonparametric	Nonparametric
18_3_101	MW-7C	Appendix IV	Antimony	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_3_102	MW-7C	Appendix IV	Arsenic	mg/l	14	0	0%	0.770	0.002	0.259	0.011	0.844	0.019	0.221	0.062	0.230	0.05 <= p < 0.10	0.989	0.01 <= p < 0.05	0.165	Gamma; Lognormal	Gamma
18_3_103	MW-7C	Appendix IV	Barium	mg/l	14	0	0%	0.968	0.847	0.114	0.894	0.969	0.857	0.111	0.914	0.113	>= 0.10	0.226	>= 0.10	0.064	Gamma; Lognormal; Normal	Normal
18_3_104	MW-7C	Appendix IV	Beryllium	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_3_106	MW-7C	Appendix IV	Cadmium	mg/l	14	10	71%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.809		Nonparametric
18_3_109	MW-7C	Appendix IV	Chromium	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_3_110	MW-7C	Appendix IV	Cobalt	mg/l	14	13	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_3_113	MW-7C	Appendix IV	Fluoride (App IV)	mg/l	14	12	86%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.158		Nonparametric
18_3_115	MW-7C	Appendix IV	Lead	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
18_3_116	MW-7C	Appendix IV	Lithium	mg/l	14	0	0%	0.931	0.319	0.201	0.132	0.919	0.213	0.213	0.084	0.209	>= 0.10	0.472	>= 0.10	0.068	Gamma; Lognormal; Normal	Normal
18_3_117	MW-7C	Appendix IV	Mercury	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_3_118	MW-7C	Appendix IV	Molybdenum	mg/l	14	0	0%	0.959	0.705	0.113	0.896	0.950	0.561	0.117	0.868	0.122	>= 0.10	0.283	>= 0.10	0.054	Gamma; Lognormal; Normal	Normal
18_3_121	MW-7C	Appendix IV	Radium-226+228	pci/l	14	0	0%	0.868	0.040	0.181	0.243	0.922	0.237	0.163	0.399	0.176	>= 0.10	0.486	>= 0.10	0.552	Gamma; Lognormal; Normal	Normal
18_3_122	MW-7C	Appendix IV	Selenium	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_3_125	MW-7C	Appendix IV	Thallium	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_5_111	MW-7C	Part 115	Copper	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_5_114	MW-7C	Part 115	Iron	mg/l	14	0	0%	0.831	0.012	0.173	0.306	0.774	0.002	0.204	0.117	0.176	>= 0.10	0.840	0.01 <= p < 0.05	0.114	Gamma; Lognormal; Normal	Normal
18_5_119	MW-7C	Part 115	Nickel	mg/l	14	0	0%	0.843	0.018	0.237	0.032	0.870	0.042	0.221	0.062	0.220	0.05 <= p < 0.10	0.918	0.01 <= p < 0.05	0.121	Gamma; Lognormal	Gamma
18_5_123	MW-7C	Part 115	Silver	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_5_128	MW-7C	Part 115	Vanadium	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_5_129	MW-7C	Part 115	Zinc	mg/l	14	11	79%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.810		Nonparametric
19_2_105	MW-8	Appendix III	Boron	mg/l	15	1	7%	0.824	0.010	0.211	0.093	0.933	0.331	0.242	0.025	0.215	0.05 <= p < 0.10	0.621	>= 0.10	0.422	Gamma; Lognormal; Normal	Normal
19_2_107	MW-8	Appendix III	Calcium	mg/l	15	0	0%	0.959	0.679	0.100	0.955	0.960	0.696	0.104	0.931	0.110	>= 0.10	0.234	>= 0.10	0.056	Gamma; Lognormal; Normal	Normal
19_2_108	MW-8	Appendix III	Chloride	mg/l	15	2	13%	0.838	0.020	0.195	0.196	0.976	0.955	0.121	0.865	0.144	>= 0.10	0.304	>= 0.10	0.791	Gamma; Lognormal; Normal	Normal
19_2_112	MW-8	Appendix III	Fluoride	mg/l	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.042		Nonparametric
19_2_120	MW-8	Appendix III	pH, Field	su	15	0	0%	0.713	0.000	0.239	0.021	0.727	0.000	0.233	0.028	0.234	0.01 <= p < 0.05	1.248	< 0.01	0.027	Nonparametric	Nonparametric
19_2_124	MW-8	Appendix III	Sulfate	mg/l	15	0	0%	0.891	0.070	0.160	0.383	0.961	0.715	0.109	0.906	0.128	>= 0.10	0.276	>= 0.10	0.484	Gamma; Lognormal; Normal	Normal
19_2_126	MW-8	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	0.938	0.357	0.172	0.272	0.956	0.625	0.157	0.414	0.159	>= 0.10	0.365	>= 0.10	0.076	Gamma; Lognormal; Normal	Normal
19_3_101	MW-8	Appendix IV	Antimony	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_3_102	MW-8	Appendix IV	Arsenic	mg/l	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.203		Nonparametric
19_3_103	MW-8	Appendix IV	Barium	mg/l	15	0	0%	0.925	0.228	0.215	0.059	0.939	0.368	0.206	0.087	0.197	>= 0.10	0.563	>= 0.10	0.134	Gamma; Lognormal; Normal	Normal
19_3_104	MW-8	Appendix IV	Beryllium	mg/l	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_3_106	MW-8	Appendix IV	Cadmium	mg/l	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_3_109	MW-8	Appendix IV	Chromium	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_3_110	MW-8	Appendix IV	Cobalt	mg/l	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_3_113	MW-8	Appendix IV	Fluoride (App IV)	mg/l	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.042		Nonparametric
19_3_115	MW-8	Appendix IV	Lead	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_3_116	MW-8	Appendix IV	Lithium	mg/l	15	6	40%	0.928	0.461	0.163	0.703	0.950	0.692	0.151	0.801	0.148	>= 0.10	0.256	>= 0.10	0.323	Gamma; Lognormal; Normal	Normal
19_3_117	MW-8	Appendix IV	Mercury	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_3_118	MW-8	Appendix IV	Molybdenum	mg/l	15	11	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.518		Nonparametric
19_3_121	MW-8	Appendix IV	Radium-226+228	pci/l	15	0	0%	0.859	0.024	0.185	0.183	0.966	0.791	0.117	0.836	0.148	>= 0.10	0.219	>= 0.10	1.047	Gamma; Lognormal; Normal	Gamma
19_3_122	MW-8	Appendix IV	Selenium	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_3_125	MW-8	Appendix IV	Thallium	mg/l	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_5_111	MW-8	Part 115	Copper	mg/l	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_5_114	MW-8	Part 115	Iron	mg/l	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.573		Nonparametric
19_5_119	MW-8	Part 115	Nickel	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_5_123	MW-8	Part 115	Silver	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_5_128	MW-8	Part 115	Vanadium	mg/l	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
19_5_129	MW-8	Part 115	Zinc	mg/l	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.960		Nonparametric
20_2_105	MW-9	Appendix III	Boron	mg/l	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_2_107	MW-9	Appendix III	Calcium	mg/l	15	0	0%	0.904	0.110	0.240	0.020	0.925	0.229	0.211	0.071	0.220	0.05 <= p < 0.10	0.514	>= 0.10	0.153	Gamma; Lognormal; Normal	Normal
20_2_108	MW-9	Appendix III	Chloride	mg/l	15	10	67%	0.927	0.575	0.219	0.595	0.870	0.266	0.271	0.263	0.277	>= 0.10	0.383	>= 0.10	0.709	Gamma; Lognormal; Normal	Nonparametric
20_2_112	MW-9	Appendix III	Fluoride	mg/l	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_2_120	MW-9	Appendix III	pH, Field	su	15	0	0%	0.919	0.186	0.164	0.344	0.926	0.236	0.159	0.389	0.160	>= 0.10	0.370	>= 0.10	0.025	Gamma; Lognormal; Normal	Normal
20_2_124	MW-9	Appendix III	Sulfate	mg/l	15	8	53%	0.943	0.668	0.176	0.740	0.955	0.778	0.194	0.590	0.203	>= 0.10	0.248	>= 0.10	0.547	Gamma; Lognormal; Normal	Nonparametric
20_2_126	MW-9	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	0.805	0.004	0.223	0.043	0.834	0.010	0.192	0.143	0.199	>= 0.10	1.131	< 0.01	0.143	Gamma; Lognormal	Gamma
20_3_101	MW-9	Appendix IV	Antimony	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_102	MW-9	Appendix IV	Arsenic	mg/l	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.709		Nonparametric
20_3_103	MW-9	Appendix IV	Barium	mg/l	15	0	0%	0.880	0.048	0.180	0.214	0.900	0.096	0.162	0.359	0.164	>= 0.10	0.552	>= 0.10	0.128	Gamma; Lognormal; Normal	Normal
20_3_104	MW-9	Appendix IV	Beryllium	mg/l	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_106	MW-9	Appendix IV	Cadmium	mg/l	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_109	MW-9	Appendix IV	Chromium	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_110	MW-9	Appendix IV	Cobalt	mg/l	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_113	MW-9	Appendix IV	Fluoride (App IV)	mg/l	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_115	MW-9	Appendix IV	Lead	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_116	MW-9	Appendix IV	Lithium	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_117	MW-9	Appendix IV	Mercury	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_118	MW-9	Appendix IV	Molybdenum	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_121	MW-9	Appendix IV	Radium-226+228	pci/l	15	0	0%	0.923	0.217	0.149	0.493	NA	NA	NA	NA	NA		NA		NA	Normal	Normal
20_3_122	MW-9	Appendix IV	Selenium	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_125	MW-9	Appendix IV	Thallium	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_5_111	MW-9	Part 115	Copper	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_5_114	MW-9	Part 115	Iron	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_5_119	MW-9	Part 115	Nickel	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_5_123	MW-9	Part 115	Silver	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_5_128	MW-9	Part 115	Vanadium	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_5_129	MW-9	Part 115	Zinc	mg/l	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.425		Nonparametric
21_2_105	MW-10	Appendix III	Boron	mg/l	15	1	7%	0.884	0.066	0.276	0.005	0.883	0.065	0.252	0.016	0.264	0.01 <= p < 0.05	0.905	0.01 <= p < 0.05	0.155	Lognormal; Normal	Normal
21_2_107	MW-10	Appendix III	Calcium	mg/l	15	0	0%	0.953	0.576	0.150	0.485	0.951	0.546	0.164	0.341	0.162	>= 0.10	0.334	>= 0.10	0.080	Gamma; Lognormal; Normal	Normal
21_2_108	MW-10	Appendix III	Chloride	mg/l	15	9	60%	0.793	0.051	0.328	0.043	0.886	0.297	0.236	0.367	0.287	>= 0.10	0.540	>= 0.10	0.873	Gamma; Lognormal; Normal	Nonparametric
21_2_112	MW-10	Appendix III	Fluoride	mg/l	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.254		Nonparametric
21_2_120	MW-10	Appendix III	pH, Field	su	15	0	0%	0.889	0.064	0.178	0.227	0.900	0.095	0.172	0.268	0.169	>= 0.10	0.464	>= 0.10	0.029	Gamma; Lognormal; Normal	Normal
21_2_124	MW-10	Appendix III	Sulfate	mg/l	15	0	0%	0.876	0.042	0.165	0.329	0.954	0.590	0.129	0.722	0.131	>= 0.10	0.300	>= 0.10	0.302	Gamma; Lognormal; Normal	Normal
21_2_126	MW-10	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	0.971	0.869	0.133	0.679	0.961	0.715	0.152	0.464	0.147	>= 0.10	0.257	>= 0.10	0.110	Gamma; Lognormal; Normal	Normal
21_3_101	MW-10	Appendix IV	Antimony	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_3_102	MW-10	Appendix IV	Arsenic	mg/l	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.526		Nonparametric
21_3_103	MW-10	Appendix IV	Barium	mg/l	15	0	0%	0.972	0.891	0.130	0.706	0.960	0.698	0.143	0.560	0.147	>= 0.10	0.291	>= 0.10	0.125	Gamma; Lognormal; Normal	Normal

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
21_3_104	MW-10	Appendix IV	Beryllium	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_3_106	MW-10	Appendix IV	Cadmium	mg/l	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_3_109	MW-10	Appendix IV	Chromium	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_3_110	MW-10	Appendix IV	Cobalt	mg/l	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_3_113	MW-10	Appendix IV	Fluoride (App IV)	mg/l	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.254		Nonparametric
21_3_115	MW-10	Appendix IV	Lead	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_3_116	MW-10	Appendix IV	Lithium	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_3_117	MW-10	Appendix IV	Mercury	mg/l	15	14	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_3_118	MW-10	Appendix IV	Molybdenum	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_3_121	MW-10	Appendix IV	Radium-226+228	pci/l	15	0	0%	0.814	0.006	0.298	0.001	0.925	0.229	0.174	0.259	0.226	0.01 <= p < 0.05	0.757	0.01 <= p < 0.05	0.811	Lognormal	Lognormal
21_3_122	MW-10	Appendix IV	Selenium	mg/l	15	13	87%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.101		Nonparametric
21_3_125	MW-10	Appendix IV	Thallium	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_5_111	MW-10	Part 115	Copper	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_5_114	MW-10	Part 115	Iron	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_5_119	MW-10	Part 115	Nickel	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_5_123	MW-10	Part 115	Silver	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_5_128	MW-10	Part 115	Vanadium	mg/l	15	15	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_5_129	MW-10	Part 115	Zinc	mg/l	15	12	80%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.291		Nonparametric
22_2_105	MW-13	Appendix III	Boron	mg/l	14	0	0%	0.950	0.554	0.187	0.206	0.950	0.553	0.165	0.378	0.168	>= 0.10	0.358	>= 0.10	0.131	Gamma; Lognormal; Normal	Normal
22_2_107	MW-13	Appendix III	Calcium	mg/l	14	0	0%	0.888	0.076	0.178	0.264	0.888	0.077	0.178	0.271	0.187	>= 0.10	0.614	>= 0.10	0.200	Gamma; Lognormal; Normal	Normal
22_2_108	MW-13	Appendix III	Chloride	mg/l	14	2	14%	0.876	0.079	0.224	0.097	0.963	0.825	0.135	0.787	0.168	>= 0.10	0.321	>= 0.10	0.506	Gamma; Lognormal; Normal	Normal
22_2_112	MW-13	Appendix III	Fluoride	mg/l	14	12	86%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.137		Nonparametric
22_2_120	MW-13	Appendix III	pH, Field	su	14	0	0%	0.904	0.129	0.190	0.185	0.894	0.094	0.195	0.157	0.196	>= 0.10	0.588	>= 0.10	0.033	Gamma; Lognormal; Normal	Normal
22_2_124	MW-13	Appendix III	Sulfate	mg/l	14	0	0%	0.823	0.010	0.243	0.024	0.941	0.432	0.146	0.580	0.184	>= 0.10	0.518	>= 0.10	0.842	Gamma; Lognormal	Gamma
22_2_126	MW-13	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	0.892	0.087	0.173	0.305	0.926	0.266	0.168	0.352	0.178	>= 0.10	0.516	>= 0.10	0.234	Gamma; Lognormal; Normal	Normal
22_3_101	MW-13	Appendix IV	Antimony	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
22_3_102	MW-13	Appendix IV	Arsenic	mg/l	14	9	64%	0.968	0.862	0.162	0.936	0.898	0.399	0.224	0.563	0.220	>= 0.10	0.301	>= 0.10	0.575	Gamma; Lognormal; Normal	Nonparametric
22_3_103	MW-13	Appendix IV	Barium	mg/l	14	0	0%	0.842	0.017	0.226	0.050	0.937	0.384	0.186	0.210	0.204	>= 0.10	0.546	>= 0.10	0.278	Gamma; Lognormal	Gamma
22_3_104	MW-13	Appendix IV	Beryllium	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
22_3_106	MW-13	Appendix IV	Cadmium	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
22_3_109	MW-13	Appendix IV	Chromium	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
22_3_110	MW-13	Appendix IV	Cobalt	mg/l	14	12	86%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.498		Nonparametric
22_3_113	MW-13	Appendix IV	Fluoride (App IV)	mg/l	14	12	86%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.137		Nonparametric
22_3_115	MW-13	Appendix IV	Lead	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
22_3_116	MW-13	Appendix IV	Lithium	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
22_3_117	MW-13	Appendix IV	Mercury	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
22_3_118	MW-13	Appendix IV	Molybdenum	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
22_3_121	MW-13	Appendix IV	Radium-226+228	pci/l	14	1	7%	0.826	0.014	0.261	0.016	0.914	0.208	0.191	0.216	0.198	>= 0.10	0.599	>= 0.10	1.103	Gamma; Lognormal	Gamma
22_3_122	MW-13	Appendix IV	Selenium	mg/l	14	13	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
22_3_125	MW-13	Appendix IV	Thallium	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
22_5_111	MW-13	Part 115	Copper	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
22_5_114	MW-13	Part 115	Iron	mg/l	14	1	7%	0.620	0.000	0.378	0.000	0.804	0.008	0.232	0.053	0.302	< 0.01	1.622	< 0.01	1.529	Lognormal	Nonparametric
22_5_119	MW-13	Part 115	Nickel	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
22_5_123	MW-13	Part 115	Silver	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
22_5_128	MW-13	Part 115	Vanadium	mg/l	14	13	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
22_5_129	MW-13	Part 115	Zinc	mg/l	14	12	86%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.784		Nonparametric
23_2_105	MW-14	Appendix III	Boron	mg/l	12	0	0%	0.978	0.977	0.114	0.938	0.975	0.956	0.122	0.891	0.125	>= 0.10	0.184	>= 0.10	0.056	Gamma; Lognormal; Normal	Normal
23_2_107	MW-14	Appendix III	Calcium	mg/l	12	0	0%	0.885	0.101	0.236	0.064	0.894	0.134	0.230	0.078	0.236	0.05 <= p < 0.10	0.595	>= 0.10	0.063	Gamma; Lognormal; Normal	Normal
23_2_108	MW-14	Appendix III	Chloride	mg/l	12	0	0%	0.907	0.196	0.154	0.599	0.891	0.121	0.164	0.496	0.151	>= 0.10	0.467	>= 0.10	0.046	Gamma; Lognormal; Normal	Normal
23_2_112	MW-14	Appendix III	Fluoride	mg/l	12	10	83%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.167		Nonparametric
23_2_120	MW-14	Appendix III	pH, Field	su	12	0	0%	0.941	0.511	0.155	0.590	0.941	0.516	0.157	0.574	0.163	>= 0.10	0.333	>= 0.10	0.010	Gamma; Lognormal; Normal	Normal
23_2_124	MW-14	Appendix III	Sulfate	mg/l	12	0	0%	0.359	0.000	0.503	0.000	0.740	0.002	0.276	0.012	0.426	< 0.01	2.473	< 0.01	1.302	Nonparametric	Nonparametric
23_2_126	MW-14	Appendix III	Total Dissolved Solids	mg/l	12	1	8%	0.953	0.679	0.125	0.900	0.954	0.699	0.122	0.918	0.114	>= 0.10	0.270	>= 0.10	0.050	Gamma; Lognormal; Normal	Nonparametric
23_3_101	MW-14	Appendix IV	Antimony	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
23_3_102	MW-14	Appendix IV	Arsenic	mg/l	12	0	0%	0.956	0.724	0.165	0.491	0.936	0.445	0.203	0.188	0.188	>= 0.10	0.315	>= 0.10	0.203	Gamma; Lognormal; Normal	Normal
23_3_103	MW-14	Appendix IV	Barium	mg/l	12	0	0%	0.711	0.001	0.274	0.013	0.761	0.004	0.248	0.040	0.254	0.01 <= p < 0.05	1.054	< 0.01	0.108	Nonparametric	Nonparametric
23_3_104	MW-14	Appendix IV	Beryllium	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
23_3_106	MW-14	Appendix IV	Cadmium	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
23_3_109	MW-14	Appendix IV	Chromium	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
23_3_110	MW-14	Appendix IV	Cobalt	mg/l	12	10	83%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.187		Nonparametric
23_3_113	MW-14	Appendix IV	Fluoride (App IV)	mg/l	12	10	83%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.167		Nonparametric
23_3_115	MW-14	Appendix IV	Lead	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
23_3_116	MW-14	Appendix IV	Lithium	mg/l	12	0	0%	0.961	0.805	0.159	0.551	0.961	0.798	0.149	0.651	0.145	>= 0.10	0.309	>= 0.10	0.083	Gamma; Lognormal; Normal	Normal
23_3_117	MW-14	Appendix IV	Mercury	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
23_3_118	MW-14	Appendix IV	Molybdenum	mg/l	12	0	0%	0.955	0.705	0.169	0.453	0.946	0.584	0.181	0.339	0.168	>= 0.10	0.377	>= 0.10	0.126	Gamma; Lognormal; Normal	Normal
23_3_121	MW-14	Appendix IV	Radium-226+228	pci/l	12	2	17%	0.696	0.001	0.325	0.004	0.896	0.199	0.241	0.102	0.275	0.01 <= p < 0.05	0.849	0.01 <= p < 0.05	0.839	Lognormal	Lognormal
23_3_122	MW-14	Appendix IV	Selenium	mg/l	12	10	83%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.260		Nonparametric
23_3_125	MW-14	Appendix IV	Thallium	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
23_5_111	MW-14	Part 115	Copper	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
23_5_114	MW-14	Part 115	Iron	mg/l	12	0	0%	0.924	0.320	0.157	0.571	0.880	0.088	0.173	0.416	0.156	>= 0.10	0.433	>= 0.10	0.239	Gamma; Lognormal; Normal	Normal
23_5_119	MW-14	Part 115	Nickel	mg/l	12	6	50%	0.912	0.448	0.259	0.233	0.912	0.449	0.283	0.138	0.286	>= 0.10	0.438	>= 0.10	0.164	Gamma; Lognormal; Normal	Nonparametric
23_5_123	MW-14	Part 115	Silver	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
23_5_128	MW-14	Part 115	Vanadium	mg/l	12	10	83%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.167		Nonparametric
23_5_129	MW-14	Part 115	Zinc	mg/l	12	10	83%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.203		Nonparametric
24_2_105	MW-15	Appendix III	Boron	mg/l	12	0	0%	0.956	0.732	0.137	0.776	0.951	0.649	0.151	0.629	0.154	>= 0.10	0.344	>= 0.10	0.117	Gamma; Lognormal; Normal	Normal
24_2_107	MW-15	Appendix III	Calcium	mg/l	12	0	0%	0.925	0.326	0.152	0.617	0.956	0.732	0.170	0.442	0.159	>= 0.10	0.337	>= 0.10	0.143	Gamma; Lognormal; Normal	Normal
24_2_108	MW-15	Appendix III	Chloride	mg/l	12	0	0%	0.962	0.815	0.132	0.817	0.971	0.916	0.103	0.979	0.114	>= 0.10	0.188	>= 0.10	0.165	Gamma; Lognormal; Normal	Normal
24_2_112	MW-15	Appendix III	Fluoride	mg/l	12	10	83%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.015		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal			Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
24_2_120	MW-15	Appendix III	pH, Field	su	12	0	0%	0.901	0.165	0.207	0.164	0.902	0.170	0.207	0.164	0.217	>= 0.10	0.533	>= 0.10	0.018	Gamma; Lognormal; Normal	Normal
24_2_124	MW-15	Appendix III	Sulfate	mg/l	12	0	0%	0.769	0.004	0.268	0.017	0.854	0.041	0.236	0.064	0.219	>= 0.10	0.950	0.01 <= p < 0.05	0.351	Gamma; Lognormal	Gamma
24_2_126	MW-15	Appendix III	Total Dissolved Solids	mg/l	12	0	0%	0.858	0.046	0.201	0.199	0.911	0.222	0.173	0.408	0.173	>= 0.10	0.443	>= 0.10	0.133	Gamma; Lognormal; Normal	Normal
24_3_101	MW-15	Appendix IV	Antimony	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
24_3_102	MW-15	Appendix IV	Arsenic	mg/l	12	9	75%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.412		Nonparametric
24_3_103	MW-15	Appendix IV	Barium	mg/l	12	0	0%	0.977	0.969	0.123	0.886	0.983	0.994	0.125	0.872	0.119	>= 0.10	0.176	>= 0.10	0.174	Gamma; Lognormal; Normal	Normal
24_3_104	MW-15	Appendix IV	Beryllium	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
24_3_106	MW-15	Appendix IV	Cadmium	mg/l	12	11	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
24_3_109	MW-15	Appendix IV	Chromium	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
24_3_110	MW-15	Appendix IV	Cobalt	mg/l	12	11	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
24_3_113	MW-15	Appendix IV	Fluoride (App IV)	mg/l	12	10	83%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.015		Nonparametric
24_3_115	MW-15	Appendix IV	Lead	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
24_3_116	MW-15	Appendix IV	Lithium	mg/l	12	11	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
24_3_117	MW-15	Appendix IV	Mercury	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
24_3_118	MW-15	Appendix IV	Molybdenum	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
24_3_121	MW-15	Appendix IV	Radium-226+228	pci/l	12	0	0%	0.894	0.133	0.196	0.229	0.911	0.220	0.207	0.165	0.167	>= 0.10	0.405	>= 0.10	0.637	Gamma; Lognormal; Normal	Normal
24_3_122	MW-15	Appendix IV	Selenium	mg/l	12	5	42%	0.914	0.425	0.220	0.385	0.919	0.465	0.217	0.408	0.238	>= 0.10	0.344	>= 0.10	0.515	Gamma; Lognormal; Normal	Nonparametric
24_3_125	MW-15	Appendix IV	Thallium	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
24_5_111	MW-15	Part 115	Copper	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
24_5_114	MW-15	Part 115	Iron	mg/l	12	1	8%	0.716	0.001	0.257	0.041	0.958	0.743	0.154	0.664	0.150	>= 0.10	0.415	>= 0.10	0.861	Gamma; Lognormal	Gamma
24_5_119	MW-15	Part 115	Nickel	mg/l	12	11	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
24_5_123	MW-15	Part 115	Silver	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
24_5_128	MW-15	Part 115	Vanadium	mg/l	12	12	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
24_5_129	MW-15	Part 115	Zinc	mg/l	12	10	83%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.699		Nonparametric
25_2_105	MW-16A	Appendix III	Boron	mg/l	13	0	0%	0.889	0.094	0.195	0.192	0.858	0.036	0.210	0.122	0.215	>= 0.10	0.746	0.01 <= p < 0.05	0.347	Gamma; Lognormal; Normal	Normal
25_2_107	MW-16A	Appendix III	Calcium	mg/l	13	0	0%	0.942	0.488	0.152	0.563	0.936	0.411	0.132	0.771	0.148	>= 0.10	0.383	>= 0.10	0.143	Gamma; Lognormal; Normal	Normal
25_2_108	MW-16A	Appendix III	Chloride	mg/l	13	0	0%	0.946	0.543	0.144	0.654	0.947	0.561	0.139	0.699	0.150	>= 0.10	0.308	>= 0.10	0.103	Gamma; Lognormal; Normal	Normal
25_2_112	MW-16A	Appendix III	Fluoride	mg/l	13	11	85%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.252		Nonparametric
25_2_120	MW-16A	Appendix III	pH, Field	su	13	0	0%	0.943	0.498	0.151	0.574	0.945	0.524	0.148	0.605	0.150	>= 0.10	0.351	>= 0.10	0.015	Gamma; Lognormal; Normal	Normal
25_2_124	MW-16A	Appendix III	Sulfate	mg/l	13	0	0%	0.942	0.482	0.172	0.367	0.938	0.426	0.205	0.143	0.205	>= 0.10	0.392	>= 0.10	0.427	Gamma; Lognormal; Normal	Normal
25_2_126	MW-16A	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	0.950	0.602	0.147	0.620	0.947	0.558	0.153	0.551	0.161	>= 0.10	0.318	>= 0.10	0.126	Gamma; Lognormal; Normal	Normal
25_3_101	MW-16A	Appendix IV	Antimony	mg/l	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
25_3_102	MW-16A	Appendix IV	Arsenic	mg/l	13	0	0%	0.912	0.198	0.233	0.052	0.897	0.120	0.282	0.006	0.262	0.01 <= p < 0.05	0.703	0.05 <= p < 0.10	0.278	Gamma; Lognormal; Normal	Normal
25_3_103	MW-16A	Appendix IV	Barium	mg/l	13	0	0%	0.951	0.608	0.173	0.356	0.949	0.578	0.186	0.255	0.192	>= 0.10	0.337	>= 0.10	0.157	Gamma; Lognormal; Normal	Normal
25_3_104	MW-16A	Appendix IV	Beryllium	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
25_3_106	MW-16A	Appendix IV	Cadmium	mg/l	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
25_3_109	MW-16A	Appendix IV	Chromium	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
25_3_110	MW-16A	Appendix IV	Cobalt	mg/l	13	11	85%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.062		Nonparametric
25_3_113	MW-16A	Appendix IV	Fluoride (App IV)	mg/l	13	11	85%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.252		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
25_3_115	MW-16A	Appendix IV	Lead	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
25_3_116	MW-16A	Appendix IV	Lithium	mg/l	13	10	77%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.183		Nonparametric
25_3_117	MW-16A	Appendix IV	Mercury	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
25_3_118	MW-16A	Appendix IV	Molybdenum	mg/l	13	11	85%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.378		Nonparametric
25_3_121	MW-16A	Appendix IV	Radium-226+228	pci/l	13	0	0%	0.750	0.002	0.272	0.009	0.900	0.133	0.185	0.261	0.233	0.05 <= p < 0.10	0.689	0.05 <= p < 0.10	0.846	Gamma; Lognormal	Gamma
25_3_122	MW-16A	Appendix IV	Selenium	mg/l	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
25_3_125	MW-16A	Appendix IV	Thallium	mg/l	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
25_5_111	MW-16A	Part 115	Copper	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
25_5_114	MW-16A	Part 115	Iron	mg/l	13	0	0%	0.943	0.503	0.194	0.198	0.964	0.812	0.159	0.496	0.169	>= 0.10	0.288	>= 0.10	0.192	Gamma; Lognormal; Normal	Normal
25_5_119	MW-16A	Part 115	Nickel	mg/l	13	11	85%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.271		Nonparametric
25_5_123	MW-16A	Part 115	Silver	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
25_5_128	MW-16A	Part 115	Vanadium	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
25_5_129	MW-16A	Part 115	Zinc	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
26_2_105	MW-16B	Appendix III	Boron	mg/l	13	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.065		Nonparametric
26_2_107	MW-16B	Appendix III	Calcium	mg/l	13	0	0%	0.968	0.864	0.132	0.777	0.961	0.772	0.137	0.723	0.140	>= 0.10	0.220	>= 0.10	0.039	Gamma; Lognormal; Normal	Normal
26_2_108	MW-16B	Appendix III	Chloride	mg/l	13	5	38%	0.646	0.001	0.326	0.012	0.792	0.023	0.269	0.092	0.297	0.01 <= p < 0.05	0.959	0.01 <= p < 0.05	0.428	Lognormal	Lognormal
26_2_112	MW-16B	Appendix III	Fluoride	mg/l	13	8	62%	0.878	0.301	0.216	0.622	0.800	0.082	0.296	0.158	0.269	>= 0.10	0.514	>= 0.10	0.482	Gamma; Lognormal; Normal	Nonparametric
26_2_120	MW-16B	Appendix III	pH, Field	su	13	0	0%	0.961	0.763	0.168	0.400	0.959	0.742	0.171	0.379	0.169	>= 0.10	0.327	>= 0.10	0.012	Gamma; Lognormal; Normal	Normal
26_2_124	MW-16B	Appendix III	Sulfate	mg/l	13	0	0%	0.927	0.310	0.255	0.020	0.946	0.532	0.235	0.048	0.241	0.01 <= p < 0.05	0.420	>= 0.10	0.109	Gamma; Lognormal; Normal	Normal
26_2_126	MW-16B	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	0.888	0.092	0.221	0.083	0.885	0.084	0.225	0.072	0.228	0.05 <= p < 0.10	0.738	0.01 <= p < 0.05	0.025	Gamma; Lognormal; Normal	Normal
26_3_101	MW-16B	Appendix IV	Antimony	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
26_3_102	MW-16B	Appendix IV	Arsenic	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
26_3_103	MW-16B	Appendix IV	Barium	mg/l	13	0	0%	0.922	0.266	0.206	0.139	0.923	0.277	0.201	0.163	0.207	>= 0.10	0.613	>= 0.10	0.031	Gamma; Lognormal; Normal	Normal
26_3_104	MW-16B	Appendix IV	Beryllium	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
26_3_106	MW-16B	Appendix IV	Cadmium	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
26_3_109	MW-16B	Appendix IV	Chromium	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
26_3_110	MW-16B	Appendix IV	Cobalt	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
26_3_113	MW-16B	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	0.878	0.301	0.216	0.622	0.800	0.082	0.296	0.158	0.269	>= 0.10	0.514	>= 0.10	0.482	Gamma; Lognormal; Normal	Nonparametric
26_3_115	MW-16B	Appendix IV	Lead	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
26_3_116	MW-16B	Appendix IV	Lithium	mg/l	13	0	0%	0.938	0.437	0.166	0.424	0.939	0.442	0.155	0.531	0.161	>= 0.10	0.421	>= 0.10	0.058	Gamma; Lognormal; Normal	Normal
26_3_117	MW-16B	Appendix IV	Mercury	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
26_3_118	MW-16B	Appendix IV	Molybdenum	mg/l	13	0	0%	0.741	0.001	0.313	0.001	0.765	0.003	0.325	0.001	0.317	< 0.01	1.708	< 0.01	0.106	Nonparametric	Nonparametric
26_3_121	MW-16B	Appendix IV	Radium-226+228	pci/l	13	0	0%	0.742	0.001	0.281	0.006	0.921	0.261	0.171	0.379	0.206	>= 0.10	0.683	0.05 <= p < 0.10	0.499	Gamma; Lognormal	Gamma
26_3_122	MW-16B	Appendix IV	Selenium	mg/l	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
26_3_125	MW-16B	Appendix IV	Thallium	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
26_5_111	MW-16B	Part 115	Copper	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
26_5_114	MW-16B	Part 115	Iron	mg/l	13	0	0%	0.799	0.007	0.268	0.011	0.890	0.098	0.224	0.074	0.243	0.01 <= p < 0.05	0.771	0.01 <= p < 0.05	0.300	Lognormal	Lognormal
26_5_119	MW-16B	Part 115	Nickel	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
26_5_123	MW-16B	Part 115	Silver	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal			Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
26_5_128	MW-16B	Part 115	Vanadium	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
26_5_129	MW-16B	Part 115	Zinc	mg/l	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
27_2_105	MW-17A	Appendix III	Boron	mg/l	8	0	0%	0.886	0.216	0.232	0.229	0.903	0.309	0.215	0.338	0.219	>= 0.10	0.436	>= 0.10	0.096	Gamma; Lognormal; Normal	Normal
27_2_107	MW-17A	Appendix III	Calcium	mg/l	8	0	0%	0.915	0.391	0.225	0.272	0.917	0.403	0.234	0.222	0.222	>= 0.10	0.451	>= 0.10	0.065	Gamma; Lognormal; Normal	Normal
27_2_108	MW-17A	Appendix III	Chloride	mg/l	8	0	0%	0.840	0.074	0.259	0.117	0.850	0.096	0.257	0.125	0.264	>= 0.10	0.591	>= 0.10	0.035	Gamma; Lognormal; Normal	Normal
27_2_112	MW-17A	Appendix III	Fluoride	mg/l	8	3	38%	0.767	0.042	0.366	0.027	0.825	0.127	0.333	0.072	0.351	0.05 <= p < 0.10	0.606	0.05 <= p < 0.10	0.252	Gamma; Lognormal	Gamma
27_2_120	MW-17A	Appendix III	pH, Field	su	8	0	0%	0.947	0.678	0.160	0.791	0.948	0.693	0.158	0.803	0.161	>= 0.10	0.247	>= 0.10	0.010	Gamma; Lognormal; Normal	Normal
27_2_124	MW-17A	Appendix III	Sulfate	mg/l	8	0	0%	0.918	0.415	0.235	0.218	0.897	0.269	0.249	0.154	0.232	>= 0.10	0.415	>= 0.10	0.069	Gamma; Lognormal; Normal	Normal
27_2_126	MW-17A	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.035		Nonparametric
27_3_101	MW-17A	Appendix IV	Antimony	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
27_3_102	MW-17A	Appendix IV	Arsenic	mg/l	8	1	12%	0.836	0.092	0.231	0.313	0.828	0.076	0.253	0.192	0.256	>= 0.10	0.621	0.05 <= p < 0.10	0.270	Gamma; Lognormal; Normal	Normal
27_3_103	MW-17A	Appendix IV	Barium	mg/l	8	0	0%	0.879	0.186	0.229	0.251	0.889	0.230	0.222	0.295	0.236	>= 0.10	0.538	>= 0.10	0.119	Gamma; Lognormal; Normal	Normal
27_3_104	MW-17A	Appendix IV	Beryllium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
27_3_106	MW-17A	Appendix IV	Cadmium	mg/l	8	7	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
27_3_109	MW-17A	Appendix IV	Chromium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
27_3_110	MW-17A	Appendix IV	Cobalt	mg/l	8	7	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
27_3_113	MW-17A	Appendix IV	Fluoride (App IV)	mg/l	8	3	38%	0.767	0.042	0.366	0.027	0.825	0.127	0.333	0.072	0.351	0.05 <= p < 0.10	0.606	0.05 <= p < 0.10	0.252	Gamma; Lognormal	Gamma
27_3_115	MW-17A	Appendix IV	Lead	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
27_3_116	MW-17A	Appendix IV	Lithium	mg/l	8	0	0%	0.857	0.113	0.214	0.343	0.846	0.087	0.205	0.412	0.230	>= 0.10	0.611	0.05 <= p < 0.10	0.100	Gamma; Lognormal; Normal	Normal
27_3_117	MW-17A	Appendix IV	Mercury	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
27_3_118	MW-17A	Appendix IV	Molybdenum	mg/l	8	0	0%	0.938	0.592	0.169	0.717	0.957	0.777	0.174	0.680	0.183	>= 0.10	0.254	>= 0.10	0.147	Gamma; Lognormal; Normal	Normal
27_3_121	MW-17A	Appendix IV	Radium-226+228	pci/l	8	1	12%	0.603	0.000	0.362	0.006	0.789	0.032	0.234	0.293	0.286	>= 0.10	0.939	0.01 <= p < 0.05	0.777	Gamma; Lognormal	Gamma
27_3_122	MW-17A	Appendix IV	Selenium	mg/l	8	7	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
27_3_125	MW-17A	Appendix IV	Thallium	mg/l	8	7	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
27_5_111	MW-17A	Part 115	Copper	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
27_5_114	MW-17A	Part 115	Iron	mg/l	8	0	0%	0.809	0.036	0.253	0.137	0.848	0.092	0.225	0.270	0.226	>= 0.10	0.572	>= 0.10	0.124	Gamma; Lognormal; Normal	Normal
27_5_119	MW-17A	Part 115	Nickel	mg/l	8	1	12%	0.935	0.591	0.160	0.850	0.933	0.573	0.167	0.800	0.182	>= 0.10	0.288	>= 0.10	0.117	Gamma; Lognormal; Normal	Normal
27_5_123	MW-17A	Part 115	Silver	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
27_5_128	MW-17A	Part 115	Vanadium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
27_5_129	MW-17A	Part 115	Zinc	mg/l	8	4	50%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.205		Nonparametric
28_2_105	MW-17B	Appendix III	Boron	mg/l	8	0	0%	0.607	0.000	0.399	0.000	0.693	0.002	0.349	0.005	0.369	< 0.01	1.259	< 0.01	0.277	Nonparametric	Nonparametric
28_2_107	MW-17B	Appendix III	Calcium	mg/l	8	0	0%	0.703	0.002	0.354	0.004	0.790	0.022	0.301	0.032	0.317	0.01 <= p < 0.05	0.832	0.01 <= p < 0.05	0.254	Nonparametric	Nonparametric
28_2_108	MW-17B	Appendix III	Chloride	mg/l	8	0	0%	0.911	0.363	0.173	0.681	0.914	0.387	0.175	0.672	0.188	>= 0.10	0.374	>= 0.10	0.065	Gamma; Lognormal; Normal	Normal
28_2_112	MW-17B	Appendix III	Fluoride	mg/l	8	2	25%	0.718	0.009	0.385	0.006	0.641	0.001	0.423	0.001	0.422	< 0.01	1.104	< 0.01	0.401	Nonparametric	Nonparametric
28_2_120	MW-17B	Appendix III	pH, Field	su	8	0	0%	0.891	0.240	0.200	0.449	0.896	0.263	0.197	0.478	0.200	>= 0.10	0.401	>= 0.10	0.018	Gamma; Lognormal; Normal	Normal
28_2_124	MW-17B	Appendix III	Sulfate	mg/l	8	0	0%	0.673	0.001	0.345	0.006	0.747	0.007	0.295	0.038	0.309	0.01 <= p < 0.05	0.976	< 0.01	0.225	Nonparametric	Nonparametric
28_2_126	MW-17B	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	0.716	0.003	0.396	0.001	0.797	0.026	0.357	0.003	0.371	< 0.01	0.939	0.01 <= p < 0.05	0.219	Nonparametric	Nonparametric
28_3_101	MW-17B	Appendix IV	Antimony	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
28_3_102	MW-17B	Appendix IV	Arsenic	mg/l	8	1	12%	0.742	0.011	0.337	0.016	0.772	0.021	0.300	0.056	0.322	0.01 <= p < 0.05	0.914	0.01 <= p < 0.05	0.331	Lognormal	Lognormal

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
28_3_103	MW-17B	Appendix IV	Barium	mg/l	8	0	0%	0.923	0.459	0.164	0.758	0.942	0.628	0.141	0.911	0.159	>= 0.10	0.264	>= 0.10	0.227	Gamma; Lognormal; Normal	Normal
28_3_104	MW-17B	Appendix IV	Beryllium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
28_3_106	MW-17B	Appendix IV	Cadmium	mg/l	8	7	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
28_3_109	MW-17B	Appendix IV	Chromium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
28_3_110	MW-17B	Appendix IV	Cobalt	mg/l	8	5	62%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.570		Nonparametric
28_3_113	MW-17B	Appendix IV	Fluoride (App IV)	mg/l	8	2	25%	0.718	0.009	0.385	0.006	0.641	0.001	0.423	0.001	0.422	< 0.01	1.104	< 0.01	0.401	Nonparametric	Nonparametric
28_3_115	MW-17B	Appendix IV	Lead	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
28_3_116	MW-17B	Appendix IV	Lithium	mg/l	8	0	0%	0.906	0.325	0.277	0.072	0.873	0.162	0.312	0.021	0.290	0.05 <= p < 0.10	0.563	>= 0.10	0.192	Gamma; Lognormal; Normal	Normal
28_3_117	MW-17B	Appendix IV	Mercury	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
28_3_118	MW-17B	Appendix IV	Molybdenum	mg/l	8	0	0%	0.696	0.002	0.362	0.003	0.556	0.000	0.439	0.000	0.427	< 0.01	1.585	< 0.01	0.612	Nonparametric	Nonparametric
28_3_121	MW-17B	Appendix IV	Radium-226+228	pci/l	8	1	12%	0.790	0.033	0.323	0.027	0.818	0.062	0.317	0.032	0.338	0.01 <= p < 0.05	0.726	0.01 <= p < 0.05	0.597	Lognormal	Lognormal
28_3_122	MW-17B	Appendix IV	Selenium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
28_3_125	MW-17B	Appendix IV	Thallium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
28_5_111	MW-17B	Part 115	Copper	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
28_5_114	MW-17B	Part 115	Iron	mg/l	8	0	0%	0.607	0.000	0.382	0.001	0.752	0.009	0.289	0.047	0.324	0.01 <= p < 0.05	1.092	< 0.01	0.442	Nonparametric	Nonparametric
28_5_119	MW-17B	Part 115	Nickel	mg/l	8	3	38%	0.958	0.795	0.225	0.556	0.940	0.663	0.238	0.461	0.252	>= 0.10	0.293	>= 0.10	0.140	Gamma; Lognormal; Normal	Normal
28_5_123	MW-17B	Part 115	Silver	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
28_5_128	MW-17B	Part 115	Vanadium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
28_5_129	MW-17B	Part 115	Zinc	mg/l	8	3	38%	0.780	0.055	0.277	0.236	0.938	0.650	0.198	0.747	0.254	>= 0.10	0.367	>= 0.10	1.050	Gamma; Lognormal; Normal	Gamma
29_2_105	MW-17C	Appendix III	Boron	mg/l	8	0	0%	0.907	0.332	0.165	0.751	0.919	0.419	0.172	0.695	0.186	>= 0.10	0.348	>= 0.10	0.189	Gamma; Lognormal; Normal	Normal
29_2_107	MW-17C	Appendix III	Calcium	mg/l	8	0	0%	0.964	0.849	0.161	0.782	0.958	0.788	0.195	0.497	0.178	>= 0.10	0.243	>= 0.10	0.202	Gamma; Lognormal; Normal	Normal
29_2_108	MW-17C	Appendix III	Chloride	mg/l	8	0	0%	0.779	0.017	0.306	0.027	0.796	0.026	0.300	0.033	0.307	0.01 <= p < 0.05	0.819	0.01 <= p < 0.05	0.114	Nonparametric	Nonparametric
29_2_112	MW-17C	Appendix III	Fluoride	mg/l	8	2	25%	0.720	0.010	0.315	0.063	0.698	0.006	0.320	0.054	0.341	0.01 <= p < 0.05	0.981	< 0.01	0.155	Lognormal; Normal	Normal
29_2_120	MW-17C	Appendix III	pH, Field	su	8	0	0%	0.759	0.010	0.358	0.003	0.762	0.011	0.355	0.004	0.362	< 0.01	0.995	< 0.01	0.027	Nonparametric	Nonparametric
29_2_124	MW-17C	Appendix III	Sulfate	mg/l	8	0	0%	0.873	0.159	0.239	0.196	0.826	0.054	0.281	0.062	0.269	>= 0.10	0.652	0.05 <= p < 0.10	0.253	Gamma; Lognormal; Normal	Normal
29_2_126	MW-17C	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	0.914	0.383	0.234	0.223	0.891	0.240	0.255	0.132	0.256	>= 0.10	0.477	>= 0.10	0.166	Gamma; Lognormal; Normal	Normal
29_3_101	MW-17C	Appendix IV	Antimony	mg/l	8	7	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
29_3_102	MW-17C	Appendix IV	Arsenic	mg/l	8	0	0%	0.835	0.067	0.258	0.121	0.904	0.315	0.217	0.326	0.241	>= 0.10	0.451	>= 0.10	0.383	Gamma; Lognormal; Normal	Normal
29_3_103	MW-17C	Appendix IV	Barium	mg/l	8	0	0%	0.802	0.030	0.314	0.020	0.854	0.104	0.282	0.060	0.290	0.05 <= p < 0.10	0.593	>= 0.10	0.151	Gamma; Lognormal	Gamma
29_3_104	MW-17C	Appendix IV	Beryllium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
29_3_106	MW-17C	Appendix IV	Cadmium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
29_3_109	MW-17C	Appendix IV	Chromium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
29_3_110	MW-17C	Appendix IV	Cobalt	mg/l	8	4	50%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.400		Nonparametric
29_3_113	MW-17C	Appendix IV	Fluoride (App IV)	mg/l	8	2	25%	0.720	0.010	0.315	0.063	0.698	0.006	0.320	0.054	0.341	0.01 <= p < 0.05	0.981	< 0.01	0.155	Lognormal; Normal	Normal
29_3_115	MW-17C	Appendix IV	Lead	mg/l	8	5	62%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.093		Nonparametric
29_3_116	MW-17C	Appendix IV	Lithium	mg/l	8	0	0%	0.746	0.007	0.391	0.001	0.788	0.022	0.369	0.002	0.386	< 0.01	1.021	< 0.01	0.259	Nonparametric	Nonparametric
29_3_117	MW-17C	Appendix IV	Mercury	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
29_3_118	MW-17C	Appendix IV	Molybdenum	mg/l	8	0	0%	0.915	0.389	0.194	0.501	0.928	0.500	0.154	0.837	0.158	>= 0.10	0.288	>= 0.10	0.527	Gamma; Lognormal; Normal	Normal
29_3_121	MW-17C	Appendix IV	Radium-226+228	pci/l	8	0	0%	0.929	0.509	0.185	0.584	0.931	0.526	0.187	0.567	0.204	>= 0.10	0.314	>= 0.10	0.443	Gamma; Lognormal; Normal	Normal

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
29_3_122	MW-17C	Appendix IV	Selenium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
29_3_125	MW-17C	Appendix IV	Thallium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
29_5_111	MW-17C	Part 115	Copper	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
29_5_114	MW-17C	Part 115	Iron	mg/l	8	0	0%	0.905	0.322	0.240	0.193	0.929	0.503	0.190	0.537	0.208	>= 0.10	0.350	>= 0.10	0.478	Gamma; Lognormal; Normal	Normal
29_5_119	MW-17C	Part 115	Nickel	mg/l	8	1	12%	0.966	0.865	0.187	0.649	0.928	0.537	0.217	0.411	0.204	>= 0.10	0.299	>= 0.10	0.172	Gamma; Lognormal; Normal	Normal
29_5_123	MW-17C	Part 115	Silver	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
29_5_128	MW-17C	Part 115	Vanadium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
29_5_129	MW-17C	Part 115	Zinc	mg/l	8	4	50%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.346		Nonparametric
30_2_105	MW-18A	Appendix III	Boron	mg/l	9	0	0%	0.579	0.000	0.359	0.001	0.713	0.002	0.256	0.092	0.283	0.01 <= p < 0.05	1.278	< 0.01	0.481	Lognormal	Lognormal
30_2_107	MW-18A	Appendix III	Calcium	mg/l	9	0	0%	0.656	0.000	0.398	0.000	0.482	0.000	0.479	0.000	0.477	< 0.01	2.093	< 0.01	0.946	Nonparametric	Nonparametric
30_2_108	MW-18A	Appendix III	Chloride	mg/l	9	0	0%	0.628	0.000	0.347	0.002	0.461	0.000	0.470	0.000	0.463	< 0.01	2.241	< 0.01	1.178	Nonparametric	Nonparametric
30_2_112	MW-18A	Appendix III	Fluoride	mg/l	9	0	0%	0.960	0.797	0.179	0.558	0.938	0.561	0.220	0.239	0.194	>= 0.10	0.292	>= 0.10	0.310	Gamma; Lognormal; Normal	Normal
30_2_120	MW-18A	Appendix III	pH, Field	su	8	0	0%	0.971	0.908	0.119	0.983	0.968	0.880	0.125	0.971	0.123	>= 0.10	0.193	>= 0.10	0.034	Gamma; Lognormal; Normal	Normal
30_2_124	MW-18A	Appendix III	Sulfate	mg/l	9	0	0%	0.599	0.000	0.383	0.000	0.431	0.000	0.493	0.000	0.507	< 0.01	2.564	< 0.01	1.738	Nonparametric	Nonparametric
30_2_126	MW-18A	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	0.915	0.354	0.158	0.741	0.880	0.159	0.184	0.512	0.164	>= 0.10	0.407	>= 0.10	0.122	Gamma; Lognormal; Normal	Normal
30_3_101	MW-18A	Appendix IV	Antimony	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
30_3_102	MW-18A	Appendix IV	Arsenic	mg/l	9	3	33%	0.742	0.017	0.334	0.035	0.913	0.455	0.208	0.570	0.250	>= 0.10	0.475	>= 0.10	0.675	Gamma; Lognormal	Gamma
30_3_103	MW-18A	Appendix IV	Barium	mg/l	9	0	0%	0.921	0.401	0.204	0.348	0.691	0.001	0.362	0.001	0.314	0.01 <= p < 0.05	0.842	0.01 <= p < 0.05	0.827	Normal	Normal
30_3_104	MW-18A	Appendix IV	Beryllium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
30_3_106	MW-18A	Appendix IV	Cadmium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
30_3_109	MW-18A	Appendix IV	Chromium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
30_3_110	MW-18A	Appendix IV	Cobalt	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
30_3_113	MW-18A	Appendix IV	Fluoride (App IV)	mg/l	9	0	0%	0.960	0.797	0.179	0.558	0.938	0.561	0.220	0.239	0.194	>= 0.10	0.292	>= 0.10	0.310	Gamma; Lognormal; Normal	Normal
30_3_115	MW-18A	Appendix IV	Lead	mg/l	9	7	78%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.016		Nonparametric
30_3_116	MW-18A	Appendix IV	Lithium	mg/l	9	0	0%	0.915	0.350	0.228	0.194	0.819	0.033	0.310	0.013	0.277	0.05 <= p < 0.10	0.586	>= 0.10	0.425	Gamma; Normal	Normal
30_3_117	MW-18A	Appendix IV	Mercury	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
30_3_118	MW-18A	Appendix IV	Molybdenum	mg/l	9	1	11%	0.819	0.046	0.295	0.039	0.791	0.023	0.307	0.025	0.315	0.01 <= p < 0.05	0.809	0.01 <= p < 0.05	0.208	Nonparametric	Nonparametric
30_3_121	MW-18A	Appendix IV	Radium-226+228	pci/l	9	2	22%	0.804	0.044	0.283	0.095	0.948	0.716	0.190	0.625	0.211	>= 0.10	0.385	>= 0.10	0.488	Gamma; Lognormal; Normal	Normal
30_3_122	MW-18A	Appendix IV	Selenium	mg/l	9	8	89%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
30_3_125	MW-18A	Appendix IV	Thallium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
30_5_111	MW-18A	Part 115	Copper	mg/l	9	8	89%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
30_5_114	MW-18A	Part 115	Iron	mg/l	9	0	0%	0.905	0.282	0.229	0.190	0.671	0.001	0.342	0.003	0.264	0.05 <= p < 0.10	0.791	0.01 <= p < 0.05	1.450	Gamma; Normal	Gamma
30_5_119	MW-18A	Part 115	Nickel	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
30_5_123	MW-18A	Part 115	Silver	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
30_5_128	MW-18A	Part 115	Vanadium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
30_5_129	MW-18A	Part 115	Zinc	mg/l	9	6	67%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.212		Nonparametric
31_2_105	MW-18B	Appendix III	Boron	mg/l	9	0	0%	0.796	0.018	0.294	0.024	0.710	0.002	0.309	0.013	0.315	0.01 <= p < 0.05	1.070	< 0.01	0.367	Nonparametric	Nonparametric
31_2_107	MW-18B	Appendix III	Calcium	mg/l	9	0	0%	0.790	0.016	0.220	0.237	0.733	0.003	0.260	0.082	0.245	>= 0.10	0.926	0.01 <= p < 0.05	0.205	Gamma; Lognormal; Normal	Normal
31_2_108	MW-18B	Appendix III	Chloride	mg/l	9	0	0%	0.792	0.017	0.265	0.067	0.766	0.008	0.279	0.042	0.274	0.05 <= p < 0.10	0.904	0.01 <= p < 0.05	0.077	Gamma; Normal	Normal

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
31_2_112	MW-18B	Appendix III	Fluoride	mg/l	9	1	11%	0.838	0.073	0.289	0.048	0.773	0.015	0.300	0.033	0.310	0.01 <= p < 0.05	0.774	0.01 <= p < 0.05	0.389	Normal	Normal
31_2_120	MW-18B	Appendix III	pH, Field	su	8	0	0%	0.932	0.539	0.159	0.801	0.931	0.529	0.161	0.787	0.167	>= 0.10	0.300	>= 0.10	0.012	Gamma; Lognormal; Normal	Normal
31_2_124	MW-18B	Appendix III	Sulfate	mg/l	9	0	0%	0.755	0.006	0.261	0.077	0.636	0.000	0.344	0.003	0.316	0.01 <= p < 0.05	1.236	< 0.01	0.364	Normal	Normal
31_2_126	MW-18B	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	0.809	0.026	0.318	0.009	0.749	0.005	0.340	0.003	0.339	< 0.01	1.006	< 0.01	0.169	Nonparametric	Nonparametric
31_3_101	MW-18B	Appendix IV	Antimony	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
31_3_102	MW-18B	Appendix IV	Arsenic	mg/l	9	7	78%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.009		Nonparametric
31_3_103	MW-18B	Appendix IV	Barium	mg/l	9	0	0%	0.839	0.057	0.283	0.036	0.795	0.018	0.308	0.014	0.289	0.01 <= p < 0.05	0.780	0.01 <= p < 0.05	0.112	Normal	Normal
31_3_104	MW-18B	Appendix IV	Beryllium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
31_3_106	MW-18B	Appendix IV	Cadmium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
31_3_109	MW-18B	Appendix IV	Chromium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
31_3_110	MW-18B	Appendix IV	Cobalt	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
31_3_113	MW-18B	Appendix IV	Fluoride (App IV)	mg/l	9	1	11%	0.838	0.073	0.289	0.048	0.773	0.015	0.300	0.033	0.310	0.01 <= p < 0.05	0.774	0.01 <= p < 0.05	0.389	Normal	Normal
31_3_115	MW-18B	Appendix IV	Lead	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
31_3_116	MW-18B	Appendix IV	Lithium	mg/l	9	0	0%	0.697	0.001	0.322	0.008	0.683	0.001	0.328	0.006	0.343	< 0.01	1.534	< 0.01	0.141	Nonparametric	Nonparametric
31_3_117	MW-18B	Appendix IV	Mercury	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
31_3_118	MW-18B	Appendix IV	Molybdenum	mg/l	9	0	0%	0.773	0.010	0.316	0.010	0.744	0.005	0.326	0.007	0.332	< 0.01	1.092	< 0.01	0.159	Nonparametric	Nonparametric
31_3_121	MW-18B	Appendix IV	Radium-226+228	pci/l	9	0	0%	0.898	0.238	0.168	0.652	0.987	0.990	0.121	0.967	0.118	>= 0.10	0.178	>= 0.10	0.565	Gamma; Lognormal; Normal	Normal
31_3_122	MW-18B	Appendix IV	Selenium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
31_3_125	MW-18B	Appendix IV	Thallium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
31_5_111	MW-18B	Part 115	Copper	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
31_5_114	MW-18B	Part 115	Iron	mg/l	9	0	0%	0.906	0.292	0.227	0.197	0.893	0.212	0.241	0.139	0.225	>= 0.10	0.432	>= 0.10	0.071	Gamma; Lognormal; Normal	Normal
31_5_119	MW-18B	Part 115	Nickel	mg/l	9	1	11%	0.993	0.998	0.133	0.946	0.983	0.975	0.157	0.815	0.159	>= 0.10	0.151	>= 0.10	0.198	Gamma; Lognormal; Normal	Normal
31_5_123	MW-18B	Part 115	Silver	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
31_5_128	MW-18B	Part 115	Vanadium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
31_5_129	MW-18B	Part 115	Zinc	mg/l	9	7	78%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.361		Nonparametric
32_2_105	MW-100A	Appendix III	Boron	mg/l	11	2	18%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.098		Nonparametric
32_2_107	MW-100A	Appendix III	Calcium	mg/l	11	0	0%	0.934	0.451	0.203	0.231	0.932	0.429	0.207	0.207	0.209	>= 0.10	0.408	>= 0.10	0.024	Gamma; Lognormal; Normal	Normal
32_2_108	MW-100A	Appendix III	Chloride	mg/l	11	0	0%	0.688	0.000	0.363	0.000	0.691	0.000	0.365	0.000	0.371	< 0.01	1.561	< 0.01	0.032	Nonparametric	Nonparametric
32_2_112	MW-100A	Appendix III	Fluoride	mg/l	11	7	64%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.449		Nonparametric
32_2_120	MW-100A	Appendix III	pH, Field	su	11	0	0%	0.977	0.945	0.133	0.847	0.976	0.936	0.135	0.832	0.139	>= 0.10	0.187	>= 0.10	0.013	Gamma; Lognormal; Normal	Normal
32_2_124	MW-100A	Appendix III	Sulfate	mg/l	11	0	0%	0.924	0.357	0.208	0.200	0.955	0.703	0.177	0.437	0.195	>= 0.10	0.310	>= 0.10	0.271	Gamma; Lognormal; Normal	Normal
32_2_126	MW-100A	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	0.785	0.006	0.295	0.008	0.766	0.003	0.309	0.004	0.303	< 0.01	1.257	< 0.01	0.073	Nonparametric	Nonparametric
32_3_101	MW-100A	Appendix IV	Antimony	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
32_3_102	MW-100A	Appendix IV	Arsenic	mg/l	11	0	0%	0.966	0.848	0.149	0.704	0.935	0.459	0.185	0.363	0.176	>= 0.10	0.301	>= 0.10	0.214	Gamma; Lognormal; Normal	Normal
32_3_103	MW-100A	Appendix IV	Barium	mg/l	11	0	0%	0.849	0.041	0.231	0.104	0.846	0.038	0.231	0.103	0.243	0.05 <= p < 0.10	0.768	0.01 <= p < 0.05	0.037	Gamma; Lognormal; Normal	Normal
32_3_104	MW-100A	Appendix IV	Beryllium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
32_3_106	MW-100A	Appendix IV	Cadmium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
32_3_109	MW-100A	Appendix IV	Chromium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
32_3_110	MW-100A	Appendix IV	Cobalt	mg/l	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.287		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
32_3_113	MW-100A	Appendix IV	Fluoride (App IV)	mg/l	11	7	64%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.449		Nonparametric
32_3_115	MW-100A	Appendix IV	Lead	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
32_3_116	MW-100A	Appendix IV	Lithium	mg/l	11	0	0%	0.923	0.343	0.148	0.719	0.908	0.229	0.158	0.623	0.161	>= 0.10	0.426	>= 0.10	0.218	Gamma; Lognormal; Normal	Normal
32_3_117	MW-100A	Appendix IV	Mercury	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
32_3_118	MW-100A	Appendix IV	Molybdenum	mg/l	11	0	0%	0.909	0.235	0.192	0.307	0.908	0.230	0.190	0.328	0.202	>= 0.10	0.502	>= 0.10	0.225	Gamma; Lognormal; Normal	Normal
32_3_121	MW-100A	Appendix IV	Radium-226+228	pci/l	11	0	0%	0.905	0.215	0.144	0.753	0.945	0.582	0.128	0.884	0.147	>= 0.10	0.257	>= 0.10	0.636	Gamma; Lognormal; Normal	Normal
32_3_122	MW-100A	Appendix IV	Selenium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
32_3_125	MW-100A	Appendix IV	Thallium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
32_5_111	MW-100A	Part 115	Copper	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
32_5_114	MW-100A	Part 115	Iron	mg/l	11	0	0%	0.955	0.714	0.166	0.542	0.838	0.029	0.255	0.043	0.230	>= 0.10	0.552	>= 0.10	0.519	Gamma; Normal	Normal
32_5_119	MW-100A	Part 115	Nickel	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
32_5_123	MW-100A	Part 115	Silver	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
32_5_128	MW-100A	Part 115	Vanadium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
32_5_129	MW-100A	Part 115	Zinc	mg/l	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.805		Nonparametric
33_2_105	MW-100B	Appendix III	Boron	mg/l	11	0	0%	0.939	0.504	0.225	0.125	0.939	0.507	0.208	0.204	0.208	>= 0.10	0.425	>= 0.10	0.107	Gamma; Lognormal; Normal	Normal
33_2_107	MW-100B	Appendix III	Calcium	mg/l	11	0	0%	0.949	0.629	0.200	0.254	0.955	0.707	0.190	0.322	0.192	>= 0.10	0.347	>= 0.10	0.051	Gamma; Lognormal; Normal	Normal
33_2_108	MW-100B	Appendix III	Chloride	mg/l	11	0	0%	0.870	0.078	0.183	0.385	0.855	0.050	0.205	0.220	0.198	>= 0.10	0.759	0.01 <= p < 0.05	0.118	Gamma; Lognormal; Normal	Normal
33_2_112	MW-100B	Appendix III	Fluoride	mg/l	11	7	64%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.486		Nonparametric
33_2_120	MW-100B	Appendix III	pH, Field	su	11	0	0%	0.929	0.400	0.160	0.599	0.932	0.427	0.158	0.625	0.159	>= 0.10	0.411	>= 0.10	0.014	Gamma; Lognormal; Normal	Normal
33_2_124	MW-100B	Appendix III	Sulfate	mg/l	11	0	0%	0.899	0.179	0.183	0.384	0.917	0.291	0.176	0.449	0.181	>= 0.10	0.408	>= 0.10	0.078	Gamma; Lognormal; Normal	Normal
33_2_126	MW-100B	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	0.915	0.276	0.182	0.387	0.904	0.206	0.195	0.288	0.188	>= 0.10	0.470	>= 0.10	0.067	Gamma; Lognormal; Normal	Normal
33_3_101	MW-100B	Appendix IV	Antimony	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
33_3_102	MW-100B	Appendix IV	Arsenic	mg/l	11	0	0%	0.847	0.039	0.258	0.039	0.824	0.019	0.278	0.018	0.274	0.01 <= p < 0.05	0.800	0.01 <= p < 0.05	0.128	Nonparametric	Nonparametric
33_3_103	MW-100B	Appendix IV	Barium	mg/l	11	0	0%	0.909	0.239	0.213	0.175	0.916	0.284	0.205	0.218	0.211	>= 0.10	0.410	>= 0.10	0.053	Gamma; Lognormal; Normal	Normal
33_3_104	MW-100B	Appendix IV	Beryllium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
33_3_106	MW-100B	Appendix IV	Cadmium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
33_3_109	MW-100B	Appendix IV	Chromium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
33_3_110	MW-100B	Appendix IV	Cobalt	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
33_3_113	MW-100B	Appendix IV	Fluoride (App IV)	mg/l	11	7	64%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.486		Nonparametric
33_3_115	MW-100B	Appendix IV	Lead	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
33_3_116	MW-100B	Appendix IV	Lithium	mg/l	11	0	0%	0.889	0.134	0.219	0.148	0.890	0.140	0.215	0.167	0.227	>= 0.10	0.619	0.05 <= p < 0.10	0.057	Gamma; Lognormal; Normal	Normal
33_3_117	MW-100B	Appendix IV	Mercury	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
33_3_118	MW-100B	Appendix IV	Molybdenum	mg/l	11	0	0%	0.902	0.197	0.283	0.014	0.874	0.088	0.303	0.006	0.304	< 0.01	0.753	0.01 <= p < 0.05	0.223	Lognormal; Normal	Normal
33_3_121	MW-100B	Appendix IV	Radium-226+228	pci/l	11	1	9%	0.922	0.378	0.166	0.605	0.831	0.034	0.243	0.096	0.219	>= 0.10	0.641	0.05 <= p < 0.10	0.525	Gamma; Lognormal; Normal	Normal
33_3_122	MW-100B	Appendix IV	Selenium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
33_3_125	MW-100B	Appendix IV	Thallium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
33_5_111	MW-100B	Part 115	Copper	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
33_5_114	MW-100B	Part 115	Iron	mg/l	11	0	0%	0.880	0.105	0.280	0.016	0.912	0.257	0.250	0.053	0.260	0.01 <= p < 0.05	0.639	0.05 <= p < 0.10	0.177	Gamma; Lognormal; Normal	Normal
33_5_119	MW-100B	Part 115	Nickel	mg/l	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
33_5_123	MW-100B	Part 115	Silver	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
33_5_128	MW-100B	Part 115	Vanadium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
33_5_129	MW-100B	Part 115	Zinc	mg/l	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 4: Autocorrelation Tests, Non-Detects Excluded

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
13_2_105	MW-2	Appendix III	Boron	mg/l	18	0	0%	0.746	0.001	***
13_2_107	MW-2	Appendix III	Calcium	mg/l	18	0	0%	0.882	0.000	***
13_2_108	MW-2	Appendix III	Chloride	mg/l	18	0	0%	0.614	0.005	**
13_2_112	MW-2	Appendix III	Fluoride	mg/l	19	17	89%	-0.500	0.157	
13_2_120	MW-2	Appendix III	pH, Field	su	19	0	0%	0.270	0.203	
13_2_124	MW-2	Appendix III	Sulfate	mg/l	18	0	0%	0.868	0.000	***
13_2_126	MW-2	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	0.844	0.000	***
13_3_102	MW-2	Appendix IV	Arsenic	mg/l	19	14	74%	-0.474	0.161	
13_3_103	MW-2	Appendix IV	Barium	mg/l	19	0	0%	0.205	0.334	
13_3_106	MW-2	Appendix IV	Cadmium	mg/l	19	17	89%	-0.500	0.157	
13_3_110	MW-2	Appendix IV	Cobalt	mg/l	19	17	89%	-0.500	0.157	
13_3_113	MW-2	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	-0.500	0.157	
13_3_116	MW-2	Appendix IV	Lithium	mg/l	19	0	0%	0.793	0.000	***
13_3_118	MW-2	Appendix IV	Molybdenum	mg/l	19	0	0%	0.350	0.100	
13_3_121	MW-2	Appendix IV	Radium-226+228	pci/l	19	2	11%	-0.231	0.299	
13_5_114	MW-2	Part 115	Iron	mg/l	19	0	0%	0.363	0.087	
13_5_119	MW-2	Part 115	Nickel	mg/l	19	0	0%	0.804	0.000	***
13_5_129	MW-2	Part 115	Zinc	mg/l	19	14	74%	0.024	0.943	
14_2_105	MW-3	Appendix III	Boron	mg/l	10	0	0%	-0.331	0.227	
14_2_107	MW-3	Appendix III	Calcium	mg/l	10	0	0%	0.073	0.789	
14_2_108	MW-3	Appendix III	Chloride	mg/l	10	0	0%	0.425	0.121	
14_2_112	MW-3	Appendix III	Fluoride	mg/l	10	8	80%	-0.500	0.157	
14_2_120	MW-3	Appendix III	pH, Field	su	10	0	0%	-0.251	0.360	
14_2_124	MW-3	Appendix III	Sulfate	mg/l	10	0	0%	-0.125	0.647	
14_2_126	MW-3	Appendix III	Total Dissolved Solids	mg/l	10	0	0%	0.500	0.068	
14_3_102	MW-3	Appendix IV	Arsenic	mg/l	10	0	0%	0.169	0.536	
14_3_103	MW-3	Appendix IV	Barium	mg/l	10	0	0%	0.700	0.011	*
14_3_110	MW-3	Appendix IV	Cobalt	mg/l	10	8	80%	-0.500	0.157	
14_3_113	MW-3	Appendix IV	Fluoride (App IV)	mg/l	10	8	80%	-0.500	0.157	
14_3_115	MW-3	Appendix IV	Lead	mg/l	10	9	90%	NA	NA	
14_3_116	MW-3	Appendix IV	Lithium	mg/l	10	0	0%	0.375	0.171	
14_3_118	MW-3	Appendix IV	Molybdenum	mg/l	10	0	0%	0.244	0.374	
14_3_121	MW-3	Appendix IV	Radium-226+228	pci/l	10	2	20%	0.420	0.156	
14_5_111	MW-3	Part 115	Copper	mg/l	10	9	90%	NA	NA	
14_5_114	MW-3	Part 115	Iron	mg/l	10	0	0%	0.398	0.146	
14_5_119	MW-3	Part 115	Nickel	mg/l	10	8	80%	-0.500	0.157	
14_5_129	MW-3	Part 115	Zinc	mg/l	10	8	80%	-0.500	0.157	
15_2_105	MW-5	Appendix III	Boron	mg/l	18	0	0%	0.169	0.437	
15_2_107	MW-5	Appendix III	Calcium	mg/l	18	0	0%	0.523	0.016	*
15_2_108	MW-5	Appendix III	Chloride	mg/l	18	0	0%	0.738	0.001	***
15_2_112	MW-5	Appendix III	Fluoride	mg/l	19	17	89%	-0.500	0.157	
15_2_120	MW-5	Appendix III	pH, Field	su	19	0	0%	-0.218	0.304	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
15_2_124	MW-5	Appendix III	Sulfate	mg/l	18	0	0%	0.573	0.008	**
15_2_126	MW-5	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	0.596	0.006	**
15_3_102	MW-5	Appendix IV	Arsenic	mg/l	19	12	63%	-0.210	0.497	
15_3_103	MW-5	Appendix IV	Barium	mg/l	19	0	0%	0.270	0.204	
15_3_106	MW-5	Appendix IV	Cadmium	mg/l	19	18	95%	NA	NA	
15_3_109	MW-5	Appendix IV	Chromium	mg/l	19	16	84%	-0.020	0.957	
15_3_110	MW-5	Appendix IV	Cobalt	mg/l	19	16	84%	-0.140	0.702	
15_3_113	MW-5	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	-0.500	0.157	
15_3_115	MW-5	Appendix IV	Lead	mg/l	19	14	74%	-0.294	0.385	
15_3_116	MW-5	Appendix IV	Lithium	mg/l	19	0	0%	-0.079	0.709	
15_3_118	MW-5	Appendix IV	Molybdenum	mg/l	19	0	0%	0.291	0.171	
15_3_121	MW-5	Appendix IV	Radium-226+228	pci/l	19	2	11%	0.336	0.131	
15_5_111	MW-5	Part 115	Copper	mg/l	19	12	63%	-0.221	0.474	
15_5_114	MW-5	Part 115	Iron	mg/l	19	1	5%	0.059	0.785	
15_5_119	MW-5	Part 115	Nickel	mg/l	19	0	0%	0.558	0.009	**
15_5_123	MW-5	Part 115	Silver	mg/l	19	18	95%	NA	NA	
15_5_128	MW-5	Part 115	Vanadium	mg/l	19	15	79%	0.269	0.447	
15_5_129	MW-5	Part 115	Zinc	mg/l	19	3	16%	-0.111	0.625	
16_2_105	MW-6	Appendix III	Boron	mg/l	18	0	0%	0.441	0.043	*
16_2_107	MW-6	Appendix III	Calcium	mg/l	18	0	0%	0.503	0.021	*
16_2_108	MW-6	Appendix III	Chloride	mg/l	18	0	0%	0.487	0.025	*
16_2_112	MW-6	Appendix III	Fluoride	mg/l	19	17	89%	-0.500	0.157	
16_2_120	MW-6	Appendix III	pH, Field	su	19	0	0%	-0.018	0.934	
16_2_124	MW-6	Appendix III	Sulfate	mg/l	18	0	0%	0.358	0.100	
16_2_126	MW-6	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	0.456	0.036	*
16_3_102	MW-6	Appendix IV	Arsenic	mg/l	19	17	89%	-0.500	0.157	
16_3_103	MW-6	Appendix IV	Barium	mg/l	19	0	0%	0.434	0.041	*
16_3_106	MW-6	Appendix IV	Cadmium	mg/l	19	18	95%	NA	NA	
16_3_110	MW-6	Appendix IV	Cobalt	mg/l	19	17	89%	-0.500	0.157	
16_3_113	MW-6	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	-0.500	0.157	
16_3_116	MW-6	Appendix IV	Lithium	mg/l	19	0	0%	0.272	0.201	
16_3_118	MW-6	Appendix IV	Molybdenum	mg/l	19	0	0%	0.072	0.733	
16_3_121	MW-6	Appendix IV	Radium-226+228	pci/l	19	2	11%	0.124	0.577	
16_5_114	MW-6	Part 115	Iron	mg/l	19	9	47%	0.350	0.201	
16_5_119	MW-6	Part 115	Nickel	mg/l	19	5	26%	0.513	0.033	*
16_5_129	MW-6	Part 115	Zinc	mg/l	19	16	84%	-0.154	0.672	
17_2_105	MW-7	Appendix III	Boron	mg/l	15	0	0%	0.343	0.143	
17_2_107	MW-7	Appendix III	Calcium	mg/l	15	0	0%	-0.147	0.531	
17_2_108	MW-7	Appendix III	Chloride	mg/l	15	0	0%	0.290	0.215	
17_2_112	MW-7	Appendix III	Fluoride	mg/l	15	11	73%	0.150	0.672	
17_2_120	MW-7	Appendix III	pH, Field	su	15	0	0%	-0.038	0.872	
17_2_124	MW-7	Appendix III	Sulfate	mg/l	15	0	0%	-0.303	0.196	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
17_2_126	MW-7	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	-0.147	0.531	
17_3_102	MW-7	Appendix IV	Arsenic	mg/l	15	0	0%	0.297	0.205	
17_3_103	MW-7	Appendix IV	Barium	mg/l	15	0	0%	-0.050	0.830	
17_3_109	MW-7	Appendix IV	Chromium	mg/l	15	14	93%	NA	NA	
17_3_110	MW-7	Appendix IV	Cobalt	mg/l	15	13	87%	-0.500	0.157	
17_3_113	MW-7	Appendix IV	Fluoride (App IV)	mg/l	15	11	73%	0.150	0.672	
17_3_116	MW-7	Appendix IV	Lithium	mg/l	15	0	0%	0.650	0.006	**
17_3_117	MW-7	Appendix IV	Mercury	mg/l	15	14	93%	NA	NA	
17_3_118	MW-7	Appendix IV	Molybdenum	mg/l	15	0	0%	0.701	0.003	**
17_3_121	MW-7	Appendix IV	Radium-226+228	pci/l	15	0	0%	-0.216	0.356	
17_5_114	MW-7	Part 115	Iron	mg/l	15	0	0%	0.018	0.938	
17_5_128	MW-7	Part 115	Vanadium	mg/l	15	14	93%	NA	NA	
17_5_129	MW-7	Part 115	Zinc	mg/l	15	11	73%	-0.029	0.934	
18_2_105	MW-7C	Appendix III	Boron	mg/l	14	0	0%	-0.113	0.640	
18_2_107	MW-7C	Appendix III	Calcium	mg/l	14	0	0%	-0.068	0.776	
18_2_108	MW-7C	Appendix III	Chloride	mg/l	14	0	0%	-0.143	0.554	
18_2_112	MW-7C	Appendix III	Fluoride	mg/l	14	12	86%	-0.500	0.157	
18_2_120	MW-7C	Appendix III	pH, Field	su	14	0	0%	0.012	0.959	
18_2_124	MW-7C	Appendix III	Sulfate	mg/l	14	0	0%	0.545	0.024	*
18_2_126	MW-7C	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	0.543	0.024	*
18_3_102	MW-7C	Appendix IV	Arsenic	mg/l	14	0	0%	0.231	0.338	
18_3_103	MW-7C	Appendix IV	Barium	mg/l	14	0	0%	0.121	0.615	
18_3_106	MW-7C	Appendix IV	Cadmium	mg/l	14	10	71%	-0.225	0.525	
18_3_110	MW-7C	Appendix IV	Cobalt	mg/l	14	13	93%	NA	NA	
18_3_113	MW-7C	Appendix IV	Fluoride (App IV)	mg/l	14	12	86%	-0.500	0.157	
18_3_116	MW-7C	Appendix IV	Lithium	mg/l	14	0	0%	0.539	0.025	*
18_3_118	MW-7C	Appendix IV	Molybdenum	mg/l	14	0	0%	0.162	0.500	
18_3_121	MW-7C	Appendix IV	Radium-226+228	pci/l	14	0	0%	-0.064	0.792	
18_5_114	MW-7C	Part 115	Iron	mg/l	14	0	0%	0.119	0.622	
18_5_119	MW-7C	Part 115	Nickel	mg/l	14	0	0%	0.183	0.448	
18_5_129	MW-7C	Part 115	Zinc	mg/l	14	11	79%	-0.306	0.402	
19_2_105	MW-8	Appendix III	Boron	mg/l	15	1	7%	-0.062	0.796	
19_2_107	MW-8	Appendix III	Calcium	mg/l	15	0	0%	0.093	0.690	
19_2_108	MW-8	Appendix III	Chloride	mg/l	15	2	13%	-0.214	0.389	
19_2_112	MW-8	Appendix III	Fluoride	mg/l	15	12	80%	-0.448	0.220	
19_2_120	MW-8	Appendix III	pH, Field	su	15	0	0%	-0.227	0.334	
19_2_124	MW-8	Appendix III	Sulfate	mg/l	15	0	0%	0.062	0.793	
19_2_126	MW-8	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	0.259	0.270	
19_3_102	MW-8	Appendix IV	Arsenic	mg/l	15	13	87%	-0.500	0.157	
19_3_103	MW-8	Appendix IV	Barium	mg/l	15	0	0%	0.201	0.390	
19_3_104	MW-8	Appendix IV	Beryllium	mg/l	15	14	93%	NA	NA	
19_3_106	MW-8	Appendix IV	Cadmium	mg/l	15	14	93%	NA	NA	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
19_3_110	MW-8	Appendix IV	Cobalt	mg/l	15	14	93%	NA	NA	
19_3_113	MW-8	Appendix IV	Fluoride (App IV)	mg/l	15	12	80%	-0.448	0.220	
19_3_116	MW-8	Appendix IV	Lithium	mg/l	15	6	40%	-0.001	0.997	
19_3_118	MW-8	Appendix IV	Molybdenum	mg/l	15	11	73%	-0.215	0.543	
19_3_121	MW-8	Appendix IV	Radium-226+228	pci/l	15	0	0%	0.149	0.525	
19_3_125	MW-8	Appendix IV	Thallium	mg/l	15	14	93%	NA	NA	
19_5_111	MW-8	Part 115	Copper	mg/l	15	14	93%	NA	NA	
19_5_114	MW-8	Part 115	Iron	mg/l	15	13	87%	-0.500	0.157	
19_5_128	MW-8	Part 115	Vanadium	mg/l	15	14	93%	NA	NA	
19_5_129	MW-8	Part 115	Zinc	mg/l	15	13	87%	-0.500	0.157	
20_2_105	MW-9	Appendix III	Boron	mg/l	15	14	93%	NA	NA	
20_2_107	MW-9	Appendix III	Calcium	mg/l	15	0	0%	0.634	0.007	**
20_2_108	MW-9	Appendix III	Chloride	mg/l	15	10	67%	-0.038	0.911	
20_2_112	MW-9	Appendix III	Fluoride	mg/l	15	14	93%	NA	NA	
20_2_120	MW-9	Appendix III	pH, Field	su	15	0	0%	-0.260	0.266	
20_2_124	MW-9	Appendix III	Sulfate	mg/l	15	8	53%	0.437	0.157	
20_2_126	MW-9	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	0.662	0.005	**
20_3_102	MW-9	Appendix IV	Arsenic	mg/l	15	13	87%	-0.500	0.157	
20_3_103	MW-9	Appendix IV	Barium	mg/l	15	0	0%	0.651	0.005	**
20_3_104	MW-9	Appendix IV	Beryllium	mg/l	15	14	93%	NA	NA	
20_3_106	MW-9	Appendix IV	Cadmium	mg/l	15	14	93%	NA	NA	
20_3_110	MW-9	Appendix IV	Cobalt	mg/l	15	14	93%	NA	NA	
20_3_113	MW-9	Appendix IV	Fluoride (App IV)	mg/l	15	14	93%	NA	NA	
20_3_121	MW-9	Appendix IV	Radium-226+228	pci/l	15	0	0%	0.029	0.901	
20_5_129	MW-9	Part 115	Zinc	mg/l	15	13	87%	-0.500	0.157	
21_2_105	MW-10	Appendix III	Boron	mg/l	15	1	7%	-0.116	0.630	
21_2_107	MW-10	Appendix III	Calcium	mg/l	15	0	0%	0.058	0.806	
21_2_108	MW-10	Appendix III	Chloride	mg/l	15	9	60%	0.125	0.699	
21_2_112	MW-10	Appendix III	Fluoride	mg/l	15	12	80%	-0.490	0.180	
21_2_120	MW-10	Appendix III	pH, Field	su	15	0	0%	-0.167	0.475	
21_2_124	MW-10	Appendix III	Sulfate	mg/l	15	0	0%	-0.042	0.858	
21_2_126	MW-10	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	0.276	0.240	
21_3_102	MW-10	Appendix IV	Arsenic	mg/l	15	13	87%	-0.500	0.157	
21_3_103	MW-10	Appendix IV	Barium	mg/l	15	0	0%	0.576	0.014	*
21_3_106	MW-10	Appendix IV	Cadmium	mg/l	15	14	93%	NA	NA	
21_3_110	MW-10	Appendix IV	Cobalt	mg/l	15	14	93%	NA	NA	
21_3_113	MW-10	Appendix IV	Fluoride (App IV)	mg/l	15	12	80%	-0.490	0.180	
21_3_117	MW-10	Appendix IV	Mercury	mg/l	15	14	93%	NA	NA	
21_3_121	MW-10	Appendix IV	Radium-226+228	pci/l	15	0	0%	0.517	0.027	*
21_3_122	MW-10	Appendix IV	Selenium	mg/l	15	13	87%	-0.500	0.157	
21_5_129	MW-10	Part 115	Zinc	mg/l	15	12	80%	-0.008	0.982	
22_2_105	MW-13	Appendix III	Boron	mg/l	14	0	0%	0.461	0.056	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
22_2_107	MW-13	Appendix III	Calcium	mg/l	14	0	0%	0.633	0.009	**
22_2_108	MW-13	Appendix III	Chloride	mg/l	14	2	14%	0.656	0.010	*
22_2_112	MW-13	Appendix III	Fluoride	mg/l	14	12	86%	-0.500	0.157	
22_2_120	MW-13	Appendix III	pH, Field	su	14	0	0%	0.104	0.666	
22_2_124	MW-13	Appendix III	Sulfate	mg/l	14	0	0%	0.548	0.023	*
22_2_126	MW-13	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	0.593	0.014	*
22_3_102	MW-13	Appendix IV	Arsenic	mg/l	14	9	64%	0.013	0.970	
22_3_103	MW-13	Appendix IV	Barium	mg/l	14	0	0%	0.405	0.093	
22_3_110	MW-13	Appendix IV	Cobalt	mg/l	14	12	86%	-0.500	0.157	
22_3_113	MW-13	Appendix IV	Fluoride (App IV)	mg/l	14	12	86%	-0.500	0.157	
22_3_121	MW-13	Appendix IV	Radium-226+228	pci/l	14	1	7%	-0.044	0.859	
22_3_122	MW-13	Appendix IV	Selenium	mg/l	14	13	93%	NA	NA	
22_5_114	MW-13	Part 115	Iron	mg/l	14	1	7%	0.510	0.040	*
22_5_128	MW-13	Part 115	Vanadium	mg/l	14	13	93%	NA	NA	
22_5_129	MW-13	Part 115	Zinc	mg/l	14	12	86%	-0.500	0.157	
23_2_105	MW-14	Appendix III	Boron	mg/l	12	0	0%	0.365	0.153	
23_2_107	MW-14	Appendix III	Calcium	mg/l	12	0	0%	0.731	0.004	**
23_2_108	MW-14	Appendix III	Chloride	mg/l	12	0	0%	0.053	0.837	
23_2_112	MW-14	Appendix III	Fluoride	mg/l	12	10	83%	-0.500	0.157	
23_2_120	MW-14	Appendix III	pH, Field	su	12	0	0%	-0.019	0.940	
23_2_124	MW-14	Appendix III	Sulfate	mg/l	12	0	0%	-0.084	0.743	
23_2_126	MW-14	Appendix III	Total Dissolved Solids	mg/l	12	1	8%	0.180	0.495	
23_3_102	MW-14	Appendix IV	Arsenic	mg/l	12	0	0%	0.320	0.211	
23_3_103	MW-14	Appendix IV	Barium	mg/l	12	0	0%	-0.207	0.418	
23_3_110	MW-14	Appendix IV	Cobalt	mg/l	12	10	83%	-0.500	0.157	
23_3_113	MW-14	Appendix IV	Fluoride (App IV)	mg/l	12	10	83%	-0.500	0.157	
23_3_116	MW-14	Appendix IV	Lithium	mg/l	12	0	0%	0.561	0.028	*
23_3_118	MW-14	Appendix IV	Molybdenum	mg/l	12	0	0%	0.227	0.374	
23_3_121	MW-14	Appendix IV	Radium-226+228	pci/l	12	2	17%	-0.054	0.843	
23_3_122	MW-14	Appendix IV	Selenium	mg/l	12	10	83%	-0.500	0.157	
23_5_114	MW-14	Part 115	Iron	mg/l	12	0	0%	0.585	0.022	*
23_5_119	MW-14	Part 115	Nickel	mg/l	12	6	50%	0.271	0.401	
23_5_128	MW-14	Part 115	Vanadium	mg/l	12	10	83%	-0.500	0.157	
23_5_129	MW-14	Part 115	Zinc	mg/l	12	10	83%	-0.500	0.157	
24_2_105	MW-15	Appendix III	Boron	mg/l	12	0	0%	0.110	0.668	
24_2_107	MW-15	Appendix III	Calcium	mg/l	12	0	0%	0.276	0.282	
24_2_108	MW-15	Appendix III	Chloride	mg/l	12	0	0%	0.501	0.050	
24_2_112	MW-15	Appendix III	Fluoride	mg/l	12	10	83%	-0.500	0.157	
24_2_120	MW-15	Appendix III	pH, Field	su	12	0	0%	0.662	0.010	**
24_2_124	MW-15	Appendix III	Sulfate	mg/l	12	0	0%	0.219	0.391	
24_2_126	MW-15	Appendix III	Total Dissolved Solids	mg/l	12	0	0%	-0.081	0.752	
24_3_102	MW-15	Appendix IV	Arsenic	mg/l	12	9	75%	-0.177	0.629	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
24_3_103	MW-15	Appendix IV	Barium	mg/l	12	0	0%	0.287	0.262	
24_3_106	MW-15	Appendix IV	Cadmium	mg/l	12	11	92%	NA	NA	
24_3_110	MW-15	Appendix IV	Cobalt	mg/l	12	11	92%	NA	NA	
24_3_113	MW-15	Appendix IV	Fluoride (App IV)	mg/l	12	10	83%	-0.500	0.157	
24_3_116	MW-15	Appendix IV	Lithium	mg/l	12	11	92%	NA	NA	
24_3_121	MW-15	Appendix IV	Radium-226+228	pci/l	12	0	0%	-0.333	0.193	
24_3_122	MW-15	Appendix IV	Selenium	mg/l	12	5	42%	0.265	0.390	
24_5_114	MW-15	Part 115	Iron	mg/l	12	1	8%	-0.035	0.894	
24_5_119	MW-15	Part 115	Nickel	mg/l	12	11	92%	NA	NA	
24_5_129	MW-15	Part 115	Zinc	mg/l	12	10	83%	-0.500	0.157	
25_2_105	MW-16A	Appendix III	Boron	mg/l	13	0	0%	0.522	0.035	*
25_2_107	MW-16A	Appendix III	Calcium	mg/l	13	0	0%	0.650	0.009	**
25_2_108	MW-16A	Appendix III	Chloride	mg/l	13	0	0%	0.382	0.123	
25_2_112	MW-16A	Appendix III	Fluoride	mg/l	13	11	85%	-0.500	0.157	
25_2_120	MW-16A	Appendix III	pH, Field	su	13	0	0%	0.178	0.474	
25_2_124	MW-16A	Appendix III	Sulfate	mg/l	13	0	0%	0.717	0.004	**
25_2_126	MW-16A	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	0.728	0.003	**
25_3_101	MW-16A	Appendix IV	Antimony	mg/l	13	12	92%	NA	NA	
25_3_102	MW-16A	Appendix IV	Arsenic	mg/l	13	0	0%	0.201	0.418	
25_3_103	MW-16A	Appendix IV	Barium	mg/l	13	0	0%	0.471	0.058	
25_3_106	MW-16A	Appendix IV	Cadmium	mg/l	13	12	92%	NA	NA	
25_3_110	MW-16A	Appendix IV	Cobalt	mg/l	13	11	85%	-0.500	0.157	
25_3_113	MW-16A	Appendix IV	Fluoride (App IV)	mg/l	13	11	85%	-0.500	0.157	
25_3_116	MW-16A	Appendix IV	Lithium	mg/l	13	10	77%	-0.332	0.363	
25_3_118	MW-16A	Appendix IV	Molybdenum	mg/l	13	11	85%	-0.500	0.157	
25_3_121	MW-16A	Appendix IV	Radium-226+228	pci/l	13	0	0%	-0.200	0.420	
25_3_122	MW-16A	Appendix IV	Selenium	mg/l	13	12	92%	NA	NA	
25_3_125	MW-16A	Appendix IV	Thallium	mg/l	13	12	92%	NA	NA	
25_5_114	MW-16A	Part 115	Iron	mg/l	13	0	0%	0.073	0.770	
25_5_119	MW-16A	Part 115	Nickel	mg/l	13	11	85%	-0.500	0.157	
26_2_105	MW-16B	Appendix III	Boron	mg/l	13	0	0%	0.186	0.454	
26_2_107	MW-16B	Appendix III	Calcium	mg/l	13	0	0%	0.529	0.033	*
26_2_108	MW-16B	Appendix III	Chloride	mg/l	13	5	38%	0.171	0.562	
26_2_112	MW-16B	Appendix III	Fluoride	mg/l	13	8	62%	0.281	0.406	
26_2_120	MW-16B	Appendix III	pH, Field	su	13	0	0%	0.070	0.776	
26_2_124	MW-16B	Appendix III	Sulfate	mg/l	13	0	0%	0.633	0.011	*
26_2_126	MW-16B	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	0.195	0.431	
26_3_103	MW-16B	Appendix IV	Barium	mg/l	13	0	0%	0.103	0.679	
26_3_113	MW-16B	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	0.281	0.406	
26_3_116	MW-16B	Appendix IV	Lithium	mg/l	13	0	0%	0.225	0.365	
26_3_118	MW-16B	Appendix IV	Molybdenum	mg/l	13	0	0%	-0.003	0.991	
26_3_121	MW-16B	Appendix IV	Radium-226+228	pci/l	13	0	0%	-0.140	0.574	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
26_3_122	MW-16B	Appendix IV	Selenium	mg/l	13	12	92%	NA	NA	
26_5_114	MW-16B	Part 115	Iron	mg/l	13	0	0%	0.360	0.147	
26_5_129	MW-16B	Part 115	Zinc	mg/l	13	12	92%	NA	NA	
27_2_105	MW-17A	Appendix III	Boron	mg/l	8	0	0%	0.282	0.340	
27_2_107	MW-17A	Appendix III	Calcium	mg/l	8	0	0%	-0.488	0.099	
27_2_108	MW-17A	Appendix III	Chloride	mg/l	8	0	0%	0.059	0.842	
27_2_112	MW-17A	Appendix III	Fluoride	mg/l	8	3	38%	-0.309	0.360	
27_2_120	MW-17A	Appendix III	pH, Field	su	8	0	0%	-0.047	0.873	
27_2_124	MW-17A	Appendix III	Sulfate	mg/l	8	0	0%	0.145	0.625	
27_2_126	MW-17A	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	0.236	0.424	
27_3_102	MW-17A	Appendix IV	Arsenic	mg/l	8	1	12%	0.245	0.427	
27_3_103	MW-17A	Appendix IV	Barium	mg/l	8	0	0%	0.412	0.164	
27_3_106	MW-17A	Appendix IV	Cadmium	mg/l	8	7	88%	NA	NA	
27_3_110	MW-17A	Appendix IV	Cobalt	mg/l	8	7	88%	NA	NA	
27_3_113	MW-17A	Appendix IV	Fluoride (App IV)	mg/l	8	3	38%	-0.309	0.360	
27_3_116	MW-17A	Appendix IV	Lithium	mg/l	8	0	0%	0.431	0.145	
27_3_118	MW-17A	Appendix IV	Molybdenum	mg/l	8	0	0%	0.394	0.183	
27_3_121	MW-17A	Appendix IV	Radium-226+228	pci/l	8	1	12%	-0.274	0.375	
27_3_122	MW-17A	Appendix IV	Selenium	mg/l	8	7	88%	NA	NA	
27_3_125	MW-17A	Appendix IV	Thallium	mg/l	8	7	88%	NA	NA	
27_5_114	MW-17A	Part 115	Iron	mg/l	8	0	0%	-0.088	0.767	
27_5_119	MW-17A	Part 115	Nickel	mg/l	8	1	12%	-0.112	0.716	
27_5_129	MW-17A	Part 115	Zinc	mg/l	8	4	50%	-0.377	0.286	
28_2_105	MW-17B	Appendix III	Boron	mg/l	8	0	0%	-0.108	0.714	
28_2_107	MW-17B	Appendix III	Calcium	mg/l	8	0	0%	0.015	0.958	
28_2_108	MW-17B	Appendix III	Chloride	mg/l	8	0	0%	-0.038	0.897	
28_2_112	MW-17B	Appendix III	Fluoride	mg/l	8	2	25%	0.053	0.870	
28_2_120	MW-17B	Appendix III	pH, Field	su	8	0	0%	0.142	0.632	
28_2_124	MW-17B	Appendix III	Sulfate	mg/l	8	0	0%	-0.257	0.386	
28_2_126	MW-17B	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	0.044	0.883	
28_3_102	MW-17B	Appendix IV	Arsenic	mg/l	8	1	12%	0.185	0.550	
28_3_103	MW-17B	Appendix IV	Barium	mg/l	8	0	0%	0.152	0.608	
28_3_106	MW-17B	Appendix IV	Cadmium	mg/l	8	7	88%	NA	NA	
28_3_110	MW-17B	Appendix IV	Cobalt	mg/l	8	5	62%	-0.149	0.684	
28_3_113	MW-17B	Appendix IV	Fluoride (App IV)	mg/l	8	2	25%	0.053	0.870	
28_3_116	MW-17B	Appendix IV	Lithium	mg/l	8	0	0%	-0.598	0.043	*
28_3_118	MW-17B	Appendix IV	Molybdenum	mg/l	8	0	0%	-0.492	0.096	
28_3_121	MW-17B	Appendix IV	Radium-226+228	pci/l	8	1	12%	0.585	0.058	
28_5_114	MW-17B	Part 115	Iron	mg/l	8	0	0%	0.051	0.862	
28_5_119	MW-17B	Part 115	Nickel	mg/l	8	3	38%	0.370	0.274	
28_5_129	MW-17B	Part 115	Zinc	mg/l	8	3	38%	0.208	0.539	
29_2_105	MW-17C	Appendix III	Boron	mg/l	8	0	0%	0.621	0.036	*

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
29_2_107	MW-17C	Appendix III	Calcium	mg/l	8	0	0%	0.359	0.224	
29_2_108	MW-17C	Appendix III	Chloride	mg/l	8	0	0%	0.365	0.217	
29_2_112	MW-17C	Appendix III	Fluoride	mg/l	8	2	25%	-0.172	0.593	
29_2_120	MW-17C	Appendix III	pH, Field	su	8	0	0%	0.512	0.083	
29_2_124	MW-17C	Appendix III	Sulfate	mg/l	8	0	0%	0.563	0.057	
29_2_126	MW-17C	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	0.262	0.376	
29_3_101	MW-17C	Appendix IV	Antimony	mg/l	8	7	88%	NA	NA	
29_3_102	MW-17C	Appendix IV	Arsenic	mg/l	8	0	0%	-0.043	0.884	
29_3_103	MW-17C	Appendix IV	Barium	mg/l	8	0	0%	-0.014	0.962	
29_3_110	MW-17C	Appendix IV	Cobalt	mg/l	8	4	50%	-0.241	0.495	
29_3_113	MW-17C	Appendix IV	Fluoride (App IV)	mg/l	8	2	25%	-0.172	0.593	
29_3_115	MW-17C	Appendix IV	Lead	mg/l	8	5	62%	-0.653	0.074	
29_3_116	MW-17C	Appendix IV	Lithium	mg/l	8	0	0%	0.460	0.120	
29_3_118	MW-17C	Appendix IV	Molybdenum	mg/l	8	0	0%	0.655	0.027	*
29_3_121	MW-17C	Appendix IV	Radium-226+228	pci/l	8	0	0%	0.308	0.297	
29_5_114	MW-17C	Part 115	Iron	mg/l	8	0	0%	0.023	0.938	
29_5_119	MW-17C	Part 115	Nickel	mg/l	8	1	12%	-0.007	0.982	
29_5_129	MW-17C	Part 115	Zinc	mg/l	8	4	50%	-0.099	0.780	
30_2_105	MW-18A	Appendix III	Boron	mg/l	9	0	0%	-0.111	0.696	
30_2_107	MW-18A	Appendix III	Calcium	mg/l	9	0	0%	-0.072	0.801	
30_2_108	MW-18A	Appendix III	Chloride	mg/l	9	0	0%	-0.059	0.837	
30_2_112	MW-18A	Appendix III	Fluoride	mg/l	9	0	0%	-0.462	0.104	
30_2_120	MW-18A	Appendix III	pH, Field	su	8	0	0%	-0.057	0.848	
30_2_124	MW-18A	Appendix III	Sulfate	mg/l	9	0	0%	-0.050	0.860	
30_2_126	MW-18A	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	-0.128	0.654	
30_3_102	MW-18A	Appendix IV	Arsenic	mg/l	9	3	33%	0.165	0.609	
30_3_103	MW-18A	Appendix IV	Barium	mg/l	9	0	0%	-0.135	0.635	
30_3_113	MW-18A	Appendix IV	Fluoride (App IV)	mg/l	9	0	0%	-0.462	0.104	
30_3_115	MW-18A	Appendix IV	Lead	mg/l	9	7	78%	-0.500	0.157	
30_3_116	MW-18A	Appendix IV	Lithium	mg/l	9	0	0%	0.078	0.784	
30_3_118	MW-18A	Appendix IV	Molybdenum	mg/l	9	1	11%	0.397	0.179	
30_3_121	MW-18A	Appendix IV	Radium-226+228	pci/l	9	2	22%	-0.255	0.408	
30_3_122	MW-18A	Appendix IV	Selenium	mg/l	9	8	89%	NA	NA	
30_5_111	MW-18A	Part 115	Copper	mg/l	9	8	89%	NA	NA	
30_5_114	MW-18A	Part 115	Iron	mg/l	9	0	0%	0.133	0.639	
30_5_129	MW-18A	Part 115	Zinc	mg/l	9	6	67%	-0.286	0.434	
31_2_105	MW-18B	Appendix III	Boron	mg/l	9	0	0%	-0.170	0.549	
31_2_107	MW-18B	Appendix III	Calcium	mg/l	9	0	0%	0.126	0.657	
31_2_108	MW-18B	Appendix III	Chloride	mg/l	9	0	0%	-0.028	0.922	
31_2_112	MW-18B	Appendix III	Fluoride	mg/l	9	1	11%	-0.082	0.782	
31_2_120	MW-18B	Appendix III	pH, Field	su	8	0	0%	-0.270	0.361	
31_2_124	MW-18B	Appendix III	Sulfate	mg/l	9	0	0%	0.182	0.523	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
31_2_126	MW-18B	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	-0.108	0.704	
31_3_102	MW-18B	Appendix IV	Arsenic	mg/l	9	7	78%	-0.500	0.157	
31_3_103	MW-18B	Appendix IV	Barium	mg/l	9	0	0%	0.143	0.615	
31_3_113	MW-18B	Appendix IV	Fluoride (App IV)	mg/l	9	1	11%	-0.082	0.782	
31_3_116	MW-18B	Appendix IV	Lithium	mg/l	9	0	0%	-0.427	0.133	
31_3_118	MW-18B	Appendix IV	Molybdenum	mg/l	9	0	0%	-0.380	0.181	
31_3_121	MW-18B	Appendix IV	Radium-226+228	pci/l	9	0	0%	0.352	0.216	
31_5_114	MW-18B	Part 115	Iron	mg/l	9	0	0%	-0.094	0.740	
31_5_119	MW-18B	Part 115	Nickel	mg/l	9	1	11%	0.310	0.294	
31_5_129	MW-18B	Part 115	Zinc	mg/l	9	7	78%	-0.500	0.157	
32_2_105	MW-100A	Appendix III	Boron	mg/l	11	2	18%	-0.175	0.539	
32_2_107	MW-100A	Appendix III	Calcium	mg/l	11	0	0%	0.425	0.108	
32_2_108	MW-100A	Appendix III	Chloride	mg/l	11	0	0%	0.073	0.783	
32_2_112	MW-100A	Appendix III	Fluoride	mg/l	11	7	64%	0.245	0.489	
32_2_120	MW-100A	Appendix III	pH, Field	su	11	0	0%	-0.182	0.491	
32_2_124	MW-100A	Appendix III	Sulfate	mg/l	11	0	0%	0.649	0.014	*
32_2_126	MW-100A	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	0.477	0.071	
32_3_102	MW-100A	Appendix IV	Arsenic	mg/l	11	0	0%	0.409	0.122	
32_3_103	MW-100A	Appendix IV	Barium	mg/l	11	0	0%	0.486	0.066	
32_3_110	MW-100A	Appendix IV	Cobalt	mg/l	11	9	82%	-0.500	0.157	
32_3_113	MW-100A	Appendix IV	Fluoride (App IV)	mg/l	11	7	64%	0.245	0.489	
32_3_116	MW-100A	Appendix IV	Lithium	mg/l	11	0	0%	0.798	0.003	**
32_3_118	MW-100A	Appendix IV	Molybdenum	mg/l	11	0	0%	0.787	0.003	**
32_3_121	MW-100A	Appendix IV	Radium-226+228	pci/l	11	0	0%	-0.207	0.435	
32_5_114	MW-100A	Part 115	Iron	mg/l	11	0	0%	0.363	0.170	
32_5_129	MW-100A	Part 115	Zinc	mg/l	11	8	73%	-0.024	0.948	
33_2_105	MW-100B	Appendix III	Boron	mg/l	11	0	0%	0.018	0.945	
33_2_107	MW-100B	Appendix III	Calcium	mg/l	11	0	0%	0.156	0.556	
33_2_108	MW-100B	Appendix III	Chloride	mg/l	11	0	0%	0.696	0.008	**
33_2_112	MW-100B	Appendix III	Fluoride	mg/l	11	7	64%	0.207	0.559	
33_2_120	MW-100B	Appendix III	pH, Field	su	11	0	0%	0.255	0.334	
33_2_124	MW-100B	Appendix III	Sulfate	mg/l	11	0	0%	0.390	0.141	
33_2_126	MW-100B	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	0.379	0.151	
33_3_102	MW-100B	Appendix IV	Arsenic	mg/l	11	0	0%	0.405	0.126	
33_3_103	MW-100B	Appendix IV	Barium	mg/l	11	0	0%	0.579	0.028	*
33_3_113	MW-100B	Appendix IV	Fluoride (App IV)	mg/l	11	7	64%	0.207	0.559	
33_3_116	MW-100B	Appendix IV	Lithium	mg/l	11	0	0%	0.207	0.434	
33_3_118	MW-100B	Appendix IV	Molybdenum	mg/l	11	0	0%	0.534	0.043	*
33_3_121	MW-100B	Appendix IV	Radium-226+228	pci/l	11	1	9%	-0.245	0.372	
33_5_114	MW-100B	Part 115	Iron	mg/l	11	0	0%	-0.198	0.453	
33_5_119	MW-100B	Part 115	Nickel	mg/l	11	10	91%	NA	NA	
33_5_129	MW-100B	Part 115	Zinc	mg/l	11	10	91%	NA	NA	

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 5: Outlier Counts by Date

Date	Count
2020-04-28	1
2020-05-26	3
2021-01-27	1
2021-05-04	1
2021-06-15	2
2022-02-01	2
2022-02-17	1
2022-03-10	1
2023-01-12	2
2023-02-02	1
2023-03-21	1
2023-03-24	1
2023-07-05	1
2023-10-17	1
2024-01-29	1
2024-01-30	3
2024-08-05	1
2024-08-07	1
2024-11-13	12
2024-12-18	4
2025-01-23	1
2025-02-27	1
2025-08-07	4
2025-08-08	1

Table 6: Outliers Identified at the 1% Significance Level, Non-Detects Excluded

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	No. Detects	Date	Dilution	Value
13_5_114	MW-2	Part 115	Iron	mg/l	19	0	0%	19	2022-02-01	1	1.93
13_5_129	MW-2	Part 115	Zinc	mg/l	19	14	74%	5	2020-05-26	1	0.0410
14_3_102	MW-3	Appendix IV	Arsenic	mg/l	10	0	0%	10	2024-01-29	1	0.00600
15_2_120	MW-5	Appendix III	pH, Field	su	19	0	0%	19	2021-05-04	1	6.40
15_3_116	MW-5	Appendix IV	Lithium	mg/l	19	0	0%	19	2022-02-01	1	0.0160
15_5_114	MW-5	Part 115	Iron	mg/l	19	1	5%	18	2020-04-28	1	8.00
15_5_129	MW-5	Part 115	Zinc	mg/l	19	3	16%	16	2021-01-27	1	0.0980
16_2_120	MW-6	Appendix III	pH, Field	su	19	0	0%	19	2020-05-26	1	6.35
16_3_121	MW-6	Appendix IV	Radium-226+228	pci/l	19	2	11%	17	2024-08-05	1	4.29
16_5_114	MW-6	Part 115	Iron	mg/l	19	9	47%	10	2020-05-26	1	0.200
17_2_107	MW-7	Appendix III	Calcium	mg/l	15	0	0%	15	2024-01-30	1	165
17_2_120	MW-7	Appendix III	pH, Field	su	15	0	0%	15	2021-06-15	1	8.18
17_2_126	MW-7	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	15	2024-01-30	1	864

(Table continues on next page)

Table 6: Outliers Identified at the 1% Significance Level, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	No. Detects	Date	Dilution	Value
17_5_114	MW-7	Part 115	Iron	mg/l	15	0	0%	15	2022-02-17	1	2.81
18_2_126	MW-7C	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	14	2025-08-07	1	1100
18_3_102	MW-7C	Appendix IV	Arsenic	mg/l	14	0	0%	14	2024-01-30	1	0.0100
18_5_114	MW-7C	Part 115	Iron	mg/l	14	0	0%	14	2025-08-07	1	2.80
18_5_119	MW-7C	Part 115	Nickel	mg/l	14	0	0%	14	2022-03-10	1	0.0100
19_2_120	MW-8	Appendix III	pH, Field	su	15	0	0%	15	2021-06-15	1	7.78
22_3_103	MW-13	Appendix IV	Barium	mg/l	14	0	0%	14	2025-08-08	1	0.0600
23_2_124	MW-14	Appendix III	Sulfate	mg/l	12	0	0%	12	2023-03-24	1	748
23_3_103	MW-14	Appendix IV	Barium	mg/l	12	0	0%	12	2023-01-12	1	0.177
24_2_124	MW-15	Appendix III	Sulfate	mg/l	12	0	0%	12	2023-01-12	1	238
24_5_114	MW-15	Part 115	Iron	mg/l	12	1	8%	11	2024-08-07	1	0.380
25_3_121	MW-16A	Appendix IV	Radium-226+228	pci/l	13	0	0%	13	2023-07-05	1	7.46
26_2_108	MW-16B	Appendix III	Chloride	mg/l	13	5	38%	8	2023-03-21	1	11.0
26_3_118	MW-16B	Appendix IV	Molybdenum	mg/l	13	0	0%	13	2023-02-02	1	0.00800
26_3_121	MW-16B	Appendix IV	Radium-226+228	pci/l	13	0	0%	13	2023-10-17	1	6.43
27_3_121	MW-17A	Appendix IV	Radium-226+228	pci/l	8	1	12%	7	2024-12-18	1	5.52
28_2_105	MW-17B	Appendix III	Boron	mg/l	8	0	0%	8	2024-11-13	1	4.10
28_2_107	MW-17B	Appendix III	Calcium	mg/l	8	0	0%	8	2024-11-13	1	243
28_2_112	MW-17B	Appendix III	Fluoride	mg/l	8	2	25%	6	2024-12-18	1	0.130
28_2_124	MW-17B	Appendix III	Sulfate	mg/l	8	0	0%	8	2024-11-13	1	643
28_2_126	MW-17B	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	8	2024-11-13	1	1400
28_3_113	MW-17B	Appendix IV	Fluoride (App IV)	mg/l	8	2	25%	6	2024-12-18	1	0.130
28_3_116	MW-17B	Appendix IV	Lithium	mg/l	8	0	0%	8	2024-11-13	1	0.0590
28_3_118	MW-17B	Appendix IV	Molybdenum	mg/l	8	0	0%	8	2024-11-13	1	0.0180
28_5_114	MW-17B	Part 115	Iron	mg/l	8	0	0%	8	2024-11-13	1	7.27
29_5_129	MW-17C	Part 115	Zinc	mg/l	8	4	50%	4	2025-01-23	1	0.0560
30_2_105	MW-18A	Appendix III	Boron	mg/l	9	0	0%	9	2024-11-13	1	3.47
30_2_107	MW-18A	Appendix III	Calcium	mg/l	9	0	0%	9	2024-11-13	1	5.69
30_2_108	MW-18A	Appendix III	Chloride	mg/l	9	0	0%	9	2024-11-13	1	2.20
30_2_124	MW-18A	Appendix III	Sulfate	mg/l	9	0	0%	9	2024-11-13	1	0.900
30_3_102	MW-18A	Appendix IV	Arsenic	mg/l	9	3	33%	6	2024-12-18	1	0.00500
31_2_124	MW-18B	Appendix III	Sulfate	mg/l	9	0	0%	9	2024-11-13	1	143
31_3_103	MW-18B	Appendix IV	Barium	mg/l	9	0	0%	9	2025-02-27	1	0.0430
32_2_108	MW-100A	Appendix III	Chloride	mg/l	11	0	0%	11	2025-08-07	1	11.0
32_2_126	MW-100A	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	11	2025-08-07	1	340

Table 7: Seasonality Tests

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
13_2_105	MW-2	Appendix III	Boron	mg/l	0%	5	3	8	2	18	0.198	0.172	0.217	5	3	8	2	18	0.198	0.172	0.217
13_2_107	MW-2	Appendix III	Calcium	mg/l	0%	5	3	8	2	18	0.244	0.173	0.170	5	3	8	2	18	0.244	0.173	0.170
13_2_108	MW-2	Appendix III	Chloride	mg/l	0%	5	3	8	2	18	0.063	0.197	0.243	5	3	8	2	18	0.063	0.197	0.243
13_2_112	MW-2	Appendix III	Fluoride	mg/l	89%	5	3	8	3	19	0.782	0.797	0.805	1	0	1	0	2	0.317	NA	NA
13_2_120	MW-2	Appendix III	pH, Field	su	0%	5	3	8	3	19	0.056	0.021 *	0.021 *	5	3	8	3	19	0.056	0.021 *	0.021 *
13_2_124	MW-2	Appendix III	Sulfate	mg/l	0%	5	3	8	2	18	0.220	0.257	0.317	5	3	8	2	18	0.220	0.257	0.317
13_2_126	MW-2	Appendix III	Total Dissolved Solids	mg/l	0%	5	3	8	2	18	0.252	0.257	0.293	5	3	8	2	18	0.252	0.257	0.293
13_3_101	MW-2	Appendix IV	Antimony	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
13_3_102	MW-2	Appendix IV	Arsenic	mg/l	74%	5	3	8	3	19	1.000	0.984	0.995	2	0	2	1	5	0.674	0.772	0.781
13_3_103	MW-2	Appendix IV	Barium	mg/l	0%	5	3	8	3	19	0.936	0.934	0.903	5	3	8	3	19	0.936	0.934	0.903
13_3_104	MW-2	Appendix IV	Beryllium	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
13_3_106	MW-2	Appendix IV	Cadmium	mg/l	89%	5	3	8	3	19	0.744	0.781	0.761	1	0	1	0	2	0.317	NA	NA
13_3_109	MW-2	Appendix IV	Chromium	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
13_3_110	MW-2	Appendix IV	Cobalt	mg/l	89%	5	3	8	3	19	0.744	0.750	0.742	1	0	1	0	2	0.317	NA	NA
13_3_113	MW-2	Appendix IV	Fluoride (App IV)	mg/l	89%	5	3	8	3	19	0.782	0.797	0.805	1	0	1	0	2	0.317	NA	NA
13_3_115	MW-2	Appendix IV	Lead	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
13_3_116	MW-2	Appendix IV	Lithium	mg/l	0%	5	3	8	3	19	0.120	0.110	0.151	5	3	8	3	19	0.120	0.110	0.151
13_3_117	MW-2	Appendix IV	Mercury	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
13_3_118	MW-2	Appendix IV	Molybdenum	mg/l	0%	5	3	8	3	19	0.220	0.411	0.422	5	3	8	3	19	0.220	0.411	0.422
13_3_121	MW-2	Appendix IV	Radium-226+228	pci/l	11%	5	3	8	3	19	0.899	0.965	NA	4	3	7	3	17	0.892	0.964	NA
13_3_122	MW-2	Appendix IV	Selenium	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
13_3_125	MW-2	Appendix IV	Thallium	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
13_5_111	MW-2	Part 115	Copper	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
13_5_114	MW-2	Part 115	Iron	mg/l	0%	5	3	8	3	19	0.692	0.543	0.819	5	3	8	3	19	0.692	0.543	0.819
13_5_119	MW-2	Part 115	Nickel	mg/l	0%	5	3	8	3	19	0.061	0.202	0.277	5	3	8	3	19	0.061	0.202	0.277
13_5_123	MW-2	Part 115	Silver	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
13_5_128	MW-2	Part 115	Vanadium	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
13_5_129	MW-2	Part 115	Zinc	mg/l	74%	5	3	8	3	19	0.720	0.145	0.226	2	1	2	0	5	0.331	0.023 *	0.255
14_2_105	MW-3	Appendix III	Boron	mg/l	0%	4	1	5	0	10	0.286	0.325	0.328	4	1	5	0	10	0.286	0.325	0.328
14_2_107	MW-3	Appendix III	Calcium	mg/l	0%	4	1	5	0	10	0.815	0.760	0.749	4	1	5	0	10	0.815	0.760	0.749
14_2_108	MW-3	Appendix III	Chloride	mg/l	0%	4	1	5	0	10	0.286	0.339	0.322	4	1	5	0	10	0.286	0.339	0.322
14_2_112	MW-3	Appendix III	Fluoride	mg/l	80%	4	1	5	0	10	0.884	0.898	0.903	1	0	1	0	2	0.317	NA	NA
14_2_120	MW-3	Appendix III	pH, Field	su	0%	4	1	5	0	10	0.103	0.071	0.071	4	1	5	0	10	0.103	0.071	0.071
14_2_124	MW-3	Appendix III	Sulfate	mg/l	0%	4	1	5	0	10	0.946	0.996	0.993	4	1	5	0	10	0.946	0.996	0.993
14_2_126	MW-3	Appendix III	Total Dissolved Solids	mg/l	0%	4	1	5	0	10	0.472	0.801	0.813	4	1	5	0	10	0.472	0.801	0.813
14_3_101	MW-3	Appendix IV	Antimony	mg/l	100%	4	1	5	0	10	0.869	0.895	0.895	NA	NA	NA	NA	NA	NA	NA	NA
14_3_102	MW-3	Appendix IV	Arsenic	mg/l	0%	4	1	5	0	10	0.769	0.793	0.867	4	1	5	0	10	0.769	0.793	0.867
14_3_103	MW-3	Appendix IV	Barium	mg/l	0%	4	1	5	0	10	0.350	0.410	0.439	4	1	5	0	10	0.350	0.410	0.439
14_3_104	MW-3	Appendix IV	Beryllium	mg/l	100%	4	1	5	0	10	0.869	0.895	0.895	NA	NA	NA	NA	NA	NA	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
14_3_106	MW-3	Appendix IV	Cadmium	mg/l	100%	4	1	5	0	10	0.869	0.895	0.895	NA	NA	NA	NA	NA	NA	NA	NA
14_3_109	MW-3	Appendix IV	Chromium	mg/l	100%	4	1	5	0	10	0.869	0.895	0.895	NA	NA	NA	NA	NA	NA	NA	NA
14_3_110	MW-3	Appendix IV	Cobalt	mg/l	80%	4	1	5	0	10	0.836	0.890	0.875	1	0	1	0	2	0.317	NA	NA
14_3_113	MW-3	Appendix IV	Fluoride (App IV)	mg/l	80%	4	1	5	0	10	0.884	0.898	0.903	1	0	1	0	2	0.317	NA	NA
14_3_115	MW-3	Appendix IV	Lead	mg/l	90%	4	1	5	0	10	0.836	0.884	0.861	0	0	1	0	1	NA	NA	NA
14_3_116	MW-3	Appendix IV	Lithium	mg/l	0%	4	1	5	0	10	0.610	0.626	0.632	4	1	5	0	10	0.610	0.626	0.632
14_3_117	MW-3	Appendix IV	Mercury	mg/l	100%	4	1	5	0	10	0.869	0.895	0.895	NA	NA	NA	NA	NA	NA	NA	NA
14_3_118	MW-3	Appendix IV	Molybdenum	mg/l	0%	4	1	5	0	10	0.472	0.375	0.391	4	1	5	0	10	0.472	0.375	0.391
14_3_121	MW-3	Appendix IV	Radium-226+228	pci/l	20%	4	1	5	0	10	0.815	0.876	0.816	3	1	4	0	8	0.846	0.789	0.742
14_3_122	MW-3	Appendix IV	Selenium	mg/l	100%	4	1	5	0	10	0.869	0.895	0.895	NA	NA	NA	NA	NA	NA	NA	NA
14_3_125	MW-3	Appendix IV	Thallium	mg/l	100%	4	1	5	0	10	0.869	0.895	0.895	NA	NA	NA	NA	NA	NA	NA	NA
14_5_111	MW-3	Part 115	Copper	mg/l	90%	4	1	5	0	10	0.836	0.819	0.769	0	0	1	0	1	NA	NA	NA
14_5_114	MW-3	Part 115	Iron	mg/l	0%	4	1	5	0	10	0.452	0.391	0.391	4	1	5	0	10	0.452	0.391	0.391
14_5_119	MW-3	Part 115	Nickel	mg/l	80%	4	1	5	0	10	0.836	0.821	0.785	1	0	1	0	2	0.317	NA	NA
14_5_123	MW-3	Part 115	Silver	mg/l	100%	4	1	5	0	10	0.869	0.895	0.895	NA	NA	NA	NA	NA	NA	NA	NA
14_5_128	MW-3	Part 115	Vanadium	mg/l	100%	4	1	5	0	10	0.869	0.895	0.895	NA	NA	NA	NA	NA	NA	NA	NA
14_5_129	MW-3	Part 115	Zinc	mg/l	80%	4	1	5	0	10	0.836	0.872	0.854	1	0	1	0	2	0.317	NA	NA
15_2_105	MW-5	Appendix III	Boron	mg/l	0%	5	3	8	2	18	0.057	0.103	0.274	5	3	8	2	18	0.057	0.103	0.274
15_2_107	MW-5	Appendix III	Calcium	mg/l	0%	5	3	8	2	18	0.071	0.038 *	0.075	5	3	8	2	18	0.071	0.038 *	0.075
15_2_108	MW-5	Appendix III	Chloride	mg/l	0%	5	3	8	2	18	0.043 *	0.049 *	0.071	5	3	8	2	18	0.043 *	0.049 *	0.071
15_2_112	MW-5	Appendix III	Fluoride	mg/l	89%	5	3	8	3	19	0.744	0.790	0.775	1	0	1	0	2	0.317	NA	NA
15_2_120	MW-5	Appendix III	pH, Field	su	0%	5	3	8	3	19	0.485	0.211	0.209	5	3	8	3	19	0.485	0.211	0.209
15_2_124	MW-5	Appendix III	Sulfate	mg/l	0%	5	3	8	2	18	0.070	0.033 *	0.073	5	3	8	2	18	0.070	0.033 *	0.073
15_2_126	MW-5	Appendix III	Total Dissolved Solids	mg/l	0%	5	3	8	2	18	0.045 *	0.033 *	0.067	5	3	8	2	18	0.045 *	0.033 *	0.067
15_3_101	MW-5	Appendix IV	Antimony	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
15_3_102	MW-5	Appendix IV	Arsenic	mg/l	63%	5	3	8	3	19	0.729	0.471	0.723	2	3	2	0	7	0.247	0.235	0.261
15_3_103	MW-5	Appendix IV	Barium	mg/l	0%	5	3	8	3	19	0.489	0.204	0.236	5	3	8	3	19	0.489	0.204	0.236
15_3_104	MW-5	Appendix IV	Beryllium	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
15_3_106	MW-5	Appendix IV	Cadmium	mg/l	95%	5	3	8	3	19	0.782	0.801	0.811	1	0	0	0	1	NA	NA	NA
15_3_109	MW-5	Appendix IV	Chromium	mg/l	84%	5	3	8	3	19	0.512	0.357	0.622	2	1	0	0	3	0.221	0.443	0.558
15_3_110	MW-5	Appendix IV	Cobalt	mg/l	84%	5	3	8	3	19	0.317	0.691	0.798	1	1	1	0	3	0.368	NA	NA
15_3_113	MW-5	Appendix IV	Fluoride (App IV)	mg/l	89%	5	3	8	3	19	0.744	0.790	0.775	1	0	1	0	2	0.317	NA	NA
15_3_115	MW-5	Appendix IV	Lead	mg/l	74%	5	3	8	3	19	0.580	0.640	0.836	2	1	2	0	5	0.497	0.743	0.787
15_3_116	MW-5	Appendix IV	Lithium	mg/l	0%	5	3	8	3	19	0.874	0.763	0.621	5	3	8	3	19	0.874	0.763	0.621
15_3_117	MW-5	Appendix IV	Mercury	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
15_3_118	MW-5	Appendix IV	Molybdenum	mg/l	0%	5	3	8	3	19	0.339	0.320	0.401	5	3	8	3	19	0.339	0.320	0.401
15_3_121	MW-5	Appendix IV	Radium-226+228	pci/l	11%	5	3	8	3	19	0.017 *	0.022 *	0.024 *	4	3	7	3	17	0.008 **	0.010 *	0.007 **
15_3_122	MW-5	Appendix IV	Selenium	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
15_3_125	MW-5	Appendix IV	Thallium	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
15_5_111	MW-5	Part 115	Copper	mg/l	63%	5	3	8	3	19	0.819	0.997	0.977	2	1	3	1	7	0.963	0.999	0.981
15_5_114	MW-5	Part 115	Iron	mg/l	5%	5	3	8	3	19	0.032 *	0.133	0.010 *	5	3	8	2	18	0.075	0.184	0.067
15_5_119	MW-5	Part 115	Nickel	mg/l	0%	5	3	8	3	19	0.068	0.028 *	0.063	5	3	8	3	19	0.068	0.028 *	0.063
15_5_123	MW-5	Part 115	Silver	mg/l	95%	5	3	8	3	19	0.782	0.808	0.830	1	0	0	0	1	NA	NA	NA
15_5_128	MW-5	Part 115	Vanadium	mg/l	79%	5	3	8	3	19	0.512	0.350	0.623	3	1	0	0	4	0.180	0.256	0.413
15_5_129	MW-5	Part 115	Zinc	mg/l	16%	5	3	8	3	19	0.886	0.347	0.632	4	2	8	2	16	0.498	0.236	0.340
16_2_105	MW-6	Appendix III	Boron	mg/l	0%	5	3	8	2	18	0.023 *	0.007 **	0.007 **	5	3	8	2	18	0.023 *	0.007 **	0.007 **
16_2_107	MW-6	Appendix III	Calcium	mg/l	0%	5	3	8	2	18	0.049 *	0.033 *	0.025 *	5	3	8	2	18	0.049 *	0.033 *	0.025 *
16_2_108	MW-6	Appendix III	Chloride	mg/l	0%	5	3	8	2	18	0.039 *	0.053	0.040 *	5	3	8	2	18	0.039 *	0.053	0.040 *
16_2_112	MW-6	Appendix III	Fluoride	mg/l	89%	5	3	8	3	19	0.782	0.804	0.814	1	0	1	0	2	0.317	NA	NA
16_2_120	MW-6	Appendix III	pH, Field	su	0%	5	3	8	3	19	0.690	0.517	0.514	5	3	8	3	19	0.690	0.517	0.514
16_2_124	MW-6	Appendix III	Sulfate	mg/l	0%	5	3	8	2	18	0.085	0.045 *	0.050 *	5	3	8	2	18	0.085	0.045 *	0.050 *
16_2_126	MW-6	Appendix III	Total Dissolved Solids	mg/l	0%	5	3	8	2	18	0.022 *	0.007 **	0.006 **	5	3	8	2	18	0.022 *	0.007 **	0.006 **
16_3_101	MW-6	Appendix IV	Antimony	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
16_3_102	MW-6	Appendix IV	Arsenic	mg/l	89%	5	3	8	3	19	0.935	0.950	0.925	1	0	1	0	2	0.317	NA	NA
16_3_103	MW-6	Appendix IV	Barium	mg/l	0%	5	3	8	3	19	0.125	0.221	0.219	5	3	8	3	19	0.125	0.221	0.219
16_3_104	MW-6	Appendix IV	Beryllium	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
16_3_106	MW-6	Appendix IV	Cadmium	mg/l	95%	5	3	8	3	19	0.782	0.823	0.845	1	0	0	0	1	NA	NA	NA
16_3_109	MW-6	Appendix IV	Chromium	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
16_3_110	MW-6	Appendix IV	Cobalt	mg/l	89%	5	3	8	3	19	0.782	0.802	0.822	1	0	1	0	2	0.317	NA	NA
16_3_113	MW-6	Appendix IV	Fluoride (App IV)	mg/l	89%	5	3	8	3	19	0.782	0.804	0.814	1	0	1	0	2	0.317	NA	NA
16_3_115	MW-6	Appendix IV	Lead	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
16_3_116	MW-6	Appendix IV	Lithium	mg/l	0%	5	3	8	3	19	0.093	0.163	0.191	5	3	8	3	19	0.093	0.163	0.191
16_3_117	MW-6	Appendix IV	Mercury	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
16_3_118	MW-6	Appendix IV	Molybdenum	mg/l	0%	5	3	8	3	19	0.210	0.369	0.486	5	3	8	3	19	0.210	0.369	0.486
16_3_121	MW-6	Appendix IV	Radium-226+228	pci/l	11%	5	3	8	3	19	0.568	0.765	NA	4	3	7	3	17	0.407	0.647	NA
16_3_122	MW-6	Appendix IV	Selenium	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
16_3_125	MW-6	Appendix IV	Thallium	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
16_5_111	MW-6	Part 115	Copper	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
16_5_114	MW-6	Part 115	Iron	mg/l	47%	5	3	8	3	19	0.123	0.040 *	0.051	1	2	7	0	10	0.095	0.025 *	0.030 *
16_5_119	MW-6	Part 115	Nickel	mg/l	26%	5	3	8	3	19	0.187	0.355	0.564	4	2	5	3	14	0.162	0.597	0.773
16_5_123	MW-6	Part 115	Silver	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
16_5_128	MW-6	Part 115	Vanadium	mg/l	100%	5	3	8	3	19	0.765	0.796	0.796	NA	NA	NA	NA	NA	NA	NA	NA
16_5_129	MW-6	Part 115	Zinc	mg/l	84%	5	3	8	3	19	0.317	0.128	0.216	1	1	1	0	3	0.368	NA	NA
17_2_105	MW-7	Appendix III	Boron	mg/l	0%	6	0	7	2	15	0.375	0.362	0.402	6	0	7	2	15	0.375	0.362	0.402
17_2_107	MW-7	Appendix III	Calcium	mg/l	0%	6	0	7	2	15	0.267	0.128	0.131	6	0	7	2	15	0.267	0.128	0.131
17_2_108	MW-7	Appendix III	Chloride	mg/l	0%	6	0	7	2	15	0.490	0.495	0.491	6	0	7	2	15	0.490	0.495	0.491
17_2_112	MW-7	Appendix III	Fluoride	mg/l	73%	6	0	7	2	15	0.672	0.697	0.701	2	0	2	0	4	1.000	0.932	0.985
17_2_120	MW-7	Appendix III	pH, Field	su	0%	6	0	7	2	15	0.867	0.631	0.633	6	0	7	2	15	0.867	0.631	0.633

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
17_2_124	MW-7	Appendix III	Sulfate	mg/l	0%	6	0	7	2	15	0.014 *	0.028 *	0.020 *	6	0	7	2	15	0.014 *	0.028 *	0.020 *
17_2_126	MW-7	Appendix III	Total Dissolved Solids	mg/l	0%	6	0	7	2	15	0.121	0.140	0.129	6	0	7	2	15	0.121	0.140	0.129
17_3_101	MW-7	Appendix IV	Antimony	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
17_3_102	MW-7	Appendix IV	Arsenic	mg/l	0%	6	0	7	2	15	0.693	0.571	0.533	6	0	7	2	15	0.693	0.571	0.533
17_3_103	MW-7	Appendix IV	Barium	mg/l	0%	6	0	7	2	15	0.717	0.670	0.631	6	0	7	2	15	0.717	0.670	0.631
17_3_104	MW-7	Appendix IV	Beryllium	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
17_3_106	MW-7	Appendix IV	Cadmium	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
17_3_109	MW-7	Appendix IV	Chromium	mg/l	93%	6	0	7	2	15	0.796	0.858	0.869	0	0	1	0	1	NA	NA	NA
17_3_110	MW-7	Appendix IV	Cobalt	mg/l	87%	6	0	7	2	15	0.848	0.862	0.867	1	0	1	0	2	0.317	NA	NA
17_3_113	MW-7	Appendix IV	Fluoride (App IV)	mg/l	73%	6	0	7	2	15	0.672	0.697	0.701	2	0	2	0	4	1.000	0.932	0.985
17_3_115	MW-7	Appendix IV	Lead	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
17_3_116	MW-7	Appendix IV	Lithium	mg/l	0%	6	0	7	2	15	0.249	0.352	0.372	6	0	7	2	15	0.249	0.352	0.372
17_3_117	MW-7	Appendix IV	Mercury	mg/l	93%	6	0	7	2	15	0.841	0.861	0.861	0	0	1	0	1	NA	NA	NA
17_3_118	MW-7	Appendix IV	Molybdenum	mg/l	0%	6	0	7	2	15	0.306	0.388	0.378	6	0	7	2	15	0.306	0.388	0.378
17_3_121	MW-7	Appendix IV	Radium-226+228	pci/l	0%	6	0	7	2	15	0.933	0.998	0.876	6	0	7	2	15	0.933	0.998	0.876
17_3_122	MW-7	Appendix IV	Selenium	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
17_3_125	MW-7	Appendix IV	Thallium	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
17_5_111	MW-7	Part 115	Copper	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
17_5_114	MW-7	Part 115	Iron	mg/l	0%	6	0	7	2	15	0.319	0.398	0.504	6	0	7	2	15	0.319	0.398	0.504
17_5_119	MW-7	Part 115	Nickel	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
17_5_123	MW-7	Part 115	Silver	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
17_5_128	MW-7	Part 115	Vanadium	mg/l	93%	6	0	7	2	15	0.845	0.899	0.880	1	0	0	0	1	NA	NA	NA
17_5_129	MW-7	Part 115	Zinc	mg/l	73%	6	0	7	2	15	0.329	0.486	0.672	0	0	4	0	4	NA	NA	NA
18_2_105	MW-7C	Appendix III	Boron	mg/l	0%	3	3	5	3	14	0.774	0.612	0.623	3	3	5	3	14	0.774	0.612	0.623
18_2_107	MW-7C	Appendix III	Calcium	mg/l	0%	3	3	5	3	14	0.763	0.987	0.985	3	3	5	3	14	0.763	0.987	0.985
18_2_108	MW-7C	Appendix III	Chloride	mg/l	0%	3	3	5	3	14	0.324	0.445	0.426	3	3	5	3	14	0.324	0.445	0.426
18_2_112	MW-7C	Appendix III	Fluoride	mg/l	86%	3	3	5	3	14	0.566	0.634	0.613	1	0	1	0	2	0.317	NA	NA
18_2_120	MW-7C	Appendix III	pH, Field	su	0%	3	3	5	3	14	0.028 *	0.006 **	0.006 **	3	3	5	3	14	0.028 *	0.006 **	0.006 **
18_2_124	MW-7C	Appendix III	Sulfate	mg/l	0%	3	3	5	3	14	0.026 *	0.000 ***	0.000 ***	3	3	5	3	14	0.026 *	0.000 ***	0.000 ***
18_2_126	MW-7C	Appendix III	Total Dissolved Solids	mg/l	0%	3	3	5	3	14	0.028 *	0.092	0.126	3	3	5	3	14	0.028 *	0.092	0.126
18_3_101	MW-7C	Appendix IV	Antimony	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
18_3_102	MW-7C	Appendix IV	Arsenic	mg/l	0%	3	3	5	3	14	0.321	0.567	0.550	3	3	5	3	14	0.321	0.567	0.550
18_3_103	MW-7C	Appendix IV	Barium	mg/l	0%	3	3	5	3	14	0.112	0.083	0.086	3	3	5	3	14	0.112	0.083	0.086
18_3_104	MW-7C	Appendix IV	Beryllium	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
18_3_106	MW-7C	Appendix IV	Cadmium	mg/l	71%	3	3	5	3	14	0.108	0.106	0.271	0	1	1	2	4	0.259	0.124	0.059
18_3_109	MW-7C	Appendix IV	Chromium	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
18_3_110	MW-7C	Appendix IV	Cobalt	mg/l	93%	3	3	5	3	14	0.566	0.647	0.598	0	0	1	0	1	NA	NA	NA
18_3_113	MW-7C	Appendix IV	Fluoride (App IV)	mg/l	86%	3	3	5	3	14	0.566	0.634	0.613	1	0	1	0	2	0.317	NA	NA
18_3_115	MW-7C	Appendix IV	Lead	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
18_3_116	MW-7C	Appendix IV	Lithium	mg/l	0%	3	3	5	3	14	0.498	0.548	0.543	3	3	5	3	14	0.498	0.548	0.543
18_3_117	MW-7C	Appendix IV	Mercury	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
18_3_118	MW-7C	Appendix IV	Molybdenum	mg/l	0%	3	3	5	3	14	0.193	0.203	0.216	3	3	5	3	14	0.193	0.203	0.216
18_3_121	MW-7C	Appendix IV	Radium-226+228	pci/l	0%	3	3	5	3	14	0.592	0.468	0.611	3	3	5	3	14	0.592	0.468	0.611
18_3_122	MW-7C	Appendix IV	Selenium	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
18_3_125	MW-7C	Appendix IV	Thallium	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
18_5_111	MW-7C	Part 115	Copper	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
18_5_114	MW-7C	Part 115	Iron	mg/l	0%	3	3	5	3	14	0.307	0.426	0.452	3	3	5	3	14	0.307	0.426	0.452
18_5_119	MW-7C	Part 115	Nickel	mg/l	0%	3	3	5	3	14	0.158	0.099	0.108	3	3	5	3	14	0.158	0.099	0.108
18_5_123	MW-7C	Part 115	Silver	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
18_5_128	MW-7C	Part 115	Vanadium	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
18_5_129	MW-7C	Part 115	Zinc	mg/l	79%	3	3	5	3	14	0.701	0.617	0.525	1	0	2	0	3	0.221	0.526	0.403
19_2_105	MW-8	Appendix III	Boron	mg/l	7%	6	0	7	2	15	0.053	0.025 *	0.014 *	5	0	7	2	14	0.102	0.048 *	0.035 *
19_2_107	MW-8	Appendix III	Calcium	mg/l	0%	6	0	7	2	15	0.051	0.050	0.056	6	0	7	2	15	0.051	0.050	0.056
19_2_108	MW-8	Appendix III	Chloride	mg/l	13%	6	0	7	2	15	0.365	0.455	0.336	4	0	7	2	13	0.890	0.734	0.798
19_2_112	MW-8	Appendix III	Fluoride	mg/l	80%	6	0	7	2	15	0.548	0.578	0.579	2	0	1	0	3	1.000	0.945	0.953
19_2_120	MW-8	Appendix III	pH, Field	su	0%	6	0	7	2	15	0.650	0.984	0.989	6	0	7	2	15	0.650	0.984	0.989
19_2_124	MW-8	Appendix III	Sulfate	mg/l	0%	6	0	7	2	15	0.281	0.342	0.315	6	0	7	2	15	0.281	0.342	0.315
19_2_126	MW-8	Appendix III	Total Dissolved Solids	mg/l	0%	6	0	7	2	15	0.918	0.937	0.944	6	0	7	2	15	0.918	0.937	0.944
19_3_101	MW-8	Appendix IV	Antimony	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
19_3_102	MW-8	Appendix IV	Arsenic	mg/l	87%	6	0	7	2	15	0.827	0.702	0.650	1	0	1	0	2	0.317	NA	NA
19_3_103	MW-8	Appendix IV	Barium	mg/l	0%	6	0	7	2	15	0.407	0.267	0.257	6	0	7	2	15	0.407	0.267	0.257
19_3_104	MW-8	Appendix IV	Beryllium	mg/l	93%	6	0	7	2	15	0.827	0.856	0.850	0	0	1	0	1	NA	NA	NA
19_3_106	MW-8	Appendix IV	Cadmium	mg/l	93%	6	0	7	2	15	0.827	0.809	0.731	0	0	1	0	1	NA	NA	NA
19_3_109	MW-8	Appendix IV	Chromium	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
19_3_110	MW-8	Appendix IV	Cobalt	mg/l	93%	6	0	7	2	15	0.827	0.856	0.796	0	0	1	0	1	NA	NA	NA
19_3_113	MW-8	Appendix IV	Fluoride (App IV)	mg/l	80%	6	0	7	2	15	0.548	0.578	0.579	2	0	1	0	3	1.000	0.945	0.953
19_3_115	MW-8	Appendix IV	Lead	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
19_3_116	MW-8	Appendix IV	Lithium	mg/l	40%	6	0	7	2	15	0.169	0.050	0.081	3	0	4	2	9	0.215	0.134	0.163
19_3_117	MW-8	Appendix IV	Mercury	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
19_3_118	MW-8	Appendix IV	Molybdenum	mg/l	73%	6	0	7	2	15	0.533	0.161	0.215	1	0	2	1	4	0.407	0.220	0.360
19_3_121	MW-8	Appendix IV	Radium-226+228	pci/l	0%	6	0	7	2	15	0.609	0.600	0.819	6	0	7	2	15	0.609	0.600	0.819
19_3_122	MW-8	Appendix IV	Selenium	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
19_3_125	MW-8	Appendix IV	Thallium	mg/l	93%	6	0	7	2	15	0.827	0.858	0.854	0	0	1	0	1	NA	NA	NA
19_5_111	MW-8	Part 115	Copper	mg/l	93%	6	0	7	2	15	0.845	0.783	0.897	1	0	0	0	1	NA	NA	NA
19_5_114	MW-8	Part 115	Iron	mg/l	87%	6	0	7	2	15	0.338	0.476	0.410	1	0	1	0	2	0.317	NA	NA
19_5_119	MW-8	Part 115	Nickel	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
19_5_123	MW-8	Part 115	Silver	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
19_5_128	MW-8	Part 115	Vanadium	mg/l	93%	6	0	7	2	15	0.841	0.861	0.861	1	0	0	0	1	NA	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
19_5_129	MW-8	Part 115	Zinc	mg/l	87%	6	0	7	2	15	0.882	0.934	0.878	1	0	1	0	2	0.317	NA	NA
20_2_105	MW-9	Appendix III	Boron	mg/l	93%	6	0	7	2	15	0.841	0.861	0.861	0	0	1	0	1	NA	NA	NA
20_2_107	MW-9	Appendix III	Calcium	mg/l	0%	6	0	7	2	15	0.270	0.377	0.331	6	0	7	2	15	0.270	0.377	0.331
20_2_108	MW-9	Appendix III	Chloride	mg/l	67%	6	0	7	2	15	0.819	0.776	0.706	3	0	2	0	5	0.564	0.813	0.755
20_2_112	MW-9	Appendix III	Fluoride	mg/l	93%	6	0	7	2	15	0.586	0.580	0.596	1	0	0	0	1	NA	NA	NA
20_2_120	MW-9	Appendix III	pH, Field	su	0%	6	0	7	2	15	0.398	0.739	0.727	6	0	7	2	15	0.398	0.739	0.727
20_2_124	MW-9	Appendix III	Sulfate	mg/l	53%	6	0	7	2	15	0.688	0.674	0.753	3	0	4	0	7	0.724	0.517	0.730
20_2_126	MW-9	Appendix III	Total Dissolved Solids	mg/l	0%	6	0	7	2	15	0.254	0.387	0.351	6	0	7	2	15	0.254	0.387	0.351
20_3_101	MW-9	Appendix IV	Antimony	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
20_3_102	MW-9	Appendix IV	Arsenic	mg/l	87%	6	0	7	2	15	0.882	0.933	0.939	1	0	1	0	2	0.317	NA	NA
20_3_103	MW-9	Appendix IV	Barium	mg/l	0%	6	0	7	2	15	0.775	0.692	0.716	6	0	7	2	15	0.775	0.692	0.716
20_3_104	MW-9	Appendix IV	Beryllium	mg/l	93%	6	0	7	2	15	0.827	0.859	0.858	0	0	1	0	1	NA	NA	NA
20_3_106	MW-9	Appendix IV	Cadmium	mg/l	93%	6	0	7	2	15	0.827	0.836	0.786	0	0	1	0	1	NA	NA	NA
20_3_109	MW-9	Appendix IV	Chromium	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
20_3_110	MW-9	Appendix IV	Cobalt	mg/l	93%	6	0	7	2	15	0.827	0.859	0.843	0	0	1	0	1	NA	NA	NA
20_3_113	MW-9	Appendix IV	Fluoride (App IV)	mg/l	93%	6	0	7	2	15	0.586	0.580	0.596	1	0	0	0	1	NA	NA	NA
20_3_115	MW-9	Appendix IV	Lead	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
20_3_116	MW-9	Appendix IV	Lithium	mg/l	100%	6	0	7	2	15	0.796	0.680	0.741	NA	NA	NA	NA	NA	NA	NA	NA
20_3_117	MW-9	Appendix IV	Mercury	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
20_3_118	MW-9	Appendix IV	Molybdenum	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
20_3_121	MW-9	Appendix IV	Radium-226+228	pci/l	0%	6	0	7	2	15	0.389	0.370	NA	6	0	7	2	15	0.389	0.370	NA
20_3_122	MW-9	Appendix IV	Selenium	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
20_3_125	MW-9	Appendix IV	Thallium	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
20_5_111	MW-9	Part 115	Copper	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
20_5_114	MW-9	Part 115	Iron	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
20_5_119	MW-9	Part 115	Nickel	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
20_5_123	MW-9	Part 115	Silver	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
20_5_128	MW-9	Part 115	Vanadium	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
20_5_129	MW-9	Part 115	Zinc	mg/l	87%	6	0	7	2	15	0.803	0.834	0.884	2	0	0	0	2	NA	NA	NA
21_2_105	MW-10	Appendix III	Boron	mg/l	7%	6	0	7	2	15	0.399	0.256	0.265	5	0	7	2	14	0.277	0.183	0.177
21_2_107	MW-10	Appendix III	Calcium	mg/l	0%	6	0	7	2	15	0.451	0.466	0.478	6	0	7	2	15	0.451	0.466	0.478
21_2_108	MW-10	Appendix III	Chloride	mg/l	60%	6	0	7	2	15	0.907	0.917	0.802	3	0	3	0	6	0.658	0.826	0.900
21_2_112	MW-10	Appendix III	Fluoride	mg/l	80%	6	0	7	2	15	0.466	0.567	0.525	2	0	1	0	3	0.221	0.322	0.368
21_2_120	MW-10	Appendix III	pH, Field	su	0%	6	0	7	2	15	0.840	0.763	0.771	6	0	7	2	15	0.840	0.763	0.771
21_2_124	MW-10	Appendix III	Sulfate	mg/l	0%	6	0	7	2	15	0.250	0.207	0.174	6	0	7	2	15	0.250	0.207	0.174
21_2_126	MW-10	Appendix III	Total Dissolved Solids	mg/l	0%	6	0	7	2	15	0.229	0.261	0.301	6	0	7	2	15	0.229	0.261	0.301
21_3_101	MW-10	Appendix IV	Antimony	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
21_3_102	MW-10	Appendix IV	Arsenic	mg/l	87%	6	0	7	2	15	0.827	0.842	0.827	1	0	1	0	2	0.317	NA	NA
21_3_103	MW-10	Appendix IV	Barium	mg/l	0%	6	0	7	2	15	0.418	0.540	0.543	6	0	7	2	15	0.418	0.540	0.543

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
21_3_104	MW-10	Appendix IV	Beryllium	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
21_3_106	MW-10	Appendix IV	Cadmium	mg/l	93%	6	0	7	2	15	0.827	0.856	0.846	0	0	1	0	1	NA	NA	NA
21_3_109	MW-10	Appendix IV	Chromium	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
21_3_110	MW-10	Appendix IV	Cobalt	mg/l	93%	6	0	7	2	15	0.841	0.861	0.861	0	0	1	0	1	NA	NA	NA
21_3_113	MW-10	Appendix IV	Fluoride (App IV)	mg/l	80%	6	0	7	2	15	0.466	0.567	0.525	2	0	1	0	3	0.221	0.322	0.368
21_3_115	MW-10	Appendix IV	Lead	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
21_3_116	MW-10	Appendix IV	Lithium	mg/l	100%	6	0	7	2	15	0.796	0.680	0.741	NA	NA	NA	NA	NA	NA	NA	NA
21_3_117	MW-10	Appendix IV	Mercury	mg/l	93%	6	0	7	2	15	0.841	0.861	0.861	0	0	1	0	1	NA	NA	NA
21_3_118	MW-10	Appendix IV	Molybdenum	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
21_3_121	MW-10	Appendix IV	Radium-226+228	pci/l	0%	6	0	7	2	15	0.251	0.230	0.172	6	0	7	2	15	0.251	0.230	0.172
21_3_122	MW-10	Appendix IV	Selenium	mg/l	87%	6	0	7	2	15	0.848	0.864	0.866	1	0	1	0	2	0.317	NA	NA
21_3_125	MW-10	Appendix IV	Thallium	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
21_5_111	MW-10	Part 115	Copper	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
21_5_114	MW-10	Part 115	Iron	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
21_5_119	MW-10	Part 115	Nickel	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
21_5_123	MW-10	Part 115	Silver	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
21_5_128	MW-10	Part 115	Vanadium	mg/l	100%	6	0	7	2	15	0.841	0.861	0.861	NA	NA	NA	NA	NA	NA	NA	NA
21_5_129	MW-10	Part 115	Zinc	mg/l	80%	6	0	7	2	15	1.000	0.770	0.990	1	0	2	0	3	0.221	0.262	0.467
22_2_105	MW-13	Appendix III	Boron	mg/l	0%	4	2	6	2	14	0.035 *	0.002 **	0.001 **	4	2	6	2	14	0.035 *	0.002 **	0.001 **
22_2_107	MW-13	Appendix III	Calcium	mg/l	0%	4	2	6	2	14	0.283	0.233	0.213	4	2	6	2	14	0.283	0.233	0.213
22_2_108	MW-13	Appendix III	Chloride	mg/l	14%	4	2	6	2	14	0.218	0.488	0.203	3	1	6	2	12	0.373	0.668	0.415
22_2_112	MW-13	Appendix III	Fluoride	mg/l	86%	4	2	6	2	14	0.779	0.837	0.827	1	0	1	0	2	0.317	NA	NA
22_2_120	MW-13	Appendix III	pH, Field	su	0%	4	2	6	2	14	0.221	0.417	0.426	4	2	6	2	14	0.221	0.417	0.426
22_2_124	MW-13	Appendix III	Sulfate	mg/l	0%	4	2	6	2	14	0.263	0.444	0.359	4	2	6	2	14	0.263	0.444	0.359
22_2_126	MW-13	Appendix III	Total Dissolved Solids	mg/l	0%	4	2	6	2	14	0.268	0.357	0.294	4	2	6	2	14	0.268	0.357	0.294
22_3_101	MW-13	Appendix IV	Antimony	mg/l	100%	4	2	6	2	14	0.803	0.842	0.842	NA	NA	NA	NA	NA	NA	NA	NA
22_3_102	MW-13	Appendix IV	Arsenic	mg/l	64%	4	2	6	2	14	0.574	0.507	0.509	2	0	3	0	5	0.248	0.310	0.329
22_3_103	MW-13	Appendix IV	Barium	mg/l	0%	4	2	6	2	14	0.146	0.430	0.316	4	2	6	2	14	0.146	0.430	0.316
22_3_104	MW-13	Appendix IV	Beryllium	mg/l	100%	4	2	6	2	14	0.803	0.842	0.842	NA	NA	NA	NA	NA	NA	NA	NA
22_3_106	MW-13	Appendix IV	Cadmium	mg/l	100%	4	2	6	2	14	0.803	0.842	0.842	NA	NA	NA	NA	NA	NA	NA	NA
22_3_109	MW-13	Appendix IV	Chromium	mg/l	100%	4	2	6	2	14	0.803	0.842	0.842	NA	NA	NA	NA	NA	NA	NA	NA
22_3_110	MW-13	Appendix IV	Cobalt	mg/l	86%	4	2	6	2	14	0.822	0.854	0.873	1	0	1	0	2	0.317	NA	NA
22_3_113	MW-13	Appendix IV	Fluoride (App IV)	mg/l	86%	4	2	6	2	14	0.779	0.837	0.827	1	0	1	0	2	0.317	NA	NA
22_3_115	MW-13	Appendix IV	Lead	mg/l	100%	4	2	6	2	14	0.803	0.842	0.842	NA	NA	NA	NA	NA	NA	NA	NA
22_3_116	MW-13	Appendix IV	Lithium	mg/l	100%	4	2	6	2	14	0.803	0.842	0.842	NA	NA	NA	NA	NA	NA	NA	NA
22_3_117	MW-13	Appendix IV	Mercury	mg/l	100%	4	2	6	2	14	0.803	0.842	0.842	NA	NA	NA	NA	NA	NA	NA	NA
22_3_118	MW-13	Appendix IV	Molybdenum	mg/l	100%	4	2	6	2	14	0.803	0.842	0.842	NA	NA	NA	NA	NA	NA	NA	NA
22_3_121	MW-13	Appendix IV	Radium-226+228	pci/l	7%	4	2	6	2	14	0.781	0.738	0.912	3	2	6	2	13	0.738	0.785	0.909
22_3_122	MW-13	Appendix IV	Selenium	mg/l	93%	4	2	6	2	14	0.439	0.469	0.495	0	0	1	0	1	NA	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
22_3_125	MW-13	Appendix IV	Thallium	mg/l	100%	4	2	6	2	14	0.803	0.842	0.842	NA	NA	NA	NA	NA	NA	NA	NA
22_5_111	MW-13	Part 115	Copper	mg/l	100%	4	2	6	2	14	0.803	0.842	0.842	NA	NA	NA	NA	NA	NA	NA	NA
22_5_114	MW-13	Part 115	Iron	mg/l	7%	4	2	6	2	14	0.093	0.360	0.246	4	1	6	2	13	0.188	0.448	0.377
22_5_119	MW-13	Part 115	Nickel	mg/l	100%	4	2	6	2	14	0.803	0.842	0.842	NA	NA	NA	NA	NA	NA	NA	NA
22_5_123	MW-13	Part 115	Silver	mg/l	100%	4	2	6	2	14	0.803	0.842	0.842	NA	NA	NA	NA	NA	NA	NA	NA
22_5_128	MW-13	Part 115	Vanadium	mg/l	93%	4	2	6	2	14	0.779	0.815	0.774	0	0	1	0	1	NA	NA	NA
22_5_129	MW-13	Part 115	Zinc	mg/l	86%	4	2	6	2	14	0.890	0.978	0.977	1	0	1	0	2	0.317	NA	NA
23_2_105	MW-14	Appendix III	Boron	mg/l	0%	4	2	5	1	12	0.247	0.332	0.347	4	2	5	1	12	0.247	0.332	0.347
23_2_107	MW-14	Appendix III	Calcium	mg/l	0%	4	2	5	1	12	0.441	0.687	0.674	4	2	5	1	12	0.441	0.687	0.674
23_2_108	MW-14	Appendix III	Chloride	mg/l	0%	4	2	5	1	12	0.558	0.581	0.566	4	2	5	1	12	0.558	0.581	0.566
23_2_112	MW-14	Appendix III	Fluoride	mg/l	83%	4	2	5	1	12	0.840	0.890	0.883	1	0	1	0	2	0.317	NA	NA
23_2_120	MW-14	Appendix III	pH, Field	su	0%	4	2	5	1	12	0.317	0.393	0.391	4	2	5	1	12	0.317	0.393	0.391
23_2_124	MW-14	Appendix III	Sulfate	mg/l	0%	4	2	5	1	12	0.512	0.161	0.185	4	2	5	1	12	0.512	0.161	0.185
23_2_126	MW-14	Appendix III	Total Dissolved Solids	mg/l	8%	4	2	5	1	12	0.589	0.187	0.164	4	1	5	1	11	0.683	0.770	0.766
23_3_101	MW-14	Appendix IV	Antimony	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
23_3_102	MW-14	Appendix IV	Arsenic	mg/l	0%	4	2	5	1	12	0.352	0.442	0.529	4	2	5	1	12	0.352	0.442	0.529
23_3_103	MW-14	Appendix IV	Barium	mg/l	0%	4	2	5	1	12	0.563	0.505	0.505	4	2	5	1	12	0.563	0.505	0.505
23_3_104	MW-14	Appendix IV	Beryllium	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
23_3_106	MW-14	Appendix IV	Cadmium	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
23_3_109	MW-14	Appendix IV	Chromium	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
23_3_110	MW-14	Appendix IV	Cobalt	mg/l	83%	4	2	5	1	12	0.866	0.895	0.899	1	0	1	0	2	0.317	NA	NA
23_3_113	MW-14	Appendix IV	Fluoride (App IV)	mg/l	83%	4	2	5	1	12	0.840	0.890	0.883	1	0	1	0	2	0.317	NA	NA
23_3_115	MW-14	Appendix IV	Lead	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
23_3_116	MW-14	Appendix IV	Lithium	mg/l	0%	4	2	5	1	12	0.304	0.444	0.460	4	2	5	1	12	0.304	0.444	0.460
23_3_117	MW-14	Appendix IV	Mercury	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
23_3_118	MW-14	Appendix IV	Molybdenum	mg/l	0%	4	2	5	1	12	0.759	0.918	0.904	4	2	5	1	12	0.759	0.918	0.904
23_3_121	MW-14	Appendix IV	Radium-226+228	pci/l	17%	4	2	5	1	12	0.515	0.975	0.956	3	2	4	1	10	0.712	0.962	0.972
23_3_122	MW-14	Appendix IV	Selenium	mg/l	83%	4	2	5	1	12	0.745	0.740	0.904	0	0	2	0	2	NA	NA	NA
23_3_125	MW-14	Appendix IV	Thallium	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
23_5_111	MW-14	Part 115	Copper	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
23_5_114	MW-14	Part 115	Iron	mg/l	0%	4	2	5	1	12	0.530	0.736	0.715	4	2	5	1	12	0.530	0.736	0.715
23_5_119	MW-14	Part 115	Nickel	mg/l	50%	4	2	5	1	12	0.960	0.979	0.981	4	0	2	0	6	0.623	0.612	0.646
23_5_123	MW-14	Part 115	Silver	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
23_5_128	MW-14	Part 115	Vanadium	mg/l	83%	4	2	5	1	12	0.866	0.899	0.902	1	0	1	0	2	0.317	NA	NA
23_5_129	MW-14	Part 115	Zinc	mg/l	83%	4	2	5	1	12	0.233	0.224	0.281	2	0	0	0	2	NA	NA	NA
24_2_105	MW-15	Appendix III	Boron	mg/l	0%	4	2	5	1	12	0.054	0.043 *	0.055	4	2	5	1	12	0.054	0.043 *	0.055
24_2_107	MW-15	Appendix III	Calcium	mg/l	0%	4	2	5	1	12	0.075	0.086	0.059	4	2	5	1	12	0.075	0.086	0.059
24_2_108	MW-15	Appendix III	Chloride	mg/l	0%	4	2	5	1	12	0.267	0.249	0.255	4	2	5	1	12	0.267	0.249	0.255
24_2_112	MW-15	Appendix III	Fluoride	mg/l	83%	4	2	5	1	12	0.840	0.893	0.893	1	0	1	0	2	0.317	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
24_2_120	MW-15	Appendix III	pH, Field	su	0%	4	2	5	1	12	0.111	0.148	0.149	4	2	5	1	12	0.111	0.148	0.149
24_2_124	MW-15	Appendix III	Sulfate	mg/l	0%	4	2	5	1	12	0.537	0.491	0.490	4	2	5	1	12	0.537	0.491	0.490
24_2_126	MW-15	Appendix III	Total Dissolved Solids	mg/l	0%	4	2	5	1	12	0.507	0.606	0.592	4	2	5	1	12	0.507	0.606	0.592
24_3_101	MW-15	Appendix IV	Antimony	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
24_3_102	MW-15	Appendix IV	Arsenic	mg/l	75%	4	2	5	1	12	0.840	0.892	0.891	2	0	1	0	3	1.000	0.677	0.682
24_3_103	MW-15	Appendix IV	Barium	mg/l	0%	4	2	5	1	12	0.128	0.157	0.106	4	2	5	1	12	0.128	0.157	0.106
24_3_104	MW-15	Appendix IV	Beryllium	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
24_3_106	MW-15	Appendix IV	Cadmium	mg/l	92%	4	2	5	1	12	0.840	0.893	0.892	0	0	1	0	1	NA	NA	NA
24_3_109	MW-15	Appendix IV	Chromium	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
24_3_110	MW-15	Appendix IV	Cobalt	mg/l	92%	4	2	5	1	12	0.840	0.885	0.823	0	0	1	0	1	NA	NA	NA
24_3_113	MW-15	Appendix IV	Fluoride (App IV)	mg/l	83%	4	2	5	1	12	0.840	0.893	0.893	1	0	1	0	2	0.317	NA	NA
24_3_115	MW-15	Appendix IV	Lead	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
24_3_116	MW-15	Appendix IV	Lithium	mg/l	92%	4	2	5	1	12	0.937	0.742	0.840	1	0	0	0	1	NA	NA	NA
24_3_117	MW-15	Appendix IV	Mercury	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
24_3_118	MW-15	Appendix IV	Molybdenum	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
24_3_121	MW-15	Appendix IV	Radium-226+228	pci/l	0%	4	2	5	1	12	0.642	0.406	0.508	4	2	5	1	12	0.642	0.406	0.508
24_3_122	MW-15	Appendix IV	Selenium	mg/l	42%	4	2	5	1	12	0.107	0.034 *	0.133	3	2	2	0	7	0.180	0.170	0.148
24_3_125	MW-15	Appendix IV	Thallium	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
24_5_111	MW-15	Part 115	Copper	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
24_5_114	MW-15	Part 115	Iron	mg/l	8%	4	2	5	1	12	0.096	0.420	0.096	3	2	5	1	11	0.103	0.530	0.129
24_5_119	MW-15	Part 115	Nickel	mg/l	92%	4	2	5	1	12	0.840	0.884	0.875	0	0	1	0	1	NA	NA	NA
24_5_123	MW-15	Part 115	Silver	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
24_5_128	MW-15	Part 115	Vanadium	mg/l	100%	4	2	5	1	12	0.857	0.893	0.893	NA	NA	NA	NA	NA	NA	NA	NA
24_5_129	MW-15	Part 115	Zinc	mg/l	83%	4	2	5	1	12	0.374	0.154	0.360	0	1	1	0	2	0.317	NA	NA
25_2_105	MW-16A	Appendix III	Boron	mg/l	0%	3	3	4	3	13	0.099	0.047 *	0.022 *	3	3	4	3	13	0.099	0.047 *	0.022 *
25_2_107	MW-16A	Appendix III	Calcium	mg/l	0%	3	3	4	3	13	0.017 *	0.001 **	0.001 **	3	3	4	3	13	0.017 *	0.001 **	0.001 **
25_2_108	MW-16A	Appendix III	Chloride	mg/l	0%	3	3	4	3	13	0.169	0.137	0.149	3	3	4	3	13	0.169	0.137	0.149
25_2_112	MW-16A	Appendix III	Fluoride	mg/l	85%	3	3	4	3	13	1.000	0.711	0.975	1	0	1	0	2	0.317	NA	NA
25_2_120	MW-16A	Appendix III	pH, Field	su	0%	3	3	4	3	13	0.645	0.396	0.401	3	3	4	3	13	0.645	0.396	0.401
25_2_124	MW-16A	Appendix III	Sulfate	mg/l	0%	3	3	4	3	13	0.040 *	0.029 *	0.012 *	3	3	4	3	13	0.040 *	0.029 *	0.012 *
25_2_126	MW-16A	Appendix III	Total Dissolved Solids	mg/l	0%	3	3	4	3	13	0.023 *	0.002 **	0.001 **	3	3	4	3	13	0.023 *	0.002 **	0.001 **
25_3_101	MW-16A	Appendix IV	Antimony	mg/l	92%	3	3	4	3	13	0.561	0.636	0.626	0	0	1	0	1	NA	NA	NA
25_3_102	MW-16A	Appendix IV	Arsenic	mg/l	0%	3	3	4	3	13	0.417	0.599	0.558	3	3	4	3	13	0.417	0.599	0.558
25_3_103	MW-16A	Appendix IV	Barium	mg/l	0%	3	3	4	3	13	0.010 *	0.000 ***	0.000 ***	3	3	4	3	13	0.010 *	0.000 ***	0.000 ***
25_3_104	MW-16A	Appendix IV	Beryllium	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
25_3_106	MW-16A	Appendix IV	Cadmium	mg/l	92%	3	3	4	3	13	0.561	0.566	0.499	0	0	1	0	1	NA	NA	NA
25_3_109	MW-16A	Appendix IV	Chromium	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
25_3_110	MW-16A	Appendix IV	Cobalt	mg/l	85%	3	3	4	3	13	0.599	0.644	0.648	1	0	1	0	2	0.317	NA	NA
25_3_113	MW-16A	Appendix IV	Fluoride (App IV)	mg/l	85%	3	3	4	3	13	1.000	0.711	0.975	1	0	1	0	2	0.317	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
25_3_115	MW-16A	Appendix IV	Lead	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
25_3_116	MW-16A	Appendix IV	Lithium	mg/l	77%	3	3	4	3	13	0.561	0.595	0.587	2	0	1	0	3	1.000	0.832	0.858
25_3_117	MW-16A	Appendix IV	Mercury	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
25_3_118	MW-16A	Appendix IV	Molybdenum	mg/l	85%	3	3	4	3	13	0.561	0.572	0.535	1	0	1	0	2	0.317	NA	NA
25_3_121	MW-16A	Appendix IV	Radium-226+228	pci/l	0%	3	3	4	3	13	0.884	0.898	0.916	3	3	4	3	13	0.884	0.898	0.916
25_3_122	MW-16A	Appendix IV	Selenium	mg/l	92%	3	3	4	3	13	0.582	0.641	0.641	0	0	0	1	1	NA	NA	NA
25_3_125	MW-16A	Appendix IV	Thallium	mg/l	92%	3	3	4	3	13	0.561	0.631	0.619	0	0	1	0	1	NA	NA	NA
25_5_111	MW-16A	Part 115	Copper	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
25_5_114	MW-16A	Part 115	Iron	mg/l	0%	3	3	4	3	13	0.037 *	0.022 *	0.019 *	3	3	4	3	13	0.037 *	0.022 *	0.019 *
25_5_119	MW-16A	Part 115	Nickel	mg/l	85%	3	3	4	3	13	0.561	0.609	0.583	1	0	1	0	2	0.317	NA	NA
25_5_123	MW-16A	Part 115	Silver	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
25_5_128	MW-16A	Part 115	Vanadium	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
25_5_129	MW-16A	Part 115	Zinc	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
26_2_105	MW-16B	Appendix III	Boron	mg/l	0%	3	3	4	3	13	0.093	0.030 *	0.034 *	3	3	4	3	13	0.093	0.030 *	0.034 *
26_2_107	MW-16B	Appendix III	Calcium	mg/l	0%	3	3	4	3	13	0.134	0.120	0.125	3	3	4	3	13	0.134	0.120	0.125
26_2_108	MW-16B	Appendix III	Chloride	mg/l	38%	3	3	4	3	13	0.239	0.189	0.178	2	2	3	1	8	0.208	0.233	0.152
26_2_112	MW-16B	Appendix III	Fluoride	mg/l	62%	3	3	4	3	13	0.147	0.445	0.488	2	0	3	0	5	0.564	0.634	0.588
26_2_120	MW-16B	Appendix III	pH, Field	su	0%	3	3	4	3	13	0.239	0.348	0.352	3	3	4	3	13	0.239	0.348	0.352
26_2_124	MW-16B	Appendix III	Sulfate	mg/l	0%	3	3	4	3	13	0.085	0.121	0.089	3	3	4	3	13	0.085	0.121	0.089
26_2_126	MW-16B	Appendix III	Total Dissolved Solids	mg/l	0%	3	3	4	3	13	0.178	0.319	0.325	3	3	4	3	13	0.178	0.319	0.325
26_3_101	MW-16B	Appendix IV	Antimony	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
26_3_102	MW-16B	Appendix IV	Arsenic	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
26_3_103	MW-16B	Appendix IV	Barium	mg/l	0%	3	3	4	3	13	0.062	0.076	0.075	3	3	4	3	13	0.062	0.076	0.075
26_3_104	MW-16B	Appendix IV	Beryllium	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
26_3_106	MW-16B	Appendix IV	Cadmium	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
26_3_109	MW-16B	Appendix IV	Chromium	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
26_3_110	MW-16B	Appendix IV	Cobalt	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
26_3_113	MW-16B	Appendix IV	Fluoride (App IV)	mg/l	62%	3	3	4	3	13	0.147	0.445	0.488	2	0	3	0	5	0.564	0.634	0.588
26_3_115	MW-16B	Appendix IV	Lead	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
26_3_116	MW-16B	Appendix IV	Lithium	mg/l	0%	3	3	4	3	13	0.199	0.213	0.219	3	3	4	3	13	0.199	0.213	0.219
26_3_117	MW-16B	Appendix IV	Mercury	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
26_3_118	MW-16B	Appendix IV	Molybdenum	mg/l	0%	3	3	4	3	13	0.257	0.298	0.278	3	3	4	3	13	0.257	0.298	0.278
26_3_121	MW-16B	Appendix IV	Radium-226+228	pci/l	0%	3	3	4	3	13	0.625	0.498	0.536	3	3	4	3	13	0.625	0.498	0.536
26_3_122	MW-16B	Appendix IV	Selenium	mg/l	92%	3	3	4	3	13	0.338	0.548	0.600	0	0	0	1	1	NA	NA	NA
26_3_125	MW-16B	Appendix IV	Thallium	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
26_5_111	MW-16B	Part 115	Copper	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
26_5_114	MW-16B	Part 115	Iron	mg/l	0%	3	3	4	3	13	0.210	0.331	0.268	3	3	4	3	13	0.210	0.331	0.268
26_5_119	MW-16B	Part 115	Nickel	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
26_5_123	MW-16B	Part 115	Silver	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
26_5_128	MW-16B	Part 115	Vanadium	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
26_5_129	MW-16B	Part 115	Zinc	mg/l	92%	3	3	4	3	13	0.561	0.566	0.505	0	0	1	0	1	NA	NA	NA
27_2_105	MW-17A	Appendix III	Boron	mg/l	0%	3	0	2	3	8	0.566	0.546	0.544	3	0	2	3	8	0.566	0.546	0.544
27_2_107	MW-17A	Appendix III	Calcium	mg/l	0%	3	0	2	3	8	0.780	0.536	0.536	3	0	2	3	8	0.780	0.536	0.536
27_2_108	MW-17A	Appendix III	Chloride	mg/l	0%	3	0	2	3	8	0.069	0.029 *	0.028 *	3	0	2	3	8	0.069	0.029 *	0.028 *
27_2_112	MW-17A	Appendix III	Fluoride	mg/l	38%	3	0	2	3	8	0.506	0.425	0.437	2	0	2	1	5	0.368	0.644	0.629
27_2_120	MW-17A	Appendix III	pH, Field	su	0%	3	0	2	3	8	0.133	0.167	0.163	3	0	2	3	8	0.133	0.167	0.163
27_2_124	MW-17A	Appendix III	Sulfate	mg/l	0%	3	0	2	3	8	0.133	0.234	0.259	3	0	2	3	8	0.133	0.234	0.259
27_2_126	MW-17A	Appendix III	Total Dissolved Solids	mg/l	0%	3	0	2	3	8	0.786	0.774	0.775	3	0	2	3	8	0.786	0.774	0.775
27_3_101	MW-17A	Appendix IV	Antimony	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
27_3_102	MW-17A	Appendix IV	Arsenic	mg/l	12%	3	0	2	3	8	0.796	0.846	0.893	3	0	2	2	7	0.977	0.945	0.962
27_3_103	MW-17A	Appendix IV	Barium	mg/l	0%	3	0	2	3	8	0.828	0.715	0.756	3	0	2	3	8	0.828	0.715	0.756
27_3_104	MW-17A	Appendix IV	Beryllium	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
27_3_106	MW-17A	Appendix IV	Cadmium	mg/l	88%	3	0	2	3	8	0.534	0.466	0.415	0	0	1	0	1	NA	NA	NA
27_3_109	MW-17A	Appendix IV	Chromium	mg/l	100%	3	0	2	3	8	0.323	0.466	0.370	NA	NA	NA	NA	NA	NA	NA	NA
27_3_110	MW-17A	Appendix IV	Cobalt	mg/l	88%	3	0	2	3	8	0.614	0.430	0.472	0	0	1	0	1	NA	NA	NA
27_3_113	MW-17A	Appendix IV	Fluoride (App IV)	mg/l	38%	3	0	2	3	8	0.506	0.425	0.437	2	0	2	1	5	0.368	0.644	0.629
27_3_115	MW-17A	Appendix IV	Lead	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
27_3_116	MW-17A	Appendix IV	Lithium	mg/l	0%	3	0	2	3	8	0.575	0.861	0.873	3	0	2	3	8	0.575	0.861	0.873
27_3_117	MW-17A	Appendix IV	Mercury	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
27_3_118	MW-17A	Appendix IV	Molybdenum	mg/l	0%	3	0	2	3	8	0.090	0.047 *	0.055	3	0	2	3	8	0.090	0.047 *	0.055
27_3_121	MW-17A	Appendix IV	Radium-226+228	pci/l	12%	3	0	2	3	8	0.566	0.623	0.747	2	0	2	3	7	0.507	0.418	0.535
27_3_122	MW-17A	Appendix IV	Selenium	mg/l	88%	3	0	2	3	8	0.614	0.438	0.456	0	0	1	0	1	NA	NA	NA
27_3_125	MW-17A	Appendix IV	Thallium	mg/l	88%	3	0	2	3	8	0.614	0.513	0.578	0	0	1	0	1	NA	NA	NA
27_5_111	MW-17A	Part 115	Copper	mg/l	100%	3	0	2	3	8	0.323	0.471	0.380	NA	NA	NA	NA	NA	NA	NA	NA
27_5_114	MW-17A	Part 115	Iron	mg/l	0%	3	0	2	3	8	0.603	0.379	0.404	3	0	2	3	8	0.603	0.379	0.404
27_5_119	MW-17A	Part 115	Nickel	mg/l	12%	3	0	2	3	8	0.482	0.621	0.742	3	0	2	2	7	0.080	0.035 *	0.026 *
27_5_123	MW-17A	Part 115	Silver	mg/l	100%	3	0	2	3	8	0.323	0.460	0.363	NA	NA	NA	NA	NA	NA	NA	NA
27_5_128	MW-17A	Part 115	Vanadium	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
27_5_129	MW-17A	Part 115	Zinc	mg/l	50%	3	0	2	3	8	0.694	0.590	0.687	1	0	2	1	4	0.259	0.726	0.525
28_2_105	MW-17B	Appendix III	Boron	mg/l	0%	3	0	2	3	8	0.742	0.530	0.563	3	0	2	3	8	0.742	0.530	0.563
28_2_107	MW-17B	Appendix III	Calcium	mg/l	0%	3	0	2	3	8	0.306	0.485	0.474	3	0	2	3	8	0.306	0.485	0.474
28_2_108	MW-17B	Appendix III	Chloride	mg/l	0%	3	0	2	3	8	0.142	0.288	0.281	3	0	2	3	8	0.142	0.288	0.281
28_2_112	MW-17B	Appendix III	Fluoride	mg/l	25%	3	0	2	3	8	0.291	0.784	0.762	3	0	2	1	6	0.117	0.514	0.587
28_2_120	MW-17B	Appendix III	pH, Field	su	0%	3	0	2	3	8	0.707	0.949	0.949	3	0	2	3	8	0.707	0.949	0.949
28_2_124	MW-17B	Appendix III	Sulfate	mg/l	0%	3	0	2	3	8	0.707	0.684	0.737	3	0	2	3	8	0.707	0.684	0.737
28_2_126	MW-17B	Appendix III	Total Dissolved Solids	mg/l	0%	3	0	2	3	8	0.236	0.529	0.512	3	0	2	3	8	0.236	0.529	0.512
28_3_101	MW-17B	Appendix IV	Antimony	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
28_3_102	MW-17B	Appendix IV	Arsenic	mg/l	12%	3	0	2	3	8	0.739	0.211	0.247	3	0	2	2	7	0.754	0.312	0.350

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
28_3_103	MW-17B	Appendix IV	Barium	mg/l	0%	3	0	2	3	8	0.177	0.175	0.152	3	0	2	3	8	0.177	0.175	0.152
28_3_104	MW-17B	Appendix IV	Beryllium	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
28_3_106	MW-17B	Appendix IV	Cadmium	mg/l	88%	3	0	2	3	8	0.534	0.464	0.390	0	0	1	0	1	NA	NA	NA
28_3_109	MW-17B	Appendix IV	Chromium	mg/l	100%	3	0	2	3	8	0.323	0.466	0.370	NA	NA	NA	NA	NA	NA	NA	NA
28_3_110	MW-17B	Appendix IV	Cobalt	mg/l	62%	3	0	2	3	8	0.301	0.423	0.400	2	0	1	0	3	0.221	0.646	0.632
28_3_113	MW-17B	Appendix IV	Fluoride (App IV)	mg/l	25%	3	0	2	3	8	0.291	0.784	0.762	3	0	2	1	6	0.117	0.514	0.587
28_3_115	MW-17B	Appendix IV	Lead	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
28_3_116	MW-17B	Appendix IV	Lithium	mg/l	0%	3	0	2	3	8	0.890	0.973	0.905	3	0	2	3	8	0.890	0.973	0.905
28_3_117	MW-17B	Appendix IV	Mercury	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
28_3_118	MW-17B	Appendix IV	Molybdenum	mg/l	0%	3	0	2	3	8	0.895	0.645	0.573	3	0	2	3	8	0.895	0.645	0.573
28_3_121	MW-17B	Appendix IV	Radium-226+228	pci/l	12%	3	0	2	3	8	0.236	0.210	0.250	2	0	2	3	7	0.368	0.313	0.354
28_3_122	MW-17B	Appendix IV	Selenium	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
28_3_125	MW-17B	Appendix IV	Thallium	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
28_5_111	MW-17B	Part 115	Copper	mg/l	100%	3	0	2	3	8	0.323	0.471	0.380	NA	NA	NA	NA	NA	NA	NA	NA
28_5_114	MW-17B	Part 115	Iron	mg/l	0%	3	0	2	3	8	0.249	0.510	0.488	3	0	2	3	8	0.249	0.510	0.488
28_5_119	MW-17B	Part 115	Nickel	mg/l	38%	3	0	2	3	8	0.407	0.512	0.551	2	0	2	1	5	0.165	0.124	0.108
28_5_123	MW-17B	Part 115	Silver	mg/l	100%	3	0	2	3	8	0.323	0.460	0.363	NA	NA	NA	NA	NA	NA	NA	NA
28_5_128	MW-17B	Part 115	Vanadium	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
28_5_129	MW-17B	Part 115	Zinc	mg/l	38%	3	0	2	3	8	0.243	0.306	0.275	2	0	2	1	5	0.165	0.332	0.139
29_2_105	MW-17C	Appendix III	Boron	mg/l	0%	3	0	2	3	8	0.093	0.037 *	0.046 *	3	0	2	3	8	0.093	0.037 *	0.046 *
29_2_107	MW-17C	Appendix III	Calcium	mg/l	0%	3	0	2	3	8	0.062	0.044 *	0.042 *	3	0	2	3	8	0.062	0.044 *	0.042 *
29_2_108	MW-17C	Appendix III	Chloride	mg/l	0%	3	0	2	3	8	0.487	0.266	0.285	3	0	2	3	8	0.487	0.266	0.285
29_2_112	MW-17C	Appendix III	Fluoride	mg/l	25%	3	0	2	3	8	0.890	0.614	0.678	2	0	2	2	6	0.851	0.616	0.595
29_2_120	MW-17C	Appendix III	pH, Field	su	0%	3	0	2	3	8	0.077	0.078	0.076	3	0	2	3	8	0.077	0.078	0.076
29_2_124	MW-17C	Appendix III	Sulfate	mg/l	0%	3	0	2	3	8	0.044 *	0.025 *	0.036 *	3	0	2	3	8	0.044 *	0.025 *	0.036 *
29_2_126	MW-17C	Appendix III	Total Dissolved Solids	mg/l	0%	3	0	2	3	8	0.067	0.028 *	0.026 *	3	0	2	3	8	0.067	0.028 *	0.026 *
29_3_101	MW-17C	Appendix IV	Antimony	mg/l	88%	3	0	2	3	8	0.322	0.423	0.415	1	0	0	0	1	NA	NA	NA
29_3_102	MW-17C	Appendix IV	Arsenic	mg/l	0%	3	0	2	3	8	0.146	0.227	0.169	3	0	2	3	8	0.146	0.227	0.169
29_3_103	MW-17C	Appendix IV	Barium	mg/l	0%	3	0	2	3	8	0.506	0.454	0.456	3	0	2	3	8	0.506	0.454	0.456
29_3_104	MW-17C	Appendix IV	Beryllium	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
29_3_106	MW-17C	Appendix IV	Cadmium	mg/l	100%	3	0	2	3	8	0.323	0.462	0.364	NA	NA	NA	NA	NA	NA	NA	NA
29_3_109	MW-17C	Appendix IV	Chromium	mg/l	100%	3	0	2	3	8	0.323	0.466	0.370	NA	NA	NA	NA	NA	NA	NA	NA
29_3_110	MW-17C	Appendix IV	Cobalt	mg/l	50%	3	0	2	3	8	0.388	0.425	0.424	2	0	1	1	4	0.407	0.852	0.850
29_3_113	MW-17C	Appendix IV	Fluoride (App IV)	mg/l	25%	3	0	2	3	8	0.890	0.614	0.678	2	0	2	2	6	0.851	0.616	0.595
29_3_115	MW-17C	Appendix IV	Lead	mg/l	62%	3	0	2	3	8	0.366	0.435	0.429	0	0	2	1	3	1.000	0.758	0.751
29_3_116	MW-17C	Appendix IV	Lithium	mg/l	0%	3	0	2	3	8	0.116	0.131	0.124	3	0	2	3	8	0.116	0.131	0.124
29_3_117	MW-17C	Appendix IV	Mercury	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
29_3_118	MW-17C	Appendix IV	Molybdenum	mg/l	0%	3	0	2	3	8	0.096	0.071	0.024 *	3	0	2	3	8	0.096	0.071	0.024 *
29_3_121	MW-17C	Appendix IV	Radium-226+228	pci/l	0%	3	0	2	3	8	0.368	0.647	0.531	3	0	2	3	8	0.368	0.647	0.531

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
29_3_122	MW-17C	Appendix IV	Selenium	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
29_3_125	MW-17C	Appendix IV	Thallium	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
29_5_111	MW-17C	Part 115	Copper	mg/l	100%	3	0	2	3	8	0.323	0.471	0.380	NA	NA	NA	NA	NA	NA	NA	NA
29_5_114	MW-17C	Part 115	Iron	mg/l	0%	3	0	2	3	8	0.130	0.081	0.155	3	0	2	3	8	0.130	0.081	0.155
29_5_119	MW-17C	Part 115	Nickel	mg/l	12%	3	0	2	3	8	0.260	0.470	0.414	3	0	2	2	7	0.331	0.439	0.449
29_5_123	MW-17C	Part 115	Silver	mg/l	100%	3	0	2	3	8	0.323	0.460	0.363	NA	NA	NA	NA	NA	NA	NA	NA
29_5_128	MW-17C	Part 115	Vanadium	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
29_5_129	MW-17C	Part 115	Zinc	mg/l	50%	3	0	2	3	8	0.694	0.491	0.434	2	0	2	0	4	0.439	0.430	0.452
30_2_105	MW-18A	Appendix III	Boron	mg/l	0%	3	2	2	2	9	0.146	0.431	0.410	3	2	2	2	9	0.146	0.431	0.410
30_2_107	MW-18A	Appendix III	Calcium	mg/l	0%	3	2	2	2	9	0.070	0.207	0.323	3	2	2	2	9	0.070	0.207	0.323
30_2_108	MW-18A	Appendix III	Chloride	mg/l	0%	3	2	2	2	9	0.158	0.419	0.399	3	2	2	2	9	0.158	0.419	0.399
30_2_112	MW-18A	Appendix III	Fluoride	mg/l	0%	3	2	2	2	9	0.306	0.382	0.412	3	2	2	2	9	0.306	0.382	0.412
30_2_120	MW-18A	Appendix III	pH, Field	su	0%	3	1	2	2	8	0.120	0.079	0.083	3	1	2	2	8	0.120	0.079	0.083
30_2_124	MW-18A	Appendix III	Sulfate	mg/l	0%	3	2	2	2	9	0.251	0.429	0.390	3	2	2	2	9	0.251	0.429	0.390
30_2_126	MW-18A	Appendix III	Total Dissolved Solids	mg/l	0%	3	2	2	2	9	0.122	0.132	0.166	3	2	2	2	9	0.122	0.132	0.166
30_3_101	MW-18A	Appendix IV	Antimony	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
30_3_102	MW-18A	Appendix IV	Arsenic	mg/l	33%	3	2	2	2	9	0.082	0.287	0.054	3	1	2	0	6	0.117	0.408	0.175
30_3_103	MW-18A	Appendix IV	Barium	mg/l	0%	3	2	2	2	9	0.112	0.114	0.323	3	2	2	2	9	0.112	0.114	0.323
30_3_104	MW-18A	Appendix IV	Beryllium	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
30_3_106	MW-18A	Appendix IV	Cadmium	mg/l	100%	3	2	2	2	9	0.124	0.276	0.079	NA	NA	NA	NA	NA	NA	NA	NA
30_3_109	MW-18A	Appendix IV	Chromium	mg/l	100%	3	2	2	2	9	0.124	0.284	0.092	NA	NA	NA	NA	NA	NA	NA	NA
30_3_110	MW-18A	Appendix IV	Cobalt	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
30_3_113	MW-18A	Appendix IV	Fluoride (App IV)	mg/l	0%	3	2	2	2	9	0.306	0.382	0.412	3	2	2	2	9	0.306	0.382	0.412
30_3_115	MW-18A	Appendix IV	Lead	mg/l	78%	3	2	2	2	9	0.215	0.114	0.115	0	1	1	0	2	0.317	NA	NA
30_3_116	MW-18A	Appendix IV	Lithium	mg/l	0%	3	2	2	2	9	0.115	0.050 *	0.145	3	2	2	2	9	0.115	0.050 *	0.145
30_3_117	MW-18A	Appendix IV	Mercury	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
30_3_118	MW-18A	Appendix IV	Molybdenum	mg/l	11%	3	2	2	2	9	0.337	0.502	0.455	3	2	2	1	8	0.107	0.053	0.070
30_3_121	MW-18A	Appendix IV	Radium-226+228	pci/l	22%	3	2	2	2	9	0.711	0.562	0.643	1	2	2	2	7	0.682	0.755	0.793
30_3_122	MW-18A	Appendix IV	Selenium	mg/l	89%	3	2	2	2	9	0.215	0.130	0.154	0	1	0	0	1	NA	NA	NA
30_3_125	MW-18A	Appendix IV	Thallium	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
30_5_111	MW-18A	Part 115	Copper	mg/l	89%	3	2	2	2	9	0.179	0.295	0.118	0	0	1	0	1	NA	NA	NA
30_5_114	MW-18A	Part 115	Iron	mg/l	0%	3	2	2	2	9	0.115	0.014 *	0.267	3	2	2	2	9	0.115	0.014 *	0.267
30_5_119	MW-18A	Part 115	Nickel	mg/l	100%	3	2	2	2	9	0.124	0.290	0.103	NA	NA	NA	NA	NA	NA	NA	NA
30_5_123	MW-18A	Part 115	Silver	mg/l	100%	3	2	2	2	9	0.124	0.271	0.074	NA	NA	NA	NA	NA	NA	NA	NA
30_5_128	MW-18A	Part 115	Vanadium	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
30_5_129	MW-18A	Part 115	Zinc	mg/l	67%	3	2	2	2	9	0.156	0.455	0.200	1	1	1	0	3	0.368	NA	NA
31_2_105	MW-18B	Appendix III	Boron	mg/l	0%	3	2	2	2	9	0.427	0.509	0.478	3	2	2	2	9	0.427	0.509	0.478
31_2_107	MW-18B	Appendix III	Calcium	mg/l	0%	3	2	2	2	9	0.093	0.164	0.201	3	2	2	2	9	0.093	0.164	0.201
31_2_108	MW-18B	Appendix III	Chloride	mg/l	0%	3	2	2	2	9	0.140	0.336	0.348	3	2	2	2	9	0.140	0.336	0.348

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
31_2_112	MW-18B	Appendix III	Fluoride	mg/l	11%	3	2	2	2	9	0.228	0.496	0.356	2	2	2	2	8	0.198	0.387	0.467
31_2_120	MW-18B	Appendix III	pH, Field	su	0%	3	1	2	2	8	0.215	0.392	0.396	3	1	2	2	8	0.215	0.392	0.396
31_2_124	MW-18B	Appendix III	Sulfate	mg/l	0%	3	2	2	2	9	0.081	0.148	0.221	3	2	2	2	9	0.081	0.148	0.221
31_2_126	MW-18B	Appendix III	Total Dissolved Solids	mg/l	0%	3	2	2	2	9	0.164	0.283	0.307	3	2	2	2	9	0.164	0.283	0.307
31_3_101	MW-18B	Appendix IV	Antimony	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
31_3_102	MW-18B	Appendix IV	Arsenic	mg/l	78%	3	2	2	2	9	0.179	0.137	0.103	0	0	1	1	2	0.317	NA	NA
31_3_103	MW-18B	Appendix IV	Barium	mg/l	0%	3	2	2	2	9	0.591	0.563	0.567	3	2	2	2	9	0.591	0.563	0.567
31_3_104	MW-18B	Appendix IV	Beryllium	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
31_3_106	MW-18B	Appendix IV	Cadmium	mg/l	100%	3	2	2	2	9	0.124	0.276	0.079	NA	NA	NA	NA	NA	NA	NA	NA
31_3_109	MW-18B	Appendix IV	Chromium	mg/l	100%	3	2	2	2	9	0.124	0.284	0.092	NA	NA	NA	NA	NA	NA	NA	NA
31_3_110	MW-18B	Appendix IV	Cobalt	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
31_3_113	MW-18B	Appendix IV	Fluoride (App IV)	mg/l	11%	3	2	2	2	9	0.228	0.496	0.356	2	2	2	2	8	0.198	0.387	0.467
31_3_115	MW-18B	Appendix IV	Lead	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
31_3_116	MW-18B	Appendix IV	Lithium	mg/l	0%	3	2	2	2	9	0.807	0.749	0.735	3	2	2	2	9	0.807	0.749	0.735
31_3_117	MW-18B	Appendix IV	Mercury	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
31_3_118	MW-18B	Appendix IV	Molybdenum	mg/l	0%	3	2	2	2	9	0.534	0.726	0.726	3	2	2	2	9	0.534	0.726	0.726
31_3_121	MW-18B	Appendix IV	Radium-226+228	pci/l	0%	3	2	2	2	9	0.177	0.133	0.208	3	2	2	2	9	0.177	0.133	0.208
31_3_122	MW-18B	Appendix IV	Selenium	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
31_3_125	MW-18B	Appendix IV	Thallium	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
31_5_111	MW-18B	Part 115	Copper	mg/l	100%	3	2	2	2	9	0.124	0.294	0.112	NA	NA	NA	NA	NA	NA	NA	NA
31_5_114	MW-18B	Part 115	Iron	mg/l	0%	3	2	2	2	9	0.886	0.989	0.994	3	2	2	2	9	0.886	0.989	0.994
31_5_119	MW-18B	Part 115	Nickel	mg/l	11%	3	2	2	2	9	0.343	0.426	0.503	3	2	2	1	8	0.154	0.181	0.236
31_5_123	MW-18B	Part 115	Silver	mg/l	100%	3	2	2	2	9	0.124	0.271	0.074	NA	NA	NA	NA	NA	NA	NA	NA
31_5_128	MW-18B	Part 115	Vanadium	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
31_5_129	MW-18B	Part 115	Zinc	mg/l	78%	3	2	2	2	9	0.239	0.513	0.311	0	0	2	0	2	NA	NA	NA
32_2_105	MW-100A	Appendix III	Boron	mg/l	18%	3	0	5	3	11	0.435	0.490	0.498	2	0	4	3	9	0.700	0.755	0.755
32_2_107	MW-100A	Appendix III	Calcium	mg/l	0%	3	0	5	3	11	0.093	0.086	0.084	3	0	5	3	11	0.093	0.086	0.084
32_2_108	MW-100A	Appendix III	Chloride	mg/l	0%	3	0	5	3	11	0.308	0.515	0.508	3	0	5	3	11	0.308	0.515	0.508
32_2_112	MW-100A	Appendix III	Fluoride	mg/l	64%	3	0	5	3	11	0.257	0.274	0.273	2	0	2	0	4	0.683	0.689	0.616
32_2_120	MW-100A	Appendix III	pH, Field	su	0%	3	0	5	3	11	0.472	0.512	0.516	3	0	5	3	11	0.472	0.512	0.516
32_2_124	MW-100A	Appendix III	Sulfate	mg/l	0%	3	0	5	3	11	0.080	0.044 *	0.042 *	3	0	5	3	11	0.080	0.044 *	0.042 *
32_2_126	MW-100A	Appendix III	Total Dissolved Solids	mg/l	0%	3	0	5	3	11	0.283	0.755	0.769	3	0	5	3	11	0.283	0.755	0.769
32_3_101	MW-100A	Appendix IV	Antimony	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
32_3_102	MW-100A	Appendix IV	Arsenic	mg/l	0%	3	0	5	3	11	0.174	0.171	0.179	3	0	5	3	11	0.174	0.171	0.179
32_3_103	MW-100A	Appendix IV	Barium	mg/l	0%	3	0	5	3	11	0.309	0.314	0.313	3	0	5	3	11	0.309	0.314	0.313
32_3_104	MW-100A	Appendix IV	Beryllium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
32_3_106	MW-100A	Appendix IV	Cadmium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
32_3_109	MW-100A	Appendix IV	Chromium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
32_3_110	MW-100A	Appendix IV	Cobalt	mg/l	82%	3	0	5	3	11	0.636	0.651	0.676	1	0	1	0	2	0.317	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
32_3_113	MW-100A	Appendix IV	Fluoride (App IV)	mg/l	64%	3	0	5	3	11	0.257	0.274	0.273	2	0	2	0	4	0.683	0.689	0.616
32_3_115	MW-100A	Appendix IV	Lead	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
32_3_116	MW-100A	Appendix IV	Lithium	mg/l	0%	3	0	5	3	11	0.178	0.170	0.191	3	0	5	3	11	0.178	0.170	0.191
32_3_117	MW-100A	Appendix IV	Mercury	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
32_3_118	MW-100A	Appendix IV	Molybdenum	mg/l	0%	3	0	5	3	11	0.176	0.146	0.141	3	0	5	3	11	0.176	0.146	0.141
32_3_121	MW-100A	Appendix IV	Radium-226+228	pci/l	0%	3	0	5	3	11	0.059	0.045 *	0.039 *	3	0	5	3	11	0.059	0.045 *	0.039 *
32_3_122	MW-100A	Appendix IV	Selenium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
32_3_125	MW-100A	Appendix IV	Thallium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
32_5_111	MW-100A	Part 115	Copper	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
32_5_114	MW-100A	Part 115	Iron	mg/l	0%	3	0	5	3	11	0.177	0.246	0.252	3	0	5	3	11	0.177	0.246	0.252
32_5_119	MW-100A	Part 115	Nickel	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
32_5_123	MW-100A	Part 115	Silver	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
32_5_128	MW-100A	Part 115	Vanadium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
32_5_129	MW-100A	Part 115	Zinc	mg/l	73%	3	0	5	3	11	0.785	0.778	0.733	2	0	1	0	3	0.221	0.454	0.314
33_2_105	MW-100B	Appendix III	Boron	mg/l	0%	3	0	5	3	11	0.070	0.064	0.061	3	0	5	3	11	0.070	0.064	0.061
33_2_107	MW-100B	Appendix III	Calcium	mg/l	0%	3	0	5	3	11	0.049 *	0.058	0.055	3	0	5	3	11	0.049 *	0.058	0.055
33_2_108	MW-100B	Appendix III	Chloride	mg/l	0%	3	0	5	3	11	0.149	0.274	0.290	3	0	5	3	11	0.149	0.274	0.290
33_2_112	MW-100B	Appendix III	Fluoride	mg/l	64%	3	0	5	3	11	0.892	0.949	0.835	1	0	2	1	4	0.259	0.316	0.241
33_2_120	MW-100B	Appendix III	pH, Field	su	0%	3	0	5	3	11	0.036 *	0.007 **	0.008 **	3	0	5	3	11	0.036 *	0.007 **	0.008 **
33_2_124	MW-100B	Appendix III	Sulfate	mg/l	0%	3	0	5	3	11	0.020 *	0.012 *	0.009 **	3	0	5	3	11	0.020 *	0.012 *	0.009 **
33_2_126	MW-100B	Appendix III	Total Dissolved Solids	mg/l	0%	3	0	5	3	11	0.219	0.400	0.432	3	0	5	3	11	0.219	0.400	0.432
33_3_101	MW-100B	Appendix IV	Antimony	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
33_3_102	MW-100B	Appendix IV	Arsenic	mg/l	0%	3	0	5	3	11	0.688	0.802	0.782	3	0	5	3	11	0.688	0.802	0.782
33_3_103	MW-100B	Appendix IV	Barium	mg/l	0%	3	0	5	3	11	0.357	0.354	0.356	3	0	5	3	11	0.357	0.354	0.356
33_3_104	MW-100B	Appendix IV	Beryllium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
33_3_106	MW-100B	Appendix IV	Cadmium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
33_3_109	MW-100B	Appendix IV	Chromium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
33_3_110	MW-100B	Appendix IV	Cobalt	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
33_3_113	MW-100B	Appendix IV	Fluoride (App IV)	mg/l	64%	3	0	5	3	11	0.892	0.949	0.835	1	0	2	1	4	0.259	0.316	0.241
33_3_115	MW-100B	Appendix IV	Lead	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
33_3_116	MW-100B	Appendix IV	Lithium	mg/l	0%	3	0	5	3	11	0.635	0.667	0.656	3	0	5	3	11	0.635	0.667	0.656
33_3_117	MW-100B	Appendix IV	Mercury	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
33_3_118	MW-100B	Appendix IV	Molybdenum	mg/l	0%	3	0	5	3	11	0.653	0.746	0.720	3	0	5	3	11	0.653	0.746	0.720
33_3_121	MW-100B	Appendix IV	Radium-226+228	pci/l	9%	3	0	5	3	11	0.212	0.274	0.290	2	0	5	3	10	0.306	0.523	0.552
33_3_122	MW-100B	Appendix IV	Selenium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
33_3_125	MW-100B	Appendix IV	Thallium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
33_5_111	MW-100B	Part 115	Copper	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
33_5_114	MW-100B	Part 115	Iron	mg/l	0%	3	0	5	3	11	0.743	0.549	0.669	3	0	5	3	11	0.743	0.549	0.669
33_5_119	MW-100B	Part 115	Nickel	mg/l	91%	3	0	5	3	11	0.549	0.607	0.576	0	0	1	0	1	NA	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
33_5_123	MW-100B	Part 115	Silver	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
33_5_128	MW-100B	Part 115	Vanadium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
33_5_129	MW-100B	Part 115	Zinc	mg/l	91%	3	0	5	3	11	0.636	0.699	0.727	1	0	0	0	1	NA	NA	NA

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 8: Trend Tests: Lognormal MLE and MK

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
13_2_105	MW-2	Appendix III	Boron	mg/l	18	0	0%	Parametric	Lognormal MLE	-0.000163	0.021	↔
13_2_107	MW-2	Appendix III	Calcium	mg/l	18	0	0%	Nonparametric	MK	-0.0465	0.000	↓
13_2_108	MW-2	Appendix III	Chloride	mg/l	18	0	0%	Parametric	Lognormal MLE	-0.0000658	0.119	↔
13_2_120	MW-2	Appendix III	pH, Field	su	19	0	0%	Parametric	Lognormal MLE	0.000000150	0.980	↔
13_2_124	MW-2	Appendix III	Sulfate	mg/l	18	0	0%	Parametric	Lognormal MLE	-0.000479	0.000	↓
13_2_126	MW-2	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	Parametric	Lognormal MLE	-0.000231	0.000	↓
13_3_103	MW-2	Appendix IV	Barium	mg/l	19	0	0%	Parametric	Lognormal MLE	-0.0000580	0.063	↔
13_3_116	MW-2	Appendix IV	Lithium	mg/l	19	0	0%	Parametric	Lognormal MLE	-0.000230	0.000	↓
13_3_118	MW-2	Appendix IV	Molybdenum	mg/l	19	0	0%	Parametric	Lognormal MLE	0.000000550	0.994	↔
13_5_114	MW-2	Part 115	Iron	mg/l	19	0	0%	Parametric	Lognormal MLE	-0.000280	0.098	↔
13_5_119	MW-2	Part 115	Nickel	mg/l	19	0	0%	Parametric	Lognormal MLE	-0.000326	0.000	↓
14_2_105	MW-3	Appendix III	Boron	mg/l	10	0	0%	Parametric	Lognormal MLE	-0.0000103	0.673	↔
14_2_107	MW-3	Appendix III	Calcium	mg/l	10	0	0%	Parametric	Lognormal MLE	-0.0000170	0.605	↔
14_2_108	MW-3	Appendix III	Chloride	mg/l	10	0	0%	Parametric	Lognormal MLE	0.0000219	0.473	↔
14_2_120	MW-3	Appendix III	pH, Field	su	10	0	0%	Parametric	Lognormal MLE	0.00000588	0.296	↔
14_2_124	MW-3	Appendix III	Sulfate	mg/l	10	0	0%	Parametric	Lognormal MLE	-0.0000323	0.136	↔
14_2_126	MW-3	Appendix III	Total Dissolved Solids	mg/l	10	0	0%	Nonparametric	MK	-0.0824	0.001	↓
14_3_102	MW-3	Appendix IV	Arsenic	mg/l	10	0	0%	Nonparametric	MK	0	0.611	↔
14_3_103	MW-3	Appendix IV	Barium	mg/l	10	0	0%	Parametric	Lognormal MLE	-0.000187	0.000	↓
14_3_116	MW-3	Appendix IV	Lithium	mg/l	10	0	0%	Parametric	Lognormal MLE	-0.0000506	0.134	↔
14_3_118	MW-3	Appendix IV	Molybdenum	mg/l	10	0	0%	Parametric	Lognormal MLE	-0.0000324	0.375	↔
14_3_121	MW-3	Appendix IV	Radium-226+228	pci/l	10	2	20%	Parametric	Lognormal MLE	-0.000952	0.019	↔
14_5_114	MW-3	Part 115	Iron	mg/l	10	0	0%	Parametric	Lognormal MLE	-0.000216	0.000	↓
15_2_105	MW-5	Appendix III	Boron	mg/l	18	0	0%	Parametric	Lognormal MLE	-0.000279	0.187	↔
15_2_107	MW-5	Appendix III	Calcium	mg/l	18	0	0%	Parametric	Lognormal MLE	-0.000406	0.000	↓
15_2_108	MW-5	Appendix III	Chloride	mg/l	18	0	0%	Nonparametric	MK	-0.0248	0.000	↓
15_2_120	MW-5	Appendix III	pH, Field	su	19	0	0%	Nonparametric	MK	0	0.972	↔
15_2_124	MW-5	Appendix III	Sulfate	mg/l	18	0	0%	Parametric	Lognormal MLE	-0.000688	0.000	↓
15_2_126	MW-5	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	Parametric	Lognormal MLE	-0.000519	0.000	↓
15_3_103	MW-5	Appendix IV	Barium	mg/l	19	0	0%	Parametric	Lognormal MLE	-0.0000731	0.202	↔
15_3_116	MW-5	Appendix IV	Lithium	mg/l	19	0	0%	Parametric	Lognormal MLE	-0.0000453	0.742	↔
15_3_118	MW-5	Appendix IV	Molybdenum	mg/l	19	0	0%	Parametric	Lognormal MLE	0.000212	0.211	↔
15_3_121	MW-5	Appendix IV	Radium-226+228	pci/l	19	2	11%	Parametric	Lognormal MLE	-0.000276	0.291	↔
15_5_114	MW-5	Part 115	Iron	mg/l	19	1	5%	Parametric	Lognormal MLE	-0.000113	0.825	↔
15_5_119	MW-5	Part 115	Nickel	mg/l	19	0	0%	Parametric	Lognormal MLE	-0.000662	0.000	↓
15_5_129	MW-5	Part 115	Zinc	mg/l	19	3	16%	Parametric	Lognormal MLE	-0.000750	0.026	↔
16_2_105	MW-6	Appendix III	Boron	mg/l	18	0	0%	Parametric	Lognormal MLE	0.0000701	0.372	↔
16_2_107	MW-6	Appendix III	Calcium	mg/l	18	0	0%	Parametric	Lognormal MLE	0.0000970	0.005	↑
16_2_108	MW-6	Appendix III	Chloride	mg/l	18	0	0%	Parametric	Lognormal MLE	0.000140	0.051	↔
16_2_120	MW-6	Appendix III	pH, Field	su	19	0	0%	Parametric	Lognormal MLE	0.00000444	0.597	↔
16_2_124	MW-6	Appendix III	Sulfate	mg/l	18	0	0%	Parametric	Lognormal MLE	0.0000451	0.618	↔
16_2_126	MW-6	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	Parametric	Lognormal MLE	0.0000564	0.193	↔
16_3_103	MW-6	Appendix IV	Barium	mg/l	19	0	0%	Parametric	Lognormal MLE	0.0000546	0.184	↔

(Table continues on next page)

Table 8: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
16_3_116	MW-6	Appendix IV	Lithium	mg/l	19	0	0%	Parametric	Lognormal MLE	0.0000731	0.232	↔
16_3_118	MW-6	Appendix IV	Molybdenum	mg/l	19	0	0%	Parametric	Lognormal MLE	-0.000258	0.005	↓
16_5_119	MW-6	Part 115	Nickel	mg/l	19	5	26%	Nonparametric	MK	-0.00000167	0.007	↓
17_2_105	MW-7	Appendix III	Boron	mg/l	15	0	0%	Parametric	Lognormal MLE	-0.0000756	0.498	↔
17_2_107	MW-7	Appendix III	Calcium	mg/l	15	0	0%	Nonparametric	MK	-0.000772	0.765	↔
17_2_108	MW-7	Appendix III	Chloride	mg/l	15	0	0%	Parametric	Lognormal MLE	0.0000778	0.035	↔
17_2_120	MW-7	Appendix III	pH, Field	su	15	0	0%	Nonparametric	MK	-0.000131	0.150	↔
17_2_124	MW-7	Appendix III	Sulfate	mg/l	15	0	0%	Parametric	Lognormal MLE	-0.00000545	0.937	↔
17_2_126	MW-7	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	Nonparametric	MK	0.0180	0.457	↔
17_3_102	MW-7	Appendix IV	Arsenic	mg/l	15	0	0%	Nonparametric	MK	-0.000000950	0.040	↔
17_3_103	MW-7	Appendix IV	Barium	mg/l	15	0	0%	Parametric	Lognormal MLE	-0.0000677	0.300	↔
17_3_116	MW-7	Appendix IV	Lithium	mg/l	15	0	0%	Parametric	Lognormal MLE	-0.000203	0.000	↓
17_3_118	MW-7	Appendix IV	Molybdenum	mg/l	15	0	0%	Nonparametric	MK	-0.0000823	0.102	↔
17_3_121	MW-7	Appendix IV	Radium-226+228	pci/l	15	0	0%	Parametric	Lognormal MLE	-0.000491	0.137	↔
17_5_114	MW-7	Part 115	Iron	mg/l	15	0	0%	Parametric	Lognormal MLE	-0.000168	0.203	↔
18_2_105	MW-7C	Appendix III	Boron	mg/l	14	0	0%	Parametric	Lognormal MLE	-0.0000327	0.152	↔
18_2_107	MW-7C	Appendix III	Calcium	mg/l	14	0	0%	Parametric	Lognormal MLE	-0.0000626	0.288	↔
18_2_108	MW-7C	Appendix III	Chloride	mg/l	14	0	0%	Parametric	Lognormal MLE	-0.0000552	0.119	↔
18_2_120	MW-7C	Appendix III	pH, Field	su	14	0	0%	Parametric	Lognormal MLE	-0.00000287	0.726	↔
18_2_124	MW-7C	Appendix III	Sulfate	mg/l	14	0	0%	Parametric	Lognormal MLE	-0.000101	0.000	↓
18_2_126	MW-7C	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	Nonparametric	MK	-0.211	0.000	↓
18_3_102	MW-7C	Appendix IV	Arsenic	mg/l	14	0	0%	Parametric	Lognormal MLE	0.0000562	0.599	↔
18_3_103	MW-7C	Appendix IV	Barium	mg/l	14	0	0%	Parametric	Lognormal MLE	-0.000116	0.000	↓
18_3_116	MW-7C	Appendix IV	Lithium	mg/l	14	0	0%	Parametric	Lognormal MLE	-0.000135	0.000	↓
18_3_118	MW-7C	Appendix IV	Molybdenum	mg/l	14	0	0%	Parametric	Lognormal MLE	-0.0000860	0.001	↓
18_3_121	MW-7C	Appendix IV	Radium-226+228	pci/l	14	0	0%	Parametric	Lognormal MLE	-0.000263	0.459	↔
18_5_114	MW-7C	Part 115	Iron	mg/l	14	0	0%	Parametric	Lognormal MLE	-0.000133	0.043	↔
18_5_119	MW-7C	Part 115	Nickel	mg/l	14	0	0%	Parametric	Lognormal MLE	-0.000150	0.028	↔
19_2_105	MW-8	Appendix III	Boron	mg/l	15	1	7%	Parametric	Lognormal MLE	0.0000176	0.942	↔
19_2_107	MW-8	Appendix III	Calcium	mg/l	15	0	0%	Parametric	Lognormal MLE	-0.0000235	0.397	↔
19_2_108	MW-8	Appendix III	Chloride	mg/l	15	2	13%	Parametric	Lognormal MLE	0.000845	0.054	↔
19_2_120	MW-8	Appendix III	pH, Field	su	15	0	0%	Nonparametric	MK	-0.0000146	0.766	↔
19_2_124	MW-8	Appendix III	Sulfate	mg/l	15	0	0%	Parametric	Lognormal MLE	0.000196	0.413	↔
19_2_126	MW-8	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	Parametric	Lognormal MLE	-0.0000143	0.710	↔
19_3_103	MW-8	Appendix IV	Barium	mg/l	15	0	0%	Parametric	Lognormal MLE	0.0000105	0.877	↔
19_3_116	MW-8	Appendix IV	Lithium	mg/l	15	6	40%	Parametric	Lognormal MLE	0.000229	0.363	↔
19_3_121	MW-8	Appendix IV	Radium-226+228	pci/l	15	0	0%	Parametric	Lognormal MLE	0.0000108	0.984	↔
20_2_107	MW-9	Appendix III	Calcium	mg/l	15	0	0%	Parametric	Lognormal MLE	0.000232	0.000	↑
20_2_120	MW-9	Appendix III	pH, Field	su	15	0	0%	Parametric	Lognormal MLE	-0.0000150	0.208	↔
20_2_126	MW-9	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	Parametric	Lognormal MLE	0.000205	0.000	↑
20_3_103	MW-9	Appendix IV	Barium	mg/l	15	0	0%	Parametric	Lognormal MLE	0.000191	0.000	↑
21_2_105	MW-10	Appendix III	Boron	mg/l	15	1	7%	Parametric	Lognormal MLE	-0.0000379	0.646	↔
21_2_107	MW-10	Appendix III	Calcium	mg/l	15	0	0%	Parametric	Lognormal MLE	-0.0000872	0.010	↔

(Table continues on next page)

Table 8: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
21_2_120	MW-10	Appendix III	pH, Field	su	15	0	0%	Parametric	Lognormal MLE	0.00000247	0.865	↔
21_2_124	MW-10	Appendix III	Sulfate	mg/l	15	0	0%	Parametric	Lognormal MLE	-0.0000552	0.717	↔
21_2_126	MW-10	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	Parametric	Lognormal MLE	-0.000111	0.020	↔
21_3_103	MW-10	Appendix IV	Barium	mg/l	15	0	0%	Parametric	Lognormal MLE	-0.000206	0.000	↓
21_3_121	MW-10	Appendix IV	Radium-226+228	pci/l	15	0	0%	Parametric	Lognormal MLE	0.000791	0.026	↔
22_2_105	MW-13	Appendix III	Boron	mg/l	14	0	0%	Parametric	Lognormal MLE	0.0000858	0.292	↔
22_2_107	MW-13	Appendix III	Calcium	mg/l	14	0	0%	Parametric	Lognormal MLE	0.000348	0.000	↑
22_2_108	MW-13	Appendix III	Chloride	mg/l	14	2	14%	Parametric	Lognormal MLE	0.000654	0.179	↔
22_2_120	MW-13	Appendix III	pH, Field	su	14	0	0%	Parametric	Lognormal MLE	-0.0000268	0.188	↔
22_2_124	MW-13	Appendix III	Sulfate	mg/l	14	0	0%	Parametric	Lognormal MLE	0.00177	0.000	↑
22_2_126	MW-13	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	Parametric	Lognormal MLE	0.000472	0.000	↑
22_3_103	MW-13	Appendix IV	Barium	mg/l	14	0	0%	Parametric	Lognormal MLE	0.000596	0.000	↑
22_3_121	MW-13	Appendix IV	Radium-226+228	pci/l	14	1	7%	Parametric	Lognormal MLE	-0.0000610	0.935	↔
22_5_114	MW-13	Part 115	Iron	mg/l	14	1	7%	Nonparametric	MK	0.000229	0.013	↔
23_2_105	MW-14	Appendix III	Boron	mg/l	12	0	0%	Parametric	Lognormal MLE	-0.000141	0.000	↓
23_2_107	MW-14	Appendix III	Calcium	mg/l	12	0	0%	Parametric	Lognormal MLE	0.000163	0.000	↑
23_2_108	MW-14	Appendix III	Chloride	mg/l	12	0	0%	Parametric	Lognormal MLE	-0.0000551	0.180	↔
23_2_120	MW-14	Appendix III	pH, Field	su	12	0	0%	Parametric	Lognormal MLE	-0.0000115	0.191	↔
23_2_124	MW-14	Appendix III	Sulfate	mg/l	12	0	0%	Nonparametric	MK	-0.0293	0.000	↓
23_2_126	MW-14	Appendix III	Total Dissolved Solids	mg/l	12	1	8%	Nonparametric	MK	0.114	0.244	↔
23_3_102	MW-14	Appendix IV	Arsenic	mg/l	12	0	0%	Parametric	Lognormal MLE	0.000269	0.133	↔
23_3_103	MW-14	Appendix IV	Barium	mg/l	12	0	0%	Nonparametric	MK	0.00000779	0.730	↔
23_3_116	MW-14	Appendix IV	Lithium	mg/l	12	0	0%	Parametric	Lognormal MLE	-0.000250	0.000	↓
23_3_118	MW-14	Appendix IV	Molybdenum	mg/l	12	0	0%	Parametric	Lognormal MLE	-0.000306	0.000	↓
23_3_121	MW-14	Appendix IV	Radium-226+228	pci/l	12	2	17%	Parametric	Lognormal MLE	-0.000847	0.412	↔
23_5_114	MW-14	Part 115	Iron	mg/l	12	0	0%	Parametric	Lognormal MLE	0.000615	0.000	↑
24_2_105	MW-15	Appendix III	Boron	mg/l	12	0	0%	Parametric	Lognormal MLE	0.0000637	0.564	↔
24_2_107	MW-15	Appendix III	Calcium	mg/l	12	0	0%	Parametric	Lognormal MLE	0.0000123	0.928	↔
24_2_108	MW-15	Appendix III	Chloride	mg/l	12	0	0%	Parametric	Lognormal MLE	0.000182	0.222	↔
24_2_120	MW-15	Appendix III	pH, Field	su	12	0	0%	Parametric	Lognormal MLE	-0.0000420	0.000	↓
24_2_124	MW-15	Appendix III	Sulfate	mg/l	12	0	0%	Parametric	Lognormal MLE	-0.000690	0.011	↔
24_2_126	MW-15	Appendix III	Total Dissolved Solids	mg/l	12	0	0%	Parametric	Lognormal MLE	-0.000151	0.206	↔
24_3_103	MW-15	Appendix IV	Barium	mg/l	12	0	0%	Parametric	Lognormal MLE	0.0000785	0.635	↔
24_3_121	MW-15	Appendix IV	Radium-226+228	pci/l	12	0	0%	Parametric	Lognormal MLE	-0.0000823	0.893	↔
24_5_114	MW-15	Part 115	Iron	mg/l	12	1	8%	Parametric	Lognormal MLE	0.00114	0.196	↔
25_2_105	MW-16A	Appendix III	Boron	mg/l	13	0	0%	Parametric	Lognormal MLE	0.000758	0.006	↑
25_2_107	MW-16A	Appendix III	Calcium	mg/l	13	0	0%	Parametric	Lognormal MLE	0.000145	0.292	↔
25_2_108	MW-16A	Appendix III	Chloride	mg/l	13	0	0%	Parametric	Lognormal MLE	0.0000622	0.543	↔
25_2_120	MW-16A	Appendix III	pH, Field	su	13	0	0%	Parametric	Lognormal MLE	-0.0000310	0.014	↔
25_2_124	MW-16A	Appendix III	Sulfate	mg/l	13	0	0%	Parametric	Lognormal MLE	0.000808	0.027	↔
25_2_126	MW-16A	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	Parametric	Lognormal MLE	0.000121	0.322	↔
25_3_102	MW-16A	Appendix IV	Arsenic	mg/l	13	0	0%	Parametric	Lognormal MLE	-0.0000936	0.735	↔
25_3_103	MW-16A	Appendix IV	Barium	mg/l	13	0	0%	Parametric	Lognormal MLE	0.0000973	0.530	↔

(Table continues on next page)

Table 8: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
25_3_121	MW-16A	Appendix IV	Radium-226+228	pci/l	13	0	0%	Parametric	Lognormal MLE	-0.000566	0.497	↔
25_5_114	MW-16A	Part 115	Iron	mg/l	13	0	0%	Parametric	Lognormal MLE	-0.000175	0.346	↔
26_2_105	MW-16B	Appendix III	Boron	mg/l	13	0	0%	Nonparametric	MK	-0.0000145	0.017	↔
26_2_107	MW-16B	Appendix III	Calcium	mg/l	13	0	0%	Parametric	Lognormal MLE	0.0000850	0.006	↑
26_2_108	MW-16B	Appendix III	Chloride	mg/l	13	5	38%	Parametric	Lognormal MLE	-0.000500	0.168	↔
26_2_120	MW-16B	Appendix III	pH, Field	su	13	0	0%	Parametric	Lognormal MLE	-0.00000895	0.449	↔
26_2_124	MW-16B	Appendix III	Sulfate	mg/l	13	0	0%	Parametric	Lognormal MLE	0.000347	0.000	↑
26_2_126	MW-16B	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	Parametric	Lognormal MLE	-0.0000308	0.200	↔
26_3_103	MW-16B	Appendix IV	Barium	mg/l	13	0	0%	Parametric	Lognormal MLE	-0.0000224	0.462	↔
26_3_116	MW-16B	Appendix IV	Lithium	mg/l	13	0	0%	Parametric	Lognormal MLE	-0.0000793	0.137	↔
26_3_118	MW-16B	Appendix IV	Molybdenum	mg/l	13	0	0%	Nonparametric	MK	0	0.440	↔
26_3_121	MW-16B	Appendix IV	Radium-226+228	pci/l	13	0	0%	Parametric	Lognormal MLE	-0.000692	0.135	↔
26_5_114	MW-16B	Part 115	Iron	mg/l	13	0	0%	Parametric	Lognormal MLE	-0.000757	0.000	↓
27_2_105	MW-17A	Appendix III	Boron	mg/l	8	0	0%	Parametric	Lognormal MLE	0.00000729	0.978	↔
27_2_107	MW-17A	Appendix III	Calcium	mg/l	8	0	0%	Parametric	Lognormal MLE	-0.000135	0.432	↔
27_2_108	MW-17A	Appendix III	Chloride	mg/l	8	0	0%	Parametric	Lognormal MLE	0.000170	0.028	↔
27_2_112	MW-17A	Appendix III	Fluoride	mg/l	8	3	38%	Parametric	Lognormal MLE	0.00418	0.075	↔
27_2_120	MW-17A	Appendix III	pH, Field	su	8	0	0%	Parametric	Lognormal MLE	-0.0000274	0.285	↔
27_2_124	MW-17A	Appendix III	Sulfate	mg/l	8	0	0%	Parametric	Lognormal MLE	0.000409	0.001	↑
27_2_126	MW-17A	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	Nonparametric	MK	0	0.772	↔
27_3_102	MW-17A	Appendix IV	Arsenic	mg/l	8	1	12%	Parametric	Lognormal MLE	-0.00135	0.017	↔
27_3_103	MW-17A	Appendix IV	Barium	mg/l	8	0	0%	Parametric	Lognormal MLE	-0.000721	0.000	↓
27_3_113	MW-17A	Appendix IV	Fluoride (App IV)	mg/l	8	3	38%	Parametric	Lognormal MLE	0.00418	0.075	↔
27_3_116	MW-17A	Appendix IV	Lithium	mg/l	8	0	0%	Parametric	Lognormal MLE	-0.000682	0.000	↓
27_3_118	MW-17A	Appendix IV	Molybdenum	mg/l	8	0	0%	Parametric	Lognormal MLE	0.000829	0.003	↑
27_3_121	MW-17A	Appendix IV	Radium-226+228	pci/l	8	1	12%	Parametric	Lognormal MLE	-0.00172	0.430	↔
27_5_114	MW-17A	Part 115	Iron	mg/l	8	0	0%	Parametric	Lognormal MLE	0.000426	0.166	↔
27_5_119	MW-17A	Part 115	Nickel	mg/l	8	1	12%	Parametric	Lognormal MLE	-0.000260	0.436	↔
28_2_105	MW-17B	Appendix III	Boron	mg/l	8	0	0%	Nonparametric	MK	-0.00106	0.135	↔
28_2_107	MW-17B	Appendix III	Calcium	mg/l	8	0	0%	Nonparametric	MK	-0.114	0.033	↔
28_2_108	MW-17B	Appendix III	Chloride	mg/l	8	0	0%	Parametric	Lognormal MLE	0.0000606	0.735	↔
28_2_120	MW-17B	Appendix III	pH, Field	su	8	0	0%	Parametric	Lognormal MLE	-0.0000559	0.206	↔
28_2_124	MW-17B	Appendix III	Sulfate	mg/l	8	0	0%	Nonparametric	MK	-0.278	0.108	↔
28_2_126	MW-17B	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	Nonparametric	MK	-0.520	0.063	↔
28_3_102	MW-17B	Appendix IV	Arsenic	mg/l	8	1	12%	Parametric	Lognormal MLE	-0.000526	0.575	↔
28_3_103	MW-17B	Appendix IV	Barium	mg/l	8	0	0%	Parametric	Lognormal MLE	-0.00136	0.001	↓
28_3_116	MW-17B	Appendix IV	Lithium	mg/l	8	0	0%	Parametric	Lognormal MLE	0.0000149	0.978	↔
28_3_118	MW-17B	Appendix IV	Molybdenum	mg/l	8	0	0%	Nonparametric	MK	-0.00000688	1.000	↔
28_3_121	MW-17B	Appendix IV	Radium-226+228	pci/l	8	1	12%	Parametric	Lognormal MLE	-0.00333	0.006	↓
28_5_114	MW-17B	Part 115	Iron	mg/l	8	0	0%	Nonparametric	MK	-0.00316	0.019	↔
28_5_119	MW-17B	Part 115	Nickel	mg/l	8	3	38%	Parametric	Lognormal MLE	-0.00104	0.000	↓
28_5_129	MW-17B	Part 115	Zinc	mg/l	8	3	38%	Parametric	Lognormal MLE	0.00597	0.285	↔
29_2_105	MW-17C	Appendix III	Boron	mg/l	8	0	0%	Parametric	Lognormal MLE	0.00114	0.001	↑

(Table continues on next page)

Table 8: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
29_2_107	MW-17C	Appendix III	Calcium	mg/l	8	0	0%	Parametric	Lognormal MLE	0.00109	0.007	↑
29_2_108	MW-17C	Appendix III	Chloride	mg/l	8	0	0%	Nonparametric	MK	-0.0442	0.212	↔
29_2_112	MW-17C	Appendix III	Fluoride	mg/l	8	2	25%	Parametric	Lognormal MLE	0.000945	0.008	↑
29_2_120	MW-17C	Appendix III	pH, Field	su	8	0	0%	Nonparametric	MK	-0.000766	0.266	↔
29_2_124	MW-17C	Appendix III	Sulfate	mg/l	8	0	0%	Parametric	Lognormal MLE	0.00137	0.006	↑
29_2_126	MW-17C	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	Parametric	Lognormal MLE	0.000667	0.090	↔
29_3_102	MW-17C	Appendix IV	Arsenic	mg/l	8	0	0%	Parametric	Lognormal MLE	0.000147	0.890	↔
29_3_103	MW-17C	Appendix IV	Barium	mg/l	8	0	0%	Parametric	Lognormal MLE	-0.000593	0.098	↔
29_3_113	MW-17C	Appendix IV	Fluoride (App IV)	mg/l	8	2	25%	Parametric	Lognormal MLE	0.000945	0.008	↑
29_3_116	MW-17C	Appendix IV	Lithium	mg/l	8	0	0%	Nonparametric	MK	-0.0000545	0.081	↔
29_3_118	MW-17C	Appendix IV	Molybdenum	mg/l	8	0	0%	Parametric	Lognormal MLE	-0.00347	0.000	↓
29_3_121	MW-17C	Appendix IV	Radium-226+228	pci/l	8	0	0%	Parametric	Lognormal MLE	-0.000890	0.451	↔
29_5_114	MW-17C	Part 115	Iron	mg/l	8	0	0%	Parametric	Lognormal MLE	0.00206	0.061	↔
29_5_119	MW-17C	Part 115	Nickel	mg/l	8	1	12%	Parametric	Lognormal MLE	-0.0000873	0.864	↔
30_2_105	MW-18A	Appendix III	Boron	mg/l	9	0	0%	Parametric	Lognormal MLE	-0.00242	0.055	↔
30_2_107	MW-18A	Appendix III	Calcium	mg/l	9	0	0%	Nonparametric	MK	-0.0161	0.675	↔
30_2_108	MW-18A	Appendix III	Chloride	mg/l	9	0	0%	Nonparametric	MK	0.0732	0.118	↔
30_2_112	MW-18A	Appendix III	Fluoride	mg/l	9	0	0%	Parametric	Lognormal MLE	0.000624	0.508	↔
30_2_120	MW-18A	Appendix III	pH, Field	su	8	0	0%	Parametric	Lognormal MLE	0.0000327	0.767	↔
30_2_124	MW-18A	Appendix III	Sulfate	mg/l	9	0	0%	Nonparametric	MK	0.128	0.090	↔
30_2_126	MW-18A	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	Parametric	Lognormal MLE	0.0000899	0.813	↔
30_3_102	MW-18A	Appendix IV	Arsenic	mg/l	9	3	33%	Parametric	Lognormal MLE	-0.00315	0.112	↔
30_3_103	MW-18A	Appendix IV	Barium	mg/l	9	0	0%	Parametric	Lognormal MLE	0.00119	0.640	↔
30_3_113	MW-18A	Appendix IV	Fluoride (App IV)	mg/l	9	0	0%	Parametric	Lognormal MLE	0.000624	0.508	↔
30_3_116	MW-18A	Appendix IV	Lithium	mg/l	9	0	0%	Parametric	Lognormal MLE	0.000319	0.809	↔
30_3_118	MW-18A	Appendix IV	Molybdenum	mg/l	9	1	11%	Nonparametric	MK	0.0000834	0.336	↔
30_3_121	MW-18A	Appendix IV	Radium-226+228	pci/l	9	2	22%	Parametric	Lognormal MLE	-0.00106	0.585	↔
30_5_114	MW-18A	Part 115	Iron	mg/l	9	0	0%	Parametric	Lognormal MLE	0.00270	0.542	↔
31_2_105	MW-18B	Appendix III	Boron	mg/l	9	0	0%	Nonparametric	MK	0.00192	0.466	↔
31_2_107	MW-18B	Appendix III	Calcium	mg/l	9	0	0%	Parametric	Lognormal MLE	0.00118	0.020	↔
31_2_108	MW-18B	Appendix III	Chloride	mg/l	9	0	0%	Parametric	Lognormal MLE	0.000393	0.048	↔
31_2_112	MW-18B	Appendix III	Fluoride	mg/l	9	1	11%	Parametric	Lognormal MLE	0.00174	0.110	↔
31_2_120	MW-18B	Appendix III	pH, Field	su	8	0	0%	Parametric	Lognormal MLE	-0.0000557	0.102	↔
31_2_124	MW-18B	Appendix III	Sulfate	mg/l	9	0	0%	Parametric	Lognormal MLE	0.00200	0.030	↔
31_2_126	MW-18B	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	Nonparametric	MK	0.405	0.076	↔
31_3_103	MW-18B	Appendix IV	Barium	mg/l	9	0	0%	Parametric	Lognormal MLE	0.0000595	0.864	↔
31_3_113	MW-18B	Appendix IV	Fluoride (App IV)	mg/l	9	1	11%	Parametric	Lognormal MLE	0.00174	0.110	↔
31_3_116	MW-18B	Appendix IV	Lithium	mg/l	9	0	0%	Nonparametric	MK	0	0.913	↔
31_3_118	MW-18B	Appendix IV	Molybdenum	mg/l	9	0	0%	Nonparametric	MK	0	0.830	↔
31_3_121	MW-18B	Appendix IV	Radium-226+228	pci/l	9	0	0%	Parametric	Lognormal MLE	-0.00209	0.195	↔
31_5_114	MW-18B	Part 115	Iron	mg/l	9	0	0%	Parametric	Lognormal MLE	-0.0000302	0.891	↔
31_5_119	MW-18B	Part 115	Nickel	mg/l	9	1	11%	Parametric	Lognormal MLE	0.00124	0.014	↔
32_2_105	MW-100A	Appendix III	Boron	mg/l	11	2	18%	Nonparametric	MK	0.00000922	0.035	↔

(Table continues on next page)

Table 8: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
32_2_107	MW-100A	Appendix III	Calcium	mg/l	11	0	0%	Parametric	Lognormal MLE	-0.0000667	0.001	↓
32_2_108	MW-100A	Appendix III	Chloride	mg/l	11	0	0%	Nonparametric	MK	0.000731	0.028	↔
32_2_120	MW-100A	Appendix III	pH, Field	su	11	0	0%	Parametric	Lognormal MLE	-0.0000193	0.181	↔
32_2_124	MW-100A	Appendix III	Sulfate	mg/l	11	0	0%	Parametric	Lognormal MLE	-0.0000871	0.787	↔
32_2_126	MW-100A	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	Nonparametric	MK	-0.107	0.006	↓
32_3_102	MW-100A	Appendix IV	Arsenic	mg/l	11	0	0%	Parametric	Lognormal MLE	0.0000469	0.854	↔
32_3_103	MW-100A	Appendix IV	Barium	mg/l	11	0	0%	Parametric	Lognormal MLE	-0.000115	0.000	↓
32_3_116	MW-100A	Appendix IV	Lithium	mg/l	11	0	0%	Parametric	Lognormal MLE	-0.000779	0.000	↓
32_3_118	MW-100A	Appendix IV	Molybdenum	mg/l	11	0	0%	Parametric	Lognormal MLE	-0.000778	0.000	↓
32_3_121	MW-100A	Appendix IV	Radium-226+228	pci/l	11	0	0%	Parametric	Lognormal MLE	0.000138	0.855	↔
32_5_114	MW-100A	Part 115	Iron	mg/l	11	0	0%	Parametric	Lognormal MLE	0.000217	0.724	↔
33_2_105	MW-100B	Appendix III	Boron	mg/l	11	0	0%	Parametric	Lognormal MLE	0.000169	0.148	↔
33_2_107	MW-100B	Appendix III	Calcium	mg/l	11	0	0%	Parametric	Lognormal MLE	-0.000101	0.053	↔
33_2_108	MW-100B	Appendix III	Chloride	mg/l	11	0	0%	Parametric	Lognormal MLE	-0.000405	0.000	↓
33_2_120	MW-100B	Appendix III	pH, Field	su	11	0	0%	Parametric	Lognormal MLE	-0.00000581	0.734	↔
33_2_124	MW-100B	Appendix III	Sulfate	mg/l	11	0	0%	Parametric	Lognormal MLE	-0.0000469	0.611	↔
33_2_126	MW-100B	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	Parametric	Lognormal MLE	-0.000211	0.000	↓
33_3_102	MW-100B	Appendix IV	Arsenic	mg/l	11	0	0%	Nonparametric	MK	0	0.510	↔
33_3_103	MW-100B	Appendix IV	Barium	mg/l	11	0	0%	Parametric	Lognormal MLE	-0.000164	0.000	↓
33_3_116	MW-100B	Appendix IV	Lithium	mg/l	11	0	0%	Parametric	Lognormal MLE	0.000154	0.002	↑
33_3_118	MW-100B	Appendix IV	Molybdenum	mg/l	11	0	0%	Parametric	Lognormal MLE	-0.000812	0.000	↓
33_3_121	MW-100B	Appendix IV	Radium-226+228	pci/l	11	1	9%	Parametric	Lognormal MLE	-0.000956	0.153	↔
33_5_114	MW-100B	Part 115	Iron	mg/l	11	0	0%	Parametric	Lognormal MLE	-0.0000910	0.664	↔

Table 9: Trend Tests: Piecewise Linear-Linear

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
13_2_105	MW-2	Appendix III	Boron	mg/l	18	0	0%	0.017203	0.000	↑	-0.0016176	0.000	↓	2020-10-08	0.905
13_2_107	MW-2	Appendix III	Calcium	mg/l	18	0	0%	-0.066601	0.000	↓	0.0011116	0.949	↔	2023-06-04	0.919
13_2_108	MW-2	Appendix III	Chloride	mg/l	18	0	0%	0.16531	0.007	↑	-0.012006	0.002	↓	2020-09-21	0.652
13_2_112	MW-2	Appendix III	Fluoride	mg/l	19	17	89%	< 0.0001	1.000	↔	-0.0025902	0.000	↓	2024-06-06	0.910
13_2_120	MW-2	Appendix III	pH, Field	su	19	0	0%	0.0011633	0.237	↔	< 0.0001	0.356	↔	2020-09-29	0.198
13_2_124	MW-2	Appendix III	Sulfate	mg/l	18	0	0%	-0.18265	0.000	↓	< 0.0001	1.000	↔	2024-11-17	0.768
13_2_126	MW-2	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	2.7857	0.005	↑	-0.30762	0.000	↓	2020-07-22	0.933
13_3_101	MW-2	Appendix IV	Antimony	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-05	0.907
13_3_102	MW-2	Appendix IV	Arsenic	mg/l	19	14	74%	< 0.0001	0.035	↔	< 0.0001	0.014	↔	2022-02-01	0.488
13_3_103	MW-2	Appendix IV	Barium	mg/l	19	0	0%	< 0.0001	0.020	↔	< 0.0001	0.494	↔	2024-08-05	0.327
13_3_104	MW-2	Appendix IV	Beryllium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-04	0.907
13_3_106	MW-2	Appendix IV	Cadmium	mg/l	19	17	89%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-05-25	0.883
13_3_109	MW-2	Appendix IV	Chromium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-05	0.907

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
13_3_110	MW-2	Appendix IV	Cobalt	mg/l	19	17	89%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-05-02	0.830
13_3_113	MW-2	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	< 0.0001	1.000	↔	-0.0025902	0.000	↓	2024-06-06	0.910
13_3_115	MW-2	Appendix IV	Lead	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-05	0.907
13_3_116	MW-2	Appendix IV	Lithium	mg/l	19	0	0%	< 0.0001	0.001	↑	< 0.0001	0.000	↓	2020-10-13	0.899
13_3_117	MW-2	Appendix IV	Mercury	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-04	0.907
13_3_118	MW-2	Appendix IV	Molybdenum	mg/l	19	0	0%	< 0.0001	0.006	↑	< 0.0001	0.009	↓	2023-04-19	0.565
13_3_121	MW-2	Appendix IV	Radium-226+228	pci/l	19	2	11%	0.00038499	0.846	↔	-0.00010531	0.891	↔	2022-01-31	0.009
13_3_122	MW-2	Appendix IV	Selenium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-04	0.907
13_3_125	MW-2	Appendix IV	Thallium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-05	0.907
13_5_111	MW-2	Part 115	Copper	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-05	0.907
13_5_114	MW-2	Part 115	Iron	mg/l	19	0	0%	0.0012978	0.013	↔	-0.00088501	0.011	↔	2022-02-04	0.524
13_5_119	MW-2	Part 115	Nickel	mg/l	19	0	0%	< 0.0001	0.000	↑	< 0.0001	0.000	↓	2020-09-04	0.932
13_5_123	MW-2	Part 115	Silver	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-05	0.907
13_5_128	MW-2	Part 115	Vanadium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-04	0.907
13_5_129	MW-2	Part 115	Zinc	mg/l	19	14	74%	-0.00012857	0.321	↔	< 0.0001	0.675	↔	2020-08-11	0.269
14_2_107	MW-3	Appendix III	Calcium	mg/l	10	0	0%	0.017204	0.143	↔	-0.10126	0.031	↔	2024-07-09	0.681
14_2_108	MW-3	Appendix III	Chloride	mg/l	10	0	0%	0.024586	0.029	↔	-0.010685	0.035	↔	2022-12-15	0.769
14_2_112	MW-3	Appendix III	Fluoride	mg/l	10	8	80%	< 0.0001	1.000	↔	-0.0023028	0.004	↓	2024-06-10	0.909
14_2_124	MW-3	Appendix III	Sulfate	mg/l	10	0	0%	0.0033497	0.878	↔	-0.27624	0.189	↔	2024-12-07	0.522
14_2_126	MW-3	Appendix III	Total Dissolved Solids	mg/l	10	0	0%	-0.068746	0.038	↔	-0.9029	0.000	↓	2024-08-01	0.979
14_3_101	MW-3	Appendix IV	Antimony	mg/l	10	10	100%	< 0.0001	0.794	↔	< 0.0001	0.010	↔	2024-04-09	0.891
14_3_102	MW-3	Appendix IV	Arsenic	mg/l	10	0	0%	< 0.0001	0.100	↔	< 0.0001	0.334	↔	2024-01-29	0.463
14_3_104	MW-3	Appendix IV	Beryllium	mg/l	10	10	100%	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2024-06-06	0.898
14_3_106	MW-3	Appendix IV	Cadmium	mg/l	10	10	100%	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2024-06-06	0.898
14_3_109	MW-3	Appendix IV	Chromium	mg/l	10	10	100%	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2024-06-06	0.898
14_3_110	MW-3	Appendix IV	Cobalt	mg/l	10	8	80%	< 0.0001	1.000	↔	< 0.0001	0.007	↓	2024-06-01	0.884
14_3_113	MW-3	Appendix IV	Fluoride (App IV)	mg/l	10	8	80%	< 0.0001	1.000	↔	-0.0023028	0.004	↓	2024-06-10	0.909
14_3_115	MW-3	Appendix IV	Lead	mg/l	10	9	90%	< 0.0001	1.000	↔	< 0.0001	0.011	↔	2024-05-26	0.869
14_3_116	MW-3	Appendix IV	Lithium	mg/l	10	0	0%	< 0.0001	0.202	↔	< 0.0001	0.080	↔	2021-08-20	0.519
14_3_117	MW-3	Appendix IV	Mercury	mg/l	10	10	100%	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2024-06-06	0.898
14_3_118	MW-3	Appendix IV	Molybdenum	mg/l	10	0	0%	< 0.0001	0.067	↔	< 0.0001	0.050	↔	2023-02-22	0.668
14_3_121	MW-3	Appendix IV	Radium-226+228	pci/l	10	2	20%	0.0049765	0.175	↔	-0.0017647	0.036	↔	2022-03-03	0.629
14_3_122	MW-3	Appendix IV	Selenium	mg/l	10	10	100%	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2024-06-06	0.898
14_3_125	MW-3	Appendix IV	Thallium	mg/l	10	10	100%	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2024-06-06	0.898
14_5_111	MW-3	Part 115	Copper	mg/l	10	9	90%	< 0.0001	0.963	↔	< 0.0001	0.106	↔	2024-03-04	0.730
14_5_114	MW-3	Part 115	Iron	mg/l	10	0	0%	-0.000169	0.631	↔	-0.000515	0.015	↔	2023-02-06	0.825
14_5_119	MW-3	Part 115	Nickel	mg/l	10	8	80%	< 0.0001	1.000	↔	< 0.0001	0.088	↔	2024-04-01	0.734
14_5_123	MW-3	Part 115	Silver	mg/l	10	10	100%	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2024-06-06	0.898
14_5_128	MW-3	Part 115	Vanadium	mg/l	10	10	100%	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2024-06-06	0.898
14_5_129	MW-3	Part 115	Zinc	mg/l	10	8	80%	< 0.0001	1.000	↔	< 0.0001	0.020	↔	2024-05-15	0.840
15_2_105	MW-5	Appendix III	Boron	mg/l	18	0	0%	-0.00387	0.085	↔	0.00043239	0.601	↔	2022-01-31	0.525
15_2_107	MW-5	Appendix III	Calcium	mg/l	18	0	0%	-0.19605	0.044	↔	-0.020621	0.557	↔	2022-01-31	0.717

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
15_2_112	MW-5	Appendix III	Fluoride	mg/l	19	17	89%	< 0.0001	1.000	↔	-0.0023497	0.000	↓	2024-05-31	0.897
15_2_120	MW-5	Appendix III	pH, Field	su	19	0	0%	-0.0016949	0.565	↔	0.00011273	0.337	↔	2020-09-27	0.104
15_2_124	MW-5	Appendix III	Sulfate	mg/l	18	0	0%	-0.70847	0.062	↔	-0.14872	0.288	↔	2022-01-31	0.729
15_2_126	MW-5	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	-1.1052	0.054	↔	-0.27564	0.195	↔	2022-01-31	0.758
15_3_101	MW-5	Appendix IV	Antimony	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-04	0.907
15_3_102	MW-5	Appendix IV	Arsenic	mg/l	19	12	63%	< 0.0001	0.329	↔	< 0.0001	0.181	↔	2022-02-01	0.195
15_3_103	MW-5	Appendix IV	Barium	mg/l	19	0	0%	-0.00026786	0.095	↔	< 0.0001	0.867	↔	2020-07-14	0.522
15_3_104	MW-5	Appendix IV	Beryllium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-05	0.907
15_3_106	MW-5	Appendix IV	Cadmium	mg/l	19	18	95%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-09	0.917
15_3_109	MW-5	Appendix IV	Chromium	mg/l	19	16	84%	< 0.0001	0.460	↔	< 0.0001	0.063	↔	2024-07-01	0.524
15_3_110	MW-5	Appendix IV	Cobalt	mg/l	19	16	84%	< 0.0001	0.616	↔	< 0.0001	0.000	↓	2024-06-20	0.906
15_3_113	MW-5	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	< 0.0001	1.000	↔	-0.0023497	0.000	↓	2024-05-31	0.897
15_3_115	MW-5	Appendix IV	Lead	mg/l	19	14	74%	< 0.0001	0.092	↔	< 0.0001	0.050	↔	2022-02-01	0.361
15_3_116	MW-5	Appendix IV	Lithium	mg/l	19	0	0%	< 0.0001	0.840	↔	< 0.0001	0.659	↔	2023-08-01	0.045
15_3_117	MW-5	Appendix IV	Mercury	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-04	0.907
15_3_118	MW-5	Appendix IV	Molybdenum	mg/l	19	0	0%	-0.00020322	0.077	↔	< 0.0001	0.008	↑	2020-11-01	0.462
15_3_121	MW-5	Appendix IV	Radium-226+228	pci/l	19	2	11%	0.00021425	0.744	↔	-0.0028743	0.511	↔	2024-03-05	0.105
15_3_122	MW-5	Appendix IV	Selenium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-04	0.907
15_3_125	MW-5	Appendix IV	Thallium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-05	0.907
15_5_111	MW-5	Part 115	Copper	mg/l	19	12	63%	< 0.0001	0.794	↔	< 0.0001	0.133	↔	2020-07-20	0.148
15_5_114	MW-5	Part 115	Iron	mg/l	19	1	5%	-0.21679	0.002	↓	< 0.0001	0.891	↔	2020-05-30	0.698
15_5_119	MW-5	Part 115	Nickel	mg/l	19	0	0%	-0.00010714	0.118	↔	< 0.0001	0.000	↓	2020-06-26	0.746
15_5_123	MW-5	Part 115	Silver	mg/l	19	18	95%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-14	0.928
15_5_129	MW-5	Part 115	Zinc	mg/l	19	3	16%	< 0.0001	0.665	↔	< 0.0001	0.152	↔	2021-01-26	0.152
16_2_105	MW-6	Appendix III	Boron	mg/l	18	0	0%	0.0030714	0.078	↔	< 0.0001	0.530	↔	2020-08-27	0.390
16_2_107	MW-6	Appendix III	Calcium	mg/l	18	0	0%	0.25973	0.160	↔	0.010171	0.184	↔	2020-08-18	0.457
16_2_108	MW-6	Appendix III	Chloride	mg/l	18	0	0%	0.093615	0.398	↔	0.0026335	0.390	↔	2020-08-17	0.317
16_2_112	MW-6	Appendix III	Fluoride	mg/l	19	17	89%	< 0.0001	1.000	↔	-0.0021858	0.000	↓	2024-06-11	0.921
16_2_120	MW-6	Appendix III	pH, Field	su	19	0	0%	0.0026071	0.143	↔	< 0.0001	0.595	↔	2020-08-20	0.261
16_2_124	MW-6	Appendix III	Sulfate	mg/l	18	0	0%	0.625	0.395	↔	-0.0082249	0.683	↔	2020-08-17	0.184
16_2_126	MW-6	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	1.5617	0.270	↔	0.0019876	0.959	↔	2020-08-17	0.320
16_3_101	MW-6	Appendix IV	Antimony	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-05	0.907
16_3_102	MW-6	Appendix IV	Arsenic	mg/l	19	17	89%	< 0.0001	0.042	↔	< 0.0001	0.003	↓	2024-02-18	0.775
16_3_103	MW-6	Appendix IV	Barium	mg/l	19	0	0%	< 0.0001	0.341	↔	< 0.0001	0.029	↔	2022-08-01	0.338
16_3_104	MW-6	Appendix IV	Beryllium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-05	0.907
16_3_106	MW-6	Appendix IV	Cadmium	mg/l	19	18	95%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-26	0.953
16_3_109	MW-6	Appendix IV	Chromium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-05	0.907
16_3_110	MW-6	Appendix IV	Cobalt	mg/l	19	17	89%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-09	0.918
16_3_113	MW-6	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	< 0.0001	1.000	↔	-0.0021858	0.000	↓	2024-06-11	0.921
16_3_115	MW-6	Appendix IV	Lead	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-05	0.907
16_3_116	MW-6	Appendix IV	Lithium	mg/l	19	0	0%	0.00010845	0.109	↔	< 0.0001	0.979	↔	2020-09-15	0.326
16_3_117	MW-6	Appendix IV	Mercury	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-04	0.907

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
16_3_118	MW-6	Appendix IV	Molybdenum	mg/l	19	0	0%	< 0.0001	0.570	↔	< 0.0001	0.089	↔	2021-08-29	0.310
16_3_121	MW-6	Appendix IV	Radium-226+228	pci/l	19	2	11%	0.0052006	0.359	↔	-0.00021572	0.698	↔	2021-01-26	0.200
16_3_122	MW-6	Appendix IV	Selenium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-04	0.907
16_3_125	MW-6	Appendix IV	Thallium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-05	0.907
16_5_111	MW-6	Part 115	Copper	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-05	0.907
16_5_114	MW-6	Part 115	Iron	mg/l	19	9	47%	-0.00089286	0.014	↔	< 0.0001	0.979	↔	2020-09-02	0.639
16_5_119	MW-6	Part 115	Nickel	mg/l	19	5	26%	< 0.0001	0.078	↔	< 0.0001	0.000	↓	2020-07-15	0.808
16_5_123	MW-6	Part 115	Silver	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-04	0.907
16_5_128	MW-6	Part 115	Vanadium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-04	0.907
16_5_129	MW-6	Part 115	Zinc	mg/l	19	16	84%	-0.00010357	0.321	↔	< 0.0001	0.640	↔	2020-08-13	0.285
17_2_105	MW-7	Appendix III	Boron	mg/l	15	0	0%	-0.00093669	0.182	↔	0.00099298	0.140	↔	2023-08-01	0.327
17_2_107	MW-7	Appendix III	Calcium	mg/l	15	0	0%	0.08898	0.525	↔	-0.0079614	0.603	↔	2021-12-15	0.071
17_2_108	MW-7	Appendix III	Chloride	mg/l	15	0	0%	0.042896	0.009	↑	-0.0072464	0.275	↔	2022-08-02	0.615
17_2_112	MW-7	Appendix III	Fluoride	mg/l	15	11	73%	< 0.0001	0.873	↔	-0.00096719	0.030	↔	2023-08-01	0.538
17_2_124	MW-7	Appendix III	Sulfate	mg/l	15	0	0%	0.1508	0.382	↔	-0.021119	0.434	↔	2022-02-16	0.137
17_2_126	MW-7	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	0.35249	0.468	↔	-0.021565	0.775	↔	2022-02-16	0.106
17_3_101	MW-7	Appendix IV	Antimony	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.902
17_3_102	MW-7	Appendix IV	Arsenic	mg/l	15	0	0%	< 0.0001	0.381	↔	< 0.0001	0.986	↔	2022-08-01	0.344
17_3_103	MW-7	Appendix IV	Barium	mg/l	15	0	0%	< 0.0001	0.050	↔	< 0.0001	0.046	↔	2024-01-29	0.489
17_3_104	MW-7	Appendix IV	Beryllium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.902
17_3_106	MW-7	Appendix IV	Cadmium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.902
17_3_109	MW-7	Appendix IV	Chromium	mg/l	15	14	93%	< 0.0001	0.400	↔	< 0.0001	0.035	↔	2024-08-08	0.794
17_3_110	MW-7	Appendix IV	Cobalt	mg/l	15	13	87%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-09	0.908
17_3_113	MW-7	Appendix IV	Fluoride (App IV)	mg/l	15	11	73%	< 0.0001	0.873	↔	-0.00096719	0.030	↔	2023-08-01	0.538
17_3_115	MW-7	Appendix IV	Lead	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.902
17_3_116	MW-7	Appendix IV	Lithium	mg/l	15	0	0%	< 0.0001	0.008	↓	< 0.0001	0.665	↔	2023-08-02	0.628
17_3_117	MW-7	Appendix IV	Mercury	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.902
17_3_118	MW-7	Appendix IV	Molybdenum	mg/l	15	0	0%	-0.0002221	0.037	↔	< 0.0001	0.970	↔	2022-12-30	0.750
17_3_121	MW-7	Appendix IV	Radium-226+228	pci/l	15	0	0%	0.0012093	0.778	↔	-0.0026131	0.207	↔	2023-02-07	0.188
17_3_122	MW-7	Appendix IV	Selenium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.902
17_3_125	MW-7	Appendix IV	Thallium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.902
17_5_111	MW-7	Part 115	Copper	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.902
17_5_114	MW-7	Part 115	Iron	mg/l	15	0	0%	0.0022962	0.276	↔	-0.00057378	0.248	↔	2022-02-17	0.219
17_5_119	MW-7	Part 115	Nickel	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.902
17_5_123	MW-7	Part 115	Silver	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.902
17_5_128	MW-7	Part 115	Vanadium	mg/l	15	14	93%	< 0.0001	0.289	↔	< 0.0001	0.000	↓	2024-04-21	0.892
17_5_129	MW-7	Part 115	Zinc	mg/l	15	11	73%	< 0.0001	0.376	↔	< 0.0001	0.343	↔	2024-08-07	0.384
18_2_105	MW-7C	Appendix III	Boron	mg/l	14	0	0%	0.0011218	0.635	↔	-0.00034457	0.159	↔	2022-08-31	0.206
18_2_107	MW-7C	Appendix III	Calcium	mg/l	14	0	0%	-0.007698	0.761	↔	-0.051274	0.774	↔	2024-08-08	0.119
18_2_108	MW-7C	Appendix III	Chloride	mg/l	14	0	0%	0.0025438	0.656	↔	-0.034938	0.393	↔	2024-08-10	0.341
18_2_112	MW-7C	Appendix III	Fluoride	mg/l	14	12	86%	< 0.0001	1.000	↔	-0.0019189	0.001	↓	2024-05-28	0.876
18_2_120	MW-7C	Appendix III	pH, Field	su	14	0	0%	-0.00095046	0.293	↔	< 0.0001	0.661	↔	2022-07-28	0.187

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
18_2_124	MW-7C	Appendix III	Sulfate	mg/l	14	0	0%	-0.70236	0.038	↔	-0.044104	0.003	↓	2022-06-22	0.876
18_2_126	MW-7C	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	-0.14372	0.006	↓	-0.54645	0.087	↔	2024-08-26	0.888
18_3_101	MW-7C	Appendix IV	Antimony	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.902
18_3_102	MW-7C	Appendix IV	Arsenic	mg/l	14	0	0%	< 0.0001	0.191	↔	< 0.0001	0.127	↔	2024-01-29	0.344
18_3_103	MW-7C	Appendix IV	Barium	mg/l	14	0	0%	< 0.0001	0.596	↔	< 0.0001	0.213	↔	2023-08-02	0.548
18_3_104	MW-7C	Appendix IV	Beryllium	mg/l	14	14	100%	< 0.0001	0.999	↔	< 0.0001	0.000	↓	2024-06-07	0.902
18_3_106	MW-7C	Appendix IV	Cadmium	mg/l	14	10	71%	< 0.0001	0.326	↔	< 0.0001	0.006	↓	2022-09-13	0.612
18_3_109	MW-7C	Appendix IV	Chromium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.902
18_3_110	MW-7C	Appendix IV	Cobalt	mg/l	14	13	93%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-04	0.895
18_3_113	MW-7C	Appendix IV	Fluoride (App IV)	mg/l	14	12	86%	< 0.0001	1.000	↔	-0.0019189	0.001	↓	2024-05-28	0.876
18_3_115	MW-7C	Appendix IV	Lead	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.902
18_3_116	MW-7C	Appendix IV	Lithium	mg/l	14	0	0%	< 0.0001	0.508	↔	< 0.0001	0.034	↔	2024-01-27	0.701
18_3_117	MW-7C	Appendix IV	Mercury	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.902
18_3_118	MW-7C	Appendix IV	Molybdenum	mg/l	14	0	0%	< 0.0001	0.935	↔	< 0.0001	0.202	↔	2024-01-30	0.538
18_3_121	MW-7C	Appendix IV	Radium-226+228	pci/l	14	0	0%	-0.013943	0.144	↔	< 0.0001	0.980	↔	2022-07-28	0.363
18_3_122	MW-7C	Appendix IV	Selenium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.902
18_3_125	MW-7C	Appendix IV	Thallium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.902
18_5_111	MW-7C	Part 115	Copper	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.902
18_5_114	MW-7C	Part 115	Iron	mg/l	14	0	0%	0.00025022	0.378	↔	-0.0060109	0.011	↔	2024-12-09	0.714
18_5_119	MW-7C	Part 115	Nickel	mg/l	14	0	0%	< 0.0001	0.046	↔	< 0.0001	0.225	↔	2022-04-22	0.666
18_5_123	MW-7C	Part 115	Silver	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.902
18_5_128	MW-7C	Part 115	Vanadium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.902
18_5_129	MW-7C	Part 115	Zinc	mg/l	14	11	79%	< 0.0001	0.853	↔	< 0.0001	0.022	↔	2024-04-20	0.761
19_2_105	MW-8	Appendix III	Boron	mg/l	15	1	7%	-0.00029538	0.241	↔	< 0.0001	0.572	↔	2022-01-11	0.179
19_2_107	MW-8	Appendix III	Calcium	mg/l	15	0	0%	0.038705	0.087	↔	-0.0084241	0.109	↔	2022-03-01	0.376
19_2_112	MW-8	Appendix III	Fluoride	mg/l	15	12	80%	0.00011996	0.681	↔	-0.0025886	0.044	↔	2024-06-01	0.556
19_2_124	MW-8	Appendix III	Sulfate	mg/l	15	0	0%	-0.066939	0.477	↔	0.0090121	0.385	↔	2021-12-26	0.114
19_2_126	MW-8	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	0.084099	0.050	↔	-0.12947	0.004	↓	2023-08-01	0.616
19_3_101	MW-8	Appendix IV	Antimony	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
19_3_102	MW-8	Appendix IV	Arsenic	mg/l	15	13	87%	< 0.0001	1.000	↔	< 0.0001	0.030	↔	2024-01-15	0.583
19_3_103	MW-8	Appendix IV	Barium	mg/l	15	0	0%	< 0.0001	0.048	↔	< 0.0001	0.173	↔	2022-01-11	0.414
19_3_104	MW-8	Appendix IV	Beryllium	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-05-31	0.886
19_3_106	MW-8	Appendix IV	Cadmium	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	0.013	↔	2024-04-12	0.774
19_3_109	MW-8	Appendix IV	Chromium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
19_3_110	MW-8	Appendix IV	Cobalt	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-05-31	0.885
19_3_113	MW-8	Appendix IV	Fluoride (App IV)	mg/l	15	12	80%	0.00011996	0.681	↔	-0.0025886	0.044	↔	2024-06-01	0.556
19_3_115	MW-8	Appendix IV	Lead	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
19_3_116	MW-8	Appendix IV	Lithium	mg/l	15	6	40%	< 0.0001	0.324	↔	< 0.0001	0.558	↔	2022-02-20	0.120
19_3_117	MW-8	Appendix IV	Mercury	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
19_3_118	MW-8	Appendix IV	Molybdenum	mg/l	15	11	73%	< 0.0001	0.212	↔	< 0.0001	0.834	↔	2022-01-04	0.373
19_3_121	MW-8	Appendix IV	Radium-226+228	pci/l	15	0	0%	0.018249	0.089	↔	-0.0021558	0.069	↔	2022-01-10	0.454
19_3_122	MW-8	Appendix IV	Selenium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
19_3_125	MW-8	Appendix IV	Thallium	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-03	0.893
19_5_111	MW-8	Part 115	Copper	mg/l	15	14	93%	< 0.0001	0.034	↔	< 0.0001	0.031	↔	2024-01-30	0.669
19_5_119	MW-8	Part 115	Nickel	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
19_5_123	MW-8	Part 115	Silver	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
19_5_128	MW-8	Part 115	Vanadium	mg/l	15	14	93%	< 0.0001	0.695	↔	< 0.0001	0.001	↓	2024-04-05	0.895
19_5_129	MW-8	Part 115	Zinc	mg/l	15	13	87%	< 0.0001	0.130	↔	< 0.0001	0.011	↔	2024-01-30	0.786
20_2_105	MW-9	Appendix III	Boron	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	0.000	↑	2024-06-07	0.903
20_2_107	MW-9	Appendix III	Calcium	mg/l	15	0	0%	0.024701	0.001	↑	-0.054645	0.365	↔	2024-12-18	0.706
20_2_108	MW-9	Appendix III	Chloride	mg/l	15	10	67%	0.0011197	0.220	↔	-0.011475	0.215	↔	2024-10-25	0.338
20_2_112	MW-9	Appendix III	Fluoride	mg/l	15	14	93%	0.00012324	0.681	↔	-0.0026764	0.043	↔	2024-06-02	0.559
20_2_126	MW-9	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	0.097712	0.000	↑	-0.43716	0.009	↓	2024-12-23	0.860
20_3_101	MW-9	Appendix IV	Antimony	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
20_3_102	MW-9	Appendix IV	Arsenic	mg/l	15	13	87%	< 0.0001	0.084	↔	< 0.0001	0.025	↔	2024-01-30	0.702
20_3_103	MW-9	Appendix IV	Barium	mg/l	15	0	0%	< 0.0001	0.362	↔	< 0.0001	0.009	↑	2022-02-28	0.673
20_3_104	MW-9	Appendix IV	Beryllium	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-05	0.899
20_3_106	MW-9	Appendix IV	Cadmium	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-05-08	0.832
20_3_109	MW-9	Appendix IV	Chromium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
20_3_110	MW-9	Appendix IV	Cobalt	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-05	0.898
20_3_113	MW-9	Appendix IV	Fluoride (App IV)	mg/l	15	14	93%	0.00012324	0.681	↔	-0.0026764	0.043	↔	2024-06-02	0.559
20_3_115	MW-9	Appendix IV	Lead	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
20_3_117	MW-9	Appendix IV	Mercury	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
20_3_118	MW-9	Appendix IV	Molybdenum	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
20_3_121	MW-9	Appendix IV	Radium-226+228	pci/l	15	0	0%	0.0061796	0.292	↔	-0.00057361	0.369	↔	2021-12-26	0.194
20_3_122	MW-9	Appendix IV	Selenium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
20_3_125	MW-9	Appendix IV	Thallium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
20_5_111	MW-9	Part 115	Copper	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
20_5_114	MW-9	Part 115	Iron	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
20_5_119	MW-9	Part 115	Nickel	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
20_5_123	MW-9	Part 115	Silver	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
20_5_128	MW-9	Part 115	Vanadium	mg/l	15	15	100%	< 0.0001	0.695	↔	< 0.0001	0.001	↓	2024-04-05	0.895
20_5_129	MW-9	Part 115	Zinc	mg/l	15	13	87%	< 0.0001	0.675	↔	< 0.0001	0.039	↔	2024-06-21	0.642
21_2_105	MW-10	Appendix III	Boron	mg/l	15	1	7%	< 0.0001	0.154	↔	< 0.0001	0.168	↔	2023-03-24	0.291
21_2_107	MW-10	Appendix III	Calcium	mg/l	15	0	0%	0.037419	0.442	↔	-0.017554	0.036	↔	2022-02-16	0.419
21_2_108	MW-10	Appendix III	Chloride	mg/l	15	9	60%	0.0025134	0.145	↔	-0.011523	0.101	↔	2024-01-30	0.519
21_2_112	MW-10	Appendix III	Fluoride	mg/l	15	12	80%	0.00011903	0.683	↔	-0.0025143	0.050	↔	2024-05-28	0.547
21_2_120	MW-10	Appendix III	pH, Field	su	15	0	0%	-0.0032286	0.184	↔	0.00014991	0.214	↔	2021-10-21	0.360
21_2_124	MW-10	Appendix III	Sulfate	mg/l	15	0	0%	0.007881	0.081	↔	-0.021592	0.217	↔	2024-01-30	0.373
21_2_126	MW-10	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	0.086304	0.164	↔	-0.17173	0.010	↓	2023-04-20	0.609
21_3_101	MW-10	Appendix IV	Antimony	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
21_3_102	MW-10	Appendix IV	Arsenic	mg/l	15	13	87%	< 0.0001	1.000	↔	< 0.0001	0.002	↓	2024-05-15	0.847
21_3_103	MW-10	Appendix IV	Barium	mg/l	15	0	0%	< 0.0001	0.148	↔	< 0.0001	0.082	↔	2022-04-06	0.727
21_3_104	MW-10	Appendix IV	Beryllium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
21_3_106	MW-10	Appendix IV	Cadmium	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-05-31	0.887
21_3_109	MW-10	Appendix IV	Chromium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
21_3_110	MW-10	Appendix IV	Cobalt	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
21_3_113	MW-10	Appendix IV	Fluoride (App IV)	mg/l	15	12	80%	0.00011903	0.683	↔	-0.0025143	0.050	↔	2024-05-28	0.547
21_3_115	MW-10	Appendix IV	Lead	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
21_3_117	MW-10	Appendix IV	Mercury	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
21_3_118	MW-10	Appendix IV	Molybdenum	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
21_3_121	MW-10	Appendix IV	Radium-226+228	pci/l	15	0	0%	0.0016914	0.025	↔	-0.008765	0.213	↔	2025-01-08	0.452
21_3_122	MW-10	Appendix IV	Selenium	mg/l	15	13	87%	< 0.0001	0.999	↔	< 0.0001	0.000	↓	2024-06-13	0.918
21_3_125	MW-10	Appendix IV	Thallium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
21_5_111	MW-10	Part 115	Copper	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
21_5_114	MW-10	Part 115	Iron	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
21_5_119	MW-10	Part 115	Nickel	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
21_5_123	MW-10	Part 115	Silver	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
21_5_128	MW-10	Part 115	Vanadium	mg/l	15	15	100%	< 0.0001	0.695	↔	< 0.0001	0.001	↓	2024-04-05	0.895
21_5_129	MW-10	Part 115	Zinc	mg/l	15	12	80%	< 0.0001	0.270	↔	< 0.0001	0.041	↔	2022-01-10	0.379
22_2_105	MW-13	Appendix III	Boron	mg/l	14	0	0%	0.00020867	0.091	↔	< 0.0001	0.603	↔	2022-09-21	0.369
22_2_107	MW-13	Appendix III	Calcium	mg/l	14	0	0%	-0.60286	0.039	↔	0.056917	0.000	↑	2022-05-04	0.801
22_2_108	MW-13	Appendix III	Chloride	mg/l	14	2	14%	0.11085	0.000	↑	-0.036971	0.002	↓	2023-03-07	0.869
22_2_112	MW-13	Appendix III	Fluoride	mg/l	14	12	86%	< 0.0001	1.000	↔	-0.0022678	0.000	↓	2024-06-02	0.892
22_2_120	MW-13	Appendix III	pH, Field	su	14	0	0%	0.0021143	0.479	↔	-0.00031017	0.124	↔	2022-06-30	0.254
22_2_124	MW-13	Appendix III	Sulfate	mg/l	14	0	0%	-0.0002747	0.998	↔	0.16096	0.000	↑	2022-10-25	0.868
22_2_126	MW-13	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	-1.7029	0.467	↔	0.27541	0.000	↑	2022-05-03	0.822
22_3_101	MW-13	Appendix IV	Antimony	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
22_3_102	MW-13	Appendix IV	Arsenic	mg/l	14	9	64%	< 0.0001	0.000	↑	< 0.0001	0.020	↔	2024-10-26	0.839
22_3_104	MW-13	Appendix IV	Beryllium	mg/l	14	14	100%	< 0.0001	0.731	↔	< 0.0001	0.001	↓	2024-04-17	0.898
22_3_106	MW-13	Appendix IV	Cadmium	mg/l	14	14	100%	< 0.0001	0.775	↔	< 0.0001	0.001	↓	2024-04-28	0.900
22_3_109	MW-13	Appendix IV	Chromium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
22_3_110	MW-13	Appendix IV	Cobalt	mg/l	14	12	86%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-19	0.932
22_3_113	MW-13	Appendix IV	Fluoride (App IV)	mg/l	14	12	86%	< 0.0001	1.000	↔	-0.0022678	0.000	↓	2024-06-02	0.892
22_3_115	MW-13	Appendix IV	Lead	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
22_3_116	MW-13	Appendix IV	Lithium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
22_3_117	MW-13	Appendix IV	Mercury	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
22_3_118	MW-13	Appendix IV	Molybdenum	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
22_3_121	MW-13	Appendix IV	Radium-226+228	pci/l	14	1	7%	-0.0023323	0.573	↔	0.00066911	0.585	↔	2022-12-18	0.064
22_3_125	MW-13	Appendix IV	Thallium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
22_5_111	MW-13	Part 115	Copper	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.903
22_5_119	MW-13	Part 115	Nickel	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.903
22_5_123	MW-13	Part 115	Silver	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.903
22_5_128	MW-13	Part 115	Vanadium	mg/l	14	13	93%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-05-14	0.846
22_5_129	MW-13	Part 115	Zinc	mg/l	14	12	86%	< 0.0001	0.608	↔	< 0.0001	0.288	↔	2024-10-09	0.498
23_2_105	MW-14	Appendix III	Boron	mg/l	12	0	0%	-0.0021623	0.517	↔	-0.00023126	0.034	↔	2023-03-23	0.656

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
23_2_107	MW-14	Appendix III	Calcium	mg/l	12	0	0%	0.050522	0.000	↑	-0.029691	0.399	↔	2024-08-05	0.858
23_2_108	MW-14	Appendix III	Chloride	mg/l	12	0	0%	0.0177	0.396	↔	-0.022841	0.069	↔	2024-01-24	0.417
23_2_112	MW-14	Appendix III	Fluoride	mg/l	12	10	83%	< 0.0001	1.000	↔	-0.0022131	0.002	↓	2024-05-29	0.885
23_2_120	MW-14	Appendix III	pH, Field	su	12	0	0%	-0.00045785	0.160	↔	< 0.0001	0.855	↔	2023-09-15	0.306
23_2_124	MW-14	Appendix III	Sulfate	mg/l	12	0	0%	-0.78041	0.467	↔	-0.0052781	0.993	↔	2023-09-23	0.123
23_2_126	MW-14	Appendix III	Total Dissolved Solids	mg/l	12	1	8%	0.99557	0.390	↔	-0.20558	0.742	↔	2023-11-10	0.150
23_3_101	MW-14	Appendix IV	Antimony	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-05	0.900
23_3_102	MW-14	Appendix IV	Arsenic	mg/l	12	0	0%	< 0.0001	0.006	↑	< 0.0001	0.344	↔	2023-09-15	0.683
23_3_104	MW-14	Appendix IV	Beryllium	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-05	0.900
23_3_106	MW-14	Appendix IV	Cadmium	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-05	0.900
23_3_109	MW-14	Appendix IV	Chromium	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
23_3_110	MW-14	Appendix IV	Cobalt	mg/l	12	10	83%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-09	0.911
23_3_113	MW-14	Appendix IV	Fluoride (App IV)	mg/l	12	10	83%	< 0.0001	1.000	↔	-0.0022131	0.002	↓	2024-05-29	0.885
23_3_115	MW-14	Appendix IV	Lead	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
23_3_116	MW-14	Appendix IV	Lithium	mg/l	12	0	0%	-0.00016861	0.010	↔	< 0.0001	0.000	↓	2023-04-09	0.942
23_3_117	MW-14	Appendix IV	Mercury	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-05	0.900
23_3_122	MW-14	Appendix IV	Selenium	mg/l	12	10	83%	< 0.0001	0.330	↔	< 0.0001	0.015	↔	2023-07-02	0.580
23_3_125	MW-14	Appendix IV	Thallium	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
23_5_111	MW-14	Part 115	Copper	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-05	0.900
23_5_114	MW-14	Part 115	Iron	mg/l	12	0	0%	0.041452	0.005	↑	0.0046469	0.003	↑	2023-05-06	0.920
23_5_119	MW-14	Part 115	Nickel	mg/l	12	6	50%	< 0.0001	0.366	↔	< 0.0001	0.153	↔	2024-08-04	0.659
23_5_123	MW-14	Part 115	Silver	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-05	0.900
23_5_128	MW-14	Part 115	Vanadium	mg/l	12	10	83%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-18	0.933
24_2_105	MW-15	Appendix III	Boron	mg/l	12	0	0%	0.00031362	0.202	↔	< 0.0001	0.471	↔	2023-09-14	0.306
24_2_107	MW-15	Appendix III	Calcium	mg/l	12	0	0%	-1.1944	0.049	↔	0.021783	0.176	↔	2023-03-03	0.684
24_2_108	MW-15	Appendix III	Chloride	mg/l	12	0	0%	-0.3946	0.008	↓	0.033666	0.001	↑	2023-04-13	0.859
24_2_112	MW-15	Appendix III	Fluoride	mg/l	12	10	83%	< 0.0001	1.000	↔	-0.002601	0.001	↓	2024-06-05	0.898
24_2_120	MW-15	Appendix III	pH, Field	su	12	0	0%	-0.00099885	0.012	↔	< 0.0001	0.782	↔	2023-09-29	0.745
24_2_124	MW-15	Appendix III	Sulfate	mg/l	12	0	0%	-2.8611	0.005	↓	-0.0389	0.104	↔	2023-02-23	0.863
24_2_126	MW-15	Appendix III	Total Dissolved Solids	mg/l	12	0	0%	-0.40099	0.368	↔	0.012158	0.959	↔	2023-10-27	0.201
24_3_101	MW-15	Appendix IV	Antimony	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-05	0.898
24_3_102	MW-15	Appendix IV	Arsenic	mg/l	12	9	75%	< 0.0001	1.000	↔	< 0.0001	0.002	↓	2024-06-03	0.892
24_3_104	MW-15	Appendix IV	Beryllium	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-05	0.898
24_3_106	MW-15	Appendix IV	Cadmium	mg/l	12	11	92%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-05	0.896
24_3_109	MW-15	Appendix IV	Chromium	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-05	0.898
24_3_110	MW-15	Appendix IV	Cobalt	mg/l	12	11	92%	< 0.0001	1.000	↔	< 0.0001	0.004	↓	2024-05-23	0.865
24_3_113	MW-15	Appendix IV	Fluoride (App IV)	mg/l	12	10	83%	< 0.0001	1.000	↔	-0.002601	0.001	↓	2024-06-05	0.898
24_3_115	MW-15	Appendix IV	Lead	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-05	0.898
24_3_117	MW-15	Appendix IV	Mercury	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-05	0.898
24_3_118	MW-15	Appendix IV	Molybdenum	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-05	0.898
24_3_121	MW-15	Appendix IV	Radium-226+228	pci/l	12	0	0%	-0.0014186	0.514	↔	0.00046199	0.868	↔	2024-01-31	0.071
24_3_122	MW-15	Appendix IV	Selenium	mg/l	12	5	42%	< 0.0001	0.106	↔	< 0.0001	0.904	↔	2023-09-15	0.399

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
24_3_125	MW-15	Appendix IV	Thallium	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-05	0.898
24_5_111	MW-15	Part 115	Copper	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-05	0.898
24_5_114	MW-15	Part 115	Iron	mg/l	12	1	8%	0.00047694	0.007	↑	-0.00072048	0.214	↔	2024-08-07	0.648
24_5_119	MW-15	Part 115	Nickel	mg/l	12	11	92%	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2024-05-21	0.859
24_5_123	MW-15	Part 115	Silver	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-05	0.898
24_5_128	MW-15	Part 115	Vanadium	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-05	0.898
24_5_129	MW-15	Part 115	Zinc	mg/l	12	10	83%	< 0.0001	0.656	↔	< 0.0001	0.118	↔	2023-04-27	0.291
25_2_105	MW-16A	Appendix III	Boron	mg/l	13	0	0%	0.00018857	0.084	↔	< 0.0001	0.997	↔	2024-08-06	0.431
25_2_107	MW-16A	Appendix III	Calcium	mg/l	13	0	0%	0.24886	0.011	↔	-0.054868	0.155	↔	2023-10-30	0.628
25_2_108	MW-16A	Appendix III	Chloride	mg/l	13	0	0%	0.21034	0.004	↑	-0.5914	0.021	↔	2024-11-10	0.713
25_2_112	MW-16A	Appendix III	Fluoride	mg/l	13	11	85%	0.0057539	0.097	↔	-0.0052642	0.229	↔	2024-02-01	0.421
25_2_120	MW-16A	Appendix III	pH, Field	su	13	0	0%	-0.0012164	0.460	↔	-0.00013968	0.250	↔	2023-05-29	0.420
25_2_124	MW-16A	Appendix III	Sulfate	mg/l	13	0	0%	0.64047	0.000	↑	-0.20992	0.203	↔	2024-02-01	0.796
25_2_126	MW-16A	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	1.7986	0.005	↑	-0.41482	0.091	↔	2023-10-29	0.696
25_3_101	MW-16A	Appendix IV	Antimony	mg/l	13	12	92%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-05-31	0.891
25_3_102	MW-16A	Appendix IV	Arsenic	mg/l	13	0	0%	< 0.0001	0.166	↔	< 0.0001	0.138	↔	2024-01-31	0.354
25_3_103	MW-16A	Appendix IV	Barium	mg/l	13	0	0%	0.00015662	0.115	↔	< 0.0001	0.358	↔	2023-10-29	0.339
25_3_104	MW-16A	Appendix IV	Beryllium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
25_3_106	MW-16A	Appendix IV	Cadmium	mg/l	13	12	92%	< 0.0001	1.000	↔	< 0.0001	0.048	↔	2024-03-18	0.727
25_3_109	MW-16A	Appendix IV	Chromium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
25_3_110	MW-16A	Appendix IV	Cobalt	mg/l	13	11	85%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-07	0.908
25_3_113	MW-16A	Appendix IV	Fluoride (App IV)	mg/l	13	11	85%	0.0057539	0.097	↔	-0.0052642	0.229	↔	2024-02-01	0.421
25_3_115	MW-16A	Appendix IV	Lead	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
25_3_116	MW-16A	Appendix IV	Lithium	mg/l	13	10	77%	< 0.0001	1.000	↔	< 0.0001	0.015	↔	2024-04-20	0.794
25_3_117	MW-16A	Appendix IV	Mercury	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
25_3_118	MW-16A	Appendix IV	Molybdenum	mg/l	13	11	85%	< 0.0001	1.000	↔	< 0.0001	0.039	↔	2024-03-25	0.740
25_3_121	MW-16A	Appendix IV	Radium-226+228	pci/l	13	0	0%	0.0065086	0.485	↔	-0.0041403	0.329	↔	2023-10-27	0.159
25_3_122	MW-16A	Appendix IV	Selenium	mg/l	13	12	92%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
25_3_125	MW-16A	Appendix IV	Thallium	mg/l	13	12	92%	< 0.0001	1.000	↔	< 0.0001	0.002	↓	2024-05-25	0.877
25_5_111	MW-16A	Part 115	Copper	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
25_5_114	MW-16A	Part 115	Iron	mg/l	13	0	0%	0.0022924	0.225	↔	-0.0023551	0.334	↔	2024-02-01	0.304
25_5_119	MW-16A	Part 115	Nickel	mg/l	13	11	85%	< 0.0001	1.000	↔	< 0.0001	0.007	↓	2024-05-04	0.826
25_5_123	MW-16A	Part 115	Silver	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
25_5_128	MW-16A	Part 115	Vanadium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
25_5_129	MW-16A	Part 115	Zinc	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
26_2_105	MW-16B	Appendix III	Boron	mg/l	13	0	0%	< 0.0001	0.051	↔	< 0.0001	1.000	↔	2024-02-02	0.494
26_2_107	MW-16B	Appendix III	Calcium	mg/l	13	0	0%	0.032933	0.001	↑	-0.001544	0.500	↔	2023-10-16	0.866
26_2_108	MW-16B	Appendix III	Chloride	mg/l	13	5	38%	-0.0099271	0.097	↔	0.00054833	0.940	↔	2024-02-15	0.391
26_2_112	MW-16B	Appendix III	Fluoride	mg/l	13	8	62%	-0.00057545	0.393	↔	0.00051249	0.558	↔	2024-03-18	0.119
26_2_120	MW-16B	Appendix III	pH, Field	su	13	0	0%	< 0.0001	0.779	↔	-0.00069892	0.356	↔	2025-01-05	0.159
26_2_124	MW-16B	Appendix III	Sulfate	mg/l	13	0	0%	-0.042553	0.062	↔	0.0073721	0.000	↑	2023-03-24	0.917
26_2_126	MW-16B	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	0.025418	0.277	↔	-0.070143	0.038	↔	2024-07-05	0.497

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
26_3_101	MW-16B	Appendix IV	Antimony	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
26_3_102	MW-16B	Appendix IV	Arsenic	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
26_3_103	MW-16B	Appendix IV	Barium	mg/l	13	0	0%	< 0.0001	0.385	↔	< 0.0001	0.286	↔	2023-12-19	0.211
26_3_104	MW-16B	Appendix IV	Beryllium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
26_3_106	MW-16B	Appendix IV	Cadmium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
26_3_109	MW-16B	Appendix IV	Chromium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
26_3_110	MW-16B	Appendix IV	Cobalt	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
26_3_113	MW-16B	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	-0.00057545	0.393	↔	0.00051249	0.558	↔	2024-03-18	0.119
26_3_115	MW-16B	Appendix IV	Lead	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
26_3_116	MW-16B	Appendix IV	Lithium	mg/l	13	0	0%	< 0.0001	0.055	↔	< 0.0001	0.509	↔	2023-10-13	0.541
26_3_117	MW-16B	Appendix IV	Mercury	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
26_3_118	MW-16B	Appendix IV	Molybdenum	mg/l	13	0	0%	< 0.0001	0.013	↔	< 0.0001	0.352	↔	2023-03-23	0.663
26_3_121	MW-16B	Appendix IV	Radium-226+228	pci/l	13	0	0%	0.0054261	0.499	↔	-0.0035986	0.183	↔	2023-10-16	0.226
26_3_122	MW-16B	Appendix IV	Selenium	mg/l	13	12	92%	< 0.0001	0.826	↔	< 0.0001	0.001	↓	2024-05-15	0.879
26_3_125	MW-16B	Appendix IV	Thallium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
26_5_111	MW-16B	Part 115	Copper	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
26_5_114	MW-16B	Part 115	Iron	mg/l	13	0	0%	-0.0026093	0.004	↓	< 0.0001	0.412	↔	2023-07-14	0.830
26_5_119	MW-16B	Part 115	Nickel	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
26_5_123	MW-16B	Part 115	Silver	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
26_5_128	MW-16B	Part 115	Vanadium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
26_5_129	MW-16B	Part 115	Zinc	mg/l	13	12	92%	< 0.0001	1.000	↔	< 0.0001	0.048	↔	2024-03-18	0.727
27_2_105	MW-17A	Appendix III	Boron	mg/l	8	0	0%	0.0046455	0.149	↔	-0.013834	0.074	↔	2025-06-07	0.692
27_2_108	MW-17A	Appendix III	Chloride	mg/l	8	0	0%	0.021729	0.107	↔	-0.040431	0.657	↔	2025-07-01	0.560
27_2_112	MW-17A	Appendix III	Fluoride	mg/l	8	3	38%	0.0125	0.270	↔	-0.0017735	0.150	↔	2024-11-27	0.567
27_3_101	MW-17A	Appendix IV	Antimony	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
27_3_102	MW-17A	Appendix IV	Arsenic	mg/l	8	1	12%	< 0.0001	0.123	↔	< 0.0001	0.903	↔	2025-02-27	0.688
27_3_103	MW-17A	Appendix IV	Barium	mg/l	8	0	0%	< 0.0001	0.054	↔	< 0.0001	0.728	↔	2025-01-28	0.825
27_3_104	MW-17A	Appendix IV	Beryllium	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
27_3_110	MW-17A	Appendix IV	Cobalt	mg/l	8	7	88%	< 0.0001	0.070	↔	< 0.0001	1.000	↔	2025-02-26	0.840
27_3_113	MW-17A	Appendix IV	Fluoride (App IV)	mg/l	8	3	38%	0.0125	0.270	↔	-0.0017735	0.150	↔	2024-11-27	0.567
27_3_115	MW-17A	Appendix IV	Lead	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
27_3_117	MW-17A	Appendix IV	Mercury	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
27_3_118	MW-17A	Appendix IV	Molybdenum	mg/l	8	0	0%	< 0.0001	0.049	↔	< 0.0001	0.048	↔	2025-06-30	0.887
27_3_121	MW-17A	Appendix IV	Radium-226+228	pci/l	8	1	12%	0.010395	0.811	↔	-0.0072348	0.514	↔	2024-12-30	0.153
27_3_122	MW-17A	Appendix IV	Selenium	mg/l	8	7	88%	< 0.0001	0.070	↔	< 0.0001	0.998	↔	2025-02-26	0.839
27_3_125	MW-17A	Appendix IV	Thallium	mg/l	8	7	88%	< 0.0001	0.078	↔	< 0.0001	0.986	↔	2025-02-22	0.816
27_5_114	MW-17A	Part 115	Iron	mg/l	8	0	0%	-0.0012576	0.905	↔	0.0060444	0.794	↔	2025-02-27	0.241
27_5_123	MW-17A	Part 115	Silver	mg/l	8	8	100%	< 0.0001	0.392	↔	< 0.0001	1.000	↔	2025-02-27	0.288
27_5_128	MW-17A	Part 115	Vanadium	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
27_5_129	MW-17A	Part 115	Zinc	mg/l	8	4	50%	< 0.0001	0.309	↔	-0.00018235	0.457	↔	2025-07-01	0.424
28_2_107	MW-17B	Appendix III	Calcium	mg/l	8	0	0%	-0.31007	0.477	↔	-0.0025714	0.998	↔	2025-05-13	0.392
28_2_108	MW-17B	Appendix III	Chloride	mg/l	8	0	0%	-0.12502	0.141	↔	0.039035	0.083	↔	2025-01-12	0.704

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
28_2_112	MW-17B	Appendix III	Fluoride	mg/l	8	2	25%	0.0013201	0.566	↔	0.00016595	0.891	↔	2025-01-23	0.211
28_2_120	MW-17B	Appendix III	pH, Field	su	8	0	0%	-0.0014007	0.342	↔	0.00017659	0.954	↔	2025-02-27	0.287
28_2_124	MW-17B	Appendix III	Sulfate	mg/l	8	0	0%	-0.34179	0.592	↔	-0.5829	0.908	↔	2025-07-01	0.214
28_3_101	MW-17B	Appendix IV	Antimony	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
28_3_102	MW-17B	Appendix IV	Arsenic	mg/l	8	1	12%	< 0.0001	0.506	↔	< 0.0001	0.127	↔	2024-12-17	0.534
28_3_103	MW-17B	Appendix IV	Barium	mg/l	8	0	0%	< 0.0001	0.779	↔	< 0.0001	0.669	↔	2025-03-06	0.555
28_3_104	MW-17B	Appendix IV	Beryllium	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
28_3_106	MW-17B	Appendix IV	Cadmium	mg/l	8	7	88%	< 0.0001	0.539	↔	< 0.0001	0.997	↔	2025-02-26	0.282
28_3_110	MW-17B	Appendix IV	Cobalt	mg/l	8	5	62%	< 0.0001	0.024	↔	< 0.0001	0.997	↔	2025-02-28	0.849
28_3_113	MW-17B	Appendix IV	Fluoride (App IV)	mg/l	8	2	25%	0.0013201	0.566	↔	0.00016595	0.891	↔	2025-01-23	0.211
28_3_115	MW-17B	Appendix IV	Lead	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
28_3_117	MW-17B	Appendix IV	Mercury	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
28_3_118	MW-17B	Appendix IV	Molybdenum	mg/l	8	0	0%	0.00011683	0.824	↔	< 0.0001	0.969	↔	2025-02-26	0.056
28_3_121	MW-17B	Appendix IV	Radium-226+228	pci/l	8	1	12%	-0.019326	0.001	↓	0.00050757	0.679	↔	2025-01-28	0.976
28_3_122	MW-17B	Appendix IV	Selenium	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
28_3_125	MW-17B	Appendix IV	Thallium	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
28_5_114	MW-17B	Part 115	Iron	mg/l	8	0	0%	-0.015245	0.430	↔	0.0013242	0.974	↔	2025-04-09	0.329
28_5_119	MW-17B	Part 115	Nickel	mg/l	8	3	38%	-0.00013271	0.606	↔	< 0.0001	0.964	↔	2025-02-25	0.225
28_5_123	MW-17B	Part 115	Silver	mg/l	8	8	100%	< 0.0001	0.392	↔	< 0.0001	1.000	↔	2025-02-27	0.288
28_5_128	MW-17B	Part 115	Vanadium	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
28_5_129	MW-17B	Part 115	Zinc	mg/l	8	3	38%	0.00082841	0.122	↔	-0.00031089	0.245	↔	2025-01-23	0.588
29_2_105	MW-17C	Appendix III	Boron	mg/l	8	0	0%	0.0045582	0.003	↑	-0.016216	0.049	↔	2025-07-23	0.933
29_2_107	MW-17C	Appendix III	Calcium	mg/l	8	0	0%	0.48408	0.062	↔	-0.29056	0.522	↔	2025-04-24	0.739
29_2_108	MW-17C	Appendix III	Chloride	mg/l	8	0	0%	-0.22136	0.070	↔	0.0016344	0.945	↔	2024-12-28	0.789
29_2_112	MW-17C	Appendix III	Fluoride	mg/l	8	2	25%	-0.00083188	0.776	↔	0.00013757	0.983	↔	2025-06-10	0.105
29_2_120	MW-17C	Appendix III	pH, Field	su	8	0	0%	-0.0036846	0.017	↔	0.0012535	0.575	↔	2025-03-20	0.838
29_2_124	MW-17C	Appendix III	Sulfate	mg/l	8	0	0%	1.8882	0.010	↔	-1.8141	0.117	↔	2025-05-11	0.902
29_2_126	MW-17C	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	2.3738	0.080	↔	-4.1527	0.138	↔	2025-06-02	0.736
29_3_101	MW-17C	Appendix IV	Antimony	mg/l	8	7	88%	< 0.0001	0.024	↔	< 0.0001	1.000	↔	2025-02-28	0.849
29_3_102	MW-17C	Appendix IV	Arsenic	mg/l	8	0	0%	< 0.0001	0.627	↔	< 0.0001	0.642	↔	2025-05-10	0.129
29_3_103	MW-17C	Appendix IV	Barium	mg/l	8	0	0%	0.00017	0.463	↔	< 0.0001	0.244	↔	2024-12-18	0.429
29_3_104	MW-17C	Appendix IV	Beryllium	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
29_3_106	MW-17C	Appendix IV	Cadmium	mg/l	8	8	100%	< 0.0001	0.397	↔	< 0.0001	1.000	↔	2025-02-27	0.283
29_3_110	MW-17C	Appendix IV	Cobalt	mg/l	8	4	50%	< 0.0001	0.024	↔	< 0.0001	0.990	↔	2025-02-27	0.847
29_3_113	MW-17C	Appendix IV	Fluoride (App IV)	mg/l	8	2	25%	-0.00083188	0.776	↔	0.00013757	0.983	↔	2025-06-10	0.105
29_3_115	MW-17C	Appendix IV	Lead	mg/l	8	5	62%	< 0.0001	0.071	↔	< 0.0001	0.733	↔	2025-02-25	0.814
29_3_116	MW-17C	Appendix IV	Lithium	mg/l	8	0	0%	-0.00046178	0.079	↔	< 0.0001	0.657	↔	2025-01-01	0.827
29_3_117	MW-17C	Appendix IV	Mercury	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
29_3_118	MW-17C	Appendix IV	Molybdenum	mg/l	8	0	0%	-0.00045909	0.002	↓	0.00032258	0.073	↔	2025-05-15	0.971
29_3_121	MW-17C	Appendix IV	Radium-226+228	pci/l	8	0	0%	-0.0072476	0.259	↔	0.011406	0.401	↔	2025-05-21	0.420
29_3_122	MW-17C	Appendix IV	Selenium	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
29_3_125	MW-17C	Appendix IV	Thallium	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
29_5_114	MW-17C	Part 115	Iron	mg/l	8	0	0%	0.0095232	0.181	↔	-0.054054	0.317	↔	2025-08-03	0.532
29_5_119	MW-17C	Part 115	Nickel	mg/l	8	1	12%	-0.00015206	0.513	↔	< 0.0001	0.998	↔	2025-02-03	0.232
29_5_123	MW-17C	Part 115	Silver	mg/l	8	8	100%	< 0.0001	0.392	↔	< 0.0001	1.000	↔	2025-02-27	0.288
29_5_128	MW-17C	Part 115	Vanadium	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
29_5_129	MW-17C	Part 115	Zinc	mg/l	8	4	50%	0.00028367	0.295	↔	-0.00013519	0.348	↔	2025-01-23	0.409
30_2_107	MW-18A	Appendix III	Calcium	mg/l	9	0	0%	0.45408	0.340	↔	-0.12806	0.656	↔	2025-02-04	0.267
30_2_112	MW-18A	Appendix III	Fluoride	mg/l	9	0	0%	-0.00083029	0.649	↔	0.0019371	0.457	↔	2025-04-08	0.165
30_2_120	MW-18A	Appendix III	pH, Field	su	8	0	0%	-0.0056427	0.312	↔	0.0019952	0.245	↔	2025-01-04	0.455
30_2_126	MW-18A	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	0.85163	0.547	↔	-0.32393	0.445	↔	2025-01-21	0.220
30_3_101	MW-18A	Appendix IV	Antimony	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
30_3_102	MW-18A	Appendix IV	Arsenic	mg/l	9	3	33%	< 0.0001	0.671	↔	< 0.0001	0.066	↔	2024-12-17	0.542
30_3_103	MW-18A	Appendix IV	Barium	mg/l	9	0	0%	0.00030014	0.353	↔	-0.00018768	0.355	↔	2025-01-28	0.301
30_3_104	MW-18A	Appendix IV	Beryllium	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
30_3_106	MW-18A	Appendix IV	Cadmium	mg/l	9	9	100%	< 0.0001	0.338	↔	< 0.0001	1.000	↔	2025-02-27	0.299
30_3_110	MW-18A	Appendix IV	Cobalt	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
30_3_113	MW-18A	Appendix IV	Fluoride (App IV)	mg/l	9	0	0%	-0.00083029	0.649	↔	0.0019371	0.457	↔	2025-04-08	0.165
30_3_115	MW-18A	Appendix IV	Lead	mg/l	9	7	78%	< 0.0001	0.012	↔	< 0.0001	0.992	↔	2025-02-27	0.851
30_3_116	MW-18A	Appendix IV	Lithium	mg/l	9	0	0%	0.00046576	0.382	↔	-0.00022492	0.179	↔	2025-01-22	0.426
30_3_117	MW-18A	Appendix IV	Mercury	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
30_3_121	MW-18A	Appendix IV	Radium-226+228	pci/l	9	2	22%	-0.022451	0.108	↔	0.0037372	0.323	↔	2025-01-12	0.672
30_3_122	MW-18A	Appendix IV	Selenium	mg/l	9	8	89%	< 0.0001	0.044	↔	< 0.0001	0.887	↔	2025-02-20	0.836
30_3_125	MW-18A	Appendix IV	Thallium	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
30_5_114	MW-18A	Part 115	Iron	mg/l	9	0	0%	0.020424	0.166	↔	-0.013234	0.155	↔	2025-01-30	0.529
30_5_128	MW-18A	Part 115	Vanadium	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
30_5_129	MW-18A	Part 115	Zinc	mg/l	9	6	67%	< 0.0001	0.713	↔	< 0.0001	0.142	↔	2025-01-22	0.425
31_2_112	MW-18B	Appendix III	Fluoride	mg/l	9	1	11%	0.0070008	0.495	↔	-0.0016919	0.198	↔	2024-12-17	0.412
31_2_120	MW-18B	Appendix III	pH, Field	su	8	0	0%	-0.00081644	0.402	↔	< 0.0001	0.996	↔	2025-03-10	0.309
31_2_124	MW-18B	Appendix III	Sulfate	mg/l	9	0	0%	0.67405	0.185	↔	< 0.0001	1.000	↔	2025-06-26	0.459
31_3_101	MW-18B	Appendix IV	Antimony	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
31_3_102	MW-18B	Appendix IV	Arsenic	mg/l	9	7	78%	< 0.0001	0.145	↔	< 0.0001	0.822	↔	2025-03-12	0.513
31_3_103	MW-18B	Appendix IV	Barium	mg/l	9	0	0%	< 0.0001	0.300	↔	< 0.0001	0.168	↔	2025-02-26	0.444
31_3_104	MW-18B	Appendix IV	Beryllium	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
31_3_106	MW-18B	Appendix IV	Cadmium	mg/l	9	9	100%	< 0.0001	0.338	↔	< 0.0001	1.000	↔	2025-02-27	0.299
31_3_110	MW-18B	Appendix IV	Cobalt	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
31_3_113	MW-18B	Appendix IV	Fluoride (App IV)	mg/l	9	1	11%	0.0070008	0.495	↔	-0.0016919	0.198	↔	2024-12-17	0.412
31_3_115	MW-18B	Appendix IV	Lead	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
31_3_117	MW-18B	Appendix IV	Mercury	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
31_3_121	MW-18B	Appendix IV	Radium-226+228	pci/l	9	0	0%	-0.039398	0.004	↓	0.0078117	0.181	↔	2025-01-28	0.882
31_3_122	MW-18B	Appendix IV	Selenium	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
31_3_125	MW-18B	Appendix IV	Thallium	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
31_5_114	MW-18B	Part 115	Iron	mg/l	9	0	0%	-0.0012321	0.556	↔	0.0013236	0.649	↔	2025-03-23	0.112
31_5_119	MW-18B	Part 115	Nickel	mg/l	9	1	11%	-0.00012432	0.420	↔	< 0.0001	0.900	↔	2025-03-02	0.187

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
31_5_128	MW-18B	Part 115	Vanadium	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
31_5_129	MW-18B	Part 115	Zinc	mg/l	9	7	78%	< 0.0001	0.618	↔	< 0.0001	0.320	↔	2025-01-23	0.345
32_2_105	MW-100A	Appendix III	Boron	mg/l	11	2	18%	< 0.0001	0.349	↔	< 0.0001	0.616	↔	2024-08-07	0.496
32_2_107	MW-100A	Appendix III	Calcium	mg/l	11	0	0%	-0.015502	0.205	↔	-0.0032763	0.354	↔	2024-01-02	0.604
32_2_112	MW-100A	Appendix III	Fluoride	mg/l	11	7	64%	-0.0014719	0.224	↔	0.00039777	0.697	↔	2024-08-06	0.494
32_2_120	MW-100A	Appendix III	pH, Field	su	11	0	0%	0.00025895	0.849	↔	-0.00019499	0.283	↔	2023-10-22	0.178
32_2_124	MW-100A	Appendix III	Sulfate	mg/l	11	0	0%	-0.12571	0.001	↓	0.018306	0.006	↑	2023-11-14	0.898
32_2_126	MW-100A	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	-0.045226	0.314	↔	-0.18443	0.002	↓	2024-08-06	0.920
32_3_101	MW-100A	Appendix IV	Antimony	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
32_3_102	MW-100A	Appendix IV	Arsenic	mg/l	11	0	0%	< 0.0001	0.026	↔	< 0.0001	0.036	↔	2023-09-06	0.791
32_3_103	MW-100A	Appendix IV	Barium	mg/l	11	0	0%	< 0.0001	0.046	↔	< 0.0001	0.873	↔	2024-06-30	0.758
32_3_104	MW-100A	Appendix IV	Beryllium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
32_3_106	MW-100A	Appendix IV	Cadmium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
32_3_109	MW-100A	Appendix IV	Chromium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
32_3_110	MW-100A	Appendix IV	Cobalt	mg/l	11	9	82%	< 0.0001	1.000	↔	< 0.0001	0.002	↓	2024-06-09	0.905
32_3_113	MW-100A	Appendix IV	Fluoride (App IV)	mg/l	11	7	64%	-0.0014719	0.224	↔	0.00039777	0.697	↔	2024-08-06	0.494
32_3_115	MW-100A	Appendix IV	Lead	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
32_3_116	MW-100A	Appendix IV	Lithium	mg/l	11	0	0%	< 0.0001	0.006	↓	< 0.0001	1.000	↔	2024-09-27	0.830
32_3_117	MW-100A	Appendix IV	Mercury	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
32_3_118	MW-100A	Appendix IV	Molybdenum	mg/l	11	0	0%	< 0.0001	0.003	↓	< 0.0001	0.655	↔	2024-03-23	0.879
32_3_122	MW-100A	Appendix IV	Selenium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
32_3_125	MW-100A	Appendix IV	Thallium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
32_5_111	MW-100A	Part 115	Copper	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
32_5_114	MW-100A	Part 115	Iron	mg/l	11	0	0%	0.040986	0.040	↔	-0.0020014	0.010	↔	2023-08-13	0.869
32_5_119	MW-100A	Part 115	Nickel	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
32_5_123	MW-100A	Part 115	Silver	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
32_5_128	MW-100A	Part 115	Vanadium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
32_5_129	MW-100A	Part 115	Zinc	mg/l	11	8	73%	< 0.0001	0.283	↔	< 0.0001	0.000	↓	2024-06-06	0.956
33_2_105	MW-100B	Appendix III	Boron	mg/l	11	0	0%	4e-04	0.236	↔	< 0.0001	0.929	↔	2023-10-06	0.437
33_2_107	MW-100B	Appendix III	Calcium	mg/l	11	0	0%	-0.14286	0.090	↔	-0.0031361	0.583	↔	2023-08-21	0.636
33_2_108	MW-100B	Appendix III	Chloride	mg/l	11	0	0%	0.041514	0.061	↔	-0.010611	0.000	↓	2023-08-14	0.906
33_2_112	MW-100B	Appendix III	Fluoride	mg/l	11	7	64%	-0.0014946	0.110	↔	< 0.0001	0.990	↔	2024-08-07	0.480
33_2_120	MW-100B	Appendix III	pH, Field	su	11	0	0%	0.0010829	0.008	↑	-0.00049847	0.099	↔	2024-02-07	0.721
33_2_124	MW-100B	Appendix III	Sulfate	mg/l	11	0	0%	-0.25143	0.001	↓	0.016584	0.028	↔	2023-09-24	0.892
33_2_126	MW-100B	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	-0.42857	0.333	↔	-0.076673	0.042	↔	2023-09-10	0.720
33_3_101	MW-100B	Appendix IV	Antimony	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
33_3_102	MW-100B	Appendix IV	Arsenic	mg/l	11	0	0%	< 0.0001	0.411	↔	< 0.0001	0.009	↓	2023-08-13	0.670
33_3_103	MW-100B	Appendix IV	Barium	mg/l	11	0	0%	-0.00012286	0.001	↓	< 0.0001	0.041	↔	2023-10-27	0.944
33_3_104	MW-100B	Appendix IV	Beryllium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
33_3_106	MW-100B	Appendix IV	Cadmium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
33_3_109	MW-100B	Appendix IV	Chromium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
33_3_110	MW-100B	Appendix IV	Cobalt	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
33_3_113	MW-100B	Appendix IV	Fluoride (App IV)	mg/l	11	7	64%	-0.0014946	0.110	↔	< 0.0001	0.990	↔	2024-08-07	0.480
33_3_115	MW-100B	Appendix IV	Lead	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
33_3_116	MW-100B	Appendix IV	Lithium	mg/l	11	0	0%	< 0.0001	0.504	↔	< 0.0001	0.143	↔	2023-09-17	0.554
33_3_117	MW-100B	Appendix IV	Mercury	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
33_3_118	MW-100B	Appendix IV	Molybdenum	mg/l	11	0	0%	< 0.0001	0.006	↓	< 0.0001	0.667	↔	2024-08-07	0.850
33_3_121	MW-100B	Appendix IV	Radium-226+228	pci/l	11	1	9%	-0.0032822	0.032	↔	0.0056831	0.148	↔	2024-11-16	0.595
33_3_122	MW-100B	Appendix IV	Selenium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
33_3_125	MW-100B	Appendix IV	Thallium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
33_5_111	MW-100B	Part 115	Copper	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
33_5_114	MW-100B	Part 115	Iron	mg/l	11	0	0%	0.00013903	0.926	↔	-0.0010031	0.815	↔	2024-08-07	0.053
33_5_119	MW-100B	Part 115	Nickel	mg/l	11	10	91%	< 0.0001	1.000	↔	< 0.0001	0.011	↔	2024-05-17	0.846
33_5_123	MW-100B	Part 115	Silver	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
33_5_128	MW-100B	Part 115	Vanadium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
33_5_129	MW-100B	Part 115	Zinc	mg/l	11	10	91%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-07-05	0.964

Table 10: Trend Tests: Piecewise Linear-Linear-Linear

								Line 1			Line 2			Line 3				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared
13_2_105	MW-2	Appendix III	Boron	mg/l	18	0	0%	0.017044	0.000	↑	-0.0005382	0.744	↔	-0.0017563	0.000	↓	2020-09-28	2021-08-07	0.911
13_2_107	MW-2	Appendix III	Calcium	mg/l	18	0	0%	0.30357	0.117	↔	-0.079916	0.000	↓	0.0011116	0.929	↔	2020-07-13	2023-03-16	0.965
13_2_108	MW-2	Appendix III	Chloride	mg/l	18	0	0%	0.175	0.016	↔	-0.0003811	0.955	↔	-0.025405	0.020	↔	2020-08-24	2023-02-28	0.755
13_2_112	MW-2	Appendix III	Fluoride	mg/l	19	17	89%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	-0.0025902	0.000	↓	2020-09-01	2024-06-06	0.910
13_2_124	MW-2	Appendix III	Sulfate	mg/l	18	0	0%	2.0964	0.000	↑	-0.33068	0.000	↓	-0.11348	0.001	↓	2020-08-10	2022-09-22	0.982
13_2_126	MW-2	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	2.6981	0.000	↑	-0.50071	0.000	↓	-0.17067	0.001	↓	2020-08-11	2022-08-02	0.980
13_3_101	MW-2	Appendix IV	Antimony	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-05-29	2024-06-05	0.907
13_3_103	MW-2	Appendix IV	Barium	mg/l	19	0	0%	< 0.0001	0.273	↔	< 0.0001	0.050	↔	< 0.0001	0.094	↔	2022-05-14	2023-09-09	0.558
13_3_104	MW-2	Appendix IV	Beryllium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-08-02	2024-06-04	0.907
13_3_106	MW-2	Appendix IV	Cadmium	mg/l	19	17	89%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2022-12-10	2024-05-25	0.883
13_3_110	MW-2	Appendix IV	Cobalt	mg/l	19	17	89%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2023-01-18	2024-05-02	0.830
13_3_113	MW-2	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	-0.0025902	0.000	↓	2020-09-01	2024-06-06	0.910
13_3_115	MW-2	Appendix IV	Lead	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2021-06-21	2024-06-04	0.907
13_3_116	MW-2	Appendix IV	Lithium	mg/l	19	0	0%	< 0.0001	0.001	↑	< 0.0001	0.000	↓	< 0.0001	0.829	↔	2020-10-20	2024-12-08	0.912
13_3_117	MW-2	Appendix IV	Mercury	mg/l	19	19	100%	< 0.0001	0.939	↔	< 0.0001	0.790	↔	< 0.0001	0.000	↓	2020-11-18	2024-04-19	0.902
13_3_118	MW-2	Appendix IV	Molybdenum	mg/l	19	0	0%	< 0.0001	0.010	↑	< 0.0001	0.436	↔	< 0.0001	0.197	↔	2023-02-12	2024-12-15	0.595
13_3_122	MW-2	Appendix IV	Selenium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-07-09	2024-06-04	0.907
13_3_125	MW-2	Appendix IV	Thallium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-07-28	2024-06-05	0.907
13_5_111	MW-2	Part 115	Copper	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2023-04-26	2024-06-04	0.907
13_5_114	MW-2	Part 115	Iron	mg/l	19	0	0%	0.0012978	0.020	↔	-0.001057	0.075	↔	0.00032787	0.895	↔	2022-03-11	2025-01-17	0.537
13_5_123	MW-2	Part 115	Silver	mg/l	19	19	100%	< 0.0001	0.964	↔	< 0.0001	0.804	↔	< 0.0001	0.000	↓	2020-10-06	2024-04-29	0.904

(Table continues on next page)

Table 10: Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

								Line 1			Line 2			Line 3					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared
13_5_128	MW-2	Part 115	Vanadium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-09-12	2024-06-04	0.907
13_5_129	MW-2	Part 115	Zinc	mg/l	19	14	74%	-0.00011429	0.249	↔	< 0.0001	0.995	↔	< 0.0001	0.811	↔	2020-08-27	2024-04-30	0.275
14_2_108	MW-3	Appendix III	Chloride	mg/l	10	0	0%	0.024343	0.012	↔	0.0013834	0.786	↔	-0.031298	0.107	↔	2022-08-08	2024-08-05	0.936
14_2_112	MW-3	Appendix III	Fluoride	mg/l	10	8	80%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	-0.0023028	0.019	↔	2022-10-17	2024-06-10	0.909
14_2_126	MW-3	Appendix III	Total Dissolved Solids	mg/l	10	0	0%	-0.1092	0.484	↔	-0.034317	0.644	↔	-0.9035	0.001	↓	2022-08-01	2024-07-16	0.981
14_3_101	MW-3	Appendix IV	Antimony	mg/l	10	10	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.025	↔	2021-09-08	2024-06-06	0.898
14_3_103	MW-3	Appendix IV	Barium	mg/l	10	0	0%	< 0.0001	0.016	↔	< 0.0001	0.300	↔	< 0.0001	0.830	↔	2023-08-01	2024-10-24	0.963
14_3_104	MW-3	Appendix IV	Beryllium	mg/l	10	10	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.025	↔	2022-08-03	2024-06-06	0.898
14_3_106	MW-3	Appendix IV	Cadmium	mg/l	10	10	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.025	↔	2022-06-13	2024-06-06	0.898
14_3_109	MW-3	Appendix IV	Chromium	mg/l	10	10	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.025	↔	2021-08-11	2024-06-06	0.898
14_3_110	MW-3	Appendix IV	Cobalt	mg/l	10	8	80%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.032	↔	2022-07-19	2024-06-01	0.884
14_3_113	MW-3	Appendix IV	Fluoride (App IV)	mg/l	10	8	80%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	-0.0023028	0.019	↔	2022-10-17	2024-06-10	0.909
14_3_115	MW-3	Appendix IV	Lead	mg/l	10	9	90%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.042	↔	2023-03-06	2024-05-26	0.869
14_3_116	MW-3	Appendix IV	Lithium	mg/l	10	0	0%	< 0.0001	0.115	↔	< 0.0001	0.026	↔	< 0.0001	0.148	↔	2021-09-18	2025-01-02	0.837
14_3_118	MW-3	Appendix IV	Molybdenum	mg/l	10	0	0%	< 0.0001	0.508	↔	< 0.0001	0.178	↔	< 0.0001	0.069	↔	2021-08-24	2023-02-07	0.756
14_3_121	MW-3	Appendix IV	Radium-226+228	pci/l	10	2	20%	0.0054051	0.042	↔	-0.0061652	0.012	↔	< 0.0001	0.997	↔	2022-06-29	2023-08-01	0.921
14_3_122	MW-3	Appendix IV	Selenium	mg/l	10	10	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.025	↔	2022-01-10	2024-06-06	0.898
14_3_125	MW-3	Appendix IV	Thallium	mg/l	10	10	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.025	↔	2021-11-28	2024-06-06	0.898
14_5_119	MW-3	Part 115	Nickel	mg/l	10	8	80%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.172	↔	2021-08-31	2024-04-01	0.734
14_5_128	MW-3	Part 115	Vanadium	mg/l	10	10	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.025	↔	2022-07-08	2024-06-06	0.898
15_2_105	MW-5	Appendix III	Boron	mg/l	18	0	0%	-0.0040261	0.027	↔	0.00080262	0.845	↔	< 0.0001	0.995	↔	2022-02-01	2023-10-25	0.527
15_2_107	MW-5	Appendix III	Calcium	mg/l	18	0	0%	-0.2308	0.004	↓	0.071046	0.823	↔	-0.087644	0.241	↔	2022-02-01	2023-07-09	0.747
15_2_120	MW-5	Appendix III	pH, Field	su	19	0	0%	-0.00097604	0.359	↔	0.00041751	0.155	↔	-0.00071269	0.478	↔	2021-05-03	2024-05-25	0.237
15_2_124	MW-5	Appendix III	Sulfate	mg/l	18	0	0%	9.0815	0.311	↔	9.6308	0.285	↔	0.084699	0.900	↔	2024-03-10	2020-05-27	0.737
15_3_101	MW-5	Appendix IV	Antimony	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-09-23	2024-06-04	0.907
15_3_102	MW-5	Appendix IV	Arsenic	mg/l	19	12	63%	< 0.0001	0.229	↔	< 0.0001	0.906	↔	< 0.0001	0.456	↔	2020-05-26	2024-12-31	0.261
15_3_103	MW-5	Appendix IV	Barium	mg/l	19	0	0%	-0.00012184	0.001	↓	< 0.0001	0.442	↔	< 0.0001	0.150	↔	2020-11-23	2022-01-31	0.674
15_3_104	MW-5	Appendix IV	Beryllium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-06-27	2024-06-04	0.907
15_3_106	MW-5	Appendix IV	Cadmium	mg/l	19	18	95%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2021-04-07	2024-06-09	0.917
15_3_110	MW-5	Appendix IV	Cobalt	mg/l	19	16	84%	< 0.0001	0.149	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-05-26	2024-06-13	0.929
15_3_113	MW-5	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	-0.0023497	0.000	↓	2020-08-16	2024-05-31	0.897
15_3_115	MW-5	Appendix IV	Lead	mg/l	19	14	74%	< 0.0001	0.049	↔	< 0.0001	0.606	↔	< 0.0001	0.633	↔	2022-02-01	2023-06-25	0.403
15_3_116	MW-5	Appendix IV	Lithium	mg/l	19	0	0%	< 0.0001	0.231	↔	0.00010084	0.156	↔	< 0.0001	0.219	↔	2022-01-31	2023-03-11	0.303
15_3_117	MW-5	Appendix IV	Mercury	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-06-09	2024-06-04	0.907
15_3_118	MW-5	Appendix IV	Molybdenum	mg/l	19	0	0%	< 0.0001	0.028	↔	< 0.0001	0.144	↔	< 0.0001	0.637	↔	2022-02-01	2023-09-30	0.550
15_3_121	MW-5	Appendix IV	Radium-226+228	pci/l	19	2	11%	0.0082609	0.261	↔	-0.00061386	0.509	↔	-0.0027068	0.526	↔	2020-11-05	2024-08-01	0.265
15_3_122	MW-5	Appendix IV	Selenium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-07-09	2024-06-04	0.907
15_3_125	MW-5	Appendix IV	Thallium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-05-26	2024-06-05	0.907
15_5_111	MW-5	Part 115	Copper	mg/l	19	12	63%	< 0.0001	0.432	↔	< 0.0001	0.532	↔	< 0.0001	0.222	↔	2021-03-02	2022-02-01	0.227
15_5_114	MW-5	Part 115	Iron	mg/l	19	1	5%	-0.22858	0.001	↓	0.0030259	0.297	↔	-0.001629	0.096	↔	2020-05-31	2022-01-31	0.780
15_5_119	MW-5	Part 115	Nickel	mg/l	19	0	0%	-0.00010714	0.440	↔	< 0.0001	0.413	↔	< 0.0001	0.029	↔	2020-06-15	2021-03-24	0.761
15_5_123	MW-5	Part 115	Silver	mg/l	19	18	95%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-08-06	2024-06-14	0.928

(Table continues on next page)

Table 10: Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

								Line 1			Line 2			Line 3					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared
16_2_105	MW-6	Appendix III	Boron	mg/l	18	0	0%	0.0030784	0.079	↔	-0.00015757	0.259	↔	0.00036121	0.314	↔	2020-09-09	2024-01-28	0.484
16_2_108	MW-6	Appendix III	Chloride	mg/l	18	0	0%	0.092734	0.270	↔	0.00051564	0.911	↔	0.025695	0.648	↔	2020-08-27	2024-10-17	0.348
16_2_112	MW-6	Appendix III	Fluoride	mg/l	19	17	89%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	-0.0021858	0.000	↓	2020-07-17	2024-06-11	0.921
16_2_120	MW-6	Appendix III	pH, Field	su	19	0	0%	0.0028084	0.128	↔	-0.00050501	0.563	↔	< 0.0001	0.660	↔	2020-09-09	2021-08-02	0.329
16_2_126	MW-6	Appendix III	Total Dissolved Solids	mg/l	18	0	0%	1.9551	0.004	↑	-1.0546	0.266	↔	0.094594	0.034	↔	2020-10-06	2021-05-03	0.672
16_3_101	MW-6	Appendix IV	Antimony	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2021-06-10	2024-06-05	0.907
16_3_102	MW-6	Appendix IV	Arsenic	mg/l	19	17	89%	< 0.0001	0.520	↔	< 0.0001	0.071	↔	< 0.0001	0.000	↓	2022-10-15	2024-02-07	0.859
16_3_103	MW-6	Appendix IV	Barium	mg/l	19	0	0%	< 0.0001	0.073	↔	< 0.0001	0.048	↔	< 0.0001	0.009	↑	2020-09-21	2022-03-18	0.593
16_3_104	MW-6	Appendix IV	Beryllium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-06-27	2024-06-04	0.907
16_3_106	MW-6	Appendix IV	Cadmium	mg/l	19	18	95%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-06-13	2024-06-26	0.953
16_3_110	MW-6	Appendix IV	Cobalt	mg/l	19	17	89%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-06-26	2024-06-09	0.918
16_3_113	MW-6	Appendix IV	Fluoride (App IV)	mg/l	19	17	89%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	-0.0021858	0.000	↓	2021-03-19	2024-06-11	0.921
16_3_115	MW-6	Appendix IV	Lead	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-06-23	2024-06-05	0.907
16_3_116	MW-6	Appendix IV	Lithium	mg/l	19	0	0%	0.00010746	0.104	↔	< 0.0001	0.233	↔	< 0.0001	0.390	↔	2020-10-08	2024-01-29	0.454
16_3_117	MW-6	Appendix IV	Mercury	mg/l	19	19	100%	< 0.0001	0.939	↔	< 0.0001	0.790	↔	< 0.0001	0.000	↓	2020-11-18	2024-04-19	0.902
16_3_121	MW-6	Appendix IV	Radium-226+228	pci/l	19	2	11%	0.0061802	0.171	↔	-0.0012201	0.822	↔	0.00028121	0.798	↔	2021-01-30	2022-08-01	0.221
16_3_122	MW-6	Appendix IV	Selenium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-07-09	2024-06-04	0.907
16_3_125	MW-6	Appendix IV	Thallium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-07-28	2024-06-05	0.907
16_5_111	MW-6	Part 115	Copper	mg/l	19	19	100%	< 0.0001	0.939	↔	< 0.0001	0.784	↔	< 0.0001	0.000	↓	2020-11-29	2024-04-19	0.902
16_5_114	MW-6	Part 115	Iron	mg/l	19	9	47%	-0.00090472	0.020	↔	< 0.0001	0.799	↔	< 0.0001	0.838	↔	2020-09-05	2022-02-01	0.642
16_5_119	MW-6	Part 115	Nickel	mg/l	19	5	26%	< 0.0001	0.049	↔	< 0.0001	0.000	↓	< 0.0001	0.152	↔	2020-07-10	2024-08-11	0.874
16_5_123	MW-6	Part 115	Silver	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2021-02-04	2024-06-04	0.907
16_5_128	MW-6	Part 115	Vanadium	mg/l	19	19	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2020-11-06	2024-06-04	0.907
16_5_129	MW-6	Part 115	Zinc	mg/l	19	16	84%	-0.00010357	0.353	↔	< 0.0001	1.000	↔	< 0.0001	0.696	↔	2020-08-17	2024-06-30	0.297
17_2_105	MW-7	Appendix III	Boron	mg/l	15	0	0%	0.0024959	0.068	↔	-0.0029451	0.184	↔	0.0012147	0.030	↔	2022-02-17	2023-04-06	0.687
17_2_108	MW-7	Appendix III	Chloride	mg/l	15	0	0%	-0.0062302	0.880	↔	0.071061	0.438	↔	-0.01043	0.049	↔	2021-12-04	2022-08-01	0.733
17_2_124	MW-7	Appendix III	Sulfate	mg/l	15	0	0%	0.16172	0.398	↔	-0.028842	0.534	↔	0.032496	0.903	↔	2022-02-16	2024-11-20	0.147
17_3_103	MW-7	Appendix IV	Barium	mg/l	15	0	0%	< 0.0001	0.903	↔	< 0.0001	0.077	↔	< 0.0001	0.181	↔	2022-02-16	2024-01-30	0.527
17_3_106	MW-7	Appendix IV	Cadmium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-06-05	2024-06-06	0.902
17_3_109	MW-7	Appendix IV	Chromium	mg/l	15	14	93%	< 0.0001	0.832	↔	< 0.0001	0.590	↔	< 0.0001	0.041	↔	2023-02-25	2024-08-08	0.805
17_3_110	MW-7	Appendix IV	Cobalt	mg/l	15	13	87%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2021-10-07	2024-06-09	0.908
17_3_115	MW-7	Appendix IV	Lead	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-09-21	2024-06-06	0.902
17_3_116	MW-7	Appendix IV	Lithium	mg/l	15	0	0%	< 0.0001	0.051	↔	< 0.0001	0.001	↓	< 0.0001	0.174	↔	2022-02-16	2023-03-04	0.893
17_3_125	MW-7	Appendix IV	Thallium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-08-09	2024-06-06	0.902
17_5_114	MW-7	Part 115	Iron	mg/l	15	0	0%	0.0024165	0.302	↔	-0.00066012	0.467	↔	< 0.0001	0.984	↔	2022-02-17	2024-10-18	0.224
17_5_119	MW-7	Part 115	Nickel	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-11-06	2024-06-06	0.902
17_5_123	MW-7	Part 115	Silver	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-07-28	2024-06-06	0.902
17_5_128	MW-7	Part 115	Vanadium	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	0.249	↔	< 0.0001	0.001	↓	2023-08-01	2024-02-26	0.908
18_2_107	MW-7C	Appendix III	Calcium	mg/l	14	0	0%	-1.1543	0.003	↓	0.5555	0.336	↔	-0.02344	0.086	↔	2022-05-19	2022-08-08	0.749
18_2_112	MW-7C	Appendix III	Fluoride	mg/l	14	12	86%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	-0.0019189	0.003	↓	2023-04-07	2024-05-28	0.876
18_2_126	MW-7C	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	-1.256	0.000	↓	-0.05419	0.003	↓	-0.57581	0.000	↓	2022-06-23	2024-07-05	0.997
18_3_101	MW-7C	Appendix IV	Antimony	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-08-25	2024-06-07	0.902

(Table continues on next page)

Table 10: Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

								Line 1			Line 2			Line 3					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared
18_3_106	MW-7C	Appendix IV	Cadmium	mg/l	14	10	71%	< 0.0001	0.407	↔	< 0.0001	0.428	↔	< 0.0001	0.232	↔	2022-09-01	2024-05-17	0.633
18_3_109	MW-7C	Appendix IV	Chromium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-06-18	2024-06-07	0.902
18_3_113	MW-7C	Appendix IV	Fluoride (App IV)	mg/l	14	12	86%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	-0.0019189	0.003	↓	2023-04-07	2024-05-28	0.876
18_3_115	MW-7C	Appendix IV	Lead	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-06-19	2024-06-07	0.902
18_3_121	MW-7C	Appendix IV	Radium-226+228	pci/l	14	0	0%	-0.014349	0.181	↔	0.00027809	0.870	↔	-0.0010297	0.905	↔	2022-07-28	2024-09-22	0.367
18_3_122	MW-7C	Appendix IV	Selenium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-05-26	2024-06-07	0.902
18_3_125	MW-7C	Appendix IV	Thallium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-05-29	2024-06-07	0.902
18_5_111	MW-7C	Part 115	Copper	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-07-18	2024-06-07	0.902
18_5_114	MW-7C	Part 115	Iron	mg/l	14	0	0%	-0.0012341	0.212	↔	0.0011672	0.050	↔	-0.0062035	0.005	↓	2023-02-07	2024-10-31	0.842
18_5_119	MW-7C	Part 115	Nickel	mg/l	14	0	0%	< 0.0001	0.065	↔	< 0.0001	0.421	↔	< 0.0001	0.802	↔	2022-04-14	2022-11-10	0.694
18_5_123	MW-7C	Part 115	Silver	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-04-26	2024-06-07	0.902
18_5_128	MW-7C	Part 115	Vanadium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-04-16	2024-06-07	0.902
19_2_105	MW-8	Appendix III	Boron	mg/l	15	1	7%	-0.0003589	0.303	↔	< 0.0001	0.580	↔	< 0.0001	0.820	↔	2021-12-28	2023-10-09	0.203
19_2_108	MW-8	Appendix III	Chloride	mg/l	15	2	13%	-0.046373	0.611	↔	0.092708	0.263	↔	-0.030869	0.541	↔	2022-06-02	2023-08-02	0.299
19_2_112	MW-8	Appendix III	Fluoride	mg/l	15	12	80%	-0.0017289	0.544	↔	0.00035174	0.409	↔	-0.0027941	0.042	↔	2021-12-06	2024-05-28	0.613
19_2_124	MW-8	Appendix III	Sulfate	mg/l	15	0	0%	-0.087888	0.111	↔	0.089474	0.317	↔	-0.030483	0.152	↔	2022-04-20	2023-06-05	0.472
19_2_126	MW-8	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	-0.3647	0.680	↔	0.10066	0.051	↔	-0.13685	0.004	↓	2021-08-23	2023-08-01	0.684
19_3_101	MW-8	Appendix IV	Antimony	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-07-29	2024-06-07	0.903
19_3_102	MW-8	Appendix IV	Arsenic	mg/l	15	13	87%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.051	↔	2023-02-07	2024-01-15	0.583
19_3_103	MW-8	Appendix IV	Barium	mg/l	15	0	0%	< 0.0001	0.063	↔	< 0.0001	0.232	↔	< 0.0001	0.804	↔	2022-01-20	2024-10-30	0.444
19_3_104	MW-8	Appendix IV	Beryllium	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-09-03	2024-05-31	0.886
19_3_106	MW-8	Appendix IV	Cadmium	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.025	↔	2021-08-07	2024-04-12	0.774
19_3_109	MW-8	Appendix IV	Chromium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2023-01-08	2024-06-07	0.903
19_3_110	MW-8	Appendix IV	Cobalt	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-07-30	2024-05-31	0.885
19_3_113	MW-8	Appendix IV	Fluoride (App IV)	mg/l	15	12	80%	-0.0017289	0.544	↔	0.00035174	0.409	↔	-0.0027941	0.042	↔	2021-12-06	2024-05-28	0.613
19_3_116	MW-8	Appendix IV	Lithium	mg/l	15	6	40%	< 0.0001	0.488	↔	< 0.0001	0.845	↔	< 0.0001	0.839	↔	2022-02-07	2024-08-08	0.128
19_3_121	MW-8	Appendix IV	Radium-226+228	pci/l	15	0	0%	-0.0082916	0.894	↔	0.026288	0.203	↔	-0.0024262	0.059	↔	2021-08-23	2022-01-10	0.511
19_3_122	MW-8	Appendix IV	Selenium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-07-21	2024-06-07	0.903
19_3_125	MW-8	Appendix IV	Thallium	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-11-08	2024-06-03	0.893
19_5_119	MW-8	Part 115	Nickel	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-08-09	2024-06-07	0.903
19_5_123	MW-8	Part 115	Silver	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-08-11	2024-06-07	0.903
19_5_128	MW-8	Part 115	Vanadium	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-08-06	2024-06-07	0.903
19_5_129	MW-8	Part 115	Zinc	mg/l	15	13	87%	< 0.0001	0.818	↔	< 0.0001	0.162	↔	< 0.0001	0.007	↓	2023-01-24	2024-01-30	0.827
20_2_105	MW-9	Appendix III	Boron	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↑	2021-08-14	2024-06-07	0.903
20_2_108	MW-9	Appendix III	Chloride	mg/l	15	10	67%	-0.0077845	0.460	↔	0.0020989	0.100	↔	-0.011869	0.202	↔	2021-12-06	2024-09-30	0.472
20_2_112	MW-9	Appendix III	Fluoride	mg/l	15	14	93%	-0.0017761	0.544	↔	0.00036136	0.409	↔	-0.0028871	0.041	↔	2021-12-06	2024-05-28	0.615
20_2_120	MW-9	Appendix III	pH, Field	su	15	0	0%	-0.015739	0.020	↔	0.00053147	0.586	↔	-0.00022649	0.148	↔	2021-07-20	2022-08-01	0.623
20_2_124	MW-9	Appendix III	Sulfate	mg/l	15	8	53%	0.00011454	0.943	↔	0.017612	0.000	↑	-0.042623	0.000	↓	2023-04-09	2025-01-25	0.964
20_2_126	MW-9	Appendix III	Total Dissolved Solids	mg/l	15	0	0%	0.051686	0.085	↔	0.36464	0.012	↔	-0.27502	0.001	↓	2023-07-31	2024-05-25	0.920
20_3_101	MW-9	Appendix IV	Antimony	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-07-29	2024-06-07	0.903
20_3_103	MW-9	Appendix IV	Barium	mg/l	15	0	0%	< 0.0001	0.098	↔	< 0.0001	0.020	↔	< 0.0001	0.047	↔	2022-09-05	2024-08-07	0.887
20_3_104	MW-9	Appendix IV	Beryllium	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2023-02-24	2024-06-05	0.899

(Table continues on next page)

Table 10: Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

								Line 1			Line 2			Line 3					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared
20_3_109	MW-9	Appendix IV	Chromium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2023-01-08	2024-06-07	0.903
20_3_110	MW-9	Appendix IV	Cobalt	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2023-06-30	2024-06-05	0.898
20_3_113	MW-9	Appendix IV	Fluoride (App IV)	mg/l	15	14	93%	-0.0017761	0.544	↔	0.00036136	0.409	↔	-0.0028871	0.041	↔	2021-12-06	2024-05-28	0.615
20_3_116	MW-9	Appendix IV	Lithium	mg/l	15	15	100%	-0.00014286	0.000	↓	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-07-20	2024-06-07	0.986
20_3_118	MW-9	Appendix IV	Molybdenum	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-09-07	2024-06-07	0.903
20_3_122	MW-9	Appendix IV	Selenium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-07-21	2024-06-07	0.903
20_3_125	MW-9	Appendix IV	Thallium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-07-20	2024-06-07	0.903
20_5_111	MW-9	Part 115	Copper	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-01-26	2024-06-07	0.903
20_5_114	MW-9	Part 115	Iron	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-08-14	2024-06-07	0.903
20_5_119	MW-9	Part 115	Nickel	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-08-09	2024-06-07	0.903
20_5_123	MW-9	Part 115	Silver	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-08-11	2024-06-07	0.903
20_5_128	MW-9	Part 115	Vanadium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-08-06	2024-06-07	0.903
20_5_129	MW-9	Part 115	Zinc	mg/l	15	13	87%	< 0.0001	0.424	↔	< 0.0001	0.476	↔	< 0.0001	0.070	↔	2021-12-07	2024-06-16	0.687
21_2_105	MW-10	Appendix III	Boron	mg/l	15	1	7%	0.00014852	0.344	↔	< 0.0001	0.084	↔	< 0.0001	0.141	↔	2021-08-28	2023-02-08	0.451
21_2_107	MW-10	Appendix III	Calcium	mg/l	15	0	0%	-0.11464	0.310	↔	0.17216	0.622	↔	-0.01951	0.012	↔	2021-09-28	2022-01-04	0.560
21_2_108	MW-10	Appendix III	Chloride	mg/l	15	9	60%	-0.004062	0.608	↔	0.0044347	0.328	↔	-0.012591	0.095	↔	2022-02-28	2024-01-30	0.566
21_2_124	MW-10	Appendix III	Sulfate	mg/l	15	0	0%	-0.0029313	0.805	↔	0.028412	0.115	↔	-0.028898	0.103	↔	2023-01-17	2024-01-30	0.520
21_3_101	MW-10	Appendix IV	Antimony	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-07-29	2024-06-07	0.903
21_3_102	MW-10	Appendix IV	Arsenic	mg/l	15	13	87%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2021-10-19	2024-05-15	0.847
21_3_103	MW-10	Appendix IV	Barium	mg/l	15	0	0%	< 0.0001	0.033	↔	< 0.0001	0.812	↔	< 0.0001	0.057	↔	2022-09-28	2024-01-29	0.788
21_3_106	MW-10	Appendix IV	Cadmium	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-09-09	2024-05-31	0.887
21_3_109	MW-10	Appendix IV	Chromium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2023-01-08	2024-06-07	0.903
21_3_110	MW-10	Appendix IV	Cobalt	mg/l	15	14	93%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-10-06	2024-06-07	0.903
21_3_116	MW-10	Appendix IV	Lithium	mg/l	15	15	100%	-0.00014286	0.000	↓	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-07-20	2024-06-07	0.986
21_3_118	MW-10	Appendix IV	Molybdenum	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-09-07	2024-06-07	0.903
21_3_125	MW-10	Appendix IV	Thallium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-07-20	2024-06-07	0.903
21_5_111	MW-10	Part 115	Copper	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-01-26	2024-06-07	0.903
21_5_114	MW-10	Part 115	Iron	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-08-14	2024-06-07	0.903
21_5_119	MW-10	Part 115	Nickel	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-08-09	2024-06-07	0.903
21_5_123	MW-10	Part 115	Silver	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-08-11	2024-06-07	0.903
21_5_128	MW-10	Part 115	Vanadium	mg/l	15	15	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2021-08-06	2024-06-07	0.903
21_5_129	MW-10	Part 115	Zinc	mg/l	15	12	80%	< 0.0001	0.207	↔	< 0.0001	0.240	↔	< 0.0001	0.961	↔	2022-01-11	2025-01-29	0.382
22_2_105	MW-13	Appendix III	Boron	mg/l	14	0	0%	0.00025975	0.010	↑	-0.00013659	0.093	↔	< 0.0001	0.036	↔	2022-10-25	2023-12-21	0.757
22_2_107	MW-13	Appendix III	Calcium	mg/l	14	0	0%	-0.57995	0.025	↔	0.096406	0.011	↔	0.0019606	0.940	↔	2022-05-18	2024-01-29	0.891
22_2_108	MW-13	Appendix III	Chloride	mg/l	14	2	14%	0.11085	0.000	↑	-0.065157	0.002	↓	0.038251	0.236	↔	2023-04-26	2024-12-21	0.942
22_2_112	MW-13	Appendix III	Fluoride	mg/l	14	12	86%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	-0.0022678	0.002	↓	2022-07-24	2024-06-02	0.892
22_2_120	MW-13	Appendix III	pH, Field	su	14	0	0%	0.0025255	0.169	↔	-0.0016275	0.282	↔	0.00035357	0.296	↔	2022-08-14	2023-08-01	0.598
22_2_124	MW-13	Appendix III	Sulfate	mg/l	14	0	0%	-0.019048	0.876	↔	0.2385	0.056	↔	0.098361	0.372	↔	2022-12-20	2024-02-22	0.883
22_2_126	MW-13	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	-1.9412	0.097	↔	0.41558	0.020	↔	0.066607	0.604	↔	2022-05-08	2024-01-29	0.881
22_3_102	MW-13	Appendix IV	Arsenic	mg/l	14	9	64%	< 0.0001	1.000	↔	< 0.0001	0.000	↑	< 0.0001	0.000	↓	2023-05-03	2024-03-27	0.982
22_3_104	MW-13	Appendix IV	Beryllium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-07-17	2024-06-06	0.903
22_3_106	MW-13	Appendix IV	Cadmium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-06-13	2024-06-06	0.903

(Table continues on next page)

Table 10: Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

								Line 1			Line 2			Line 3					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared
22_3_109	MW-13	Appendix IV	Chromium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-07-20	2024-06-07	0.903
22_3_110	MW-13	Appendix IV	Cobalt	mg/l	14	12	86%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2022-10-11	2024-06-19	0.932
22_3_113	MW-13	Appendix IV	Fluoride (App IV)	mg/l	14	12	86%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	-0.0022678	0.002	↓	2022-07-24	2024-06-02	0.892
22_3_115	MW-13	Appendix IV	Lead	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-12-07	2024-06-07	0.903
22_3_116	MW-13	Appendix IV	Lithium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-09-26	2024-06-07	0.903
22_3_118	MW-13	Appendix IV	Molybdenum	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-06-08	2024-06-07	0.903
22_3_121	MW-13	Appendix IV	Radium-226+228	pci/l	14	1	7%	-0.0029383	0.286	↔	0.010608	0.129	↔	-0.0035792	0.282	↔	2023-07-13	2024-03-03	0.414
22_3_125	MW-13	Appendix IV	Thallium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-04-24	2024-06-07	0.903
22_5_111	MW-13	Part 115	Copper	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-09-03	2024-06-07	0.903
22_5_114	MW-13	Part 115	Iron	mg/l	14	1	7%	< 0.0001	0.912	↔	0.0020811	0.005	↑	-0.006388	0.000	↓	2023-03-22	2025-01-03	0.934
22_5_119	MW-13	Part 115	Nickel	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-10-08	2024-06-07	0.903
22_5_123	MW-13	Part 115	Silver	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-10-02	2024-06-07	0.903
22_5_129	MW-13	Part 115	Zinc	mg/l	14	12	86%	< 0.0001	0.778	↔	< 0.0001	0.995	↔	< 0.0001	0.344	↔	2023-12-12	2024-09-28	0.499
23_2_105	MW-14	Appendix III	Boron	mg/l	12	0	0%	-0.0025311	0.067	↔	0.0010286	0.092	↔	-0.0005009	0.011	↔	2023-04-25	2023-10-13	0.873
23_2_107	MW-14	Appendix III	Calcium	mg/l	12	0	0%	-0.034105	0.387	↔	0.077435	0.002	↑	-0.035519	0.019	↔	2023-05-17	2024-06-15	0.952
23_2_112	MW-14	Appendix III	Fluoride	mg/l	12	10	83%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	-0.0022131	0.008	↓	2023-02-26	2024-05-29	0.885
23_2_120	MW-14	Appendix III	pH, Field	su	12	0	0%	-0.00051825	0.118	↔	0.00048128	0.363	↔	-0.00060109	0.274	↔	2023-11-30	2024-11-14	0.519
23_2_126	MW-14	Appendix III	Total Dissolved Solids	mg/l	12	1	8%	-3.1374	0.780	↔	0.8114	0.478	↔	-0.73557	0.512	↔	2023-03-23	2024-07-21	0.231
23_3_101	MW-14	Appendix IV	Antimony	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2023-05-20	2024-06-04	0.900
23_3_104	MW-14	Appendix IV	Beryllium	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2023-05-23	2024-06-04	0.900
23_3_106	MW-14	Appendix IV	Cadmium	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2023-04-14	2024-06-04	0.900
23_3_109	MW-14	Appendix IV	Chromium	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2023-03-15	2024-06-04	0.900
23_3_113	MW-14	Appendix IV	Fluoride (App IV)	mg/l	12	10	83%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	-0.0022131	0.008	↓	2023-02-26	2024-05-29	0.885
23_3_115	MW-14	Appendix IV	Lead	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2023-09-13	2024-06-04	0.900
23_3_116	MW-14	Appendix IV	Lithium	mg/l	12	0	0%	-0.00016861	0.007	↓	< 0.0001	0.887	↔	< 0.0001	0.001	↓	2023-04-24	2024-01-01	0.970
23_3_118	MW-14	Appendix IV	Molybdenum	mg/l	12	0	0%	< 0.0001	0.493	↔	< 0.0001	0.496	↔	< 0.0001	0.499	↔	2024-07-16	2023-06-13	0.621
23_3_125	MW-14	Appendix IV	Thallium	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2023-05-31	2024-06-04	0.900
23_5_111	MW-14	Part 115	Copper	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2023-02-23	2024-06-04	0.900
23_5_114	MW-14	Part 115	Iron	mg/l	12	0	0%	0.076945	0.008	↑	0.012661	0.001	↑	0.0011233	0.587	↔	2023-02-26	2024-01-31	0.979
23_5_119	MW-14	Part 115	Nickel	mg/l	12	6	50%	< 0.0001	0.377	↔	< 0.0001	0.621	↔	< 0.0001	0.300	↔	2023-03-20	2024-08-31	0.803
23_5_123	MW-14	Part 115	Silver	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2023-09-12	2024-06-04	0.900
24_2_107	MW-15	Appendix III	Calcium	mg/l	12	0	0%	-0.9028	0.002	↓	0.41429	0.051	↔	-0.0059181	0.665	↔	2023-04-13	2023-07-26	0.902
24_2_108	MW-15	Appendix III	Chloride	mg/l	12	0	0%	-0.37589	0.001	↓	0.17985	0.408	↔	0.024403	0.019	↔	2023-05-09	2023-08-10	0.915
24_2_112	MW-15	Appendix III	Fluoride	mg/l	12	10	83%	< 0.0001	0.991	↔	< 0.0001	0.966	↔	-0.0026216	0.006	↓	2023-04-11	2024-06-12	0.898
24_2_120	MW-15	Appendix III	pH, Field	su	12	0	0%	0.0033333	0.170	↔	-0.0016	0.017	↔	< 0.0001	0.813	↔	2023-02-25	2023-09-04	0.887
24_2_124	MW-15	Appendix III	Sulfate	mg/l	12	0	0%	-2.5507	0.007	↓	-0.10107	0.034	↔	0.083858	0.525	↔	2023-02-25	2024-08-07	0.925
24_3_102	MW-15	Appendix IV	Arsenic	mg/l	12	9	75%	< 0.0001	0.788	↔	< 0.0001	0.450	↔	< 0.0001	0.119	↔	2023-11-20	2024-09-28	0.870
24_3_103	MW-15	Appendix IV	Barium	mg/l	12	0	0%	-0.00077945	0.011	↔	0.00015587	0.067	↔	< 0.0001	0.283	↔	2023-03-02	2023-08-10	0.837
24_3_104	MW-15	Appendix IV	Beryllium	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.006	↓	2023-02-17	2024-06-05	0.898
24_3_106	MW-15	Appendix IV	Cadmium	mg/l	12	11	92%	< 0.0001	0.876	↔	< 0.0001	0.448	↔	< 0.0001	0.085	↔	2023-06-08	2024-08-31	0.879
24_3_110	MW-15	Appendix IV	Cobalt	mg/l	12	11	92%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.014	↔	2023-06-29	2024-05-23	0.865
24_3_113	MW-15	Appendix IV	Fluoride (App IV)	mg/l	12	10	83%	< 0.0001	0.991	↔	< 0.0001	0.966	↔	-0.0026216	0.006	↓	2023-04-11	2024-06-12	0.898

(Table continues on next page)

Table 10: Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

								Line 1			Line 2			Line 3					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared
24_3_115	MW-15	Appendix IV	Lead	mg/l	12	12	100%	< 0.0001	0.953	↔	< 0.0001	0.847	↔	< 0.0001	0.008	↓	2023-03-29	2024-04-29	0.896
24_3_122	MW-15	Appendix IV	Selenium	mg/l	12	5	42%	0.00044444	0.099	↔	-0.00032857	0.031	↔	< 0.0001	0.838	↔	2023-03-13	2023-06-14	0.823
24_3_125	MW-15	Appendix IV	Thallium	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.006	↓	2023-06-09	2024-06-05	0.898
24_5_111	MW-15	Part 115	Copper	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.006	↓	2023-03-16	2024-06-05	0.898
24_5_119	MW-15	Part 115	Nickel	mg/l	12	11	92%	< 0.0001	0.788	↔	< 0.0001	0.450	↔	< 0.0001	0.187	↔	2023-11-20	2024-09-28	0.837
24_5_123	MW-15	Part 115	Silver	mg/l	12	12	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.006	↓	2023-06-03	2024-06-05	0.898
24_5_128	MW-15	Part 115	Vanadium	mg/l	12	12	100%	< 0.0001	0.975	↔	< 0.0001	0.675	↔	< 0.0001	0.007	↓	2024-05-13	2023-03-06	0.897
24_5_129	MW-15	Part 115	Zinc	mg/l	12	10	83%	< 0.0001	0.632	↔	< 0.0001	0.489	↔	< 0.0001	0.962	↔	2023-04-27	2024-05-27	0.325
25_2_105	MW-16A	Appendix III	Boron	mg/l	13	0	0%	-0.0014323	0.026	↔	0.0010176	0.031	↔	< 0.0001	0.323	↔	2023-05-06	2023-09-12	0.835
25_2_108	MW-16A	Appendix III	Chloride	mg/l	13	0	0%	0.38031	0.019	↔	0.043603	0.695	↔	-0.57189	0.017	↔	2023-10-16	2025-01-11	0.832
25_2_120	MW-16A	Appendix III	pH, Field	su	13	0	0%	-0.0015157	0.149	↔	0.0007215	0.359	↔	-0.00045384	0.053	↔	2023-07-02	2024-01-31	0.649
25_2_124	MW-16A	Appendix III	Sulfate	mg/l	13	0	0%	-1.2553	0.192	↔	0.87232	0.001	↑	-0.24183	0.010	↔	2023-04-02	2024-01-17	0.917
25_2_126	MW-16A	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	-3.8298	0.078	↔	3.0573	0.001	↑	-0.47664	0.002	↓	2023-04-09	2023-10-11	0.931
25_3_101	MW-16A	Appendix IV	Antimony	mg/l	13	12	92%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.004	↓	2023-05-17	2024-05-31	0.891
25_3_103	MW-16A	Appendix IV	Barium	mg/l	13	0	0%	-0.00089362	0.040	↔	0.00041712	0.006	↑	< 0.0001	0.043	↔	2023-04-09	2023-09-23	0.838
25_3_104	MW-16A	Appendix IV	Beryllium	mg/l	13	13	100%	< 0.0001	0.883	↔	< 0.0001	0.443	↔	< 0.0001	0.054	↔	2023-08-26	2024-08-09	0.896
25_3_106	MW-16A	Appendix IV	Cadmium	mg/l	13	12	92%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.083	↔	2023-06-24	2024-03-18	0.727
25_3_109	MW-16A	Appendix IV	Chromium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-03-24	2024-06-04	0.900
25_3_110	MW-16A	Appendix IV	Cobalt	mg/l	13	11	85%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.002	↓	2023-06-03	2024-06-07	0.908
25_3_117	MW-16A	Appendix IV	Mercury	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-05-03	2024-06-04	0.900
25_3_122	MW-16A	Appendix IV	Selenium	mg/l	13	12	92%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-04-24	2024-06-04	0.900
25_3_125	MW-16A	Appendix IV	Thallium	mg/l	13	12	92%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.006	↓	2023-10-17	2024-05-25	0.877
25_5_111	MW-16A	Part 115	Copper	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-04-18	2024-06-04	0.900
25_5_114	MW-16A	Part 115	Iron	mg/l	13	0	0%	-0.009927	0.292	↔	0.0060215	0.043	↔	-0.0032257	0.140	↔	2023-05-23	2024-02-01	0.619
25_5_119	MW-16A	Part 115	Nickel	mg/l	13	11	85%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.019	↔	2023-04-02	2024-05-04	0.826
25_5_123	MW-16A	Part 115	Silver	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-04-24	2024-06-04	0.900
25_5_128	MW-16A	Part 115	Vanadium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-03-31	2024-06-04	0.900
25_5_129	MW-16A	Part 115	Zinc	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-10-08	2024-06-04	0.900
26_2_105	MW-16B	Appendix III	Boron	mg/l	13	0	0%	< 0.0001	0.554	↔	0.00025828	0.381	↔	< 0.0001	0.441	↔	2023-07-06	2023-04-29	0.589
26_2_107	MW-16B	Appendix III	Calcium	mg/l	13	0	0%	0.050809	0.278	↔	0.029375	0.020	↔	-0.0012015	0.676	↔	2023-04-10	2023-10-17	0.874
26_2_120	MW-16B	Appendix III	pH, Field	su	13	0	0%	-0.0015983	0.093	↔	0.00095971	0.181	↔	-0.00040505	0.050	↔	2023-06-12	2024-01-31	0.630
26_2_126	MW-16B	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	-0.14892	0.532	↔	0.086042	0.072	↔	-0.041127	0.058	↔	2023-04-24	2023-11-29	0.609
26_3_101	MW-16B	Appendix IV	Antimony	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-05-07	2024-06-04	0.900
26_3_103	MW-16B	Appendix IV	Barium	mg/l	13	0	0%	< 0.0001	0.231	↔	-0.00012487	0.132	↔	< 0.0001	0.258	↔	2024-02-01	2023-04-05	0.539
26_3_104	MW-16B	Appendix IV	Beryllium	mg/l	13	13	100%	< 0.0001	0.883	↔	< 0.0001	0.443	↔	< 0.0001	0.054	↔	2023-08-26	2024-08-09	0.896
26_3_106	MW-16B	Appendix IV	Cadmium	mg/l	13	13	100%	< 0.0001	0.926	↔	< 0.0001	0.773	↔	< 0.0001	0.005	↓	2023-06-21	2024-04-08	0.896
26_3_109	MW-16B	Appendix IV	Chromium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-03-24	2024-06-04	0.900
26_3_116	MW-16B	Appendix IV	Lithium	mg/l	13	0	0%	< 0.0001	0.171	↔	< 0.0001	0.691	↔	< 0.0001	0.523	↔	2023-07-04	2024-05-23	0.631
26_3_117	MW-16B	Appendix IV	Mercury	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-05-03	2024-06-04	0.900
26_3_118	MW-16B	Appendix IV	Molybdenum	mg/l	13	0	0%	< 0.0001	0.011	↔	< 0.0001	0.423	↔	< 0.0001	0.950	↔	2023-03-22	2023-10-17	0.711
26_3_121	MW-16B	Appendix IV	Radium-226+228	pci/l	13	0	0%	0.0081087	0.272	↔	-0.0176	0.591	↔	-0.00091934	0.884	↔	2023-10-17	2024-02-02	0.308
26_3_122	MW-16B	Appendix IV	Selenium	mg/l	13	12	92%	< 0.0001	0.620	↔	< 0.0001	0.838	↔	< 0.0001	0.005	↓	2023-09-12	2024-06-19	0.885

(Table continues on next page)

Table 10: Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

								Line 1			Line 2			Line 3					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared
26_5_111	MW-16B	Part 115	Copper	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-04-18	2024-06-04	0.900
26_5_119	MW-16B	Part 115	Nickel	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-04-30	2024-06-04	0.900
26_5_123	MW-16B	Part 115	Silver	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-04-24	2024-06-04	0.900
26_5_128	MW-16B	Part 115	Vanadium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-03-31	2024-06-04	0.900
30_2_124	MW-18A	Appendix III	Sulfate	mg/l	9	0	0%	-2.9747	0.255	↔	-4.504	0.233	↔	-0.033679	0.942	↔	2025-02-20	2024-11-19	0.657
30_2_126	MW-18A	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	0.83967	0.450	↔	-1.113	0.418	↔	0.96774	0.801	↔	2025-02-20	2025-06-05	0.365
30_3_102	MW-18A	Appendix IV	Arsenic	mg/l	9	3	33%	< 0.0001	0.156	↔	< 0.0001	0.166	↔	< 0.0001	0.724	↔	2025-03-21	2024-12-19	0.808
30_3_104	MW-18A	Appendix IV	Beryllium	mg/l	9	9	100%	< 0.0001	0.596	↔	< 0.0001	0.040	↔	< 0.0001	0.567	↔	2024-12-03	2025-02-05	0.969
30_3_117	MW-18A	Appendix IV	Mercury	mg/l	9	9	100%	< 0.0001	0.929	↔	< 0.0001	0.452	↔	< 0.0001	0.574	↔	2025-03-25	2024-11-30	0.873
30_3_121	MW-18A	Appendix IV	Radium-226+228	pci/l	9	2	22%	-0.022451	0.224	↔	0.0049396	0.560	↔	-0.0022581	0.951	↔	2025-01-14	2025-06-26	0.679
30_3_125	MW-18A	Appendix IV	Thallium	mg/l	9	9	100%	< 0.0001	0.826	↔	< 0.0001	0.026	↔	< 0.0001	0.472	↔	2024-12-11	2025-02-05	0.975
30_5_129	MW-18A	Part 115	Zinc	mg/l	9	6	67%	< 0.0001	0.382	↔	-0.00011095	0.409	↔	< 0.0001	0.843	↔	2025-01-23	2025-04-26	0.621
31_2_112	MW-18B	Appendix III	Fluoride	mg/l	9	1	11%	0.012015	0.182	↔	0.022919	0.104	↔	0.00092584	0.554	↔	2025-02-21	2024-12-15	0.812
31_2_120	MW-18B	Appendix III	pH, Field	su	8	0	0%	-0.0013783	0.464	↔	0.0012023	0.734	↔	-0.001474	0.816	↔	2025-01-31	2025-05-06	0.461
31_3_103	MW-18B	Appendix IV	Barium	mg/l	9	0	0%	0.0002486	0.225	↔	-0.00017583	0.360	↔	< 0.0001	0.069	↔	2024-11-17	2025-02-26	0.808
31_3_104	MW-18B	Appendix IV	Beryllium	mg/l	9	9	100%	< 0.0001	0.596	↔	< 0.0001	0.040	↔	< 0.0001	0.567	↔	2024-12-03	2025-02-05	0.969
31_3_113	MW-18B	Appendix IV	Fluoride (App IV)	mg/l	9	1	11%	0.012015	0.182	↔	0.022919	0.104	↔	0.00092584	0.554	↔	2025-02-21	2024-12-15	0.812
31_3_115	MW-18B	Appendix IV	Lead	mg/l	9	9	100%	< 0.0001	0.908	↔	< 0.0001	0.070	↔	< 0.0001	0.522	↔	2024-12-10	2025-02-12	0.957
31_3_117	MW-18B	Appendix IV	Mercury	mg/l	9	9	100%	< 0.0001	0.929	↔	< 0.0001	0.452	↔	< 0.0001	0.574	↔	2025-03-25	2024-11-30	0.873
31_3_121	MW-18B	Appendix IV	Radium-226+228	pci/l	9	0	0%	-0.039398	0.010	↓	0.021455	0.080	↔	-0.012258	0.650	↔	2025-02-12	2025-06-01	0.950
31_3_125	MW-18B	Appendix IV	Thallium	mg/l	9	9	100%	< 0.0001	0.826	↔	< 0.0001	0.026	↔	< 0.0001	0.472	↔	2024-12-11	2025-02-05	0.975
31_5_129	MW-18B	Part 115	Zinc	mg/l	9	7	78%	< 0.0001	0.386	↔	-0.00011389	0.399	↔	< 0.0001	0.733	↔	2025-01-23	2025-04-27	0.605

LBWL Bedrock, State Program, Downgradient Wells
95% Lower Confidence Limits

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	LCL	Method
13_2_105	MW-7B	Appendix III	Boron	mg/l	14	0	0%	2022-03-09 to 2025-08-08	2.9	Normal LCL
13_2_107	MW-7B	Appendix III	Calcium	mg/l	14	0	0%	2022-03-09 to 2025-08-08	8.6	Normal LCL
13_2_108	MW-7B	Appendix III	Chloride	mg/l	14	10	71%	2022-03-09 to 2025-08-08	1.9	Nonparametric LCL around the Median
13_2_112	MW-7B	Appendix III	Fluoride	mg/l	14	10	71%	2022-03-09 to 2025-08-08	0.81	Nonparametric LCL around the Median
13_2_120	MW-7B	Appendix III	pH, Field	su	14	0	0%	2022-03-09 to 2025-08-08	7.9	Normal LCL
13_2_124	MW-7B	Appendix III	Sulfate	mg/l	14	10	71%	2022-03-09 to 2025-08-08	2.4	Nonparametric LCL around the Median
13_2_126	MW-7B	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	2022-03-09 to 2025-08-08	360	Normal LCL
13_3_101	MW-7B	Appendix IV	Antimony	mg/l	14	14	100%	2022-03-09 to 2025-08-08	0.0050	Nonparametric LCL around the Median
13_3_102	MW-7B	Appendix IV	Arsenic	mg/l	14	11	79%	2022-03-09 to 2025-08-08	0.0020	Nonparametric LCL around the Median
13_3_103	MW-7B	Appendix IV	Barium	mg/l	14	0	0%	2022-03-09 to 2025-08-08	0.0084	Normal LCL
13_3_104	MW-7B	Appendix IV	Beryllium	mg/l	14	13	93%	2022-03-09 to 2025-08-08	0.0010	Nonparametric LCL around the Median
13_3_106	MW-7B	Appendix IV	Cadmium	mg/l	14	13	93%	2022-03-09 to 2025-08-08	0.00050	Nonparametric LCL around the Median
13_3_109	MW-7B	Appendix IV	Chromium	mg/l	14	14	100%	2022-03-09 to 2025-08-08	0.0050	Nonparametric LCL around the Median
13_3_110	MW-7B	Appendix IV	Cobalt	mg/l	14	13	93%	2022-03-09 to 2025-08-08	0.0050	Nonparametric LCL around the Median
13_3_113	MW-7B	Appendix IV	Fluoride (App IV)	mg/l	14	10	71%	2022-03-09 to 2025-08-08	0.81	Nonparametric LCL around the Median
13_3_115	MW-7B	Appendix IV	Lead	mg/l	14	13	93%	2022-03-09 to 2025-08-08	0.0030	Nonparametric LCL around the Median
13_3_116	MW-7B	Appendix IV	Lithium	mg/l	14	0	0%	2022-03-09 to 2025-08-08	0.031	Nonparametric LCL around the Median
13_3_117	MW-7B	Appendix IV	Mercury	mg/l	14	14	100%	2022-03-09 to 2025-08-08	0.00020	Nonparametric LCL around the Median
13_3_118	MW-7B	Appendix IV	Molybdenum	mg/l	14	14	100%	2022-03-09 to 2025-08-08	0.0050	Nonparametric LCL around the Median
13_3_121	MW-7B	Appendix IV	Radium-226+228	pci/l	14	1	7%	2022-03-09 to 2025-08-08	0.86	Normal MLE LCL
13_3_122	MW-7B	Appendix IV	Selenium	mg/l	14	14	100%	2022-03-09 to 2025-08-08	0.0050	Nonparametric LCL around the Median
13_3_125	MW-7B	Appendix IV	Thallium	mg/l	14	14	100%	2022-03-09 to 2025-08-08	0.0020	Nonparametric LCL around the Median
13_5_111	MW-7B	Part 115	Copper	mg/l	14	14	100%	2022-03-09 to 2025-08-08	0.0050	Nonparametric LCL around the Median
13_5_114	MW-7B	Part 115	Iron	mg/l	14	0	0%	2022-03-09 to 2025-08-08	0.055	Normal LCL
13_5_119	MW-7B	Part 115	Nickel	mg/l	14	14	100%	2022-03-09 to 2025-08-08	0.0050	Nonparametric LCL around the Median
13_5_123	MW-7B	Part 115	Silver	mg/l	14	14	100%	2022-03-09 to 2025-08-08	0.00050	Nonparametric LCL around the Median
13_5_128	MW-7B	Part 115	Vanadium	mg/l	14	14	100%	2022-03-09 to 2025-08-08	0.0050	Nonparametric LCL around the Median
13_5_129	MW-7B	Part 115	Zinc	mg/l	14	13	93%	2022-03-09 to 2025-08-08	0.0050	Nonparametric LCL around the Median
14_2_105	MW-16C	Appendix III	Boron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	0.40	Normal LCL
14_2_107	MW-16C	Appendix III	Calcium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	70	Normal LCL
14_2_108	MW-16C	Appendix III	Chloride	mg/l	13	6	46%	2023-02-02 to 2025-08-11	1.6	Gamma MLE Normal Approx. LCL
14_2_112	MW-16C	Appendix III	Fluoride	mg/l	13	8	62%	2023-02-02 to 2025-08-11	0.50	Nonparametric LCL around the Median
14_2_120	MW-16C	Appendix III	pH, Field	su	13	0	0%	2023-02-02 to 2025-08-11	7.3	Normal LCL
14_2_124	MW-16C	Appendix III	Sulfate	mg/l	13	0	0%	2023-02-02 to 2025-08-11	7.5	Nonparametric LCL around the Median
14_2_126	MW-16C	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	2023-02-02 to 2025-08-11	320	Nonparametric LCL around the Median
14_3_101	MW-16C	Appendix IV	Antimony	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
14_3_102	MW-16C	Appendix IV	Arsenic	mg/l	13	10	77%	2023-02-02 to 2025-08-11	0.0020	Nonparametric LCL around the Median
14_3_103	MW-16C	Appendix IV	Barium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	0.031	Adjusted Gamma LCL
14_3_104	MW-16C	Appendix IV	Beryllium	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0010	Nonparametric LCL around the Median
14_3_106	MW-16C	Appendix IV	Cadmium	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.00050	Nonparametric LCL around the Median
14_3_109	MW-16C	Appendix IV	Chromium	mg/l	13	12	92%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
14_3_110	MW-16C	Appendix IV	Cobalt	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
14_3_113	MW-16C	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	2023-02-02 to 2025-08-11	0.50	Nonparametric LCL around the Median
14_3_115	MW-16C	Appendix IV	Lead	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0030	Nonparametric LCL around the Median
14_3_116	MW-16C	Appendix IV	Lithium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	0.027	Normal LCL
14_3_117	MW-16C	Appendix IV	Mercury	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.00020	Nonparametric LCL around the Median
14_3_118	MW-16C	Appendix IV	Molybdenum	mg/l	13	10	77%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
14_3_121	MW-16C	Appendix IV	Radium-226+228	pci/l	13	2	15%	2023-02-02 to 2025-08-11	0.70	Normal MLE LCL
14_3_122	MW-16C	Appendix IV	Selenium	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
14_3_125	MW-16C	Appendix IV	Thallium	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0020	Nonparametric LCL around the Median
14_5_111	MW-16C	Part 115	Copper	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
14_5_114	MW-16C	Part 115	Iron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	0.46	Adjusted Gamma LCL
14_5_119	MW-16C	Part 115	Nickel	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
14_5_123	MW-16C	Part 115	Silver	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.00050	Nonparametric LCL around the Median
14_5_128	MW-16C	Part 115	Vanadium	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
14_5_129	MW-16C	Part 115	Zinc	mg/l	13	12	92%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
15_2_105	MW-16D	Appendix III	Boron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	4.5	Normal LCL
15_2_107	MW-16D	Appendix III	Calcium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	29	Adjusted Gamma LCL
15_2_108	MW-16D	Appendix III	Chloride	mg/l	13	0	0%	2023-02-02 to 2025-08-11	6.9	Normal LCL
15_2_112	MW-16D	Appendix III	Fluoride	mg/l	13	8	62%	2023-02-02 to 2025-08-11	0.50	Nonparametric LCL around the Median
15_2_120	MW-16D	Appendix III	pH, Field	su	13	0	0%	2023-02-02 to 2025-08-11	7.5	Normal LCL
15_2_124	MW-16D	Appendix III	Sulfate	mg/l	13	1	8%	2023-02-02 to 2025-08-11	5.3	Gamma MLE Normal Approx. LCL
15_2_126	MW-16D	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	2023-02-02 to 2025-08-11	370	Normal LCL
15_3_101	MW-16D	Appendix IV	Antimony	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
15_3_102	MW-16D	Appendix IV	Arsenic	mg/l	13	3	23%	2023-02-02 to 2025-08-11	0.0023	Nonparametric LCL around the Median
15_3_103	MW-16D	Appendix IV	Barium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	0.034	Normal LCL
15_3_104	MW-16D	Appendix IV	Beryllium	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0010	Nonparametric LCL around the Median
15_3_106	MW-16D	Appendix IV	Cadmium	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.00050	Nonparametric LCL around the Median
15_3_109	MW-16D	Appendix IV	Chromium	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
15_3_110	MW-16D	Appendix IV	Cobalt	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
15_3_113	MW-16D	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	2023-02-02 to 2025-08-11	0.50	Nonparametric LCL around the Median
15_3_115	MW-16D	Appendix IV	Lead	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0030	Nonparametric LCL around the Median
15_3_116	MW-16D	Appendix IV	Lithium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	0.028	Normal LCL
15_3_117	MW-16D	Appendix IV	Mercury	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.00020	Nonparametric LCL around the Median
15_3_118	MW-16D	Appendix IV	Molybdenum	mg/l	13	0	0%	2023-02-02 to 2025-08-11	0.010	Nonparametric LCL around the Median
15_3_121	MW-16D	Appendix IV	Radium-226+228	pci/l	13	1	8%	2023-02-02 to 2025-08-11	1.1	Normal MLE LCL
15_3_122	MW-16D	Appendix IV	Selenium	mg/l	13	12	92%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
15_3_125	MW-16D	Appendix IV	Thallium	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0020	Nonparametric LCL around the Median
15_5_111	MW-16D	Part 115	Copper	mg/l	13	12	92%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
15_5_114	MW-16D	Part 115	Iron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	0.24	Normal LCL
15_5_119	MW-16D	Part 115	Nickel	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
15_5_123	MW-16D	Part 115	Silver	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.00050	Nonparametric LCL around the Median

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	LCL	Method
15_5_128	MW-16D	Part 115	Vanadium	mg/l	13	13	100%	2023-02-02 to 2025-08-11	0.0050	Nonparametric LCL around the Median
15_5_129	MW-16D	Part 115	Zinc	mg/l	13	1	8%	2023-02-02 to 2025-08-11	0.018	Gamma MLE Normal Approx. LCL
16_2_105	MW-17D	Appendix III	Boron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	2.2	Normal LCL
16_2_107	MW-17D	Appendix III	Calcium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	50	Nonparametric LCL around the Median
16_2_108	MW-17D	Appendix III	Chloride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	7.0	Lognormal H-LCL
16_2_112	MW-17D	Appendix III	Fluoride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.29	Nonparametric LCL around the Median
16_2_120	MW-17D	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-09-11	7.4	Normal LCL
16_2_124	MW-17D	Appendix III	Sulfate	mg/l	8	0	0%	2024-10-08 to 2025-09-11	3.7	Nonparametric LCL around the Median
16_2_126	MW-17D	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	2024-10-08 to 2025-09-11	280	Nonparametric LCL around the Median
16_3_101	MW-17D	Appendix IV	Antimony	mg/l	8	6	75%	2024-10-08 to 2025-09-11	0.00057	Nonparametric LCL around the Median
16_3_102	MW-17D	Appendix IV	Arsenic	mg/l	8	2	25%	2024-10-08 to 2025-09-11	0.00060	Normal MLE LCL
16_3_103	MW-17D	Appendix IV	Barium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.040	Nonparametric LCL around the Median
16_3_104	MW-17D	Appendix IV	Beryllium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00027	Nonparametric LCL around the Median
16_3_106	MW-17D	Appendix IV	Cadmium	mg/l	8	7	88%	2024-10-08 to 2025-09-11	0.000077	Nonparametric LCL around the Median
16_3_109	MW-17D	Appendix IV	Chromium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.0012	Nonparametric LCL around the Median
16_3_110	MW-17D	Appendix IV	Cobalt	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.000086	Nonparametric LCL around the Median
16_3_113	MW-17D	Appendix IV	Fluoride (App IV)	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.29	Nonparametric LCL around the Median
16_3_115	MW-17D	Appendix IV	Lead	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00045	Nonparametric LCL around the Median
16_3_116	MW-17D	Appendix IV	Lithium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.033	Nonparametric LCL around the Median
16_3_117	MW-17D	Appendix IV	Mercury	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00013	Nonparametric LCL around the Median
16_3_118	MW-17D	Appendix IV	Molybdenum	mg/l	8	1	12%	2024-10-08 to 2025-09-11	0.0034	Nonparametric LCL around the Median
16_3_121	MW-17D	Appendix IV	Radium-226+228	pci/l	8	1	12%	2024-10-08 to 2025-09-11	0.85	Normal MLE LCL
16_3_122	MW-17D	Appendix IV	Selenium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00089	Nonparametric LCL around the Median
16_3_125	MW-17D	Appendix IV	Thallium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00051	Nonparametric LCL around the Median
16_5_111	MW-17D	Part 115	Copper	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.0017	Nonparametric LCL around the Median
16_5_114	MW-17D	Part 115	Iron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.59	Lognormal H-LCL
16_5_119	MW-17D	Part 115	Nickel	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.0015	Nonparametric LCL around the Median
16_5_123	MW-17D	Part 115	Silver	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.000053	Nonparametric LCL around the Median
16_5_128	MW-17D	Part 115	Vanadium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00082	Nonparametric LCL around the Median
16_5_129	MW-17D	Part 115	Zinc	mg/l	8	5	62%	2024-10-08 to 2025-09-11	0.0010	Nonparametric LCL around the Median
17_2_105	MW-17E	Appendix III	Boron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	2.9	Normal LCL
17_2_107	MW-17E	Appendix III	Calcium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	5.2	Nonparametric LCL around the Median
17_2_108	MW-17E	Appendix III	Chloride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	1.3	Nonparametric LCL around the Median
17_2_112	MW-17E	Appendix III	Fluoride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.97	Nonparametric LCL around the Median
17_2_120	MW-17E	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-09-11	8.0	Normal LCL
17_2_124	MW-17E	Appendix III	Sulfate	mg/l	8	3	38%	2024-10-08 to 2025-09-11	0.35*	Nonparametric LCL around the Median
17_2_126	MW-17E	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	2024-10-08 to 2025-09-11	350	Normal LCL
17_3_101	MW-17E	Appendix IV	Antimony	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00057	Nonparametric LCL around the Median
17_3_102	MW-17E	Appendix IV	Arsenic	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00075	Nonparametric LCL around the Median
17_3_103	MW-17E	Appendix IV	Barium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.0042	Nonparametric LCL around the Median
17_3_104	MW-17E	Appendix IV	Beryllium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00027	Nonparametric LCL around the Median
17_3_106	MW-17E	Appendix IV	Cadmium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.000077	Nonparametric LCL around the Median
17_3_109	MW-17E	Appendix IV	Chromium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.0012	Nonparametric LCL around the Median
17_3_110	MW-17E	Appendix IV	Cobalt	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.000086	Nonparametric LCL around the Median
17_3_113	MW-17E	Appendix IV	Fluoride (App IV)	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.97	Nonparametric LCL around the Median
17_3_115	MW-17E	Appendix IV	Lead	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00045	Nonparametric LCL around the Median
17_3_116	MW-17E	Appendix IV	Lithium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.024	Normal LCL
17_3_117	MW-17E	Appendix IV	Mercury	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00013	Nonparametric LCL around the Median
17_3_118	MW-17E	Appendix IV	Molybdenum	mg/l	8	7	88%	2024-10-08 to 2025-09-11	0.0011	Nonparametric LCL around the Median
17_3_121	MW-17E	Appendix IV	Radium-226+228	pci/l	8	4	50%	2024-10-08 to 2025-09-11	0.60	Nonparametric LCL around the Median
17_3_122	MW-17E	Appendix IV	Selenium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00089	Nonparametric LCL around the Median
17_3_125	MW-17E	Appendix IV	Thallium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00051	Nonparametric LCL around the Median
17_5_111	MW-17E	Part 115	Copper	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.0017	Nonparametric LCL around the Median
17_5_114	MW-17E	Part 115	Iron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	0.038	Adjusted Gamma LCL
17_5_119	MW-17E	Part 115	Nickel	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.0015	Nonparametric LCL around the Median
17_5_123	MW-17E	Part 115	Silver	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.000053	Nonparametric LCL around the Median
17_5_128	MW-17E	Part 115	Vanadium	mg/l	8	8	100%	2024-10-08 to 2025-09-11	0.00082	Nonparametric LCL around the Median
17_5_129	MW-17E	Part 115	Zinc	mg/l	8	6	75%	2024-10-08 to 2025-09-11	0.00093	Nonparametric LCL around the Median
18_2_105	MW-18C	Appendix III	Boron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	2.5	Normal LCL
18_2_107	MW-18C	Appendix III	Calcium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	140	Normal LCL
18_2_108	MW-18C	Appendix III	Chloride	mg/l	9	0	0%	2024-10-08 to 2025-08-08	58	Normal LCL
18_2_112	MW-18C	Appendix III	Fluoride	mg/l	9	2	22%	2024-10-08 to 2025-08-08	0.17	Normal MLE LCL
18_2_120	MW-18C	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-08-08	7.2	Normal LCL
18_2_124	MW-18C	Appendix III	Sulfate	mg/l	9	0	0%	2024-10-08 to 2025-08-08	340	Normal LCL
18_2_126	MW-18C	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	2024-10-08 to 2025-08-08	820	Normal LCL
18_3_101	MW-18C	Appendix IV	Antimony	mg/l	9	8	89%	2024-10-08 to 2025-08-08	0.00057	Nonparametric LCL around the Median
18_3_102	MW-18C	Appendix IV	Arsenic	mg/l	9	5	56%	2024-10-08 to 2025-08-08	0.00075	Nonparametric LCL around the Median
18_3_103	MW-18C	Appendix IV	Barium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	0.043	Normal LCL
18_3_104	MW-18C	Appendix IV	Beryllium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00027	Nonparametric LCL around the Median
18_3_106	MW-18C	Appendix IV	Cadmium	mg/l	9	8	89%	2024-10-08 to 2025-08-08	0.000077	Nonparametric LCL around the Median
18_3_109	MW-18C	Appendix IV	Chromium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.0012	Nonparametric LCL around the Median
18_3_110	MW-18C	Appendix IV	Cobalt	mg/l	9	5	56%	2024-10-08 to 2025-08-08	0.000086	Nonparametric LCL around the Median
18_3_113	MW-18C	Appendix IV	Fluoride (App IV)	mg/l	9	2	22%	2024-10-08 to 2025-08-08	0.17	Normal MLE LCL
18_3_115	MW-18C	Appendix IV	Lead	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00045	Nonparametric LCL around the Median
18_3_116	MW-18C	Appendix IV	Lithium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	0.076	Normal LCL
18_3_117	MW-18C	Appendix IV	Mercury	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00013	Nonparametric LCL around the Median
18_3_118	MW-18C	Appendix IV	Molybdenum	mg/l	9	0	0%	2024-10-08 to 2025-08-08	0.078	Normal LCL
18_3_121	MW-18C	Appendix IV	Radium-226+228	pci/l	9	0	0%	2024-10-08 to 2025-08-08	1.7	Normal LCL
18_3_122	MW-18C	Appendix IV	Selenium	mg/l	9	8	89%	2024-10-08 to 2025-08-08	0.00089	Nonparametric LCL around the Median
18_3_125	MW-18C	Appendix IV	Thallium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00051	Nonparametric LCL around the Median
18_5_111	MW-18C	Part 115	Copper	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.0017	Nonparametric LCL around the Median
18_5_114	MW-18C	Part 115	Iron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	2.1	Normal LCL
18_5_119	MW-18C	Part 115	Nickel	mg/l	9	1	11%	2024-10-08 to 2025-08-08	0.0063	Normal MLE LCL
18_5_123	MW-18C	Part 115	Silver	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.000053	Nonparametric LCL around the Median

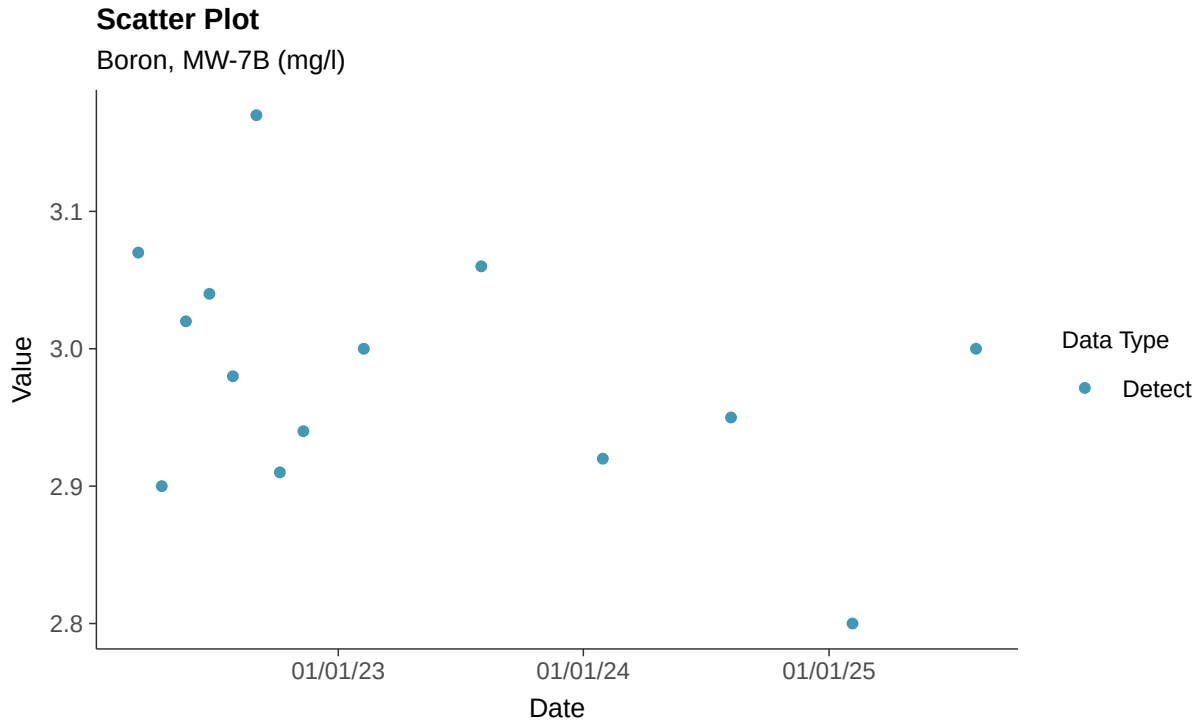
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	LCL	Method
18_5_128	MW-18C	Part 115	Vanadium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00082	Nonparametric LCL around the Median
18_5_129	MW-18C	Part 115	Zinc	mg/l	9	6	67%	2024-10-08 to 2025-08-08	0.00093	Nonparametric LCL around the Median
19_2_105	MW-18D	Appendix III	Boron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	3.3	Normal LCL
19_2_107	MW-18D	Appendix III	Calcium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	54	Adjusted Gamma LCL
19_2_108	MW-18D	Appendix III	Chloride	mg/l	9	0	0%	2024-10-08 to 2025-08-08	24	Normal LCL
19_2_112	MW-18D	Appendix III	Fluoride	mg/l	9	1	11%	2024-10-08 to 2025-08-08	0.71	Normal MLE LCL
19_2_120	MW-18D	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-08-08	7.8	Normal LCL
19_2_124	MW-18D	Appendix III	Sulfate	mg/l	9	0	0%	2024-10-08 to 2025-08-08	140	Adjusted Gamma LCL
19_2_126	MW-18D	Appendix III	Total Dissolved Solids	mg/l	9	1	11%	2024-10-08 to 2025-08-08	400	Normal MLE LCL
19_3_101	MW-18D	Appendix IV	Antimony	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00057	Nonparametric LCL around the Median
19_3_102	MW-18D	Appendix IV	Arsenic	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00075	Nonparametric LCL around the Median
19_3_103	MW-18D	Appendix IV	Barium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	0.020	Normal LCL
19_3_104	MW-18D	Appendix IV	Beryllium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00027	Nonparametric LCL around the Median
19_3_106	MW-18D	Appendix IV	Cadmium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.000077	Nonparametric LCL around the Median
19_3_109	MW-18D	Appendix IV	Chromium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.0012	Nonparametric LCL around the Median
19_3_110	MW-18D	Appendix IV	Cobalt	mg/l	9	6	67%	2024-10-08 to 2025-08-08	0.000086	Nonparametric LCL around the Median
19_3_113	MW-18D	Appendix IV	Fluoride (App IV)	mg/l	9	1	11%	2024-10-08 to 2025-08-08	0.71	Normal MLE LCL
19_3_115	MW-18D	Appendix IV	Lead	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00045	Nonparametric LCL around the Median
19_3_116	MW-18D	Appendix IV	Lithium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	0.059	Normal LCL
19_3_117	MW-18D	Appendix IV	Mercury	mg/l	9	8	89%	2024-10-08 to 2025-08-08	0.00013	Nonparametric LCL around the Median
19_3_118	MW-18D	Appendix IV	Molybdenum	mg/l	9	0	0%	2024-10-08 to 2025-08-08	0.044	Normal LCL
19_3_121	MW-18D	Appendix IV	Radium-226+228	pci/l	9	3	33%	2024-10-08 to 2025-08-08	0.63*	Nonparametric LCL around the Median
19_3_122	MW-18D	Appendix IV	Selenium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00089	Nonparametric LCL around the Median
19_3_125	MW-18D	Appendix IV	Thallium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00051	Nonparametric LCL around the Median
19_5_111	MW-18D	Part 115	Copper	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.0017	Nonparametric LCL around the Median
19_5_114	MW-18D	Part 115	Iron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	1.0	Adjusted Gamma LCL
19_5_119	MW-18D	Part 115	Nickel	mg/l	9	1	11%	2024-10-08 to 2025-08-08	0.0026	Normal MLE LCL
19_5_123	MW-18D	Part 115	Silver	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.000053	Nonparametric LCL around the Median
19_5_128	MW-18D	Part 115	Vanadium	mg/l	9	9	100%	2024-10-08 to 2025-08-08	0.00082	Nonparametric LCL around the Median
19_5_129	MW-18D	Part 115	Zinc	mg/l	9	6	67%	2024-10-08 to 2025-08-08	0.00093	Nonparametric LCL around the Median
20_2_105	MW-100C	Appendix III	Boron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	1.7	Normal LCL
20_2_107	MW-100C	Appendix III	Calcium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	57	Normal LCL
20_2_108	MW-100C	Appendix III	Chloride	mg/l	11	0	0%	2023-06-05 to 2025-08-07	4.6	Adjusted Gamma LCL
20_2_112	MW-100C	Appendix III	Fluoride	mg/l	11	7	64%	2023-06-05 to 2025-08-07	0.43	Nonparametric LCL around the Median
20_2_120	MW-100C	Appendix III	pH, Field	su	11	0	0%	2023-06-05 to 2025-08-07	7.3	Normal LCL
20_2_124	MW-100C	Appendix III	Sulfate	mg/l	11	0	0%	2023-06-05 to 2025-08-07	6.3	Adjusted Gamma LCL
20_2_126	MW-100C	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	2023-06-05 to 2025-08-07	280	Nonparametric LCL around the Median
20_3_101	MW-100C	Appendix IV	Antimony	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
20_3_102	MW-100C	Appendix IV	Arsenic	mg/l	11	9	82%	2023-06-05 to 2025-08-07	0.0020	Nonparametric LCL around the Median
20_3_103	MW-100C	Appendix IV	Barium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	0.067	Normal LCL
20_3_104	MW-100C	Appendix IV	Beryllium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0010	Nonparametric LCL around the Median
20_3_106	MW-100C	Appendix IV	Cadmium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.00050	Nonparametric LCL around the Median
20_3_109	MW-100C	Appendix IV	Chromium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
20_3_110	MW-100C	Appendix IV	Cobalt	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
20_3_113	MW-100C	Appendix IV	Fluoride (App IV)	mg/l	11	7	64%	2023-06-05 to 2025-08-07	0.43	Nonparametric LCL around the Median
20_3_115	MW-100C	Appendix IV	Lead	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0030	Nonparametric LCL around the Median
20_3_116	MW-100C	Appendix IV	Lithium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	0.031	Normal LCL
20_3_117	MW-100C	Appendix IV	Mercury	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.00020	Nonparametric LCL around the Median
20_3_118	MW-100C	Appendix IV	Molybdenum	mg/l	11	6	55%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
20_3_121	MW-100C	Appendix IV	Radium-226+228	pci/l	11	1	9%	2023-06-05 to 2025-08-07	0.82	Normal MLE LCL
20_3_122	MW-100C	Appendix IV	Selenium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
20_3_125	MW-100C	Appendix IV	Thallium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0020	Nonparametric LCL around the Median
20_5_111	MW-100C	Part 115	Copper	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
20_5_114	MW-100C	Part 115	Iron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	0.57	Normal LCL
20_5_119	MW-100C	Part 115	Nickel	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
20_5_123	MW-100C	Part 115	Silver	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.00050	Nonparametric LCL around the Median
20_5_128	MW-100C	Part 115	Vanadium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
20_5_129	MW-100C	Part 115	Zinc	mg/l	11	8	73%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
21_2_105	MW-100D	Appendix III	Boron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	2.7	Nonparametric LCL around the Median
21_2_107	MW-100D	Appendix III	Calcium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	5.9	Nonparametric LCL around the Median
21_2_108	MW-100D	Appendix III	Chloride	mg/l	11	4	36%	2023-06-05 to 2025-08-07	2.0	Normal MLE LCL
21_2_112	MW-100D	Appendix III	Fluoride	mg/l	11	5	45%	2023-06-05 to 2025-08-07	0.40	Normal MLE LCL
21_2_120	MW-100D	Appendix III	pH, Field	su	11	0	0%	2023-06-05 to 2025-08-07	7.5	Normal LCL
21_2_124	MW-100D	Appendix III	Sulfate	mg/l	11	1	9%	2023-06-05 to 2025-08-07	14	Gamma MLE Normal Approx. LCL
21_2_126	MW-100D	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	2023-06-05 to 2025-08-07	390	Adjusted Gamma LCL
21_3_101	MW-100D	Appendix IV	Antimony	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
21_3_102	MW-100D	Appendix IV	Arsenic	mg/l	11	2	18%	2023-06-05 to 2025-08-07	0.0020	Nonparametric LCL around the Median
21_3_103	MW-100D	Appendix IV	Barium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	0.0090	Normal LCL
21_3_104	MW-100D	Appendix IV	Beryllium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0010	Nonparametric LCL around the Median
21_3_106	MW-100D	Appendix IV	Cadmium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.00050	Nonparametric LCL around the Median
21_3_109	MW-100D	Appendix IV	Chromium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
21_3_110	MW-100D	Appendix IV	Cobalt	mg/l	11	10	91%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
21_3_113	MW-100D	Appendix IV	Fluoride (App IV)	mg/l	11	5	45%	2023-06-05 to 2025-08-07	0.40	Normal MLE LCL
21_3_115	MW-100D	Appendix IV	Lead	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0030	Nonparametric LCL around the Median
21_3_116	MW-100D	Appendix IV	Lithium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	0.016	Nonparametric LCL around the Median
21_3_117	MW-100D	Appendix IV	Mercury	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.00020	Nonparametric LCL around the Median
21_3_118	MW-100D	Appendix IV	Molybdenum	mg/l	11	1	9%	2023-06-05 to 2025-08-07	0.0067	Normal MLE LCL
21_3_121	MW-100D	Appendix IV	Radium-226+228	pci/l	11	1	9%	2023-06-05 to 2025-08-07	0.82	Gamma MLE Normal Approx. LCL
21_3_122	MW-100D	Appendix IV	Selenium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
21_3_125	MW-100D	Appendix IV	Thallium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0020	Nonparametric LCL around the Median
21_5_111	MW-100D	Part 115	Copper	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
21_5_114	MW-100D	Part 115	Iron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	0.20	Normal LCL
21_5_119	MW-100D	Part 115	Nickel	mg/l	11	10	91%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
21_5_123	MW-100D	Part 115	Silver	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.00050	Nonparametric LCL around the Median

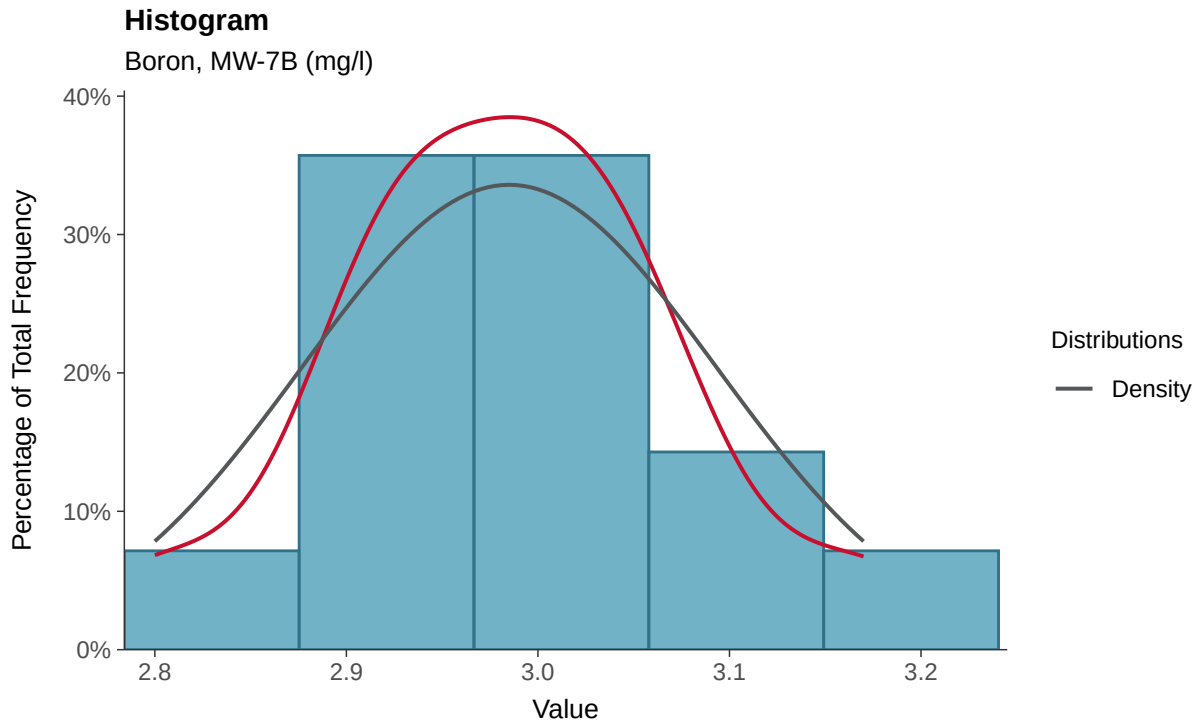
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	LCL	Method
21_5_128	MW-100D	Part 115	Vanadium	mg/l	11	11	100%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median
21_5_129	MW-100D	Part 115	Zinc	mg/l	11	9	82%	2023-06-05 to 2025-08-07	0.0050	Nonparametric LCL around the Median

*Due to convergence issue with one of the estimators, nonparametric method is used to provided the 95% LCL.

Appendix III: Boron, MW-7B

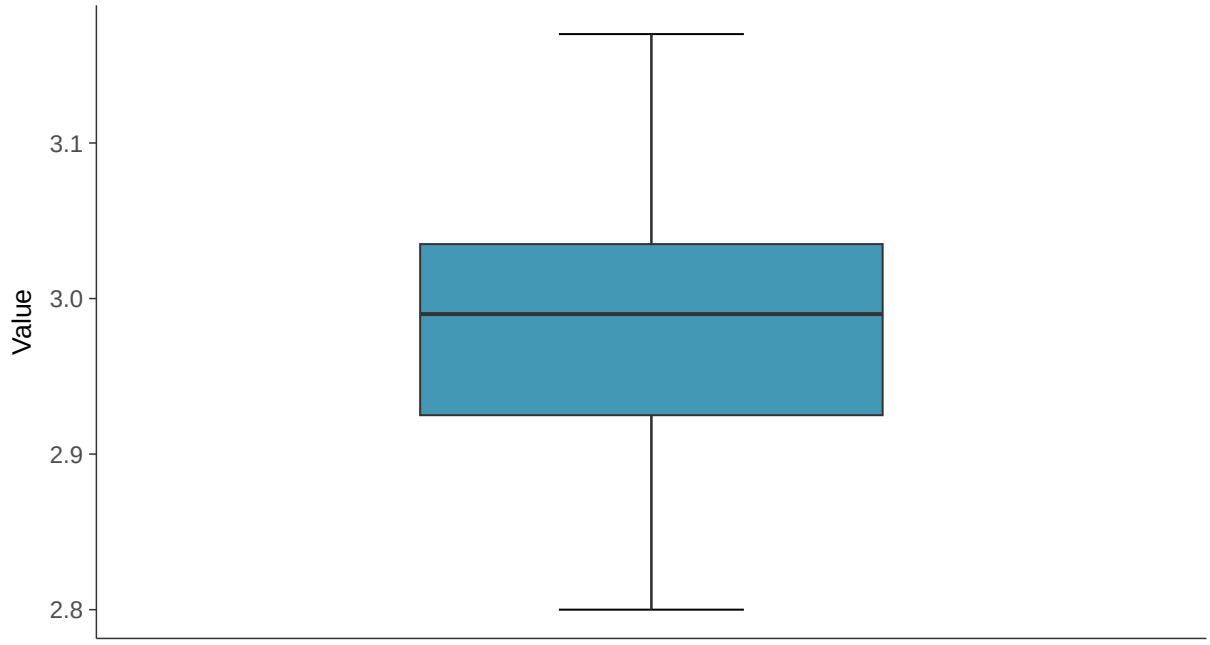
ID: 13_2_105





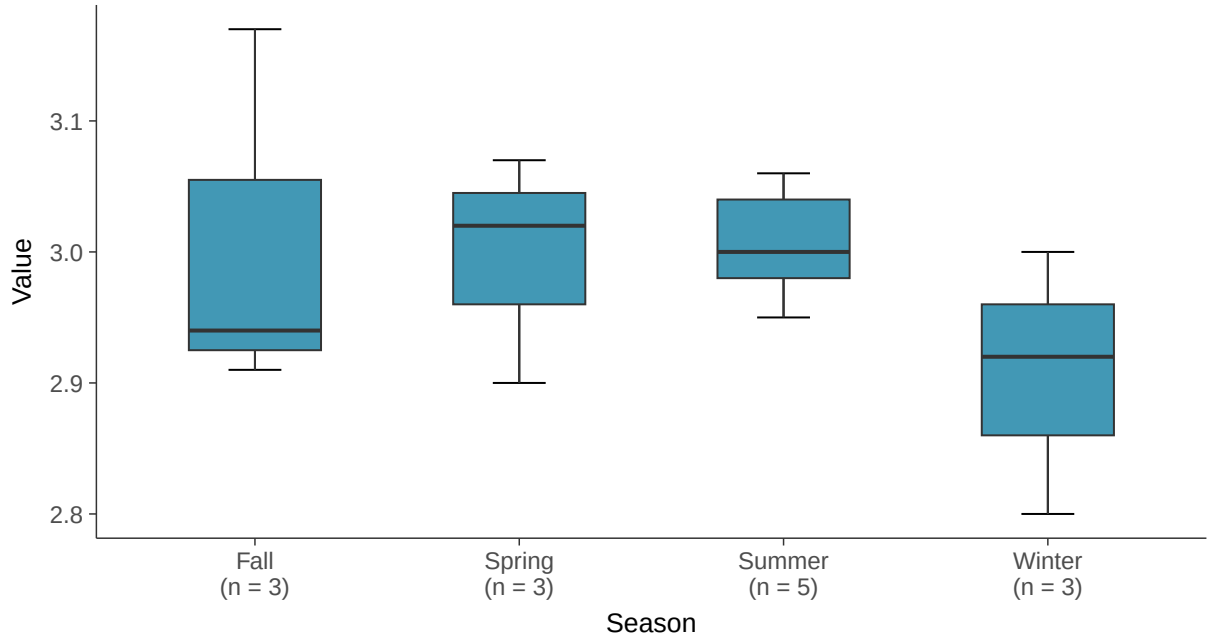
Boxplot

Boron, MW-7B (mg/l)



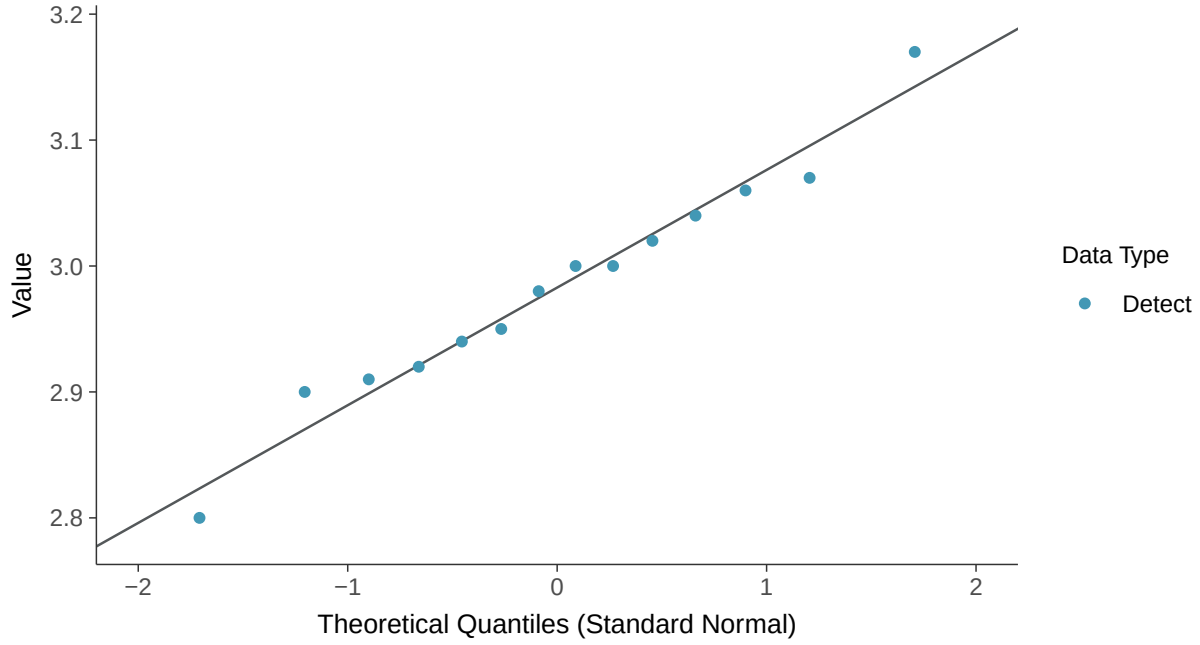
Boxplot by Season

Boron, MW-7B (mg/l)



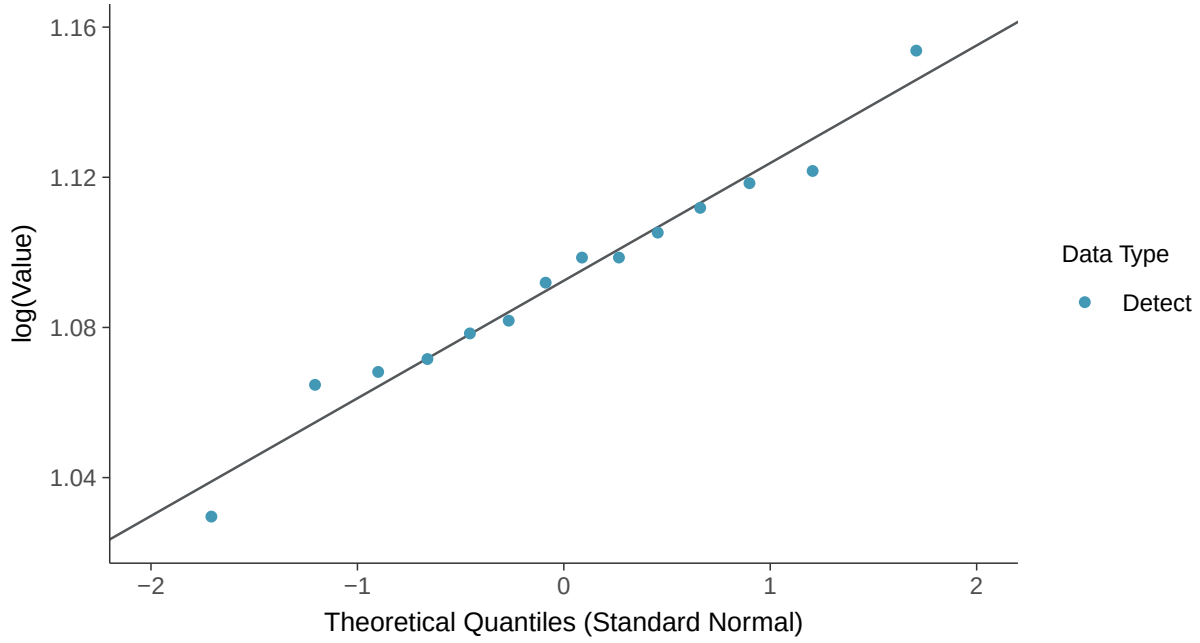
Normal Q-Q plot

Boron, MW-7B (mg/l)



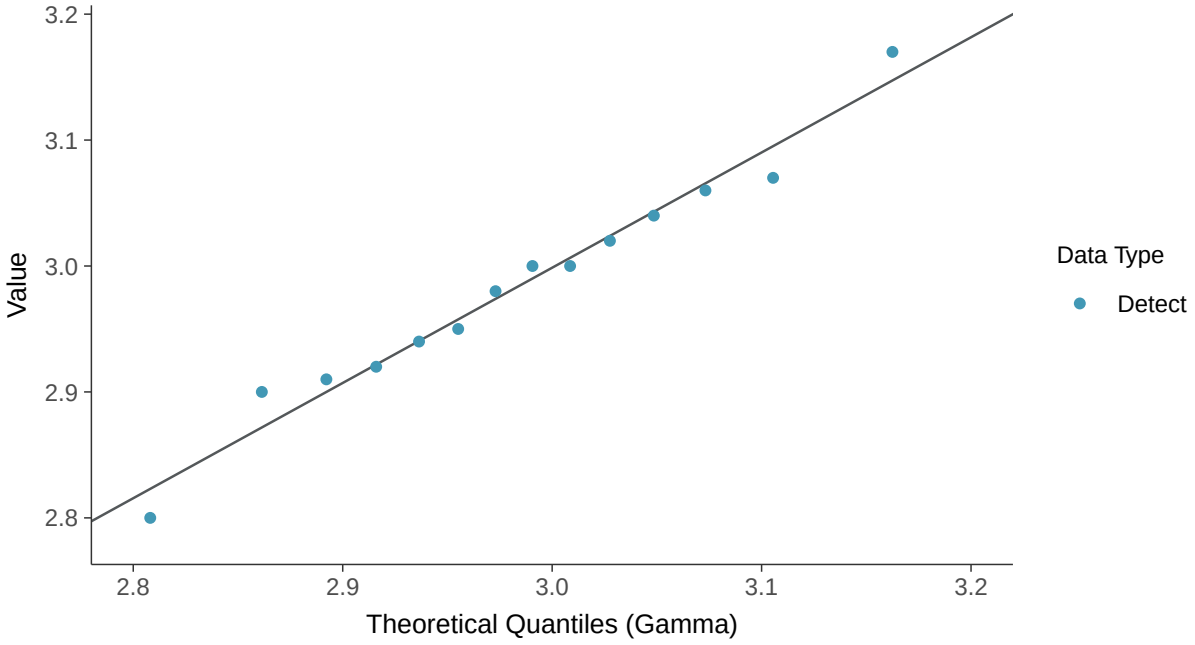
Lognormal Q-Q plot

Boron, MW-7B (mg/l)



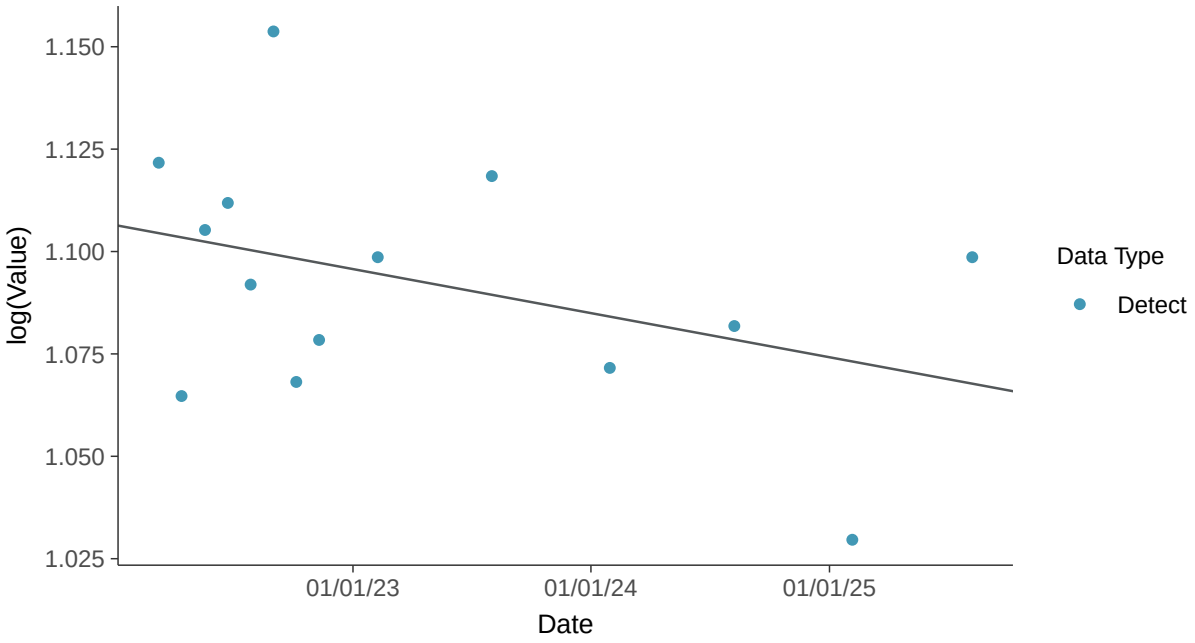
Gamma Q-Q plot

Boron, MW-7B (mg/l)



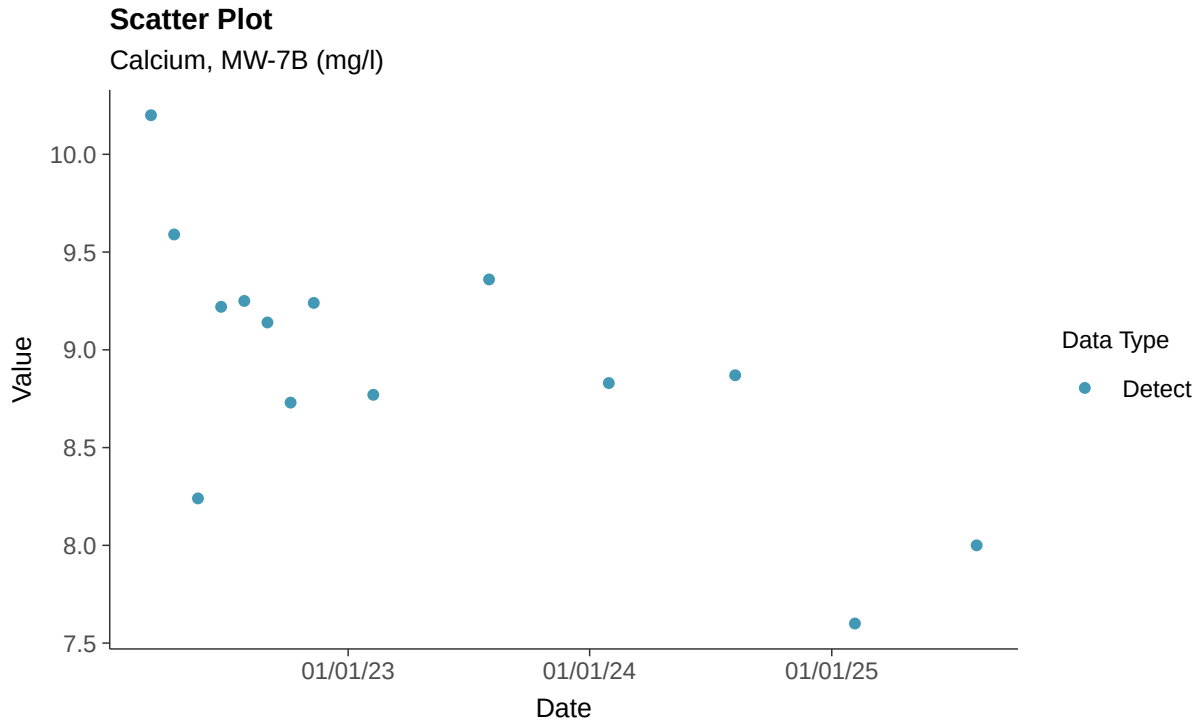
Trend Regression: Lognormal MLE

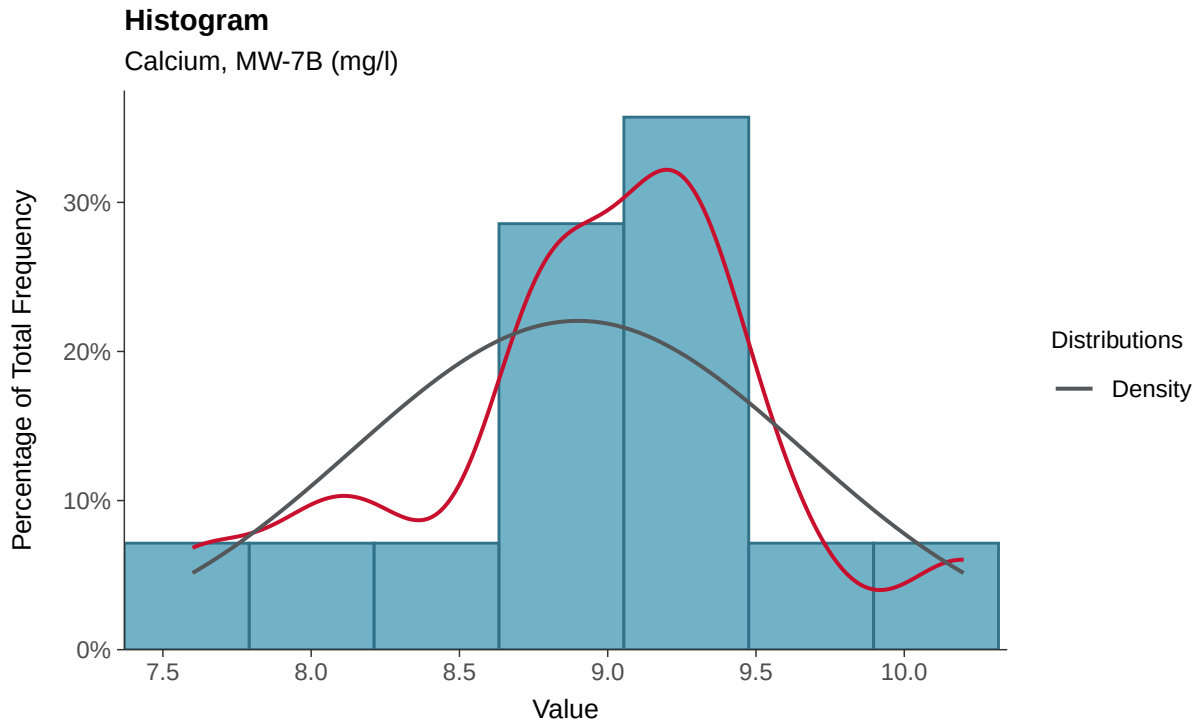
Boron, MW-7B (mg/l)



Appendix III: Calcium, MW-7B

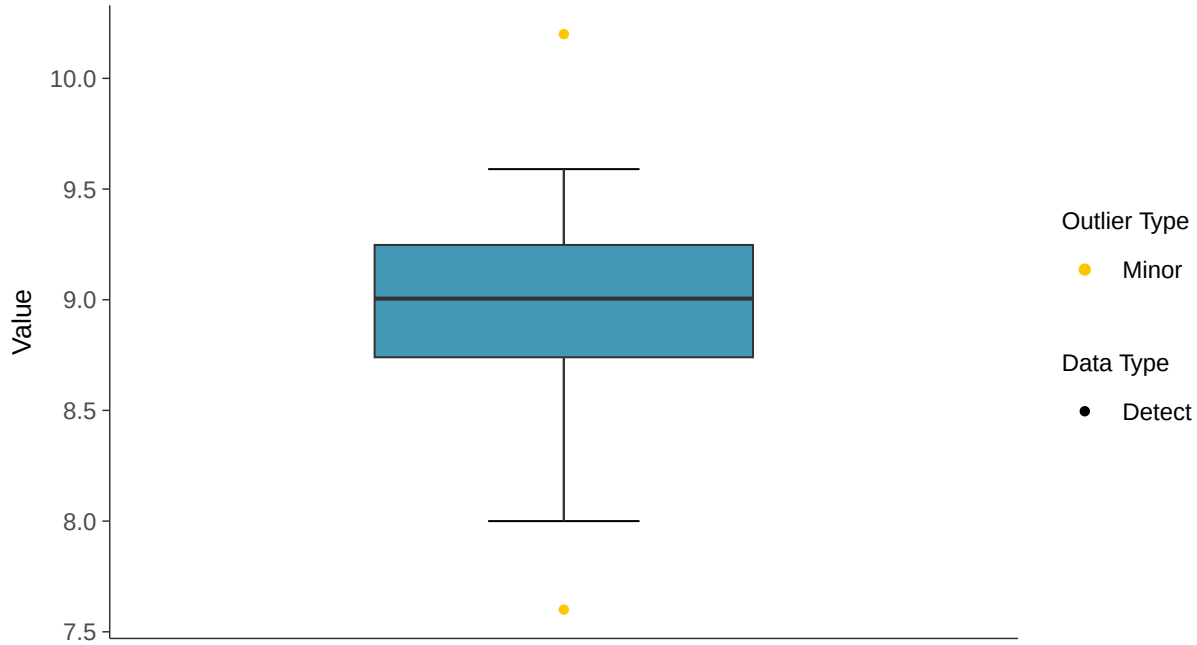
ID: 13_2_107





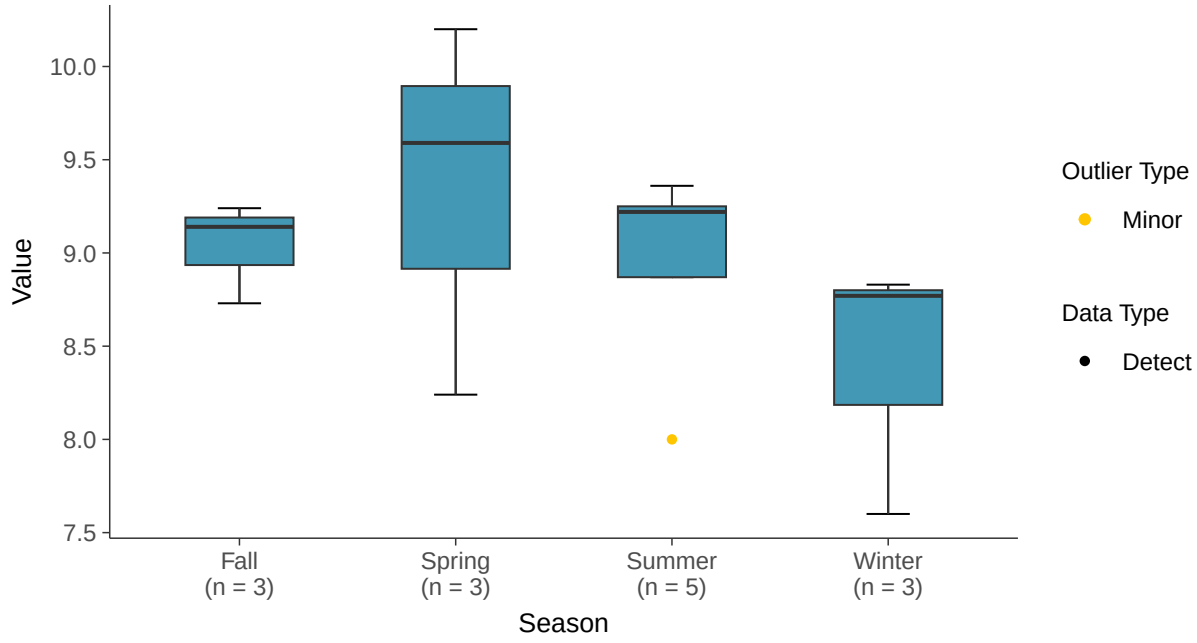
Boxplot

Calcium, MW-7B (mg/l)



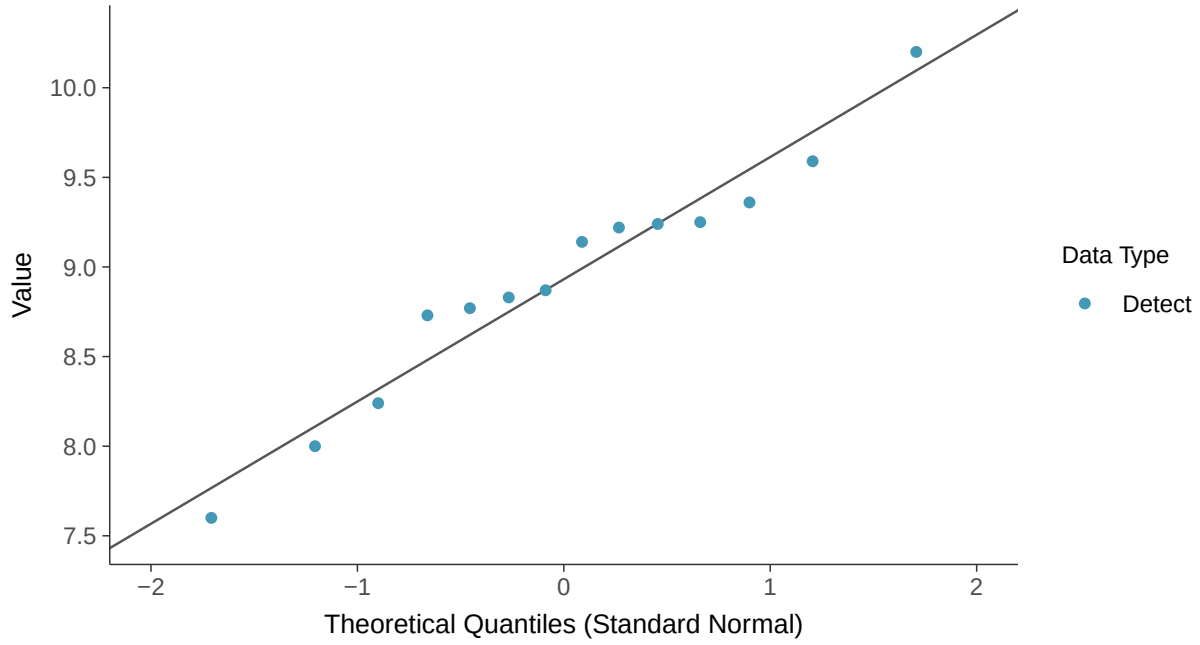
Boxplot by Season

Calcium, MW-7B (mg/l)



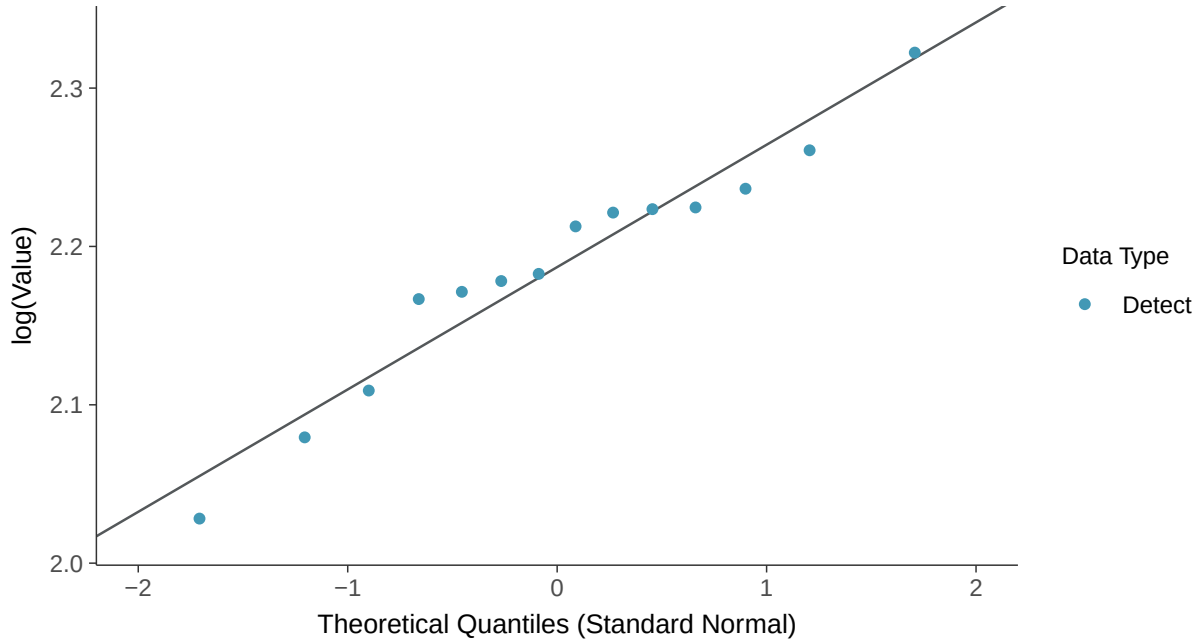
Normal Q-Q plot

Calcium, MW-7B (mg/l)



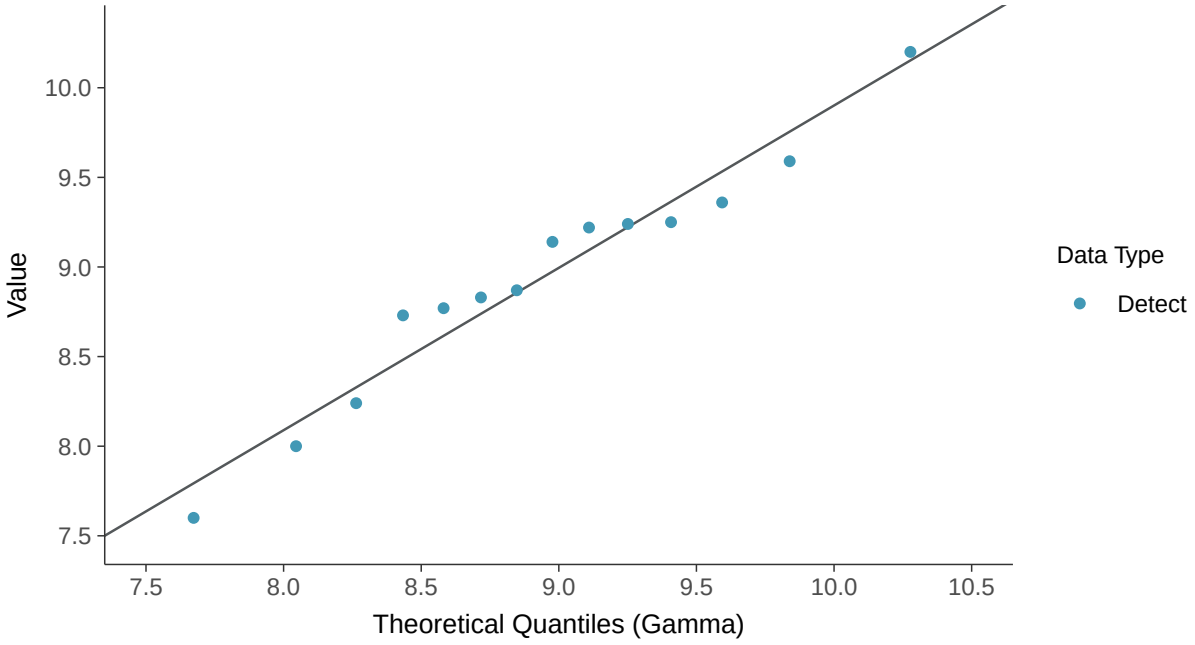
Lognormal Q-Q plot

Calcium, MW-7B (mg/l)



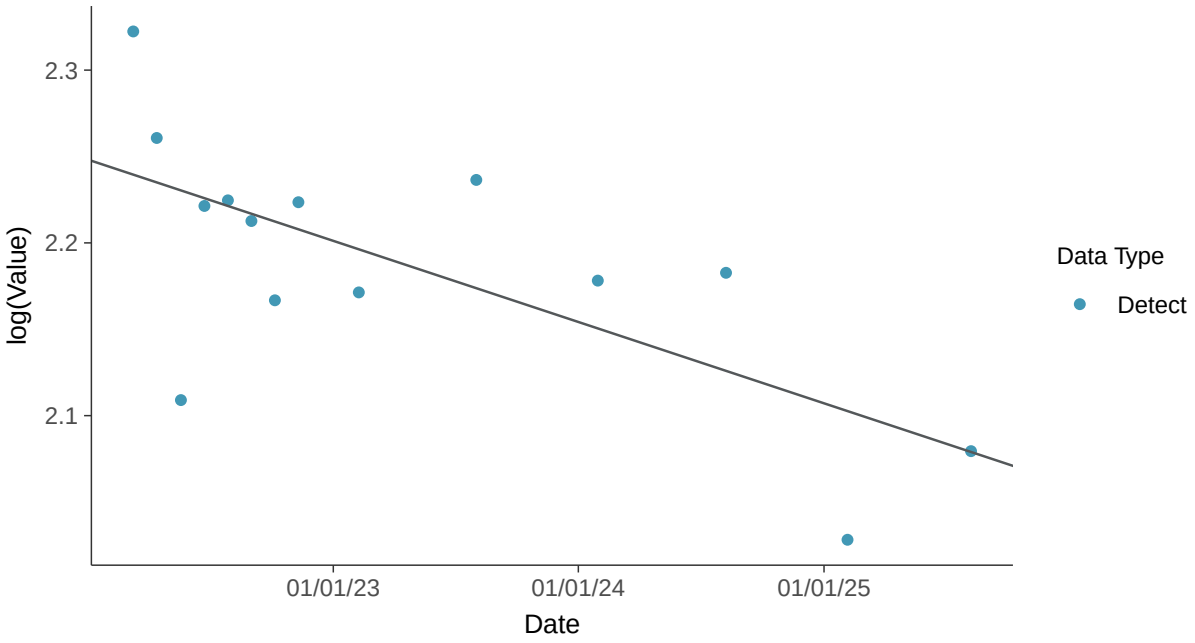
Gamma Q-Q plot

Calcium, MW-7B (mg/l)



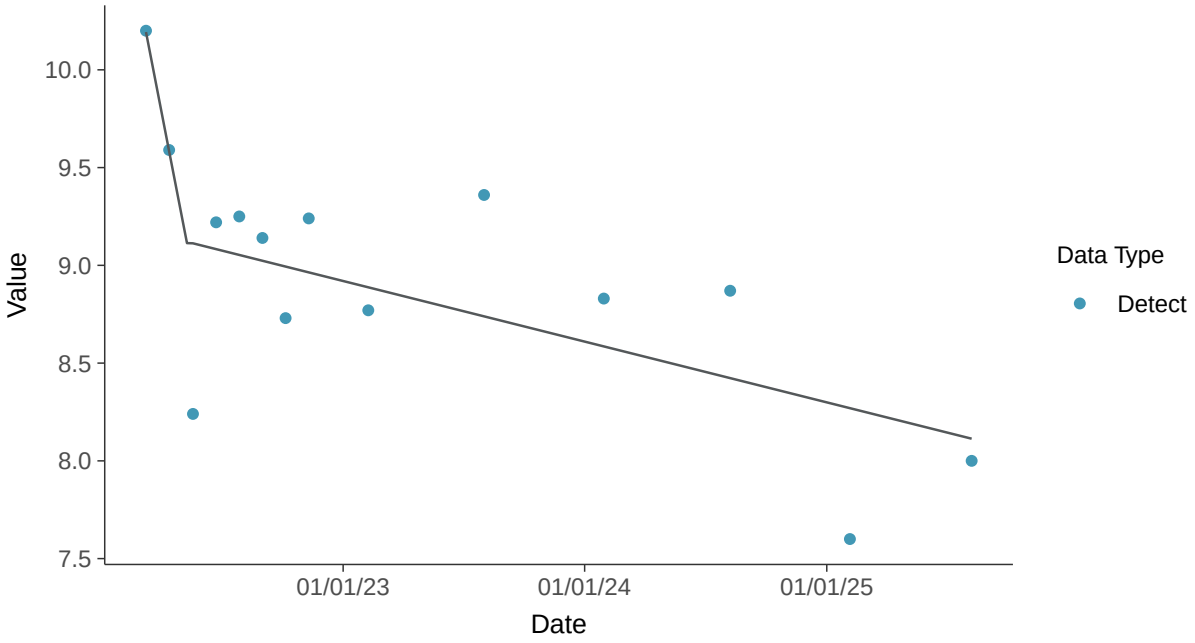
Trend Regression: Lognormal MLE

Calcium, MW-7B (mg/l)



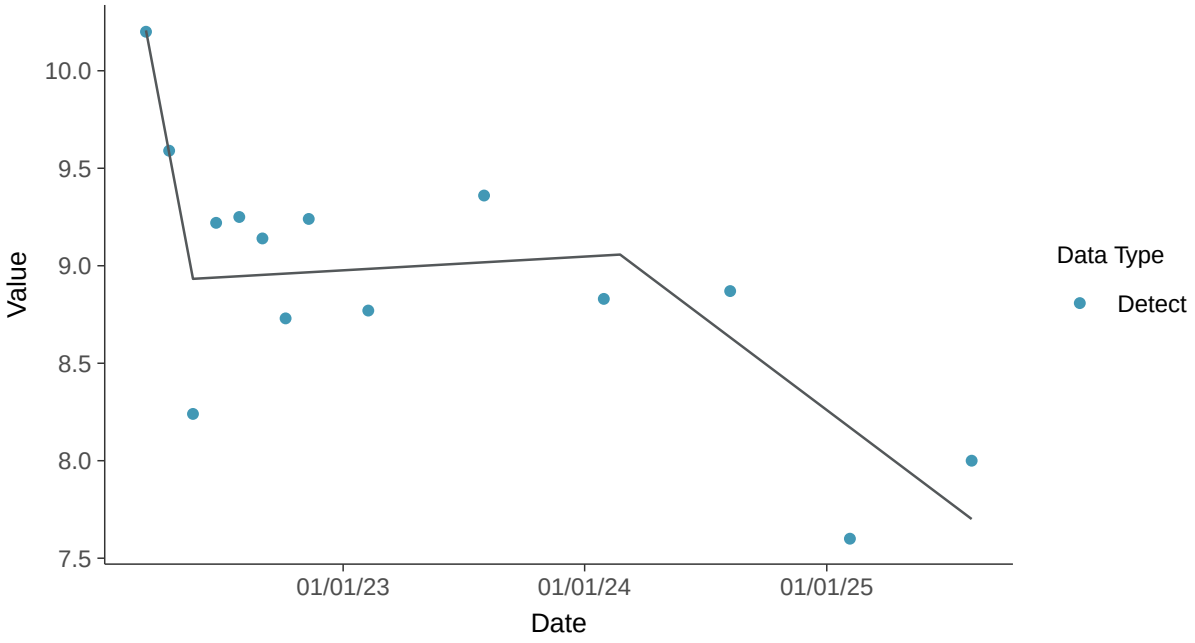
Trend Regression: Piecewise Linear-Linear

Calcium, MW-7B (mg/l)



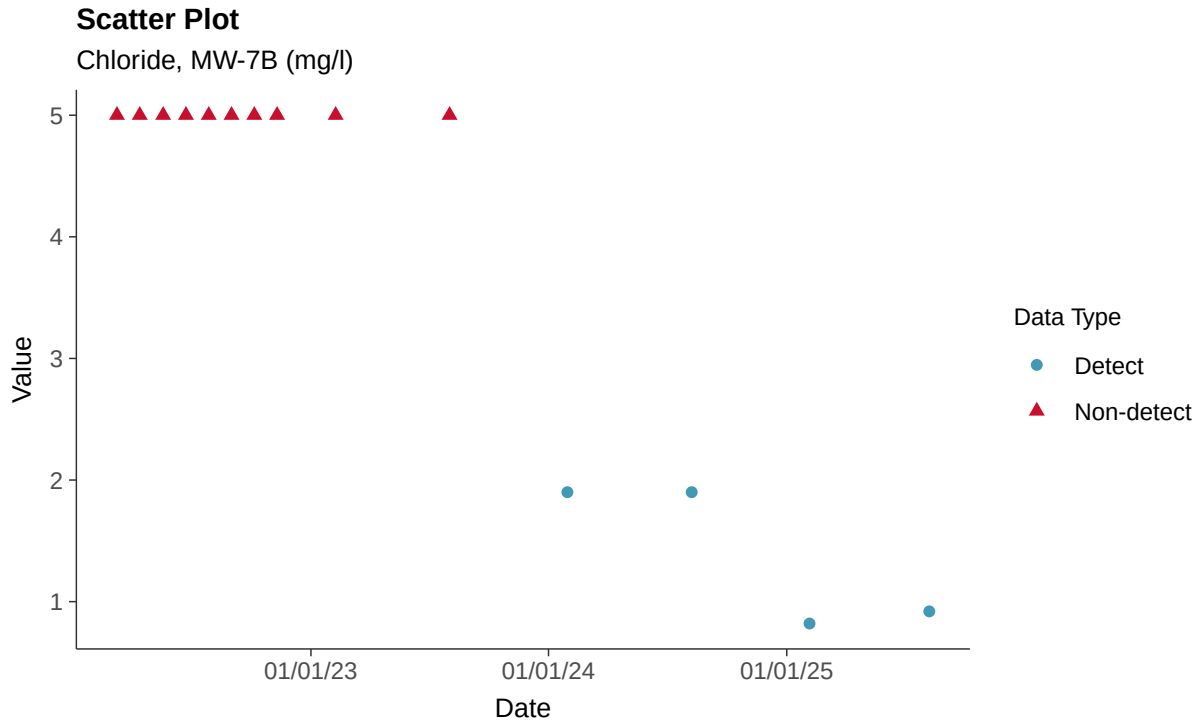
Trend Regression: Piecewise Linear-Linear-Linear

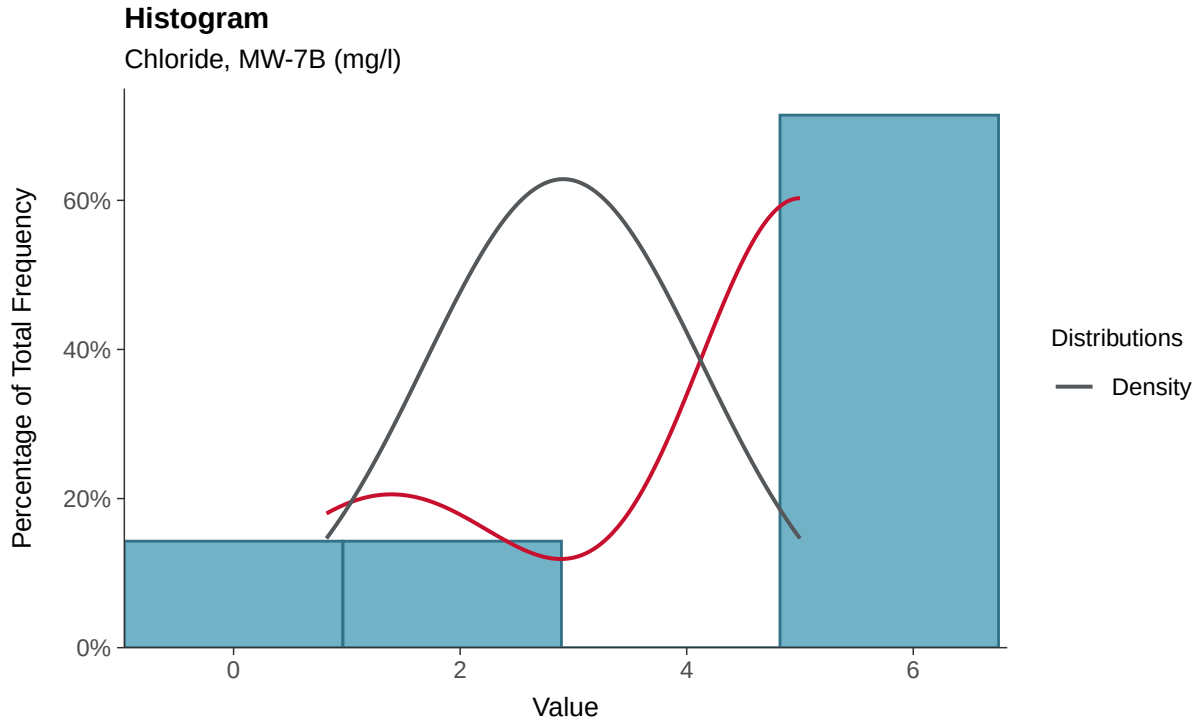
Calcium, MW-7B (mg/l)



Appendix III: Chloride, MW-7B

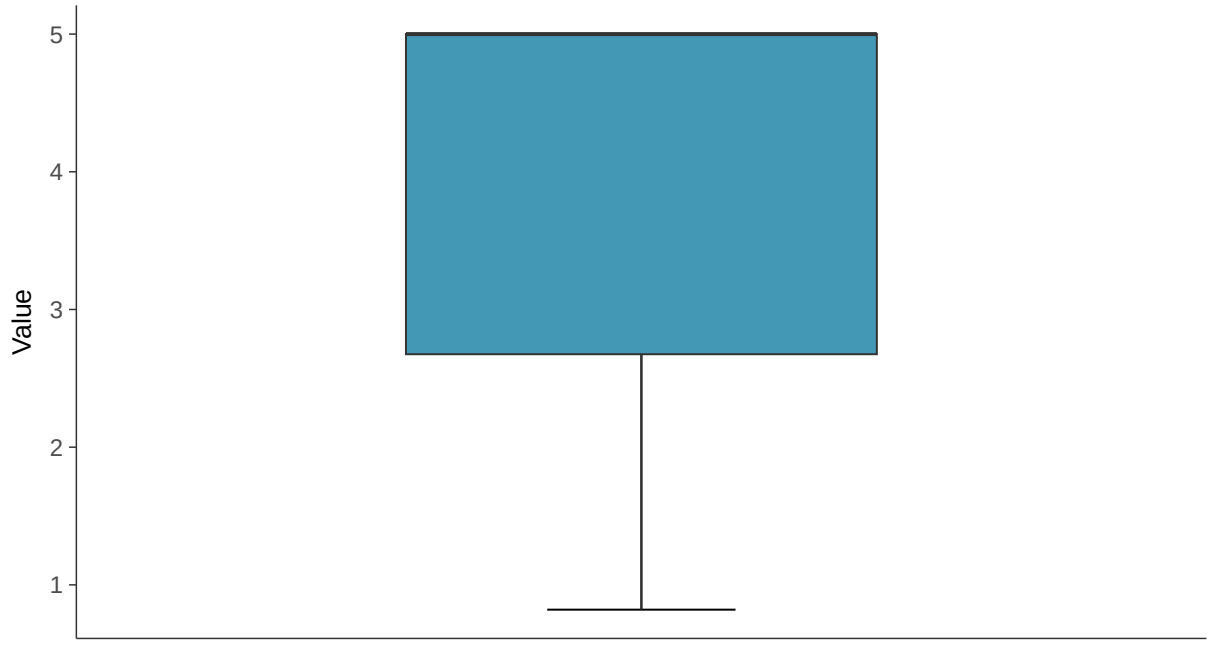
ID: 13_2_108





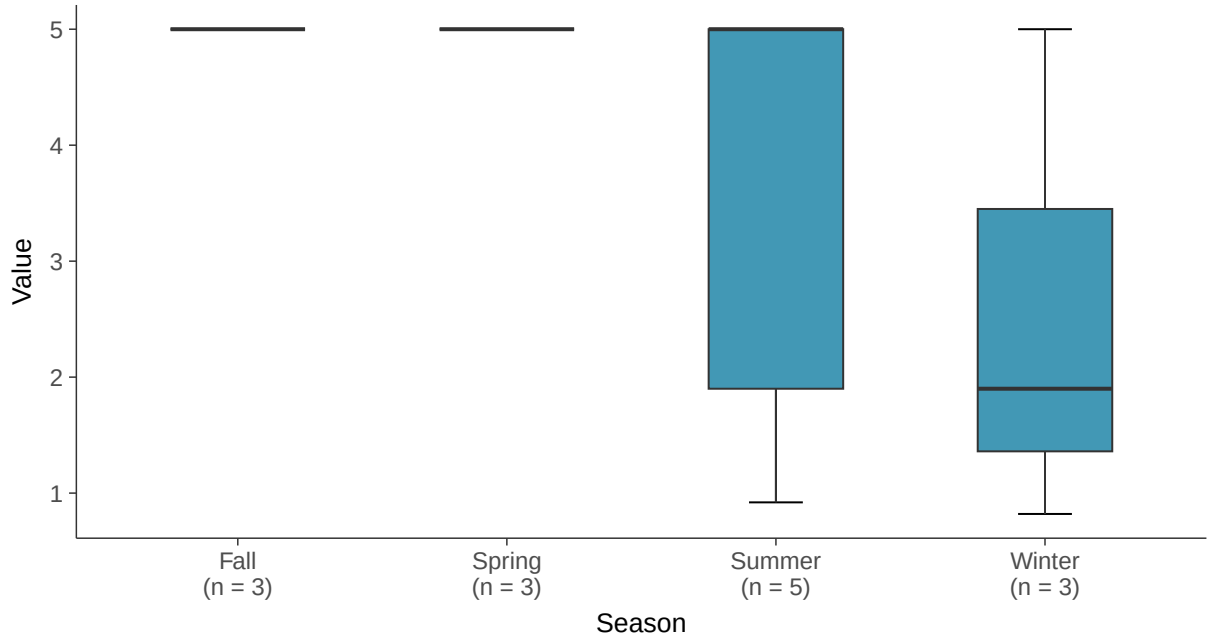
Boxplot

Chloride, MW-7B (mg/l)



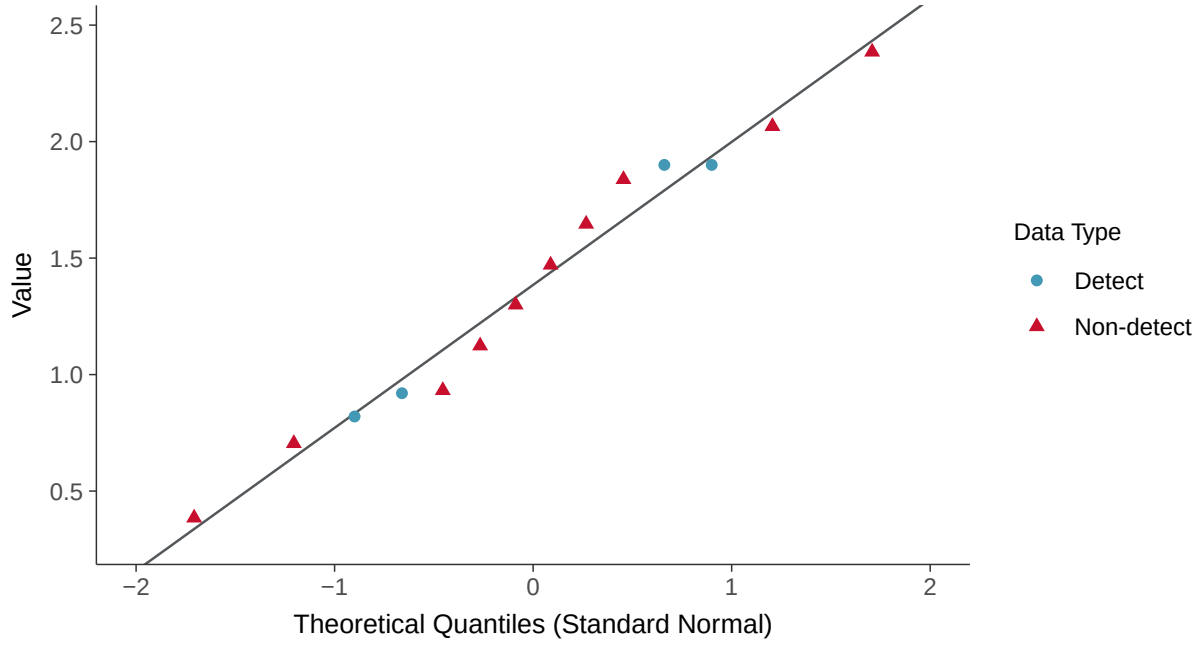
Boxplot by Season

Chloride, MW-7B (mg/l)



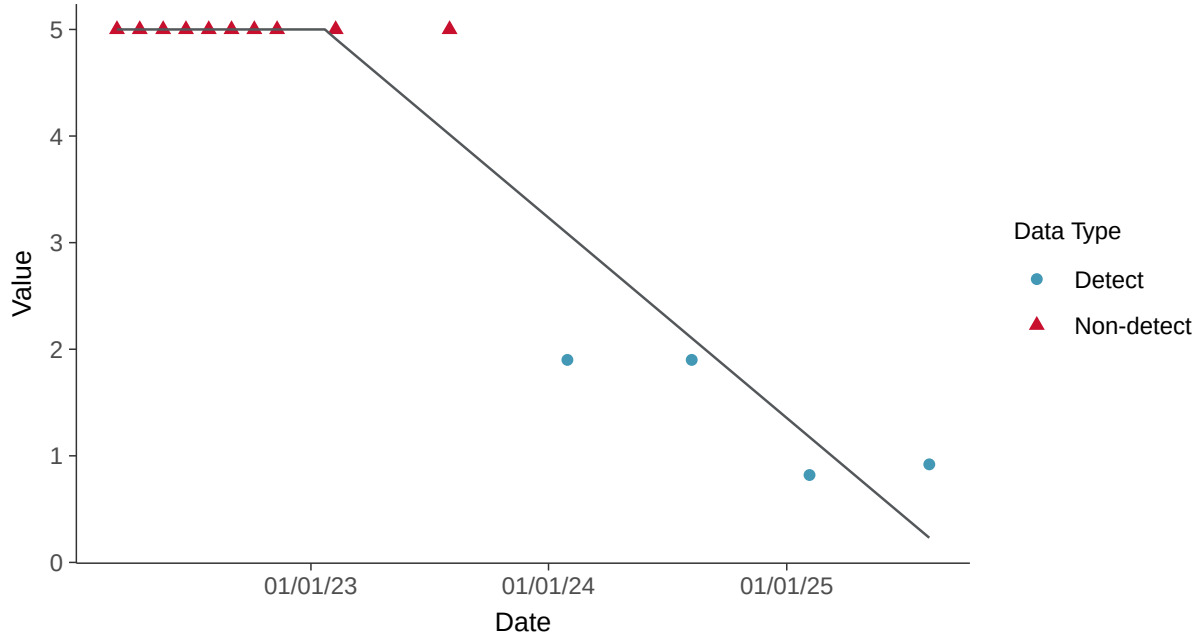
Normal Q-Q plot using ROS Imputed Estimates

Chloride, MW-7B (mg/l)



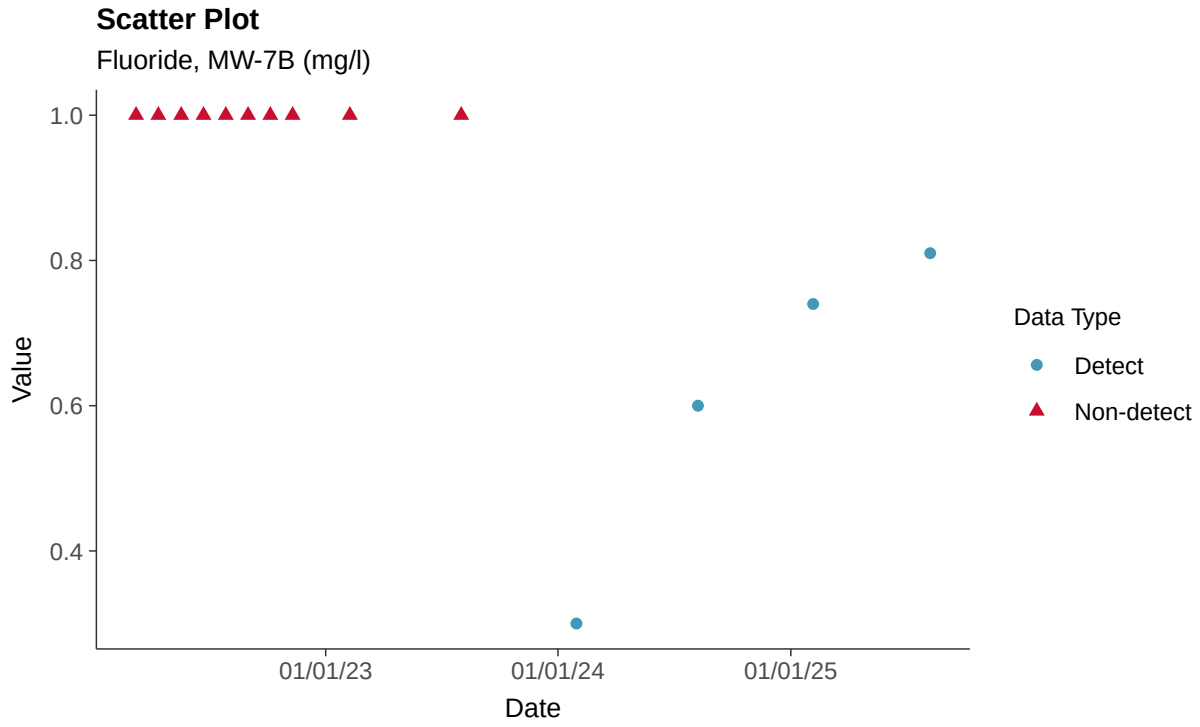
Trend Regression: Piecewise Linear-Linear

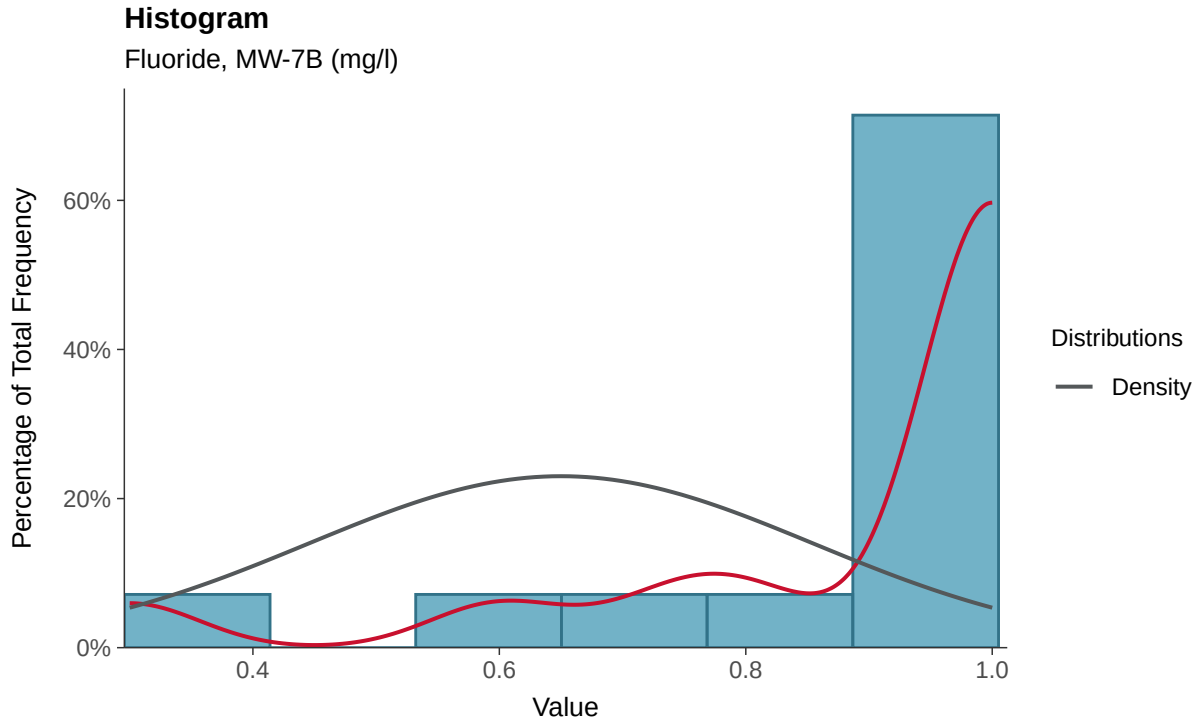
Chloride, MW-7B (mg/l)



Appendix III: Fluoride, MW-7B

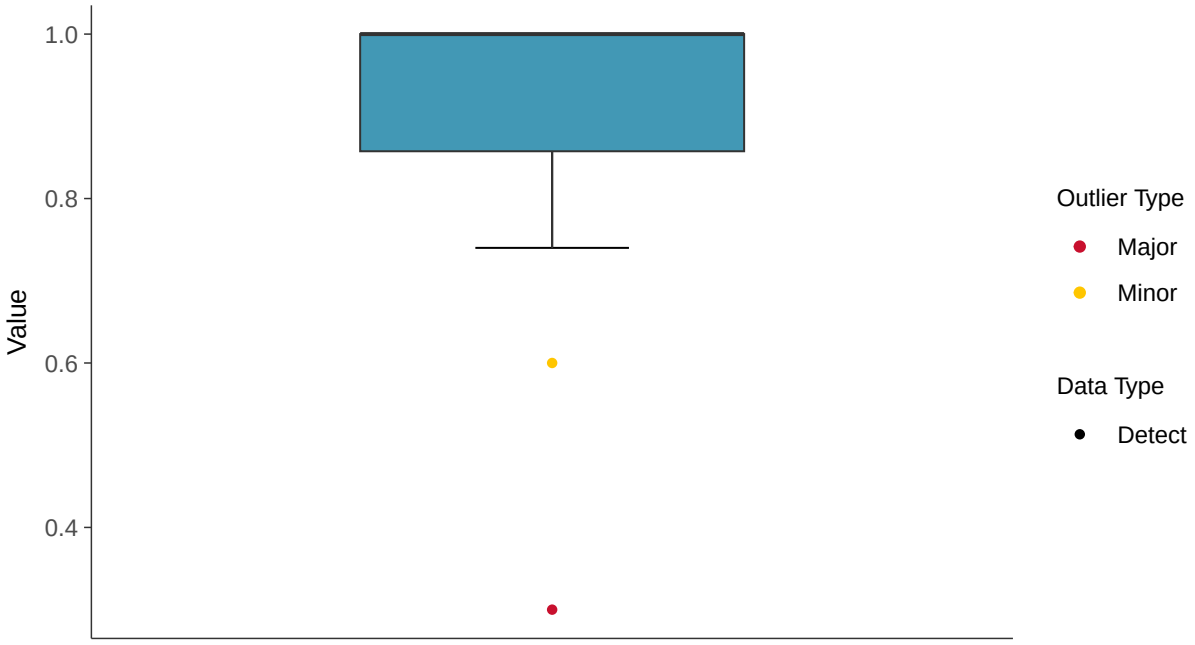
ID: 13_2_112





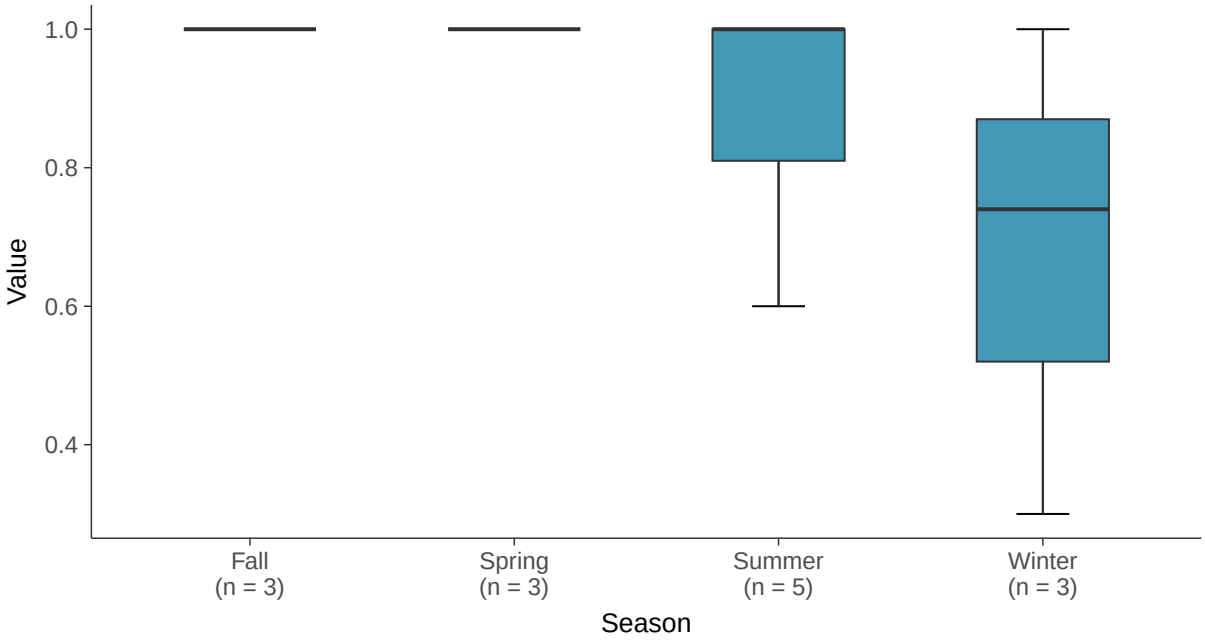
Boxplot

Fluoride, MW-7B (mg/l)



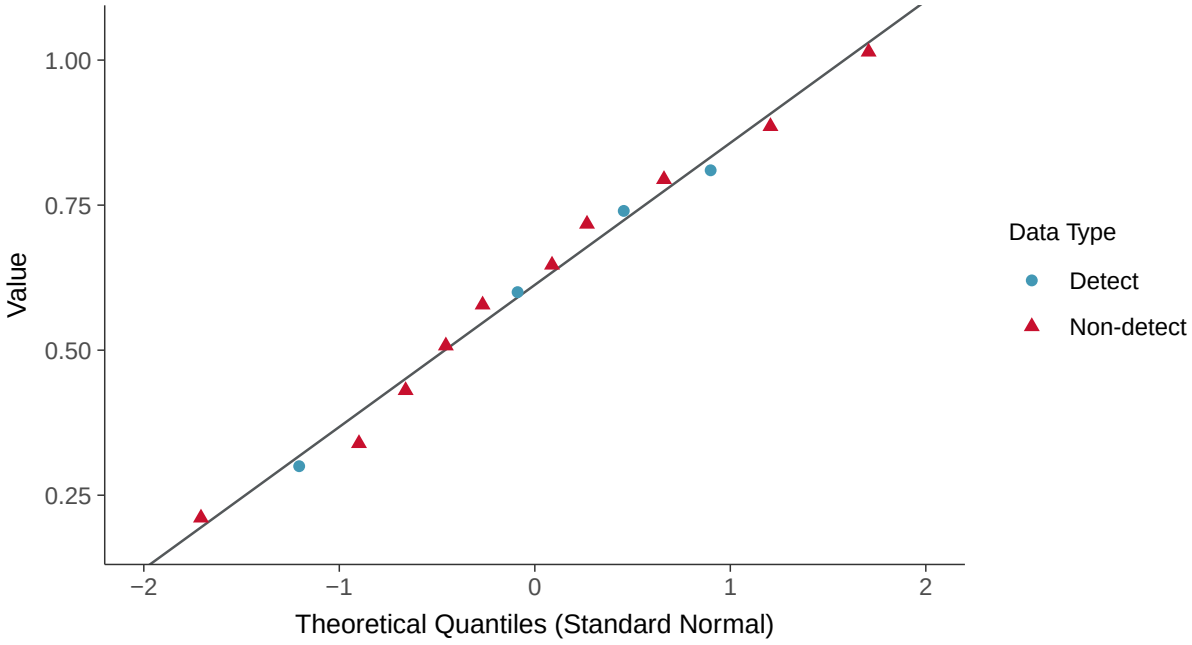
Boxplot by Season

Fluoride, MW-7B (mg/l)



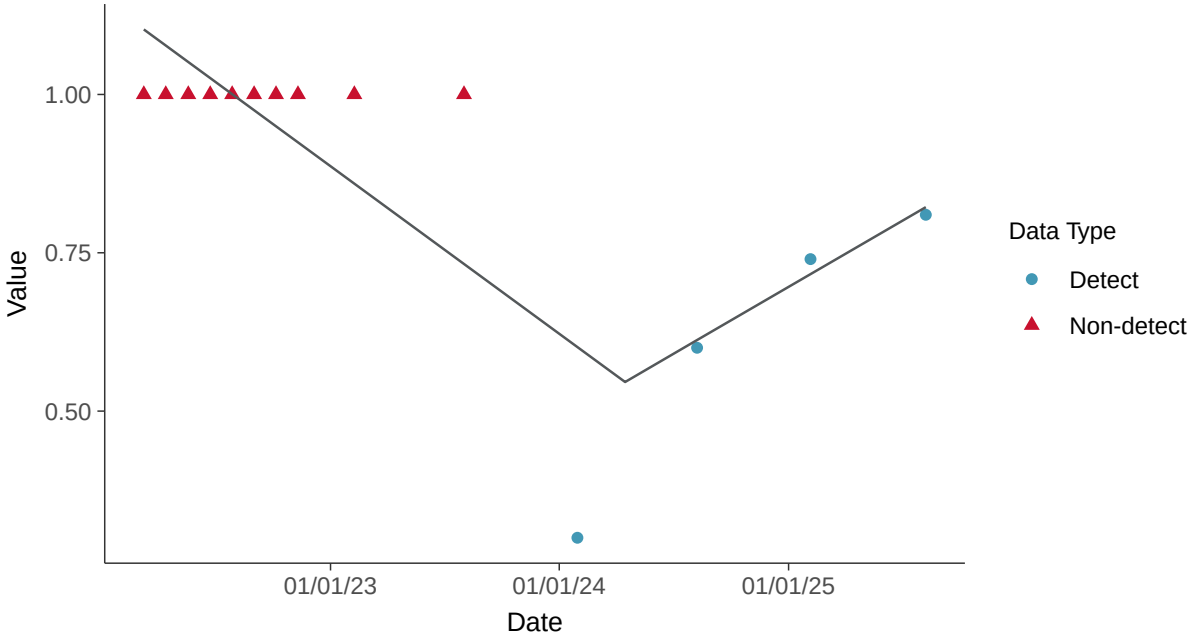
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-7B (mg/l)



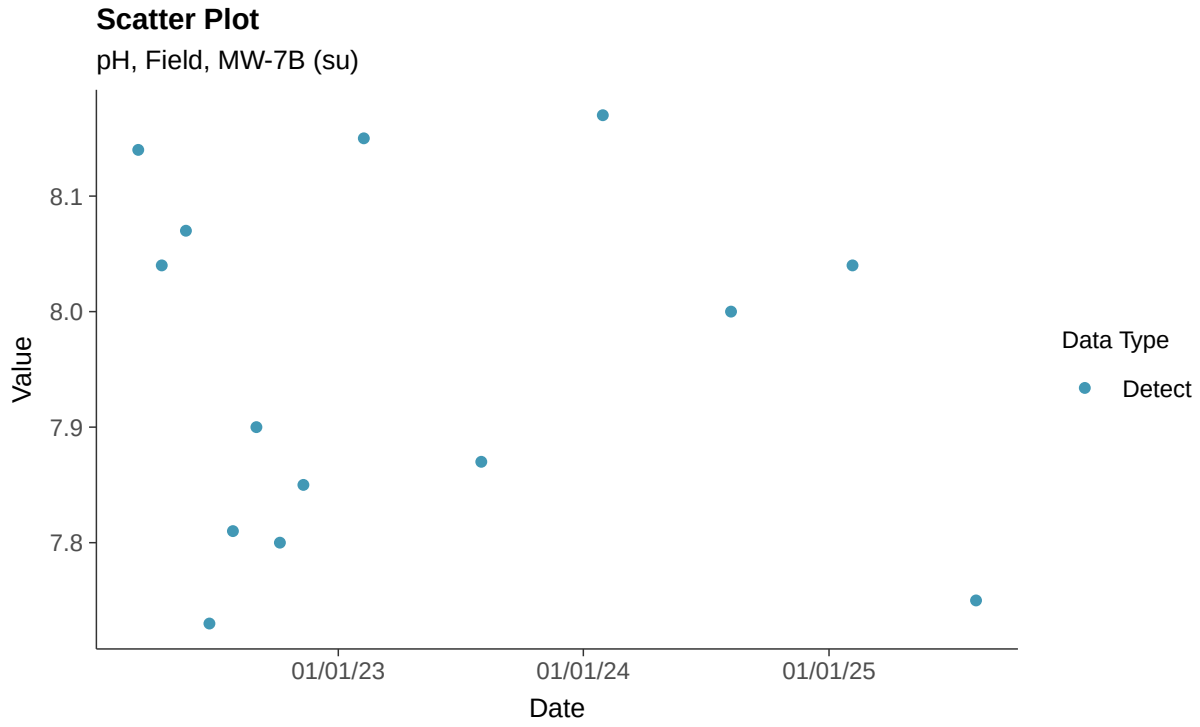
Trend Regression: Piecewise Linear-Linear

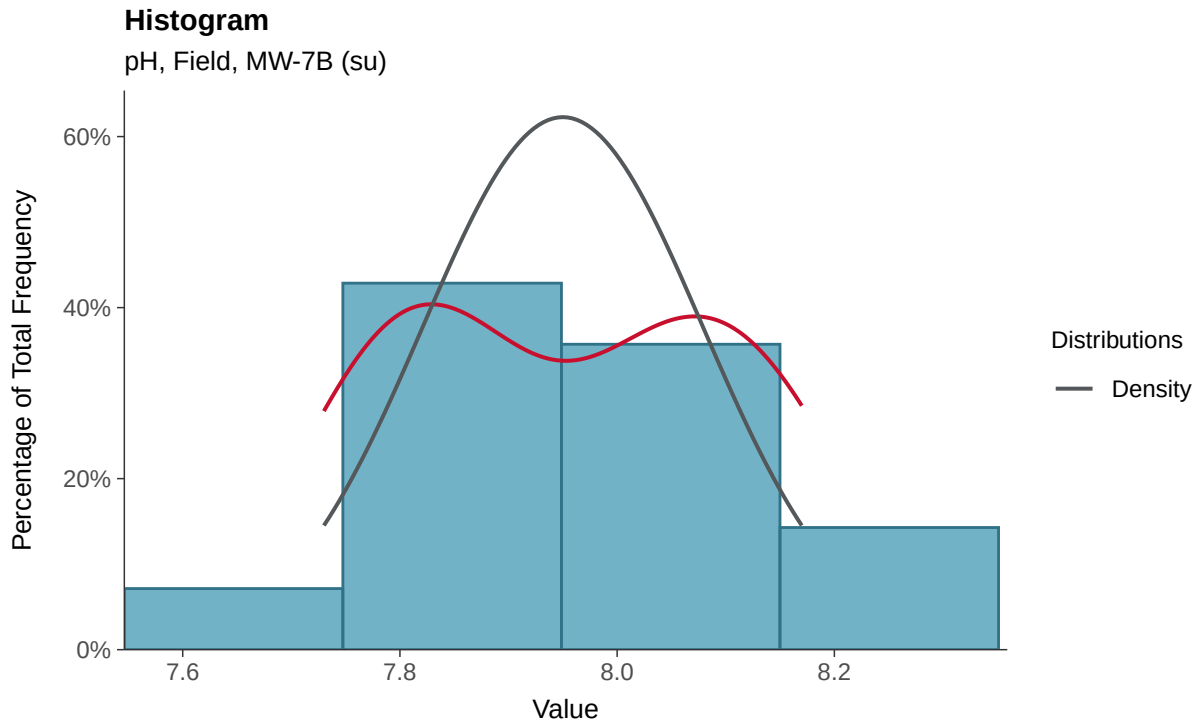
Fluoride, MW-7B (mg/l)



Appendix III: pH, Field, MW-7B

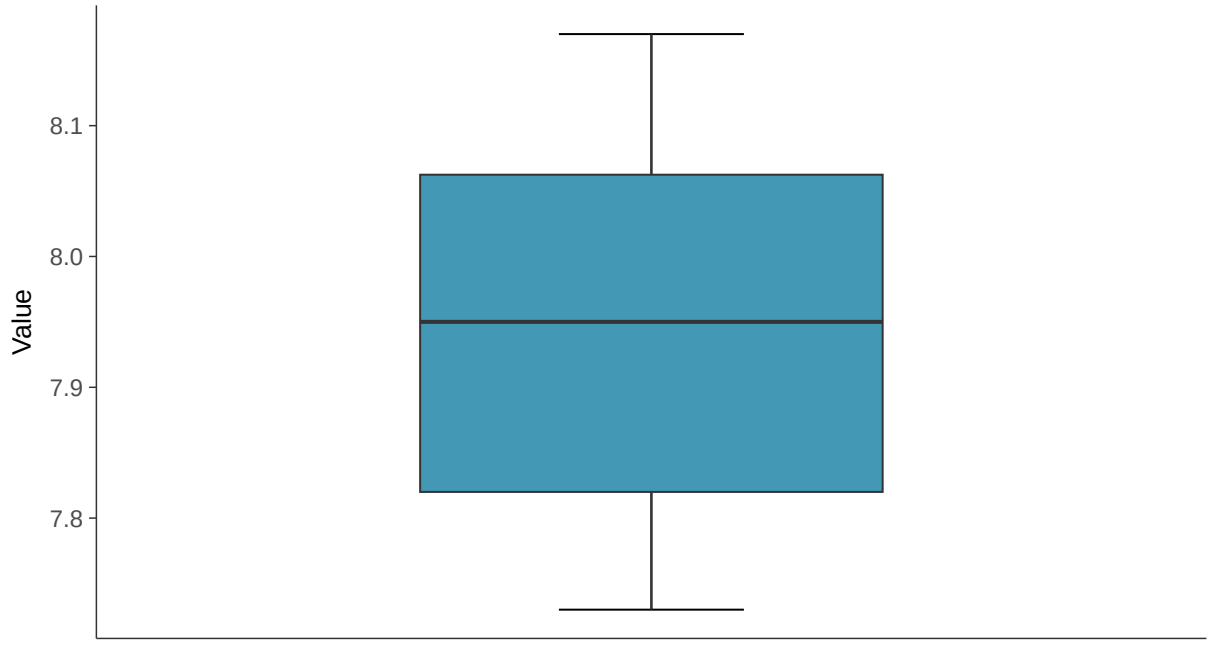
ID: 13_2_120





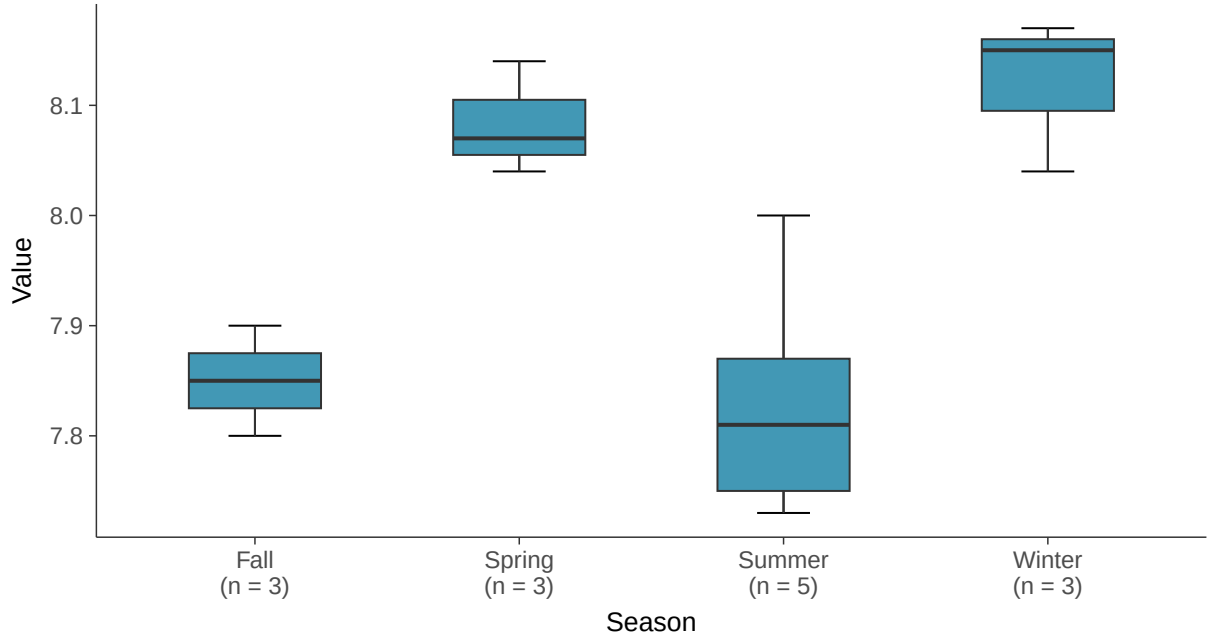
Boxplot

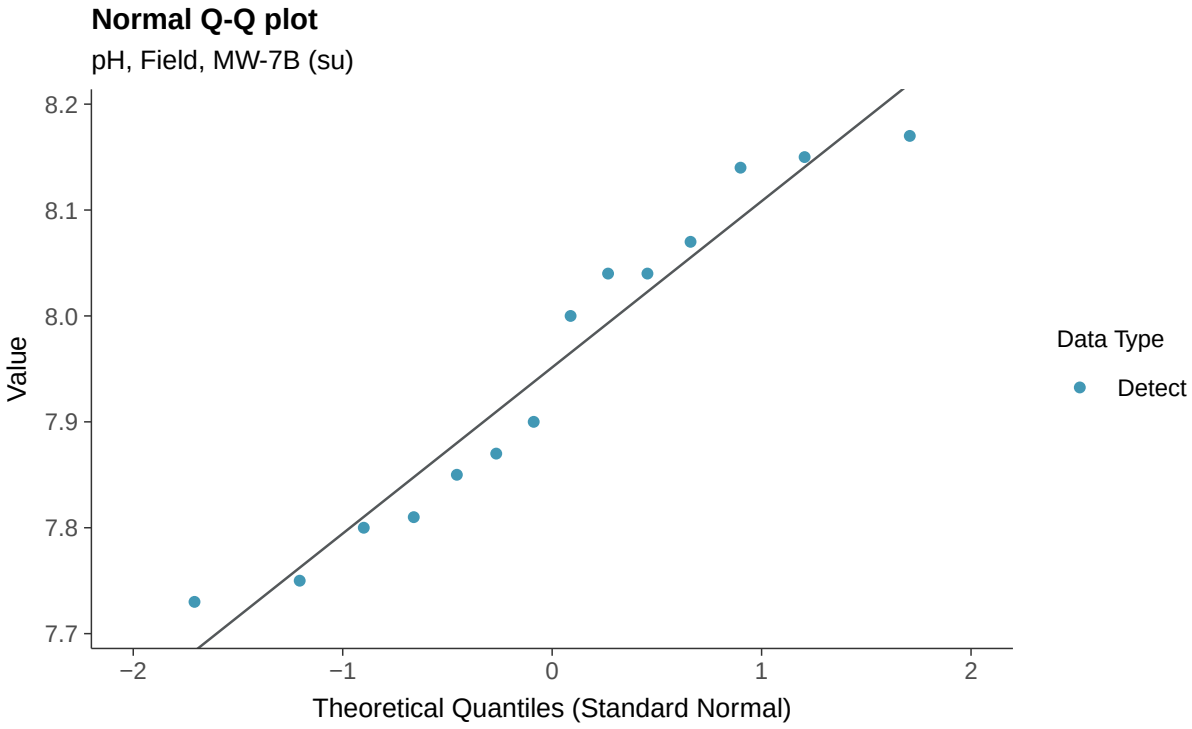
pH, Field, MW-7B (su)

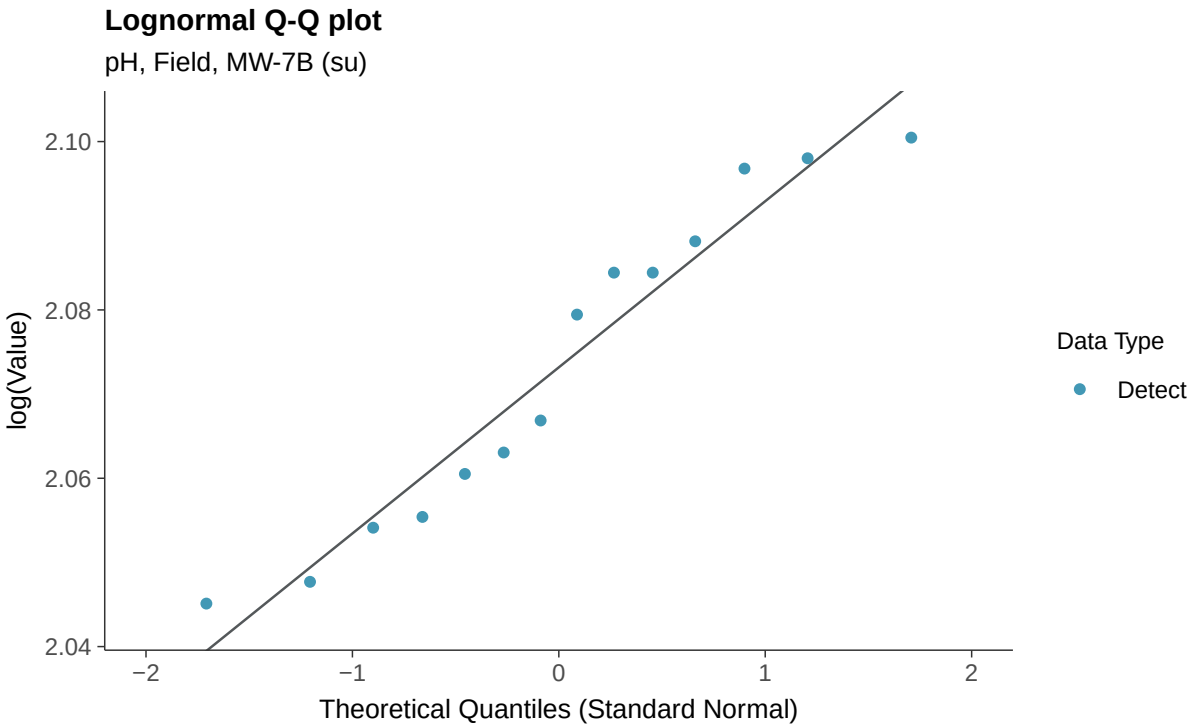


Boxplot by Season

pH, Field, MW-7B (su)

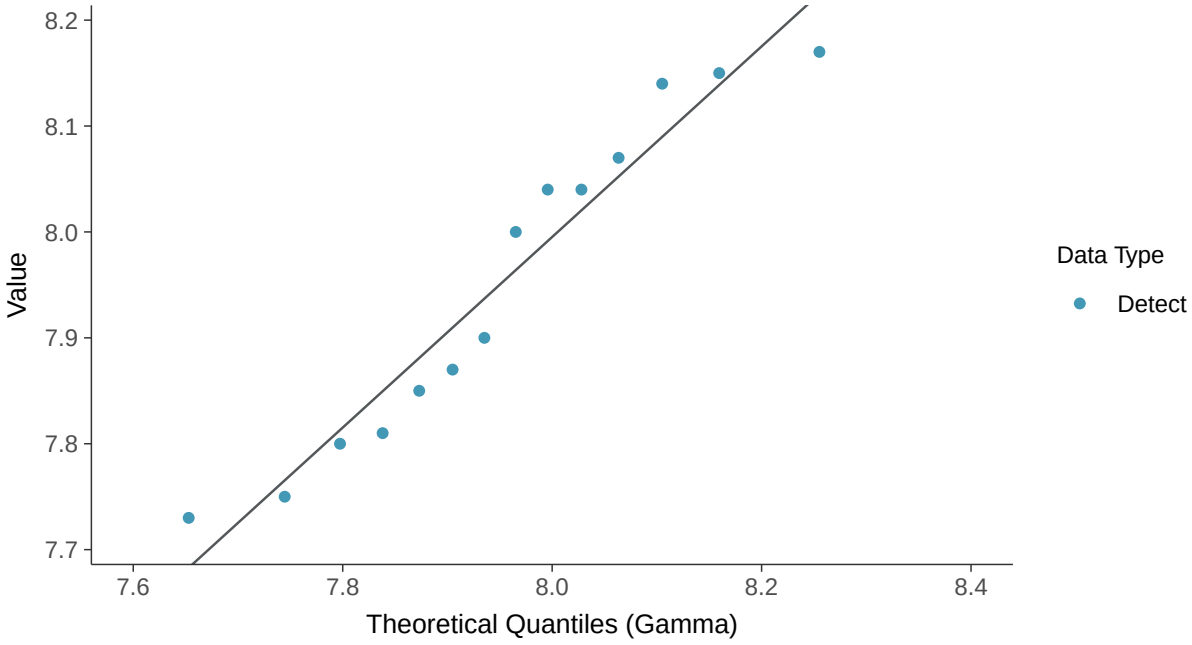



Normal Q-Q plot
pH, Field, MW-7B (su)
Value
8.2
8.1
8.0
7.9
7.8
7.7
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect


Lognormal Q-Q plot
pH, Field, MW-7B (su)
log(Value)
2.10
2.08
2.06
2.04
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect

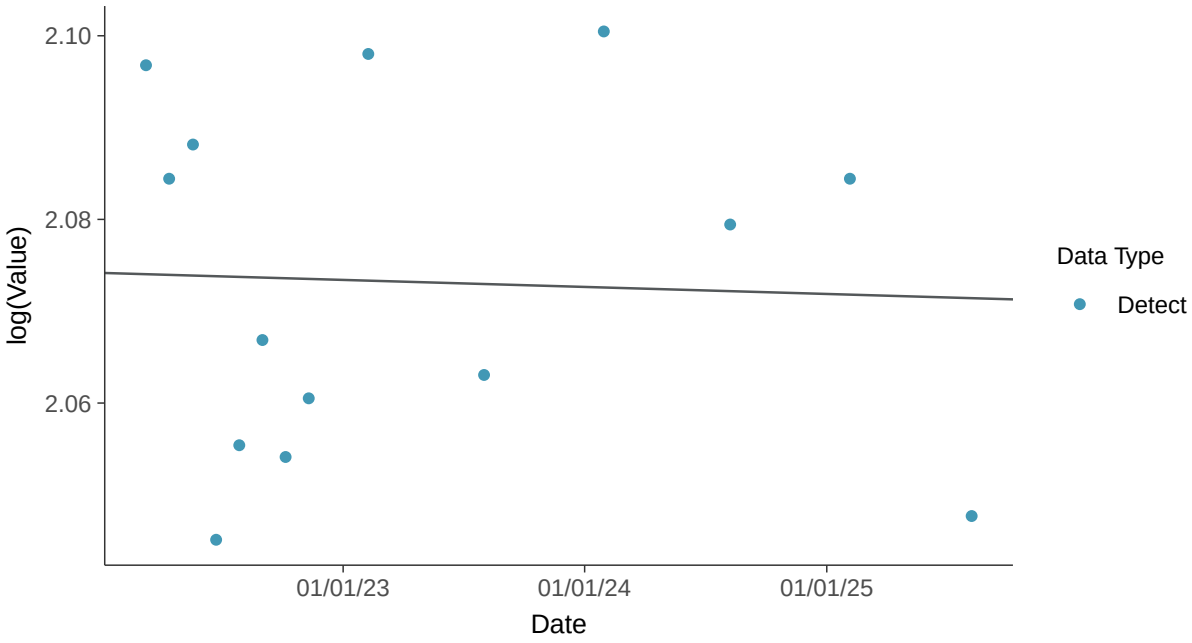
Gamma Q-Q plot

pH, Field, MW-7B (su)



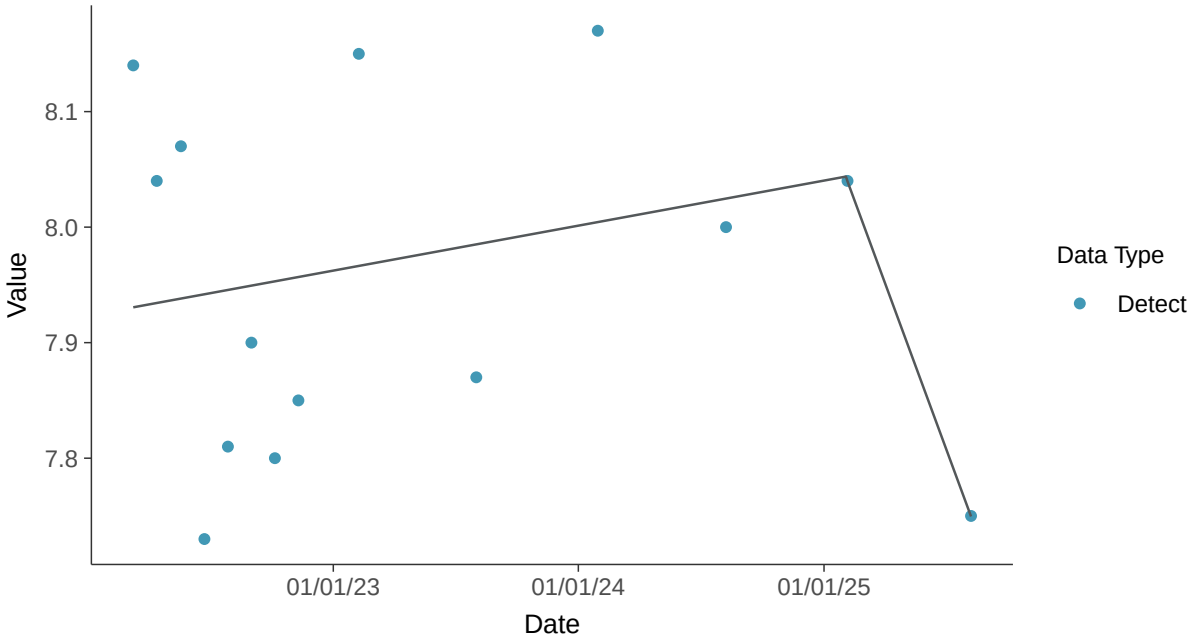
Trend Regression: Lognormal MLE

pH, Field, MW-7B (su)



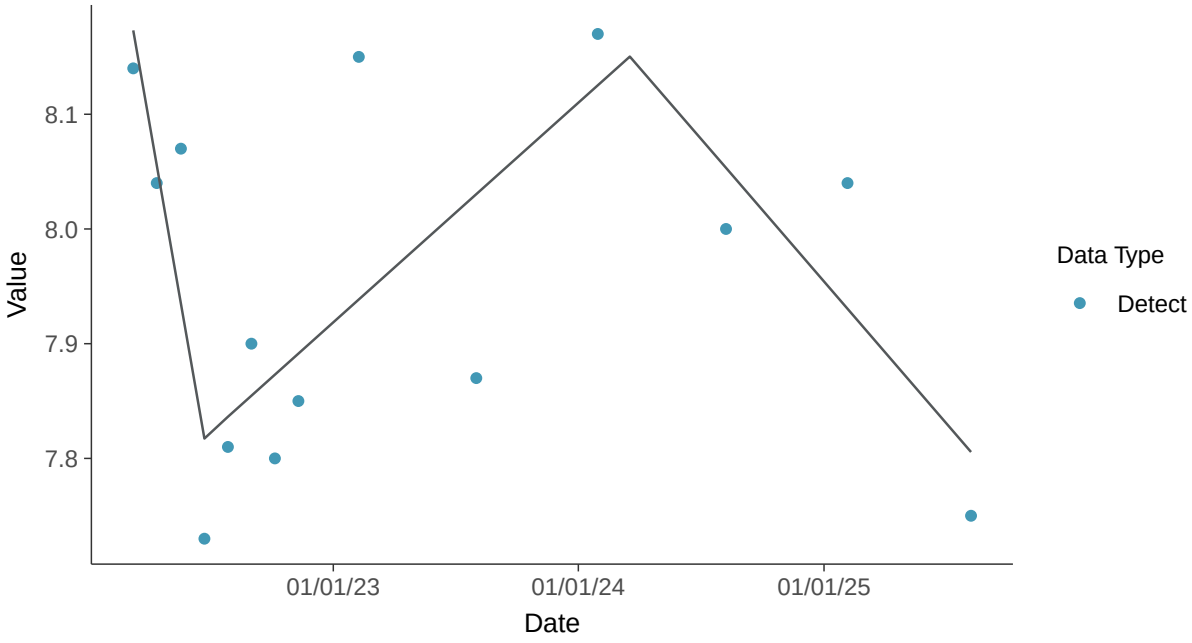
Trend Regression: Piecewise Linear-Linear

pH, Field, MW-7B (su)



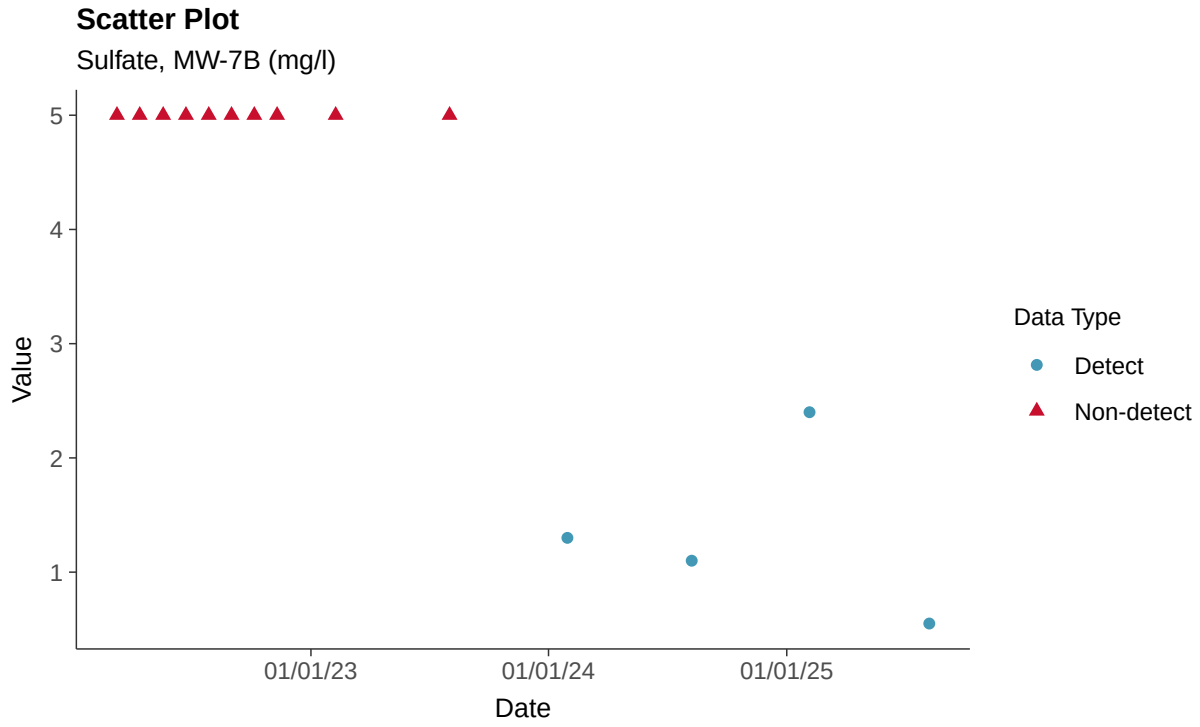
Trend Regression: Piecewise Linear-Linear-Linear

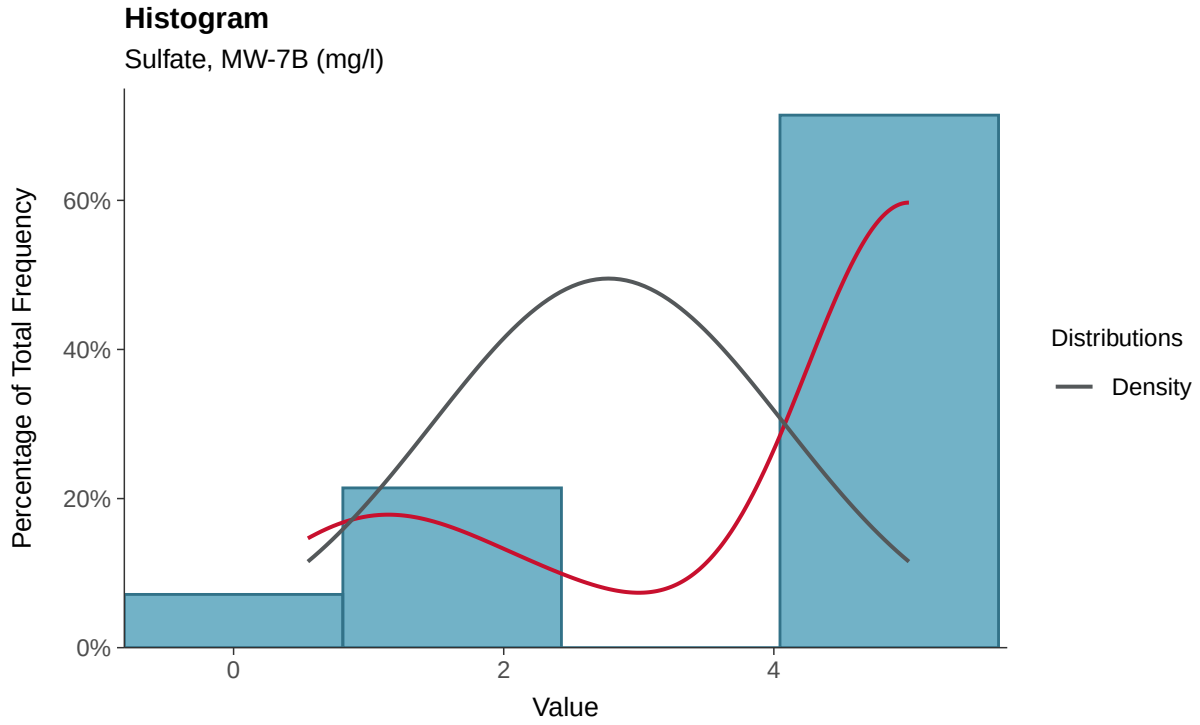
pH, Field, MW-7B (su)



Appendix III: Sulfate, MW-7B

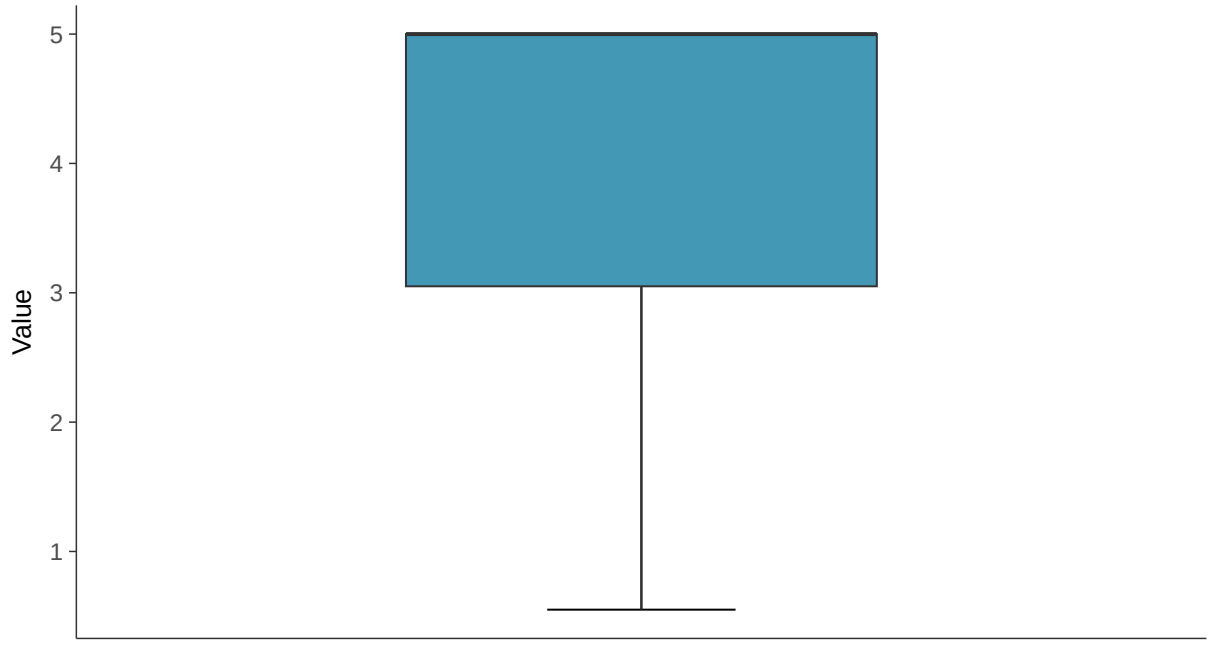
ID: 13_2_124





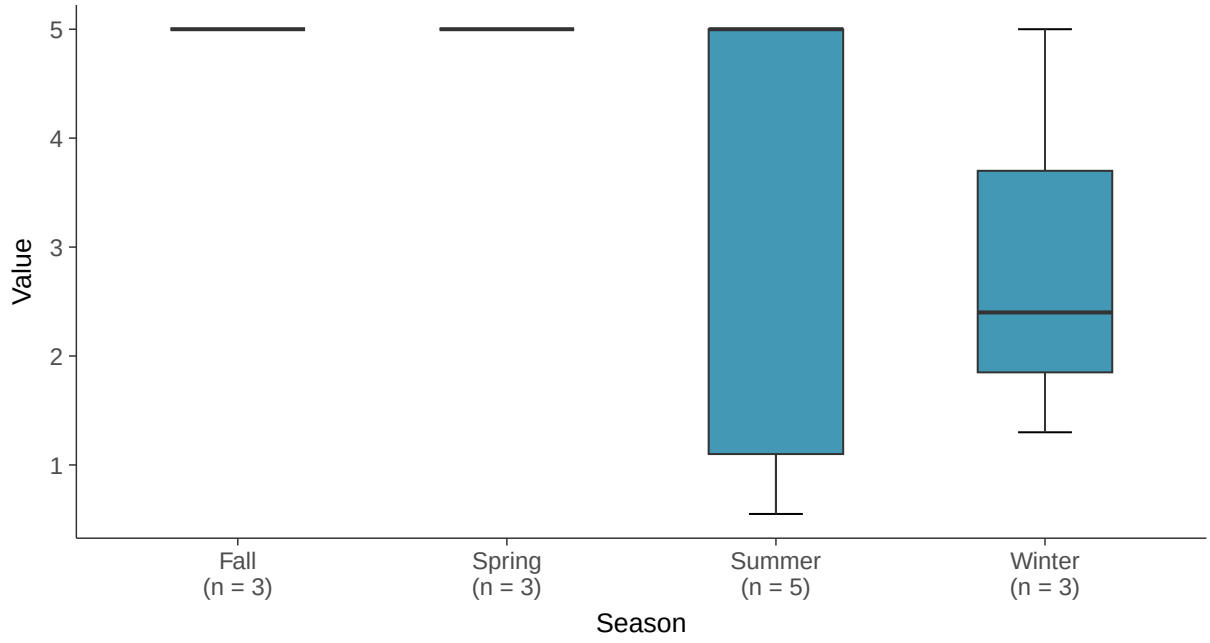
Boxplot

Sulfate, MW-7B (mg/l)



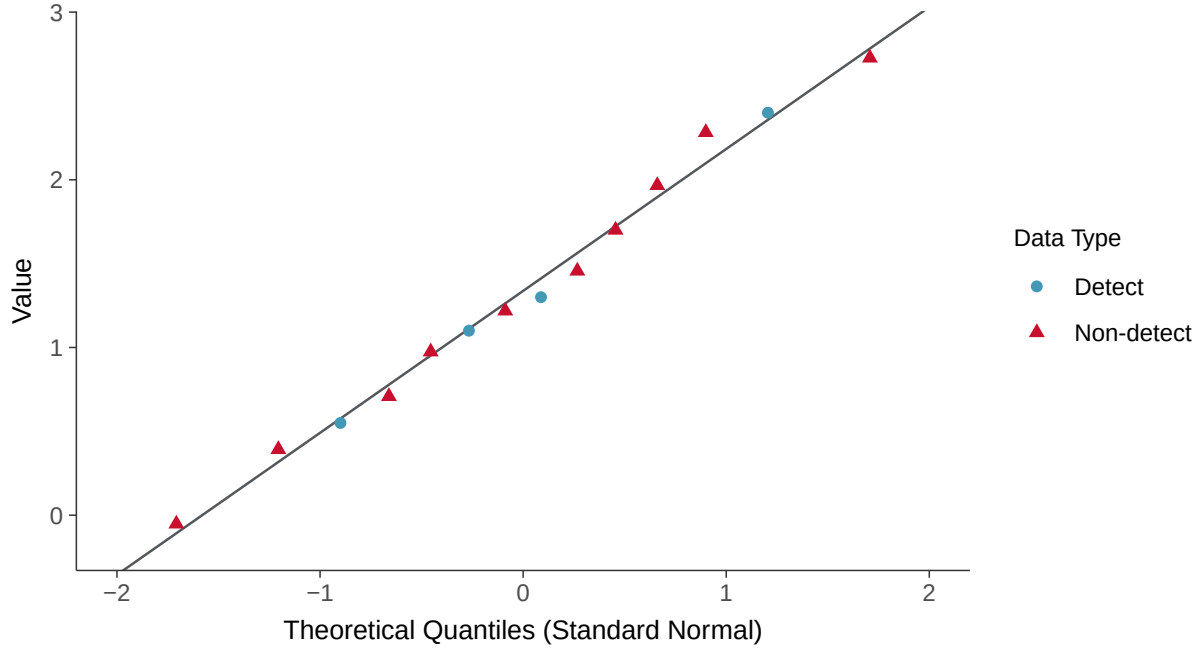
Boxplot by Season

Sulfate, MW-7B (mg/l)



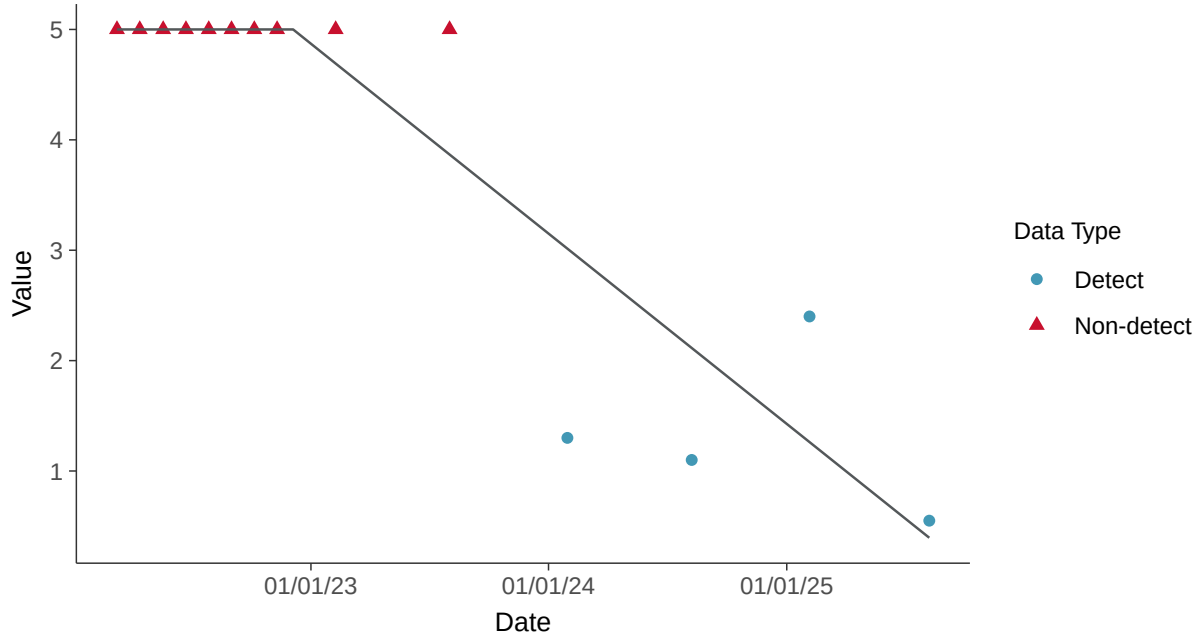
Normal Q-Q plot using ROS Imputed Estimates

Sulfate, MW-7B (mg/l)



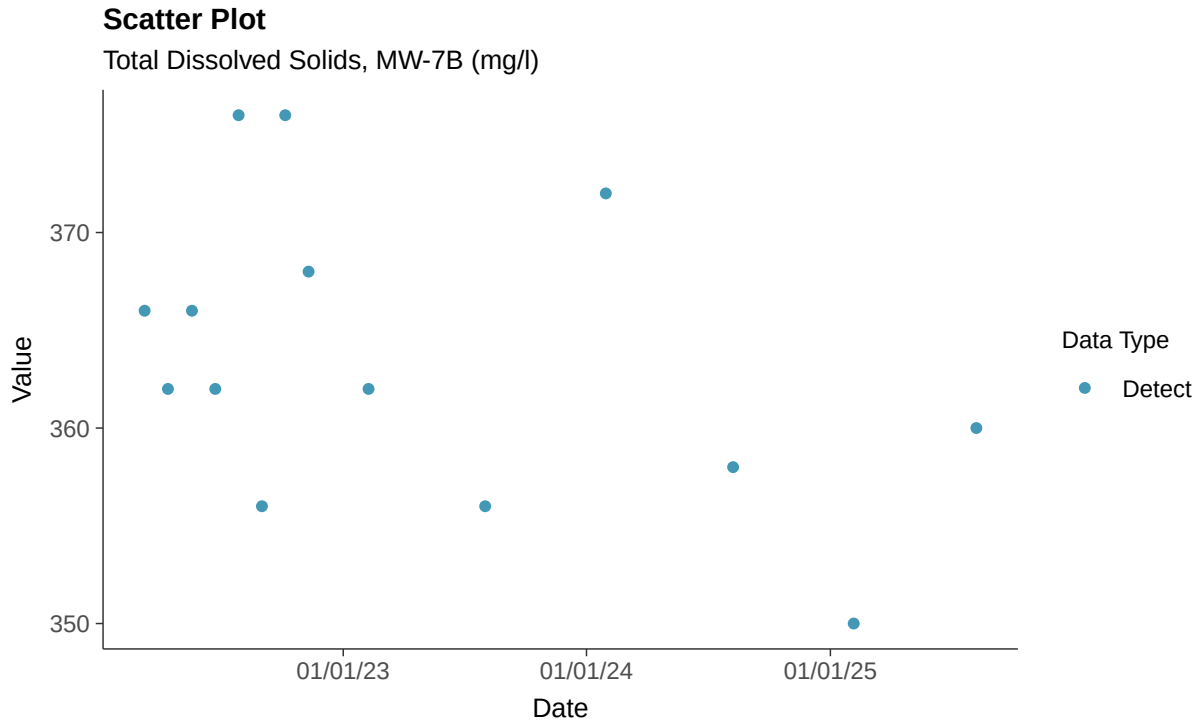
Trend Regression: Piecewise Linear-Linear

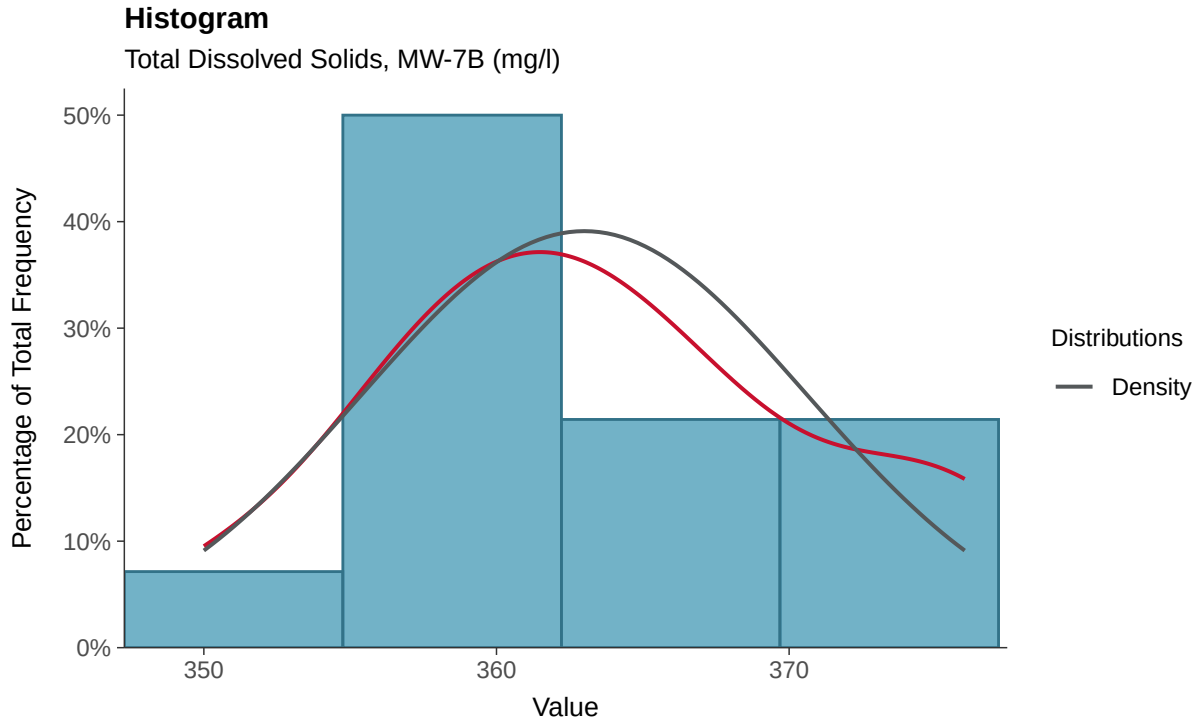
Sulfate, MW-7B (mg/l)



Appendix III: Total Dissolved Solids, MW-7B

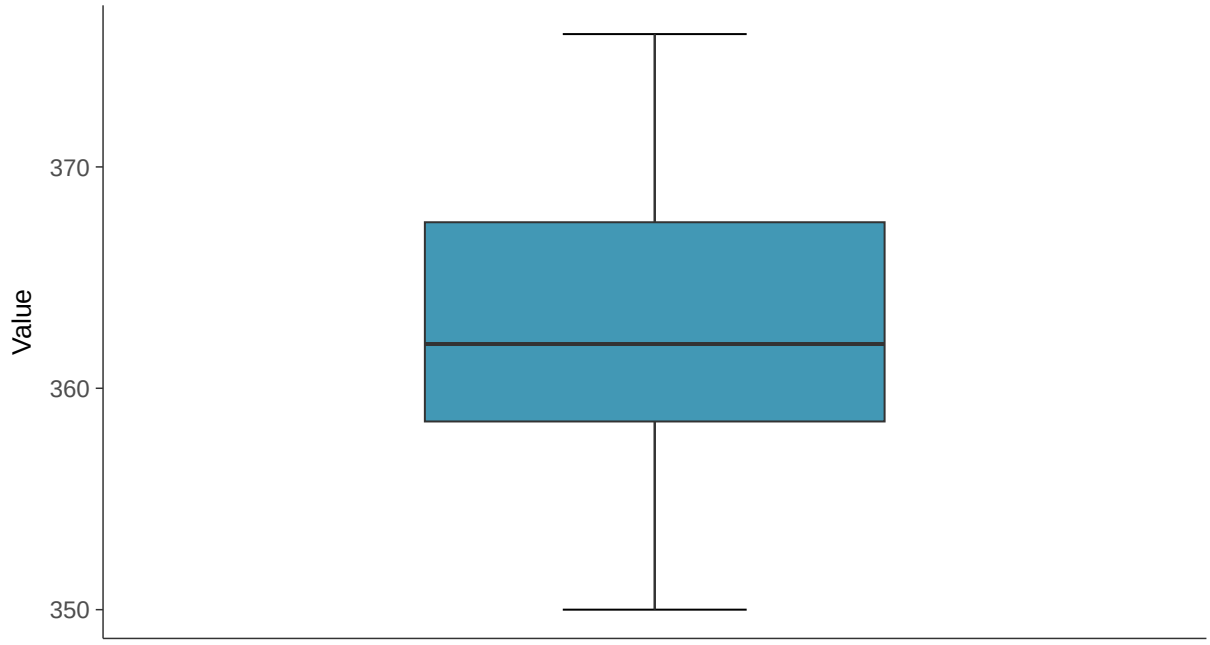
ID: 13_2_126





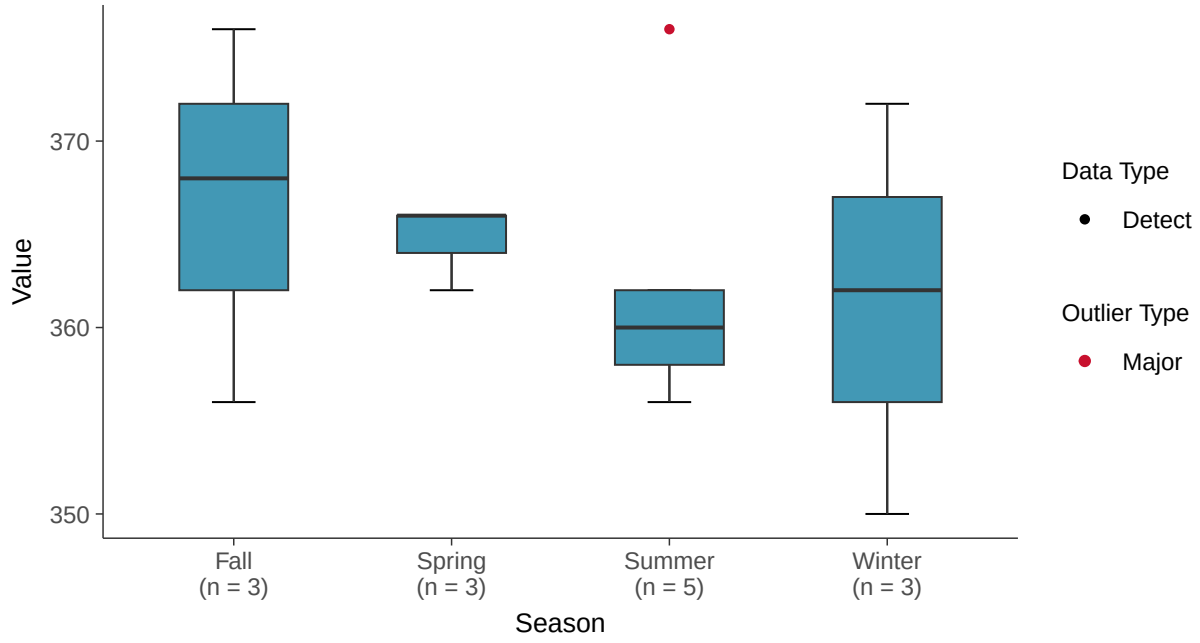
Boxplot

Total Dissolved Solids, MW-7B (mg/l)



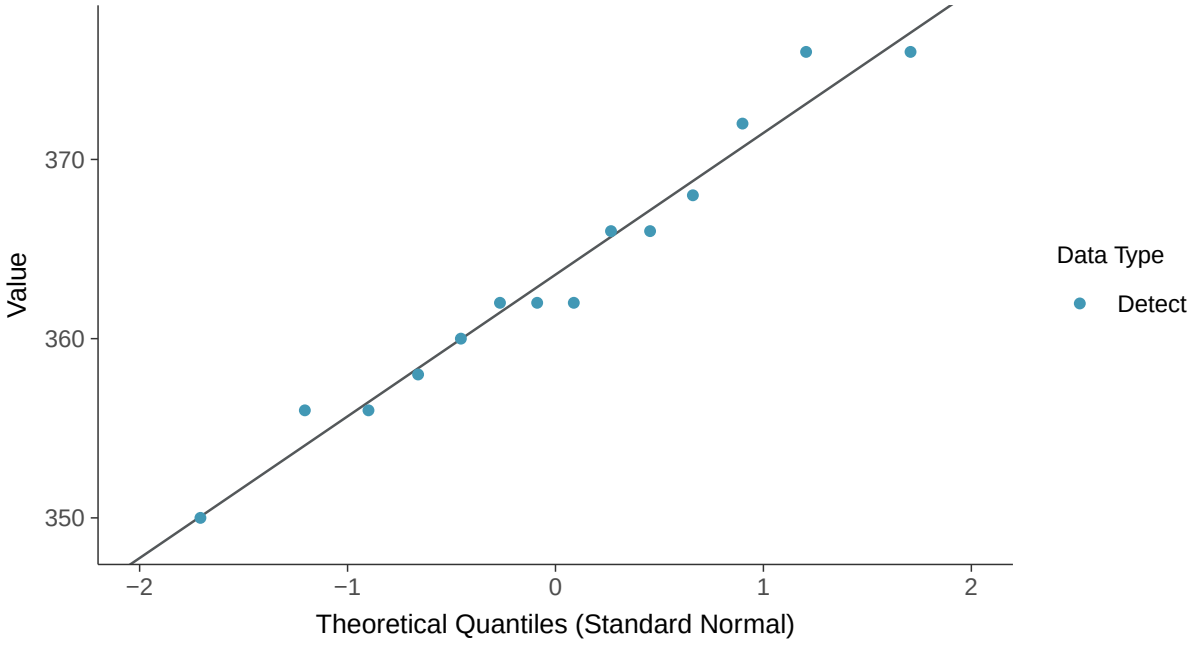
Boxplot by Season

Total Dissolved Solids, MW-7B (mg/l)



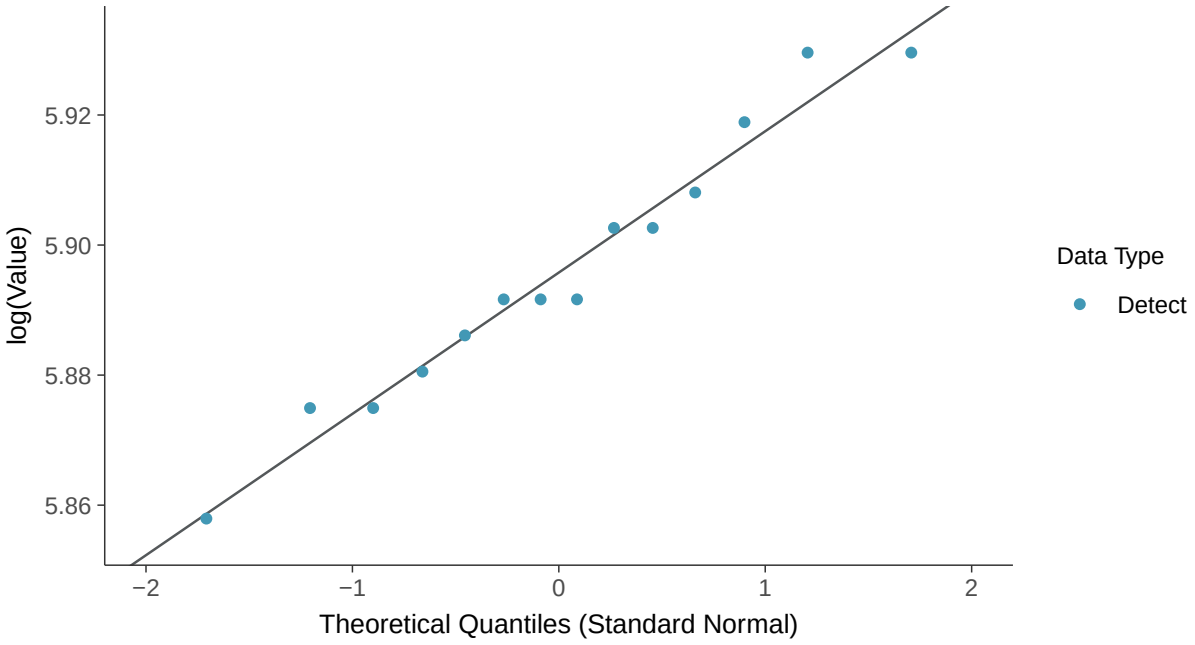
Normal Q-Q plot

Total Dissolved Solids, MW-7B (mg/l)



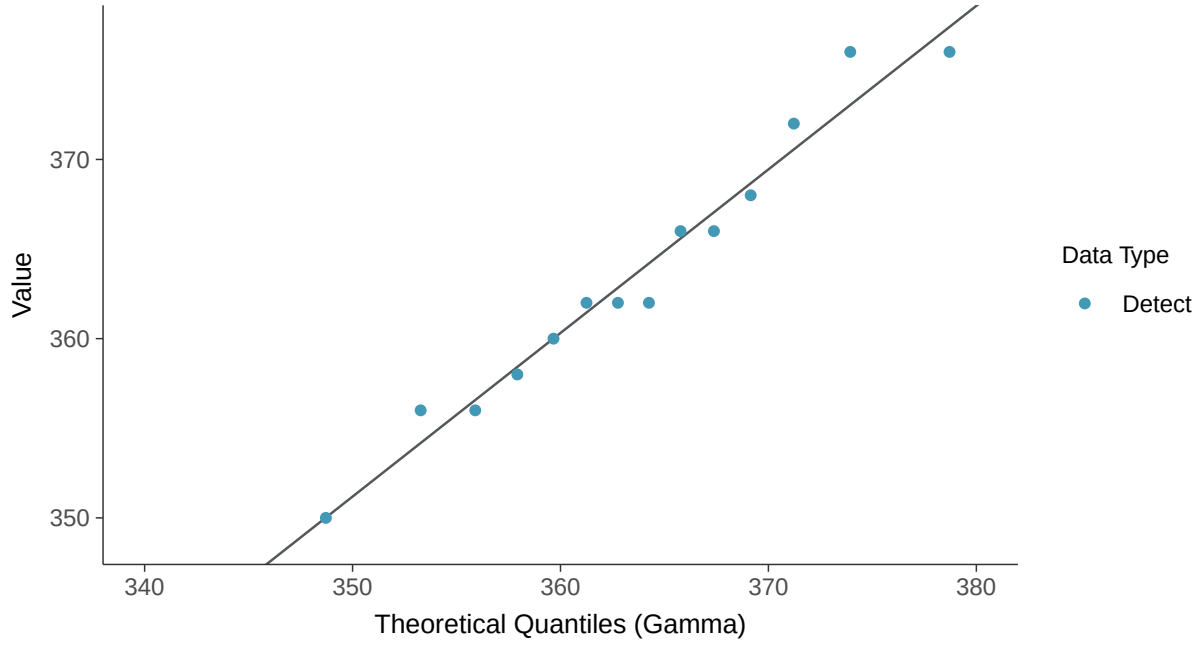
Lognormal Q-Q plot

Total Dissolved Solids, MW-7B (mg/l)



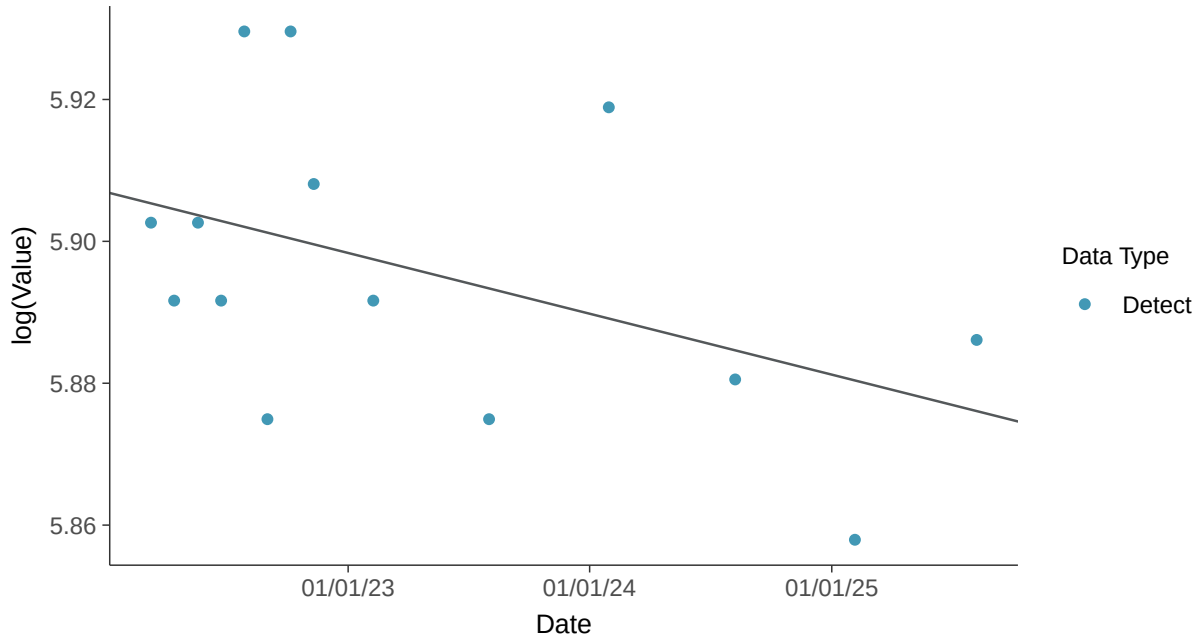
Gamma Q-Q plot

Total Dissolved Solids, MW-7B (mg/l)



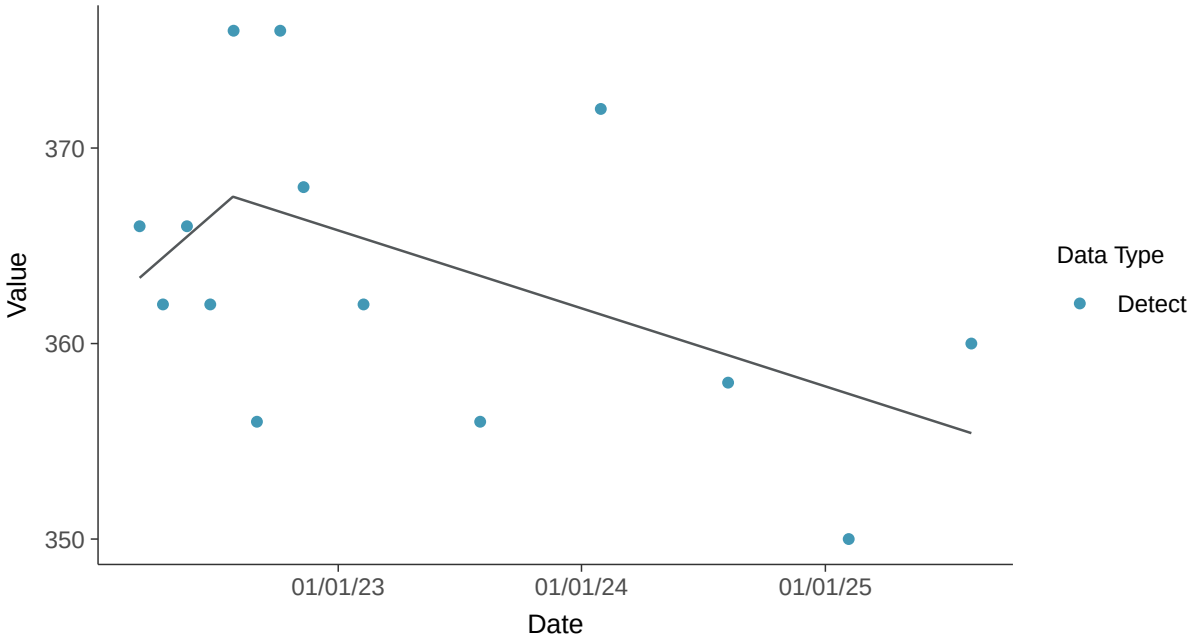
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-7B (mg/l)



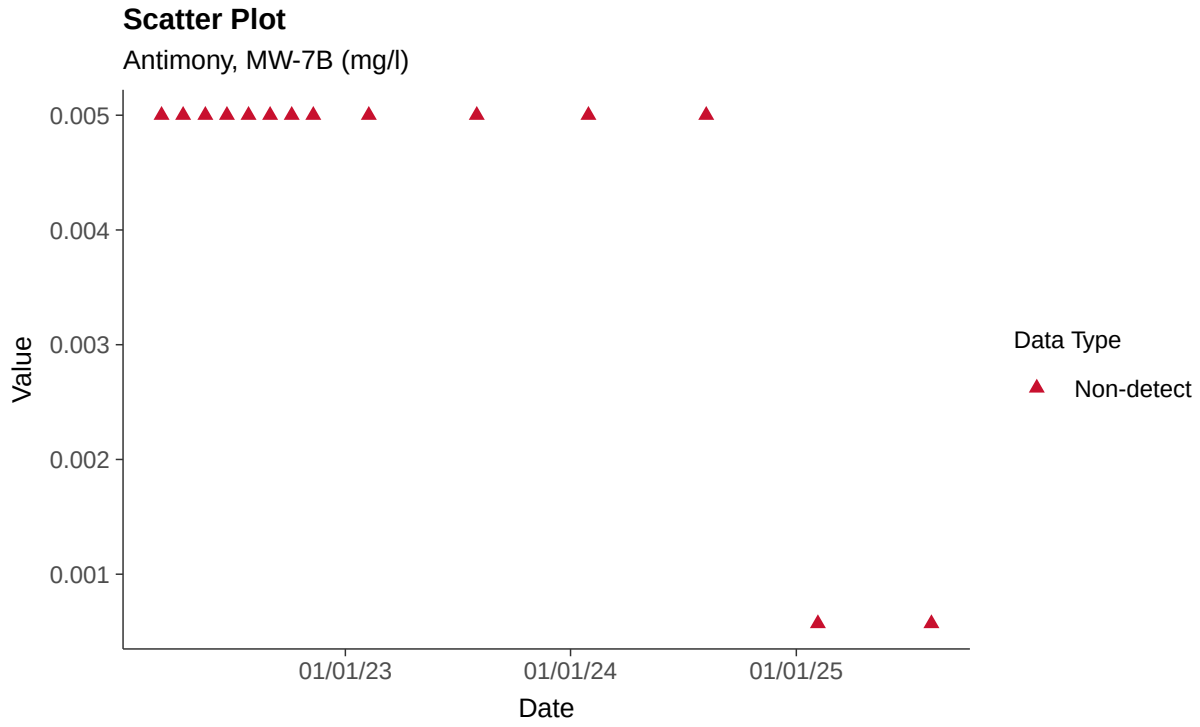
Trend Regression: Piecewise Linear-Linear

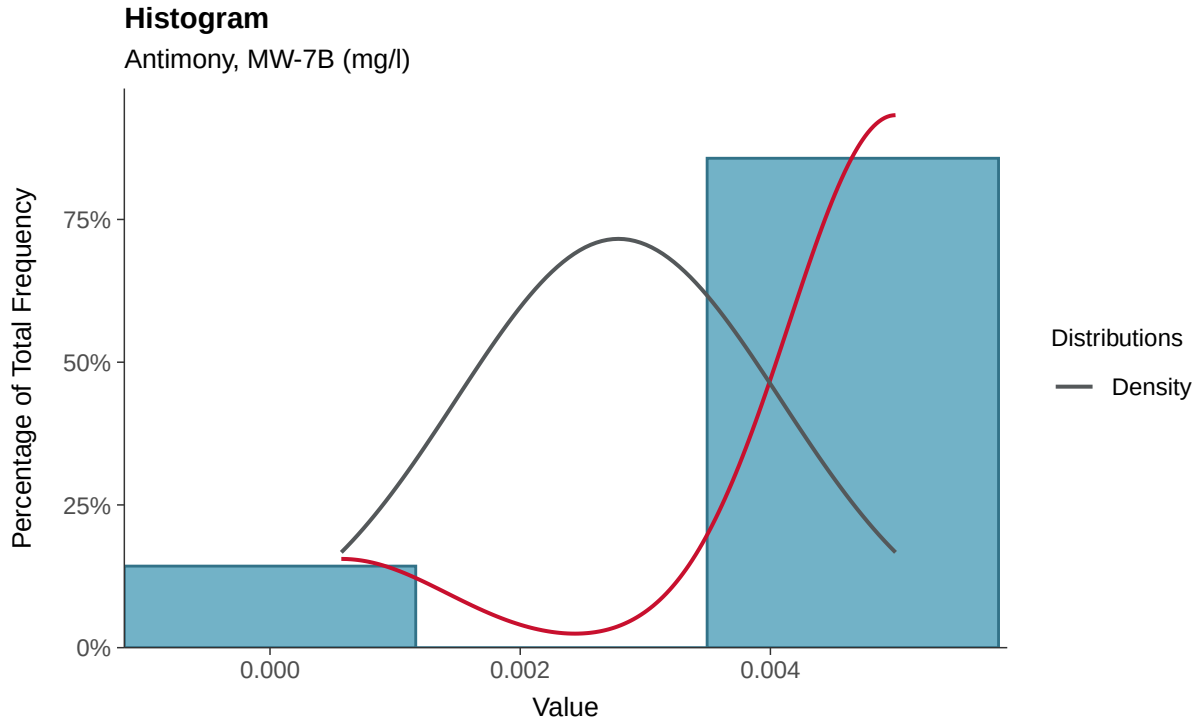
Total Dissolved Solids, MW-7B (mg/l)



Appendix IV: Antimony, MW-7B

ID: 13_3_101



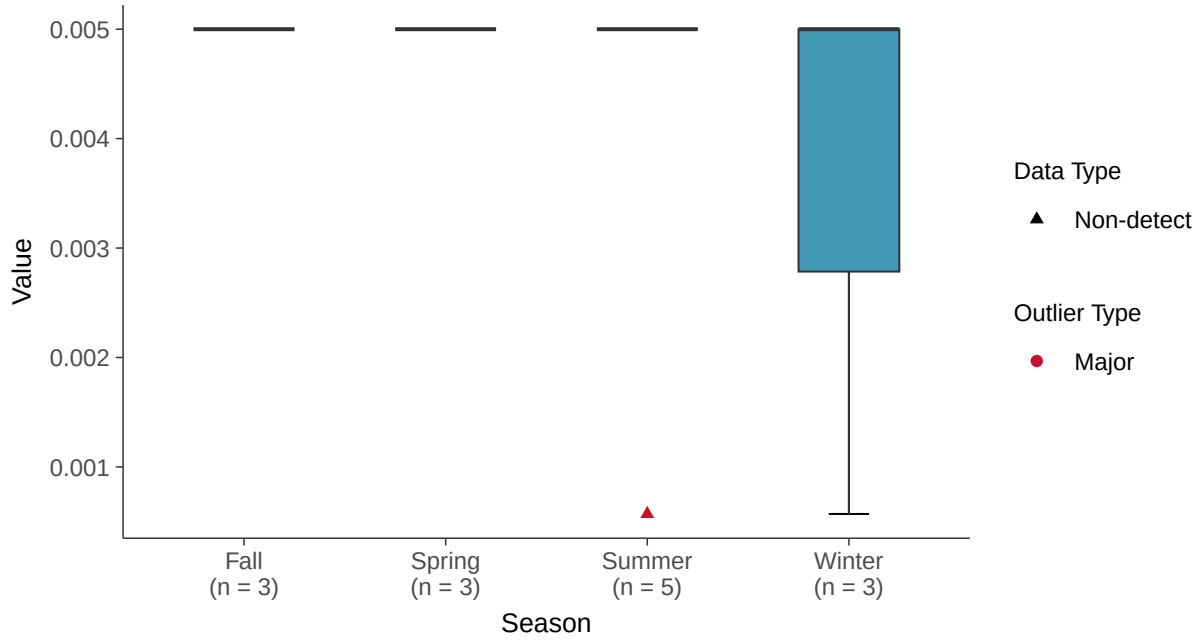


Boxplot

Antimony, MW-7B (mg/l)

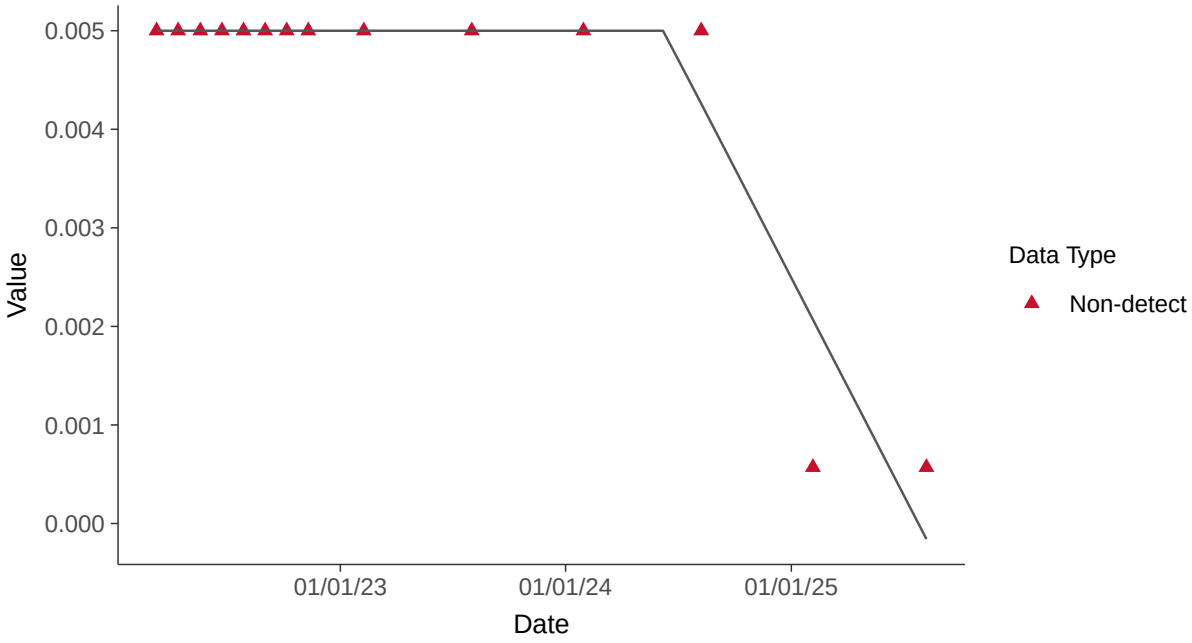
Boxplot by Season

Antimony, MW-7B (mg/l)



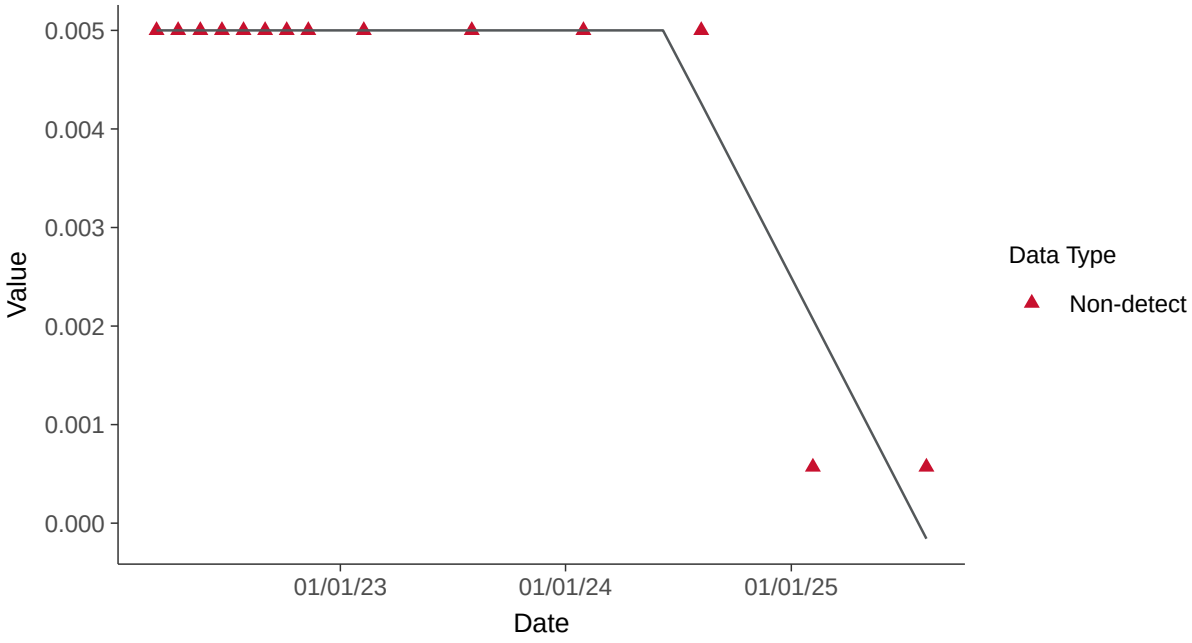
Trend Regression: Piecewise Linear-Linear

Antimony, MW-7B (mg/l)



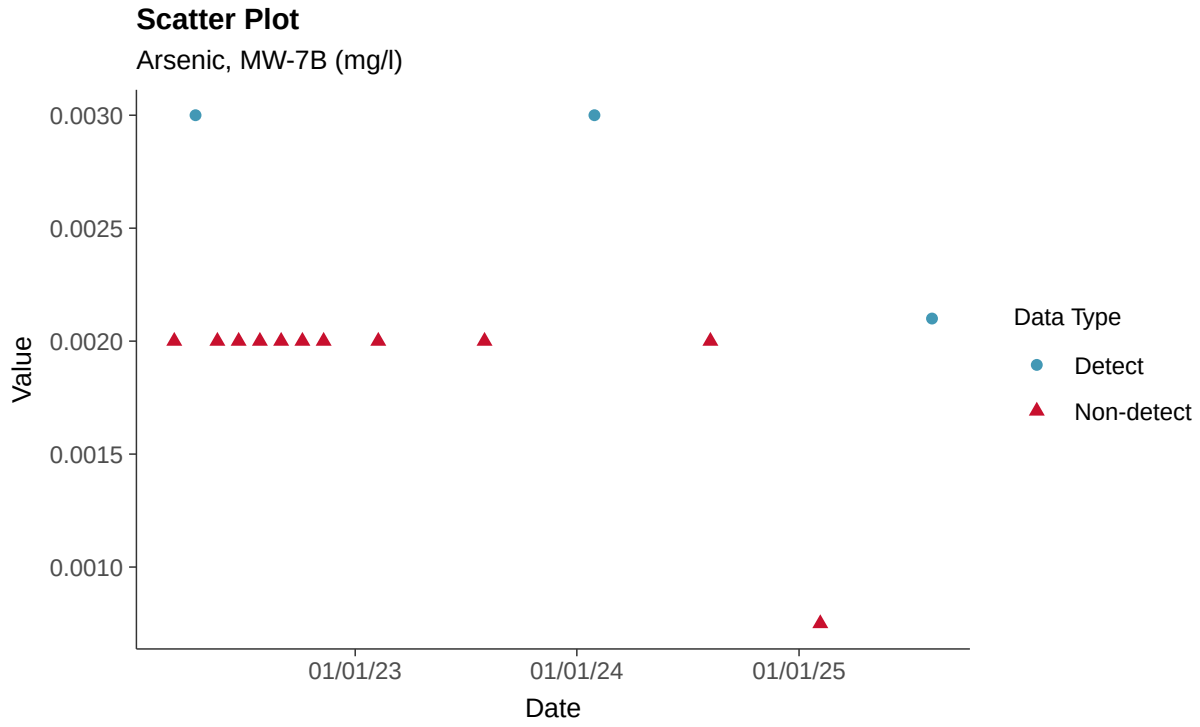
Trend Regression: Piecewise Linear-Linear-Linear

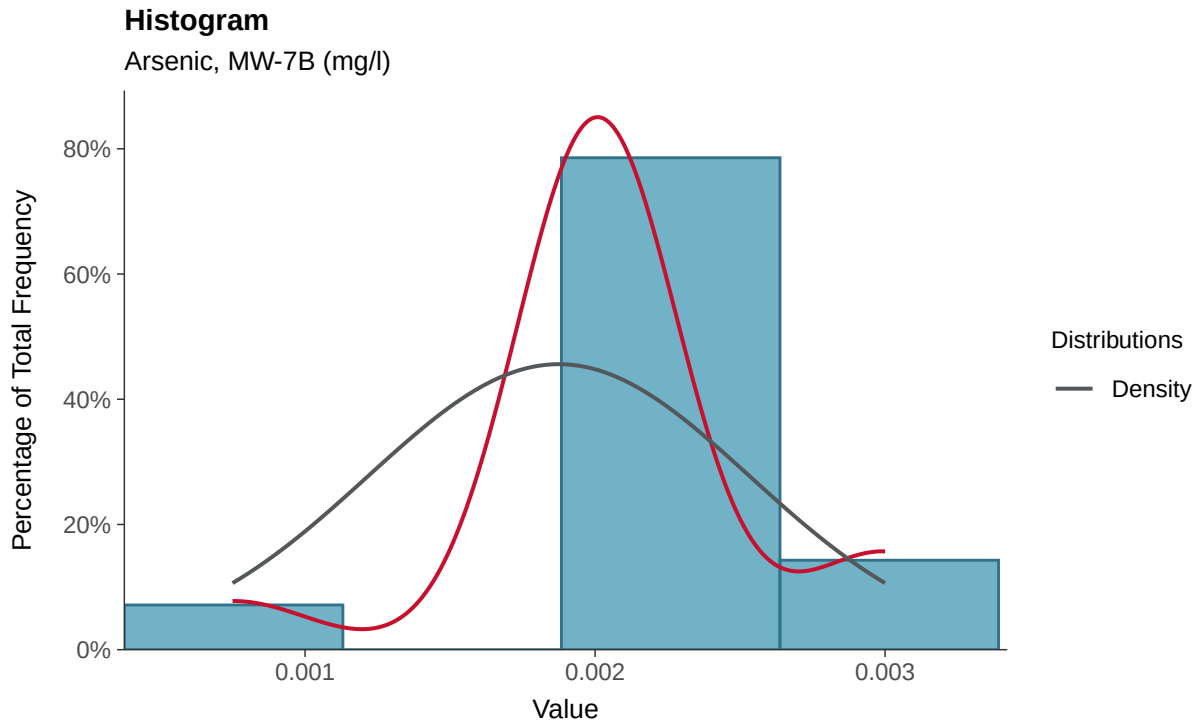
Antimony, MW-7B (mg/l)



Appendix IV: Arsenic, MW-7B

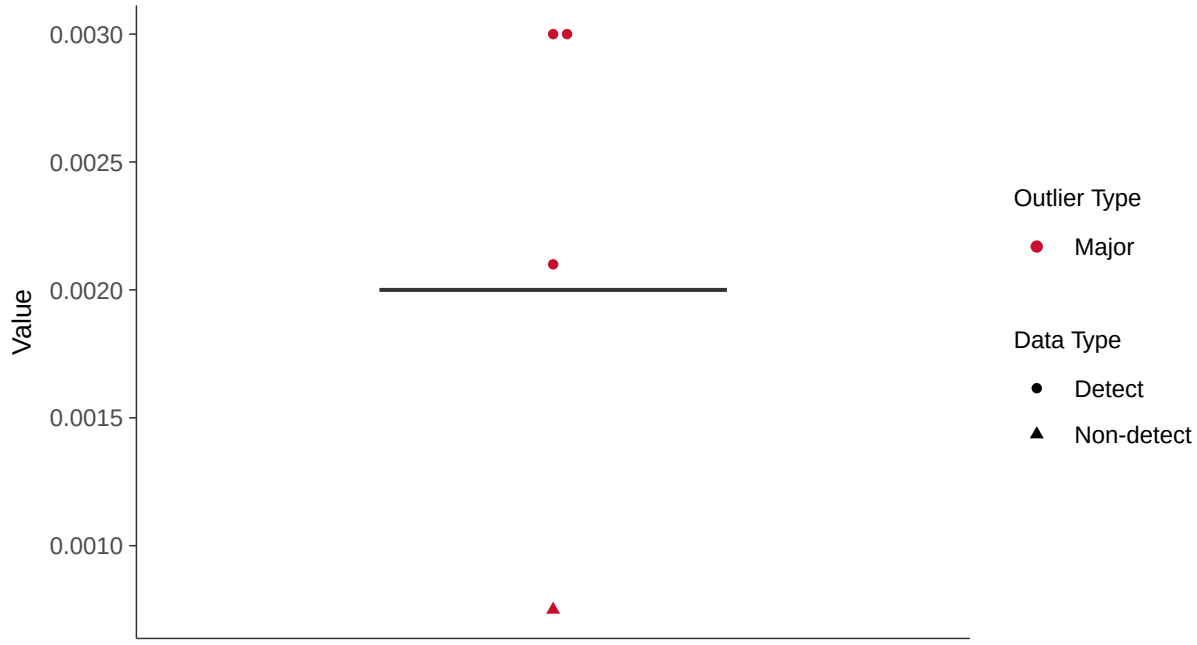
ID: 13_3_102





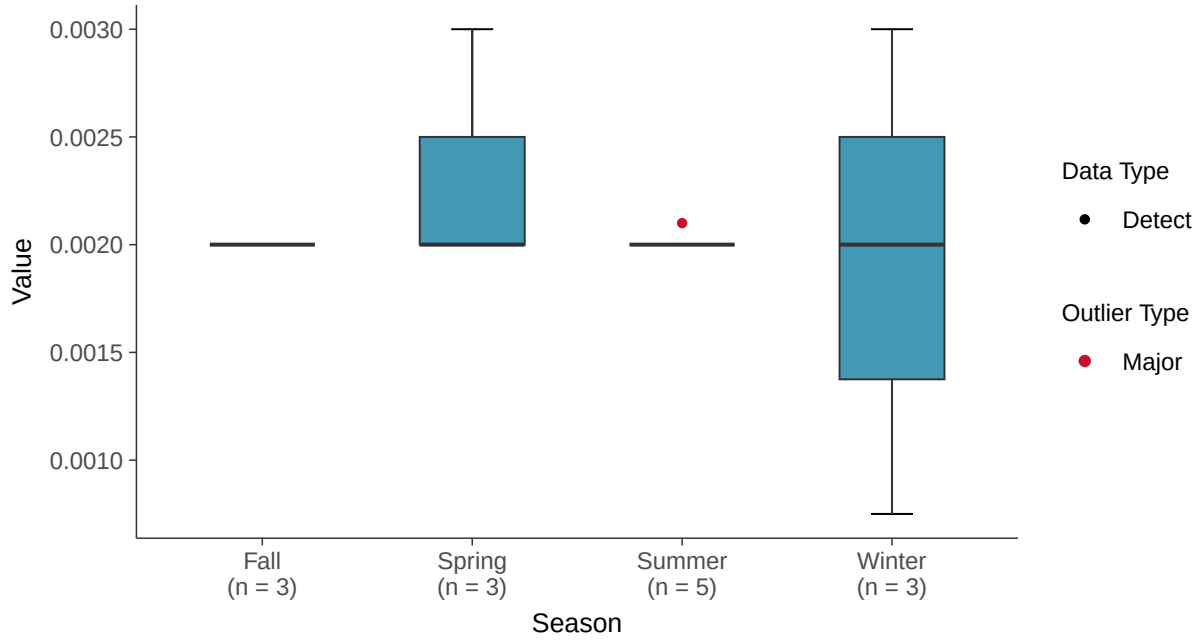
Boxplot

Arsenic, MW-7B (mg/l)



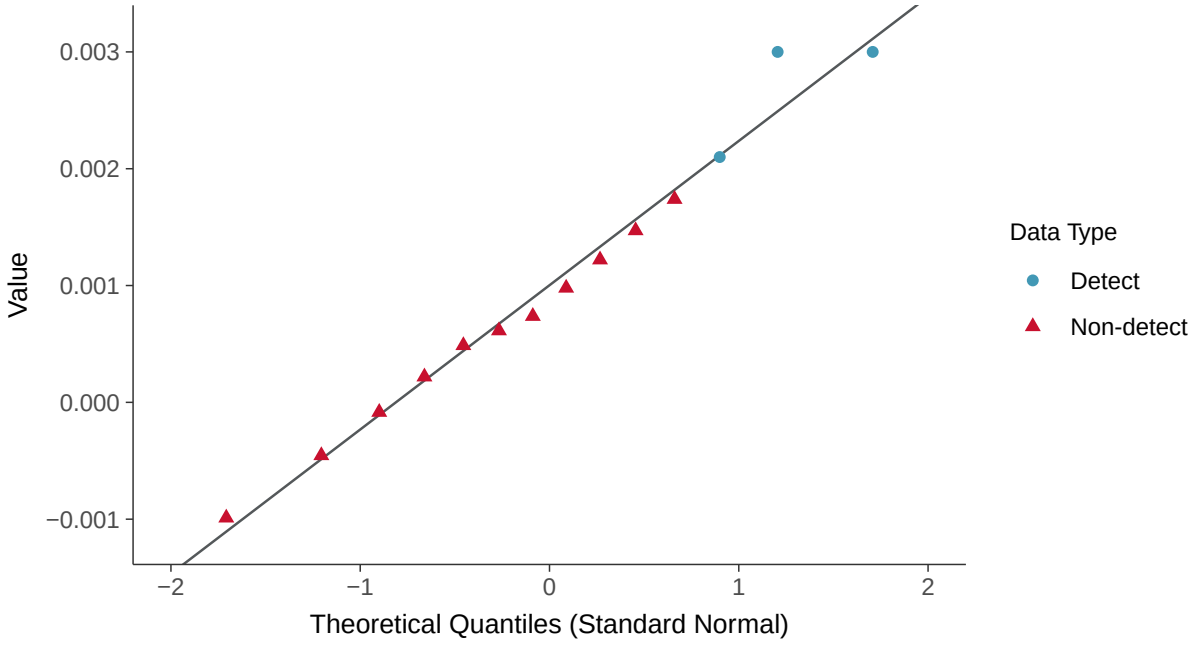
Boxplot by Season

Arsenic, MW-7B (mg/l)



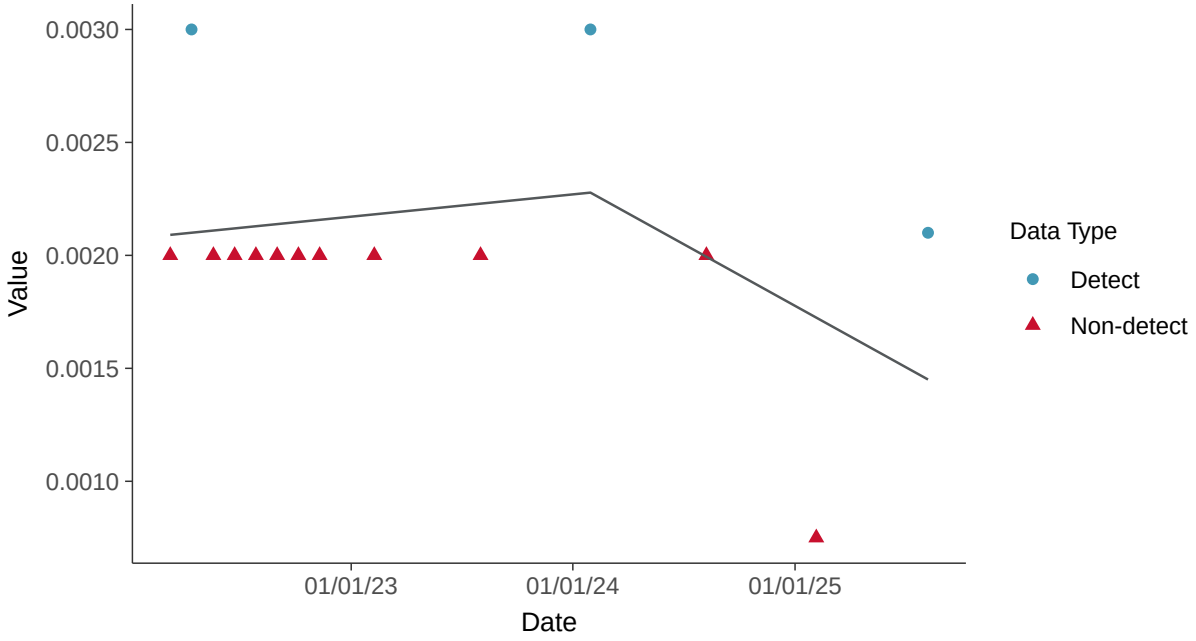
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-7B (mg/l)



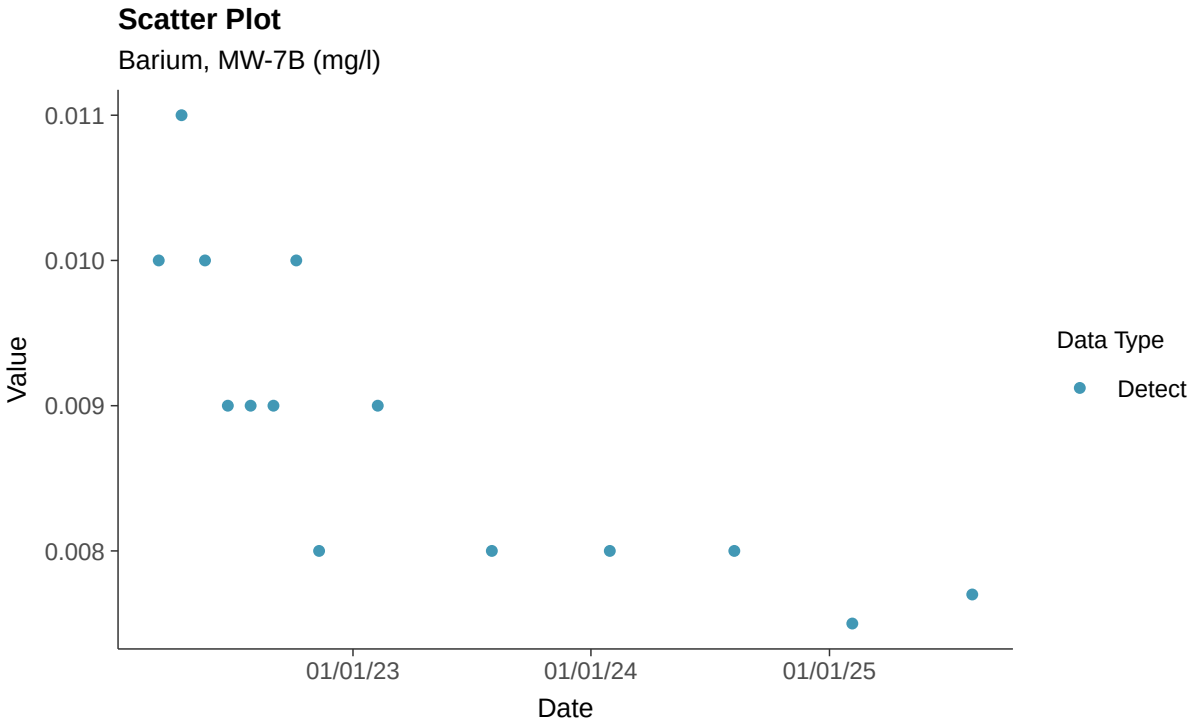
Trend Regression: Piecewise Linear-Linear

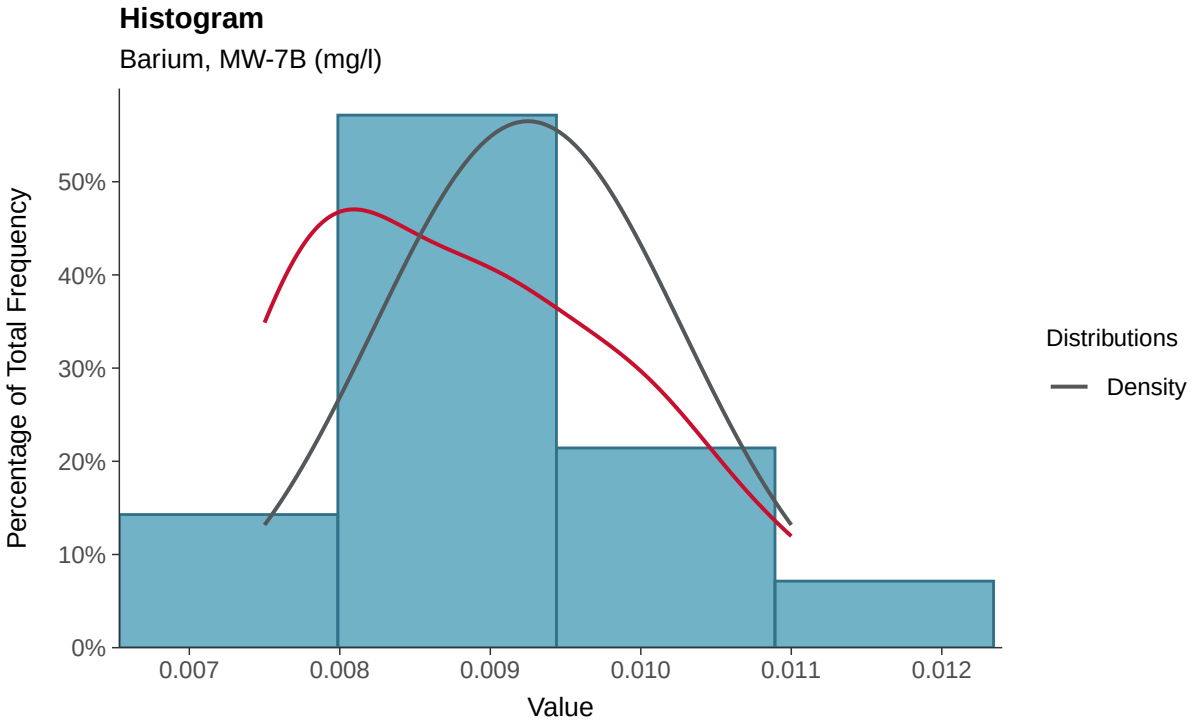
Arsenic, MW-7B (mg/l)



Appendix IV: Barium, MW-7B

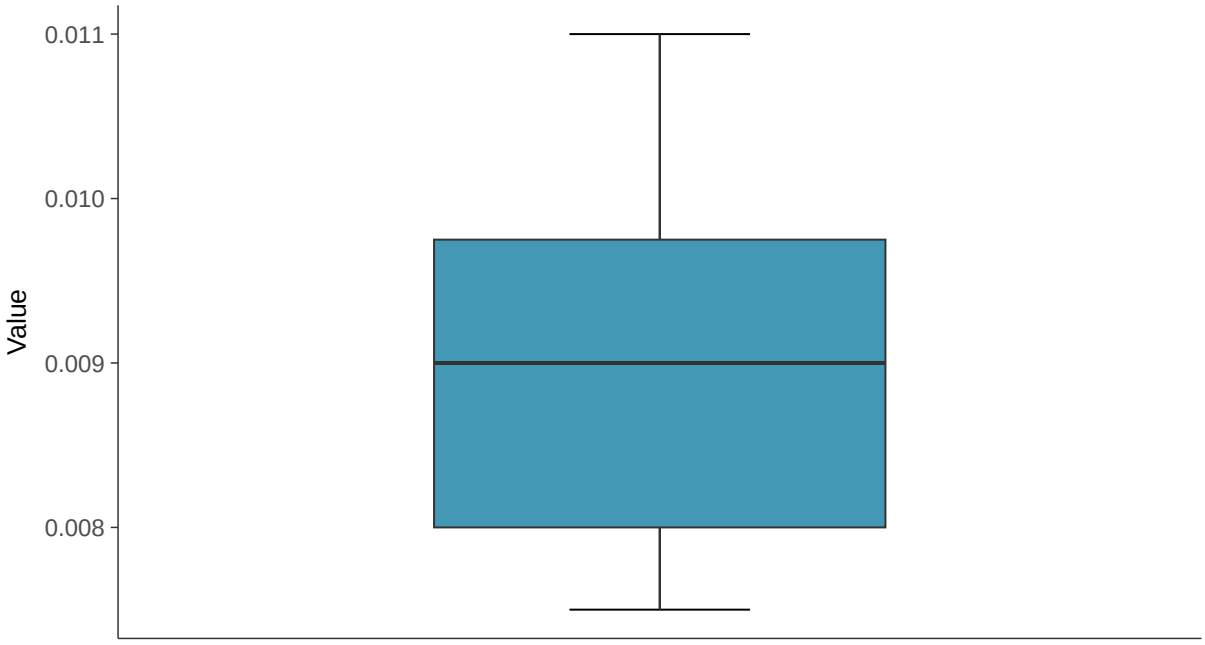
ID: 13_3_103





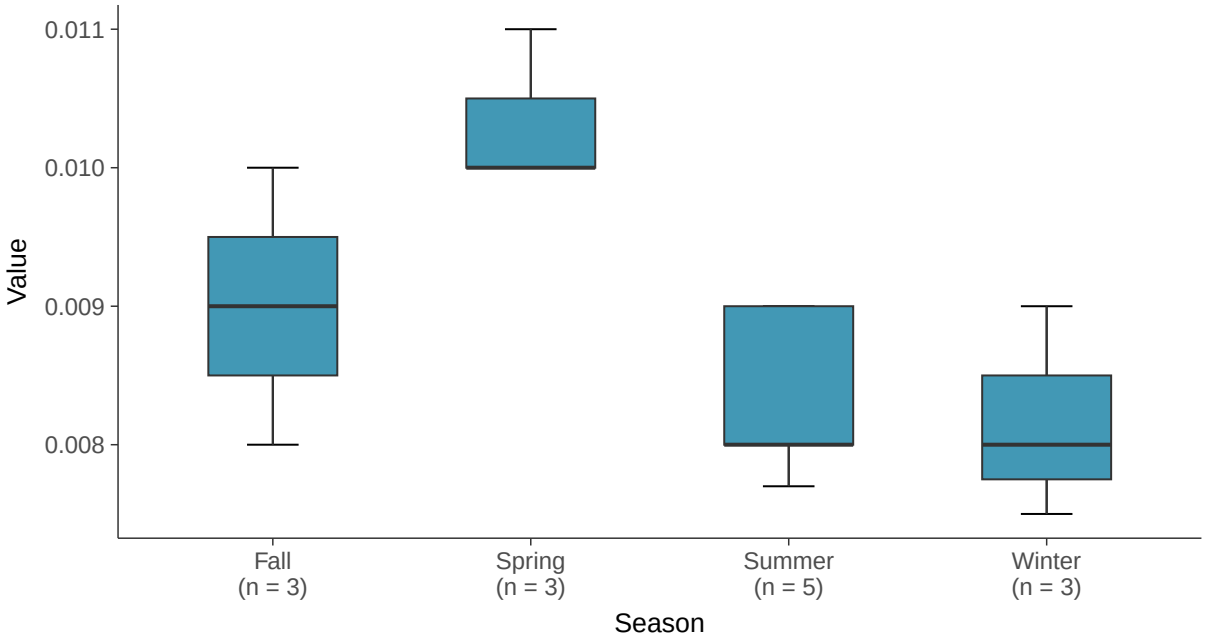
Boxplot

Barium, MW-7B (mg/l)



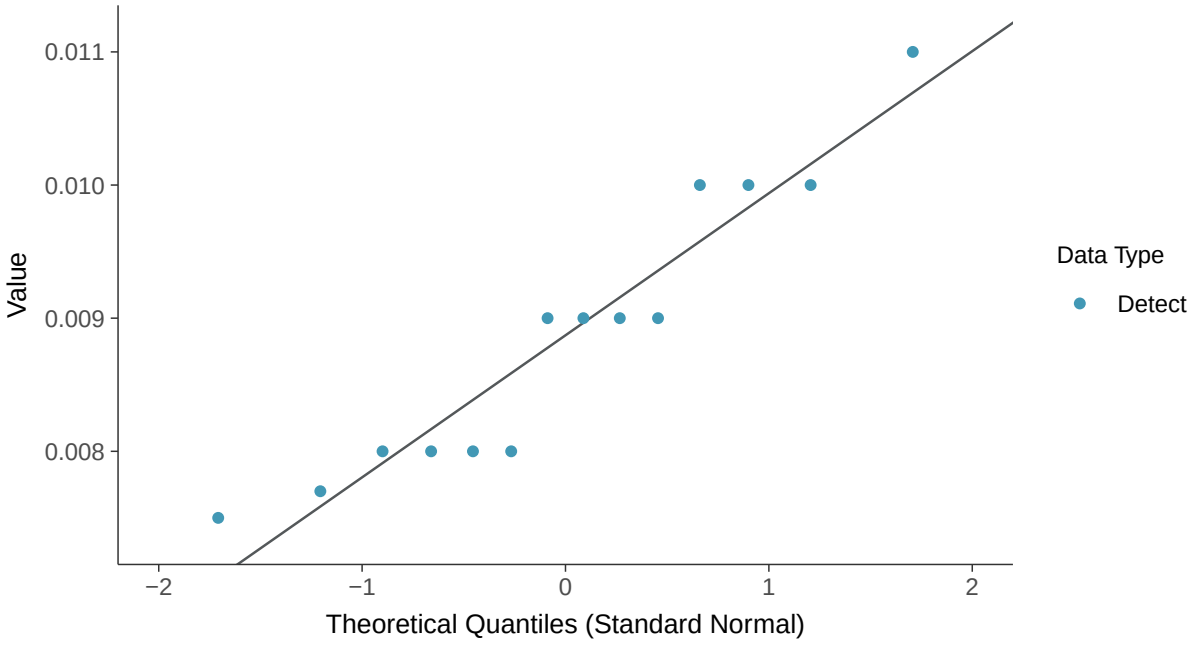
Boxplot by Season

Barium, MW-7B (mg/l)



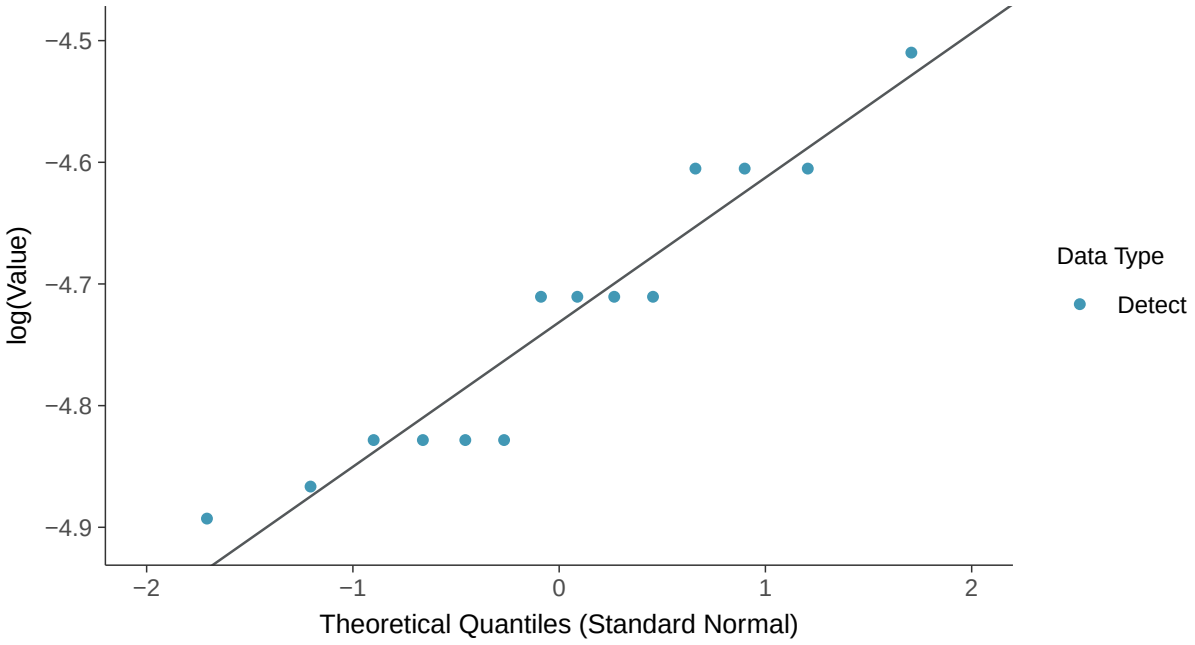
Normal Q-Q plot

Barium, MW-7B (mg/l)



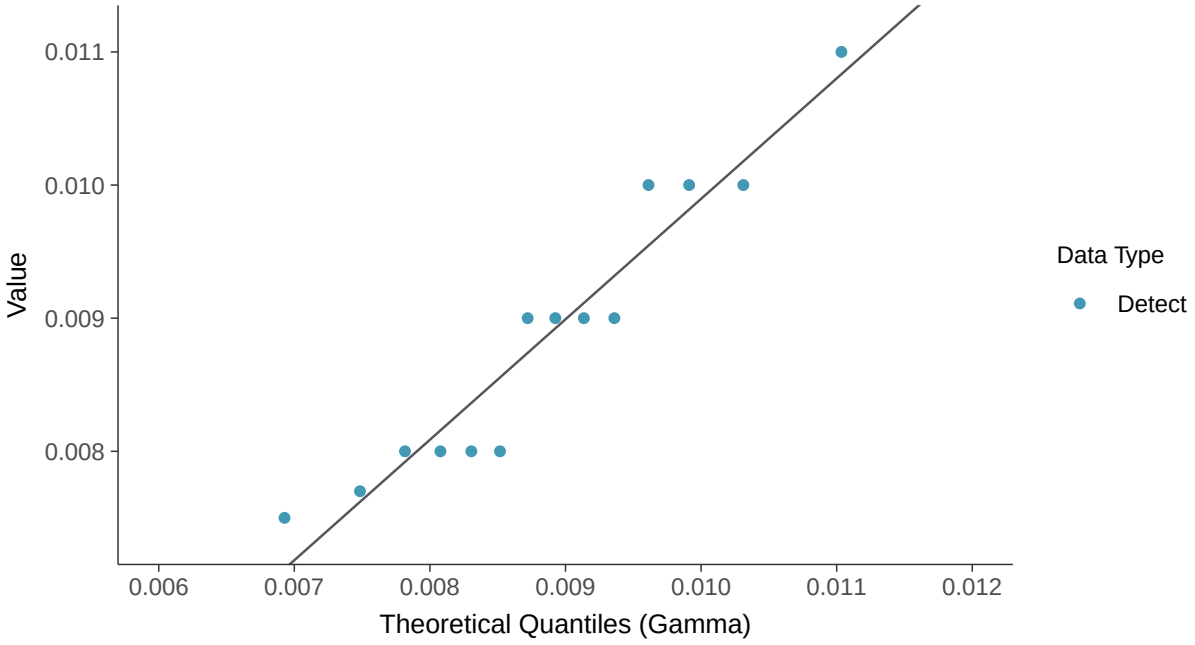
Lognormal Q-Q plot

Barium, MW-7B (mg/l)



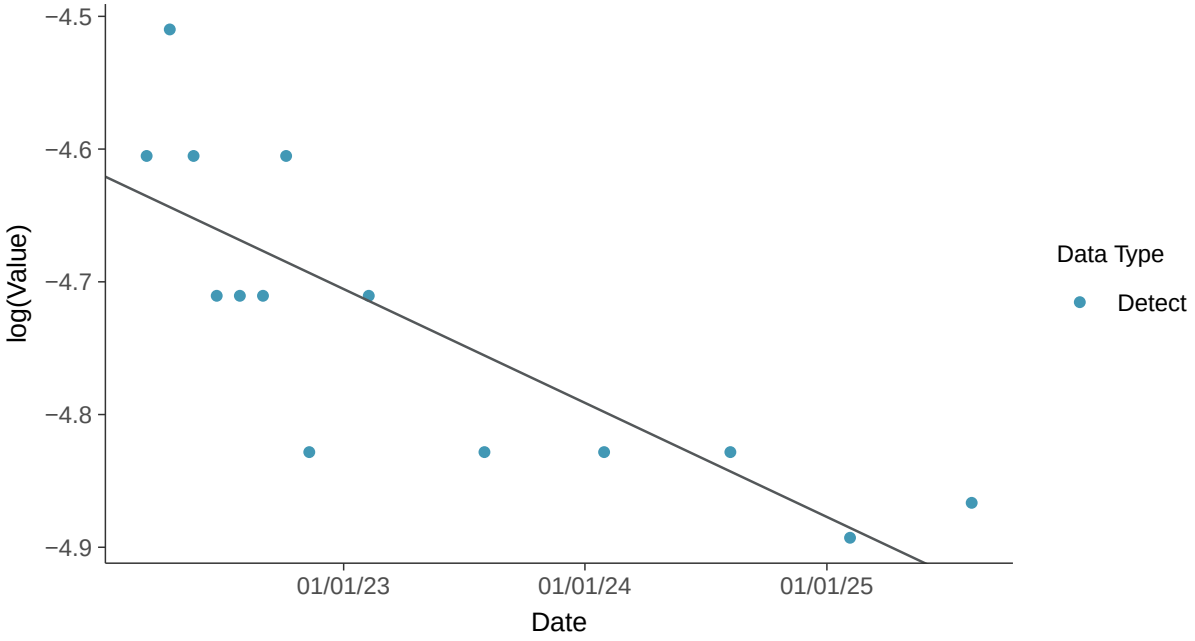
Gamma Q-Q plot

Barium, MW-7B (mg/l)



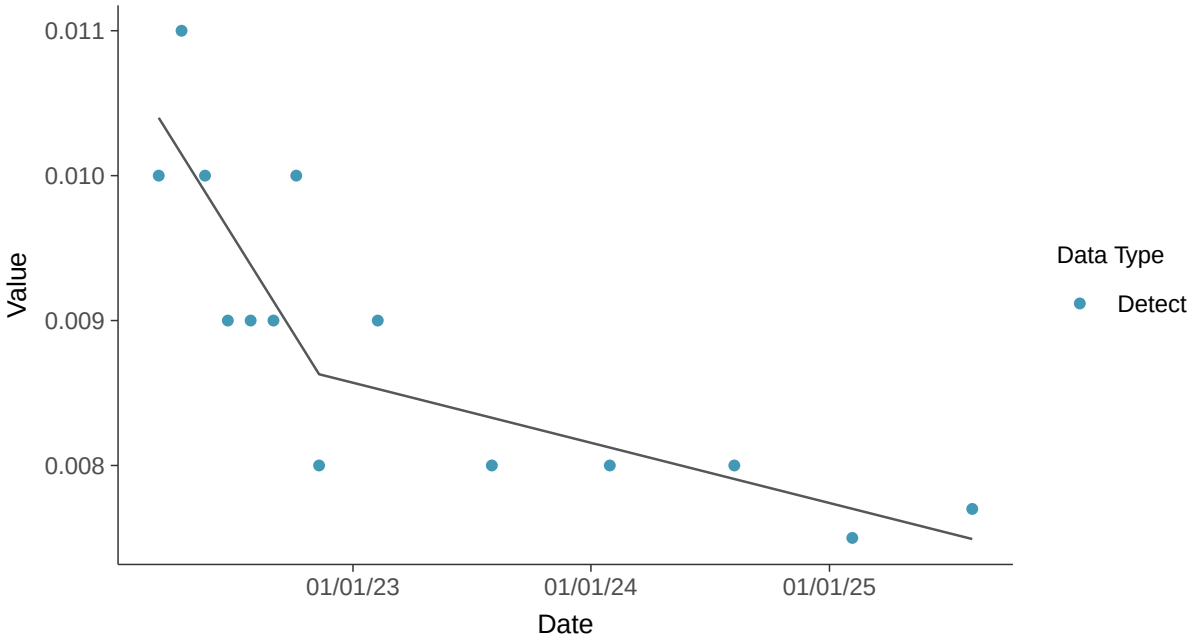
Trend Regression: Lognormal MLE

Barium, MW-7B (mg/l)



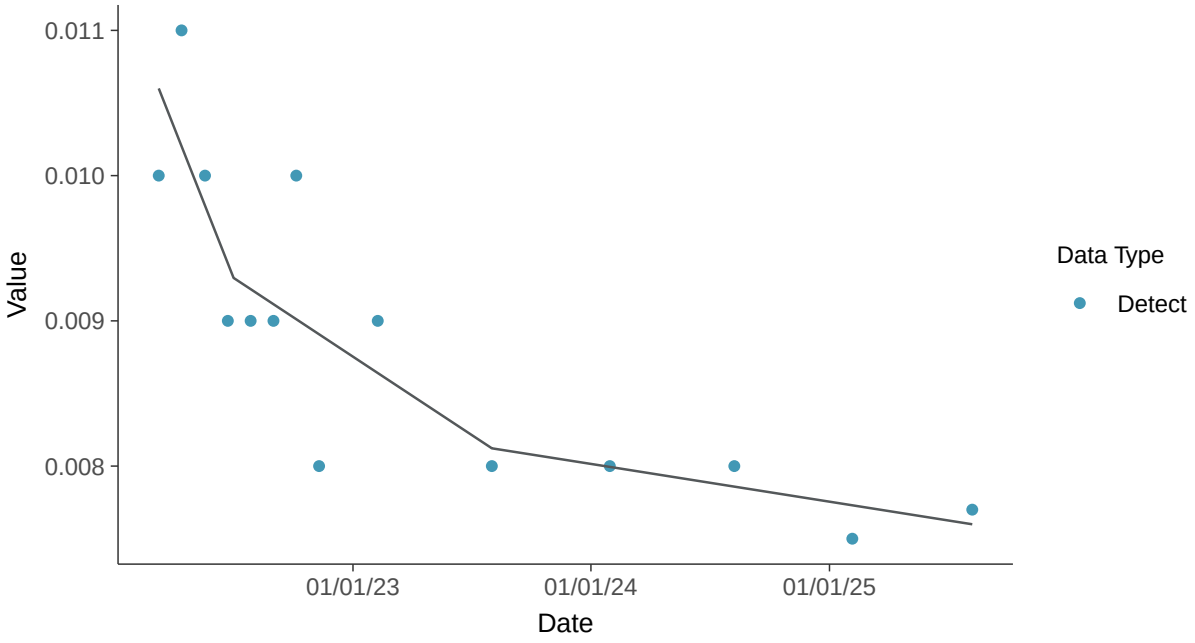
Trend Regression: Piecewise Linear-Linear

Barium, MW-7B (mg/l)



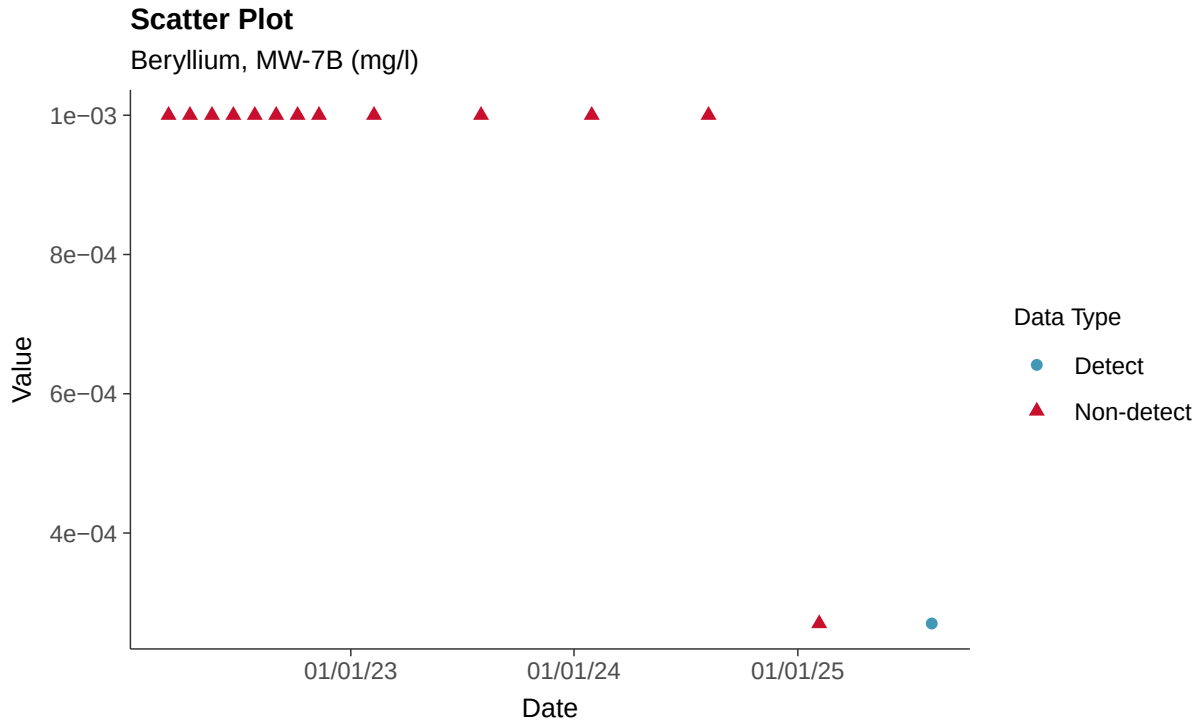
Trend Regression: Piecewise Linear-Linear-Linear

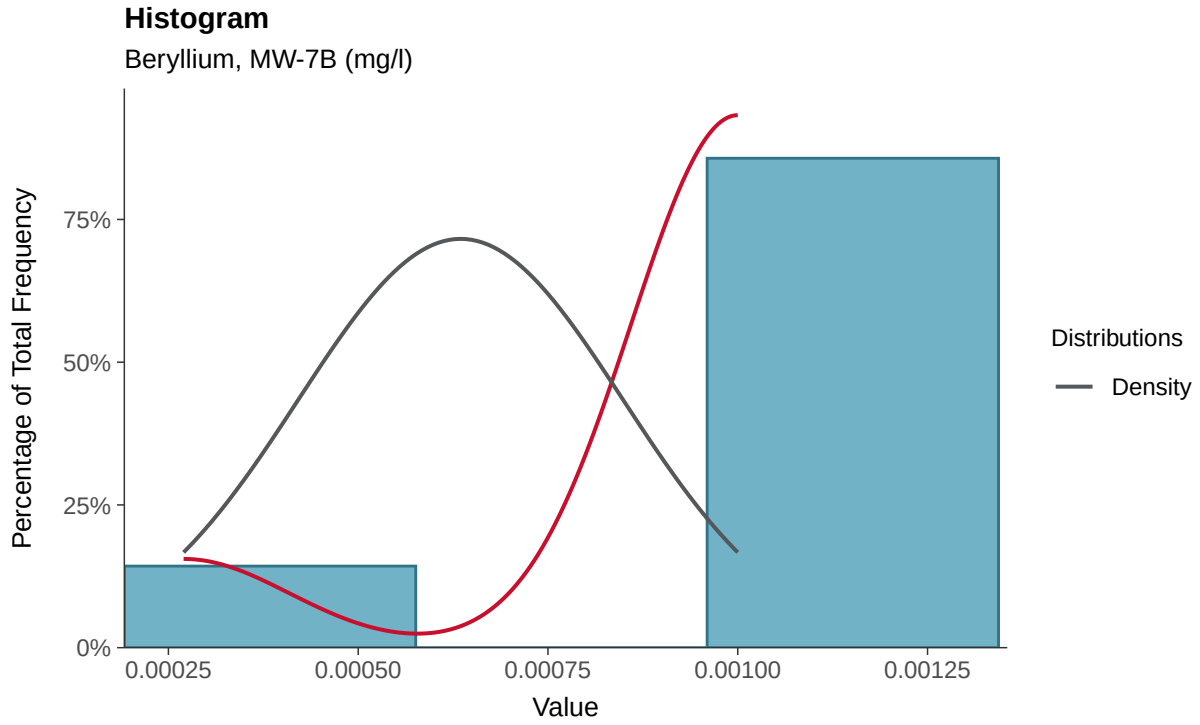
Barium, MW-7B (mg/l)



Appendix IV: Beryllium, MW-7B

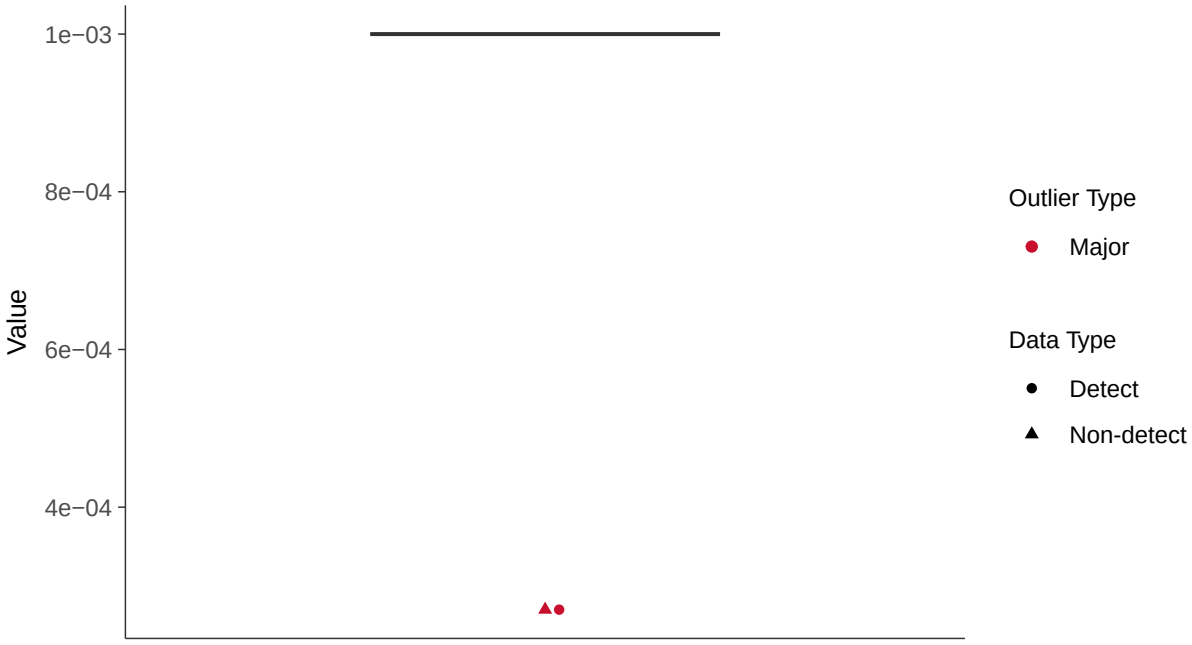
ID: 13_3_104





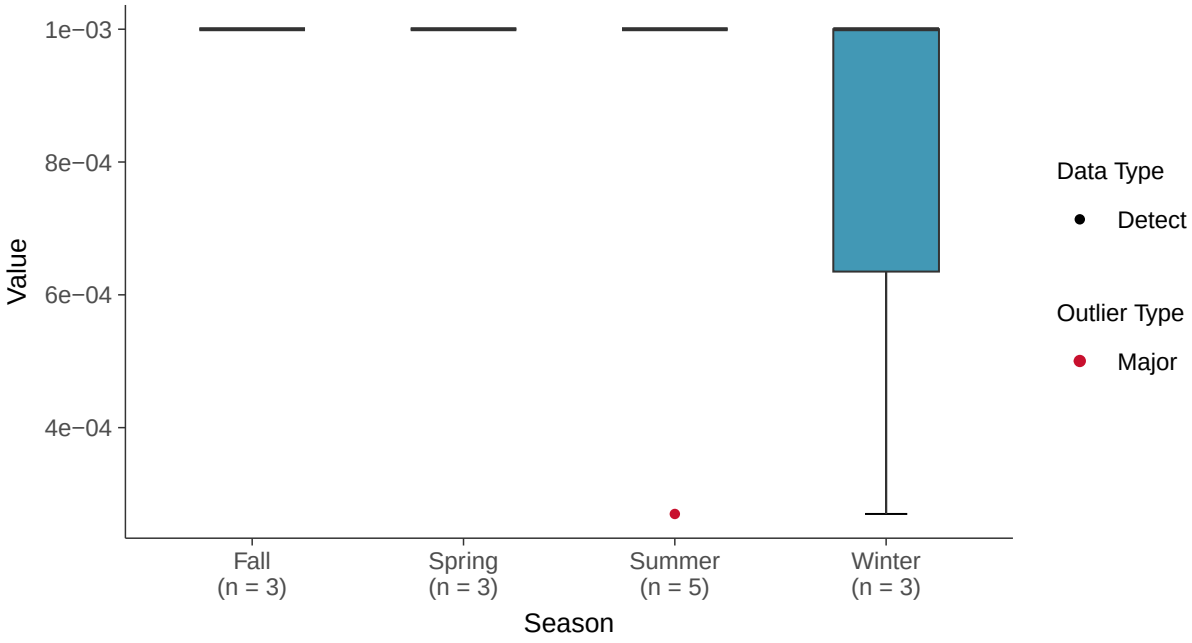
Boxplot

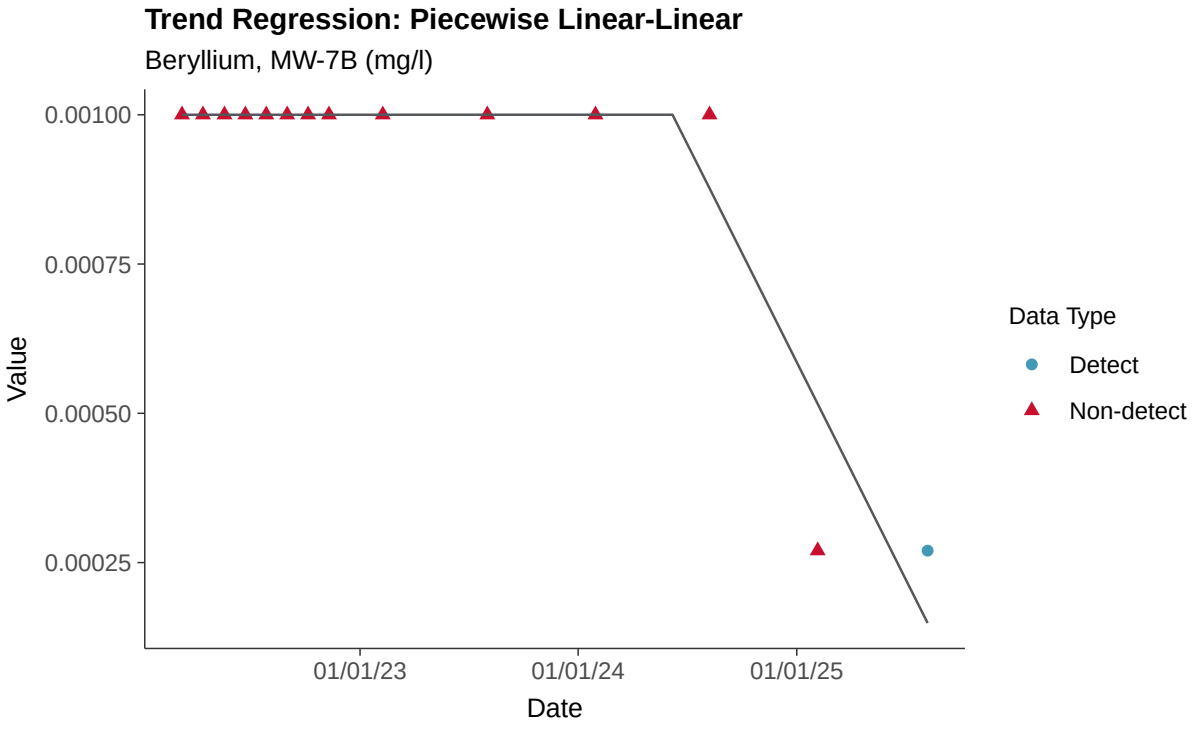
Beryllium, MW-7B (mg/l)



Boxplot by Season

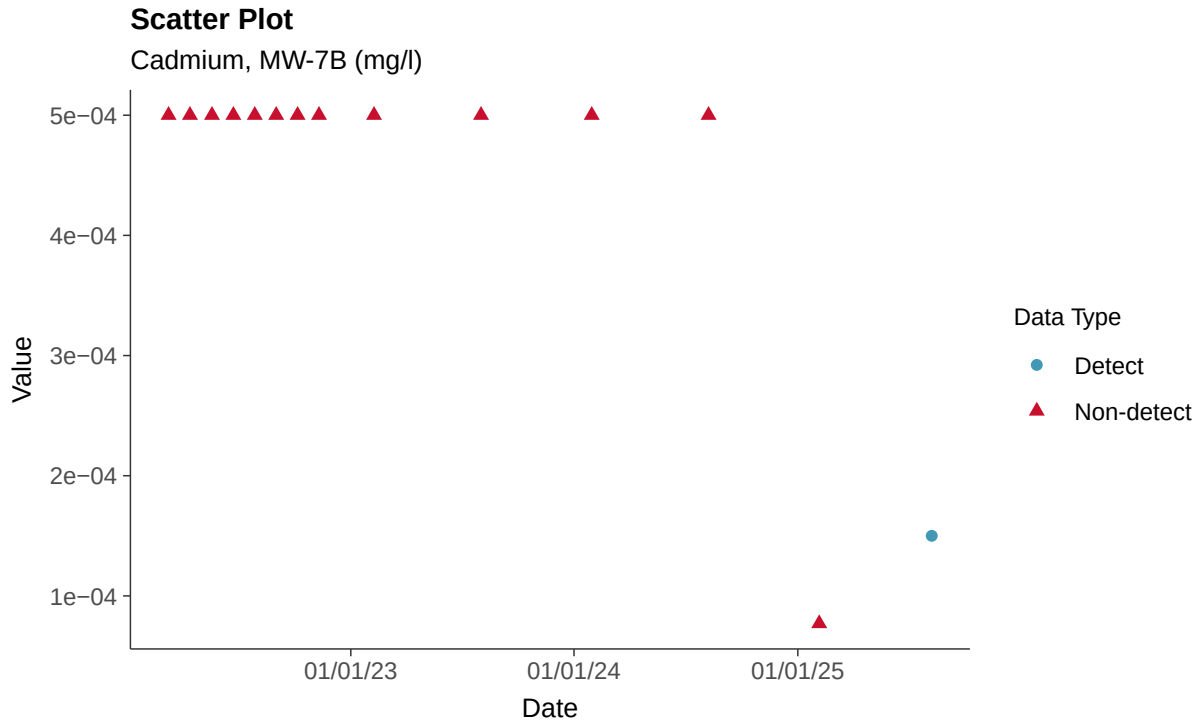
Beryllium, MW-7B (mg/l)

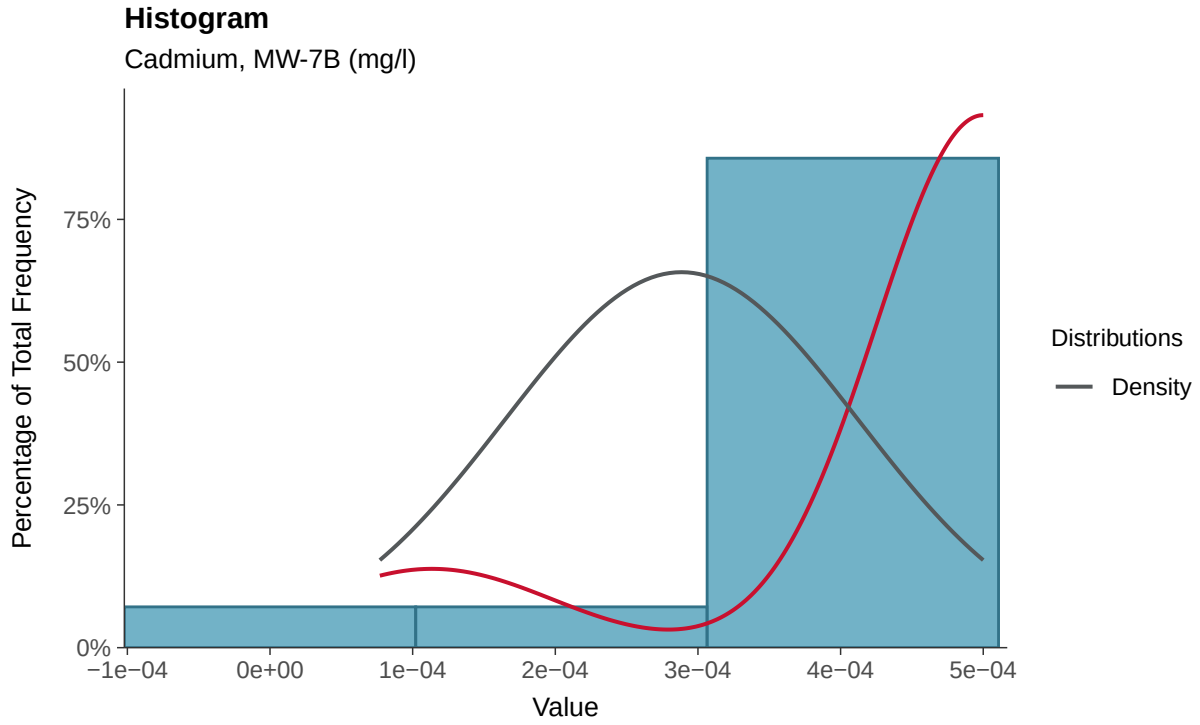



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-7B (mg/l)
0.00100
0.00075
0.00050
0.00025
Value
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Cadmium, MW-7B

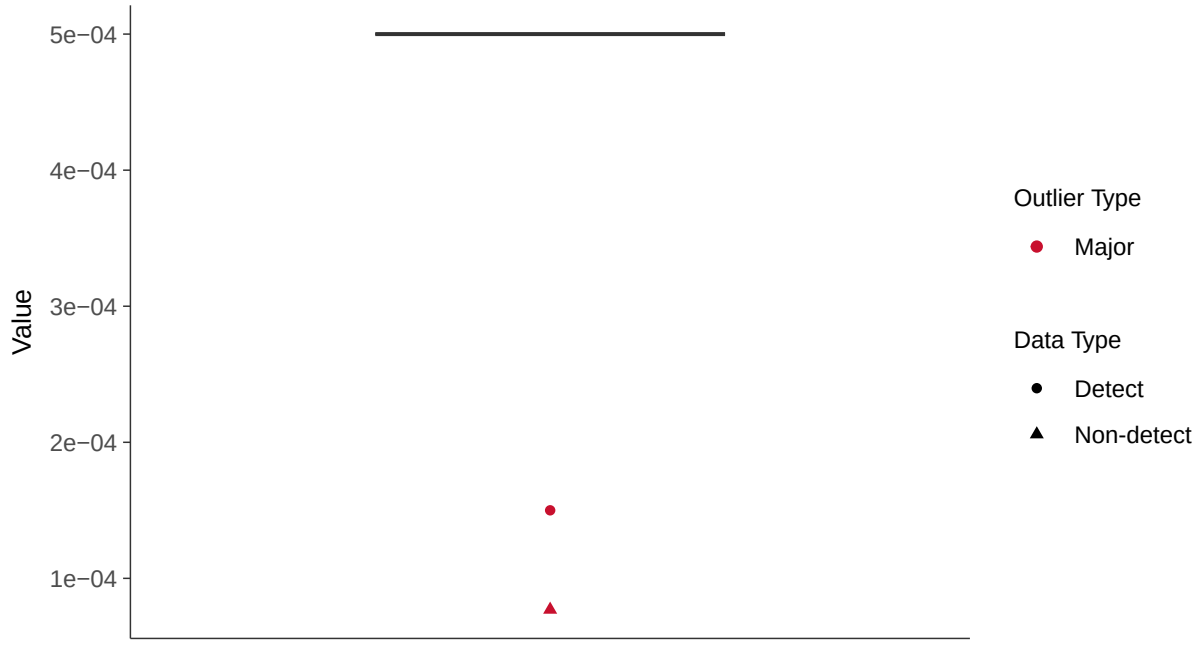
ID: 13_3_106





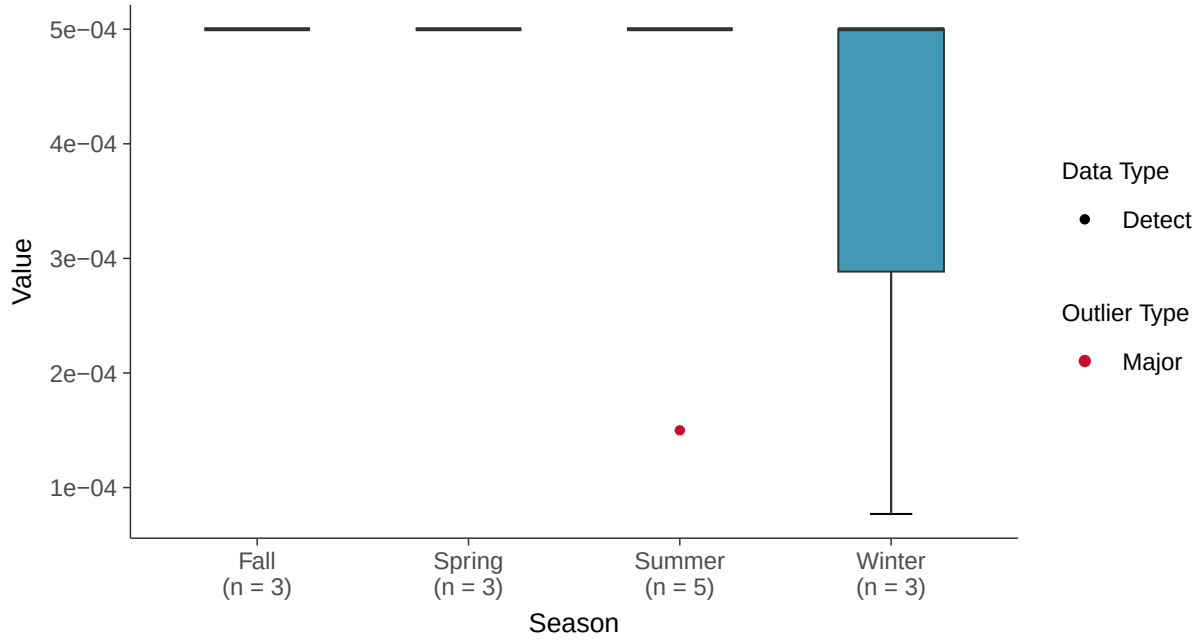
Boxplot

Cadmium, MW-7B (mg/l)



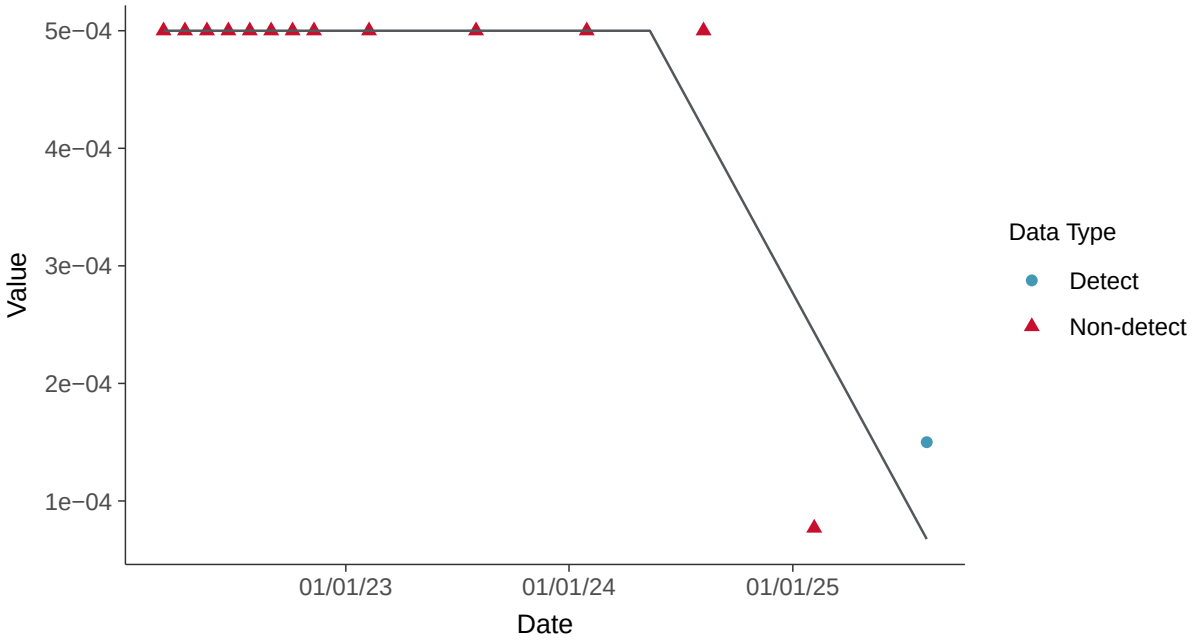
Boxplot by Season

Cadmium, MW-7B (mg/l)



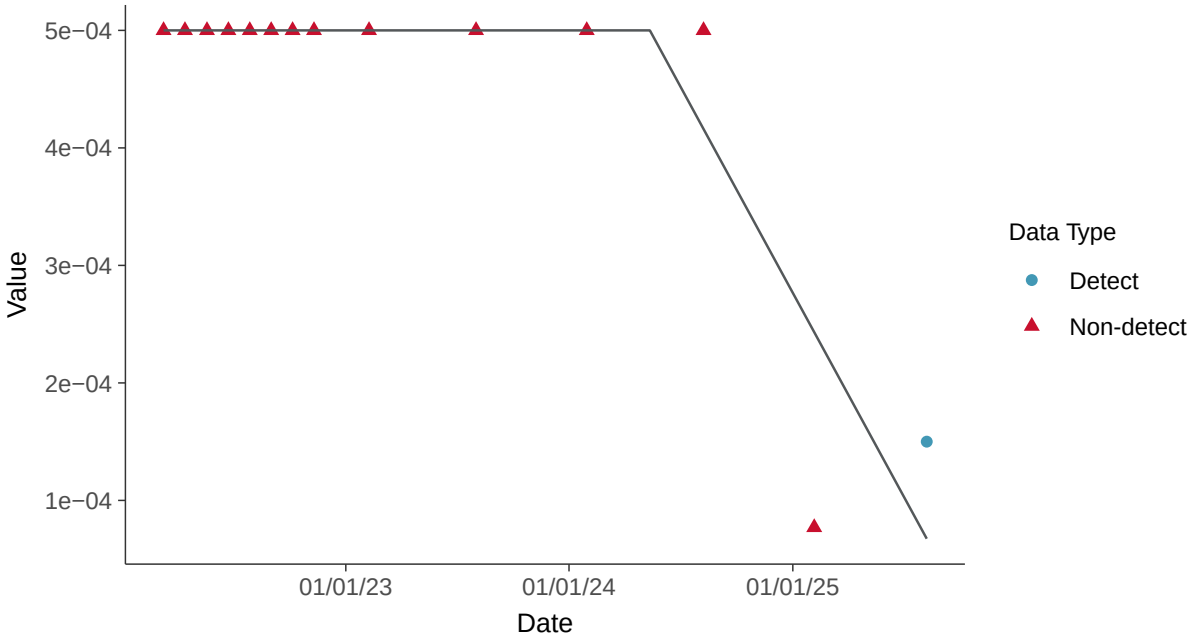
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-7B (mg/l)



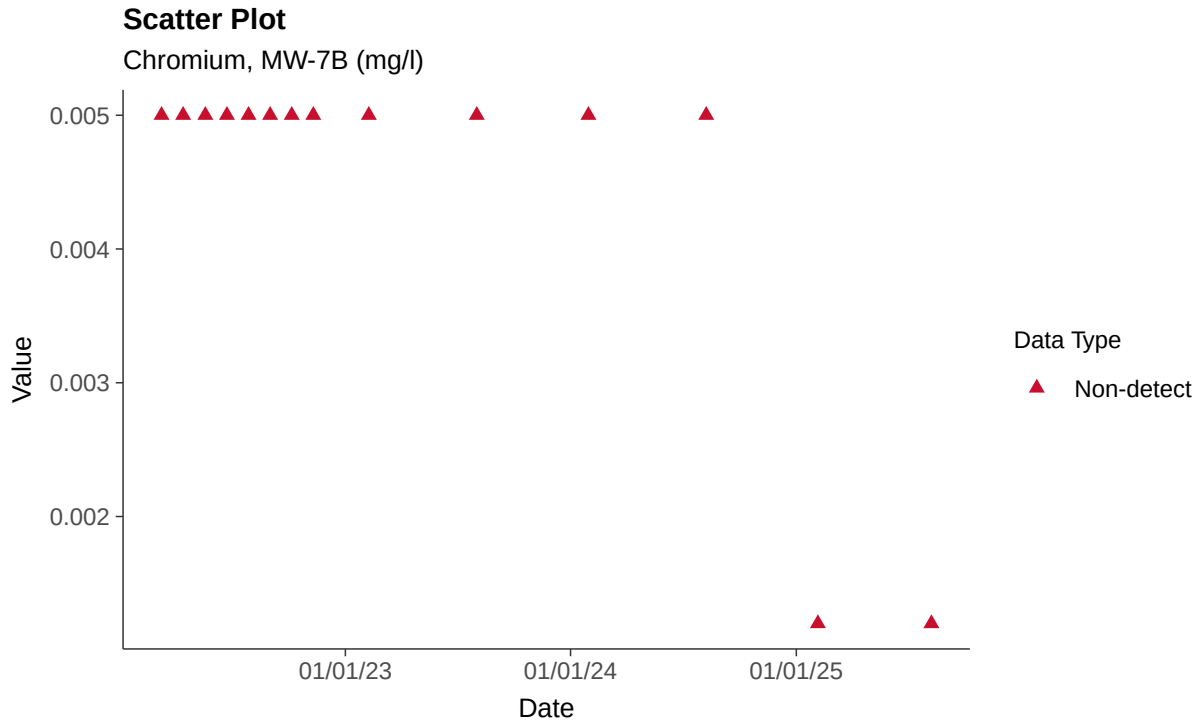
Trend Regression: Piecewise Linear-Linear-Linear

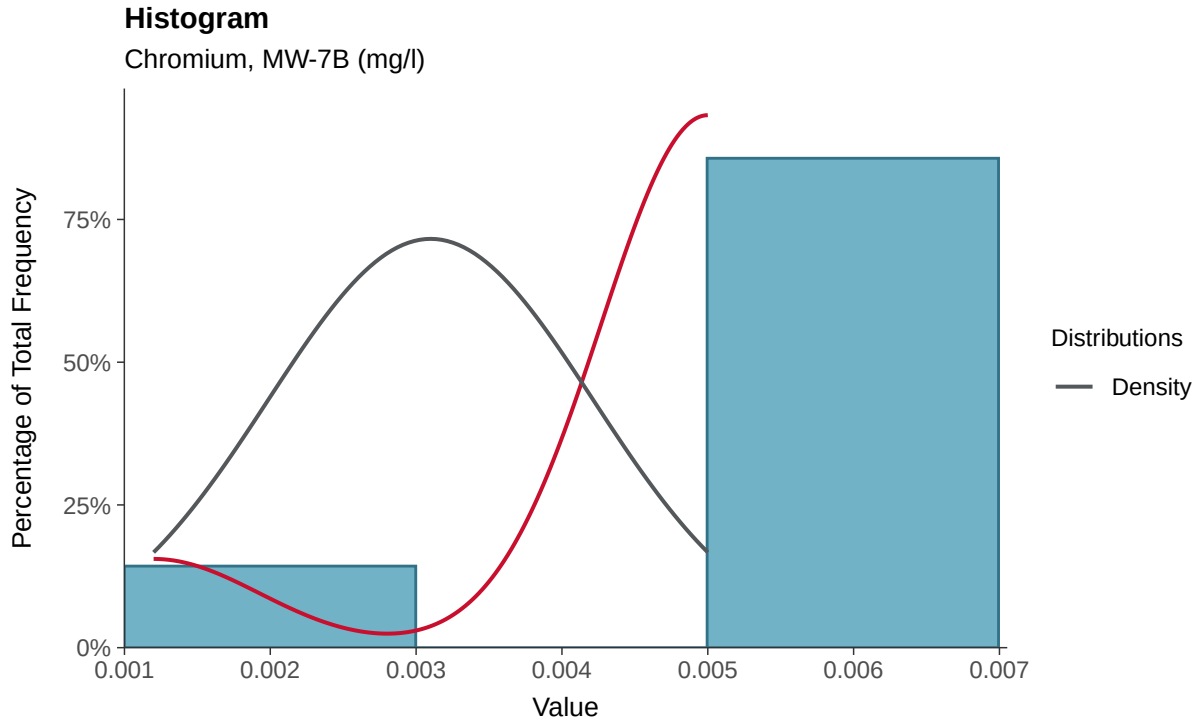
Cadmium, MW-7B (mg/l)



Appendix IV: Chromium, MW-7B

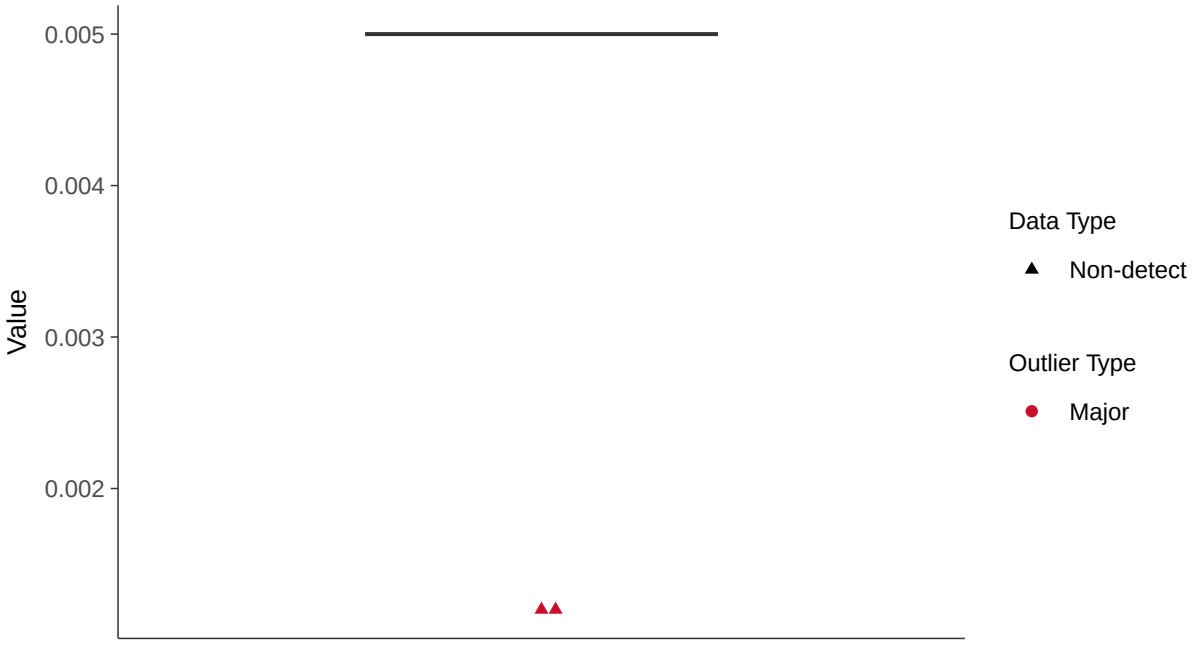
ID: 13_3_109





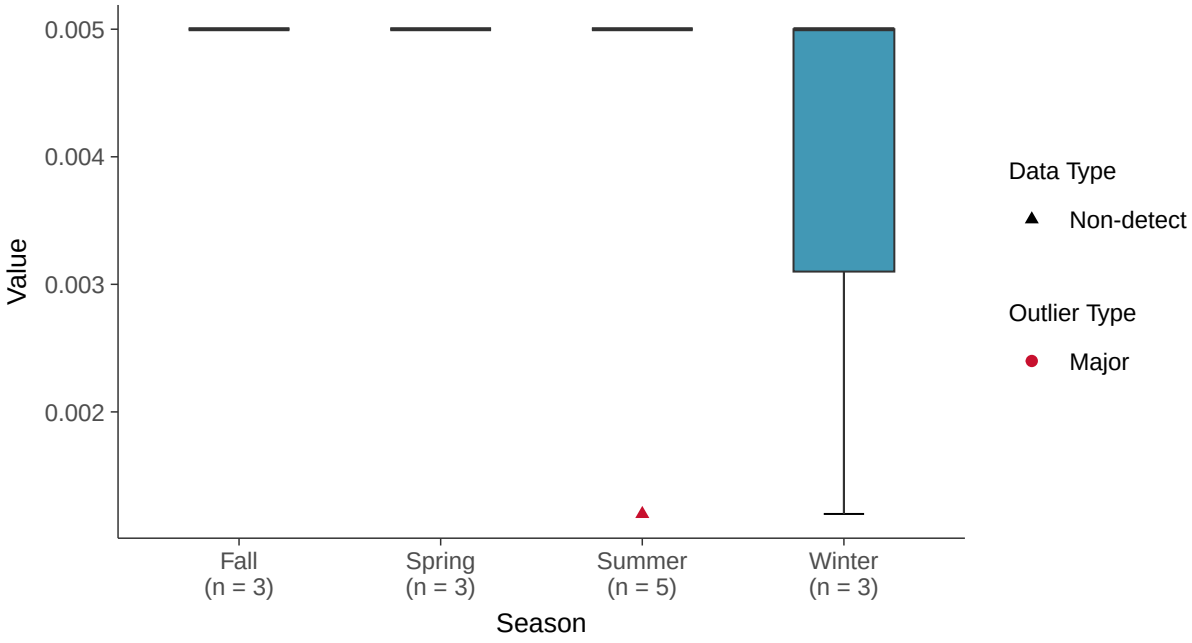
Boxplot

Chromium, MW-7B (mg/l)



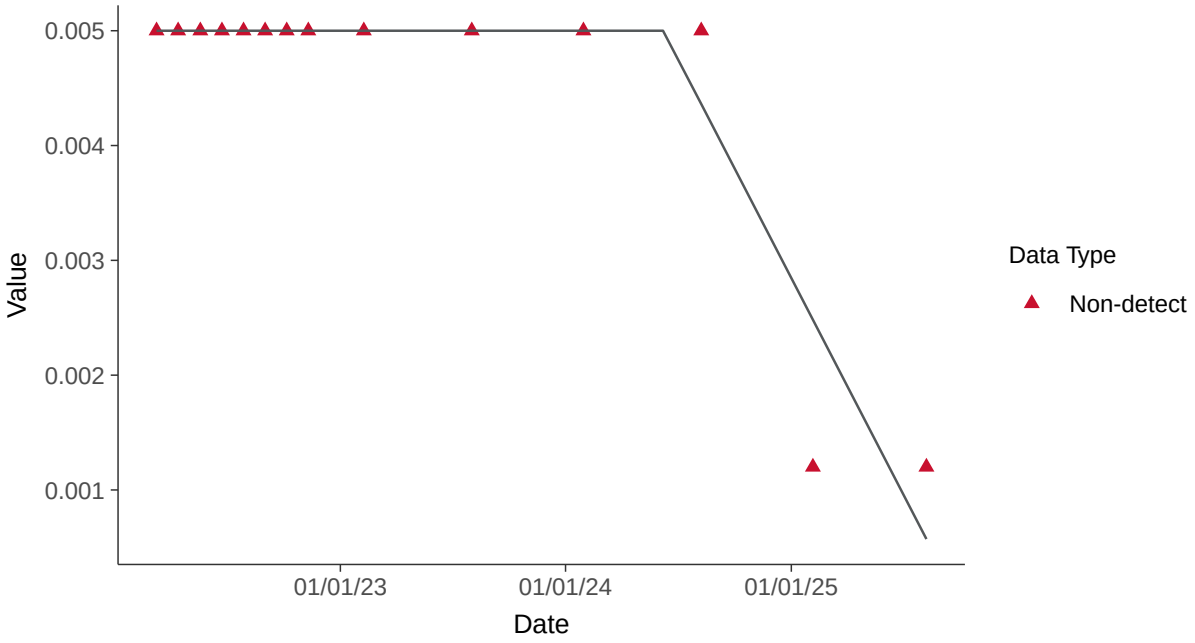
Boxplot by Season

Chromium, MW-7B (mg/l)



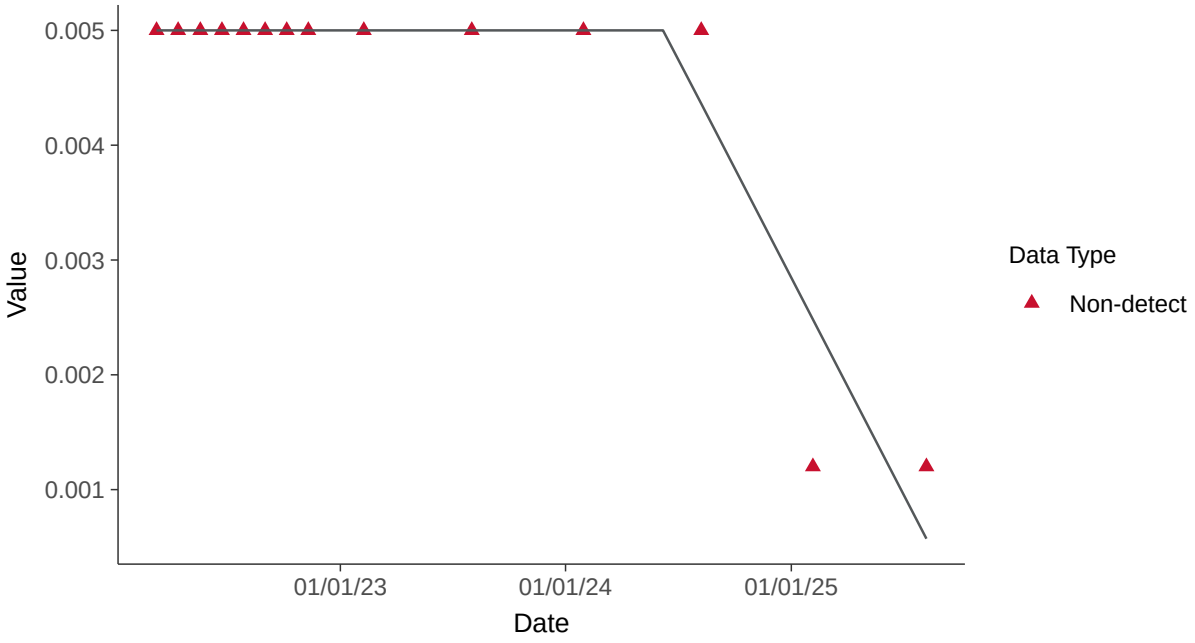
Trend Regression: Piecewise Linear-Linear

Chromium, MW-7B (mg/l)



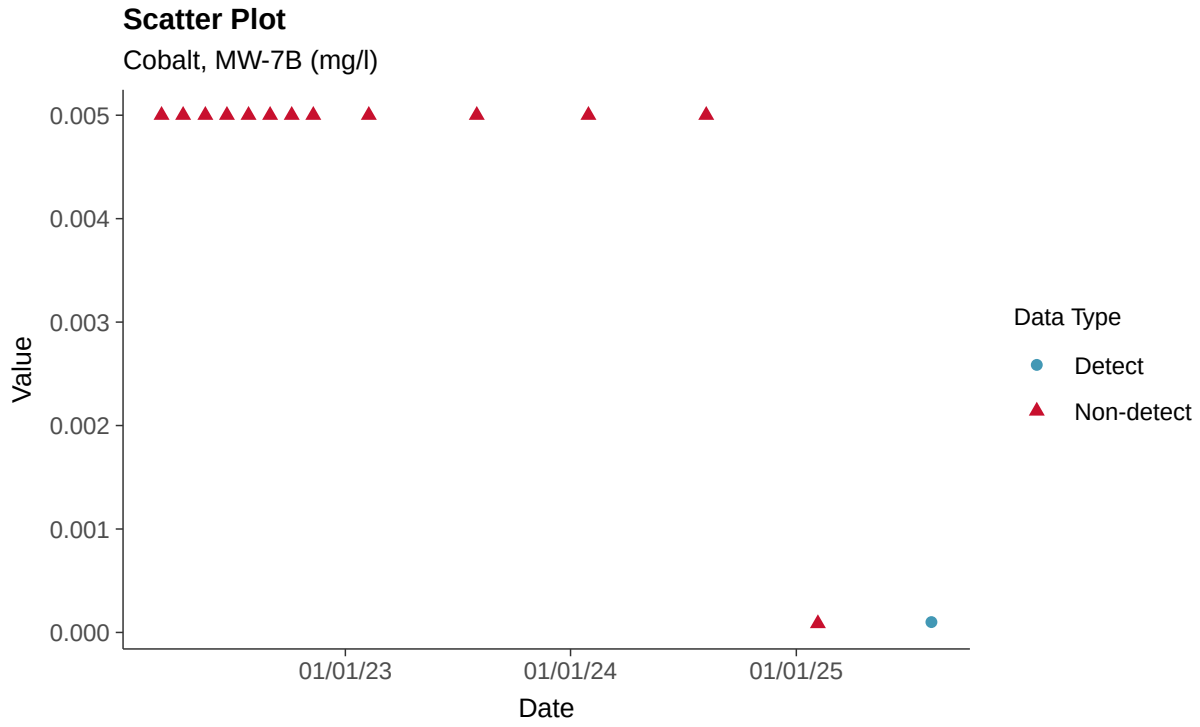
Trend Regression: Piecewise Linear-Linear-Linear

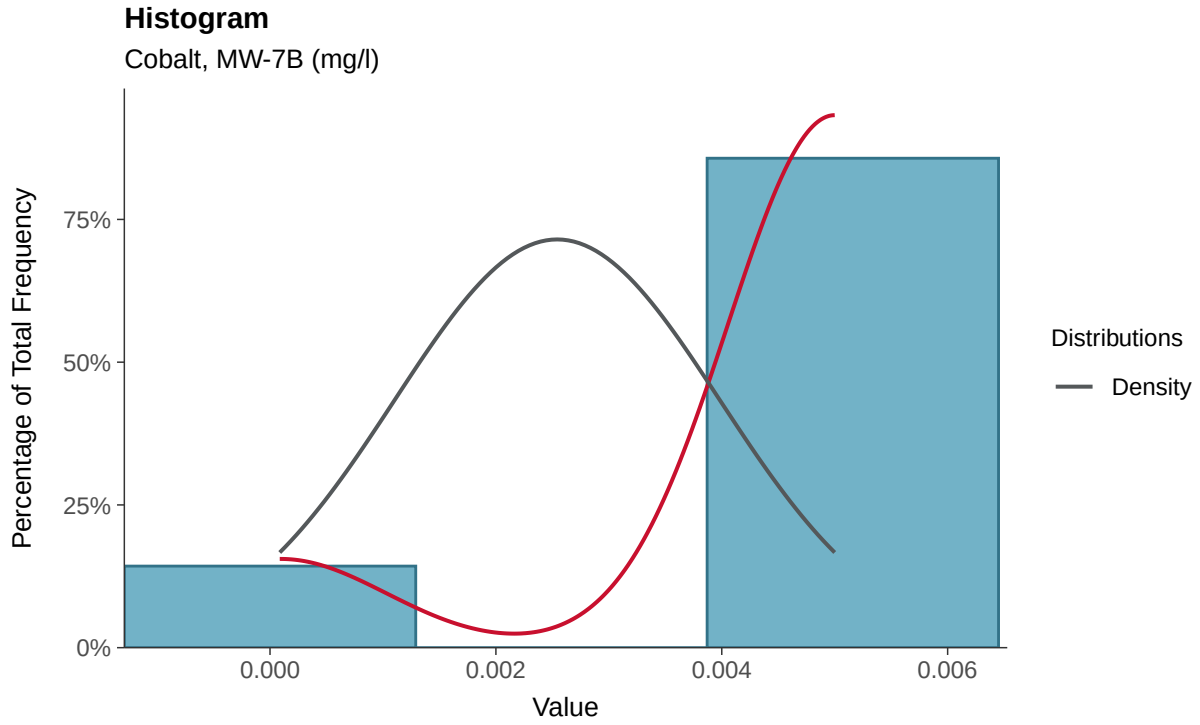
Chromium, MW-7B (mg/l)



Appendix IV: Cobalt, MW-7B

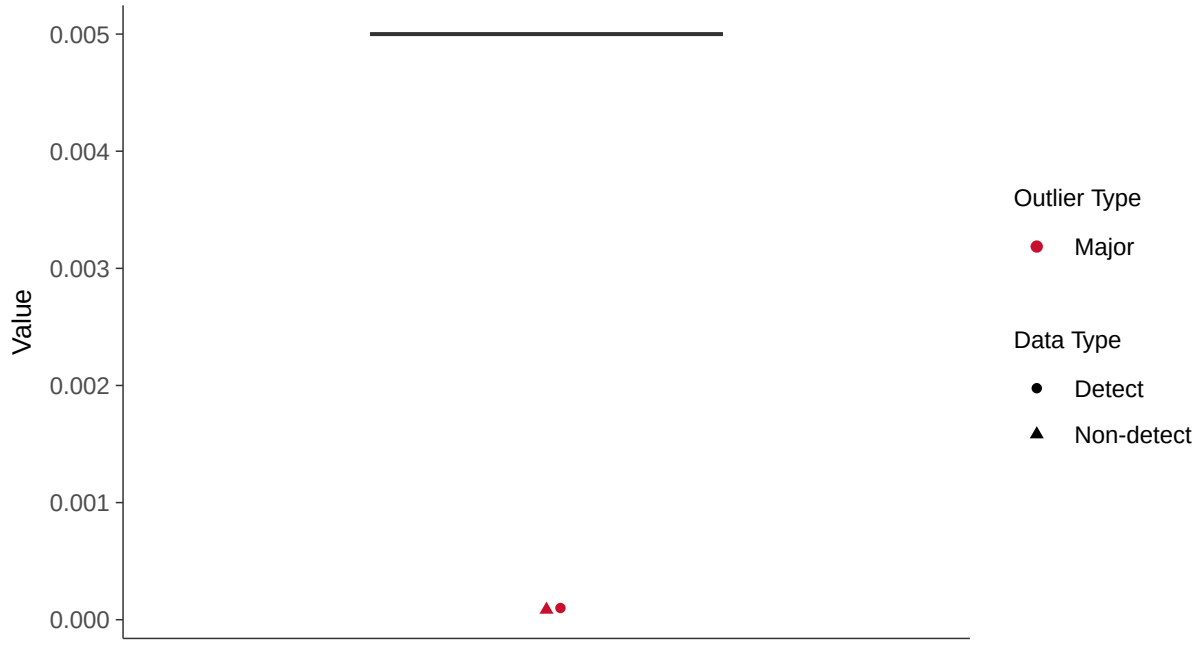
ID: 13_3_110





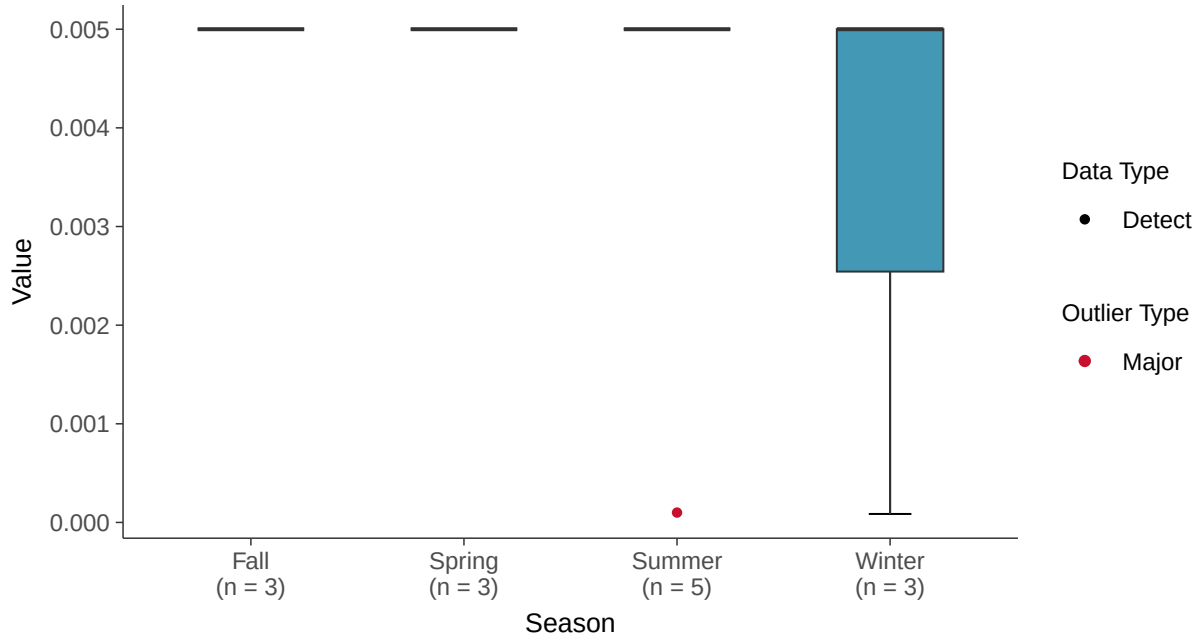
Boxplot

Cobalt, MW-7B (mg/l)



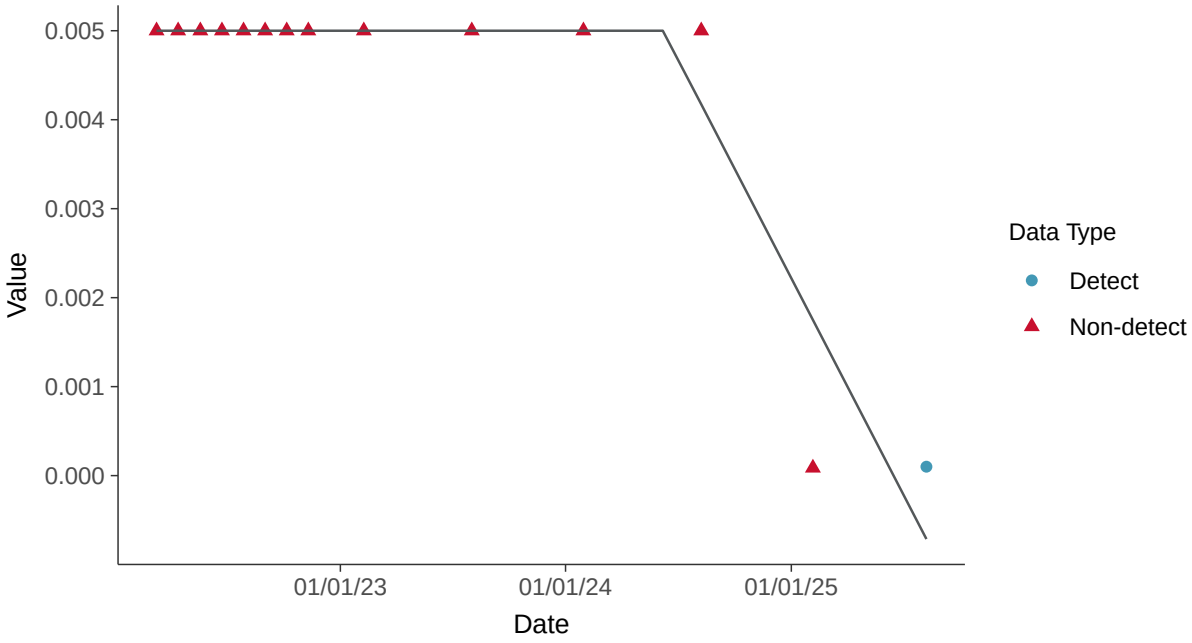
Boxplot by Season

Cobalt, MW-7B (mg/l)



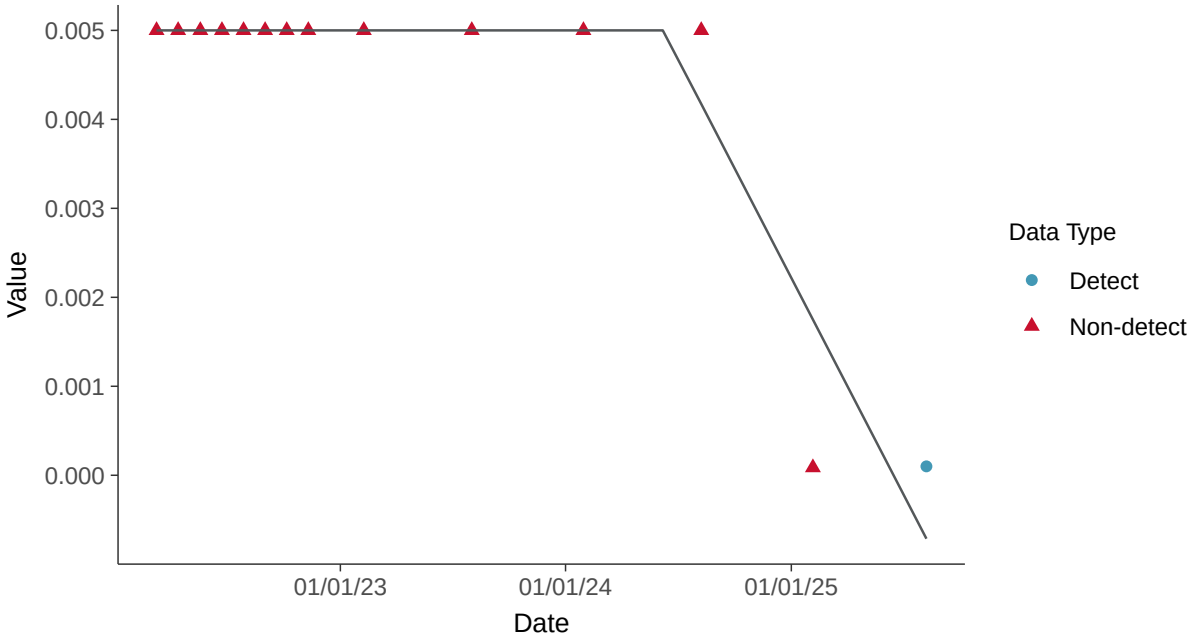
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-7B (mg/l)



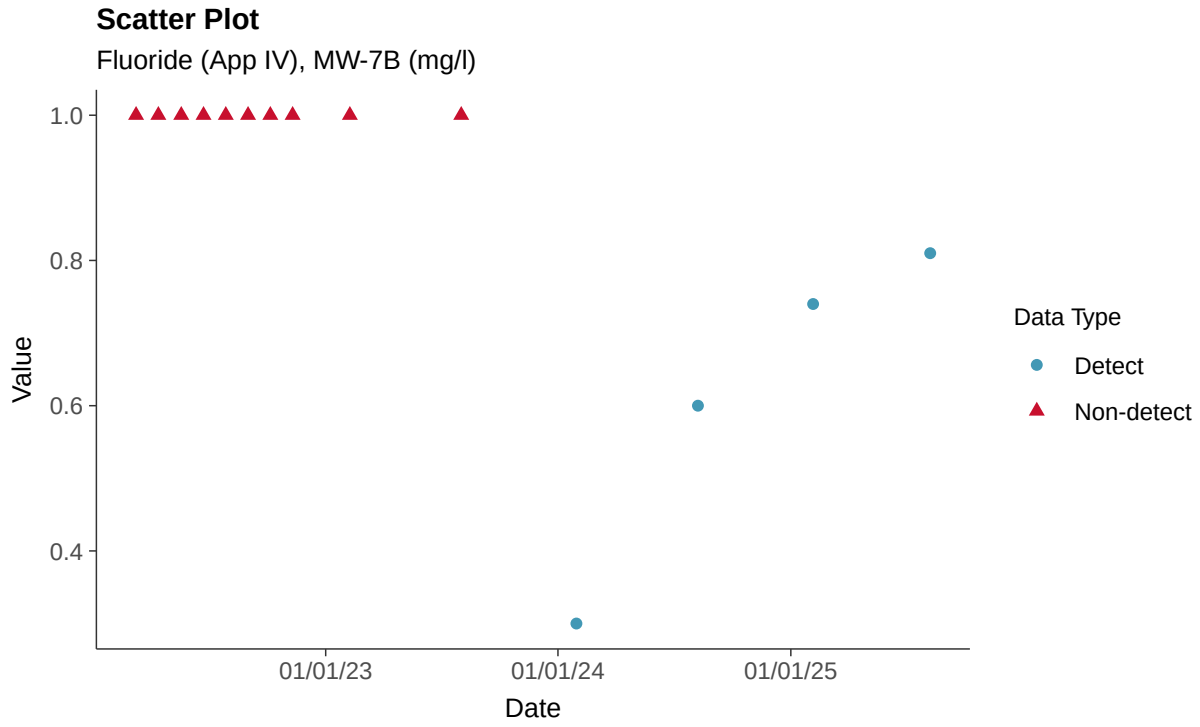
Trend Regression: Piecewise Linear-Linear-Linear

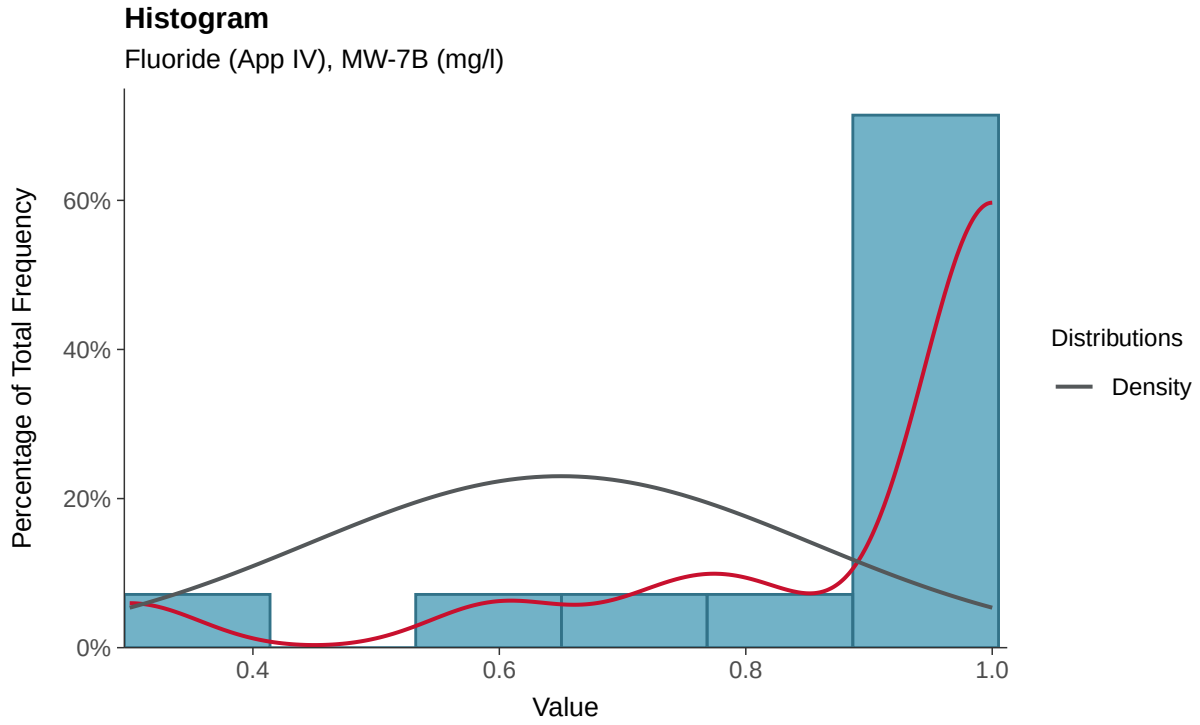
Cobalt, MW-7B (mg/l)



Appendix IV: Fluoride (App IV), MW-7B

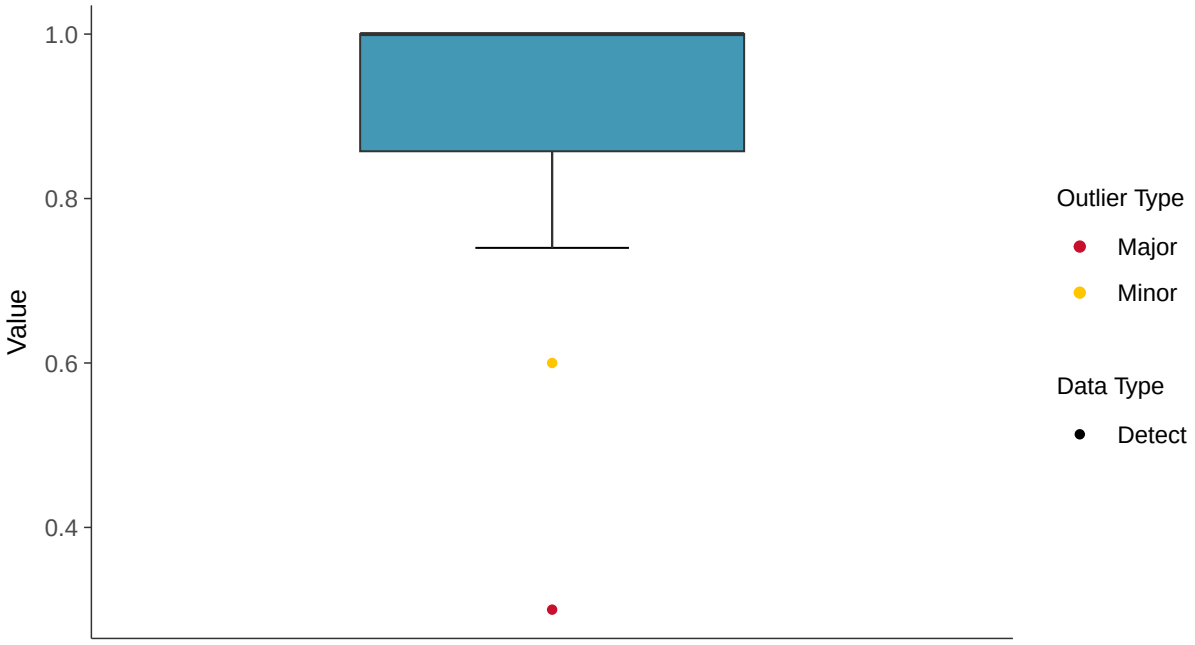
ID: 13_3_113





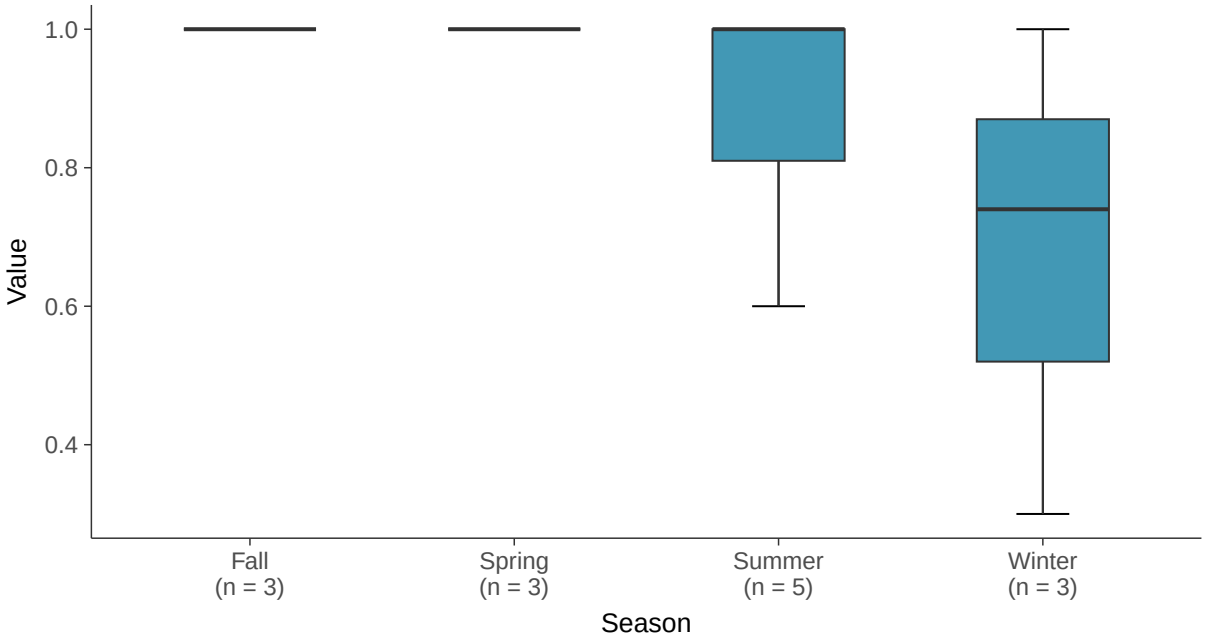
Boxplot

Fluoride (App IV), MW-7B (mg/l)



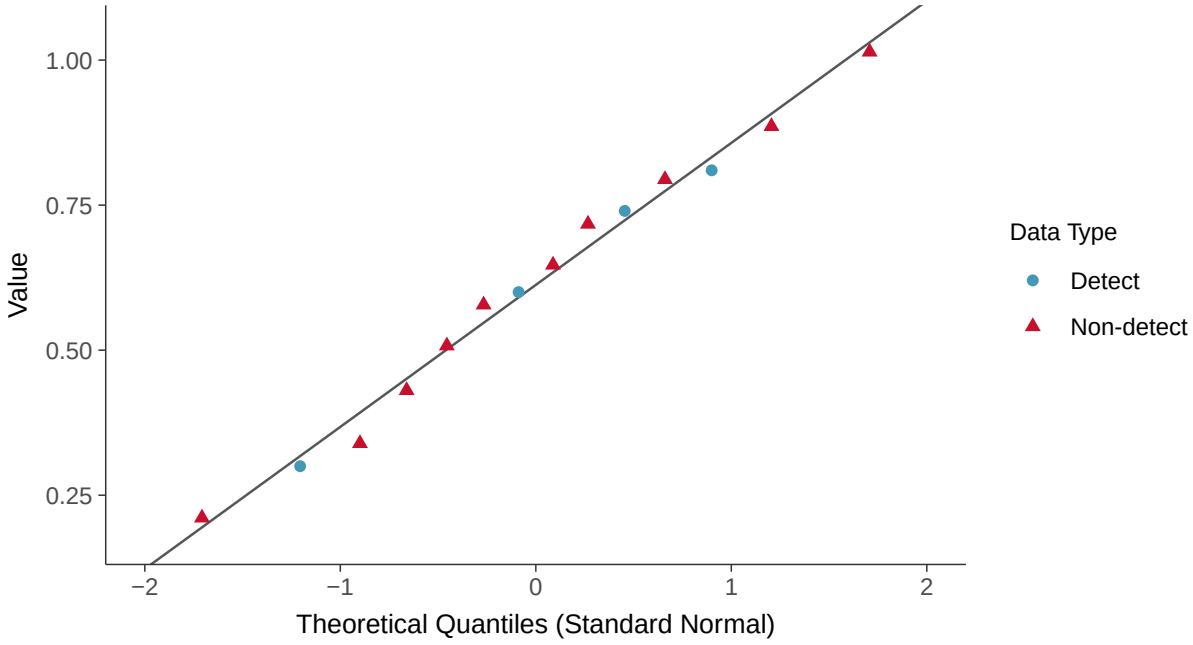
Boxplot by Season

Fluoride (App IV), MW-7B (mg/l)



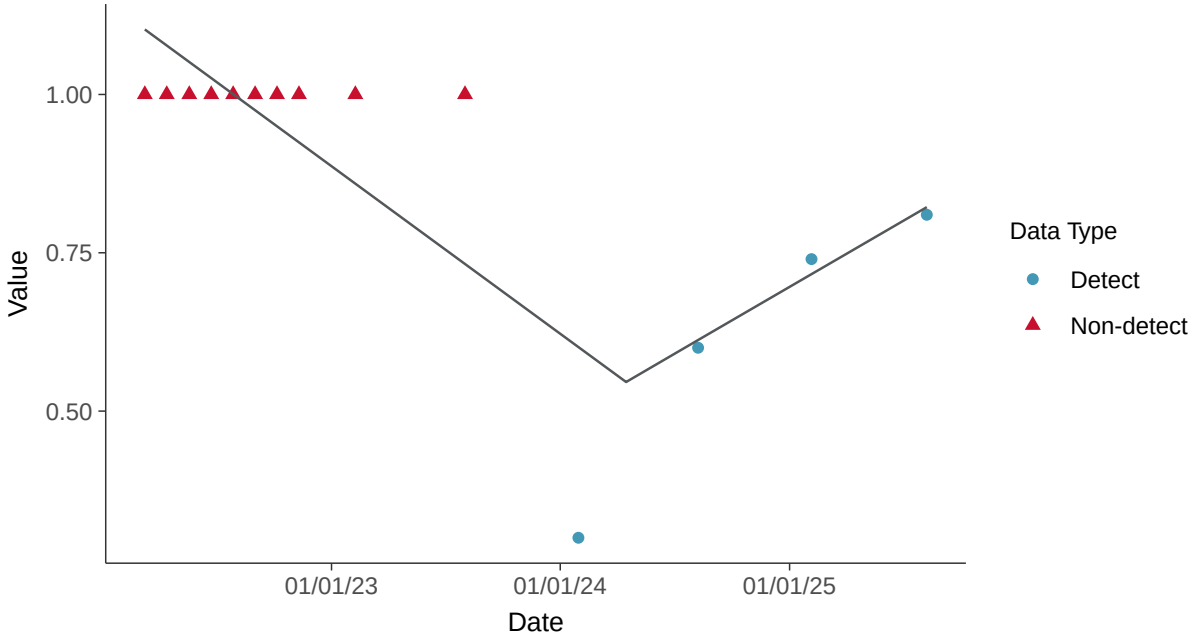
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-7B (mg/l)



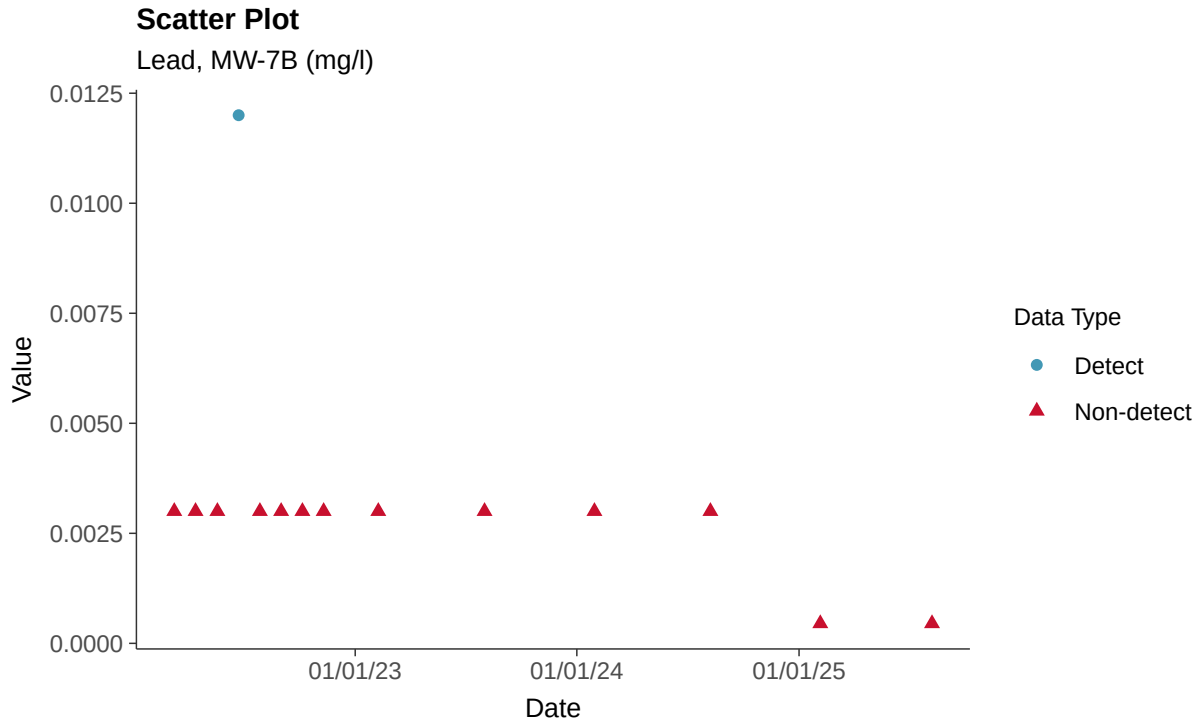
Trend Regression: Piecewise Linear-Linear

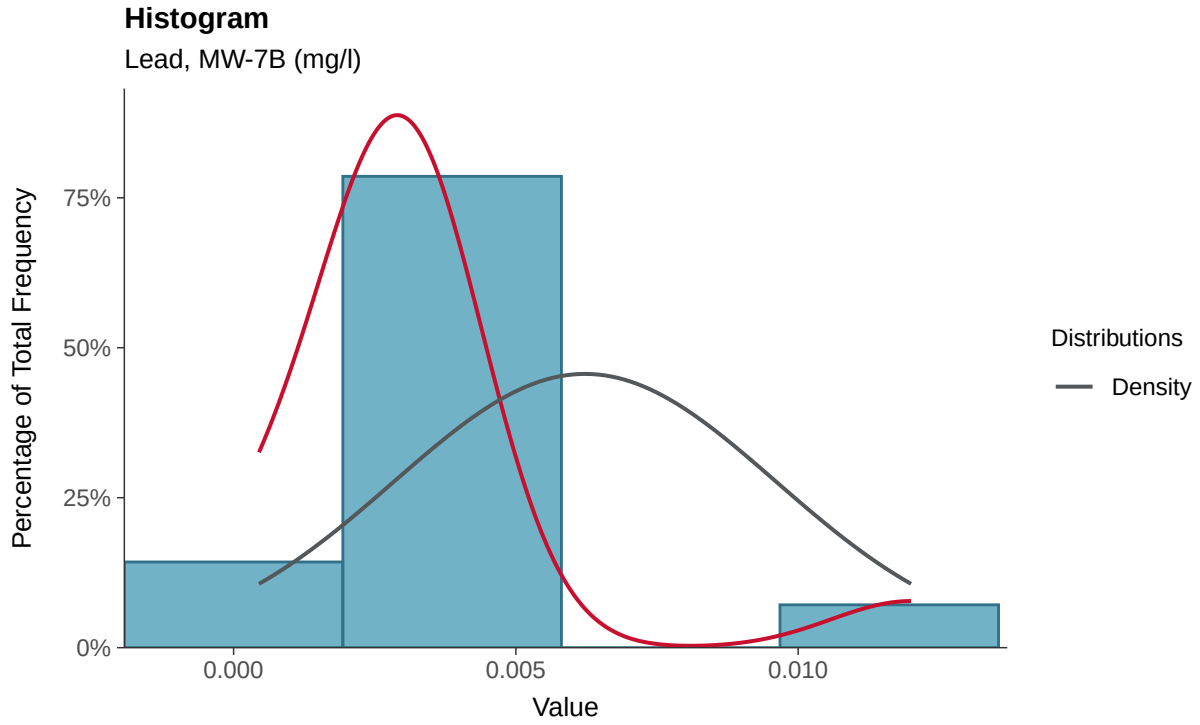
Fluoride (App IV), MW-7B (mg/l)



Appendix IV: Lead, MW-7B

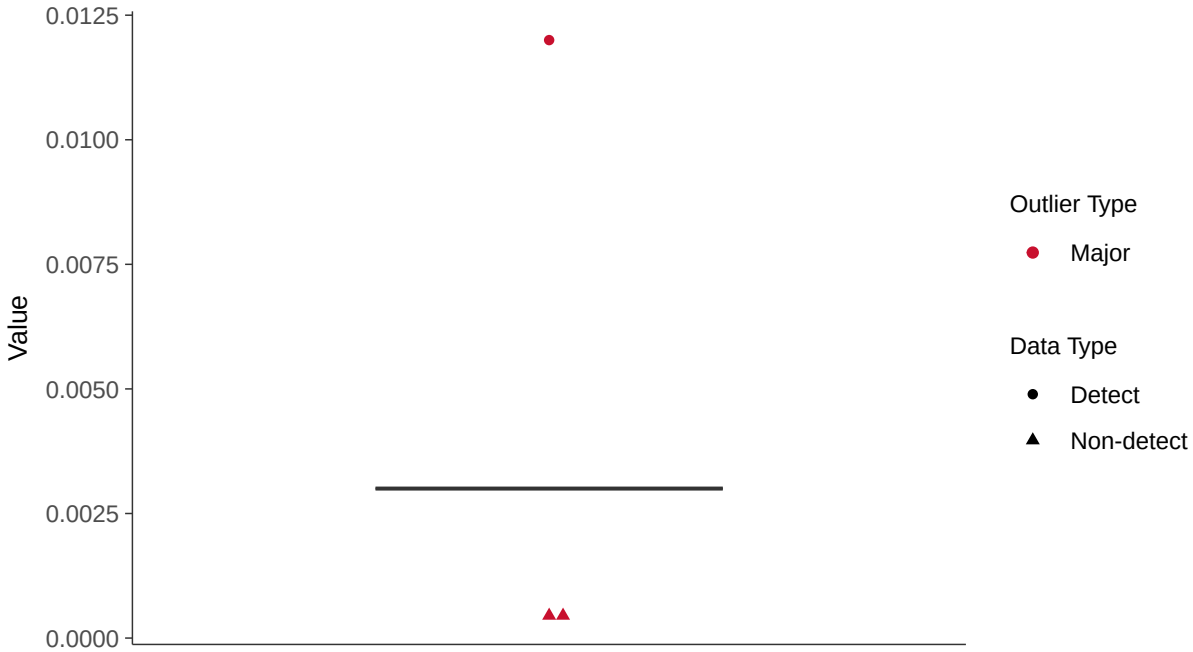
ID: 13_3_115





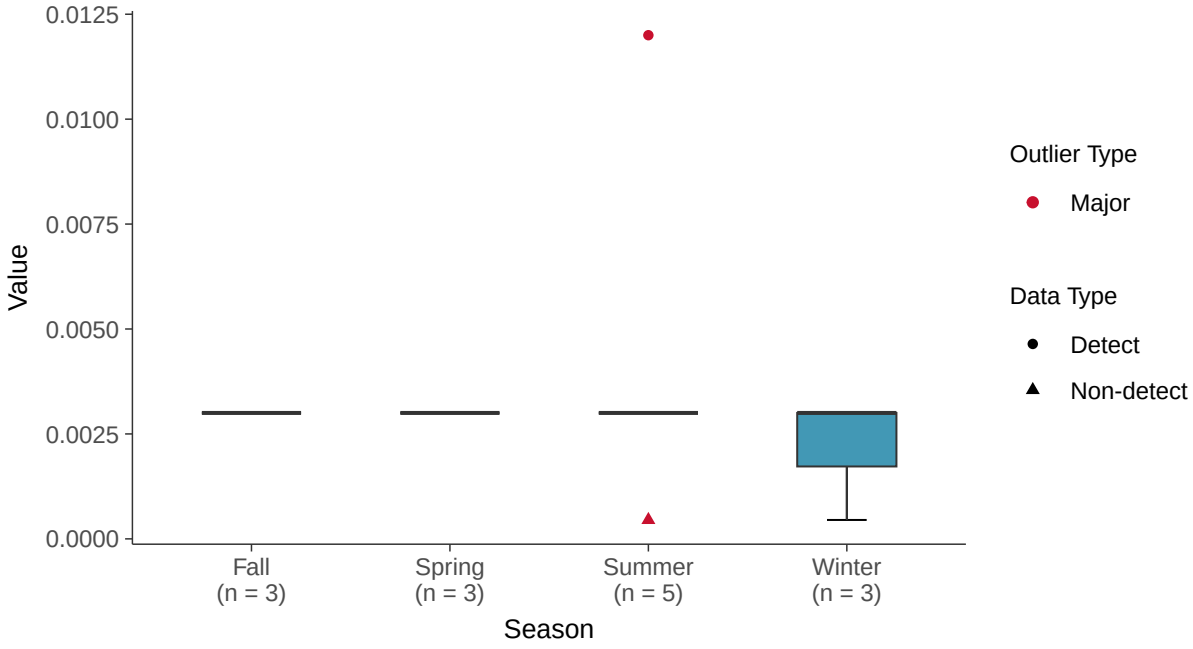
Boxplot

Lead, MW-7B (mg/l)



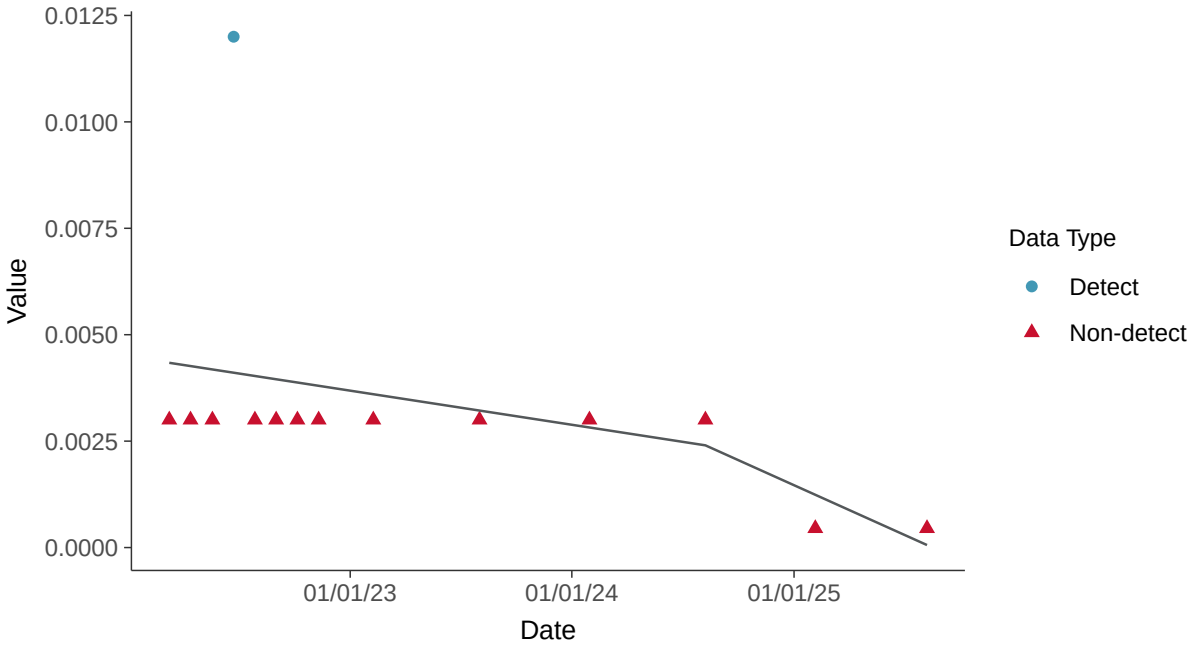
Boxplot by Season

Lead, MW-7B (mg/l)



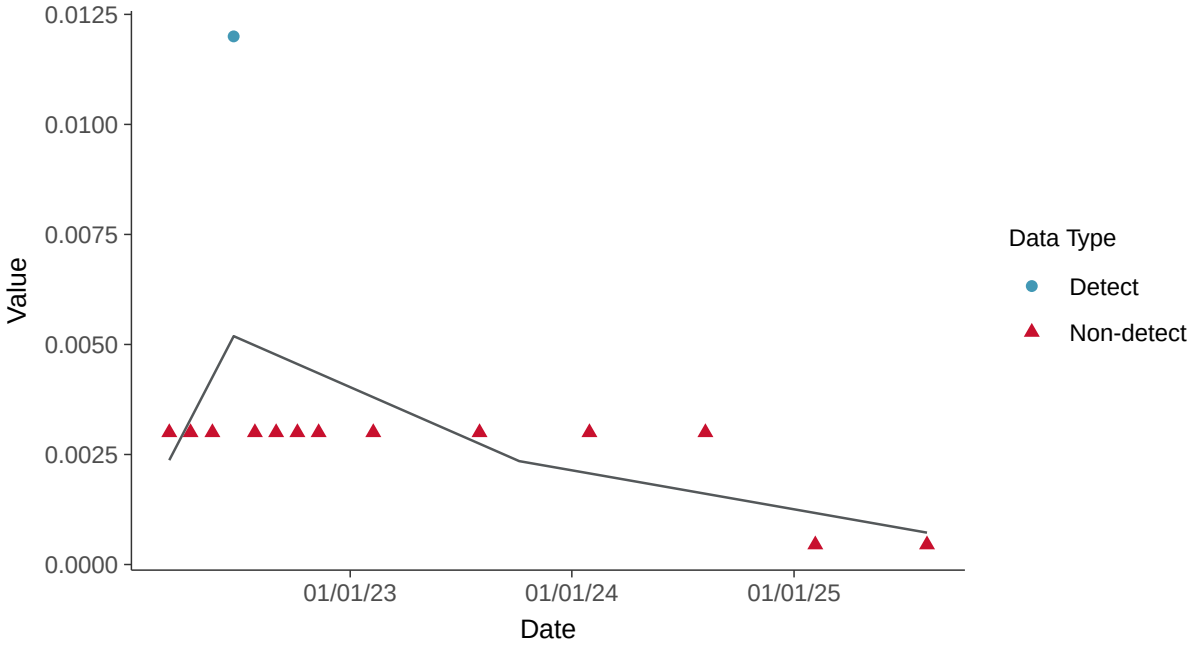
Trend Regression: Piecewise Linear-Linear

Lead, MW-7B (mg/l)



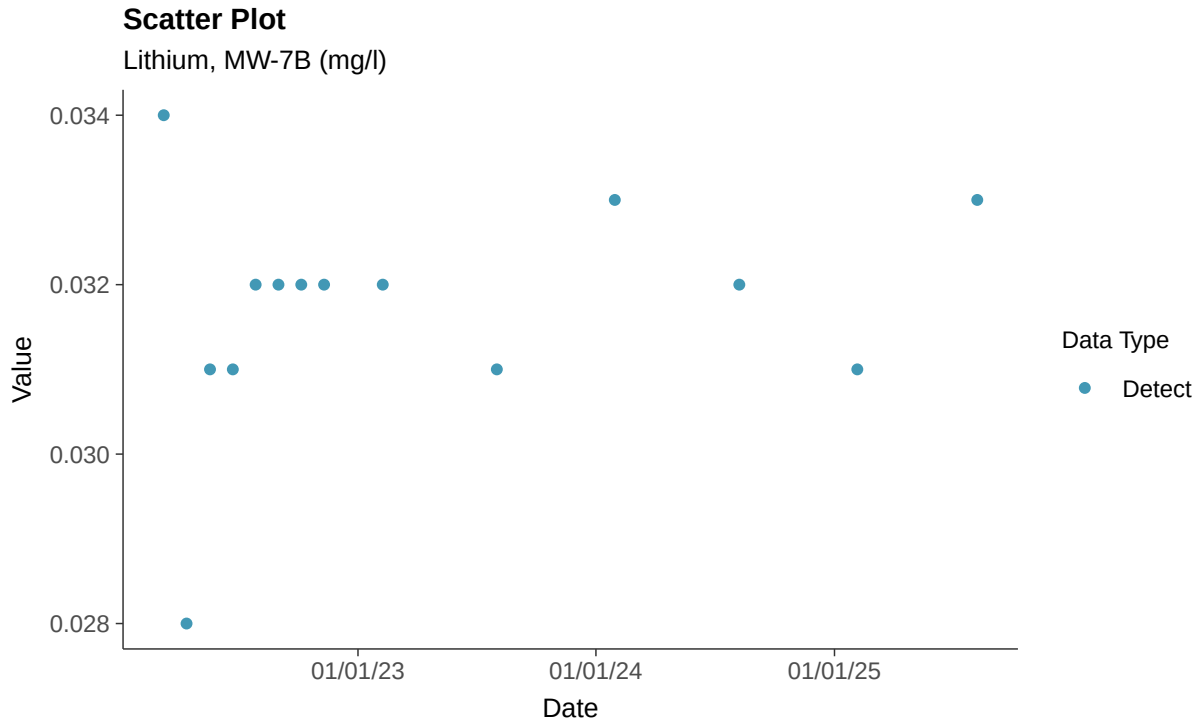
Trend Regression: Piecewise Linear-Linear-Linear

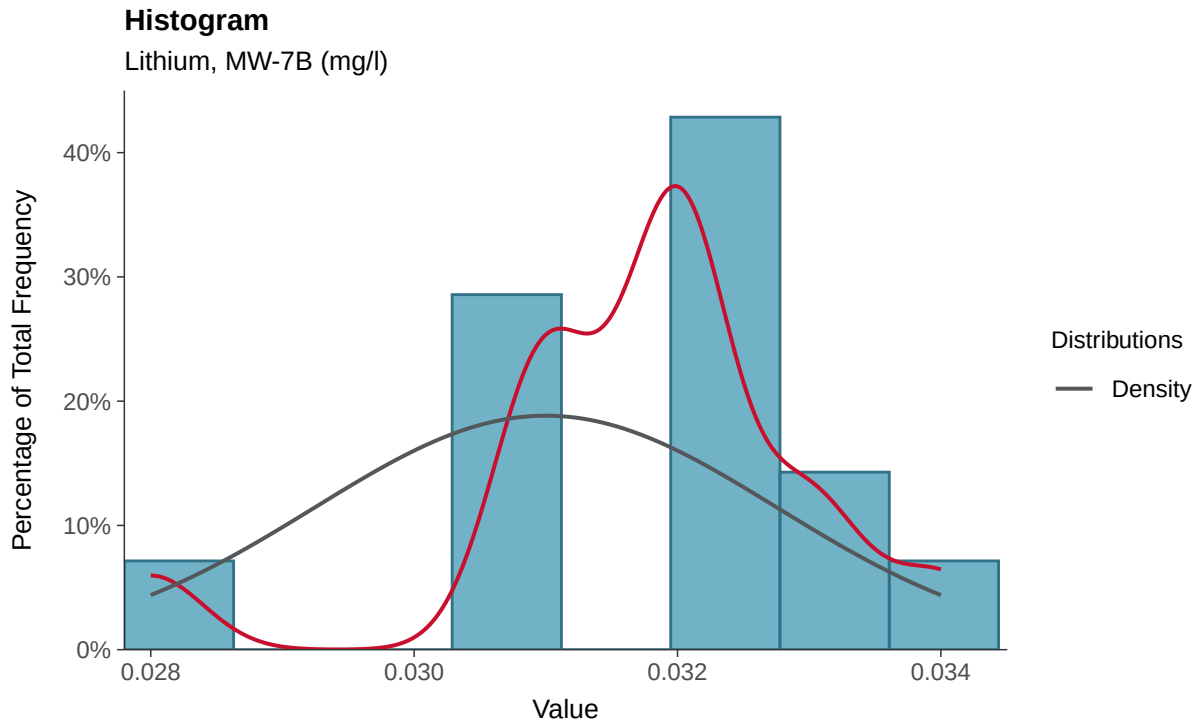
Lead, MW-7B (mg/l)



Appendix IV: Lithium, MW-7B

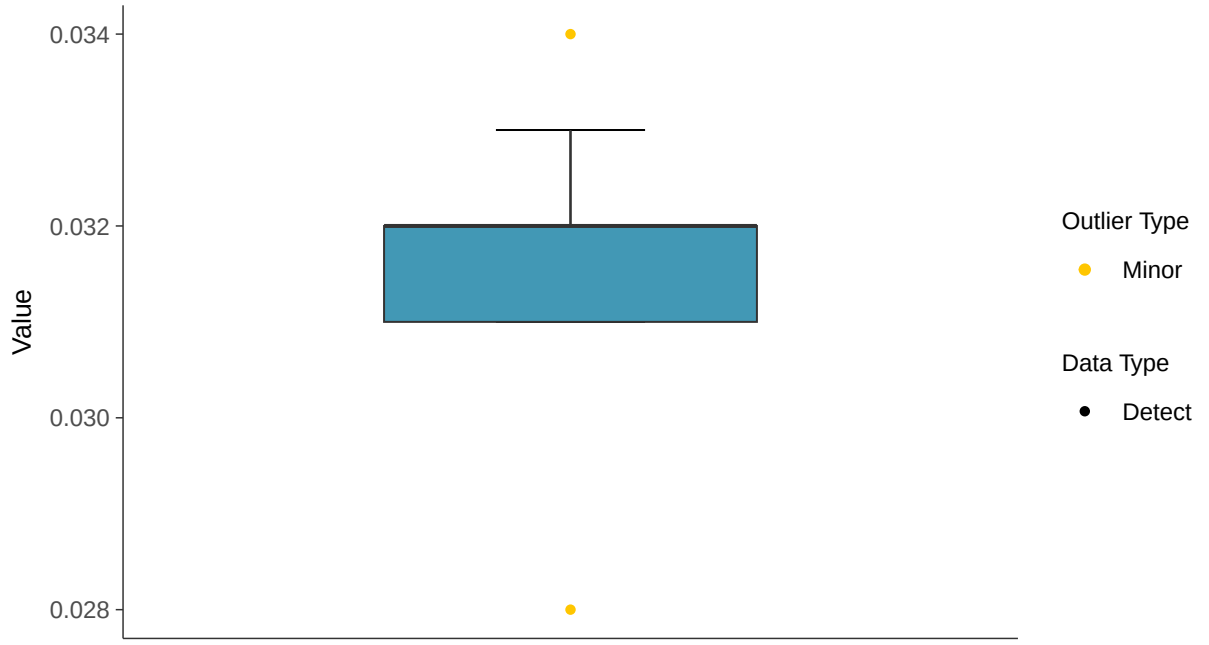
ID: 13_3_116





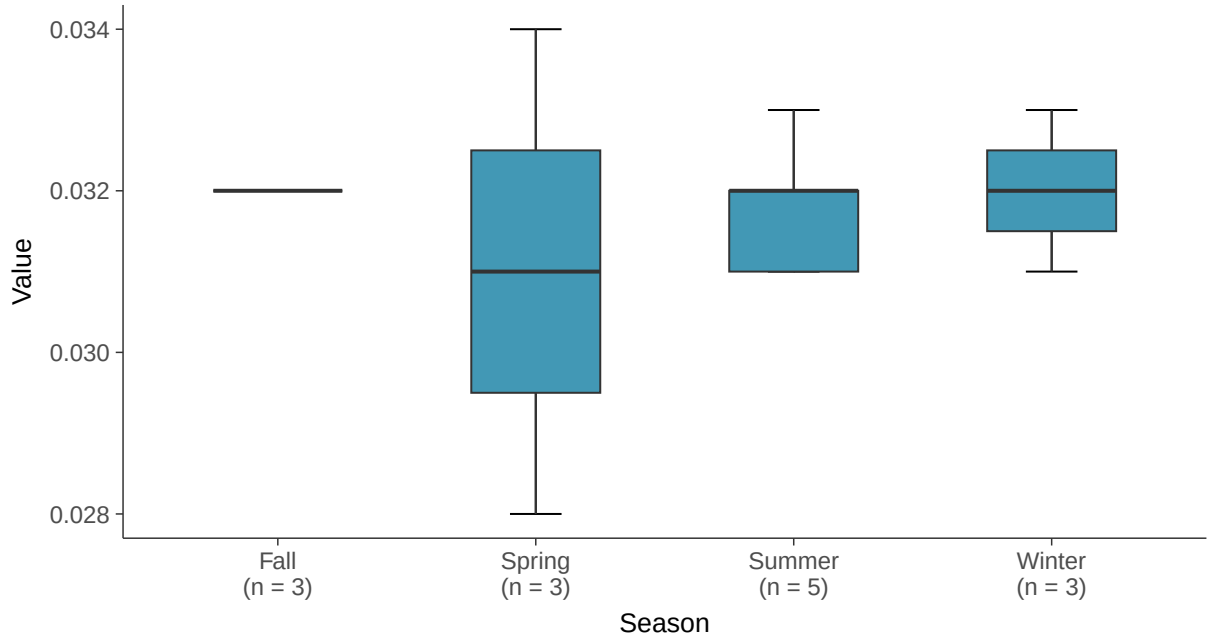
Boxplot

Lithium, MW-7B (mg/l)



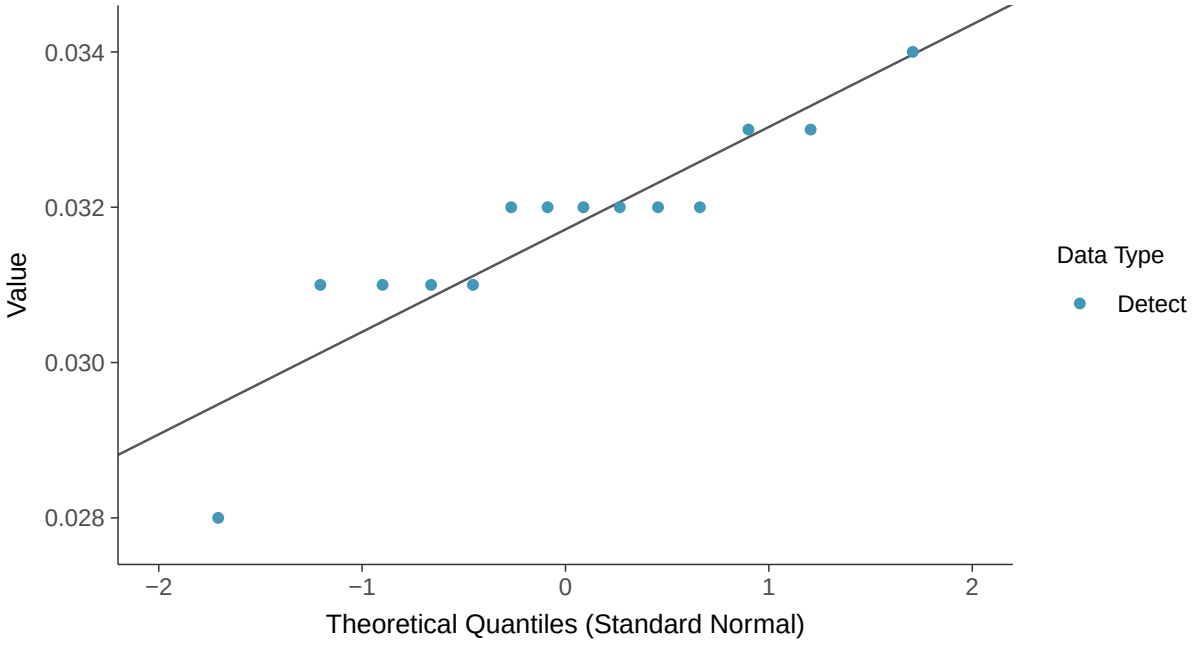
Boxplot by Season

Lithium, MW-7B (mg/l)



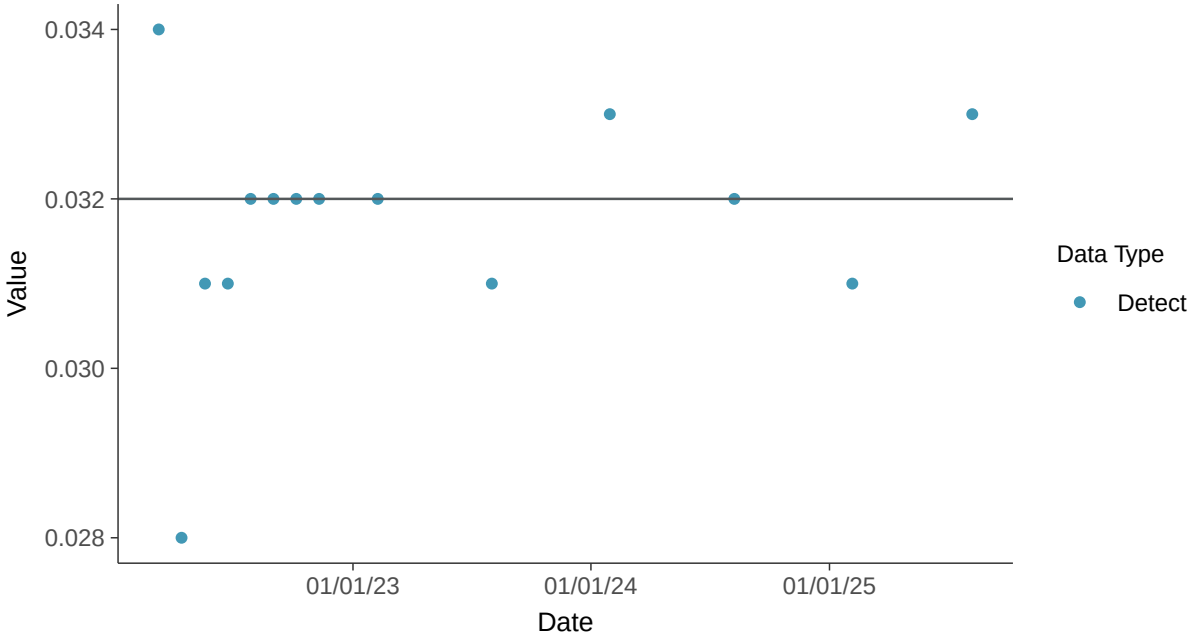
Normal Q-Q plot

Lithium, MW-7B (mg/l)



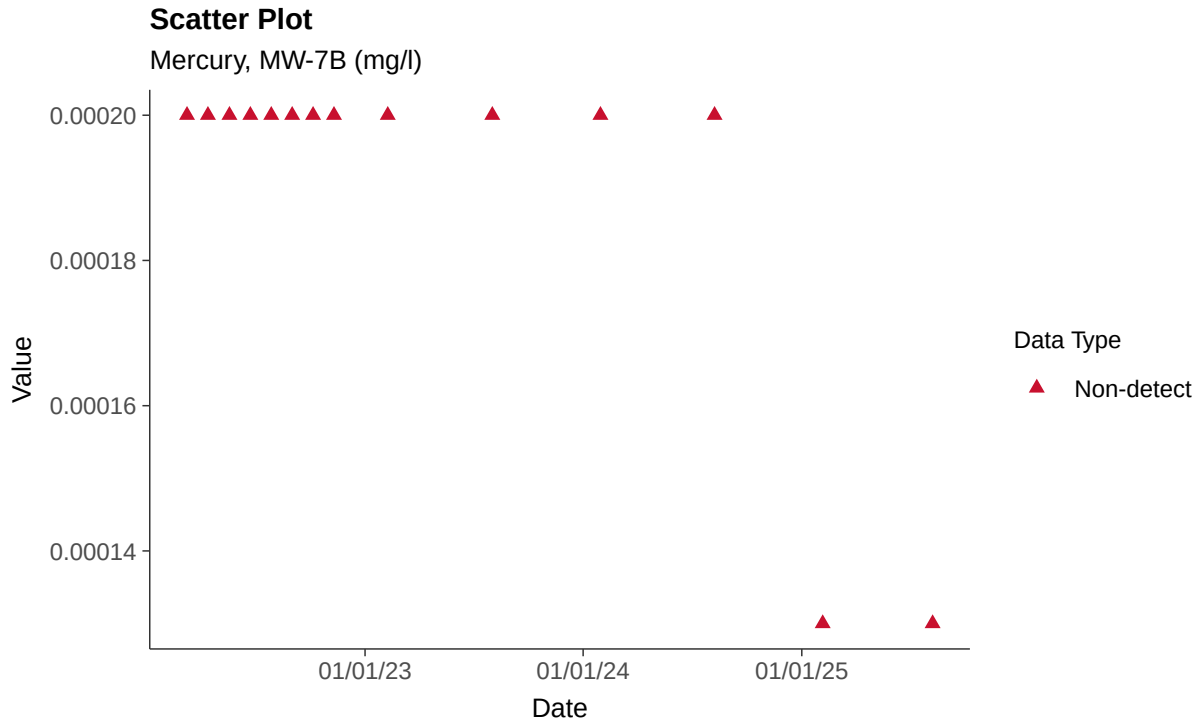
Trend Regression: Mann-Kendall/Theil-Sen Estimate

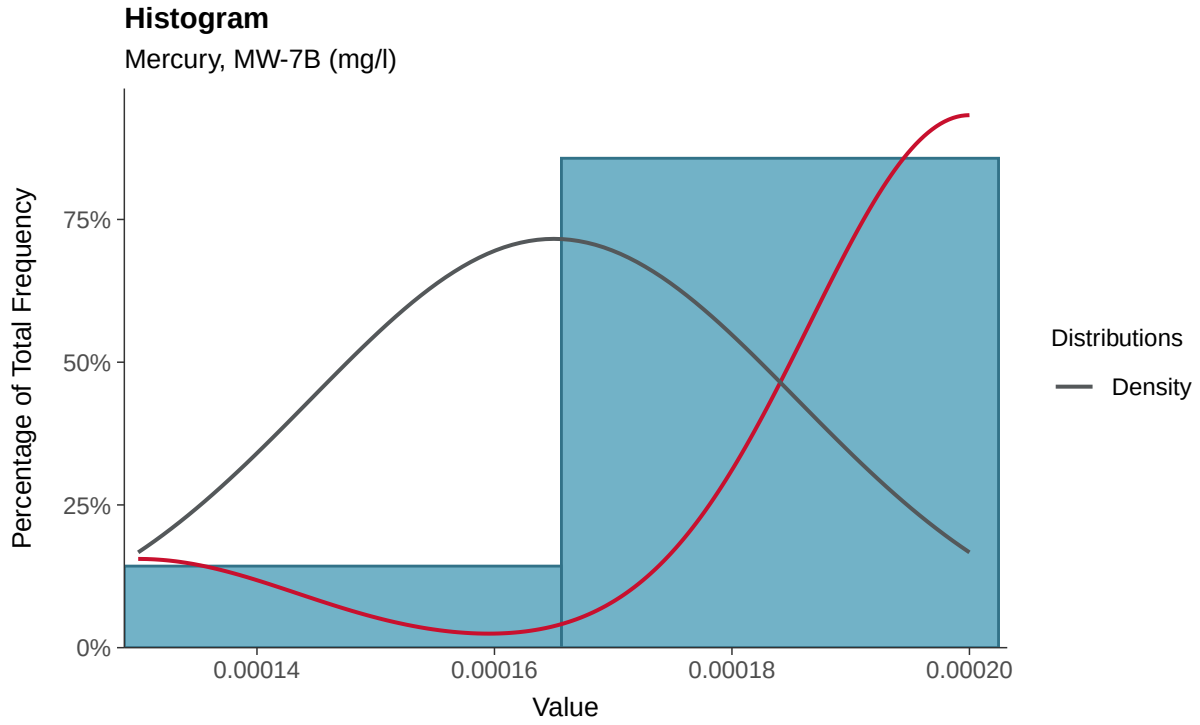
Lithium, MW-7B (mg/l)



Appendix IV: Mercury, MW-7B

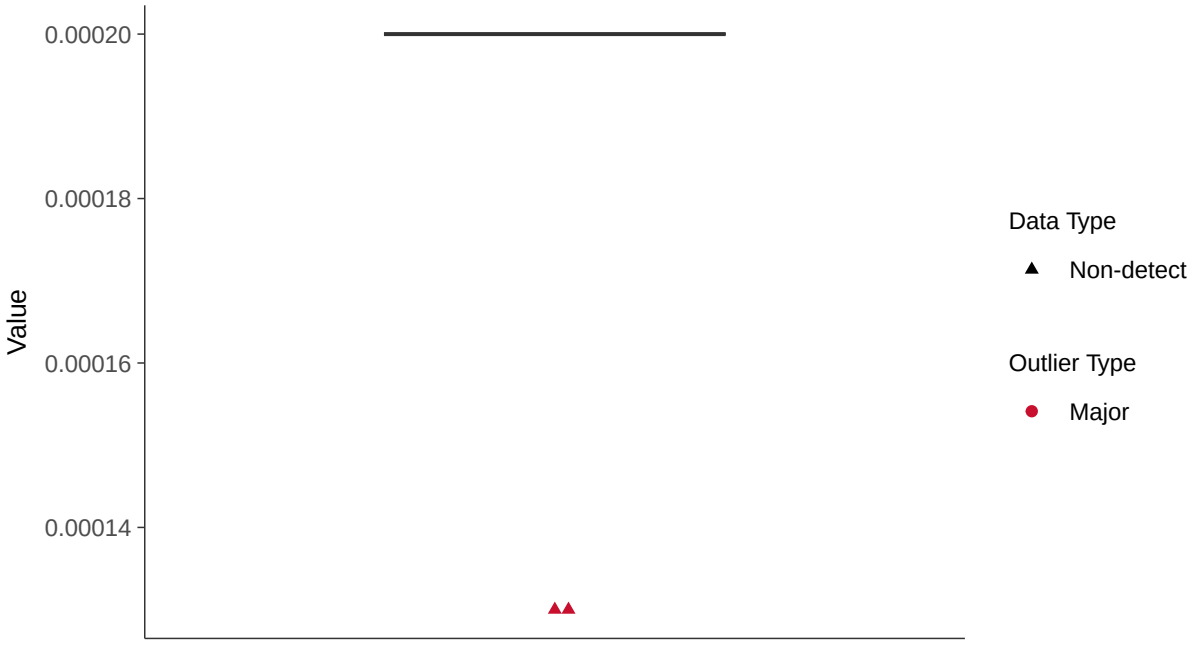
ID: 13_3_117





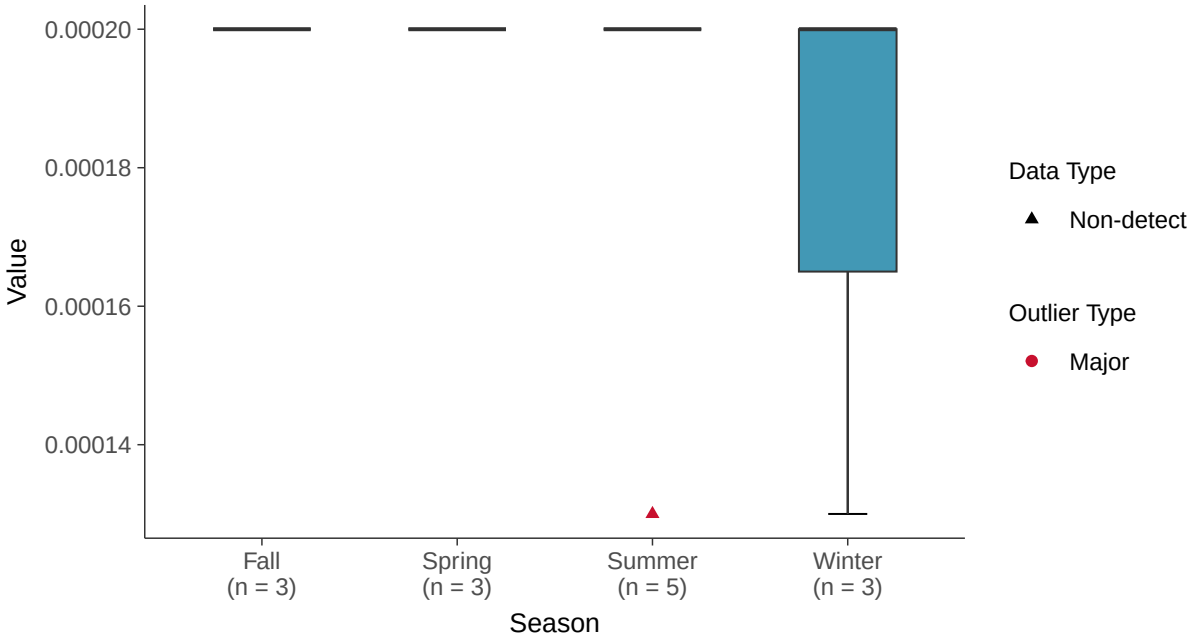
Boxplot

Mercury, MW-7B (mg/l)



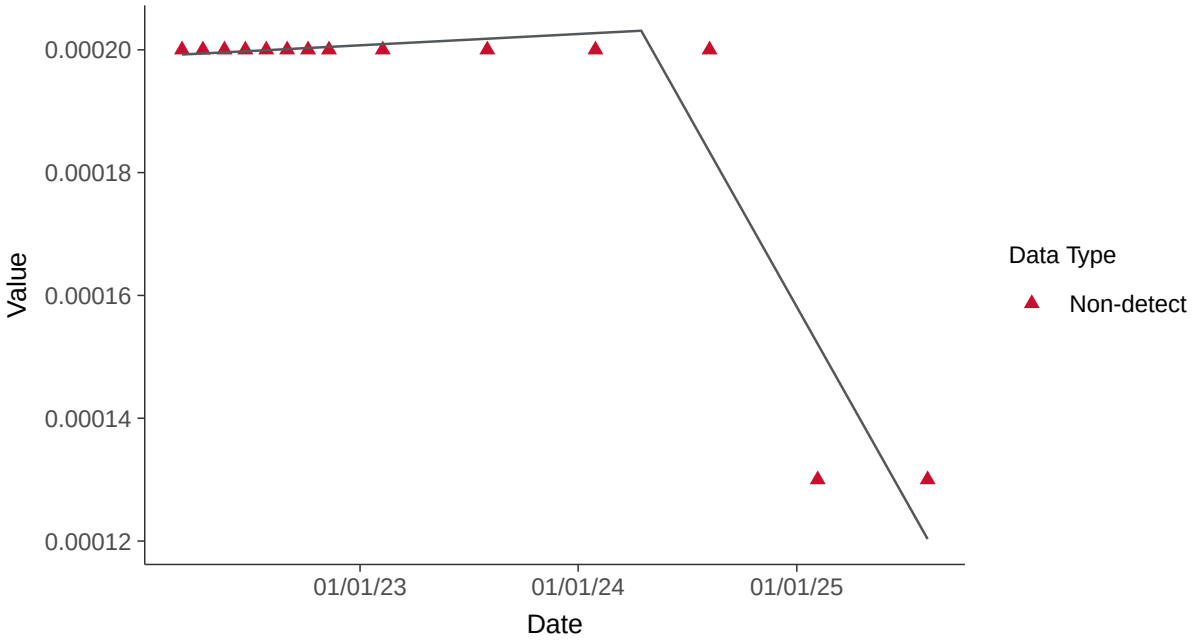
Boxplot by Season

Mercury, MW-7B (mg/l)



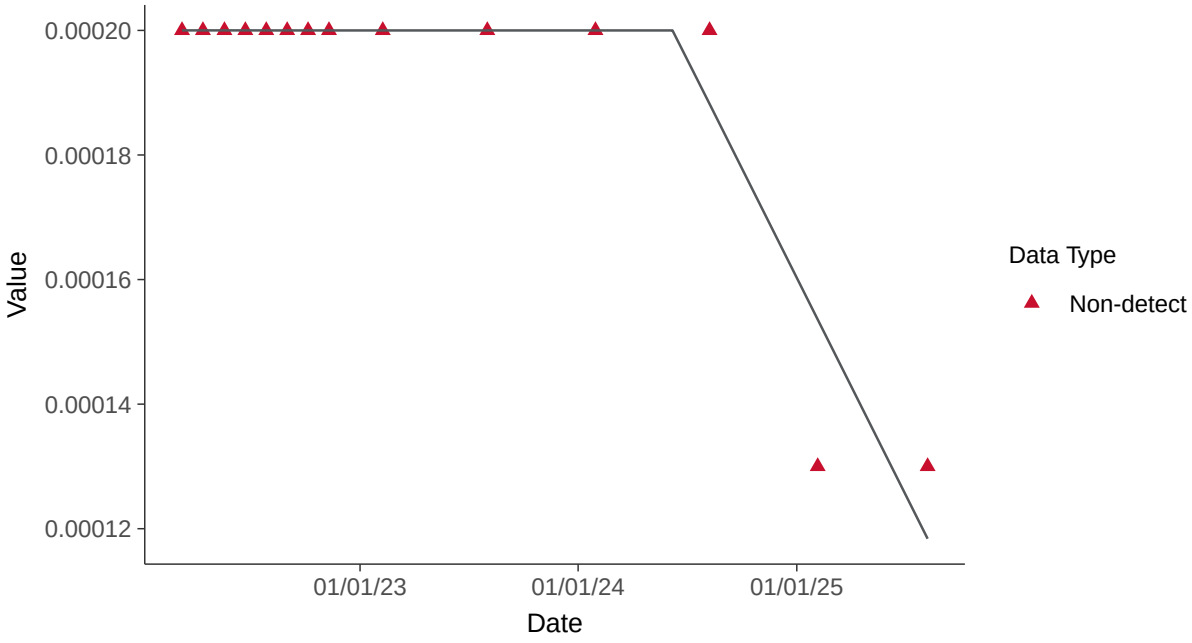
Trend Regression: Piecewise Linear-Linear

Mercury, MW-7B (mg/l)



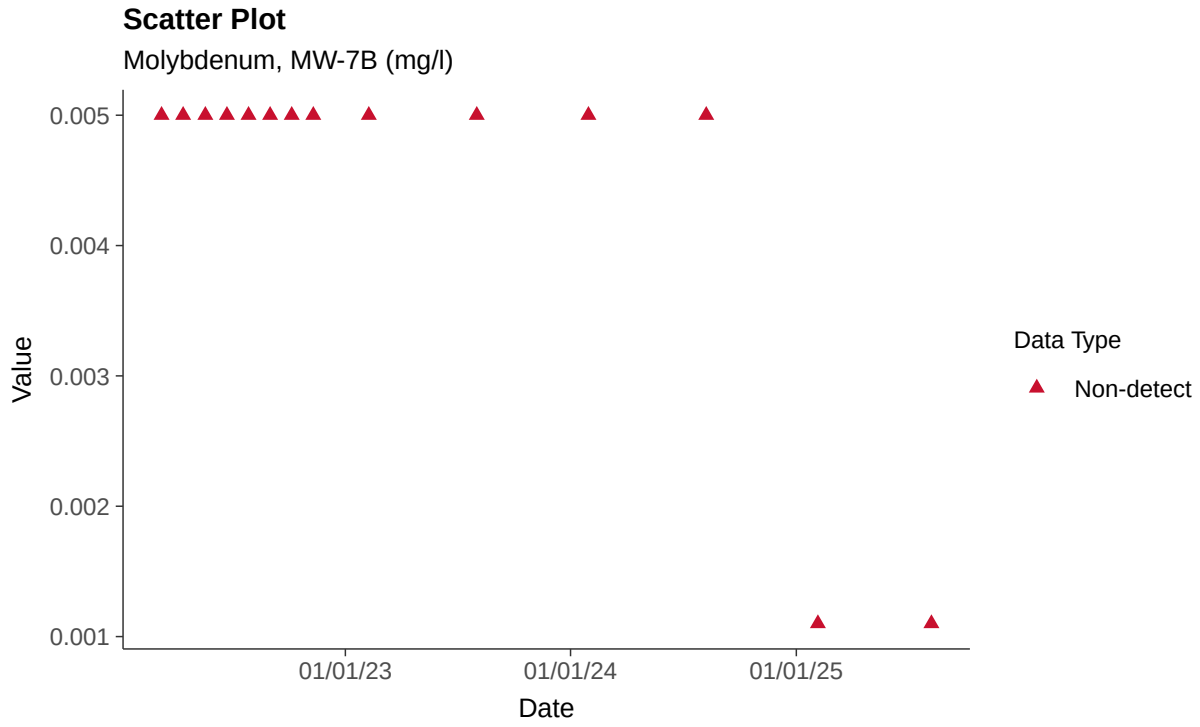
Trend Regression: Piecewise Linear-Linear-Linear

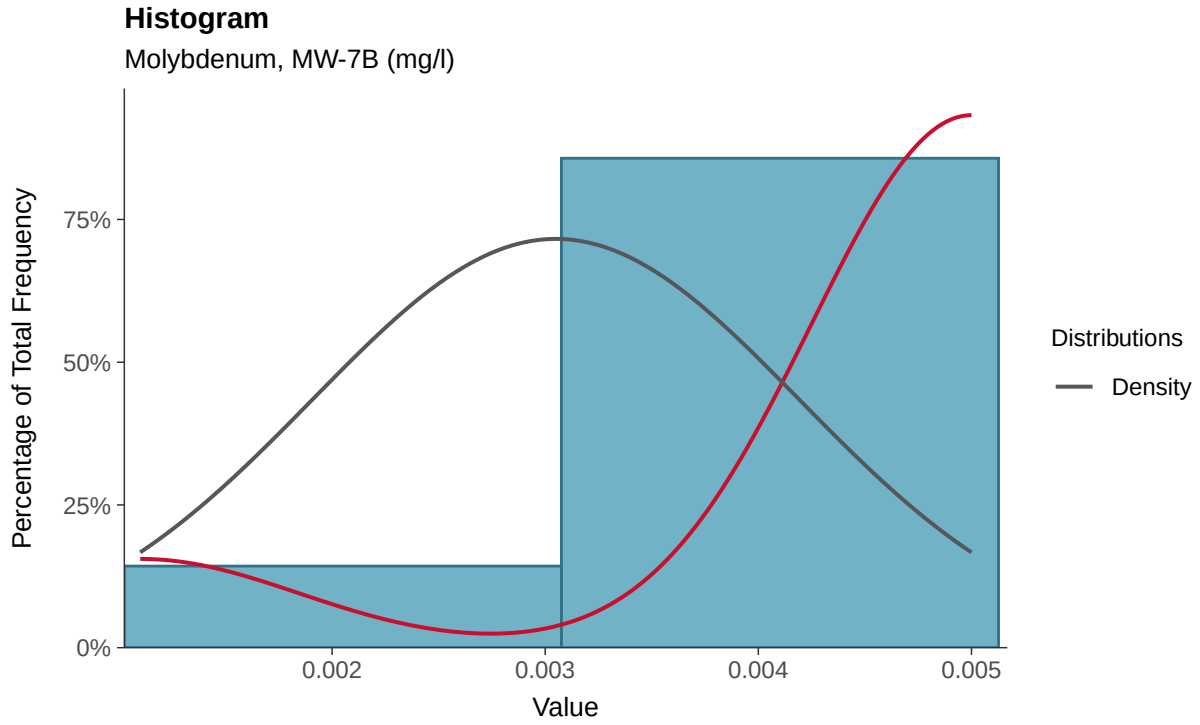
Mercury, MW-7B (mg/l)



Appendix IV: Molybdenum, MW-7B

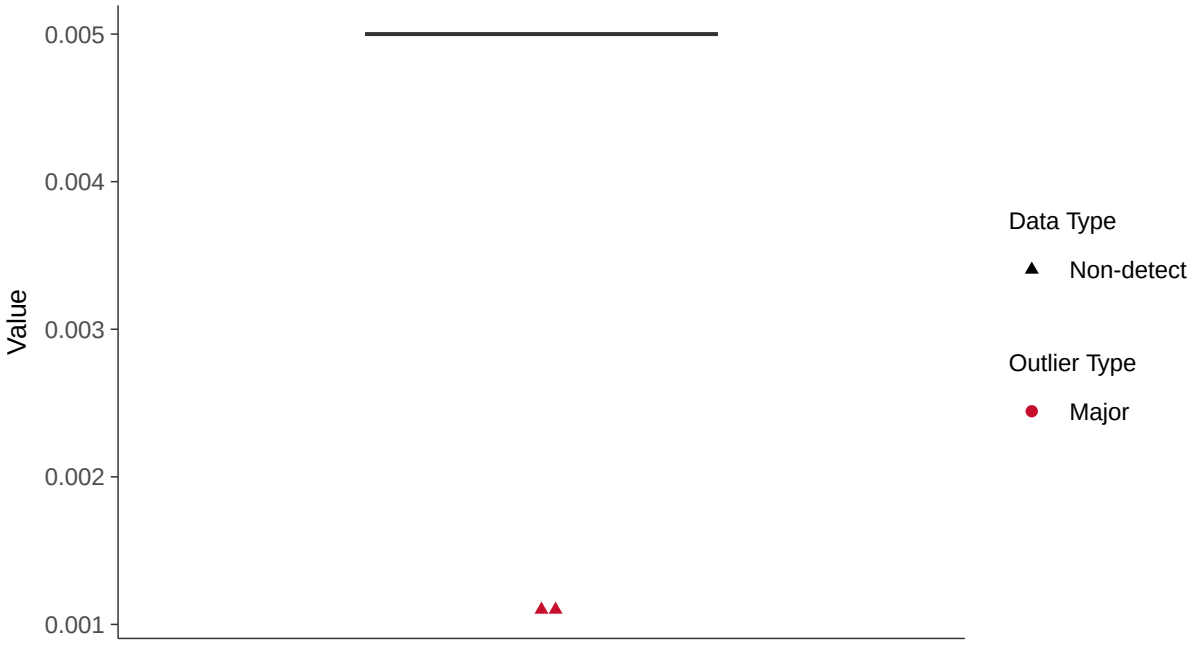
ID: 13_3_118





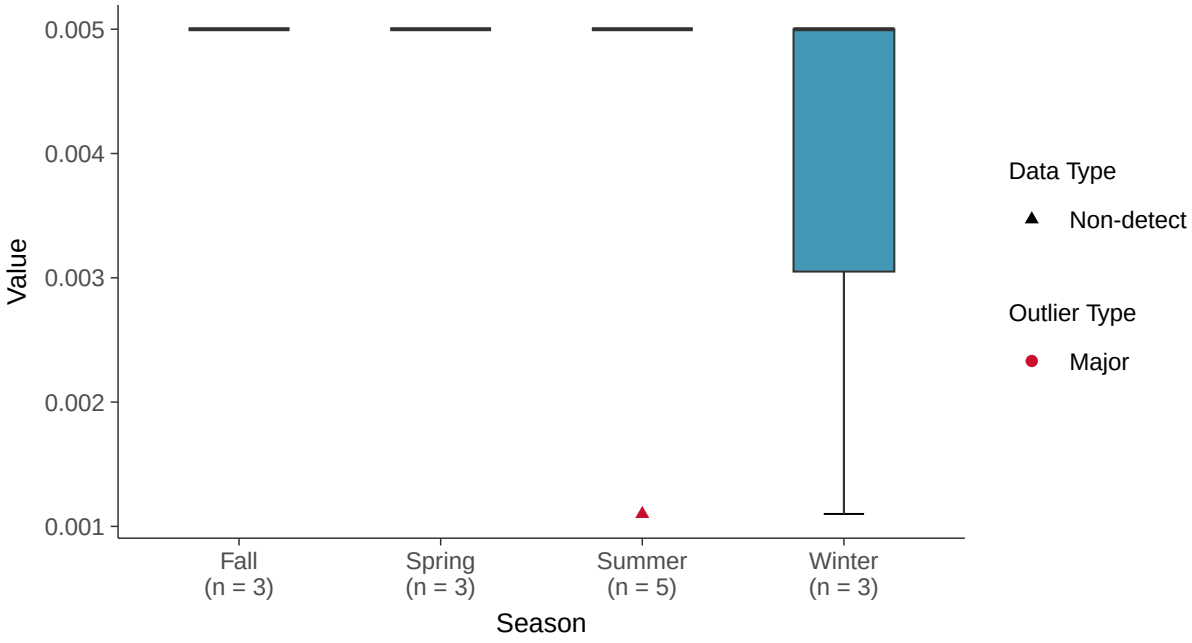
Boxplot

Molybdenum, MW-7B (mg/l)



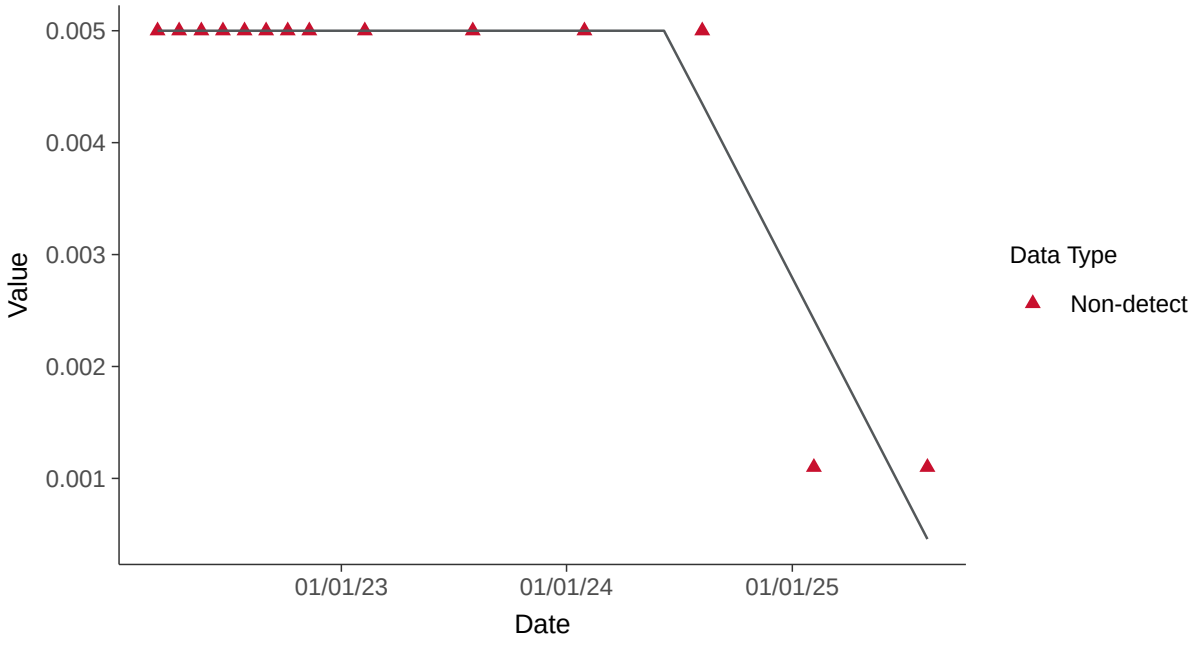
Boxplot by Season

Molybdenum, MW-7B (mg/l)



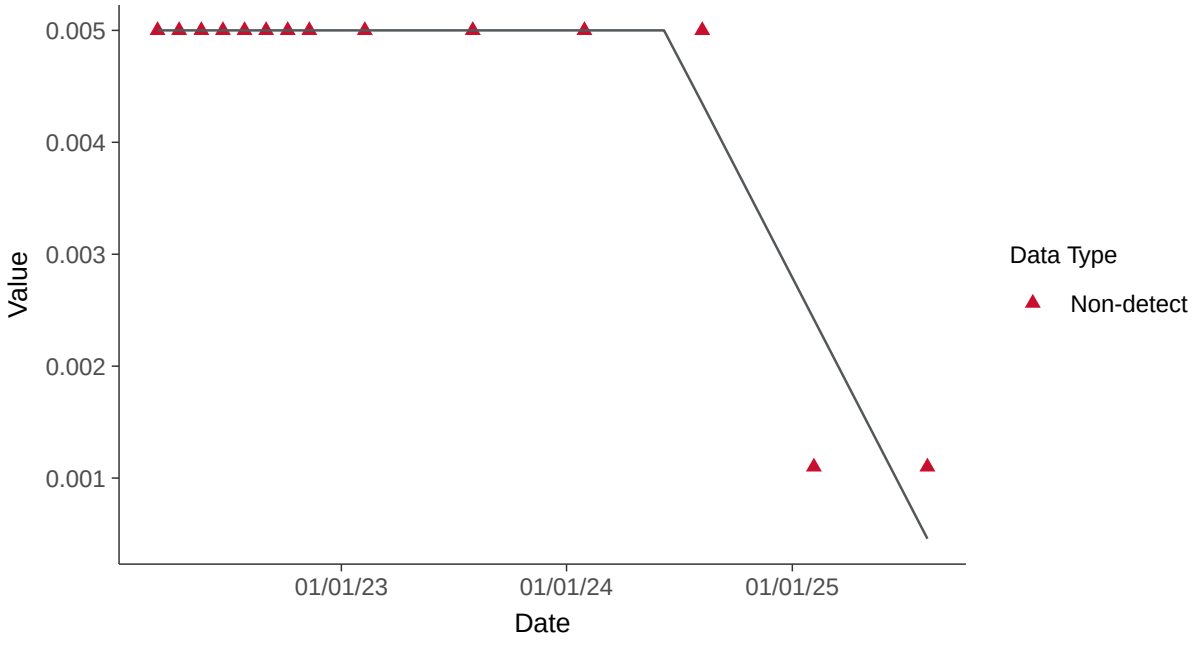
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-7B (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-7B (mg/l)

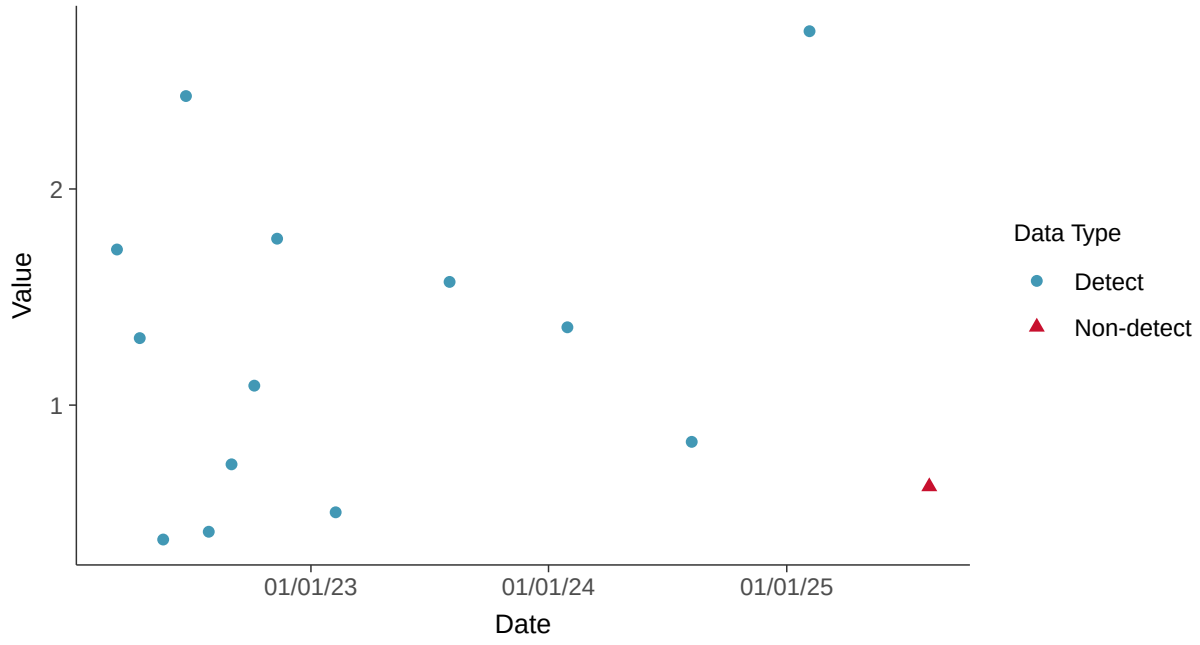


Appendix IV: Radium-226+228, MW-7B

ID: 13_3_121

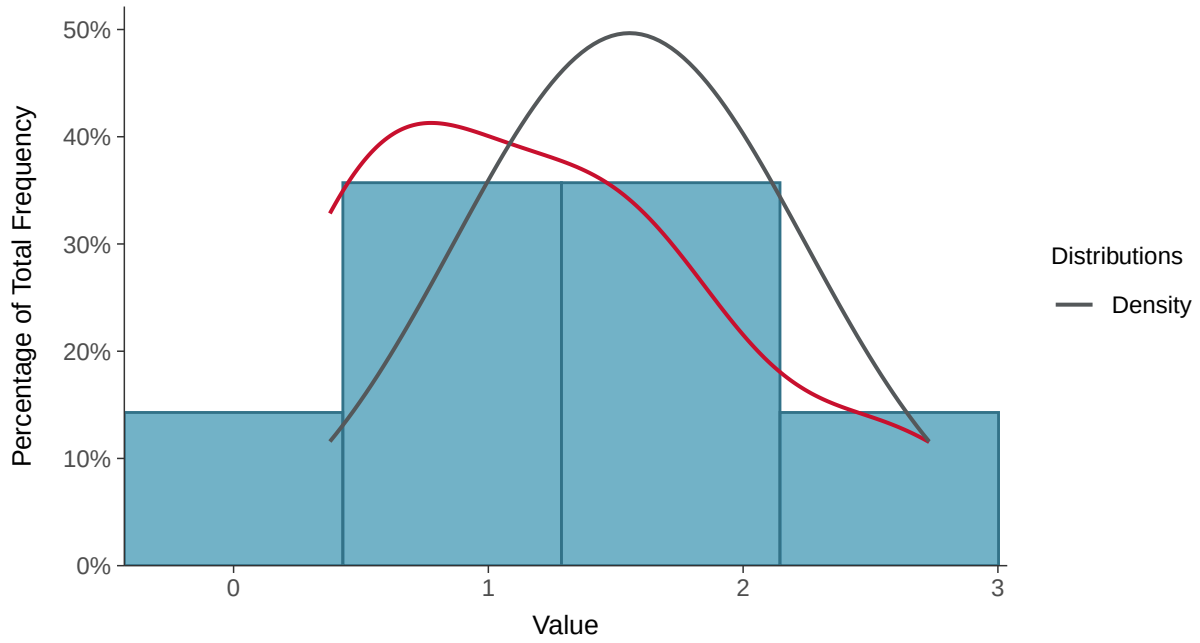
Scatter Plot

Radium-226+228, MW-7B (pci/l)



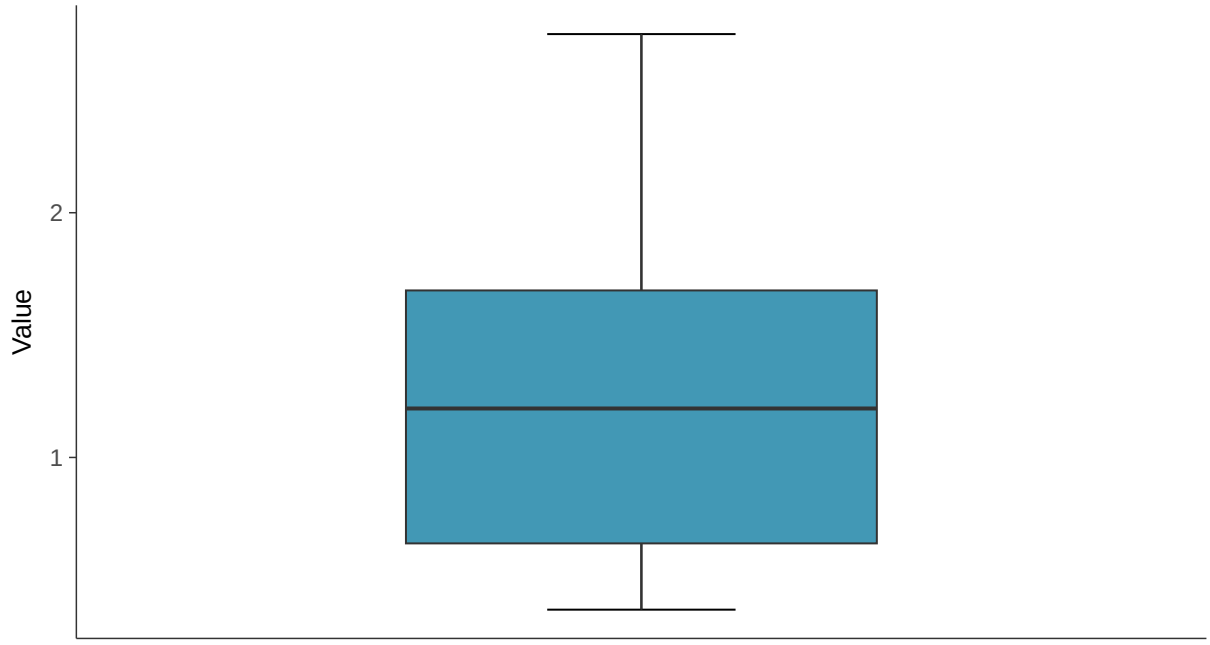
Histogram

Radium-226+228, MW-7B (pci/l)



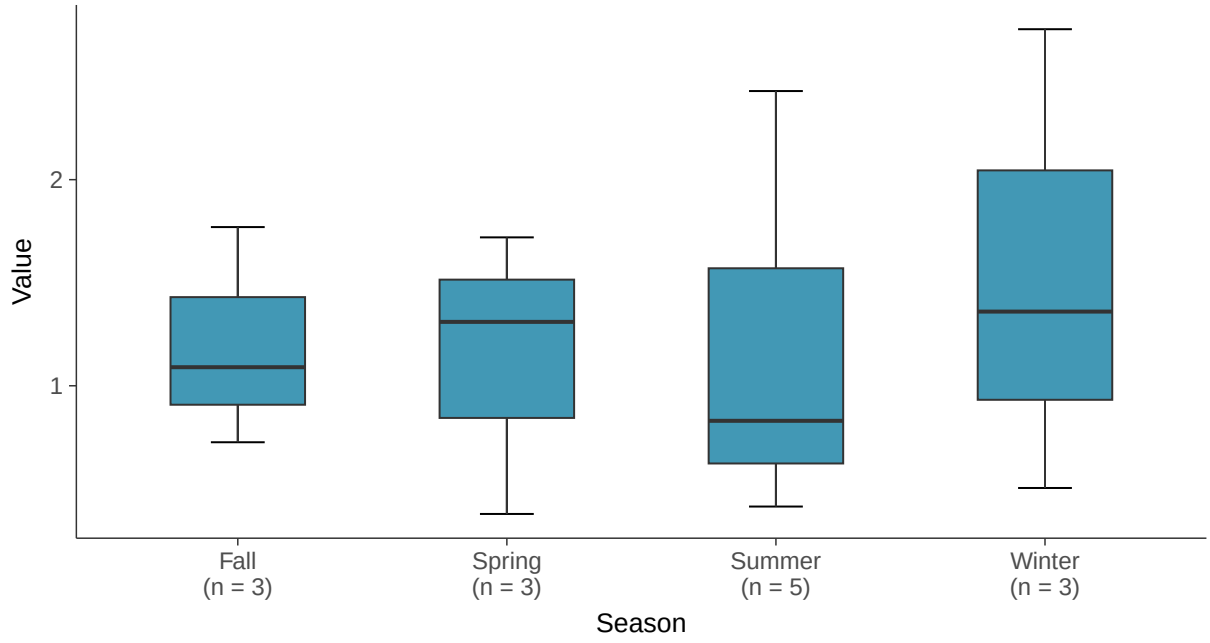
Boxplot

Radium-226+228, MW-7B (pci/l)



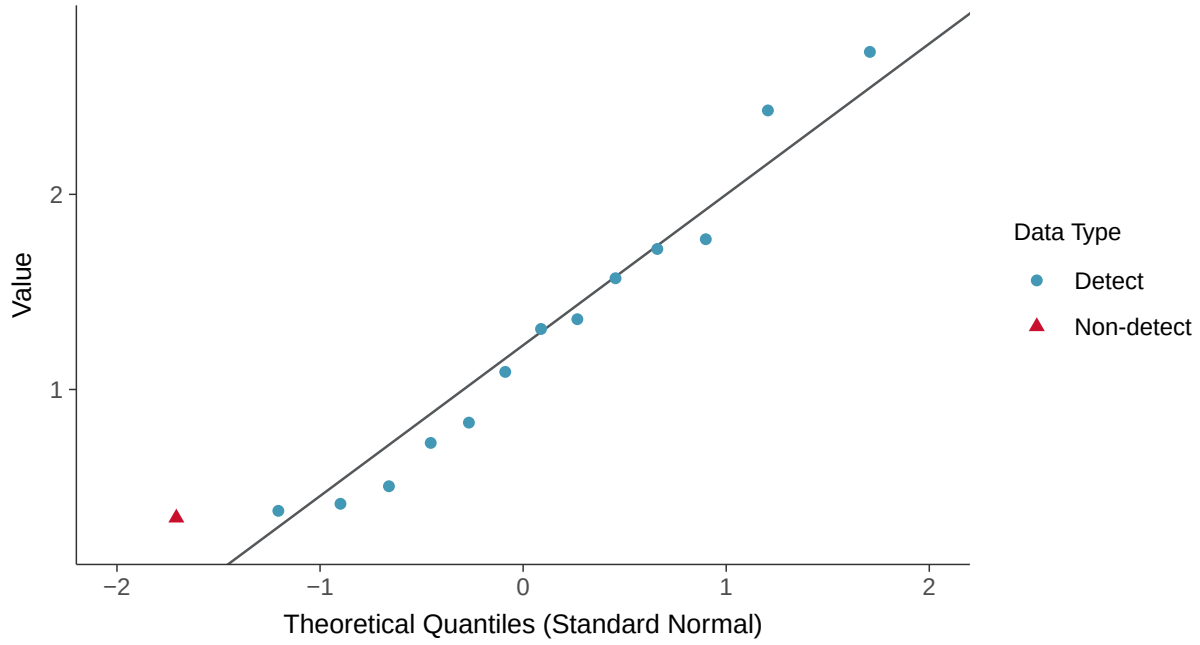
Boxplot by Season

Radium-226+228, MW-7B (pci/l)



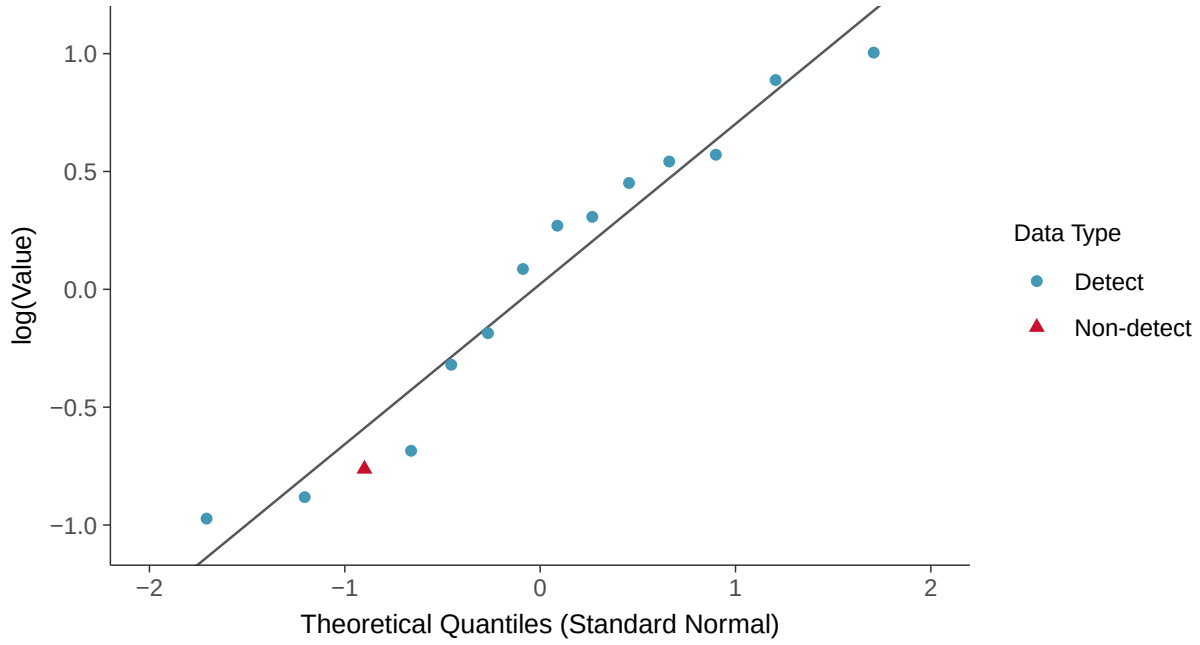
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-7B (pci/l)



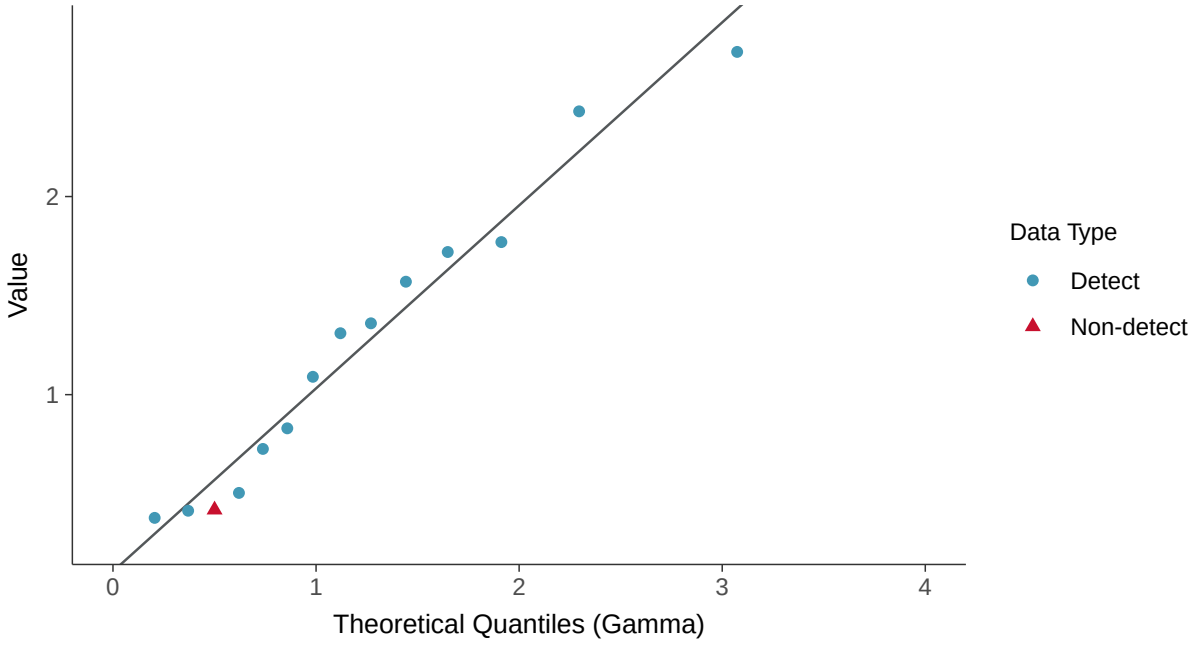
Lognormal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-7B (pci/l)



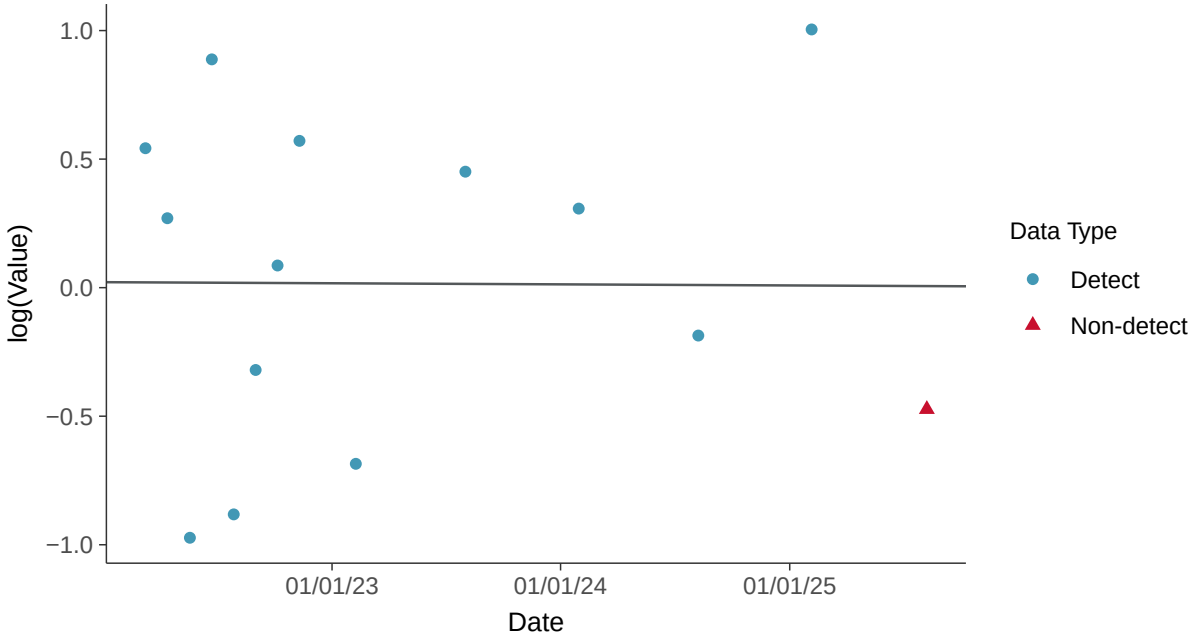
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-7B (pci/l)



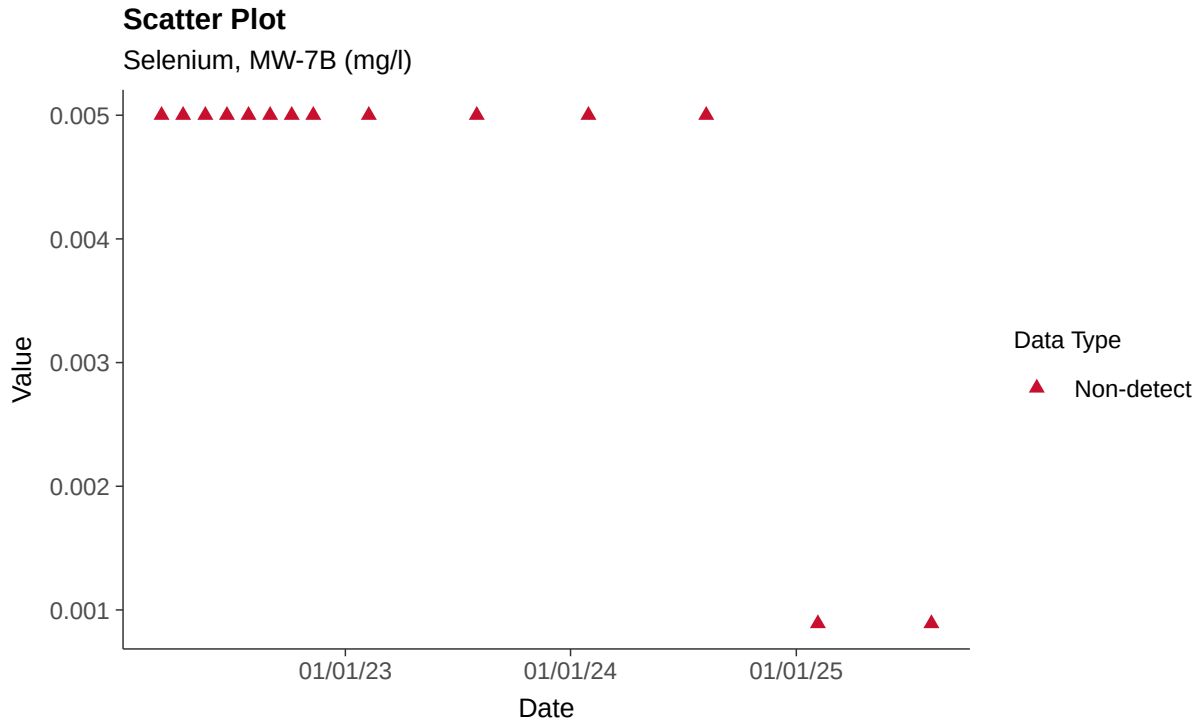
Trend Regression: Lognormal MLE

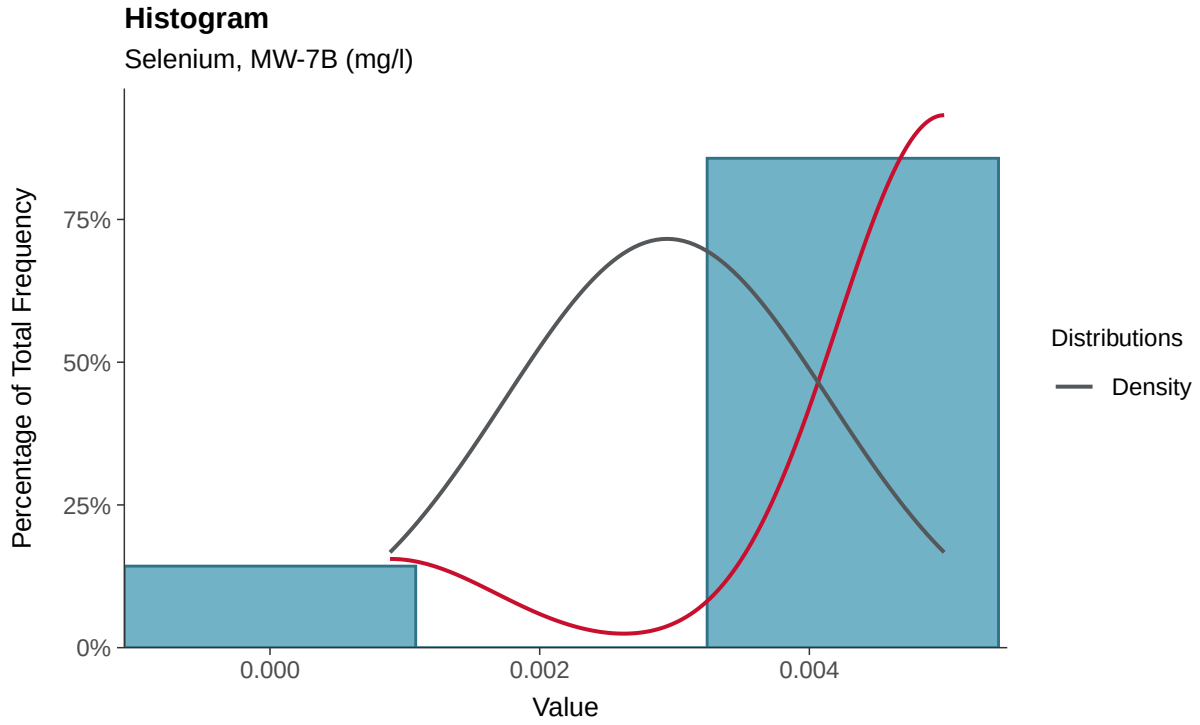
Radium-226+228, MW-7B (pci/l)



Appendix IV: Selenium, MW-7B

ID: 13_3_122



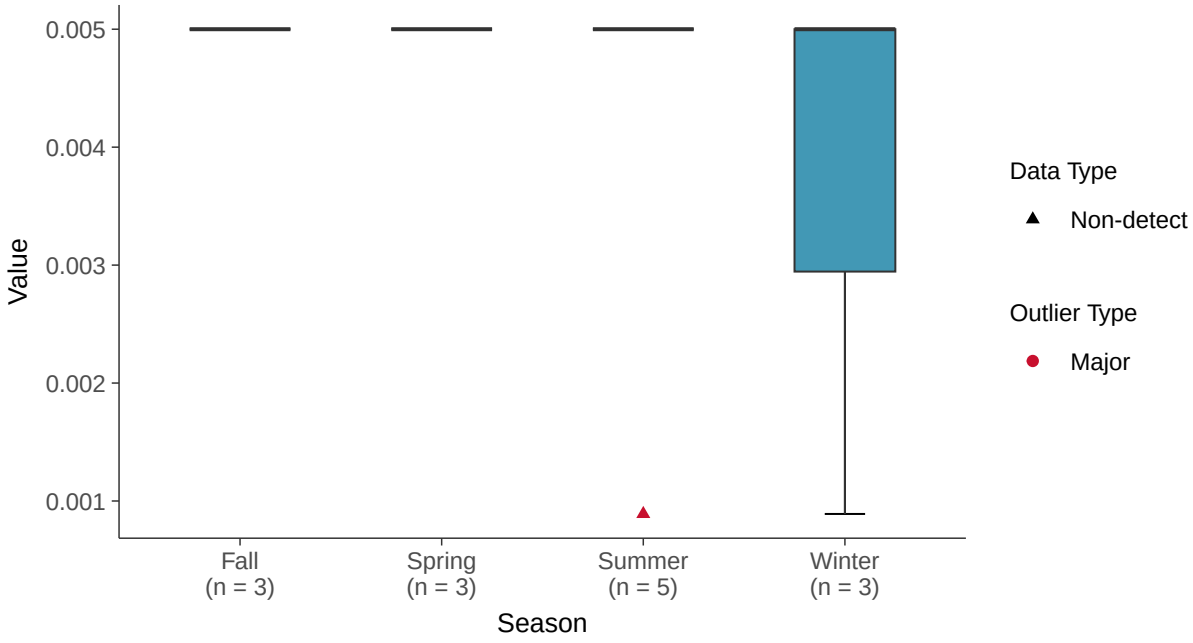


Boxplot

Selenium, MW-7B (mg/l)

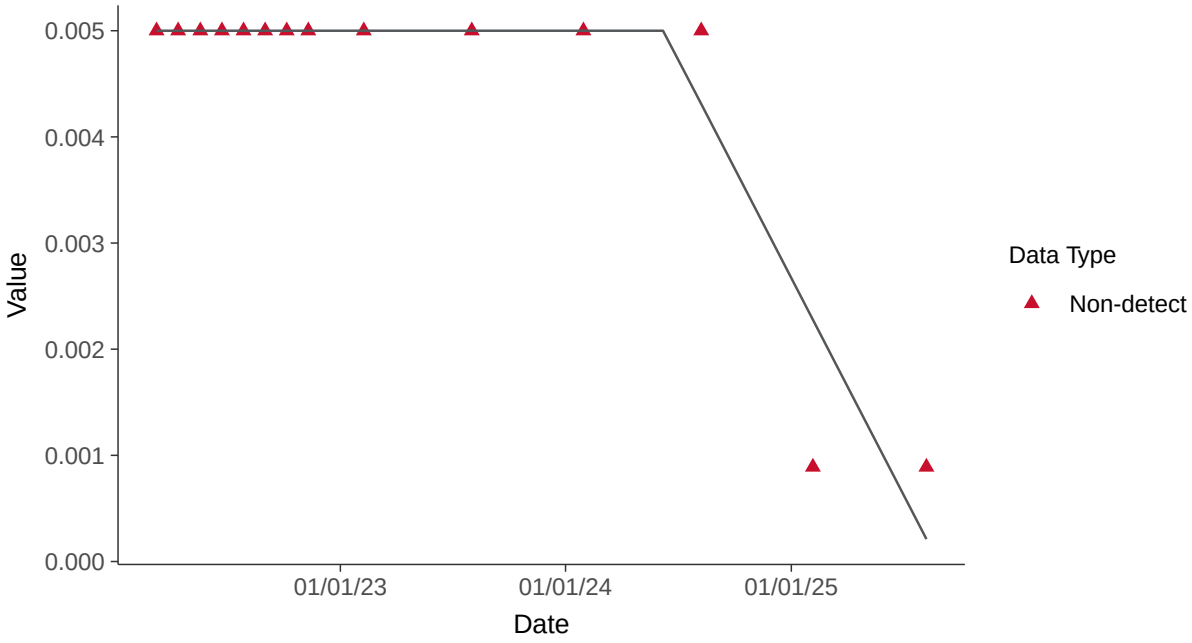
Boxplot by Season

Selenium, MW-7B (mg/l)



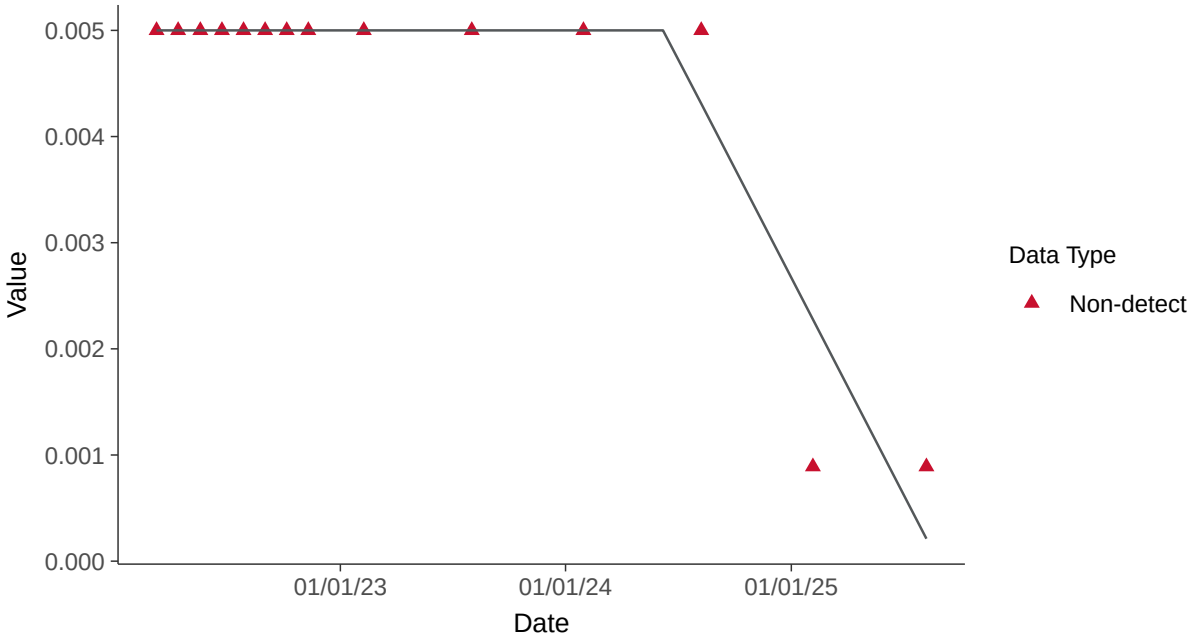
Trend Regression: Piecewise Linear-Linear

Selenium, MW-7B (mg/l)



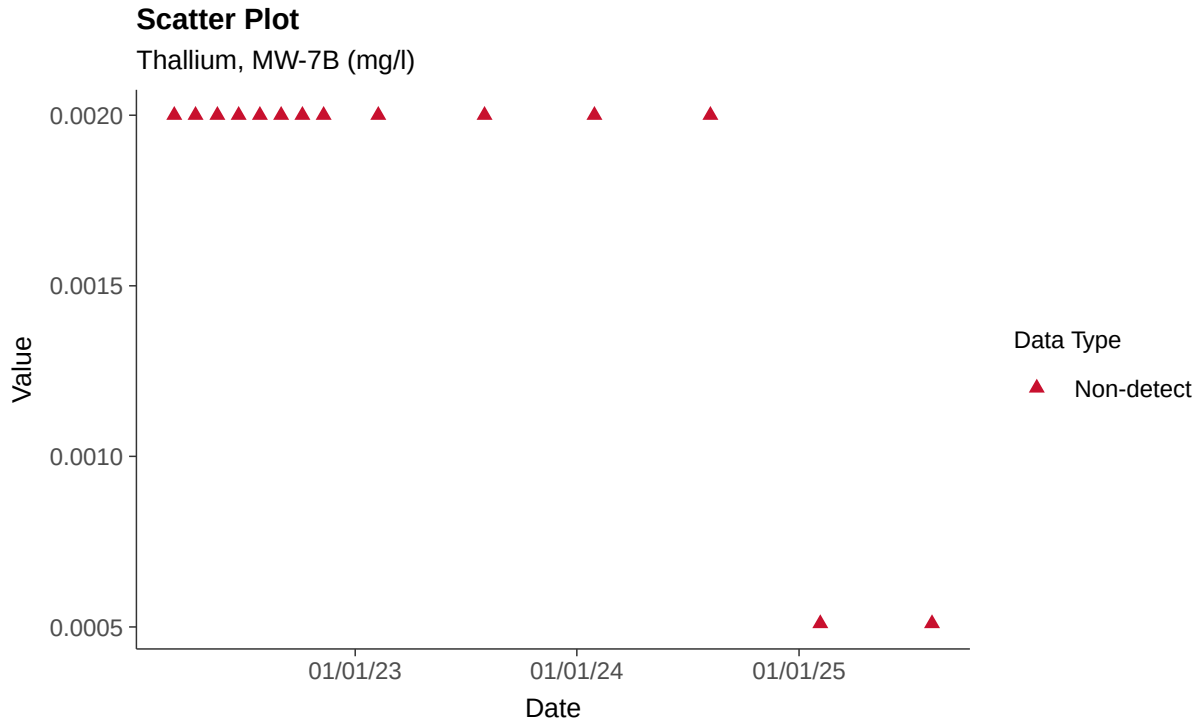
Trend Regression: Piecewise Linear-Linear-Linear

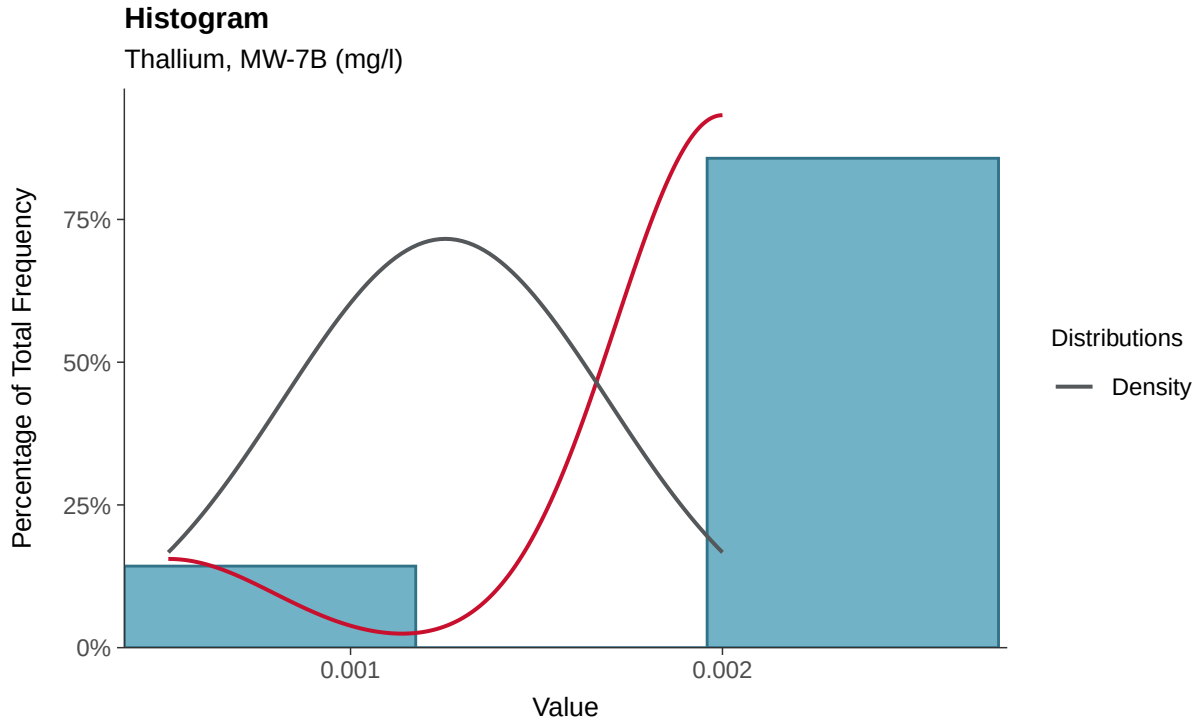
Selenium, MW-7B (mg/l)



Appendix IV: Thallium, MW-7B

ID: 13_3_125



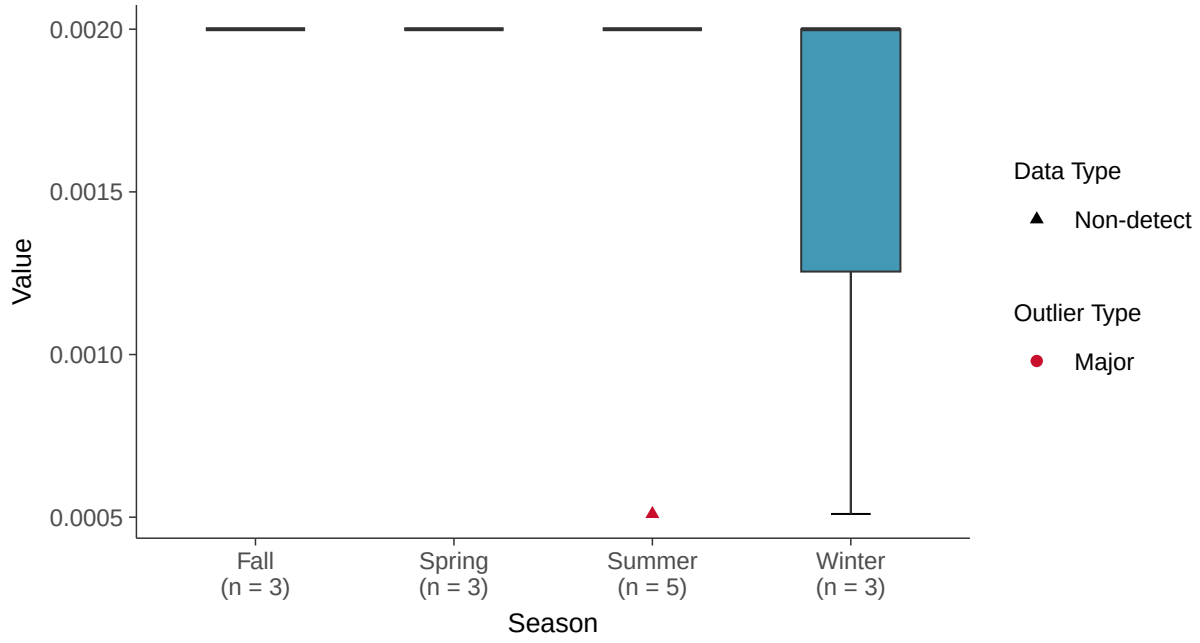


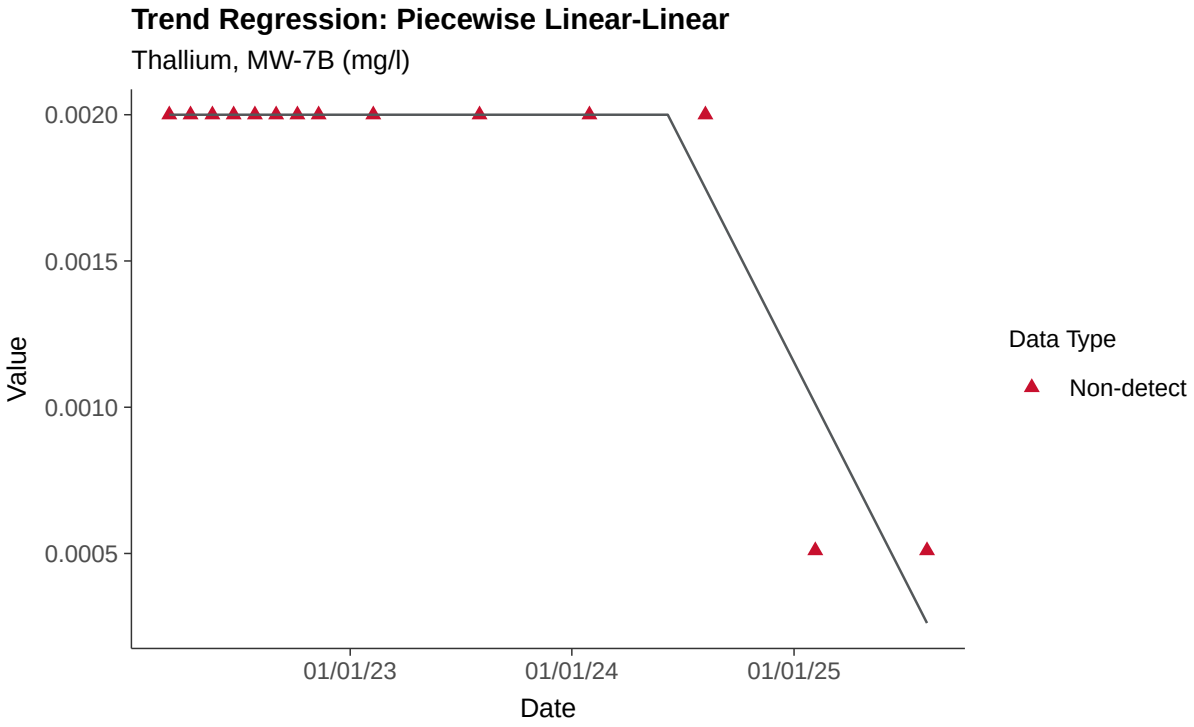
Boxplot

Thallium, MW-7B (mg/l)

Boxplot by Season

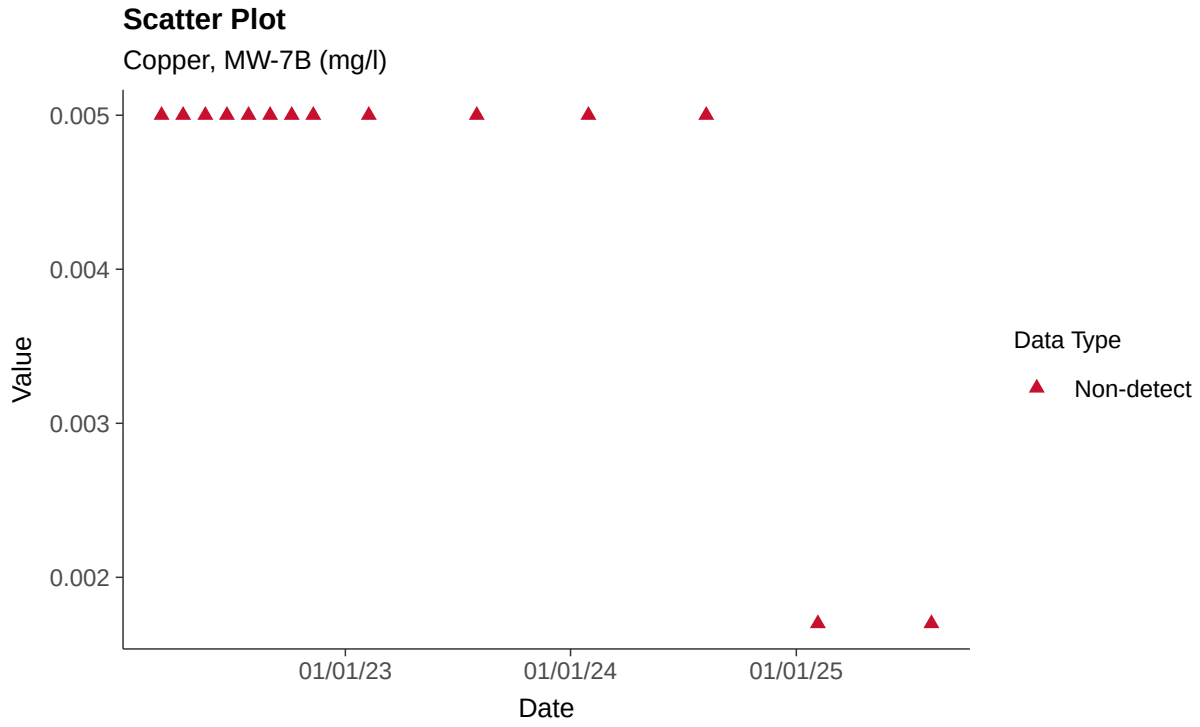
Thallium, MW-7B (mg/l)

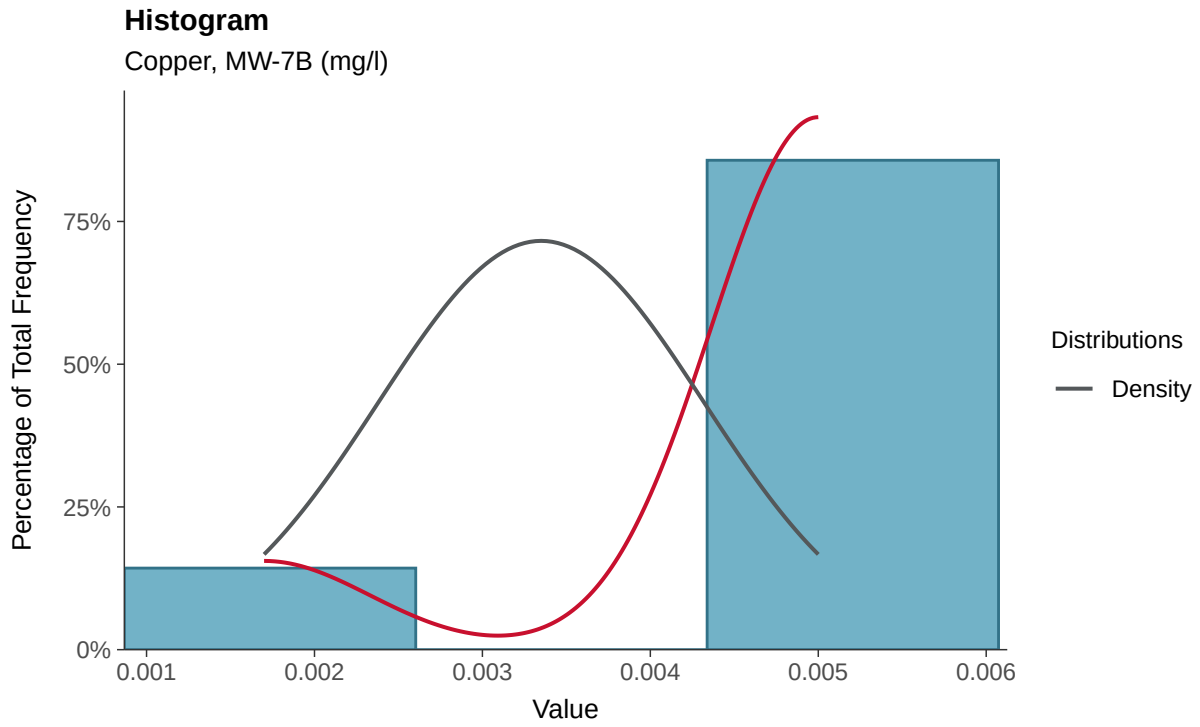



Trend Regression: Piecewise Linear-Linear
Thallium, MW-7B (mg/l)
0.0020
0.0015
0.0010
0.0005
Value
01/01/23
01/01/24
01/01/25
Date
Data Type
Non-detect

Part 115: Copper, MW-7B

ID: 13_5_111



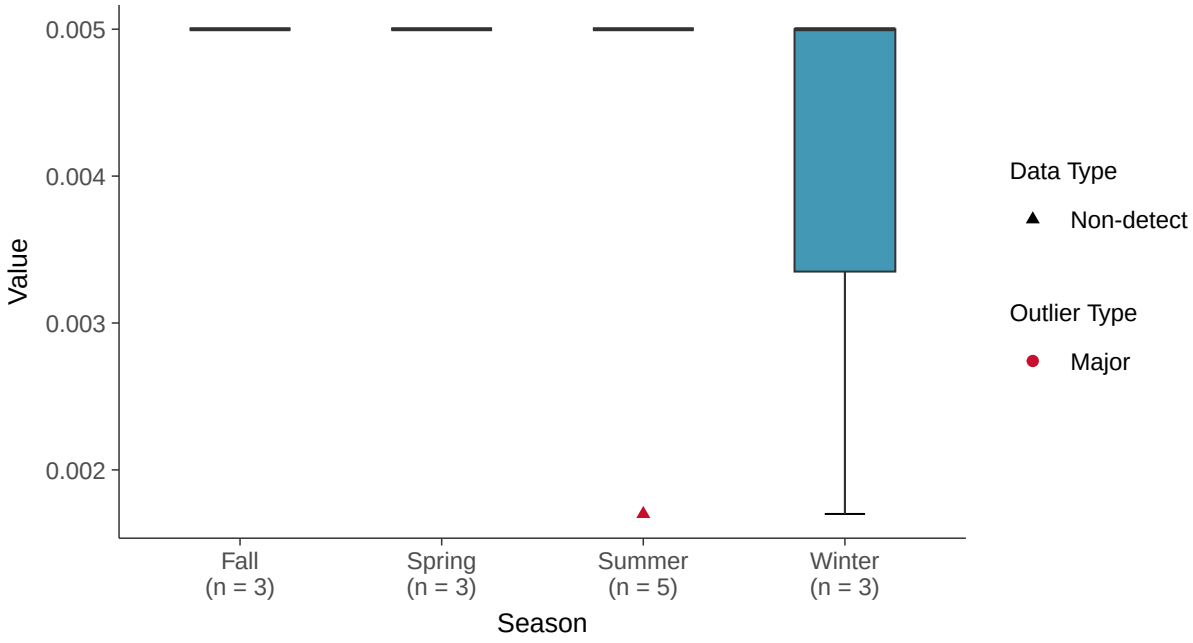


Boxplot

Copper, MW-7B (mg/l)

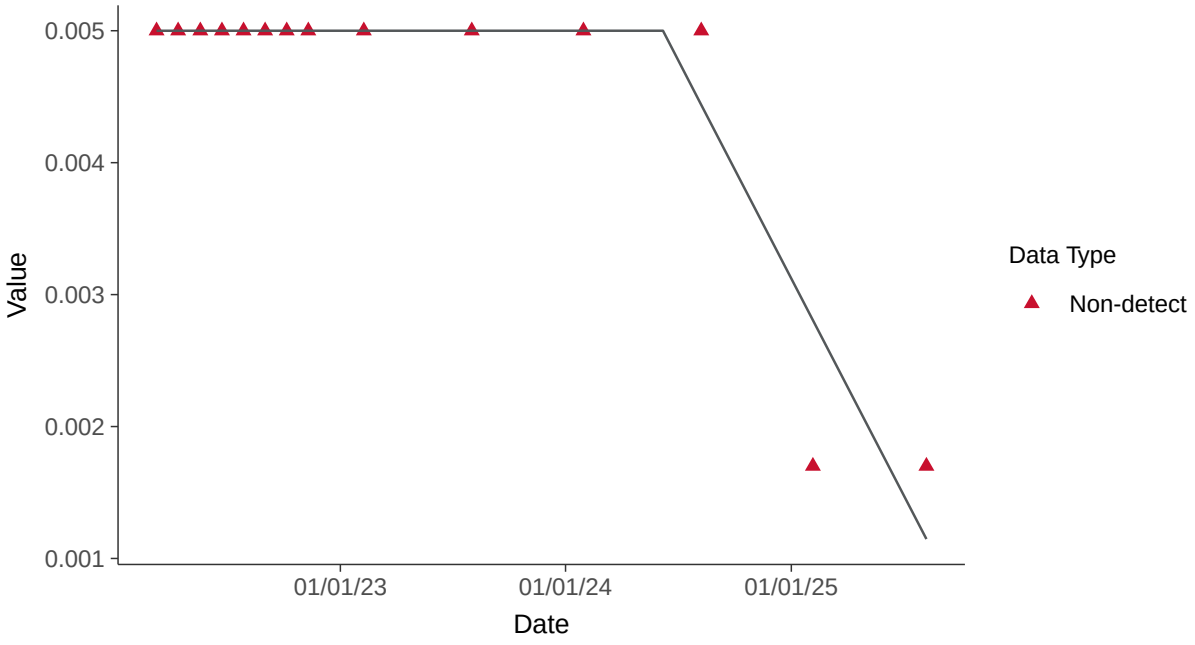
Boxplot by Season

Copper, MW-7B (mg/l)



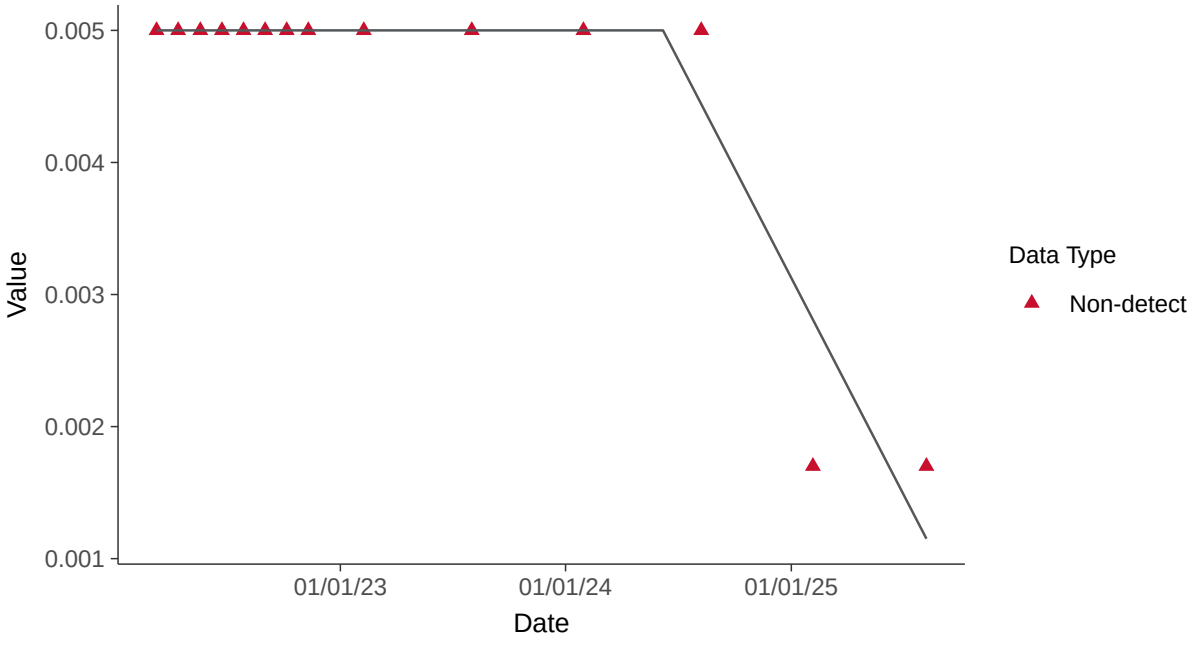
Trend Regression: Piecewise Linear-Linear

Copper, MW-7B (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Copper, MW-7B (mg/l)

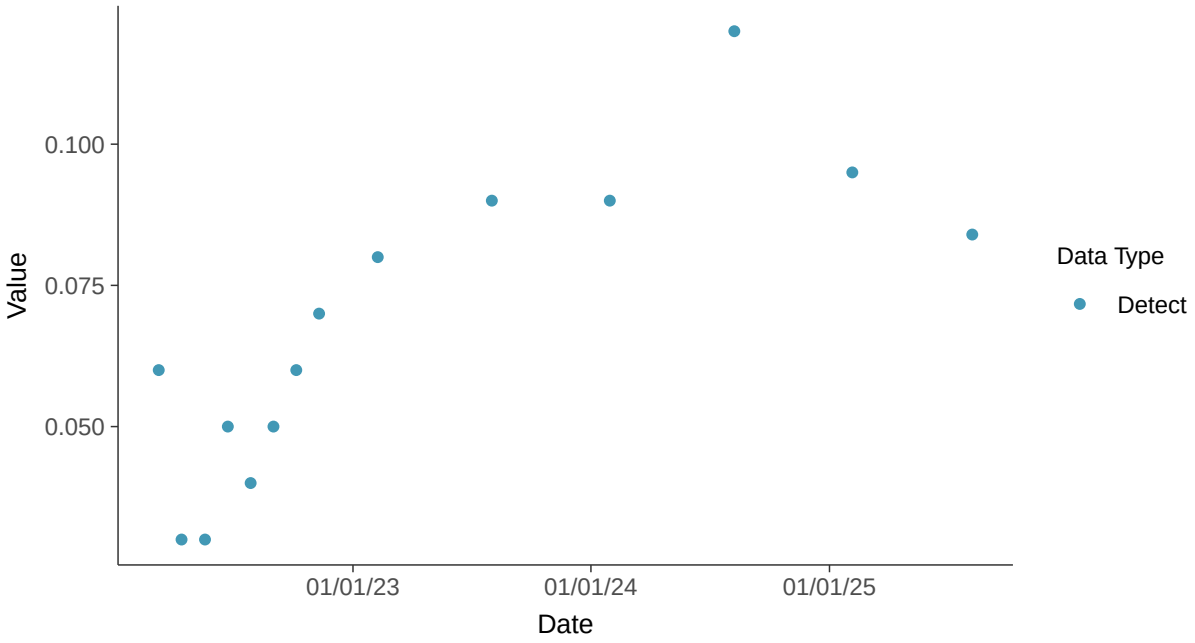


Part 115: Iron, MW-7B

ID: 13_5_114

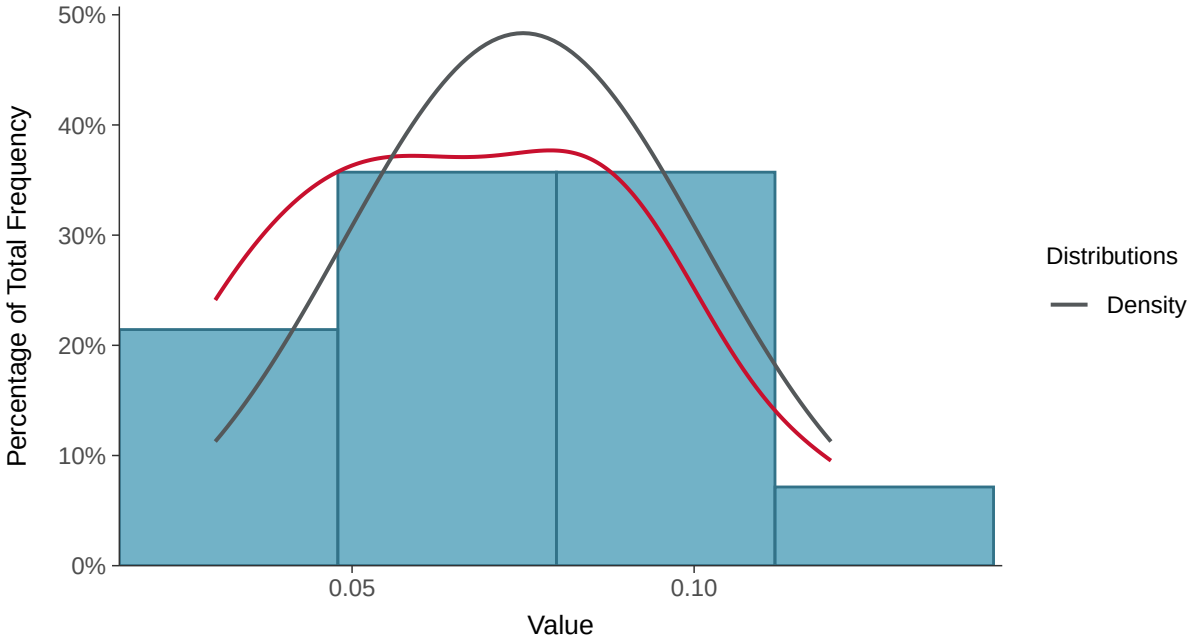
Scatter Plot

Iron, MW-7B (mg/l)



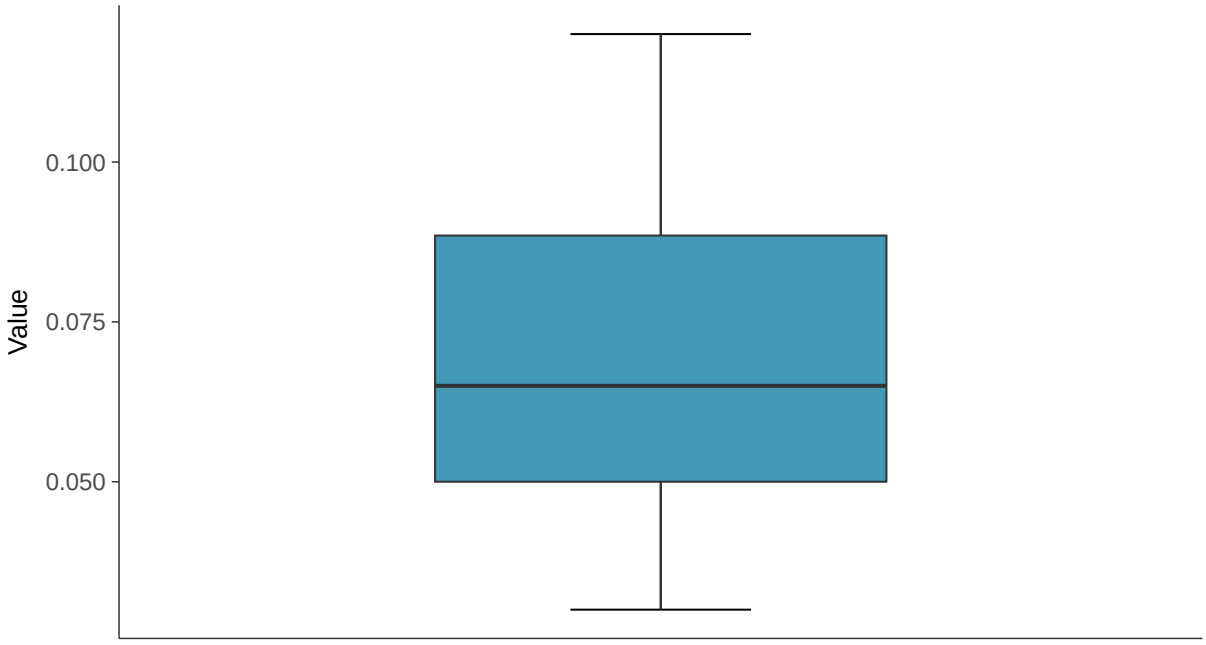
Histogram

Iron, MW-7B (mg/l)



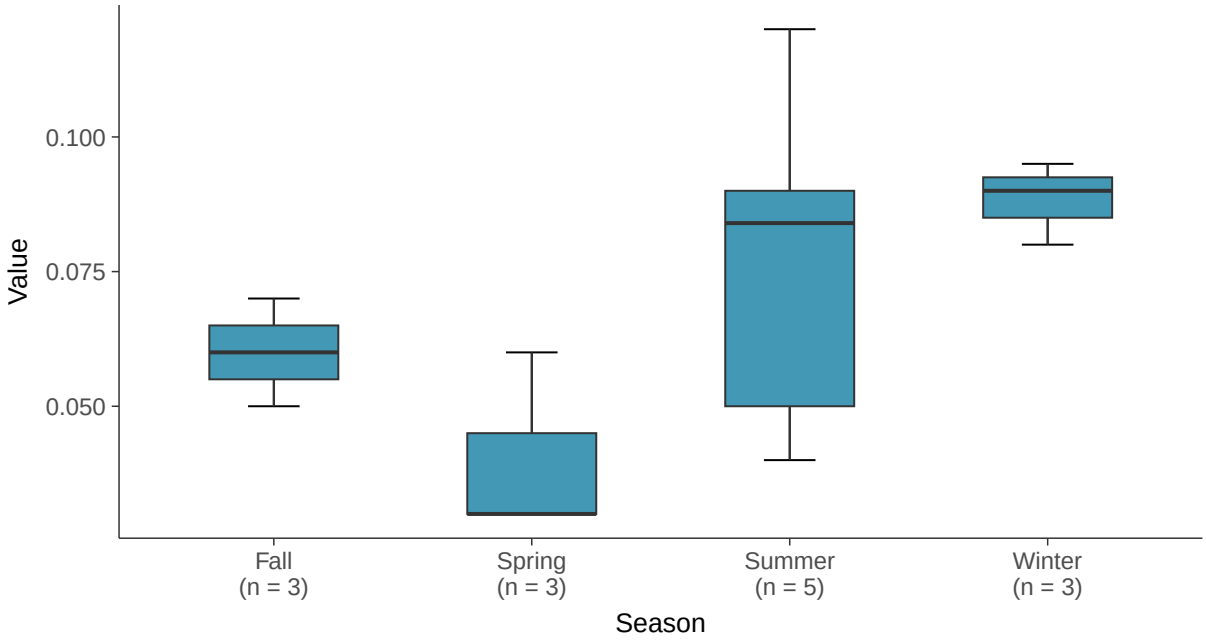
Boxplot

Iron, MW-7B (mg/l)



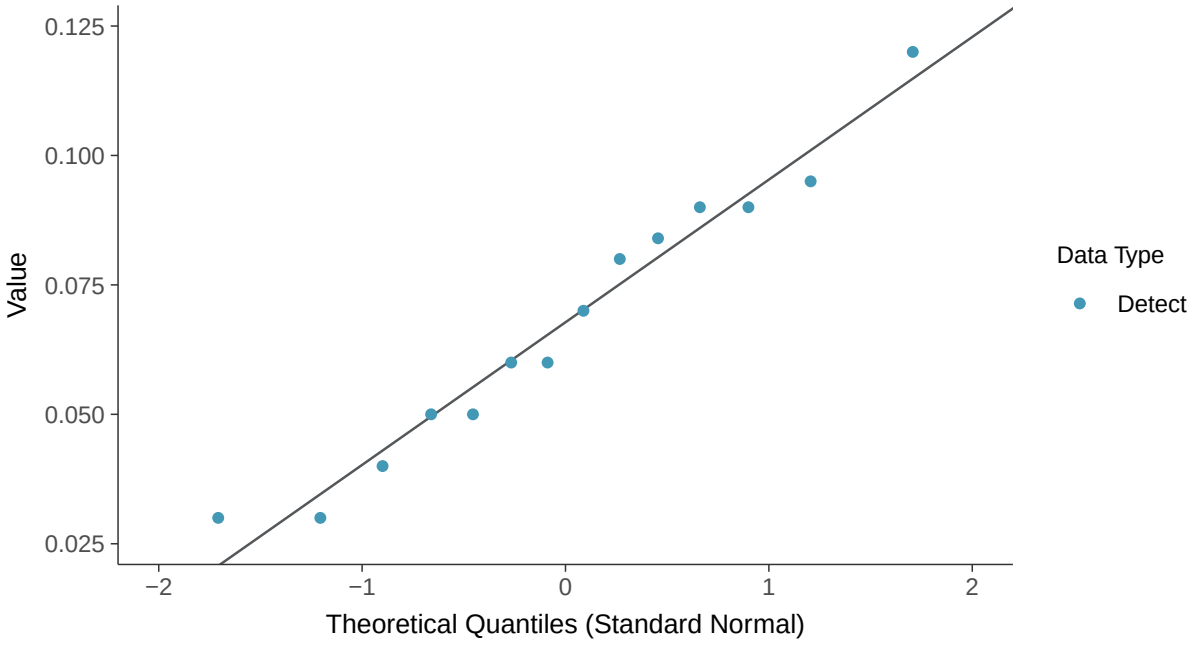
Boxplot by Season

Iron, MW-7B (mg/l)



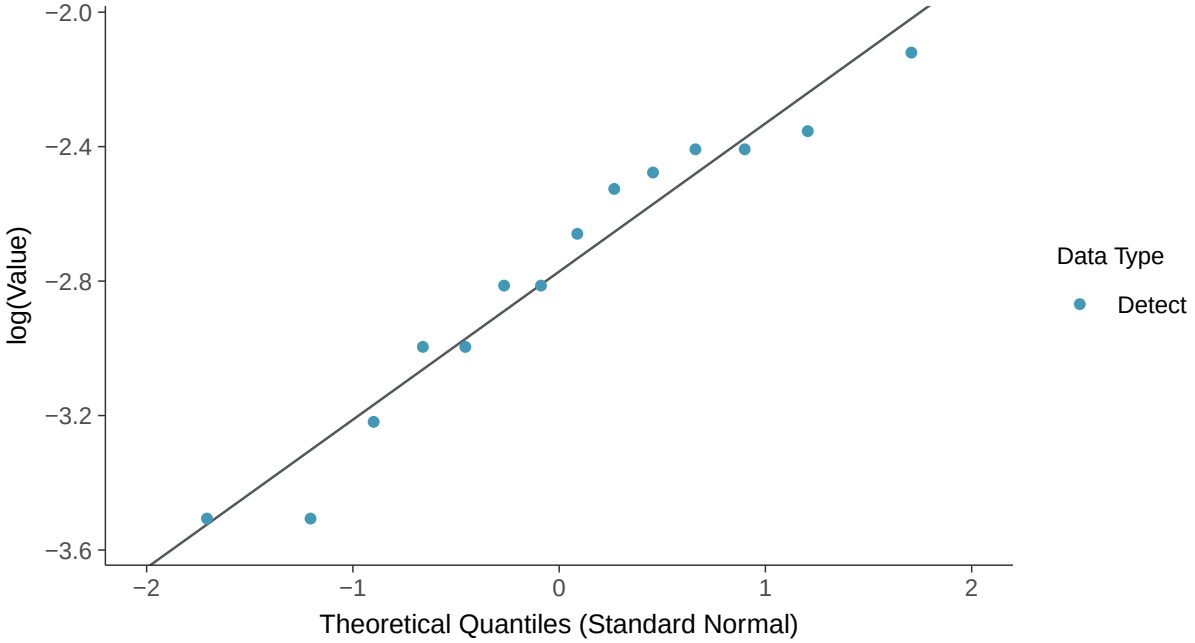
Normal Q-Q plot

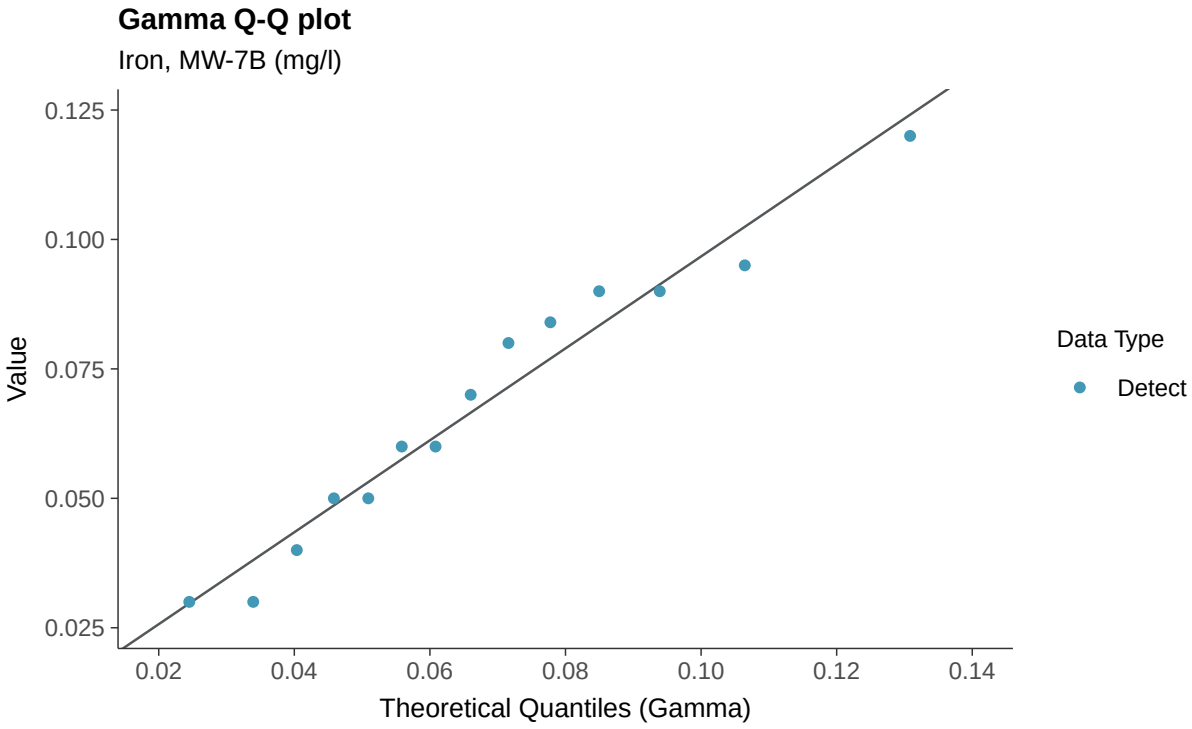
Iron, MW-7B (mg/l)

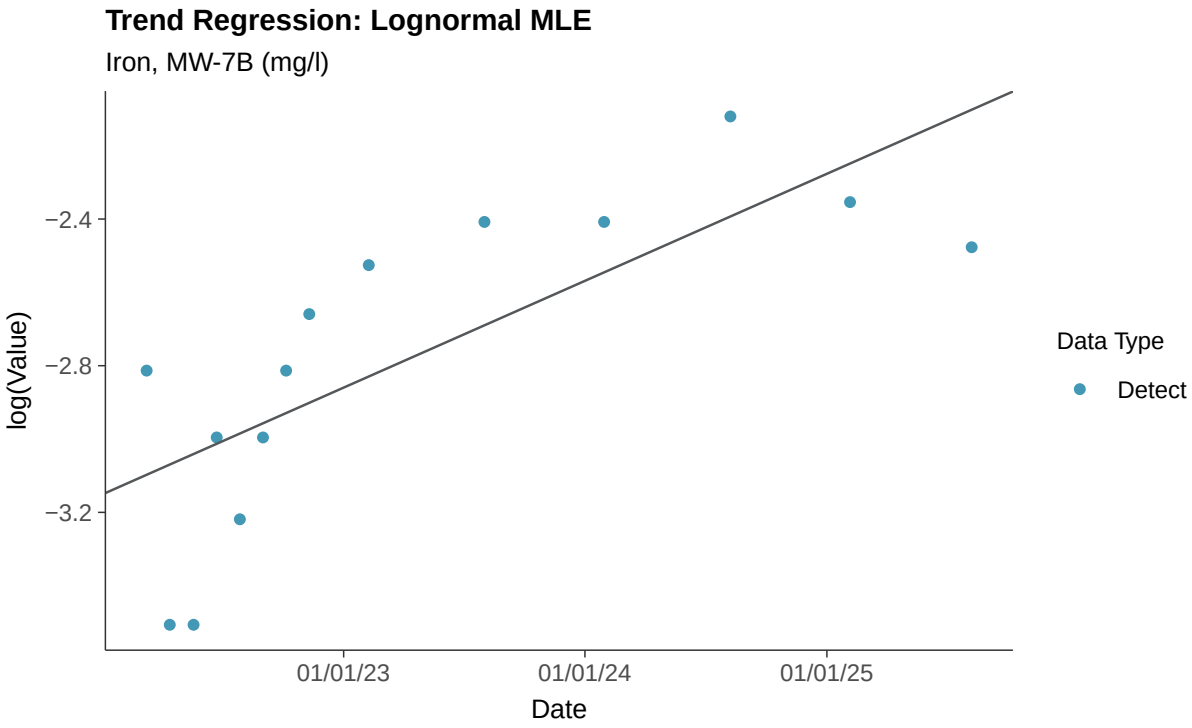


Lognormal Q-Q plot

Iron, MW-7B (mg/l)

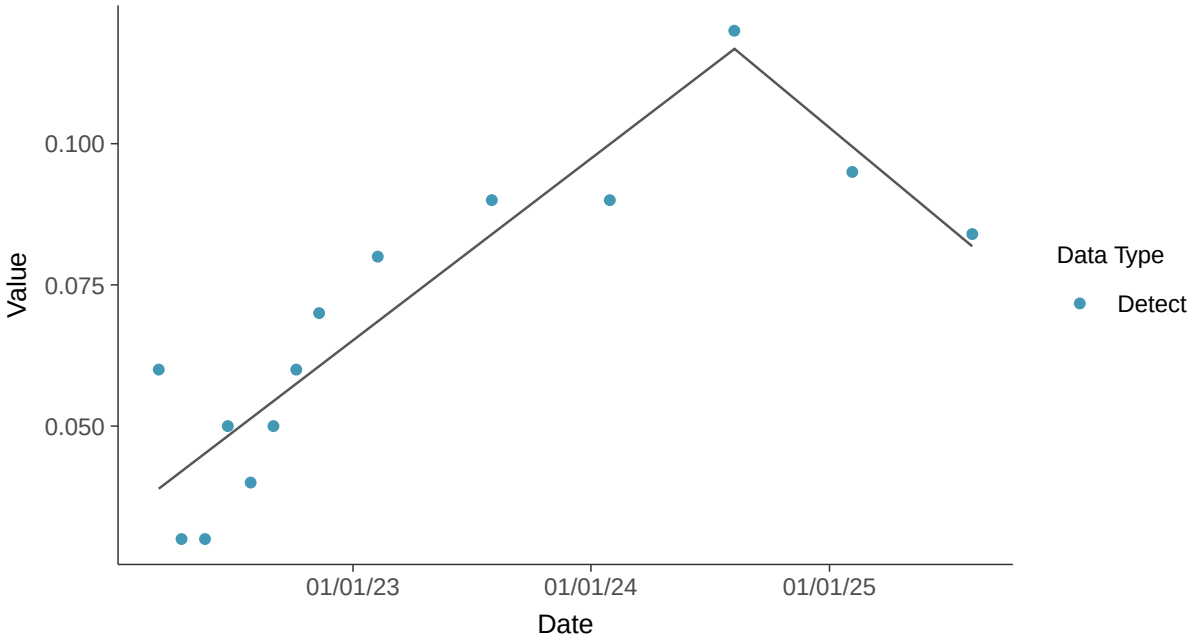



Gamma Q-Q plot
Iron, MW-7B (mg/l)
Value
0.125
0.100
0.075
0.050
0.025
0.02
0.04
0.06
0.08
0.10
0.12
0.14
Theoretical Quantiles (Gamma)
Data Type
Detect


Trend Regression: Lognormal MLE
Iron, MW-7B (mg/l)
log(Value)
−2.4
−2.8
−3.2
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect

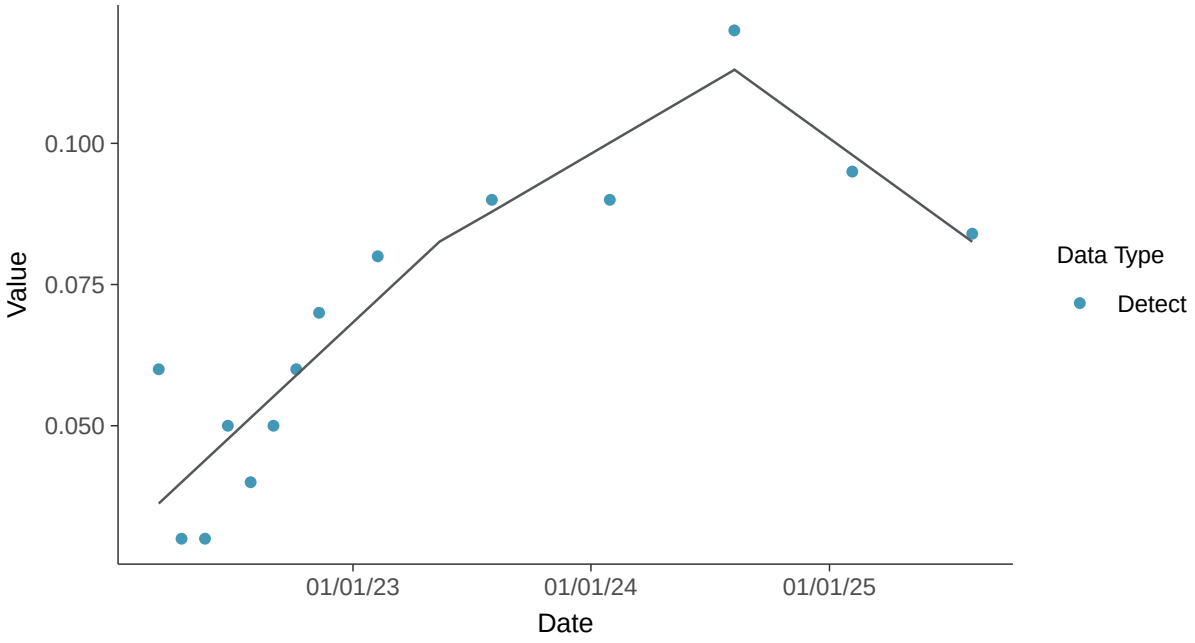
Trend Regression: Piecewise Linear-Linear

Iron, MW-7B (mg/l)



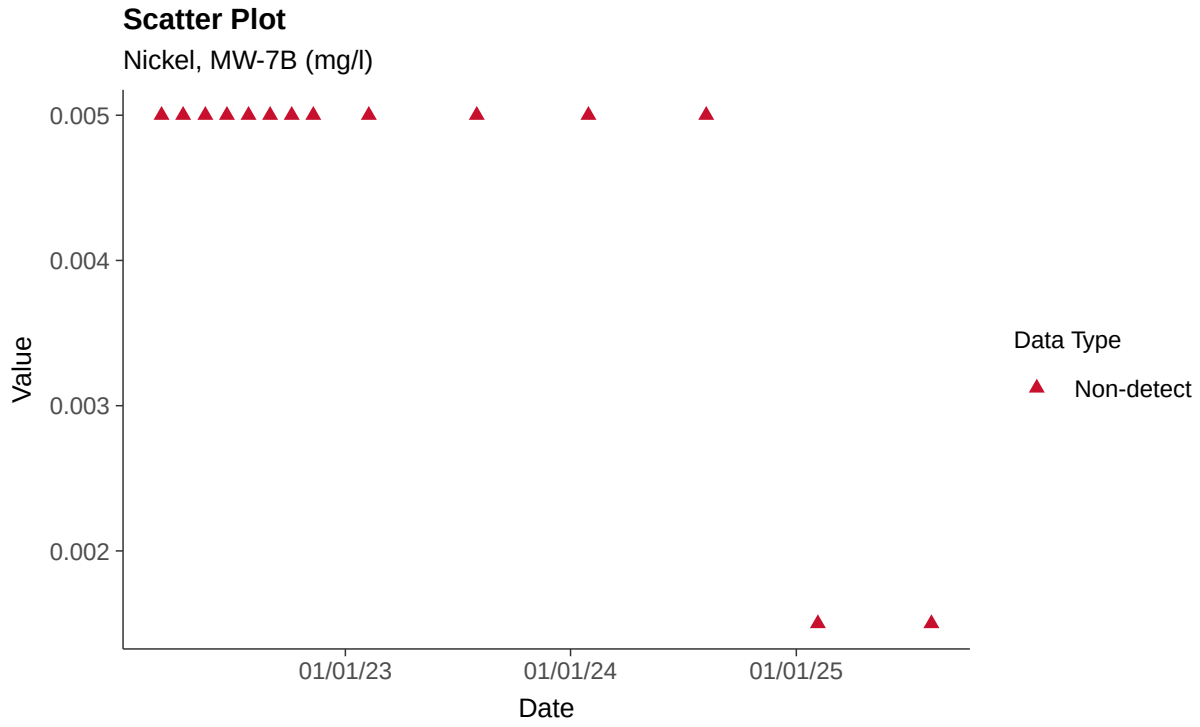
Trend Regression: Piecewise Linear-Linear-Linear

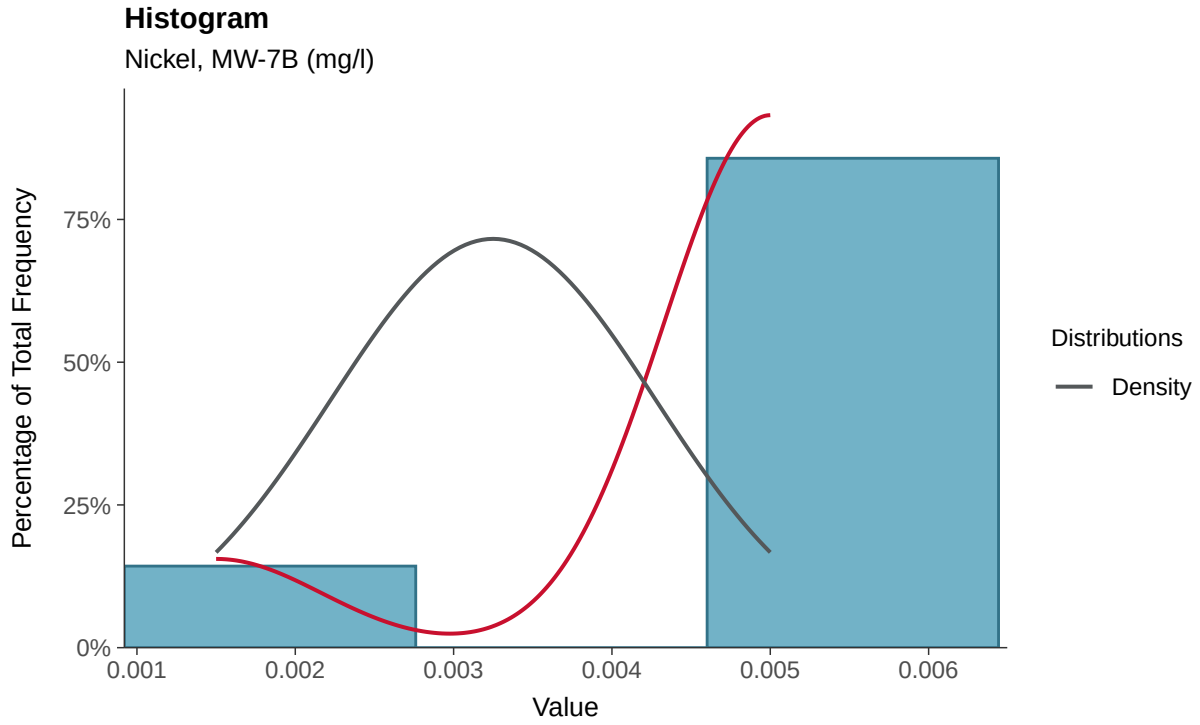
Iron, MW-7B (mg/l)



Part 115: Nickel, MW-7B

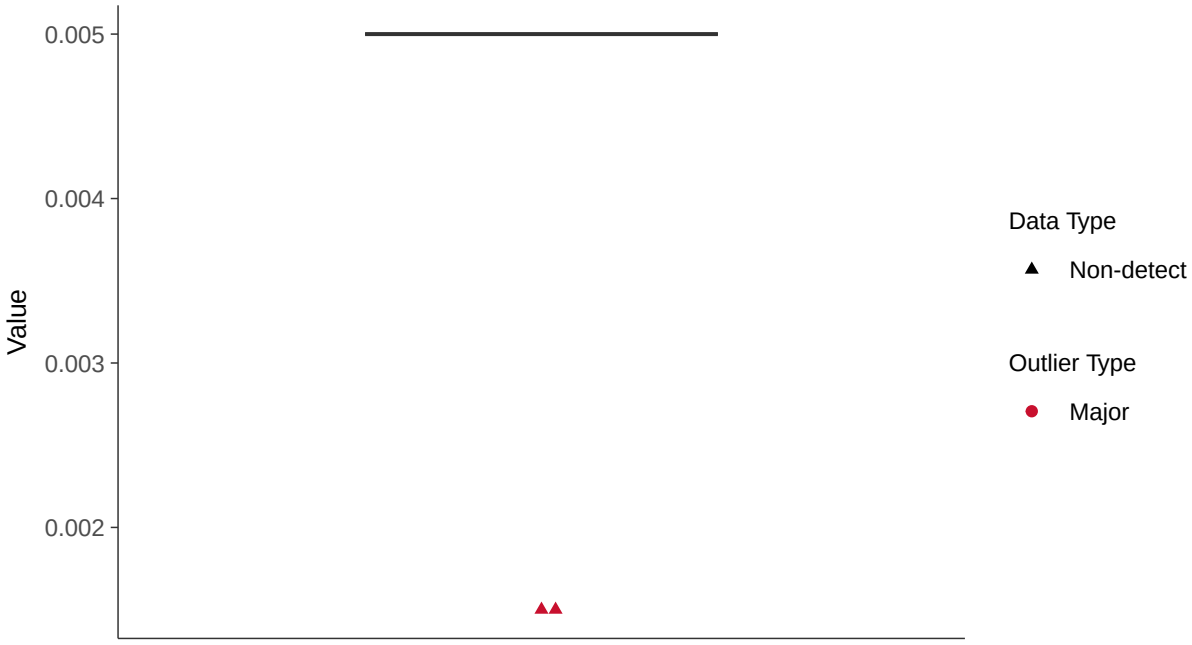
ID: 13_5_119





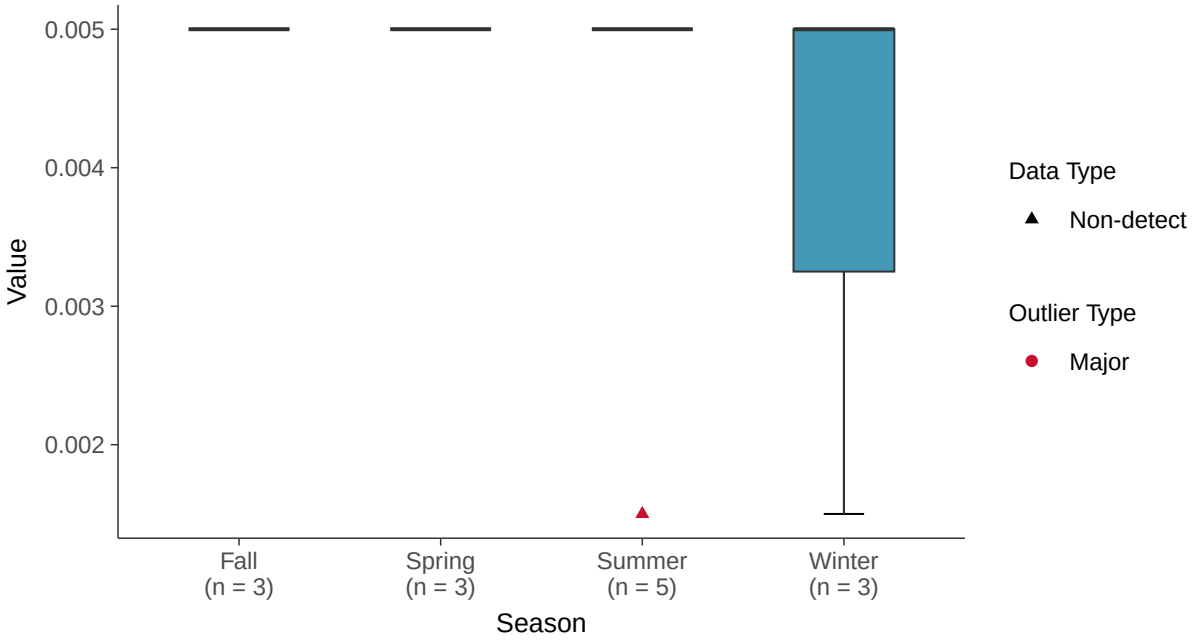
Boxplot

Nickel, MW-7B (mg/l)



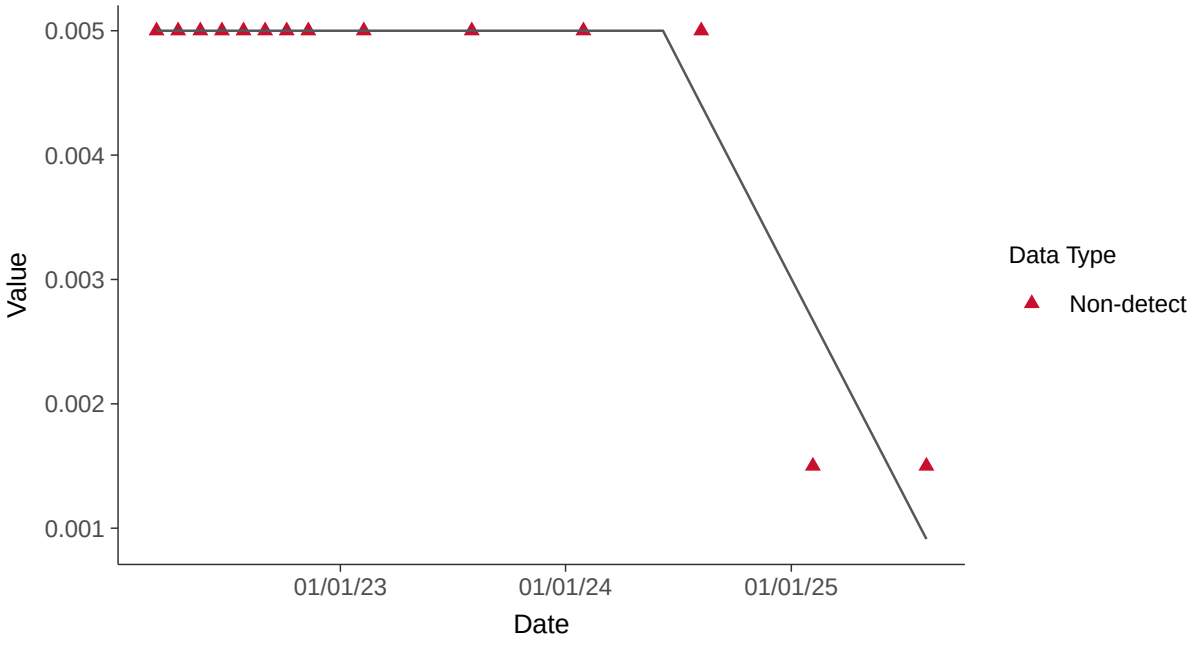
Boxplot by Season

Nickel, MW-7B (mg/l)



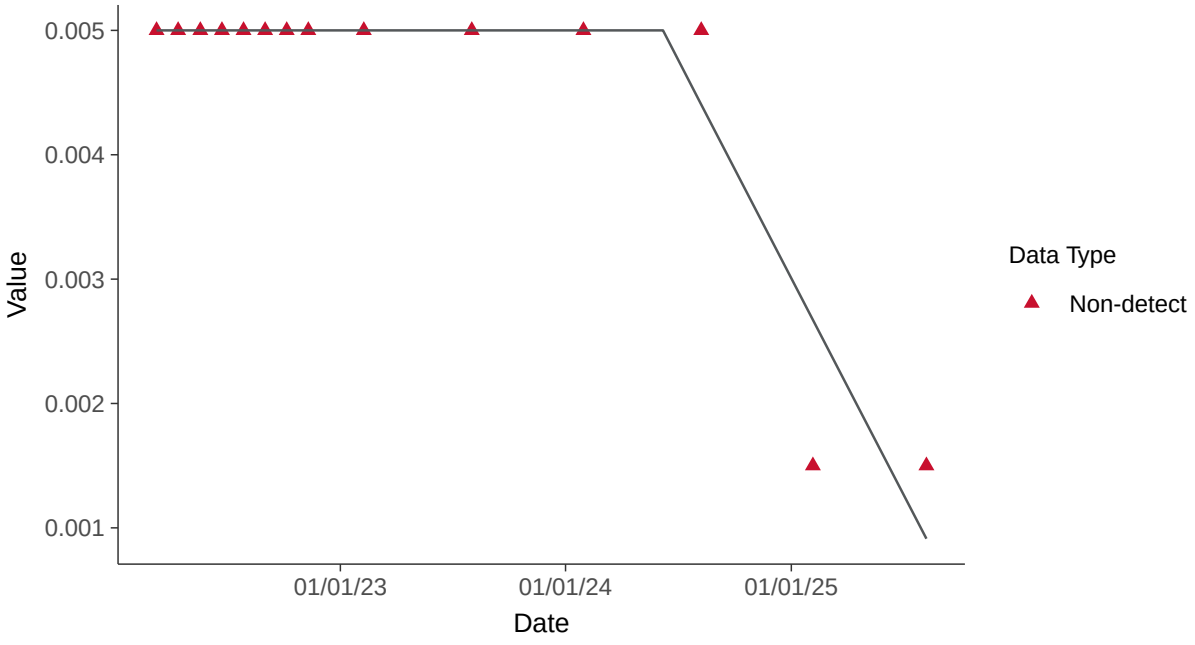
Trend Regression: Piecewise Linear-Linear

Nickel, MW-7B (mg/l)



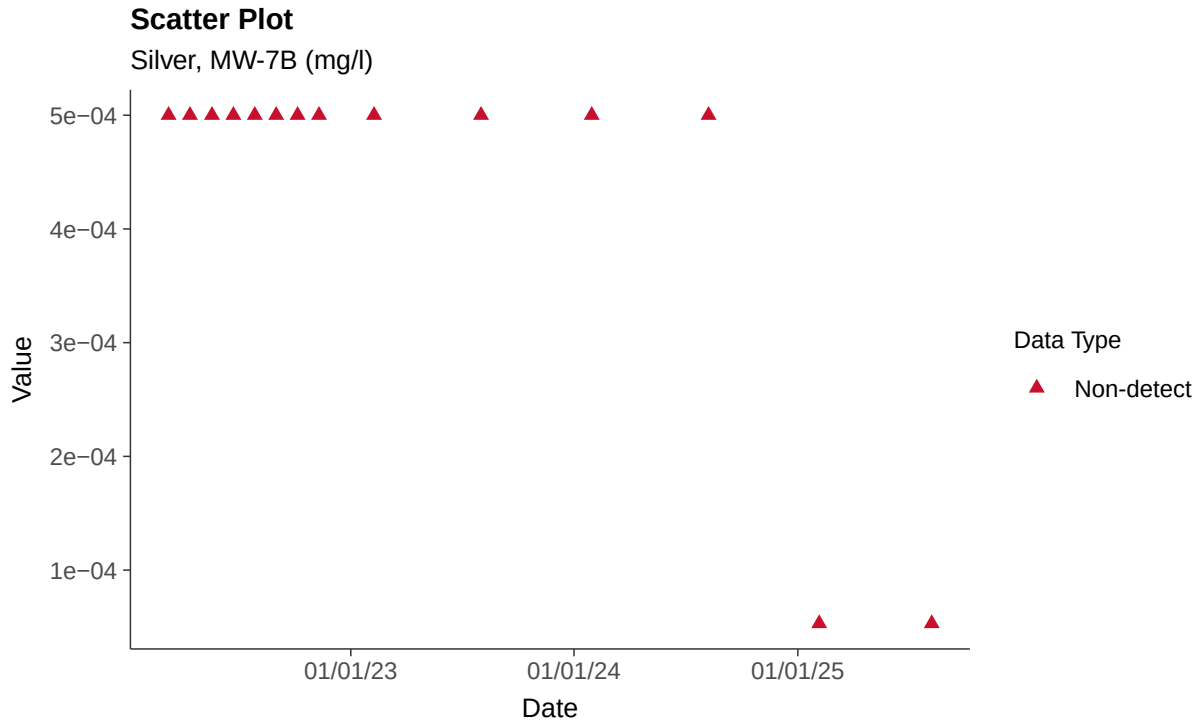
Trend Regression: Piecewise Linear-Linear-Linear

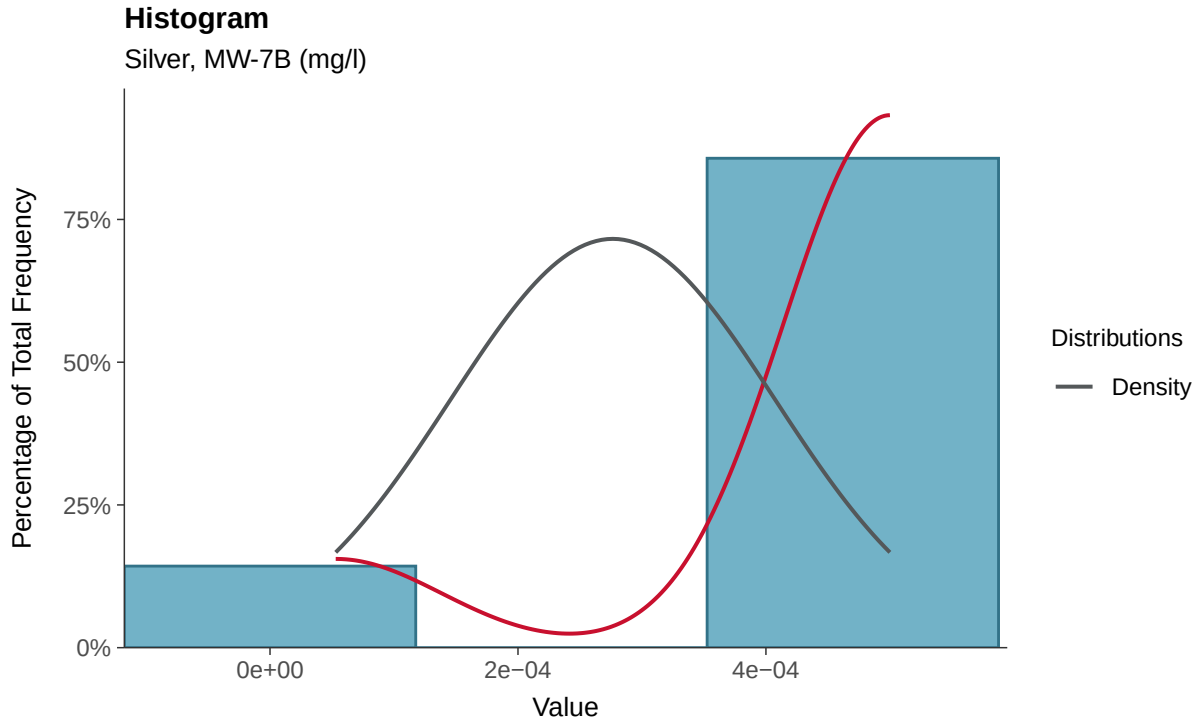
Nickel, MW-7B (mg/l)



Part 115: Silver, MW-7B

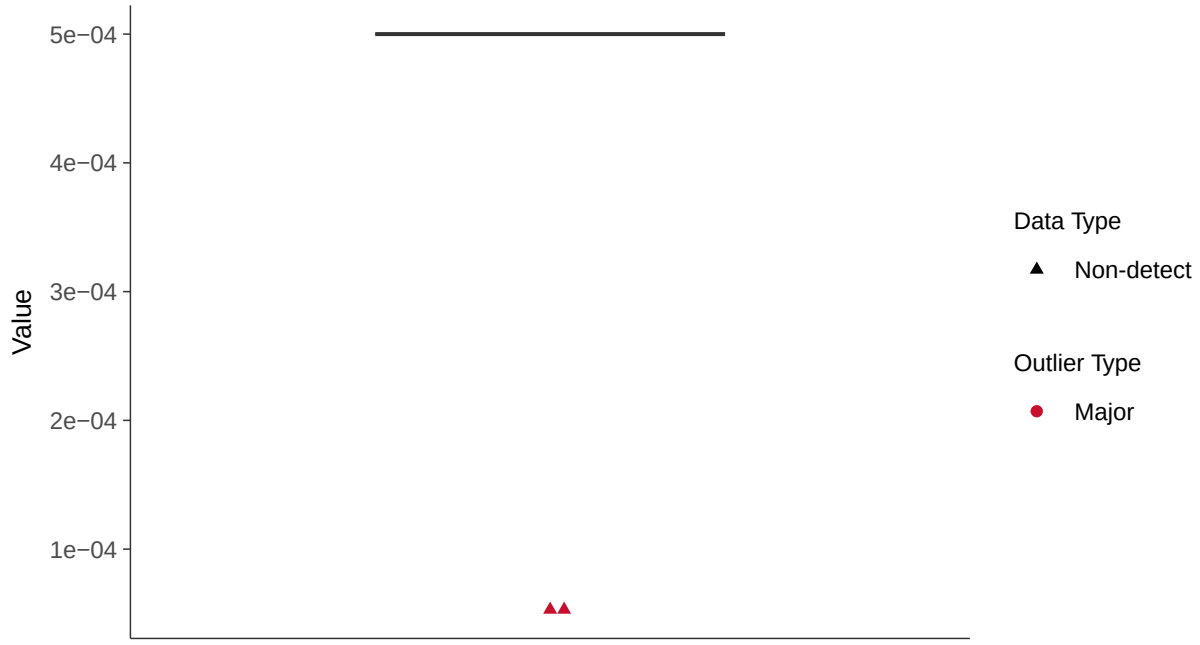
ID: 13_5_123





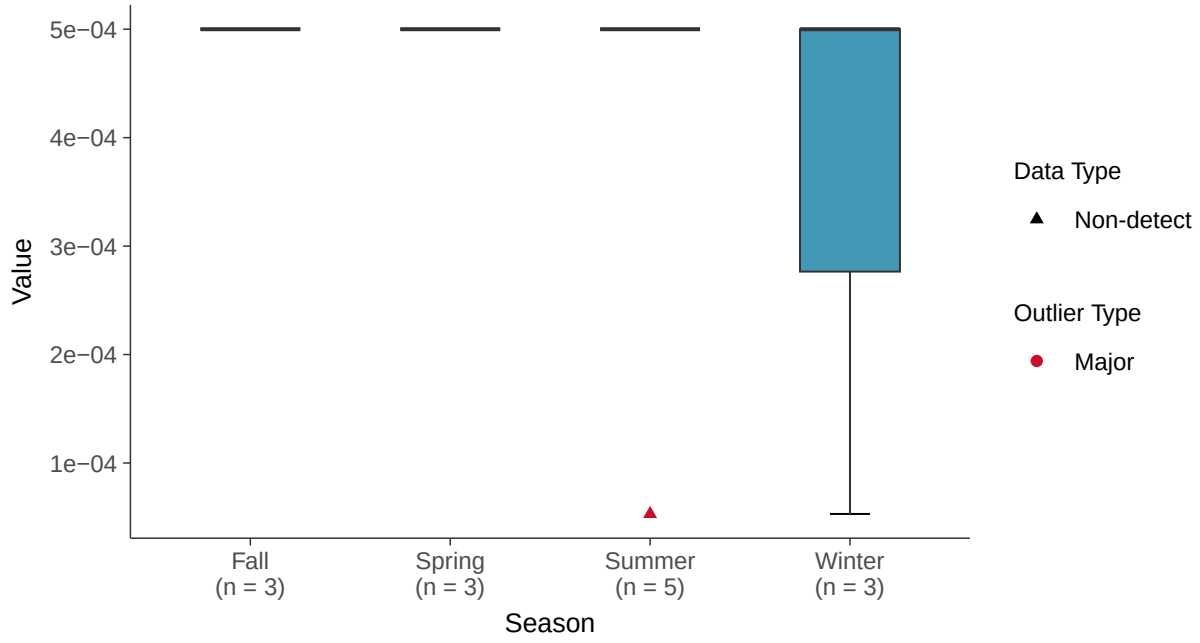
Boxplot

Silver, MW-7B (mg/l)



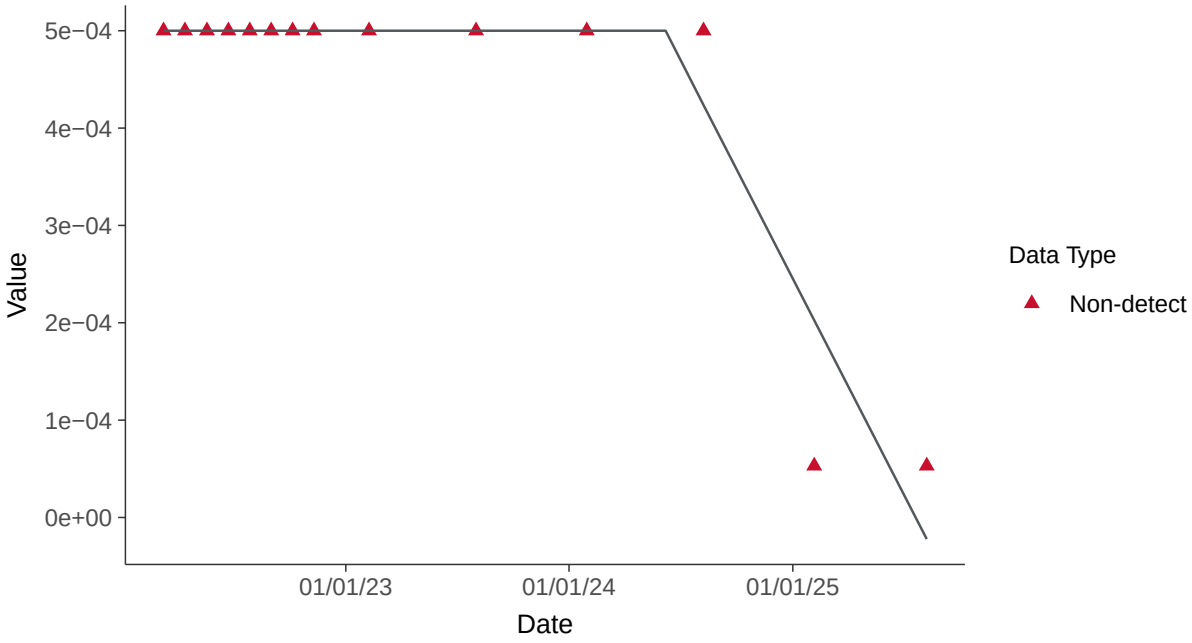
Boxplot by Season

Silver, MW-7B (mg/l)



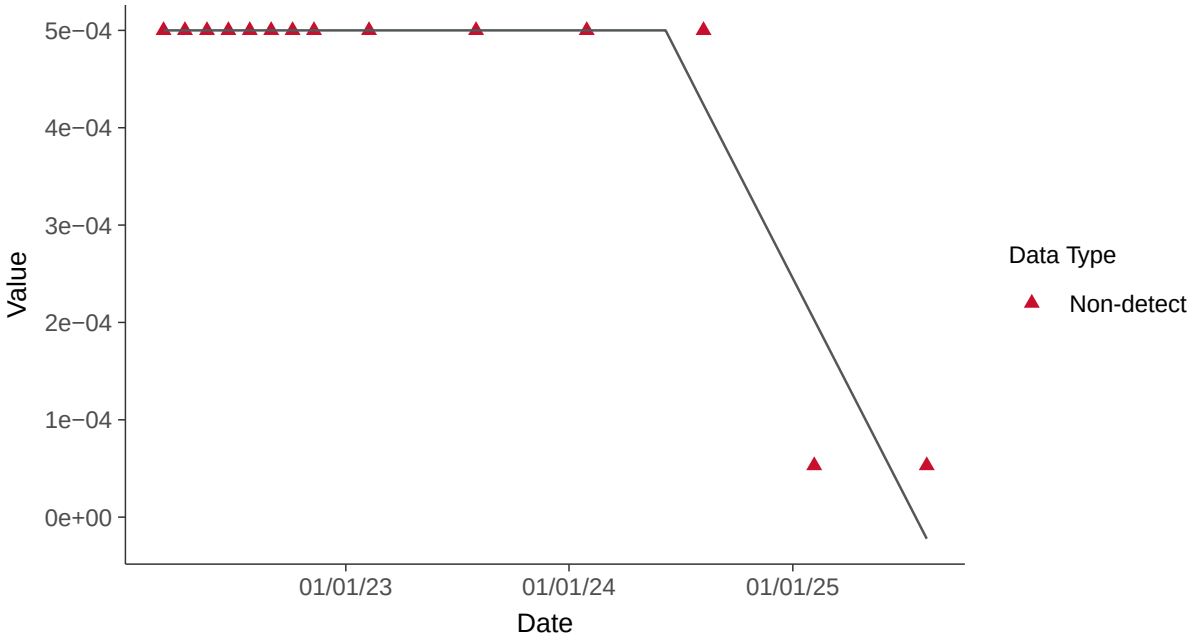
Trend Regression: Piecewise Linear-Linear

Silver, MW-7B (mg/l)



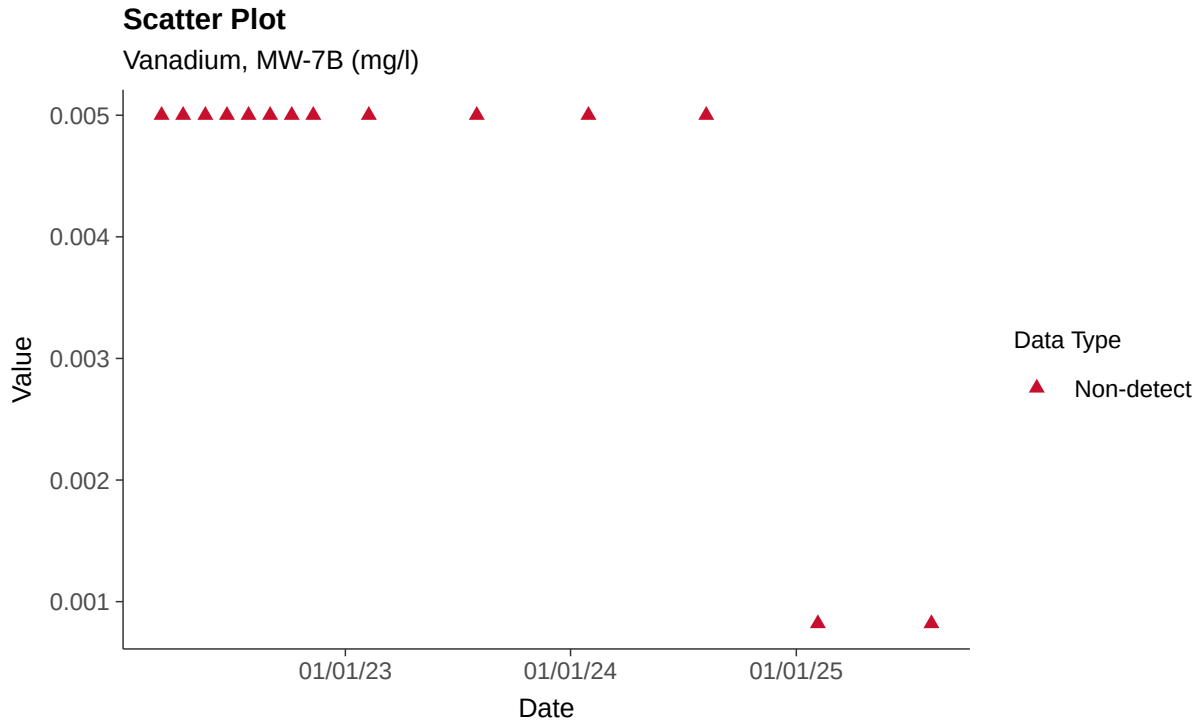
Trend Regression: Piecewise Linear-Linear-Linear

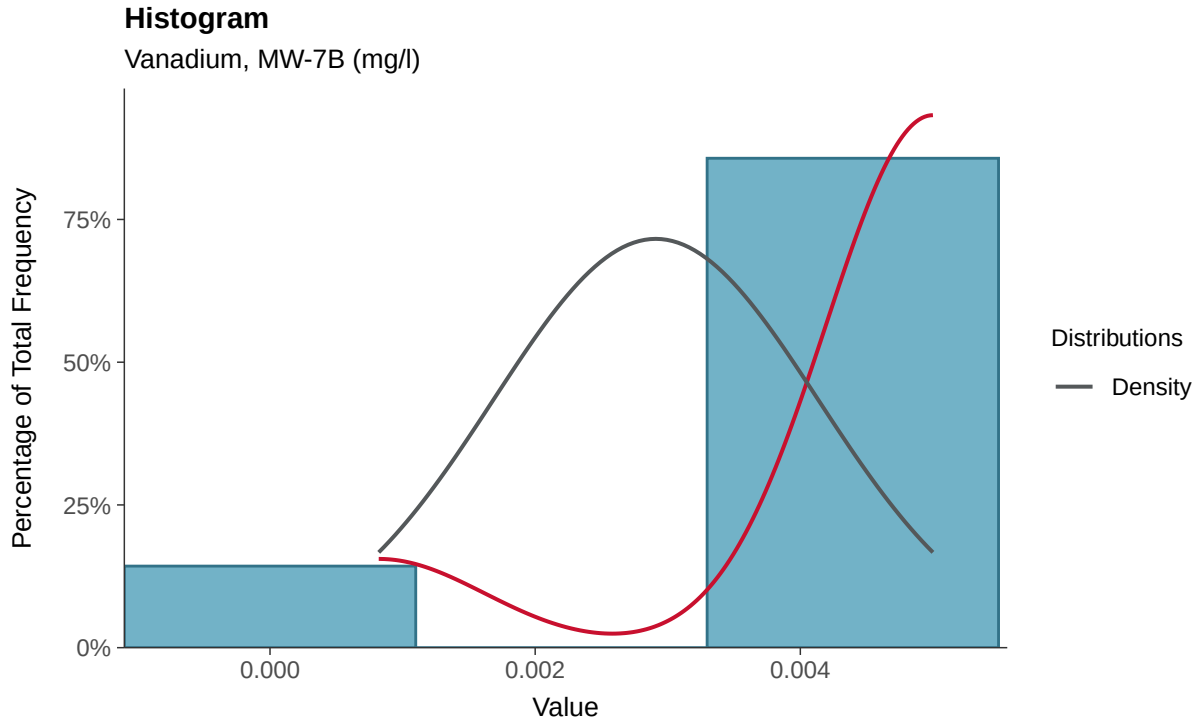
Silver, MW-7B (mg/l)



Part 115: Vanadium, MW-7B

ID: 13_5_128



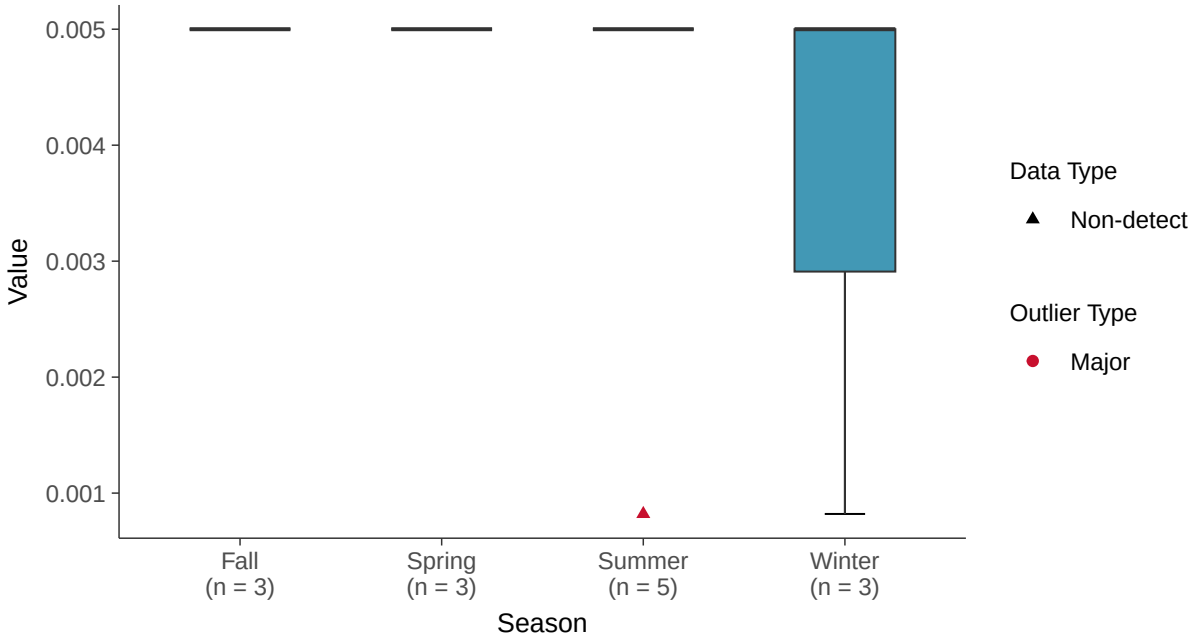


Boxplot

Vanadium, MW-7B (mg/l)

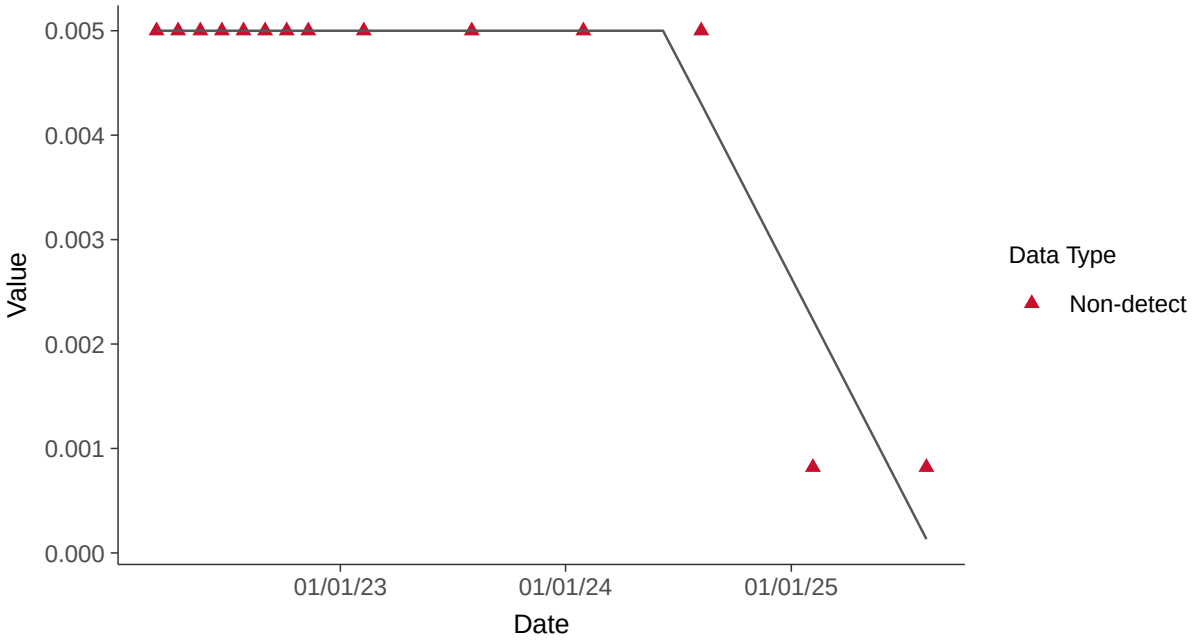
Boxplot by Season

Vanadium, MW-7B (mg/l)



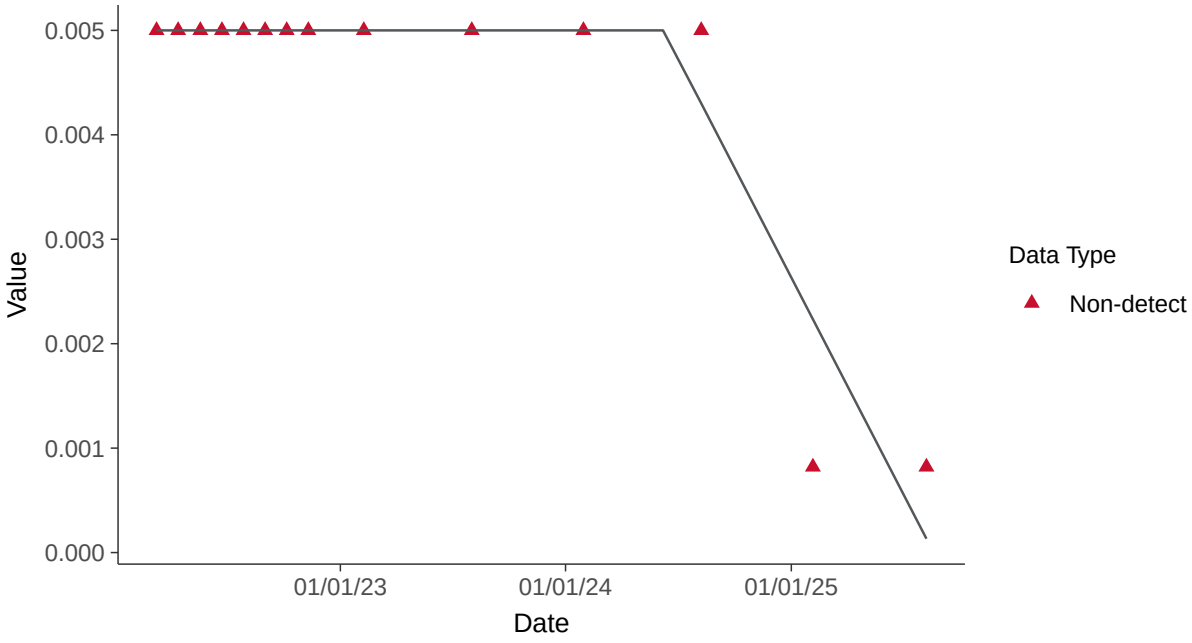
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-7B (mg/l)



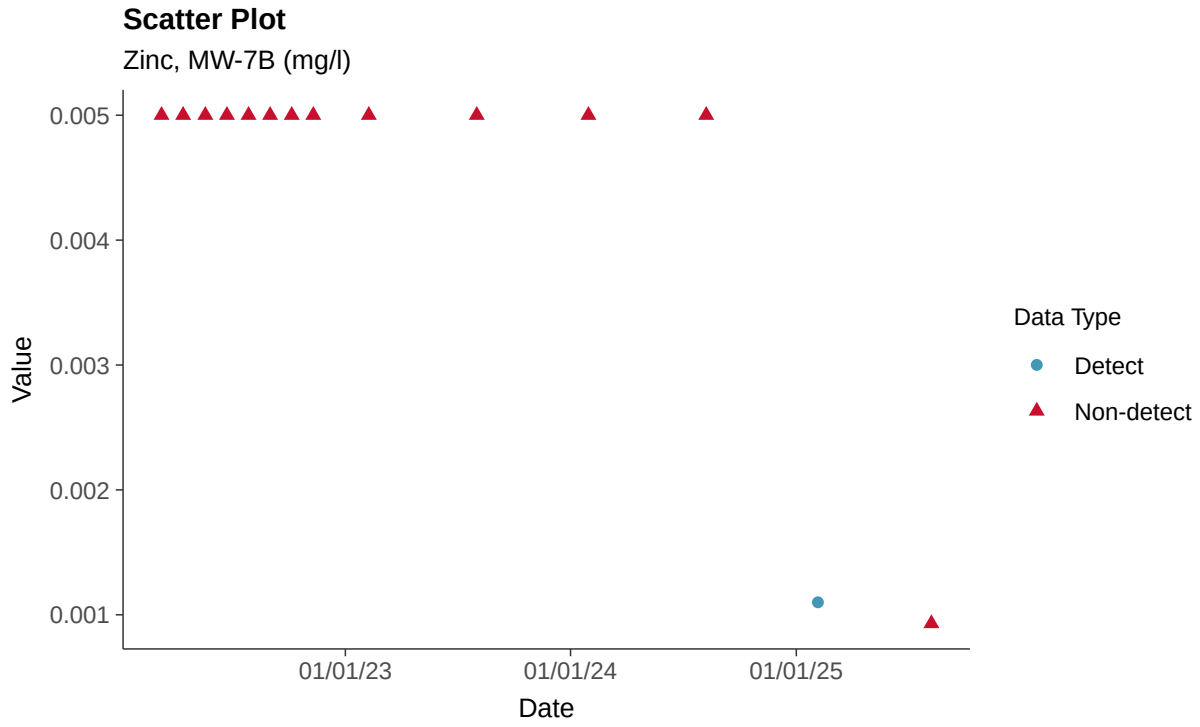
Trend Regression: Piecewise Linear-Linear-Linear

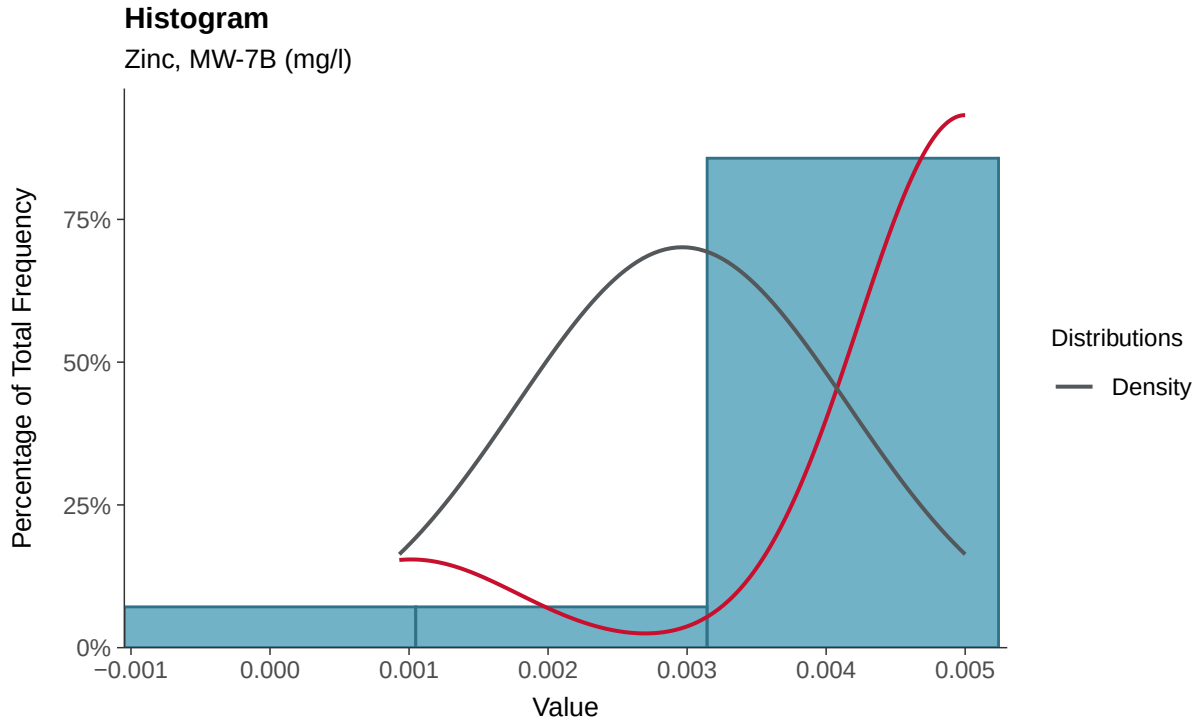
Vanadium, MW-7B (mg/l)



Part 115: Zinc, MW-7B

ID: 13_5_129



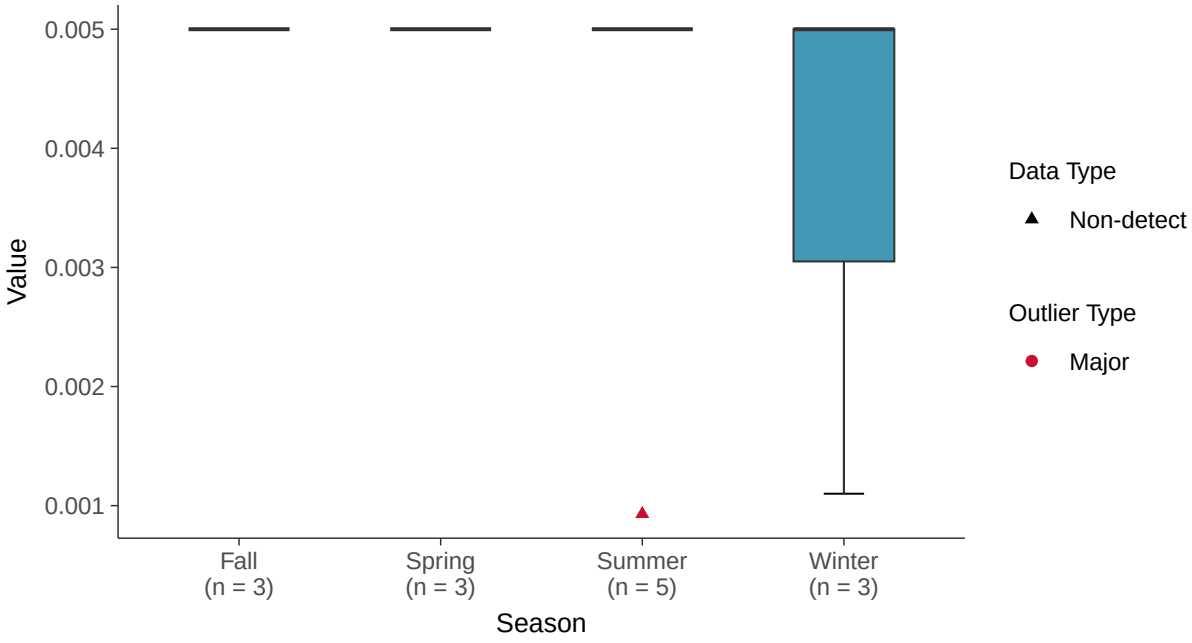


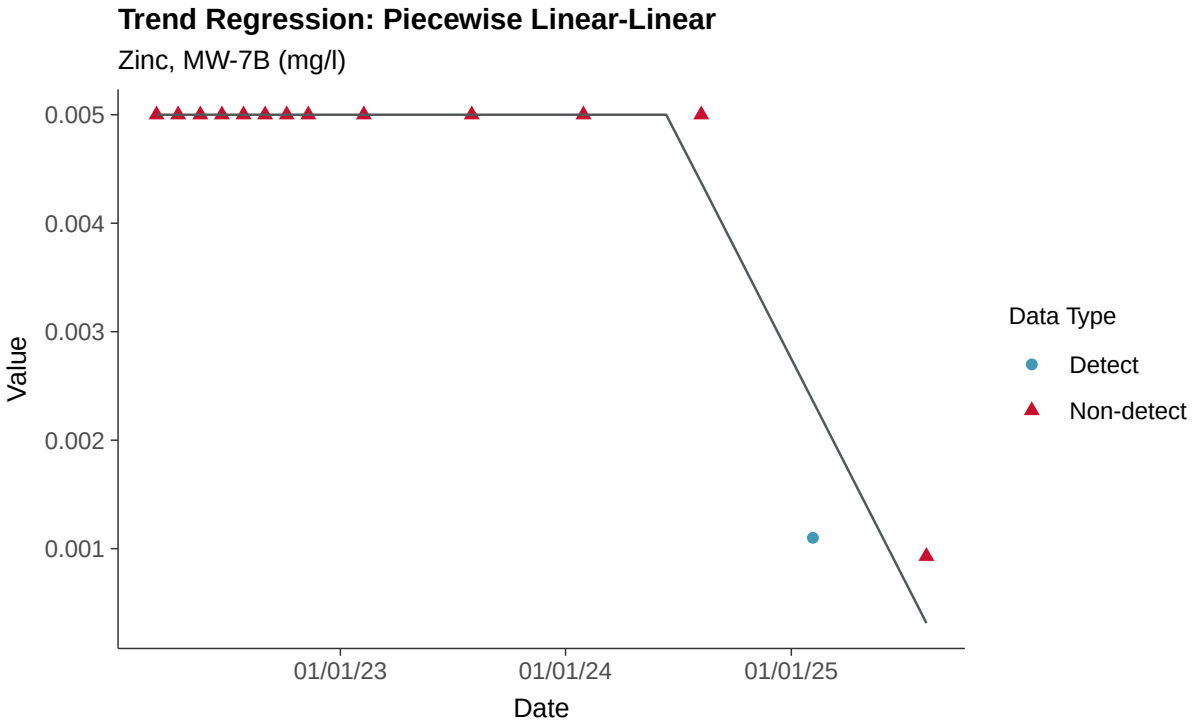
Boxplot

Zinc, MW-7B (mg/l)

Boxplot by Season

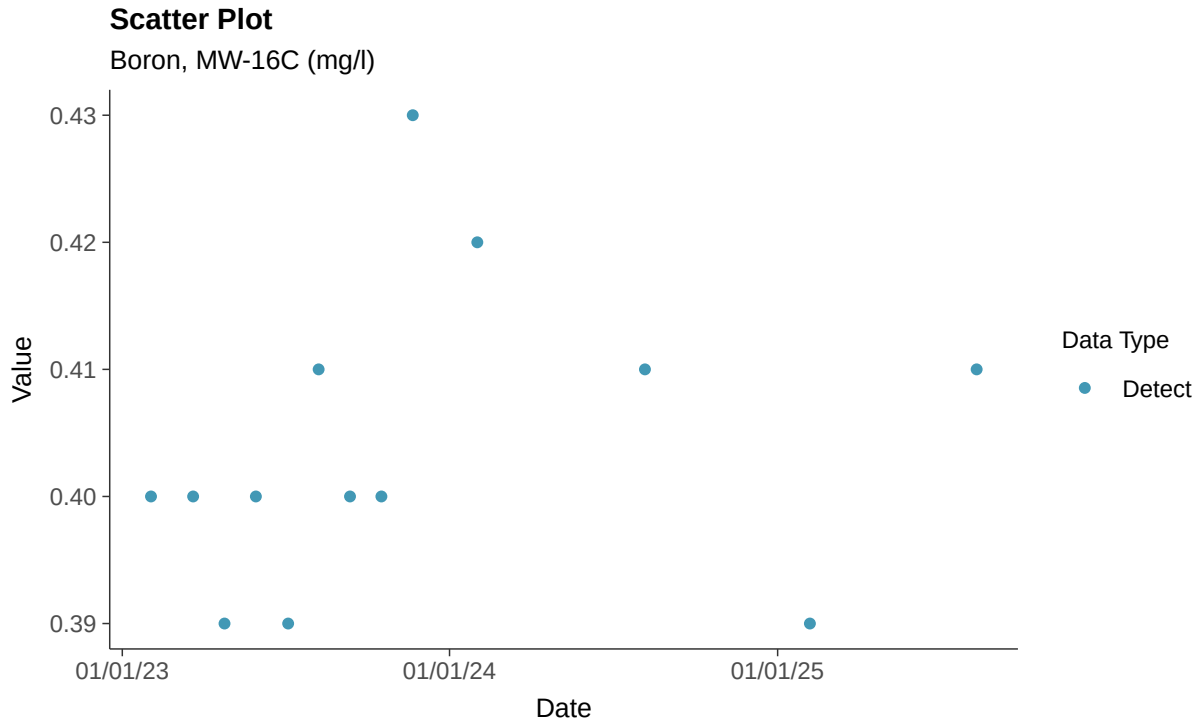
Zinc, MW-7B (mg/l)

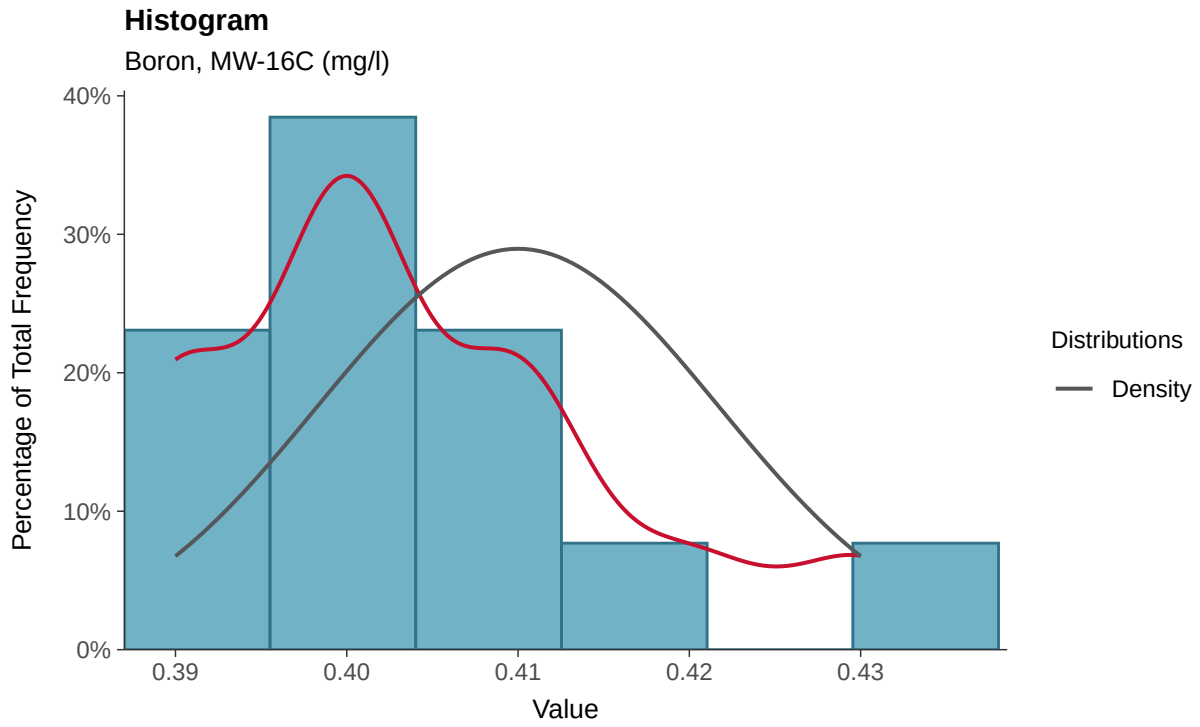



Trend Regression: Piecewise Linear-Linear
Zinc, MW-7B (mg/l)
0.005
0.004
0.003
0.002
0.001
Value
01/01/23
01/01/24
01/01/25
Date
Data Type
Detect
Non-detect

Appendix III: Boron, MW-16C

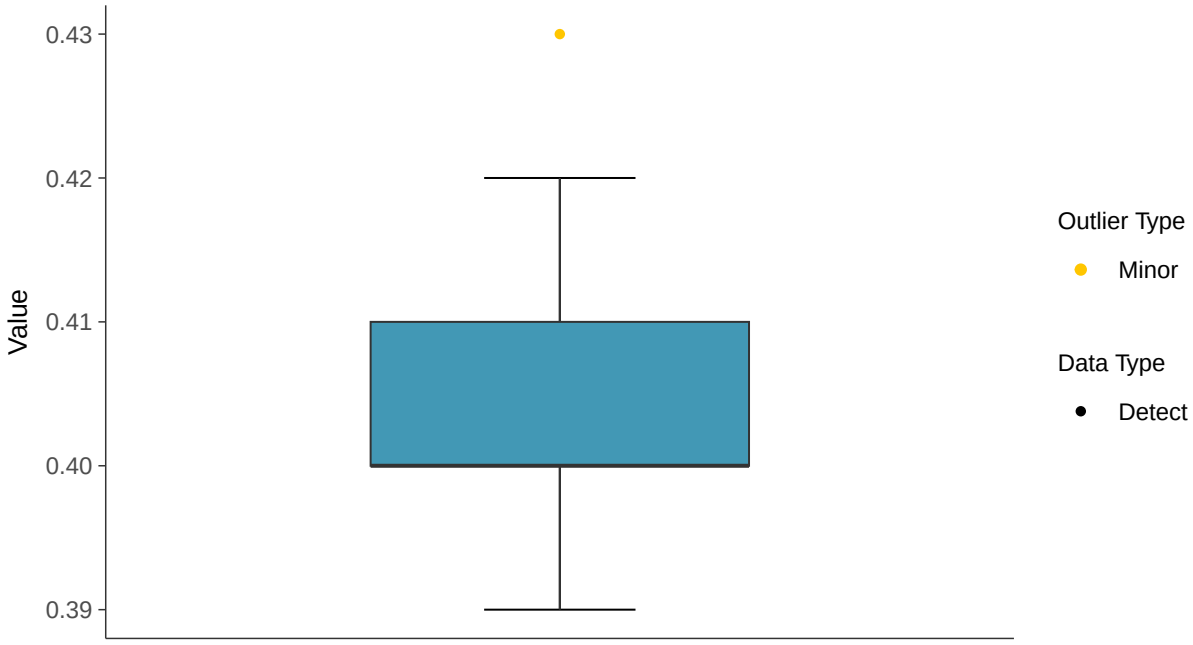
ID: 14_2_105





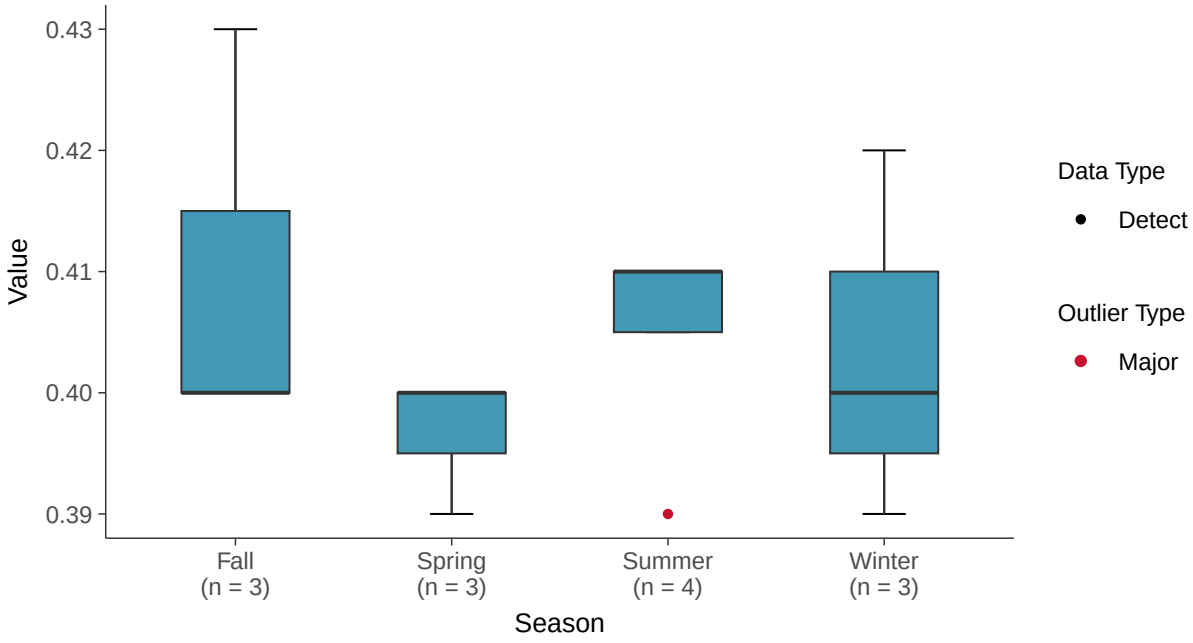
Boxplot

Boron, MW-16C (mg/l)



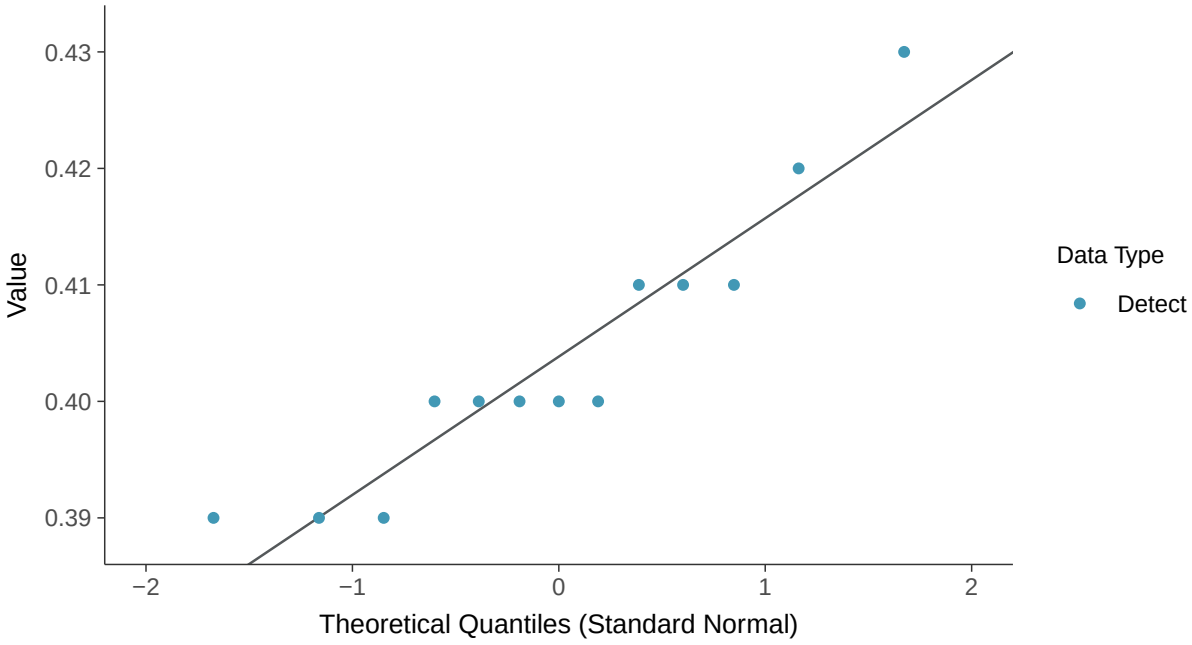
Boxplot by Season

Boron, MW-16C (mg/l)



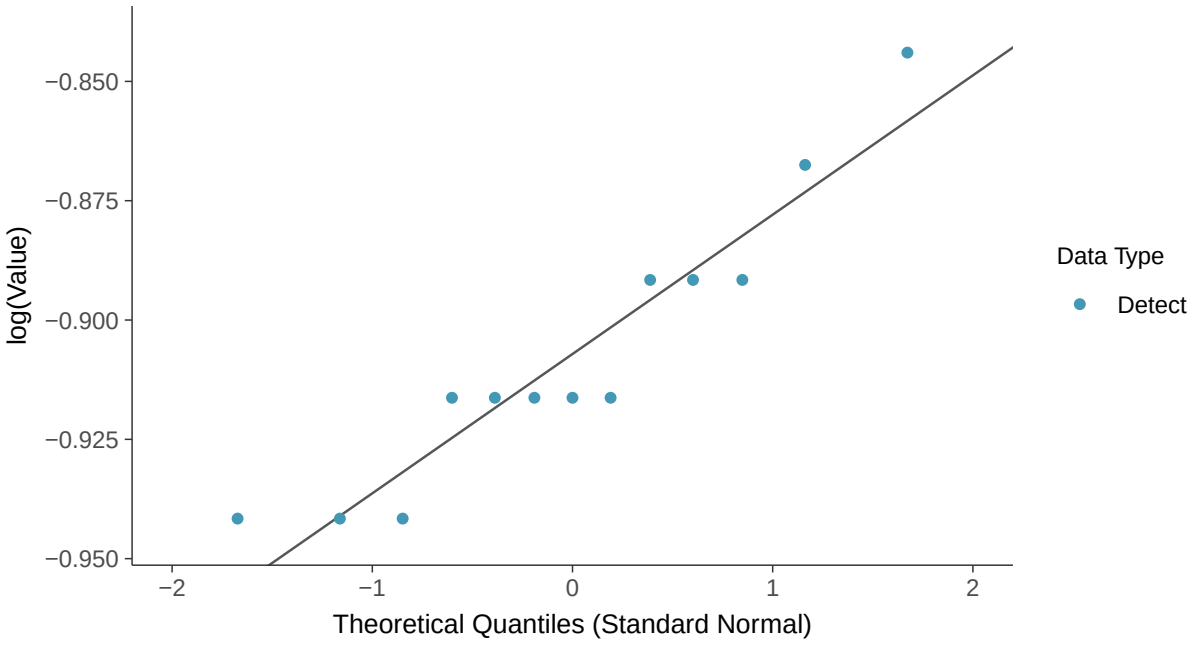
Normal Q-Q plot

Boron, MW-16C (mg/l)



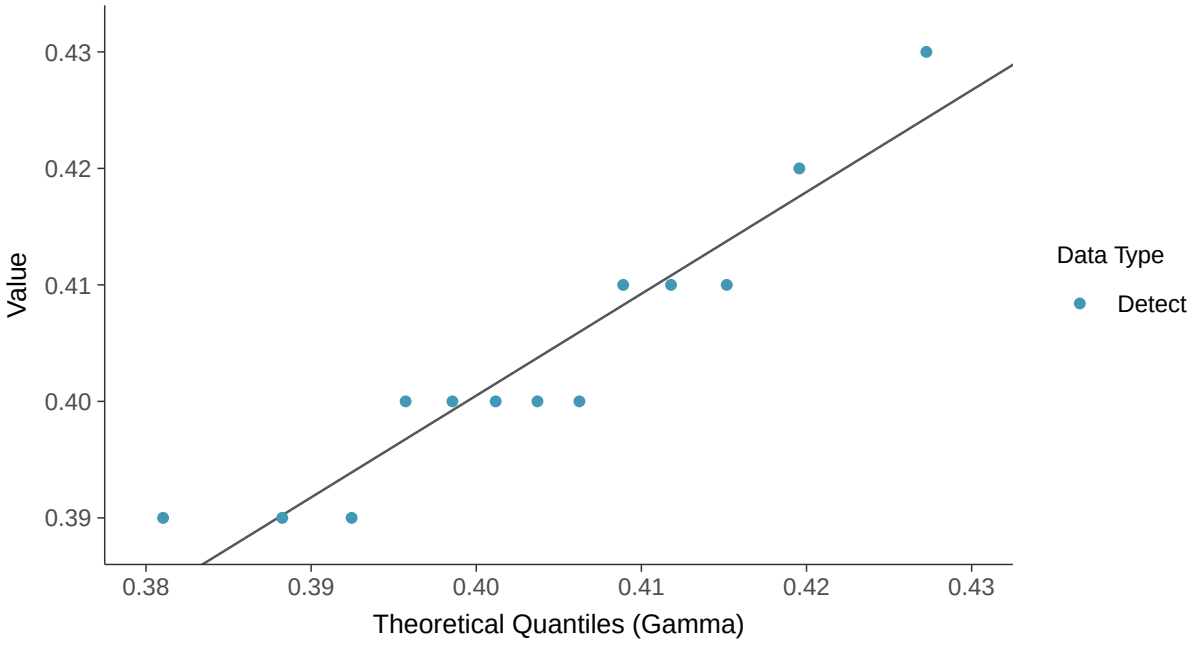
Lognormal Q-Q plot

Boron, MW-16C (mg/l)



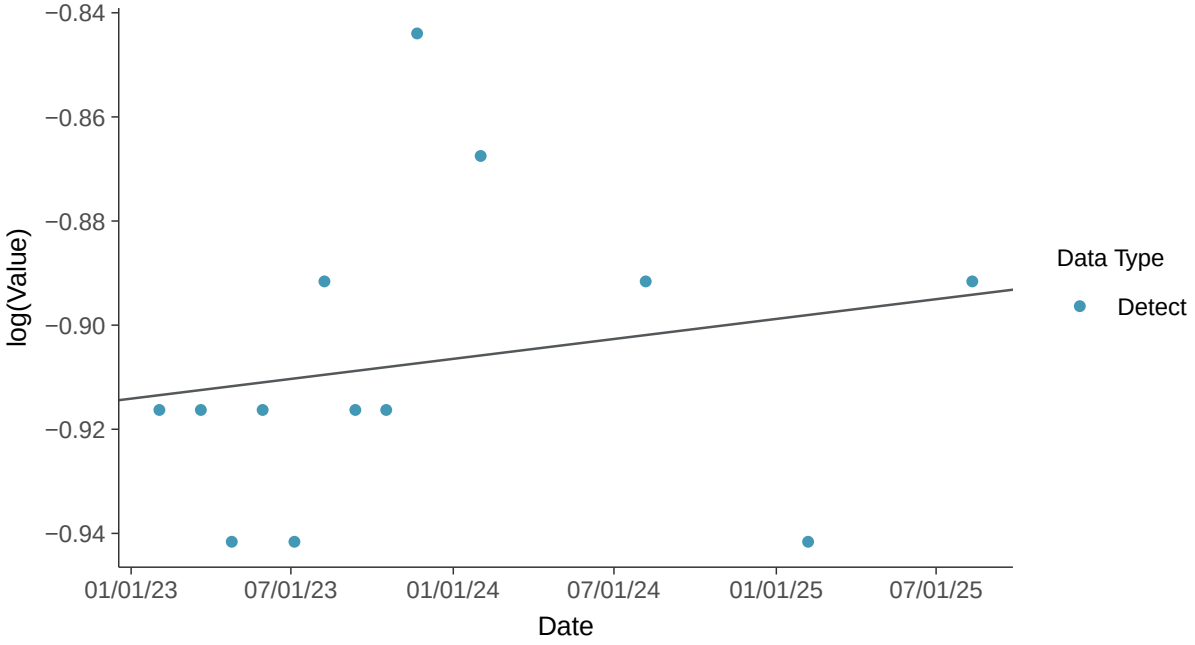
Gamma Q-Q plot

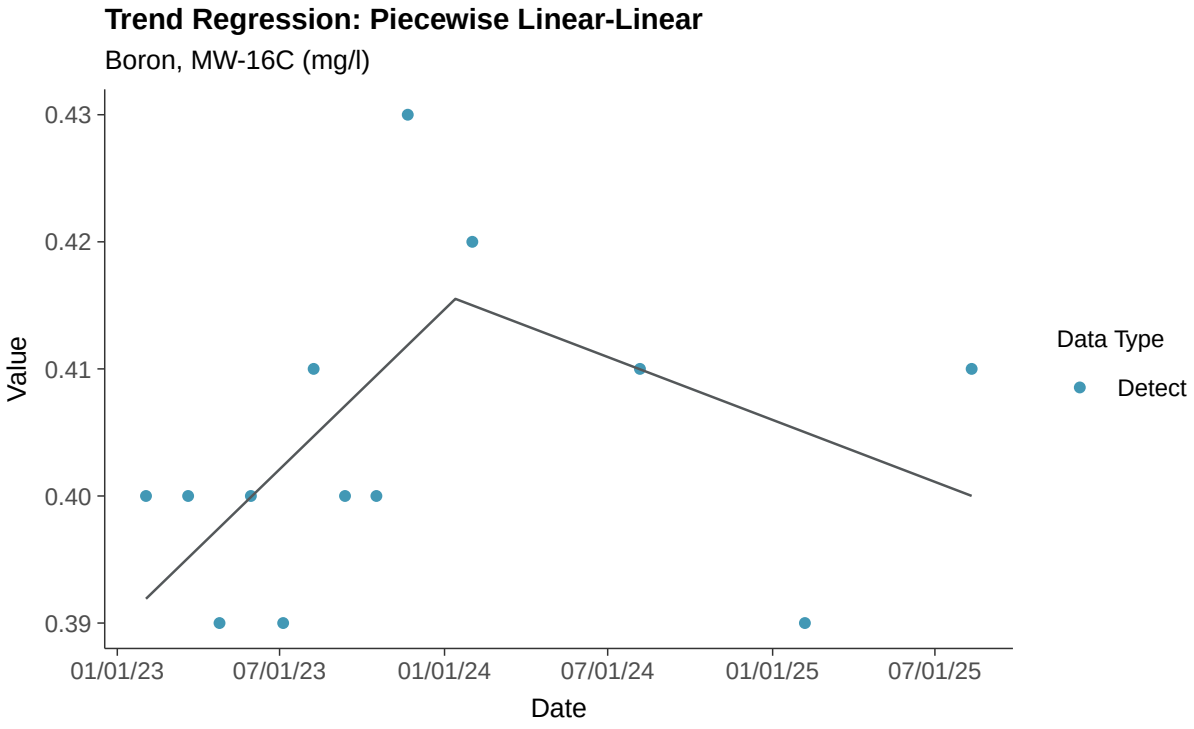
Boron, MW-16C (mg/l)



Trend Regression: Lognormal MLE

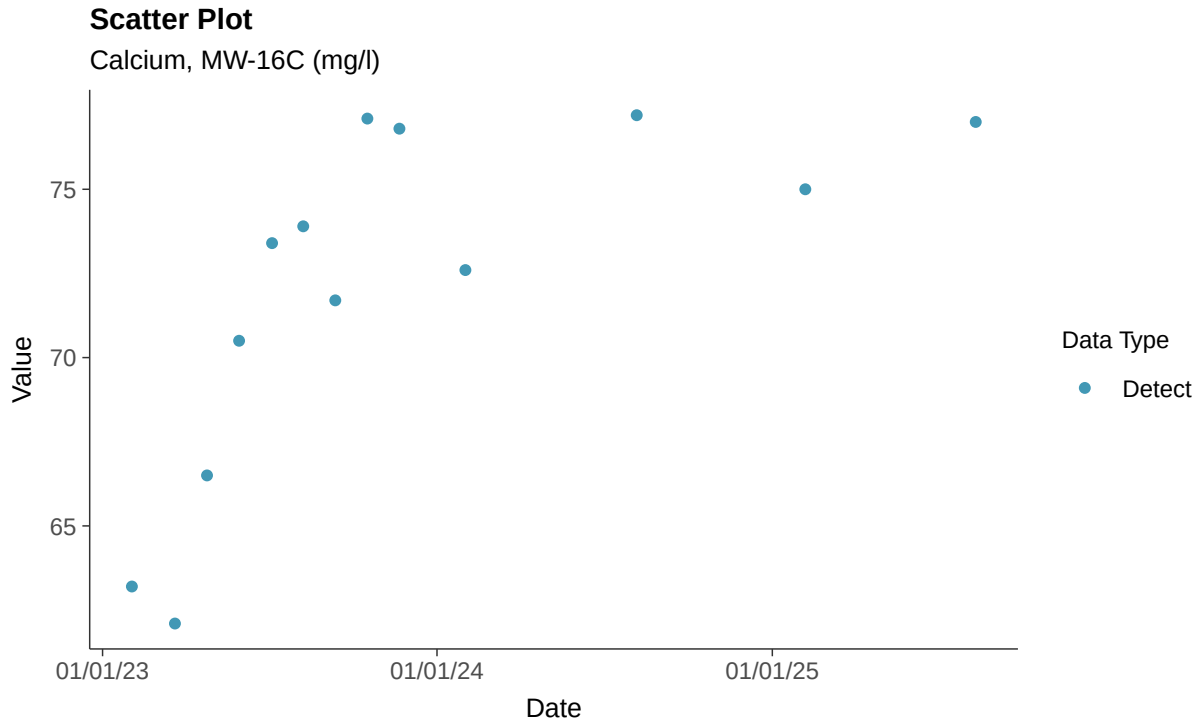
Boron, MW-16C (mg/l)

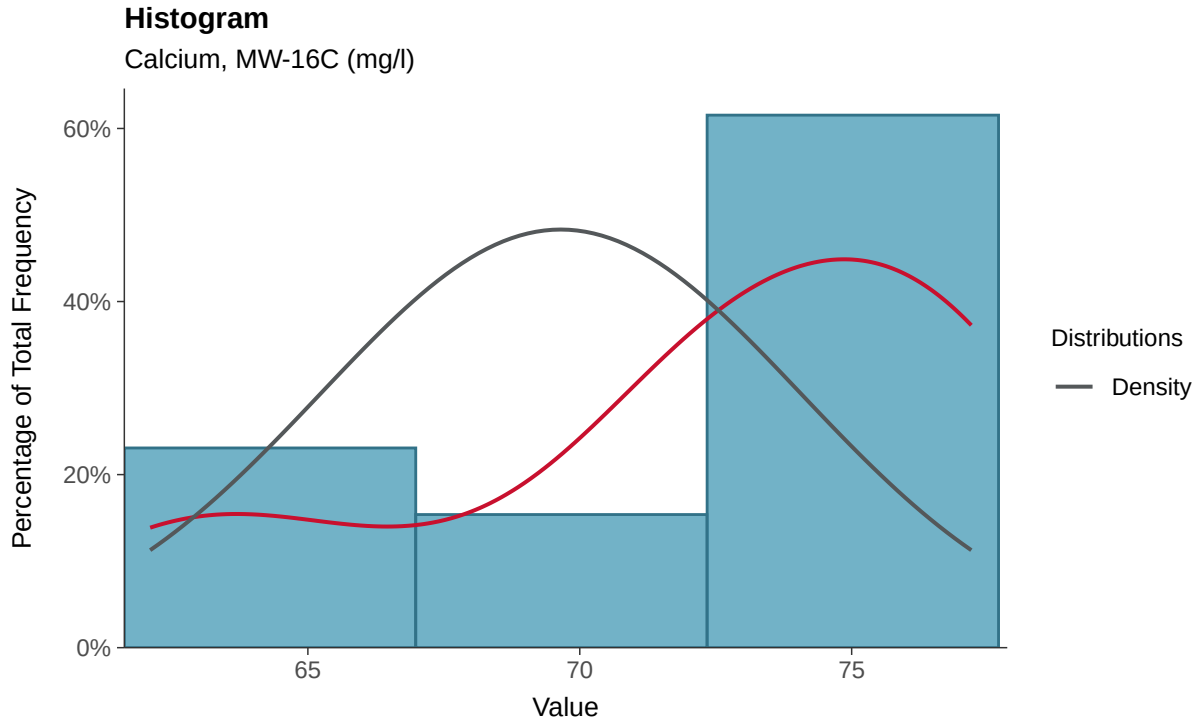



Trend Regression: Piecewise Linear-Linear
Boron, MW-16C (mg/l)
Value
0.43
0.42
0.41
0.40
0.39
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect

Appendix III: Calcium, MW-16C

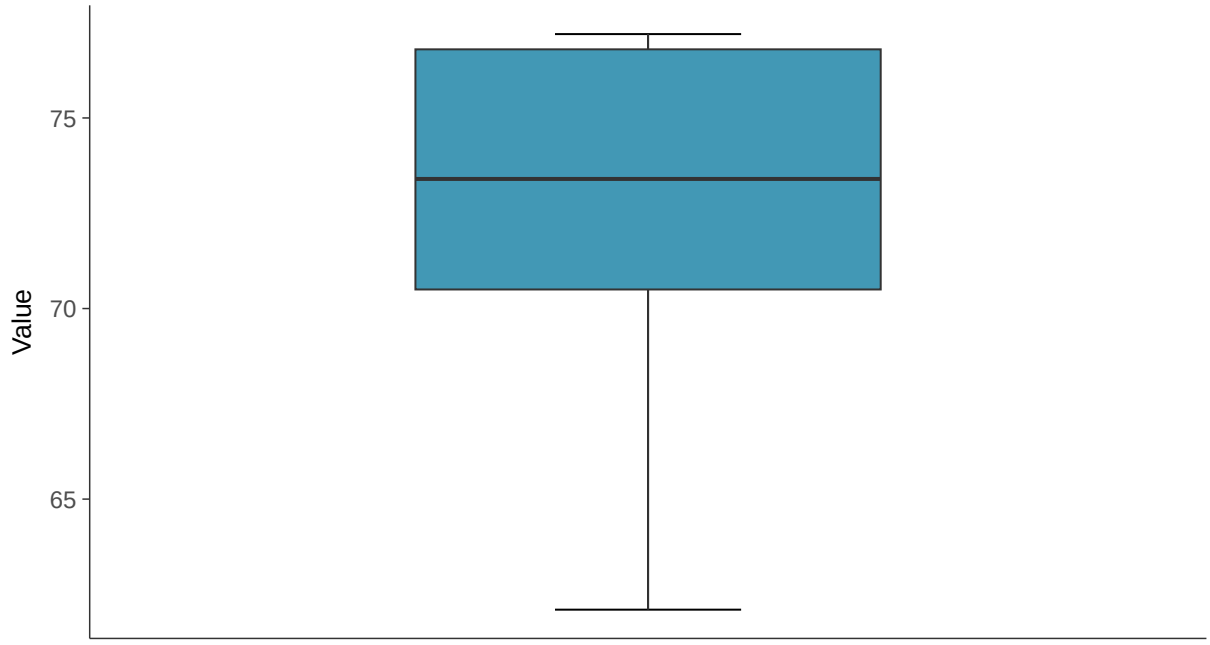
ID: 14_2_107





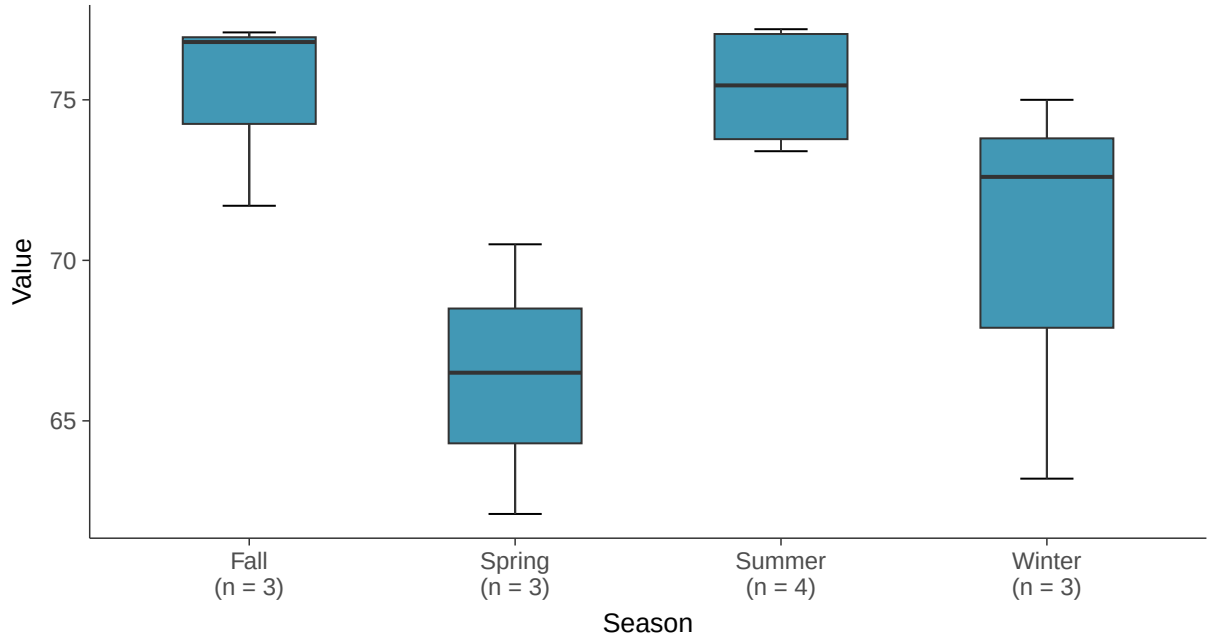
Boxplot

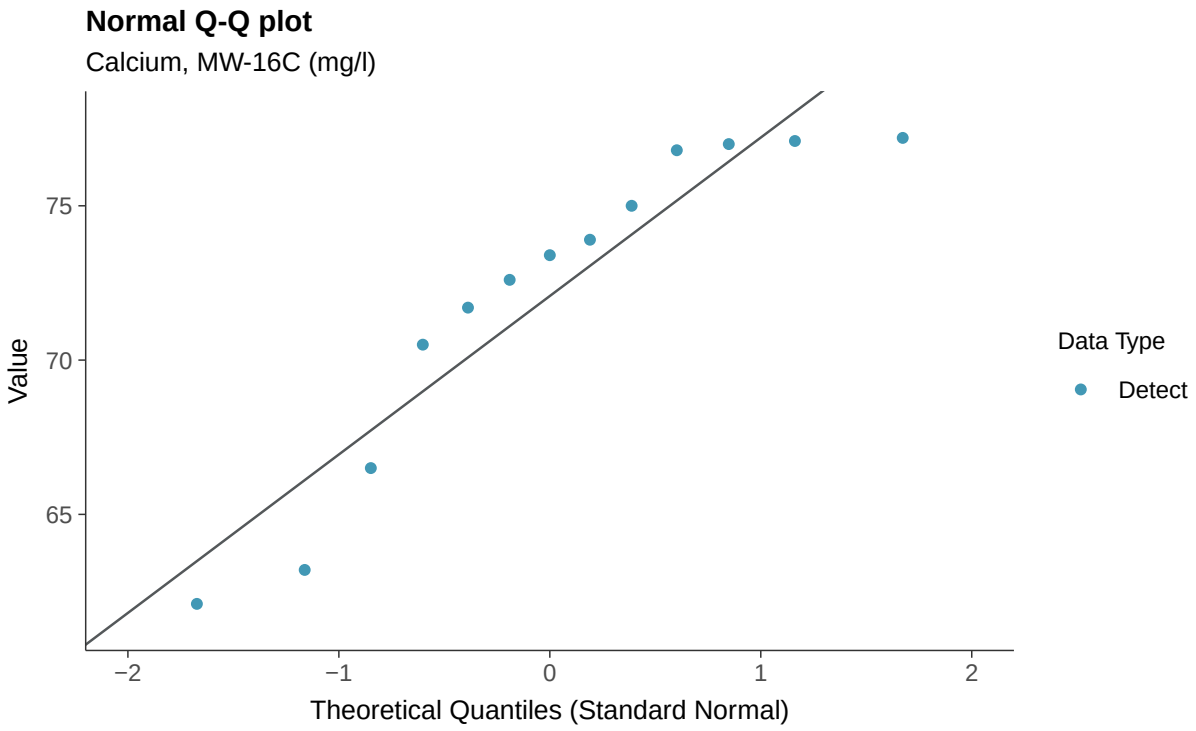
Calcium, MW-16C (mg/l)

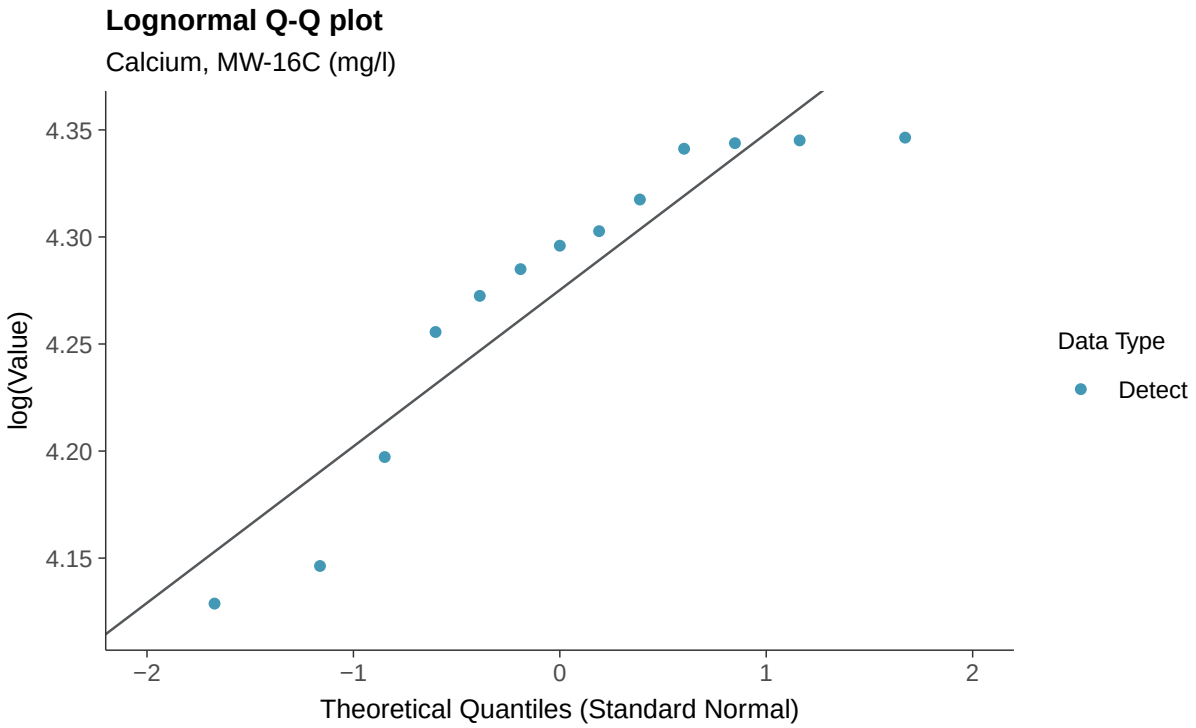


Boxplot by Season

Calcium, MW-16C (mg/l)

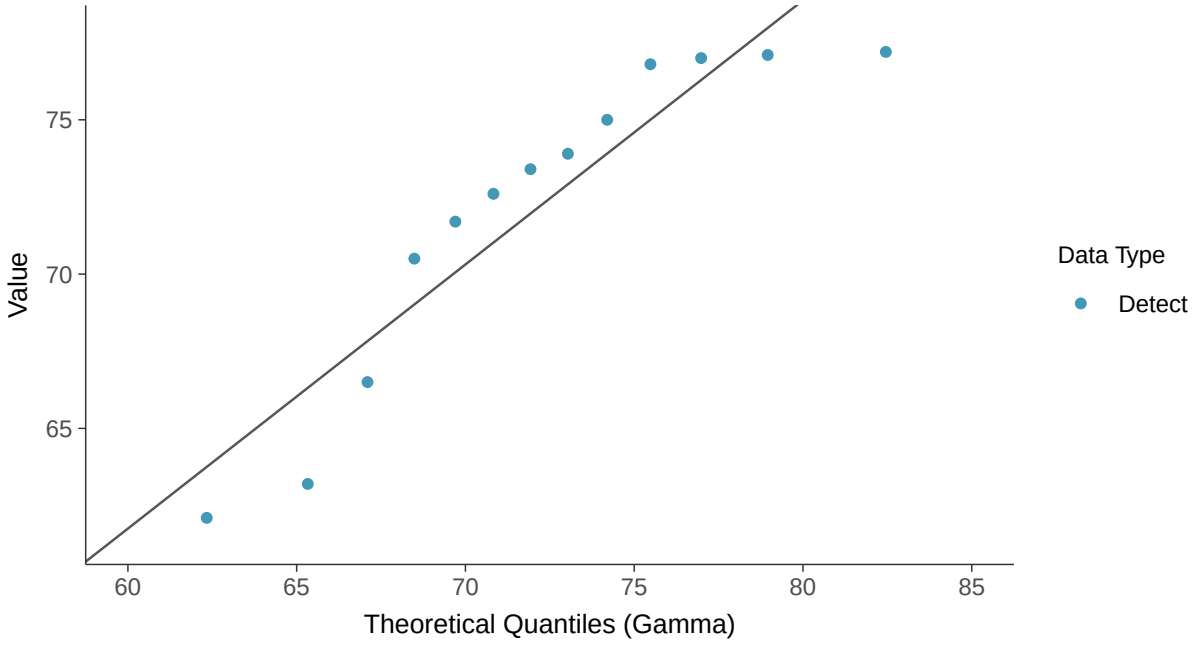



Normal Q-Q plot
Calcium, MW-16C (mg/l)
Value
75
70
65
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect


Lognormal Q-Q plot
Calcium, MW-16C (mg/l)
log(Value)
4.35
4.30
4.25
4.20
4.15
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect

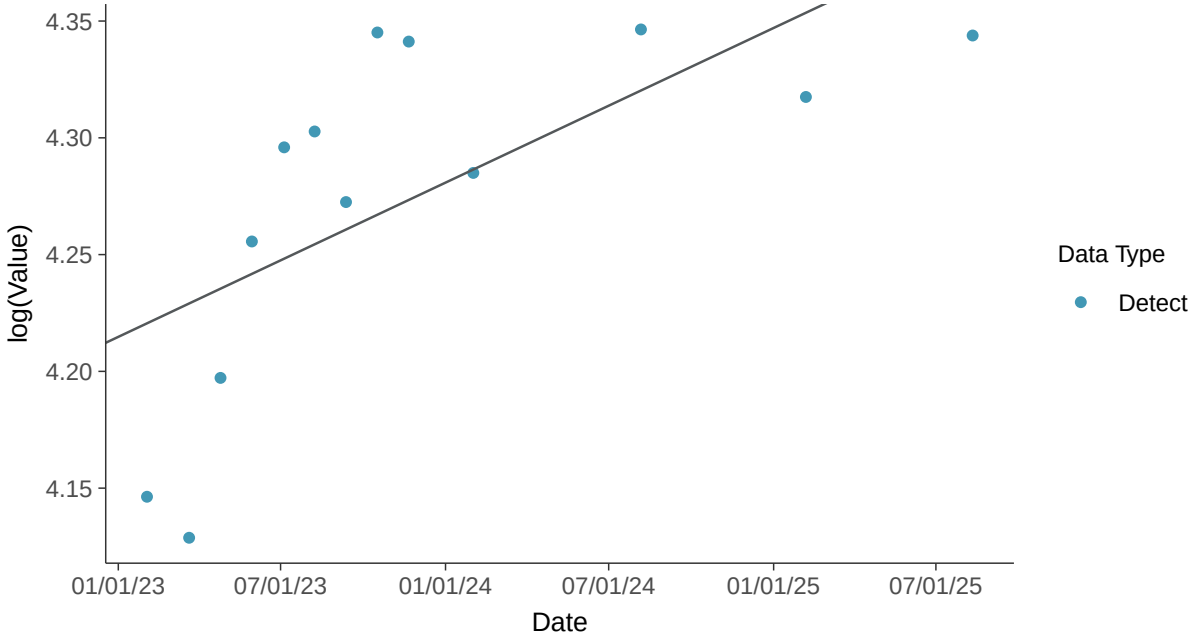
Gamma Q-Q plot

Calcium, MW-16C (mg/l)



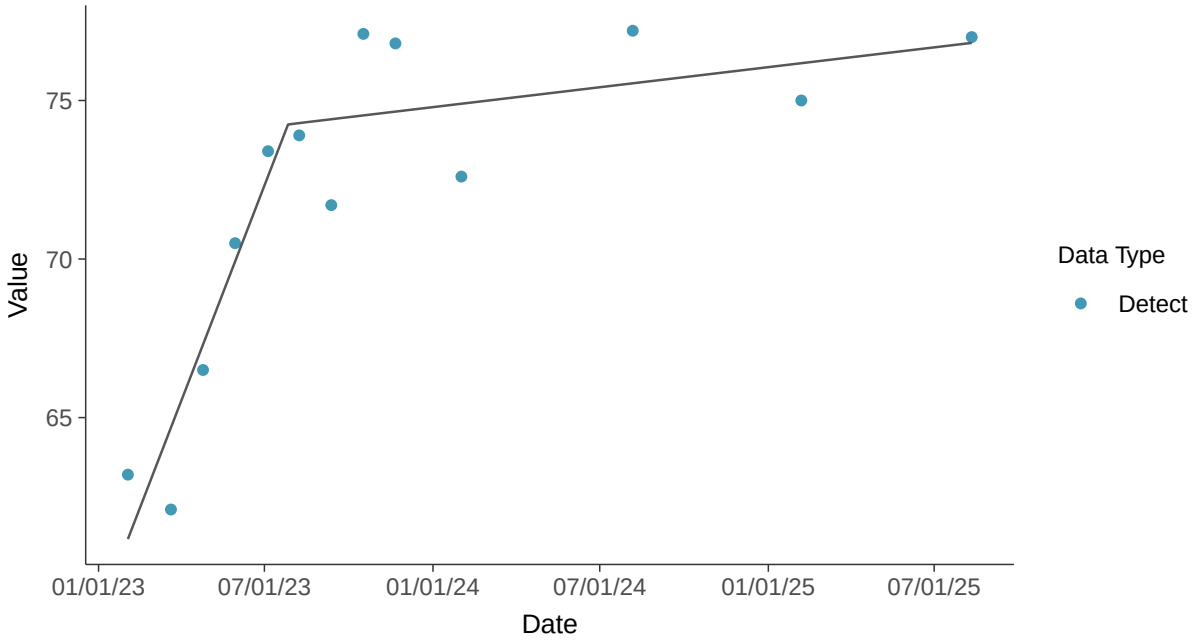
Trend Regression: Lognormal MLE

Calcium, MW-16C (mg/l)



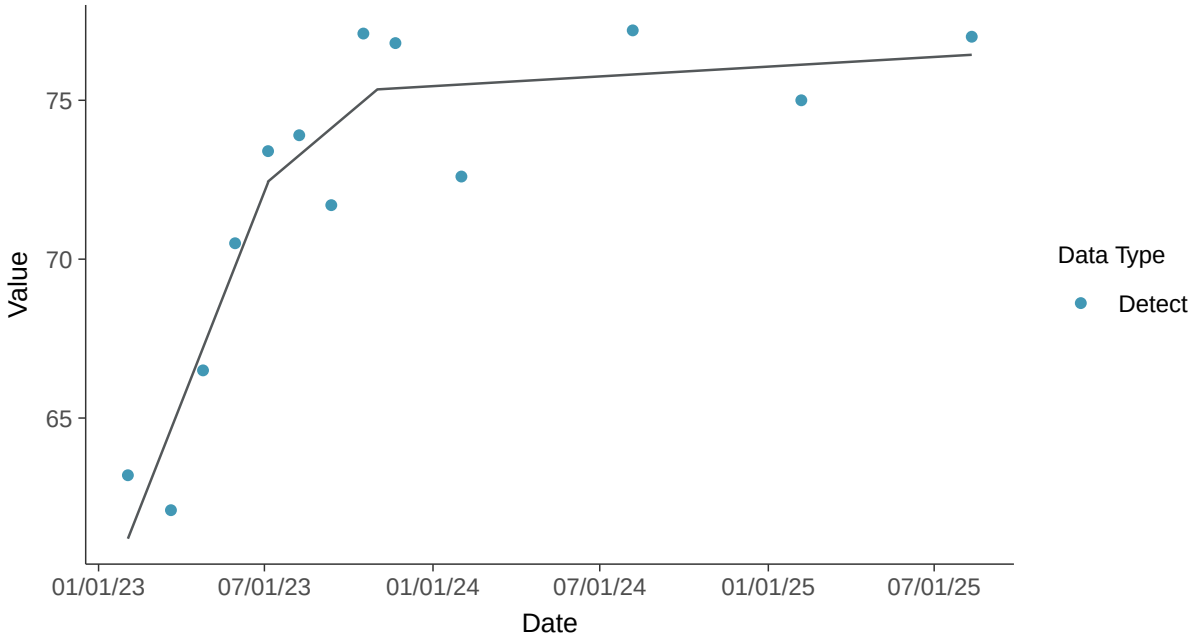
Trend Regression: Piecewise Linear-Linear

Calcium, MW-16C (mg/l)



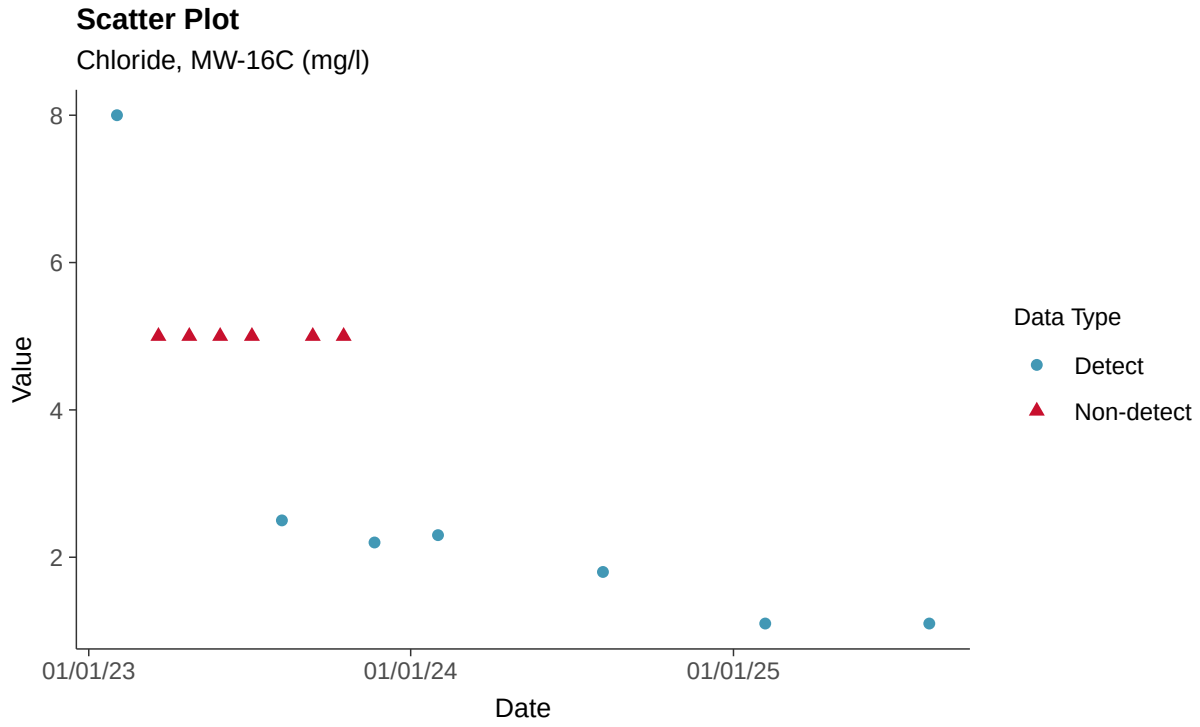
Trend Regression: Piecewise Linear-Linear-Linear

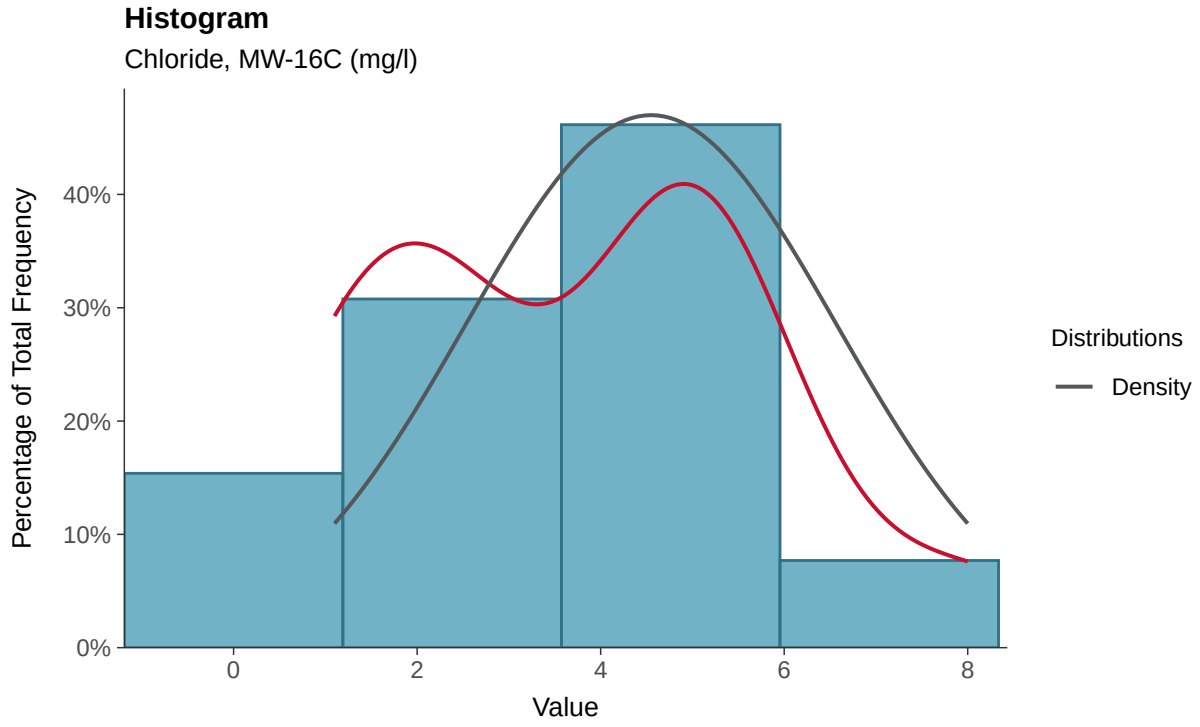
Calcium, MW-16C (mg/l)



Appendix III: Chloride, MW-16C

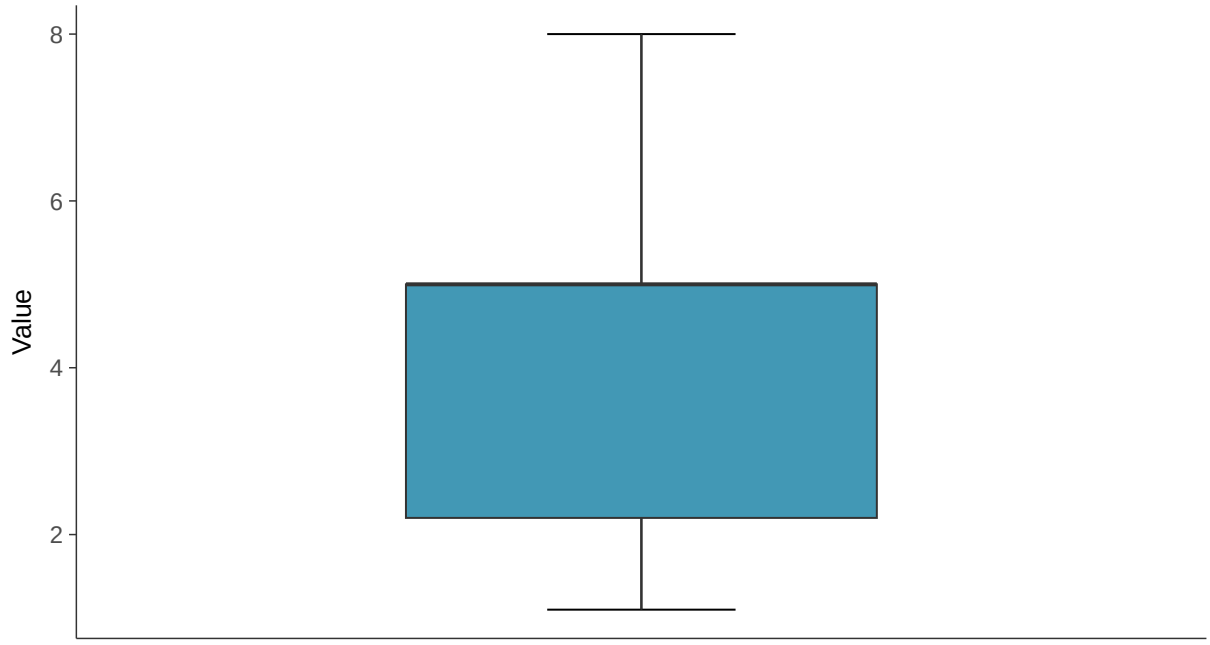
ID: 14_2_108





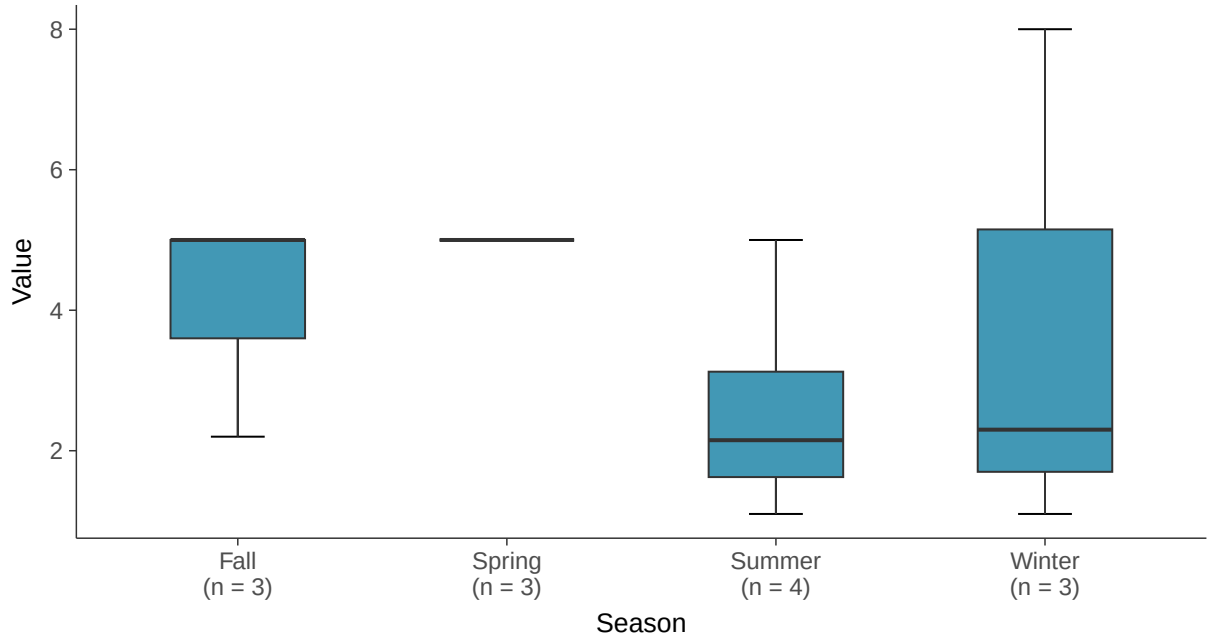
Boxplot

Chloride, MW-16C (mg/l)



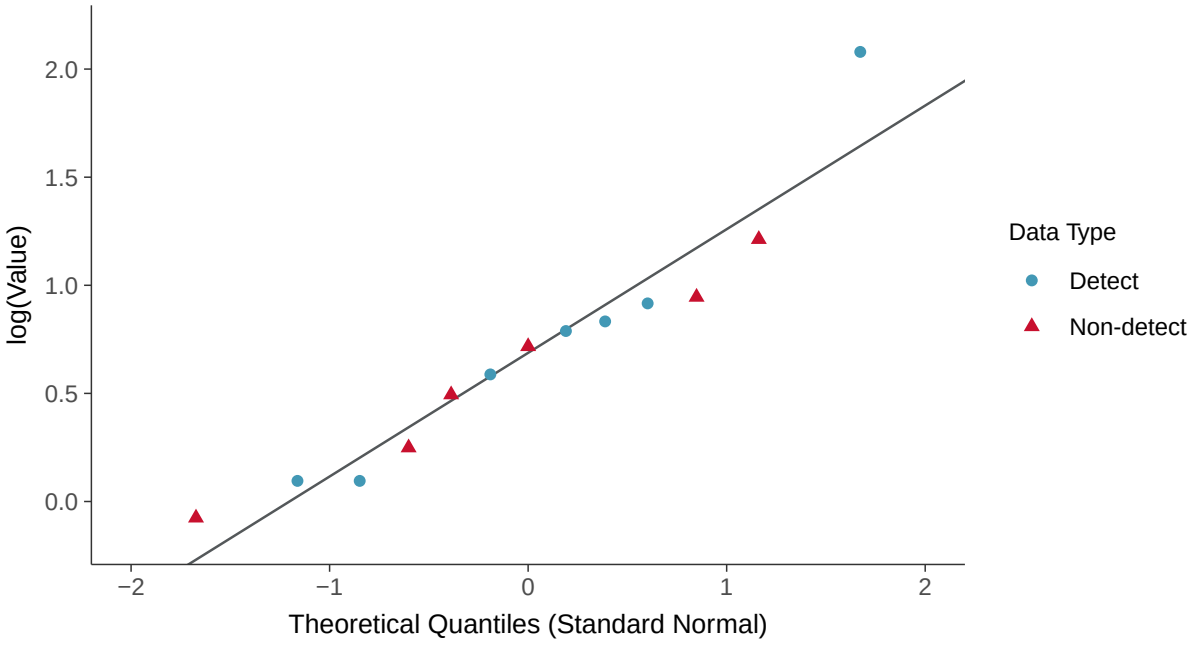
Boxplot by Season

Chloride, MW-16C (mg/l)



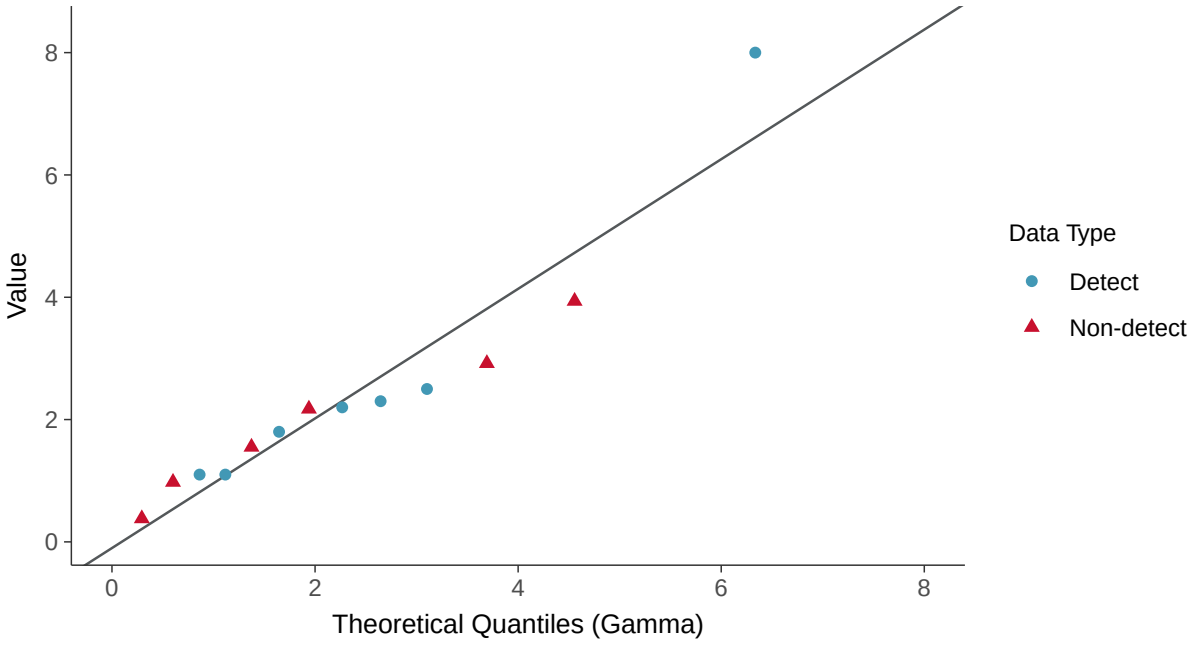
Lognormal Q-Q plot using ROS Imputed Estimates

Chloride, MW-16C (mg/l)



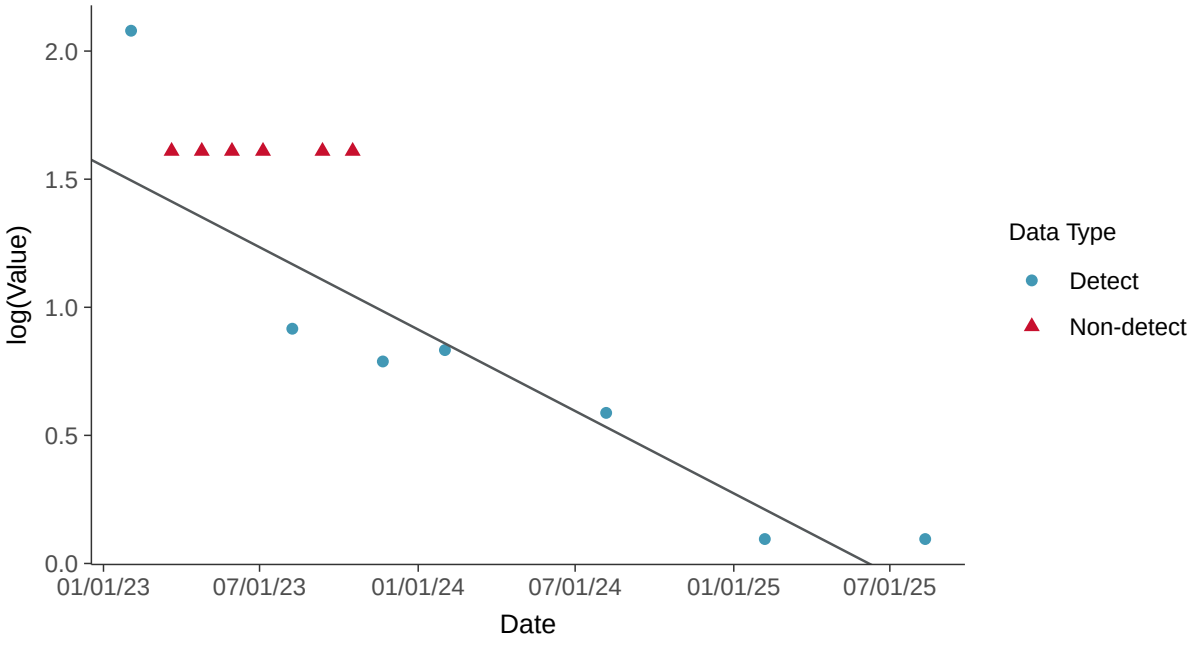
Gamma Q-Q plot using ROS Imputed Estimates

Chloride, MW-16C (mg/l)



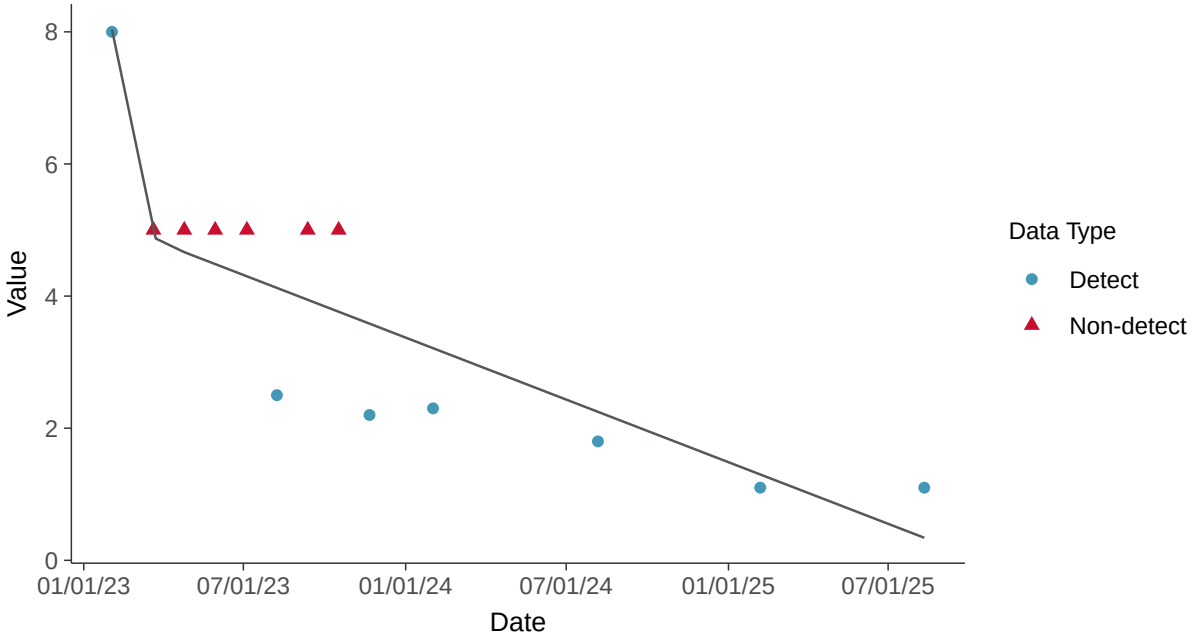
Trend Regression: Lognormal MLE

Chloride, MW-16C (mg/l)



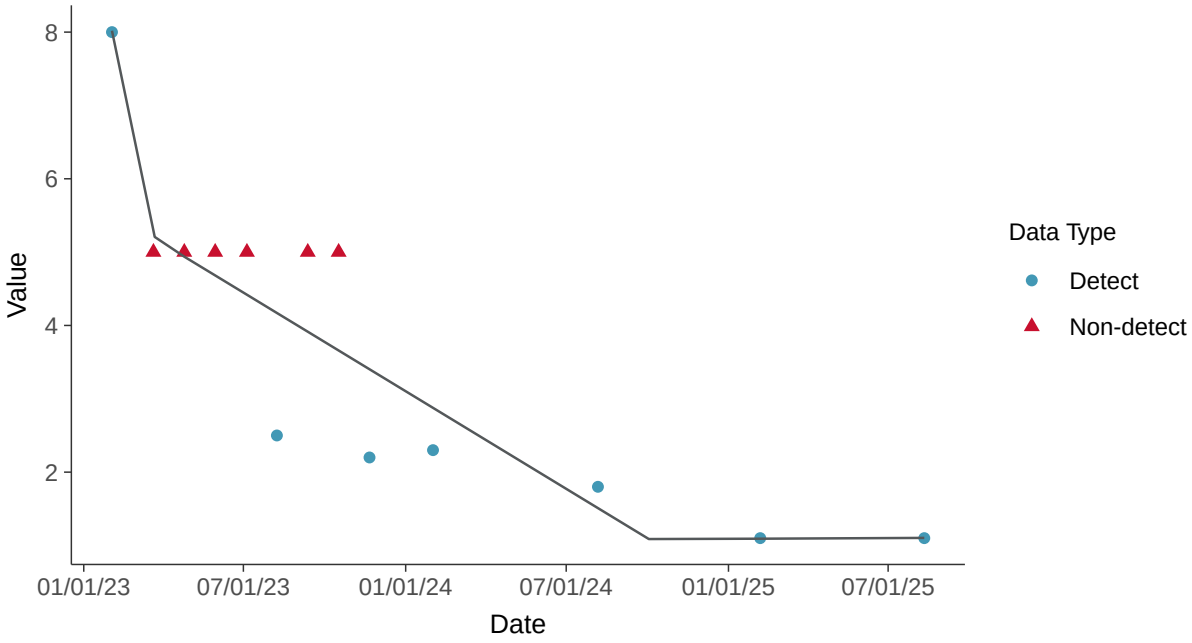
Trend Regression: Piecewise Linear-Linear

Chloride, MW-16C (mg/l)



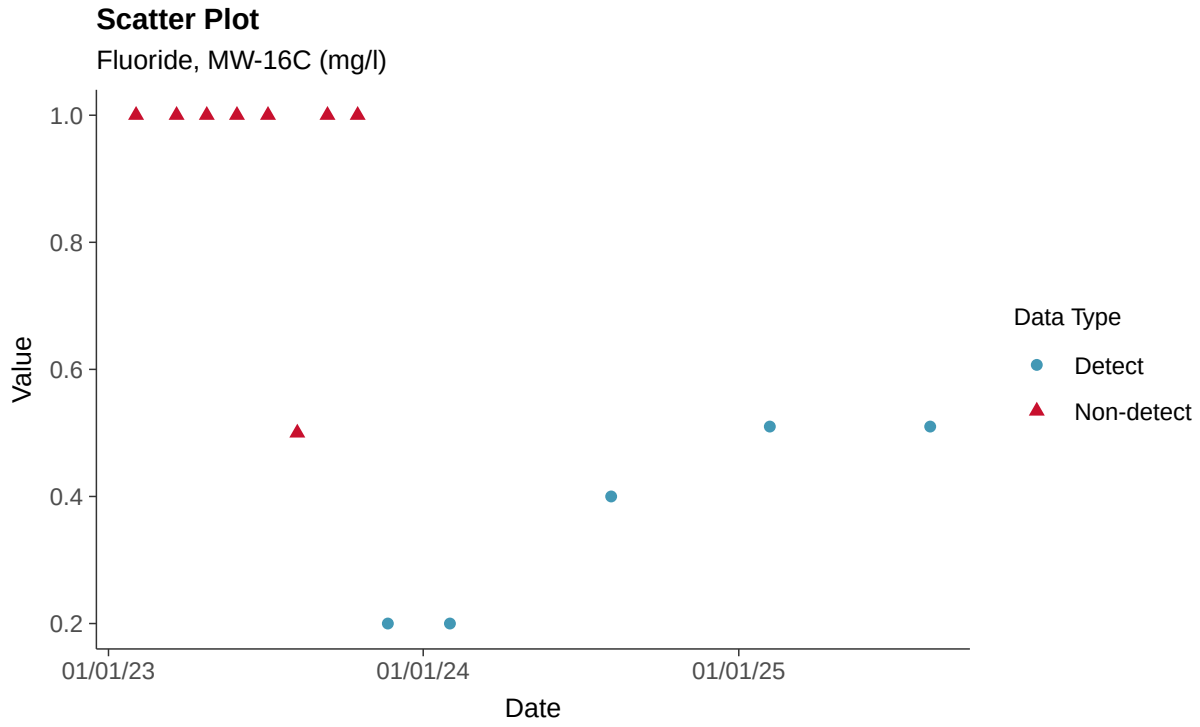
Trend Regression: Piecewise Linear-Linear-Linear

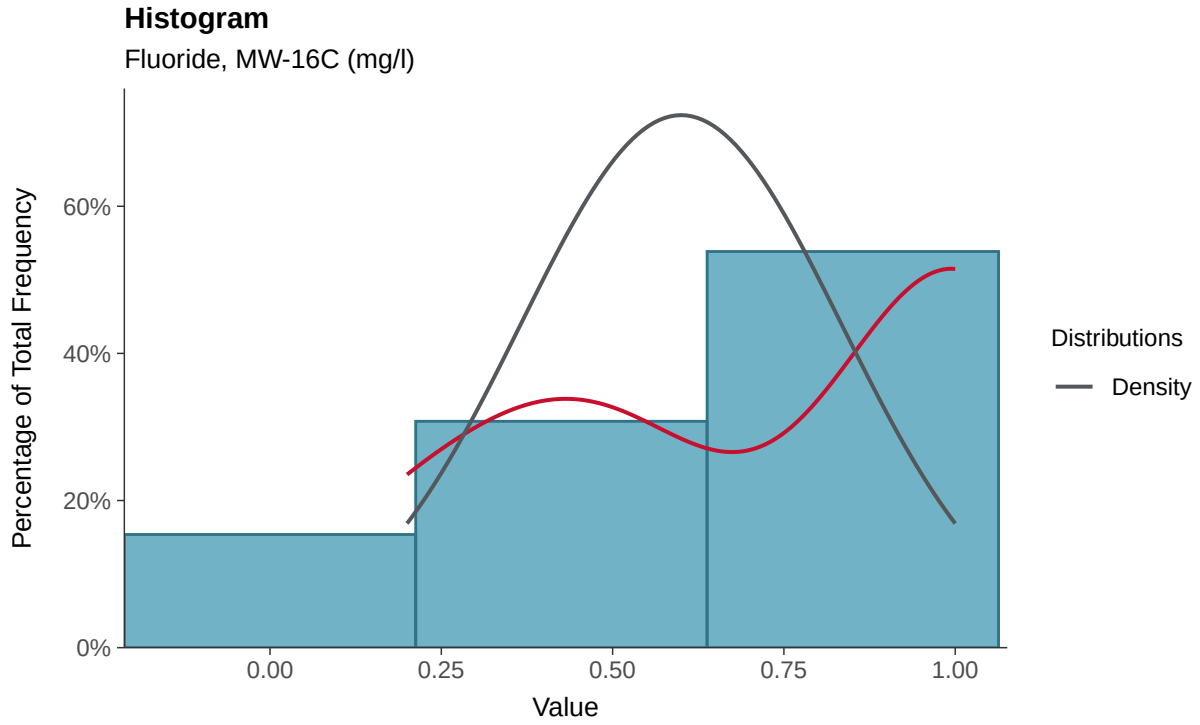
Chloride, MW-16C (mg/l)



Appendix III: Fluoride, MW-16C

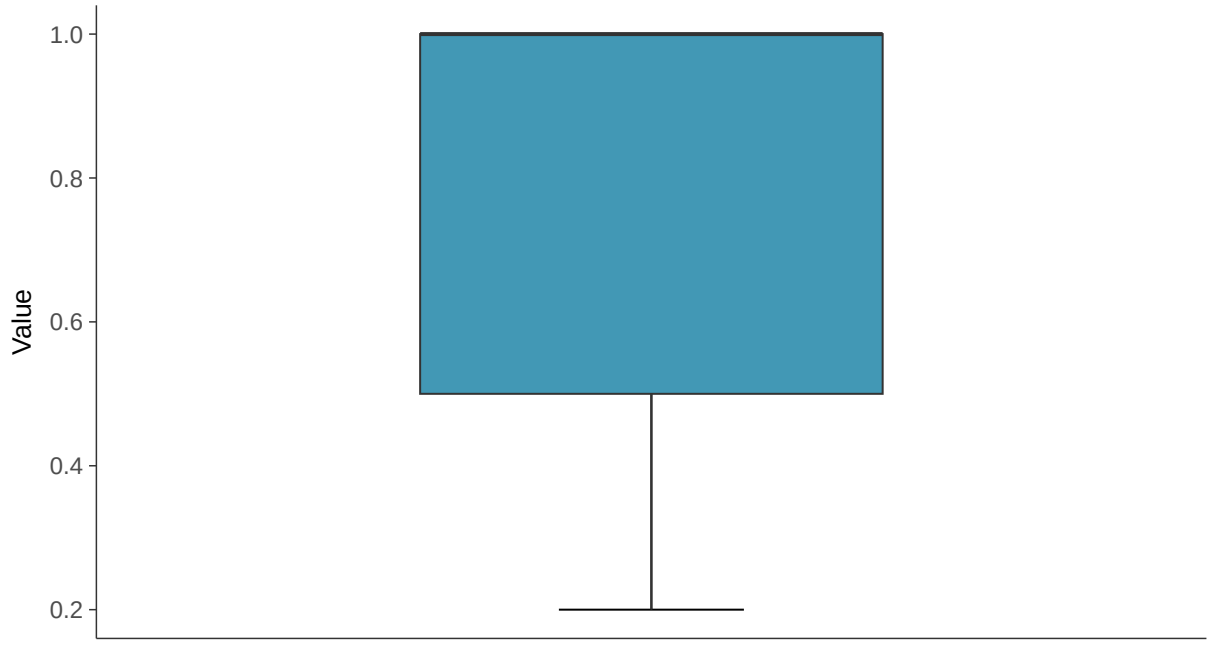
ID: 14_2_112





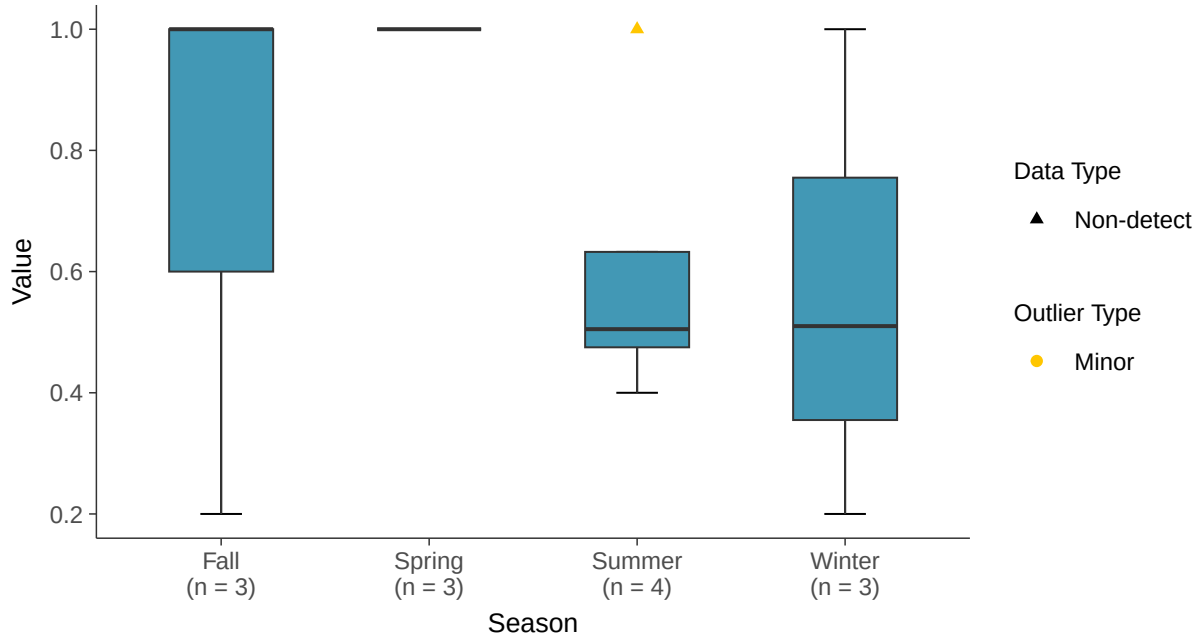
Boxplot

Fluoride, MW-16C (mg/l)



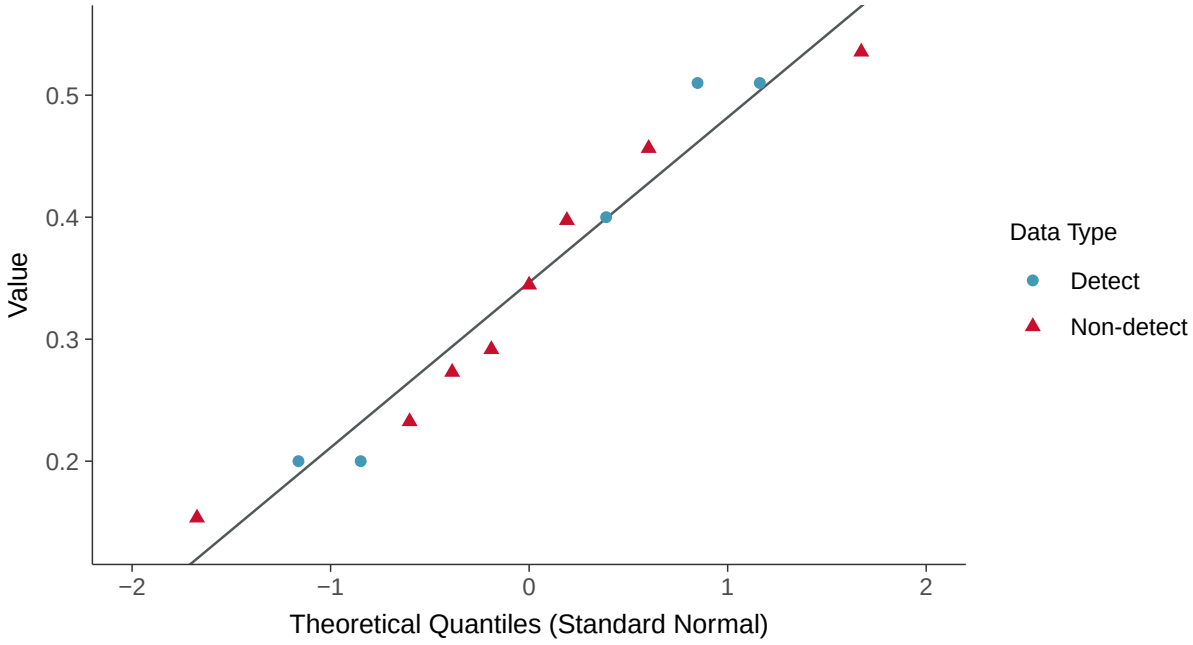
Boxplot by Season

Fluoride, MW-16C (mg/l)



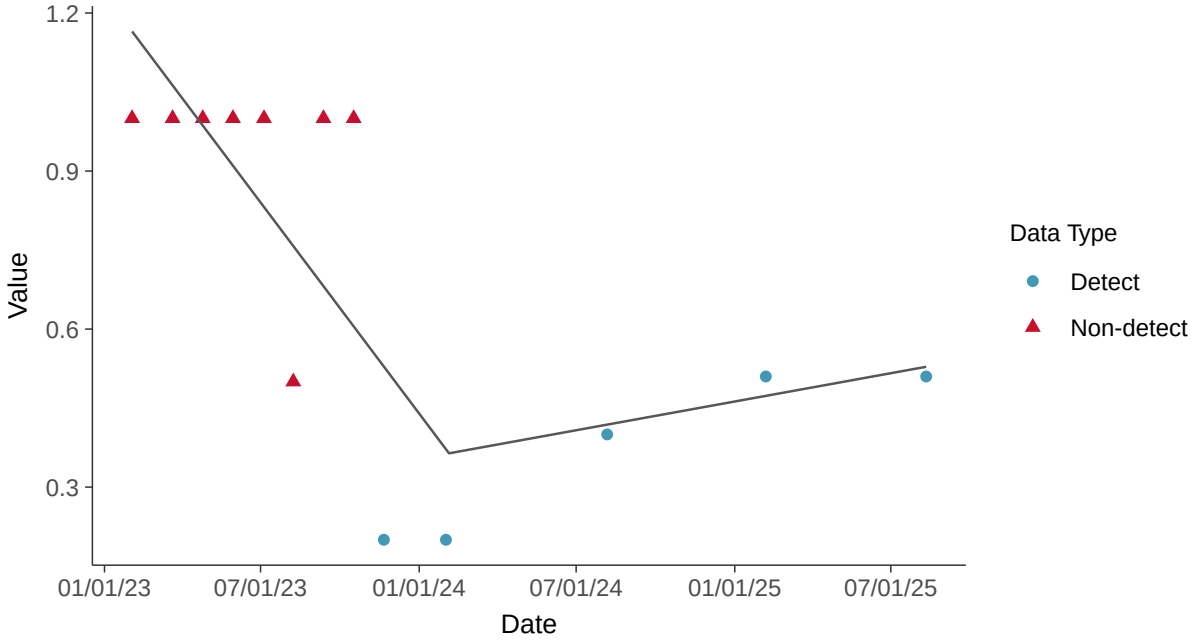
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-16C (mg/l)



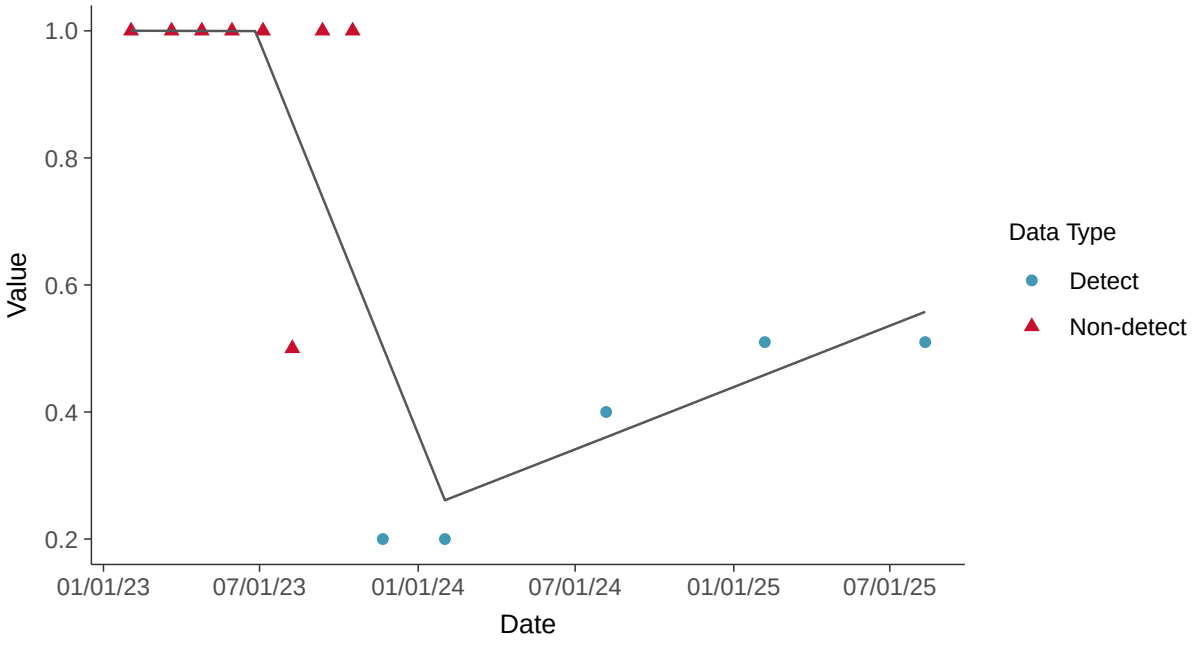
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-16C (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-16C (mg/l)

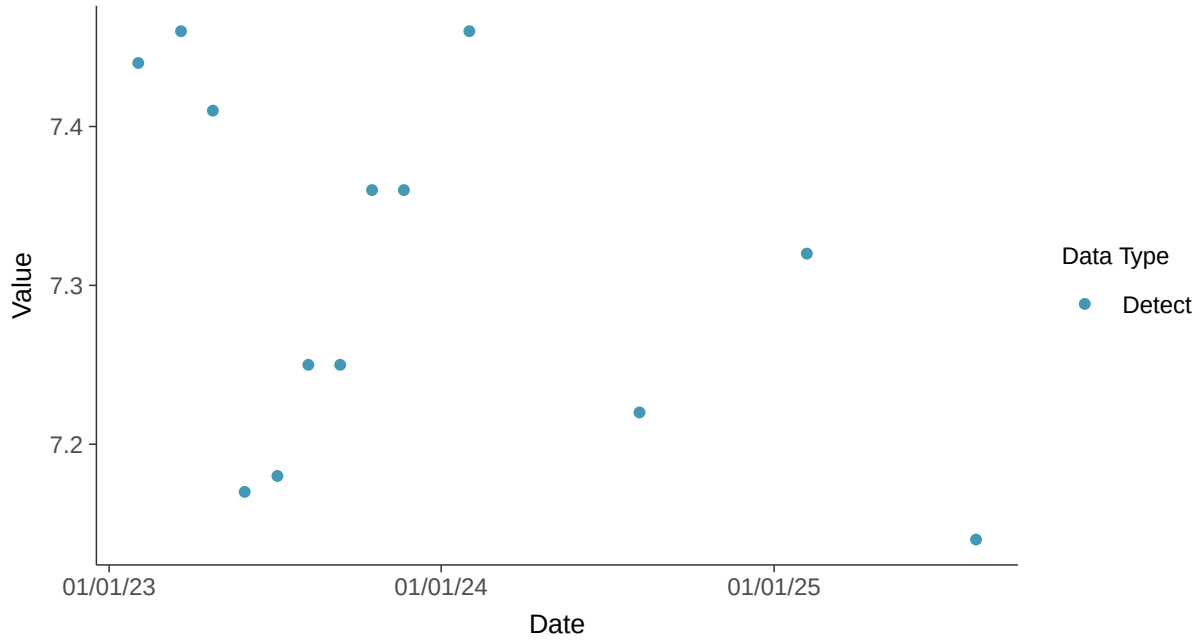


Appendix III: pH, Field, MW-16C

ID: 14_2_120

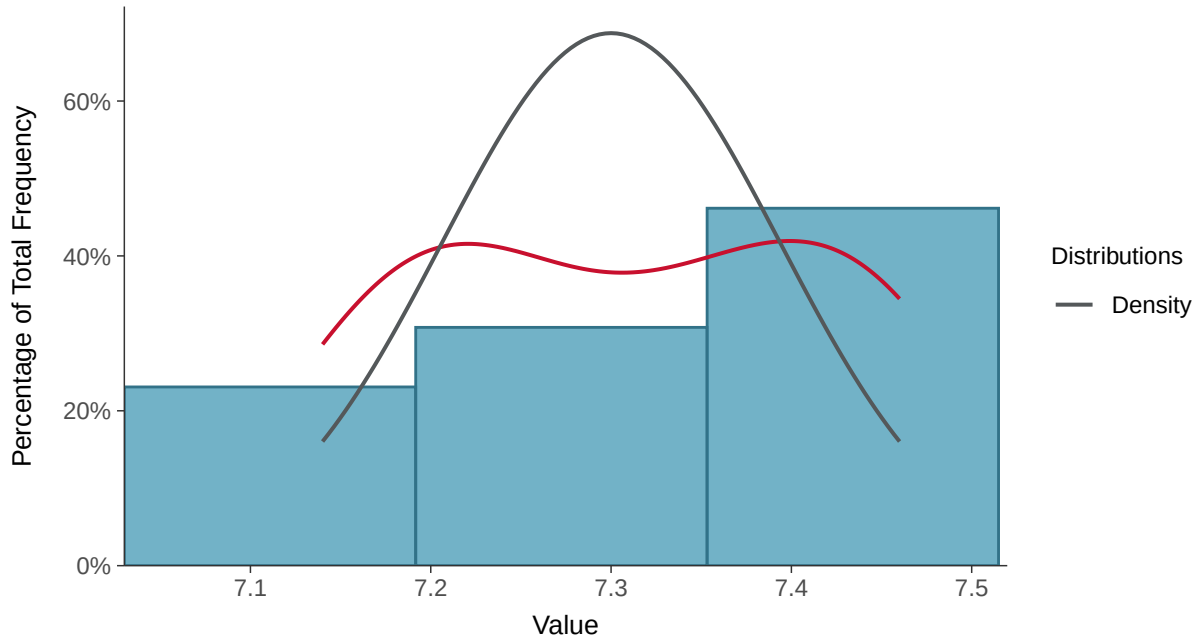
Scatter Plot

pH, Field, MW-16C (su)



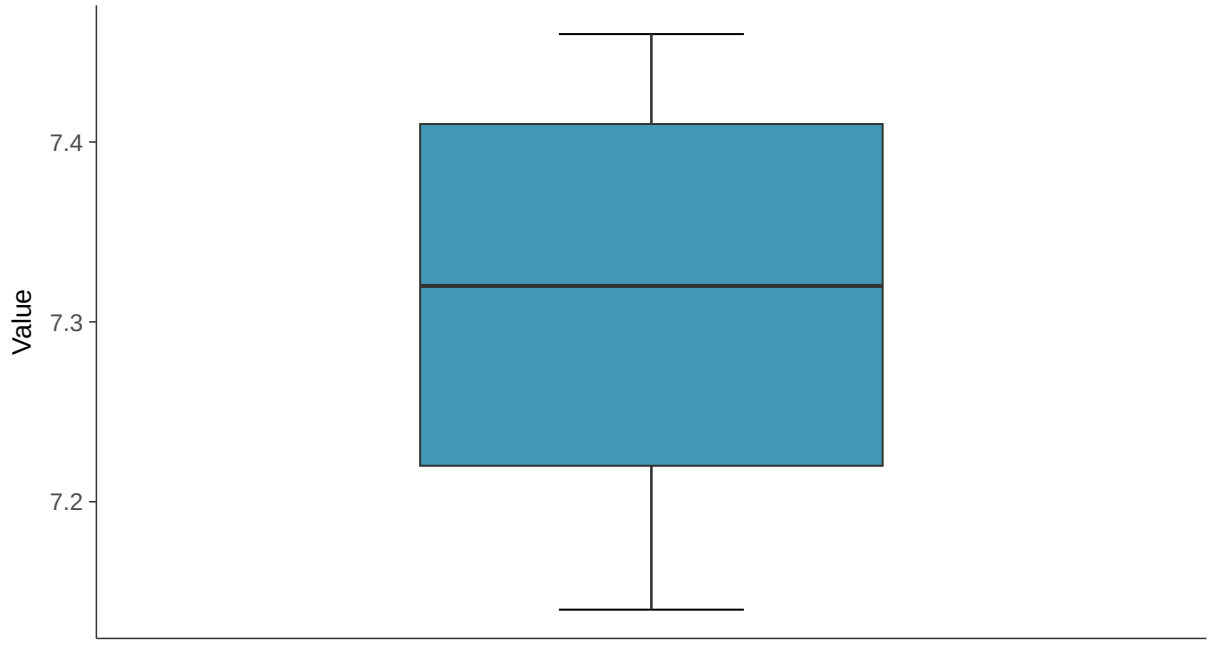
Histogram

pH, Field, MW-16C (su)



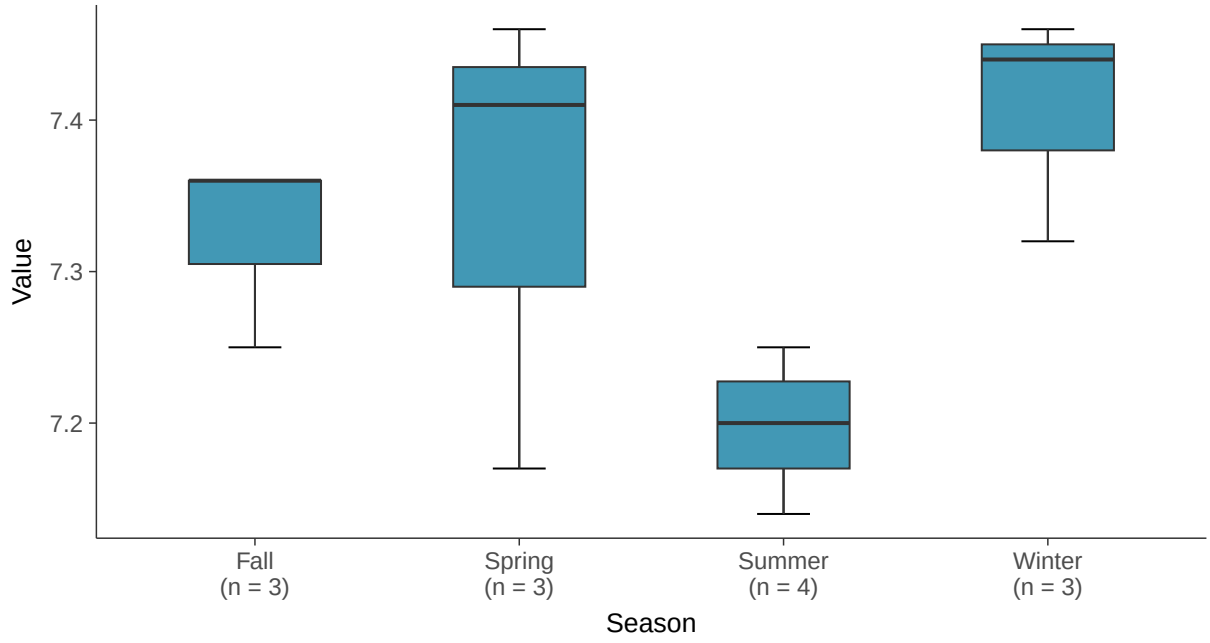
Boxplot

pH, Field, MW-16C (su)



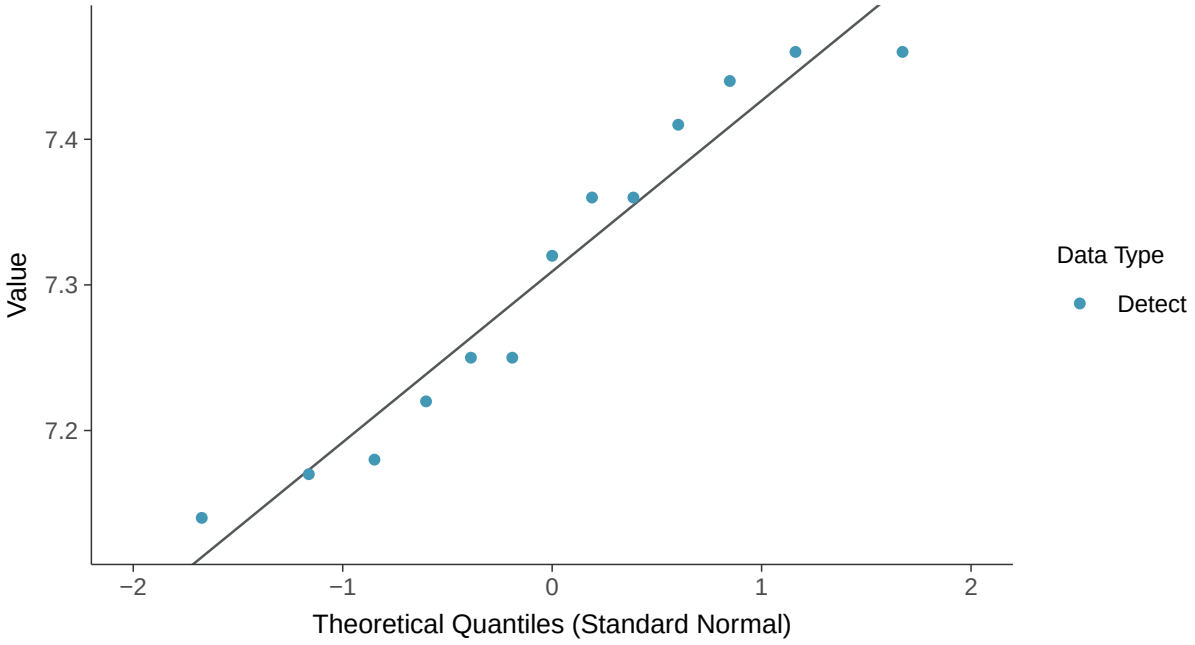
Boxplot by Season

pH, Field, MW-16C (su)



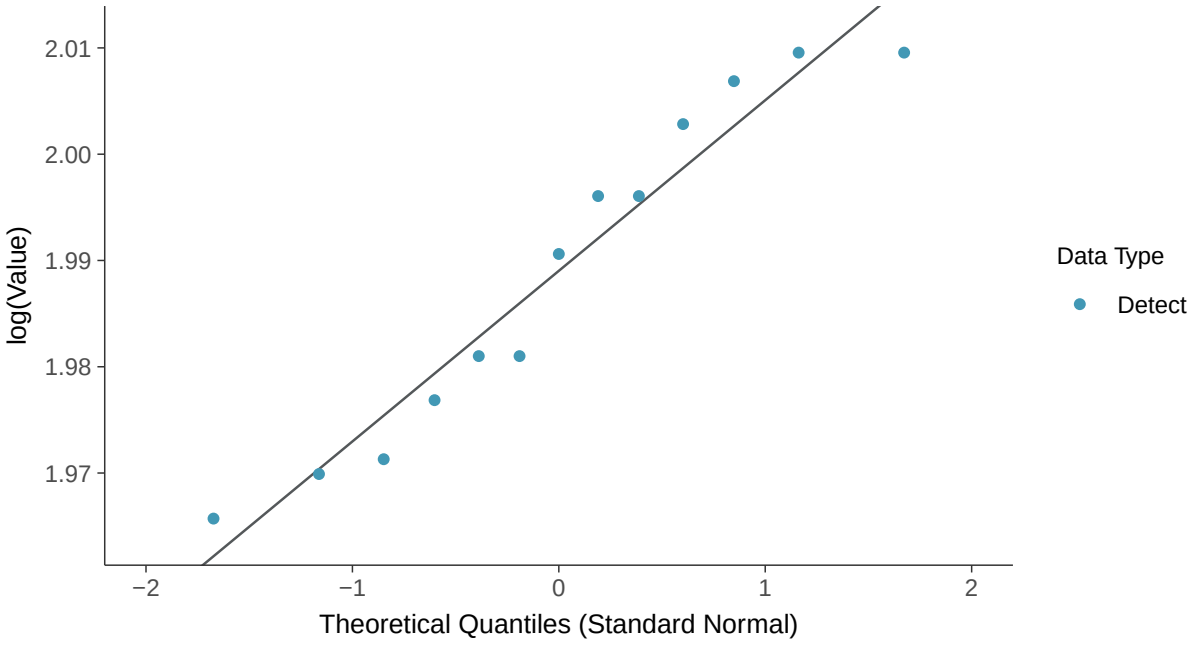
Normal Q-Q plot

pH, Field, MW-16C (su)



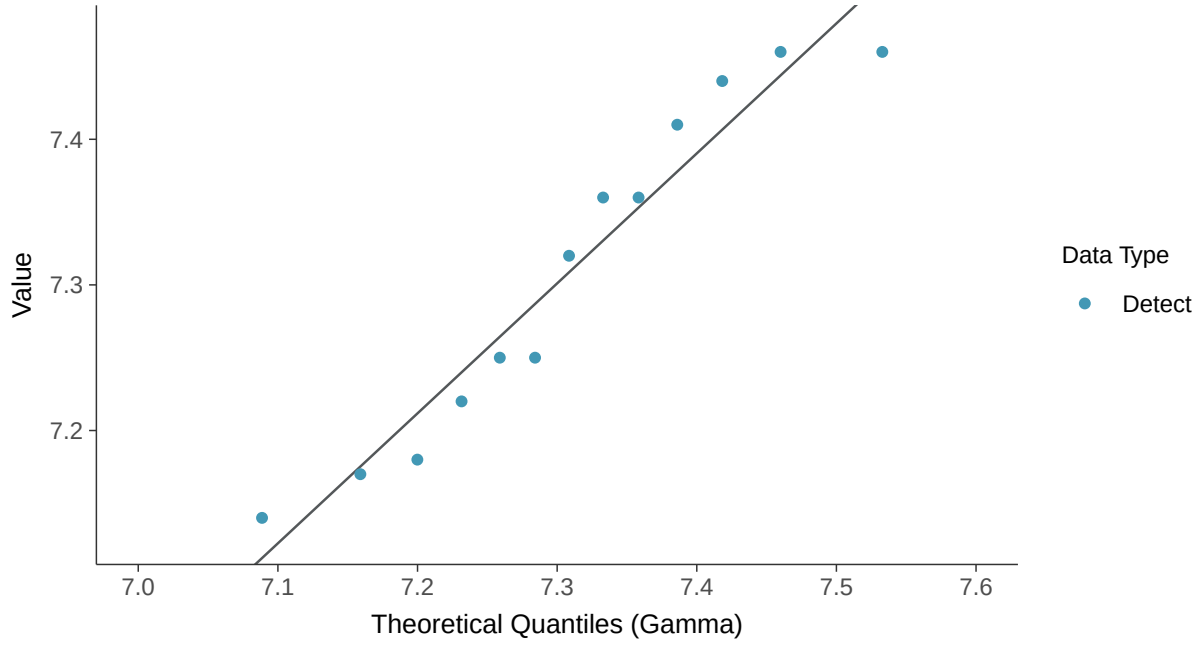
Lognormal Q-Q plot

pH, Field, MW-16C (su)



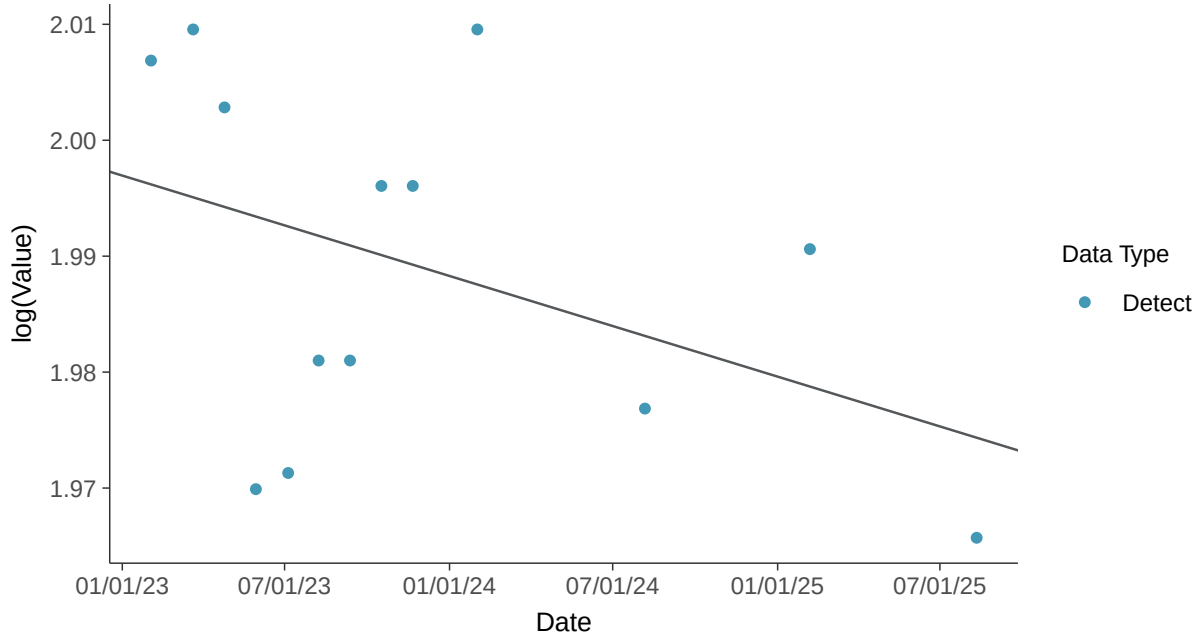
Gamma Q-Q plot

pH, Field, MW-16C (su)



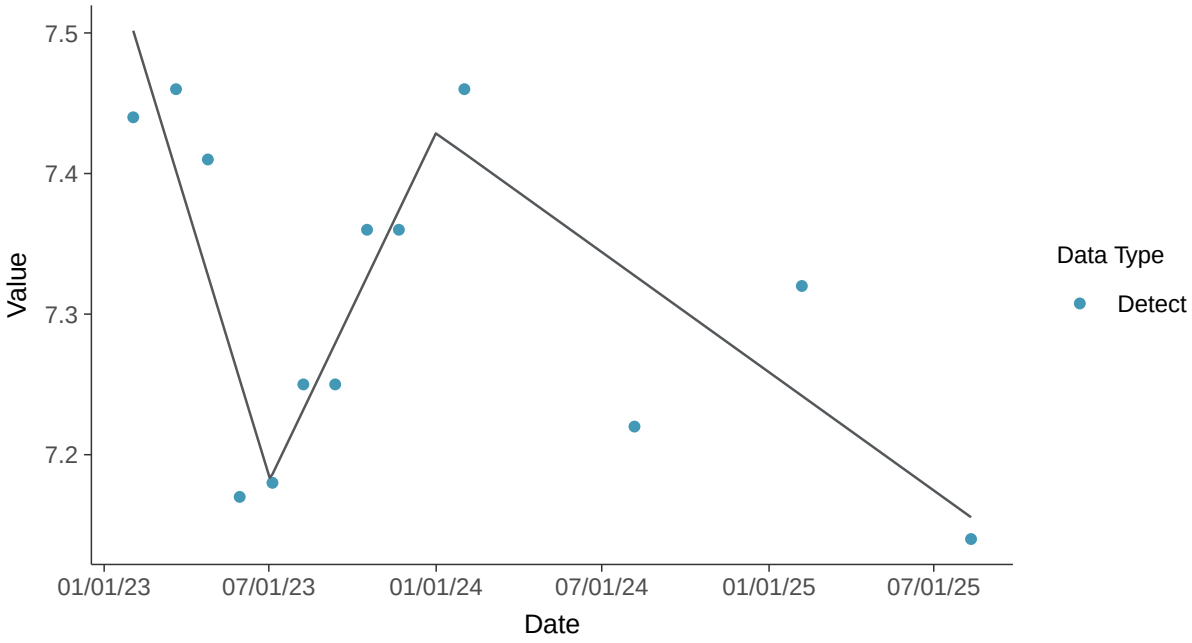
Trend Regression: Lognormal MLE

pH, Field, MW-16C (su)



Trend Regression: Piecewise Linear-Linear-Linear

pH, Field, MW-16C (su)

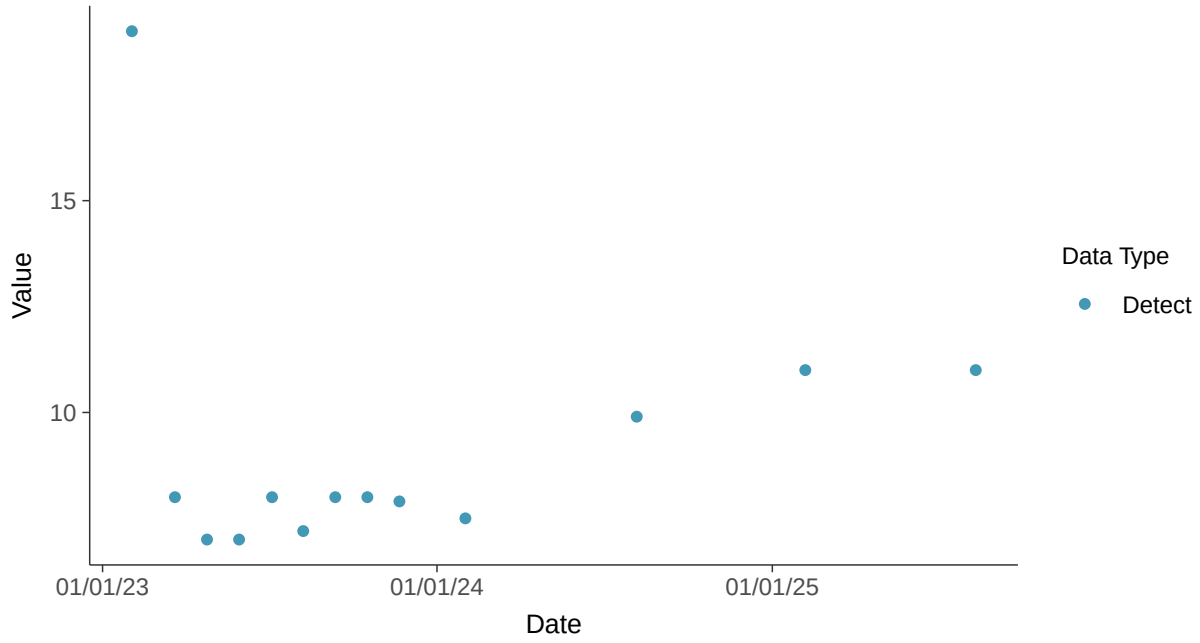


Appendix III: Sulfate, MW-16C

ID: 14_2_124

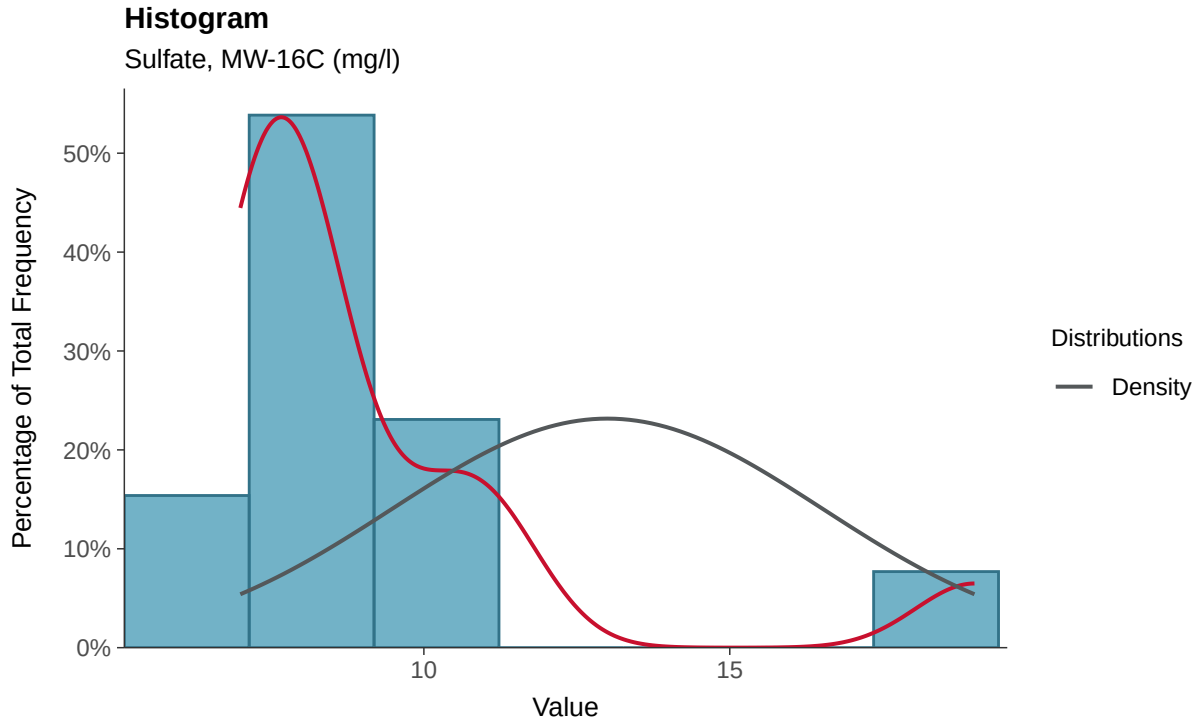
Scatter Plot

Sulfate, MW-16C (mg/l)



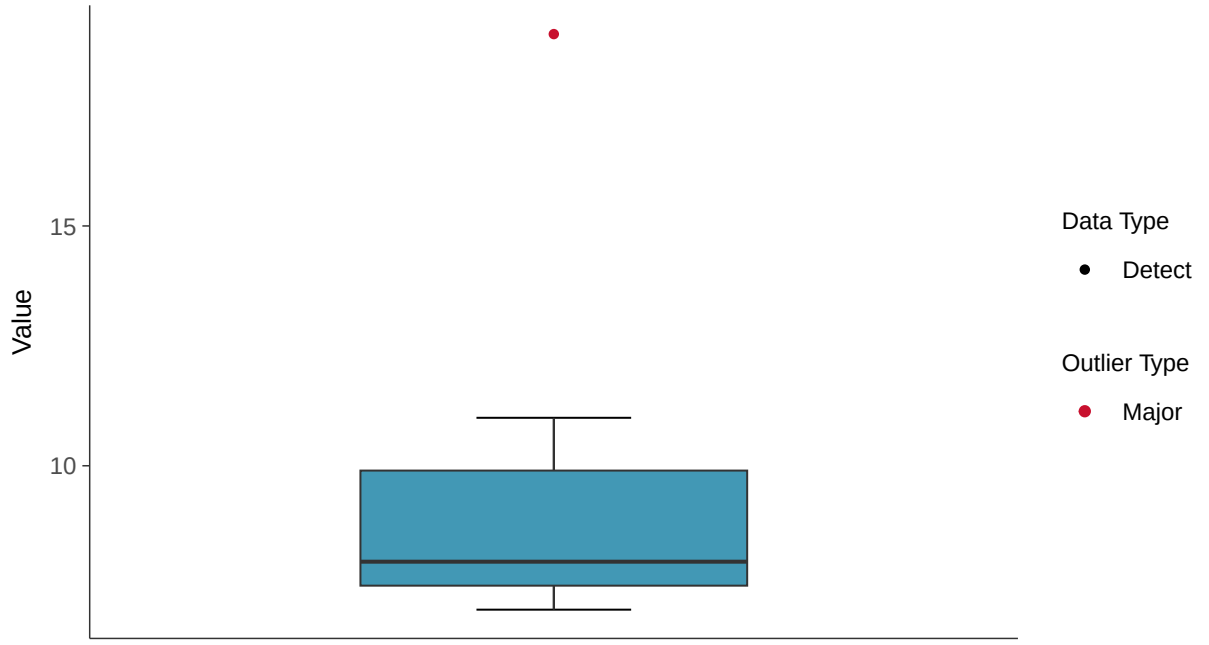
Histogram

Sulfate, MW-16C (mg/l)



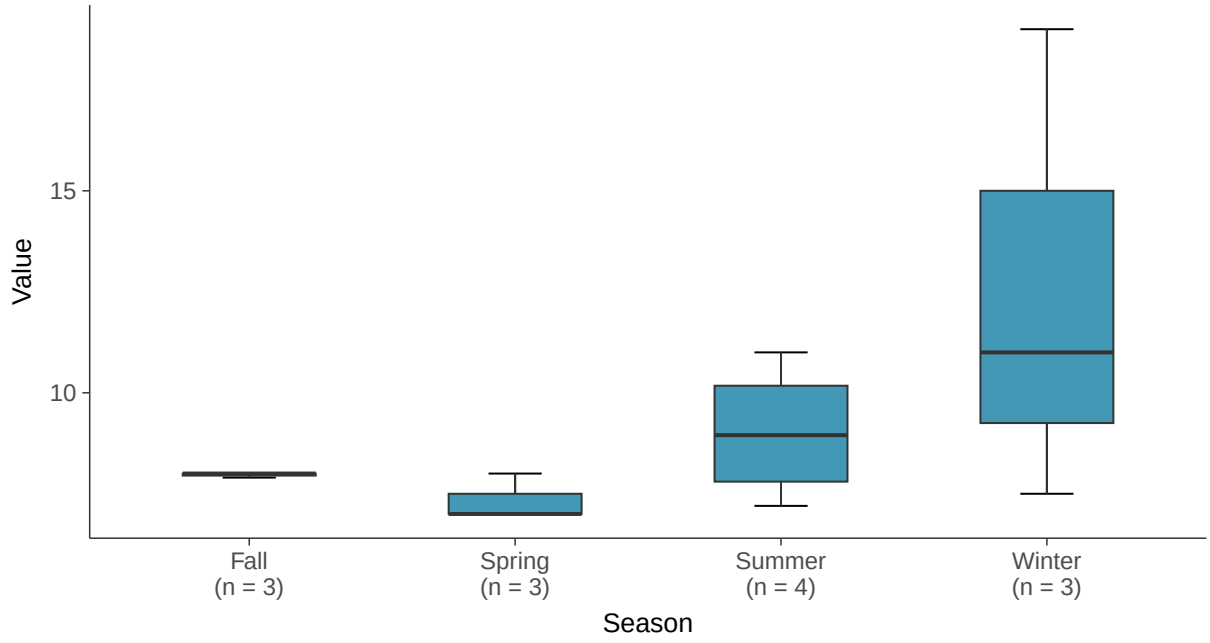
Boxplot

Sulfate, MW-16C (mg/l)



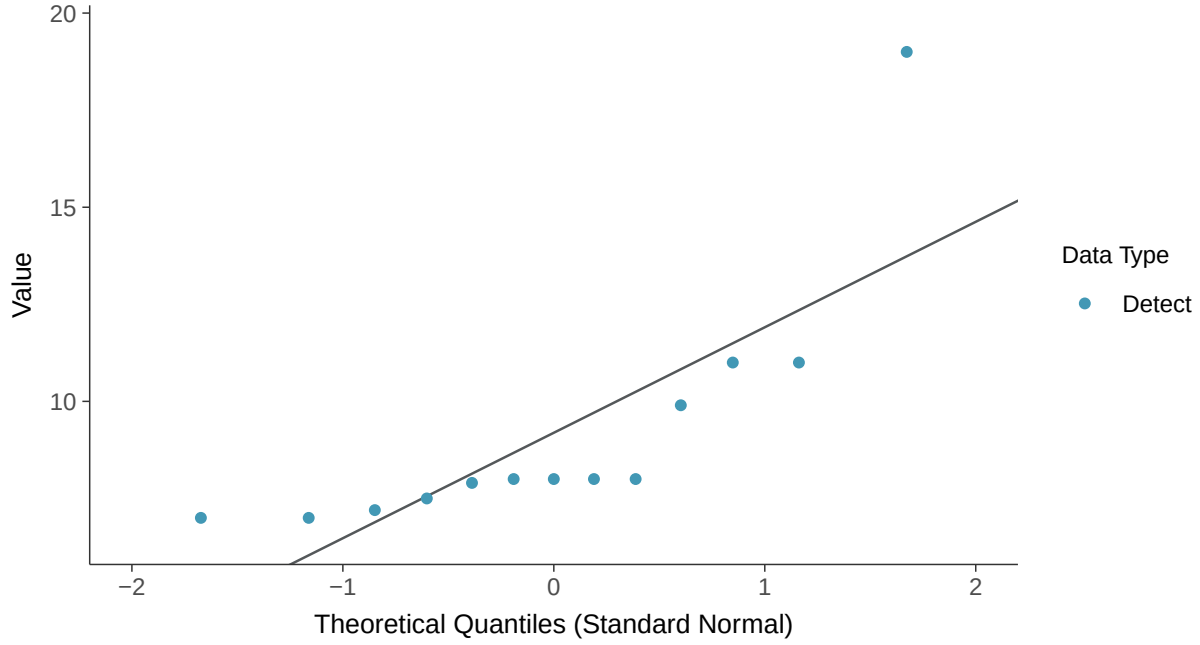
Boxplot by Season

Sulfate, MW-16C (mg/l)



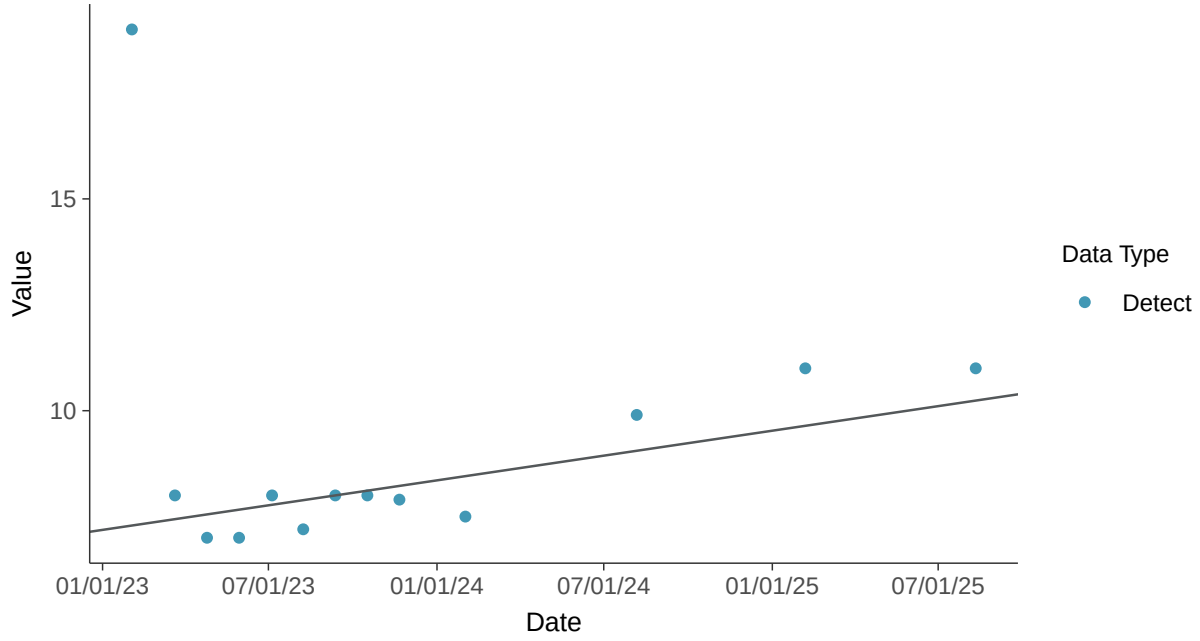
Normal Q-Q plot

Sulfate, MW-16C (mg/l)



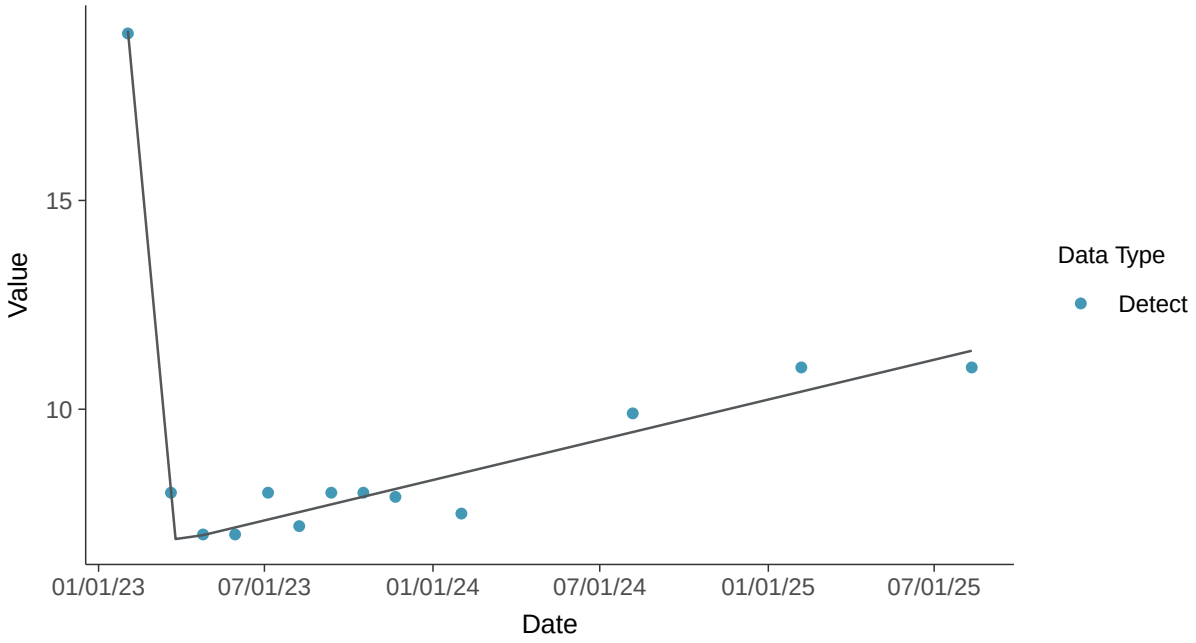
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Sulfate, MW-16C (mg/l)



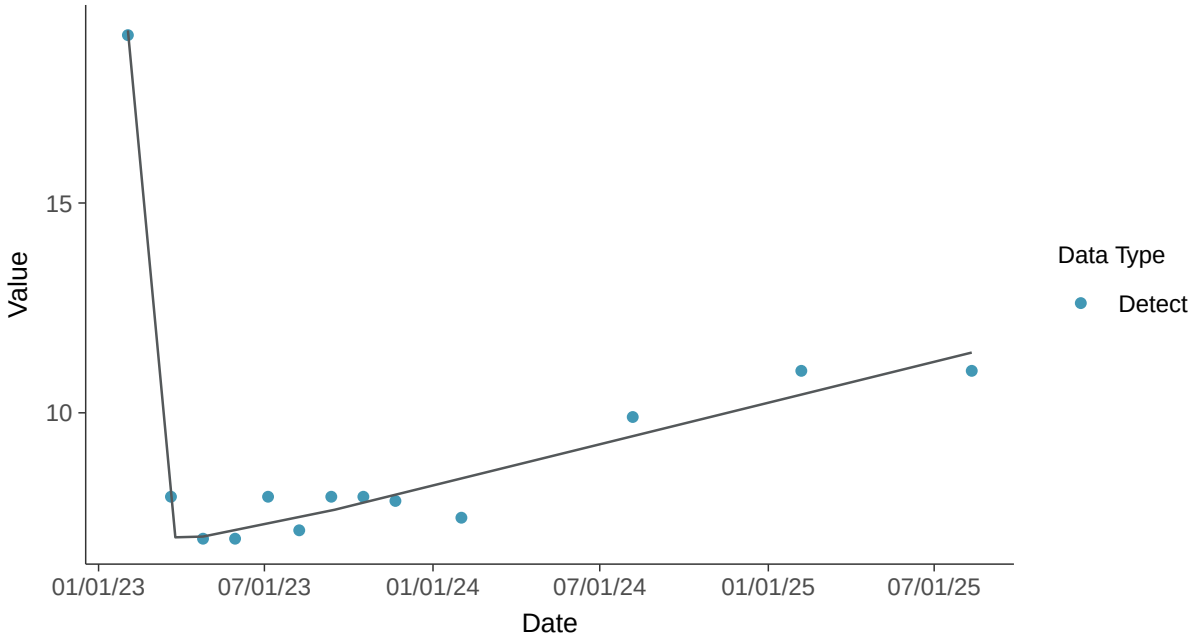
Trend Regression: Piecewise Linear-Linear

Sulfate, MW-16C (mg/l)



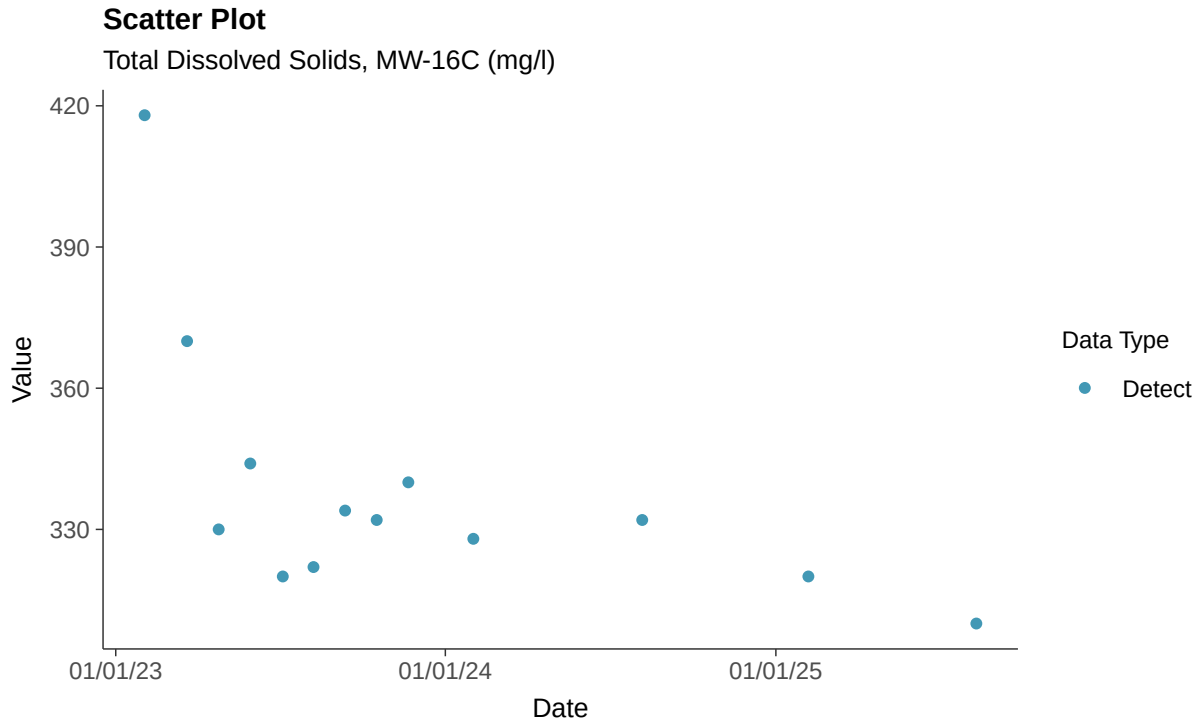
Trend Regression: Piecewise Linear-Linear-Linear

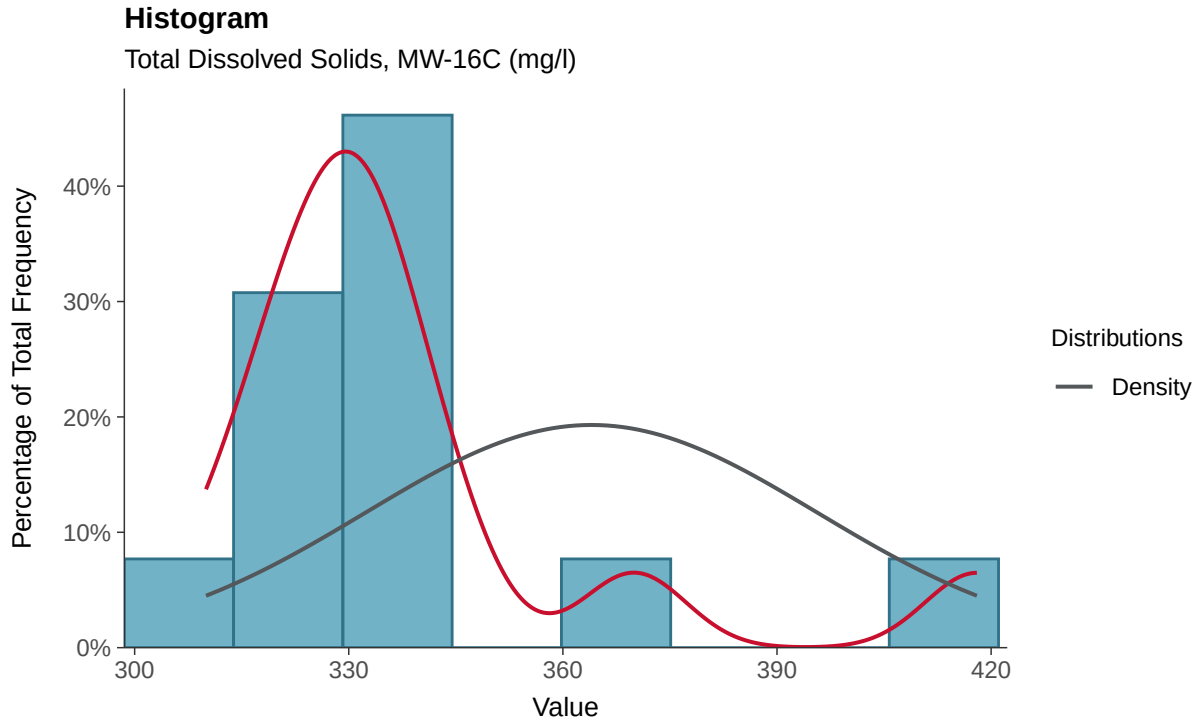
Sulfate, MW-16C (mg/l)



Appendix III: Total Dissolved Solids, MW-16C

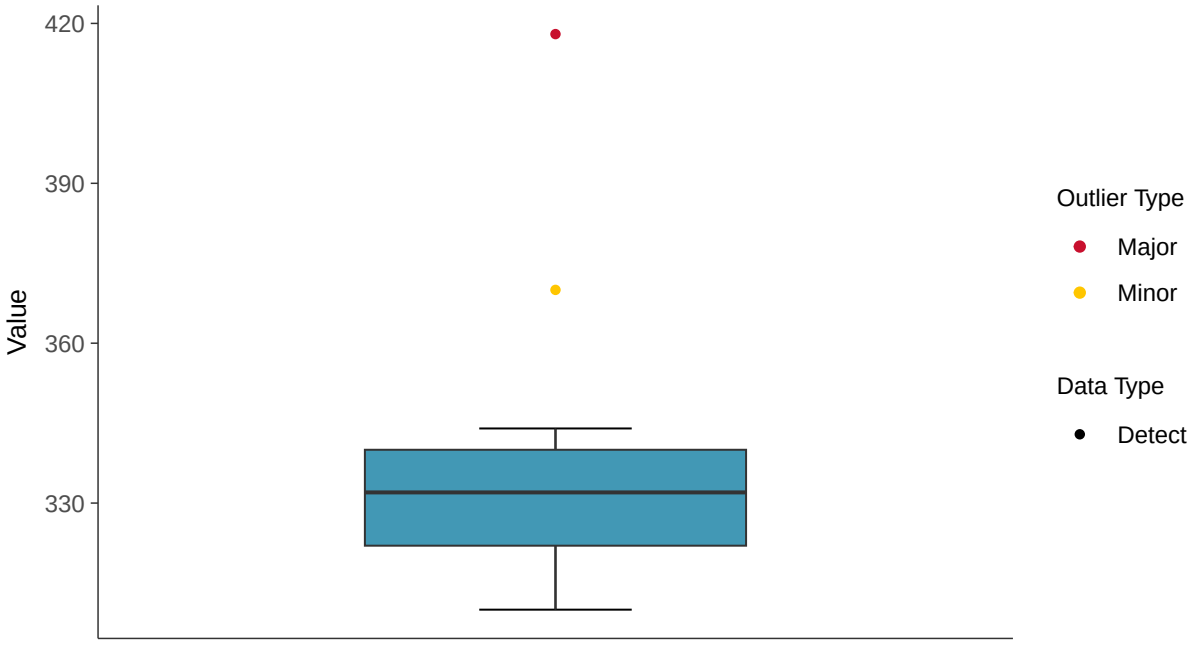
ID: 14_2_126





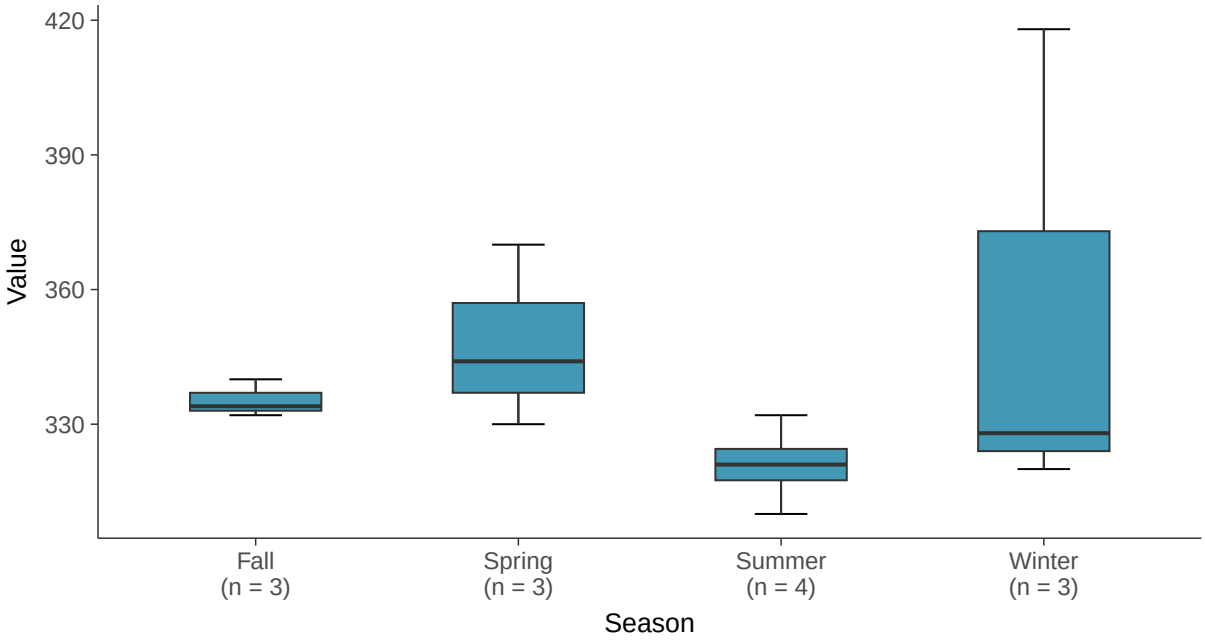
Boxplot

Total Dissolved Solids, MW-16C (mg/l)



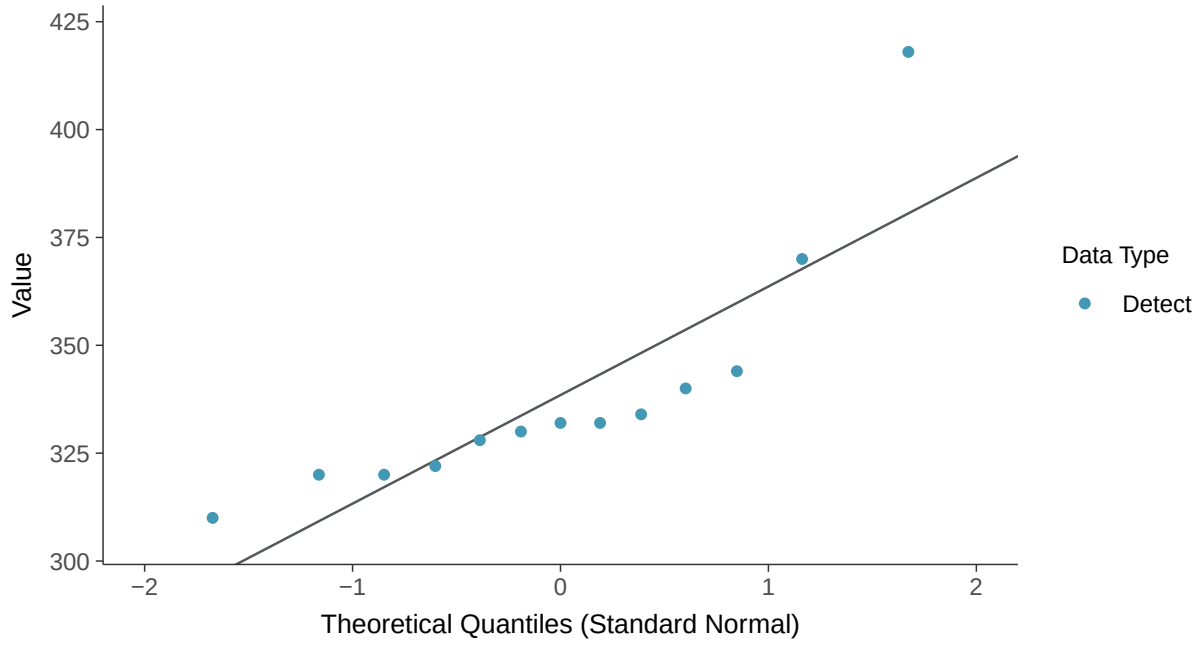
Boxplot by Season

Total Dissolved Solids, MW-16C (mg/l)



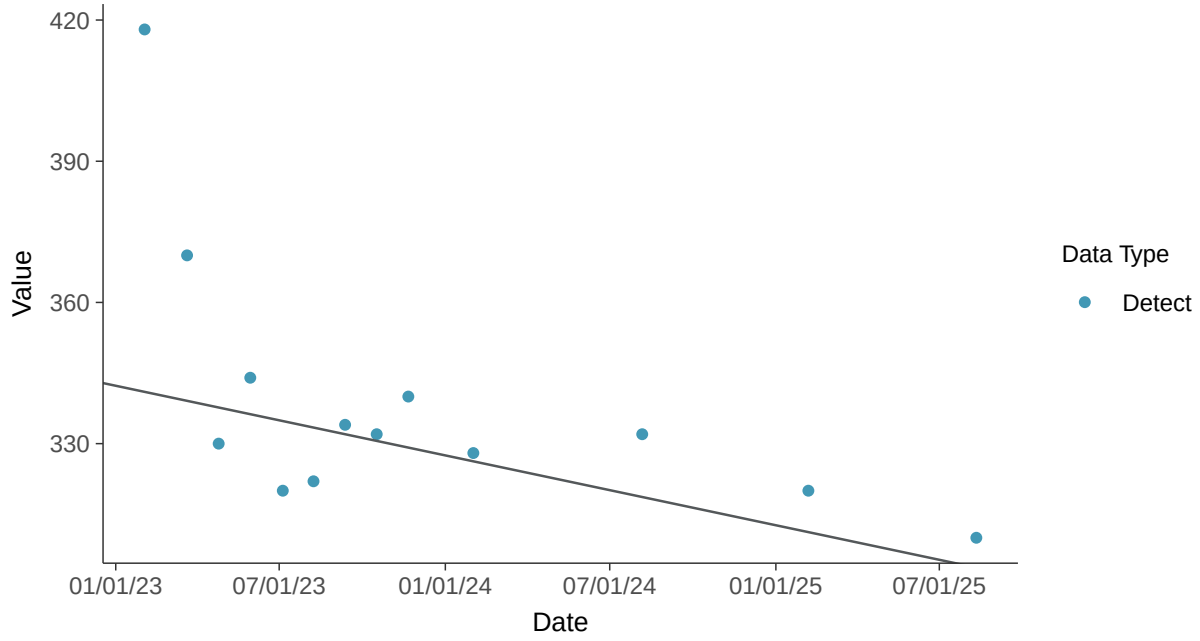
Normal Q-Q plot

Total Dissolved Solids, MW-16C (mg/l)



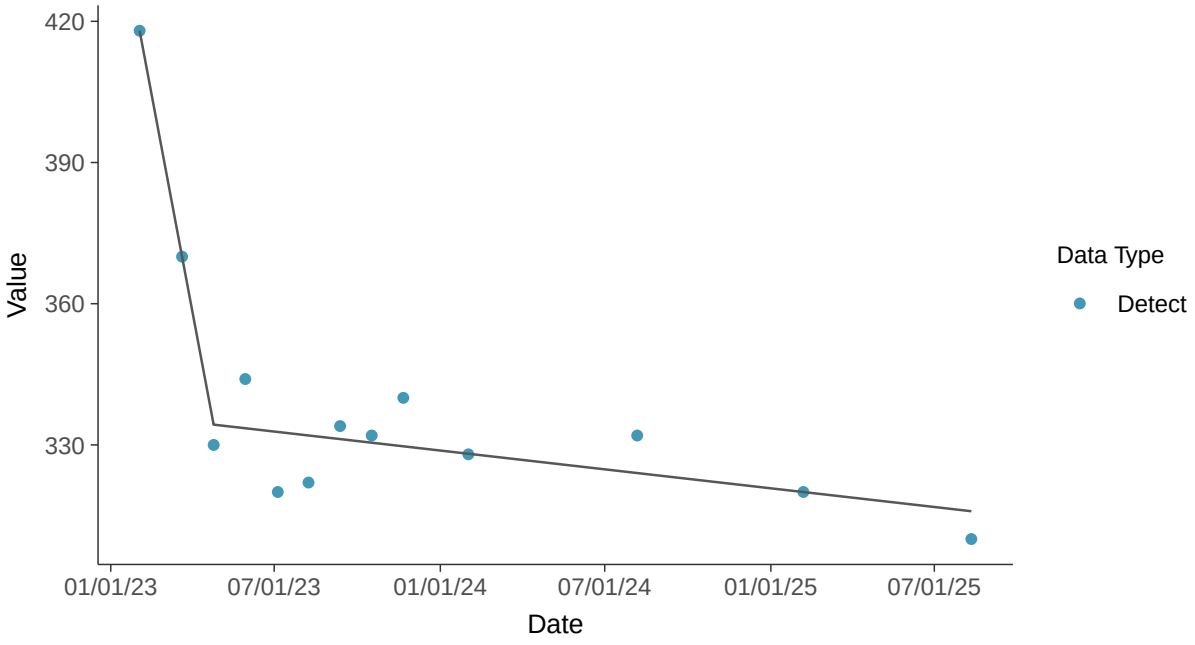
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Total Dissolved Solids, MW-16C (mg/l)



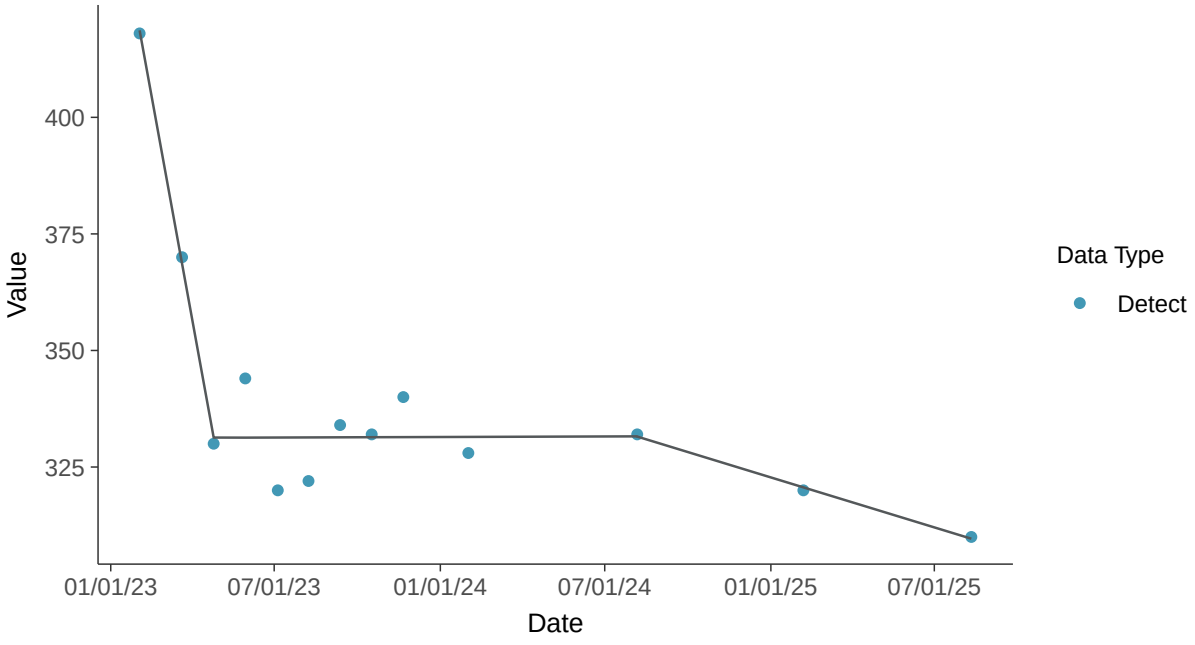
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-16C (mg/l)



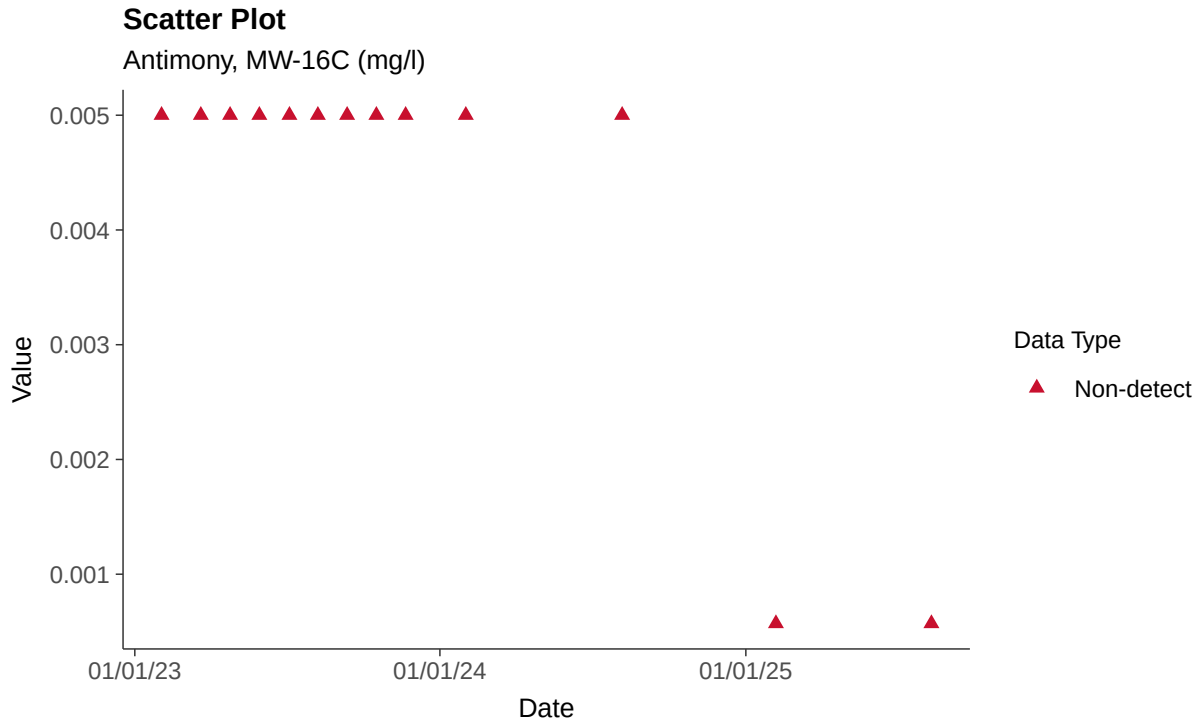
Trend Regression: Piecewise Linear-Linear-Linear

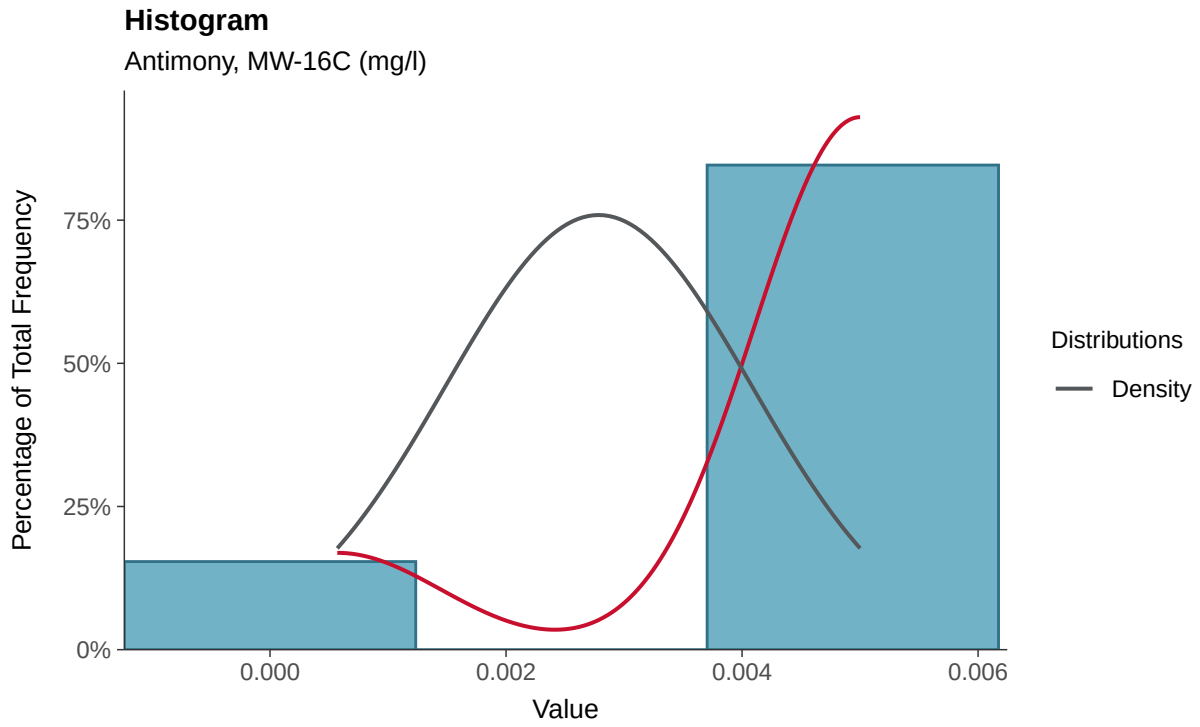
Total Dissolved Solids, MW-16C (mg/l)



Appendix IV: Antimony, MW-16C

ID: 14_3_101



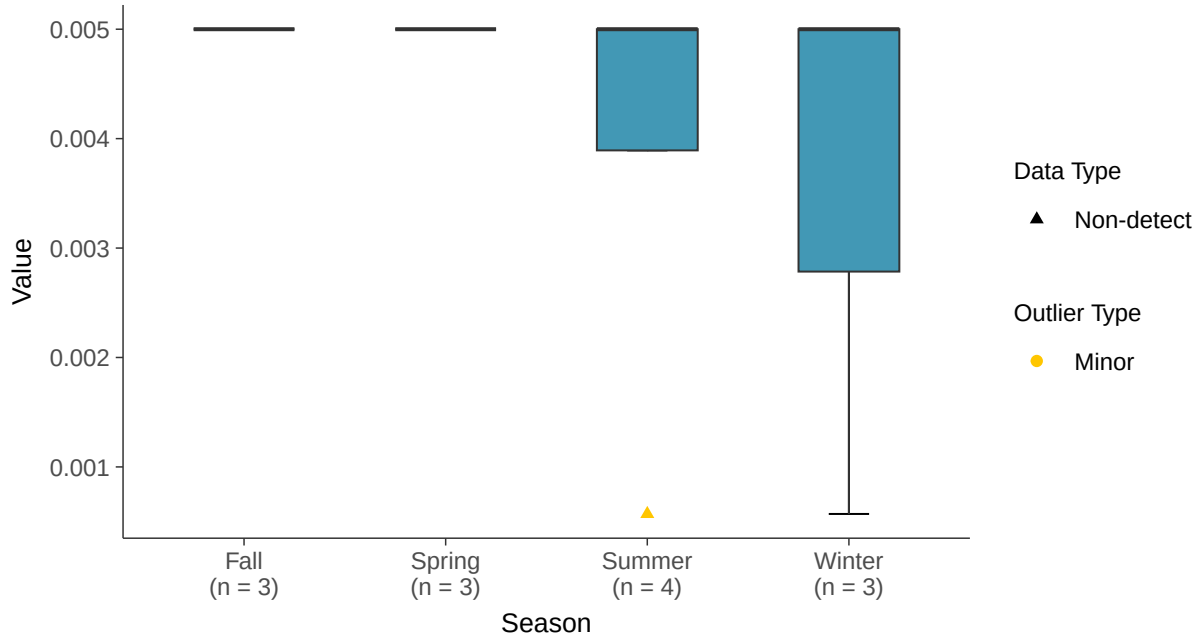


Boxplot

Antimony, MW-16C (mg/l)

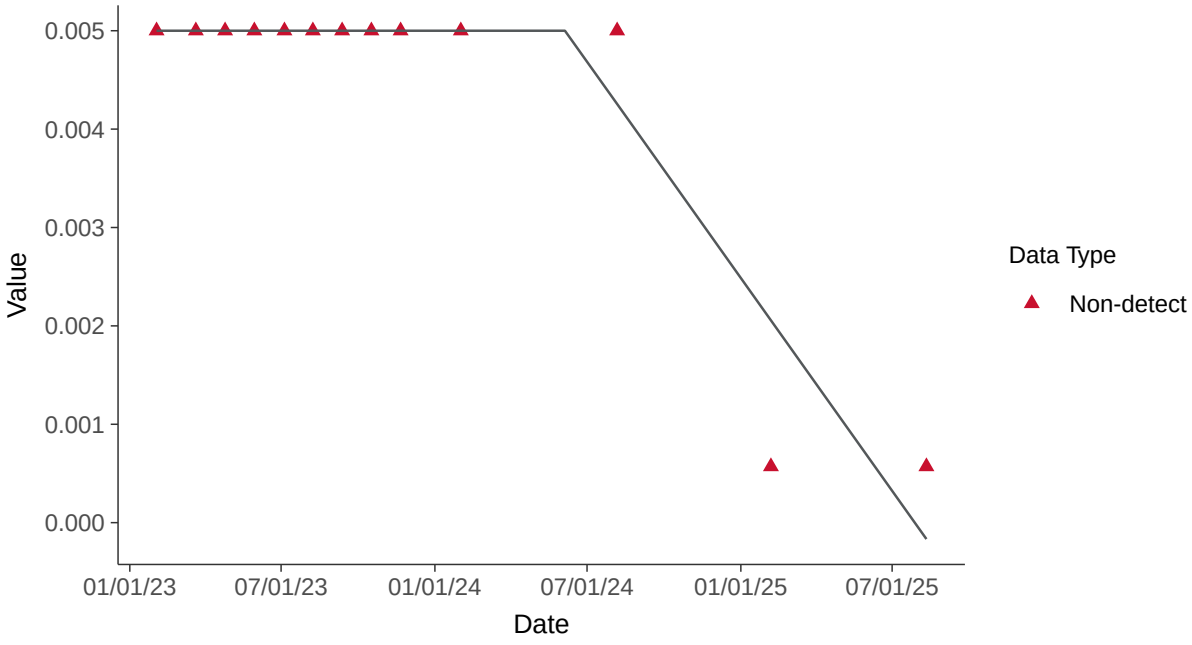
Boxplot by Season

Antimony, MW-16C (mg/l)



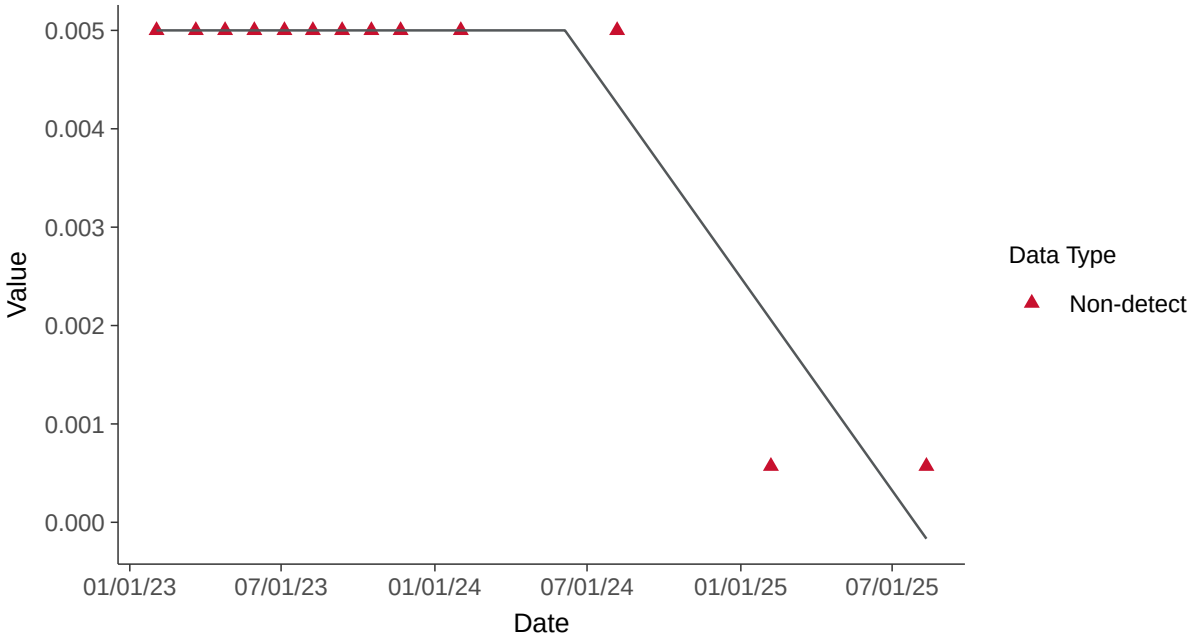
Trend Regression: Piecewise Linear-Linear

Antimony, MW-16C (mg/l)



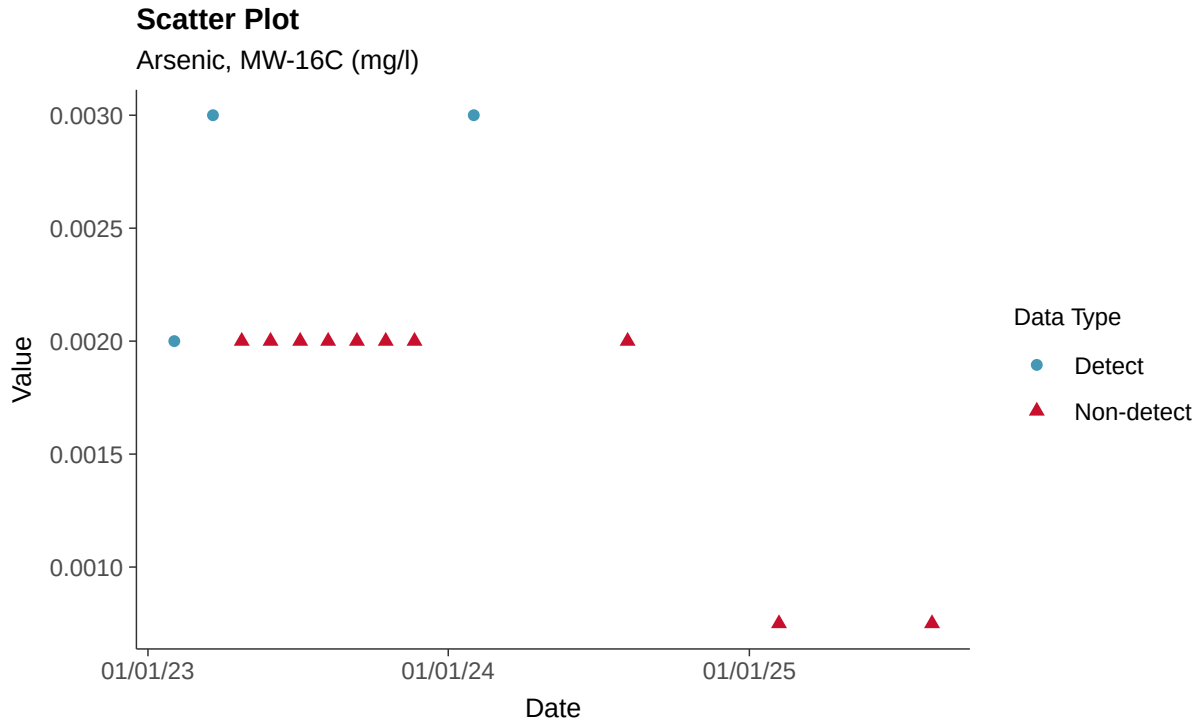
Trend Regression: Piecewise Linear-Linear-Linear

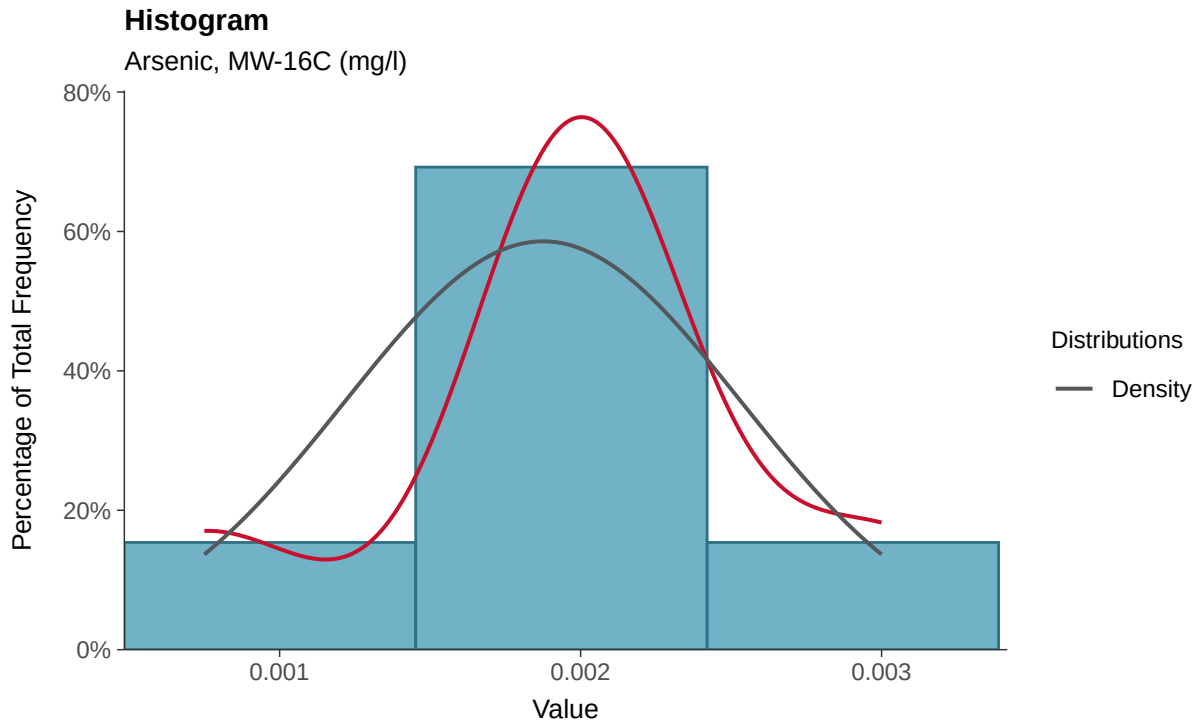
Antimony, MW-16C (mg/l)



Appendix IV: Arsenic, MW-16C

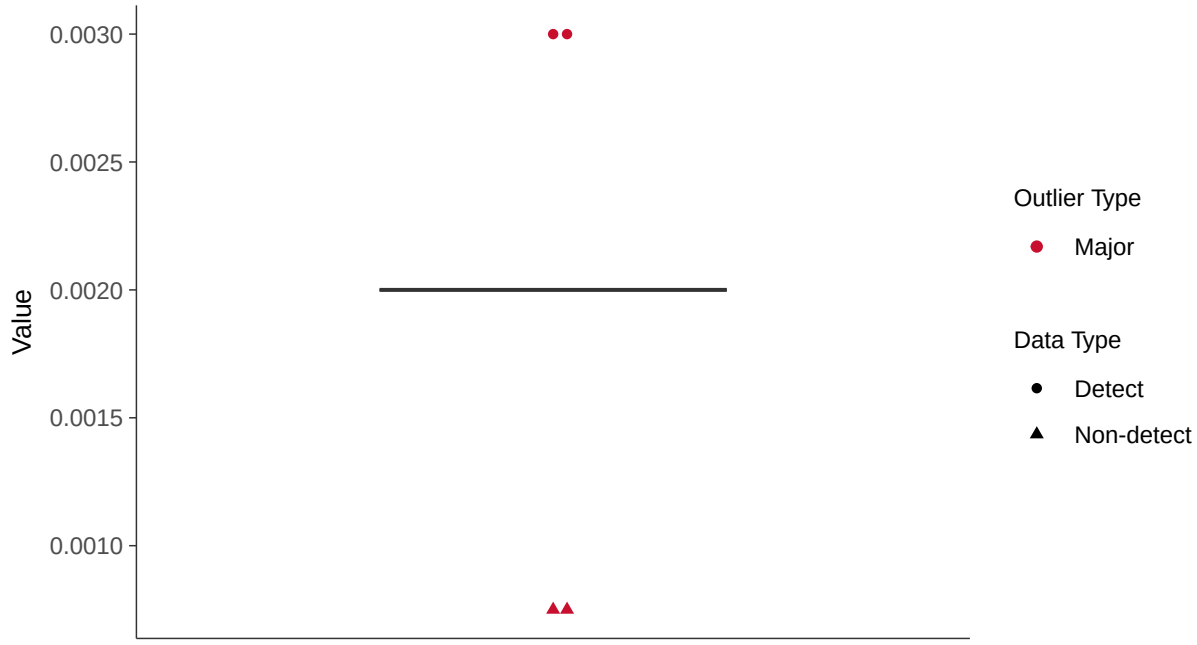
ID: 14_3_102





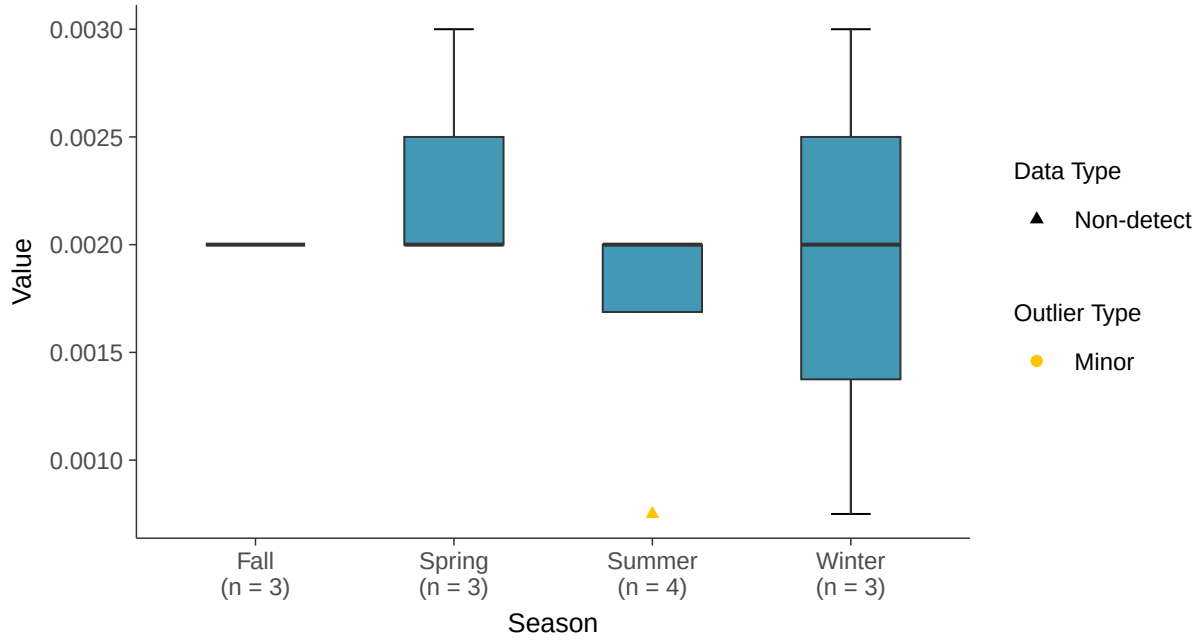
Boxplot

Arsenic, MW-16C (mg/l)



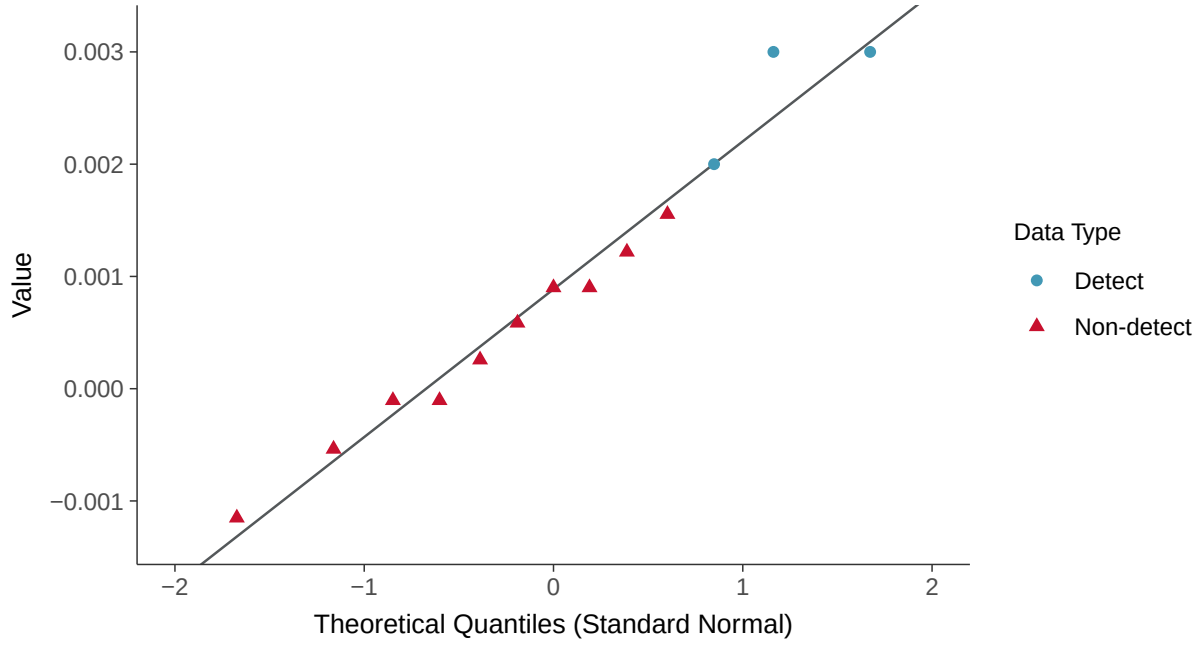
Boxplot by Season

Arsenic, MW-16C (mg/l)



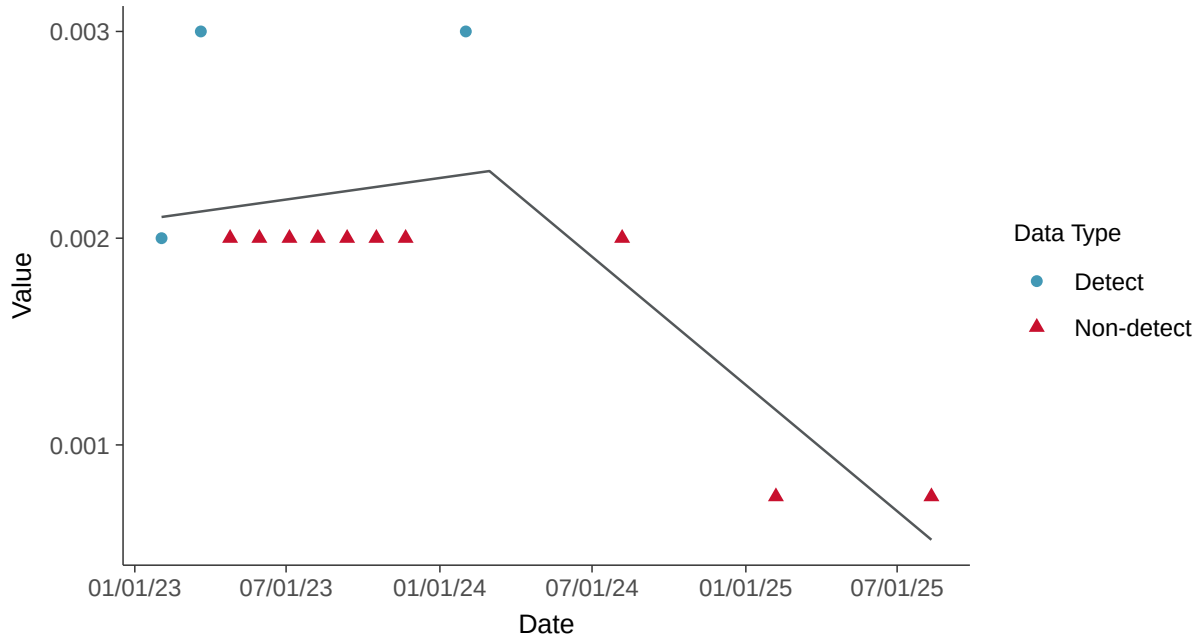
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-16C (mg/l)



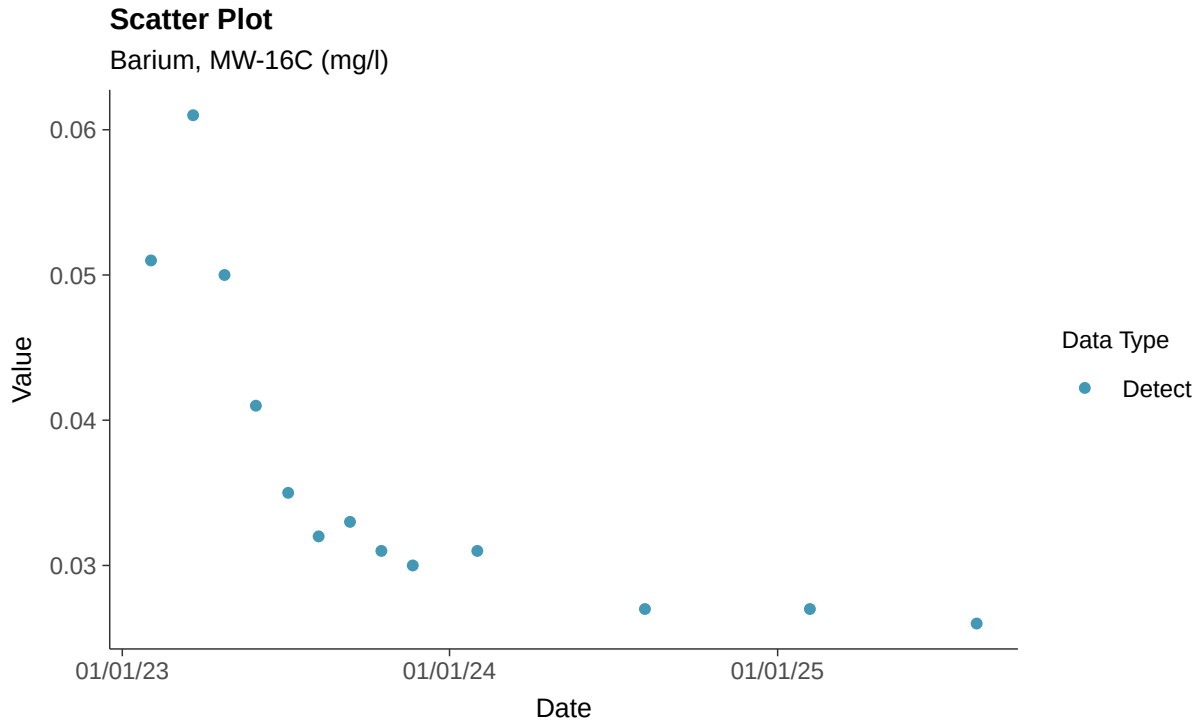
Trend Regression: Piecewise Linear-Linear

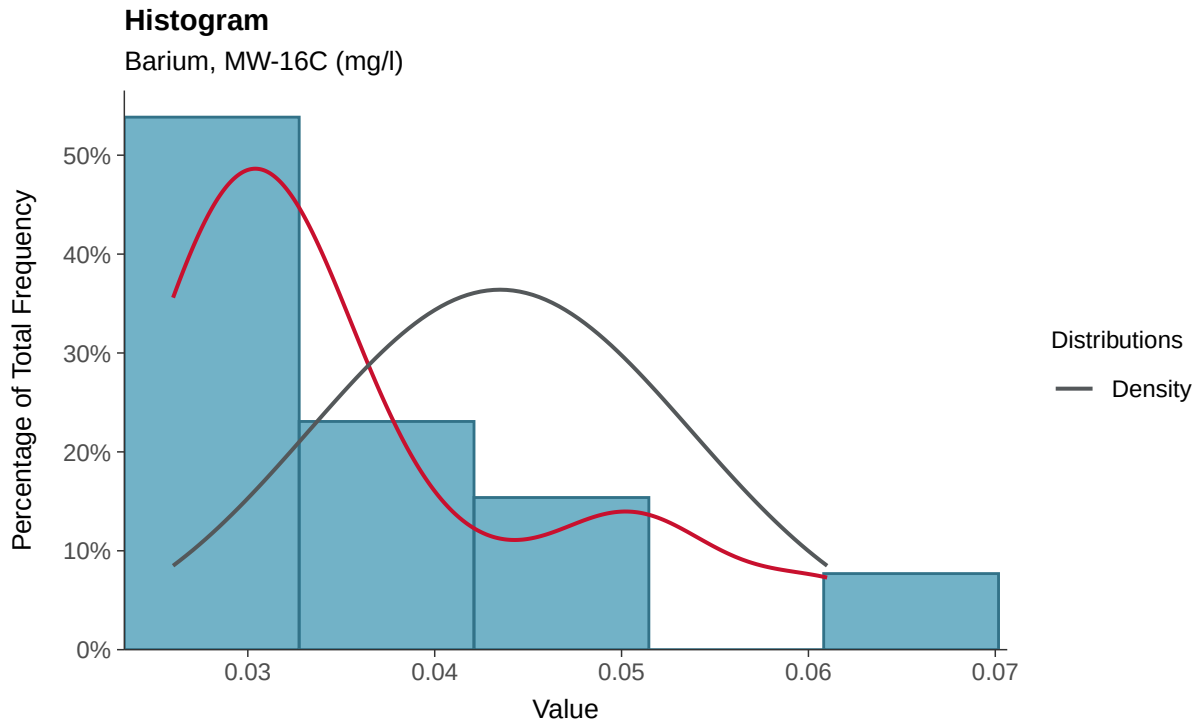
Arsenic, MW-16C (mg/l)



Appendix IV: Barium, MW-16C

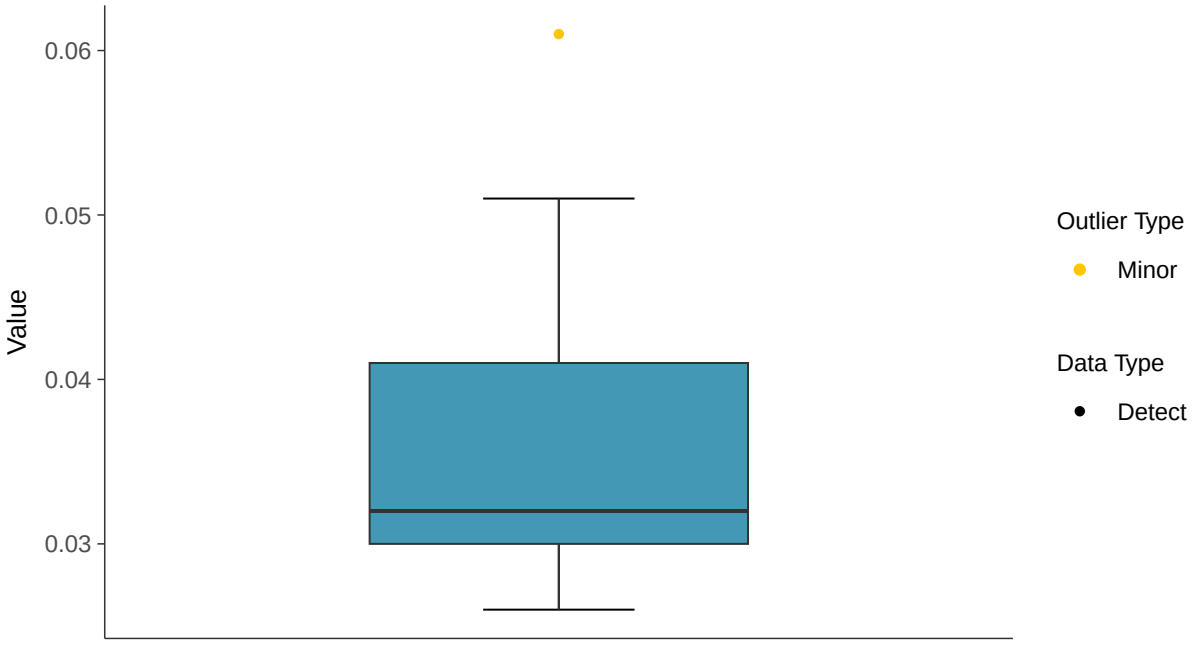
ID: 14_3_103





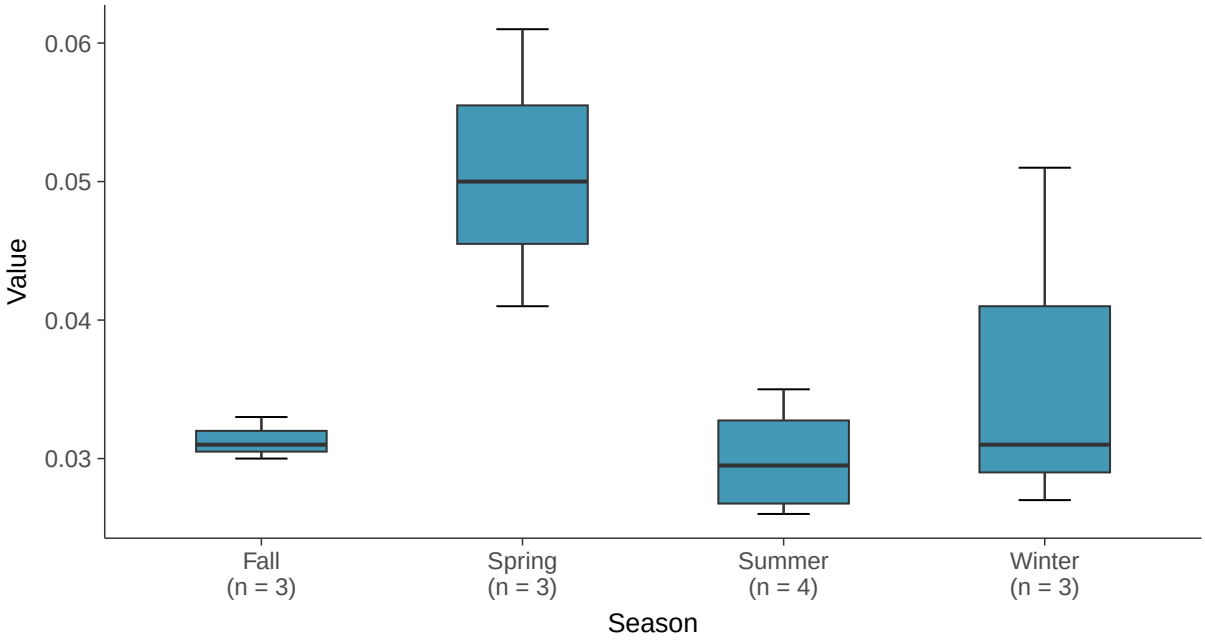
Boxplot

Barium, MW-16C (mg/l)



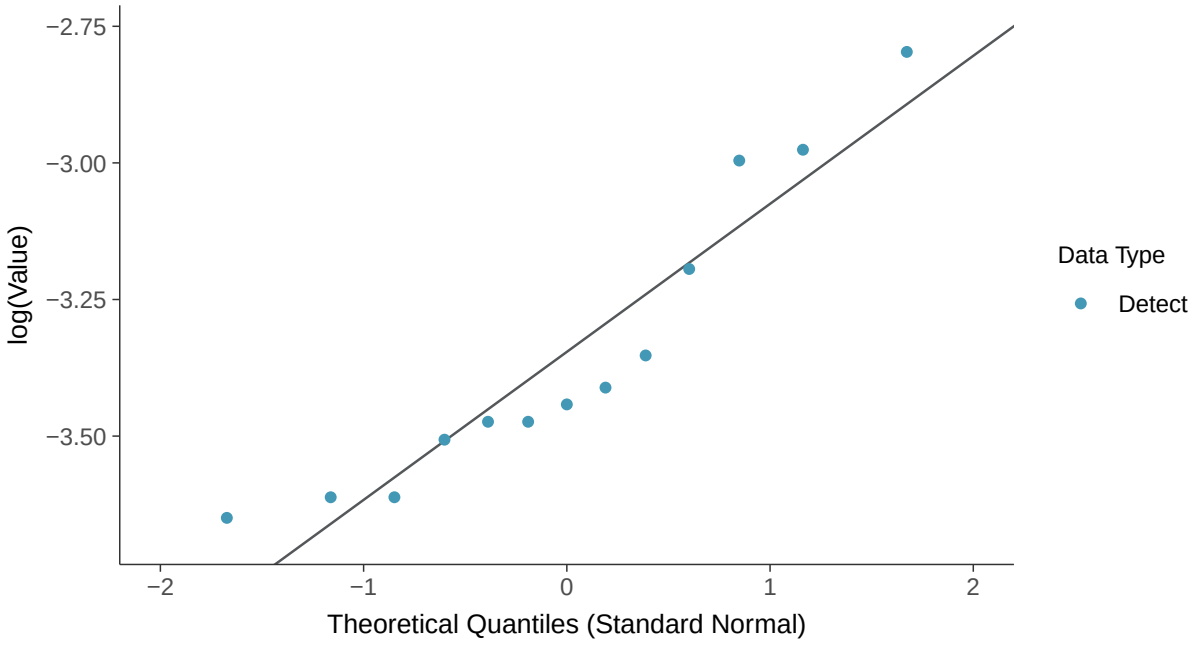
Boxplot by Season

Barium, MW-16C (mg/l)



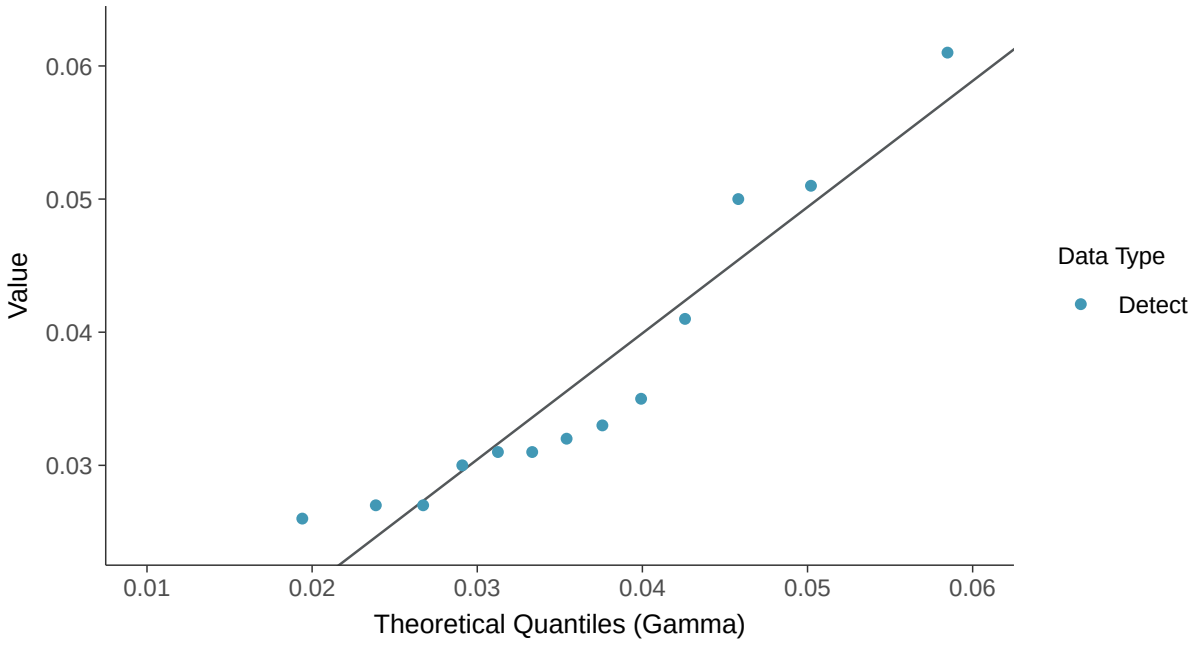
Lognormal Q-Q plot

Barium, MW-16C (mg/l)



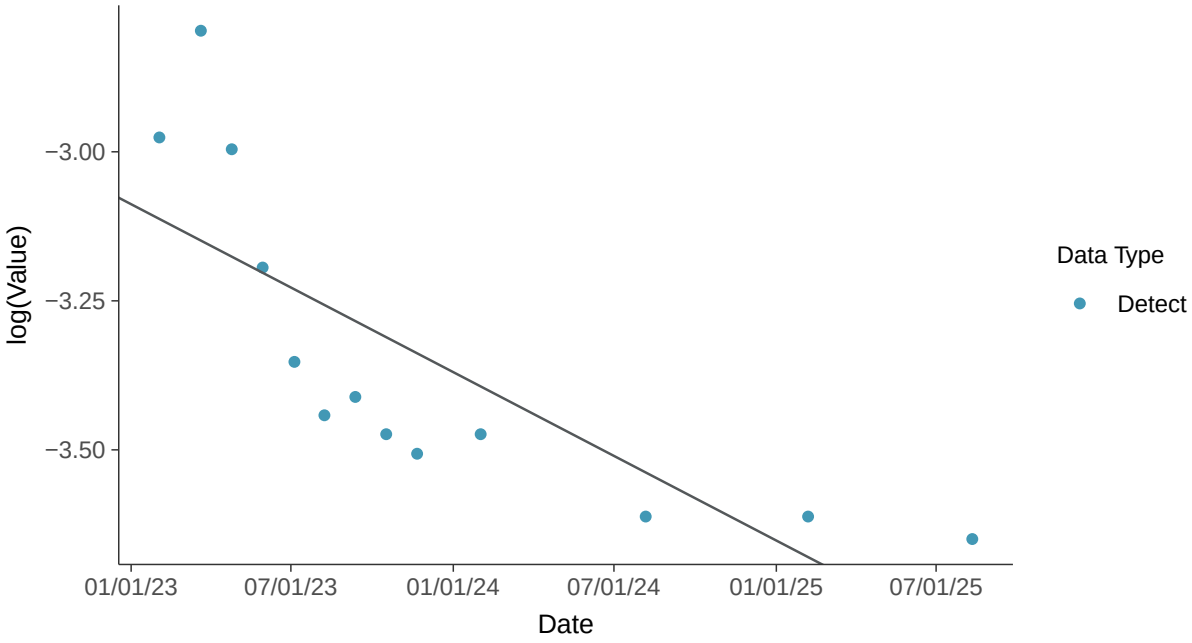
Gamma Q-Q plot

Barium, MW-16C (mg/l)



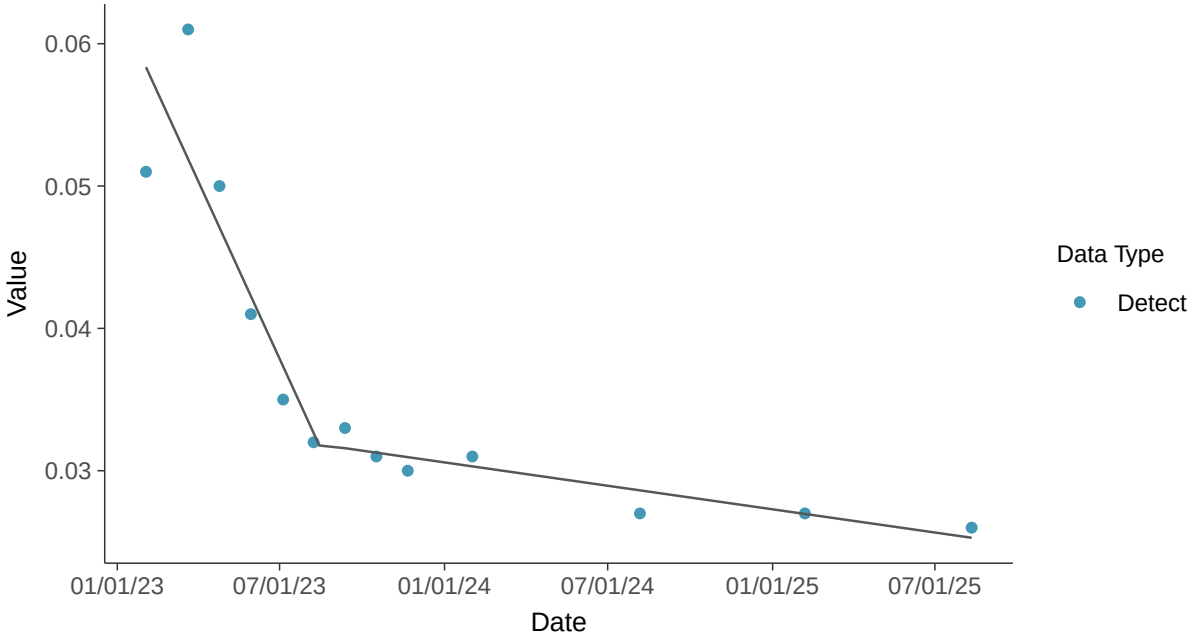
Trend Regression: Lognormal MLE

Barium, MW-16C (mg/l)



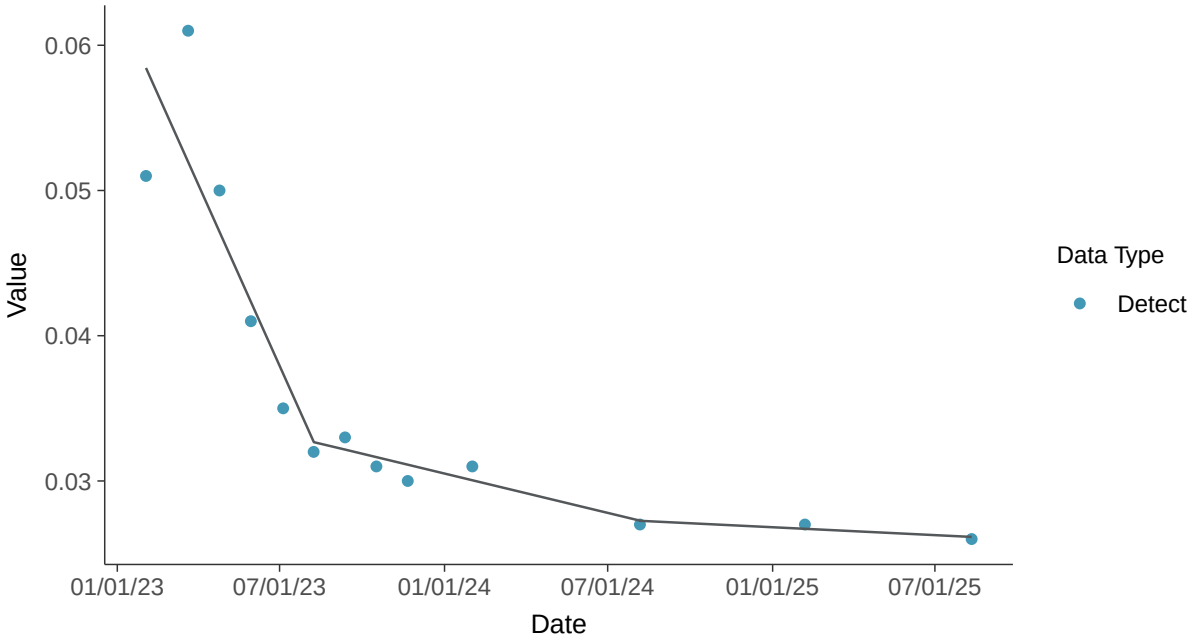
Trend Regression: Piecewise Linear-Linear

Barium, MW-16C (mg/l)



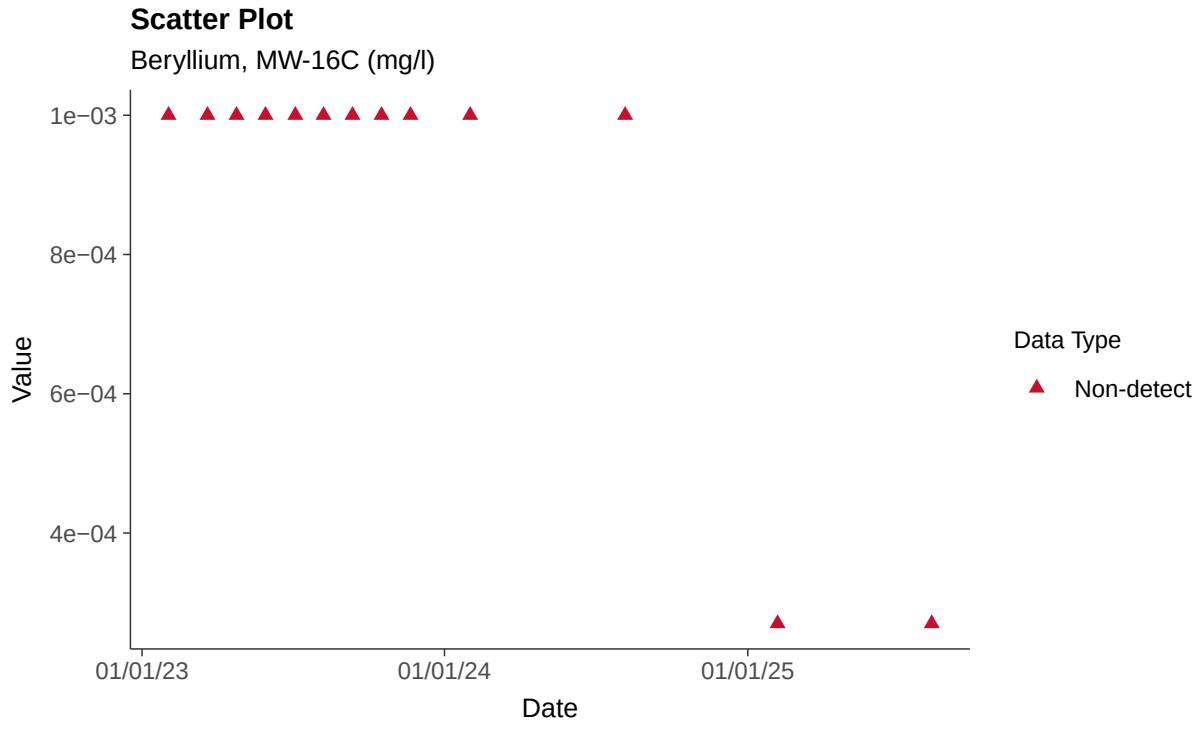
Trend Regression: Piecewise Linear-Linear-Linear

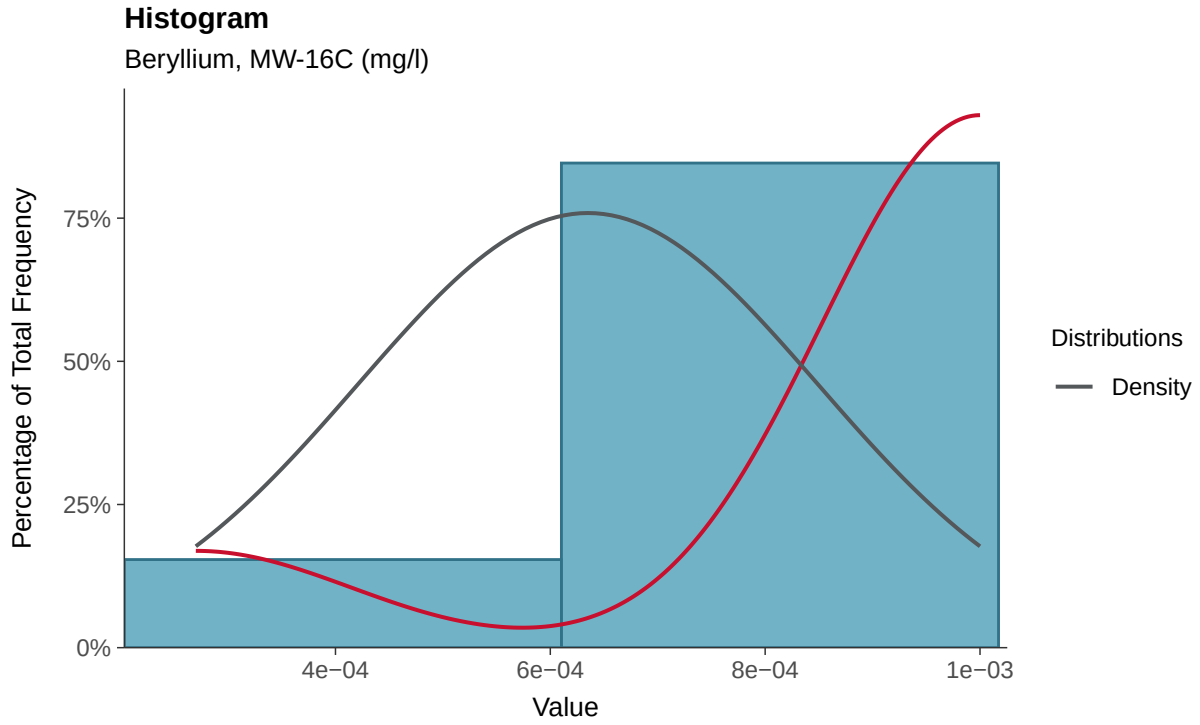
Barium, MW-16C (mg/l)



Appendix IV: Beryllium, MW-16C

ID: 14_3_104



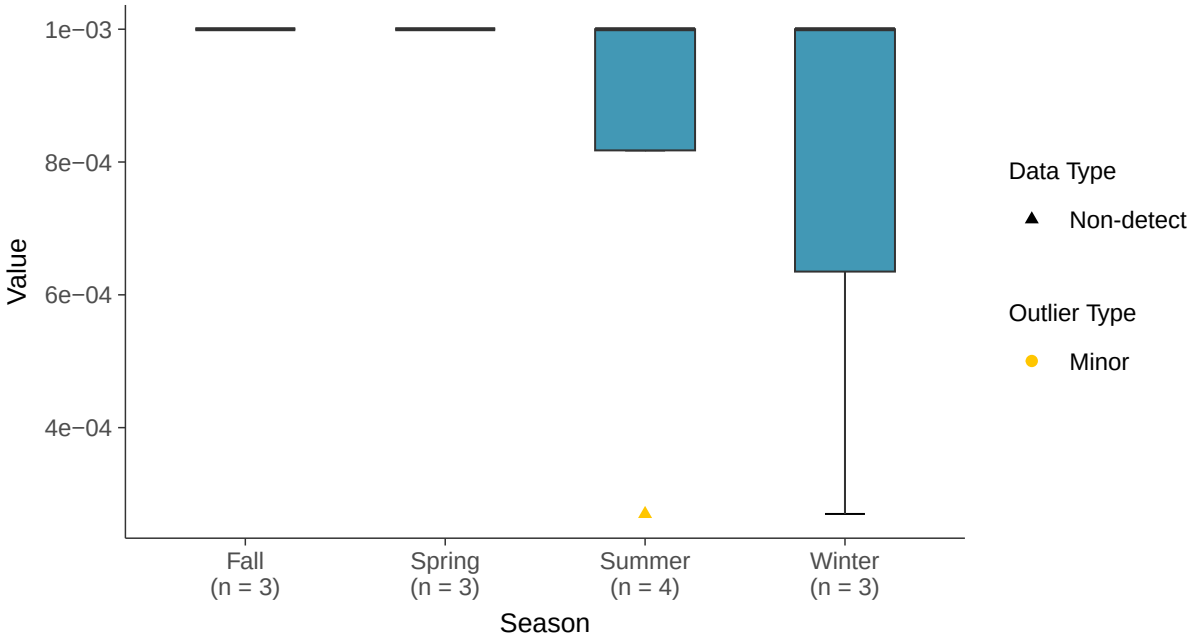


Boxplot

Beryllium, MW-16C (mg/l)

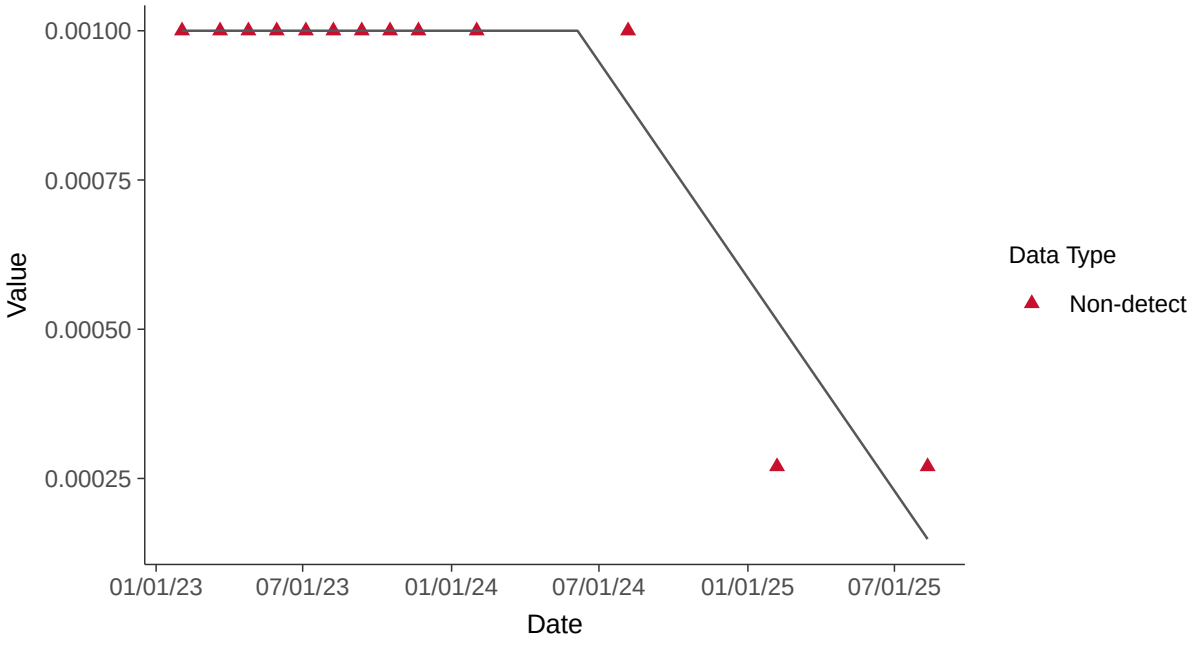
Boxplot by Season

Beryllium, MW-16C (mg/l)



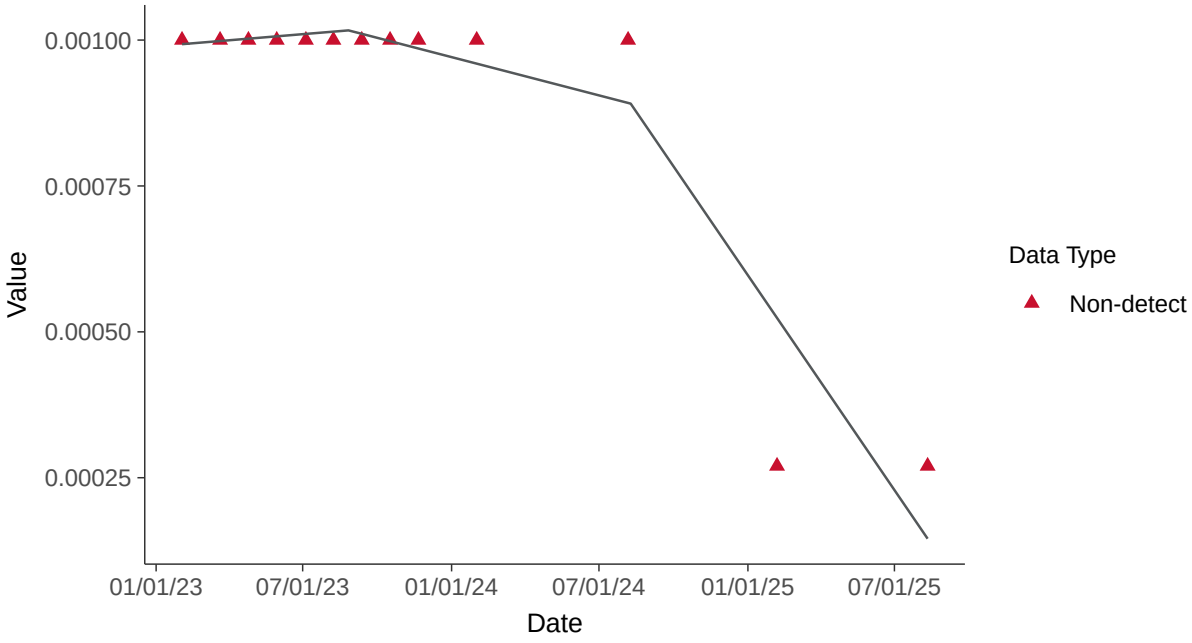
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-16C (mg/l)



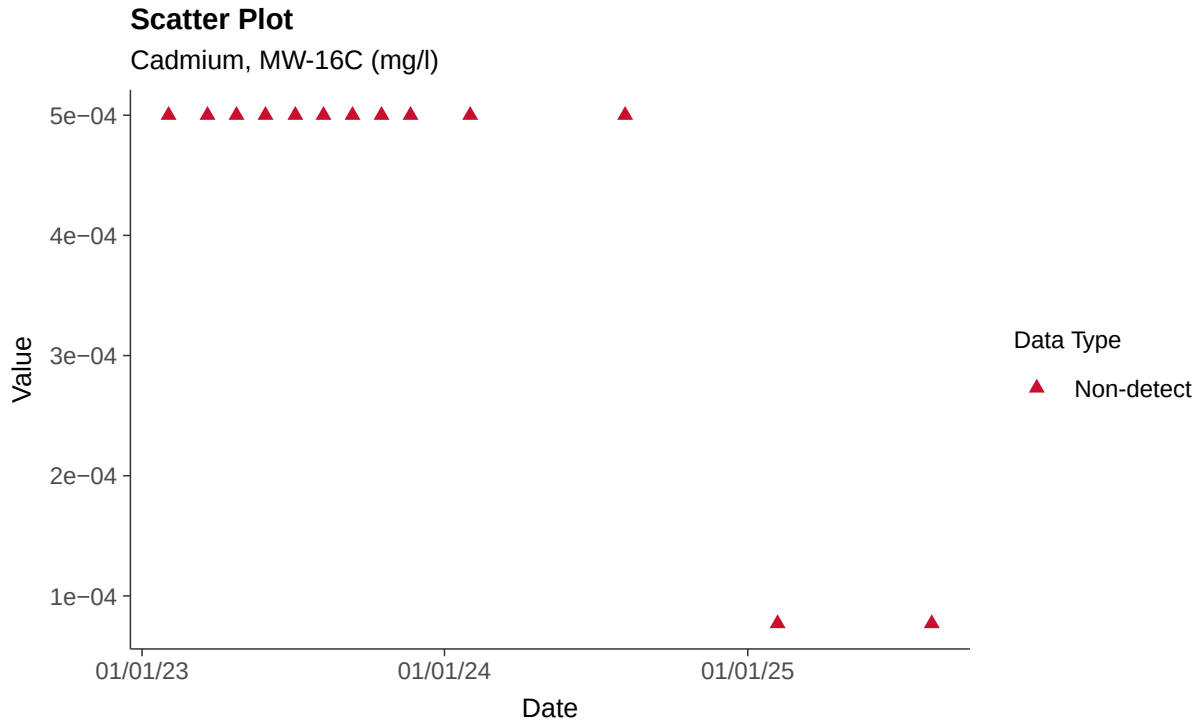
Trend Regression: Piecewise Linear-Linear-Linear

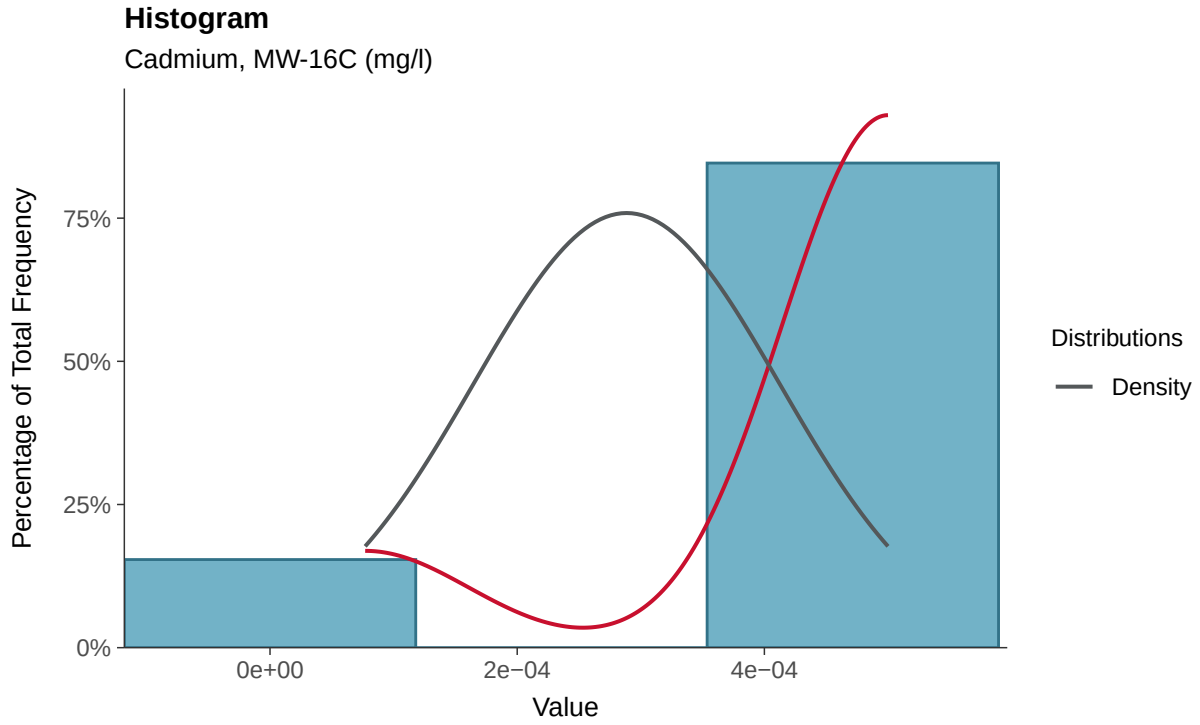
Beryllium, MW-16C (mg/l)



Appendix IV: Cadmium, MW-16C

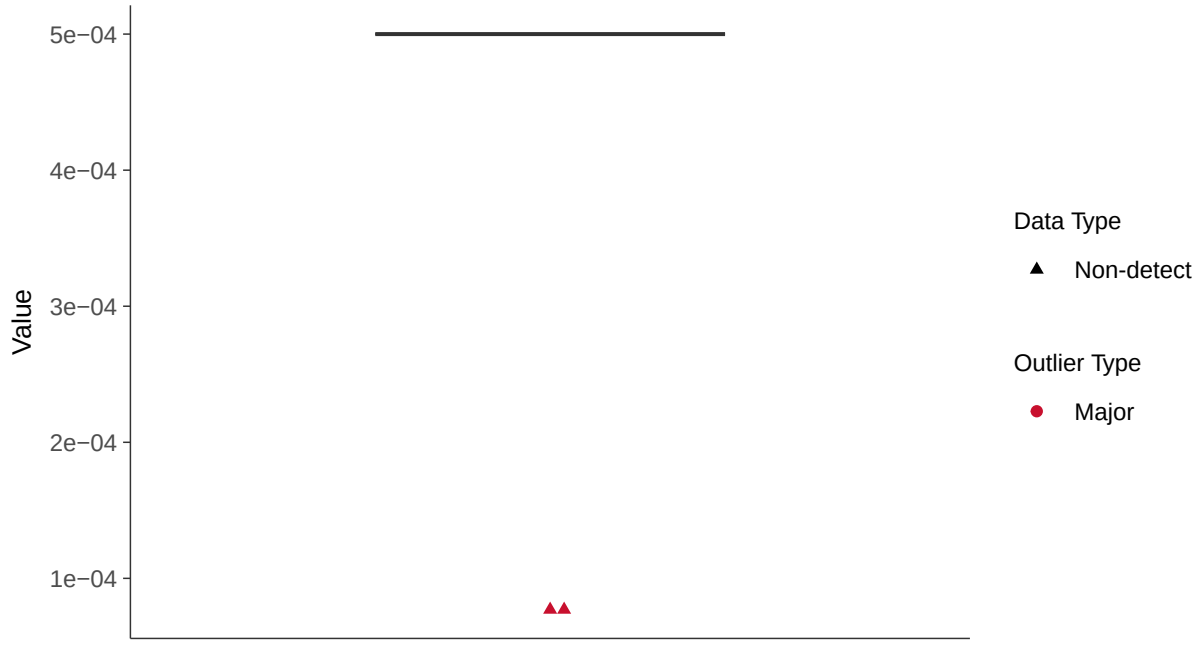
ID: 14_3_106





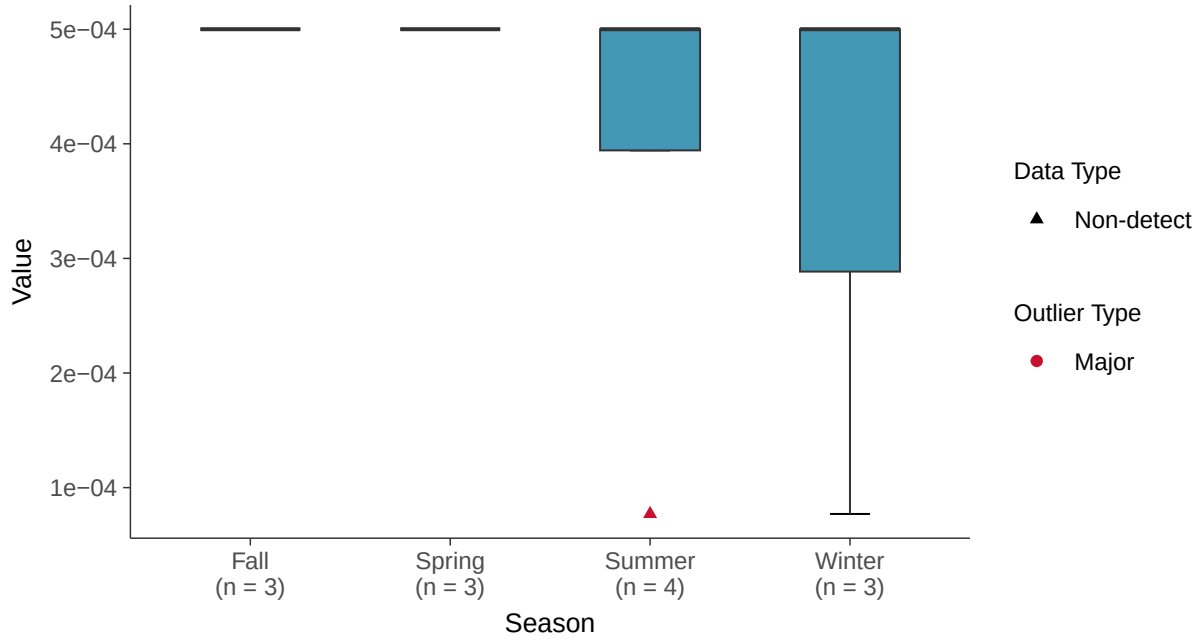
Boxplot

Cadmium, MW-16C (mg/l)



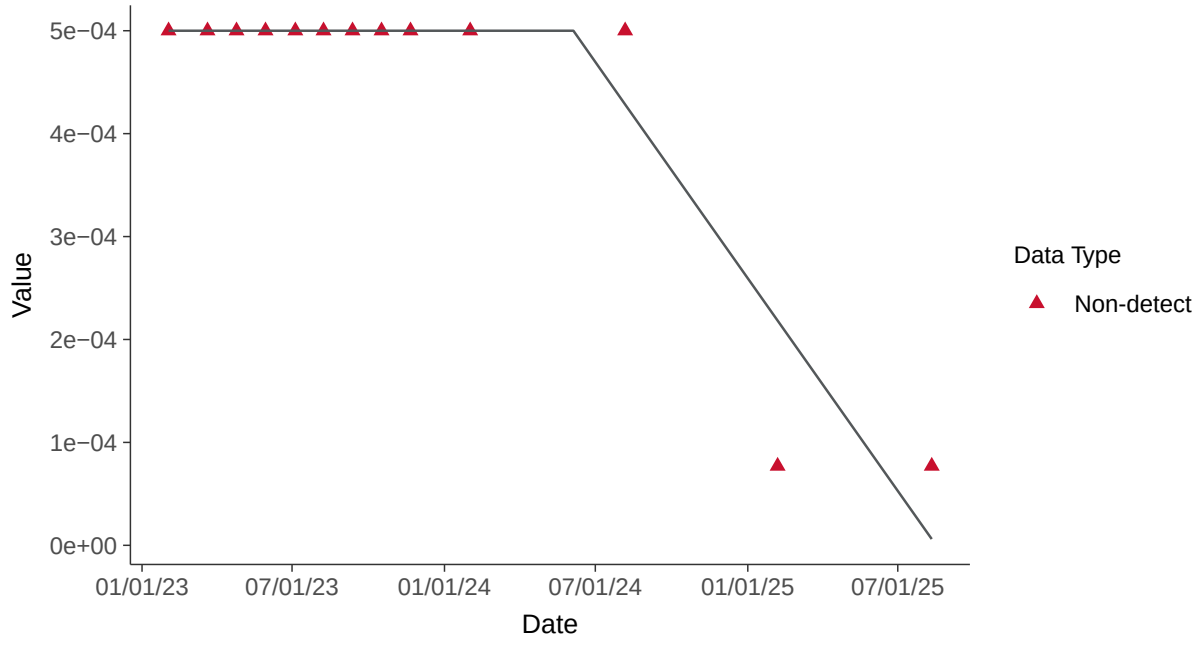
Boxplot by Season

Cadmium, MW-16C (mg/l)



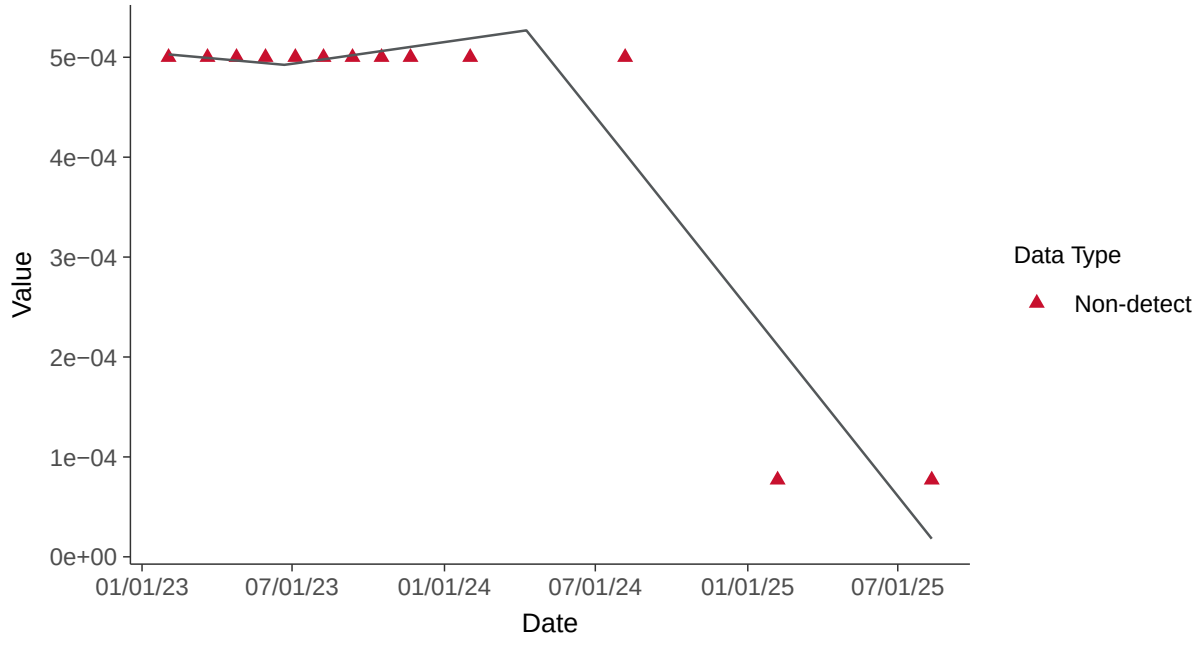
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-16C (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-16C (mg/l)

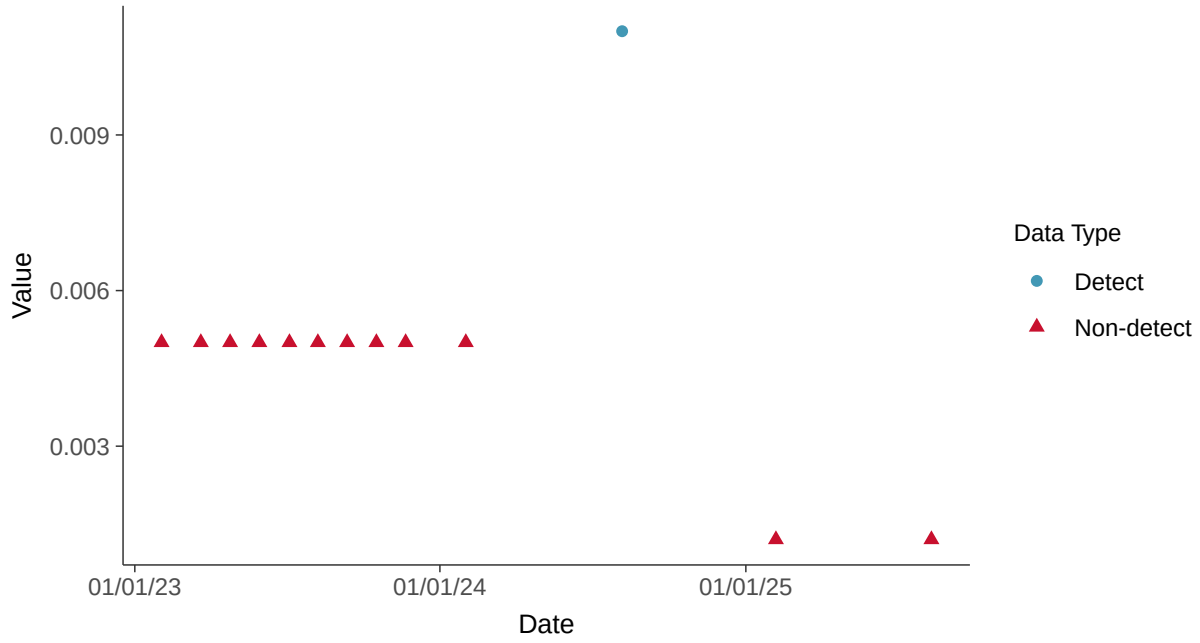


Appendix IV: Chromium, MW-16C

ID: 14_3_109

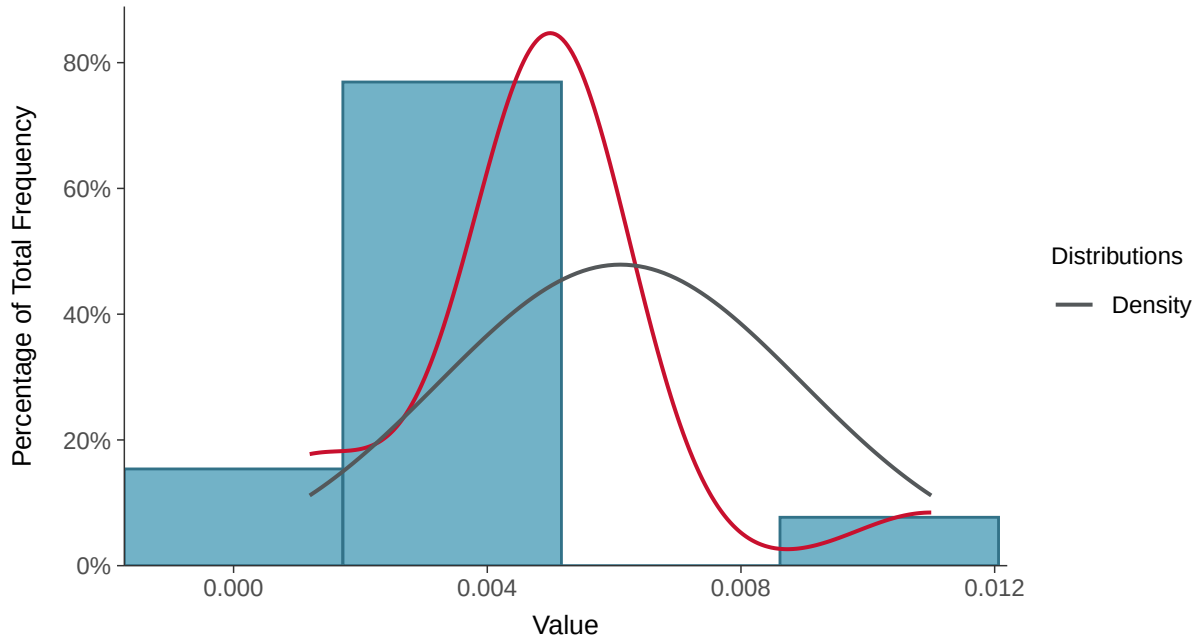
Scatter Plot

Chromium, MW-16C (mg/l)



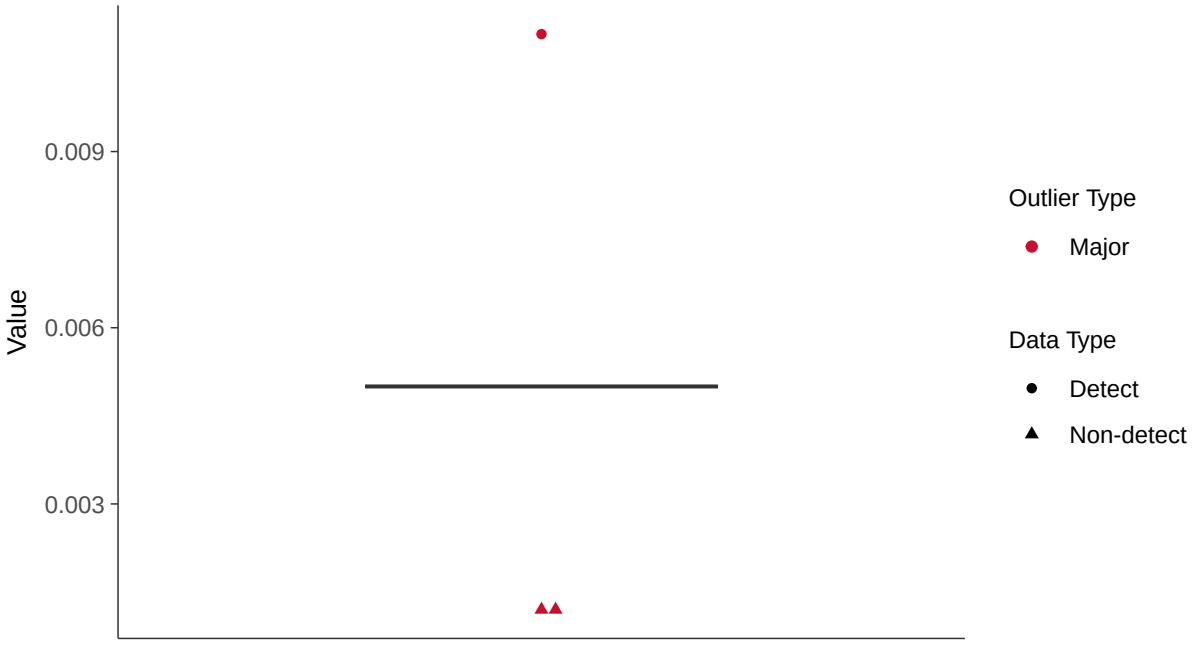
Histogram

Chromium, MW-16C (mg/l)



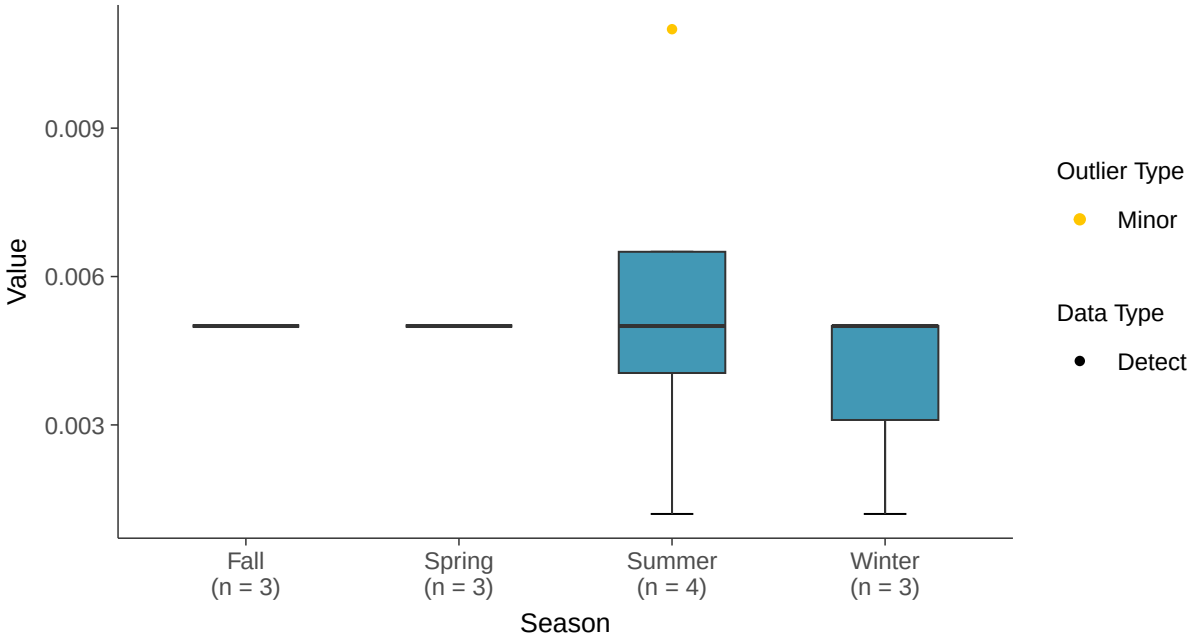
Boxplot

Chromium, MW-16C (mg/l)



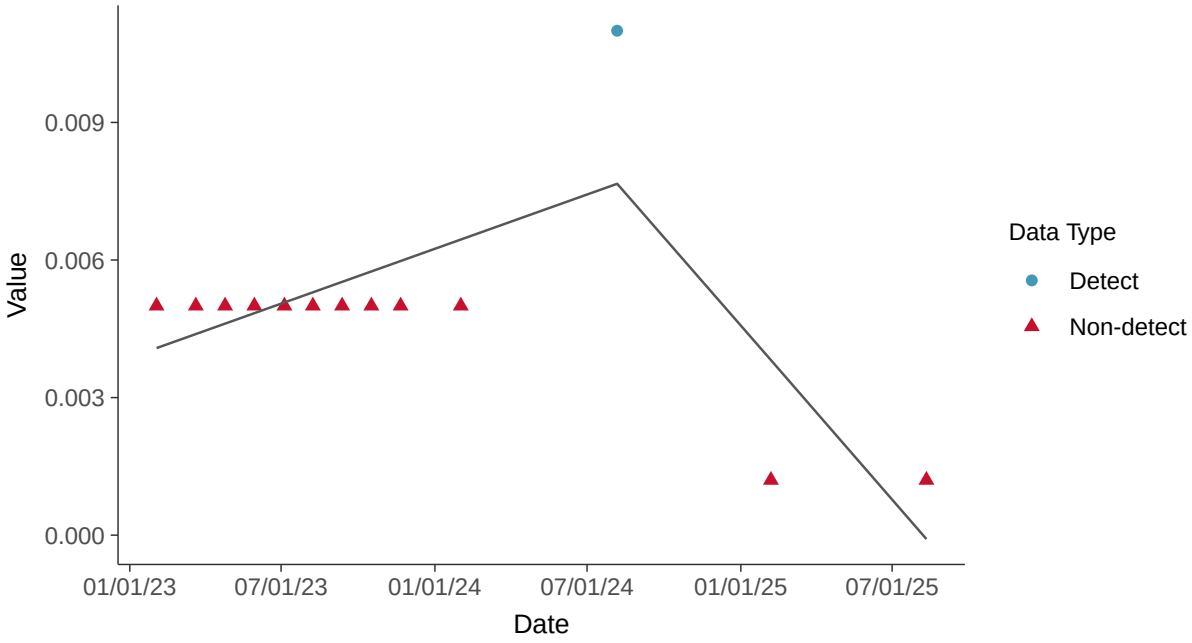
Boxplot by Season

Chromium, MW-16C (mg/l)



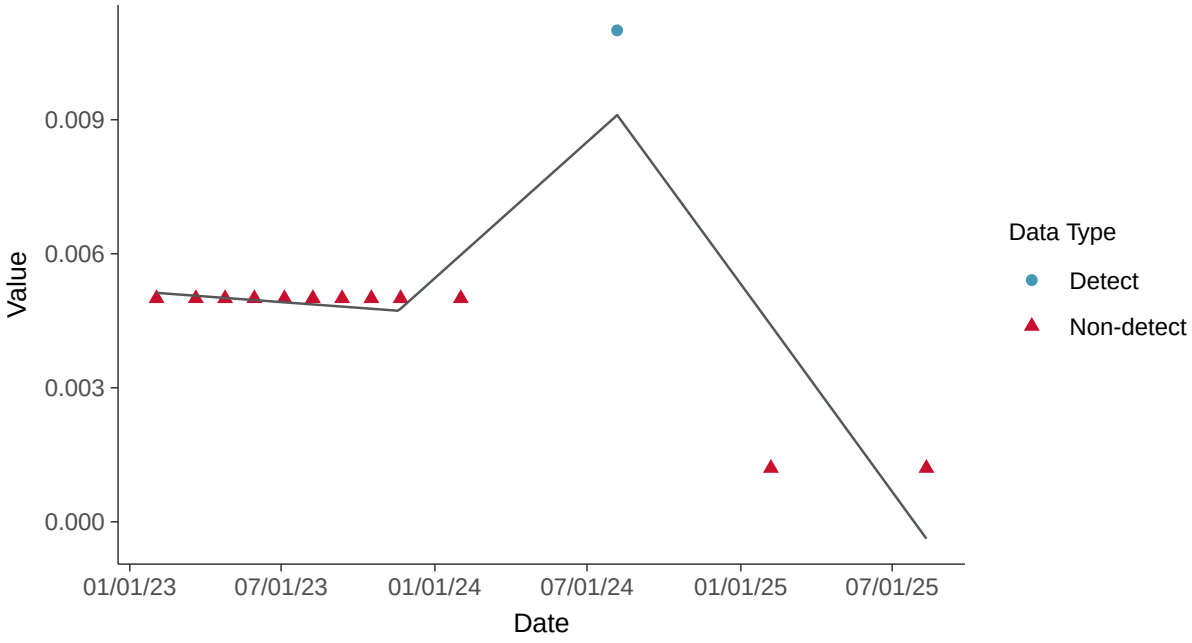
Trend Regression: Piecewise Linear-Linear

Chromium, MW-16C (mg/l)



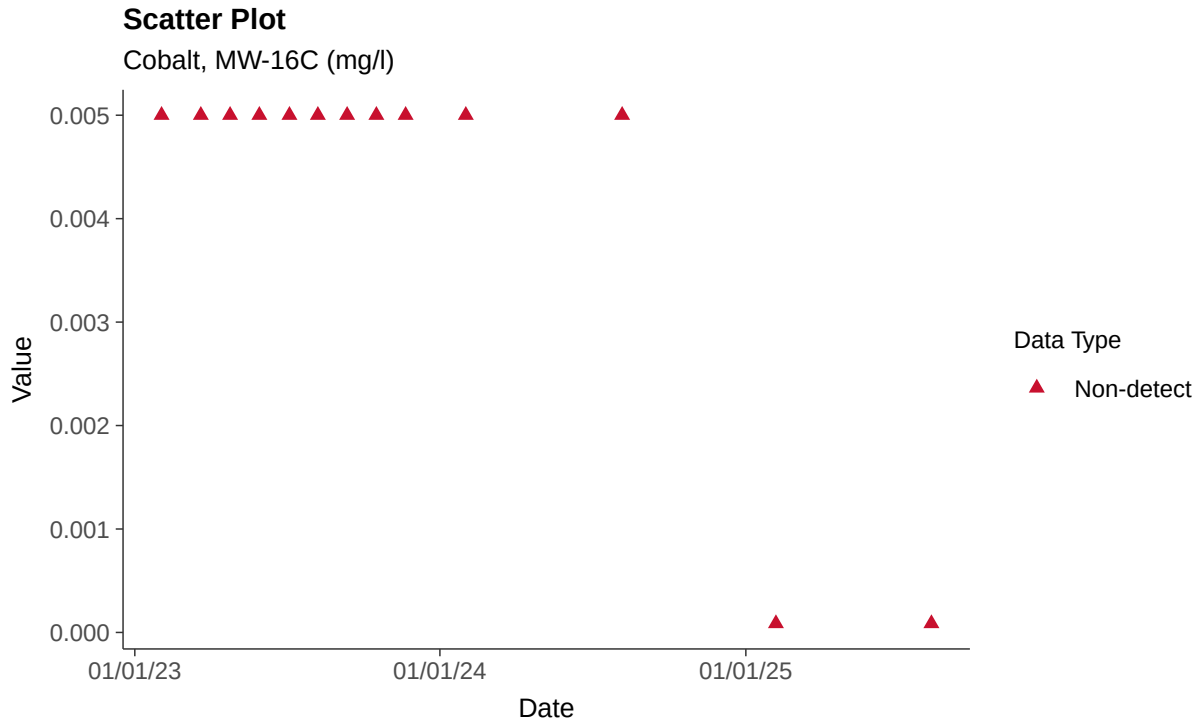
Trend Regression: Piecewise Linear-Linear-Linear

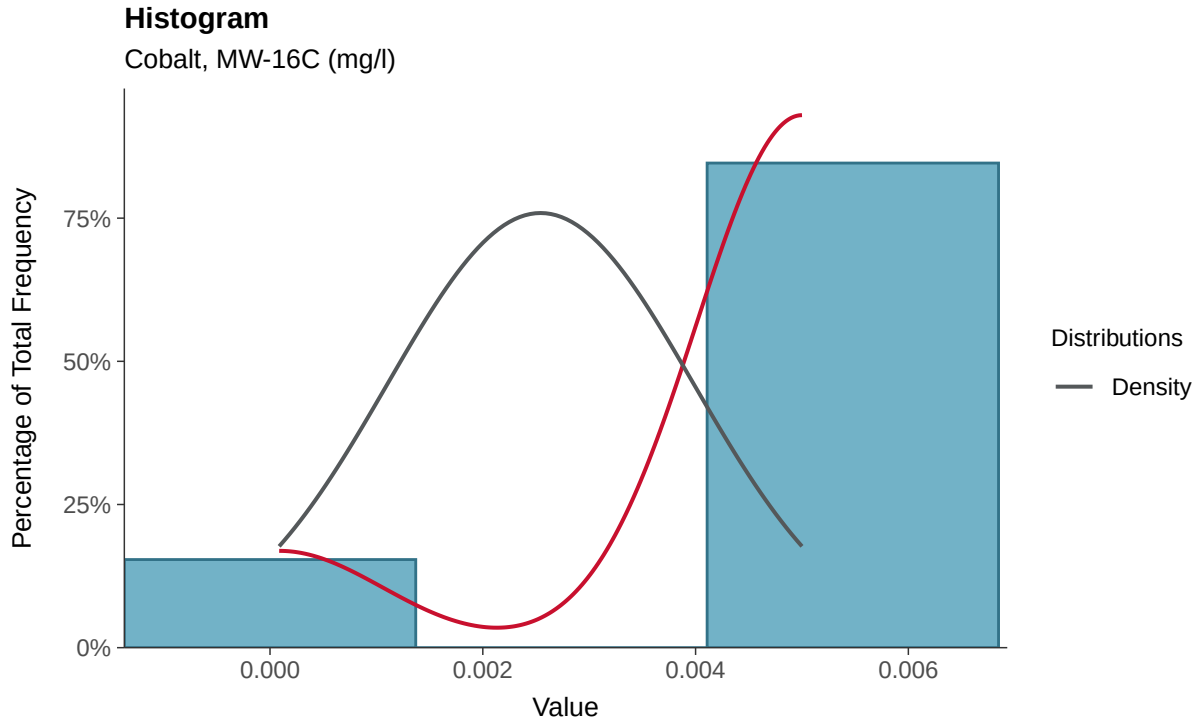
Chromium, MW-16C (mg/l)



Appendix IV: Cobalt, MW-16C

ID: 14_3_110



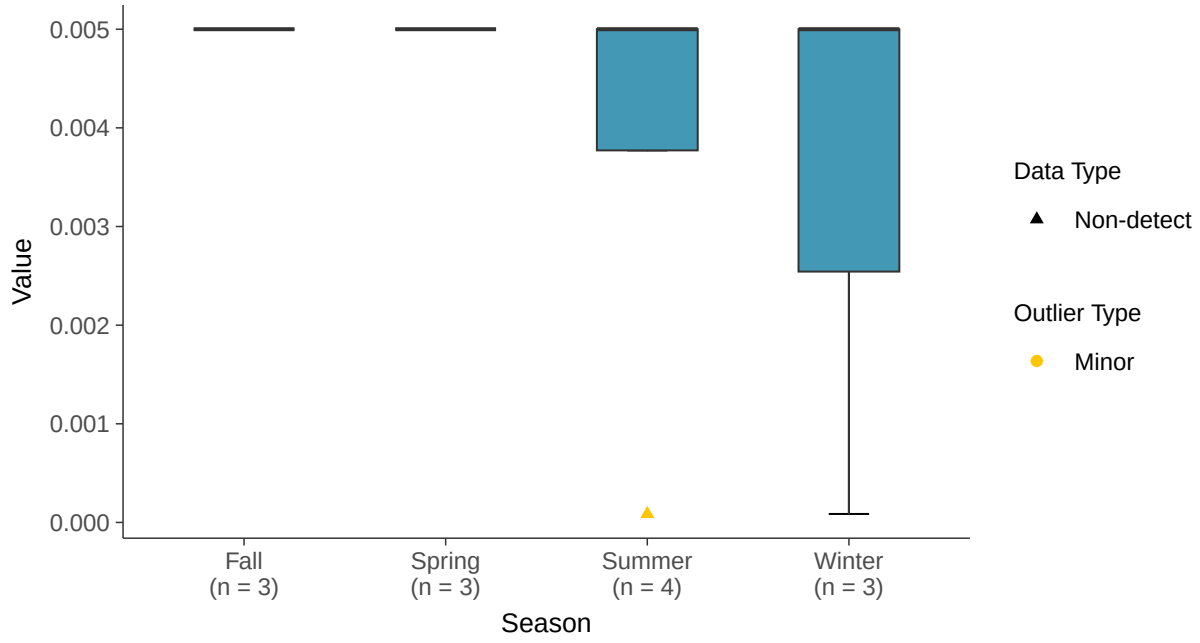


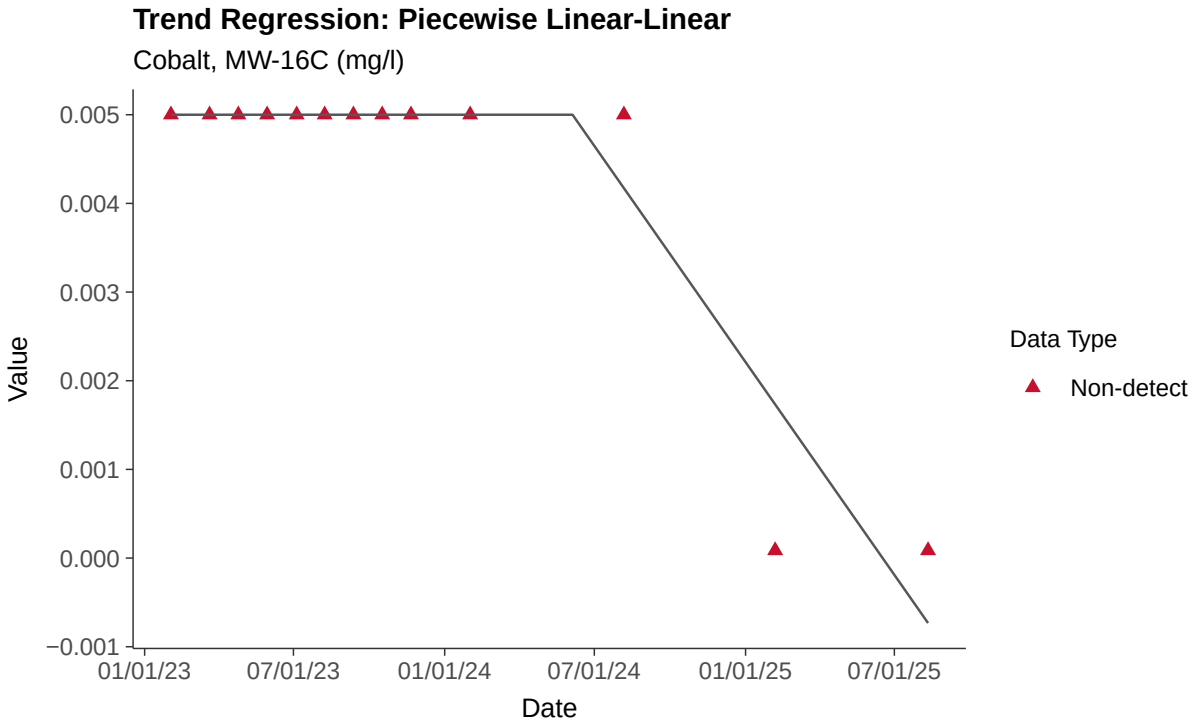
Boxplot

Cobalt, MW-16C (mg/l)

Boxplot by Season

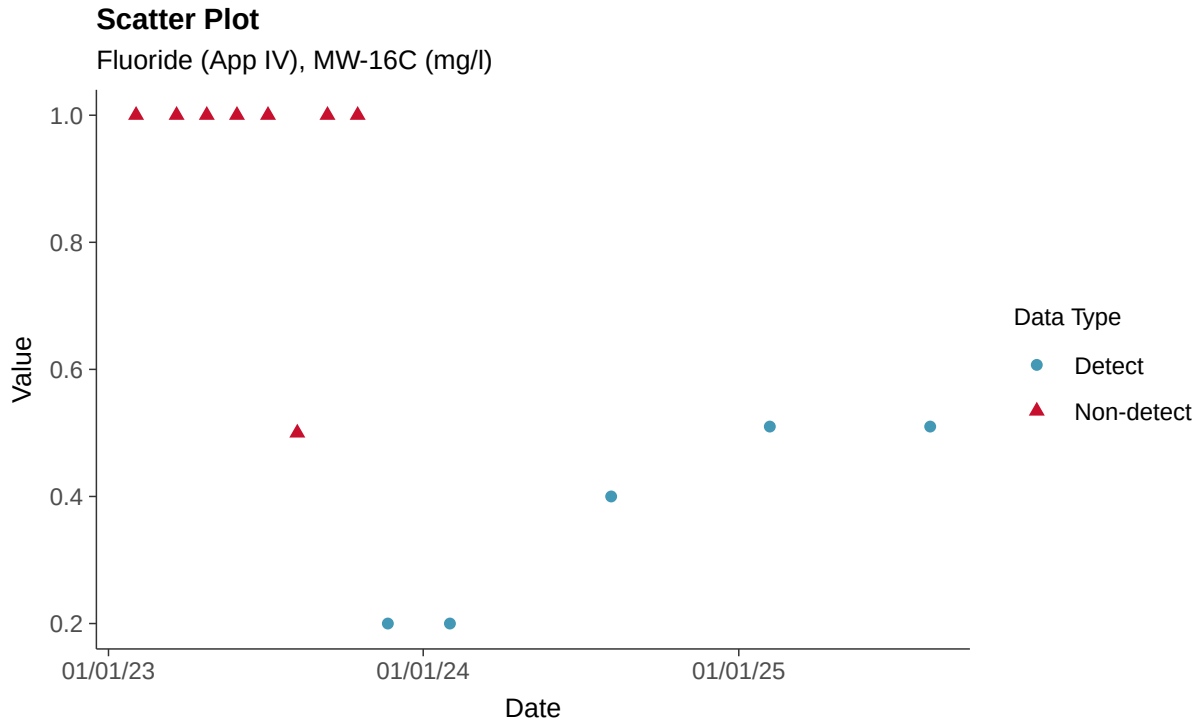
Cobalt, MW-16C (mg/l)

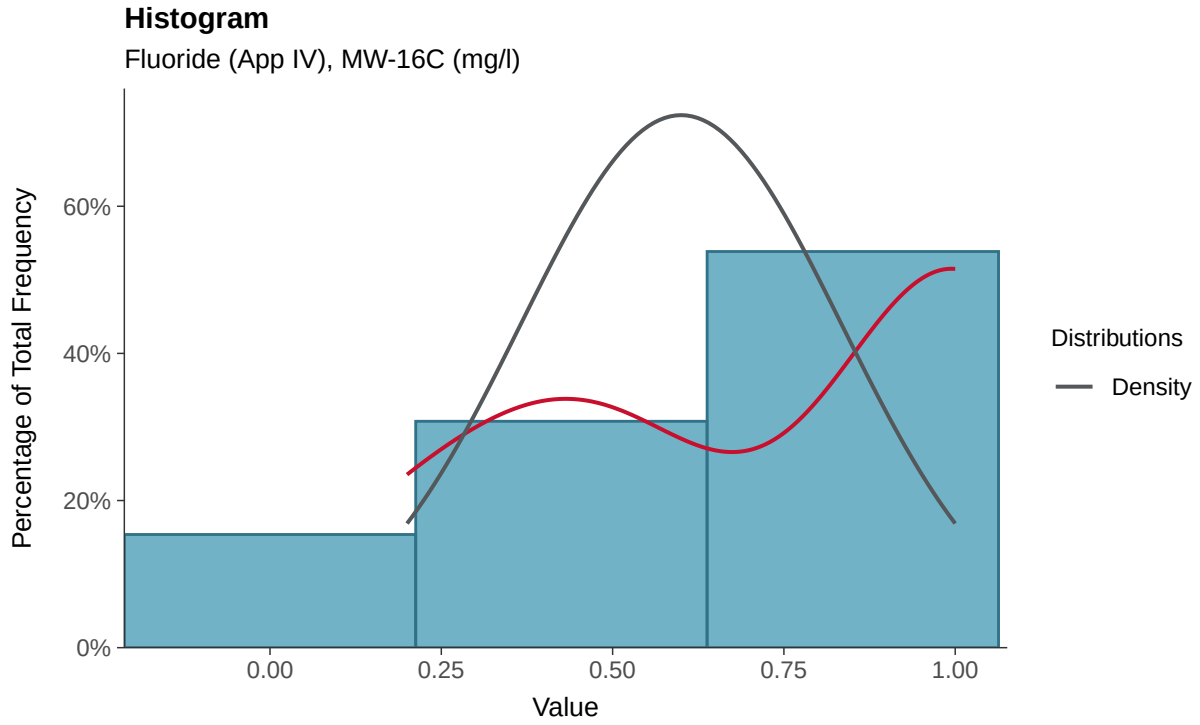



Trend Regression: Piecewise Linear-Linear
Cobalt, MW-16C (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
−0.001
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Fluoride (App IV), MW-16C

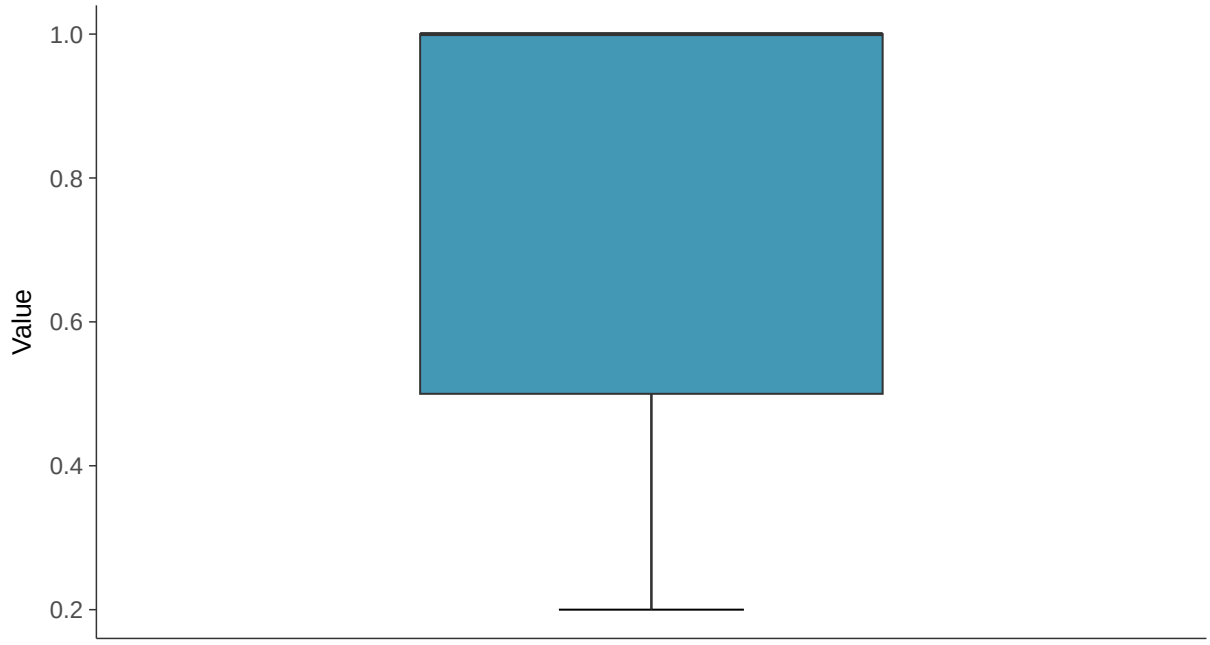
ID: 14_3_113





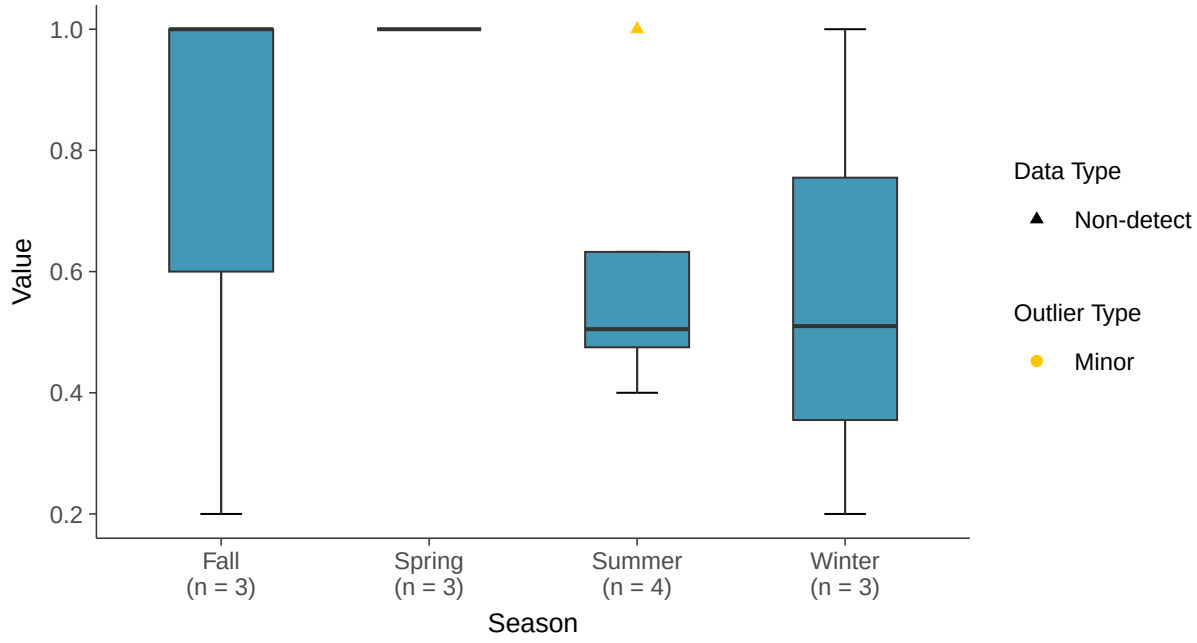
Boxplot

Fluoride (App IV), MW-16C (mg/l)



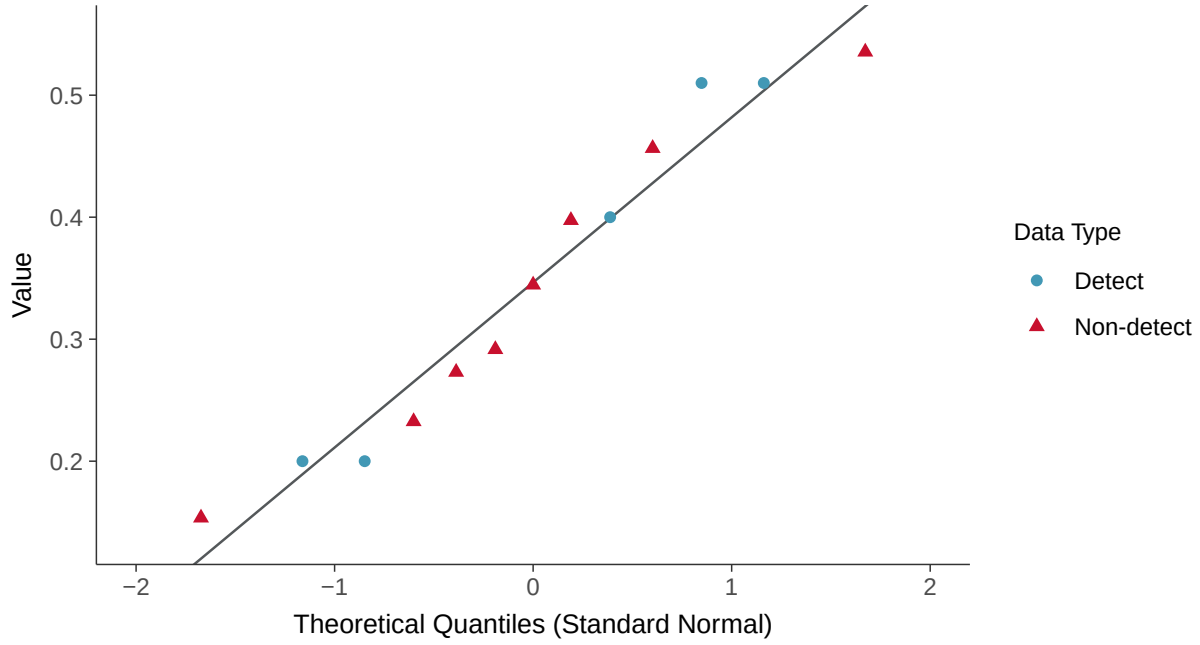
Boxplot by Season

Fluoride (App IV), MW-16C (mg/l)



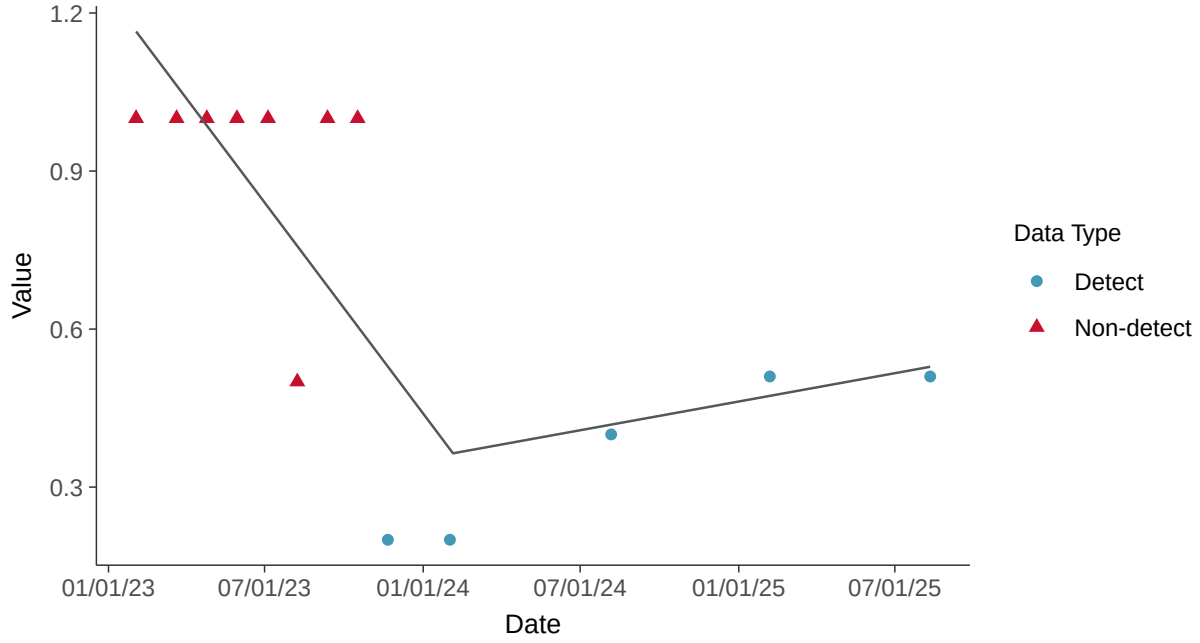
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-16C (mg/l)



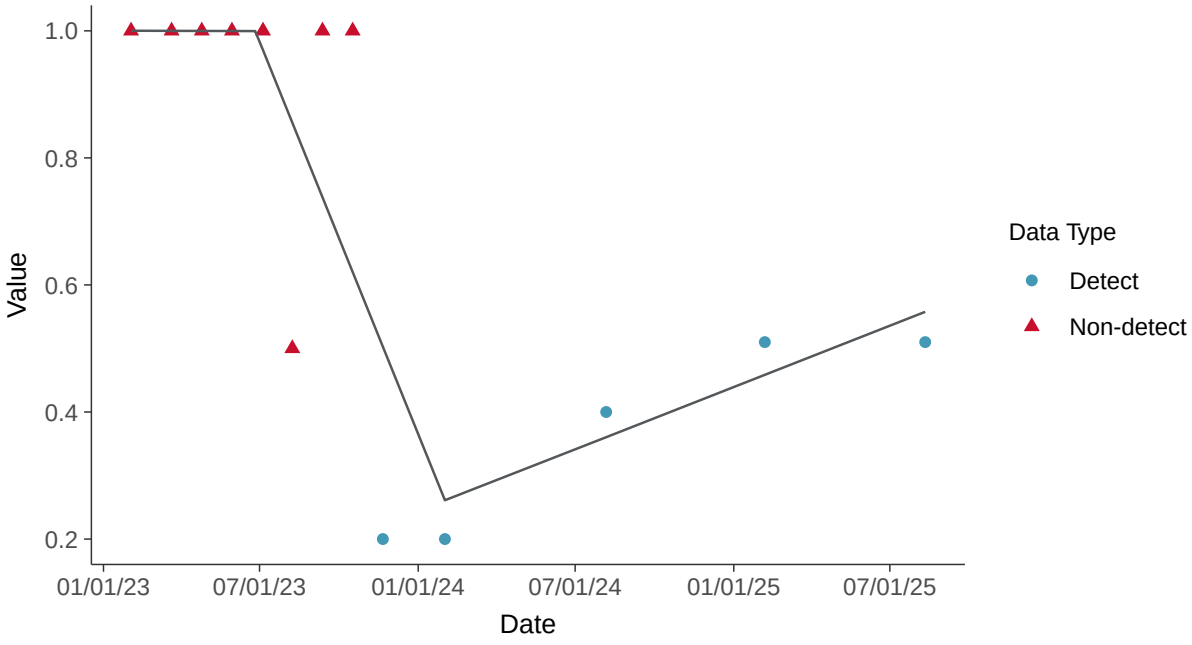
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-16C (mg/l)



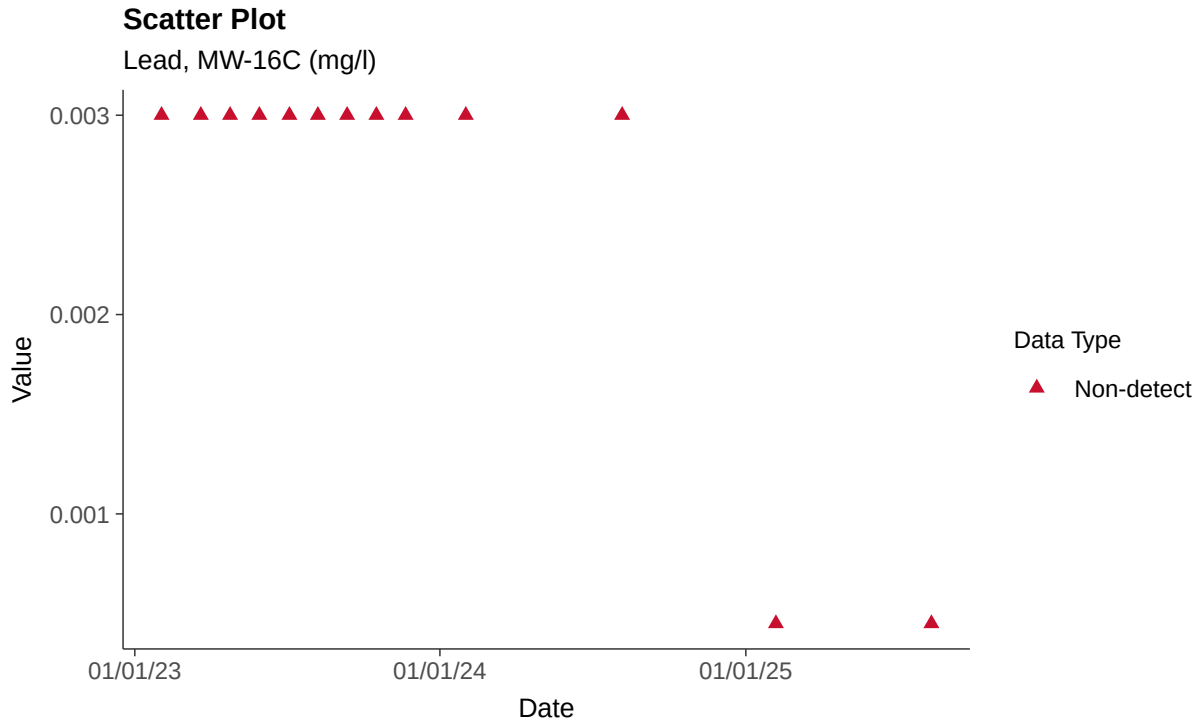
Trend Regression: Piecewise Linear-Linear-Linear

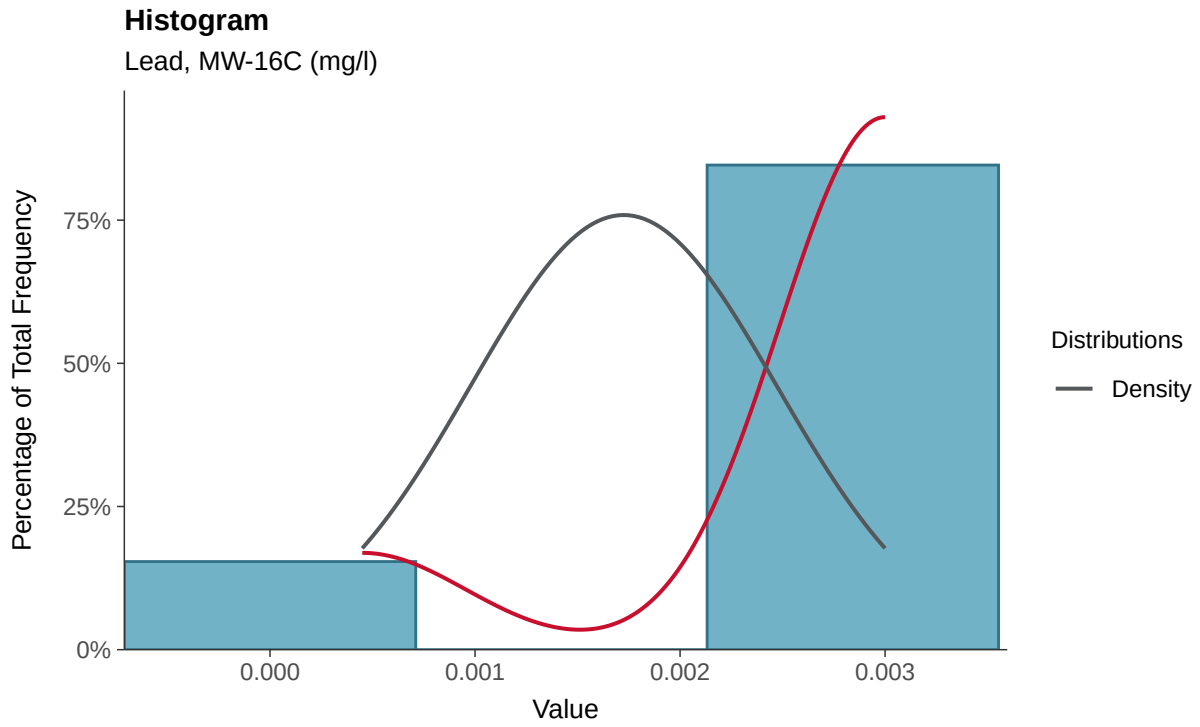
Fluoride (App IV), MW-16C (mg/l)



Appendix IV: Lead, MW-16C

ID: 14_3_115



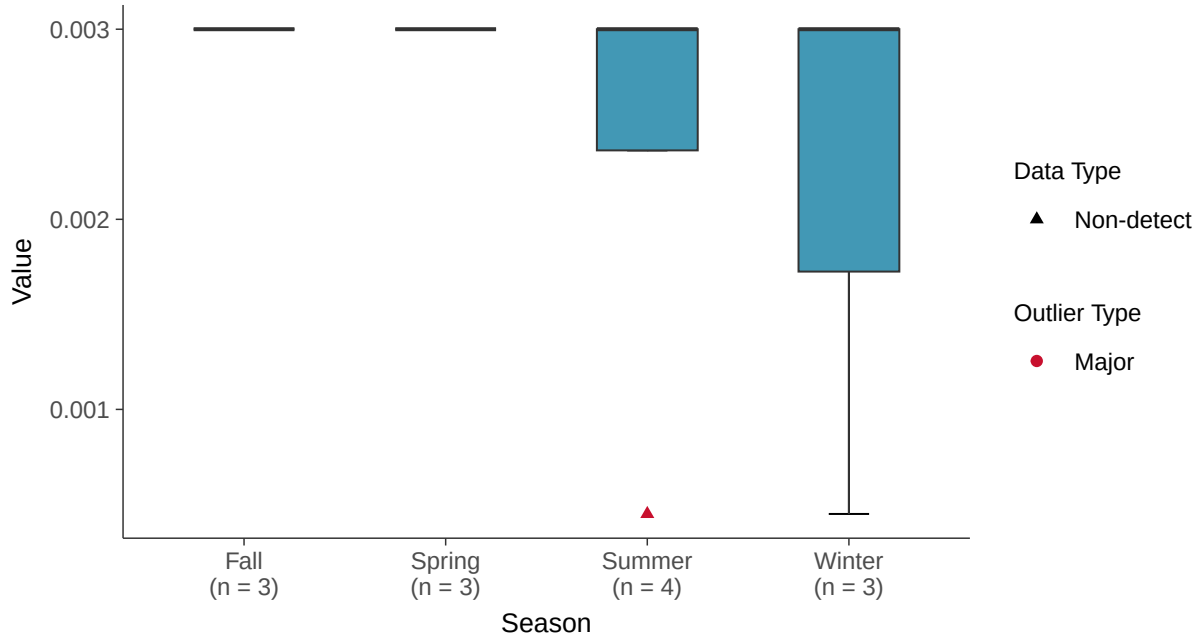


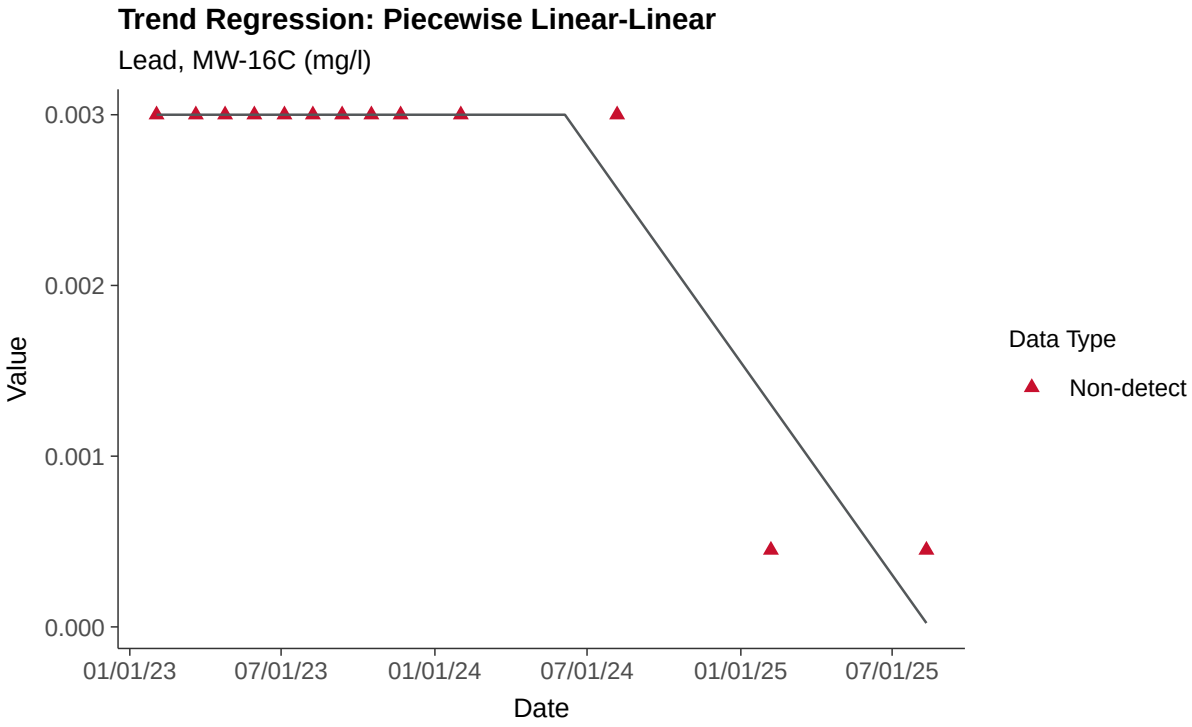
Boxplot

Lead, MW-16C (mg/l)

Boxplot by Season

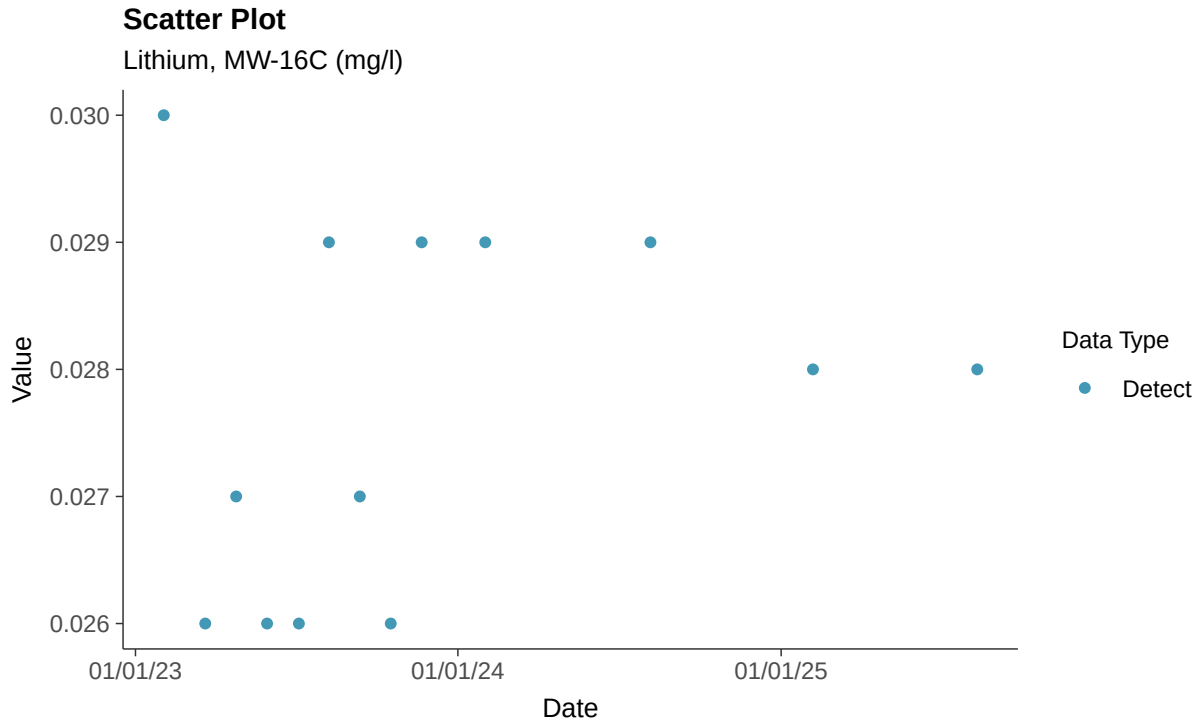
Lead, MW-16C (mg/l)

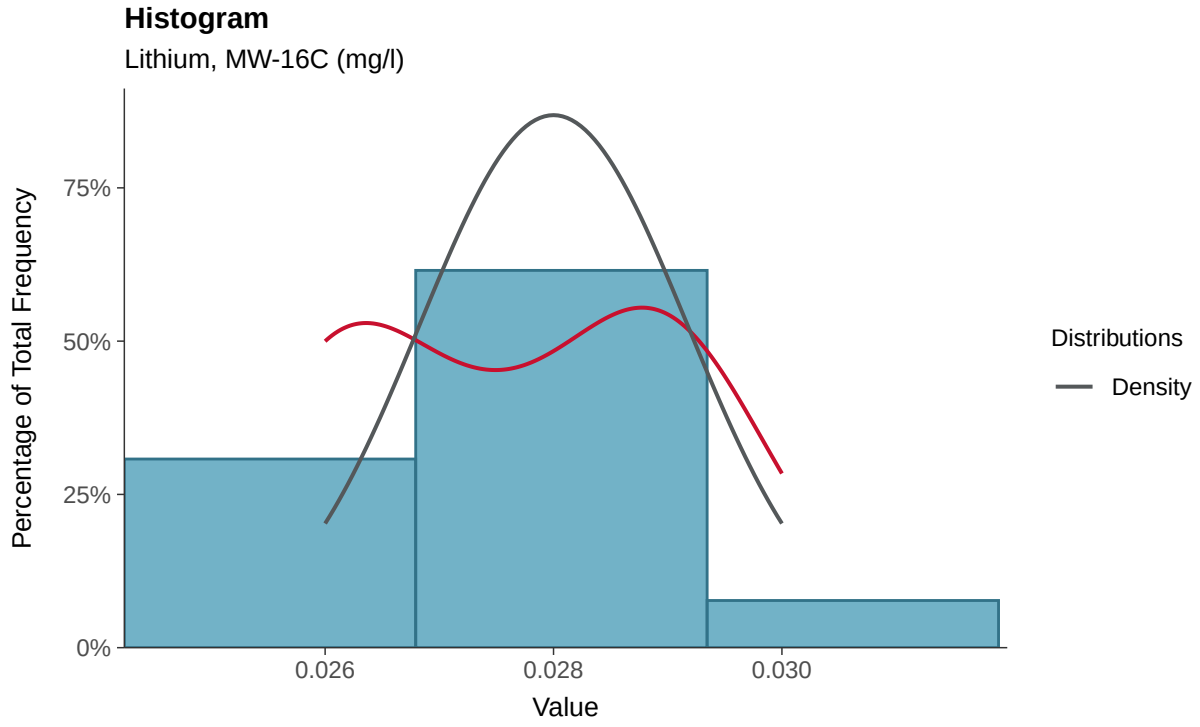



Trend Regression: Piecewise Linear-Linear
Lead, MW-16C (mg/l)
0.003
0.002
0.001
0.000
Value
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Lithium, MW-16C

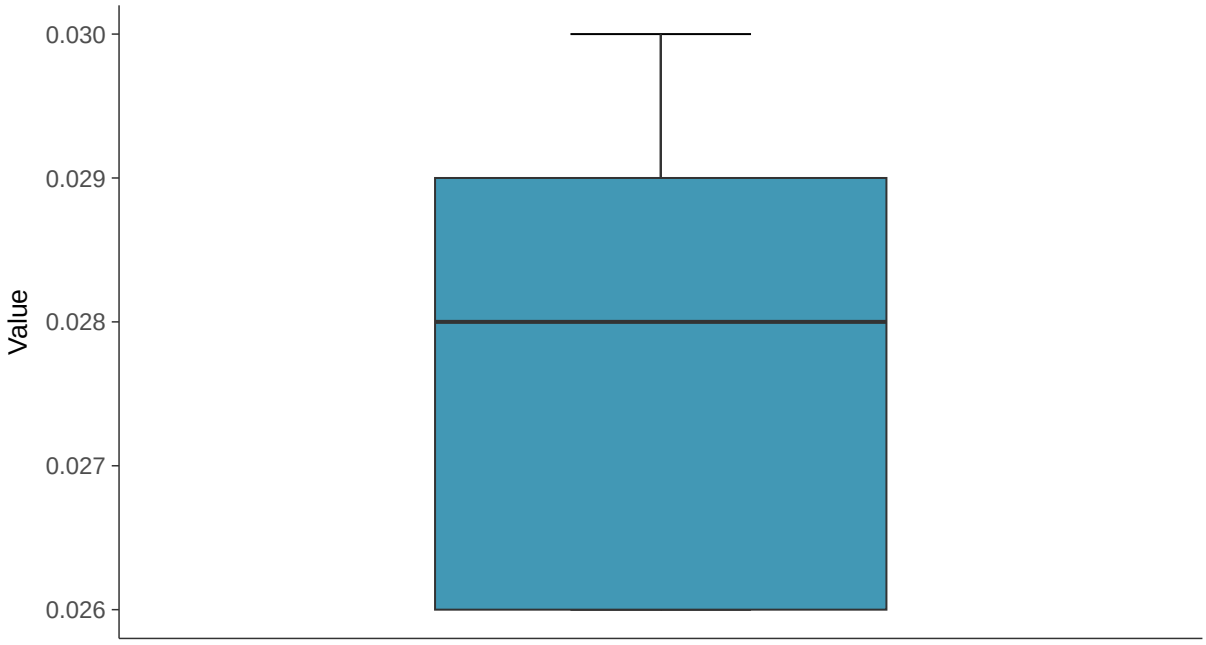
ID: 14_3_116





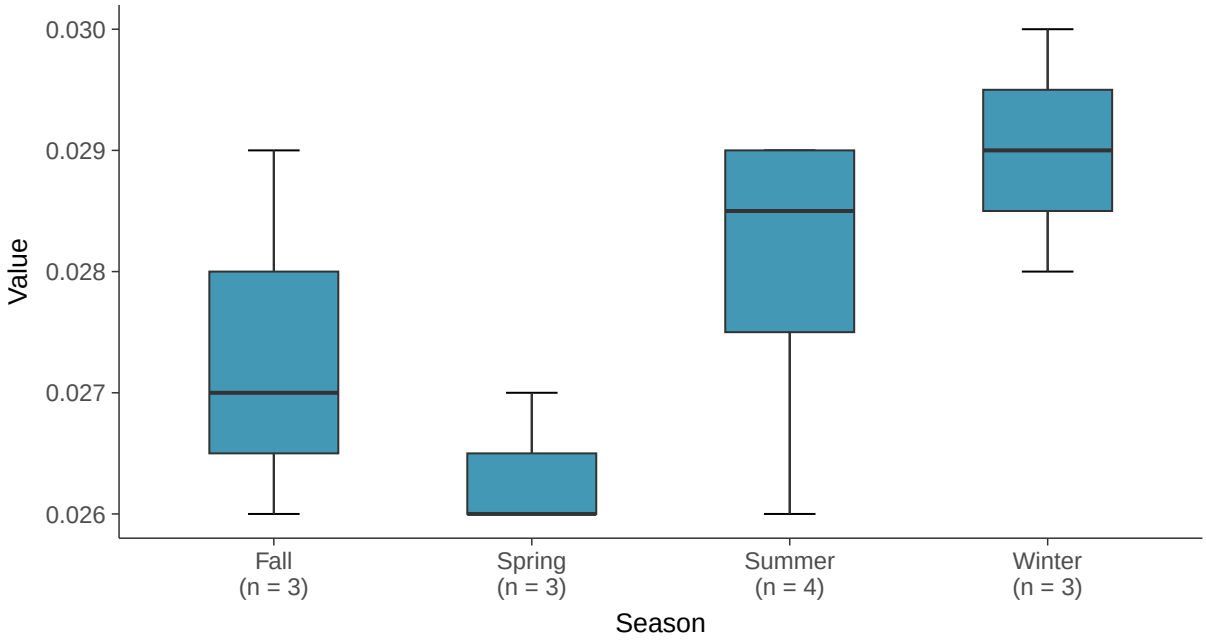
Boxplot

Lithium, MW-16C (mg/l)



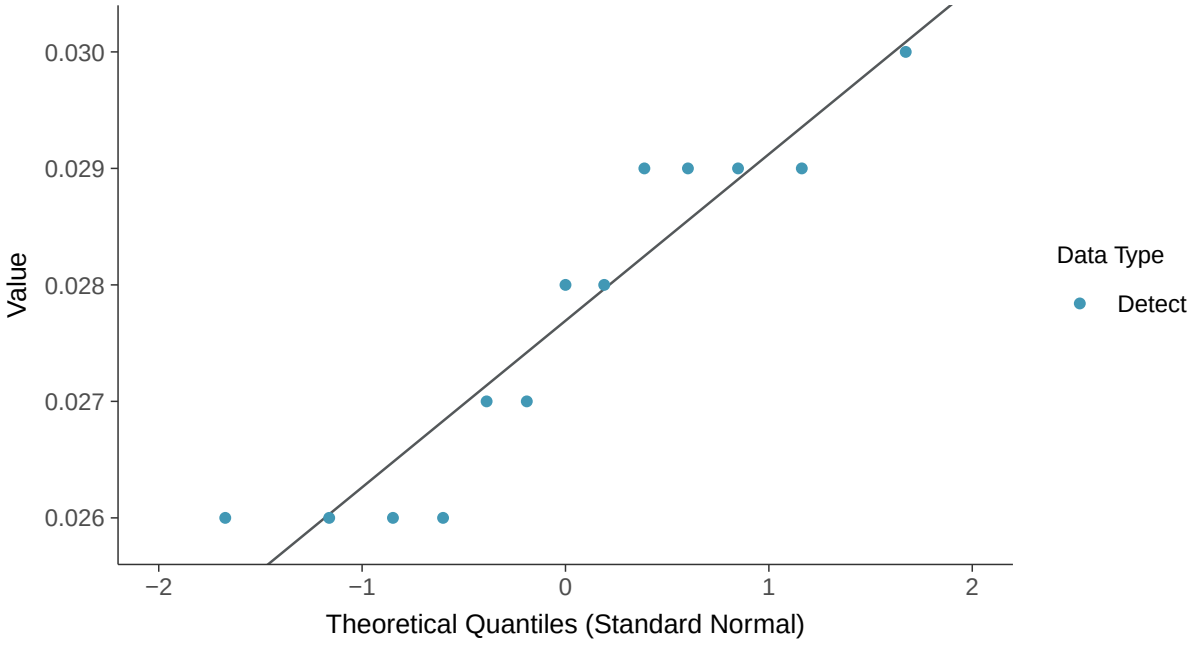
Boxplot by Season

Lithium, MW-16C (mg/l)



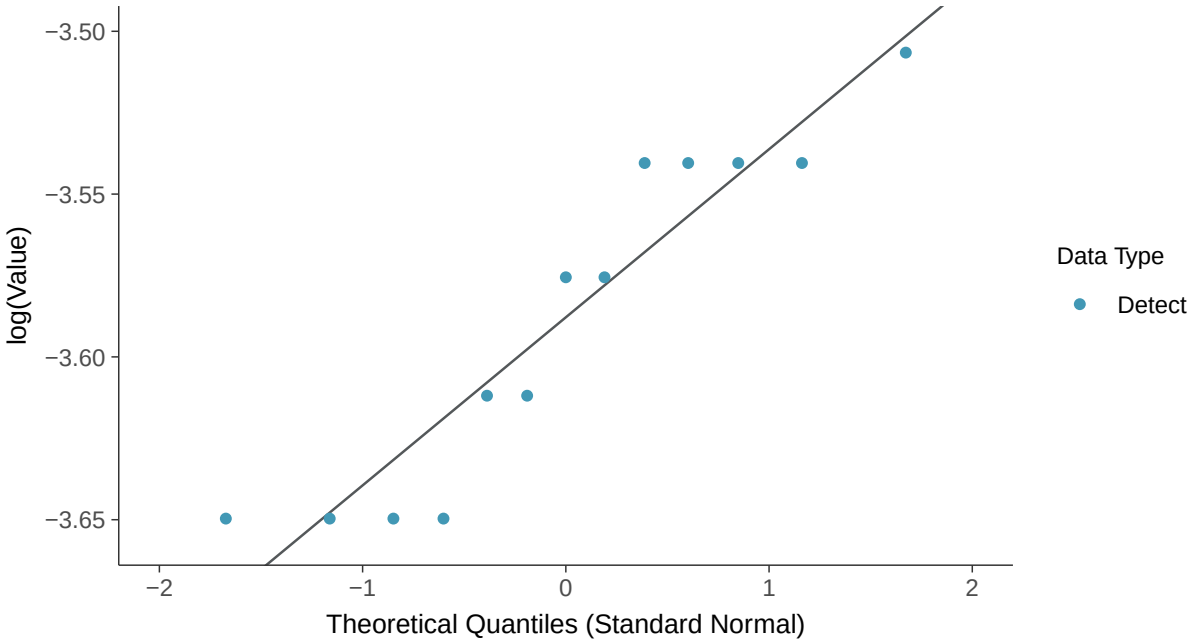
Normal Q-Q plot

Lithium, MW-16C (mg/l)



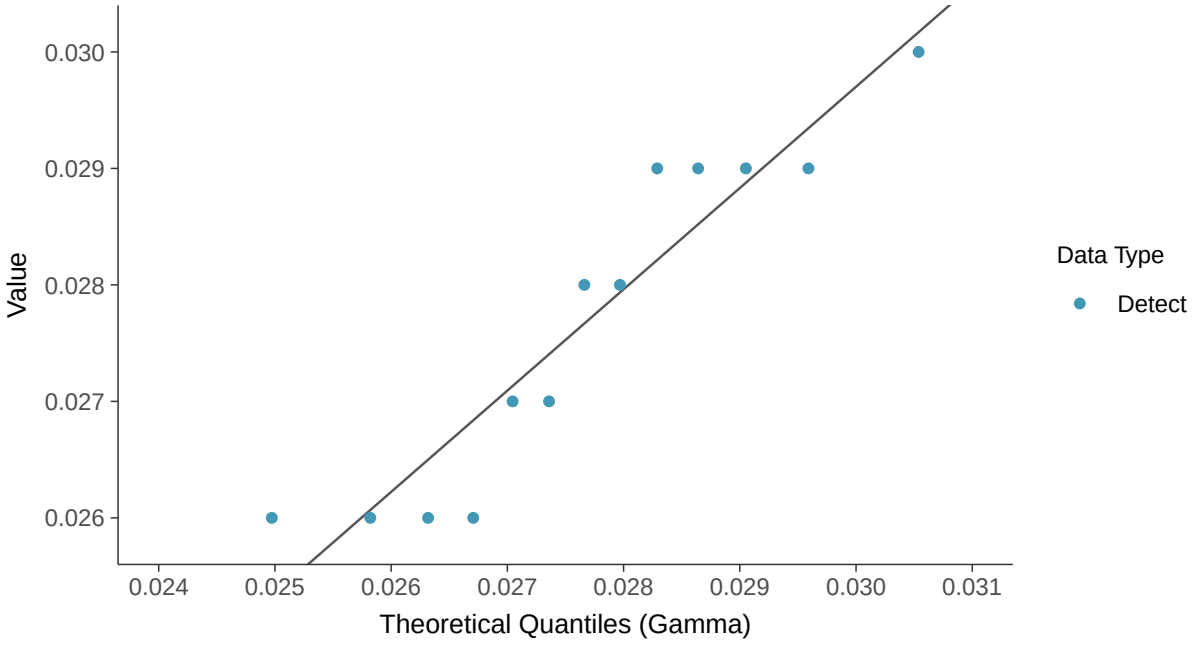
Lognormal Q-Q plot

Lithium, MW-16C (mg/l)



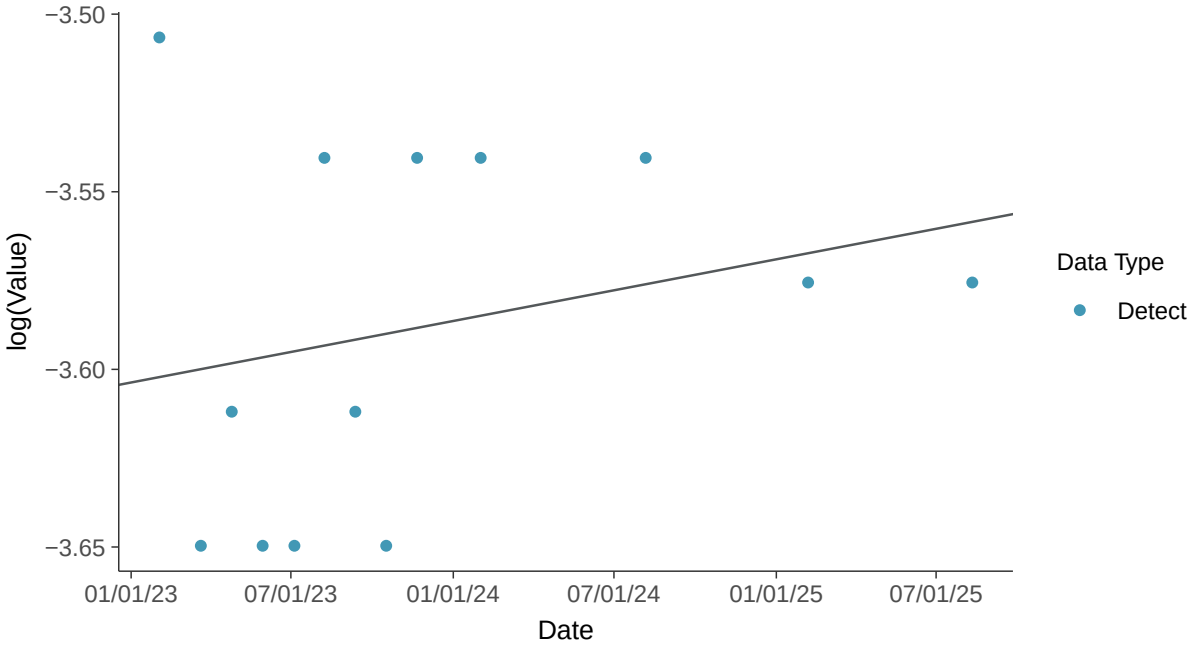
Gamma Q-Q plot

Lithium, MW-16C (mg/l)



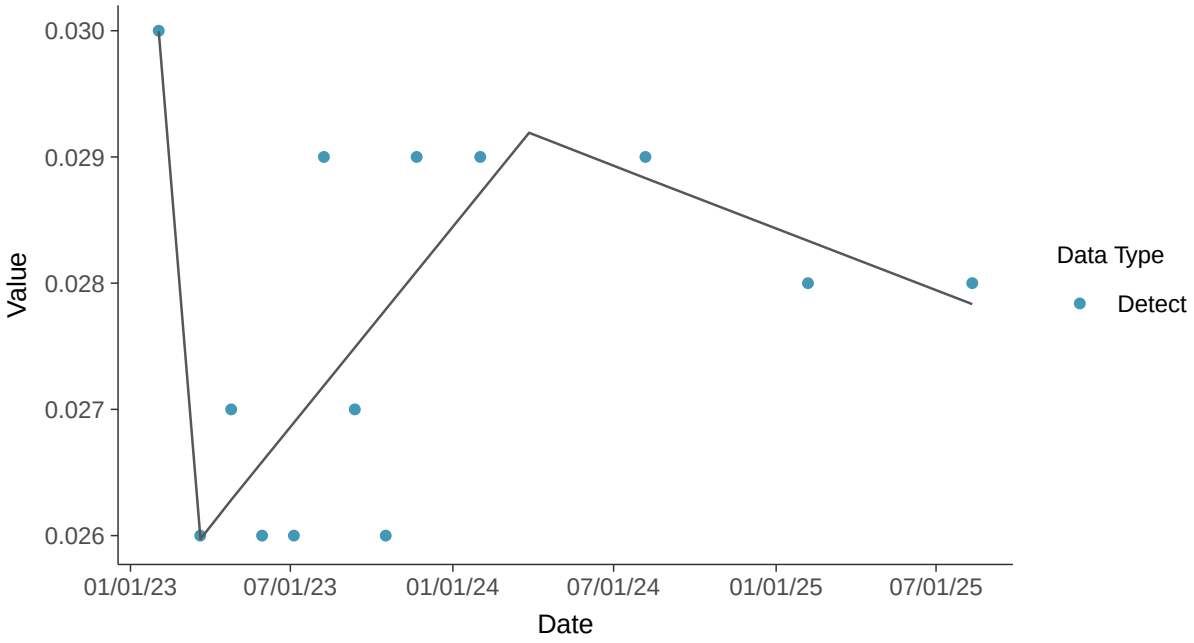
Trend Regression: Lognormal MLE

Lithium, MW-16C (mg/l)



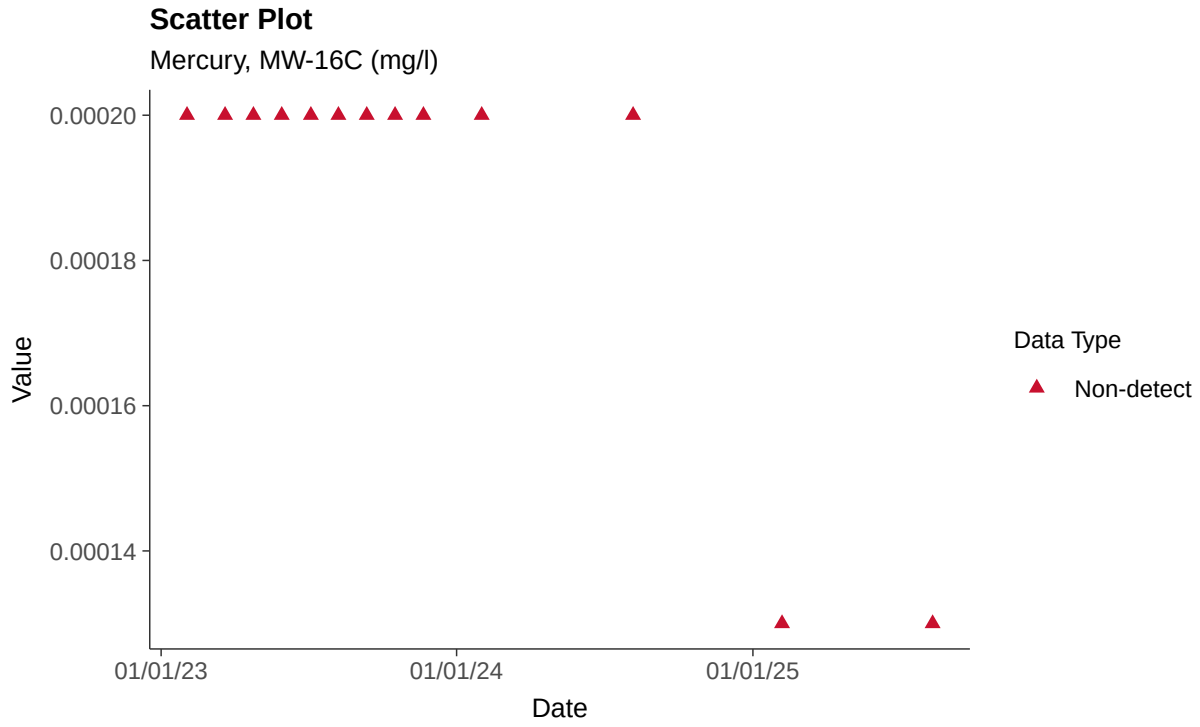
Trend Regression: Piecewise Linear-Linear-Linear

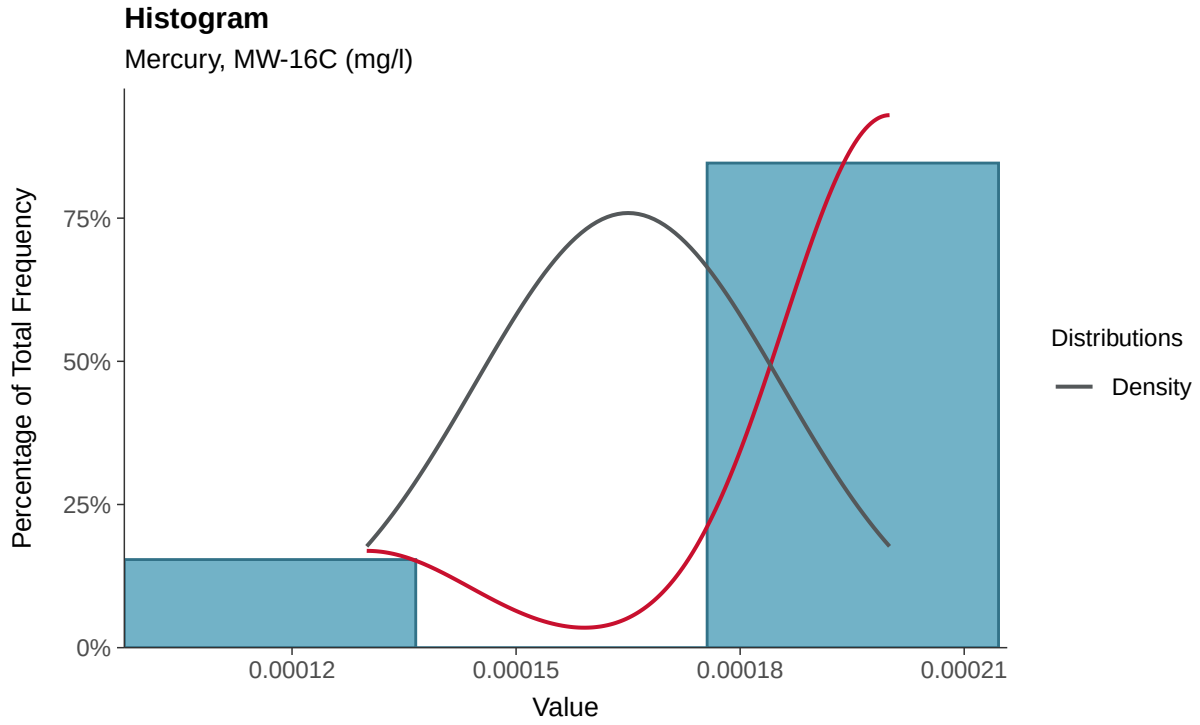
Lithium, MW-16C (mg/l)



Appendix IV: Mercury, MW-16C

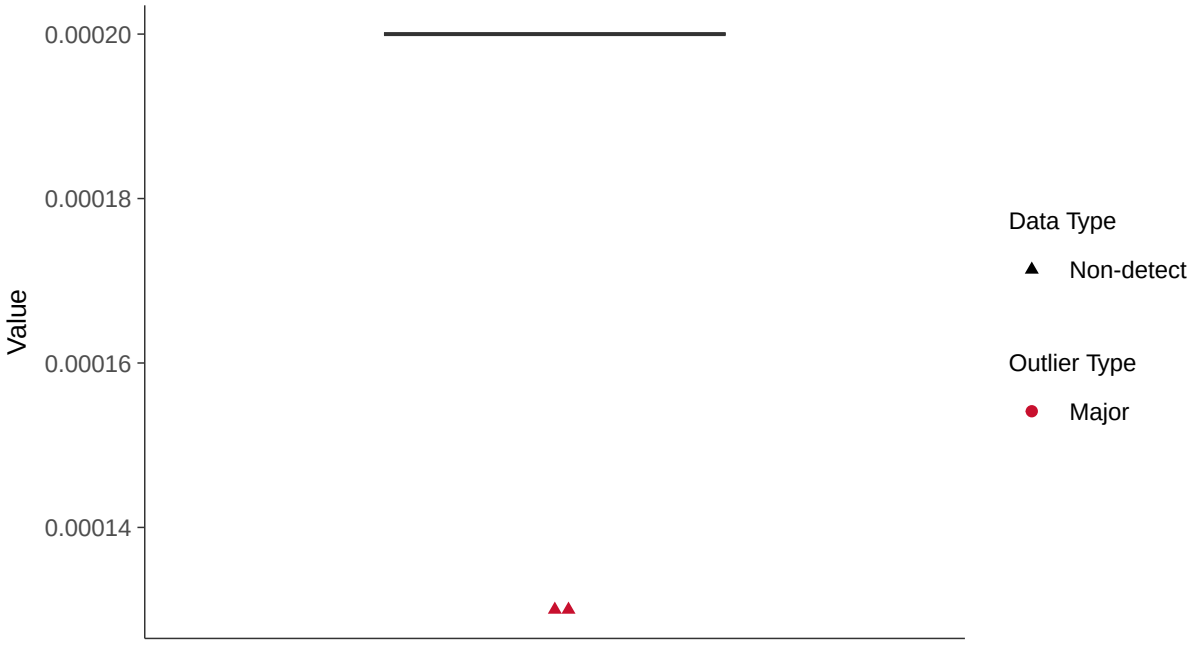
ID: 14_3_117





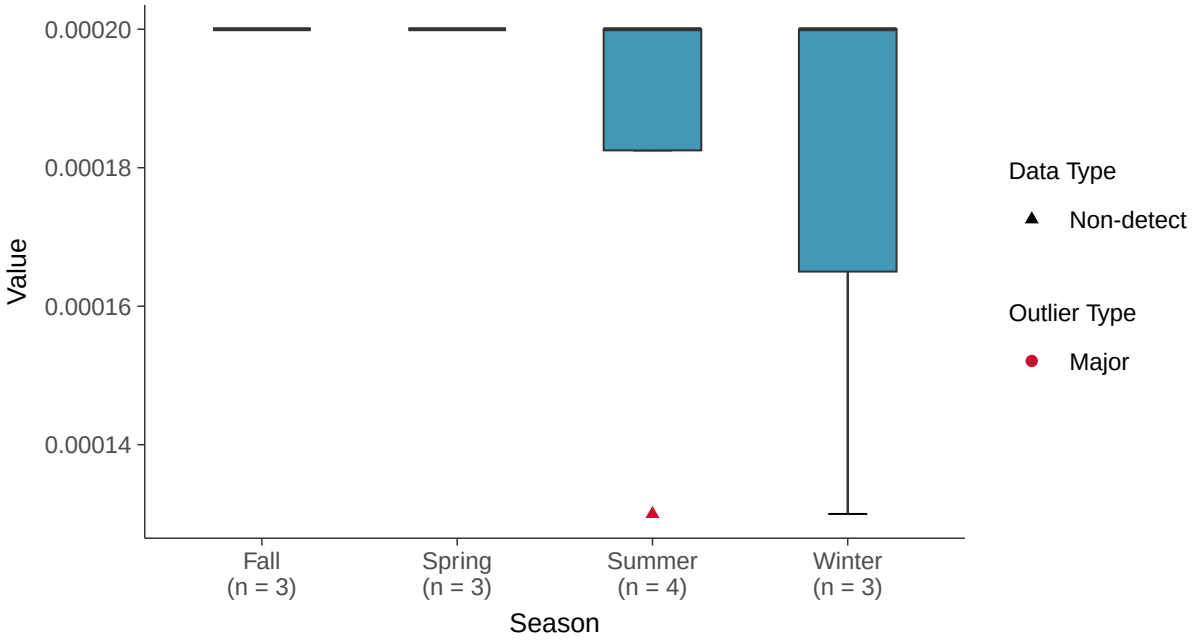
Boxplot

Mercury, MW-16C (mg/l)



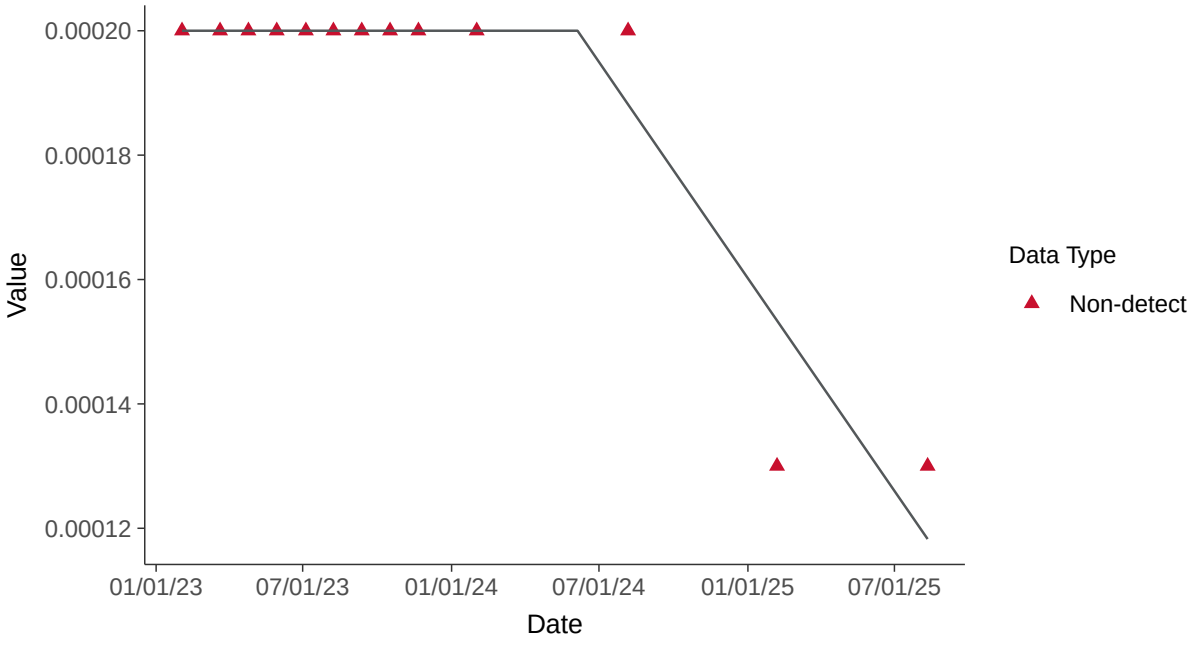
Boxplot by Season

Mercury, MW-16C (mg/l)



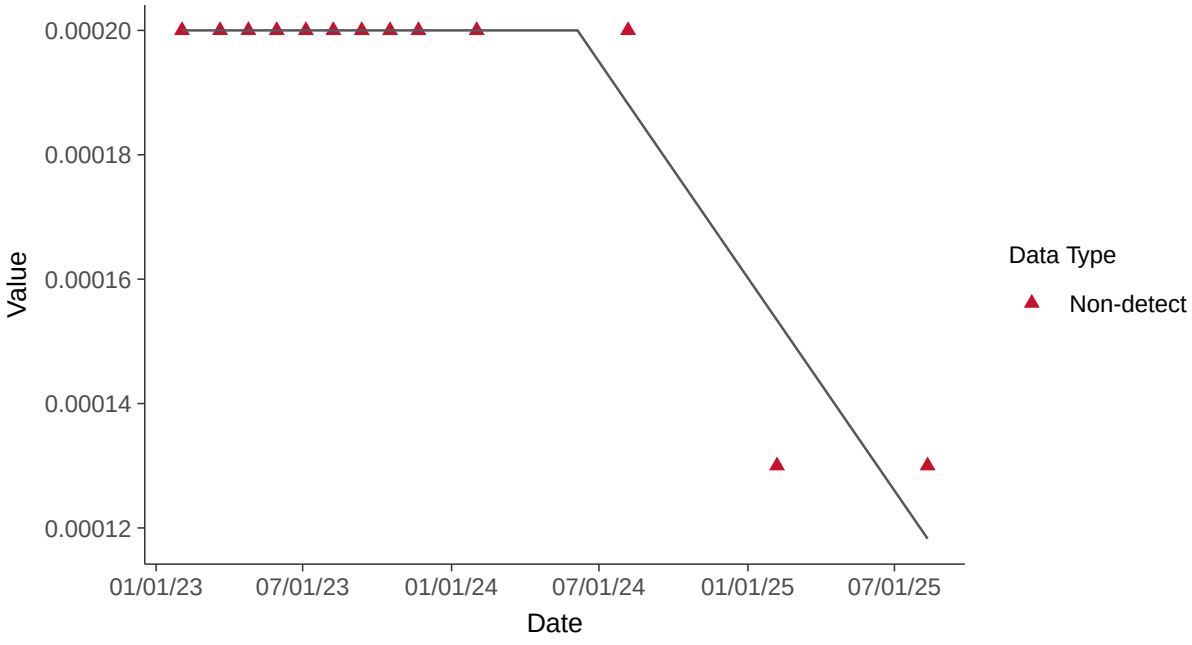
Trend Regression: Piecewise Linear-Linear

Mercury, MW-16C (mg/l)



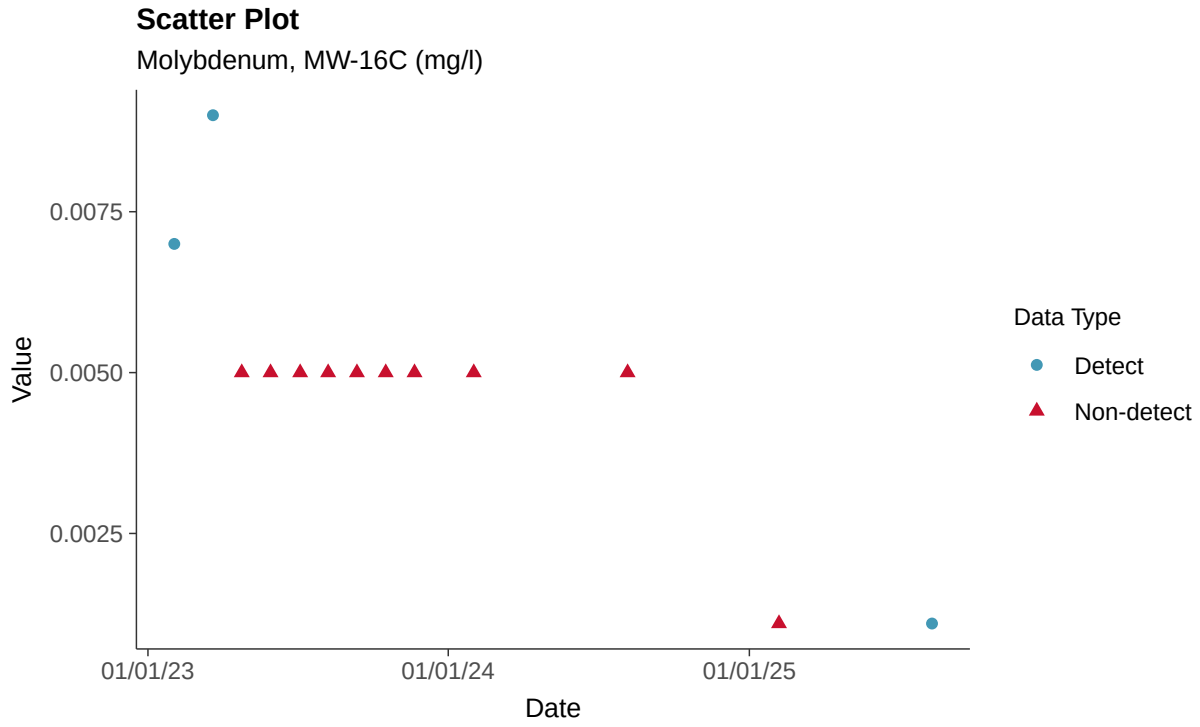
Trend Regression: Piecewise Linear-Linear-Linear

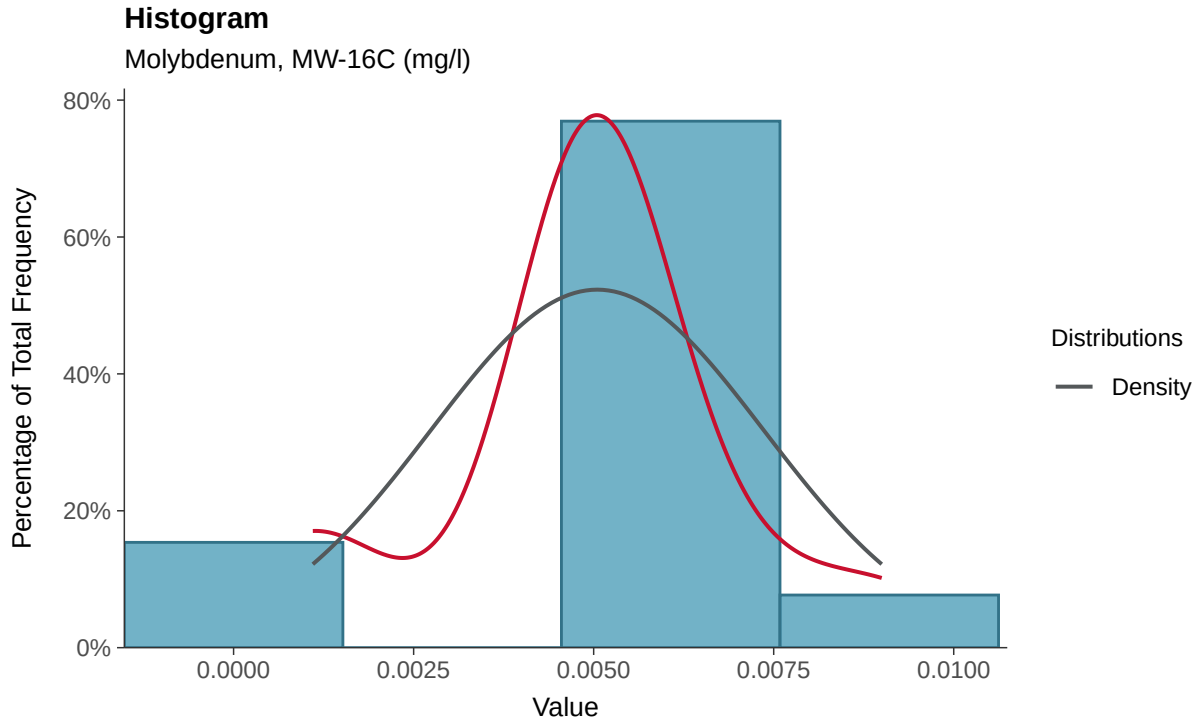
Mercury, MW-16C (mg/l)



Appendix IV: Molybdenum, MW-16C

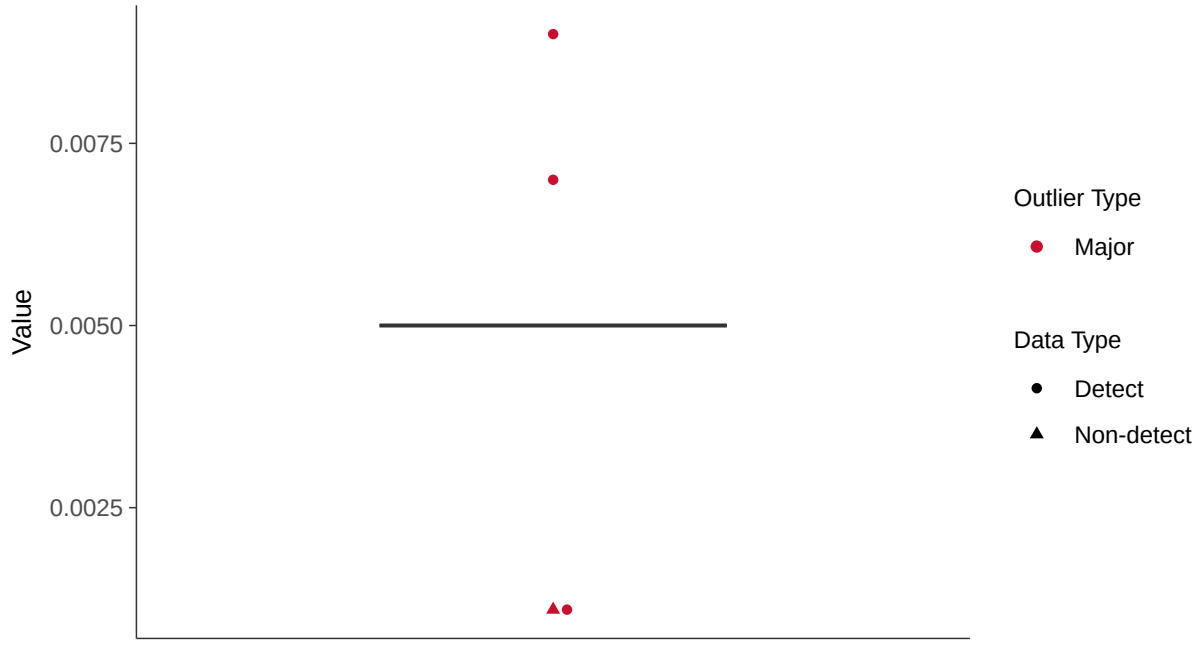
ID: 14_3_118





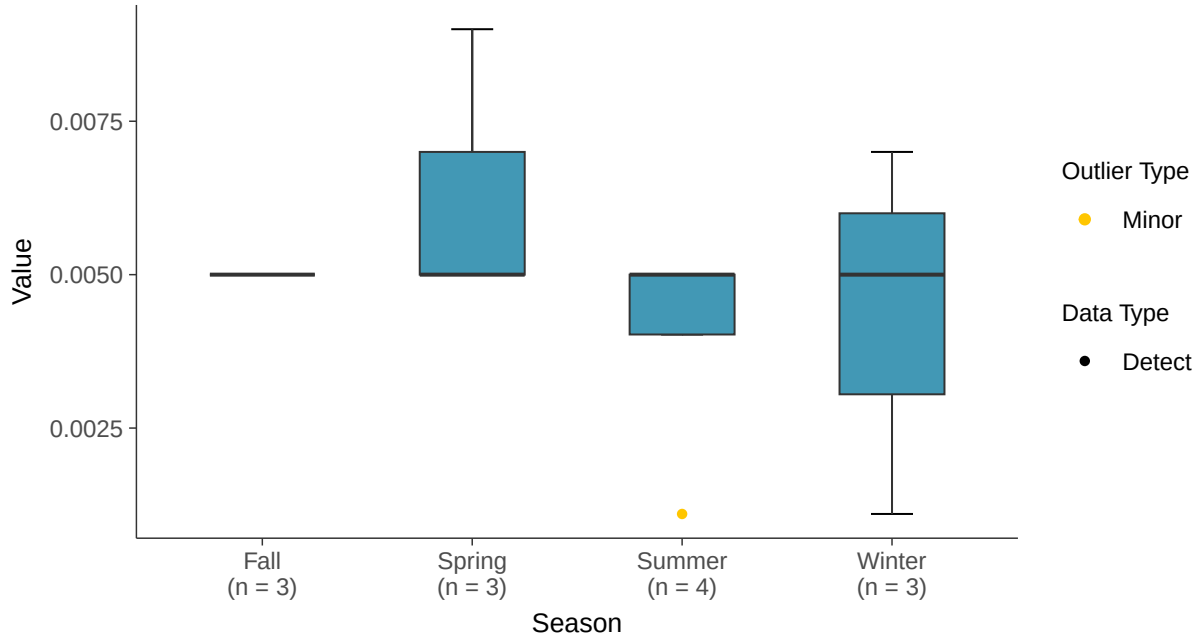
Boxplot

Molybdenum, MW-16C (mg/l)



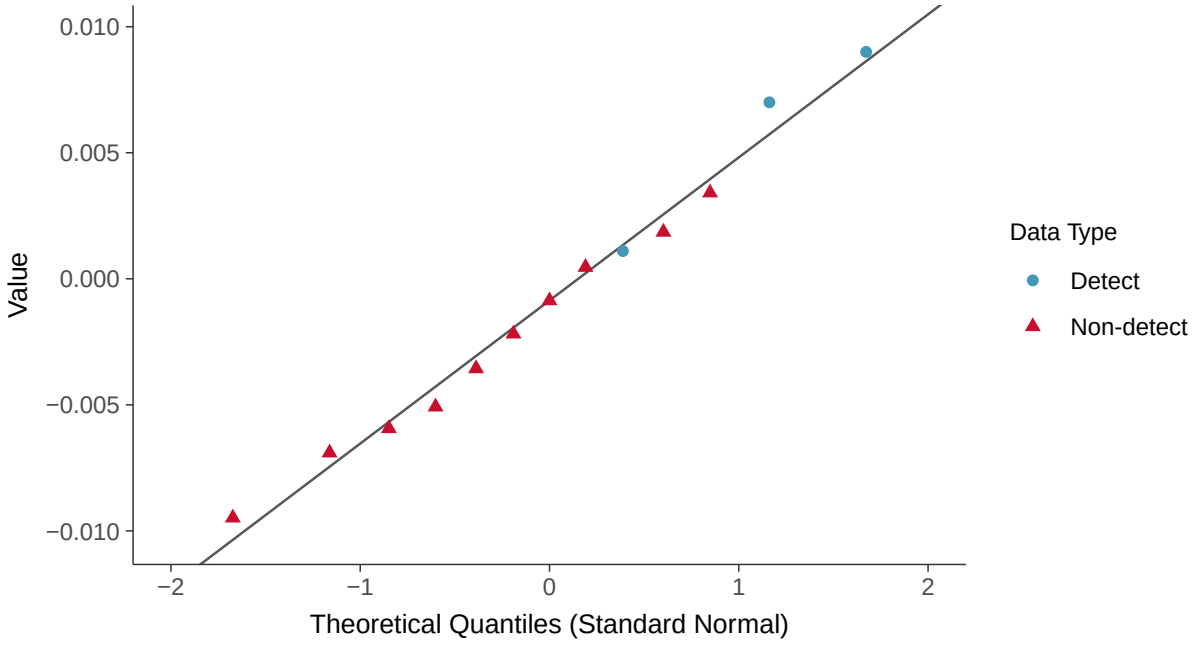
Boxplot by Season

Molybdenum, MW-16C (mg/l)



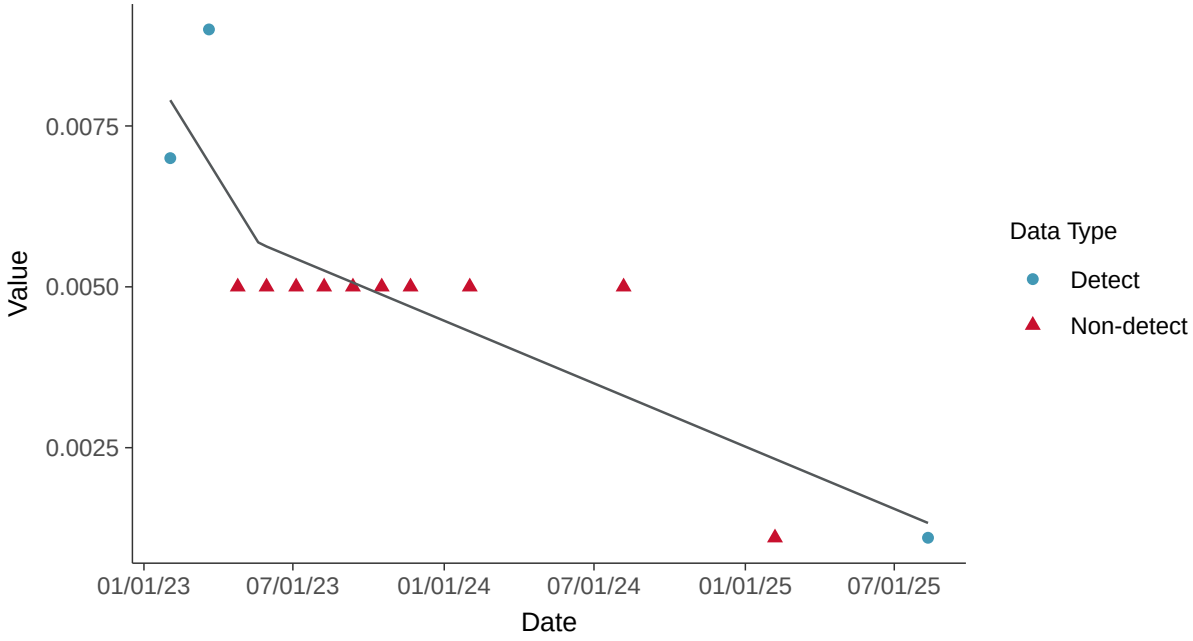
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-16C (mg/l)



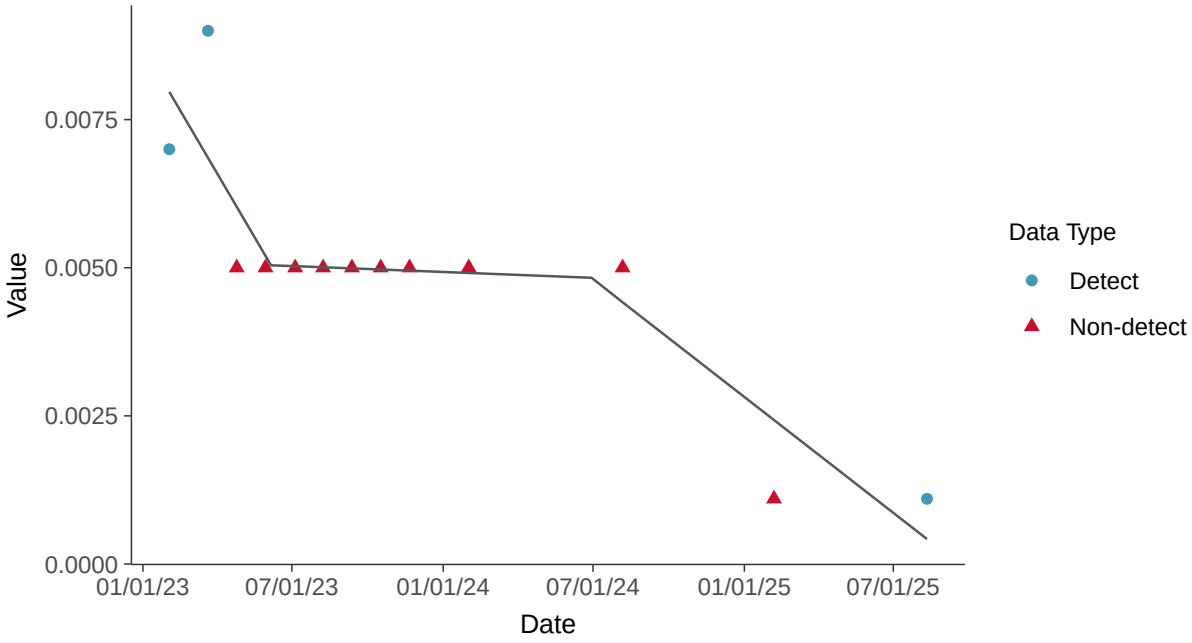
Trend Regression: Piecewise Linear-Linear

Molybdenum, MW-16C (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Molybdenum, MW-16C (mg/l)

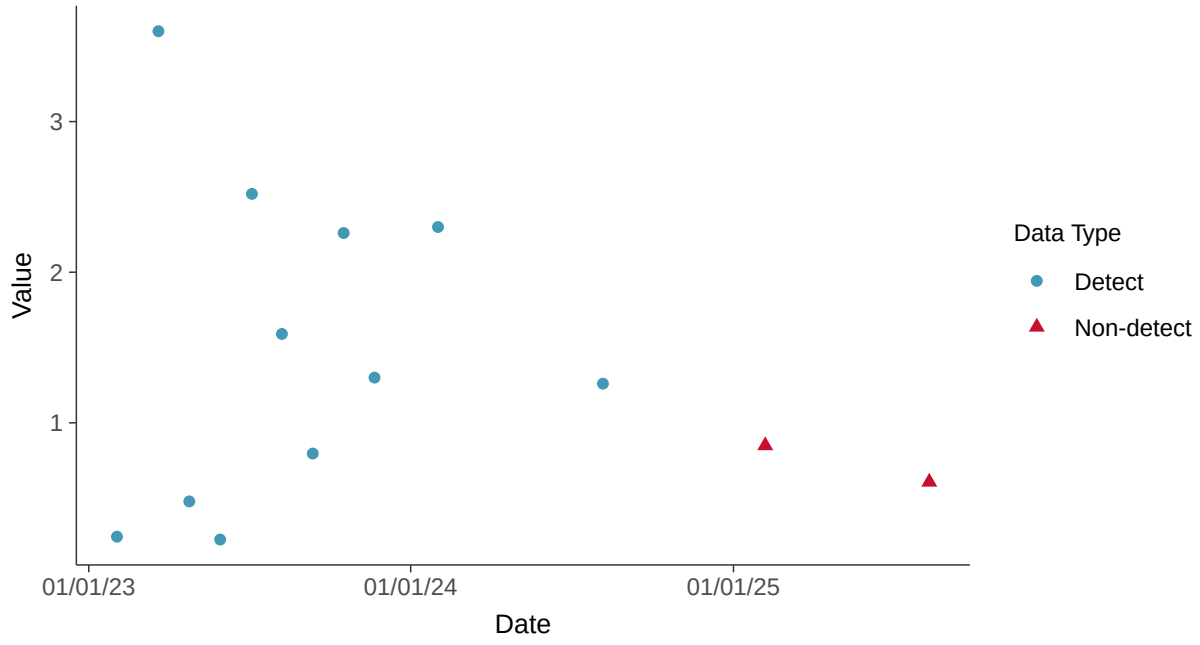


Appendix IV: Radium-226+228, MW-16C

ID: 14_3_121

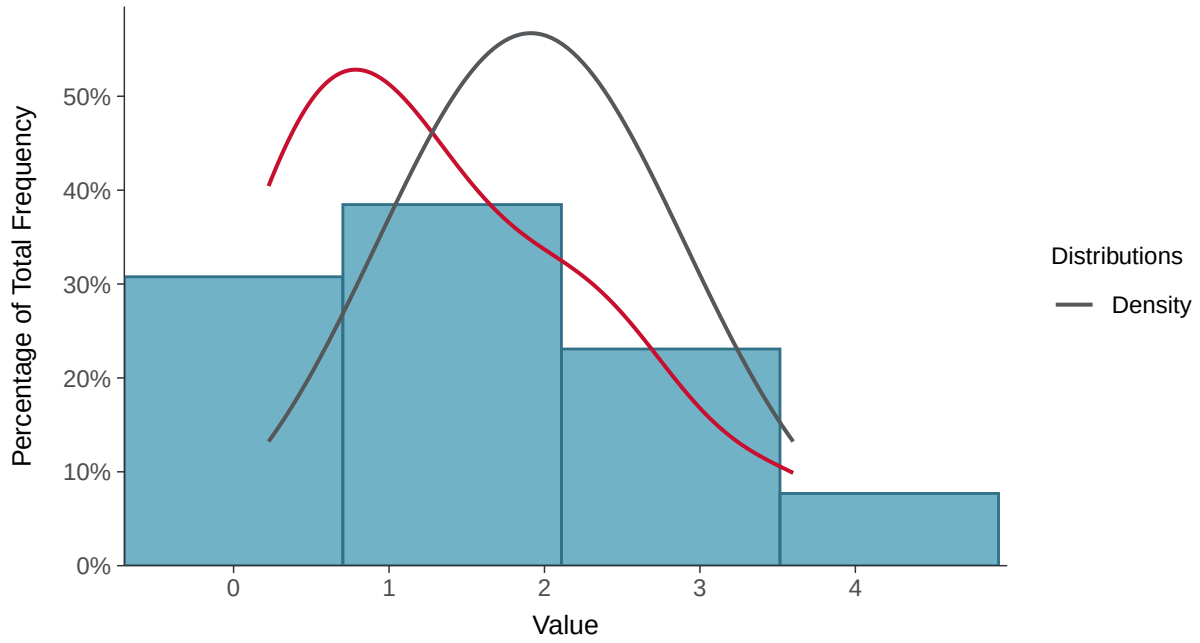
Scatter Plot

Radium-226+228, MW-16C (pci/l)



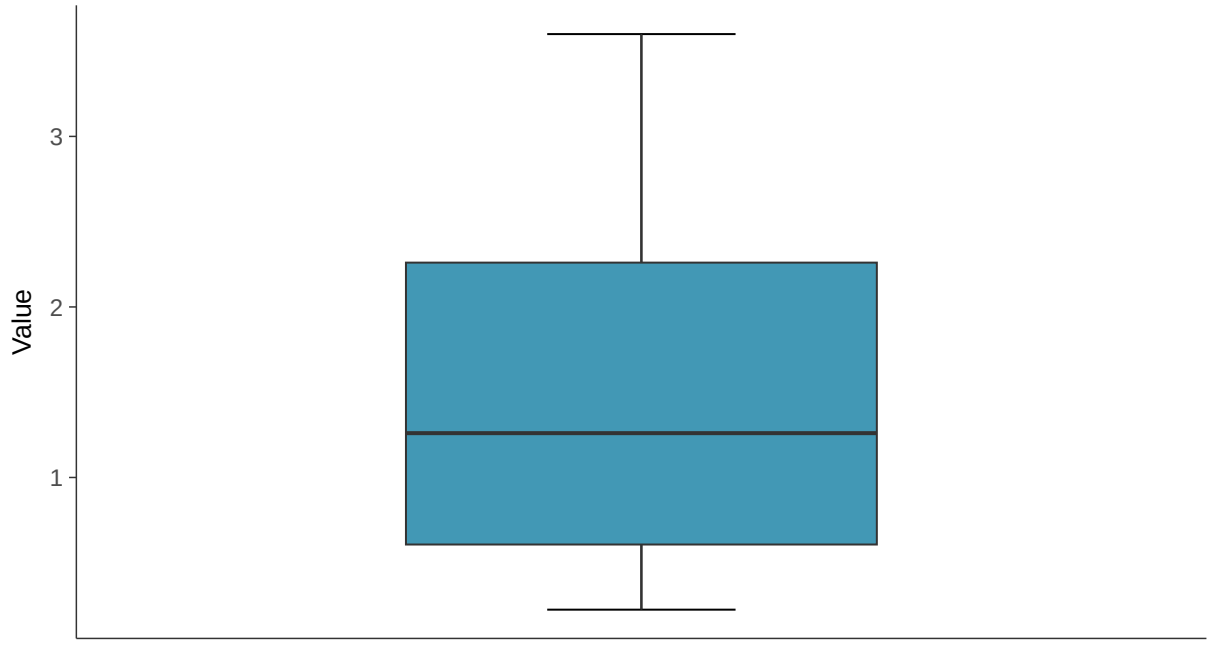
Histogram

Radium-226+228, MW-16C (pci/l)



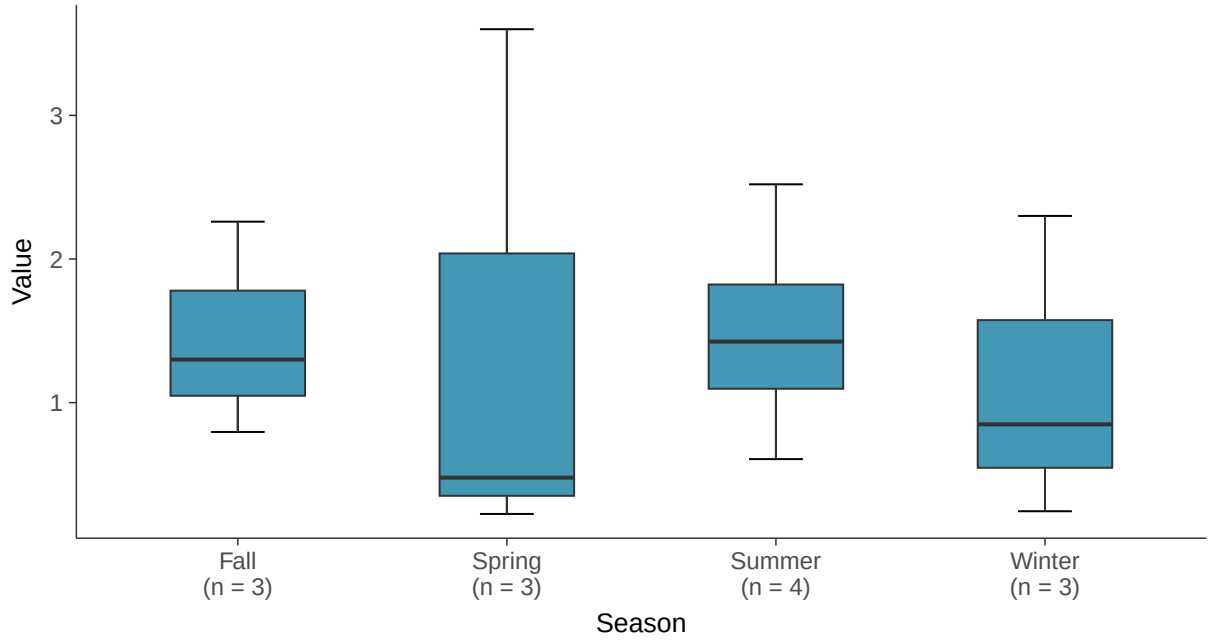
Boxplot

Radium-226+228, MW-16C (pci/l)



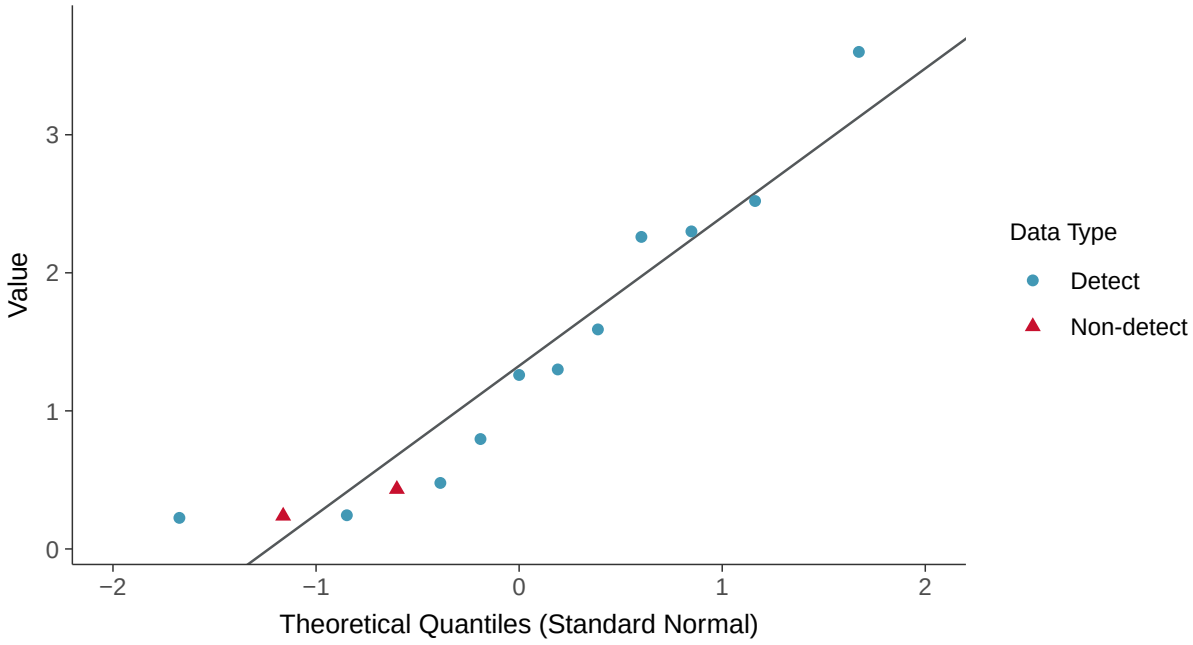
Boxplot by Season

Radium-226+228, MW-16C (pci/l)



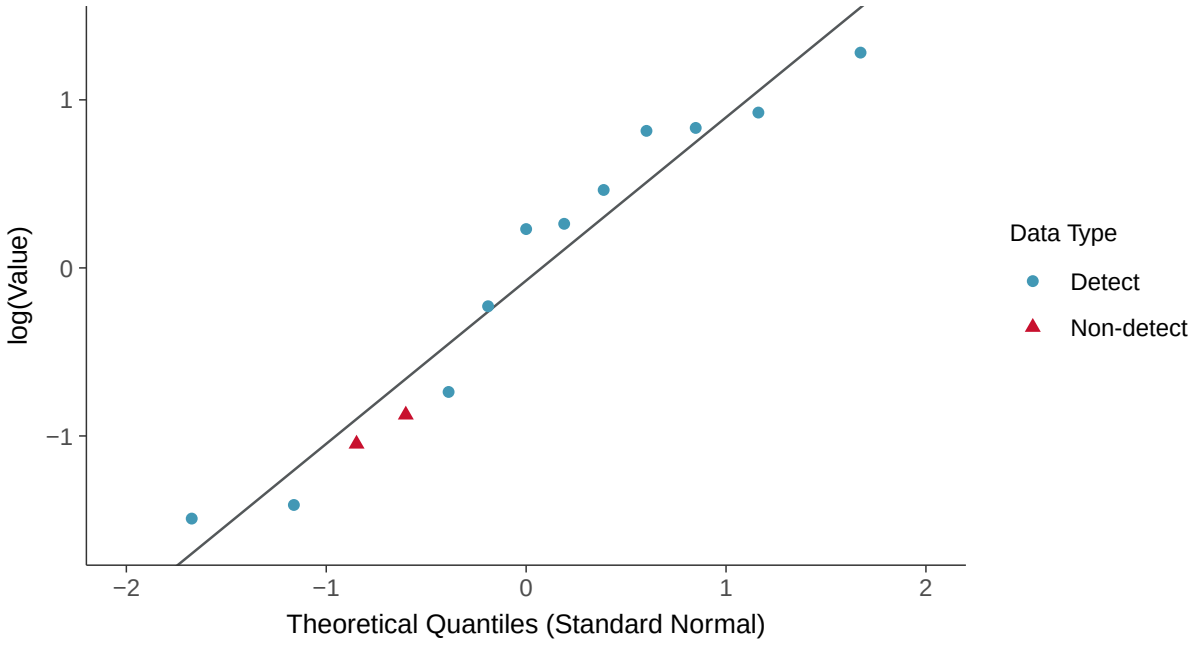
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-16C (pci/l)



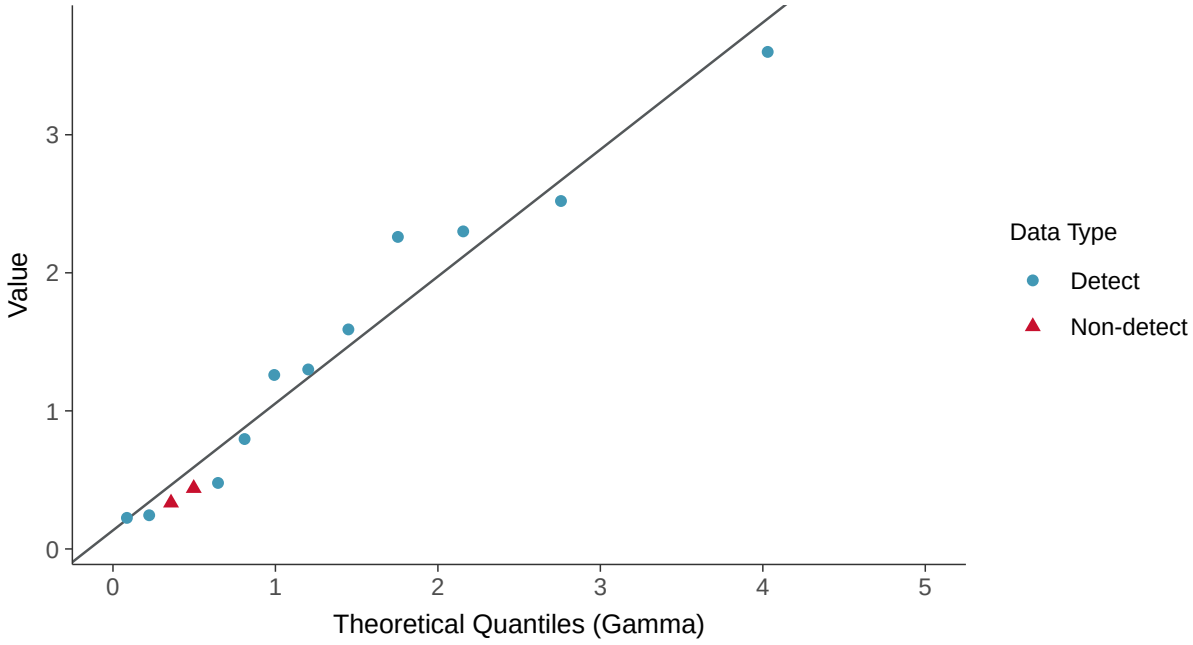
Lognormal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-16C (pci/l)



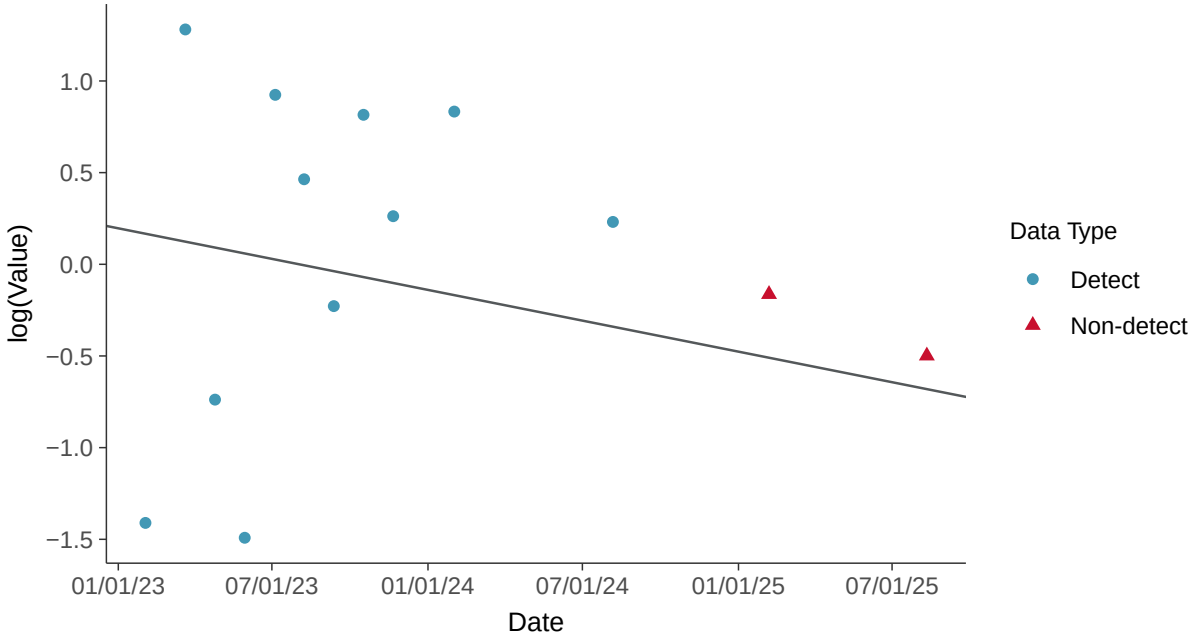
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-16C (pci/l)



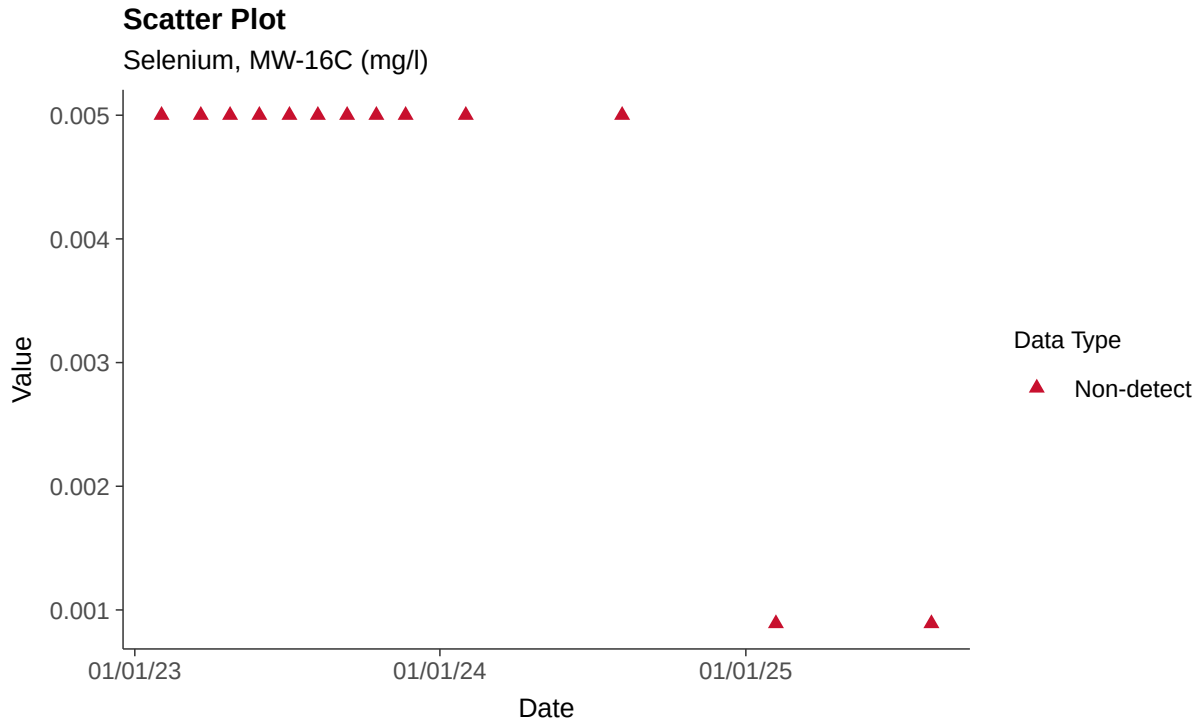
Trend Regression: Lognormal MLE

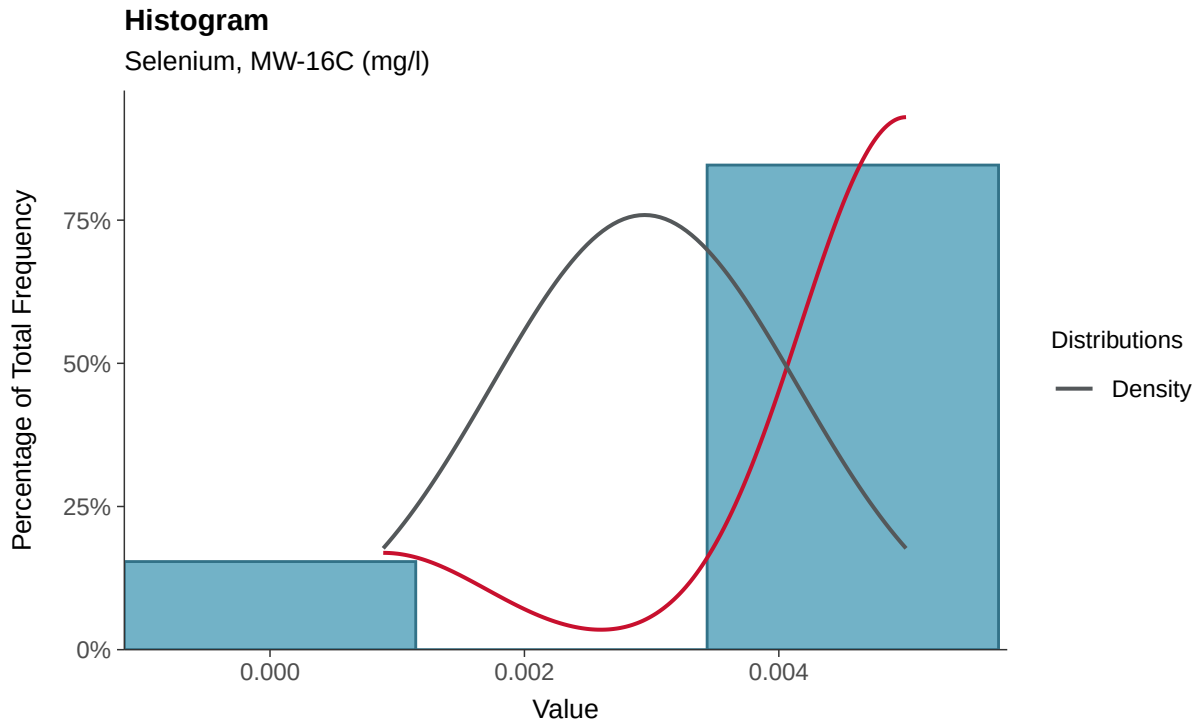
Radium-226+228, MW-16C (pci/l)



Appendix IV: Selenium, MW-16C

ID: 14_3_122



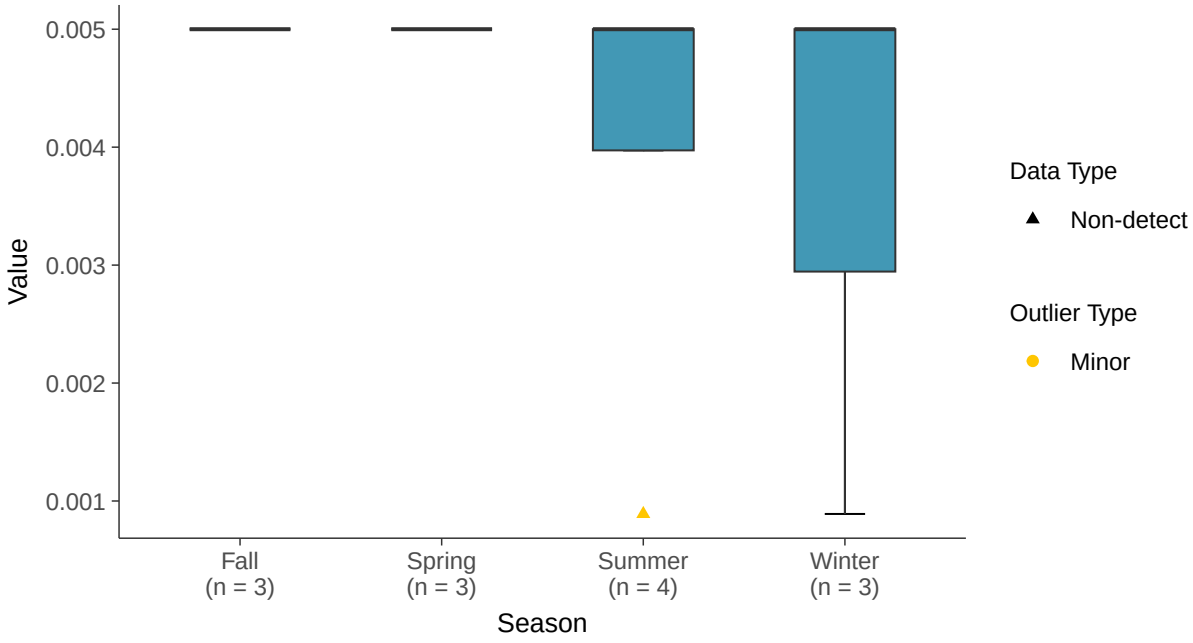


Boxplot

Selenium, MW-16C (mg/l)

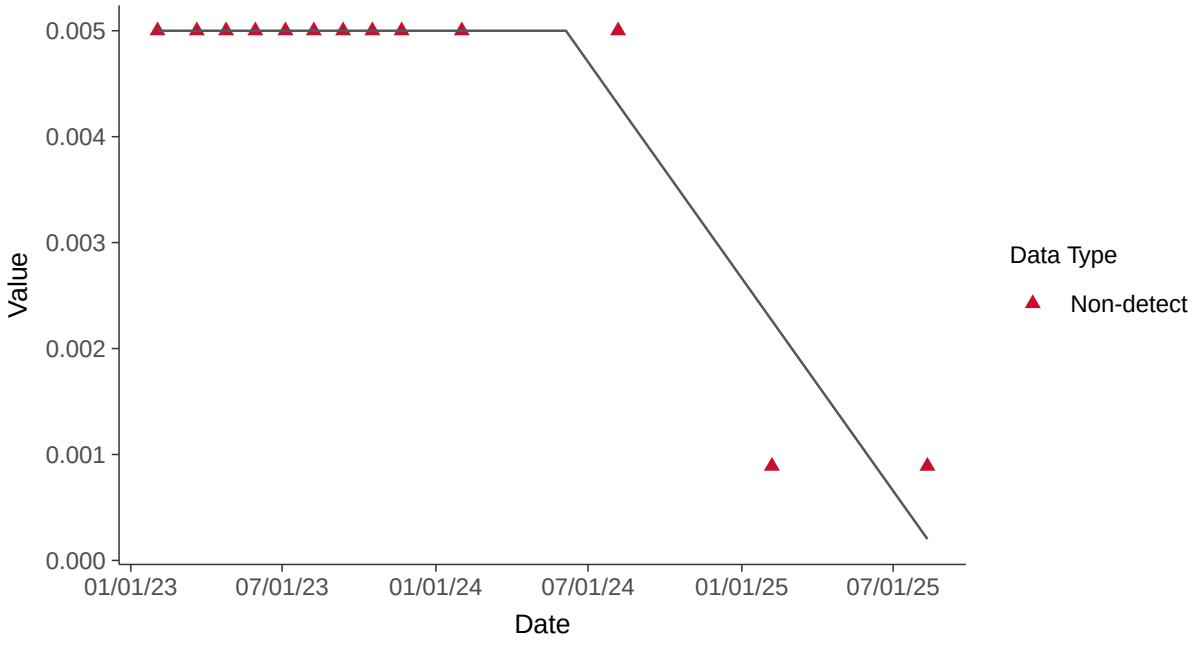
Boxplot by Season

Selenium, MW-16C (mg/l)



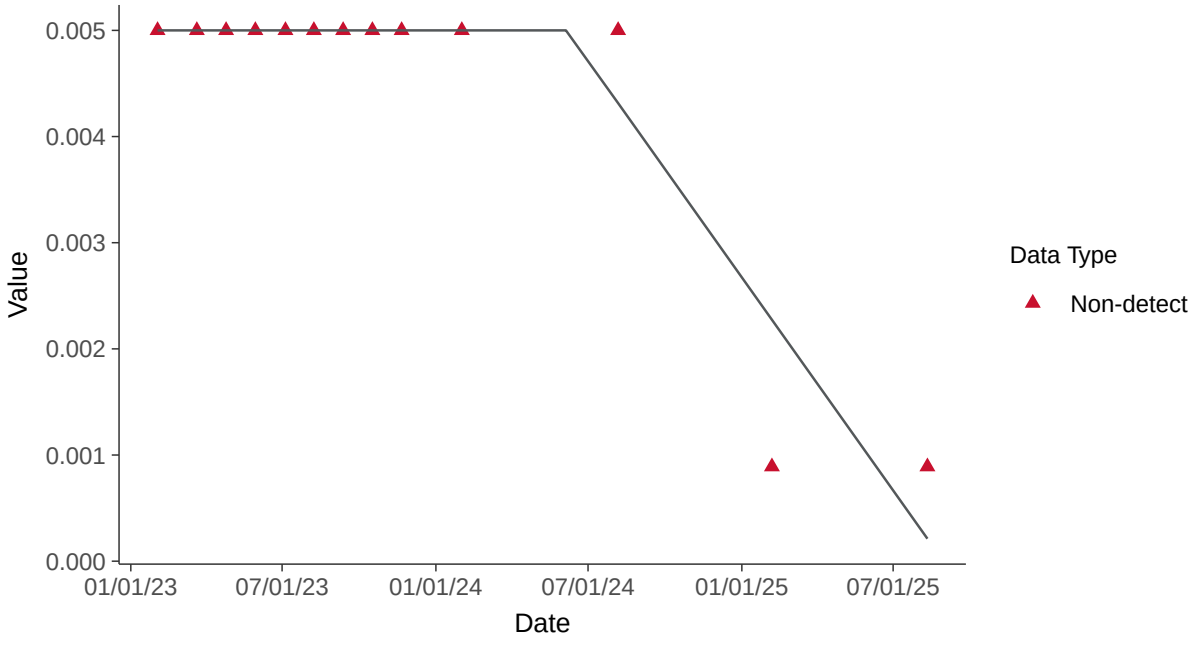
Trend Regression: Piecewise Linear-Linear

Selenium, MW-16C (mg/l)



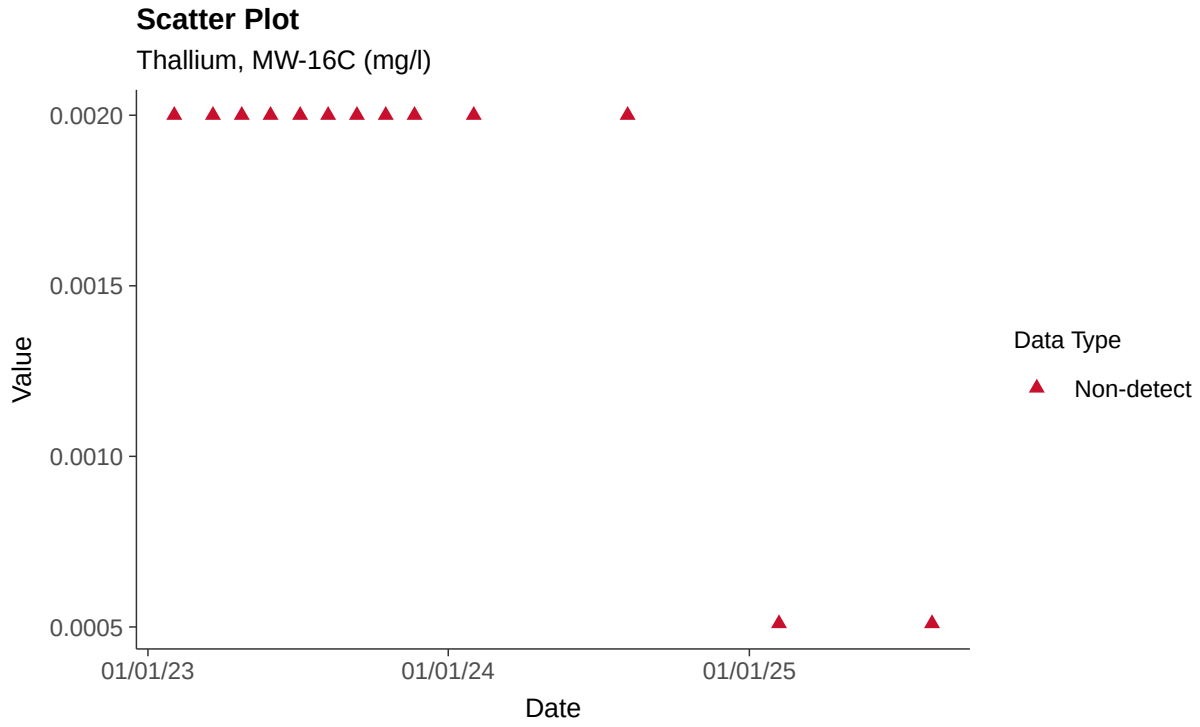
Trend Regression: Piecewise Linear-Linear-Linear

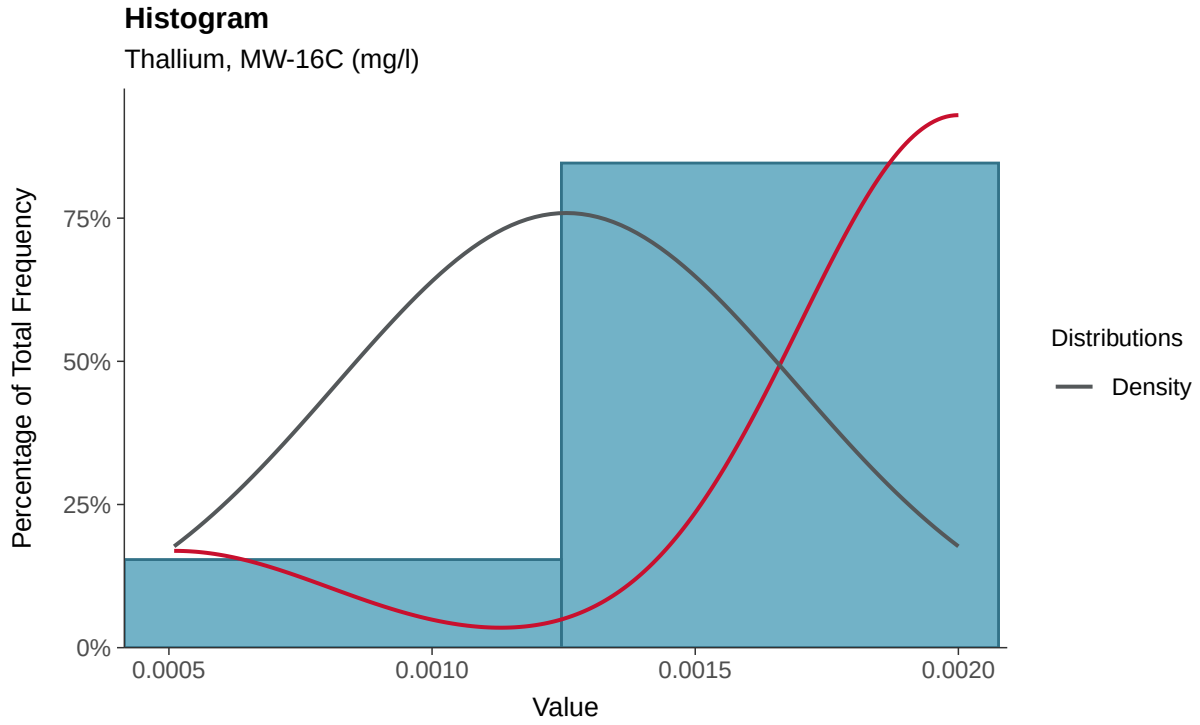
Selenium, MW-16C (mg/l)



Appendix IV: Thallium, MW-16C

ID: 14_3_125



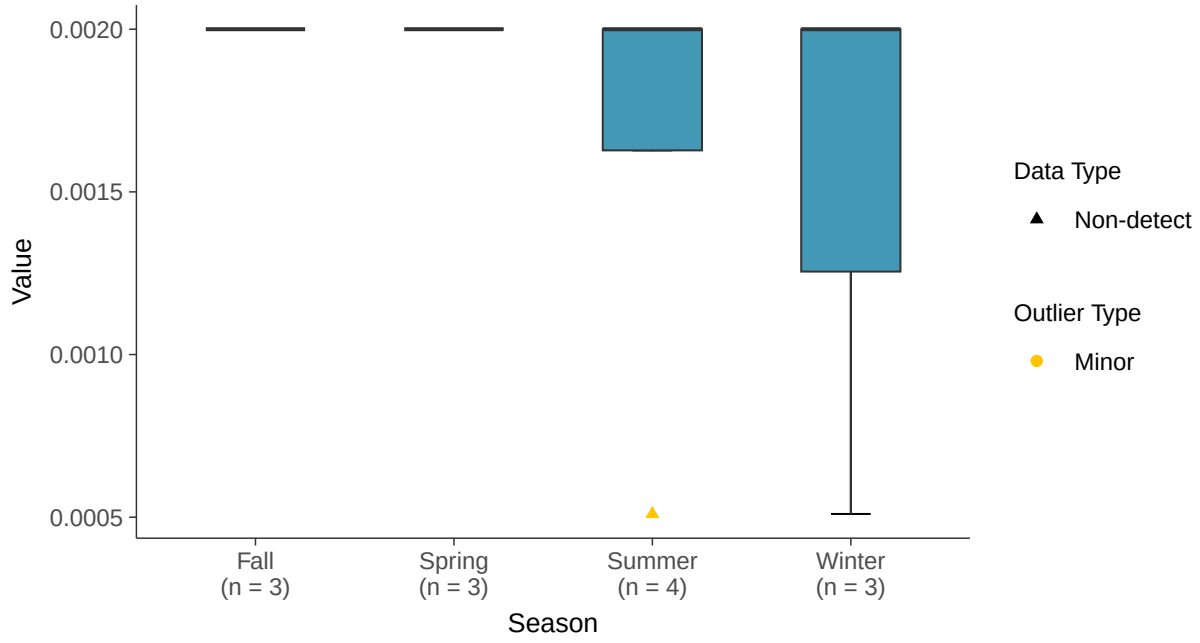


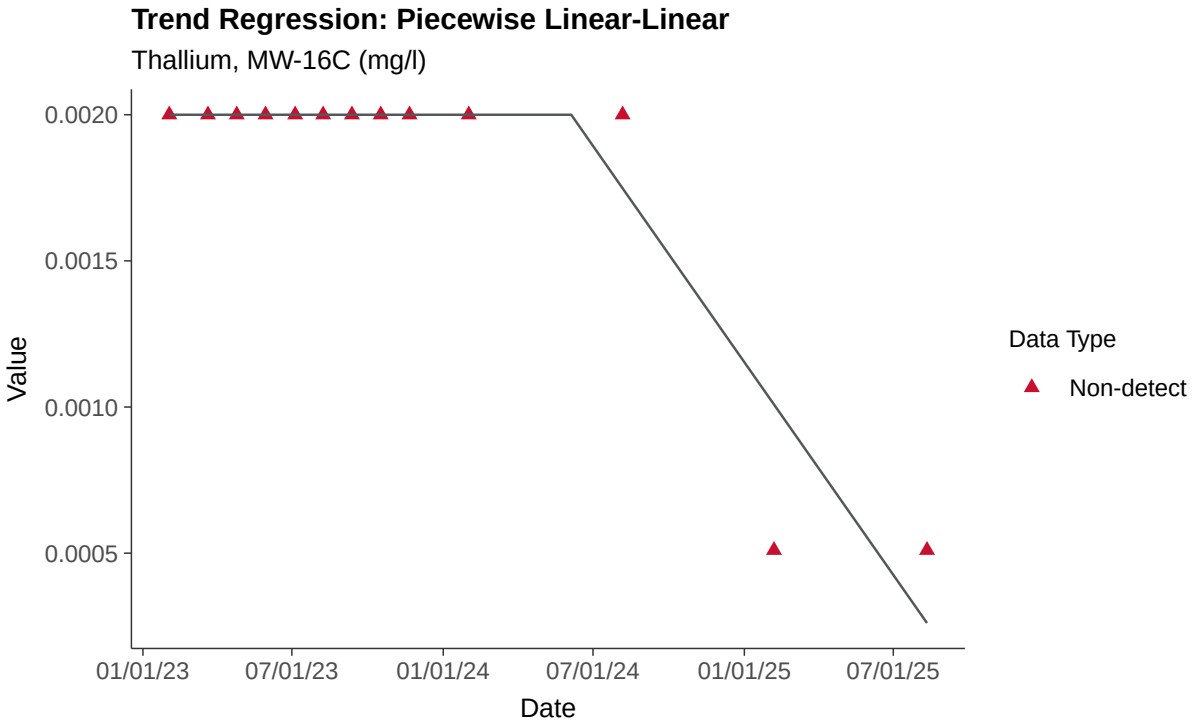
Boxplot

Thallium, MW-16C (mg/l)

Boxplot by Season

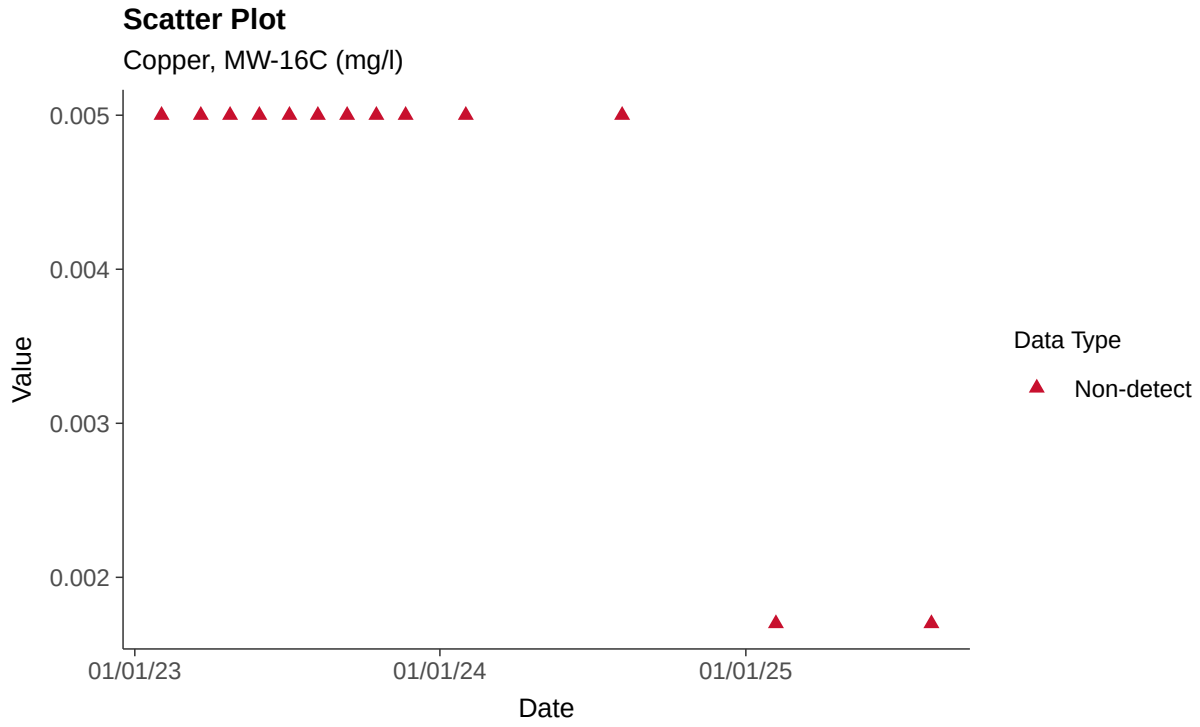
Thallium, MW-16C (mg/l)

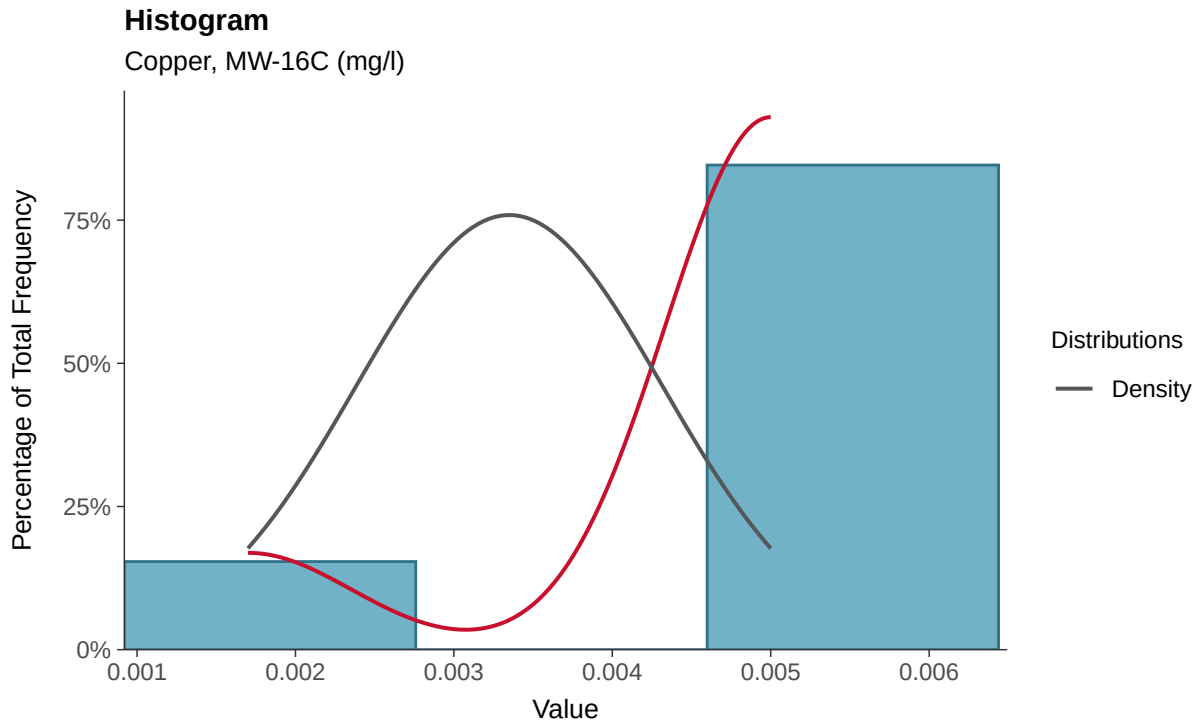



Trend Regression: Piecewise Linear-Linear
Thallium, MW-16C (mg/l)
0.0020
0.0015
0.0010
0.0005
Value
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Copper, MW-16C

ID: 14_5_111



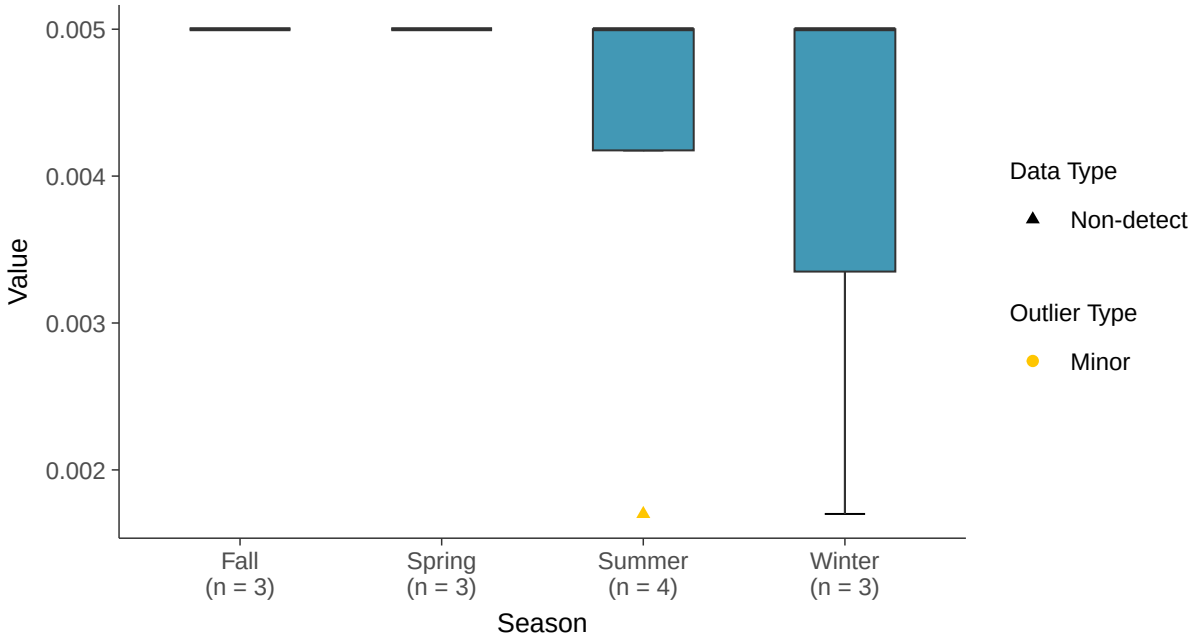


Boxplot

Copper, MW-16C (mg/l)

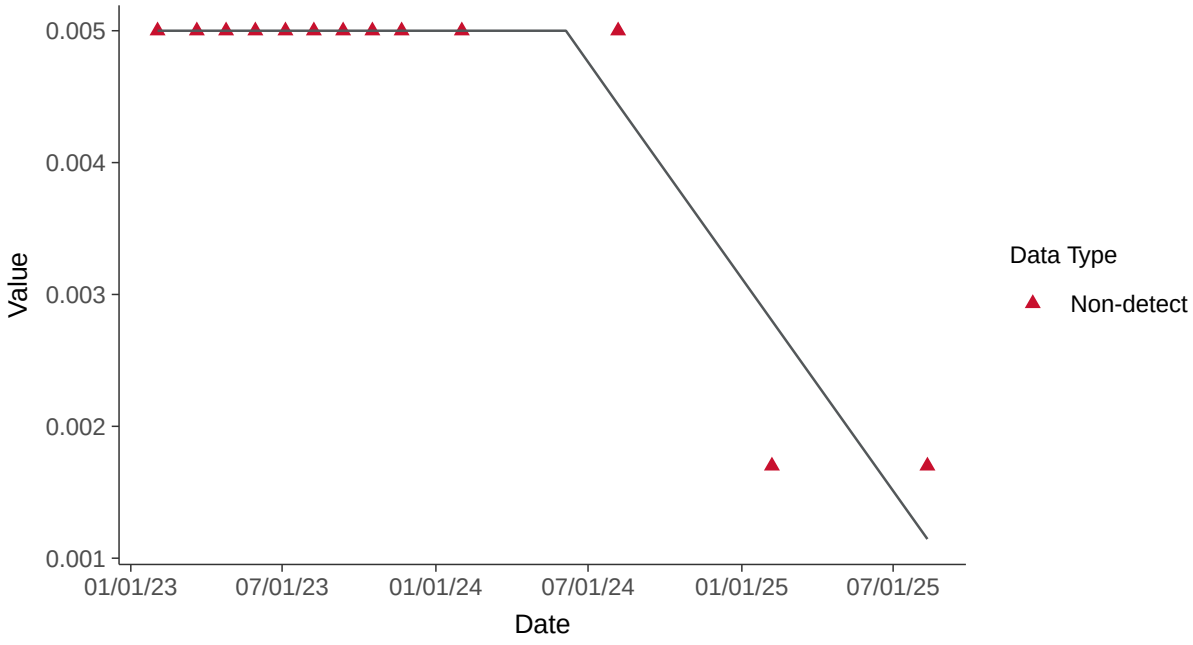
Boxplot by Season

Copper, MW-16C (mg/l)



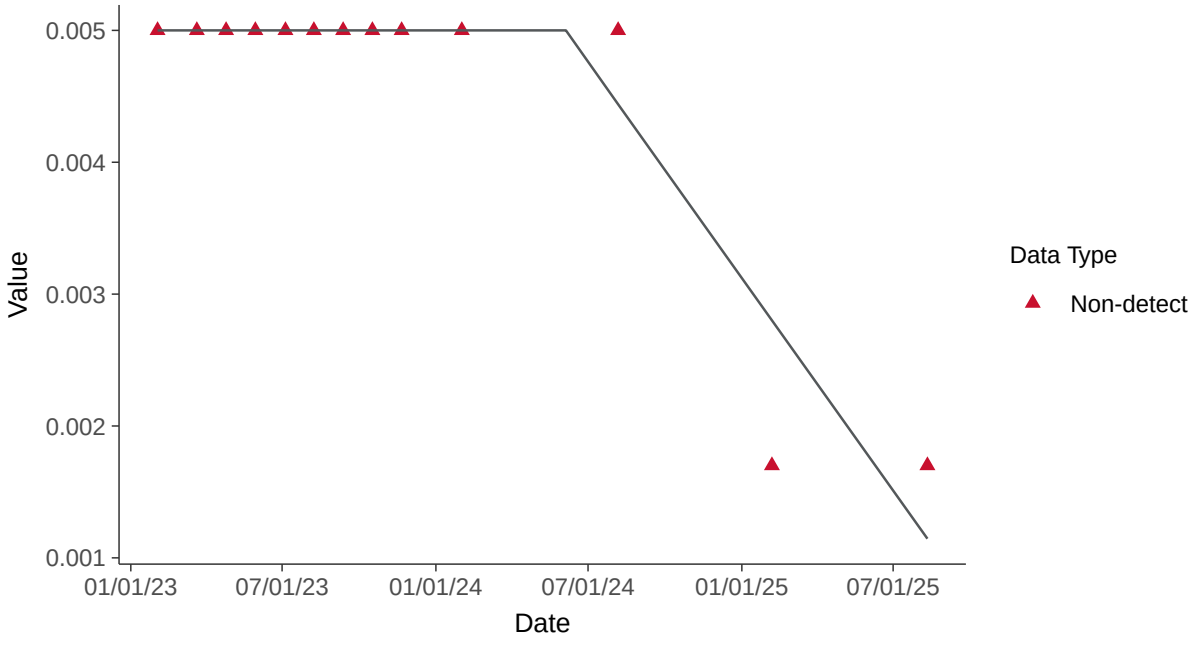
Trend Regression: Piecewise Linear-Linear

Copper, MW-16C (mg/l)



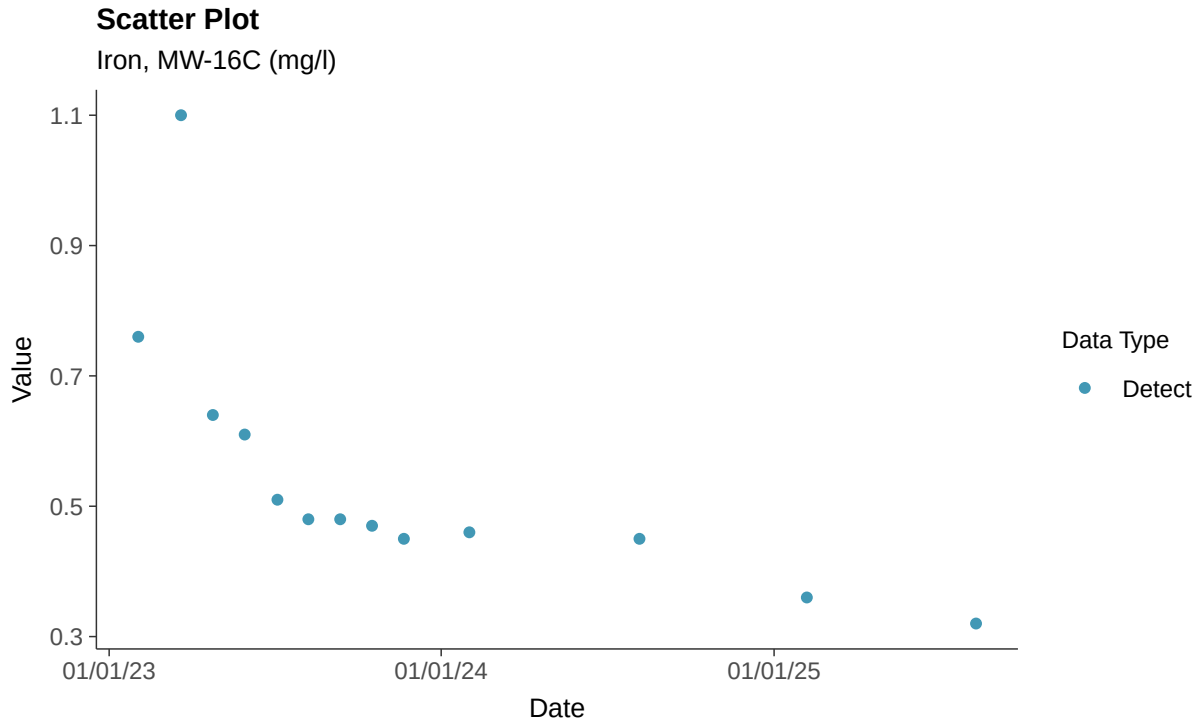
Trend Regression: Piecewise Linear-Linear-Linear

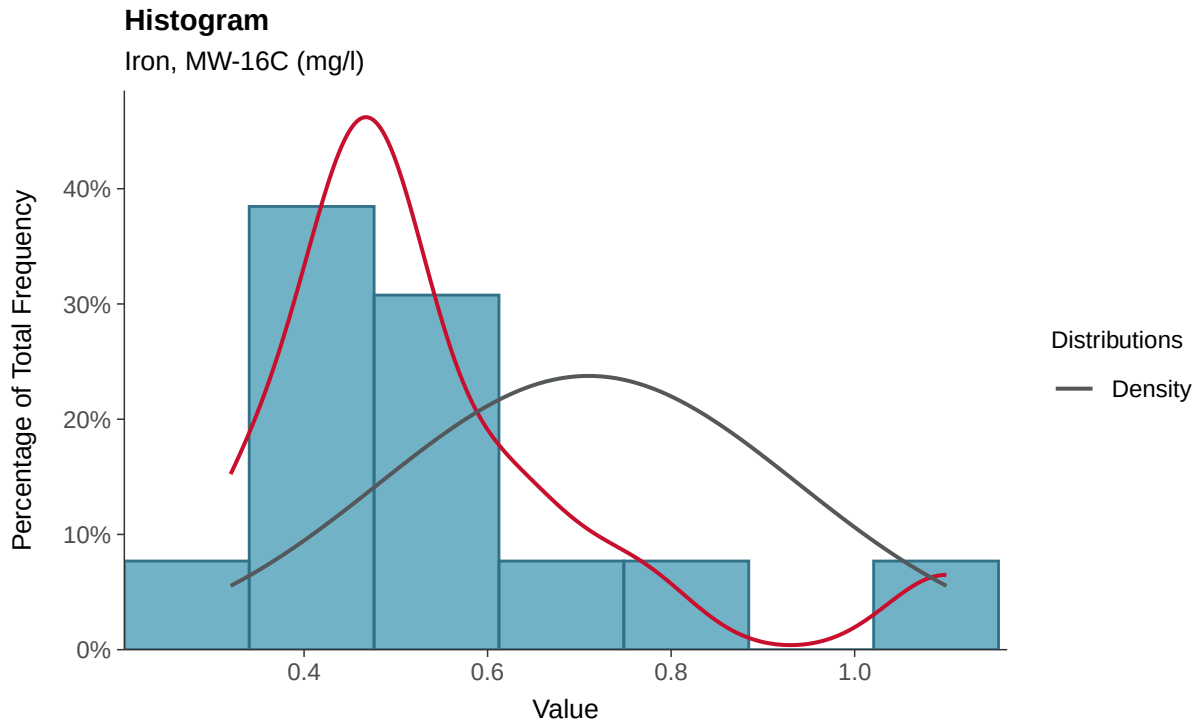
Copper, MW-16C (mg/l)



Part 115: Iron, MW-16C

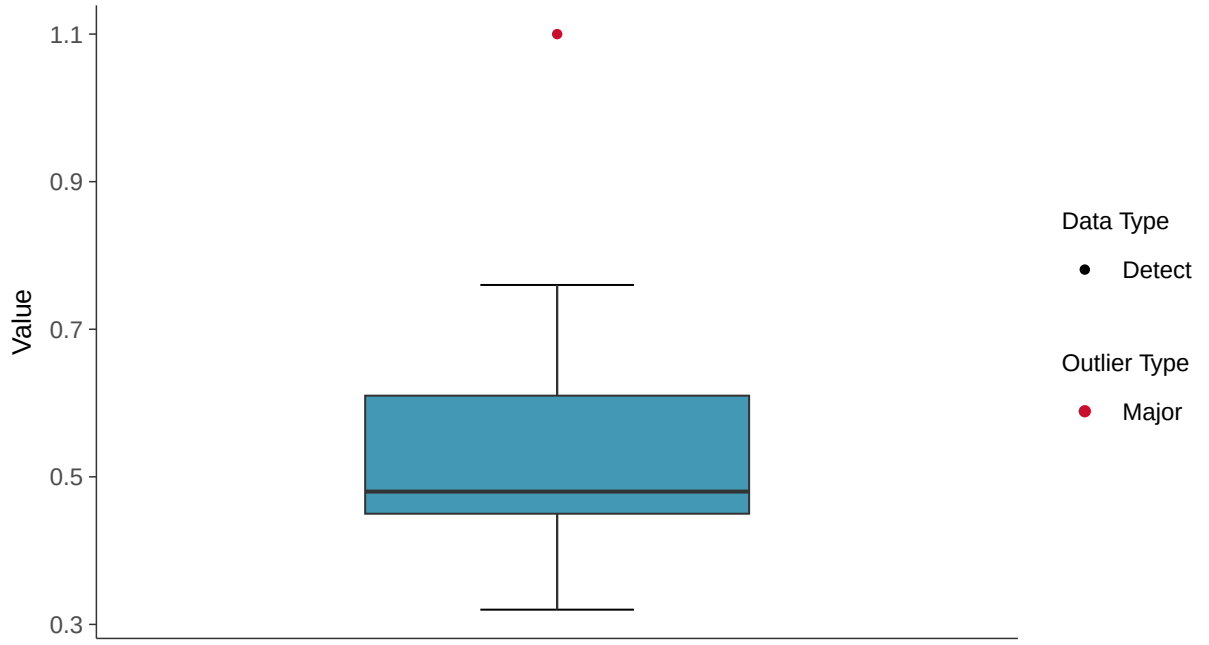
ID: 14_5_114





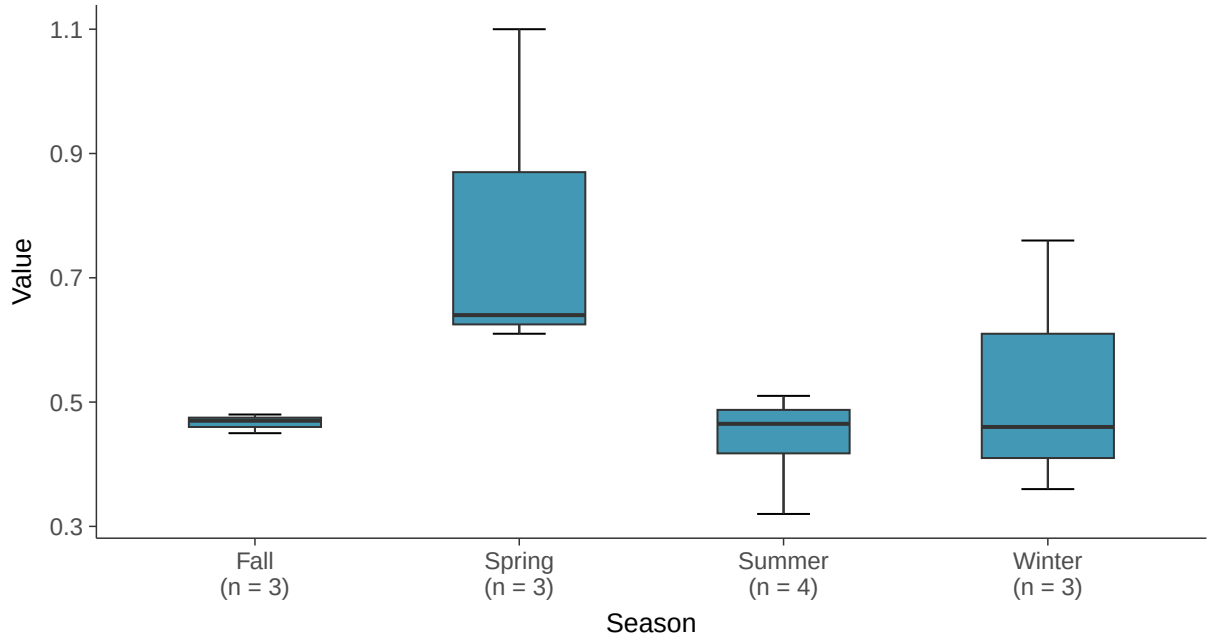
Boxplot

Iron, MW-16C (mg/l)



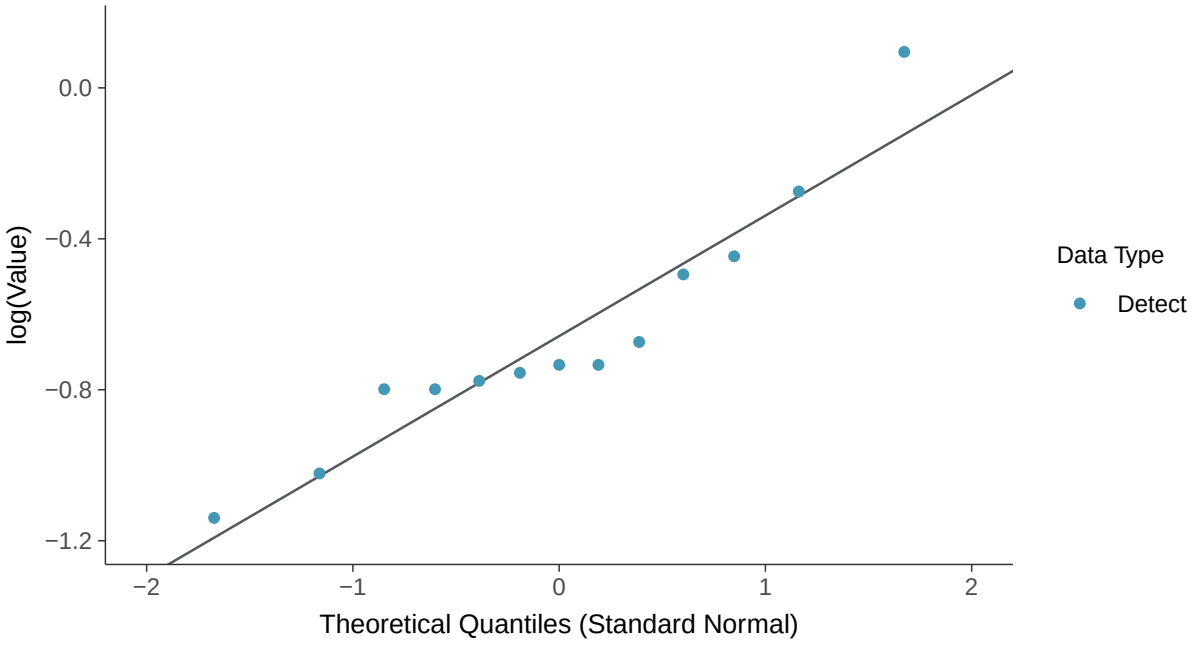
Boxplot by Season

Iron, MW-16C (mg/l)



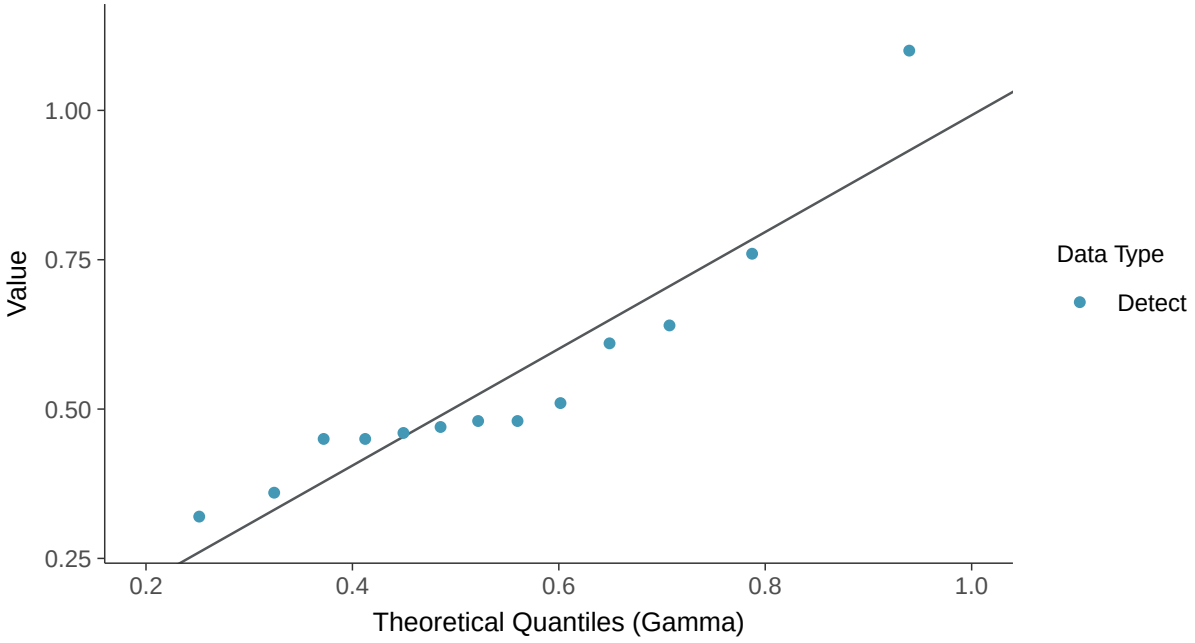
Lognormal Q-Q plot

Iron, MW-16C (mg/l)



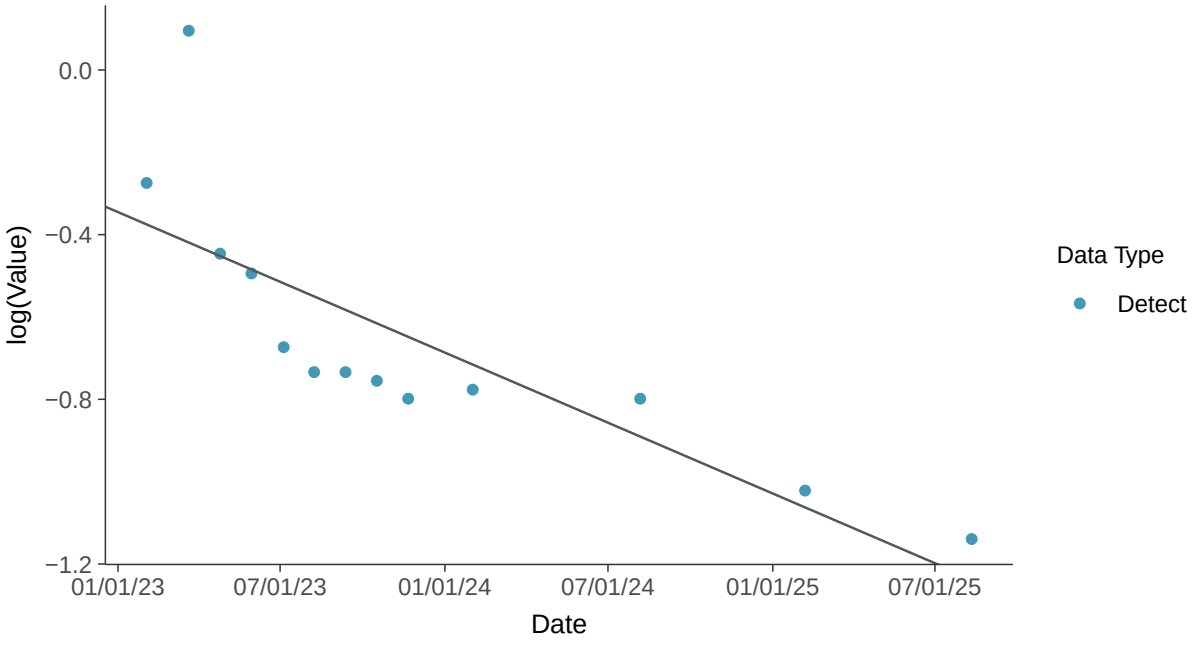
Gamma Q-Q plot

Iron, MW-16C (mg/l)



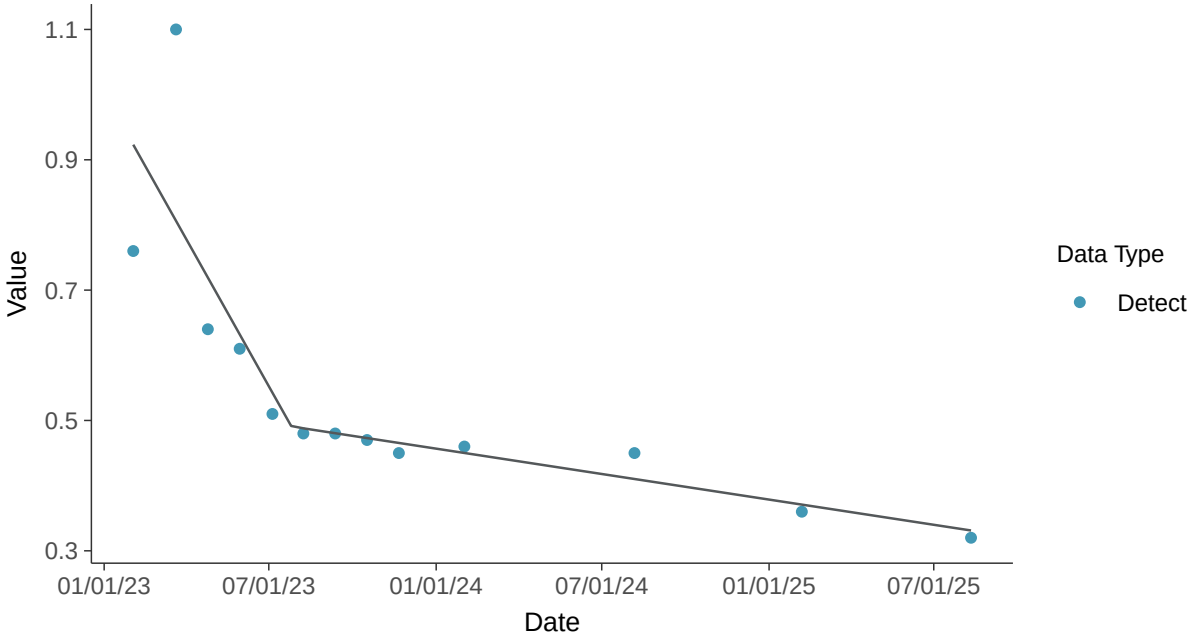
Trend Regression: Lognormal MLE

Iron, MW-16C (mg/l)



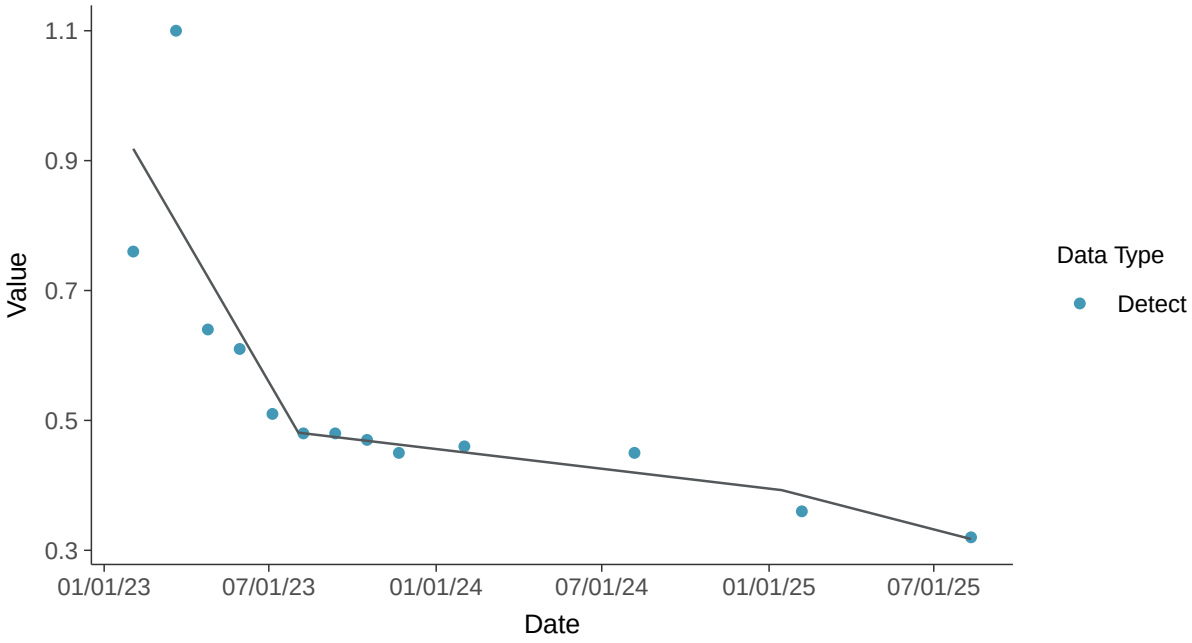
Trend Regression: Piecewise Linear-Linear

Iron, MW-16C (mg/l)



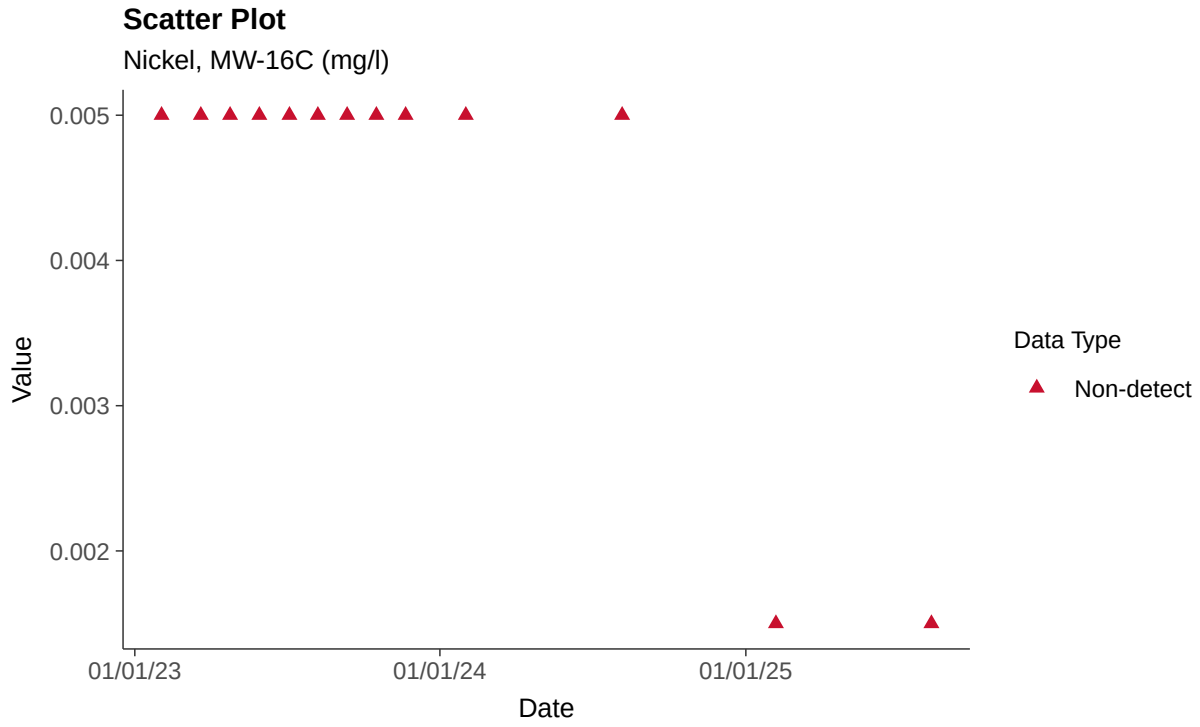
Trend Regression: Piecewise Linear-Linear-Linear

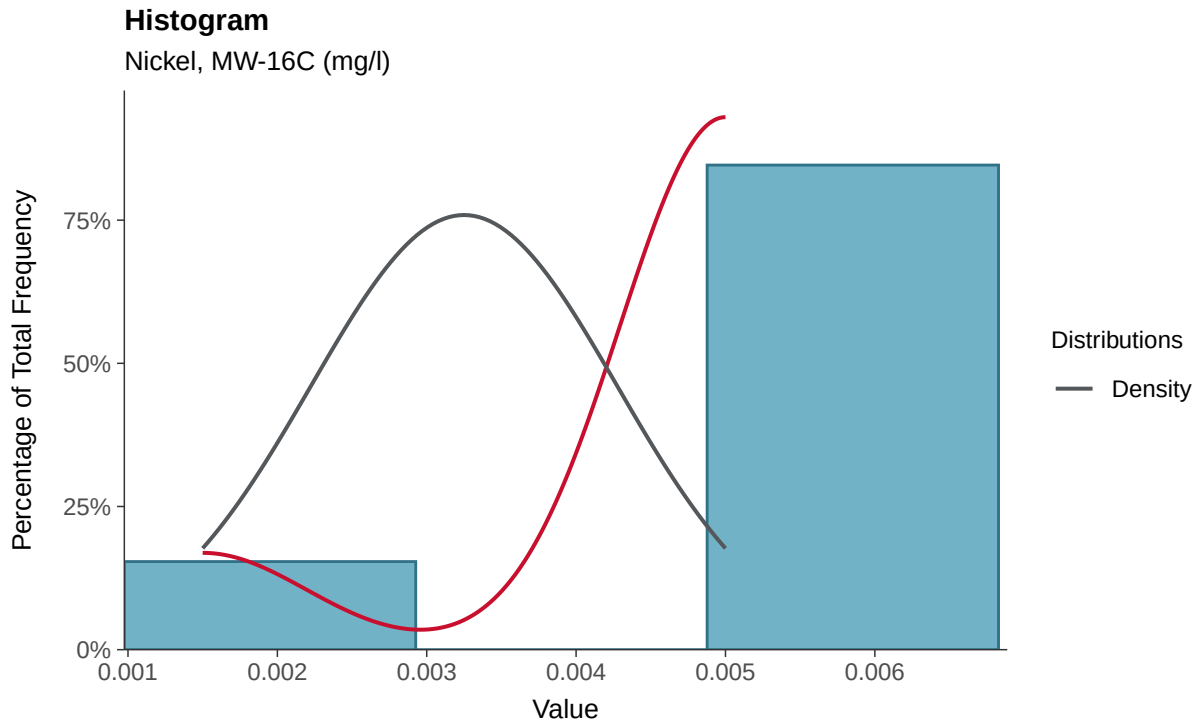
Iron, MW-16C (mg/l)



Part 115: Nickel, MW-16C

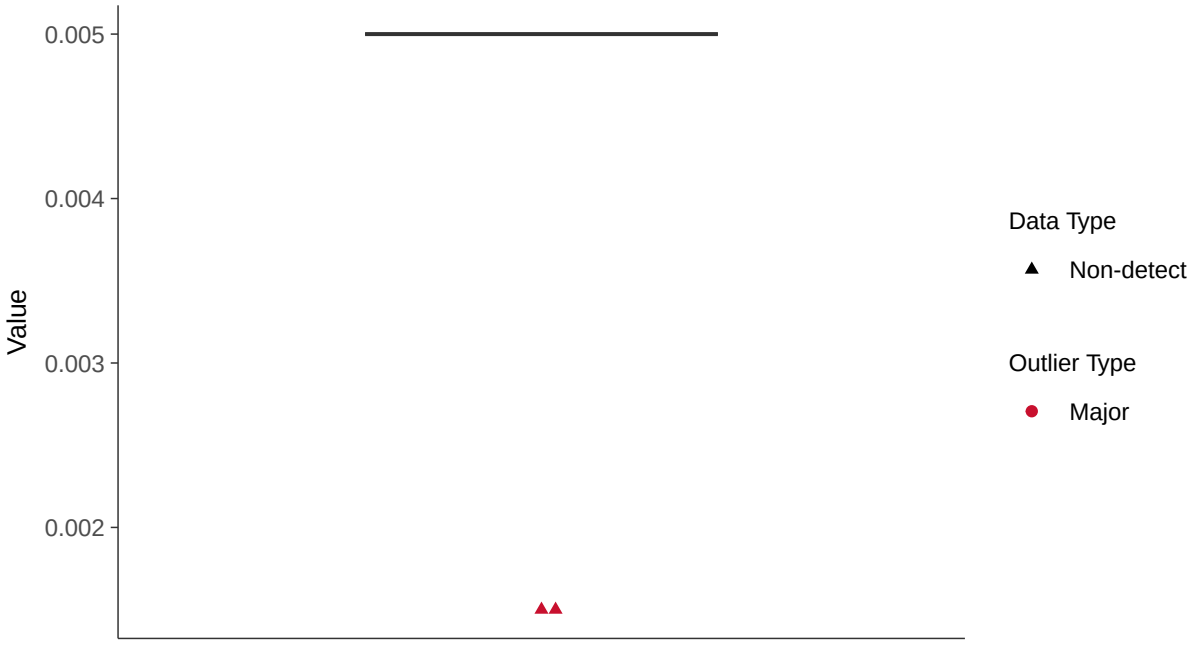
ID: 14_5_119





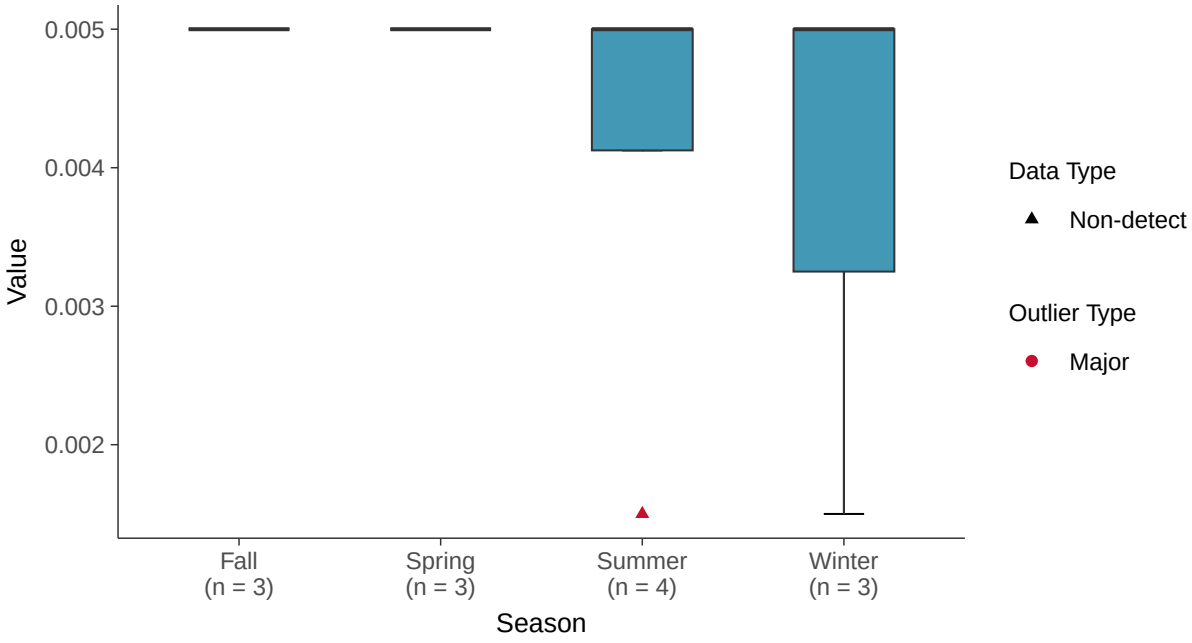
Boxplot

Nickel, MW-16C (mg/l)



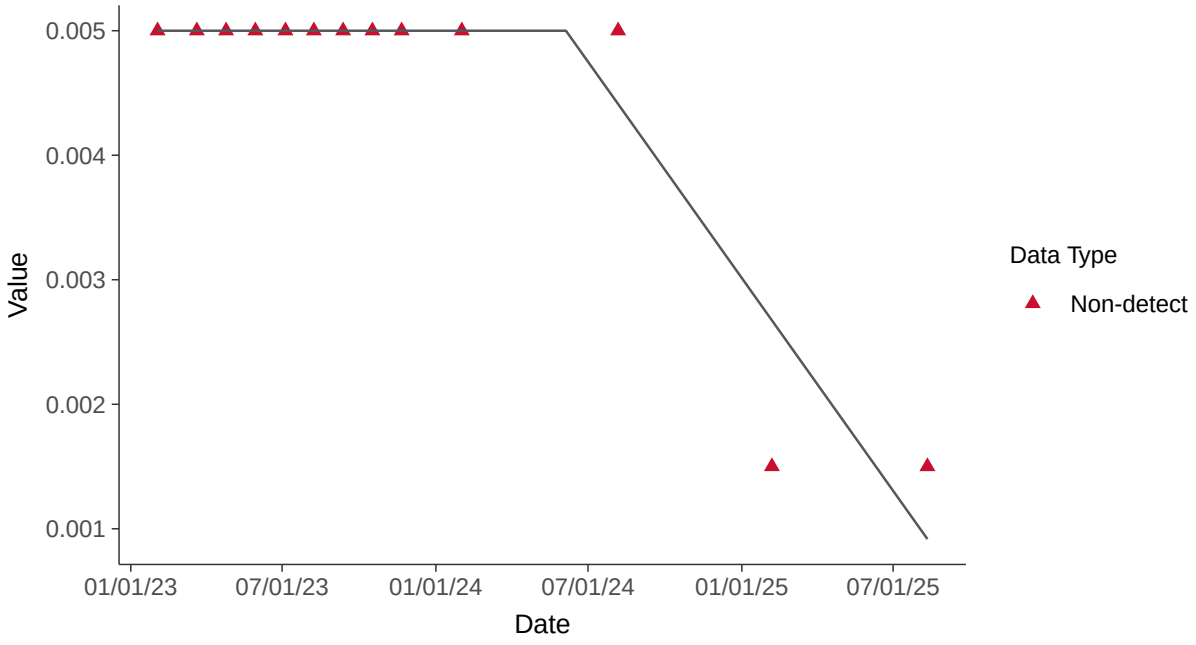
Boxplot by Season

Nickel, MW-16C (mg/l)



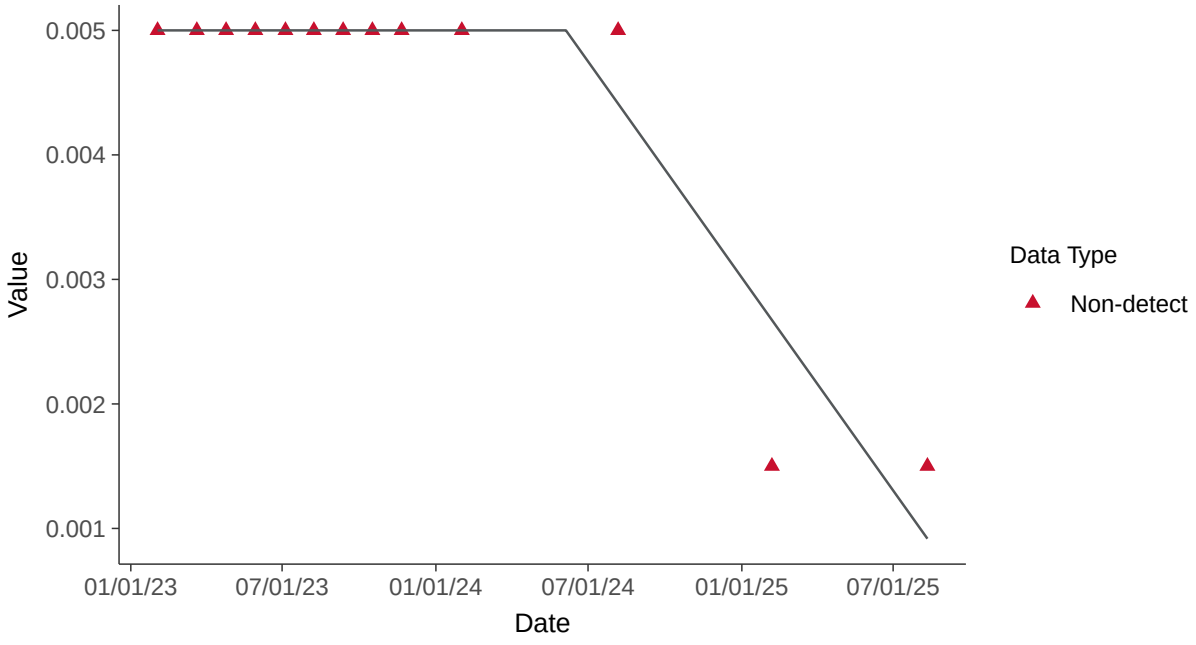
Trend Regression: Piecewise Linear-Linear

Nickel, MW-16C (mg/l)



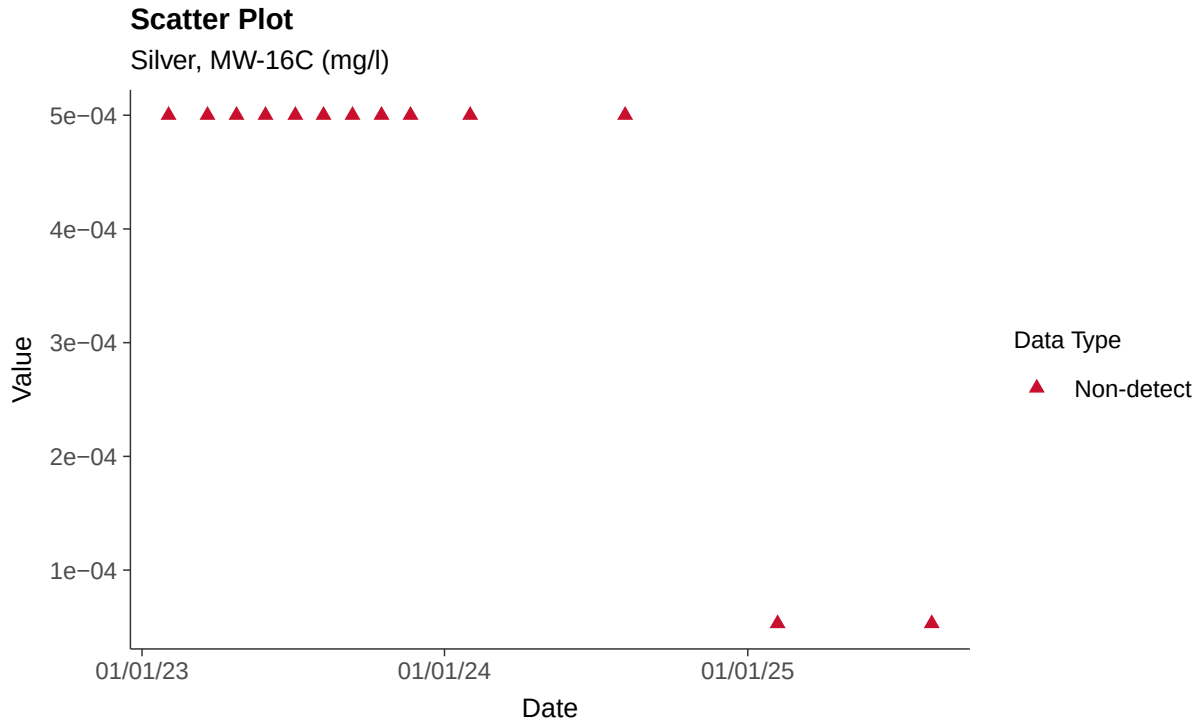
Trend Regression: Piecewise Linear-Linear-Linear

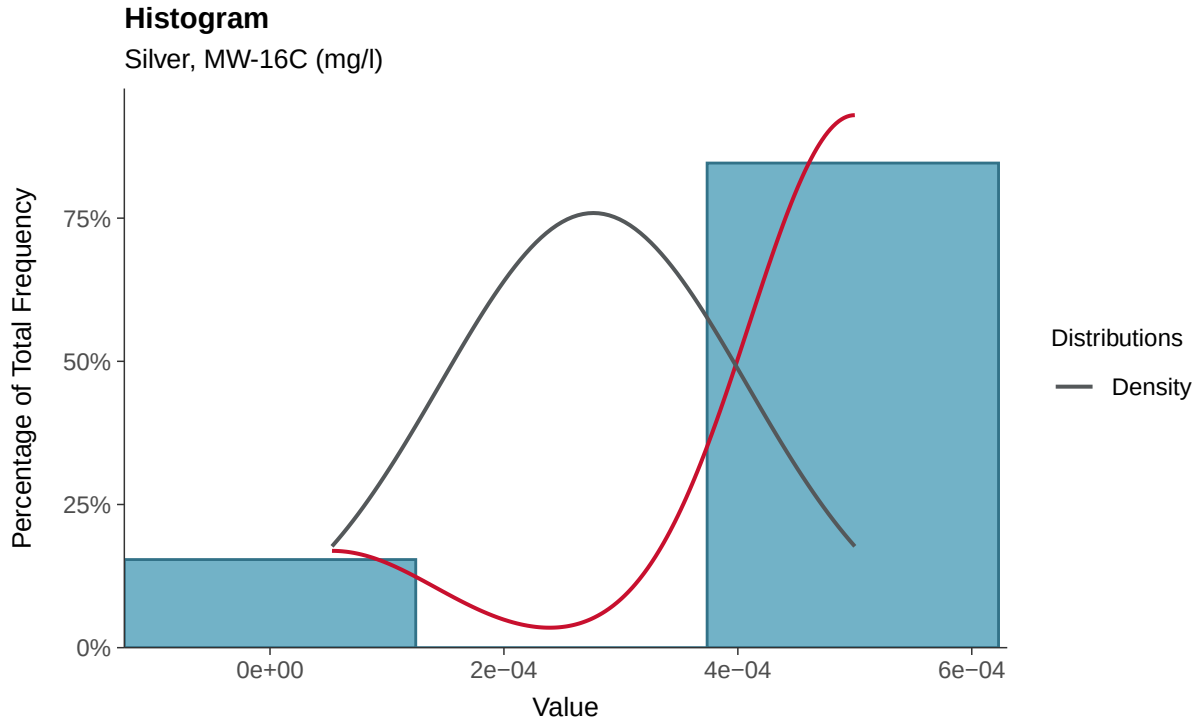
Nickel, MW-16C (mg/l)



Part 115: Silver, MW-16C

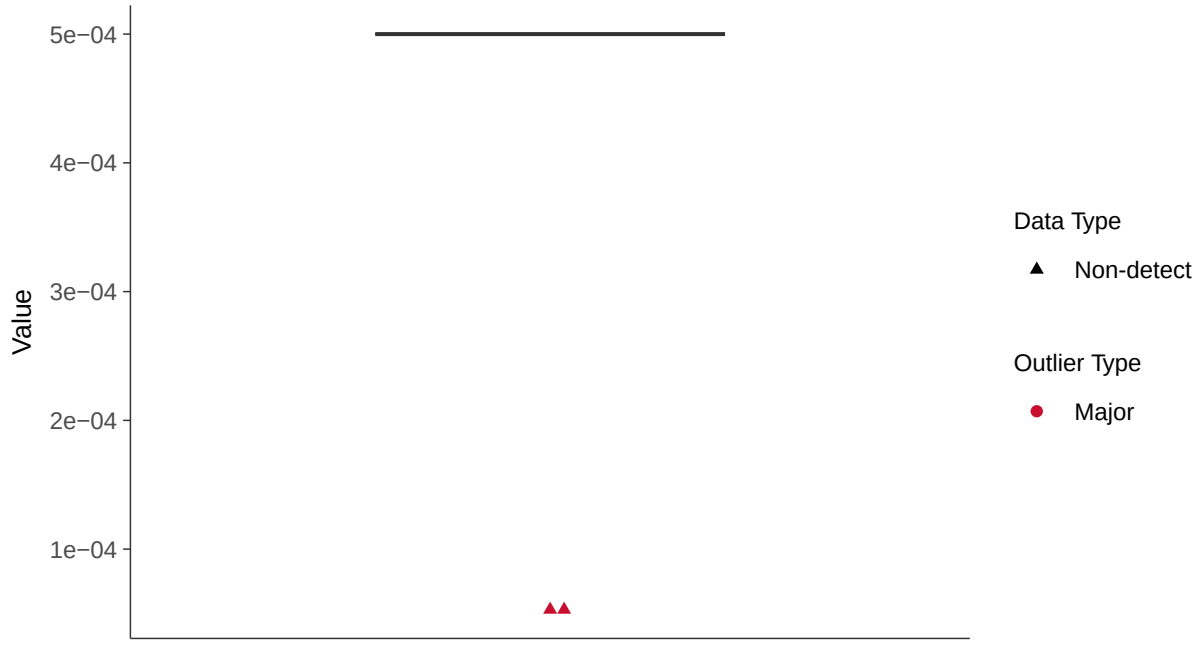
ID: 14_5_123





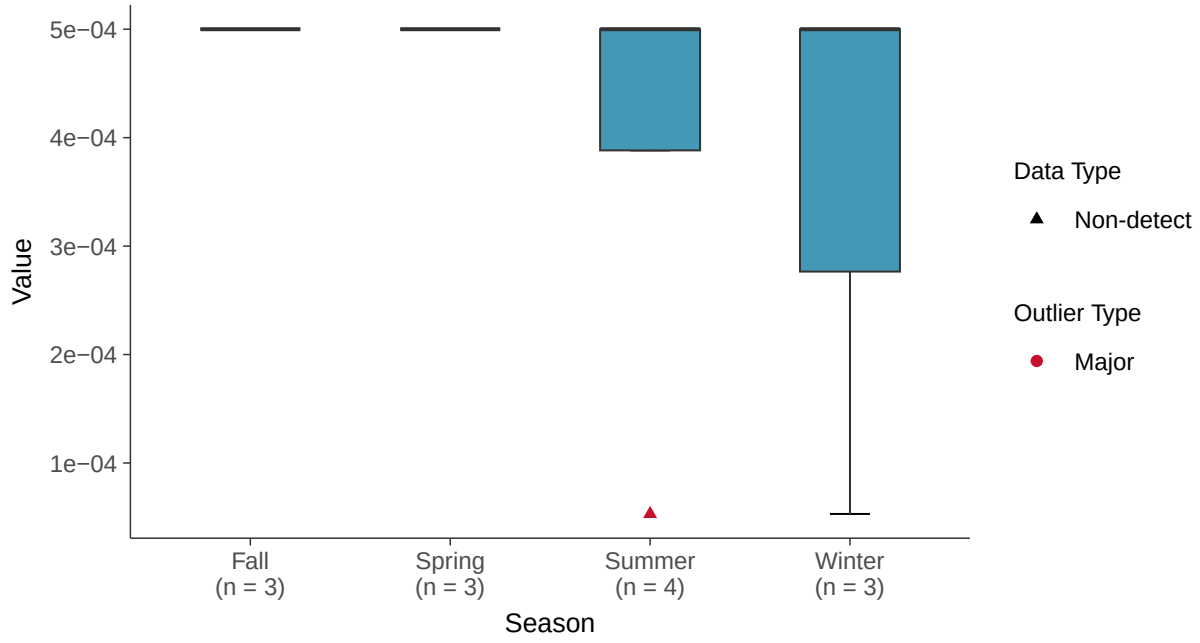
Boxplot

Silver, MW-16C (mg/l)



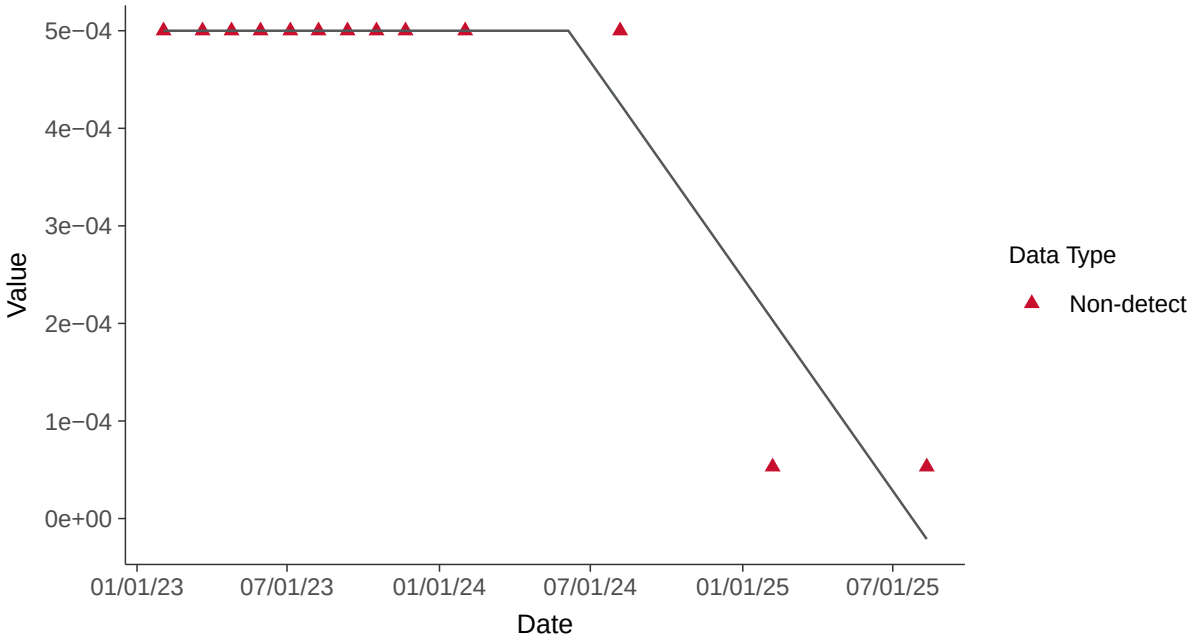
Boxplot by Season

Silver, MW-16C (mg/l)



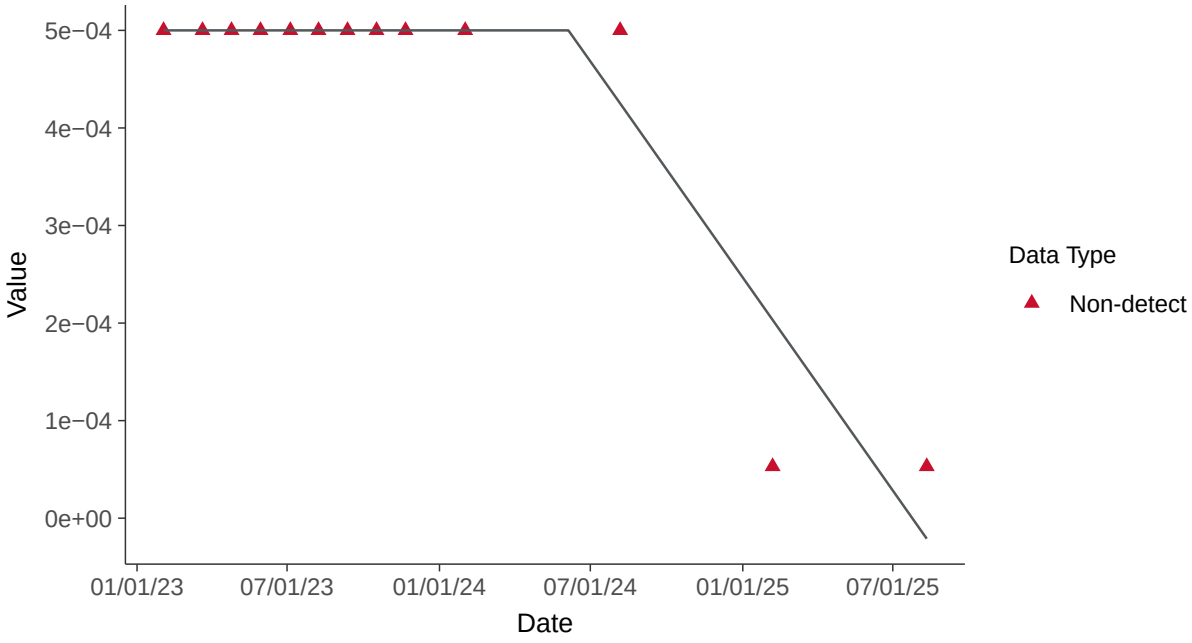
Trend Regression: Piecewise Linear-Linear

Silver, MW-16C (mg/l)



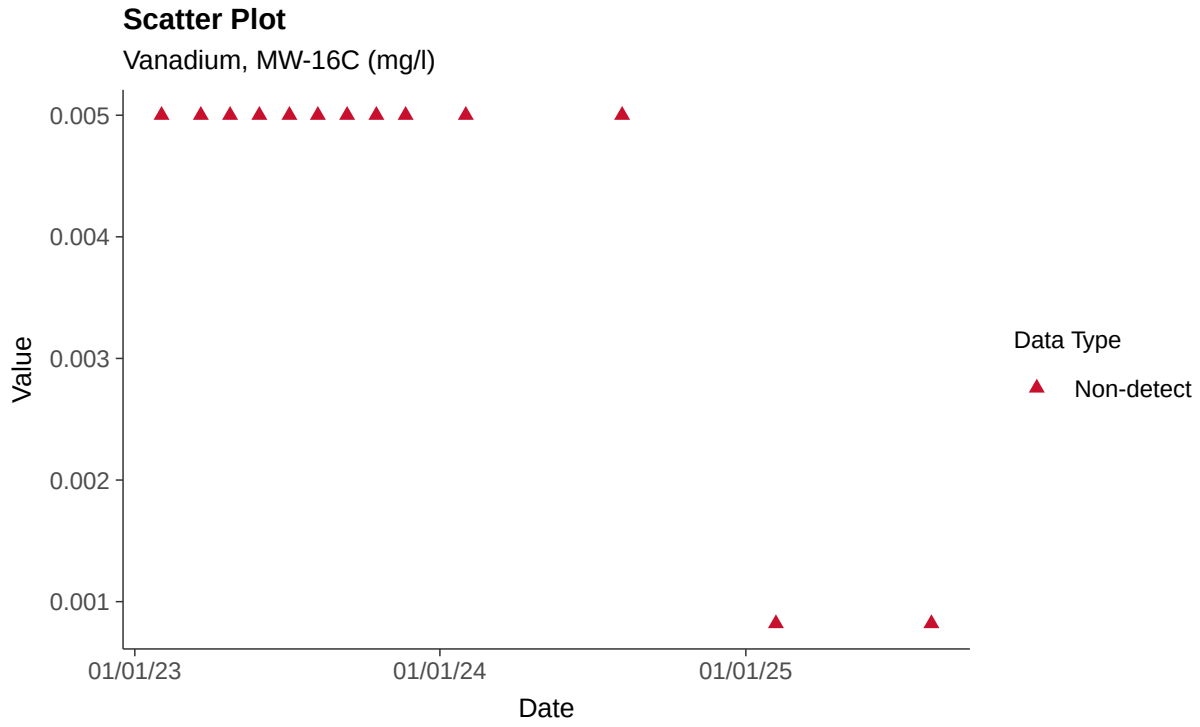
Trend Regression: Piecewise Linear-Linear-Linear

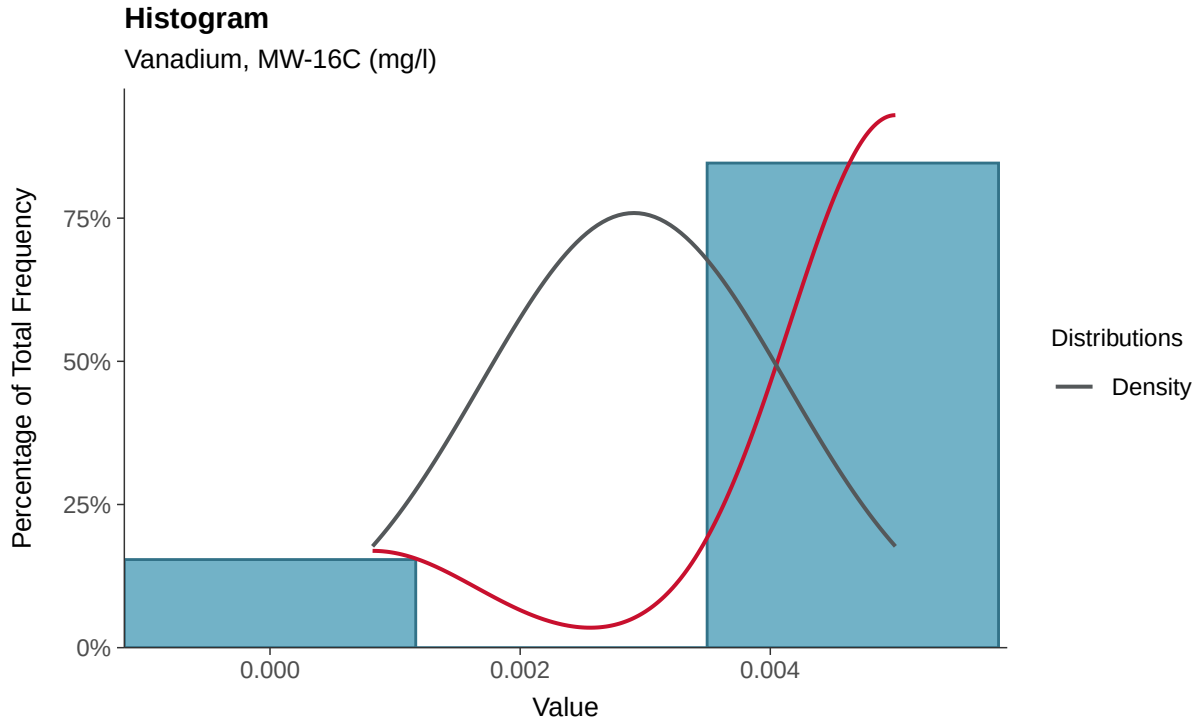
Silver, MW-16C (mg/l)



Part 115: Vanadium, MW-16C

ID: 14_5_128



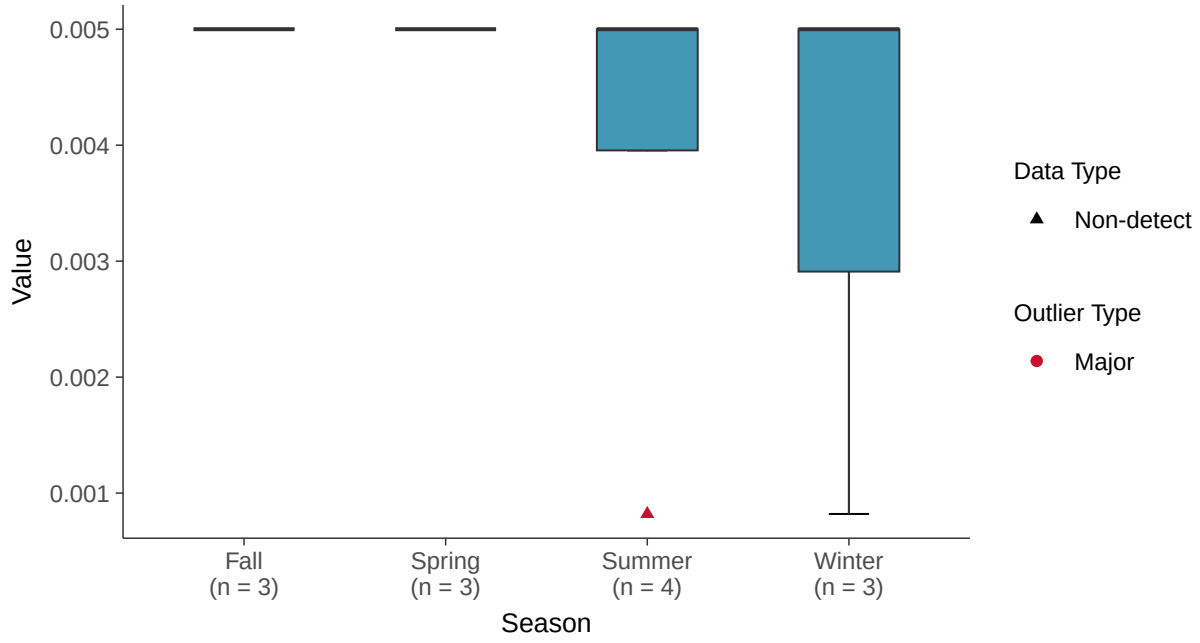


Boxplot

Vanadium, MW-16C (mg/l)

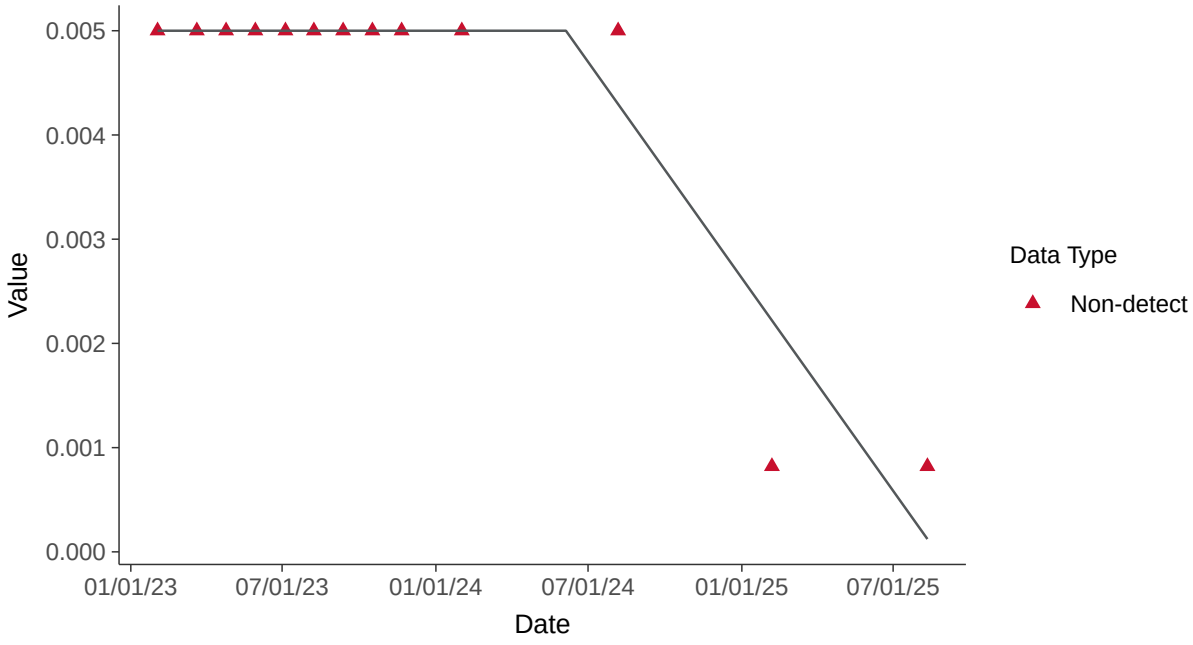
Boxplot by Season

Vanadium, MW-16C (mg/l)



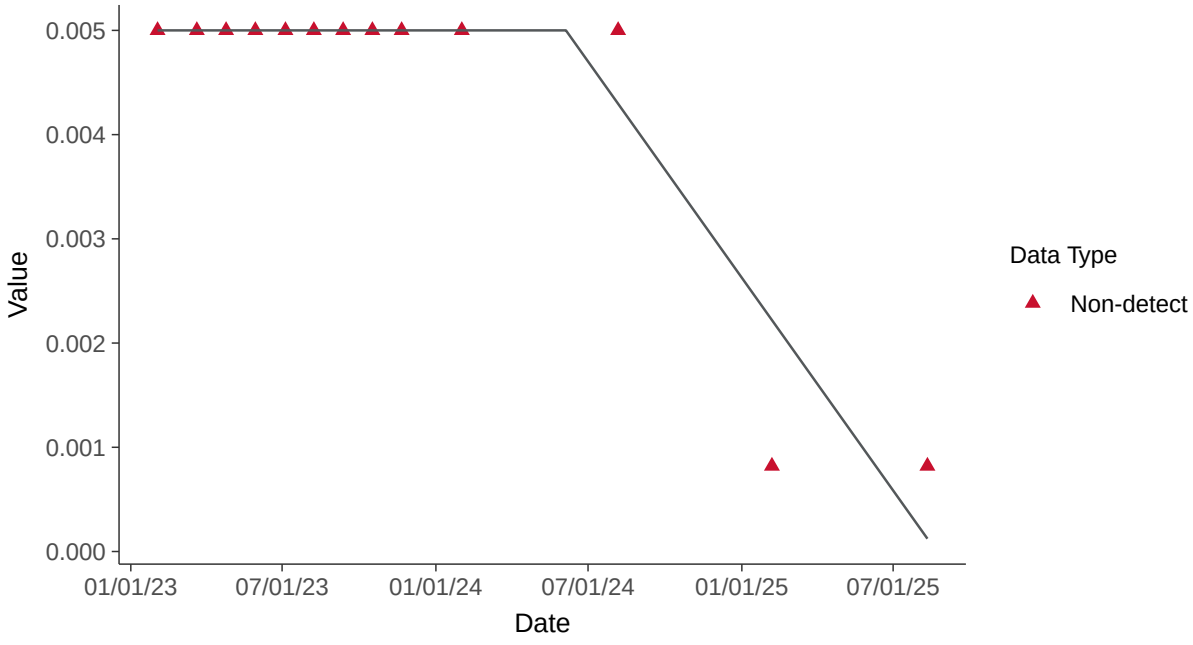
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-16C (mg/l)



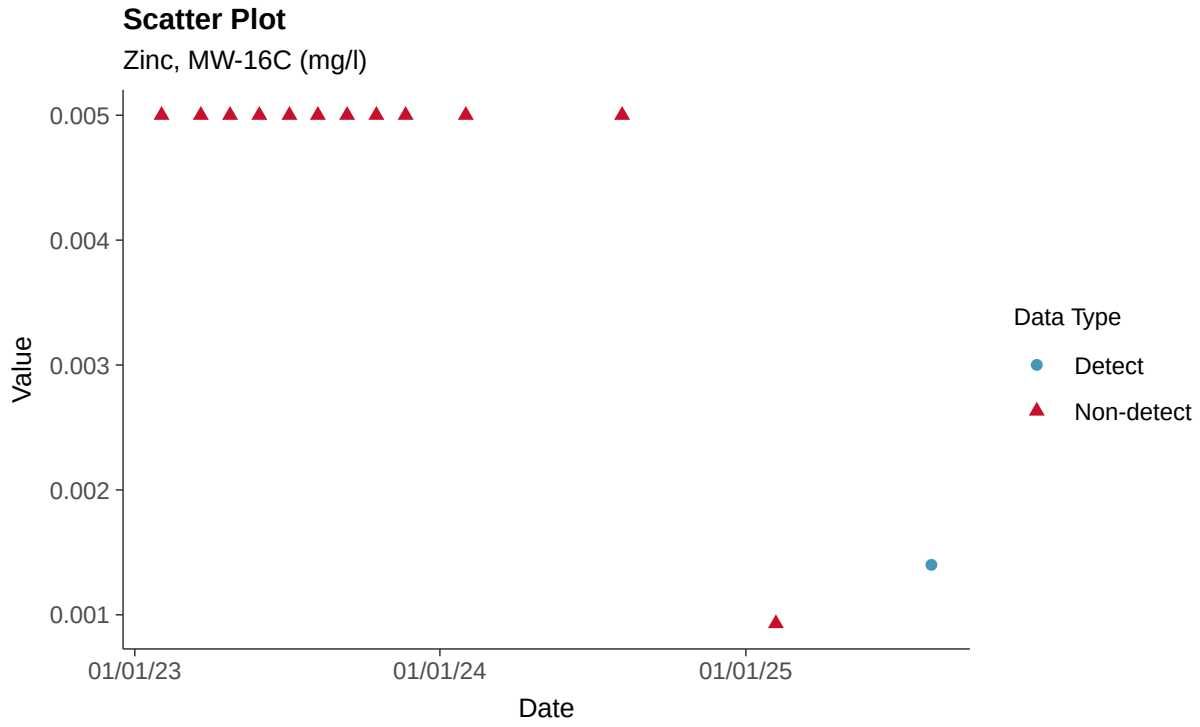
Trend Regression: Piecewise Linear-Linear-Linear

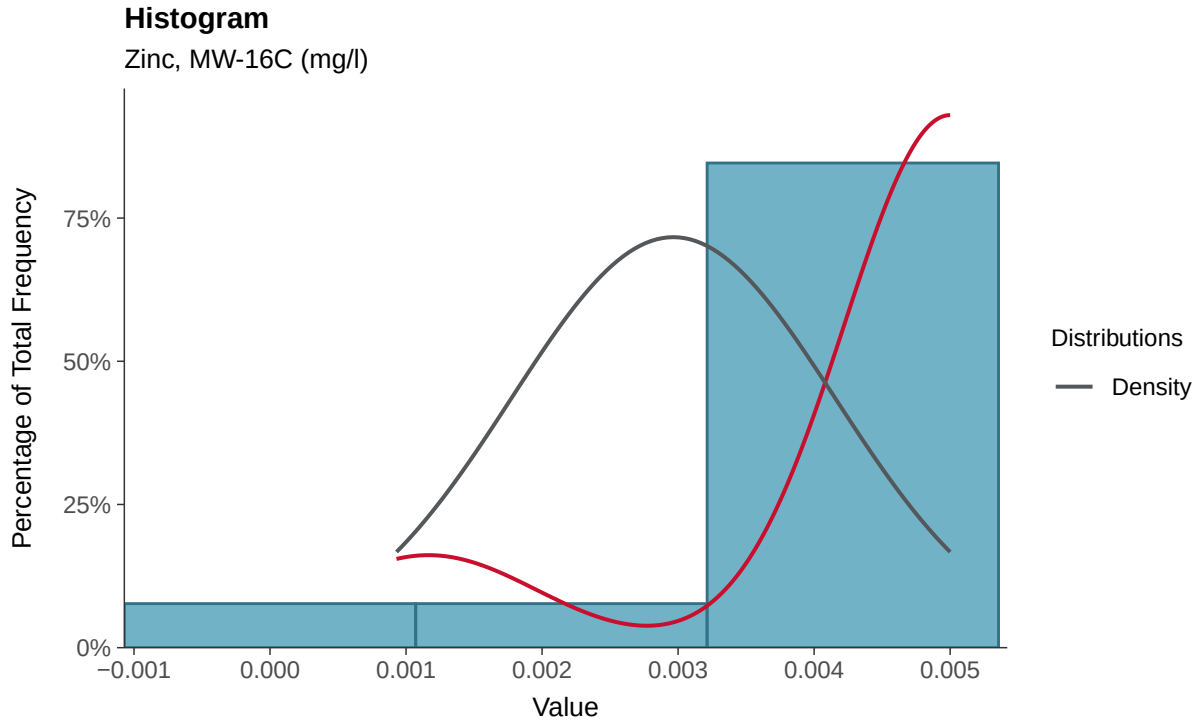
Vanadium, MW-16C (mg/l)



Part 115: Zinc, MW-16C

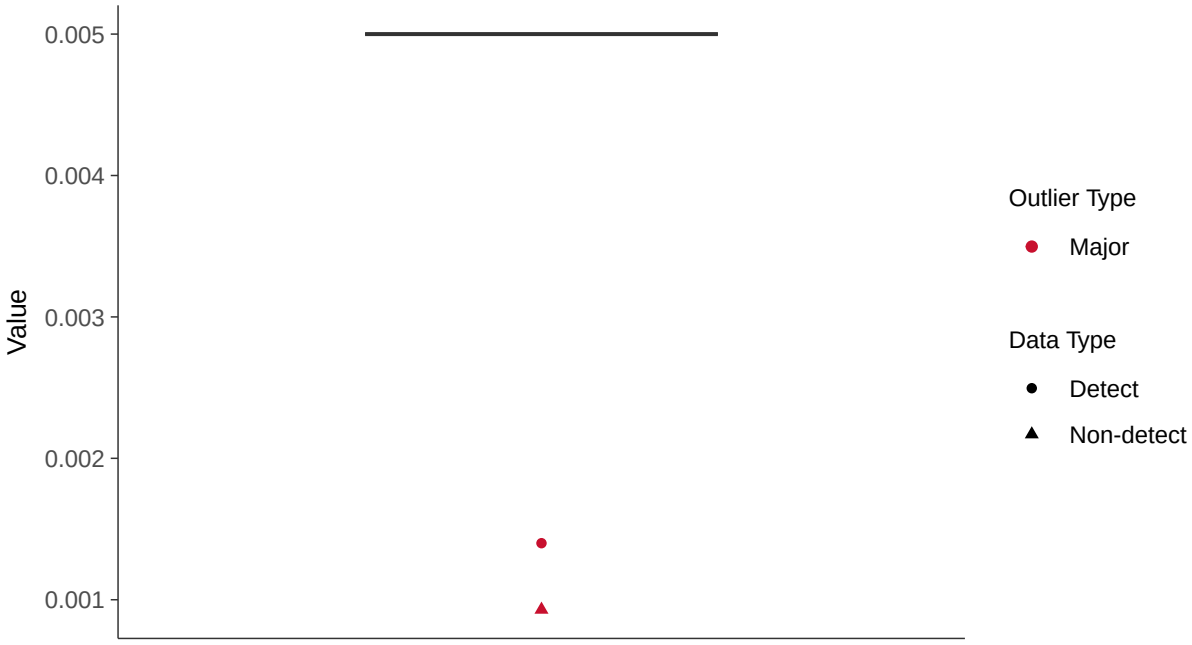
ID: 14_5_129





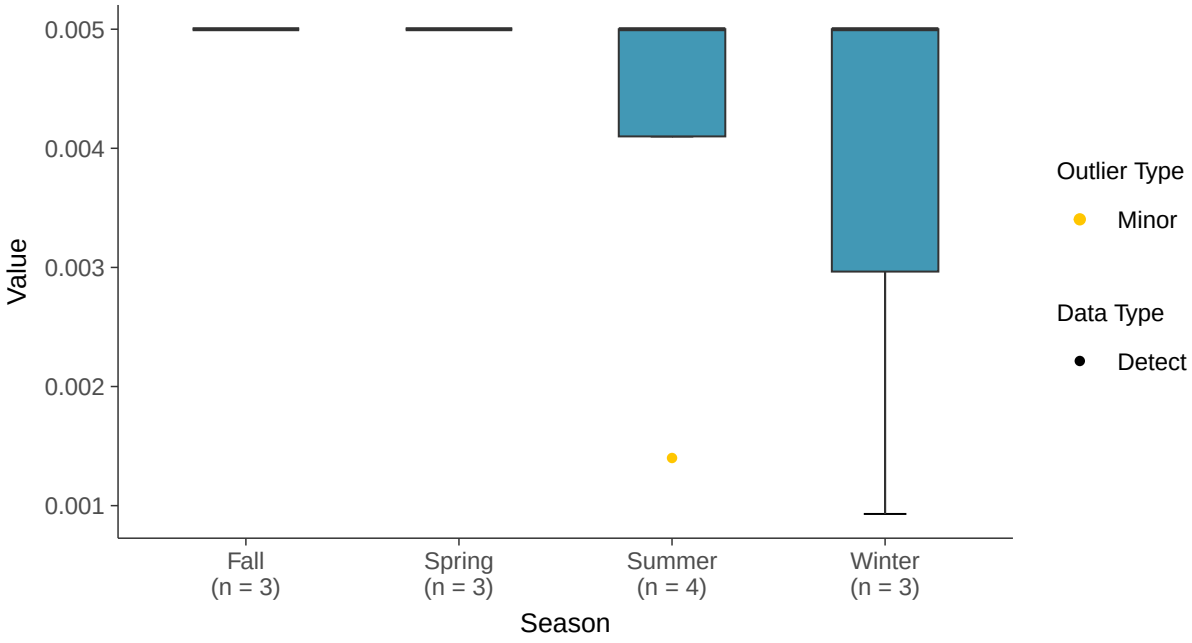
Boxplot

Zinc, MW-16C (mg/l)



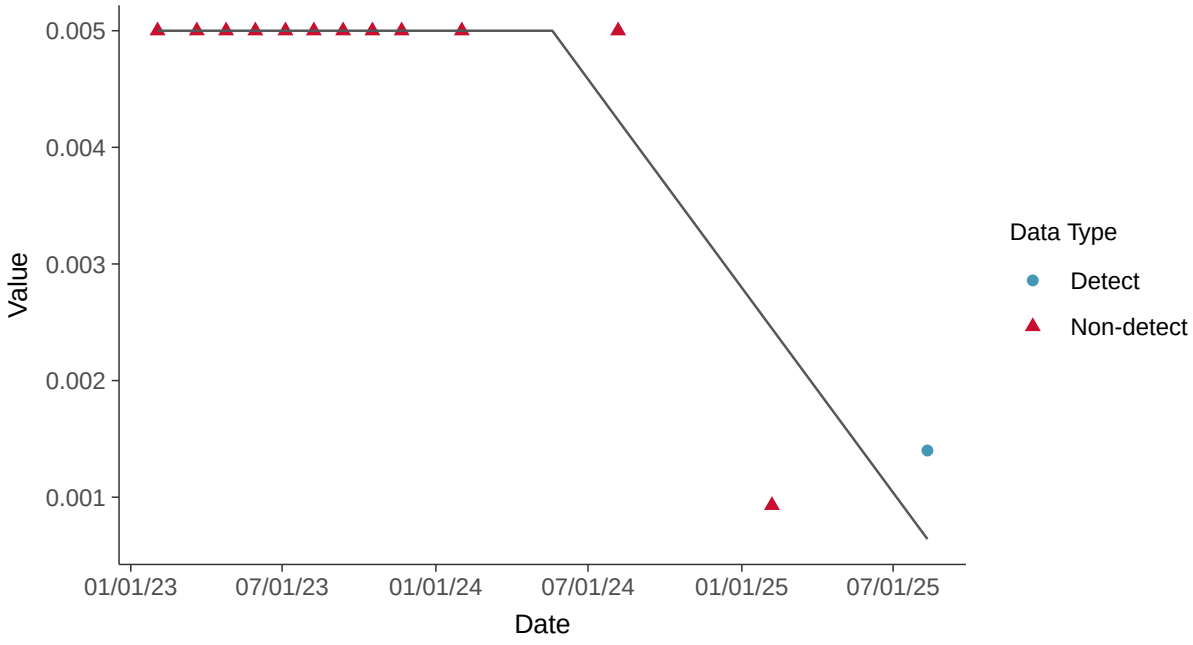
Boxplot by Season

Zinc, MW-16C (mg/l)



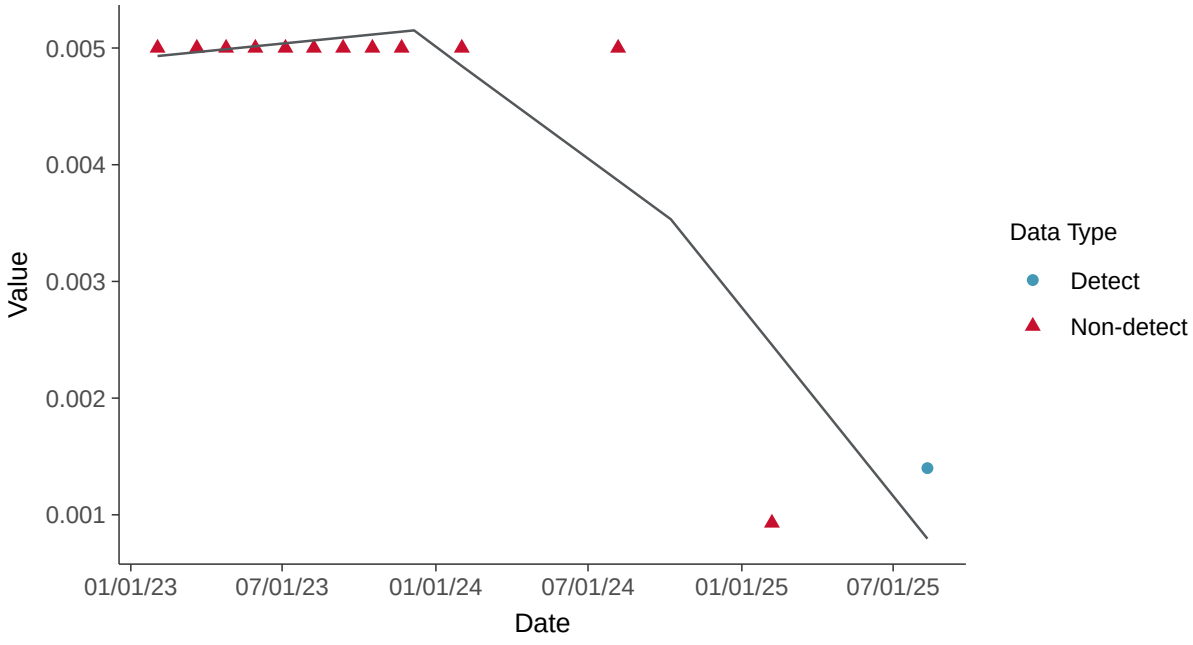
Trend Regression: Piecewise Linear-Linear

Zinc, MW-16C (mg/l)



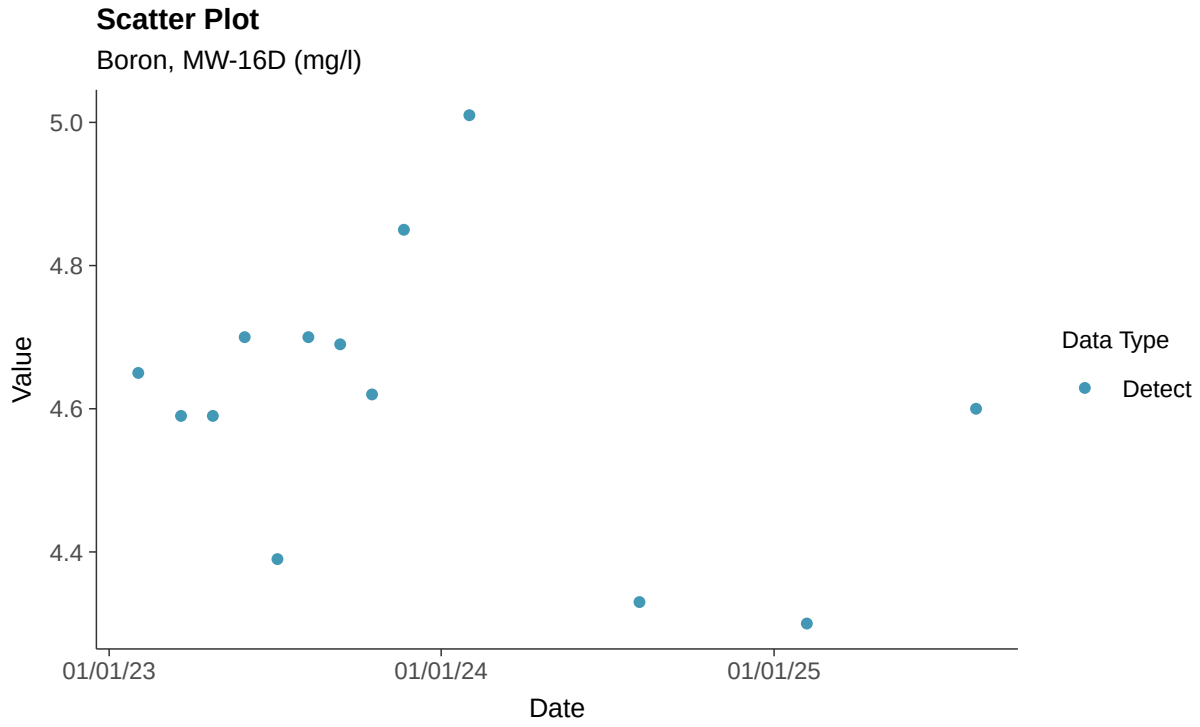
Trend Regression: Piecewise Linear-Linear-Linear

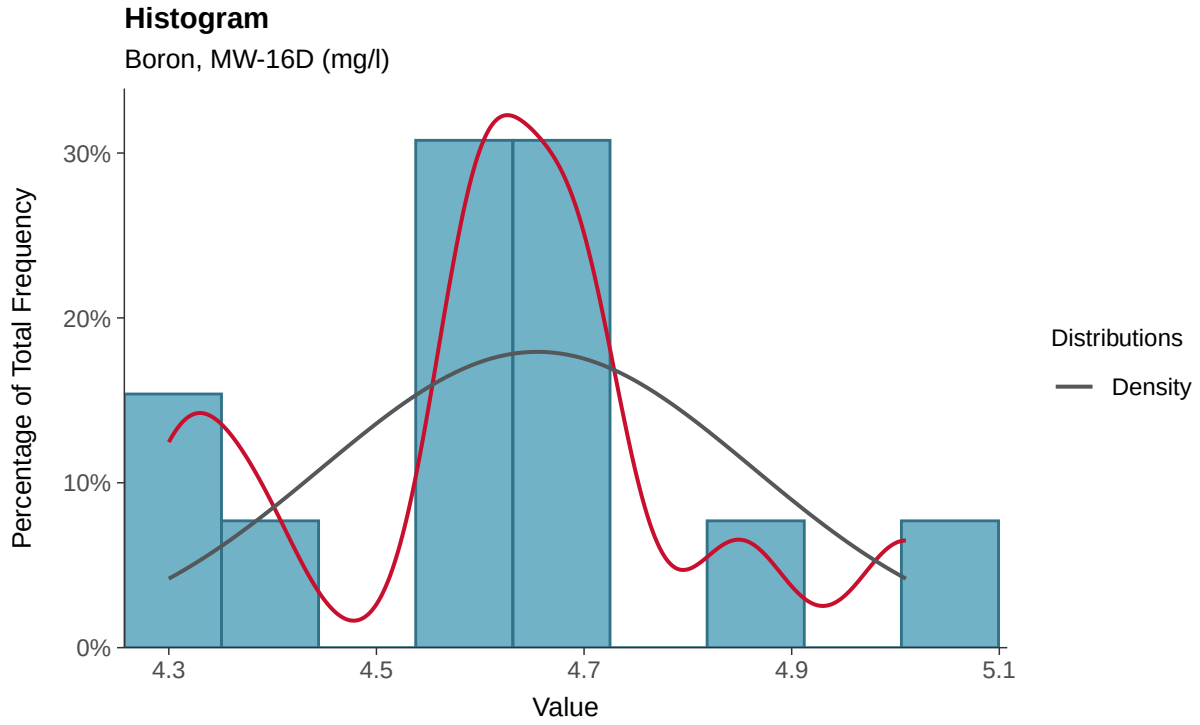
Zinc, MW-16C (mg/l)



Appendix III: Boron, MW-16D

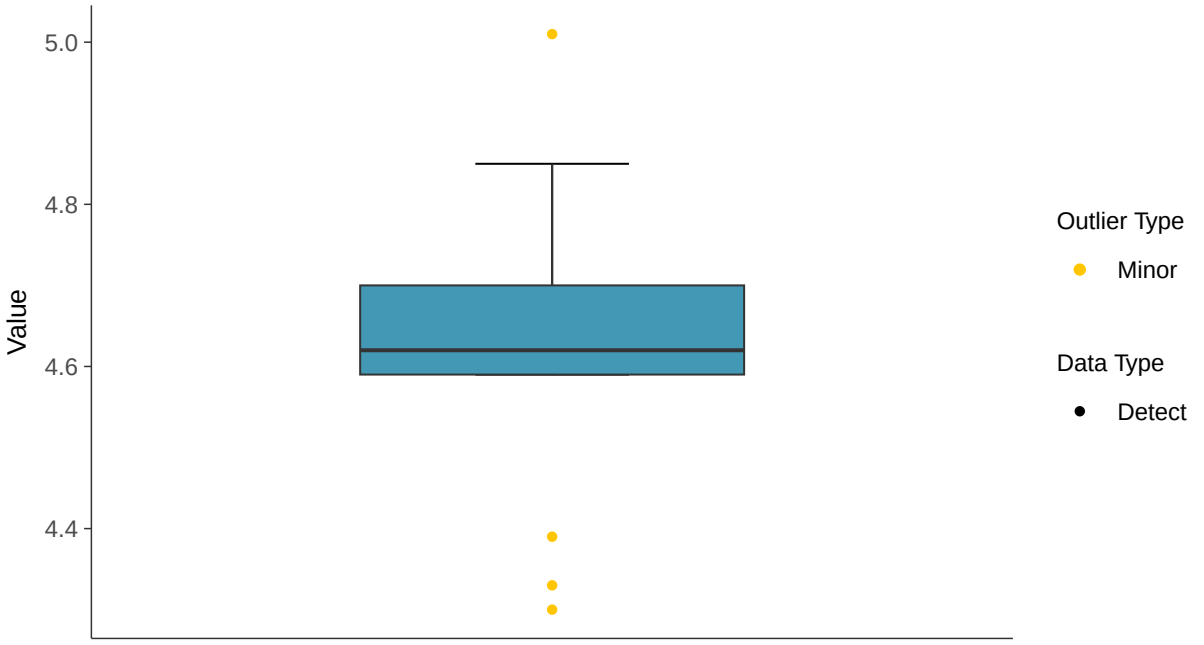
ID: 15_2_105





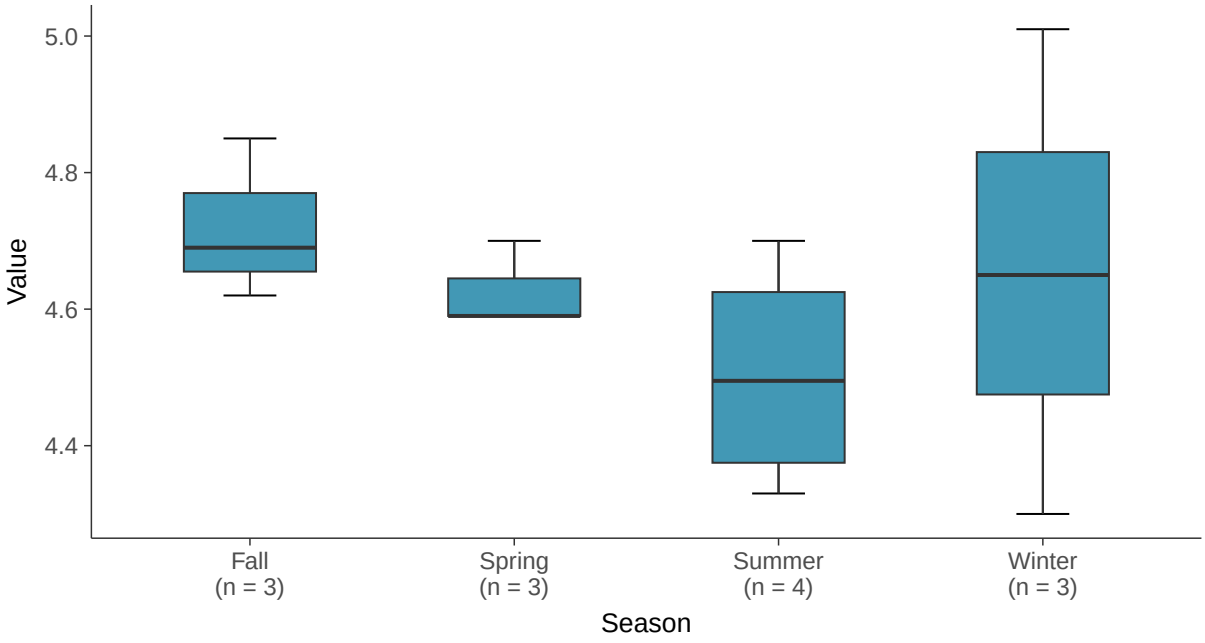
Boxplot

Boron, MW-16D (mg/l)



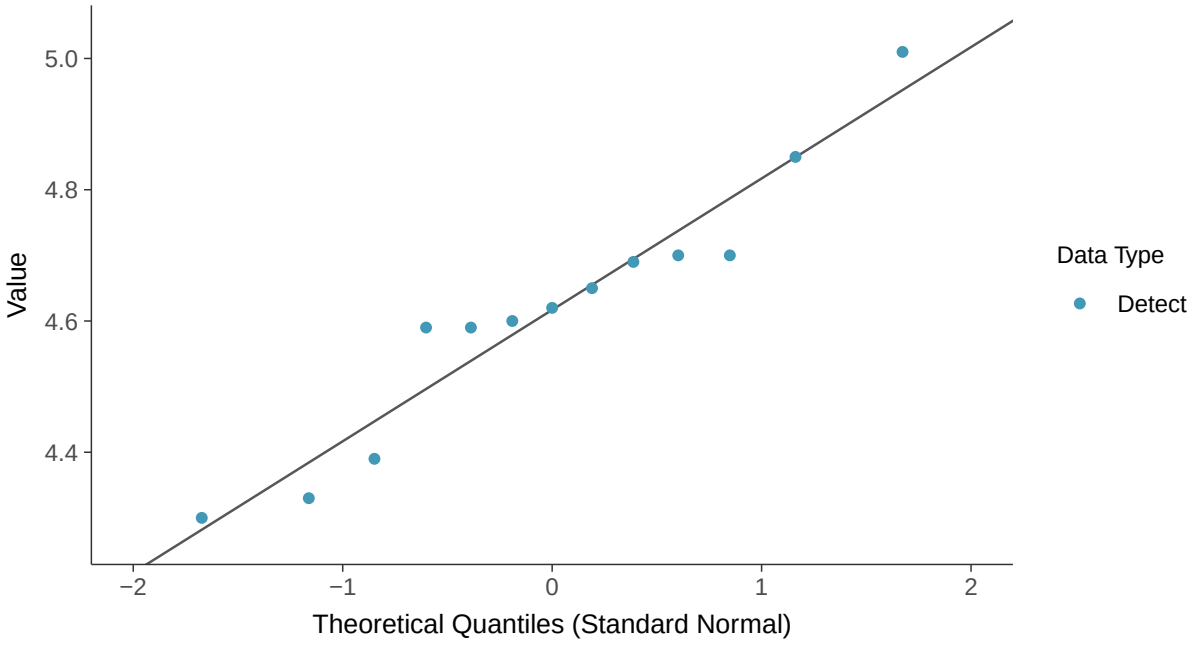
Boxplot by Season

Boron, MW-16D (mg/l)



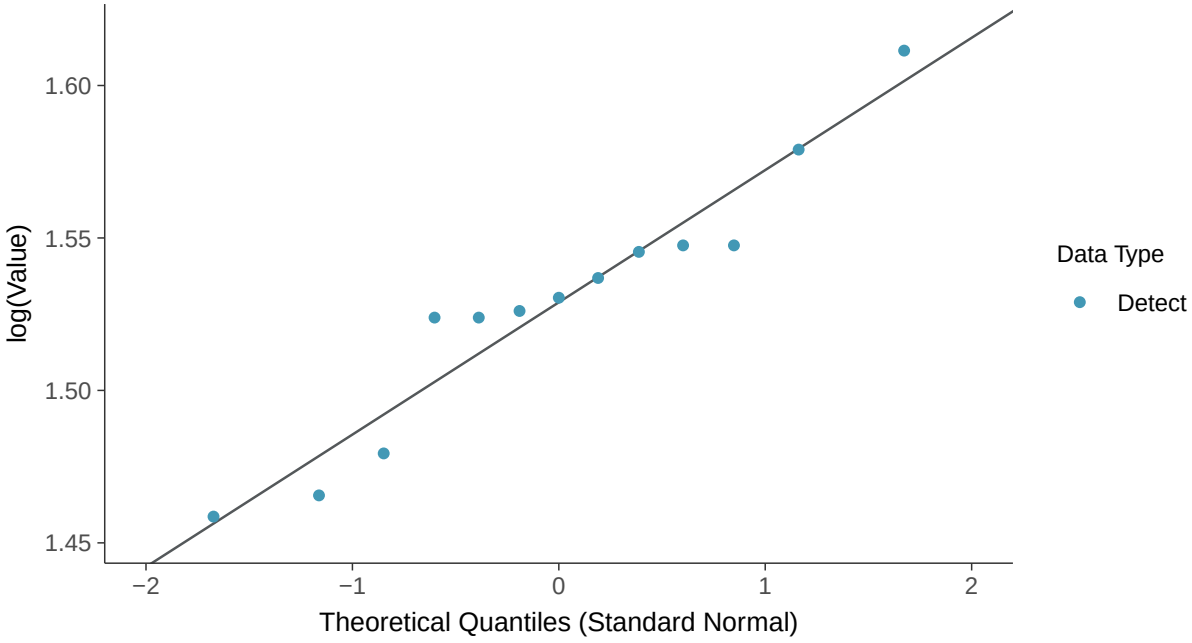
Normal Q-Q plot

Boron, MW-16D (mg/l)



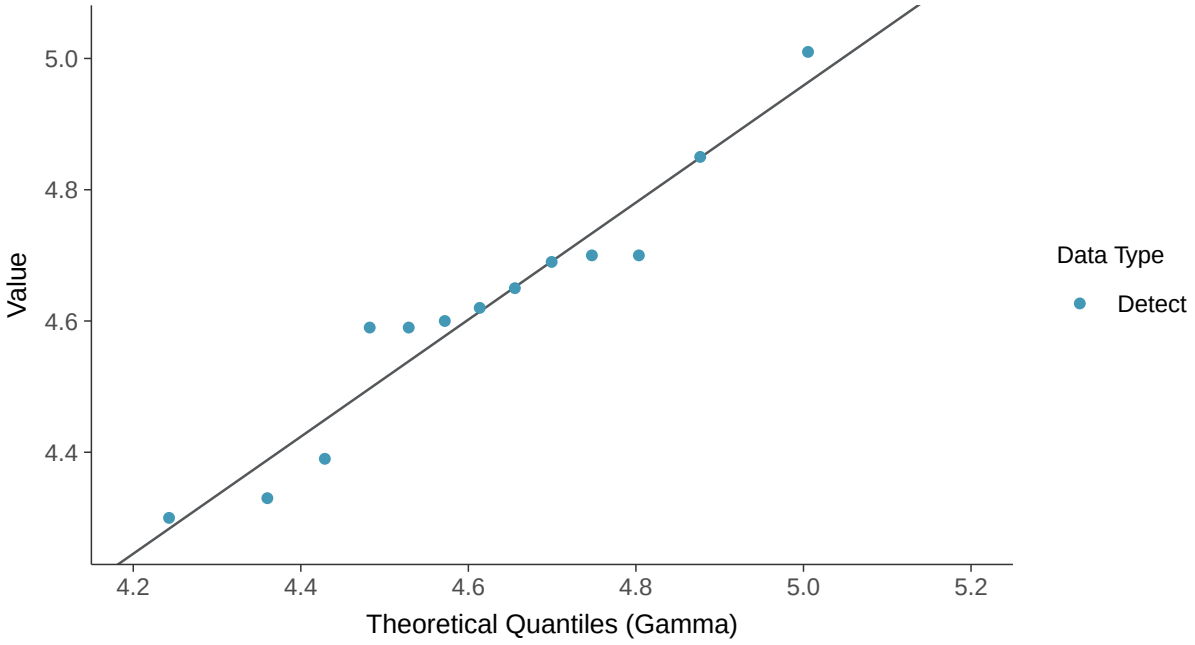
Lognormal Q-Q plot

Boron, MW-16D (mg/l)



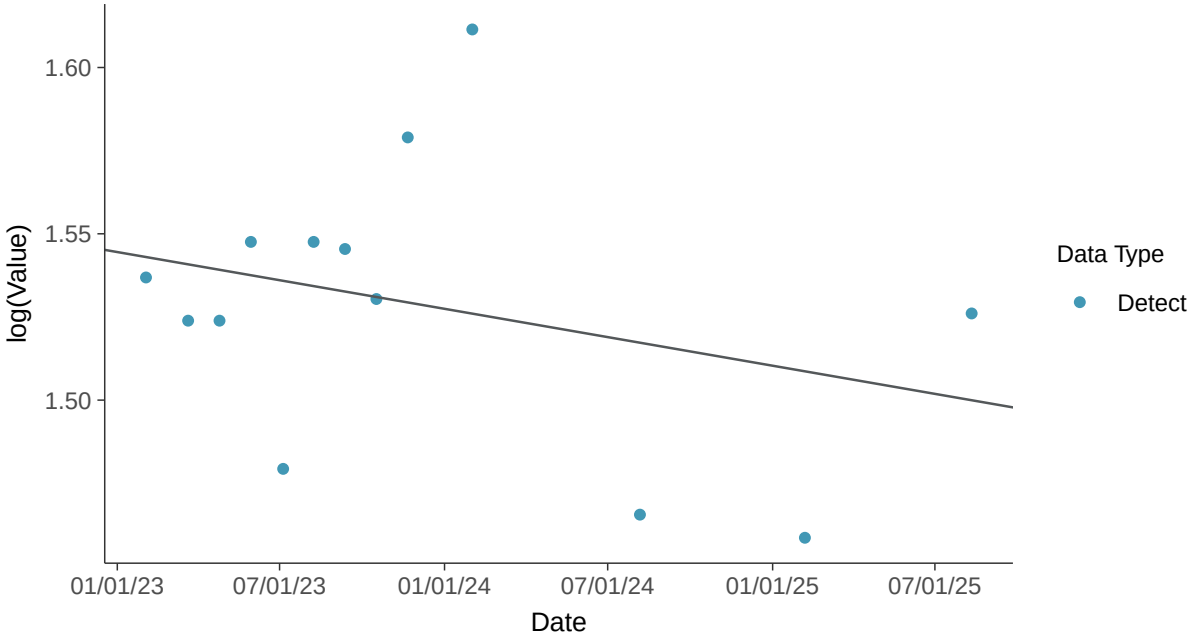
Gamma Q-Q plot

Boron, MW-16D (mg/l)



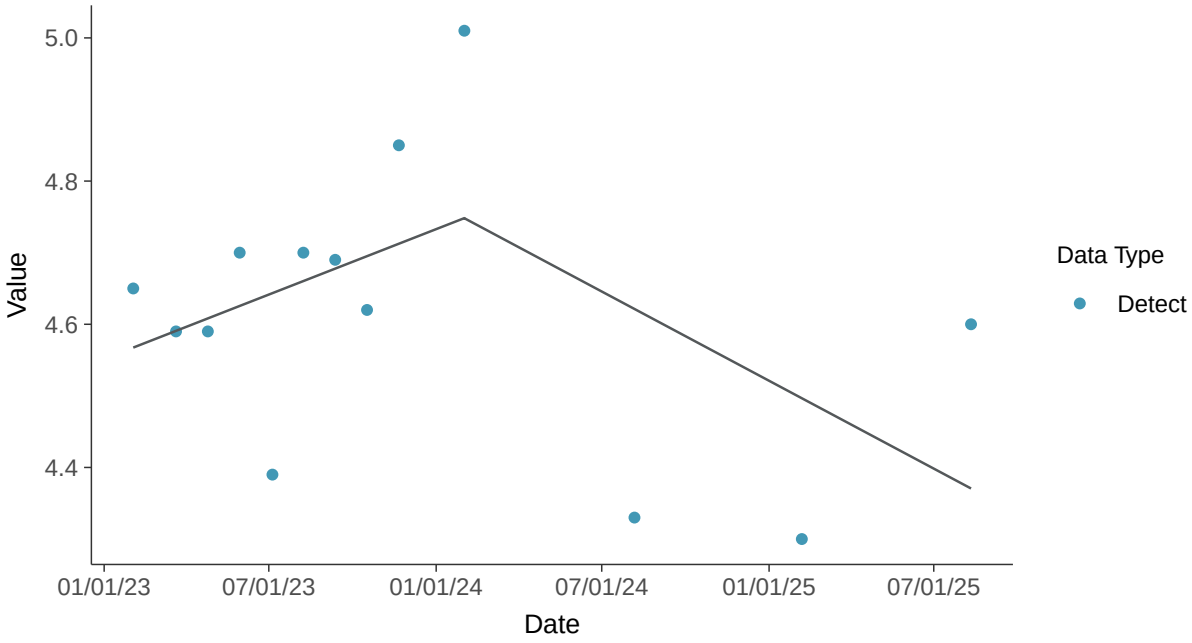
Trend Regression: Lognormal MLE

Boron, MW-16D (mg/l)



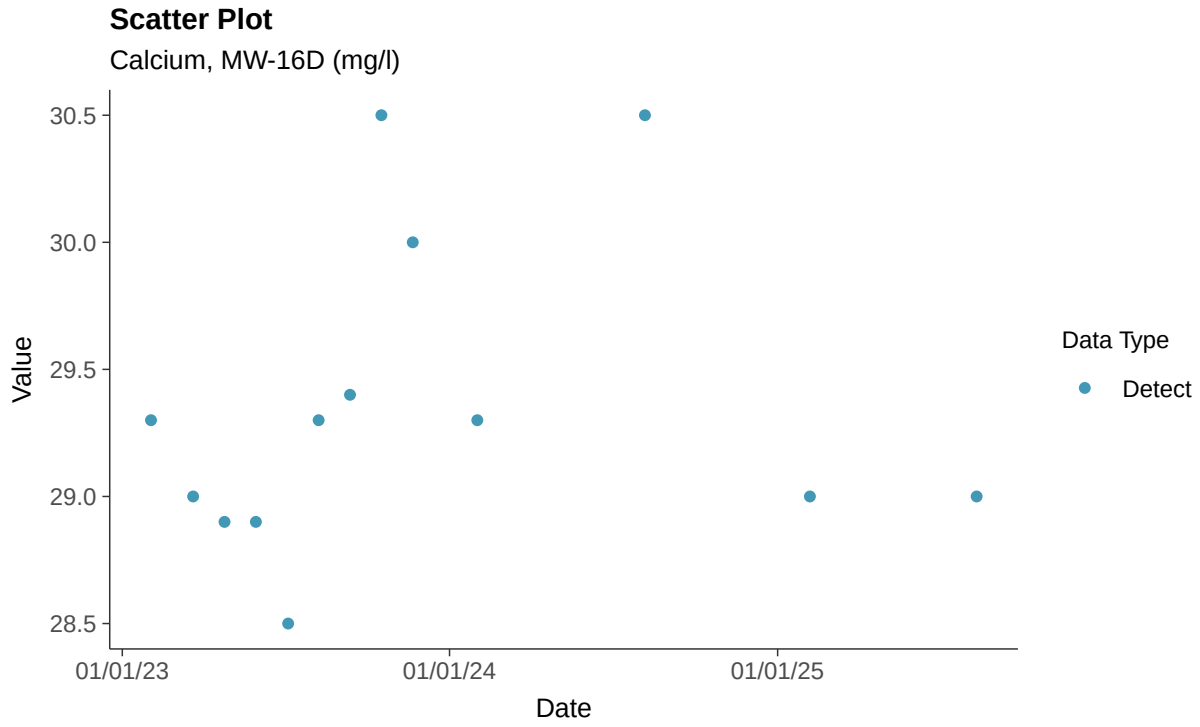
Trend Regression: Piecewise Linear-Linear

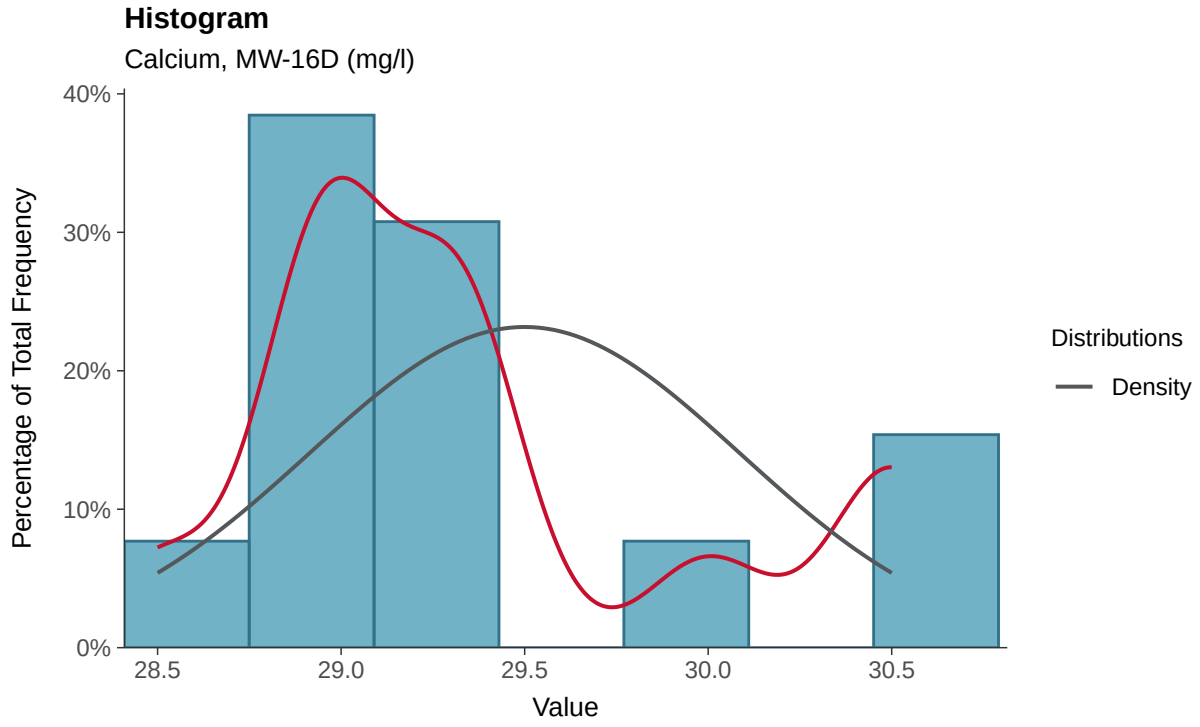
Boron, MW-16D (mg/l)



Appendix III: Calcium, MW-16D

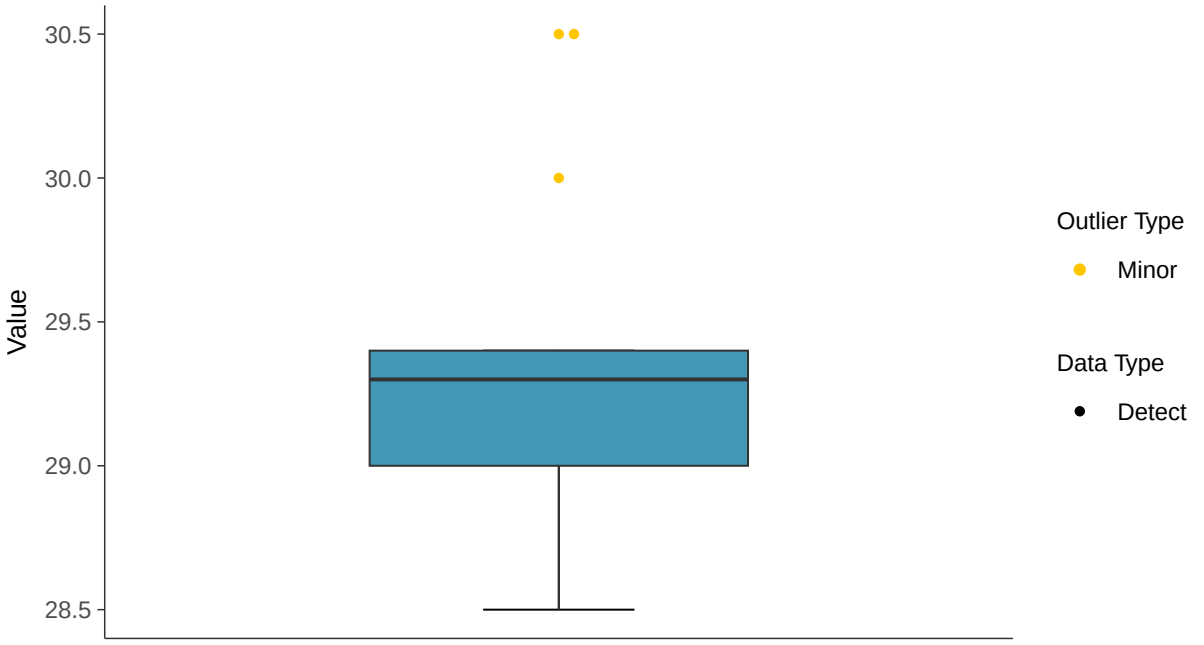
ID: 15_2_107





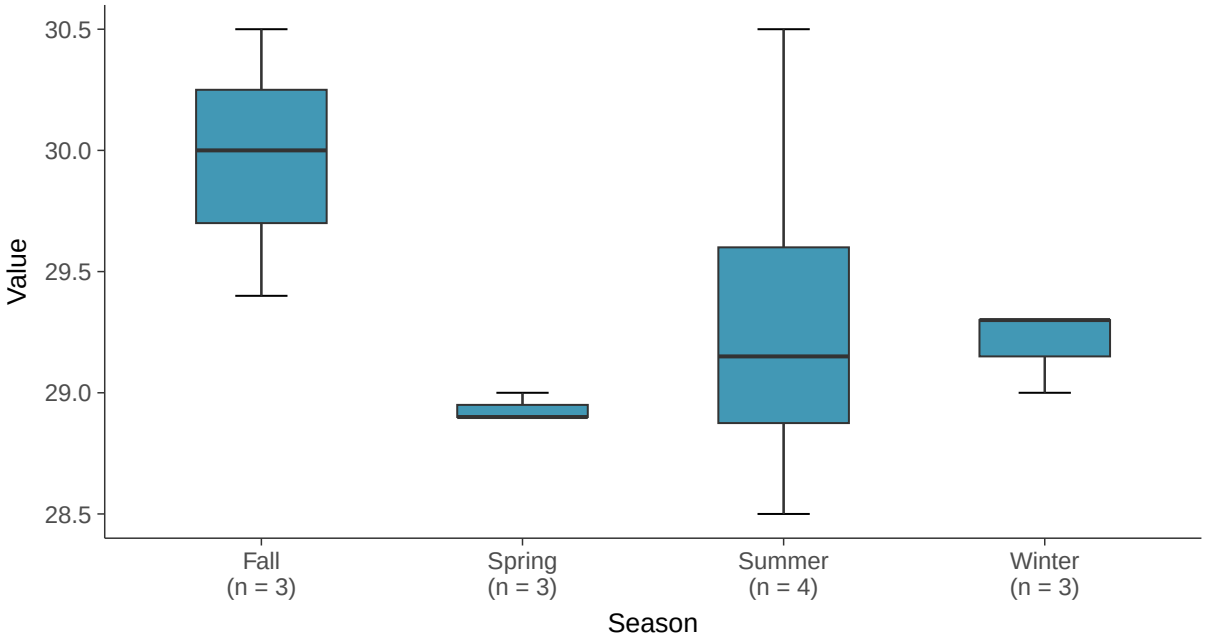
Boxplot

Calcium, MW-16D (mg/l)



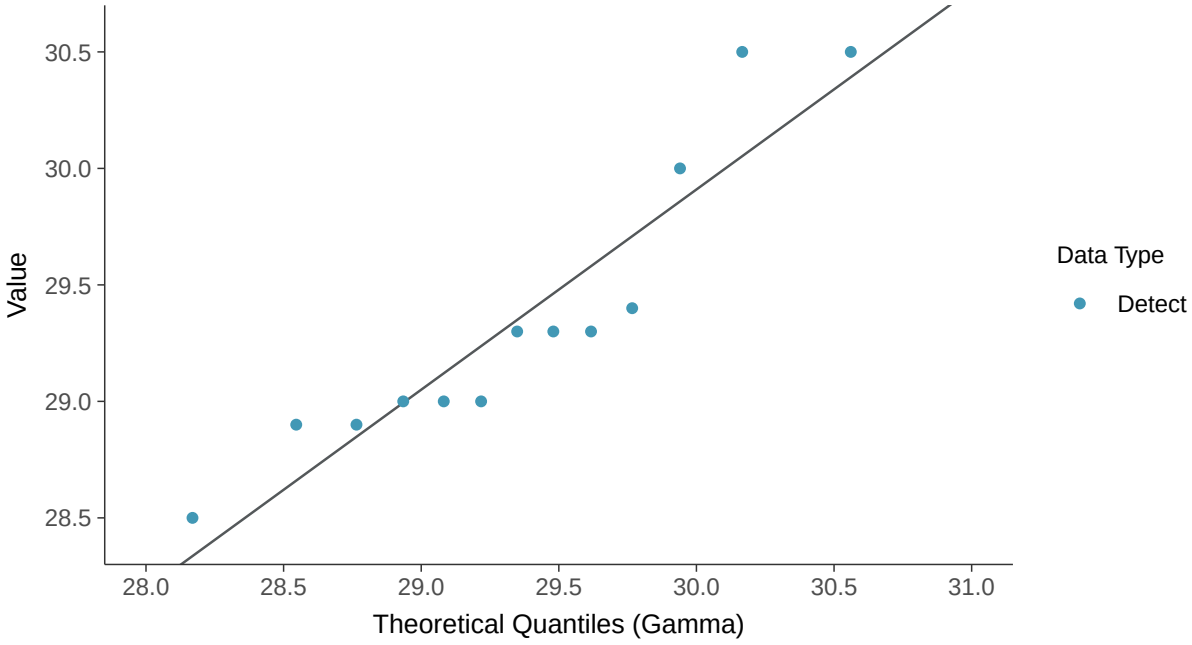
Boxplot by Season

Calcium, MW-16D (mg/l)



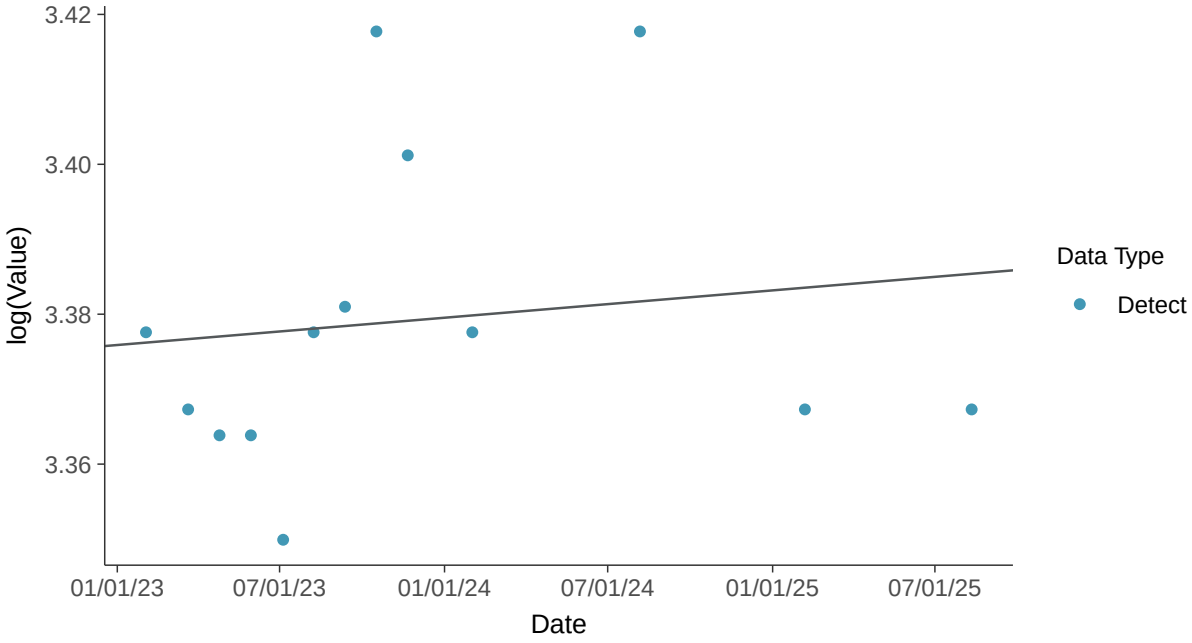
Gamma Q-Q plot

Calcium, MW-16D (mg/l)



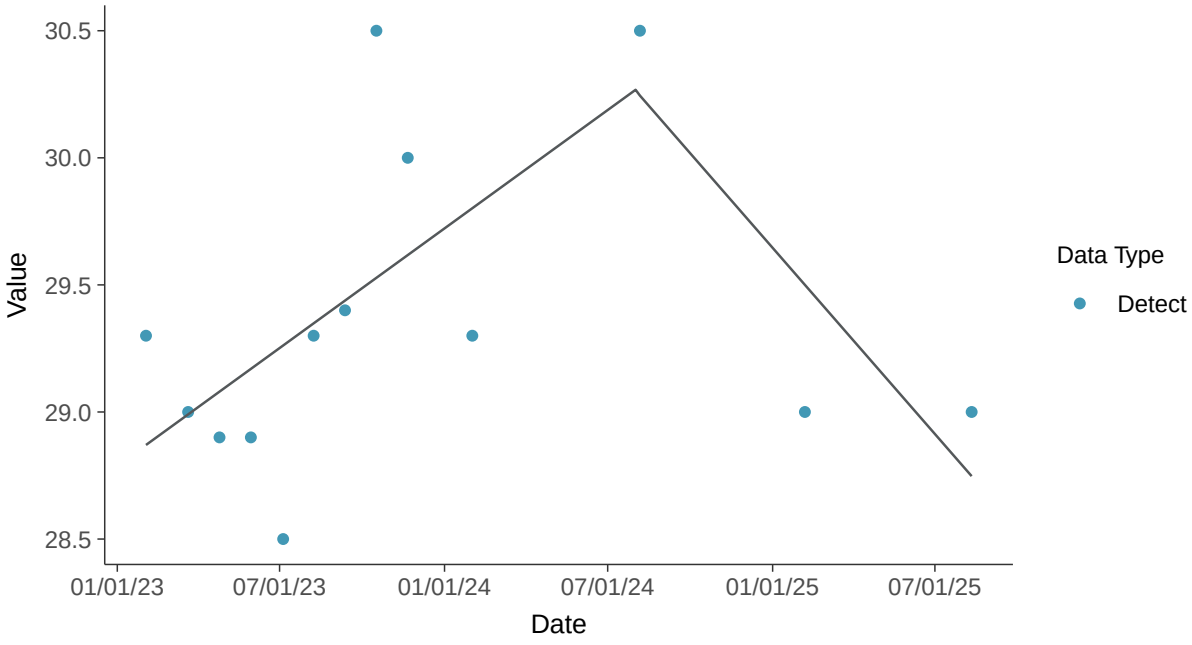
Trend Regression: Lognormal MLE

Calcium, MW-16D (mg/l)



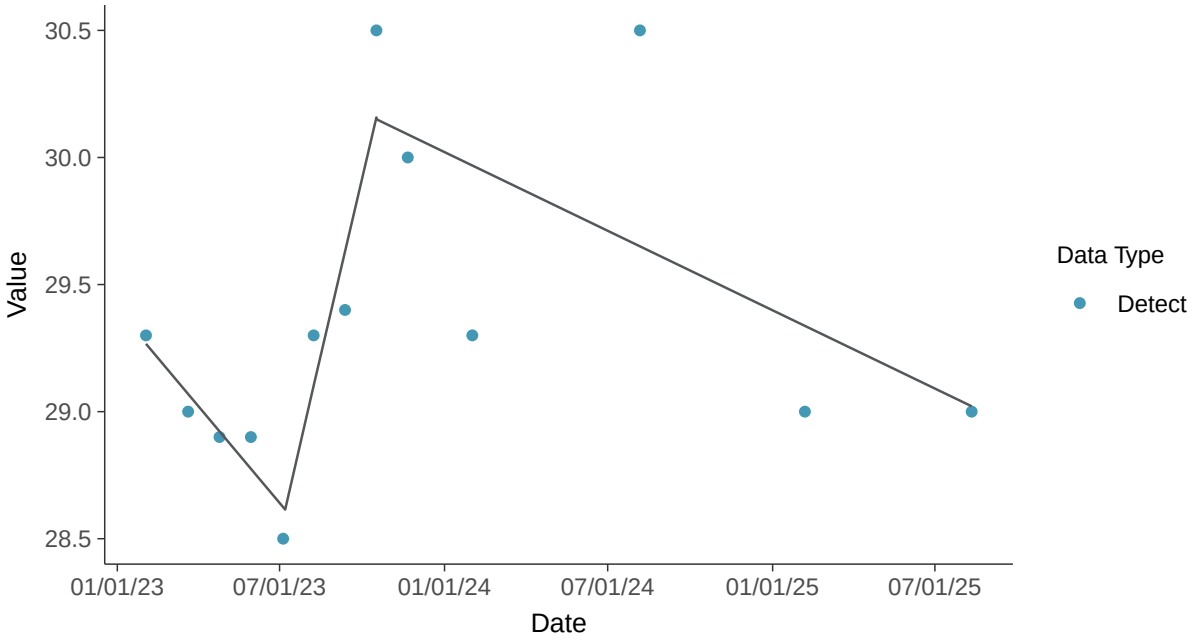
Trend Regression: Piecewise Linear-Linear

Calcium, MW-16D (mg/l)



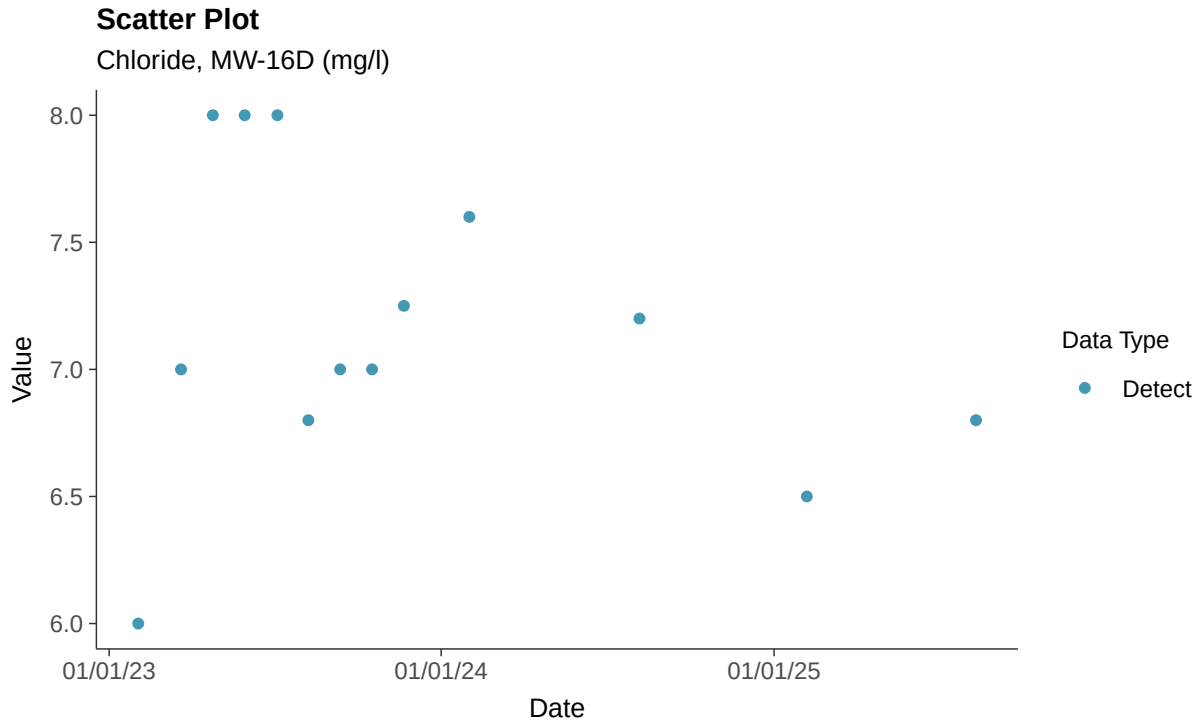
Trend Regression: Piecewise Linear-Linear-Linear

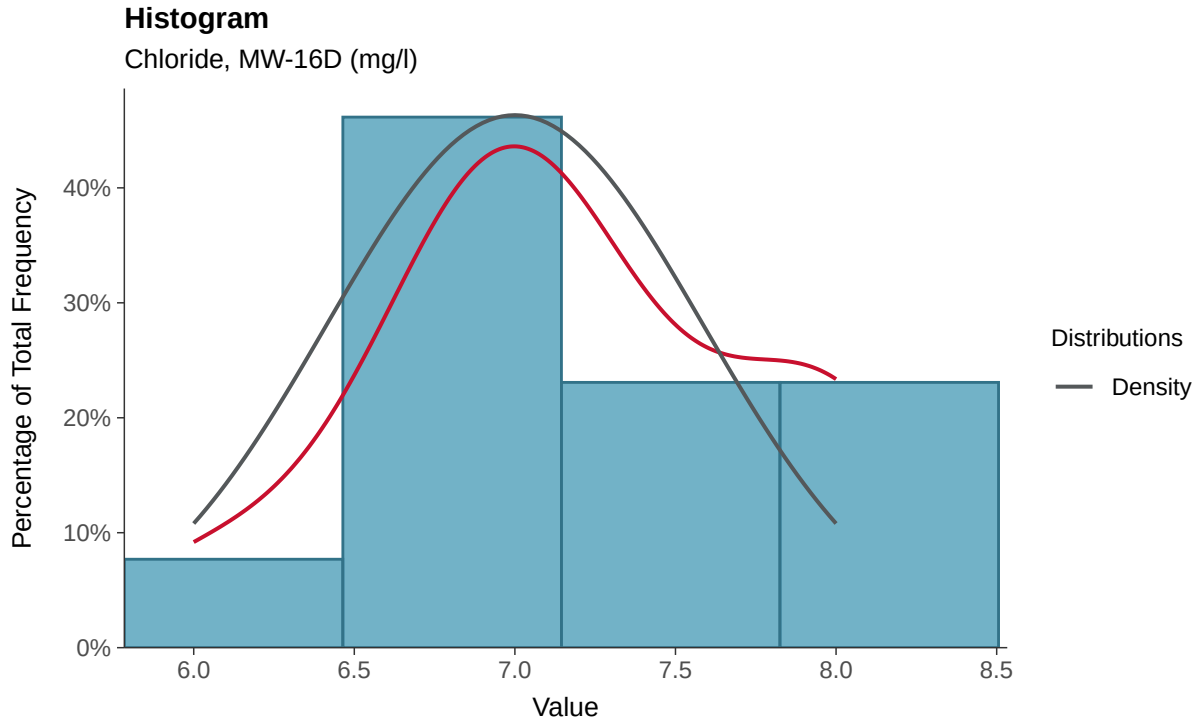
Calcium, MW-16D (mg/l)



Appendix III: Chloride, MW-16D

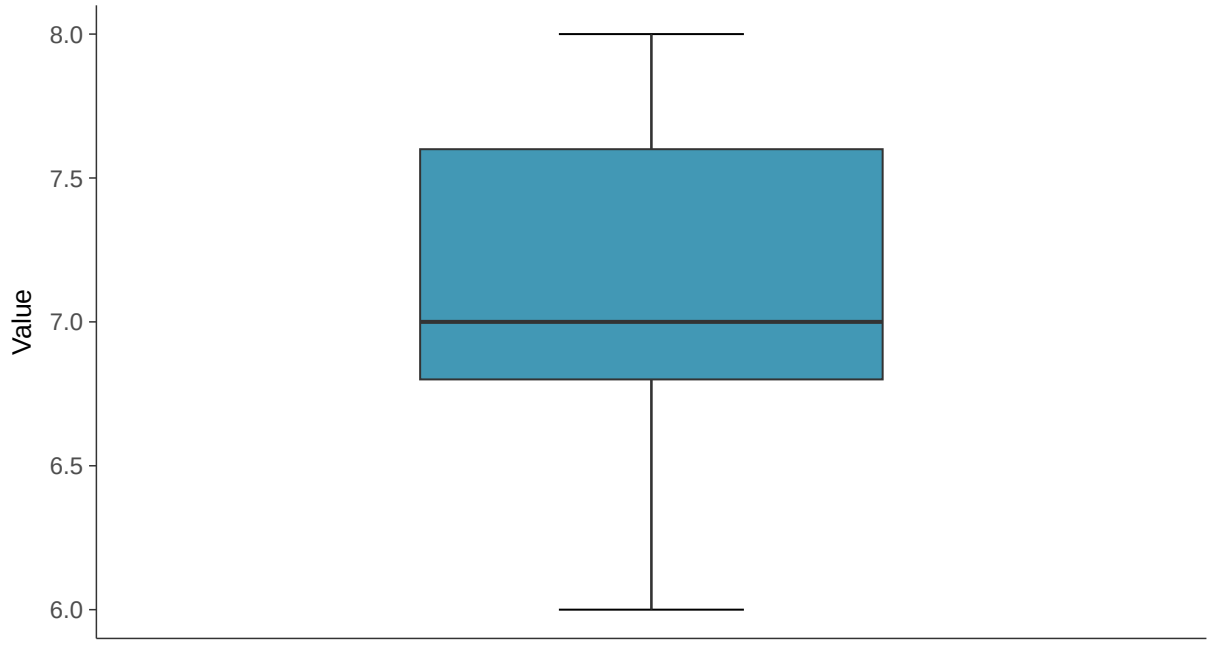
ID: 15_2_108





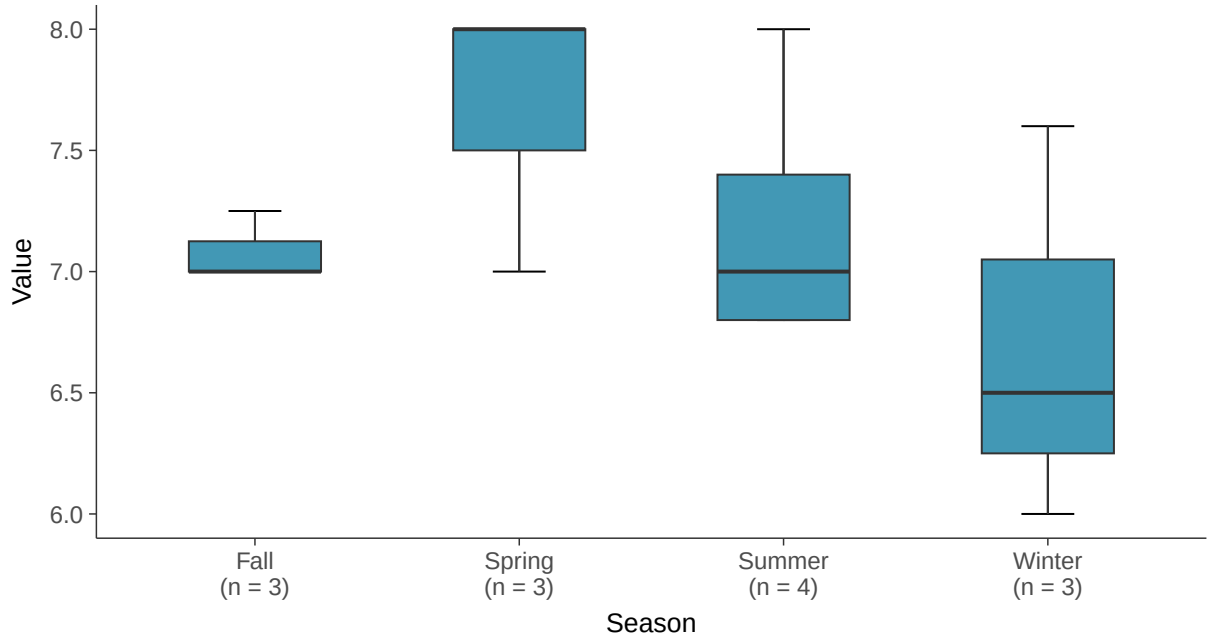
Boxplot

Chloride, MW-16D (mg/l)



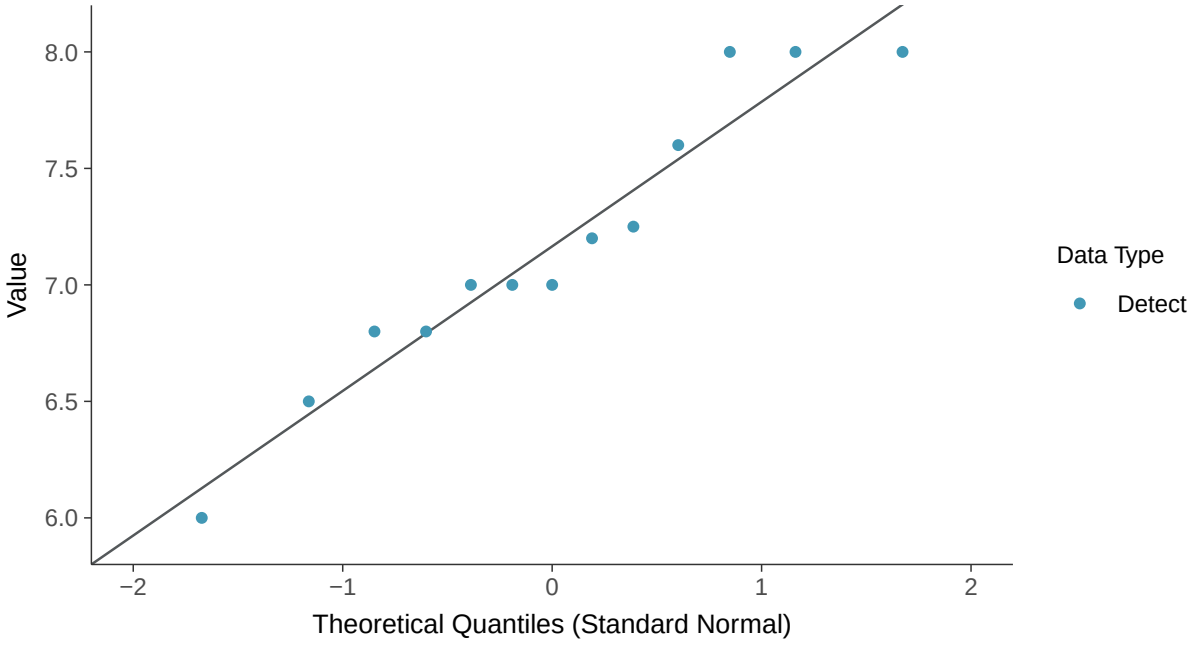
Boxplot by Season

Chloride, MW-16D (mg/l)



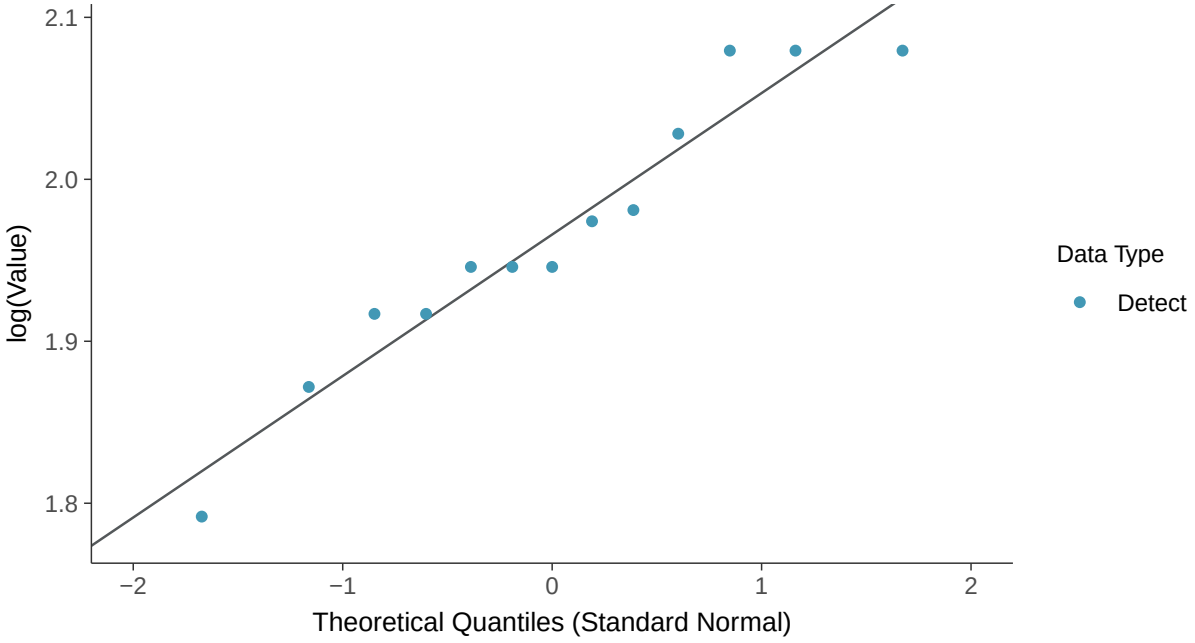
Normal Q-Q plot

Chloride, MW-16D (mg/l)



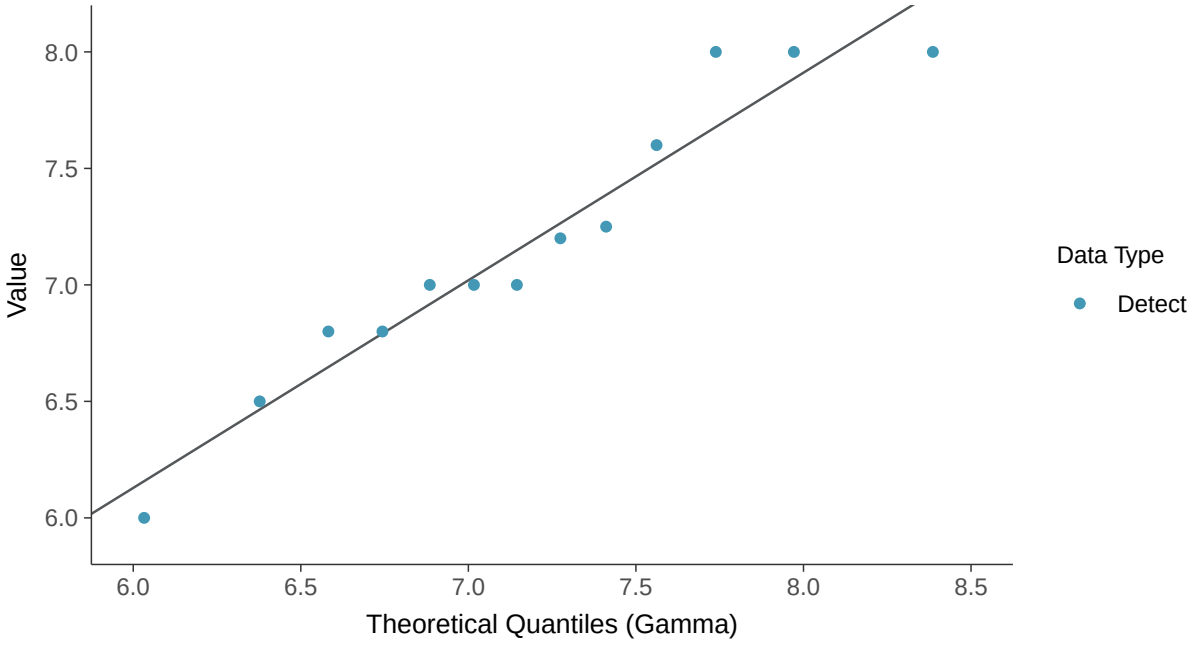
Lognormal Q-Q plot

Chloride, MW-16D (mg/l)



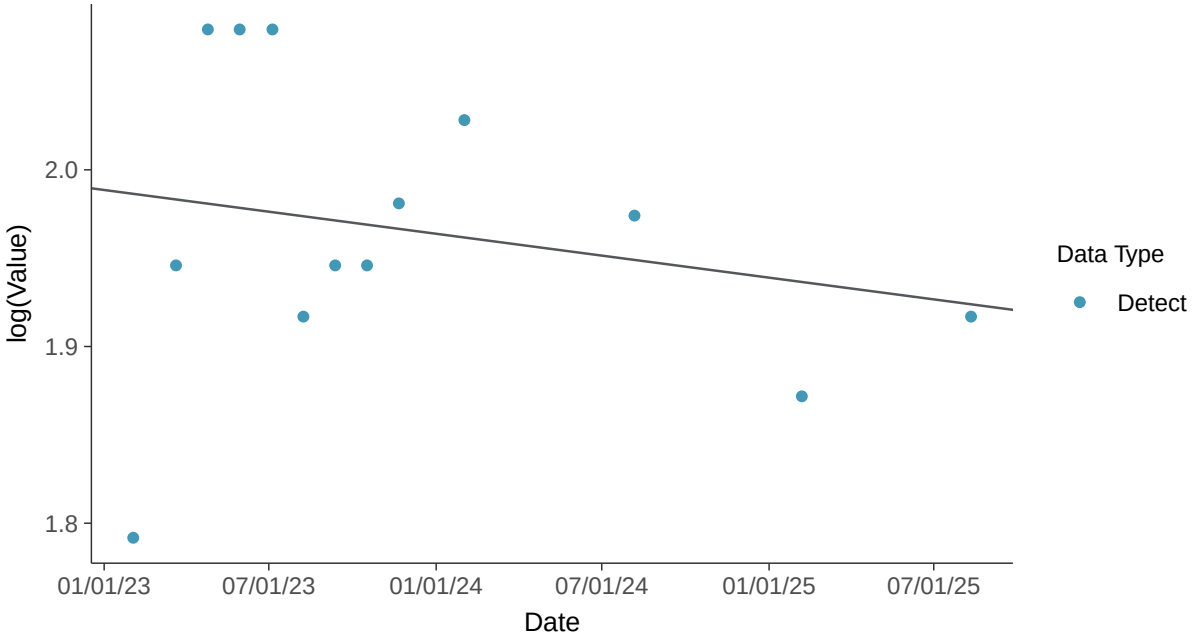
Gamma Q-Q plot

Chloride, MW-16D (mg/l)



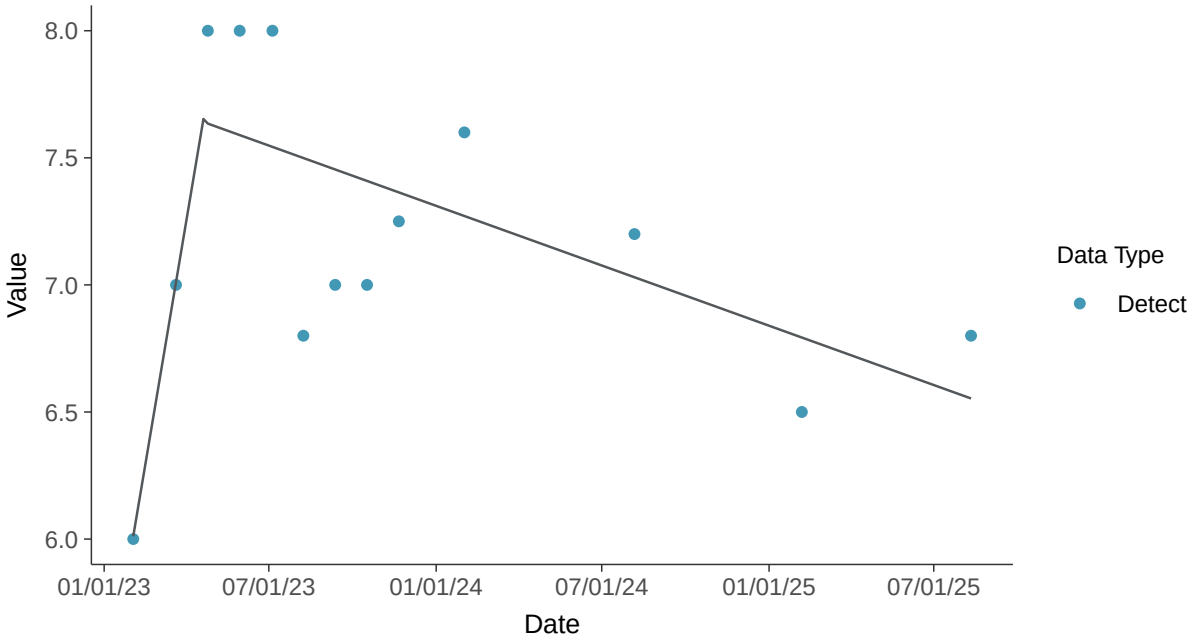
Trend Regression: Lognormal MLE

Chloride, MW-16D (mg/l)



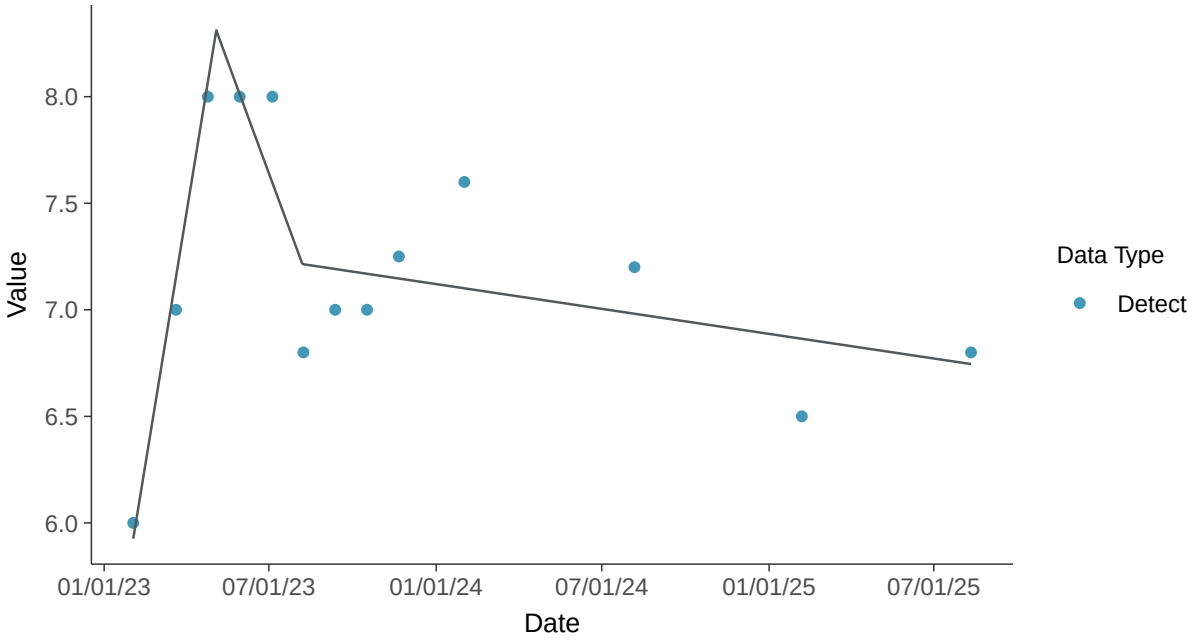
Trend Regression: Piecewise Linear-Linear

Chloride, MW-16D (mg/l)



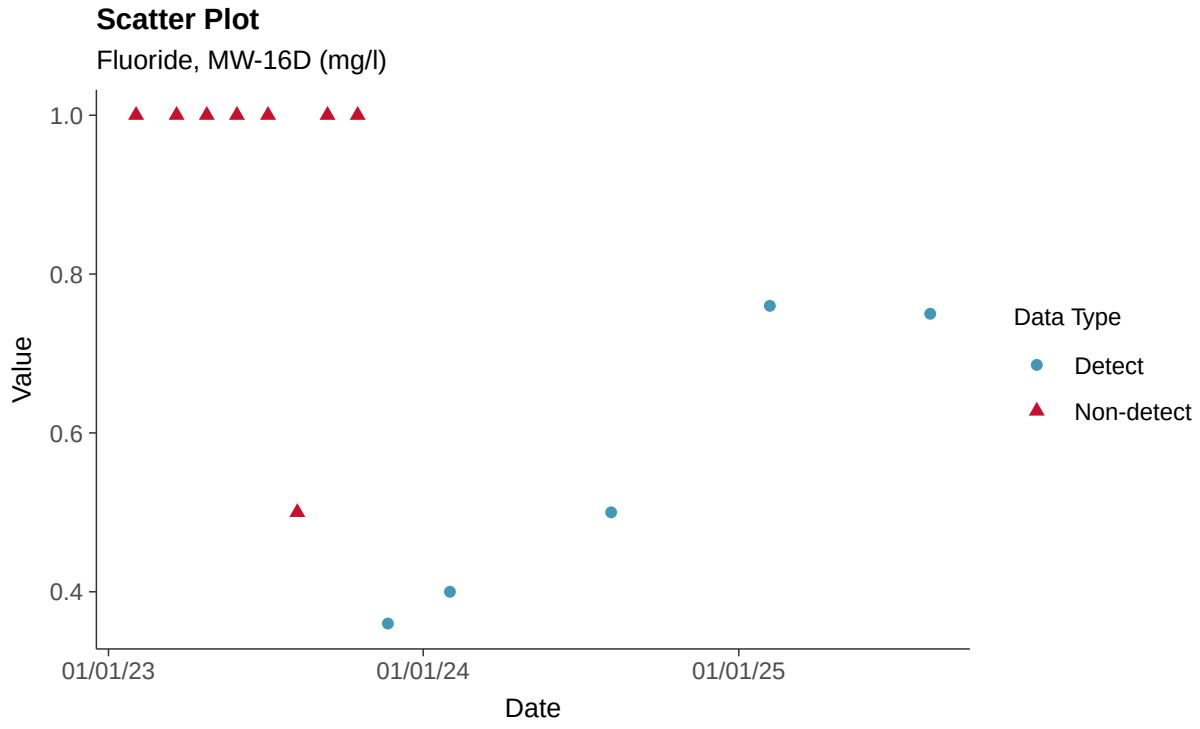
Trend Regression: Piecewise Linear-Linear-Linear

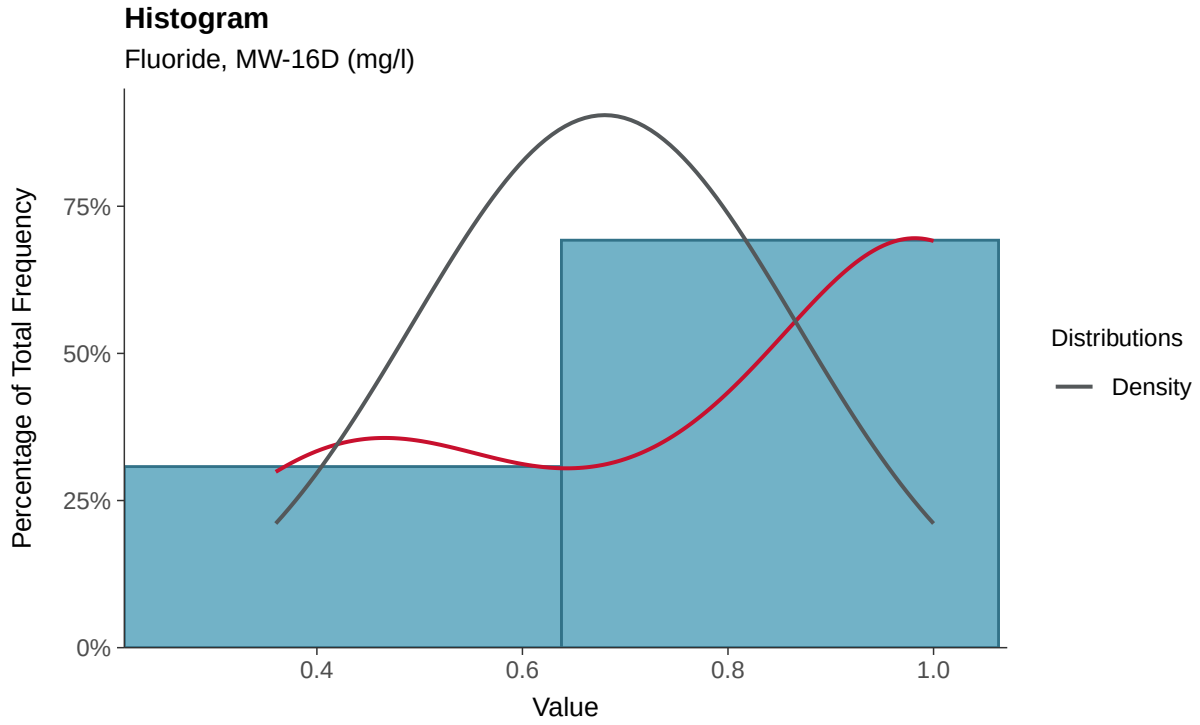
Chloride, MW-16D (mg/l)



Appendix III: Fluoride, MW-16D

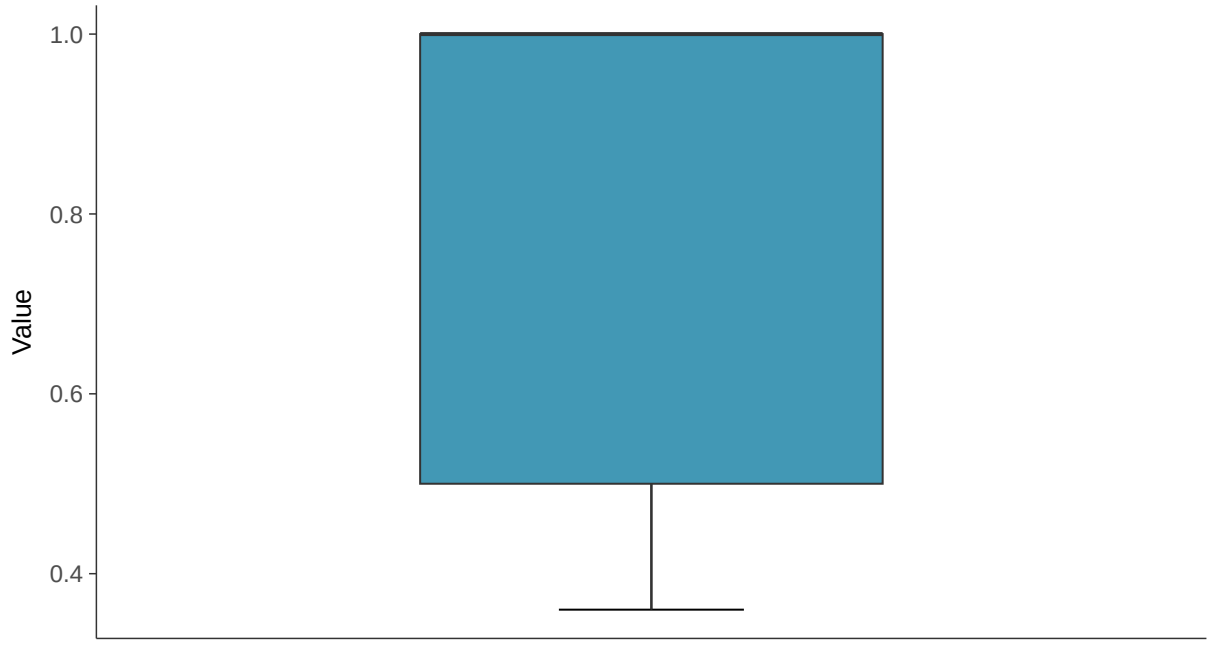
ID: 15_2_112





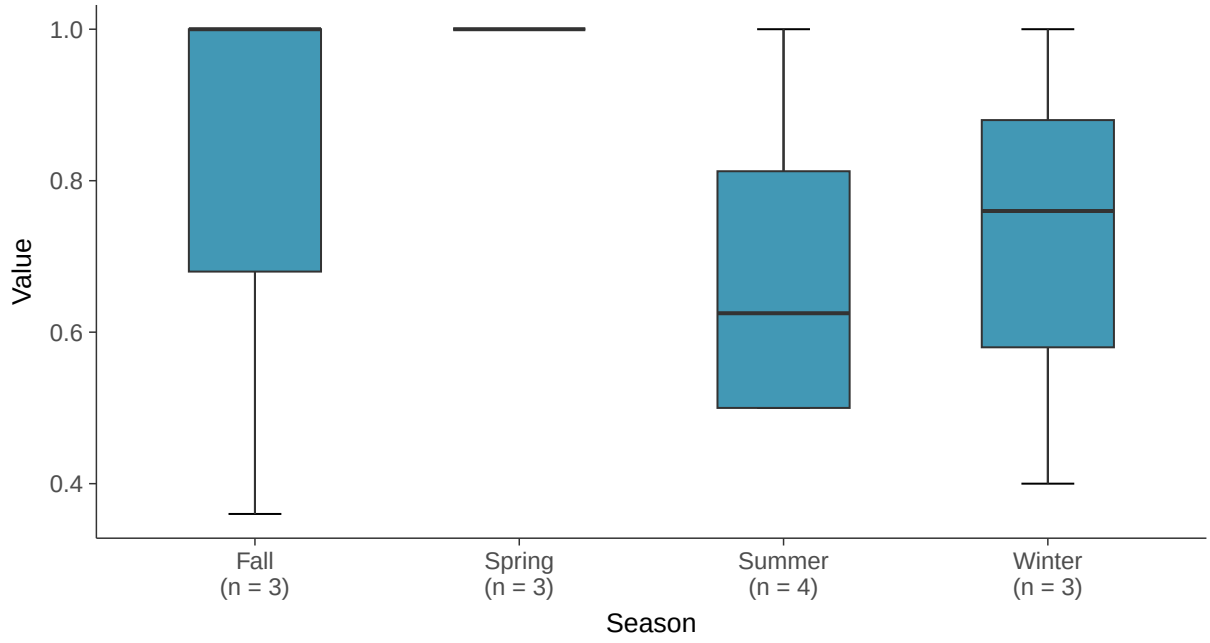
Boxplot

Fluoride, MW-16D (mg/l)



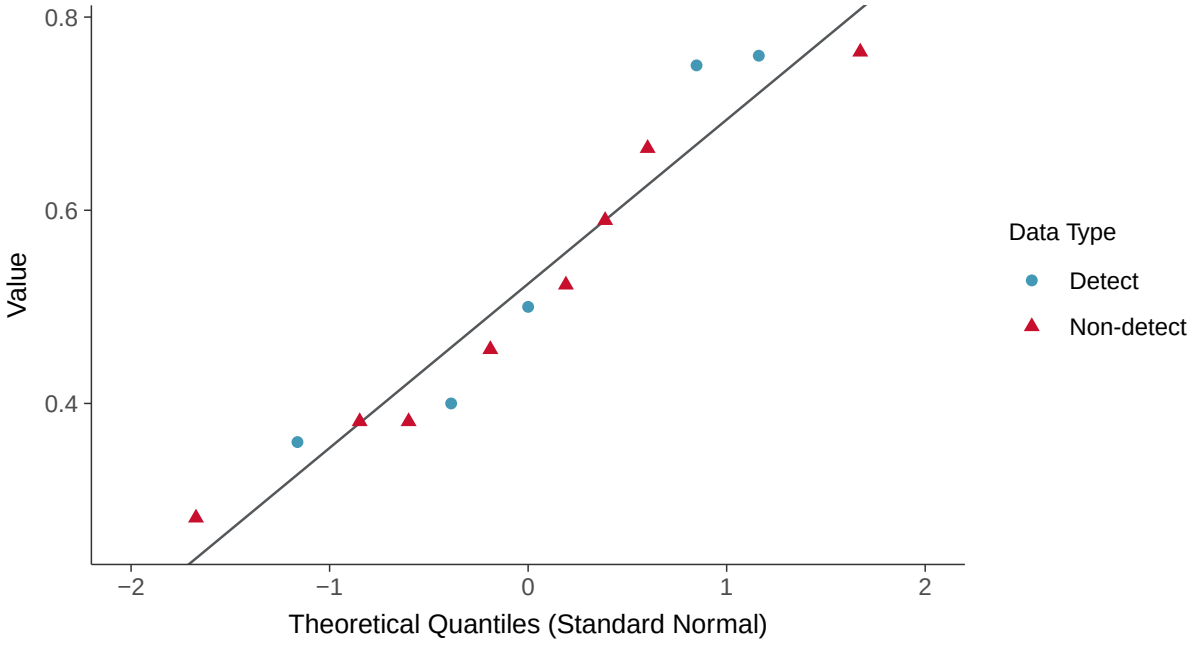
Boxplot by Season

Fluoride, MW-16D (mg/l)



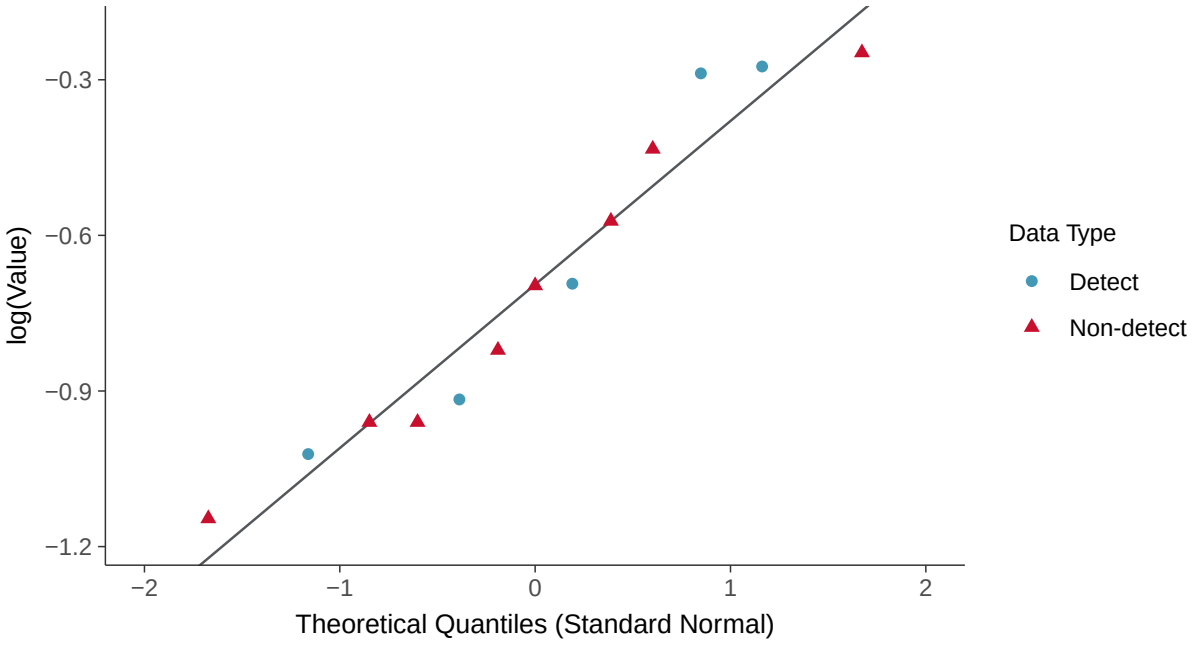
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-16D (mg/l)



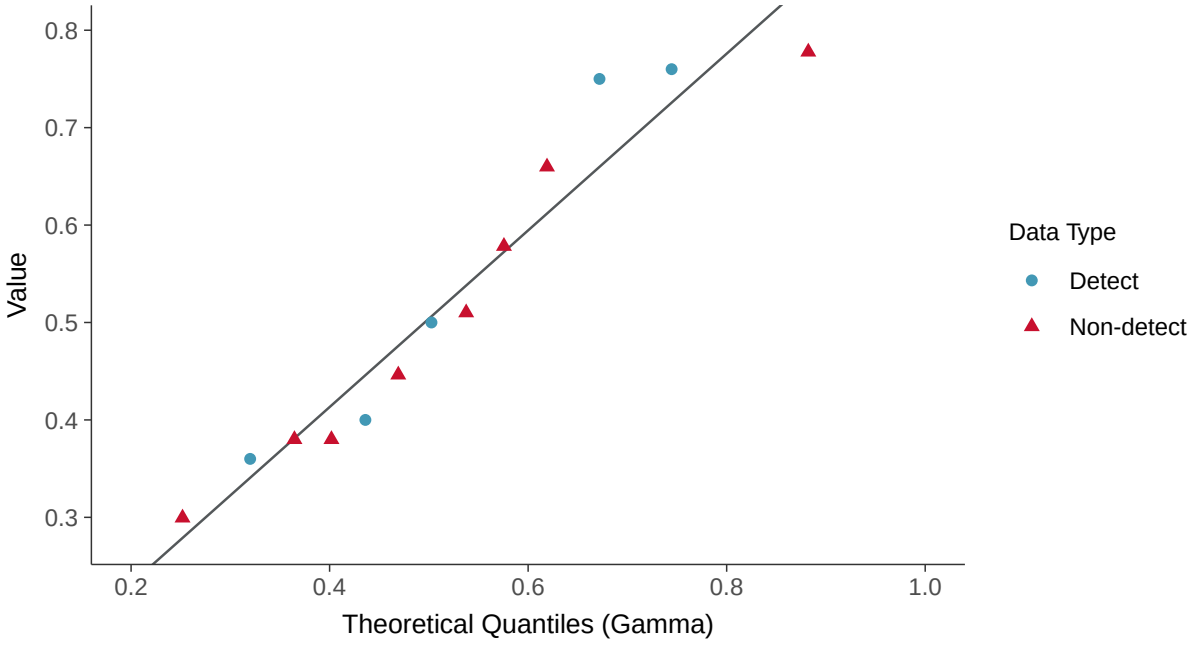
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-16D (mg/l)



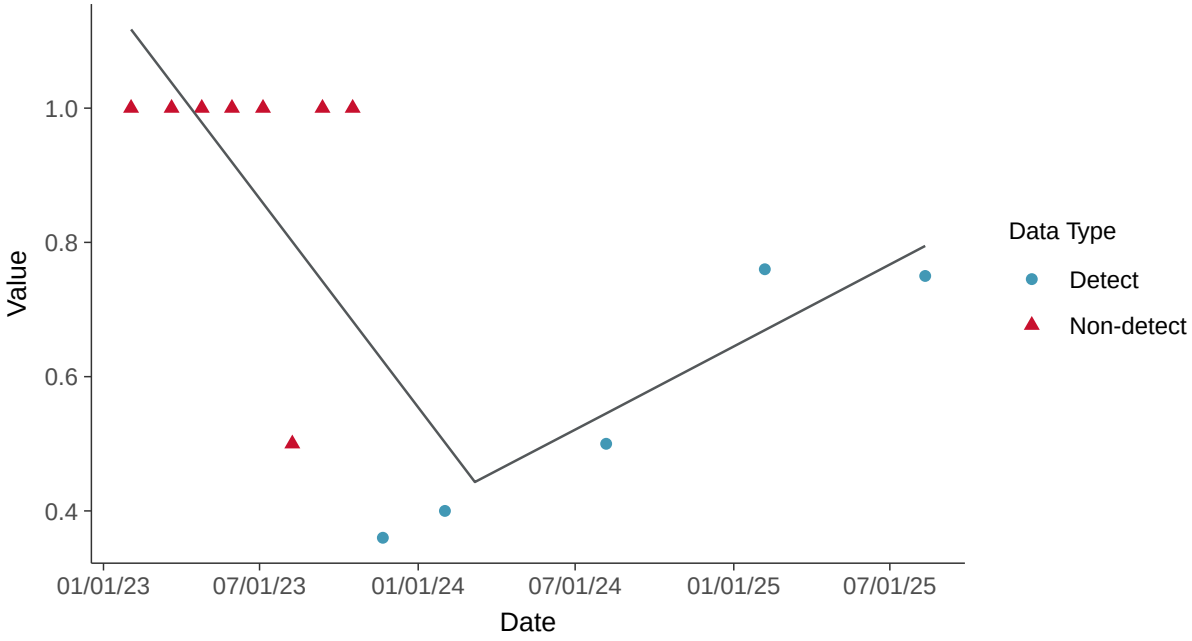
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-16D (mg/l)



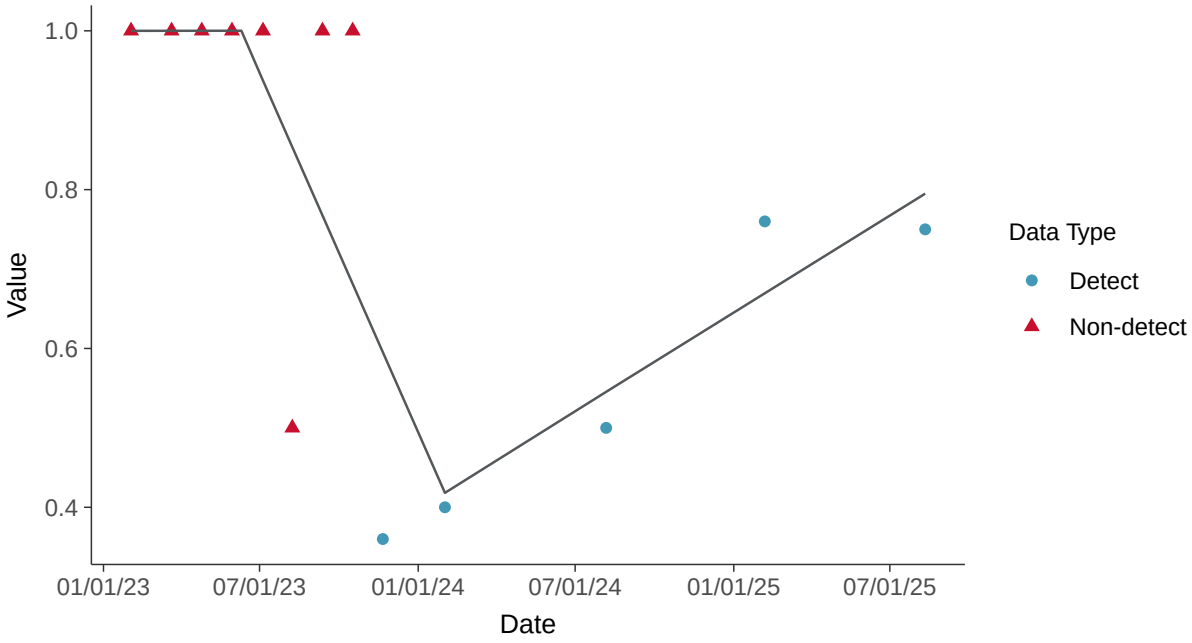
Trend Regression: Piecewise Linear-Linear

Fluoride, MW-16D (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Fluoride, MW-16D (mg/l)

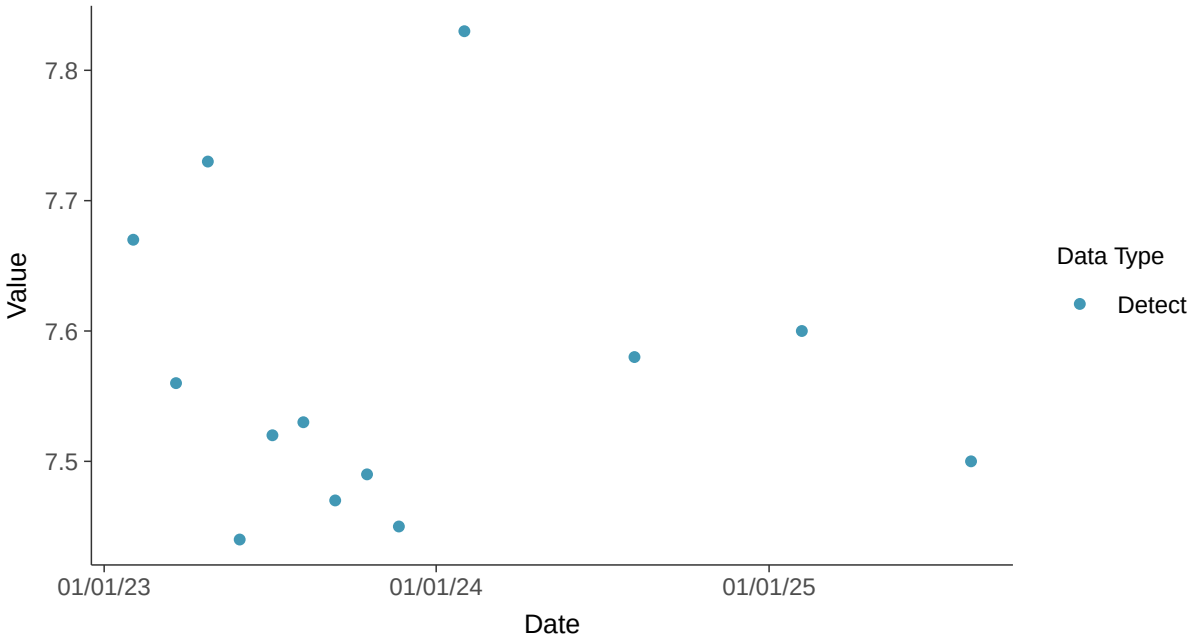


Appendix III: pH, Field, MW-16D

ID: 15_2_120

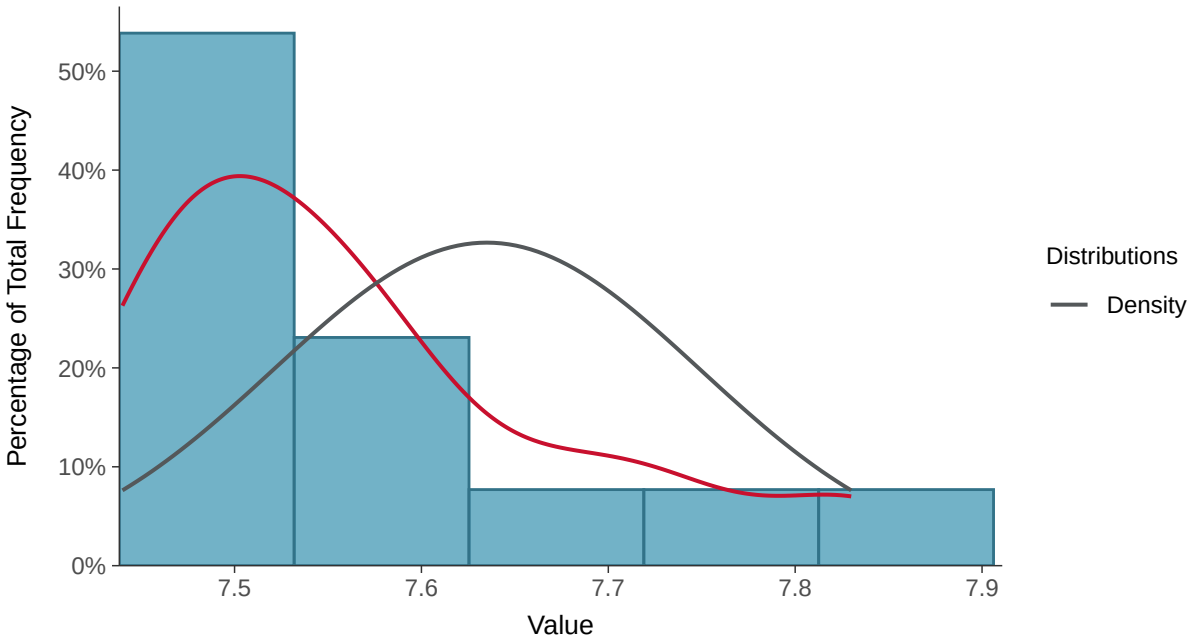
Scatter Plot

pH, Field, MW-16D (su)



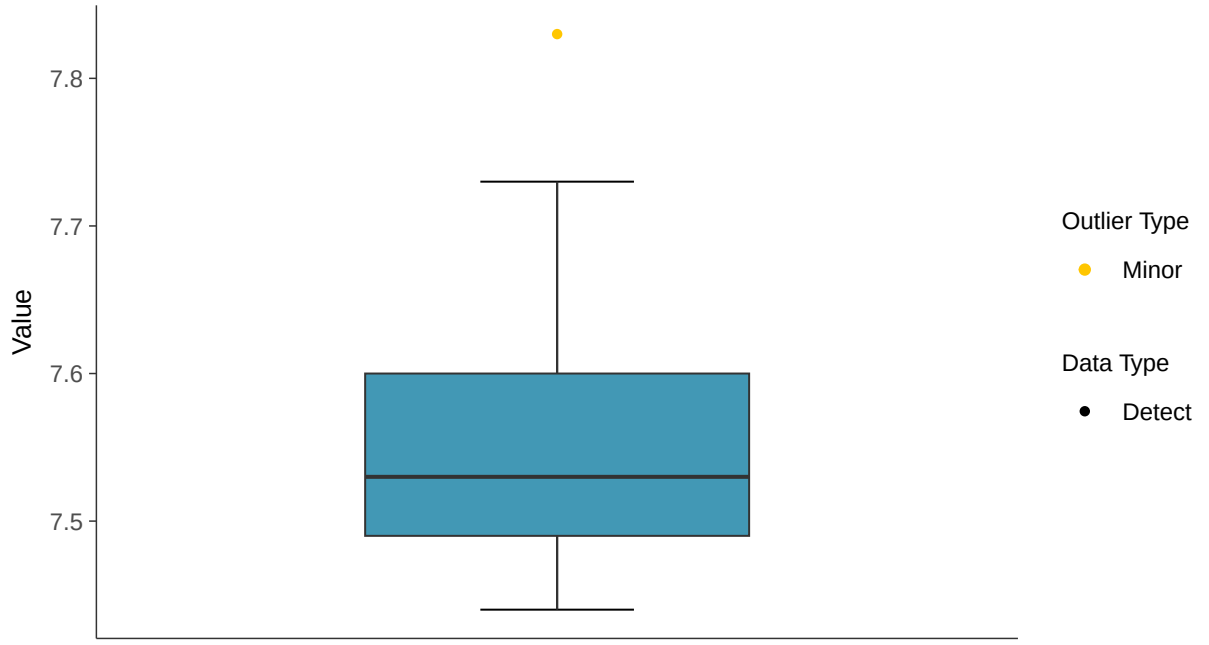
Histogram

pH, Field, MW-16D (su)



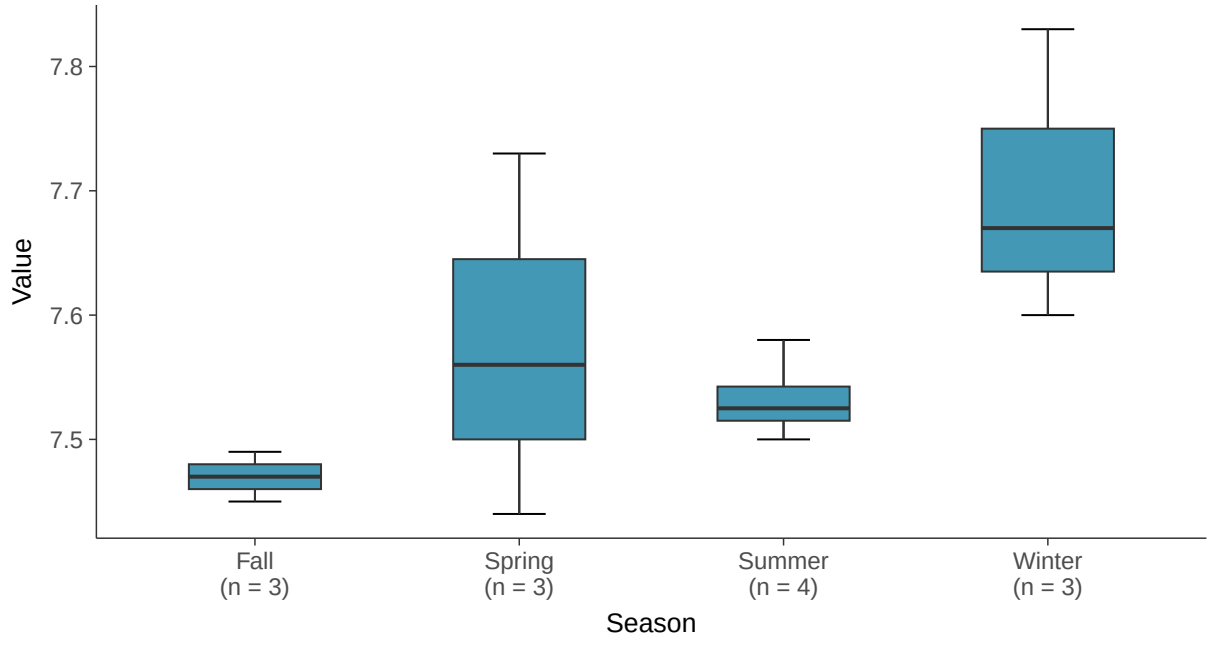
Boxplot

pH, Field, MW-16D (su)



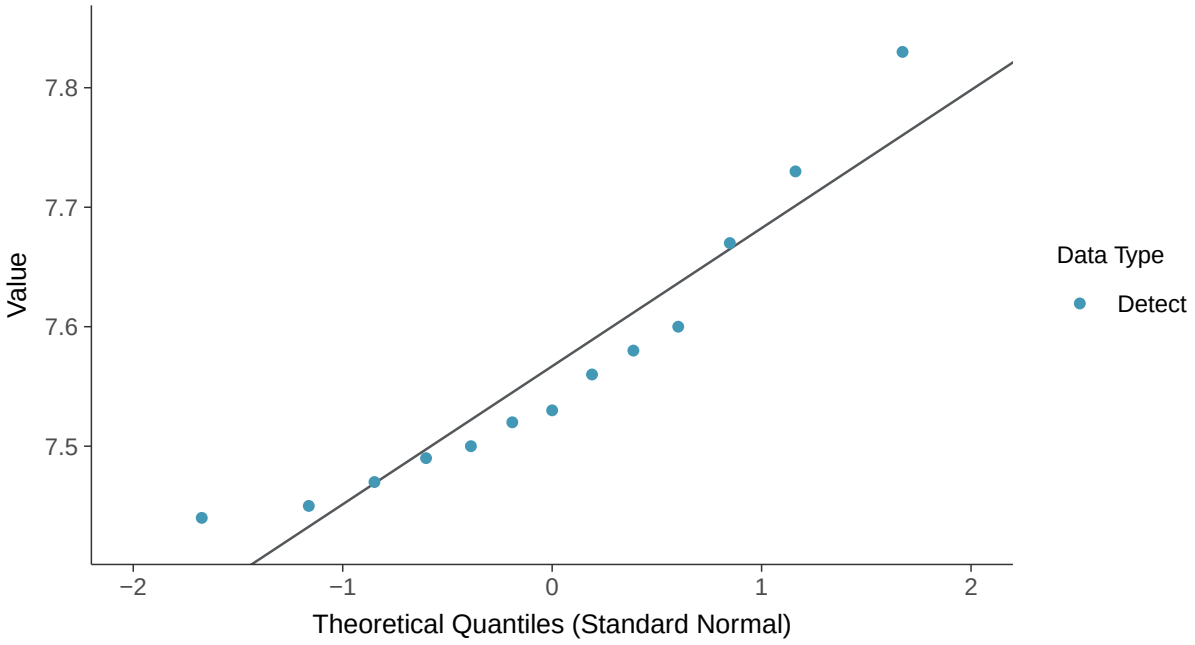
Boxplot by Season

pH, Field, MW-16D (su)



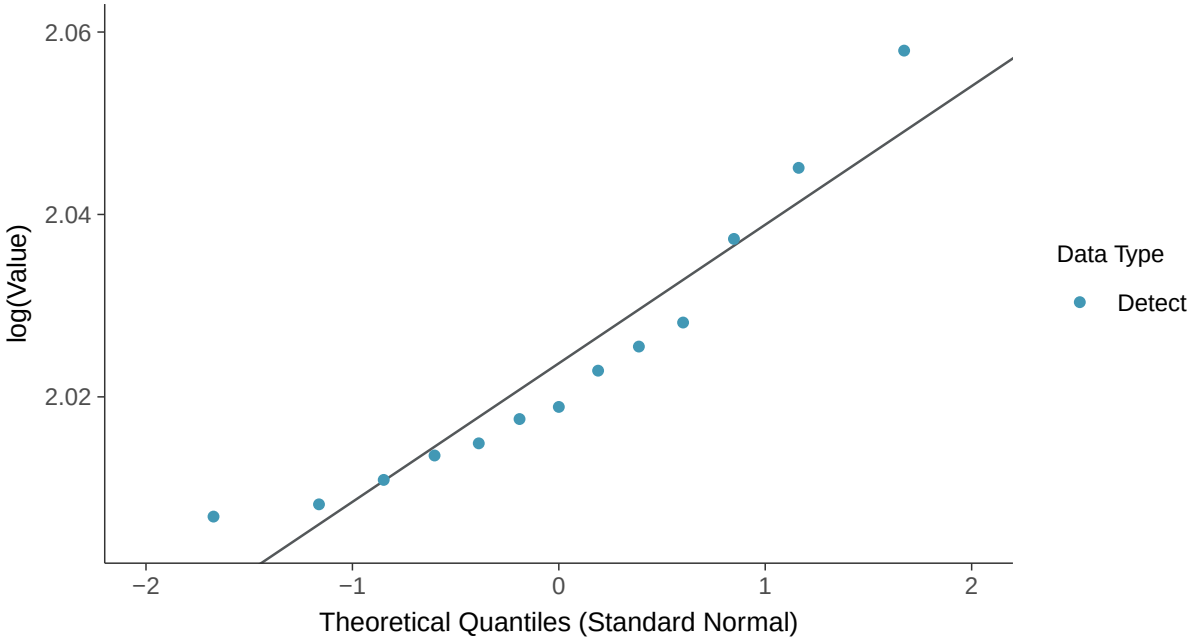
Normal Q-Q plot

pH, Field, MW-16D (su)



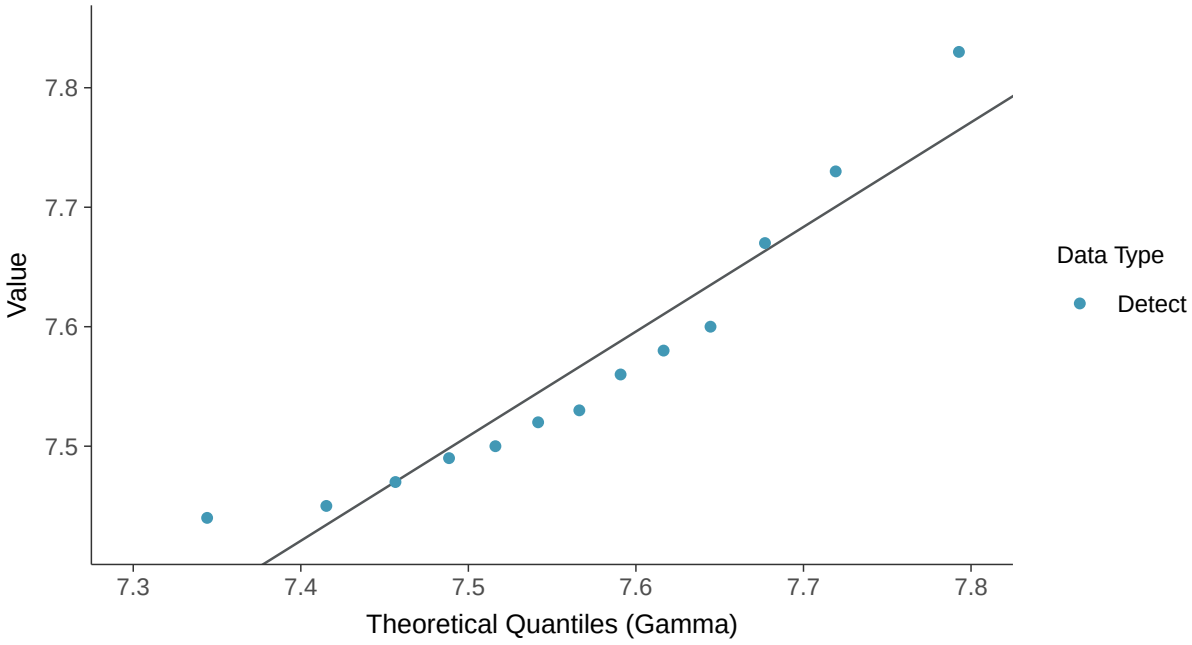
Lognormal Q-Q plot

pH, Field, MW-16D (su)



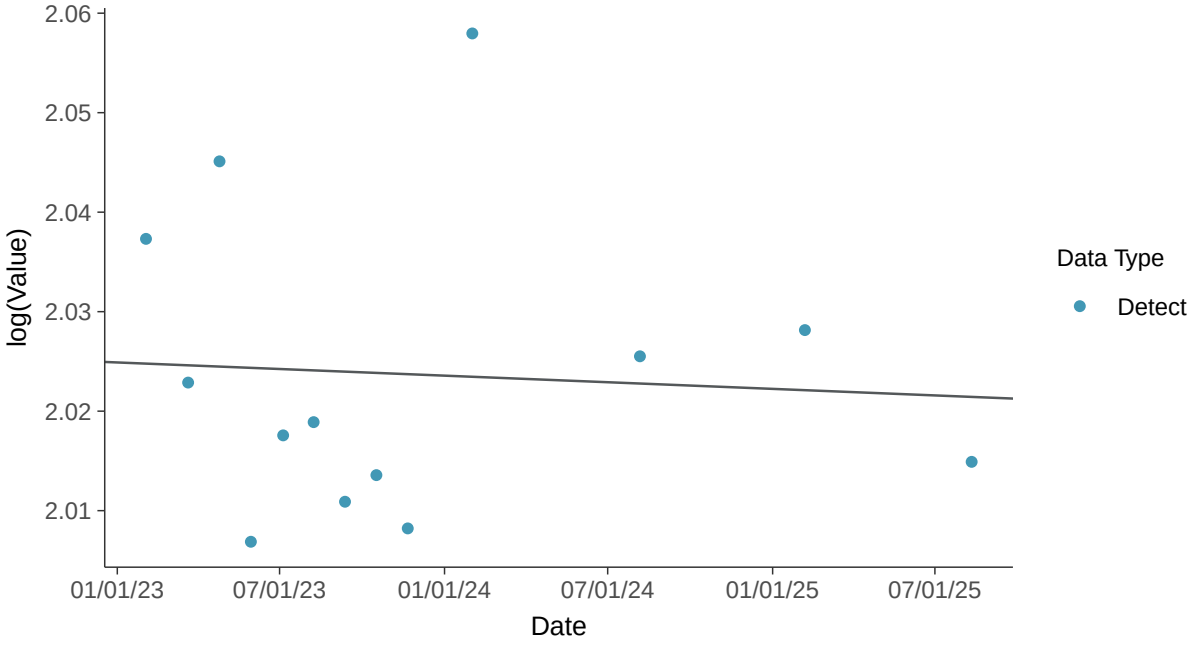
Gamma Q-Q plot

pH, Field, MW-16D (su)



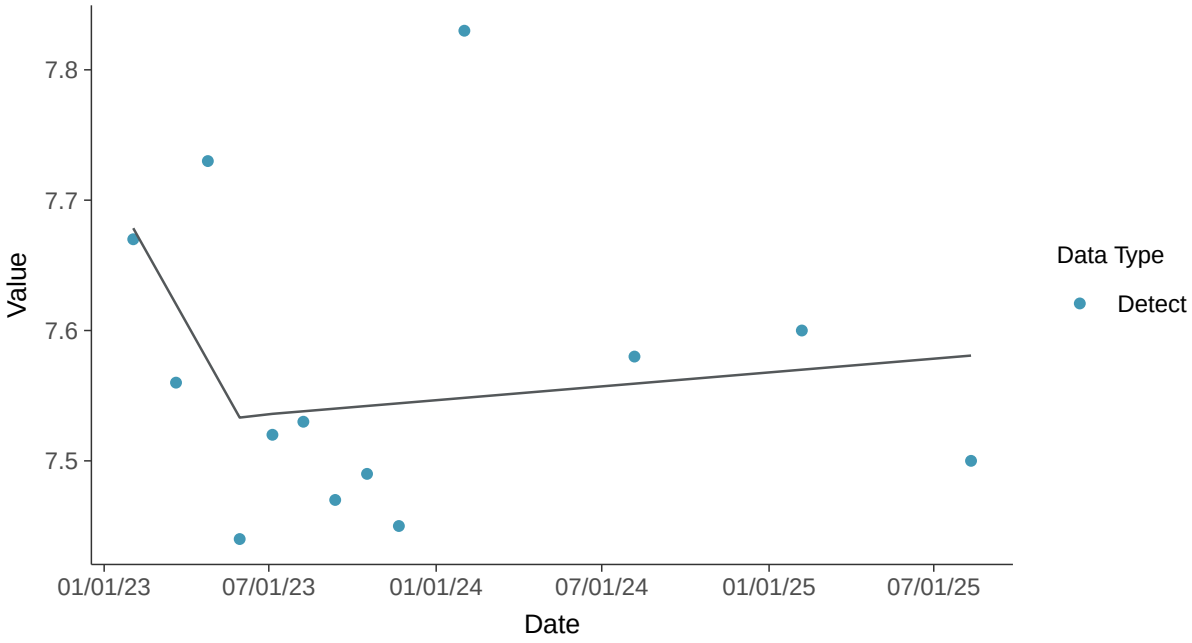
Trend Regression: Lognormal MLE

pH, Field, MW-16D (su)



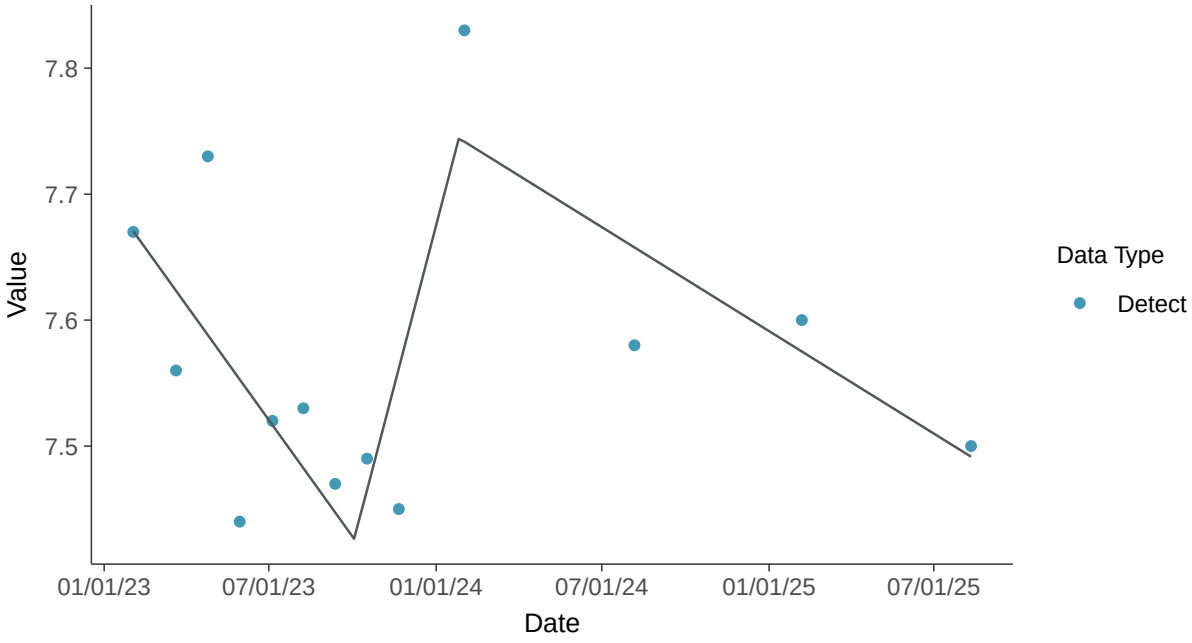
Trend Regression: Piecewise Linear-Linear

pH, Field, MW-16D (su)



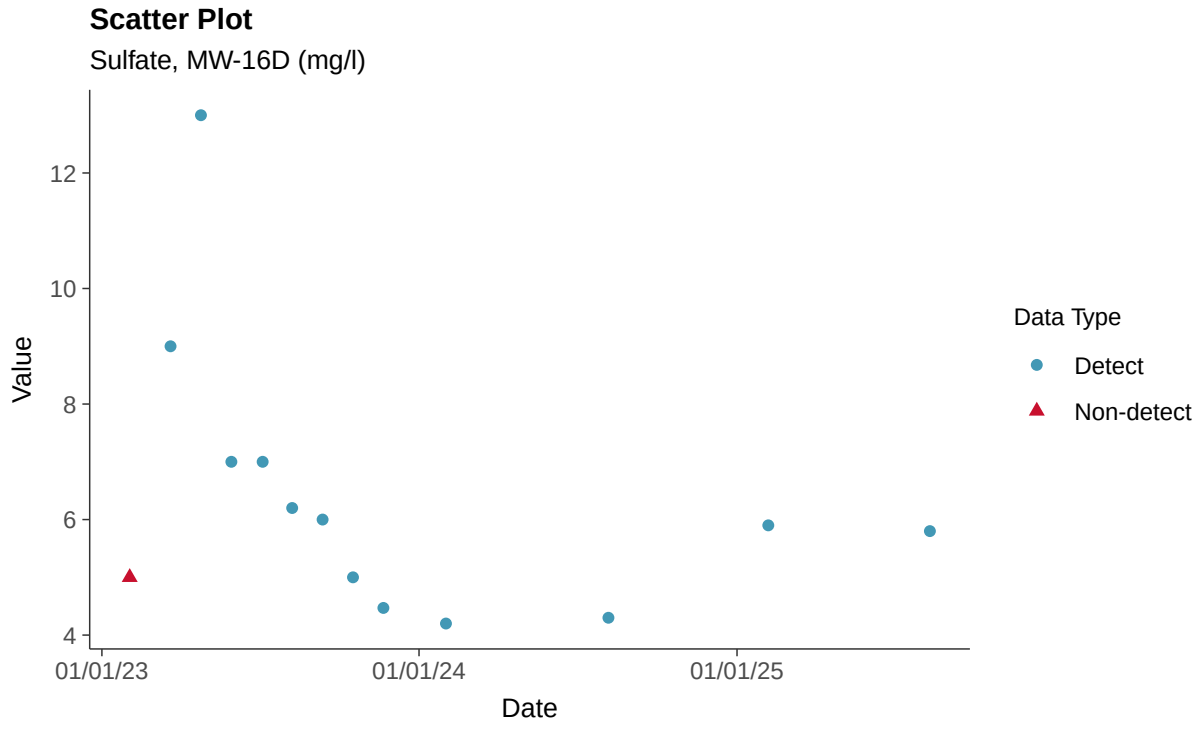
Trend Regression: Piecewise Linear-Linear-Linear

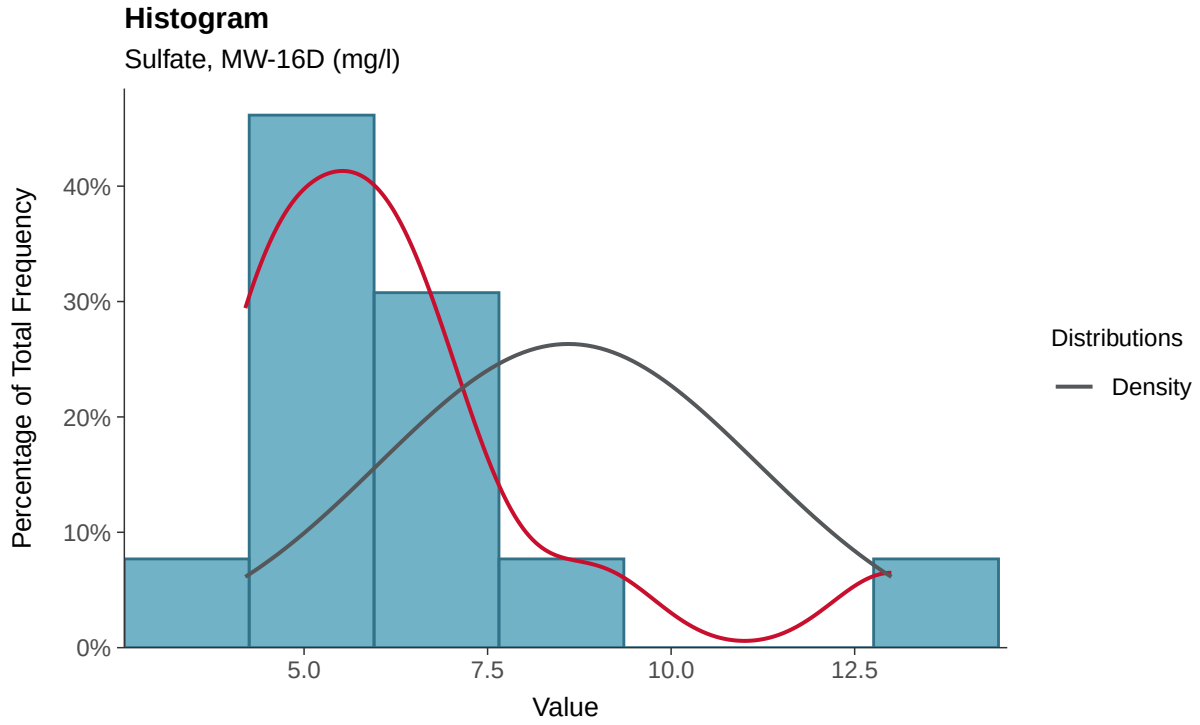
pH, Field, MW-16D (su)



Appendix III: Sulfate, MW-16D

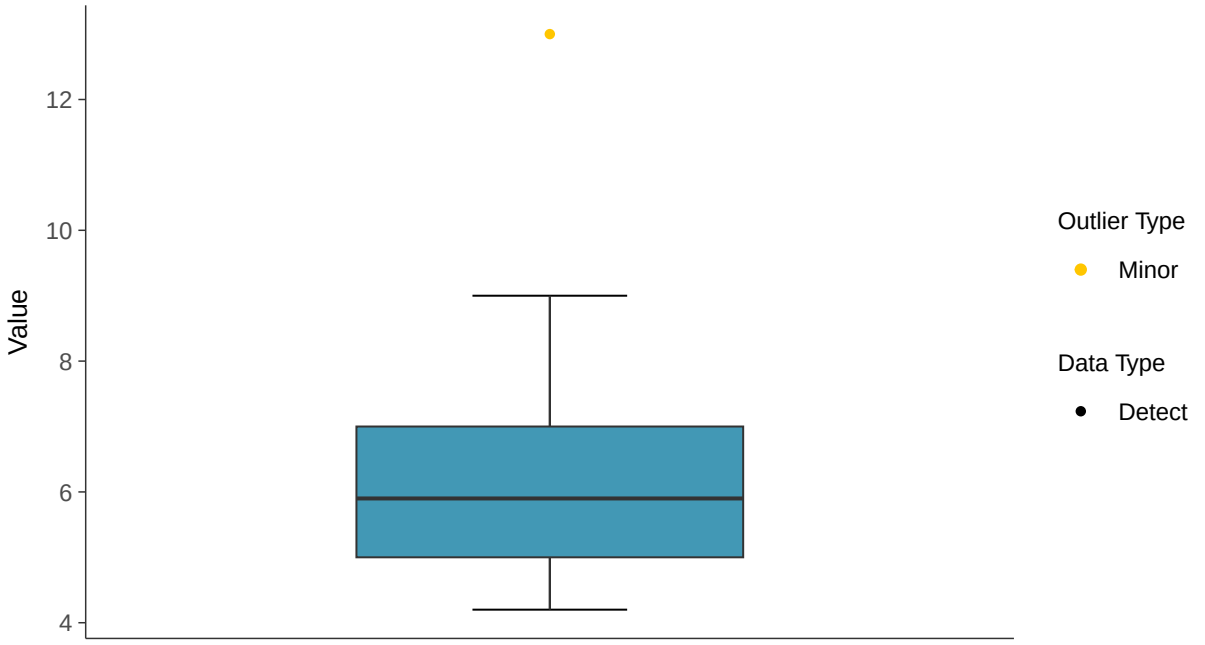
ID: 15_2_124





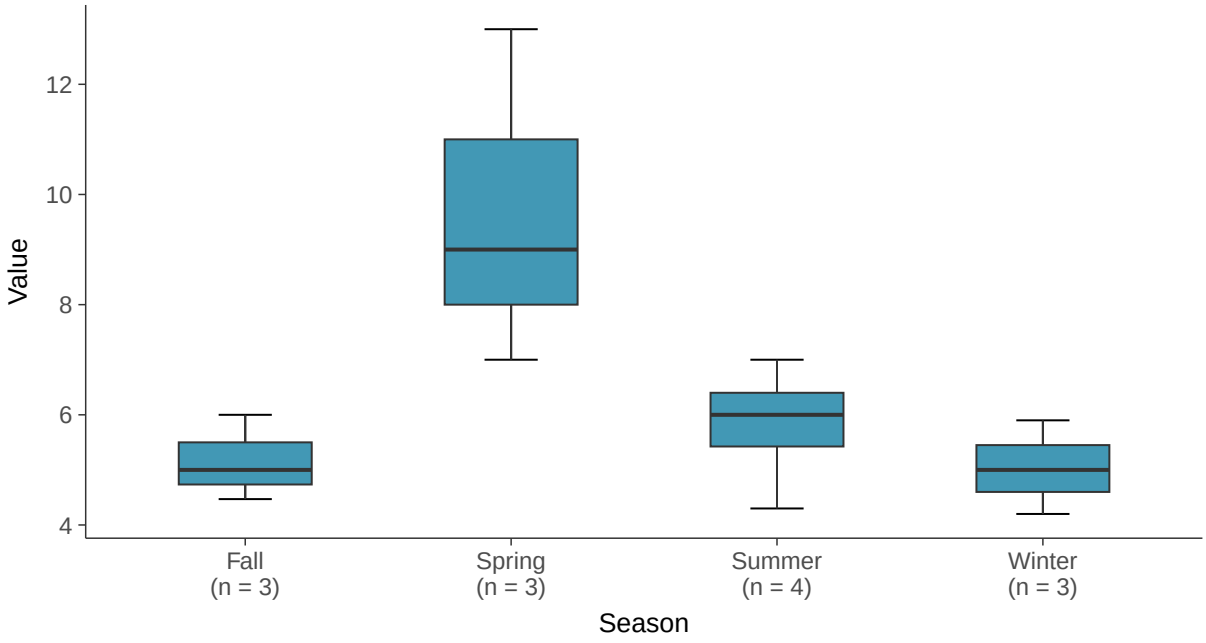
Boxplot

Sulfate, MW-16D (mg/l)



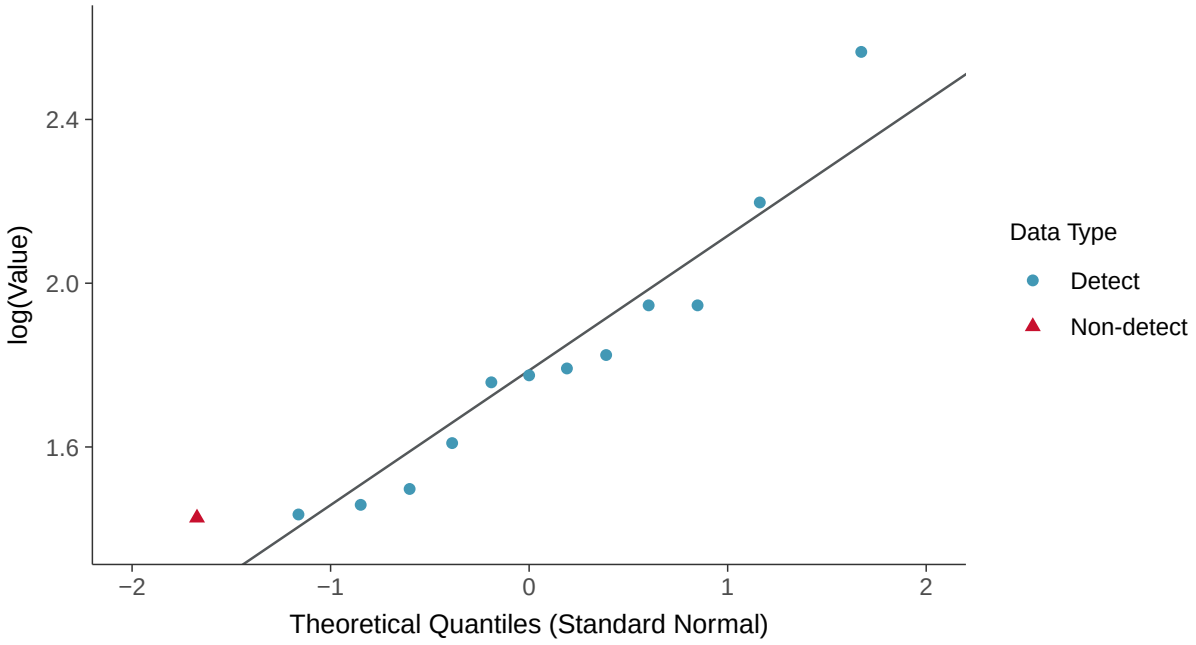
Boxplot by Season

Sulfate, MW-16D (mg/l)



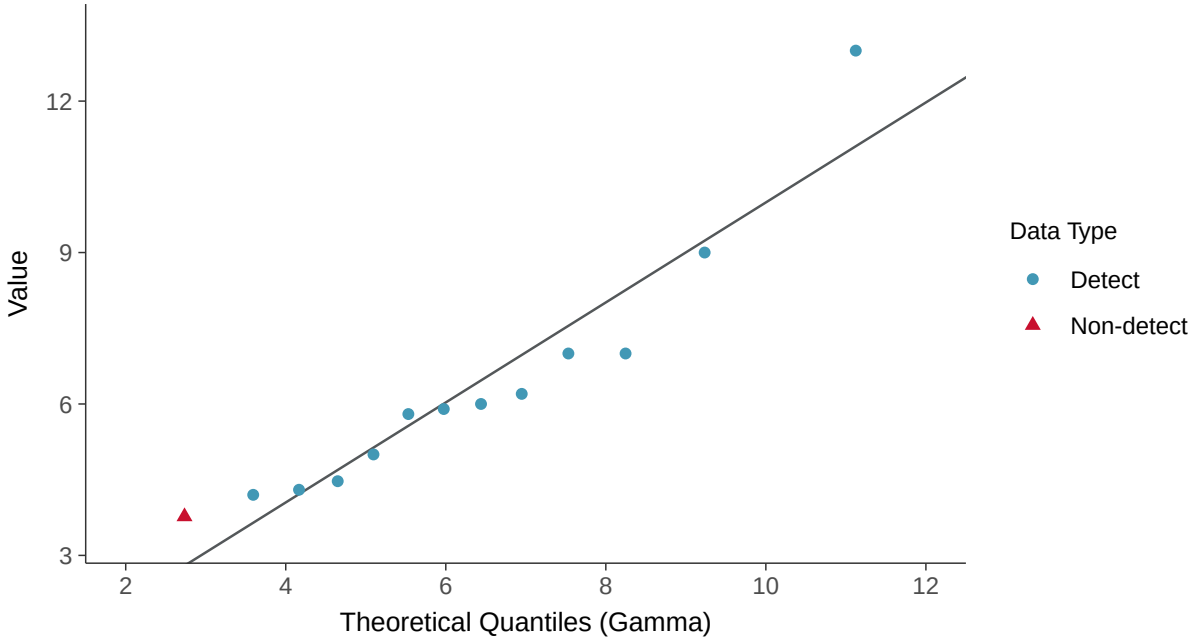
Lognormal Q-Q plot using ROS Imputed Estimates

Sulfate, MW-16D (mg/l)



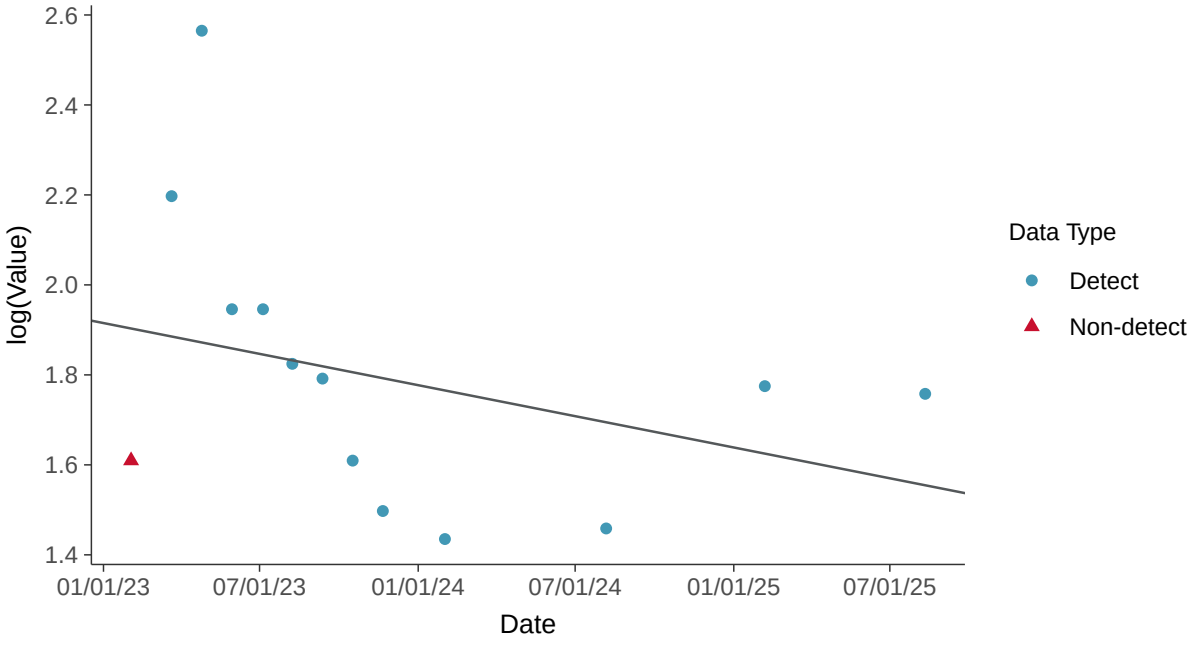
Gamma Q-Q plot using ROS Imputed Estimates

Sulfate, MW-16D (mg/l)



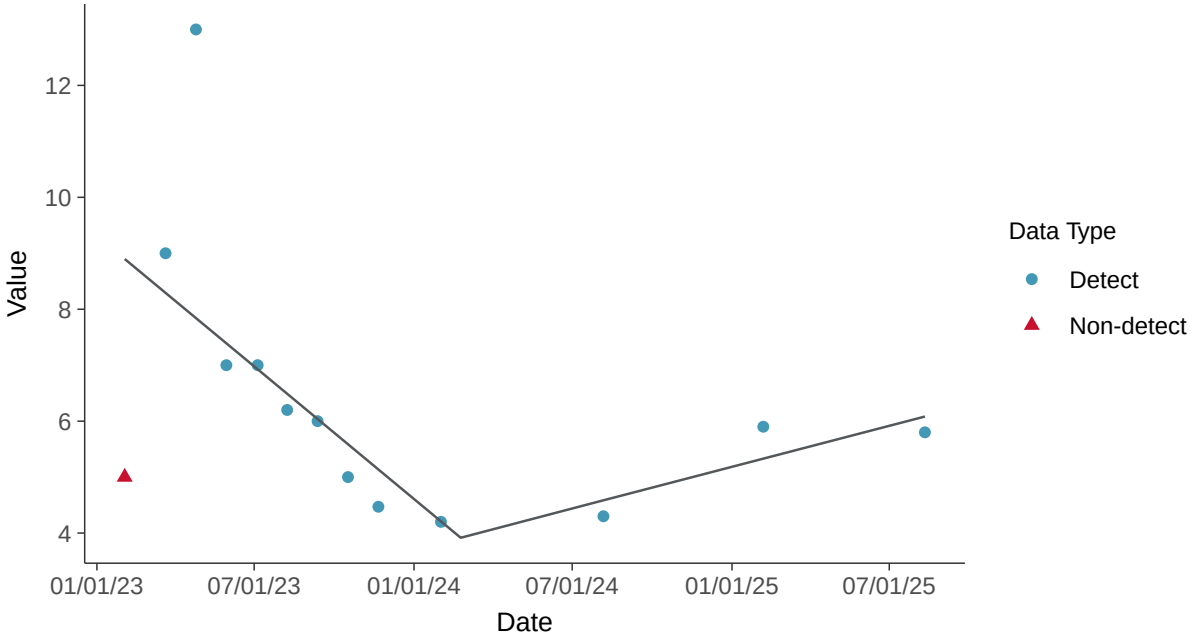
Trend Regression: Lognormal MLE

Sulfate, MW-16D (mg/l)



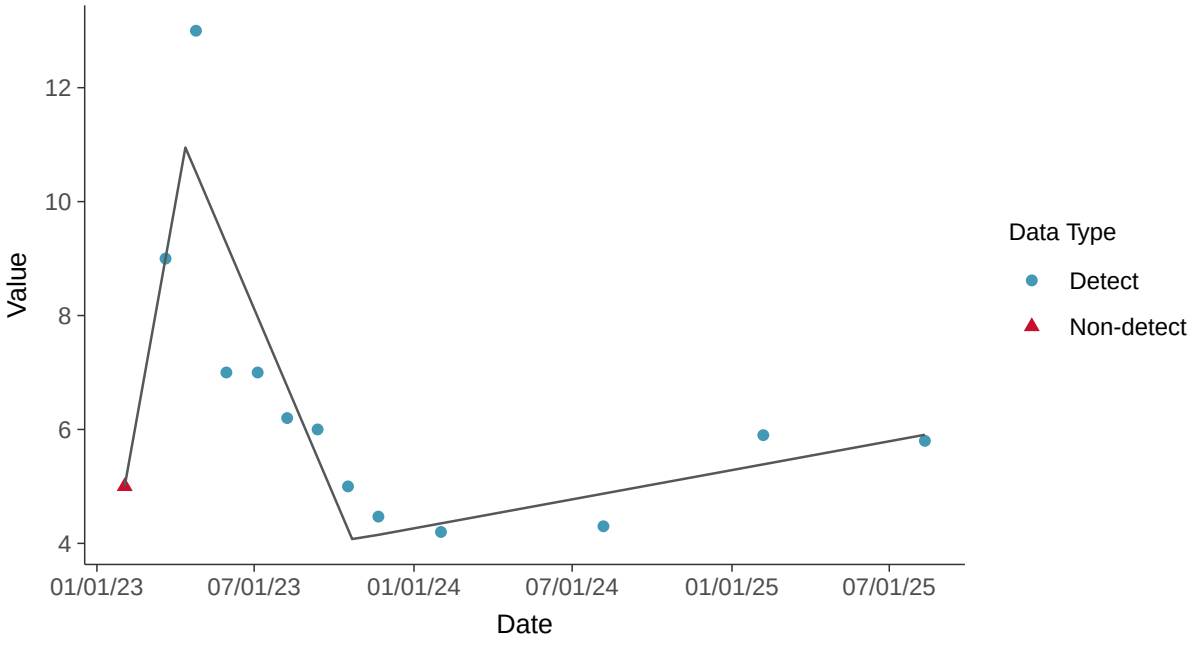
Trend Regression: Piecewise Linear-Linear

Sulfate, MW-16D (mg/l)



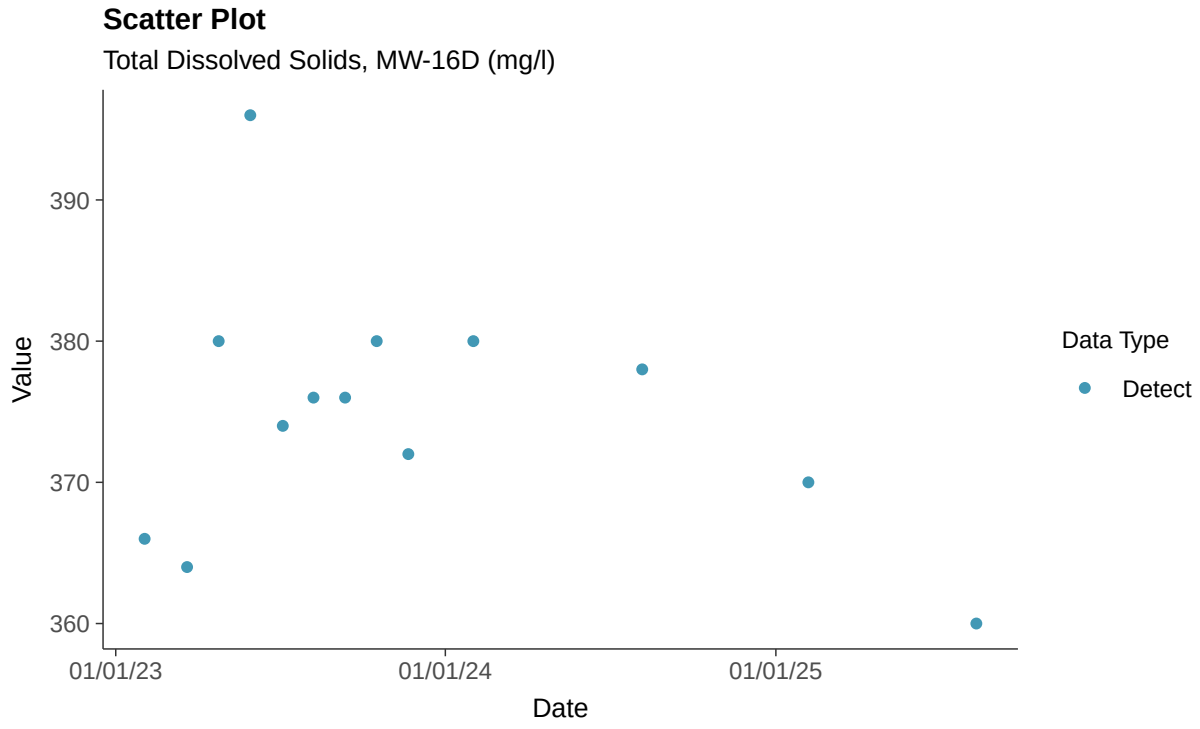
Trend Regression: Piecewise Linear-Linear-Linear

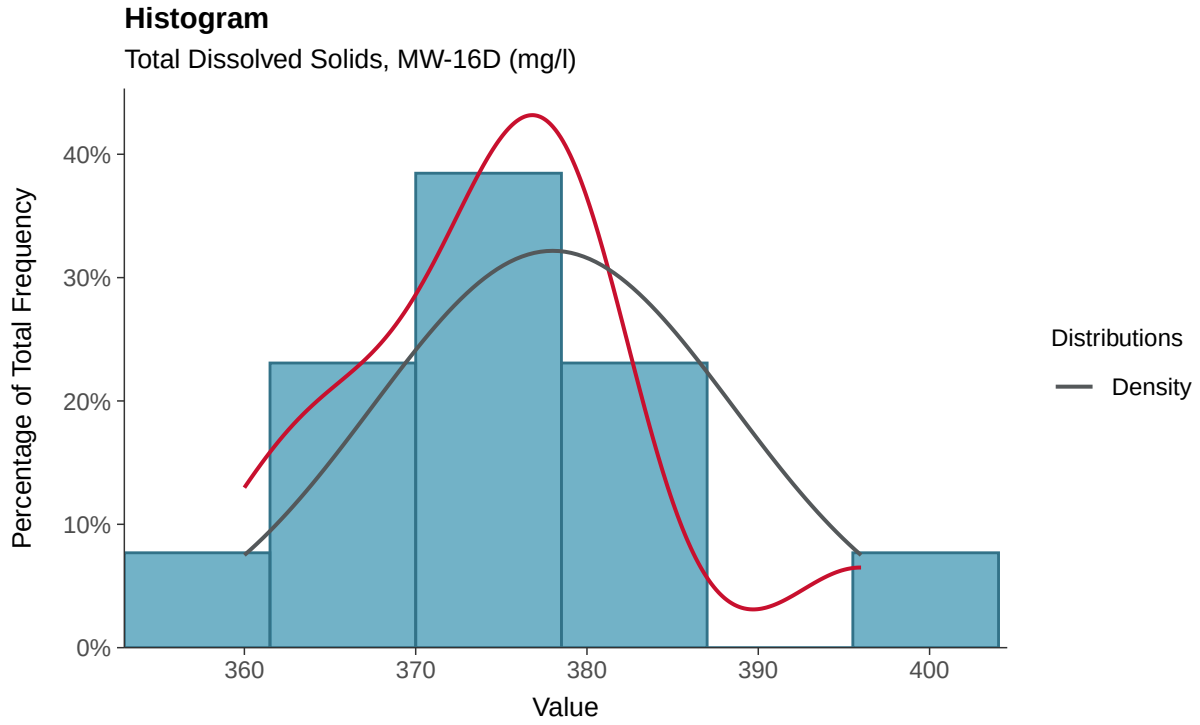
Sulfate, MW-16D (mg/l)



Appendix III: Total Dissolved Solids, MW-16D

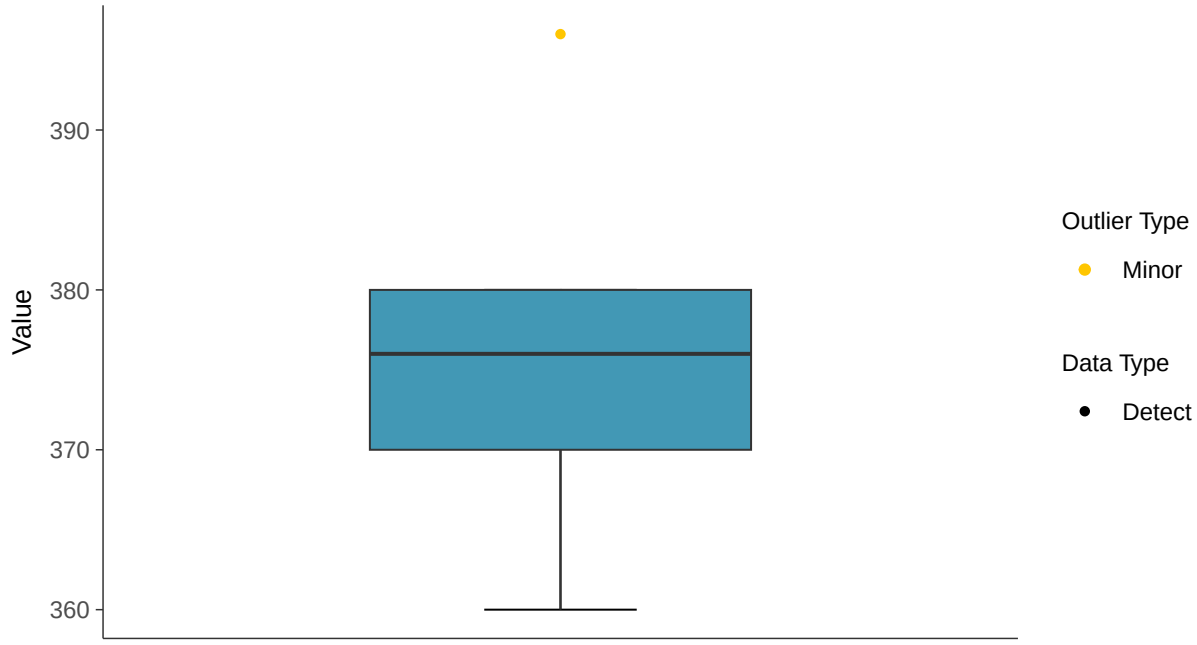
ID: 15_2_126





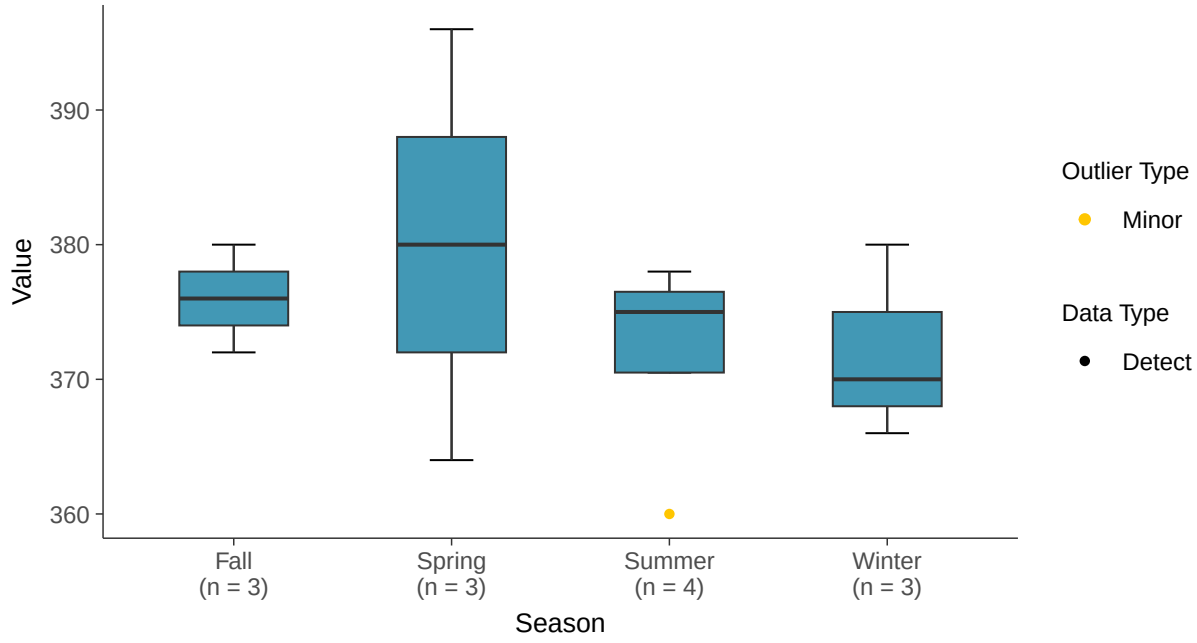
Boxplot

Total Dissolved Solids, MW-16D (mg/l)



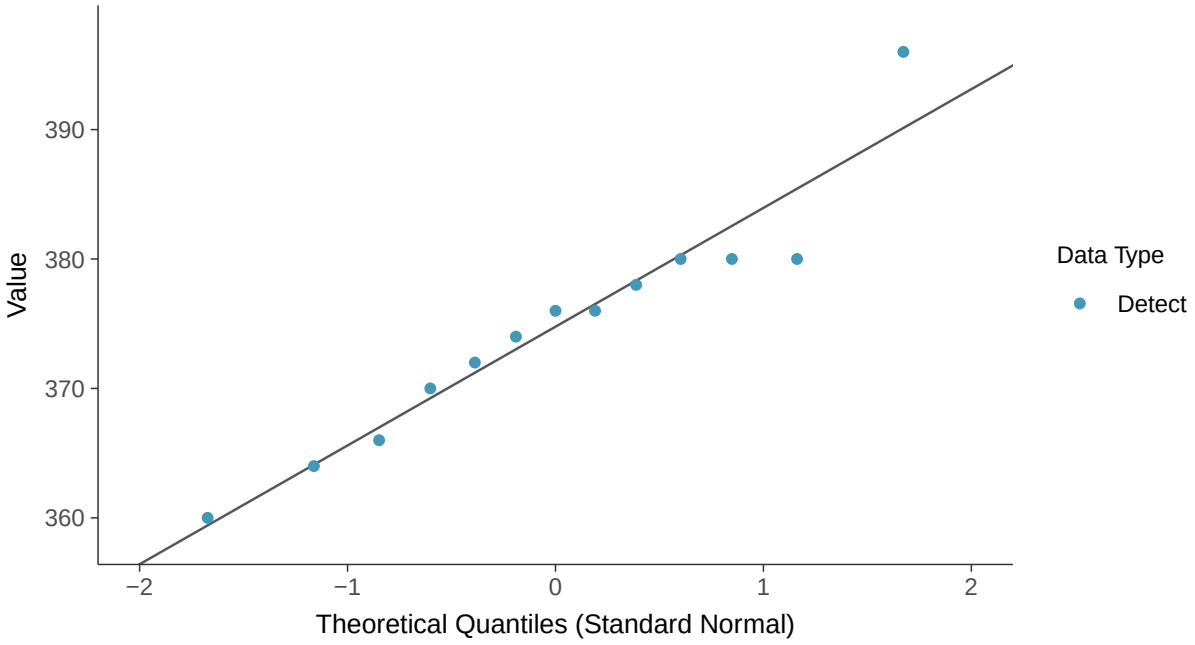
Boxplot by Season

Total Dissolved Solids, MW-16D (mg/l)



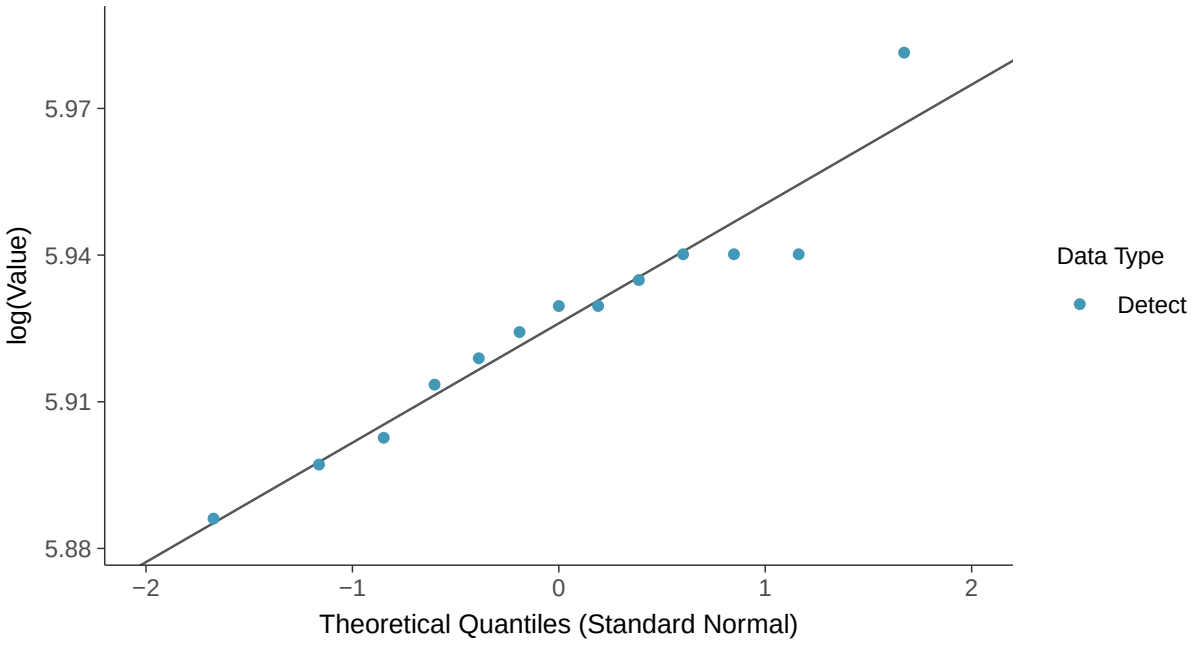
Normal Q-Q plot

Total Dissolved Solids, MW-16D (mg/l)



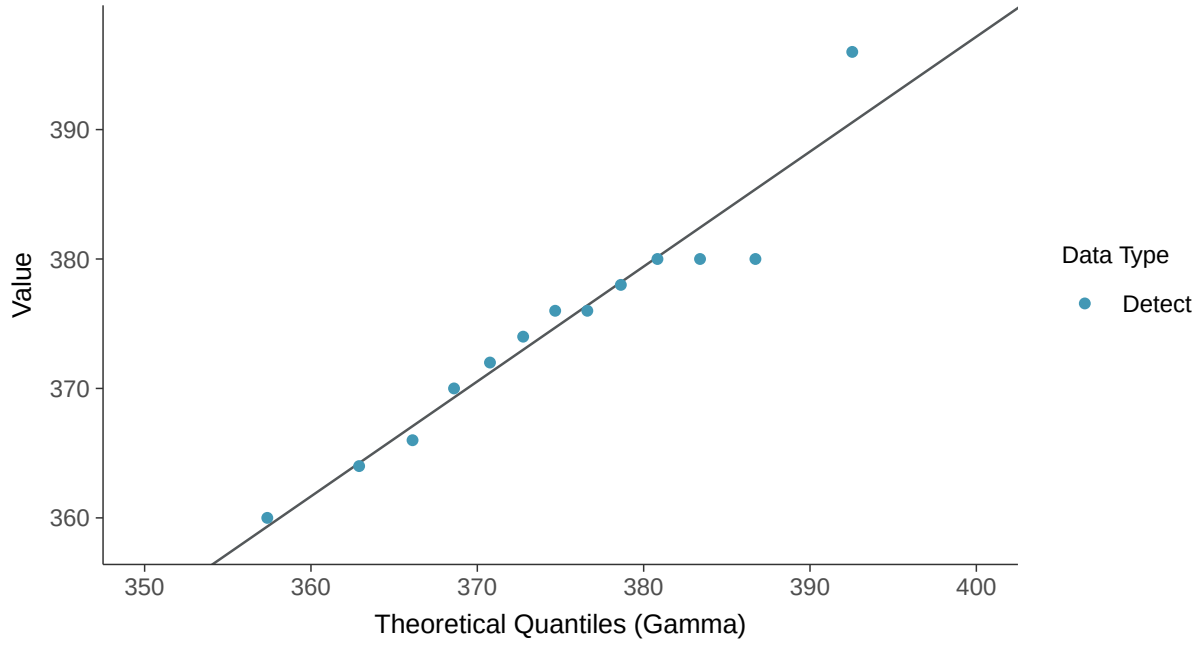
Lognormal Q-Q plot

Total Dissolved Solids, MW-16D (mg/l)



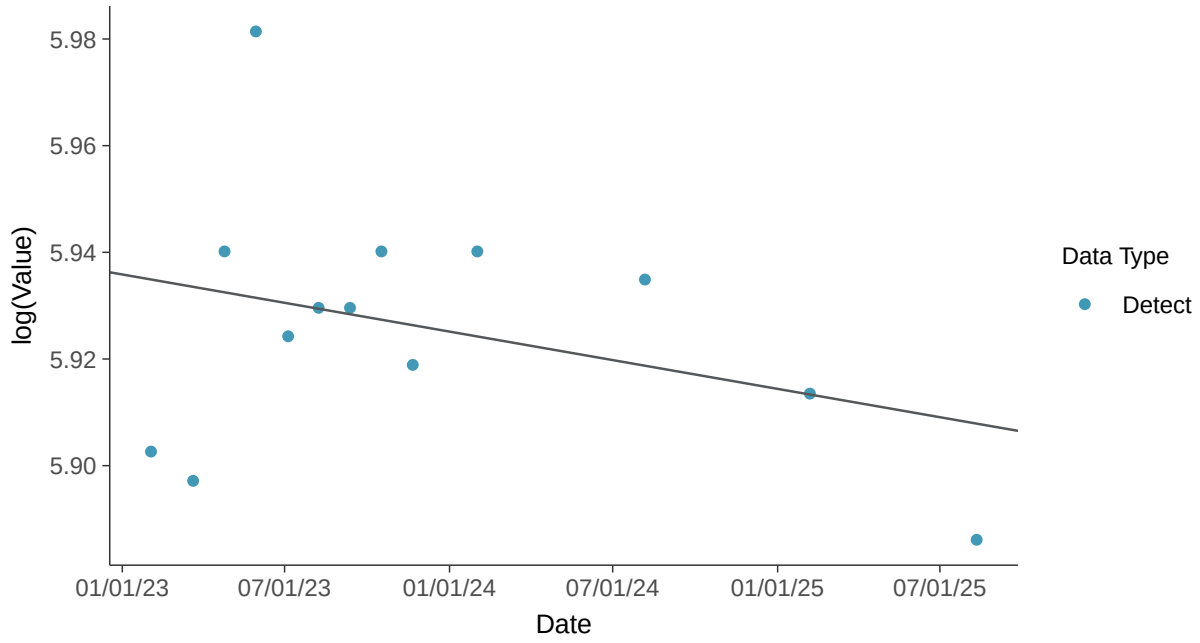
Gamma Q-Q plot

Total Dissolved Solids, MW-16D (mg/l)



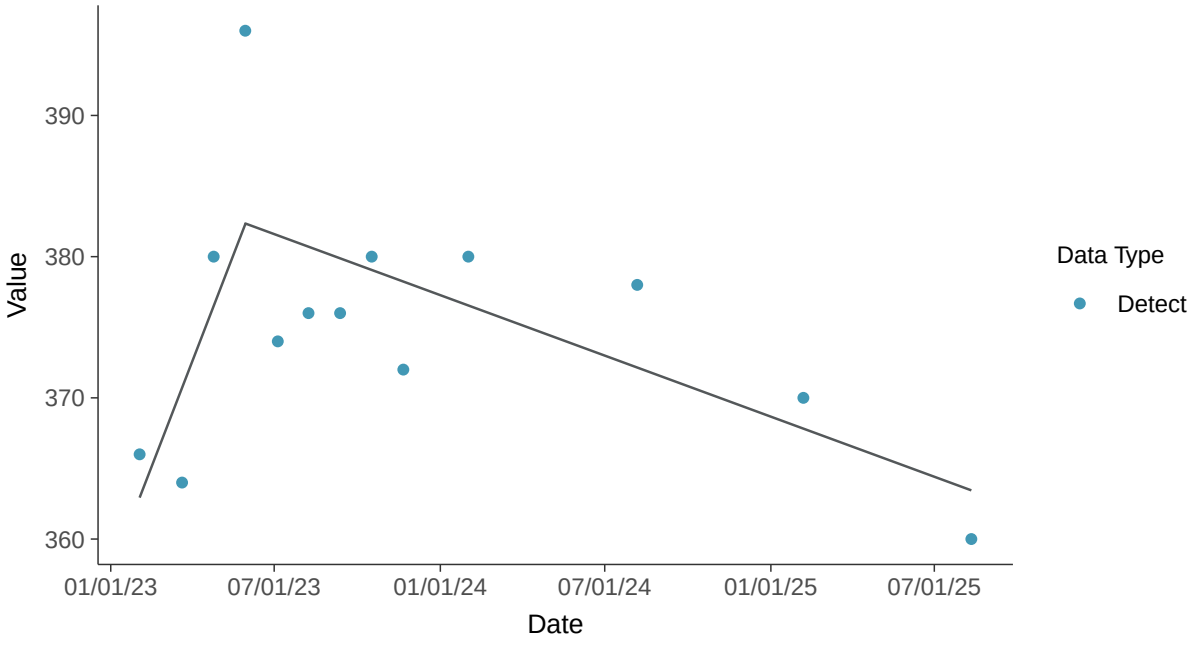
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-16D (mg/l)



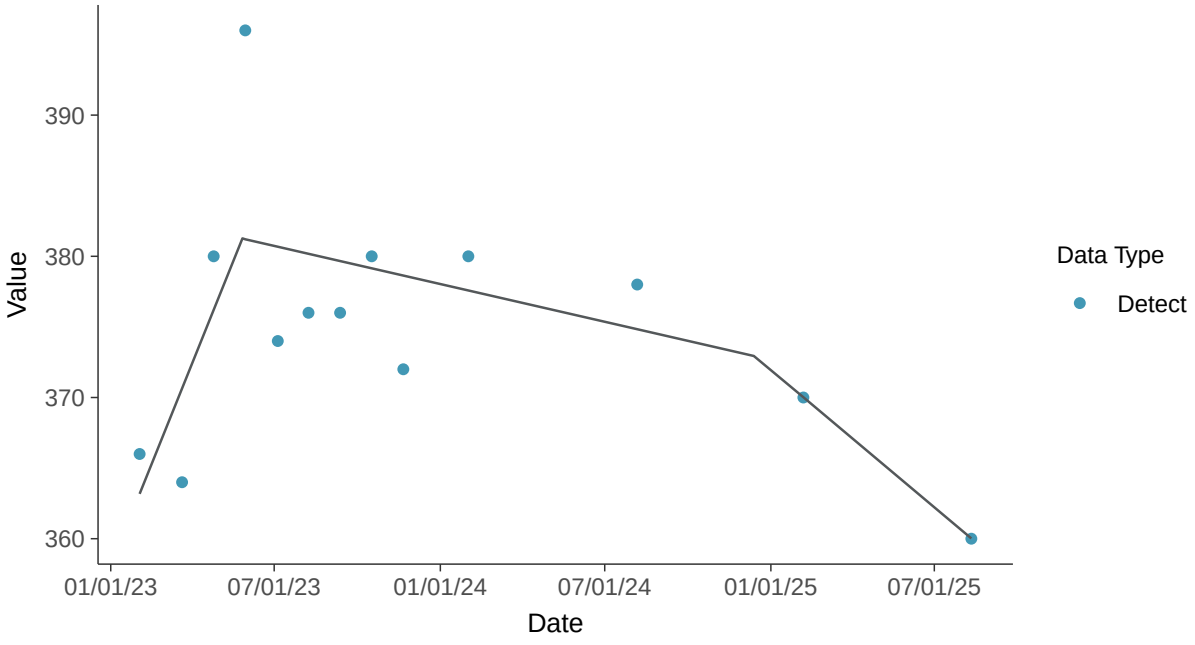
Trend Regression: Piecewise Linear-Linear

Total Dissolved Solids, MW-16D (mg/l)



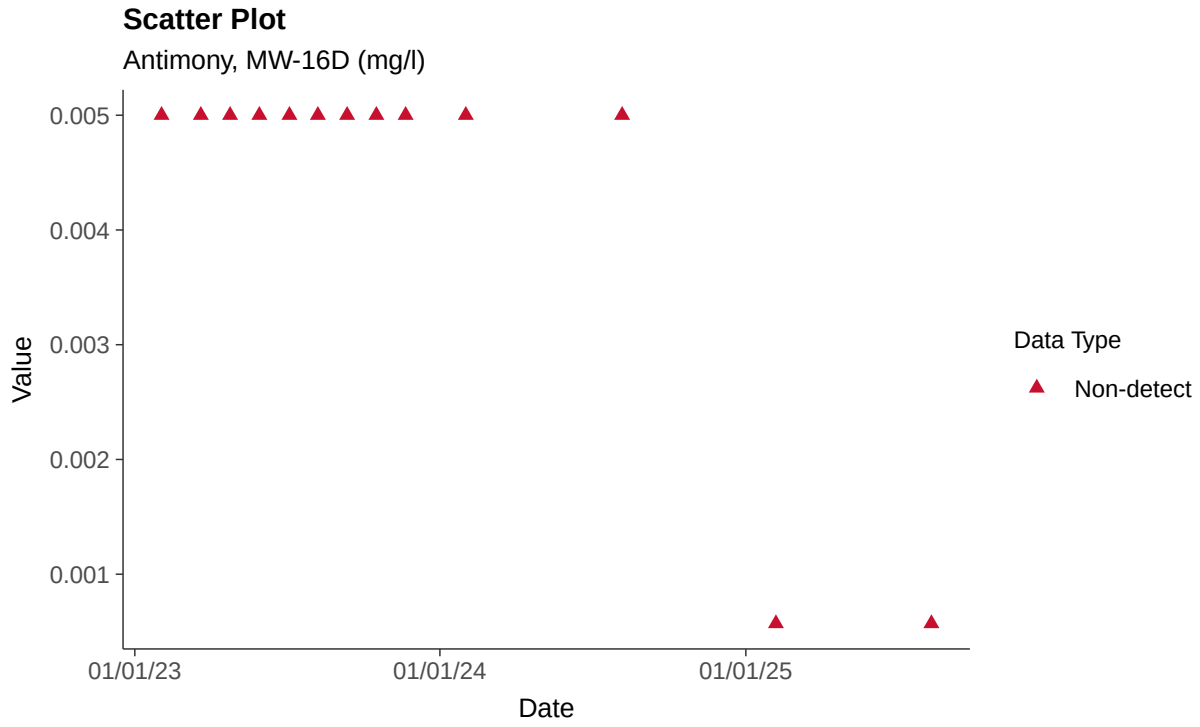
Trend Regression: Piecewise Linear-Linear-Linear

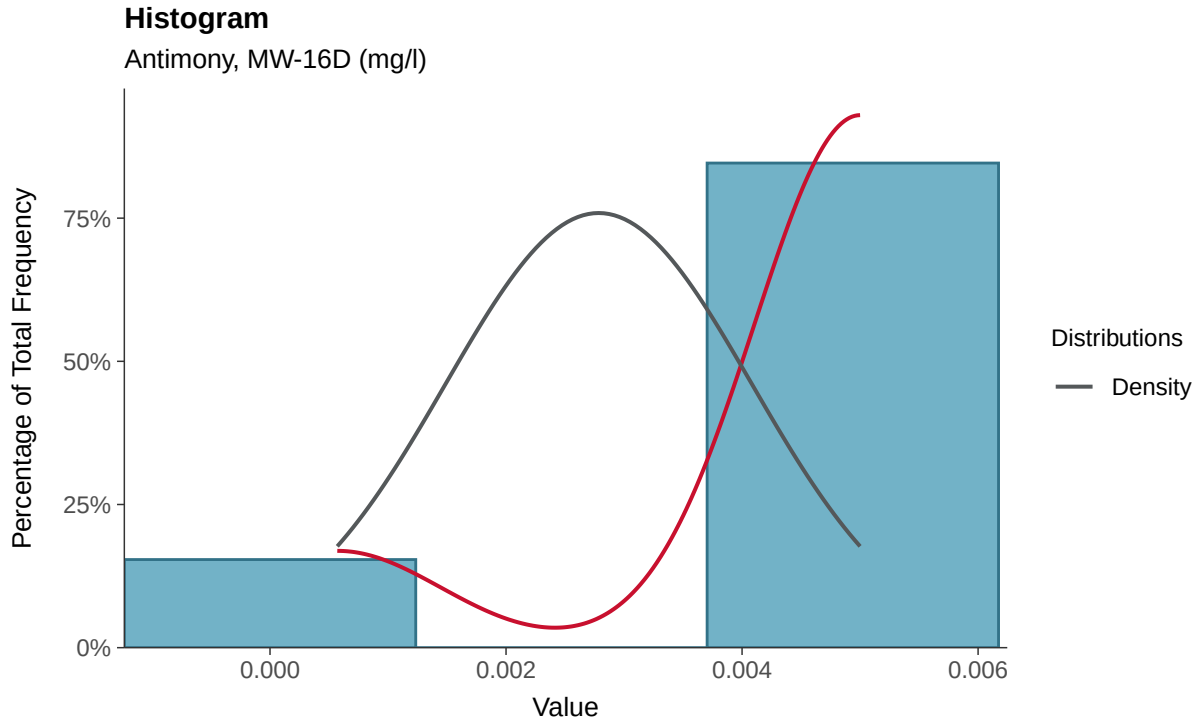
Total Dissolved Solids, MW-16D (mg/l)



Appendix IV: Antimony, MW-16D

ID: 15_3_101



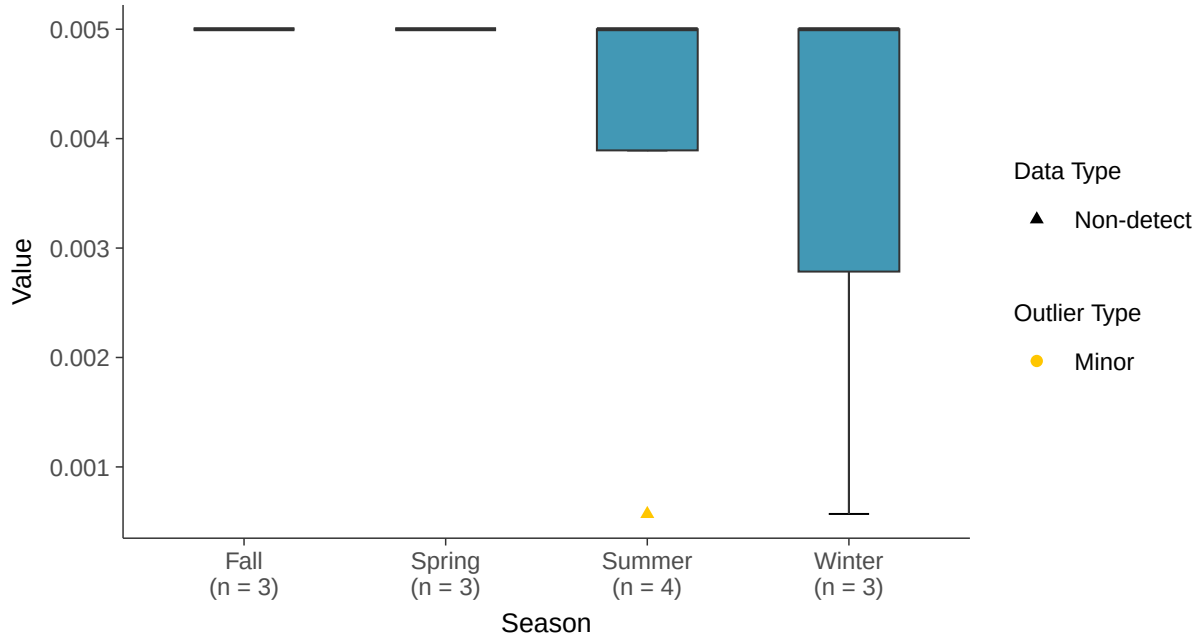


Boxplot

Antimony, MW-16D (mg/l)

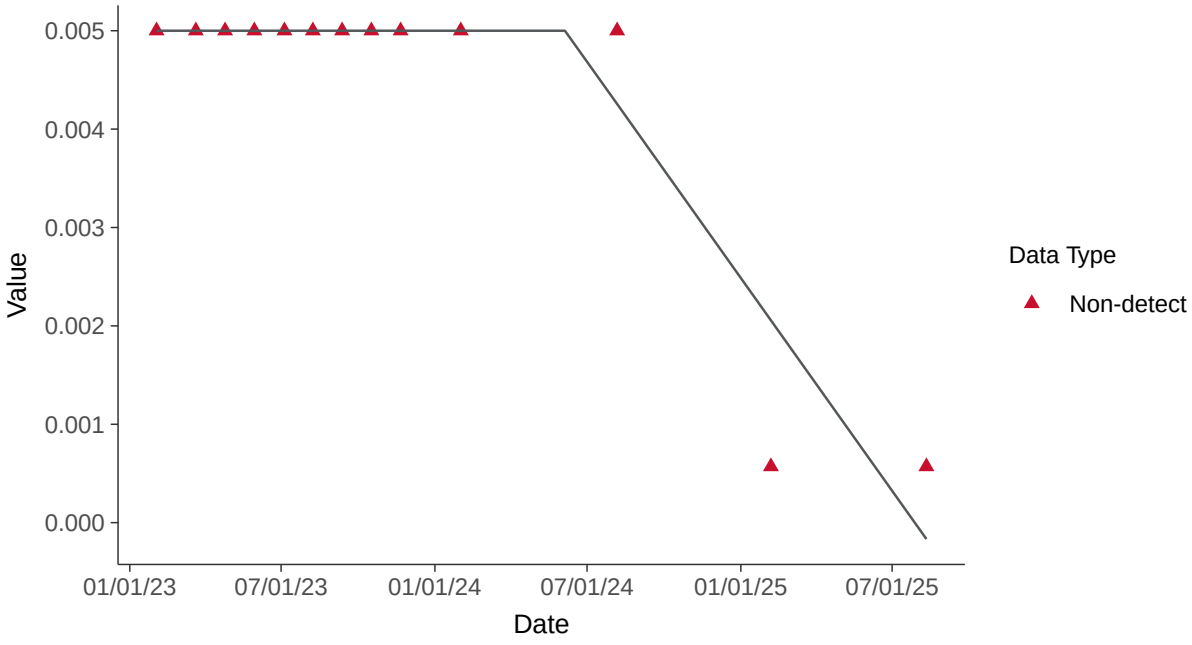
Boxplot by Season

Antimony, MW-16D (mg/l)



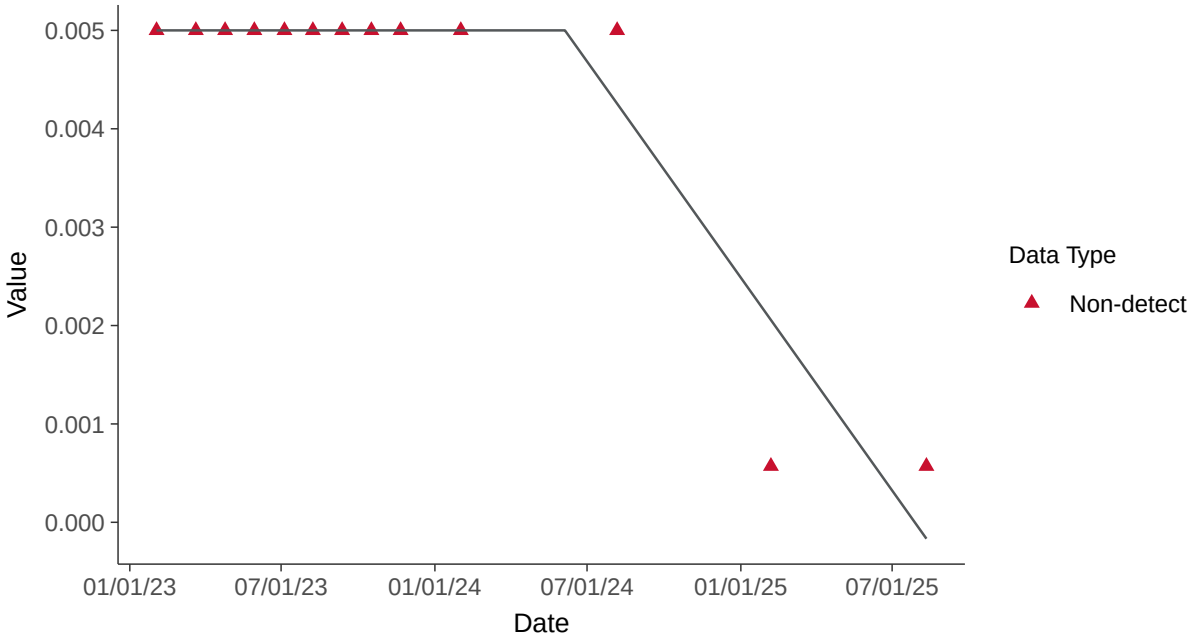
Trend Regression: Piecewise Linear-Linear

Antimony, MW-16D (mg/l)



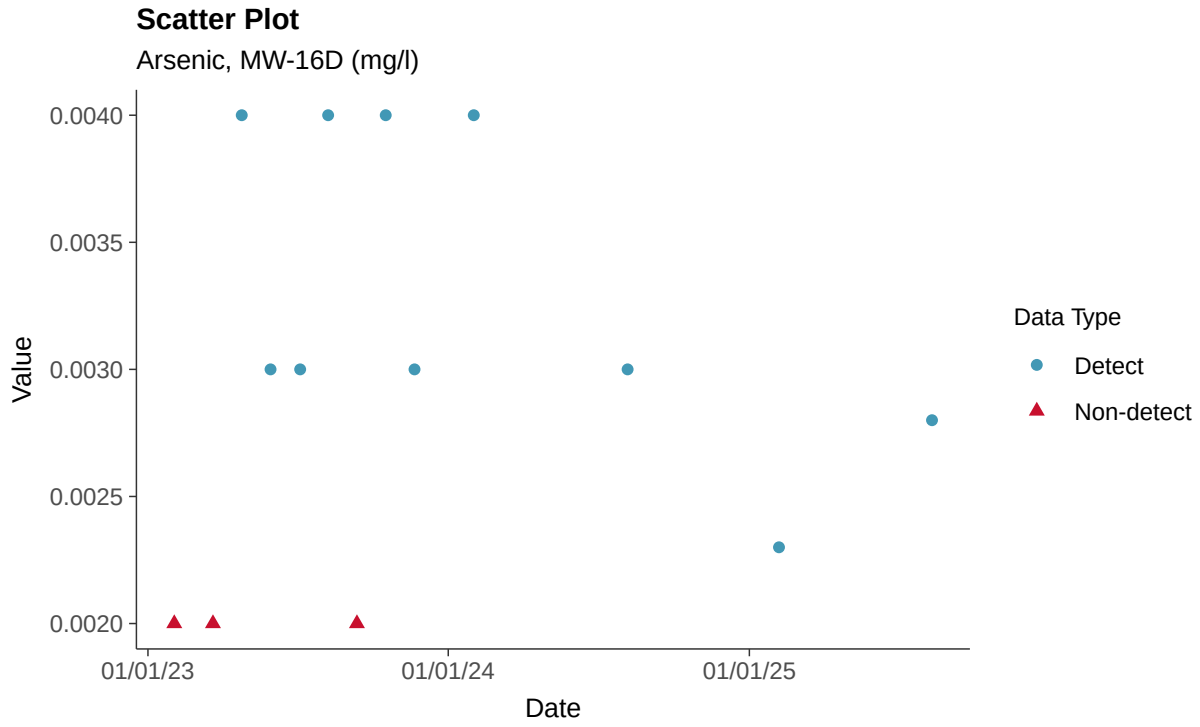
Trend Regression: Piecewise Linear-Linear-Linear

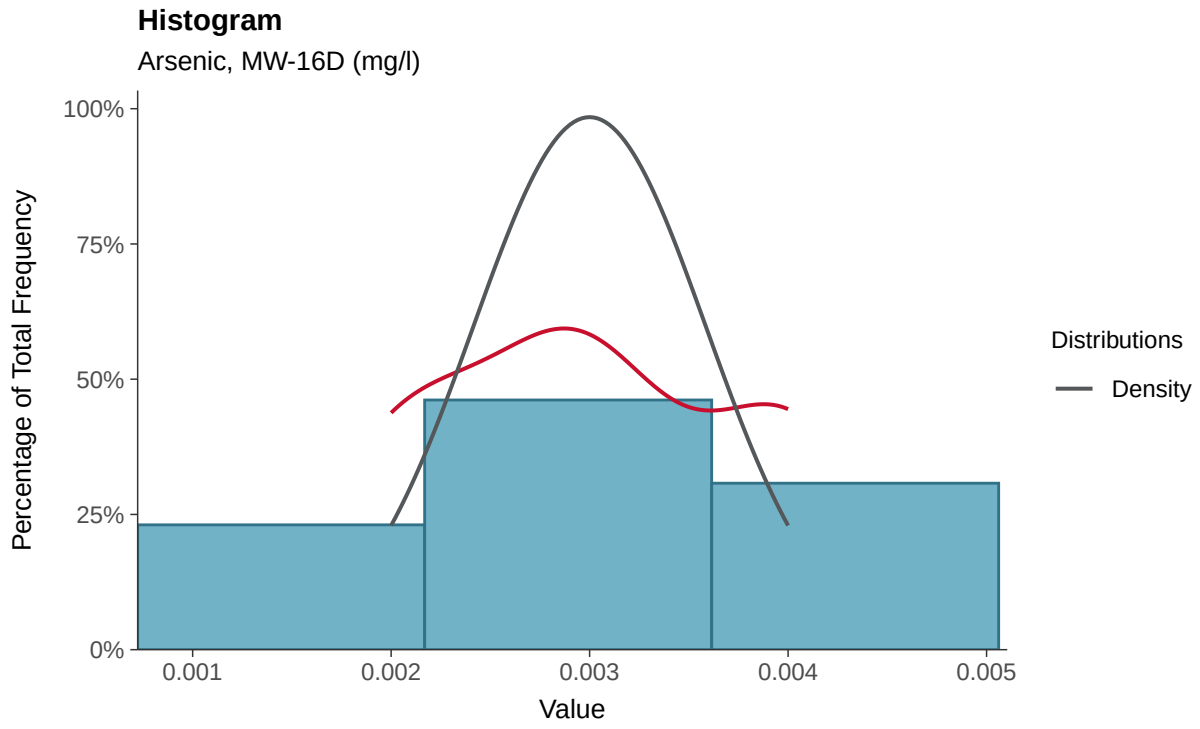
Antimony, MW-16D (mg/l)



Appendix IV: Arsenic, MW-16D

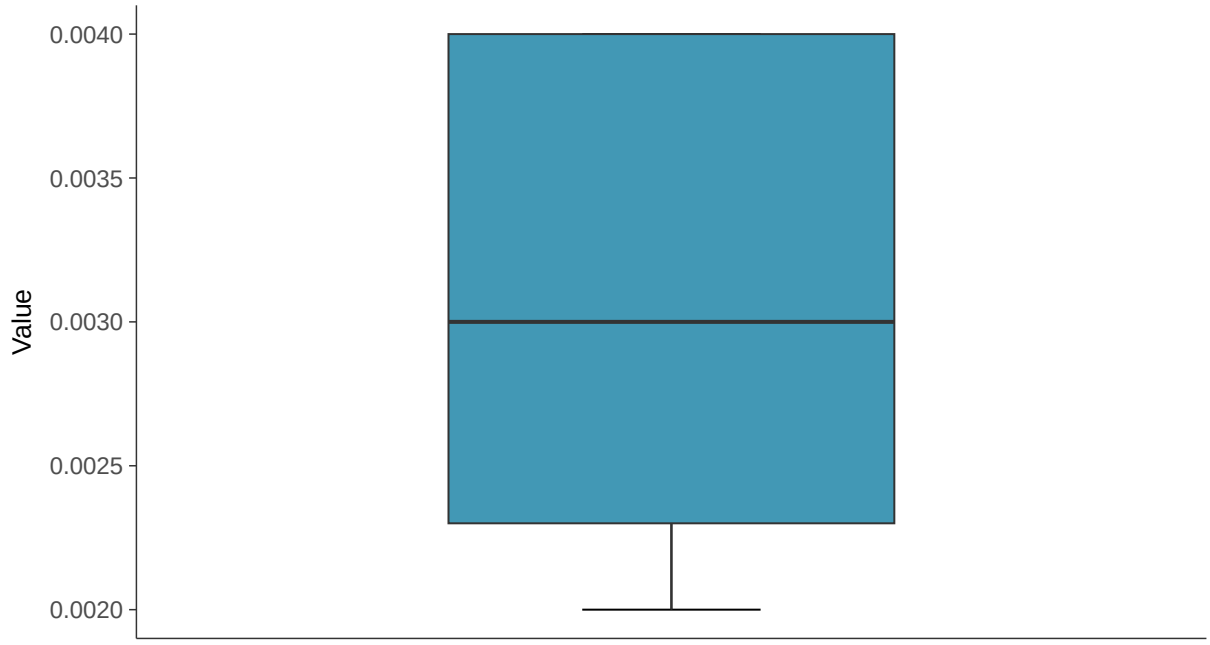
ID: 15_3_102





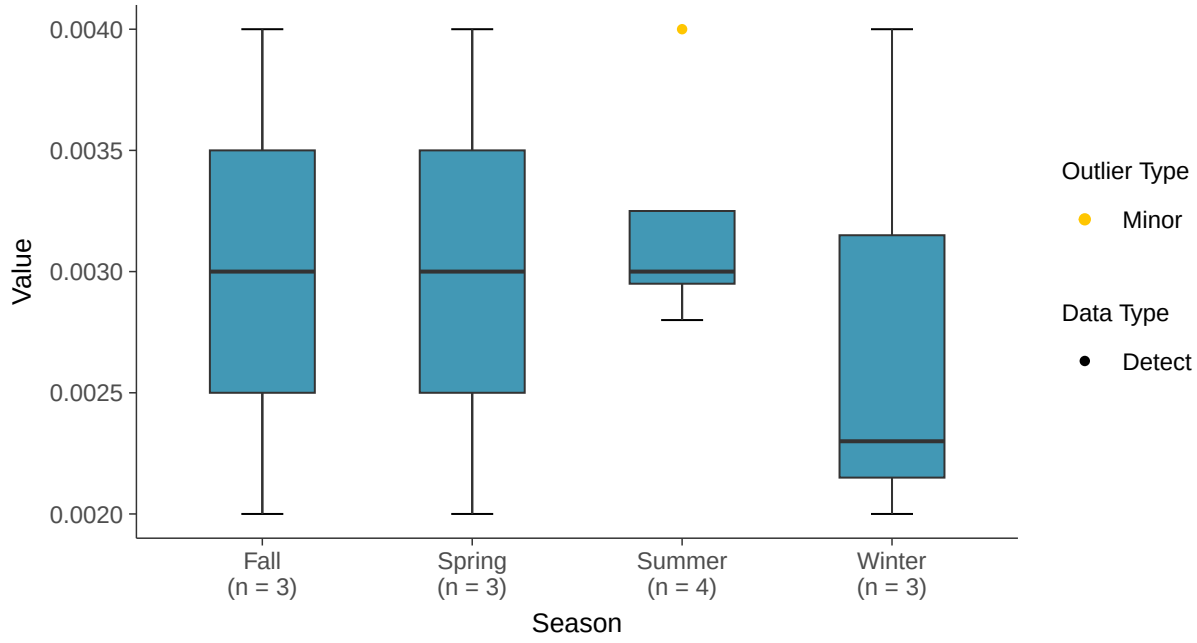
Boxplot

Arsenic, MW-16D (mg/l)



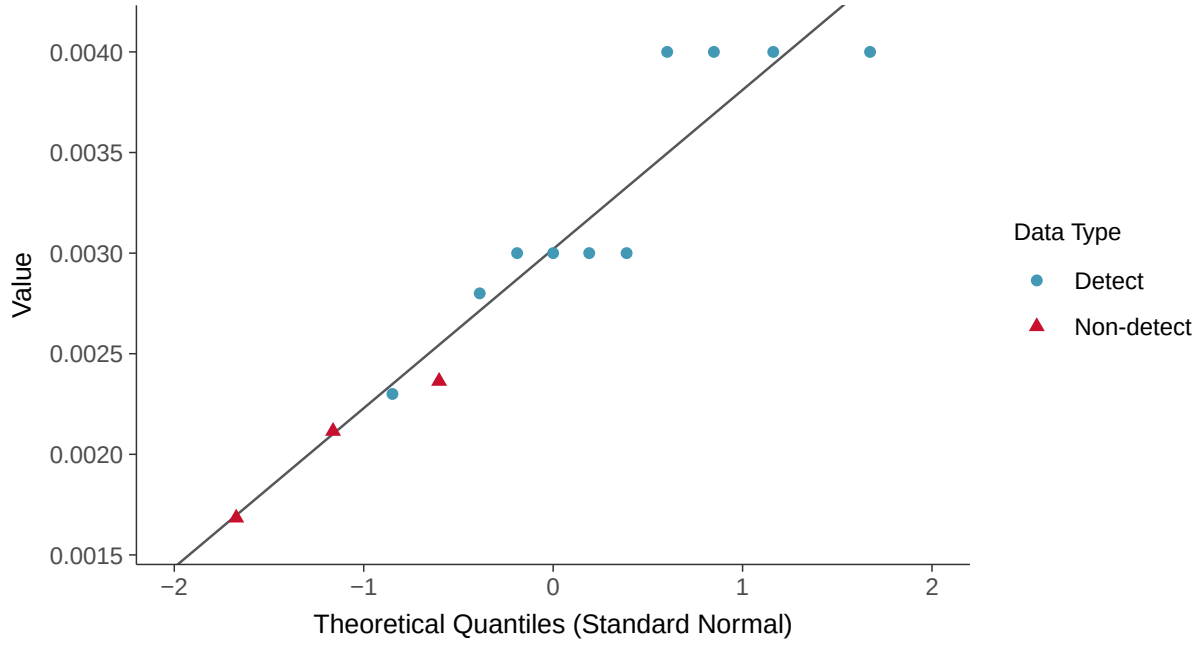
Boxplot by Season

Arsenic, MW-16D (mg/l)



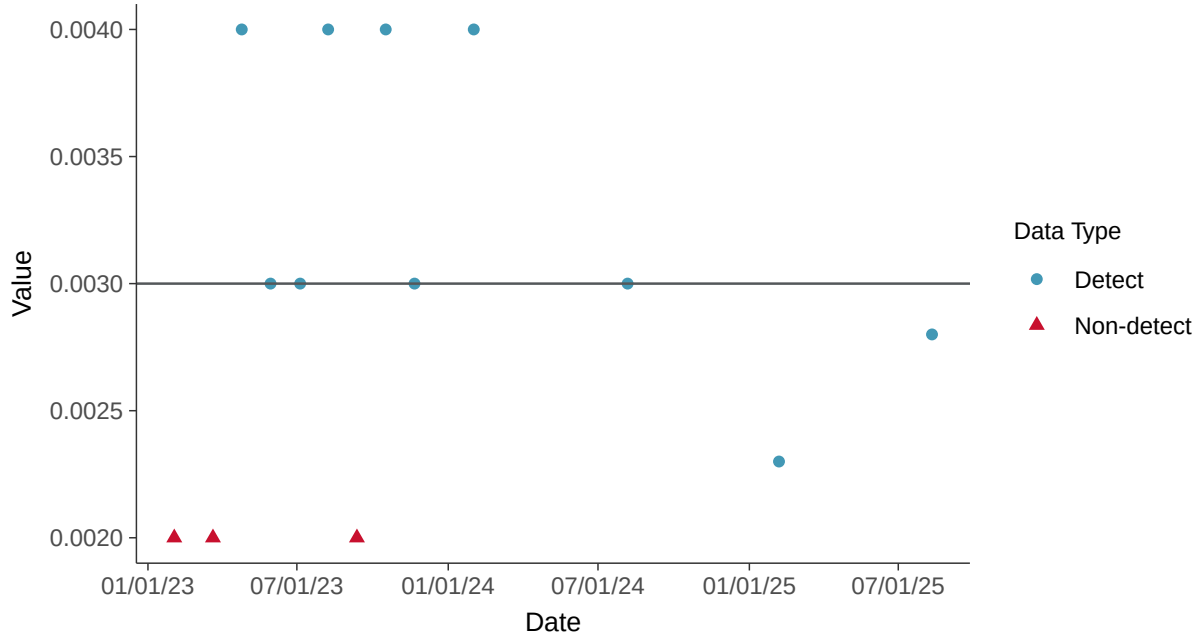
Normal Q-Q plot using ROS Imputed Estimates

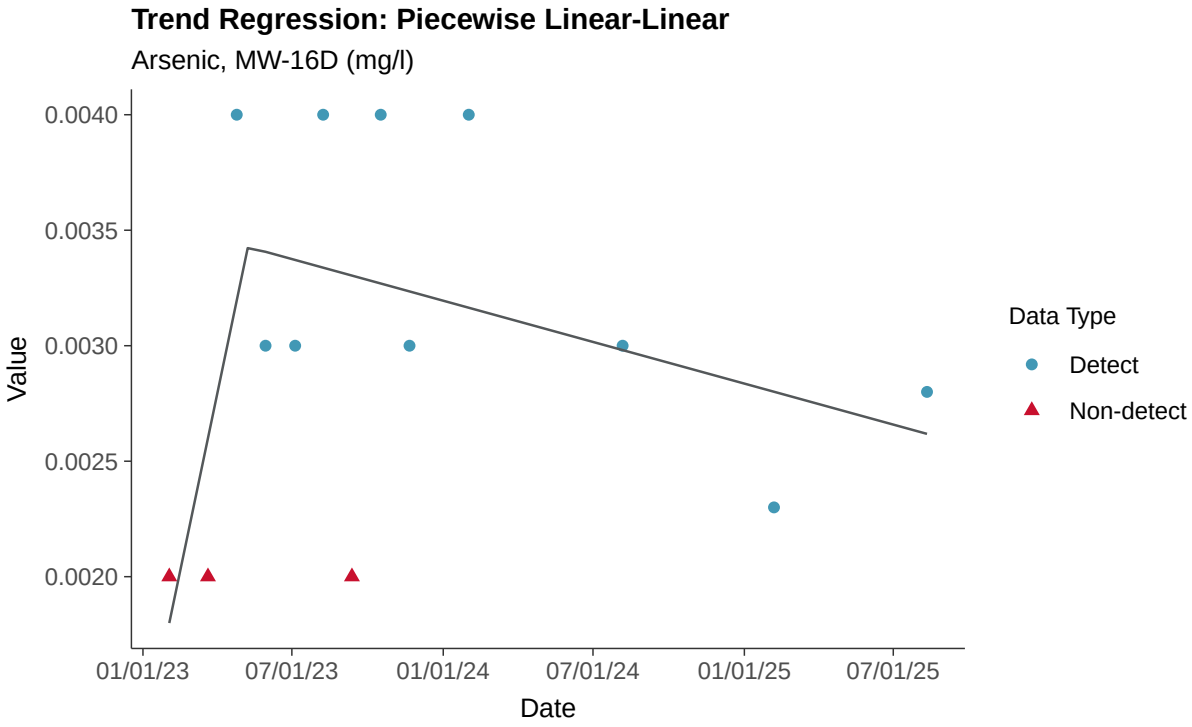
Arsenic, MW-16D (mg/l)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

Arsenic, MW-16D (mg/l)



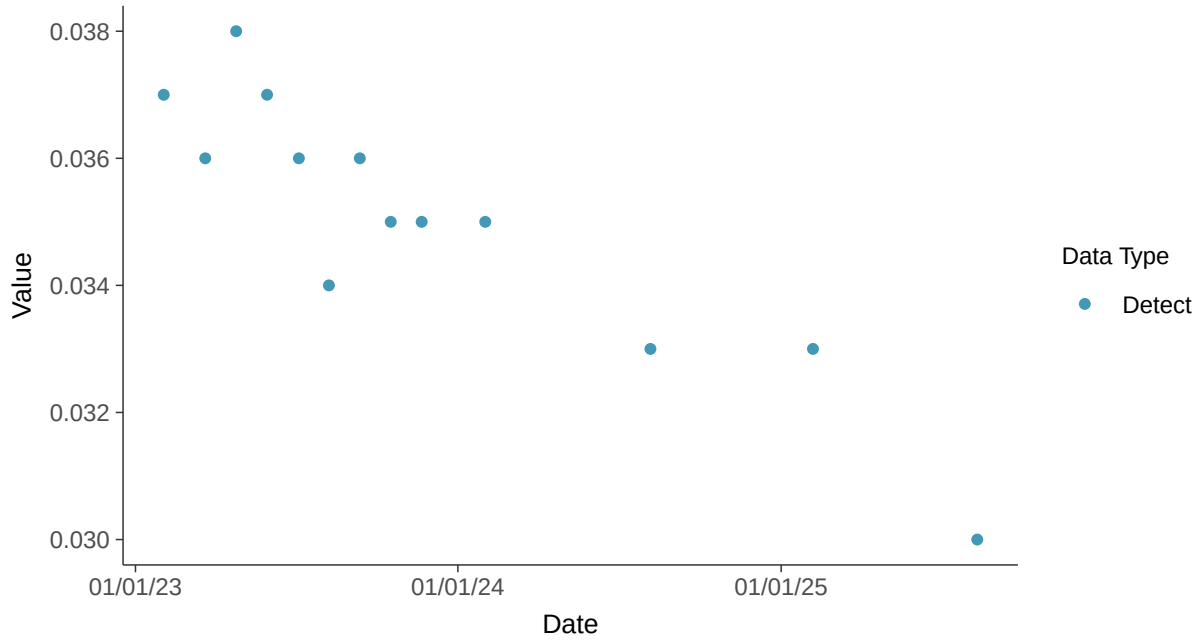

Trend Regression: Piecewise Linear-Linear
Arsenic, MW-16D (mg/l)
0.0040
0.0035
0.0030
0.0025
0.0020
Value
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Barium, MW-16D

ID: 15_3_103

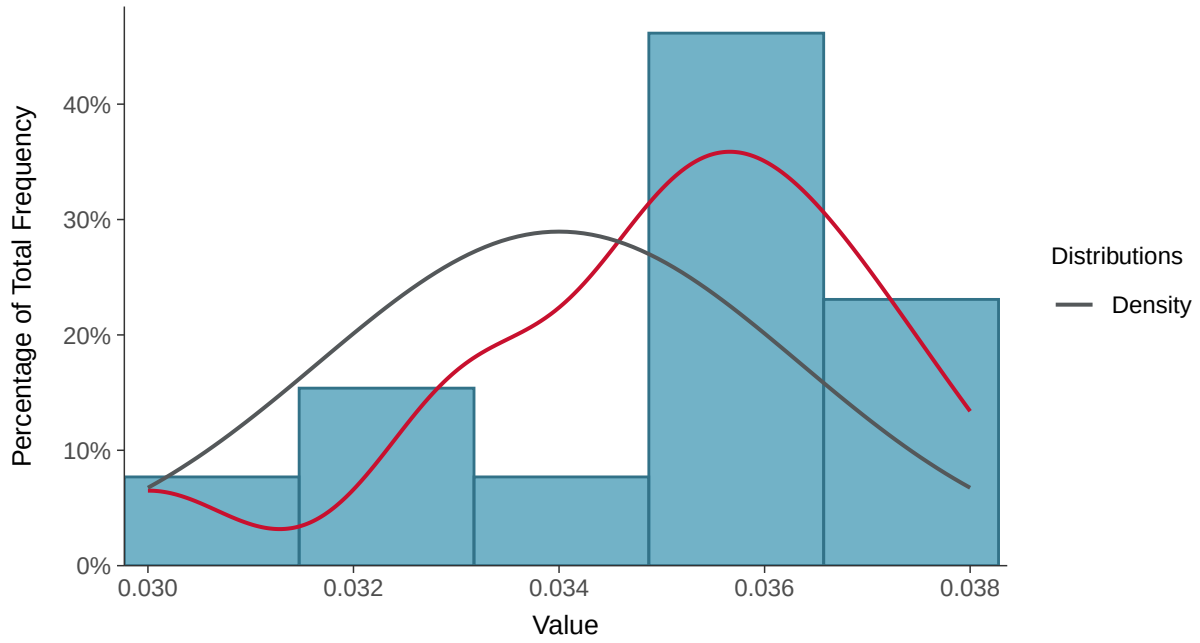
Scatter Plot

Barium, MW-16D (mg/l)



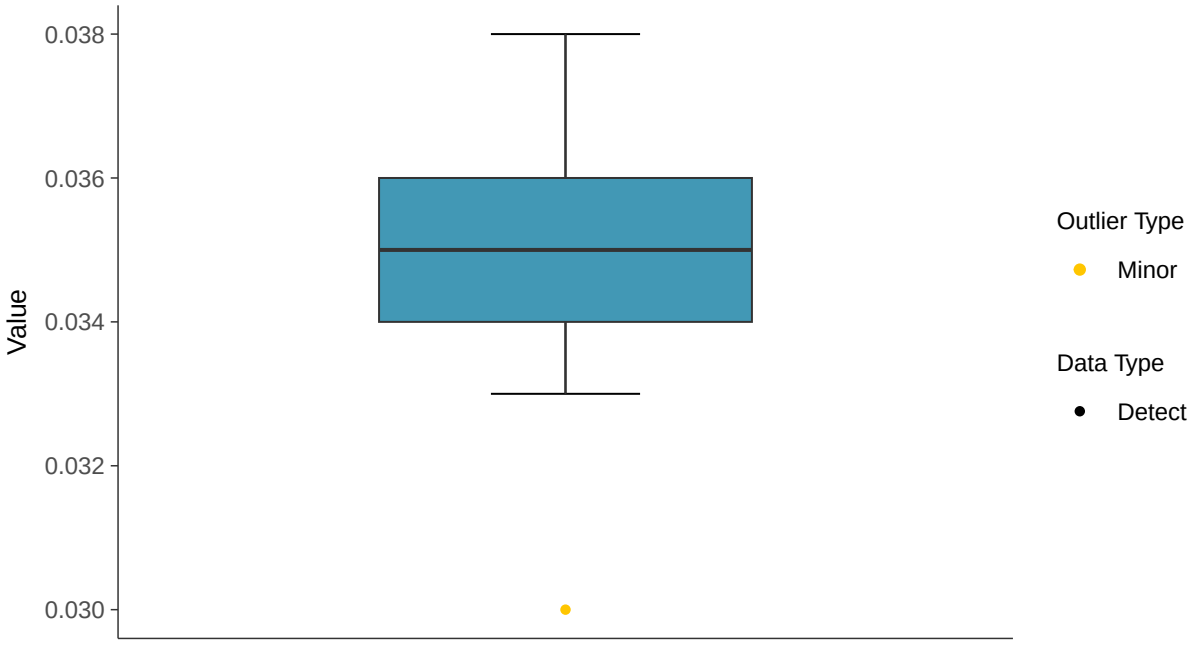
Histogram

Barium, MW-16D (mg/l)



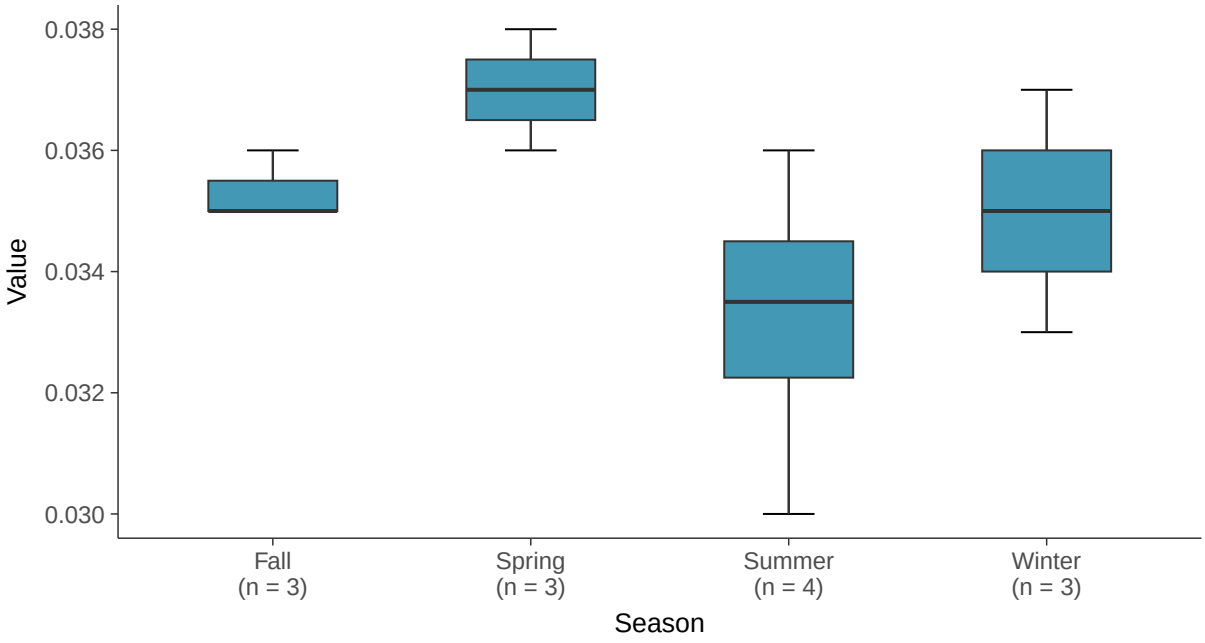
Boxplot

Barium, MW-16D (mg/l)



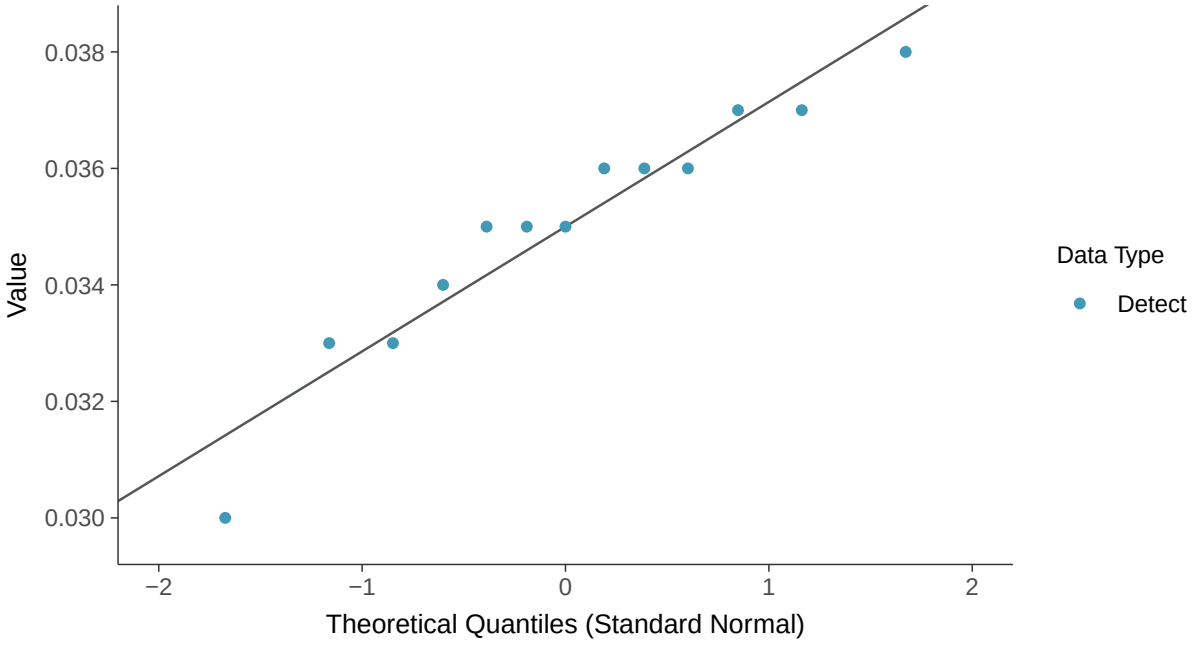
Boxplot by Season

Barium, MW-16D (mg/l)



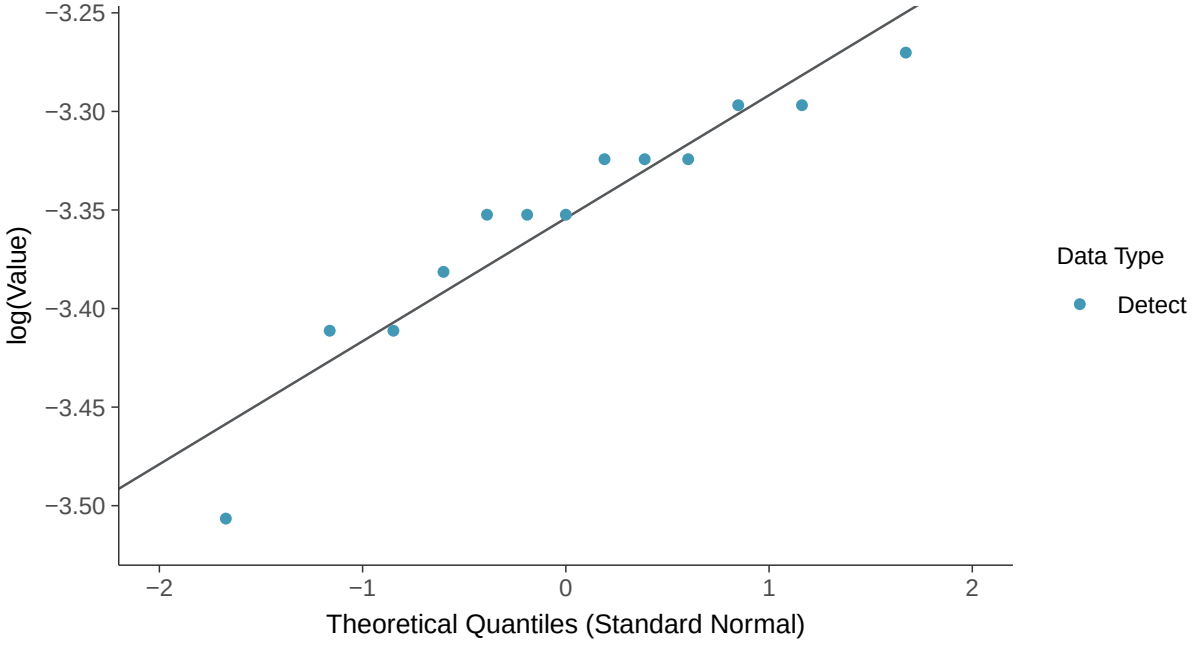
Normal Q-Q plot

Barium, MW-16D (mg/l)



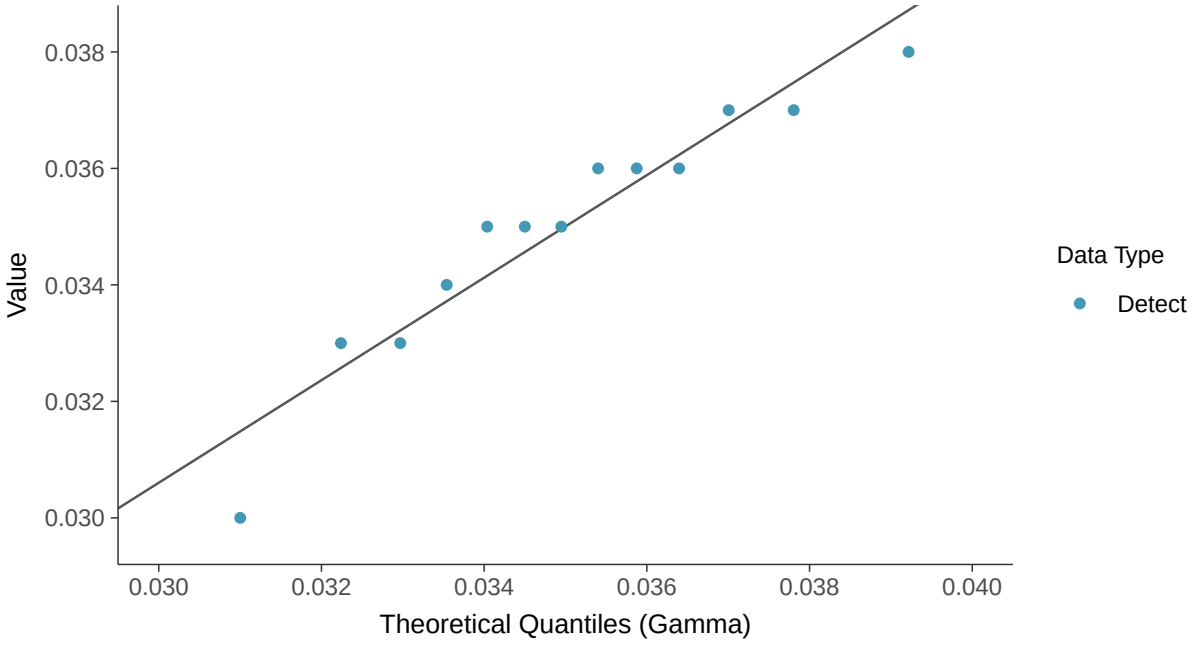
Lognormal Q-Q plot

Barium, MW-16D (mg/l)



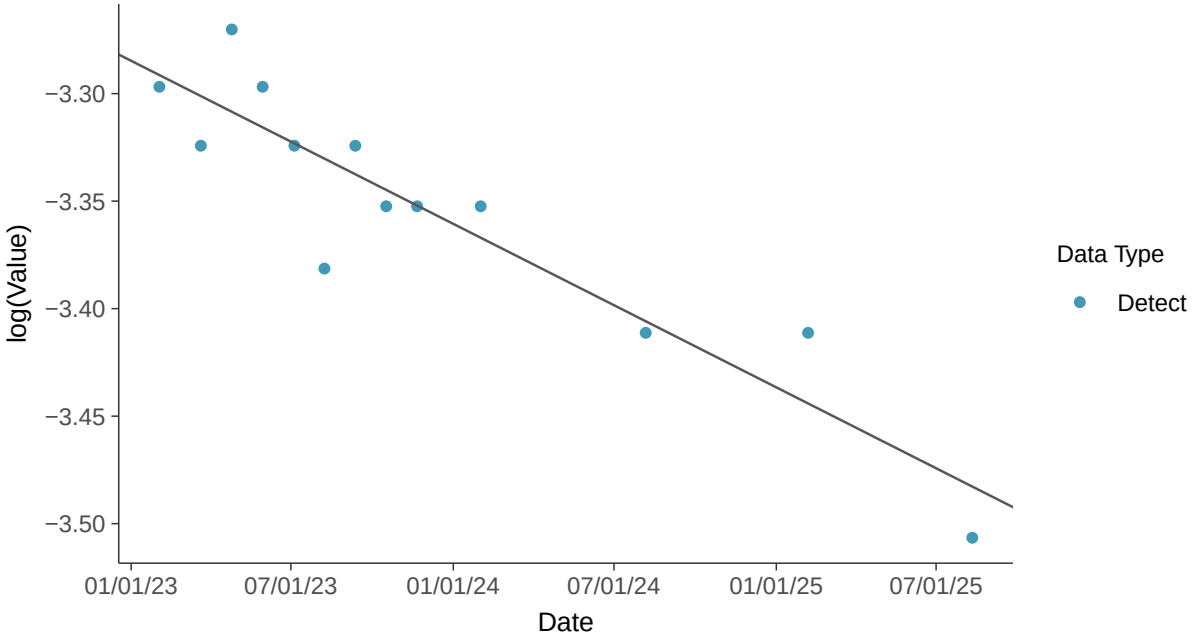
Gamma Q-Q plot

Barium, MW-16D (mg/l)



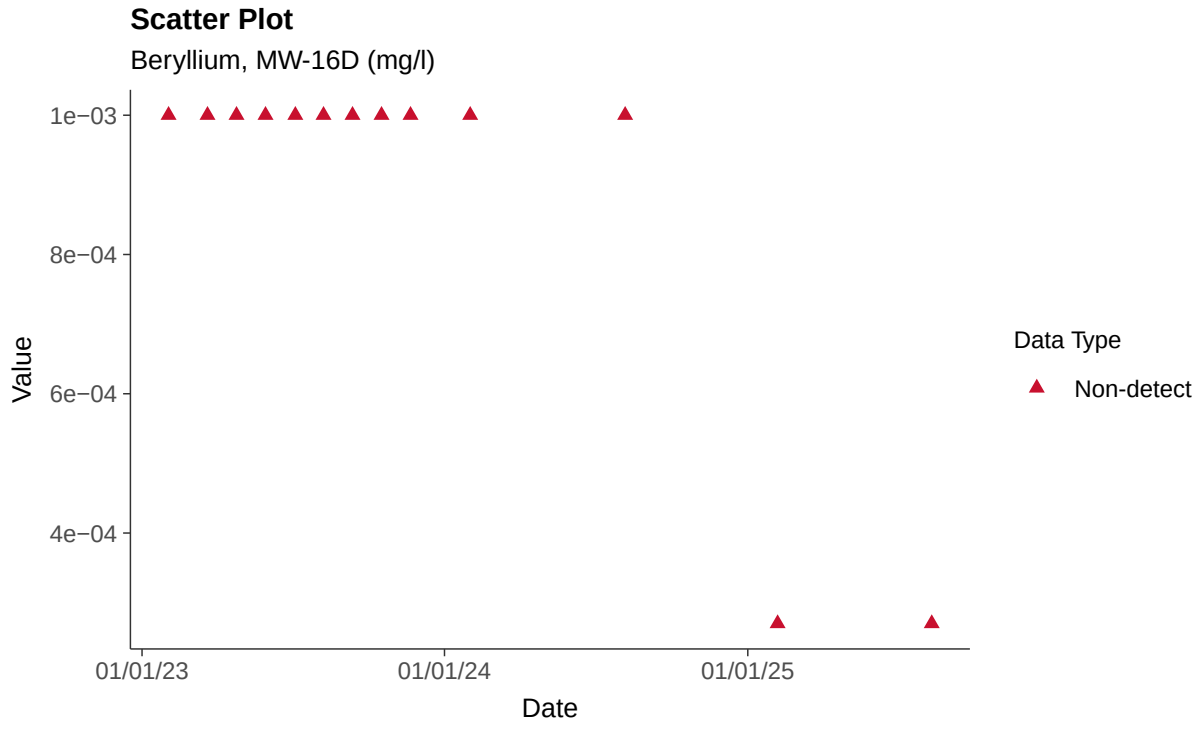
Trend Regression: Lognormal MLE

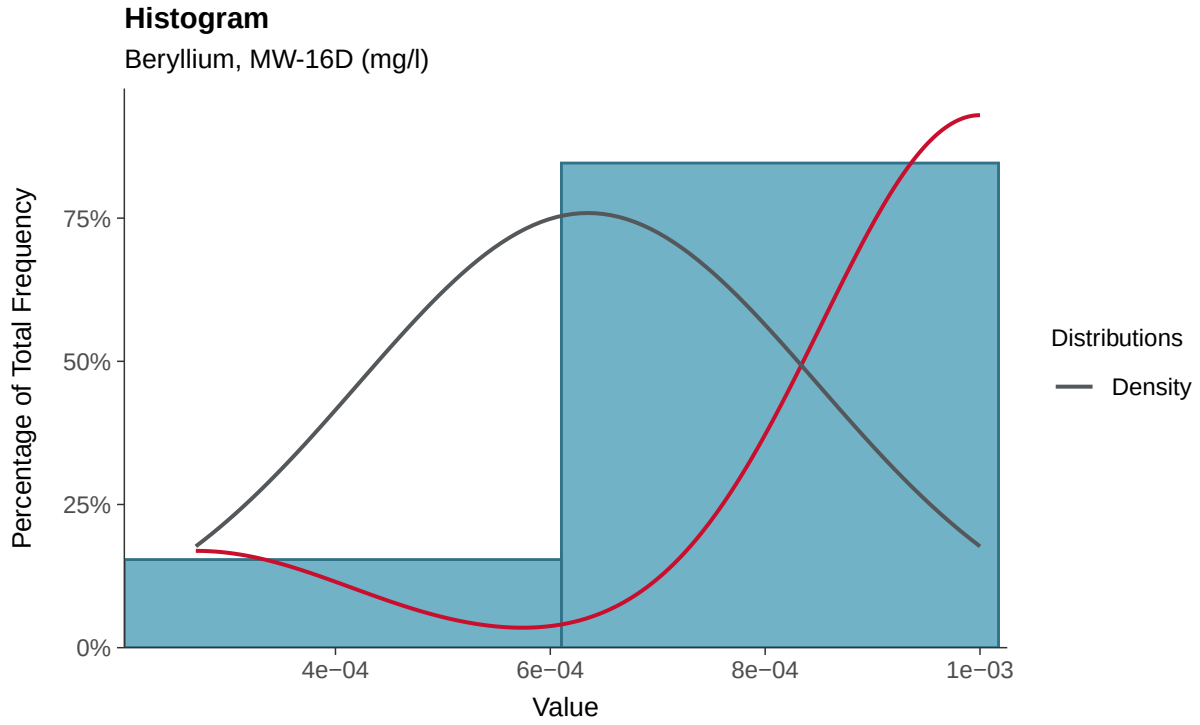
Barium, MW-16D (mg/l)



Appendix IV: Beryllium, MW-16D

ID: 15_3_104



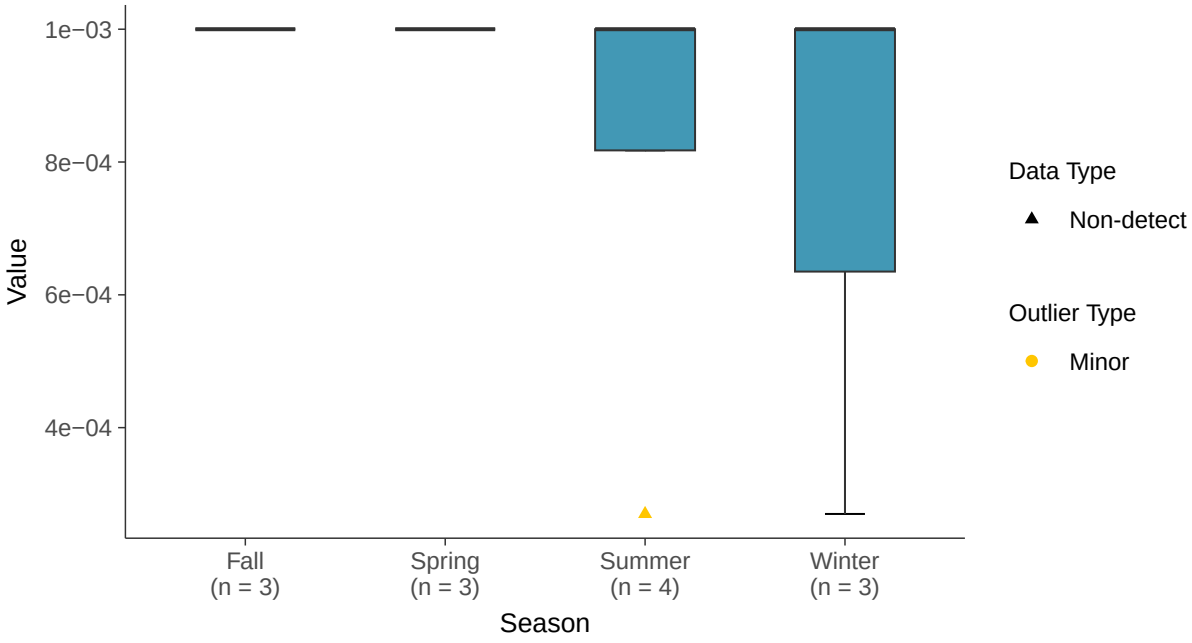


Boxplot

Beryllium, MW-16D (mg/l)

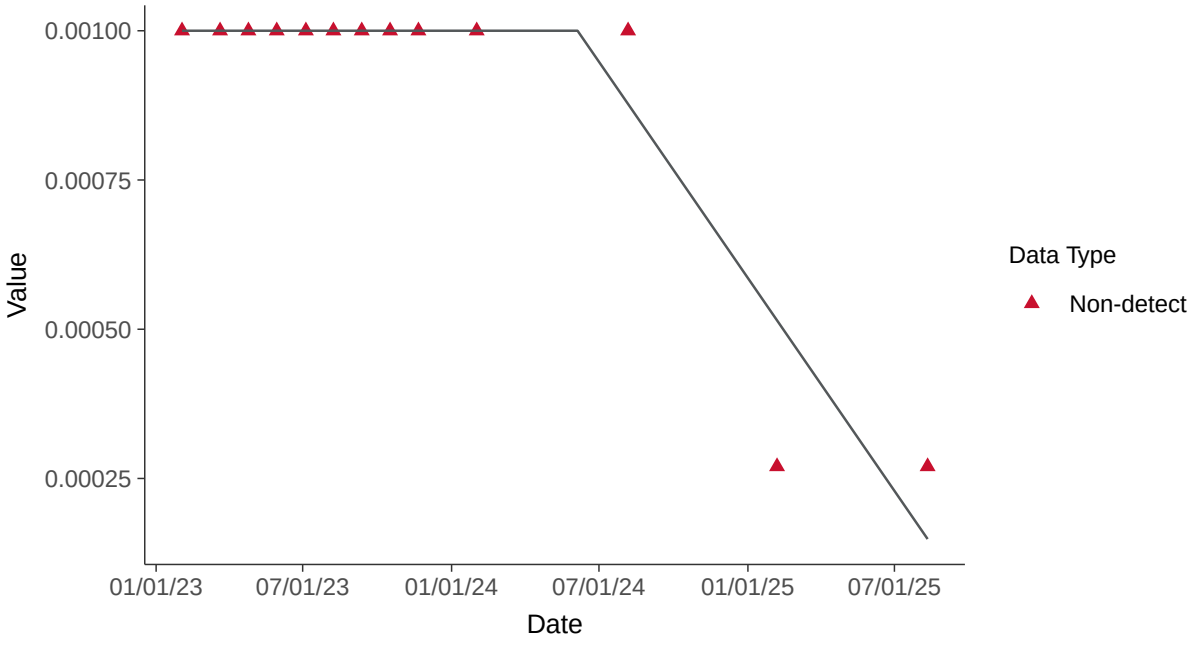
Boxplot by Season

Beryllium, MW-16D (mg/l)



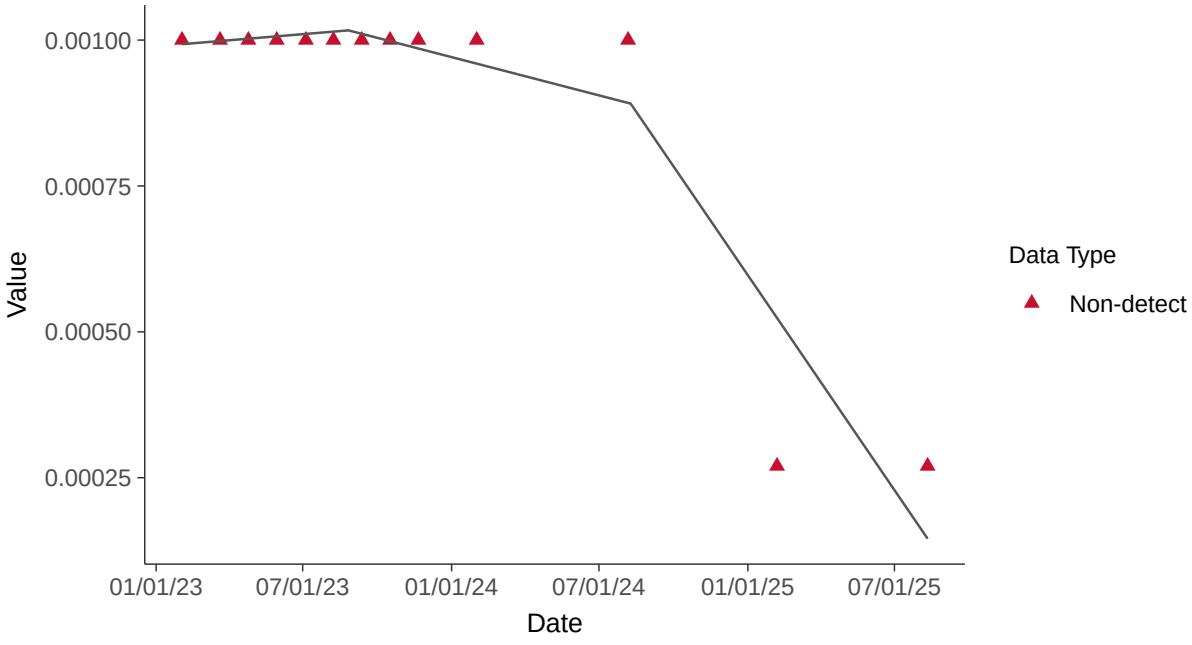
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-16D (mg/l)



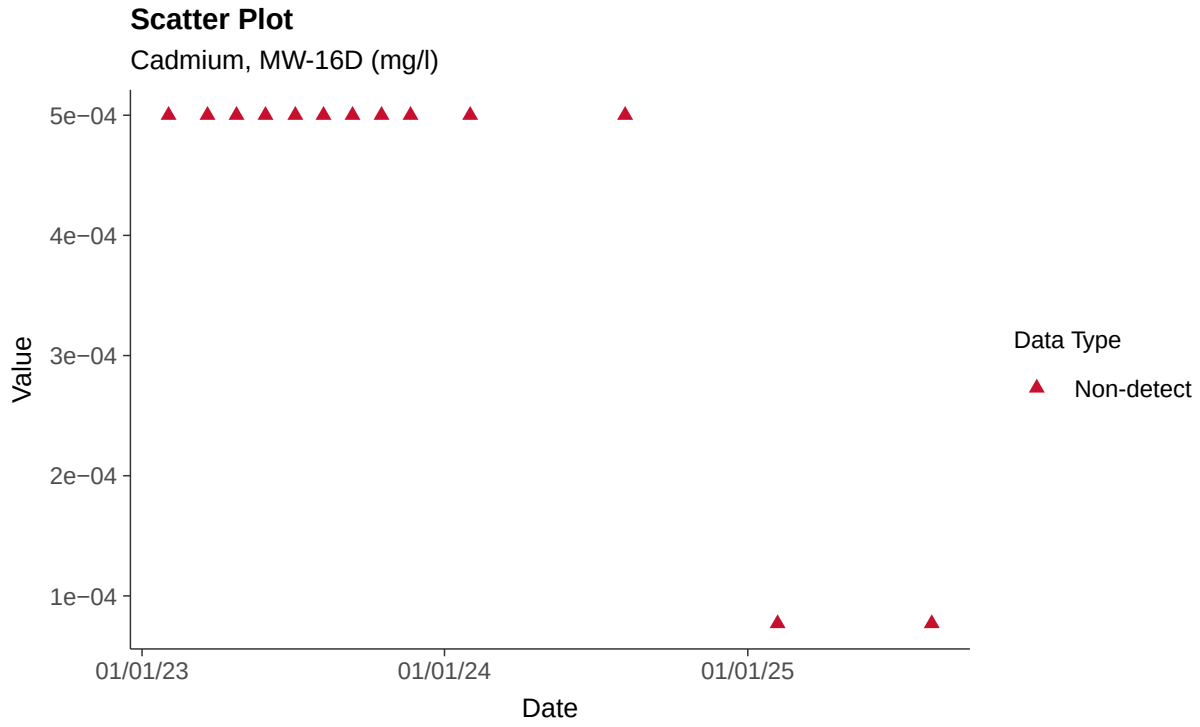
Trend Regression: Piecewise Linear-Linear-Linear

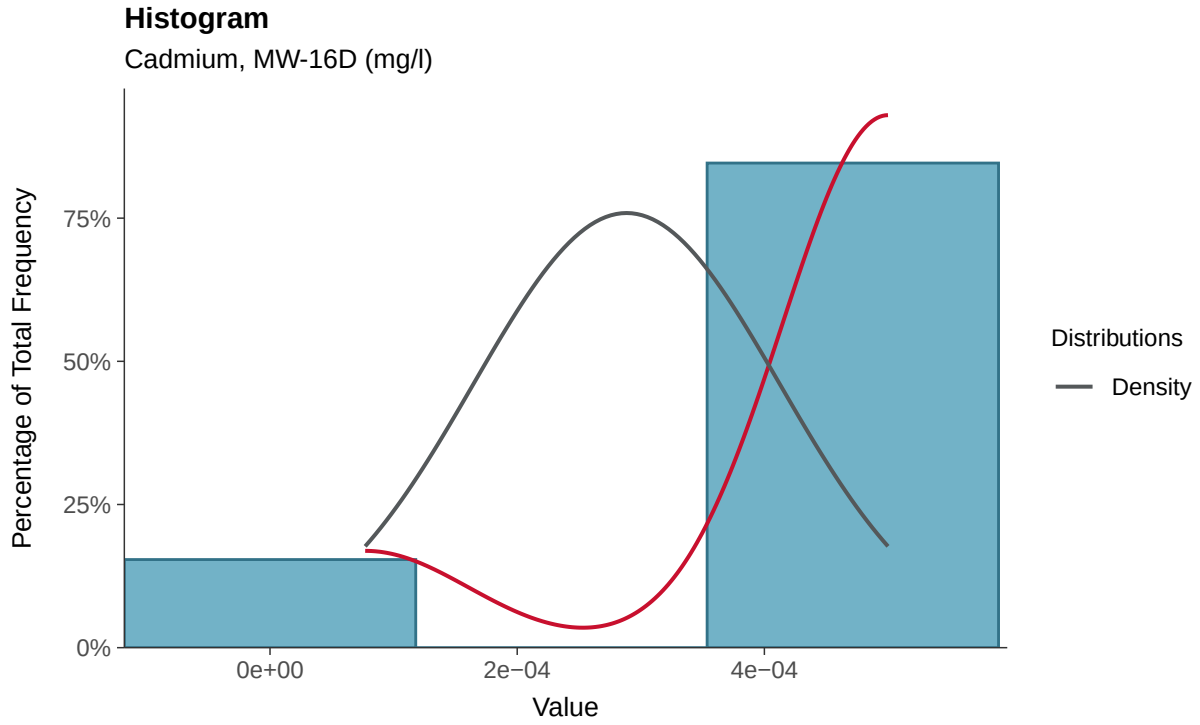
Beryllium, MW-16D (mg/l)



Appendix IV: Cadmium, MW-16D

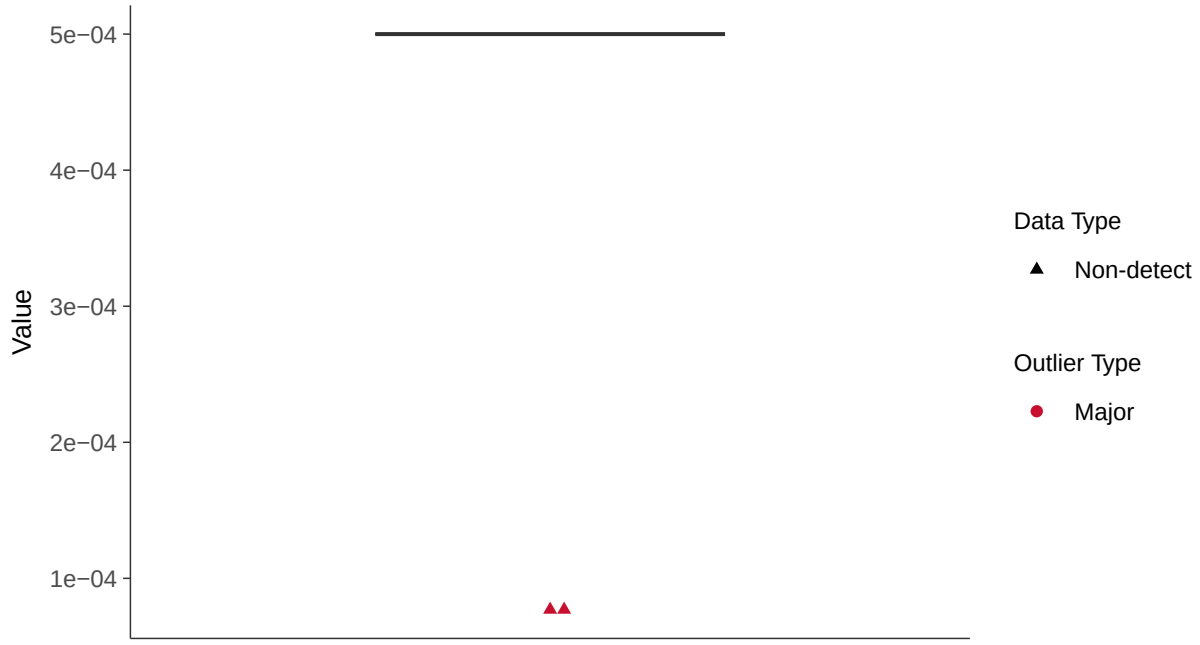
ID: 15_3_106





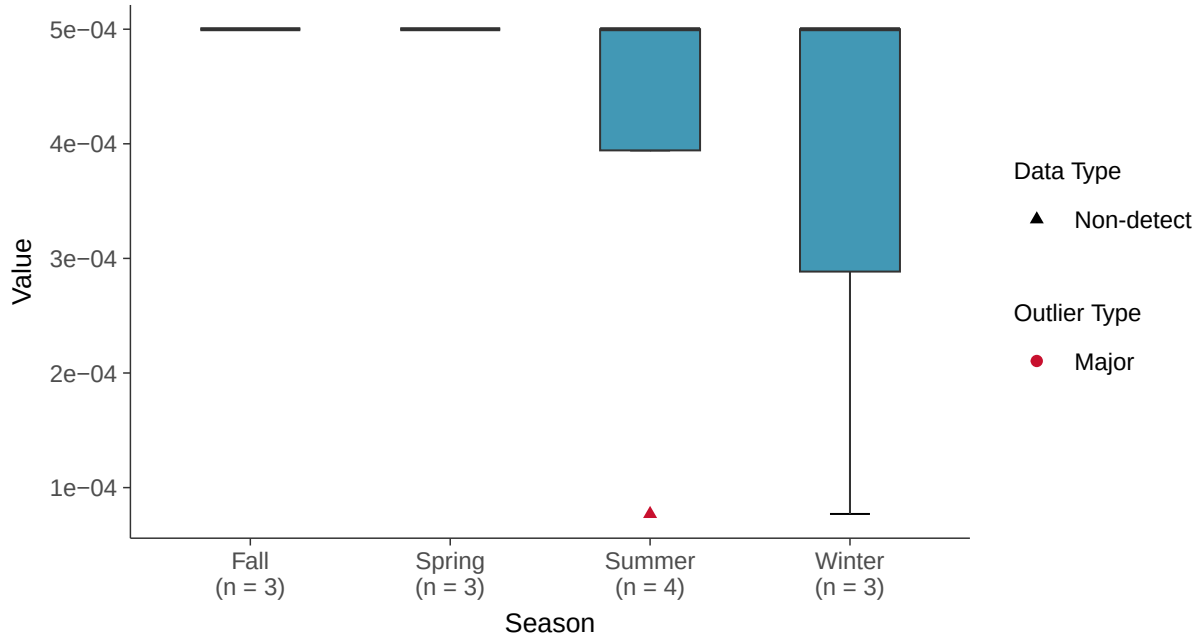
Boxplot

Cadmium, MW-16D (mg/l)



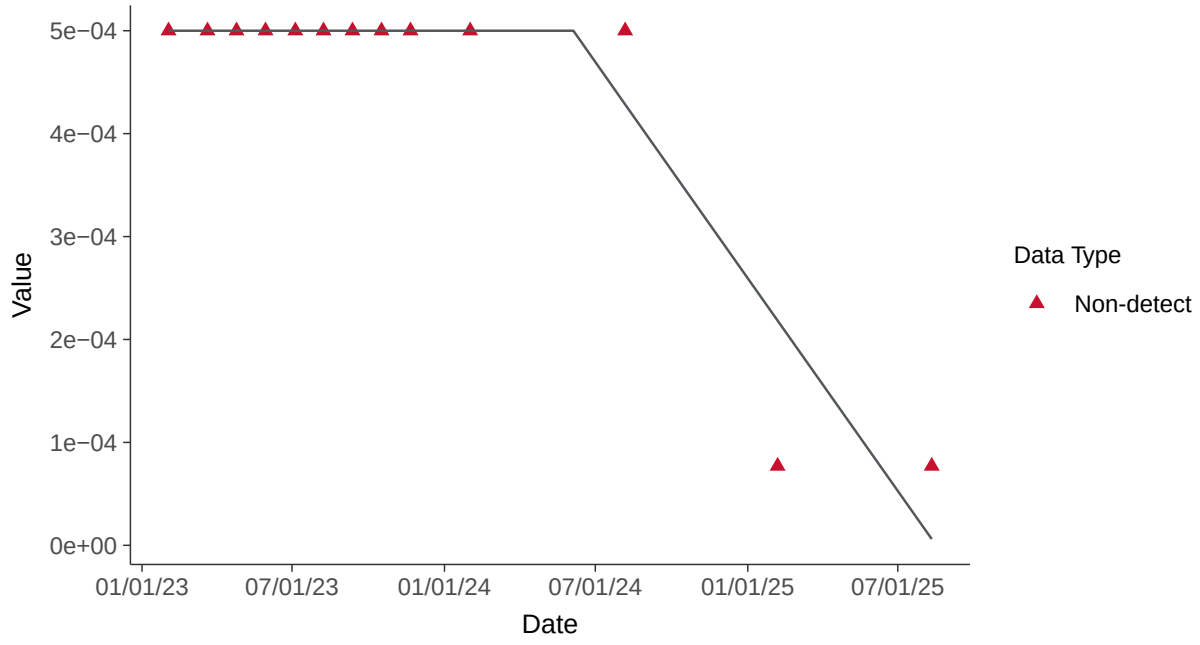
Boxplot by Season

Cadmium, MW-16D (mg/l)



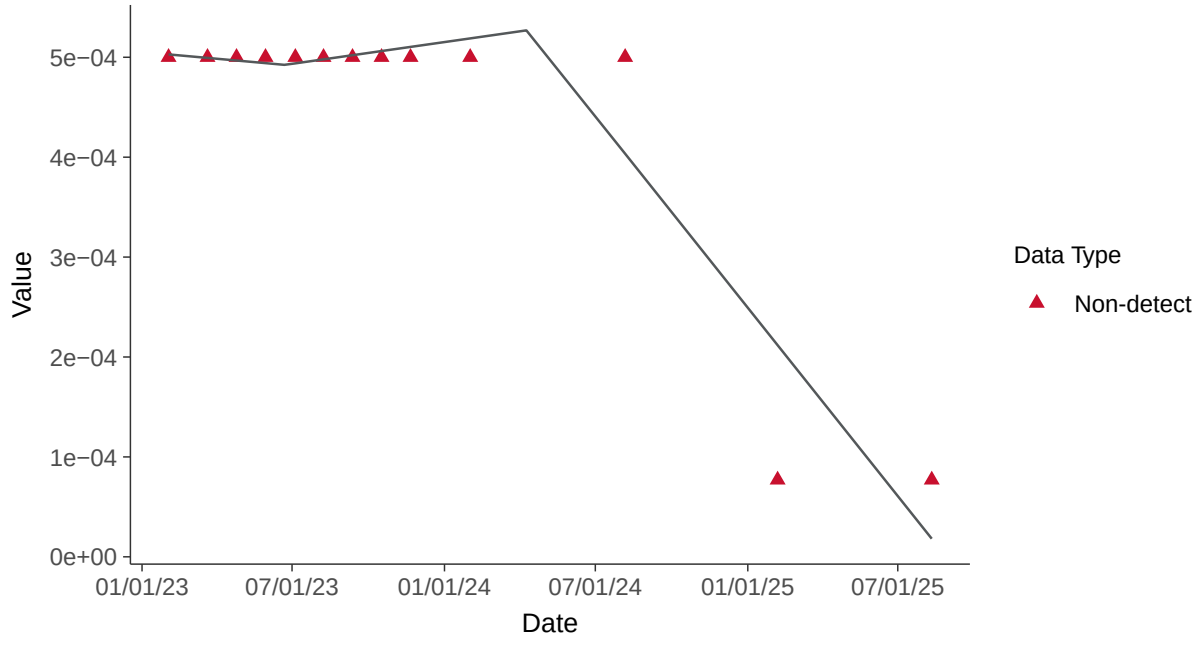
Trend Regression: Piecewise Linear-Linear

Cadmium, MW-16D (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Cadmium, MW-16D (mg/l)

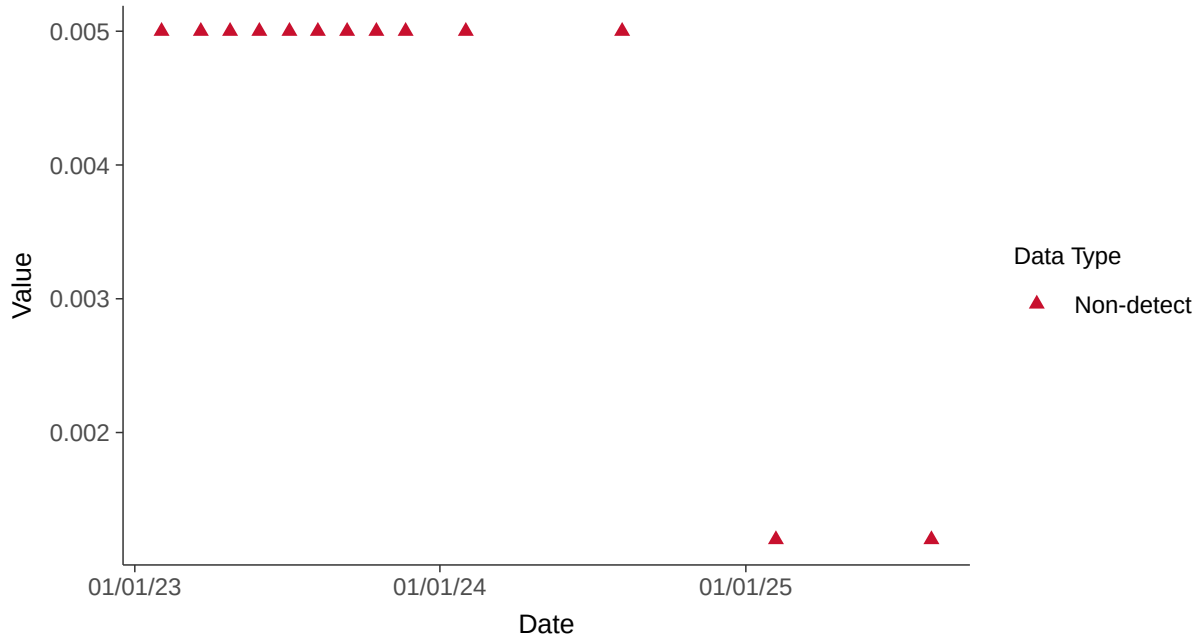


Appendix IV: Chromium, MW-16D

ID: 15_3_109

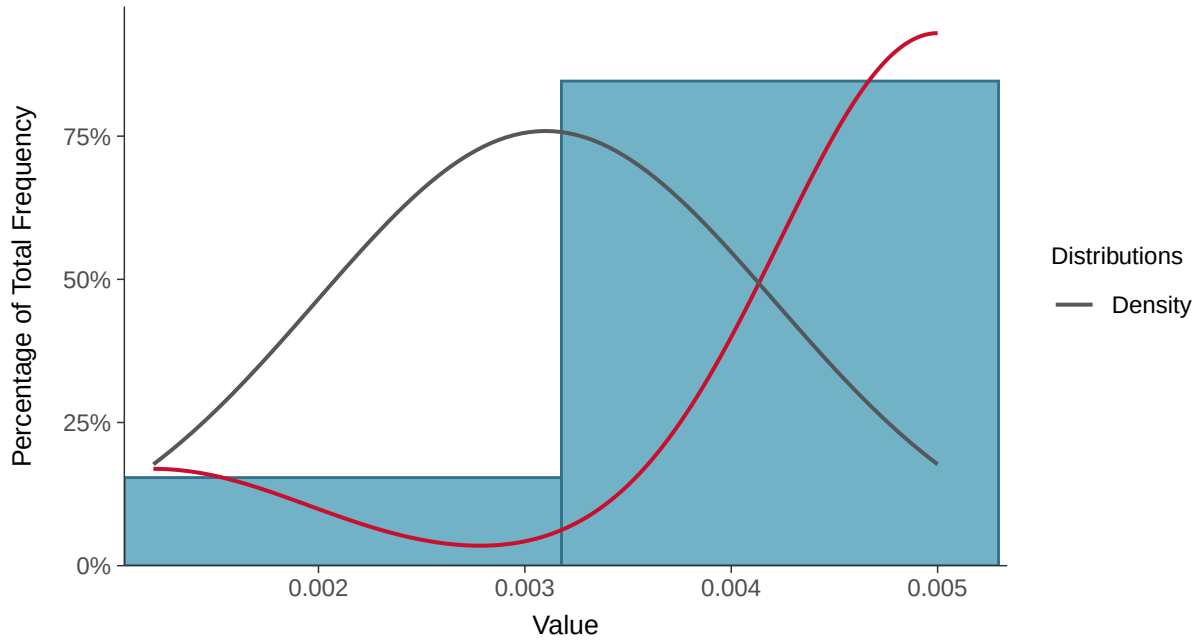
Scatter Plot

Chromium, MW-16D (mg/l)



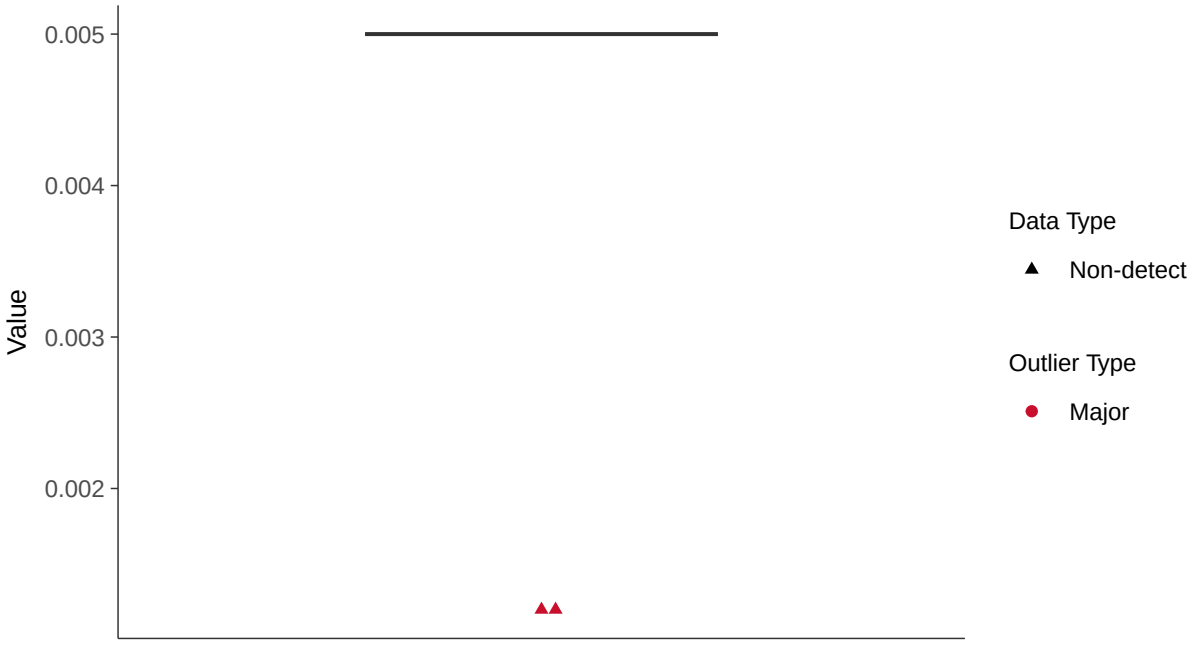
Histogram

Chromium, MW-16D (mg/l)



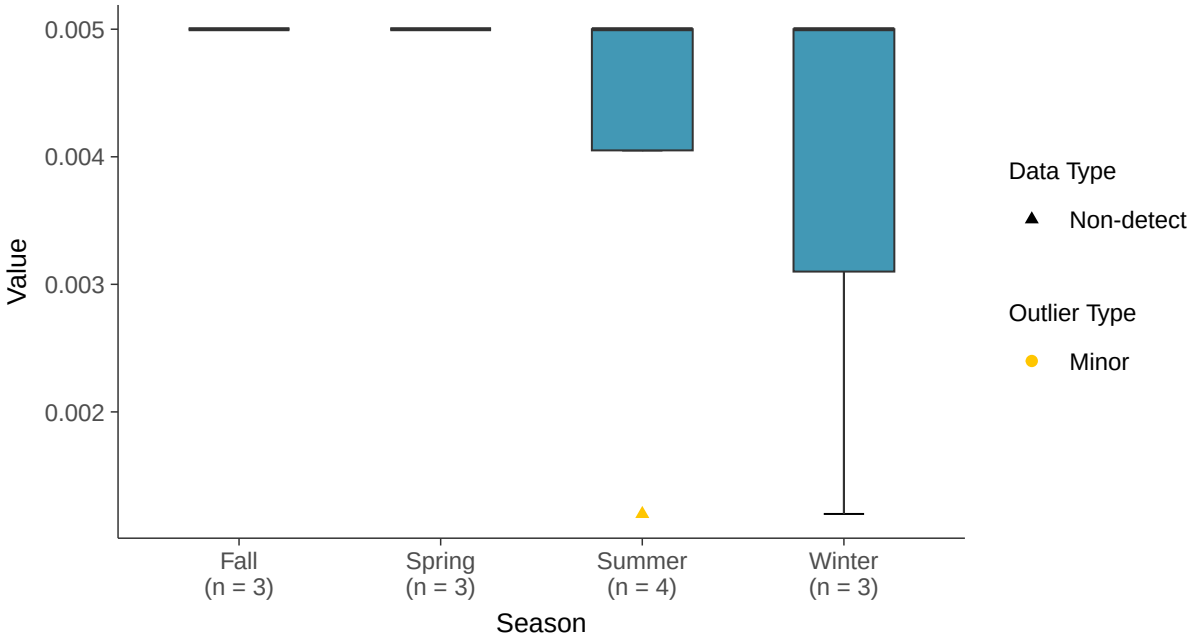
Boxplot

Chromium, MW-16D (mg/l)



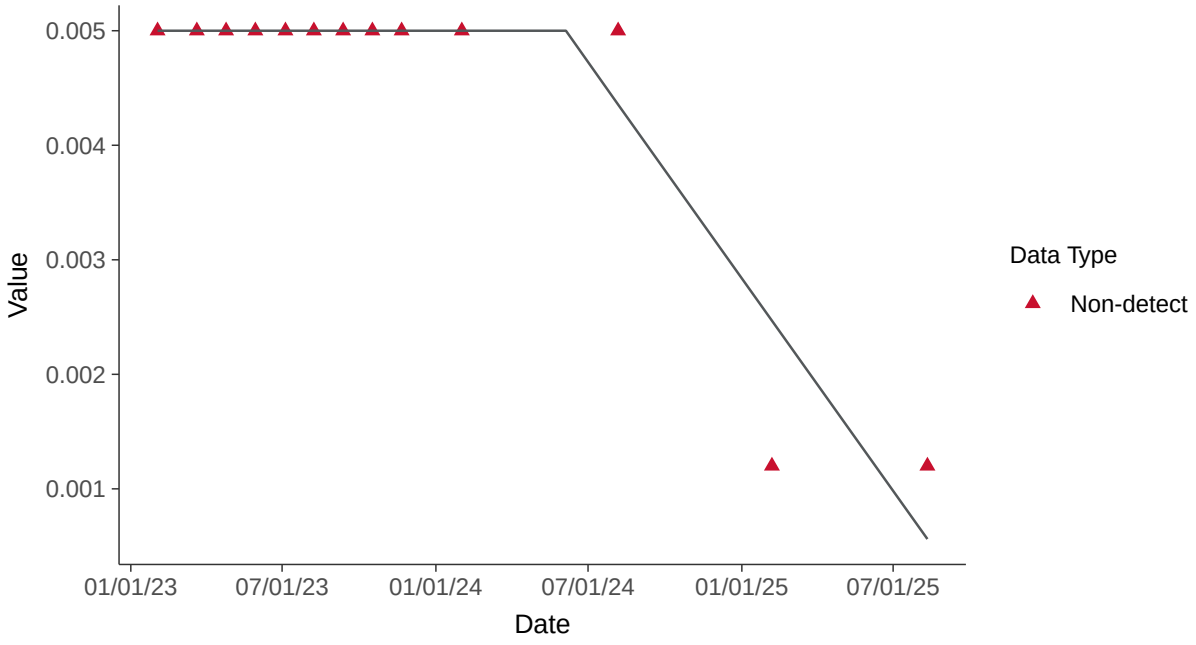
Boxplot by Season

Chromium, MW-16D (mg/l)



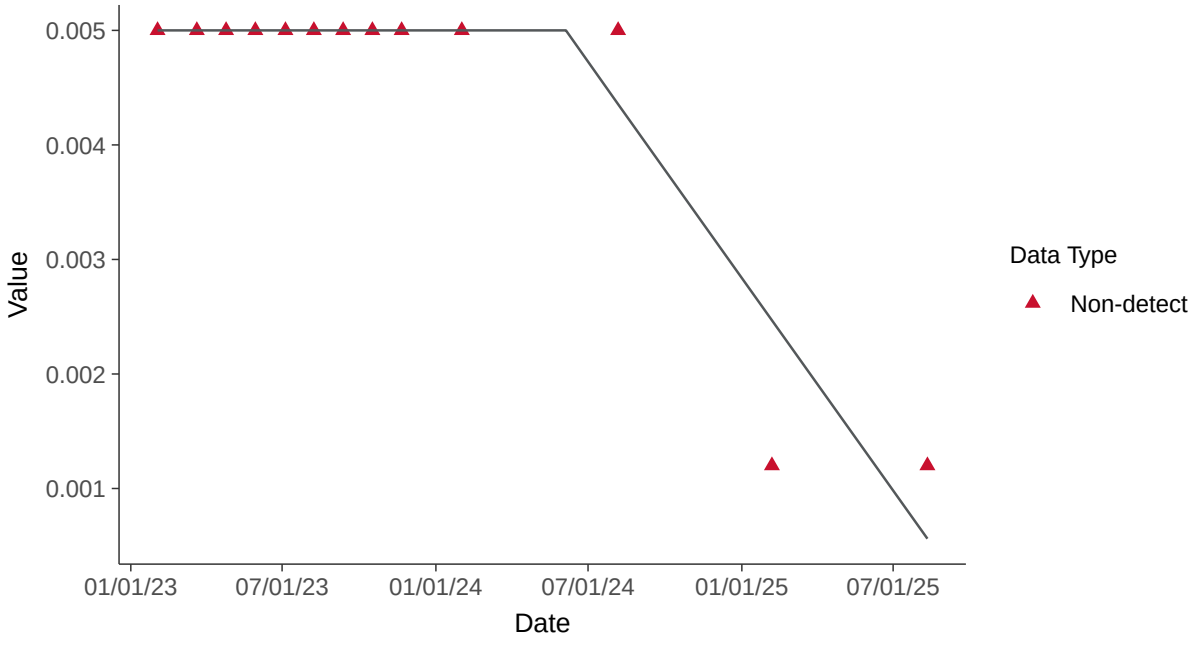
Trend Regression: Piecewise Linear-Linear

Chromium, MW-16D (mg/l)



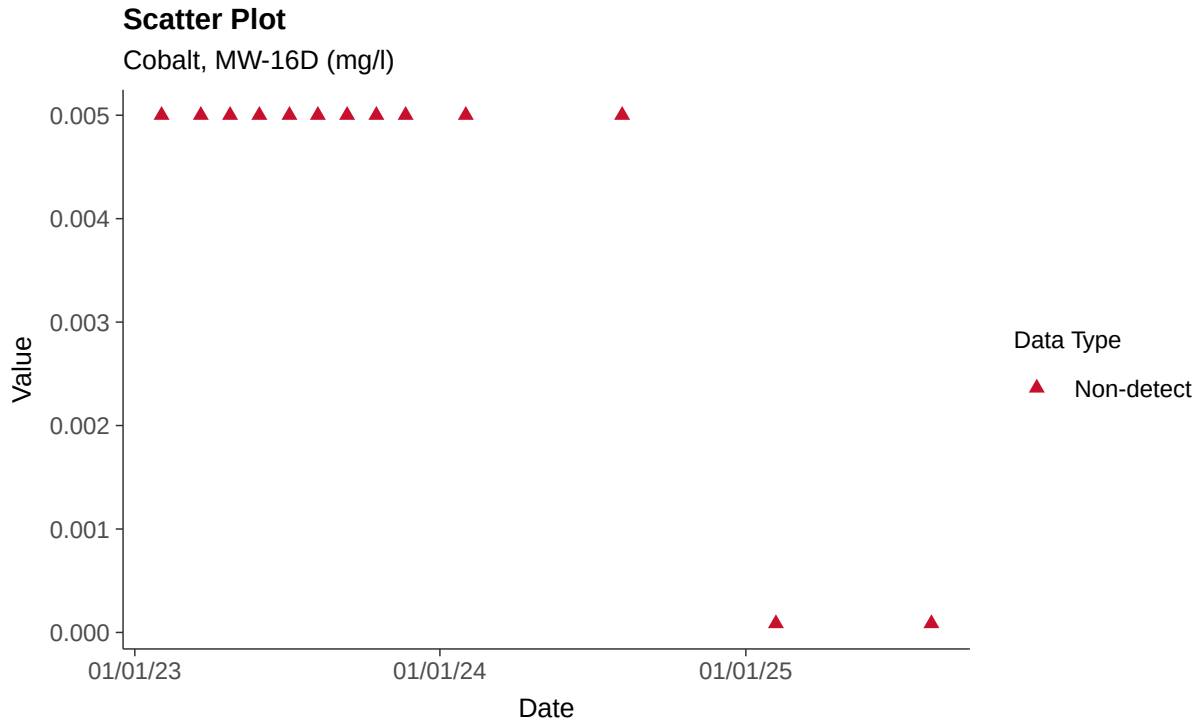
Trend Regression: Piecewise Linear-Linear-Linear

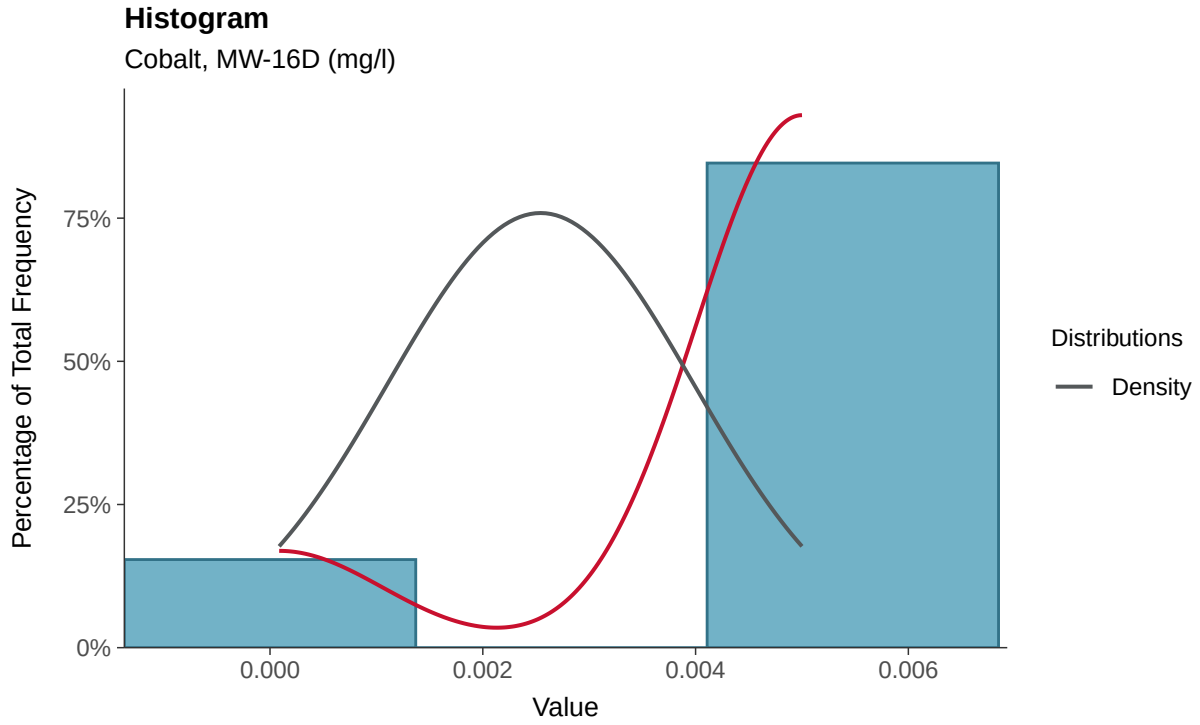
Chromium, MW-16D (mg/l)



Appendix IV: Cobalt, MW-16D

ID: 15_3_110



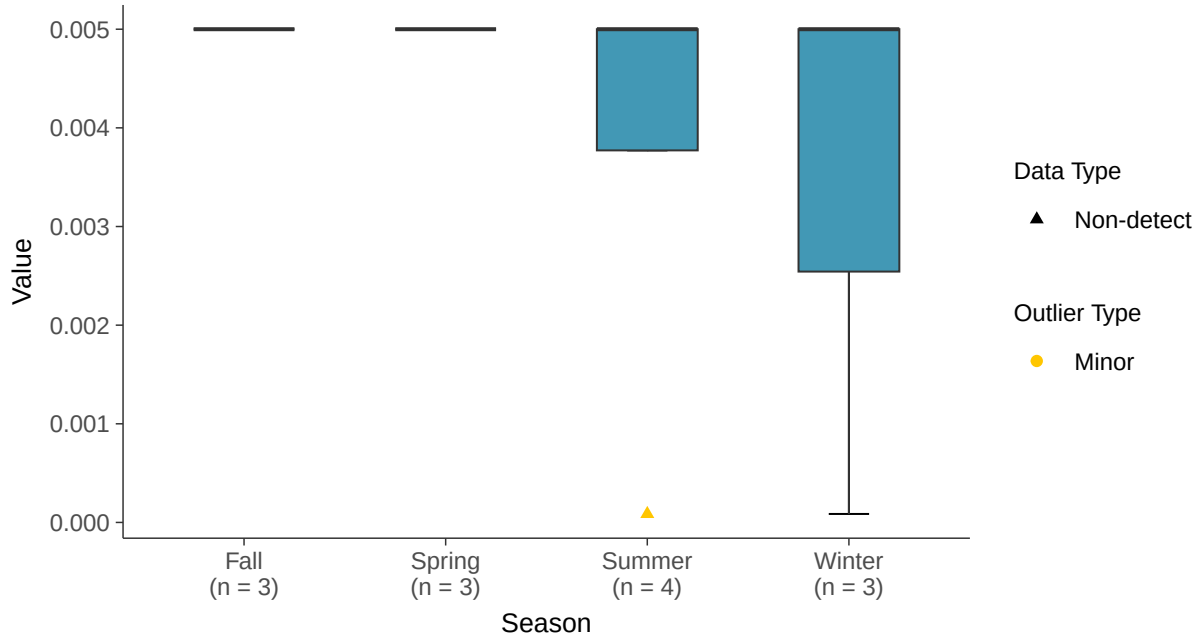


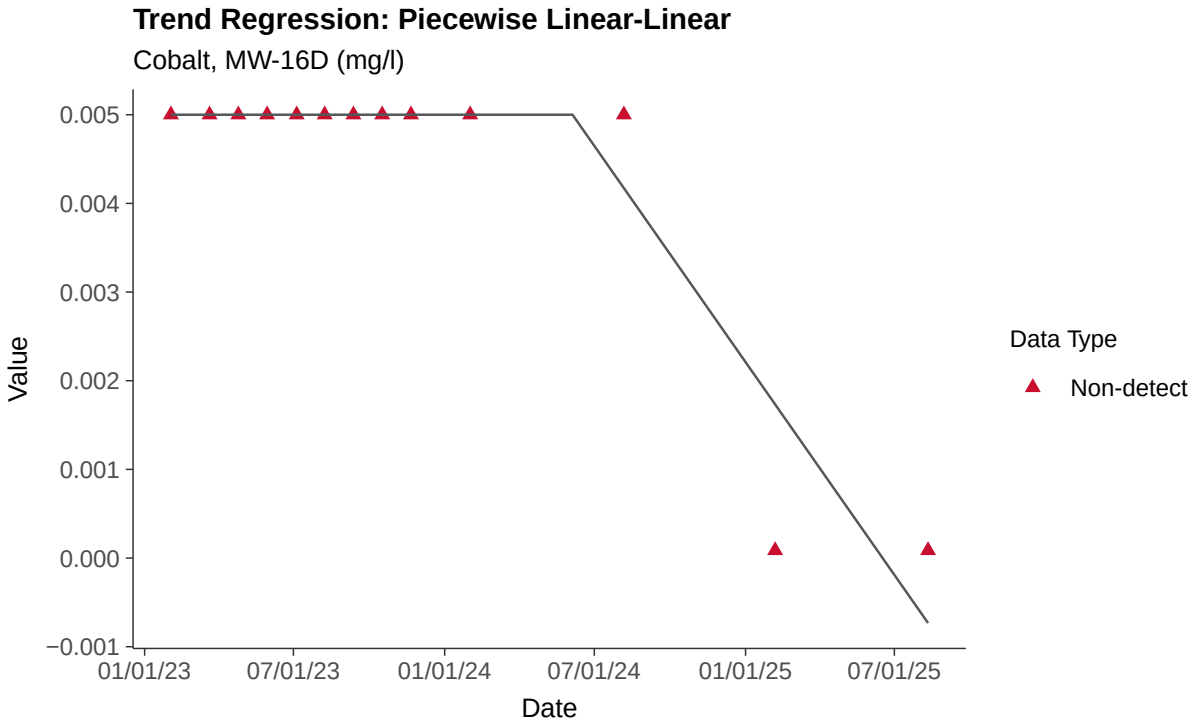
Boxplot

Cobalt, MW-16D (mg/l)

Boxplot by Season

Cobalt, MW-16D (mg/l)



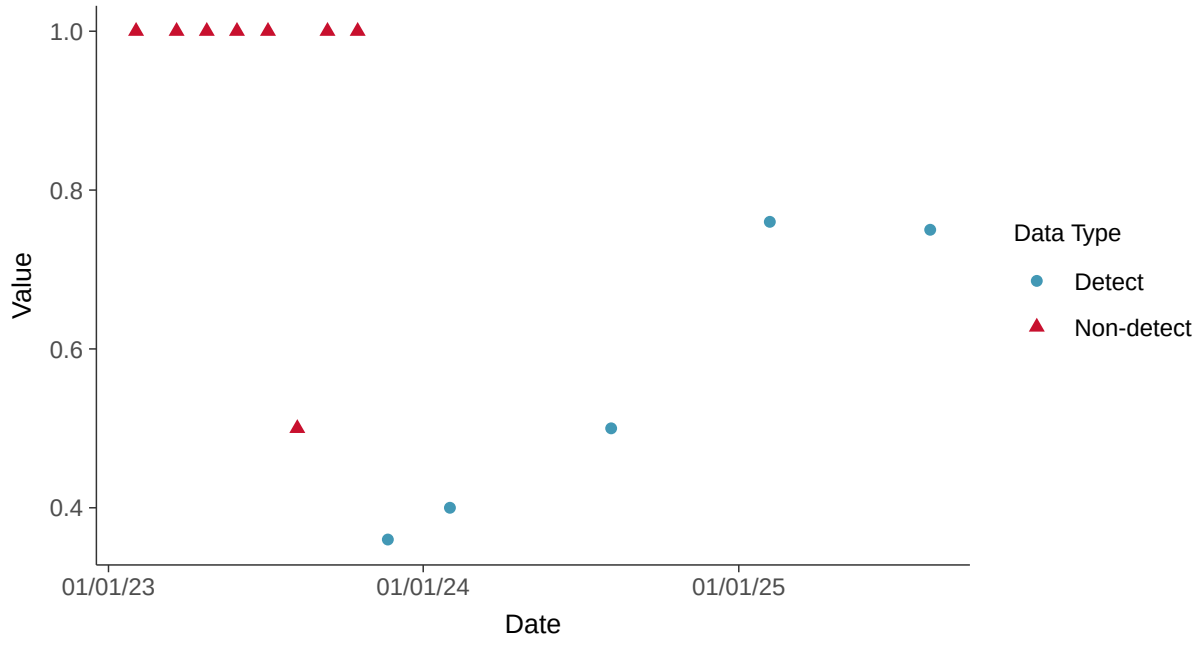

Trend Regression: Piecewise Linear-Linear
Cobalt, MW-16D (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
−0.001
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Fluoride (App IV), MW-16D

ID: 15_3_113

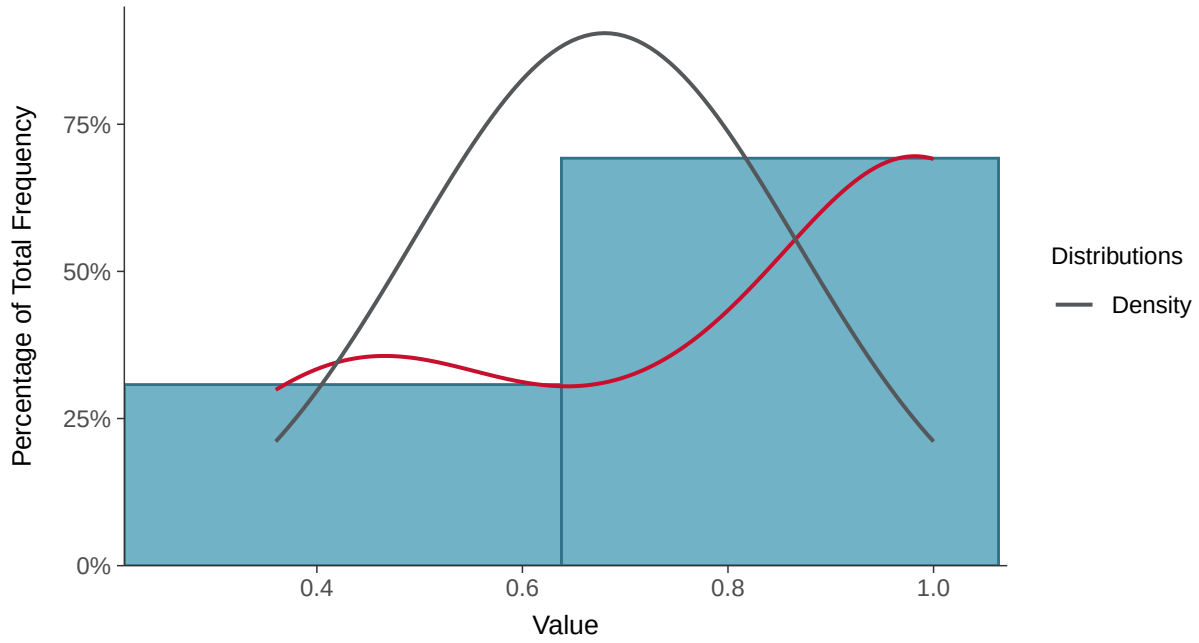
Scatter Plot

Fluoride (App IV), MW-16D (mg/l)



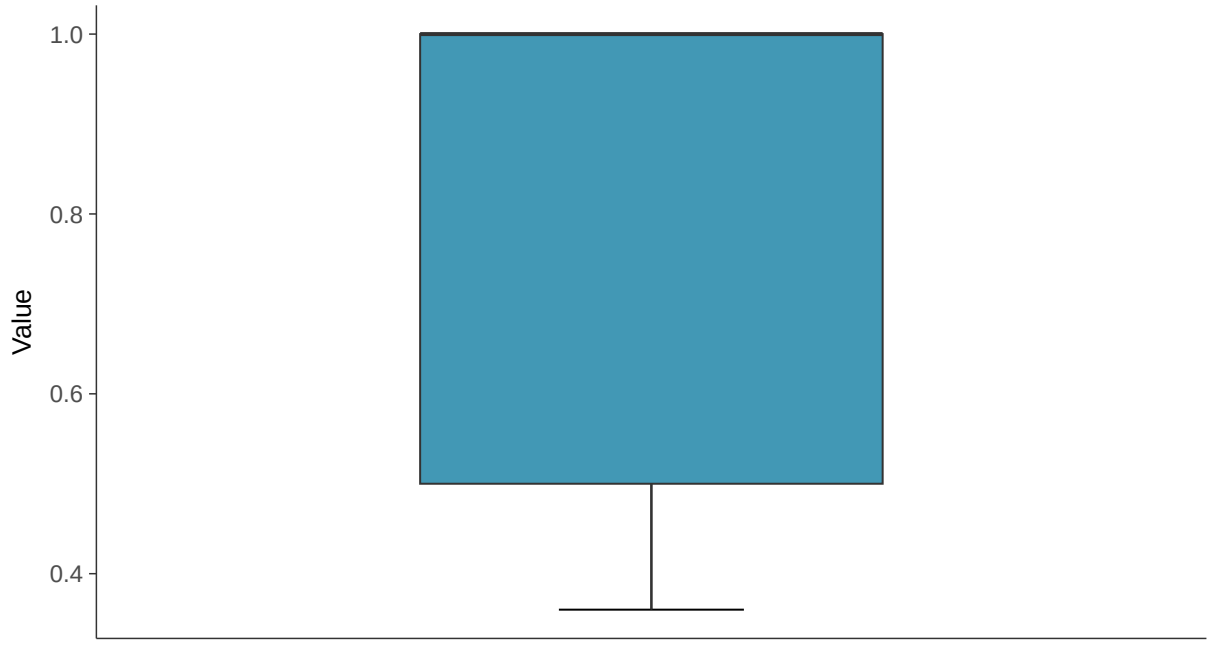
Histogram

Fluoride (App IV), MW-16D (mg/l)



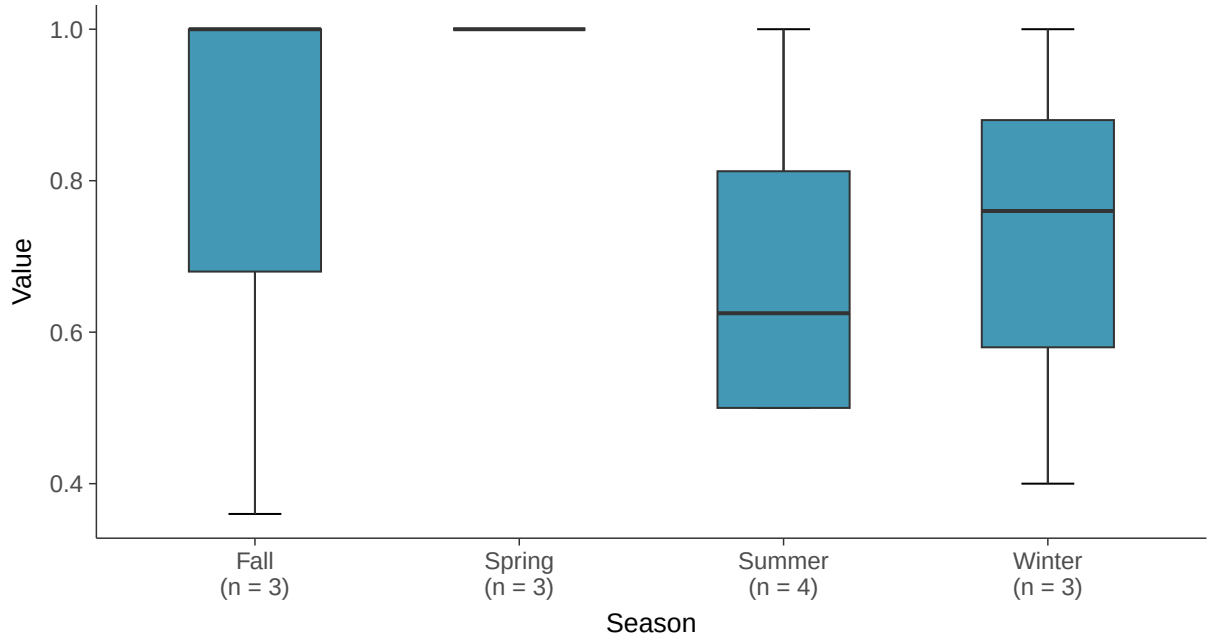
Boxplot

Fluoride (App IV), MW-16D (mg/l)



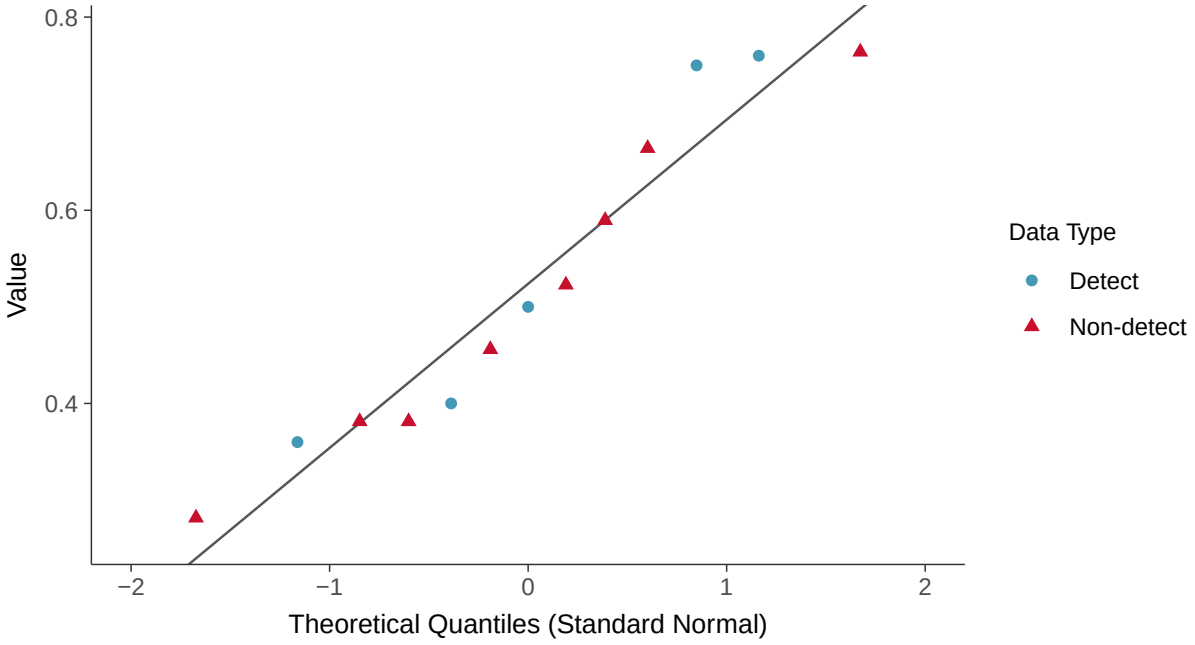
Boxplot by Season

Fluoride (App IV), MW-16D (mg/l)



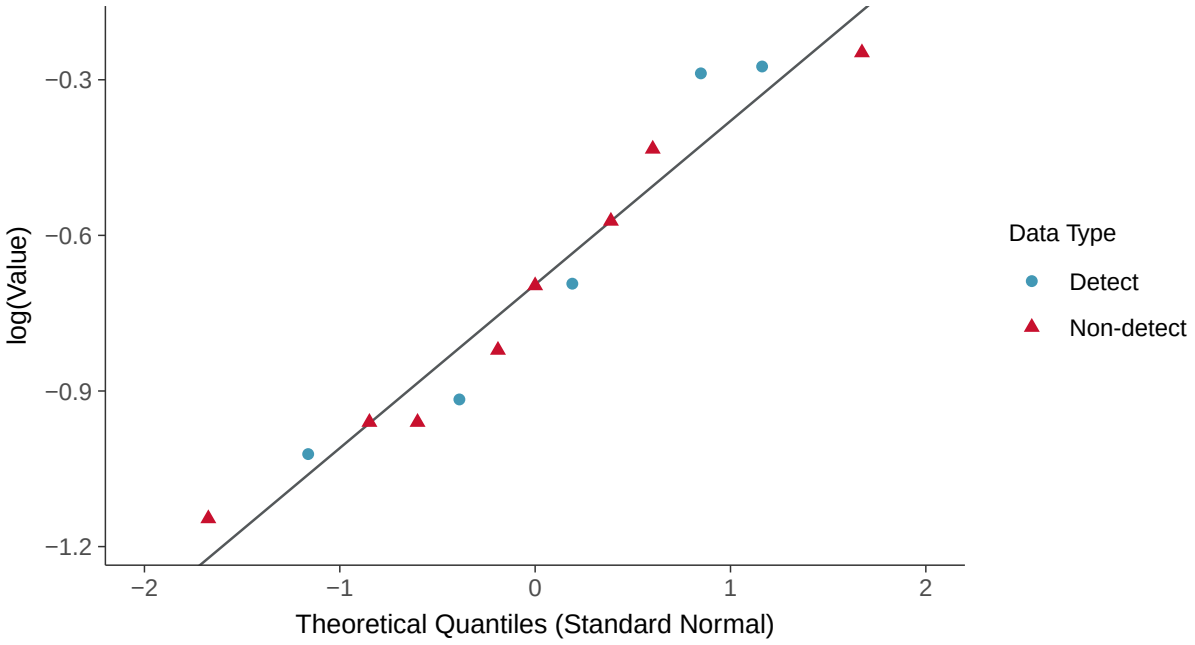
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-16D (mg/l)



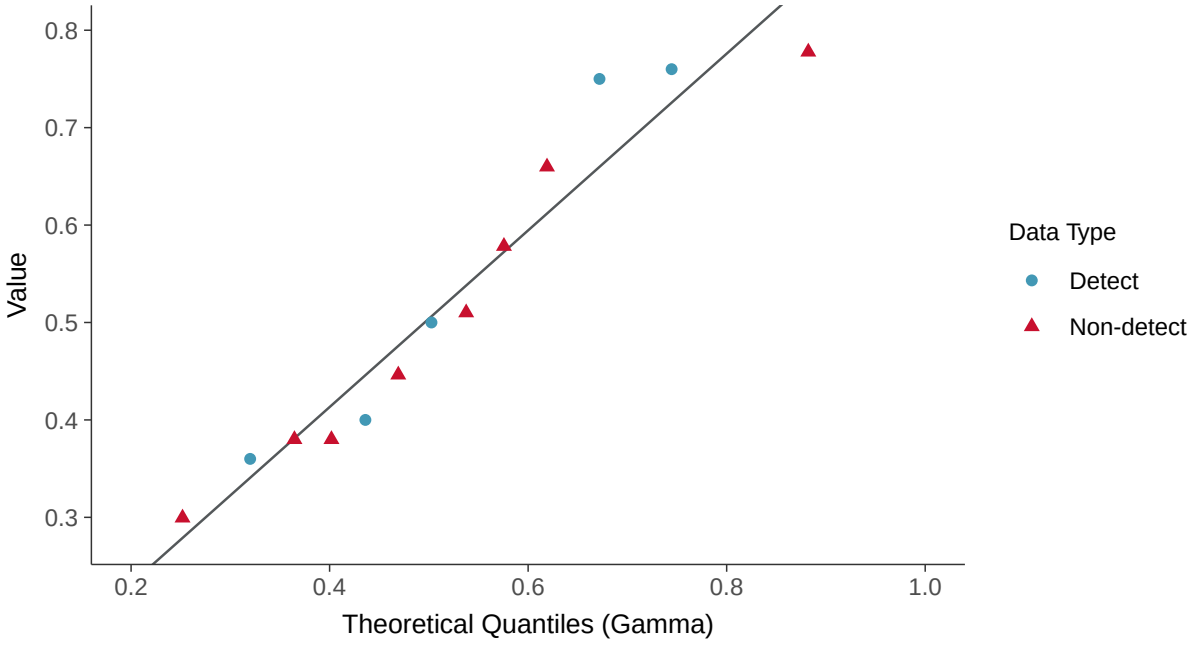
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-16D (mg/l)



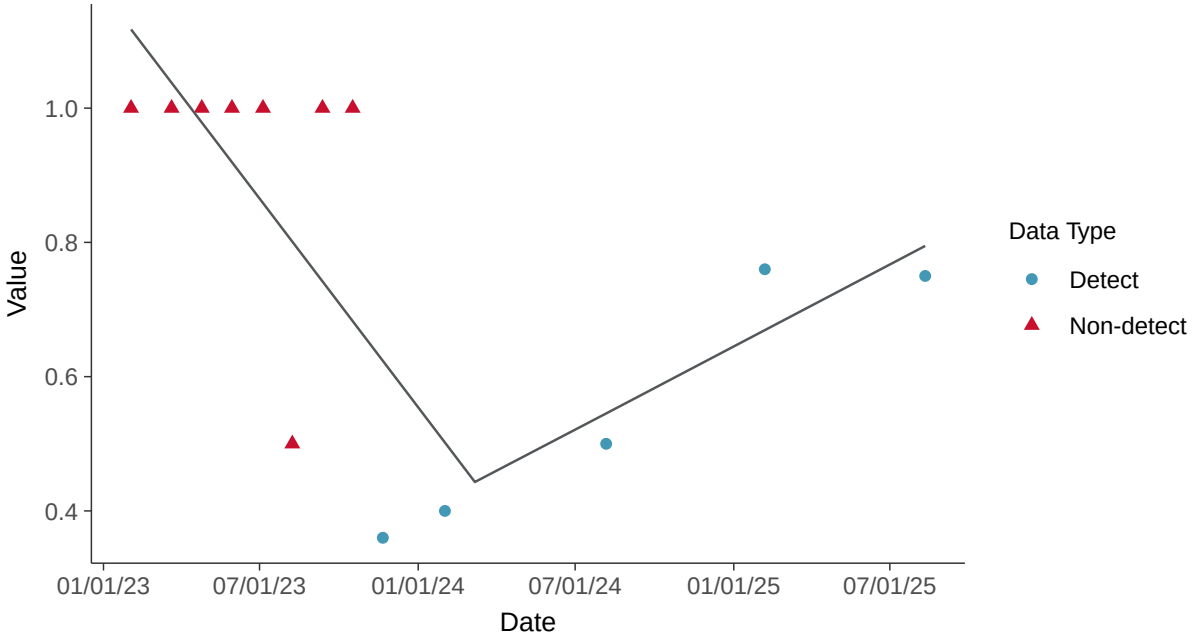
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-16D (mg/l)



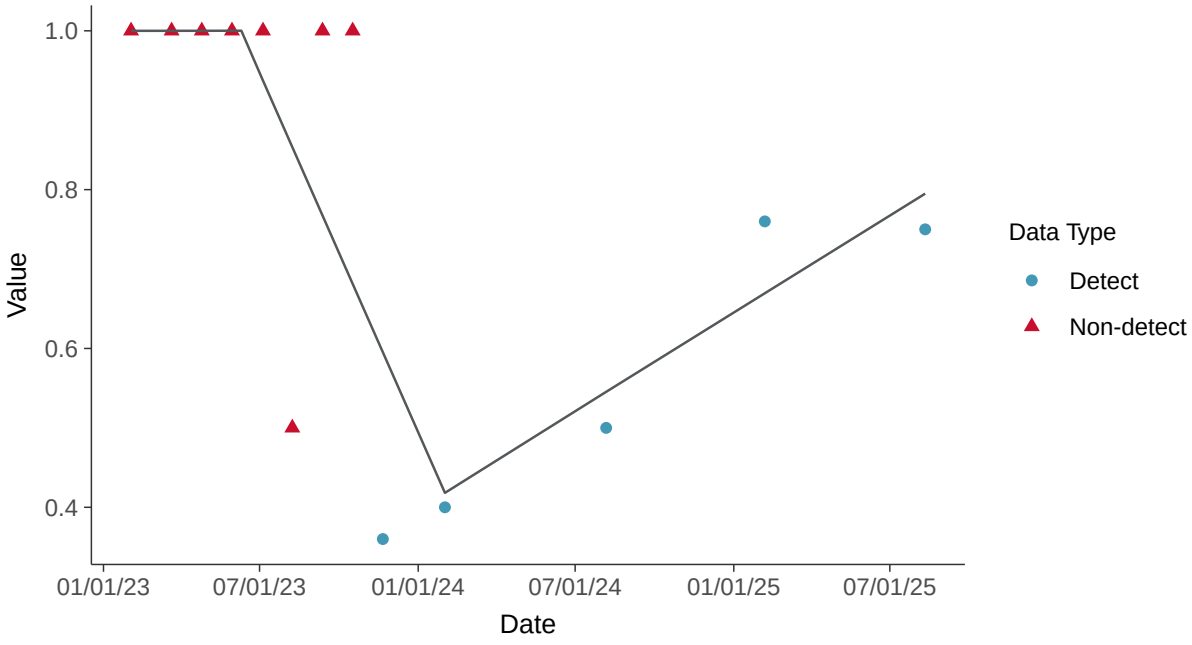
Trend Regression: Piecewise Linear-Linear

Fluoride (App IV), MW-16D (mg/l)



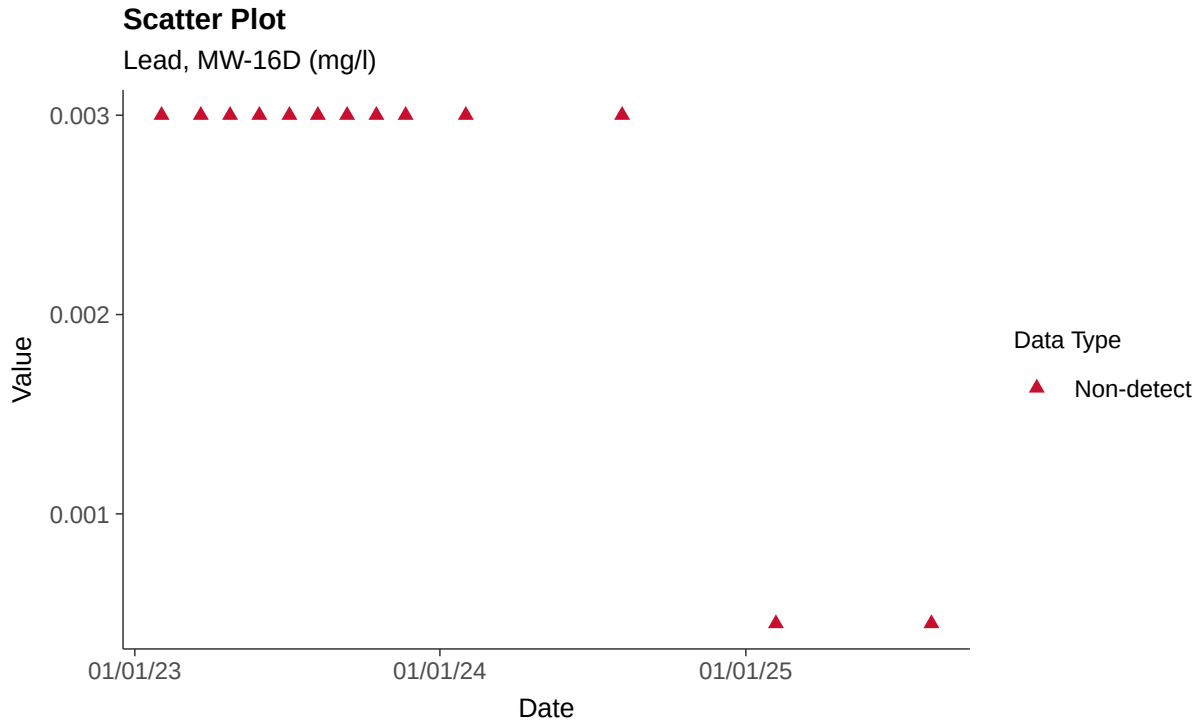
Trend Regression: Piecewise Linear-Linear-Linear

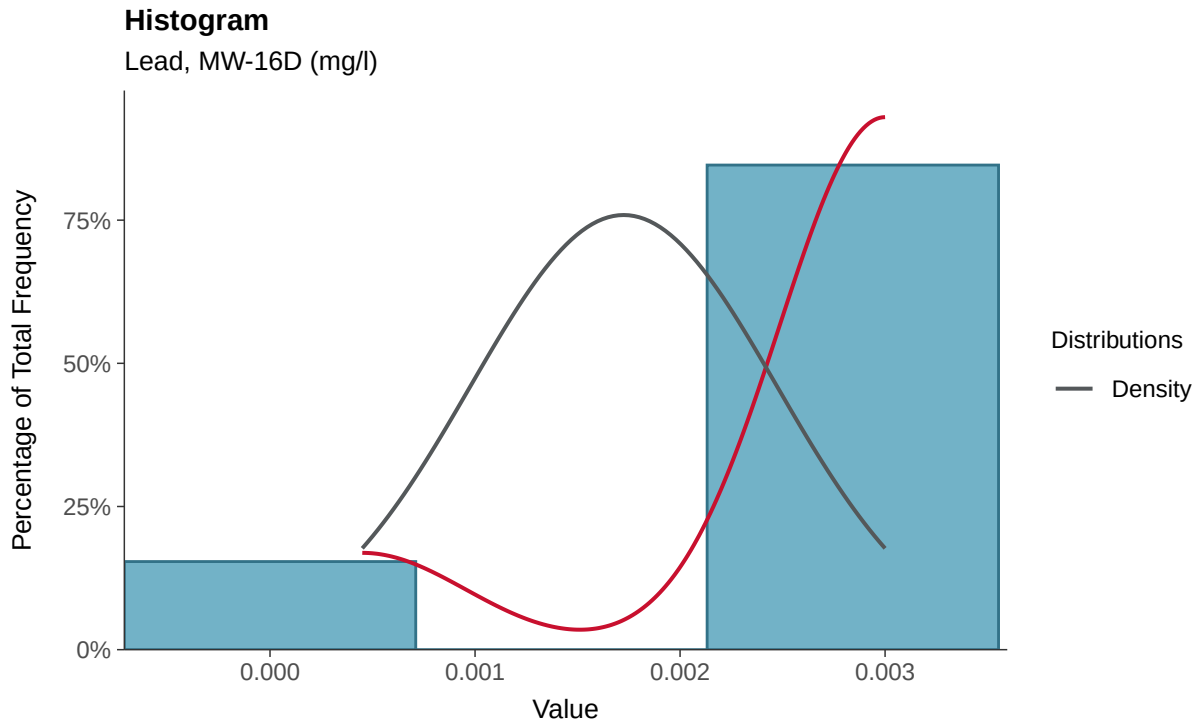
Fluoride (App IV), MW-16D (mg/l)



Appendix IV: Lead, MW-16D

ID: 15_3_115



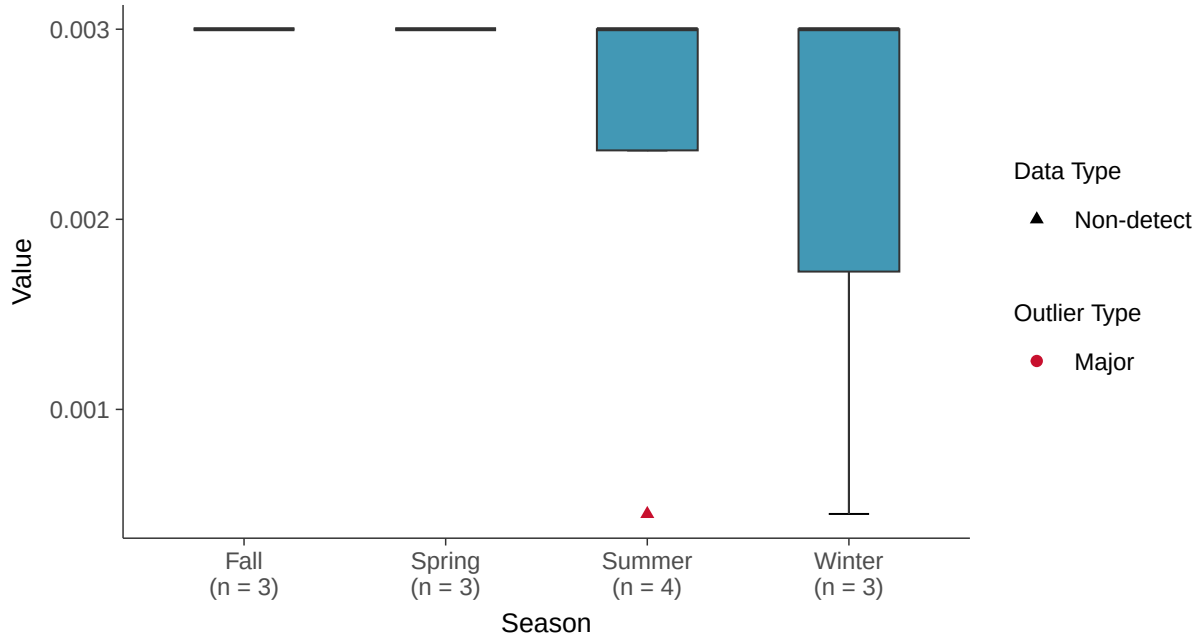


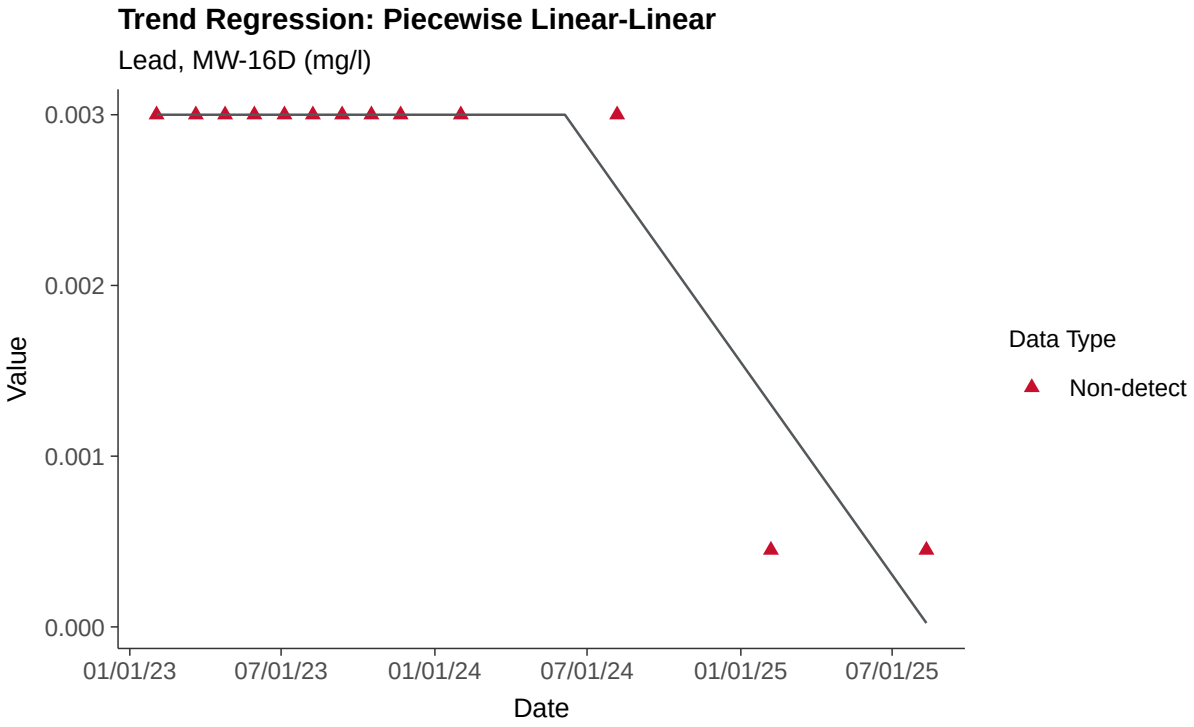
Boxplot

Lead, MW-16D (mg/l)

Boxplot by Season

Lead, MW-16D (mg/l)



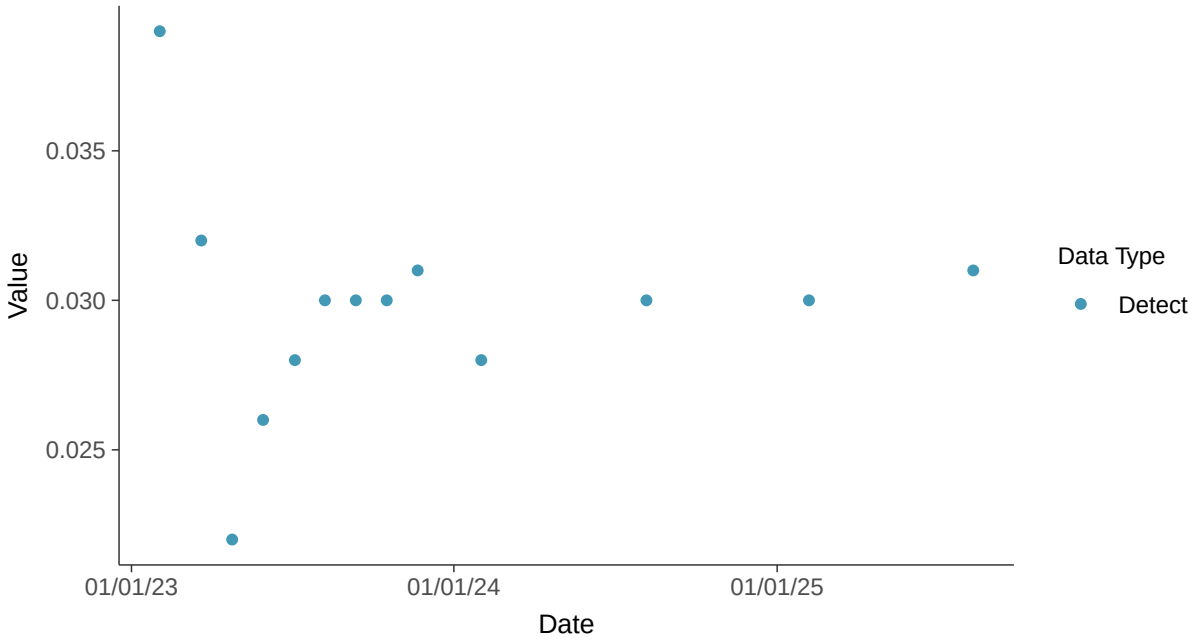

Trend Regression: Piecewise Linear-Linear
Lead, MW-16D (mg/l)
0.003
0.002
0.001
0.000
Value
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Lithium, MW-16D

ID: 15_3_116

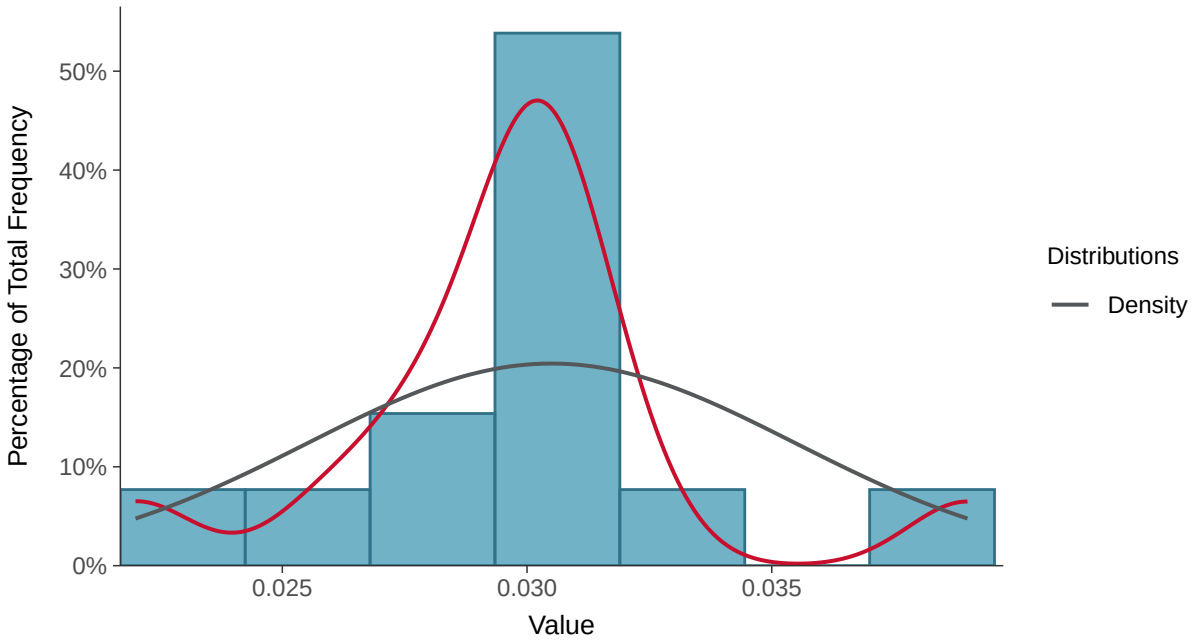
Scatter Plot

Lithium, MW-16D (mg/l)



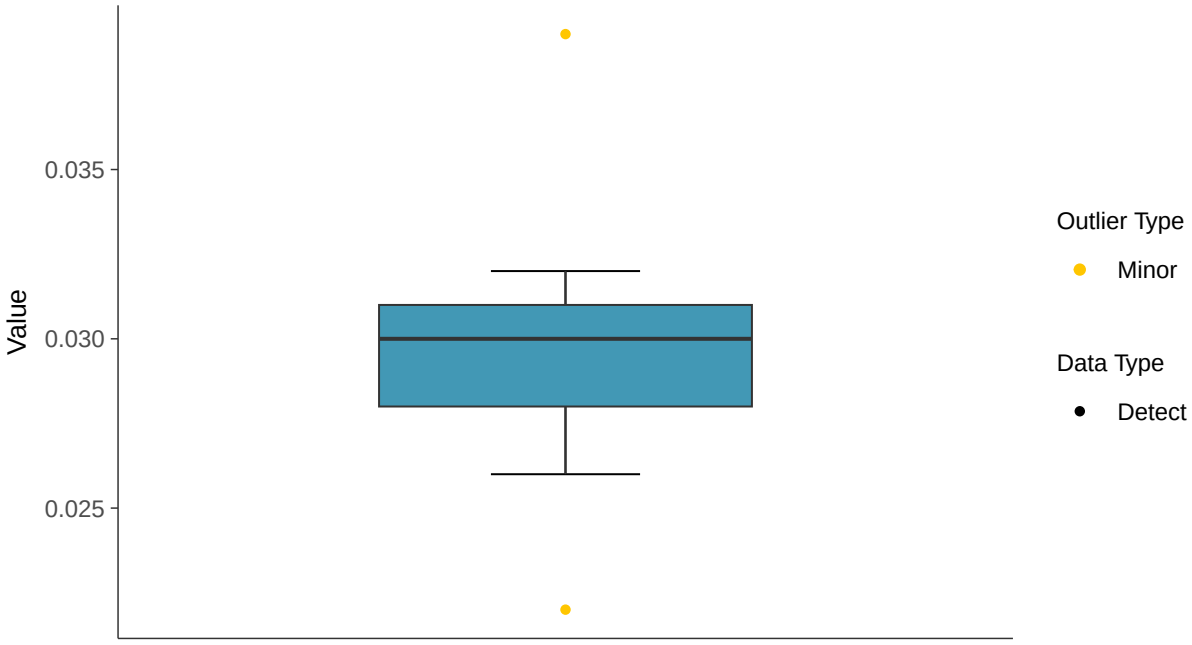
Histogram

Lithium, MW-16D (mg/l)



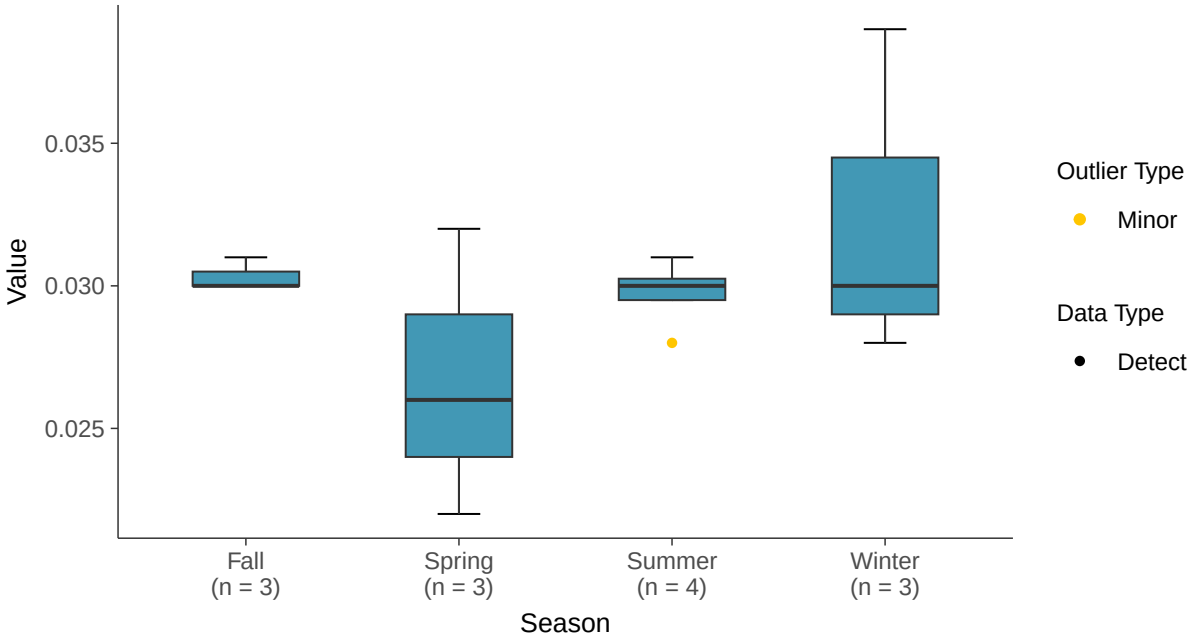
Boxplot

Lithium, MW-16D (mg/l)



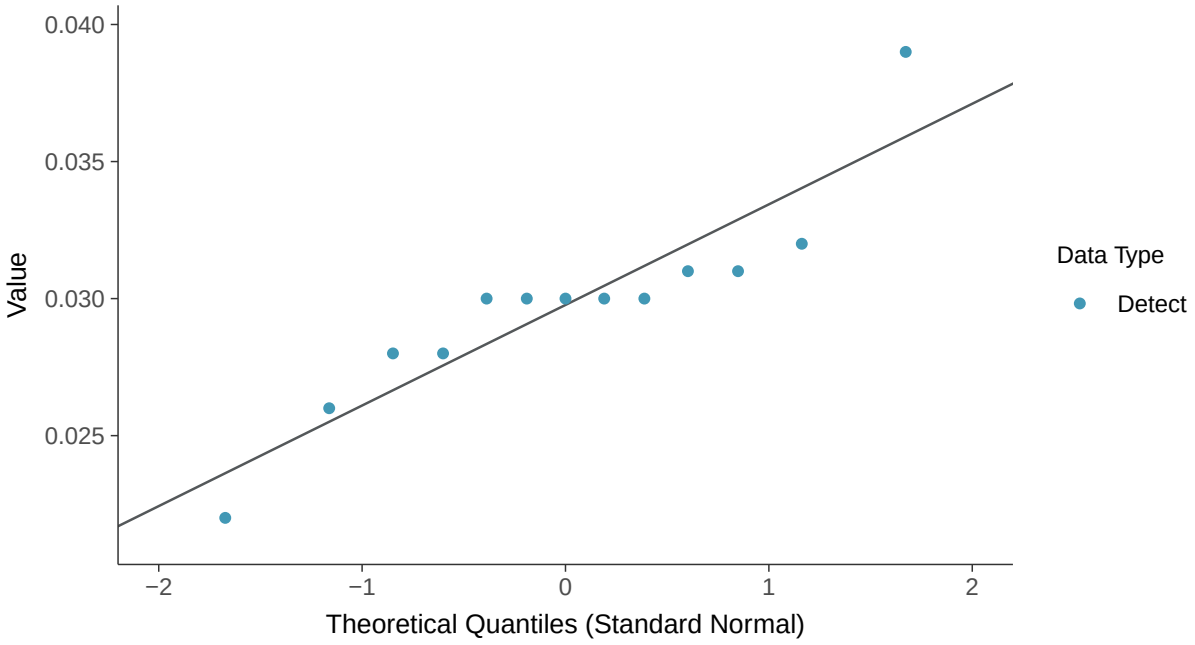
Boxplot by Season

Lithium, MW-16D (mg/l)



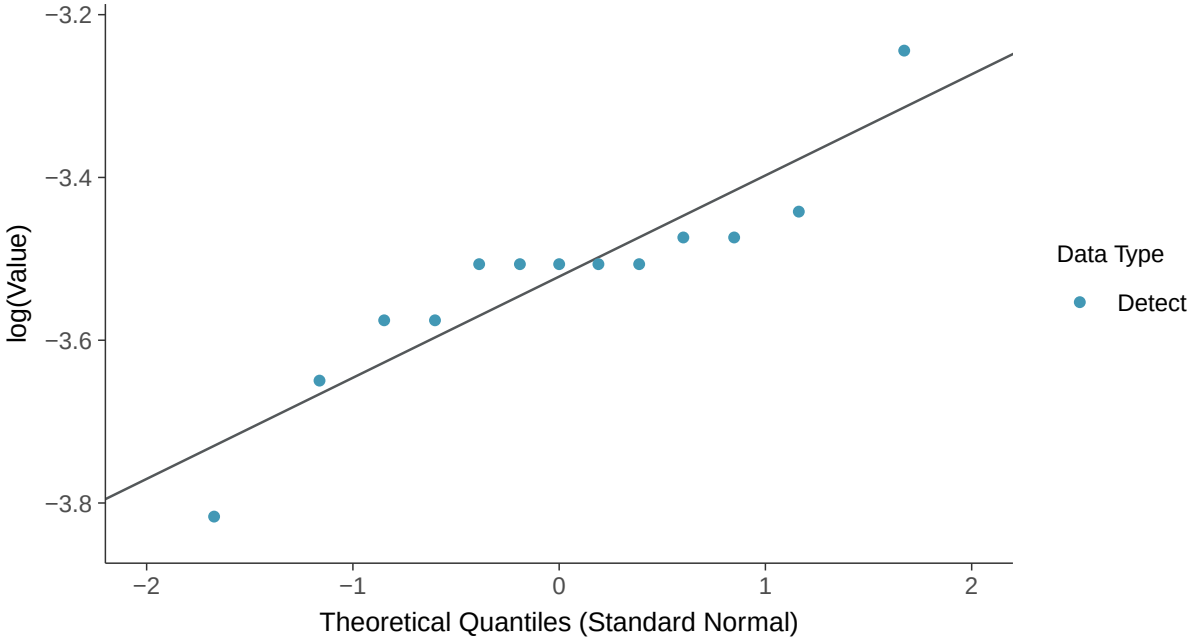
Normal Q-Q plot

Lithium, MW-16D (mg/l)



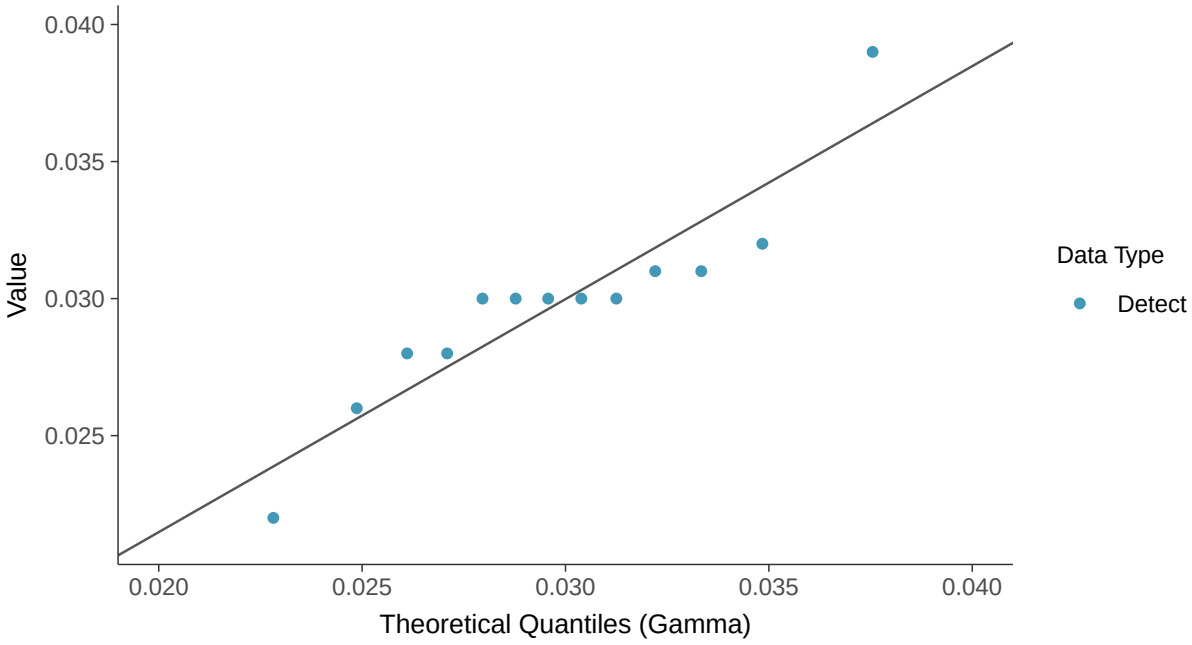
Lognormal Q-Q plot

Lithium, MW-16D (mg/l)



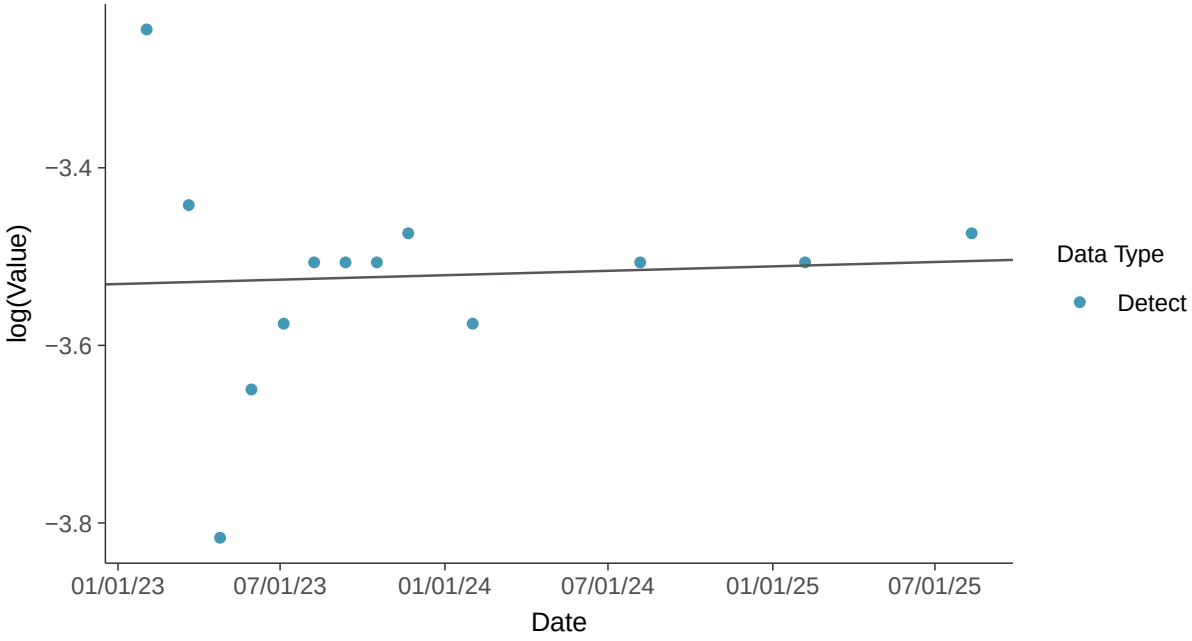
Gamma Q-Q plot

Lithium, MW-16D (mg/l)



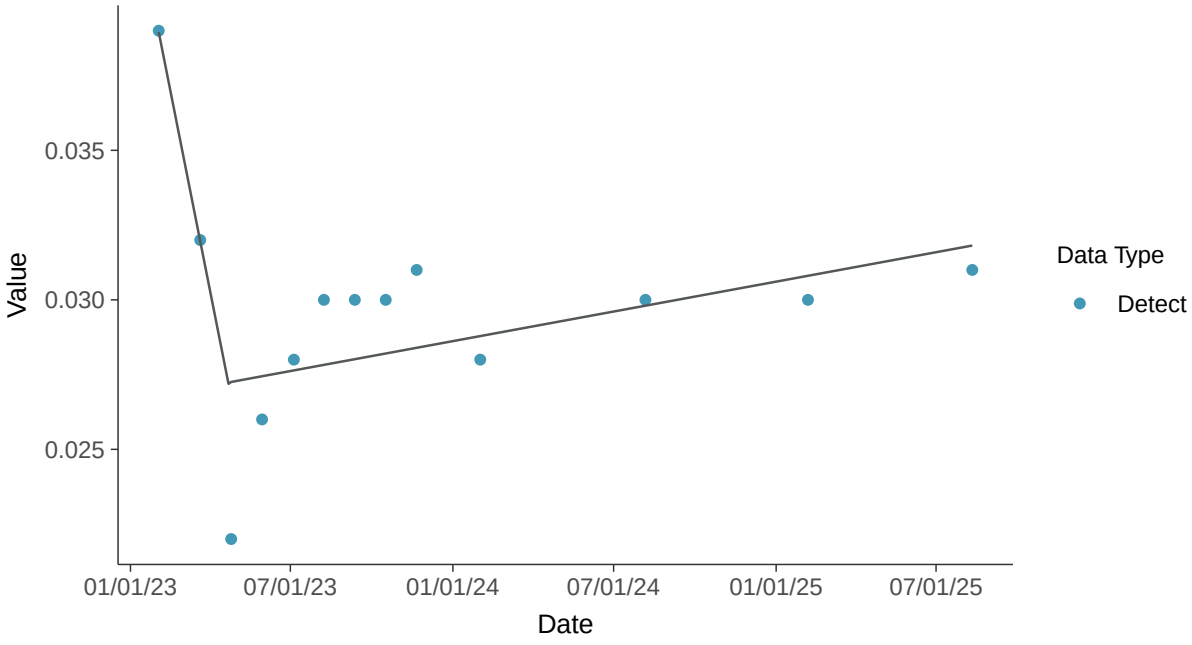
Trend Regression: Lognormal MLE

Lithium, MW-16D (mg/l)



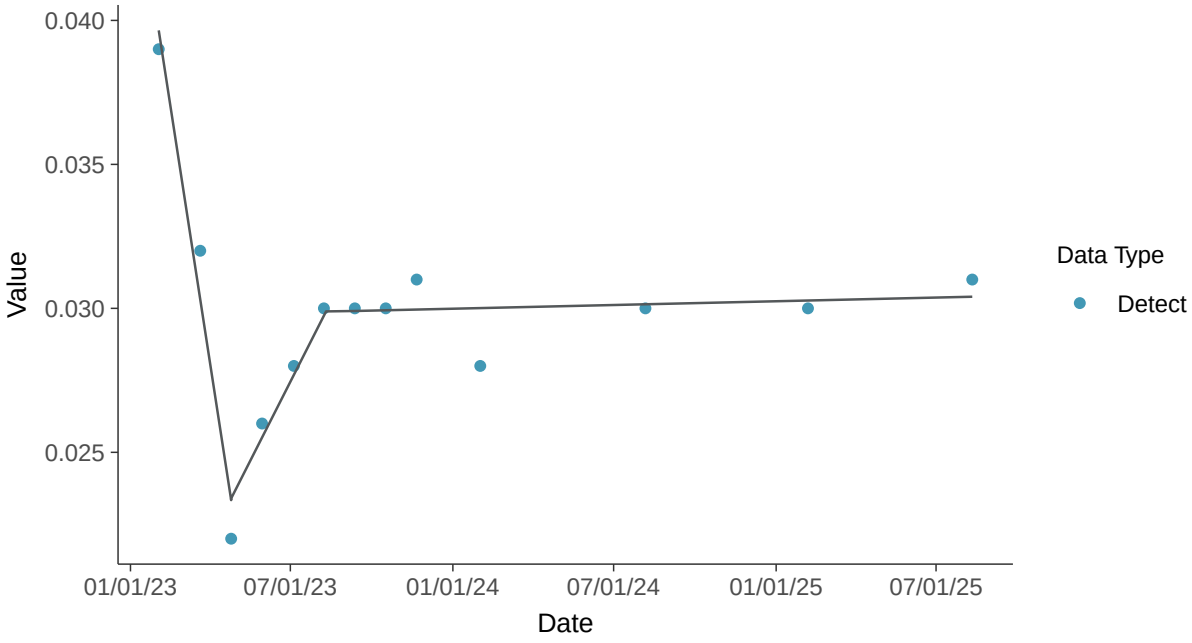
Trend Regression: Piecewise Linear-Linear

Lithium, MW-16D (mg/l)



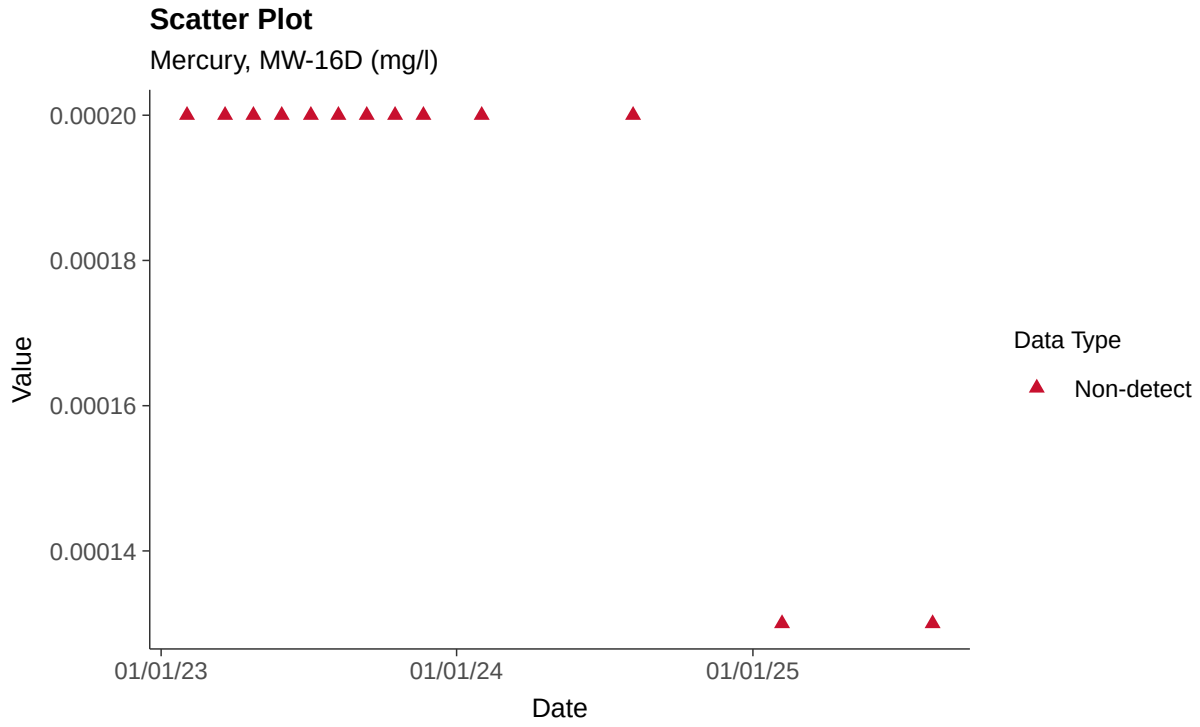
Trend Regression: Piecewise Linear-Linear-Linear

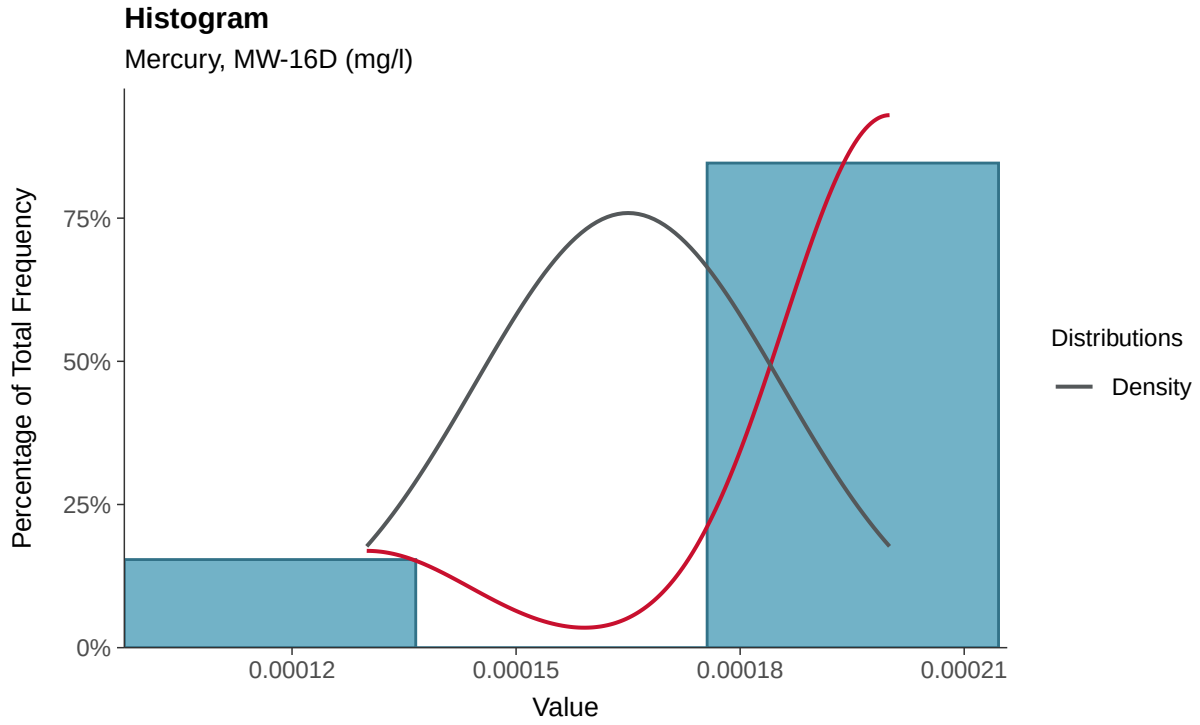
Lithium, MW-16D (mg/l)



Appendix IV: Mercury, MW-16D

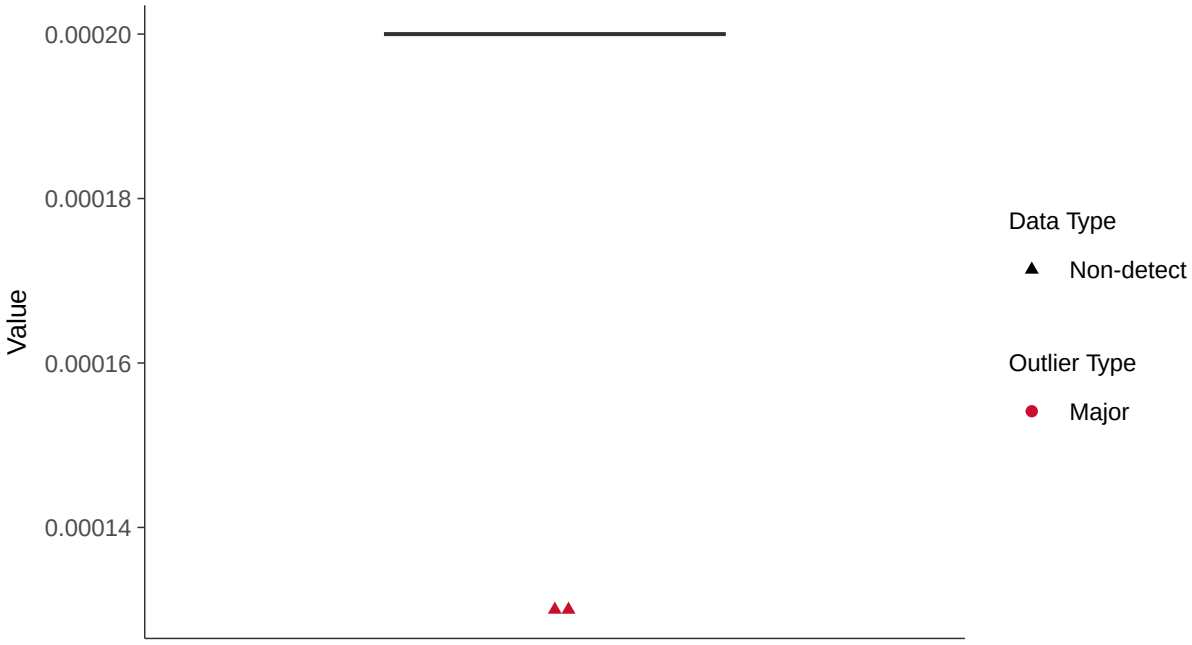
ID: 15_3_117





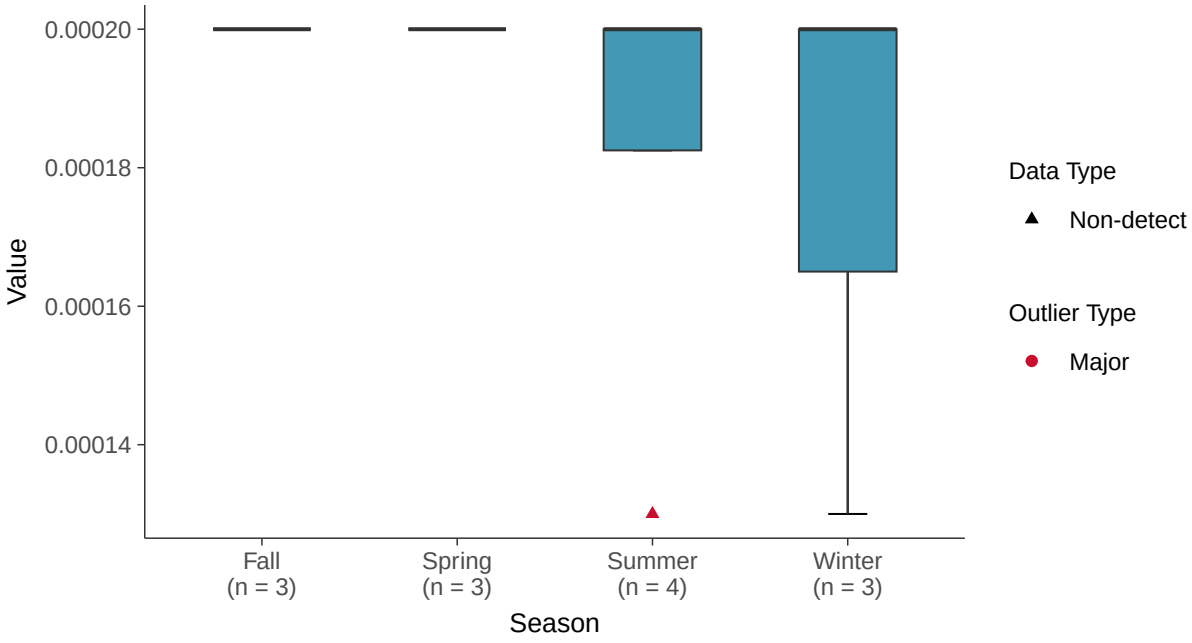
Boxplot

Mercury, MW-16D (mg/l)



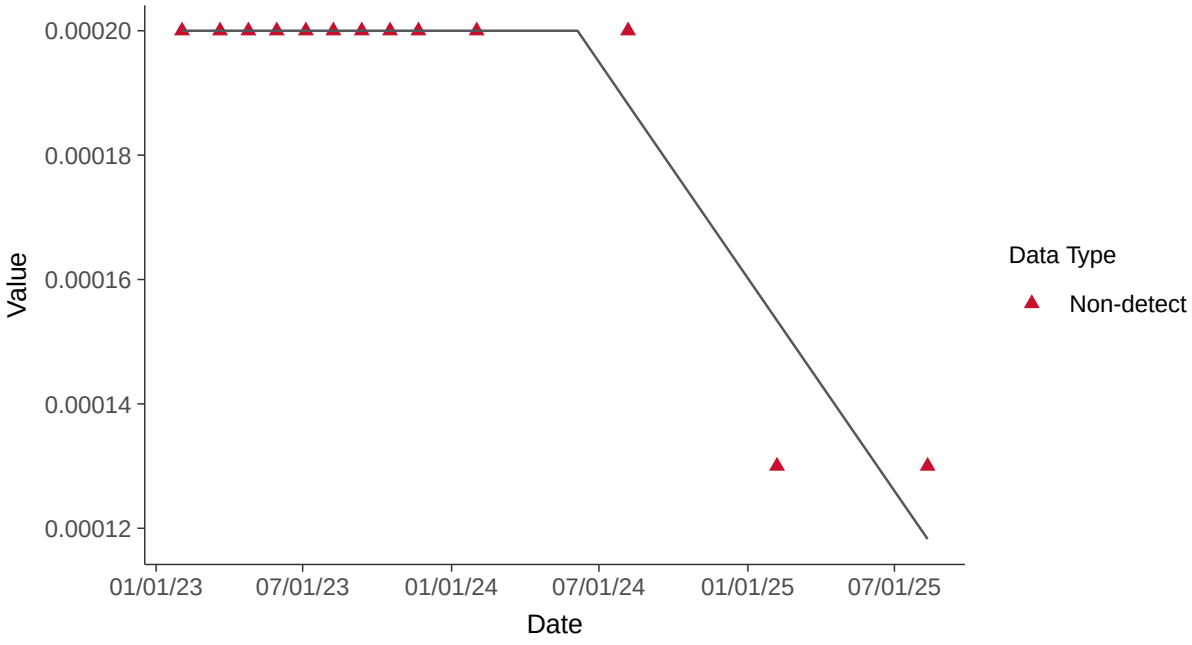
Boxplot by Season

Mercury, MW-16D (mg/l)



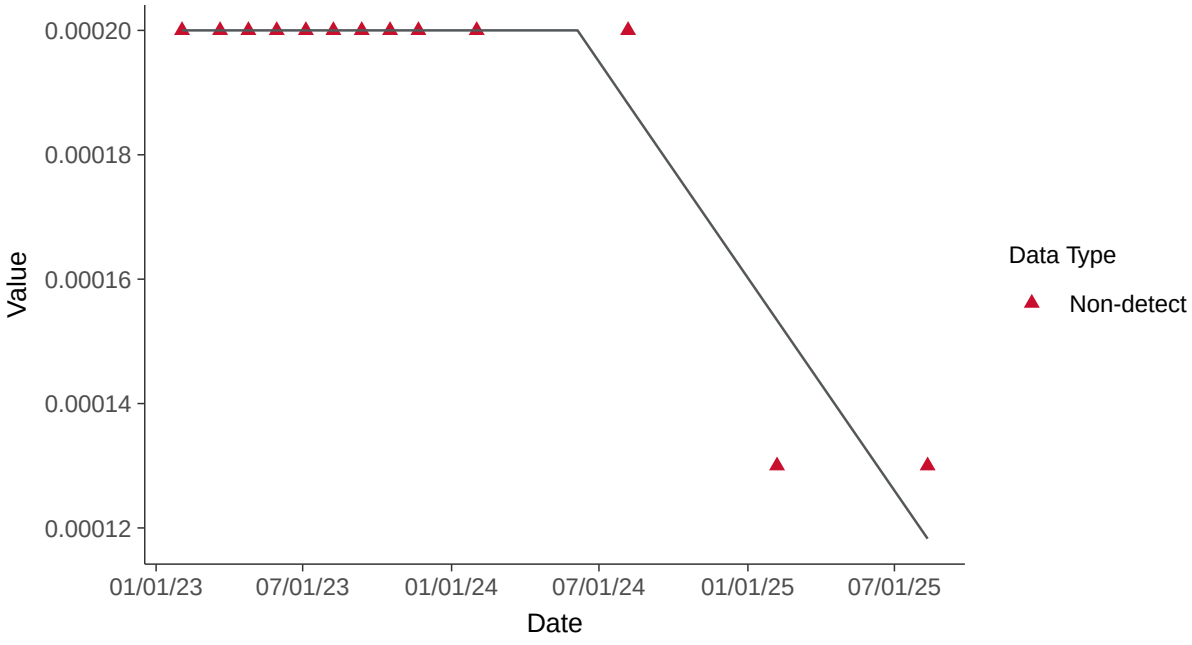
Trend Regression: Piecewise Linear-Linear

Mercury, MW-16D (mg/l)



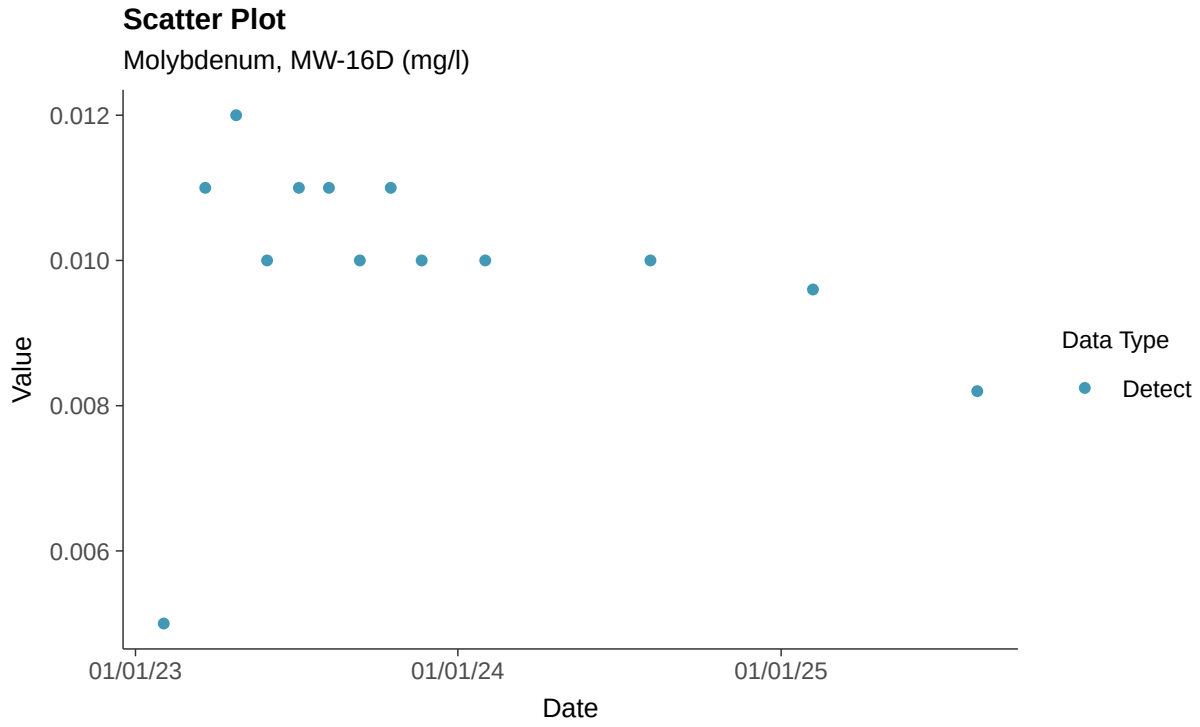
Trend Regression: Piecewise Linear-Linear-Linear

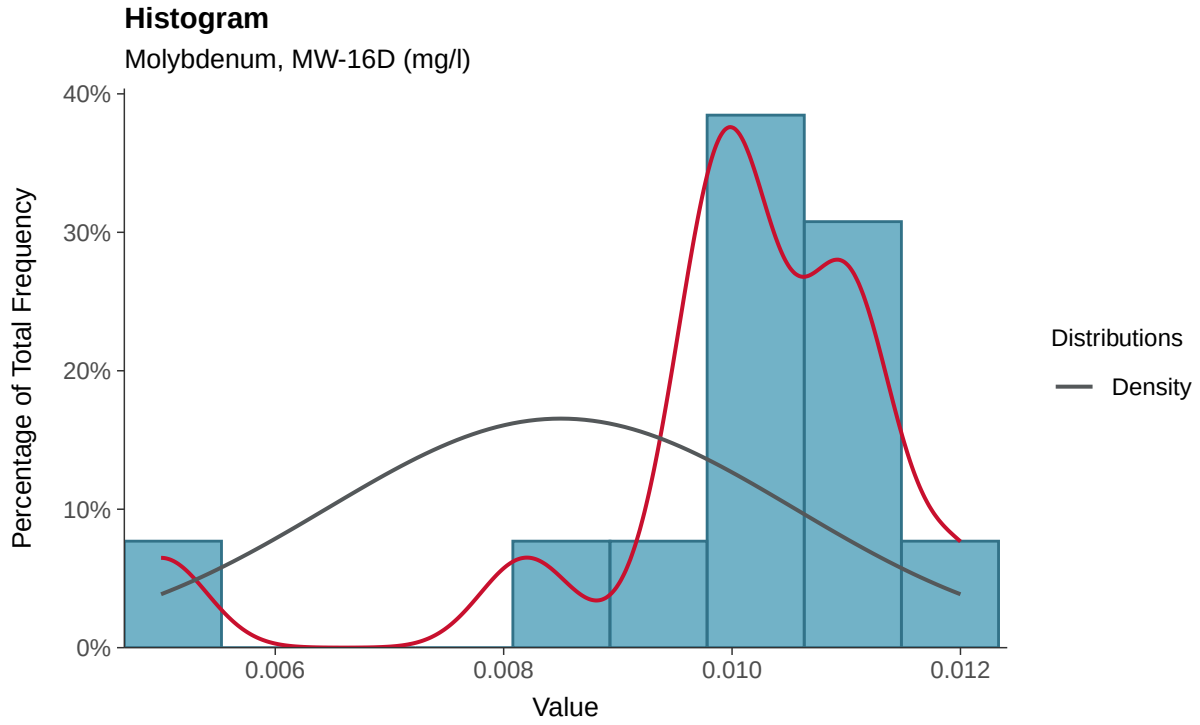
Mercury, MW-16D (mg/l)



Appendix IV: Molybdenum, MW-16D

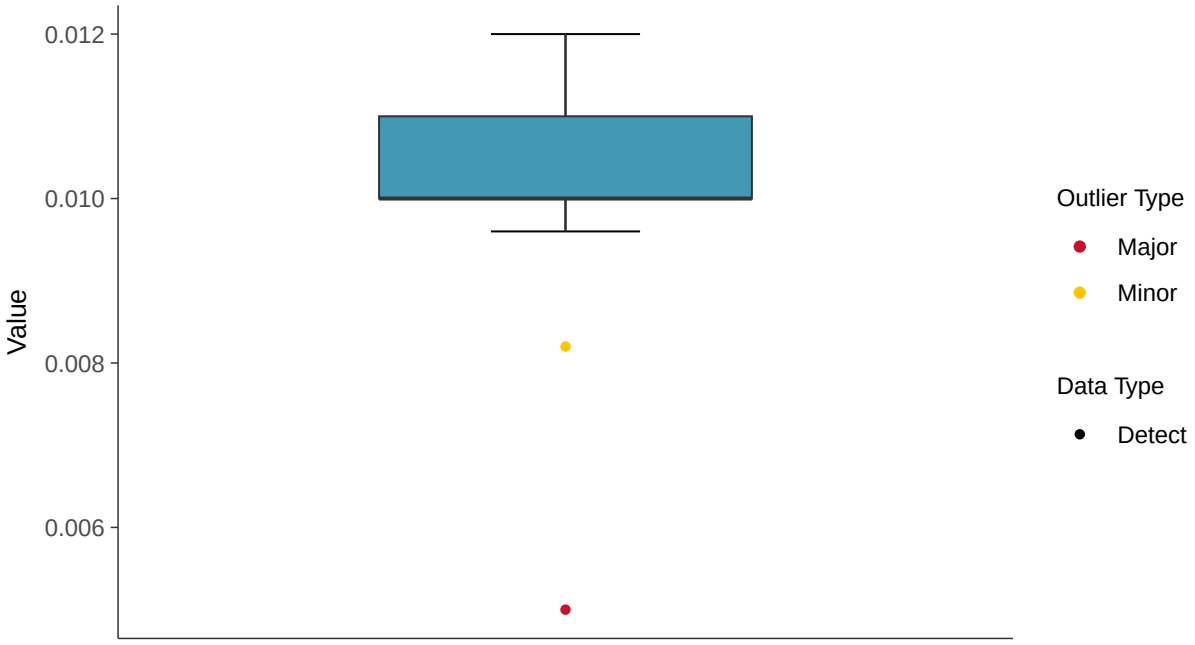
ID: 15_3_118





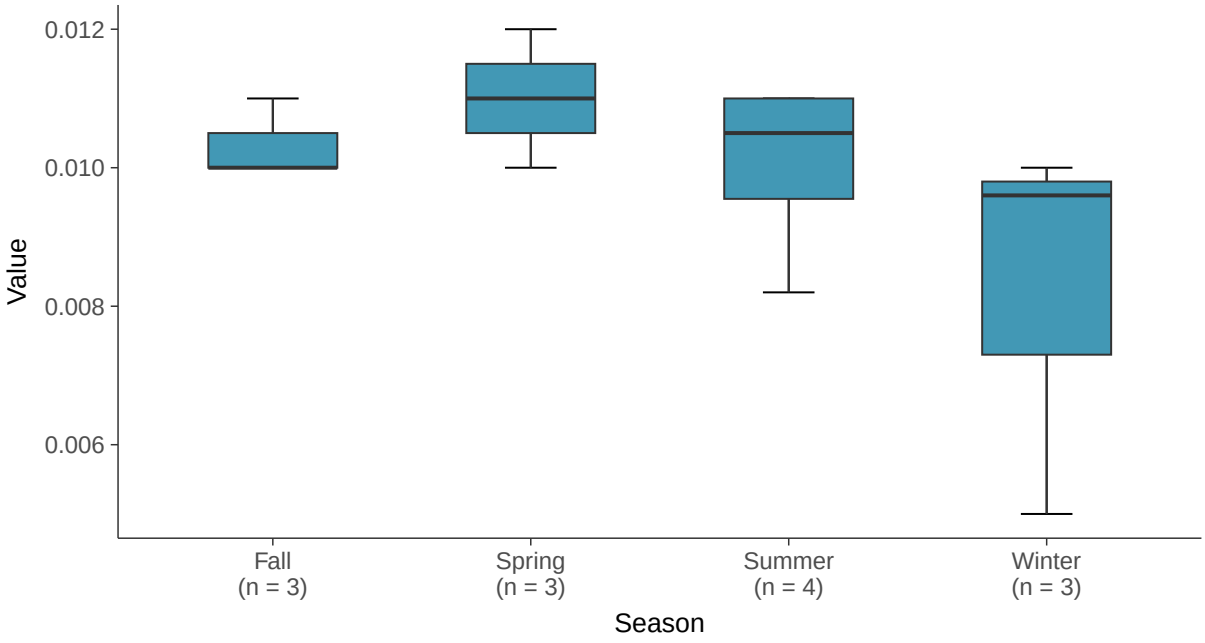
Boxplot

Molybdenum, MW-16D (mg/l)



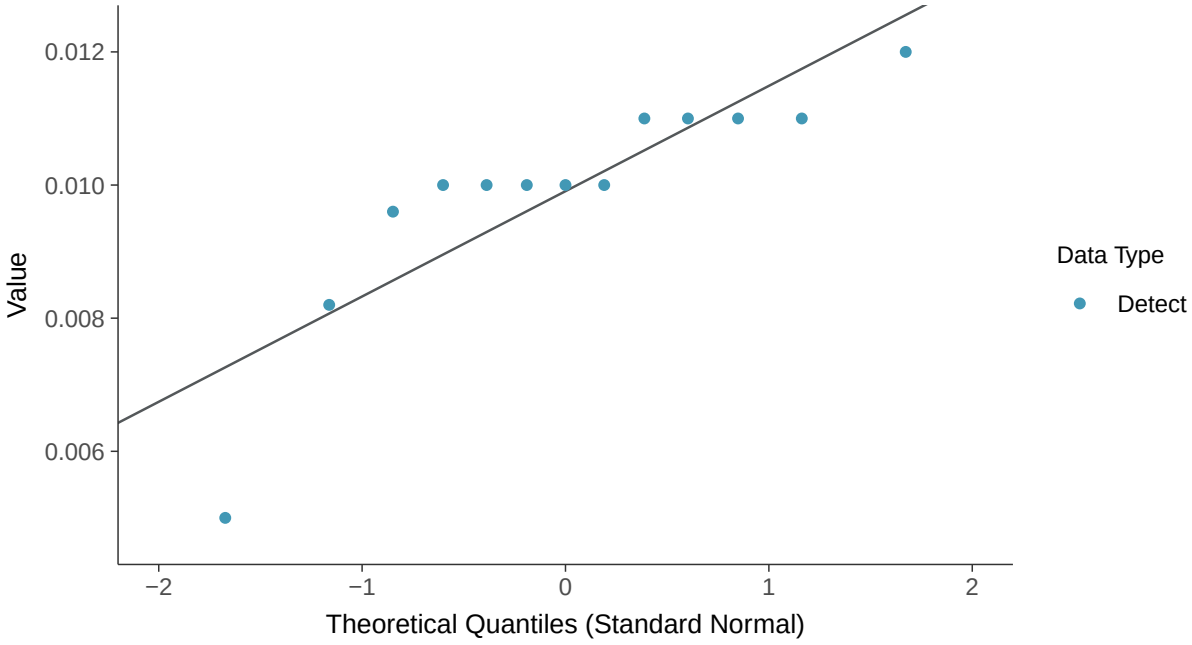
Boxplot by Season

Molybdenum, MW-16D (mg/l)



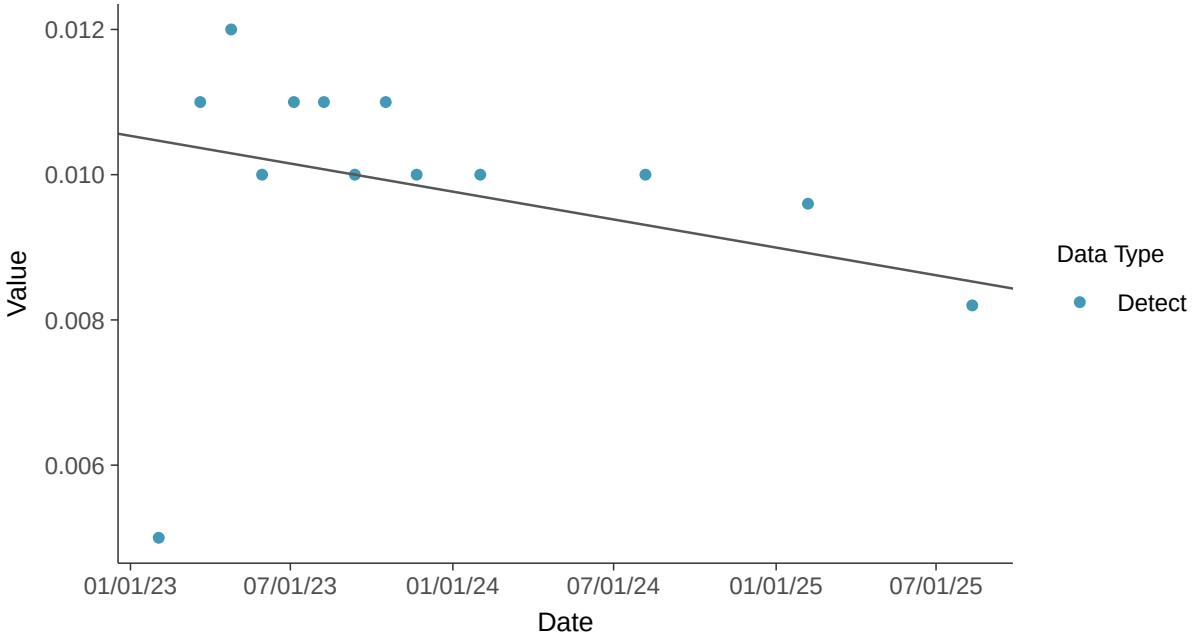
Normal Q-Q plot

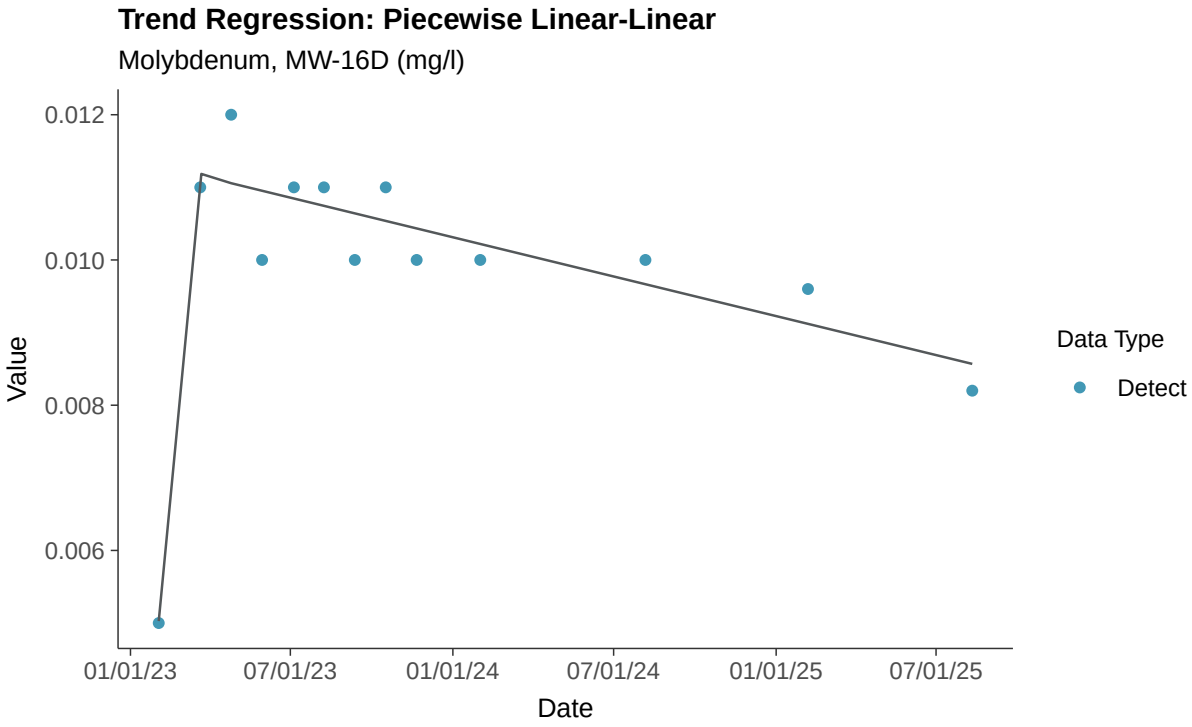
Molybdenum, MW-16D (mg/l)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

Molybdenum, MW-16D (mg/l)



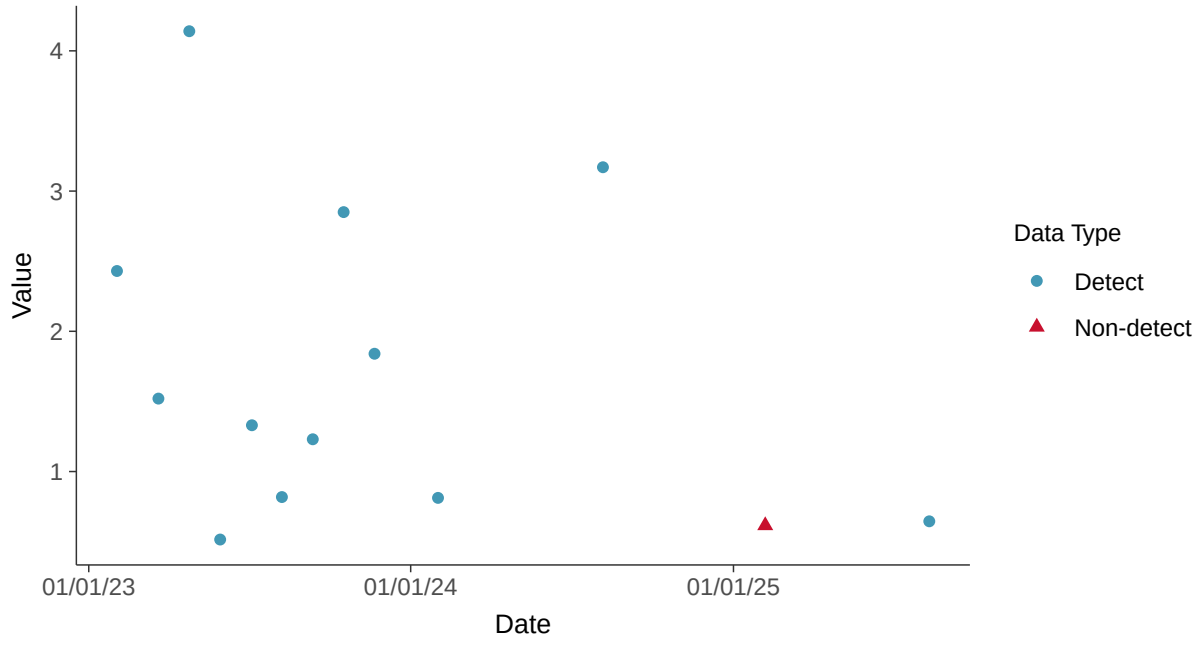

Trend Regression: Piecewise Linear-Linear
Molybdenum, MW-16D (mg/l)
0.012
0.010
0.008
0.006
Value
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect

Appendix IV: Radium-226+228, MW-16D

ID: 15_3_121

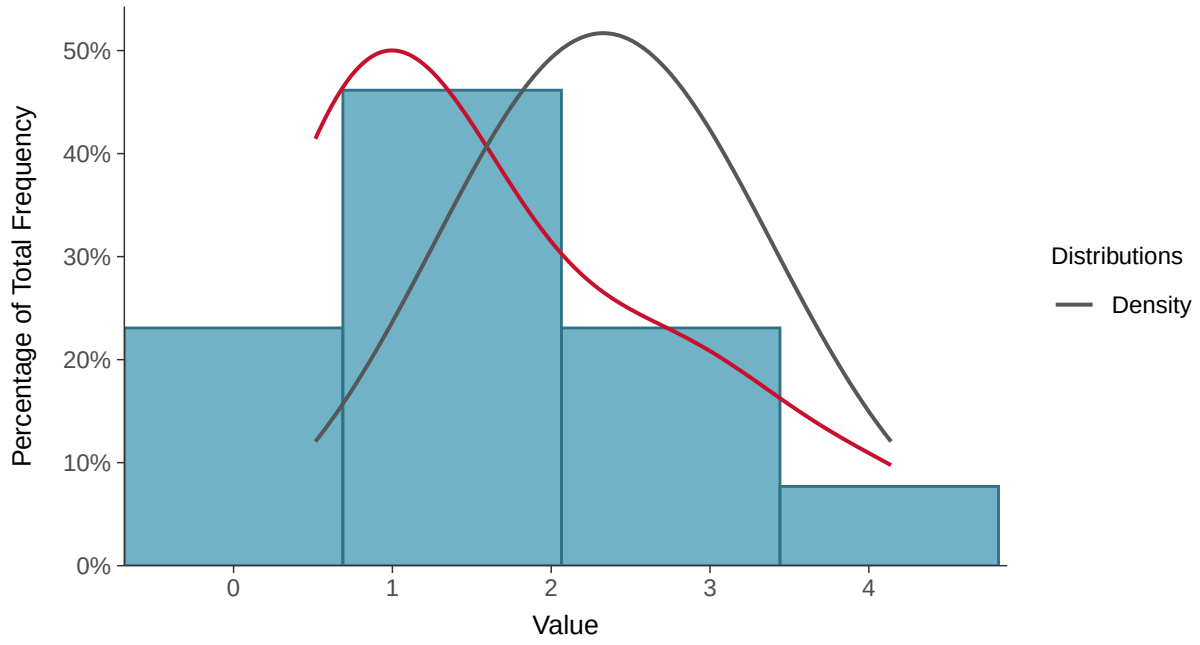
Scatter Plot

Radium-226+228, MW-16D (pci/l)



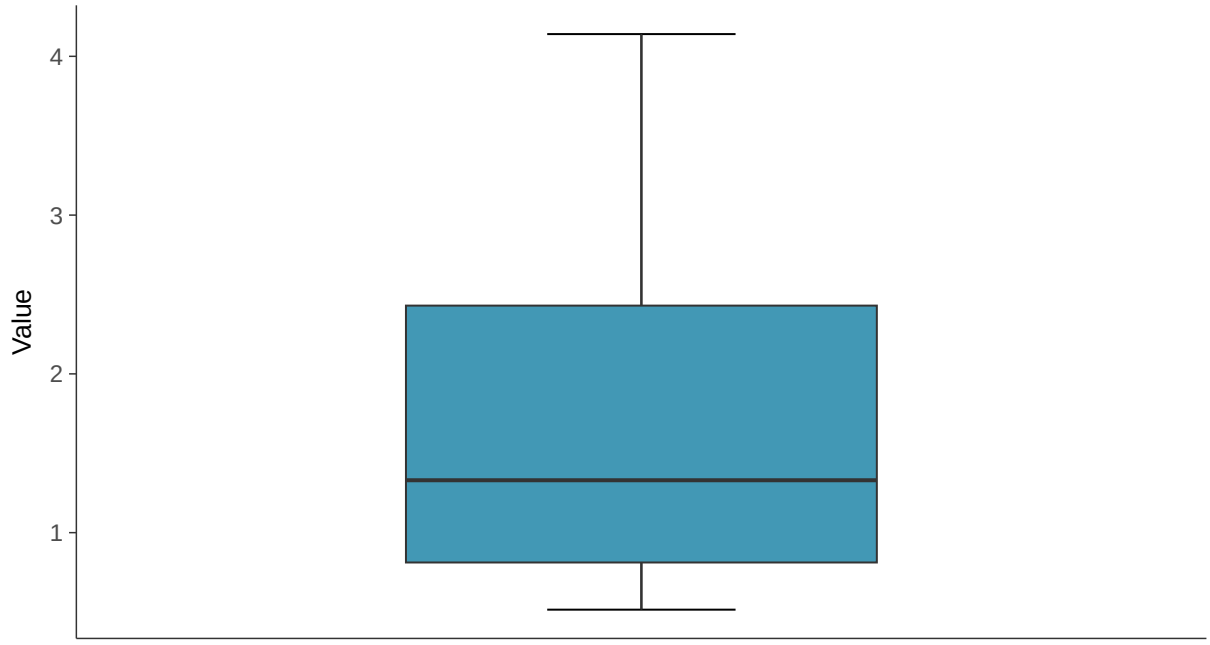
Histogram

Radium-226+228, MW-16D (pci/l)



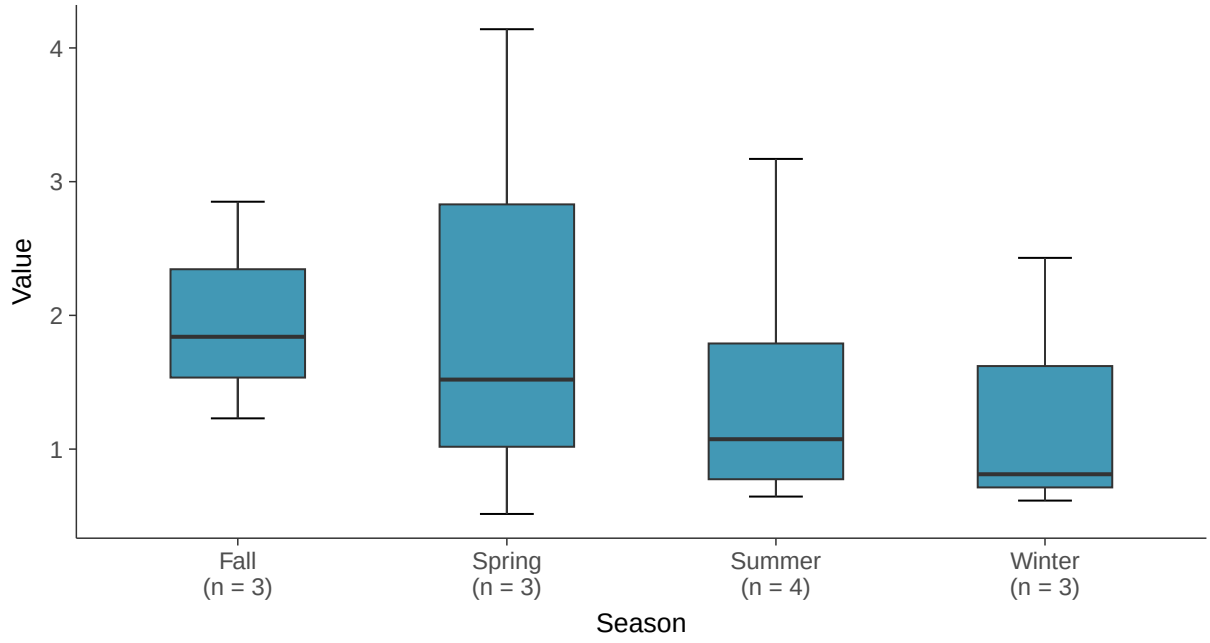
Boxplot

Radium-226+228, MW-16D (pci/l)



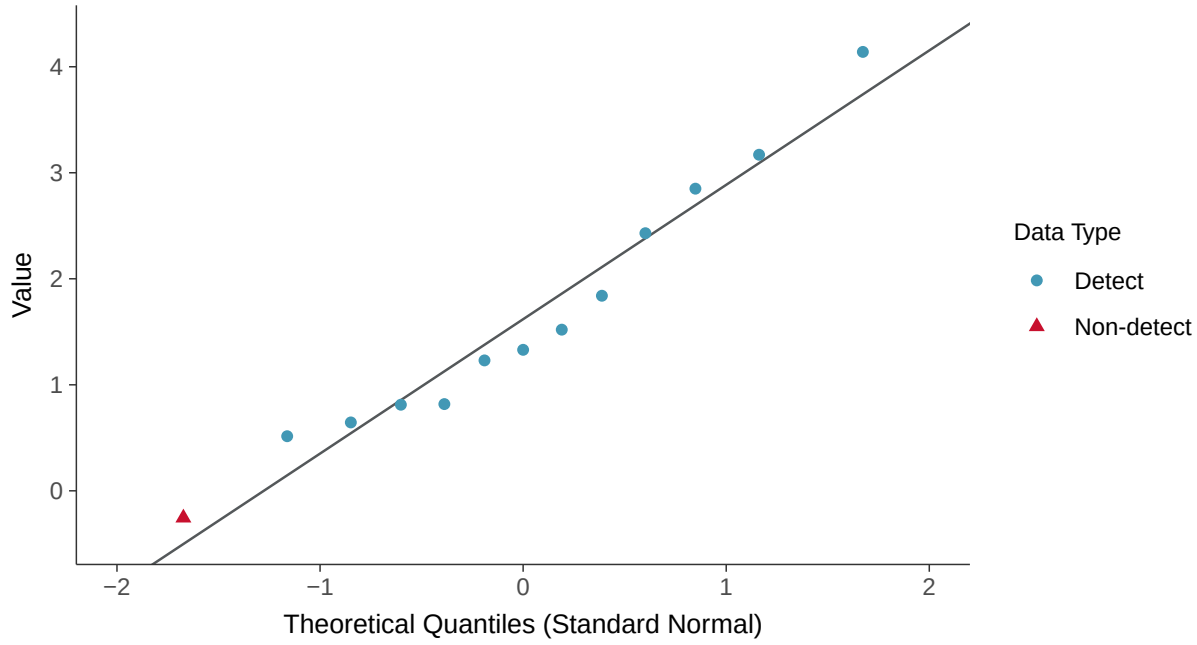
Boxplot by Season

Radium-226+228, MW-16D (pci/l)



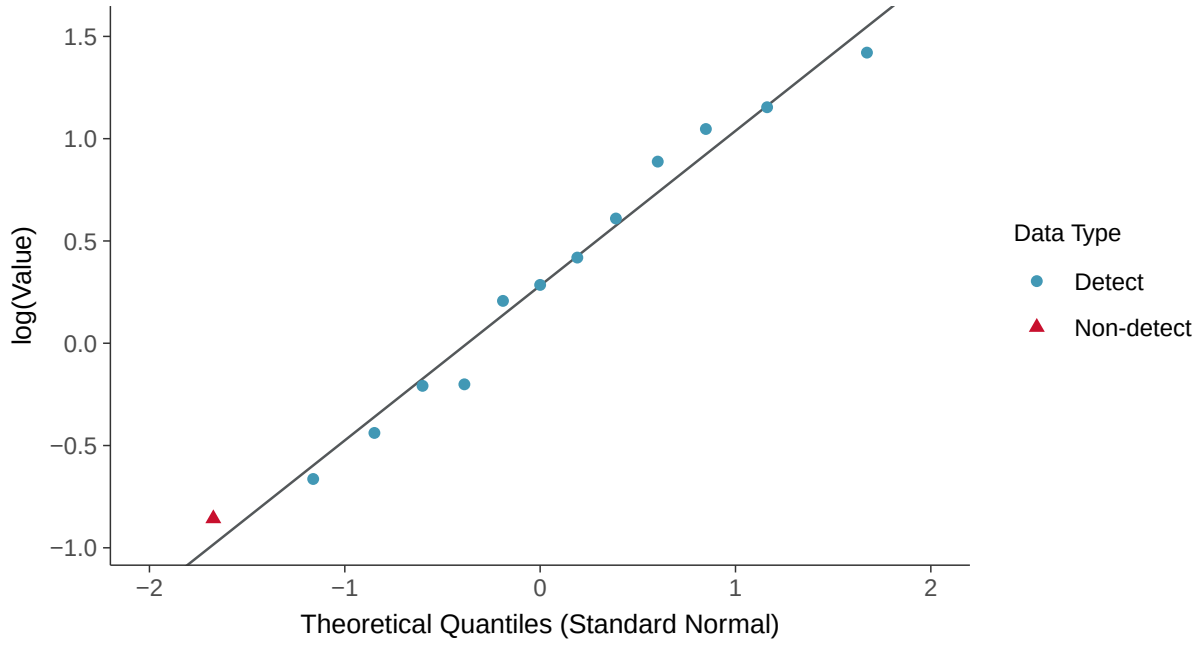
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-16D (pci/l)



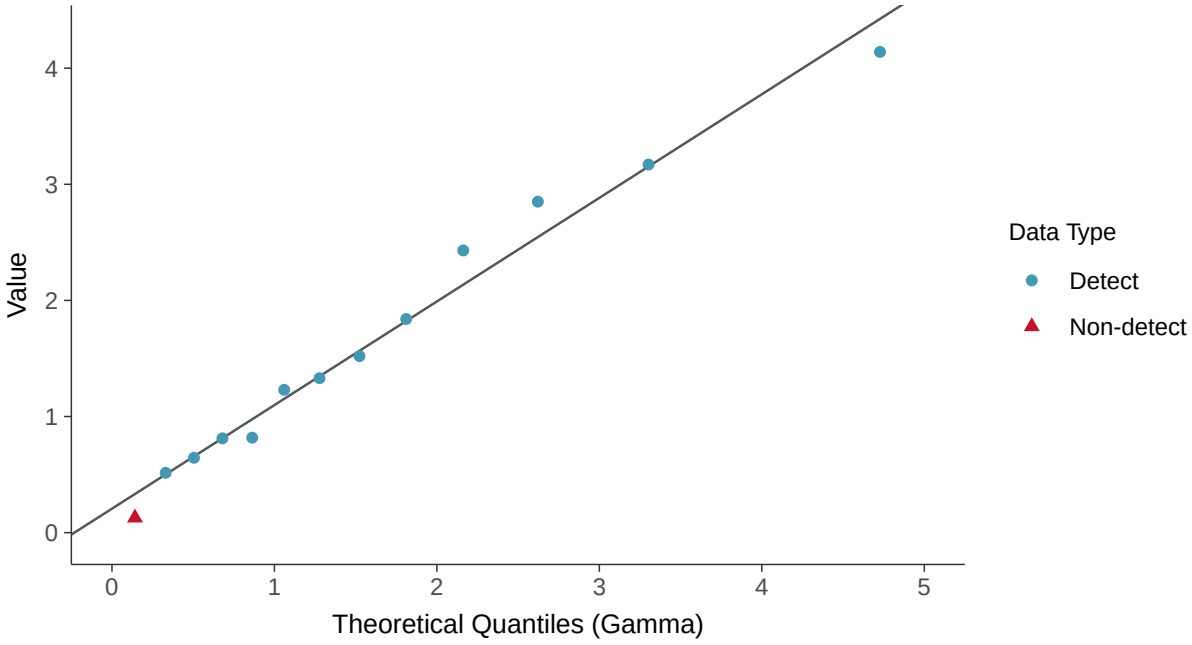
Lognormal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-16D (pci/l)



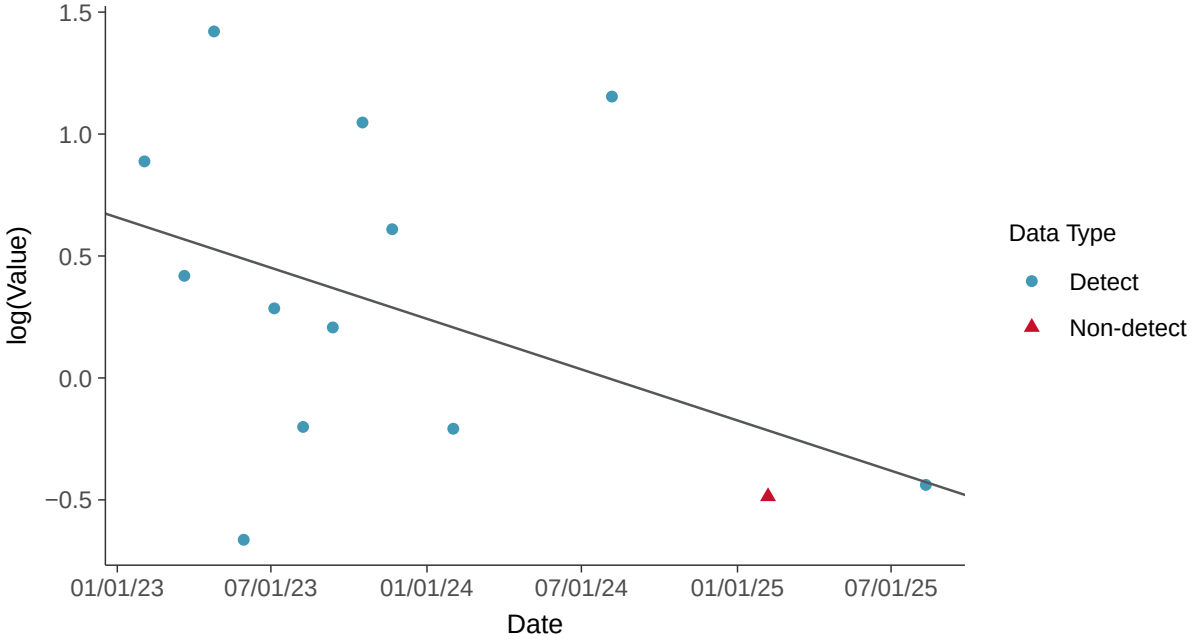
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-16D (pci/l)



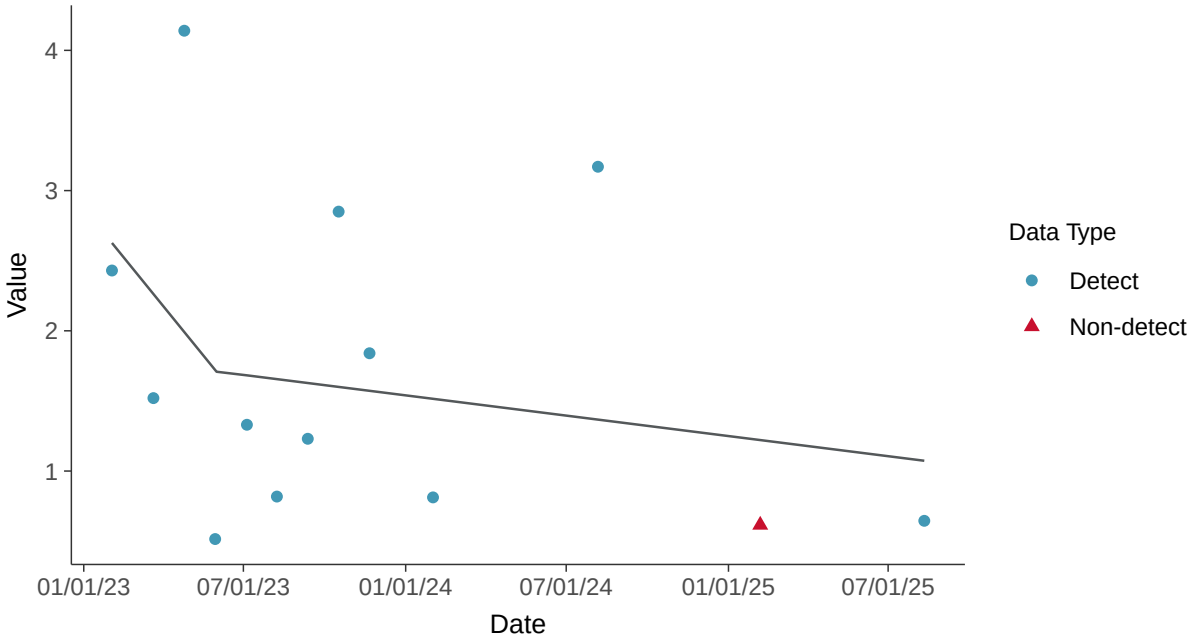
Trend Regression: Lognormal MLE

Radium-226+228, MW-16D (pci/l)



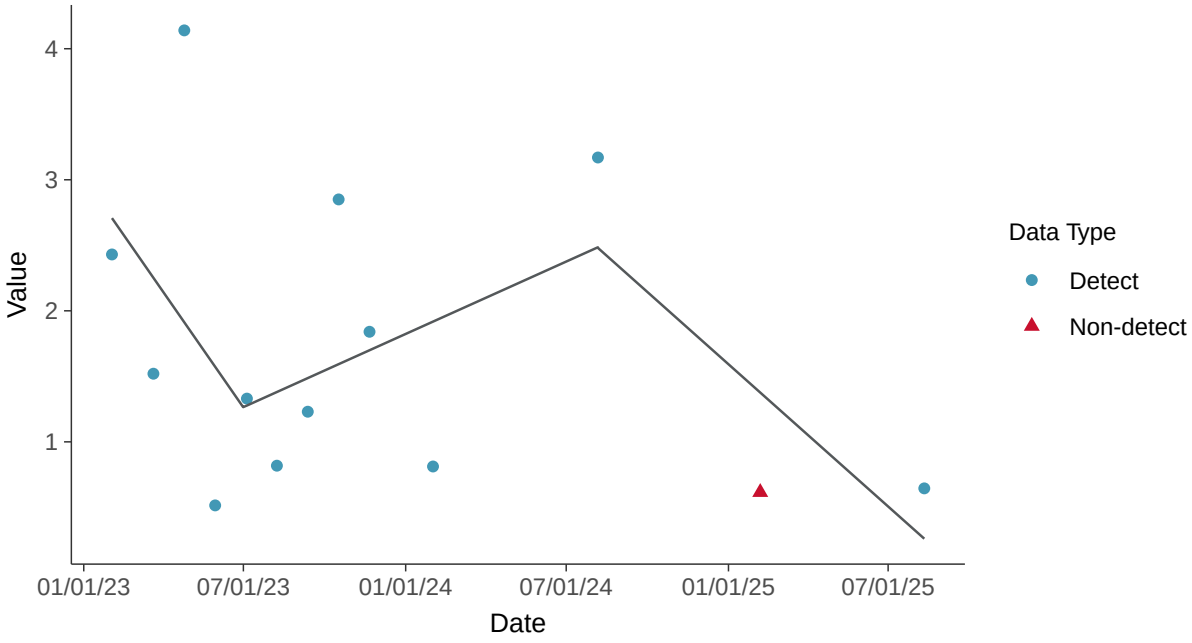
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-16D (pci/l)



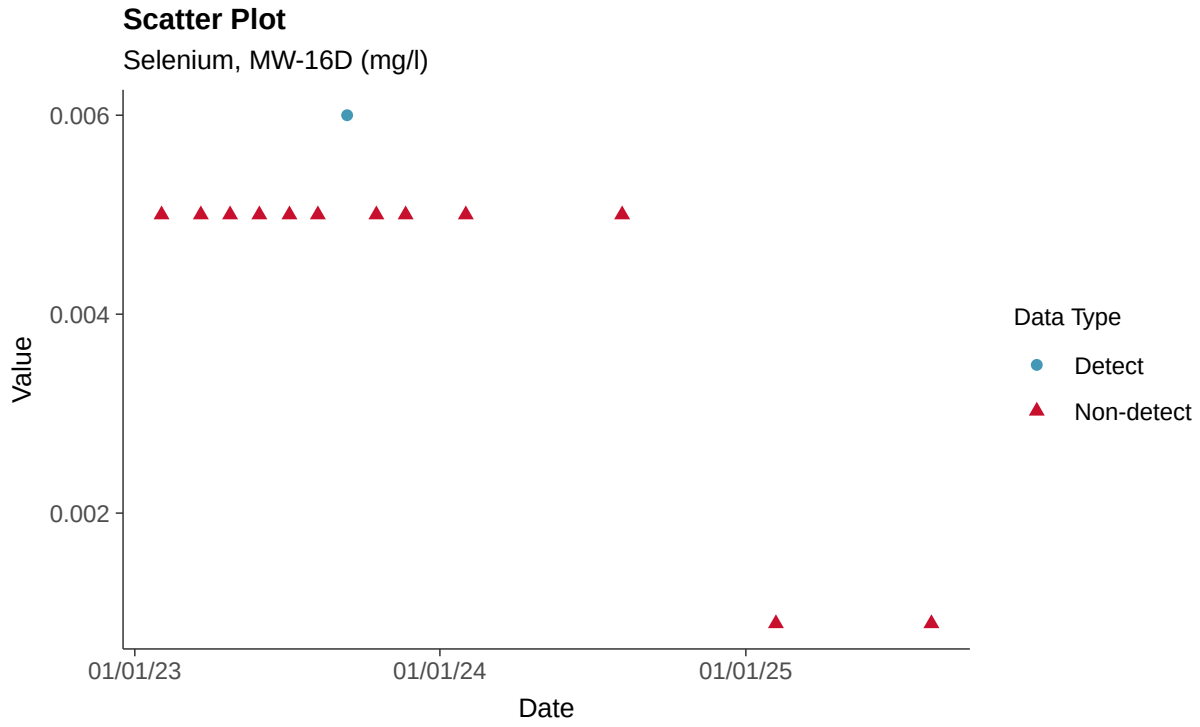
Trend Regression: Piecewise Linear-Linear-Linear

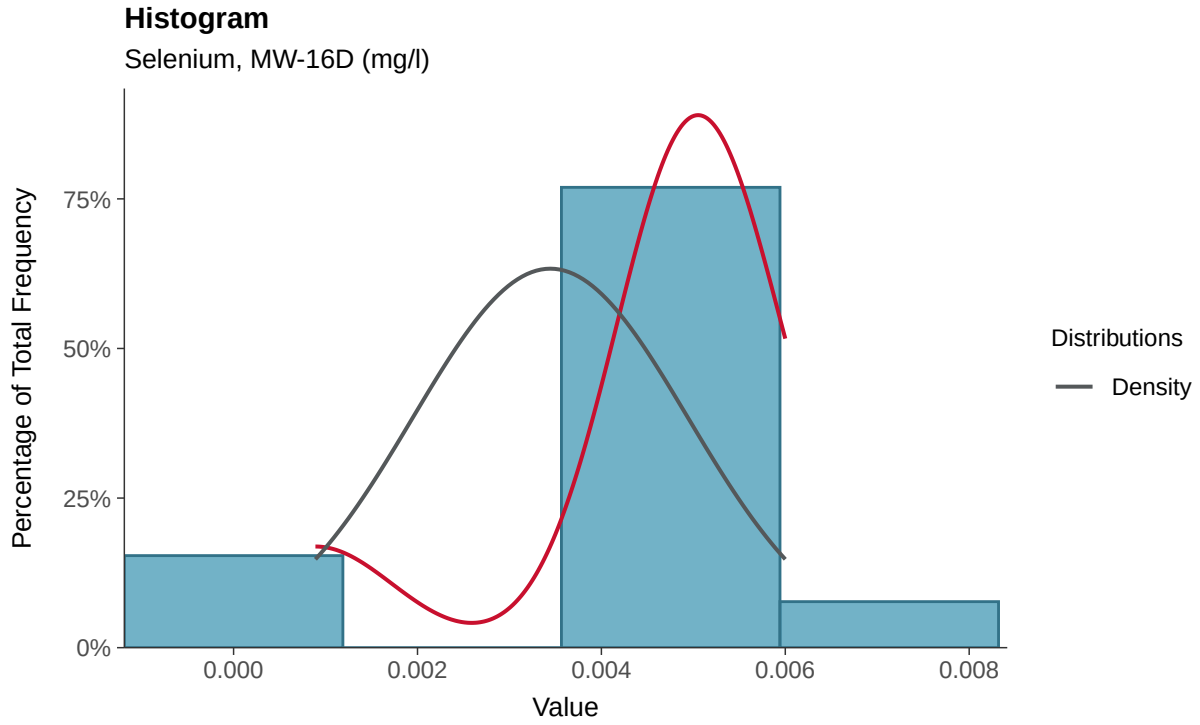
Radium-226+228, MW-16D (pci/l)



Appendix IV: Selenium, MW-16D

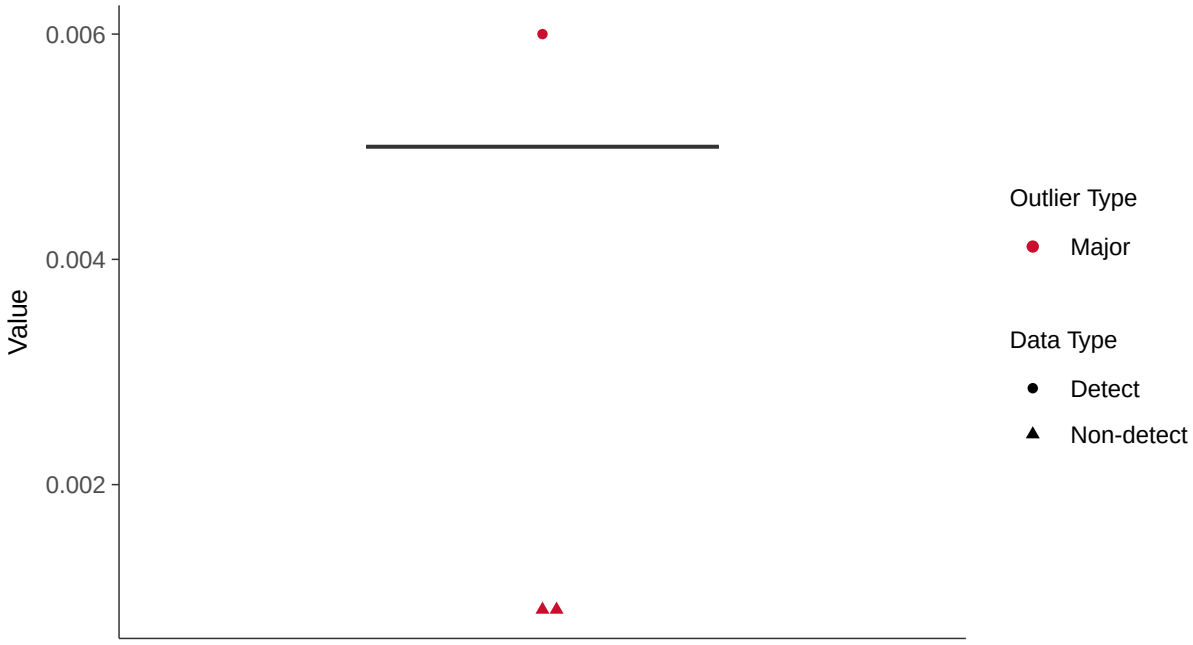
ID: 15_3_122





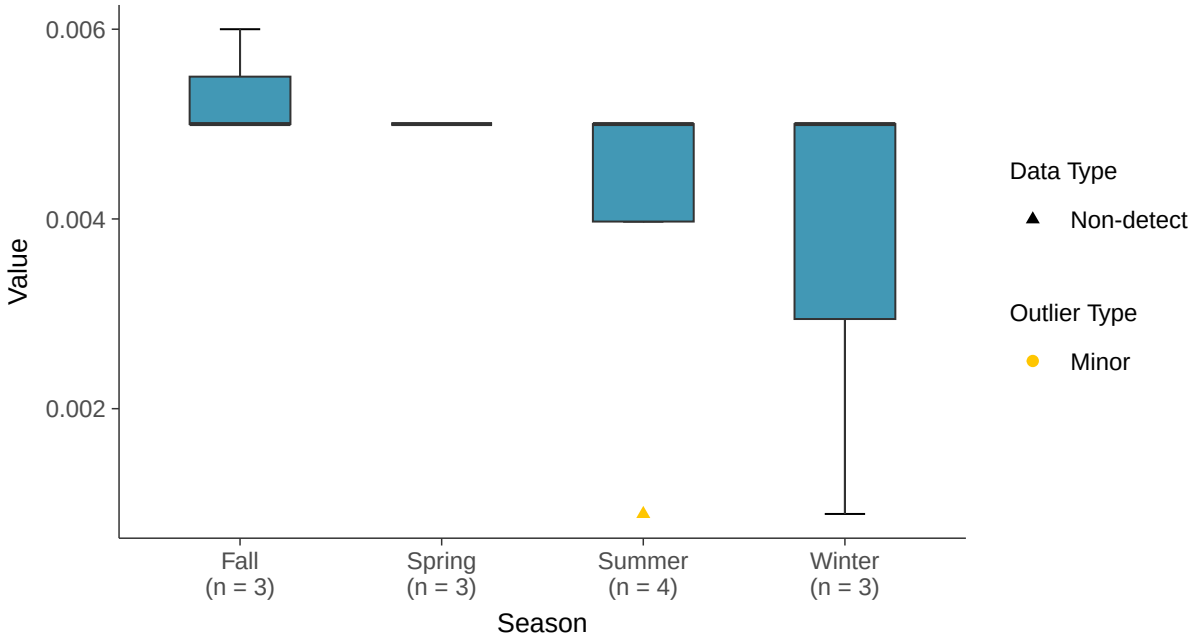
Boxplot

Selenium, MW-16D (mg/l)



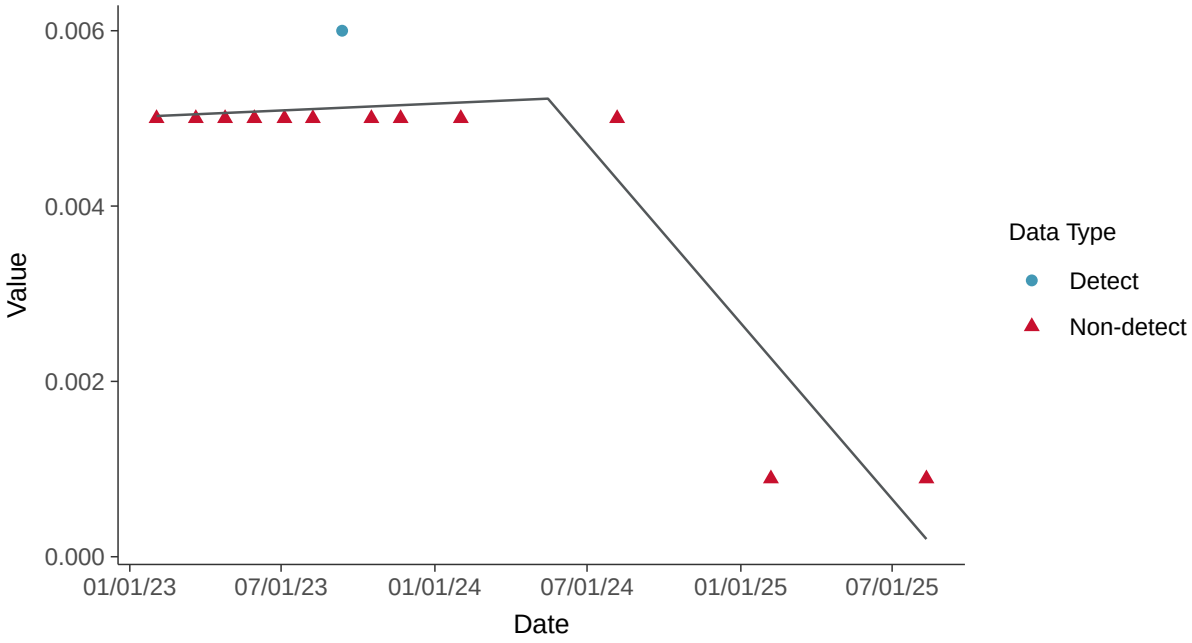
Boxplot by Season

Selenium, MW-16D (mg/l)



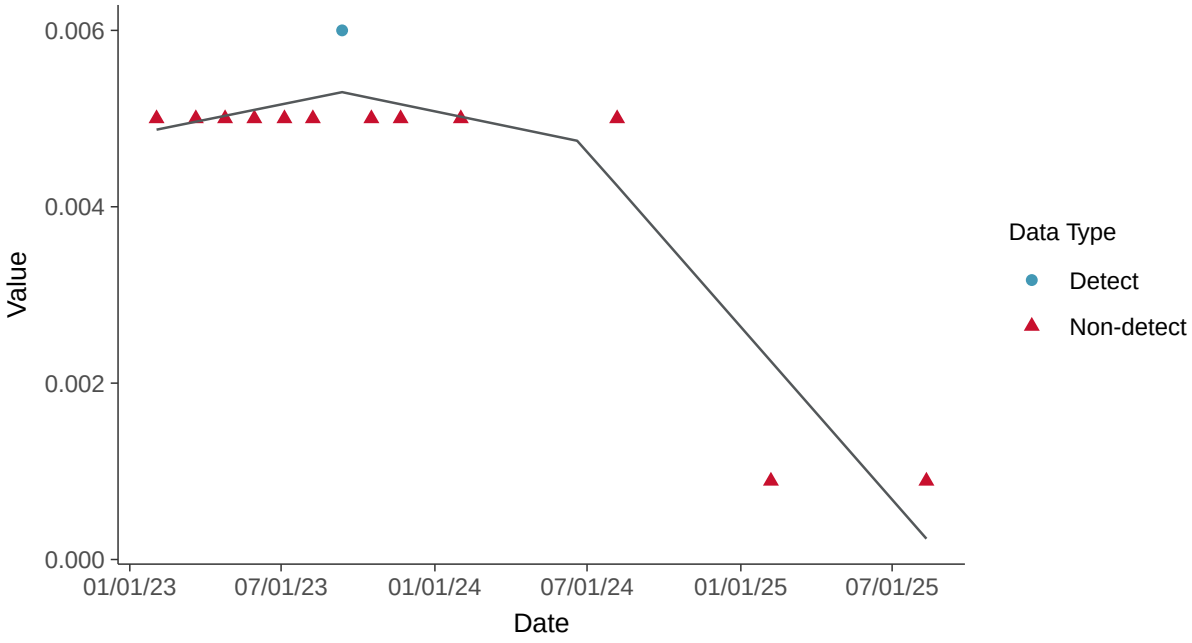
Trend Regression: Piecewise Linear-Linear

Selenium, MW-16D (mg/l)



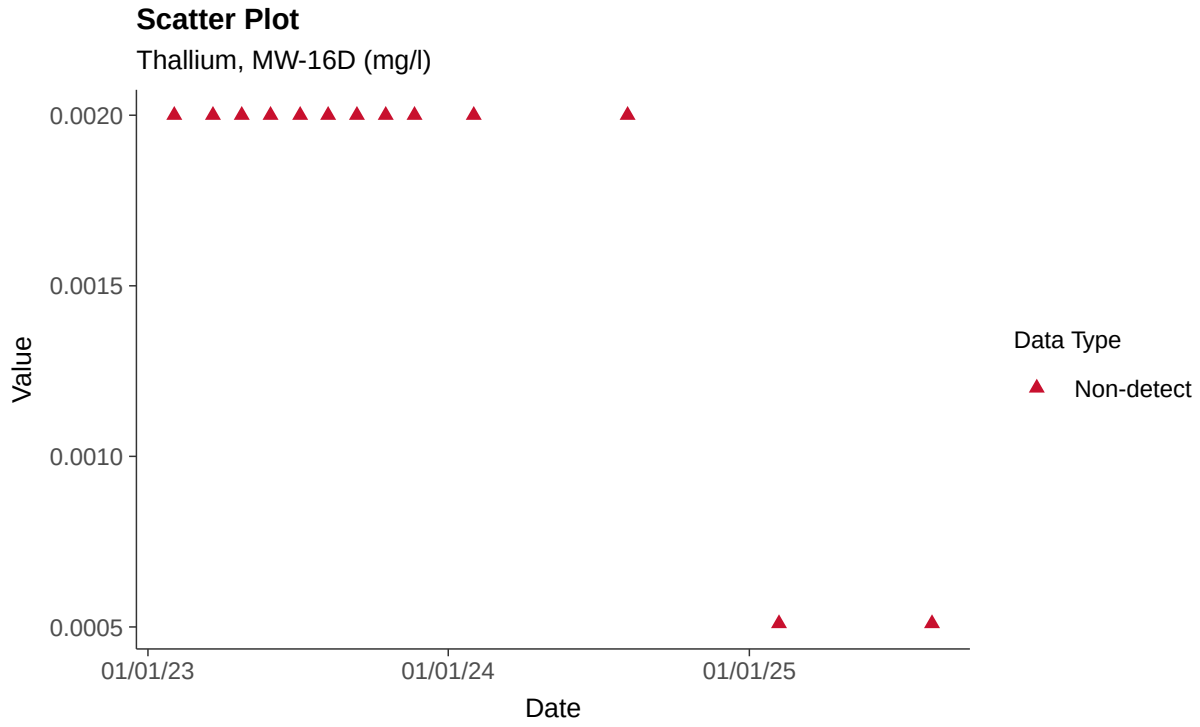
Trend Regression: Piecewise Linear-Linear-Linear

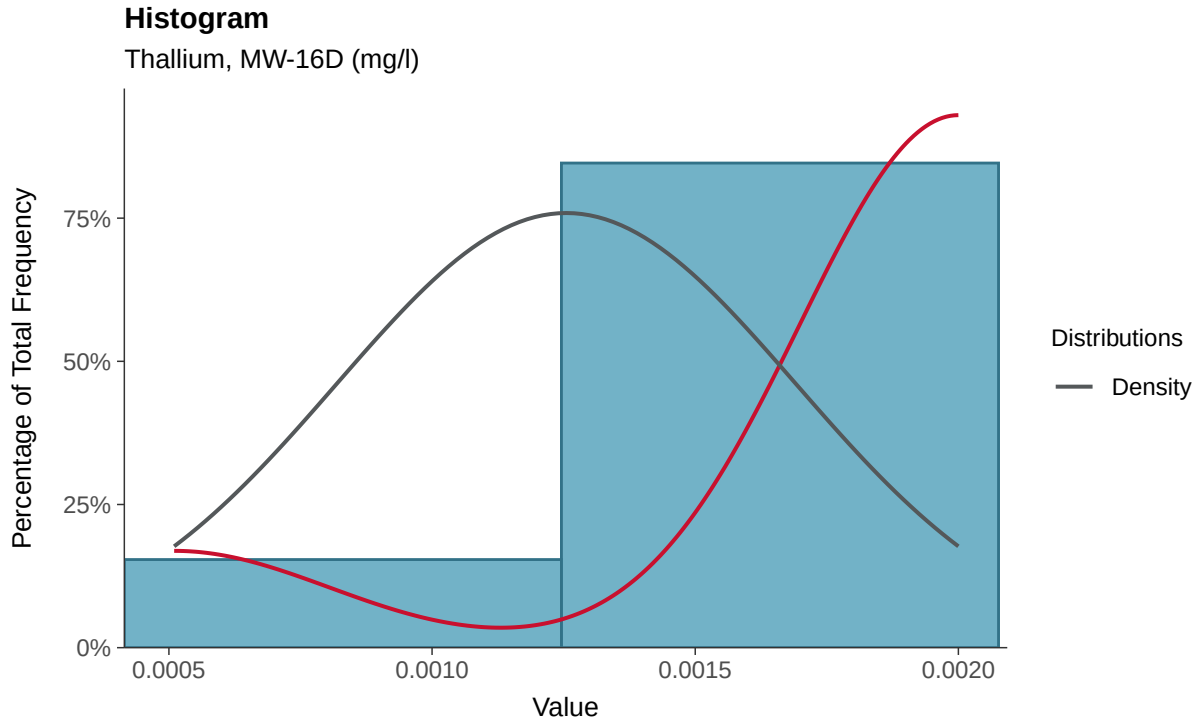
Selenium, MW-16D (mg/l)



Appendix IV: Thallium, MW-16D

ID: 15_3_125



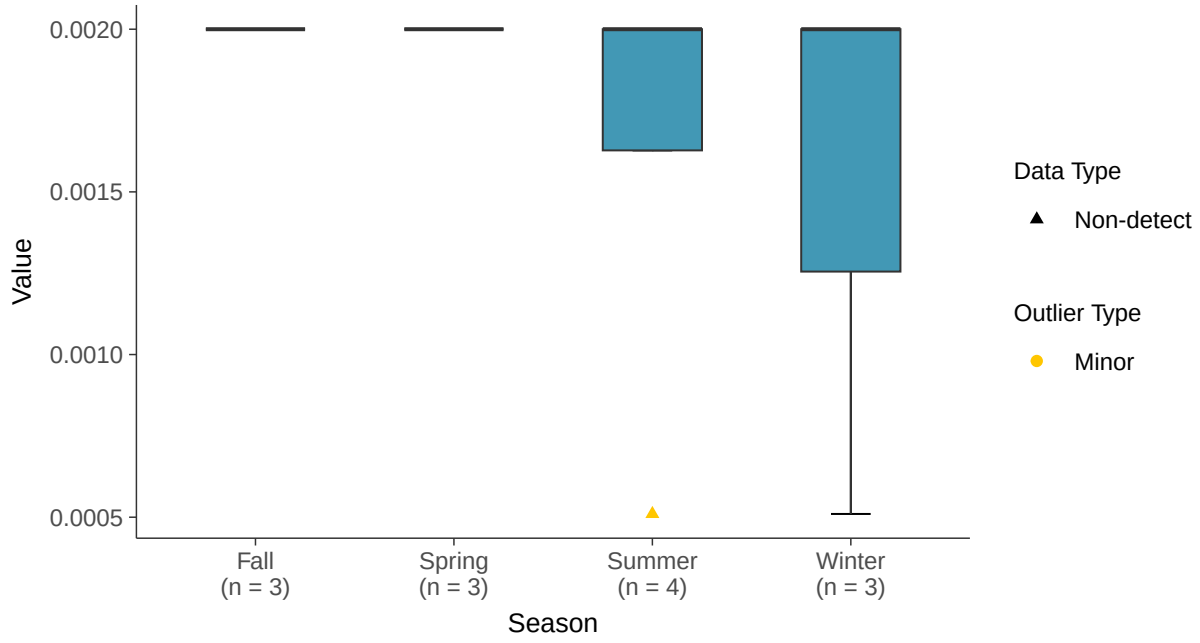


Boxplot

Thallium, MW-16D (mg/l)

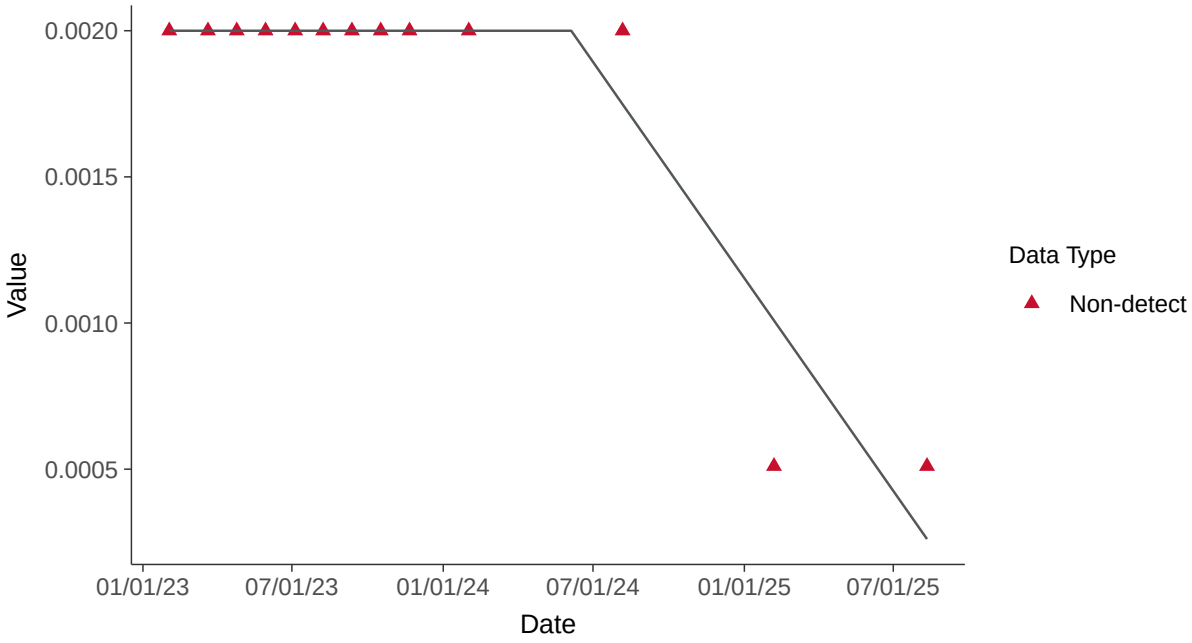
Boxplot by Season

Thallium, MW-16D (mg/l)



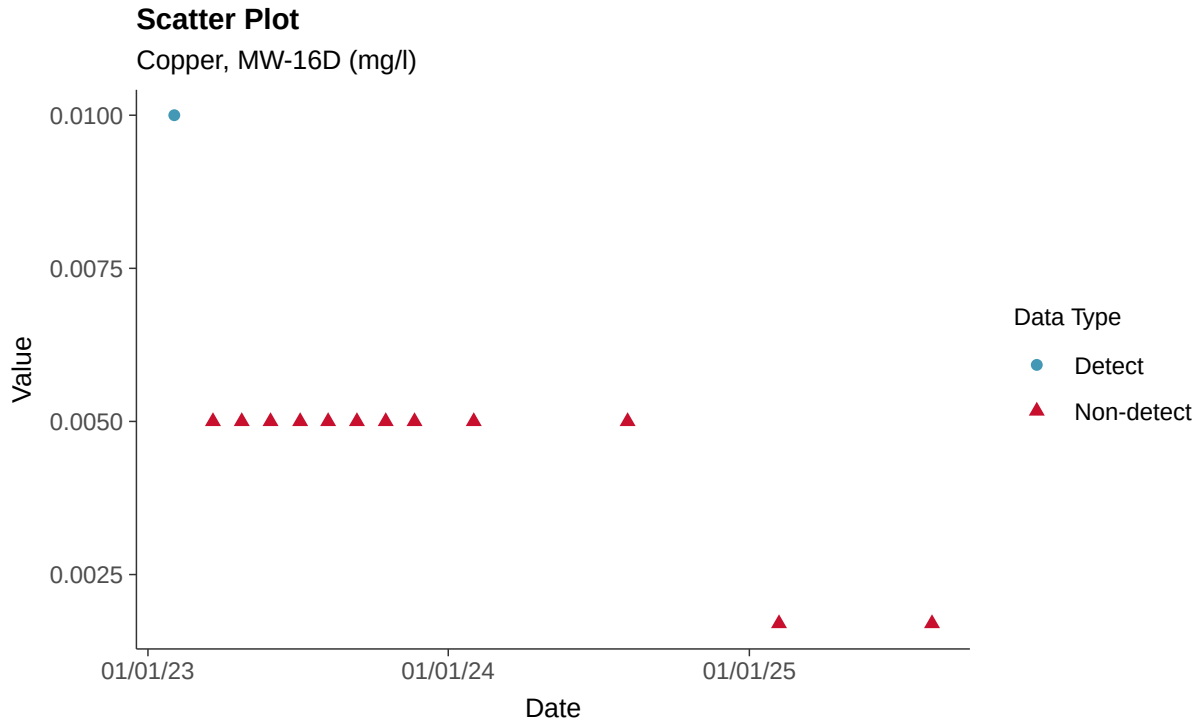
Trend Regression: Piecewise Linear-Linear

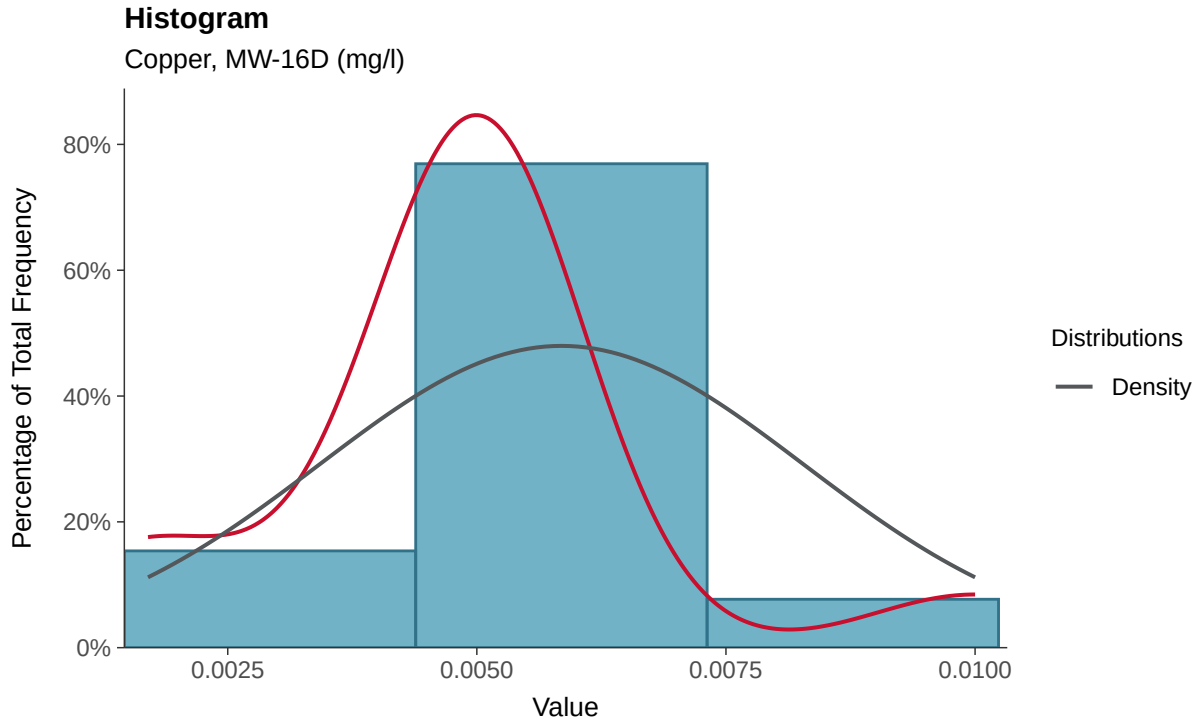
Thallium, MW-16D (mg/l)



Part 115: Copper, MW-16D

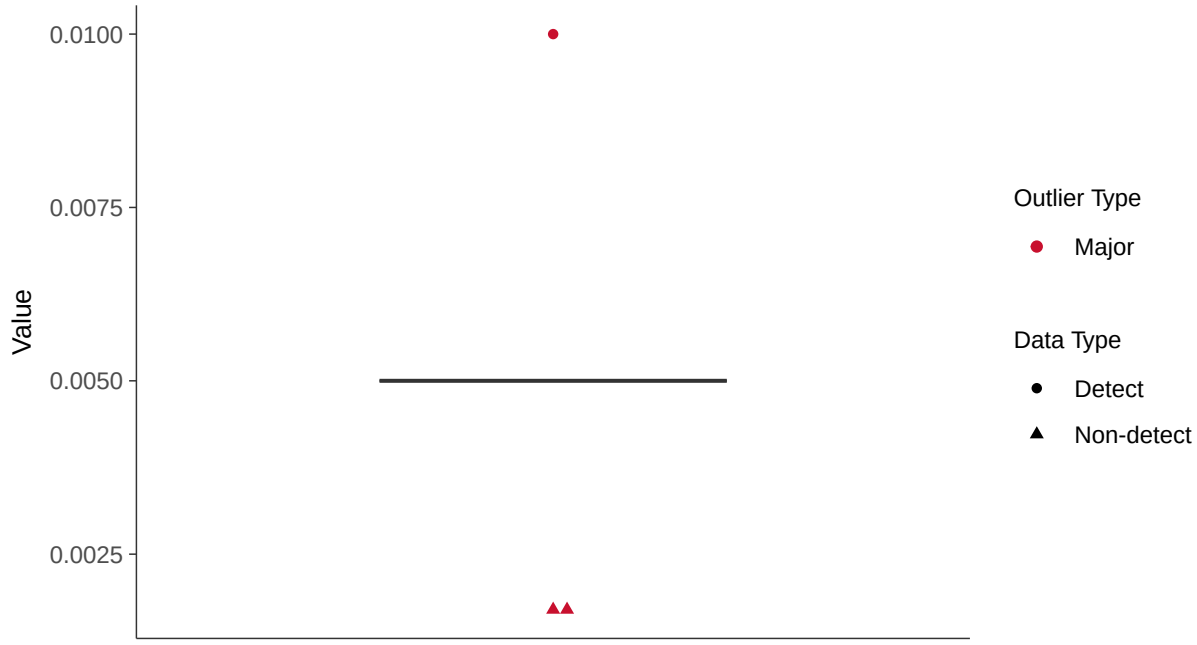
ID: 15_5_111





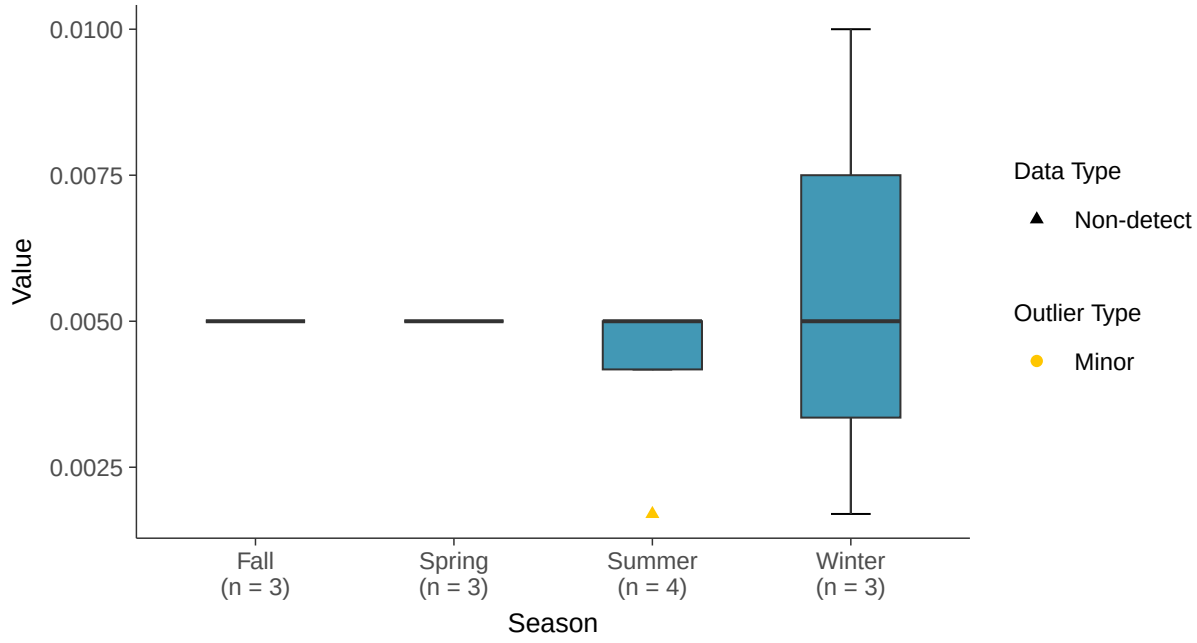
Boxplot

Copper, MW-16D (mg/l)



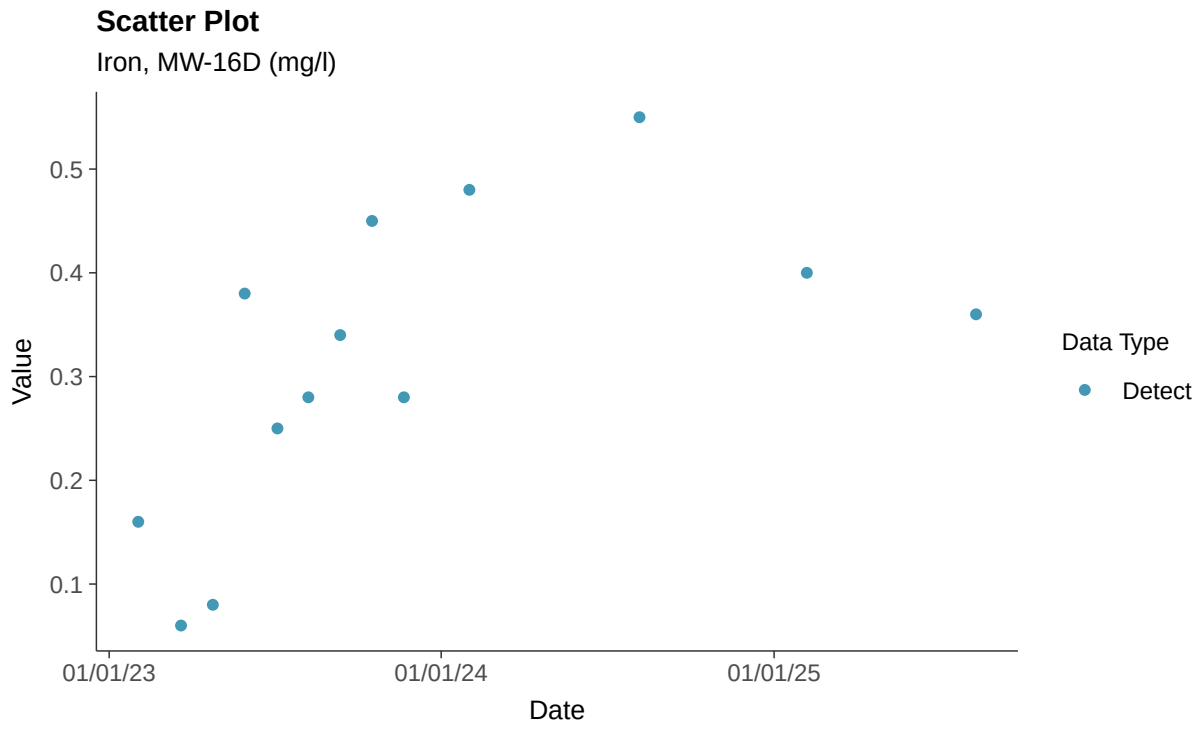
Boxplot by Season

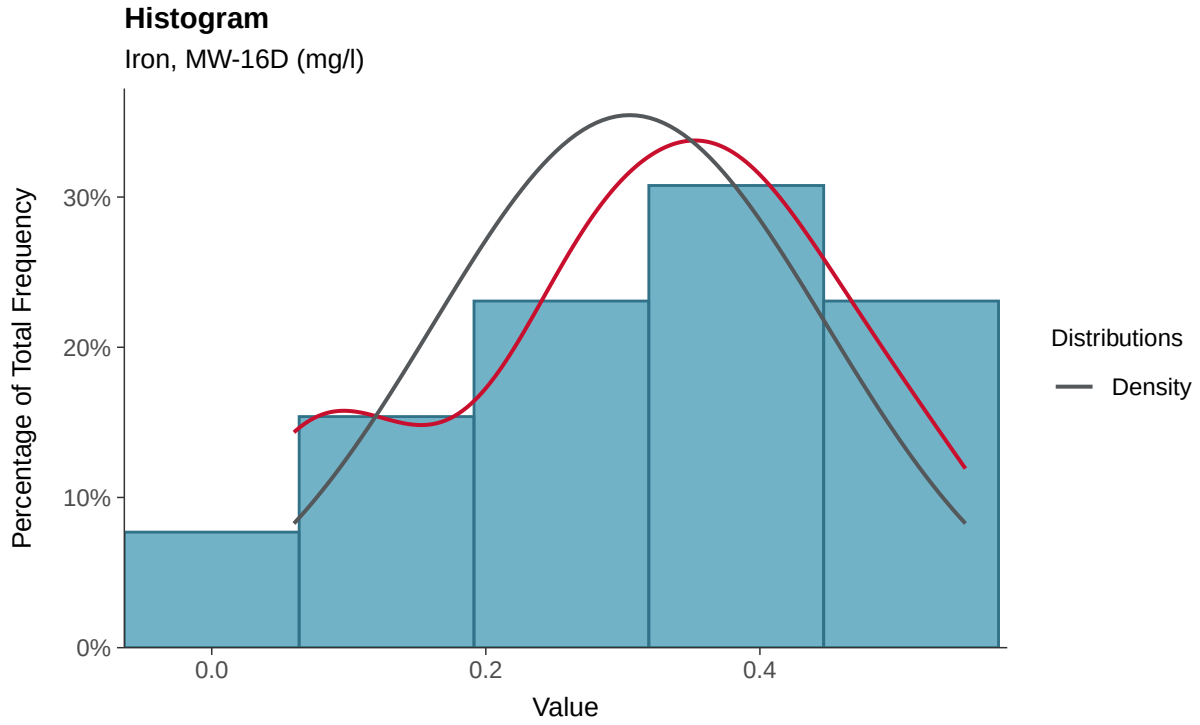
Copper, MW-16D (mg/l)



Part 115: Iron, MW-16D

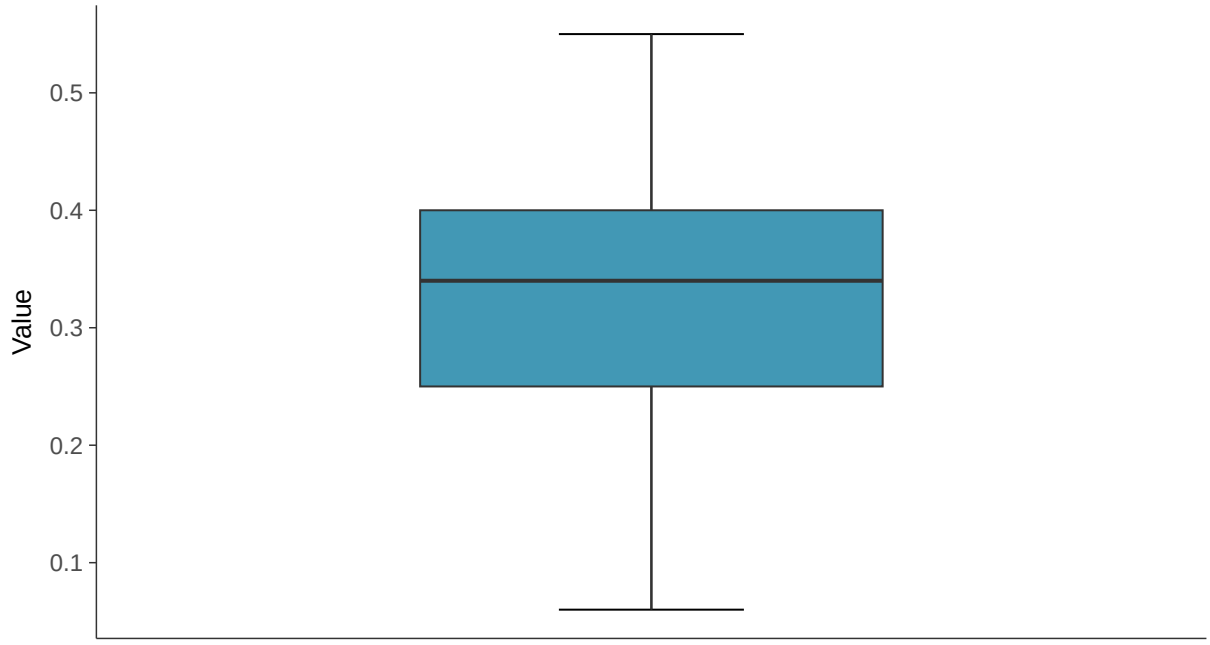
ID: 15_5_114





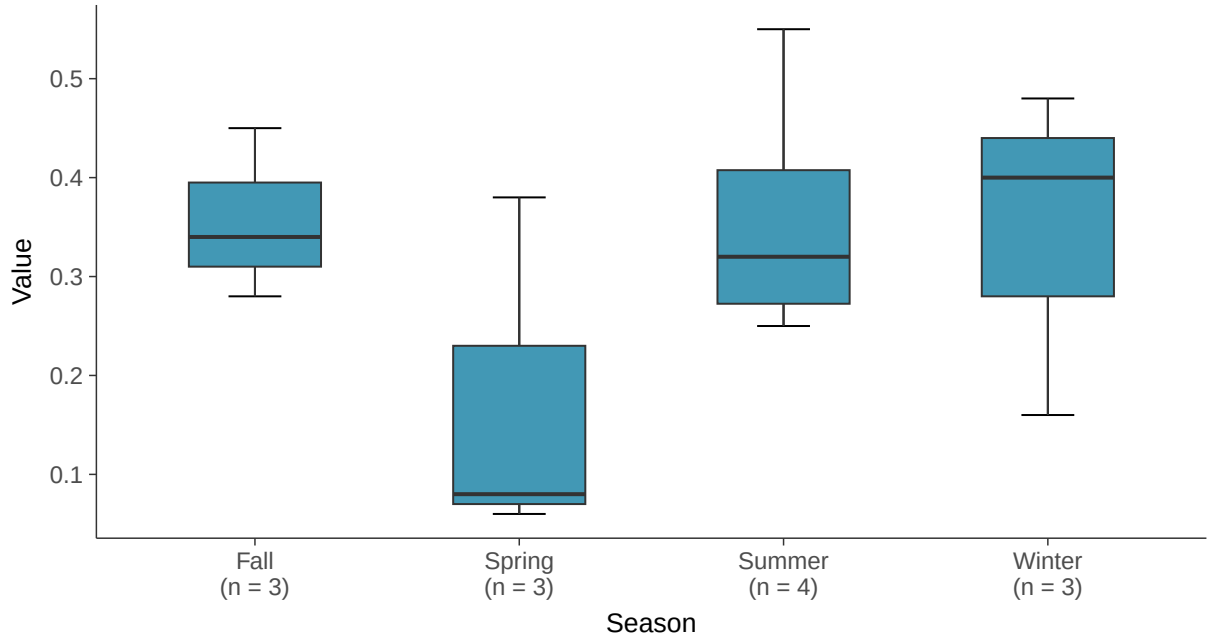
Boxplot

Iron, MW-16D (mg/l)



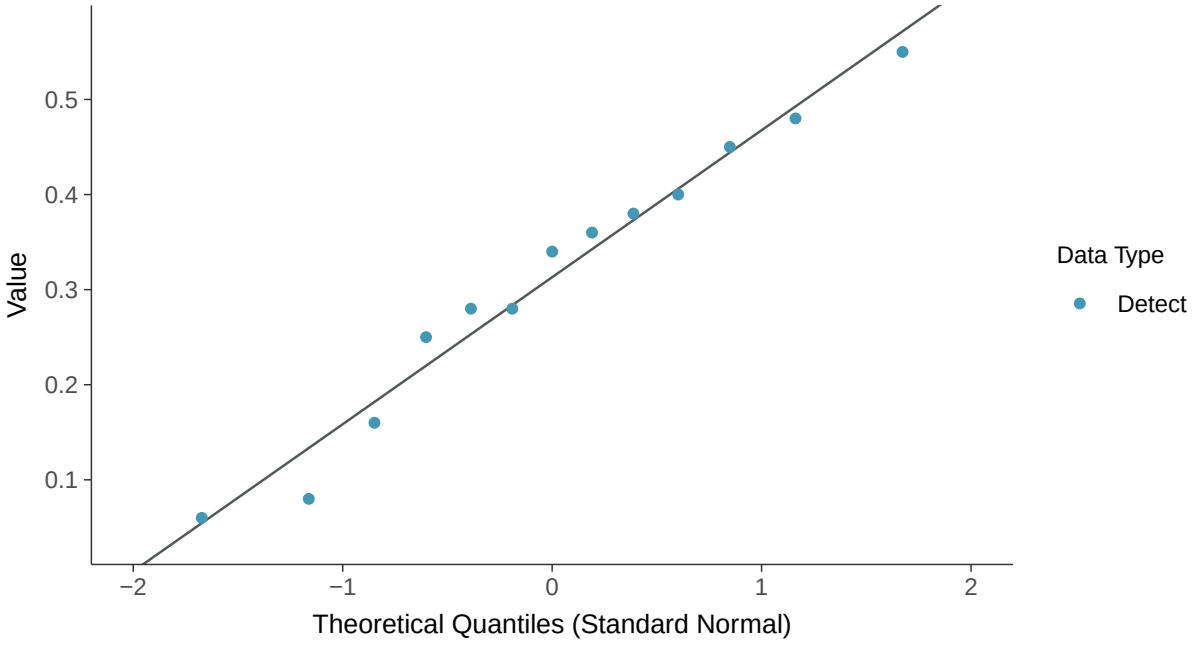
Boxplot by Season

Iron, MW-16D (mg/l)



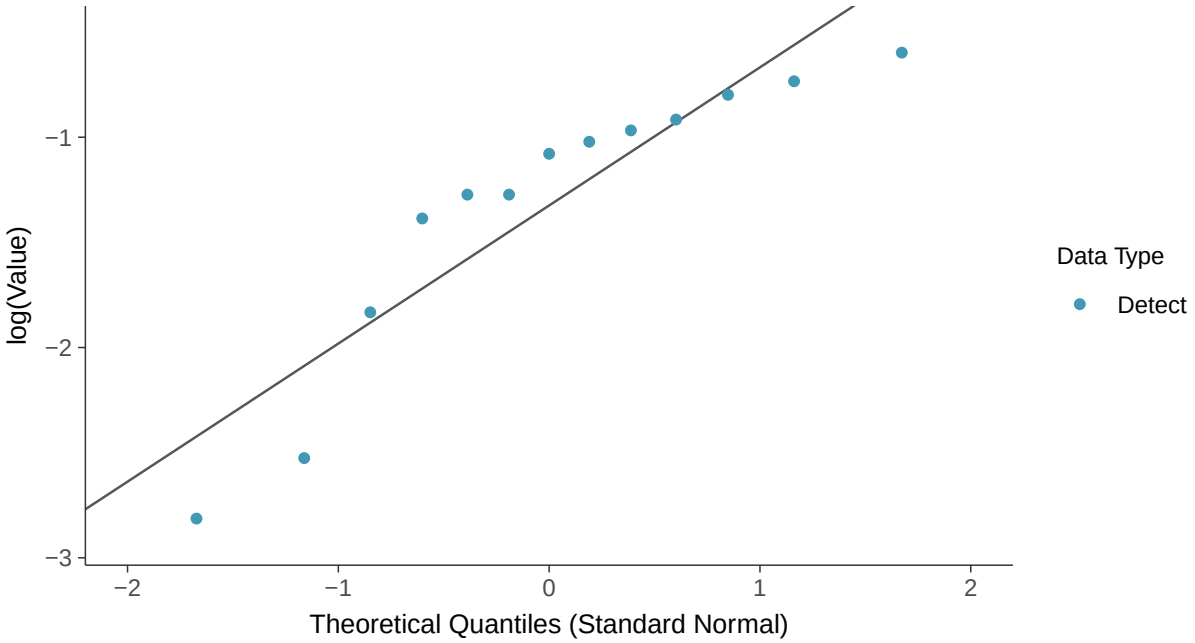
Normal Q-Q plot

Iron, MW-16D (mg/l)



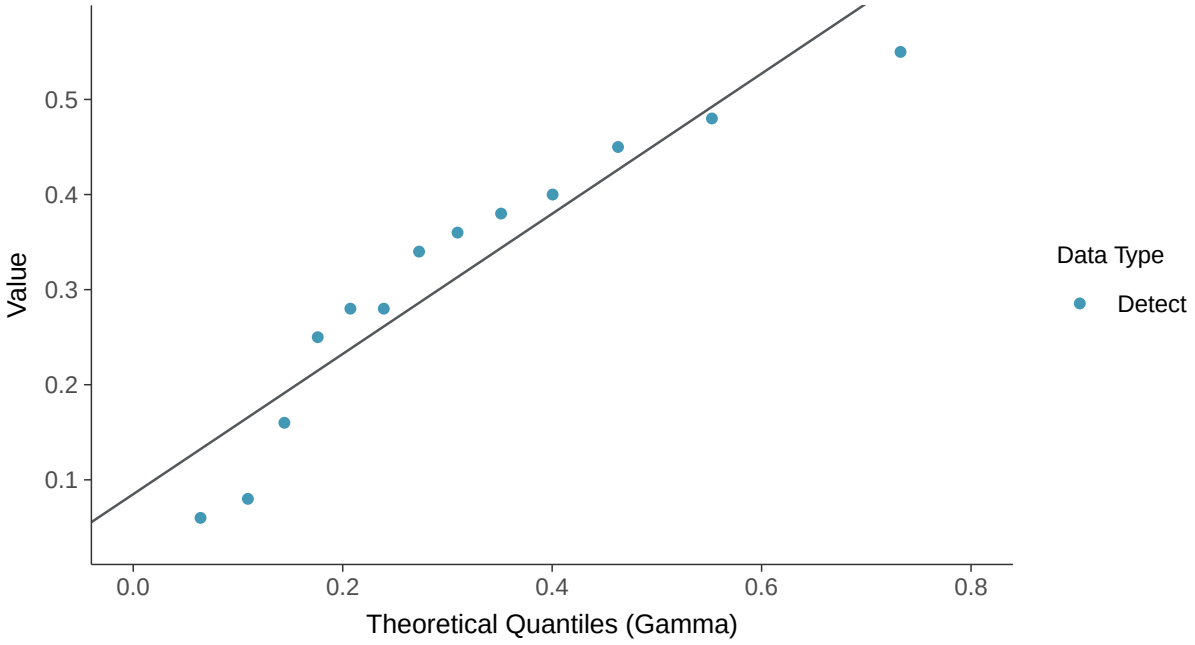
Lognormal Q-Q plot

Iron, MW-16D (mg/l)



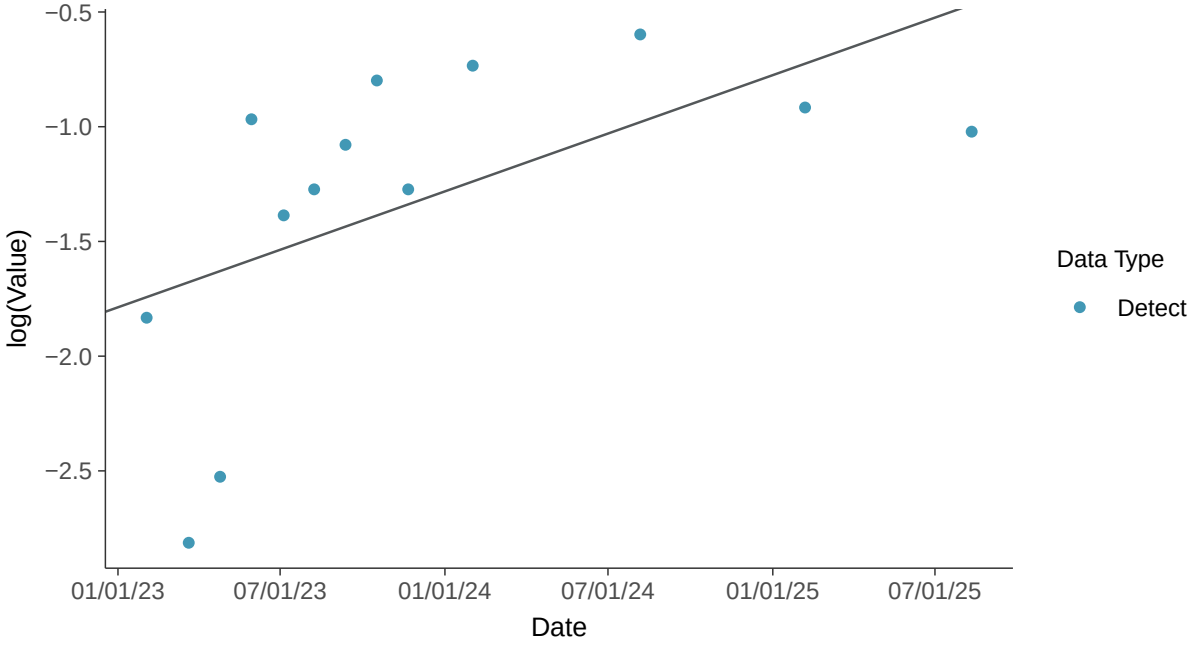
Gamma Q-Q plot

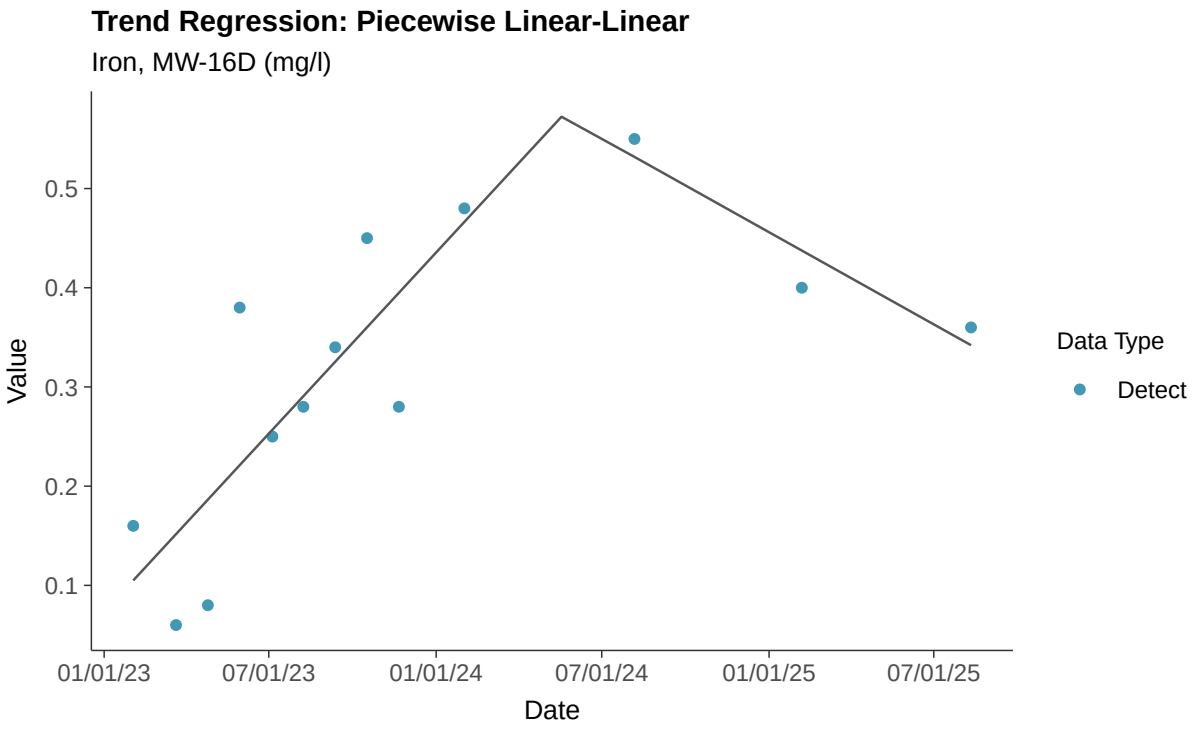
Iron, MW-16D (mg/l)



Trend Regression: Lognormal MLE

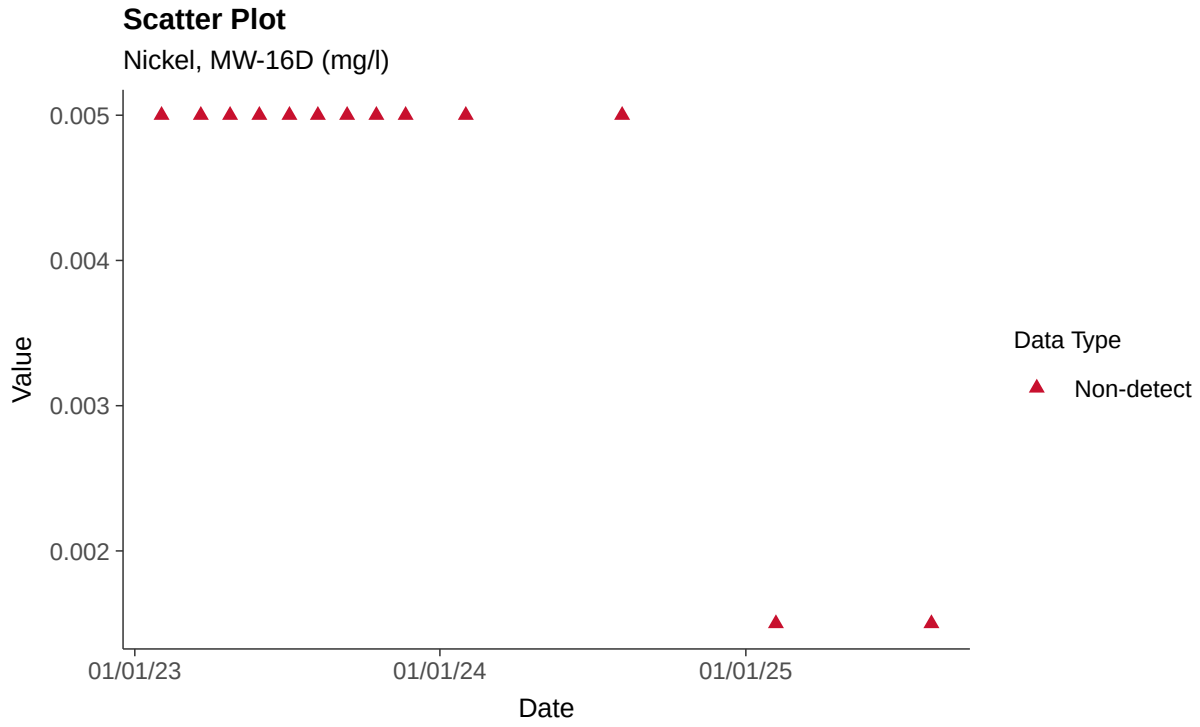
Iron, MW-16D (mg/l)

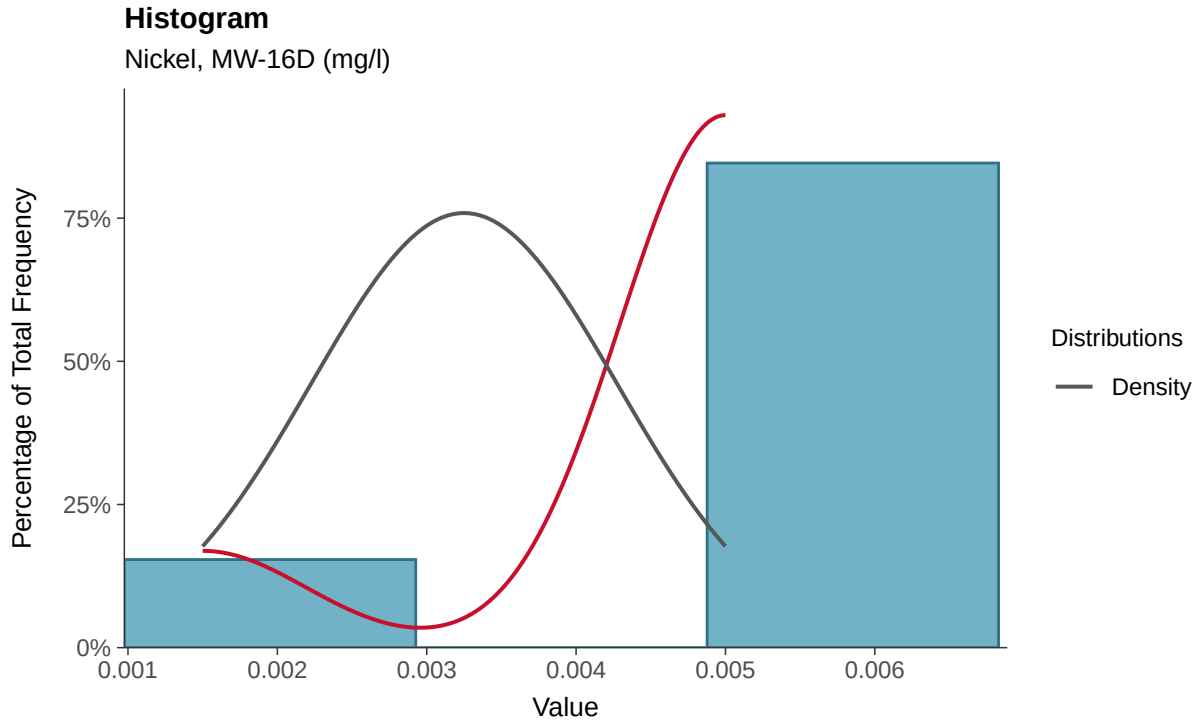



Trend Regression: Piecewise Linear-Linear
Iron, MW-16D (mg/l)
Value
0.5
0.4
0.3
0.2
0.1
01/01/23
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect

Part 115: Nickel, MW-16D

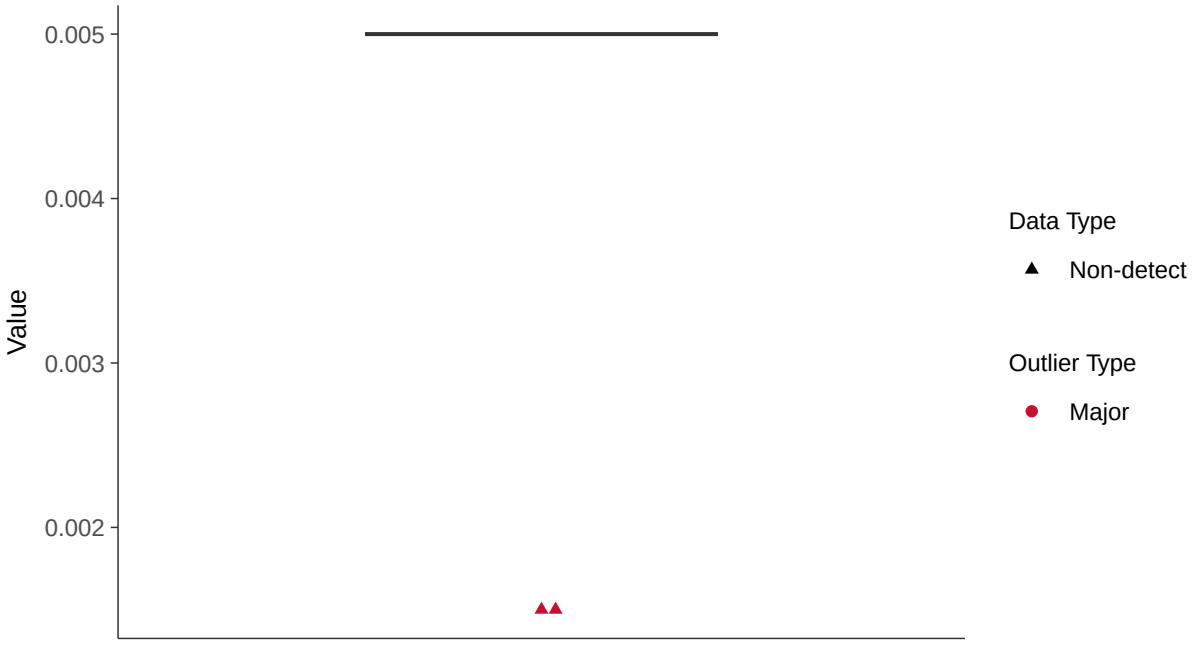
ID: 15_5_119





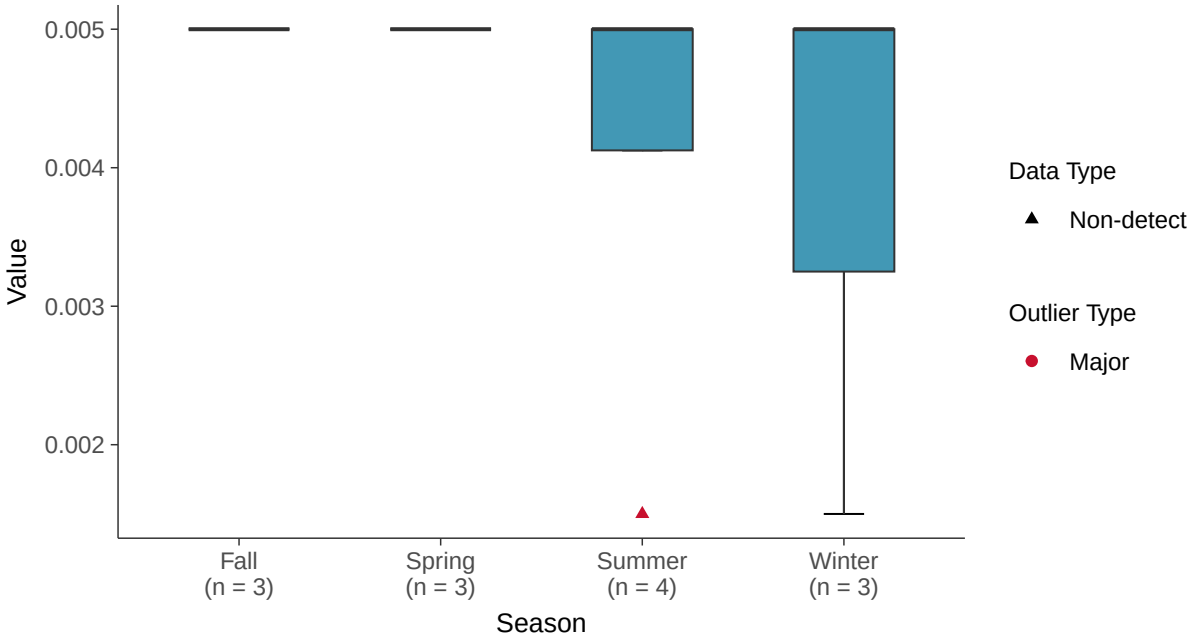
Boxplot

Nickel, MW-16D (mg/l)



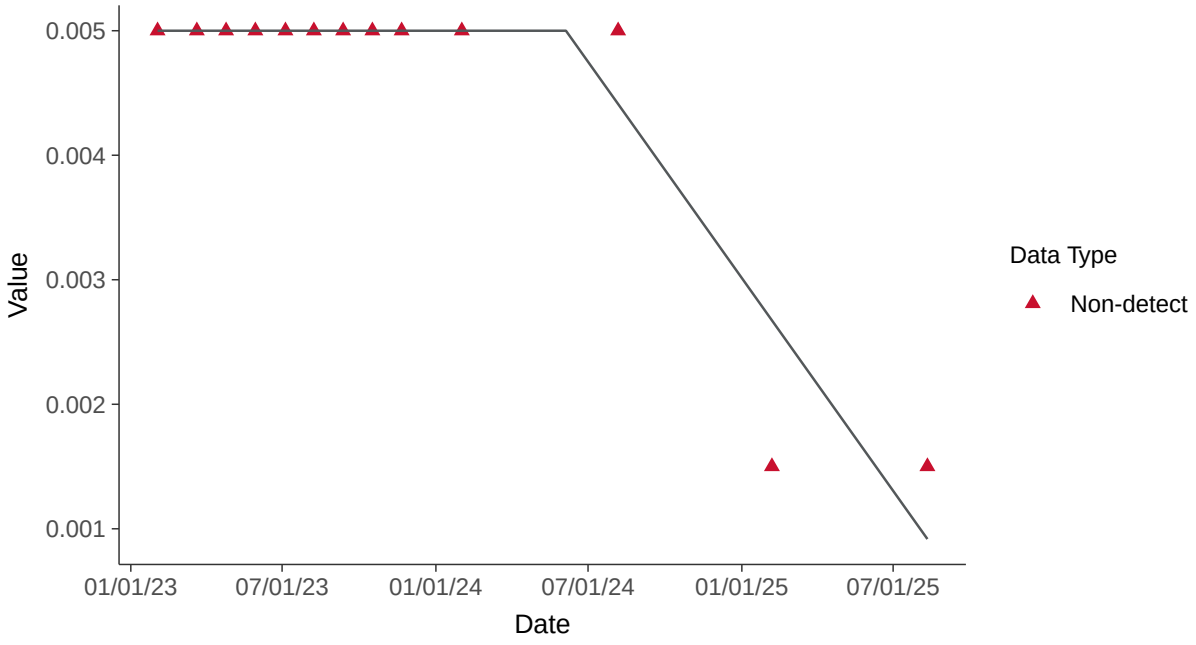
Boxplot by Season

Nickel, MW-16D (mg/l)



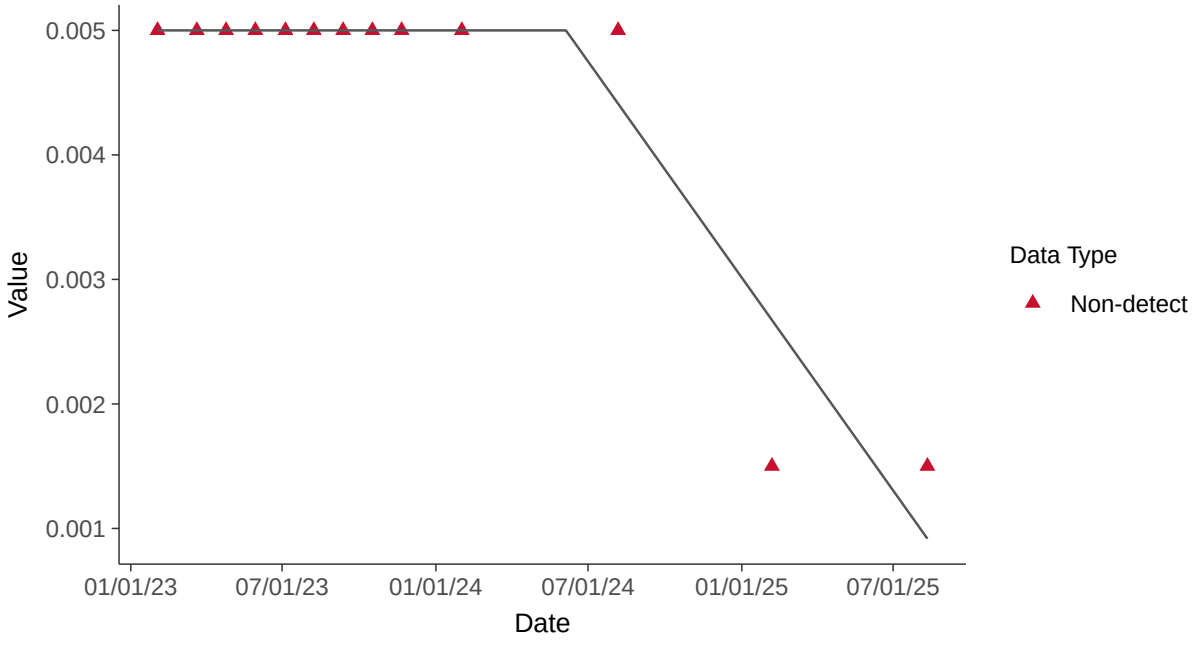
Trend Regression: Piecewise Linear-Linear

Nickel, MW-16D (mg/l)



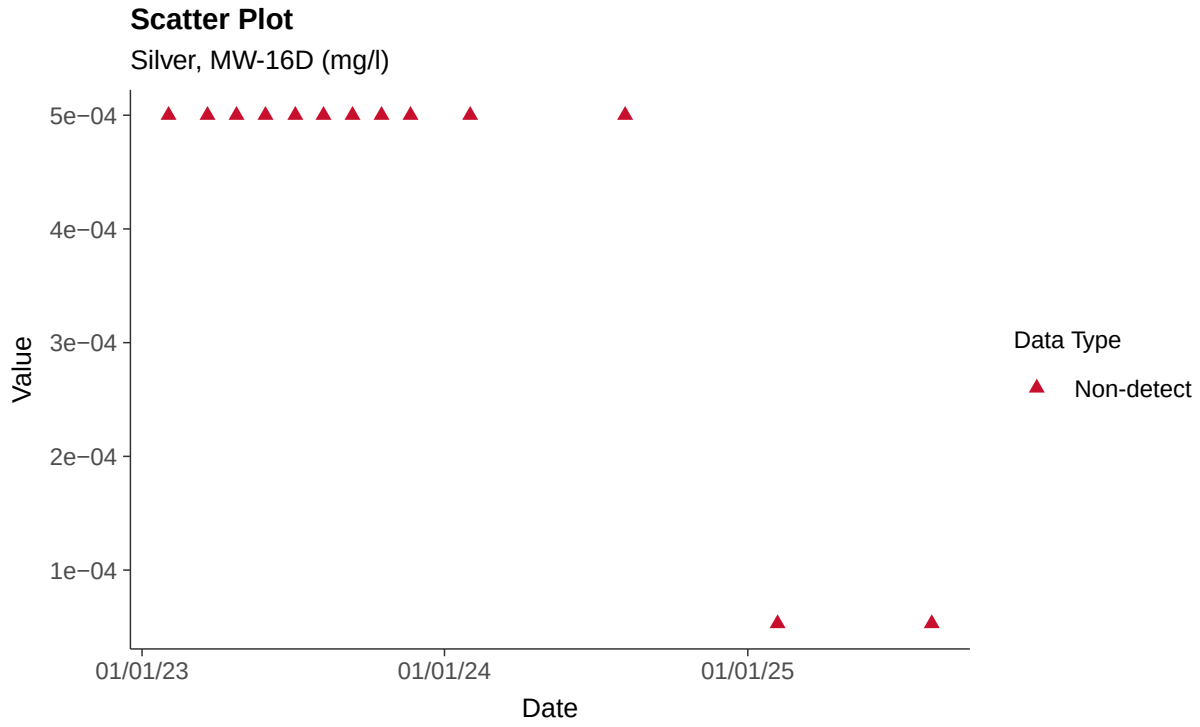
Trend Regression: Piecewise Linear-Linear-Linear

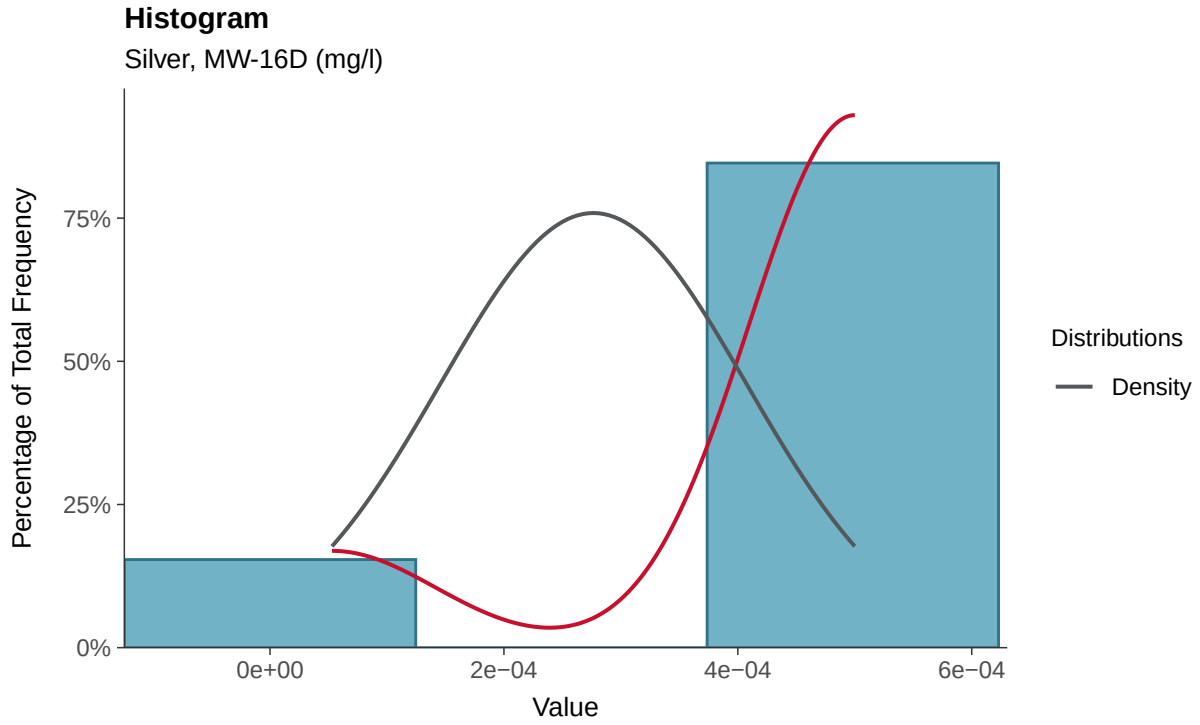
Nickel, MW-16D (mg/l)



Part 115: Silver, MW-16D

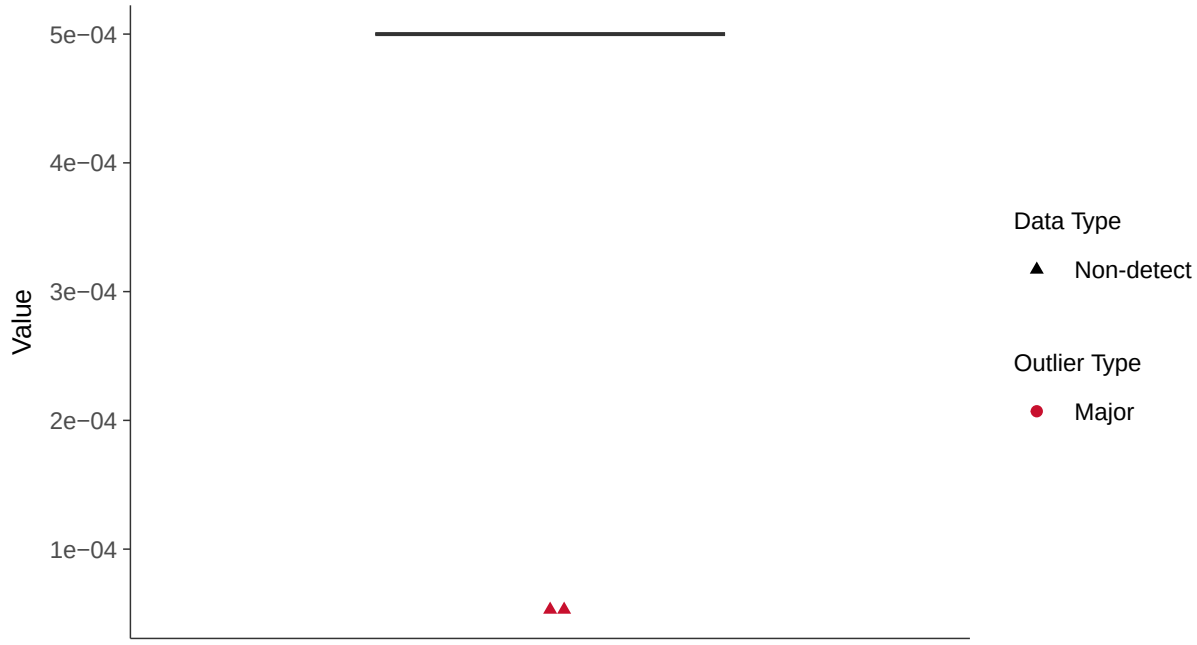
ID: 15_5_123





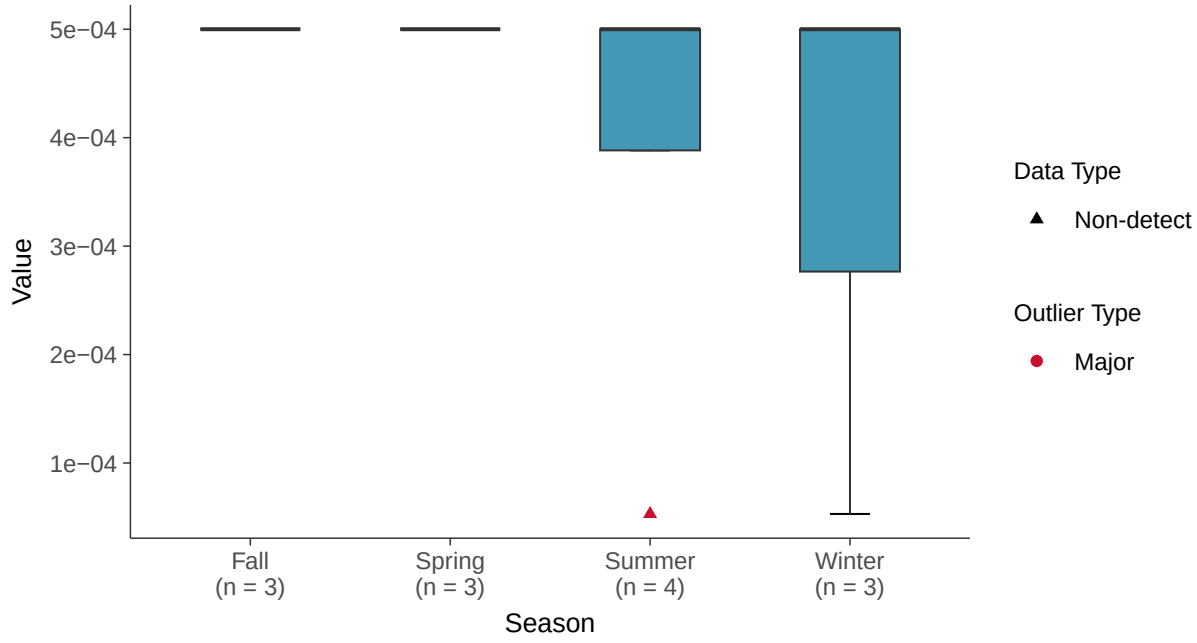
Boxplot

Silver, MW-16D (mg/l)



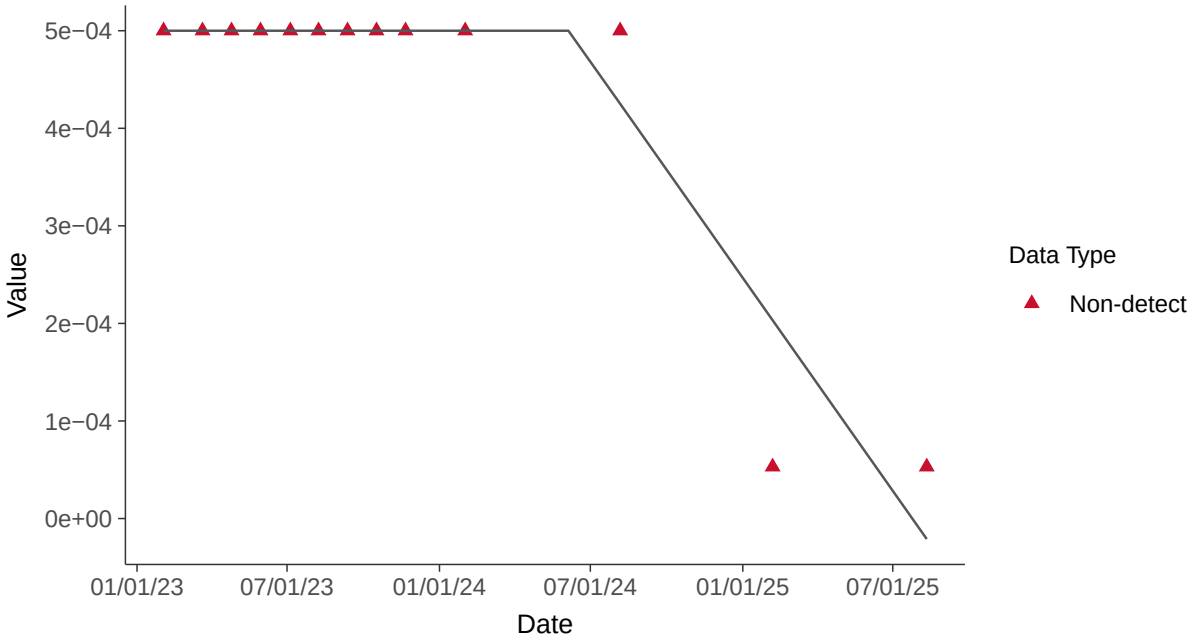
Boxplot by Season

Silver, MW-16D (mg/l)



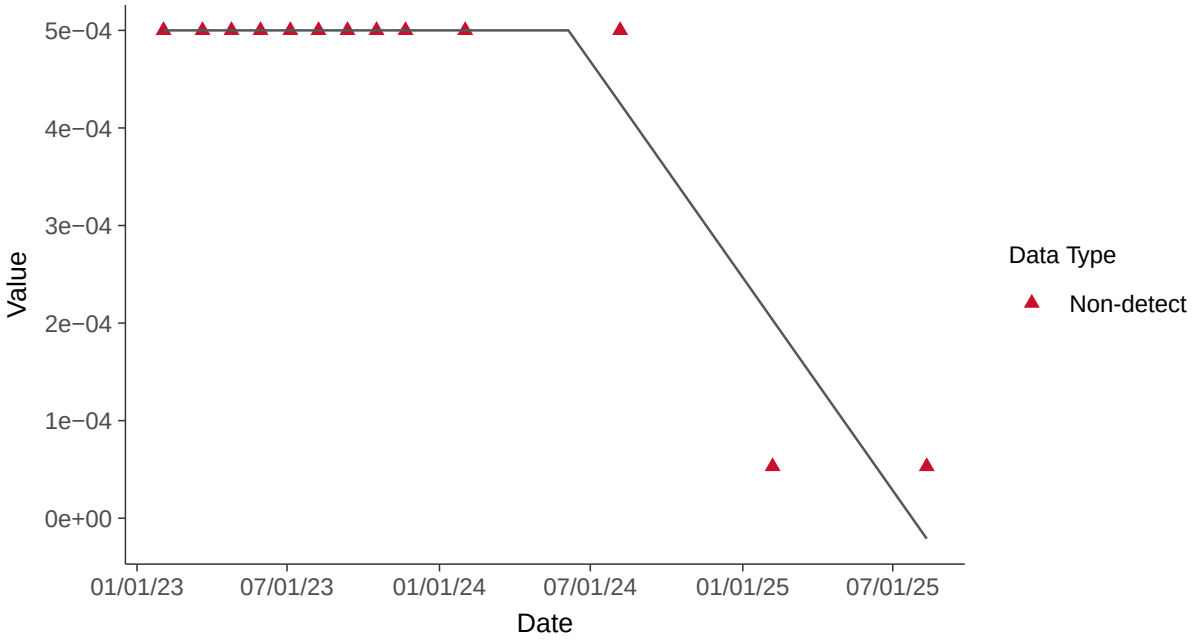
Trend Regression: Piecewise Linear-Linear

Silver, MW-16D (mg/l)



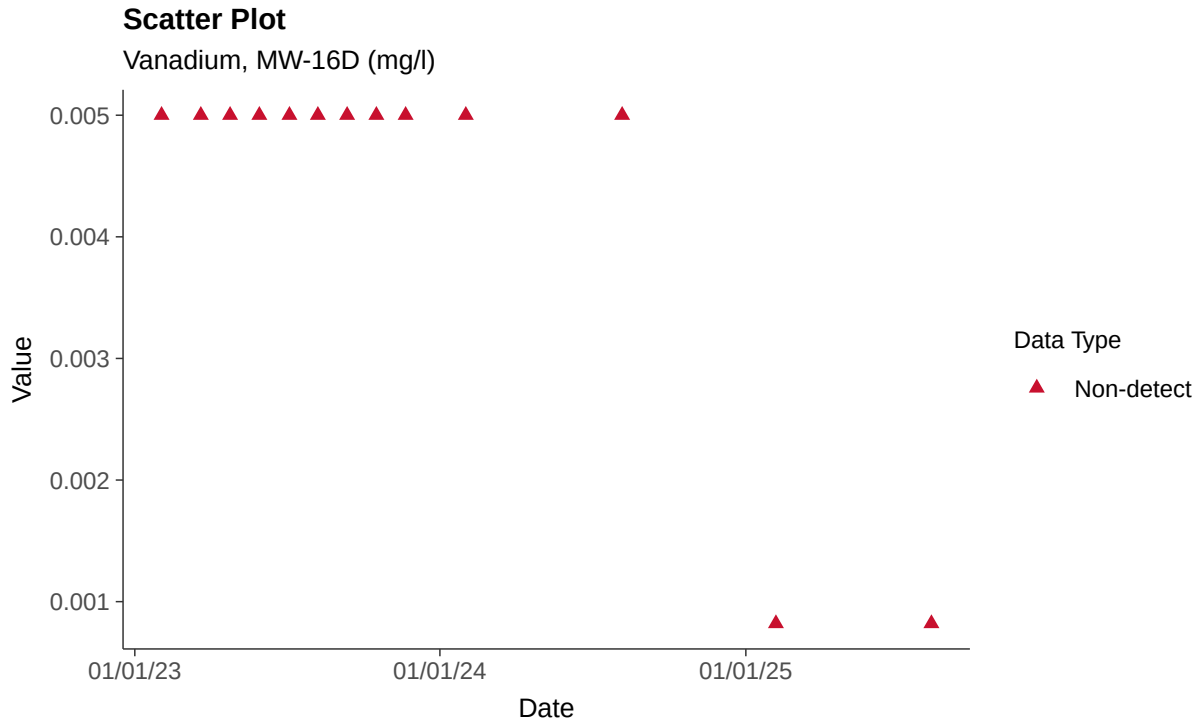
Trend Regression: Piecewise Linear-Linear-Linear

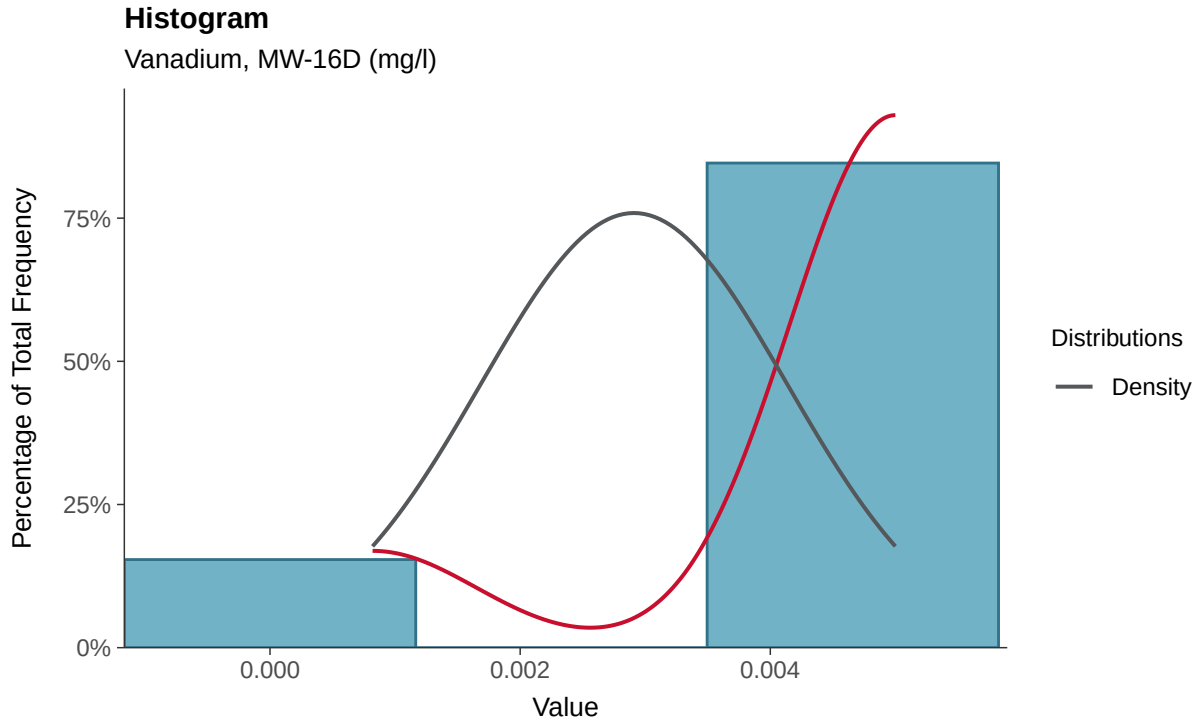
Silver, MW-16D (mg/l)



Part 115: Vanadium, MW-16D

ID: 15_5_128



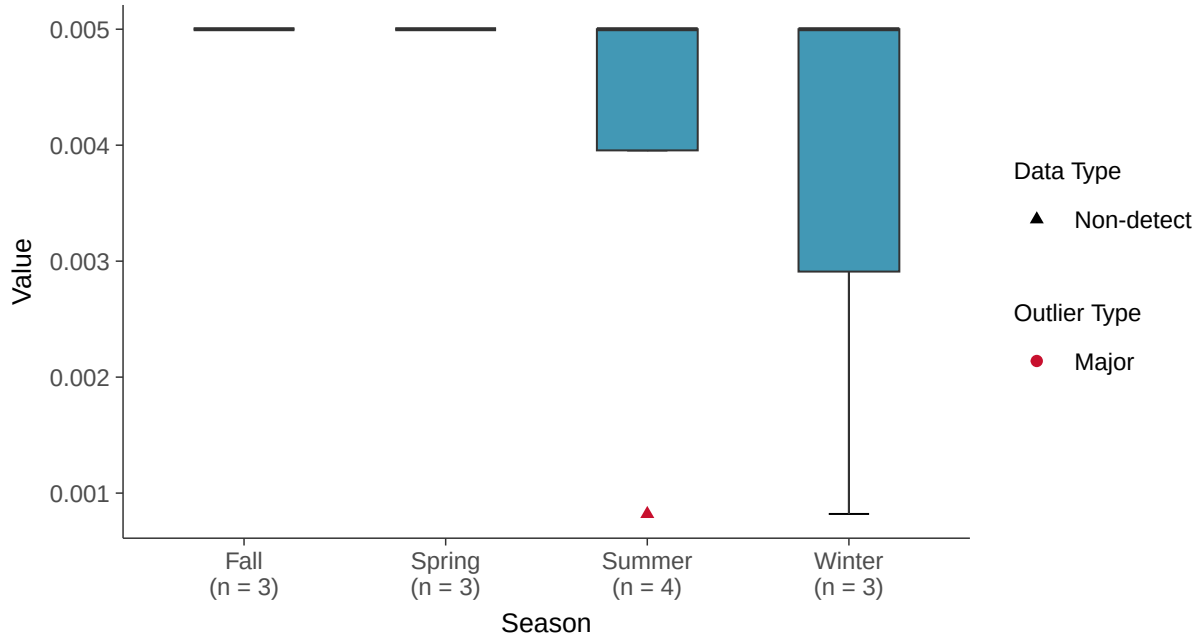


Boxplot

Vanadium, MW-16D (mg/l)

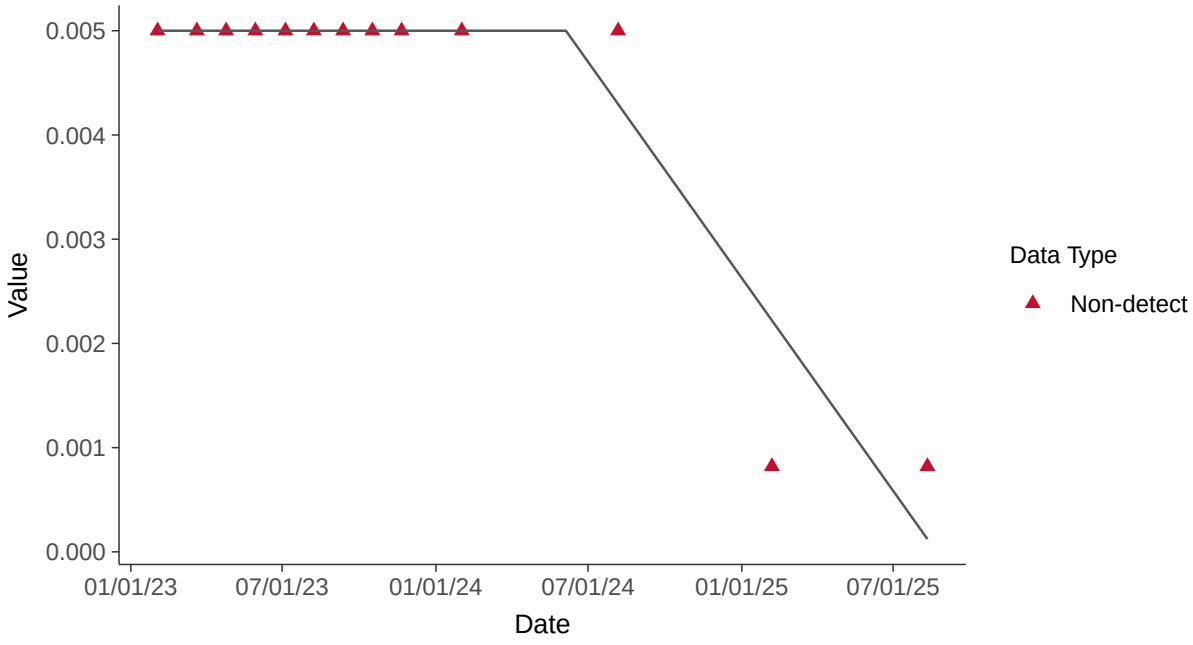
Boxplot by Season

Vanadium, MW-16D (mg/l)



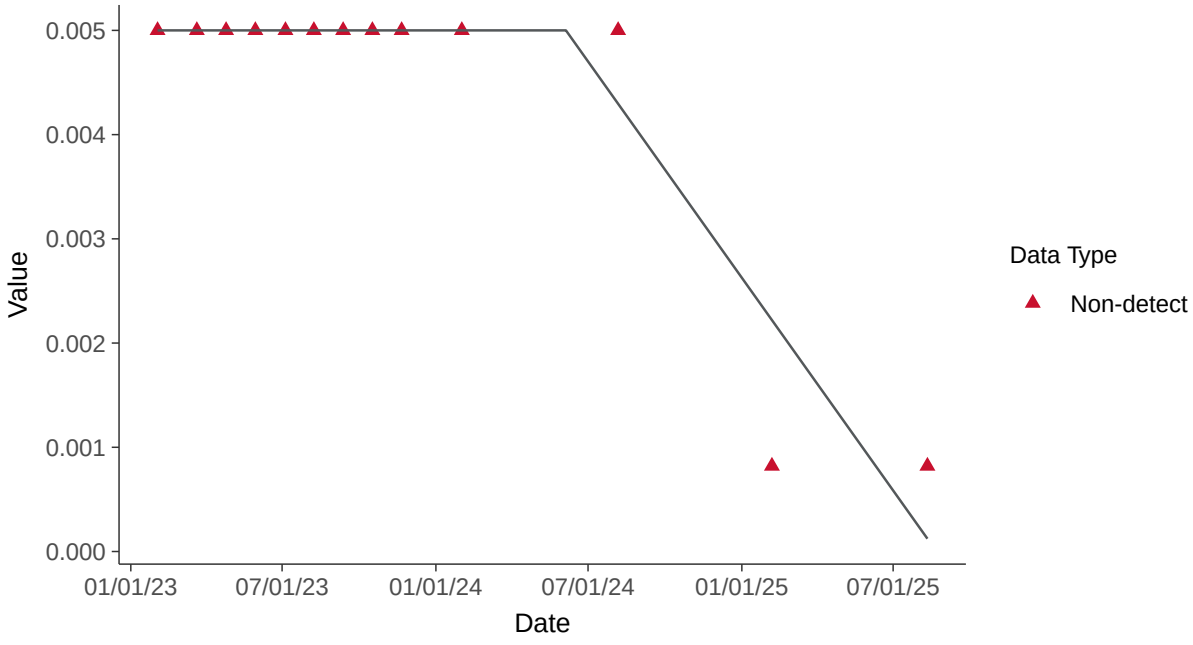
Trend Regression: Piecewise Linear-Linear

Vanadium, MW-16D (mg/l)



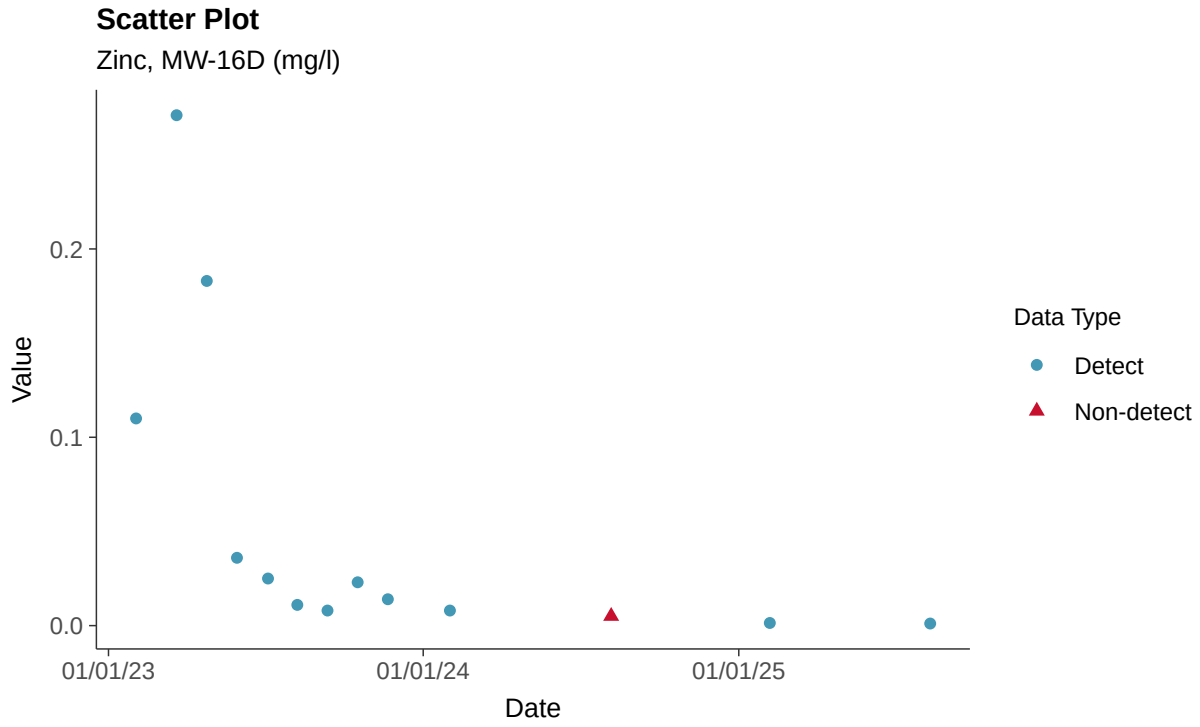
Trend Regression: Piecewise Linear-Linear-Linear

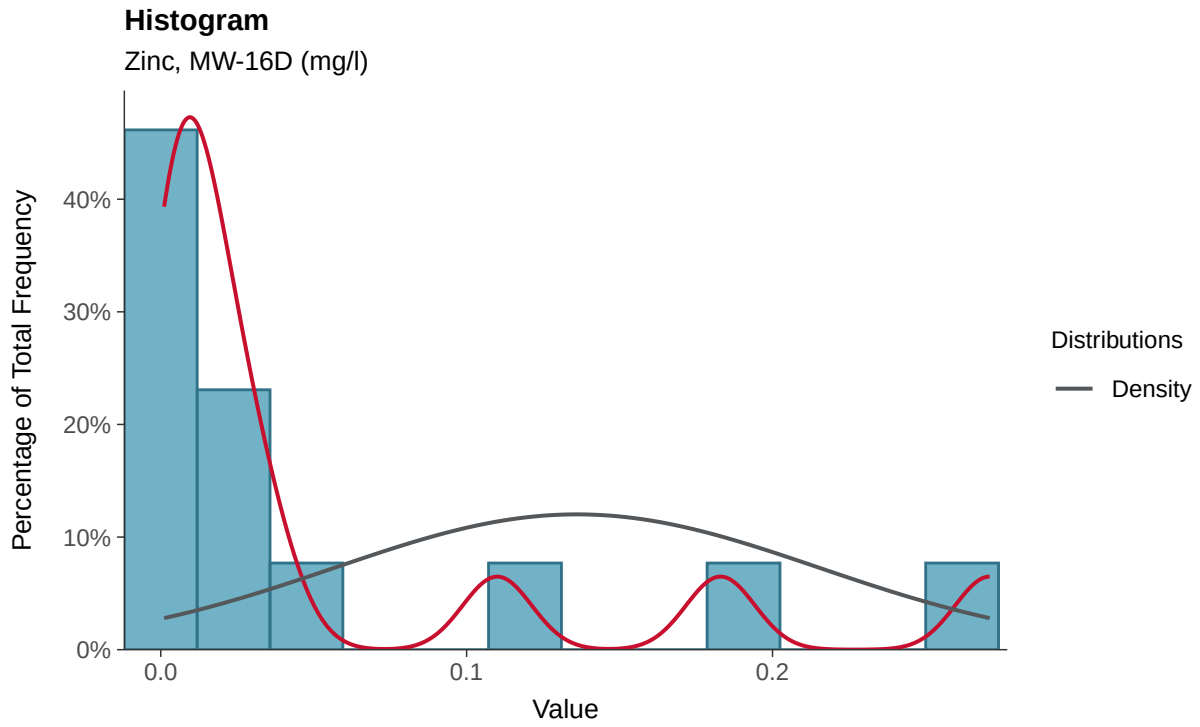
Vanadium, MW-16D (mg/l)



Part 115: Zinc, MW-16D

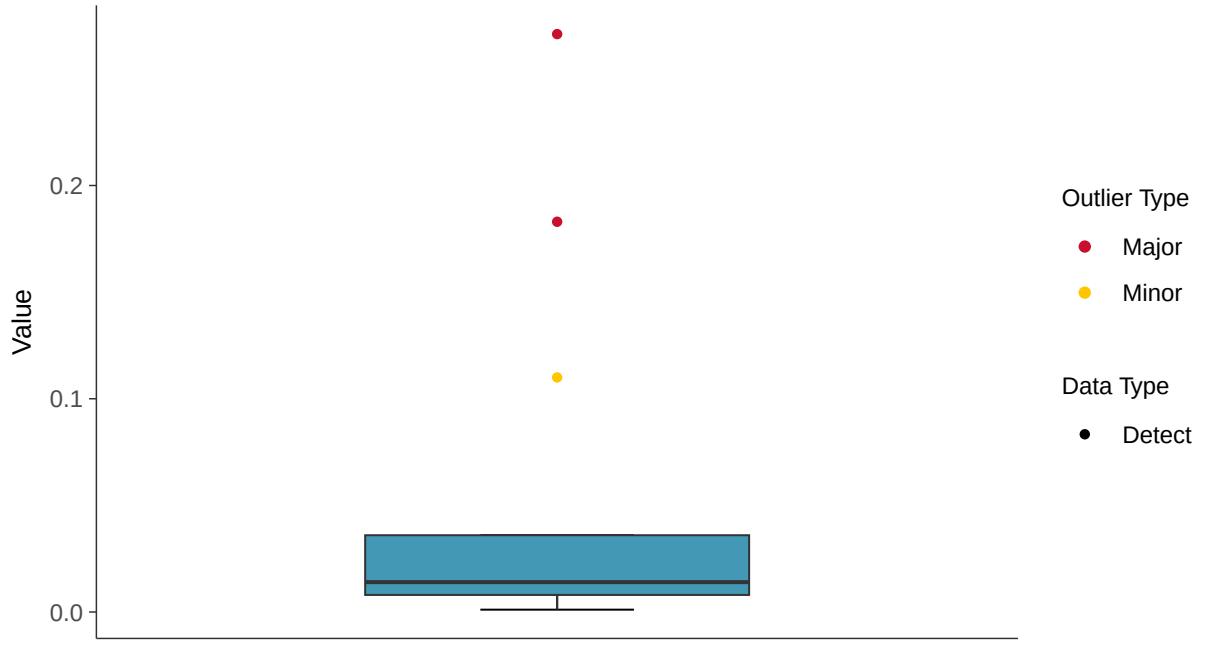
ID: 15_5_129





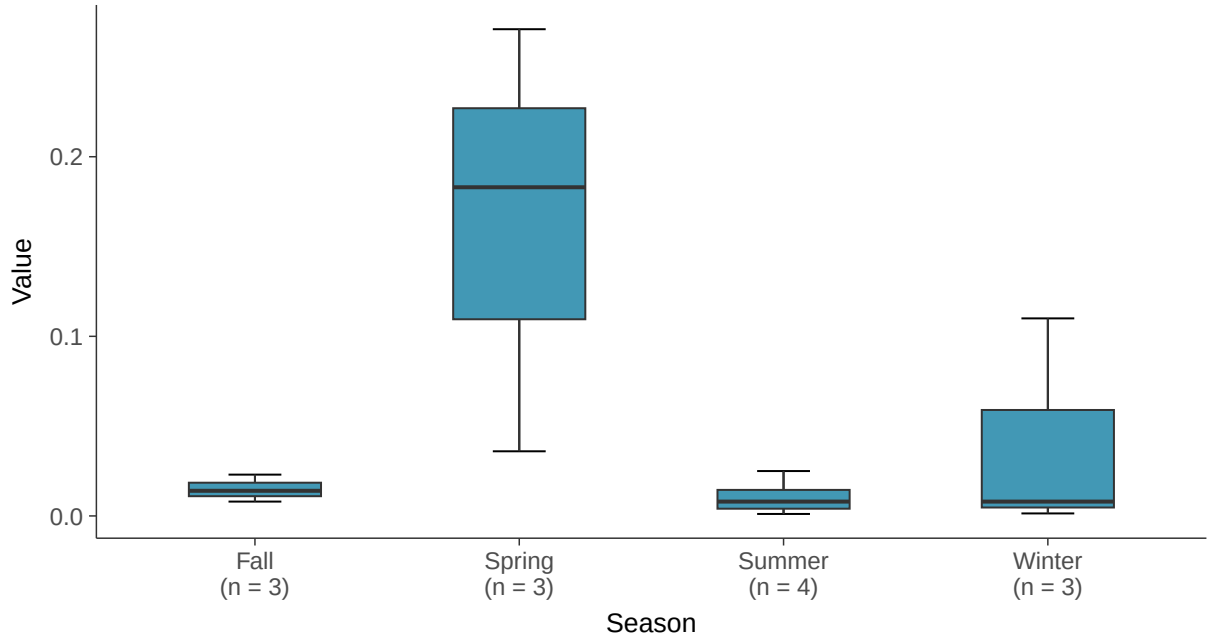
Boxplot

Zinc, MW-16D (mg/l)



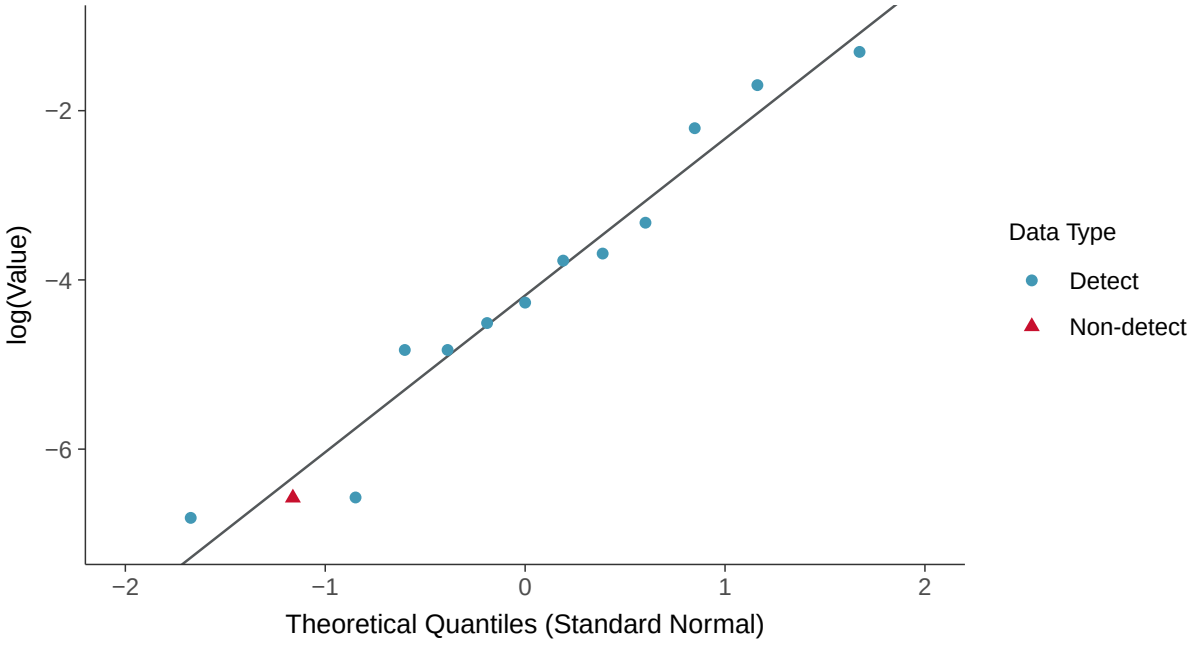
Boxplot by Season

Zinc, MW-16D (mg/l)



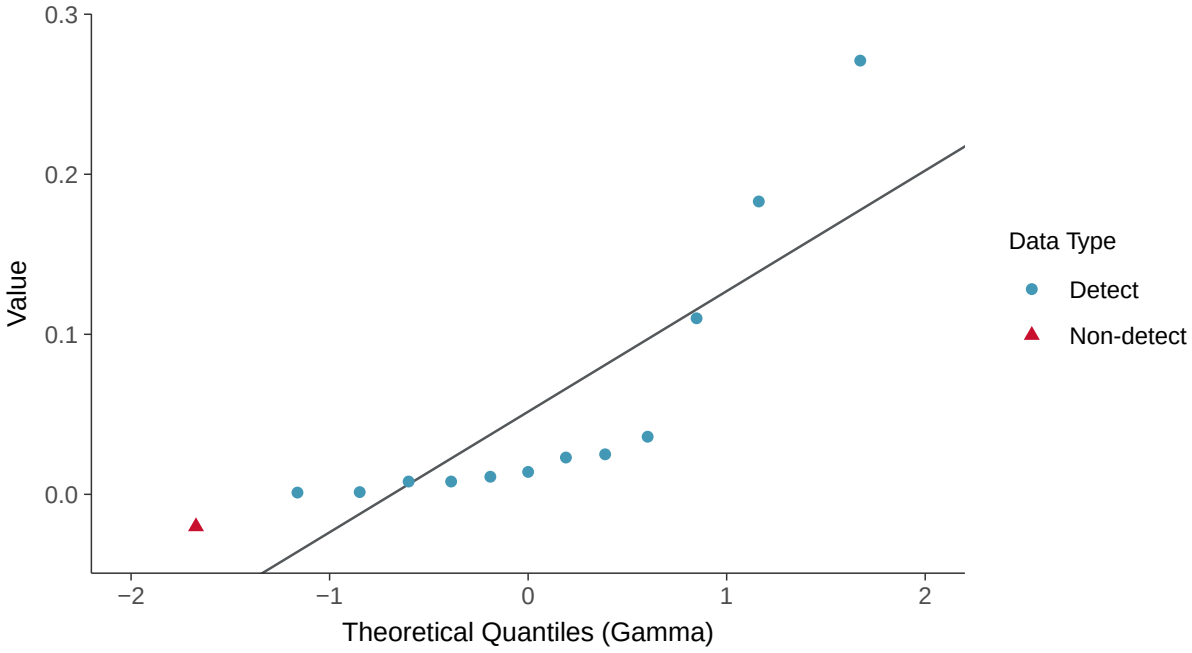
Lognormal Q-Q plot using ROS Imputed Estimates

Zinc, MW-16D (mg/l)



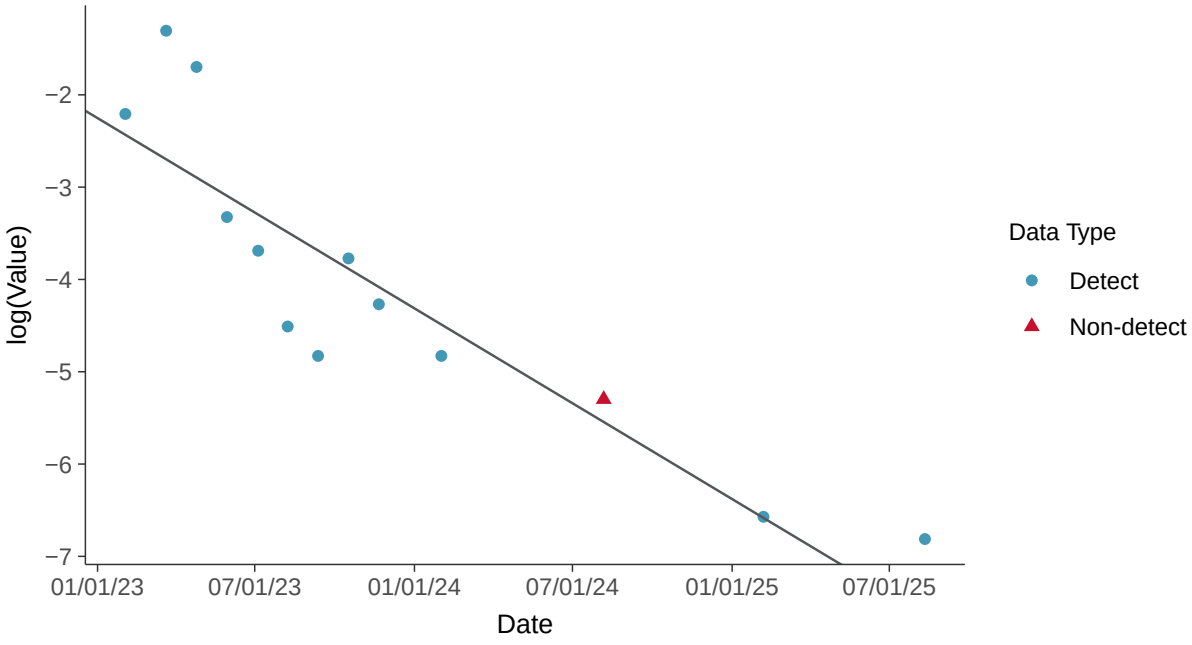
Gamma Q-Q plot using ROS Imputed Estimates

Zinc, MW-16D (mg/l)



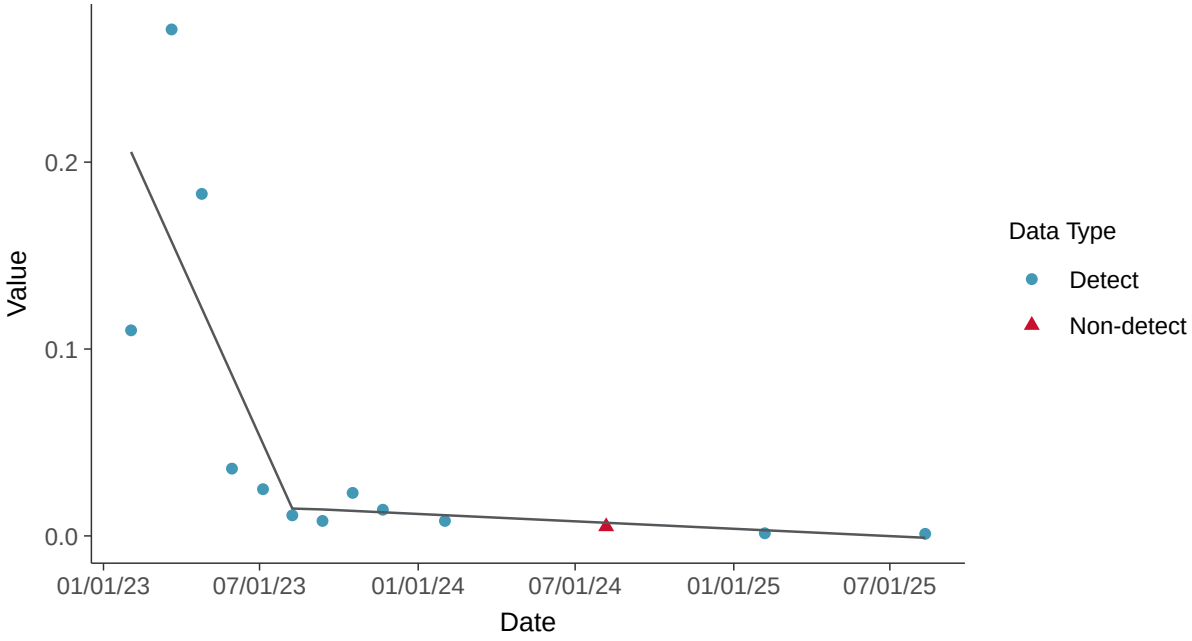
Trend Regression: Lognormal MLE

Zinc, MW-16D (mg/l)



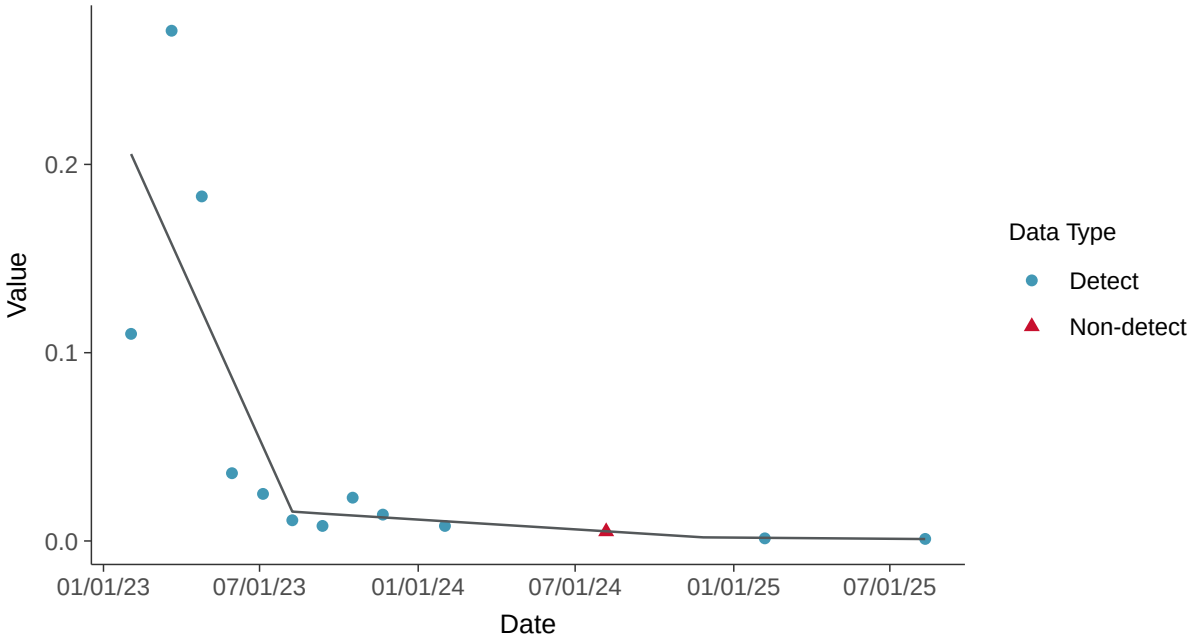
Trend Regression: Piecewise Linear-Linear

Zinc, MW-16D (mg/l)



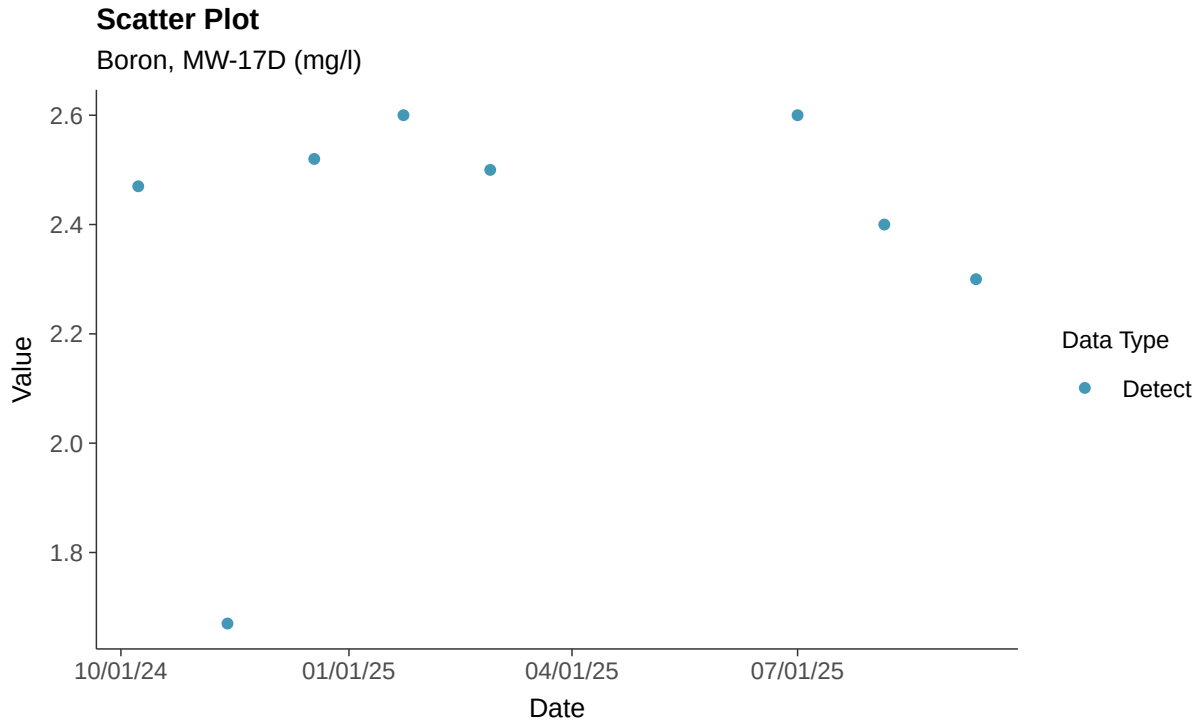
Trend Regression: Piecewise Linear-Linear-Linear

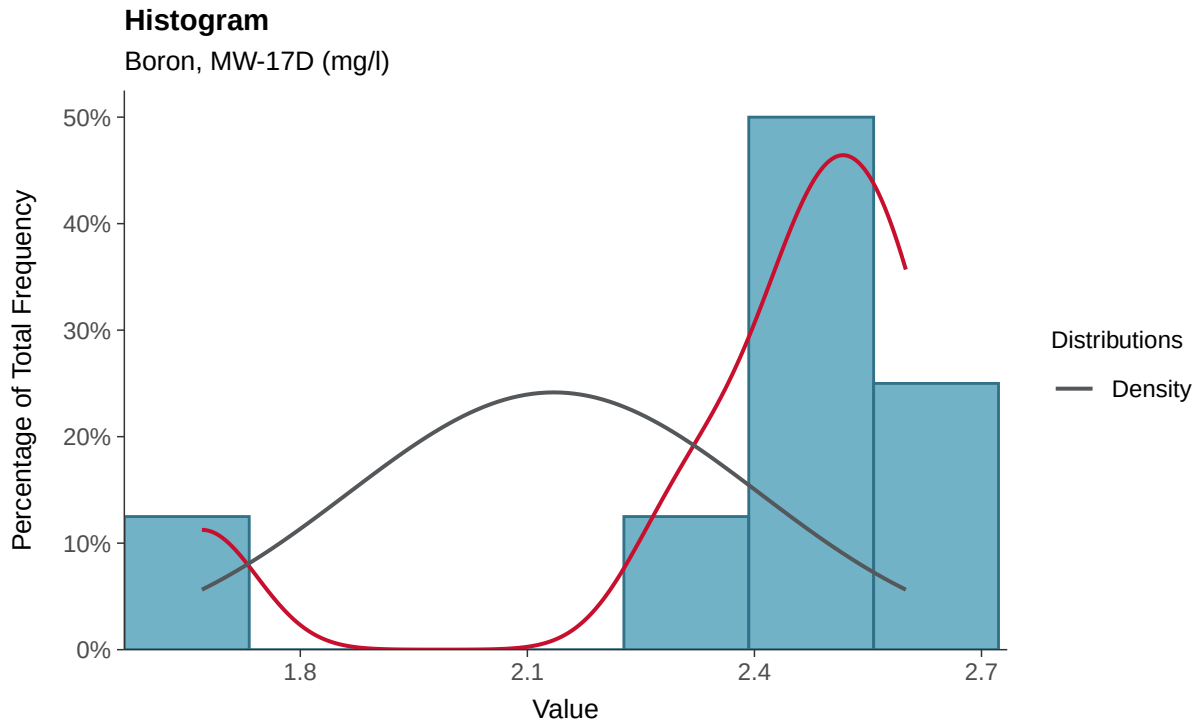
Zinc, MW-16D (mg/l)



Appendix III: Boron, MW-17D

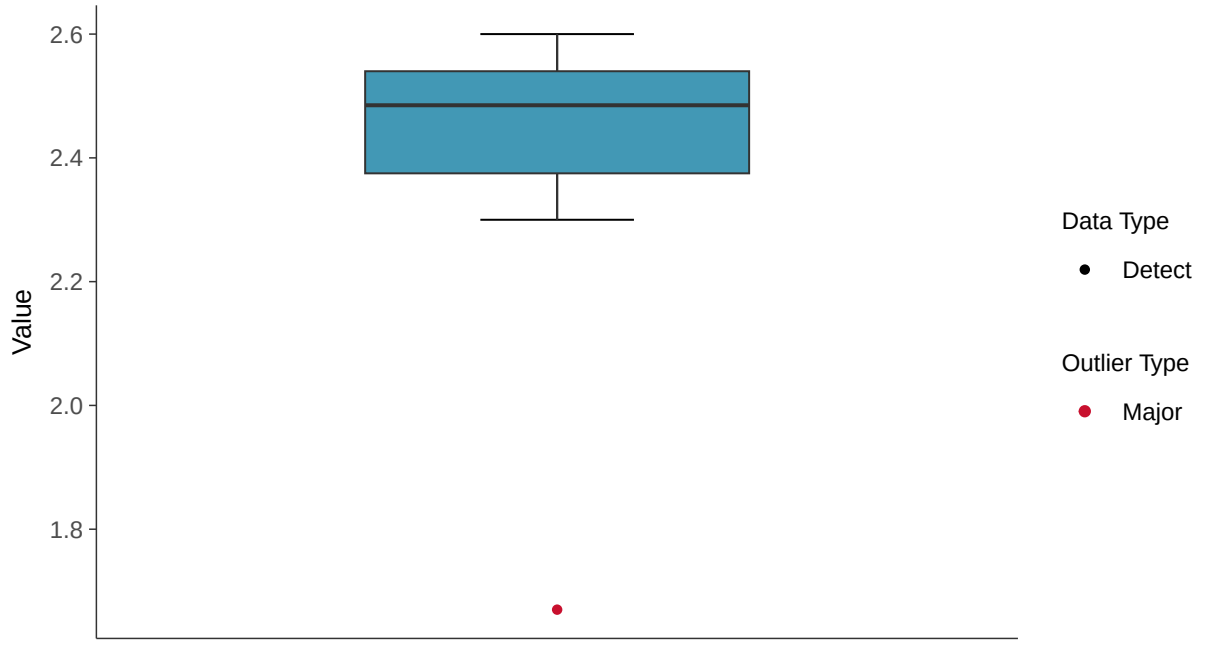
ID: 16_2_105





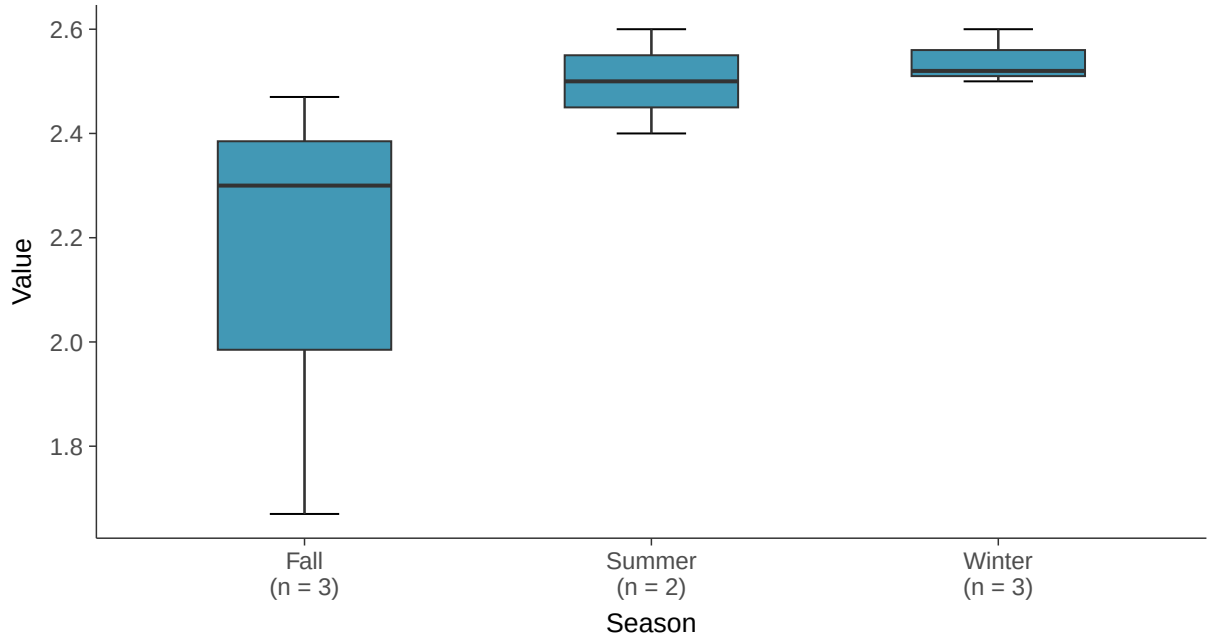
Boxplot

Boron, MW-17D (mg/l)



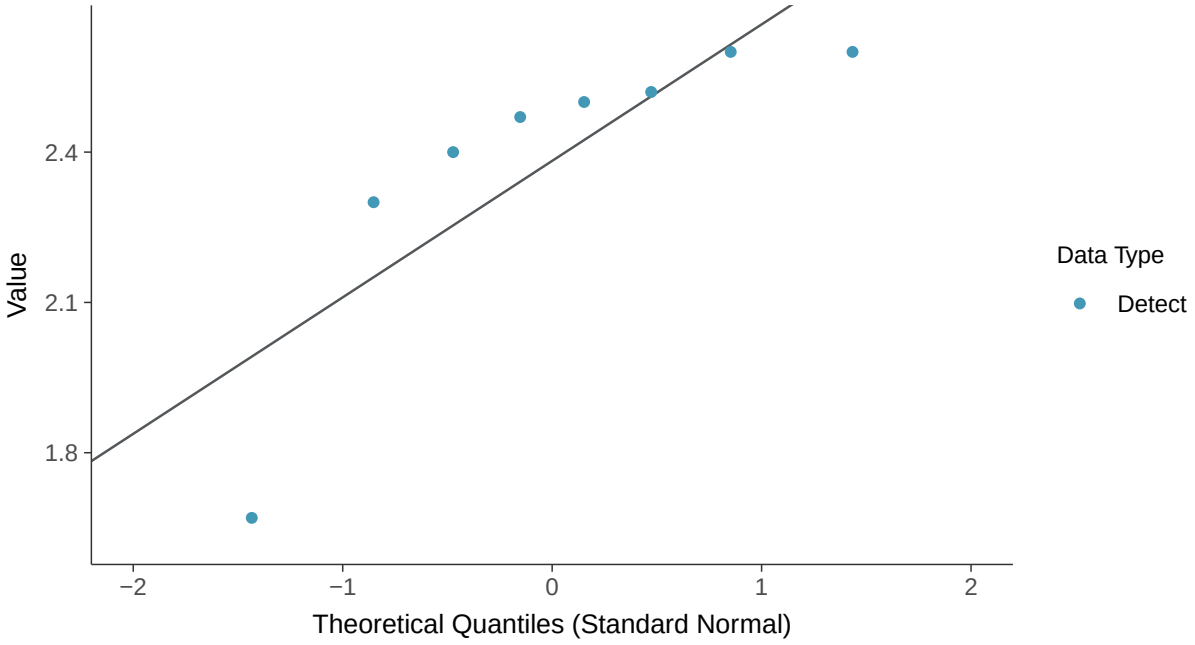
Boxplot by Season

Boron, MW-17D (mg/l)



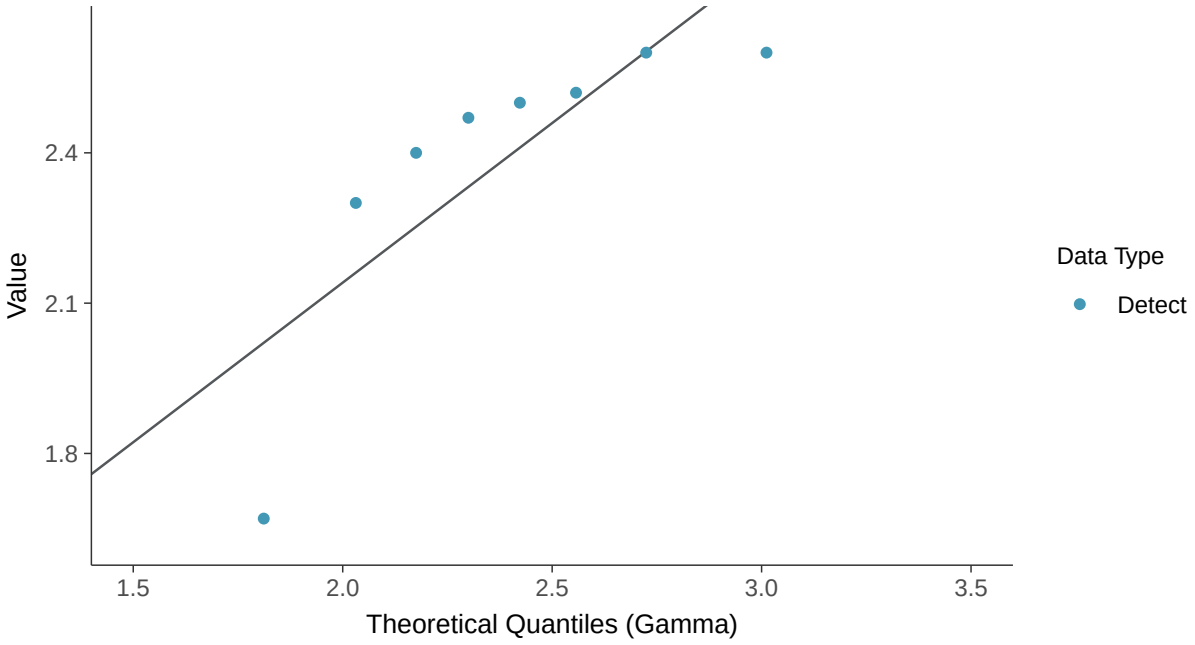
Normal Q-Q plot

Boron, MW-17D (mg/l)



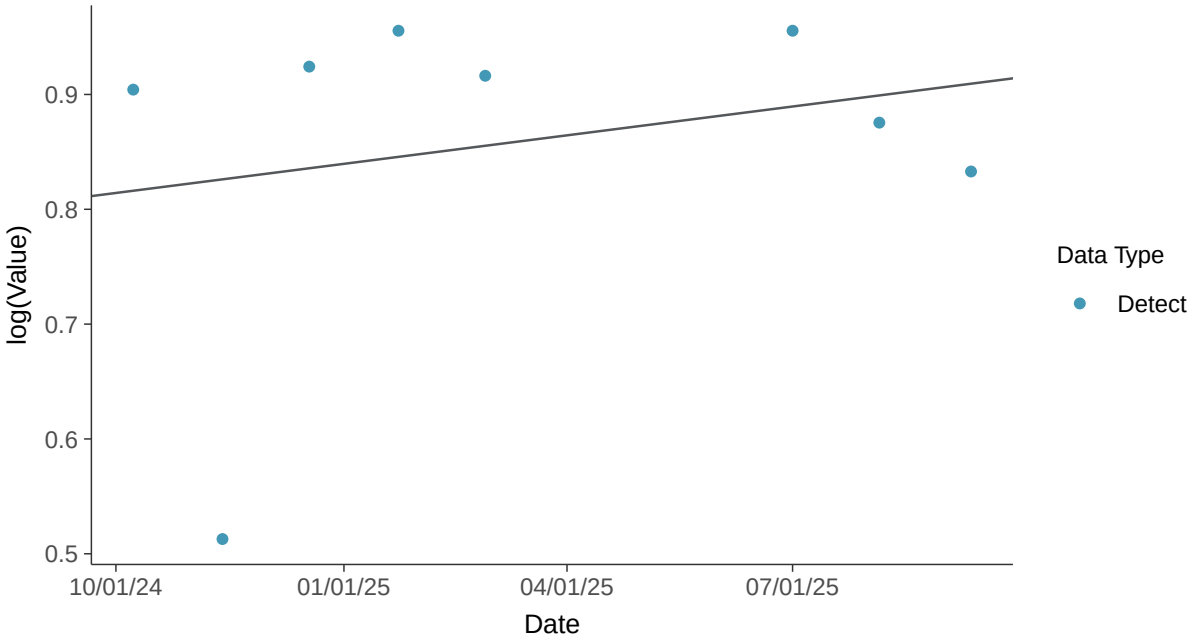
Gamma Q-Q plot

Boron, MW-17D (mg/l)



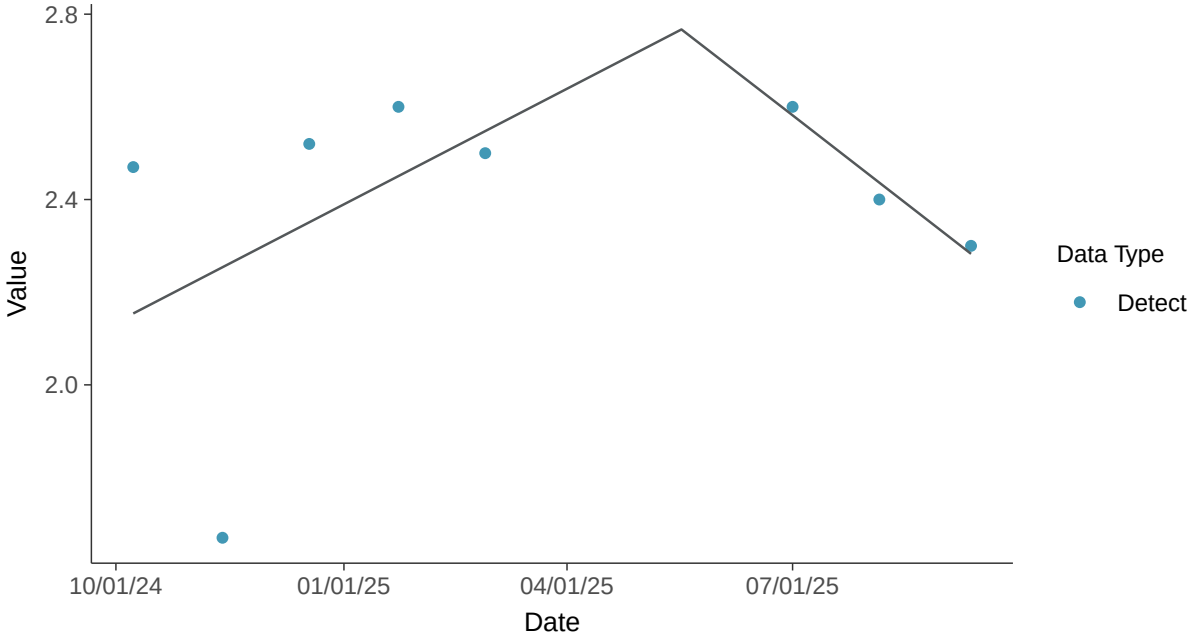
Trend Regression: Lognormal MLE

Boron, MW-17D (mg/l)



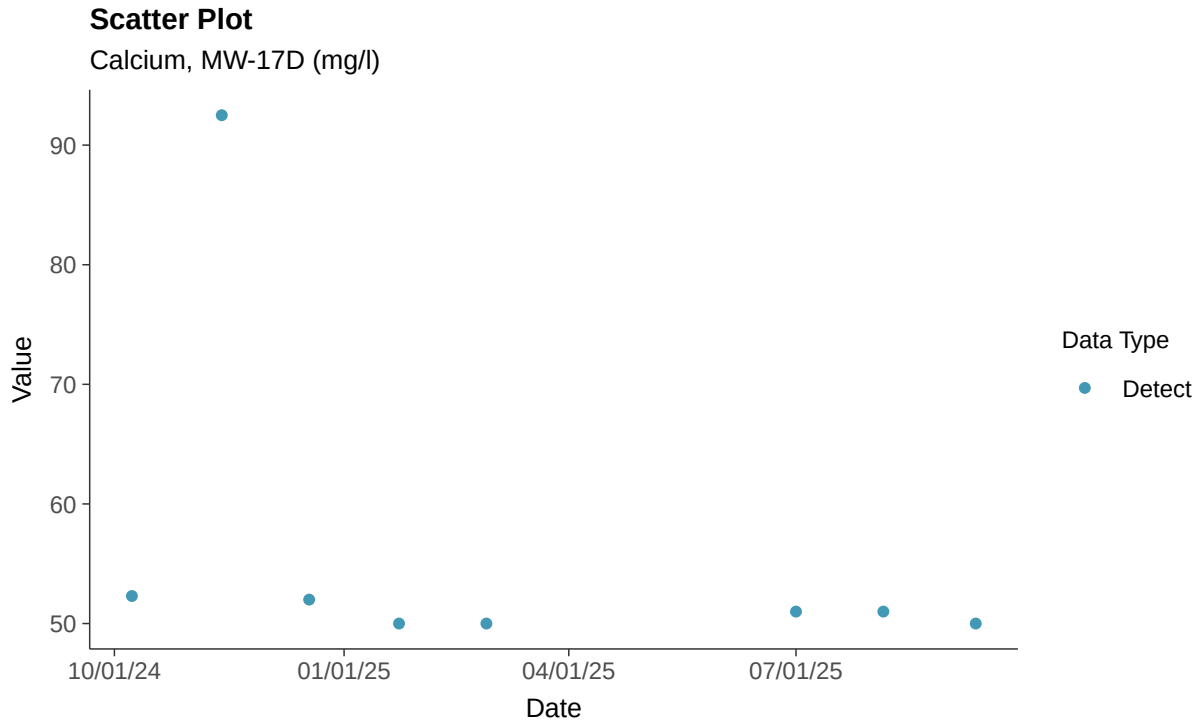
Trend Regression: Piecewise Linear-Linear

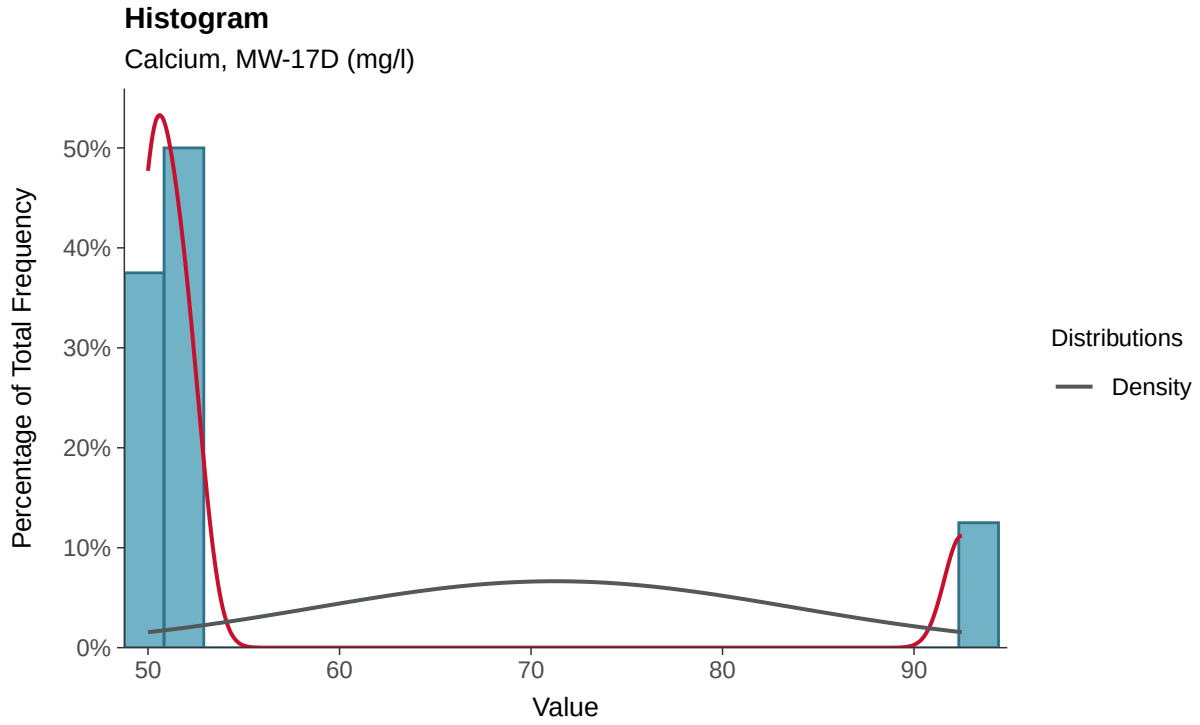
Boron, MW-17D (mg/l)



Appendix III: Calcium, MW-17D

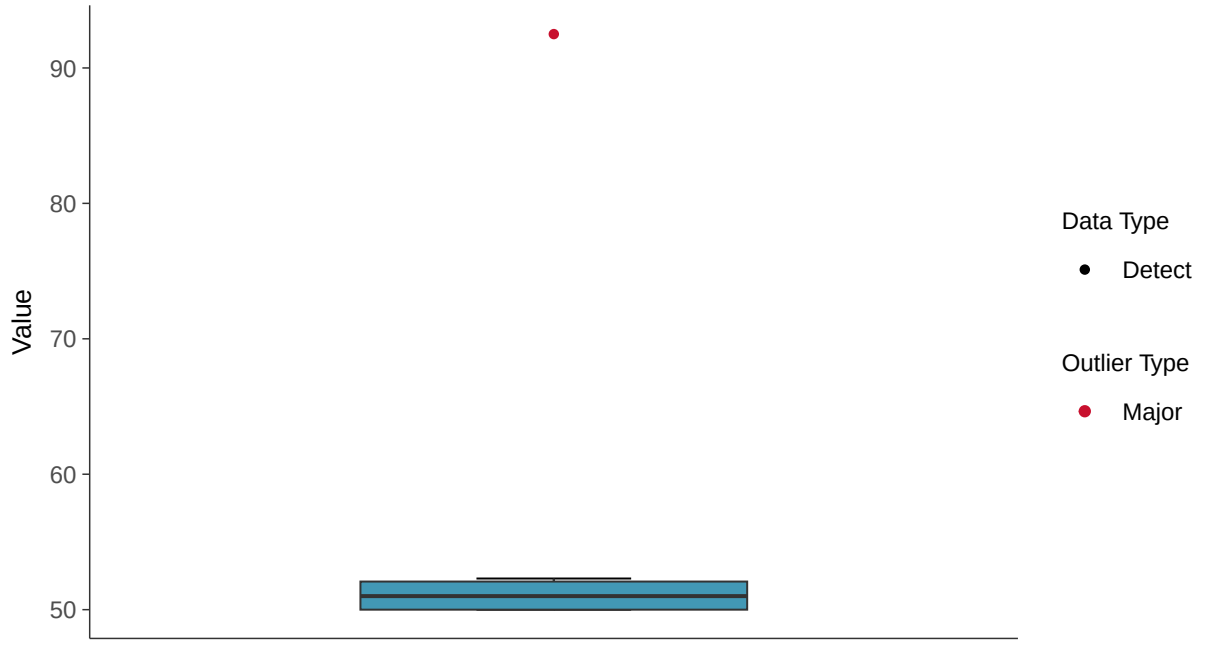
ID: 16_2_107





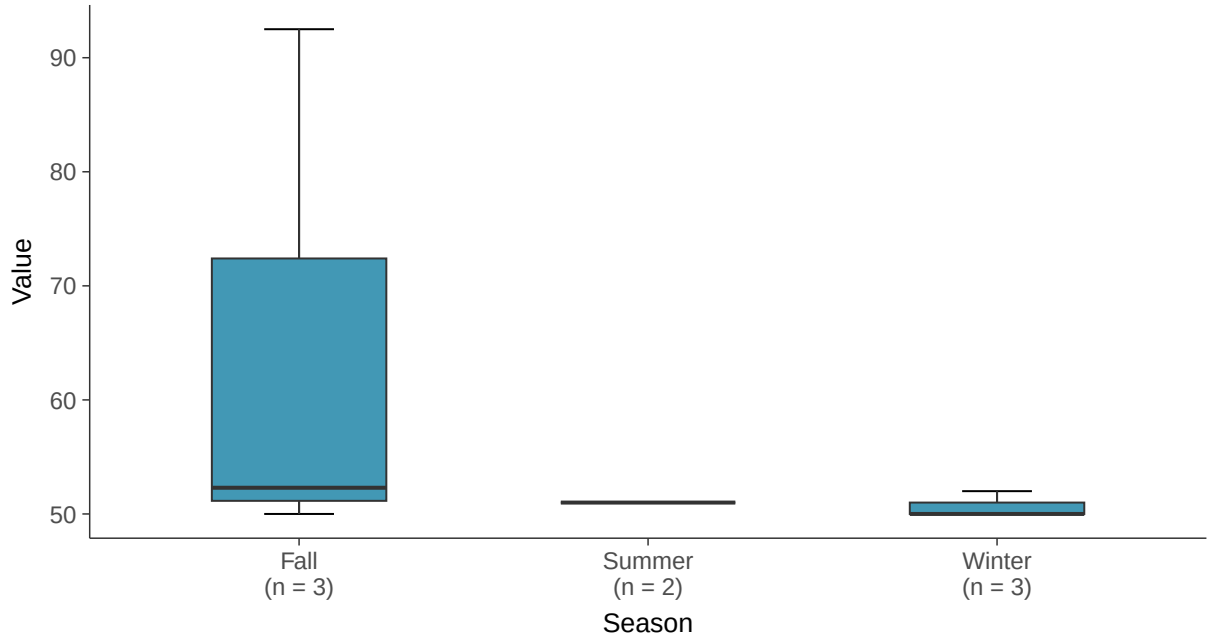
Boxplot

Calcium, MW-17D (mg/l)



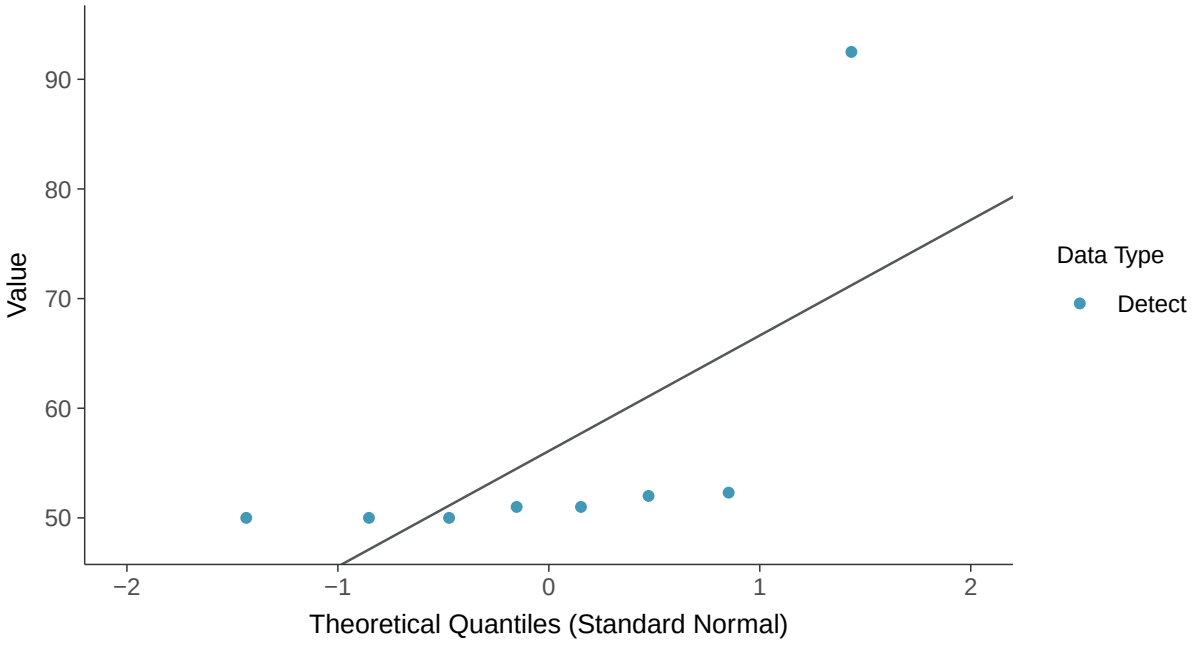
Boxplot by Season

Calcium, MW-17D (mg/l)



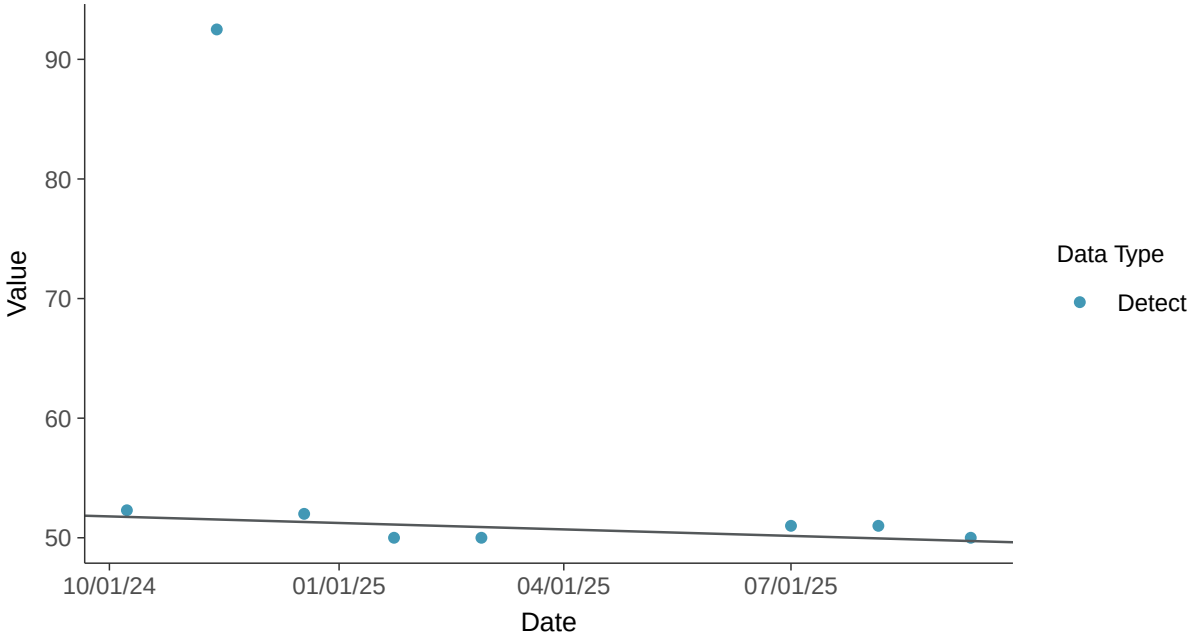
Normal Q-Q plot

Calcium, MW-17D (mg/l)



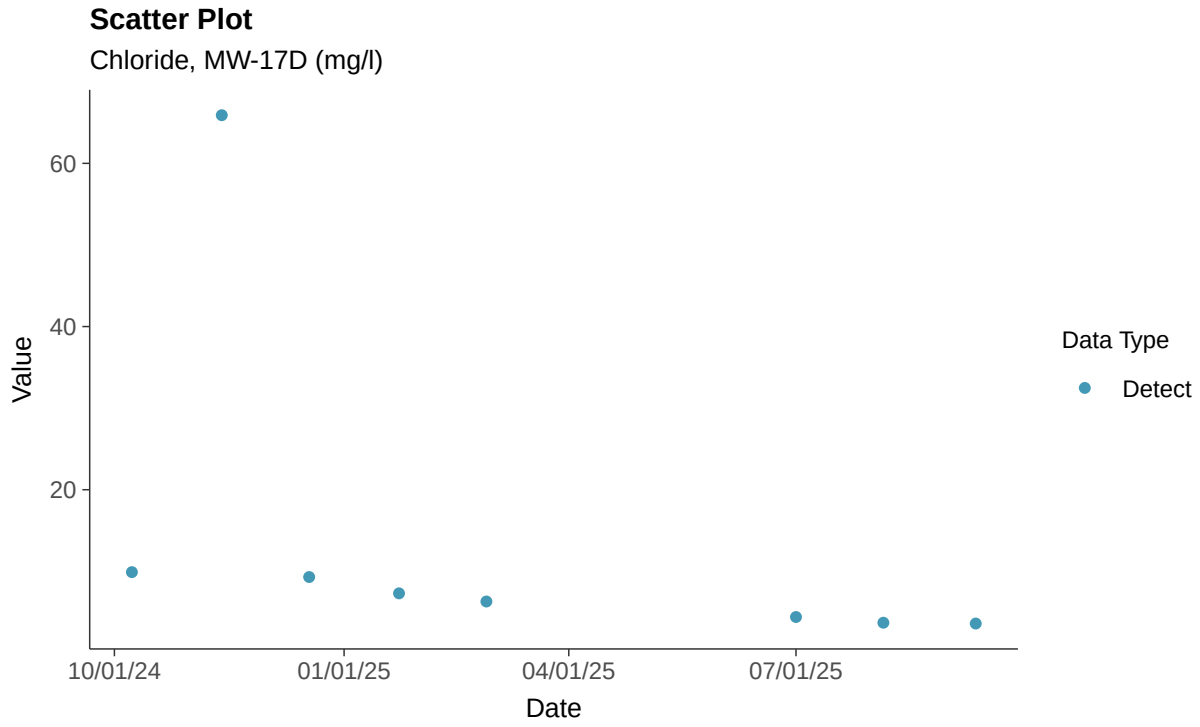
Trend Regression: Mann-Kendall/Theil-Sen Estimate

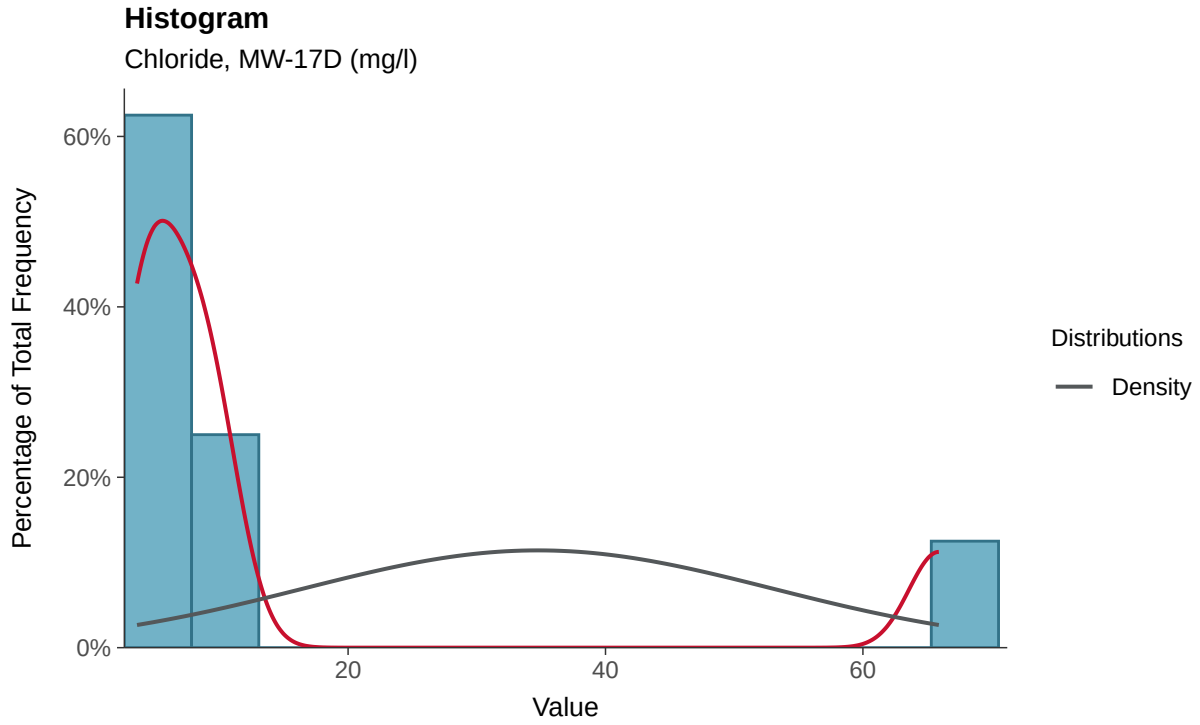
Calcium, MW-17D (mg/l)



Appendix III: Chloride, MW-17D

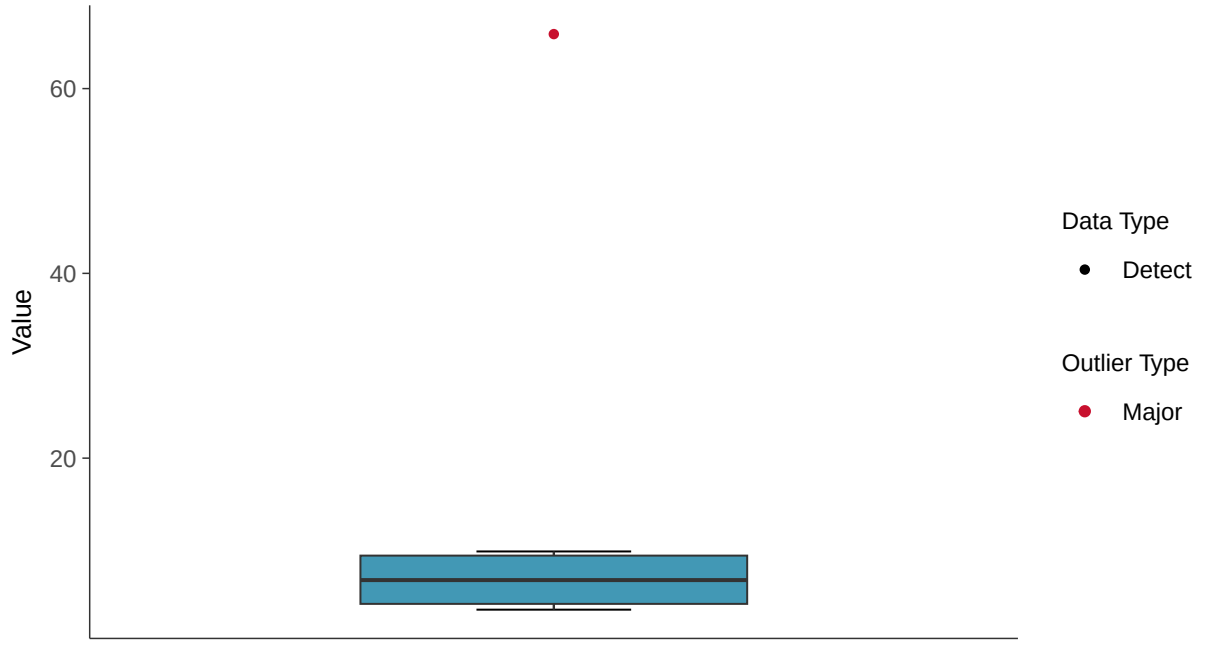
ID: 16_2_108





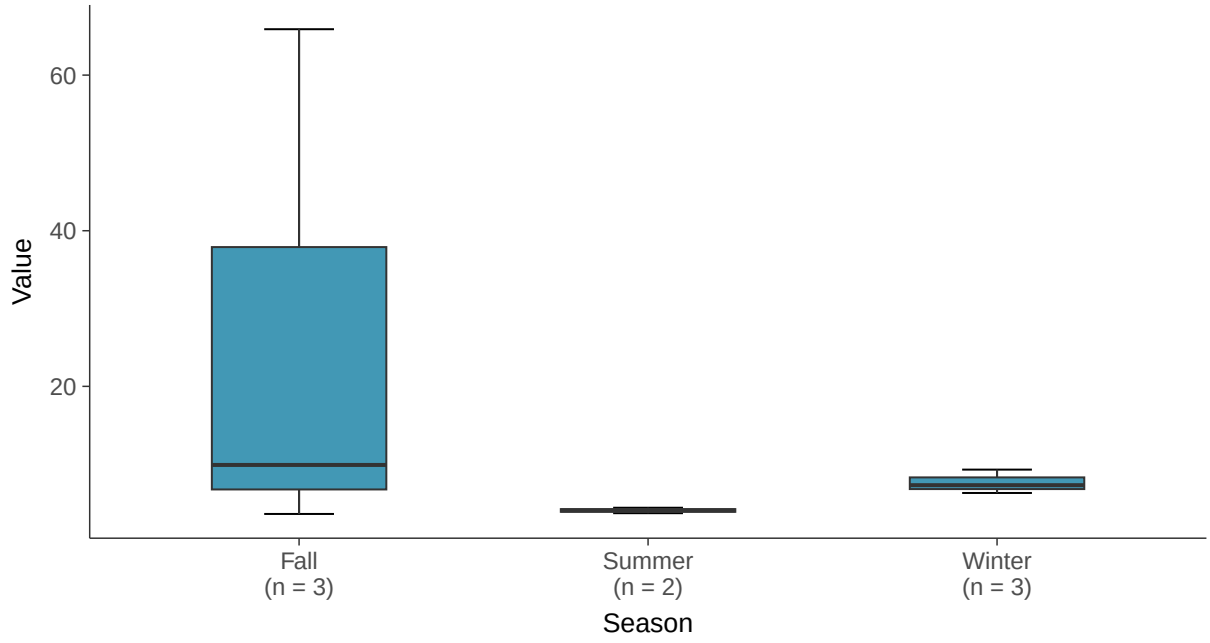
Boxplot

Chloride, MW-17D (mg/l)



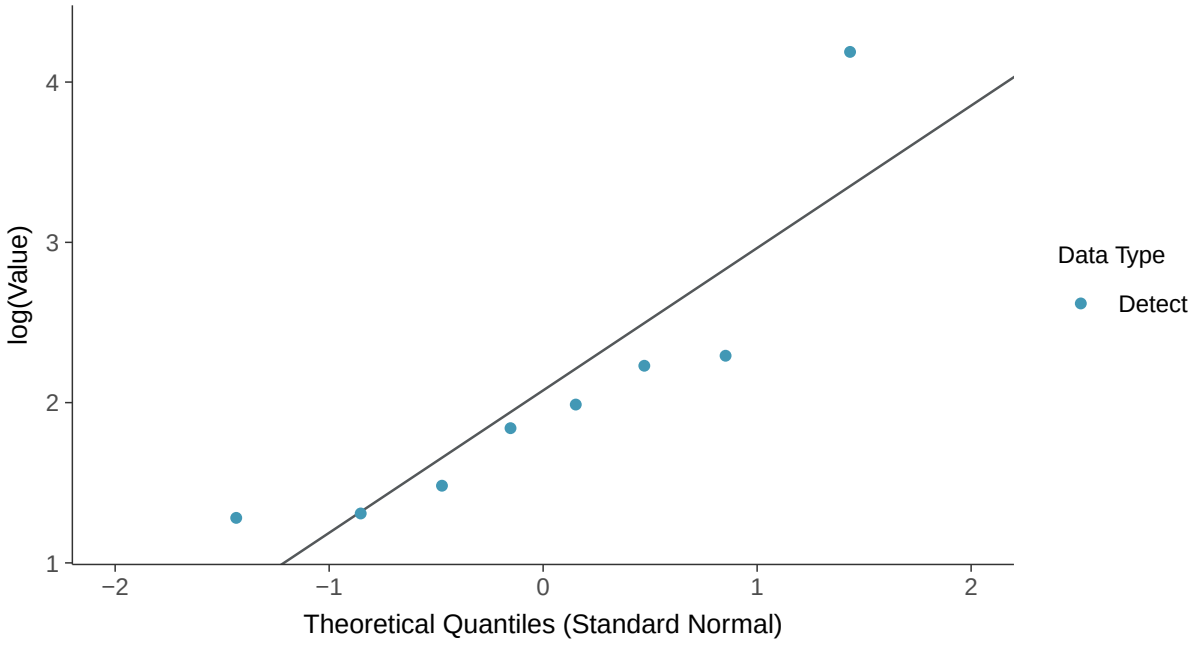
Boxplot by Season

Chloride, MW-17D (mg/l)



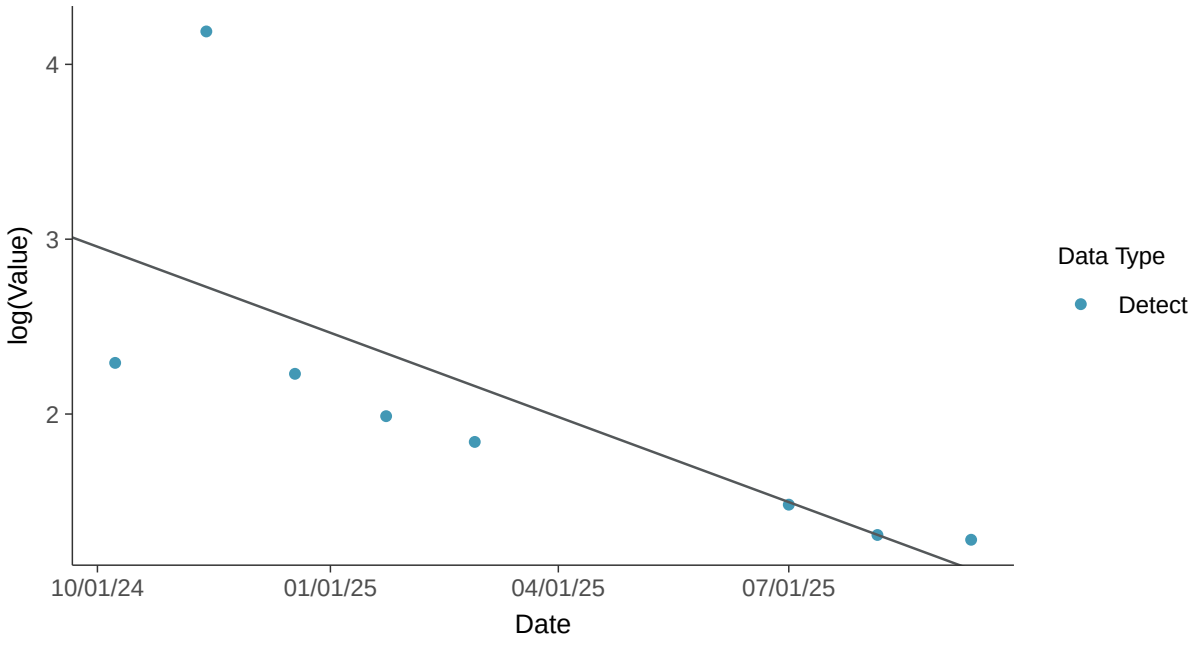
Lognormal Q-Q plot

Chloride, MW-17D (mg/l)



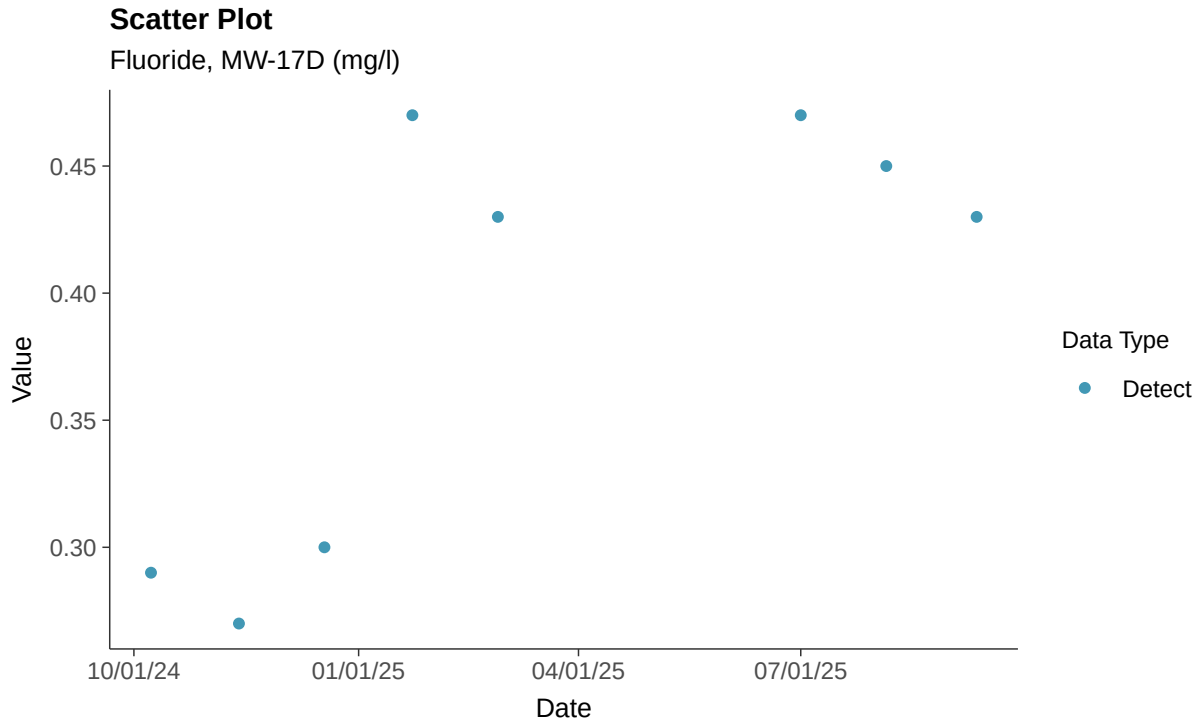
Trend Regression: Lognormal MLE

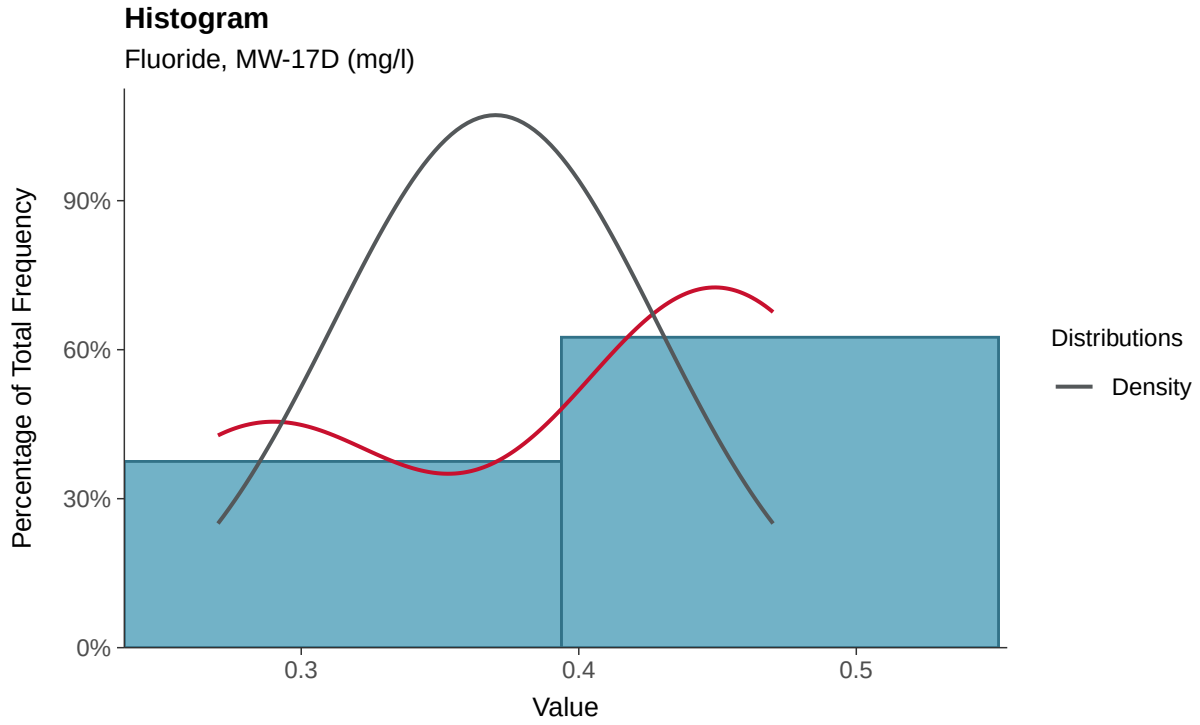
Chloride, MW-17D (mg/l)



Appendix III: Fluoride, MW-17D

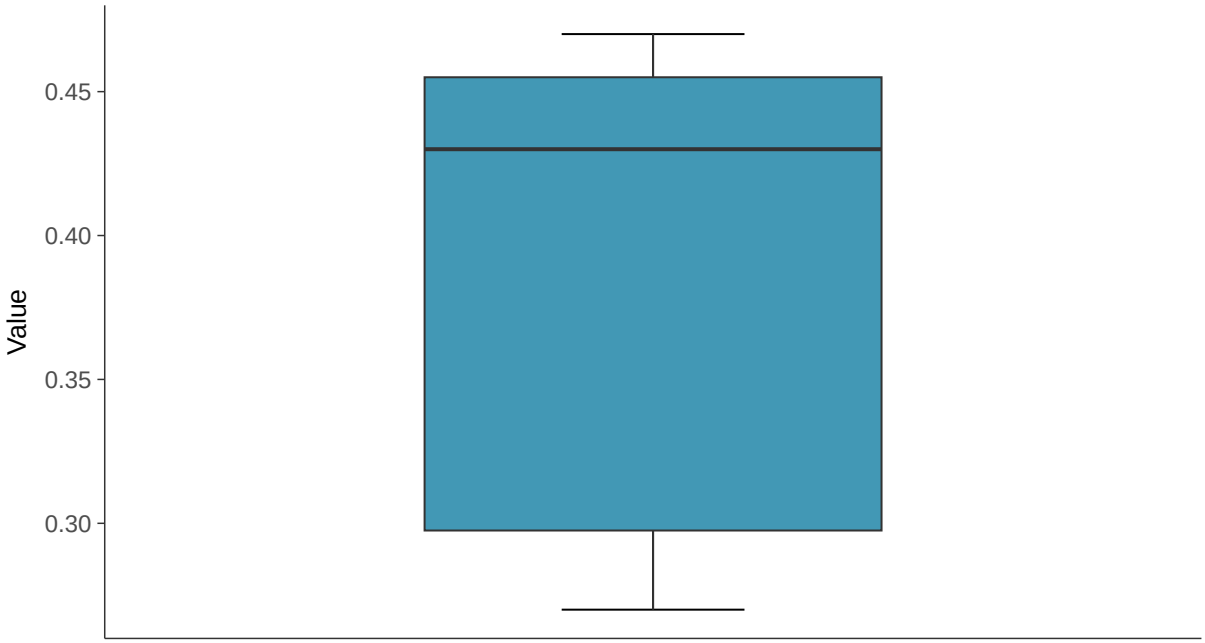
ID: 16_2_112





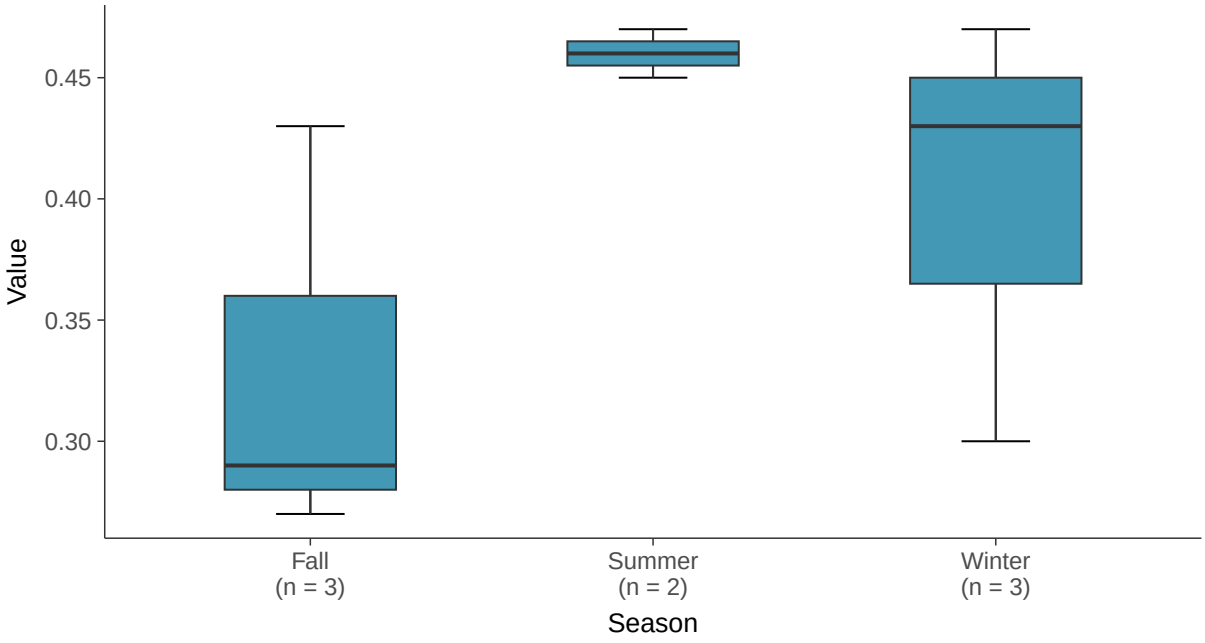
Boxplot

Fluoride, MW-17D (mg/l)



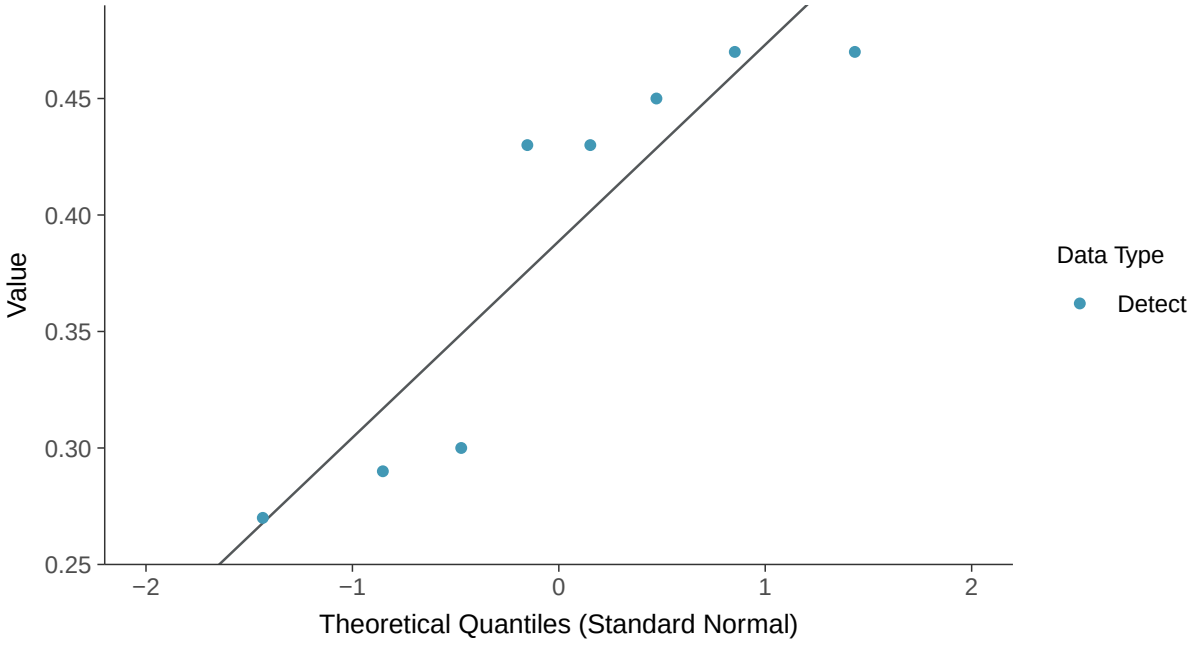
Boxplot by Season

Fluoride, MW-17D (mg/l)



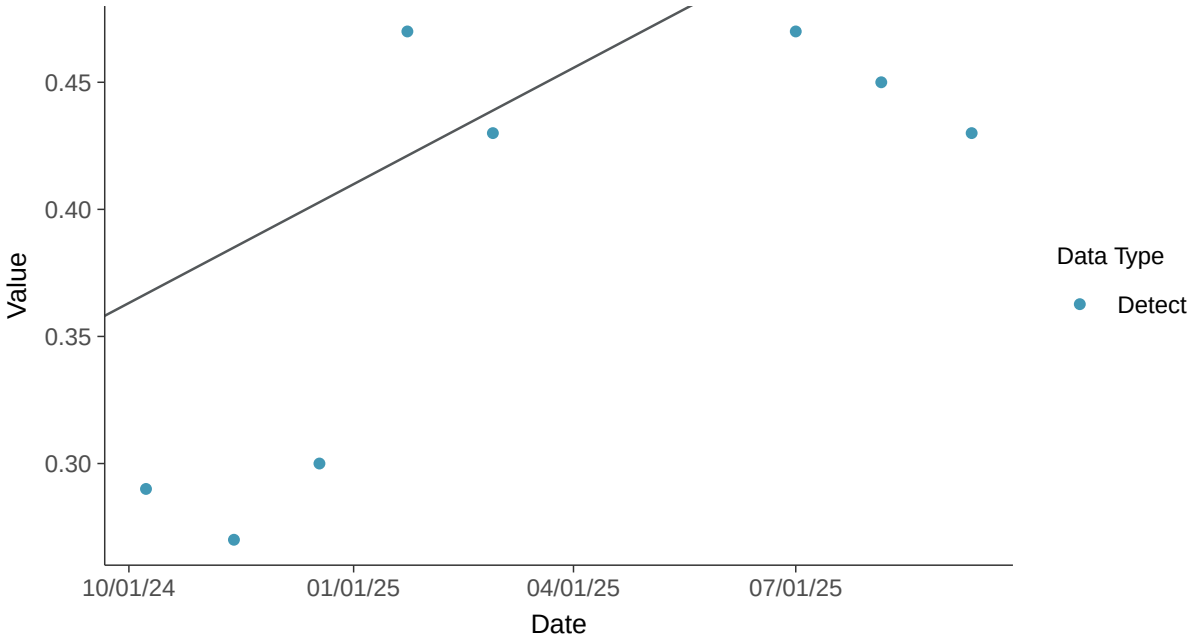
Normal Q-Q plot

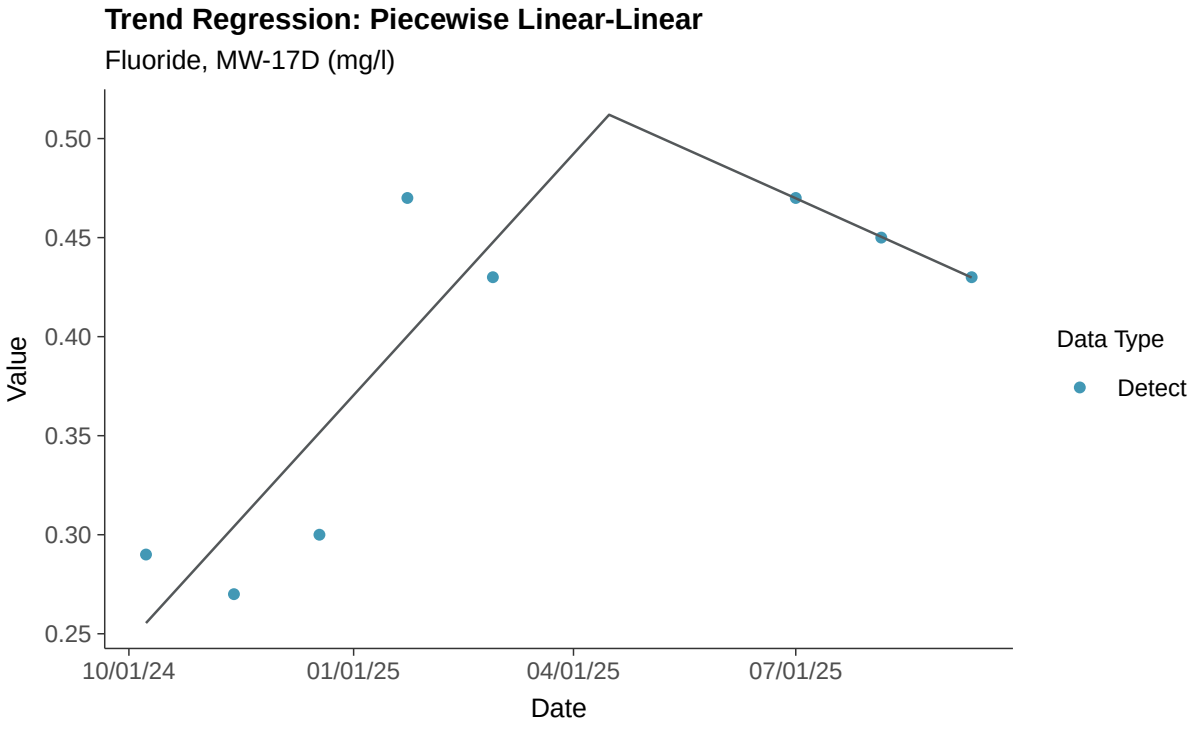
Fluoride, MW-17D (mg/l)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride, MW-17D (mg/l)



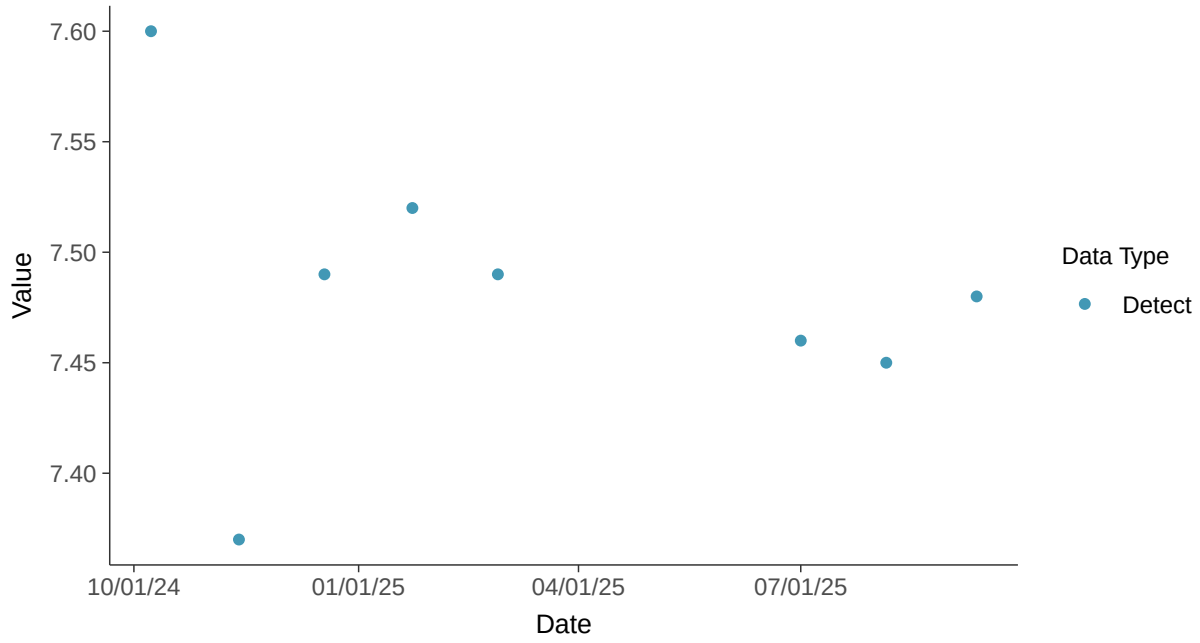

Trend Regression: Piecewise Linear-Linear
Fluoride, MW-17D (mg/l)
0.50
0.45
0.40
0.35
0.30
0.25
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix III: pH, Field, MW-17D

ID: 16_2_120

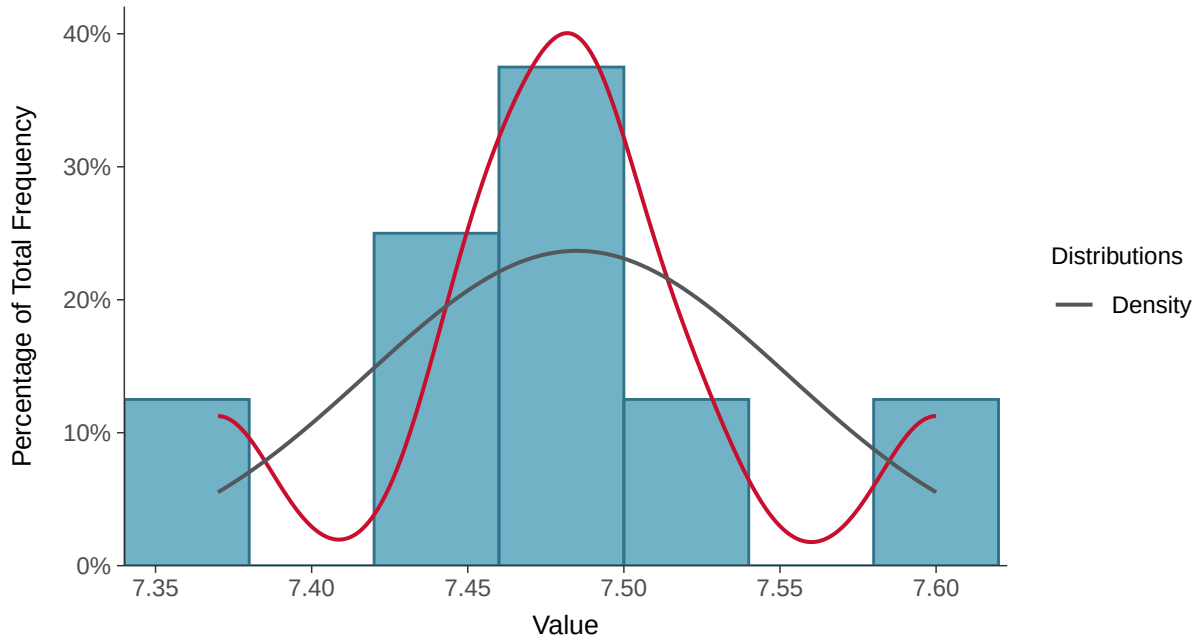
Scatter Plot

pH, Field, MW-17D (su)



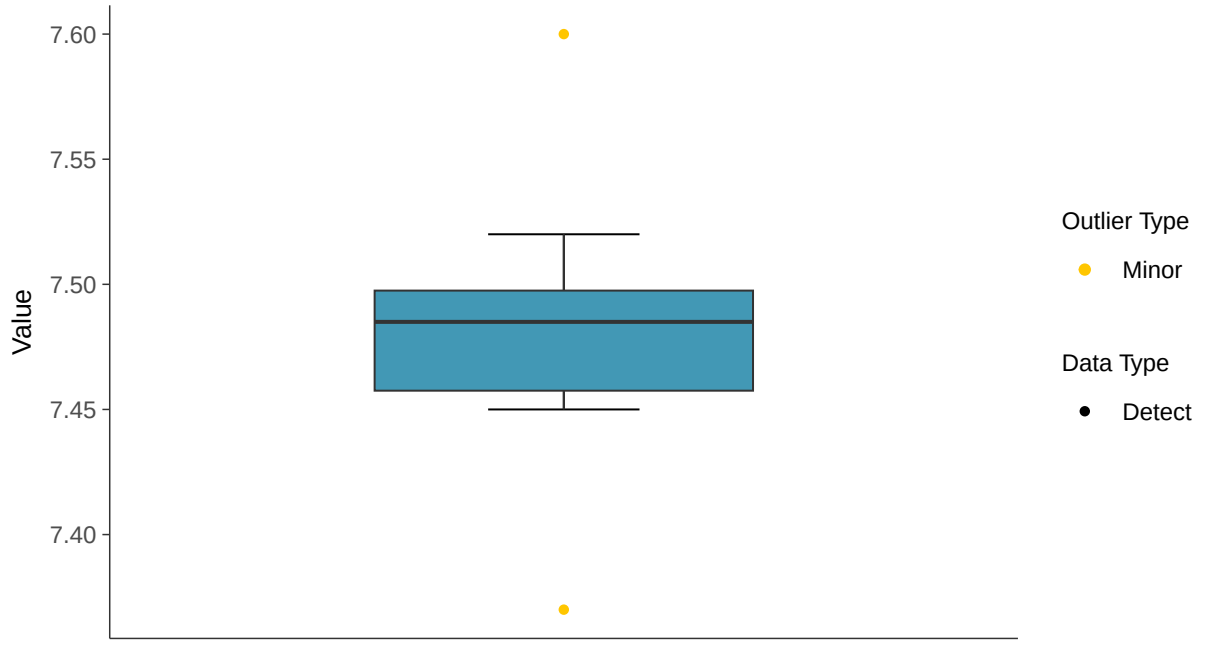
Histogram

pH, Field, MW-17D (su)



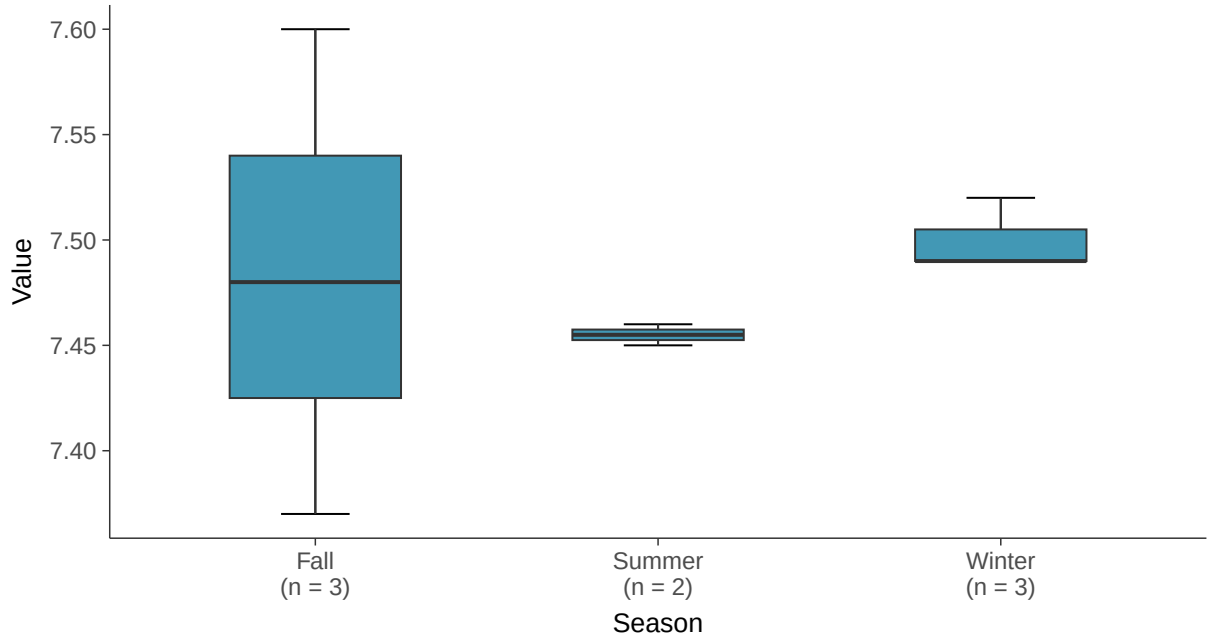
Boxplot

pH, Field, MW-17D (su)



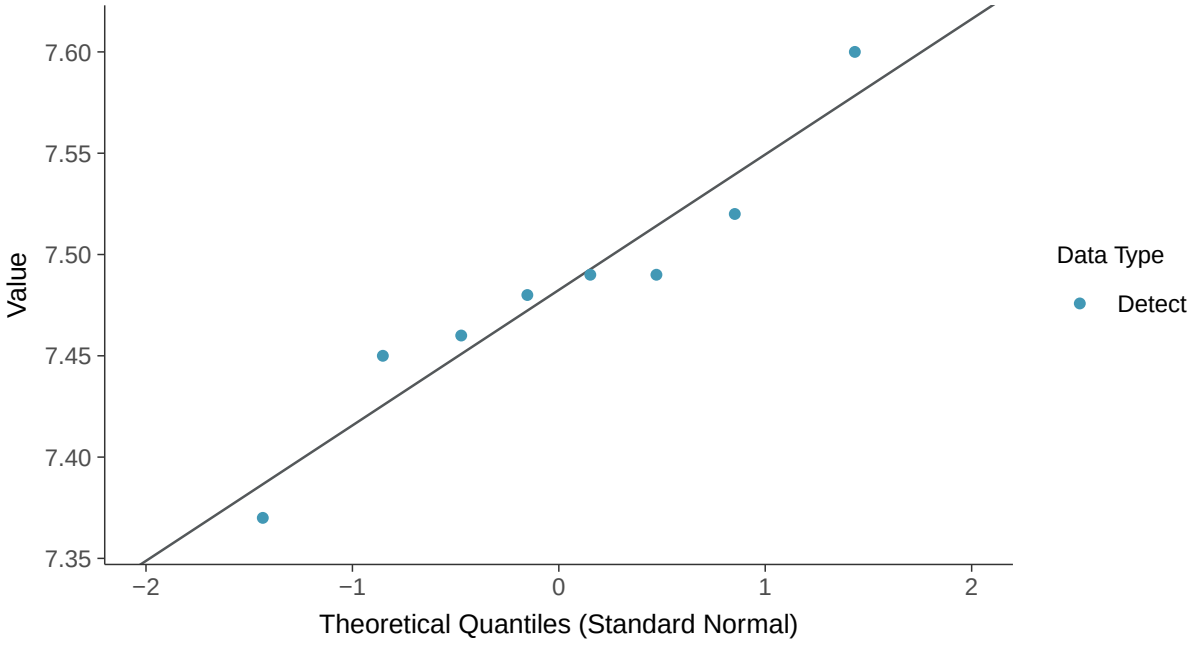
Boxplot by Season

pH, Field, MW-17D (su)



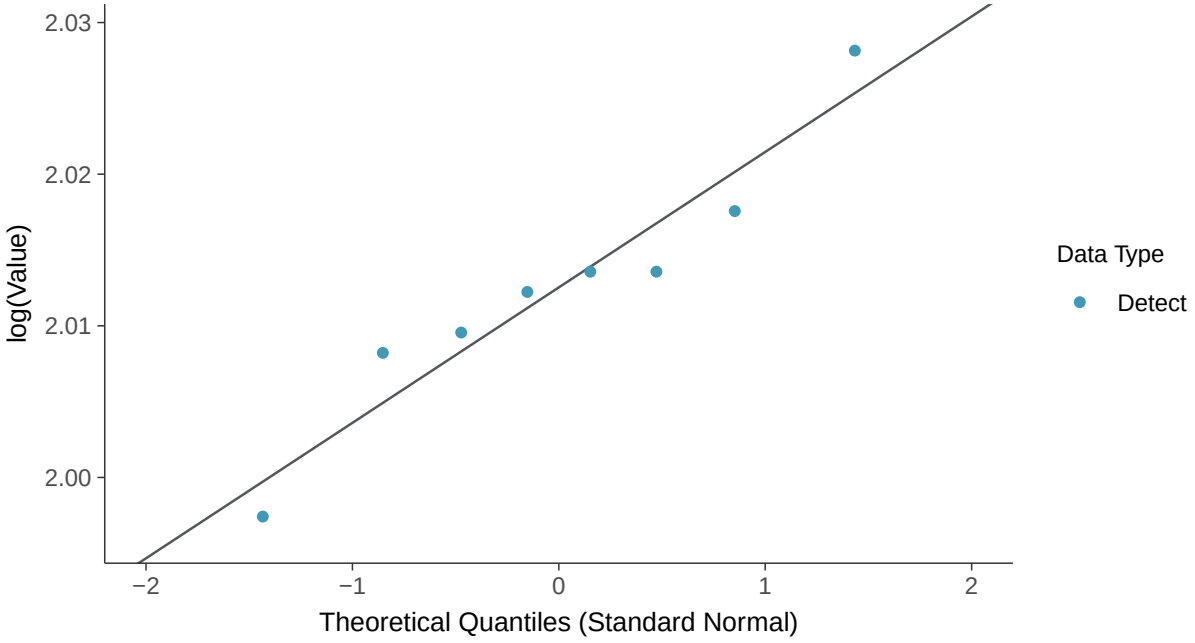
Normal Q-Q plot

pH, Field, MW-17D (su)



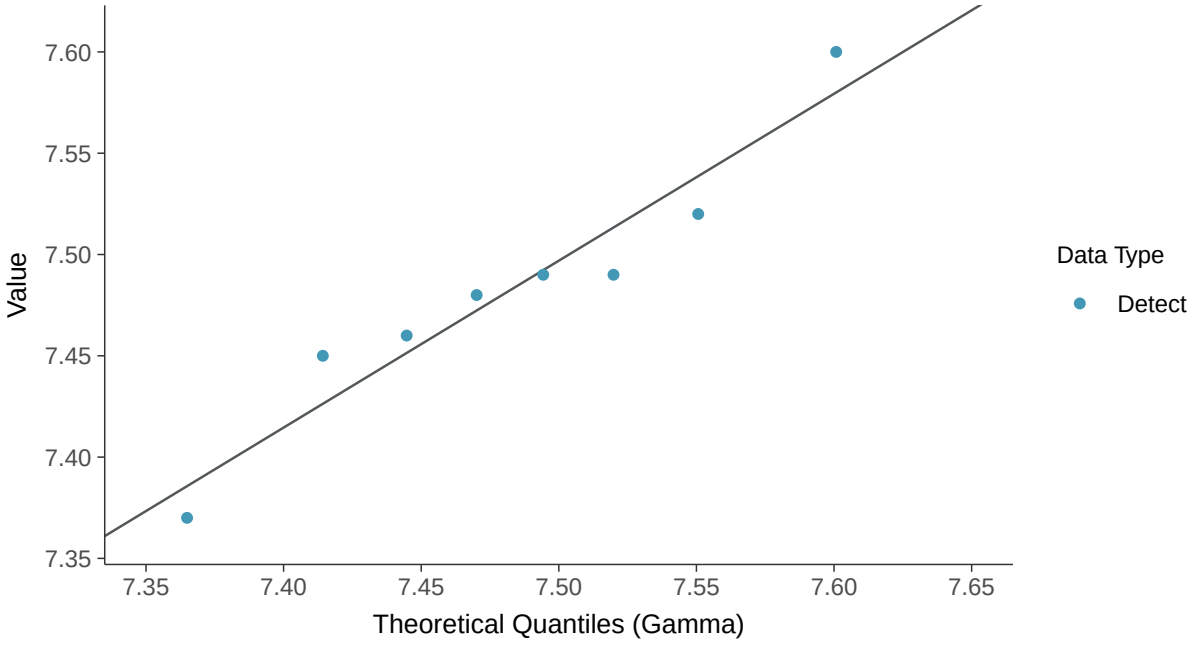
Lognormal Q-Q plot

pH, Field, MW-17D (su)



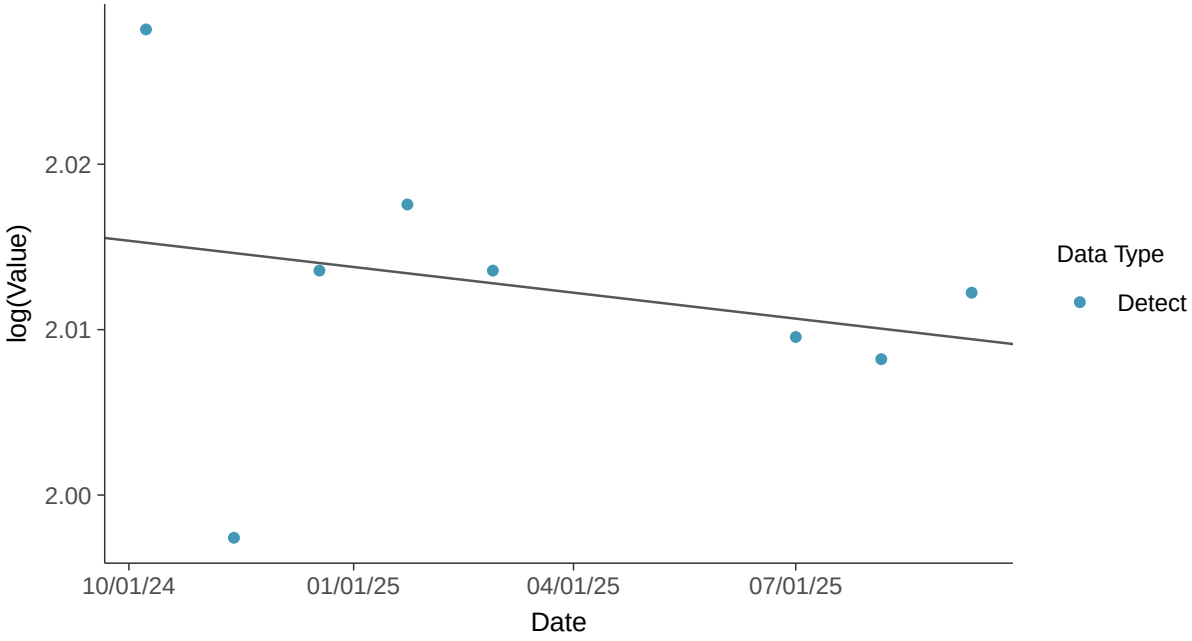
Gamma Q-Q plot

pH, Field, MW-17D (su)



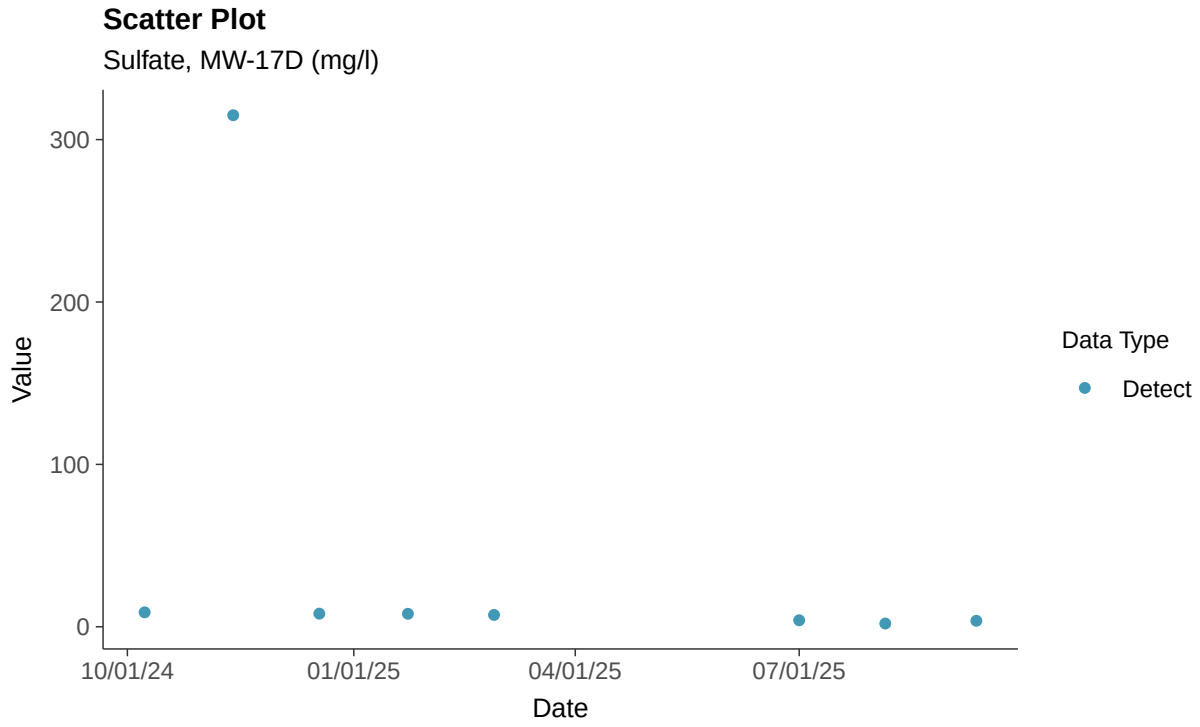
Trend Regression: Lognormal MLE

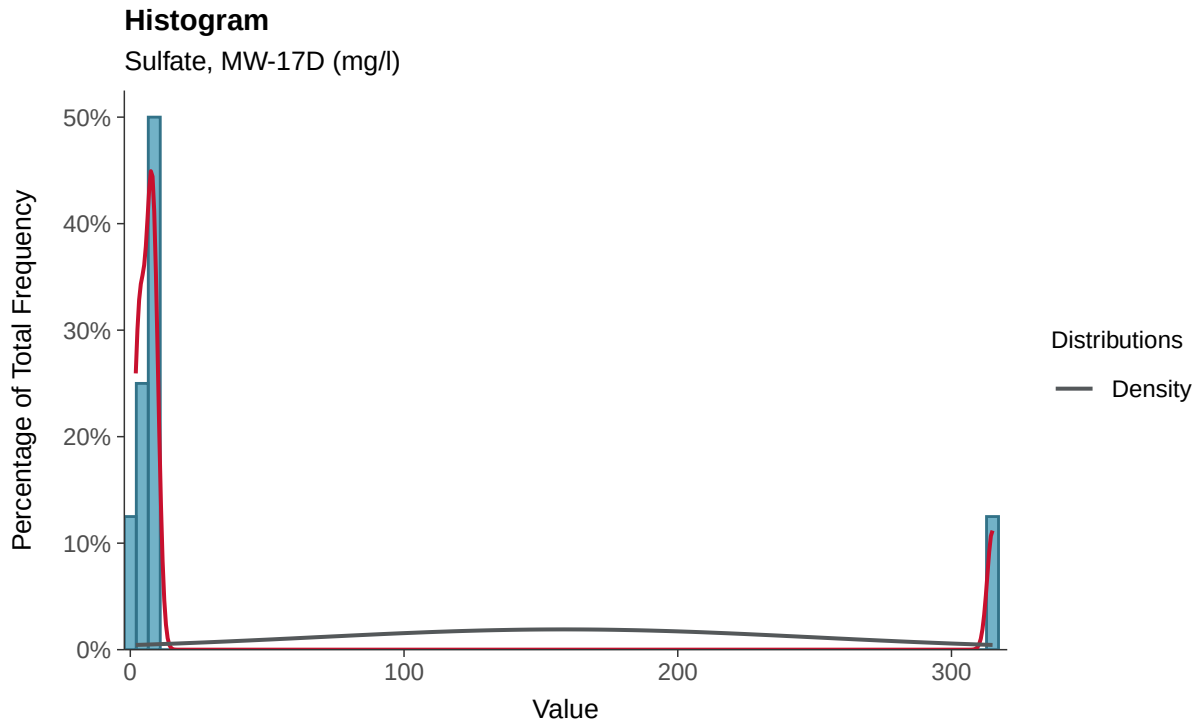
pH, Field, MW-17D (su)

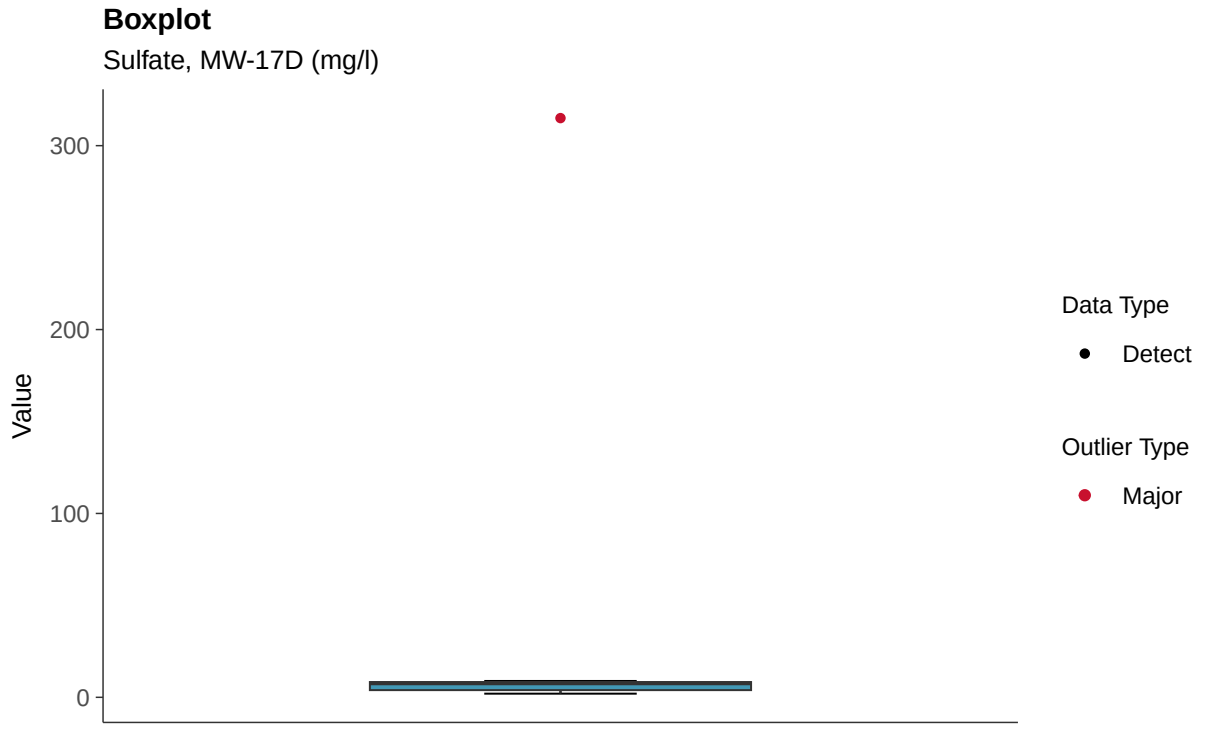


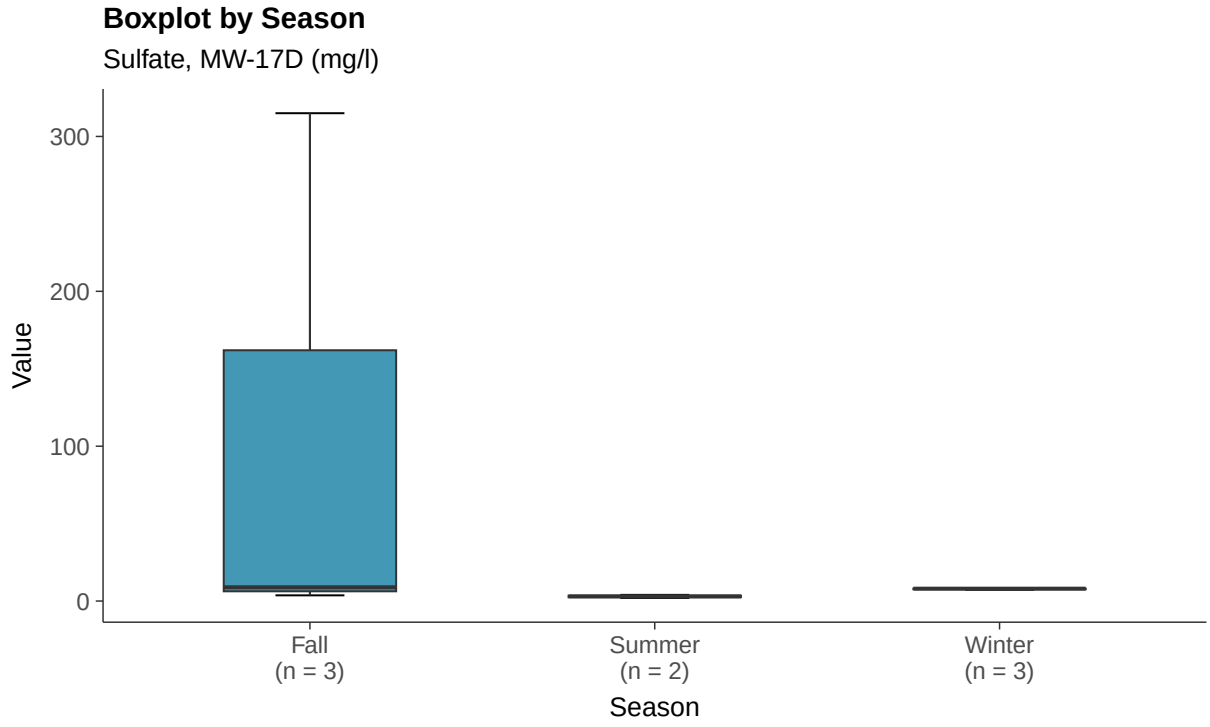
Appendix III: Sulfate, MW-17D

ID: 16_2_124



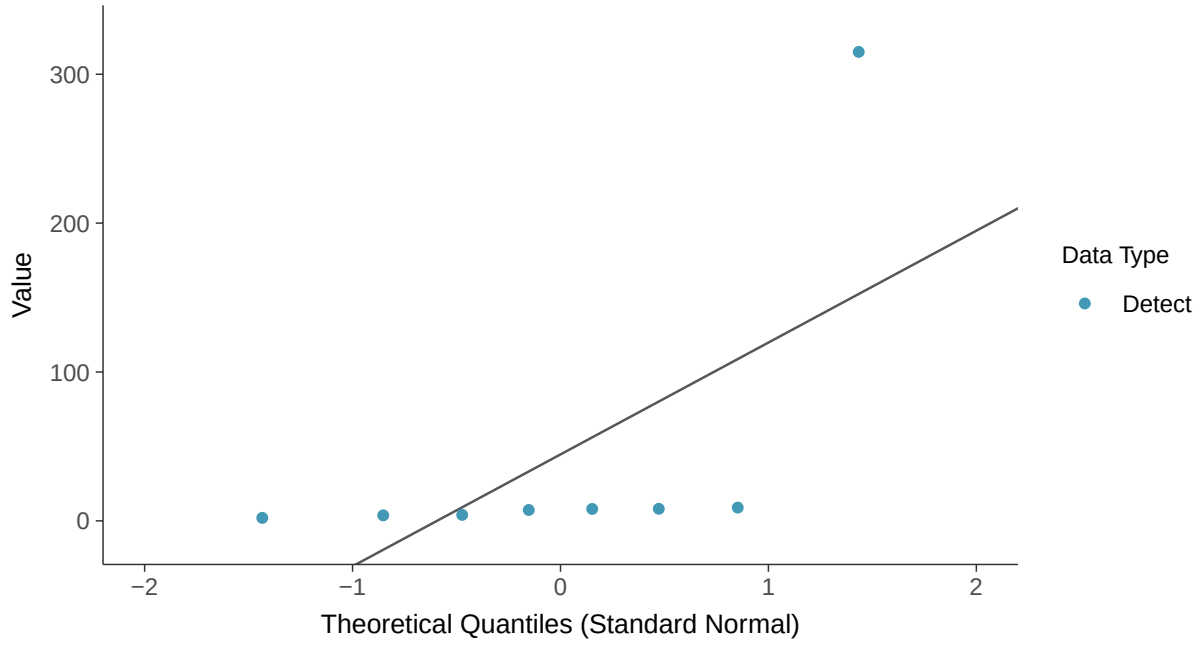



Boxplot
Sulfate, MW-17D (mg/l)
Value
300
200
100
0
Data Type
Detect
Outlier Type
Major


Boxplot by Season
Sulfate, MW-17D (mg/l)
Value
300
200
100
0
Fall
(n = 3)
Summer
(n = 2)
Winter
(n = 3)
Season

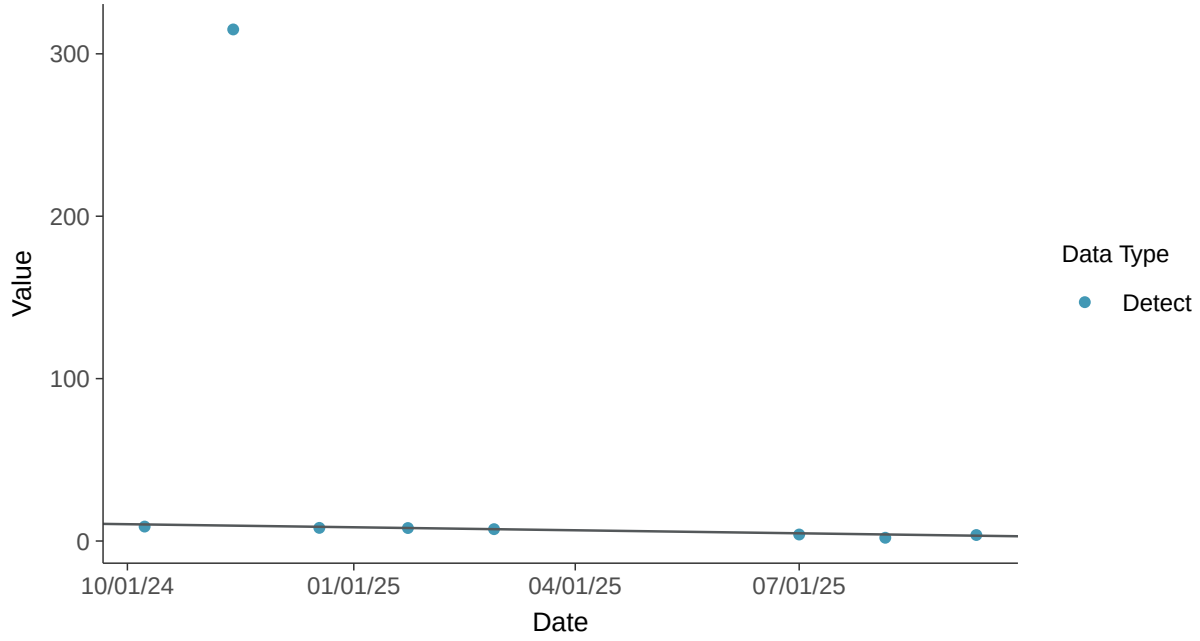
Normal Q-Q plot

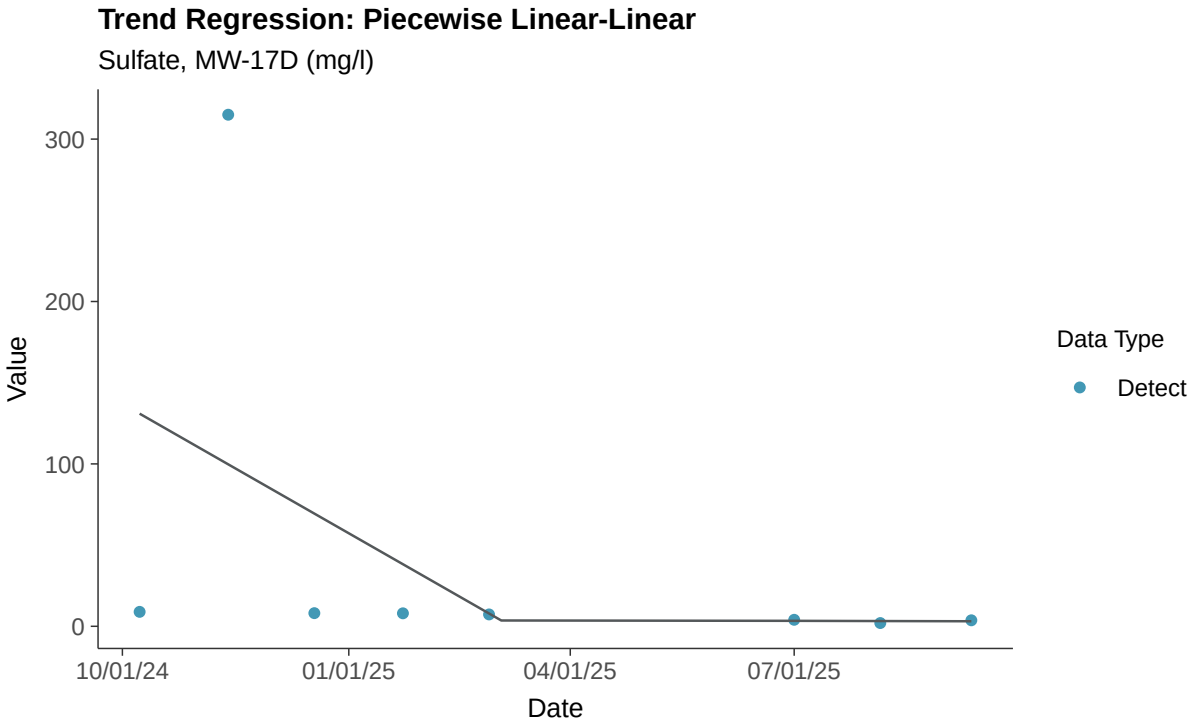
Sulfate, MW-17D (mg/l)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

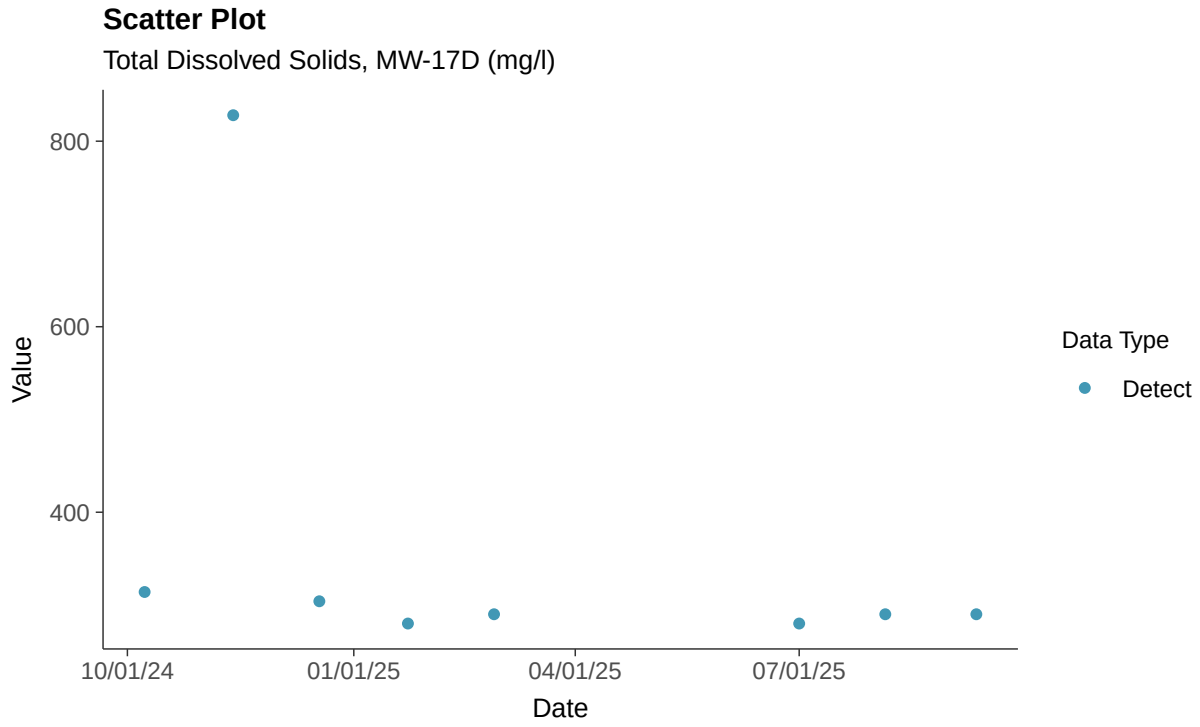
Sulfate, MW-17D (mg/l)

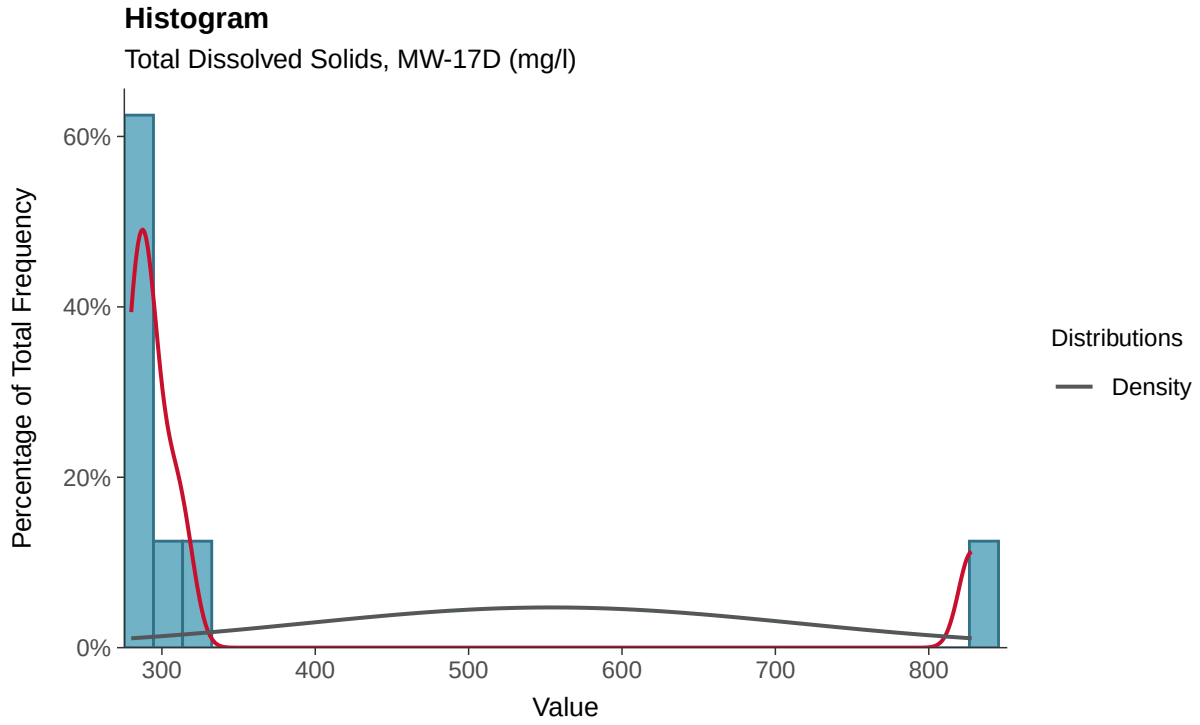



Trend Regression: Piecewise Linear-Linear
Sulfate, MW-17D (mg/l)
300
200
100
0
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix III: Total Dissolved Solids, MW-17D

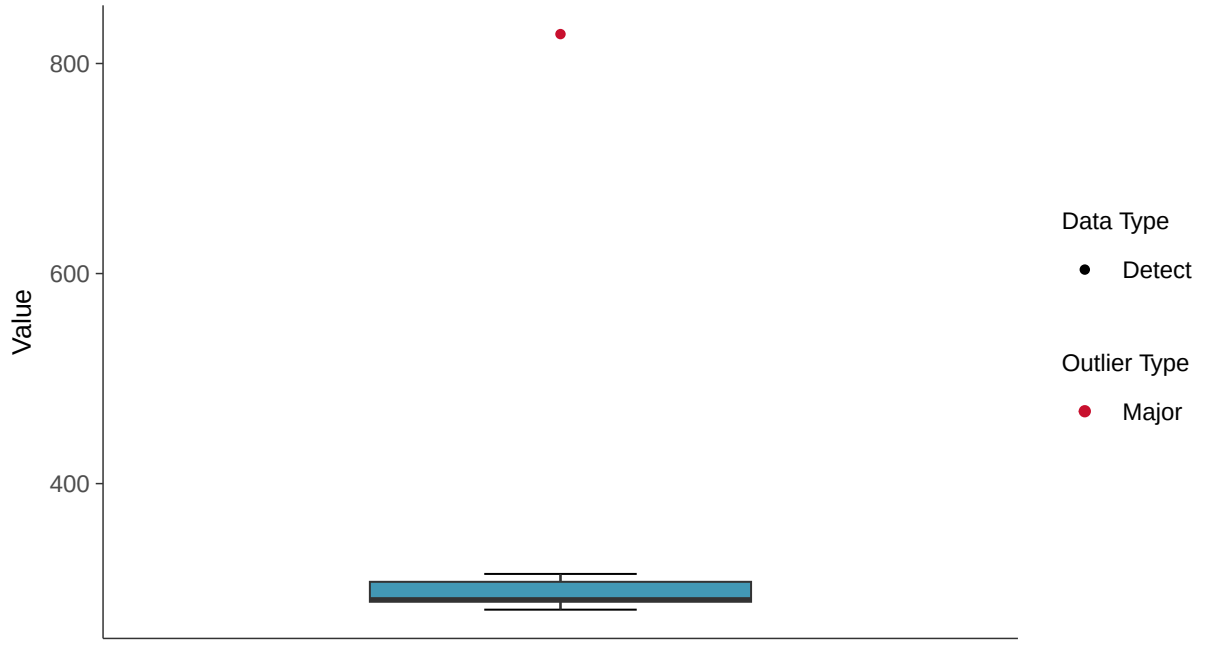
ID: 16_2_126





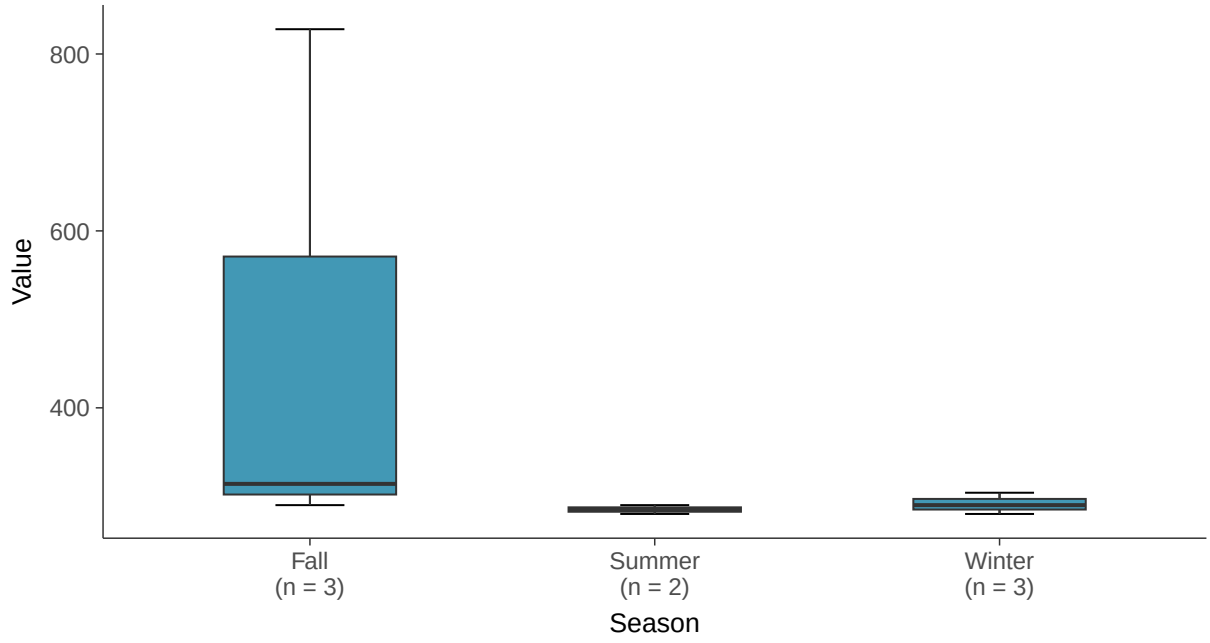
Boxplot

Total Dissolved Solids, MW-17D (mg/l)



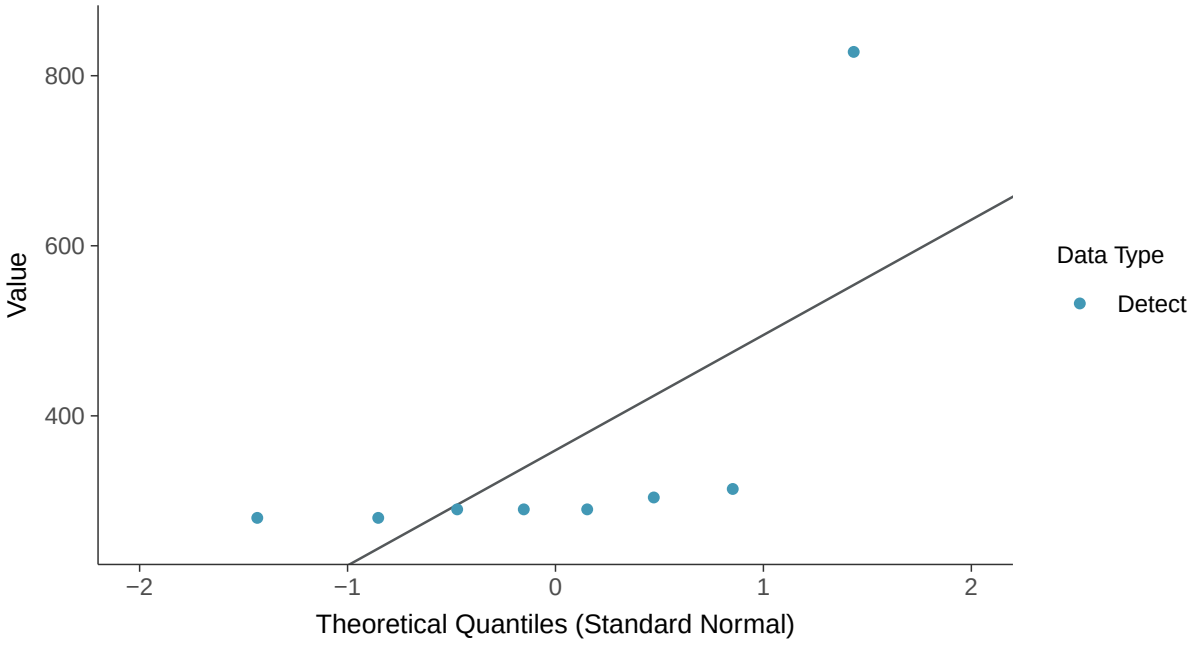
Boxplot by Season

Total Dissolved Solids, MW-17D (mg/l)



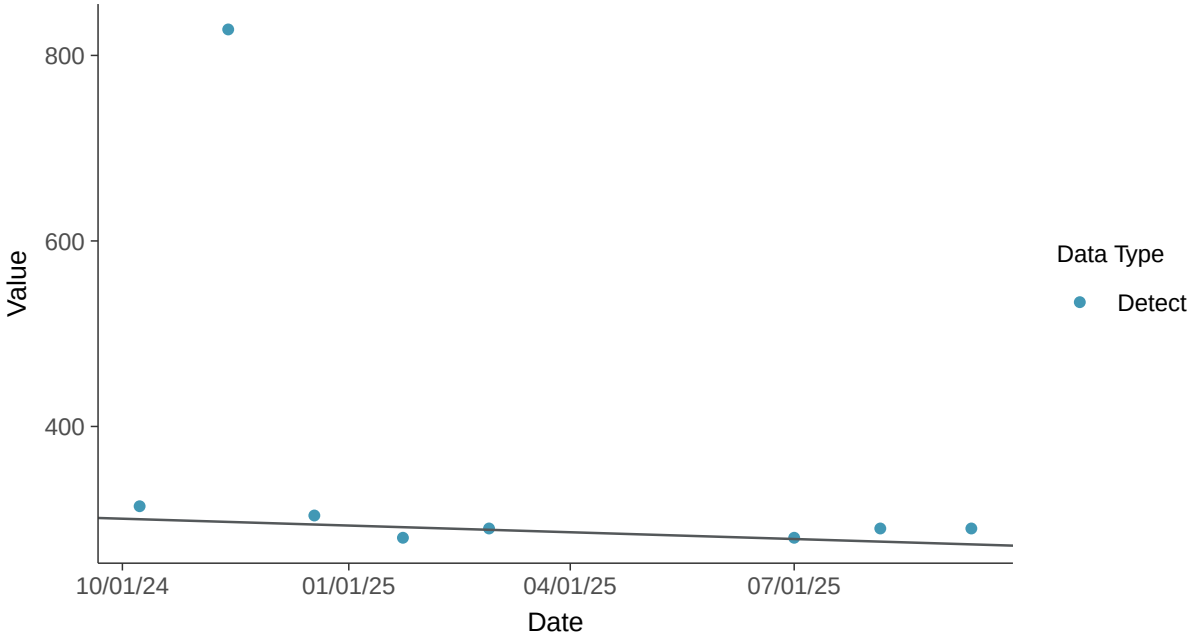
Normal Q-Q plot

Total Dissolved Solids, MW-17D (mg/l)



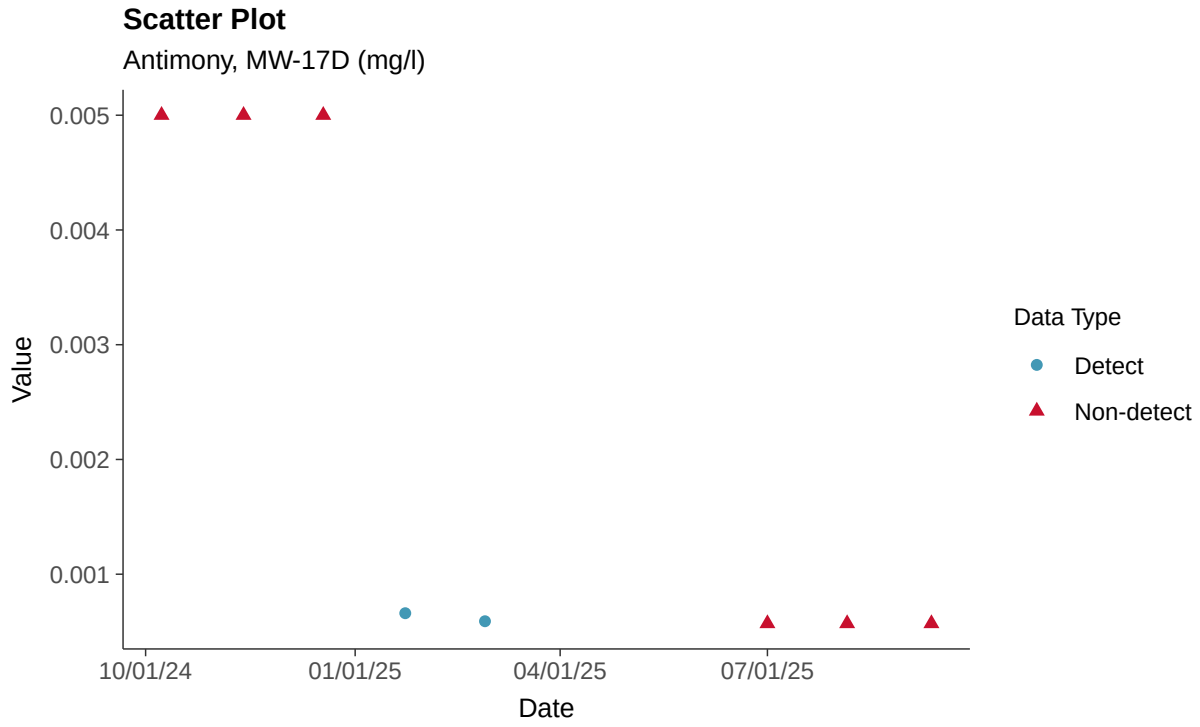
Trend Regression: Mann-Kendall/Theil-Sen Estimate

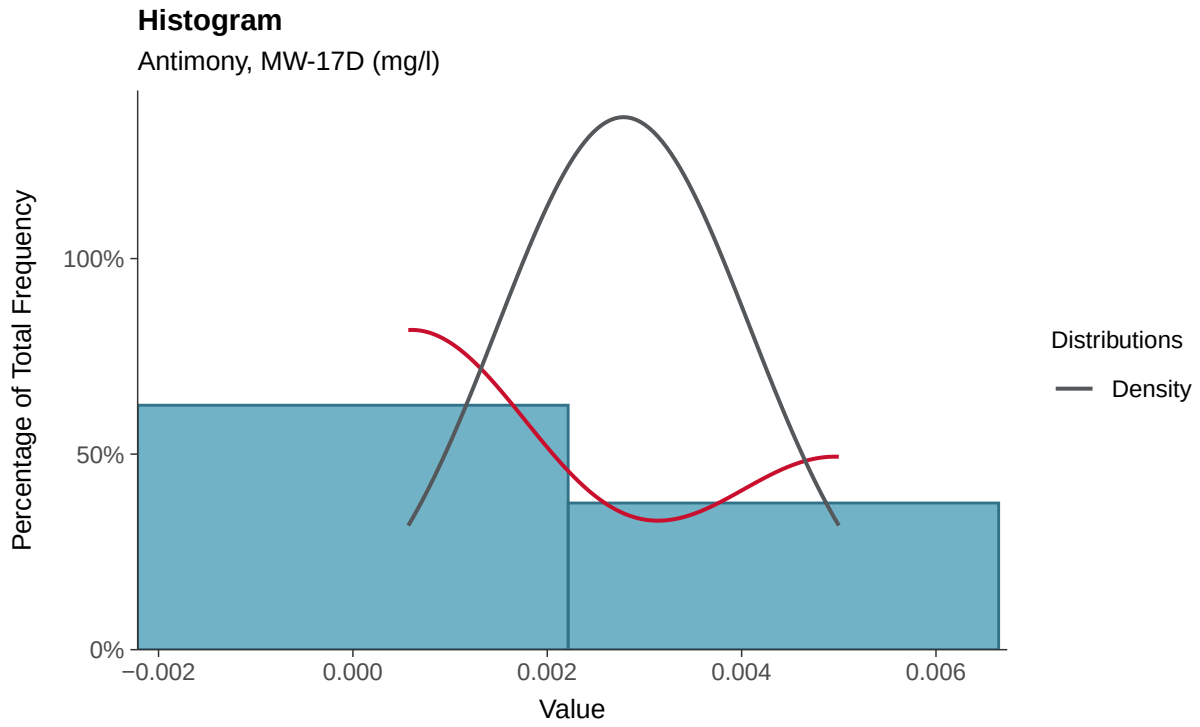
Total Dissolved Solids, MW-17D (mg/l)



Appendix IV: Antimony, MW-17D

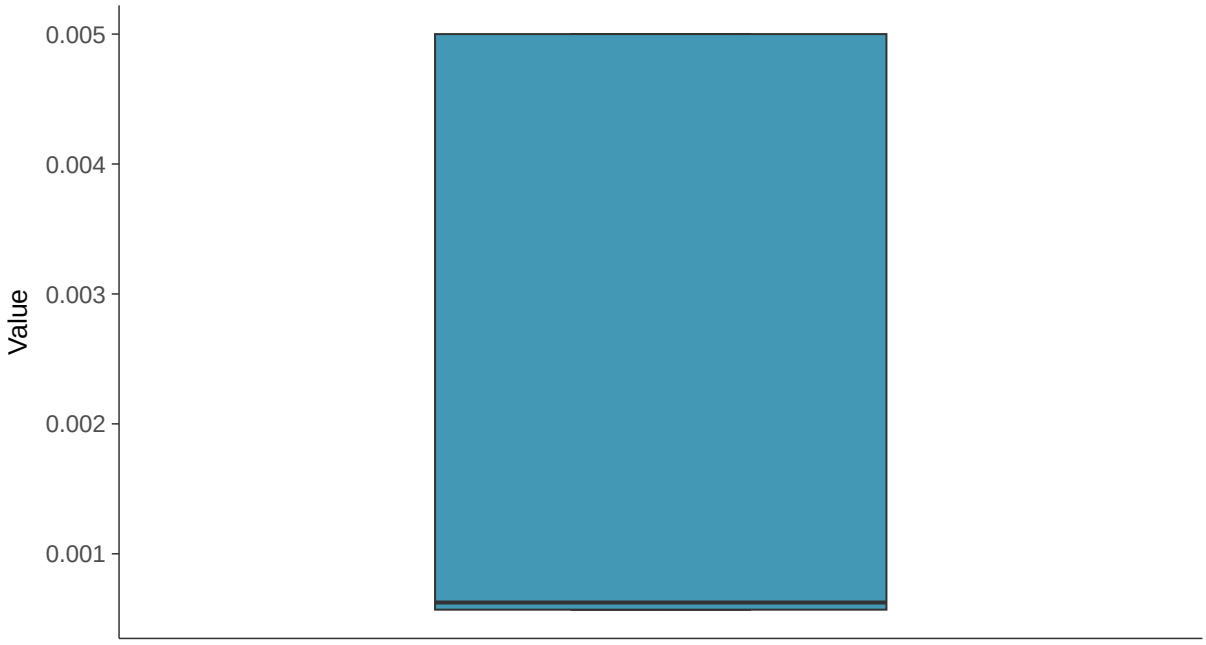
ID: 16_3_101





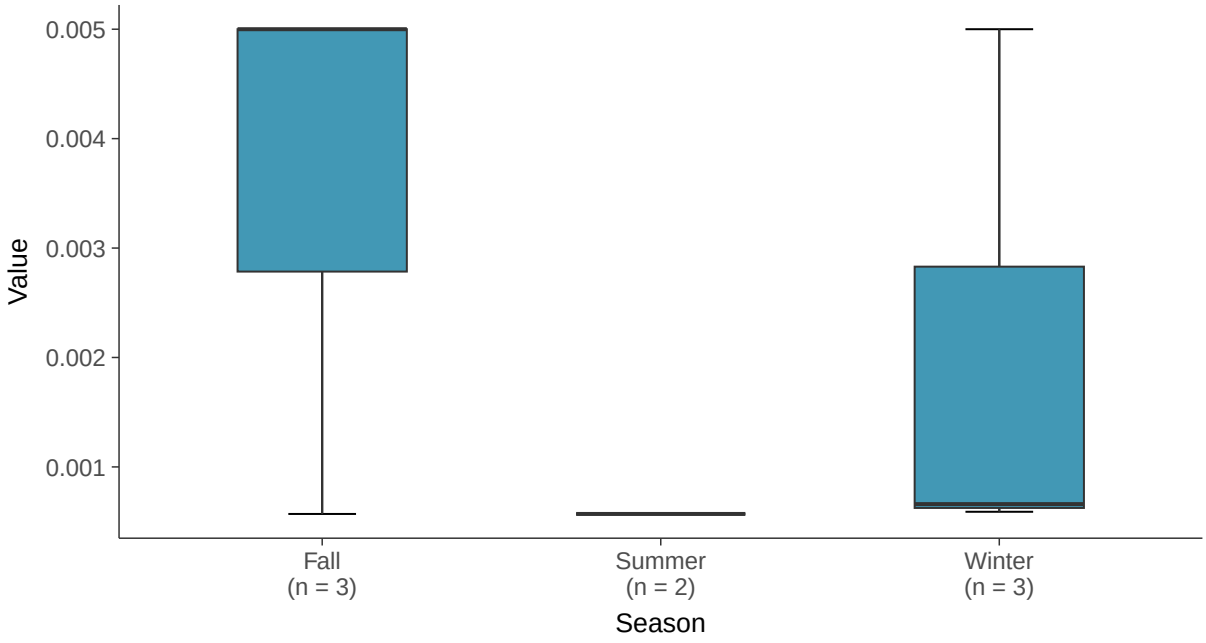
Boxplot

Antimony, MW-17D (mg/l)



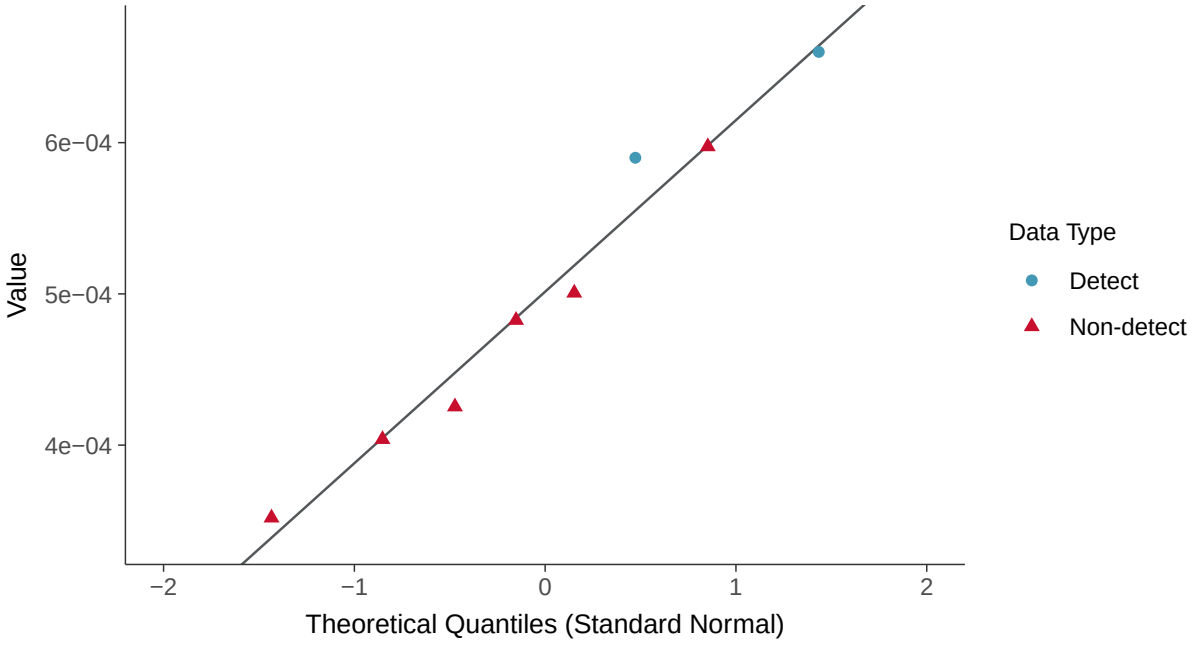
Boxplot by Season

Antimony, MW-17D (mg/l)



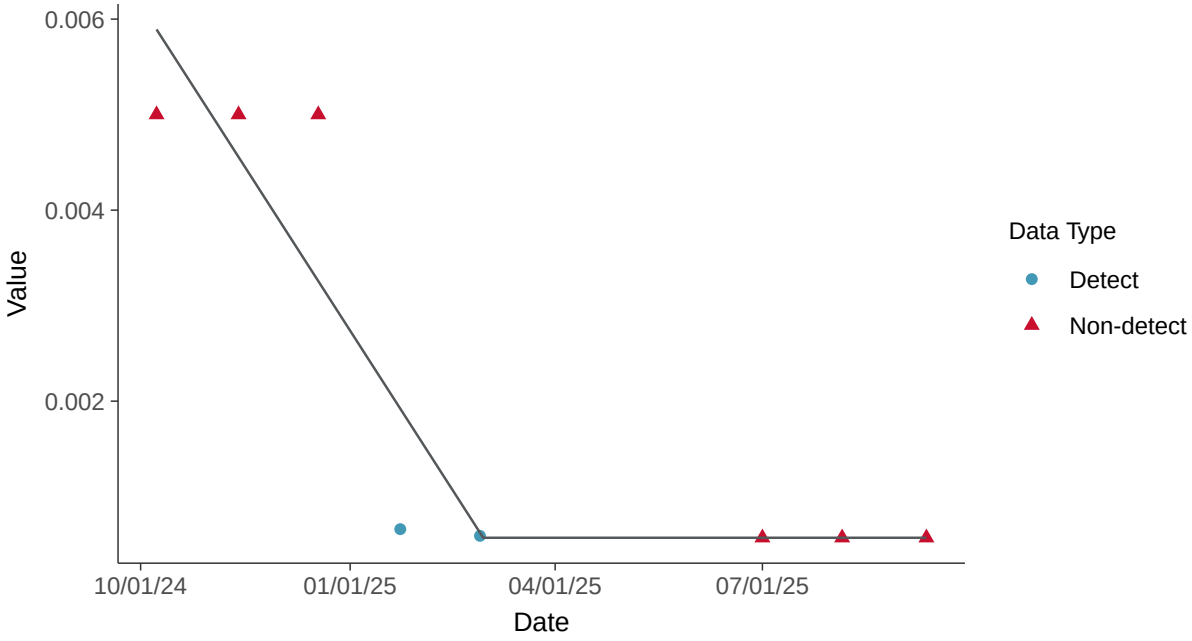
Normal Q-Q plot using ROS Imputed Estimates

Antimony, MW-17D (mg/l)



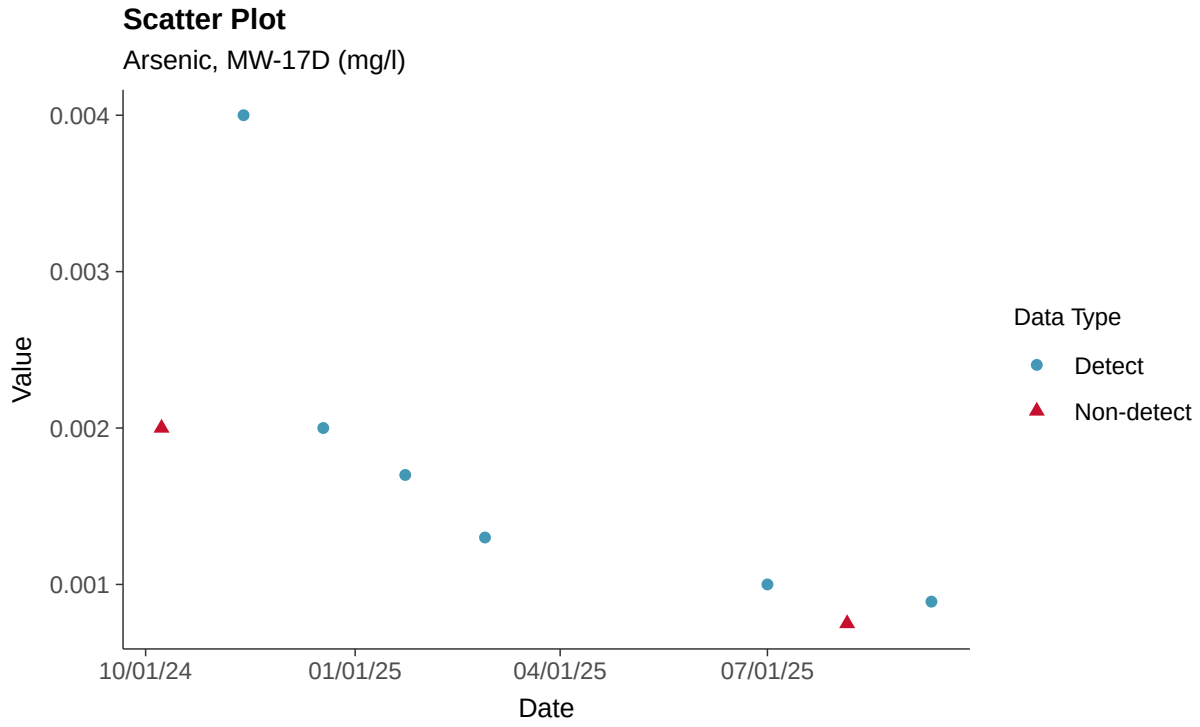
Trend Regression: Piecewise Linear-Linear

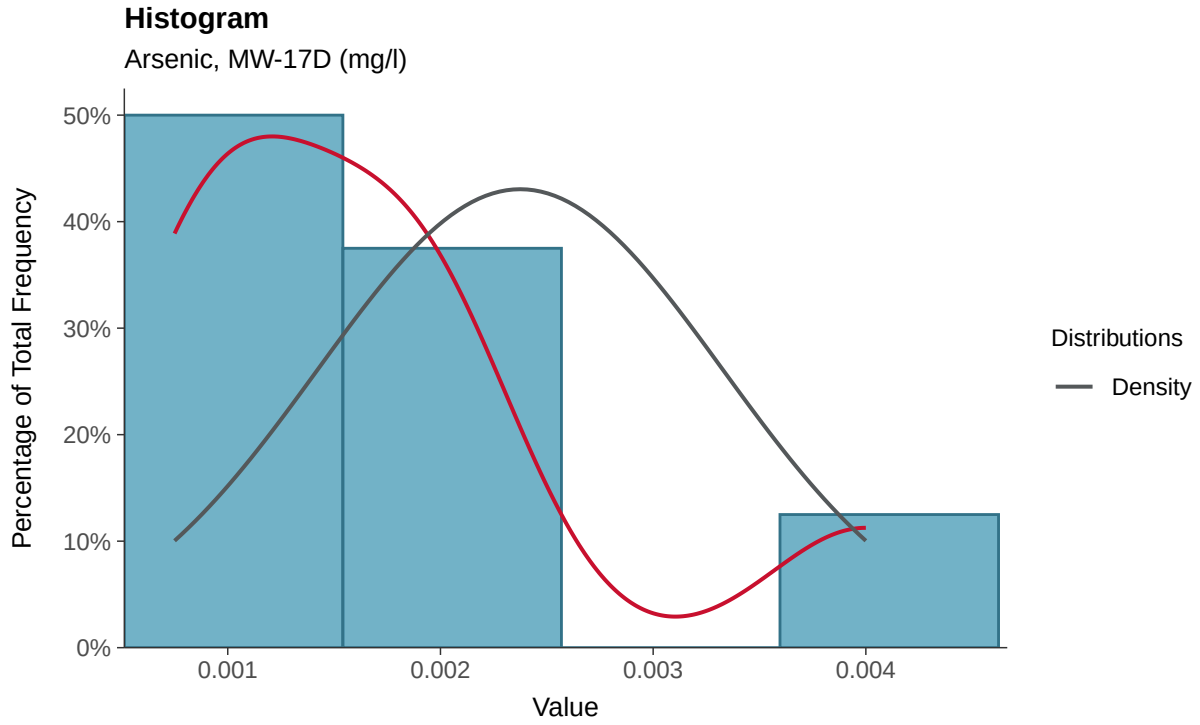
Antimony, MW-17D (mg/l)



Appendix IV: Arsenic, MW-17D

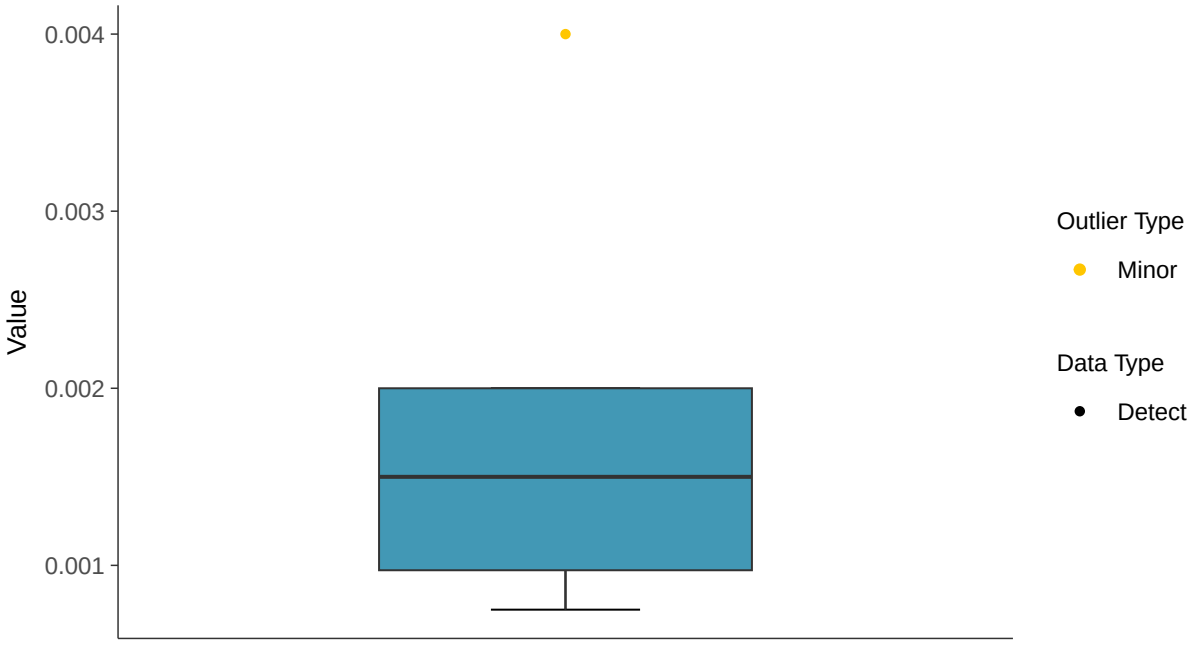
ID: 16_3_102





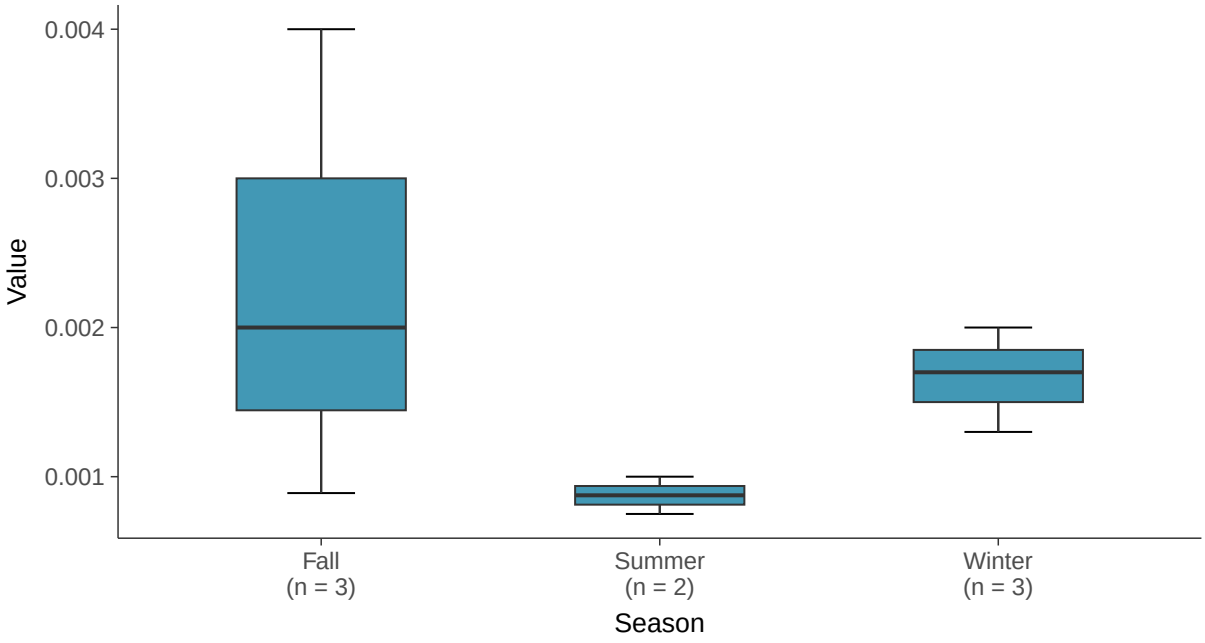
Boxplot

Arsenic, MW-17D (mg/l)



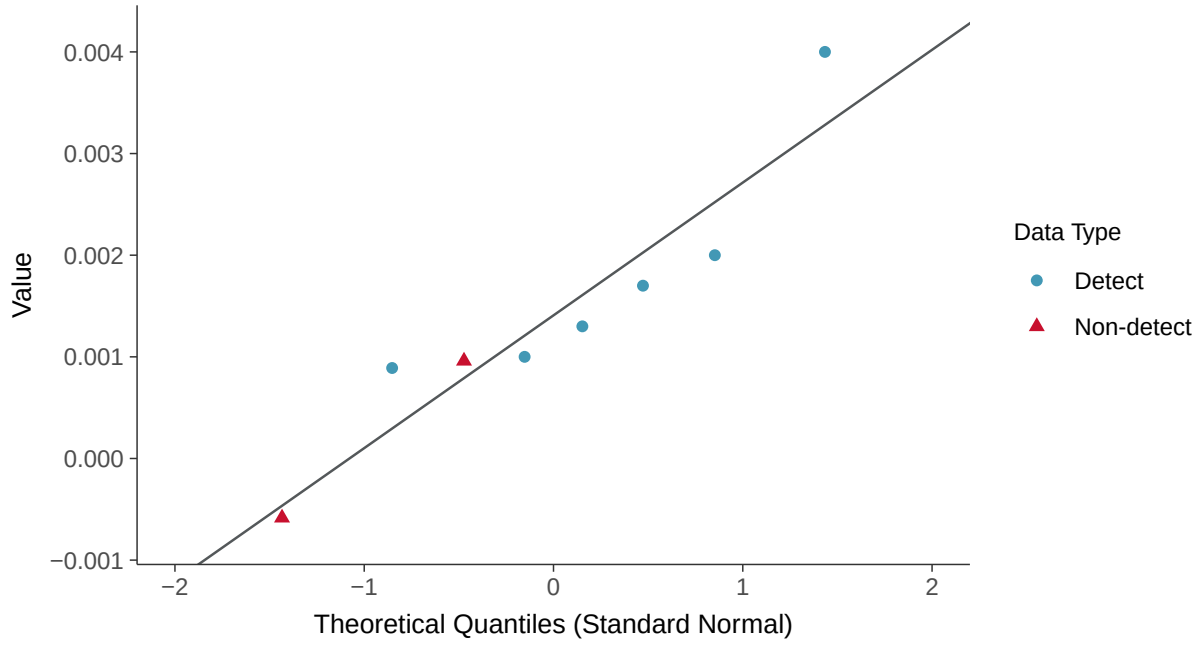
Boxplot by Season

Arsenic, MW-17D (mg/l)



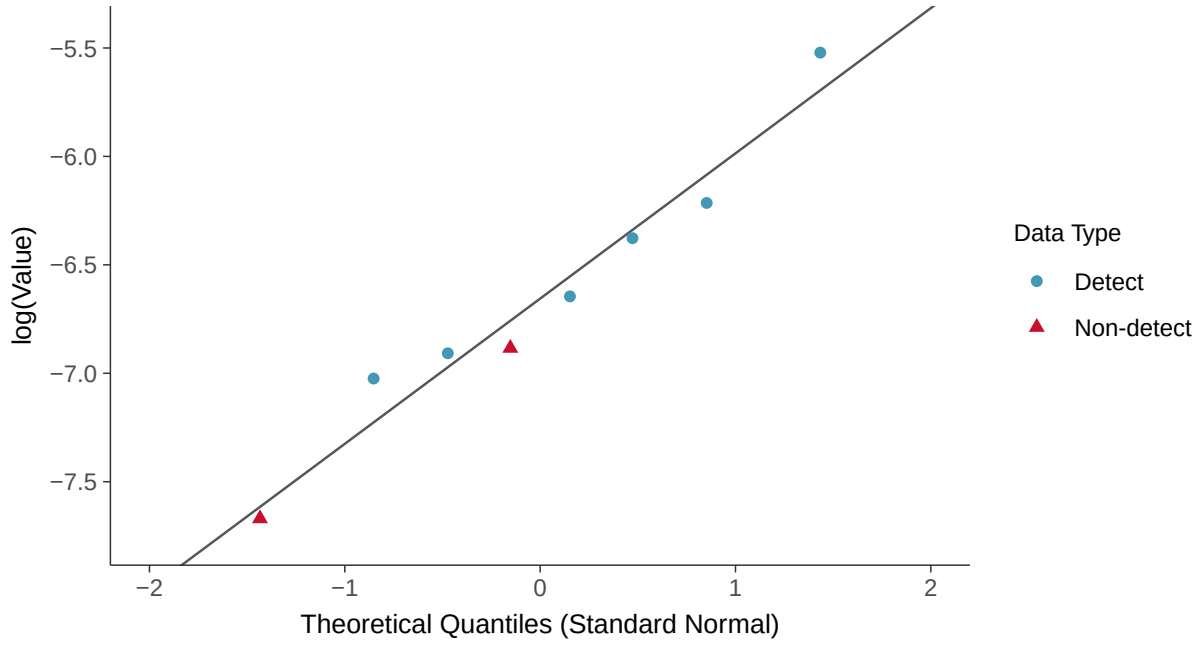
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17D (mg/l)



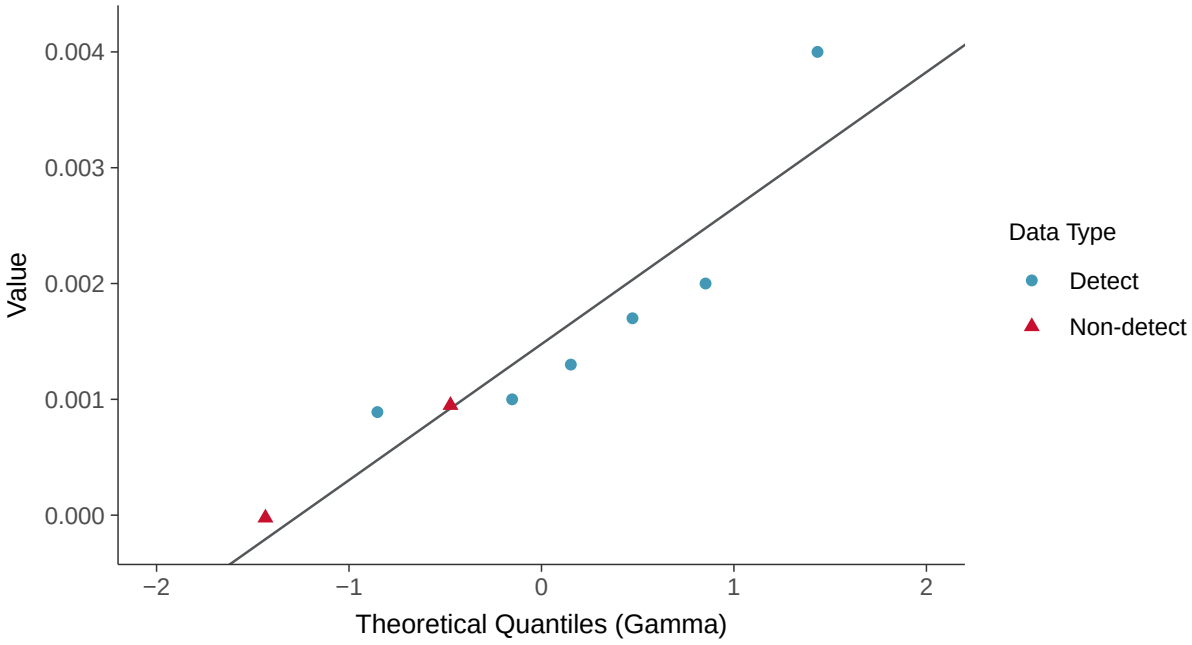
Lognormal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-17D (mg/l)



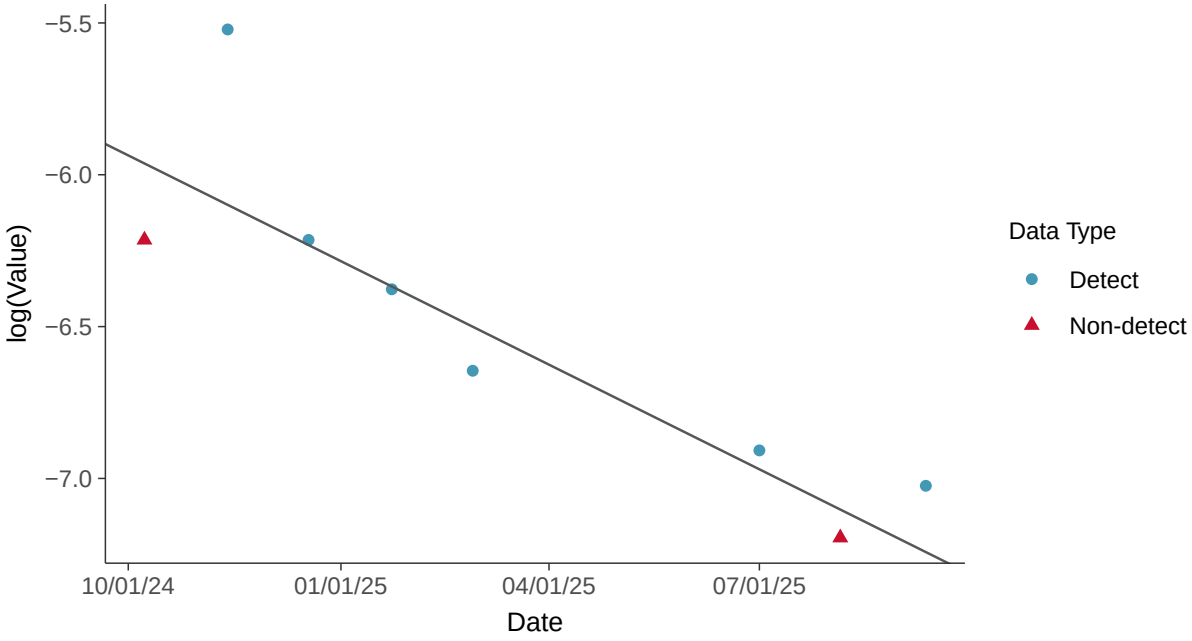
Gamma Q-Q plot using ROS Imputed Estimates

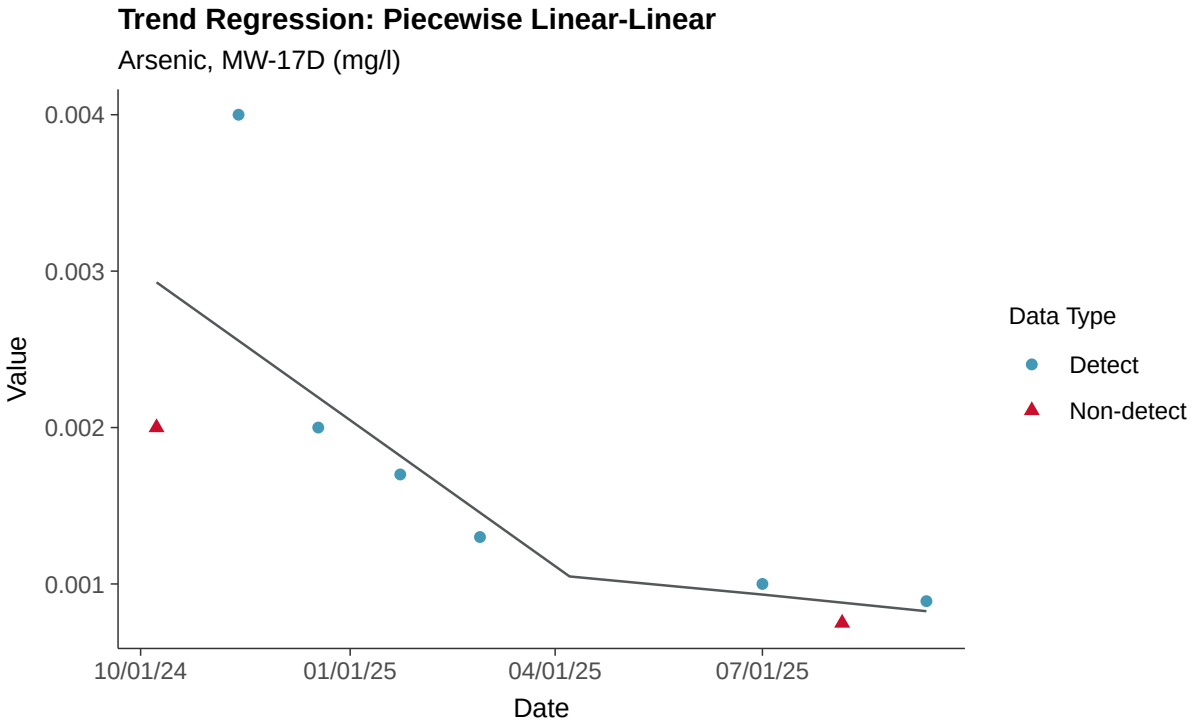
Arsenic, MW-17D (mg/l)



Trend Regression: Lognormal MLE

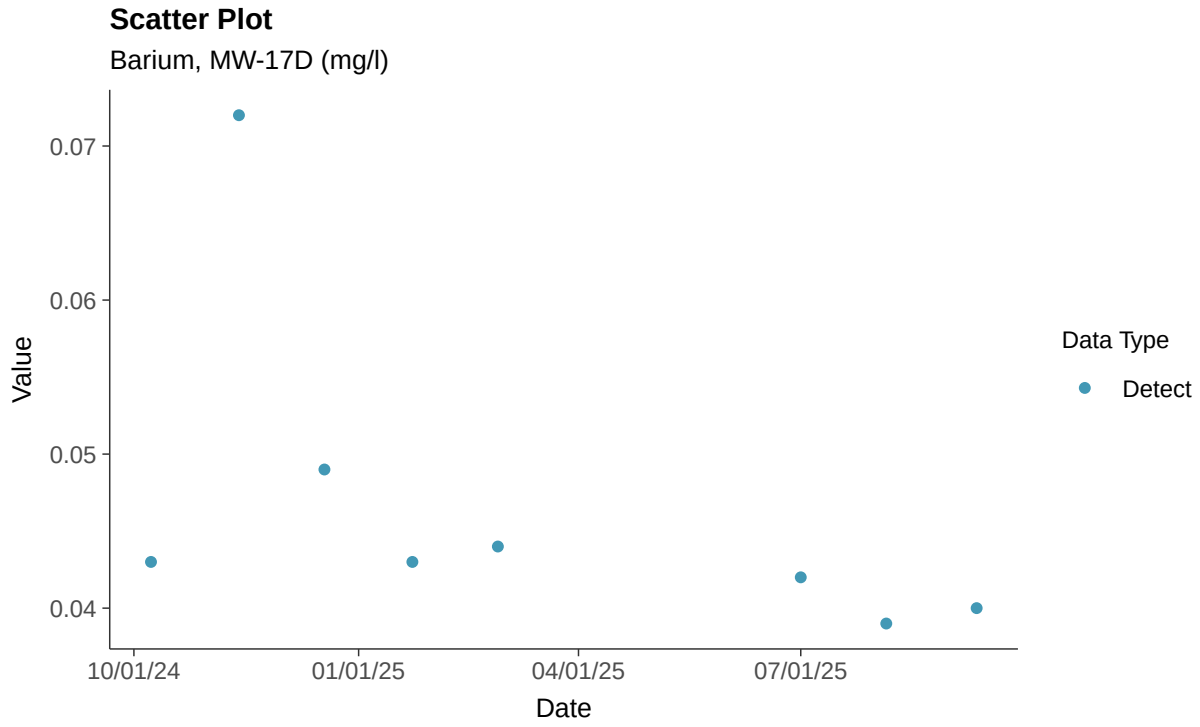
Arsenic, MW-17D (mg/l)

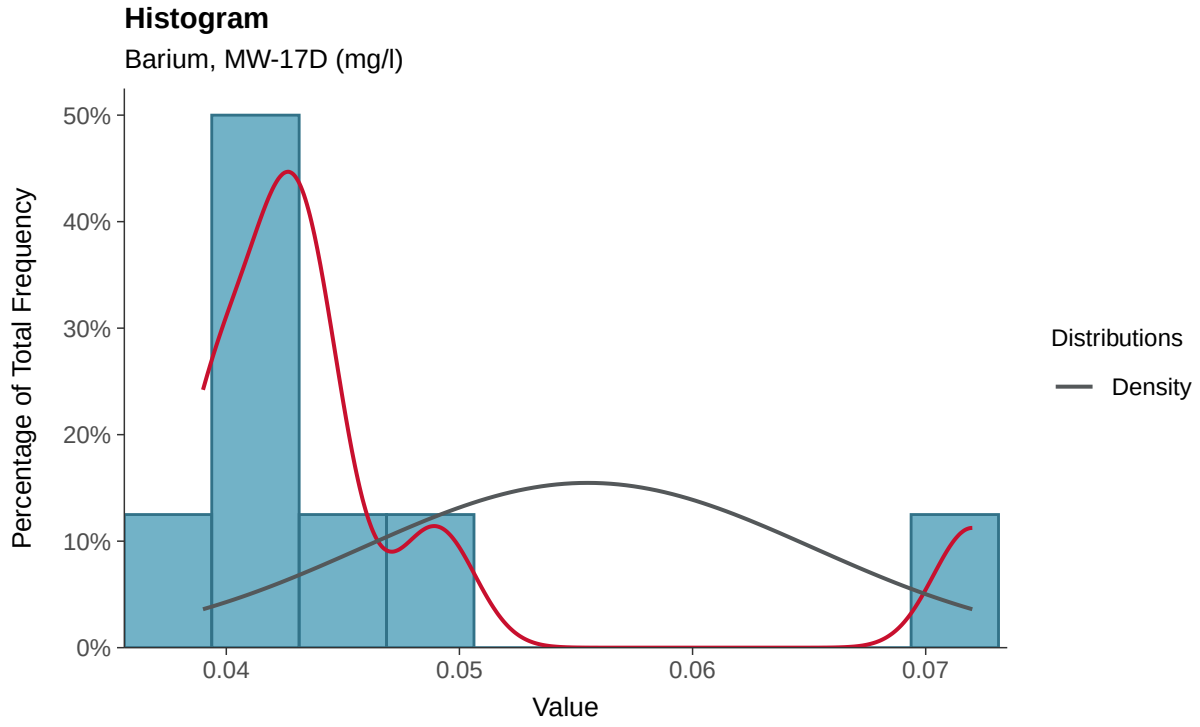



Trend Regression: Piecewise Linear-Linear
Arsenic, MW-17D (mg/l)
0.004
0.003
0.002
0.001
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Barium, MW-17D

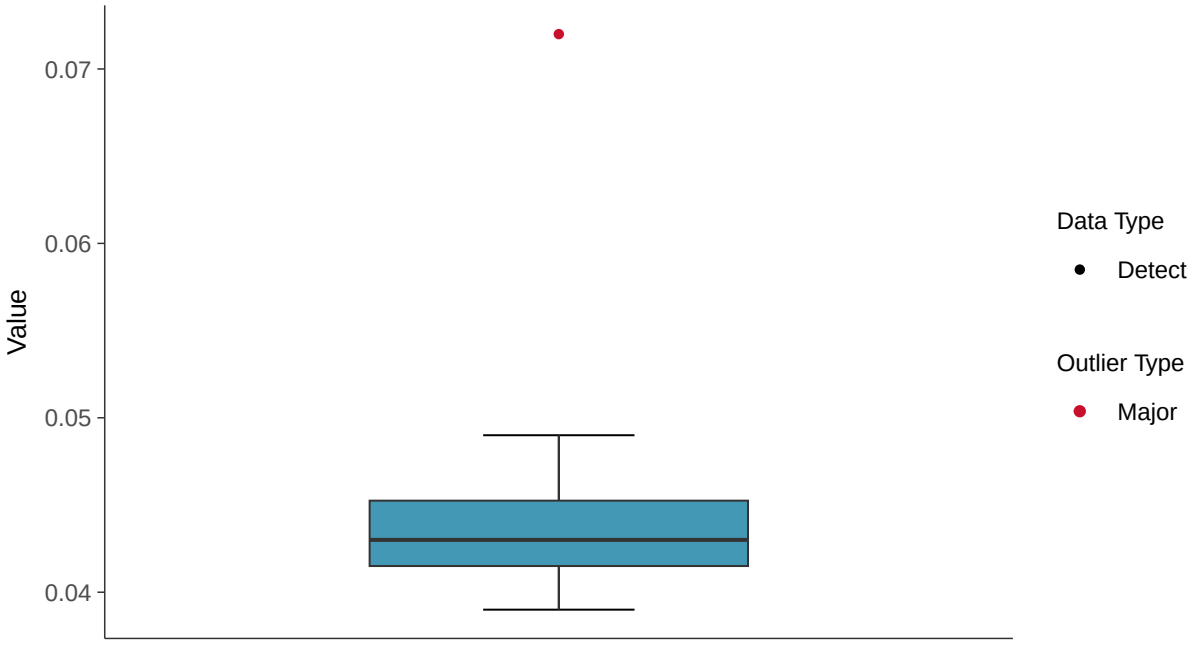
ID: 16_3_103





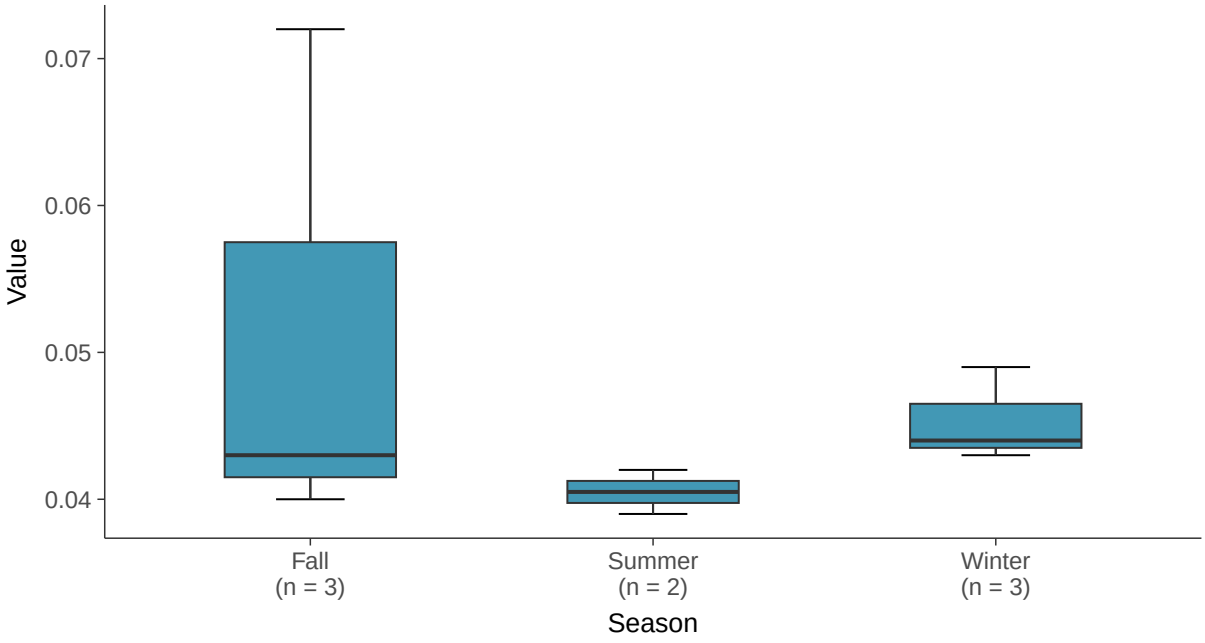
Boxplot

Barium, MW-17D (mg/l)



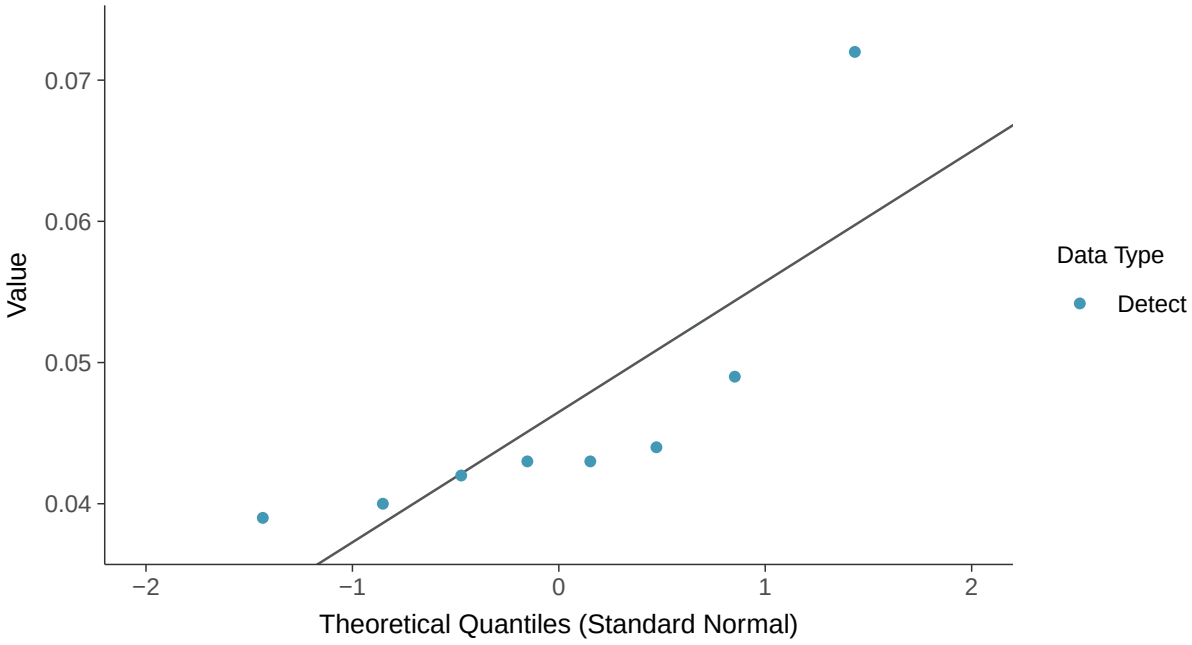
Boxplot by Season

Barium, MW-17D (mg/l)



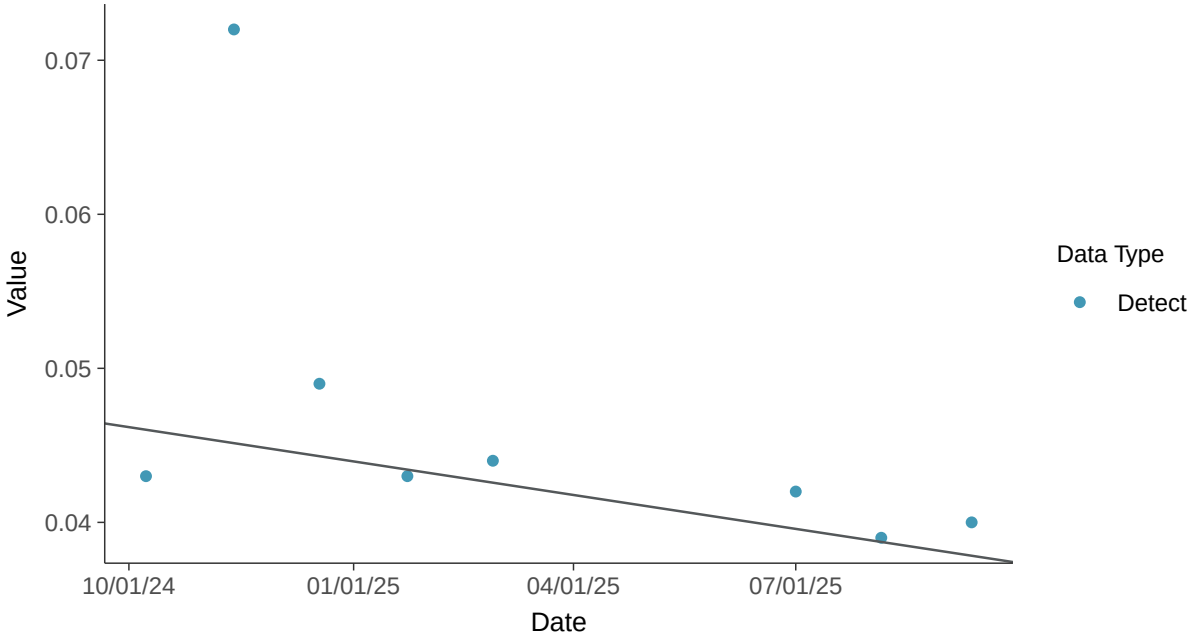
Normal Q-Q plot

Barium, MW-17D (mg/l)



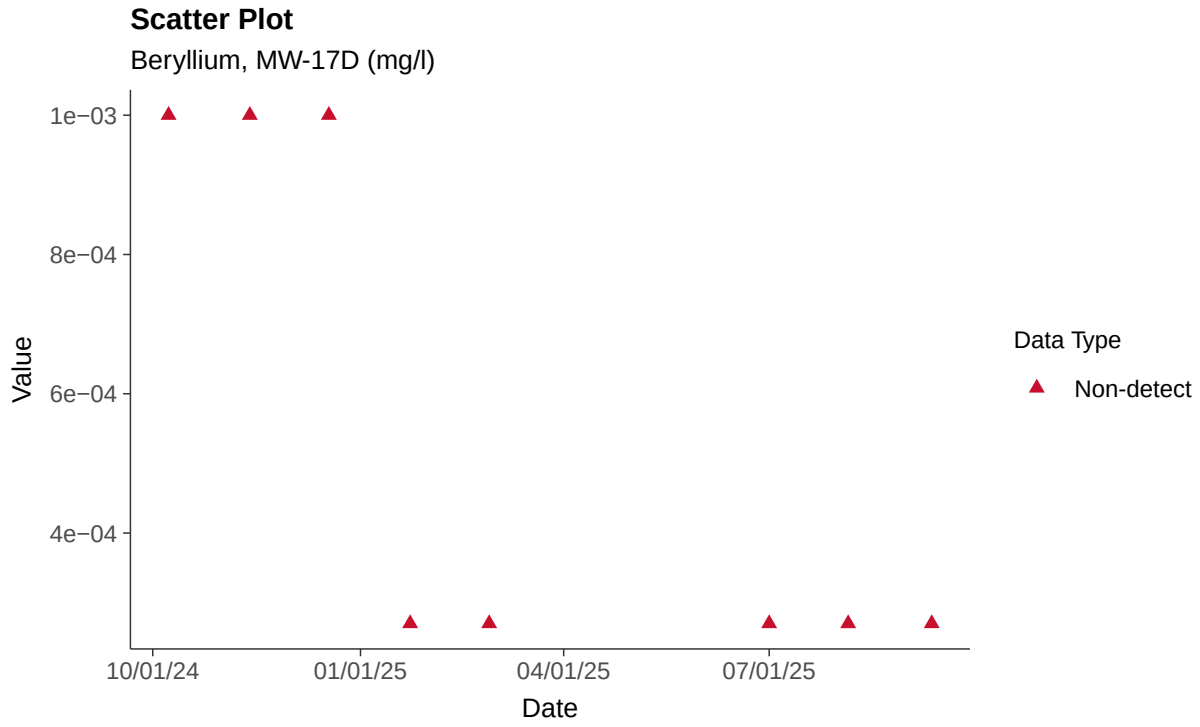
Trend Regression: Mann-Kendall/Theil-Sen Estimate

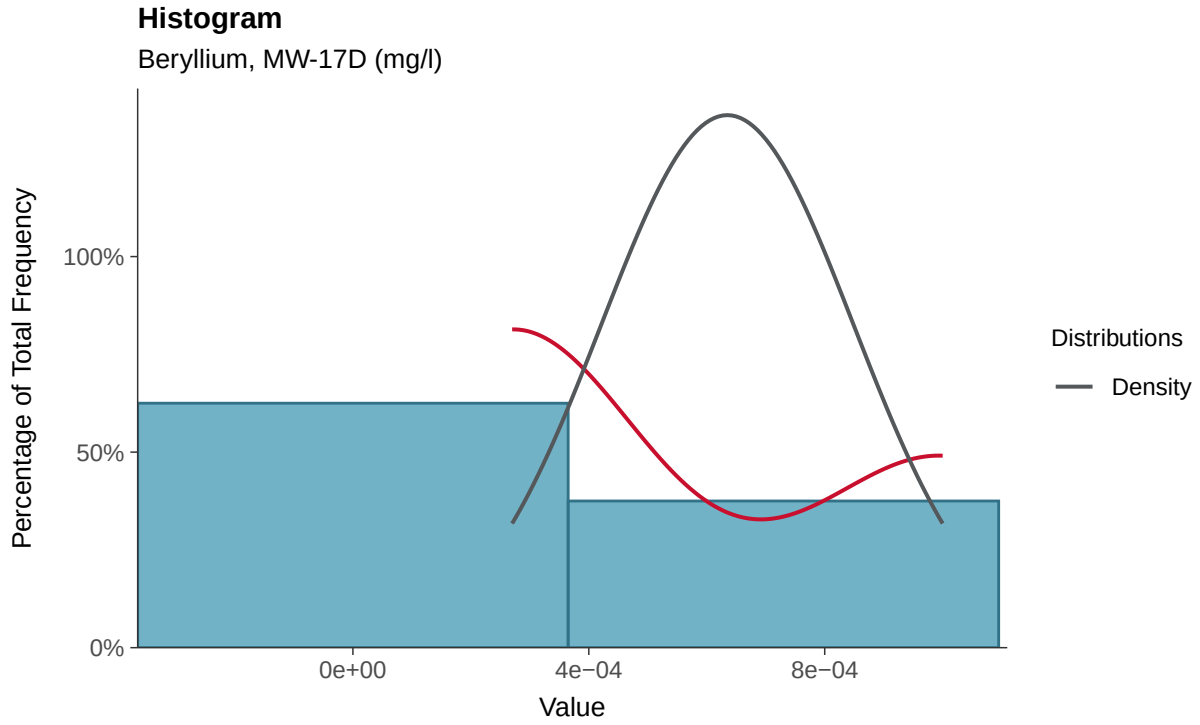
Barium, MW-17D (mg/l)



Appendix IV: Beryllium, MW-17D

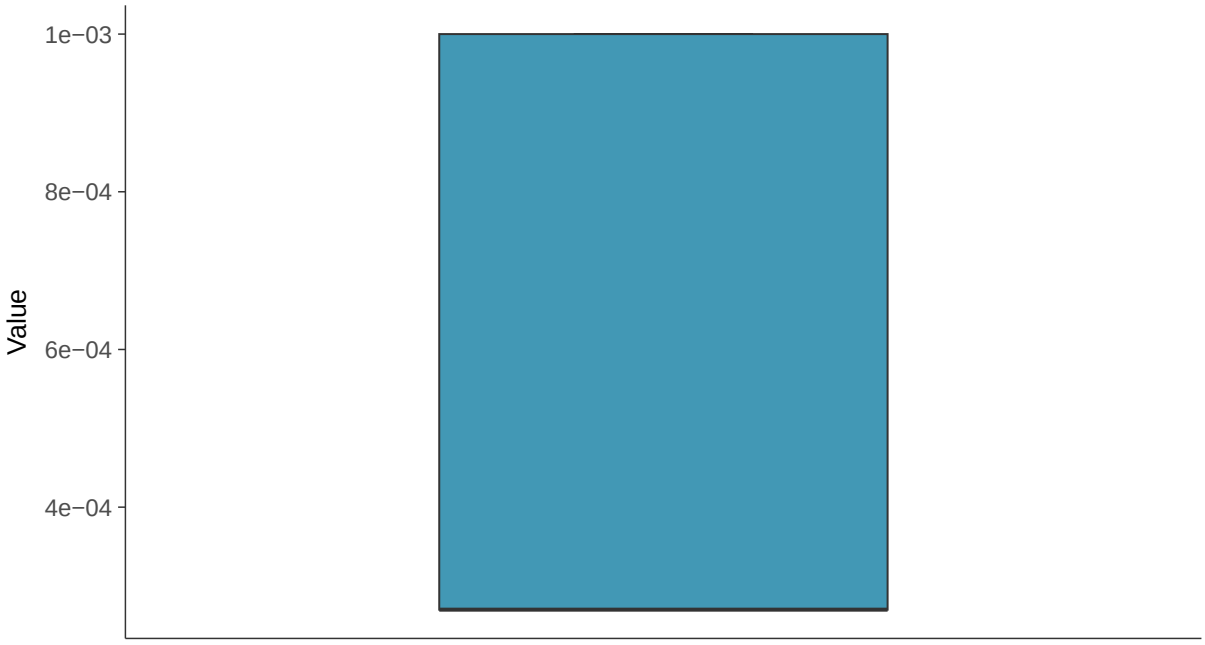
ID: 16_3_104





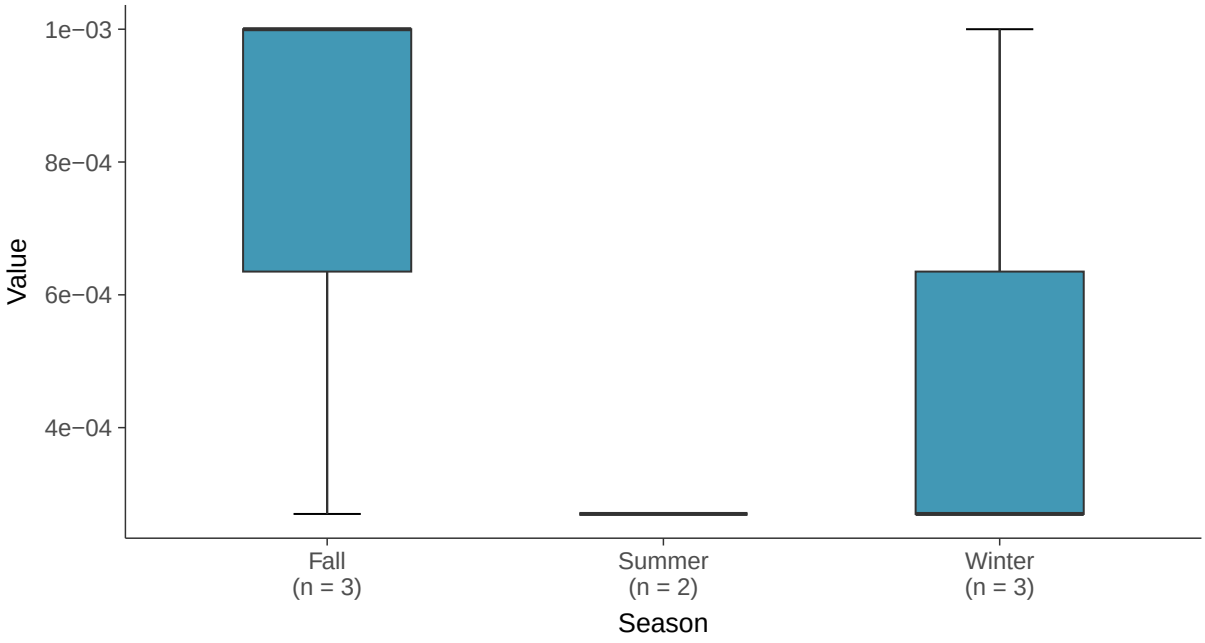
Boxplot

Beryllium, MW-17D (mg/l)



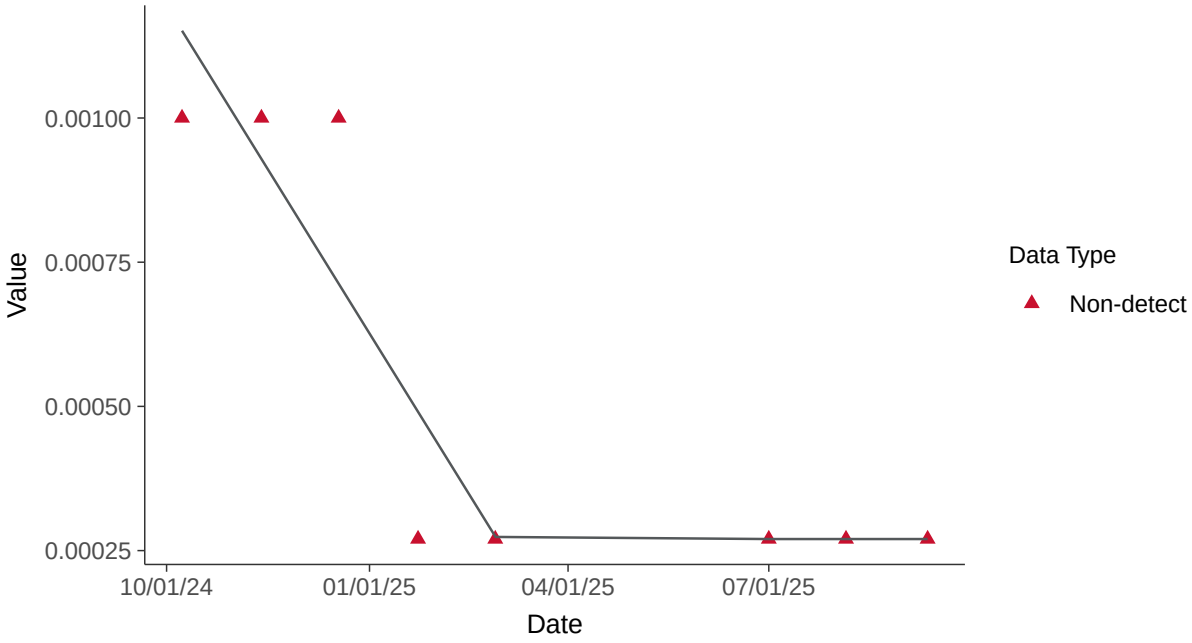
Boxplot by Season

Beryllium, MW-17D (mg/l)



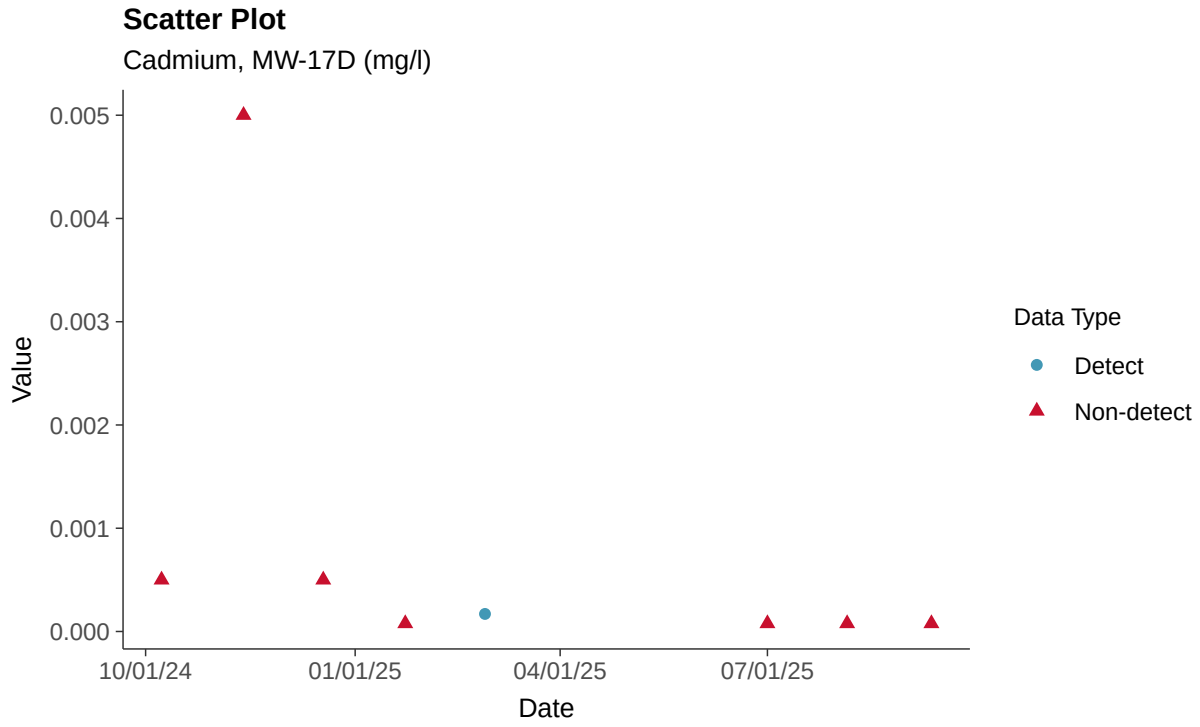
Trend Regression: Piecewise Linear-Linear

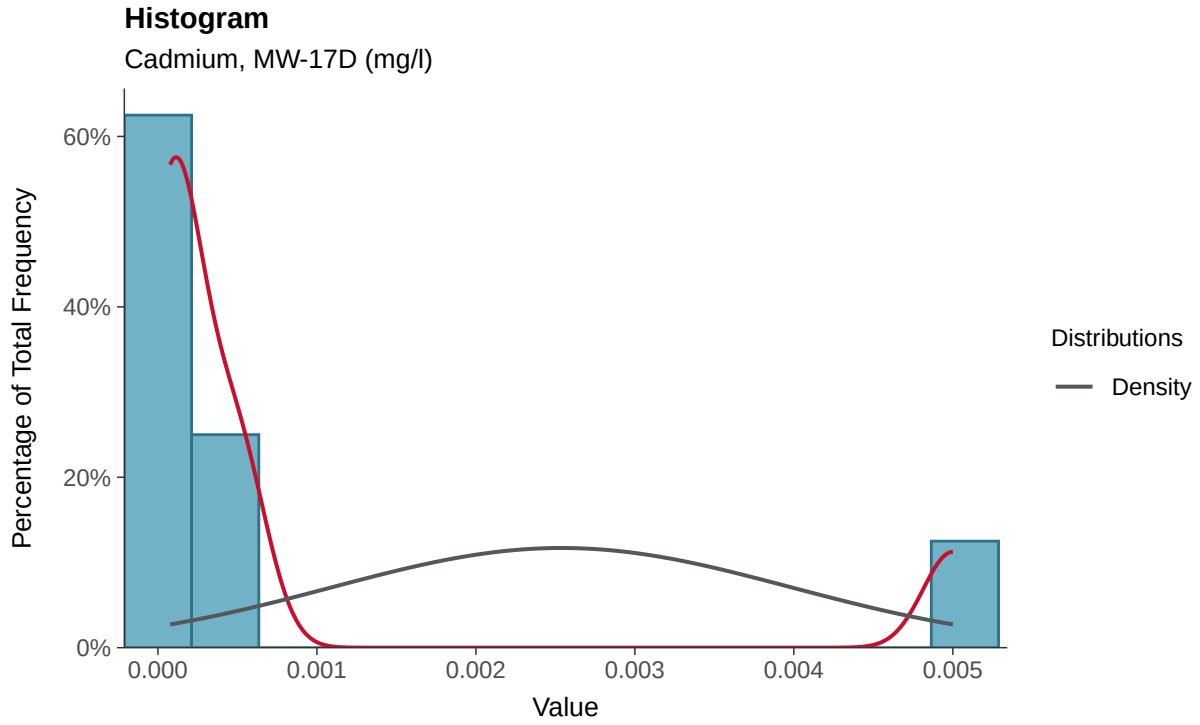
Beryllium, MW-17D (mg/l)



Appendix IV: Cadmium, MW-17D

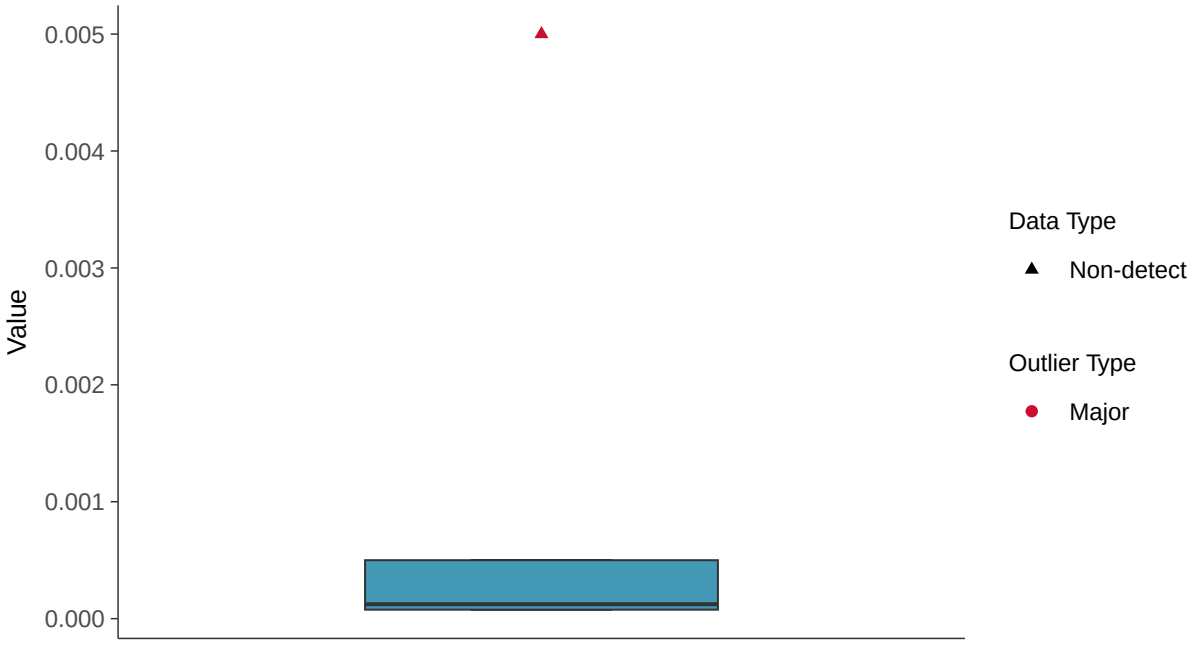
ID: 16_3_106





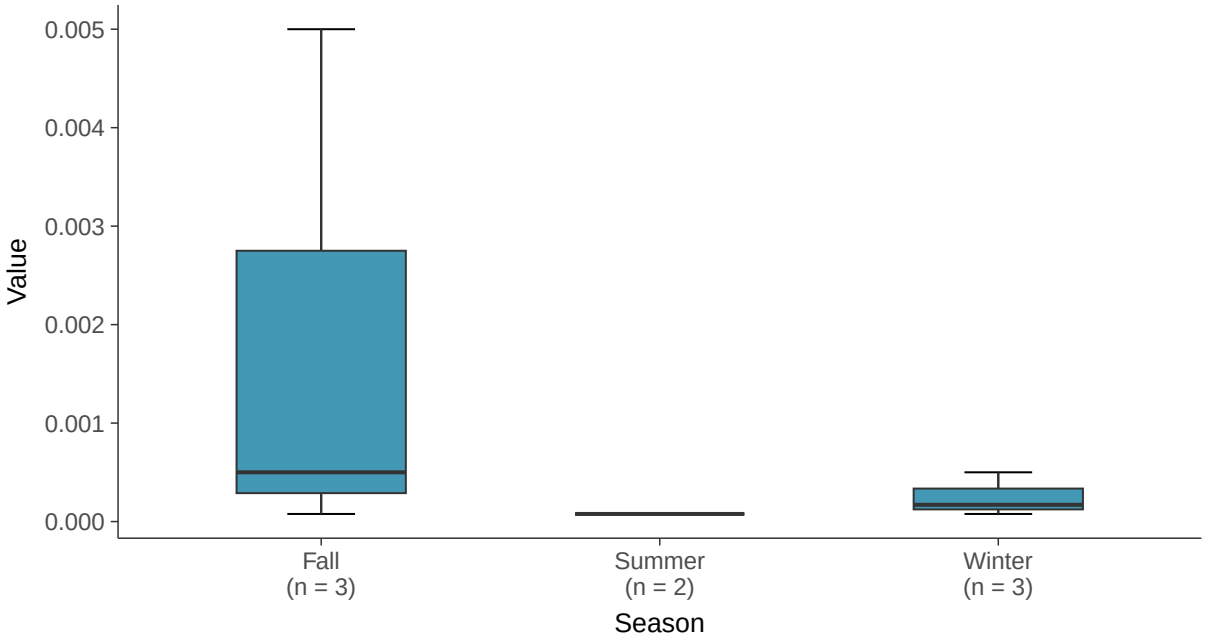
Boxplot

Cadmium, MW-17D (mg/l)



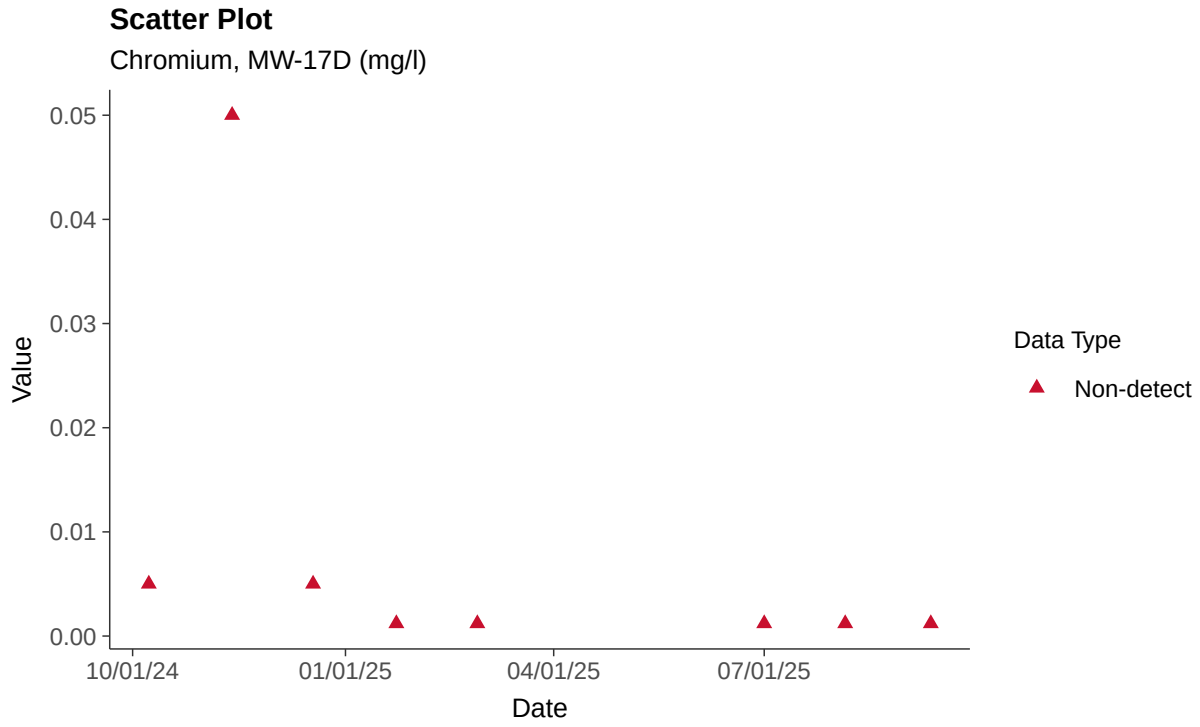
Boxplot by Season

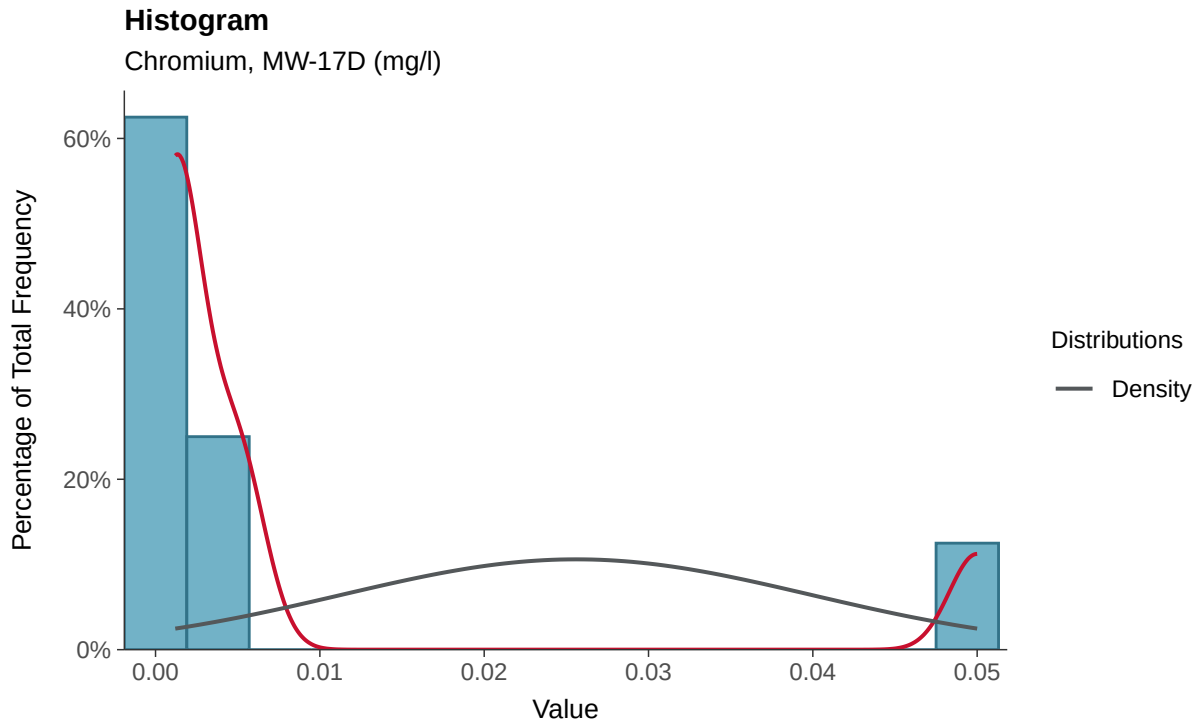
Cadmium, MW-17D (mg/l)



Appendix IV: Chromium, MW-17D

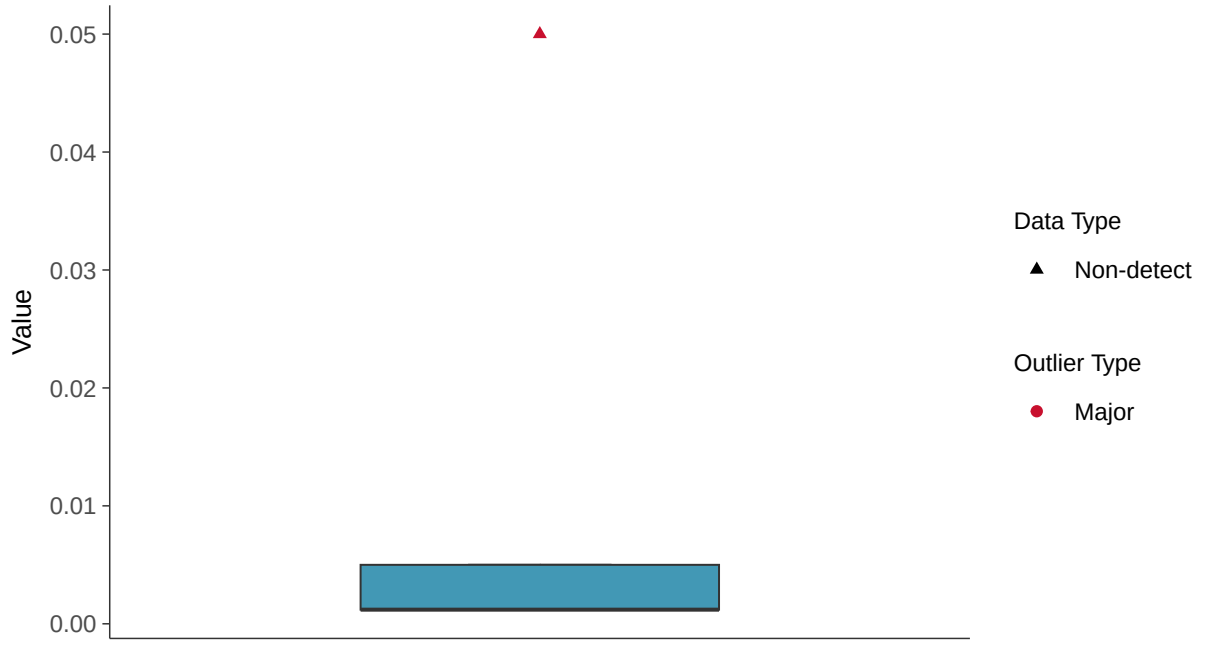
ID: 16_3_109





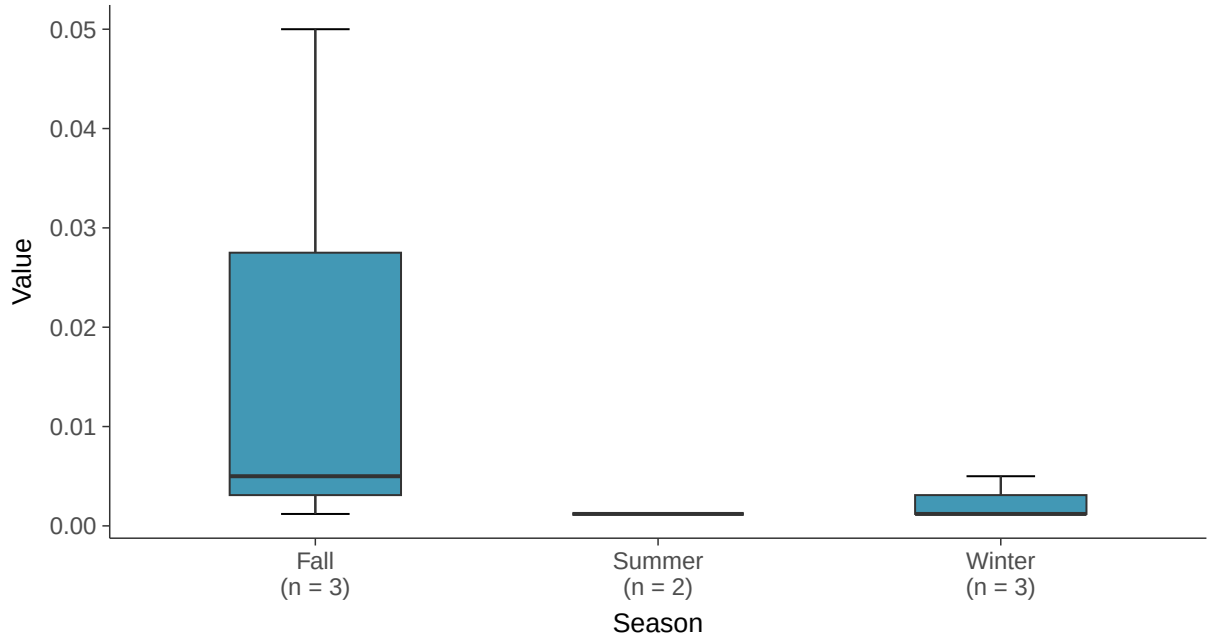
Boxplot

Chromium, MW-17D (mg/l)



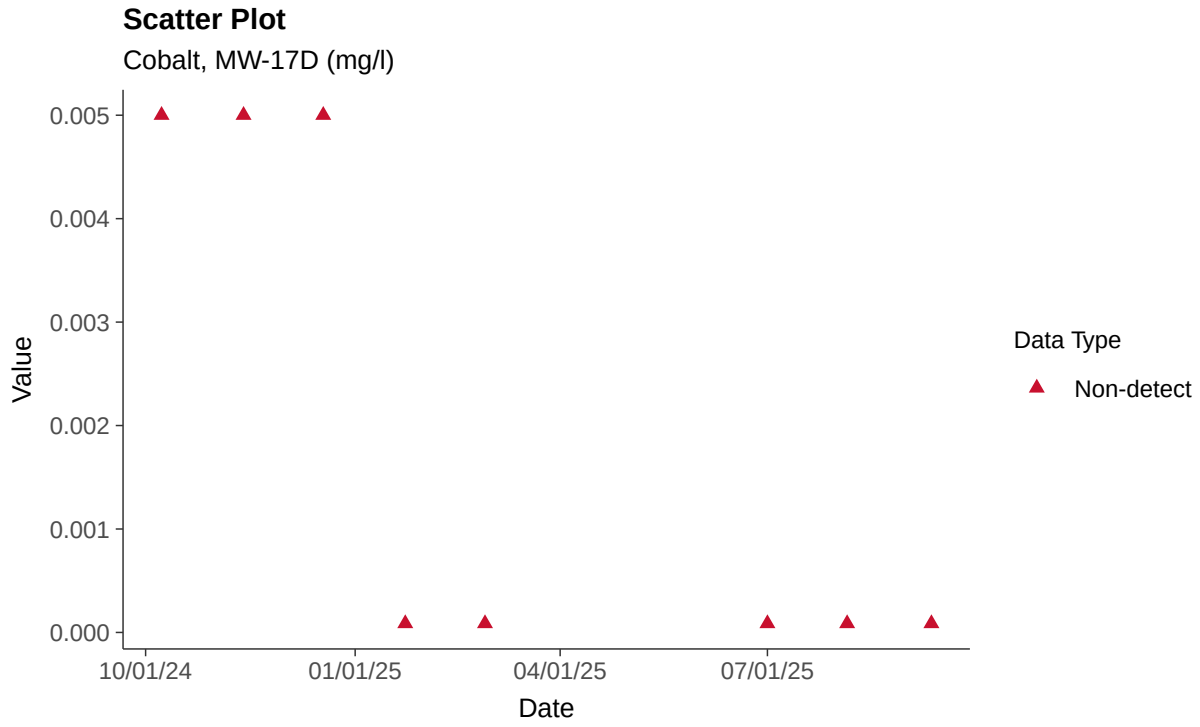
Boxplot by Season

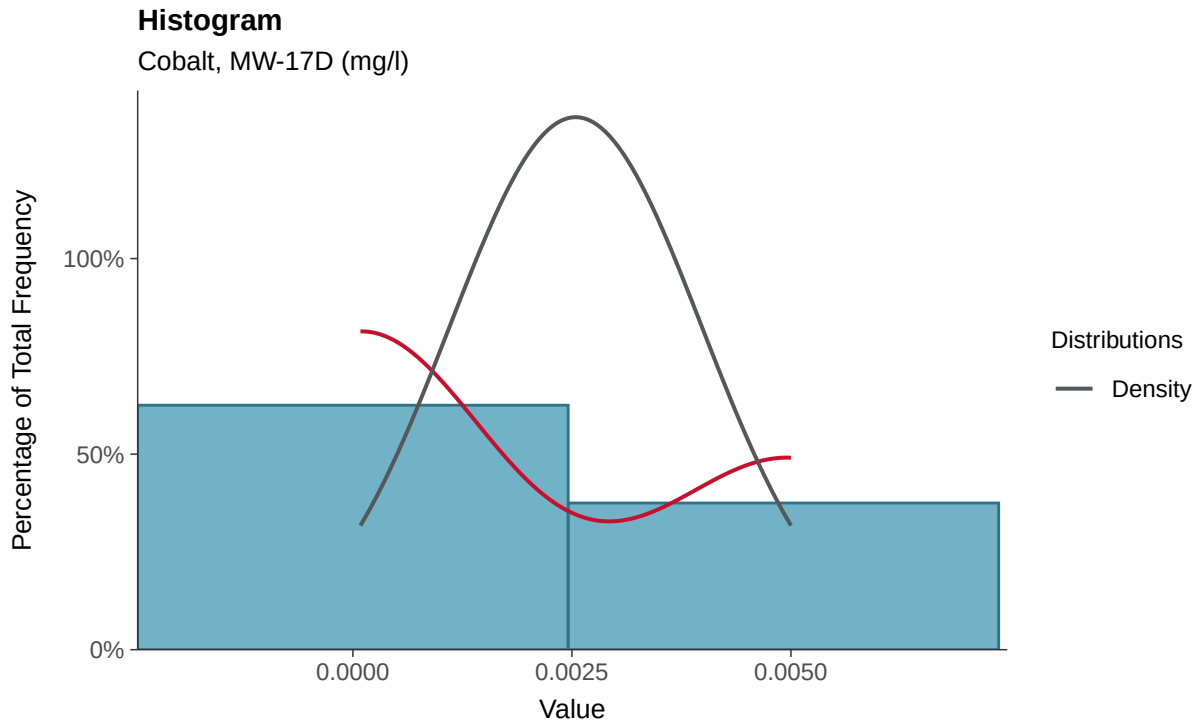
Chromium, MW-17D (mg/l)



Appendix IV: Cobalt, MW-17D

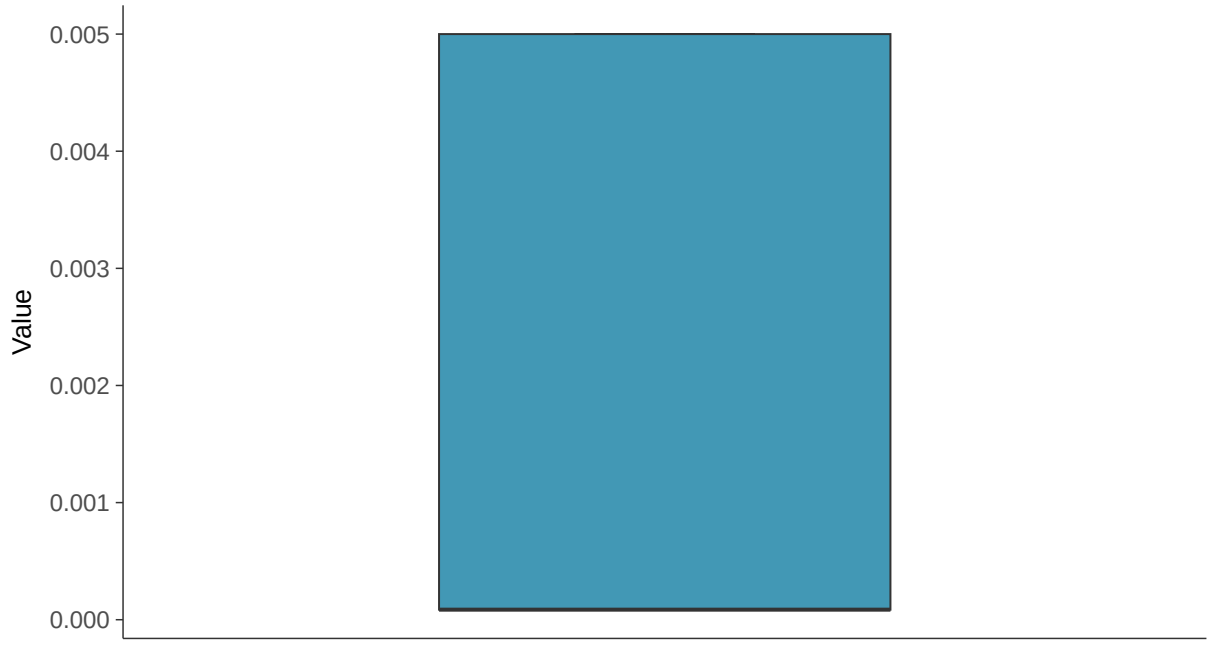
ID: 16_3_110





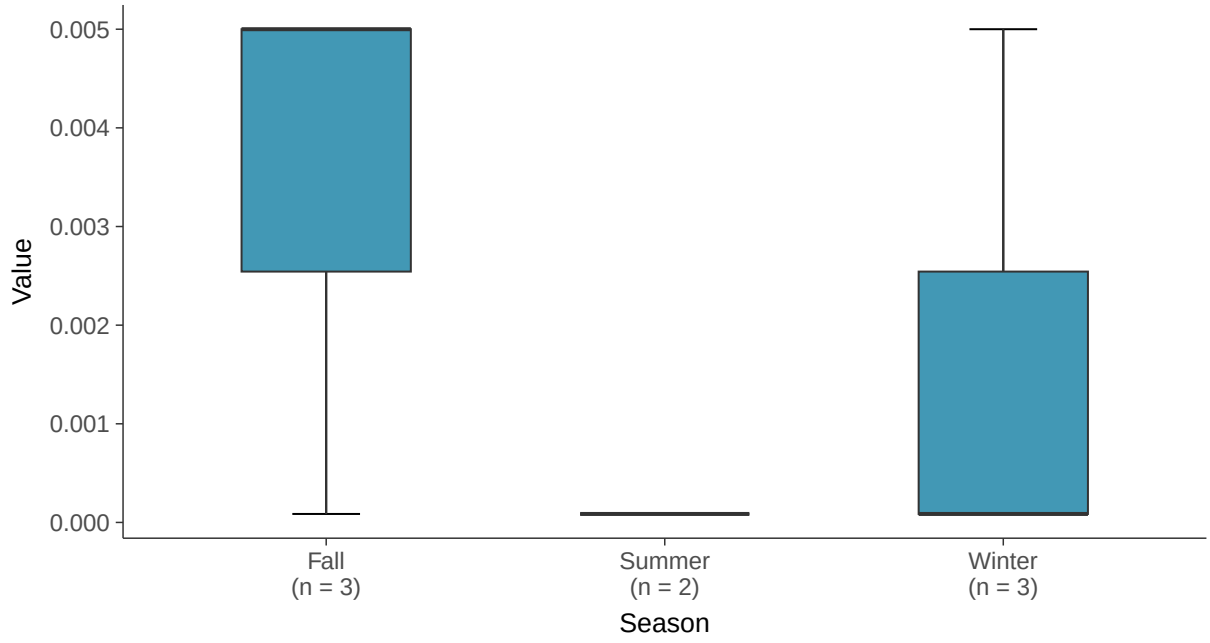
Boxplot

Cobalt, MW-17D (mg/l)



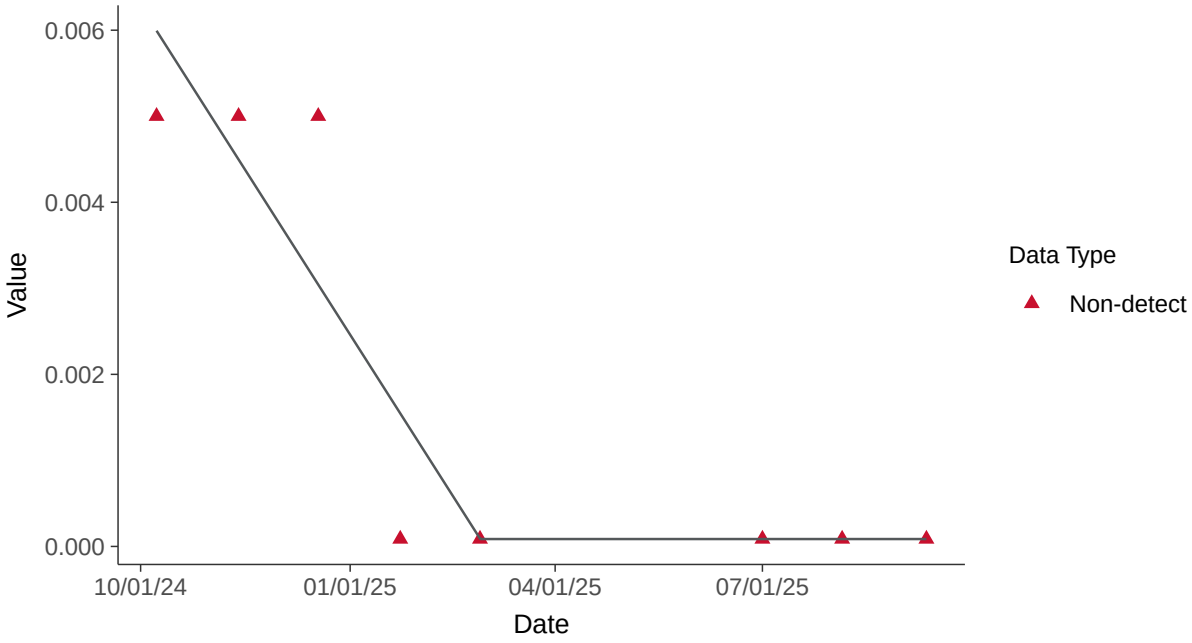
Boxplot by Season

Cobalt, MW-17D (mg/l)



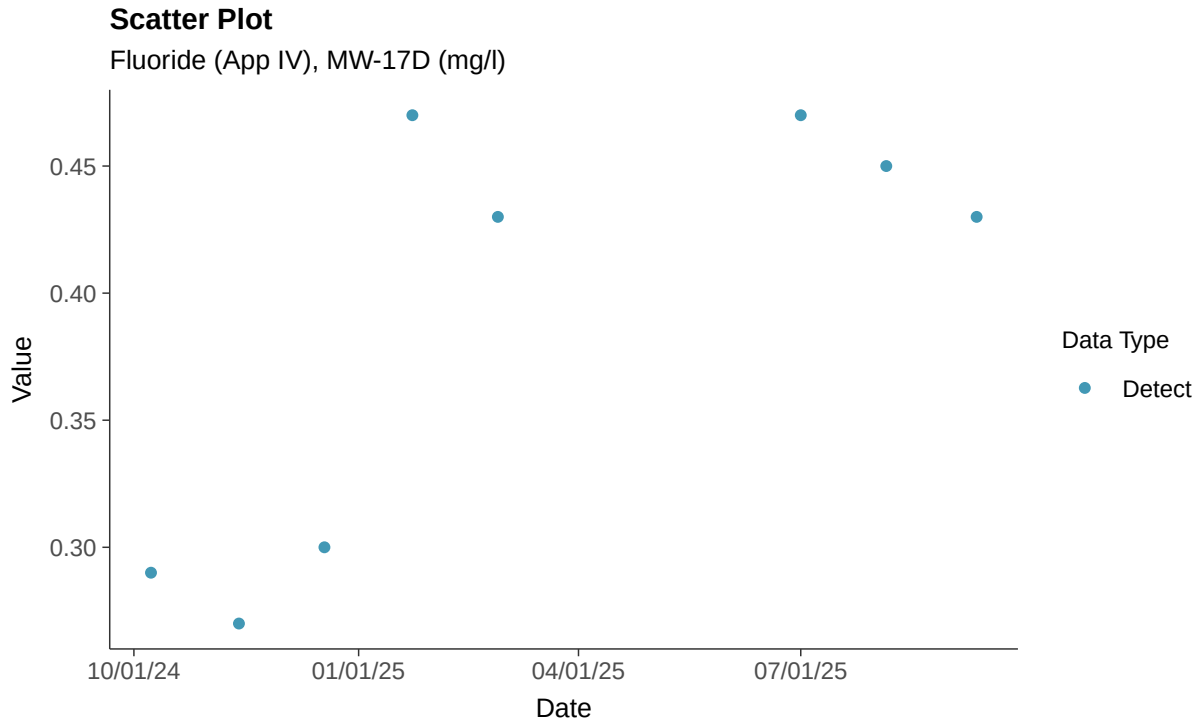
Trend Regression: Piecewise Linear-Linear

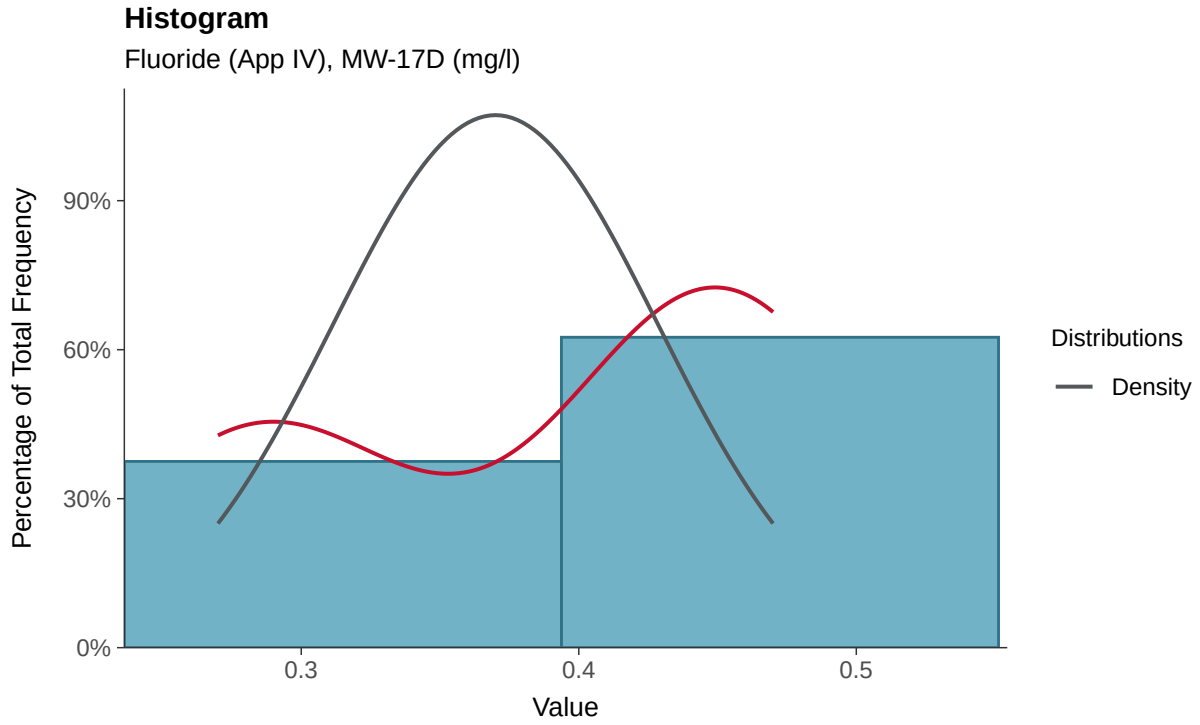
Cobalt, MW-17D (mg/l)



Appendix IV: Fluoride (App IV), MW-17D

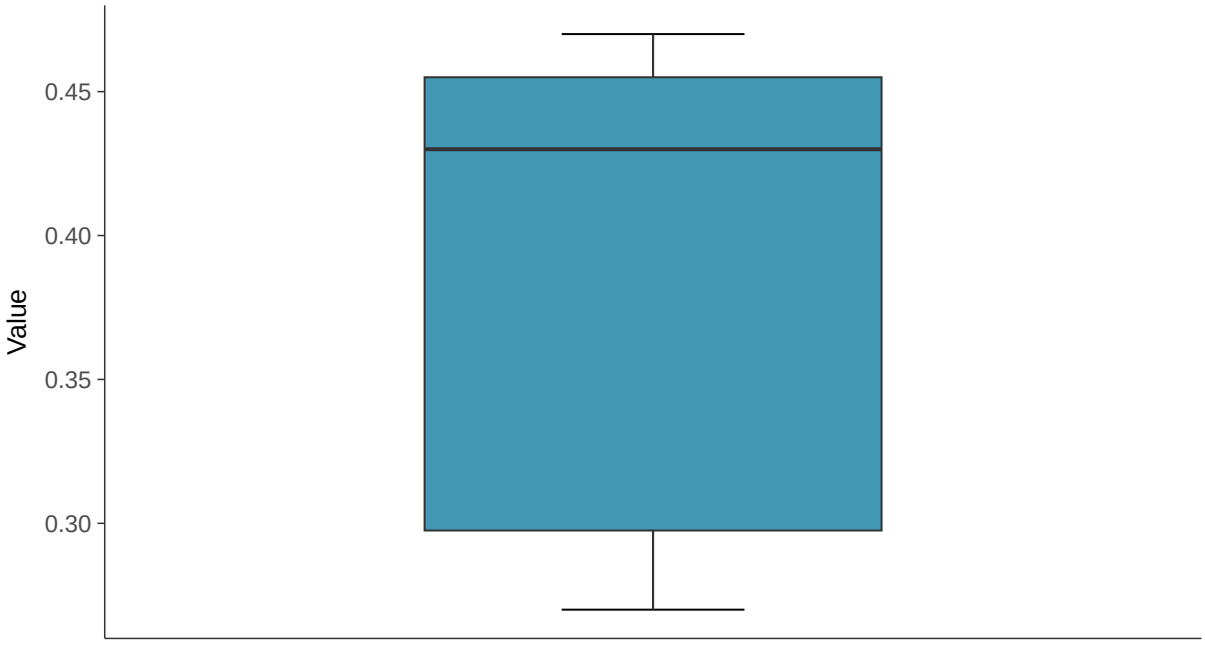
ID: 16_3_113





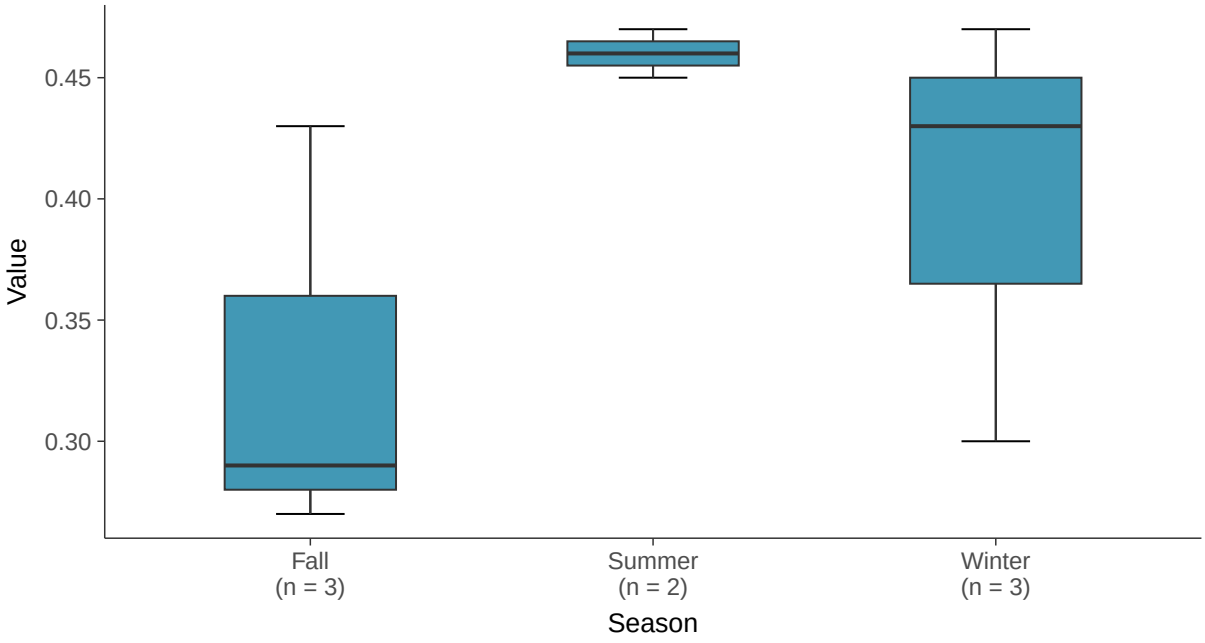
Boxplot

Fluoride (App IV), MW-17D (mg/l)



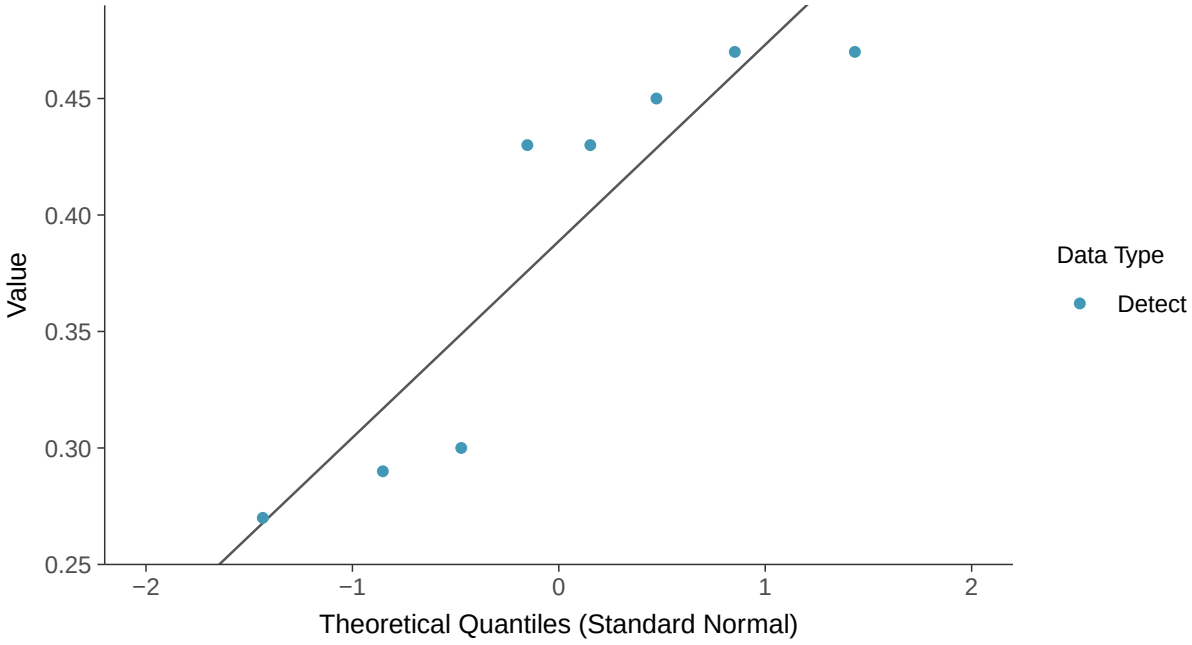
Boxplot by Season

Fluoride (App IV), MW-17D (mg/l)



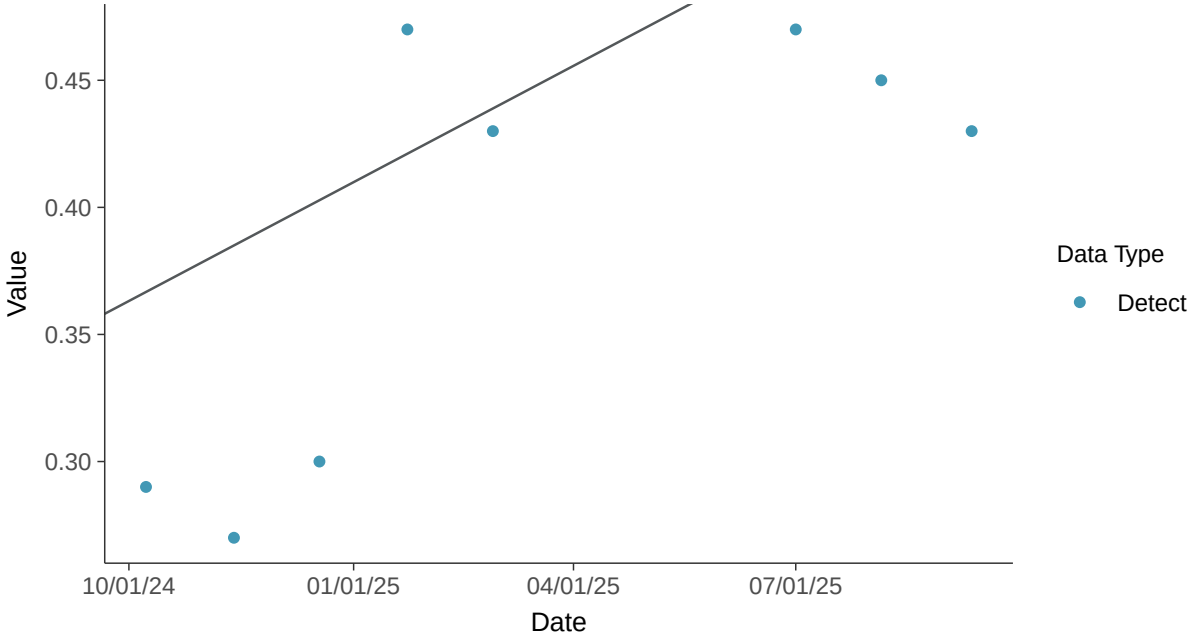
Normal Q-Q plot

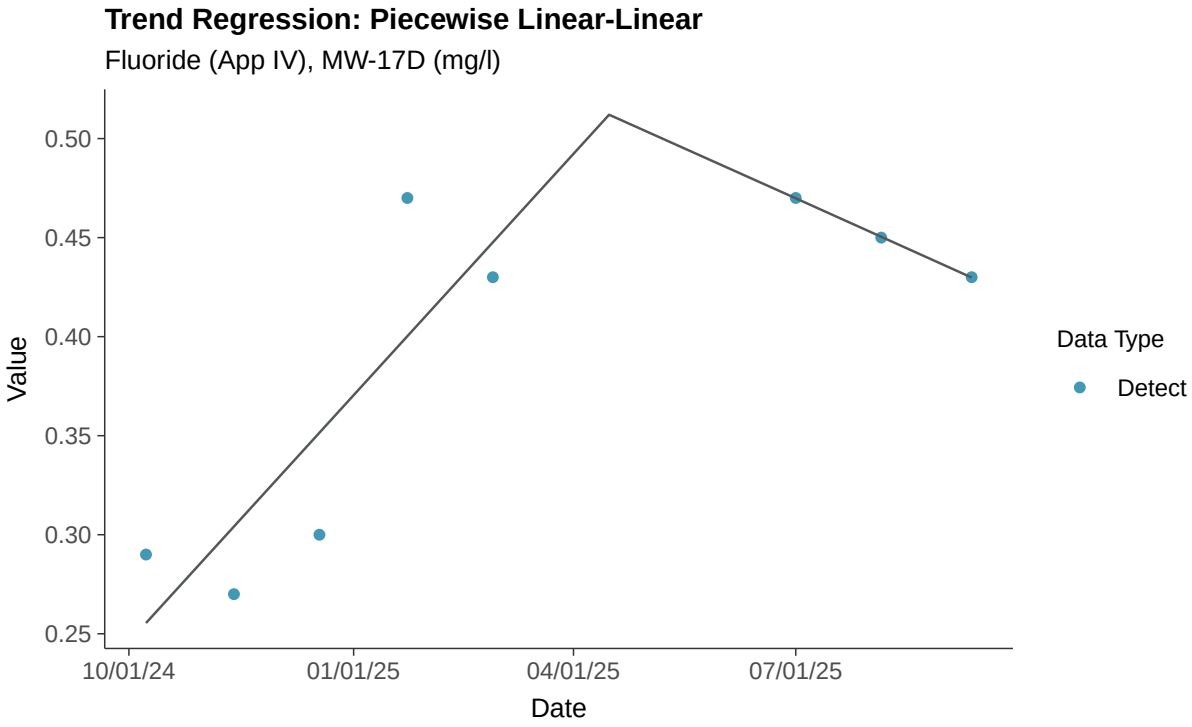
Fluoride (App IV), MW-17D (mg/l)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

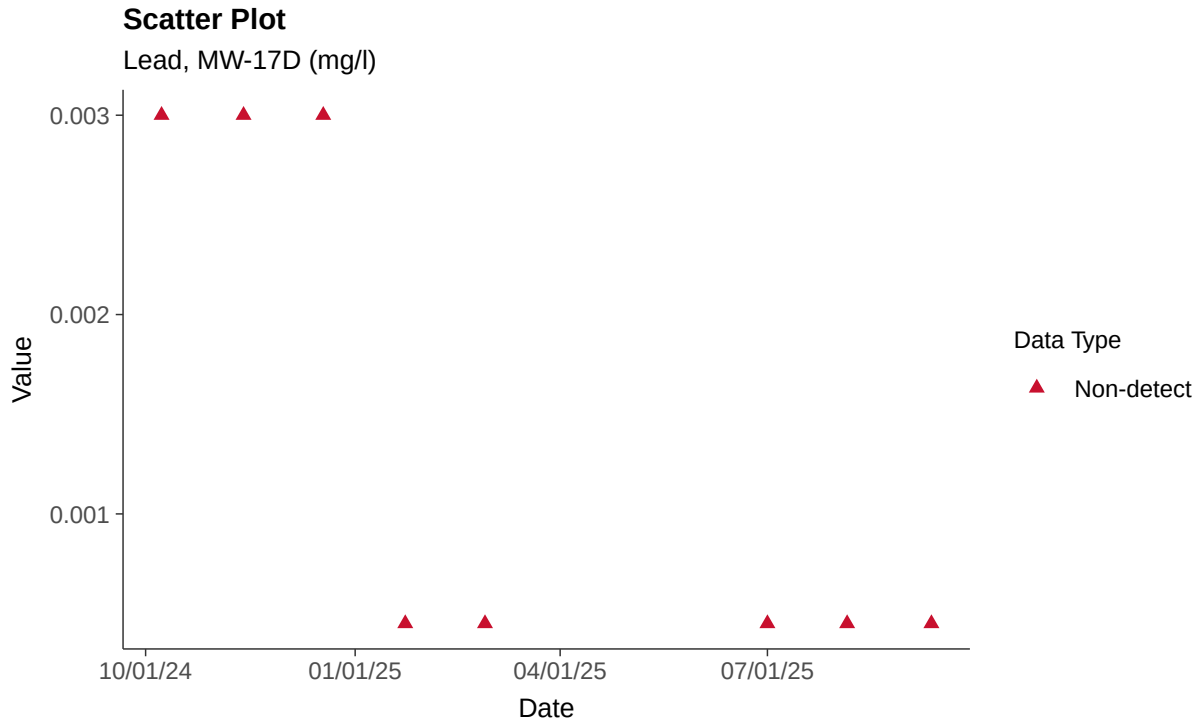
Fluoride (App IV), MW-17D (mg/l)

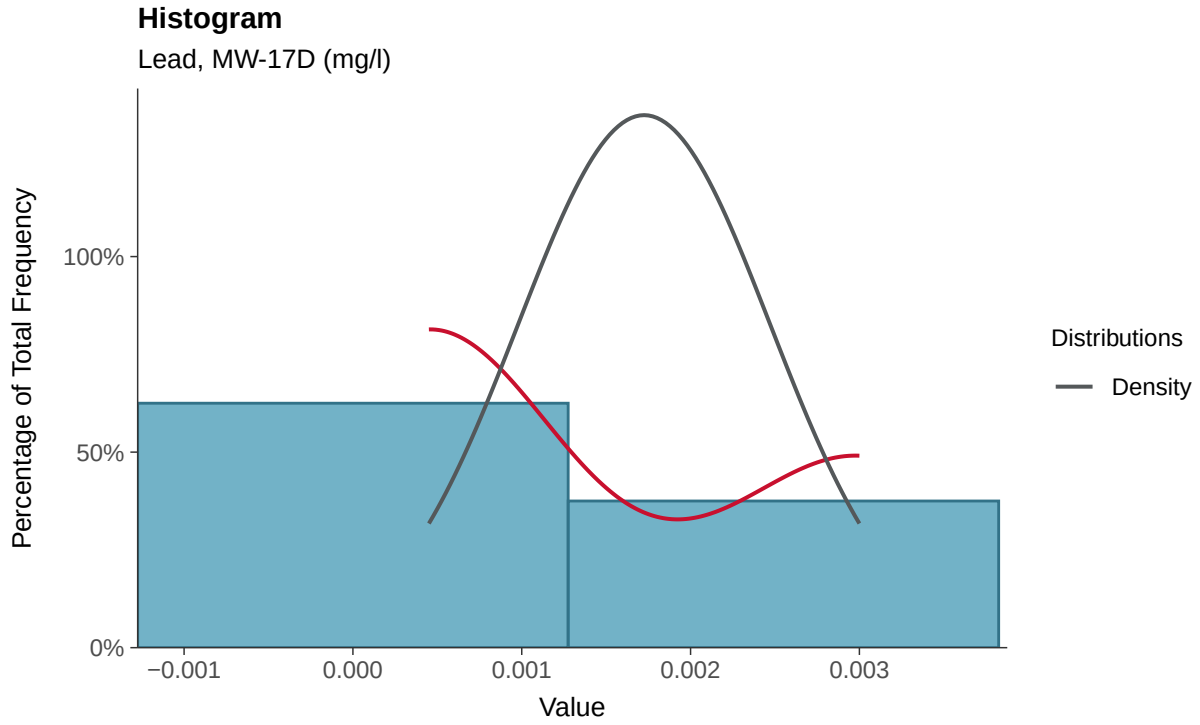



Trend Regression: Piecewise Linear-Linear
Fluoride (App IV), MW-17D (mg/l)
0.50
0.45
0.40
0.35
0.30
0.25
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix IV: Lead, MW-17D

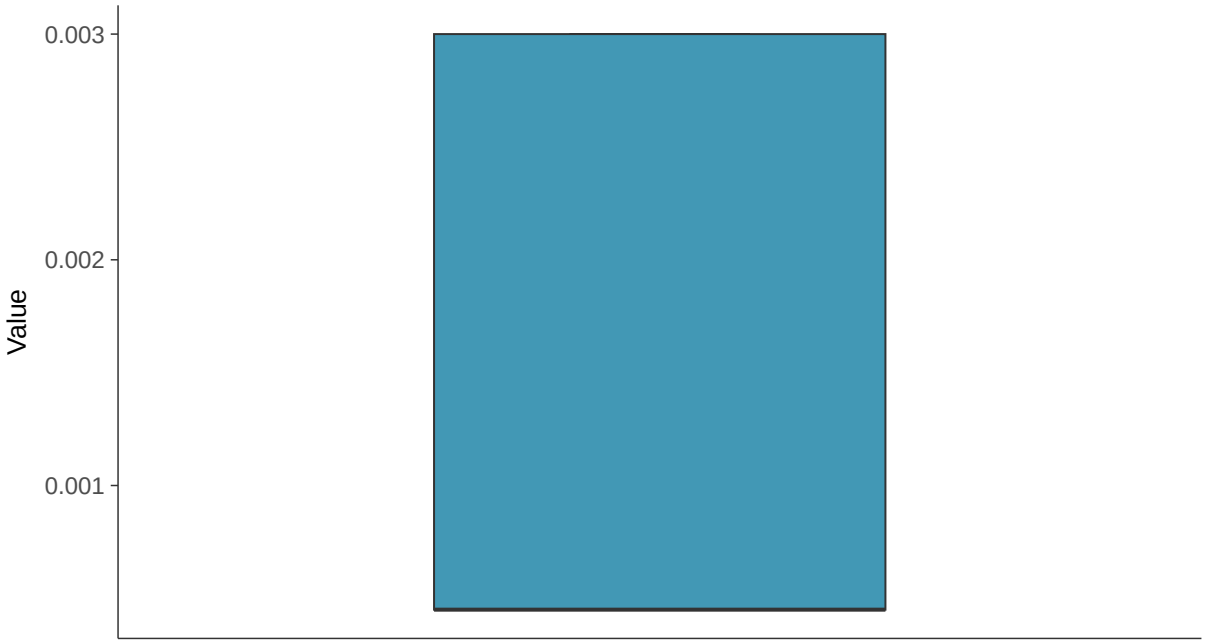
ID: 16_3_115





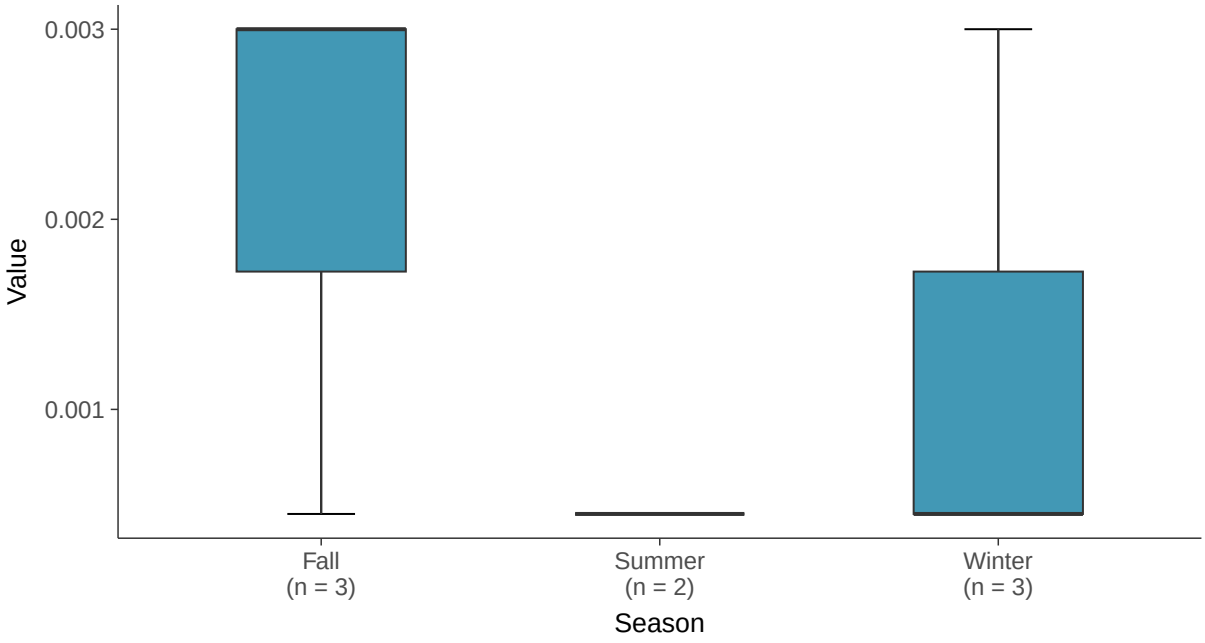
Boxplot

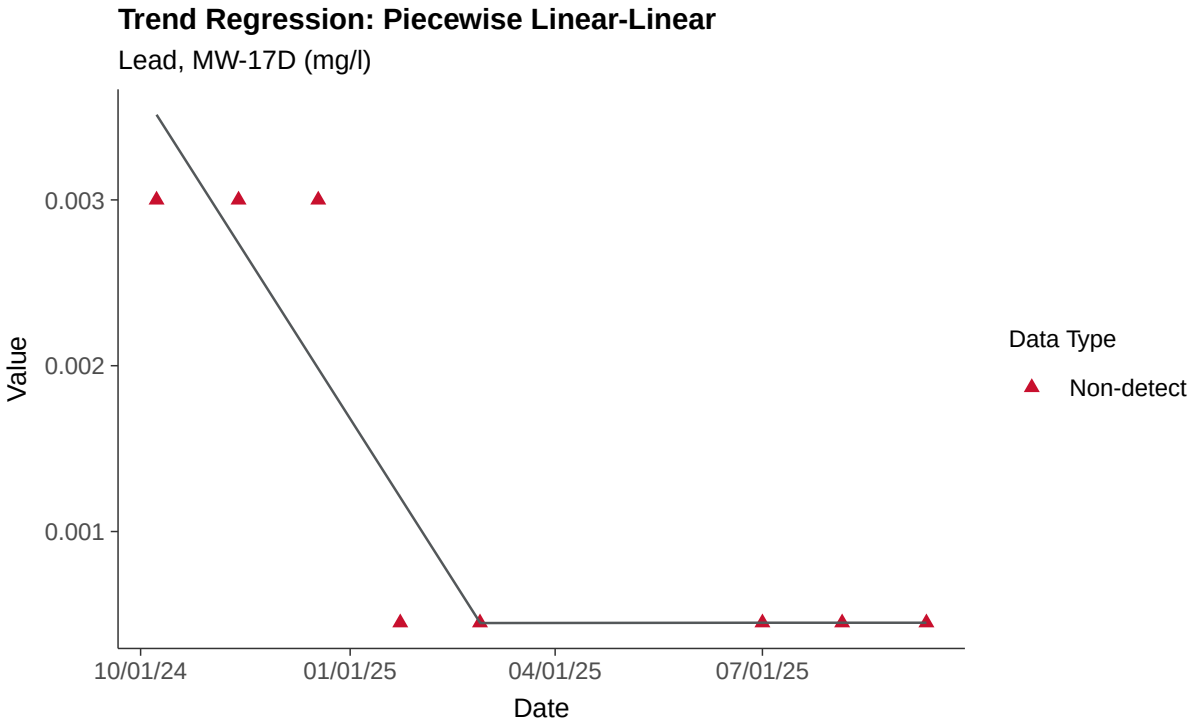
Lead, MW-17D (mg/l)



Boxplot by Season

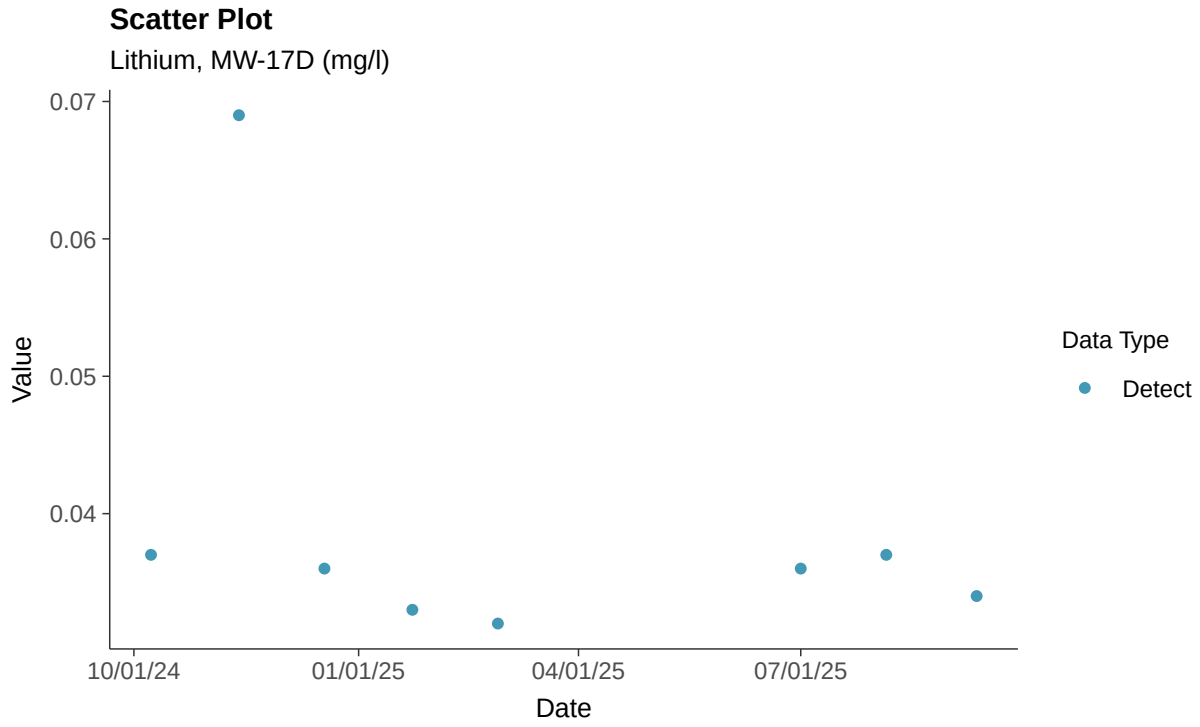
Lead, MW-17D (mg/l)

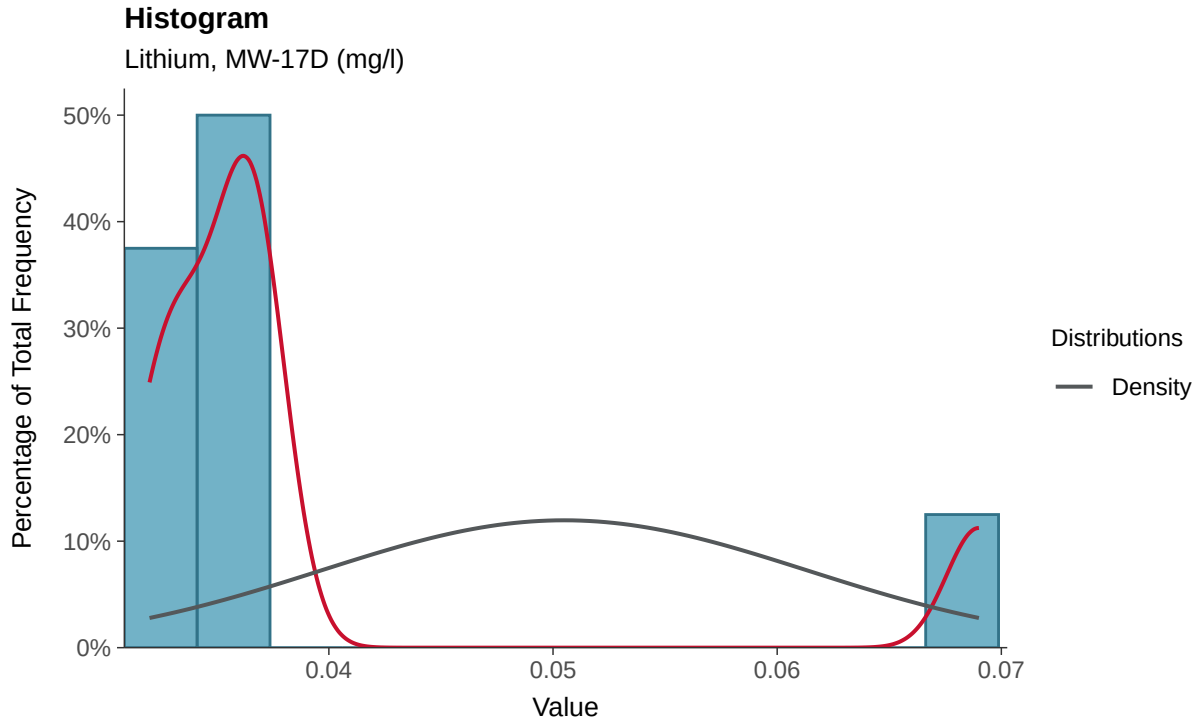



Trend Regression: Piecewise Linear-Linear
Lead, MW-17D (mg/l)
Value
0.003
0.002
0.001
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Lithium, MW-17D

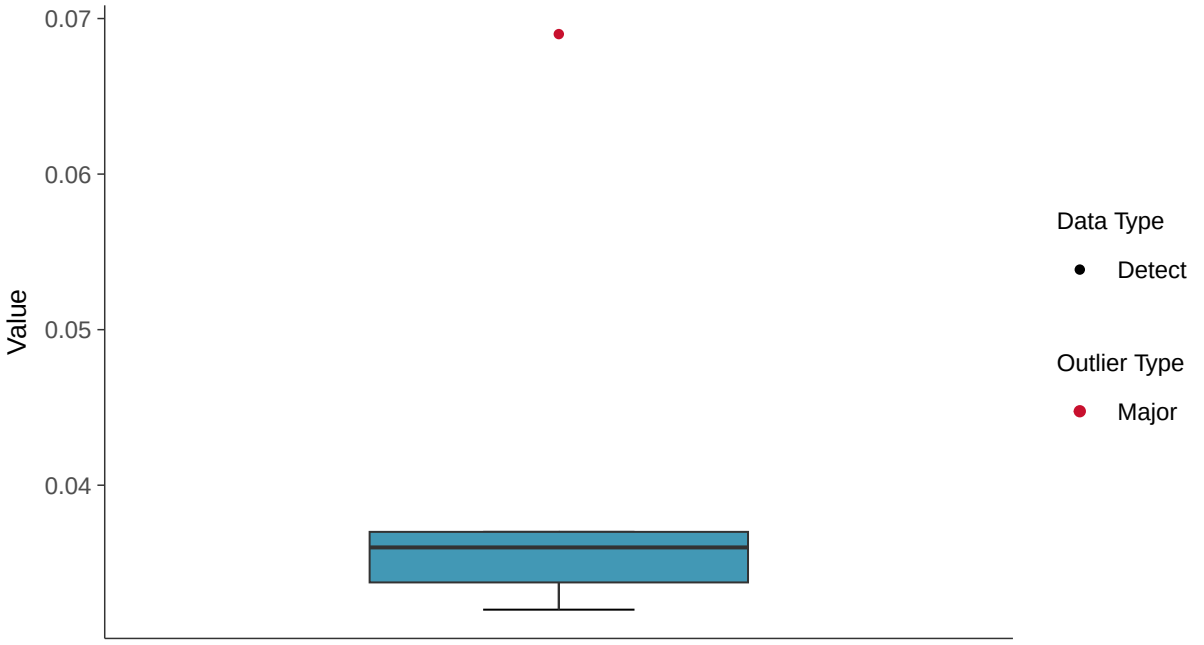
ID: 16_3_116





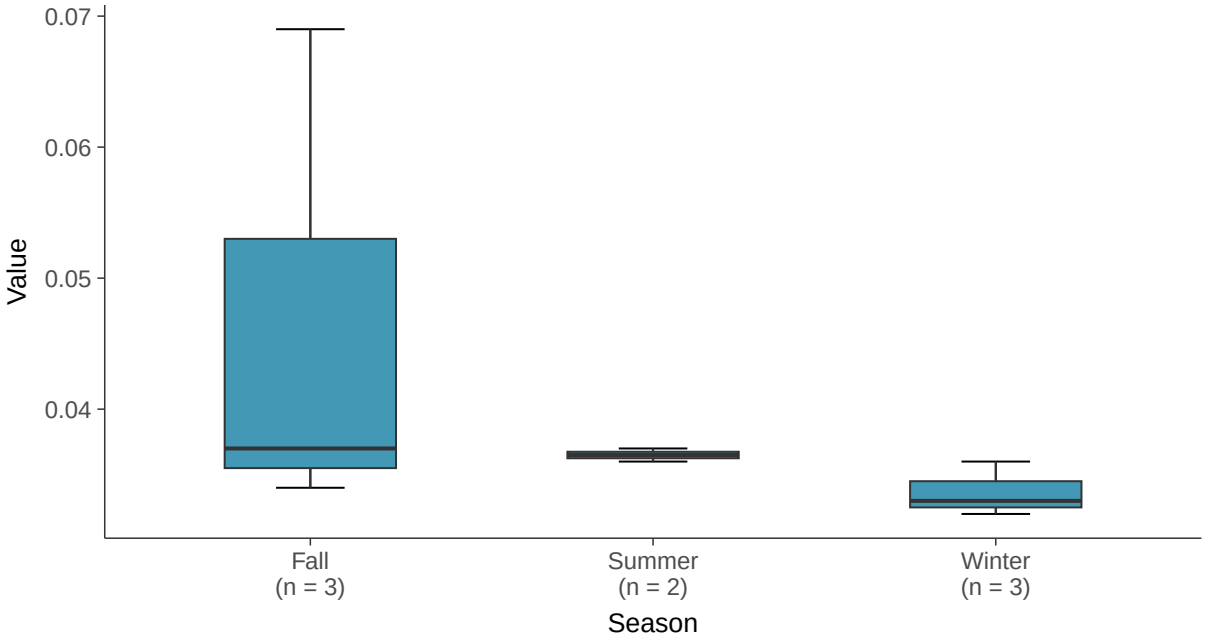
Boxplot

Lithium, MW-17D (mg/l)



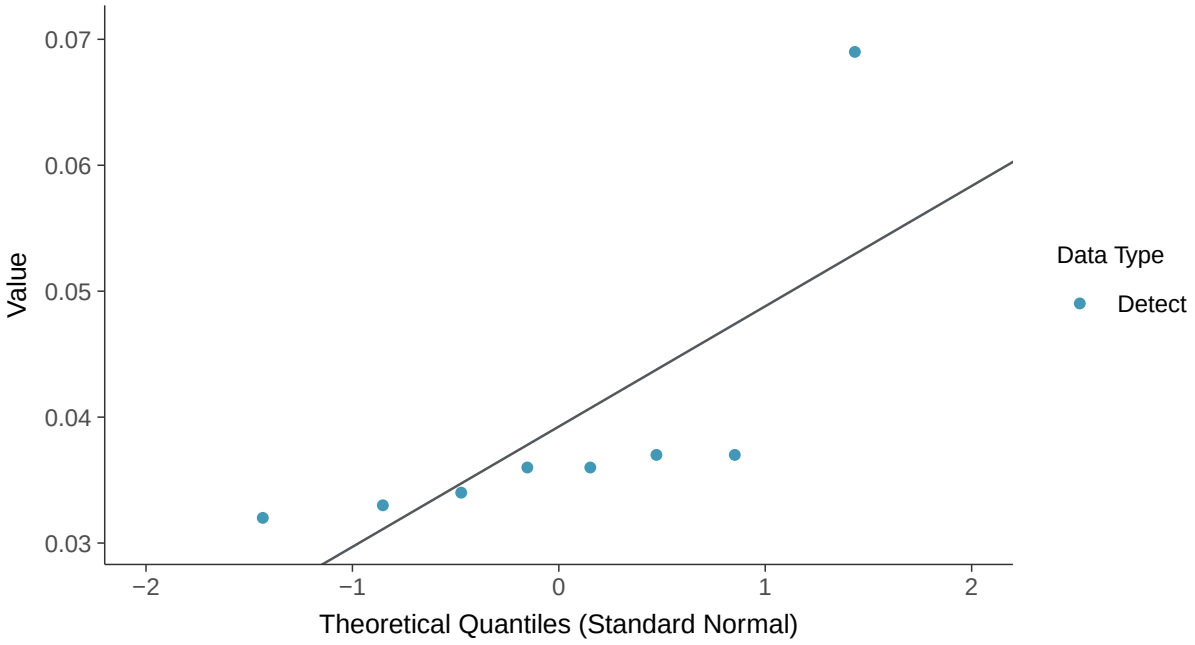
Boxplot by Season

Lithium, MW-17D (mg/l)



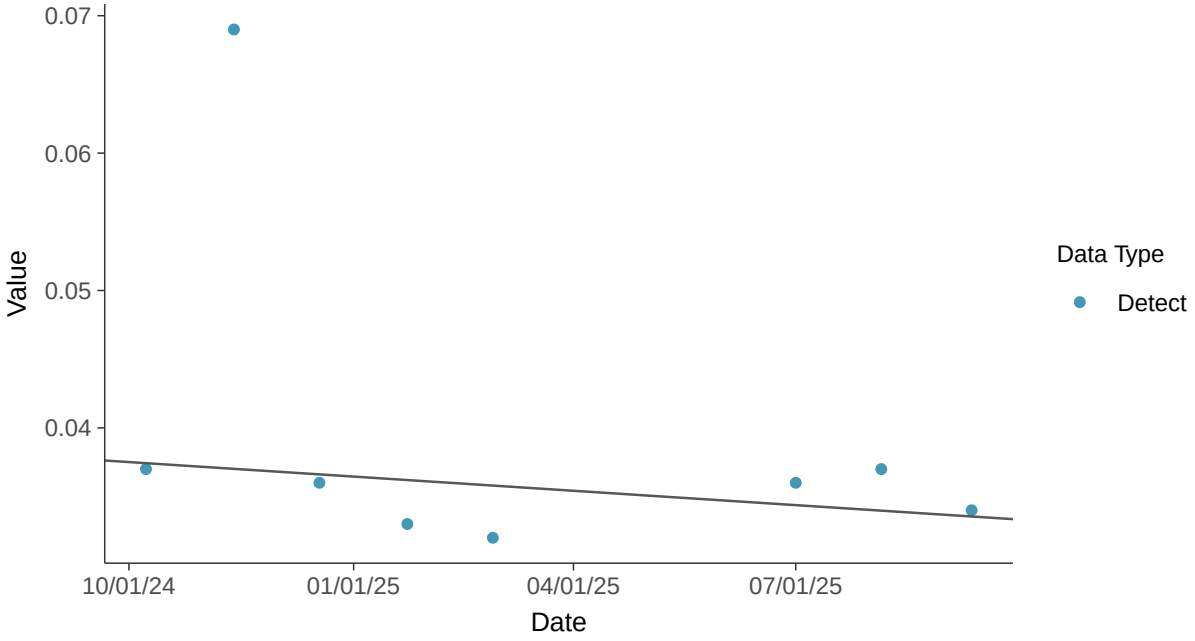
Normal Q-Q plot

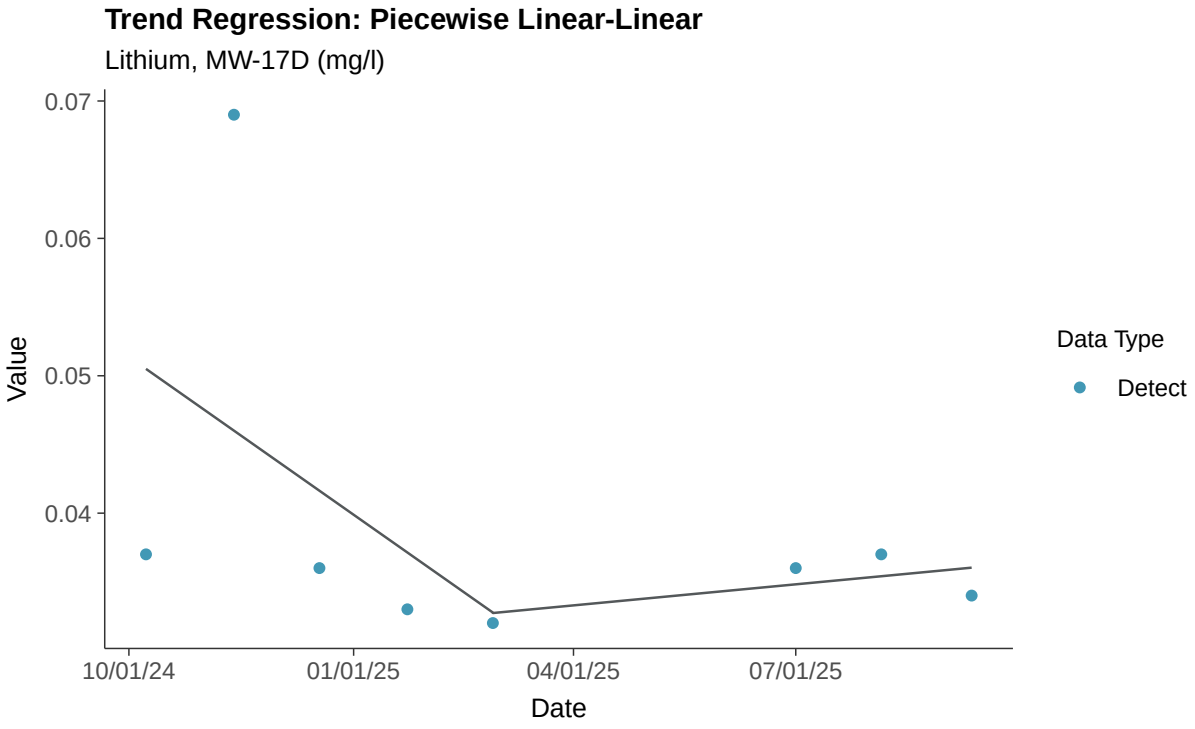
Lithium, MW-17D (mg/l)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

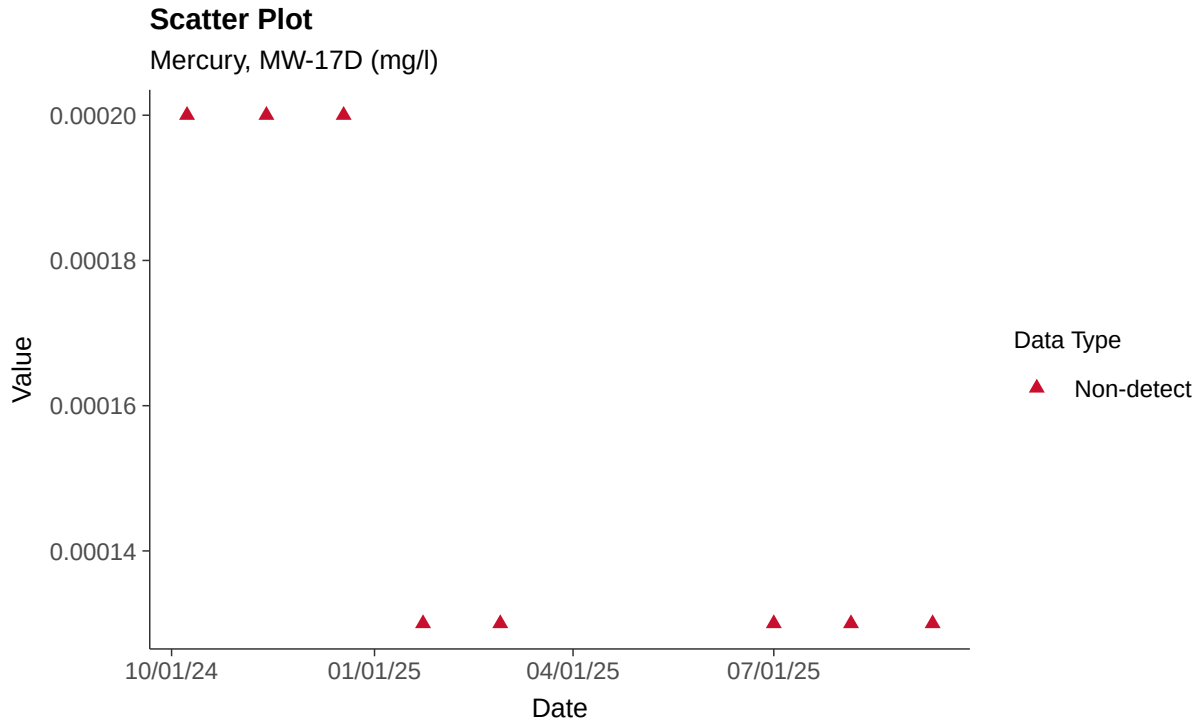
Lithium, MW-17D (mg/l)

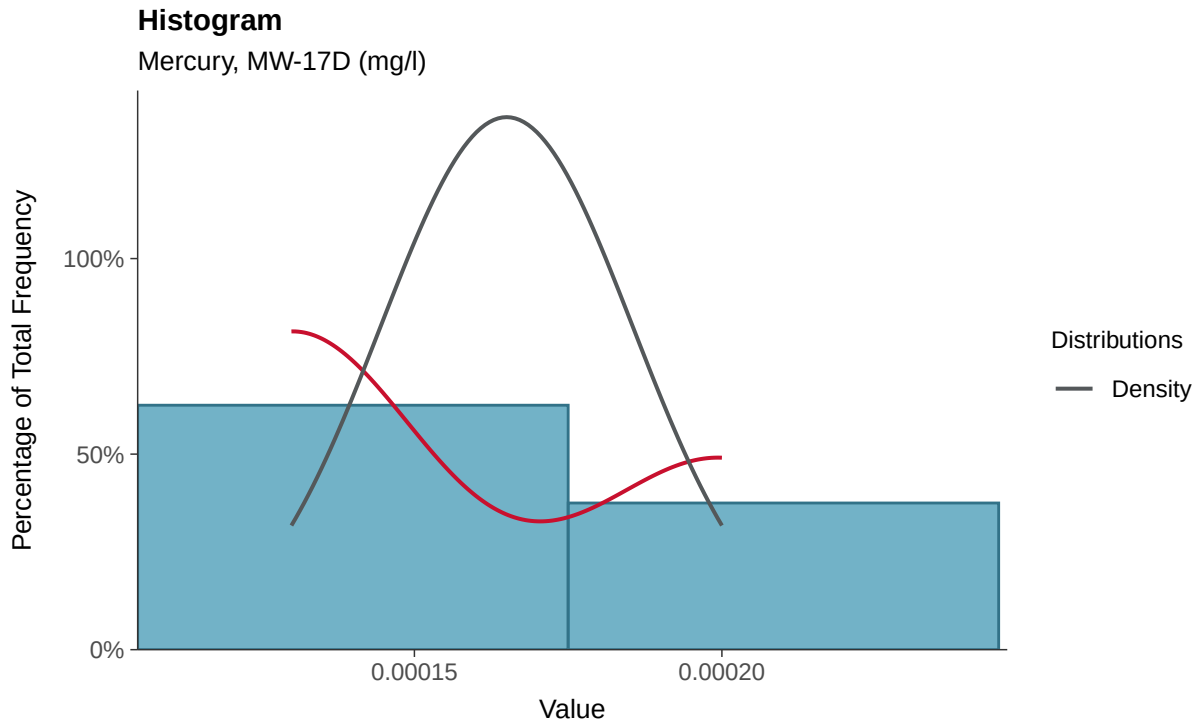



Trend Regression: Piecewise Linear-Linear
Lithium, MW-17D (mg/l)
0.07
0.06
0.05
0.04
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix IV: Mercury, MW-17D

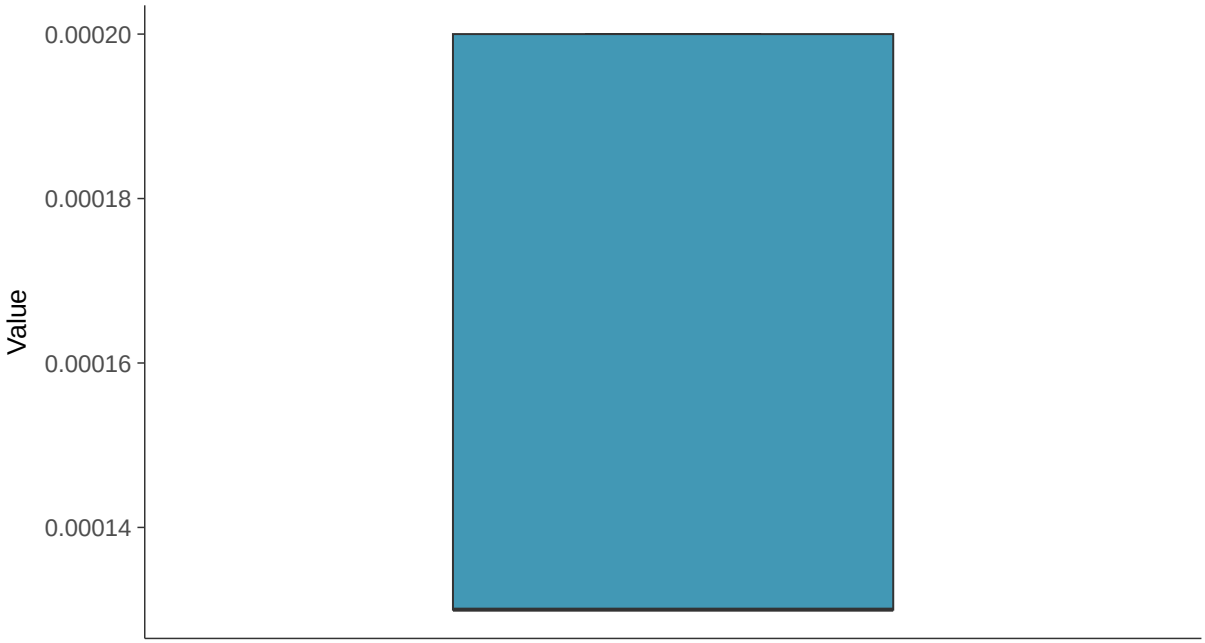
ID: 16_3_117





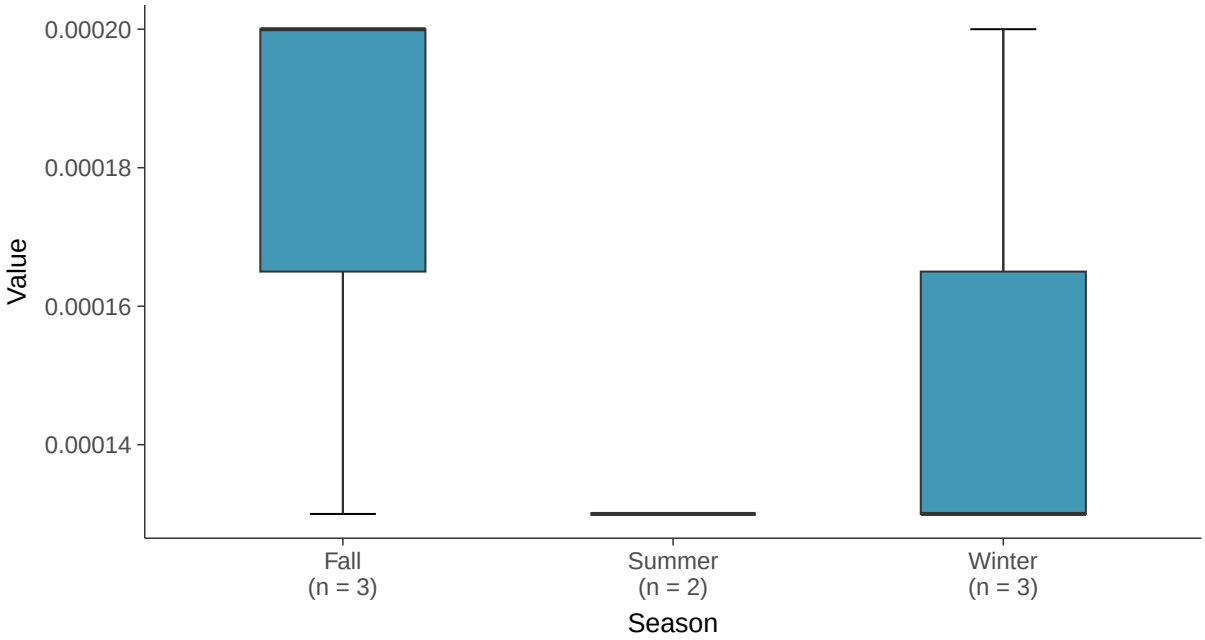
Boxplot

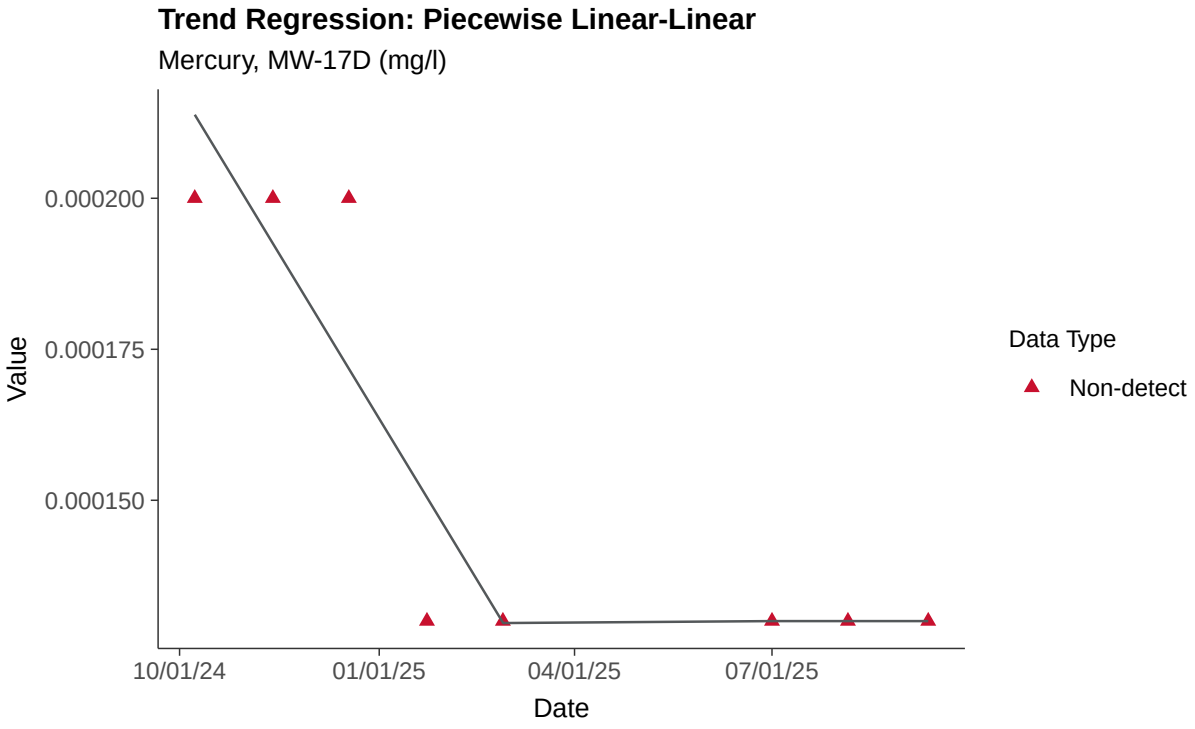
Mercury, MW-17D (mg/l)



Boxplot by Season

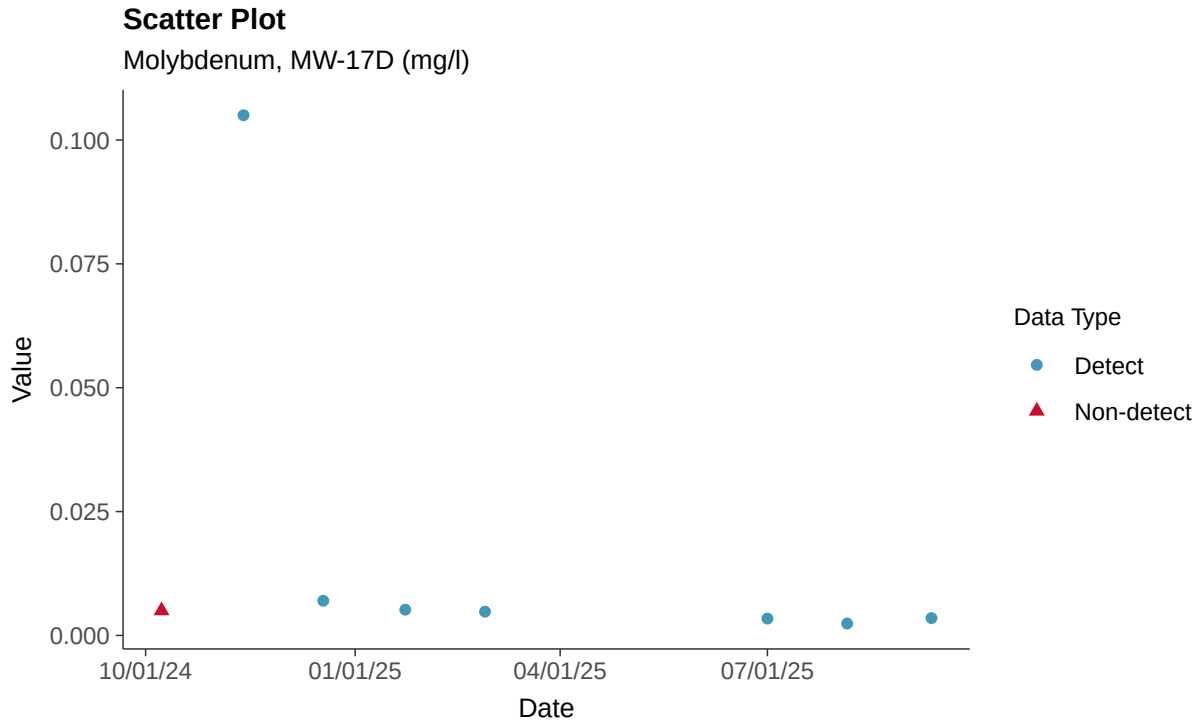
Mercury, MW-17D (mg/l)

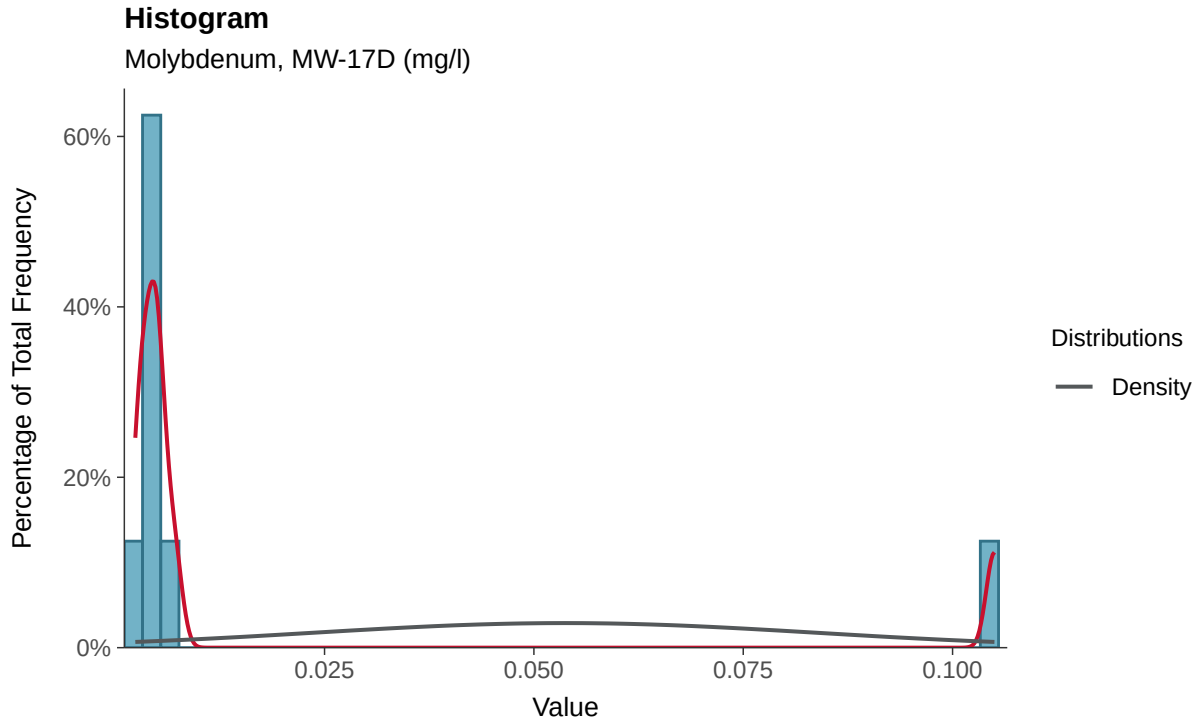



Trend Regression: Piecewise Linear-Linear
Mercury, MW-17D (mg/l)
Value
0.000200
0.000175
0.000150
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Molybdenum, MW-17D

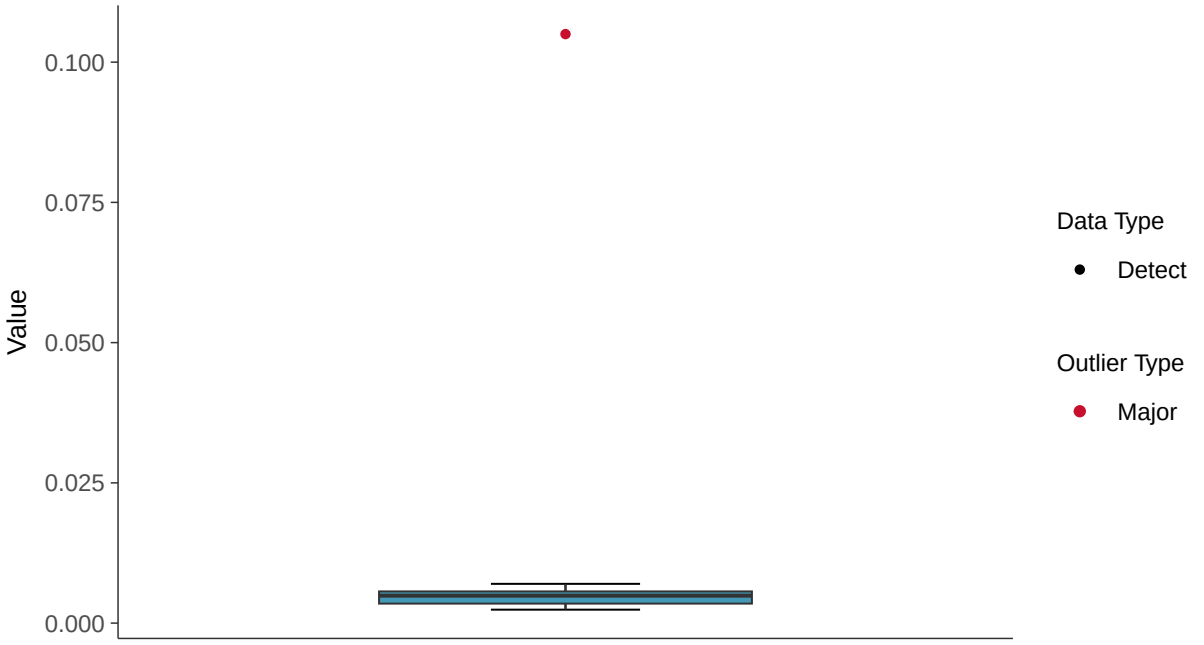
ID: 16_3_118





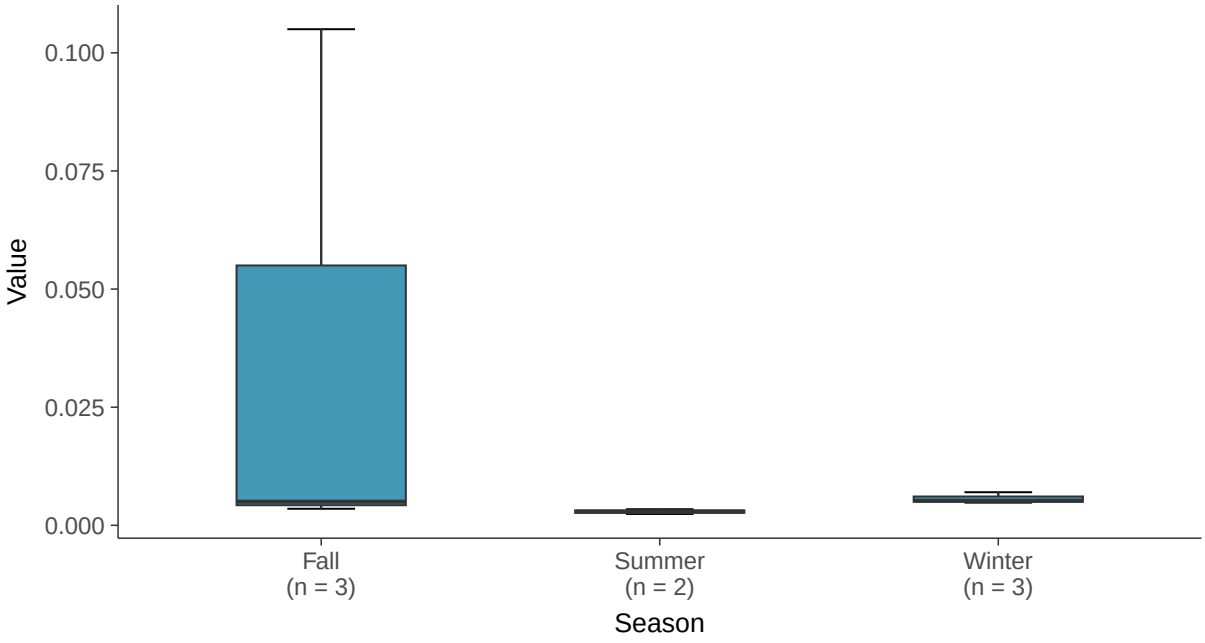
Boxplot

Molybdenum, MW-17D (mg/l)



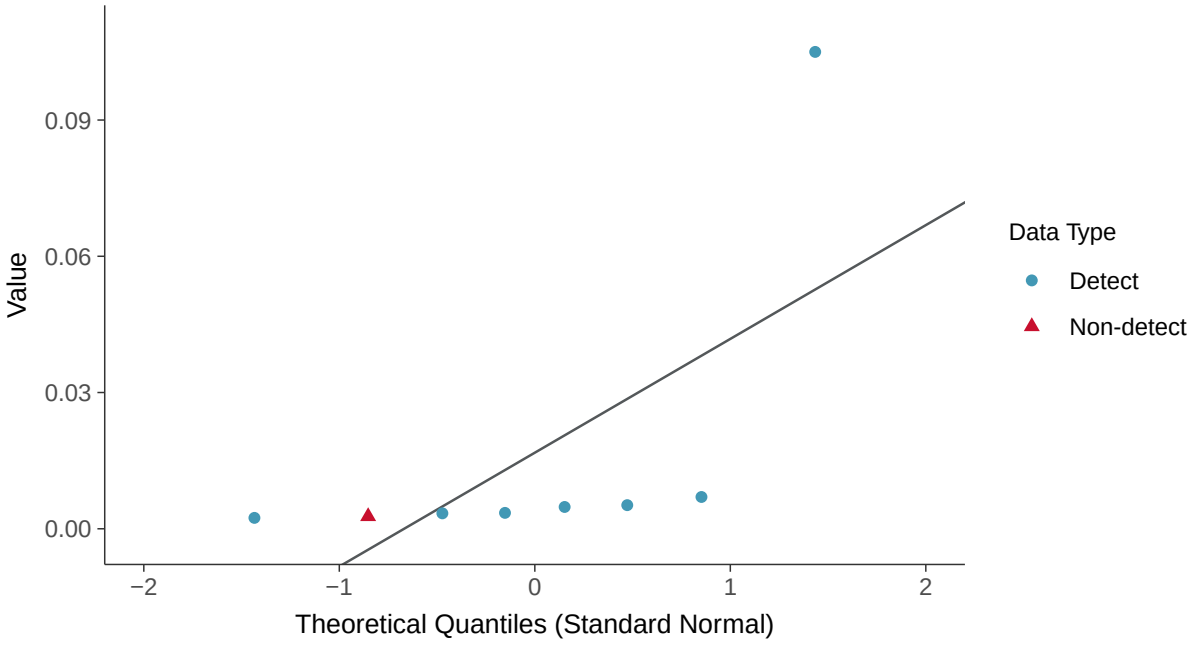
Boxplot by Season

Molybdenum, MW-17D (mg/l)



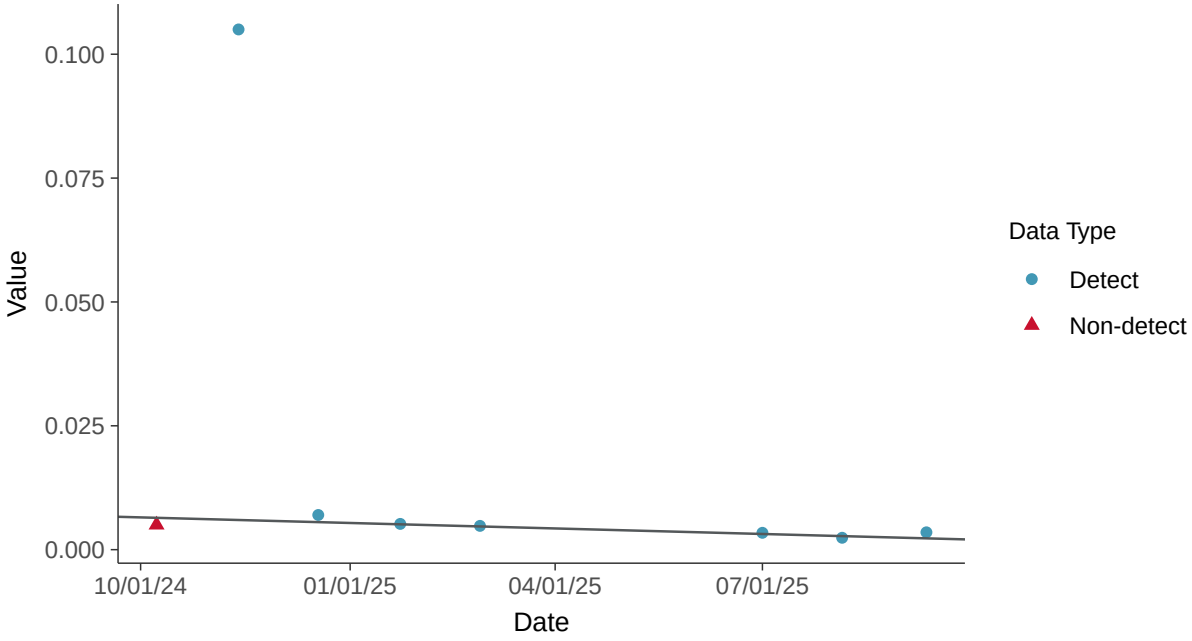
Normal Q-Q plot using ROS Imputed Estimates

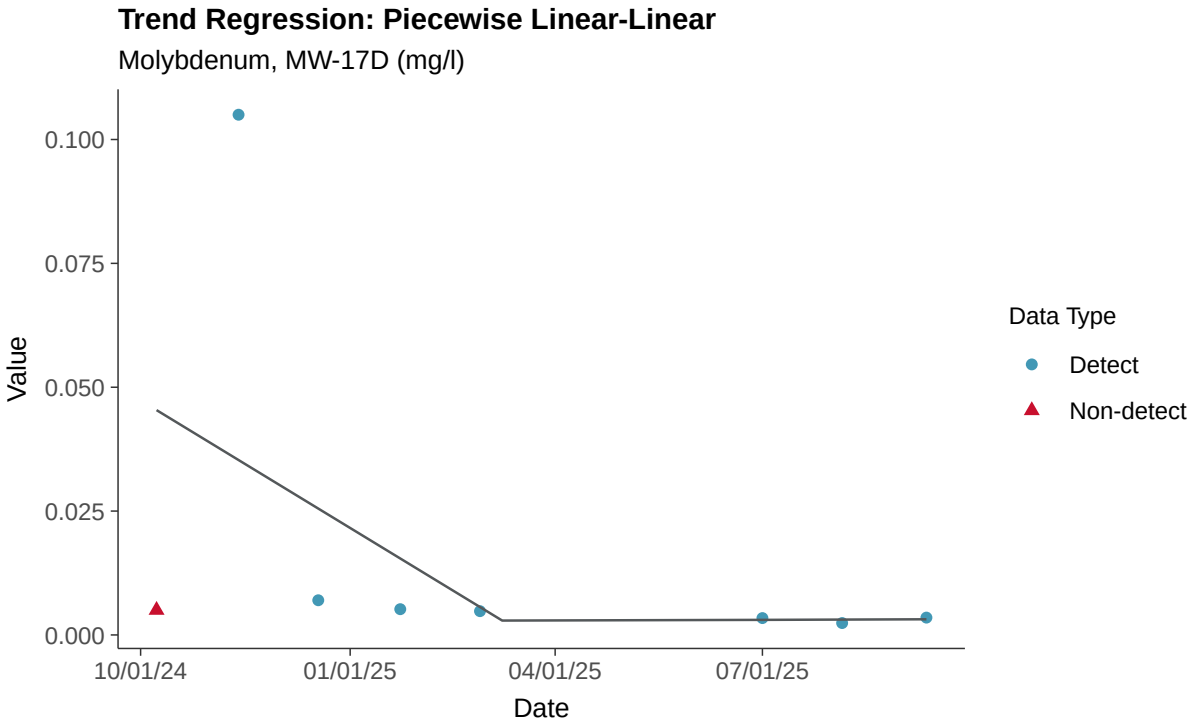
Molybdenum, MW-17D (mg/l)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

Molybdenum, MW-17D (mg/l)



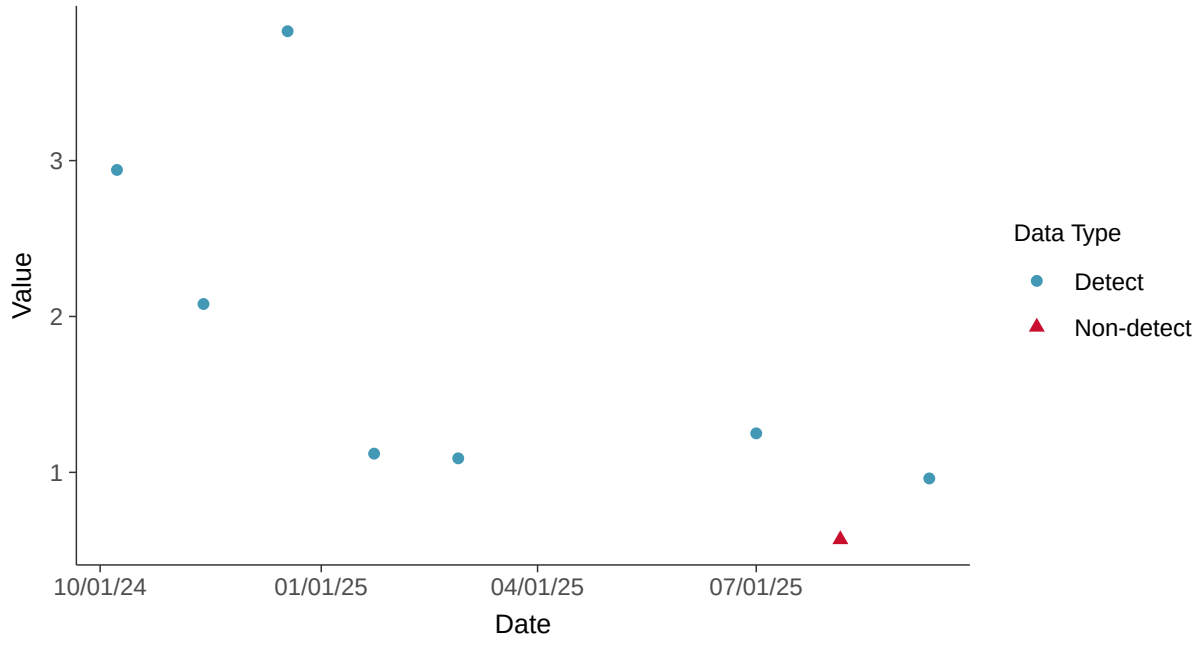

Trend Regression: Piecewise Linear-Linear
Molybdenum, MW-17D (mg/l)
Value
0.100
0.075
0.050
0.025
0.000
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Radium-226+228, MW-17D

ID: 16_3_121

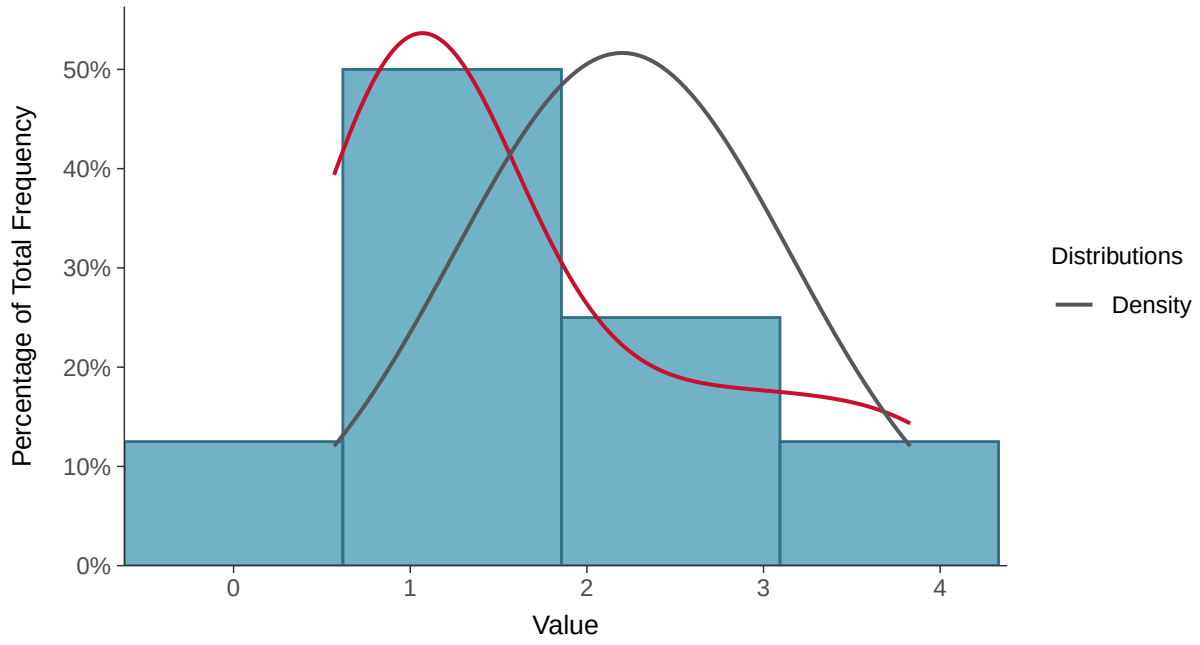
Scatter Plot

Radium-226+228, MW-17D (pci/l)



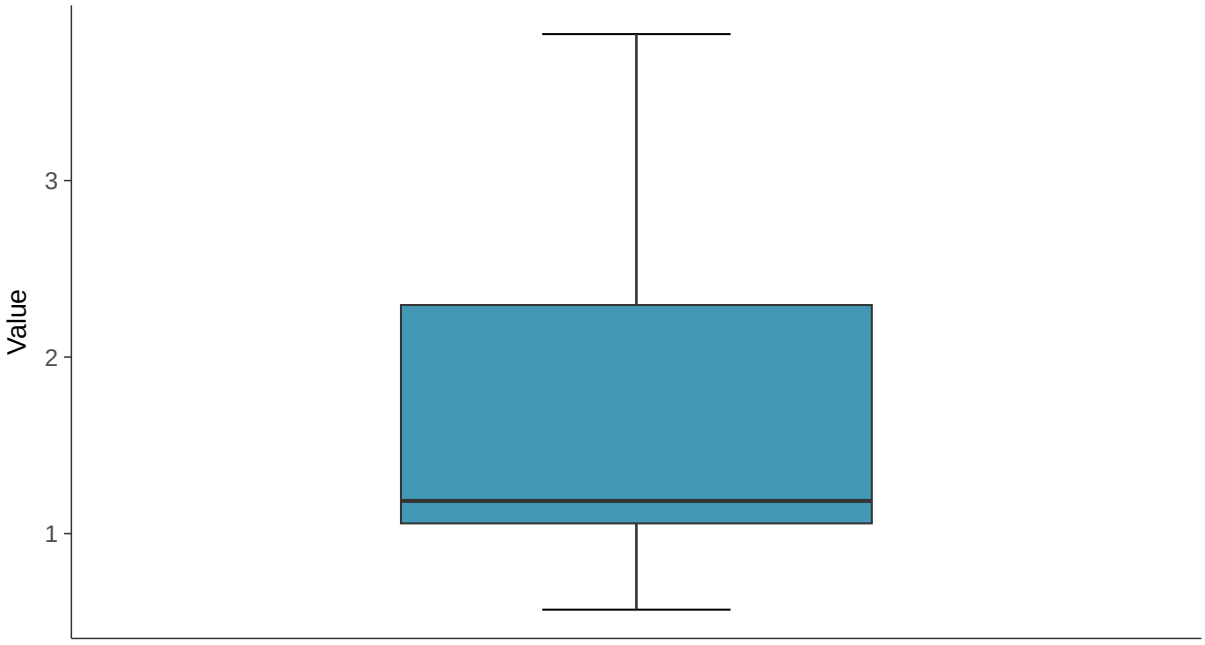
Histogram

Radium-226+228, MW-17D (pci/l)



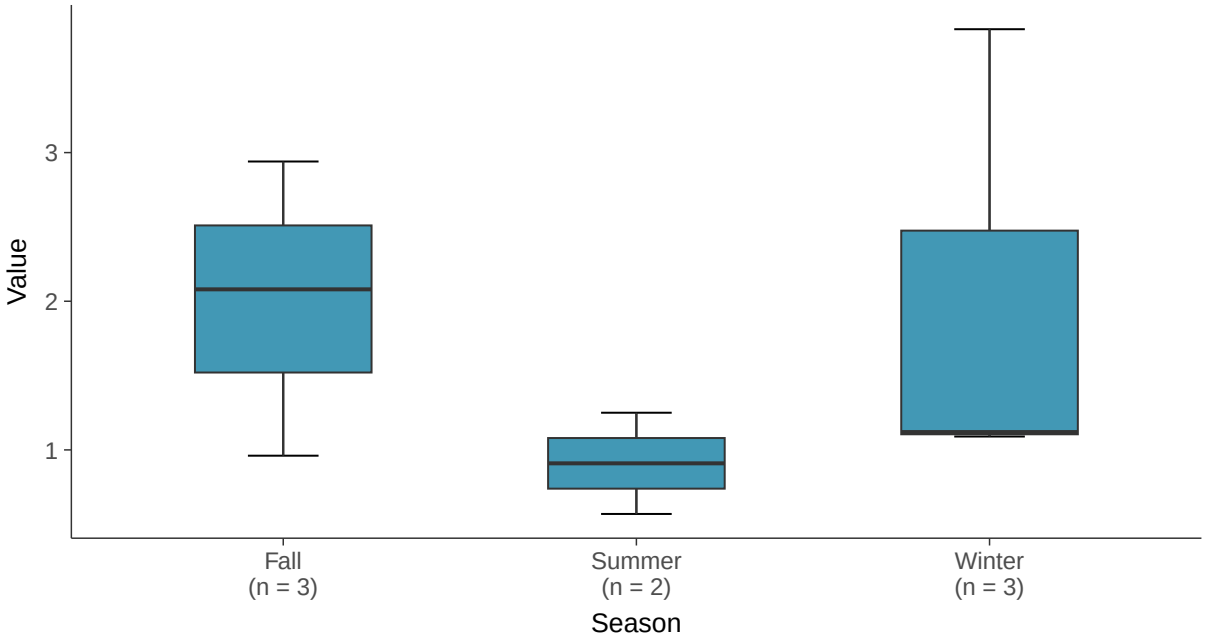
Boxplot

Radium-226+228, MW-17D (pci/l)



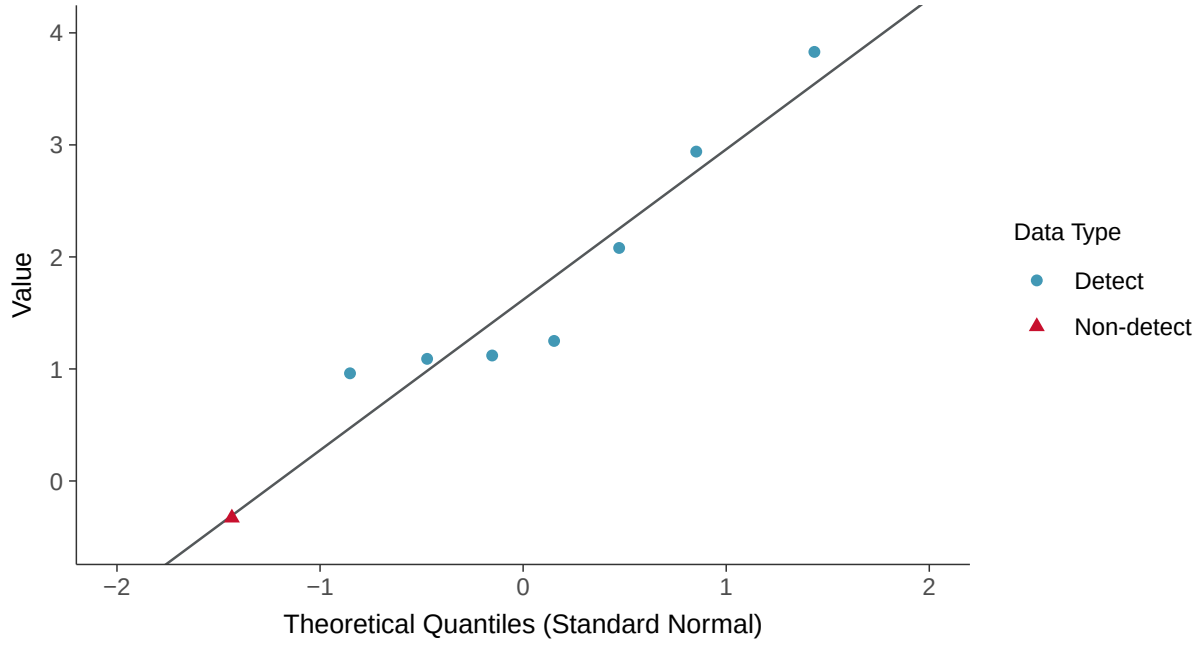
Boxplot by Season

Radium-226+228, MW-17D (pci/l)



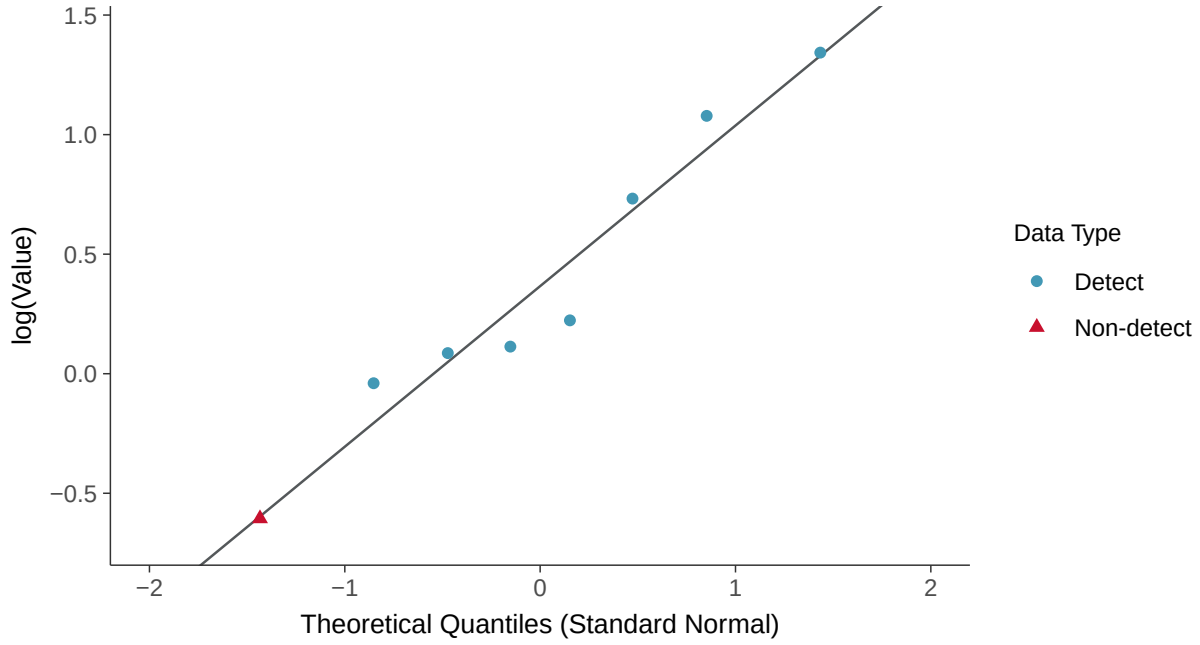
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17D (pci/l)



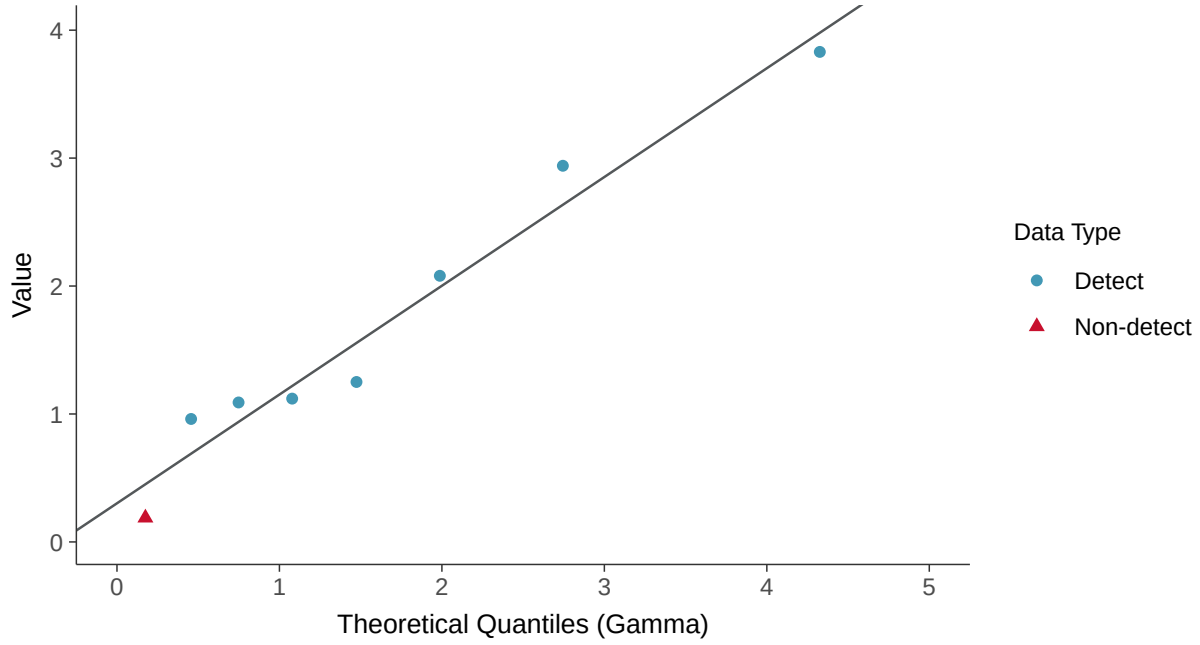
Lognormal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17D (pci/l)



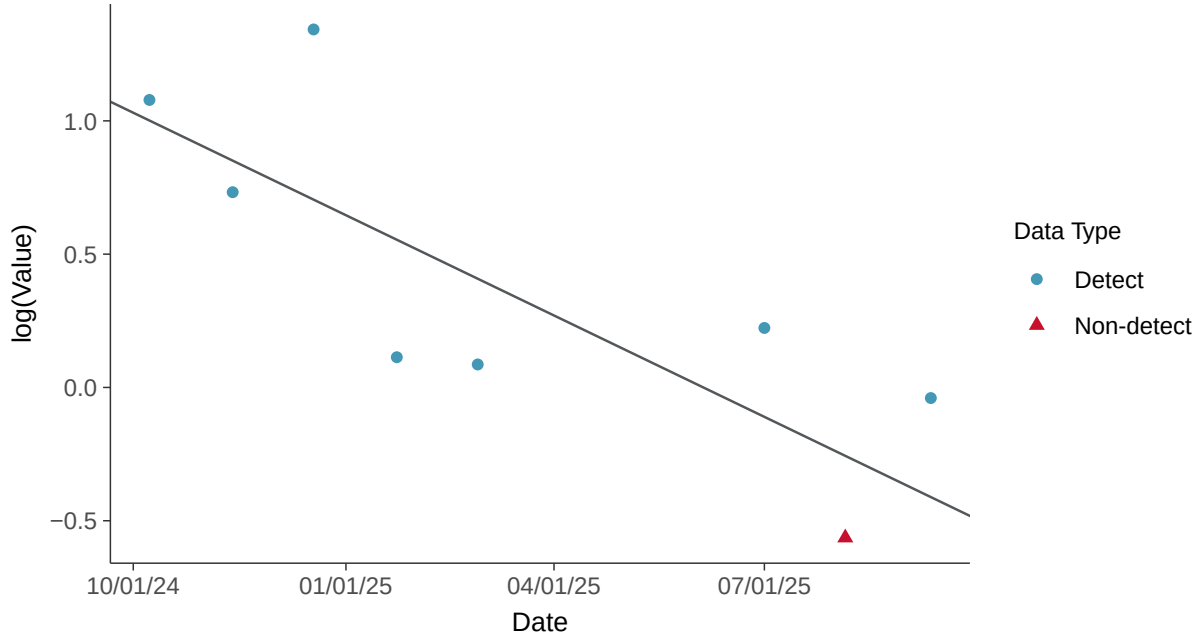
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17D (pci/l)



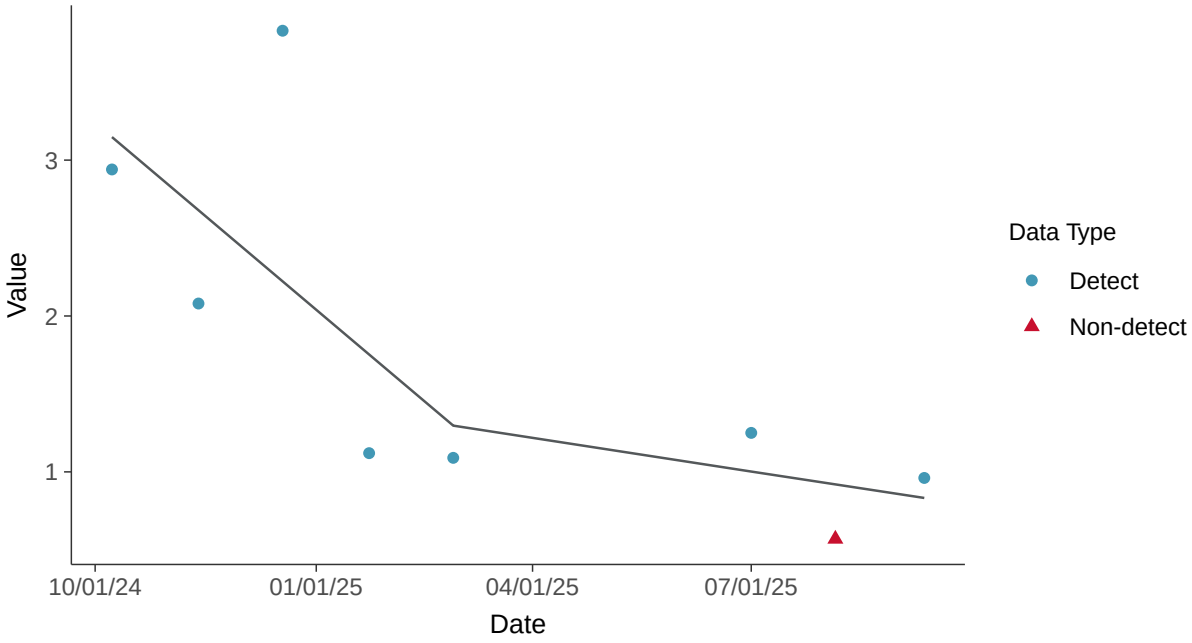
Trend Regression: Lognormal MLE

Radium-226+228, MW-17D (pci/l)



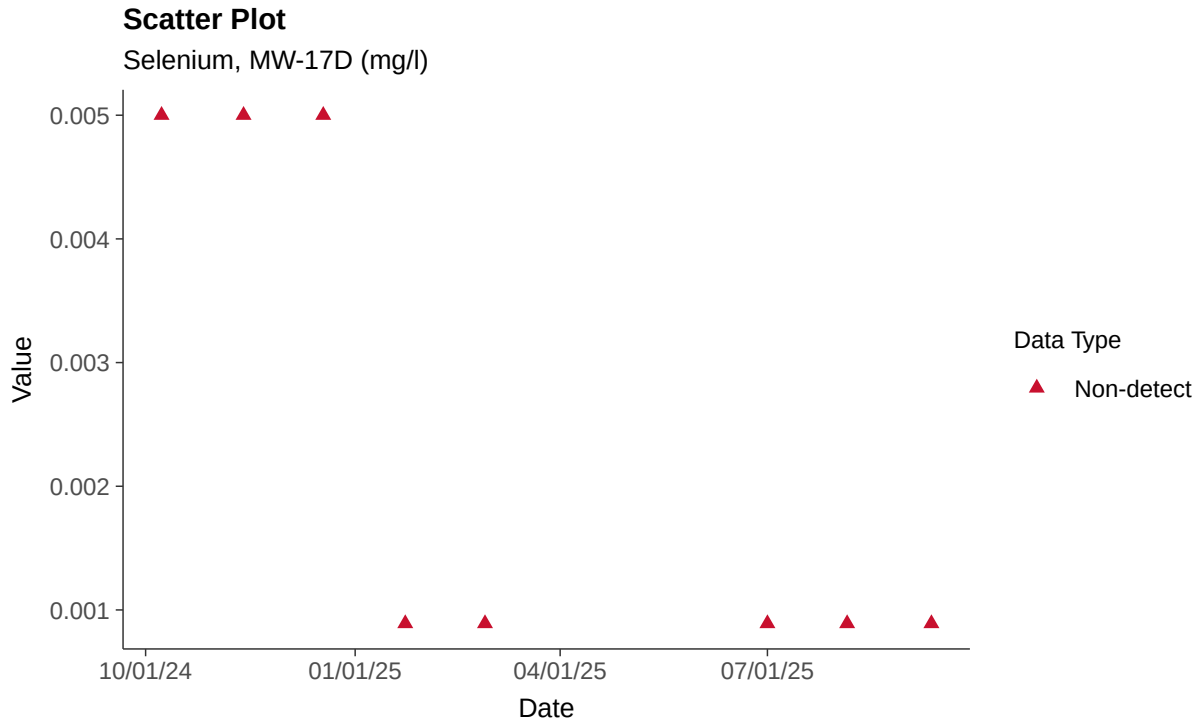
Trend Regression: Piecewise Linear-Linear

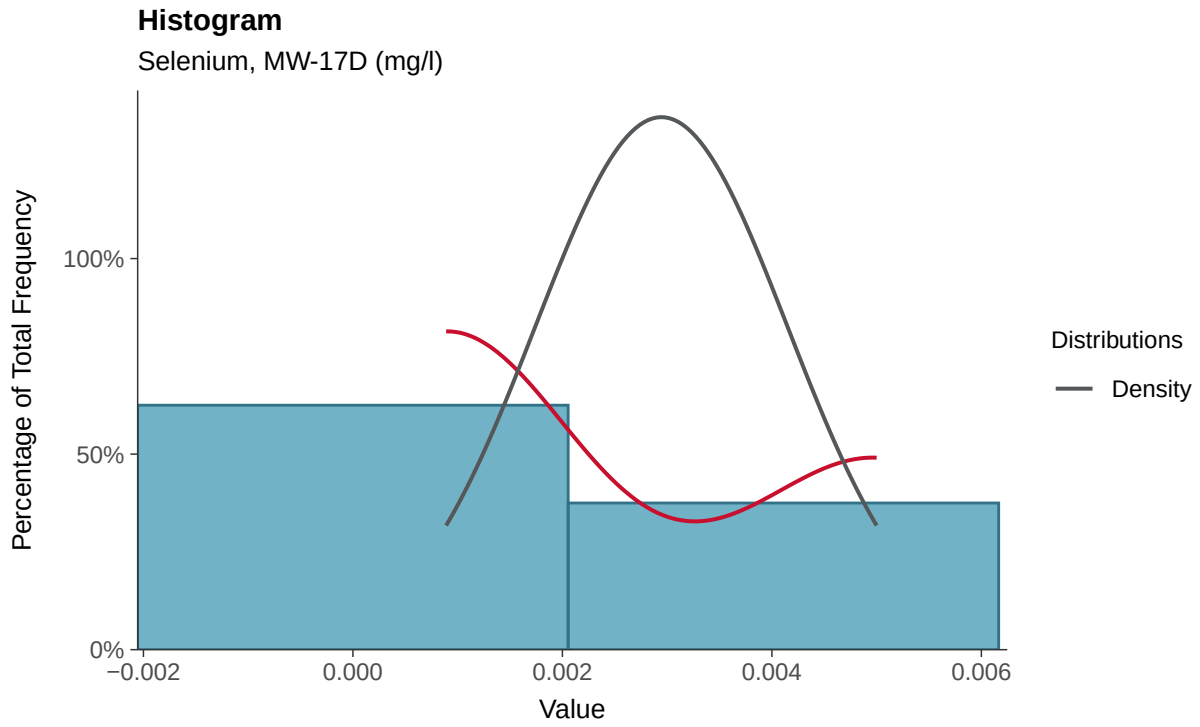
Radium-226+228, MW-17D (pci/l)



Appendix IV: Selenium, MW-17D

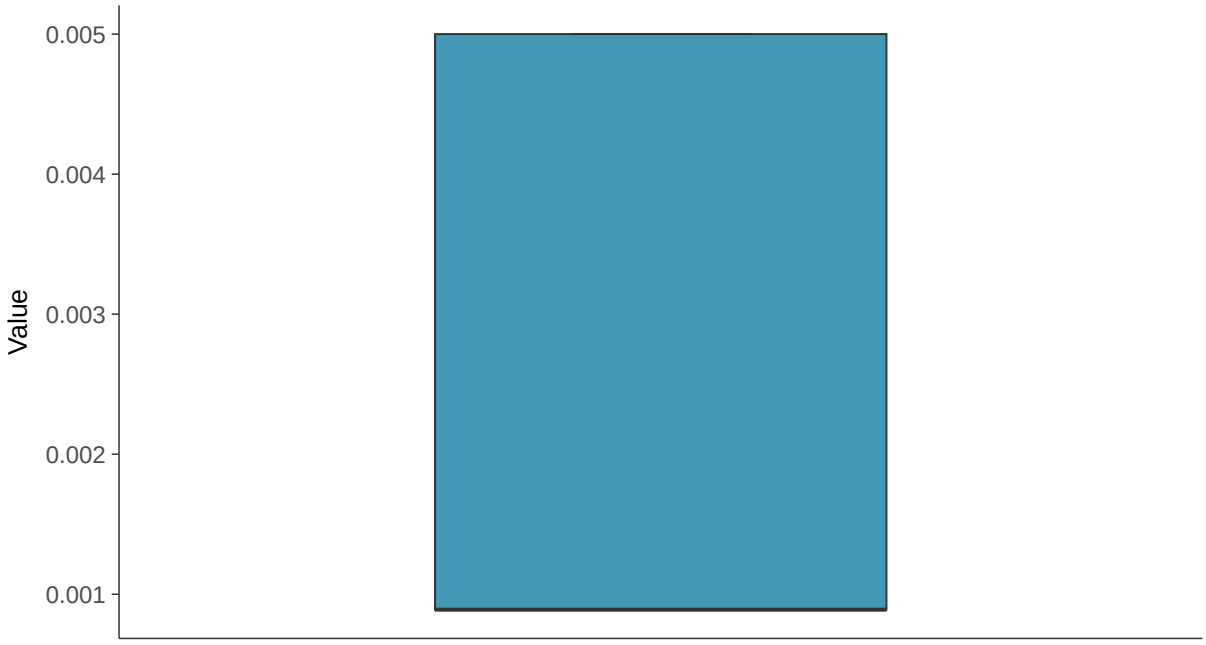
ID: 16_3_122





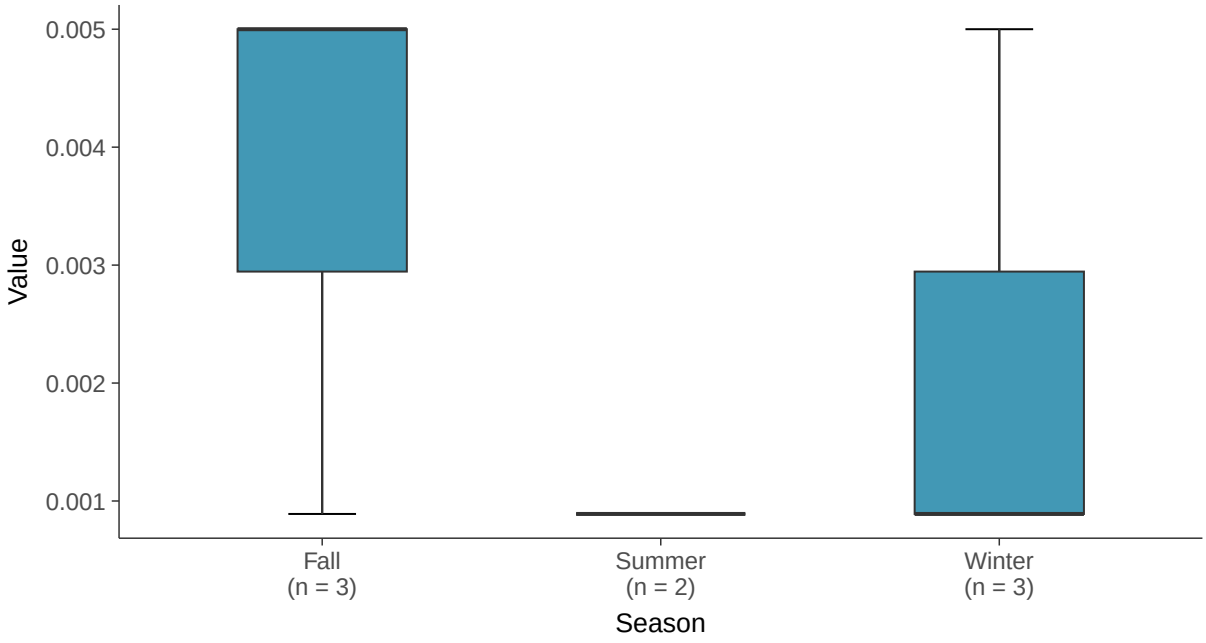
Boxplot

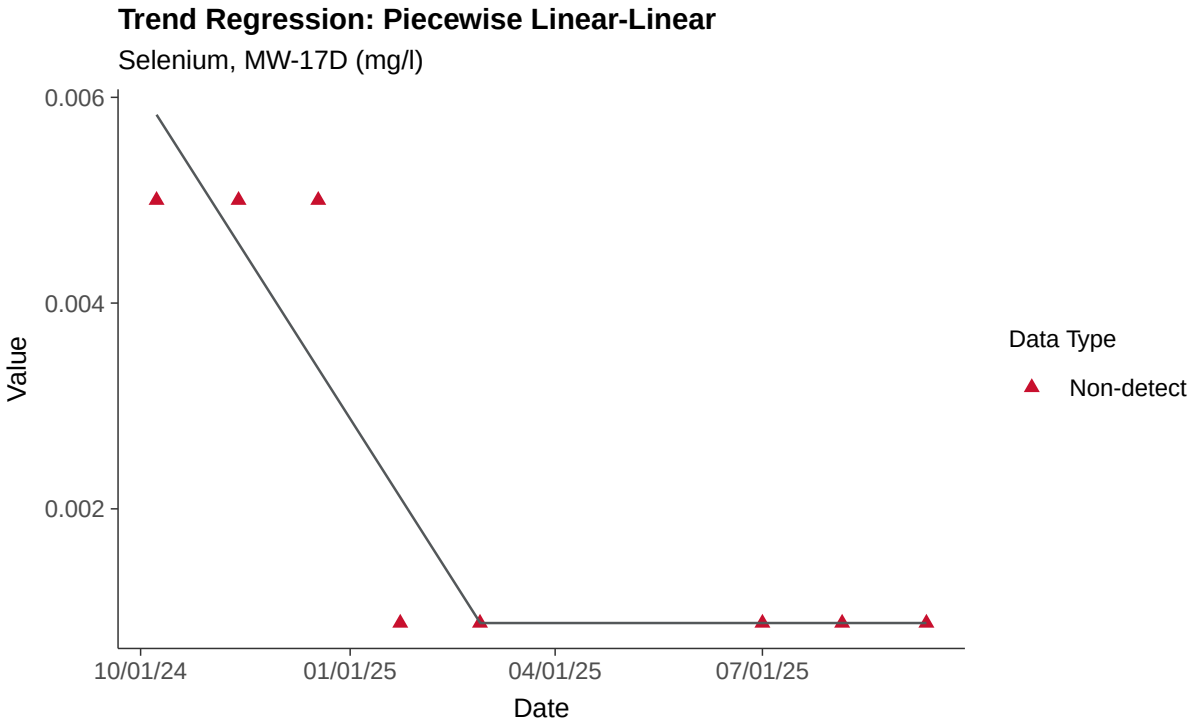
Selenium, MW-17D (mg/l)



Boxplot by Season

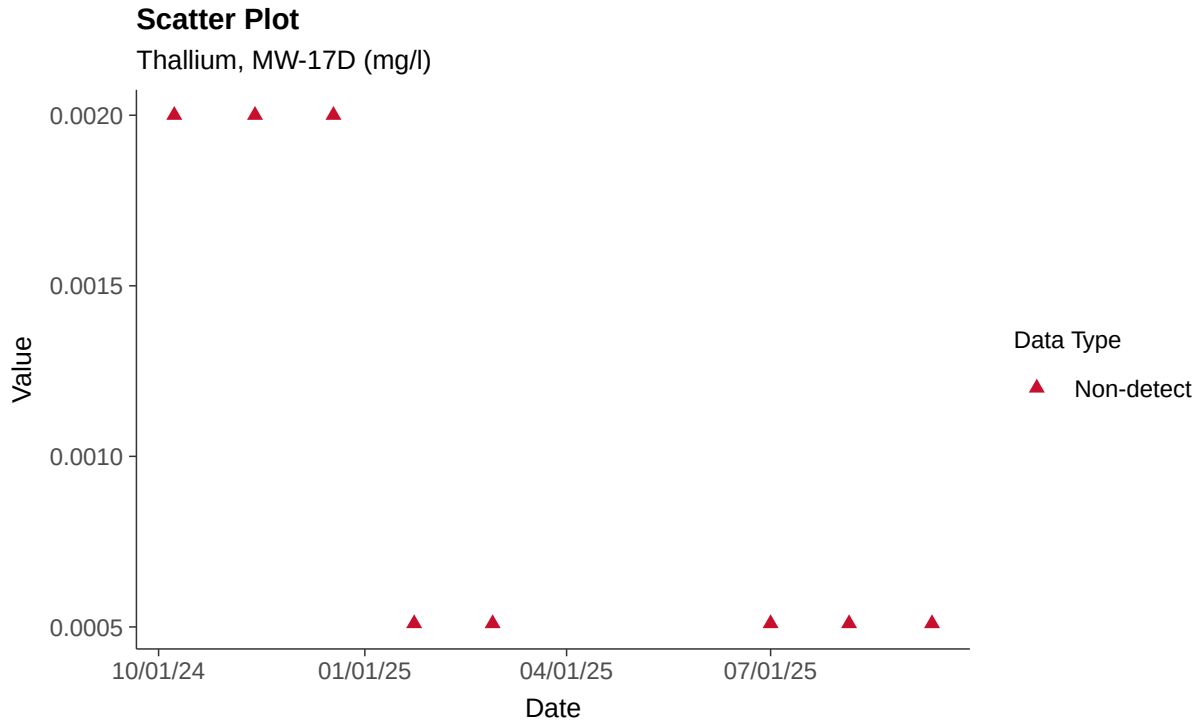
Selenium, MW-17D (mg/l)

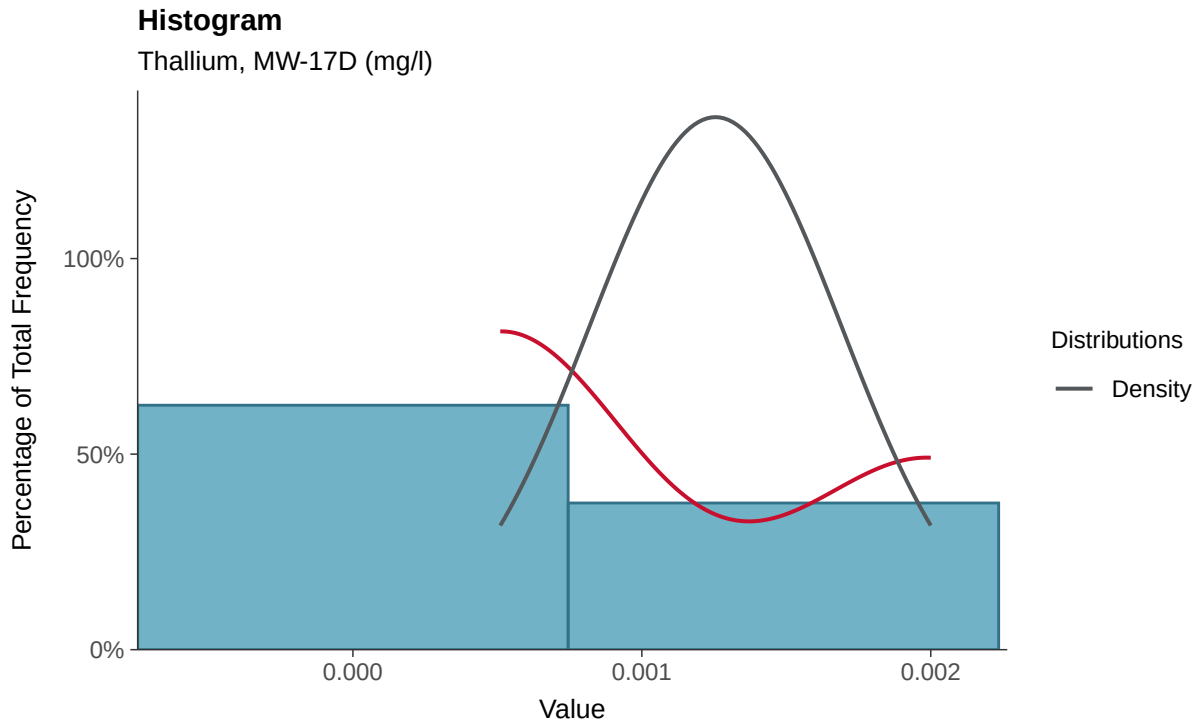



Trend Regression: Piecewise Linear-Linear
Selenium, MW-17D (mg/l)
0.006
0.004
0.002
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Thallium, MW-17D

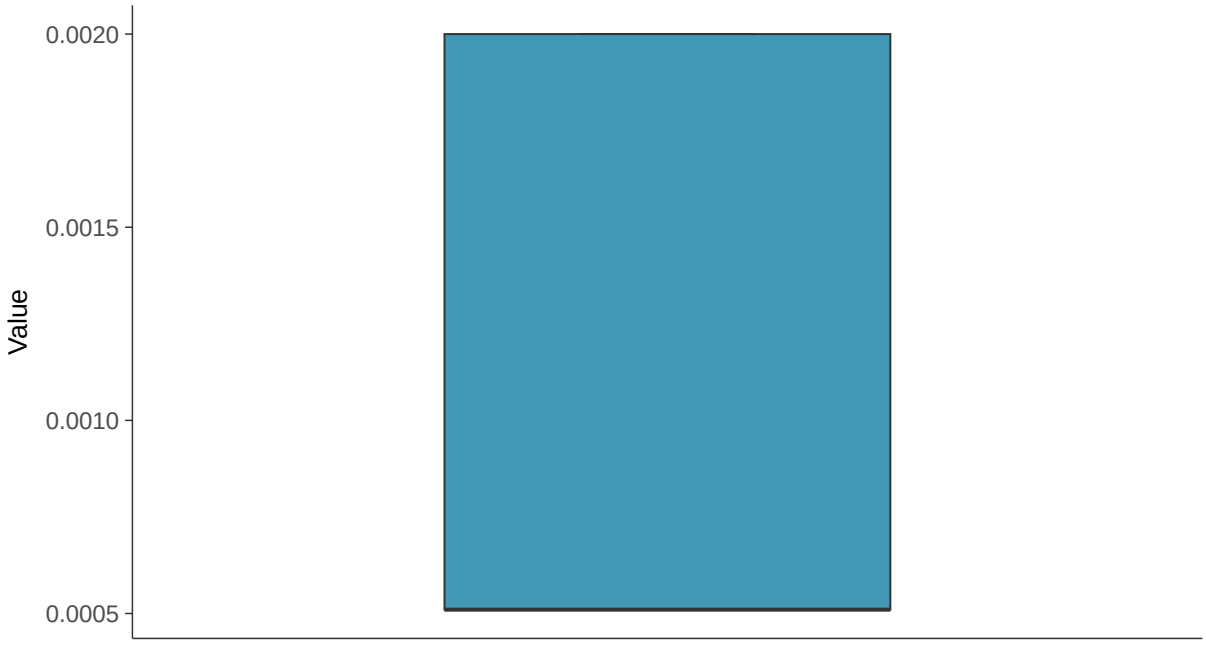
ID: 16_3_125





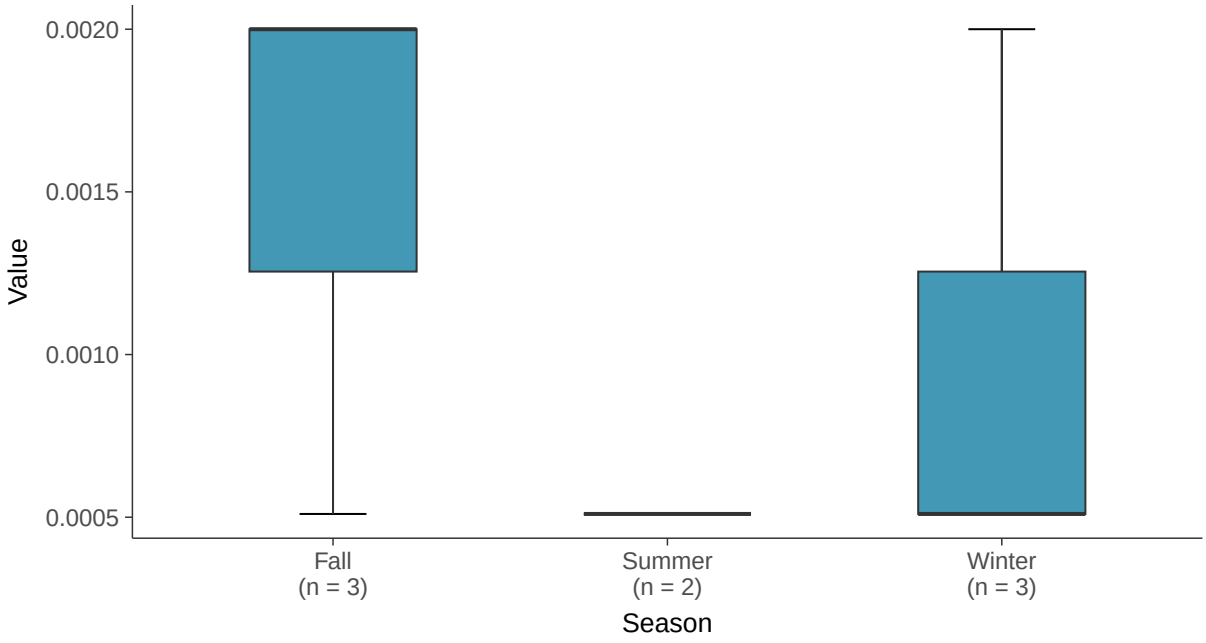
Boxplot

Thallium, MW-17D (mg/l)



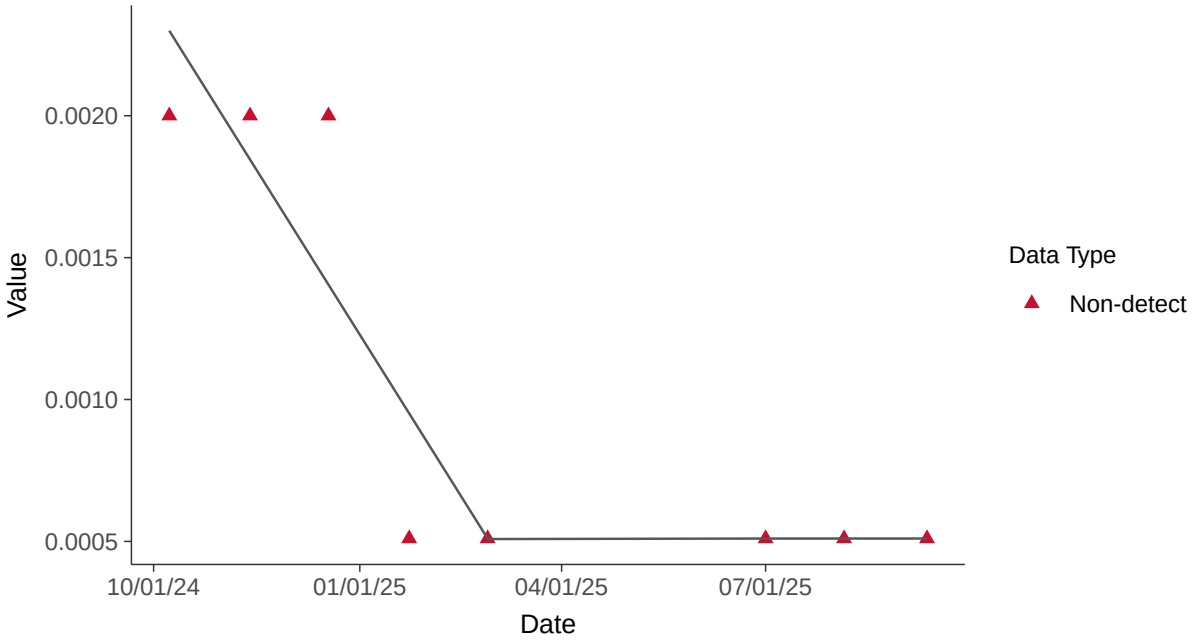
Boxplot by Season

Thallium, MW-17D (mg/l)



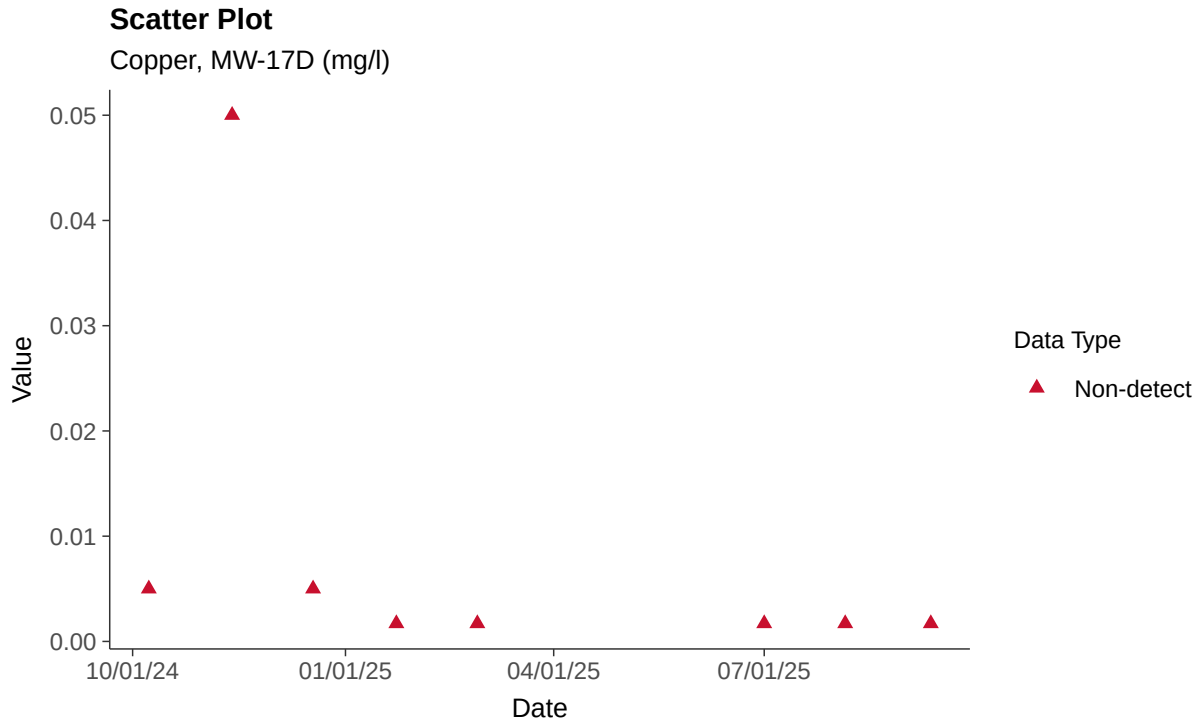
Trend Regression: Piecewise Linear-Linear

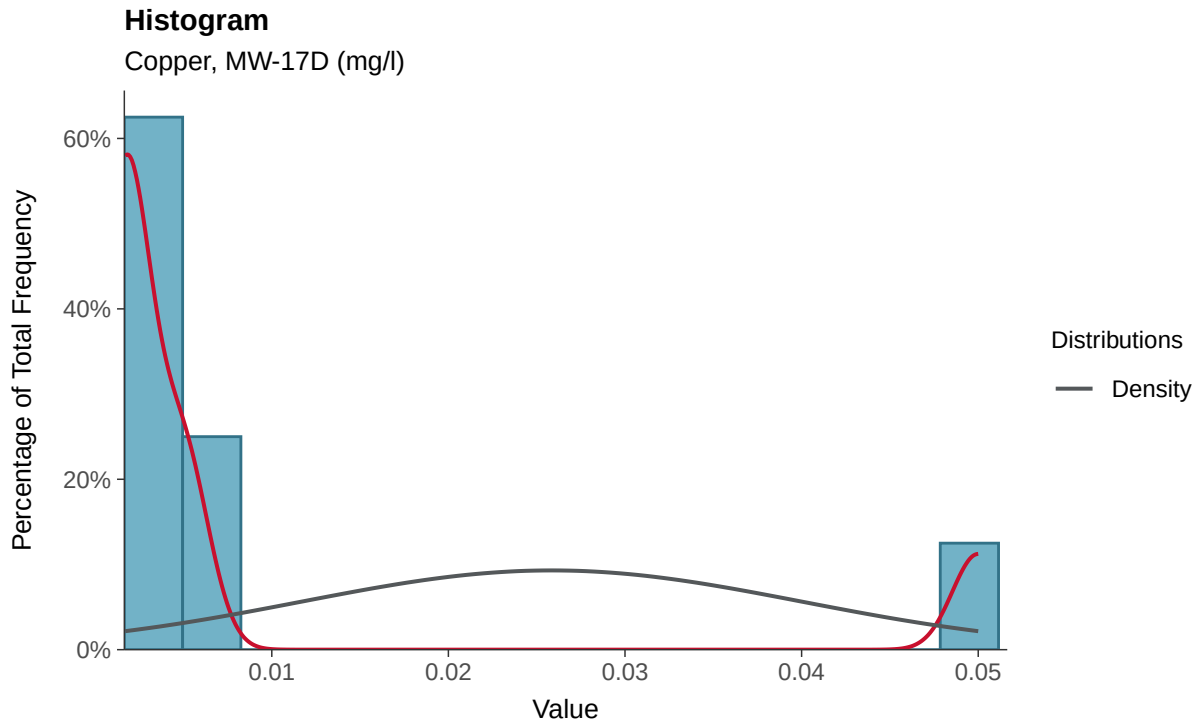
Thallium, MW-17D (mg/l)



Part 115: Copper, MW-17D

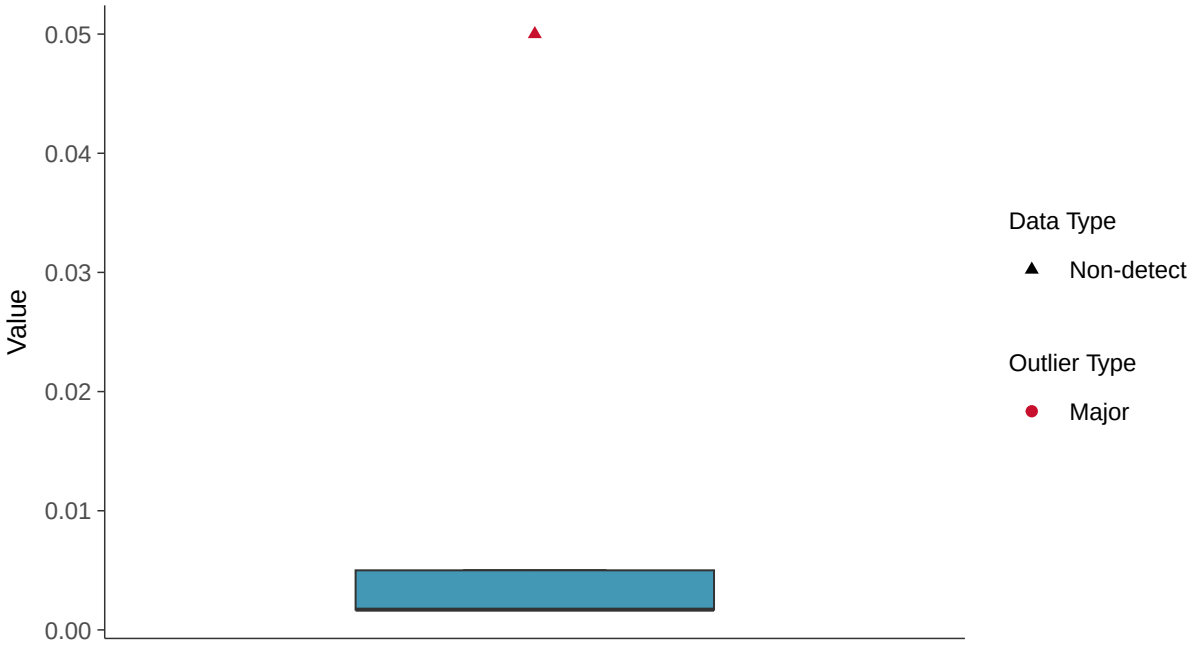
ID: 16_5_111





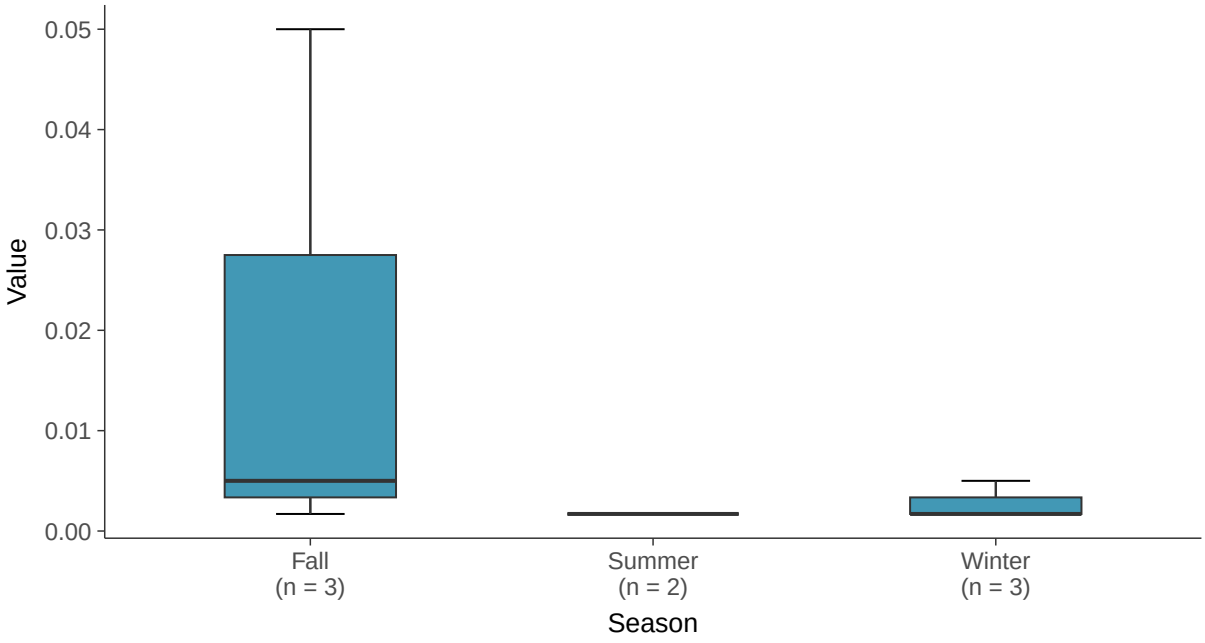
Boxplot

Copper, MW-17D (mg/l)



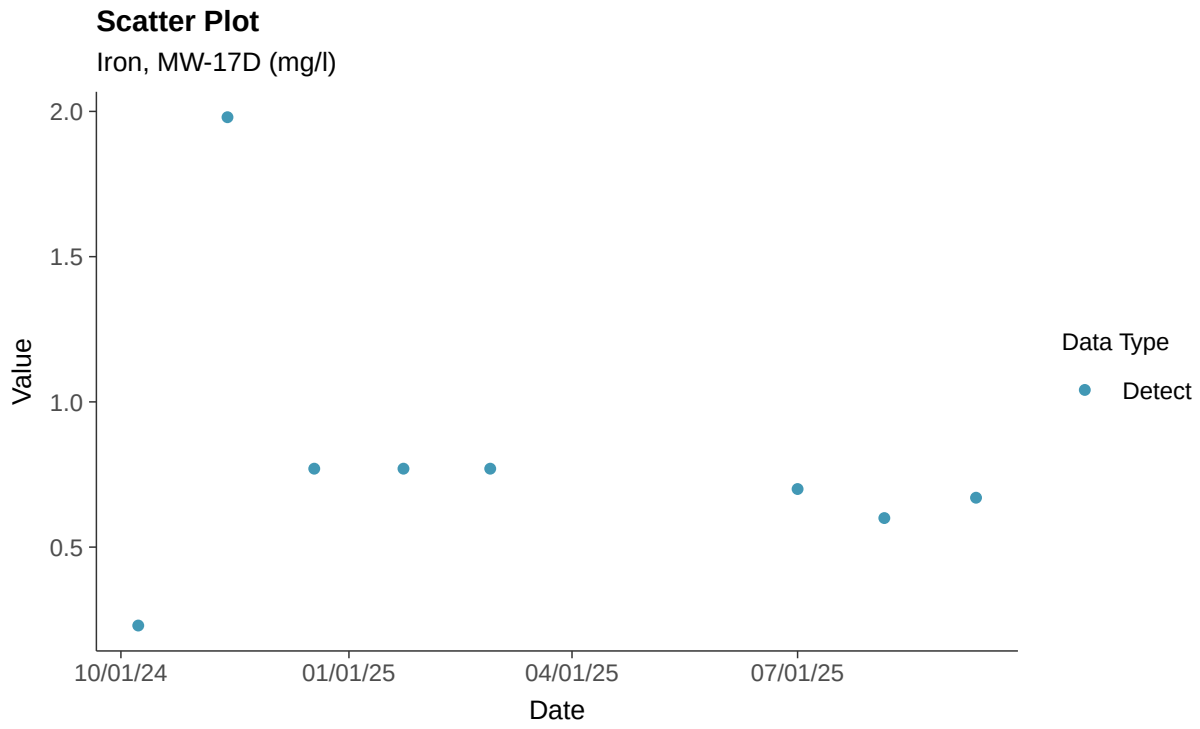
Boxplot by Season

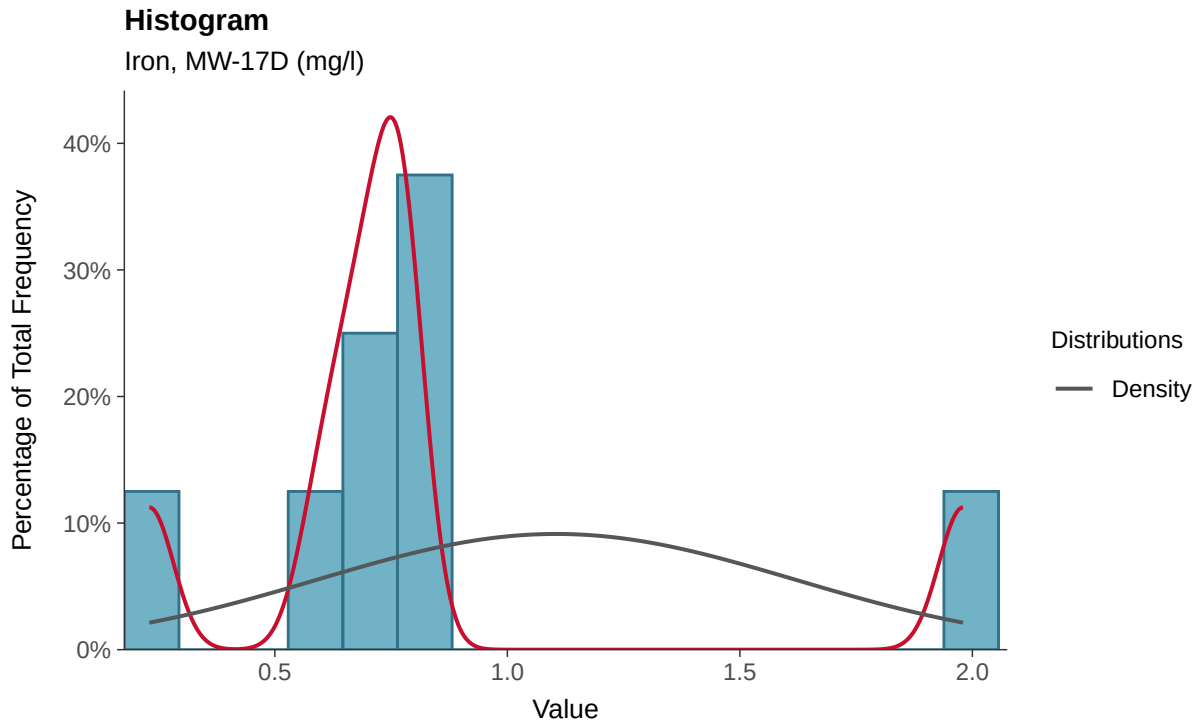
Copper, MW-17D (mg/l)



Part 115: Iron, MW-17D

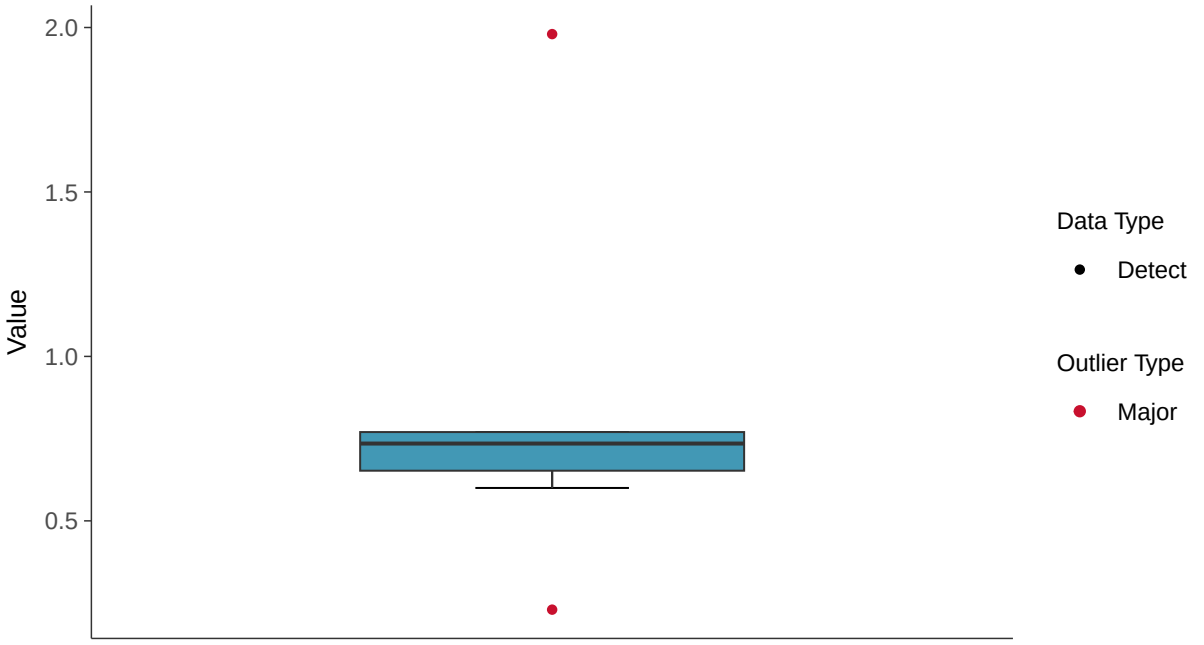
ID: 16_5_114





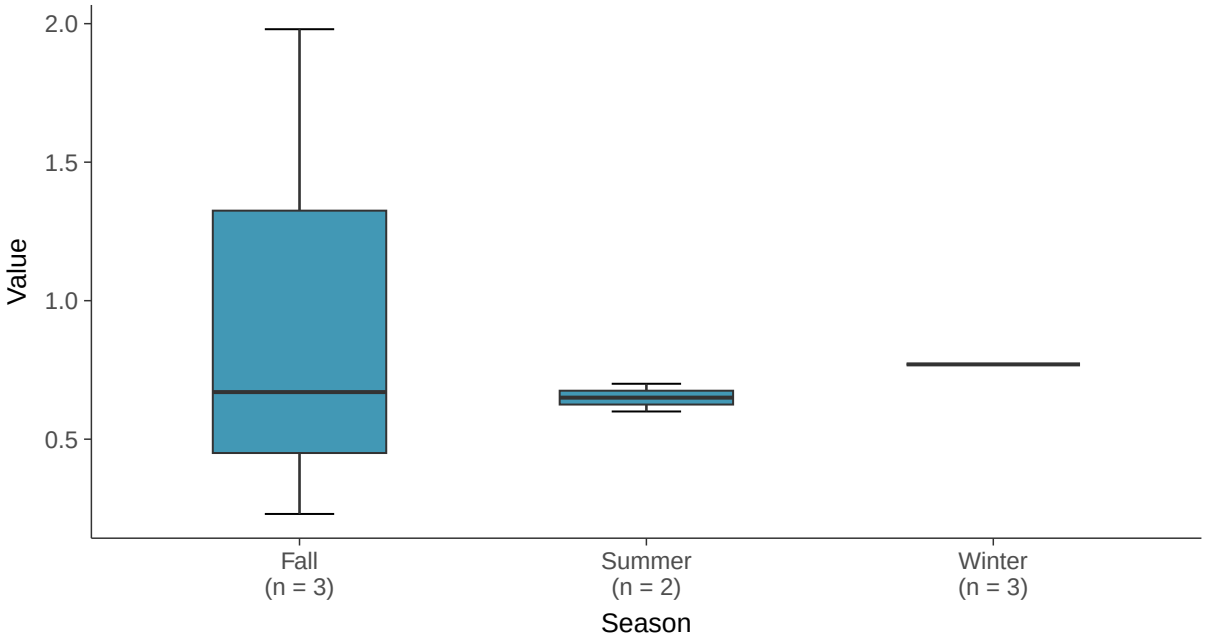
Boxplot

Iron, MW-17D (mg/l)



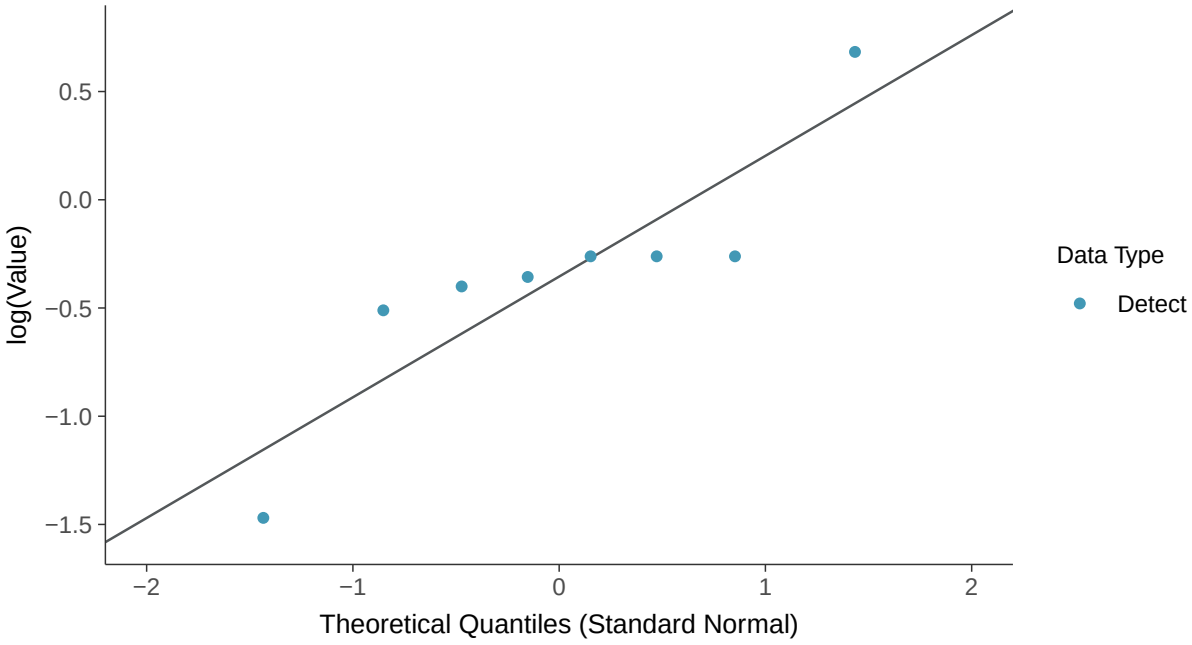
Boxplot by Season

Iron, MW-17D (mg/l)



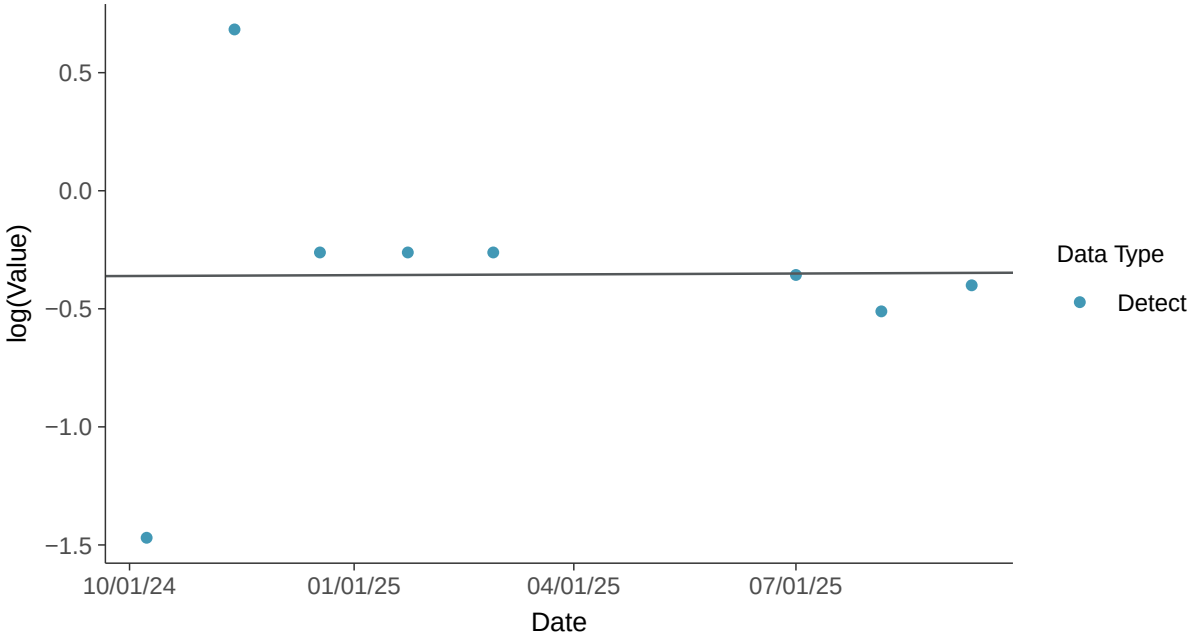
Lognormal Q-Q plot

Iron, MW-17D (mg/l)



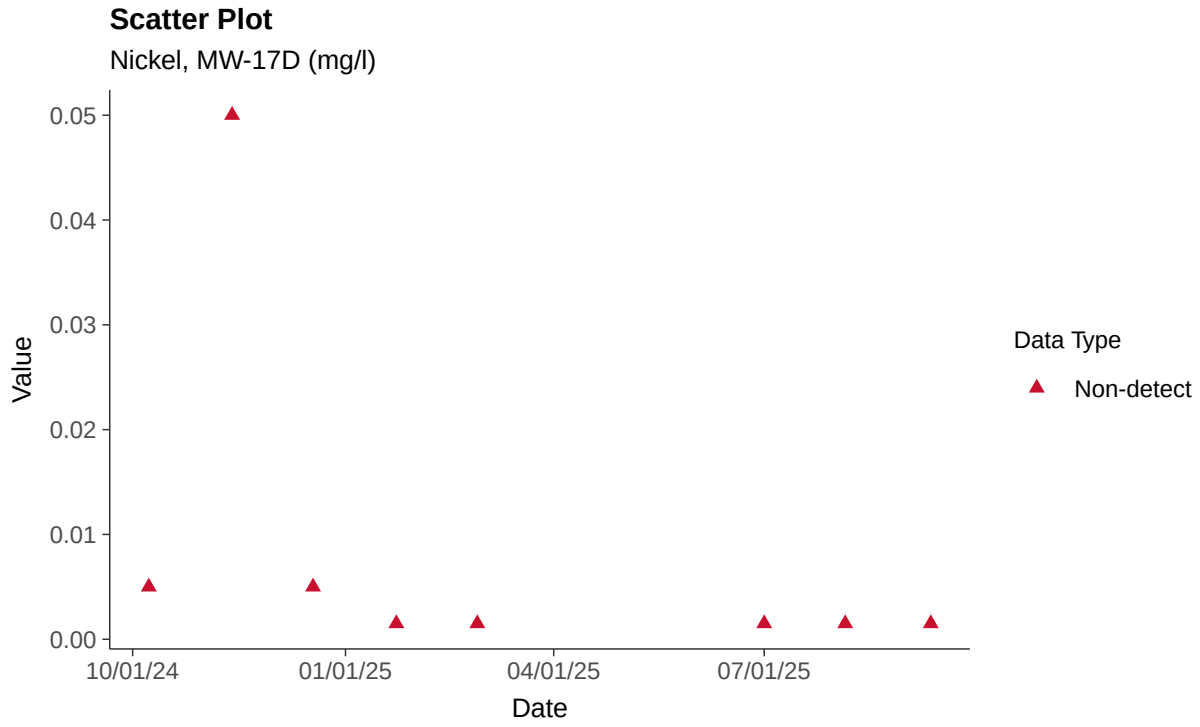
Trend Regression: Lognormal MLE

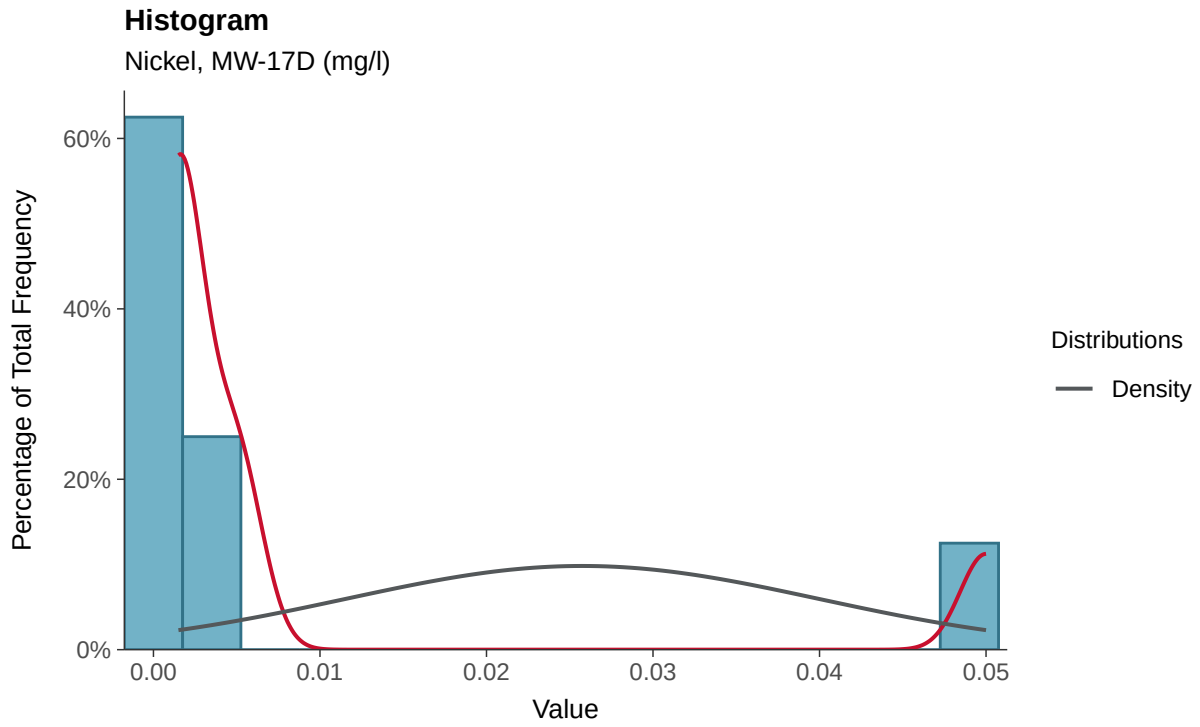
Iron, MW-17D (mg/l)



Part 115: Nickel, MW-17D

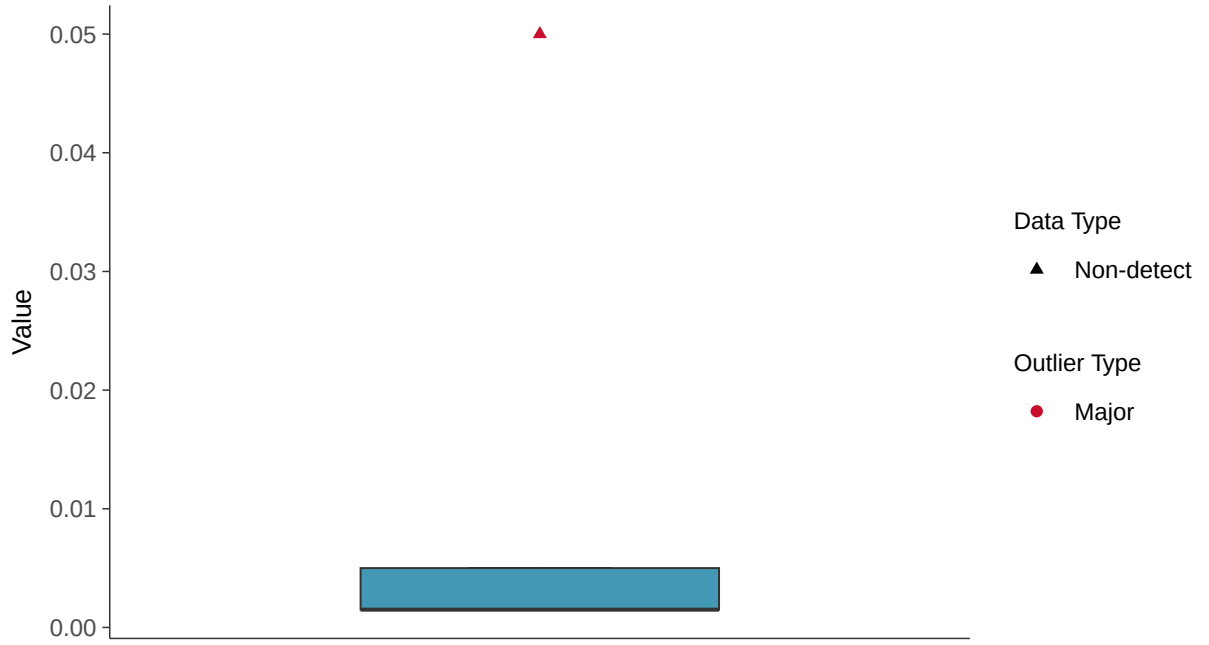
ID: 16_5_119





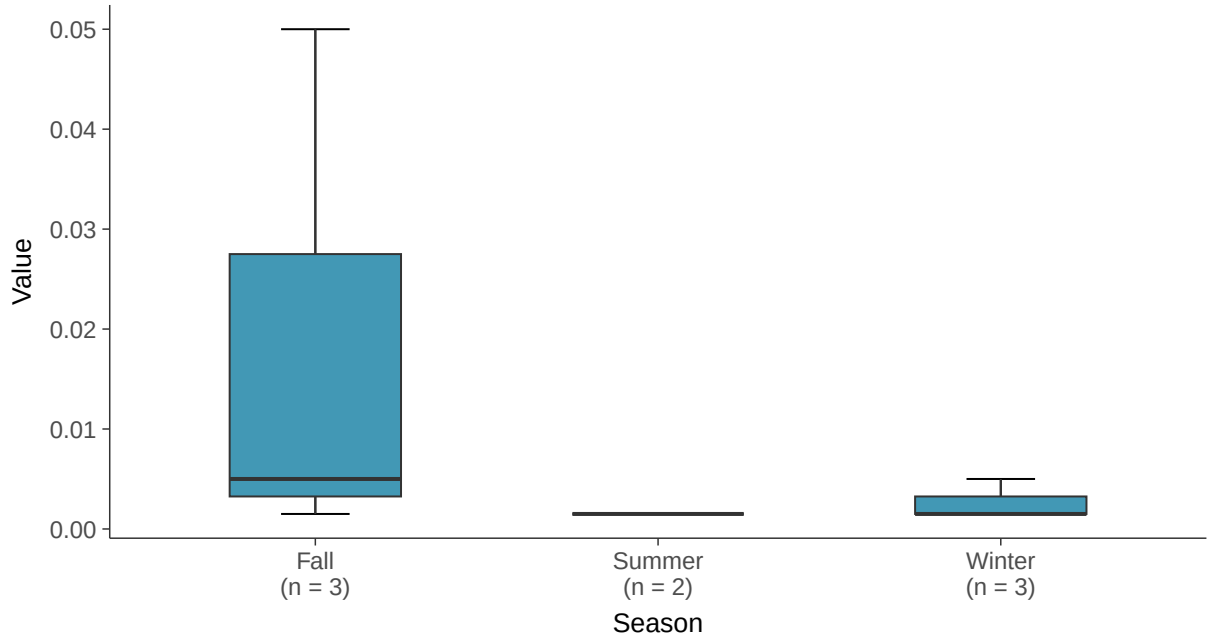
Boxplot

Nickel, MW-17D (mg/l)



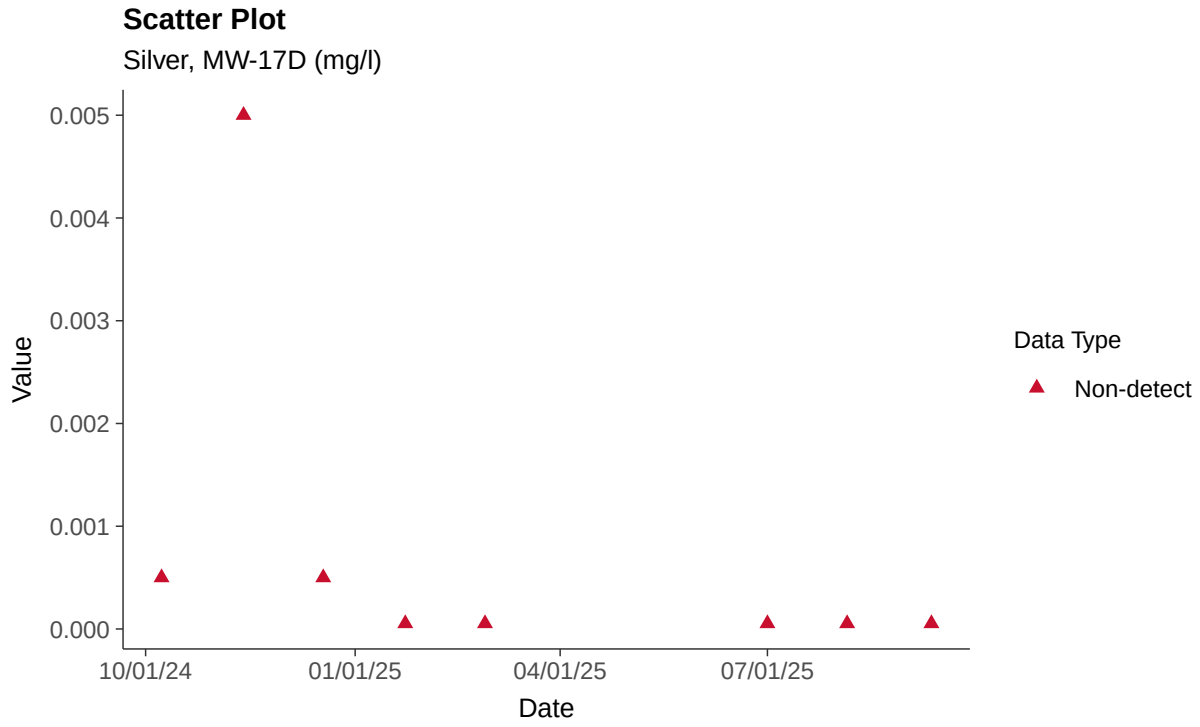
Boxplot by Season

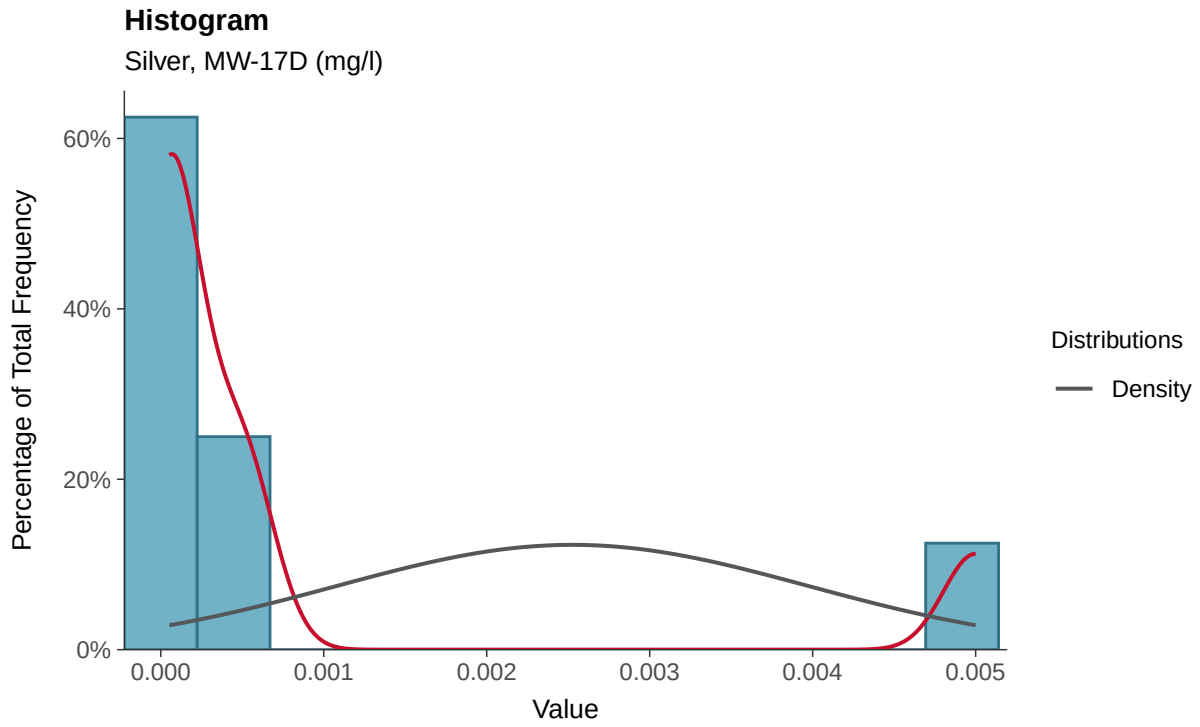
Nickel, MW-17D (mg/l)



Part 115: Silver, MW-17D

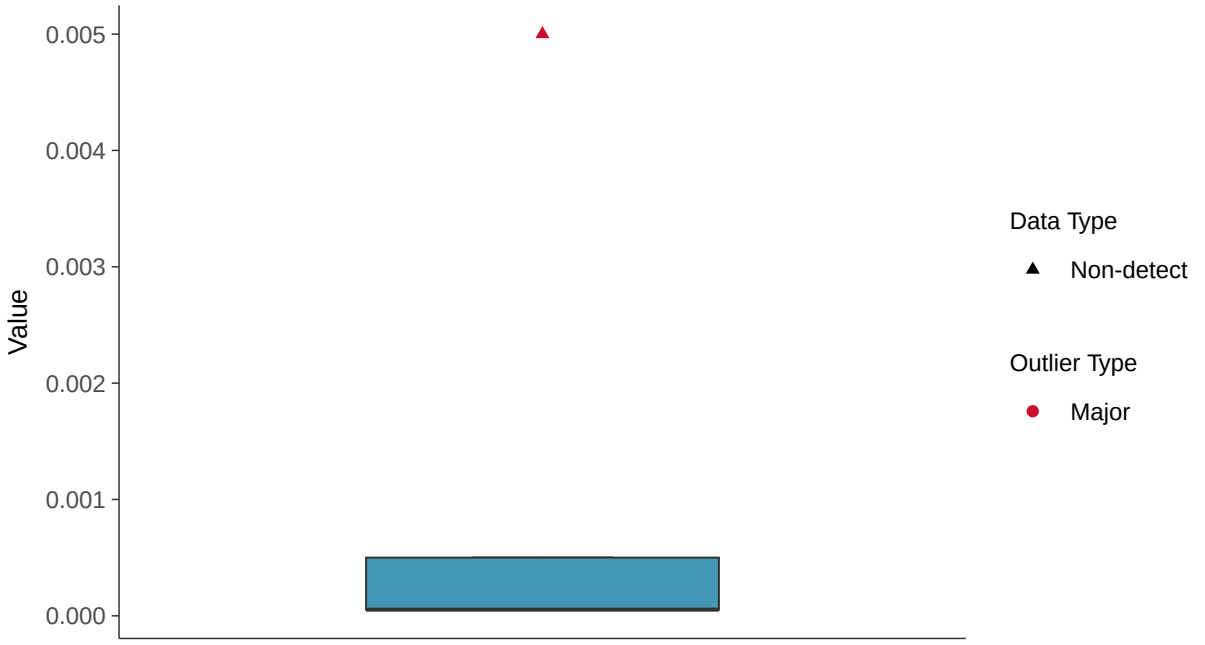
ID: 16_5_123





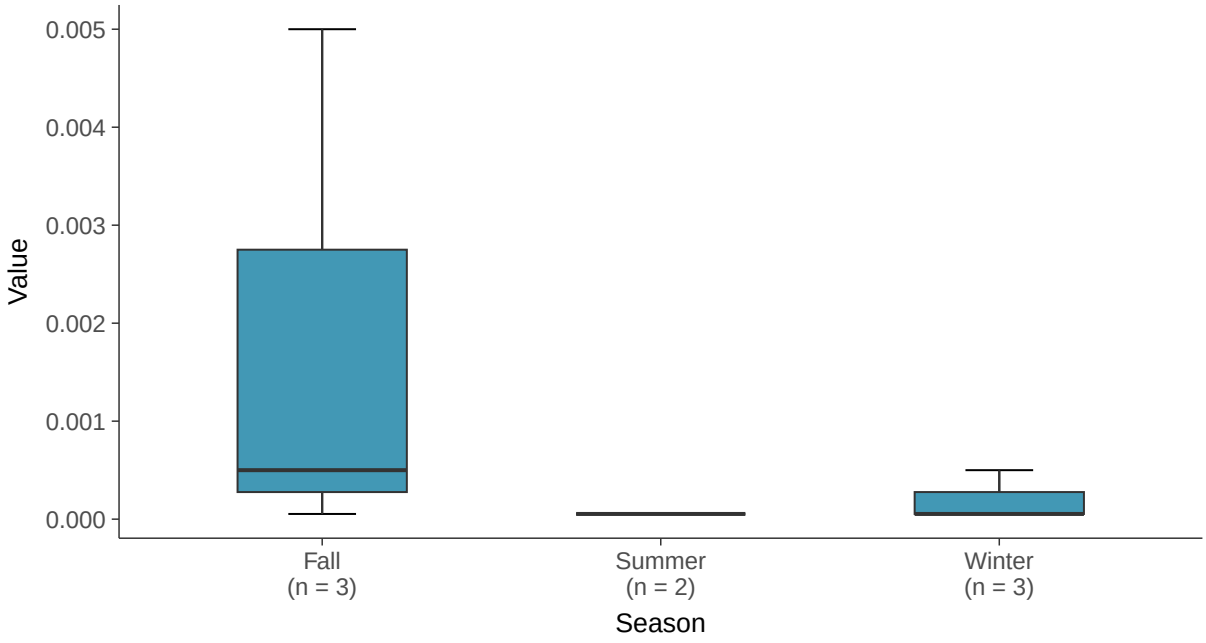
Boxplot

Silver, MW-17D (mg/l)



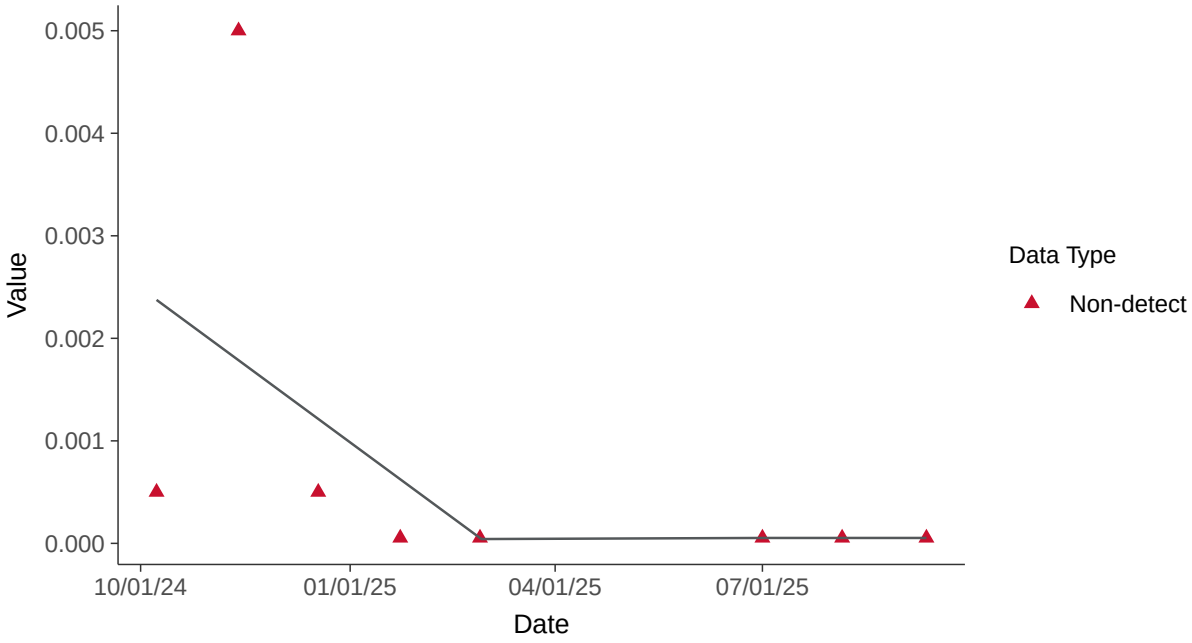
Boxplot by Season

Silver, MW-17D (mg/l)



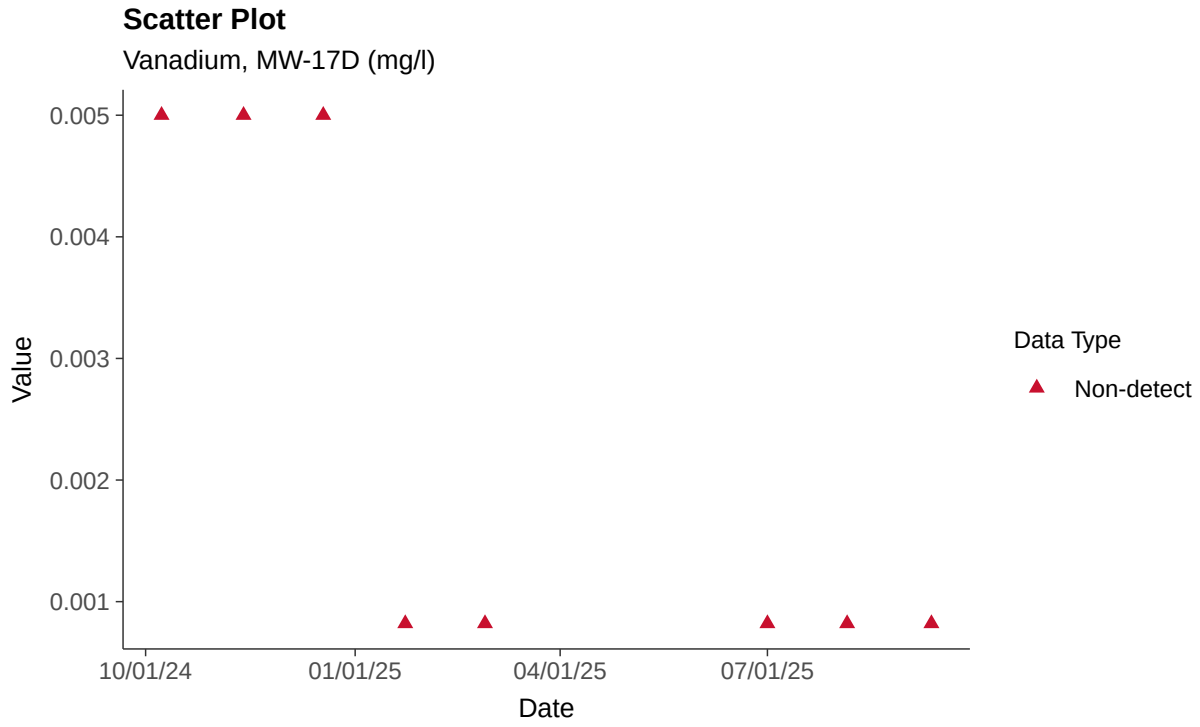
Trend Regression: Piecewise Linear-Linear

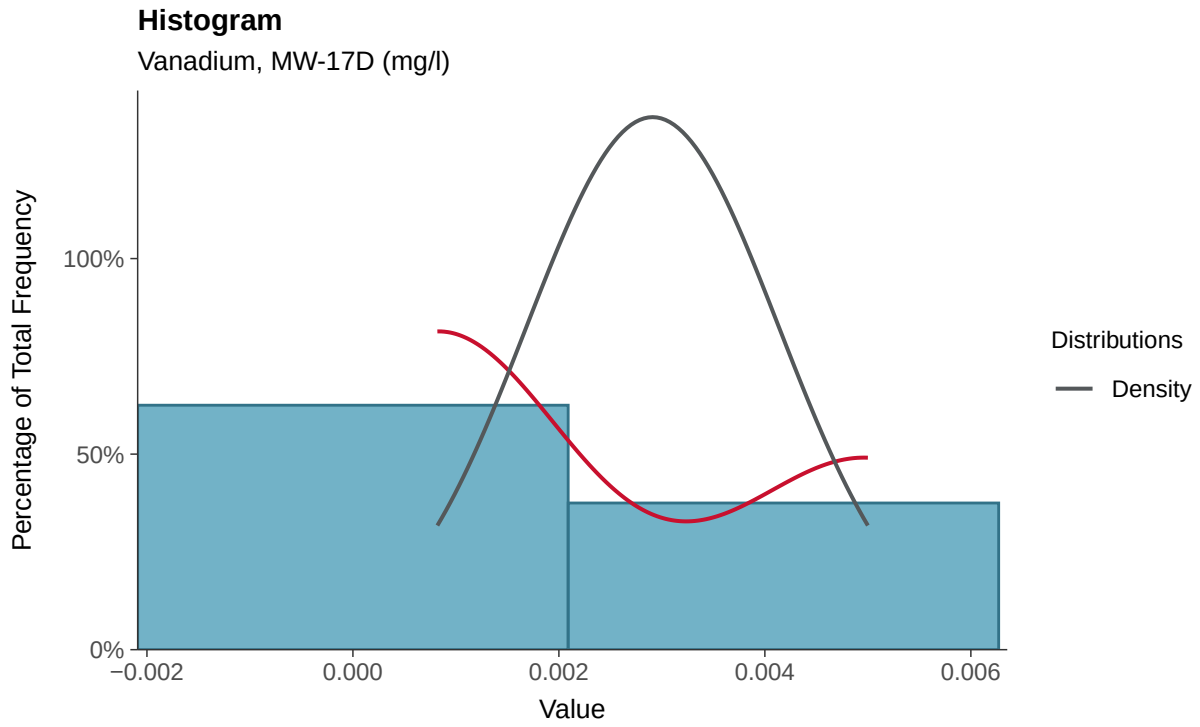
Silver, MW-17D (mg/l)



Part 115: Vanadium, MW-17D

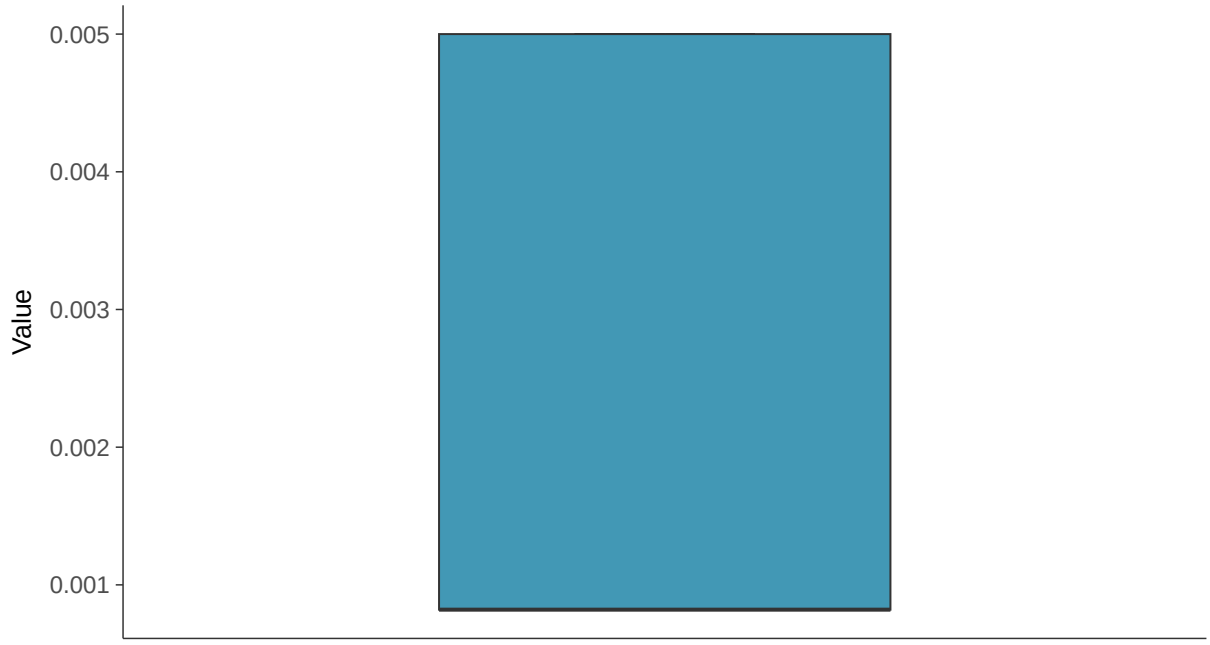
ID: 16_5_128





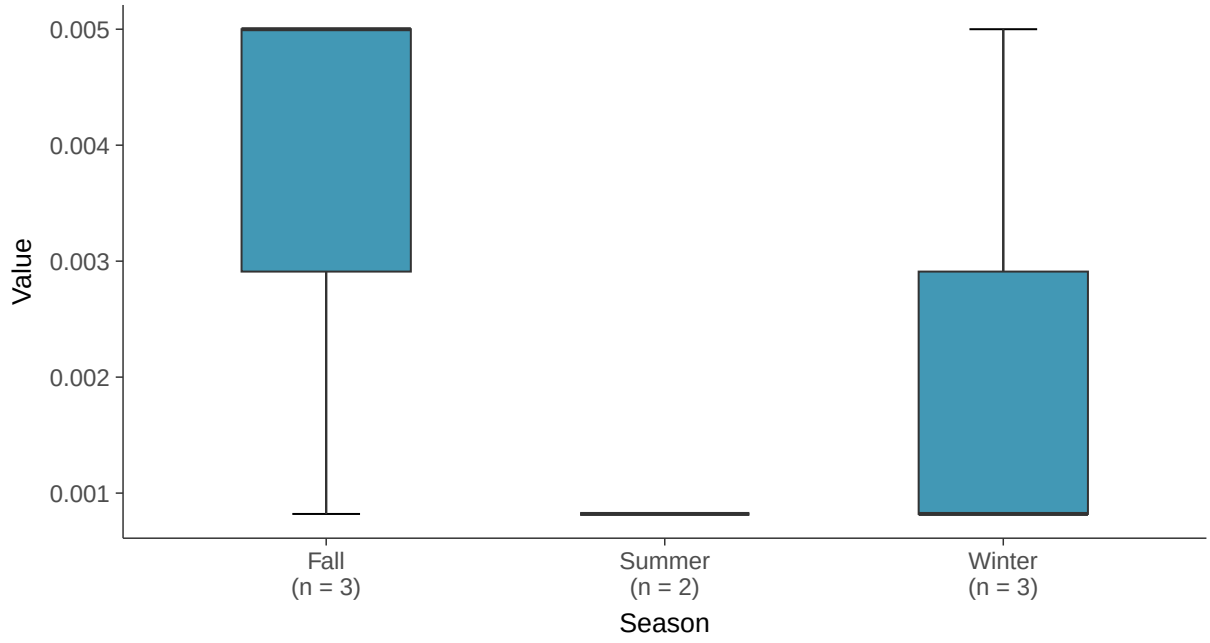
Boxplot

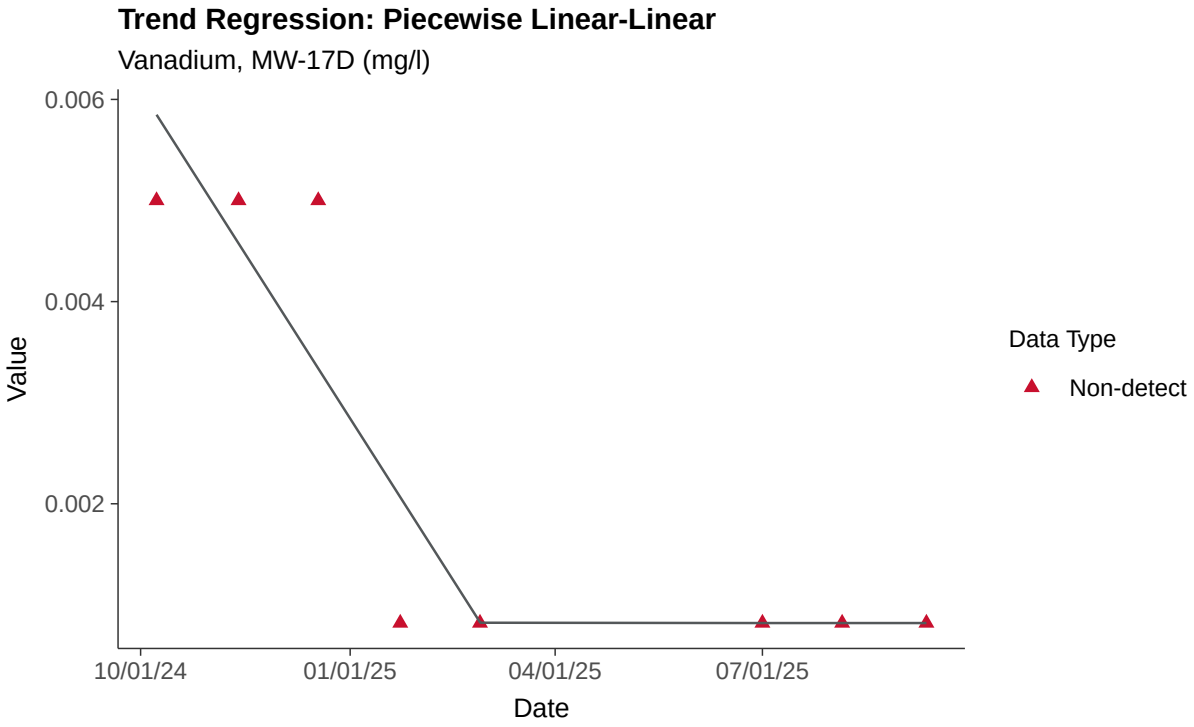
Vanadium, MW-17D (mg/l)



Boxplot by Season

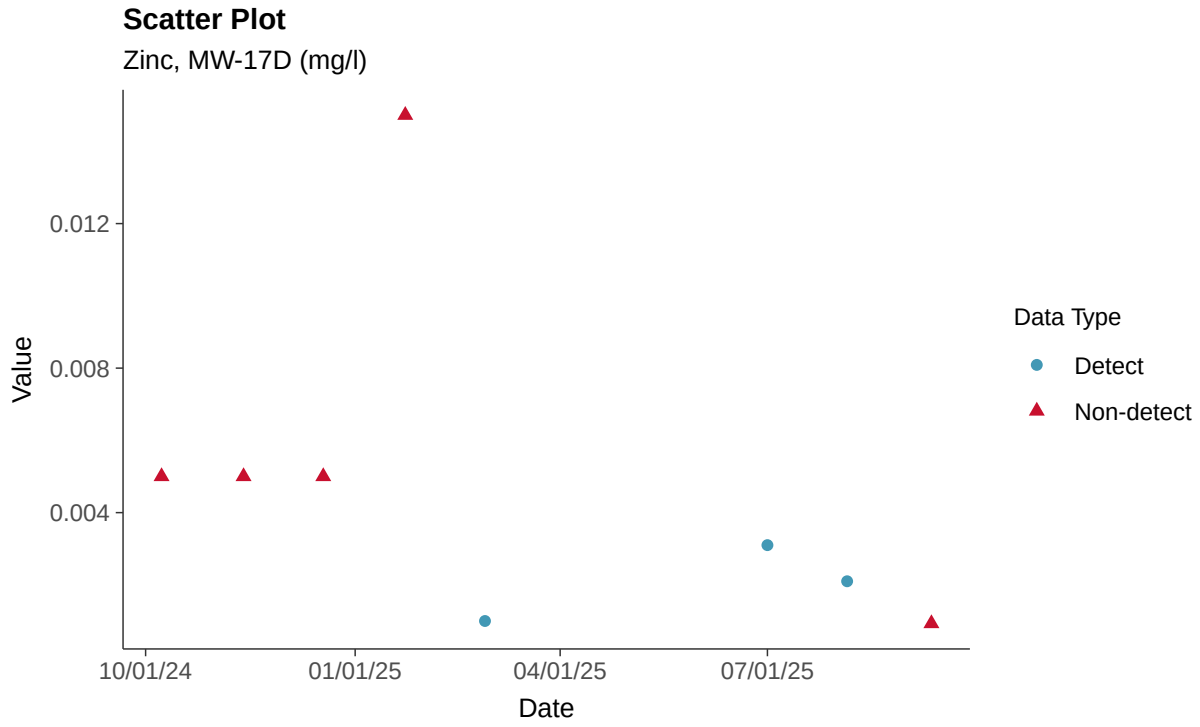
Vanadium, MW-17D (mg/l)

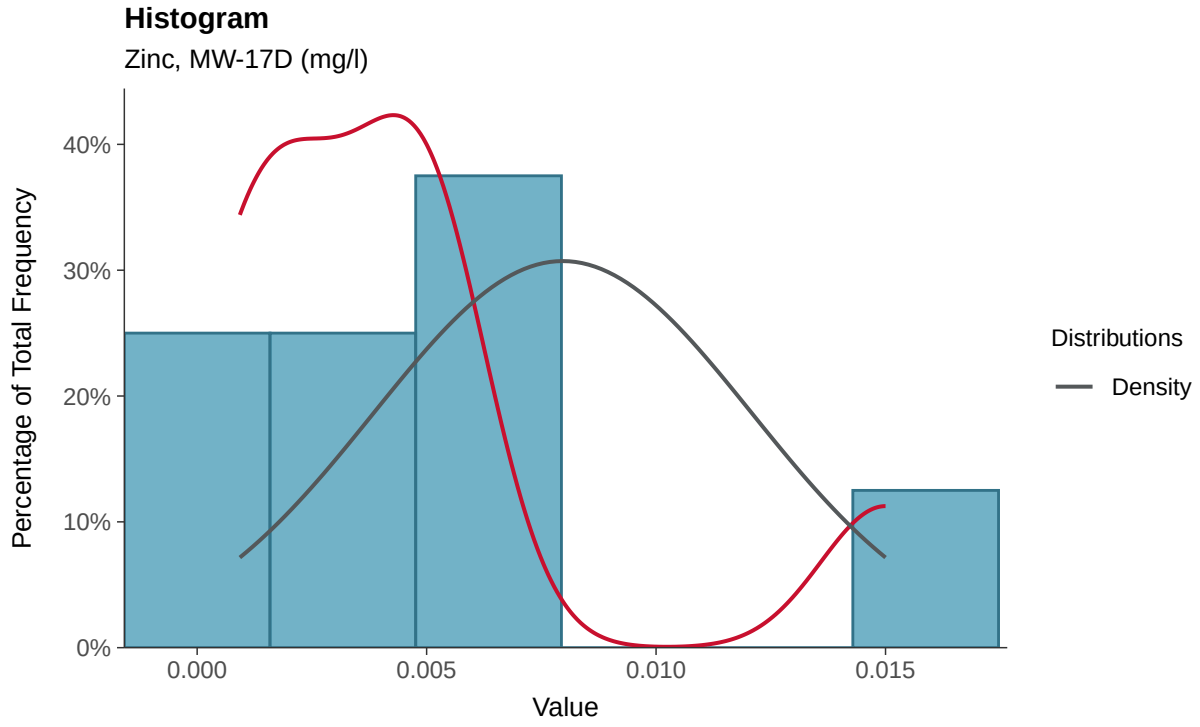



Trend Regression: Piecewise Linear-Linear
Vanadium, MW-17D (mg/l)
0.006
0.004
0.002
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Zinc, MW-17D

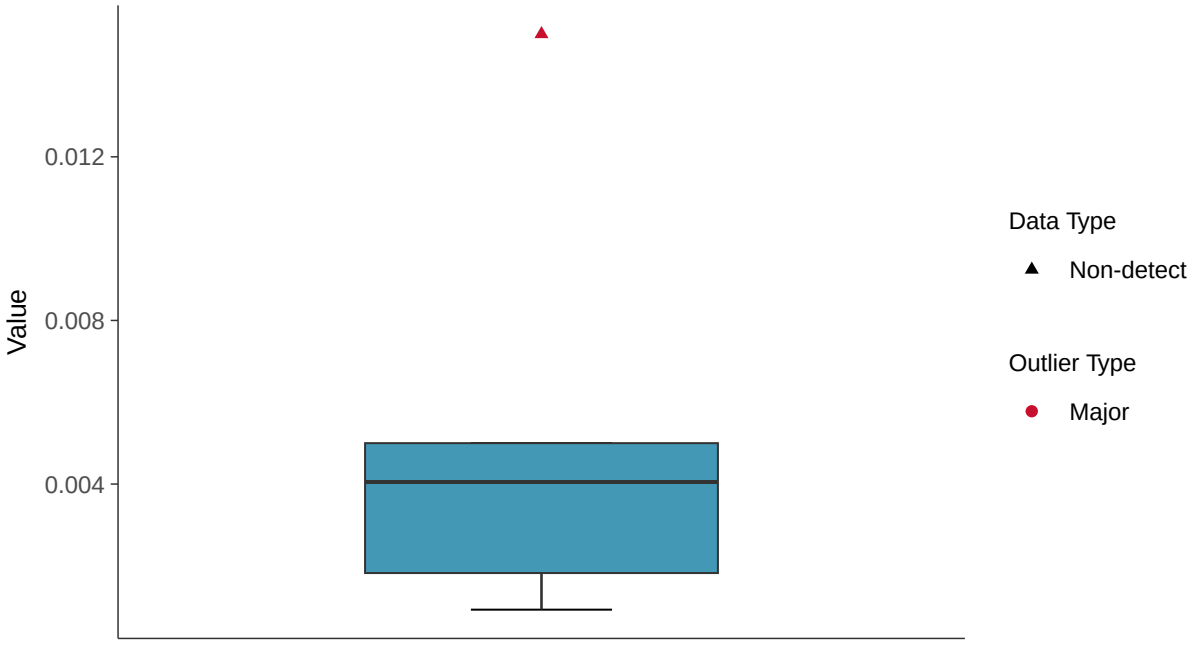
ID: 16_5_129





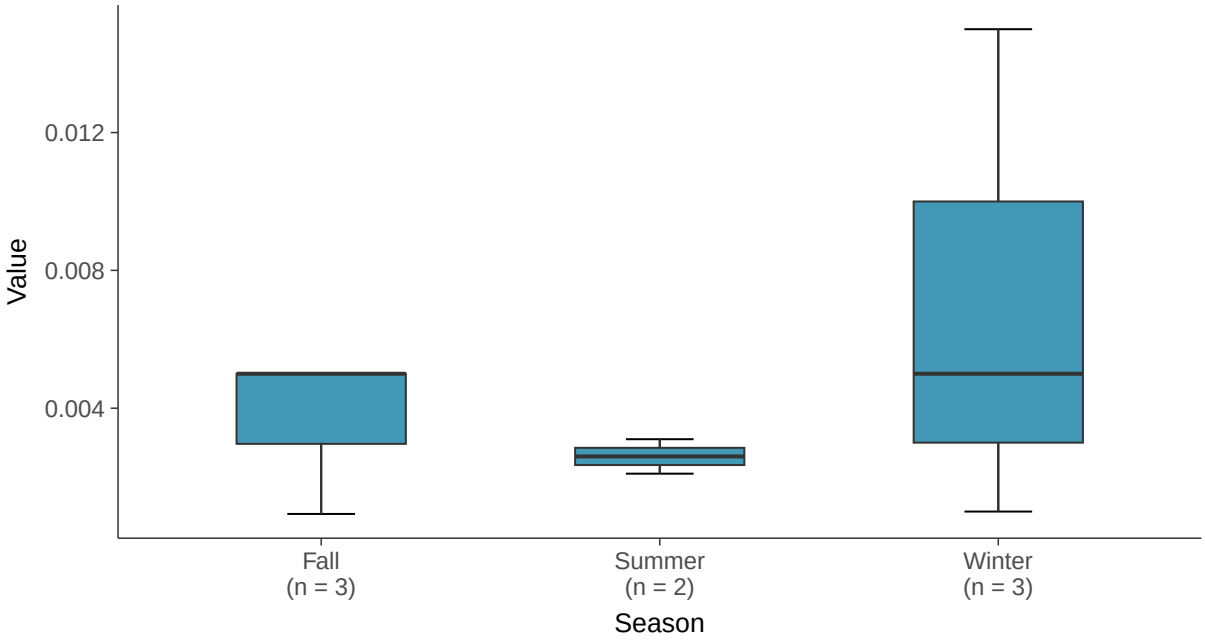
Boxplot

Zinc, MW-17D (mg/l)



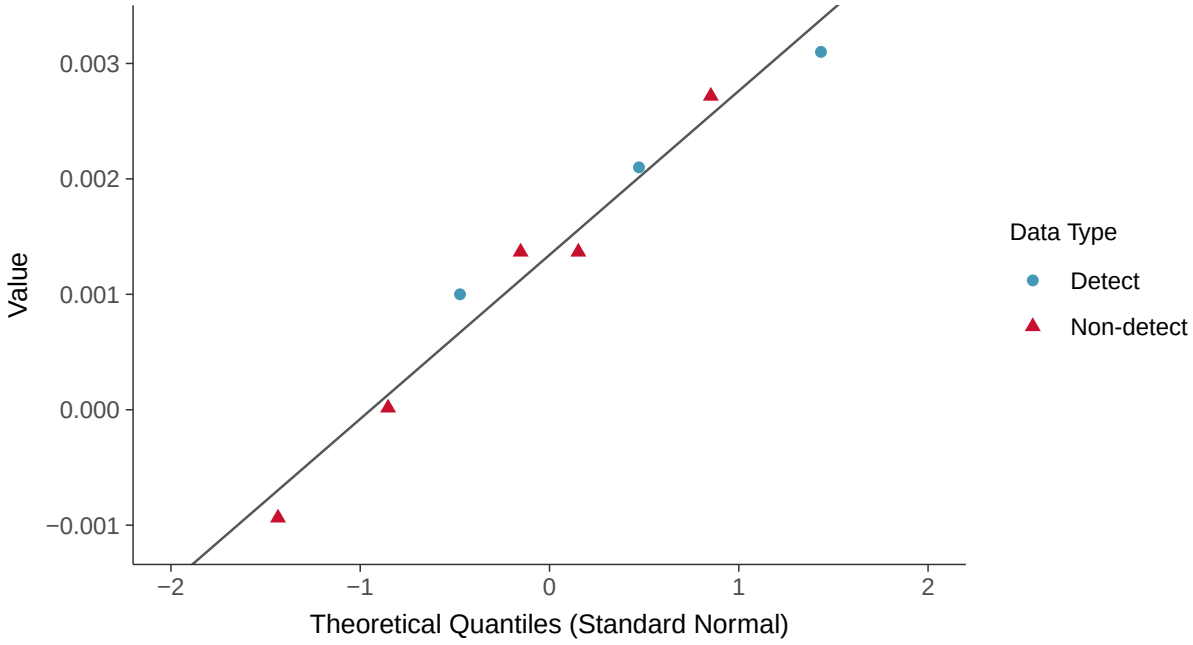
Boxplot by Season

Zinc, MW-17D (mg/l)



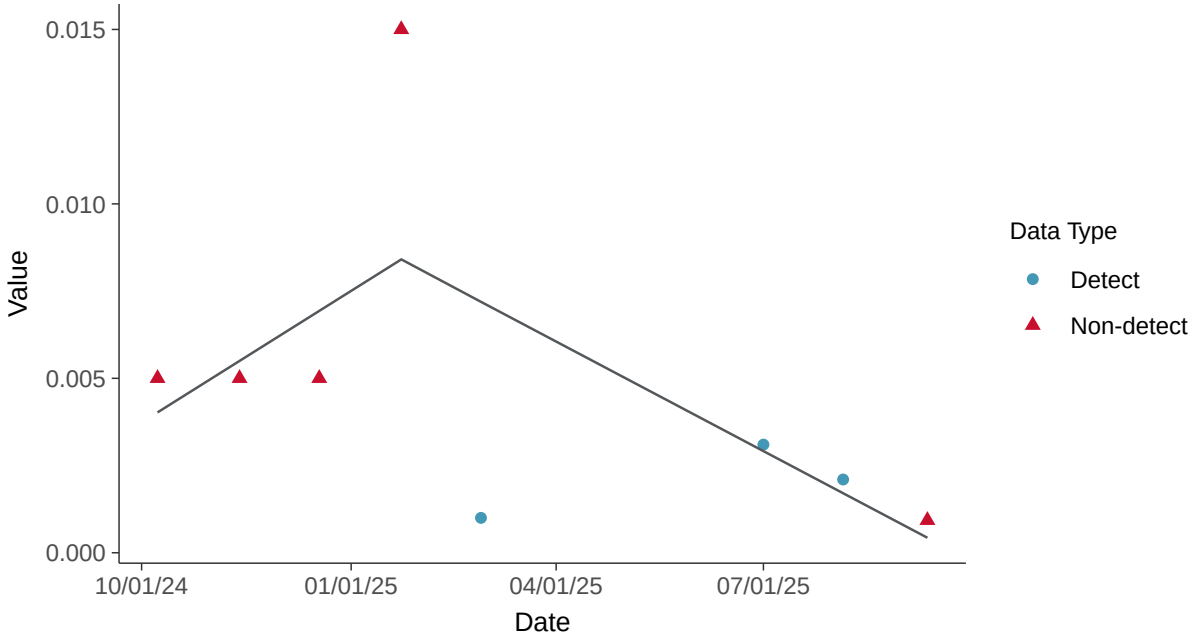
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-17D (mg/l)



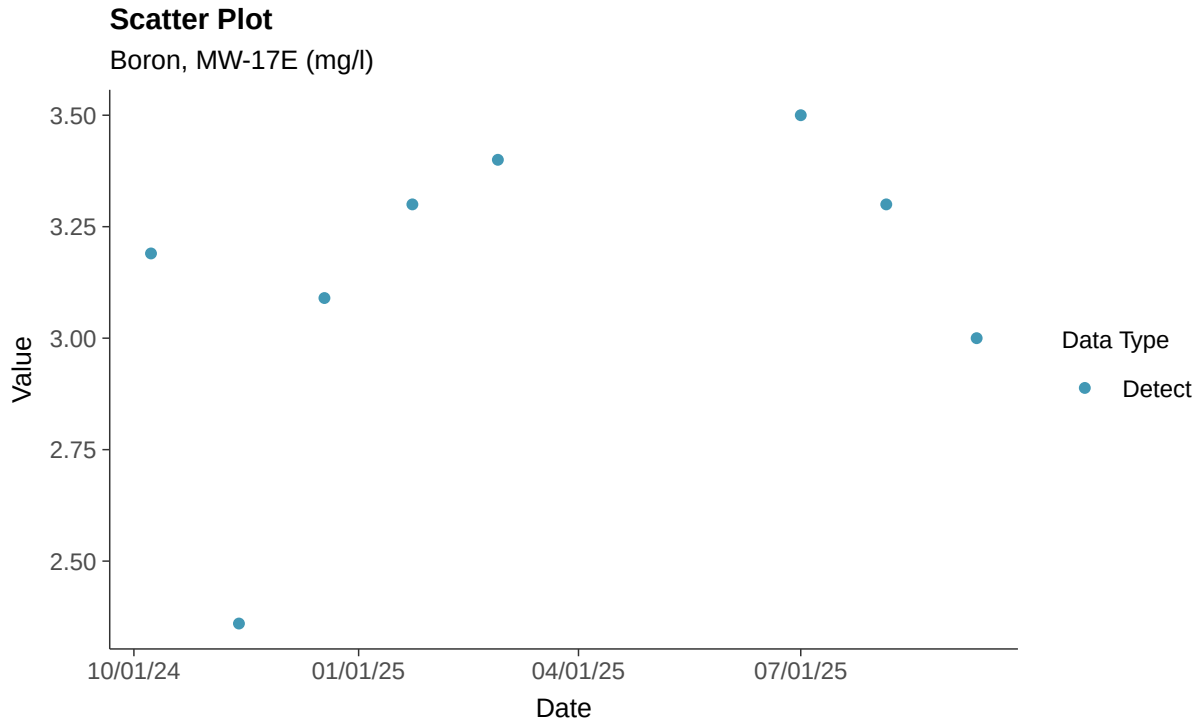
Trend Regression: Piecewise Linear-Linear

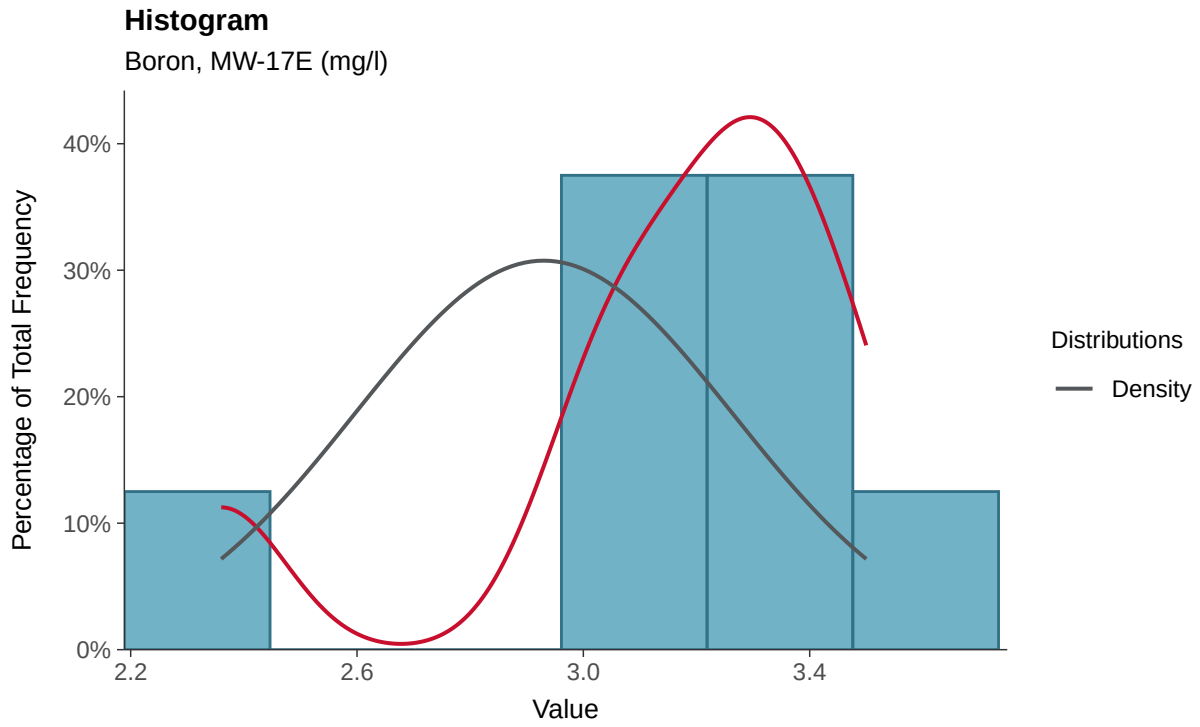
Zinc, MW-17D (mg/l)



Appendix III: Boron, MW-17E

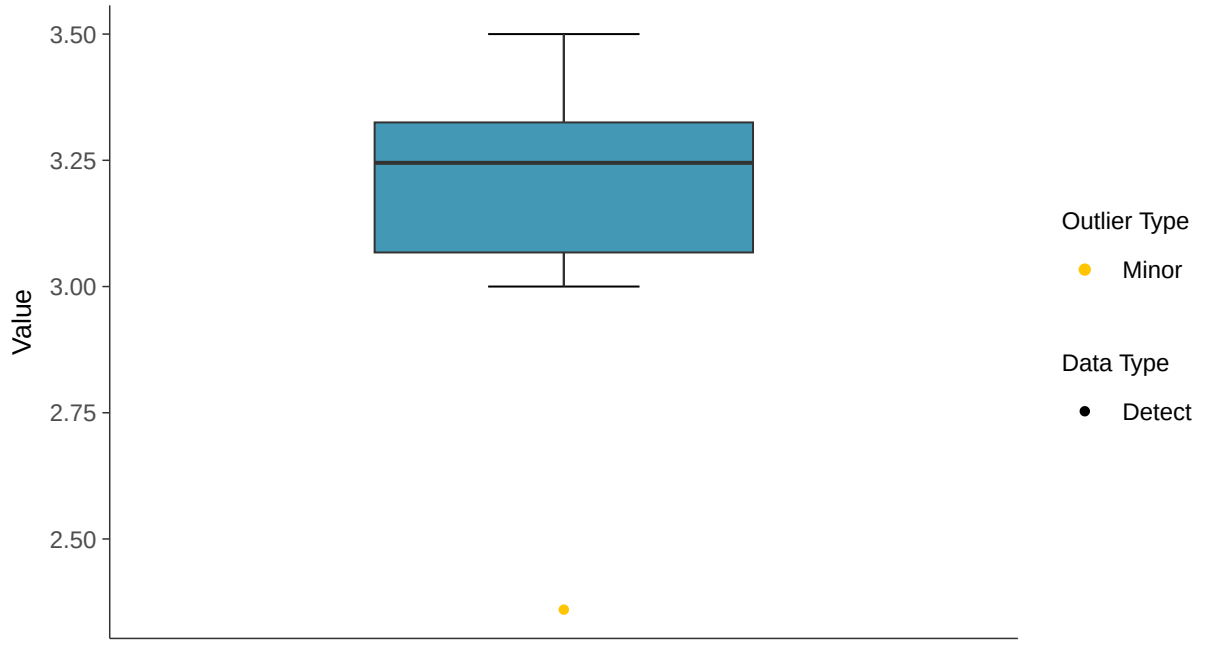
ID: 17_2_105





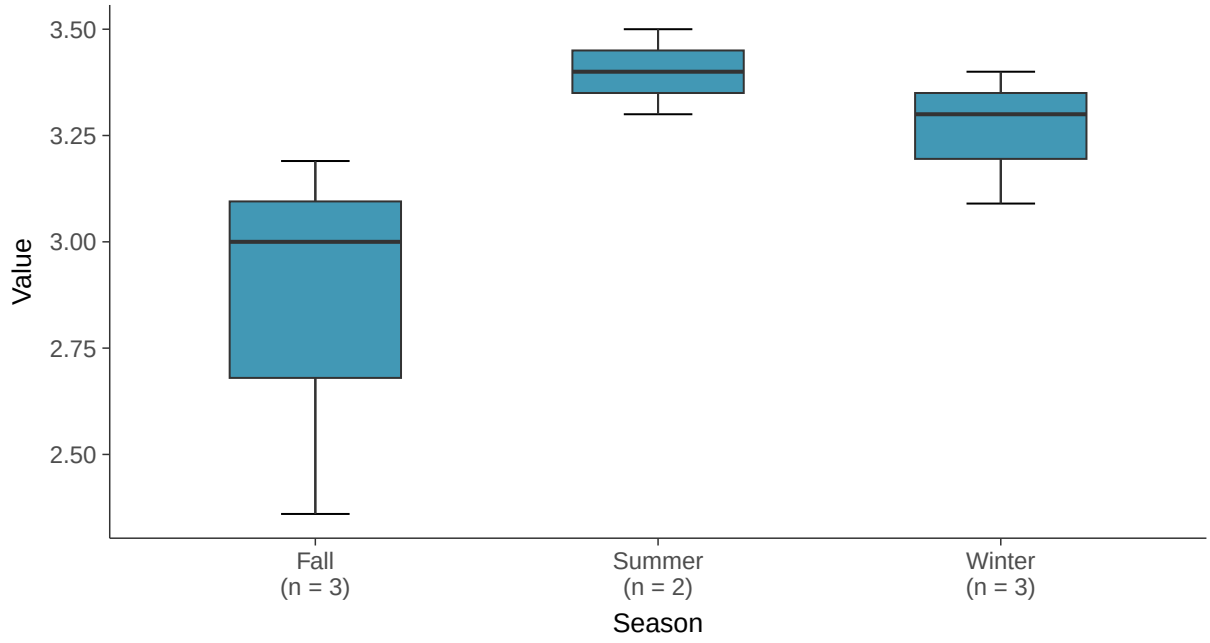
Boxplot

Boron, MW-17E (mg/l)



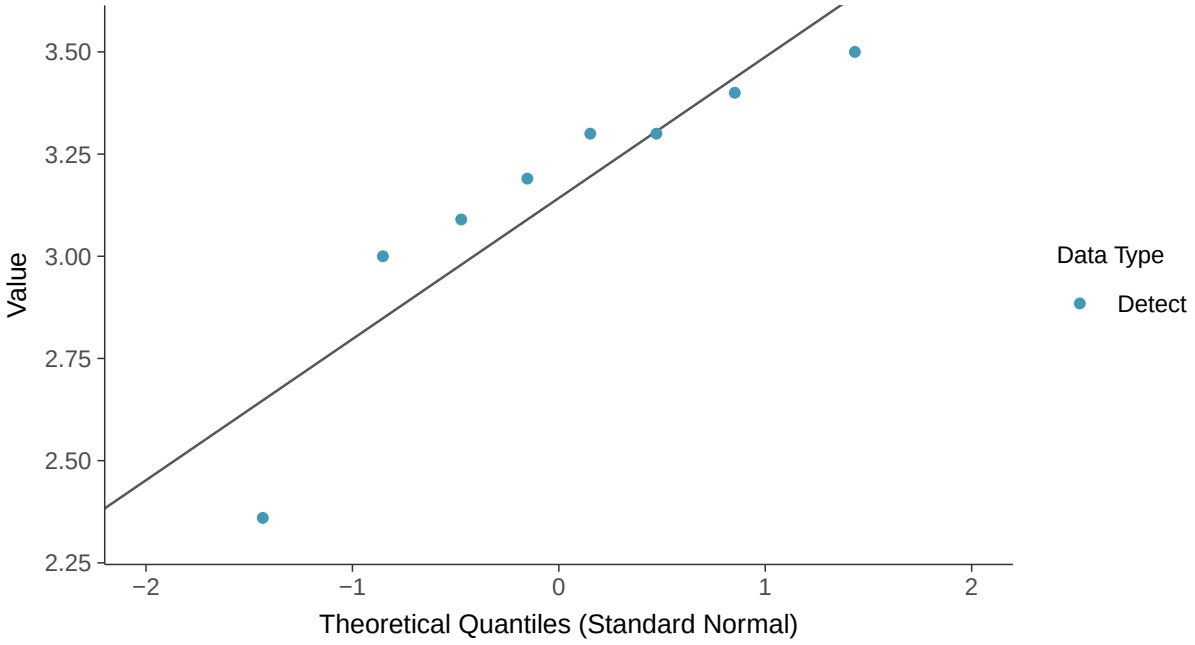
Boxplot by Season

Boron, MW-17E (mg/l)



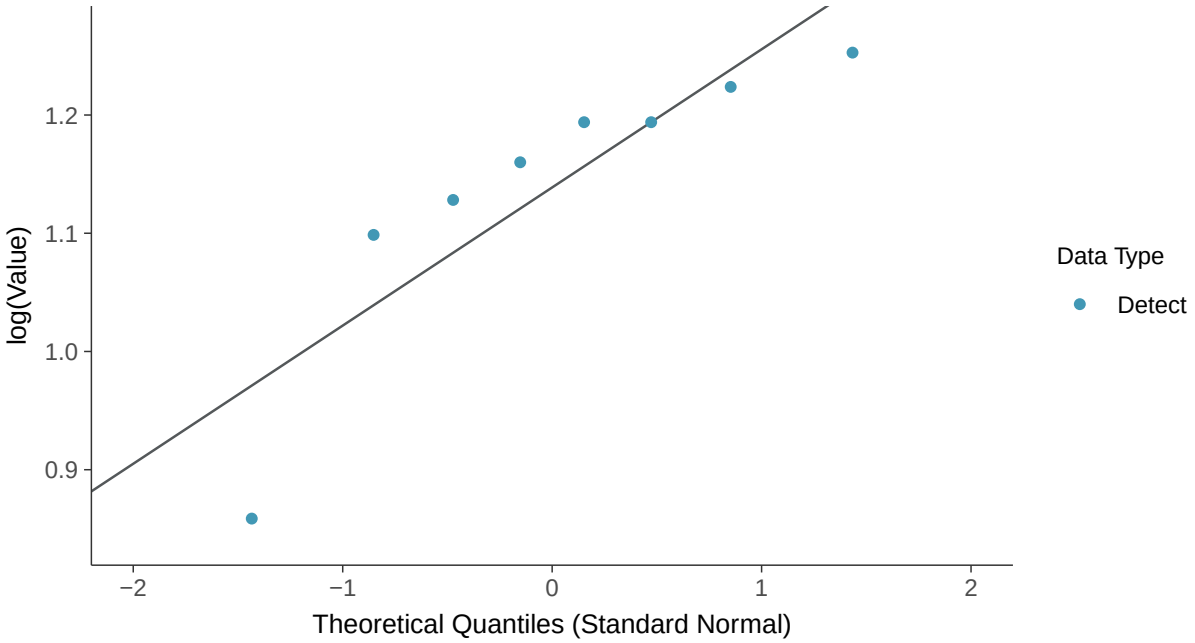
Normal Q-Q plot

Boron, MW-17E (mg/l)



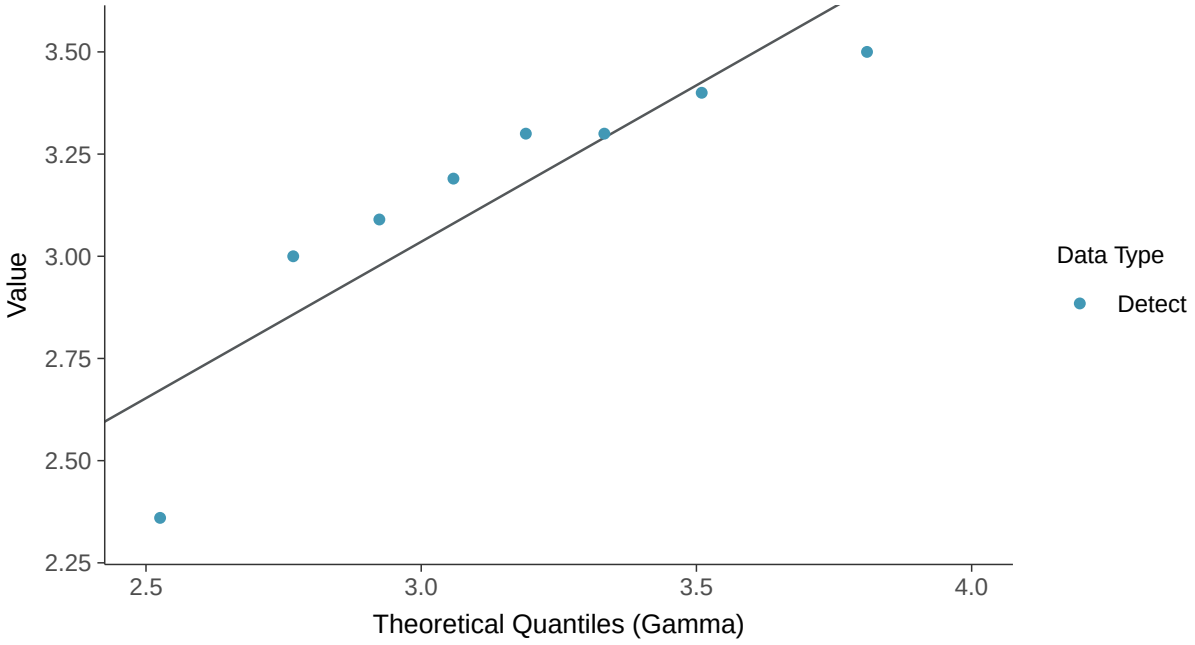
Lognormal Q-Q plot

Boron, MW-17E (mg/l)



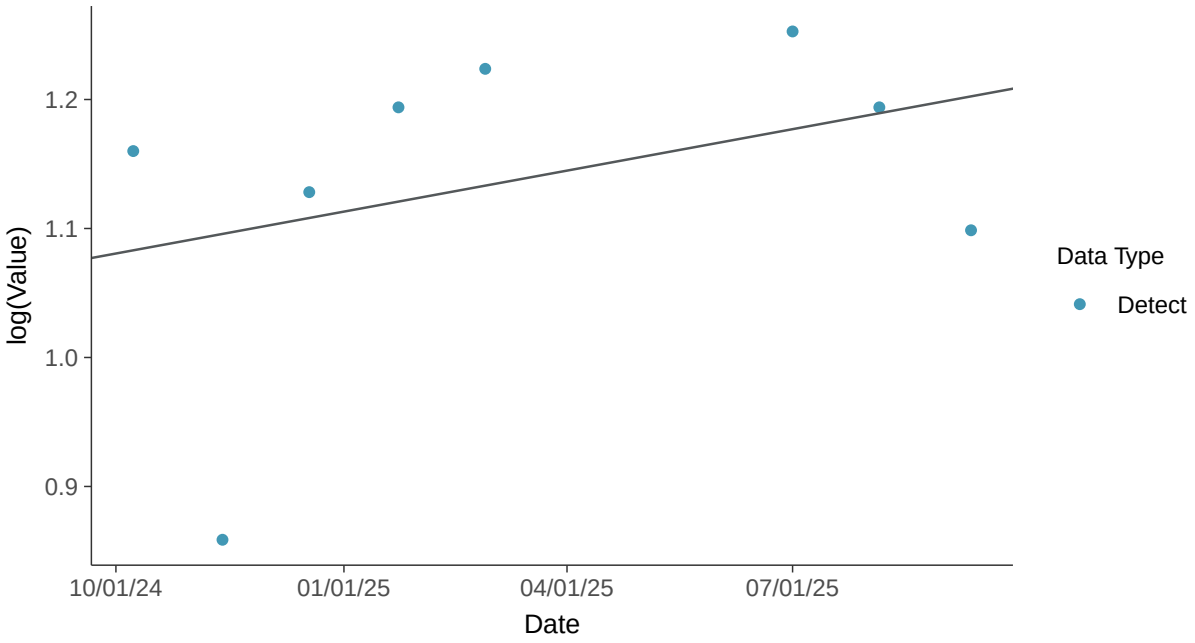
Gamma Q-Q plot

Boron, MW-17E (mg/l)



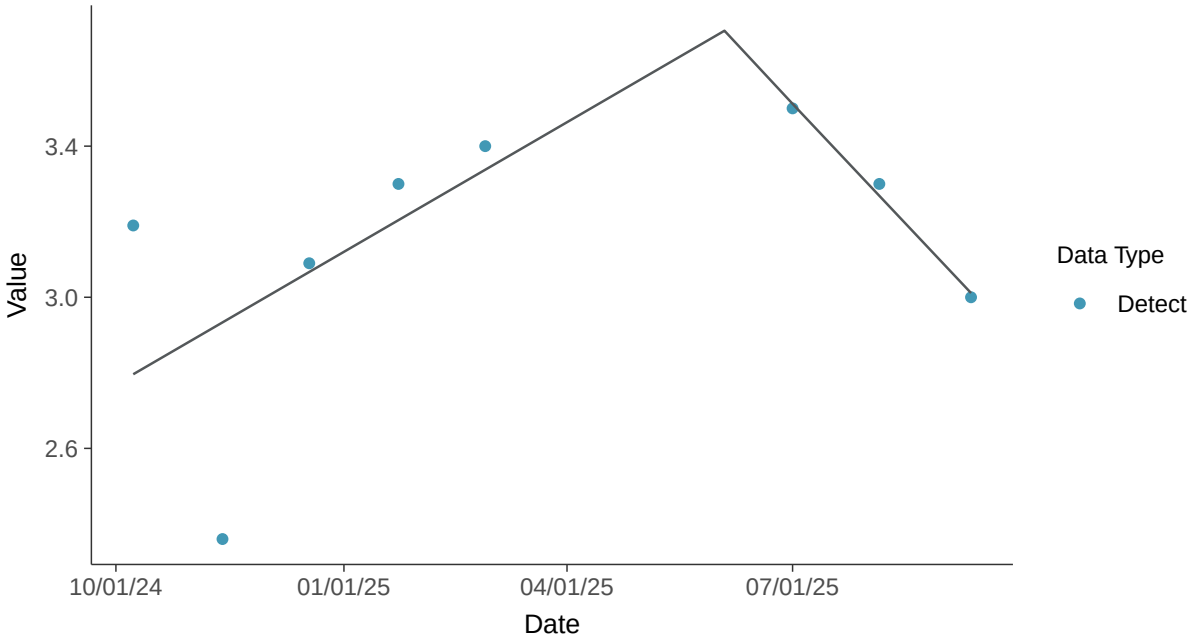
Trend Regression: Lognormal MLE

Boron, MW-17E (mg/l)



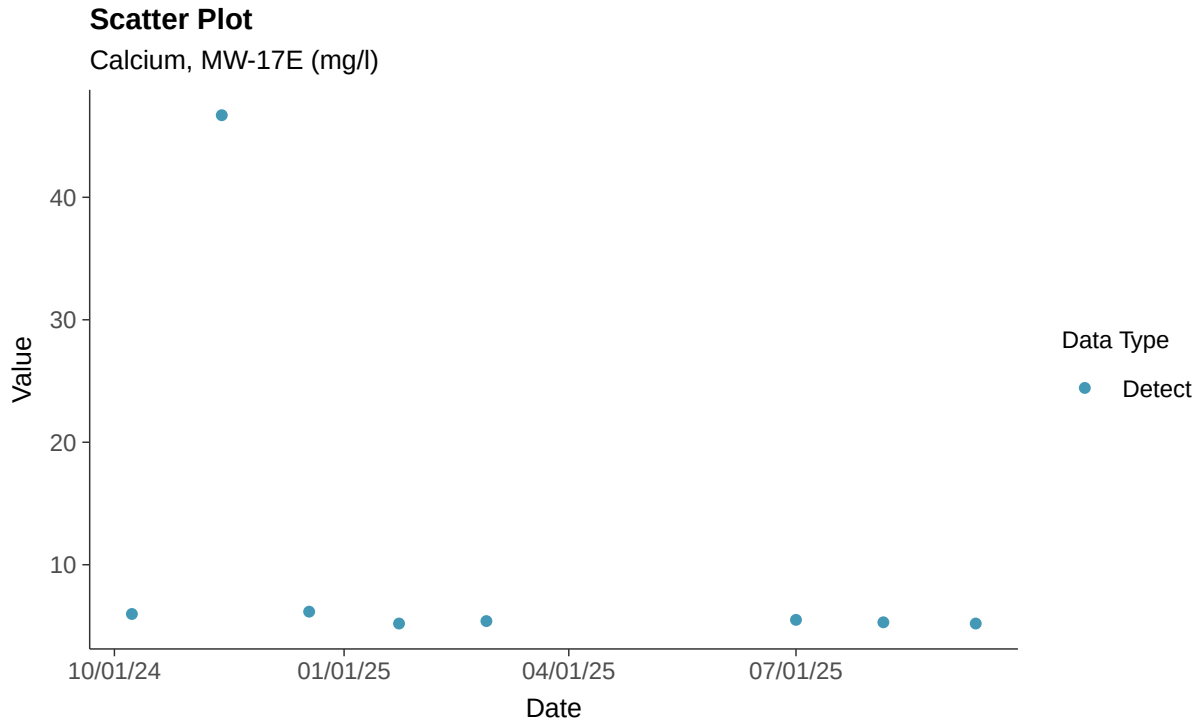
Trend Regression: Piecewise Linear-Linear

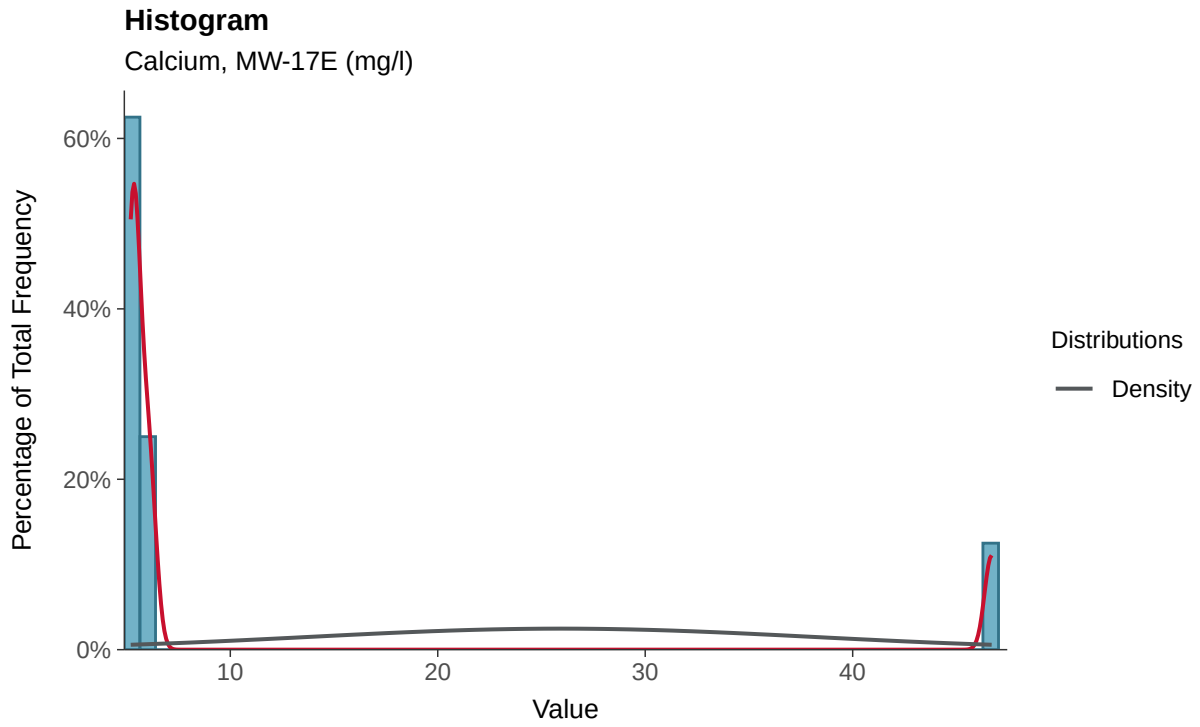
Boron, MW-17E (mg/l)



Appendix III: Calcium, MW-17E

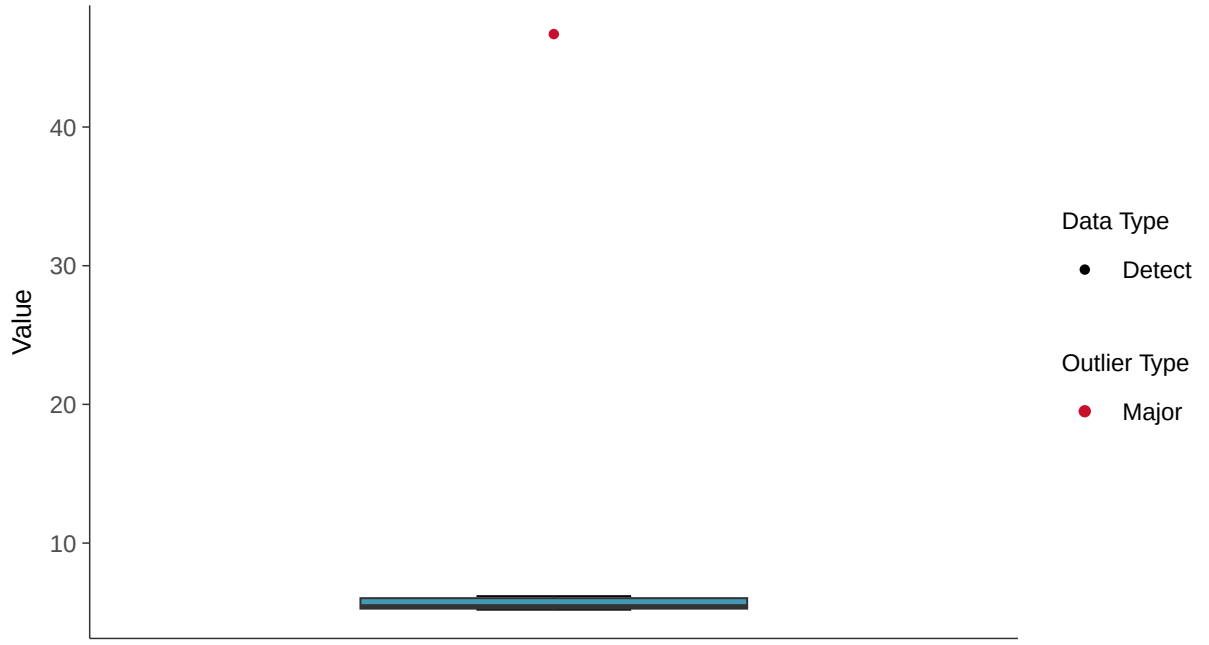
ID: 17_2_107





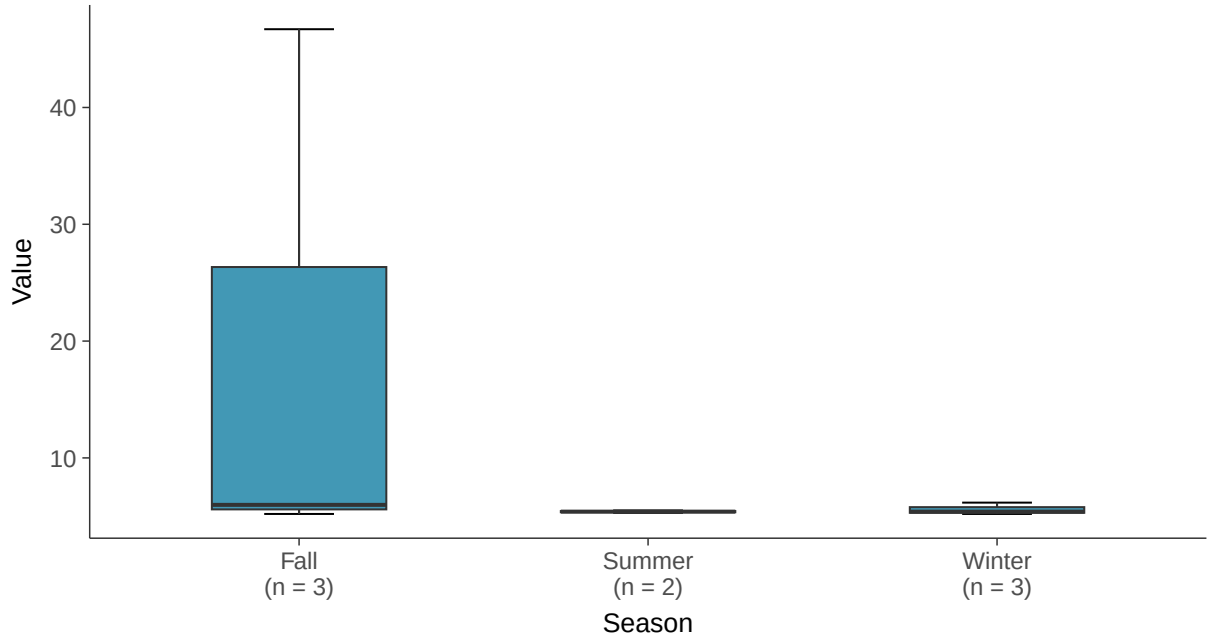
Boxplot

Calcium, MW-17E (mg/l)



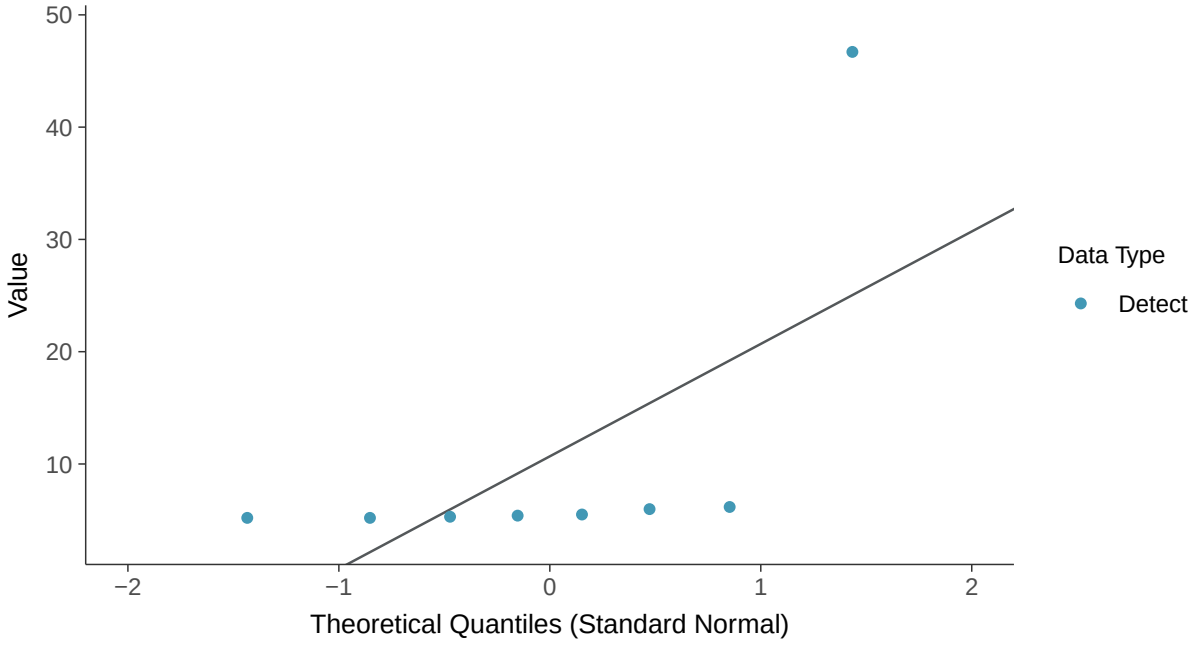
Boxplot by Season

Calcium, MW-17E (mg/l)



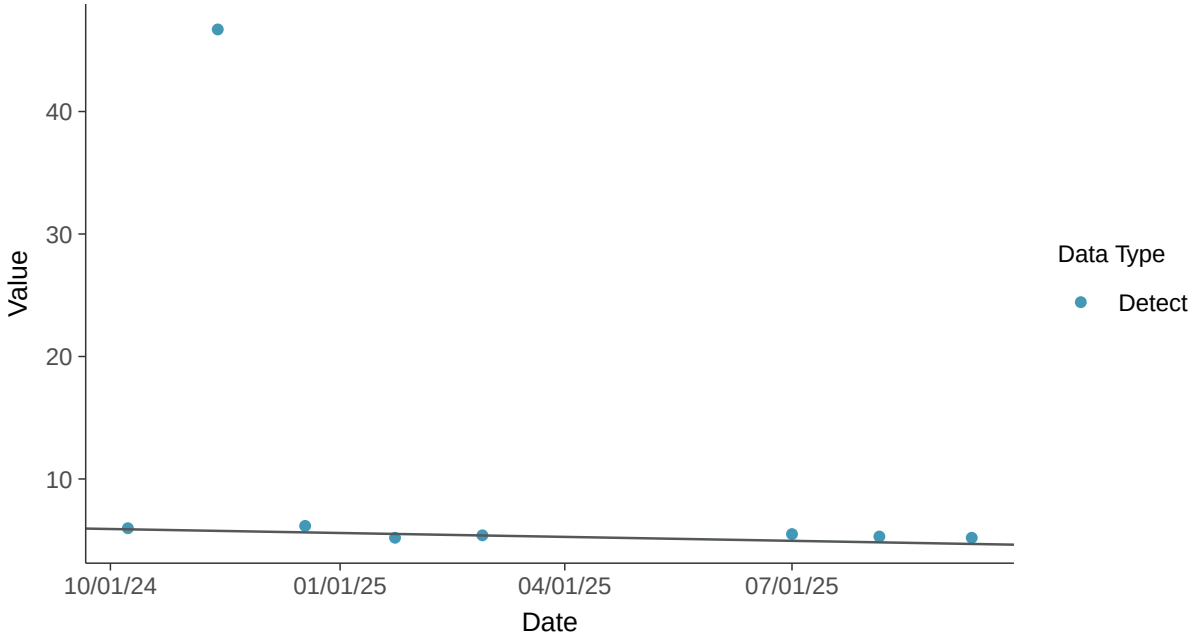
Normal Q-Q plot

Calcium, MW-17E (mg/l)



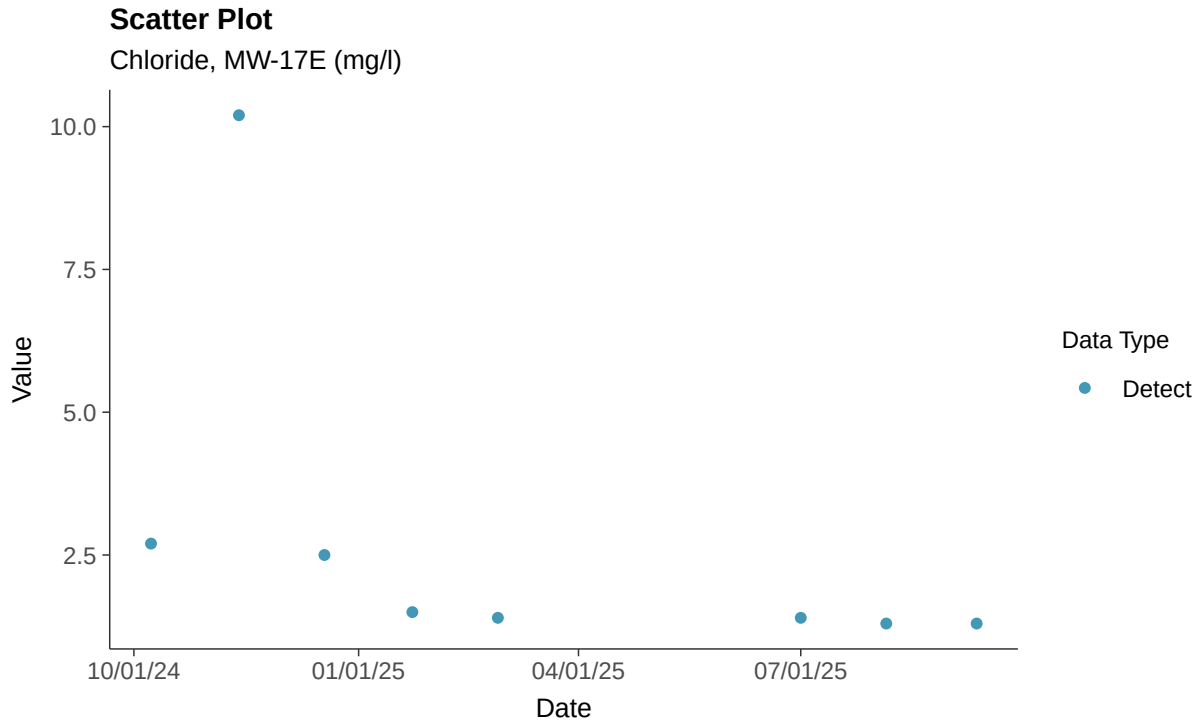
Trend Regression: Mann-Kendall/Theil-Sen Estimate

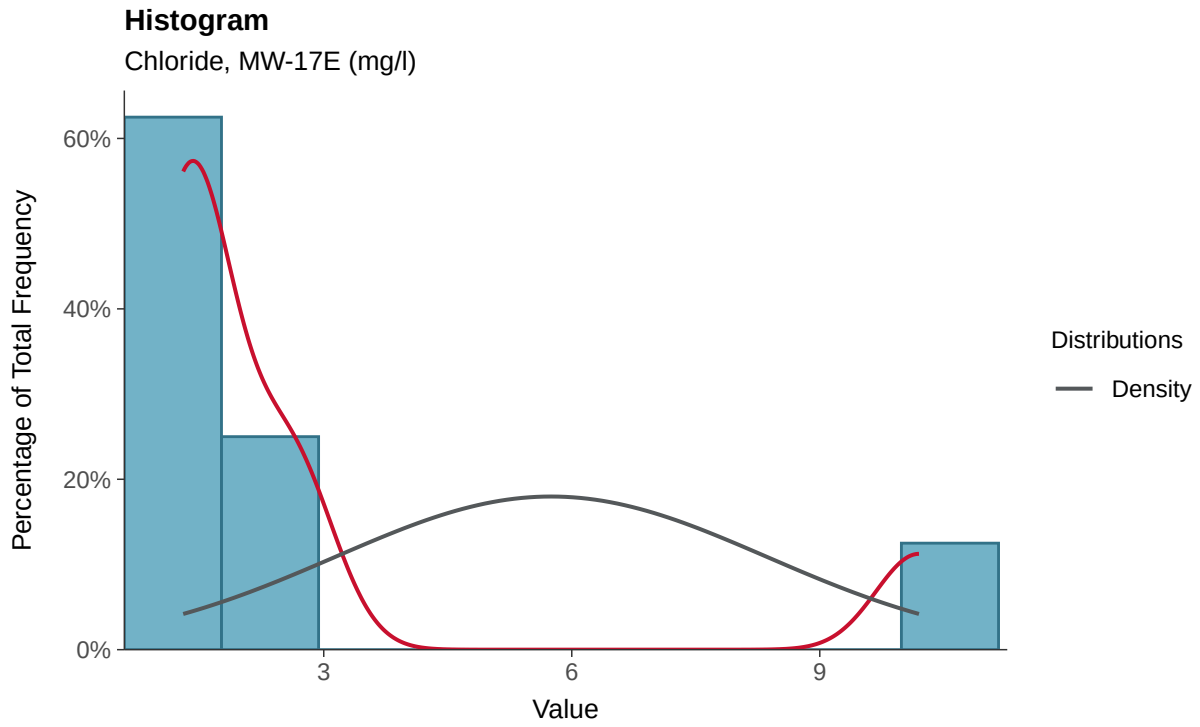
Calcium, MW-17E (mg/l)



Appendix III: Chloride, MW-17E

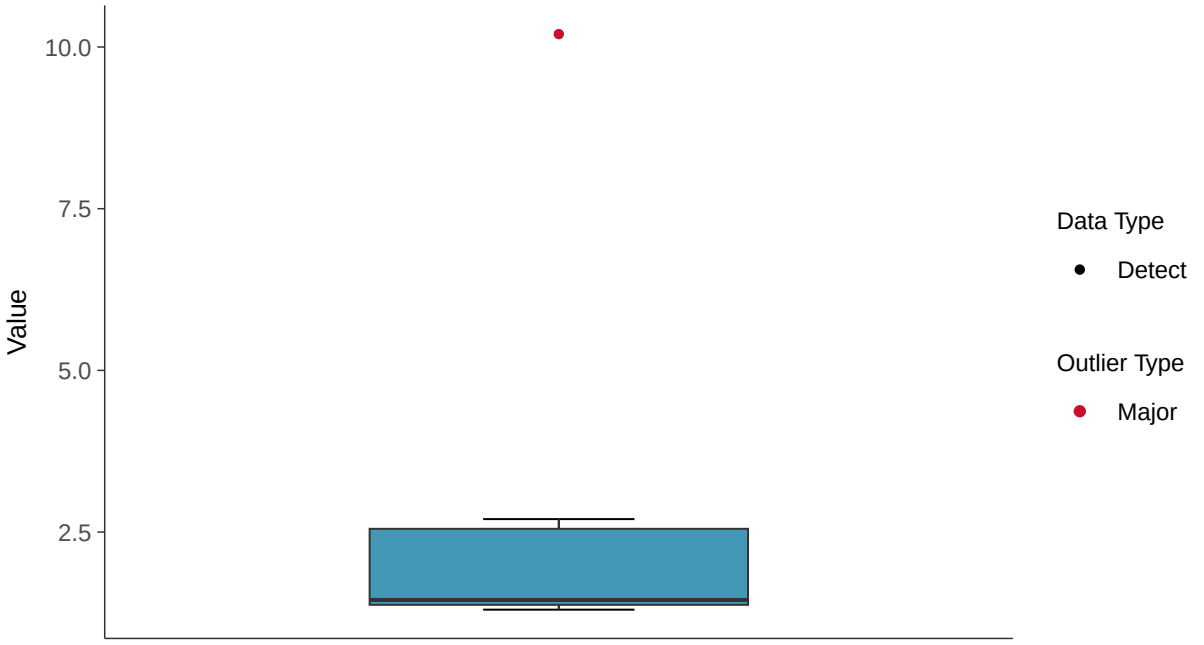
ID: 17_2_108





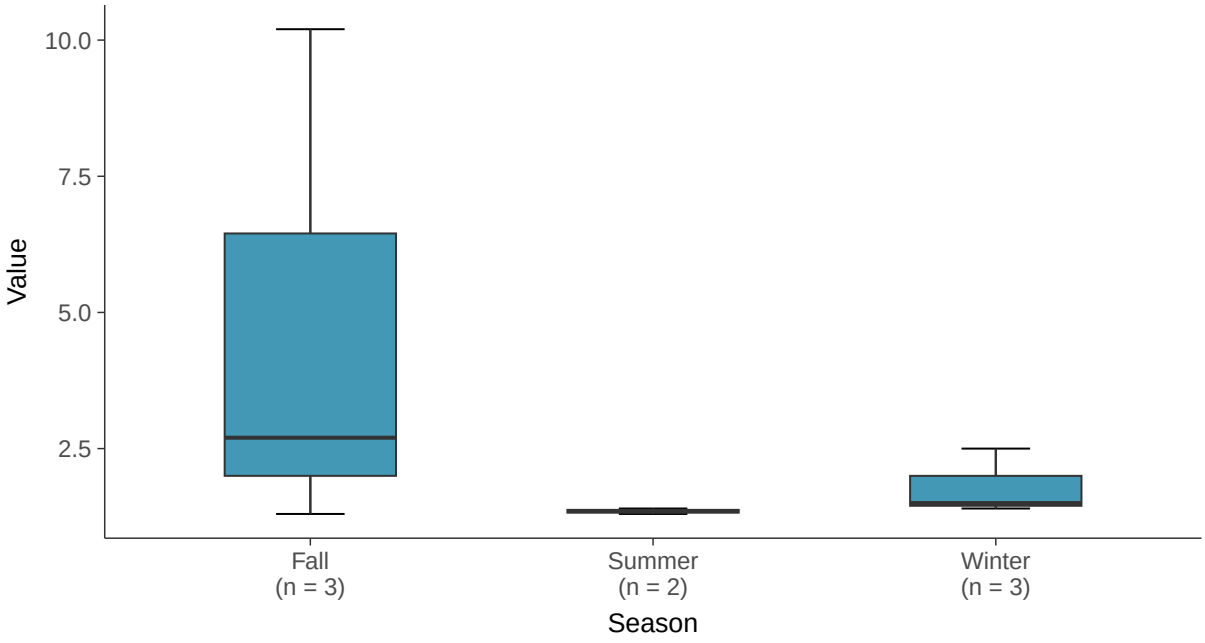
Boxplot

Chloride, MW-17E (mg/l)



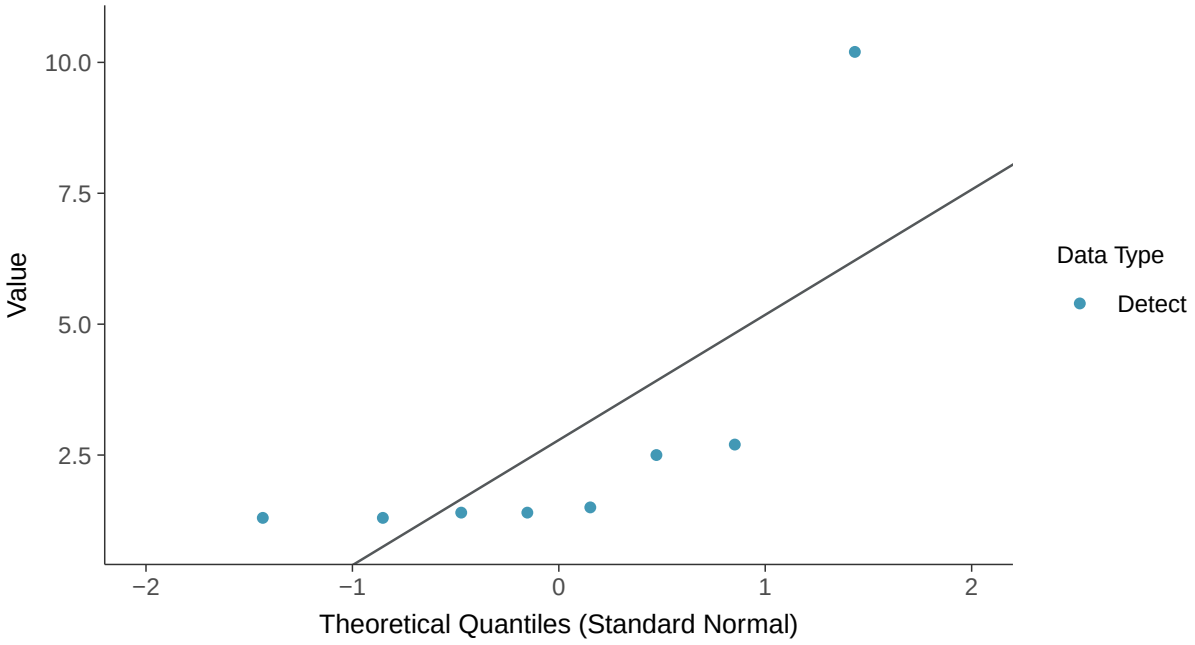
Boxplot by Season

Chloride, MW-17E (mg/l)



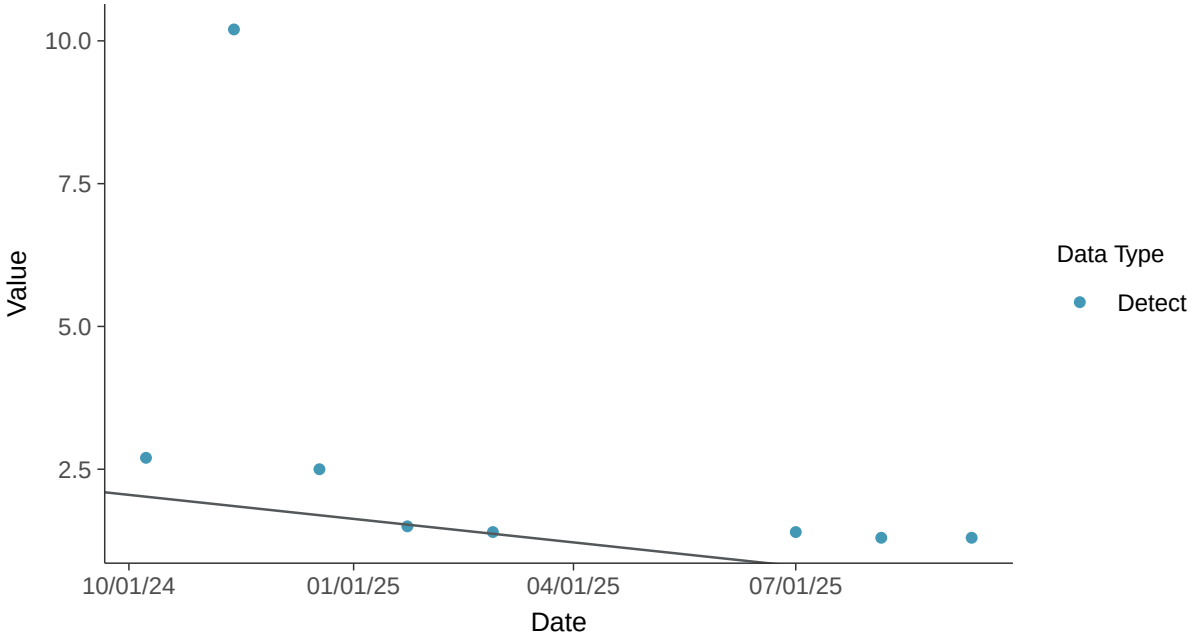
Normal Q-Q plot

Chloride, MW-17E (mg/l)



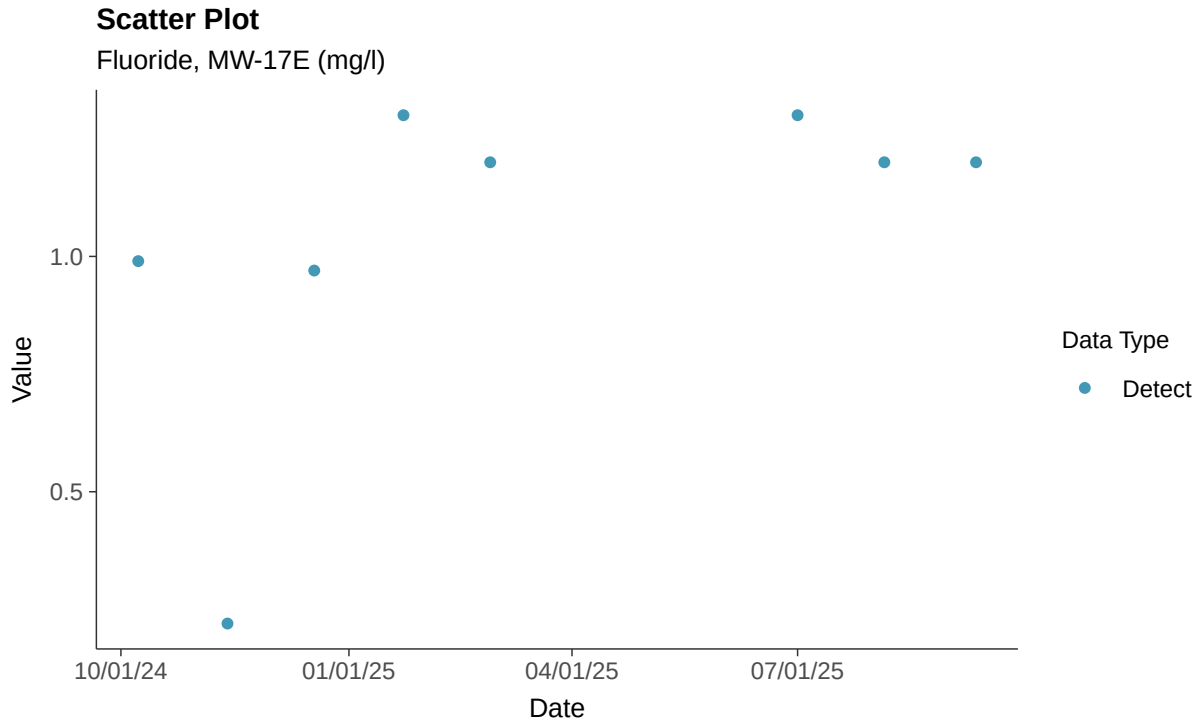
Trend Regression: Mann-Kendall/Theil-Sen Estimate

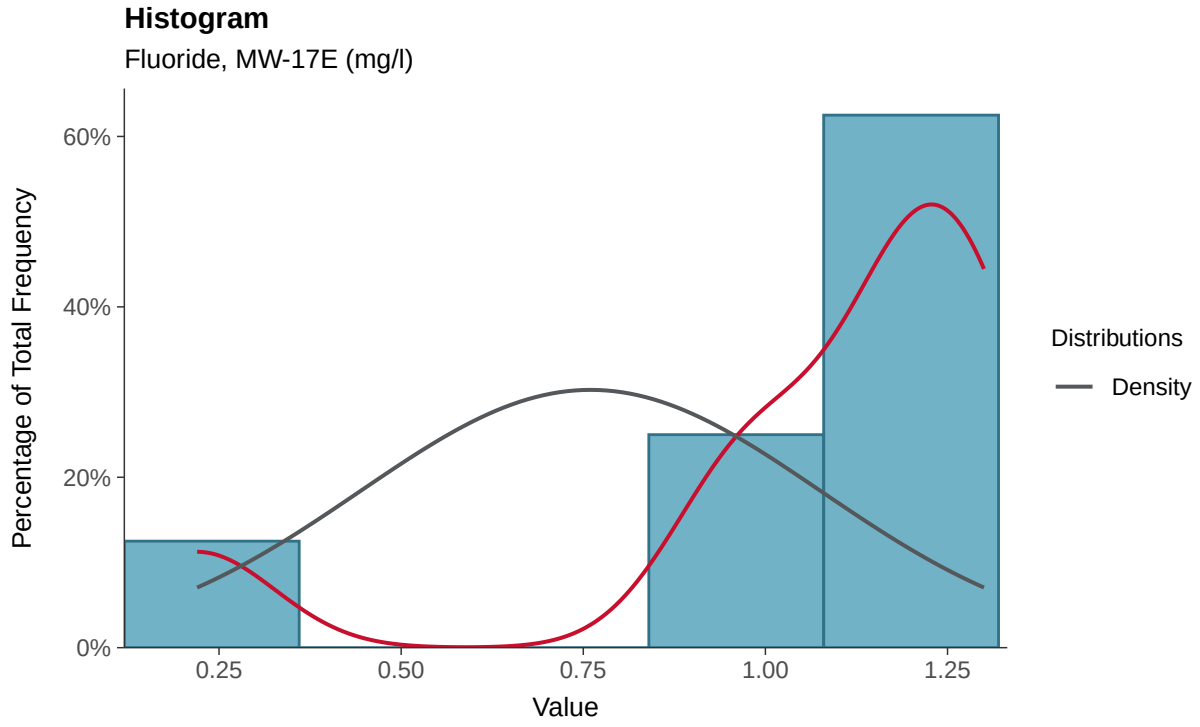
Chloride, MW-17E (mg/l)



Appendix III: Fluoride, MW-17E

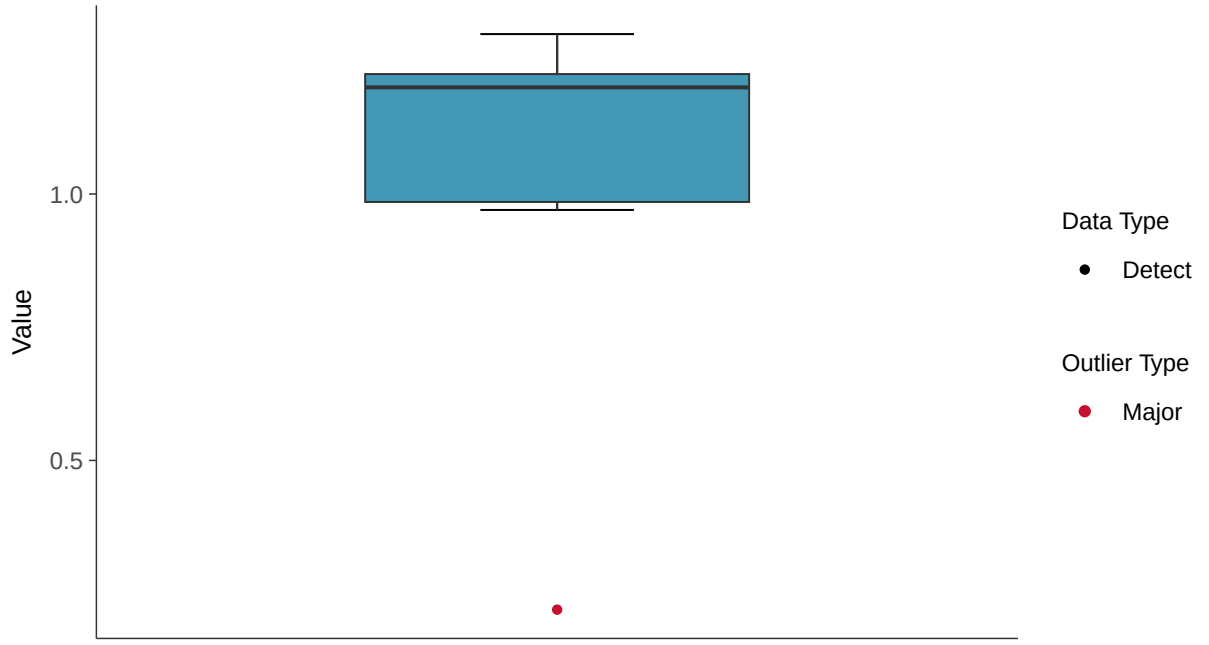
ID: 17_2_112





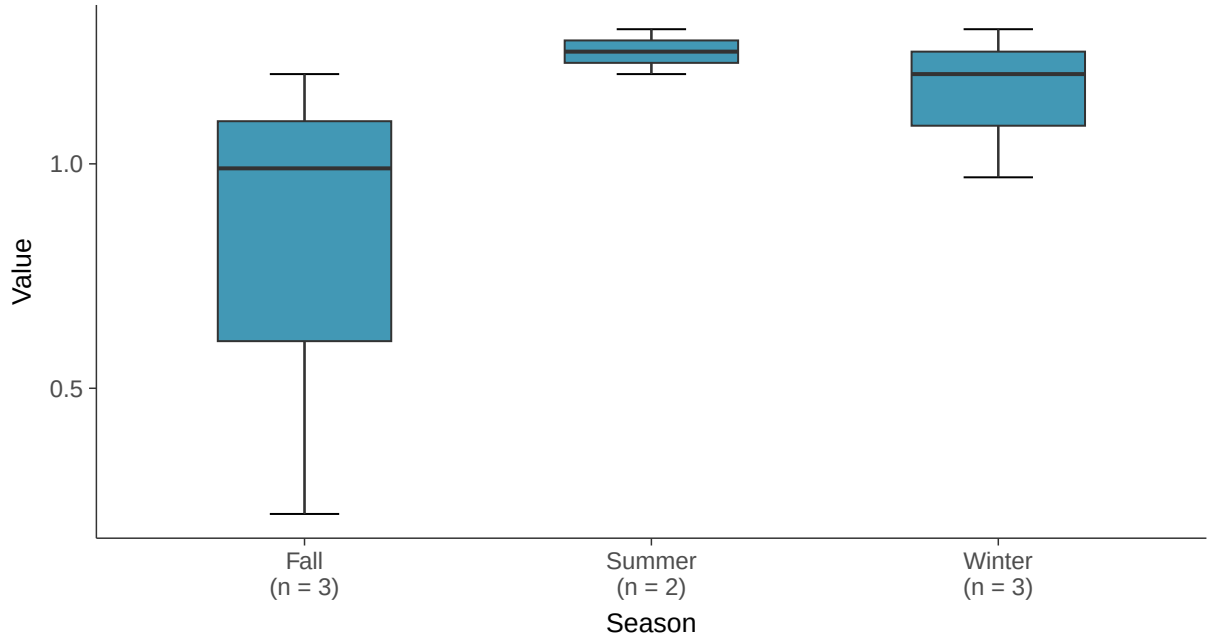
Boxplot

Fluoride, MW-17E (mg/l)



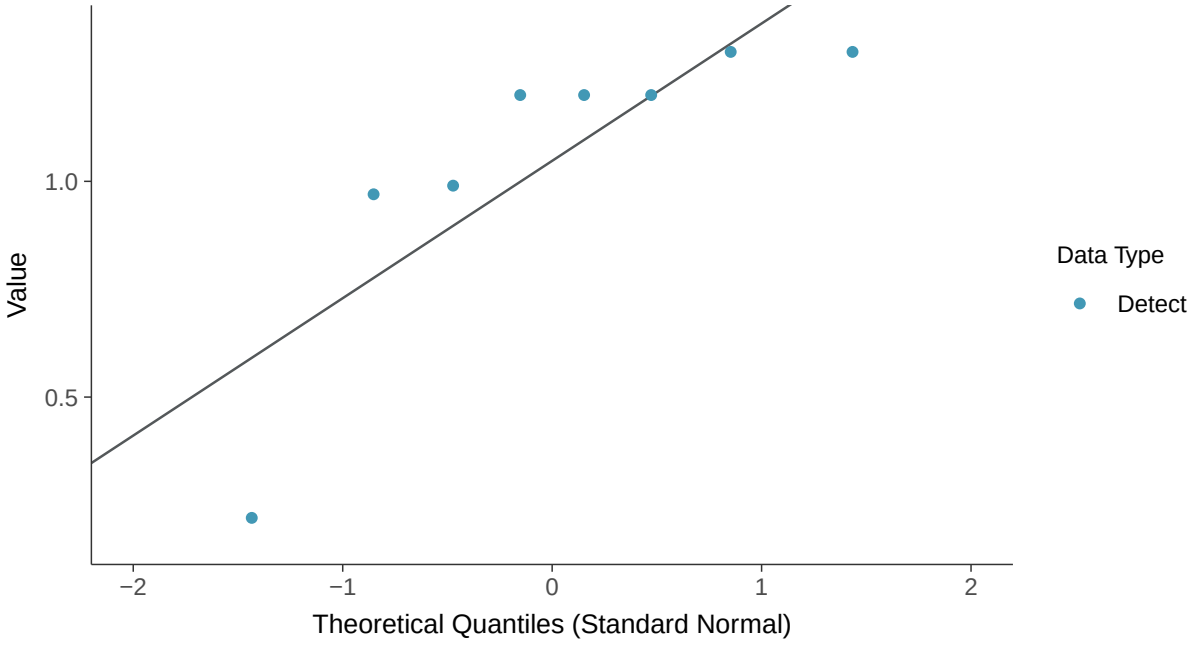
Boxplot by Season

Fluoride, MW-17E (mg/l)



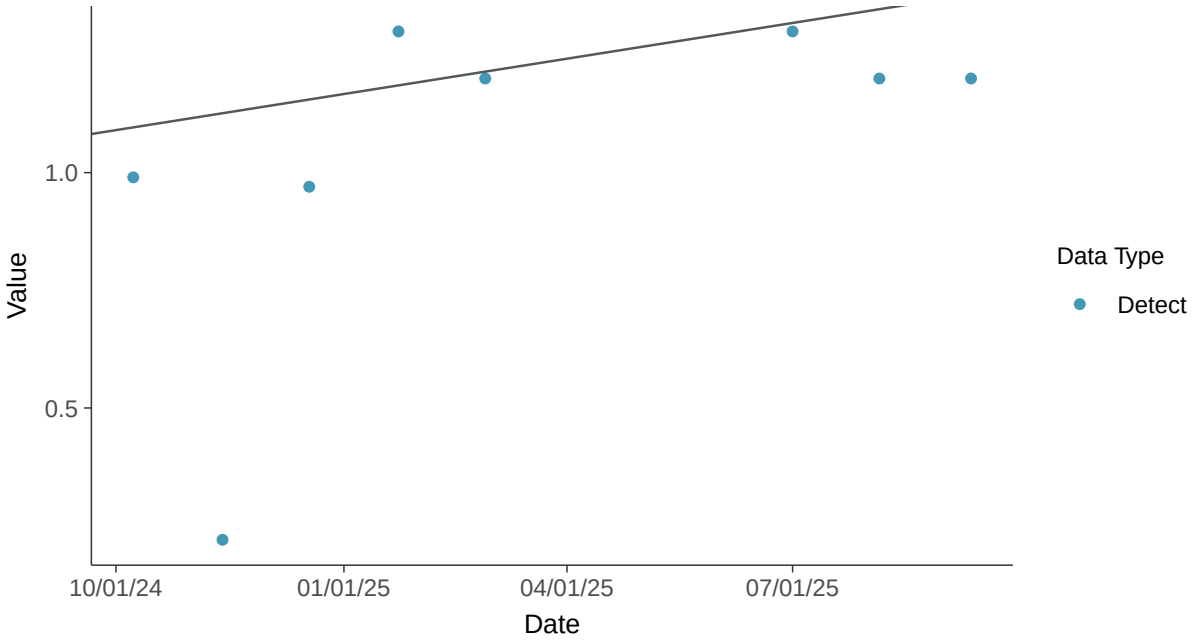
Normal Q-Q plot

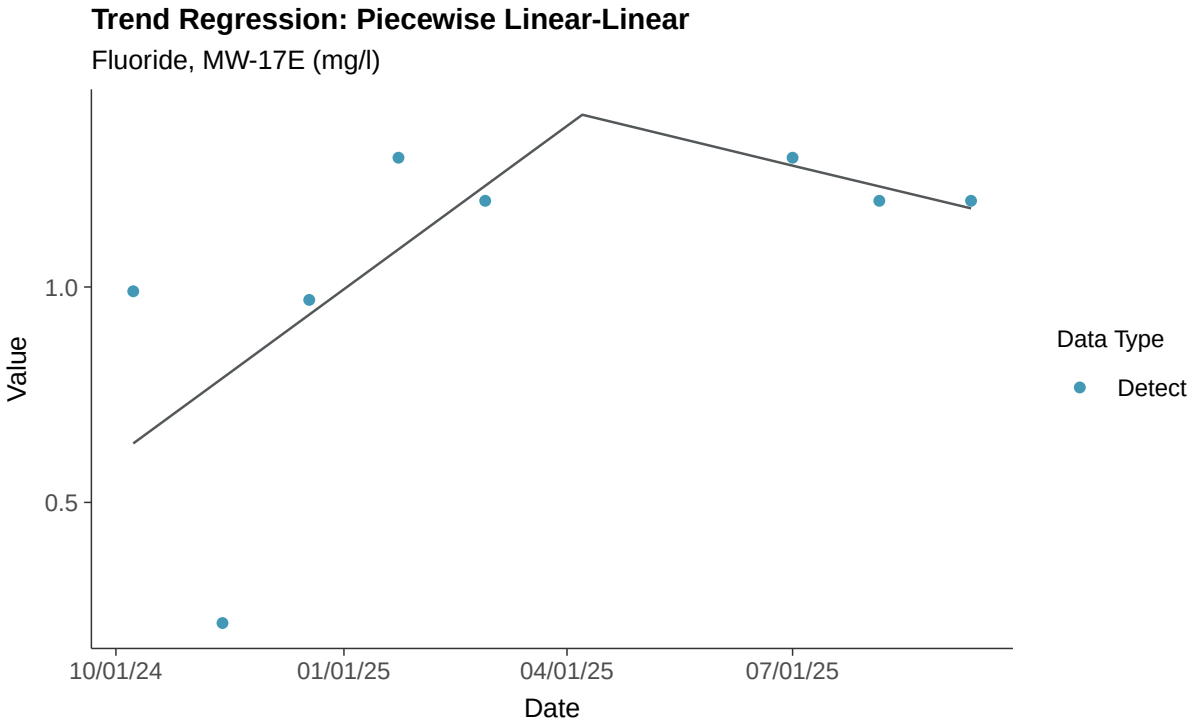
Fluoride, MW-17E (mg/l)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride, MW-17E (mg/l)



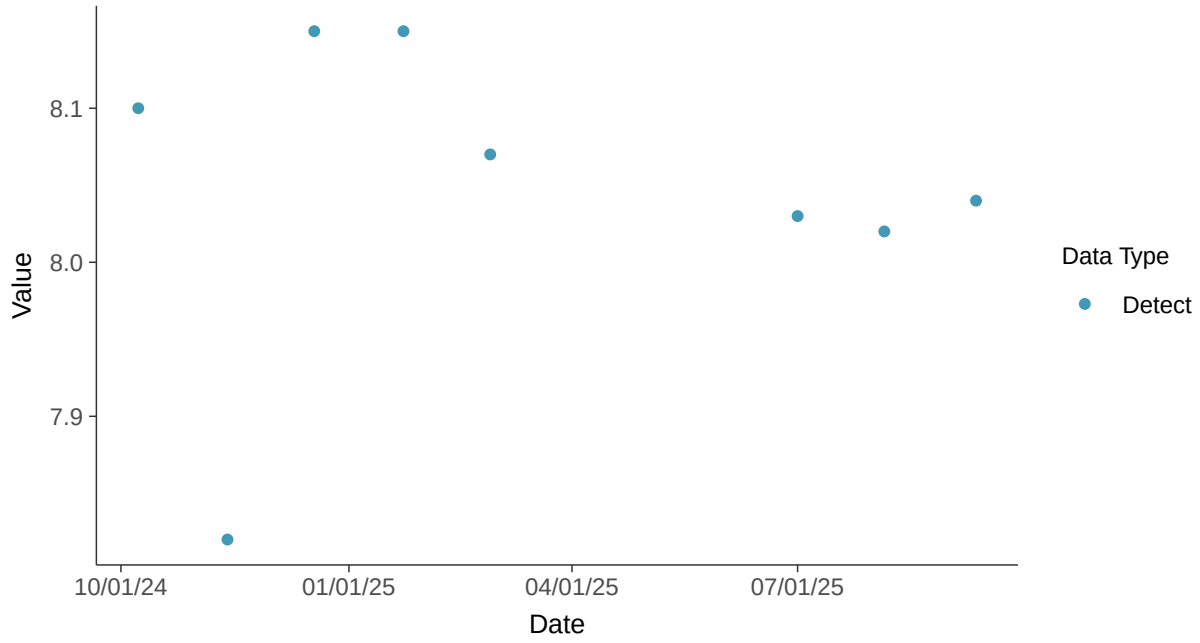

Trend Regression: Piecewise Linear-Linear
Fluoride, MW-17E (mg/l)
Value
1.0
0.5
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix III: pH, Field, MW-17E

ID: 17_2_120

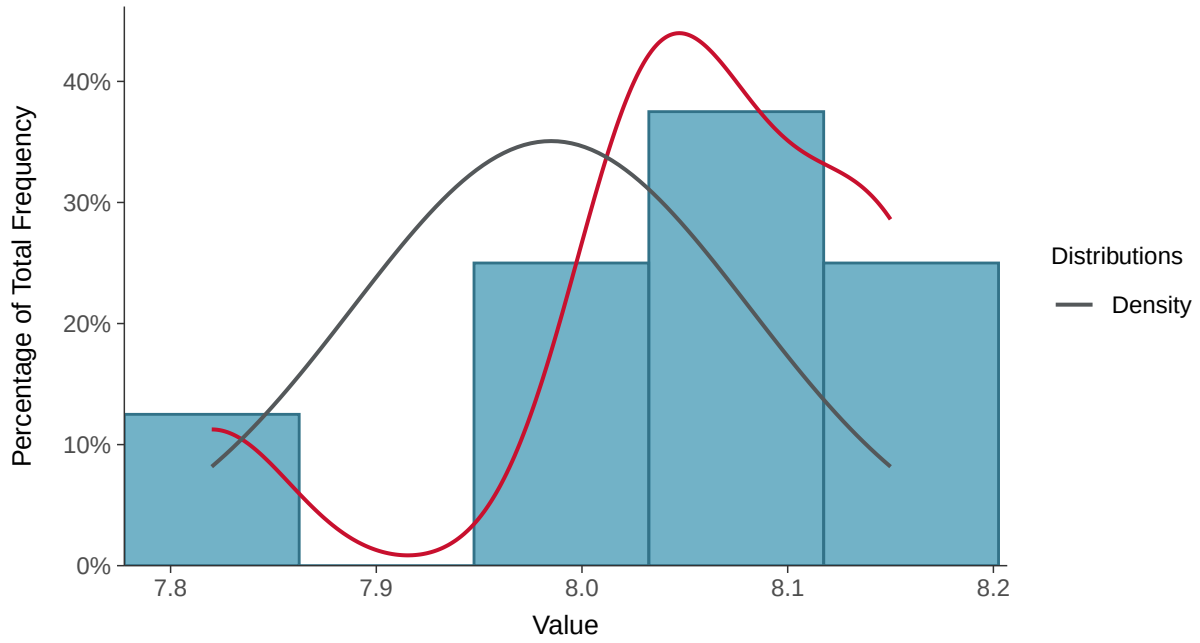
Scatter Plot

pH, Field, MW-17E (su)



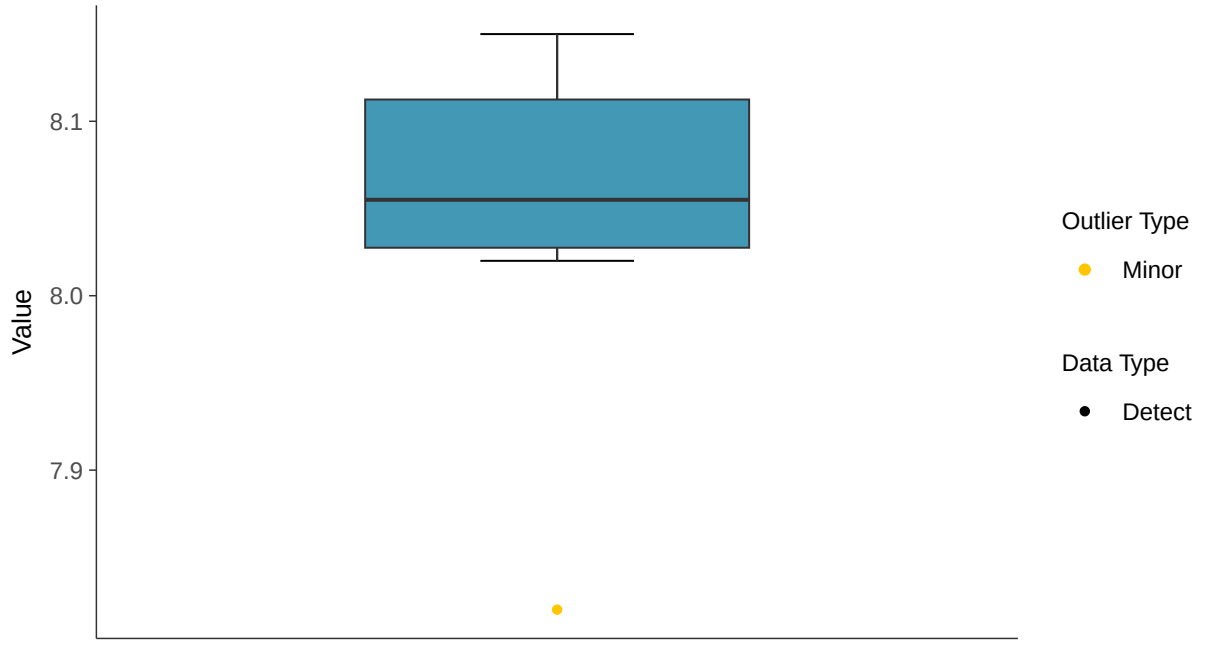
Histogram

pH, Field, MW-17E (su)



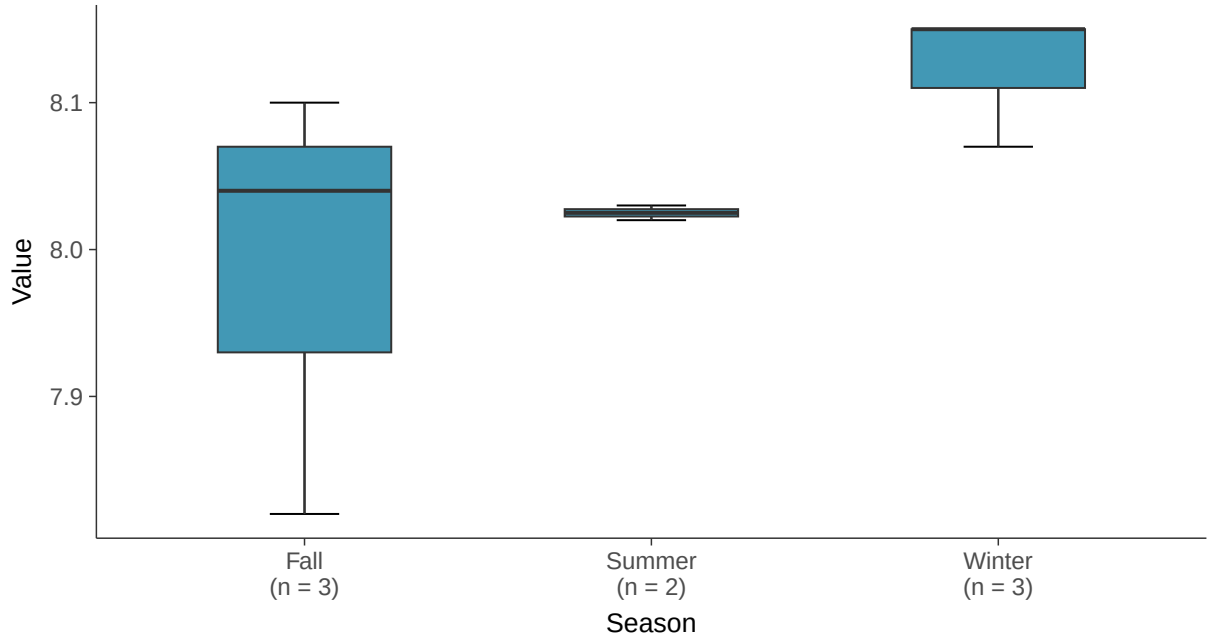
Boxplot

pH, Field, MW-17E (su)



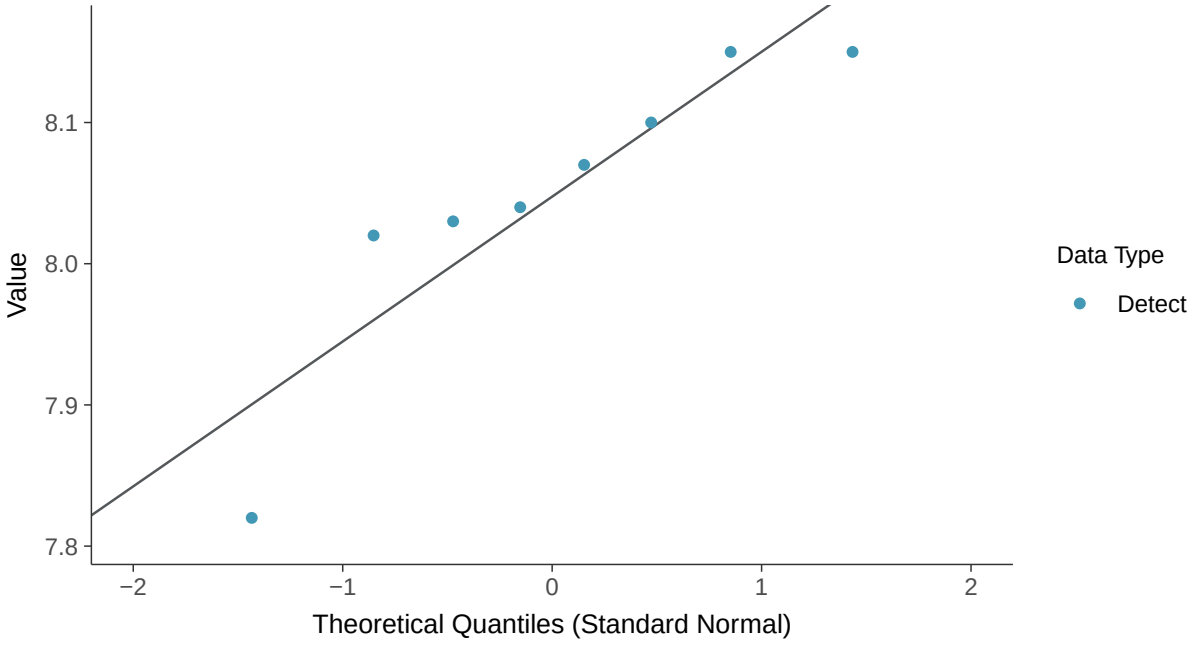
Boxplot by Season

pH, Field, MW-17E (su)



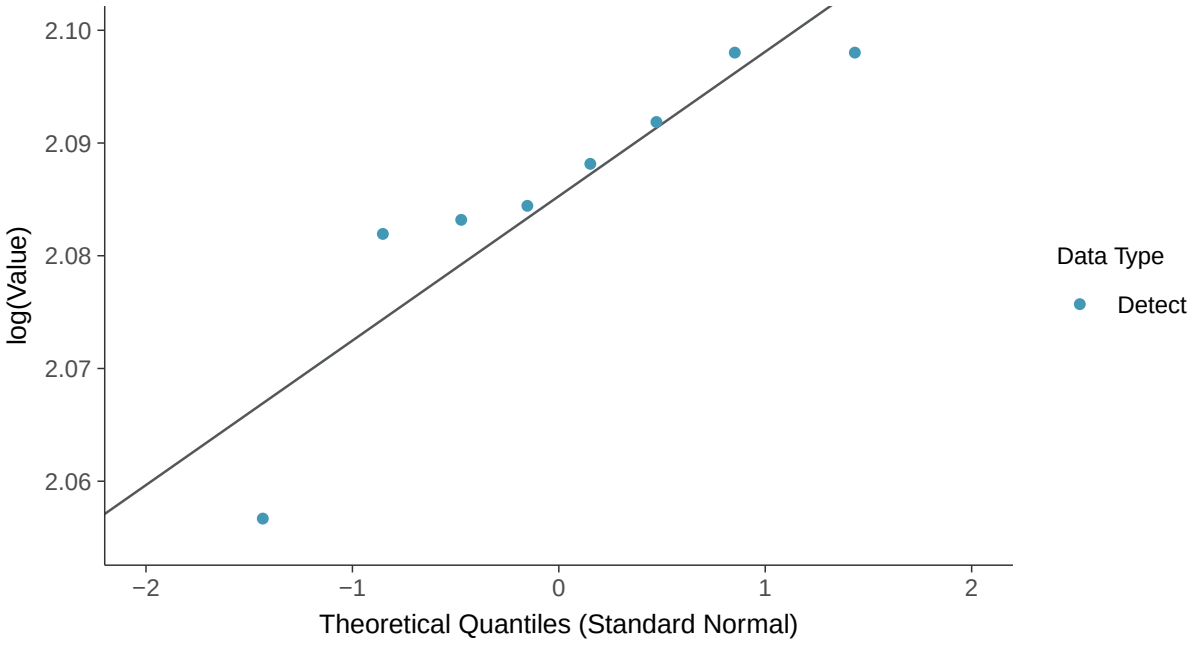
Normal Q-Q plot

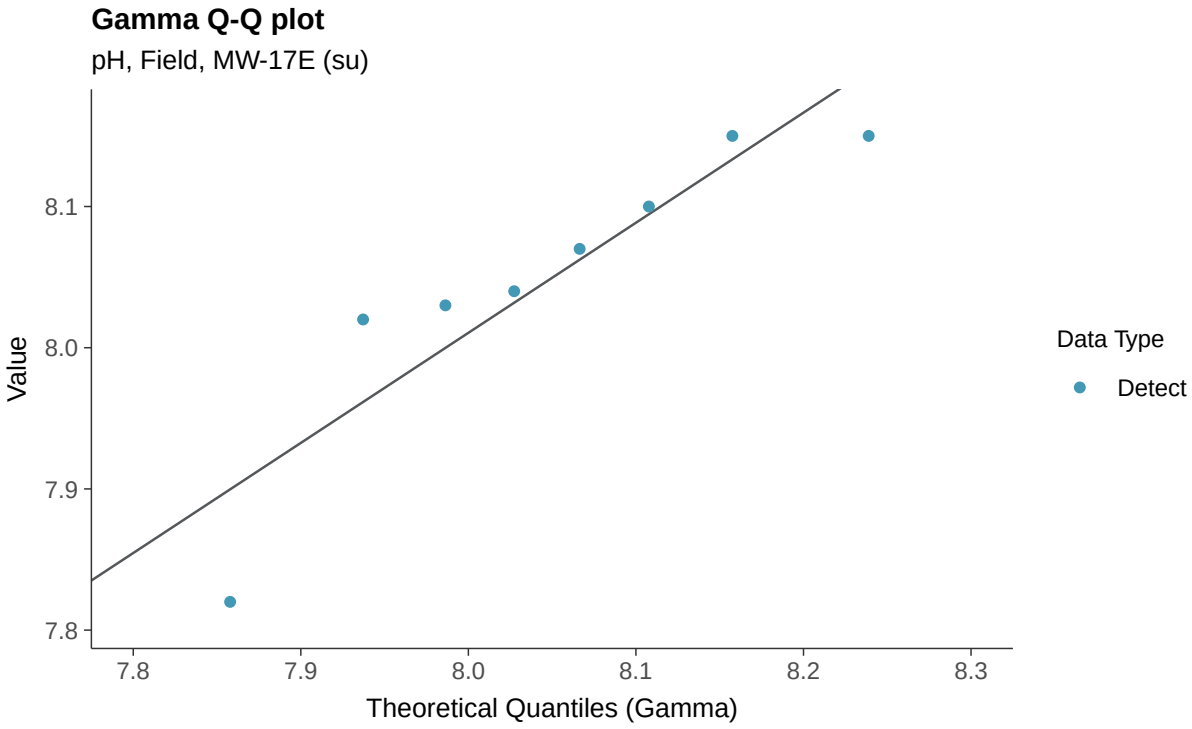
pH, Field, MW-17E (su)

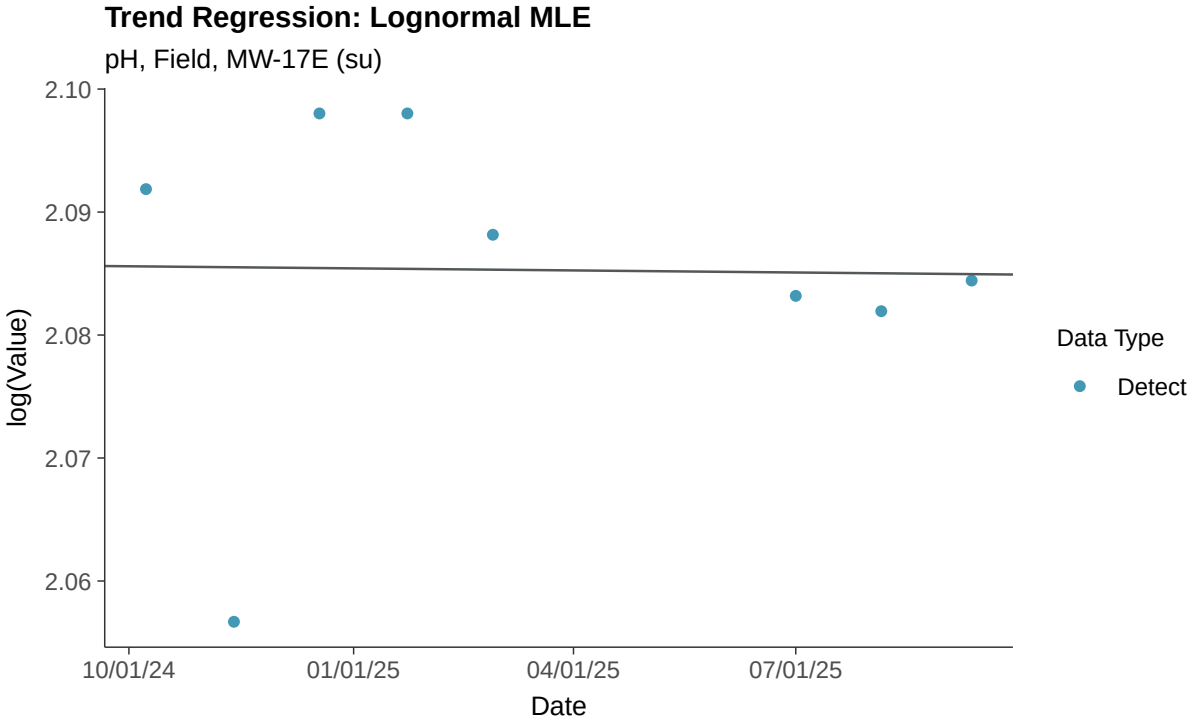


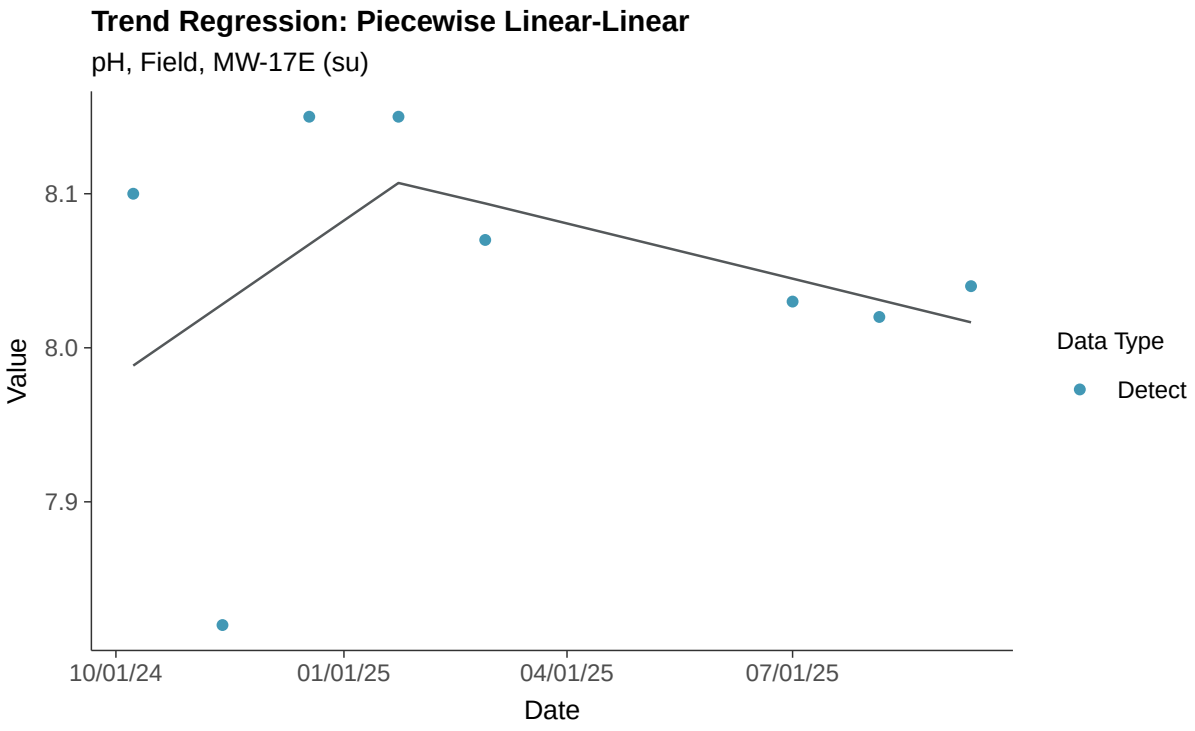
Lognormal Q-Q plot

pH, Field, MW-17E (su)



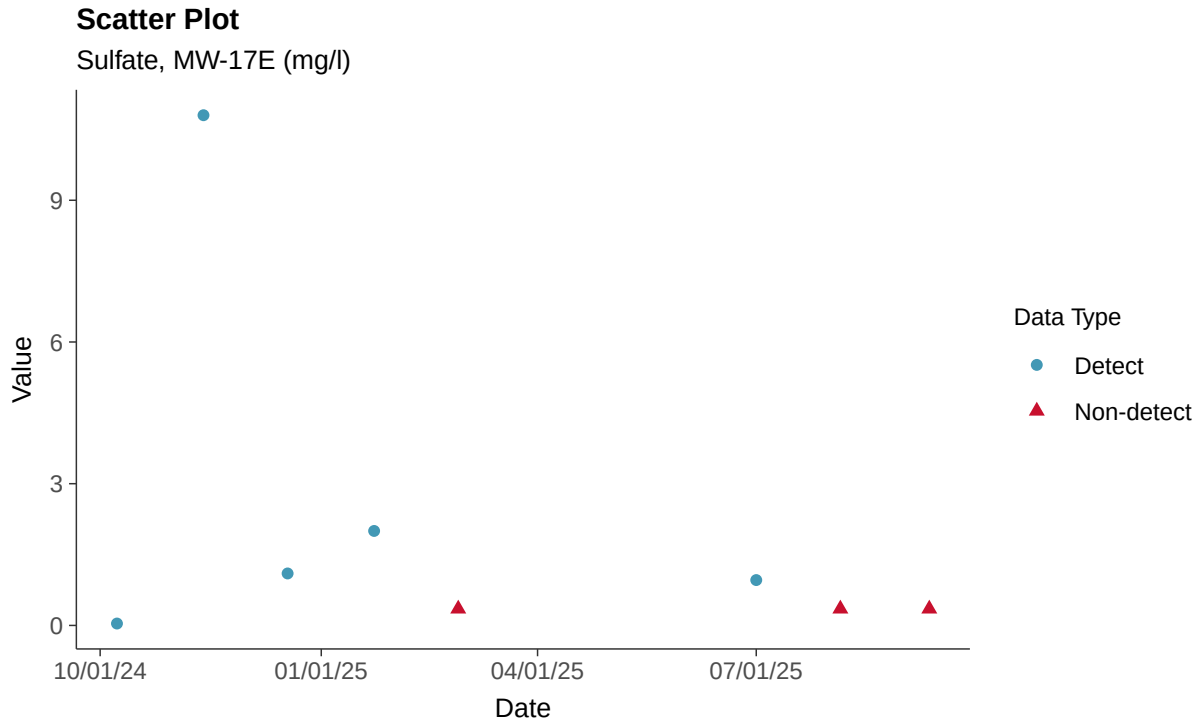

Gamma Q-Q plot
pH, Field, MW-17E (su)
Value
8.1
8.0
7.9
7.8
7.8
7.9
8.0
8.1
8.2
8.3
Theoretical Quantiles (Gamma)
Data Type
Detect

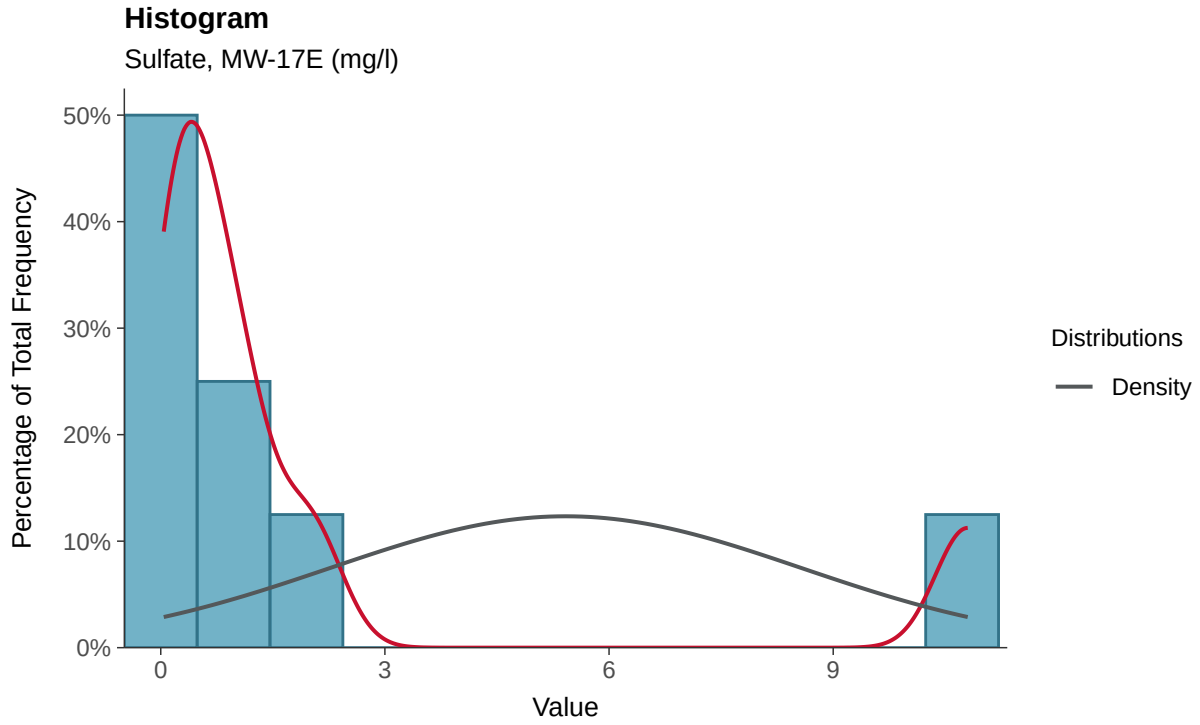

Trend Regression: Lognormal MLE
pH, Field, MW-17E (su)
log(Value)
2.10
2.09
2.08
2.07
2.06
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect


Trend Regression: Piecewise Linear-Linear
pH, Field, MW-17E (su)
Value
8.1
8.0
7.9
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix III: Sulfate, MW-17E

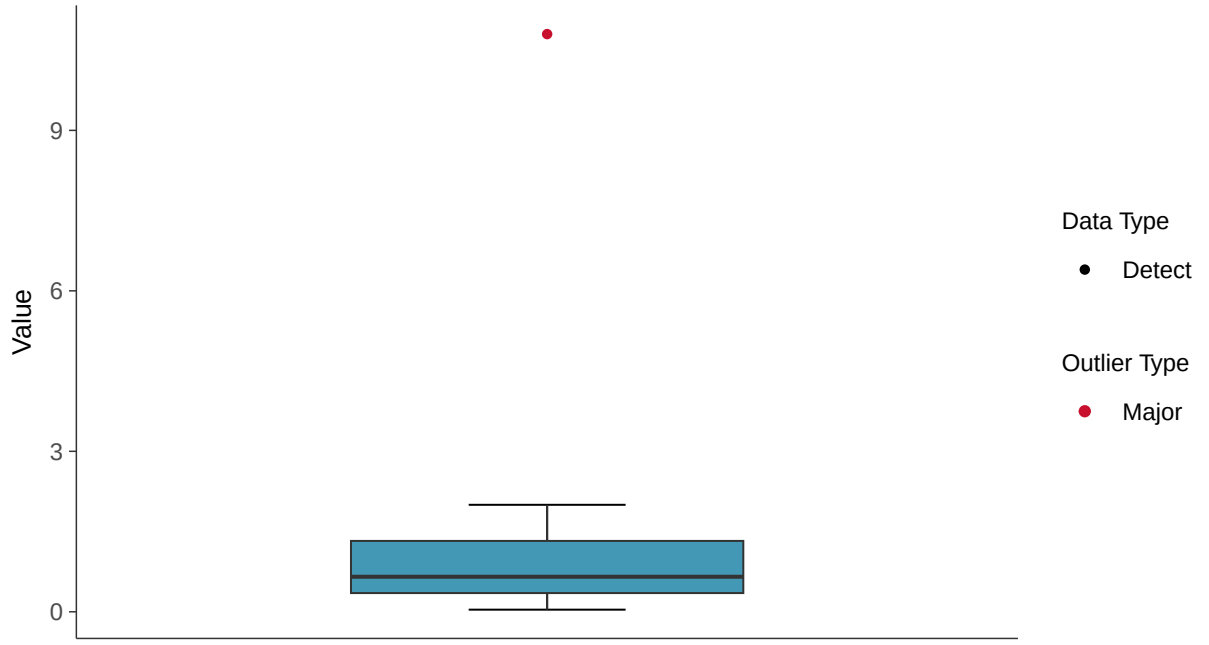
ID: 17_2_124





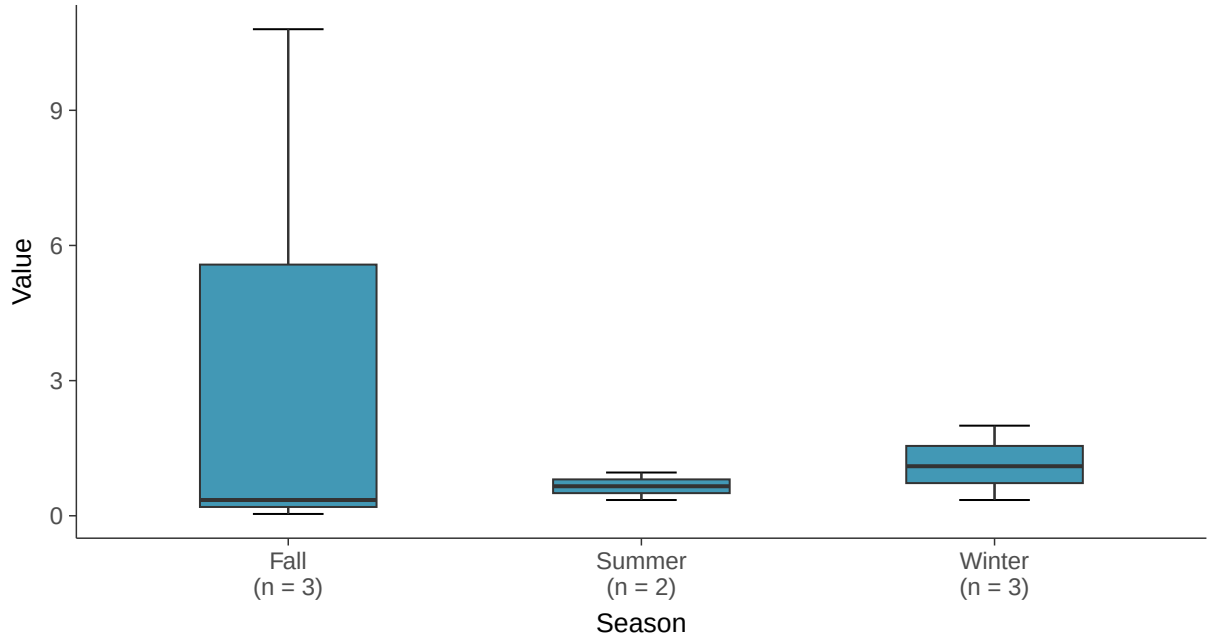
Boxplot

Sulfate, MW-17E (mg/l)



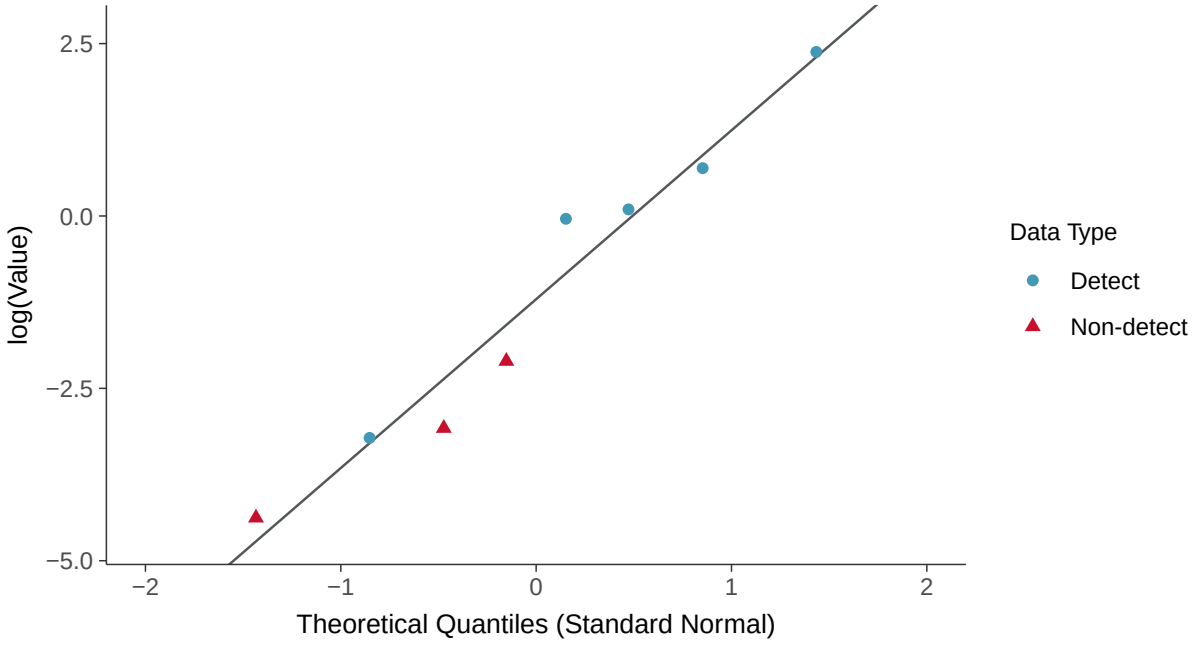
Boxplot by Season

Sulfate, MW-17E (mg/l)



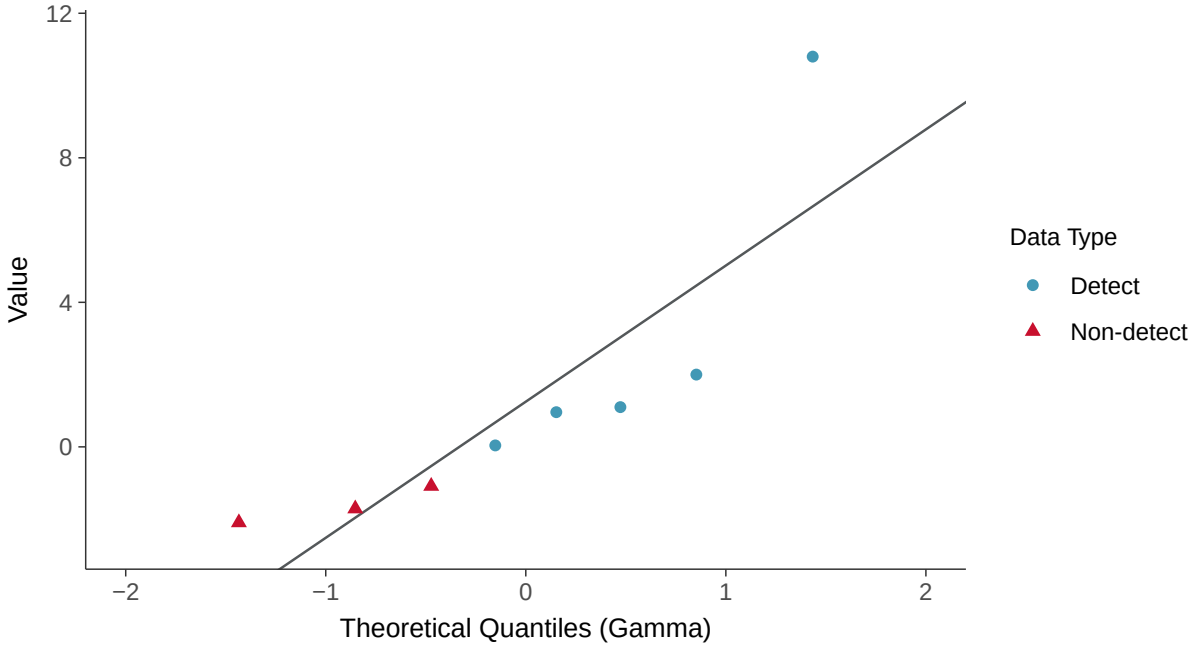
Lognormal Q-Q plot using ROS Imputed Estimates

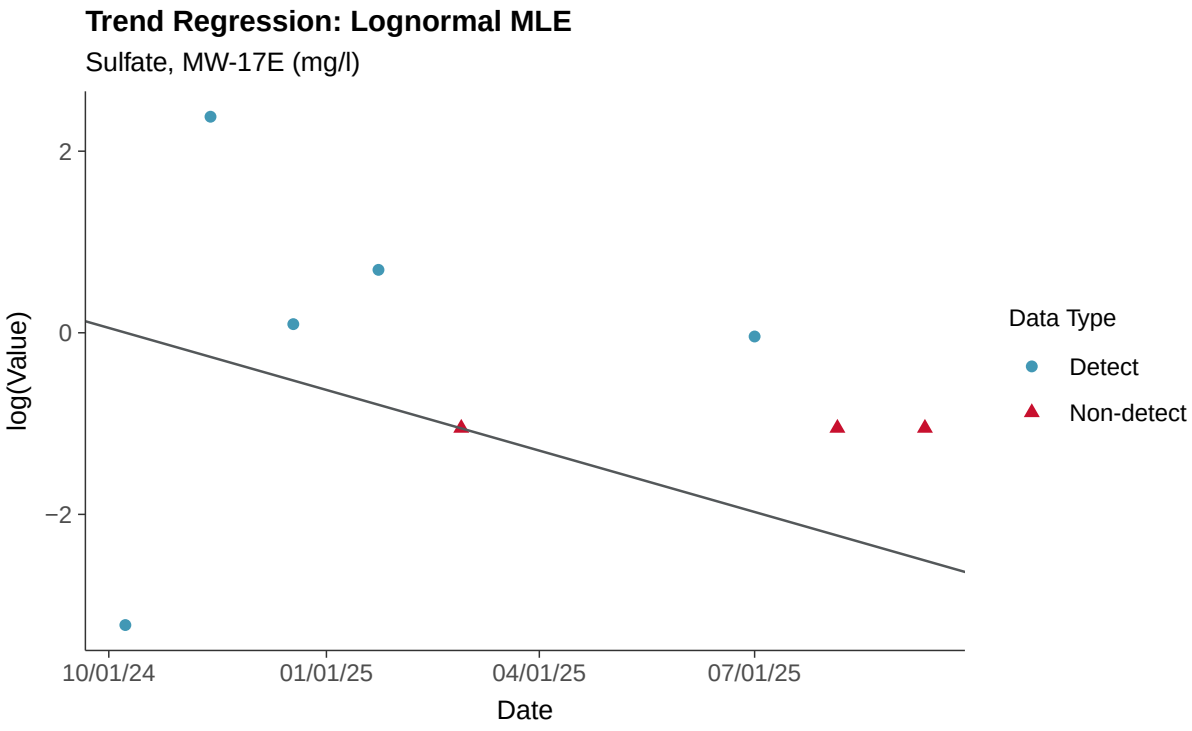
Sulfate, MW-17E (mg/l)



Gamma Q-Q plot using ROS Imputed Estimates

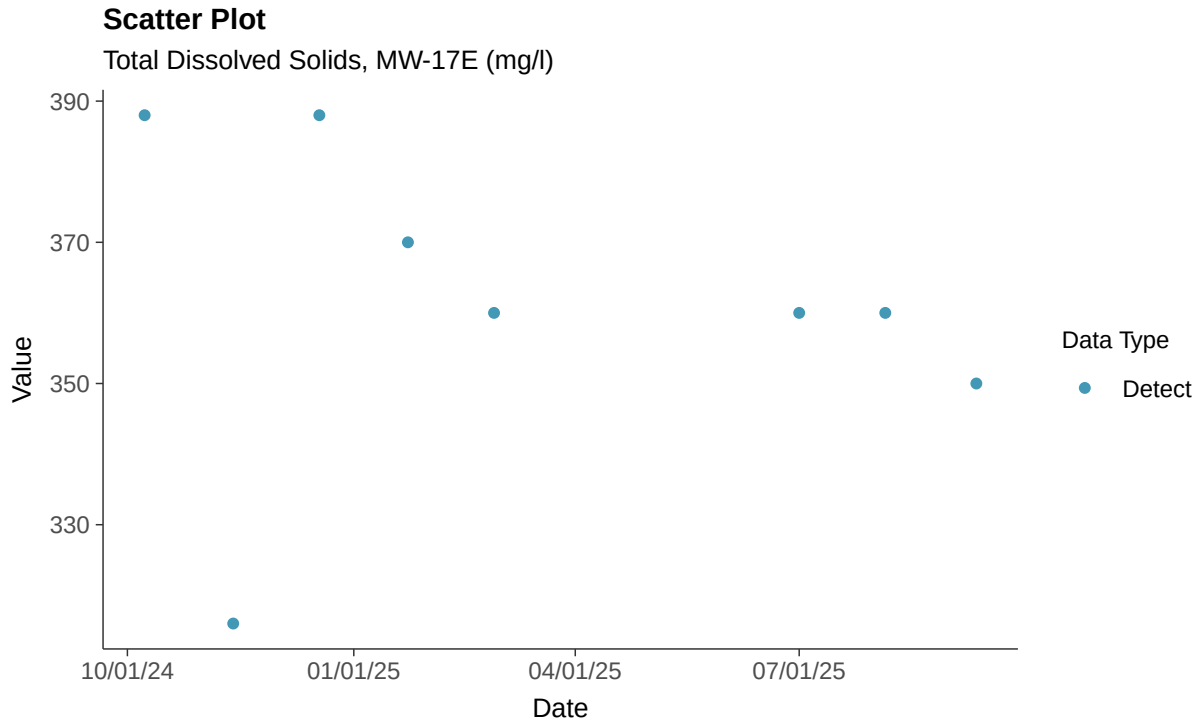
Sulfate, MW-17E (mg/l)

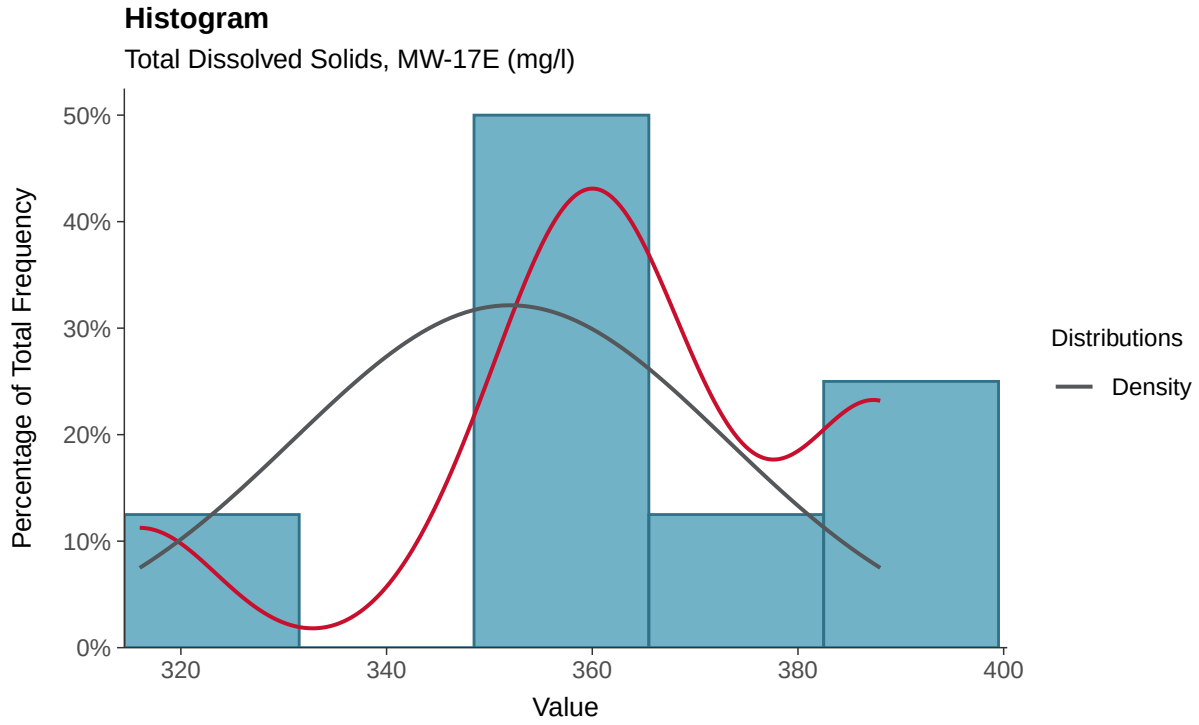



Trend Regression: Lognormal MLE
Sulfate, MW-17E (mg/l)
log(Value)
2
0
−2
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Appendix III: Total Dissolved Solids, MW-17E

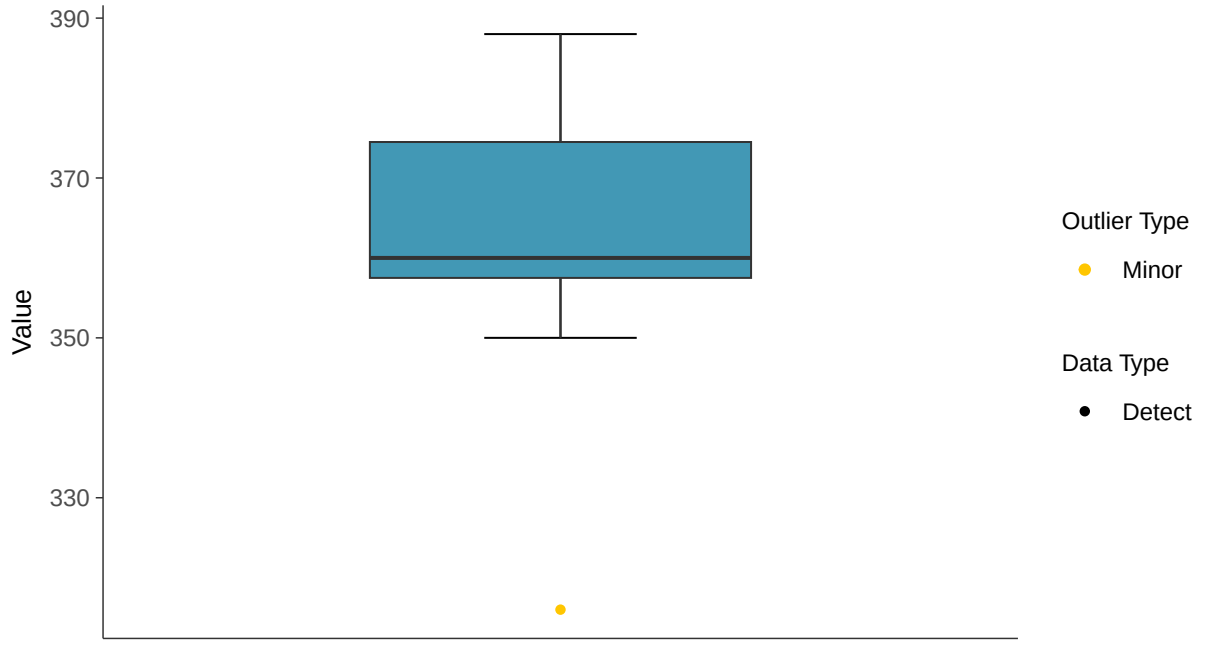
ID: 17_2_126





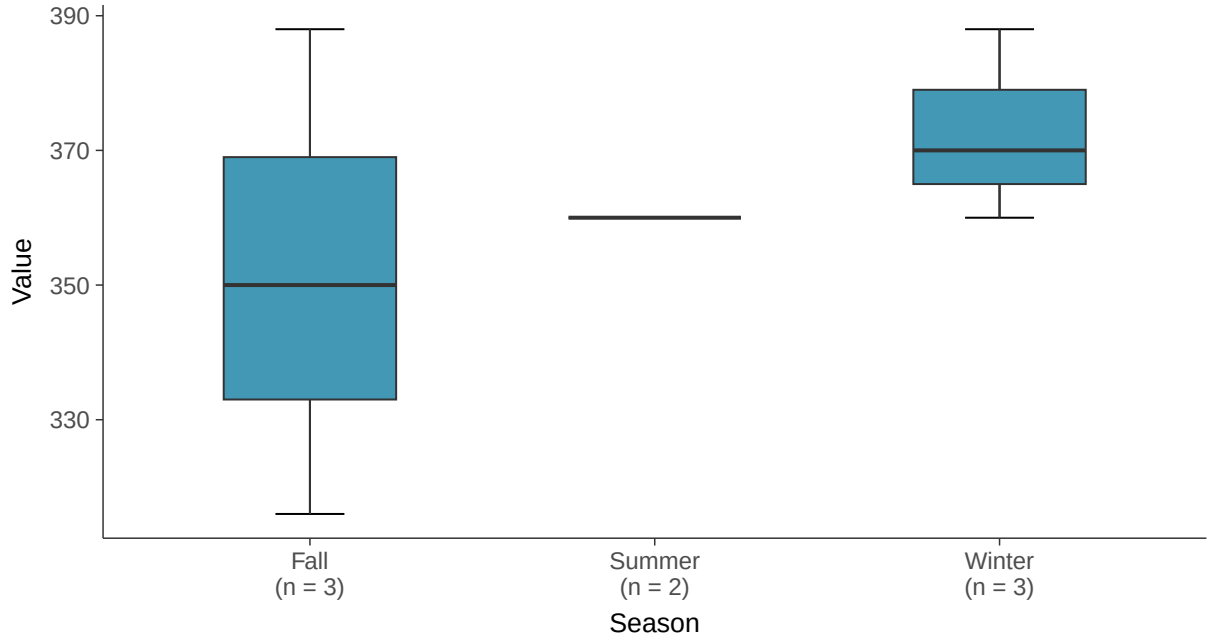
Boxplot

Total Dissolved Solids, MW-17E (mg/l)



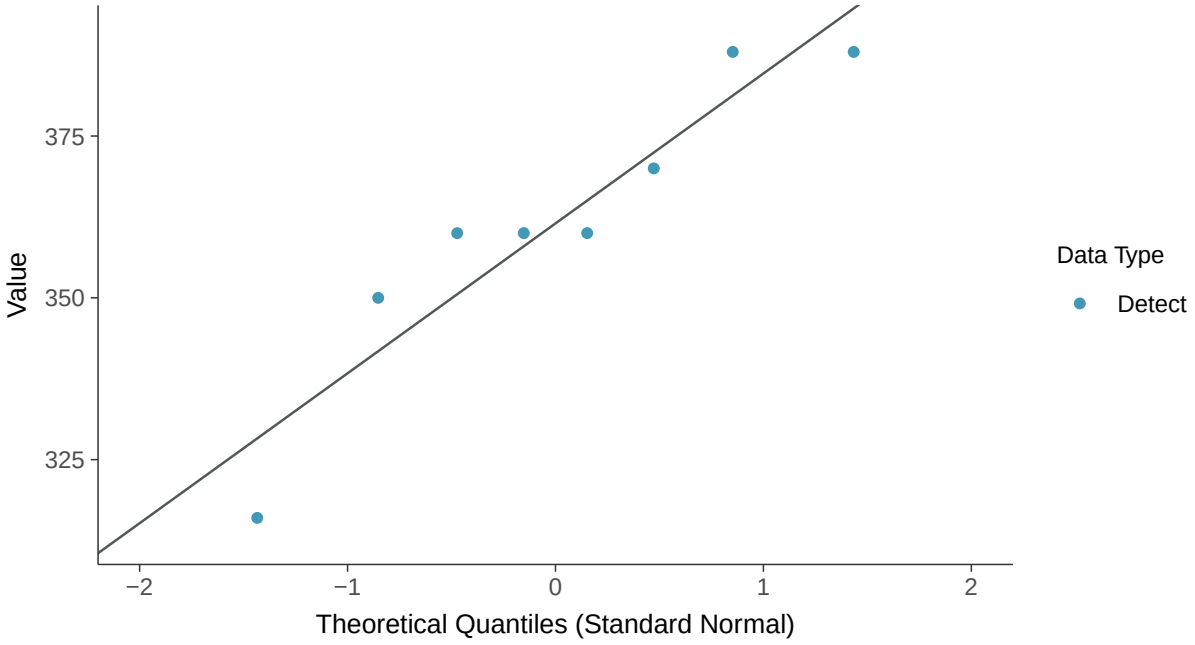
Boxplot by Season

Total Dissolved Solids, MW-17E (mg/l)



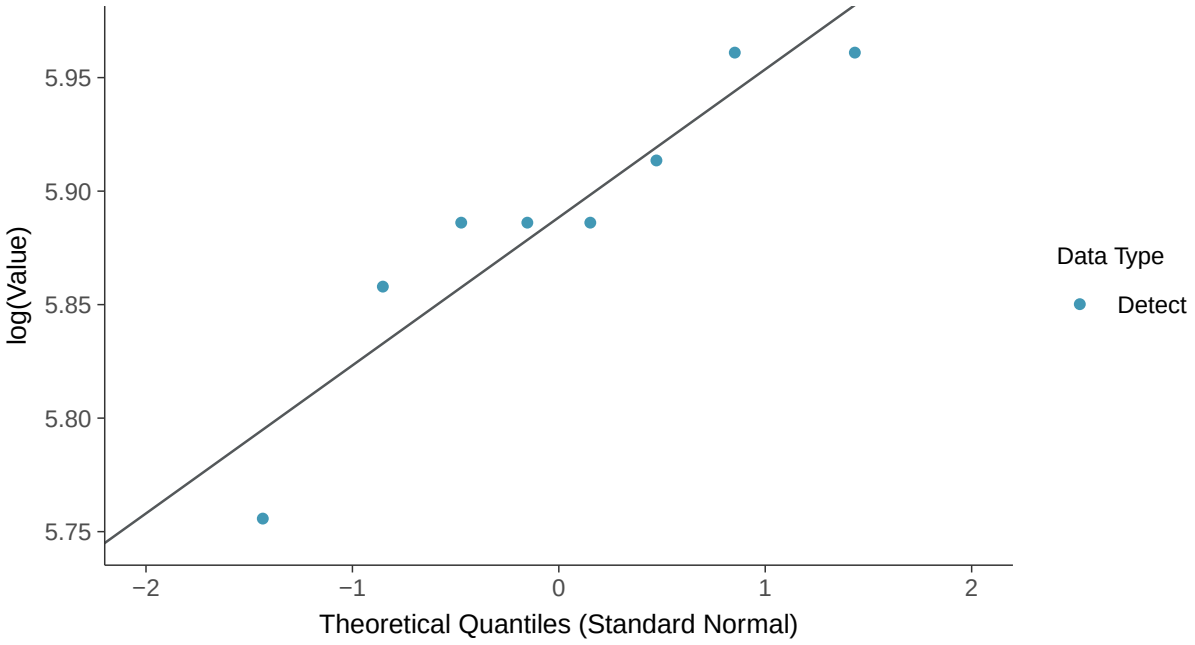
Normal Q-Q plot

Total Dissolved Solids, MW-17E (mg/l)



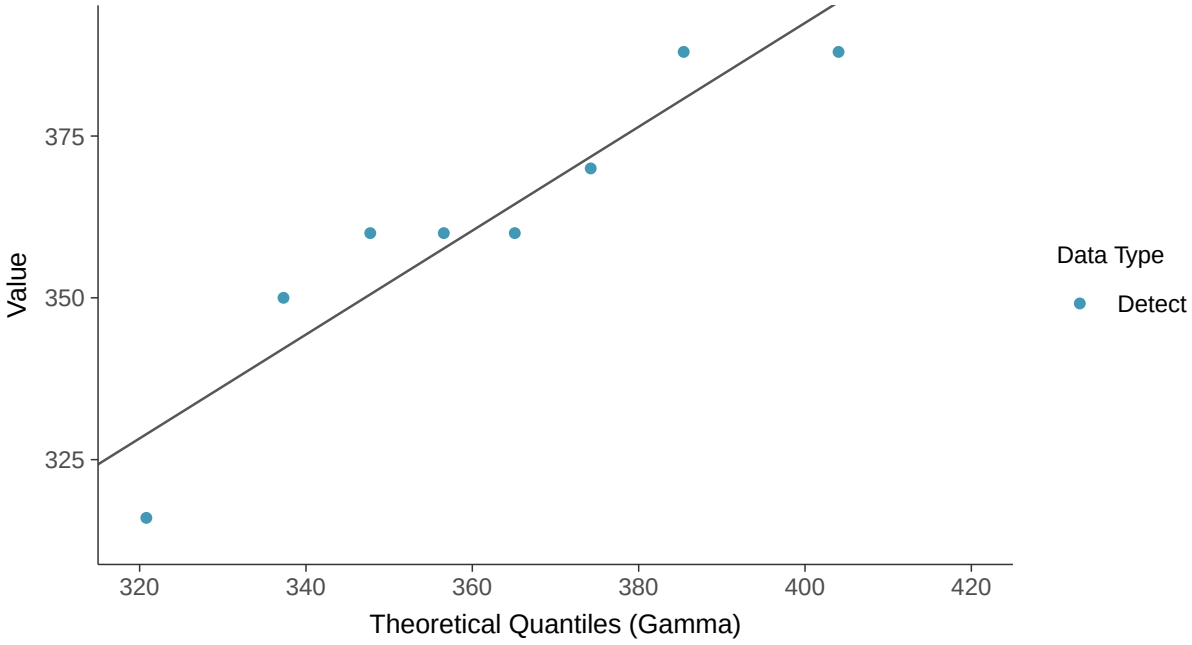
Lognormal Q-Q plot

Total Dissolved Solids, MW-17E (mg/l)



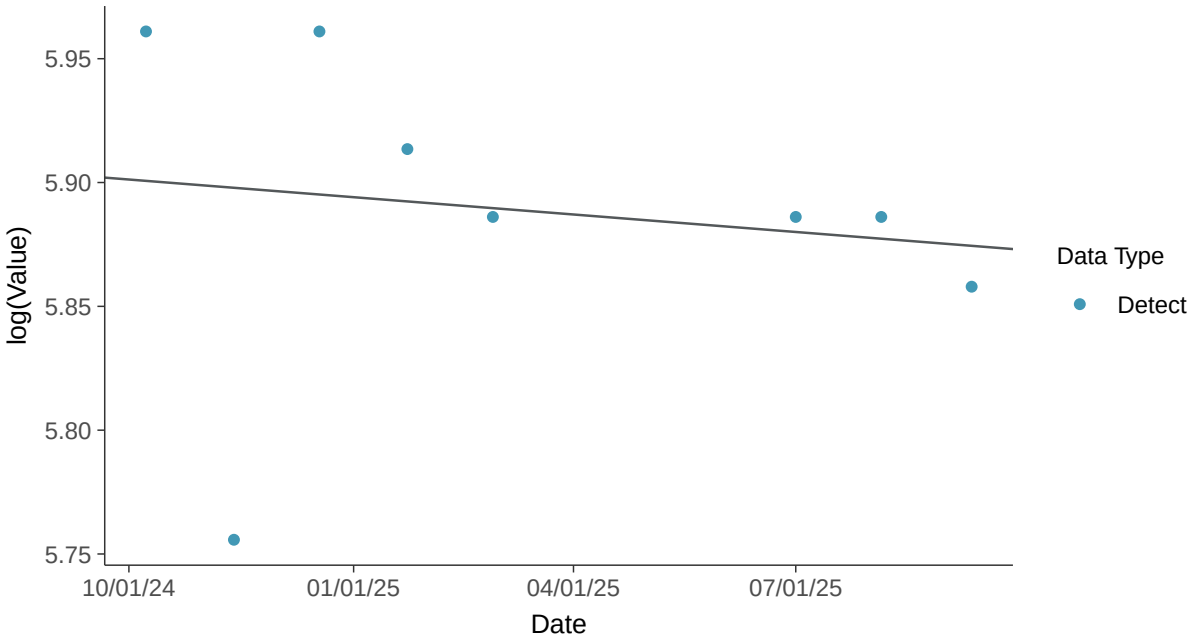
Gamma Q-Q plot

Total Dissolved Solids, MW-17E (mg/l)



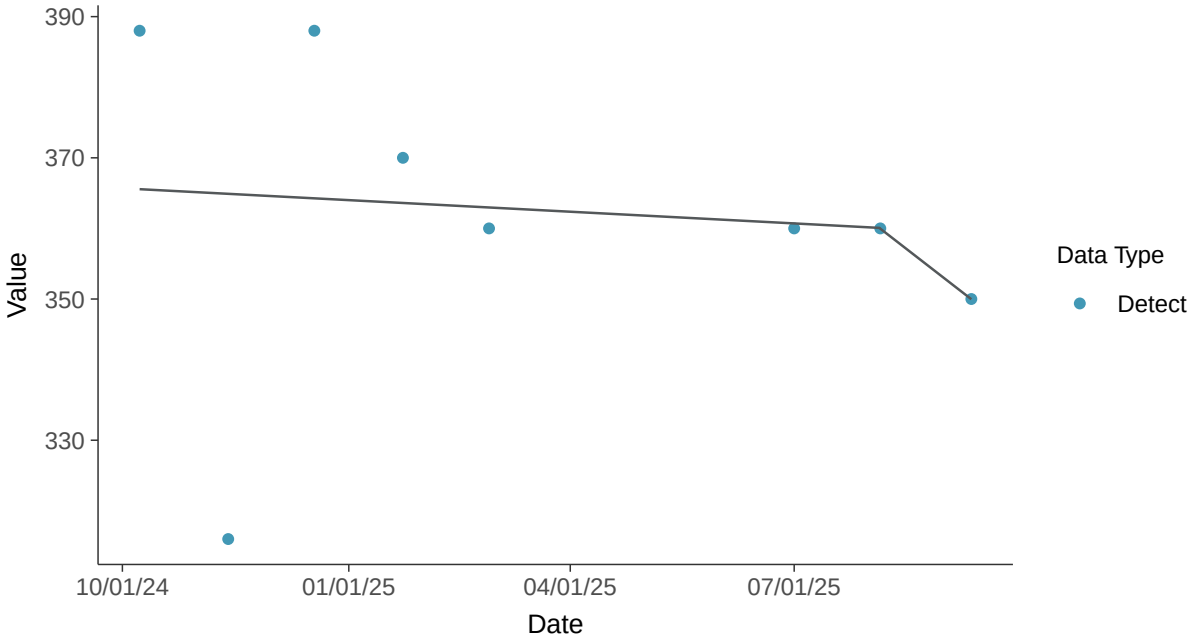
Trend Regression: Lognormal MLE

Total Dissolved Solids, MW-17E (mg/l)



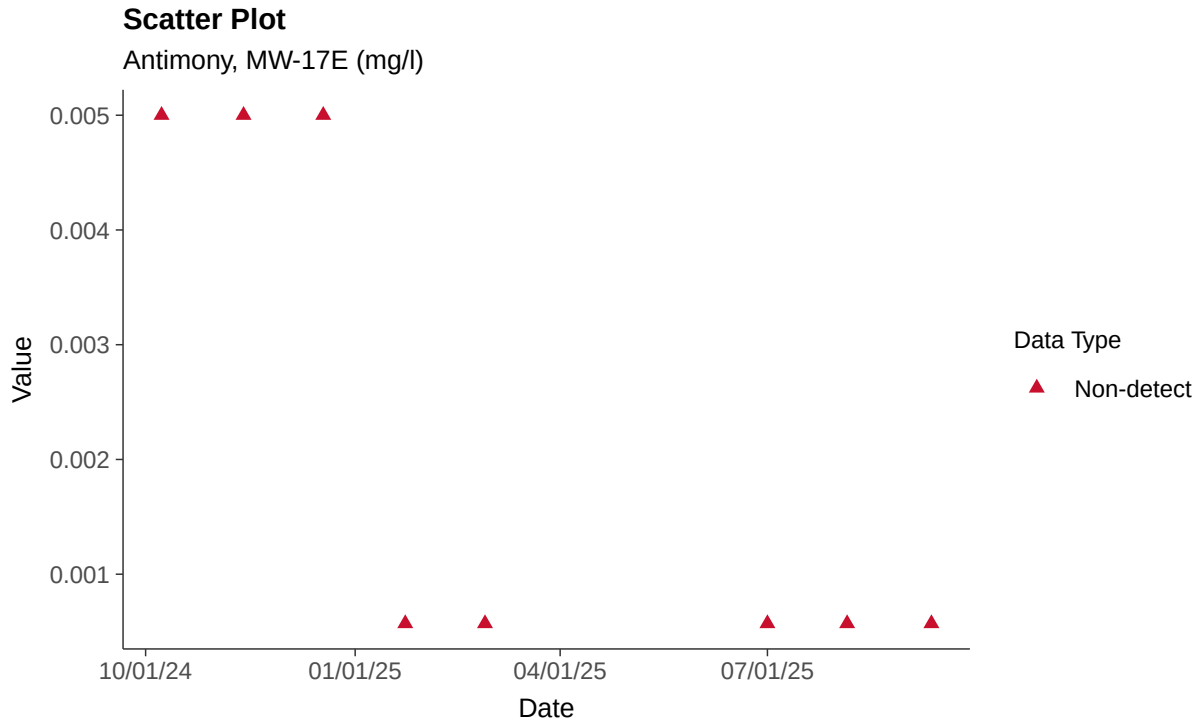
Trend Regression: Piecewise Linear-Linear

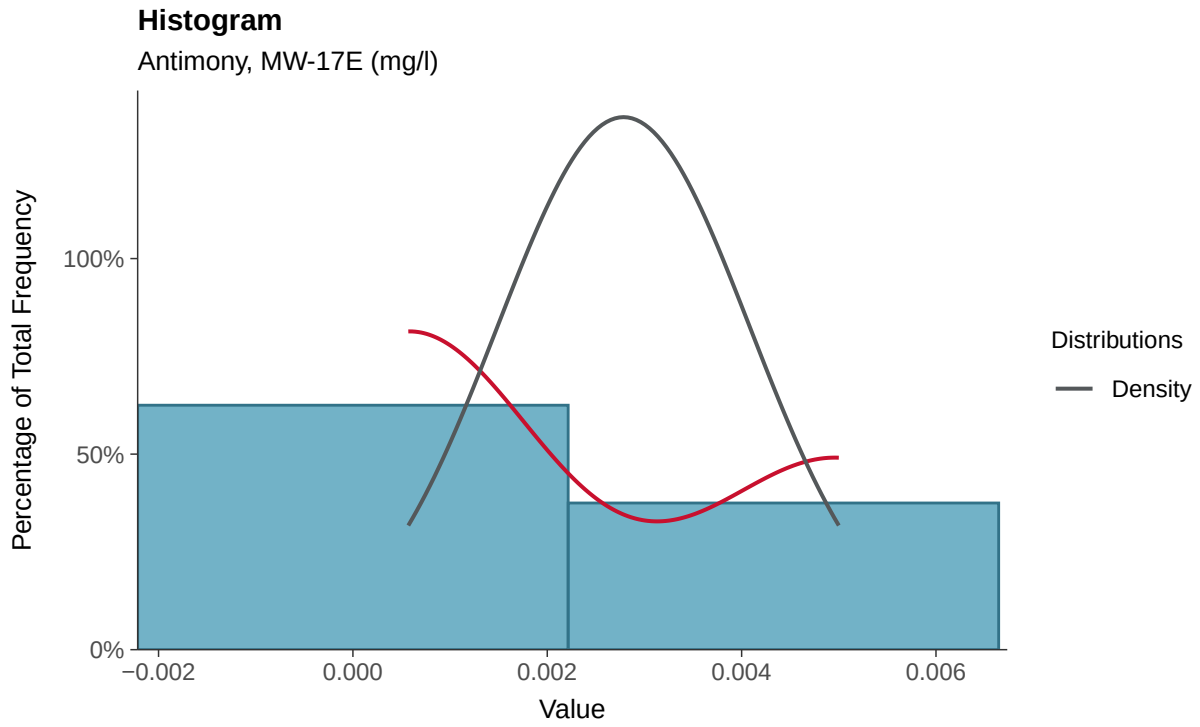
Total Dissolved Solids, MW-17E (mg/l)



Appendix IV: Antimony, MW-17E

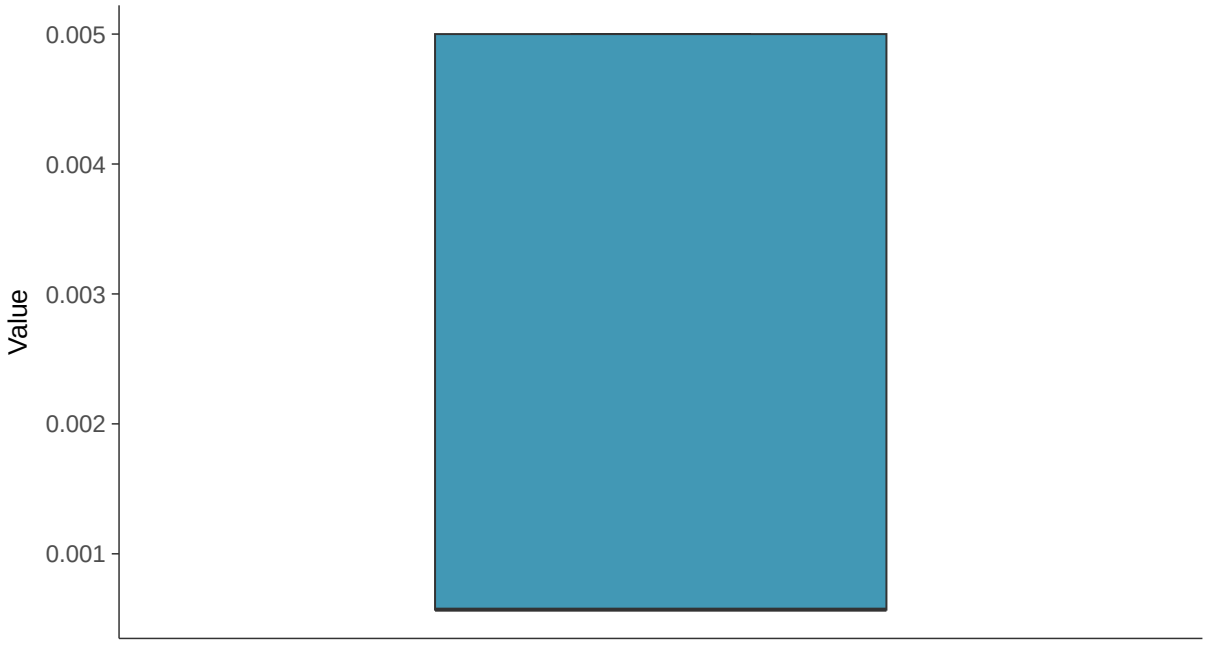
ID: 17_3_101





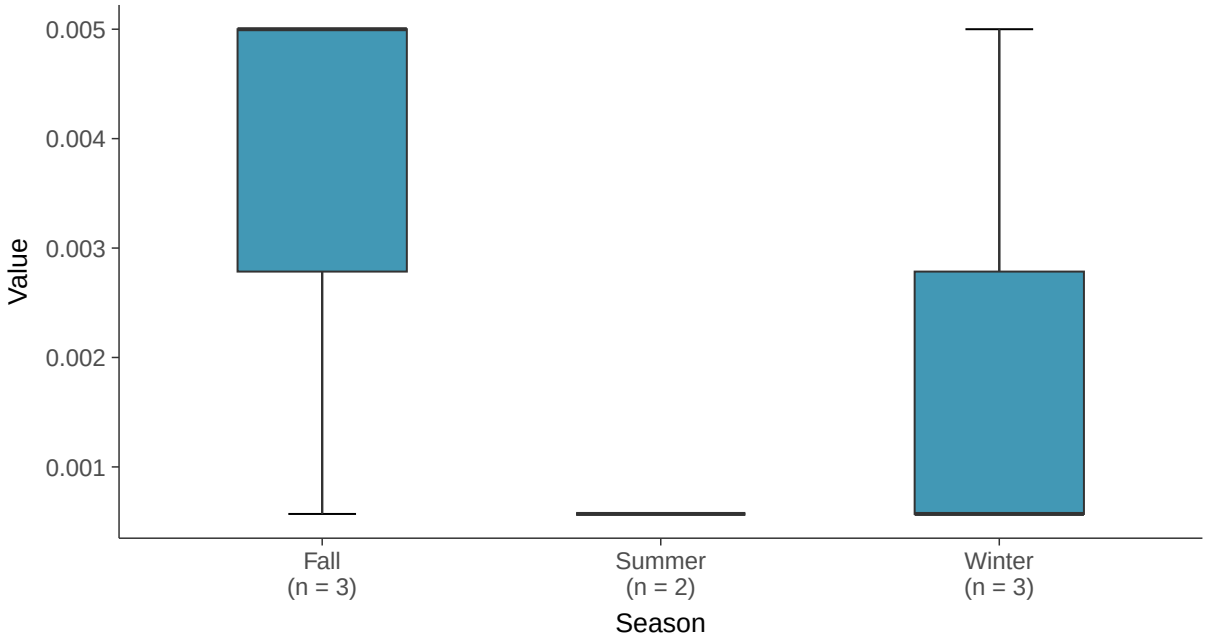
Boxplot

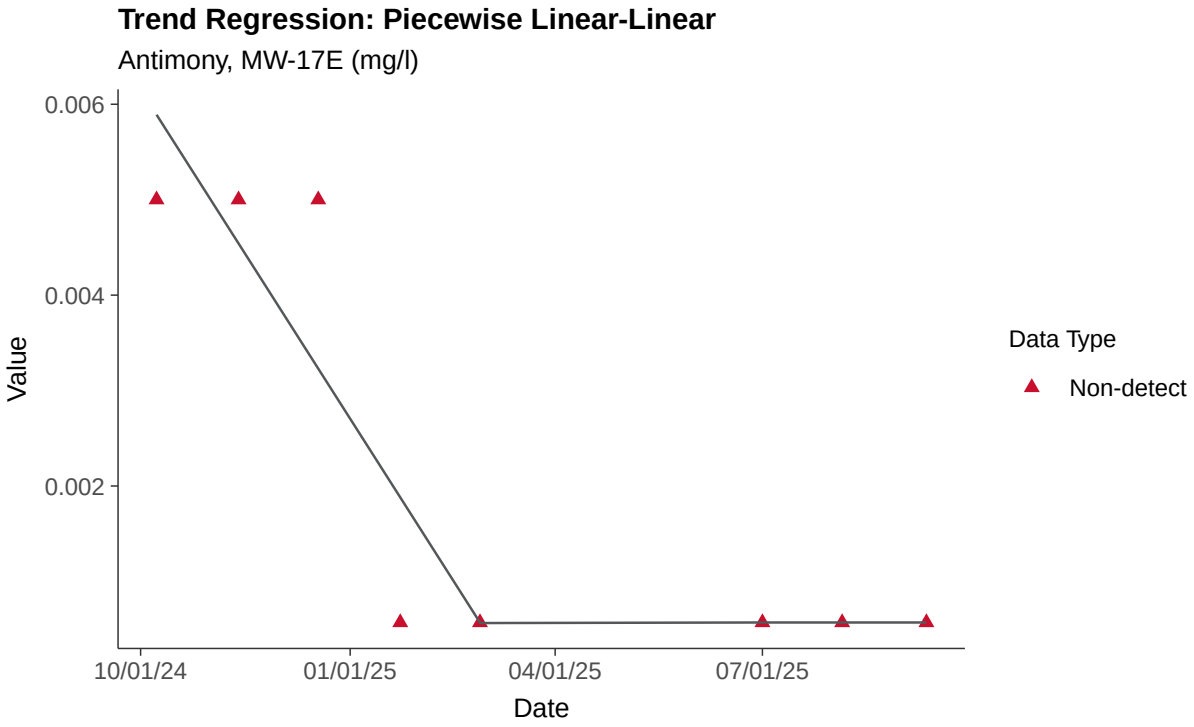
Antimony, MW-17E (mg/l)



Boxplot by Season

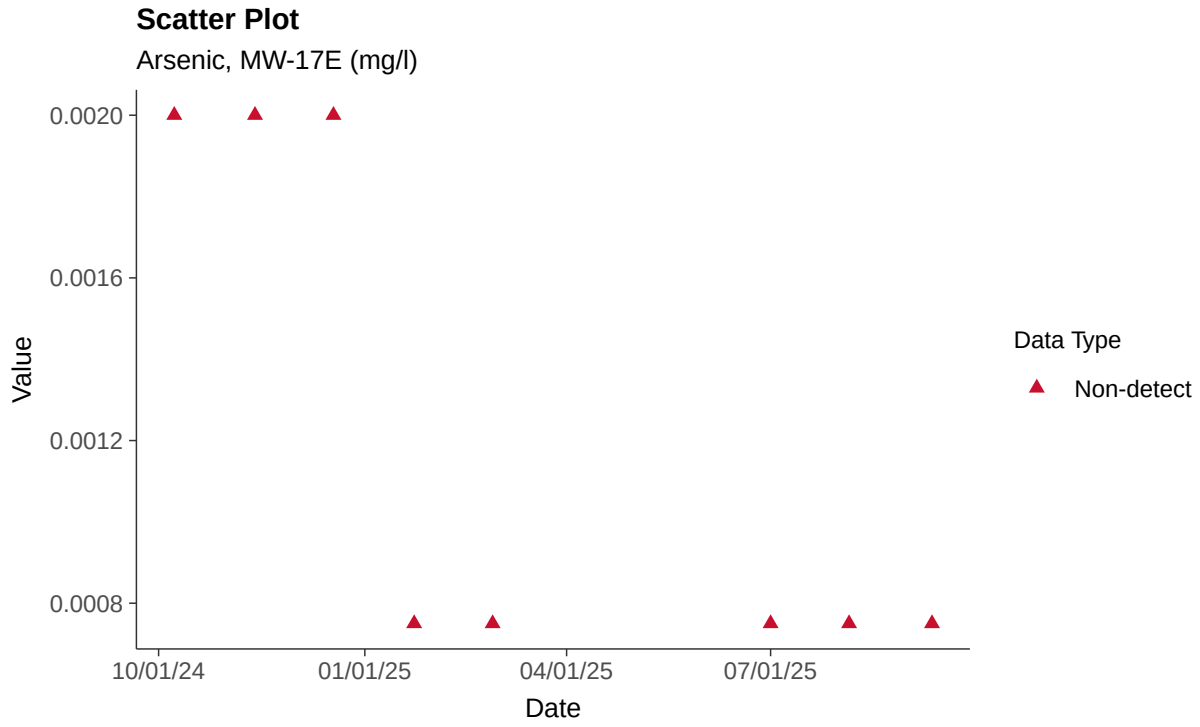
Antimony, MW-17E (mg/l)

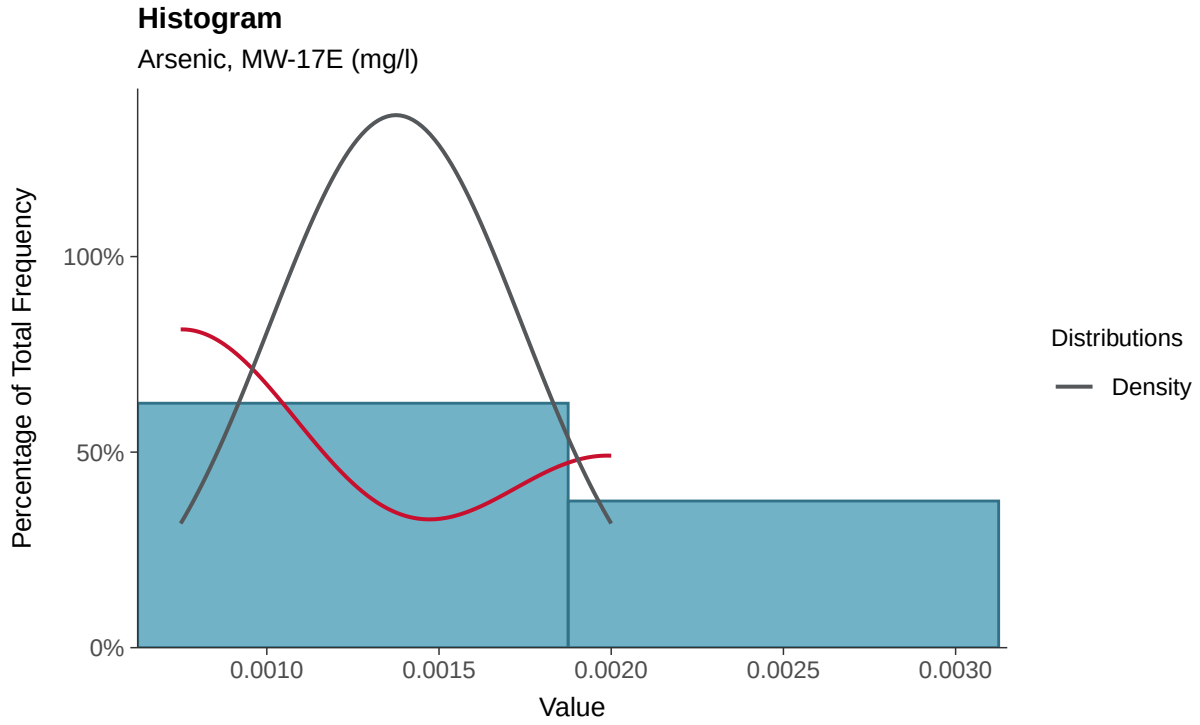



Trend Regression: Piecewise Linear-Linear
Antimony, MW-17E (mg/l)
0.006
0.004
0.002
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Arsenic, MW-17E

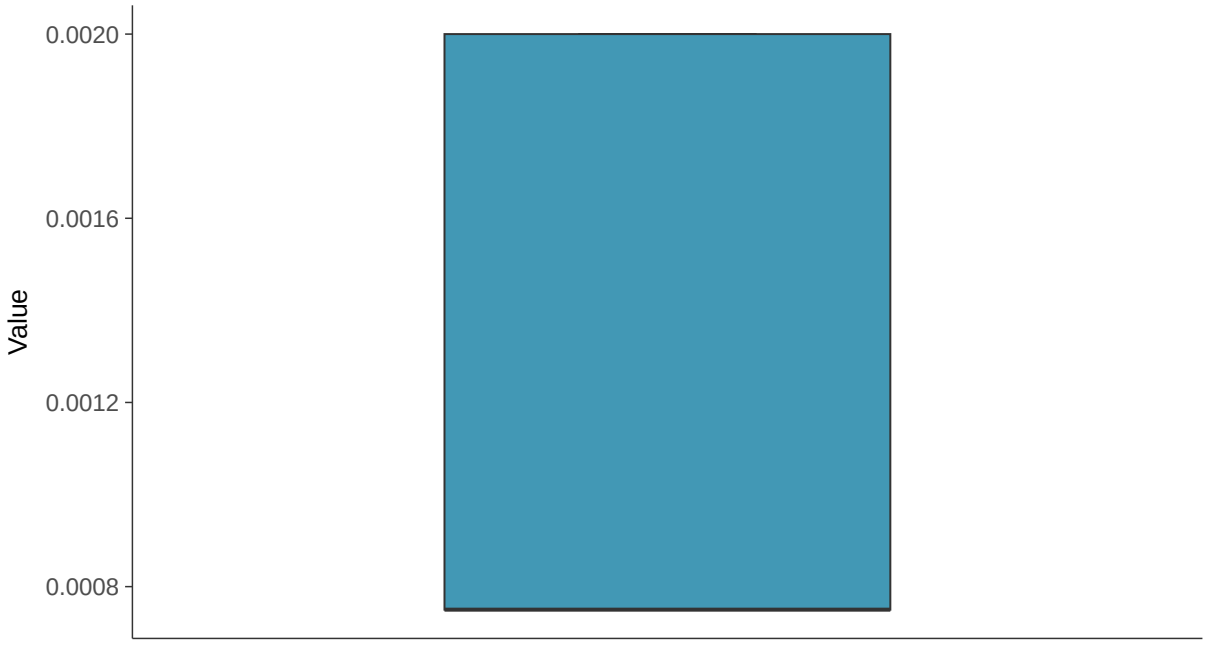
ID: 17_3_102





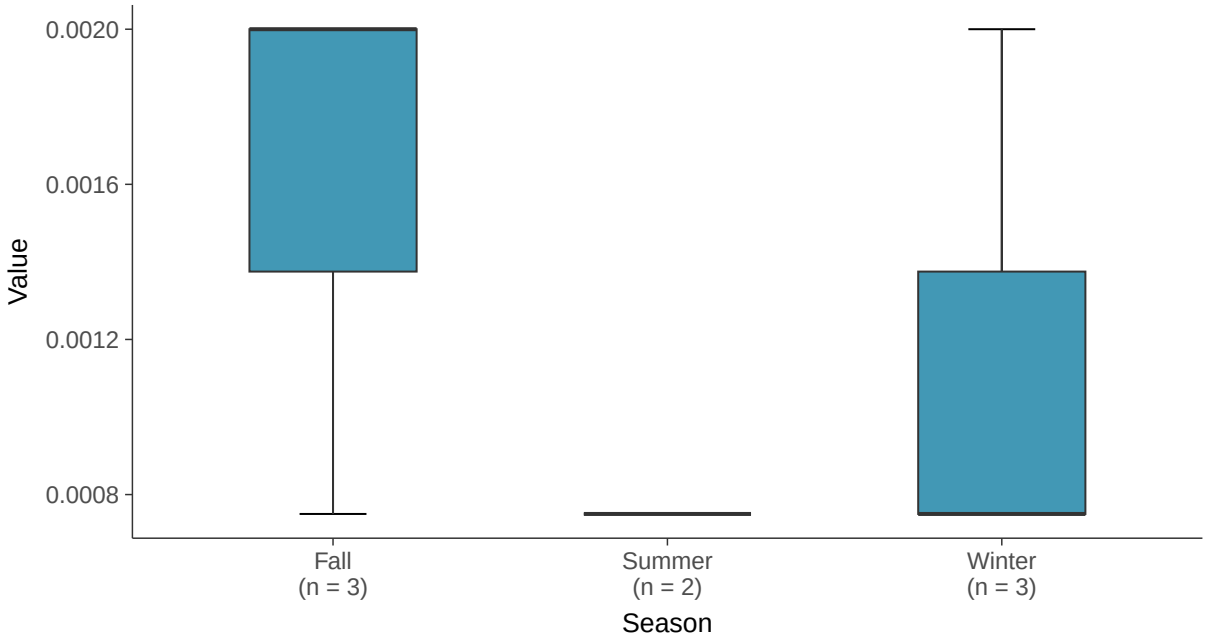
Boxplot

Arsenic, MW-17E (mg/l)



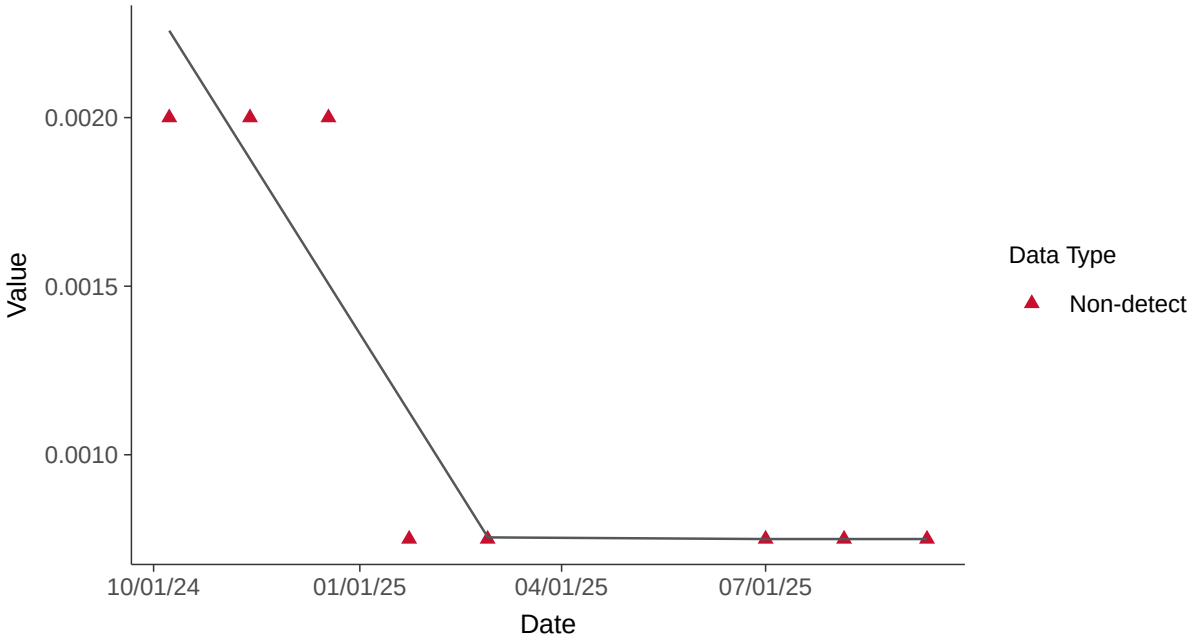
Boxplot by Season

Arsenic, MW-17E (mg/l)



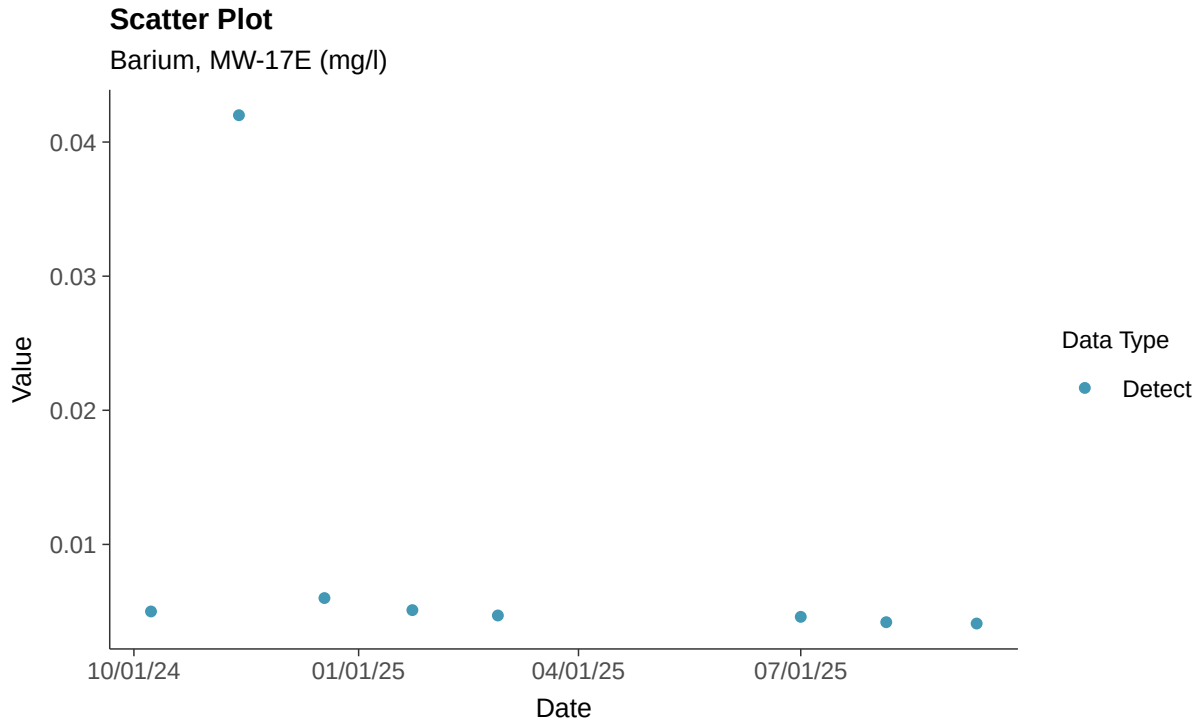
Trend Regression: Piecewise Linear-Linear

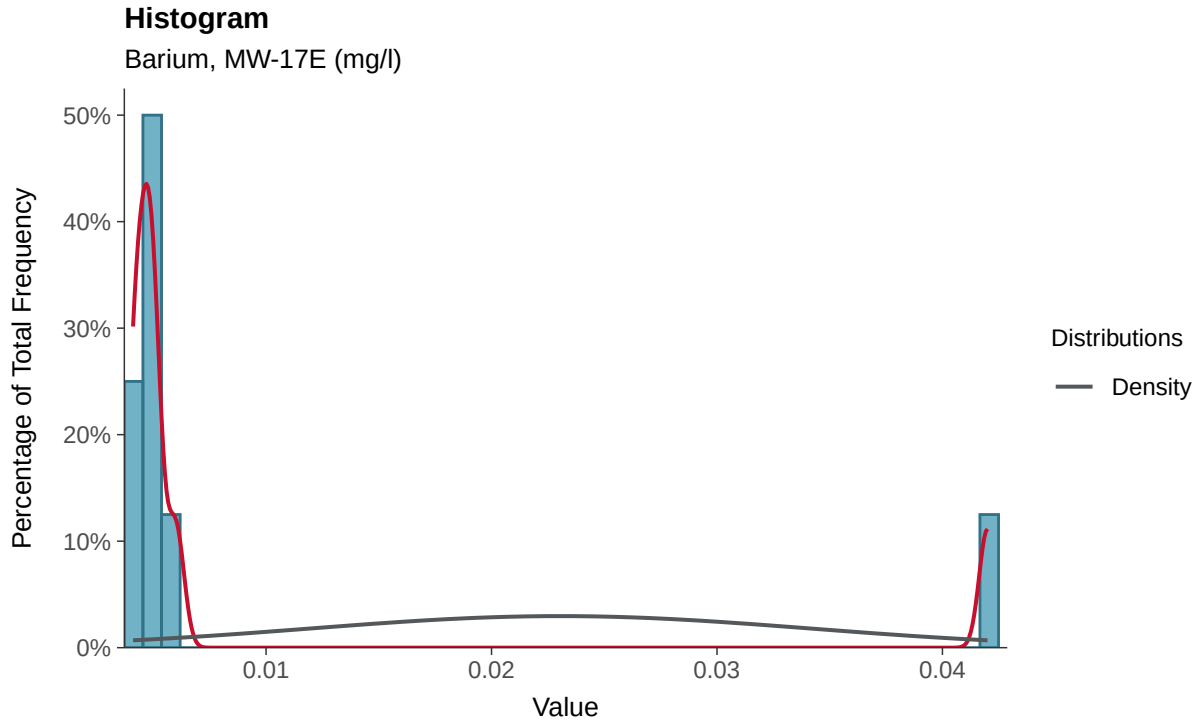
Arsenic, MW-17E (mg/l)



Appendix IV: Barium, MW-17E

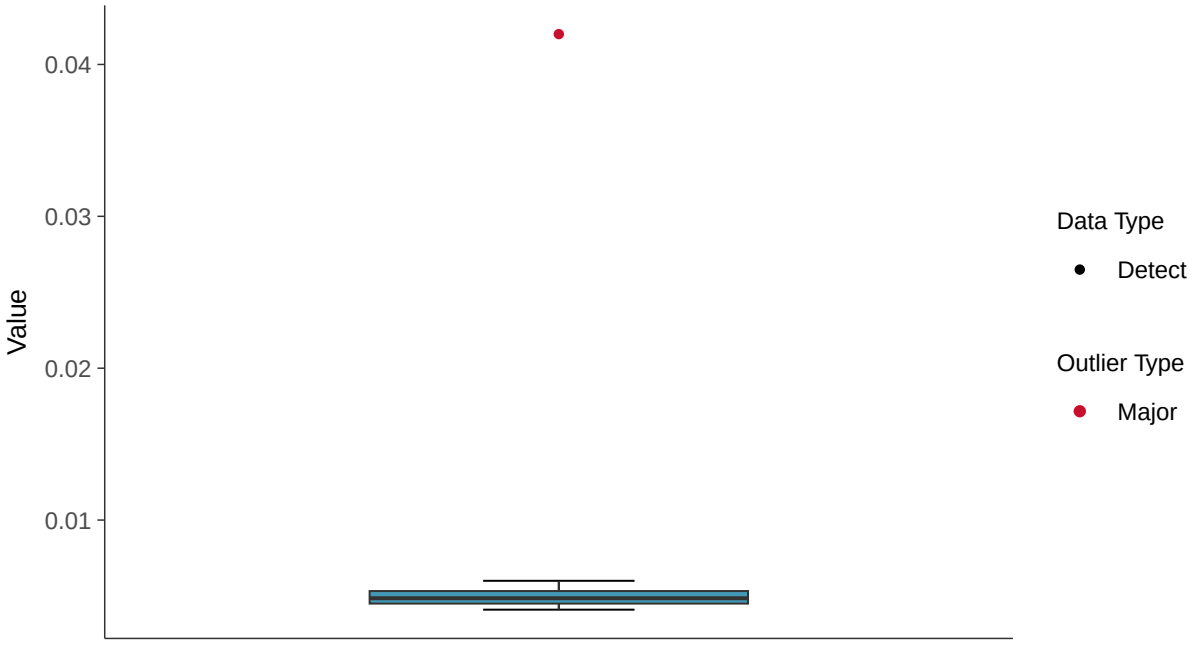
ID: 17_3_103





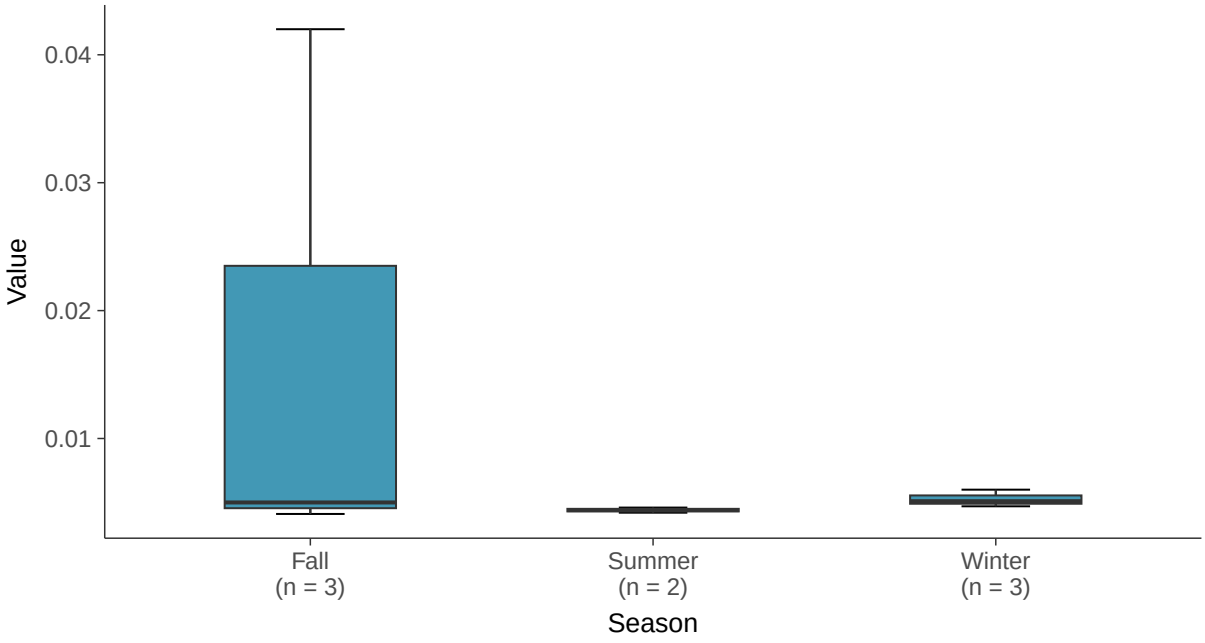
Boxplot

Barium, MW-17E (mg/l)



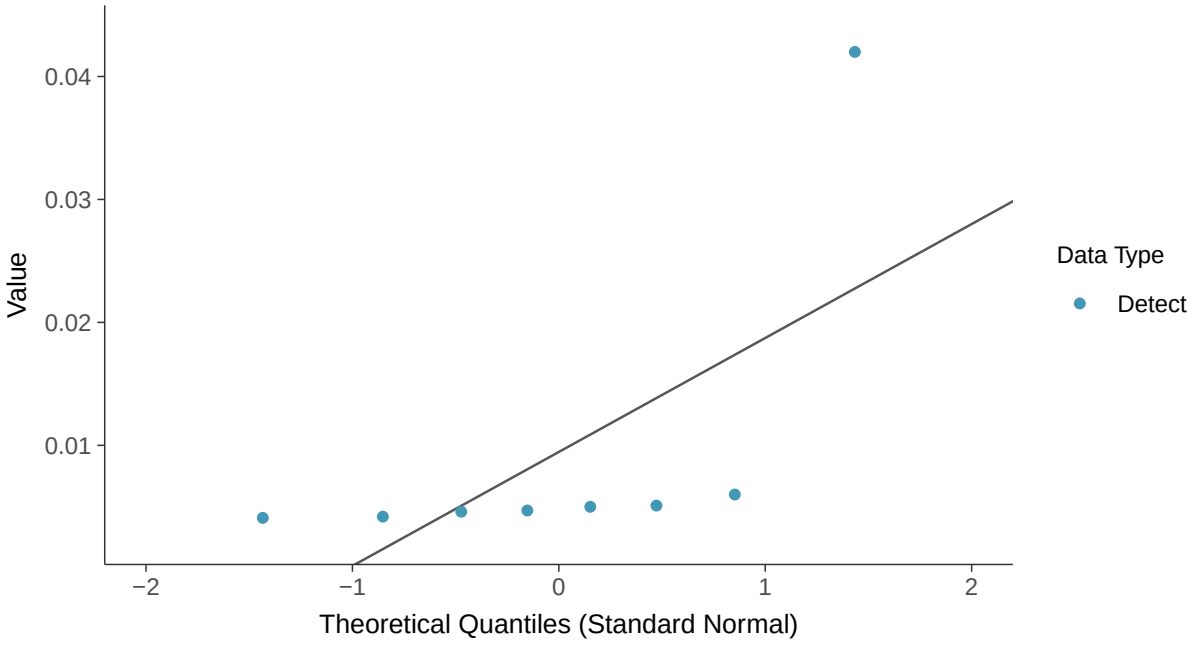
Boxplot by Season

Barium, MW-17E (mg/l)



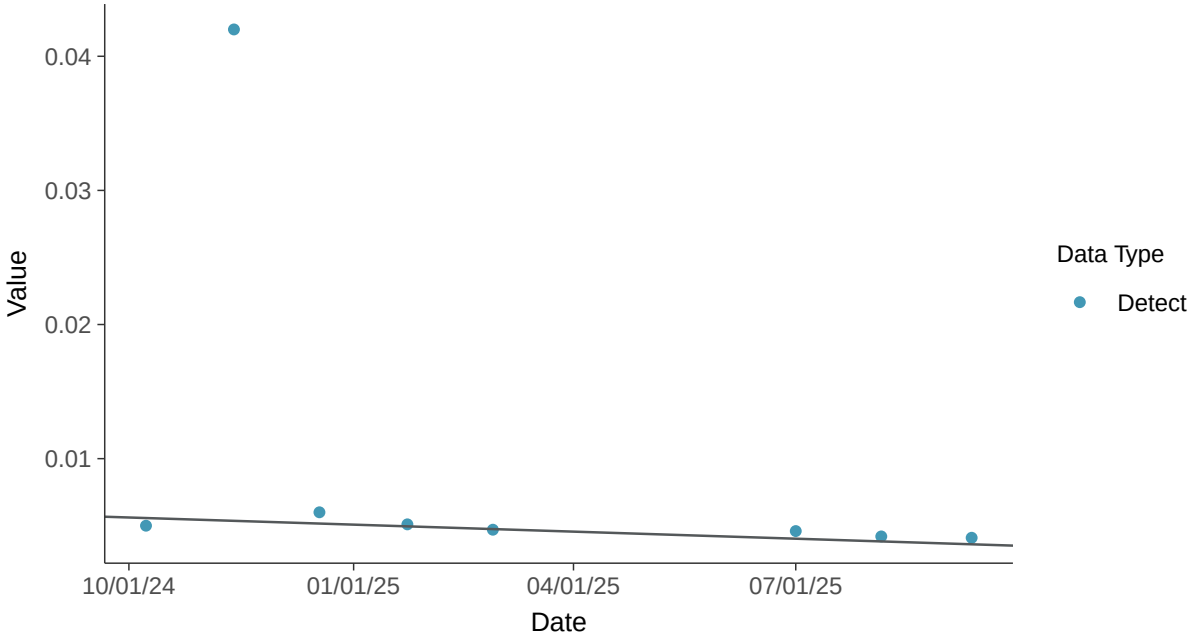
Normal Q-Q plot

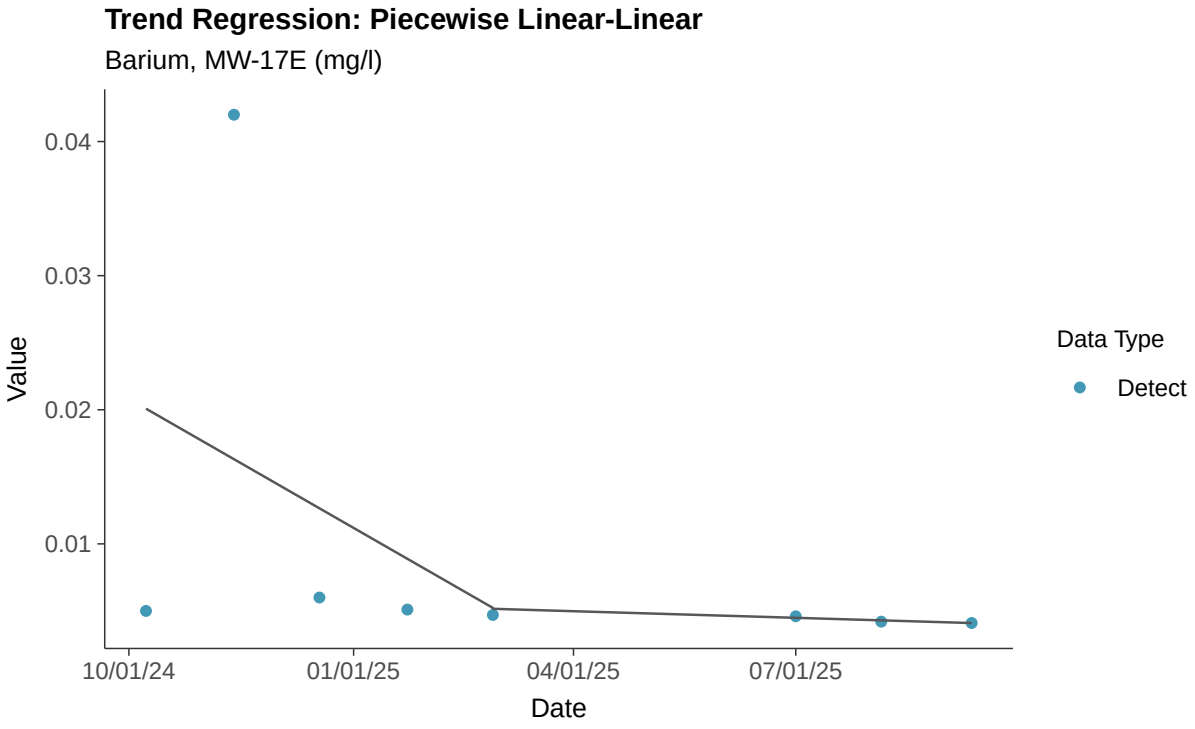
Barium, MW-17E (mg/l)



Trend Regression: Mann-Kendall/Theil-Sen Estimate

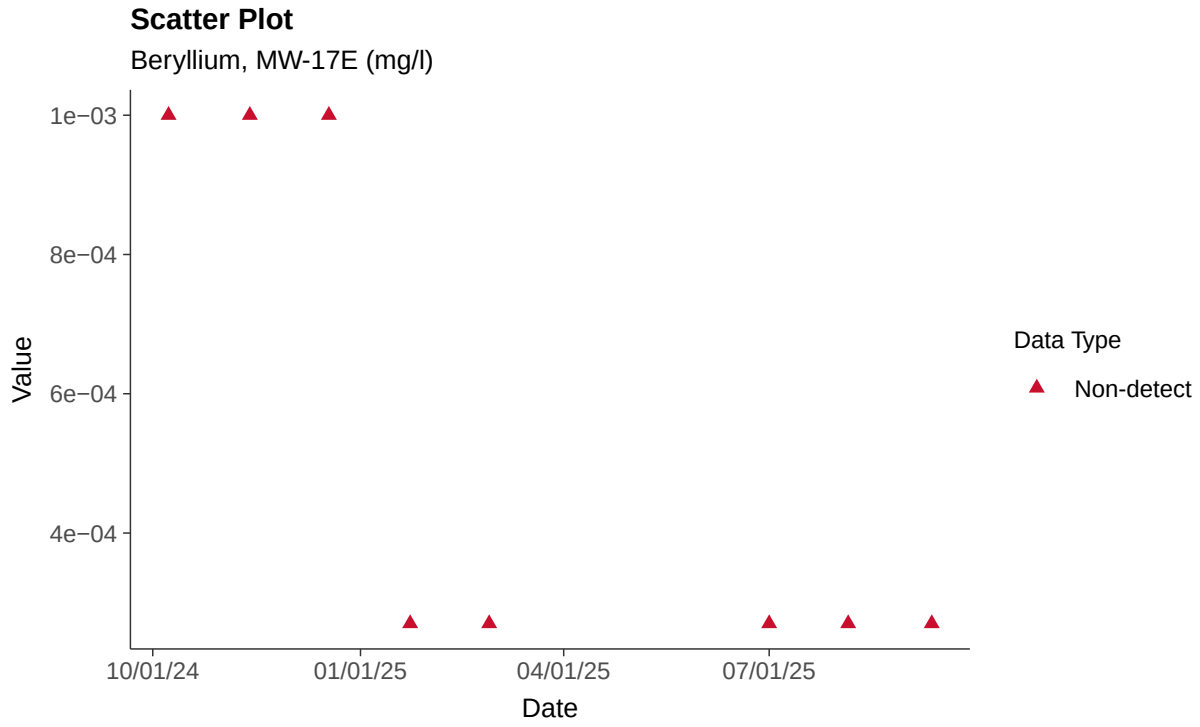
Barium, MW-17E (mg/l)

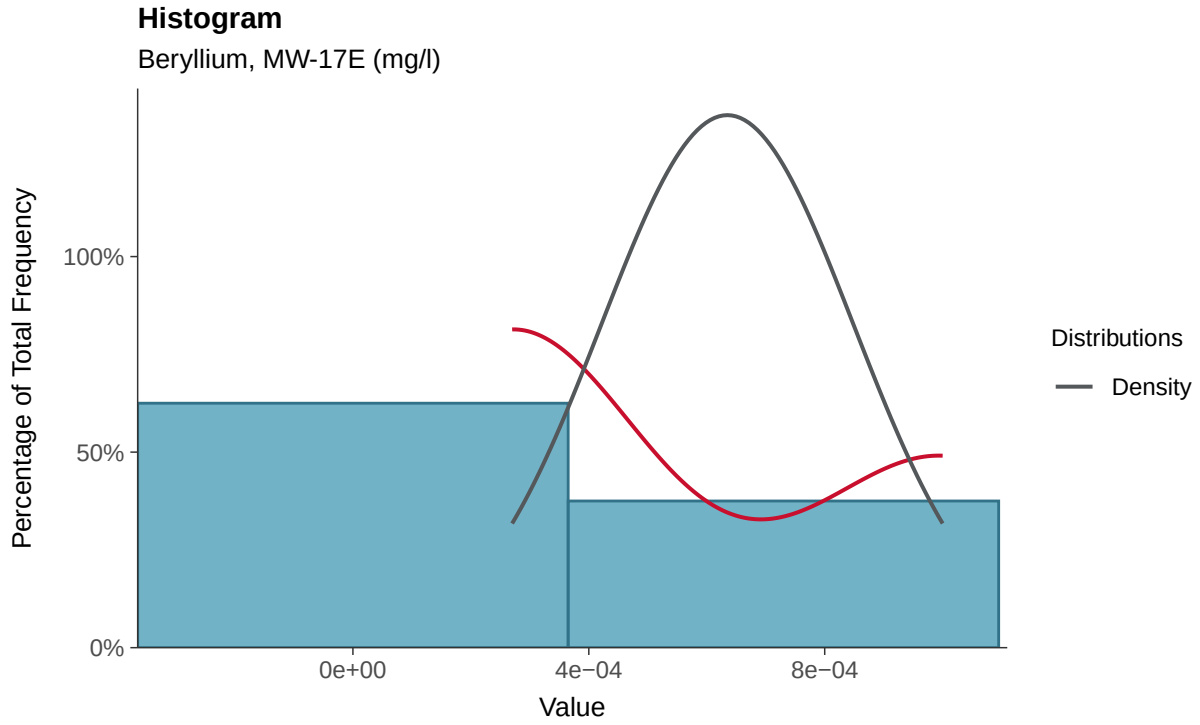



Trend Regression: Piecewise Linear-Linear
Barium, MW-17E (mg/l)
0.04
0.03
0.02
0.01
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix IV: Beryllium, MW-17E

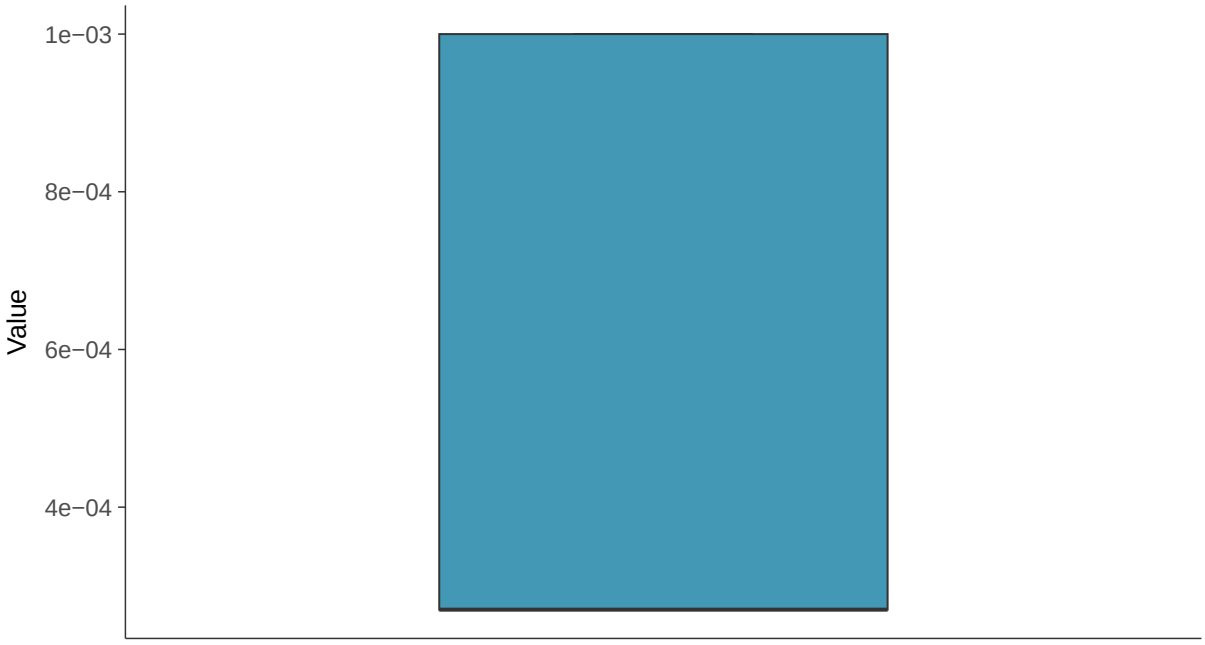
ID: 17_3_104





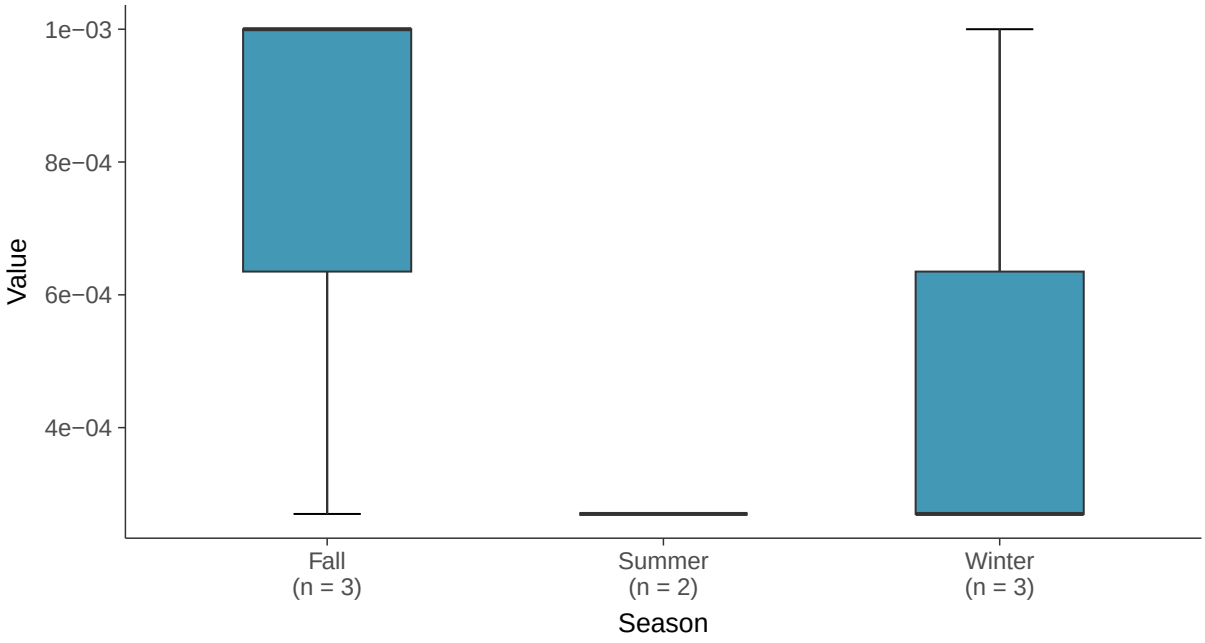
Boxplot

Beryllium, MW-17E (mg/l)



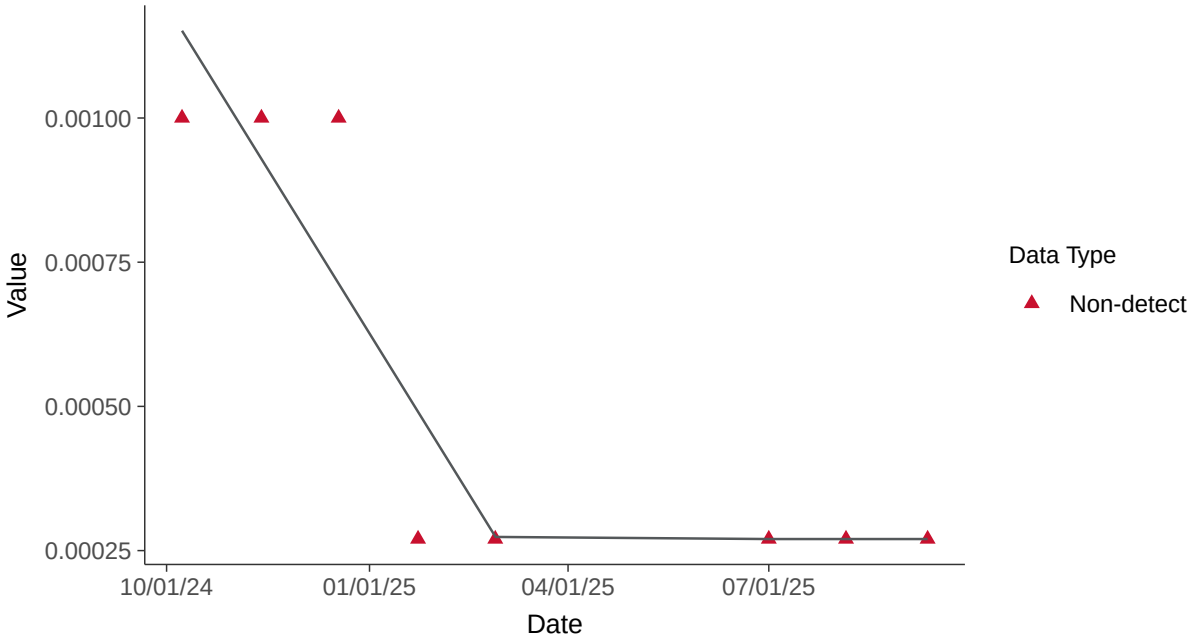
Boxplot by Season

Beryllium, MW-17E (mg/l)



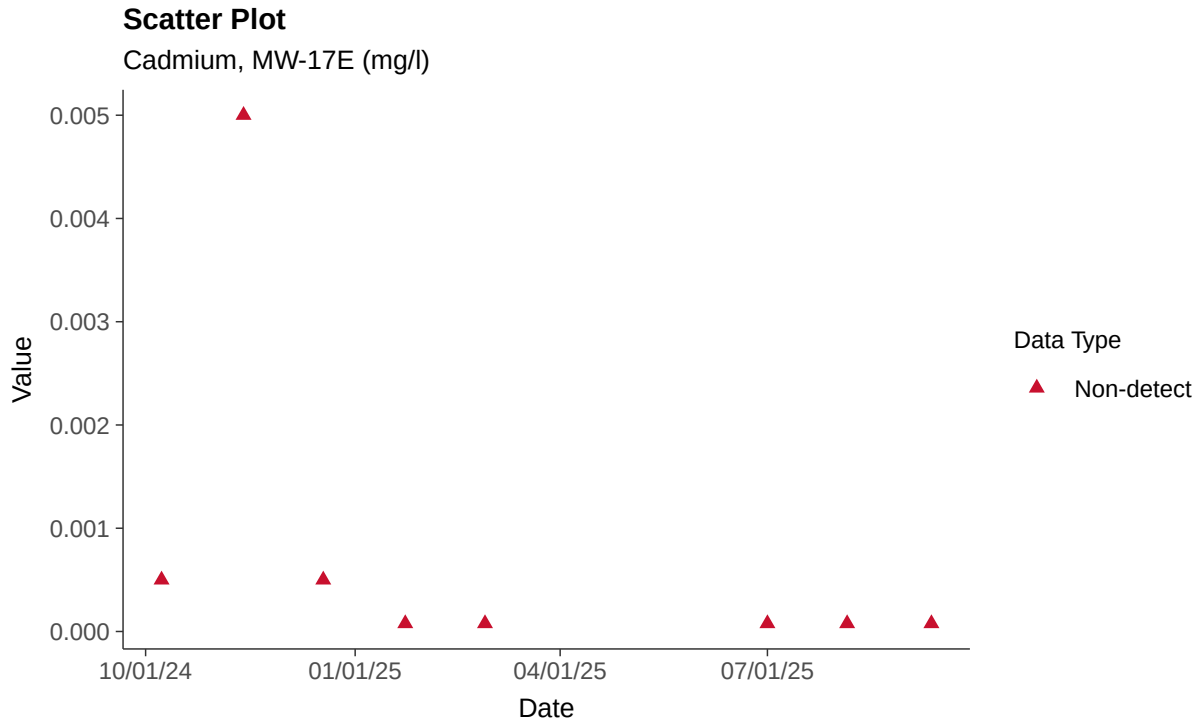
Trend Regression: Piecewise Linear-Linear

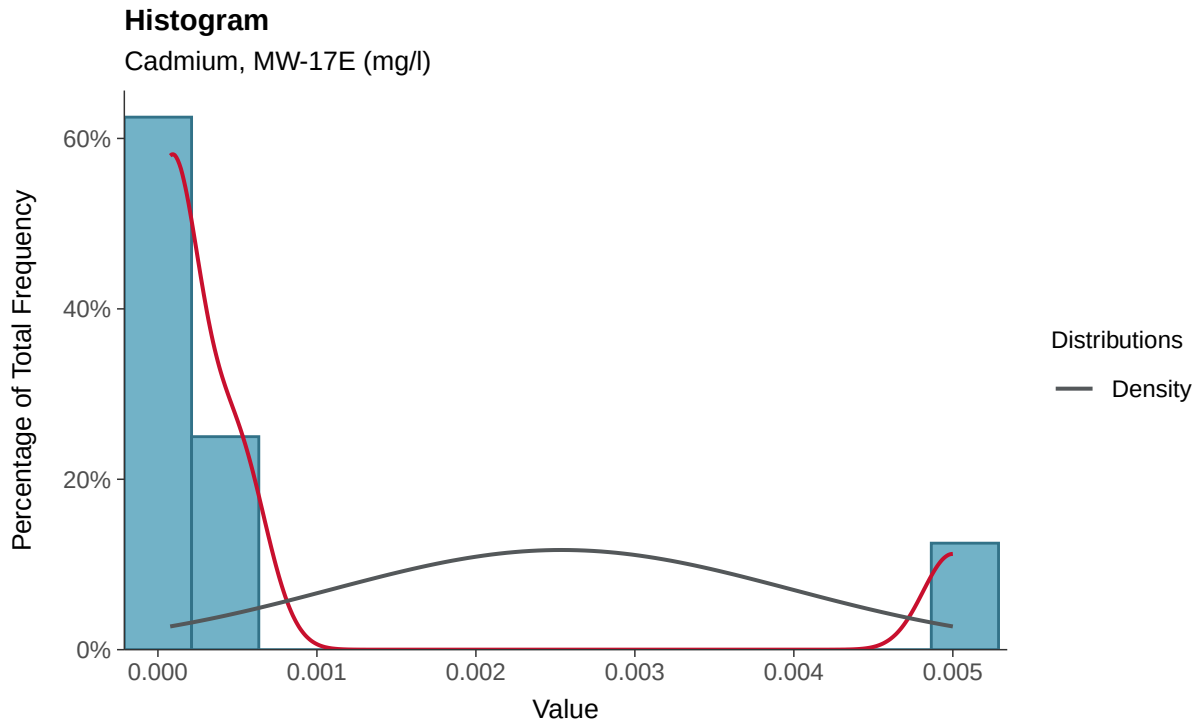
Beryllium, MW-17E (mg/l)



Appendix IV: Cadmium, MW-17E

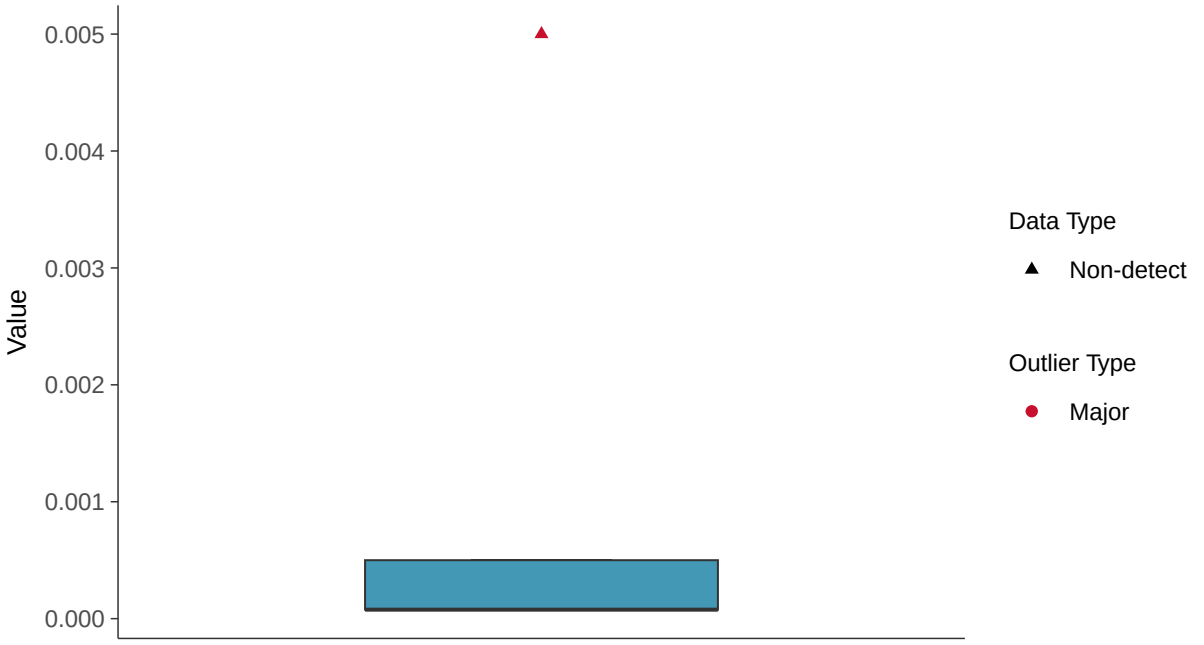
ID: 17_3_106





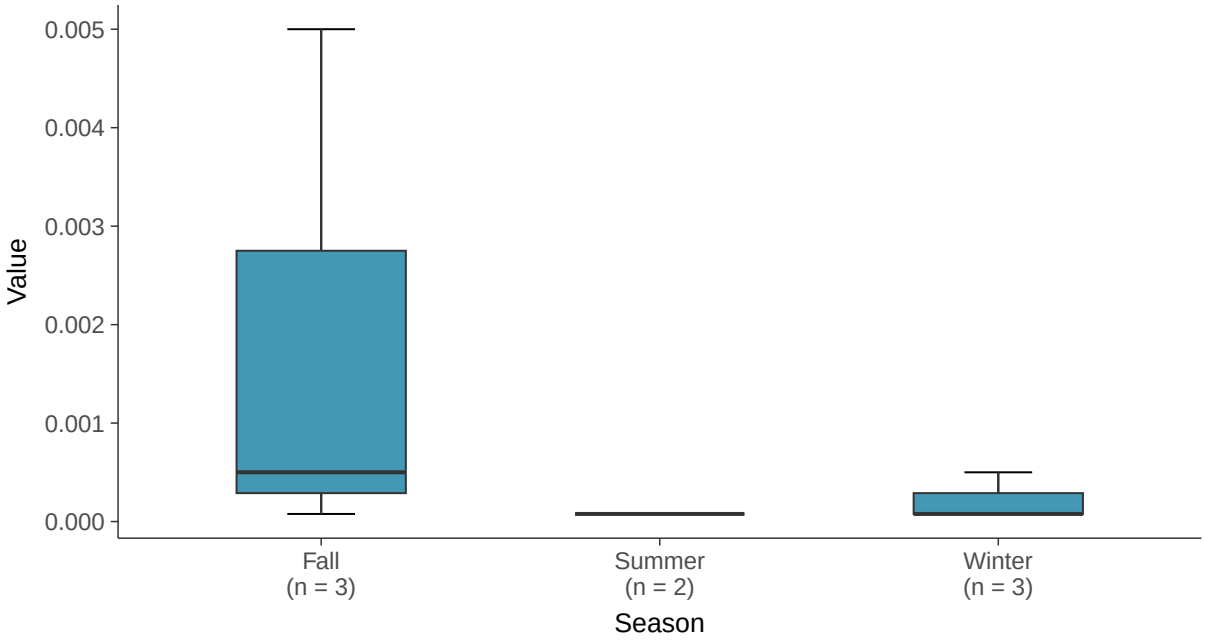
Boxplot

Cadmium, MW-17E (mg/l)



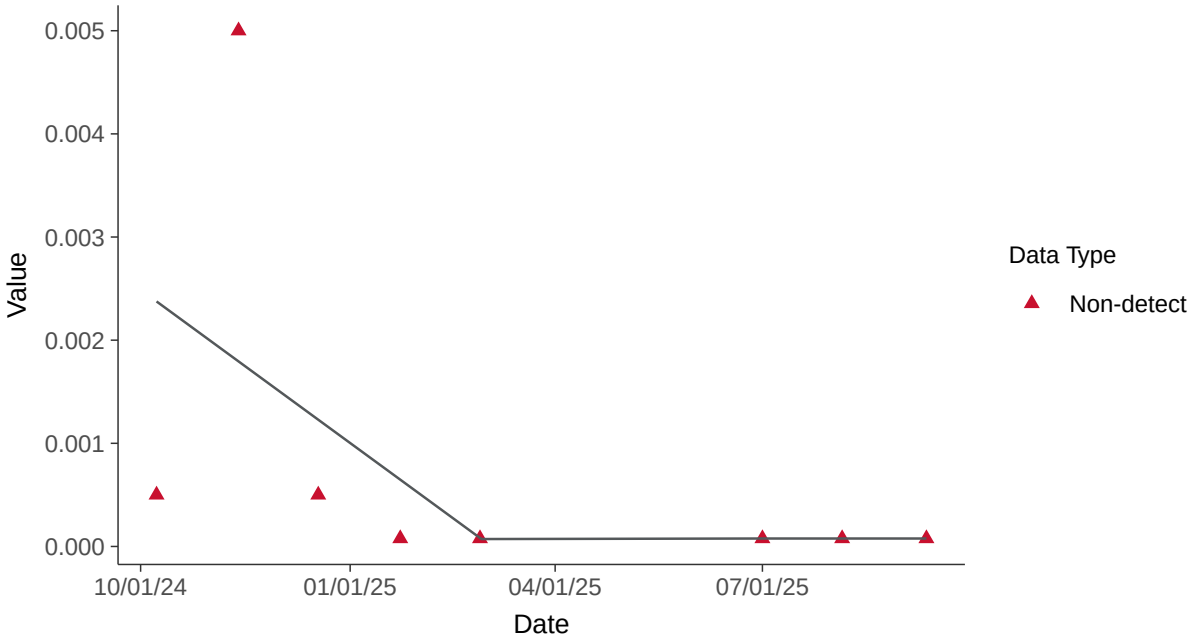
Boxplot by Season

Cadmium, MW-17E (mg/l)



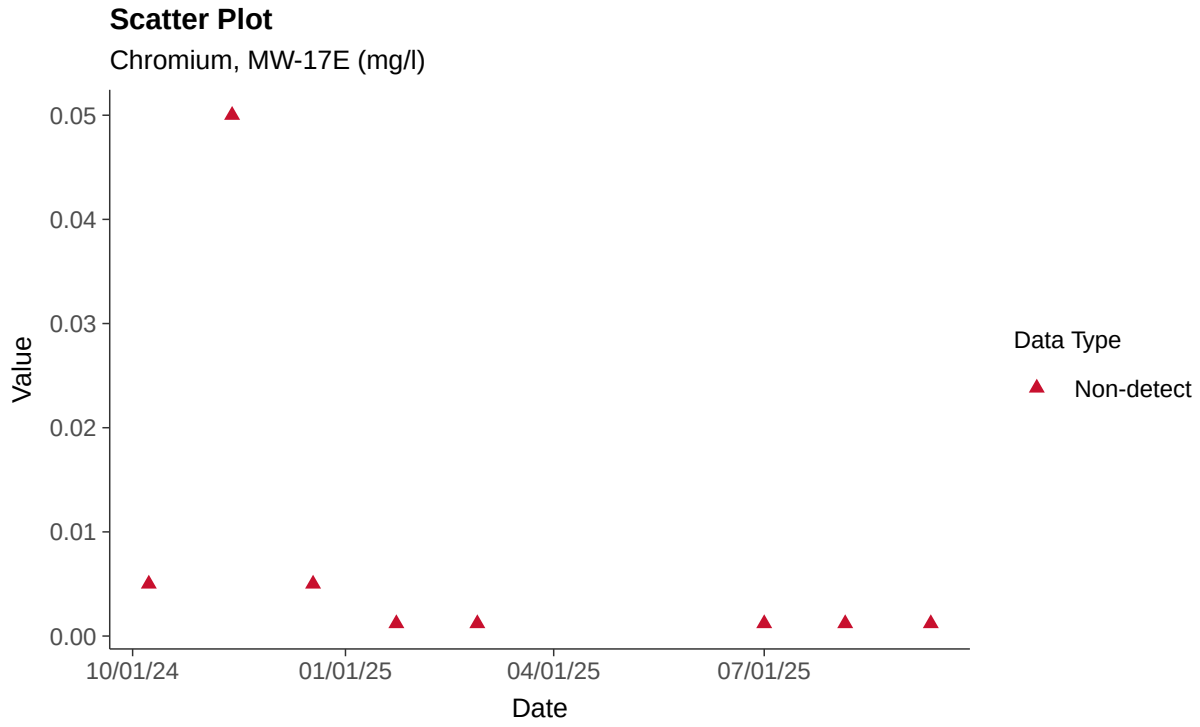
Trend Regression: Piecewise Linear-Linear

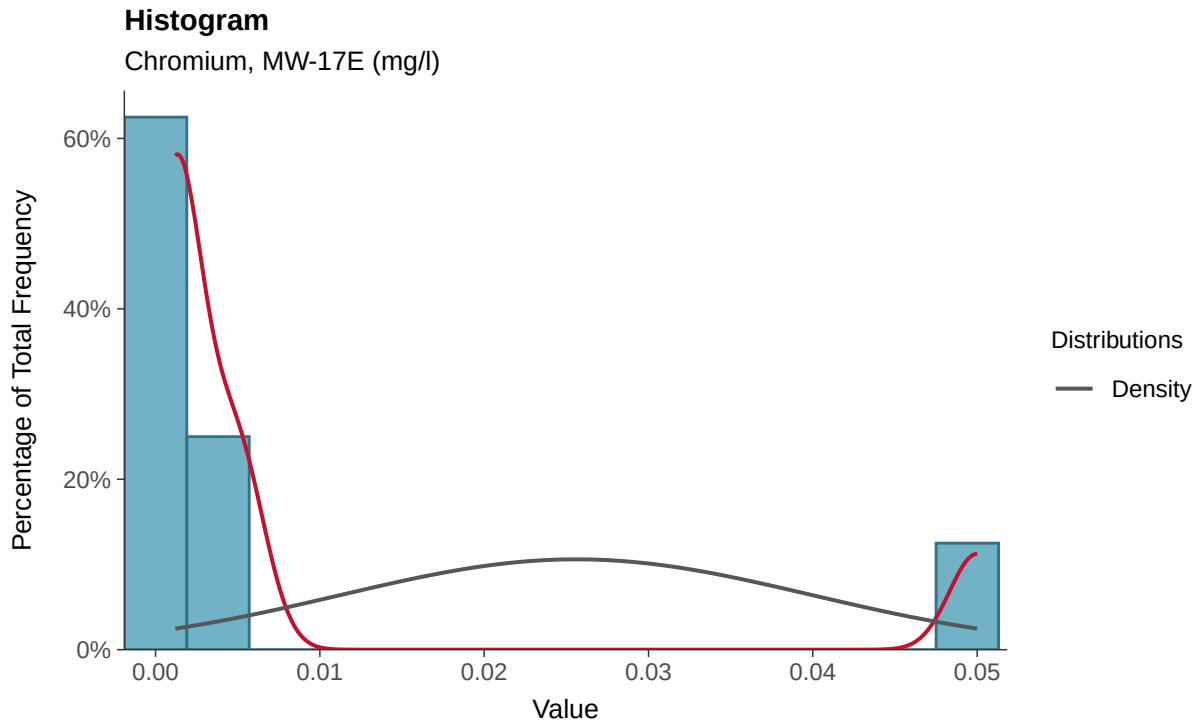
Cadmium, MW-17E (mg/l)



Appendix IV: Chromium, MW-17E

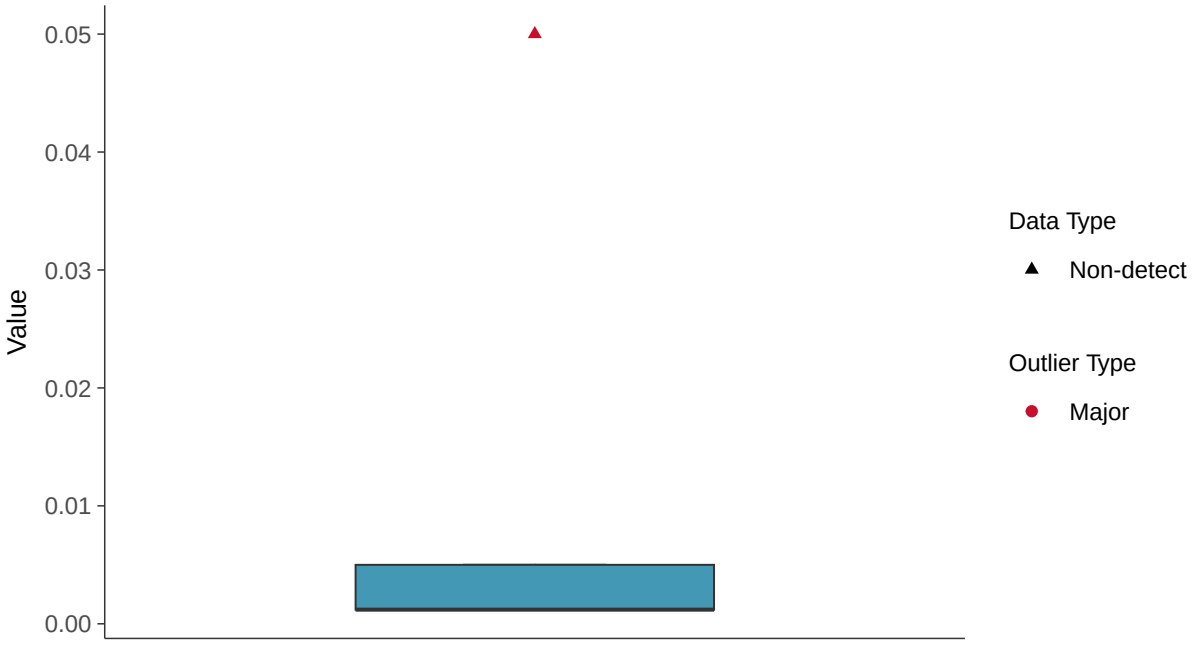
ID: 17_3_109





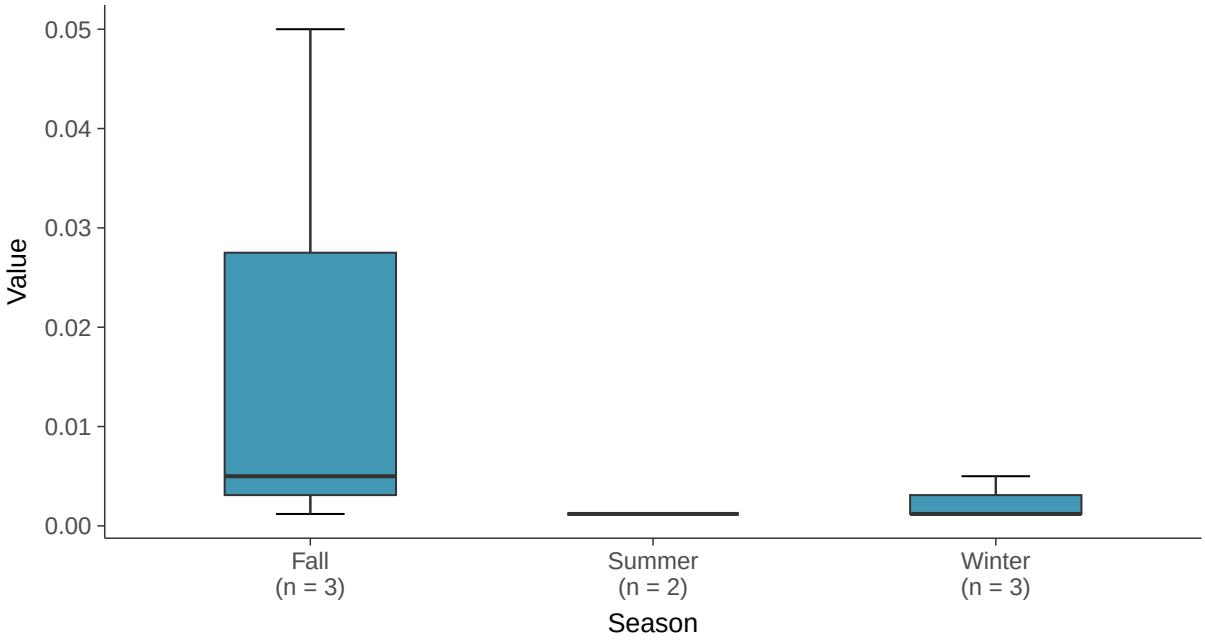
Boxplot

Chromium, MW-17E (mg/l)



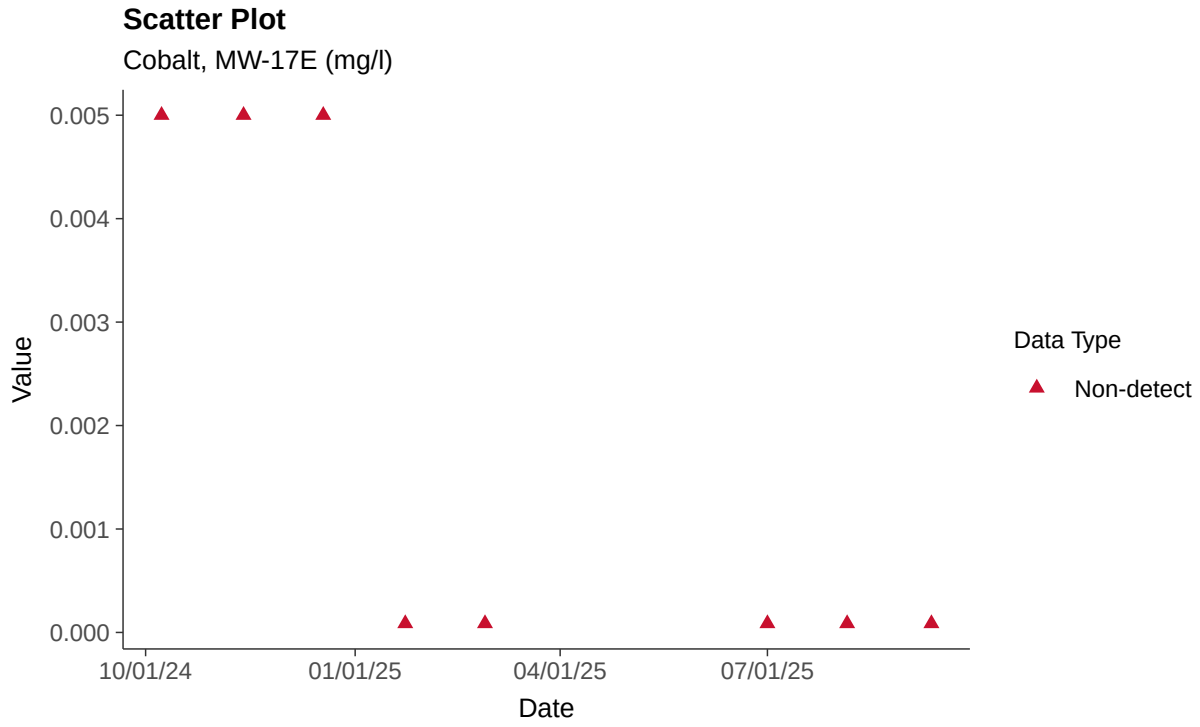
Boxplot by Season

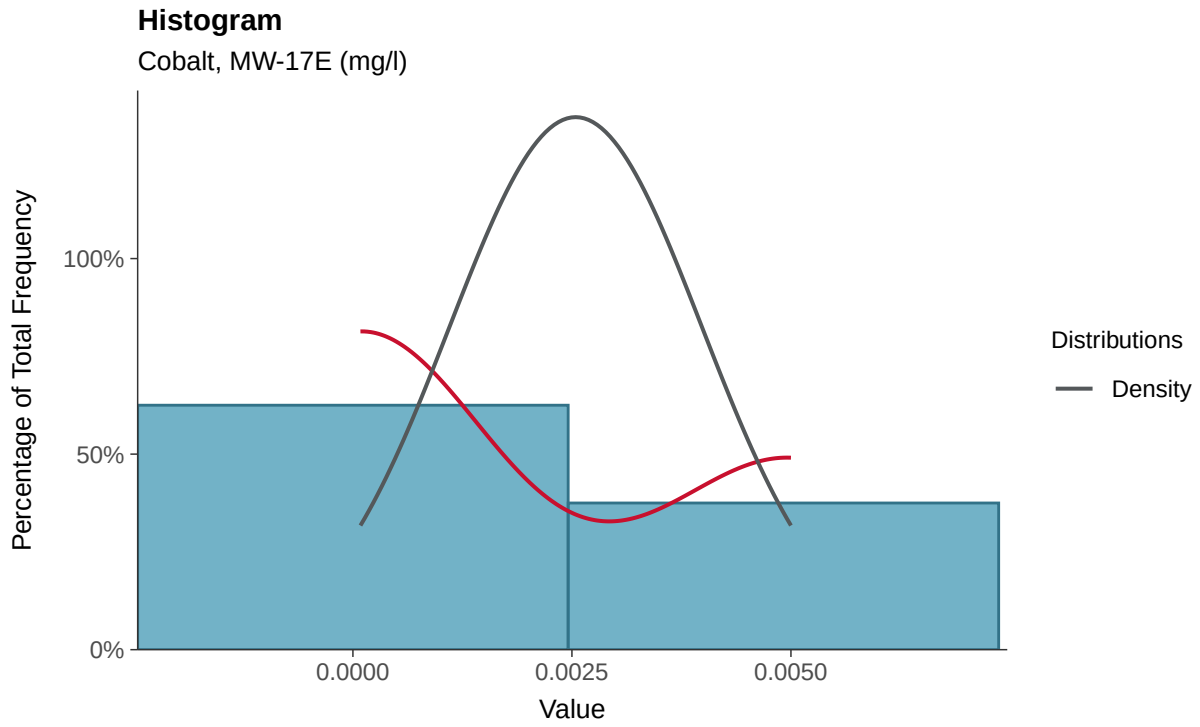
Chromium, MW-17E (mg/l)



Appendix IV: Cobalt, MW-17E

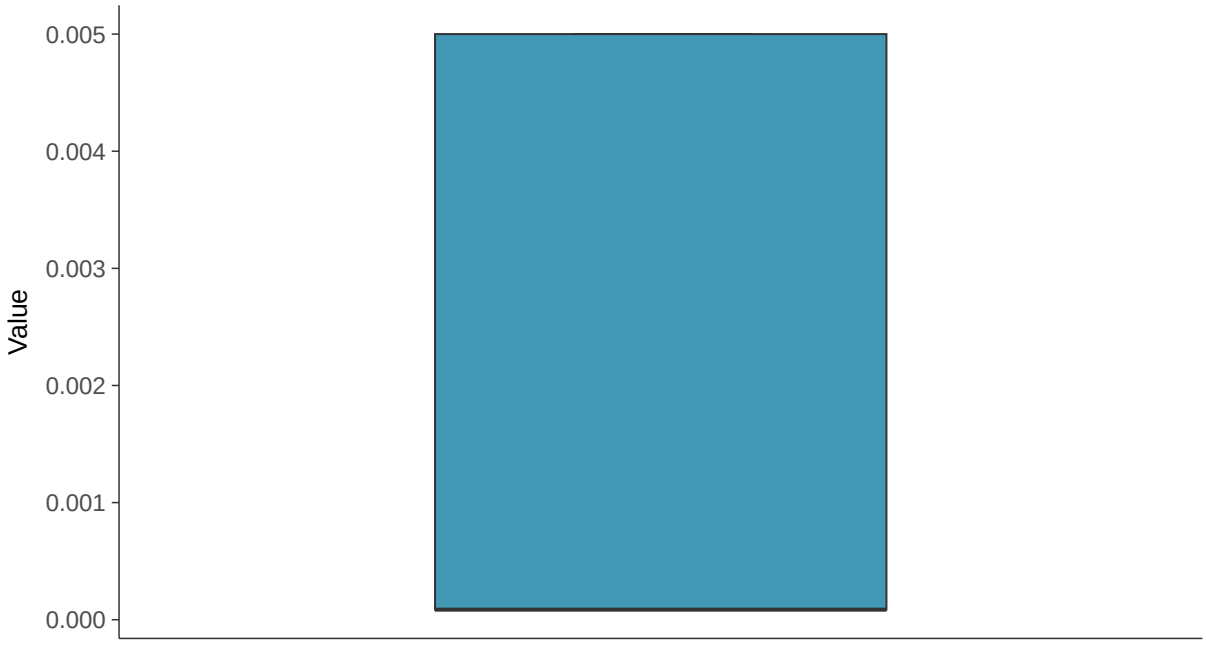
ID: 17_3_110





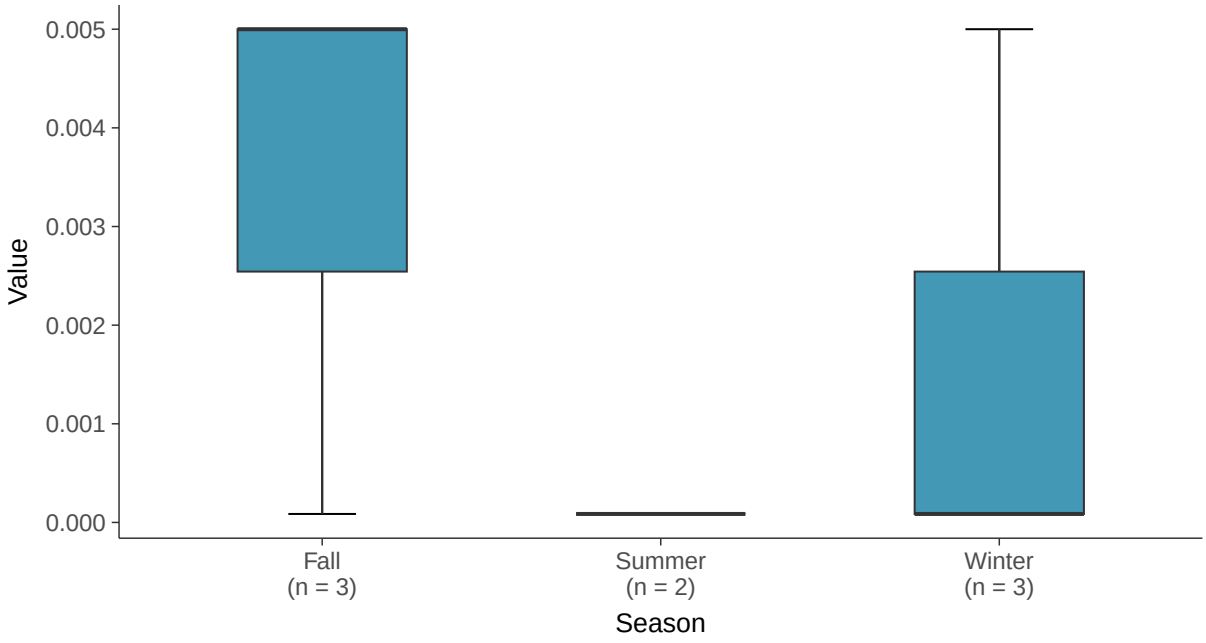
Boxplot

Cobalt, MW-17E (mg/l)



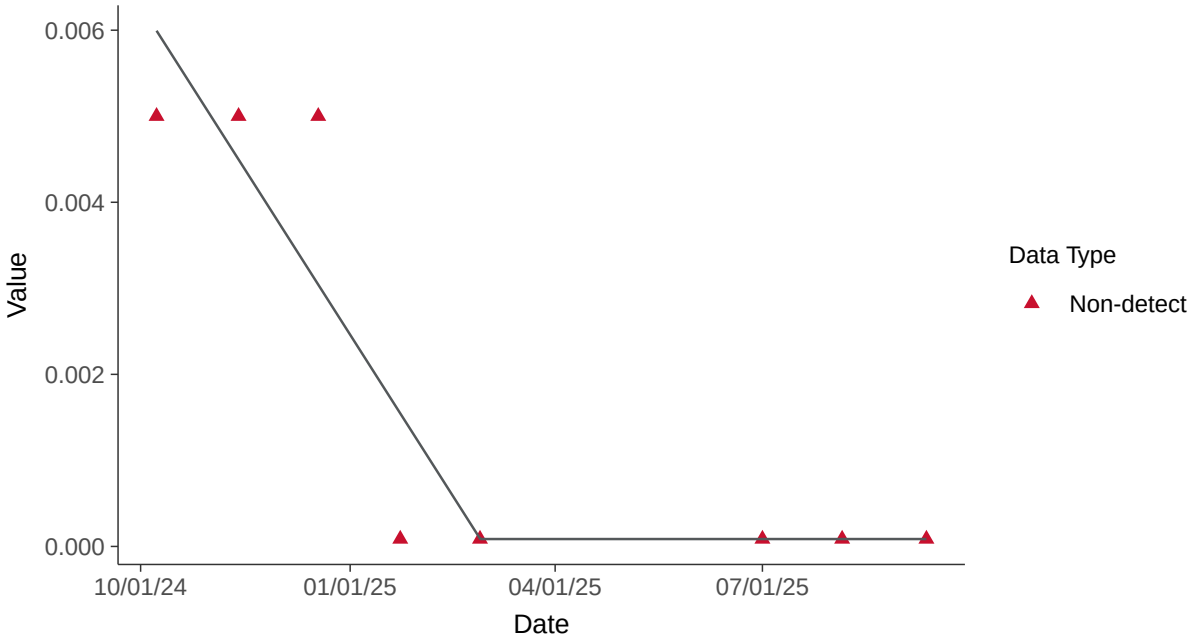
Boxplot by Season

Cobalt, MW-17E (mg/l)



Trend Regression: Piecewise Linear-Linear

Cobalt, MW-17E (mg/l)

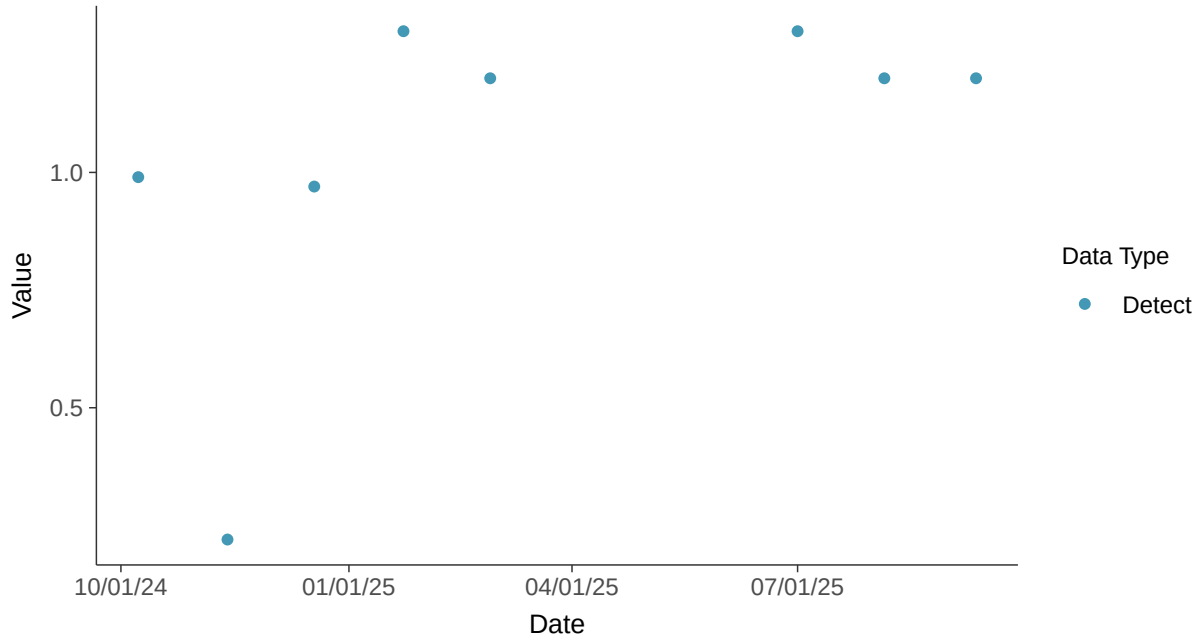


Appendix IV: Fluoride (App IV), MW-17E

ID: 17_3_113

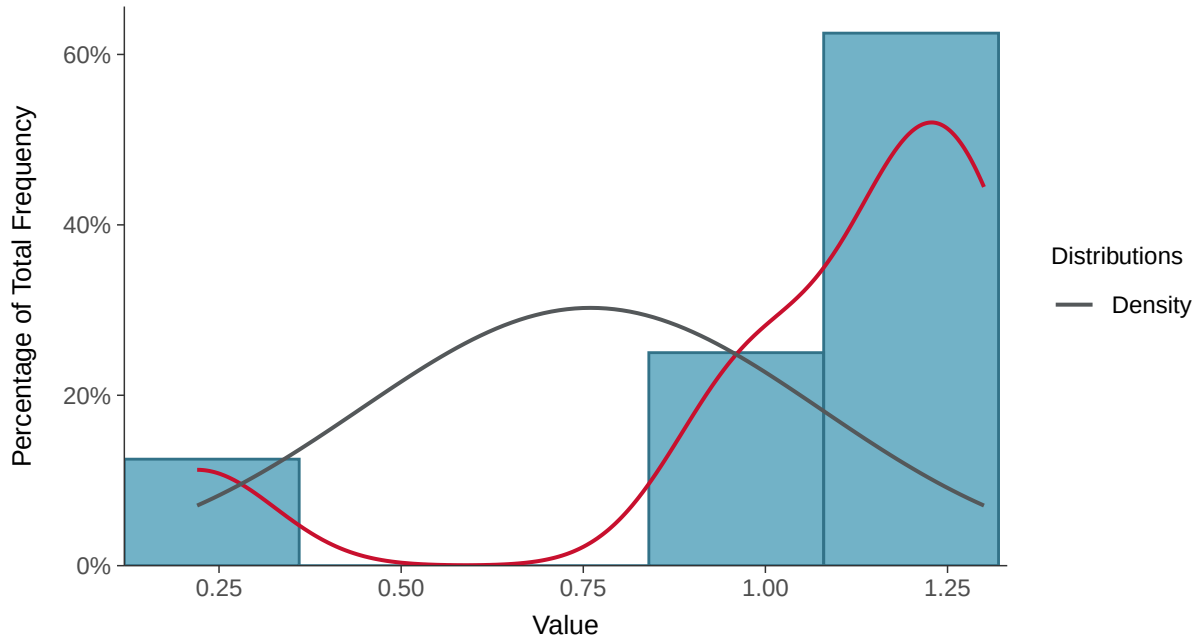
Scatter Plot

Fluoride (App IV), MW-17E (mg/l)



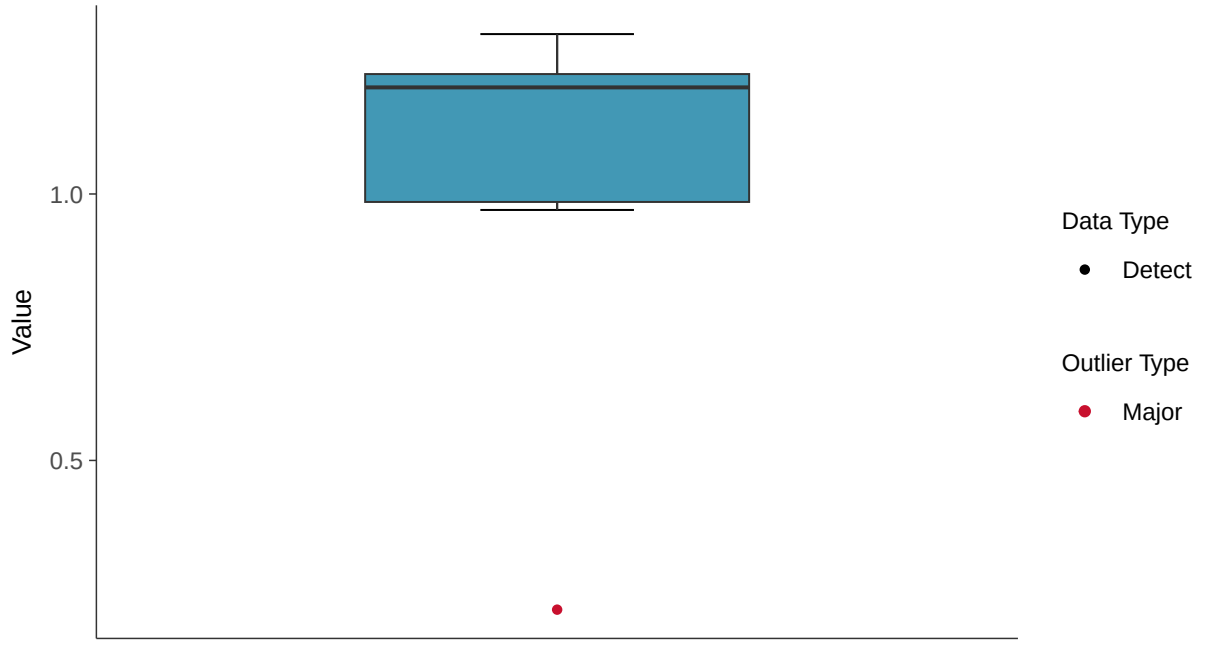
Histogram

Fluoride (App IV), MW-17E (mg/l)



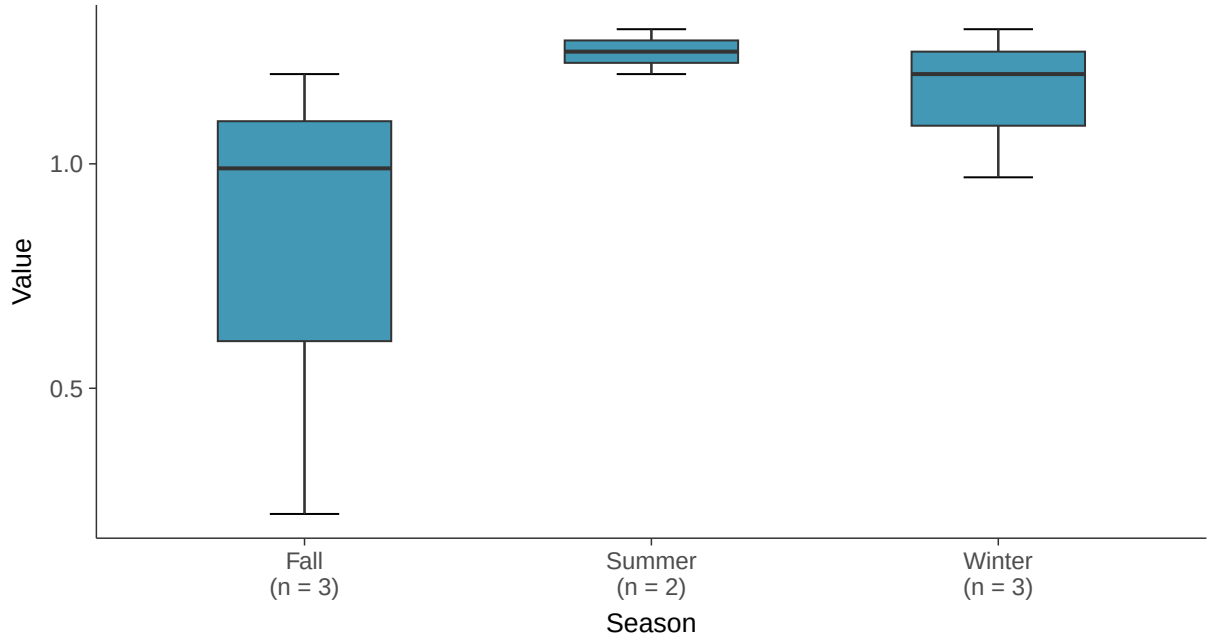
Boxplot

Fluoride (App IV), MW-17E (mg/l)



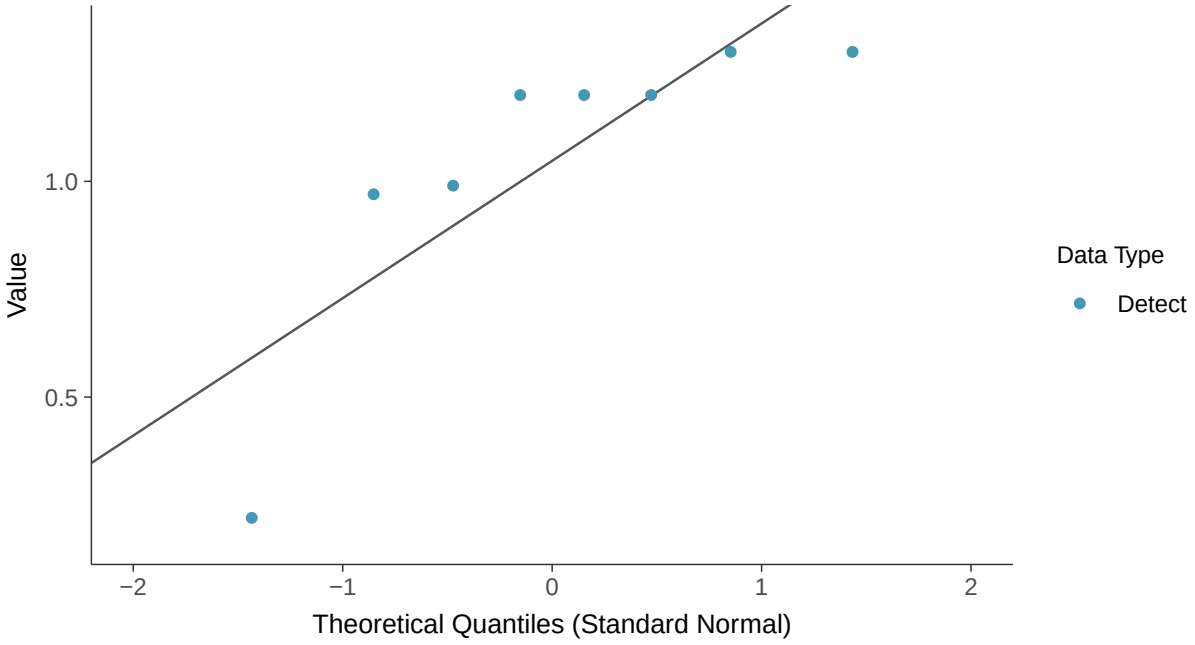
Boxplot by Season

Fluoride (App IV), MW-17E (mg/l)



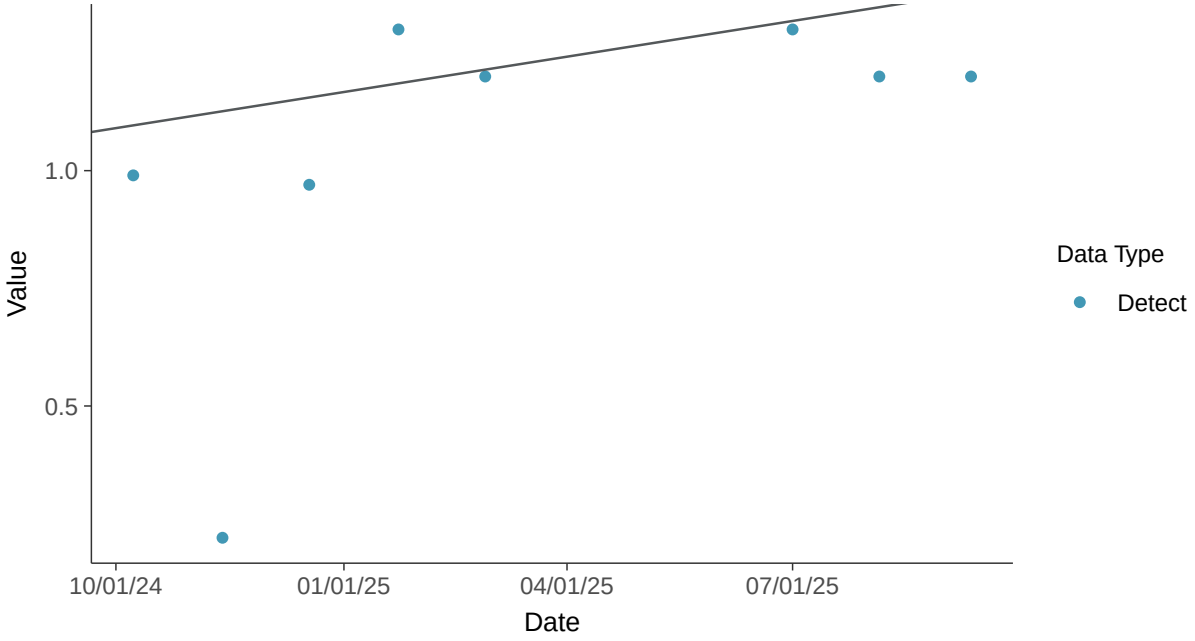
Normal Q-Q plot

Fluoride (App IV), MW-17E (mg/l)



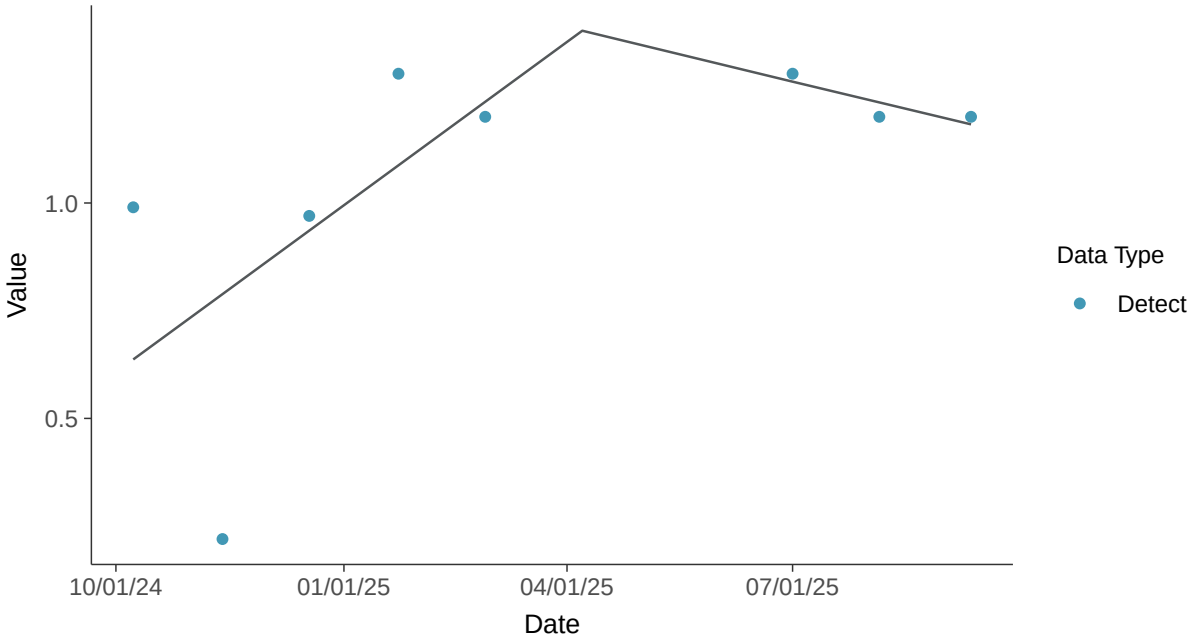
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Fluoride (App IV), MW-17E (mg/l)



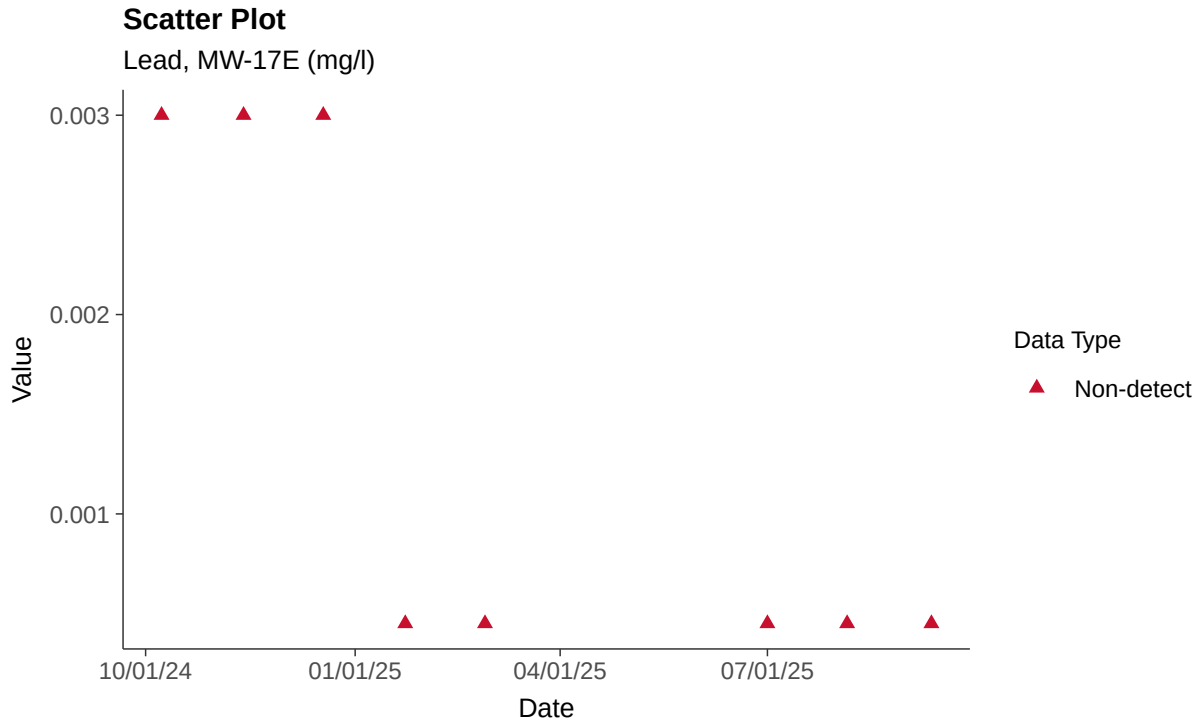
Trend Regression: Piecewise Linear-Linear

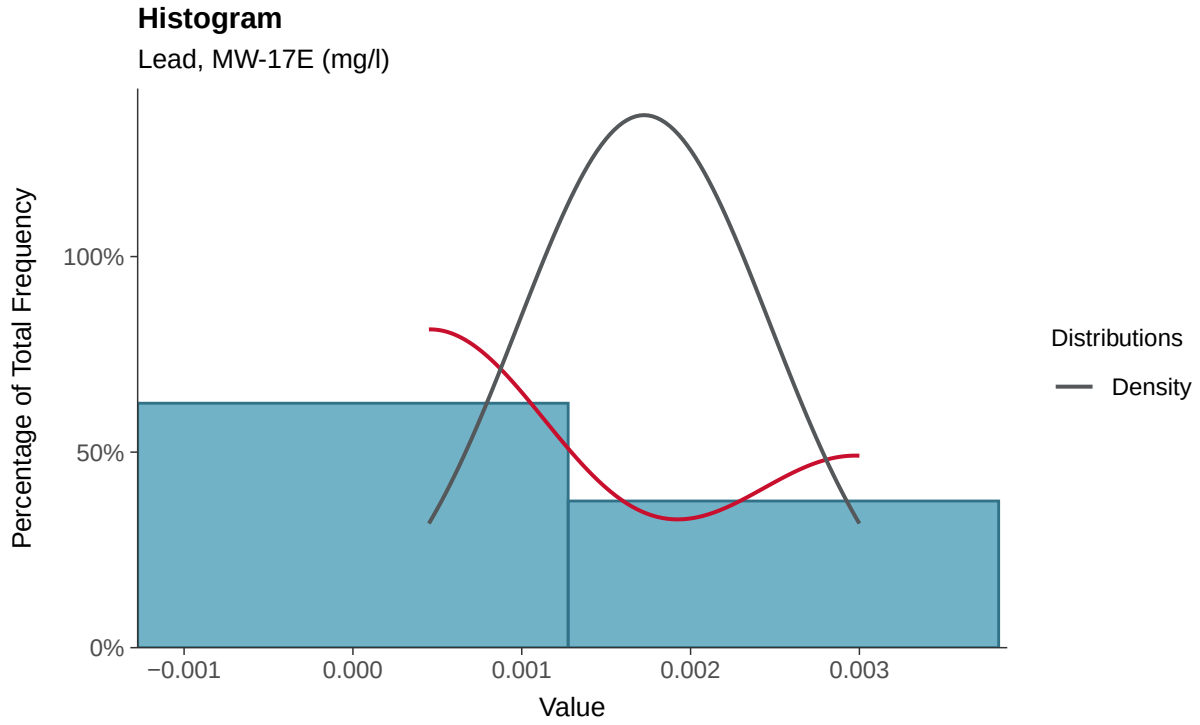
Fluoride (App IV), MW-17E (mg/l)



Appendix IV: Lead, MW-17E

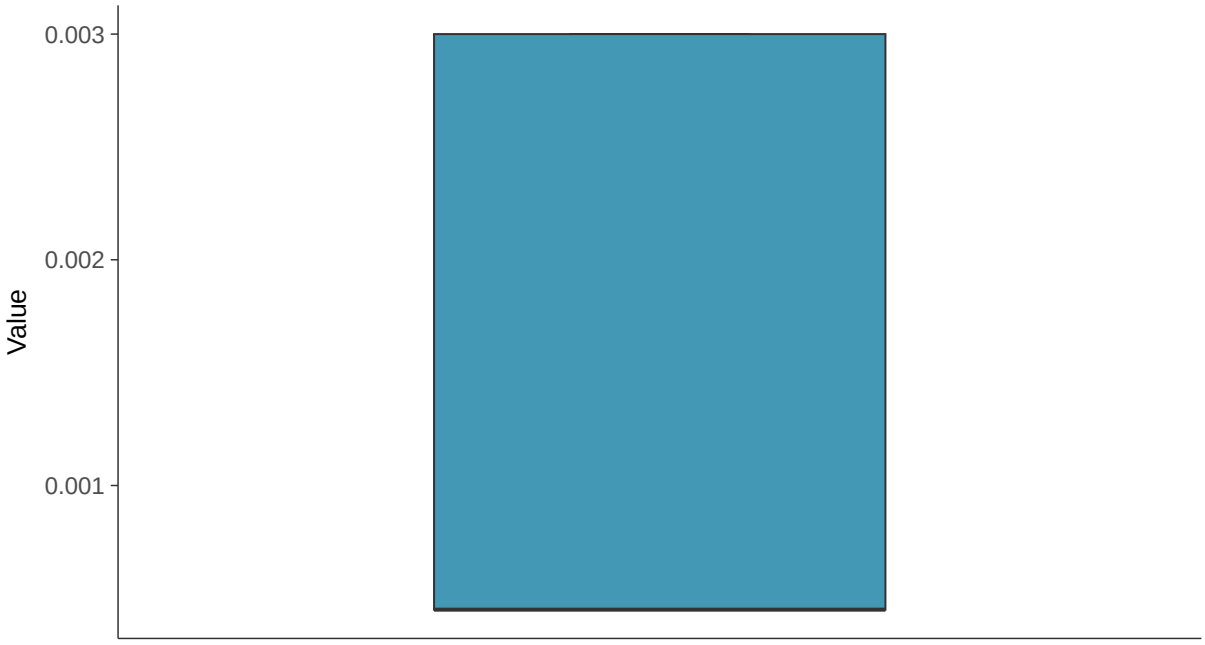
ID: 17_3_115





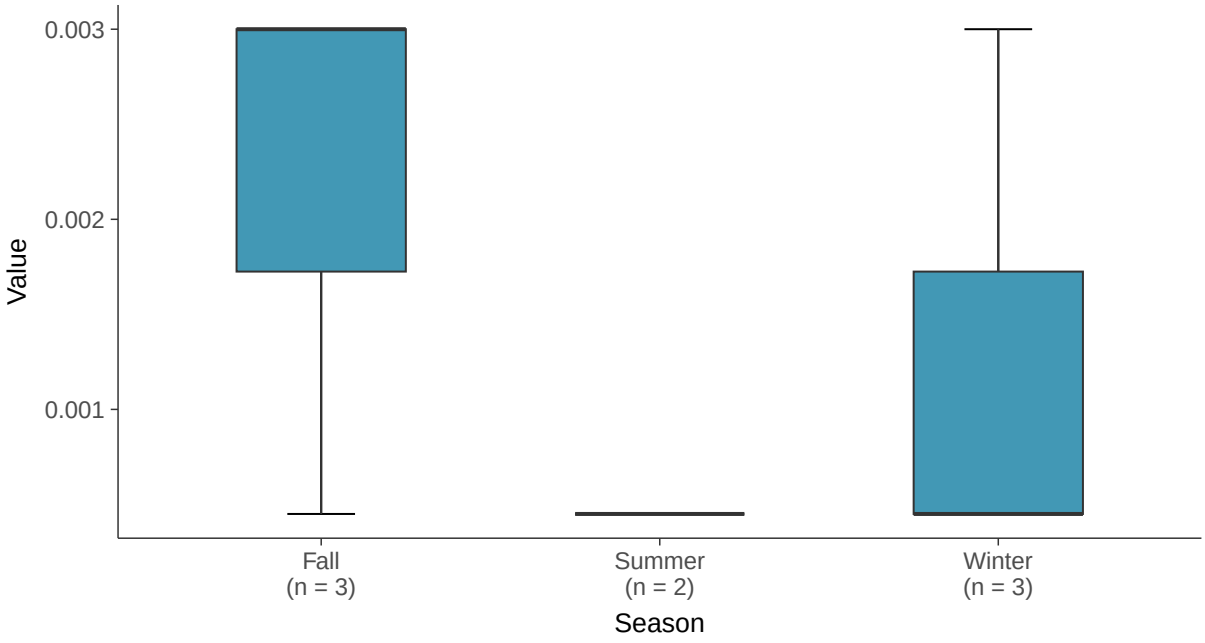
Boxplot

Lead, MW-17E (mg/l)



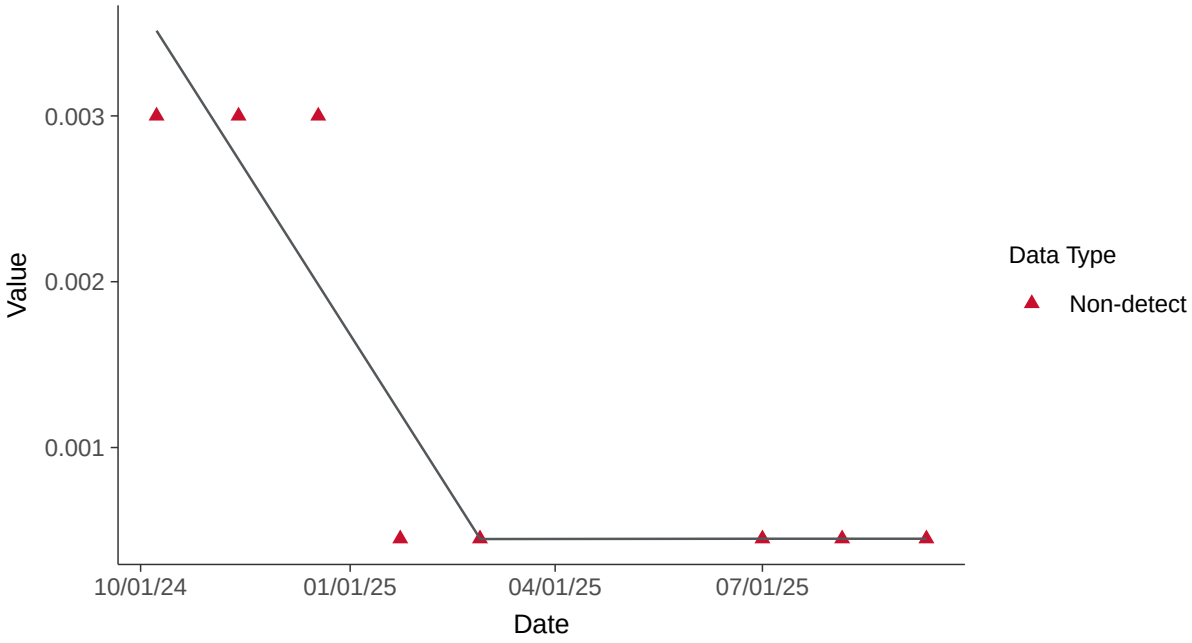
Boxplot by Season

Lead, MW-17E (mg/l)



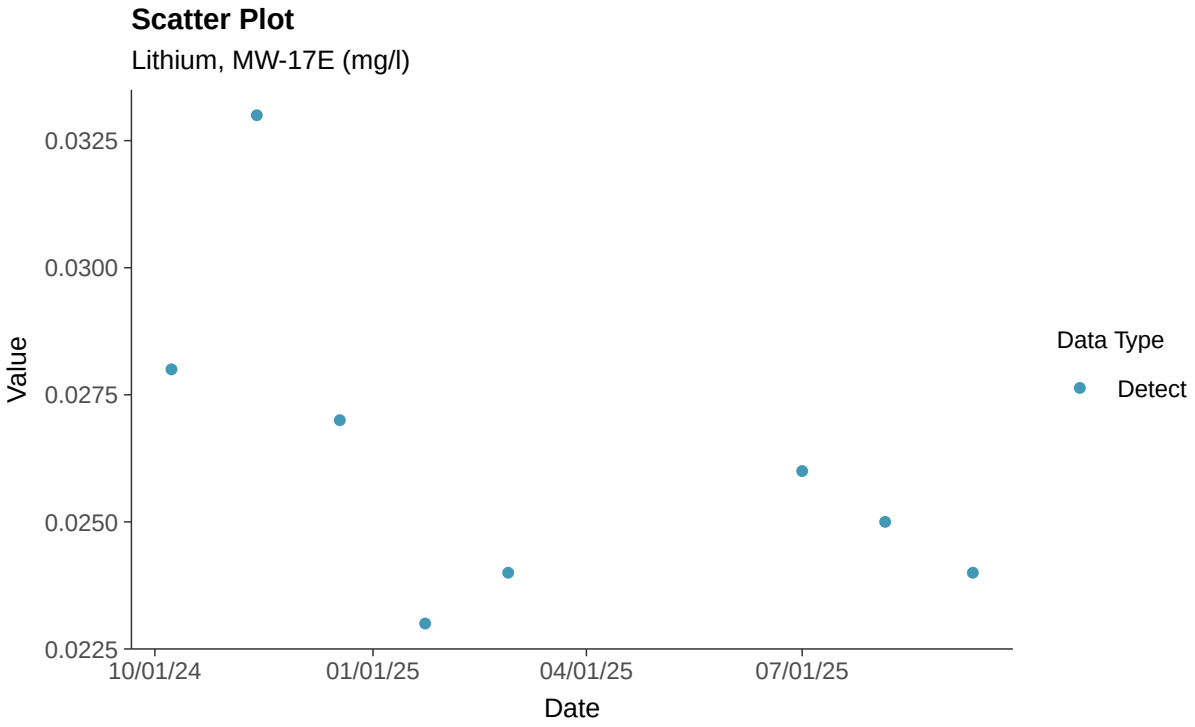
Trend Regression: Piecewise Linear-Linear

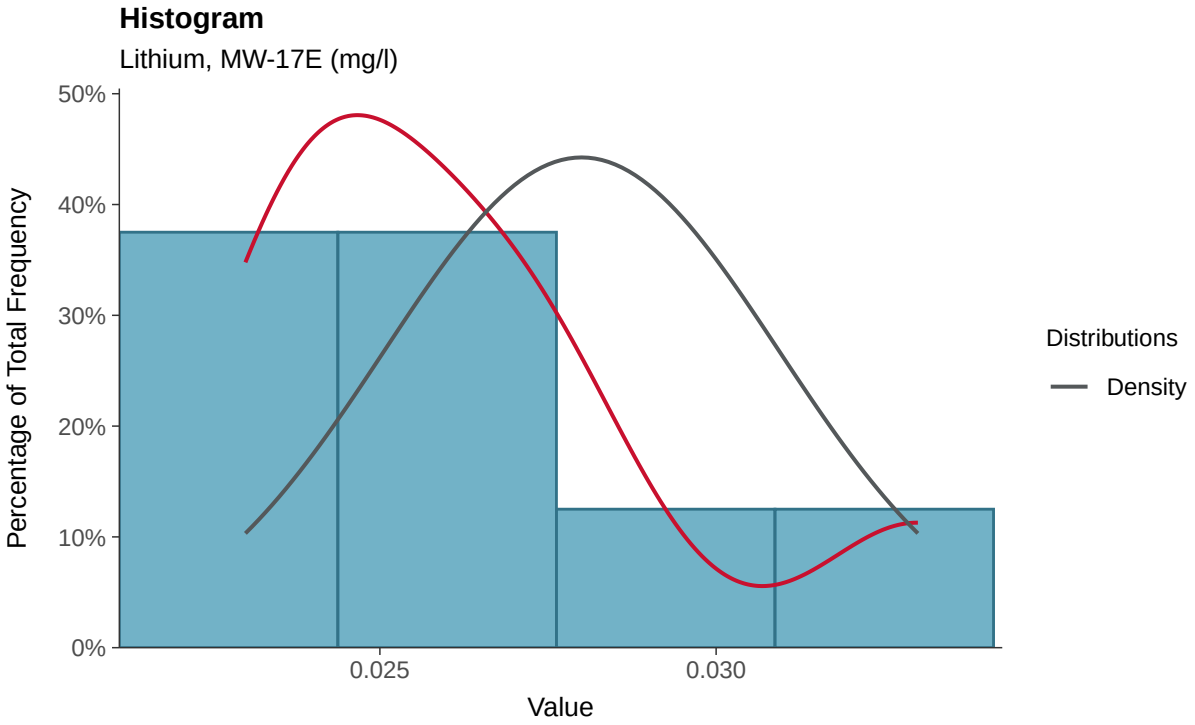
Lead, MW-17E (mg/l)



Appendix IV: Lithium, MW-17E

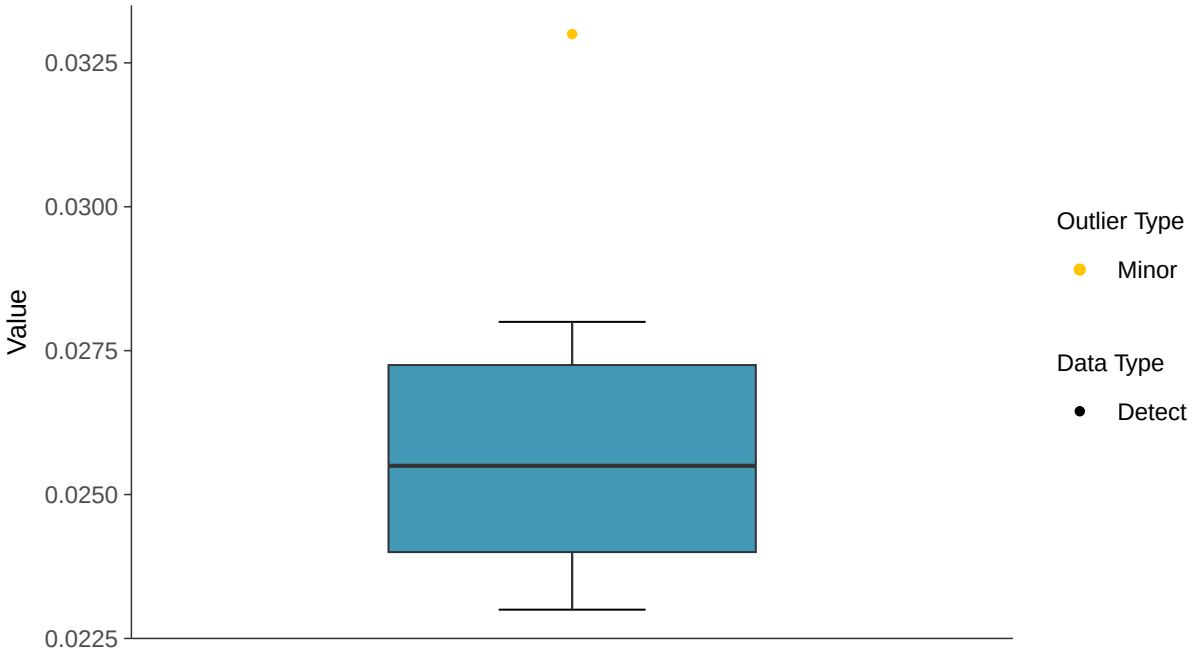
ID: 17_3_116





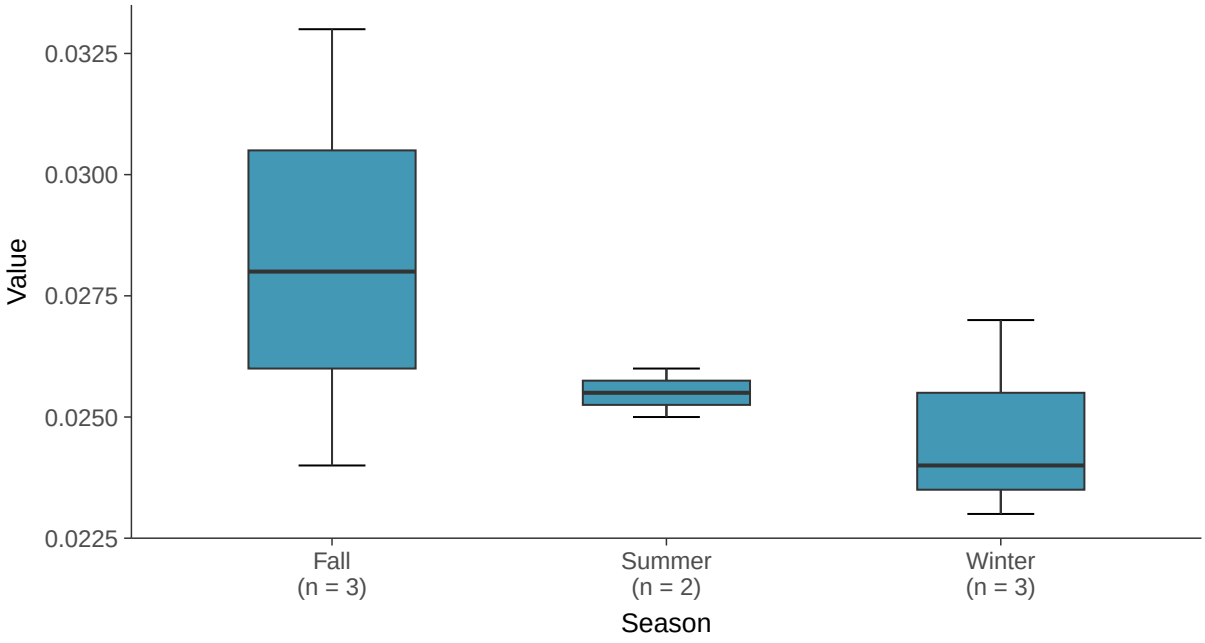
Boxplot

Lithium, MW-17E (mg/l)



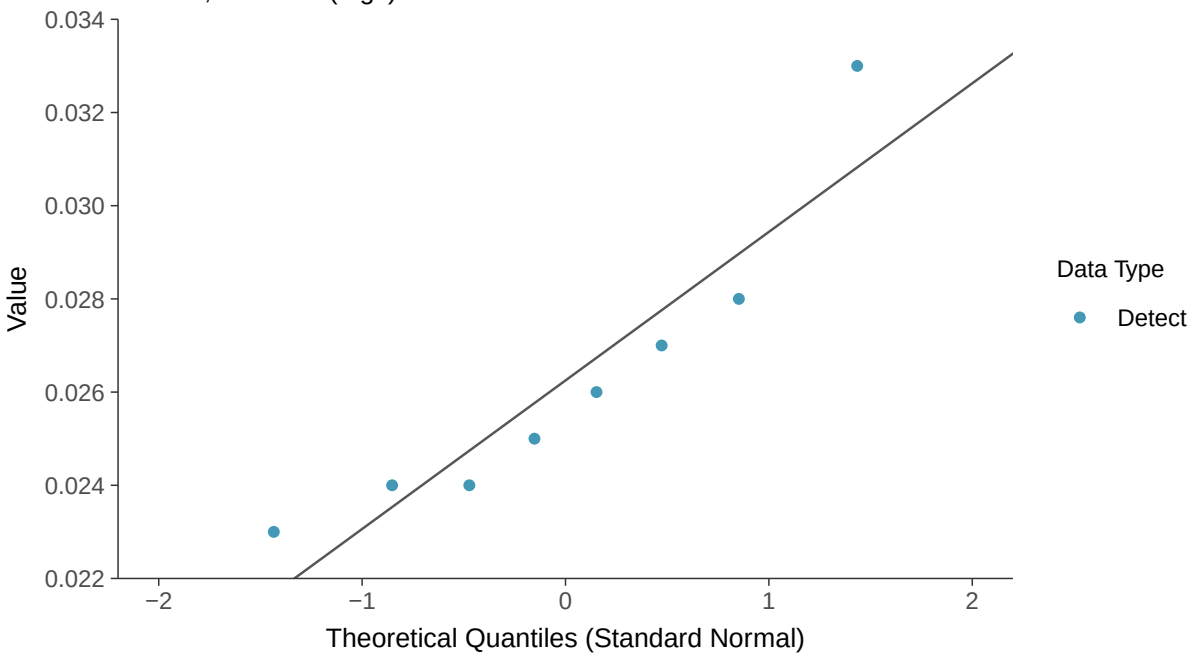
Boxplot by Season

Lithium, MW-17E (mg/l)



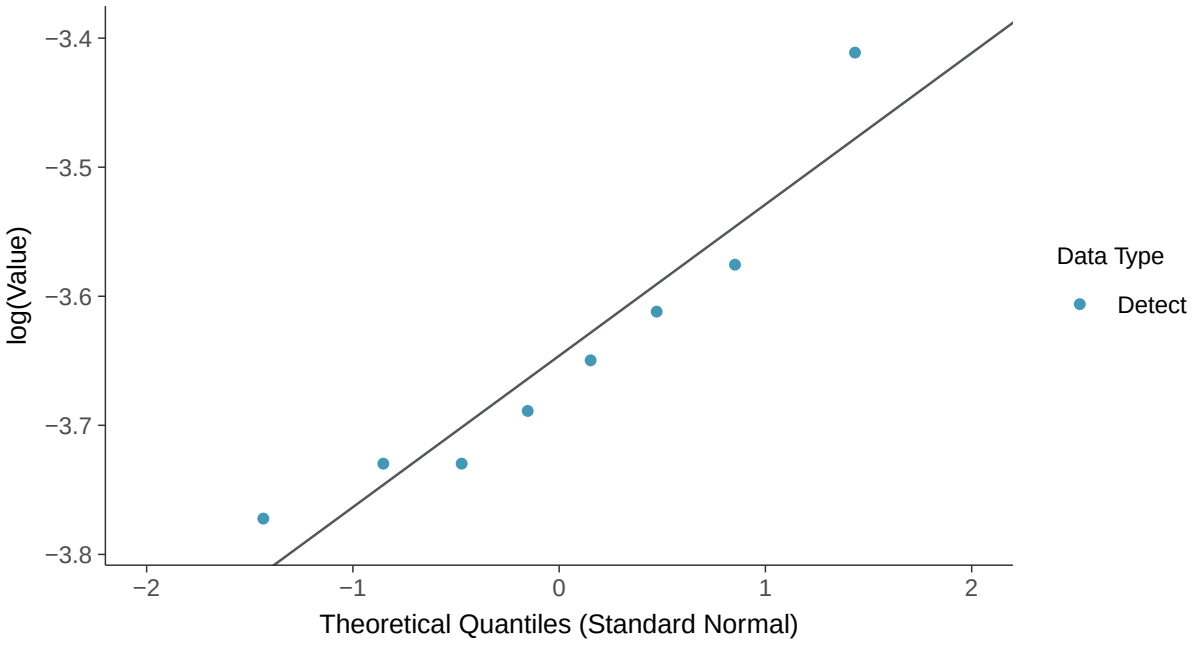
Normal Q-Q plot

Lithium, MW-17E (mg/l)



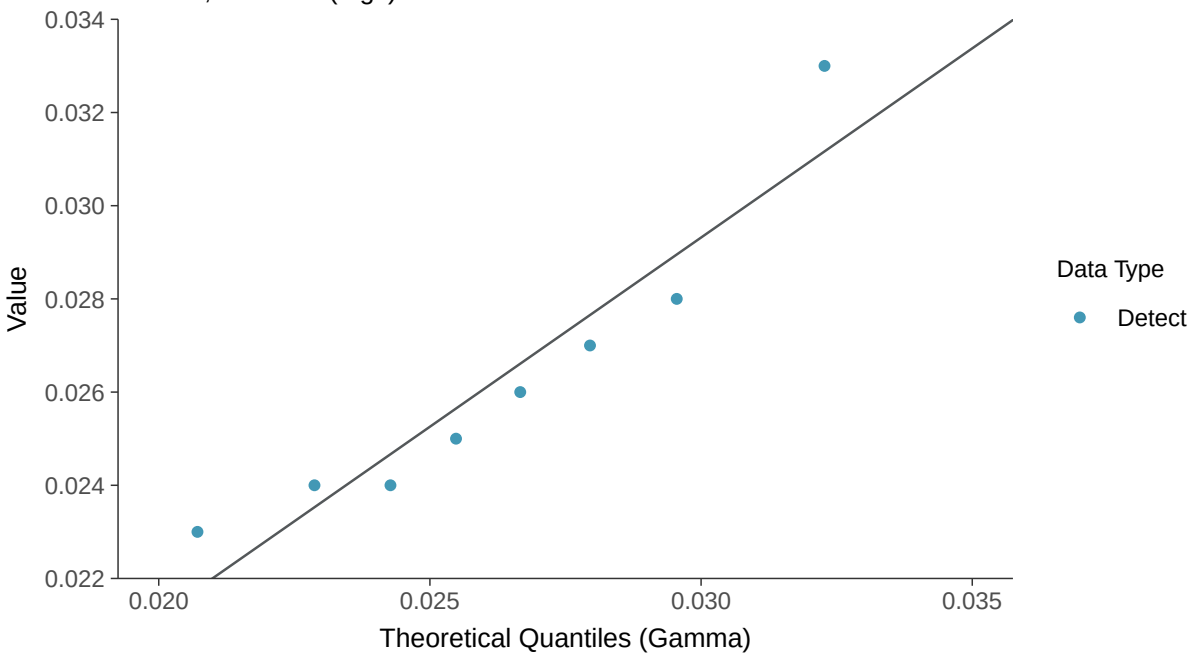
Lognormal Q-Q plot

Lithium, MW-17E (mg/l)



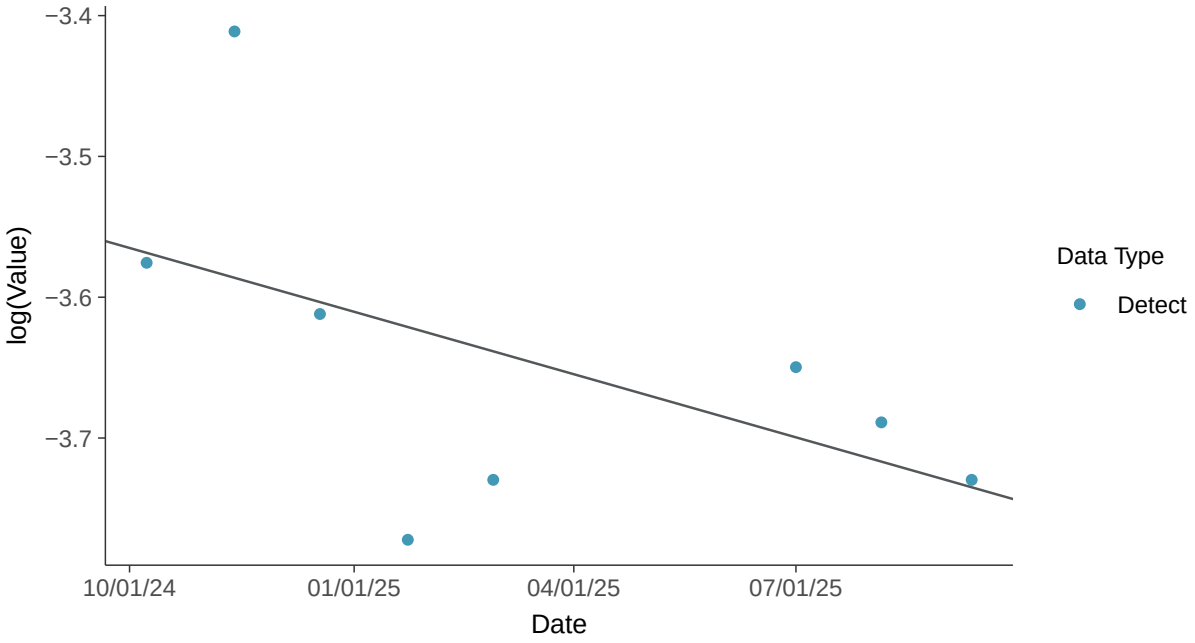
Gamma Q-Q plot

Lithium, MW-17E (mg/l)



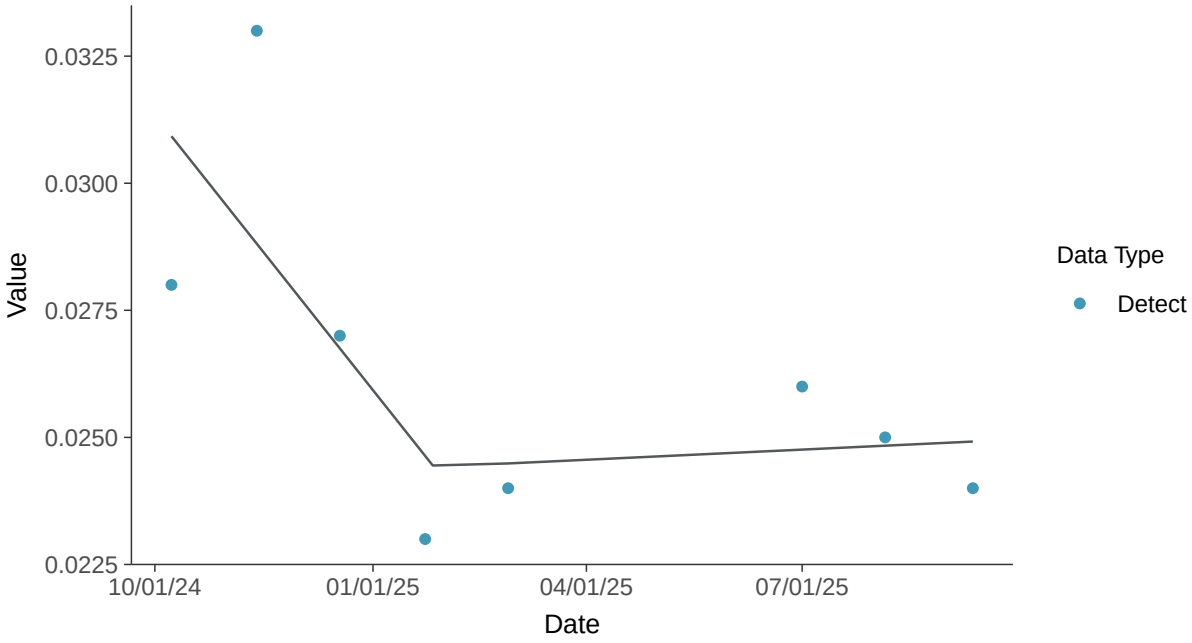
Trend Regression: Lognormal MLE

Lithium, MW-17E (mg/l)



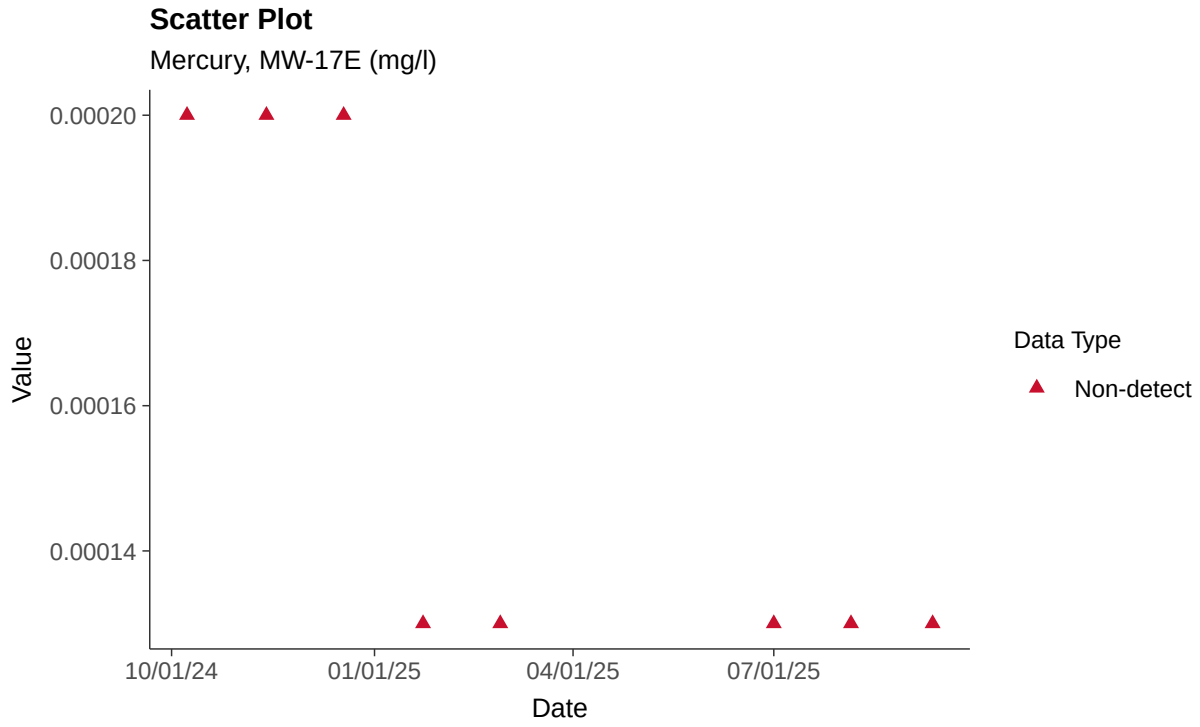
Trend Regression: Piecewise Linear-Linear

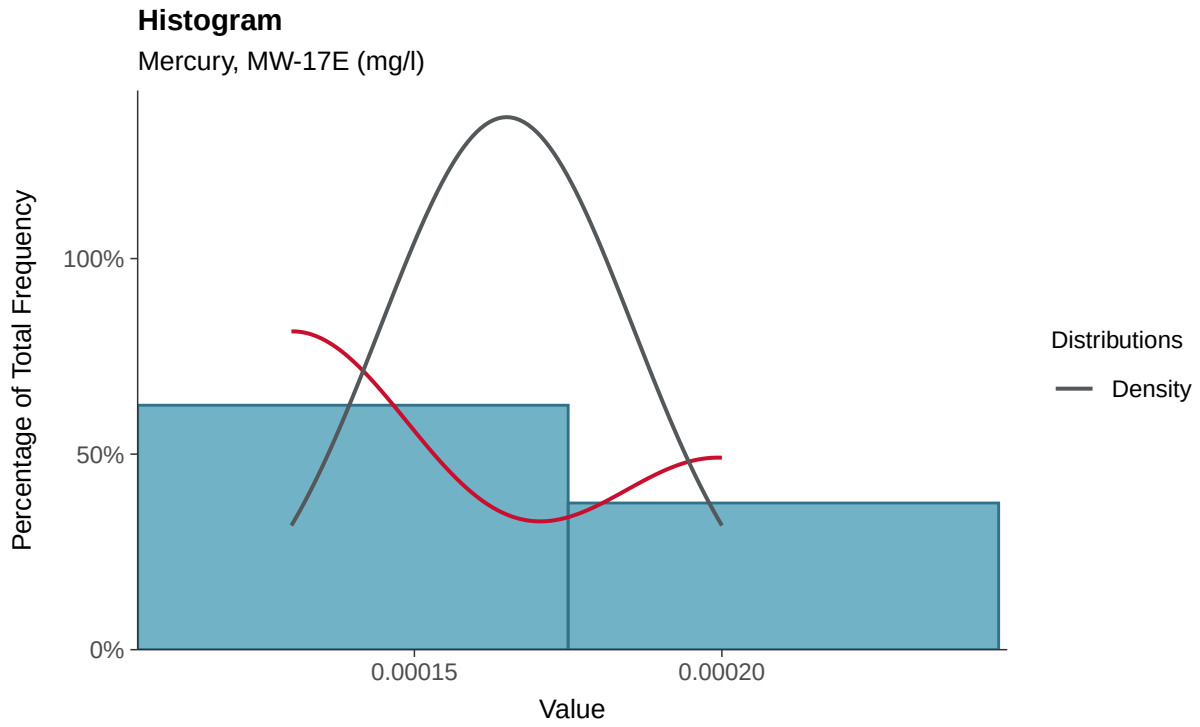
Lithium, MW-17E (mg/l)



Appendix IV: Mercury, MW-17E

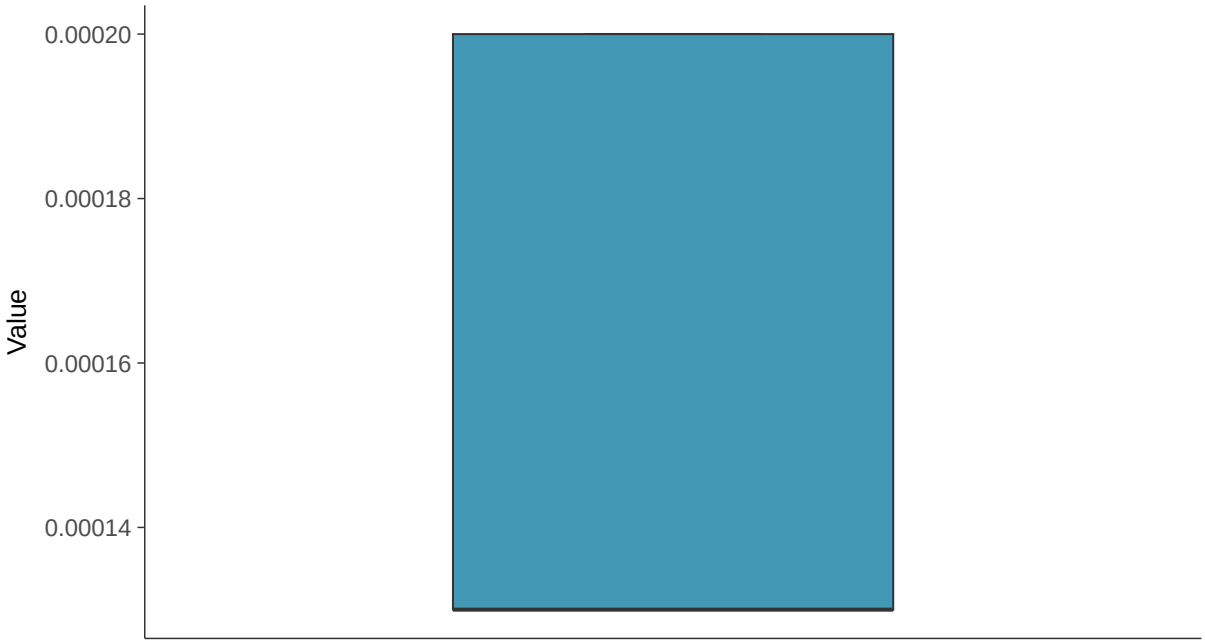
ID: 17_3_117





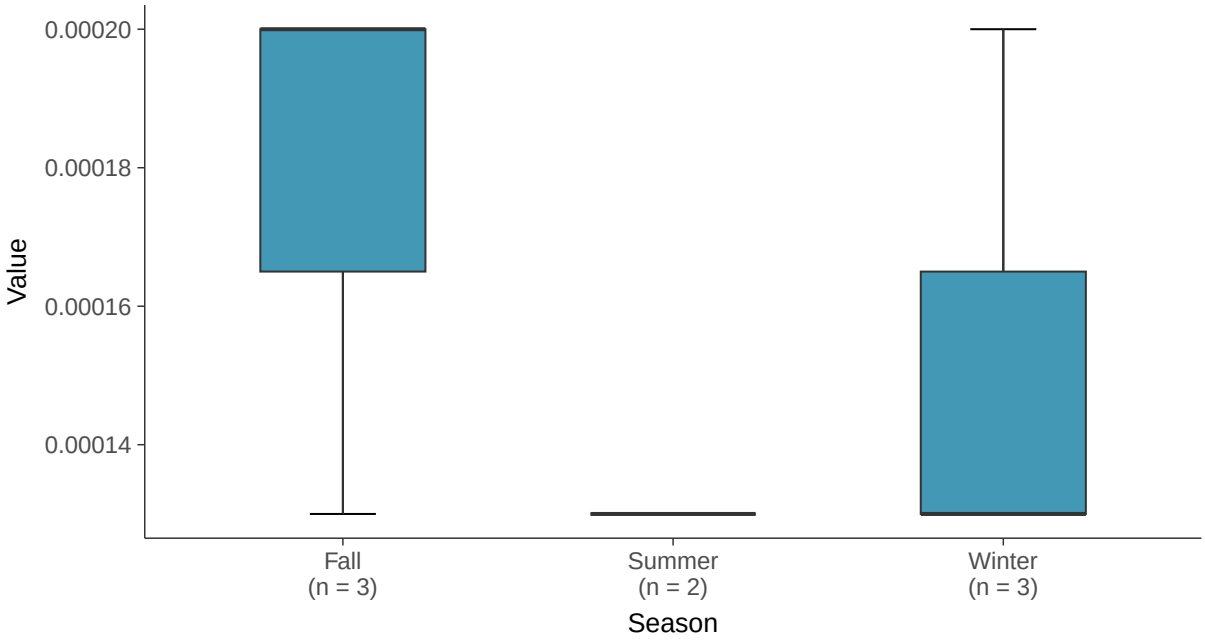
Boxplot

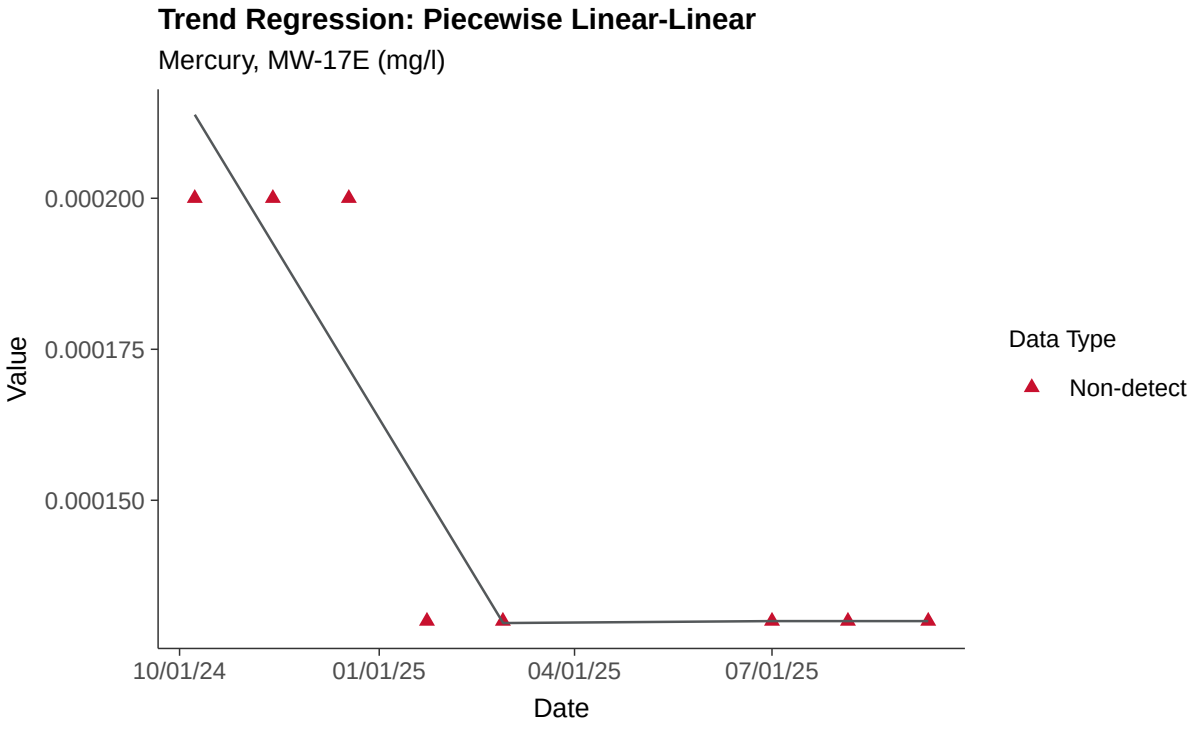
Mercury, MW-17E (mg/l)



Boxplot by Season

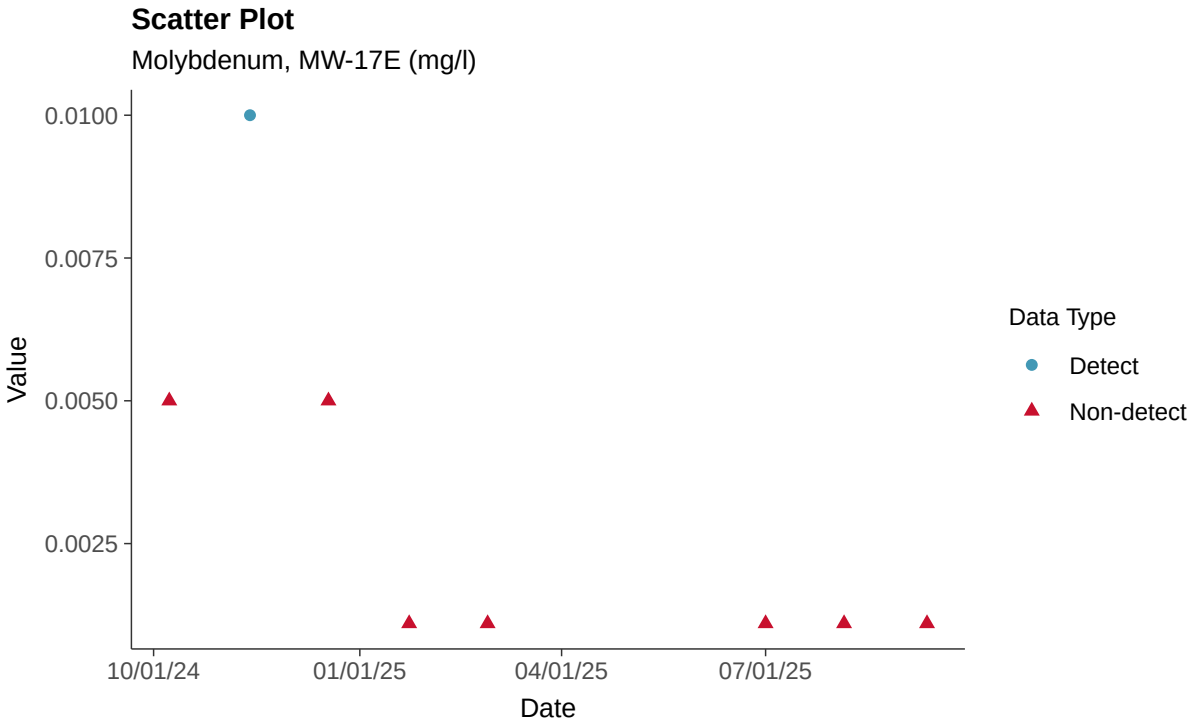
Mercury, MW-17E (mg/l)

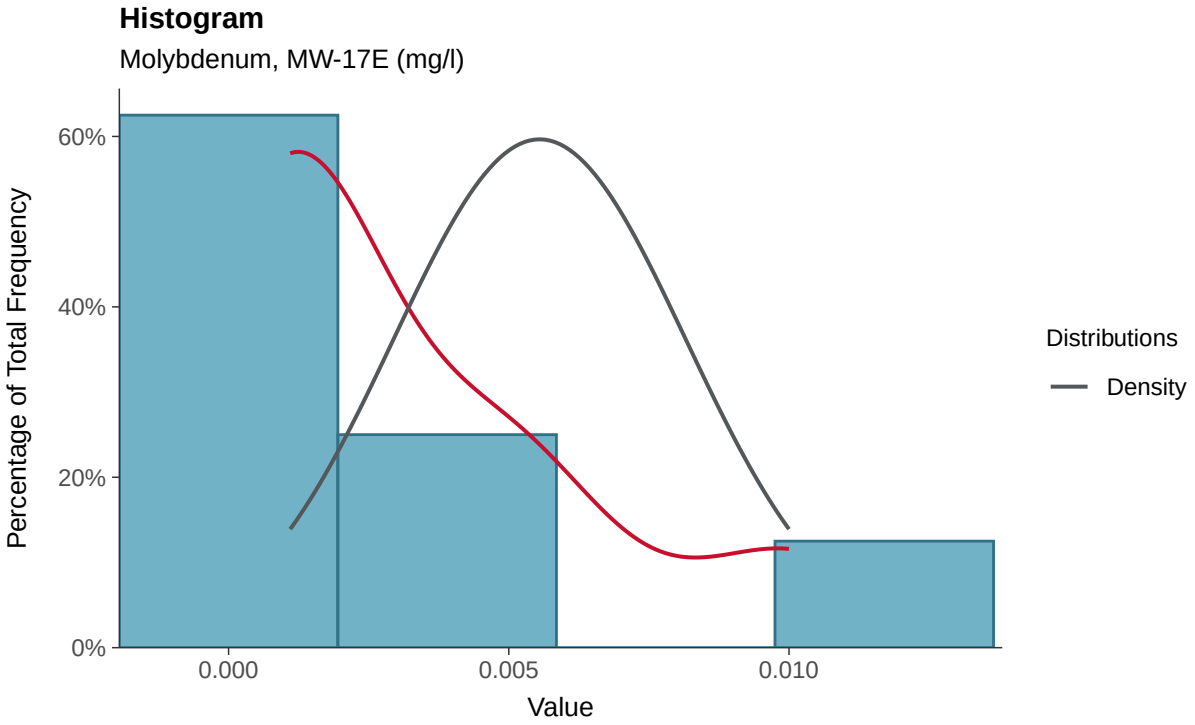



Trend Regression: Piecewise Linear-Linear
Mercury, MW-17E (mg/l)
Value
0.000200
0.000175
0.000150
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Molybdenum, MW-17E

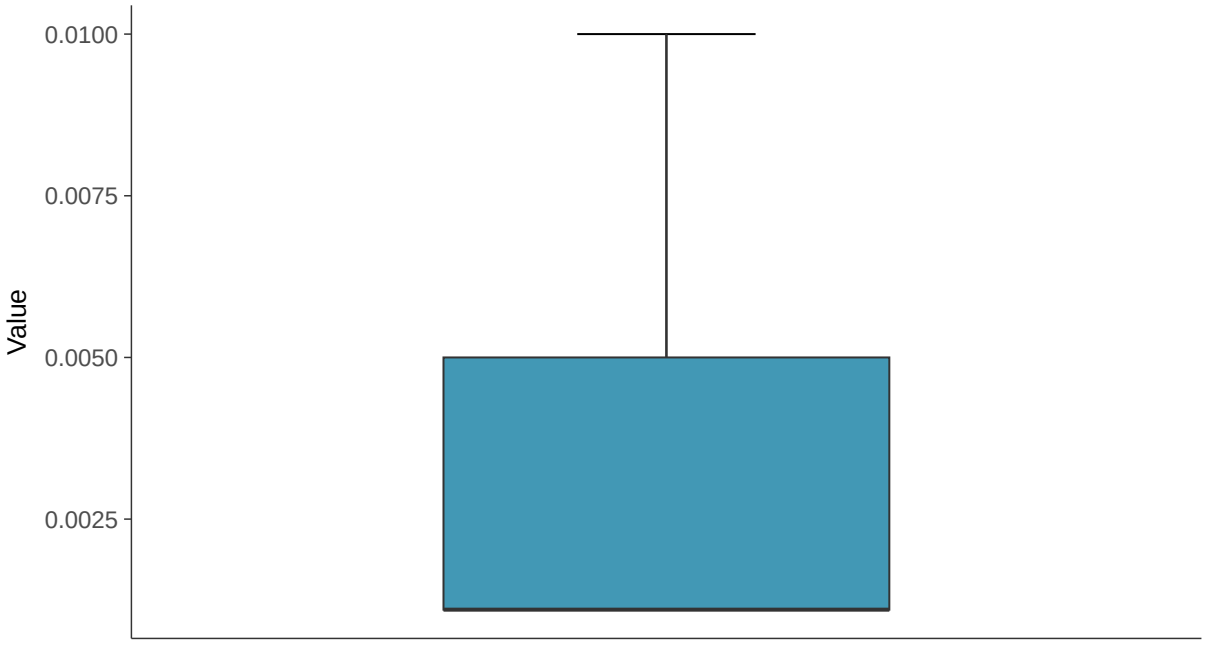
ID: 17_3_118





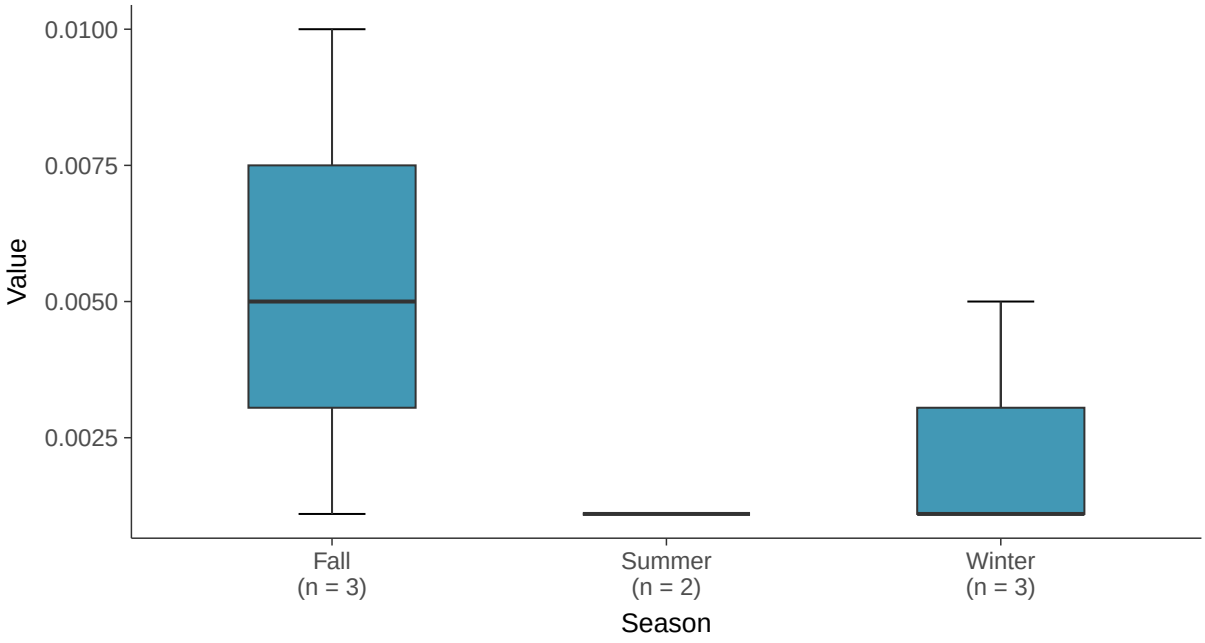
Boxplot

Molybdenum, MW-17E (mg/l)



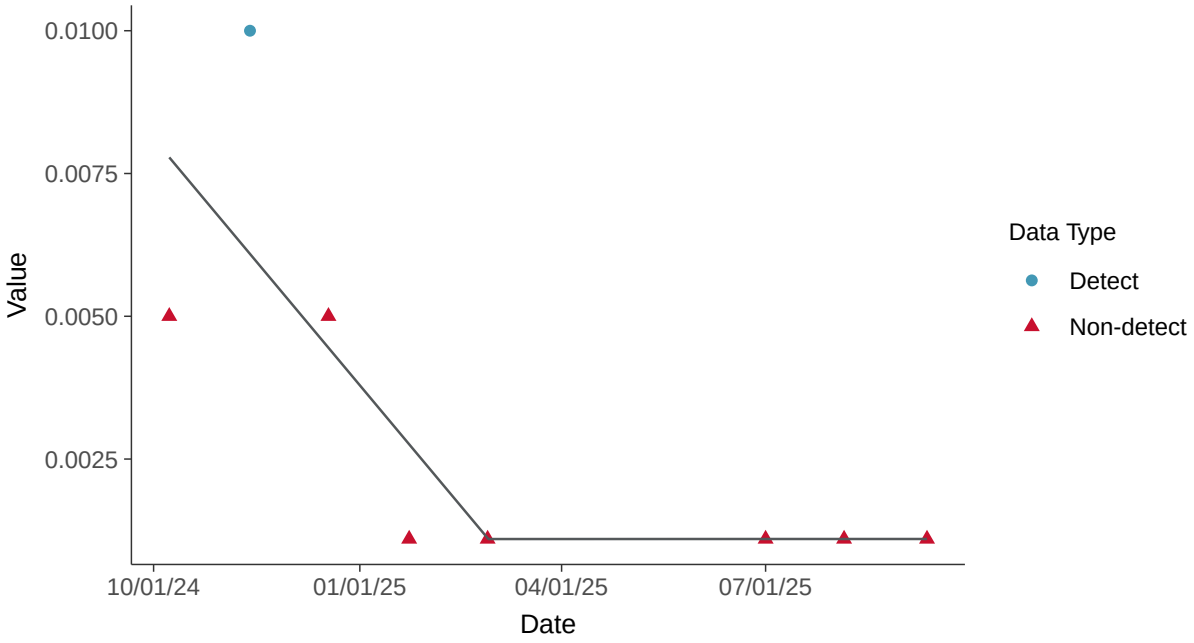
Boxplot by Season

Molybdenum, MW-17E (mg/l)



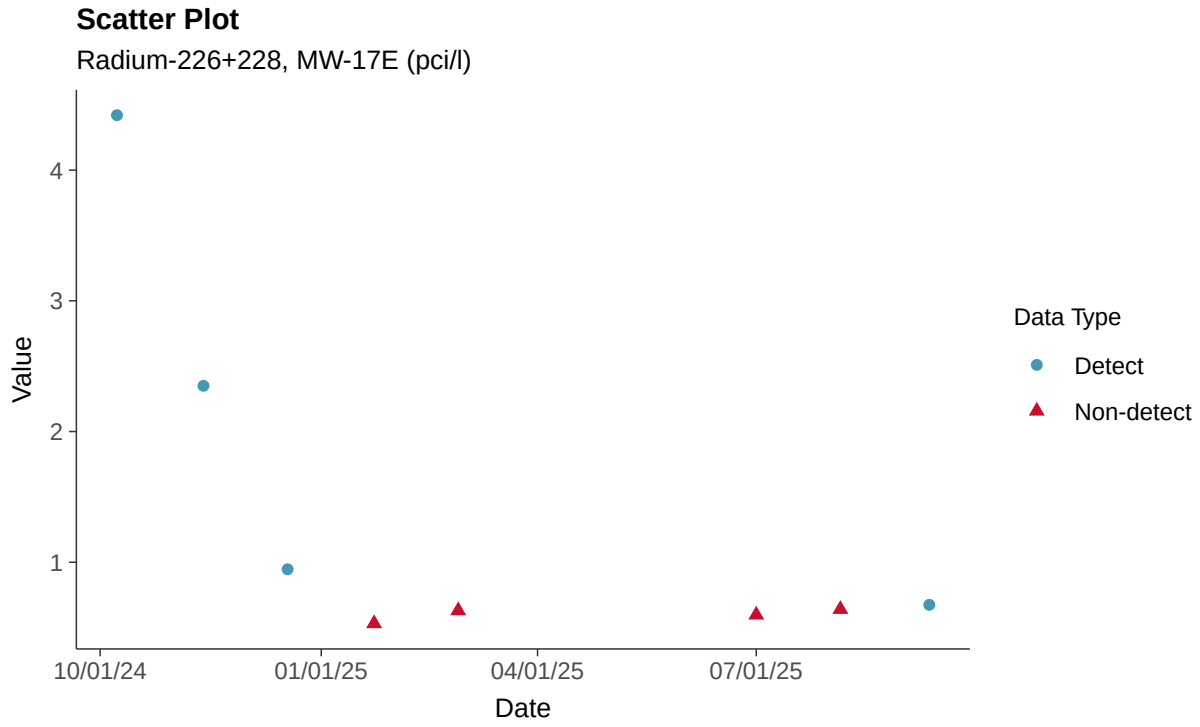
Trend Regression: Piecewise Linear-Linear

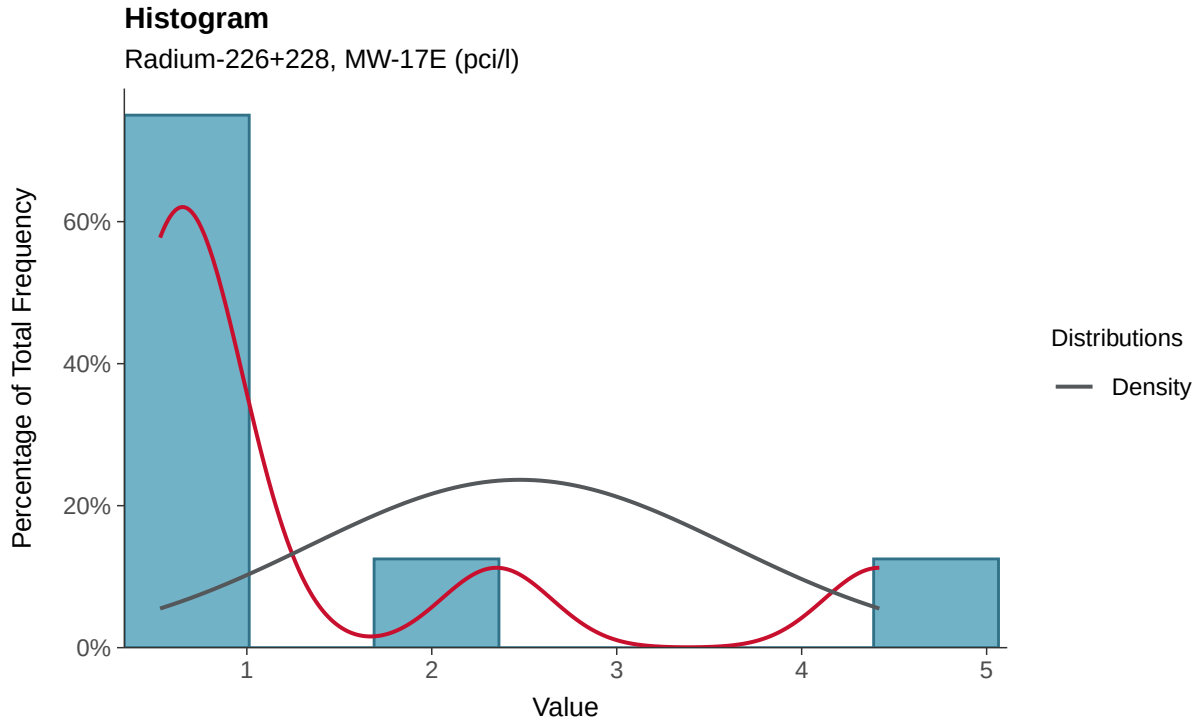
Molybdenum, MW-17E (mg/l)



Appendix IV: Radium-226+228, MW-17E

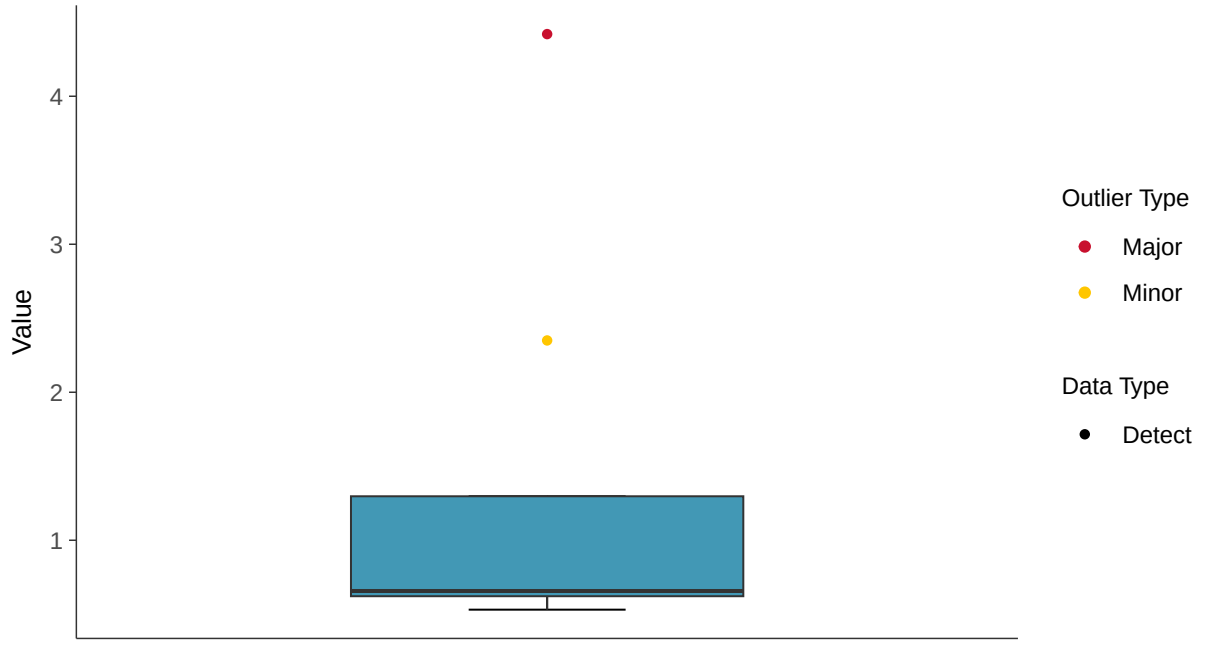
ID: 17_3_121





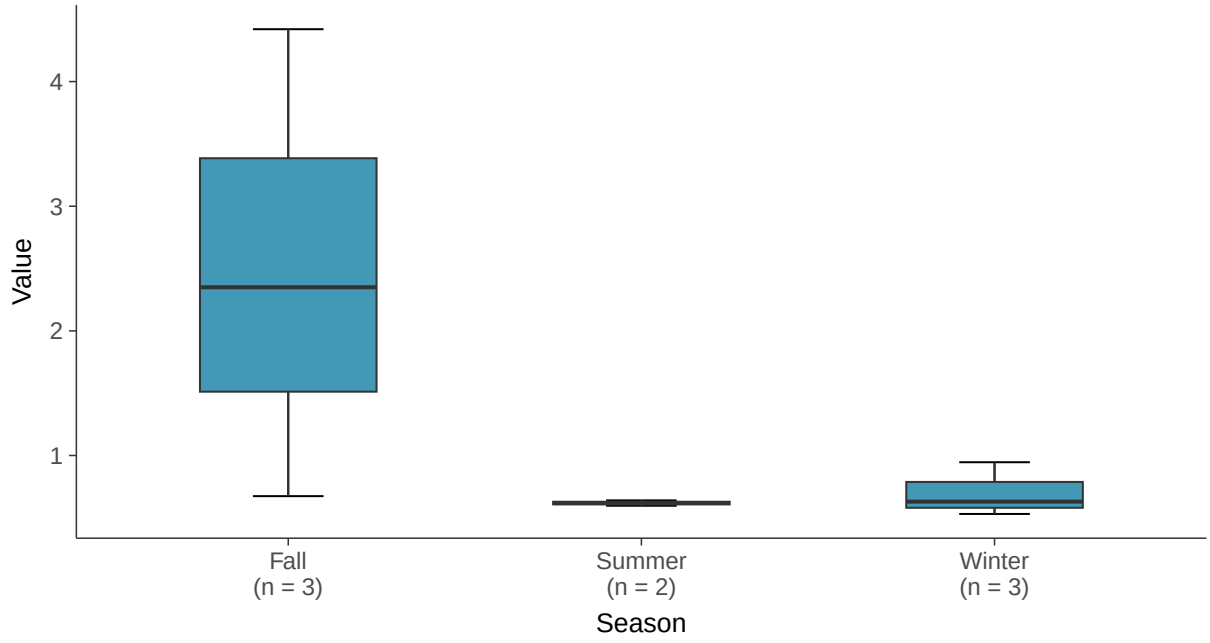
Boxplot

Radium-226+228, MW-17E (pci/l)



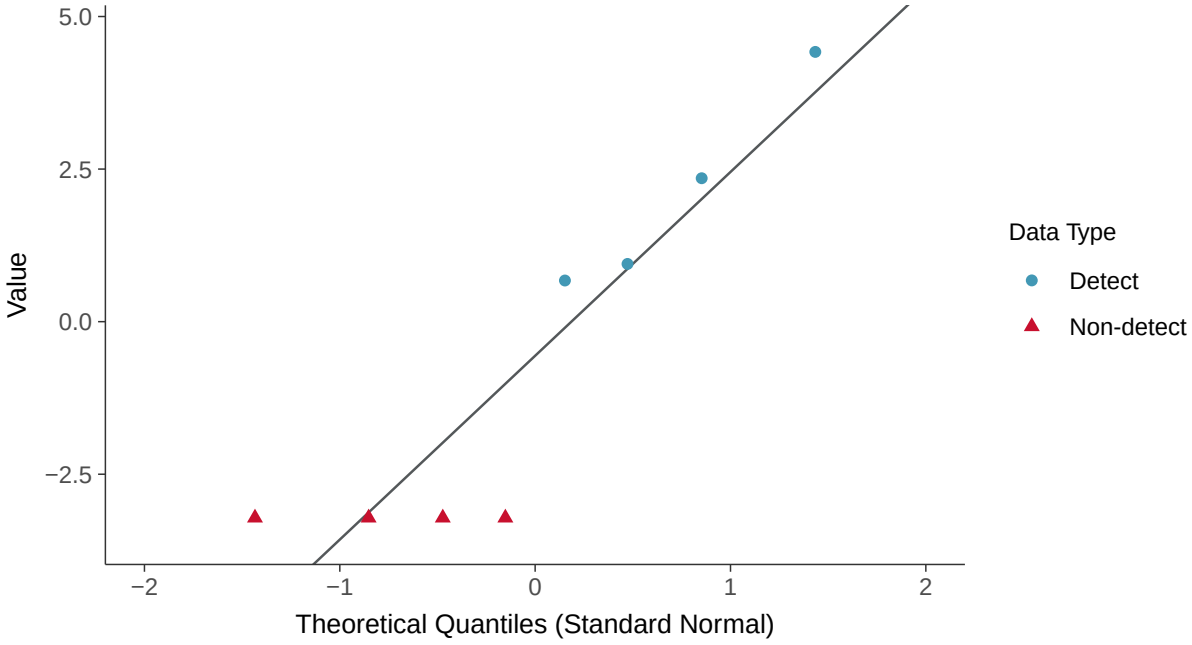
Boxplot by Season

Radium-226+228, MW-17E (pci/l)



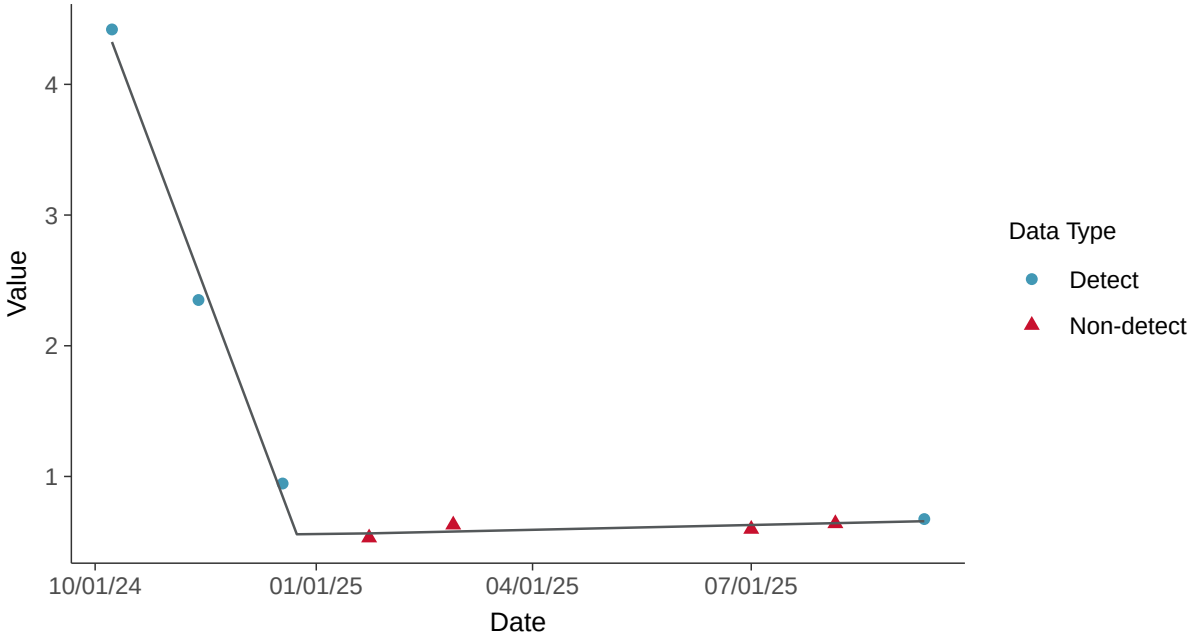
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-17E (pci/l)



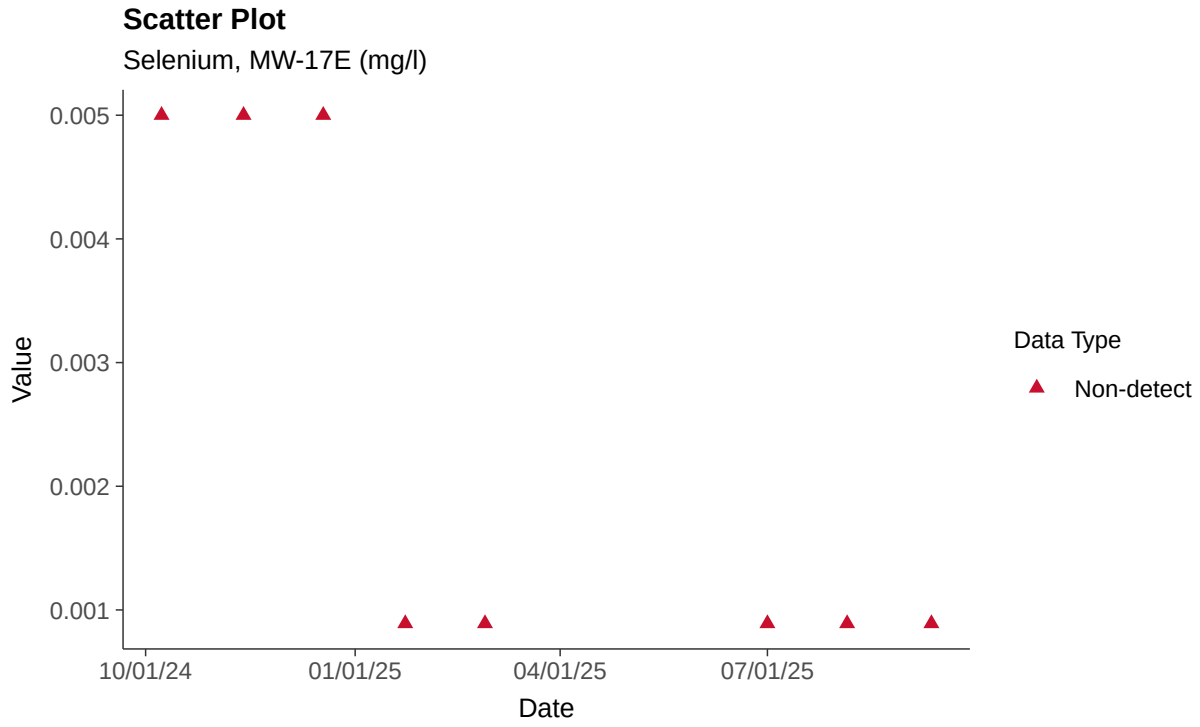
Trend Regression: Piecewise Linear-Linear

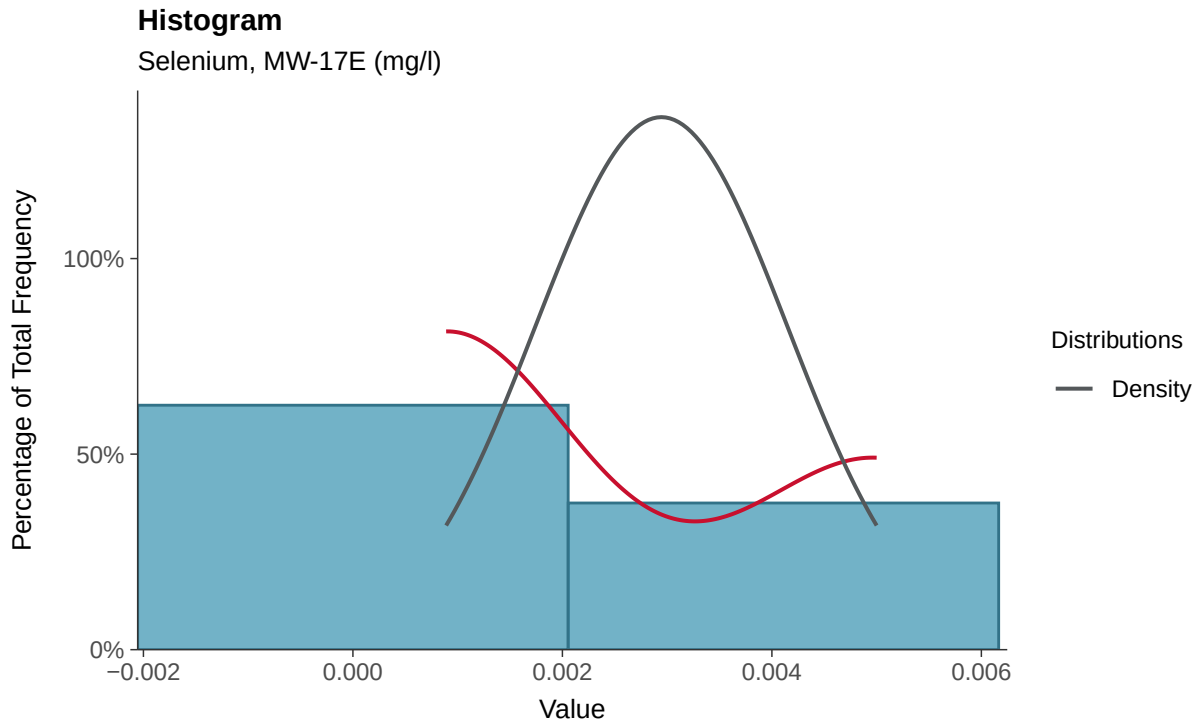
Radium-226+228, MW-17E (pci/l)



Appendix IV: Selenium, MW-17E

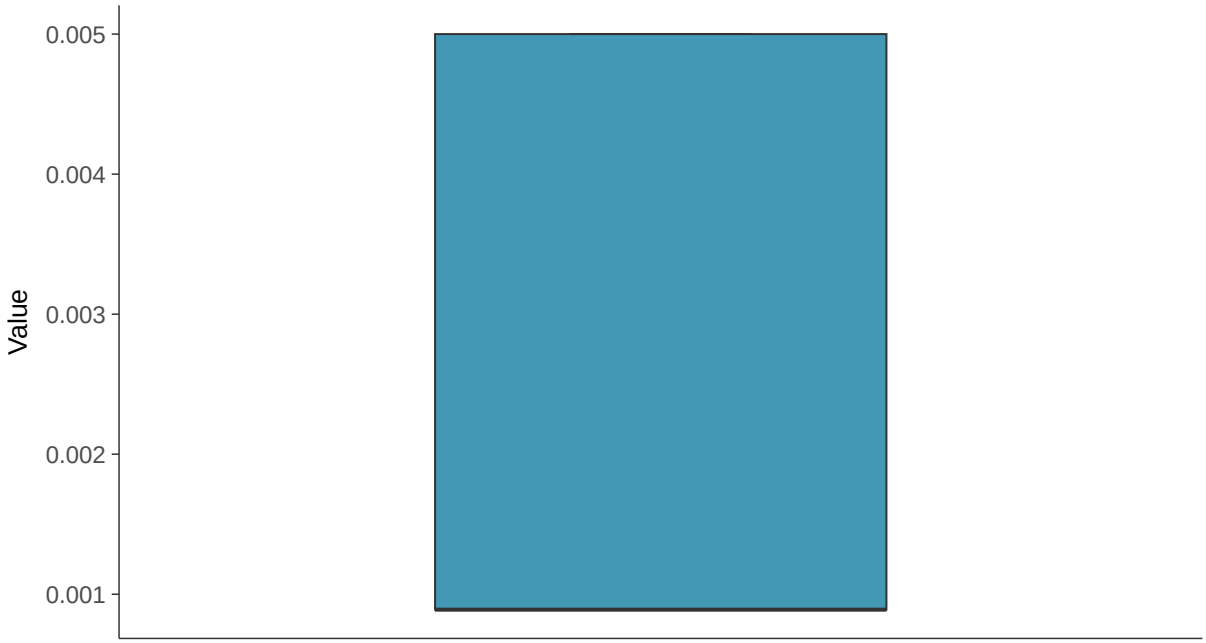
ID: 17_3_122





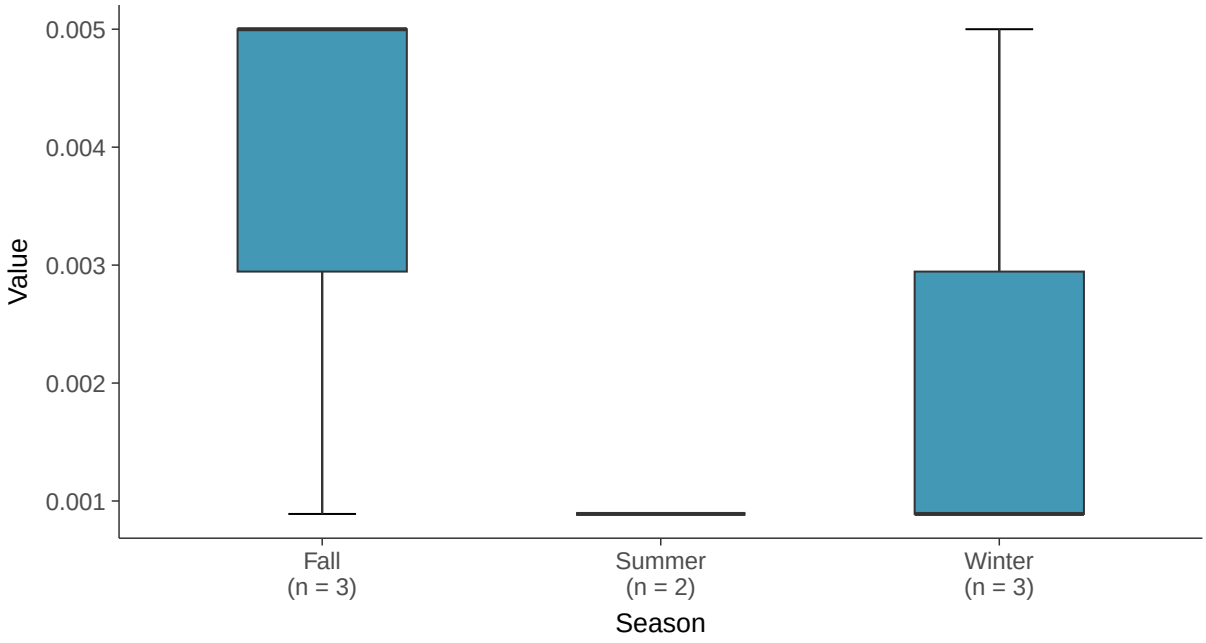
Boxplot

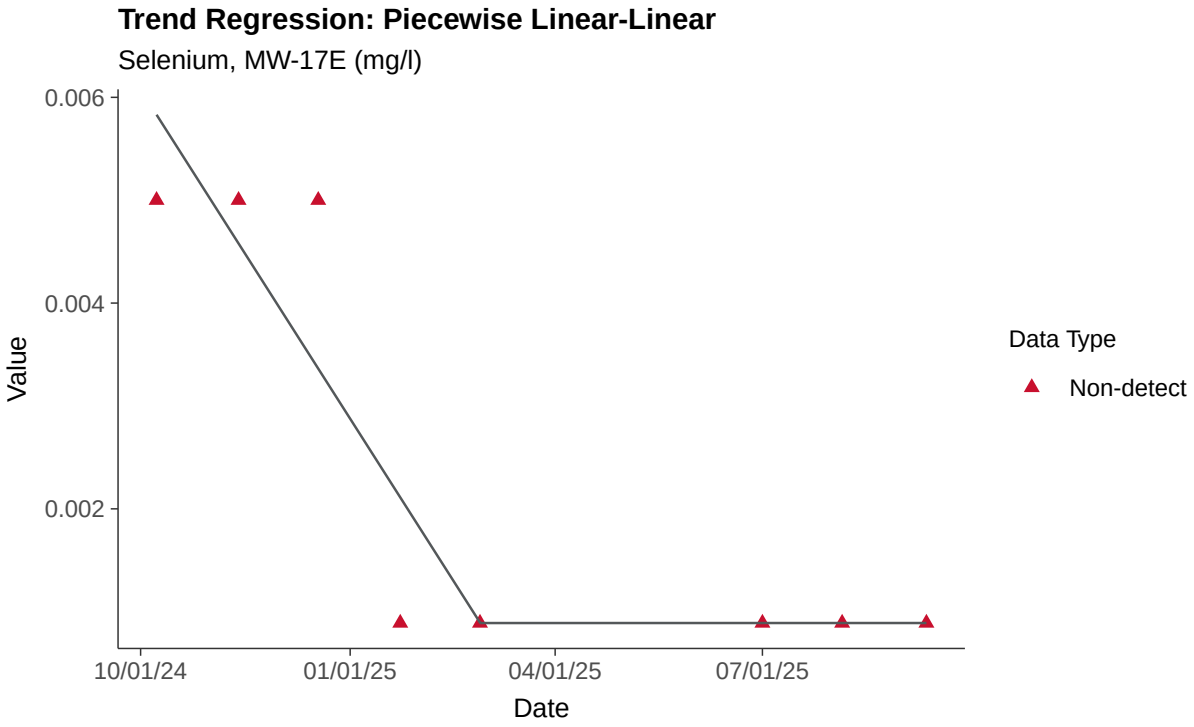
Selenium, MW-17E (mg/l)



Boxplot by Season

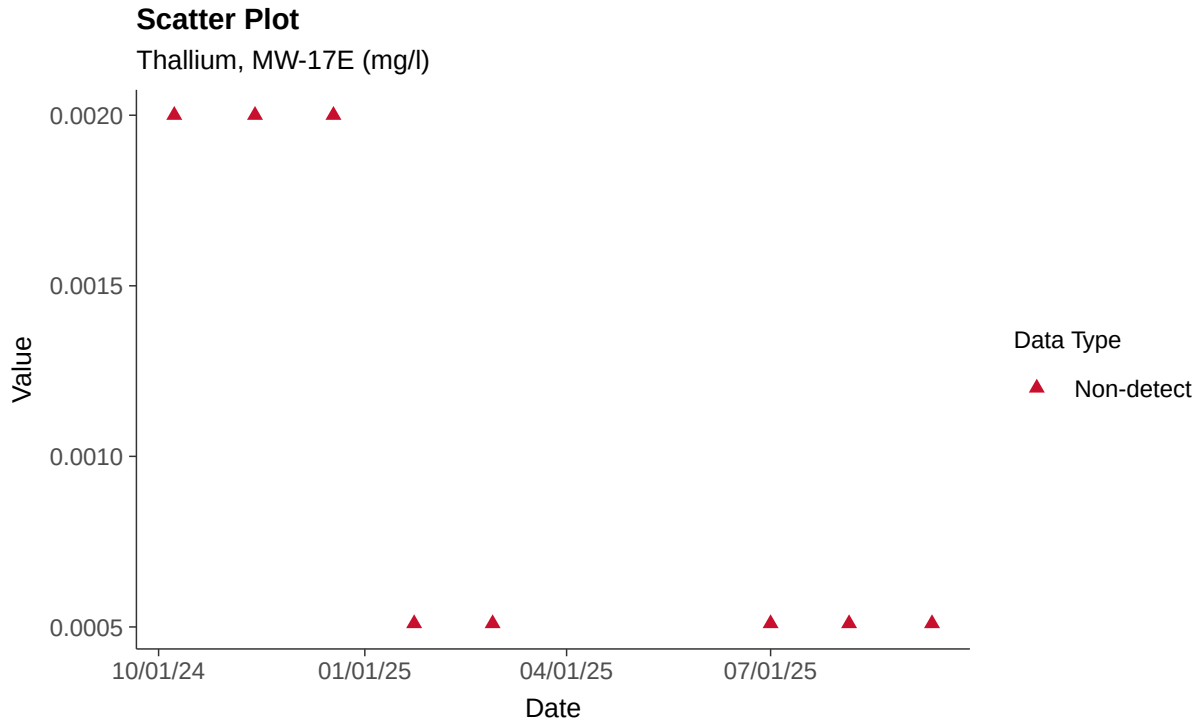
Selenium, MW-17E (mg/l)

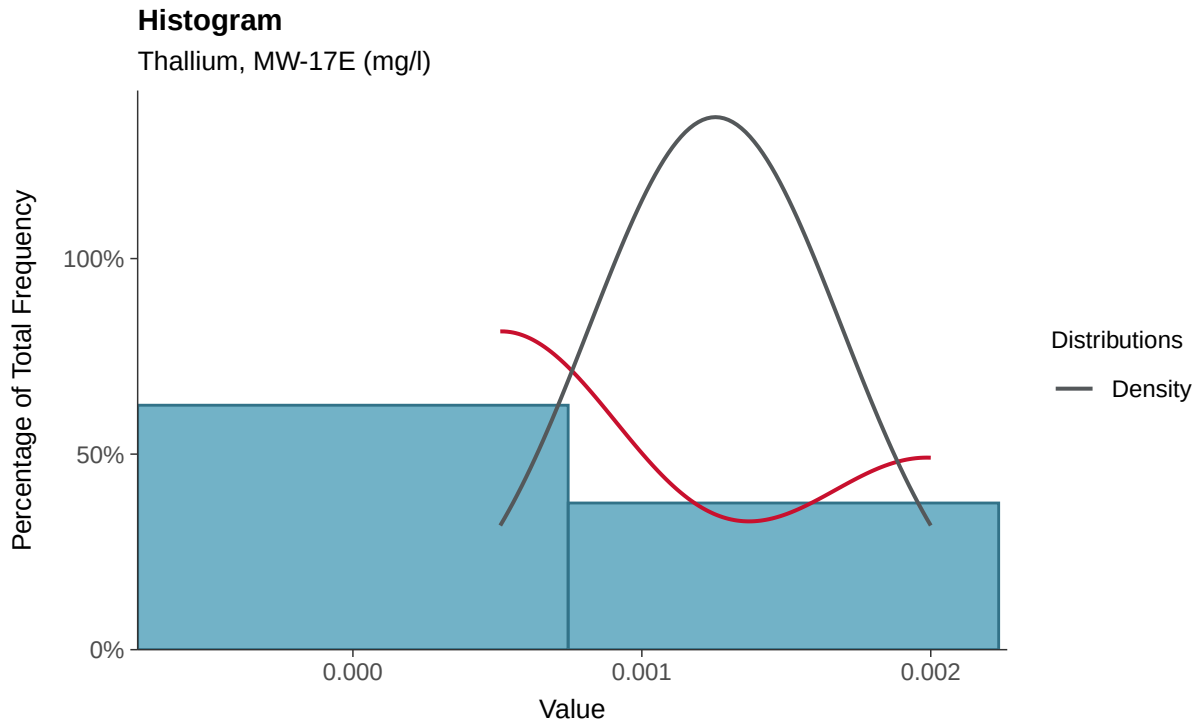



Trend Regression: Piecewise Linear-Linear
Selenium, MW-17E (mg/l)
0.006
0.004
0.002
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Thallium, MW-17E

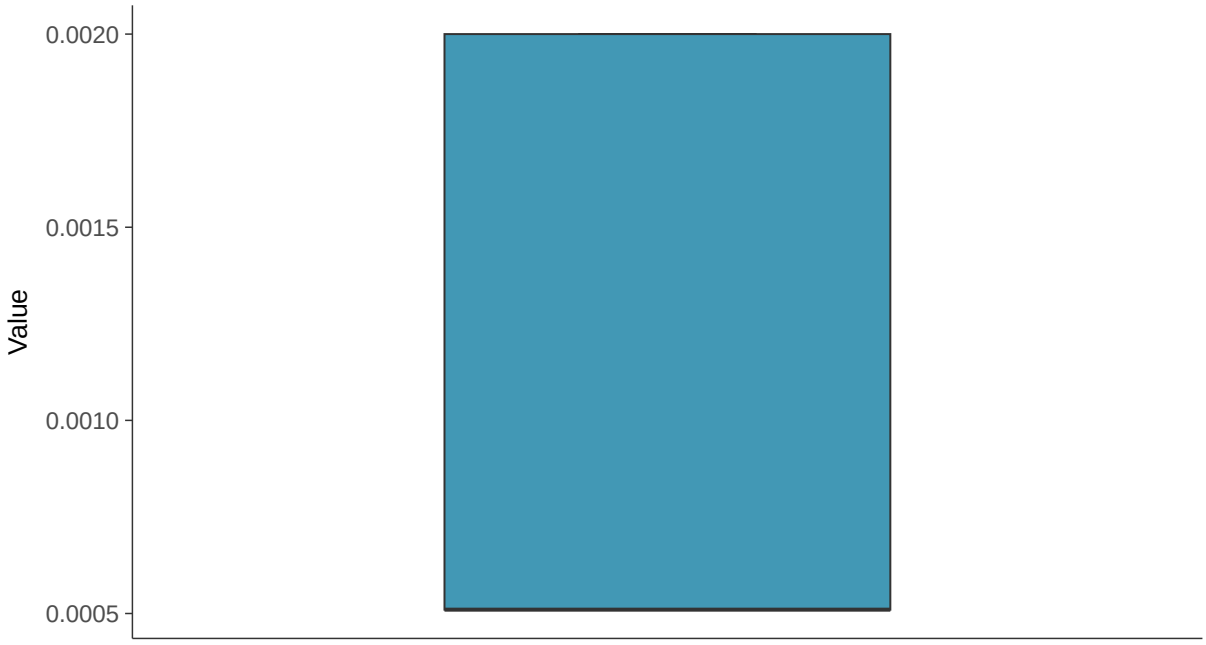
ID: 17_3_125





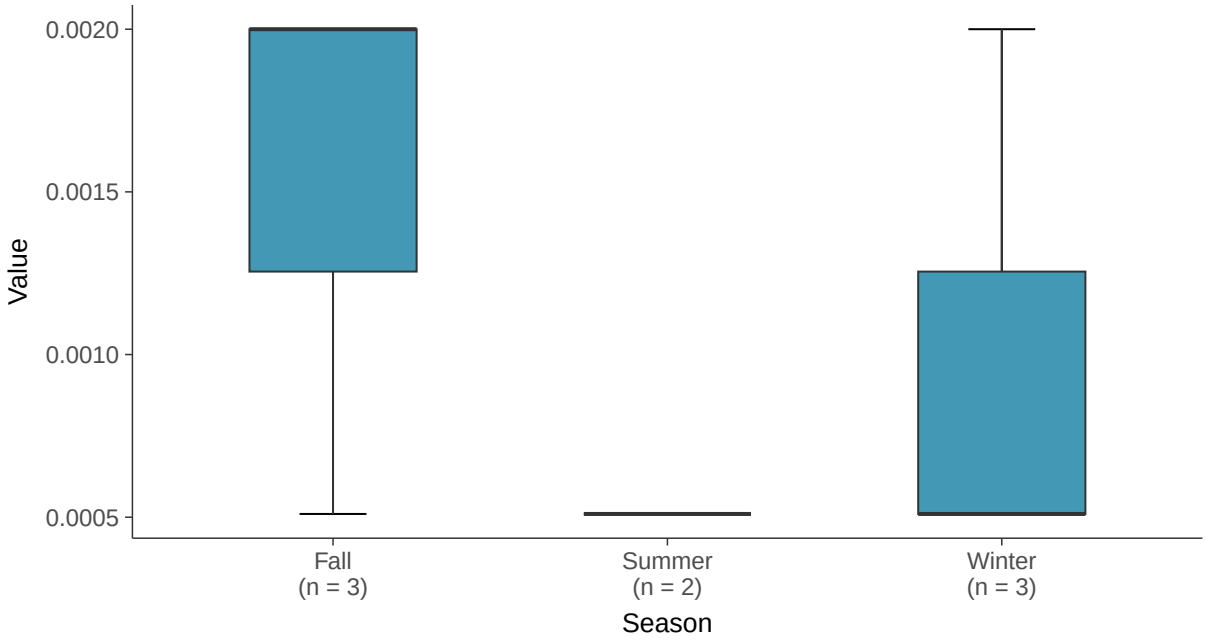
Boxplot

Thallium, MW-17E (mg/l)



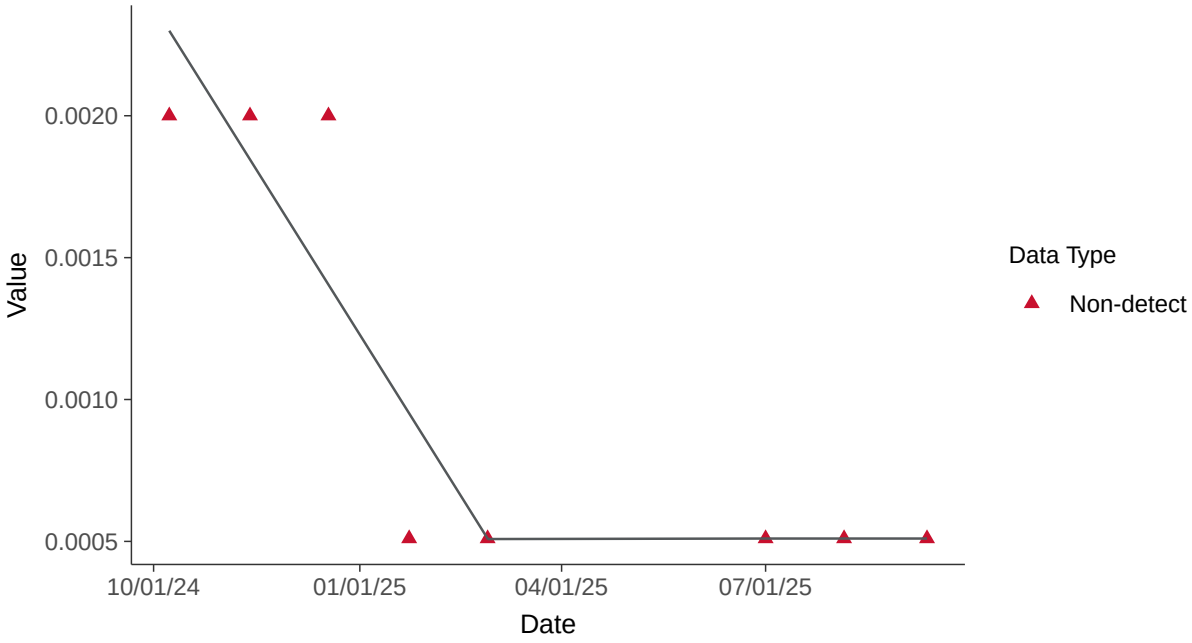
Boxplot by Season

Thallium, MW-17E (mg/l)



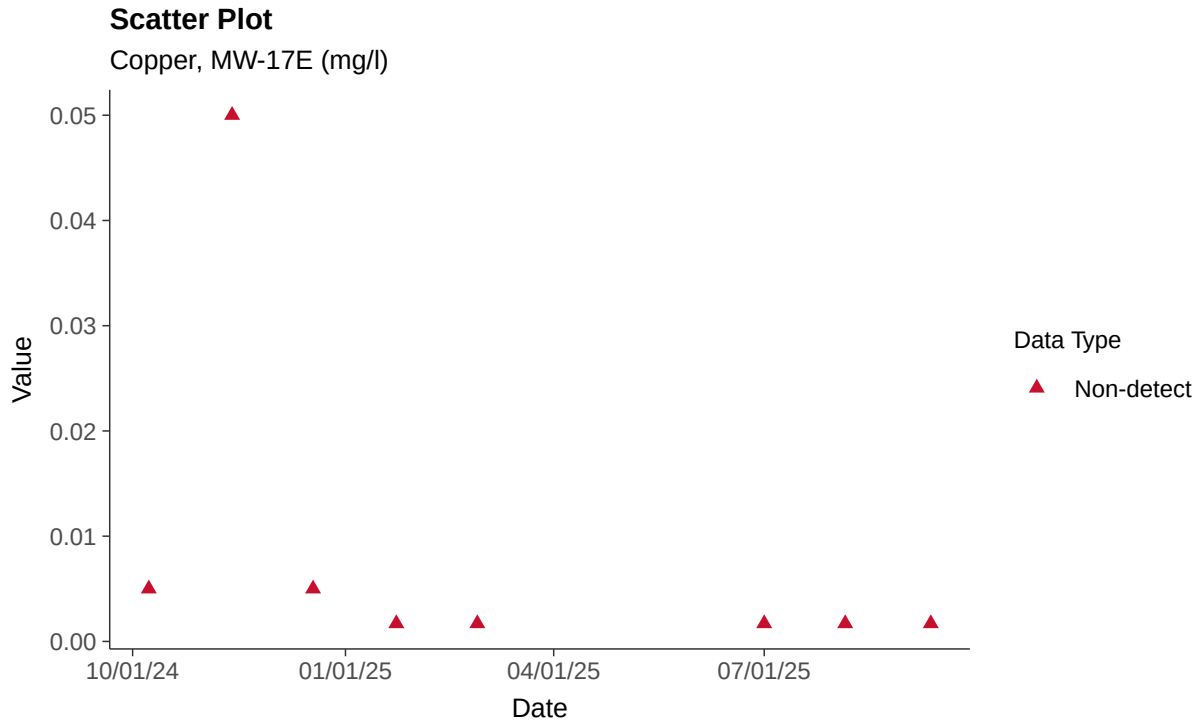
Trend Regression: Piecewise Linear-Linear

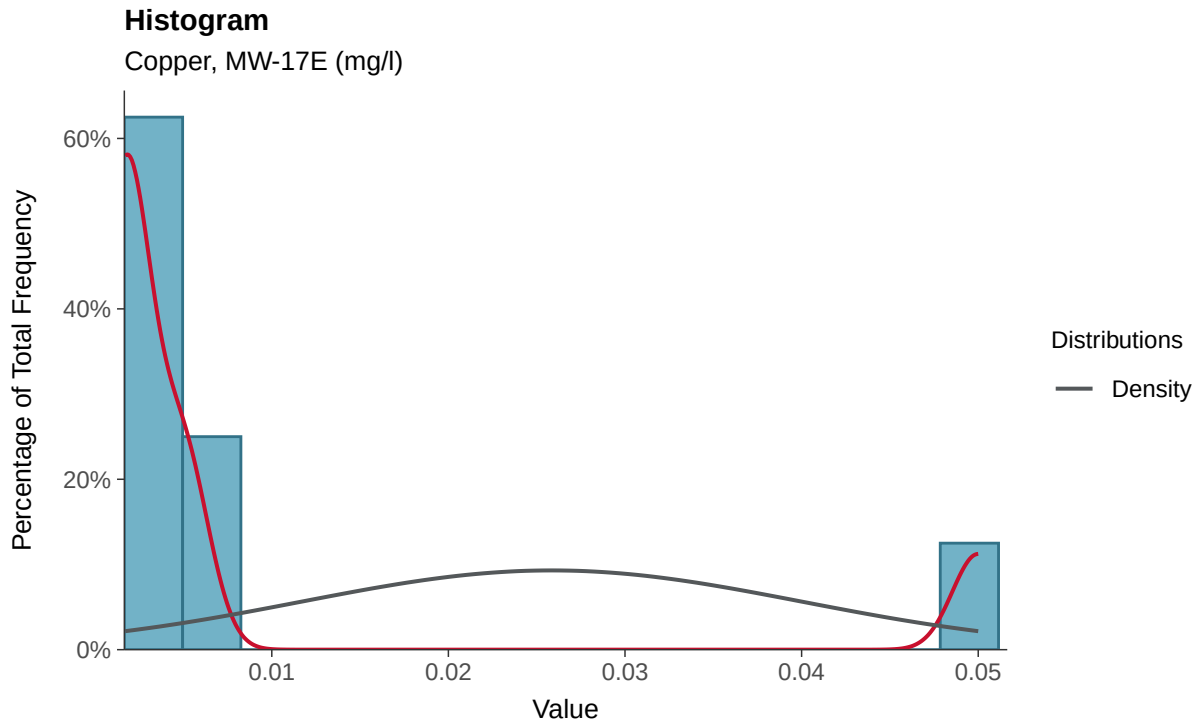
Thallium, MW-17E (mg/l)

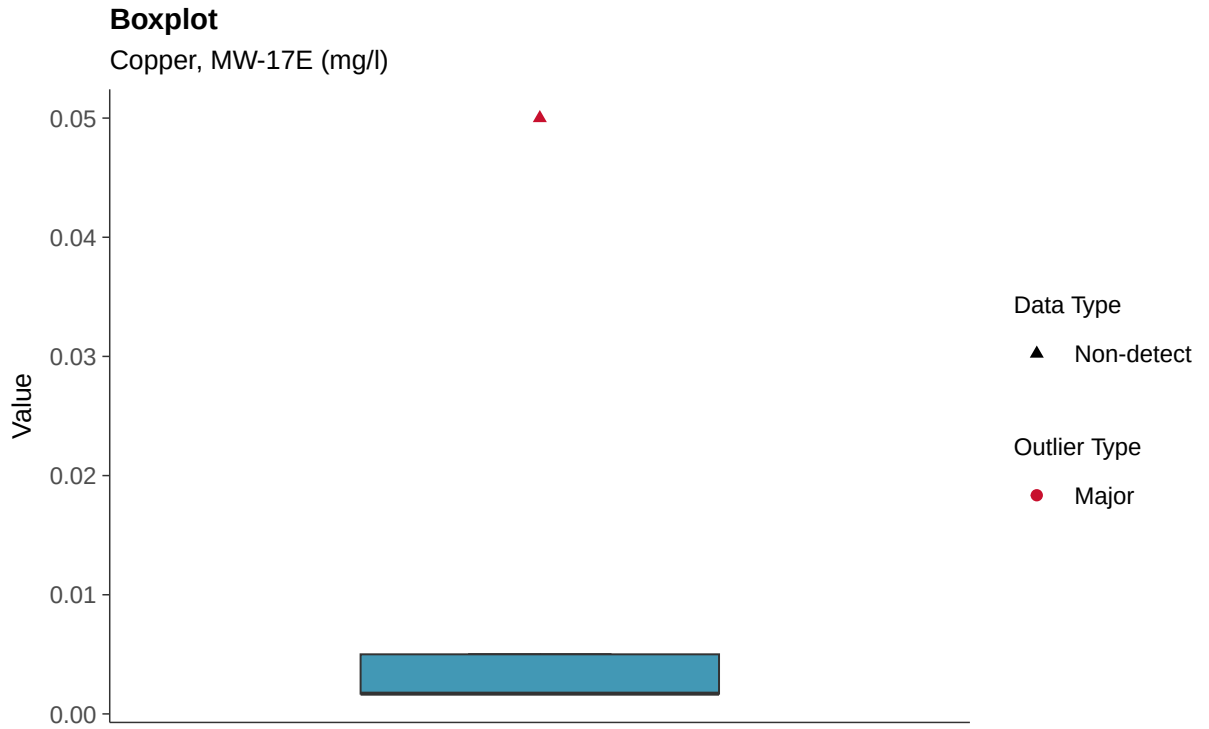


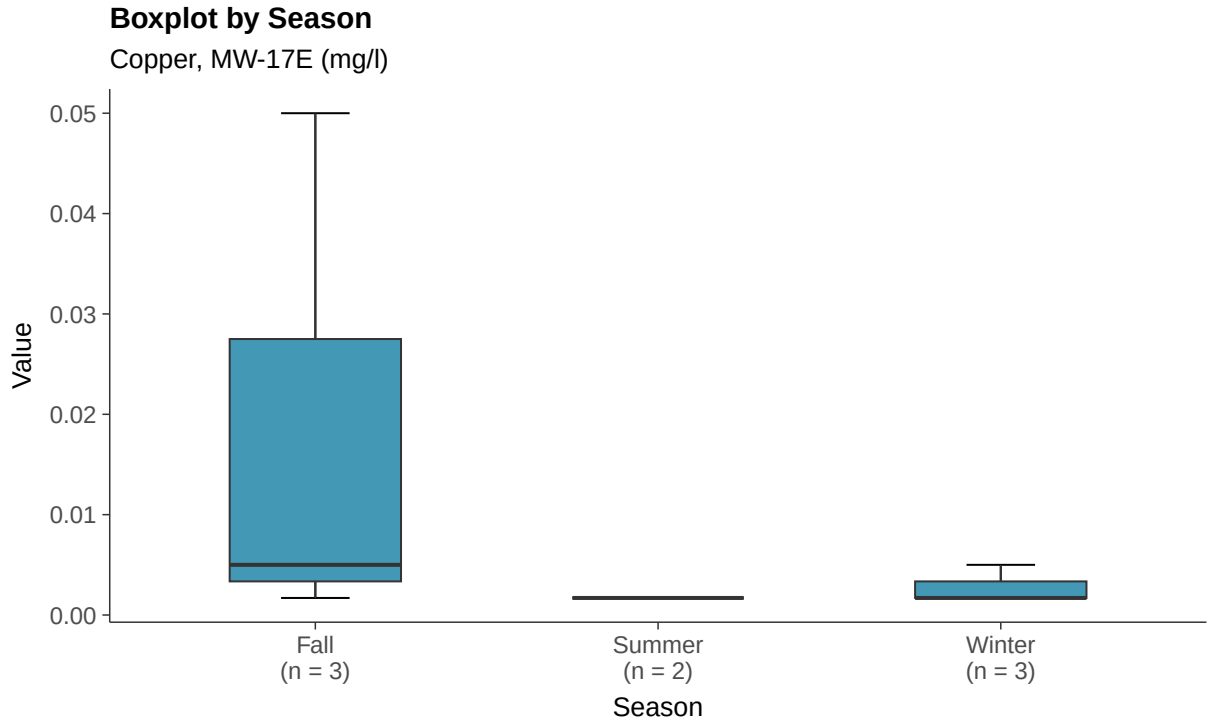
Part 115: Copper, MW-17E

ID: 17_5_111



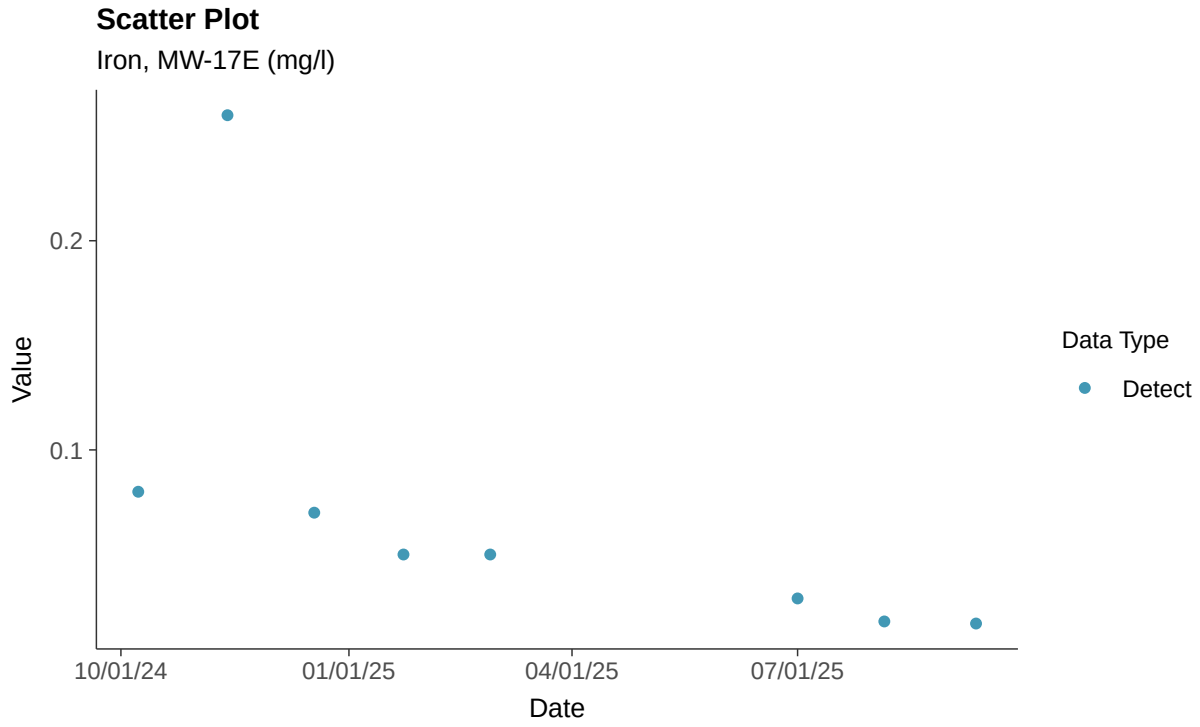


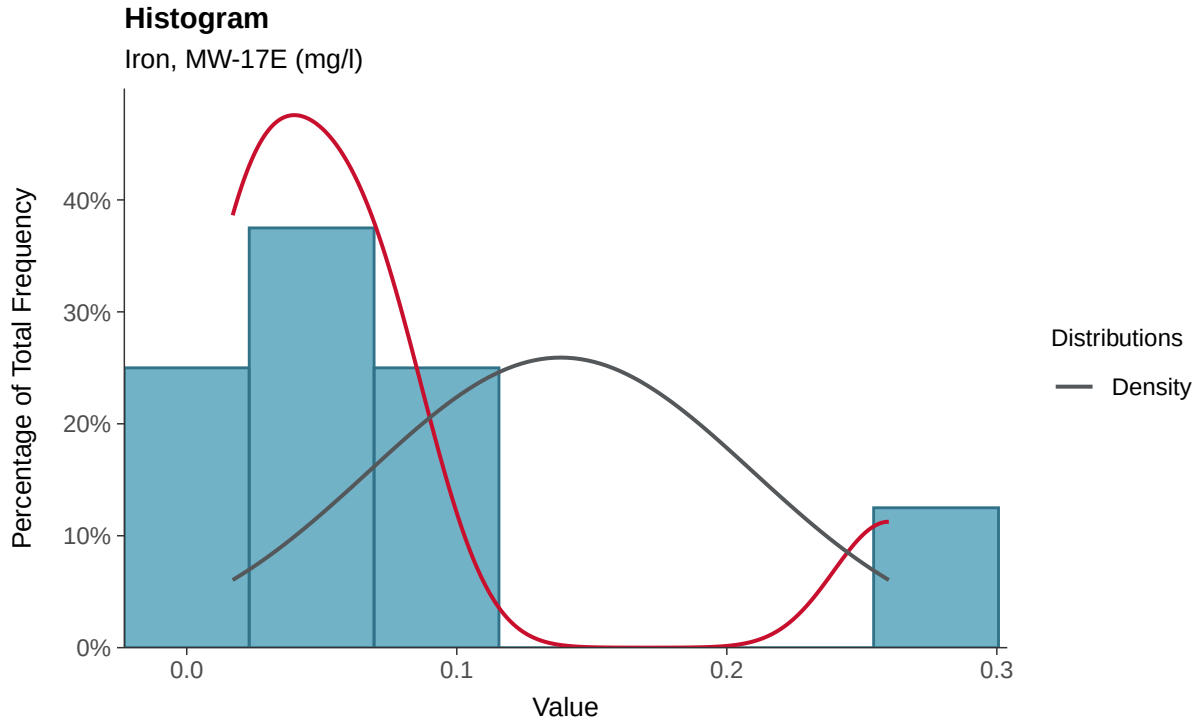

Boxplot
Copper, MW-17E (mg/l)
Value
0.05
0.04
0.03
0.02
0.01
0.00
Data Type
Non-detect
Outlier Type
Major


Boxplot by Season
Copper, MW-17E (mg/l)
Value
0.05
0.04
0.03
0.02
0.01
0.00
Fall
(n = 3)
Summer
(n = 2)
Winter
(n = 3)
Season

Part 115: Iron, MW-17E

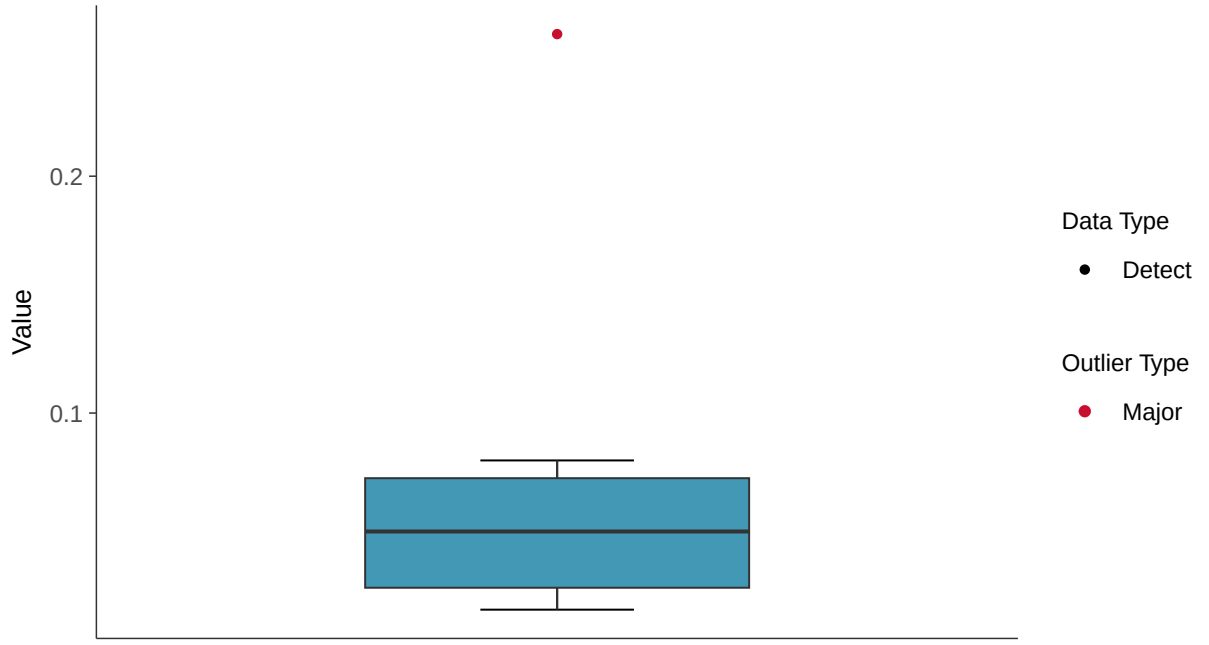
ID: 17_5_114





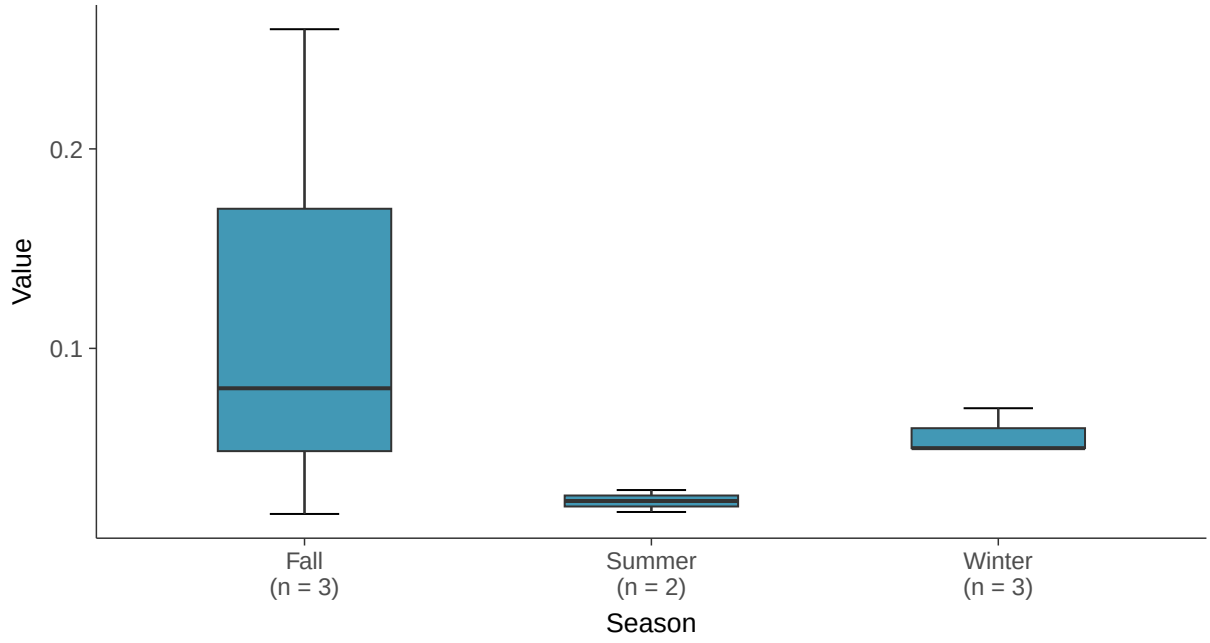
Boxplot

Iron, MW-17E (mg/l)



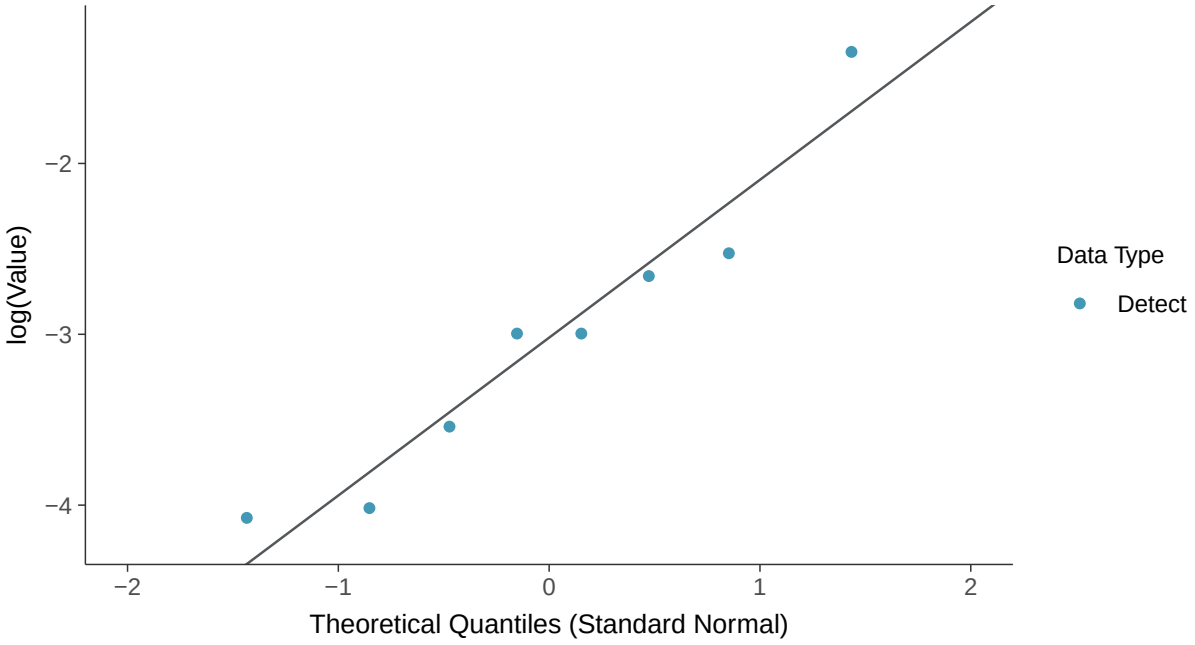
Boxplot by Season

Iron, MW-17E (mg/l)



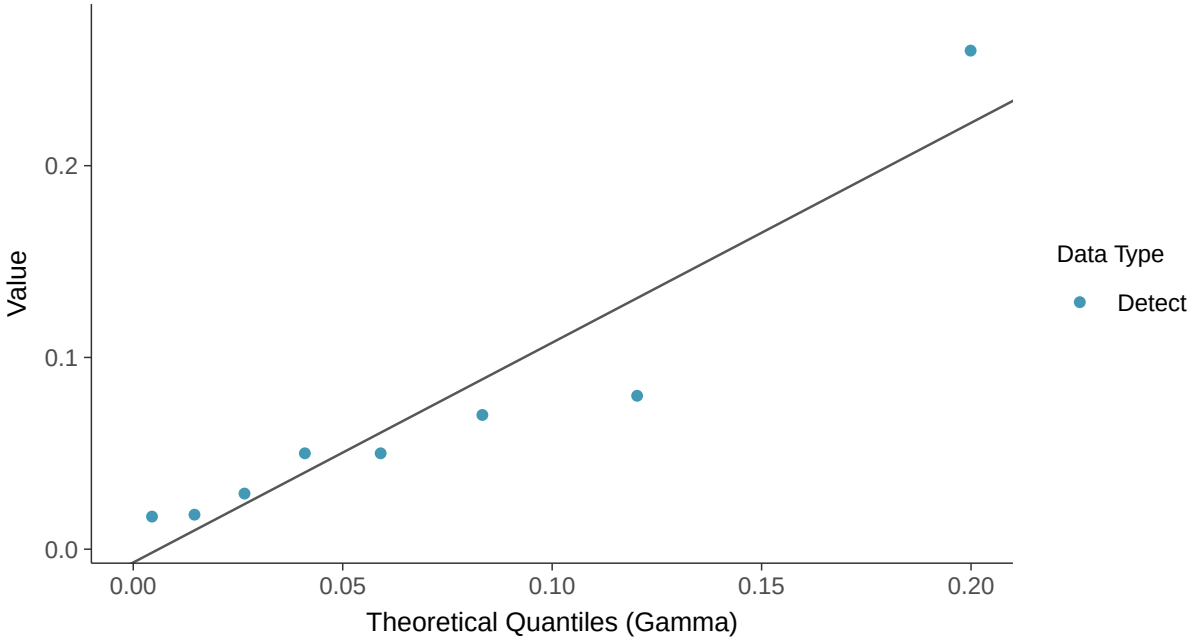
Lognormal Q-Q plot

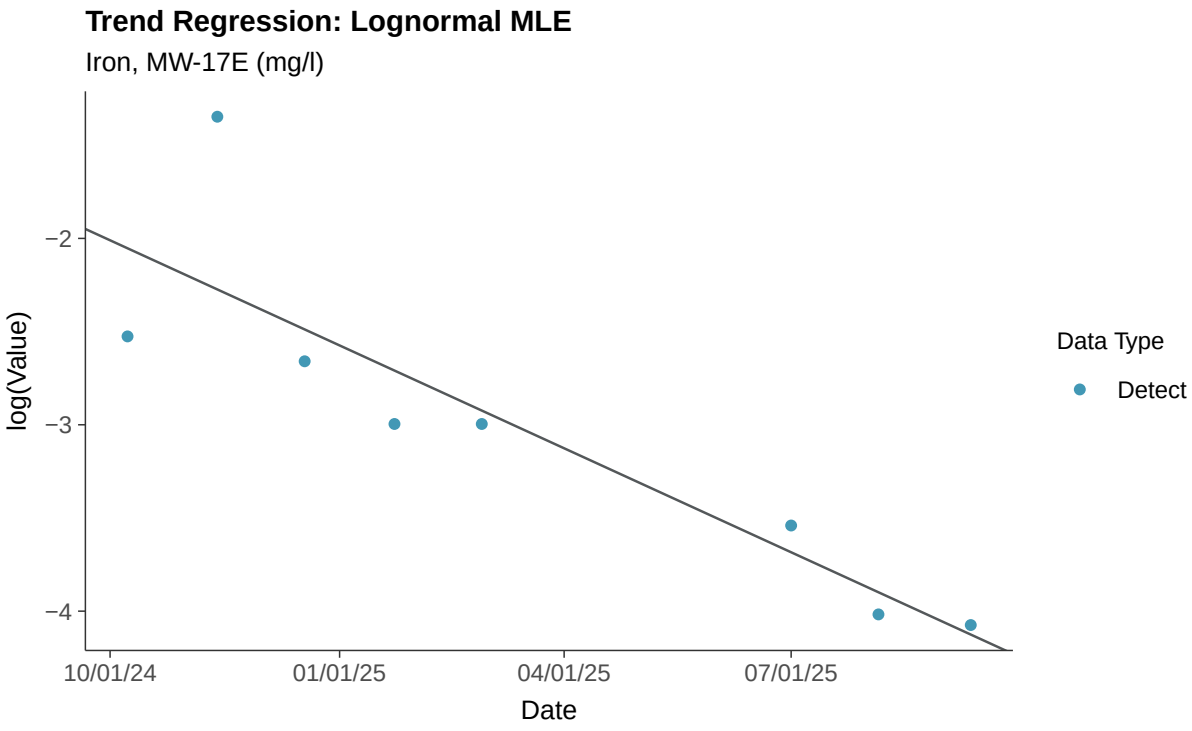
Iron, MW-17E (mg/l)



Gamma Q-Q plot

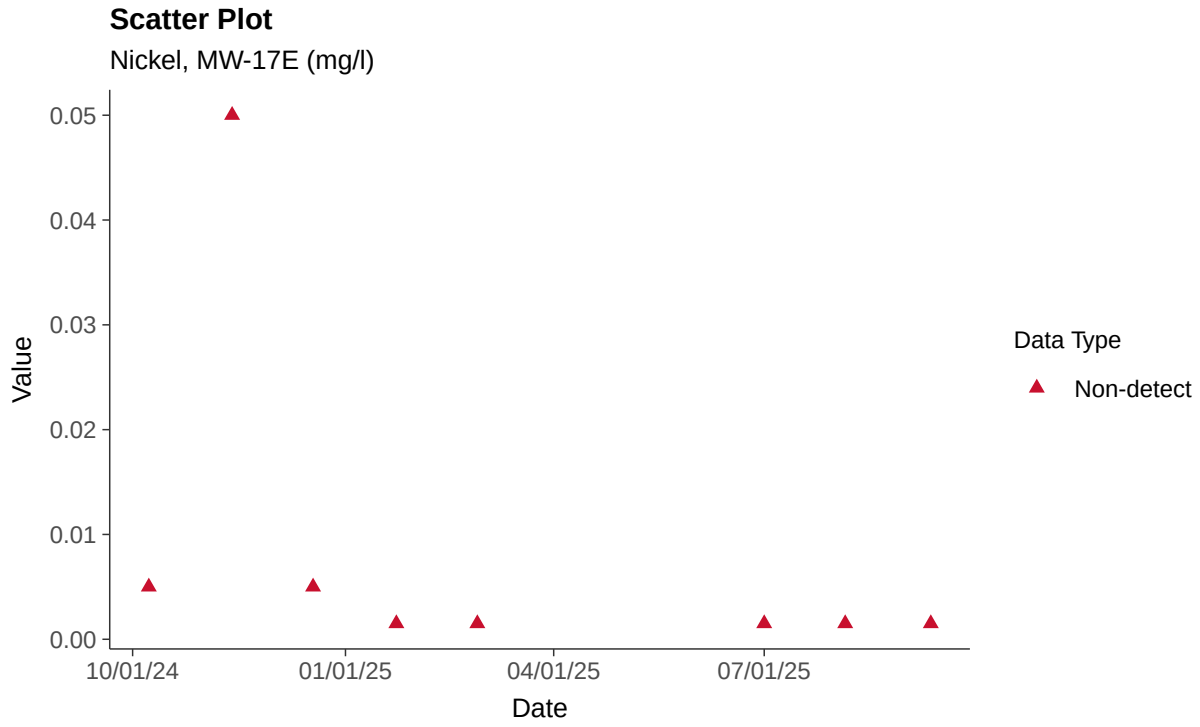
Iron, MW-17E (mg/l)

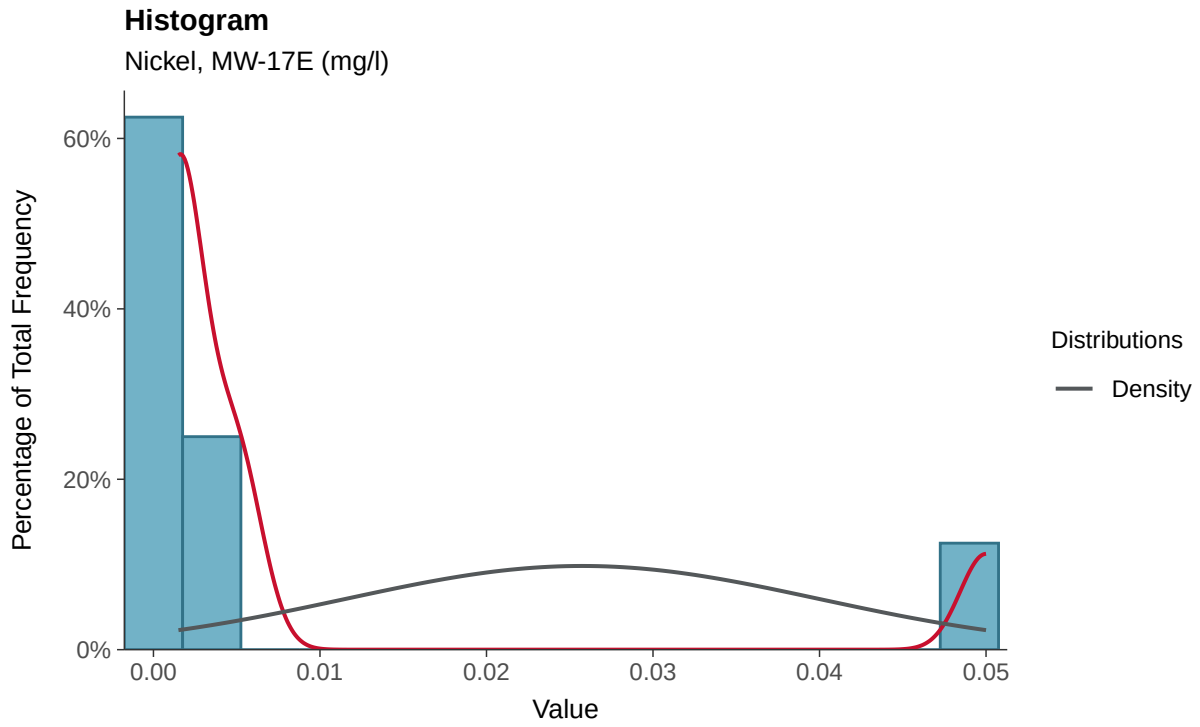



Trend Regression: Lognormal MLE
Iron, MW-17E (mg/l)
log(Value)
−2
−3
−4
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Part 115: Nickel, MW-17E

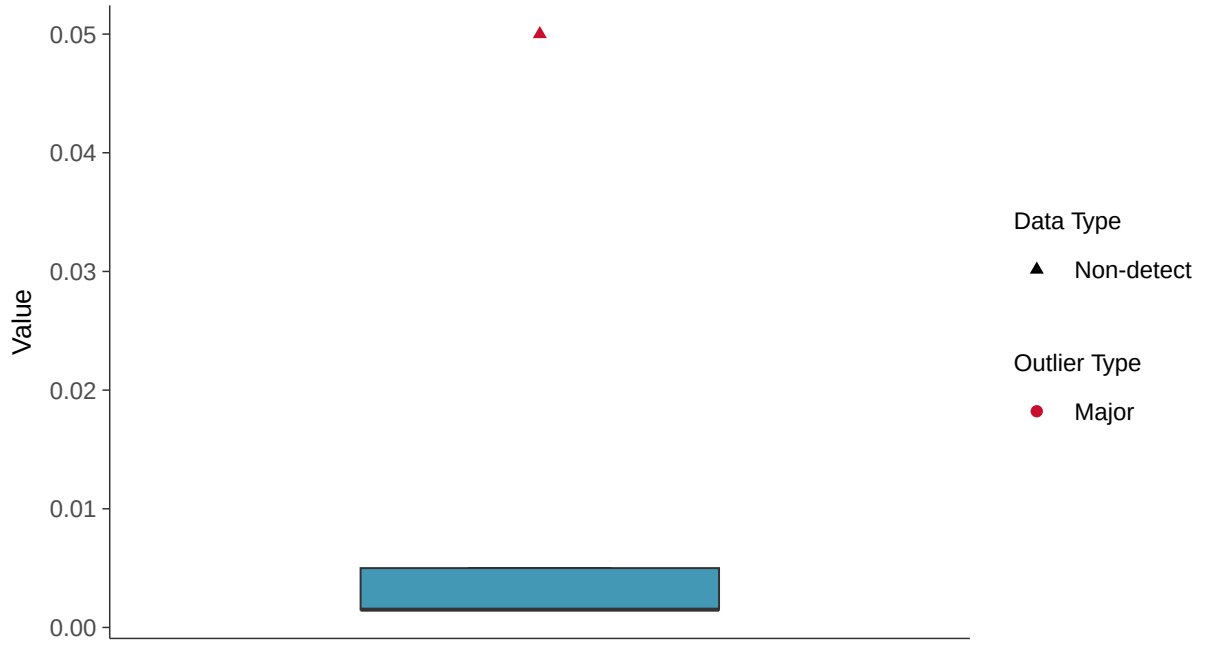
ID: 17_5_119





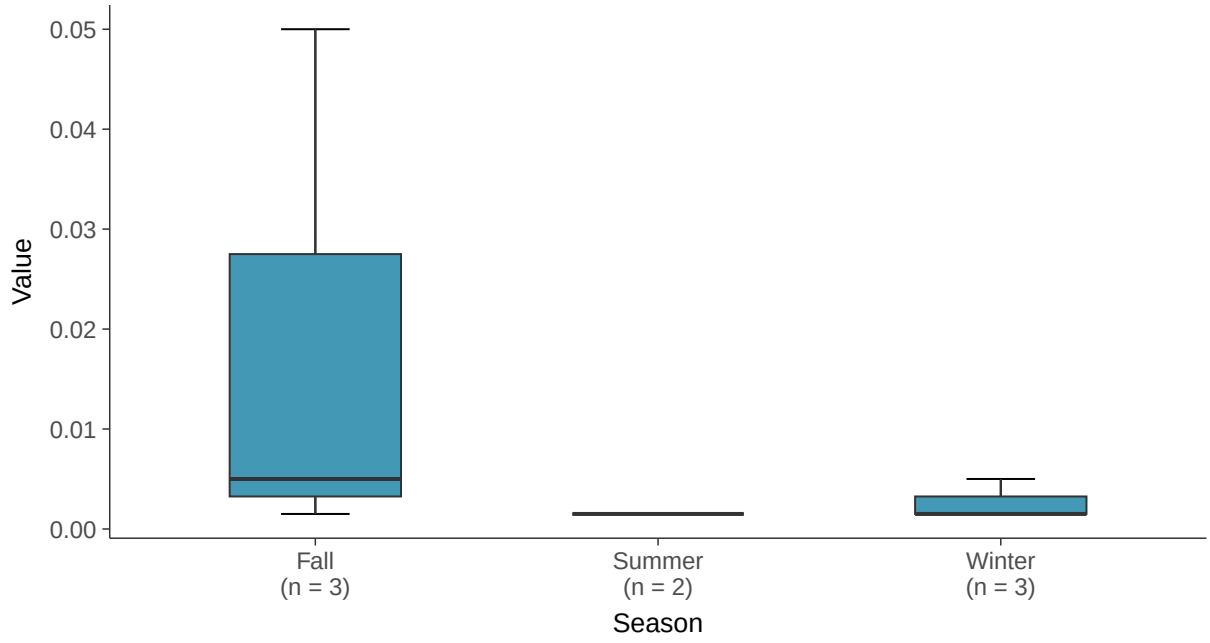
Boxplot

Nickel, MW-17E (mg/l)



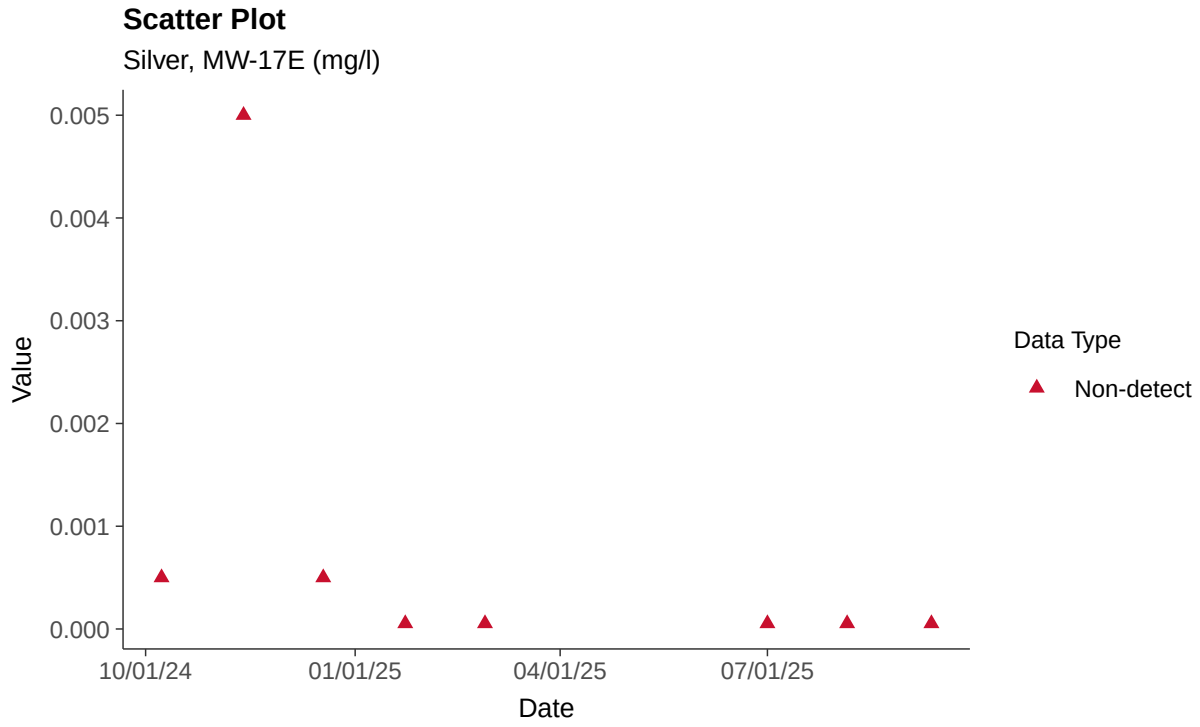
Boxplot by Season

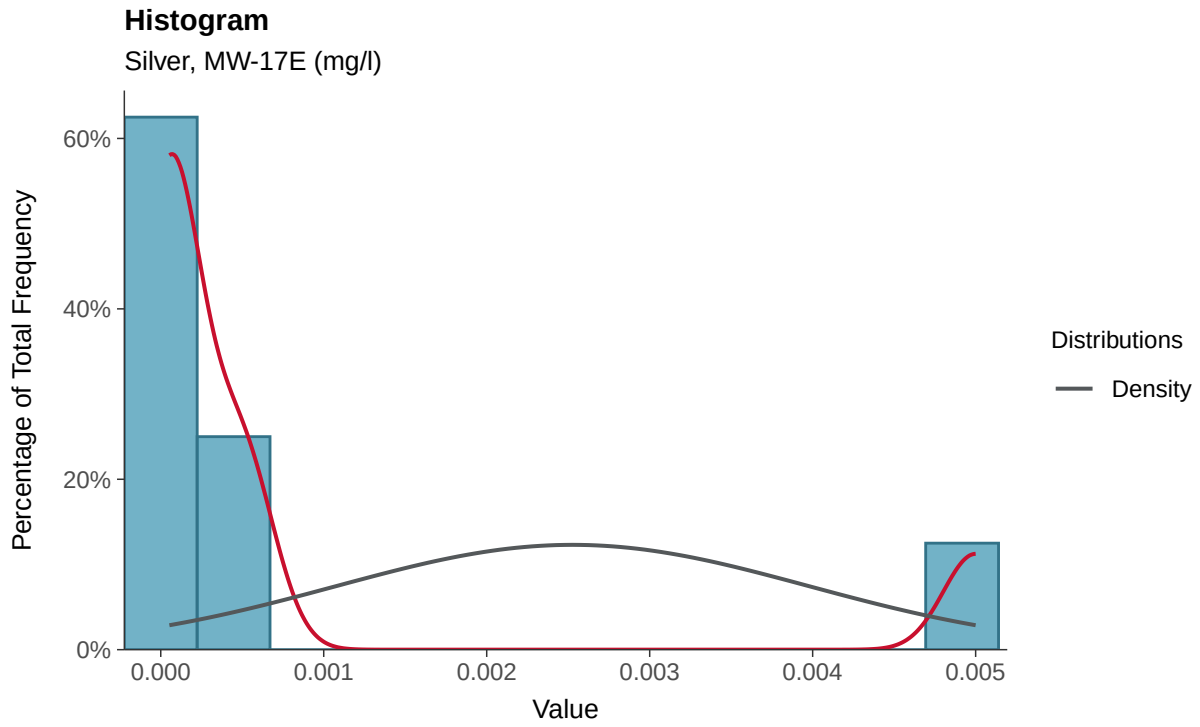
Nickel, MW-17E (mg/l)



Part 115: Silver, MW-17E

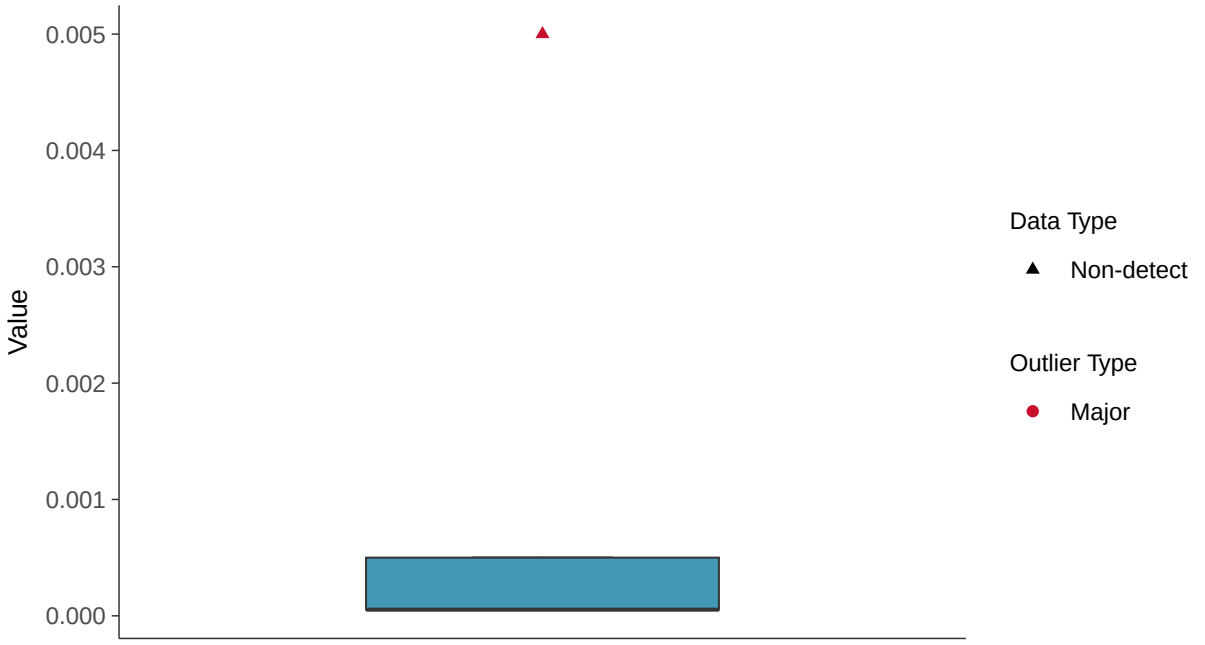
ID: 17_5_123





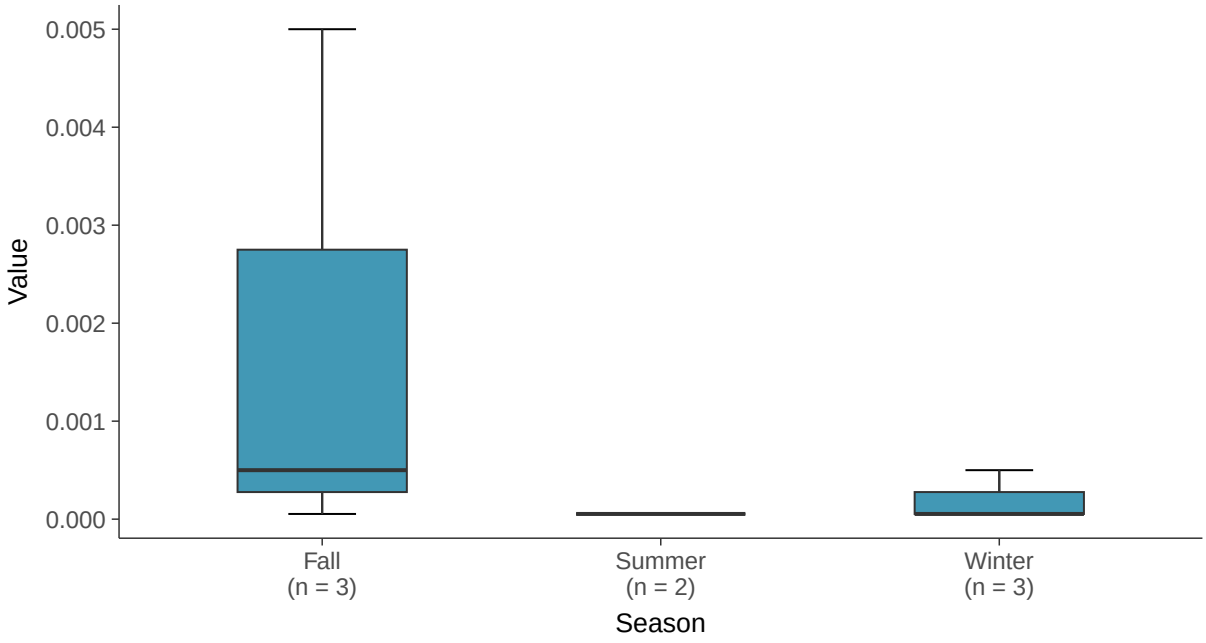
Boxplot

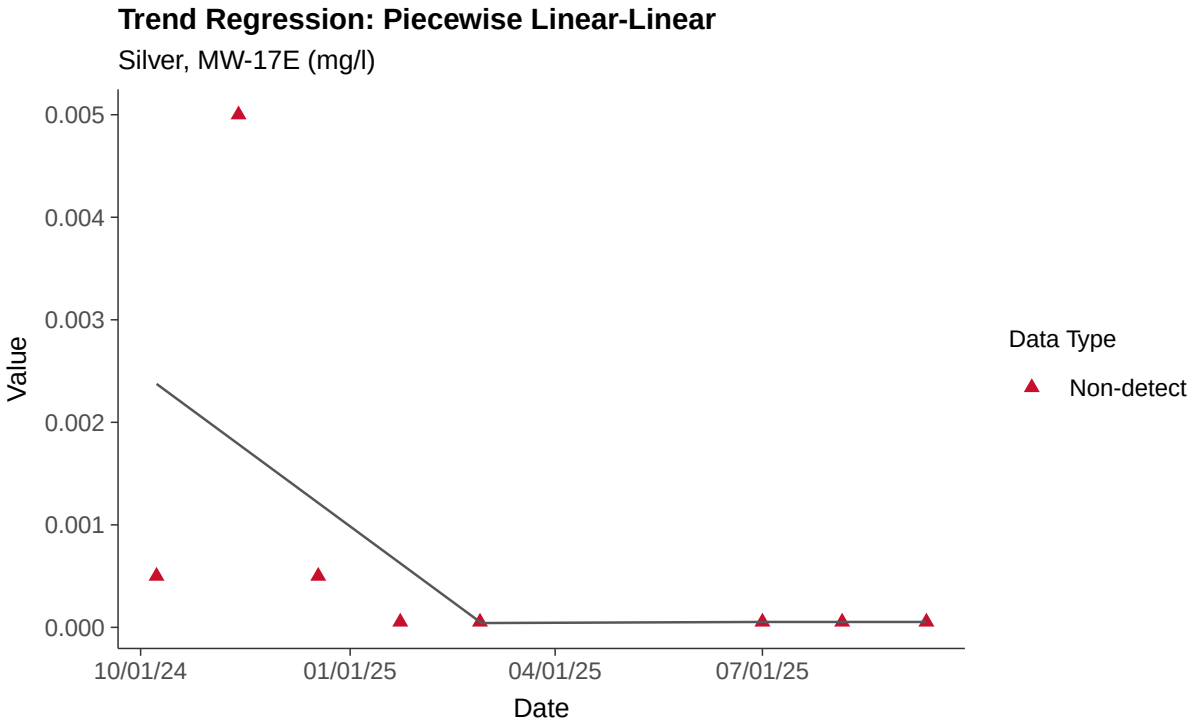
Silver, MW-17E (mg/l)



Boxplot by Season

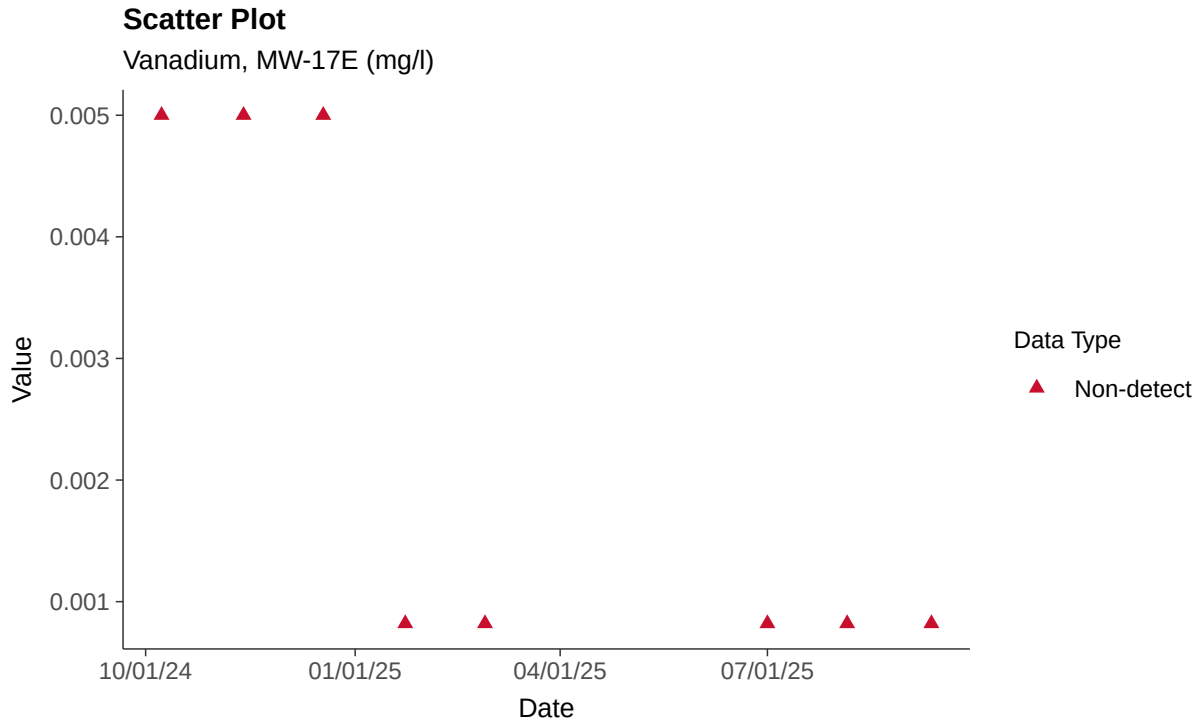
Silver, MW-17E (mg/l)

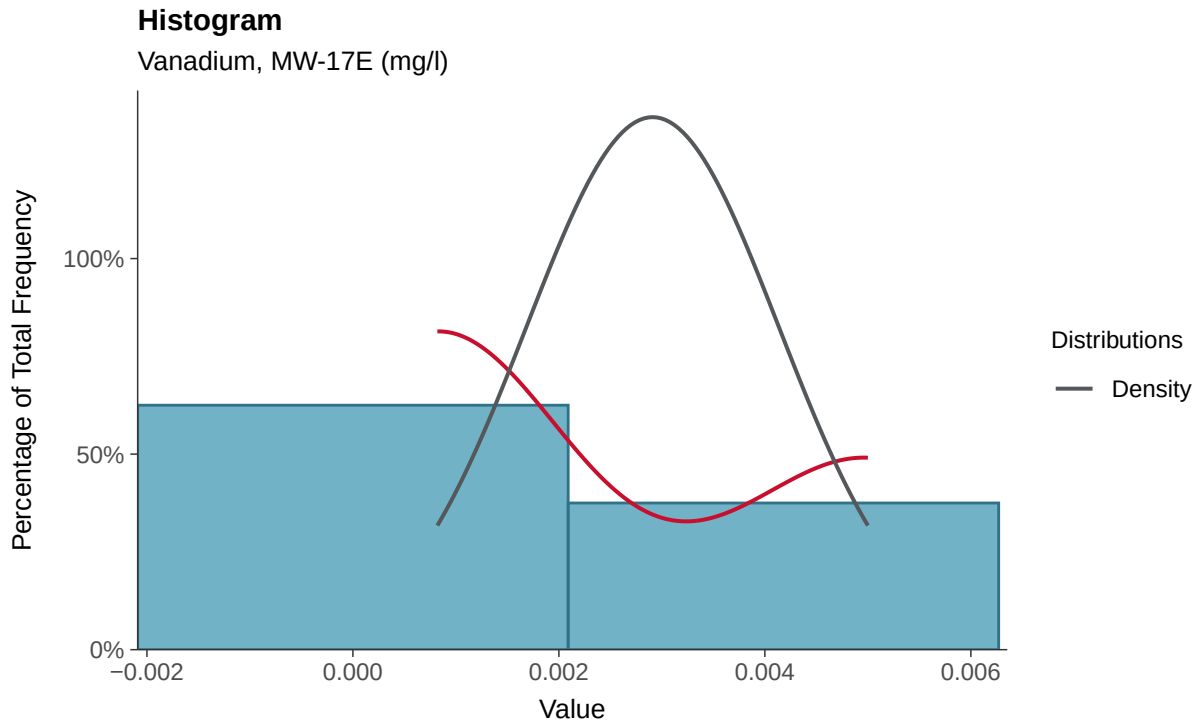



Trend Regression: Piecewise Linear-Linear
Silver, MW-17E (mg/l)
0.005
0.004
0.003
0.002
0.001
0.000
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Vanadium, MW-17E

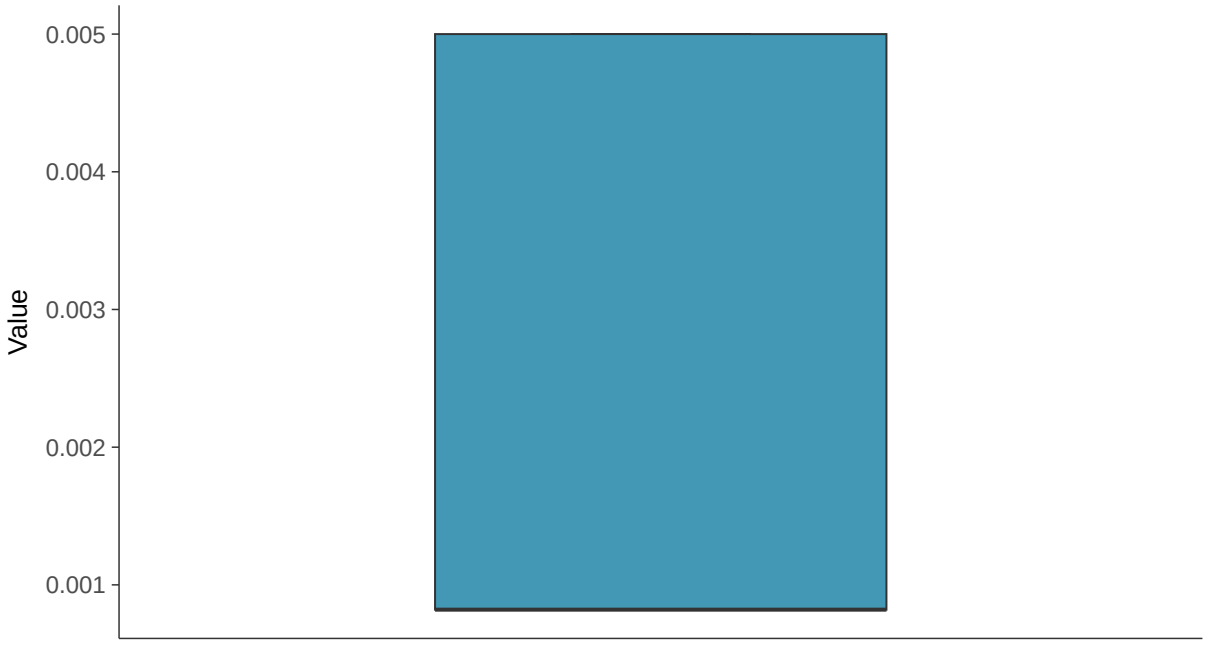
ID: 17_5_128





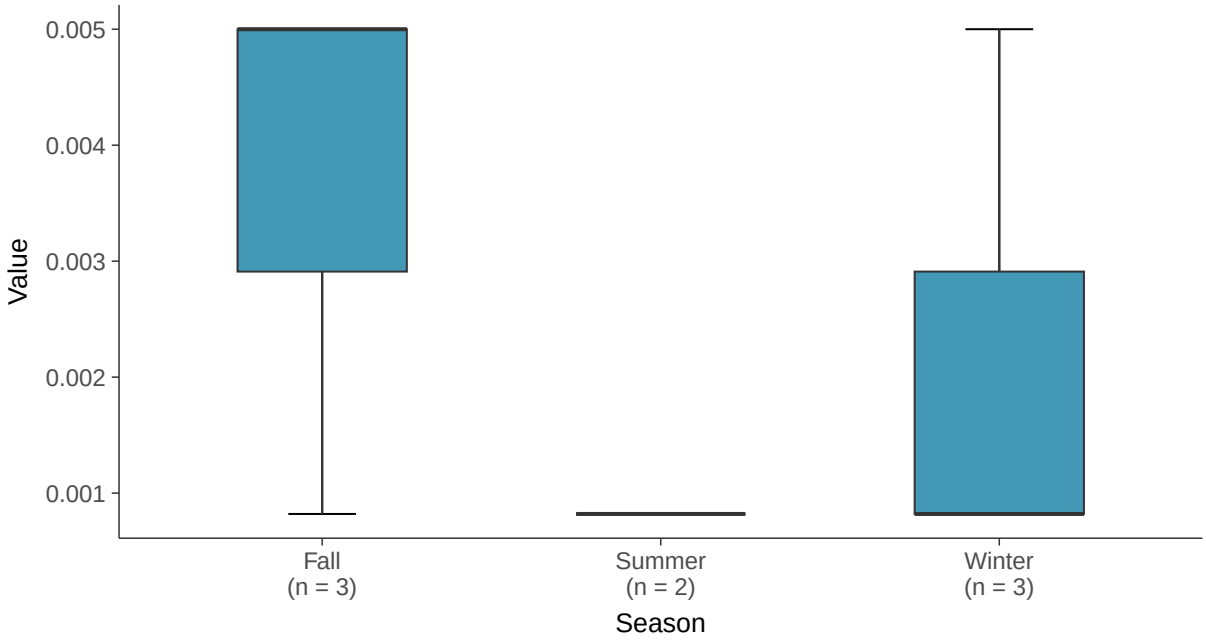
Boxplot

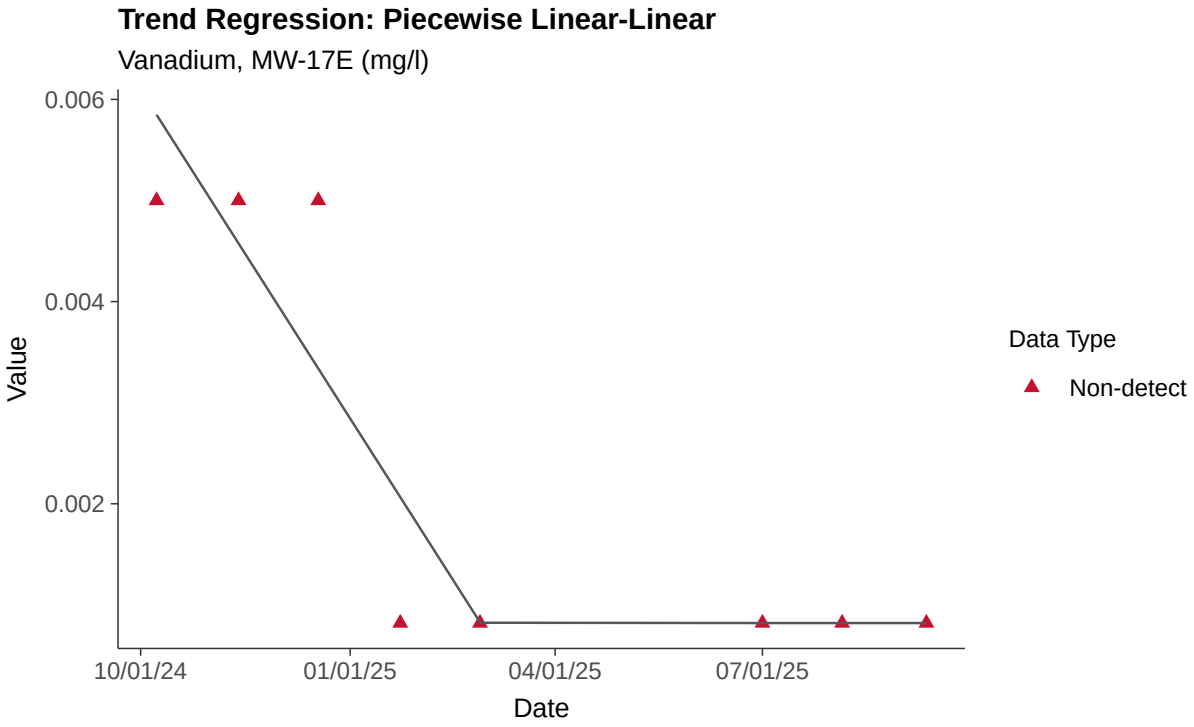
Vanadium, MW-17E (mg/l)



Boxplot by Season

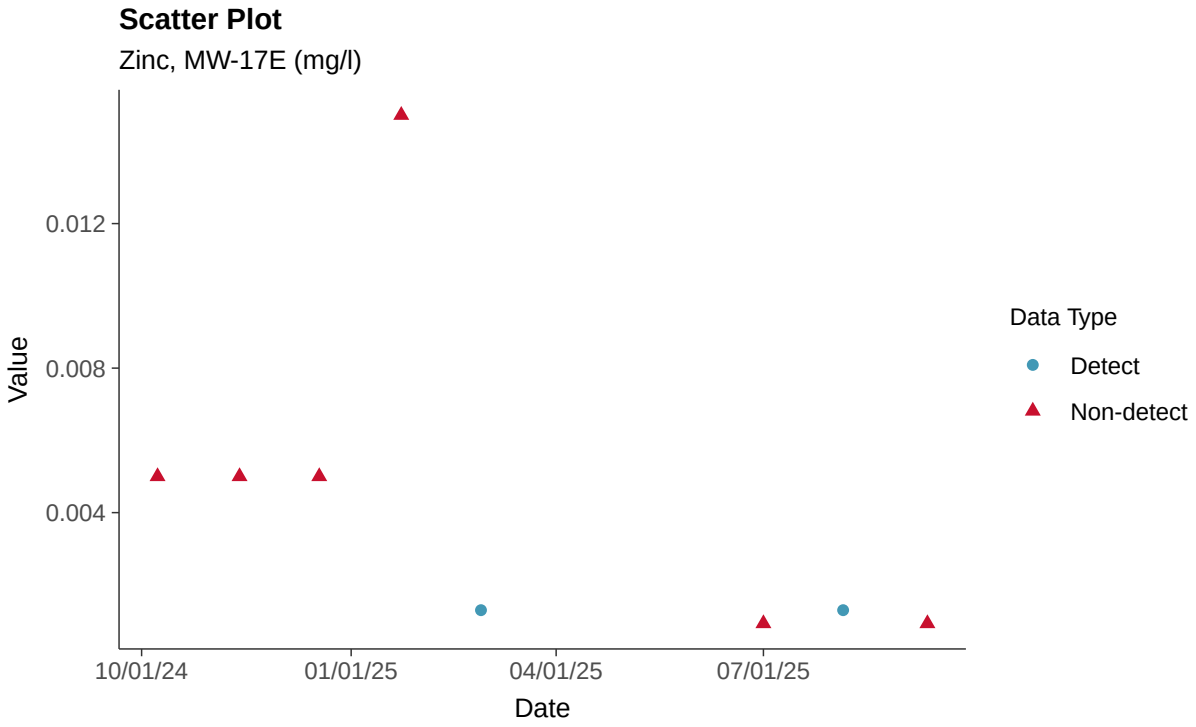
Vanadium, MW-17E (mg/l)

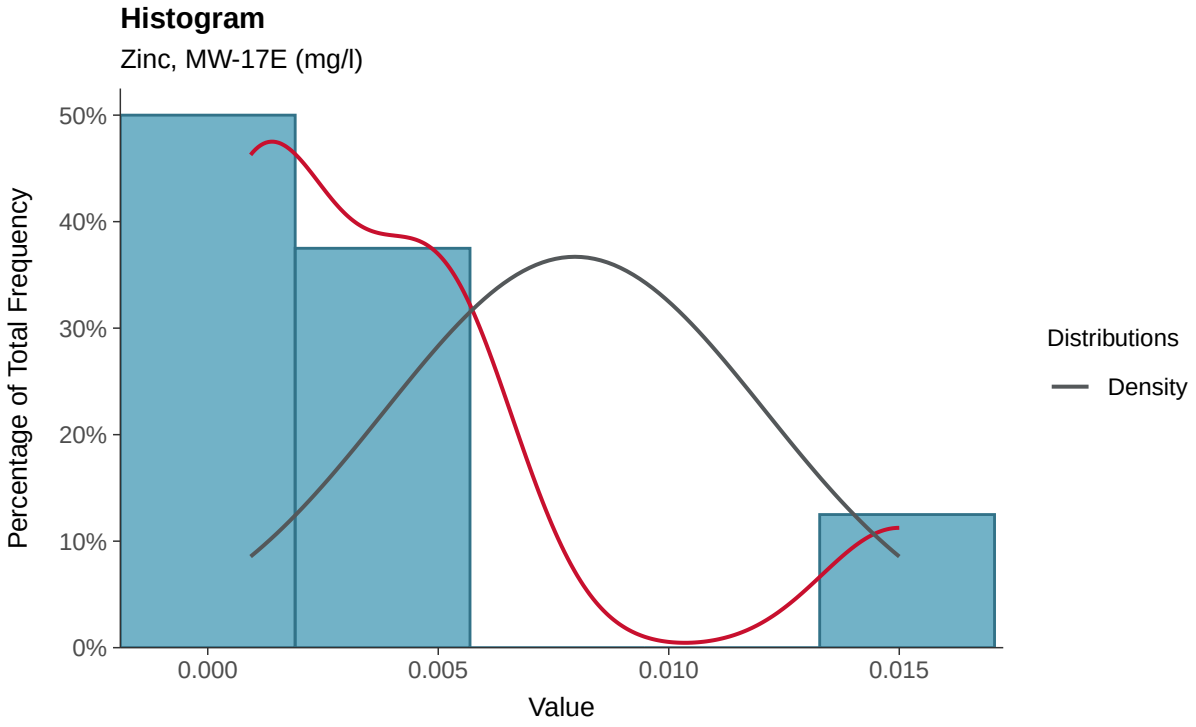



Trend Regression: Piecewise Linear-Linear
Vanadium, MW-17E (mg/l)
0.006
0.004
0.002
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Zinc, MW-17E

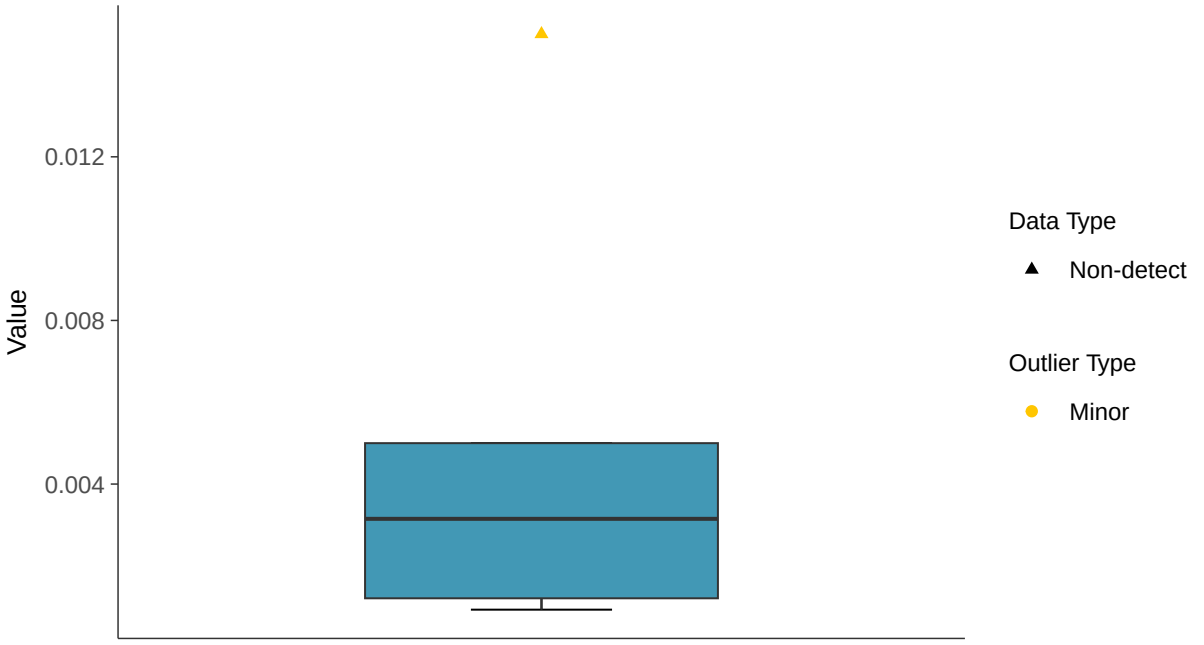
ID: 17_5_129





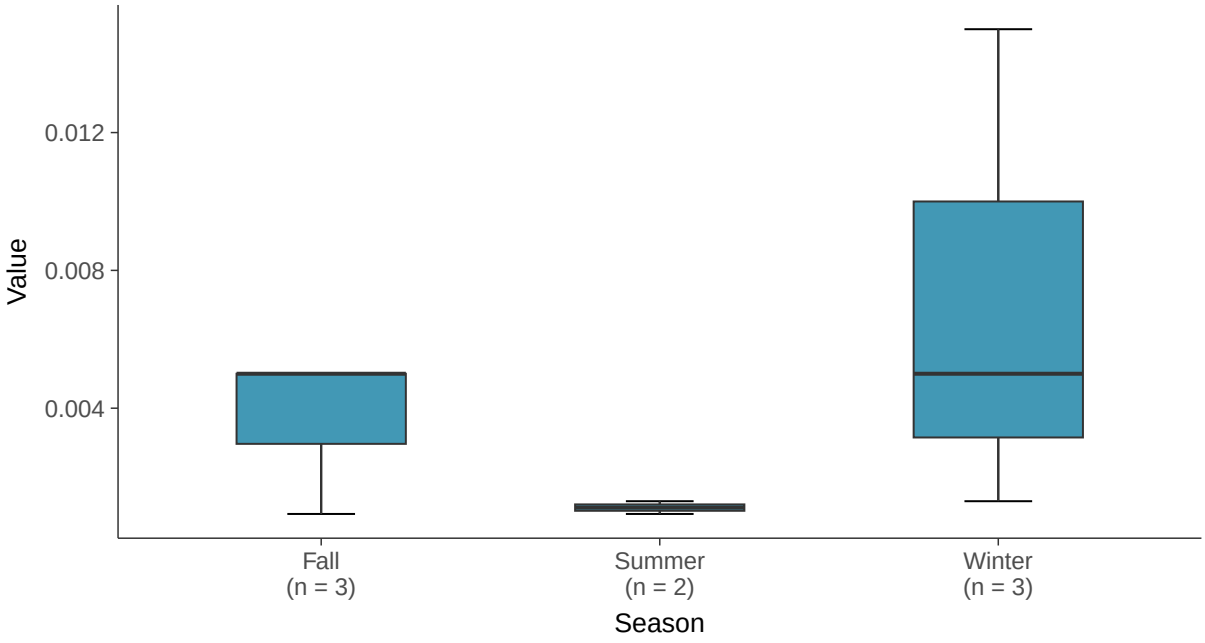
Boxplot

Zinc, MW-17E (mg/l)



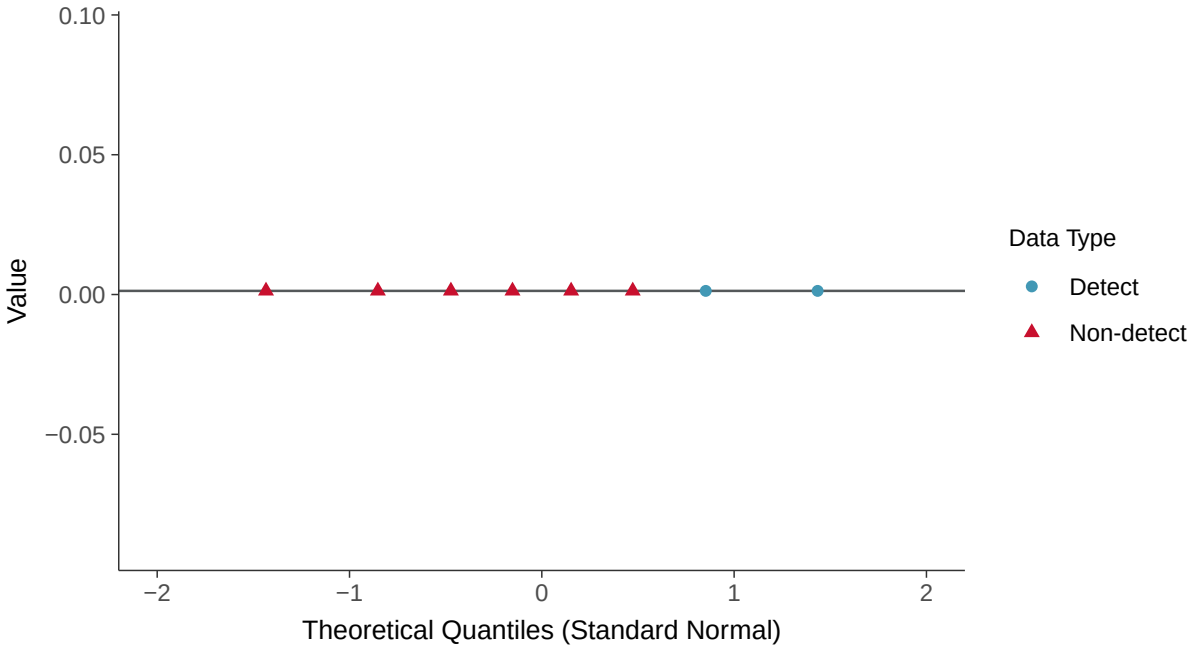
Boxplot by Season

Zinc, MW-17E (mg/l)



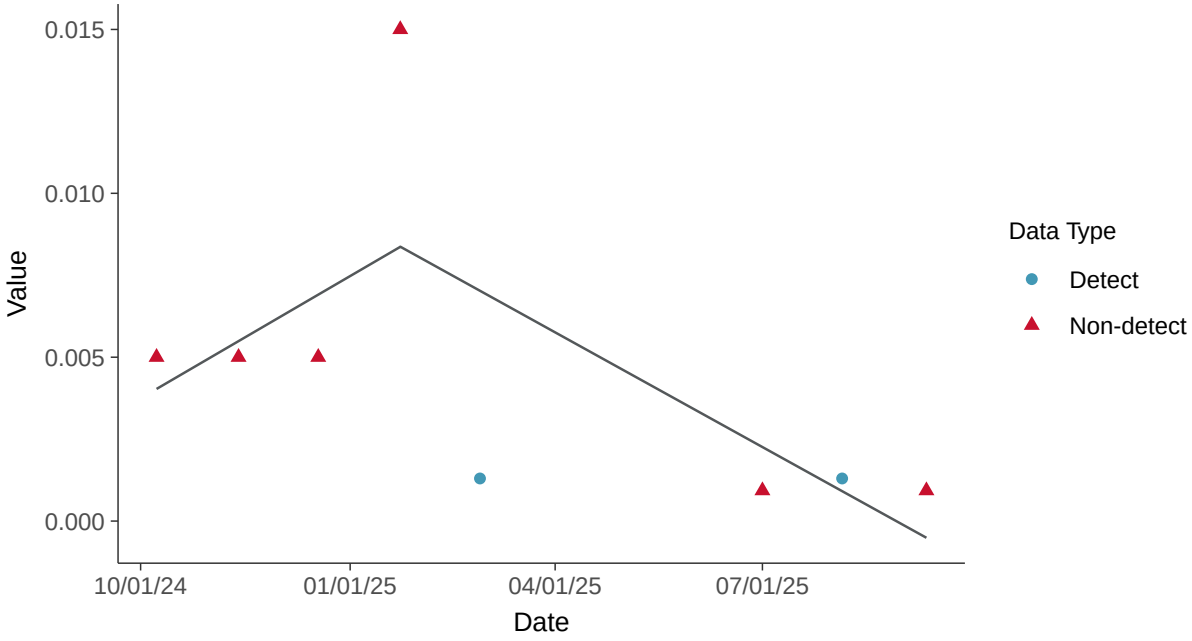
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-17E (mg/l)



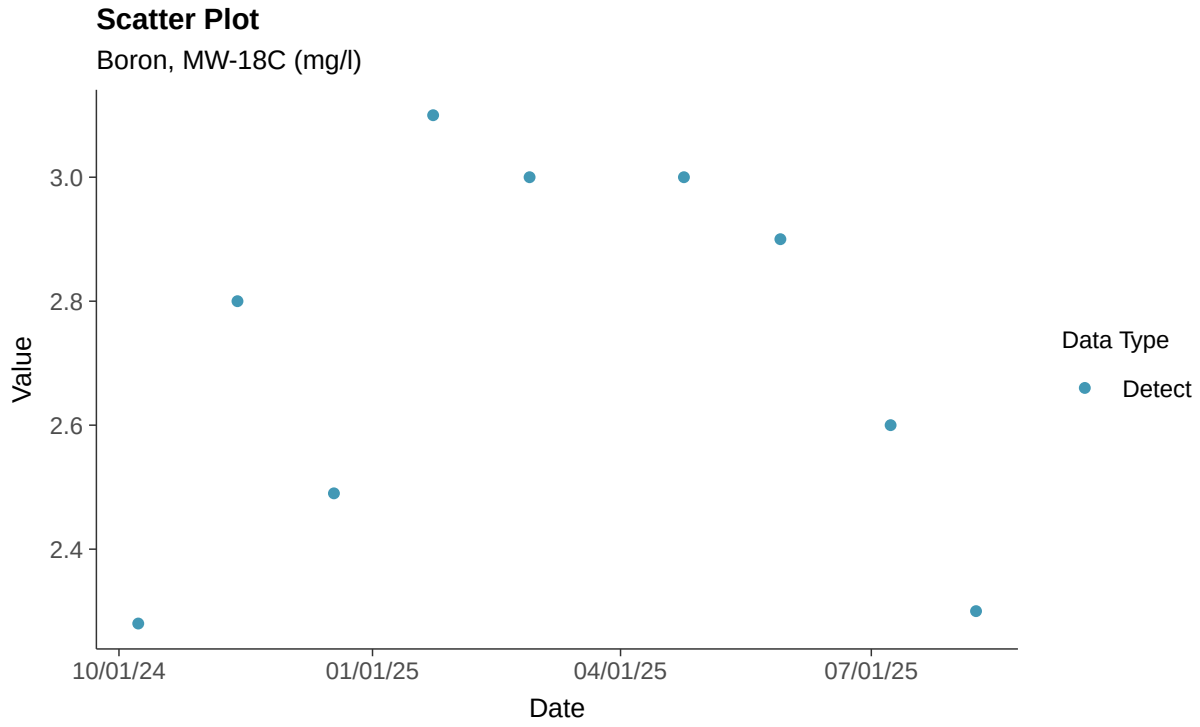
Trend Regression: Piecewise Linear-Linear

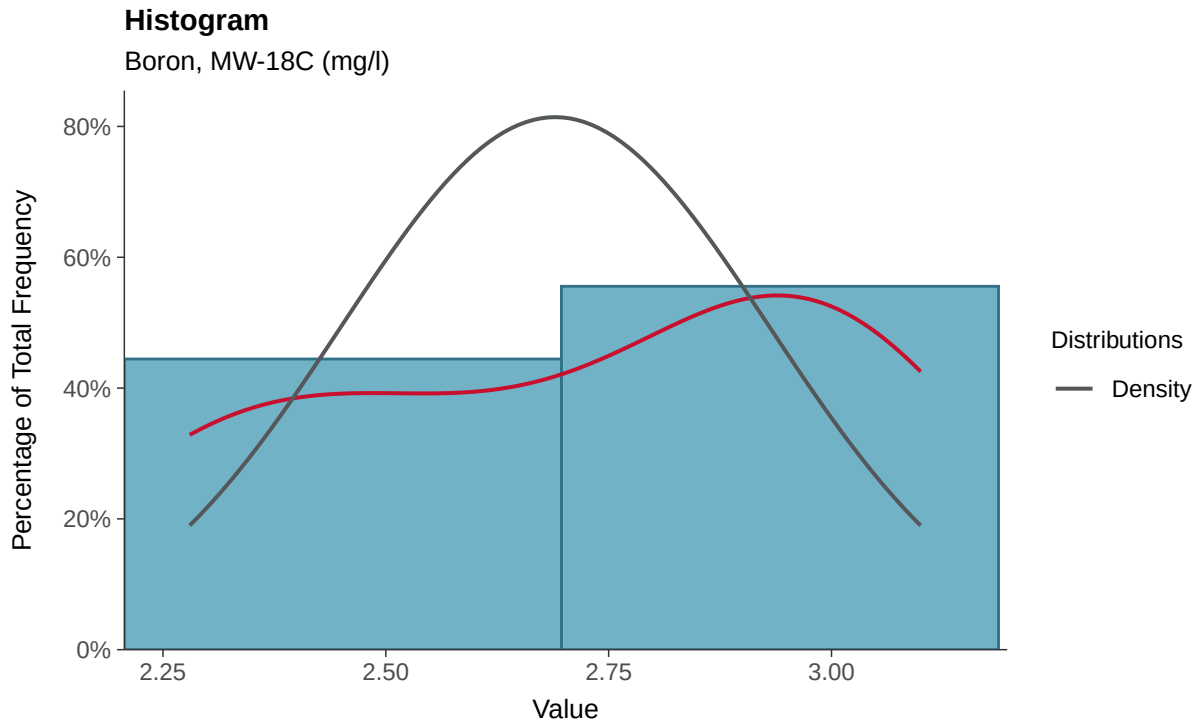
Zinc, MW-17E (mg/l)



Appendix III: Boron, MW-18C

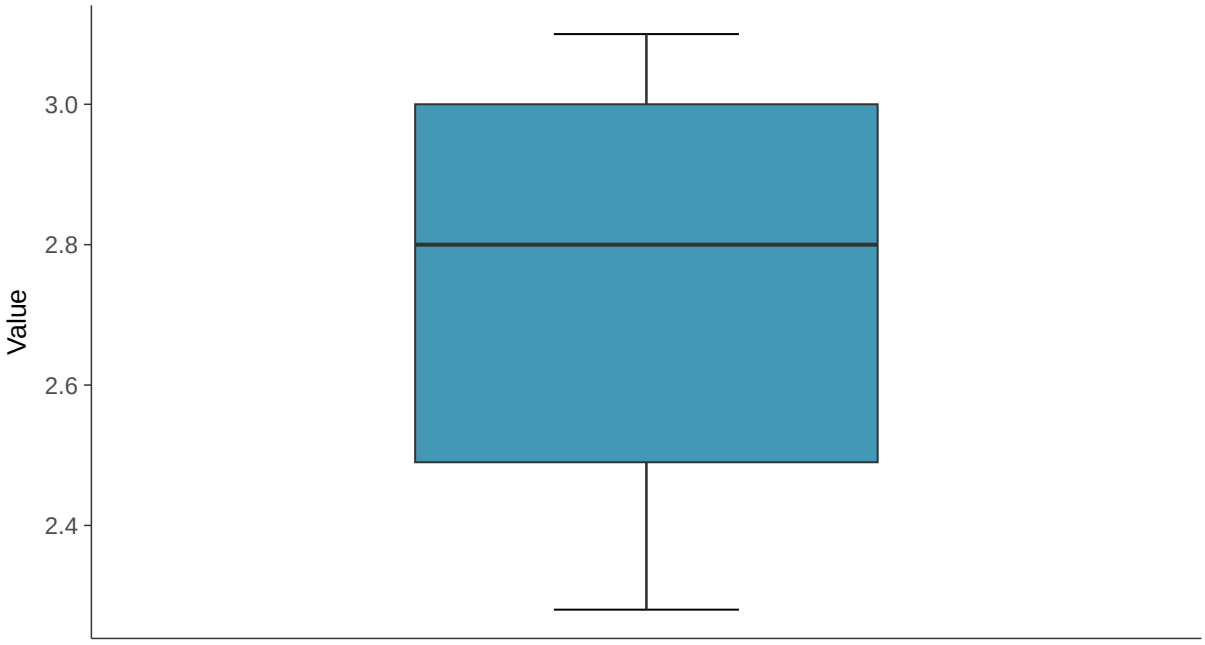
ID: 18_2_105





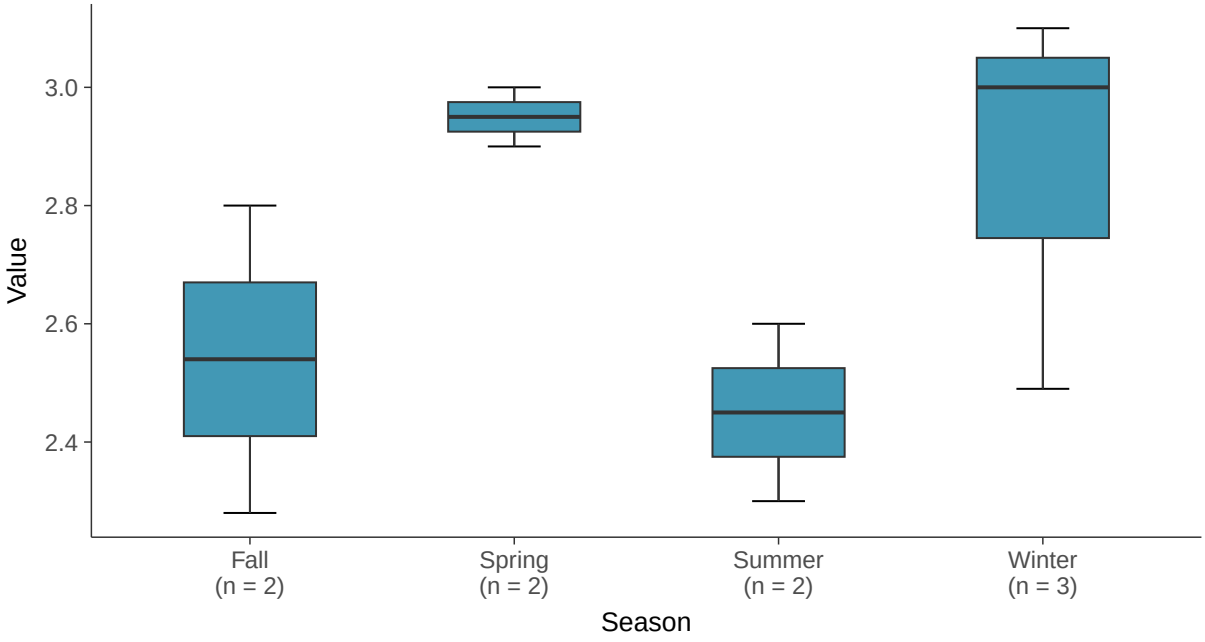
Boxplot

Boron, MW-18C (mg/l)



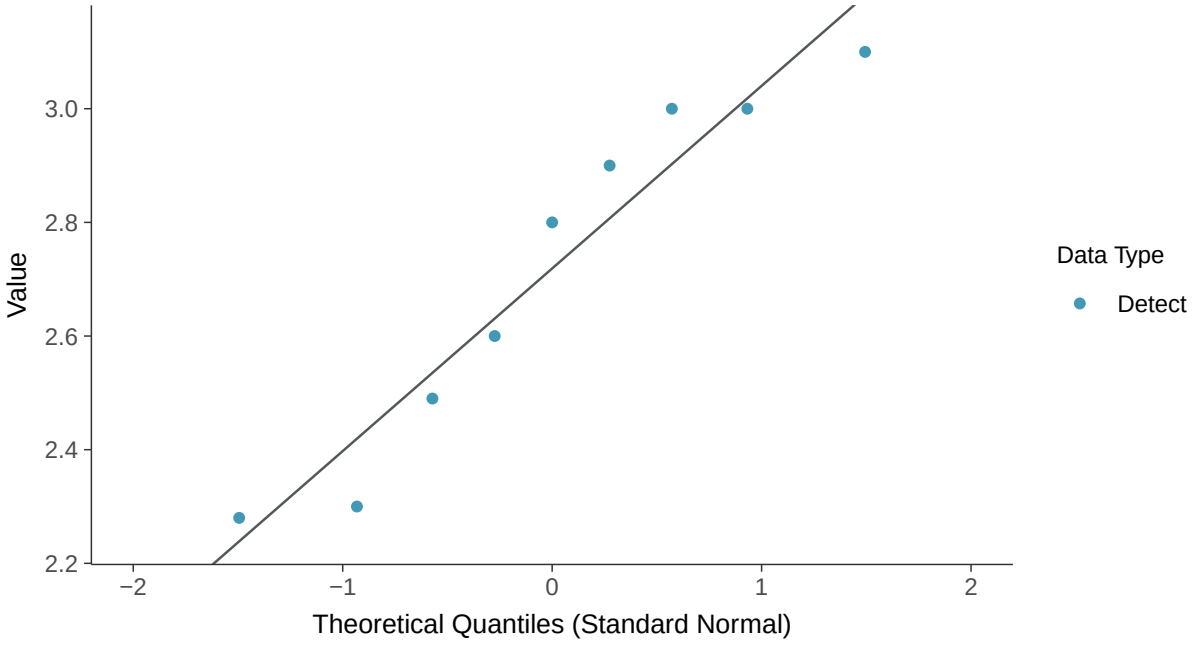
Boxplot by Season

Boron, MW-18C (mg/l)



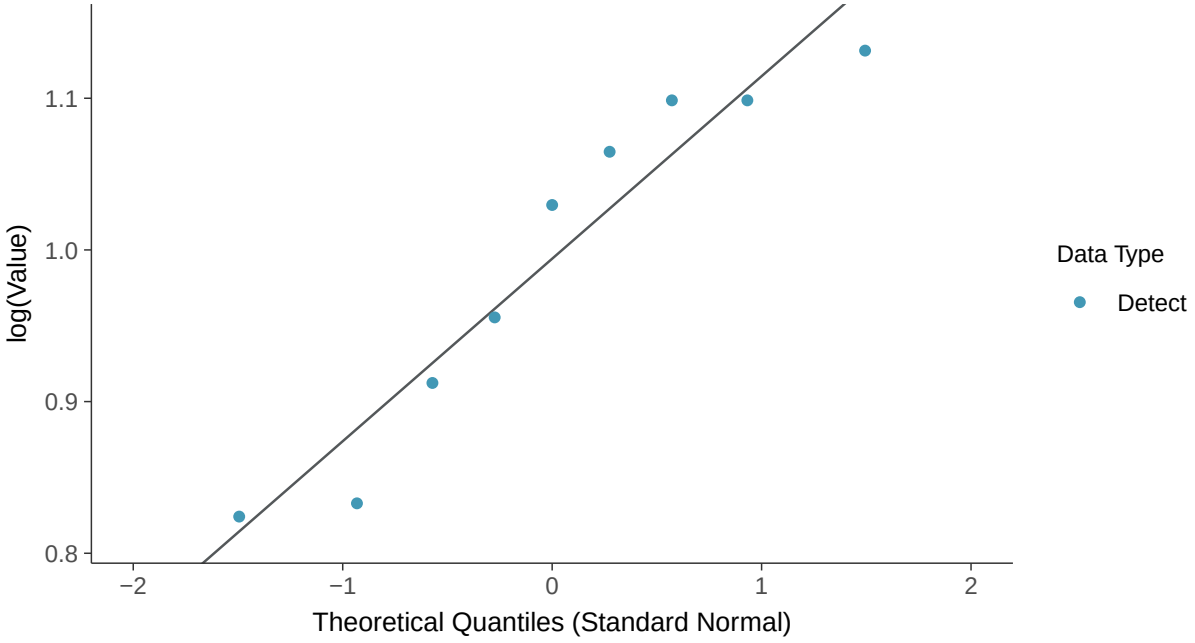
Normal Q-Q plot

Boron, MW-18C (mg/l)



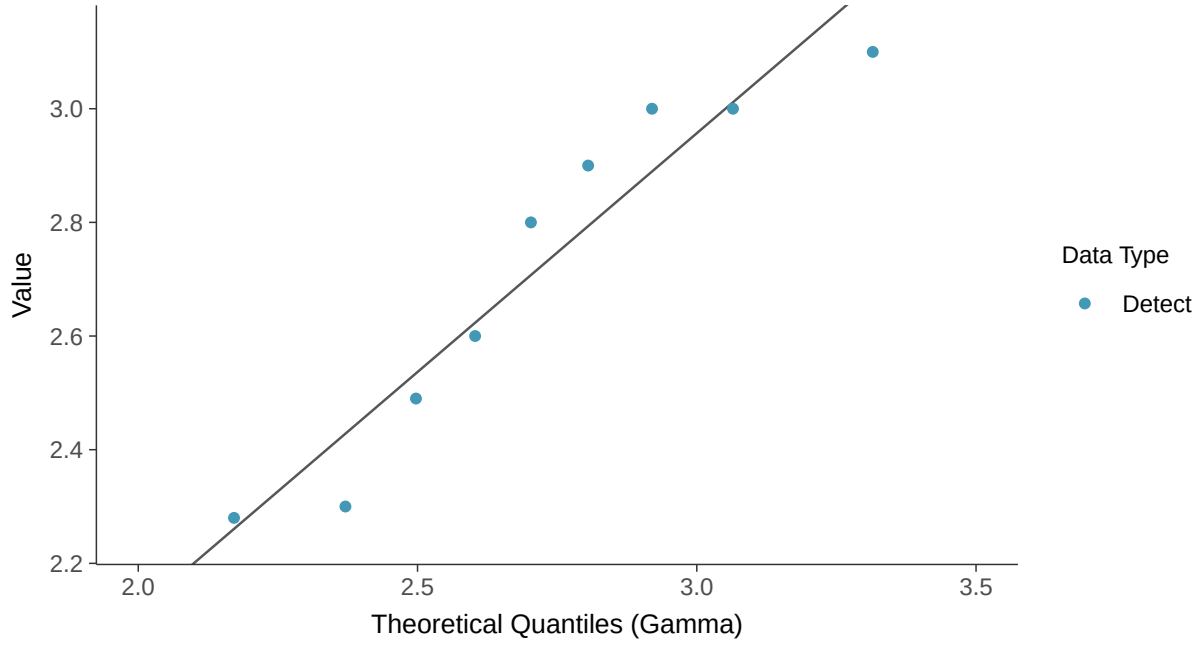
Lognormal Q-Q plot

Boron, MW-18C (mg/l)



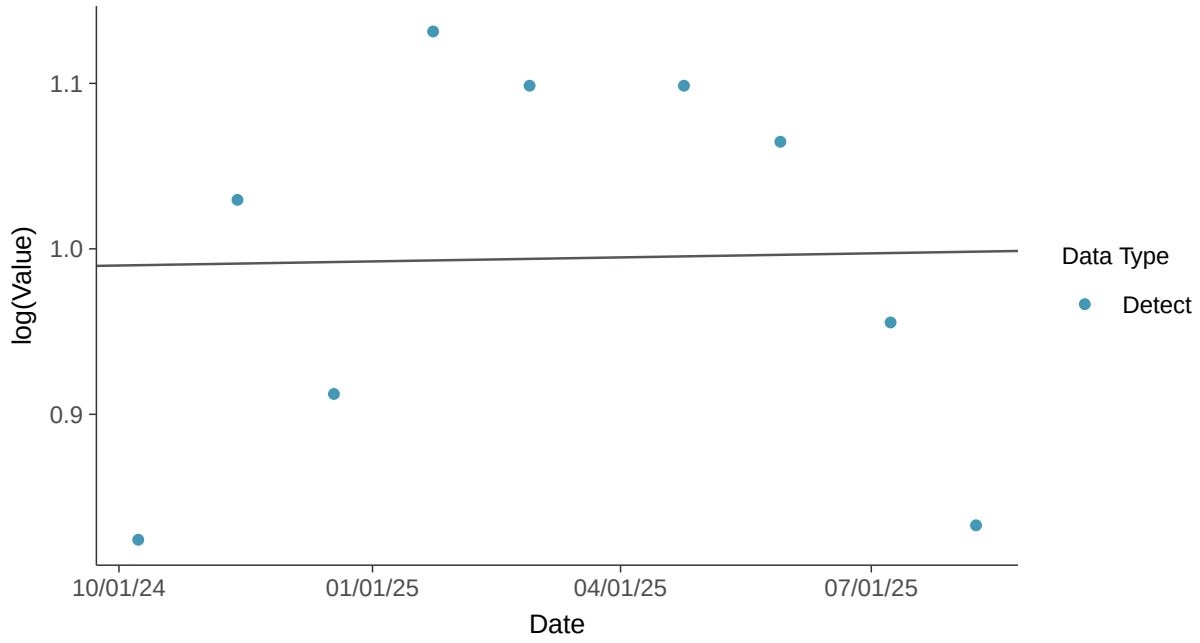
Gamma Q-Q plot

Boron, MW-18C (mg/l)



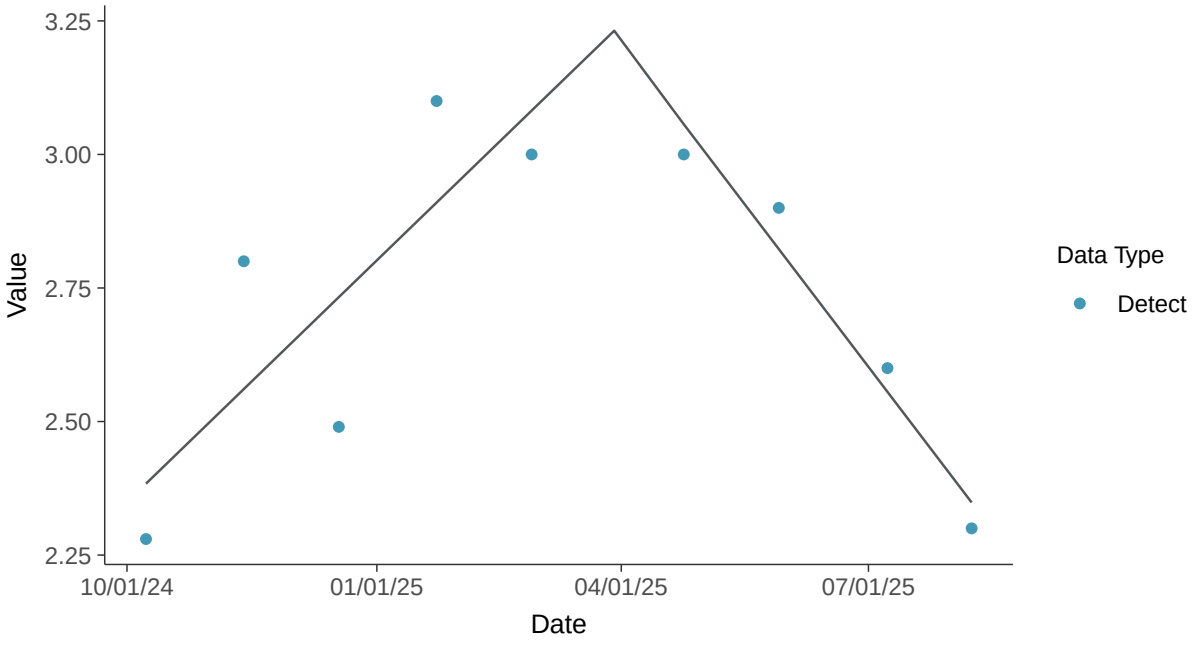
Trend Regression: Lognormal MLE

Boron, MW-18C (mg/l)



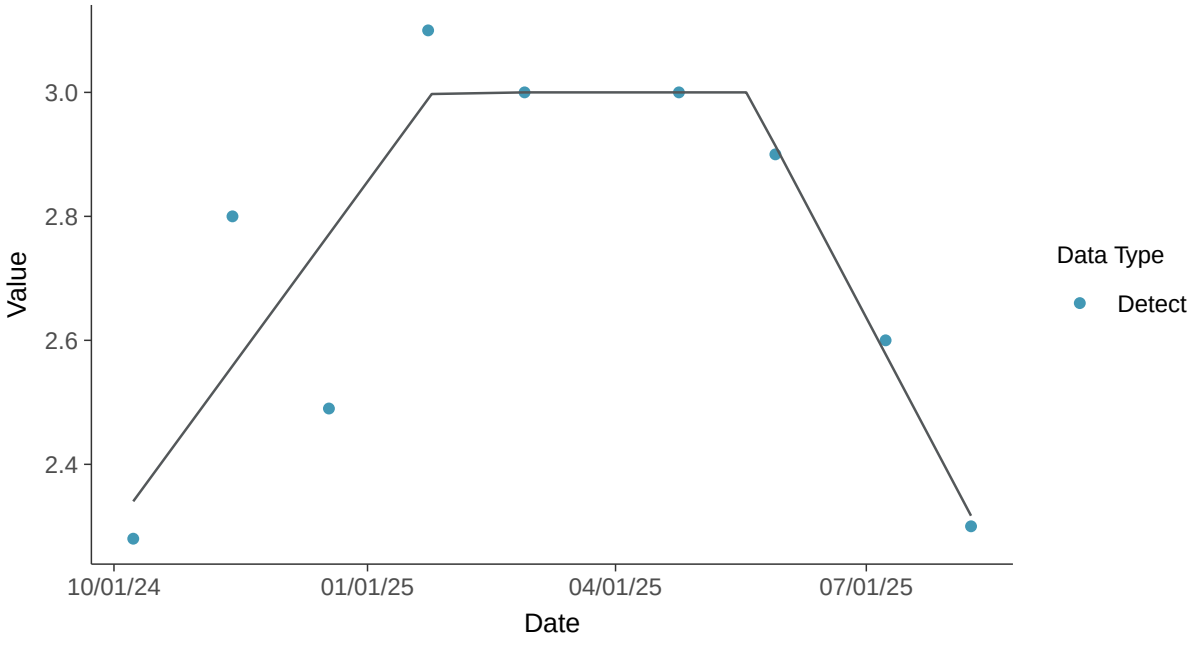
Trend Regression: Piecewise Linear-Linear

Boron, MW-18C (mg/l)



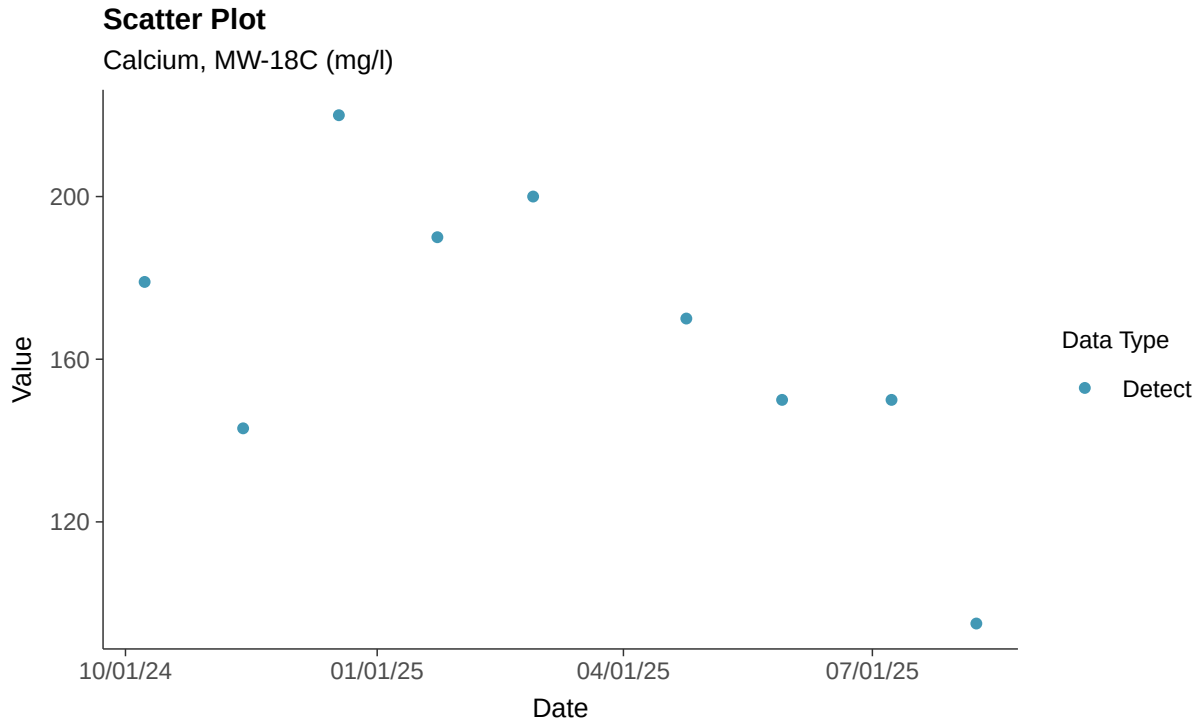
Trend Regression: Piecewise Linear-Linear-Linear

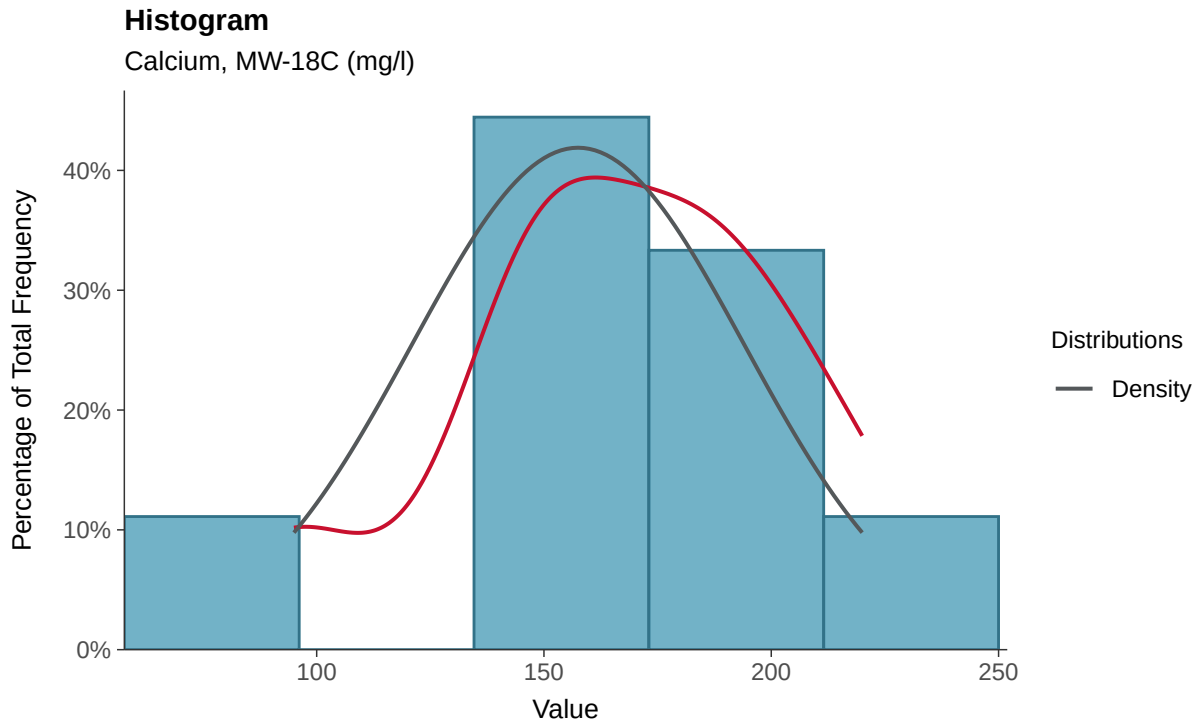
Boron, MW-18C (mg/l)



Appendix III: Calcium, MW-18C

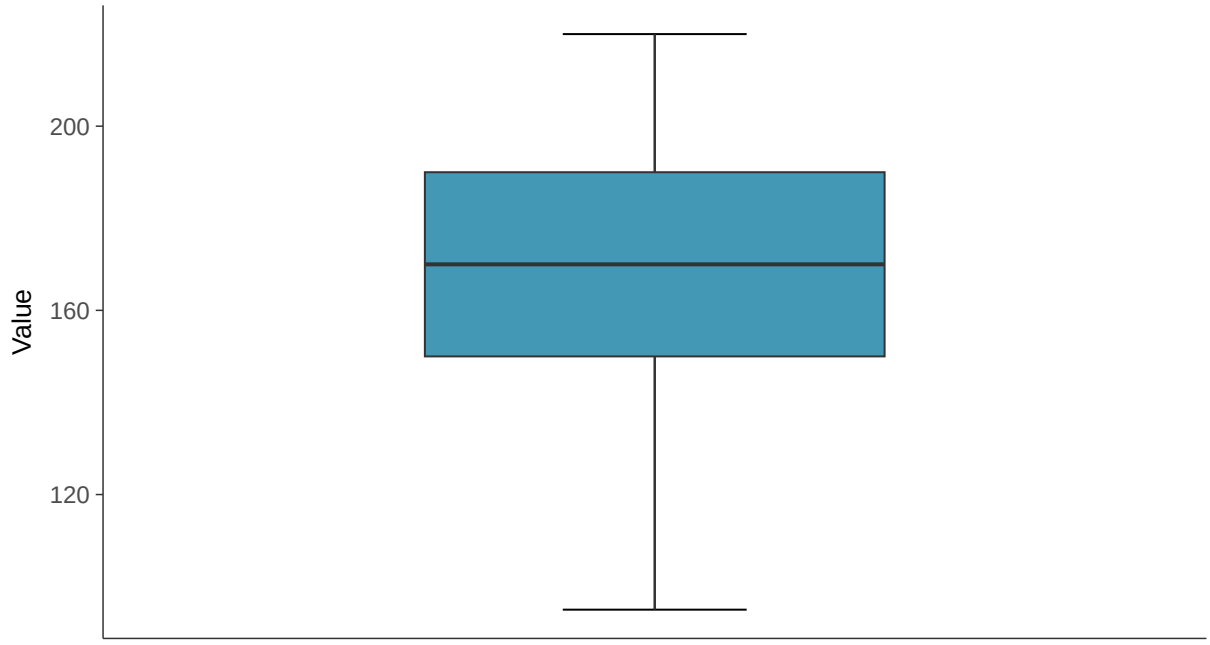
ID: 18_2_107





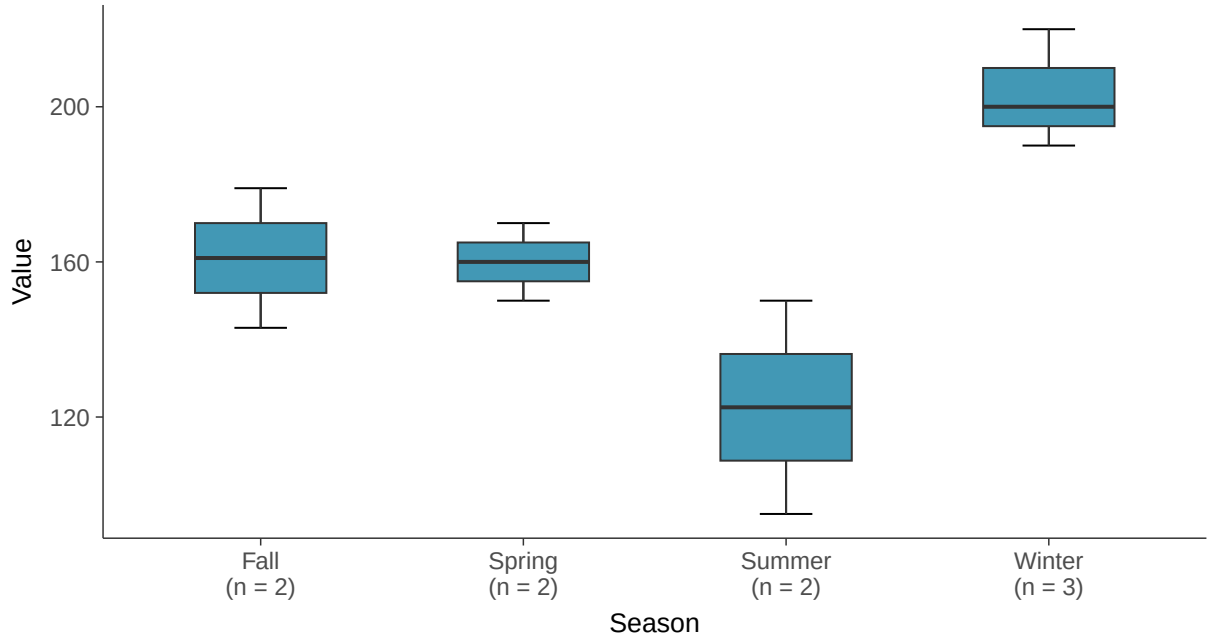
Boxplot

Calcium, MW-18C (mg/l)



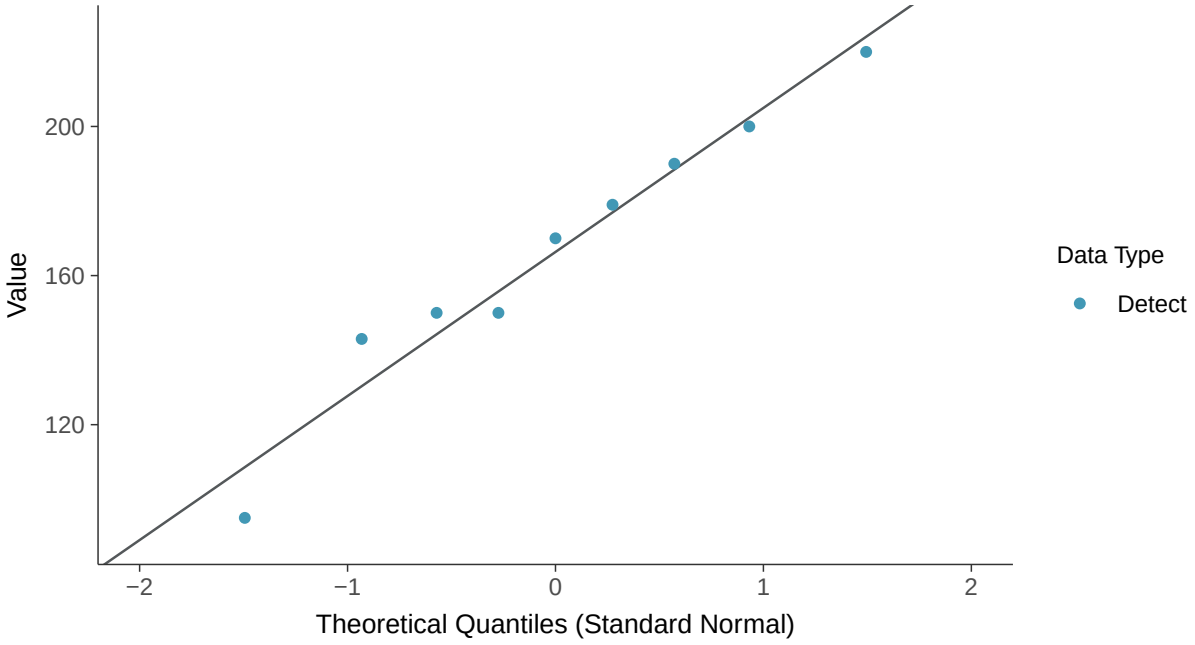
Boxplot by Season

Calcium, MW-18C (mg/l)



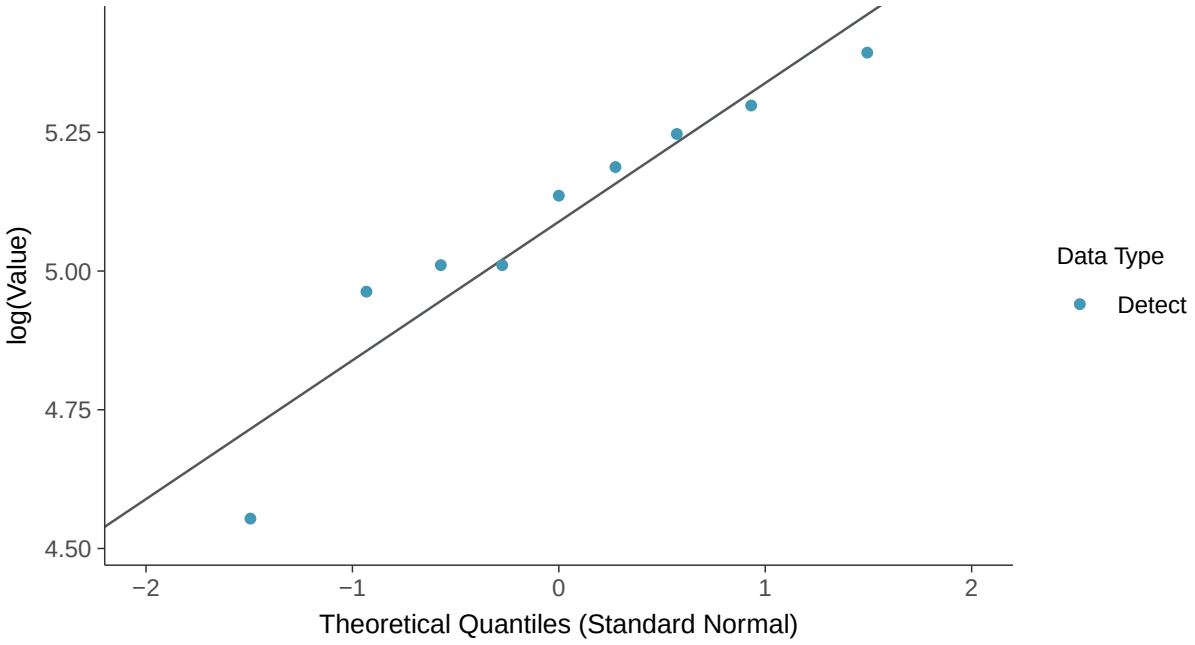
Normal Q-Q plot

Calcium, MW-18C (mg/l)



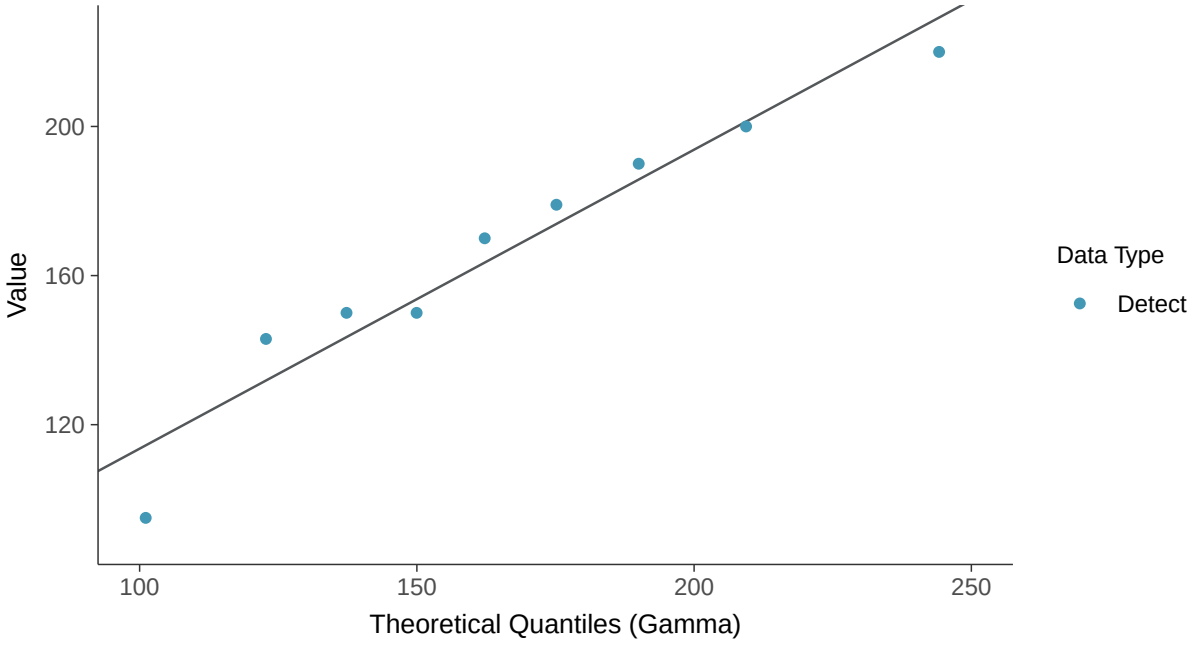
Lognormal Q-Q plot

Calcium, MW-18C (mg/l)



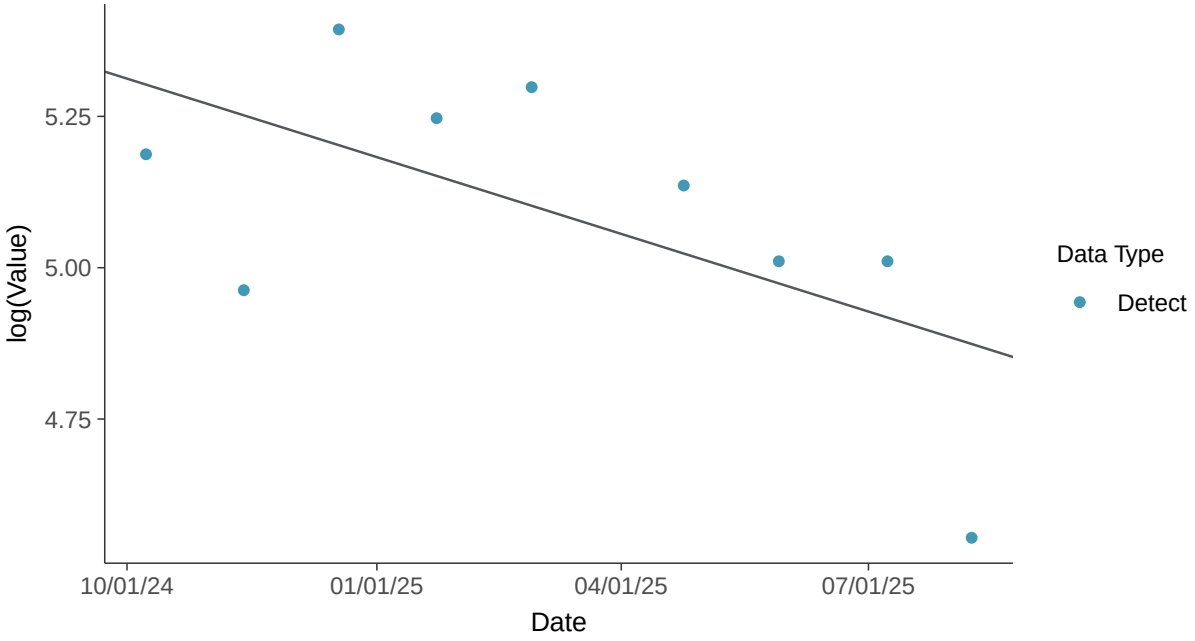
Gamma Q-Q plot

Calcium, MW-18C (mg/l)



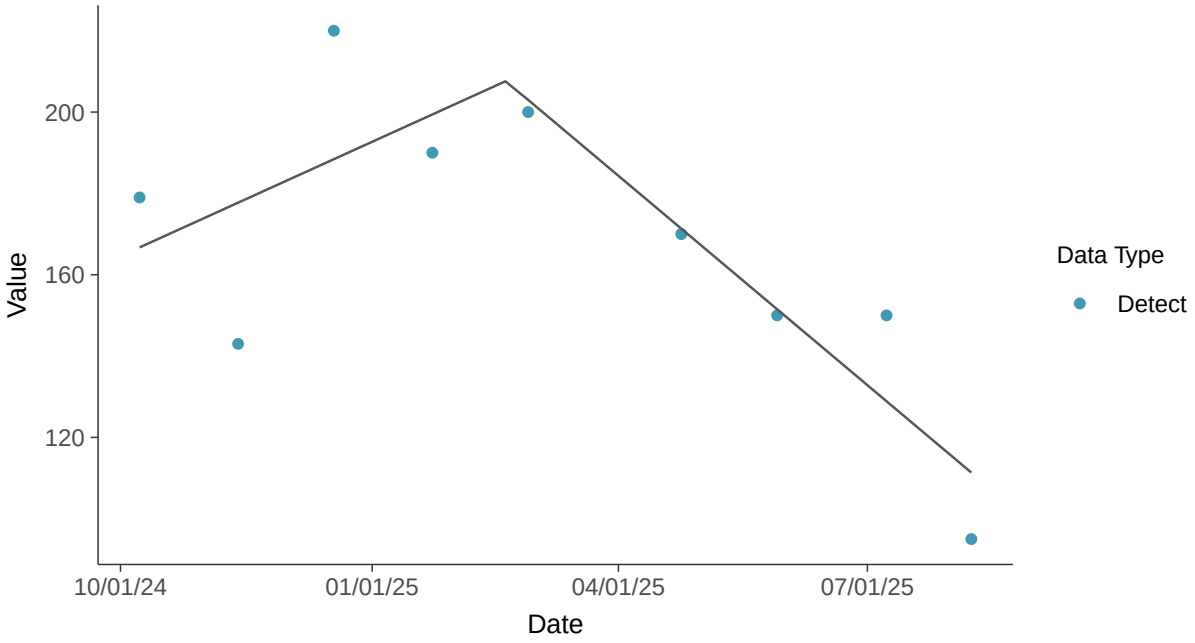
Trend Regression: Lognormal MLE

Calcium, MW-18C (mg/l)



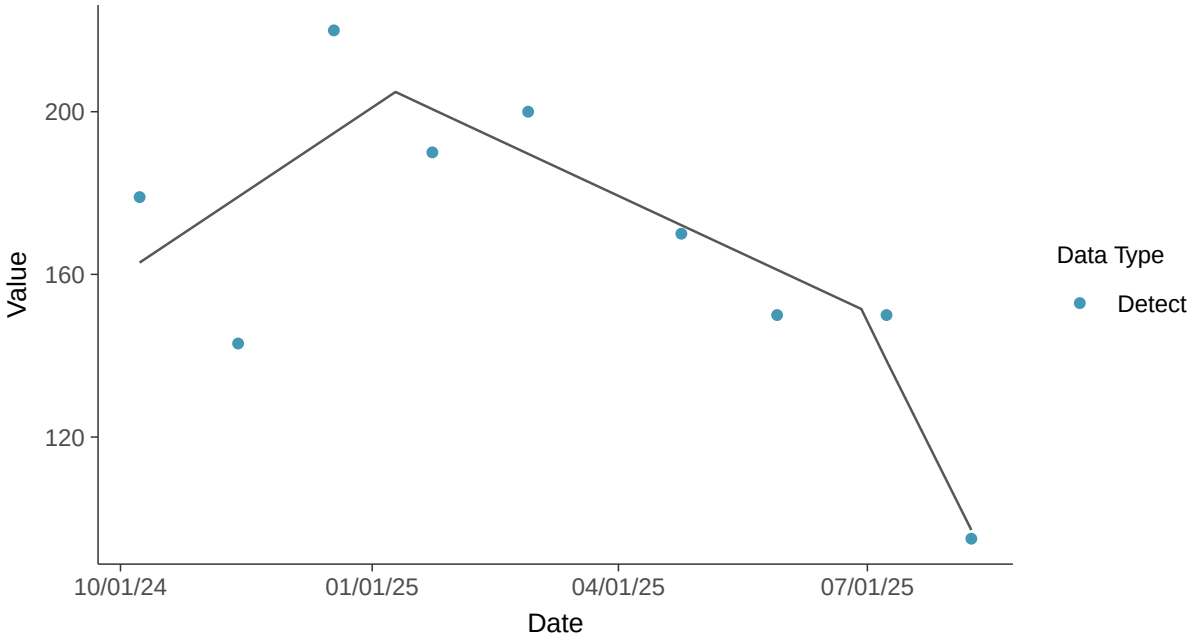
Trend Regression: Piecewise Linear-Linear

Calcium, MW-18C (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Calcium, MW-18C (mg/l)

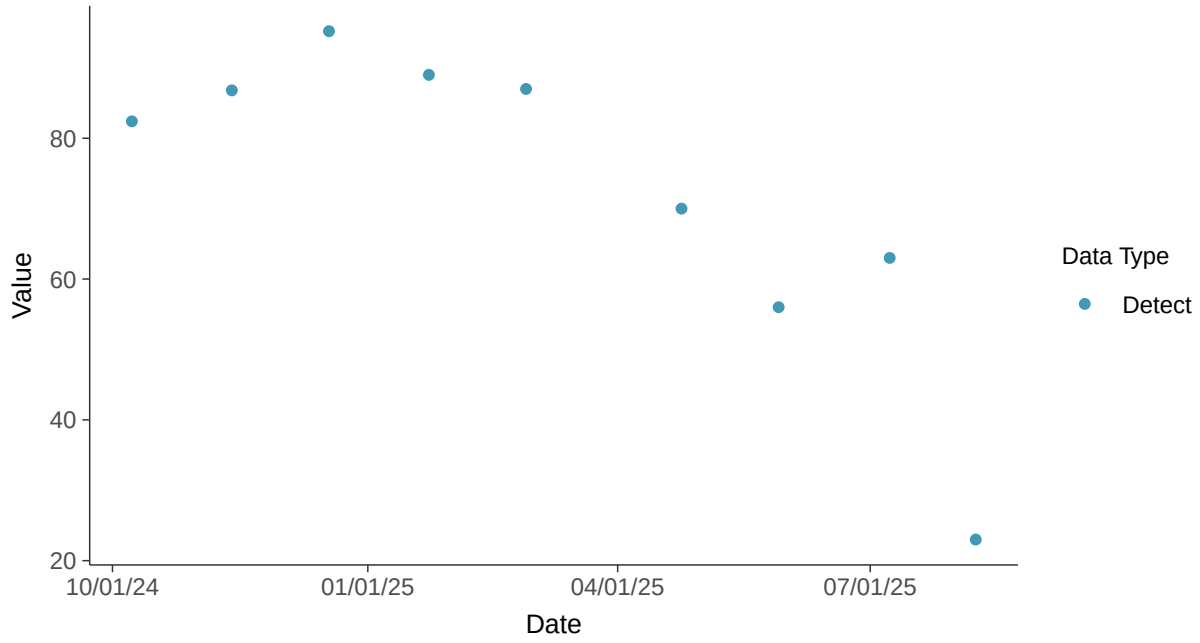


Appendix III: Chloride, MW-18C

ID: 18_2_108

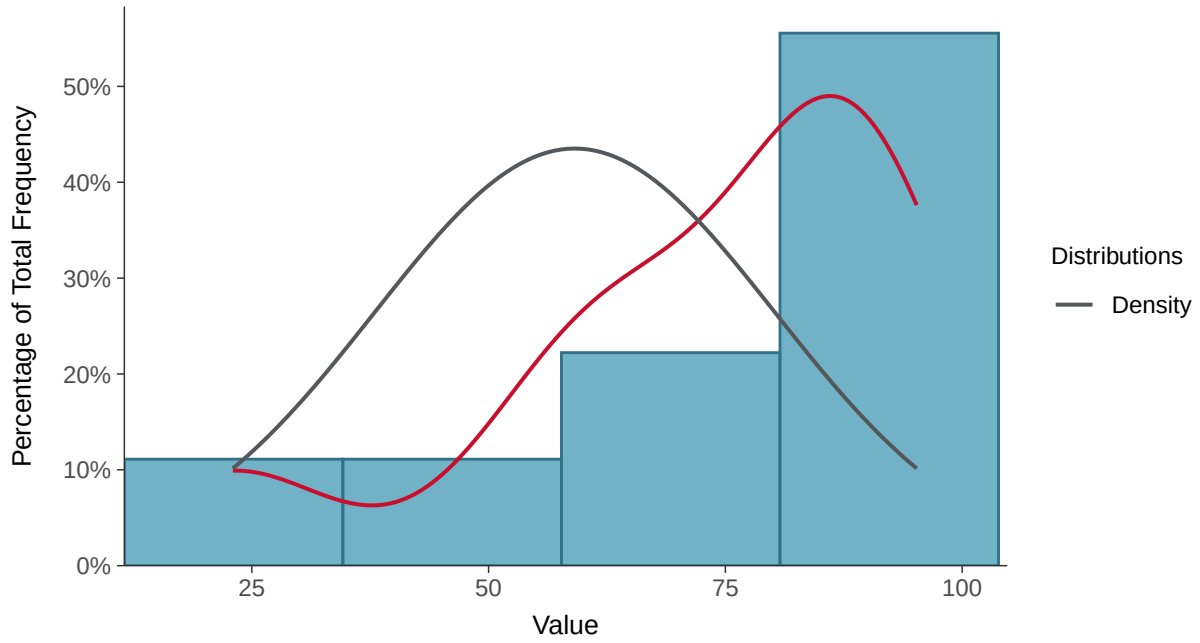
Scatter Plot

Chloride, MW-18C (mg/l)



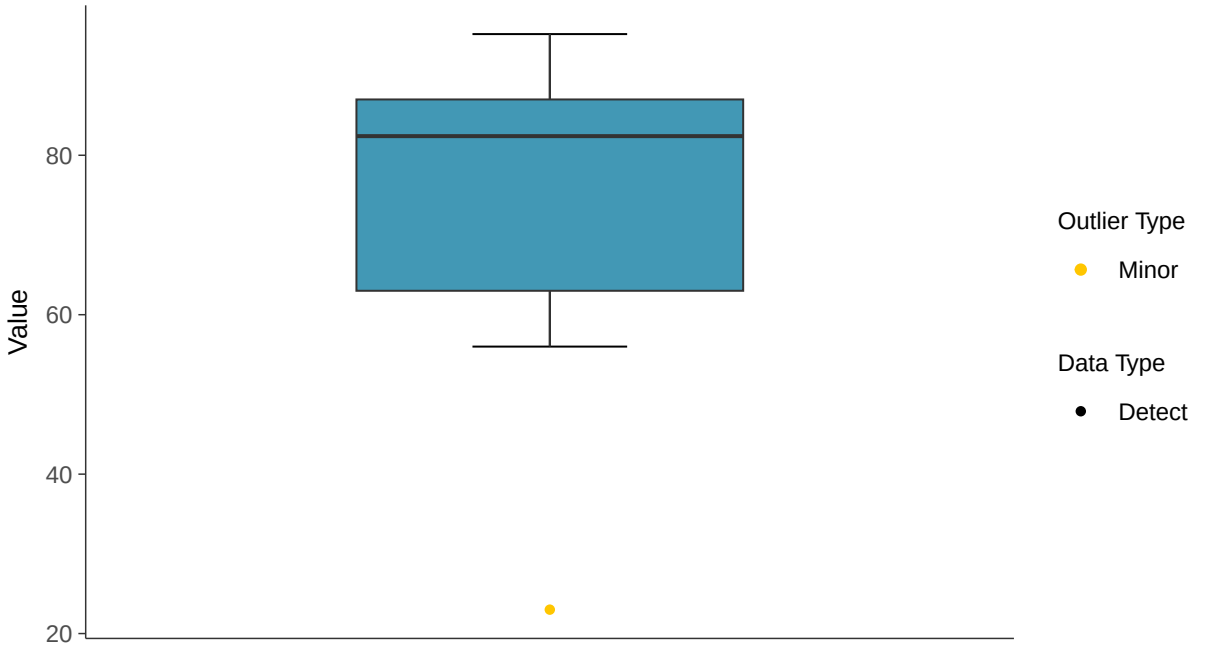
Histogram

Chloride, MW-18C (mg/l)



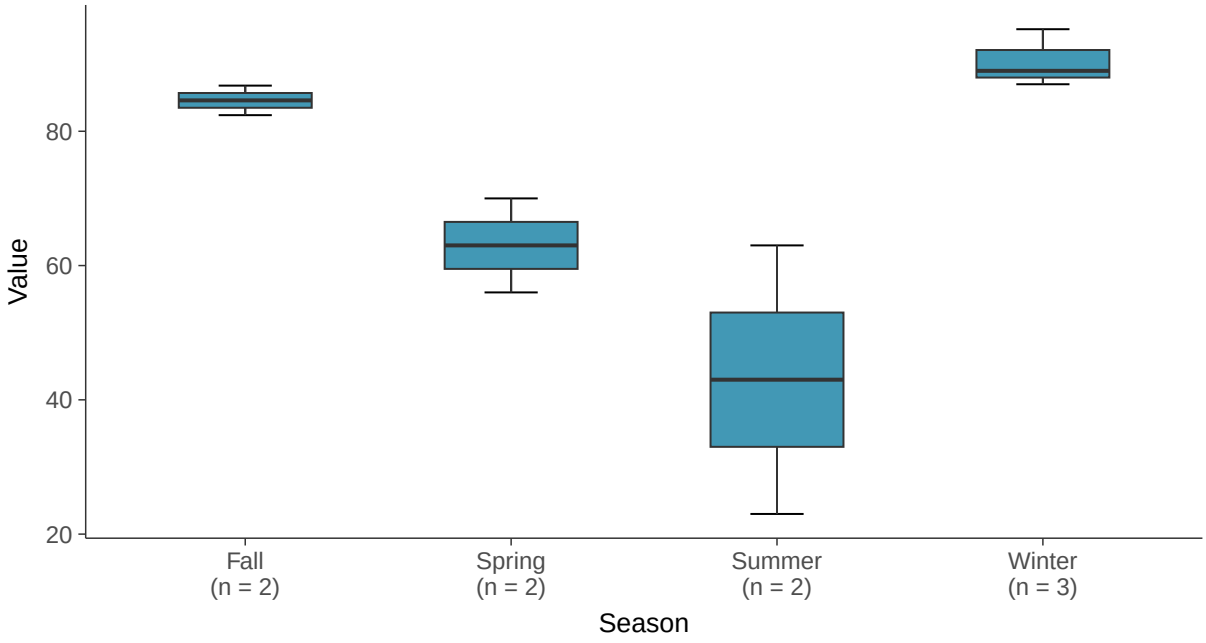
Boxplot

Chloride, MW-18C (mg/l)



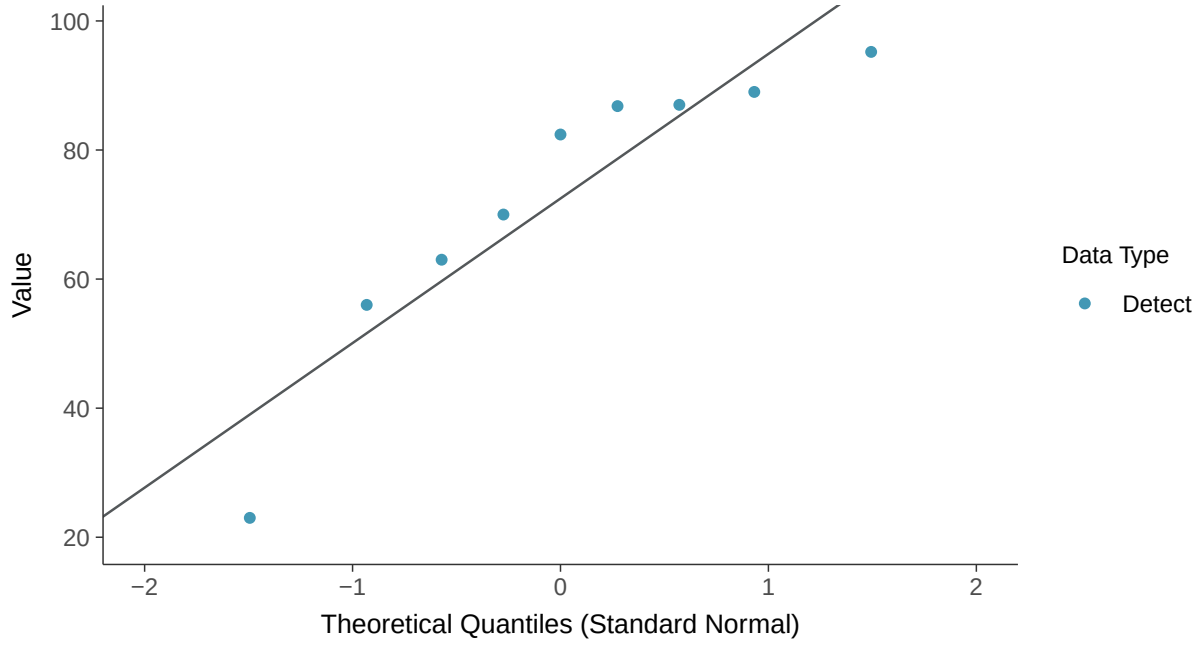
Boxplot by Season

Chloride, MW-18C (mg/l)



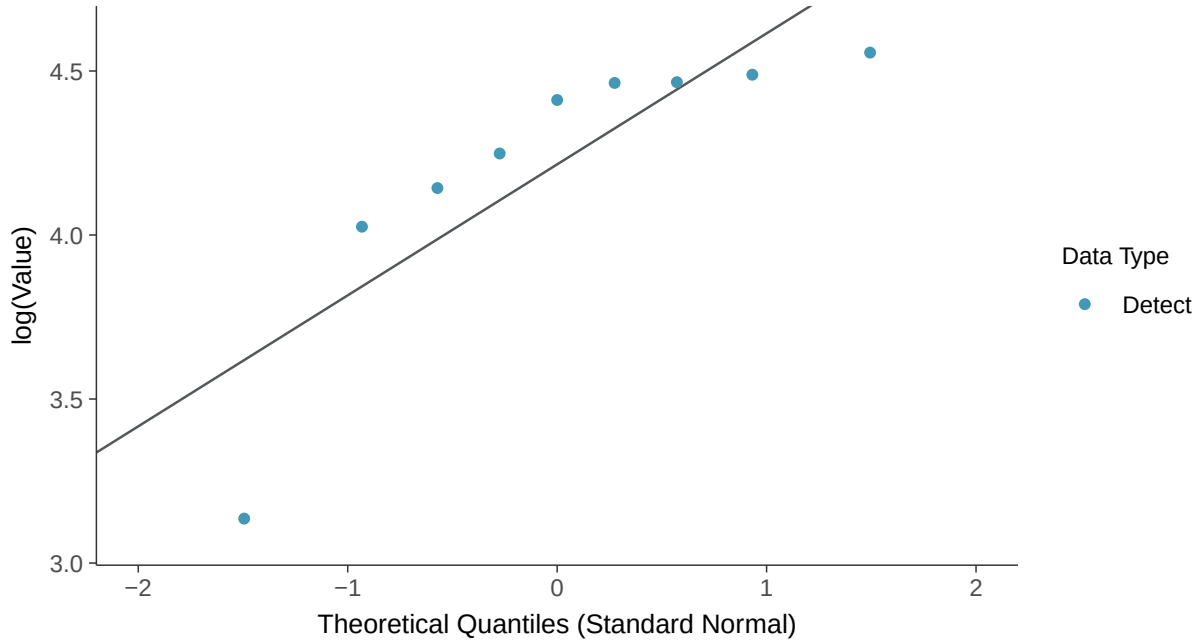
Normal Q-Q plot

Chloride, MW-18C (mg/l)



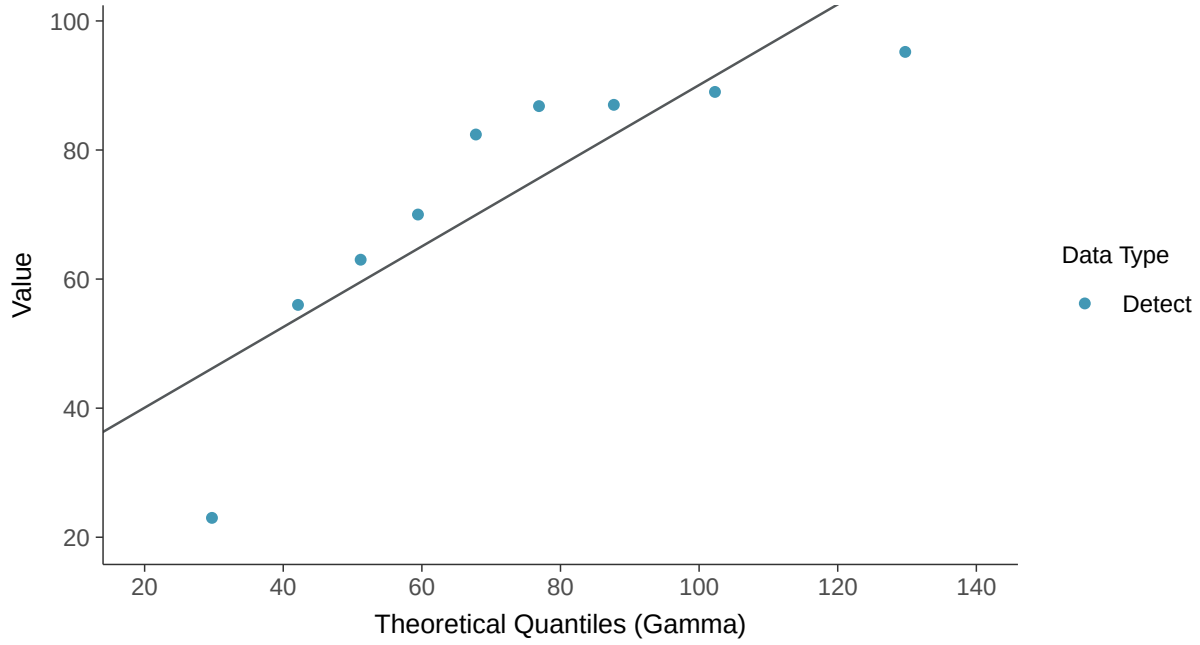
Lognormal Q-Q plot

Chloride, MW-18C (mg/l)



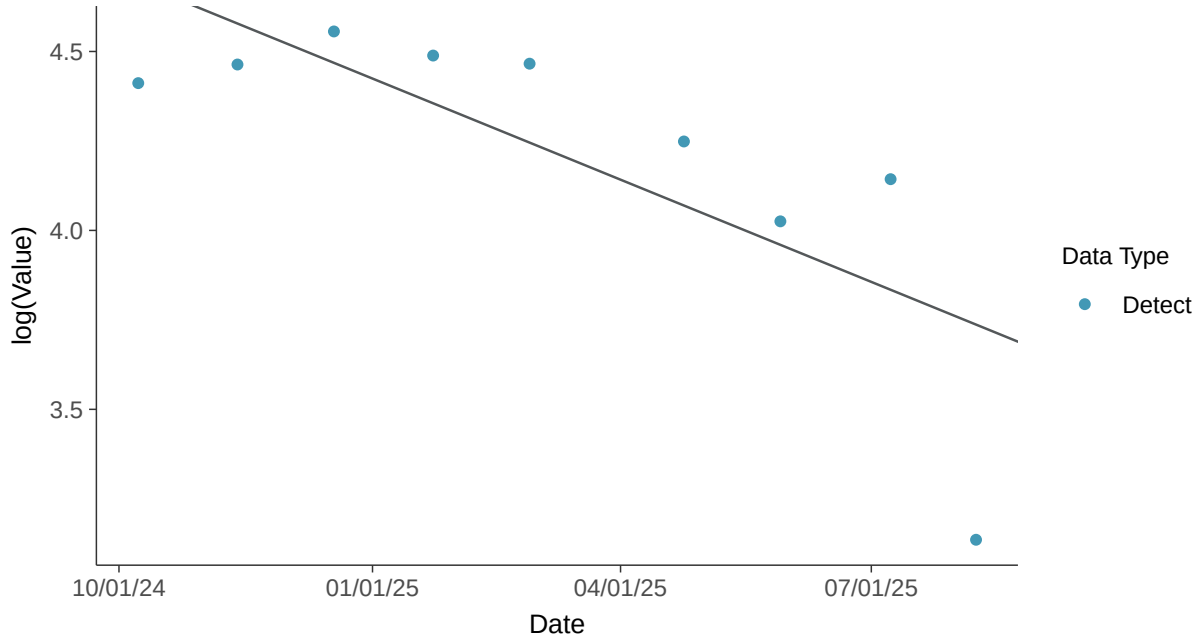
Gamma Q-Q plot

Chloride, MW-18C (mg/l)



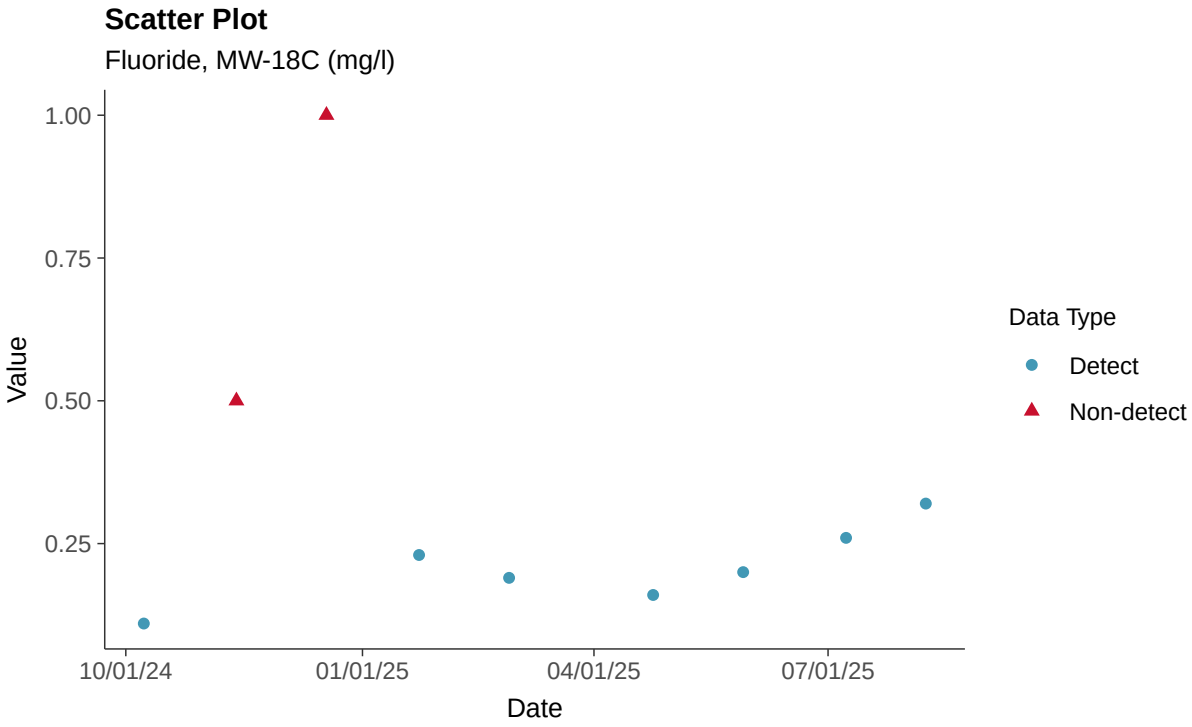
Trend Regression: Lognormal MLE

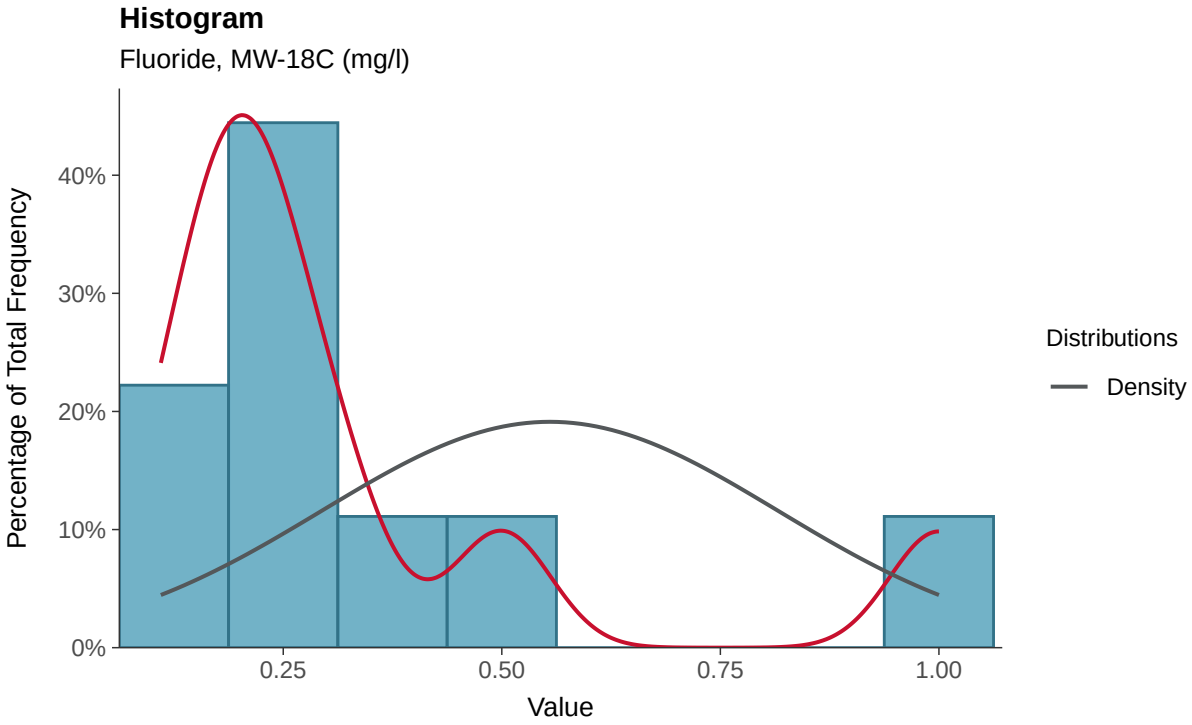
Chloride, MW-18C (mg/l)



Appendix III: Fluoride, MW-18C

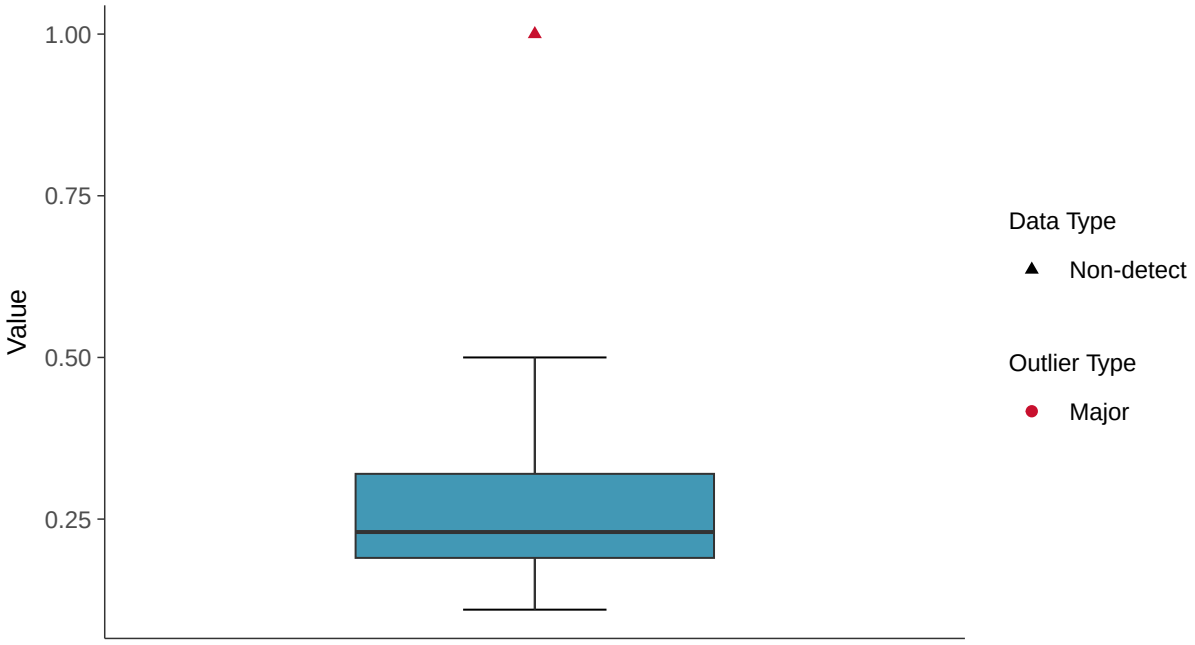
ID: 18_2_112





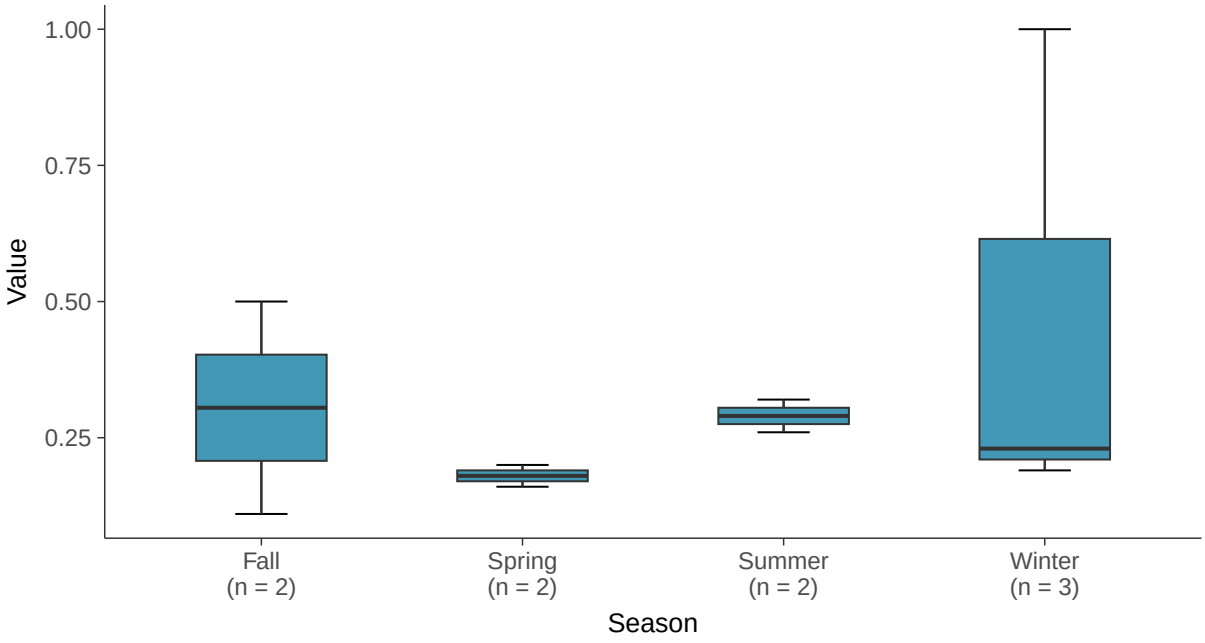
Boxplot

Fluoride, MW-18C (mg/l)



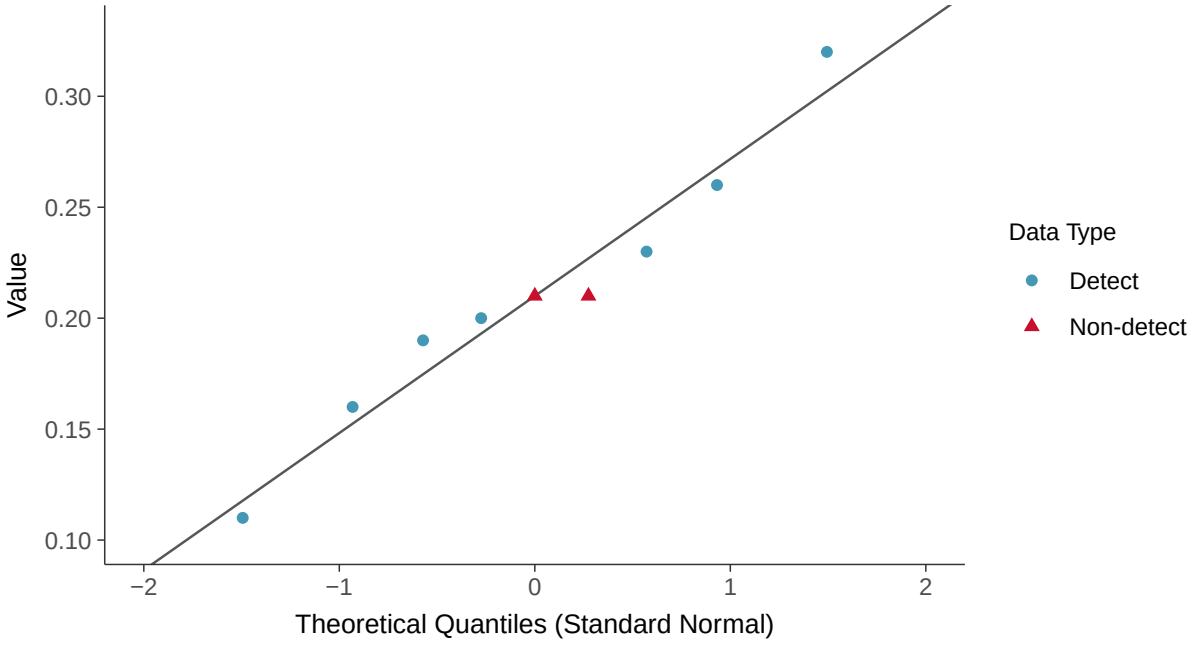
Boxplot by Season

Fluoride, MW-18C (mg/l)



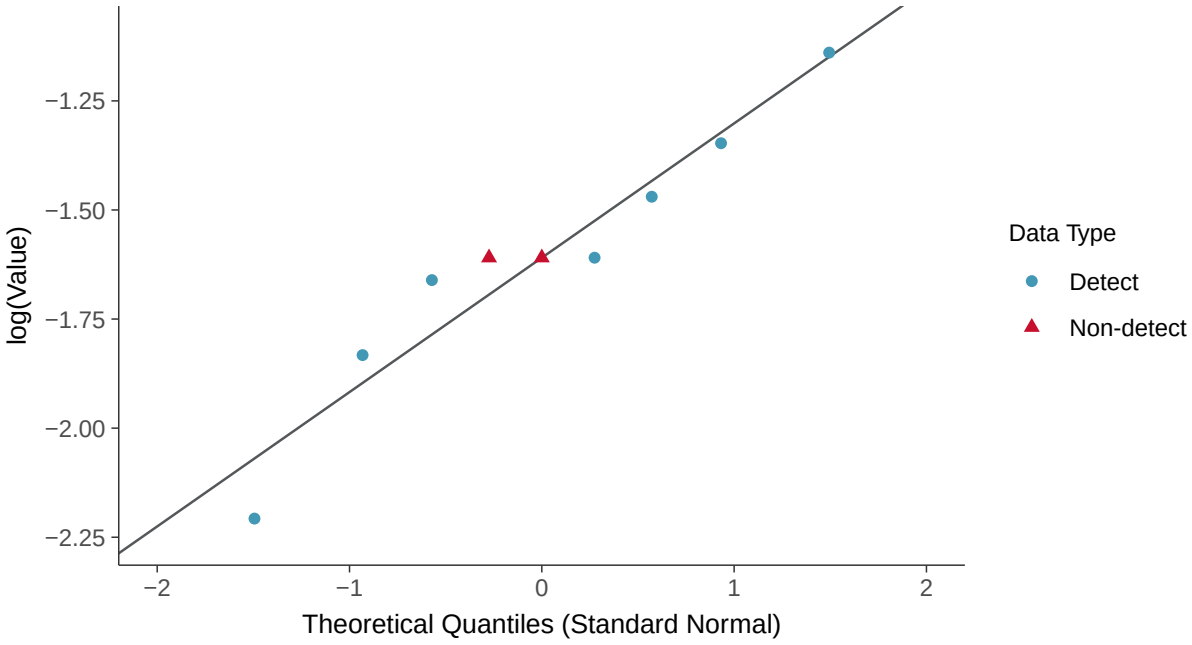
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-18C (mg/l)



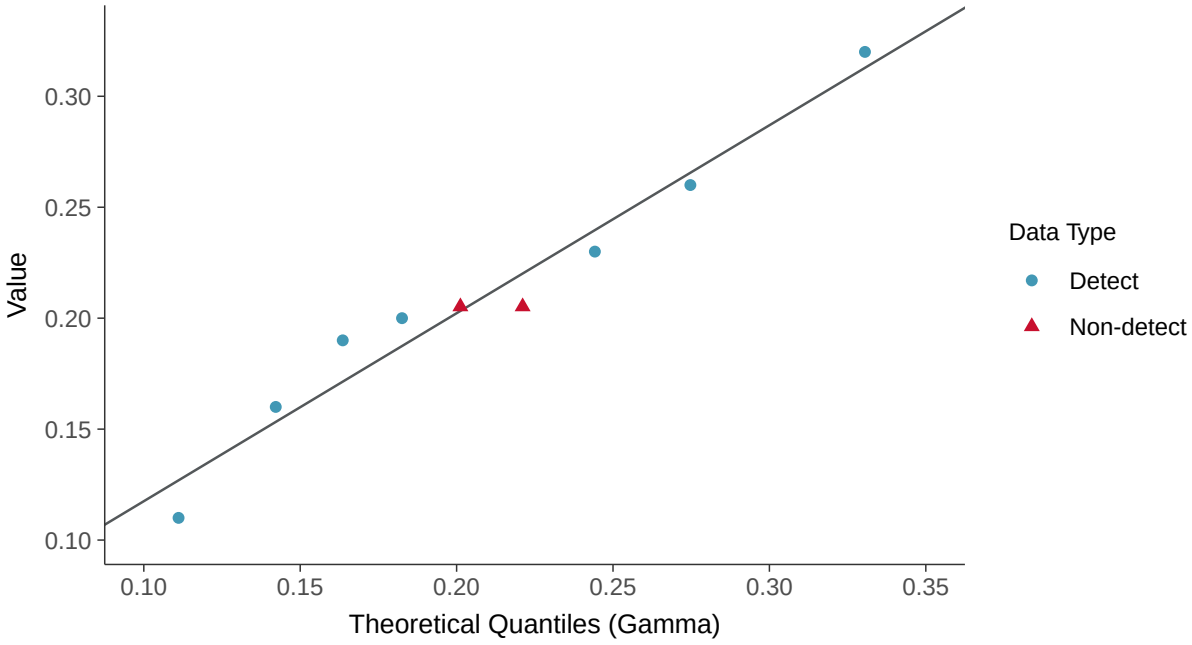
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-18C (mg/l)



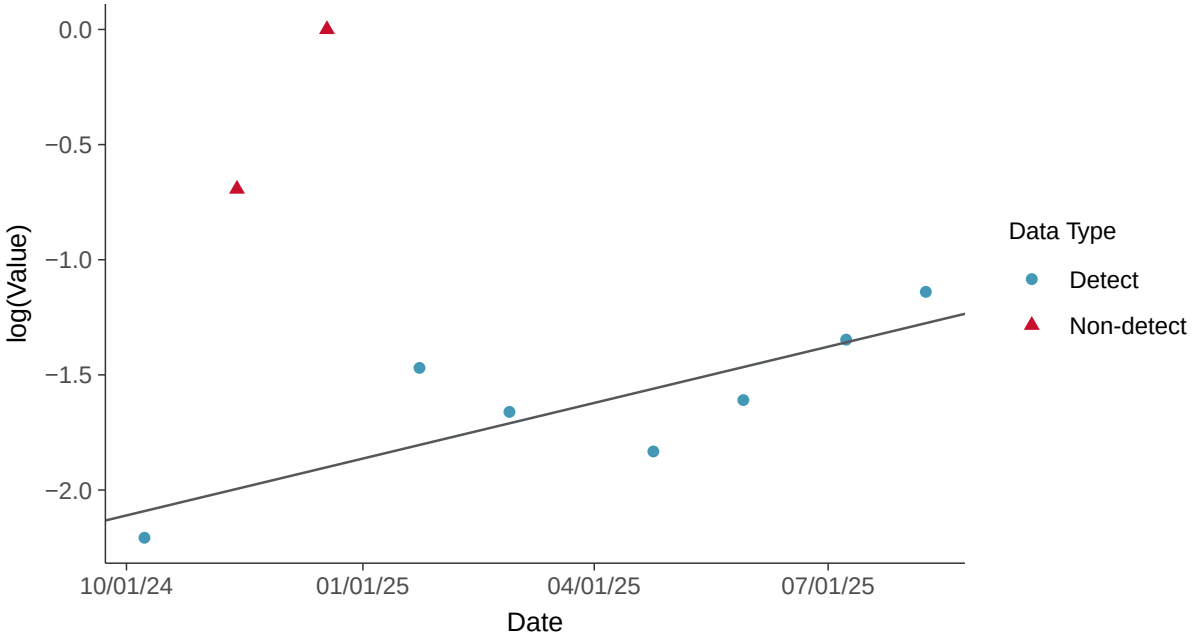
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-18C (mg/l)



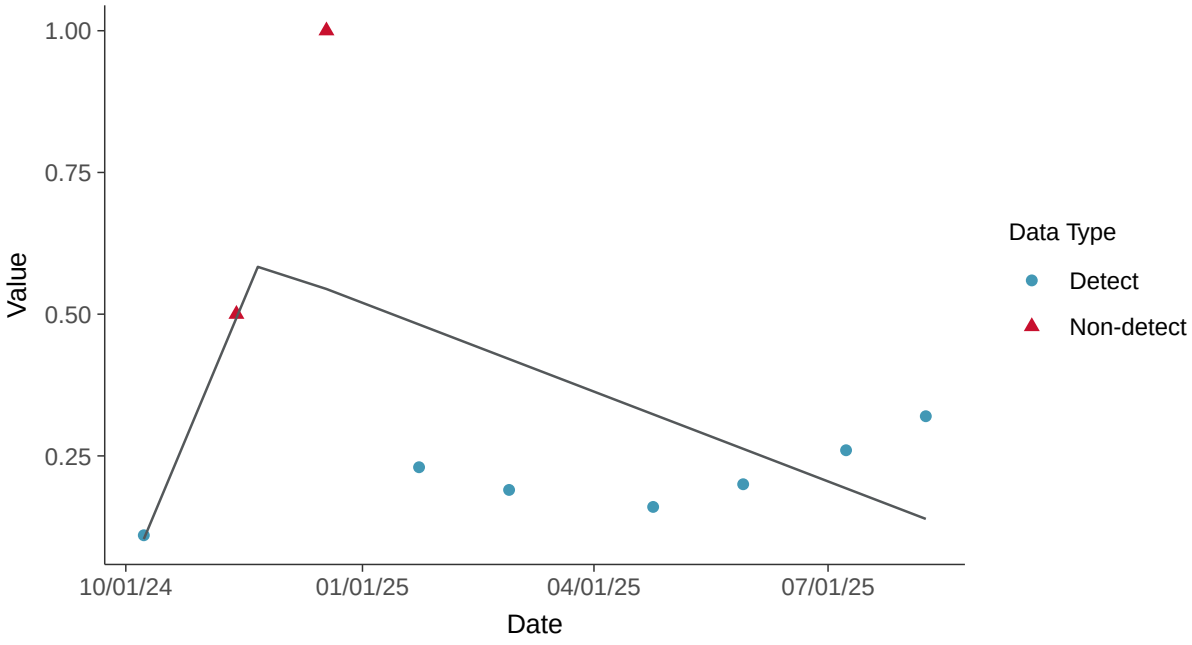
Trend Regression: Lognormal MLE

Fluoride, MW-18C (mg/l)



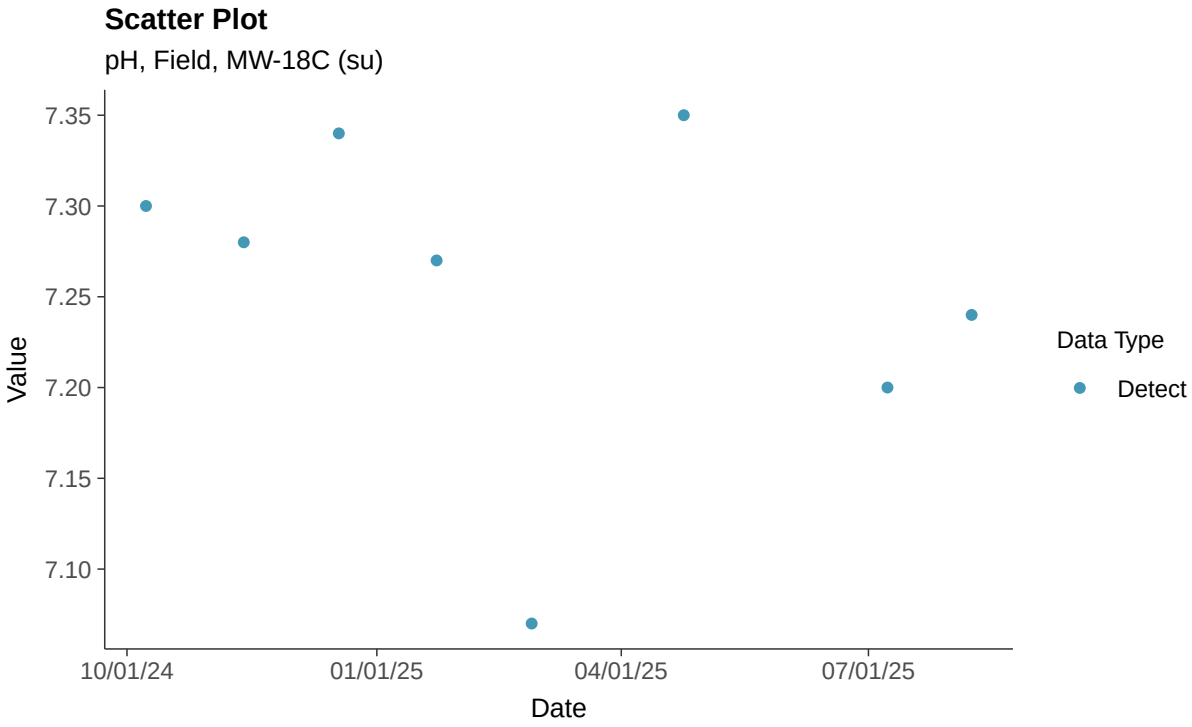
Trend Regression: Piecewise Linear-Linear

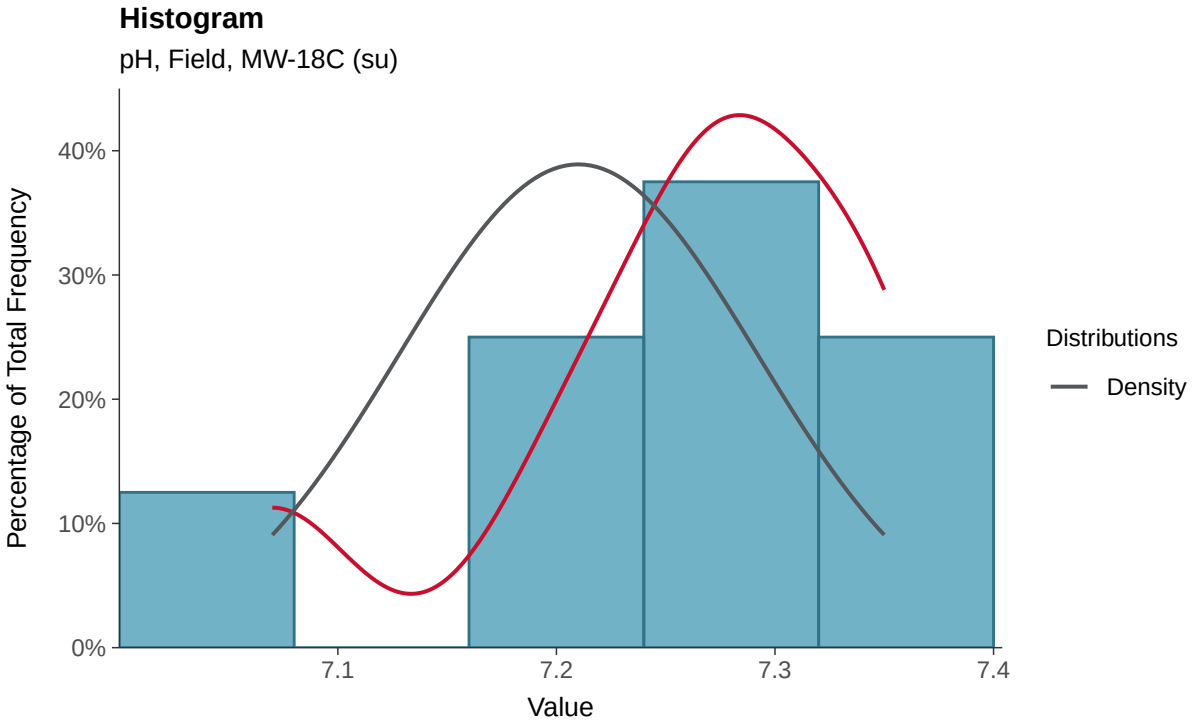
Fluoride, MW-18C (mg/l)



Appendix III: pH, Field, MW-18C

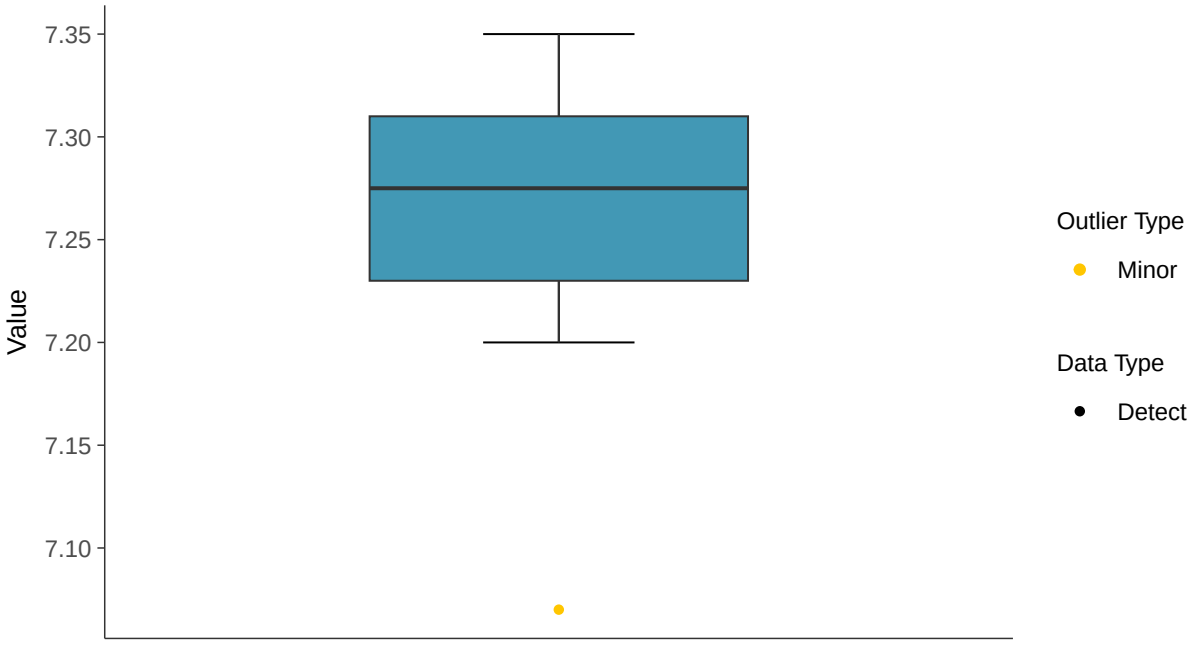
ID: 18_2_120





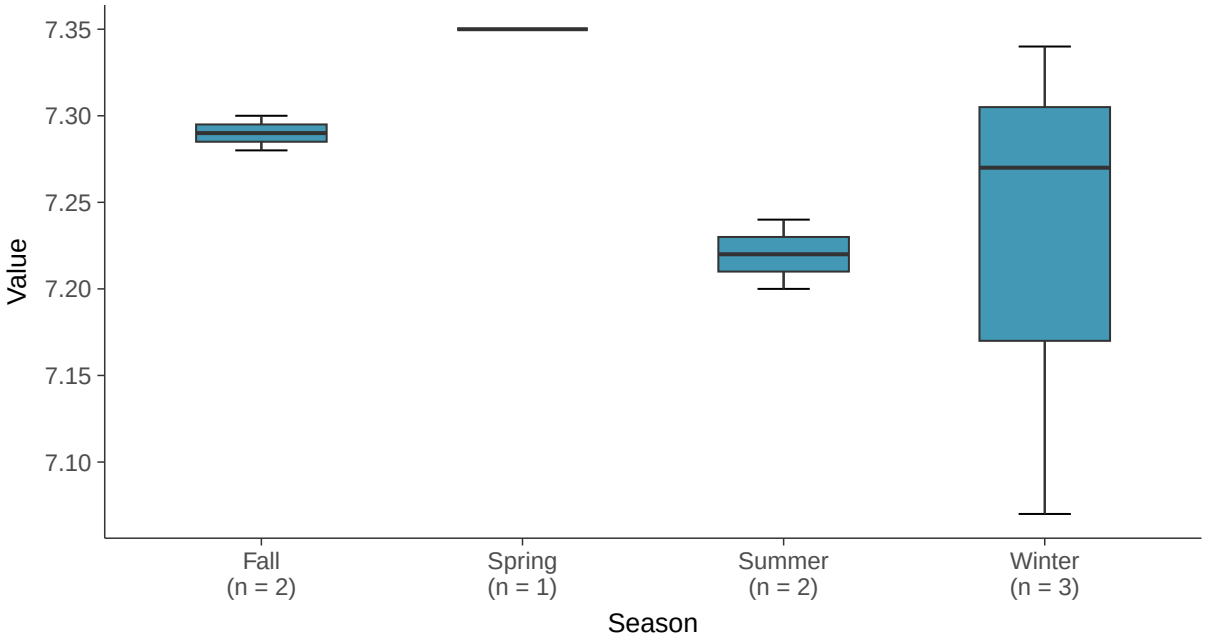
Boxplot

pH, Field, MW-18C (su)



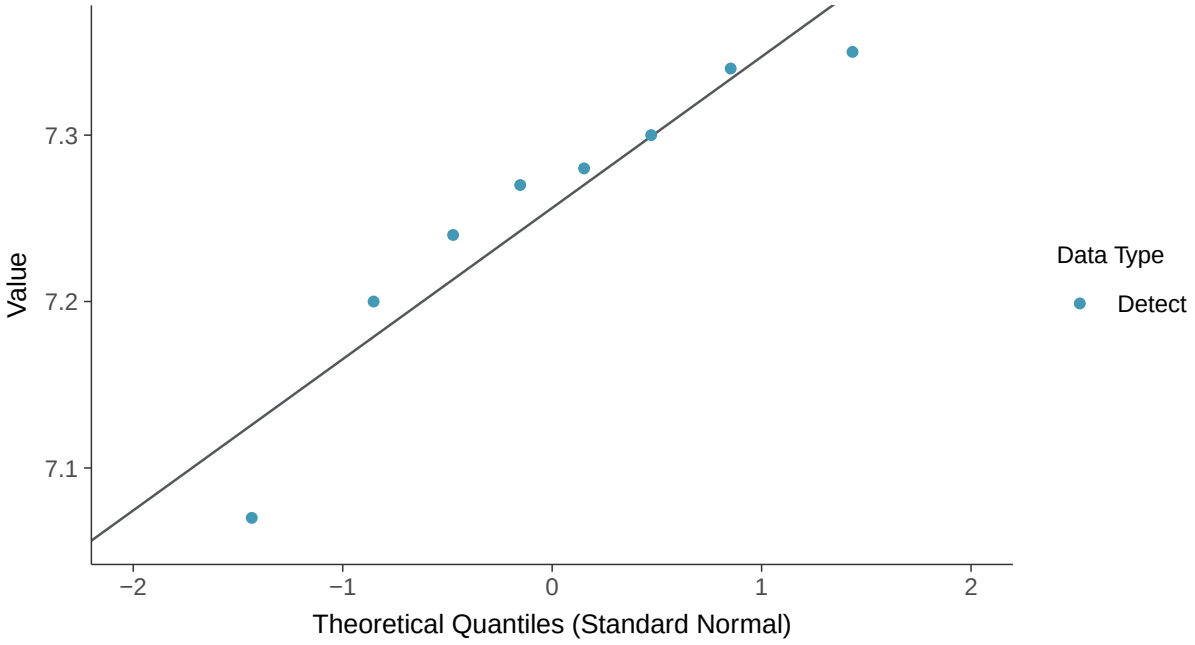
Boxplot by Season

pH, Field, MW-18C (su)



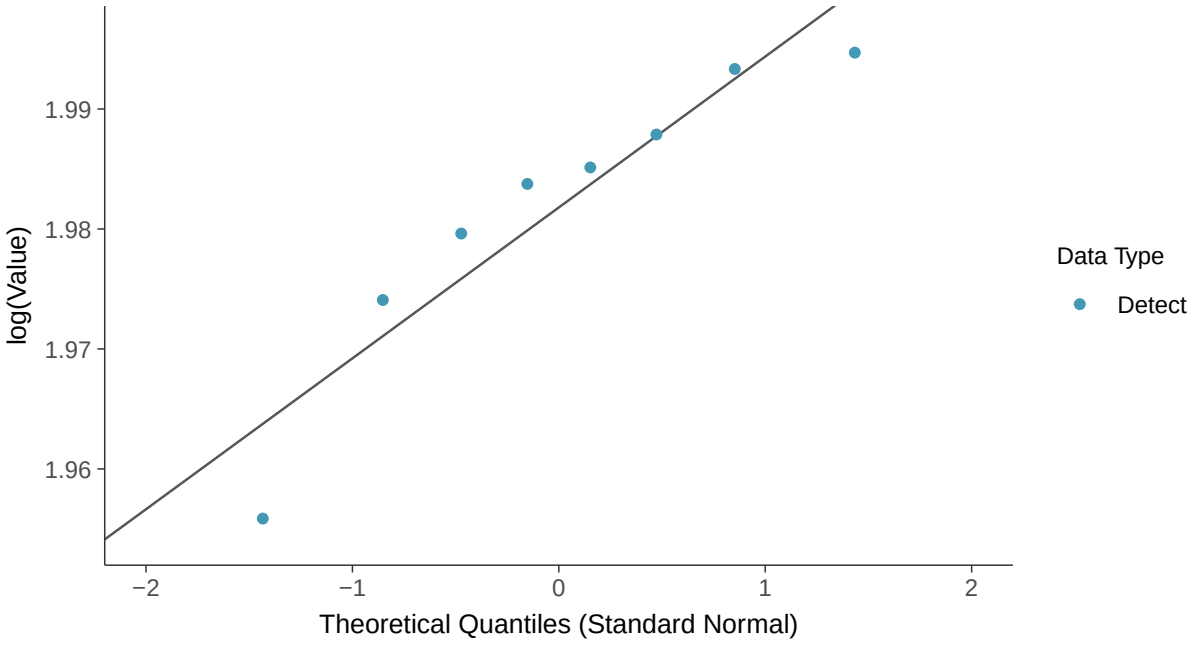
Normal Q-Q plot

pH, Field, MW-18C (su)



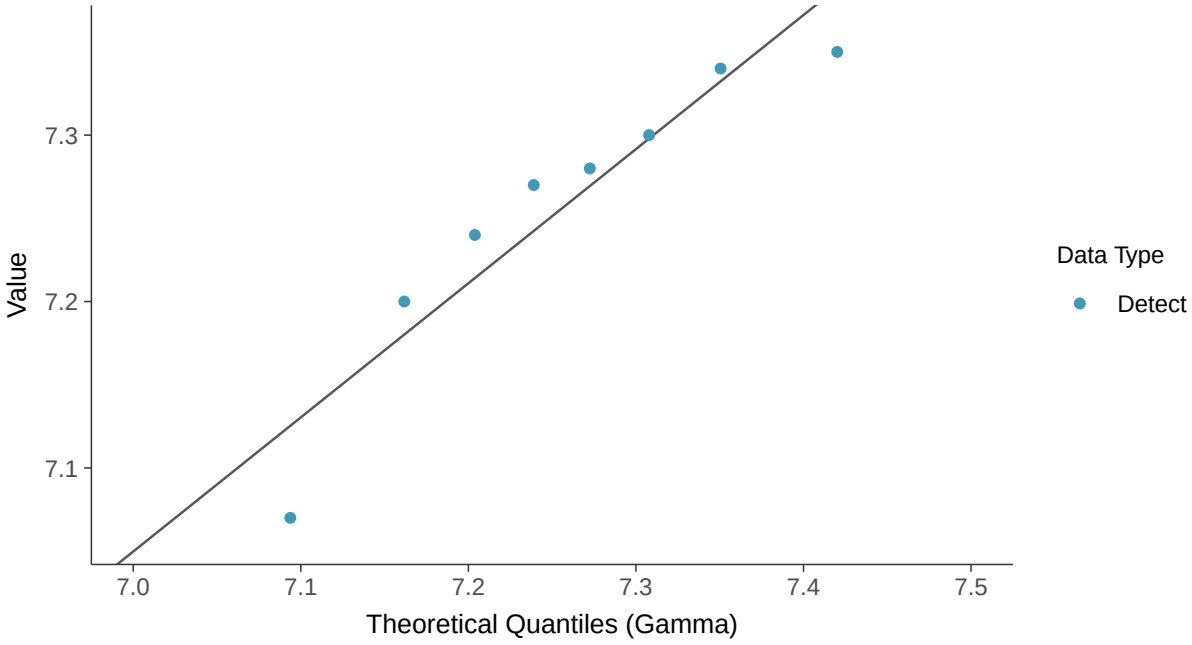
Lognormal Q-Q plot

pH, Field, MW-18C (su)



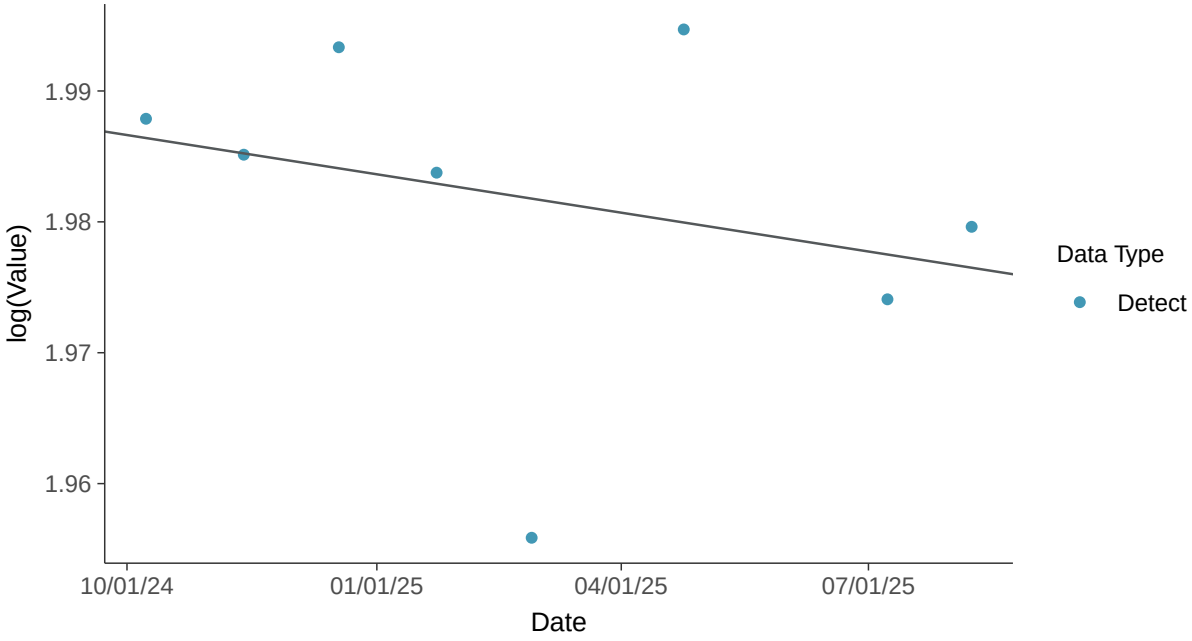
Gamma Q-Q plot

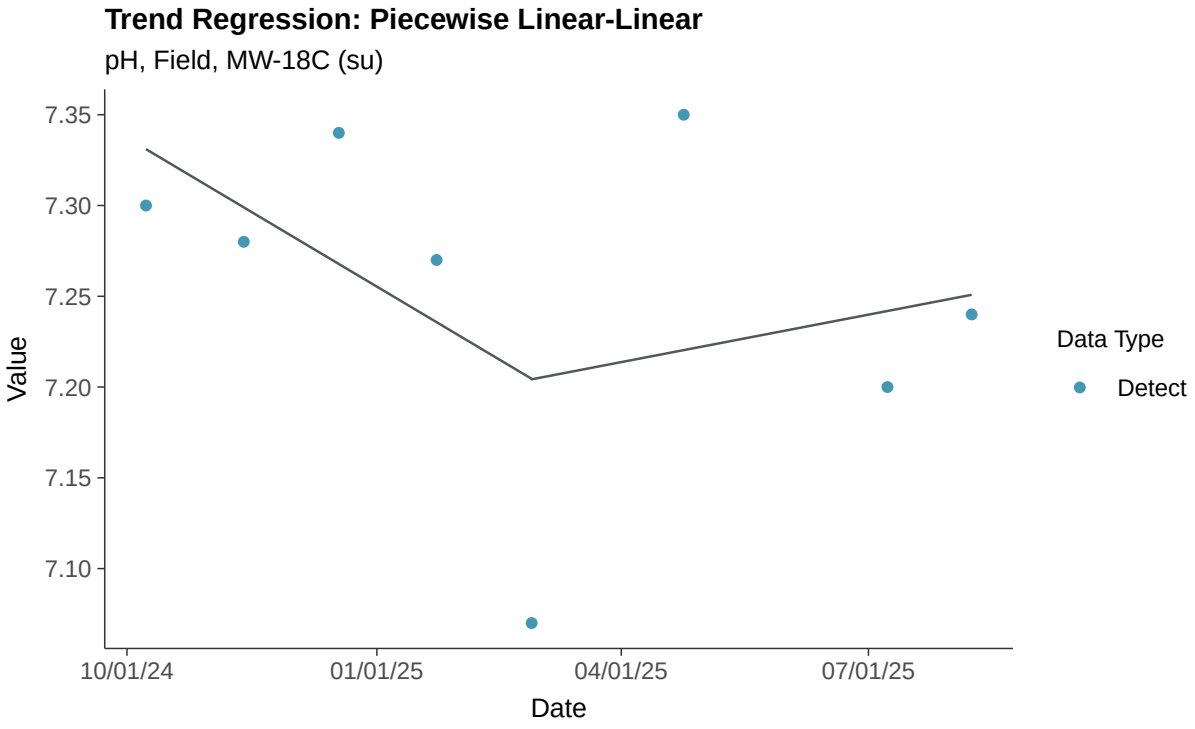
pH, Field, MW-18C (su)



Trend Regression: Lognormal MLE

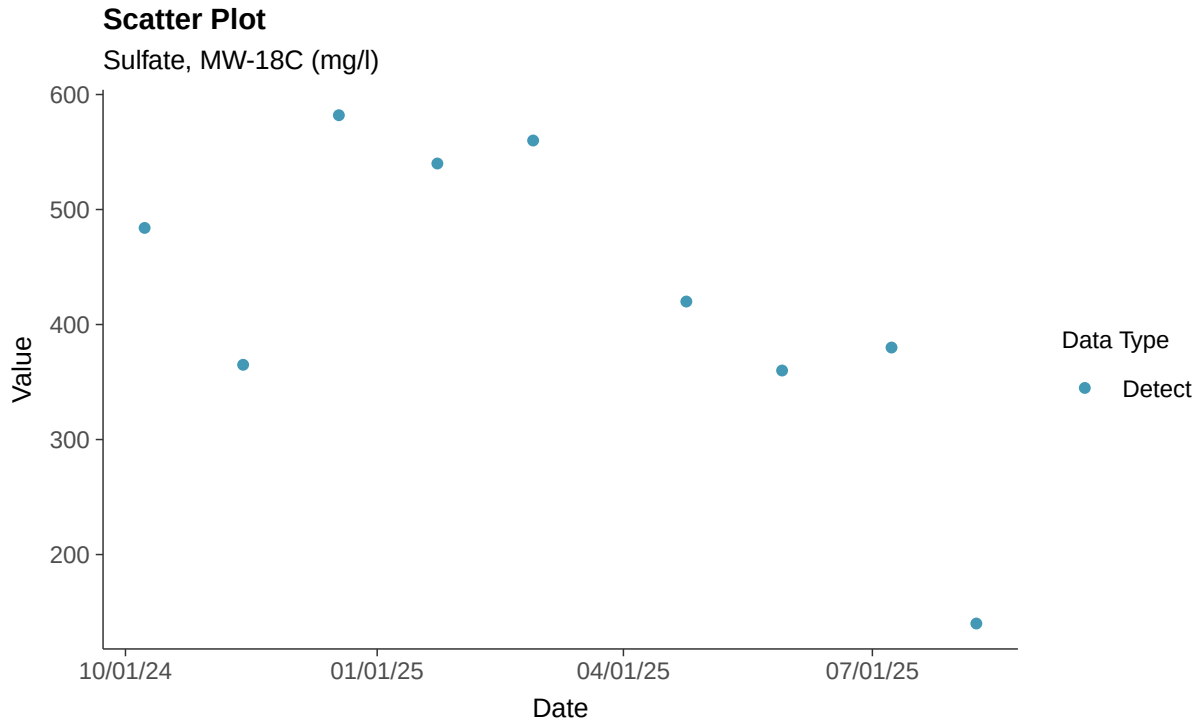
pH, Field, MW-18C (su)

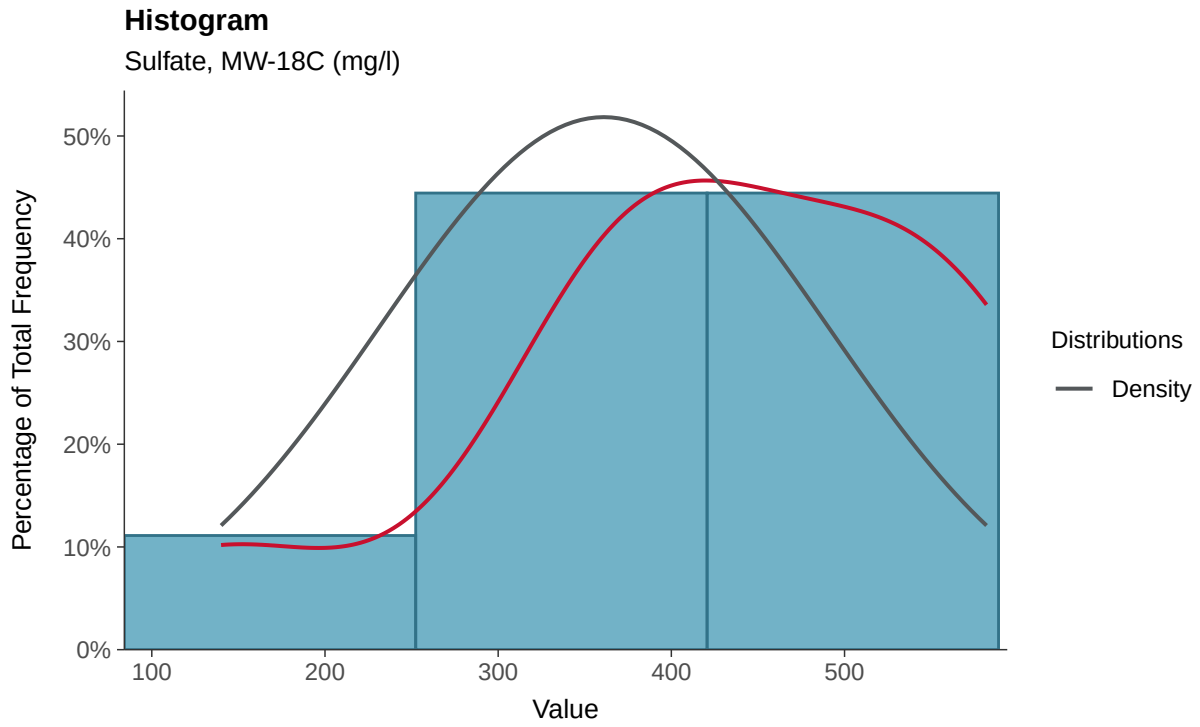



Trend Regression: Piecewise Linear-Linear
pH, Field, MW-18C (su)
Value
7.35
7.30
7.25
7.20
7.15
7.10
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix III: Sulfate, MW-18C

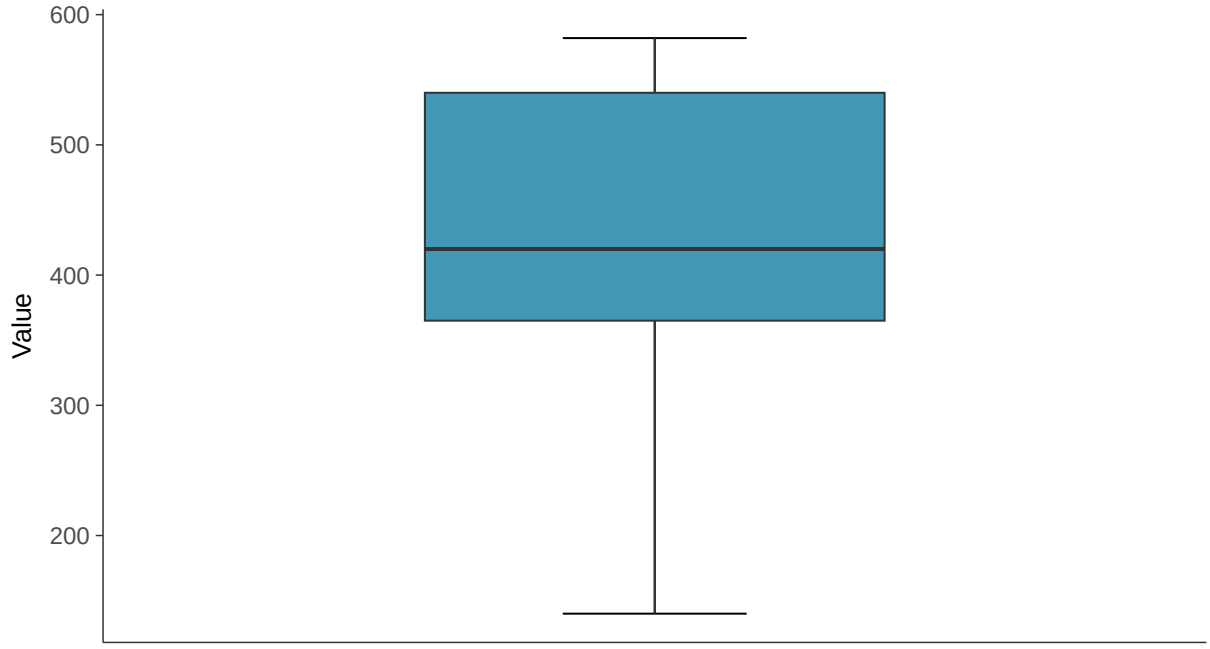
ID: 18_2_124





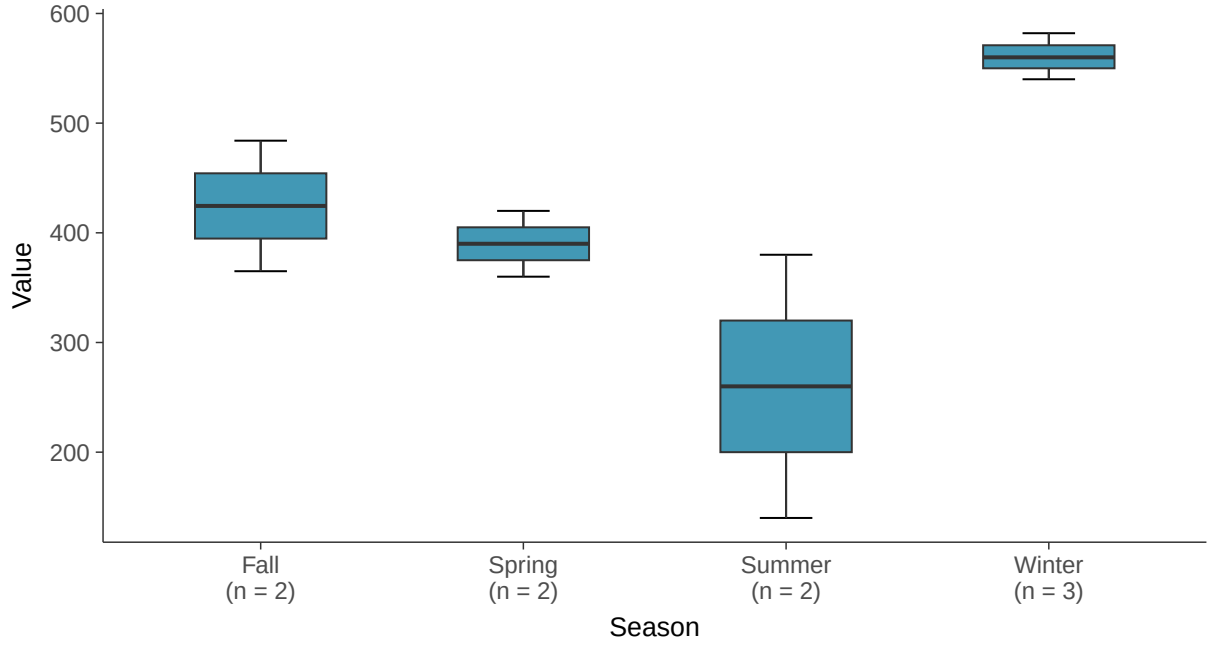
Boxplot

Sulfate, MW-18C (mg/l)



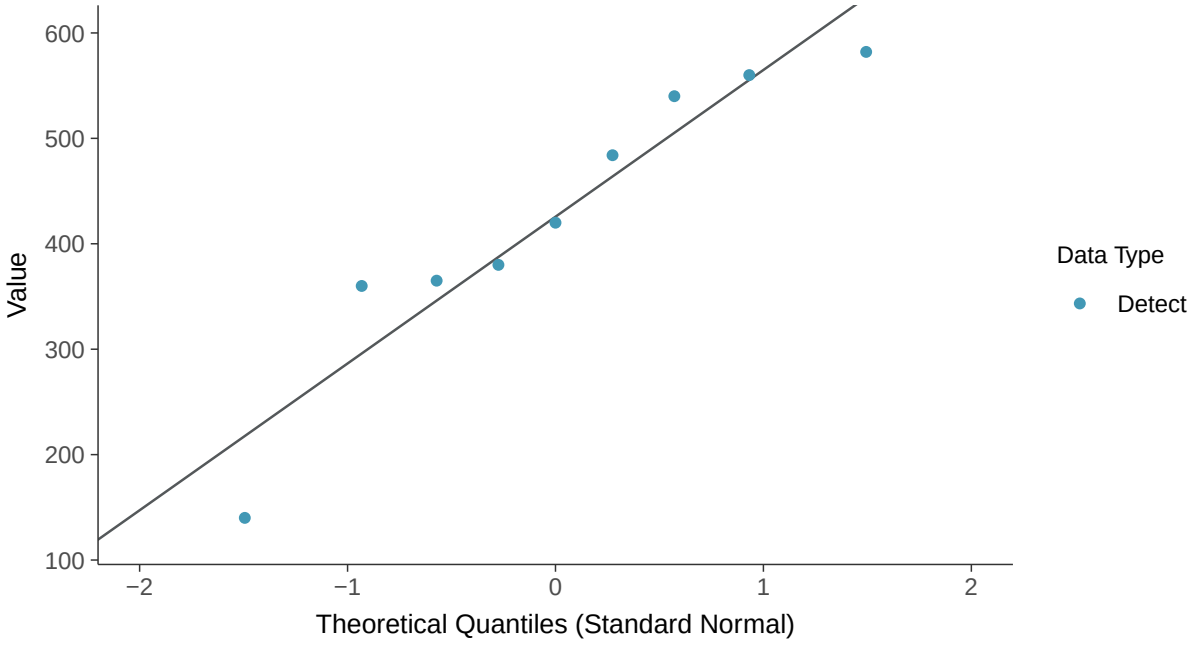
Boxplot by Season

Sulfate, MW-18C (mg/l)



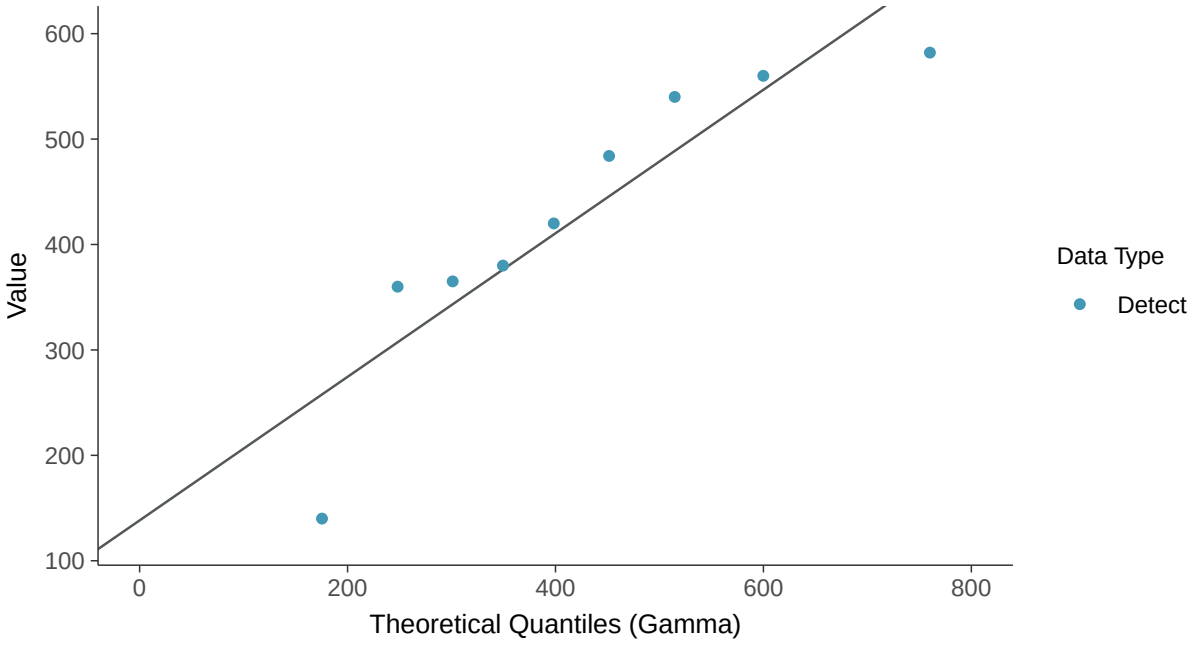
Normal Q-Q plot

Sulfate, MW-18C (mg/l)



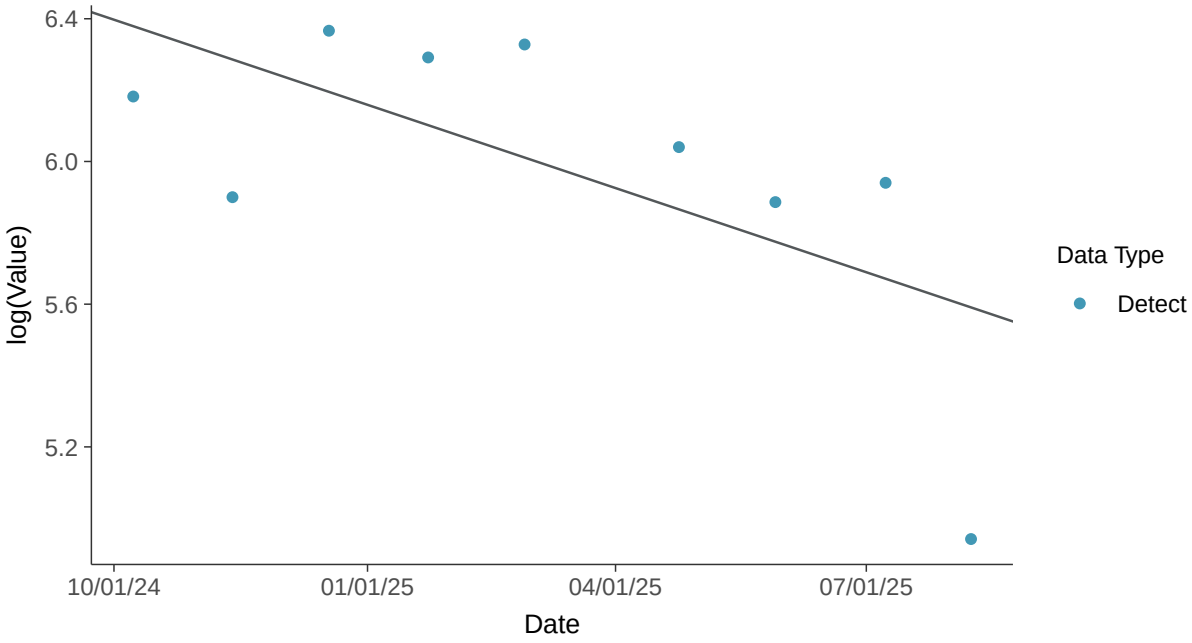
Gamma Q-Q plot

Sulfate, MW-18C (mg/l)



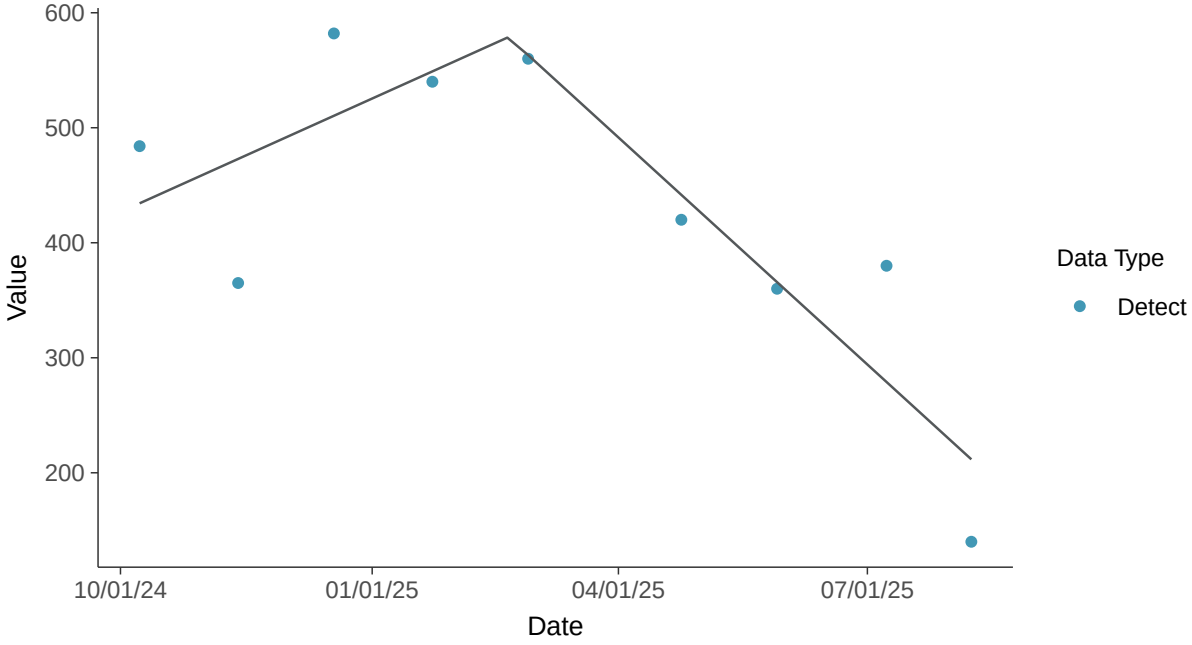
Trend Regression: Lognormal MLE

Sulfate, MW-18C (mg/l)



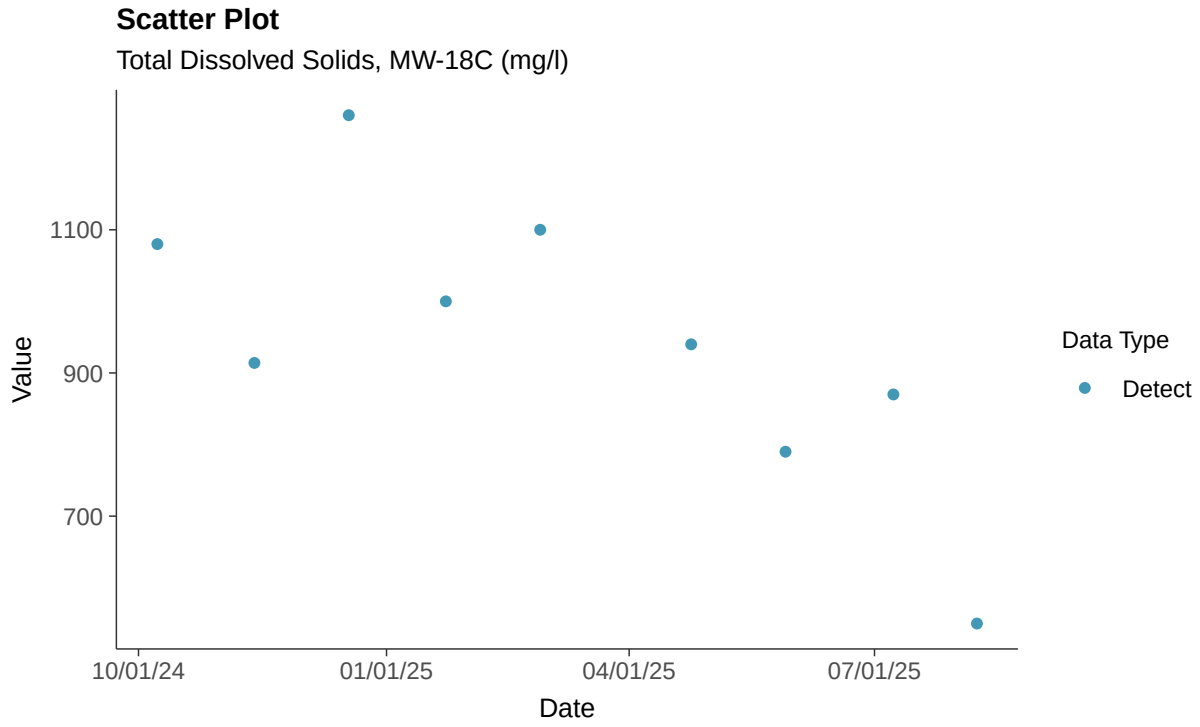
Trend Regression: Piecewise Linear-Linear

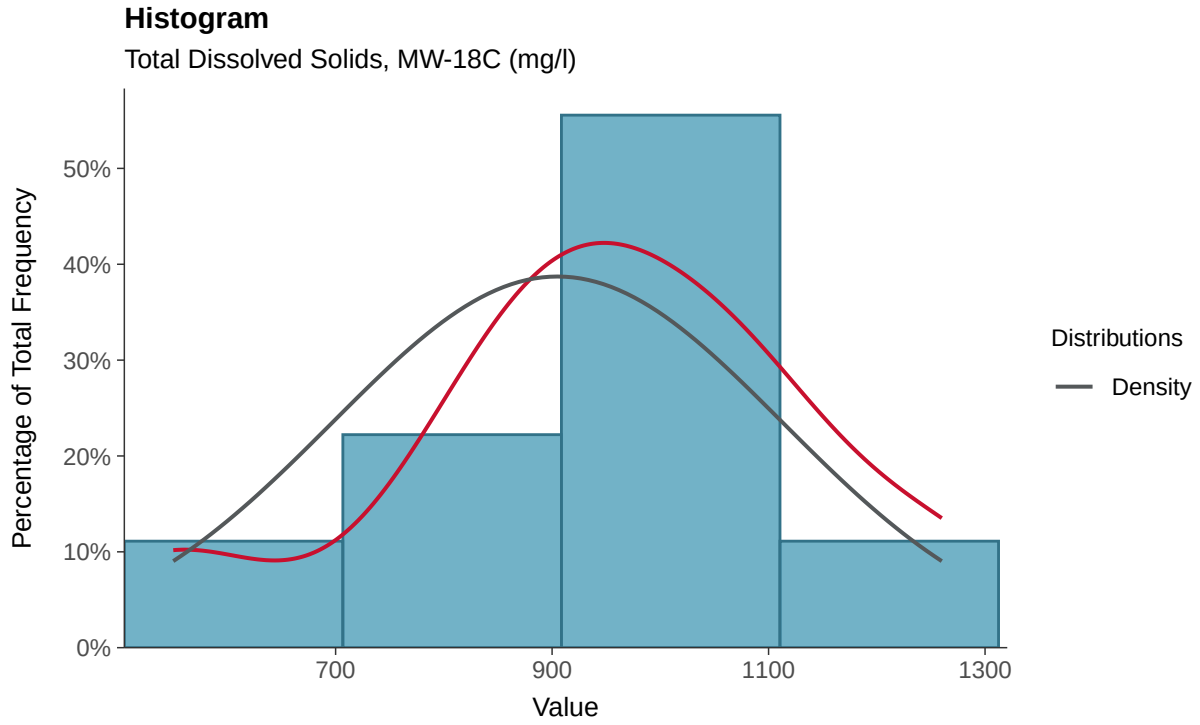
Sulfate, MW-18C (mg/l)



Appendix III: Total Dissolved Solids, MW-18C

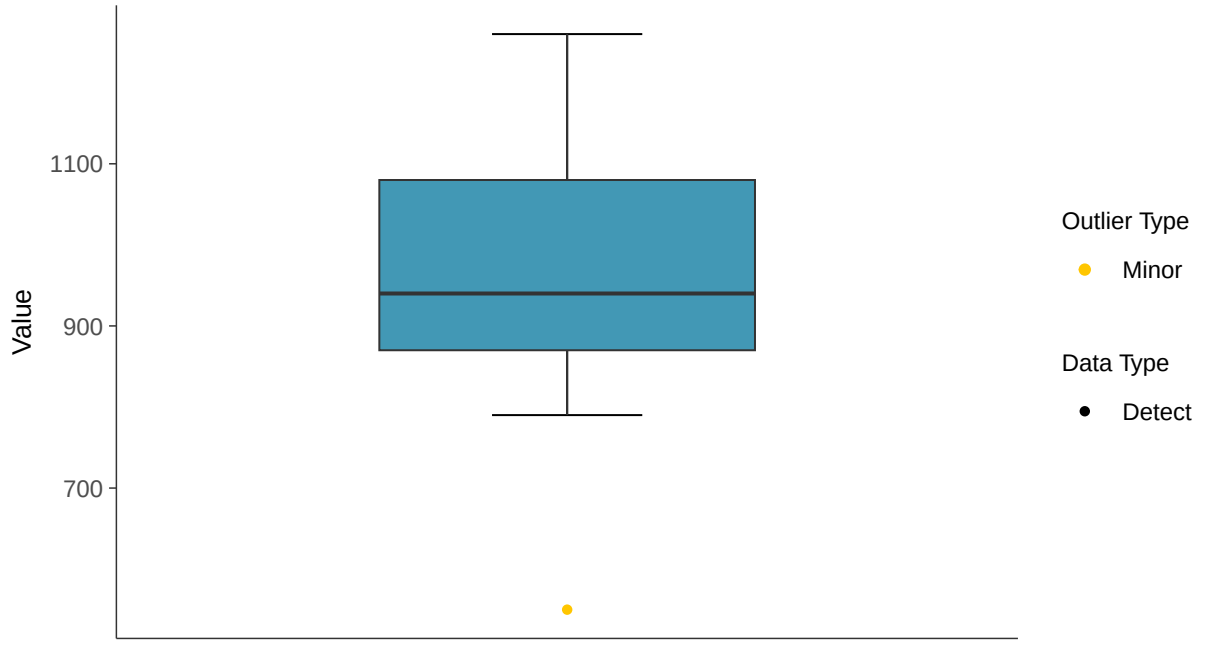
ID: 18_2_126





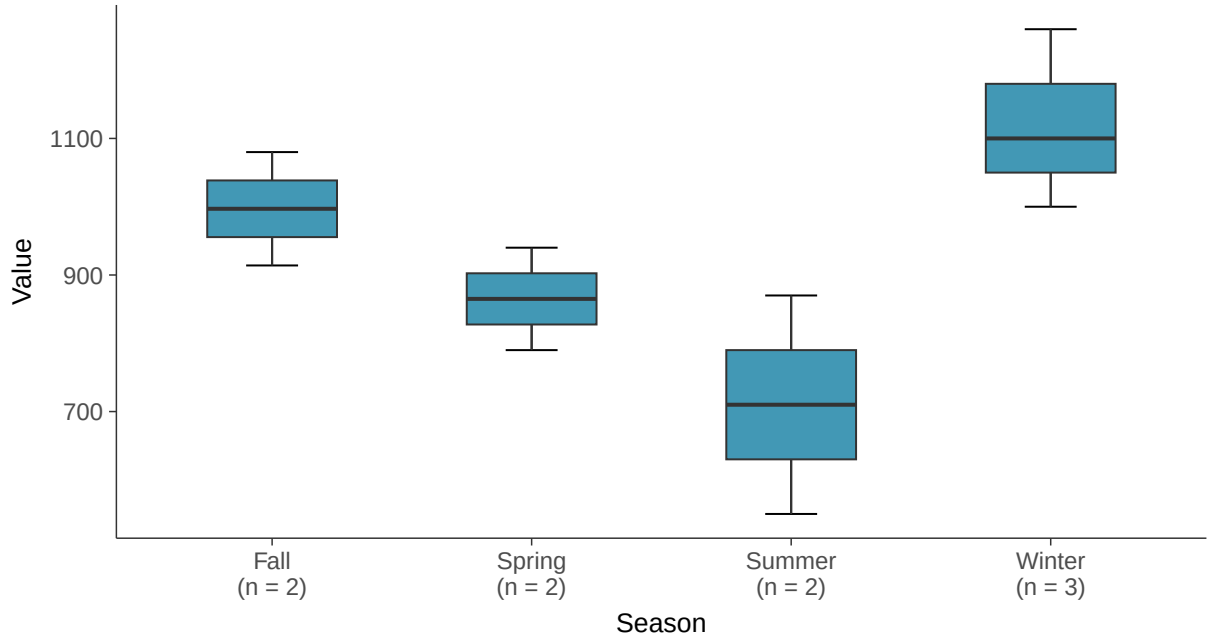
Boxplot

Total Dissolved Solids, MW-18C (mg/l)



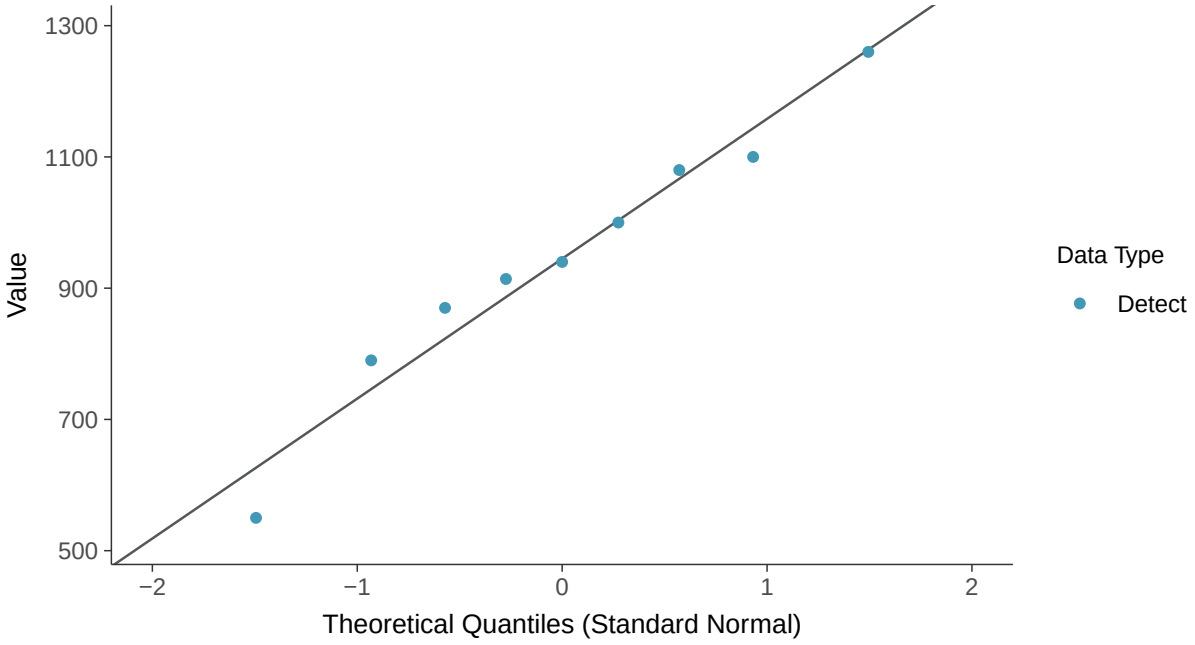
Boxplot by Season

Total Dissolved Solids, MW-18C (mg/l)



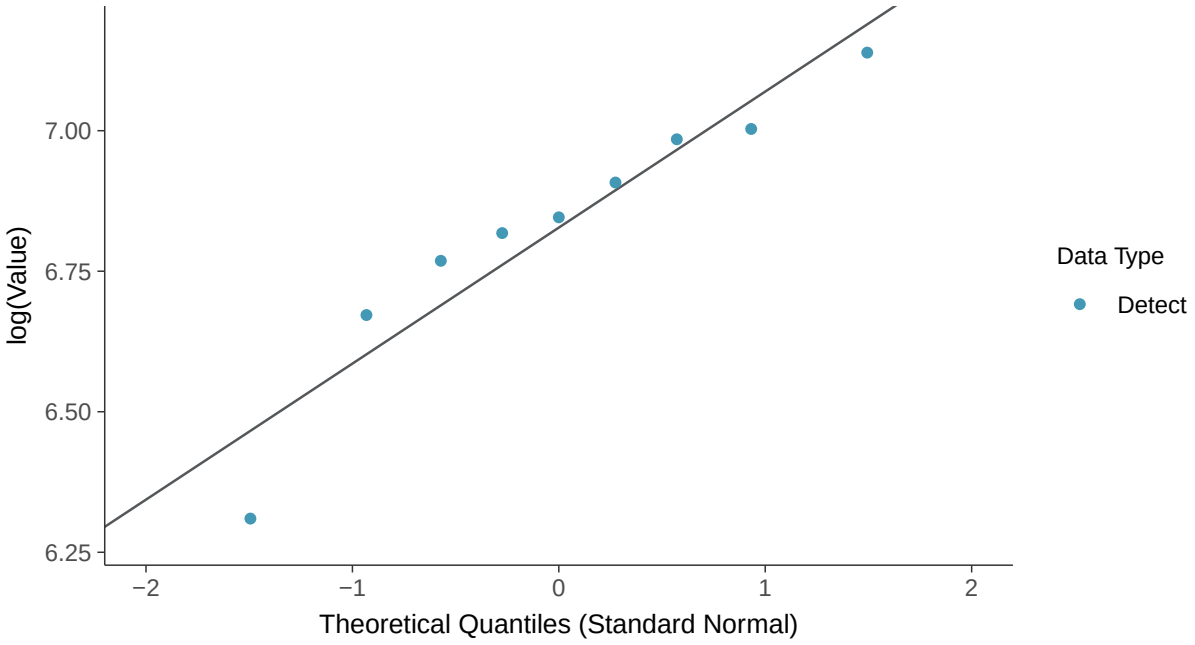
Normal Q-Q plot

Total Dissolved Solids, MW-18C (mg/l)



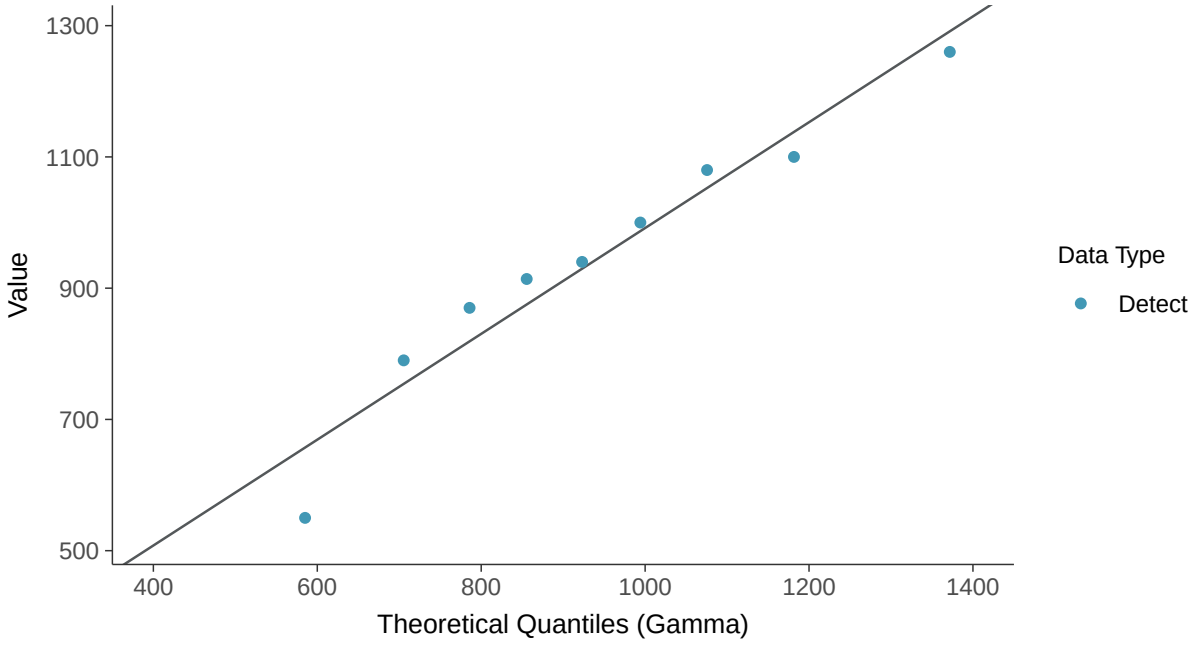
Lognormal Q-Q plot

Total Dissolved Solids, MW-18C (mg/l)



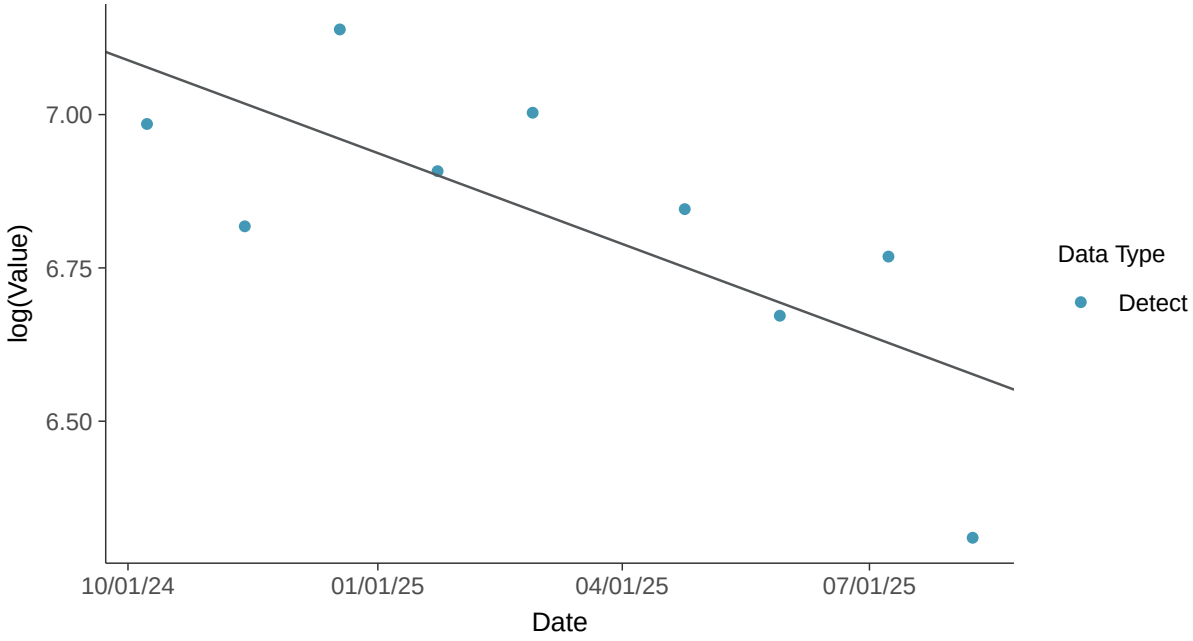
Gamma Q-Q plot

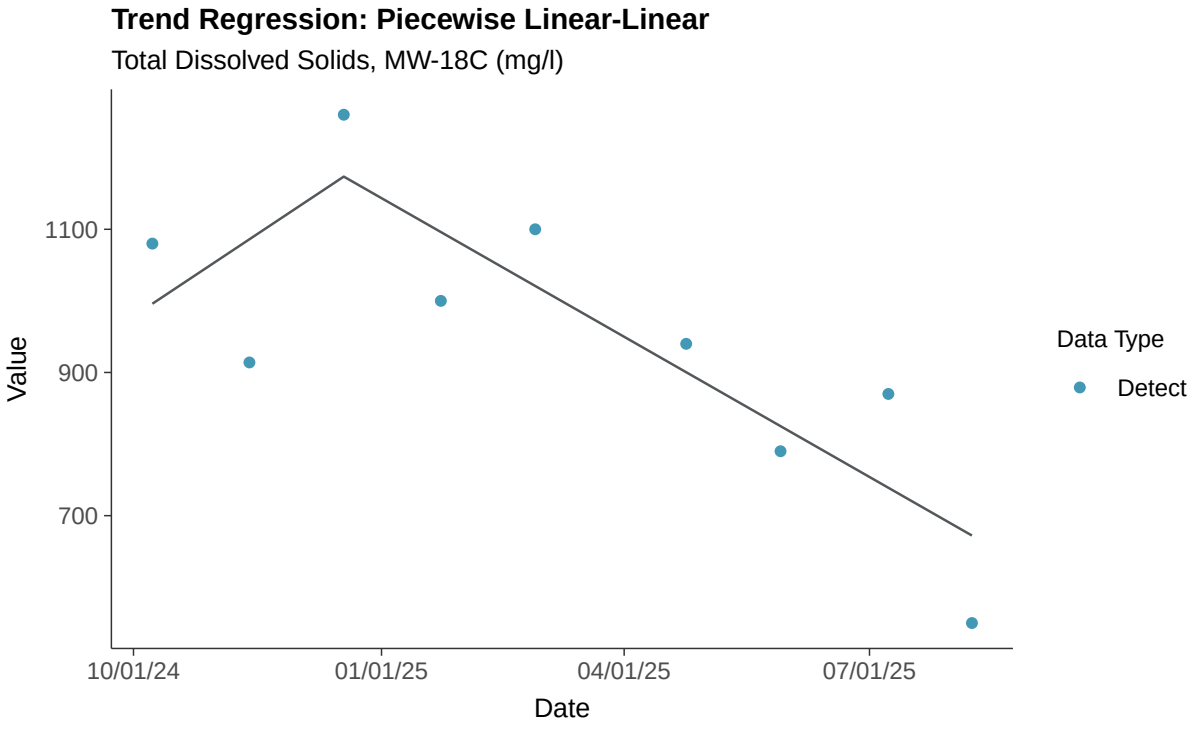
Total Dissolved Solids, MW-18C (mg/l)



Trend Regression: Lognormal MLE

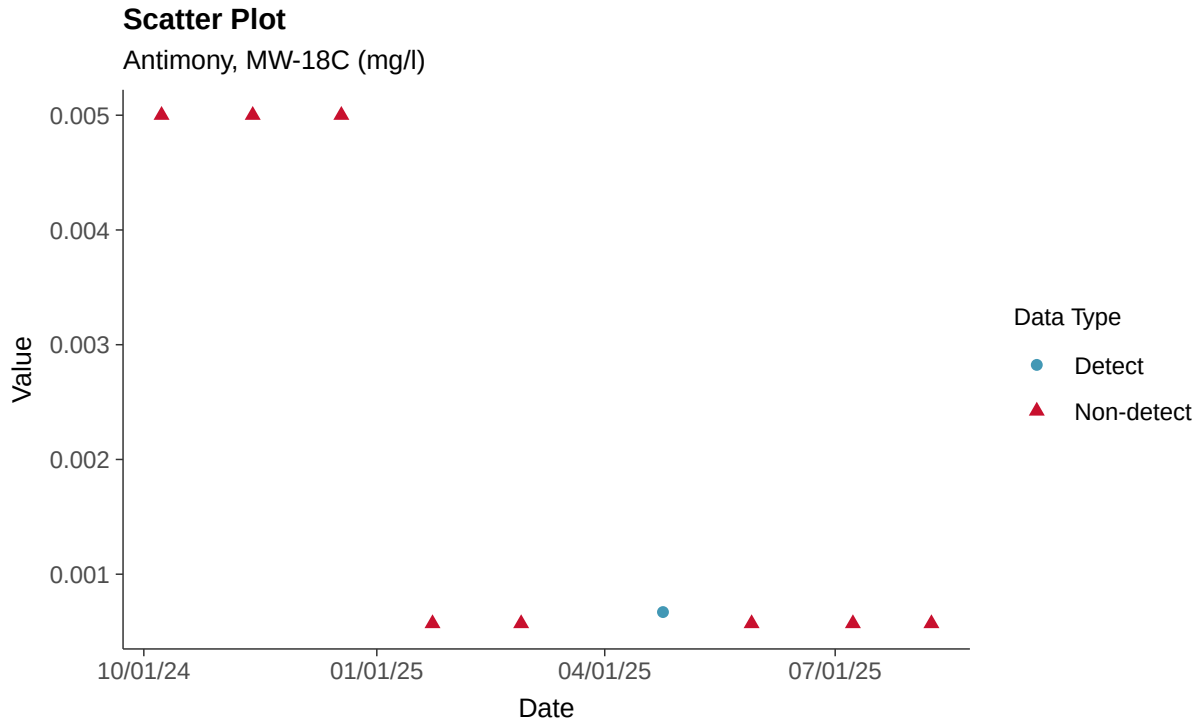
Total Dissolved Solids, MW-18C (mg/l)

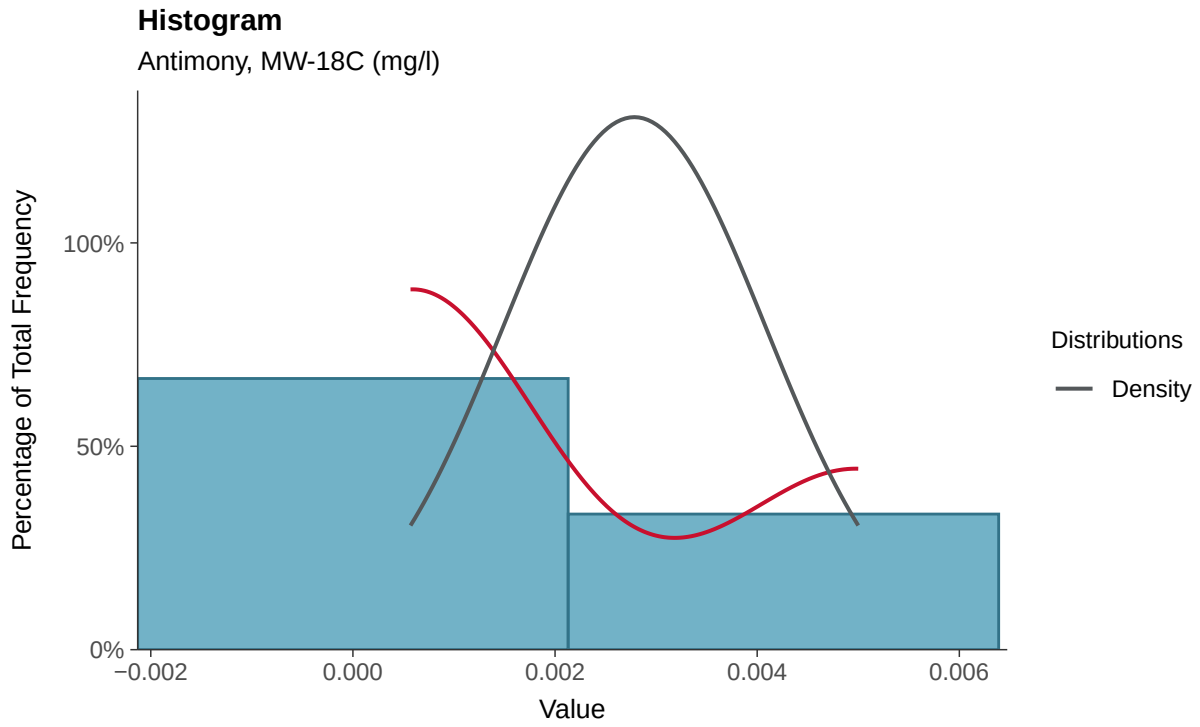



Trend Regression: Piecewise Linear-Linear
Total Dissolved Solids, MW-18C (mg/l)
Value
1100
900
700
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix IV: Antimony, MW-18C

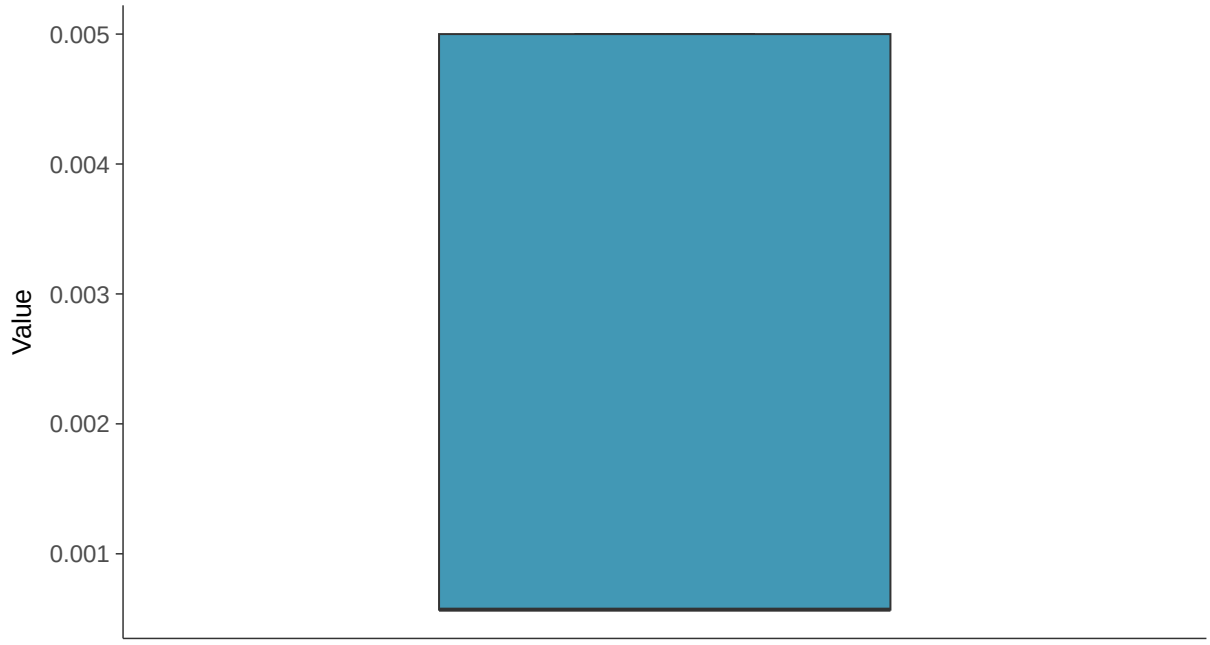
ID: 18_3_101





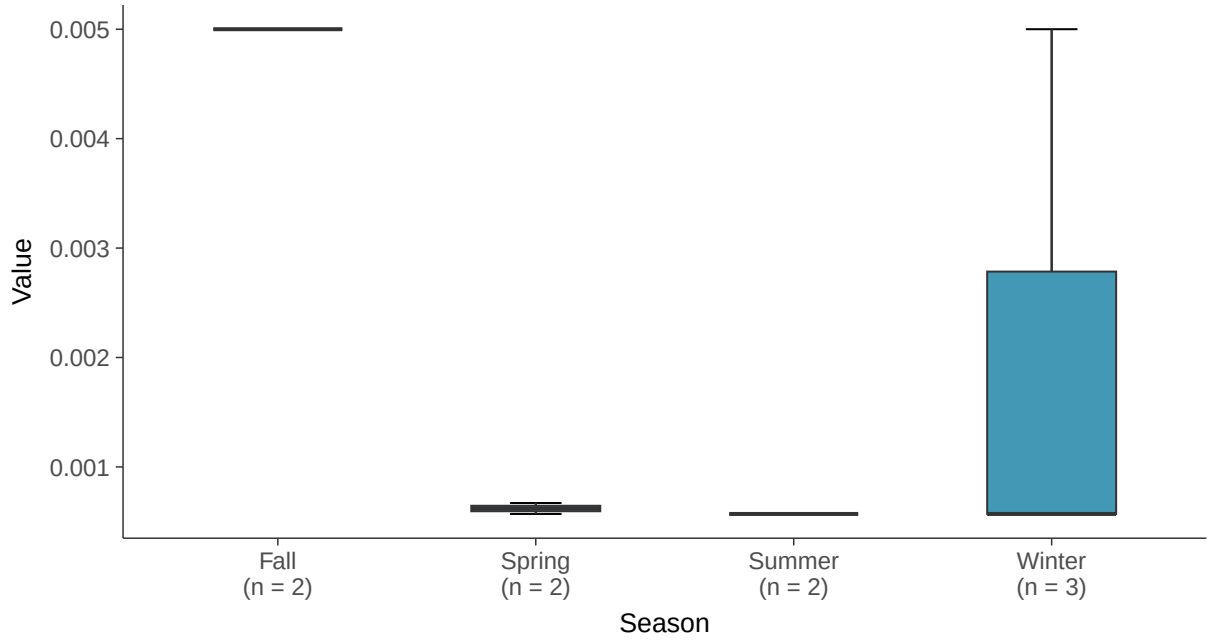
Boxplot

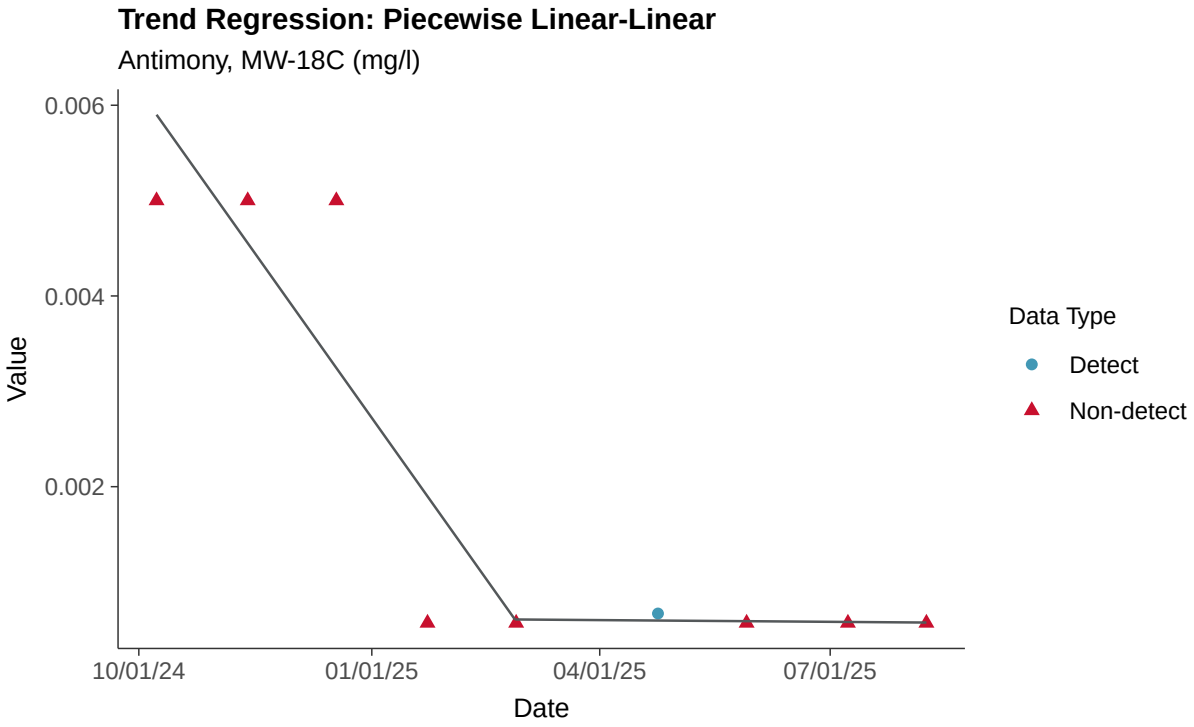
Antimony, MW-18C (mg/l)



Boxplot by Season

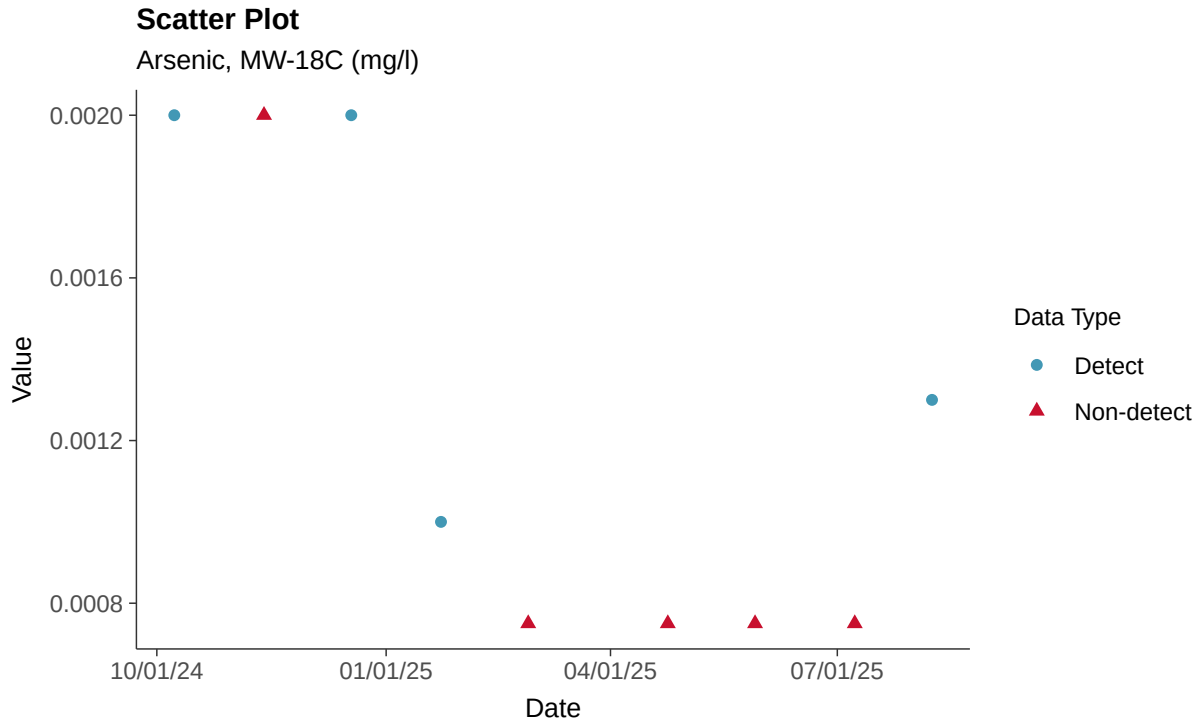
Antimony, MW-18C (mg/l)

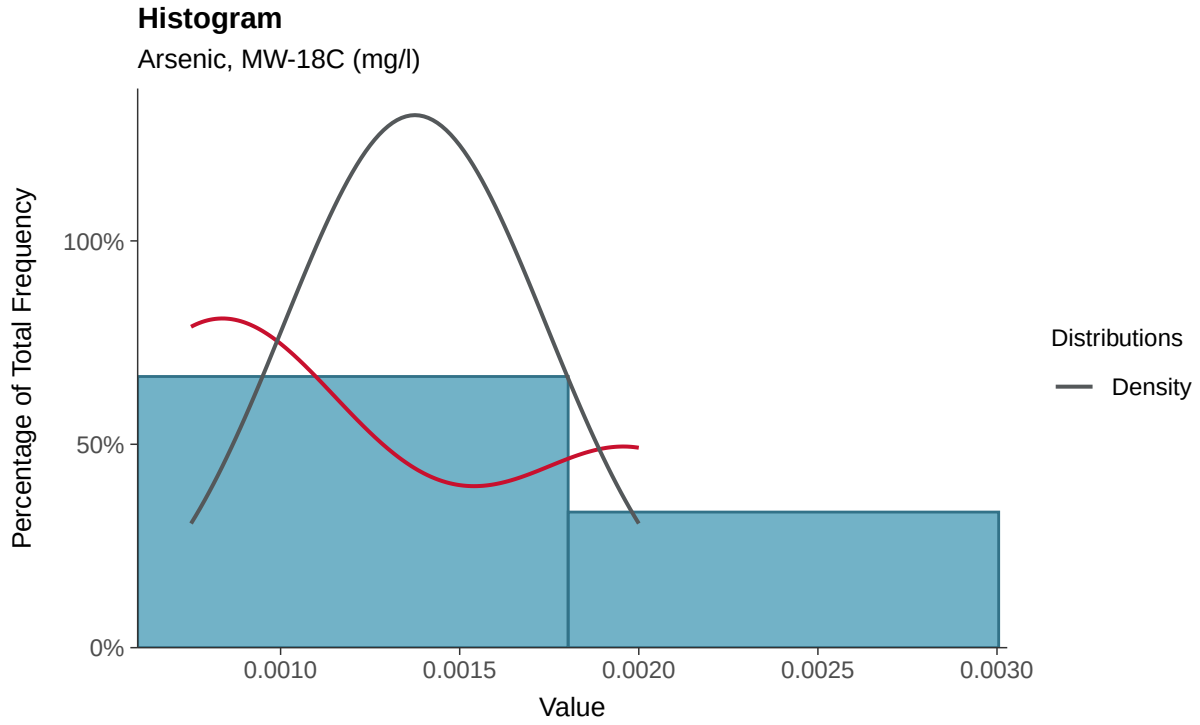



Trend Regression: Piecewise Linear-Linear
Antimony, MW-18C (mg/l)
0.006
0.004
0.002
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Arsenic, MW-18C

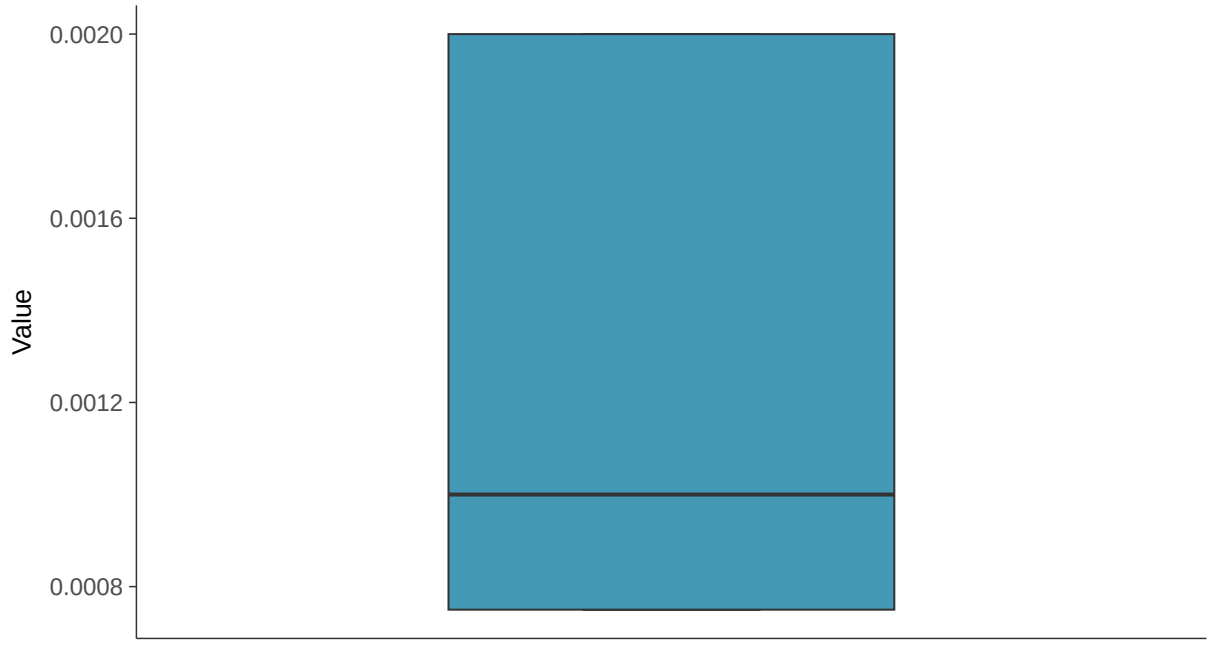
ID: 18_3_102





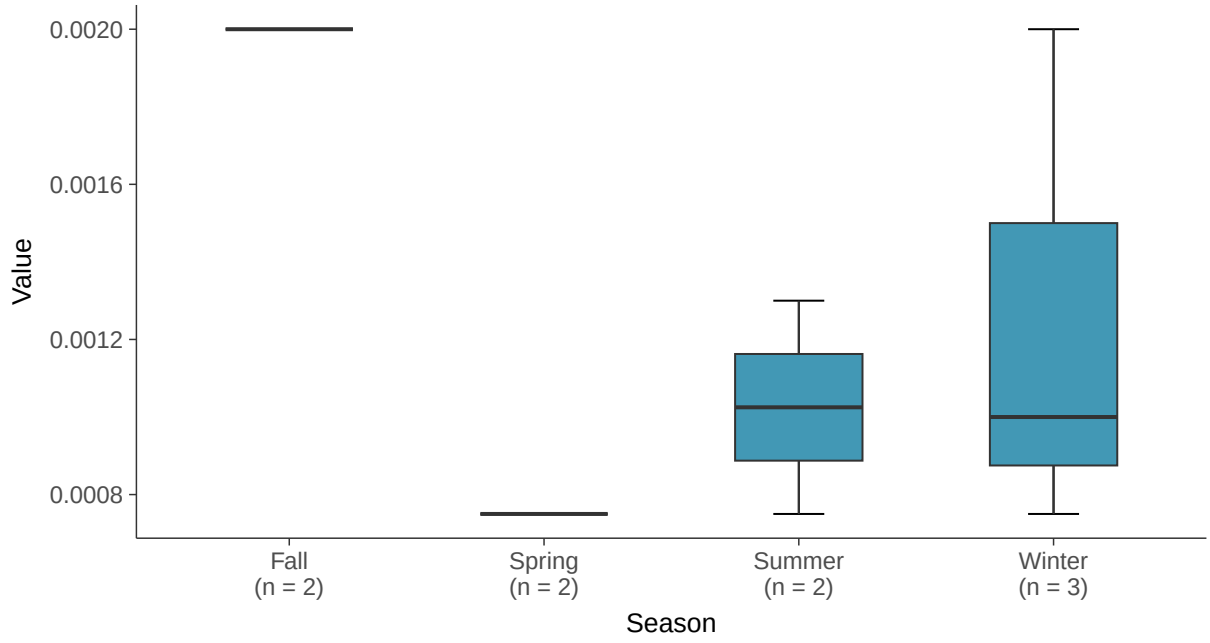
Boxplot

Arsenic, MW-18C (mg/l)



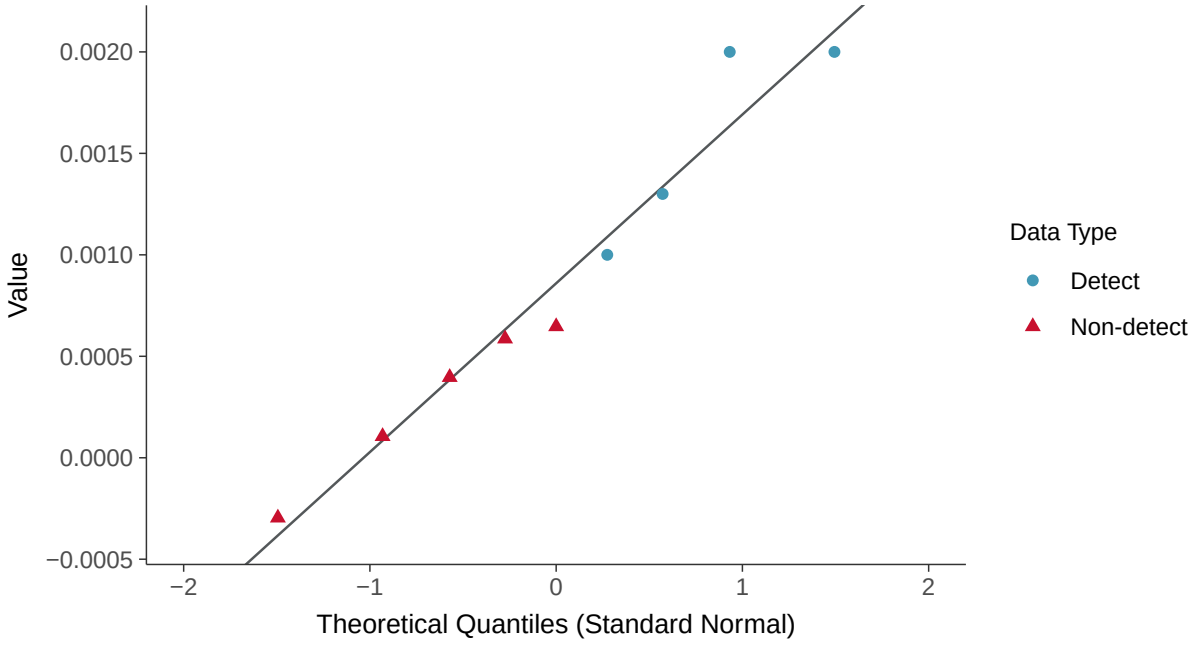
Boxplot by Season

Arsenic, MW-18C (mg/l)



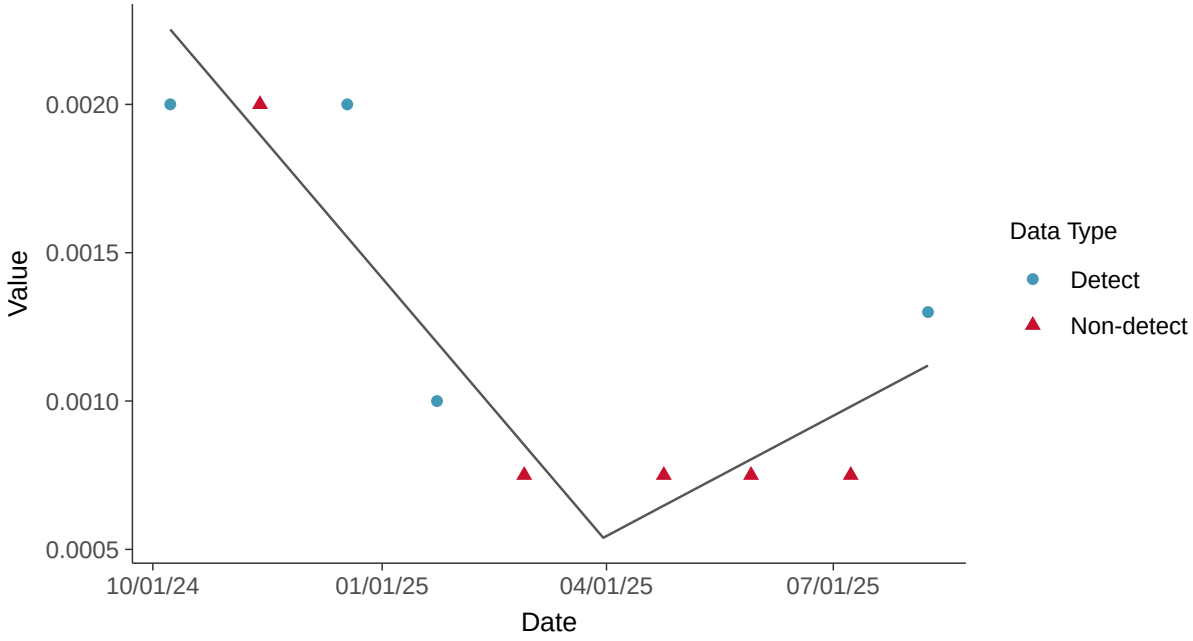
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-18C (mg/l)



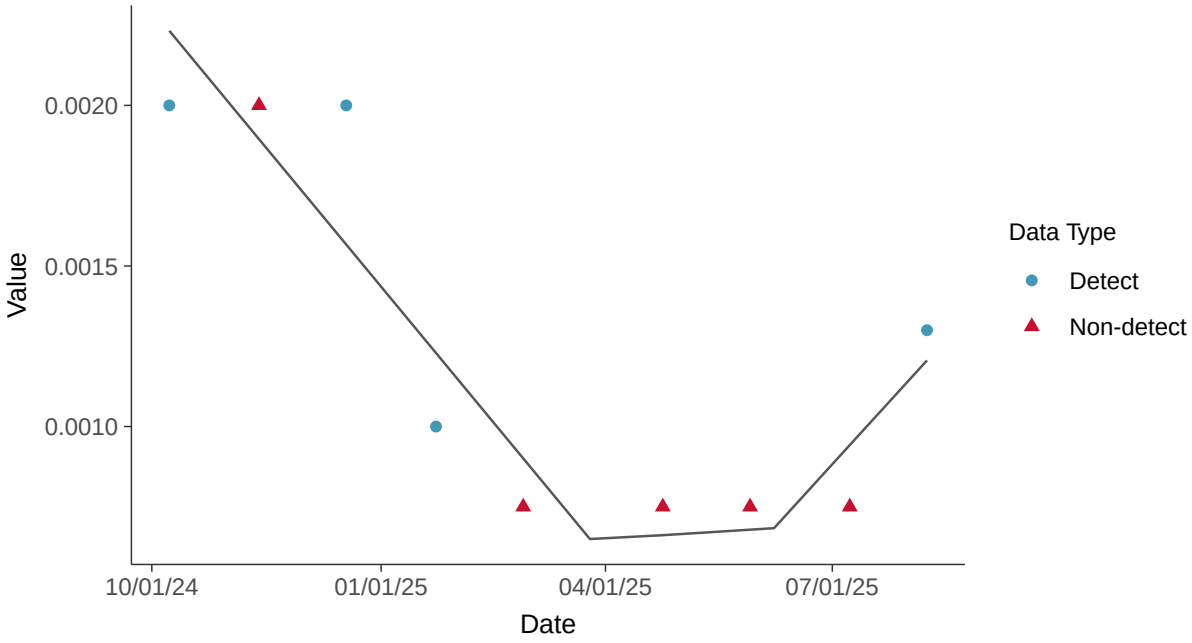
Trend Regression: Piecewise Linear-Linear

Arsenic, MW-18C (mg/l)



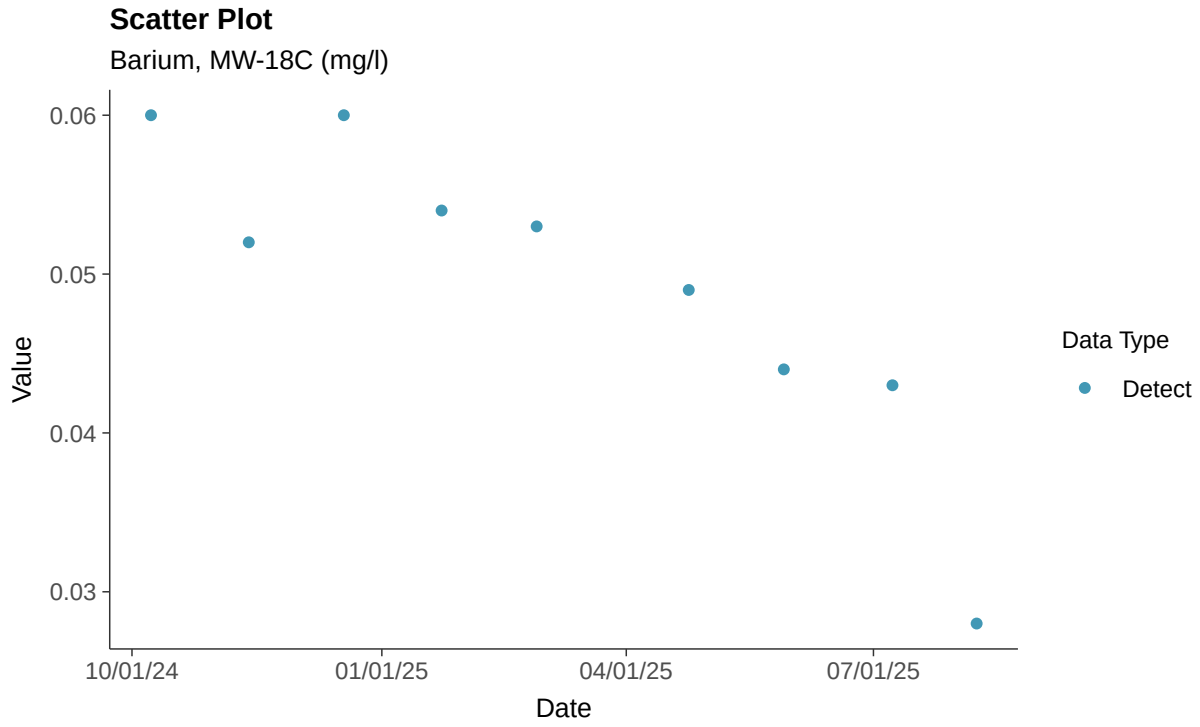
Trend Regression: Piecewise Linear-Linear-Linear

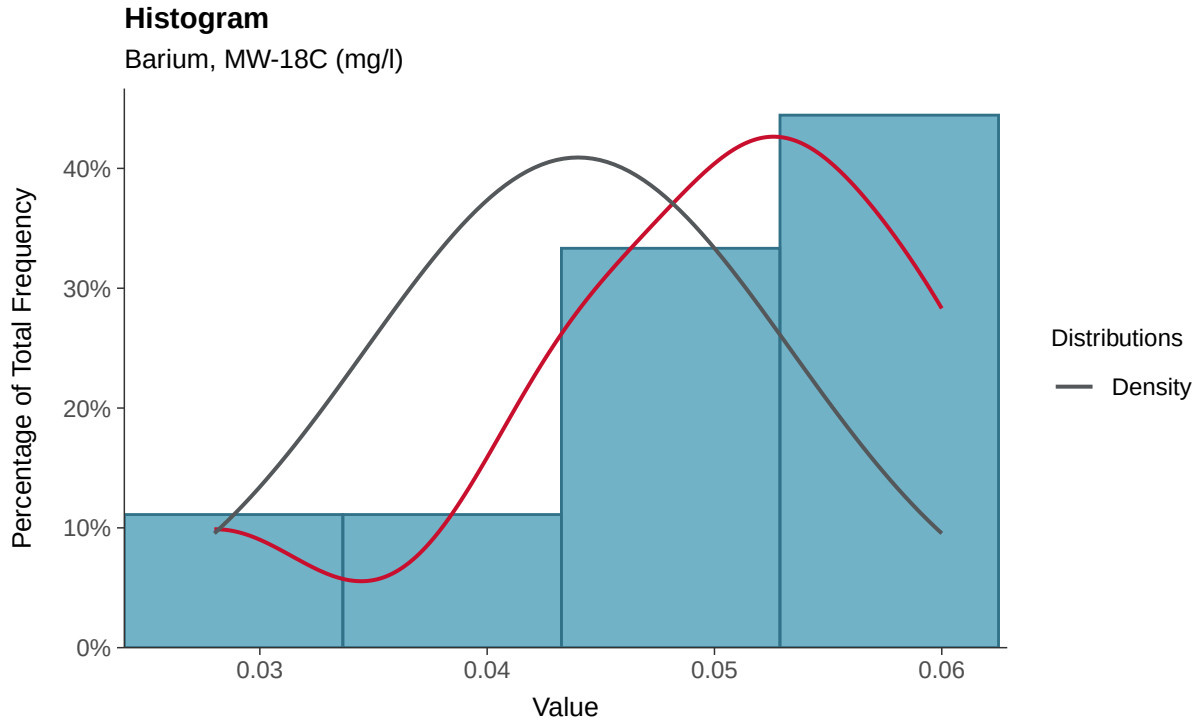
Arsenic, MW-18C (mg/l)



Appendix IV: Barium, MW-18C

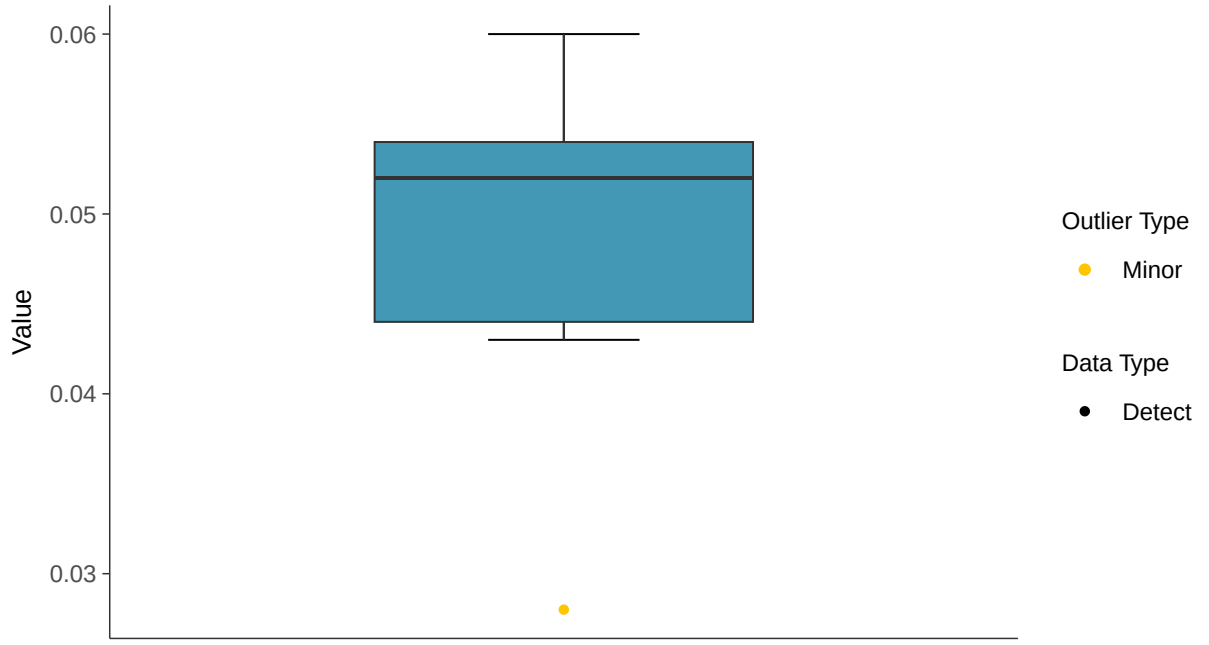
ID: 18_3_103





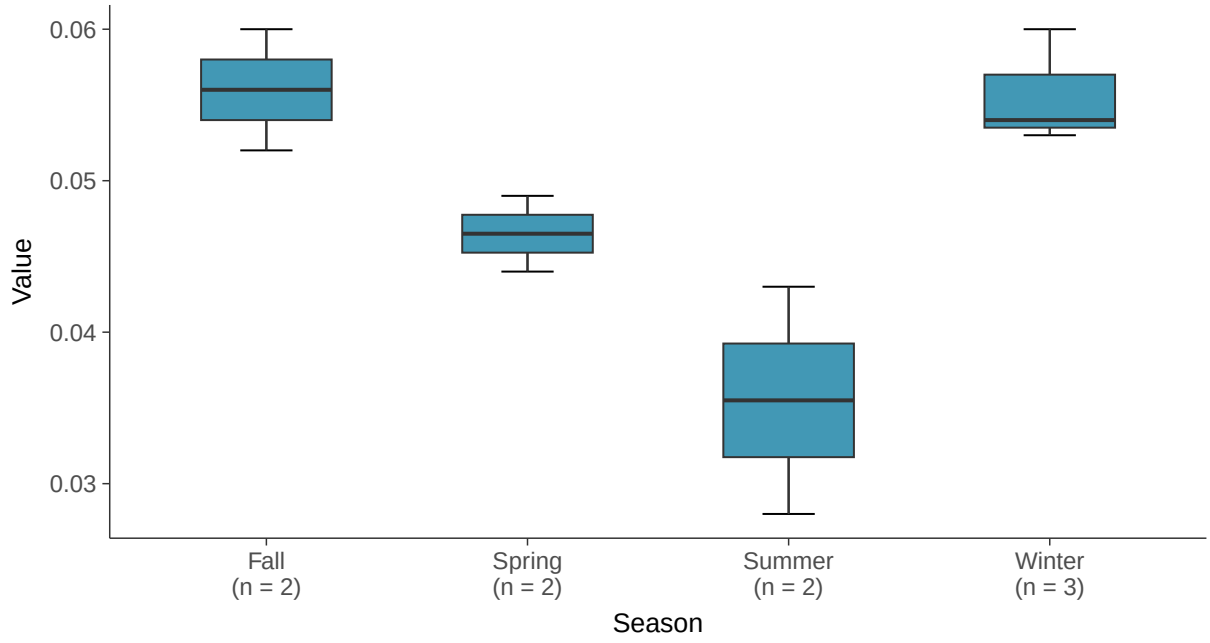
Boxplot

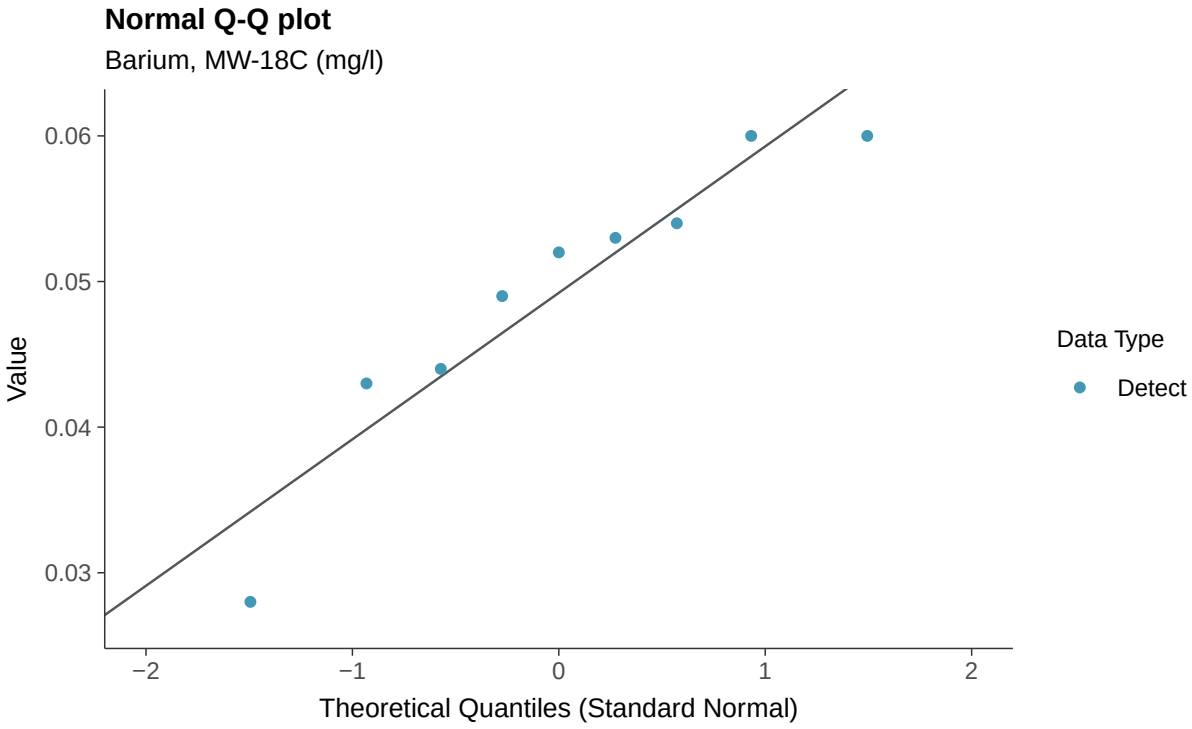
Barium, MW-18C (mg/l)

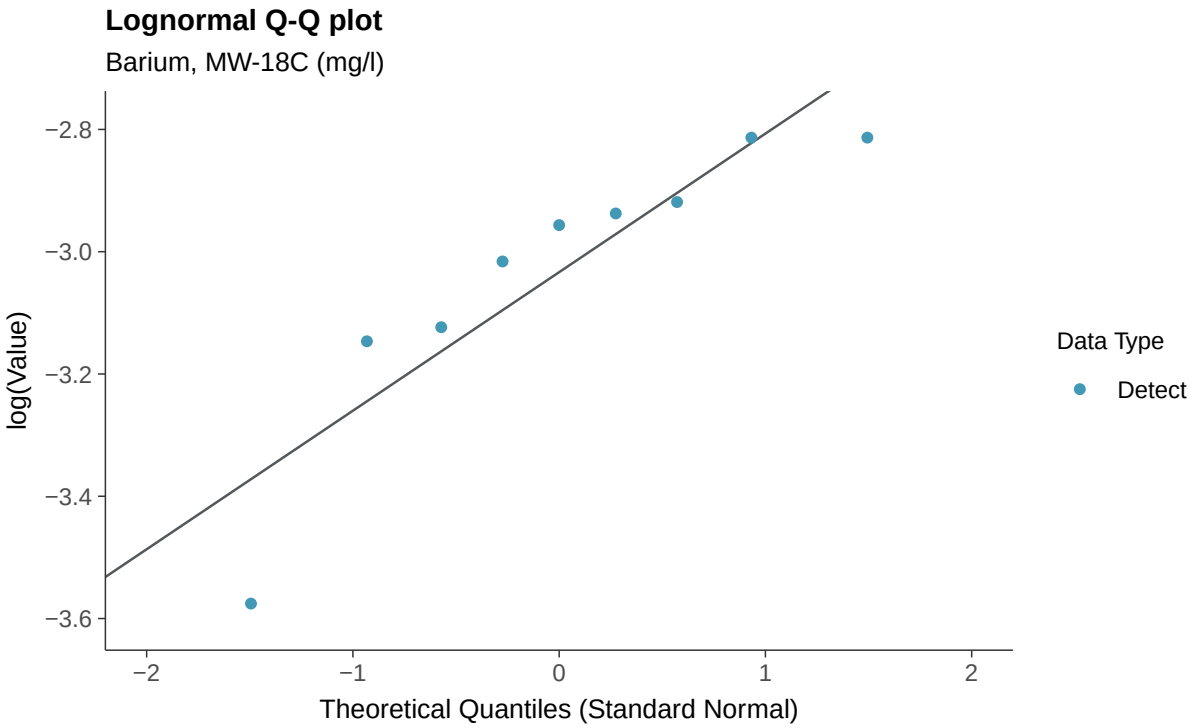


Boxplot by Season

Barium, MW-18C (mg/l)

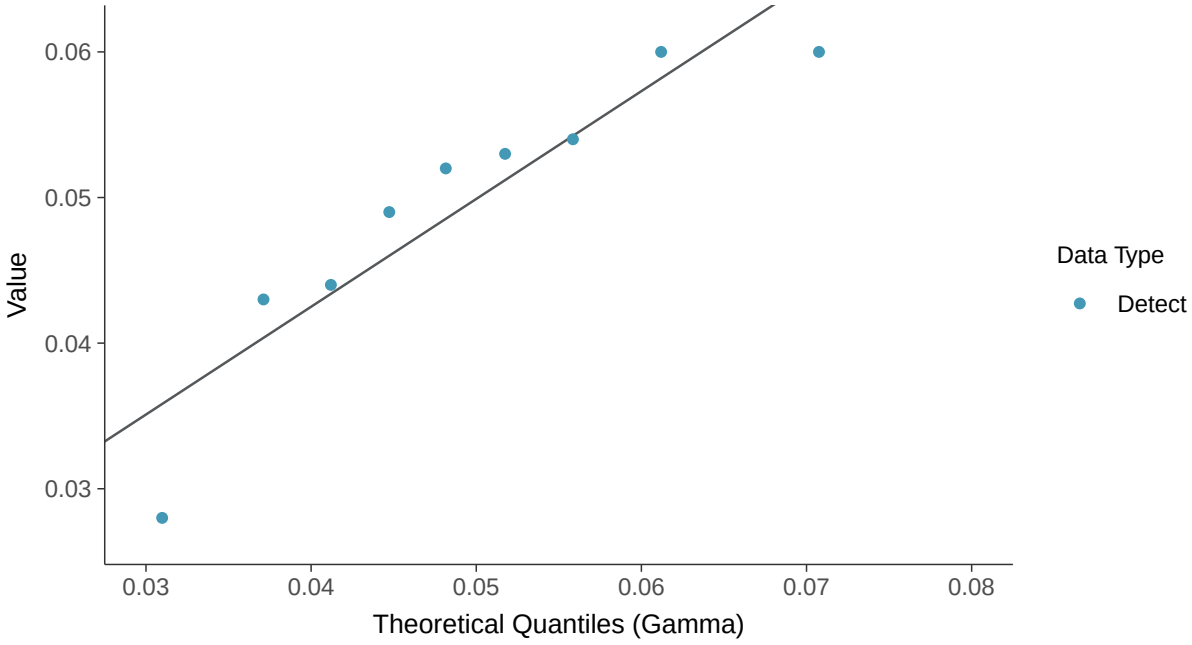



Normal Q-Q plot
Barium, MW-18C (mg/l)
Value
0.06
0.05
0.04
0.03
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect


Lognormal Q-Q plot
Barium, MW-18C (mg/l)
log(Value)
−2.8
−3.0
−3.2
−3.4
−3.6
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect

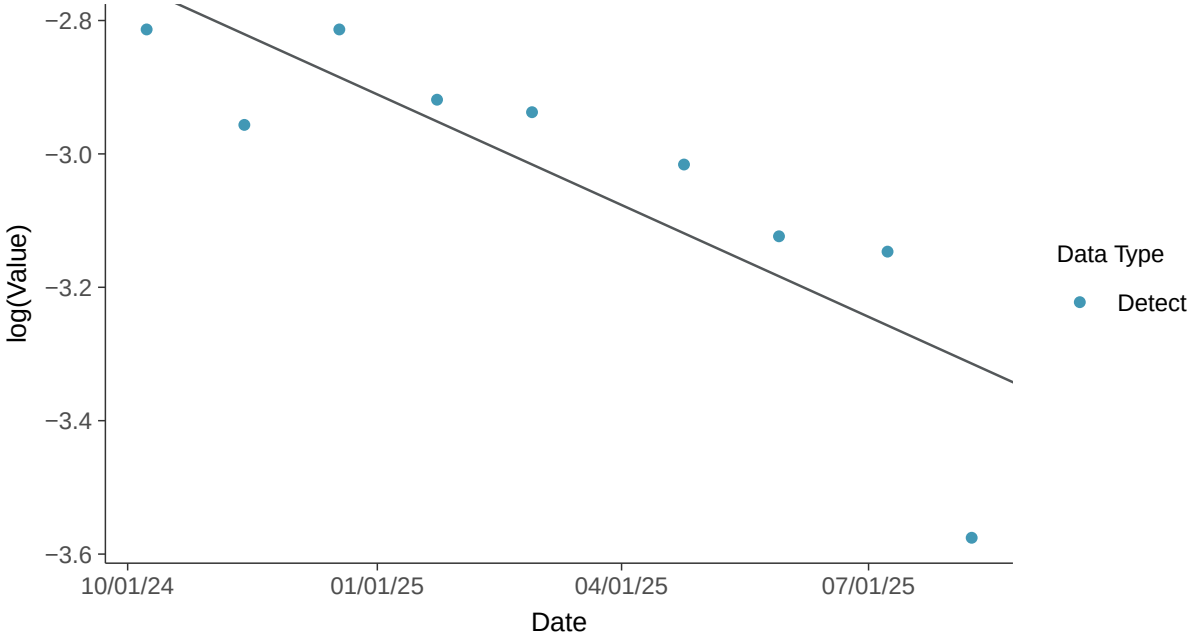
Gamma Q-Q plot

Barium, MW-18C (mg/l)



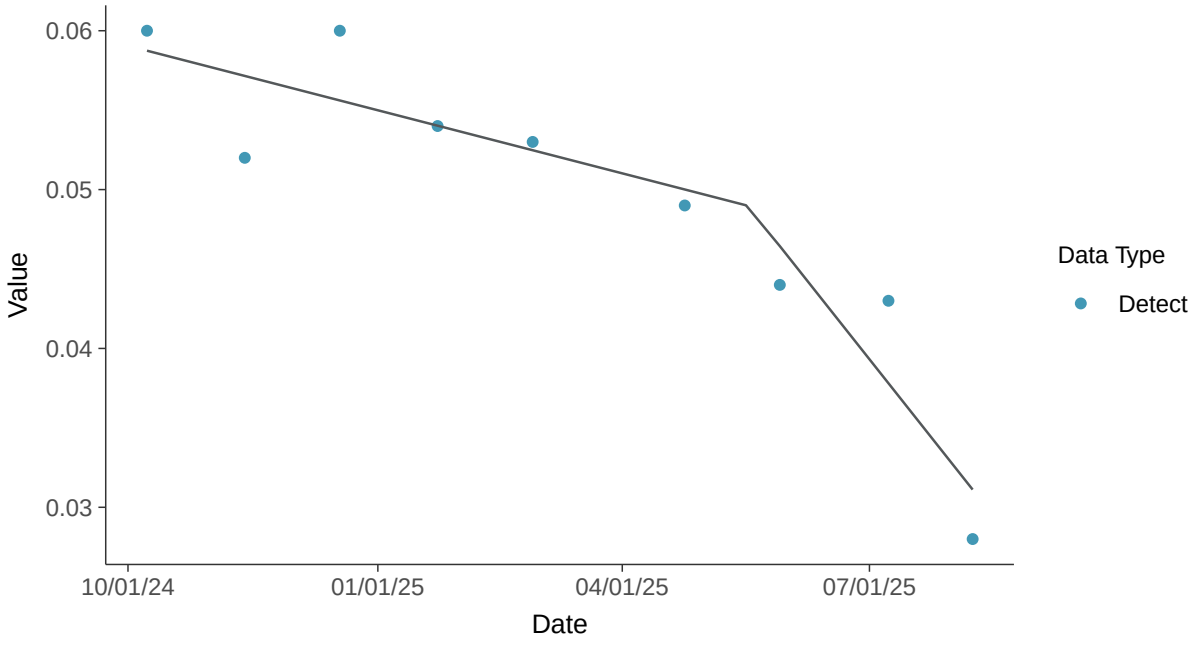
Trend Regression: Lognormal MLE

Barium, MW-18C (mg/l)



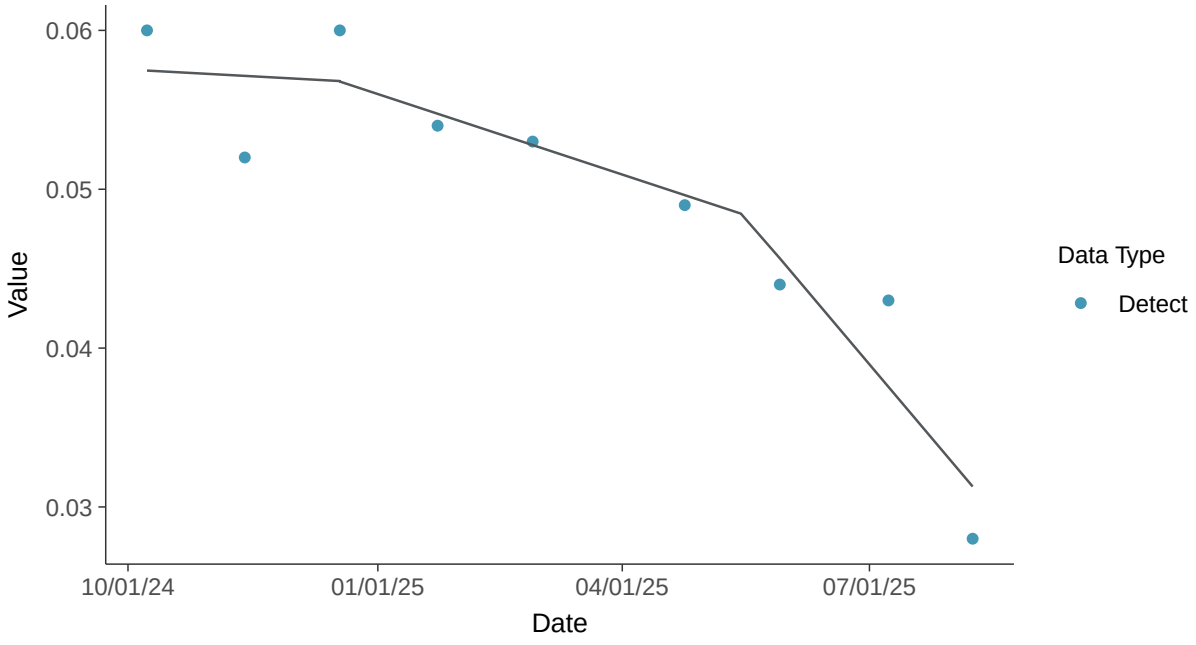
Trend Regression: Piecewise Linear-Linear

Barium, MW-18C (mg/l)



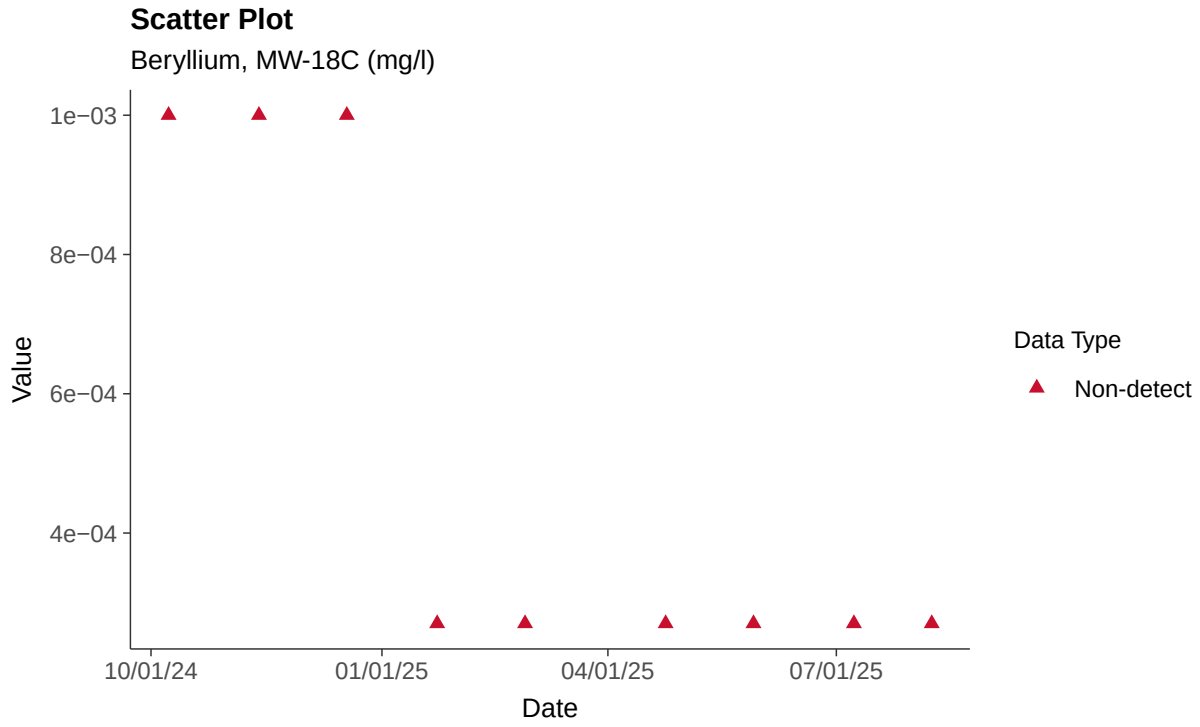
Trend Regression: Piecewise Linear-Linear-Linear

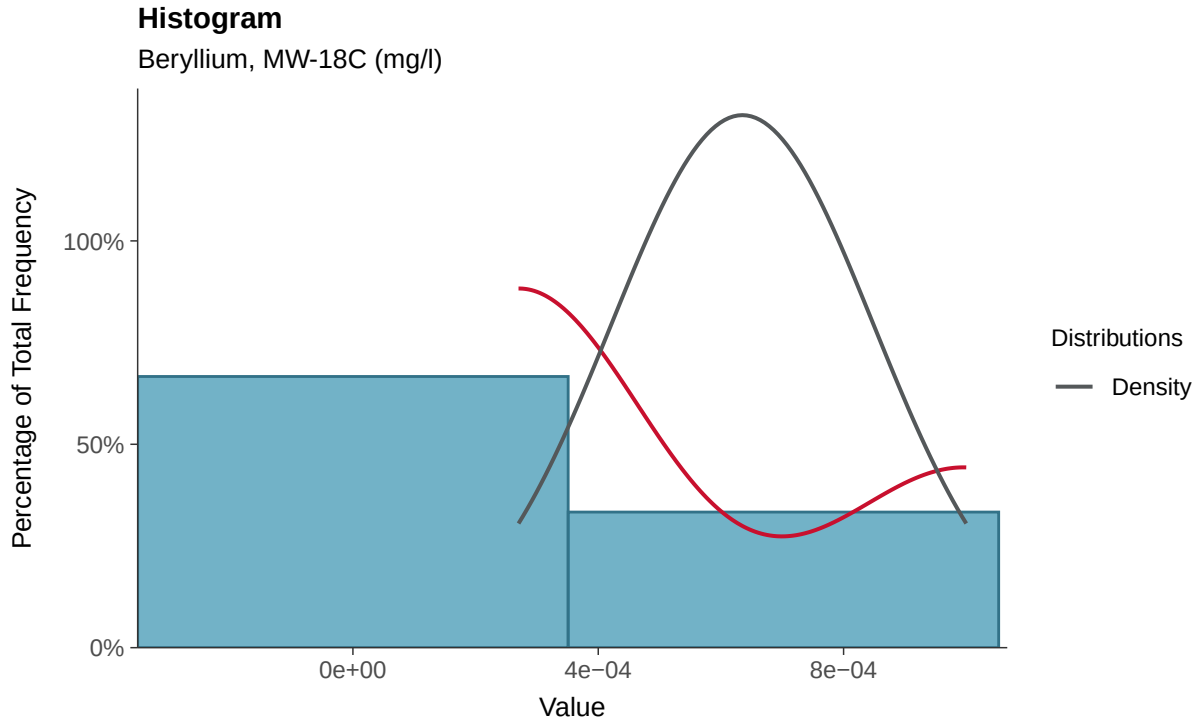
Barium, MW-18C (mg/l)



Appendix IV: Beryllium, MW-18C

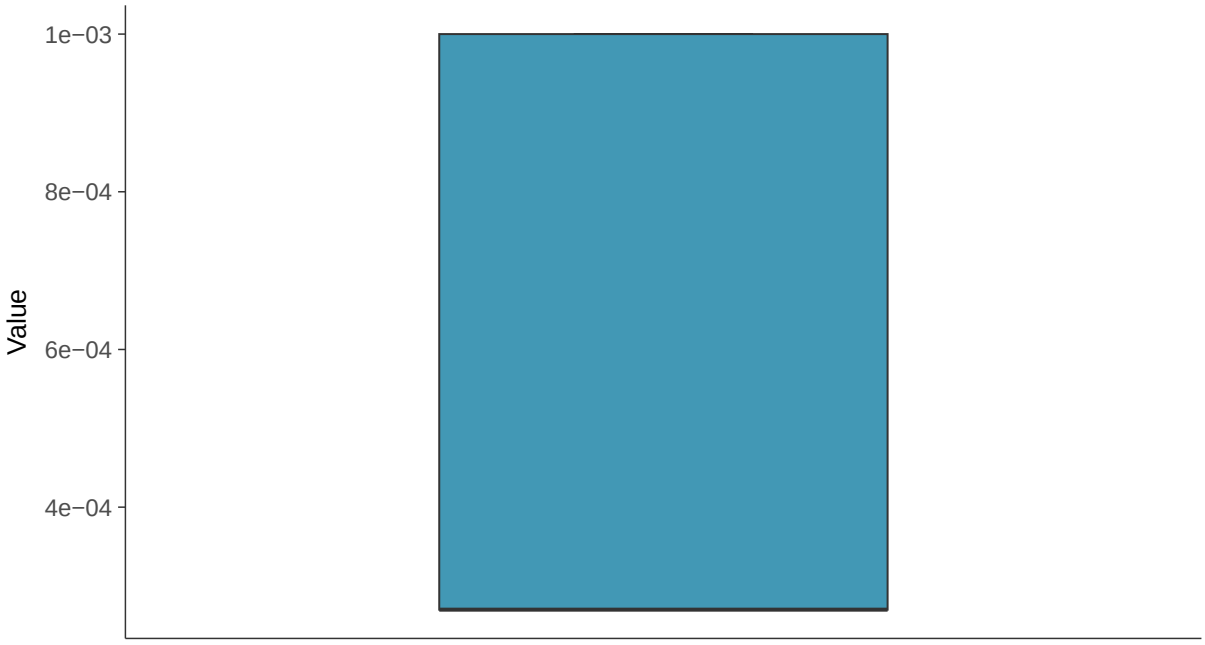
ID: 18_3_104





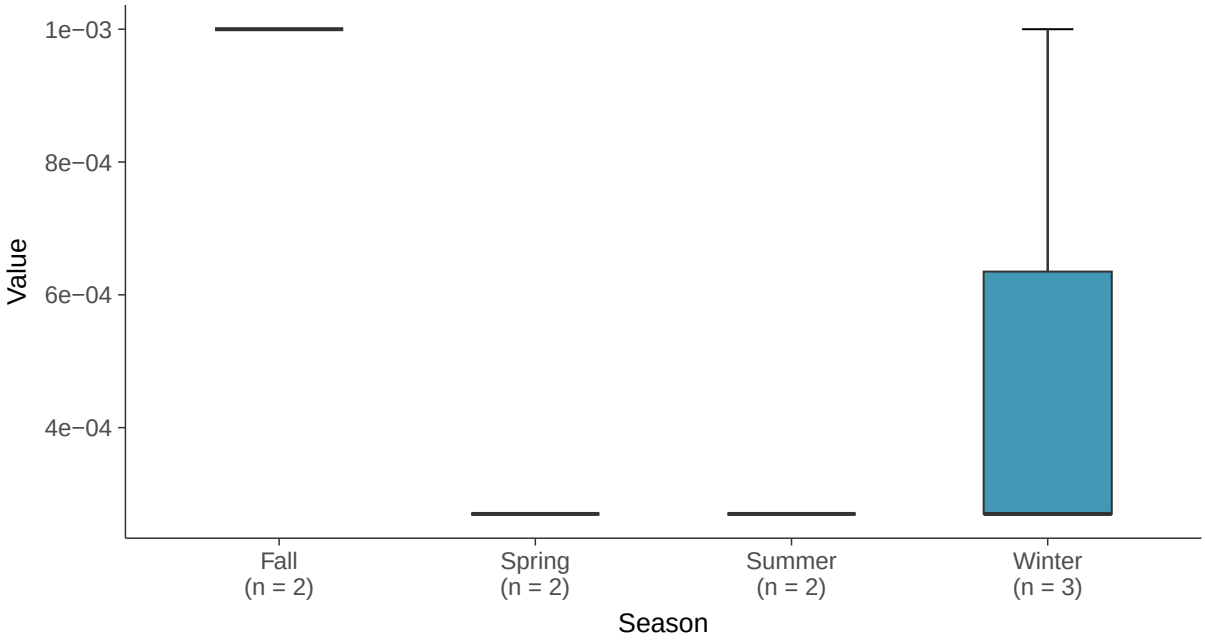
Boxplot

Beryllium, MW-18C (mg/l)



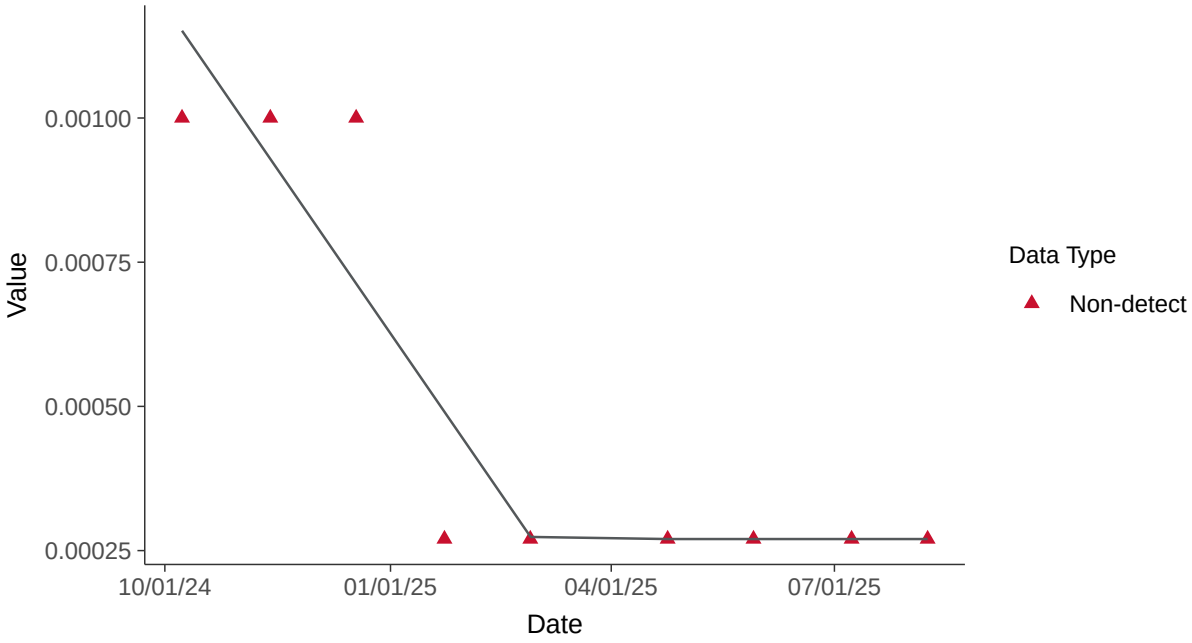
Boxplot by Season

Beryllium, MW-18C (mg/l)



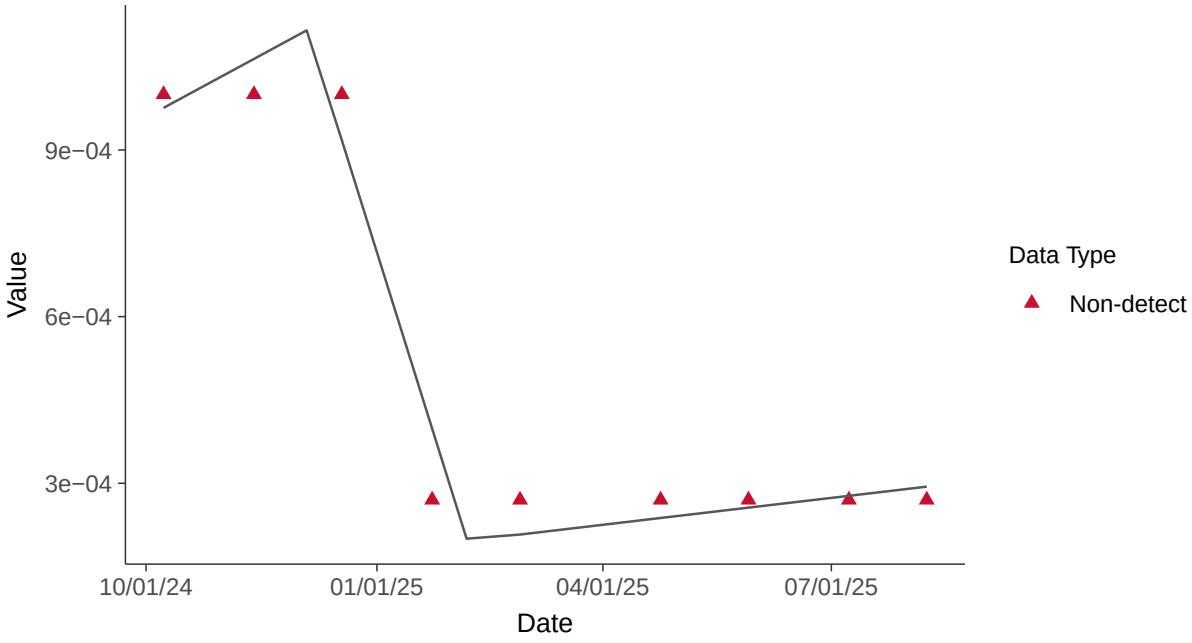
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-18C (mg/l)



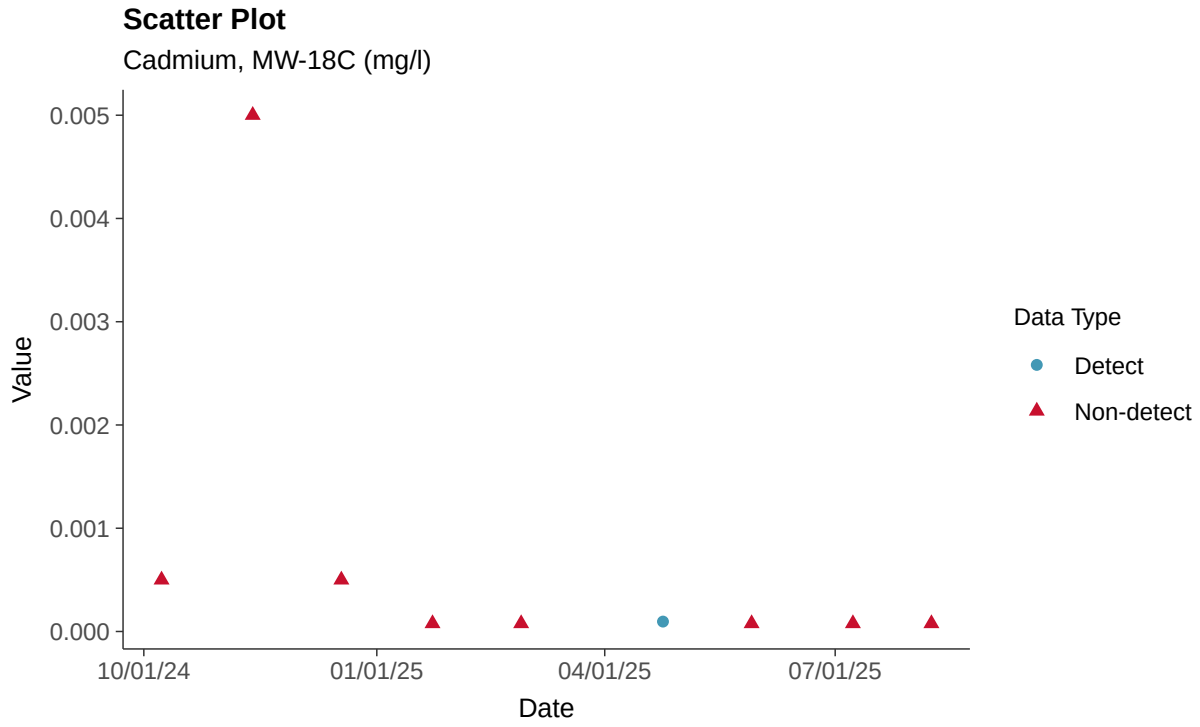
Trend Regression: Piecewise Linear-Linear-Linear

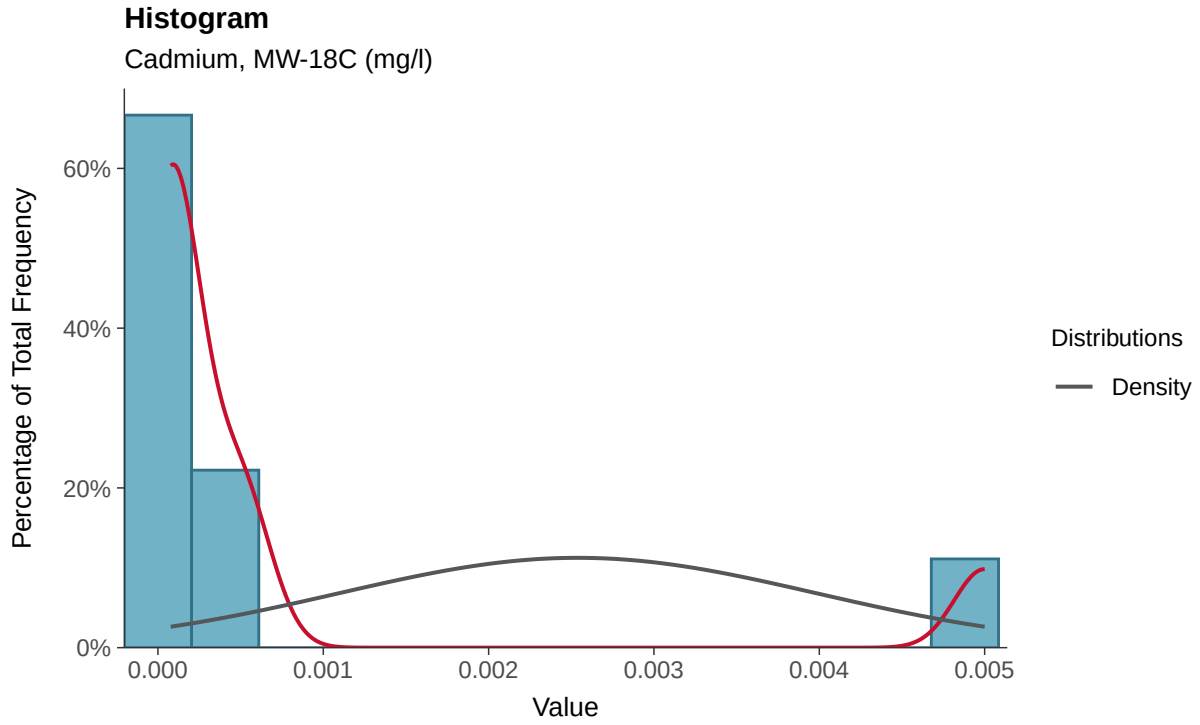
Beryllium, MW-18C (mg/l)



Appendix IV: Cadmium, MW-18C

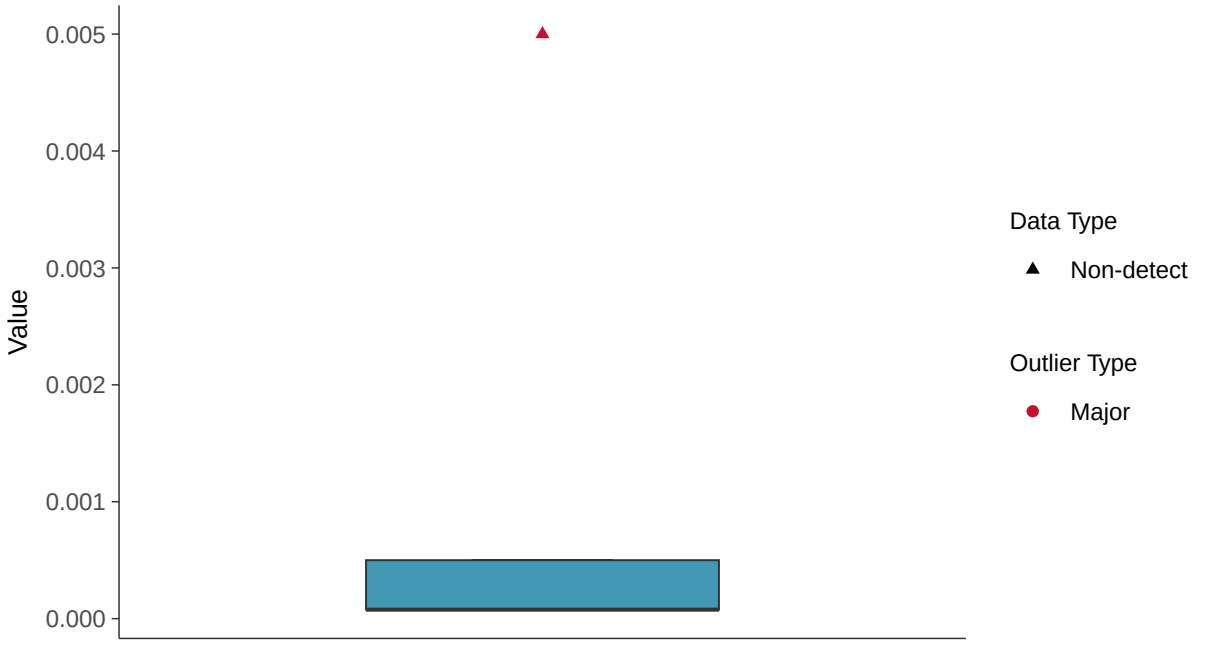
ID: 18_3_106





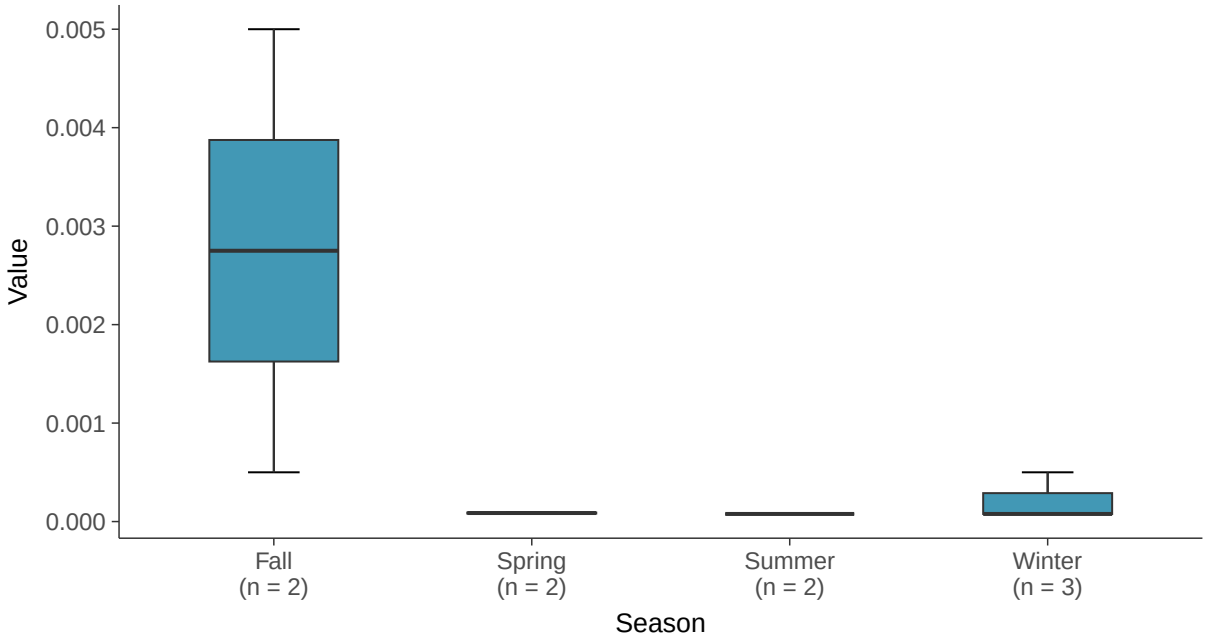
Boxplot

Cadmium, MW-18C (mg/l)



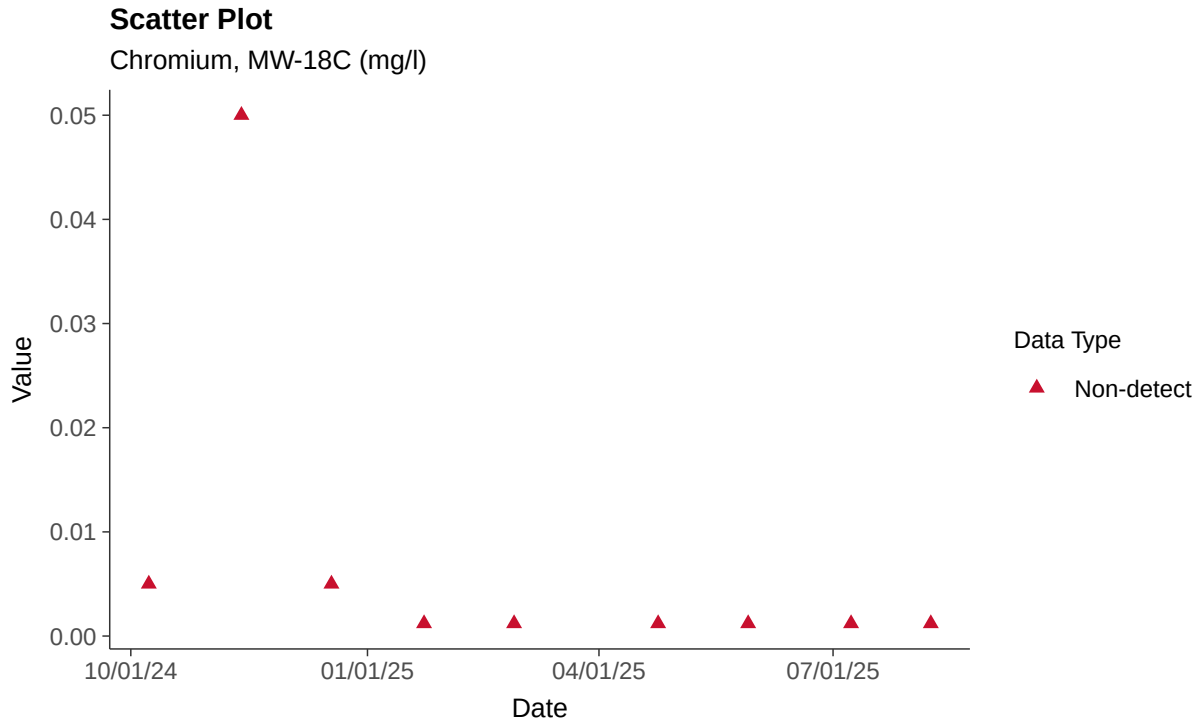
Boxplot by Season

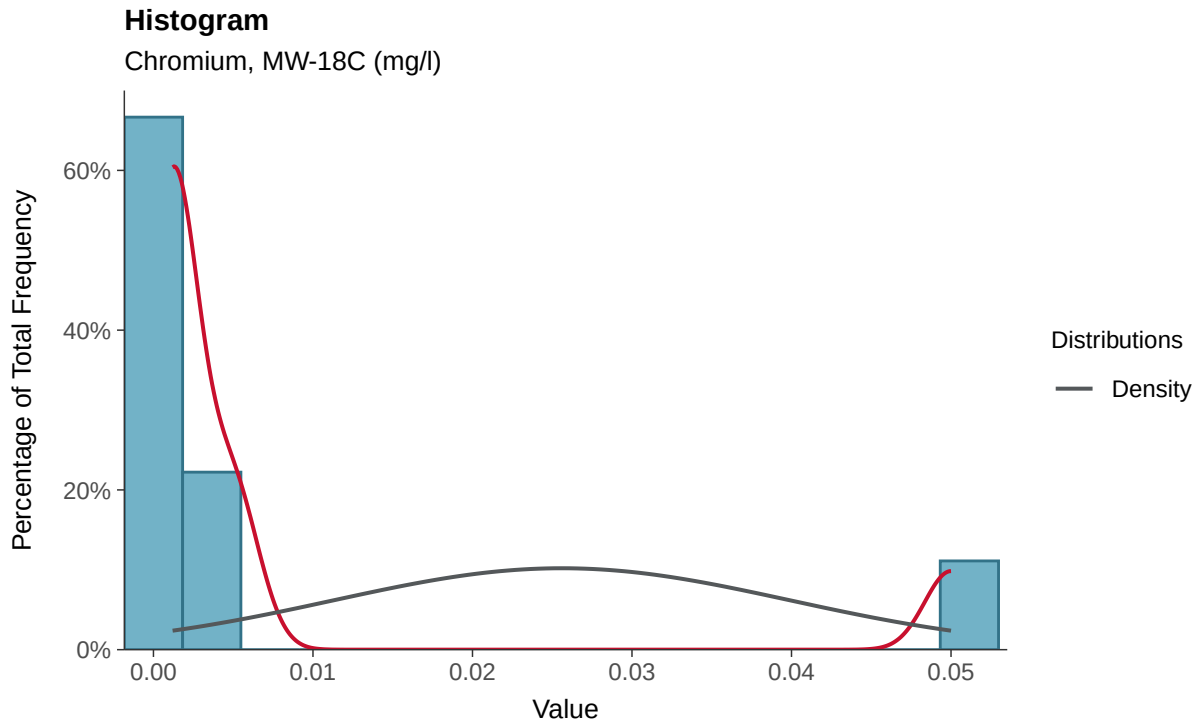
Cadmium, MW-18C (mg/l)



Appendix IV: Chromium, MW-18C

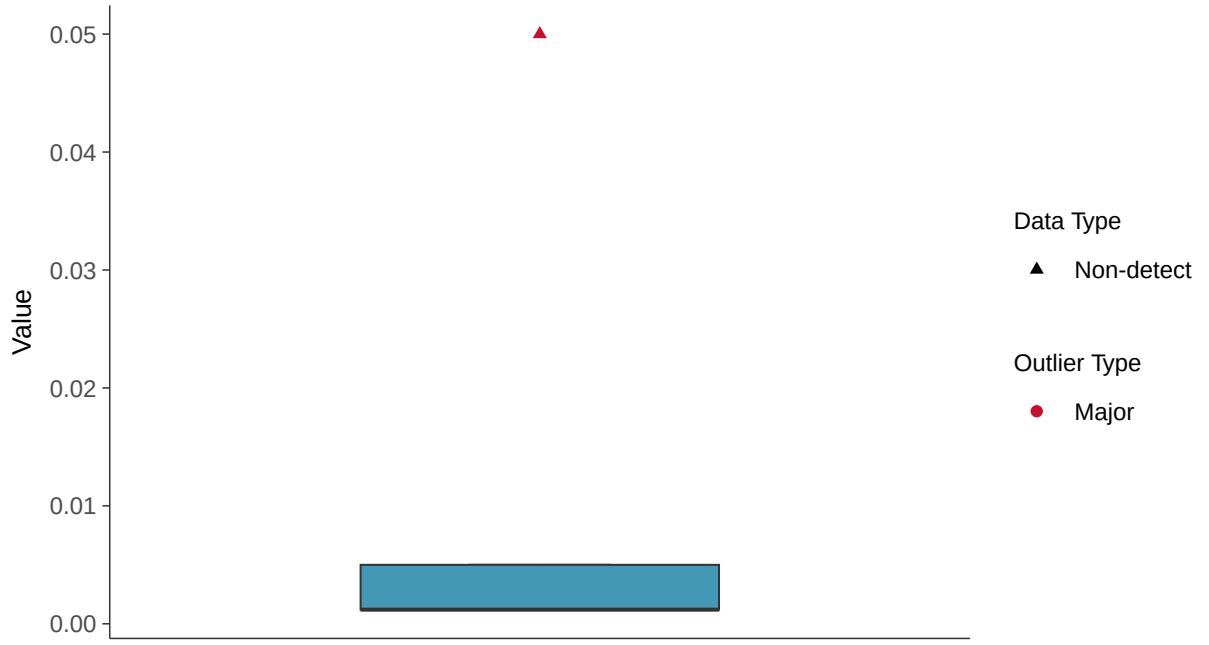
ID: 18_3_109





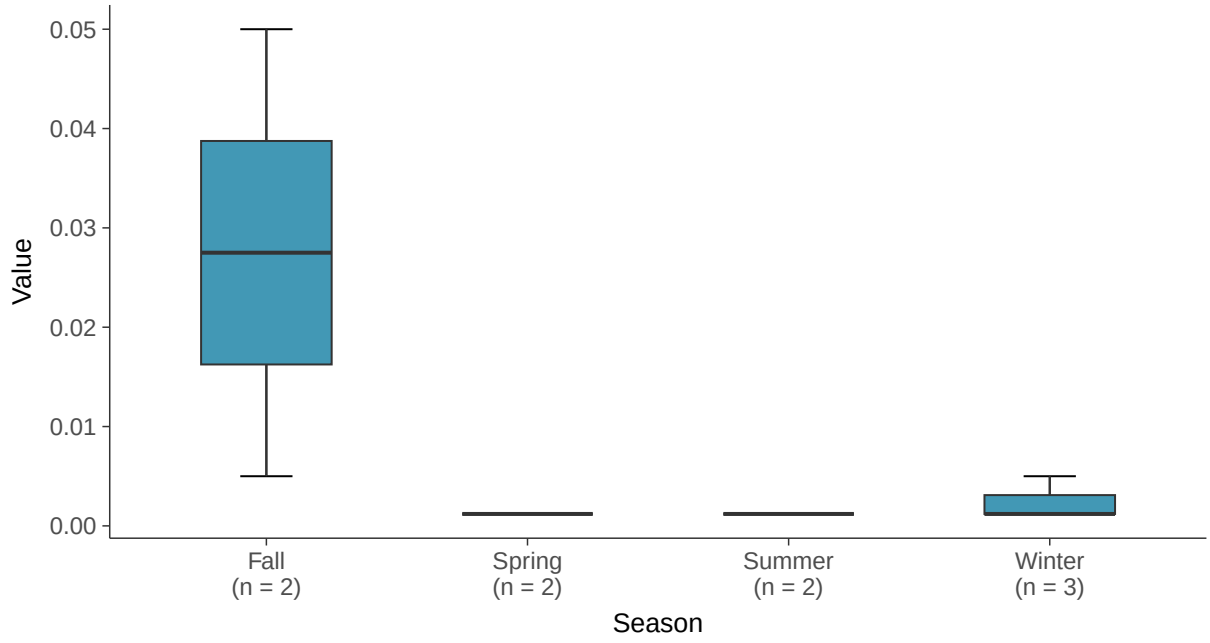
Boxplot

Chromium, MW-18C (mg/l)



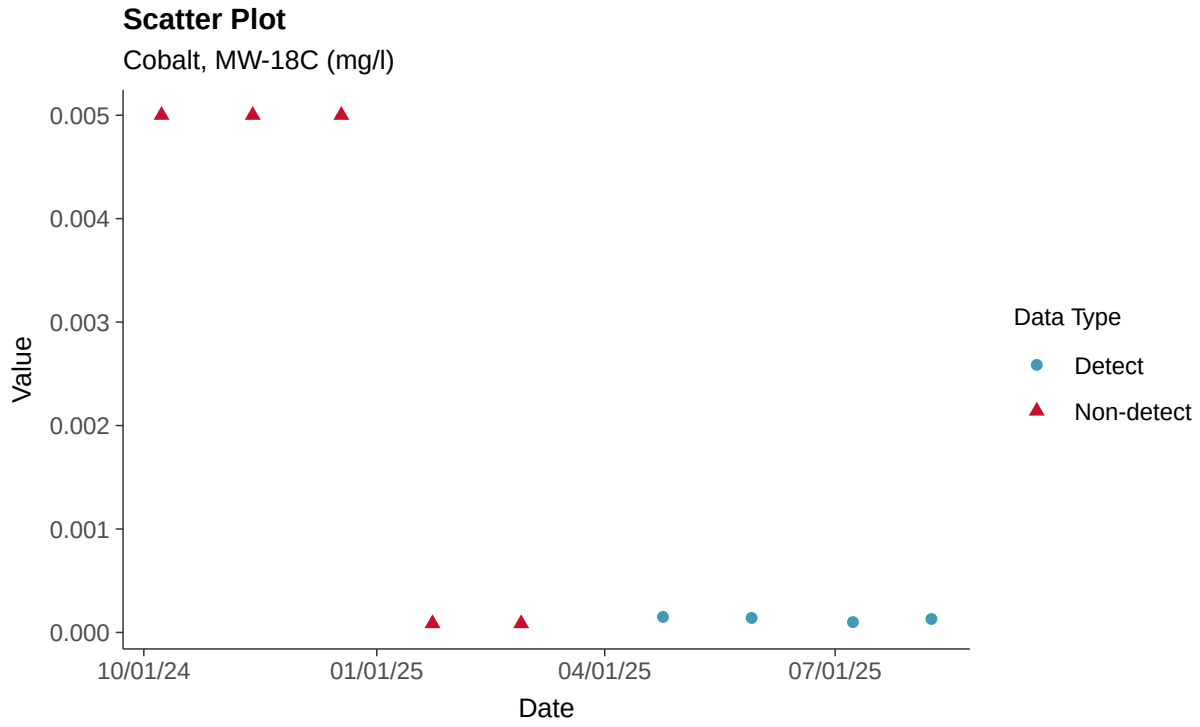
Boxplot by Season

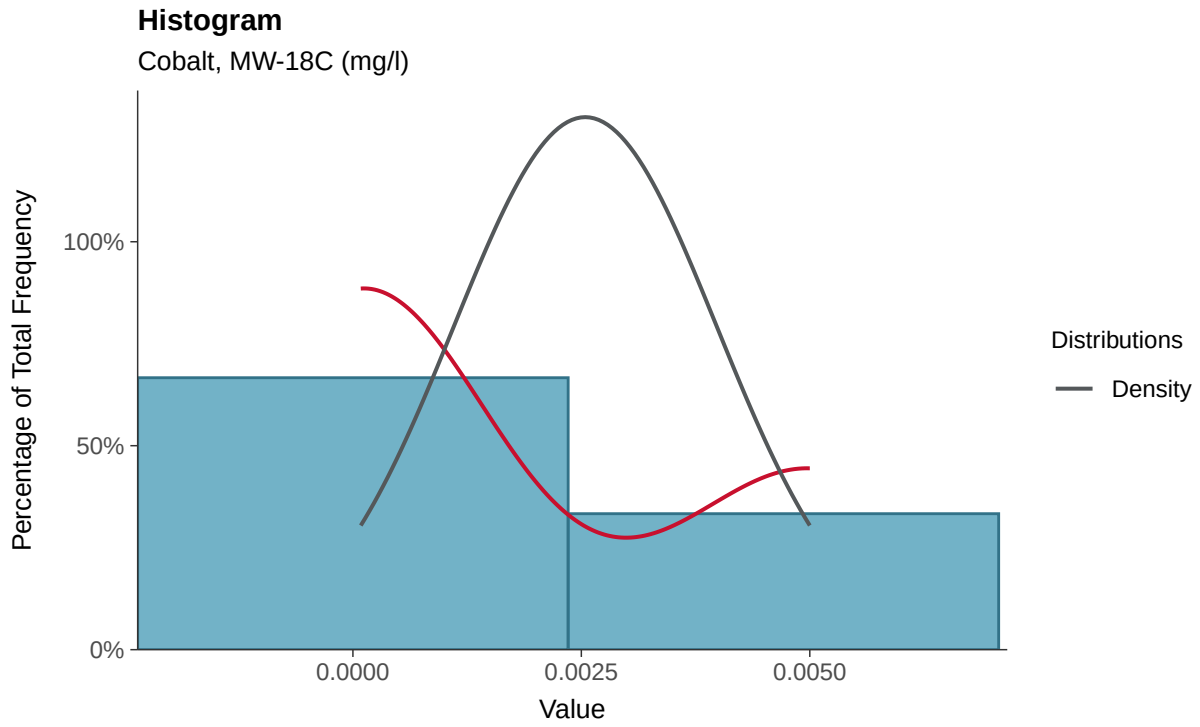
Chromium, MW-18C (mg/l)



Appendix IV: Cobalt, MW-18C

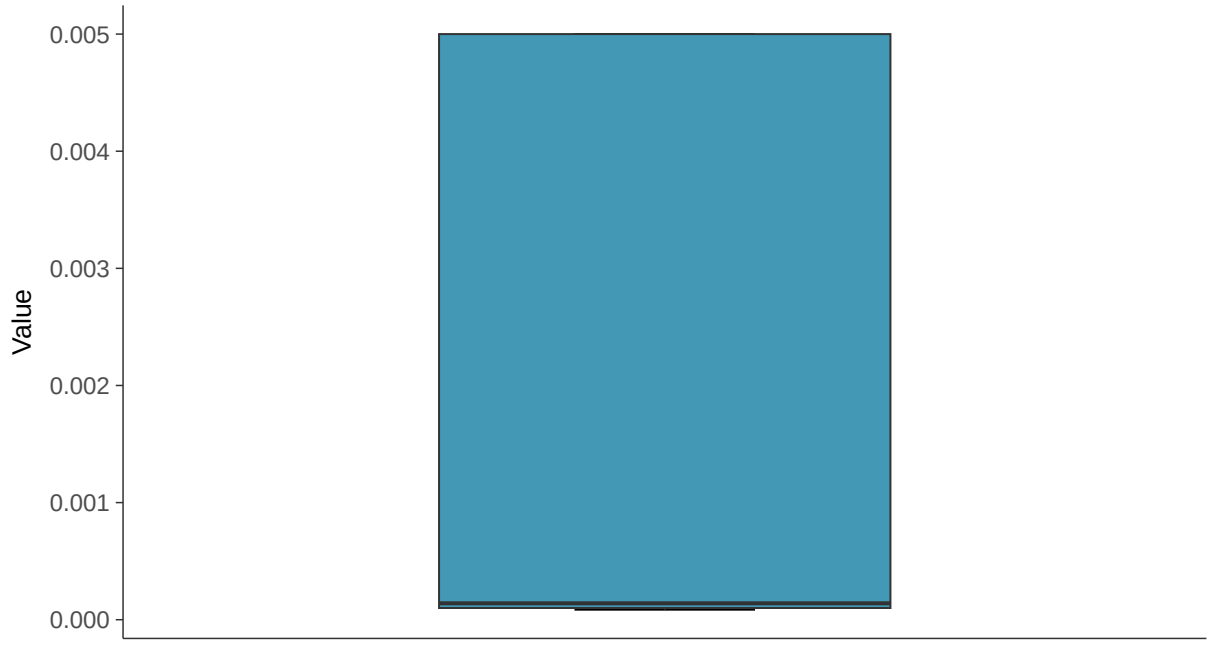
ID: 18_3_110





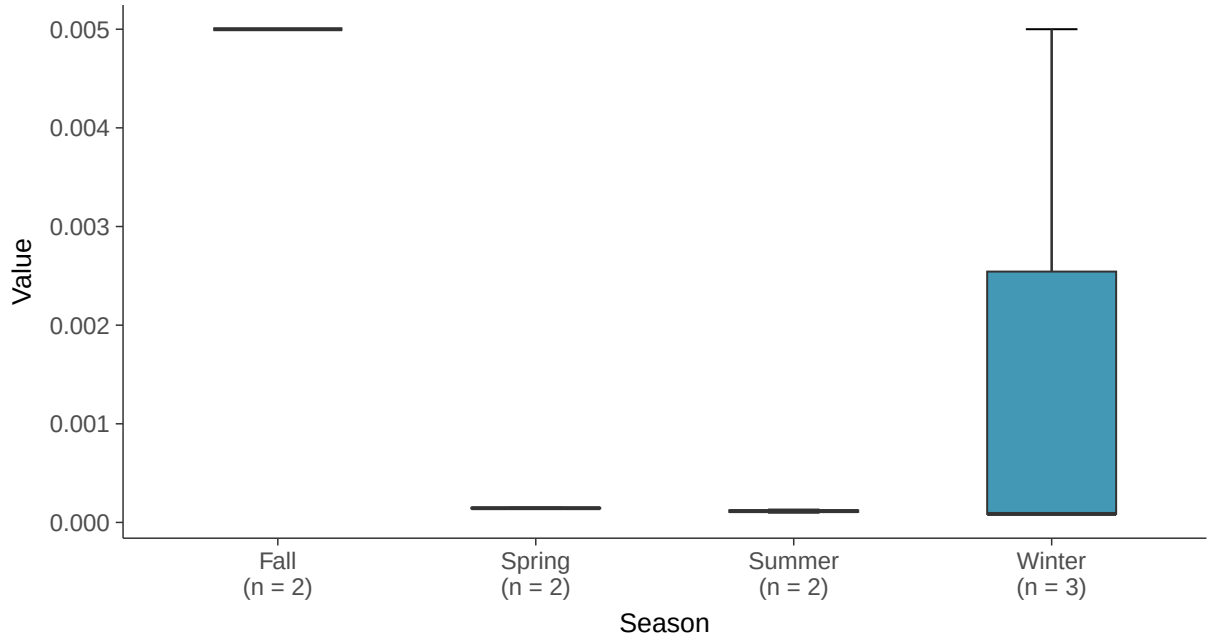
Boxplot

Cobalt, MW-18C (mg/l)



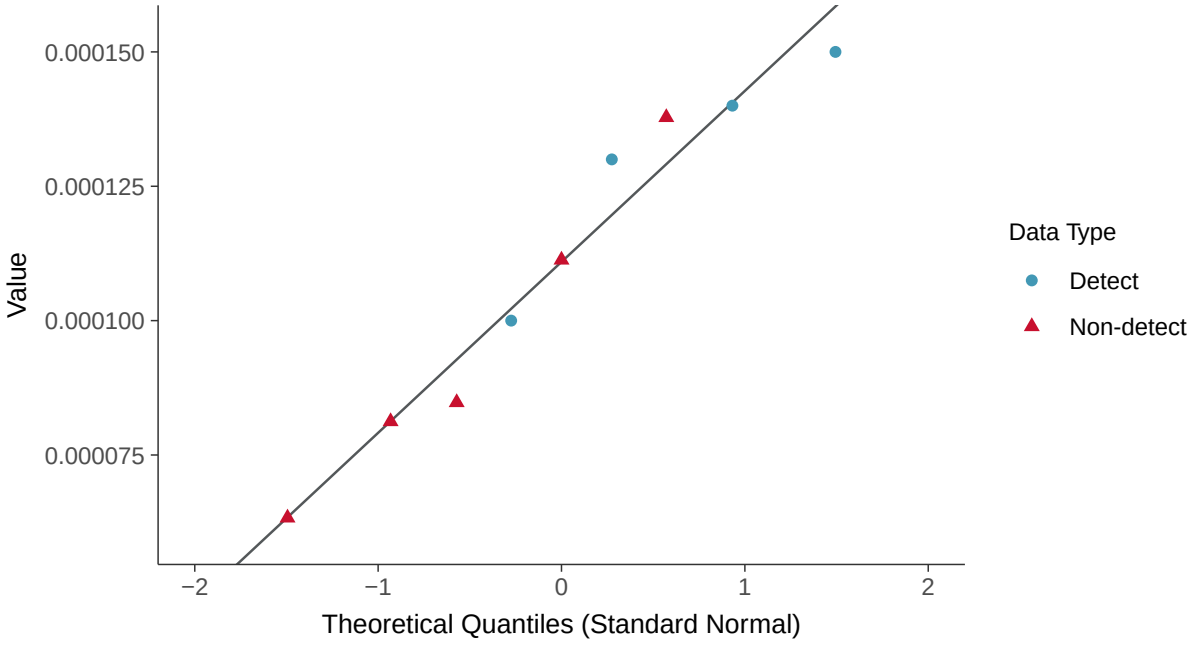
Boxplot by Season

Cobalt, MW-18C (mg/l)



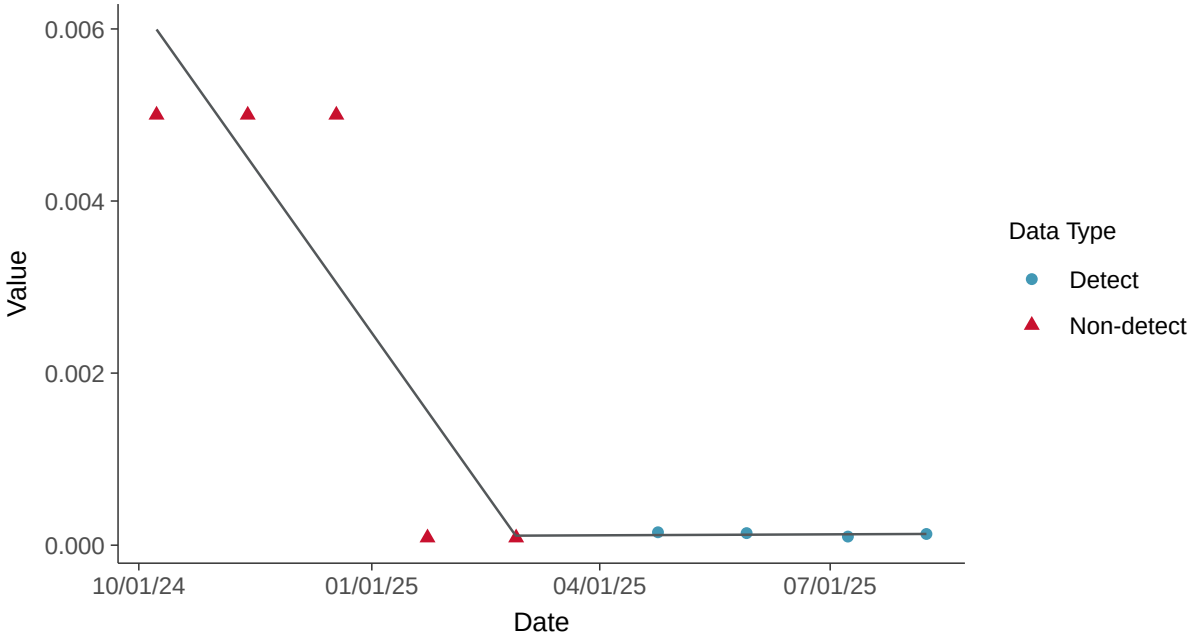
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-18C (mg/l)



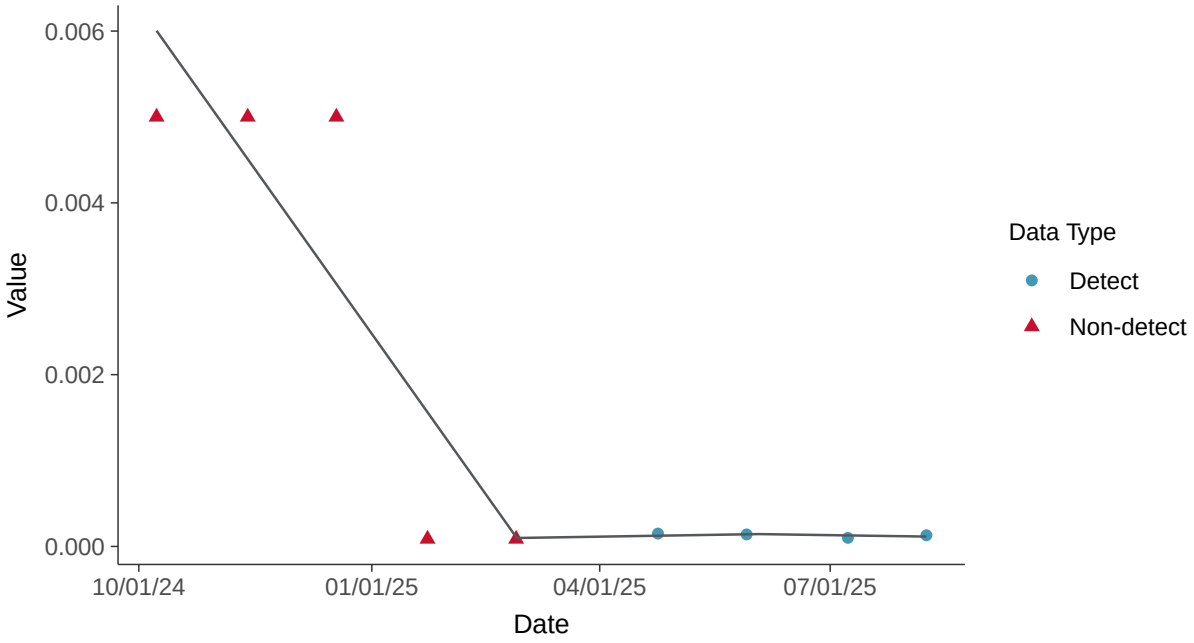
Trend Regression: Piecewise Linear-Linear

Cobalt, MW-18C (mg/l)



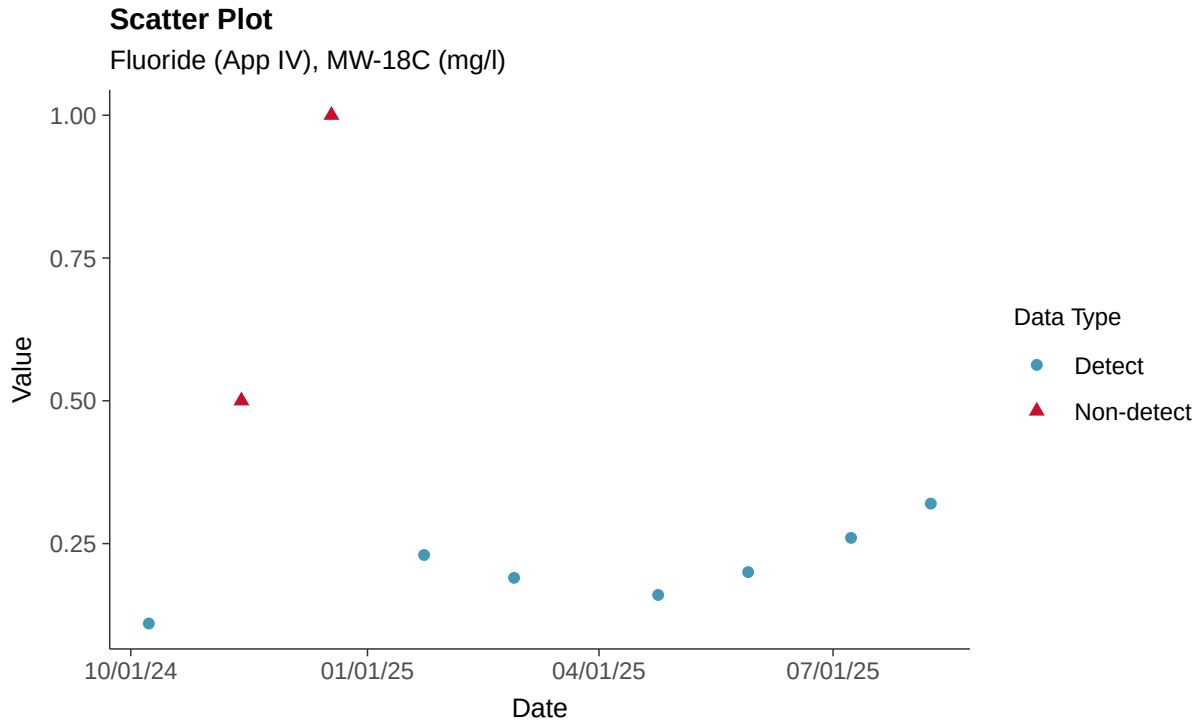
Trend Regression: Piecewise Linear-Linear-Linear

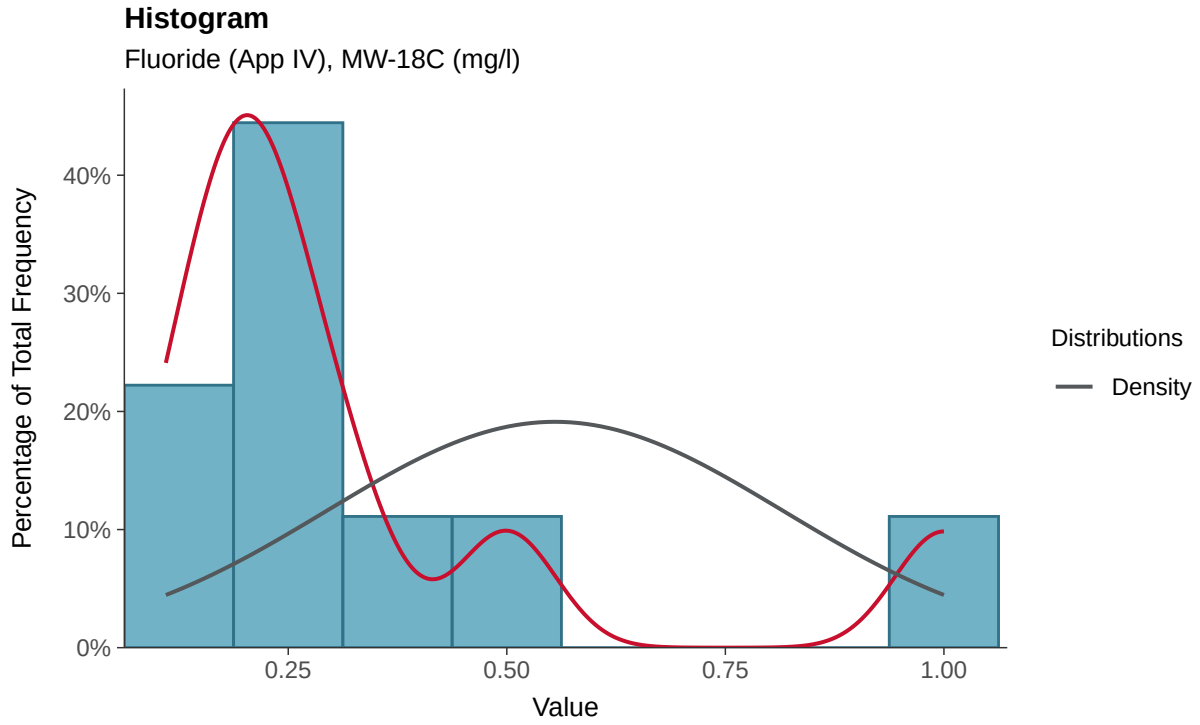
Cobalt, MW-18C (mg/l)



Appendix IV: Fluoride (App IV), MW-18C

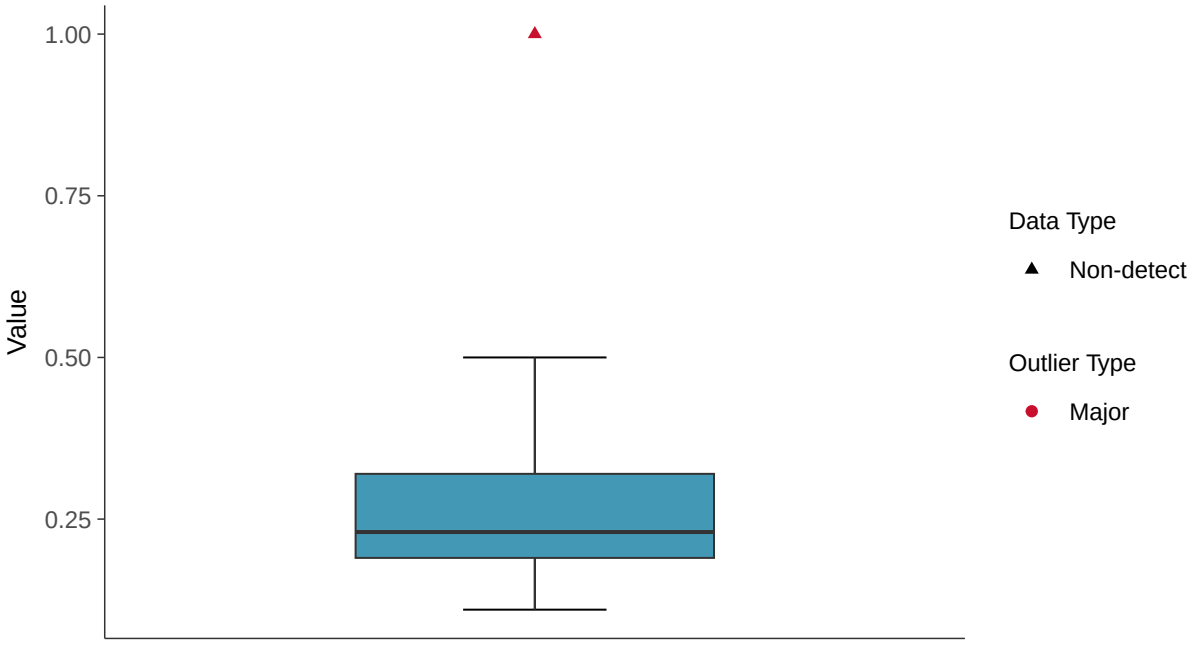
ID: 18_3_113





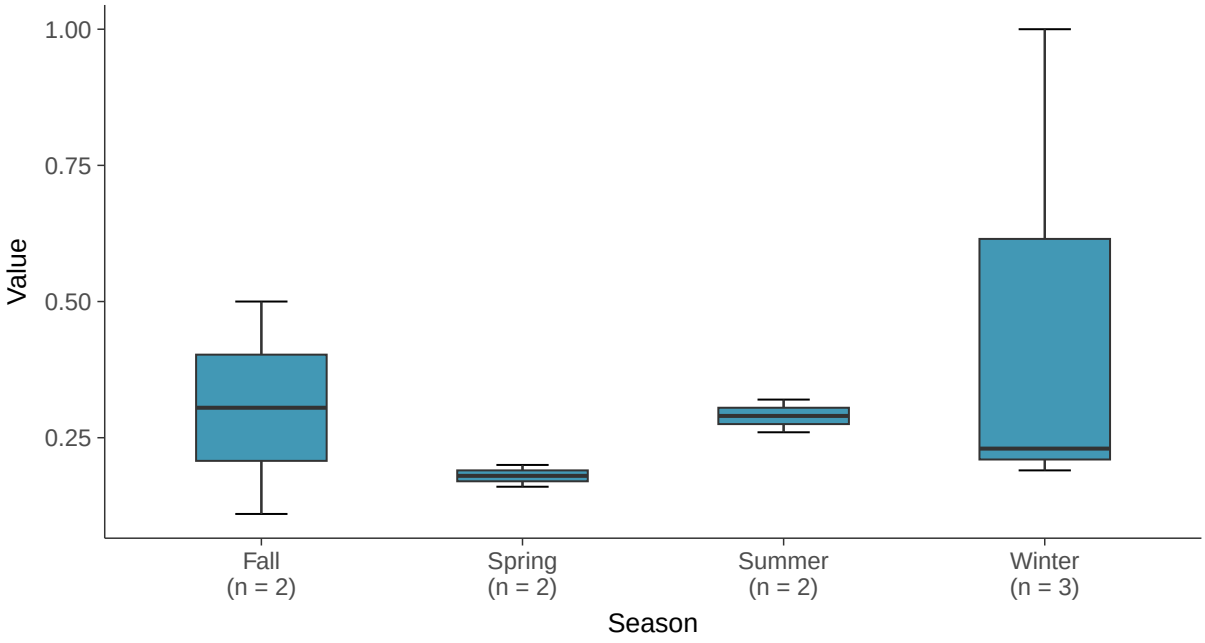
Boxplot

Fluoride (App IV), MW-18C (mg/l)



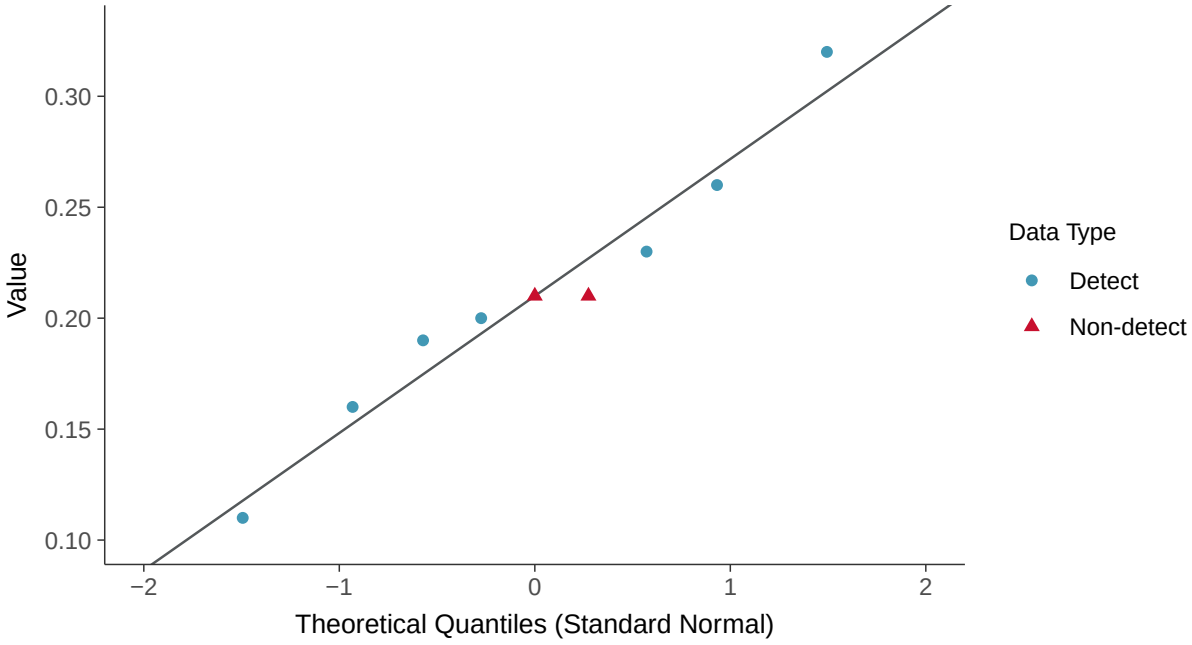
Boxplot by Season

Fluoride (App IV), MW-18C (mg/l)



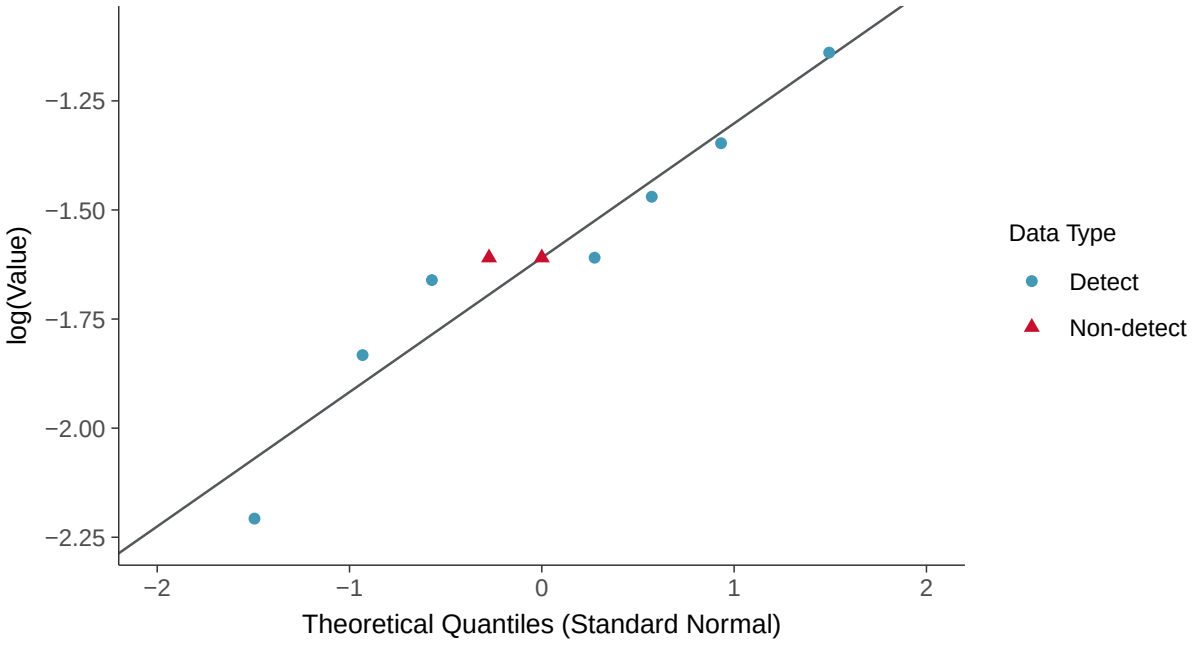
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-18C (mg/l)



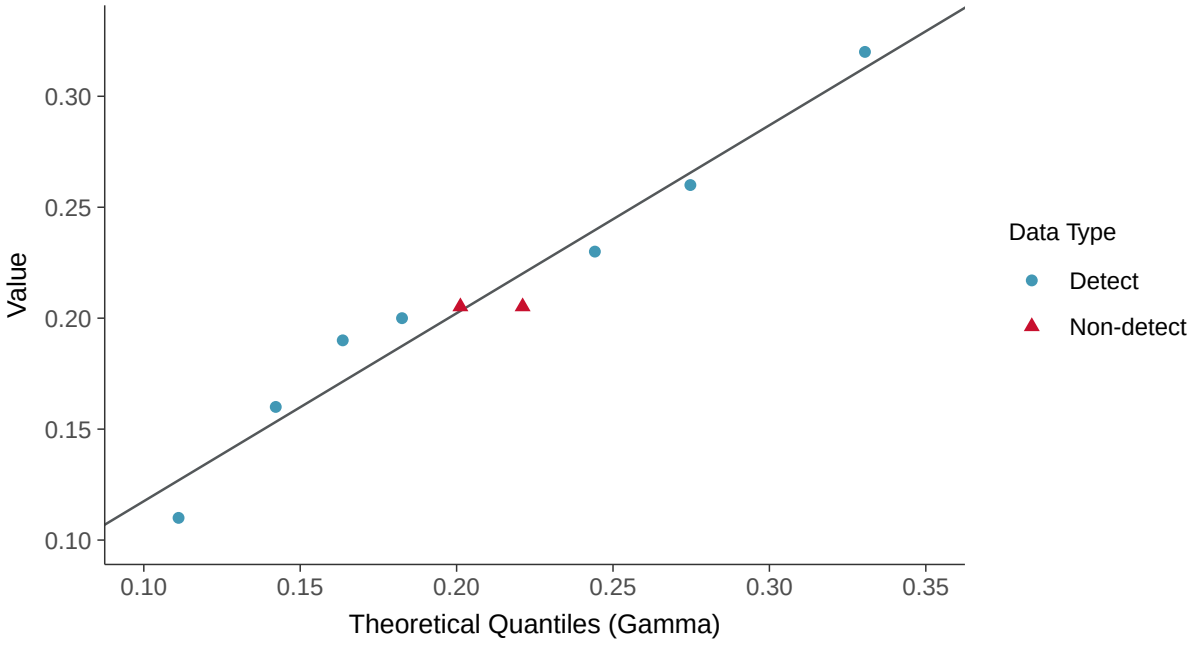
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-18C (mg/l)



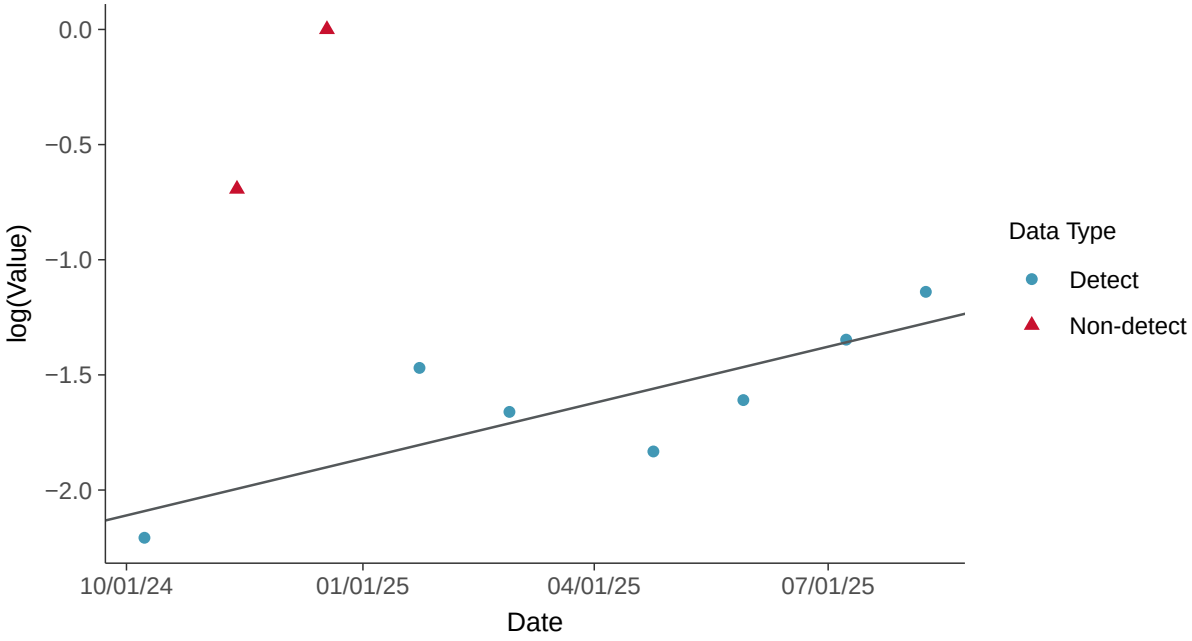
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-18C (mg/l)



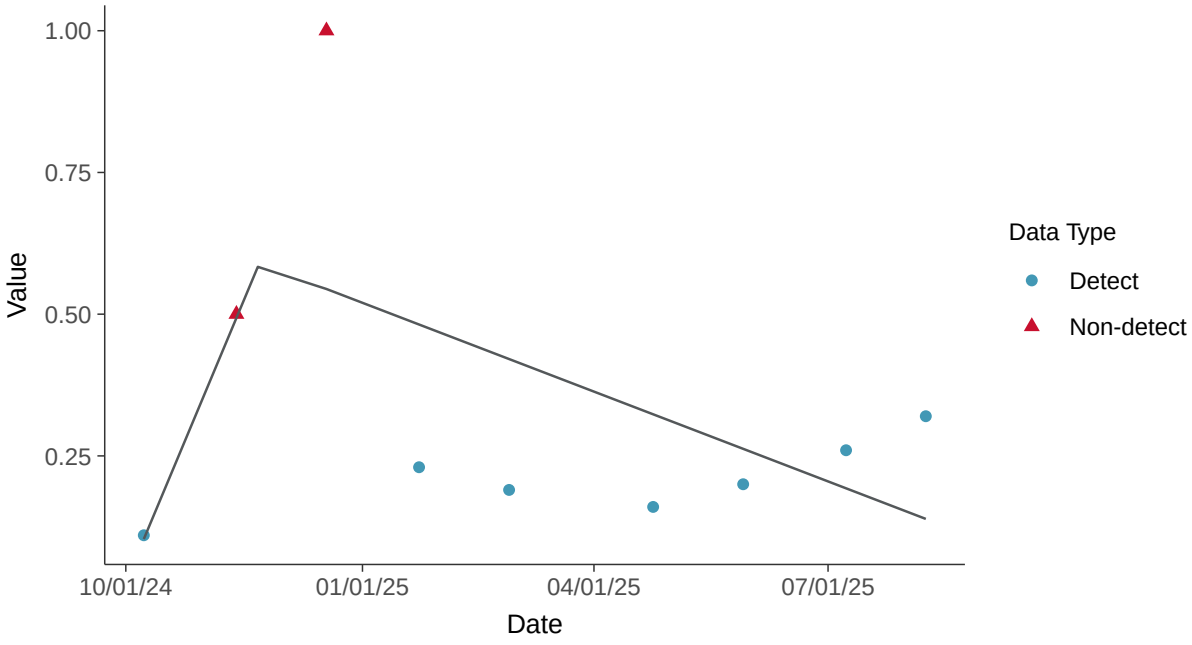
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-18C (mg/l)



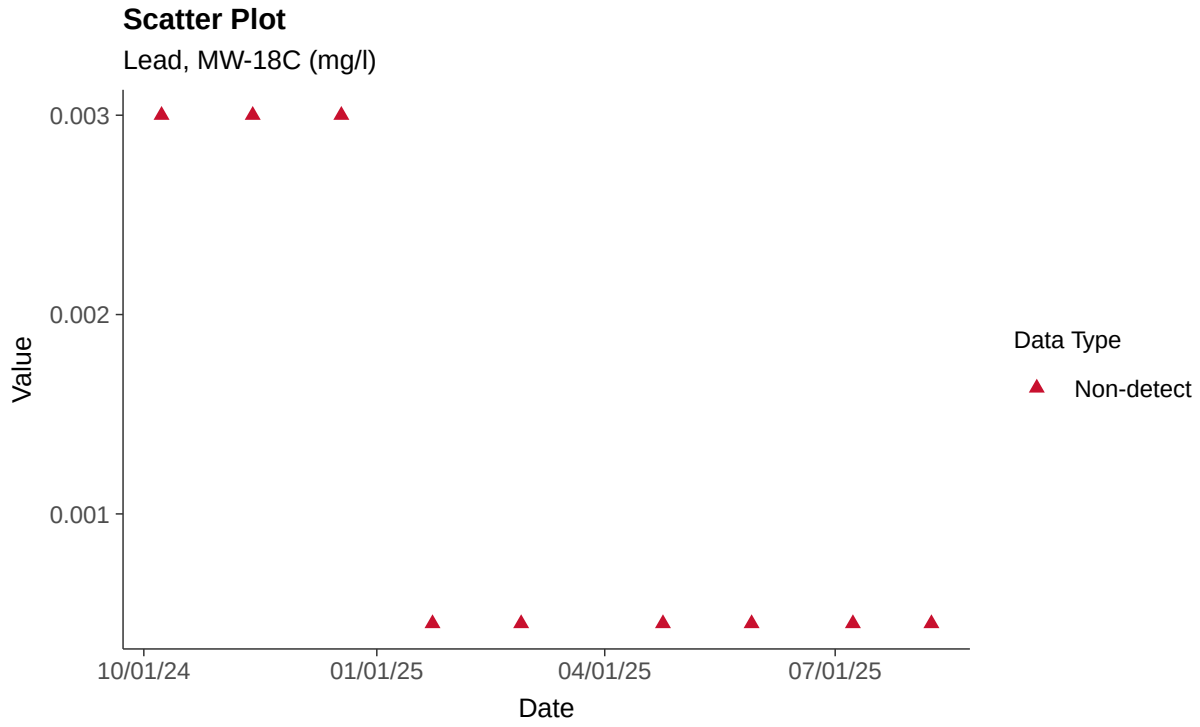
Trend Regression: Piecewise Linear-Linear

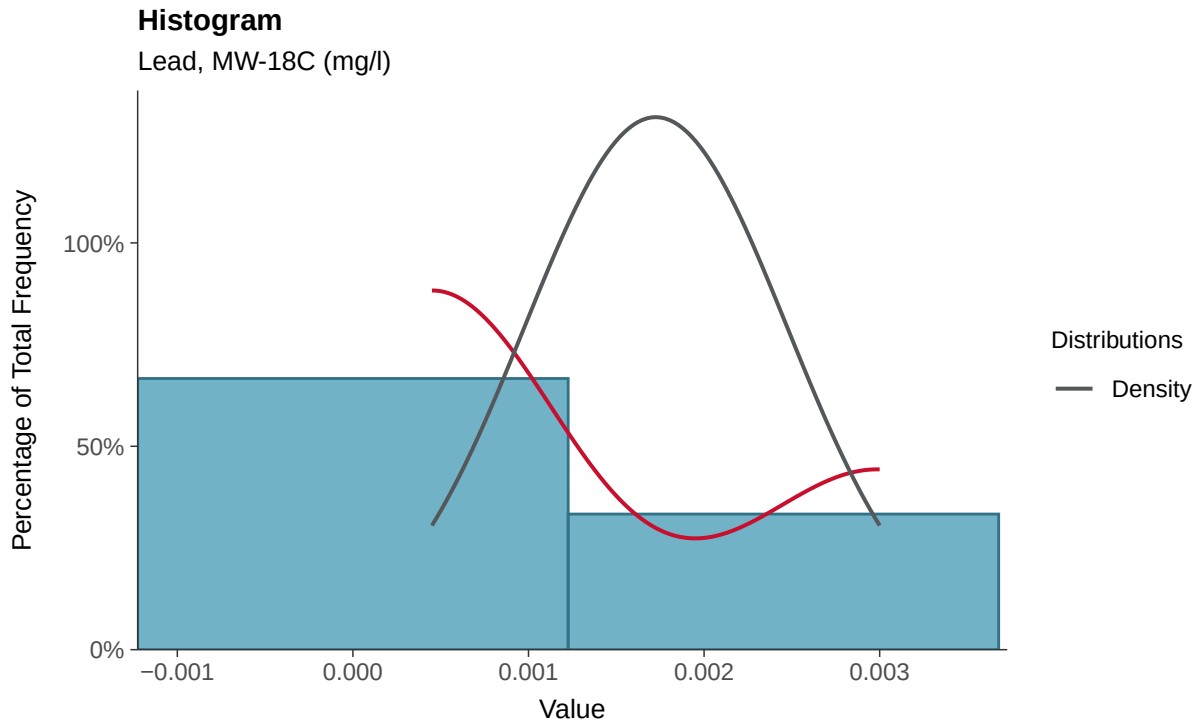
Fluoride (App IV), MW-18C (mg/l)



Appendix IV: Lead, MW-18C

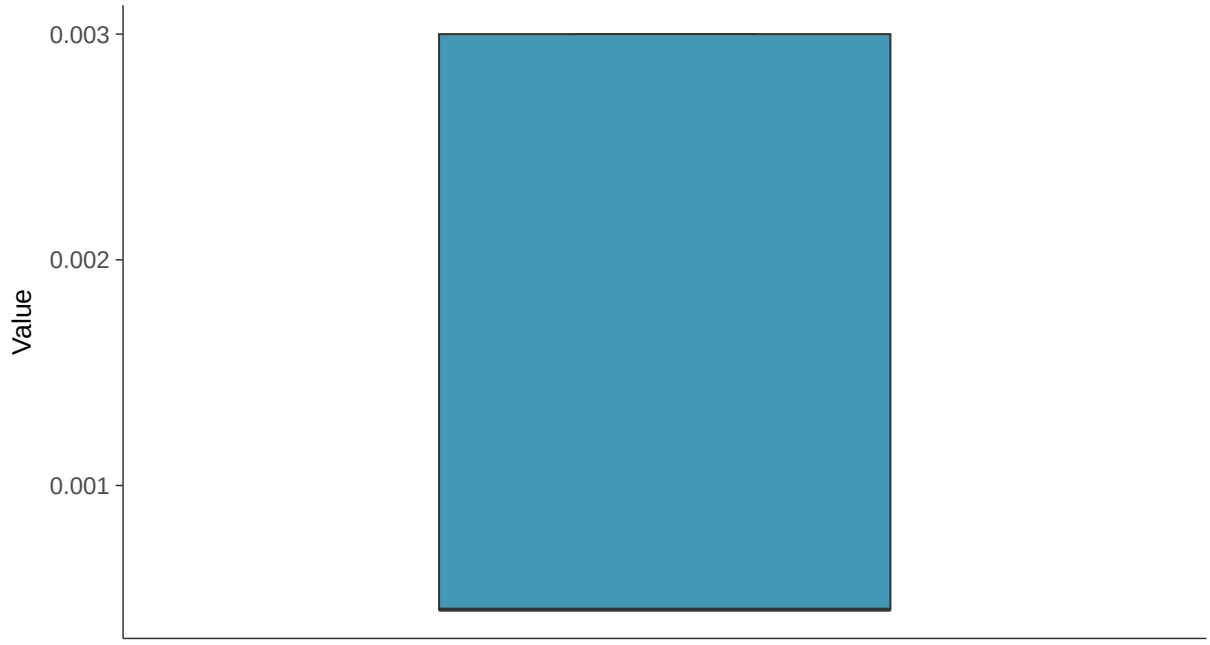
ID: 18_3_115





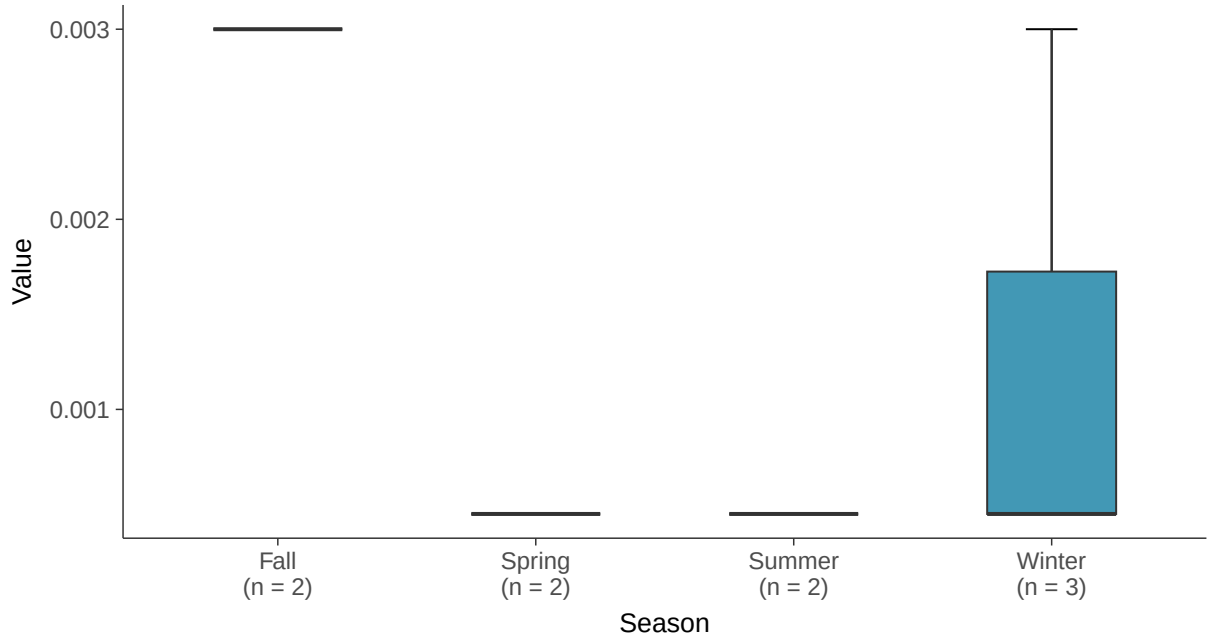
Boxplot

Lead, MW-18C (mg/l)



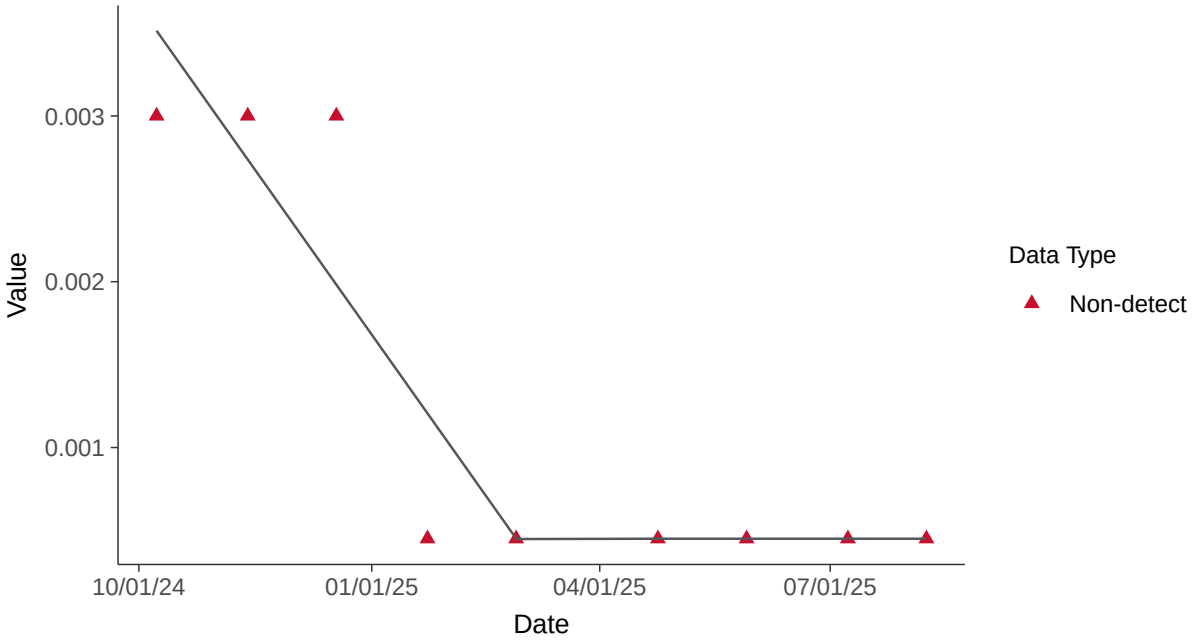
Boxplot by Season

Lead, MW-18C (mg/l)



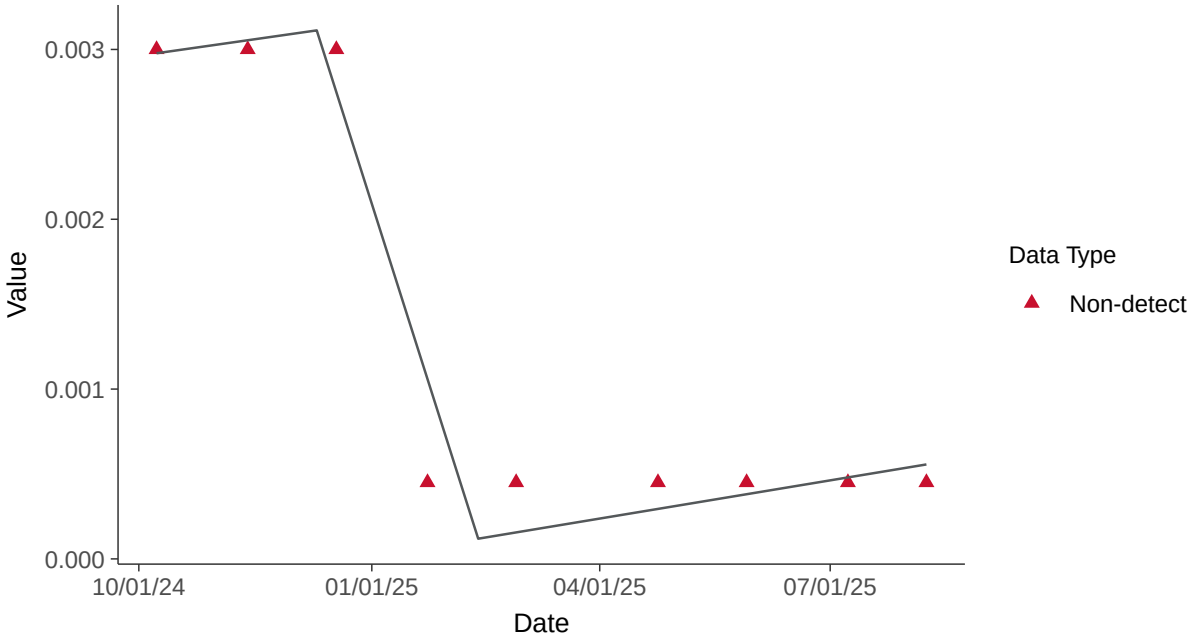
Trend Regression: Piecewise Linear-Linear

Lead, MW-18C (mg/l)



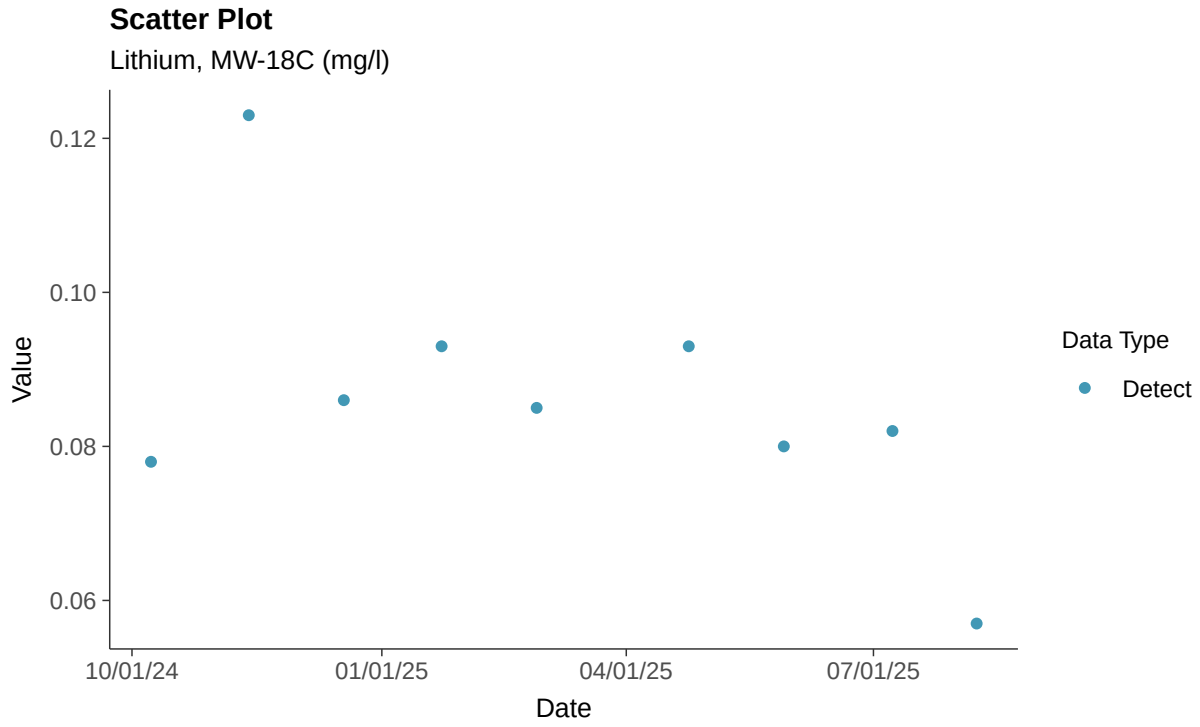
Trend Regression: Piecewise Linear-Linear-Linear

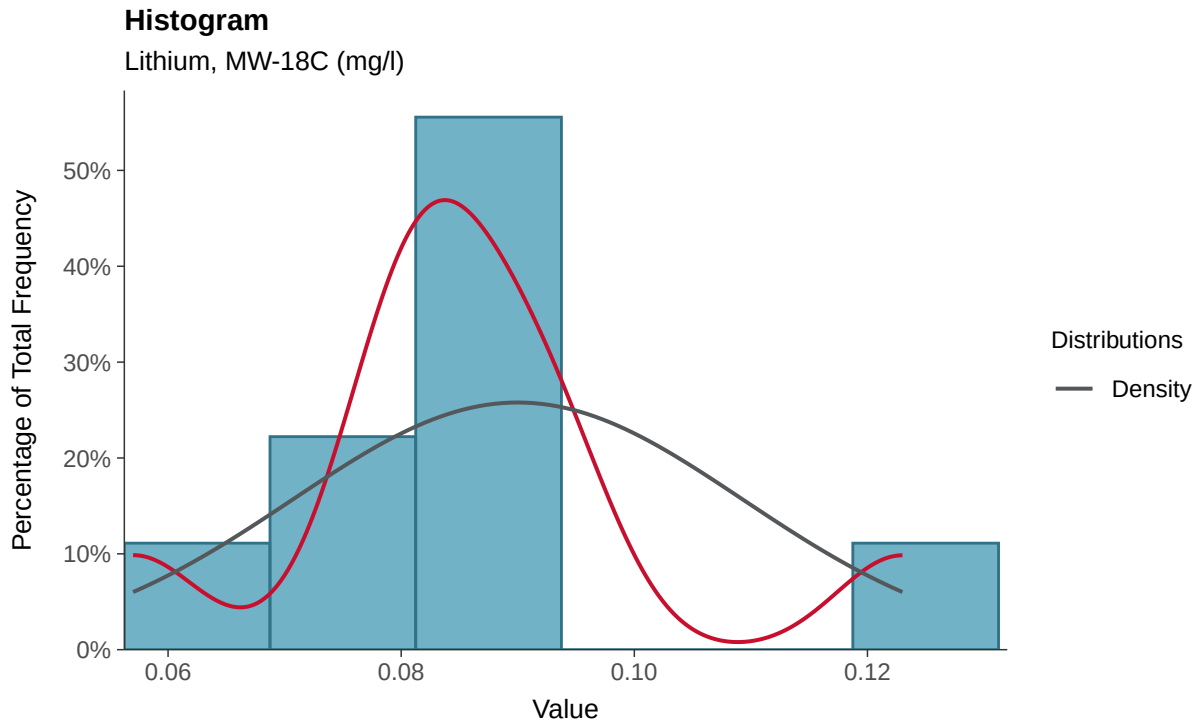
Lead, MW-18C (mg/l)



Appendix IV: Lithium, MW-18C

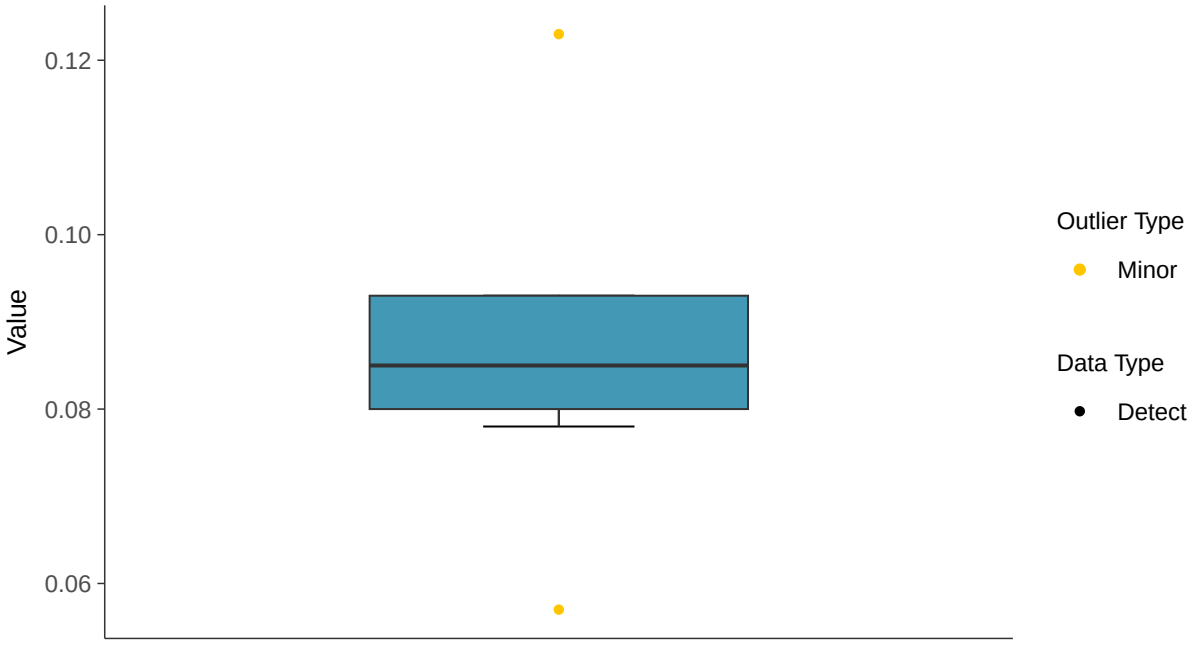
ID: 18_3_116





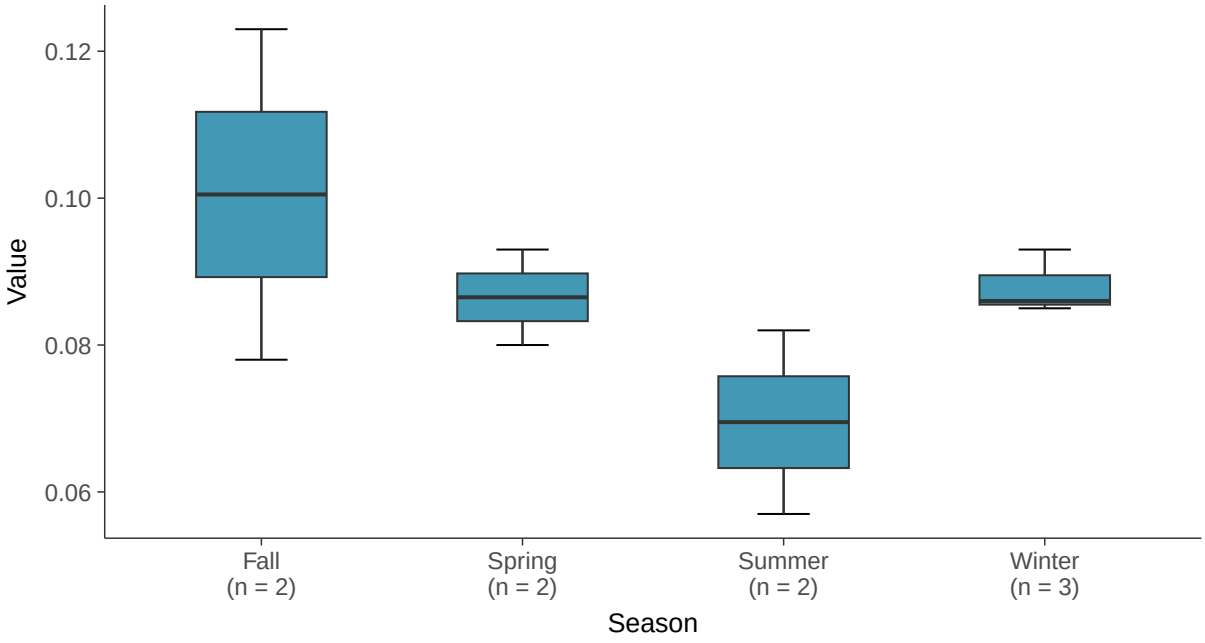
Boxplot

Lithium, MW-18C (mg/l)



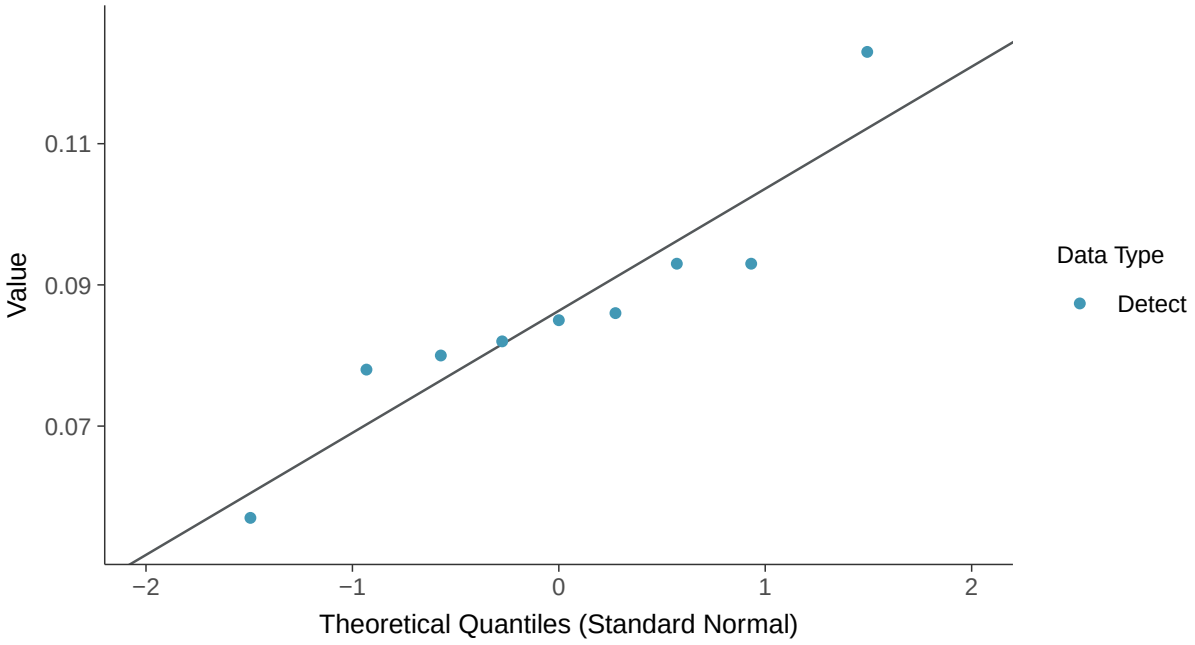
Boxplot by Season

Lithium, MW-18C (mg/l)



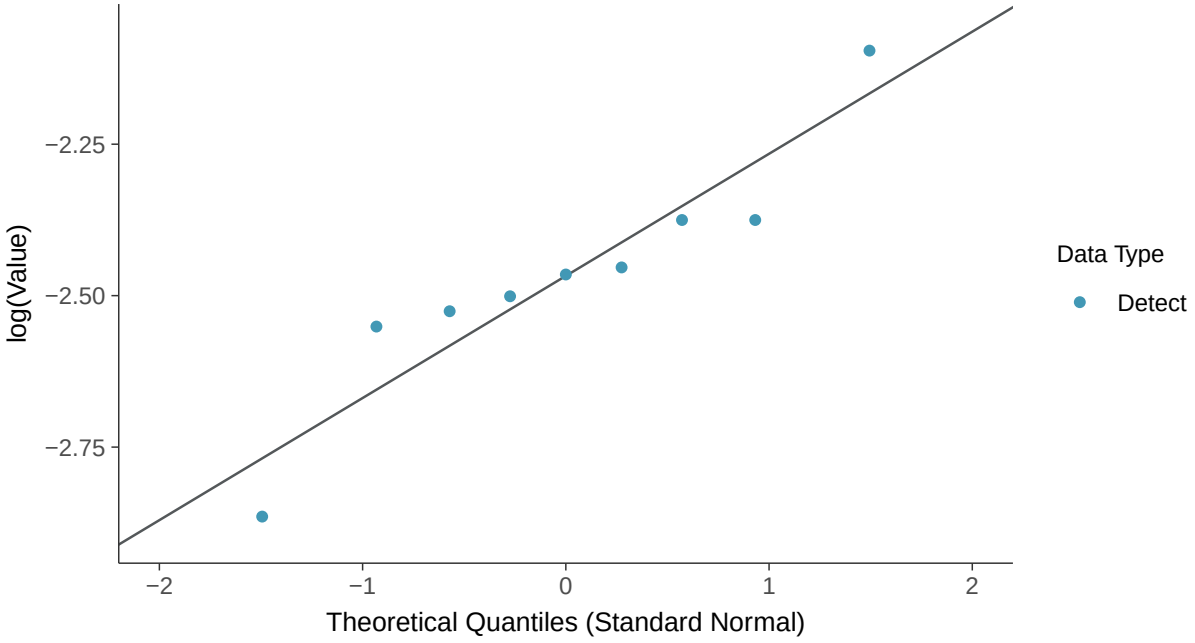
Normal Q-Q plot

Lithium, MW-18C (mg/l)



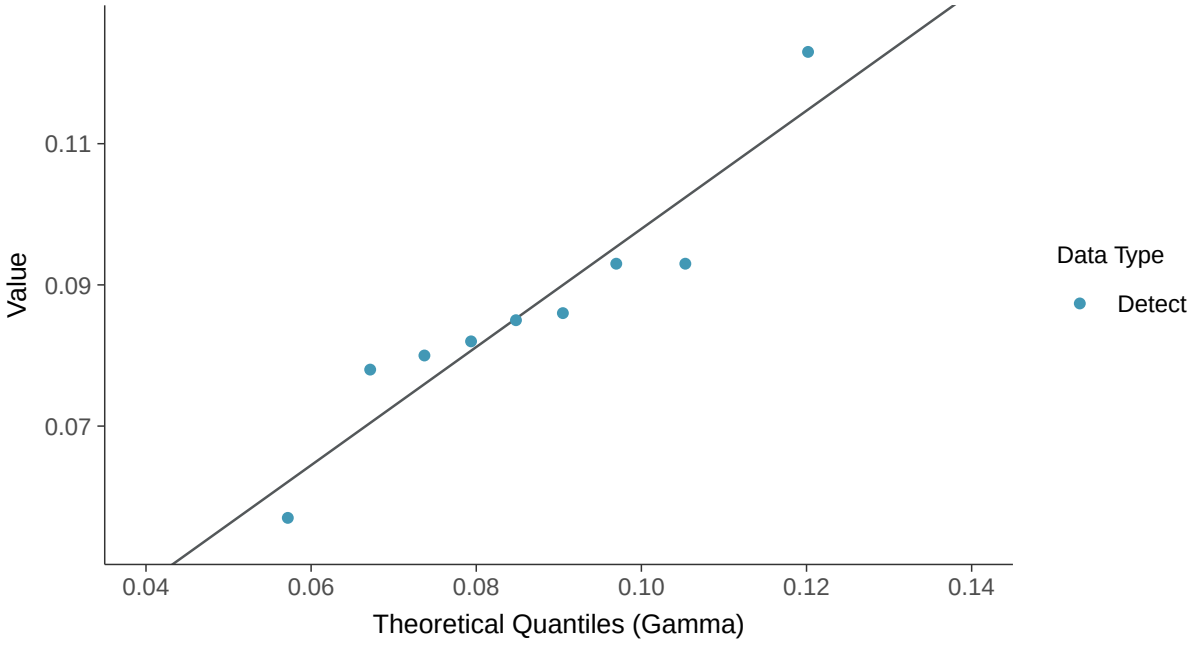
Lognormal Q-Q plot

Lithium, MW-18C (mg/l)



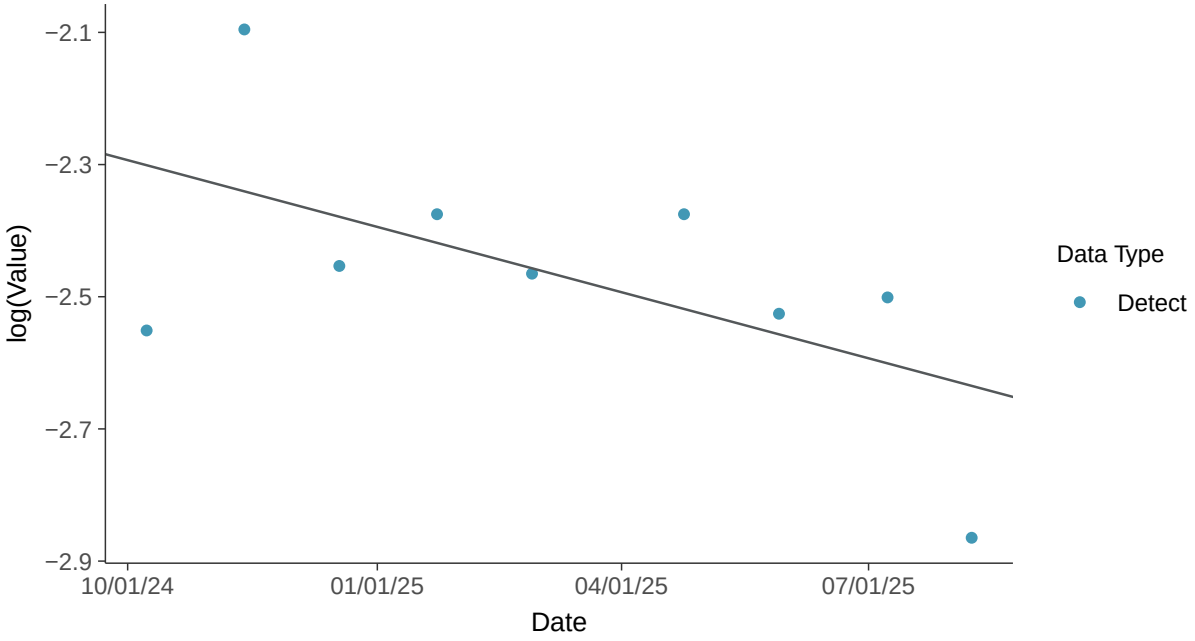
Gamma Q-Q plot

Lithium, MW-18C (mg/l)



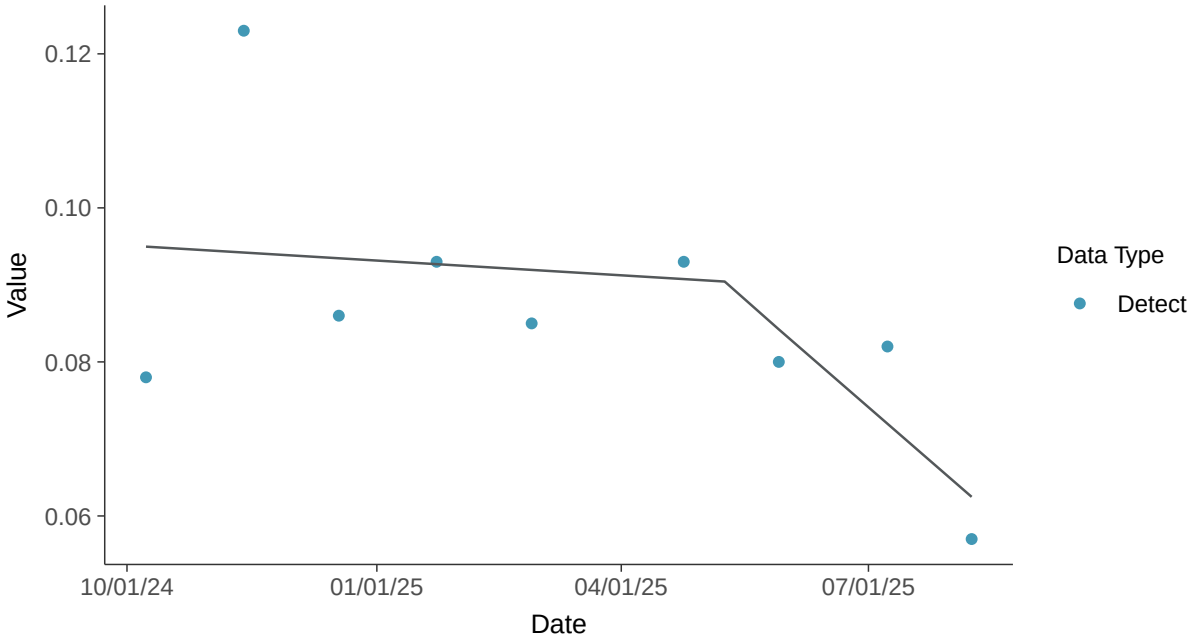
Trend Regression: Lognormal MLE

Lithium, MW-18C (mg/l)



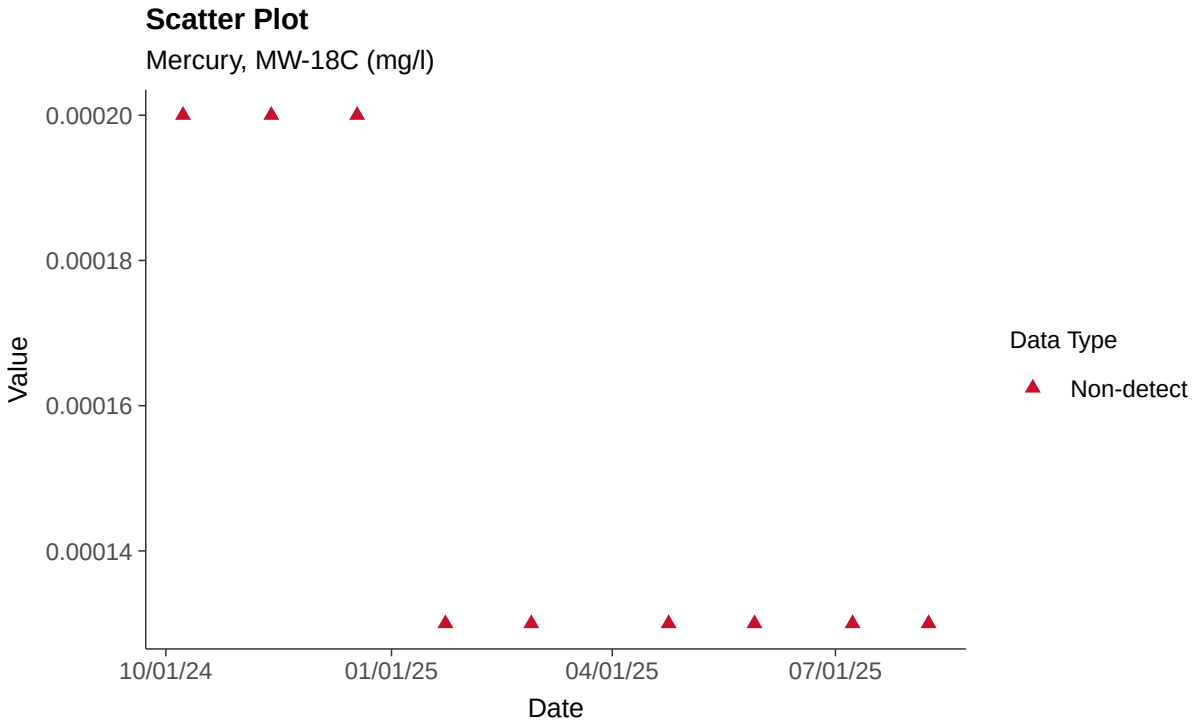
Trend Regression: Piecewise Linear-Linear

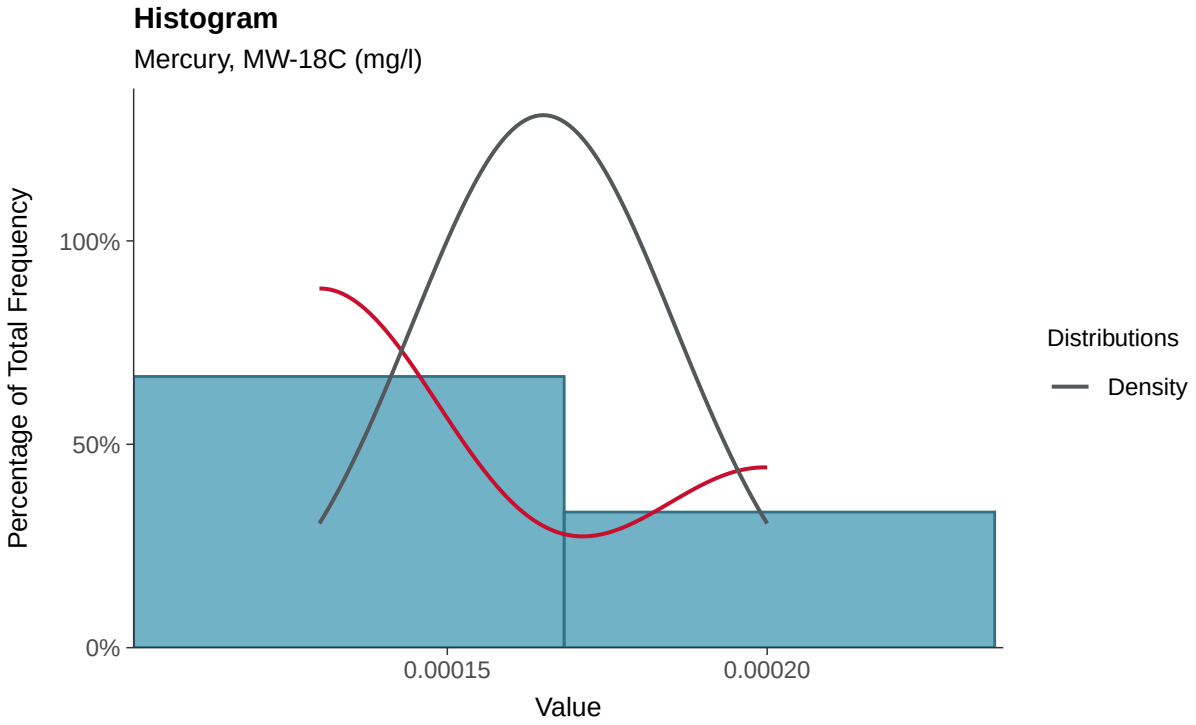
Lithium, MW-18C (mg/l)



Appendix IV: Mercury, MW-18C

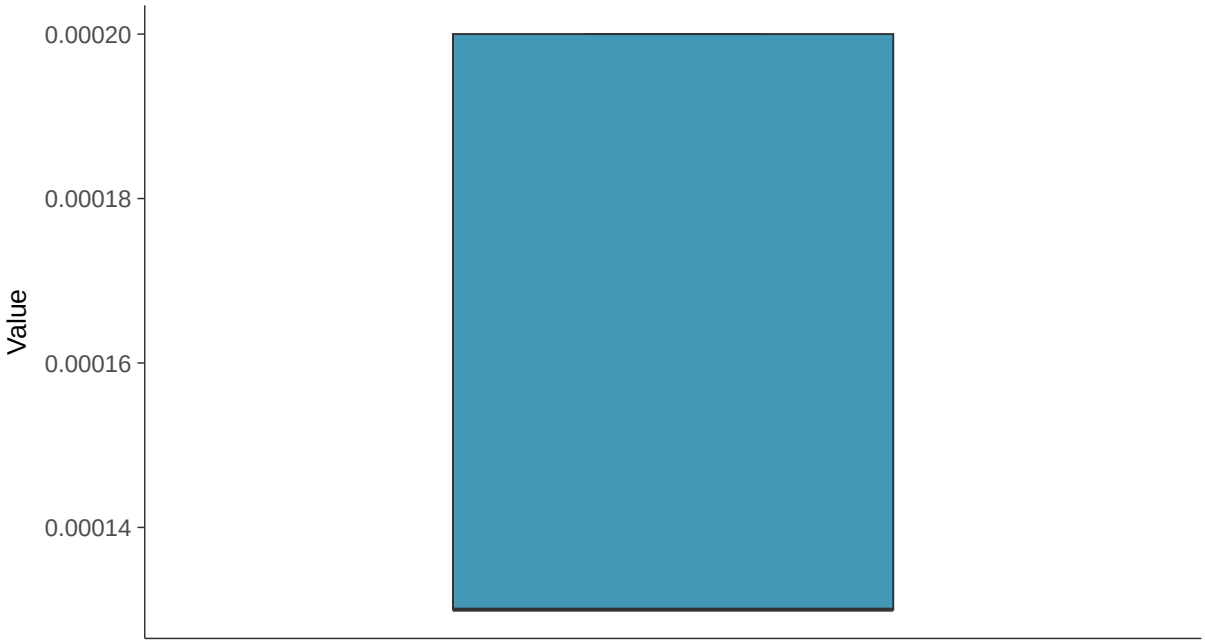
ID: 18_3_117





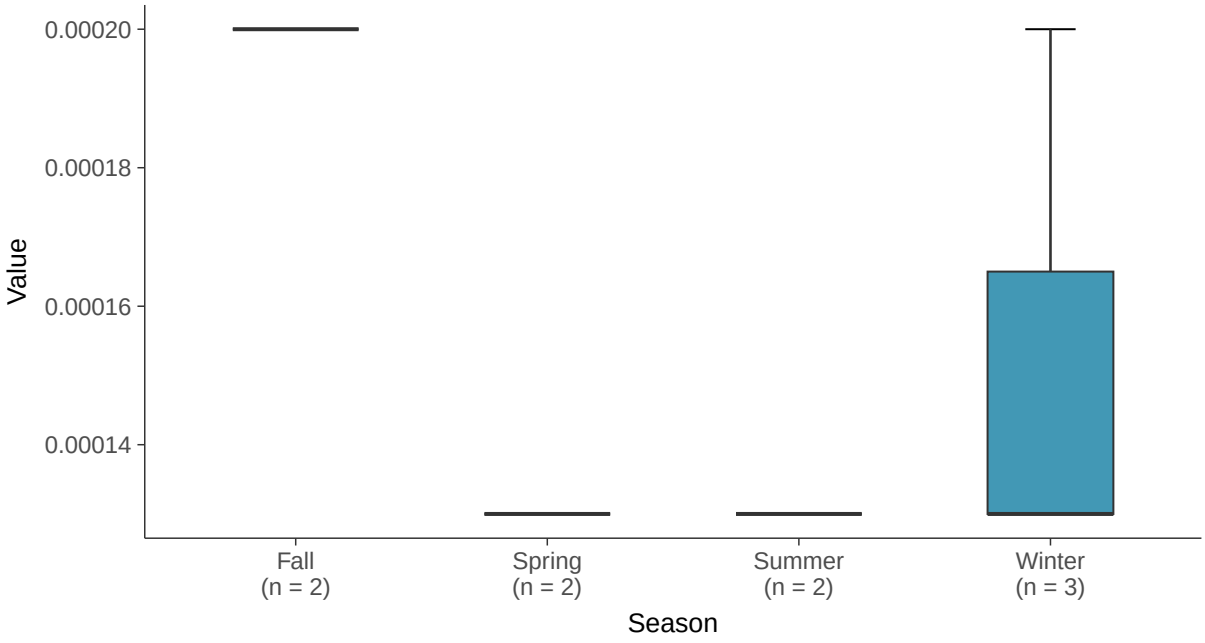
Boxplot

Mercury, MW-18C (mg/l)



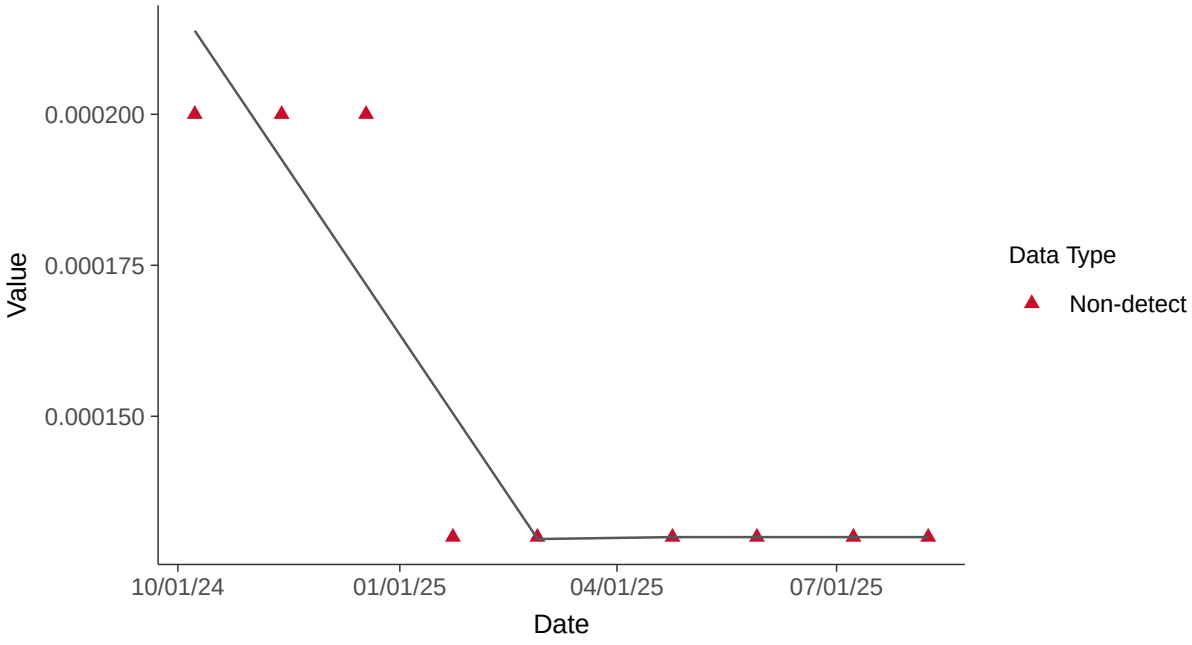
Boxplot by Season

Mercury, MW-18C (mg/l)



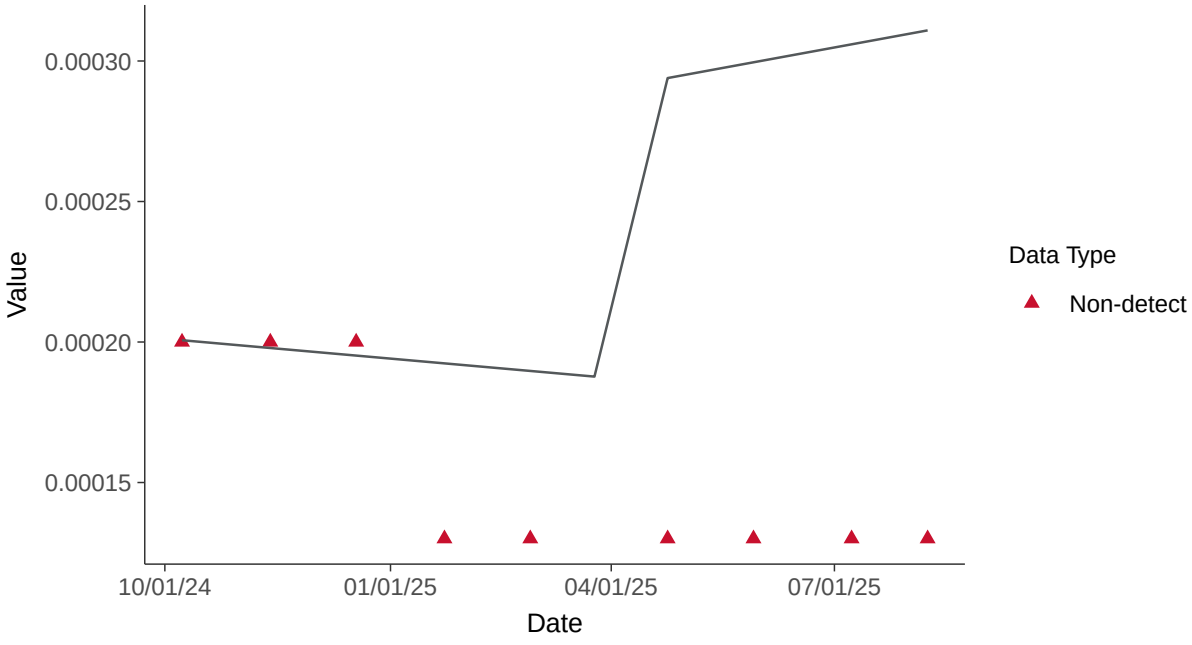
Trend Regression: Piecewise Linear-Linear

Mercury, MW-18C (mg/l)



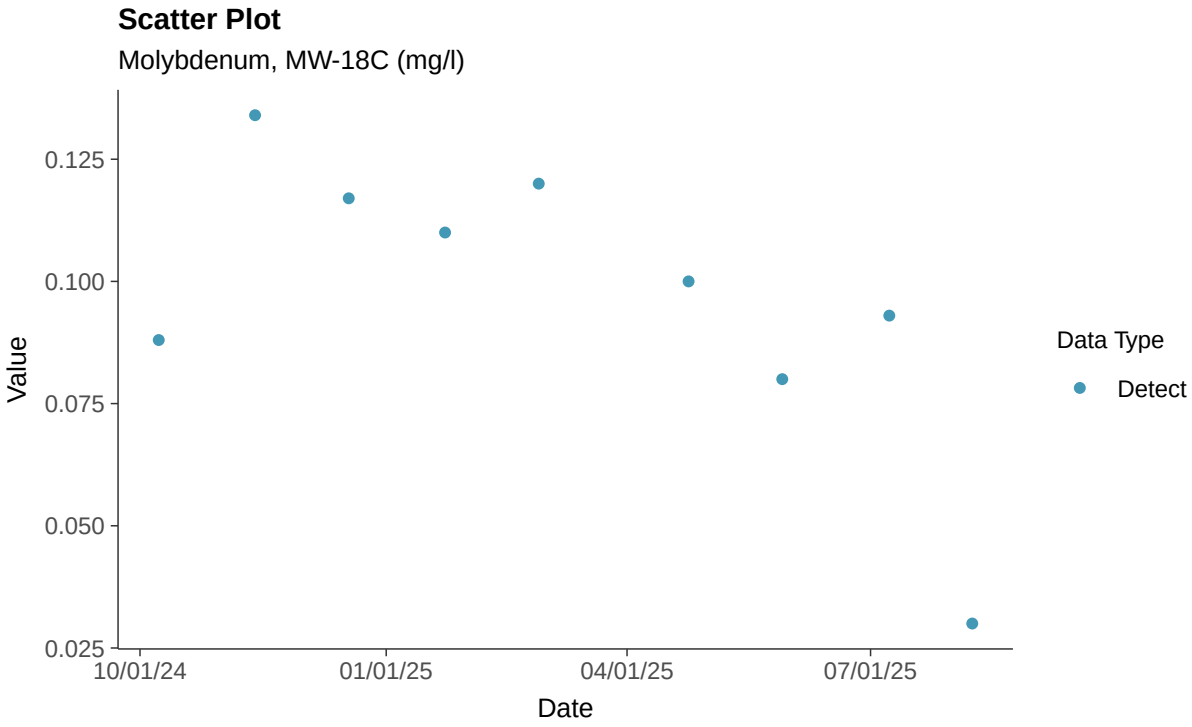
Trend Regression: Piecewise Linear-Linear-Linear

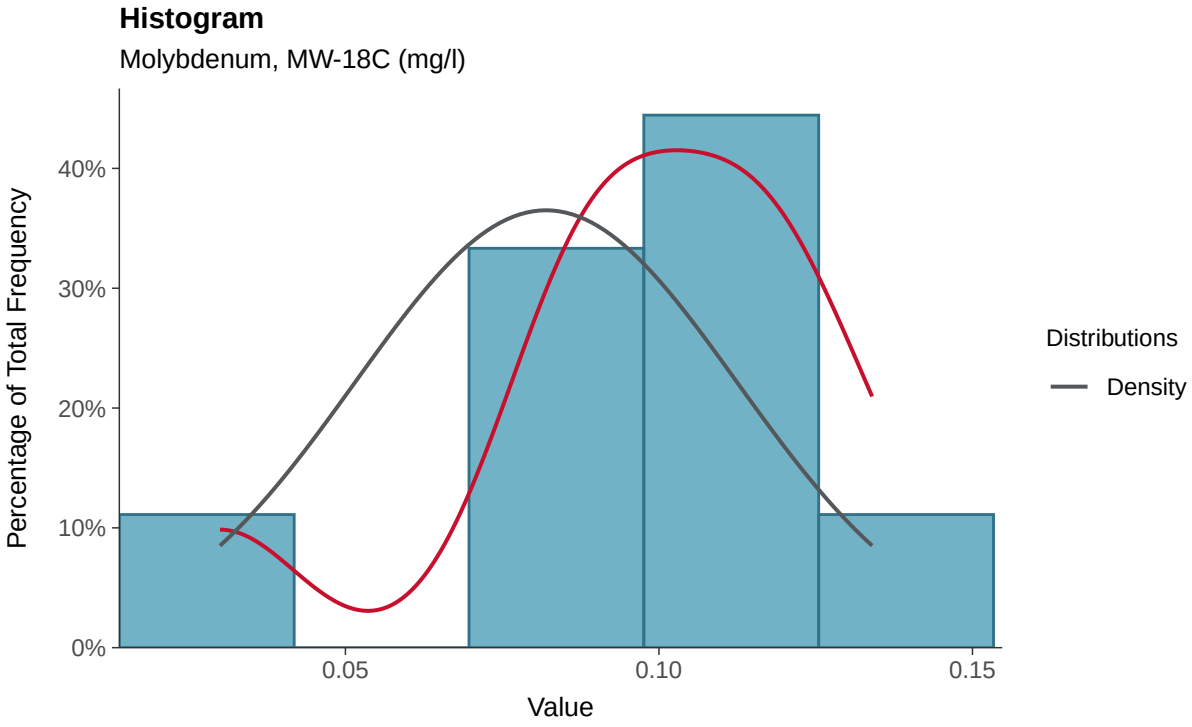
Mercury, MW-18C (mg/l)



Appendix IV: Molybdenum, MW-18C

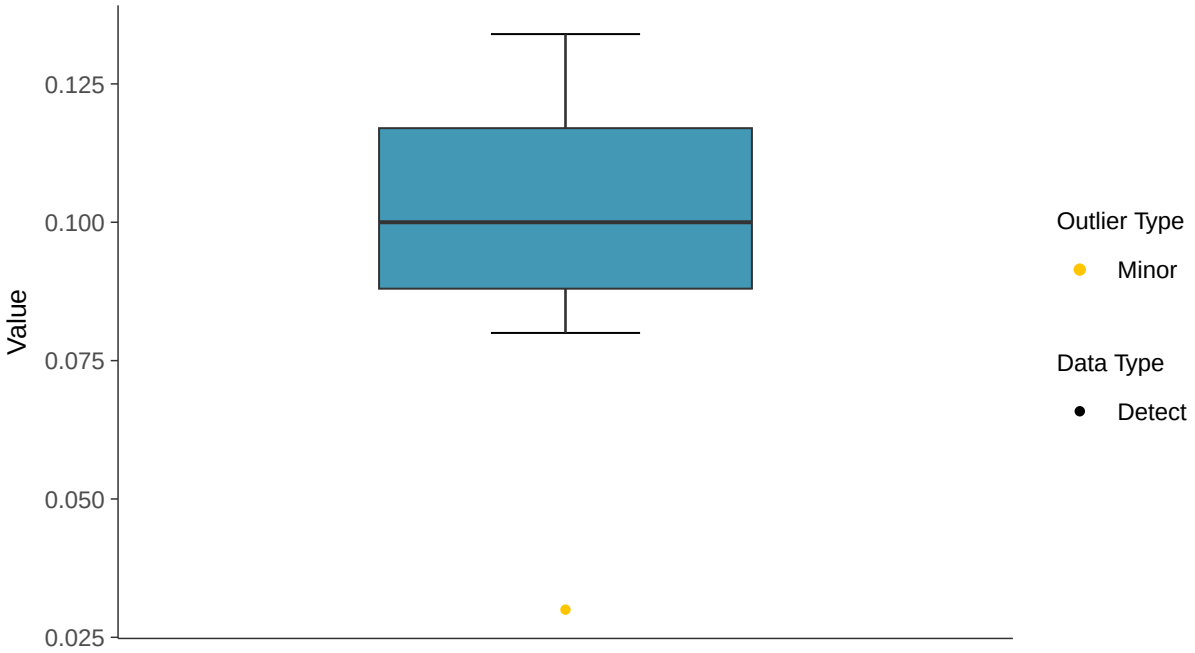
ID: 18_3_118





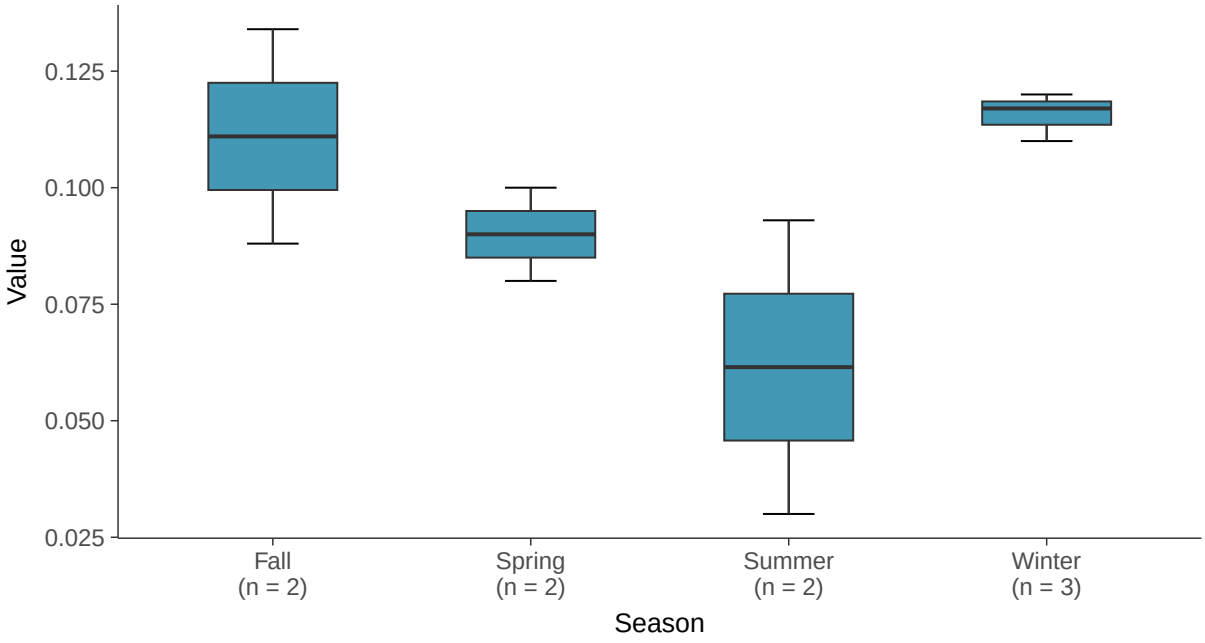
Boxplot

Molybdenum, MW-18C (mg/l)



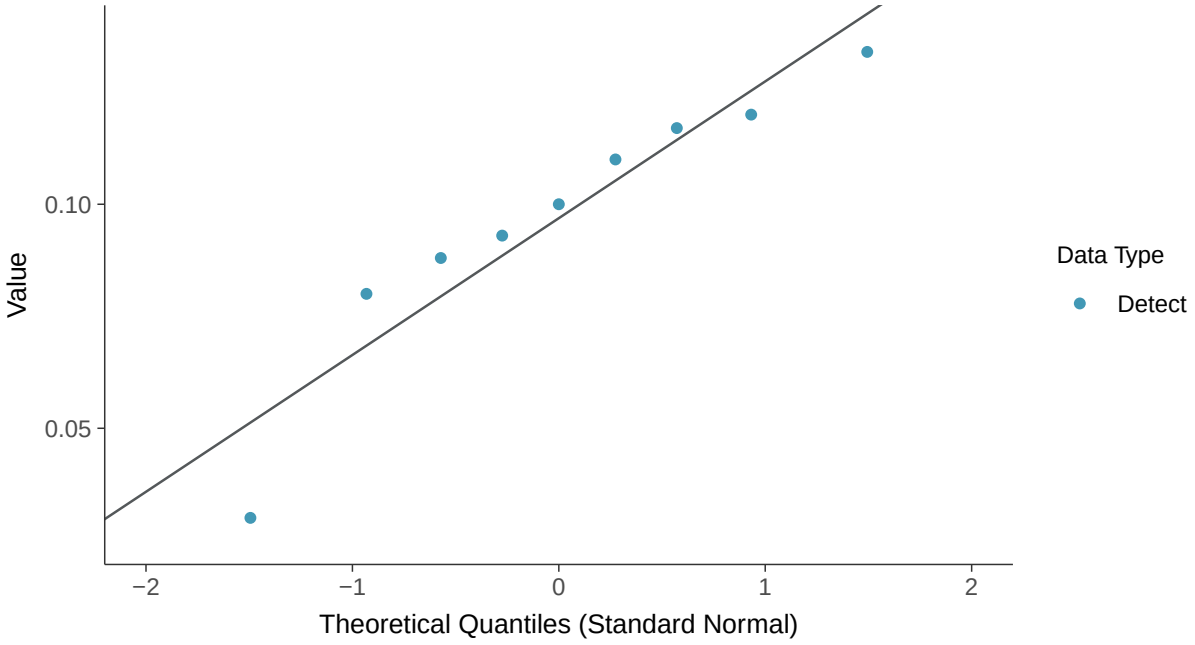
Boxplot by Season

Molybdenum, MW-18C (mg/l)



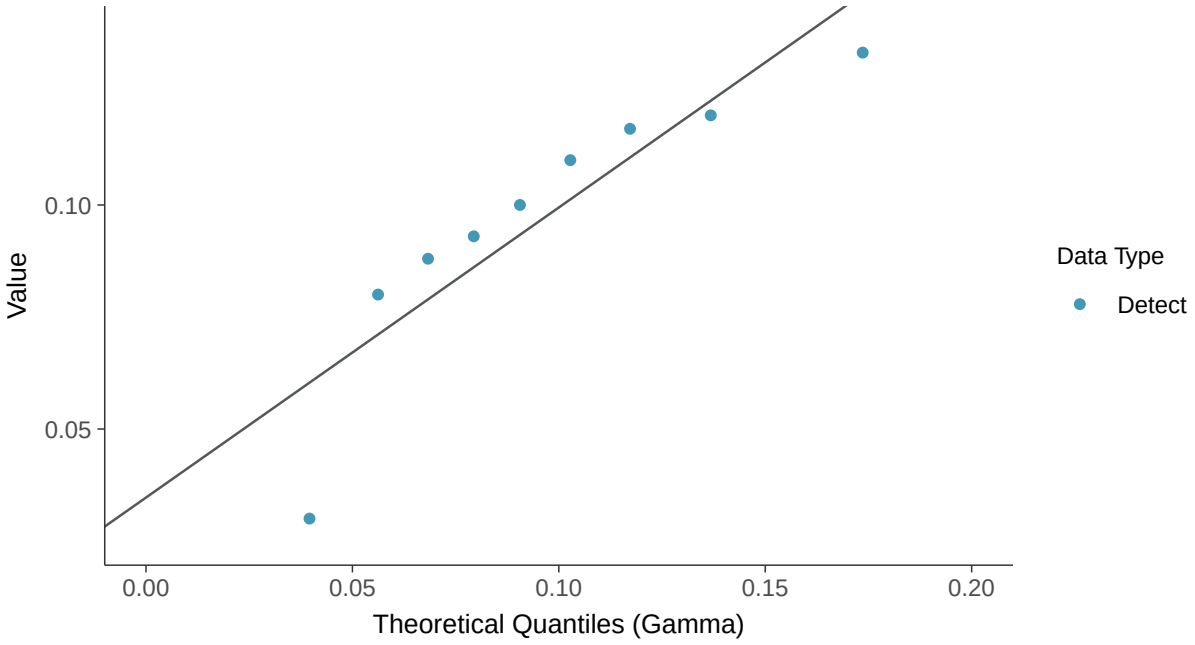
Normal Q-Q plot

Molybdenum, MW-18C (mg/l)



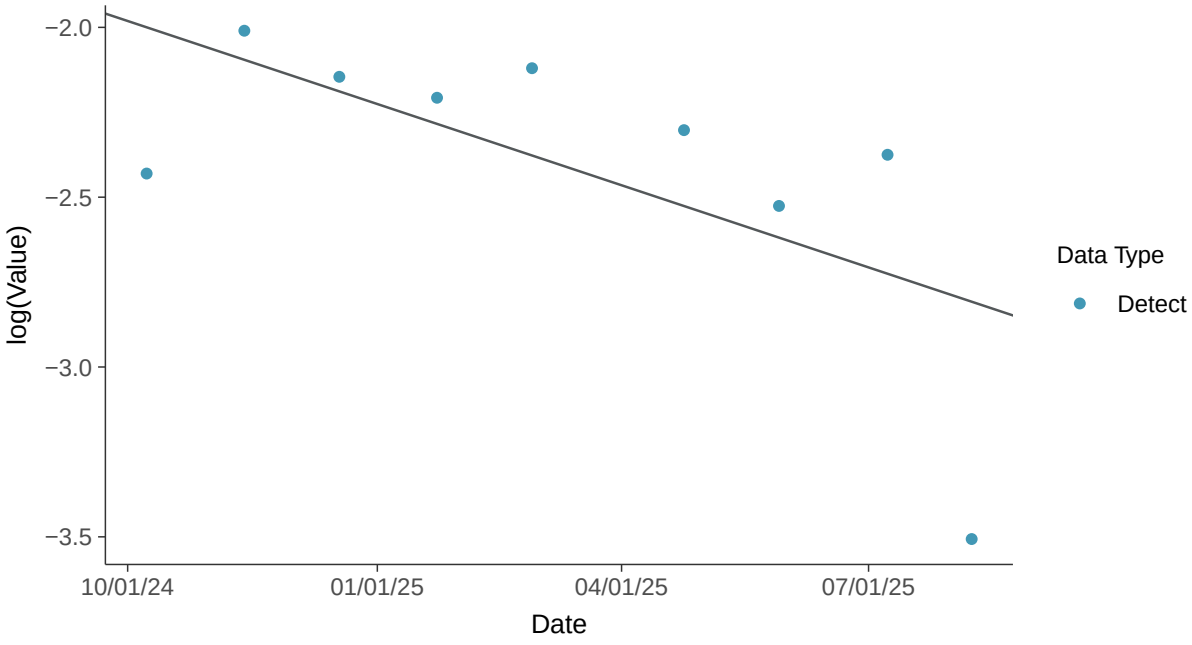
Gamma Q-Q plot

Molybdenum, MW-18C (mg/l)



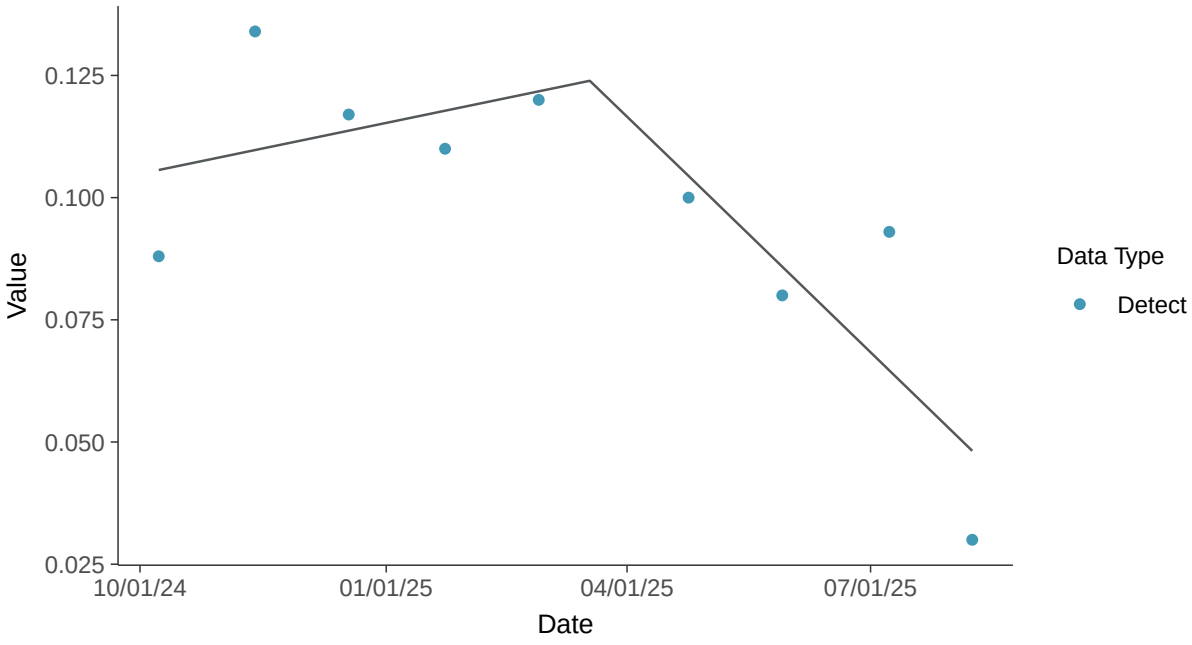
Trend Regression: Lognormal MLE

Molybdenum, MW-18C (mg/l)



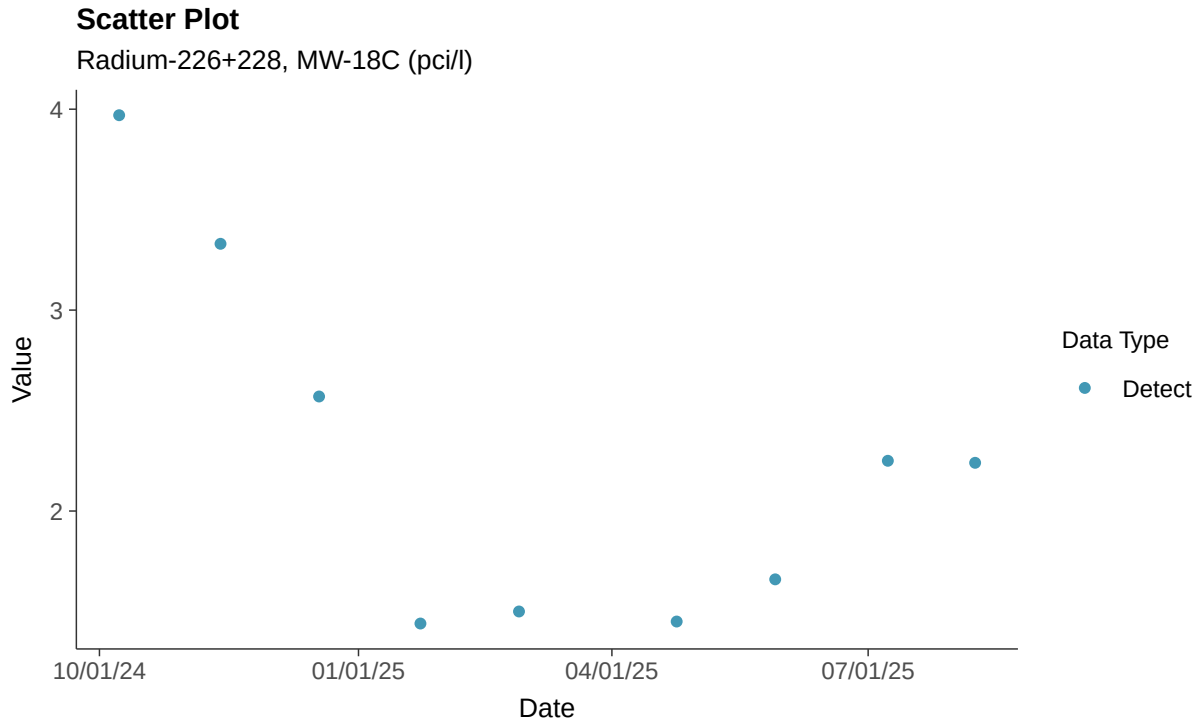
Trend Regression: Piecewise Linear-Linear

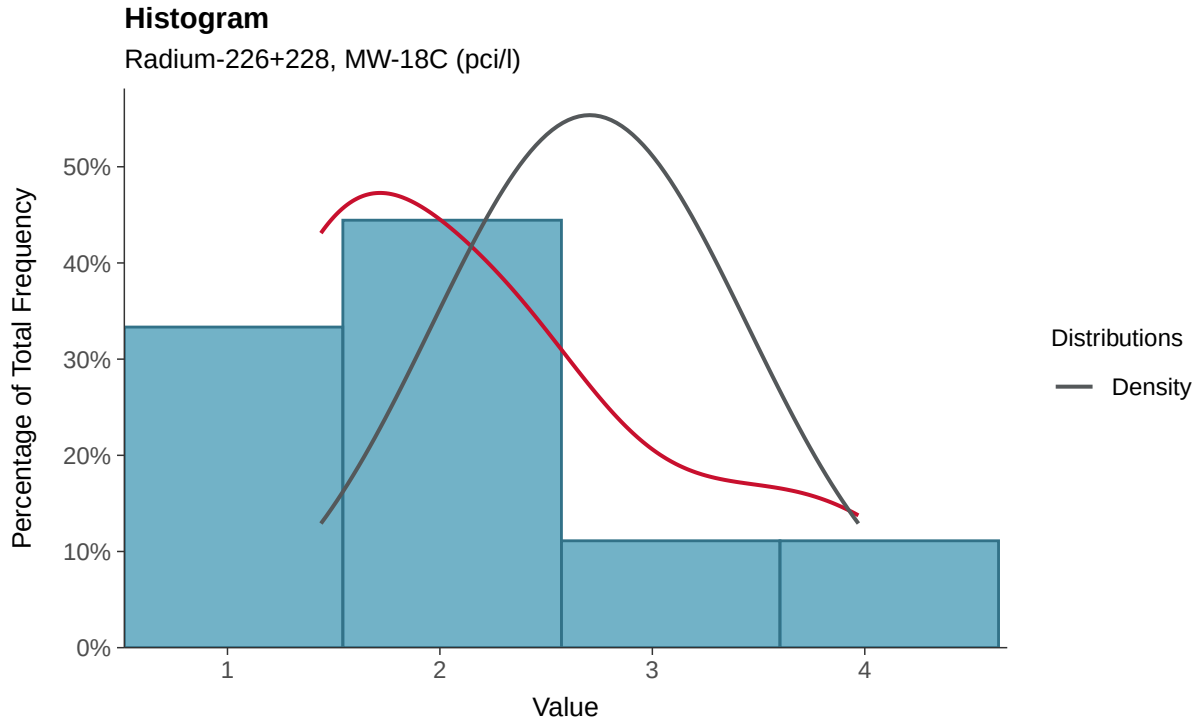
Molybdenum, MW-18C (mg/l)



Appendix IV: Radium-226+228, MW-18C

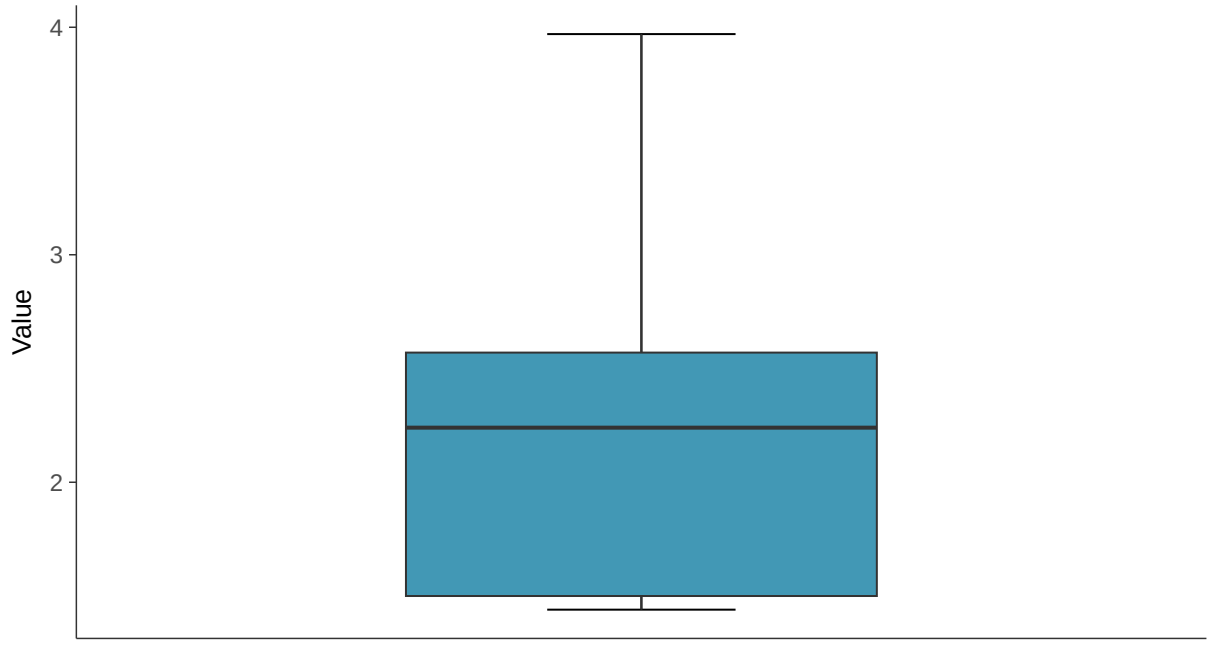
ID: 18_3_121





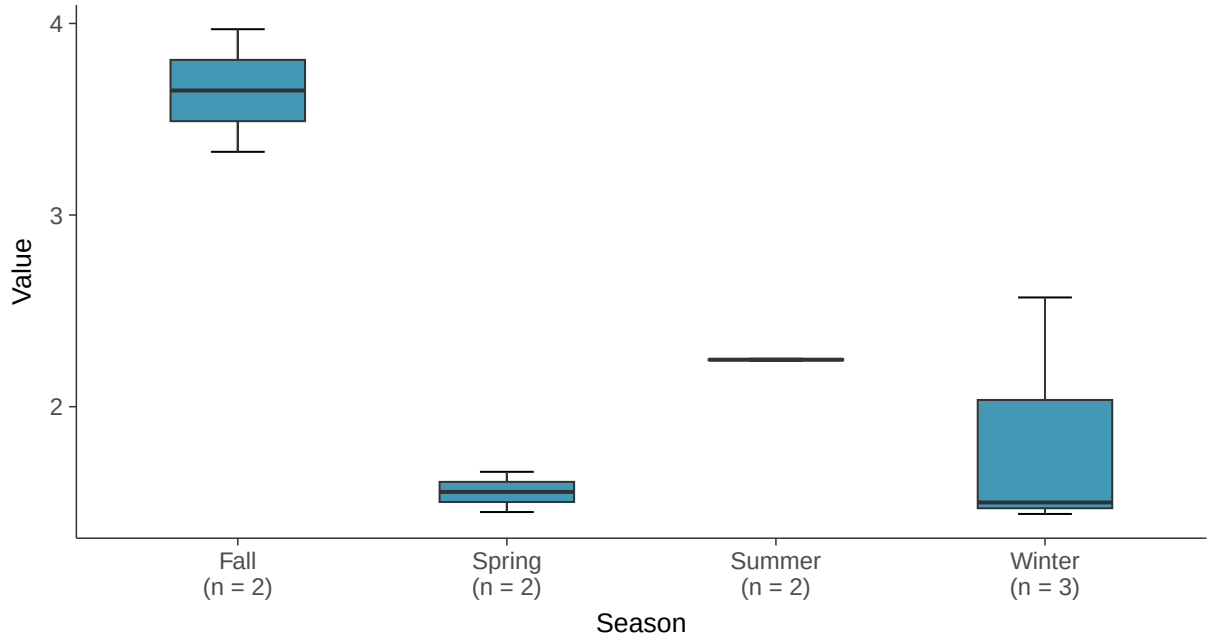
Boxplot

Radium-226+228, MW-18C (pci/l)



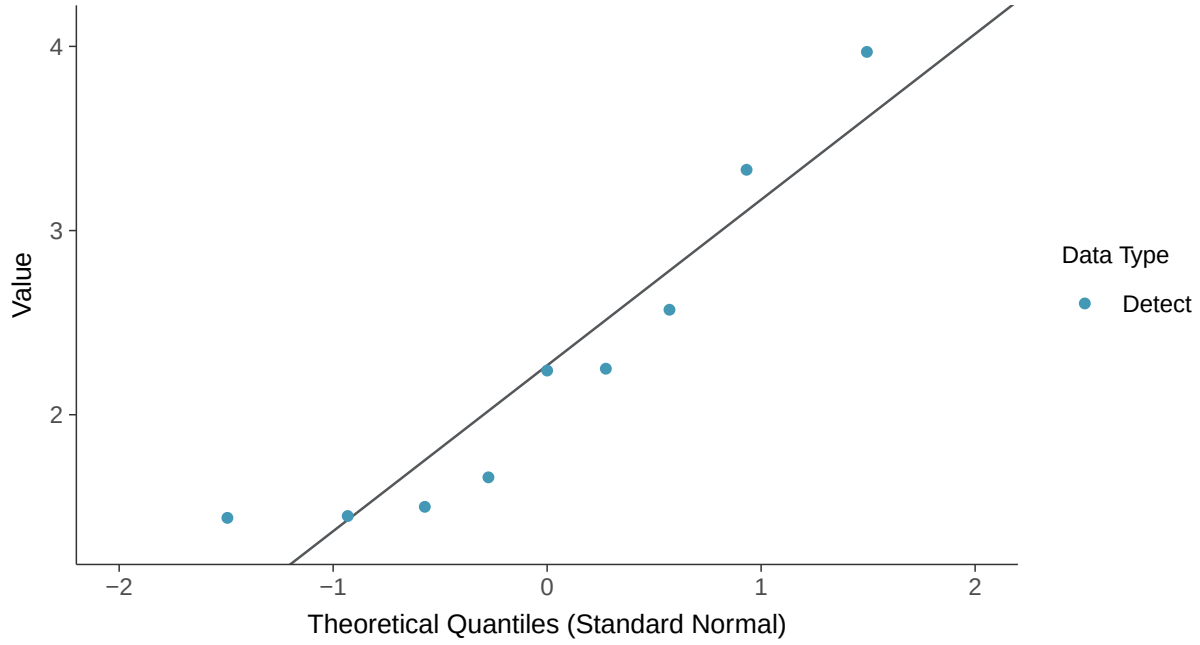
Boxplot by Season

Radium-226+228, MW-18C (pci/l)



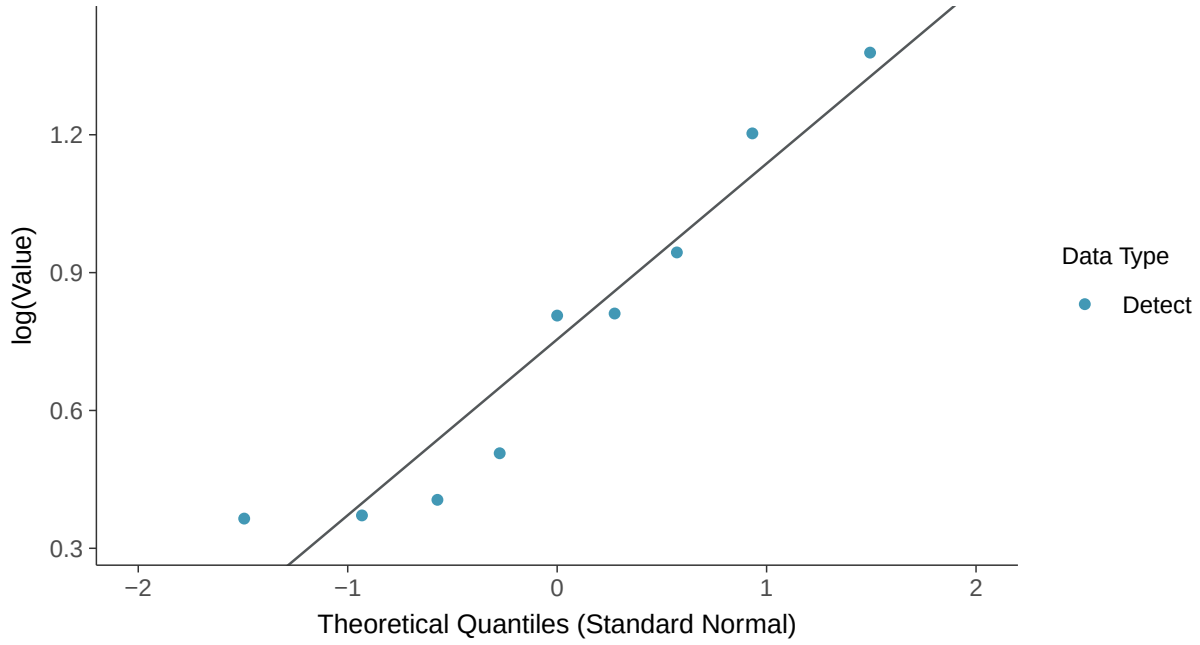
Normal Q-Q plot

Radium-226+228, MW-18C (pci/l)



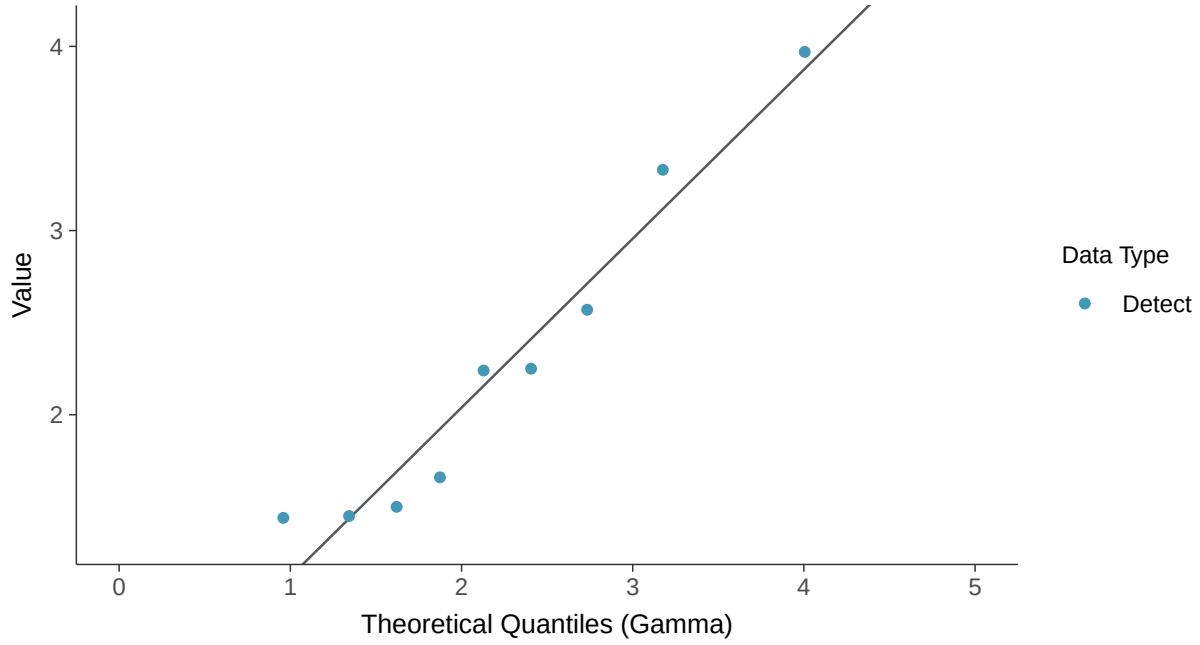
Lognormal Q-Q plot

Radium-226+228, MW-18C (pci/l)



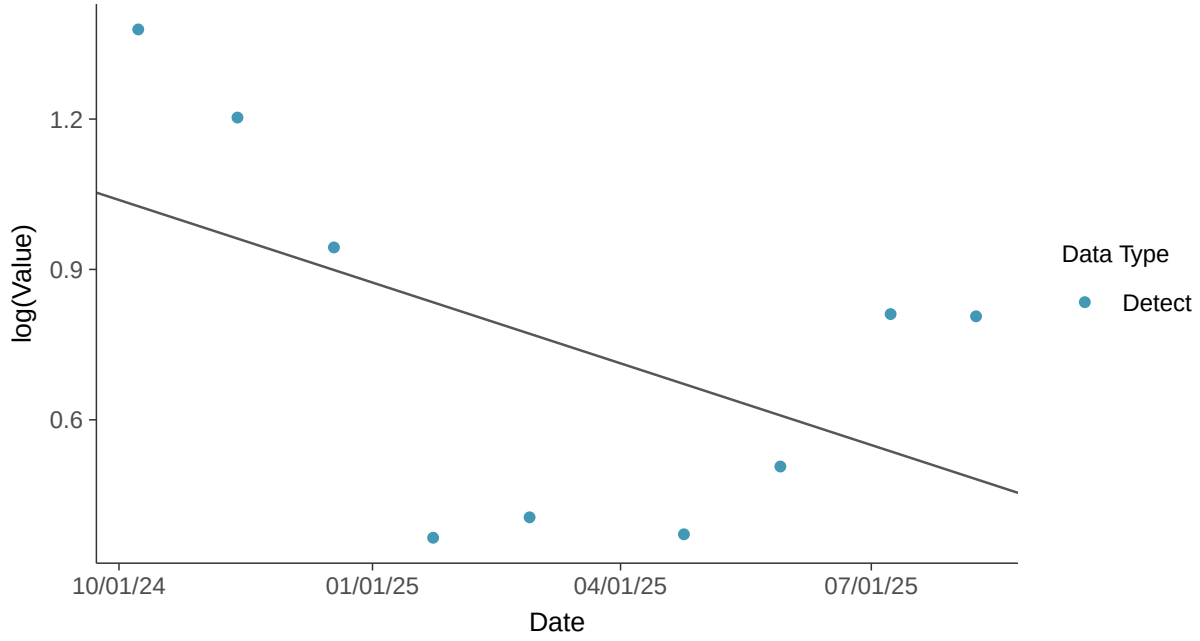
Gamma Q-Q plot

Radium-226+228, MW-18C (pci/l)



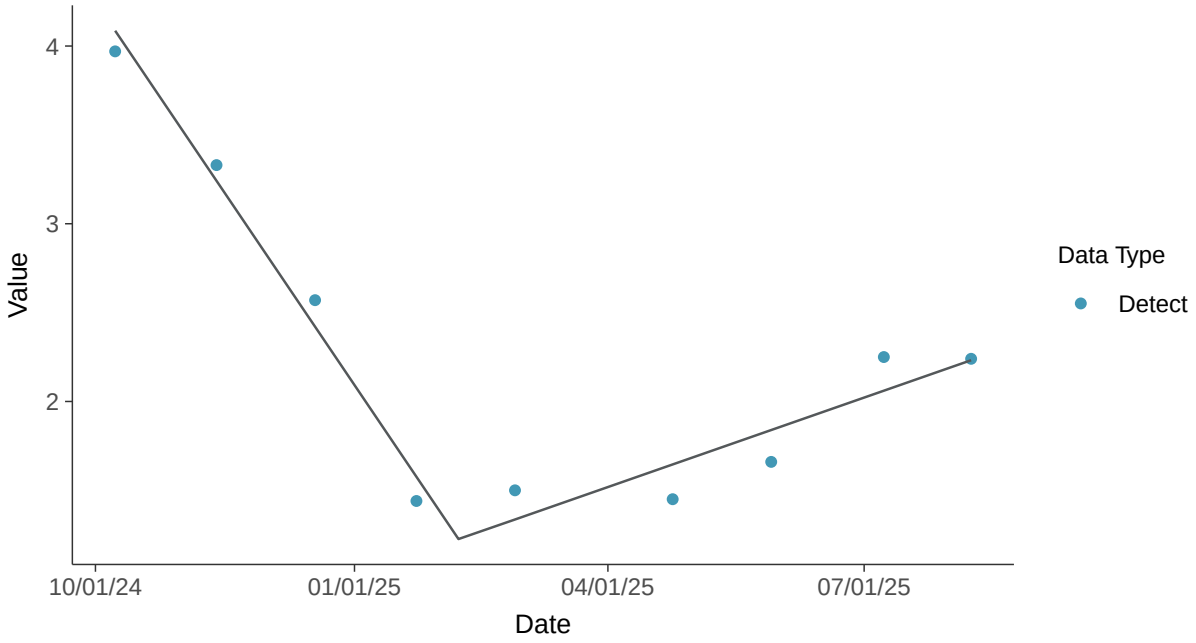
Trend Regression: Lognormal MLE

Radium-226+228, MW-18C (pci/l)



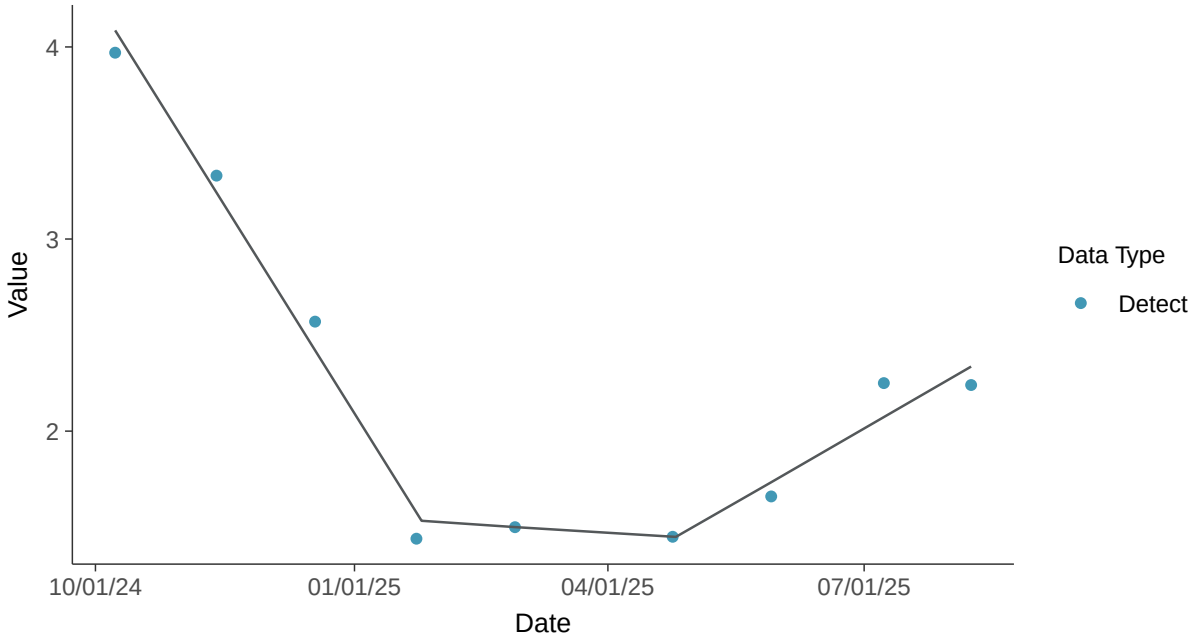
Trend Regression: Piecewise Linear-Linear

Radium-226+228, MW-18C (pci/l)



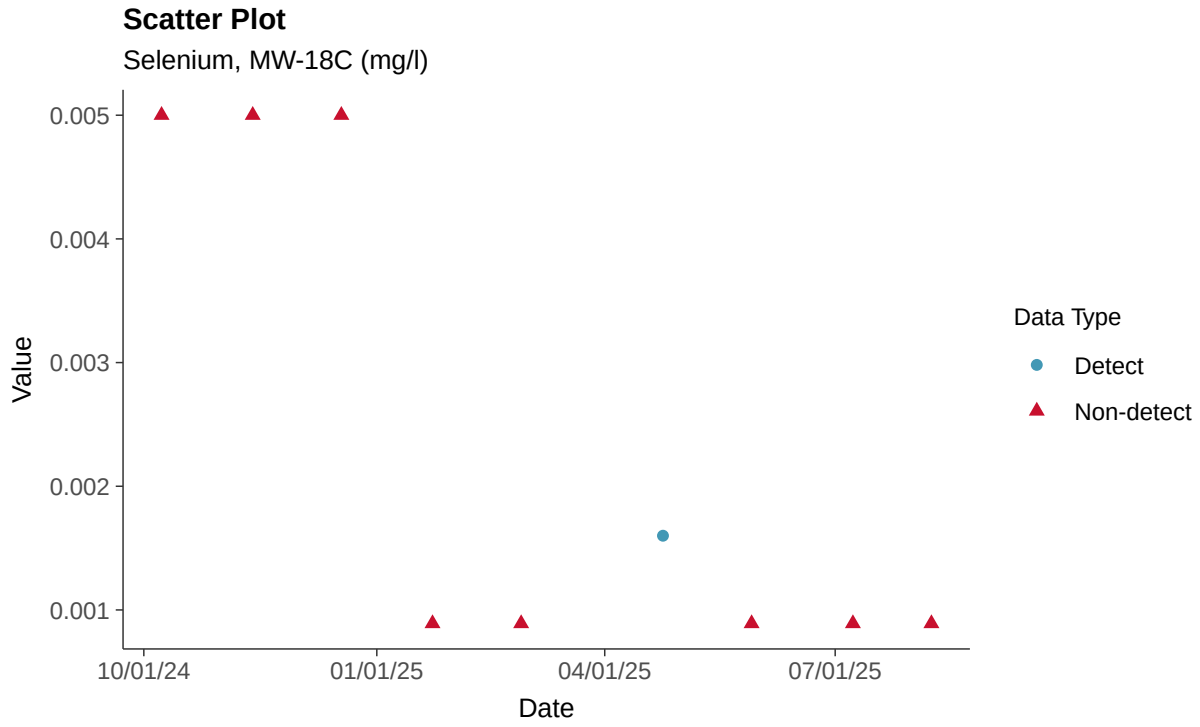
Trend Regression: Piecewise Linear-Linear-Linear

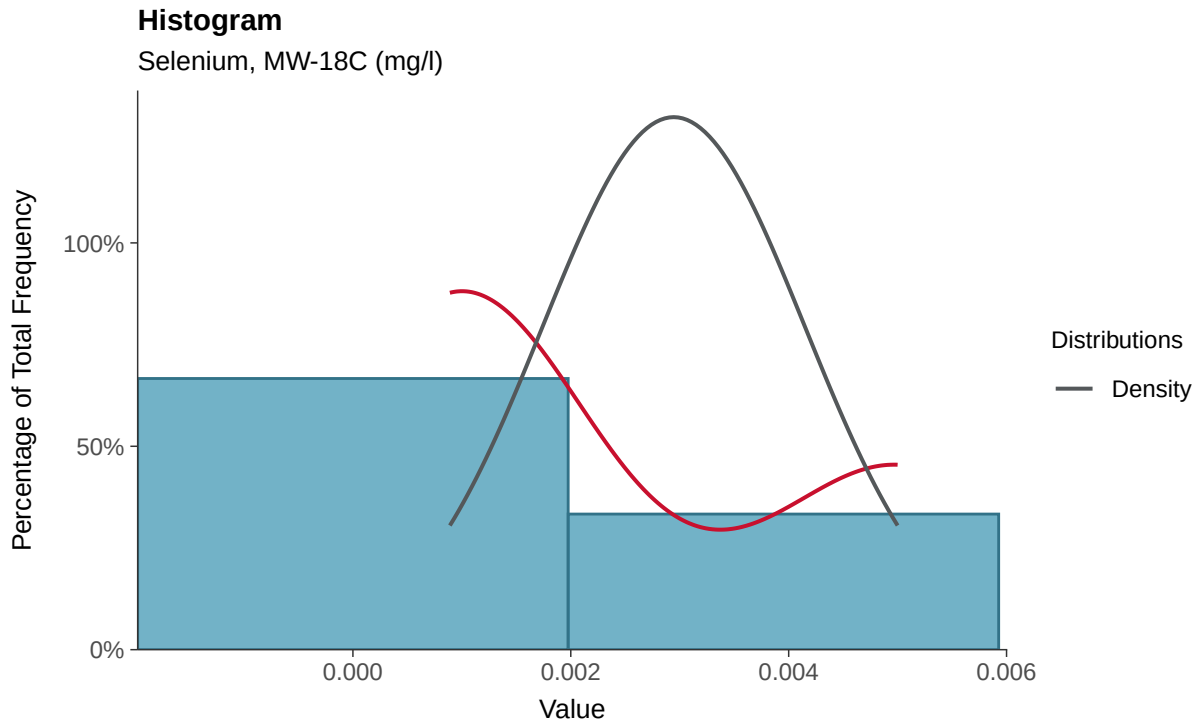
Radium-226+228, MW-18C (pci/l)



Appendix IV: Selenium, MW-18C

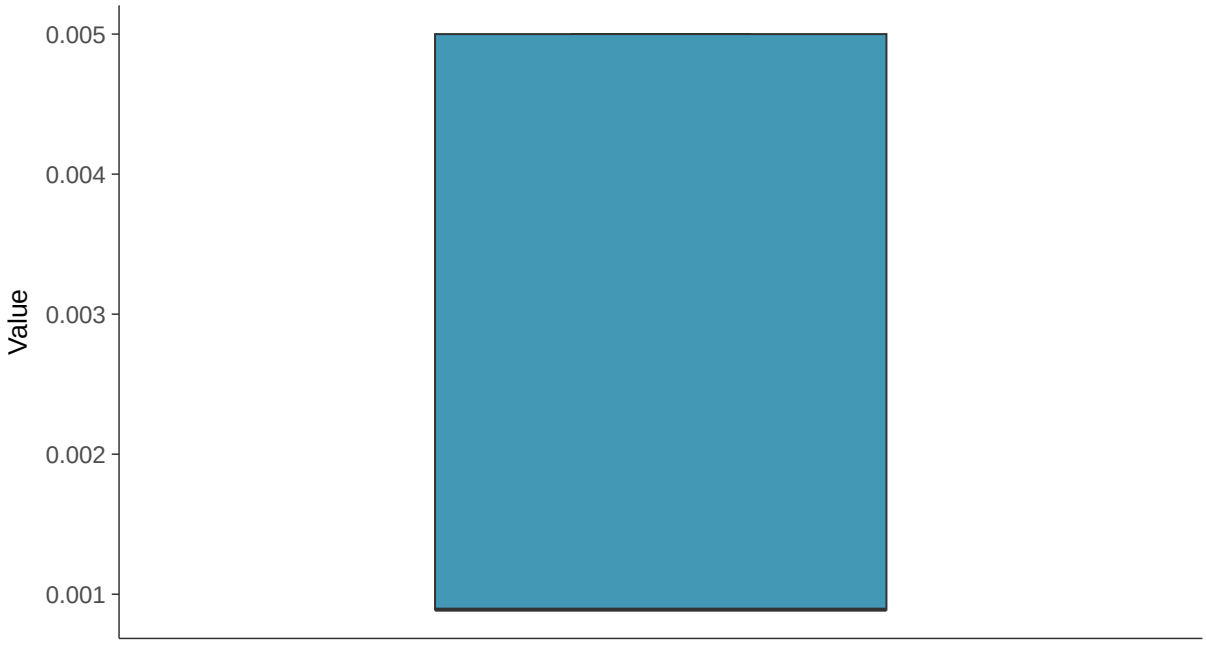
ID: 18_3_122





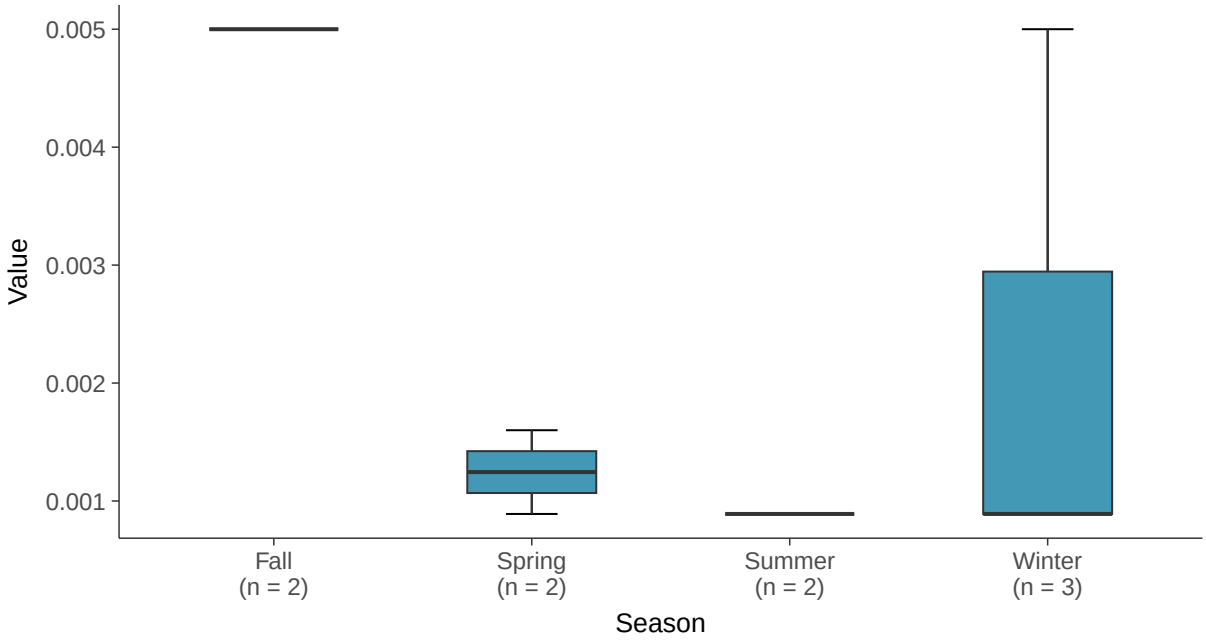
Boxplot

Selenium, MW-18C (mg/l)



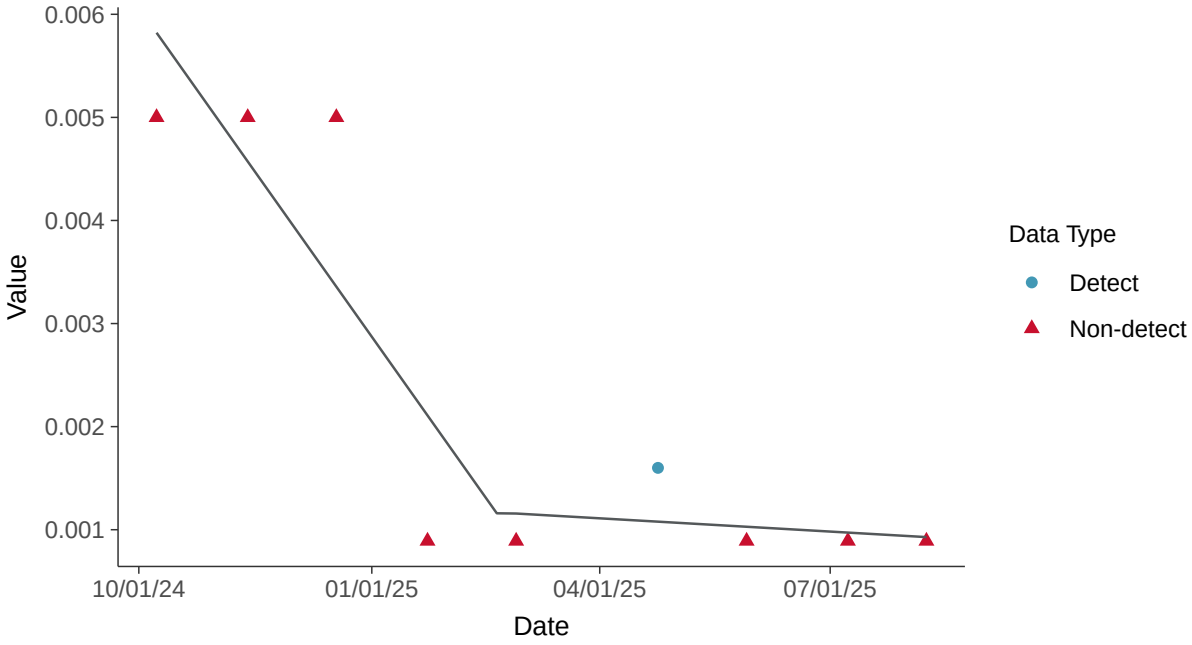
Boxplot by Season

Selenium, MW-18C (mg/l)



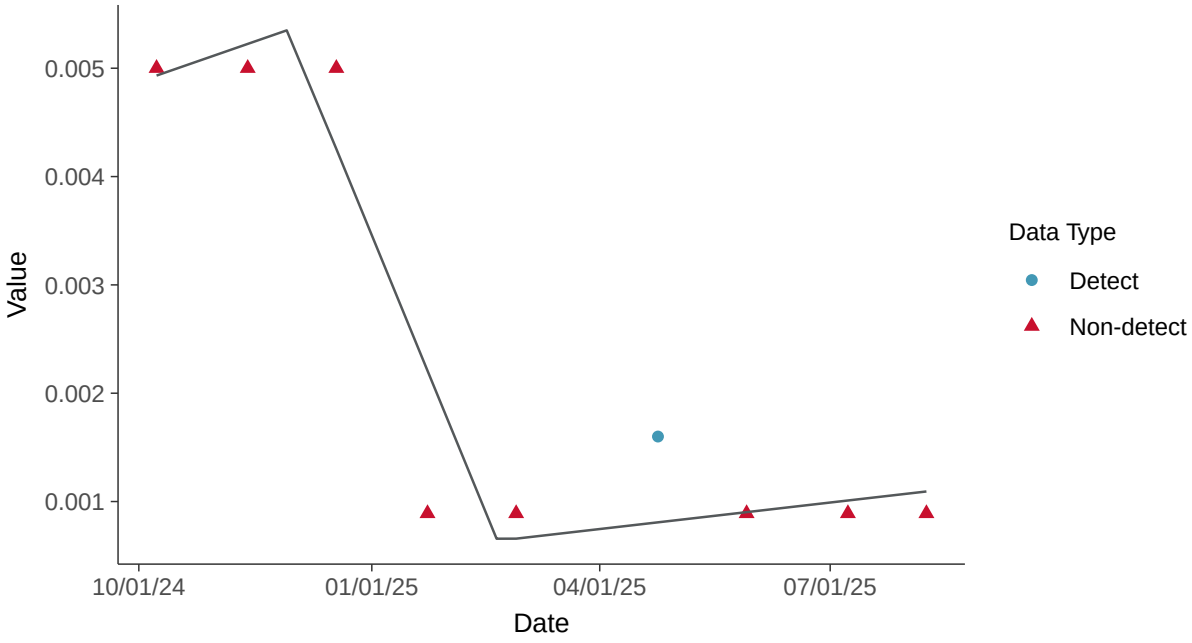
Trend Regression: Piecewise Linear-Linear

Selenium, MW-18C (mg/l)



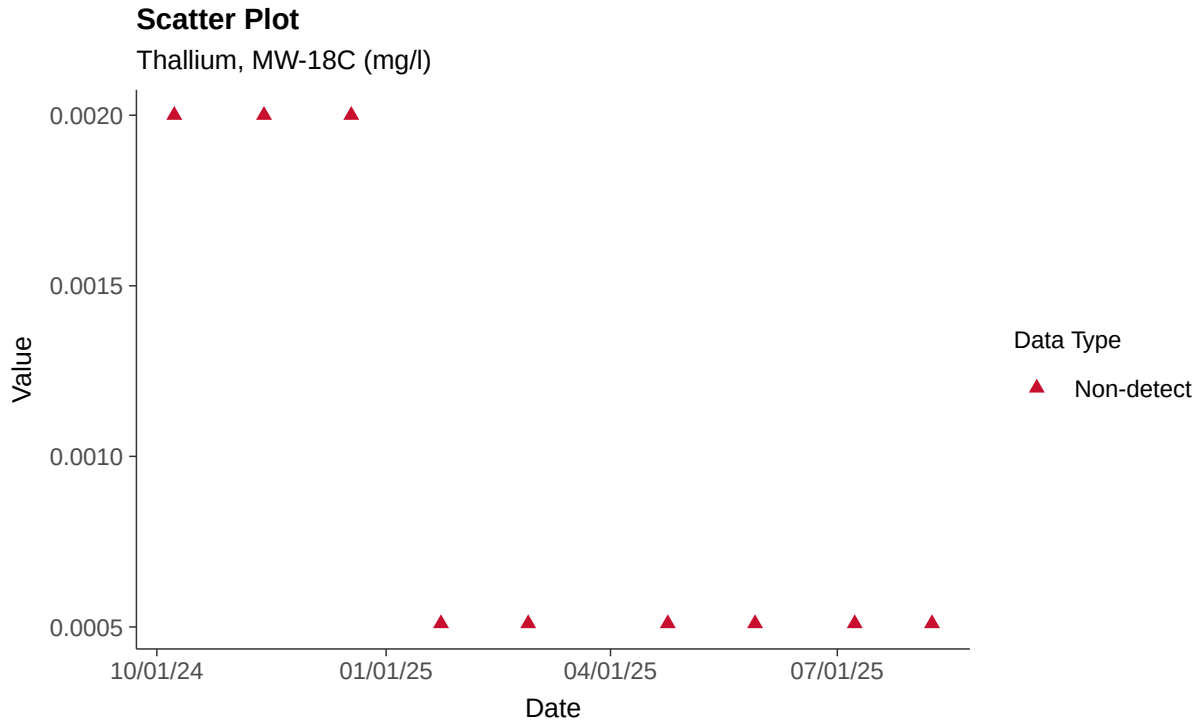
Trend Regression: Piecewise Linear-Linear-Linear

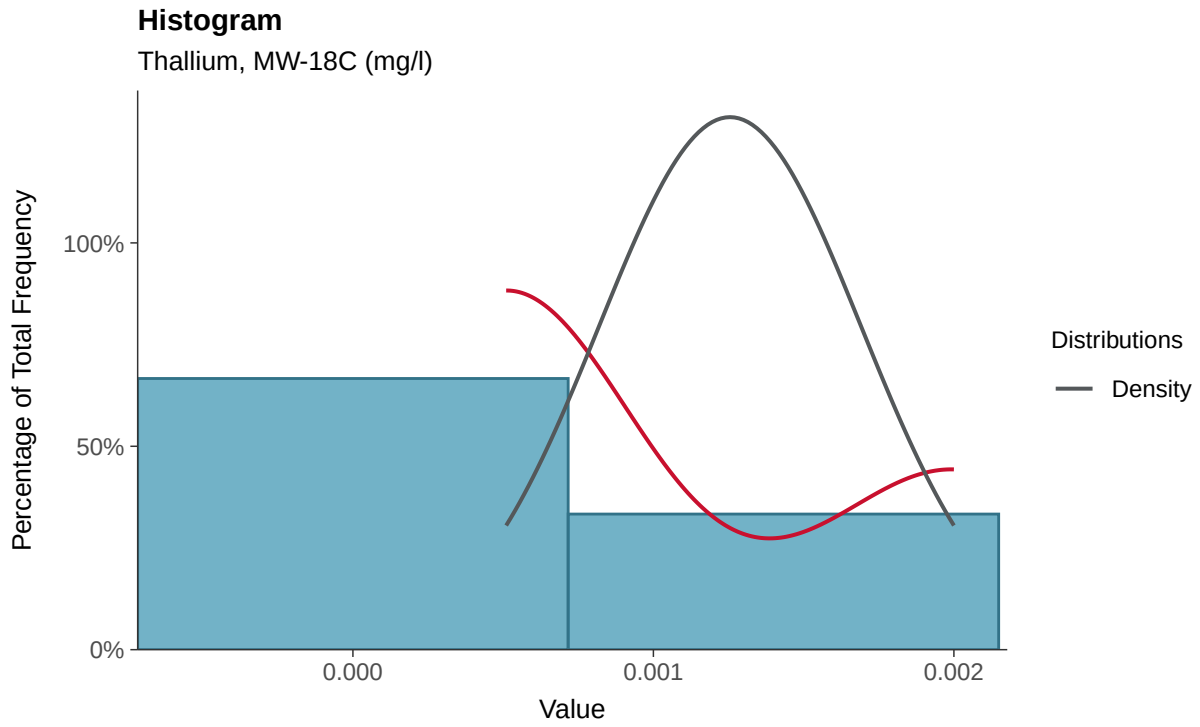
Selenium, MW-18C (mg/l)



Appendix IV: Thallium, MW-18C

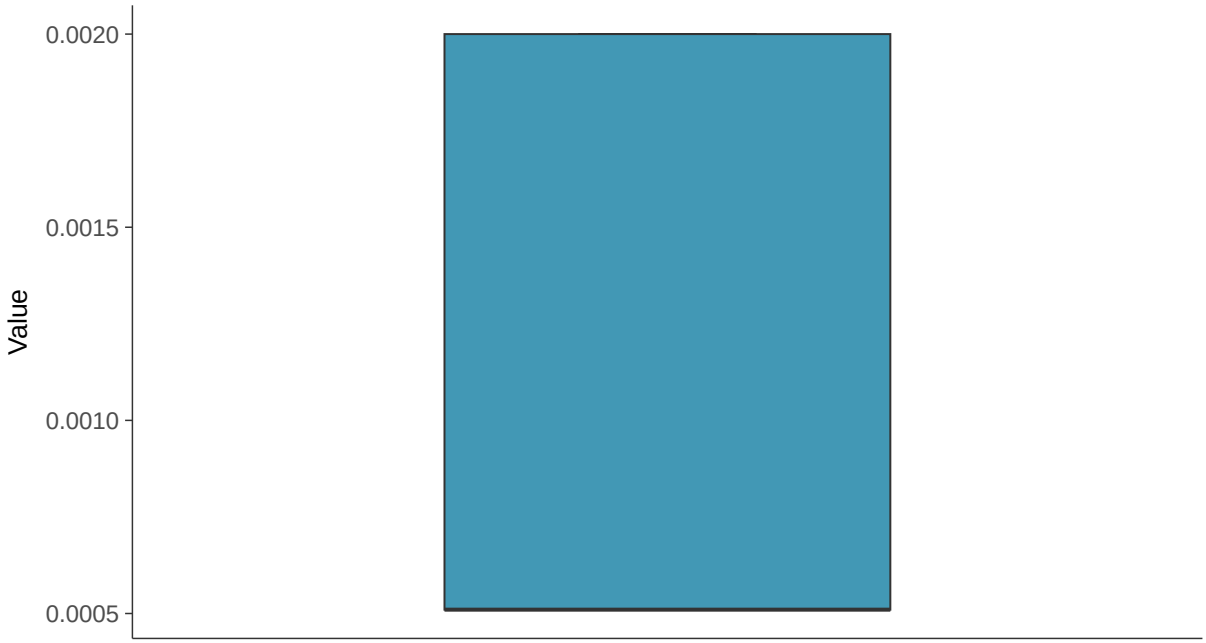
ID: 18_3_125





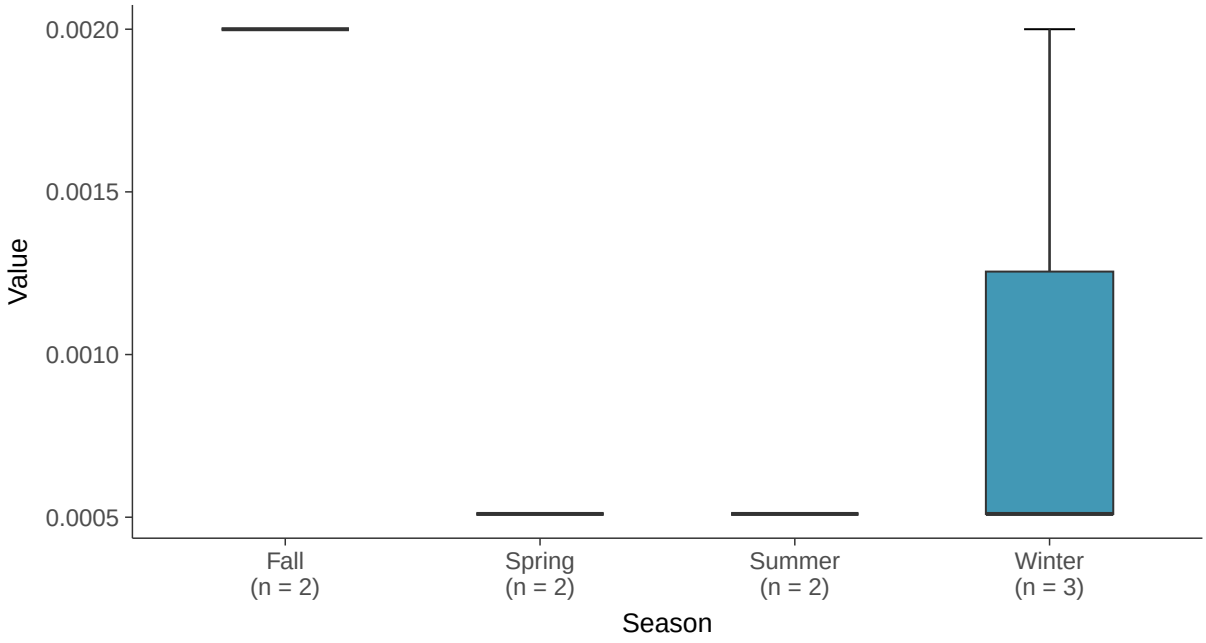
Boxplot

Thallium, MW-18C (mg/l)



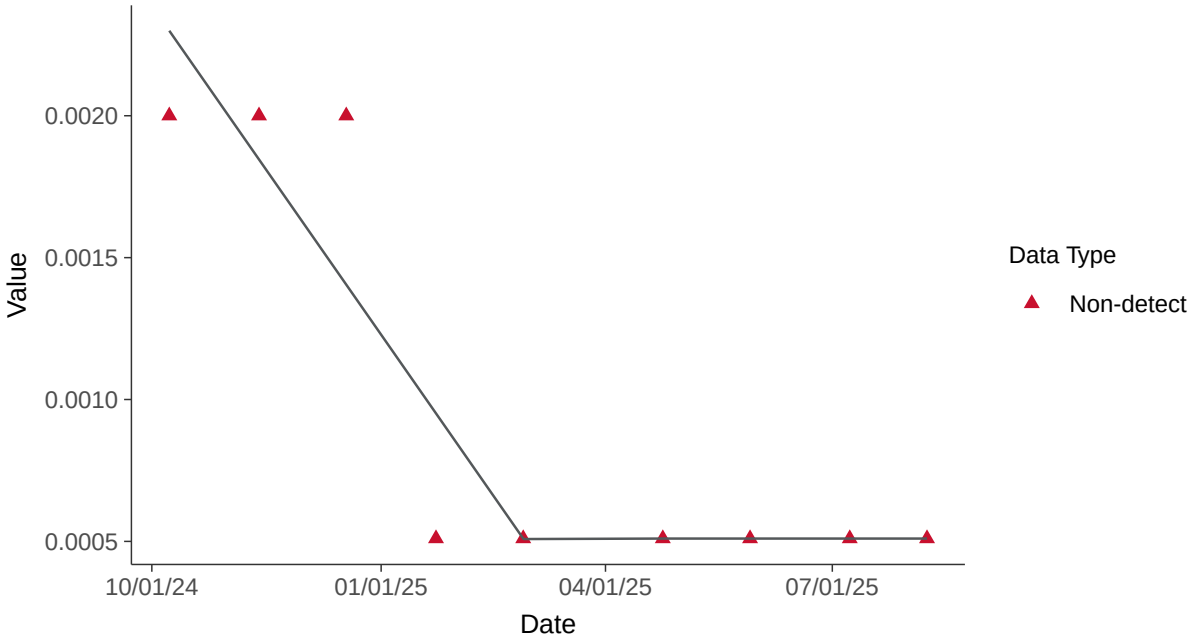
Boxplot by Season

Thallium, MW-18C (mg/l)



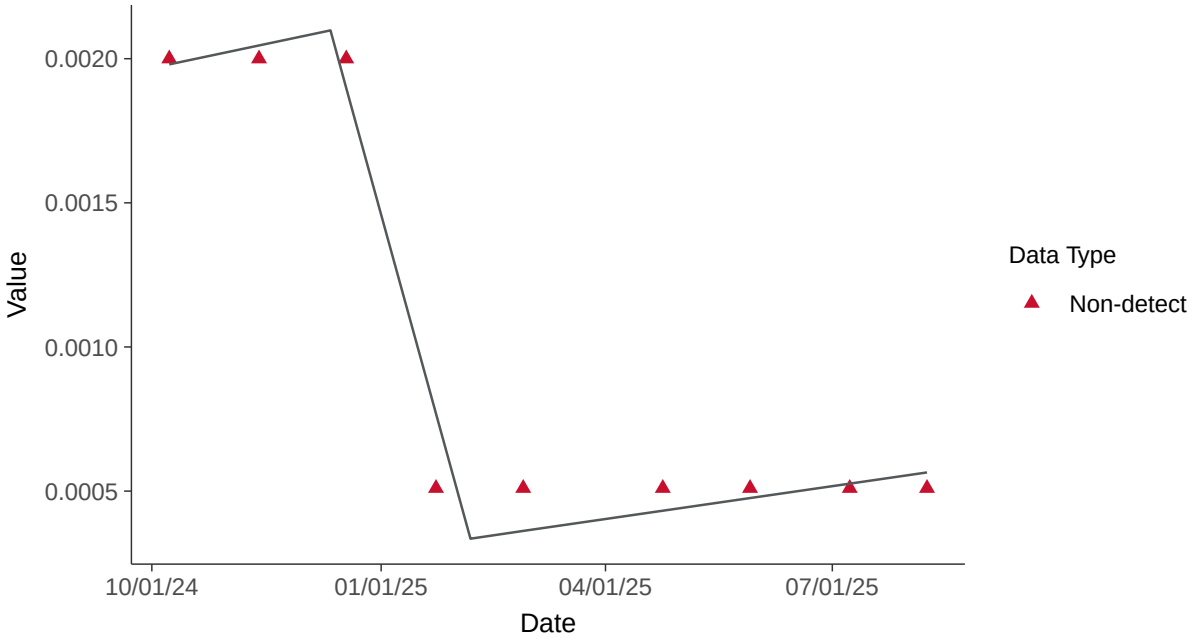
Trend Regression: Piecewise Linear-Linear

Thallium, MW-18C (mg/l)



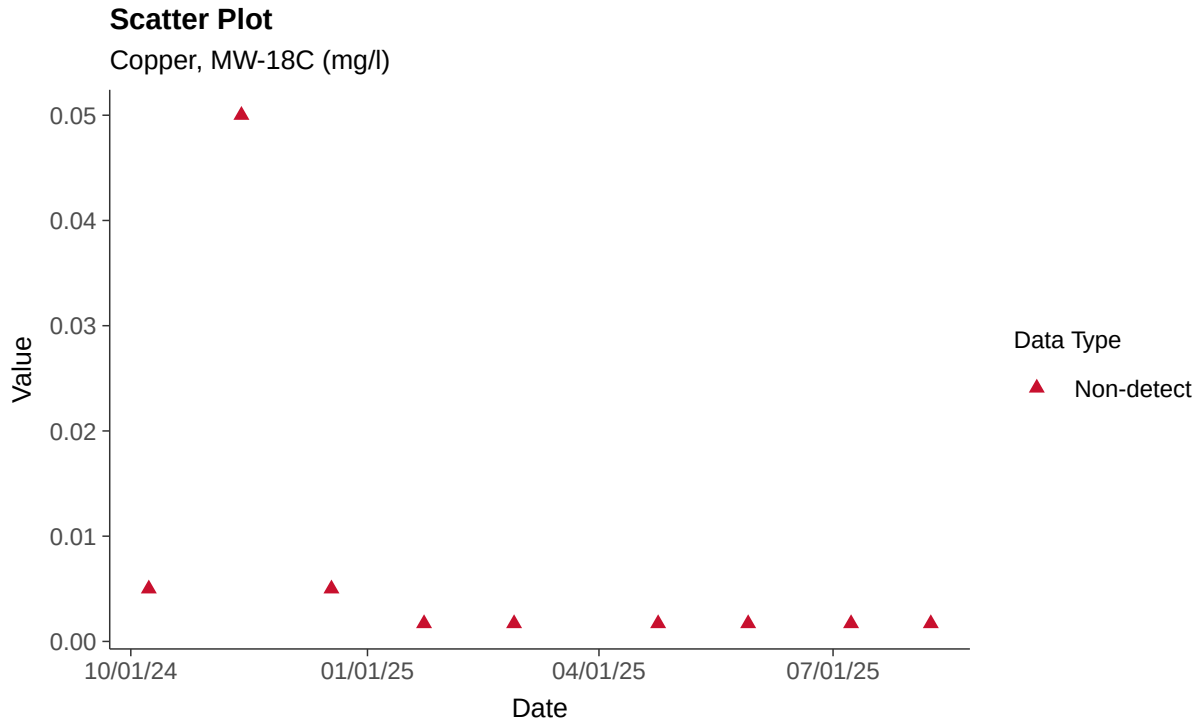
Trend Regression: Piecewise Linear-Linear-Linear

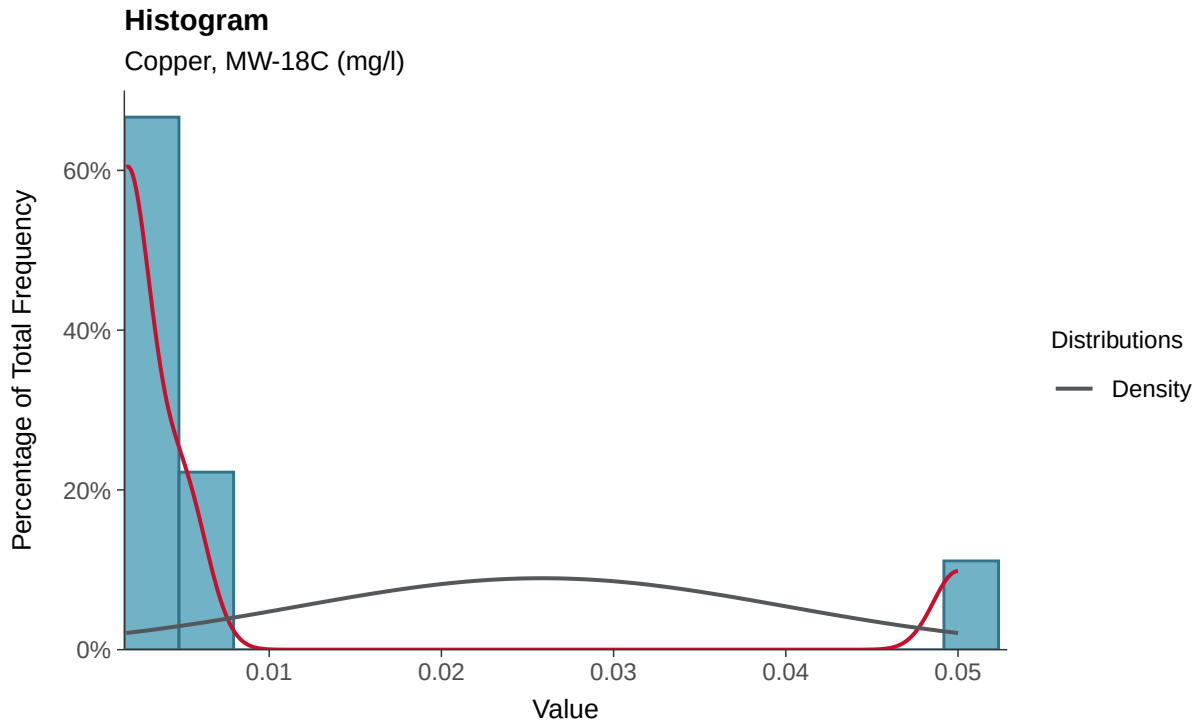
Thallium, MW-18C (mg/l)



Part 115: Copper, MW-18C

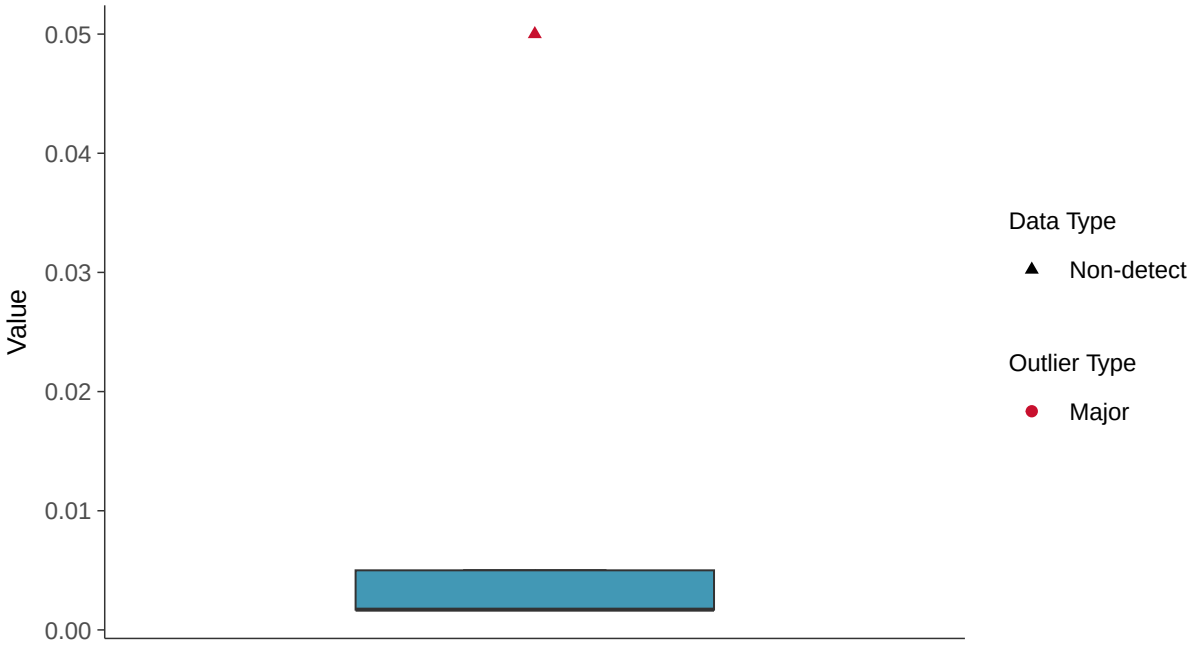
ID: 18_5_111





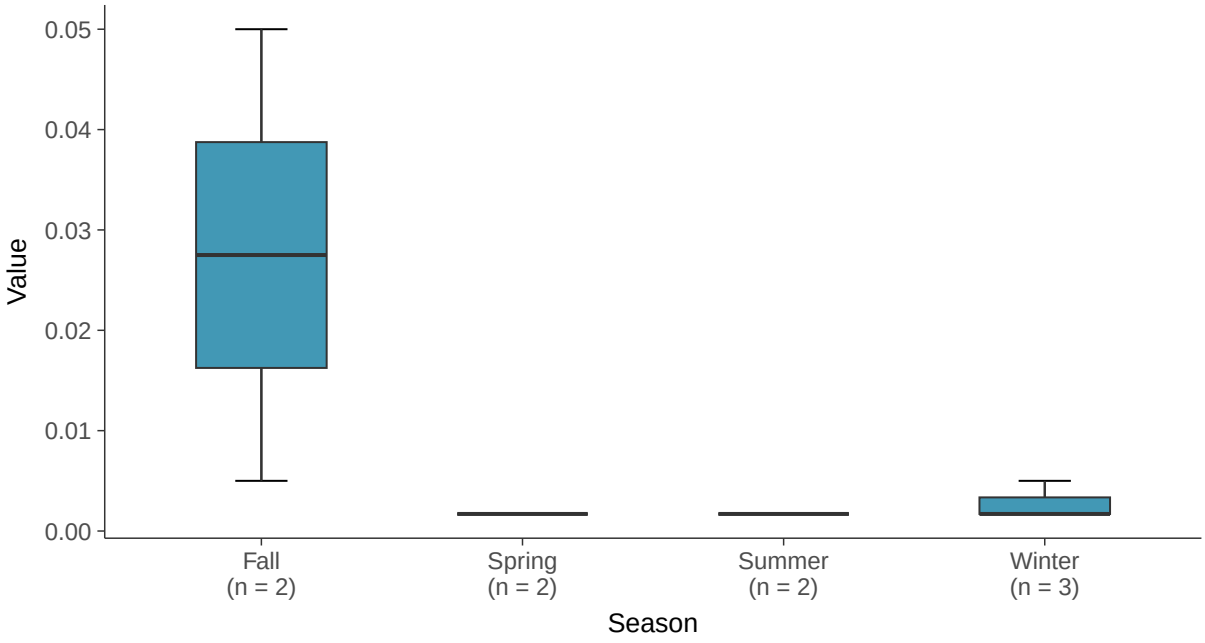
Boxplot

Copper, MW-18C (mg/l)



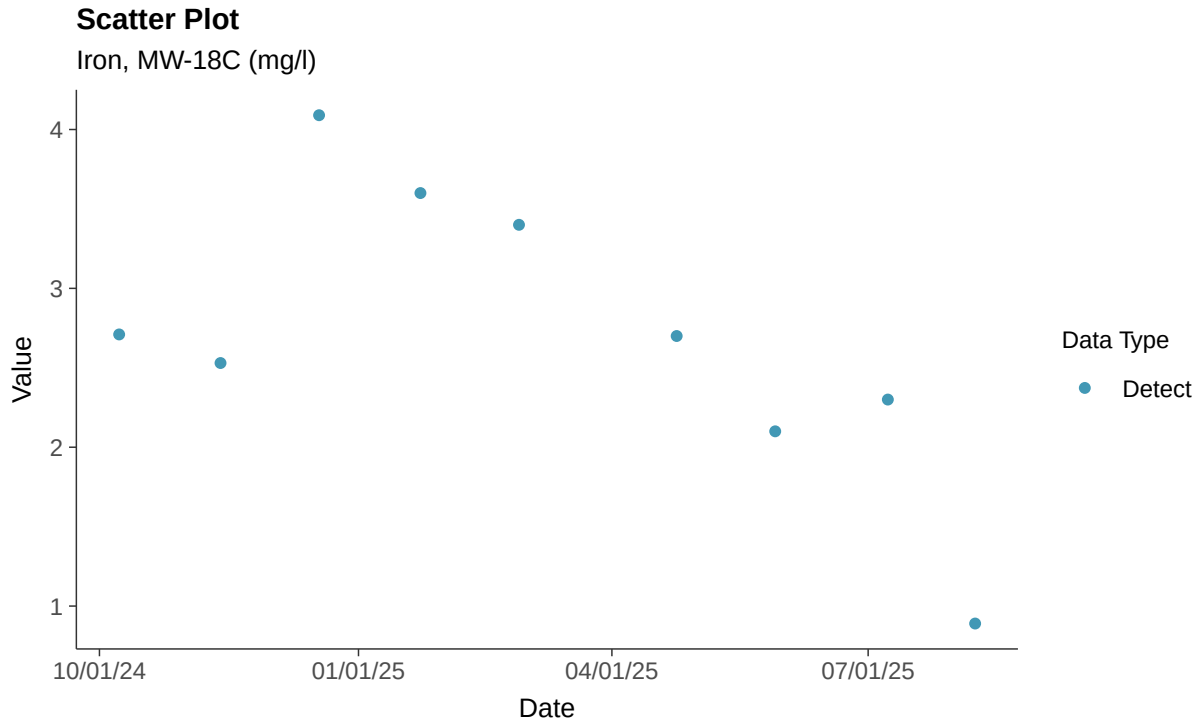
Boxplot by Season

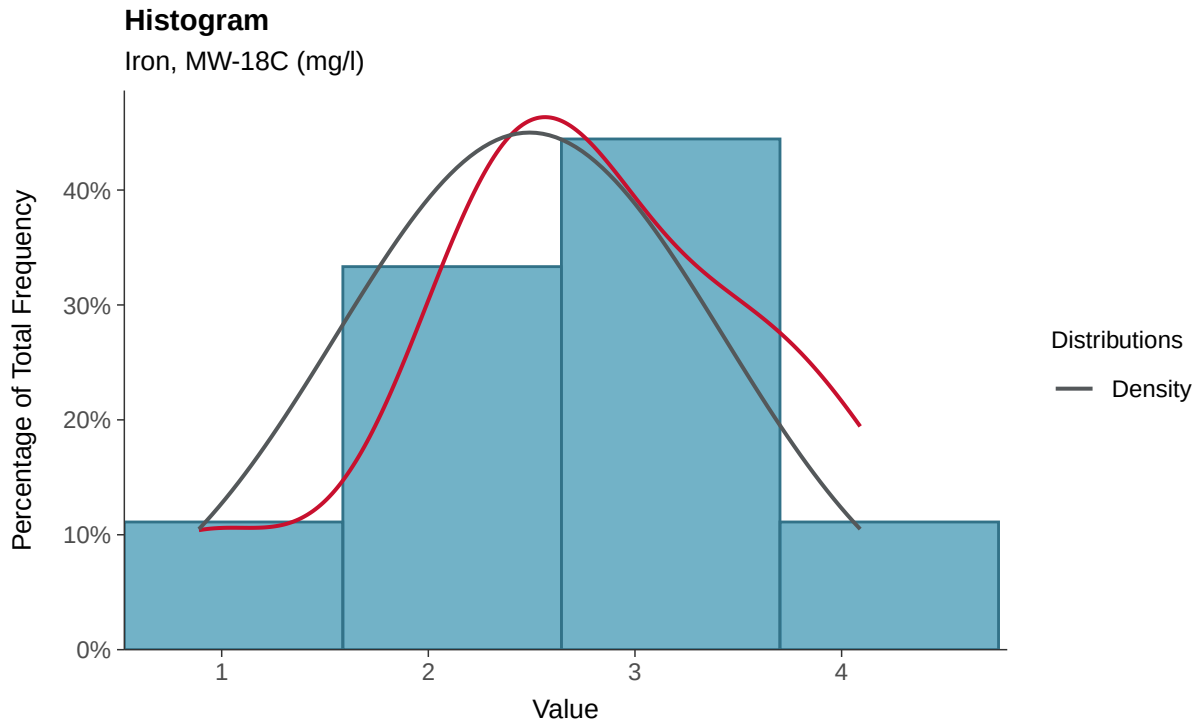
Copper, MW-18C (mg/l)



Part 115: Iron, MW-18C

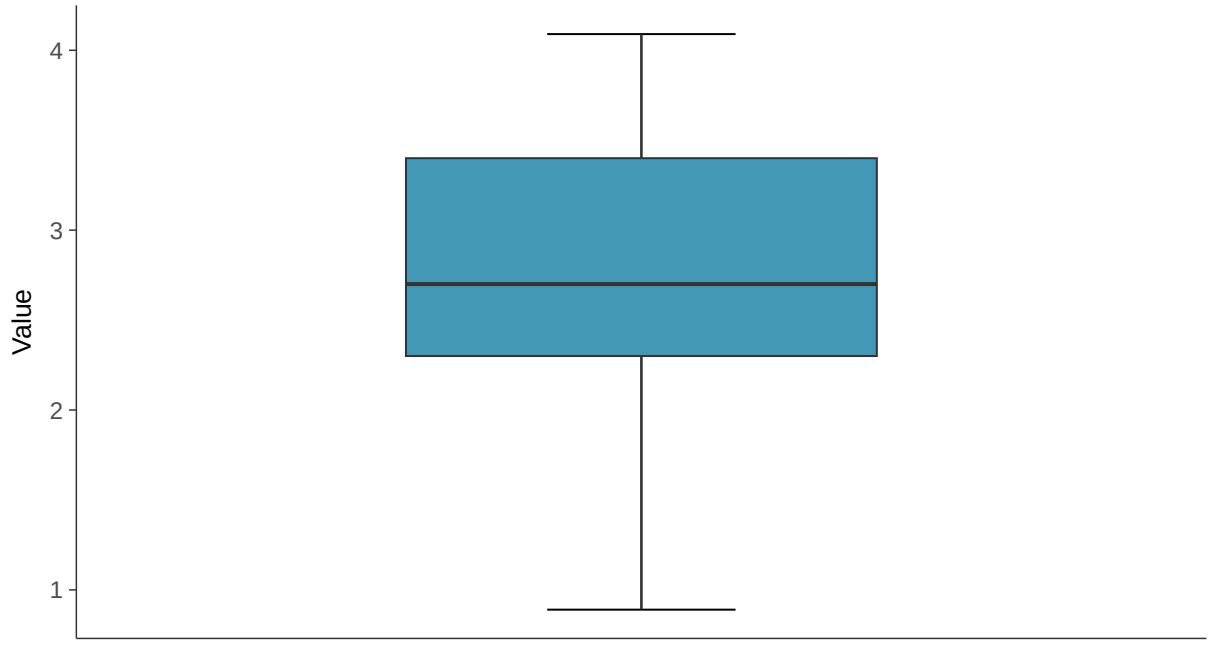
ID: 18_5_114





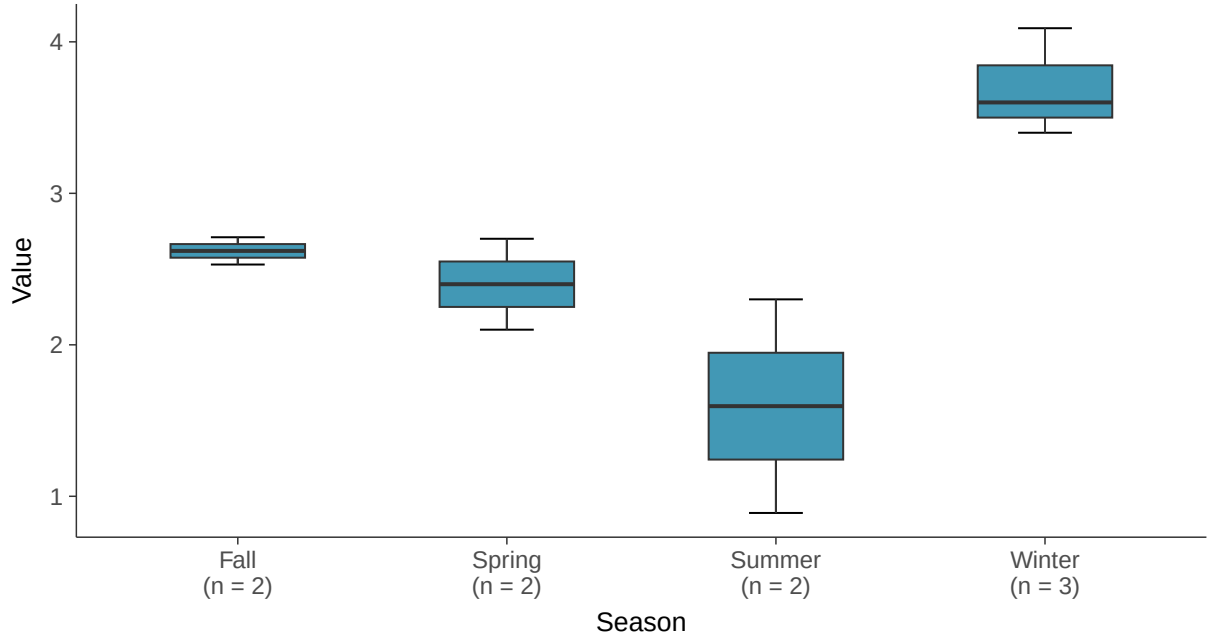
Boxplot

Iron, MW-18C (mg/l)



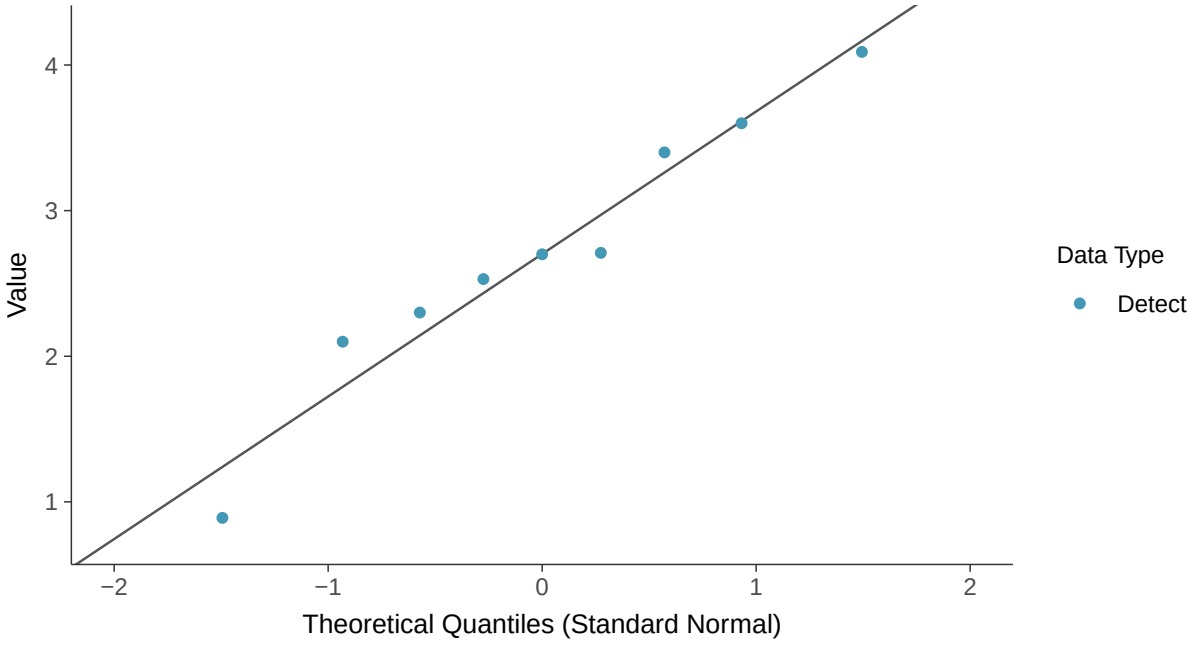
Boxplot by Season

Iron, MW-18C (mg/l)



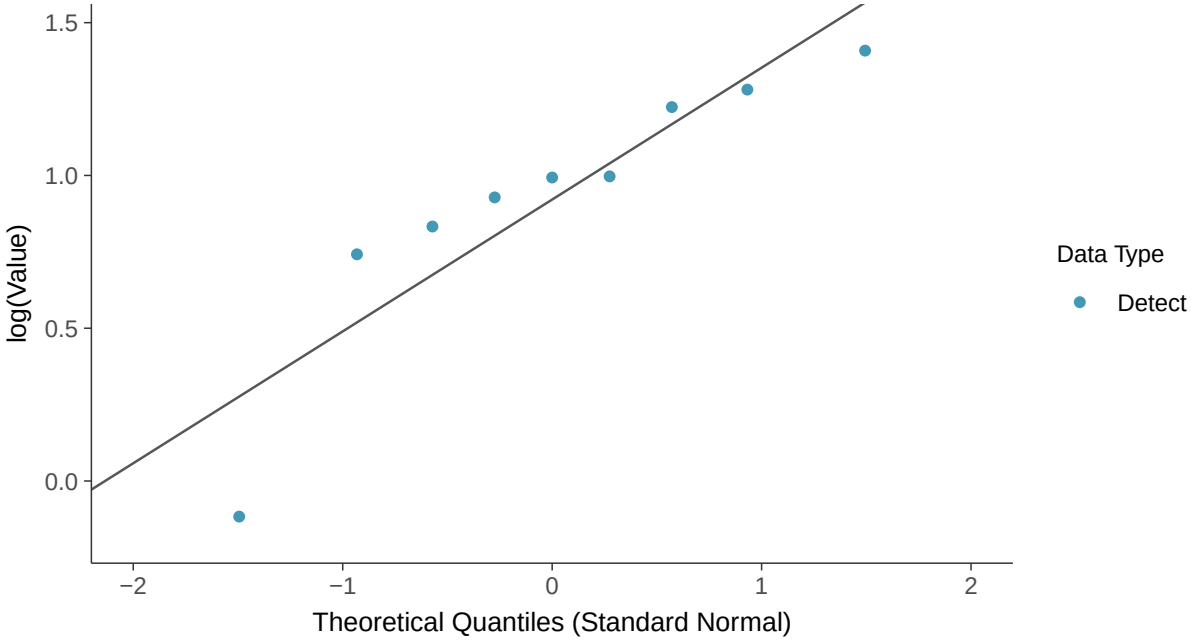
Normal Q-Q plot

Iron, MW-18C (mg/l)



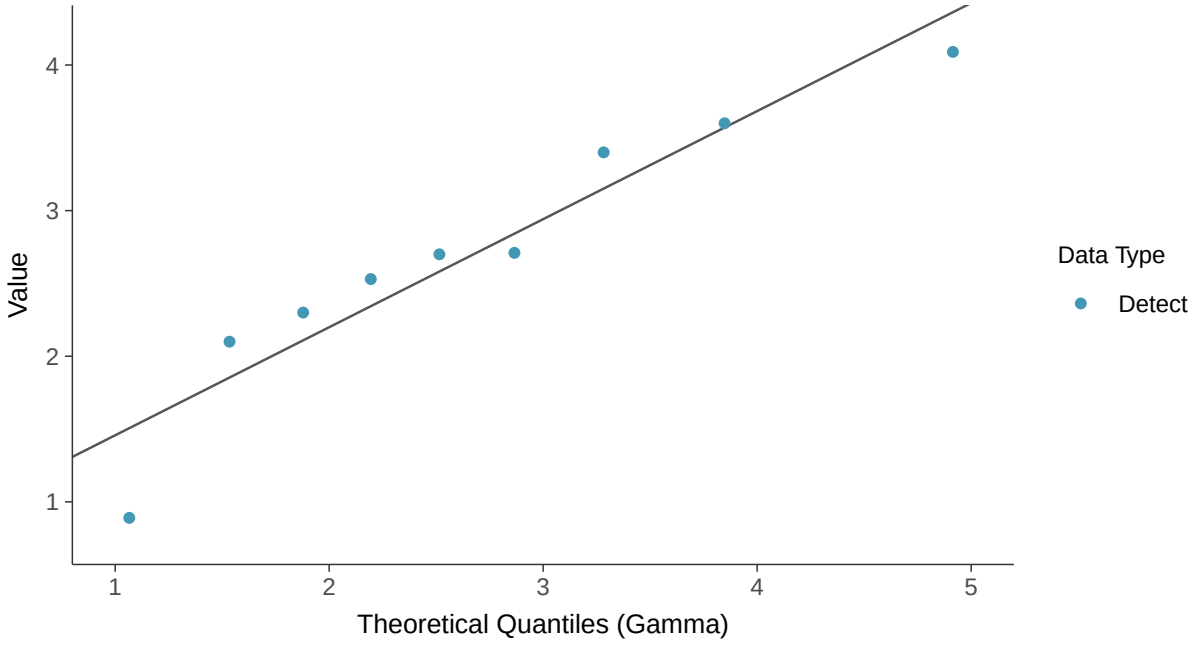
Lognormal Q-Q plot

Iron, MW-18C (mg/l)



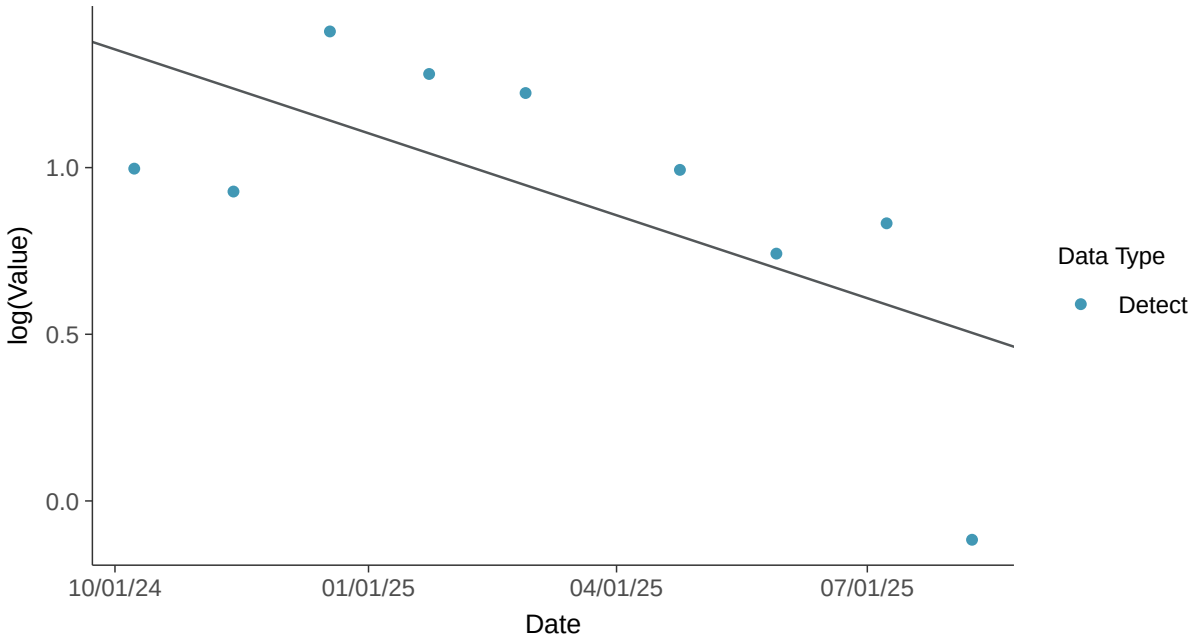
Gamma Q-Q plot

Iron, MW-18C (mg/l)



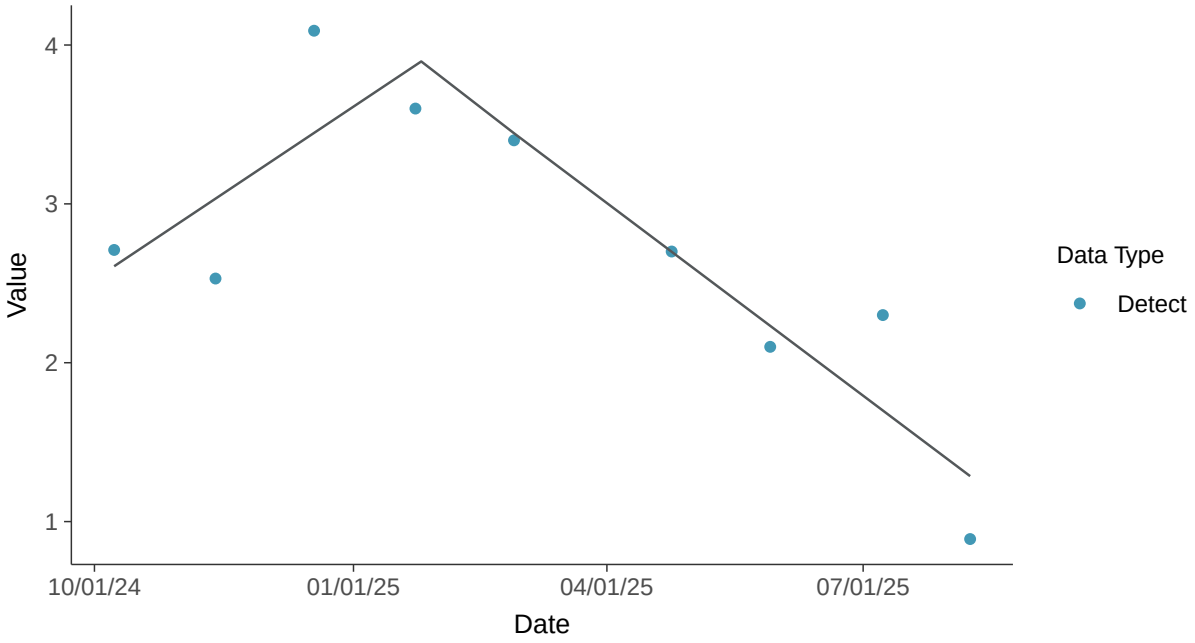
Trend Regression: Lognormal MLE

Iron, MW-18C (mg/l)



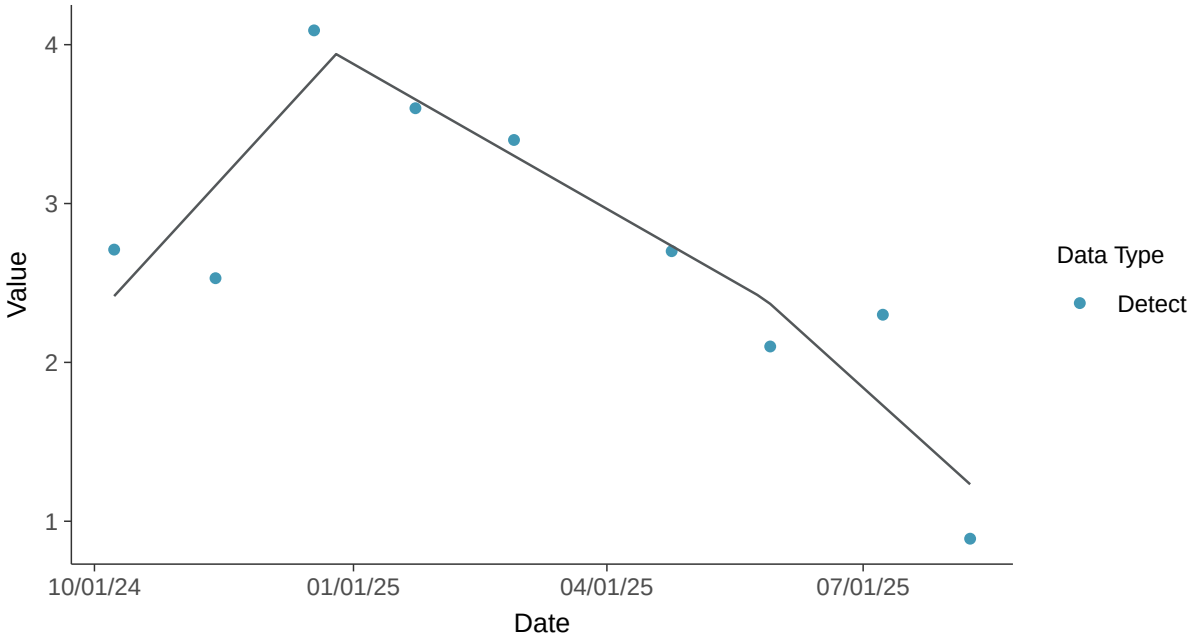
Trend Regression: Piecewise Linear-Linear

Iron, MW-18C (mg/l)



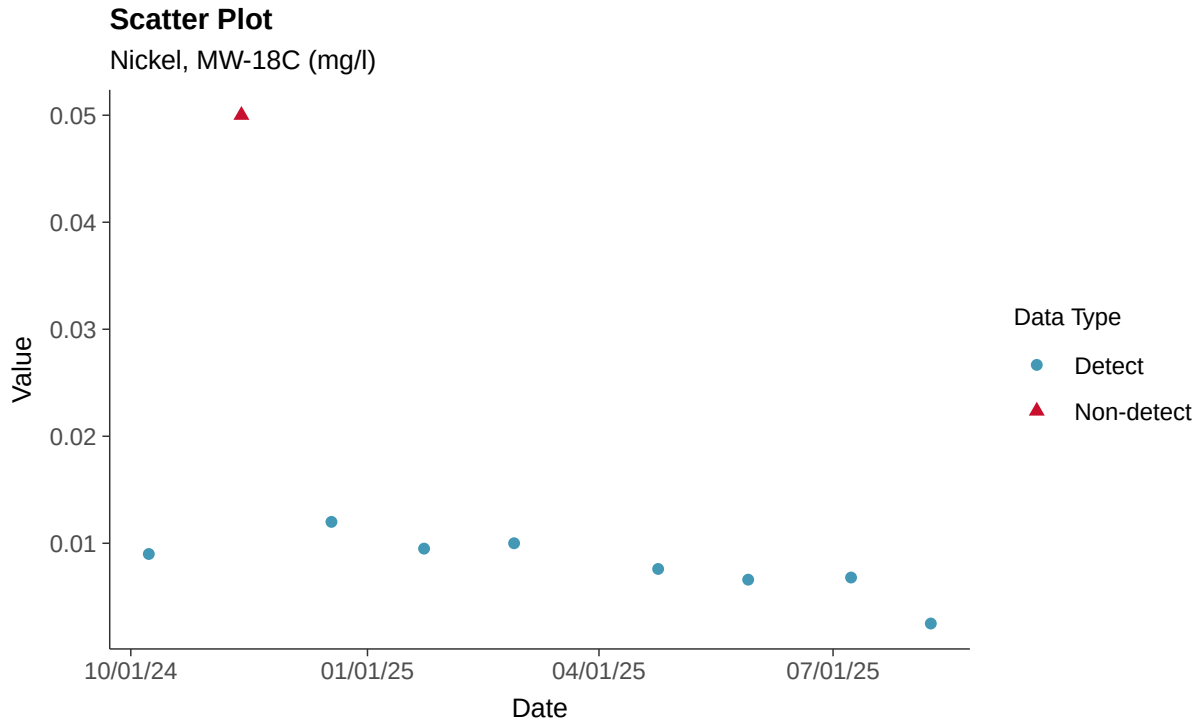
Trend Regression: Piecewise Linear-Linear-Linear

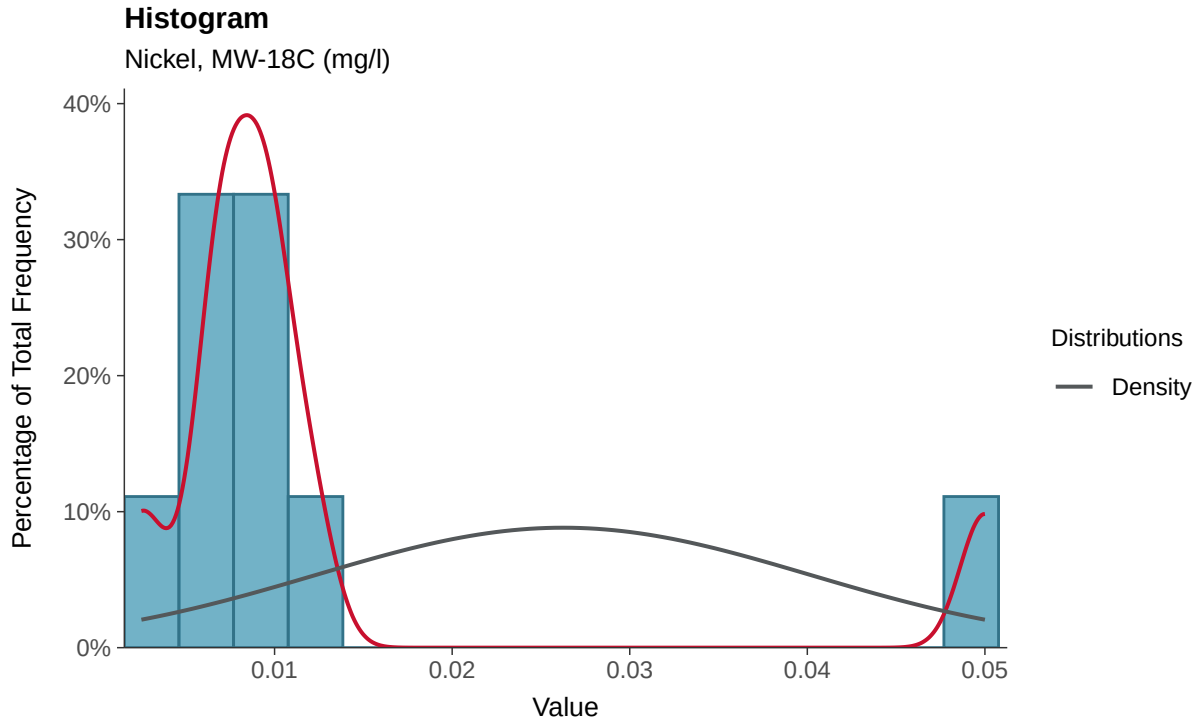
Iron, MW-18C (mg/l)



Part 115: Nickel, MW-18C

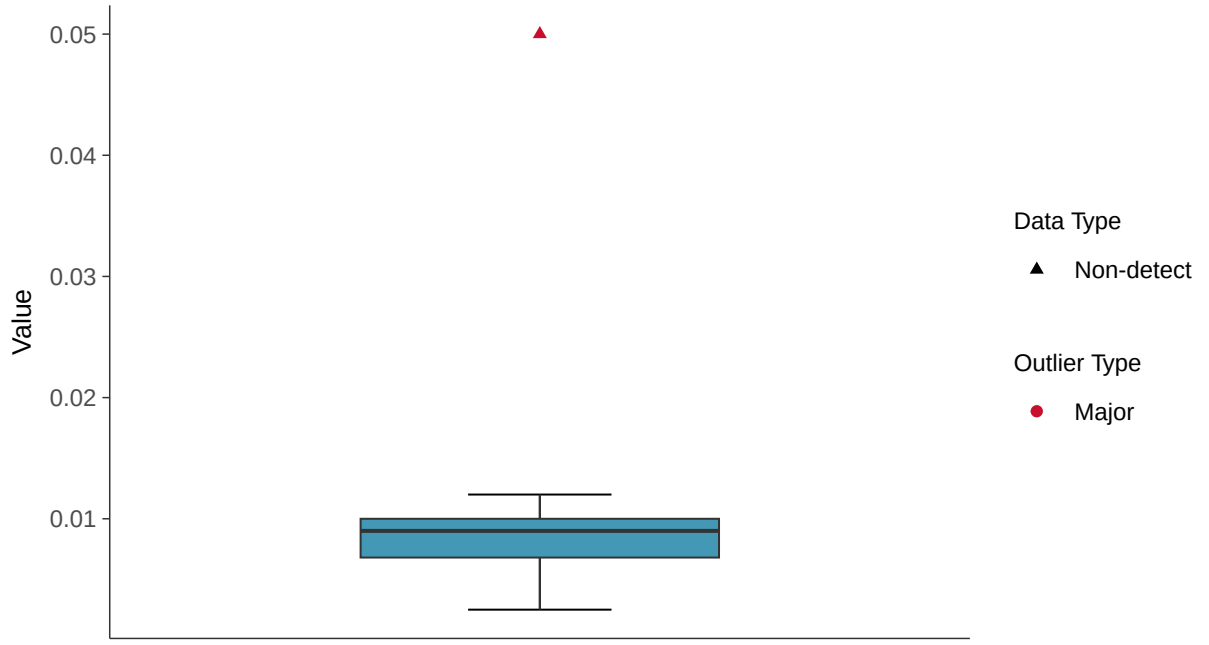
ID: 18_5_119





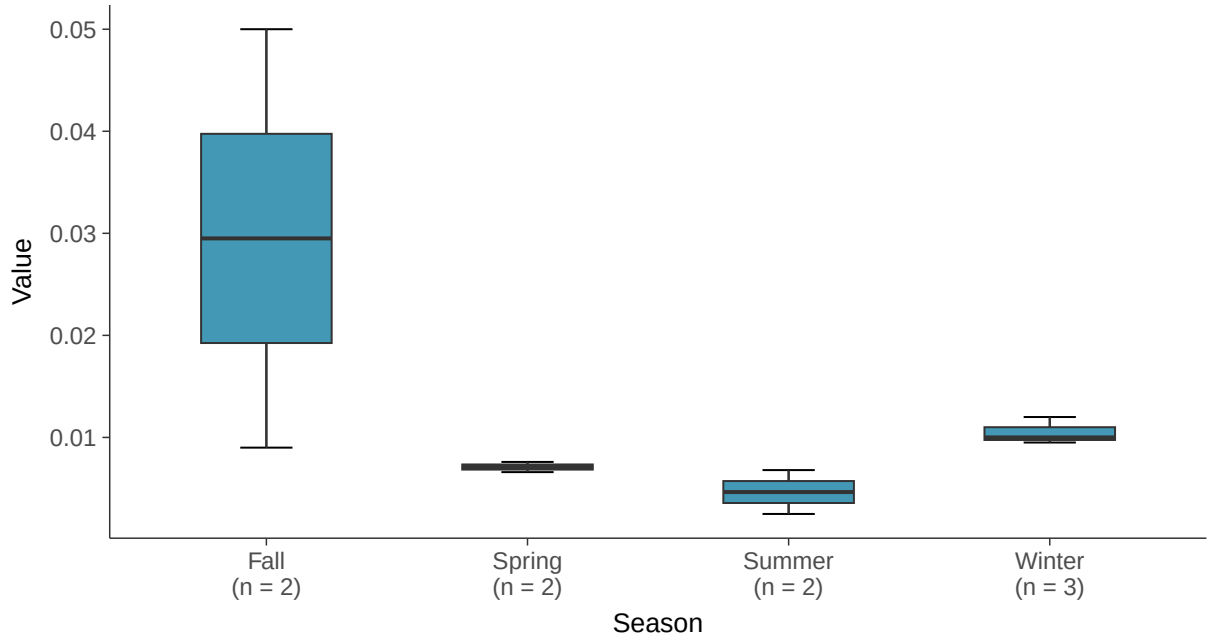
Boxplot

Nickel, MW-18C (mg/l)



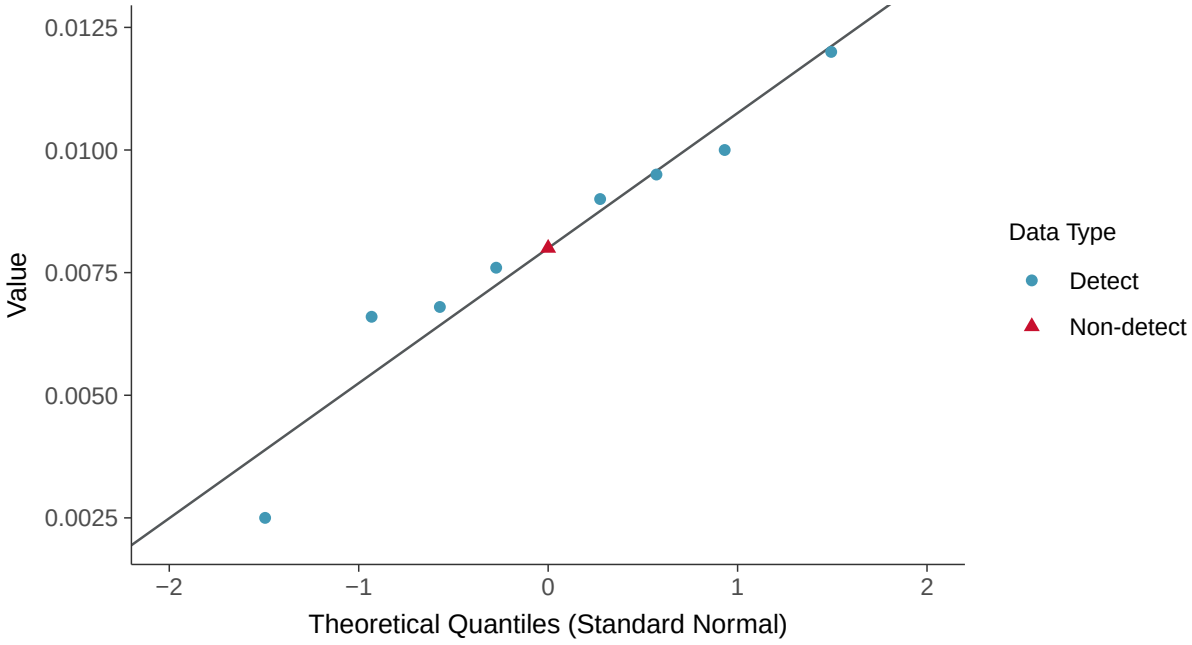
Boxplot by Season

Nickel, MW-18C (mg/l)



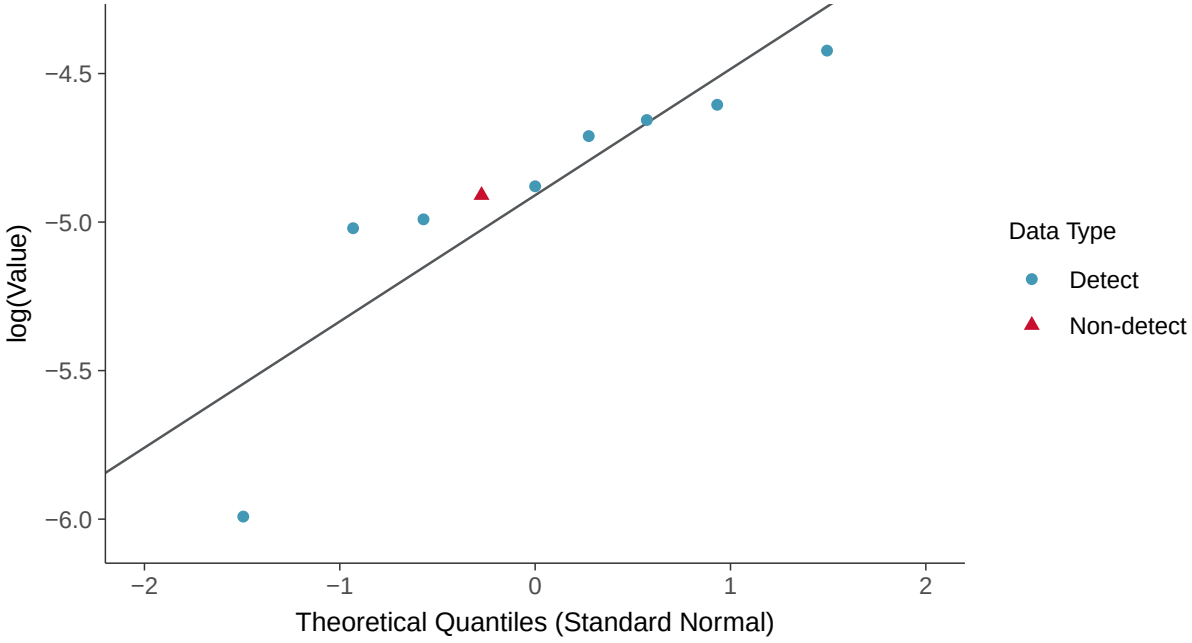
Normal Q-Q plot using ROS Imputed Estimates

Nickel, MW-18C (mg/l)



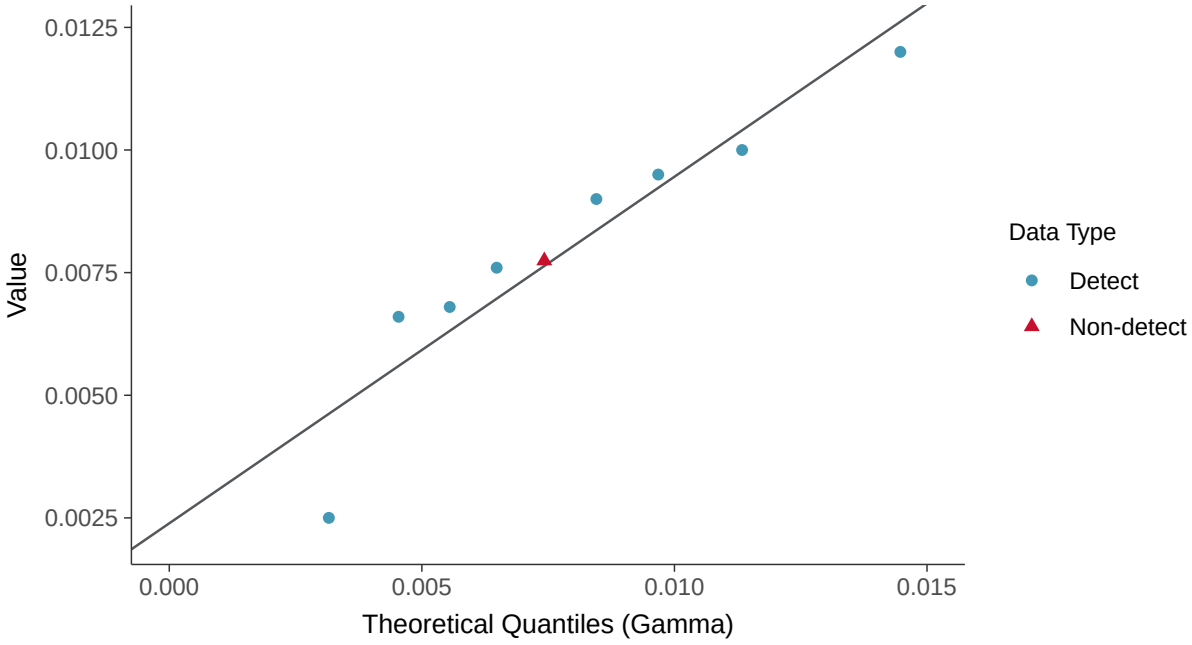
Lognormal Q-Q plot using ROS Imputed Estimates

Nickel, MW-18C (mg/l)



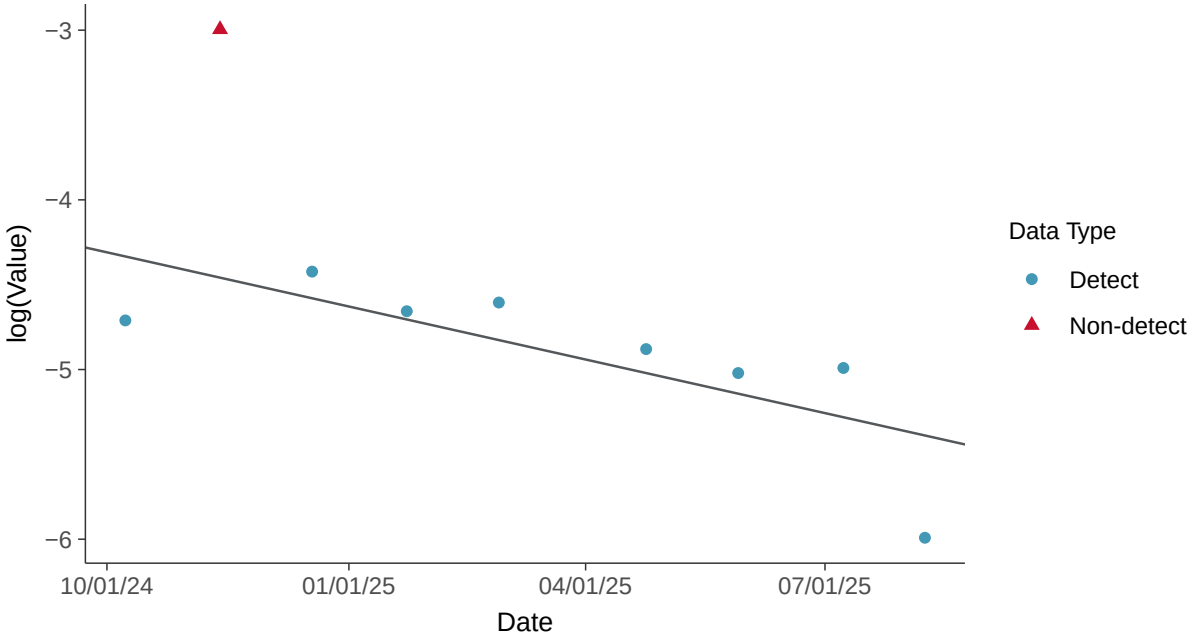
Gamma Q-Q plot using ROS Imputed Estimates

Nickel, MW-18C (mg/l)



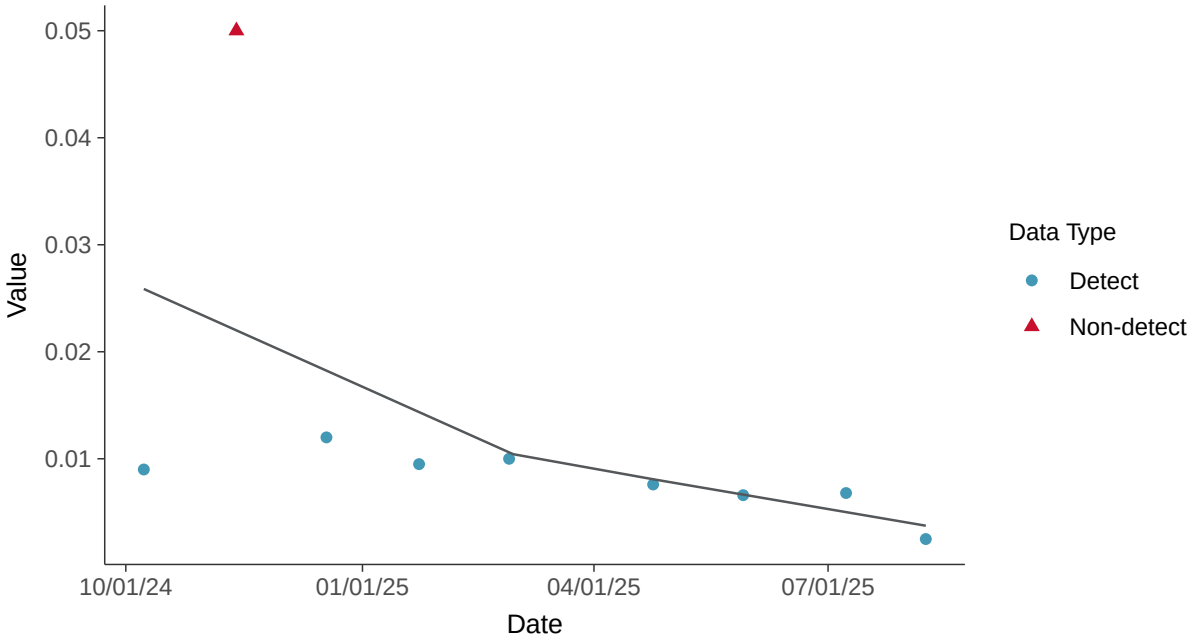
Trend Regression: Lognormal MLE

Nickel, MW-18C (mg/l)



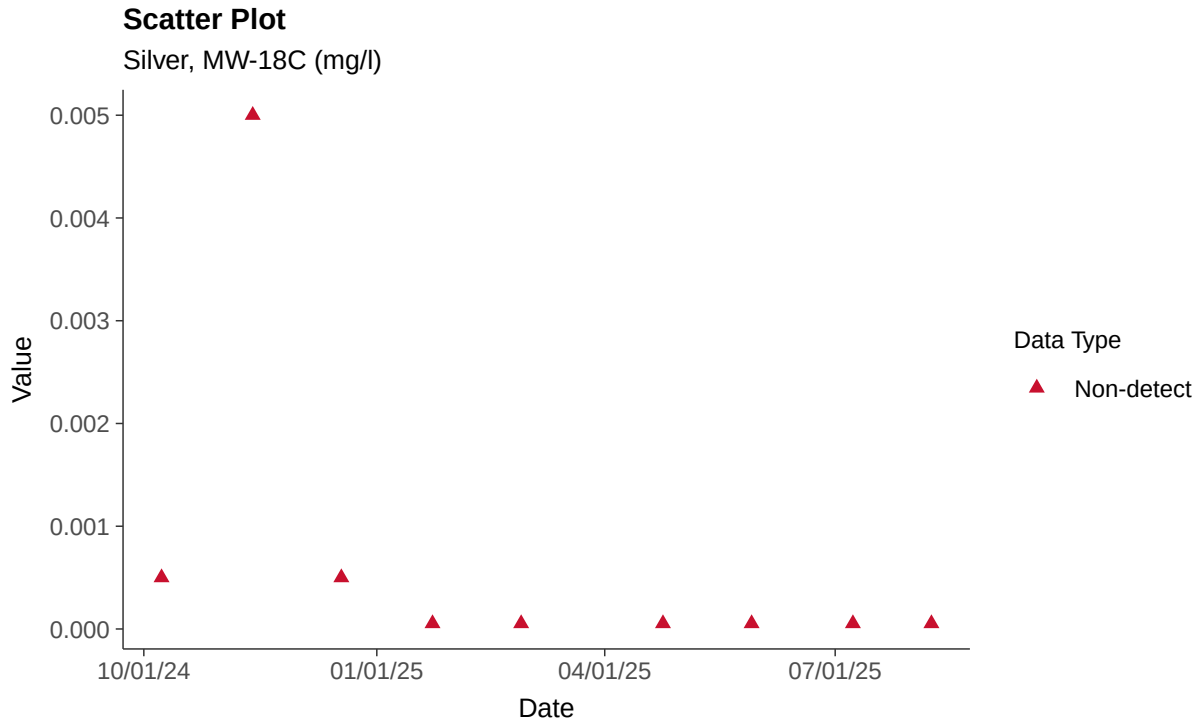
Trend Regression: Piecewise Linear-Linear

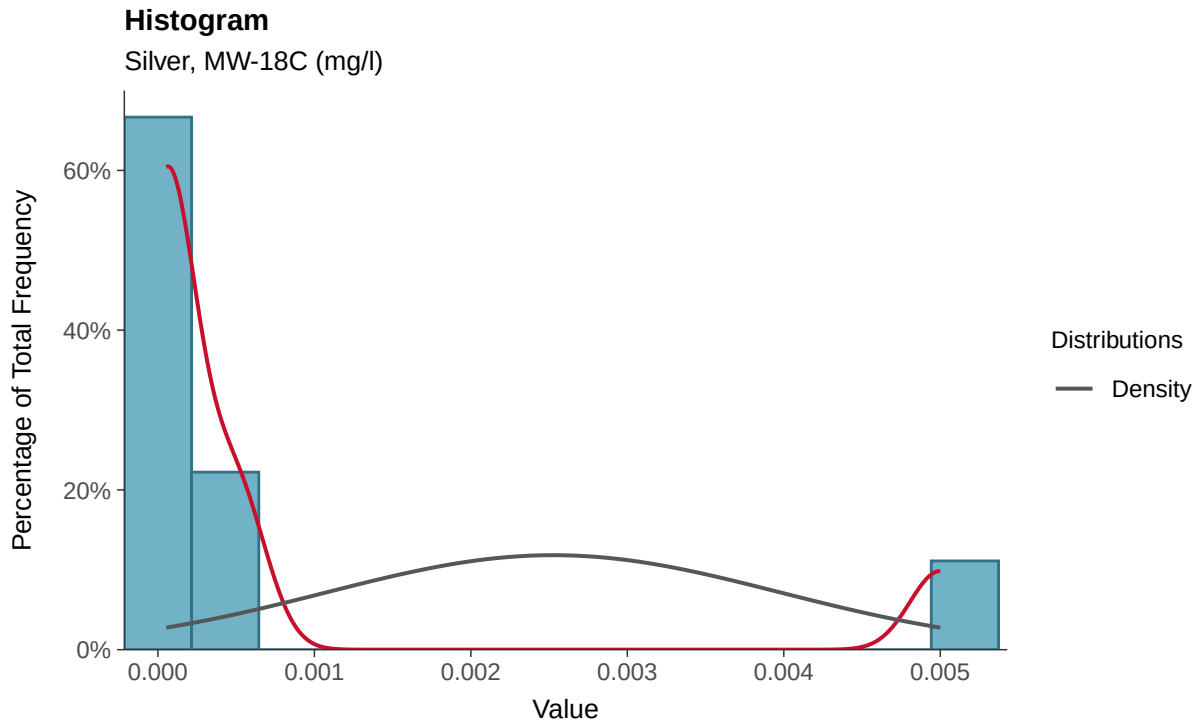
Nickel, MW-18C (mg/l)



Part 115: Silver, MW-18C

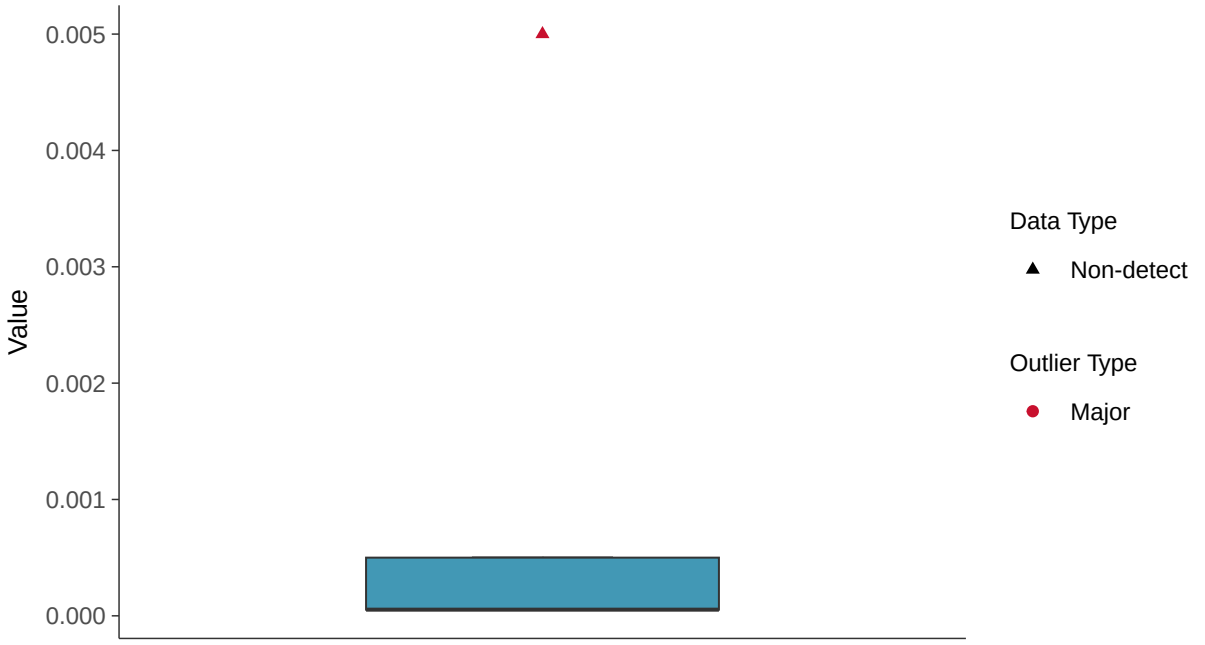
ID: 18_5_123





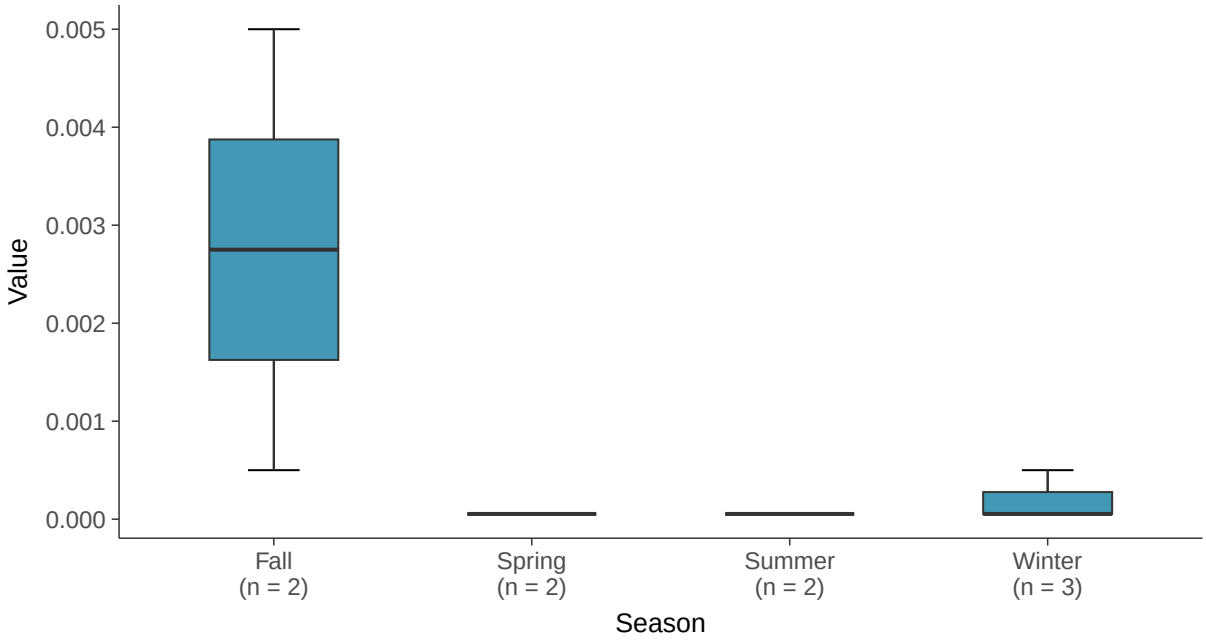
Boxplot

Silver, MW-18C (mg/l)



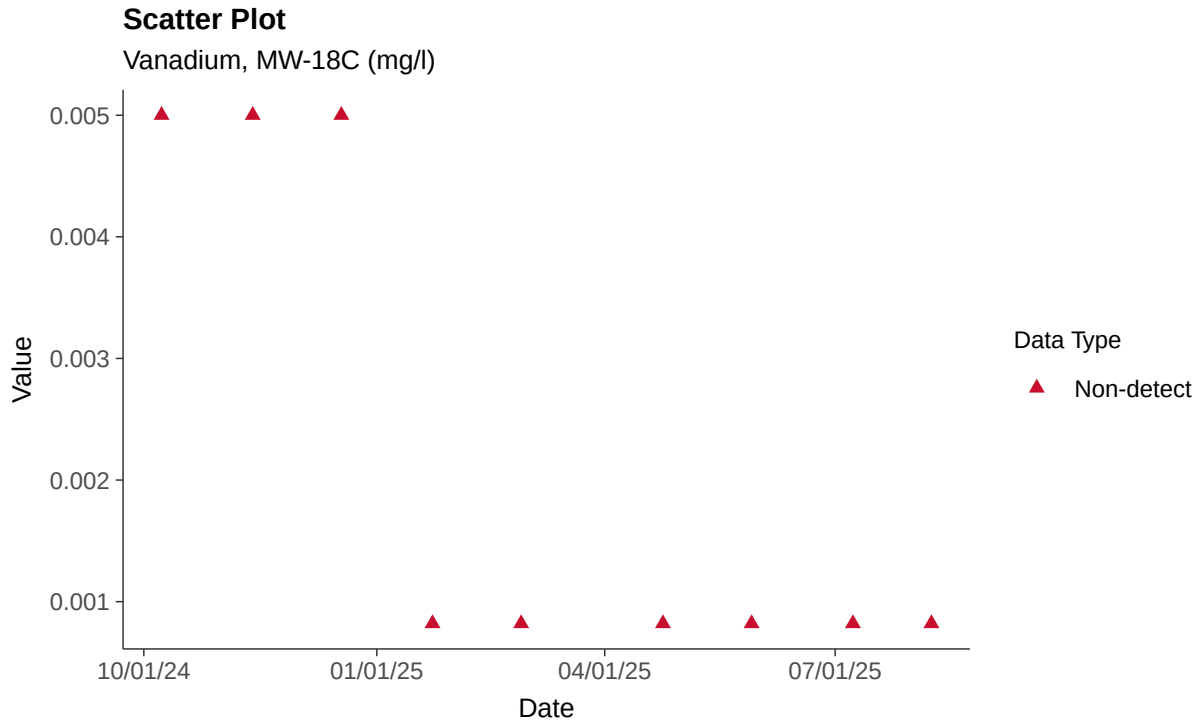
Boxplot by Season

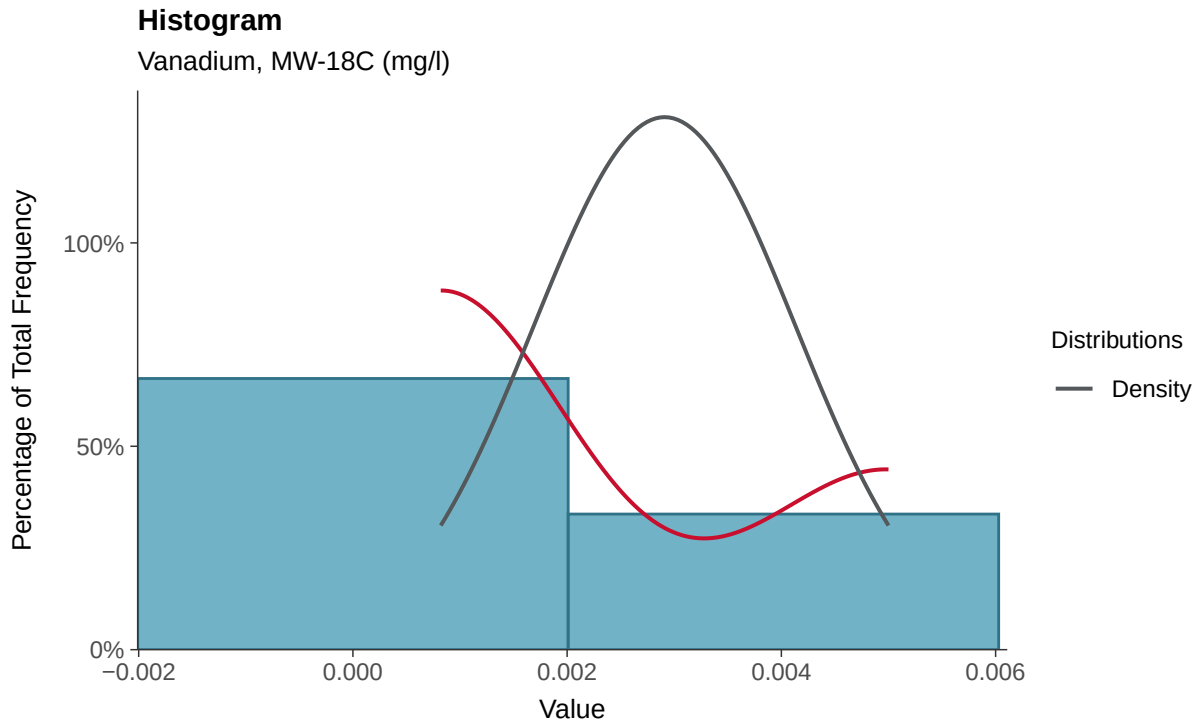
Silver, MW-18C (mg/l)



Part 115: Vanadium, MW-18C

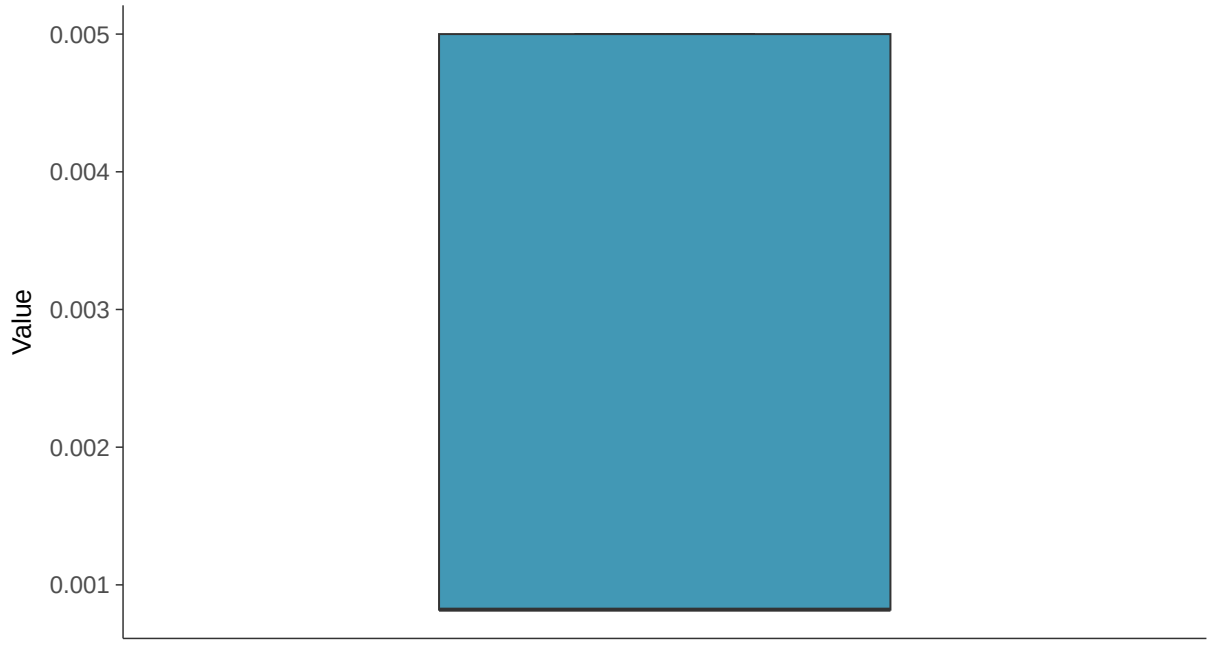
ID: 18_5_128





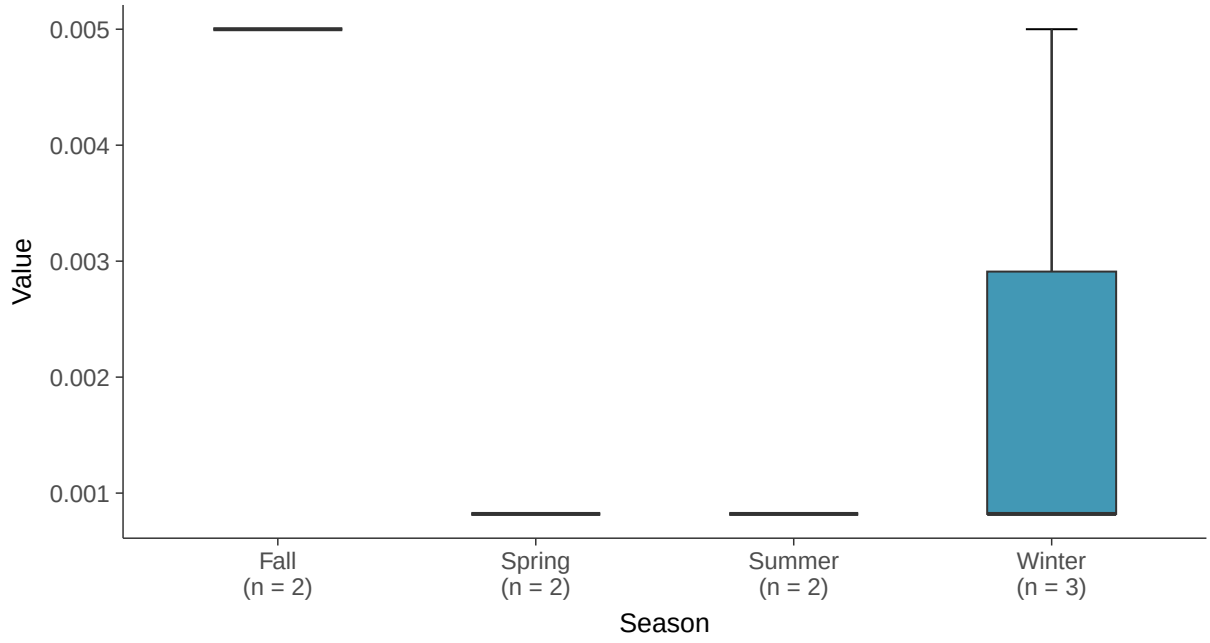
Boxplot

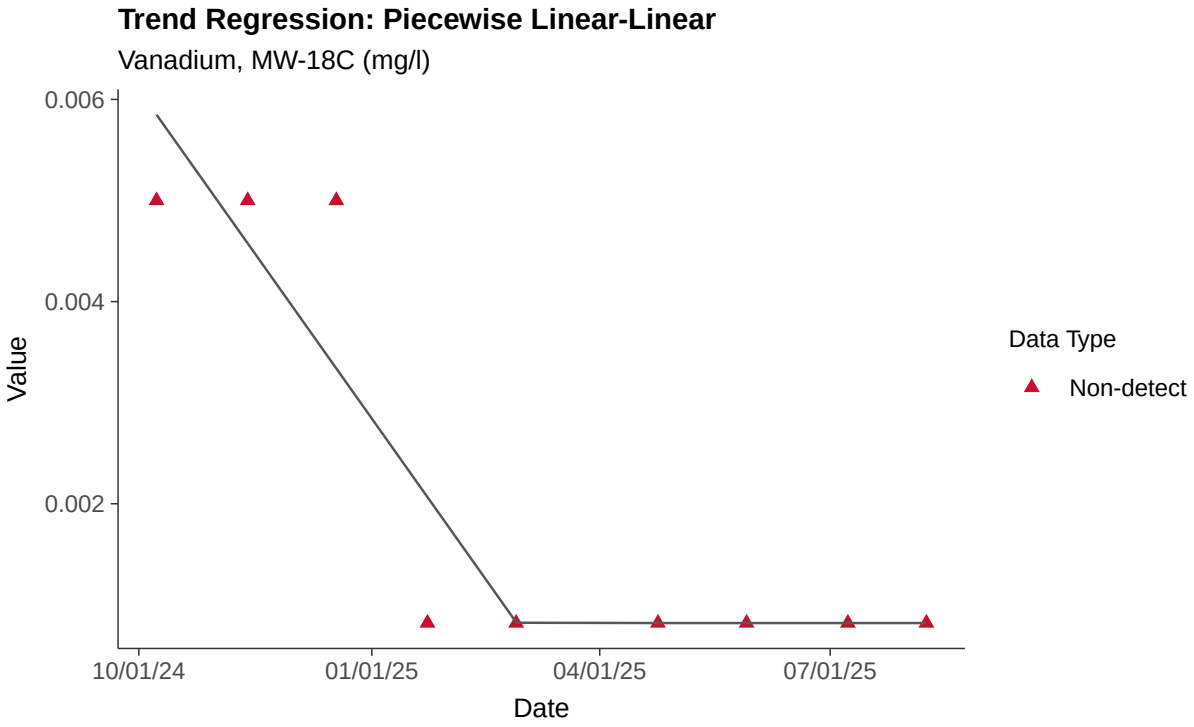
Vanadium, MW-18C (mg/l)



Boxplot by Season

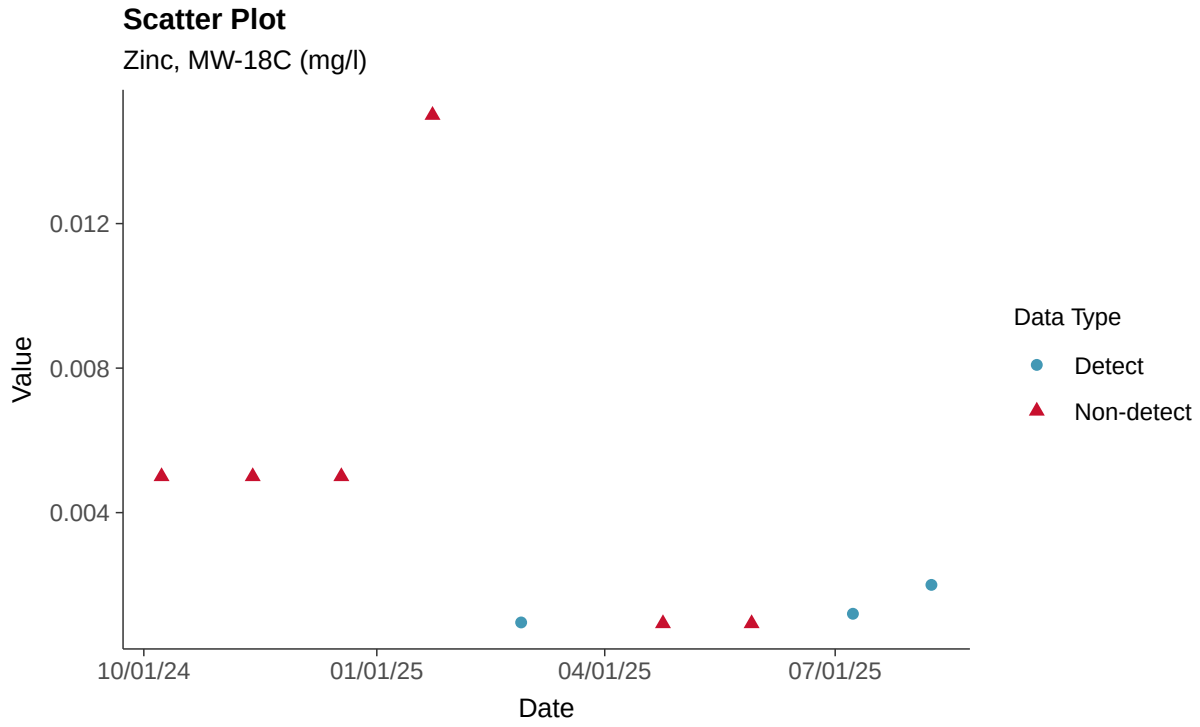
Vanadium, MW-18C (mg/l)

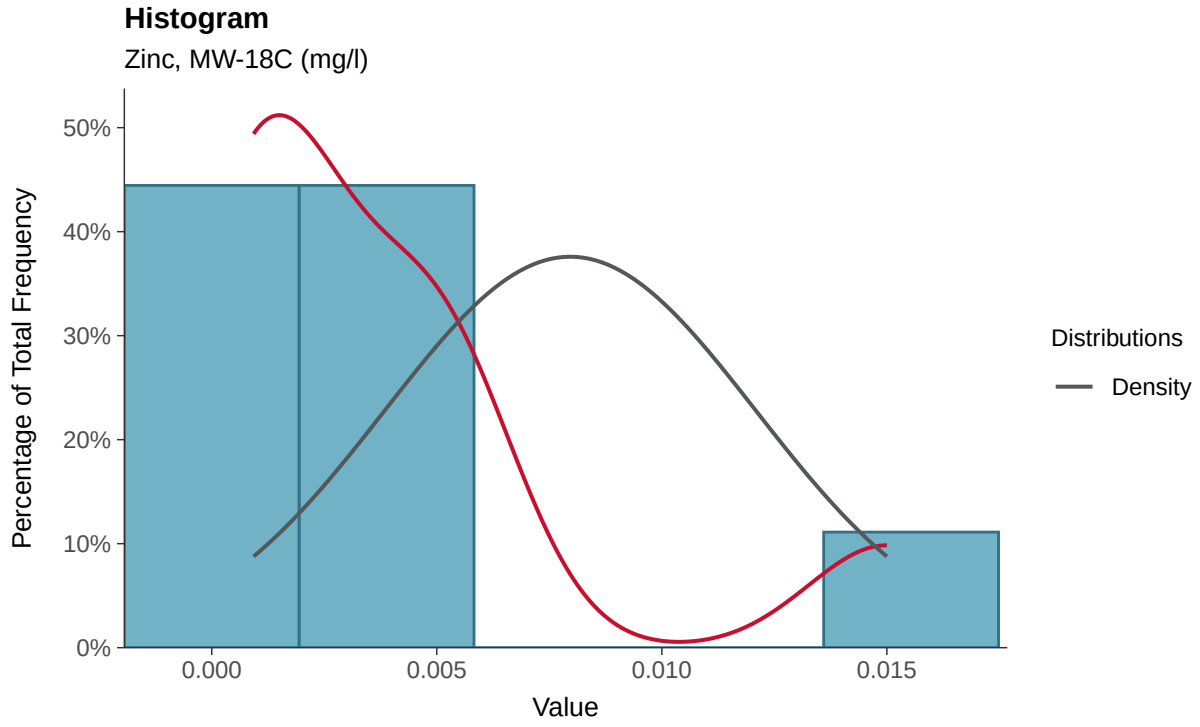



Trend Regression: Piecewise Linear-Linear
Vanadium, MW-18C (mg/l)
0.006
0.004
0.002
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Zinc, MW-18C

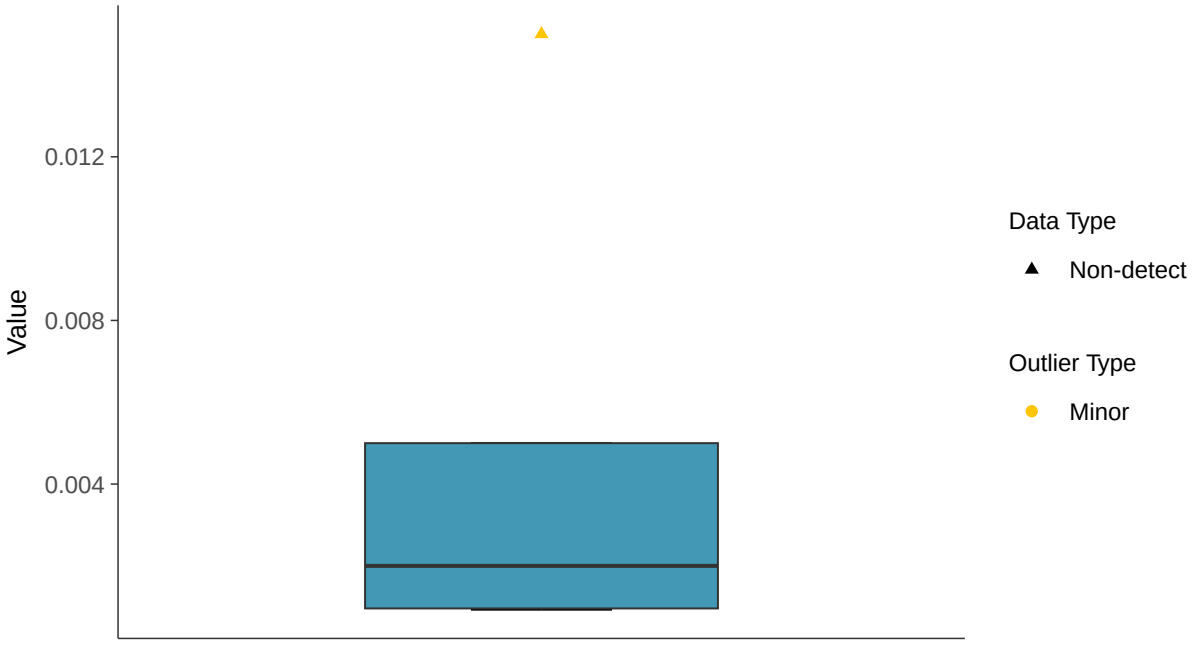
ID: 18_5_129





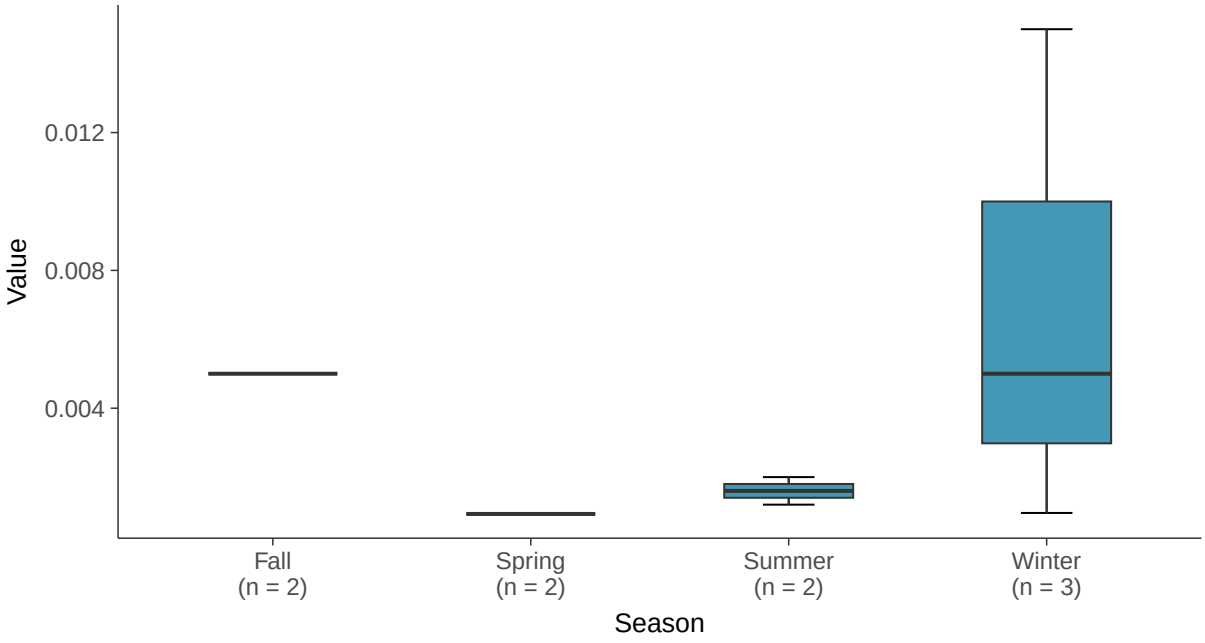
Boxplot

Zinc, MW-18C (mg/l)



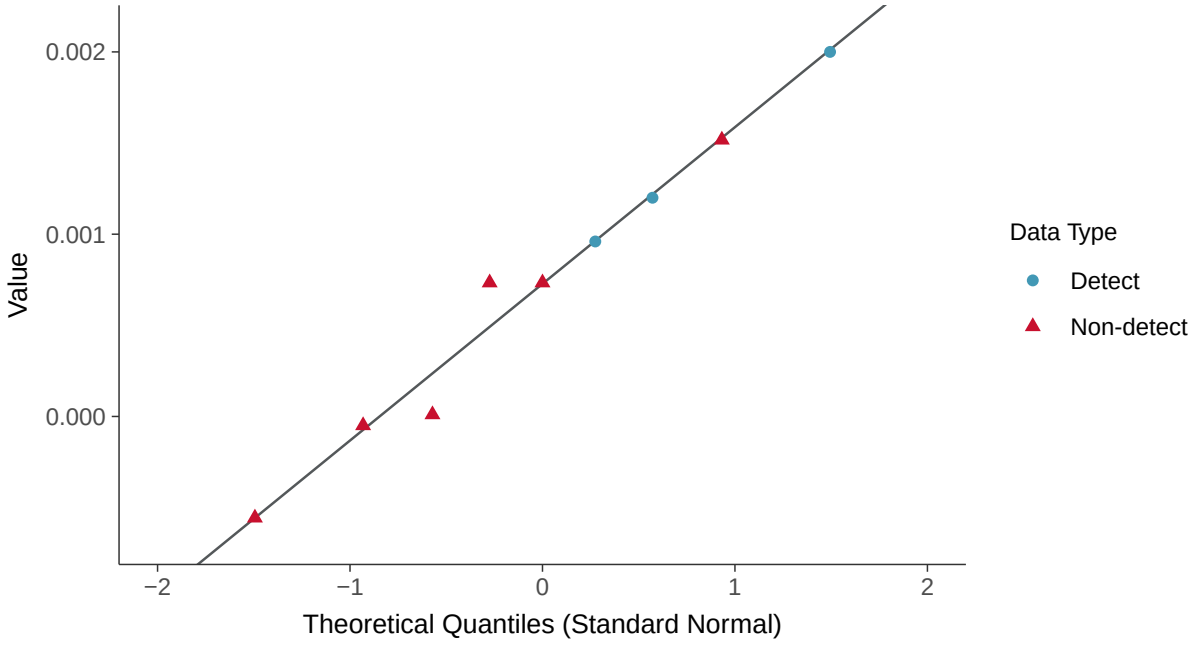
Boxplot by Season

Zinc, MW-18C (mg/l)



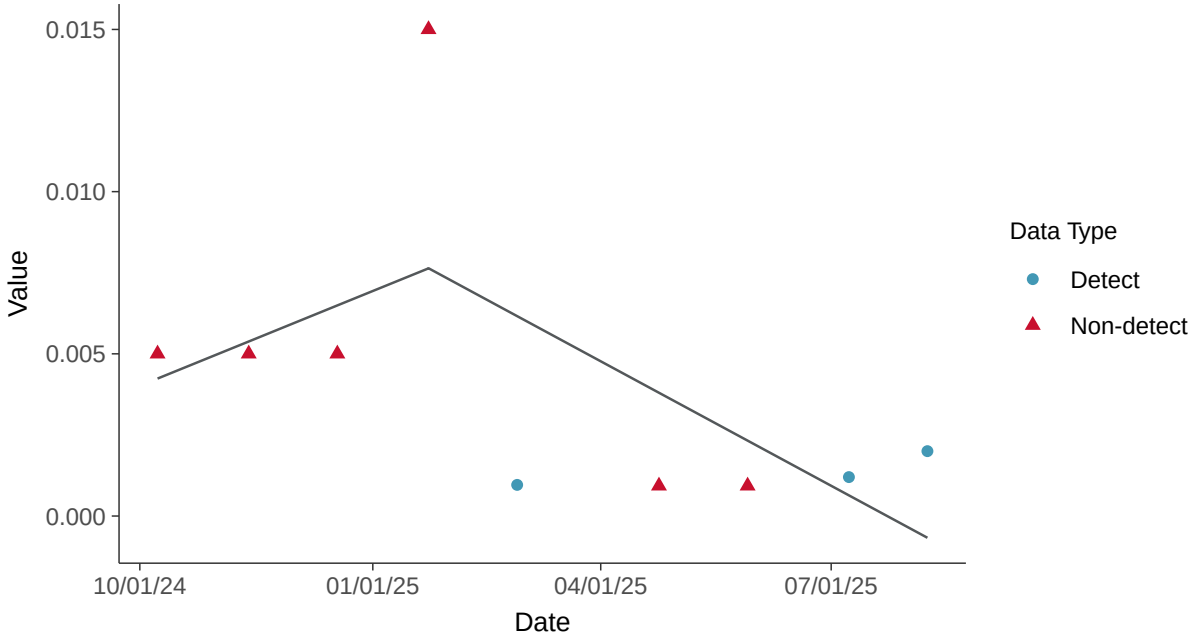
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-18C (mg/l)



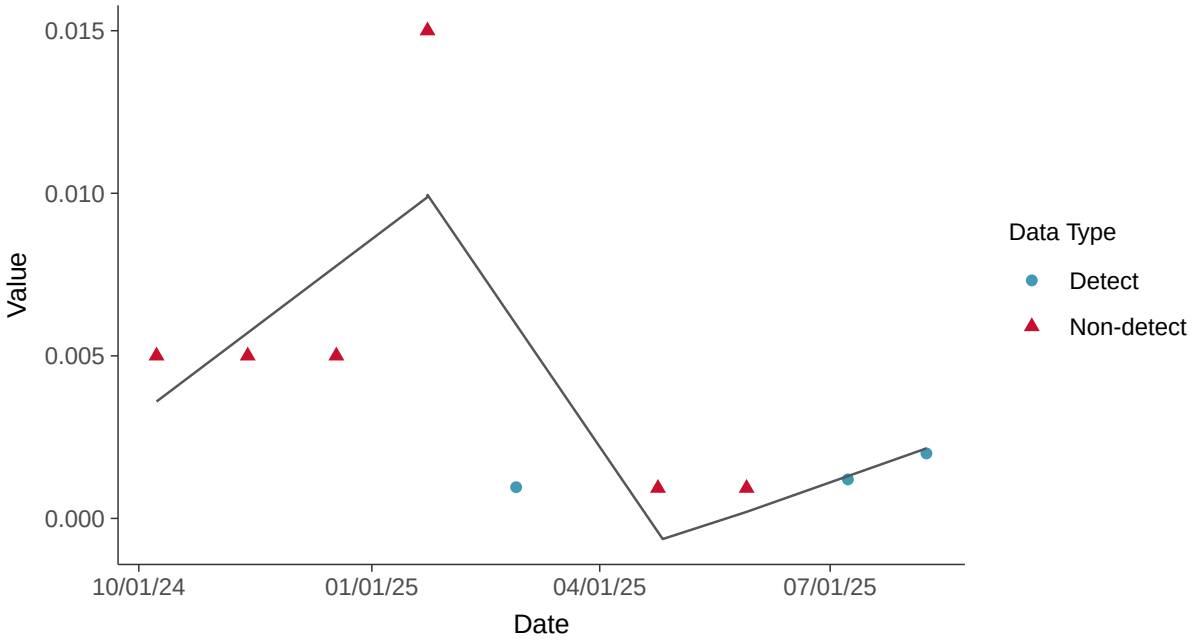
Trend Regression: Piecewise Linear-Linear

Zinc, MW-18C (mg/l)



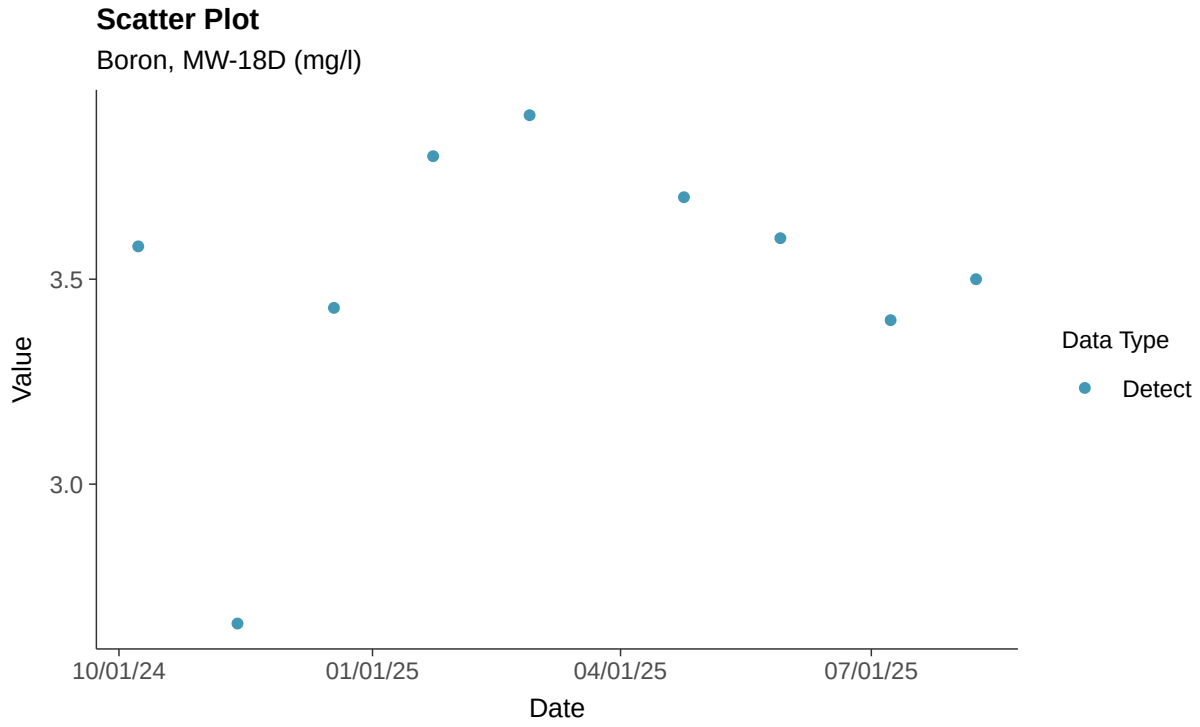
Trend Regression: Piecewise Linear-Linear-Linear

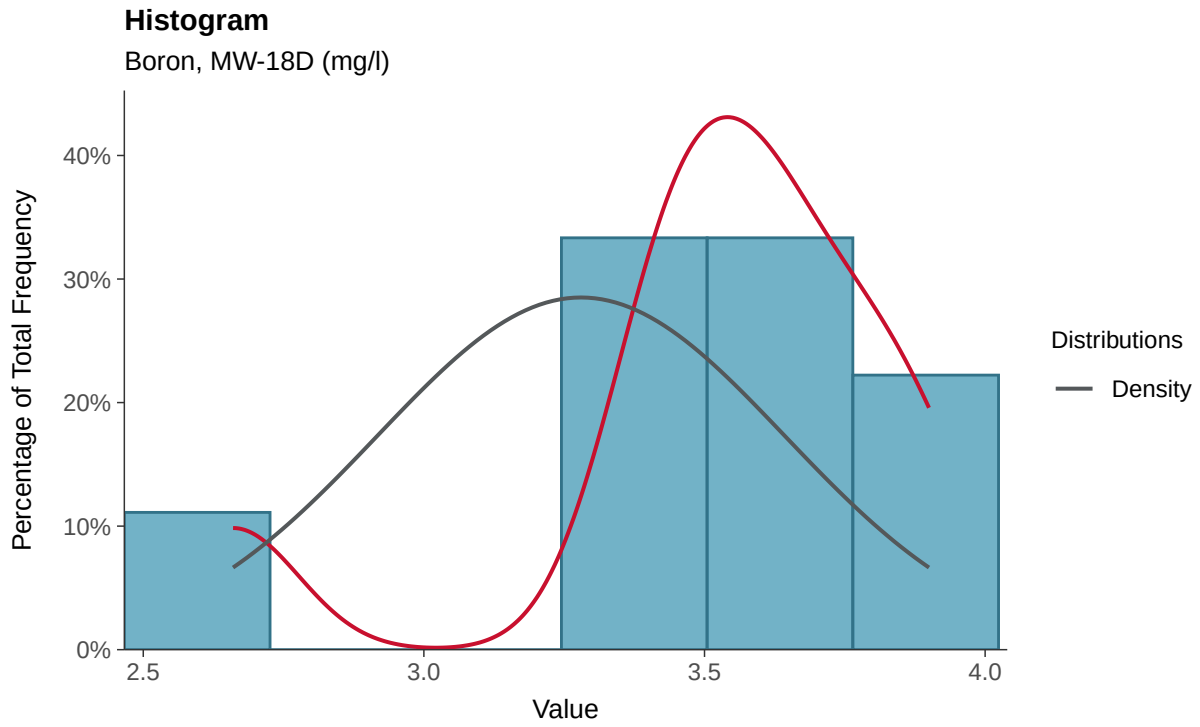
Zinc, MW-18C (mg/l)



Appendix III: Boron, MW-18D

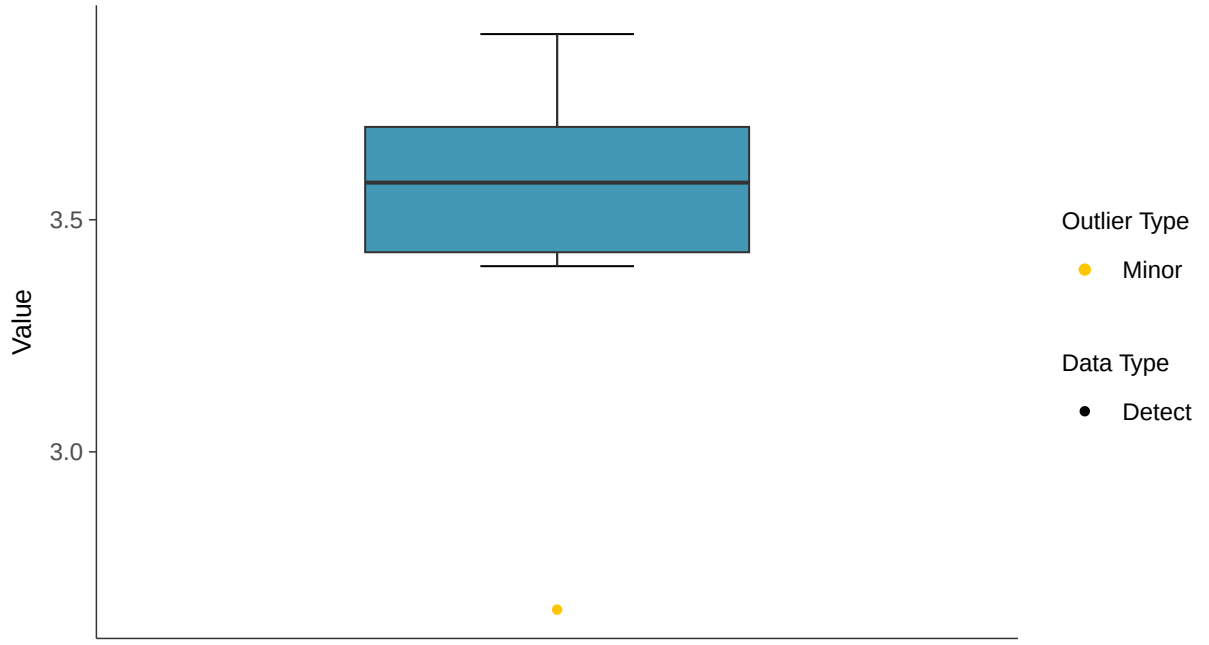
ID: 19_2_105





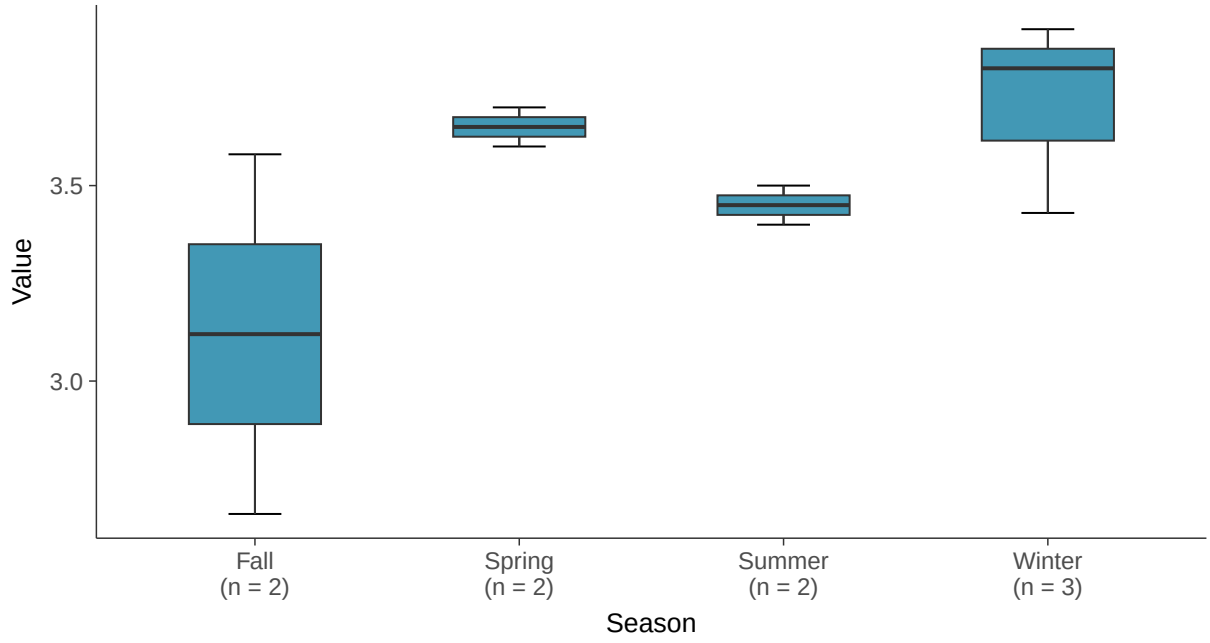
Boxplot

Boron, MW-18D (mg/l)



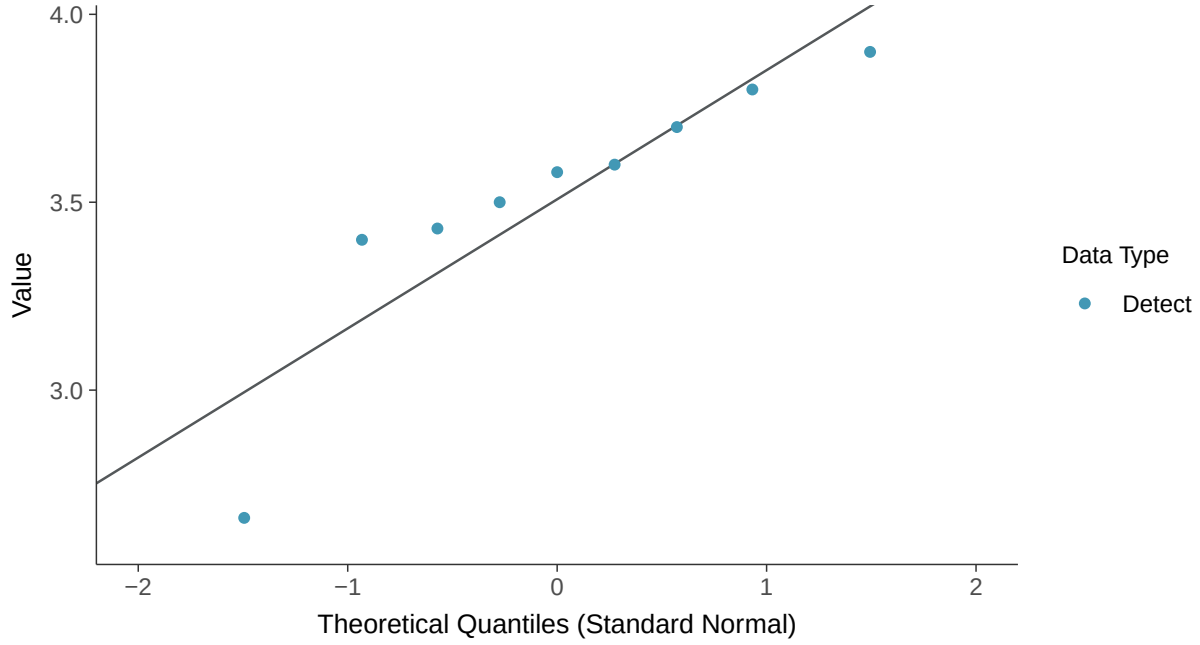
Boxplot by Season

Boron, MW-18D (mg/l)



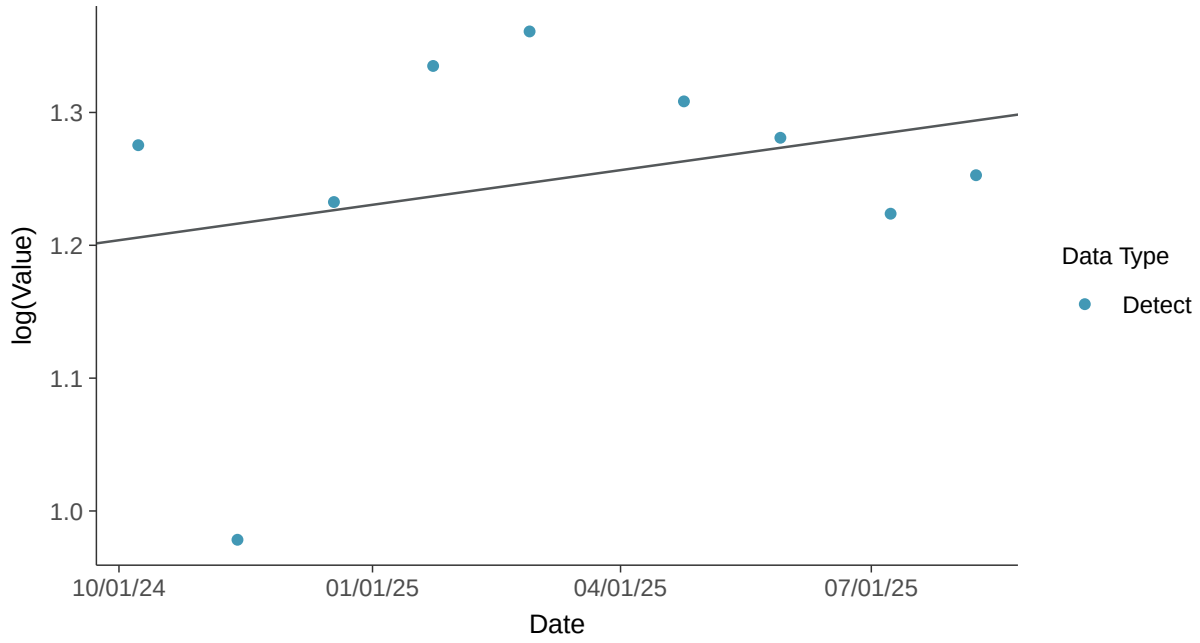
Normal Q-Q plot

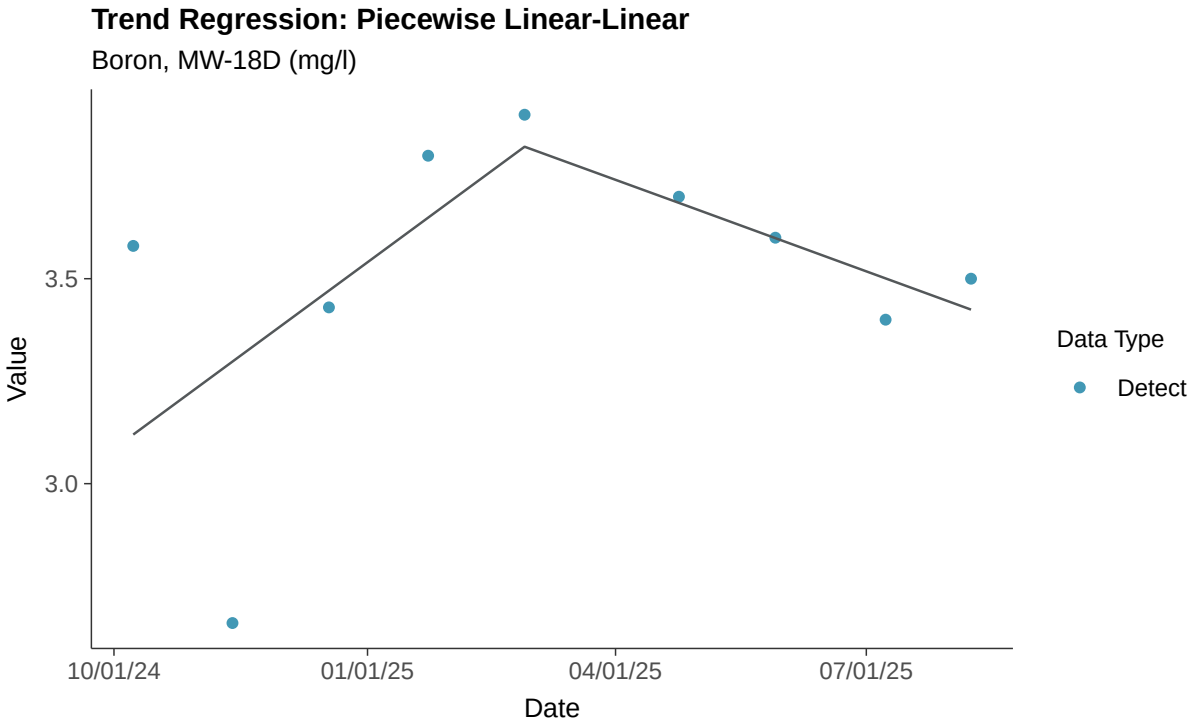
Boron, MW-18D (mg/l)



Trend Regression: Lognormal MLE

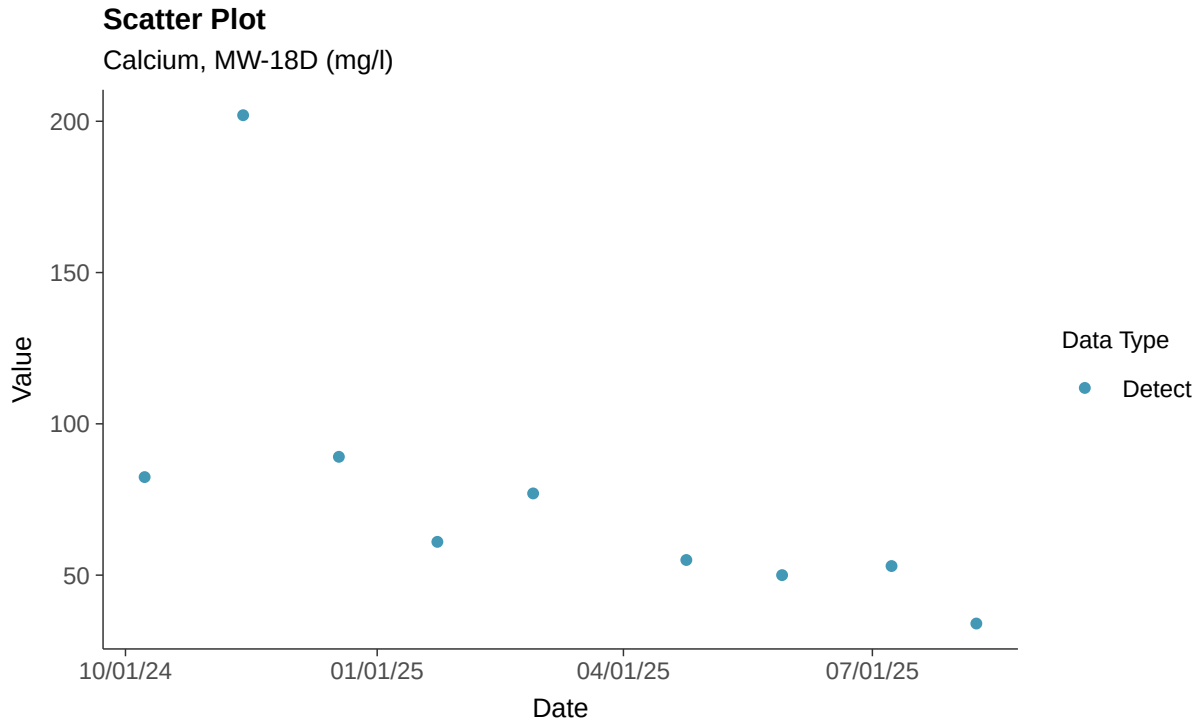
Boron, MW-18D (mg/l)

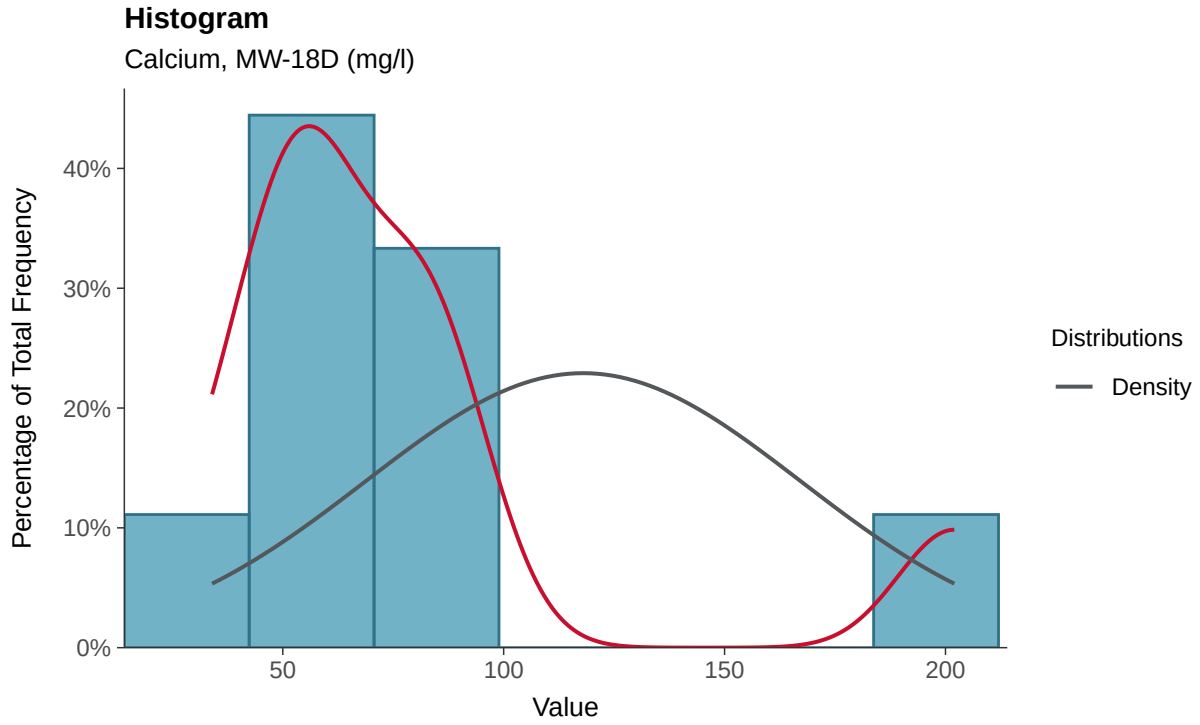



Trend Regression: Piecewise Linear-Linear
Boron, MW-18D (mg/l)
Value
3.5
3.0
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix III: Calcium, MW-18D

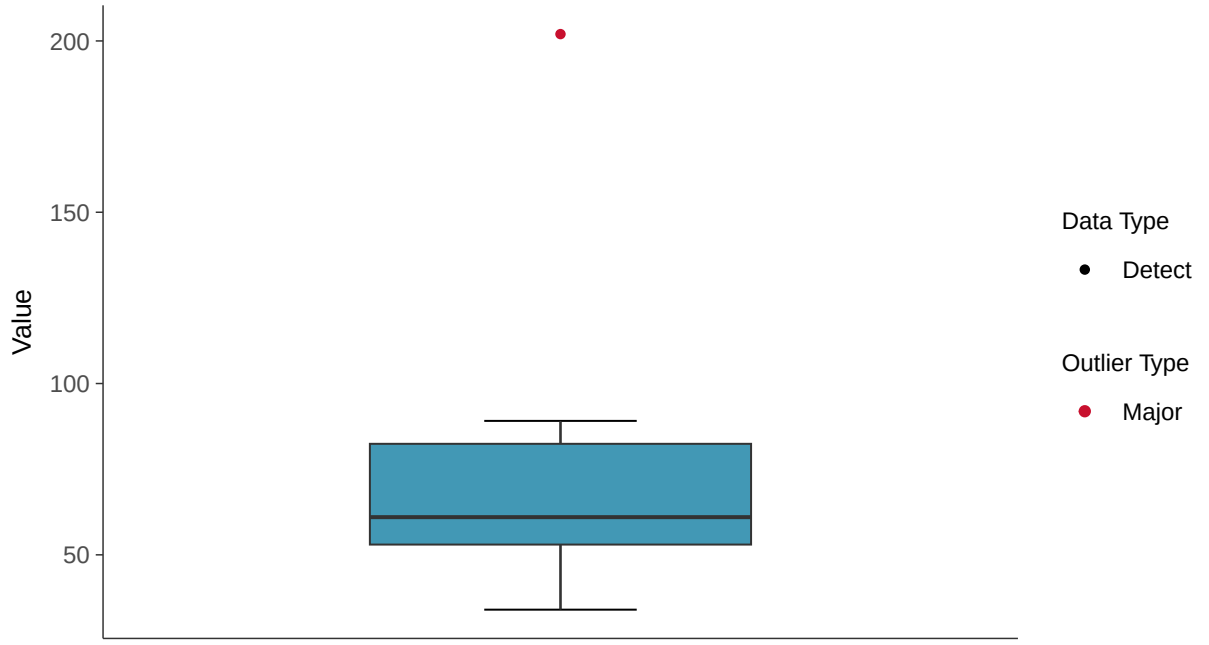
ID: 19_2_107





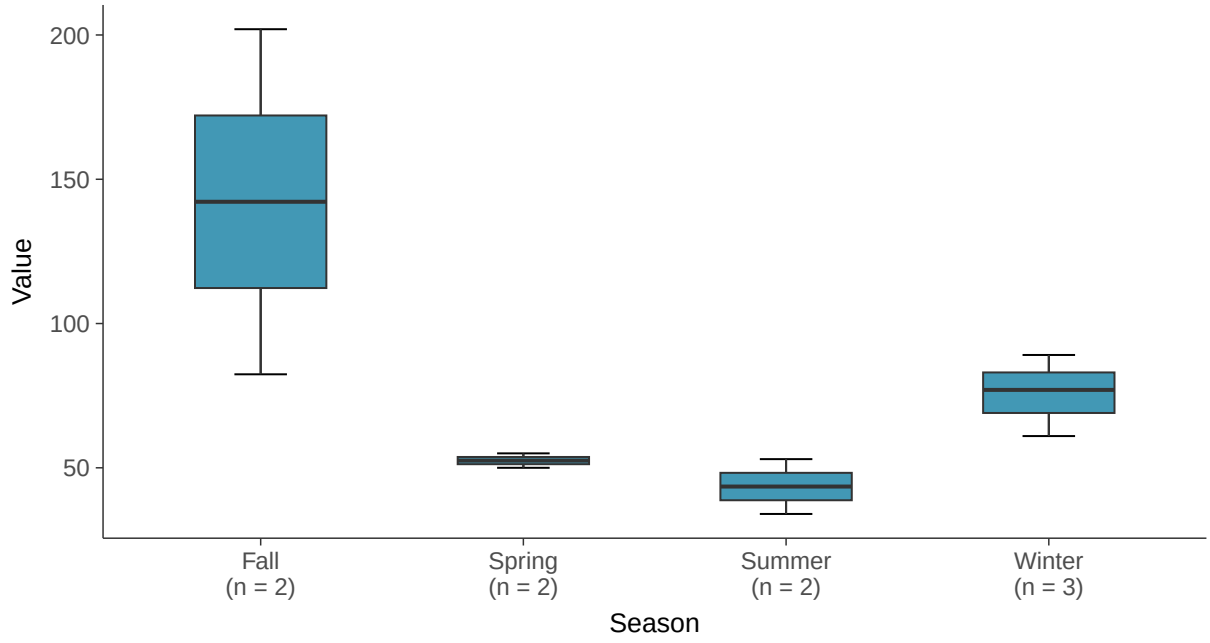
Boxplot

Calcium, MW-18D (mg/l)



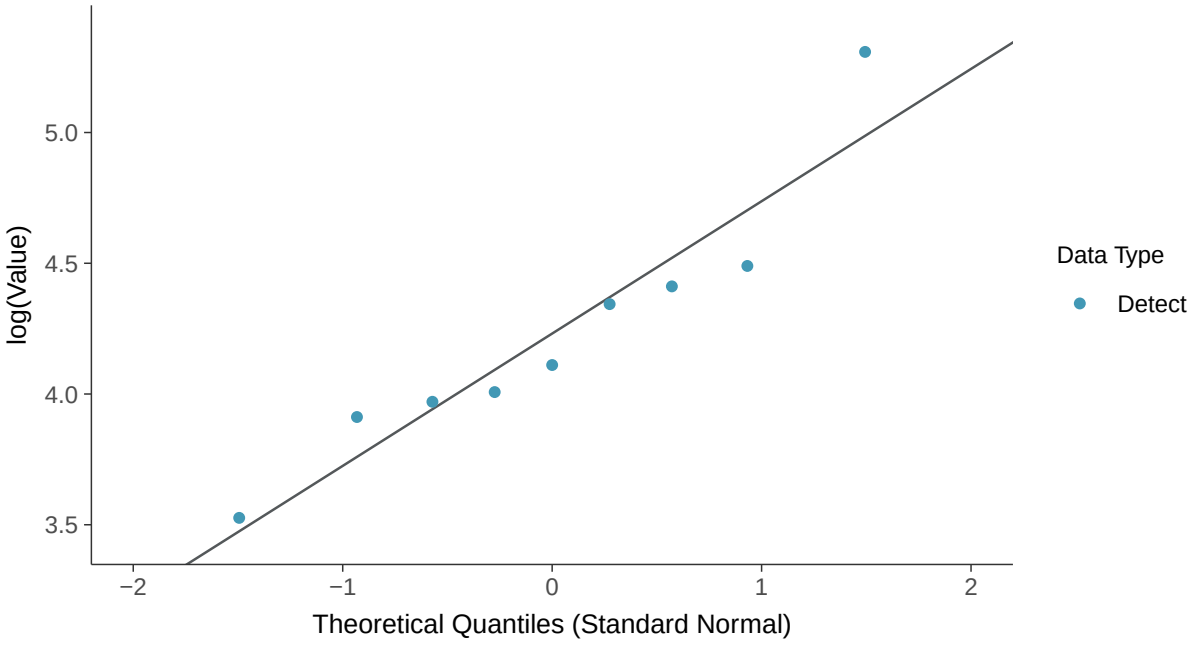
Boxplot by Season

Calcium, MW-18D (mg/l)



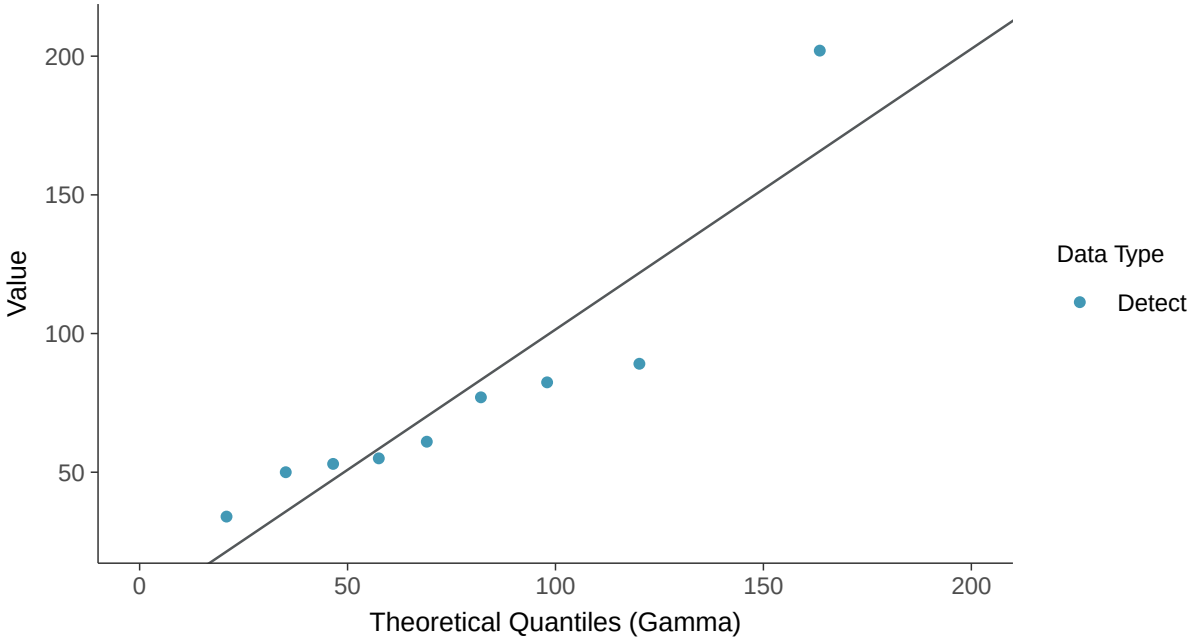
Lognormal Q-Q plot

Calcium, MW-18D (mg/l)



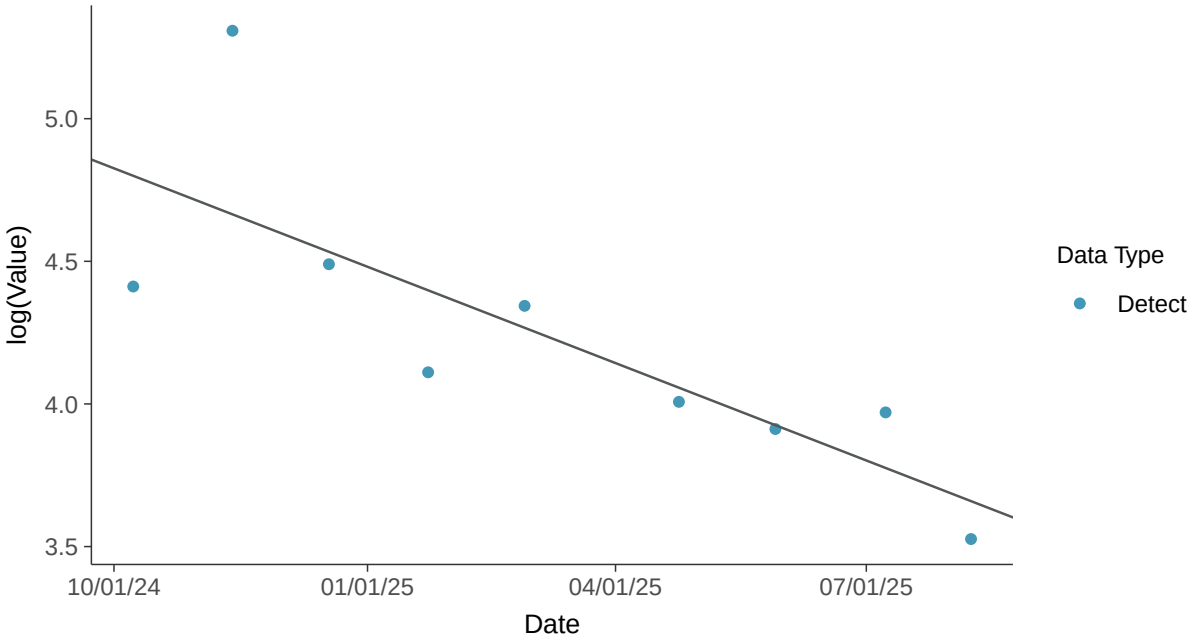
Gamma Q-Q plot

Calcium, MW-18D (mg/l)



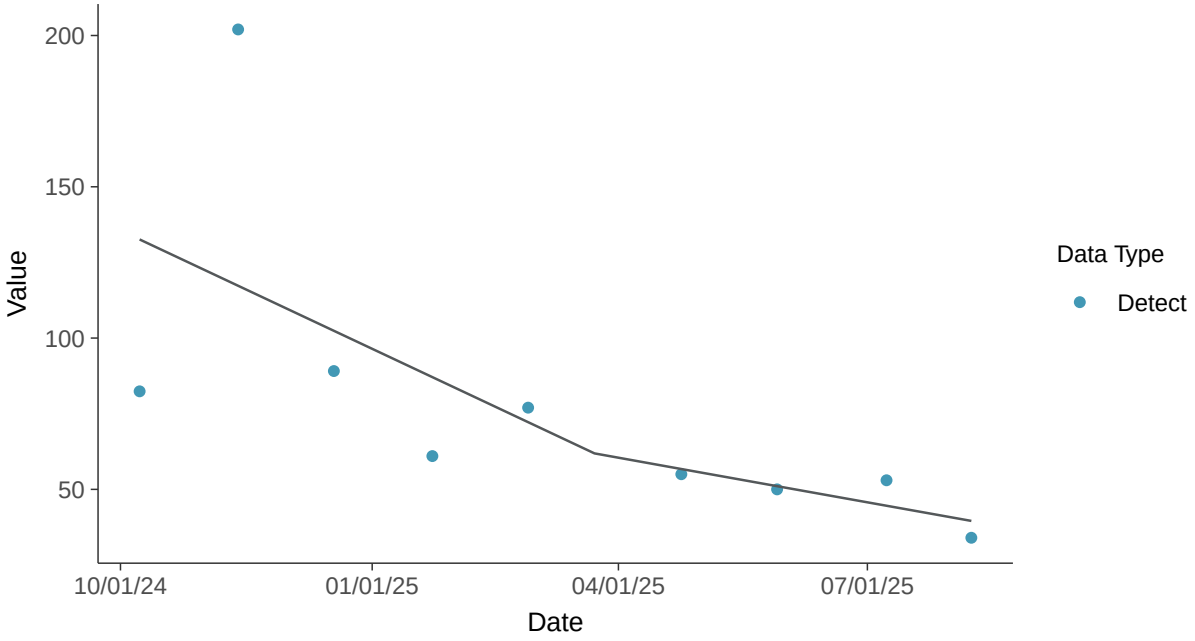
Trend Regression: Lognormal MLE

Calcium, MW-18D (mg/l)



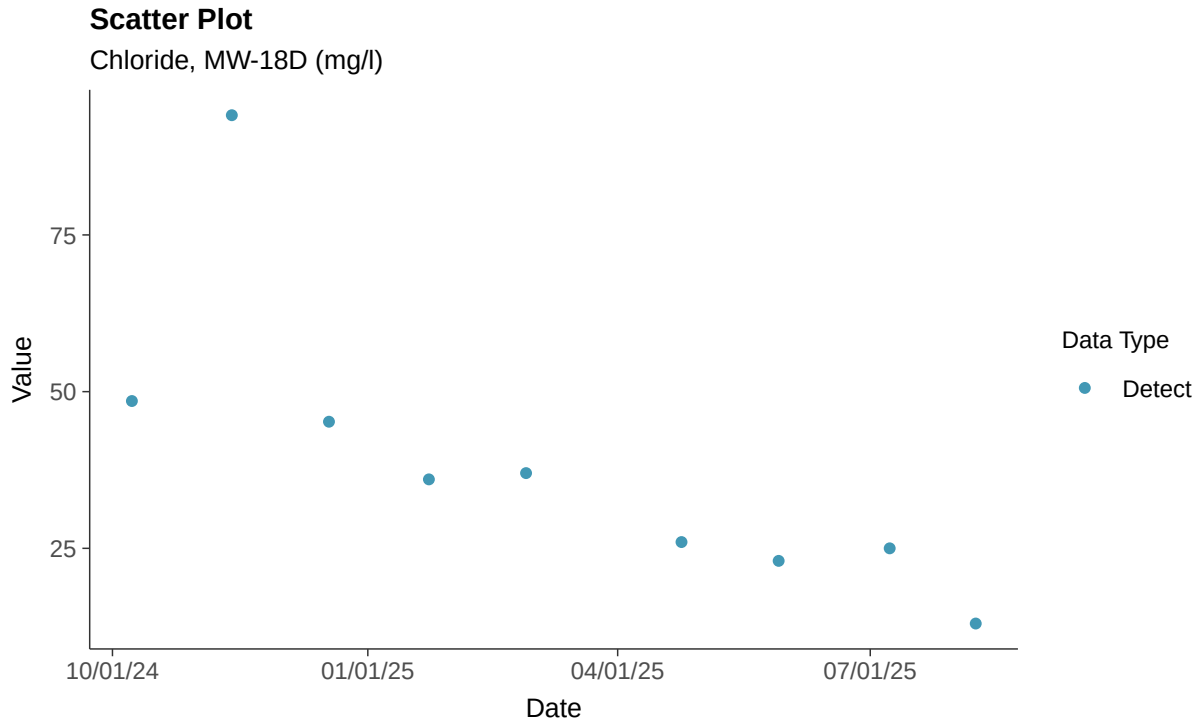
Trend Regression: Piecewise Linear-Linear

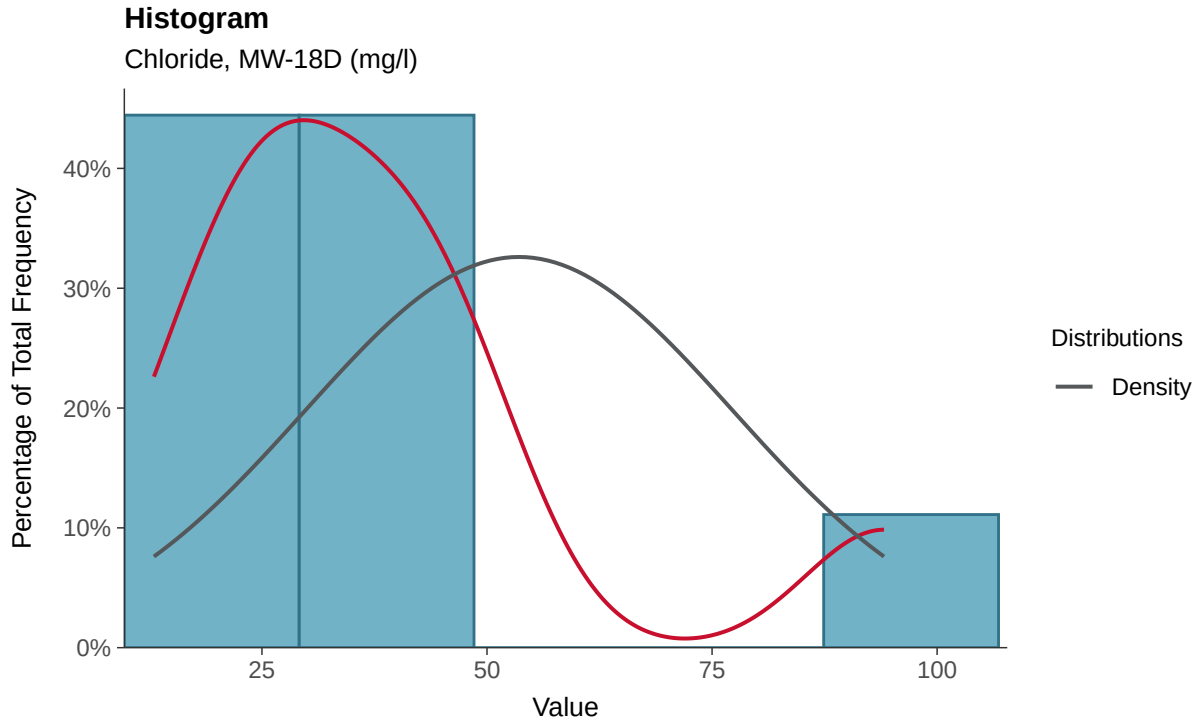
Calcium, MW-18D (mg/l)



Appendix III: Chloride, MW-18D

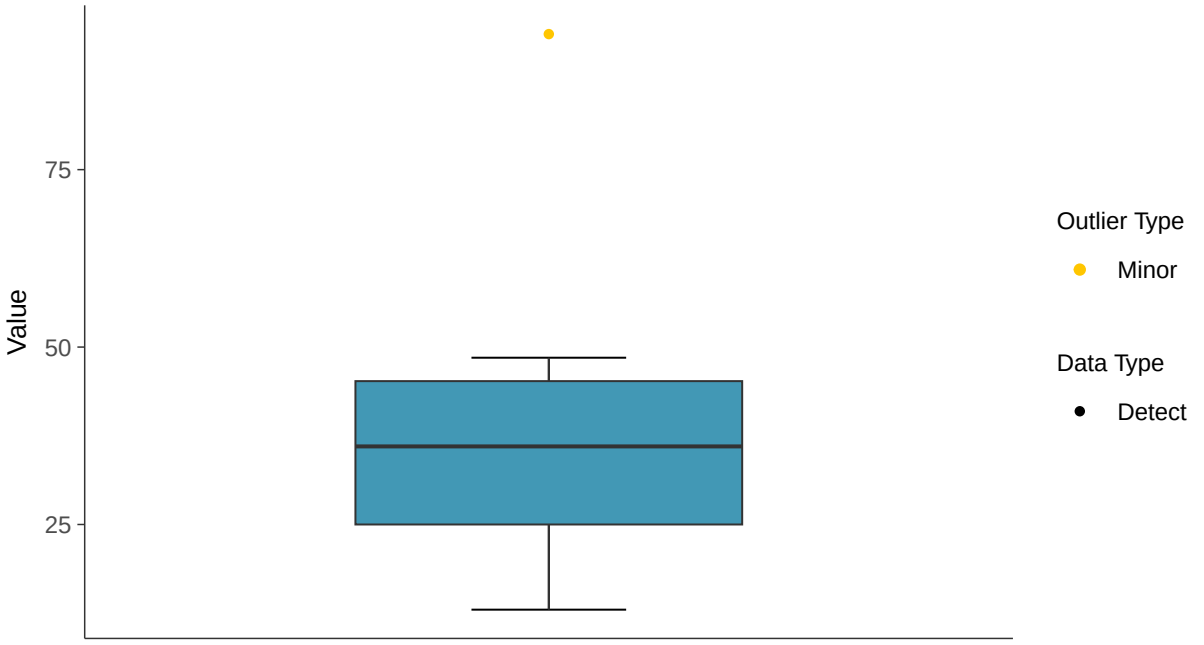
ID: 19_2_108





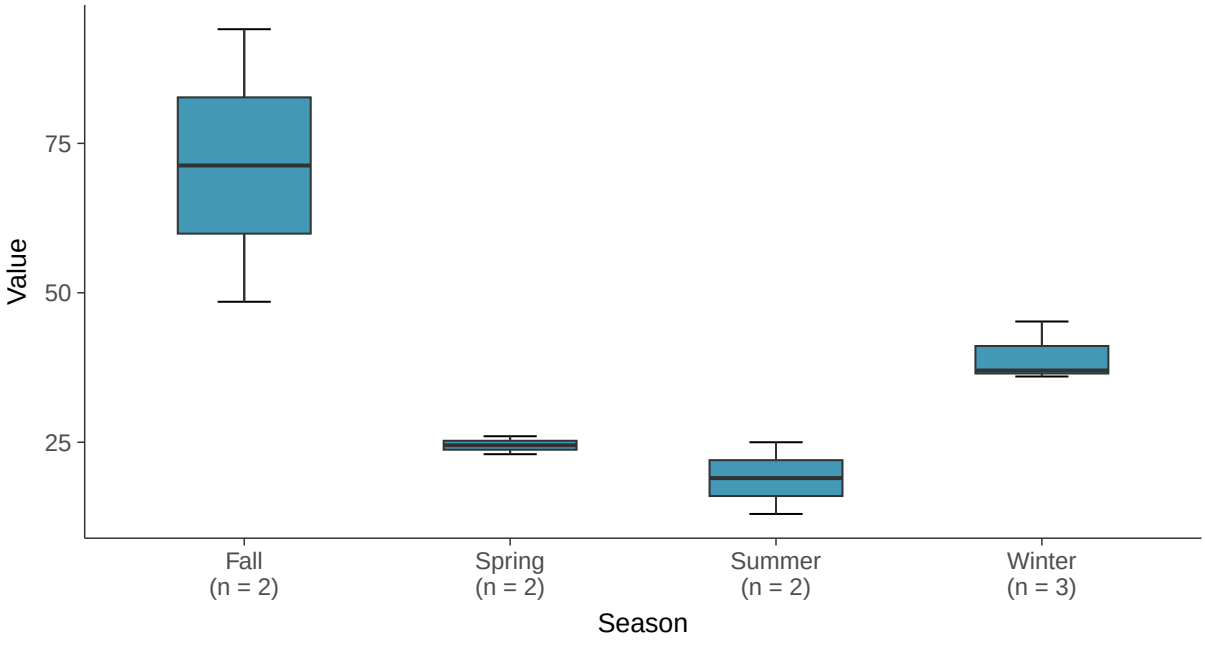
Boxplot

Chloride, MW-18D (mg/l)



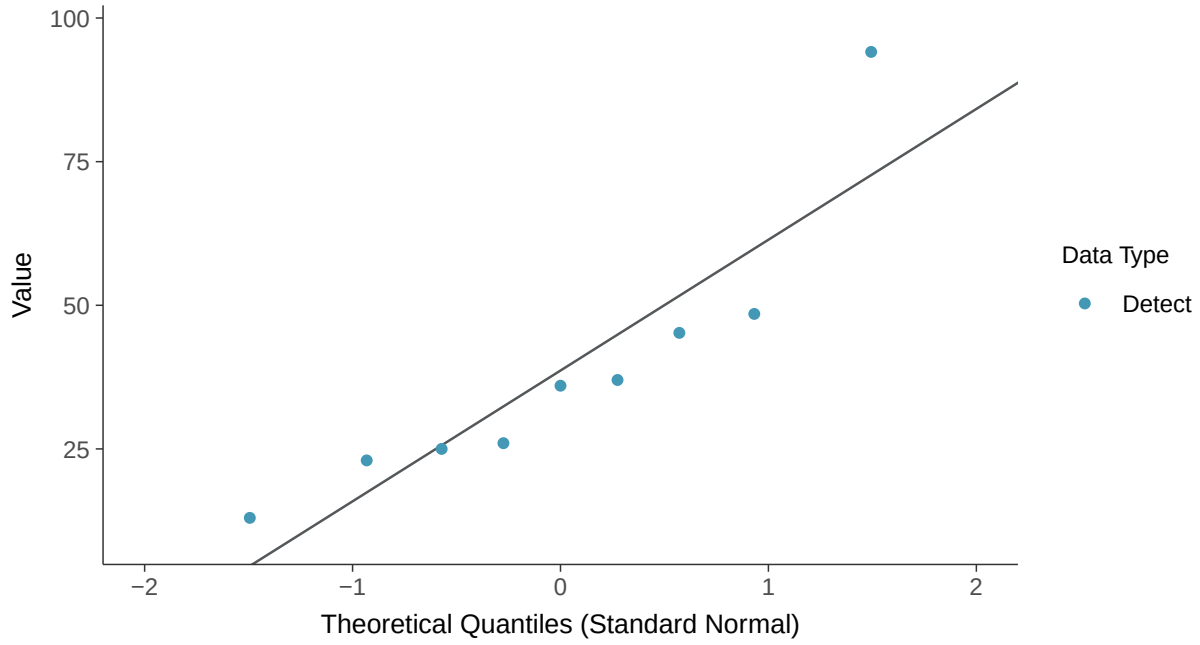
Boxplot by Season

Chloride, MW-18D (mg/l)



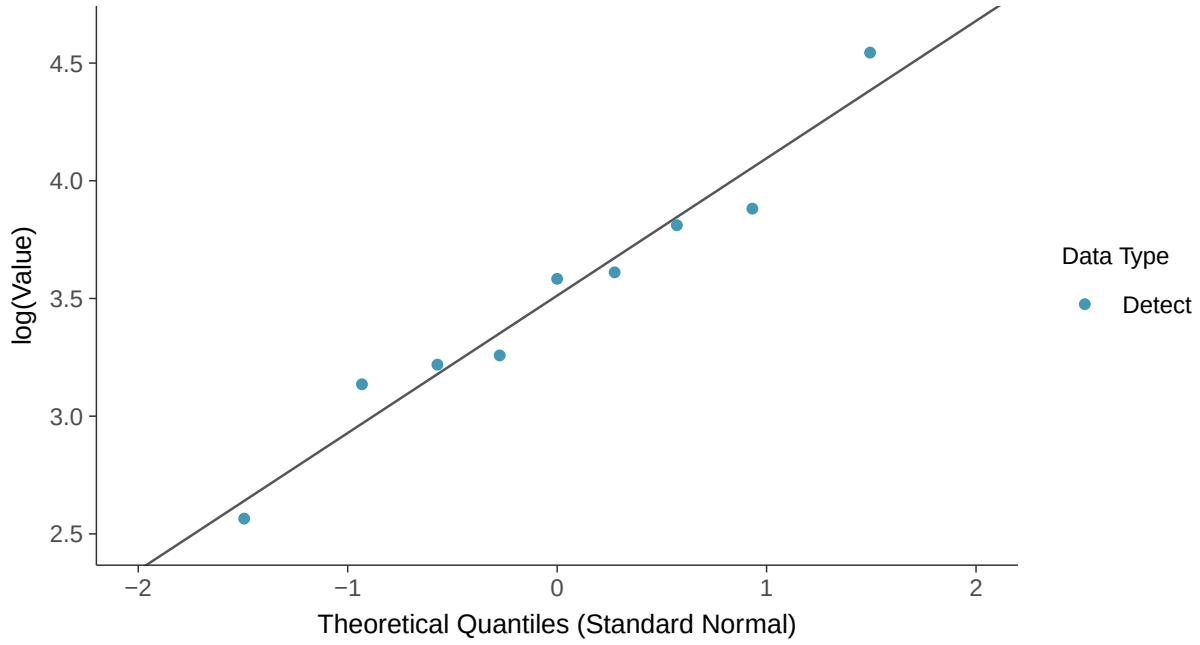
Normal Q-Q plot

Chloride, MW-18D (mg/l)



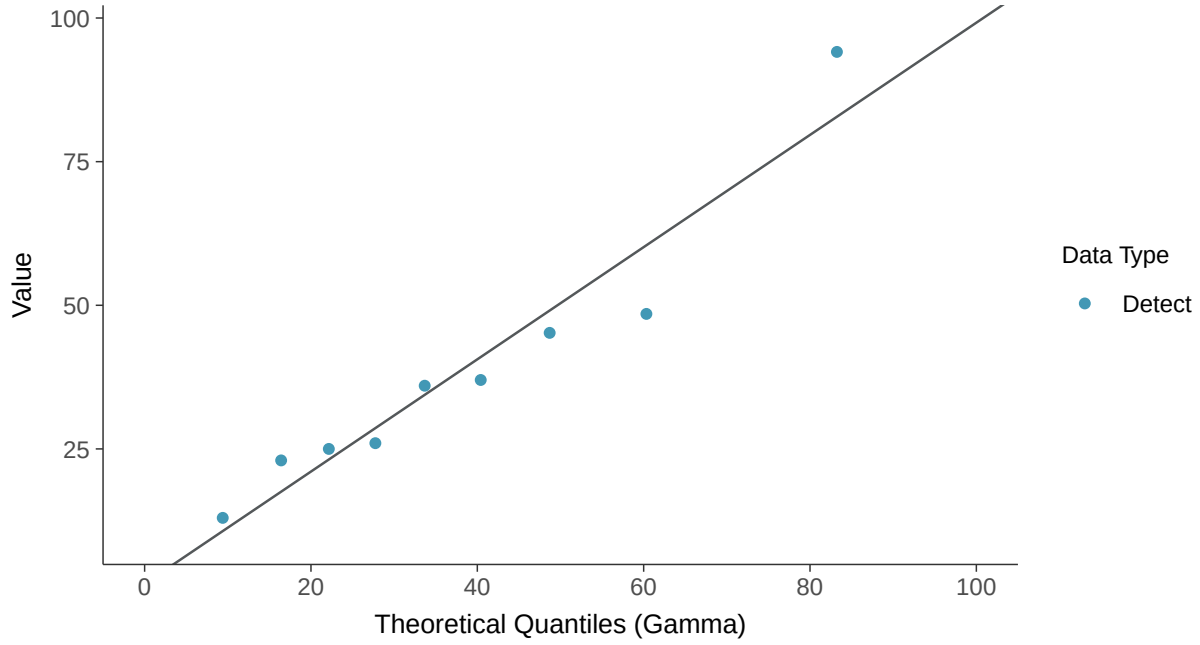
Lognormal Q-Q plot

Chloride, MW-18D (mg/l)



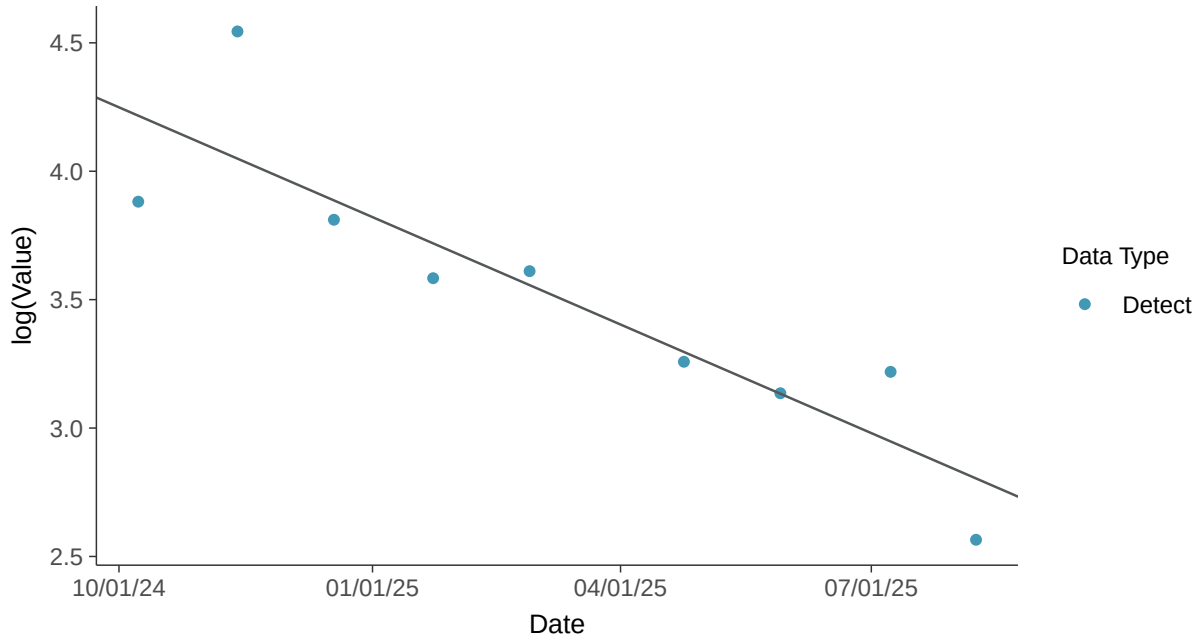
Gamma Q-Q plot

Chloride, MW-18D (mg/l)



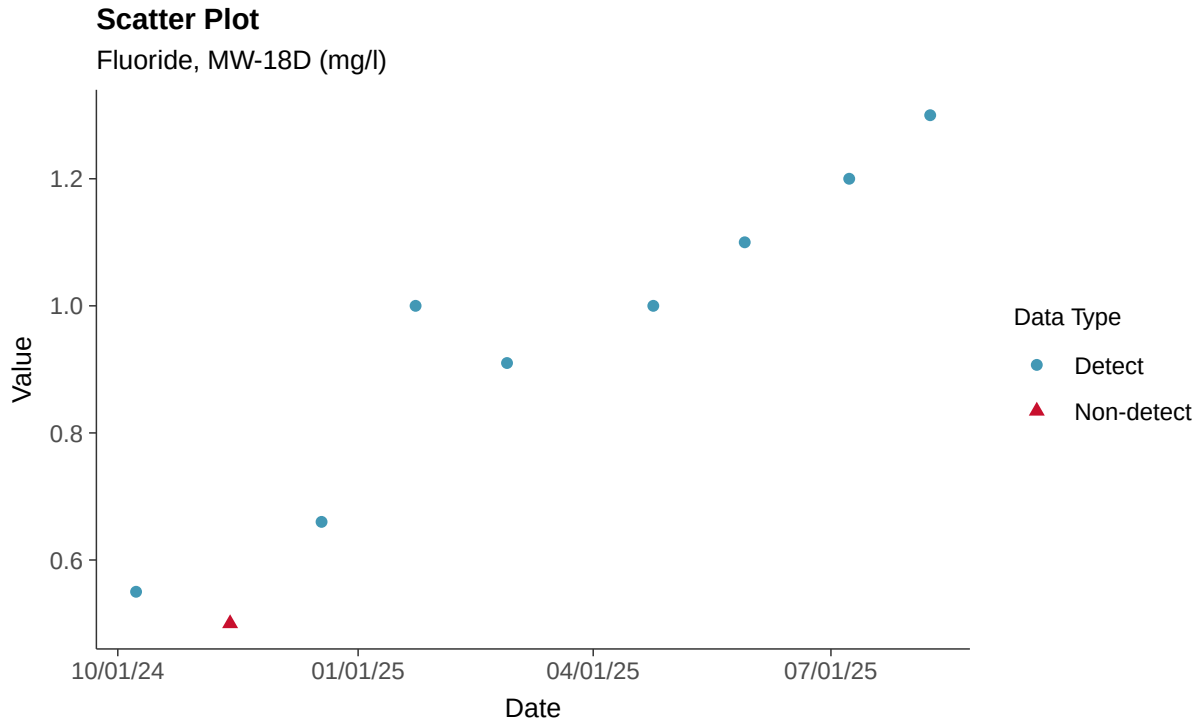
Trend Regression: Lognormal MLE

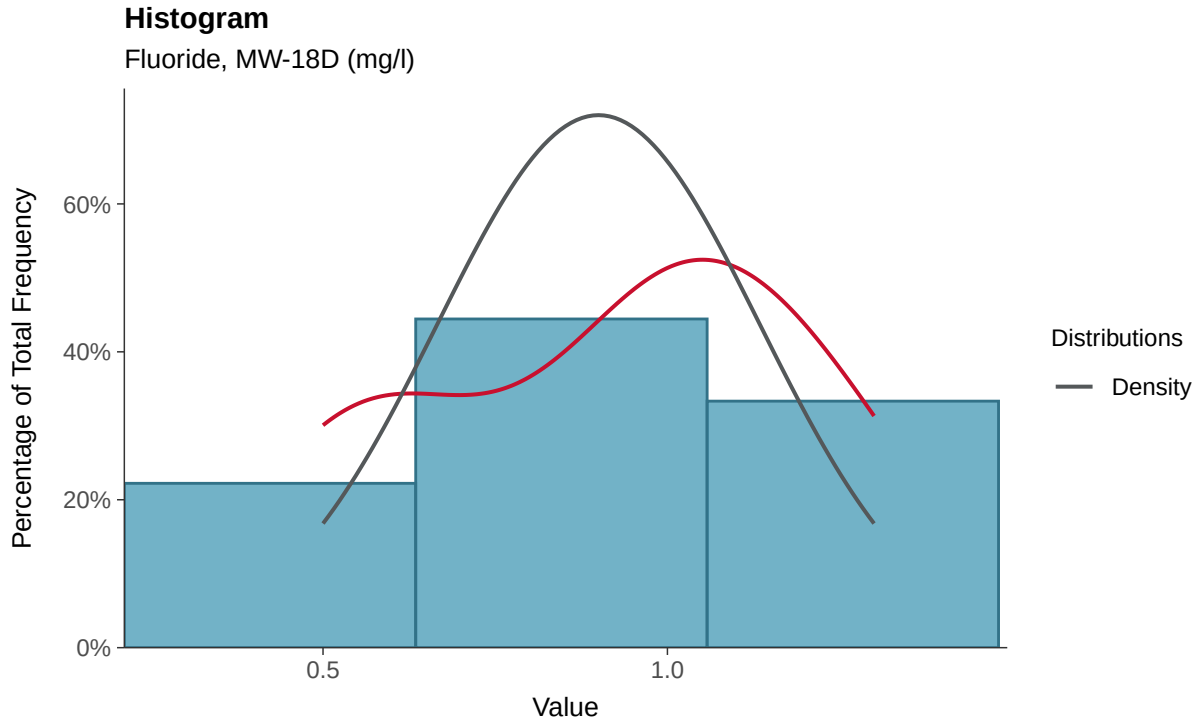
Chloride, MW-18D (mg/l)



Appendix III: Fluoride, MW-18D

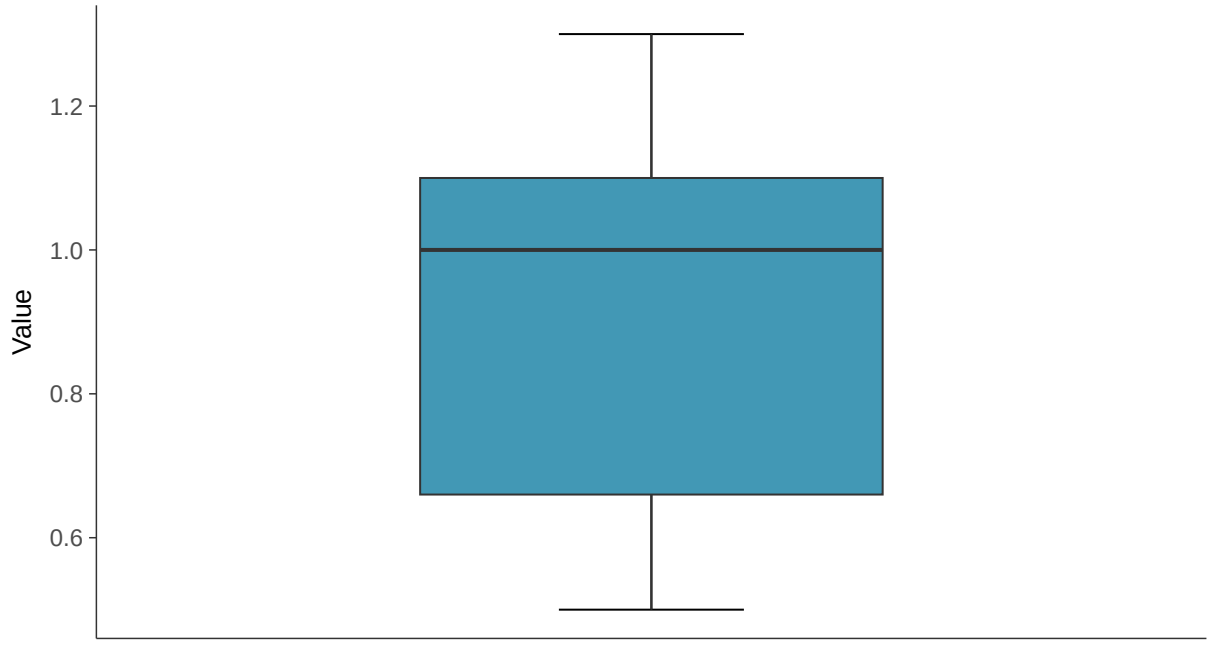
ID: 19_2_112





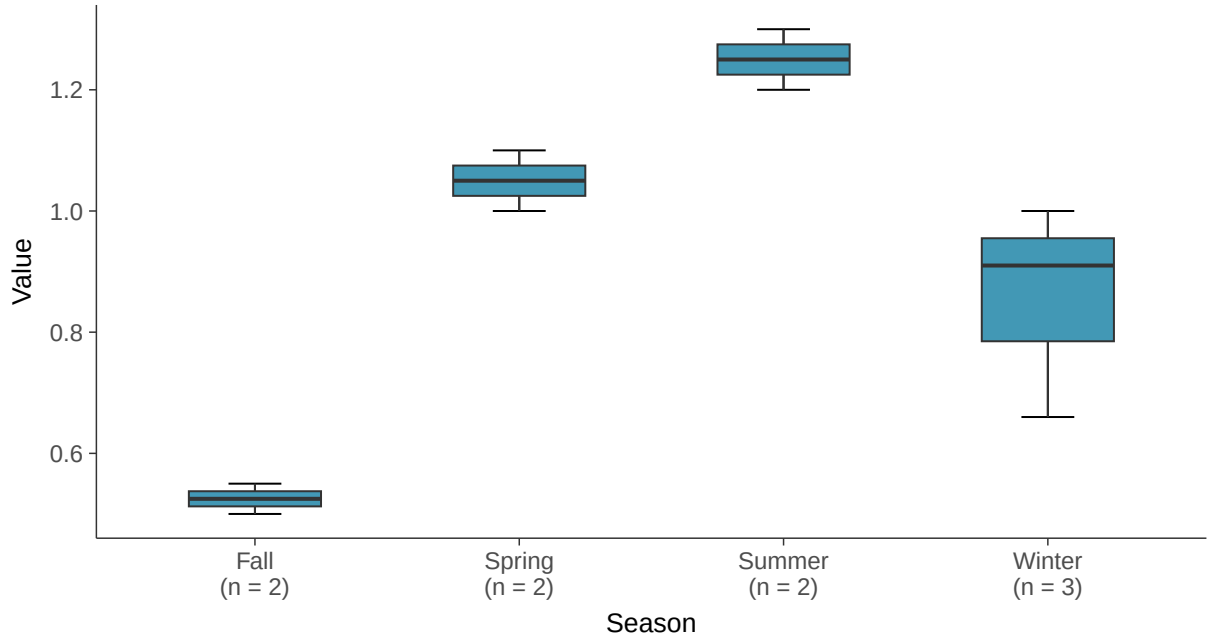
Boxplot

Fluoride, MW-18D (mg/l)



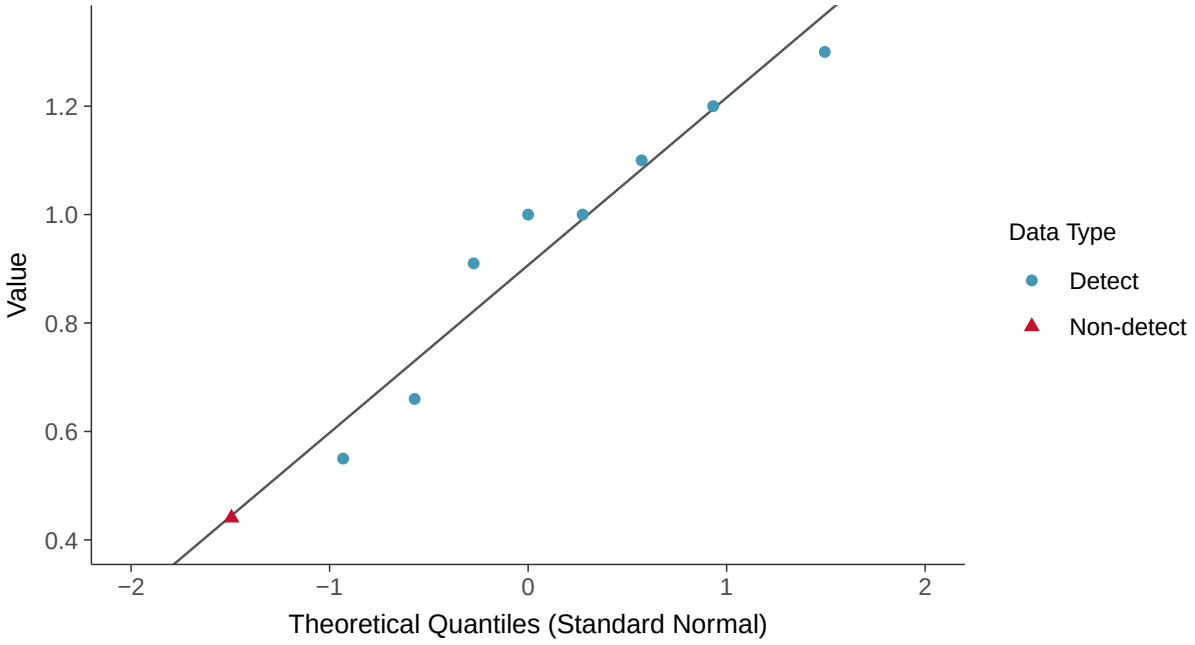
Boxplot by Season

Fluoride, MW-18D (mg/l)



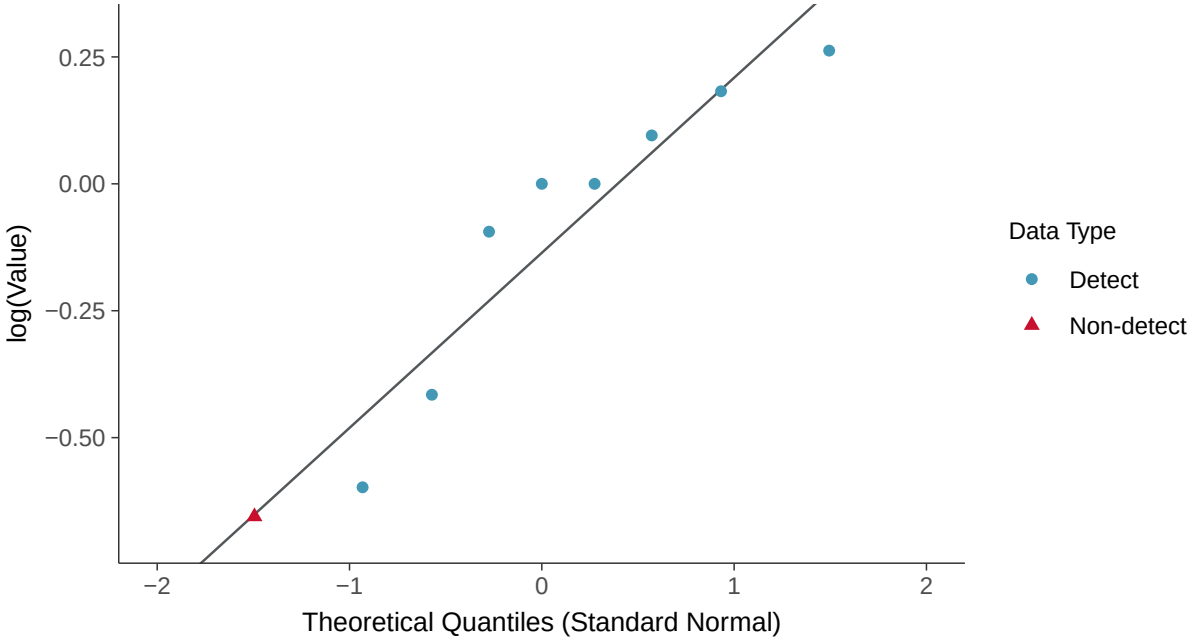
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-18D (mg/l)



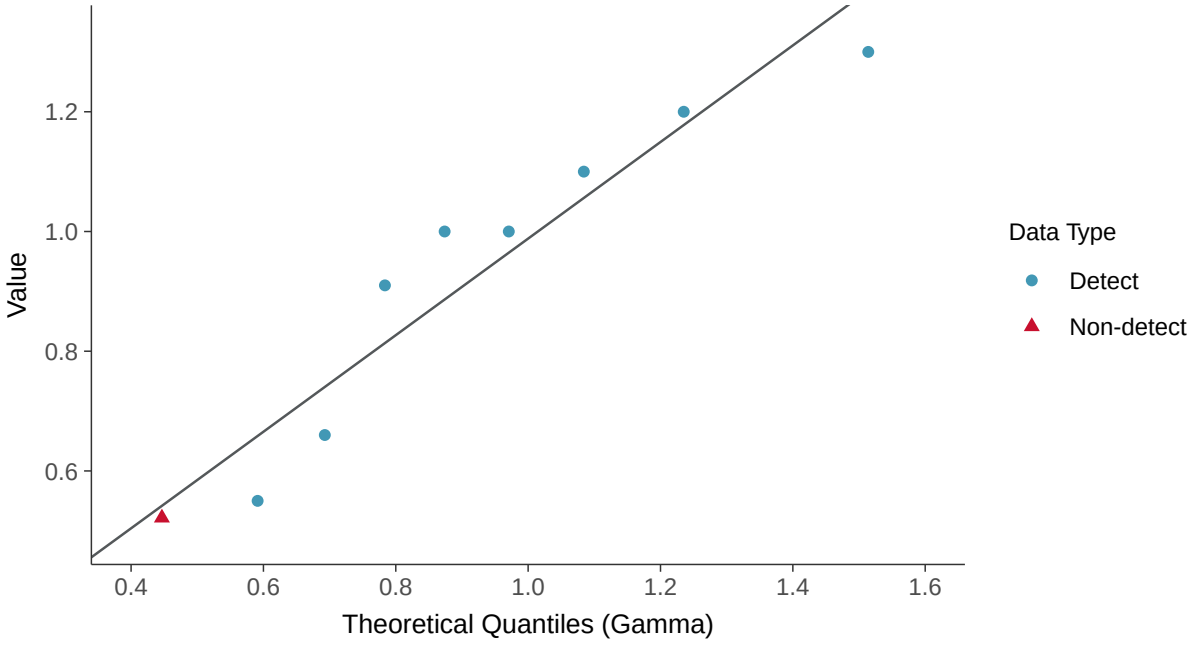
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-18D (mg/l)



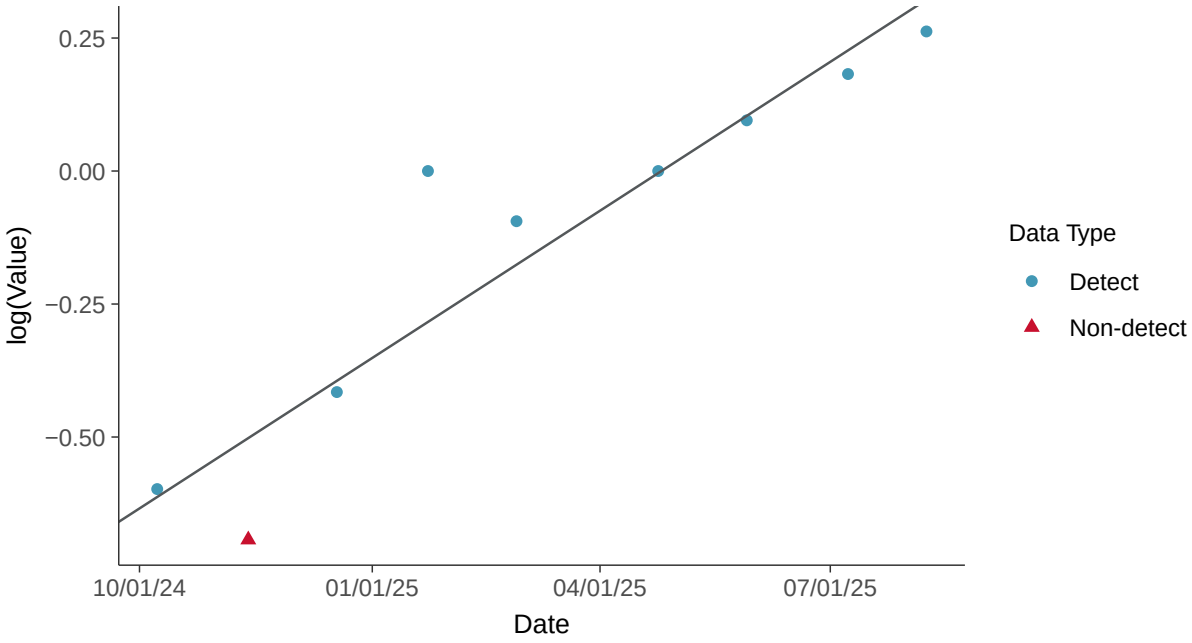
Gamma Q-Q plot using ROS Imputed Estimates

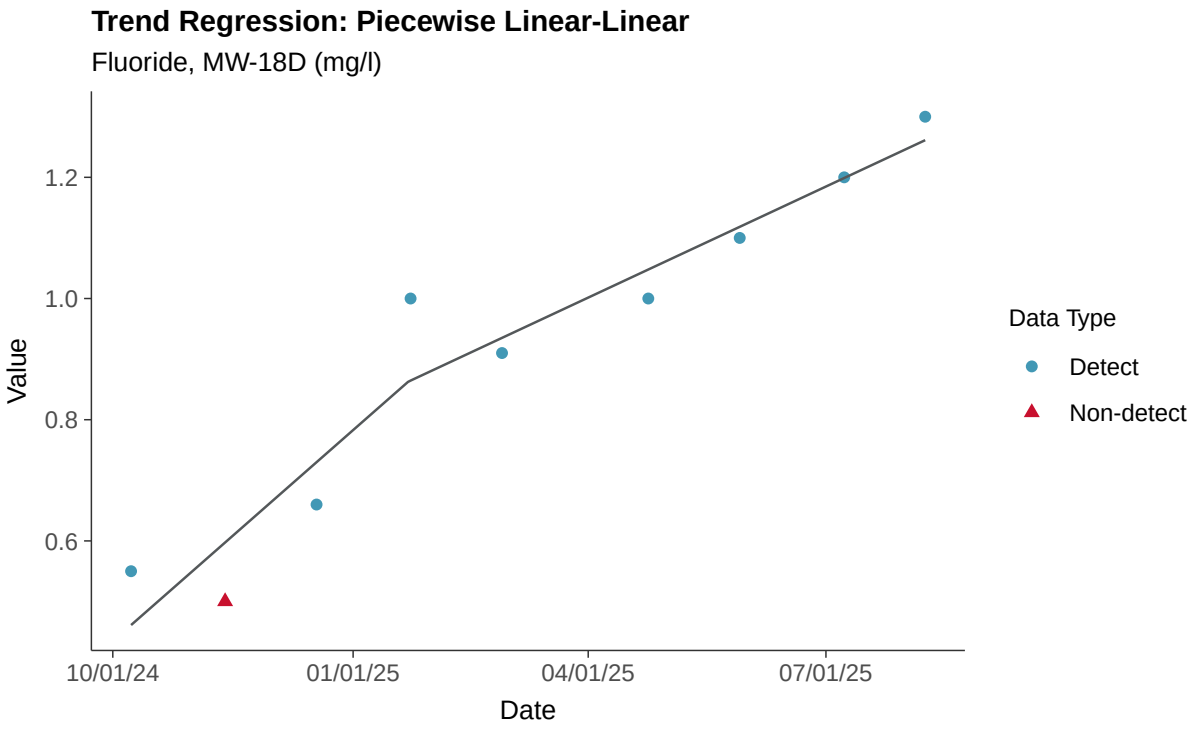
Fluoride, MW-18D (mg/l)



Trend Regression: Lognormal MLE

Fluoride, MW-18D (mg/l)



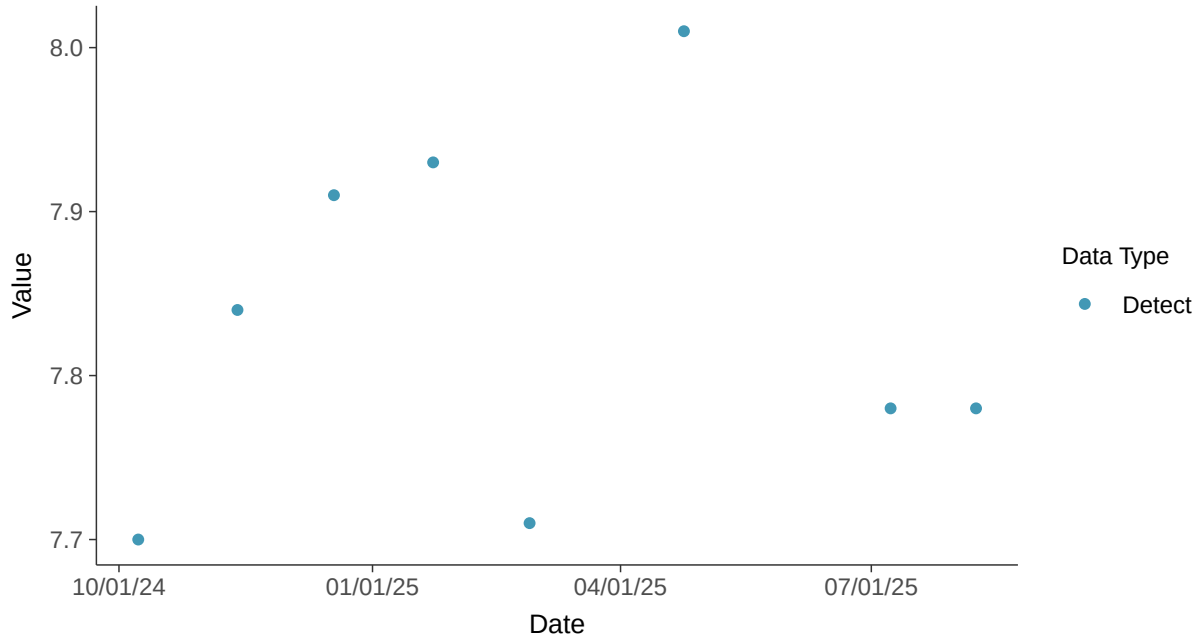

Trend Regression: Piecewise Linear-Linear
Fluoride, MW-18D (mg/l)
Value
1.2
1.0
0.8
0.6
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Appendix III: pH, Field, MW-18D

ID: 19_2_120

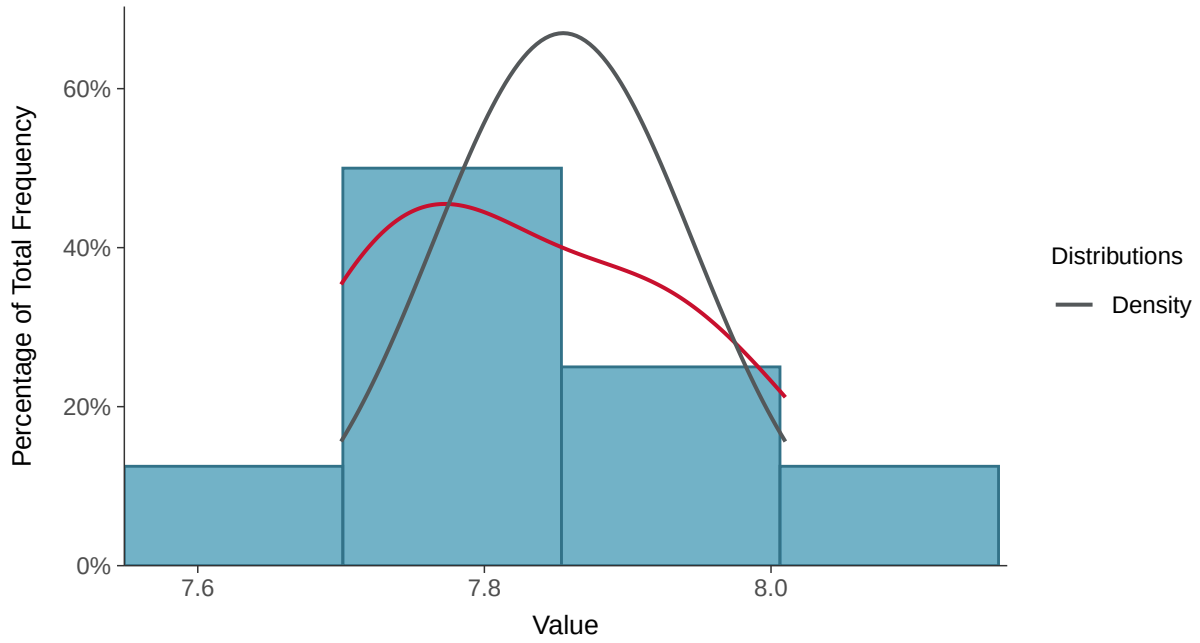
Scatter Plot

pH, Field, MW-18D (su)



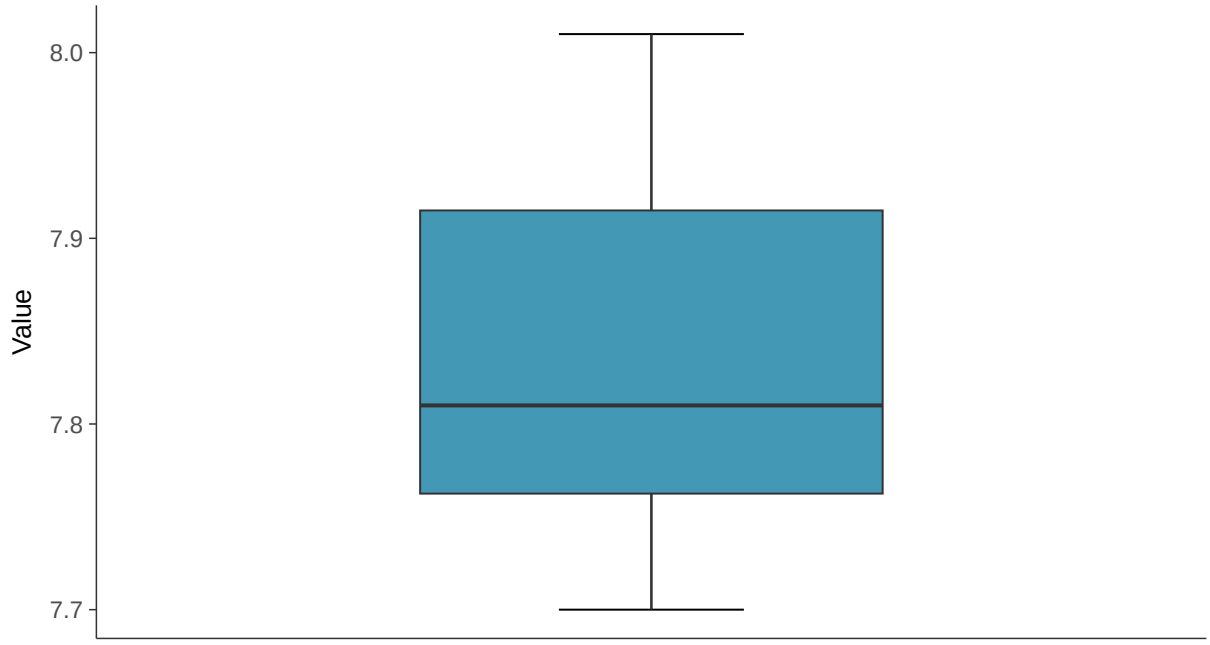
Histogram

pH, Field, MW-18D (su)



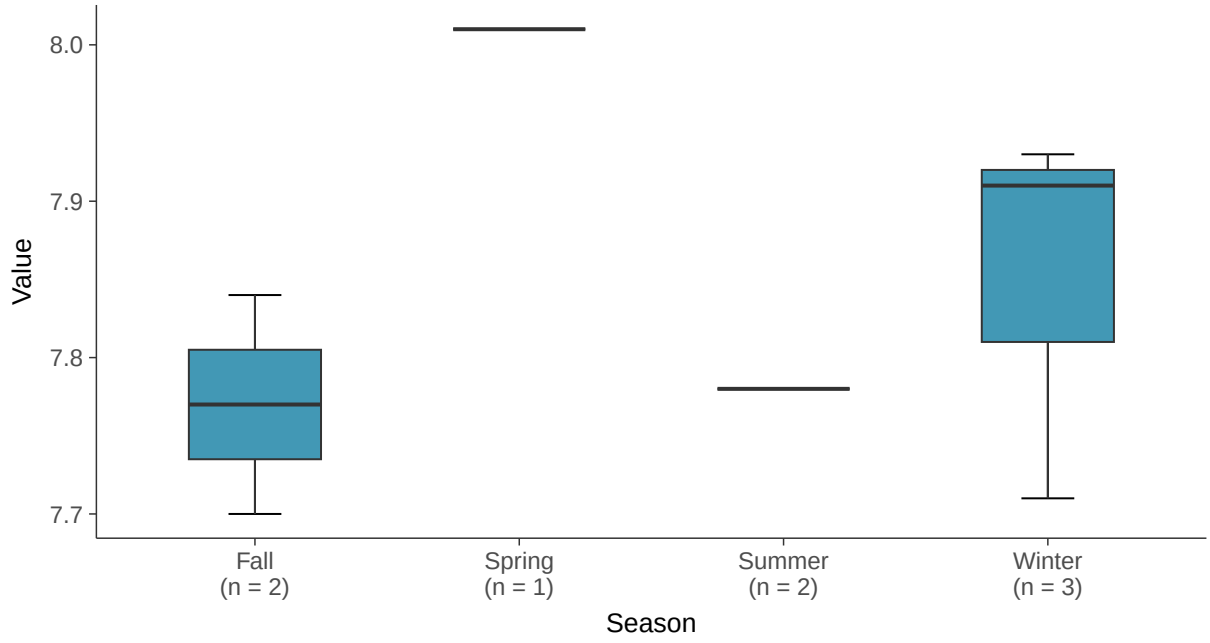
Boxplot

pH, Field, MW-18D (su)



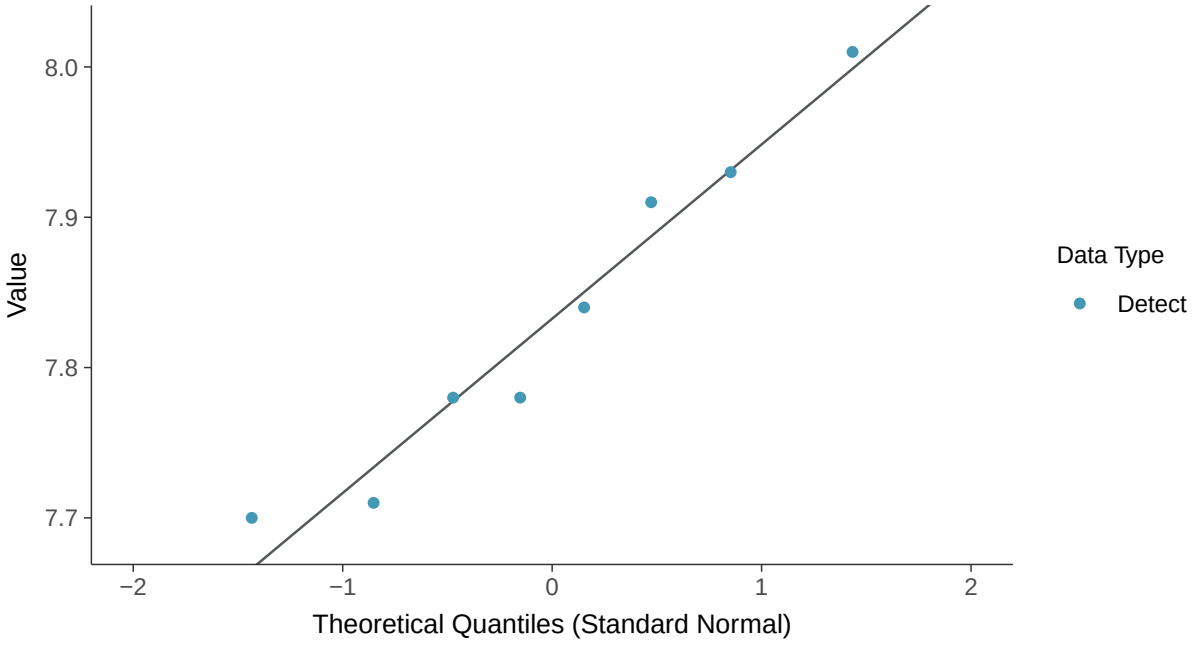
Boxplot by Season

pH, Field, MW-18D (su)



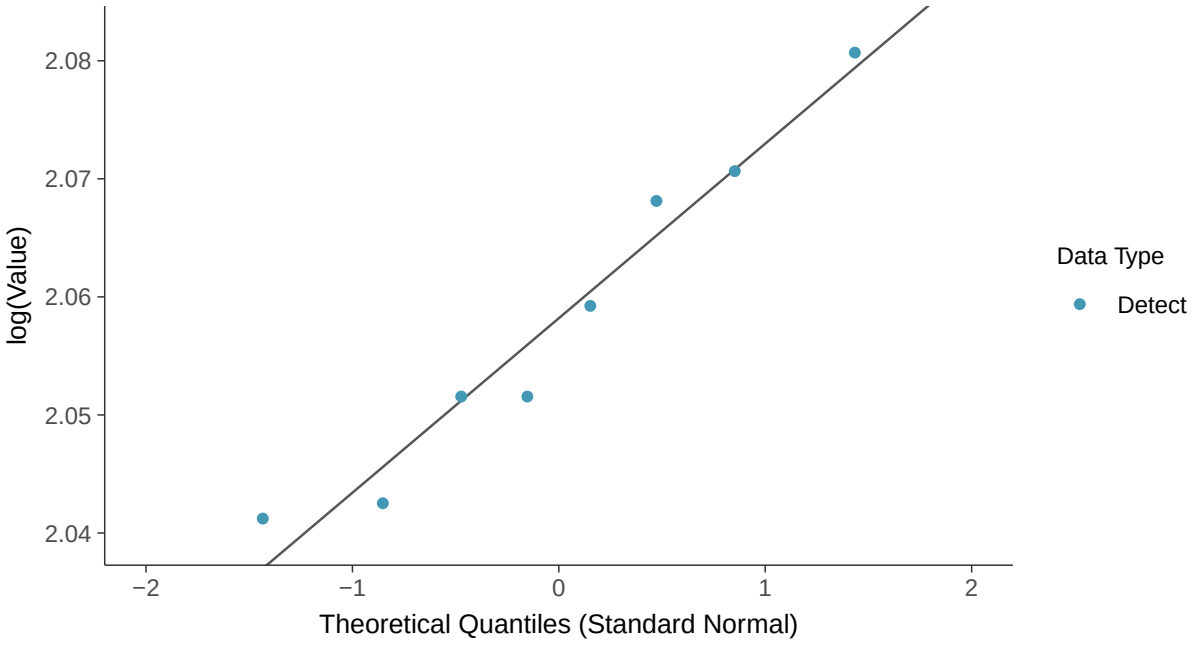
Normal Q-Q plot

pH, Field, MW-18D (su)



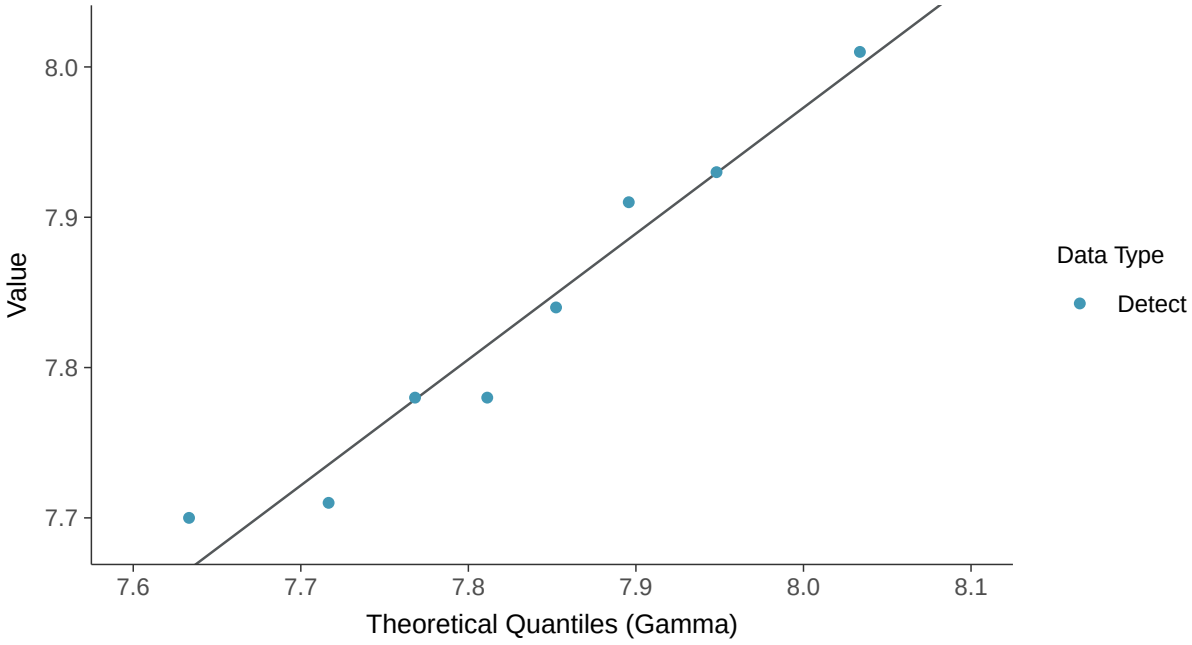
Lognormal Q-Q plot

pH, Field, MW-18D (su)



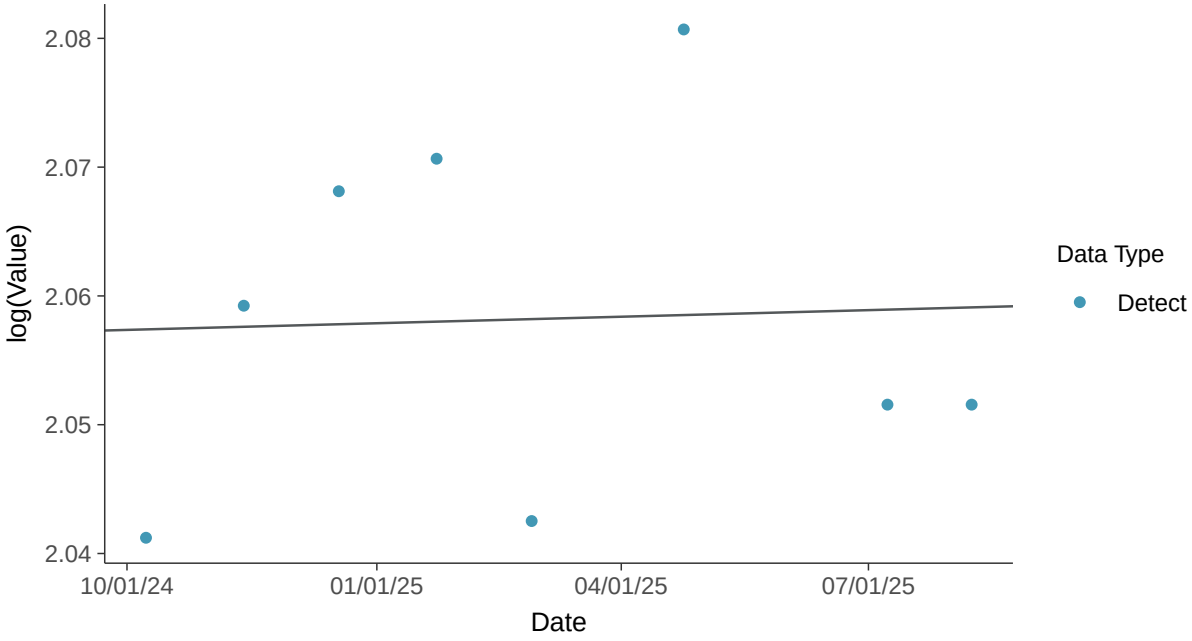
Gamma Q-Q plot

pH, Field, MW-18D (su)



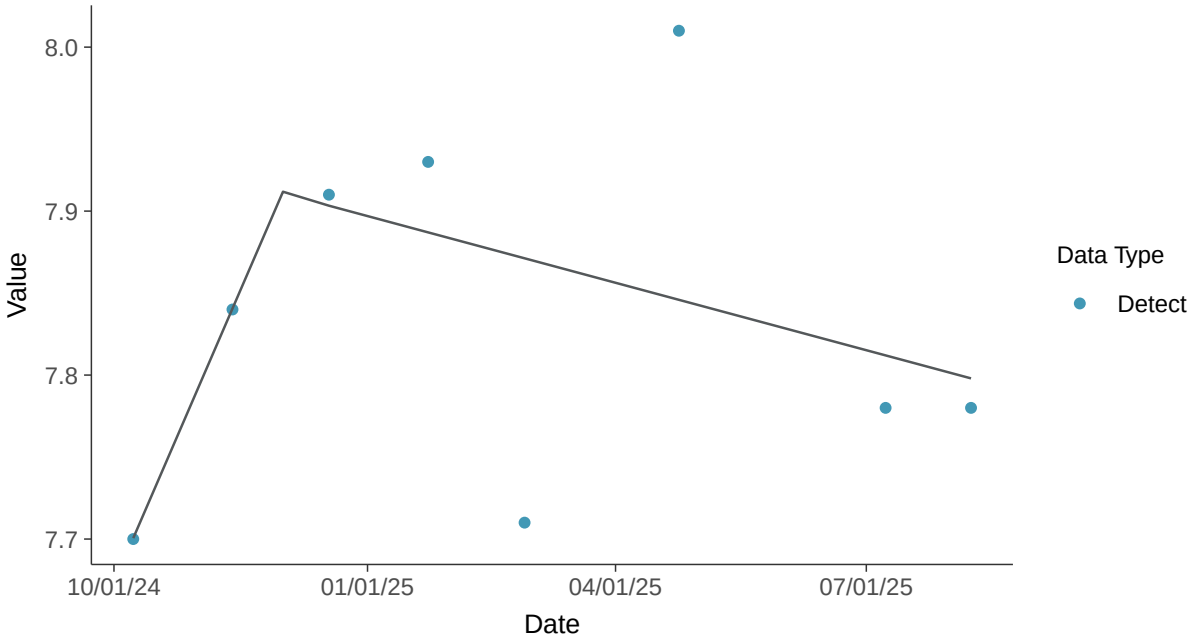
Trend Regression: Lognormal MLE

pH, Field, MW-18D (su)



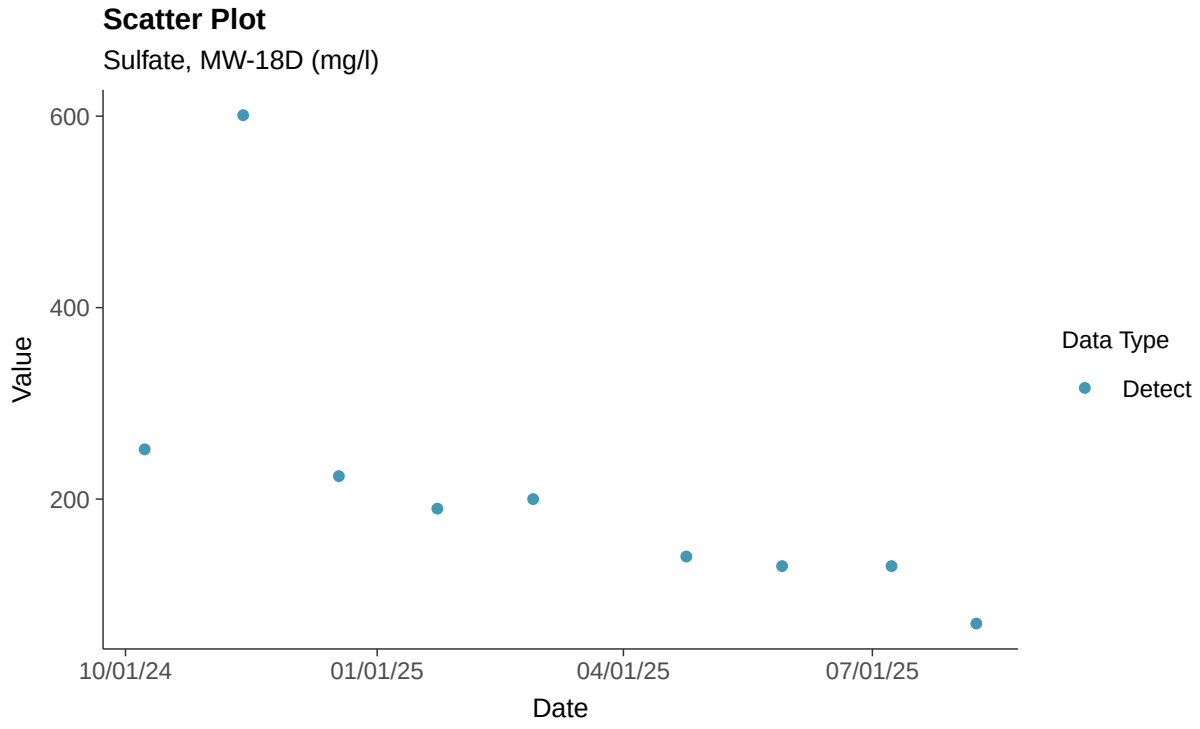
Trend Regression: Piecewise Linear-Linear

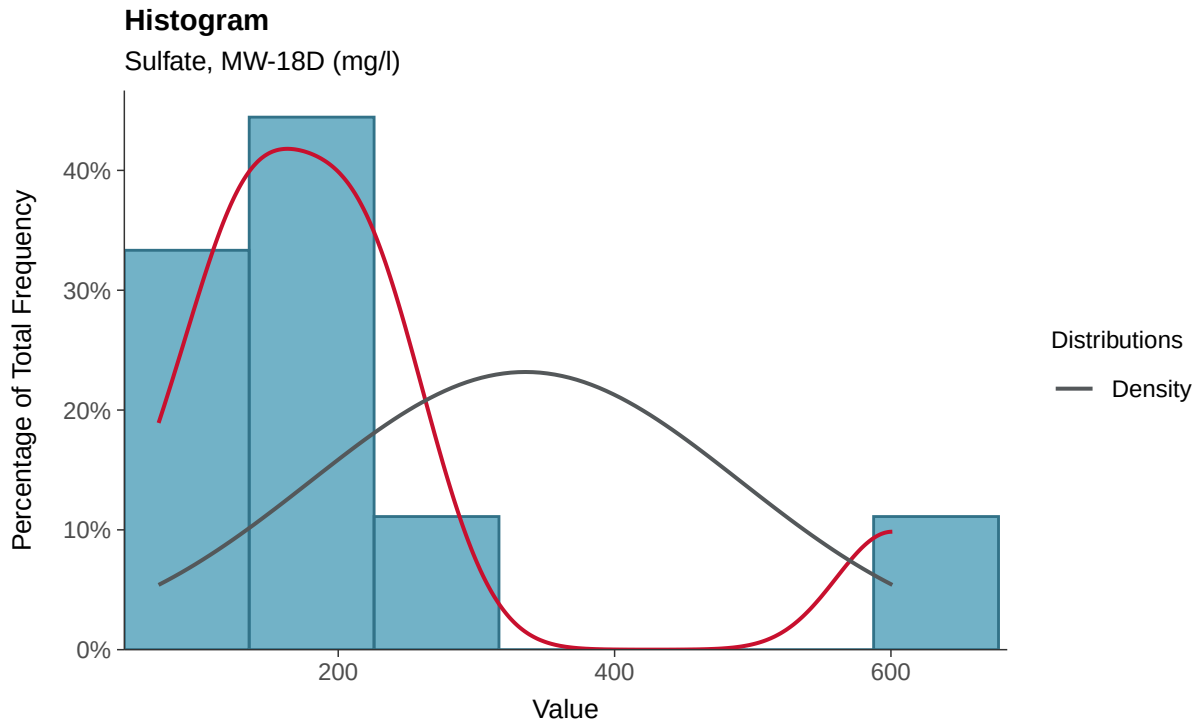
pH, Field, MW-18D (su)



Appendix III: Sulfate, MW-18D

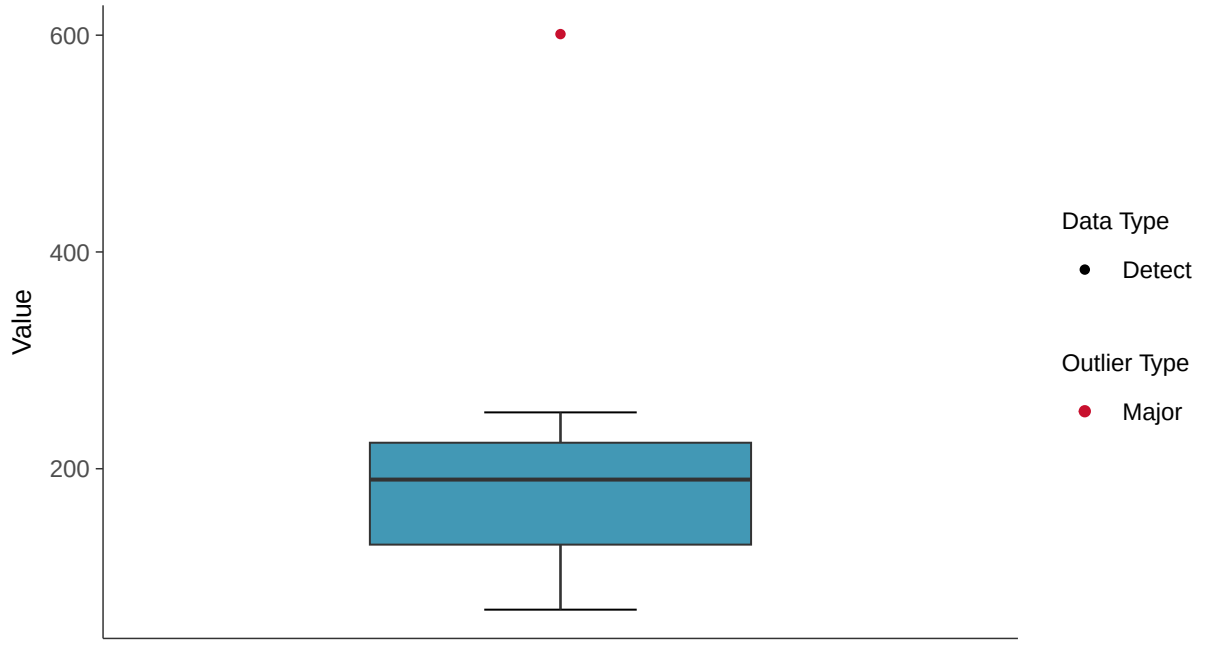
ID: 19_2_124





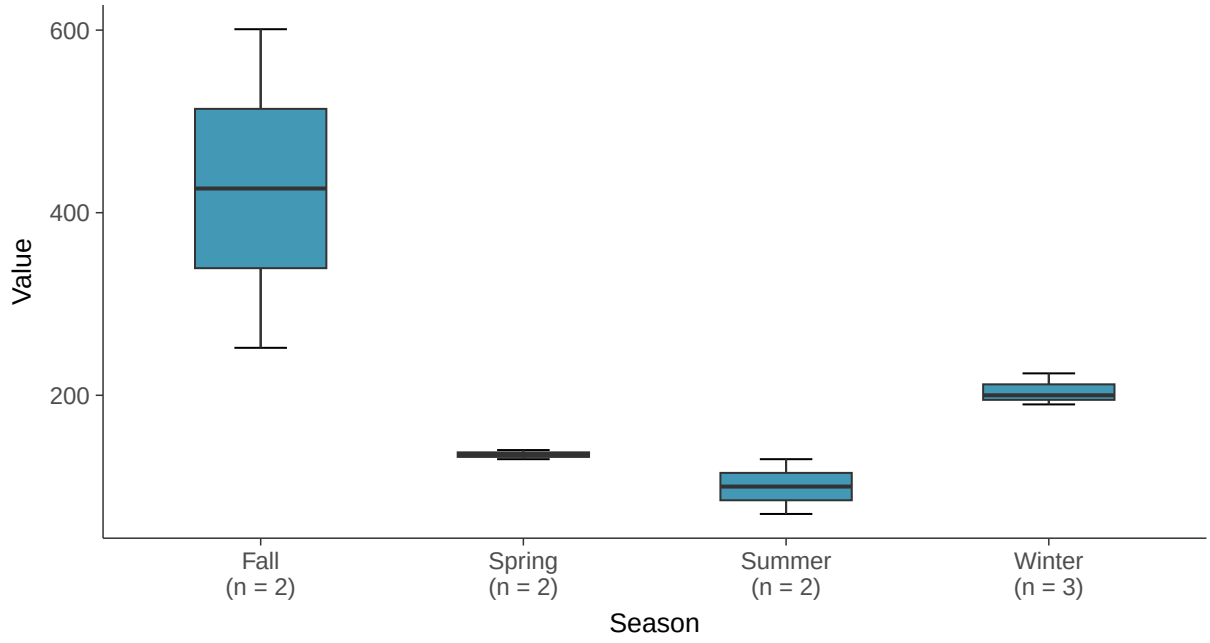
Boxplot

Sulfate, MW-18D (mg/l)



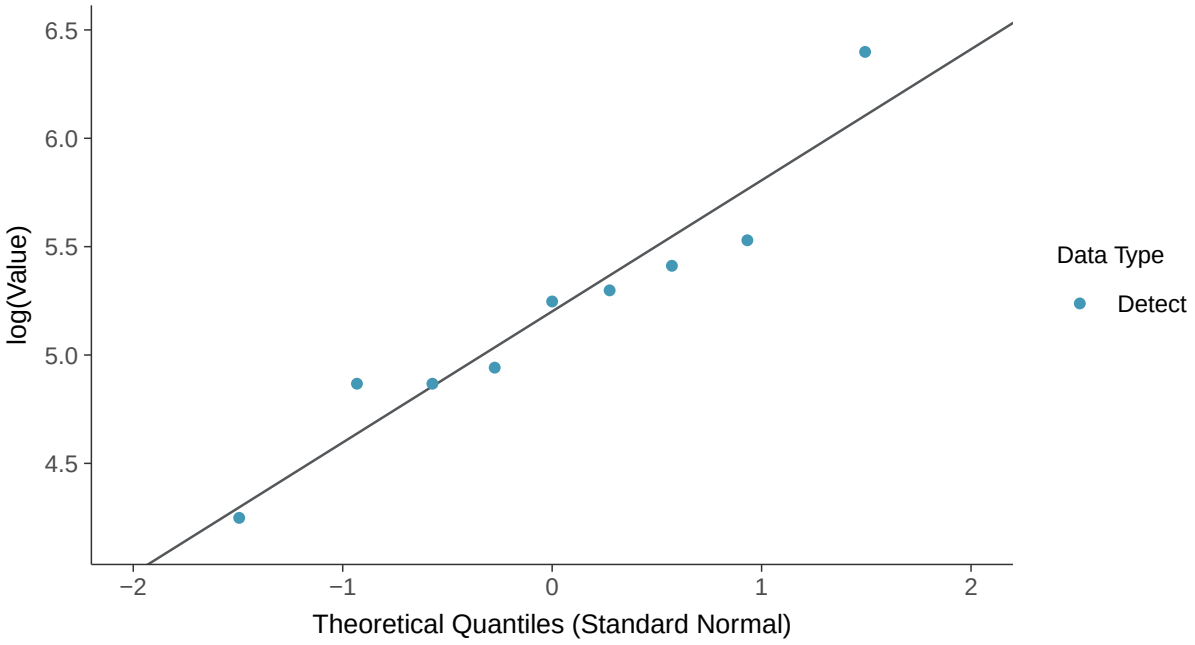
Boxplot by Season

Sulfate, MW-18D (mg/l)



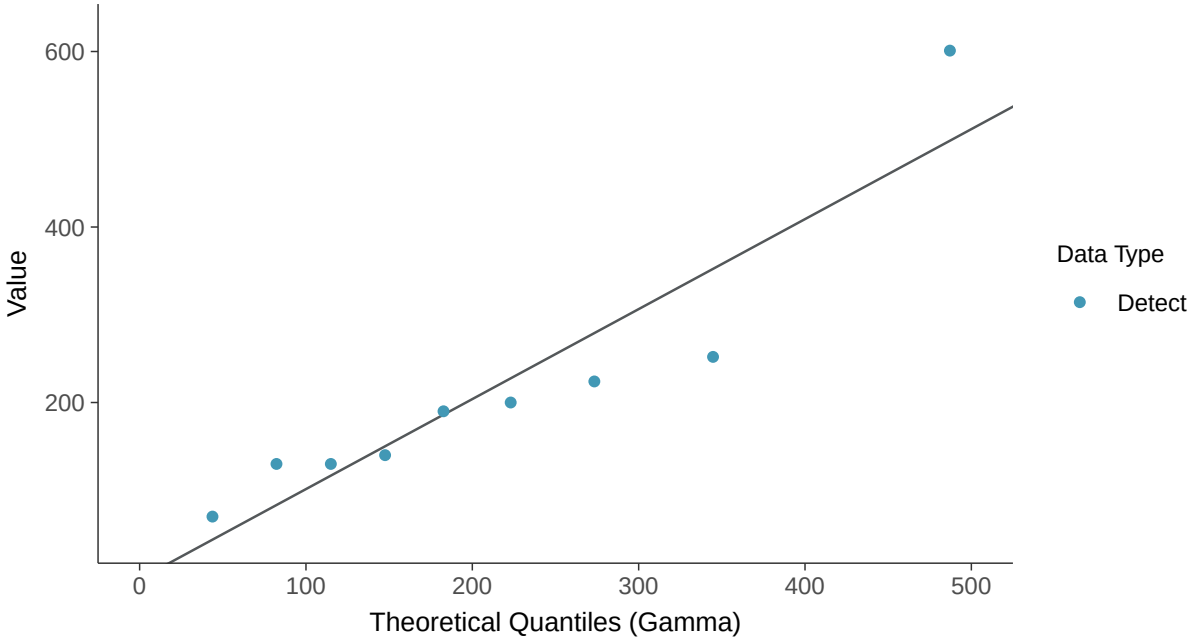
Lognormal Q-Q plot

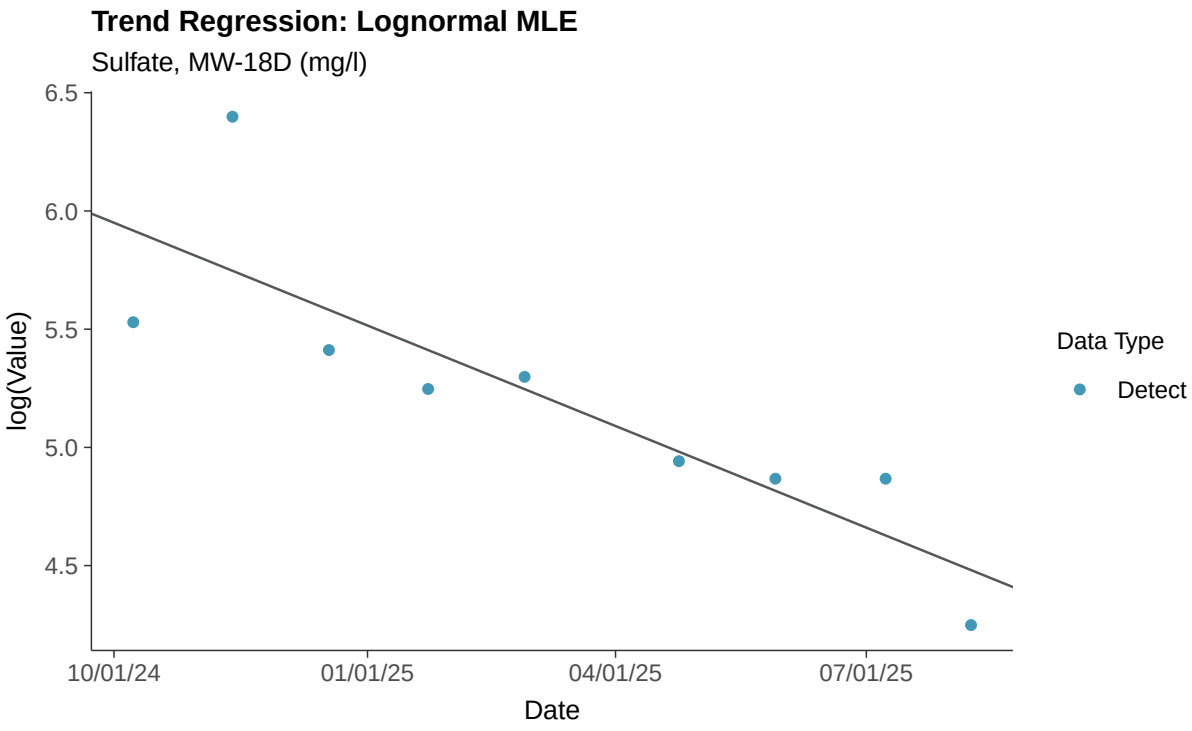
Sulfate, MW-18D (mg/l)



Gamma Q-Q plot

Sulfate, MW-18D (mg/l)



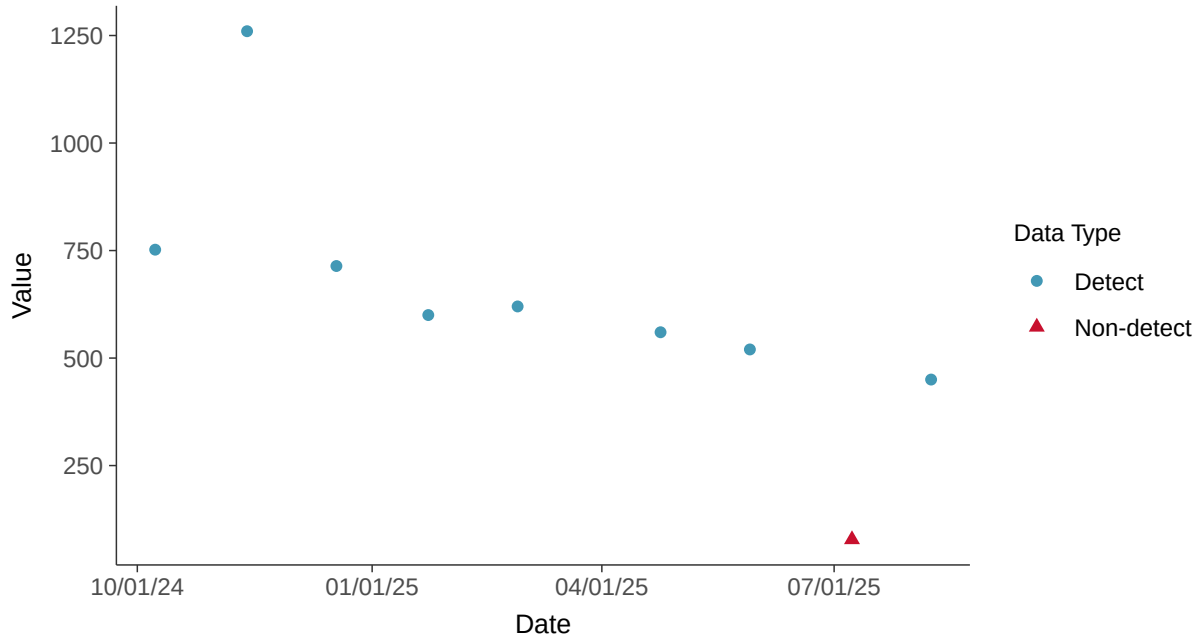

Trend Regression: Lognormal MLE
Sulfate, MW-18D (mg/l)
6.5
6.0
5.5
5.0
4.5
log(Value)
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix III: Total Dissolved Solids, MW-18D

ID: 19_2_126

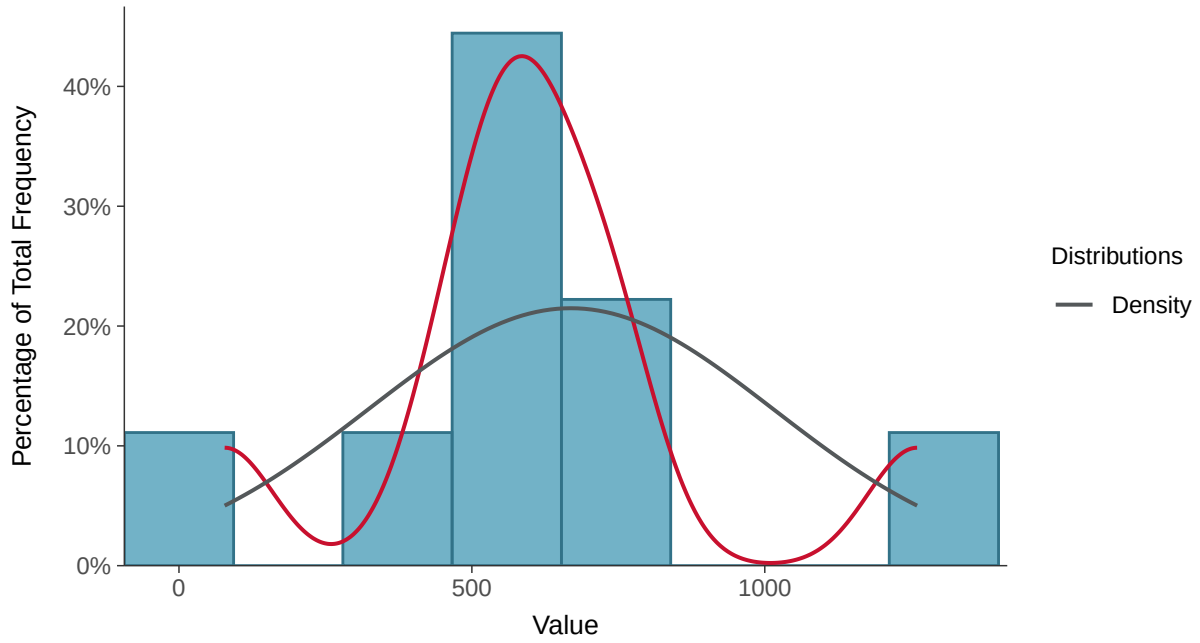
Scatter Plot

Total Dissolved Solids, MW-18D (mg/l)



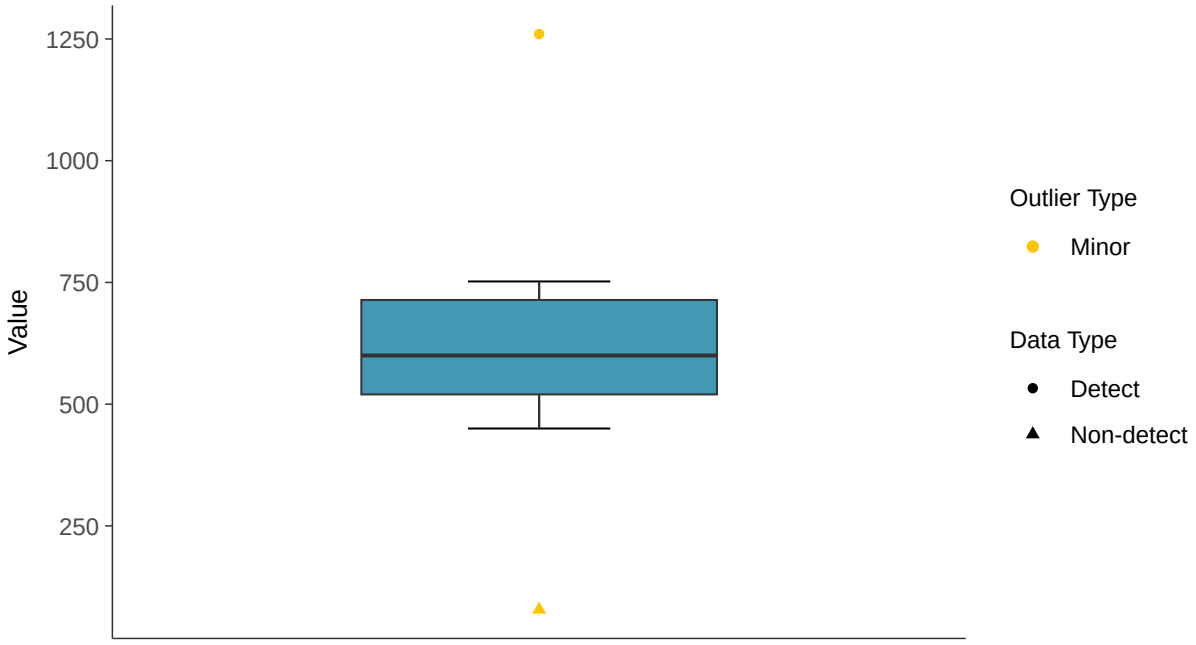
Histogram

Total Dissolved Solids, MW-18D (mg/l)



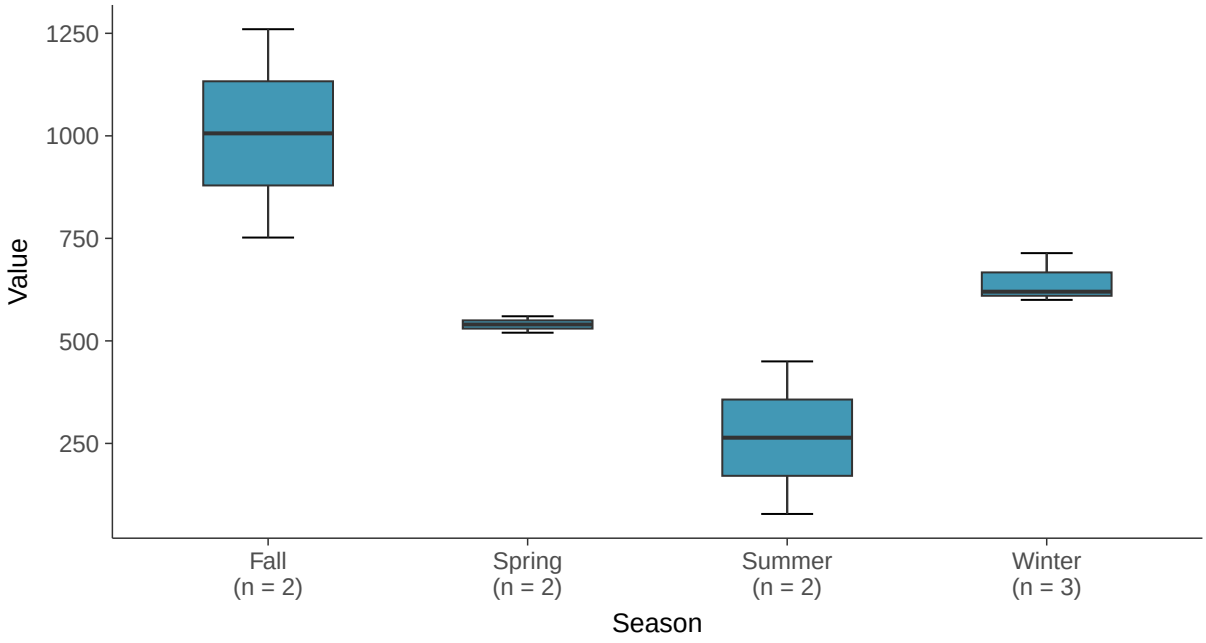
Boxplot

Total Dissolved Solids, MW-18D (mg/l)



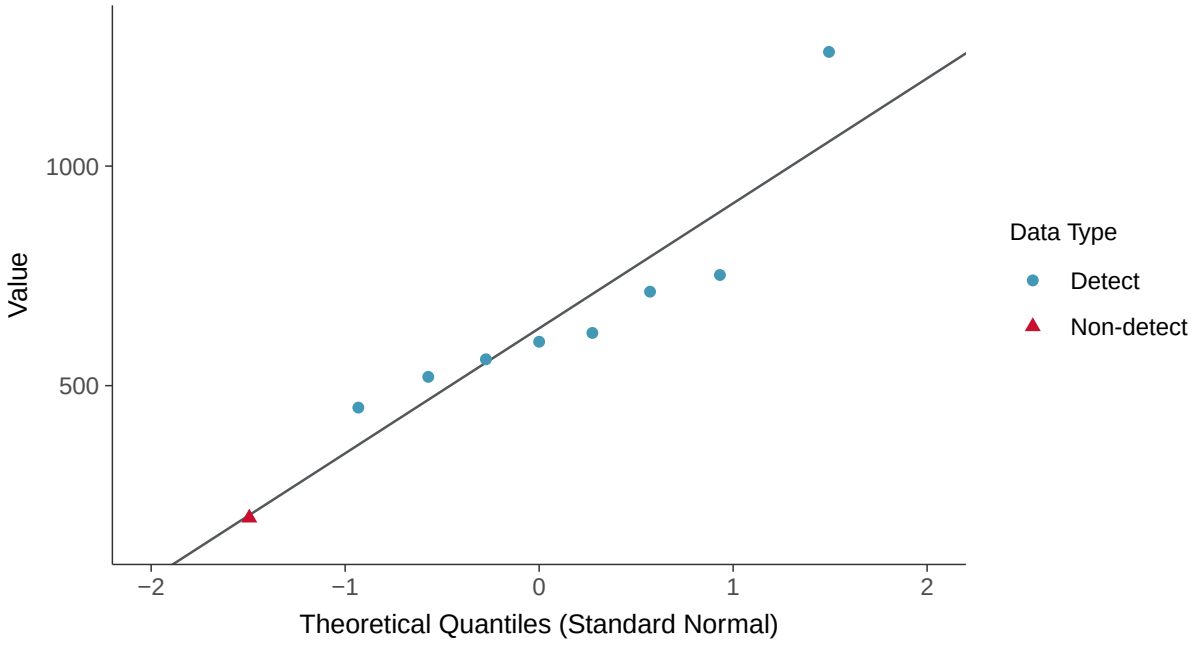
Boxplot by Season

Total Dissolved Solids, MW-18D (mg/l)



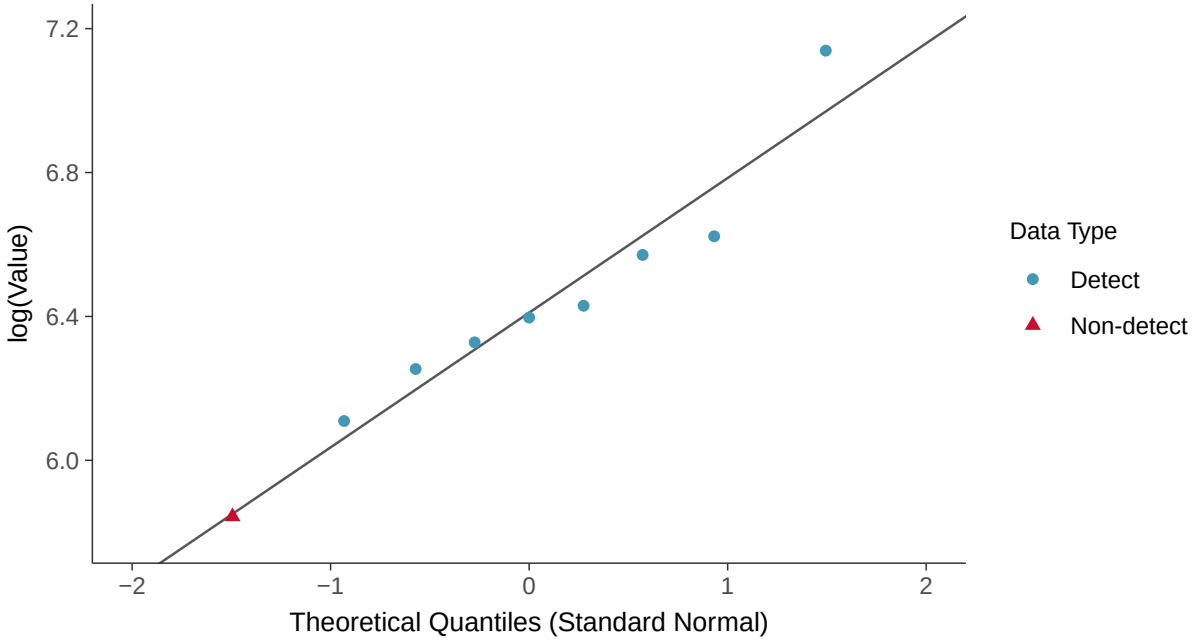
Normal Q-Q plot using ROS Imputed Estimates

Total Dissolved Solids, MW-18D (mg/l)



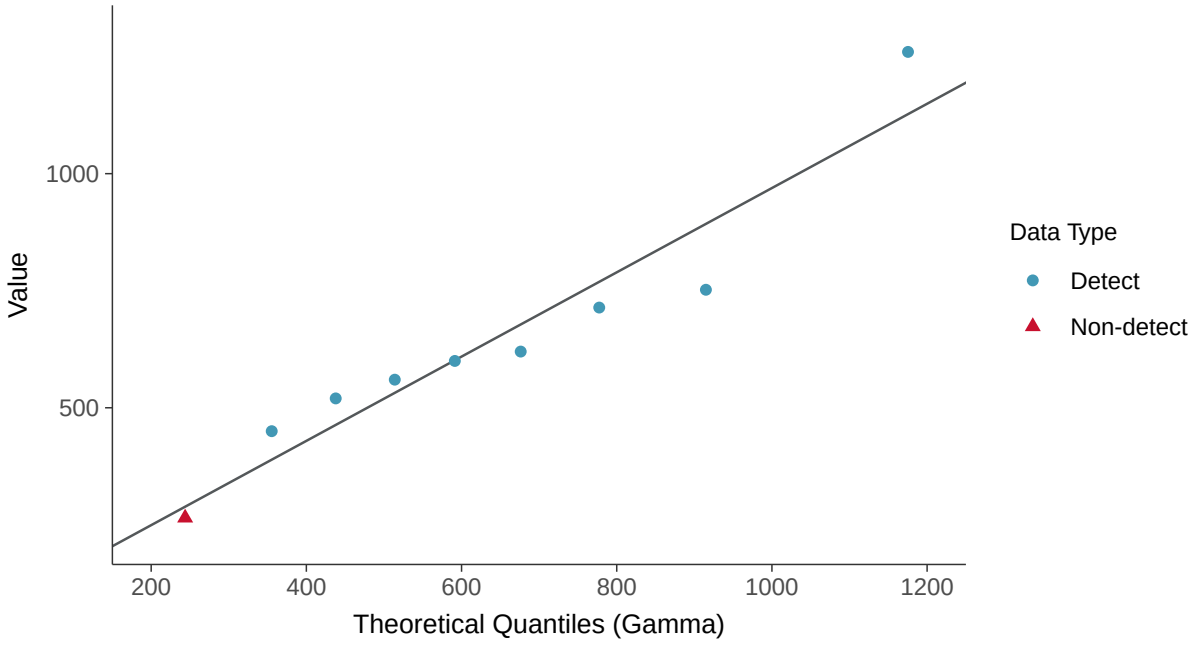
Lognormal Q-Q plot using ROS Imputed Estimates

Total Dissolved Solids, MW-18D (mg/l)



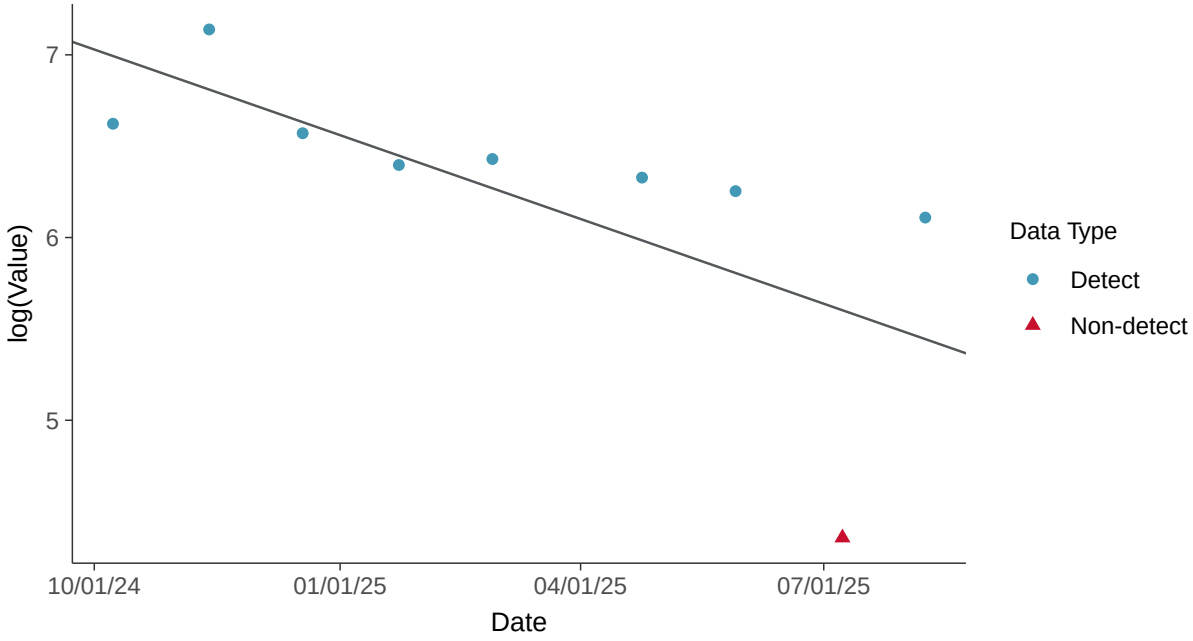
Gamma Q-Q plot using ROS Imputed Estimates

Total Dissolved Solids, MW-18D (mg/l)



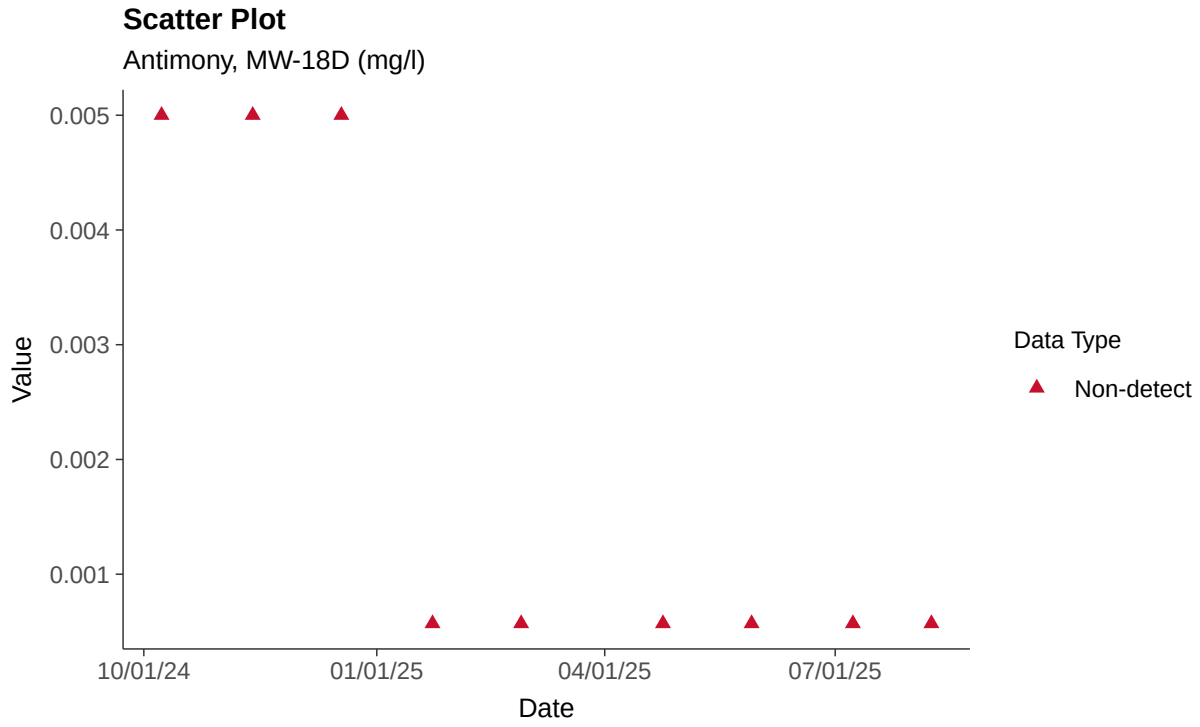
Trend Regression: Lognormal MLE

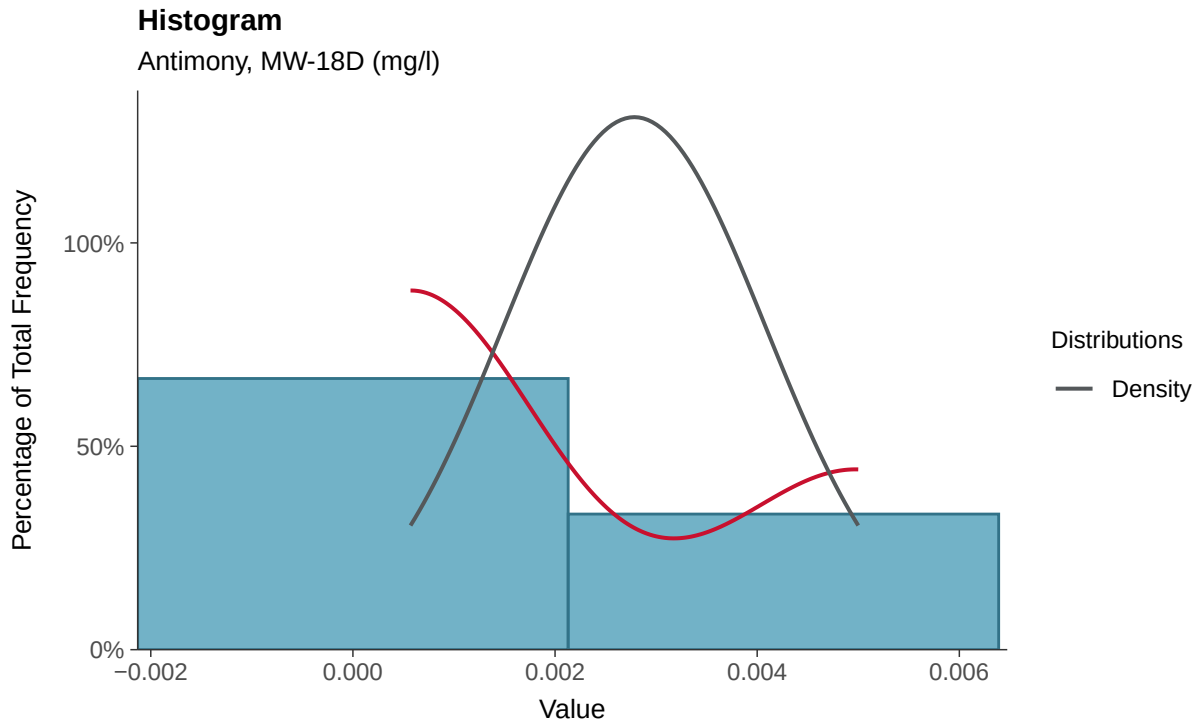
Total Dissolved Solids, MW-18D (mg/l)



Appendix IV: Antimony, MW-18D

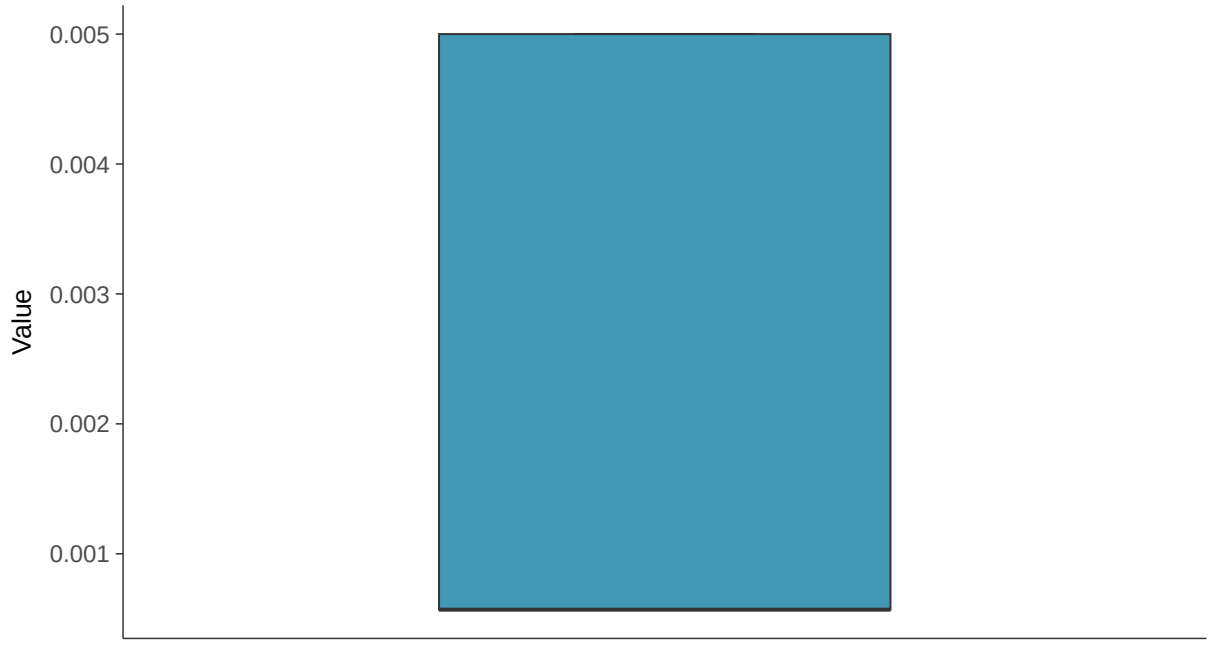
ID: 19_3_101





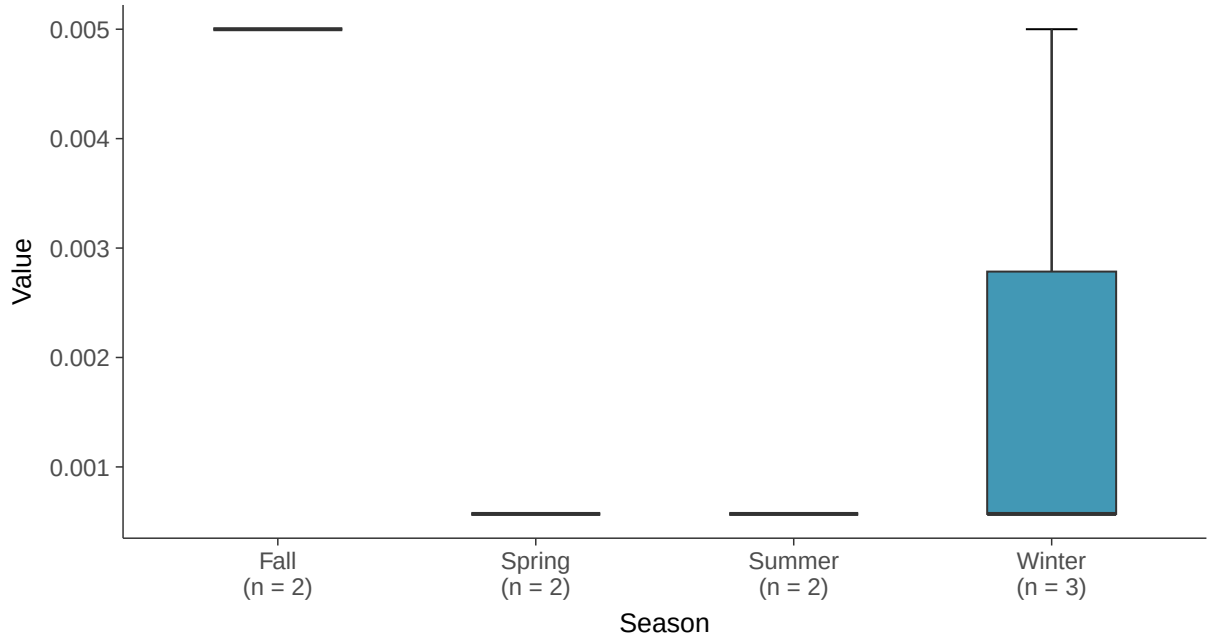
Boxplot

Antimony, MW-18D (mg/l)



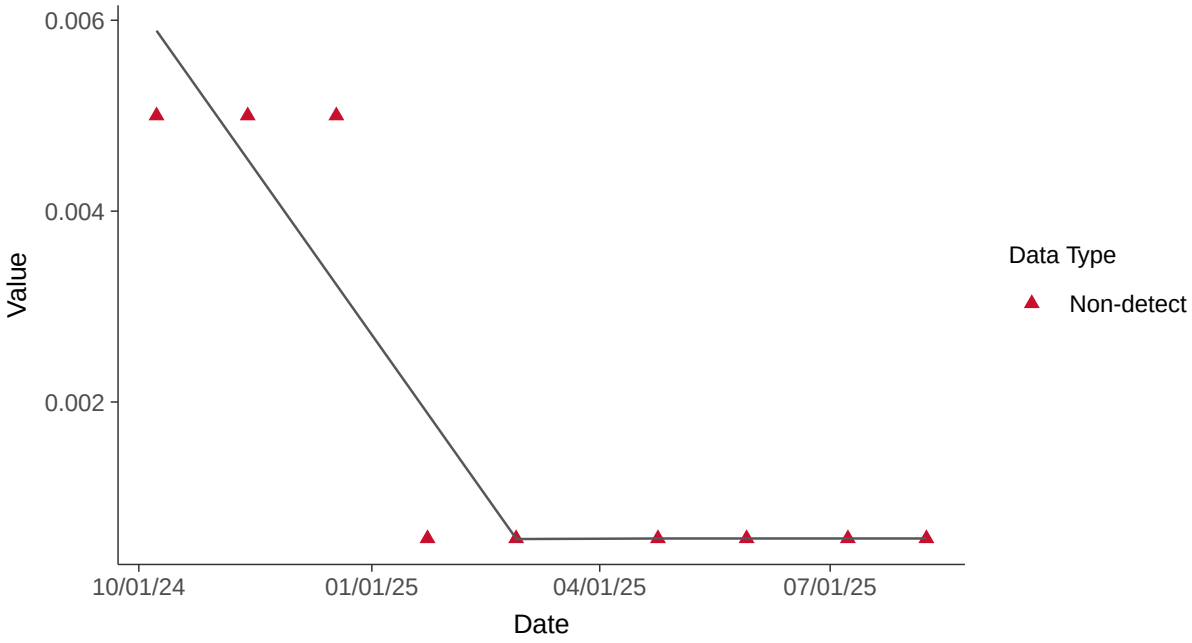
Boxplot by Season

Antimony, MW-18D (mg/l)



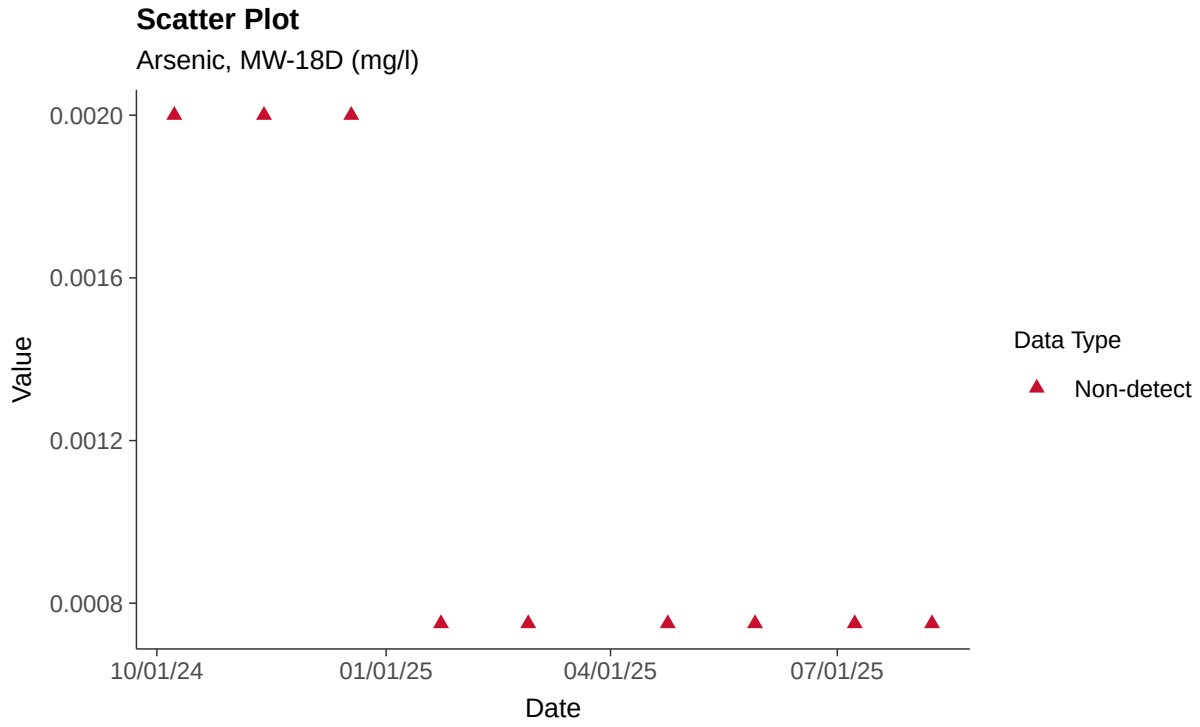
Trend Regression: Piecewise Linear-Linear

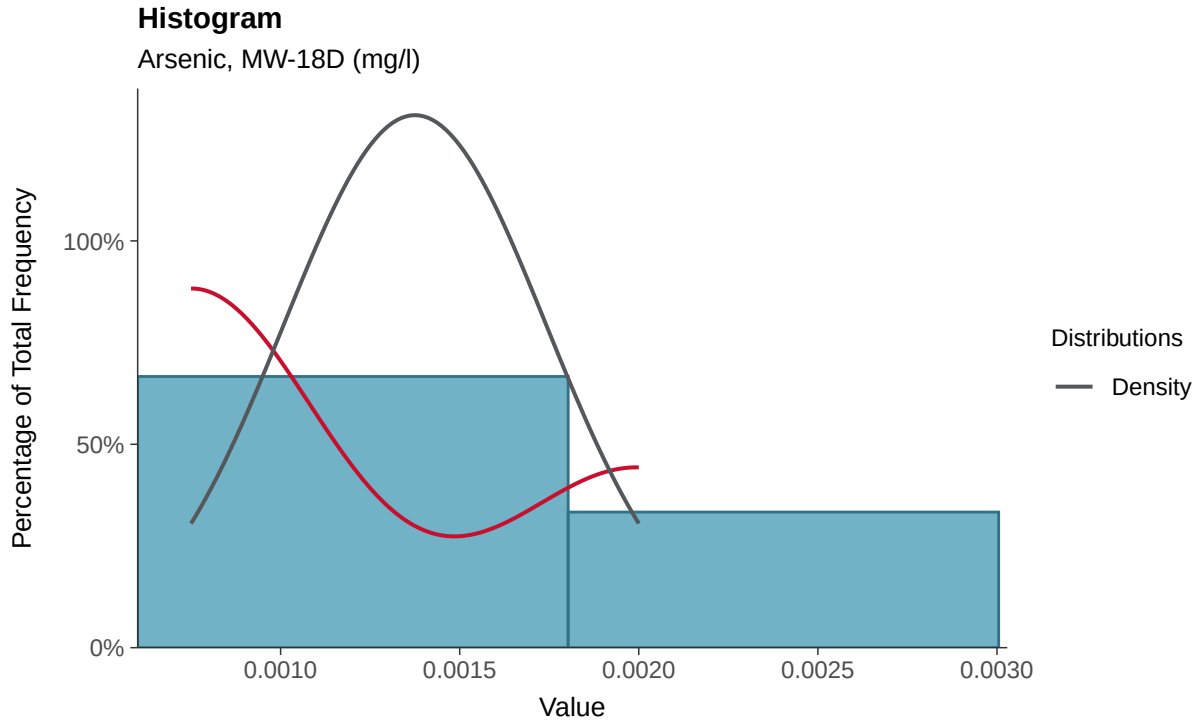
Antimony, MW-18D (mg/l)



Appendix IV: Arsenic, MW-18D

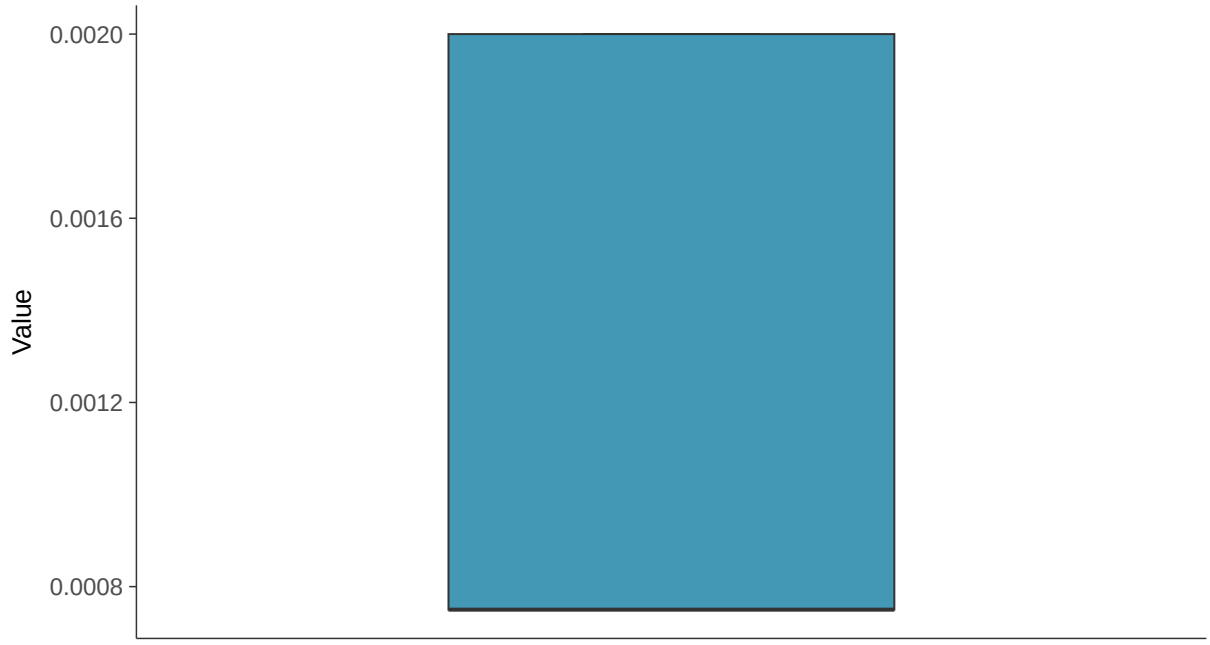
ID: 19_3_102





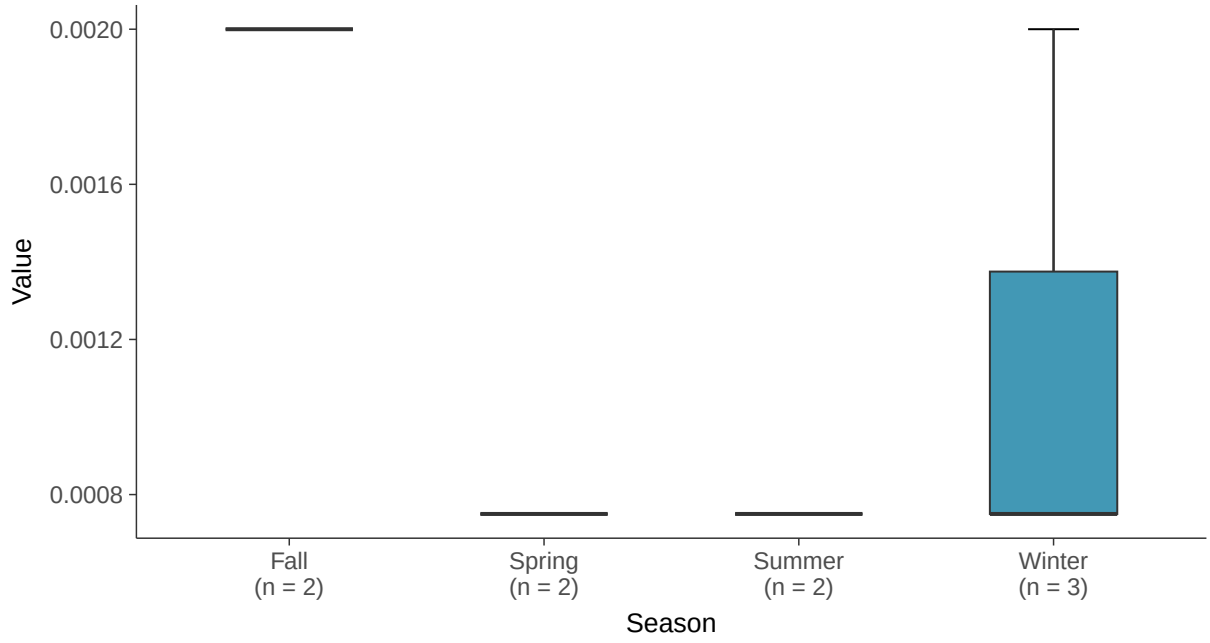
Boxplot

Arsenic, MW-18D (mg/l)



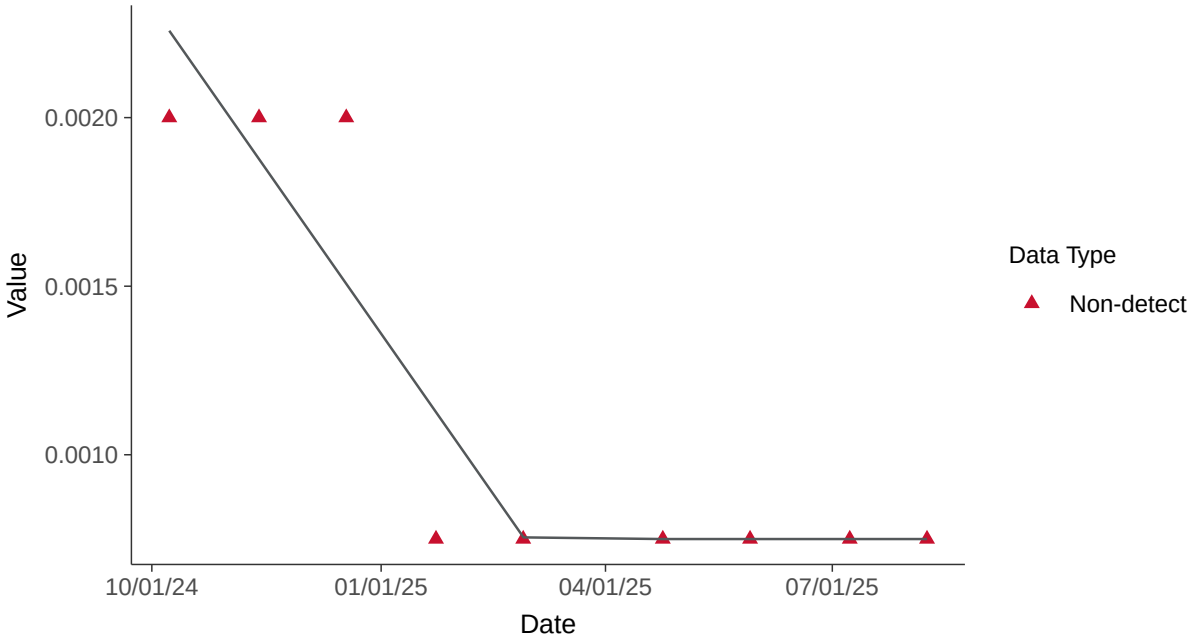
Boxplot by Season

Arsenic, MW-18D (mg/l)



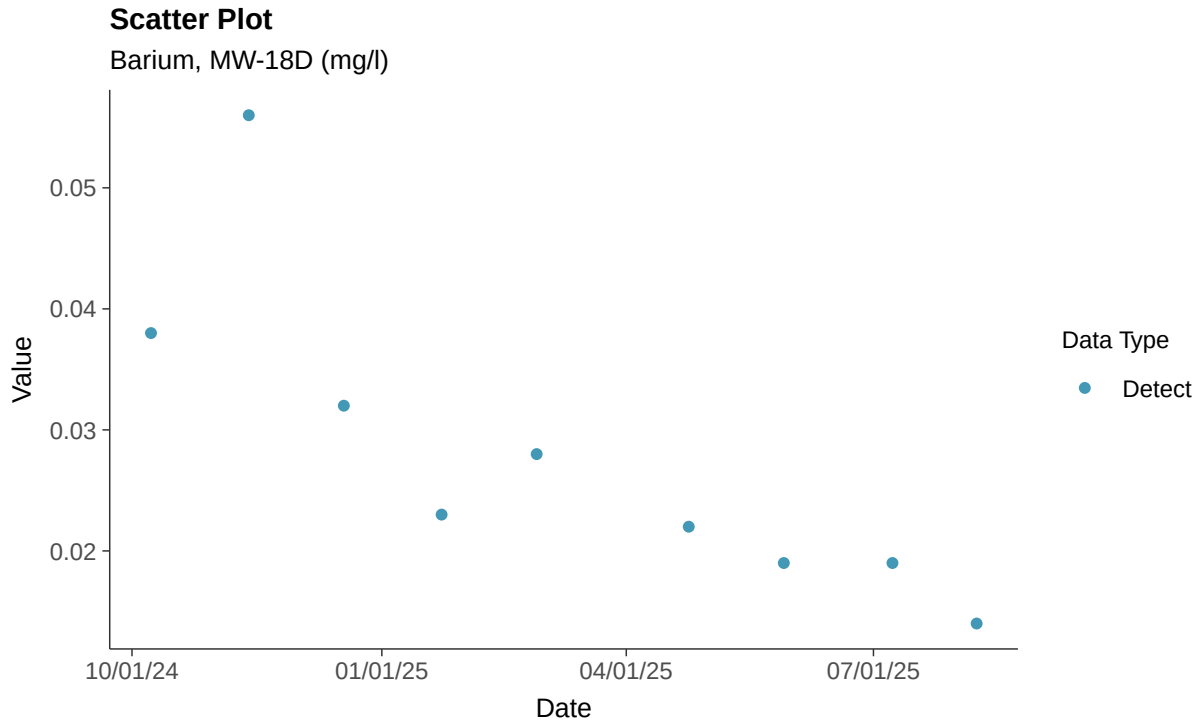
Trend Regression: Piecewise Linear-Linear

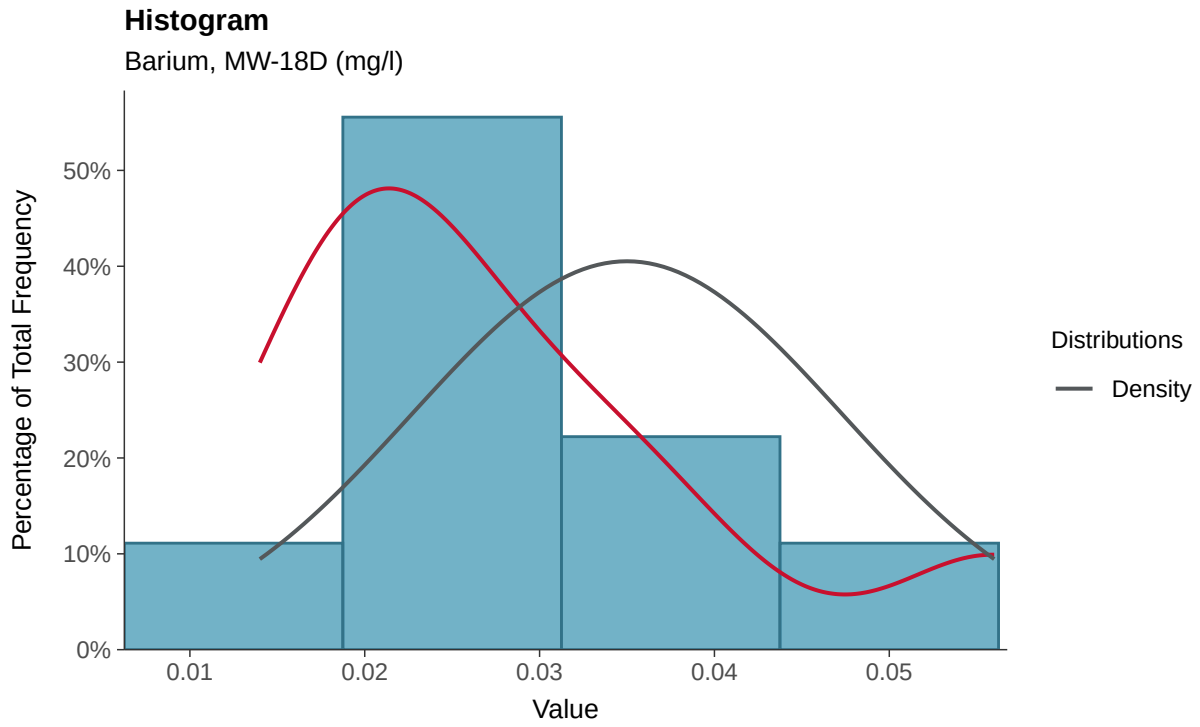
Arsenic, MW-18D (mg/l)



Appendix IV: Barium, MW-18D

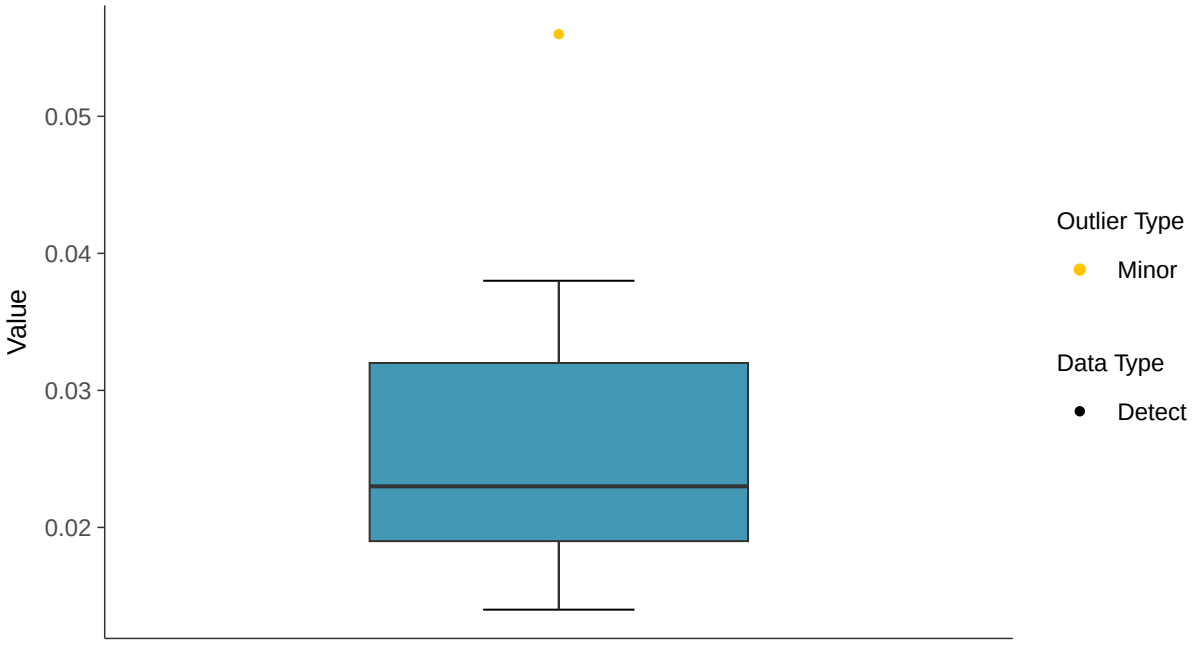
ID: 19_3_103





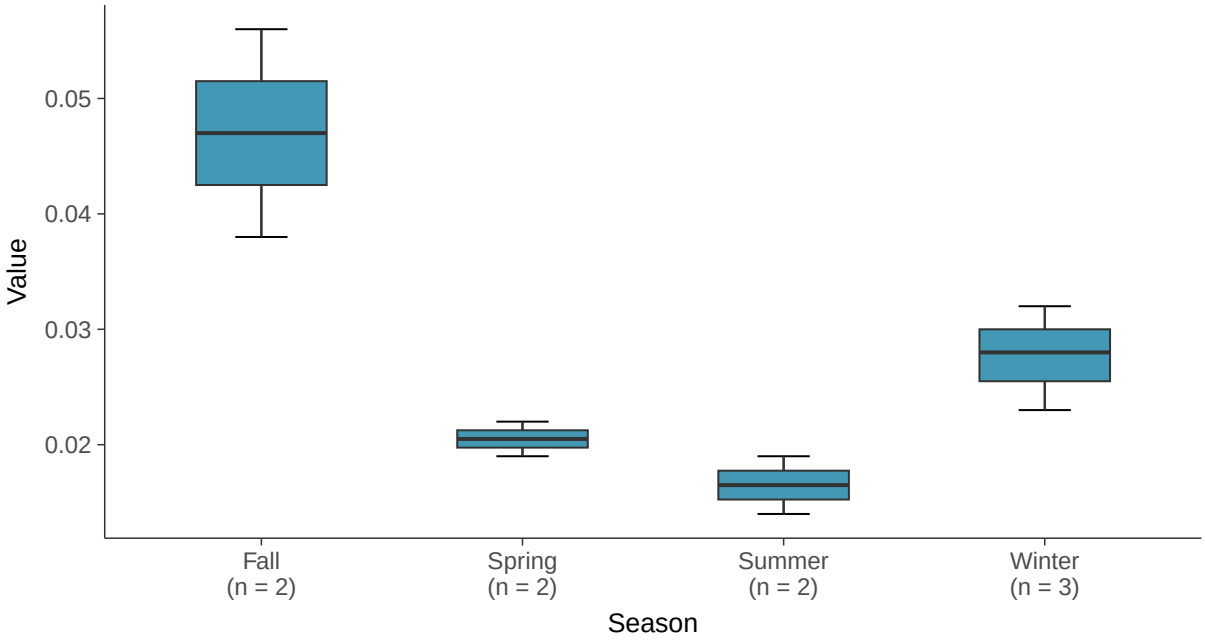
Boxplot

Barium, MW-18D (mg/l)



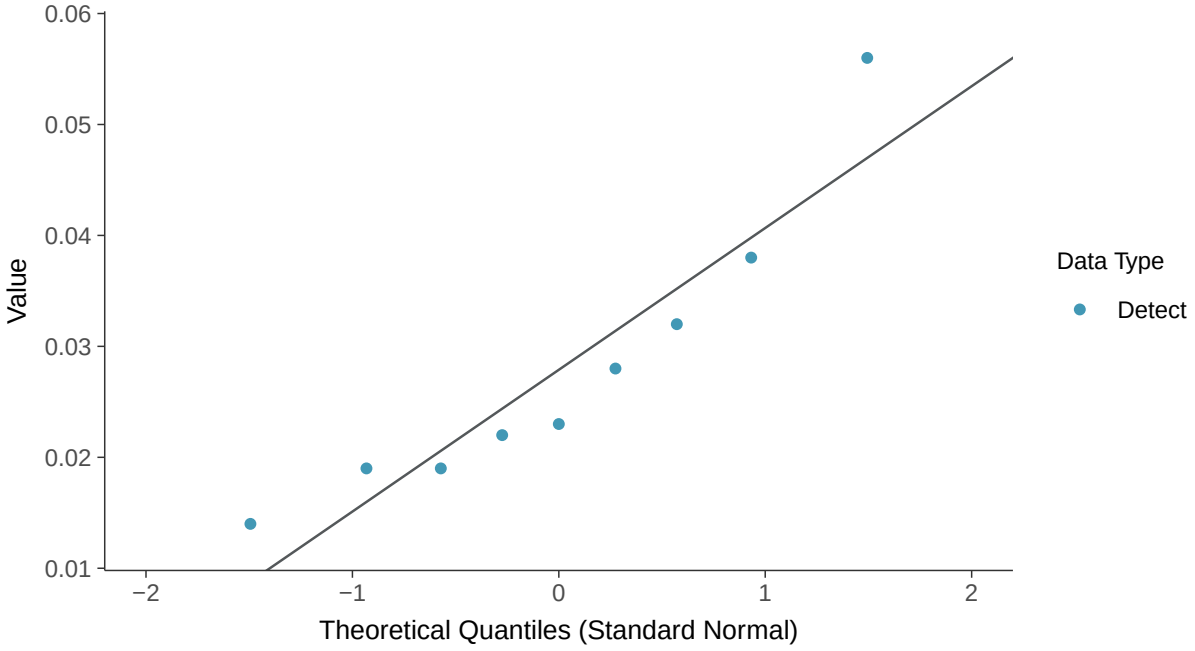
Boxplot by Season

Barium, MW-18D (mg/l)



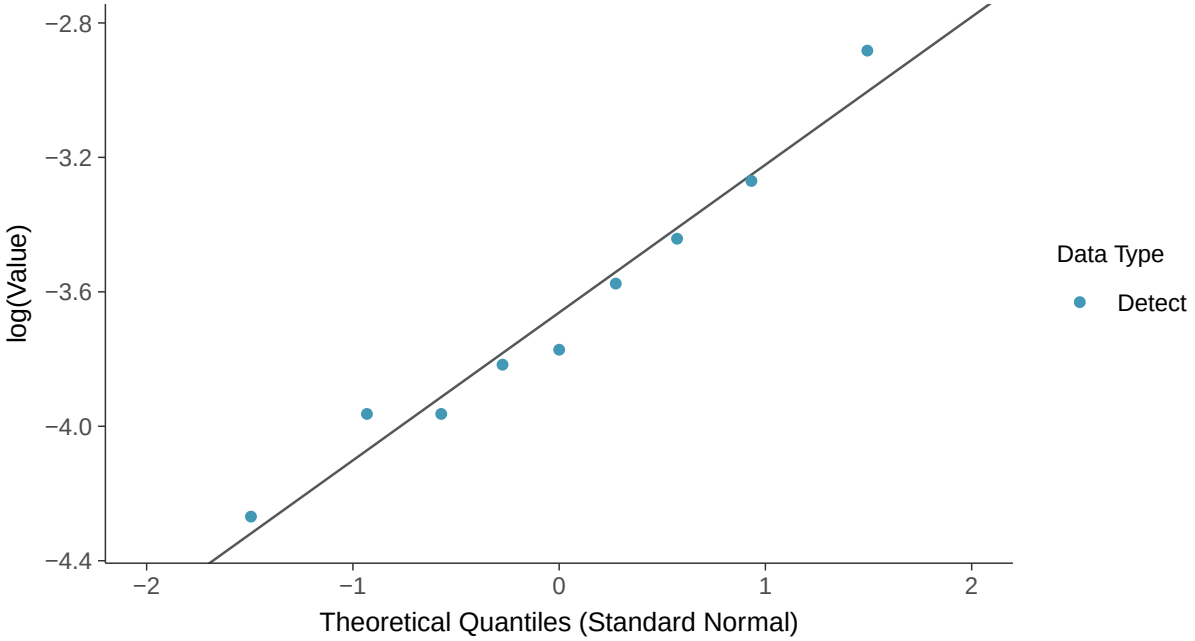
Normal Q-Q plot

Barium, MW-18D (mg/l)



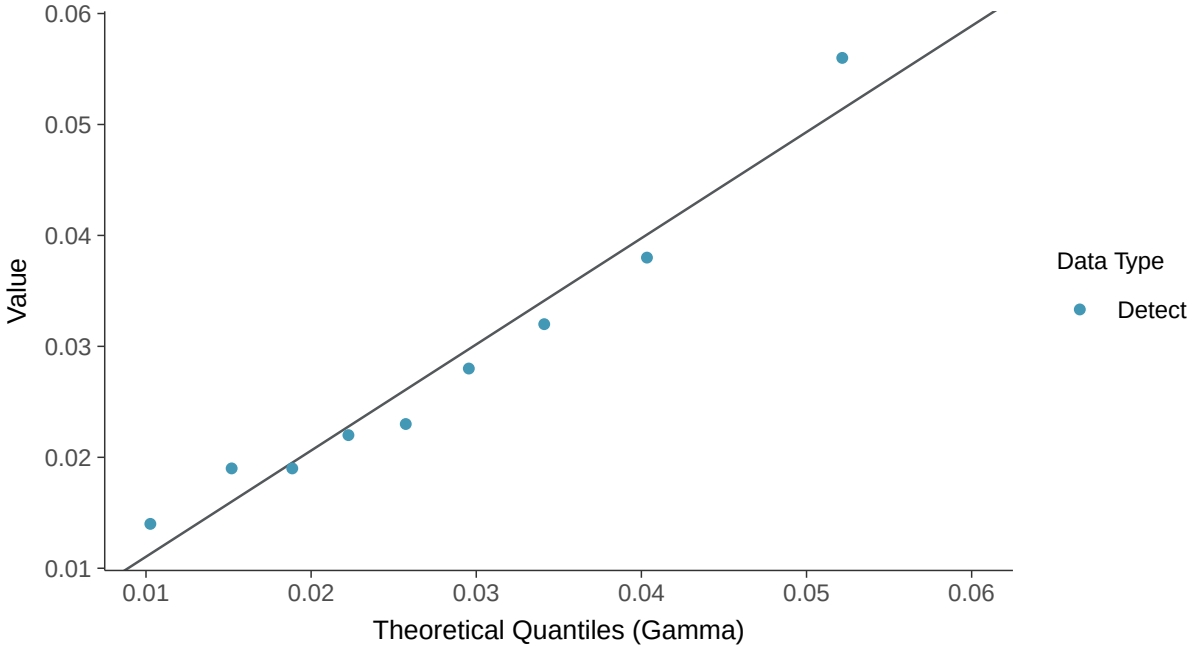
Lognormal Q-Q plot

Barium, MW-18D (mg/l)



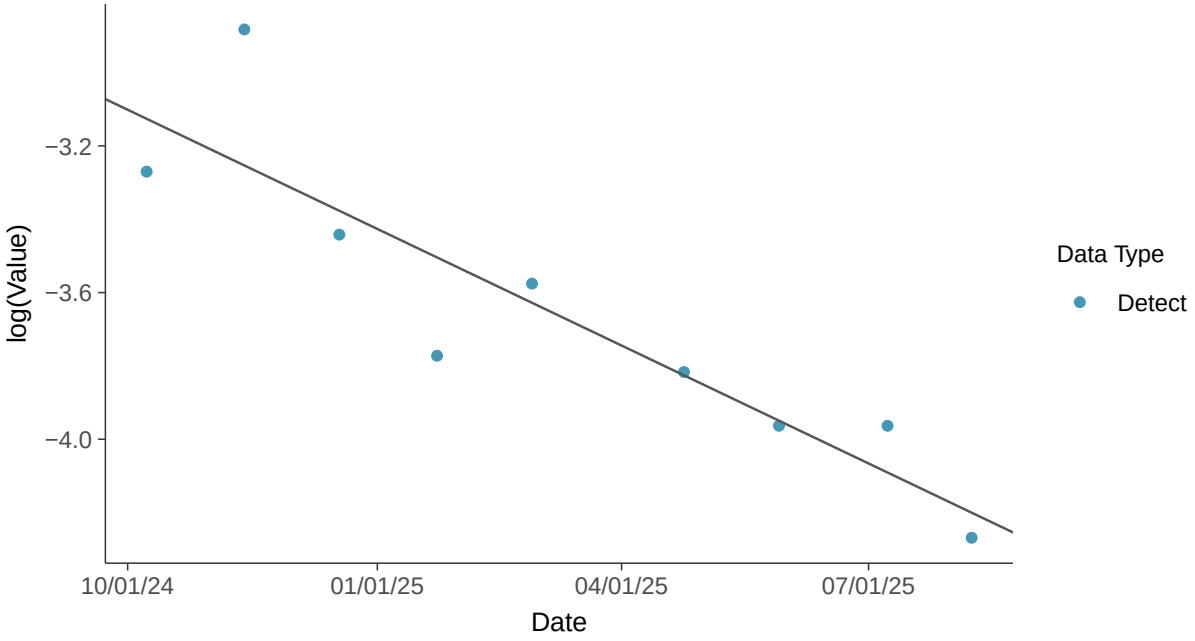
Gamma Q-Q plot

Barium, MW-18D (mg/l)



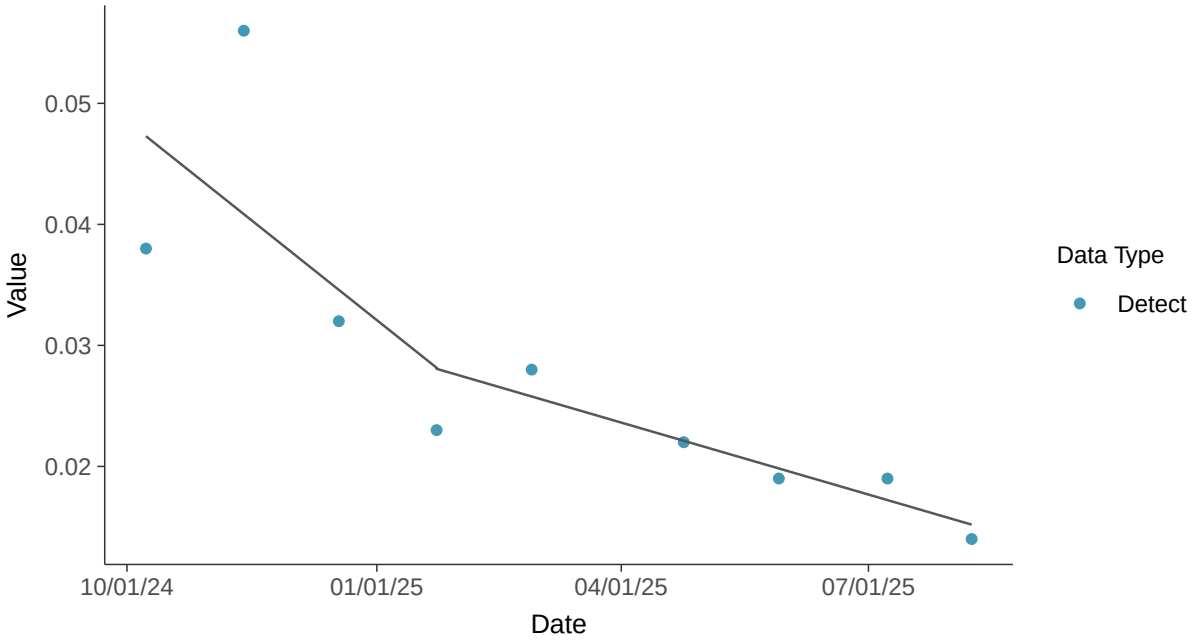
Trend Regression: Lognormal MLE

Barium, MW-18D (mg/l)



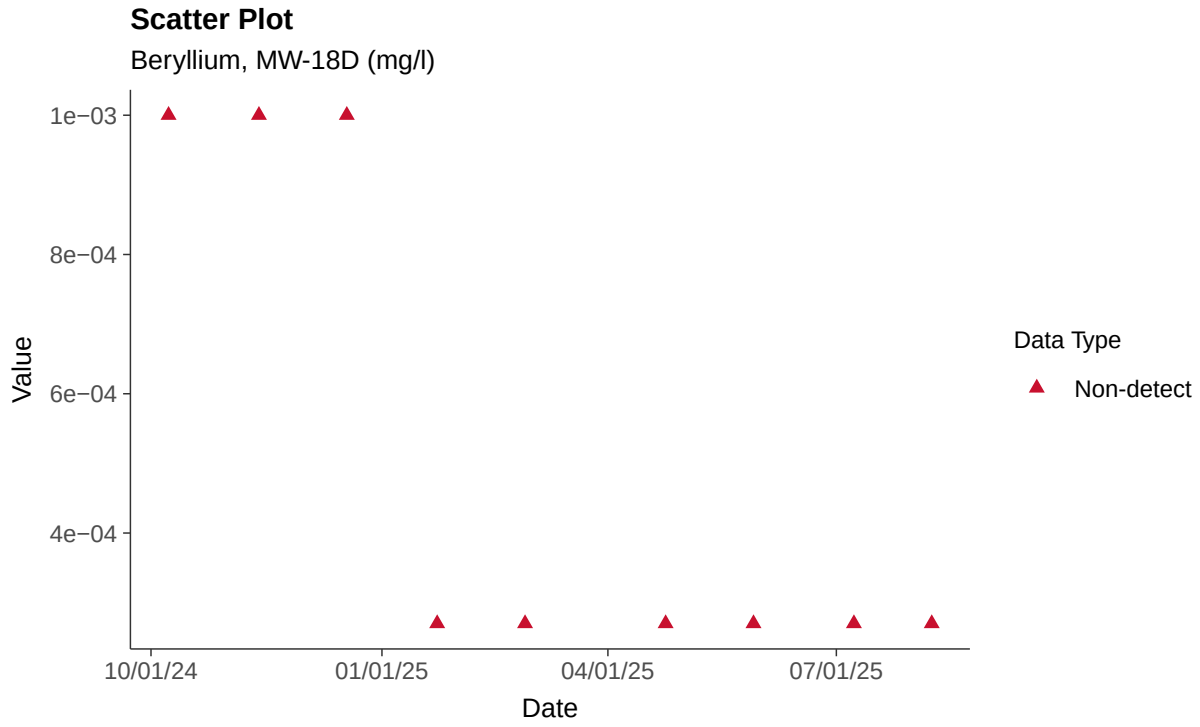
Trend Regression: Piecewise Linear-Linear

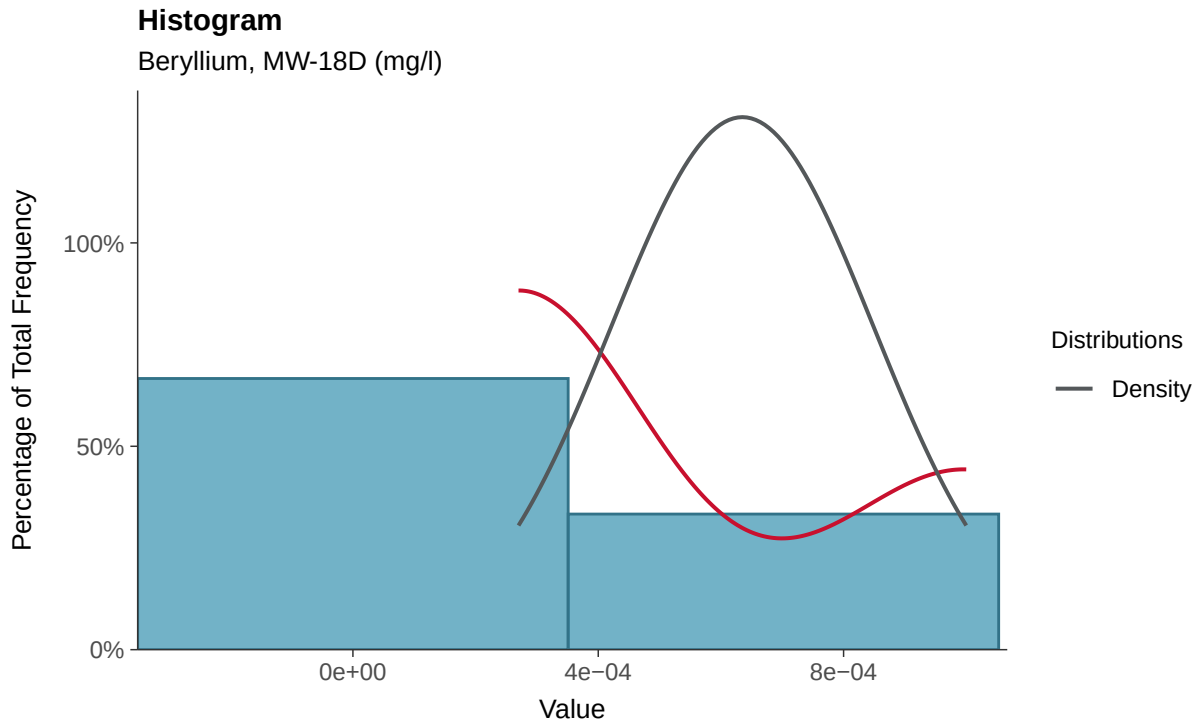
Barium, MW-18D (mg/l)



Appendix IV: Beryllium, MW-18D

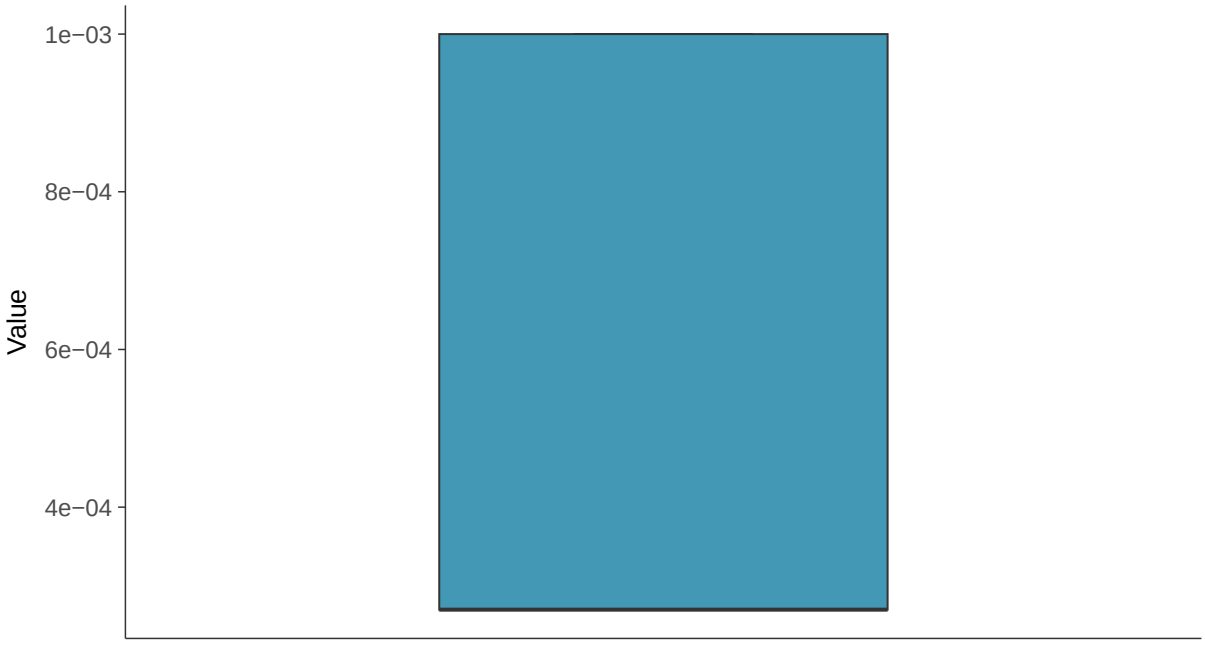
ID: 19_3_104





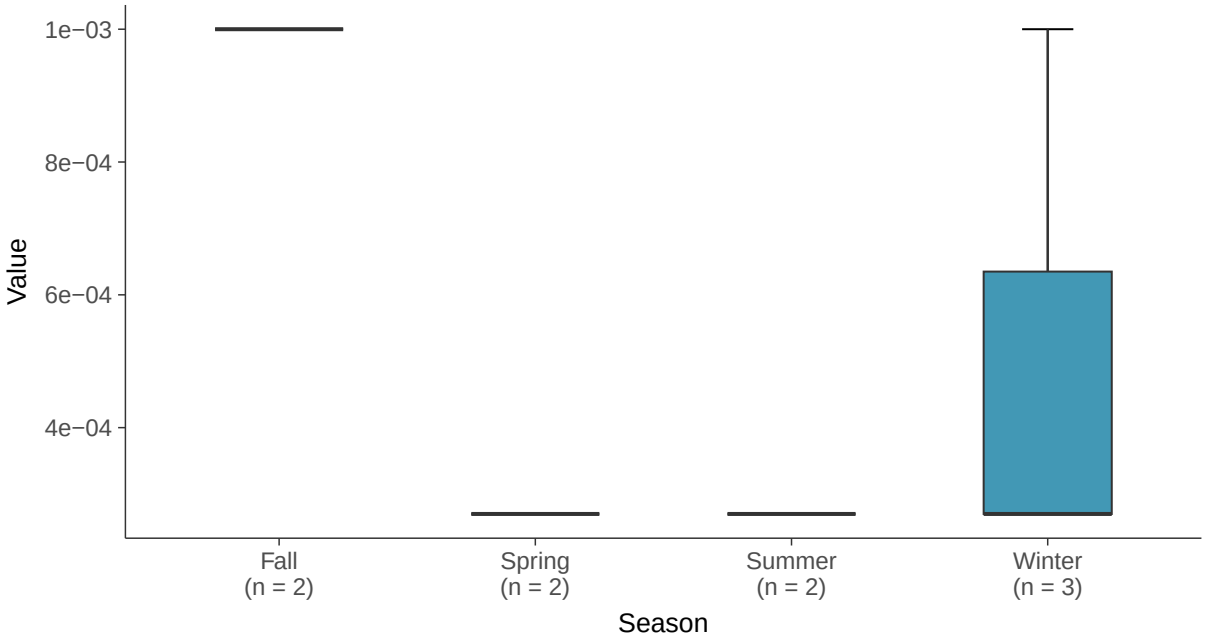
Boxplot

Beryllium, MW-18D (mg/l)



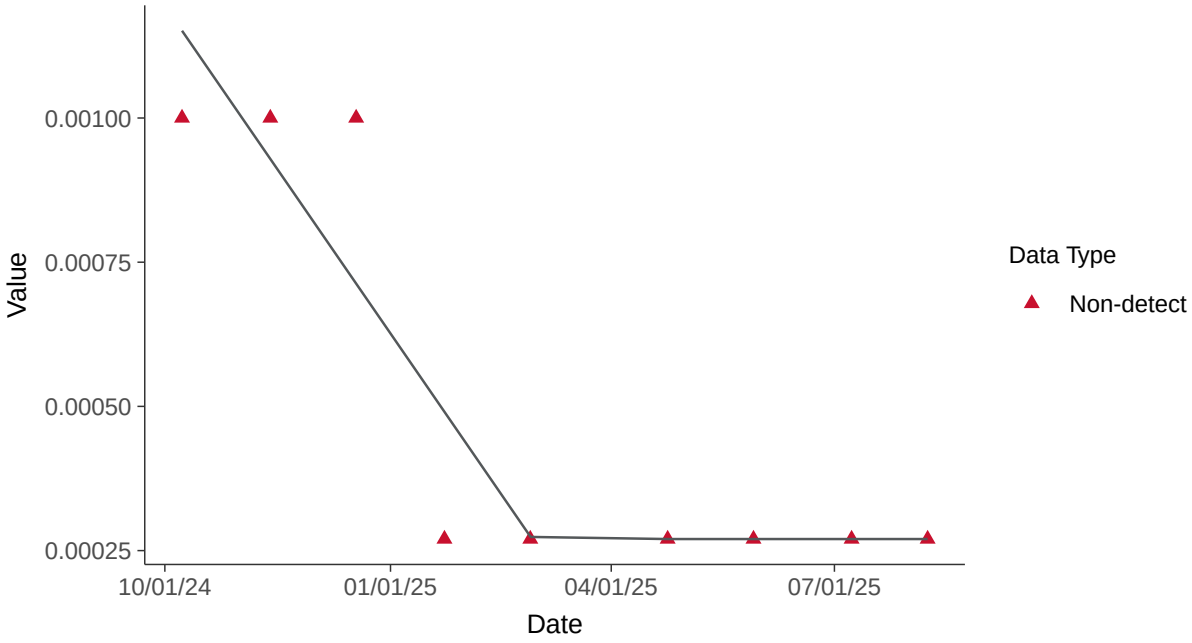
Boxplot by Season

Beryllium, MW-18D (mg/l)



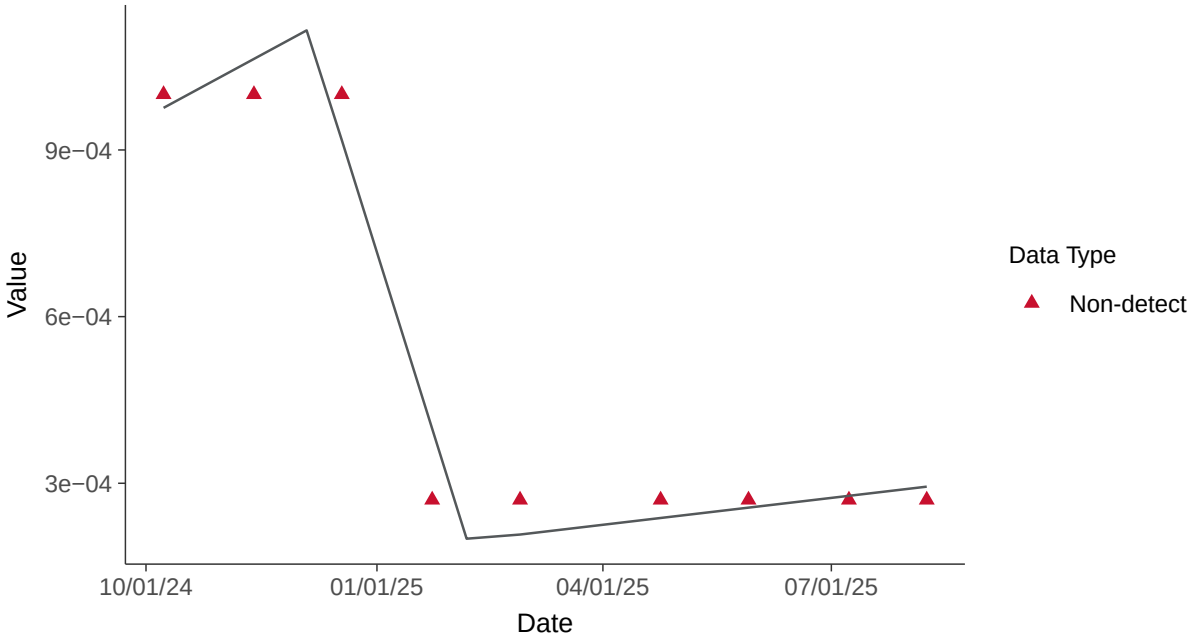
Trend Regression: Piecewise Linear-Linear

Beryllium, MW-18D (mg/l)



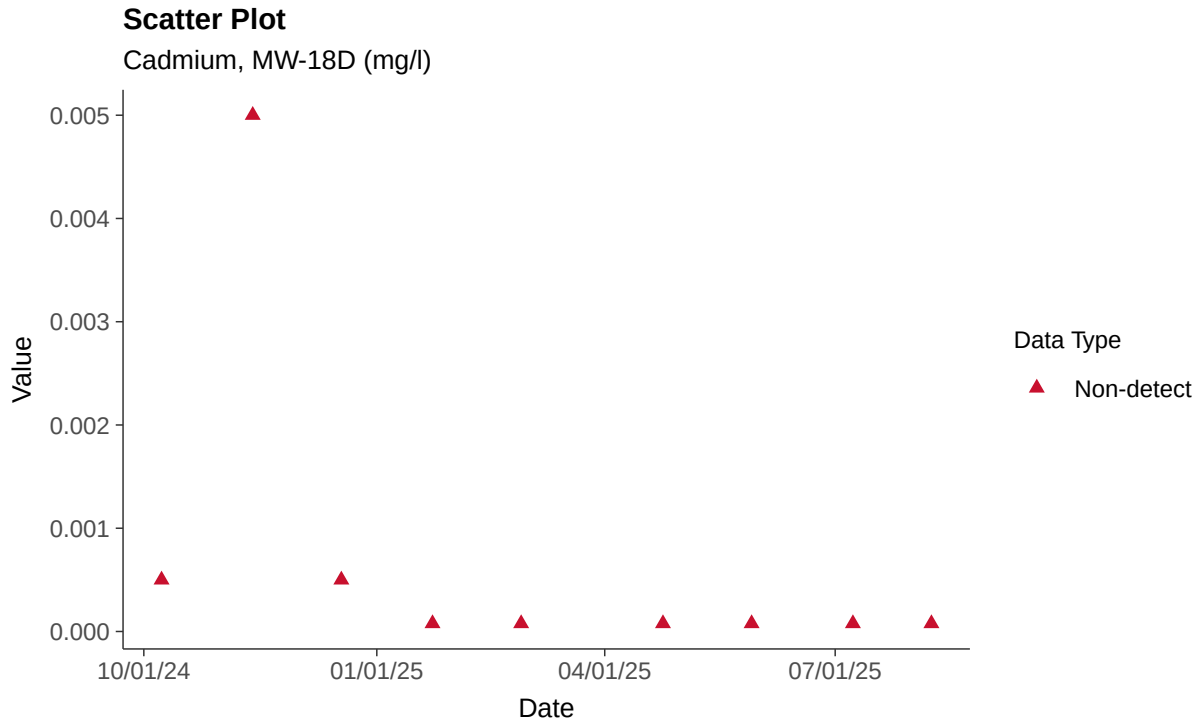
Trend Regression: Piecewise Linear-Linear-Linear

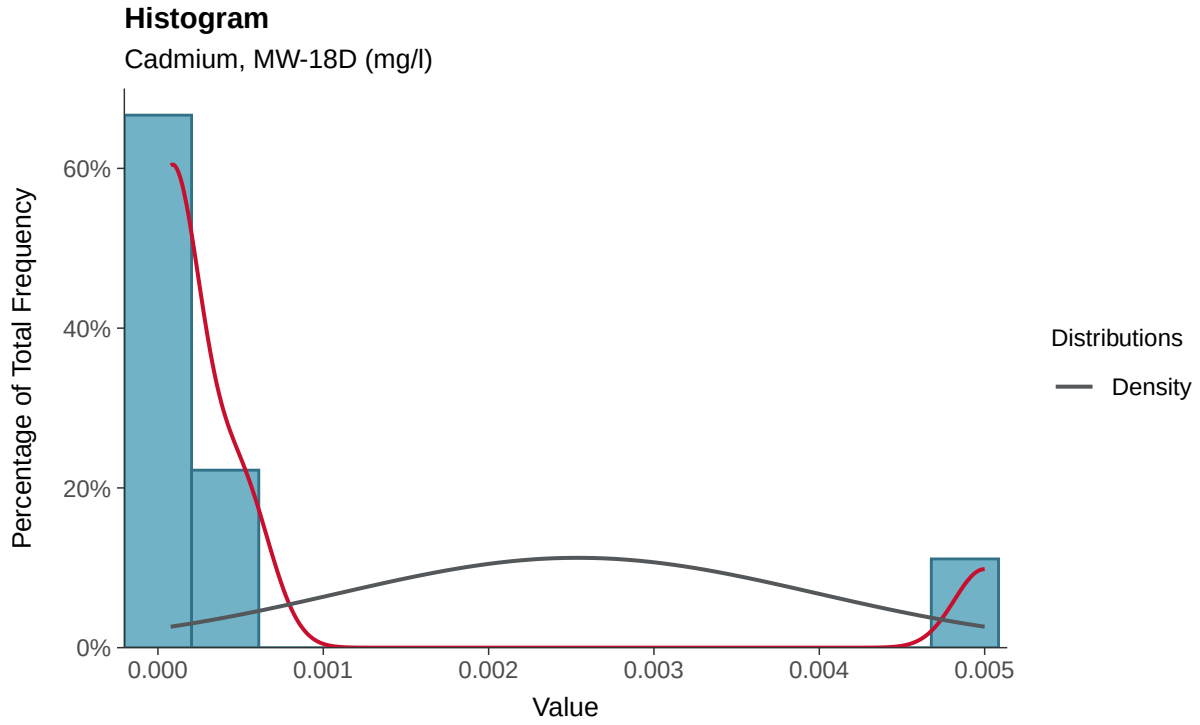
Beryllium, MW-18D (mg/l)



Appendix IV: Cadmium, MW-18D

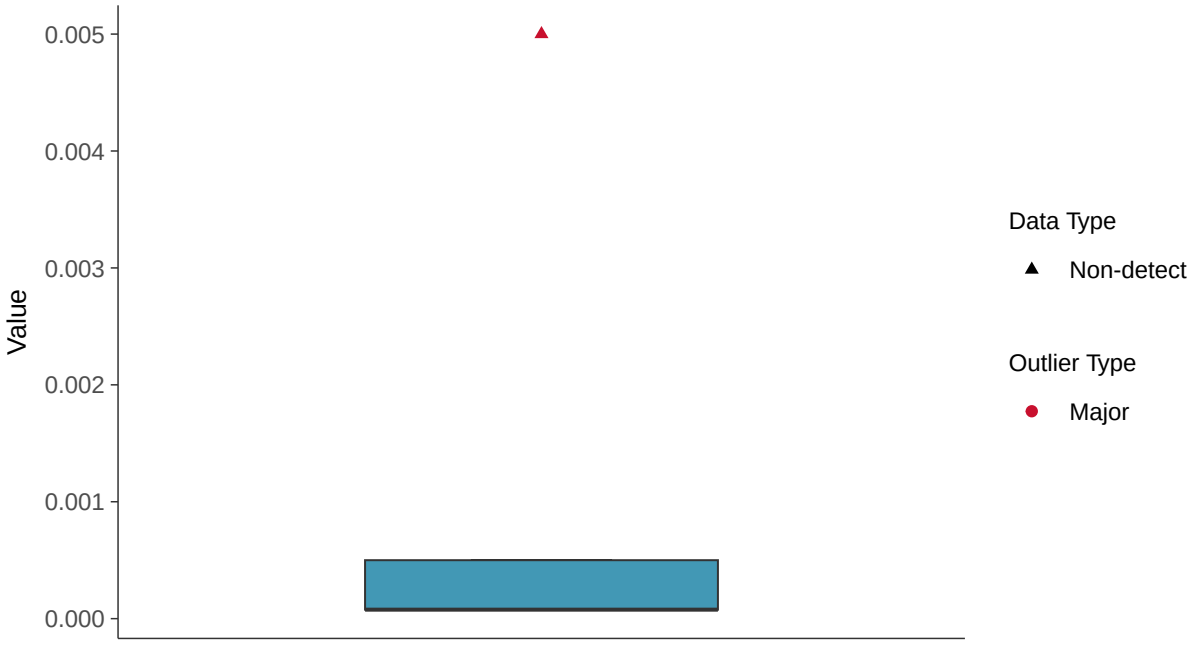
ID: 19_3_106





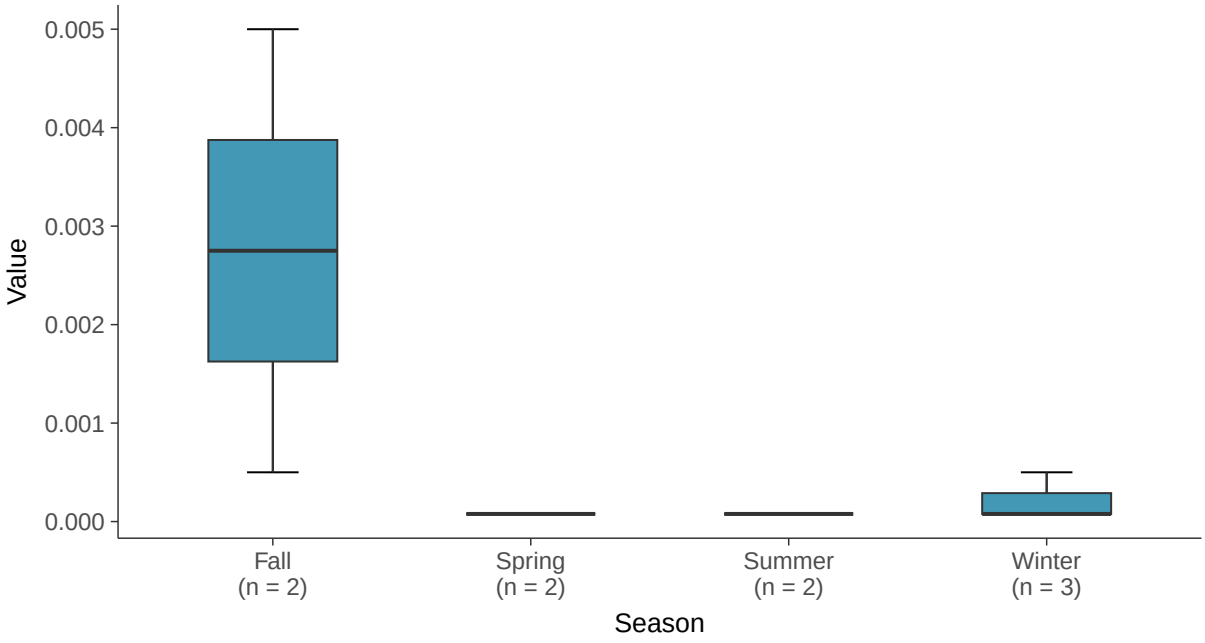
Boxplot

Cadmium, MW-18D (mg/l)



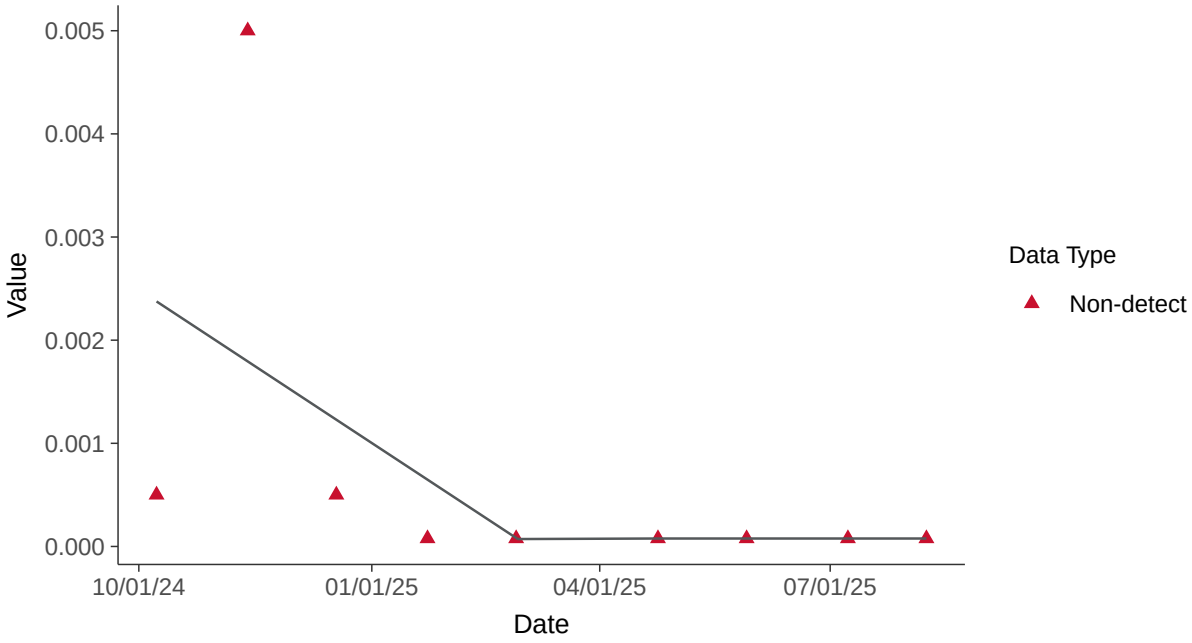
Boxplot by Season

Cadmium, MW-18D (mg/l)



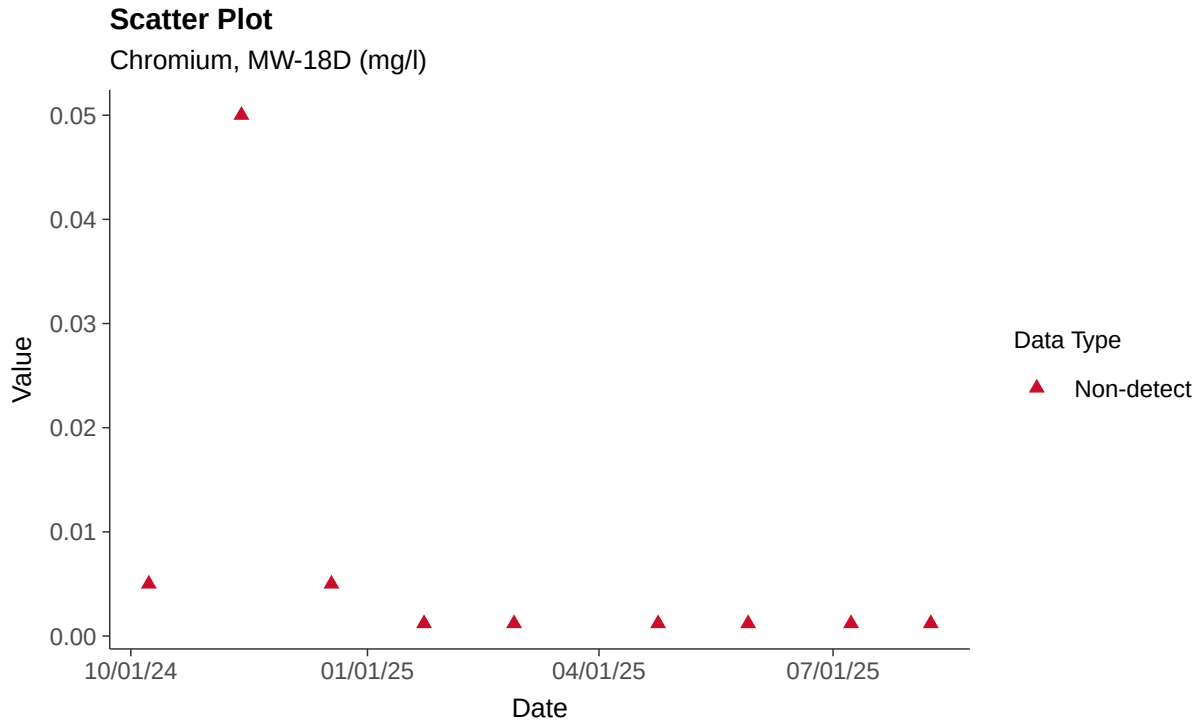
Trend Regression: Piecewise Linear-Linear

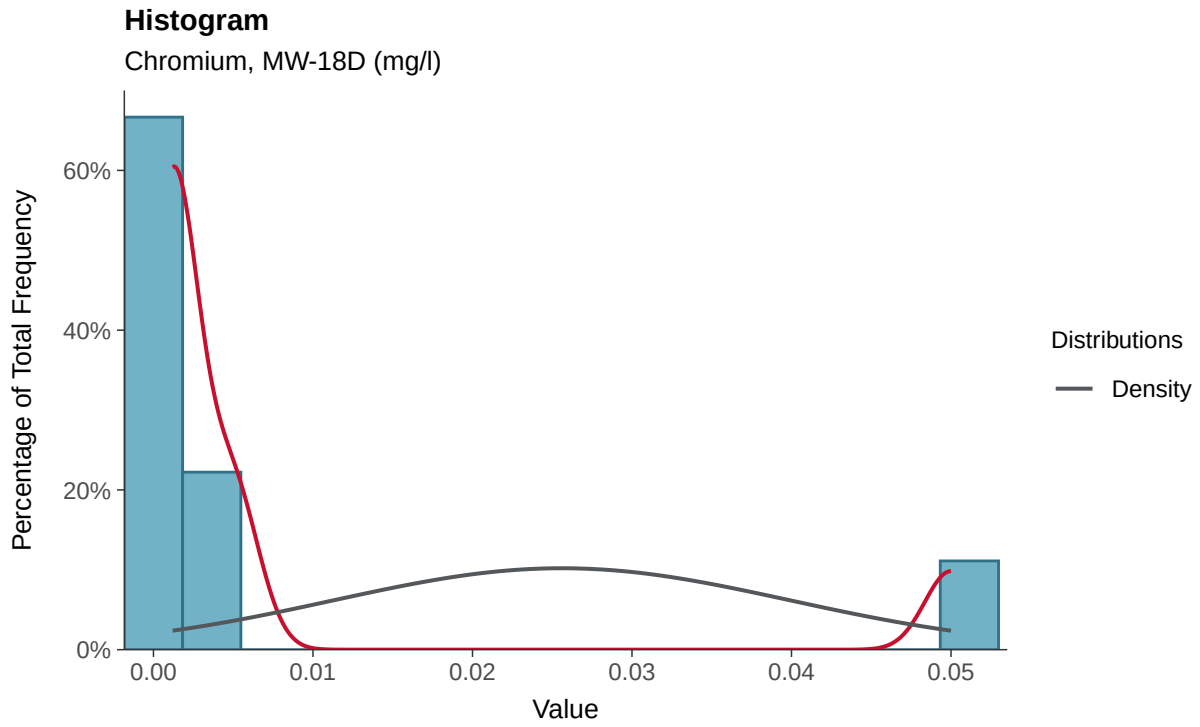
Cadmium, MW-18D (mg/l)



Appendix IV: Chromium, MW-18D

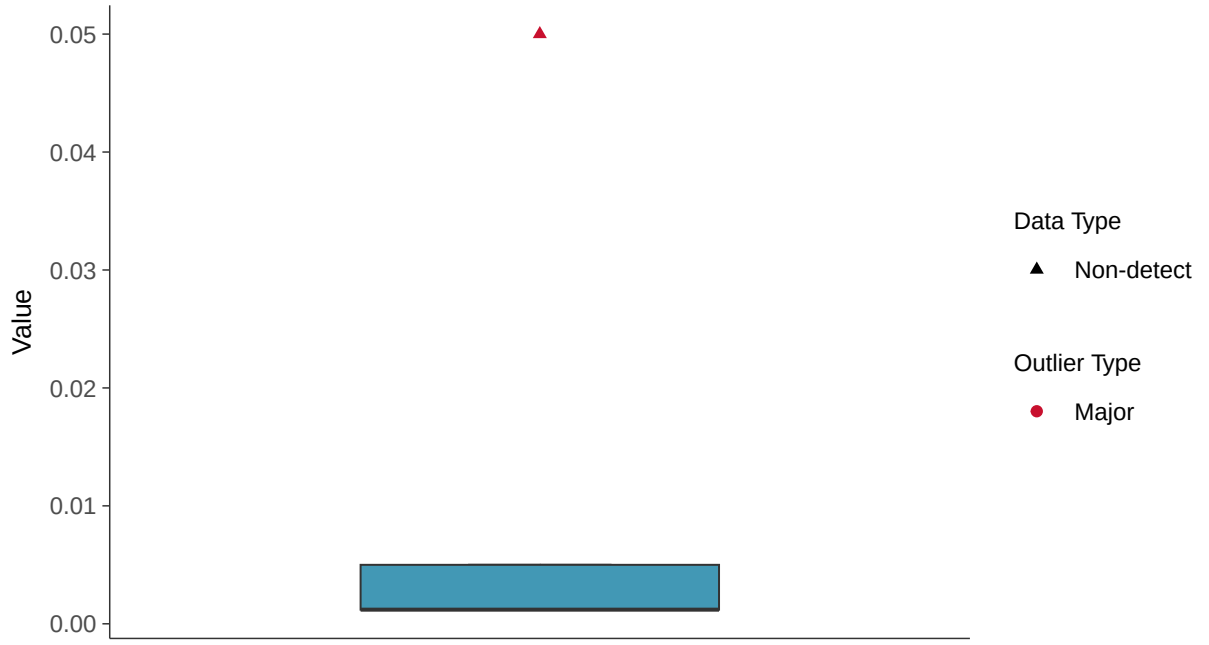
ID: 19_3_109





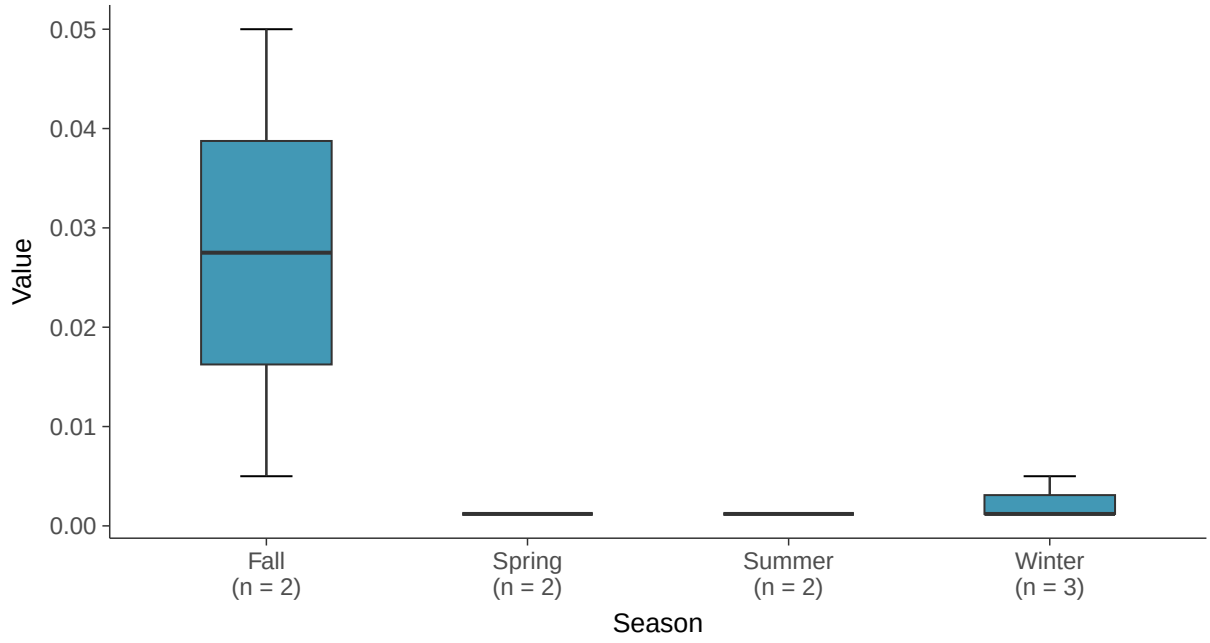
Boxplot

Chromium, MW-18D (mg/l)



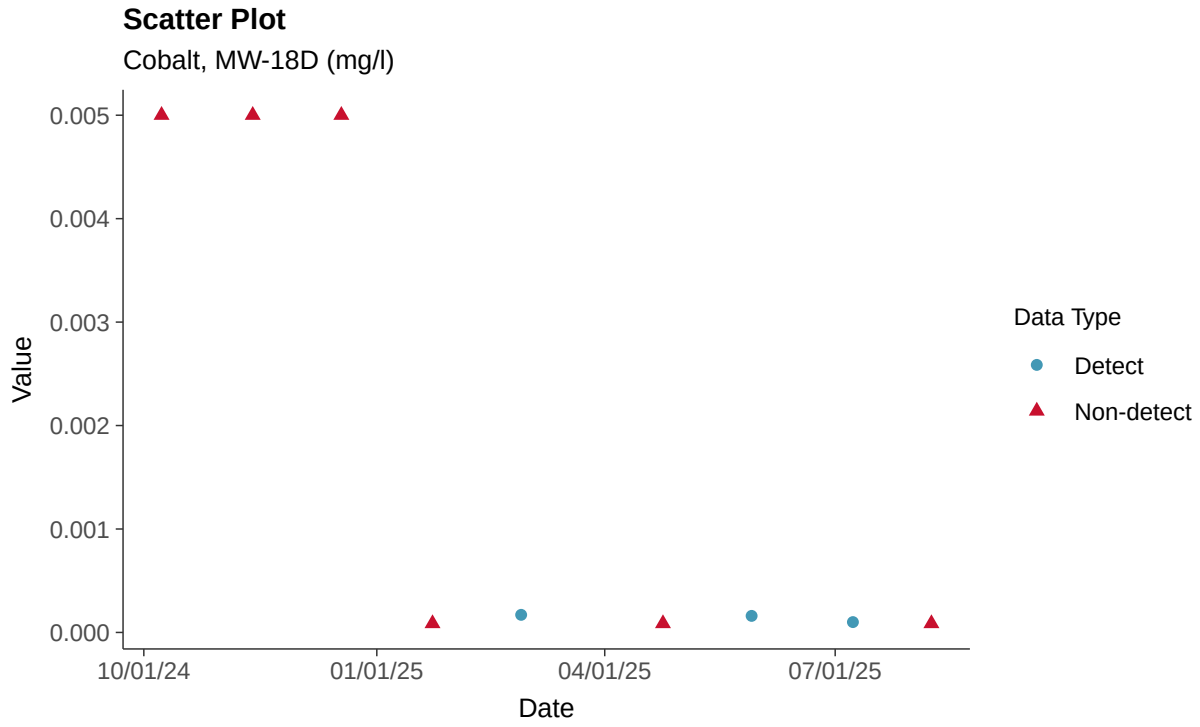
Boxplot by Season

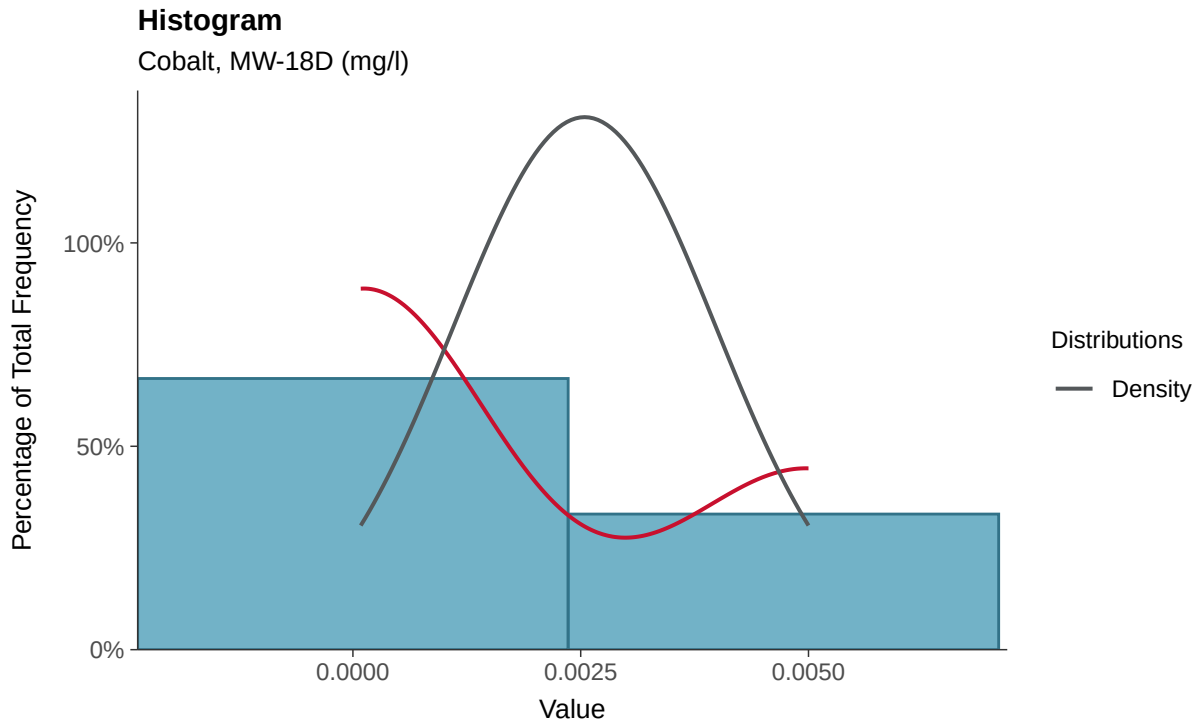
Chromium, MW-18D (mg/l)



Appendix IV: Cobalt, MW-18D

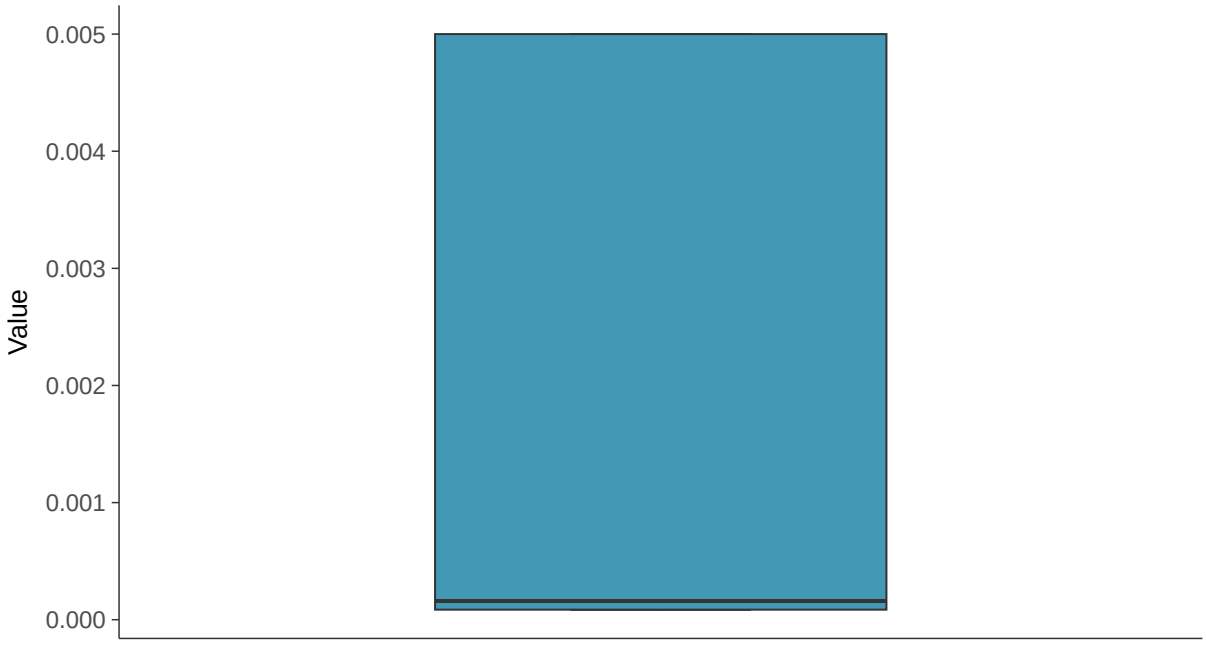
ID: 19_3_110





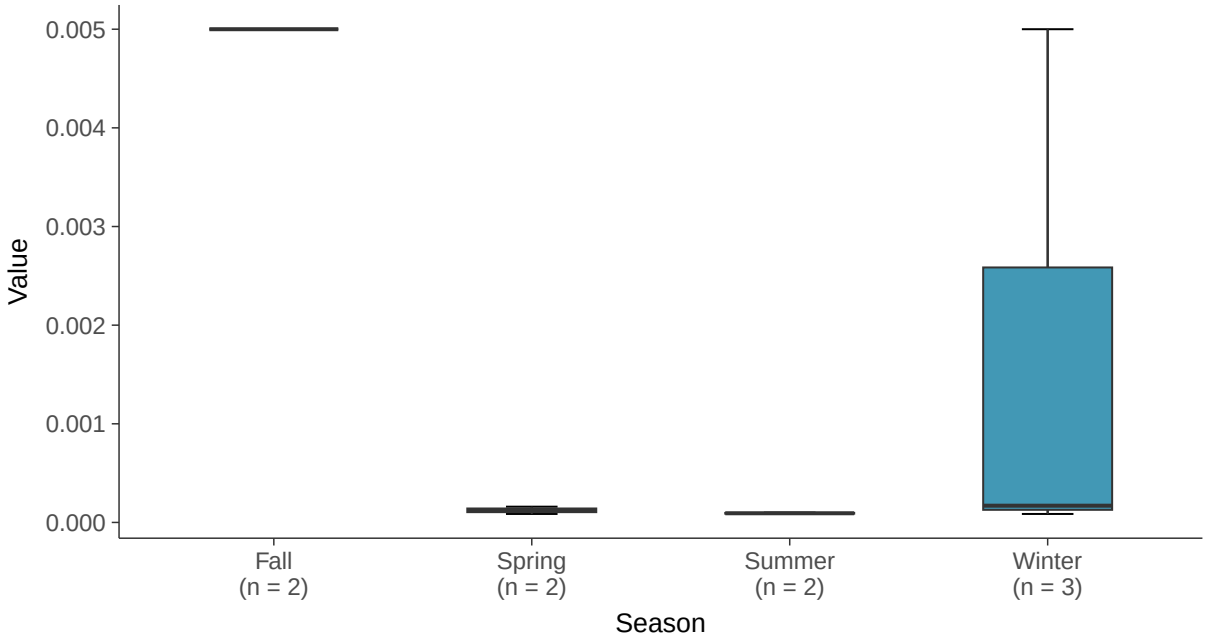
Boxplot

Cobalt, MW-18D (mg/l)



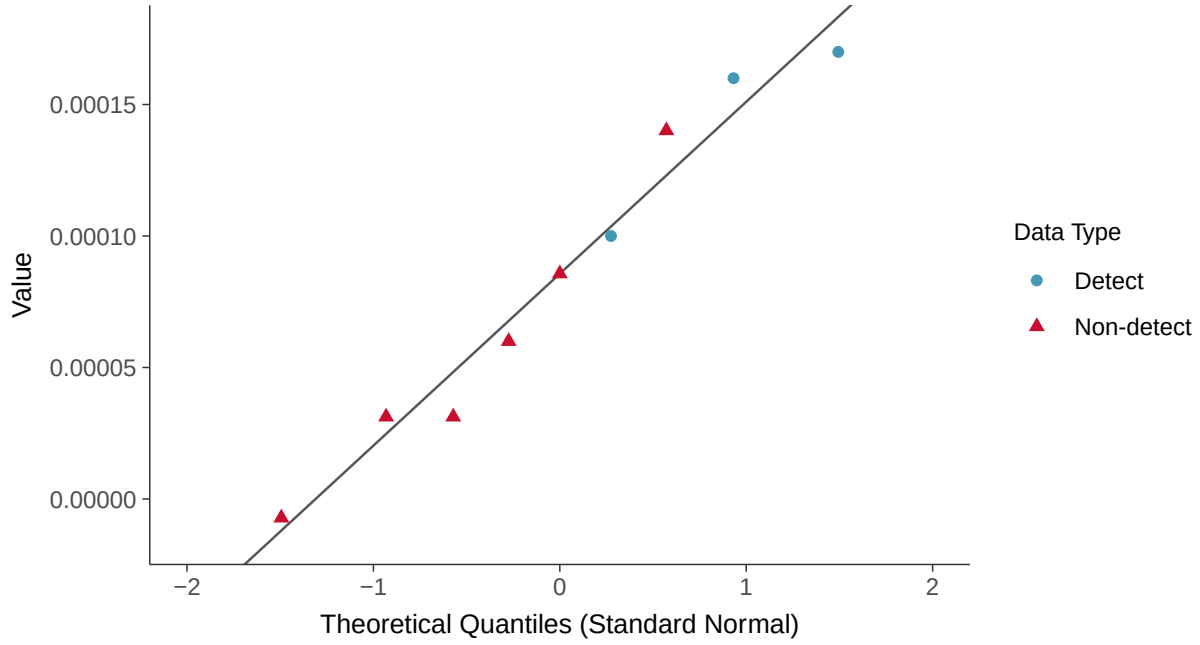
Boxplot by Season

Cobalt, MW-18D (mg/l)



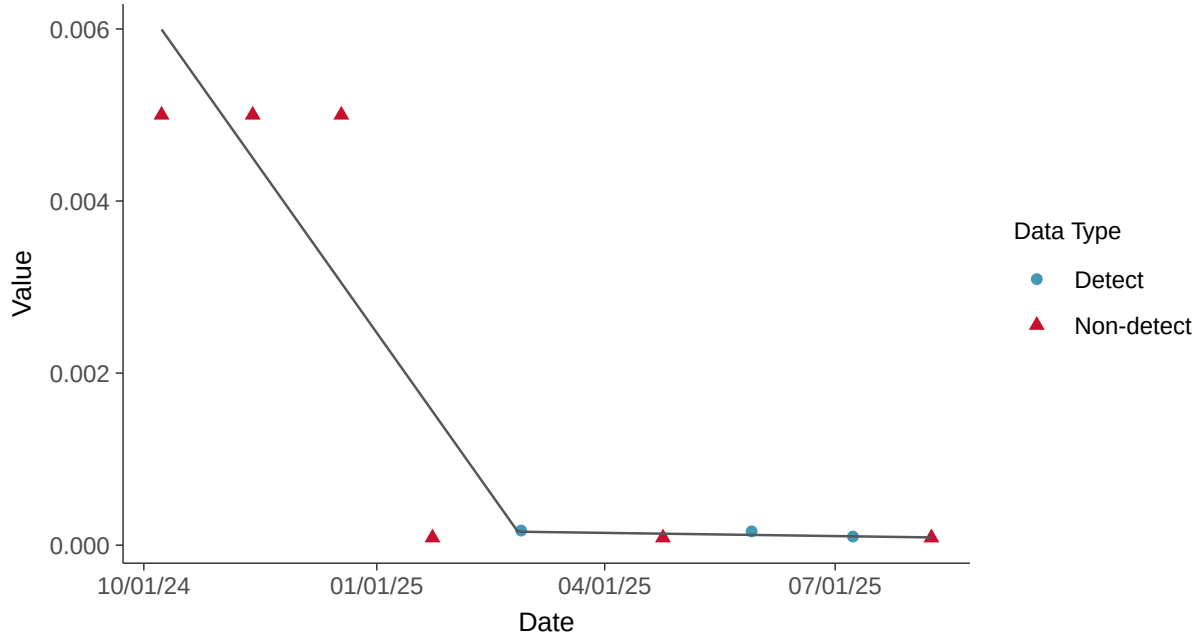
Normal Q-Q plot using ROS Imputed Estimates

Cobalt, MW-18D (mg/l)



Trend Regression: Piecewise Linear-Linear

Cobalt, MW-18D (mg/l)

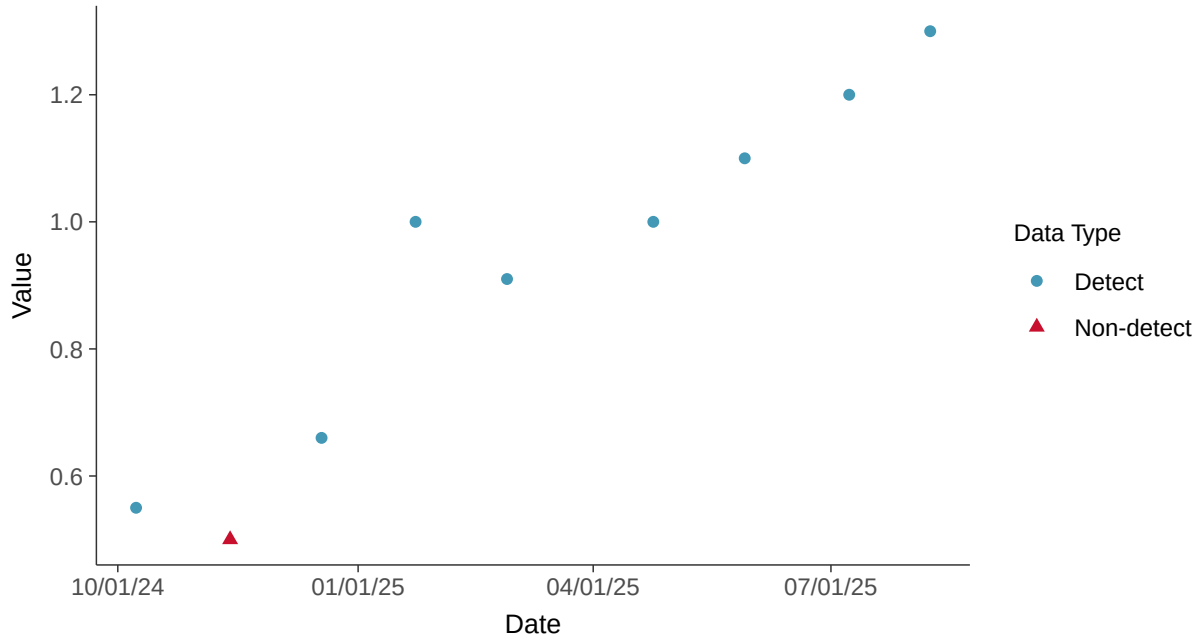


Appendix IV: Fluoride (App IV), MW-18D

ID: 19_3_113

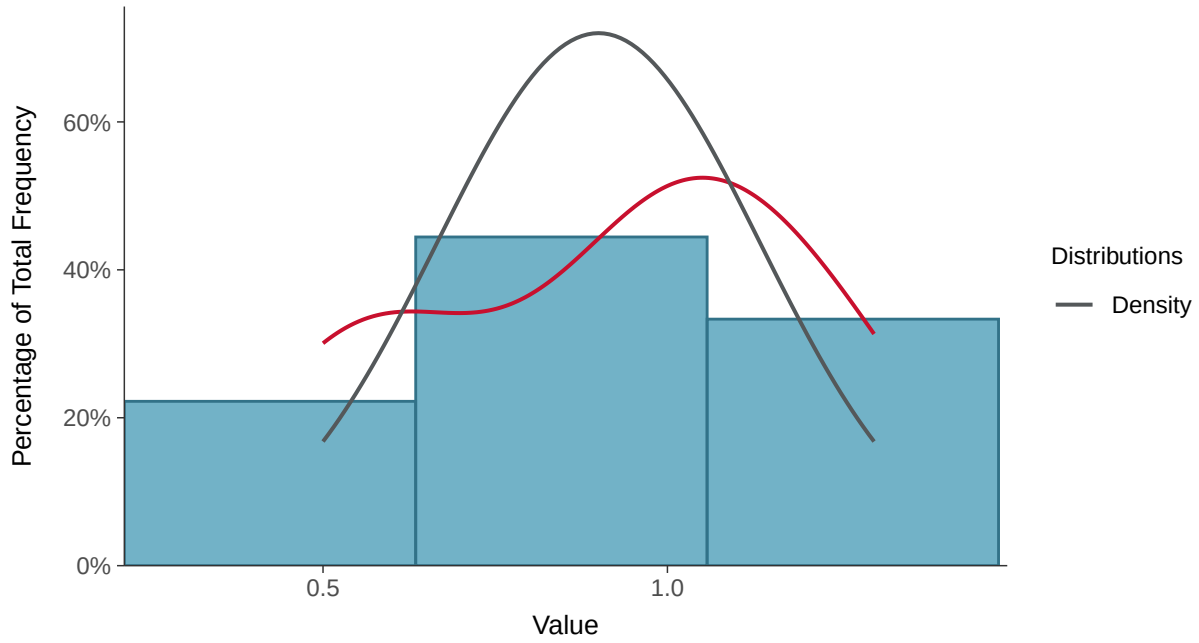
Scatter Plot

Fluoride (App IV), MW-18D (mg/l)



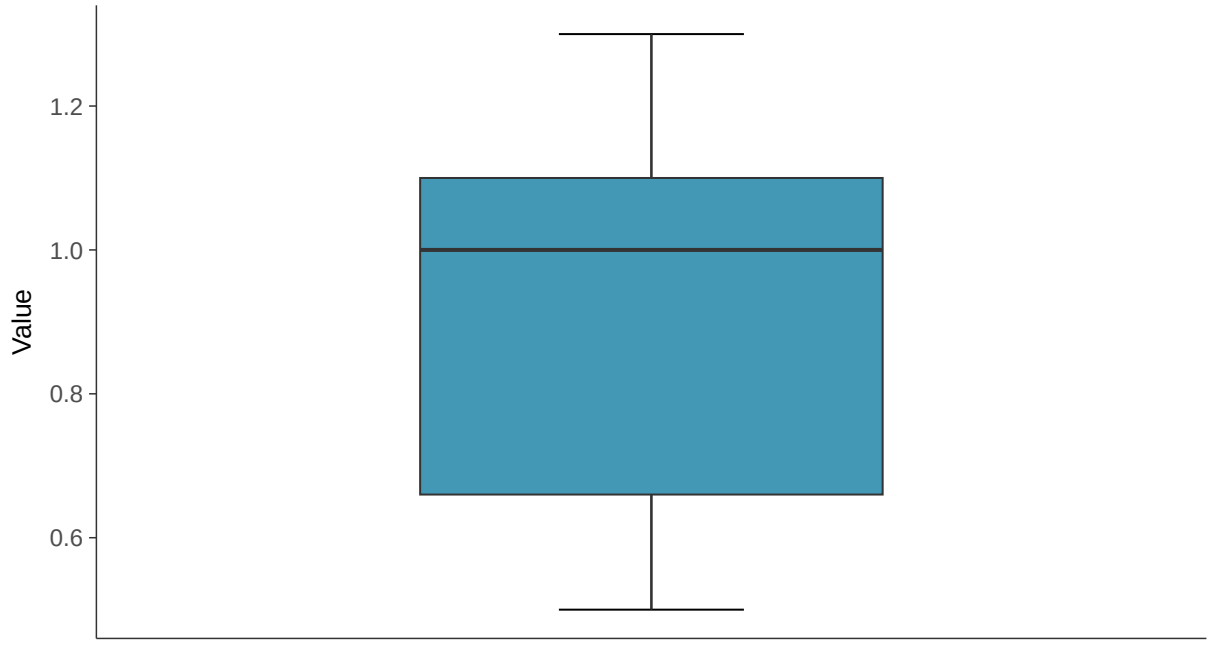
Histogram

Fluoride (App IV), MW-18D (mg/l)



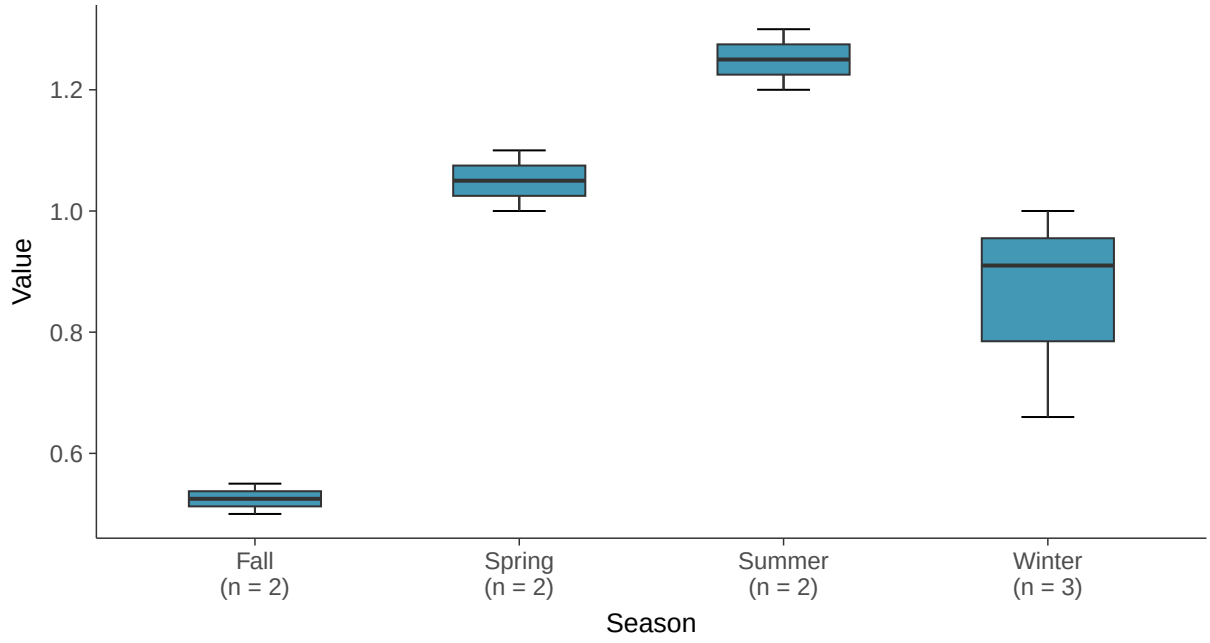
Boxplot

Fluoride (App IV), MW-18D (mg/l)



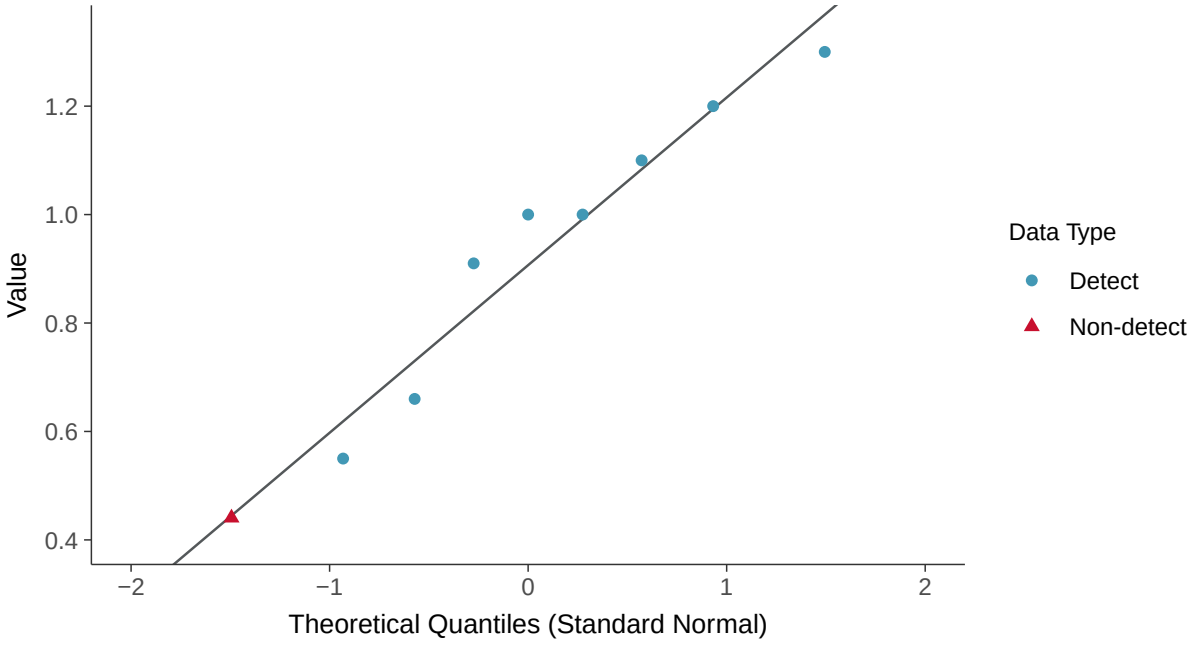
Boxplot by Season

Fluoride (App IV), MW-18D (mg/l)



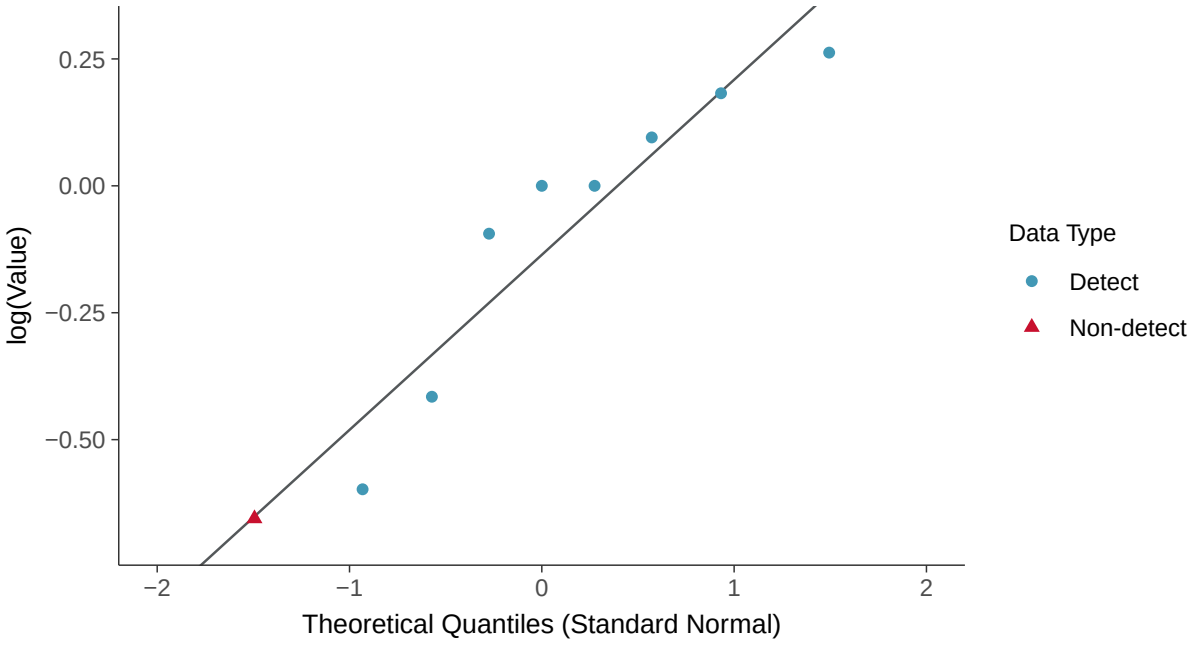
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-18D (mg/l)



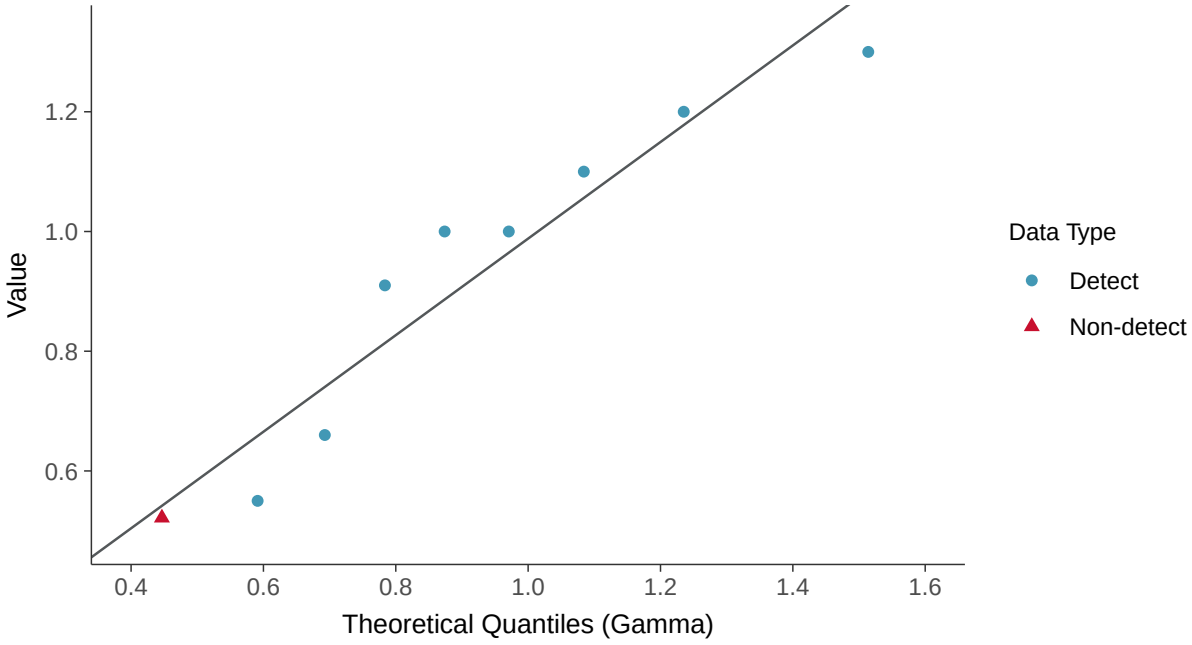
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-18D (mg/l)



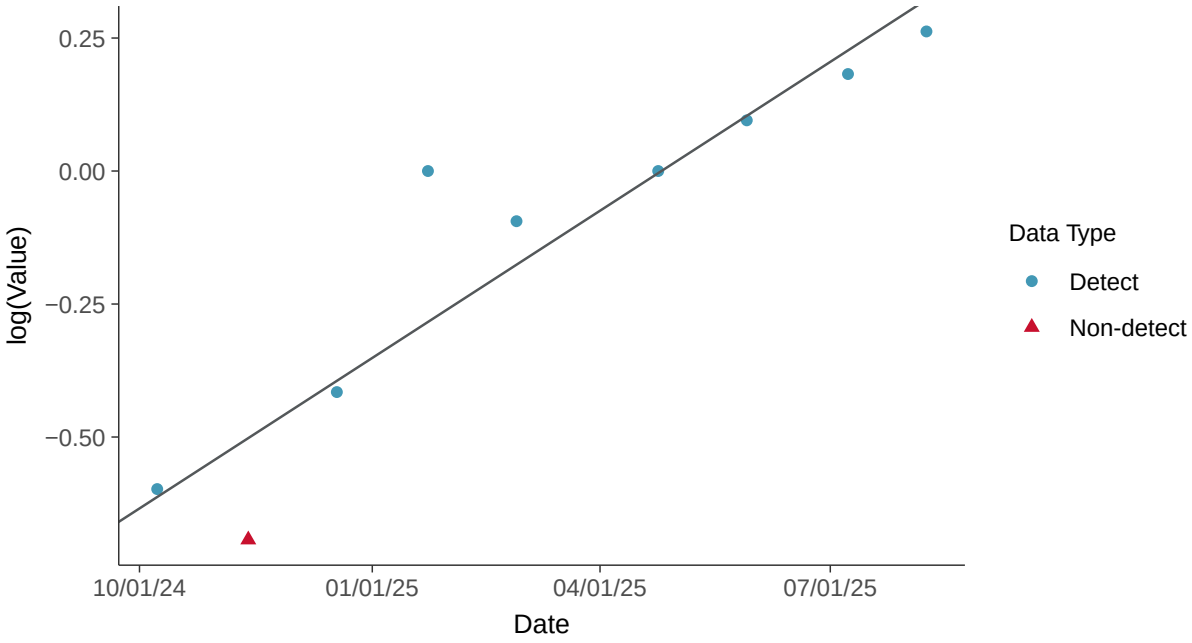
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-18D (mg/l)



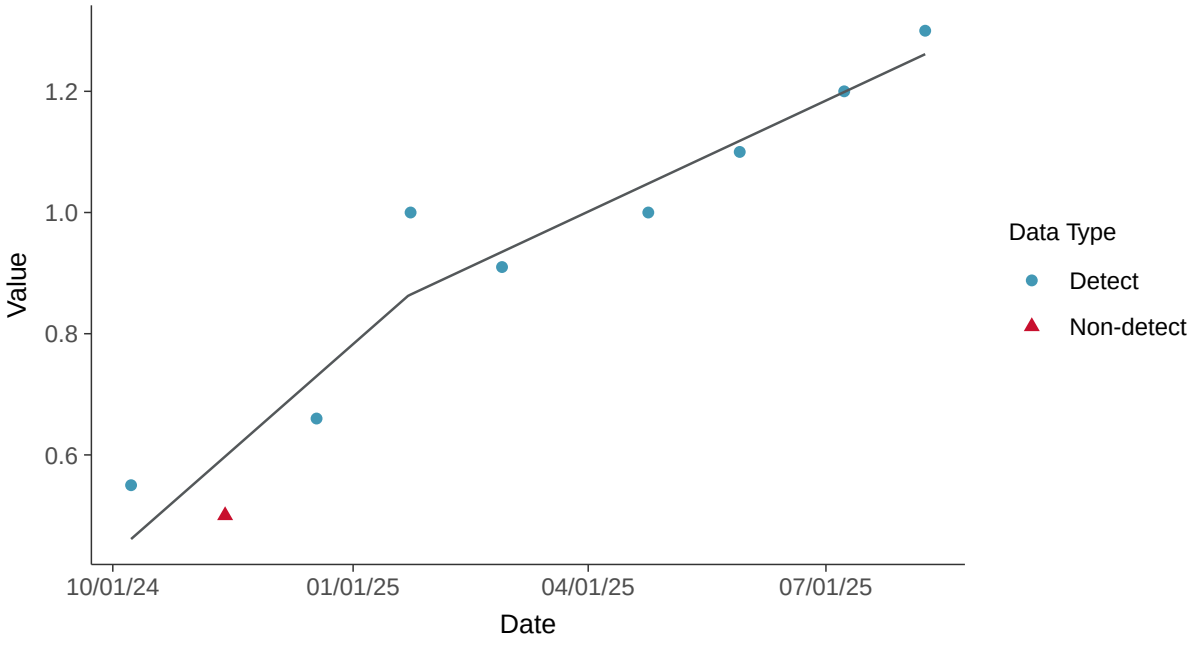
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-18D (mg/l)



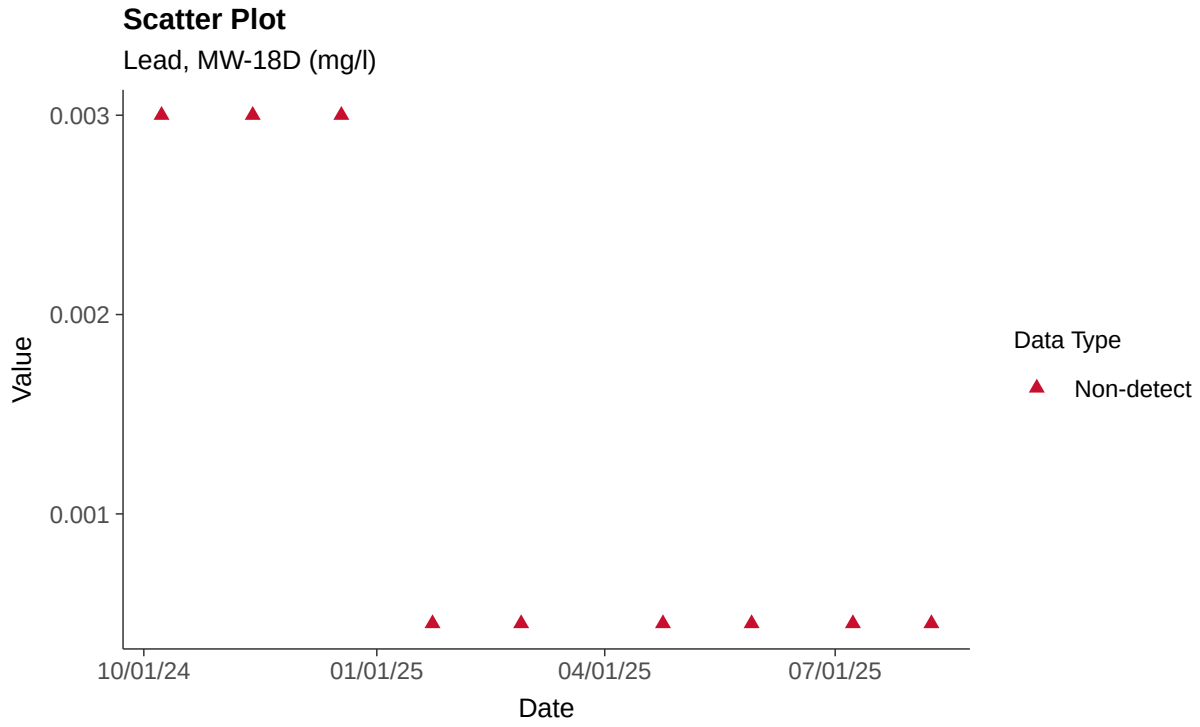
Trend Regression: Piecewise Linear-Linear

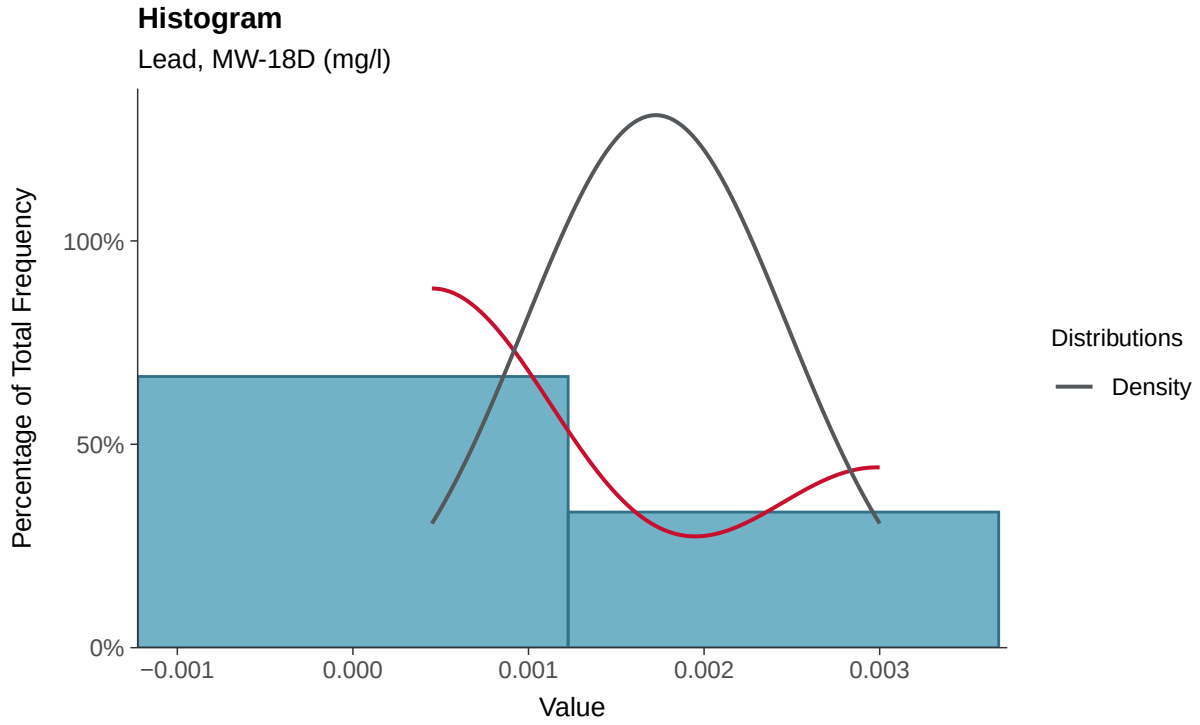
Fluoride (App IV), MW-18D (mg/l)



Appendix IV: Lead, MW-18D

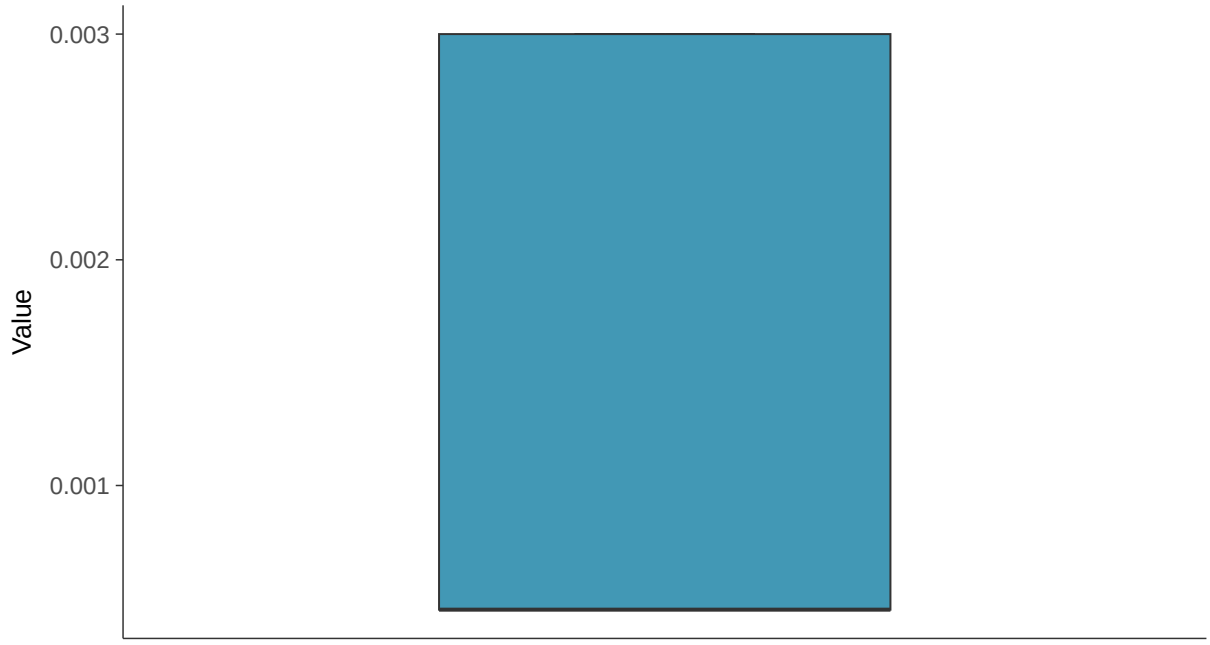
ID: 19_3_115





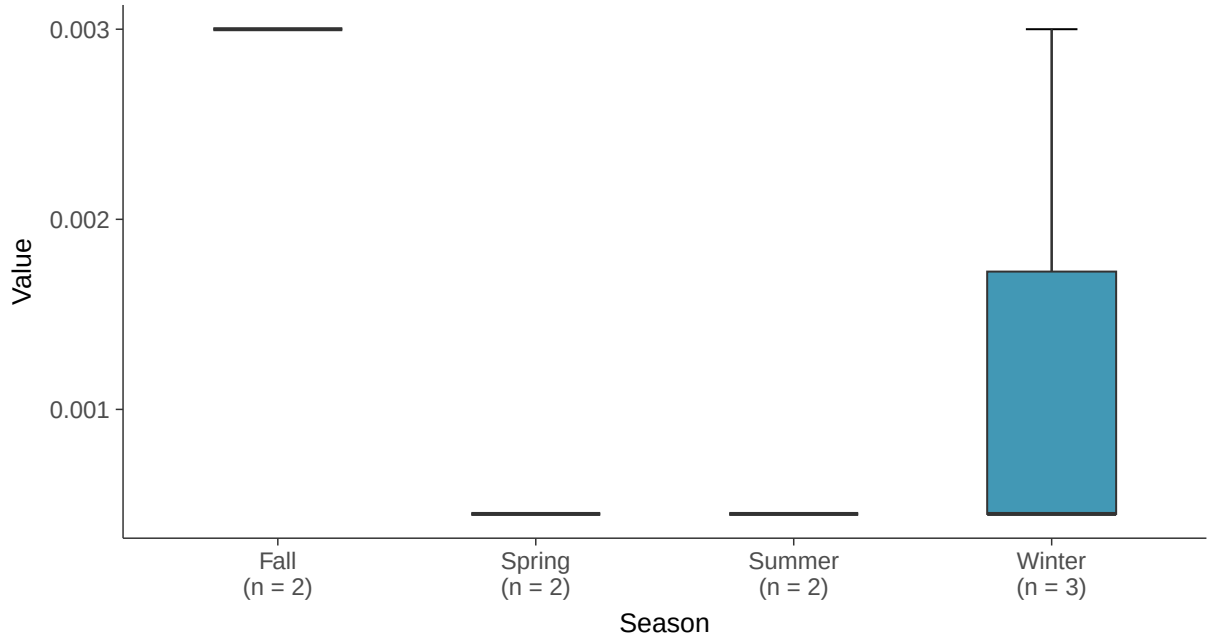
Boxplot

Lead, MW-18D (mg/l)



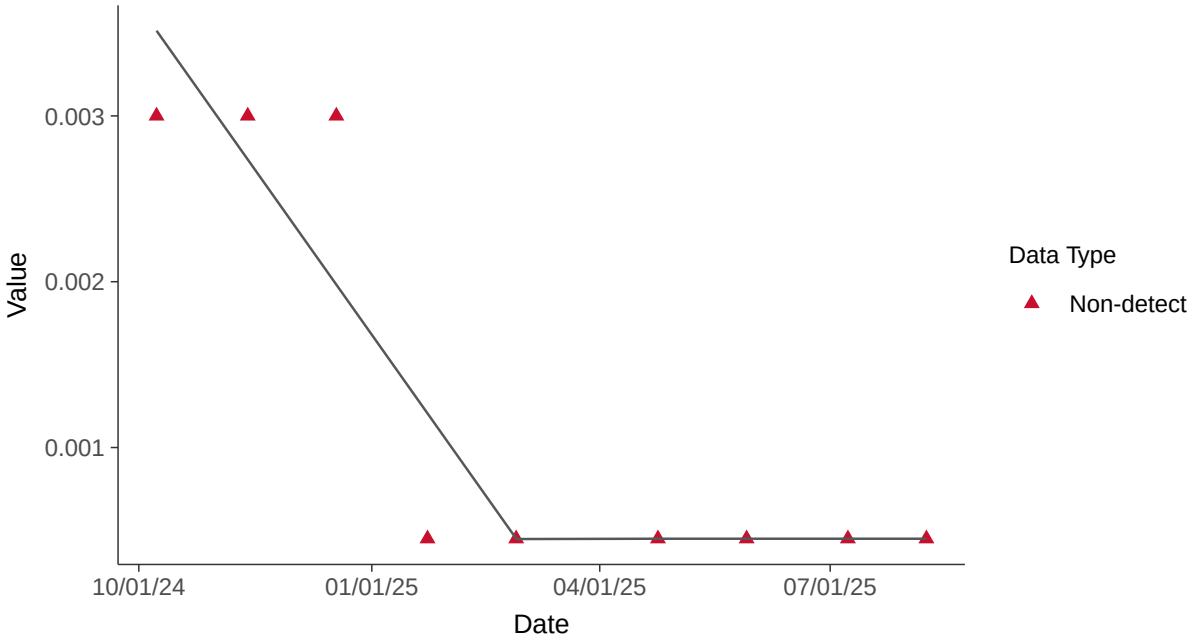
Boxplot by Season

Lead, MW-18D (mg/l)



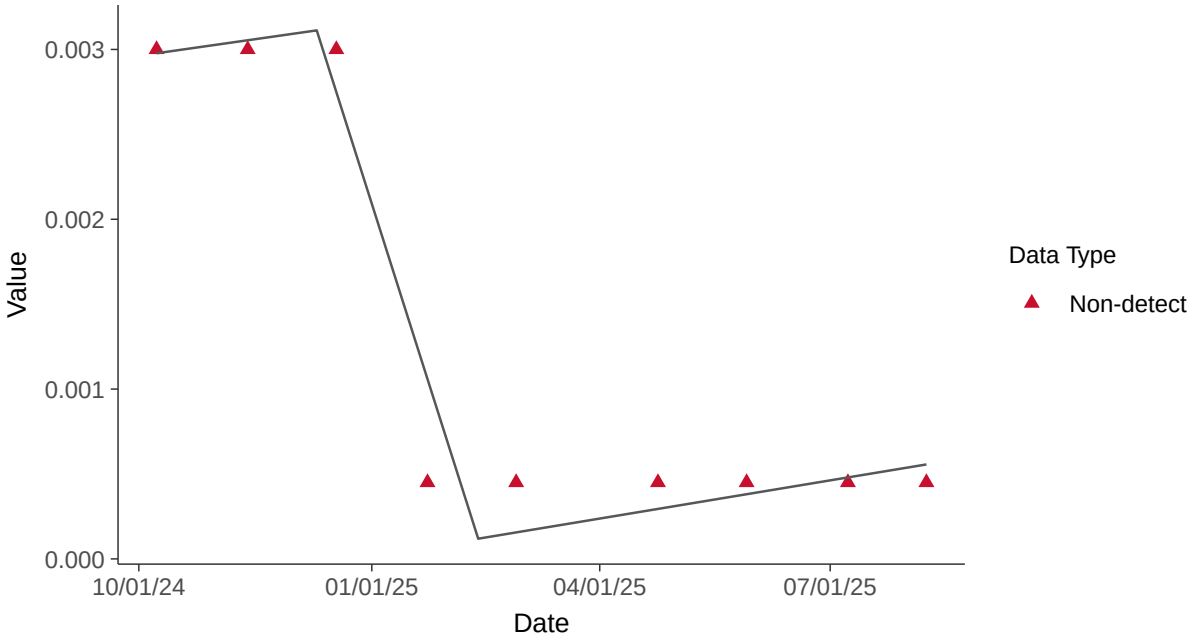
Trend Regression: Piecewise Linear-Linear

Lead, MW-18D (mg/l)



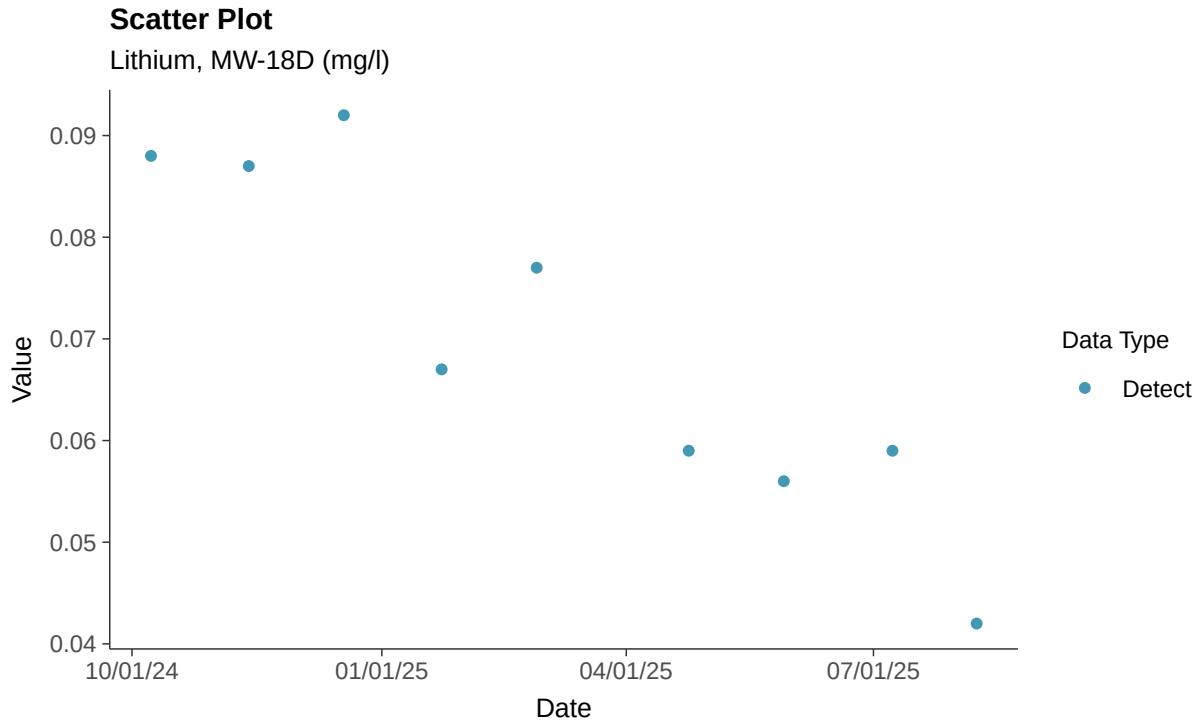
Trend Regression: Piecewise Linear-Linear-Linear

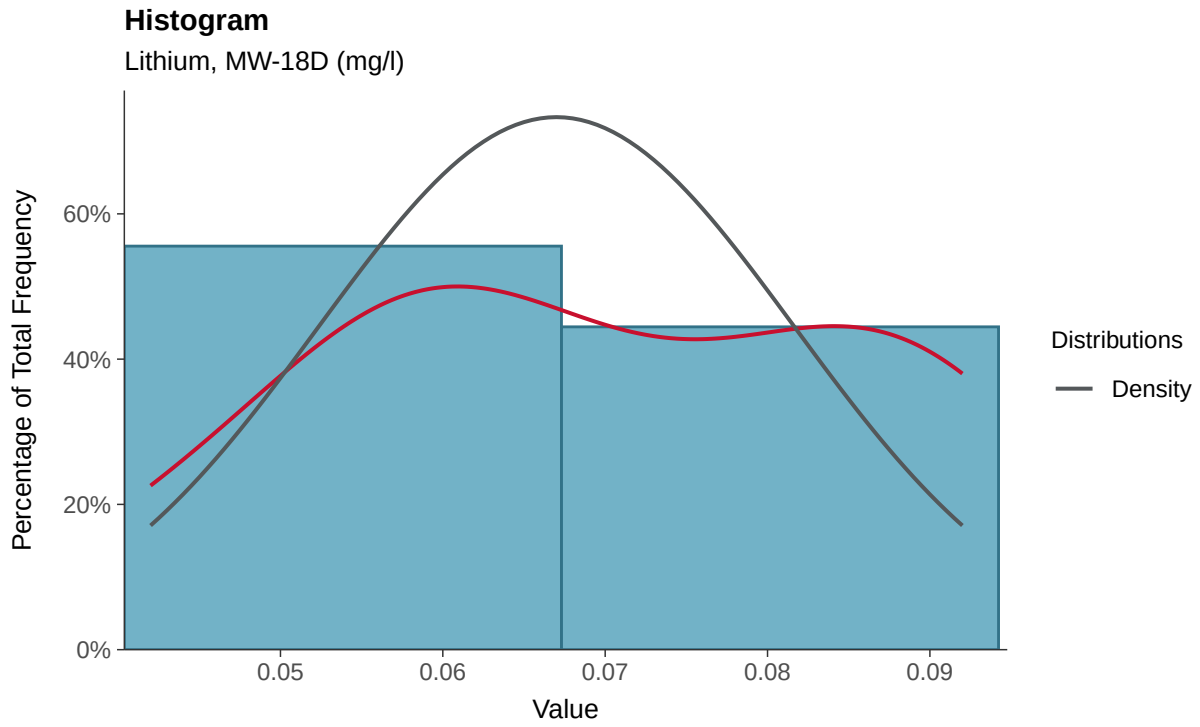
Lead, MW-18D (mg/l)



Appendix IV: Lithium, MW-18D

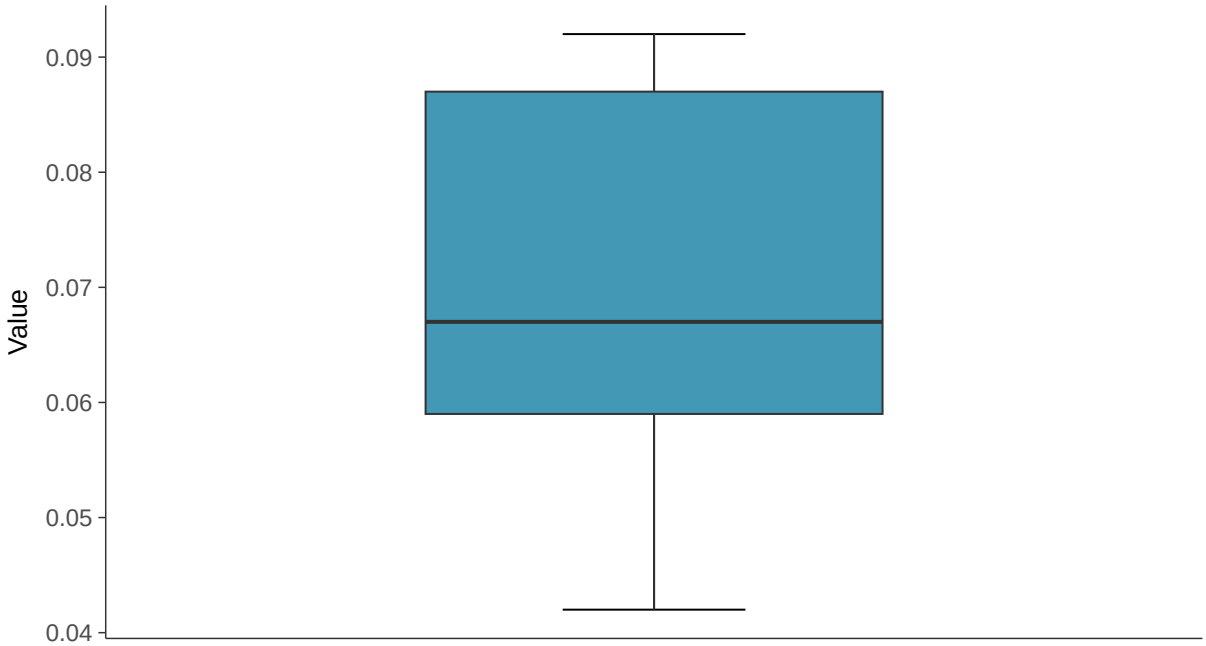
ID: 19_3_116





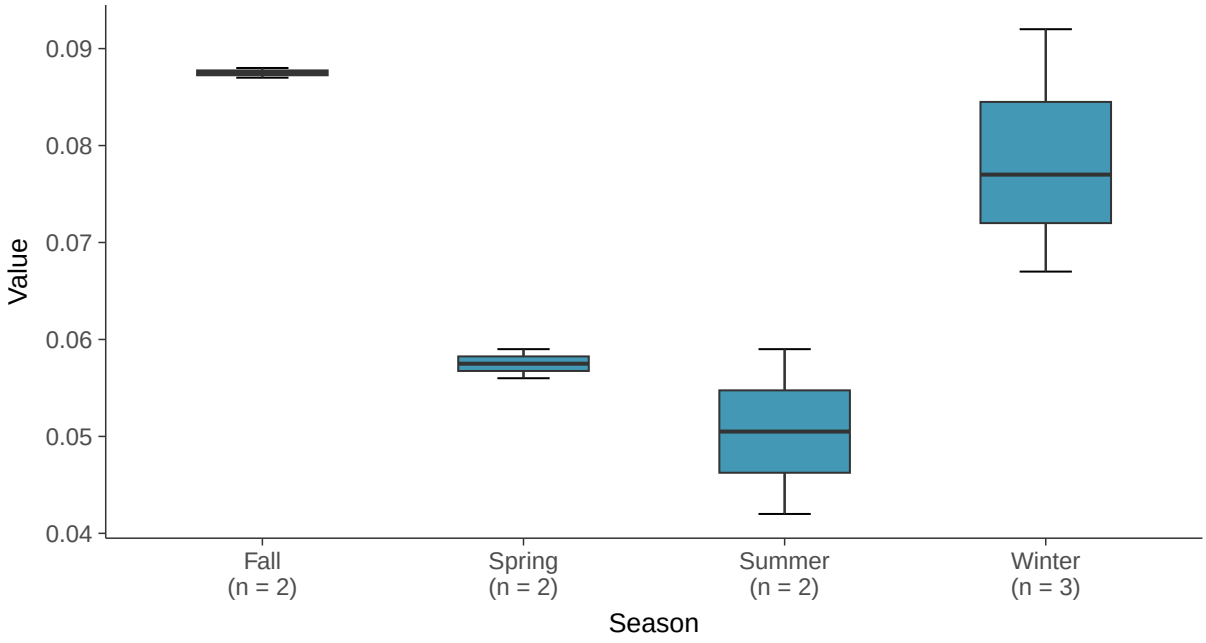
Boxplot

Lithium, MW-18D (mg/l)



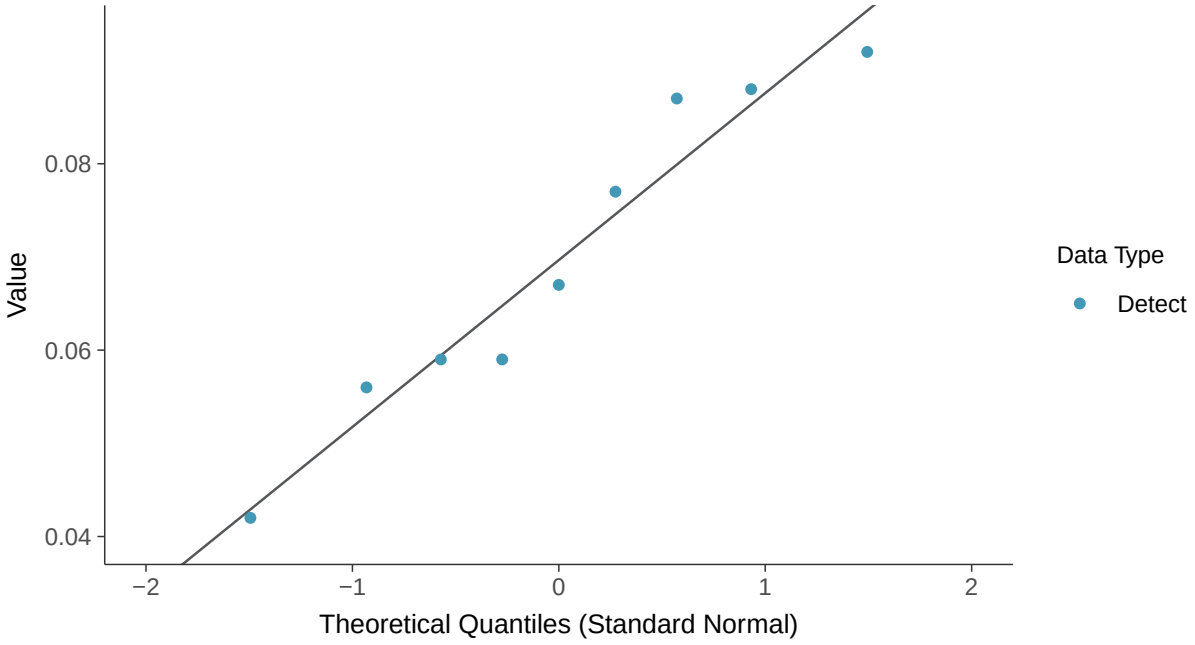
Boxplot by Season

Lithium, MW-18D (mg/l)



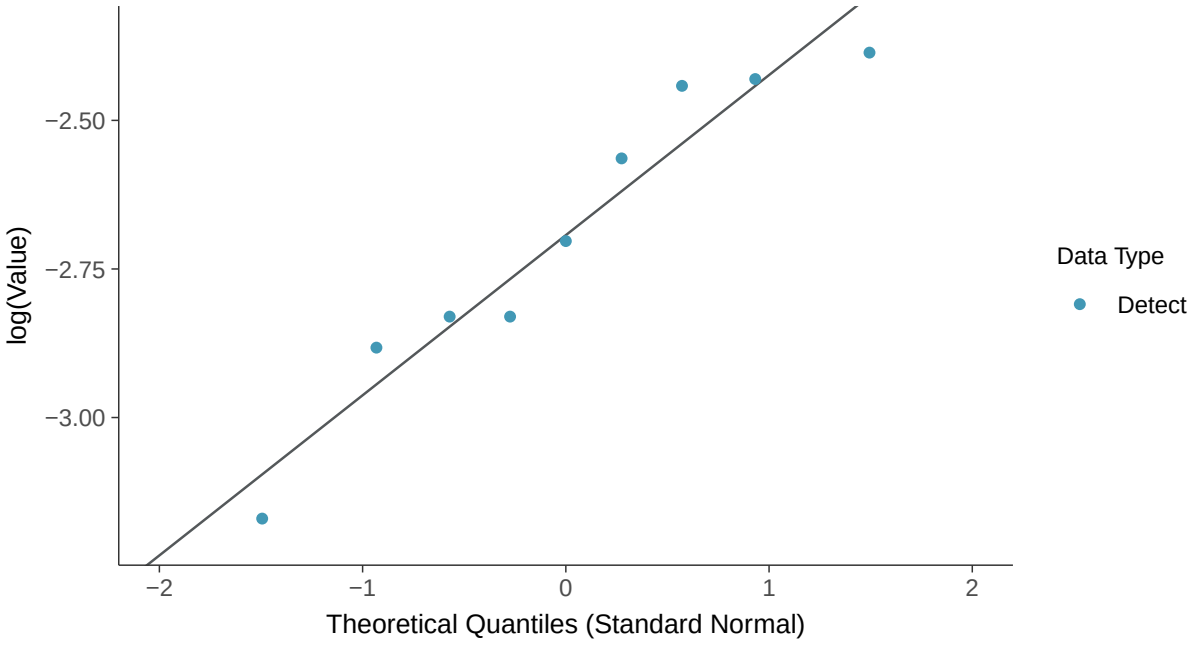
Normal Q-Q plot

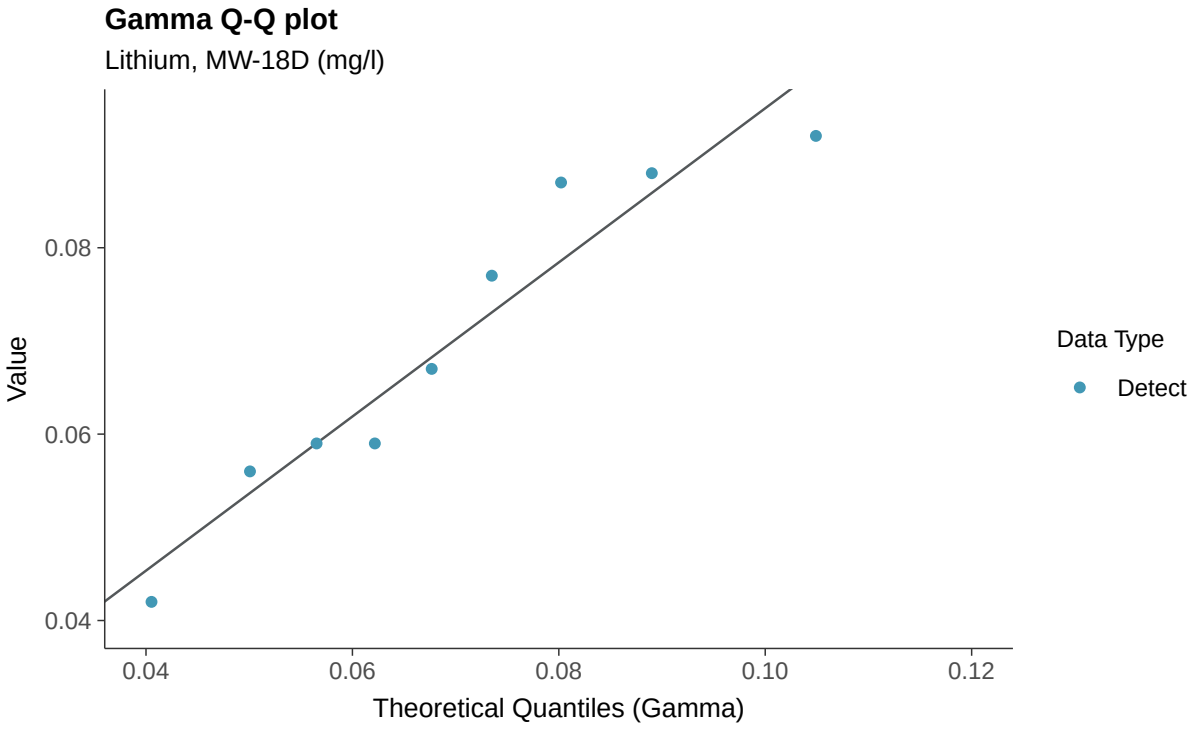
Lithium, MW-18D (mg/l)

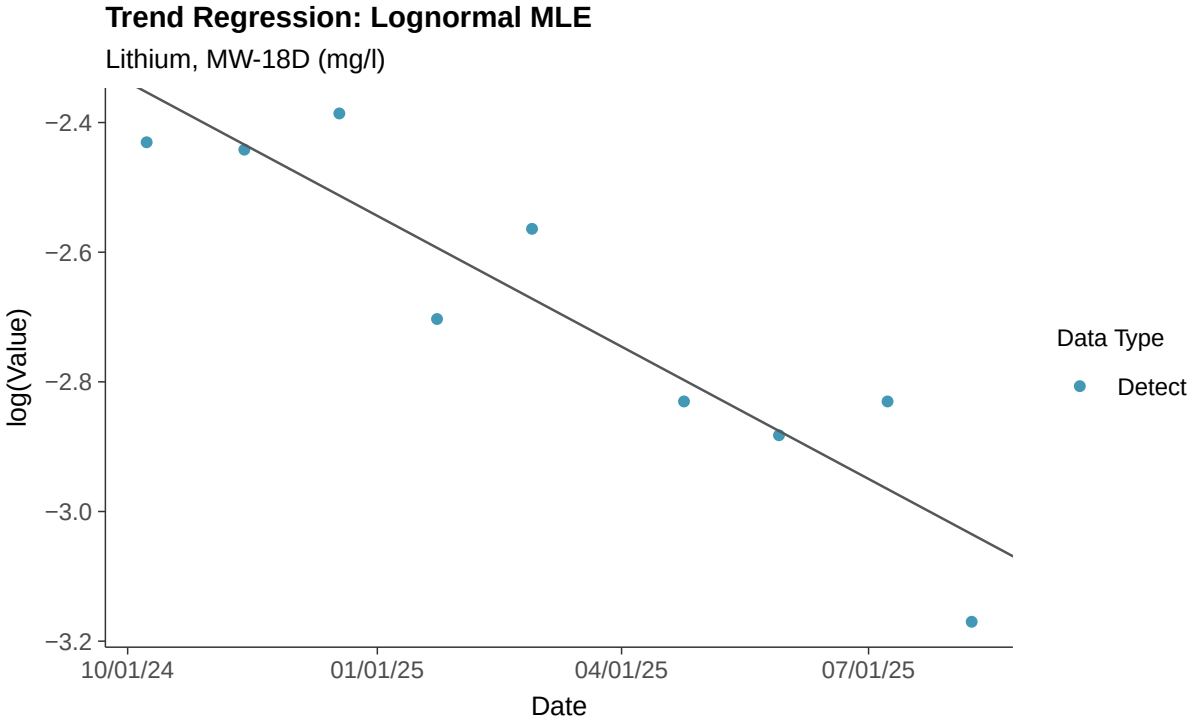


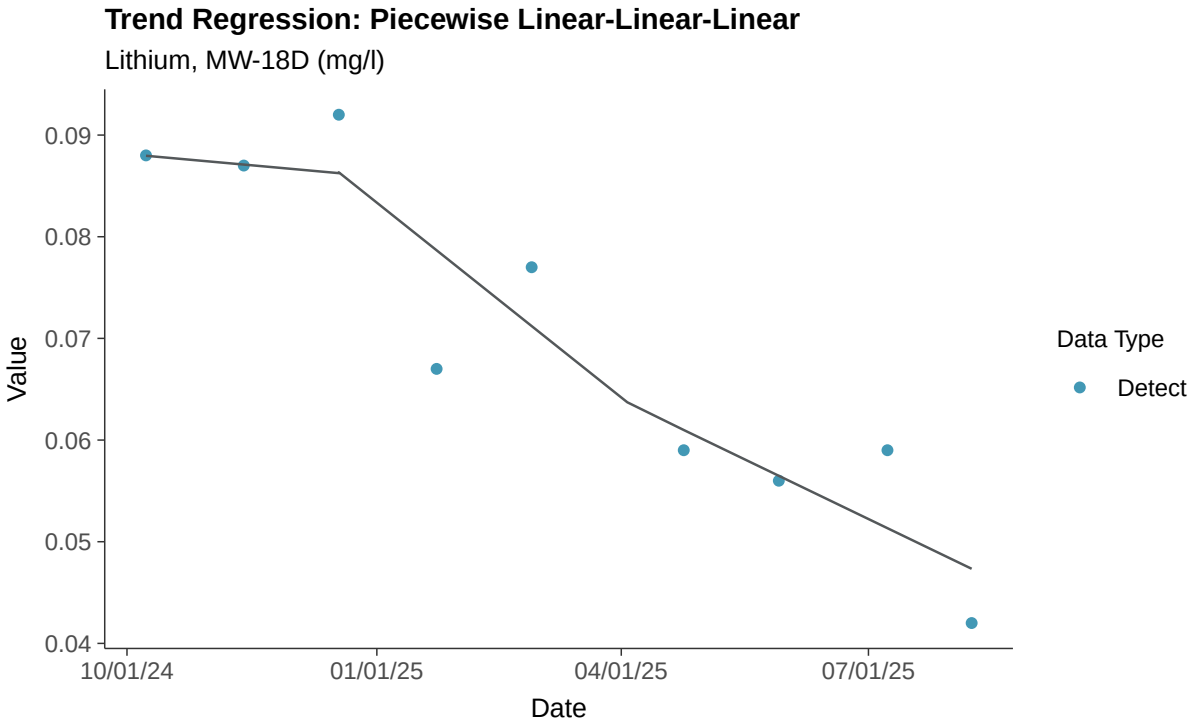
Lognormal Q-Q plot

Lithium, MW-18D (mg/l)



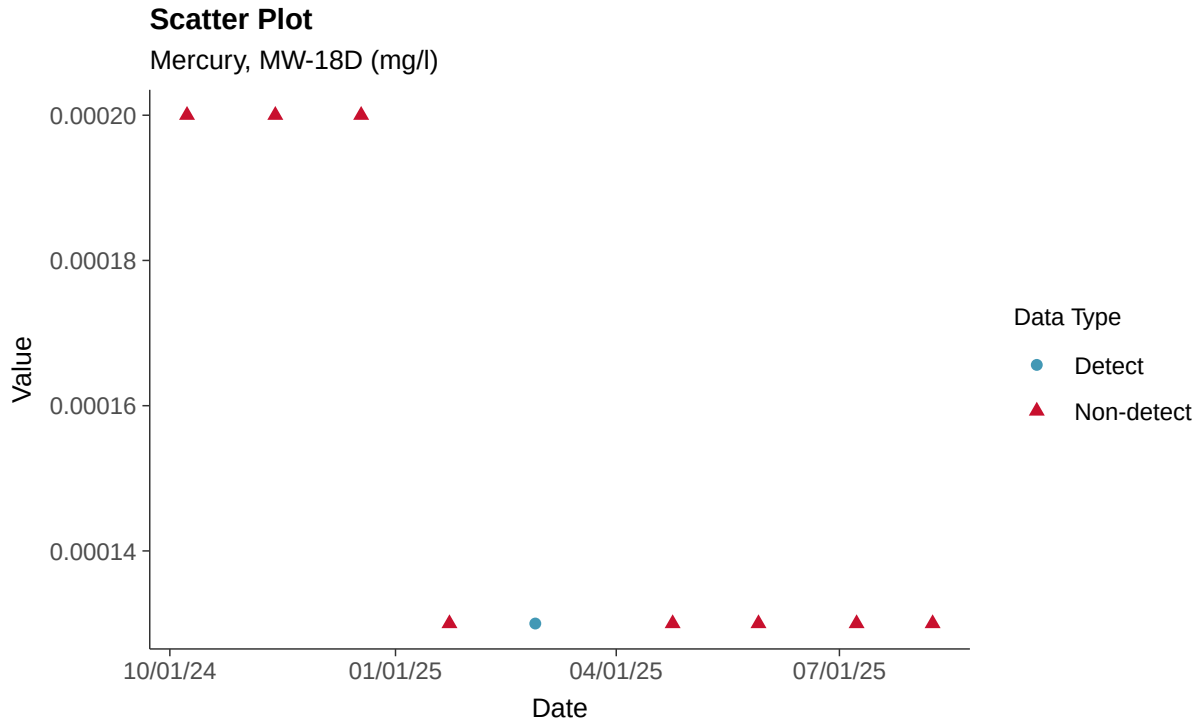

Gamma Q-Q plot
Lithium, MW-18D (mg/l)
Value
0.08
0.06
0.04
0.04
0.06
0.08
0.10
0.12
Theoretical Quantiles (Gamma)
Data Type
Detect

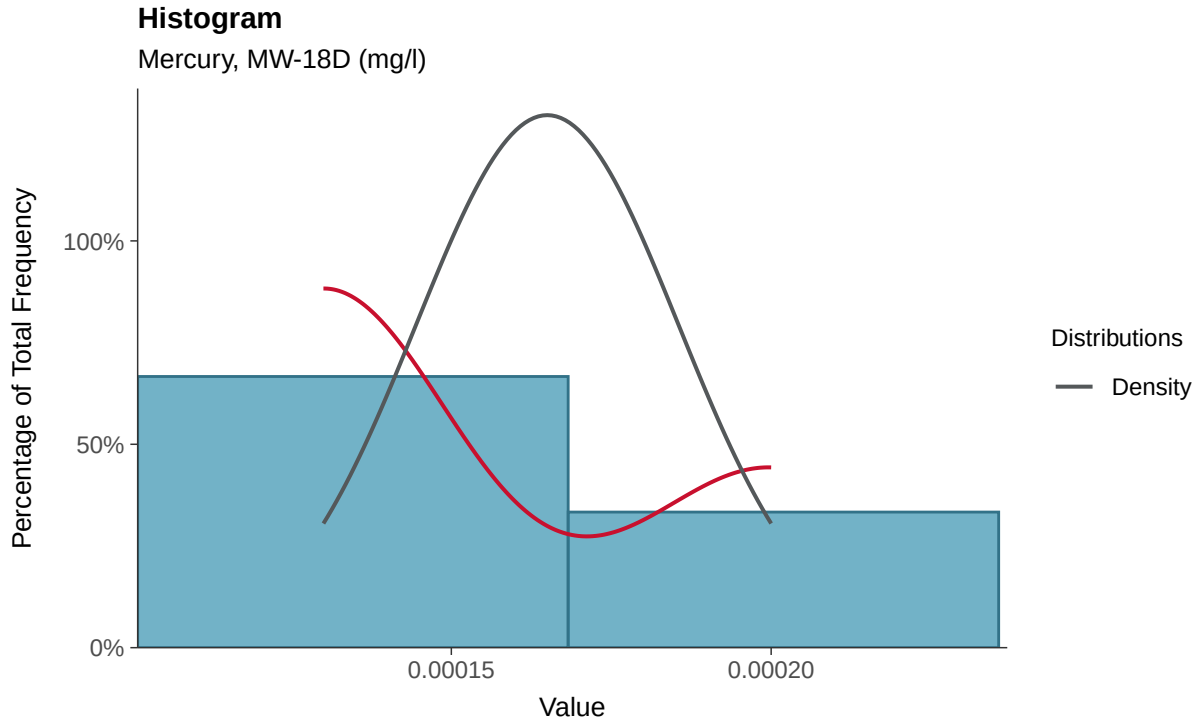

Trend Regression: Lognormal MLE
Lithium, MW-18D (mg/l)
log(Value)
−2.4
−2.6
−2.8
−3.0
−3.2
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect


Trend Regression: Piecewise Linear-Linear-Linear
Lithium, MW-18D (mg/l)
Value
0.09
0.08
0.07
0.06
0.05
0.04
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Appendix IV: Mercury, MW-18D

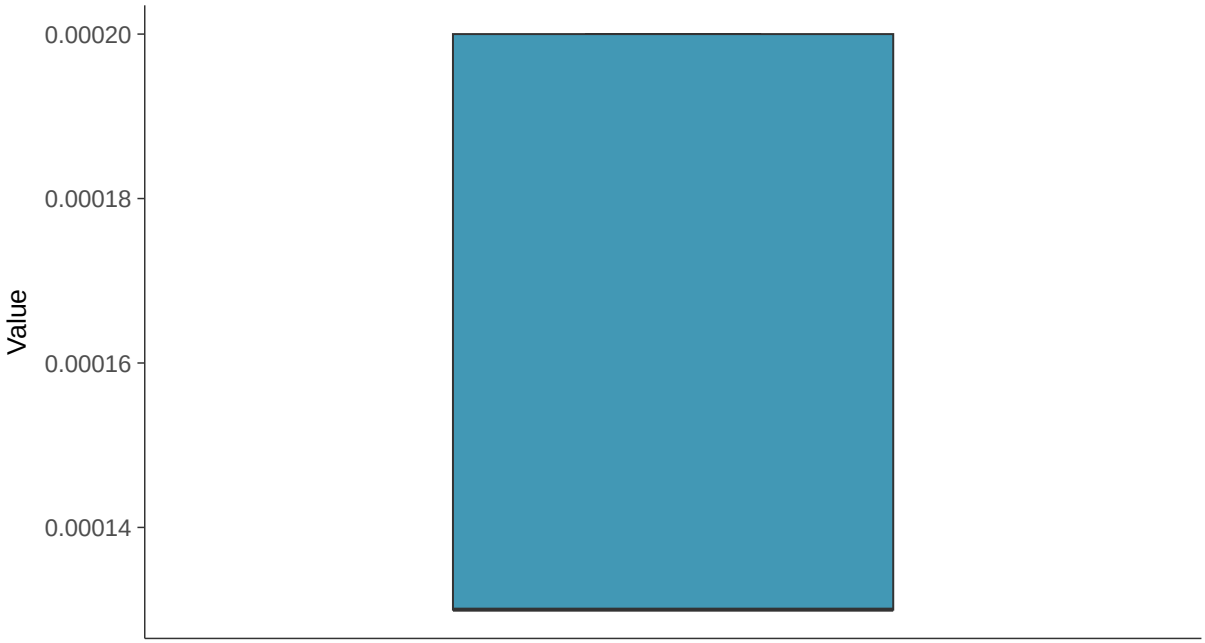
ID: 19_3_117





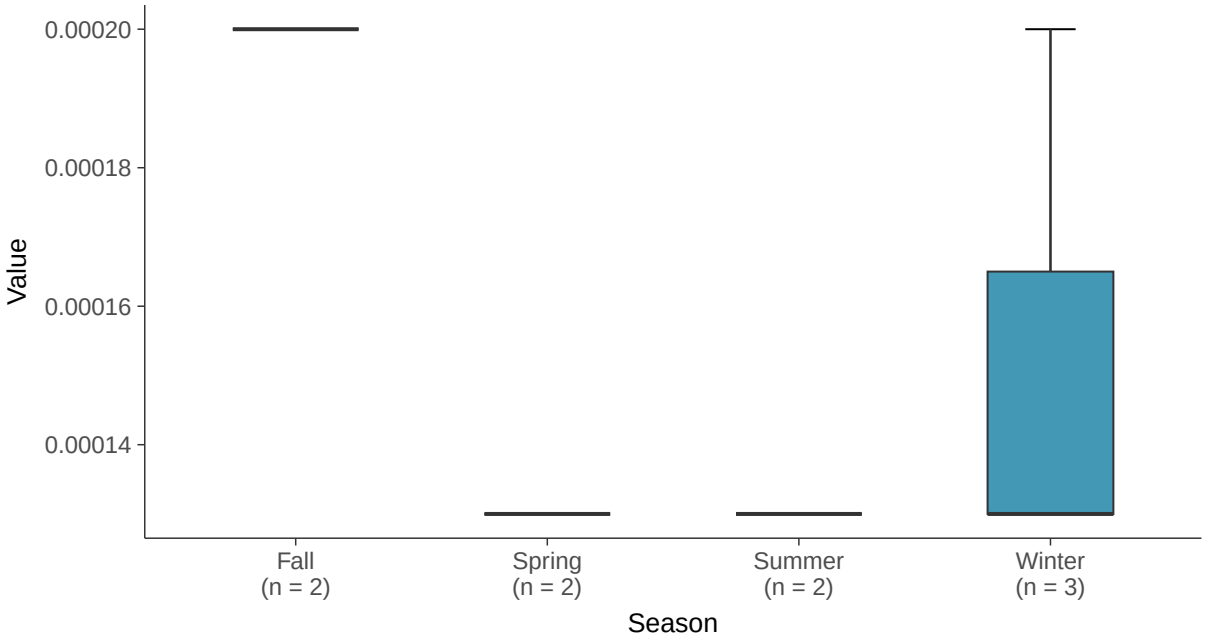
Boxplot

Mercury, MW-18D (mg/l)



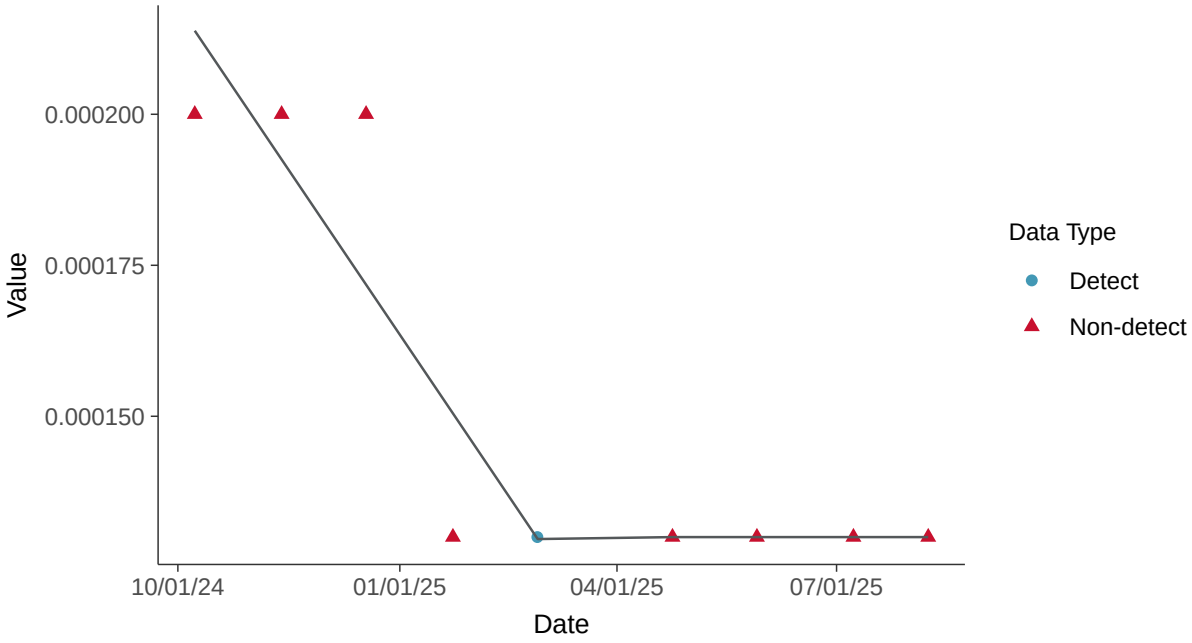
Boxplot by Season

Mercury, MW-18D (mg/l)



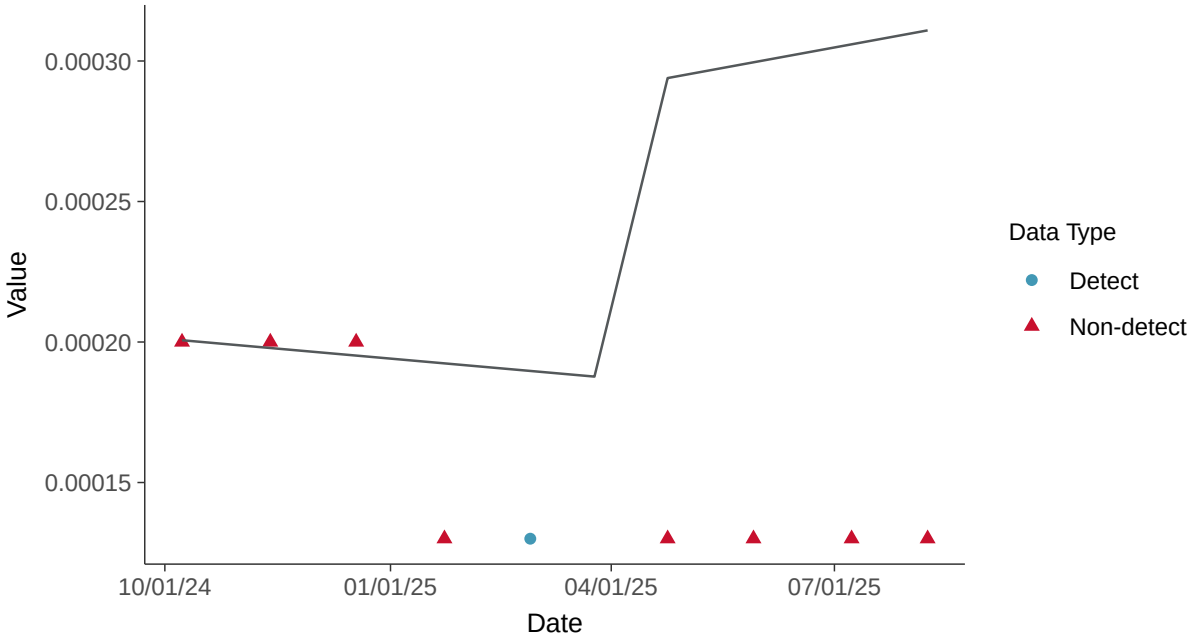
Trend Regression: Piecewise Linear-Linear

Mercury, MW-18D (mg/l)



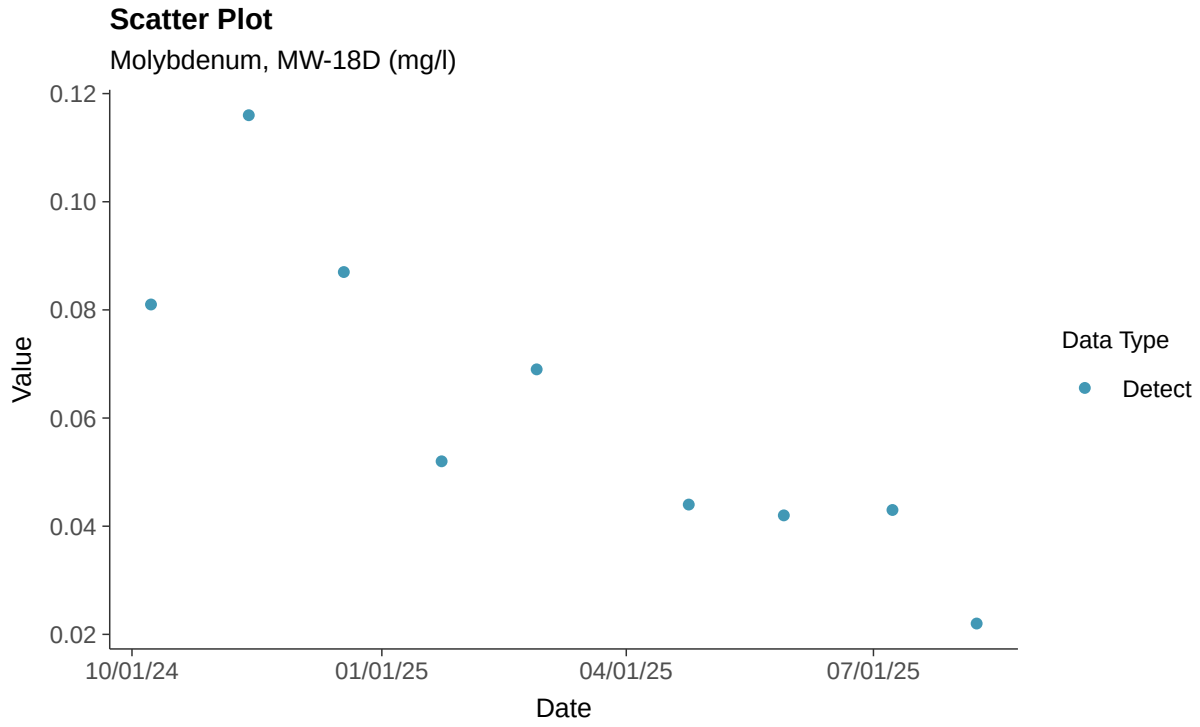
Trend Regression: Piecewise Linear-Linear-Linear

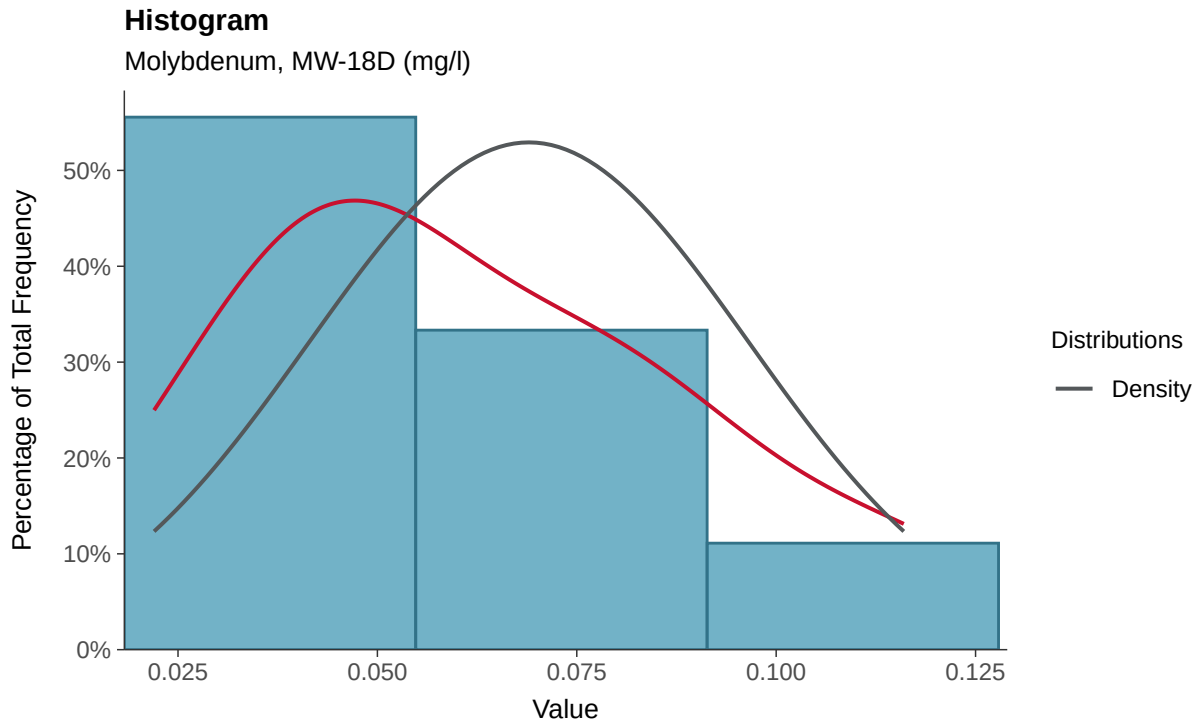
Mercury, MW-18D (mg/l)



Appendix IV: Molybdenum, MW-18D

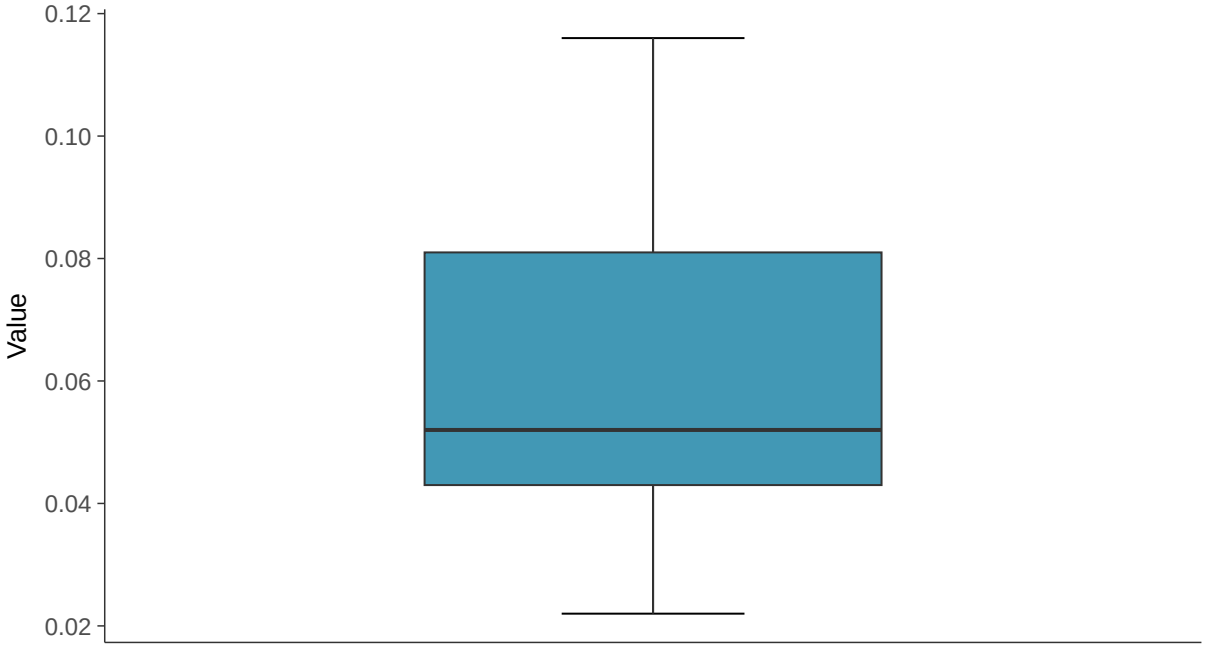
ID: 19_3_118





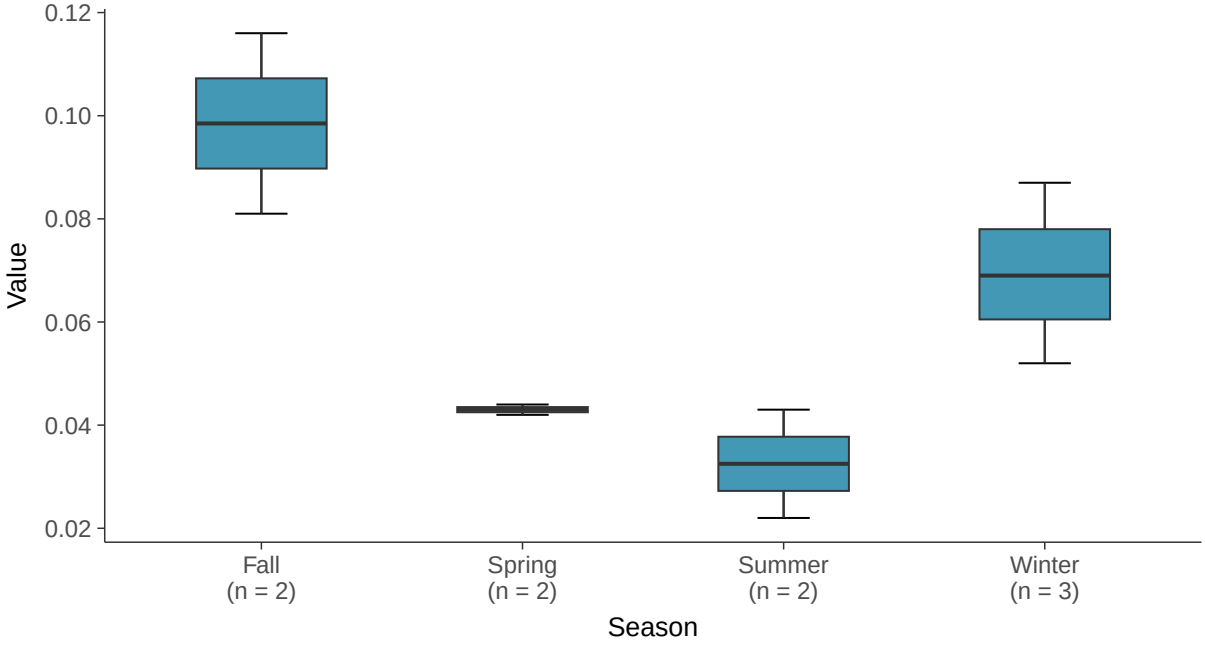
Boxplot

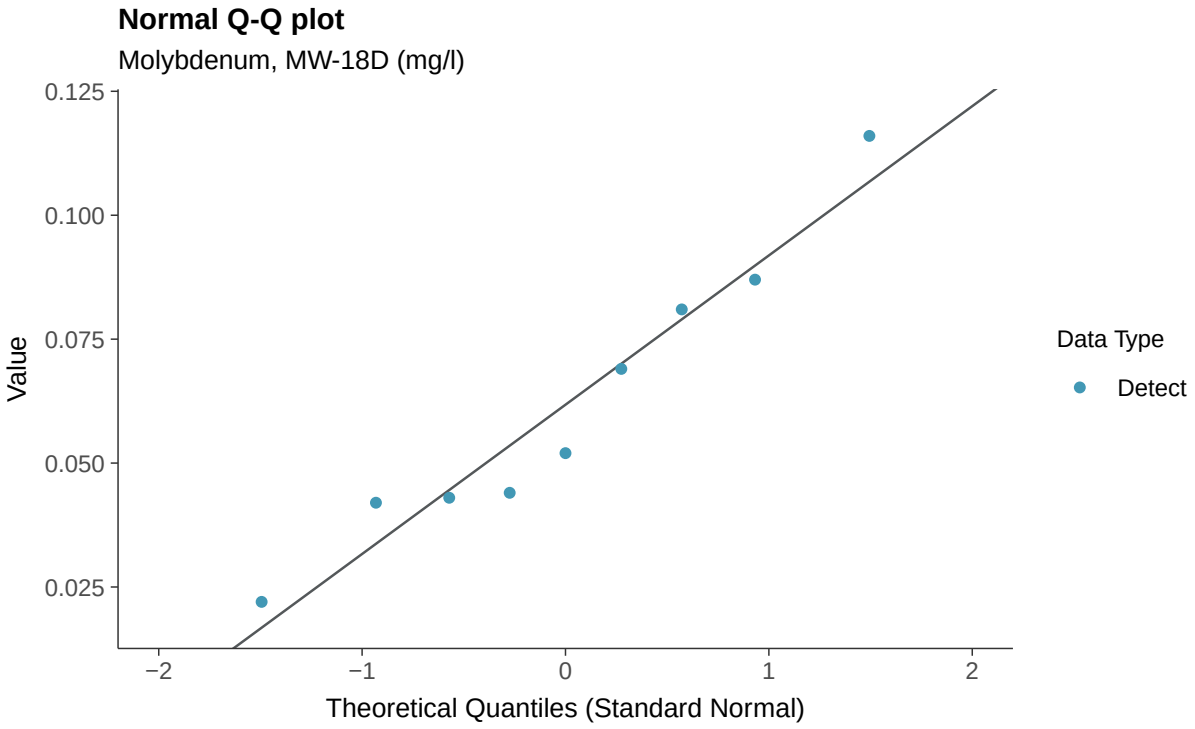
Molybdenum, MW-18D (mg/l)

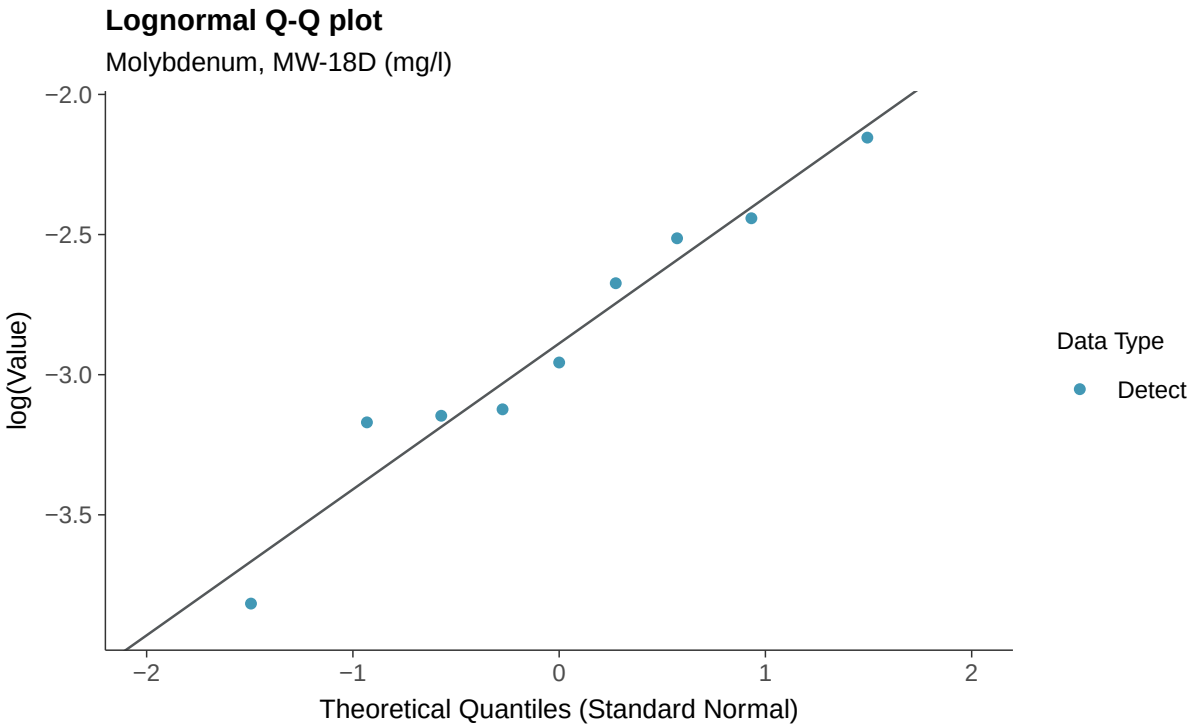


Boxplot by Season

Molybdenum, MW-18D (mg/l)

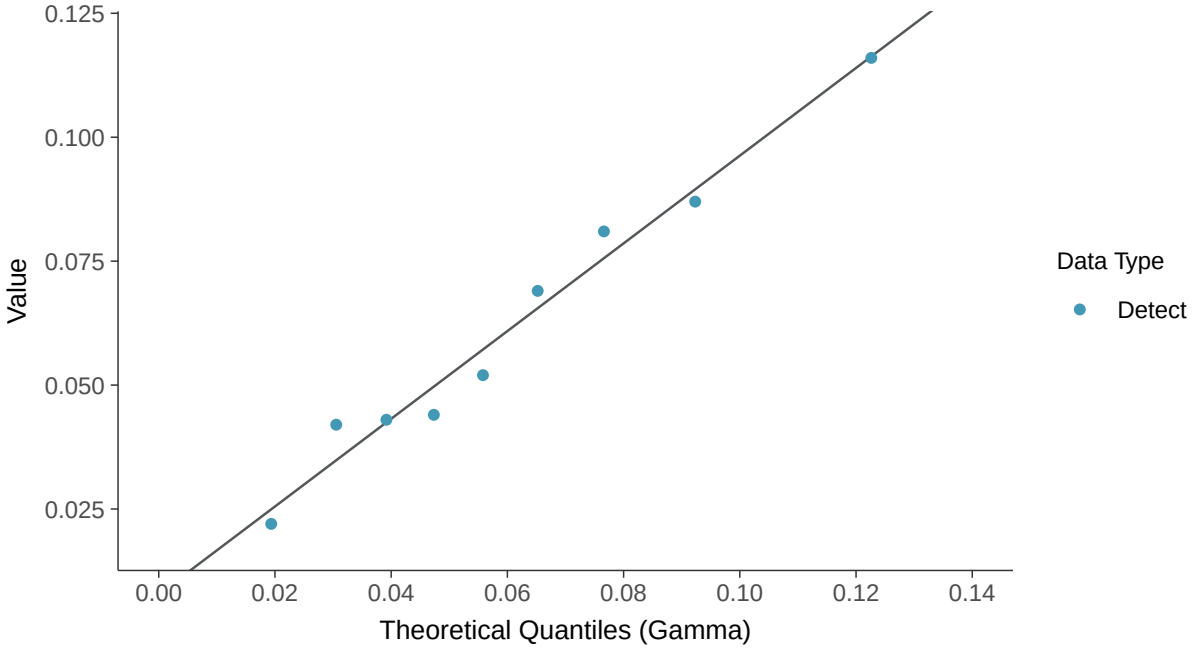



Normal Q-Q plot
Molybdenum, MW-18D (mg/l)
Value
0.125
0.100
0.075
0.050
0.025
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect


Lognormal Q-Q plot
Molybdenum, MW-18D (mg/l)
log(Value)
−2.0
−2.5
−3.0
−3.5
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect

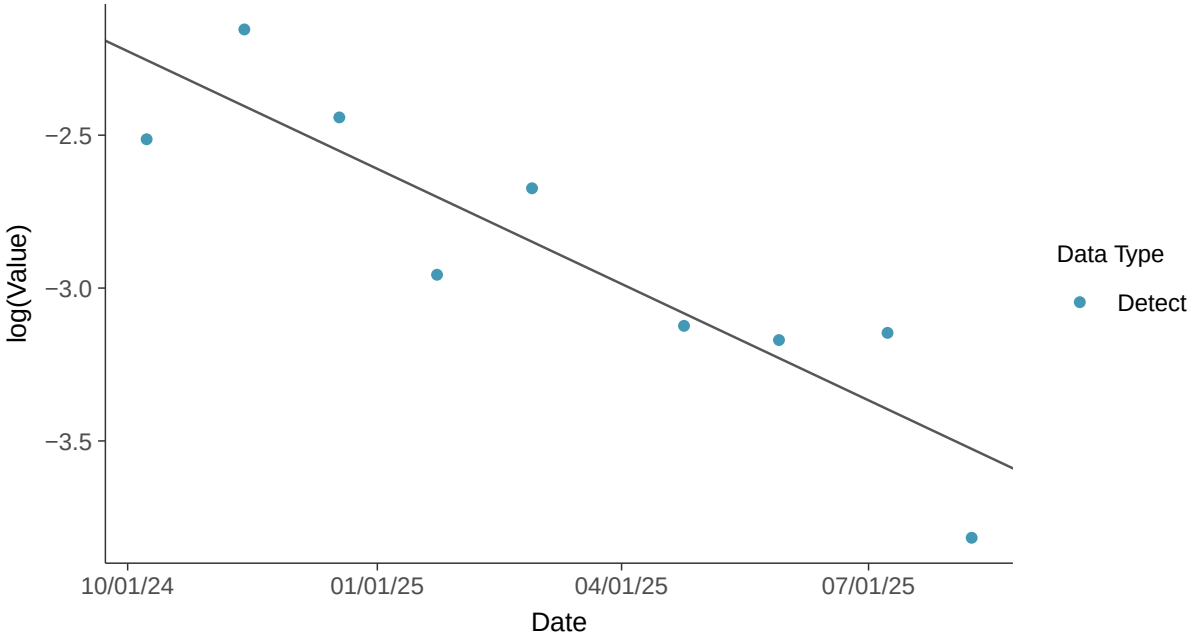
Gamma Q-Q plot

Molybdenum, MW-18D (mg/l)



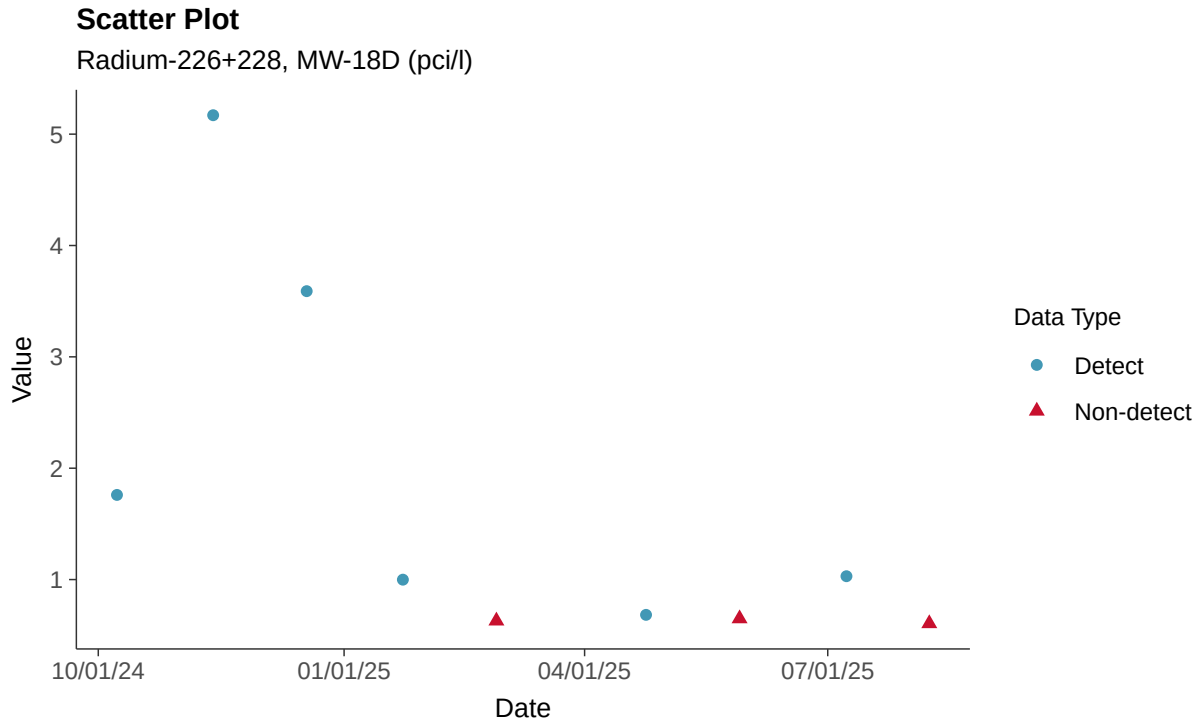
Trend Regression: Lognormal MLE

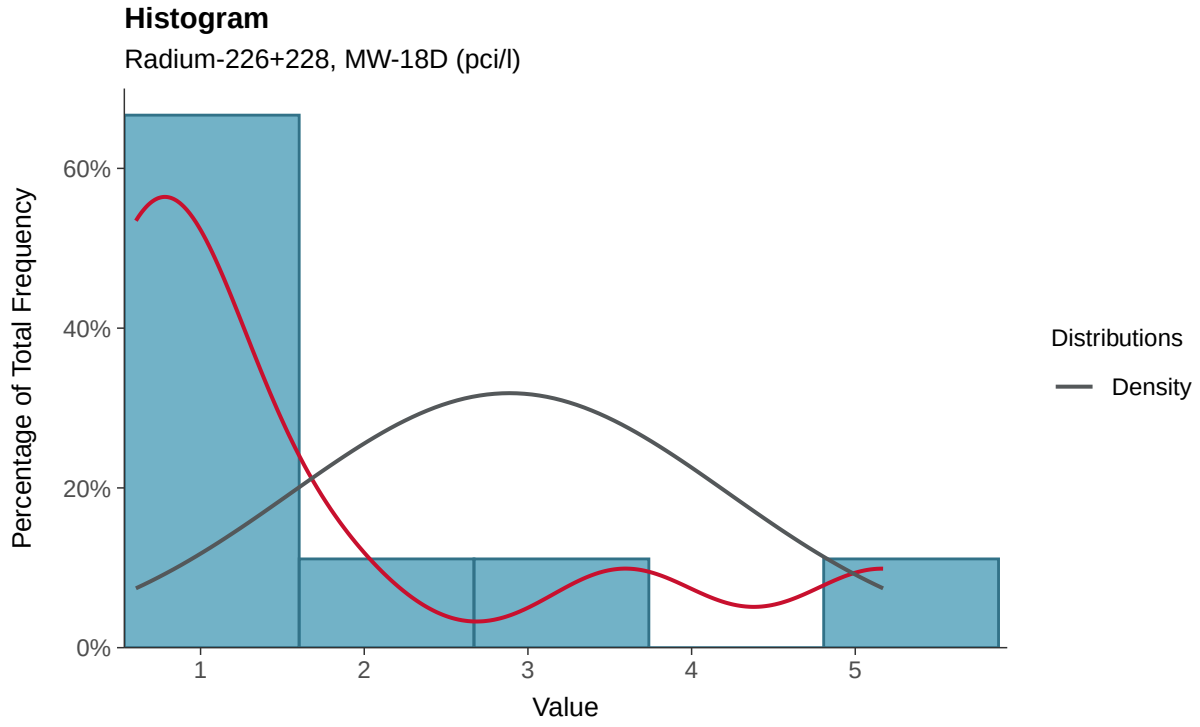
Molybdenum, MW-18D (mg/l)



Appendix IV: Radium-226+228, MW-18D

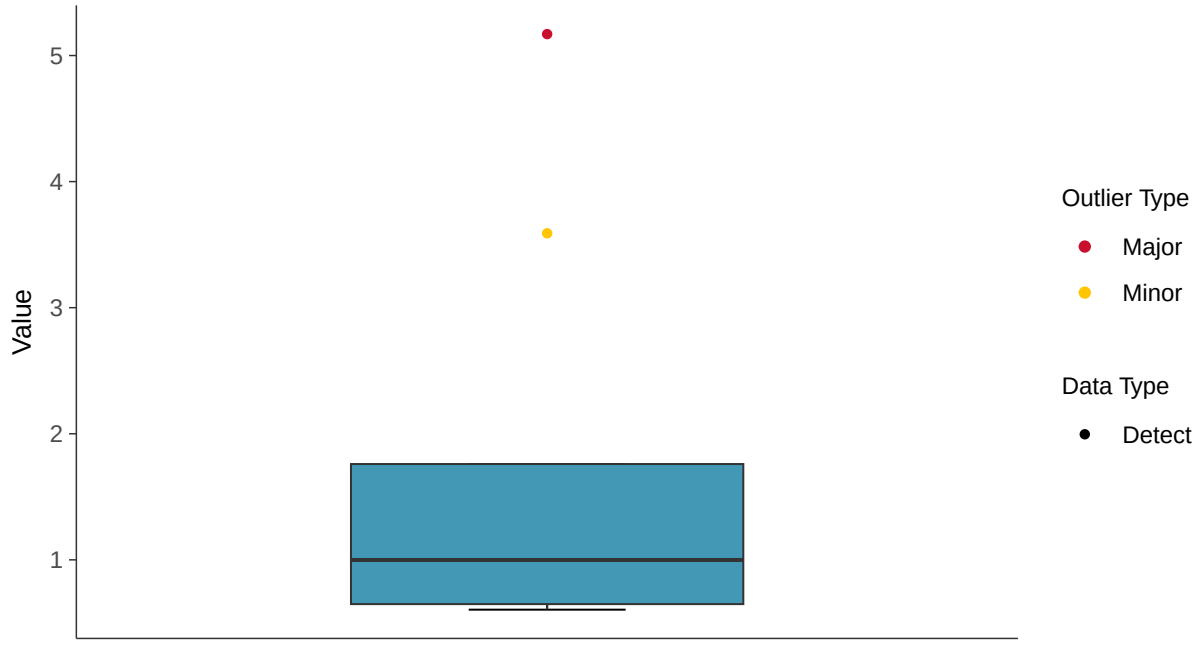
ID: 19_3_121





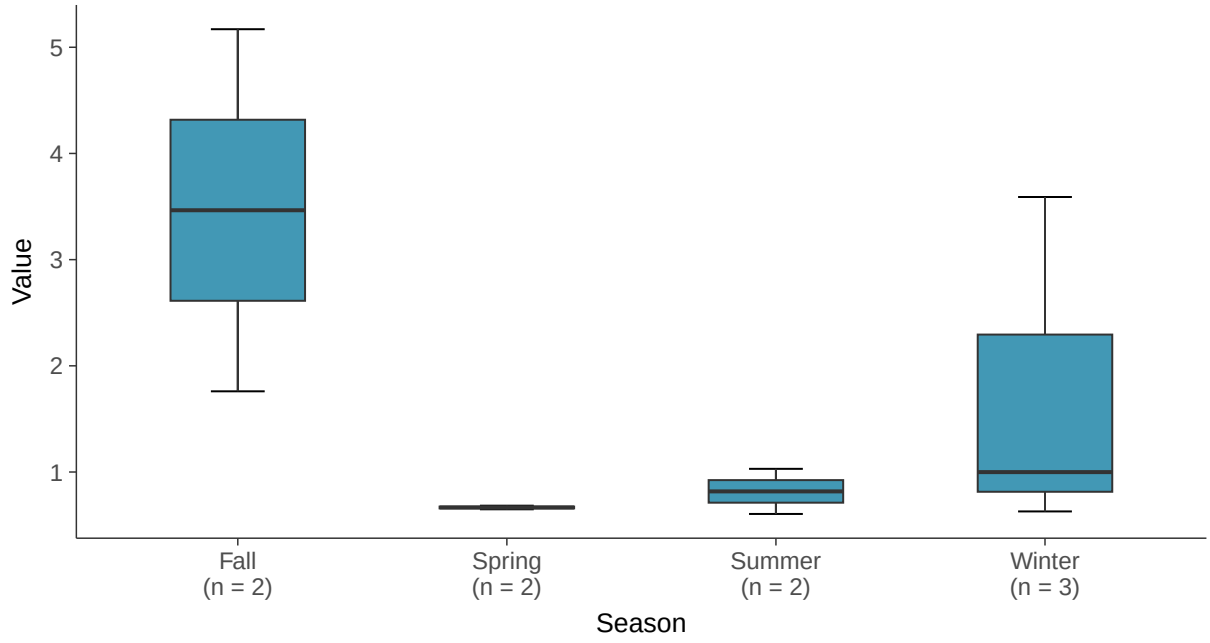
Boxplot

Radium-226+228, MW-18D (pci/l)



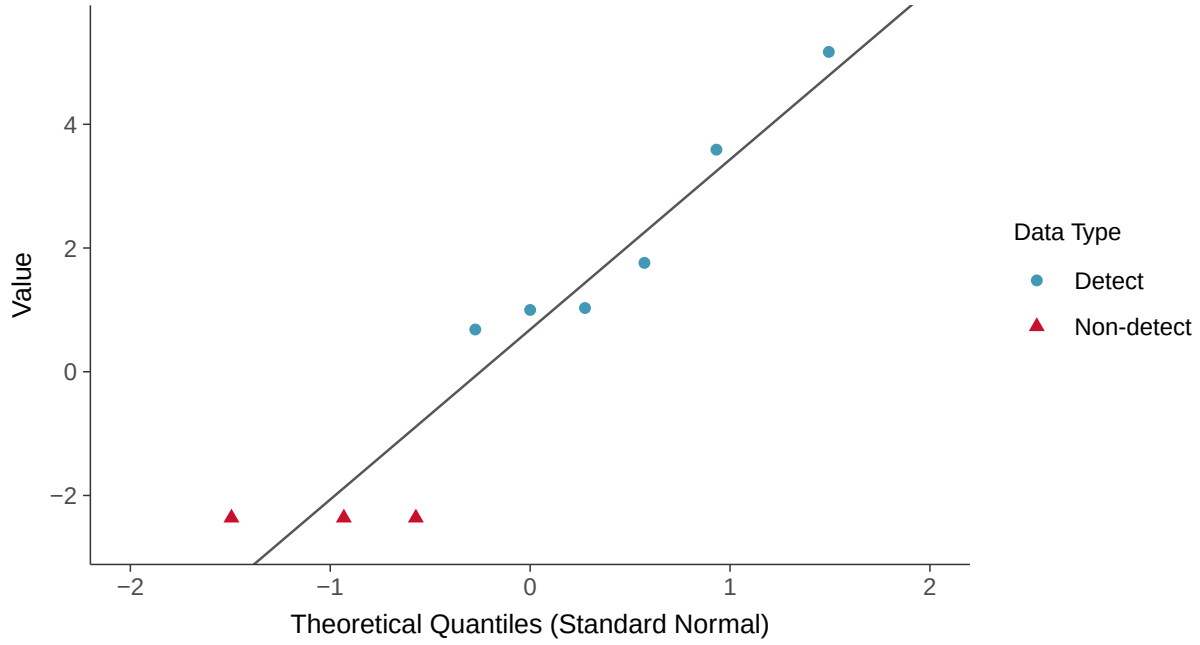
Boxplot by Season

Radium-226+228, MW-18D (pci/l)



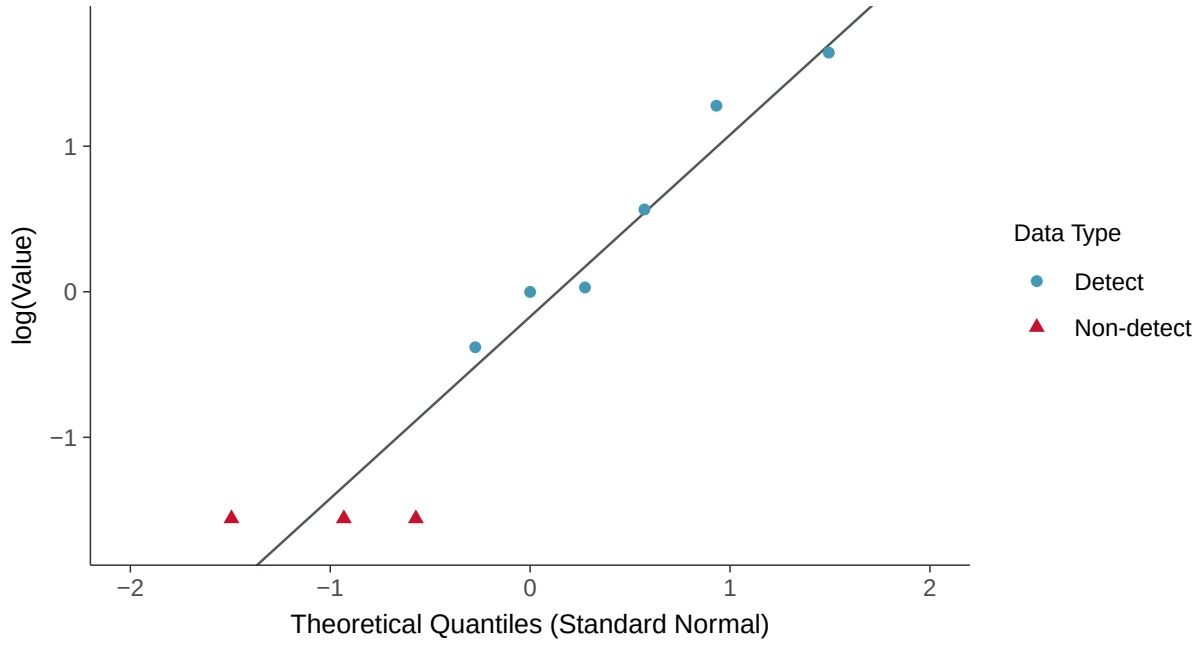
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-18D (pci/l)



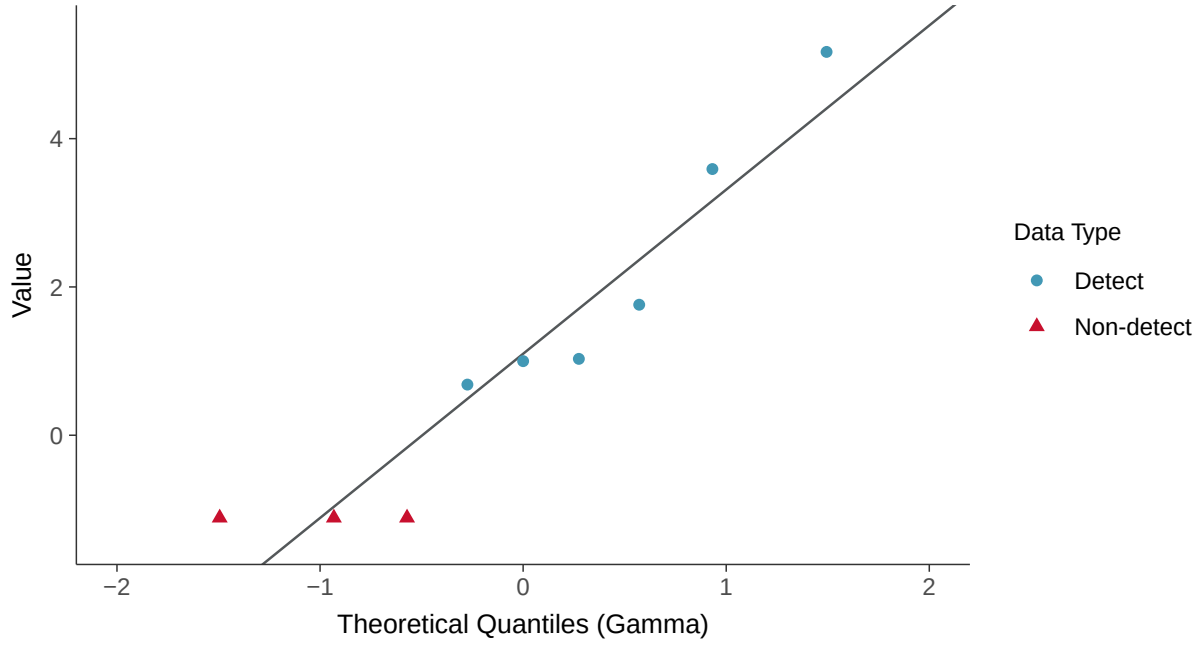
Lognormal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-18D (pci/l)



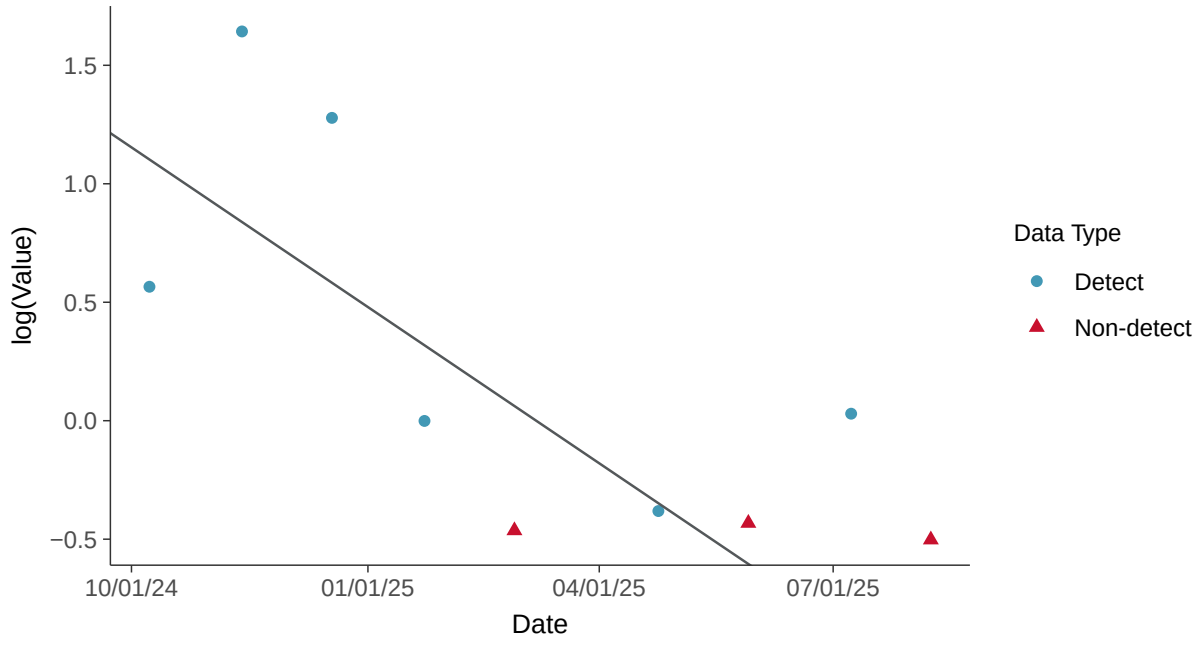
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-18D (pci/l)



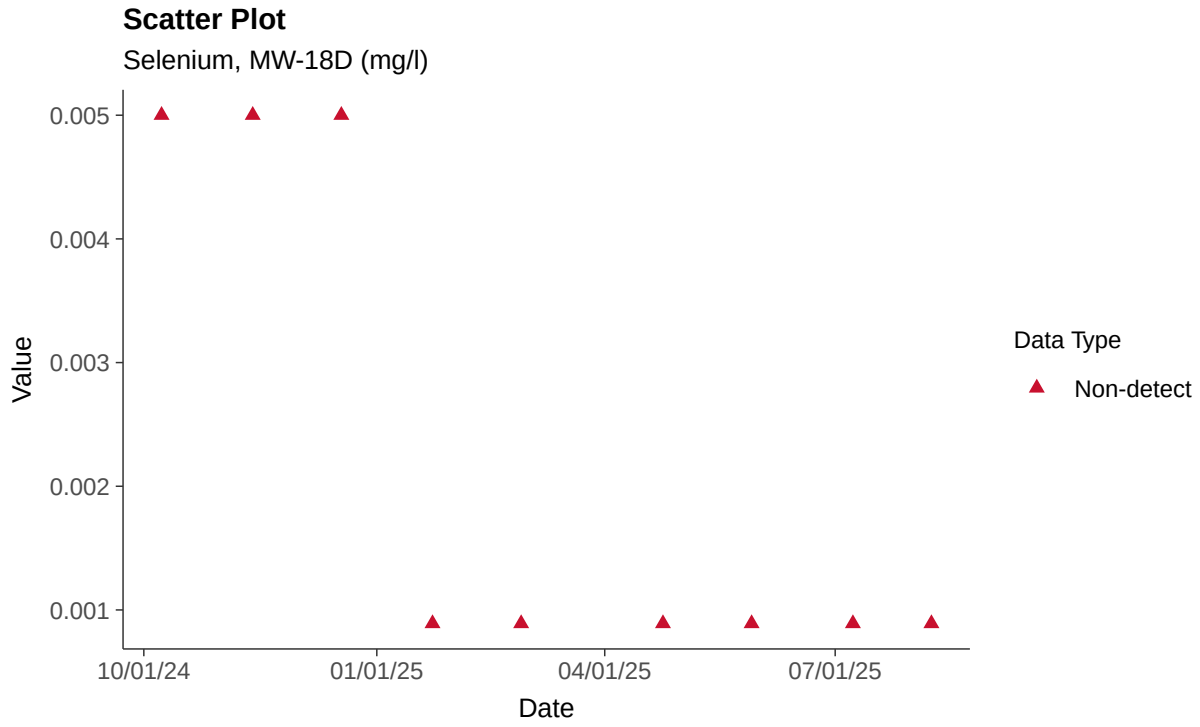
Trend Regression: Lognormal MLE

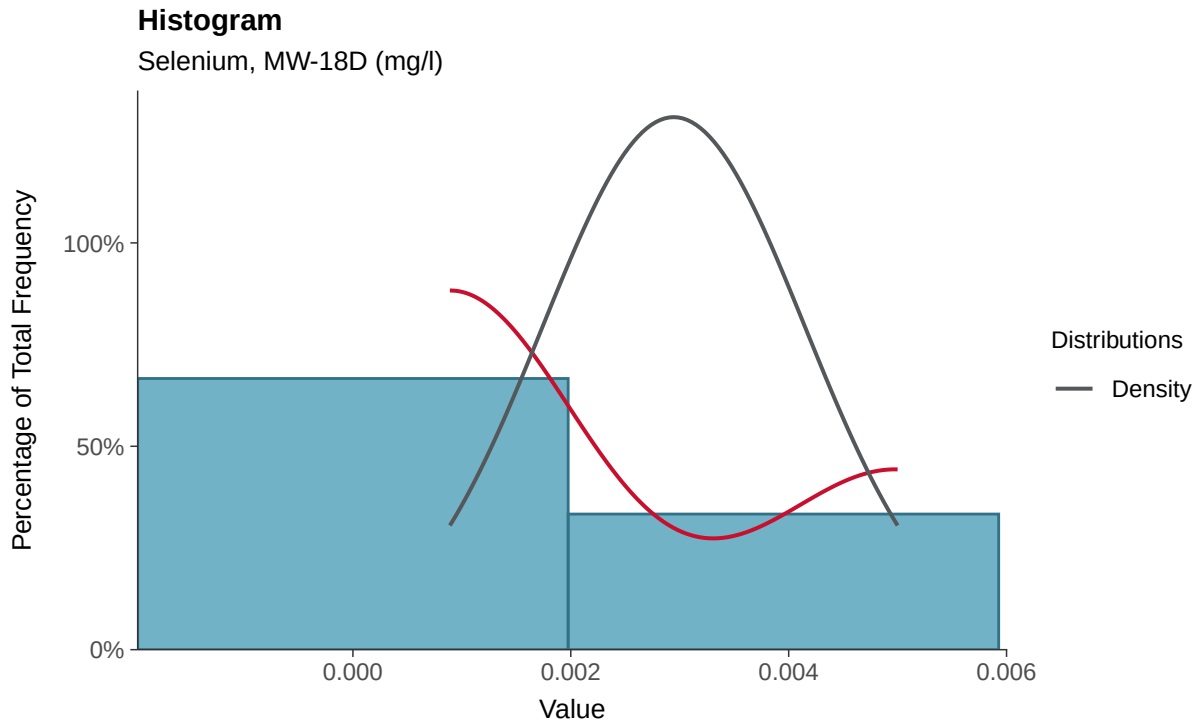
Radium-226+228, MW-18D (pci/l)



Appendix IV: Selenium, MW-18D

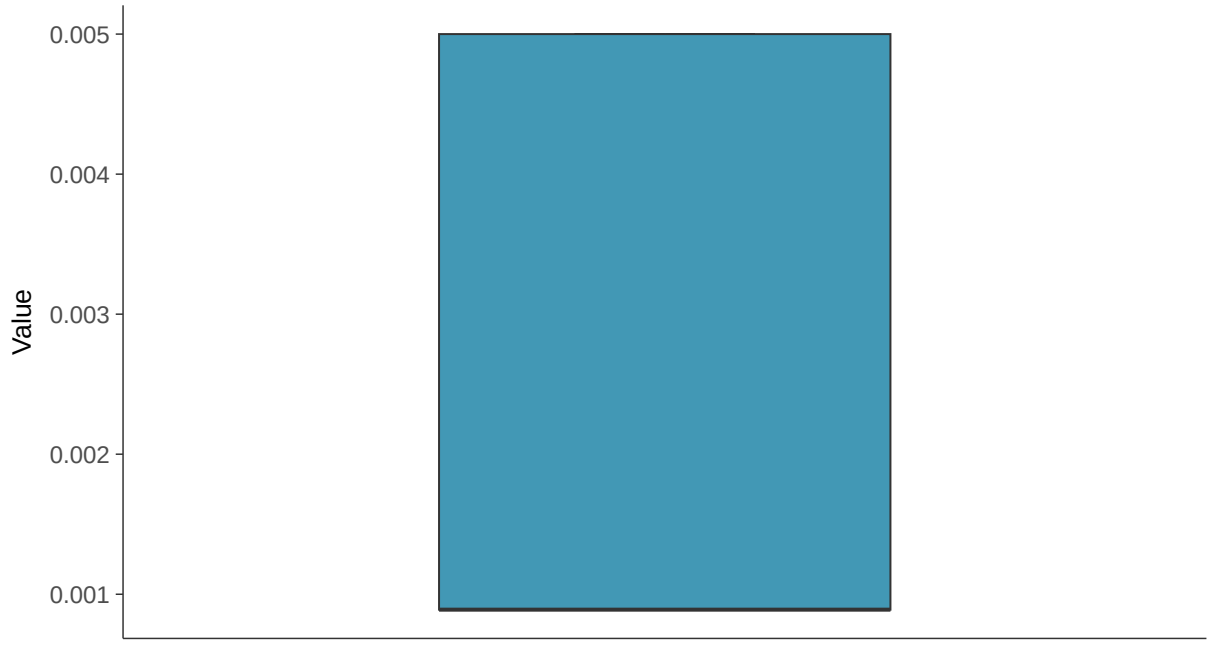
ID: 19_3_122





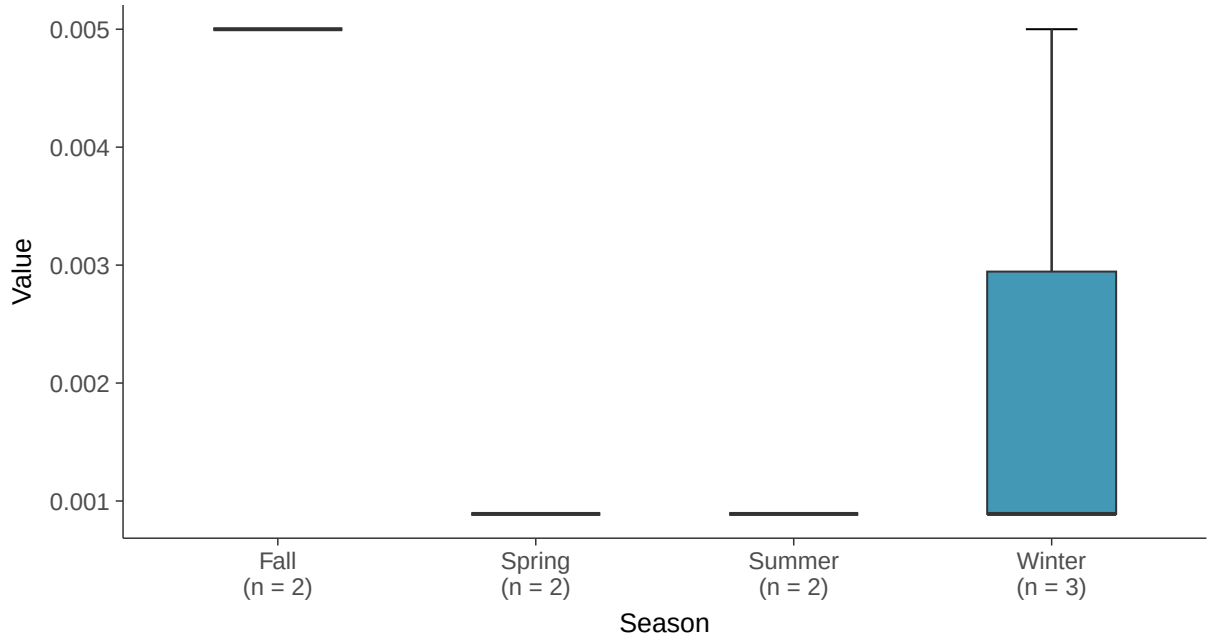
Boxplot

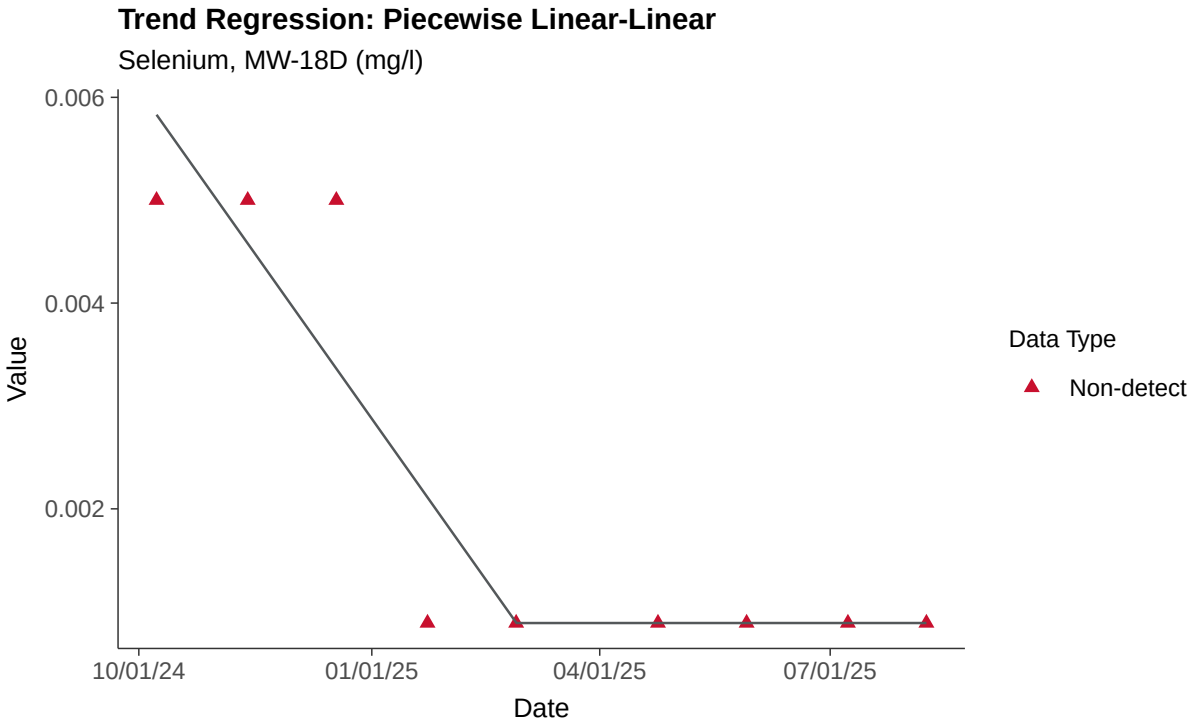
Selenium, MW-18D (mg/l)



Boxplot by Season

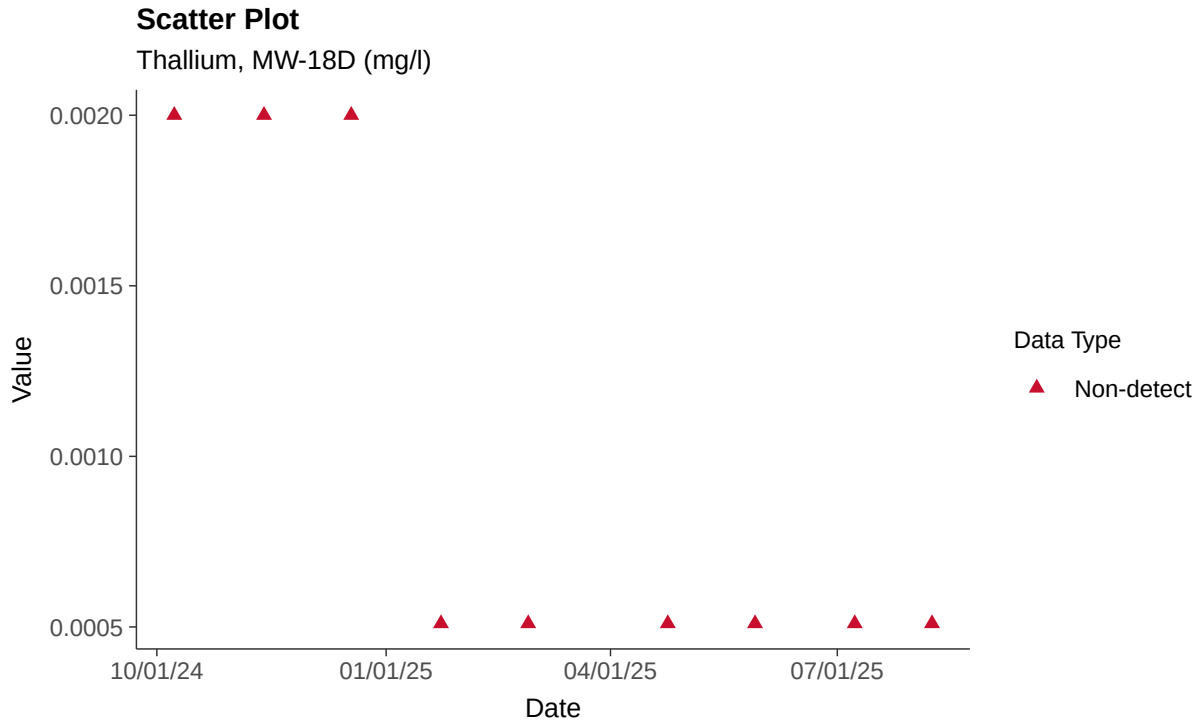
Selenium, MW-18D (mg/l)

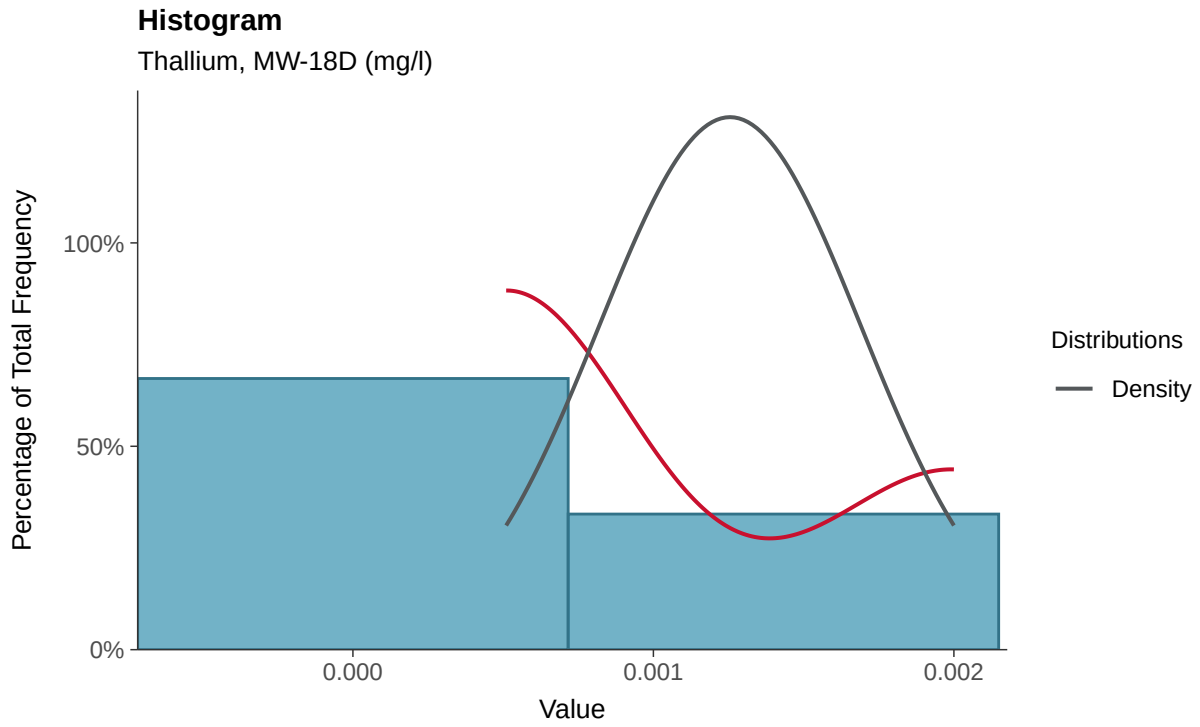



Trend Regression: Piecewise Linear-Linear
Selenium, MW-18D (mg/l)
0.006
0.004
0.002
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Thallium, MW-18D

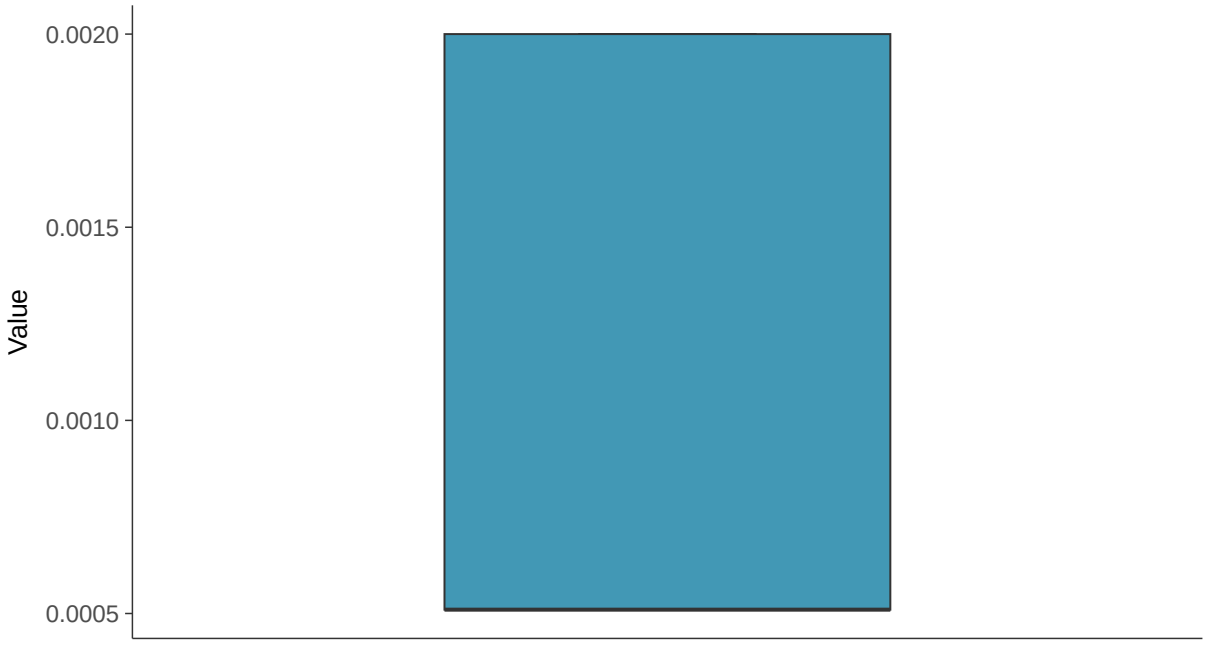
ID: 19_3_125





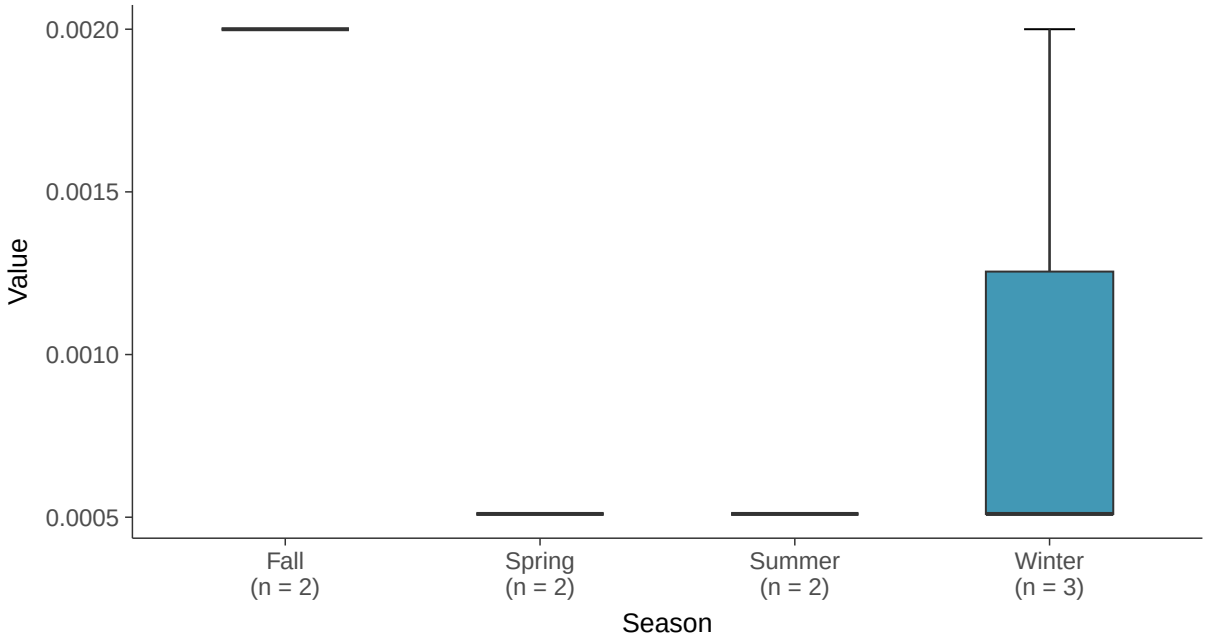
Boxplot

Thallium, MW-18D (mg/l)



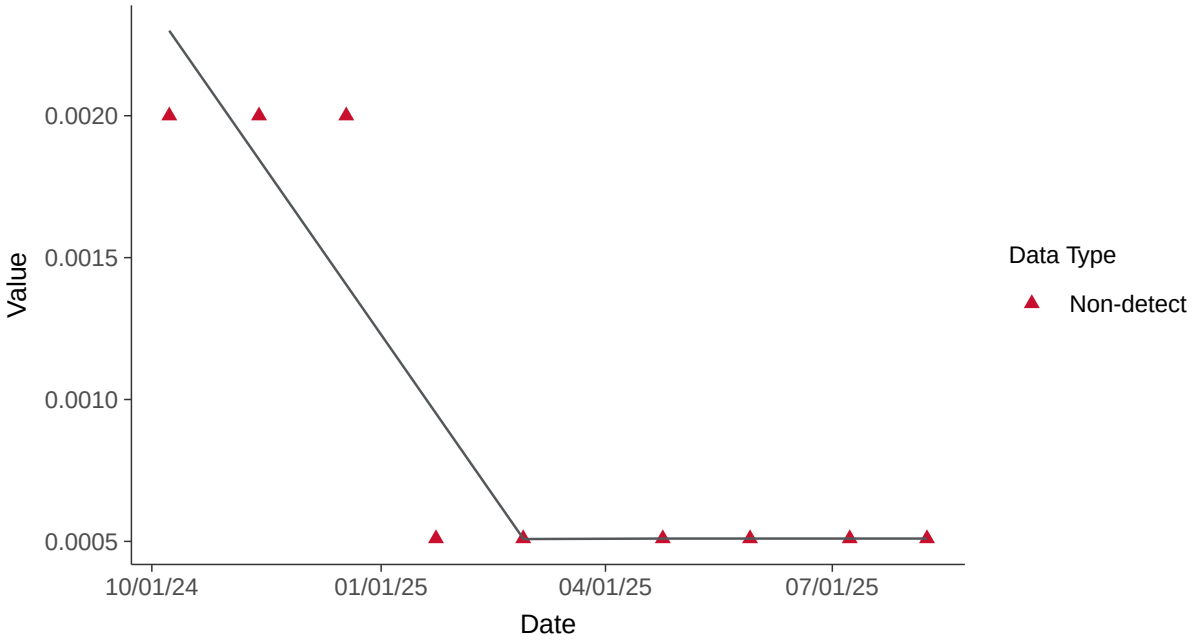
Boxplot by Season

Thallium, MW-18D (mg/l)



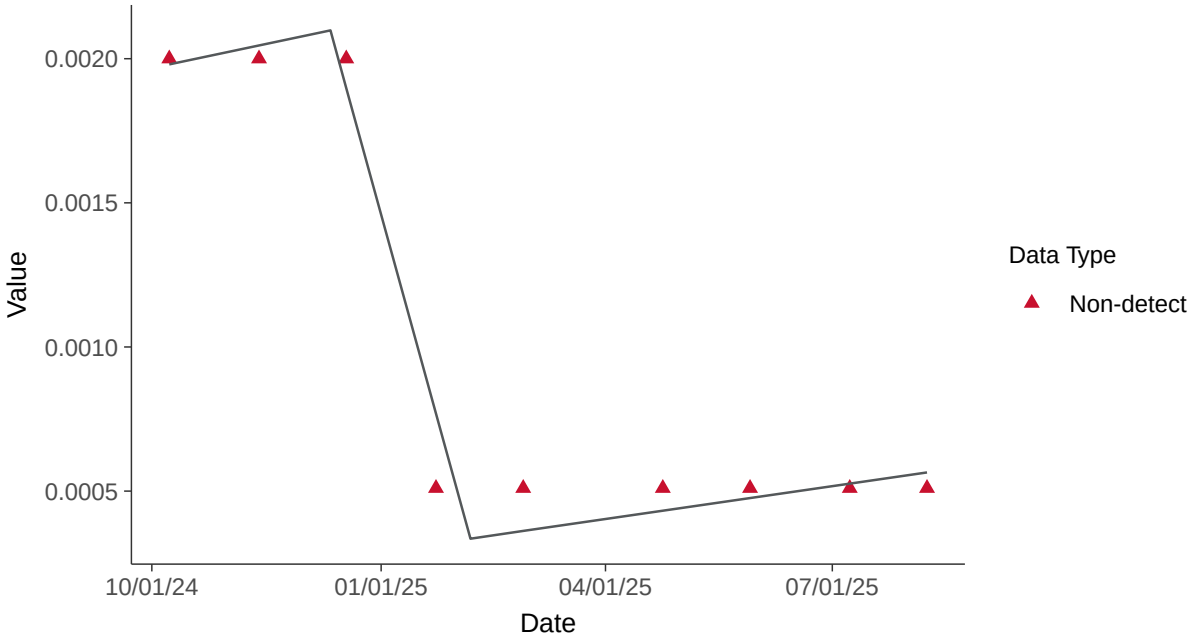
Trend Regression: Piecewise Linear-Linear

Thallium, MW-18D (mg/l)



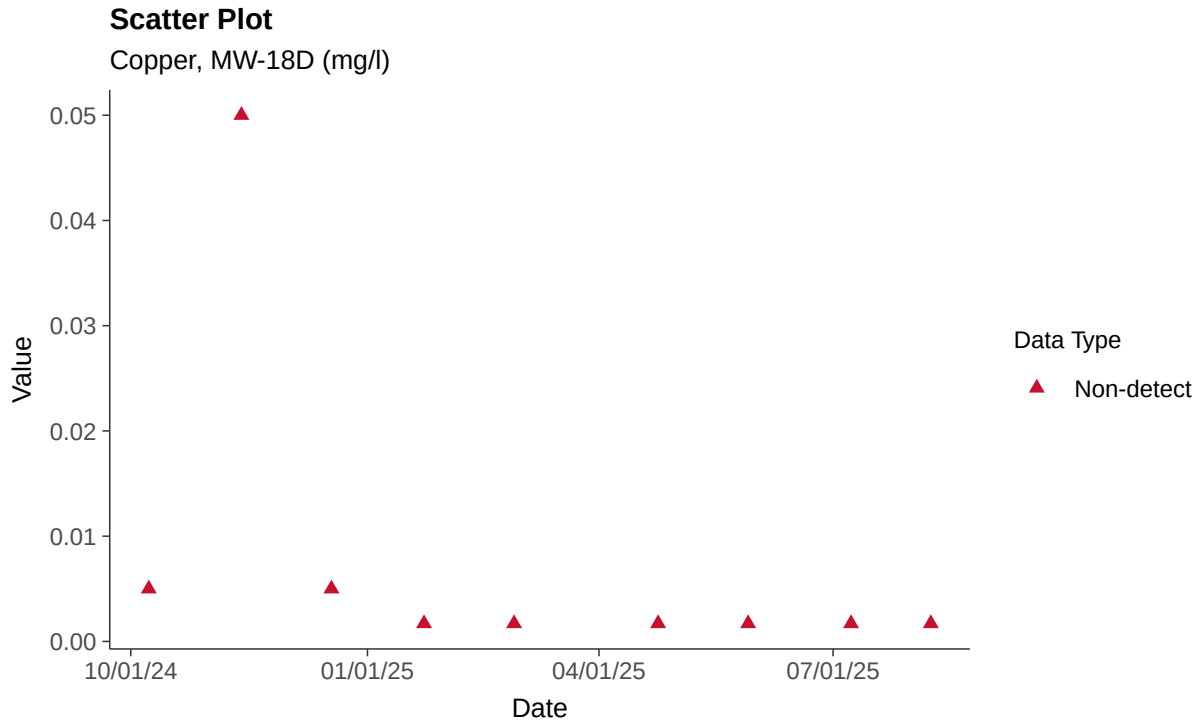
Trend Regression: Piecewise Linear-Linear-Linear

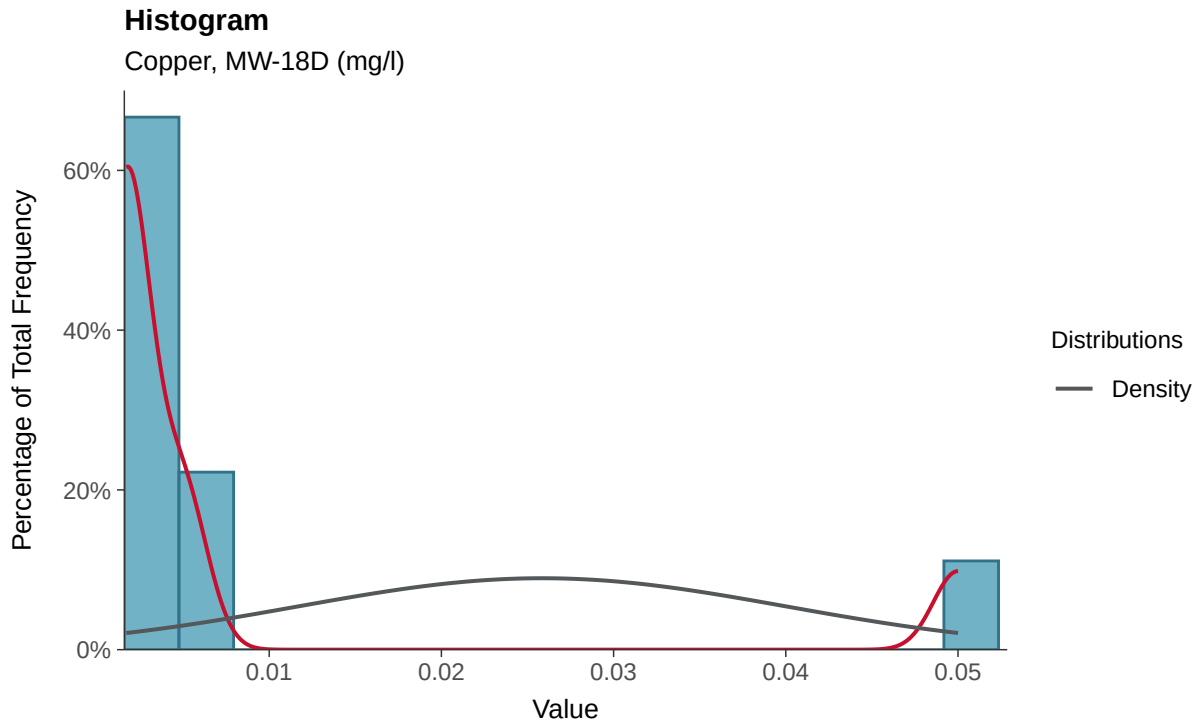
Thallium, MW-18D (mg/l)



Part 115: Copper, MW-18D

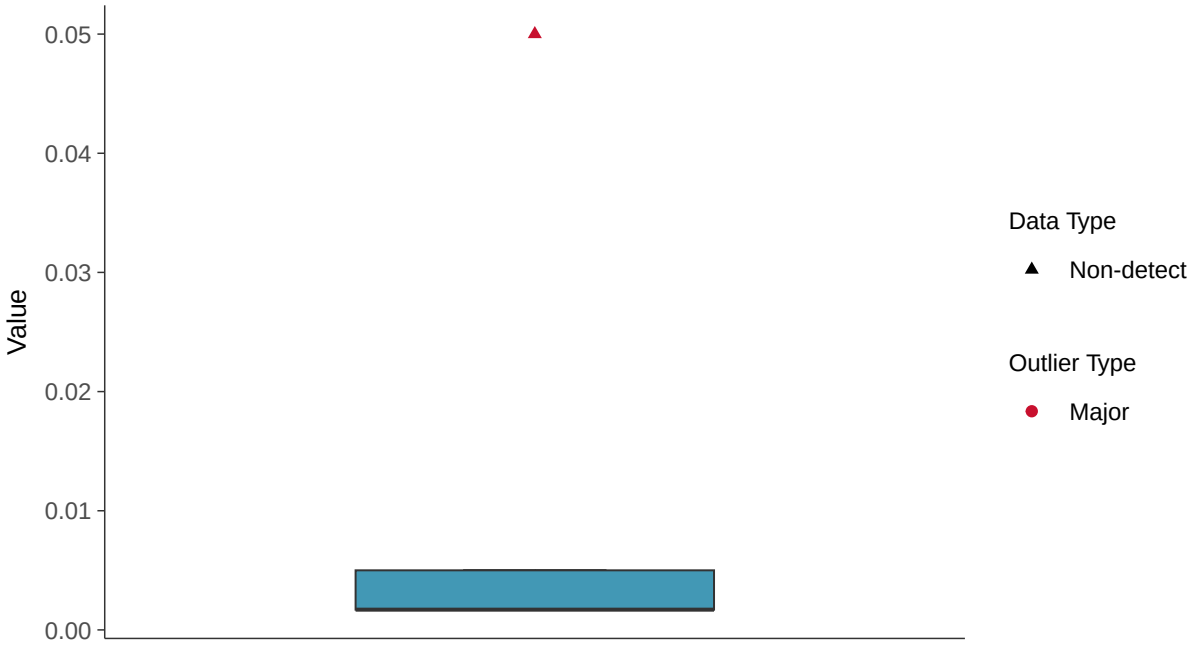
ID: 19_5_111





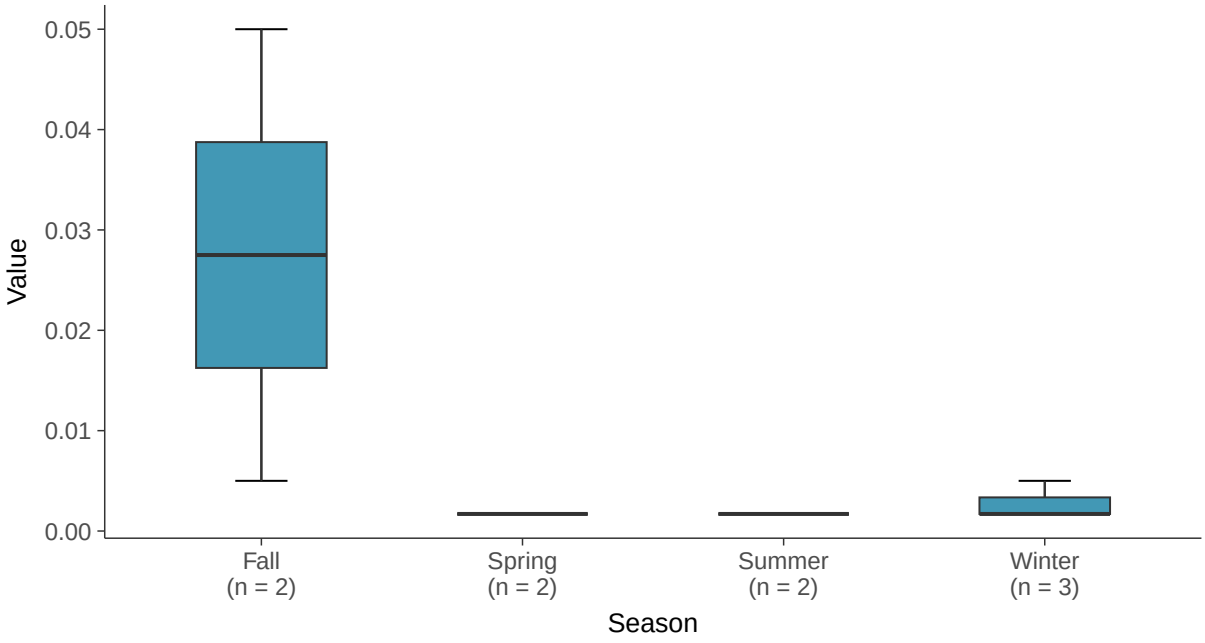
Boxplot

Copper, MW-18D (mg/l)



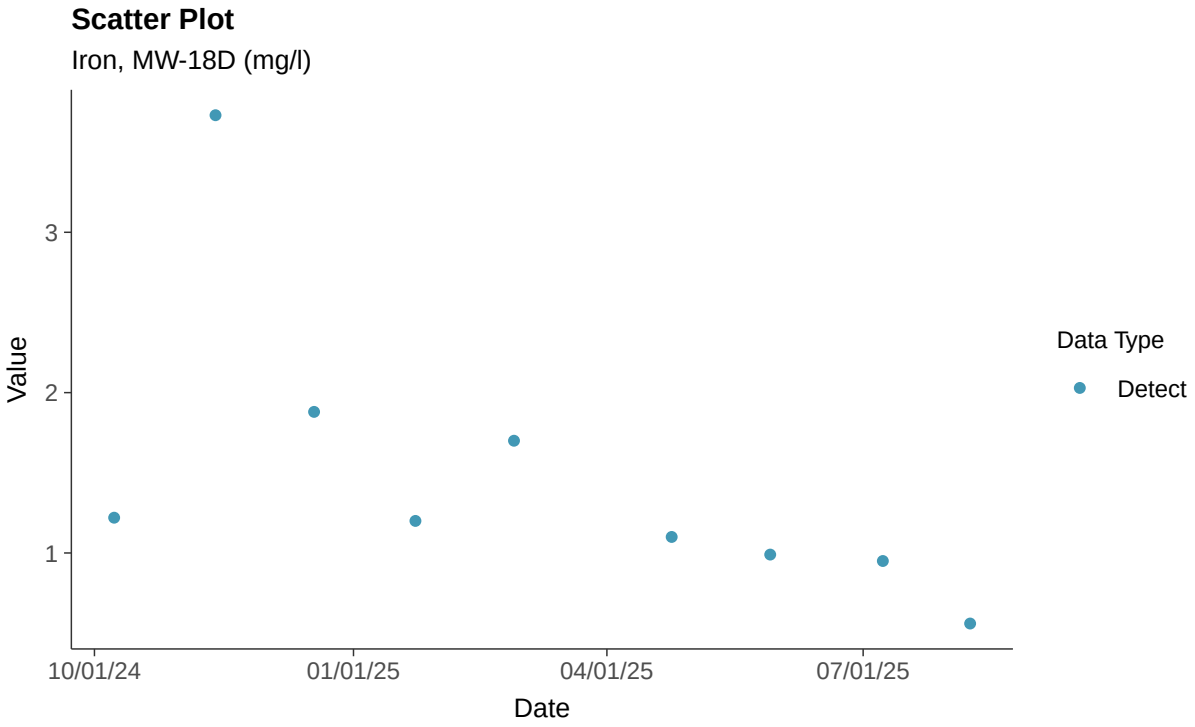
Boxplot by Season

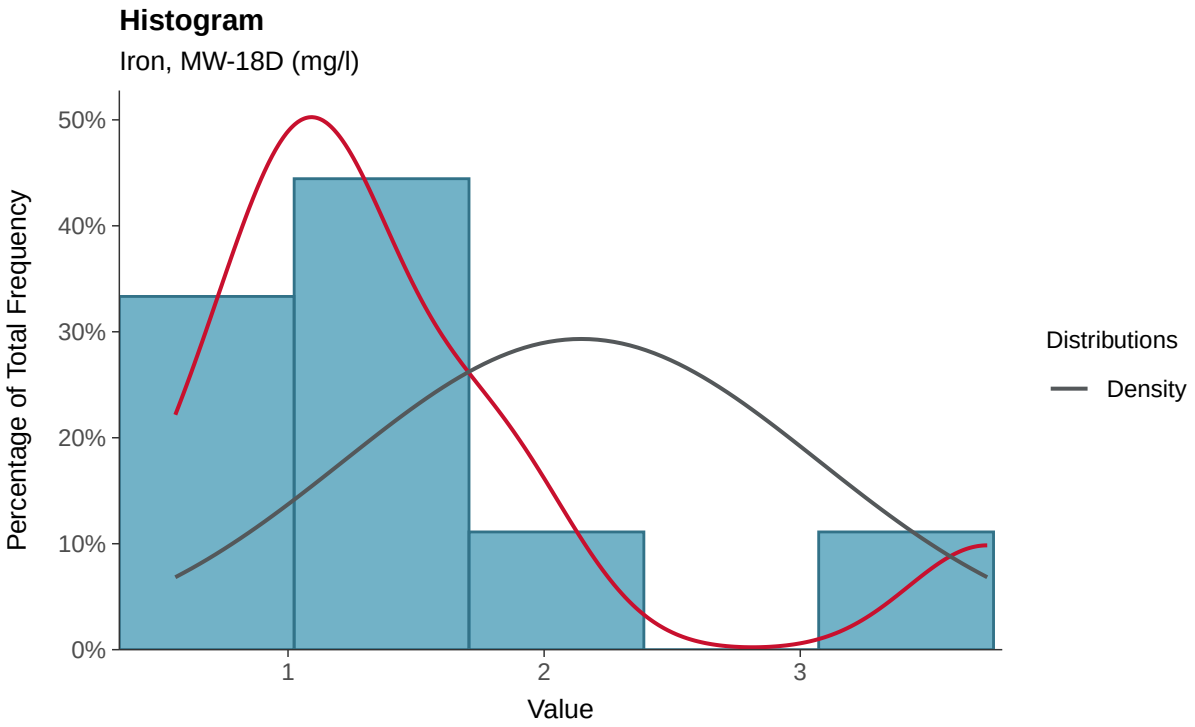
Copper, MW-18D (mg/l)



Part 115: Iron, MW-18D

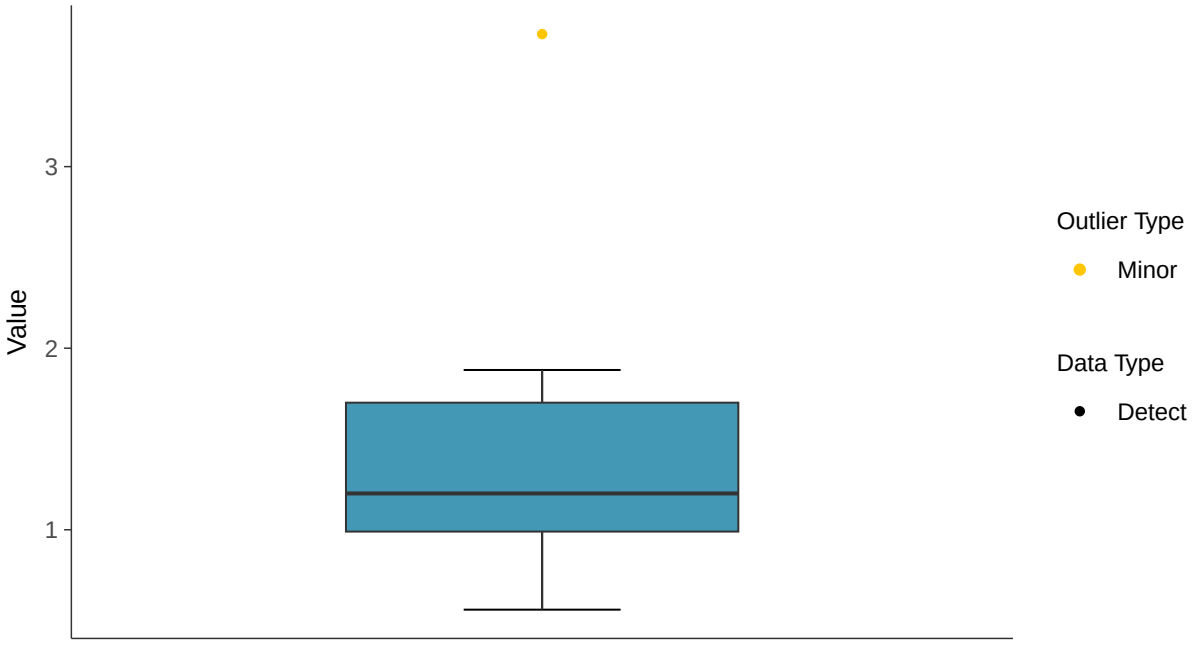
ID: 19_5_114





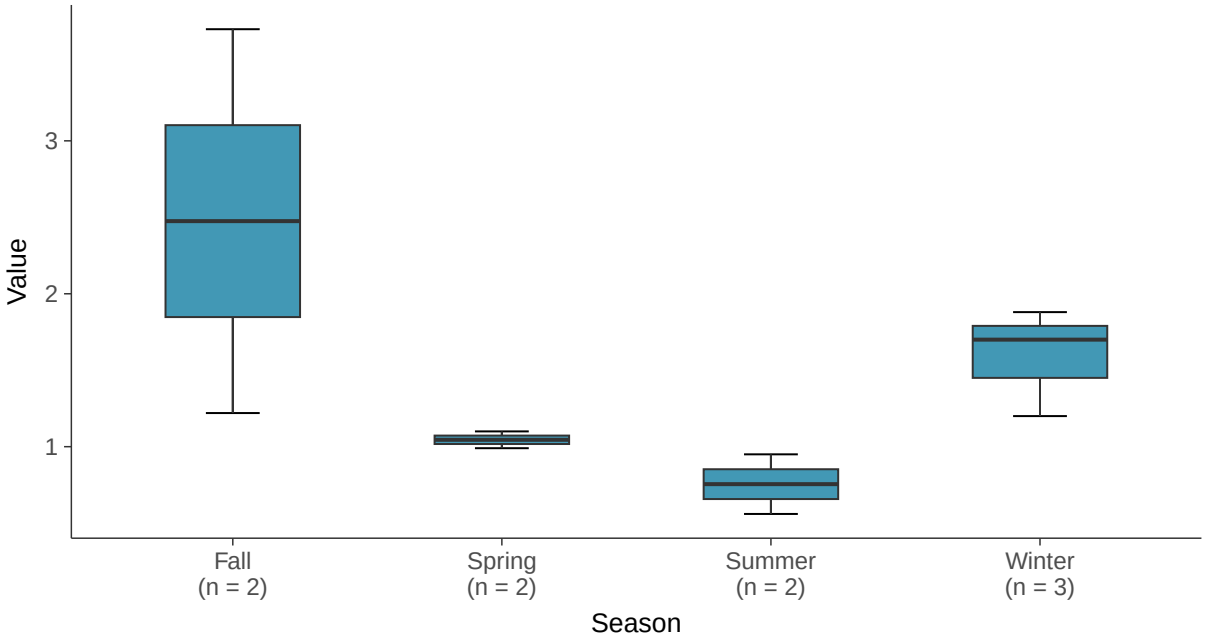
Boxplot

Iron, MW-18D (mg/l)



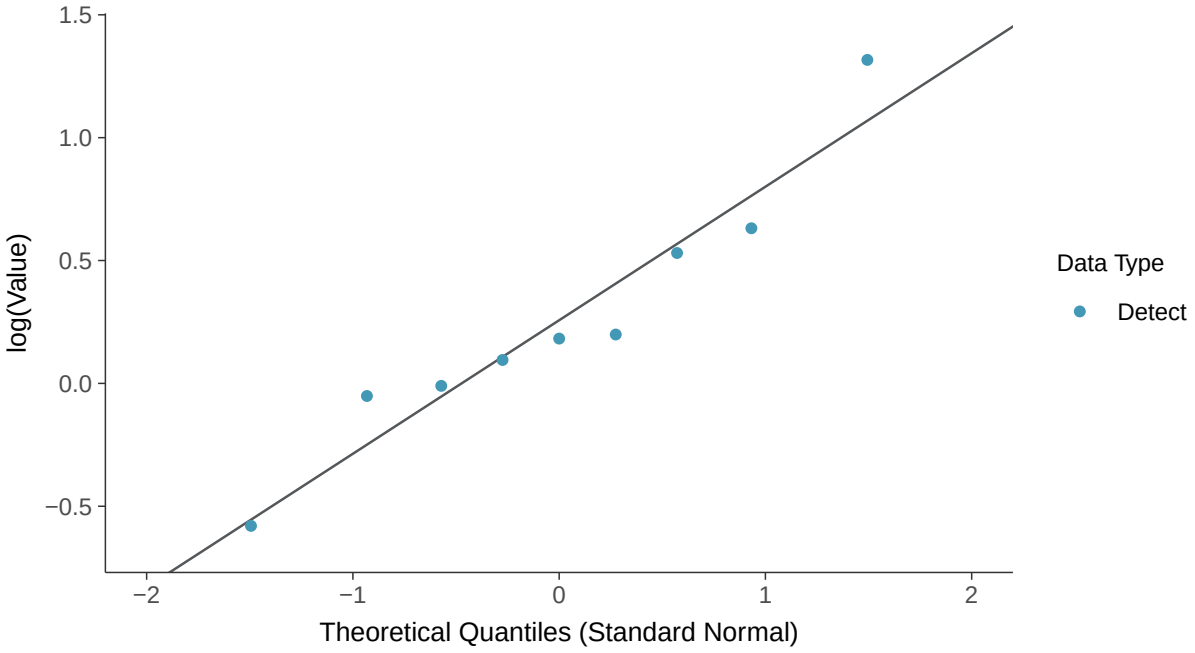
Boxplot by Season

Iron, MW-18D (mg/l)



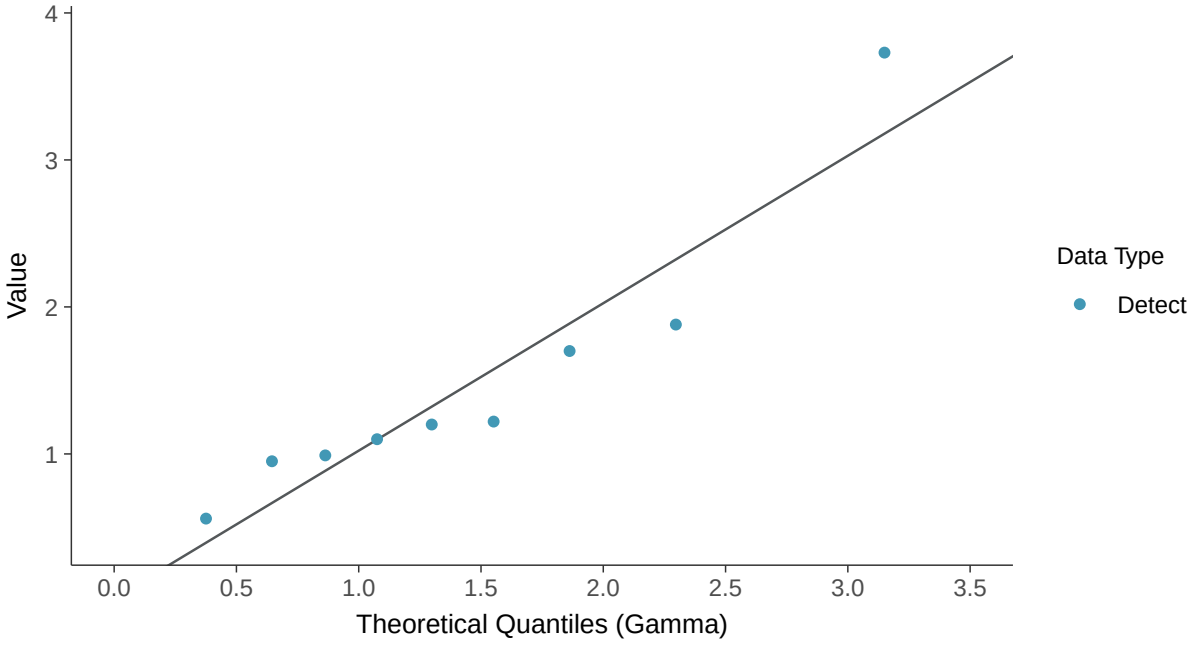
Lognormal Q-Q plot

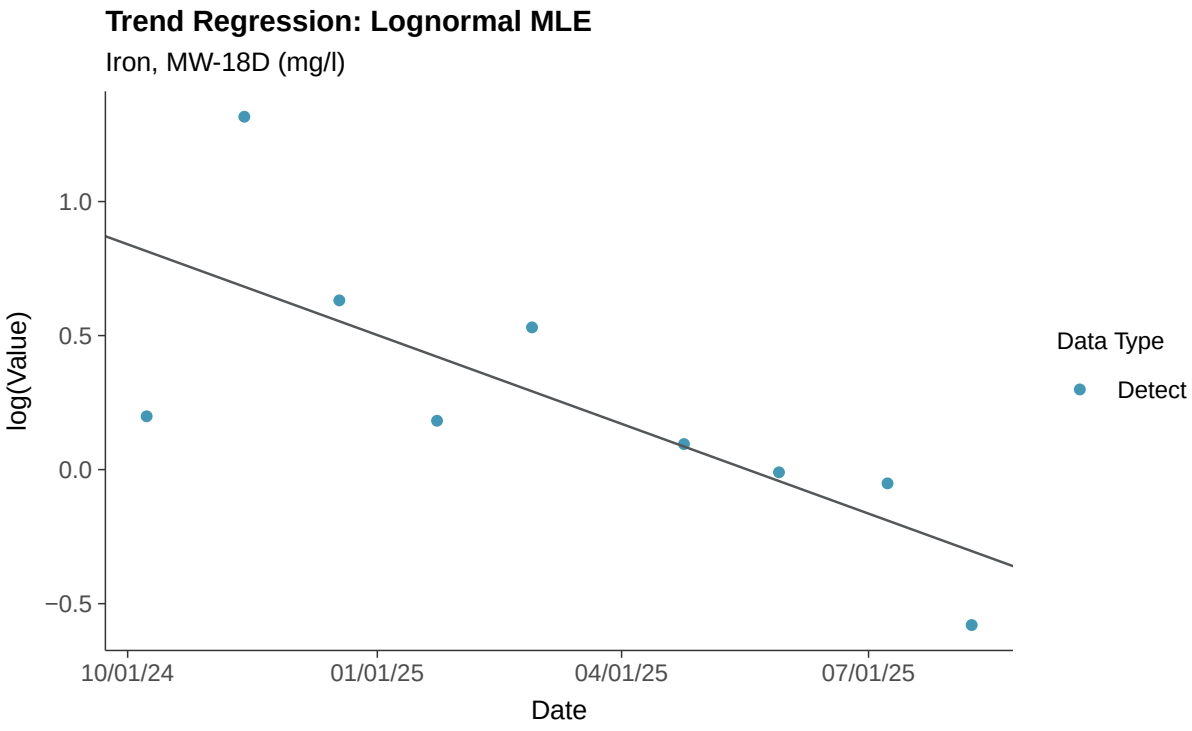
Iron, MW-18D (mg/l)



Gamma Q-Q plot

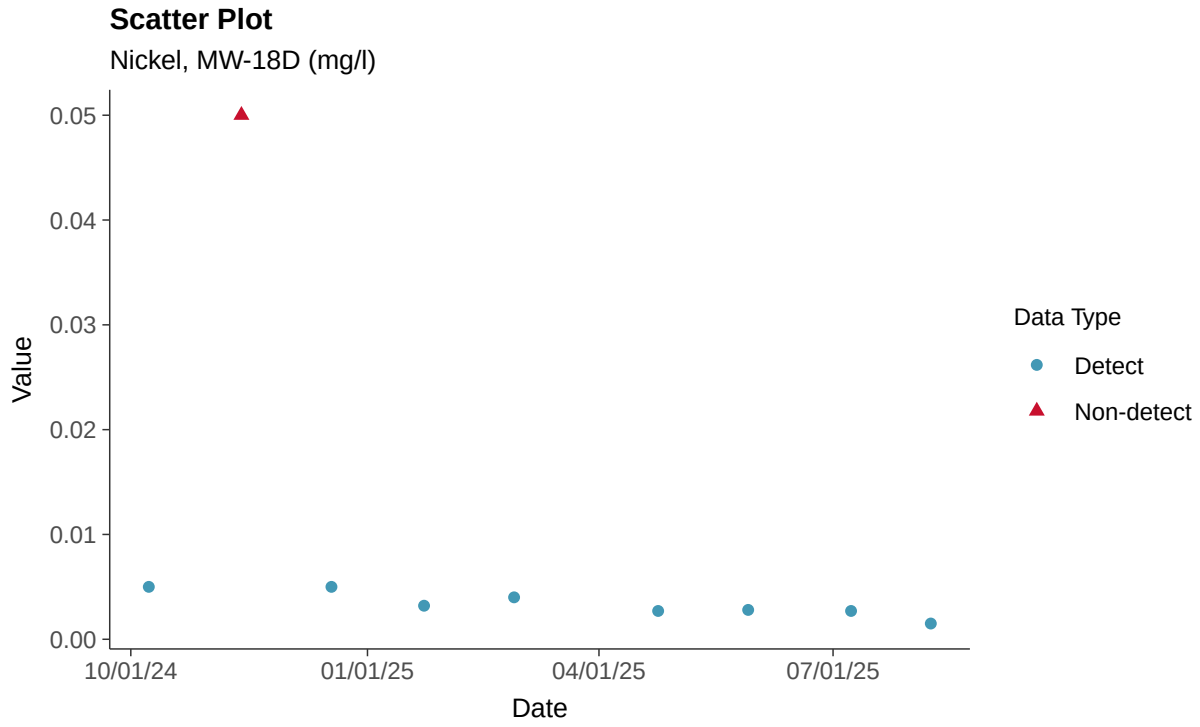
Iron, MW-18D (mg/l)

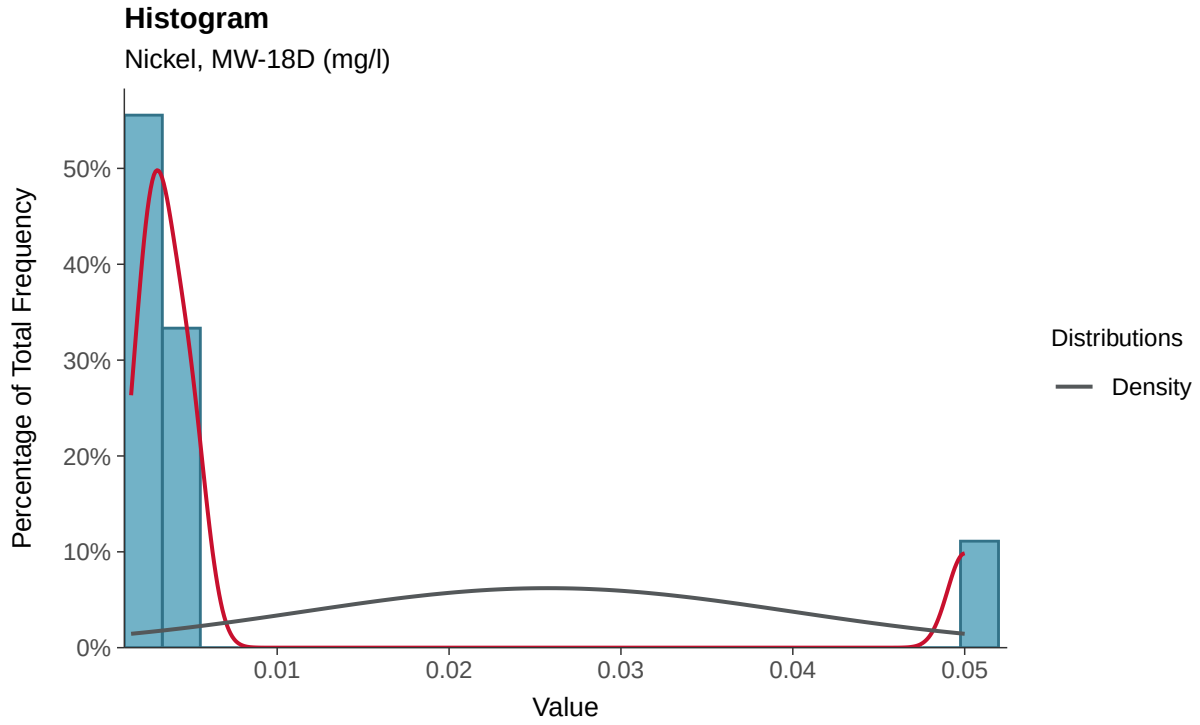



Trend Regression: Lognormal MLE
Iron, MW-18D (mg/l)
log(Value)
1.0
0.5
0.0
−0.5
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect

Part 115: Nickel, MW-18D

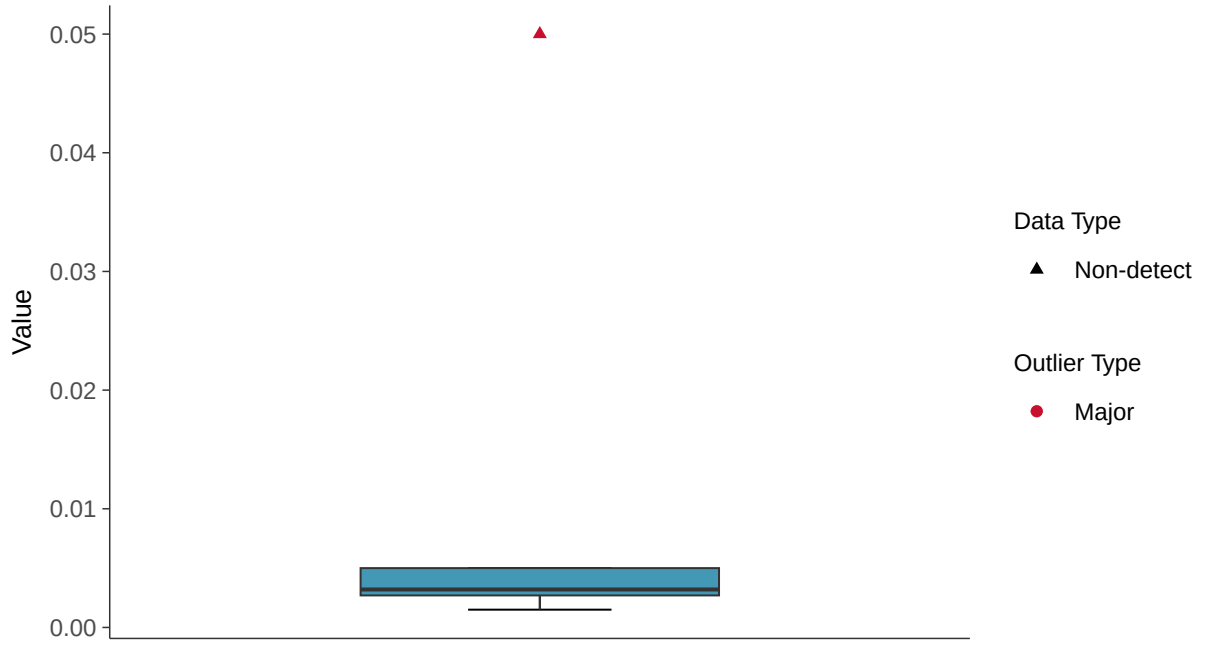
ID: 19_5_119





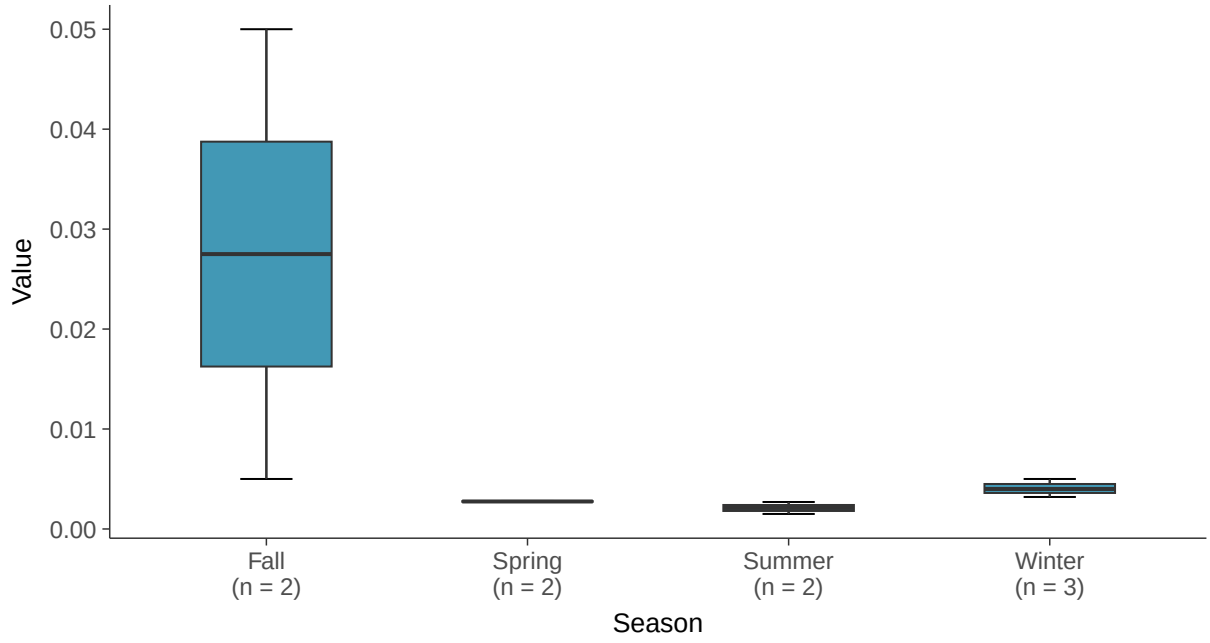
Boxplot

Nickel, MW-18D (mg/l)



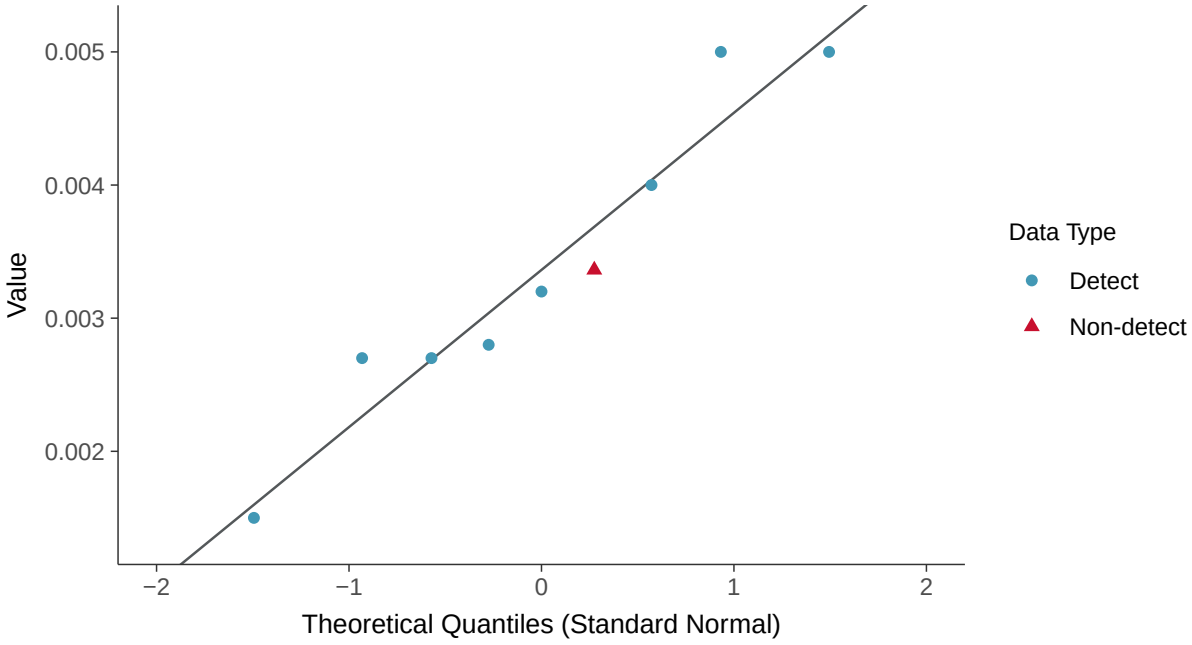
Boxplot by Season

Nickel, MW-18D (mg/l)



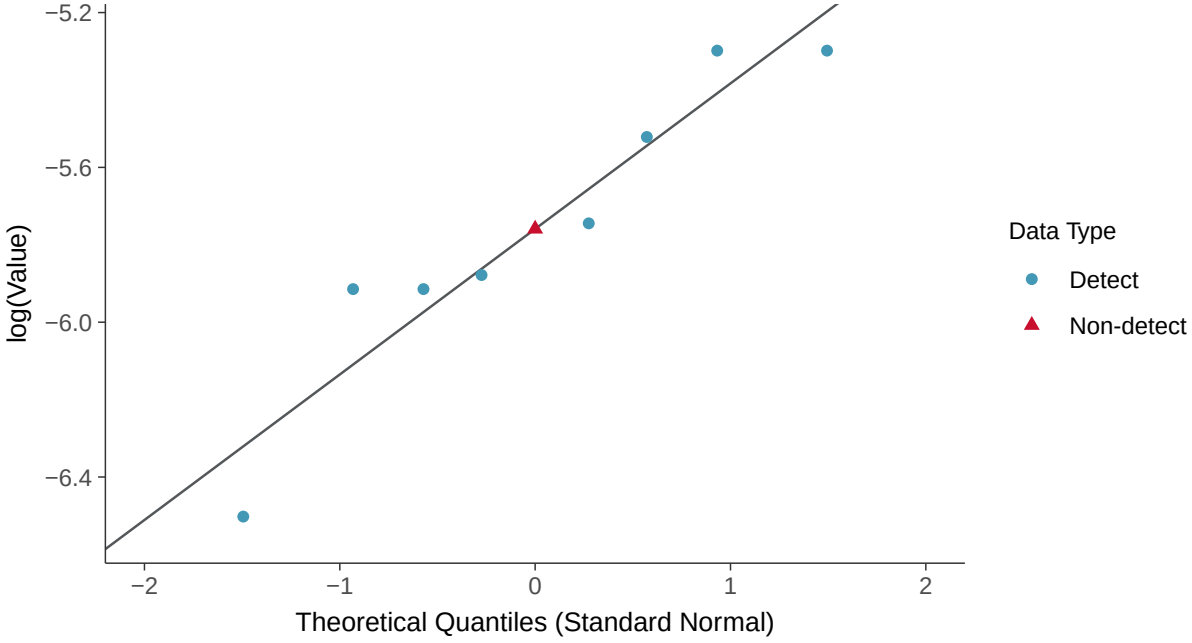
Normal Q-Q plot using ROS Imputed Estimates

Nickel, MW-18D (mg/l)



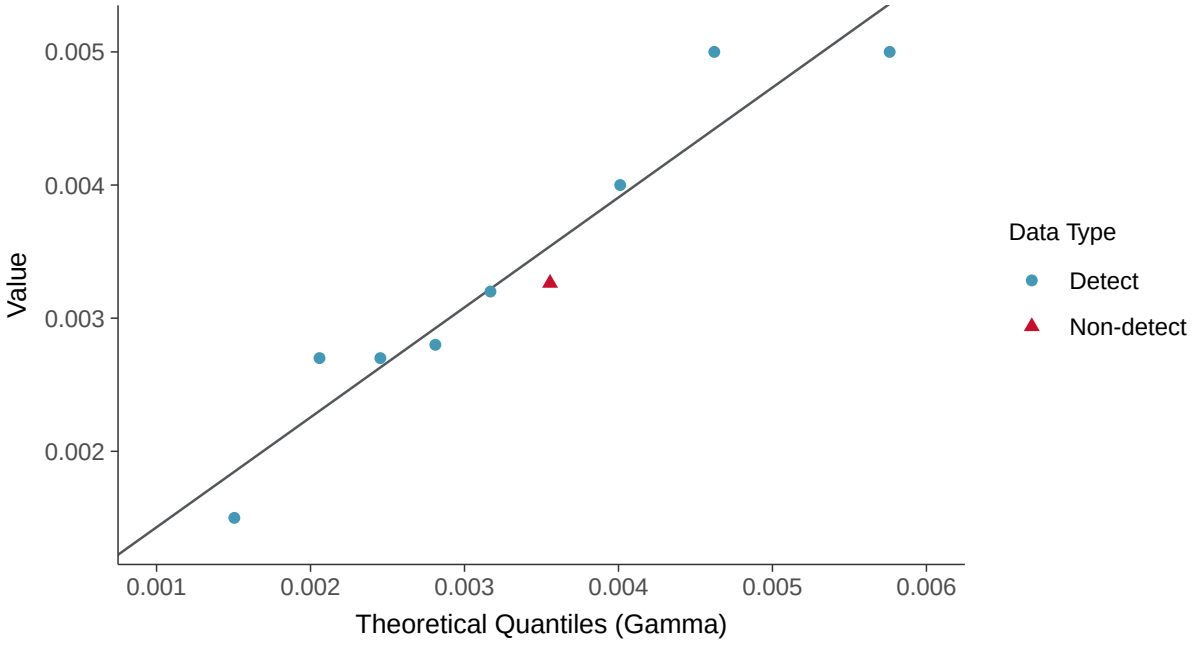
Lognormal Q-Q plot using ROS Imputed Estimates

Nickel, MW-18D (mg/l)



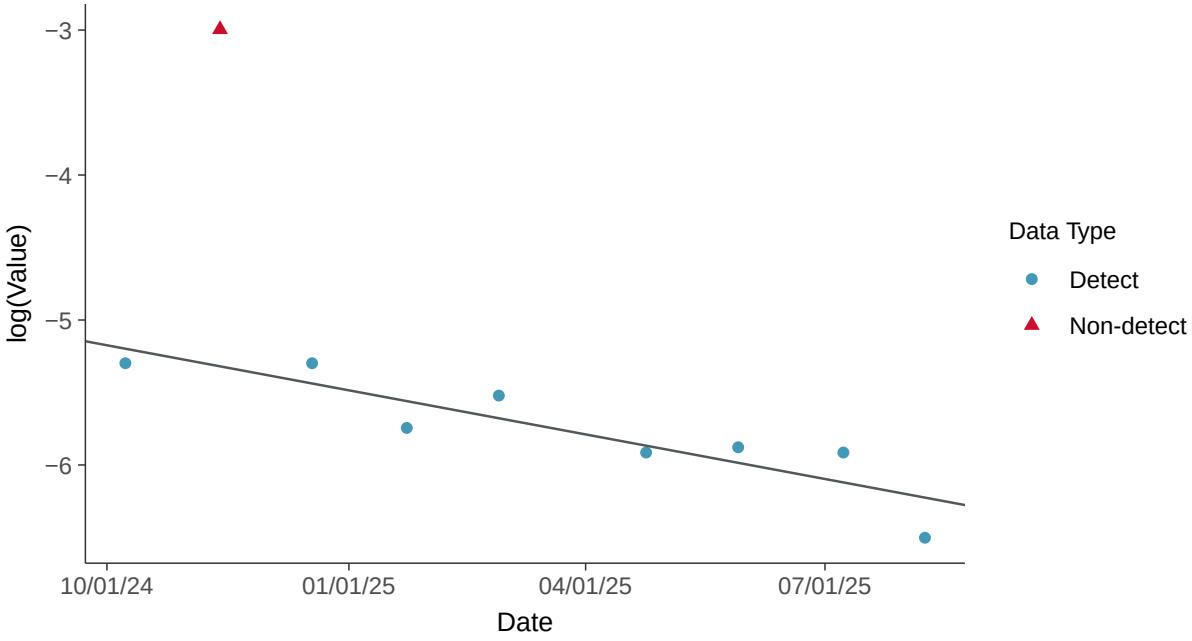
Gamma Q-Q plot using ROS Imputed Estimates

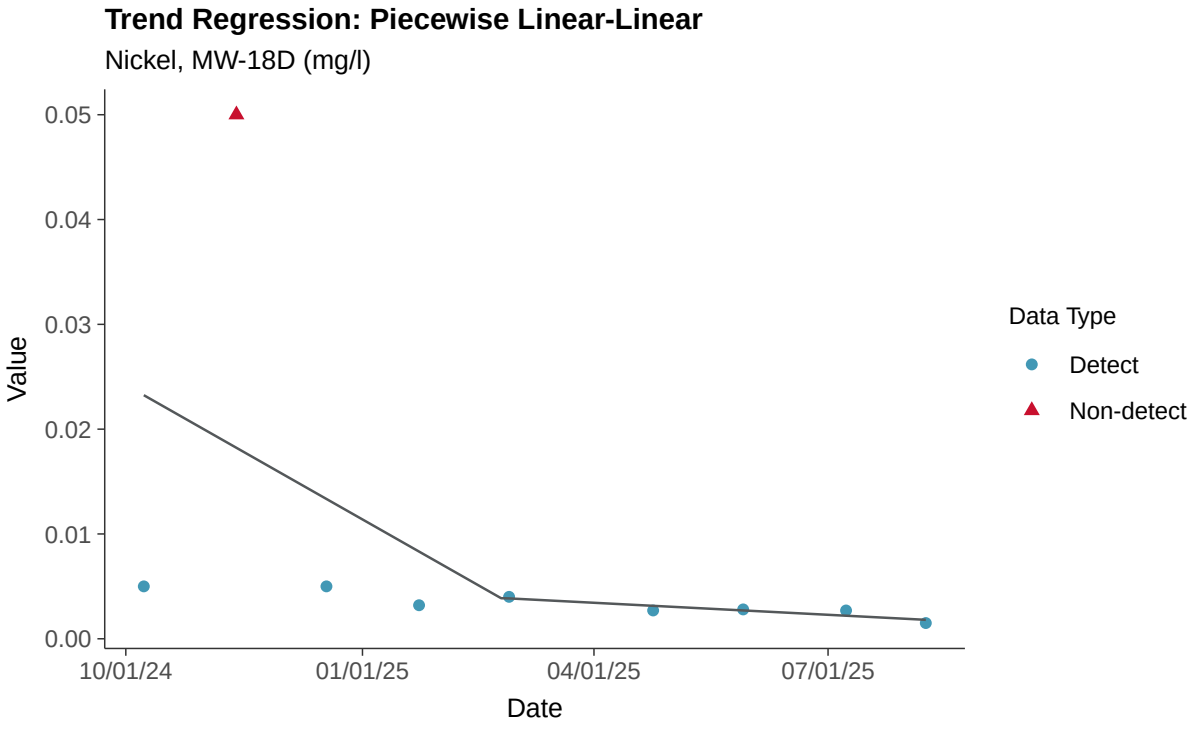
Nickel, MW-18D (mg/l)



Trend Regression: Lognormal MLE

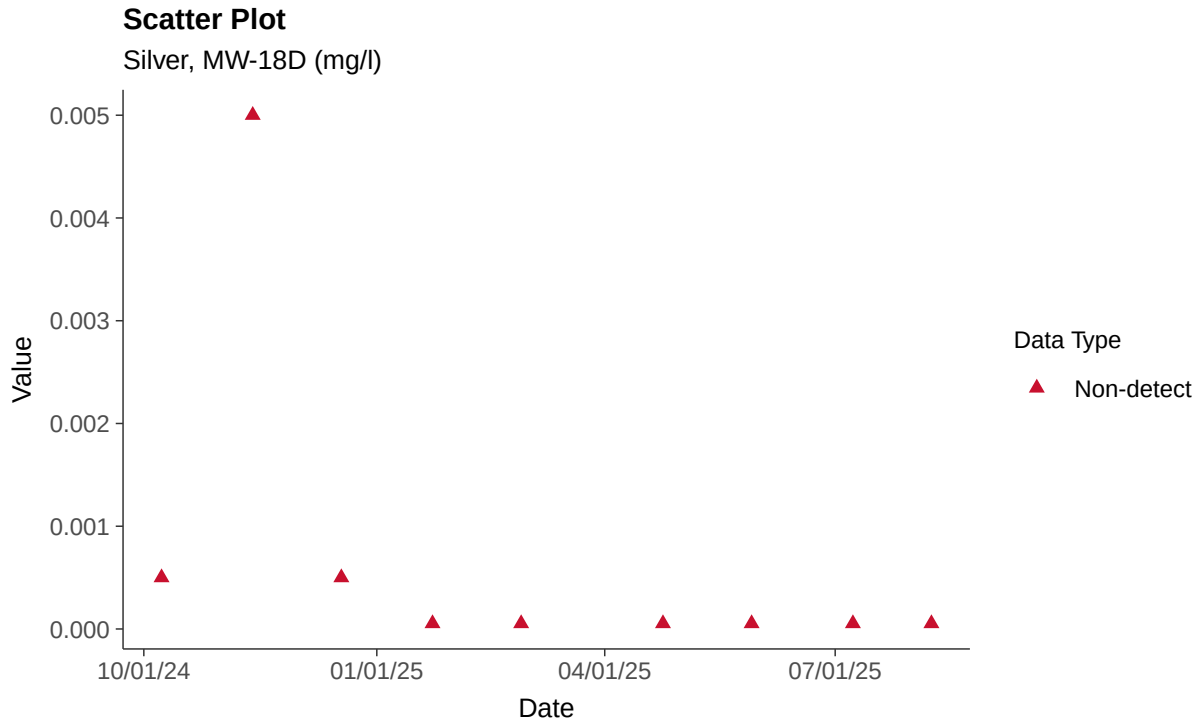
Nickel, MW-18D (mg/l)

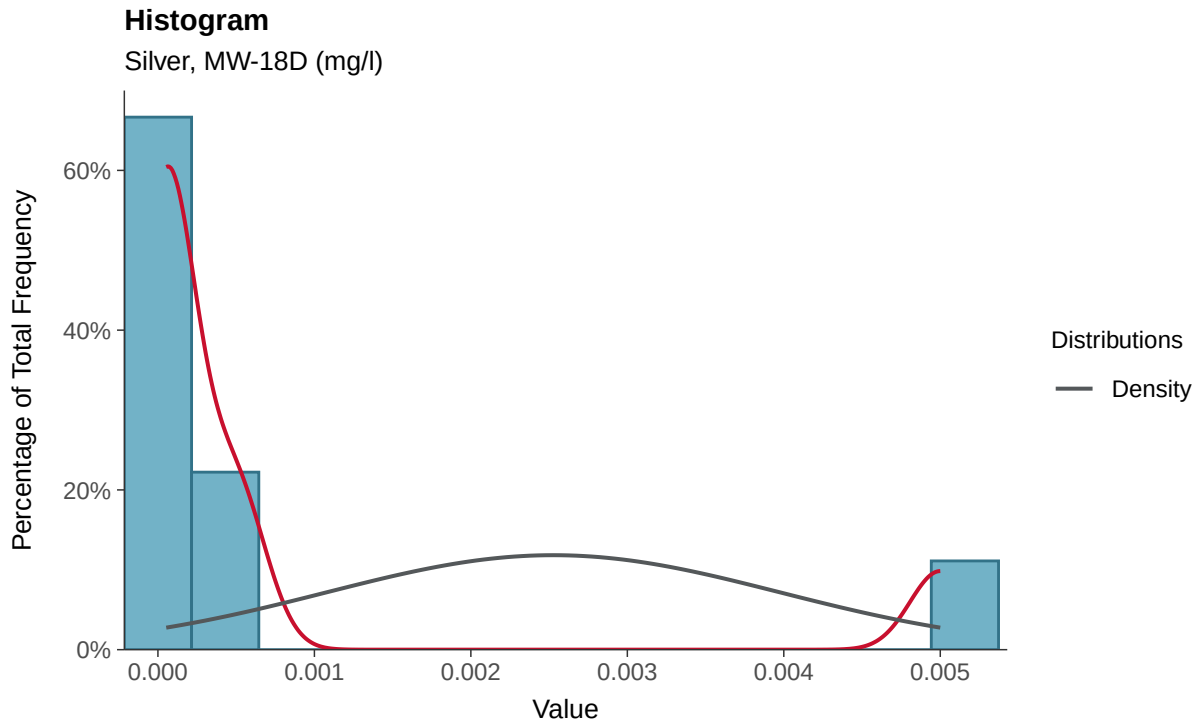



Trend Regression: Piecewise Linear-Linear
Nickel, MW-18D (mg/l)
Value
0.05
0.04
0.03
0.02
0.01
0.00
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Part 115: Silver, MW-18D

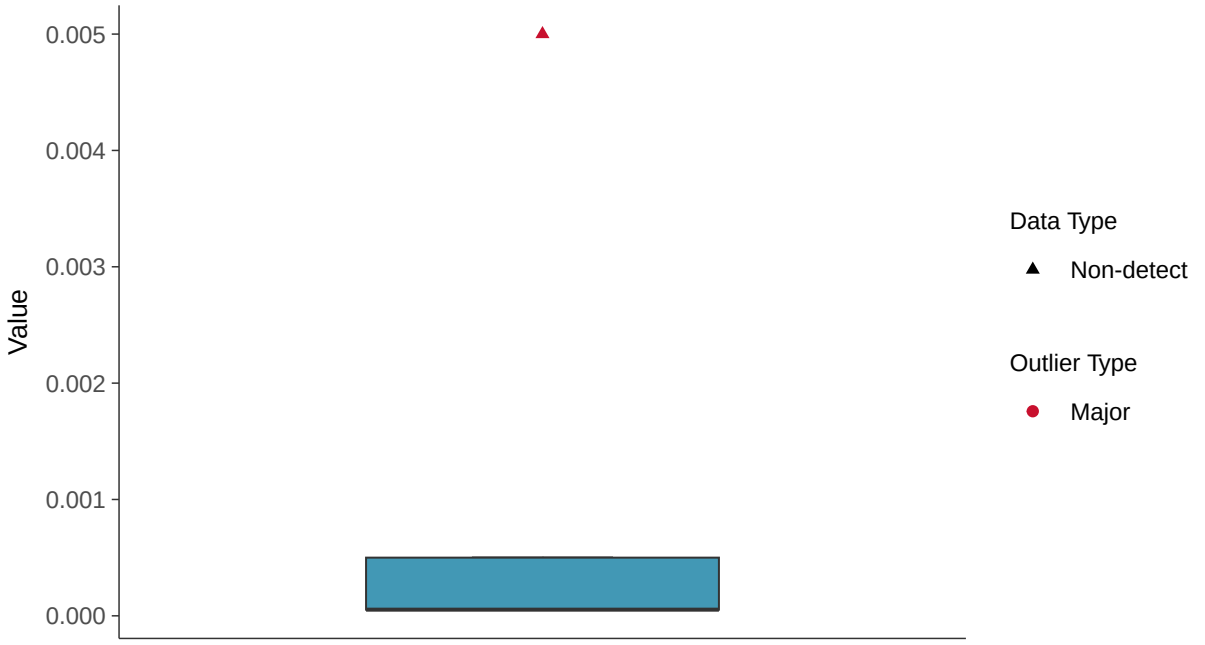
ID: 19_5_123





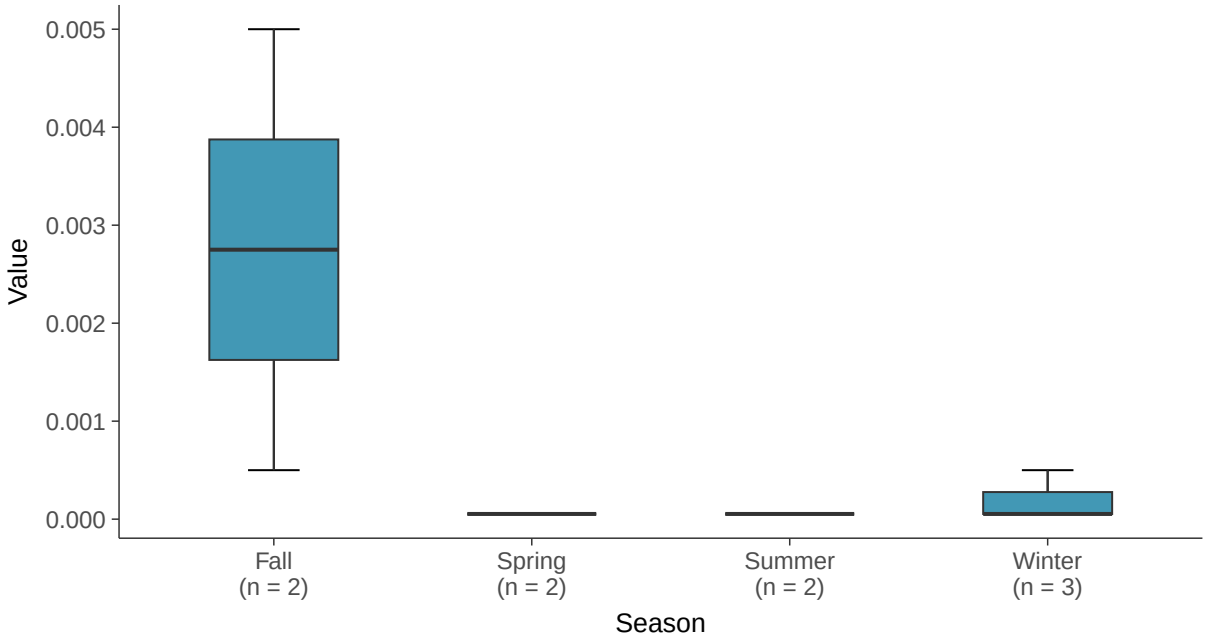
Boxplot

Silver, MW-18D (mg/l)



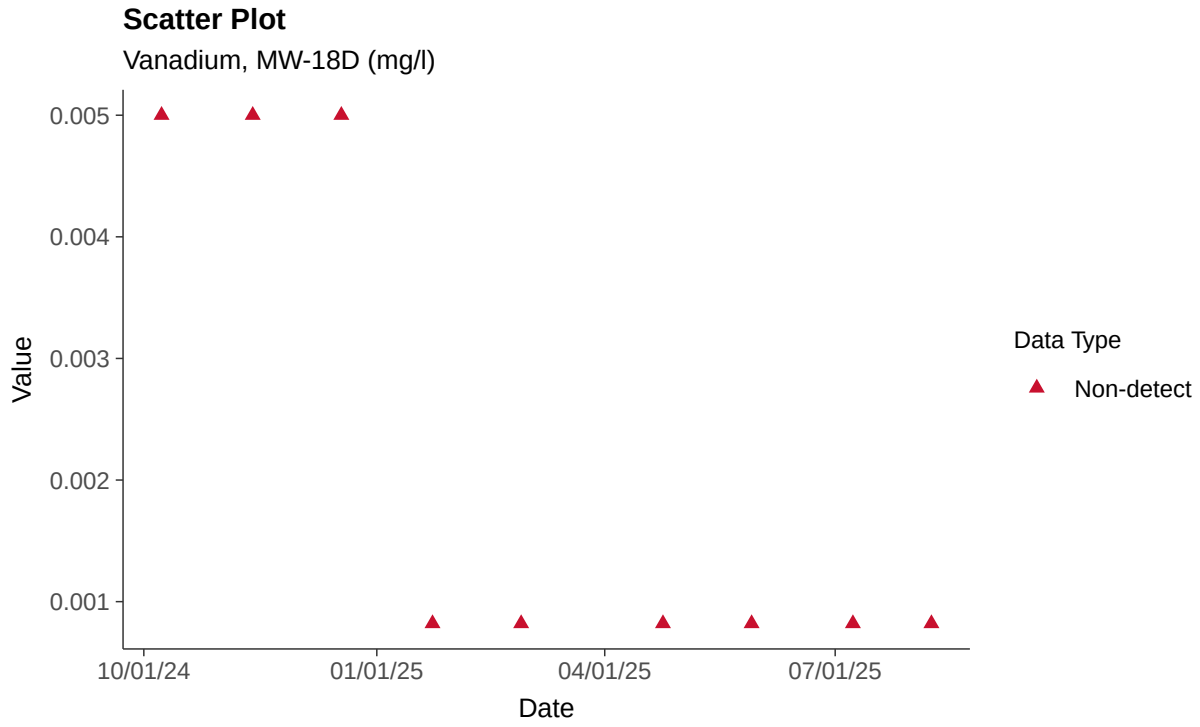
Boxplot by Season

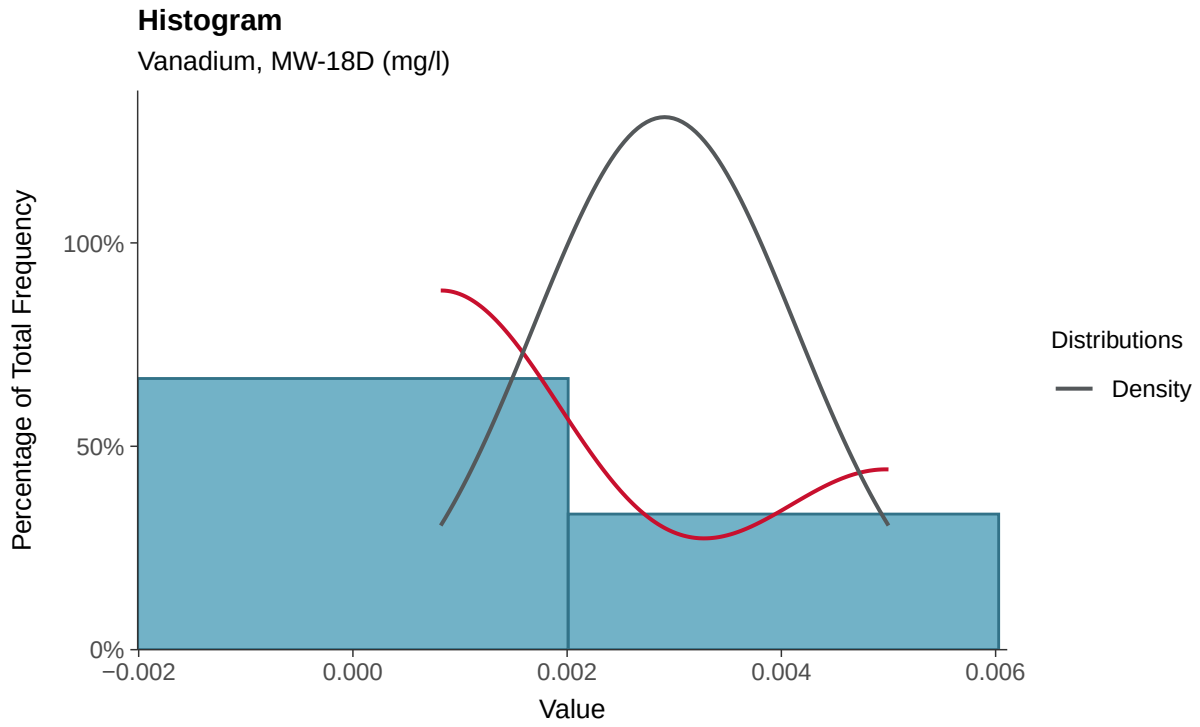
Silver, MW-18D (mg/l)



Part 115: Vanadium, MW-18D

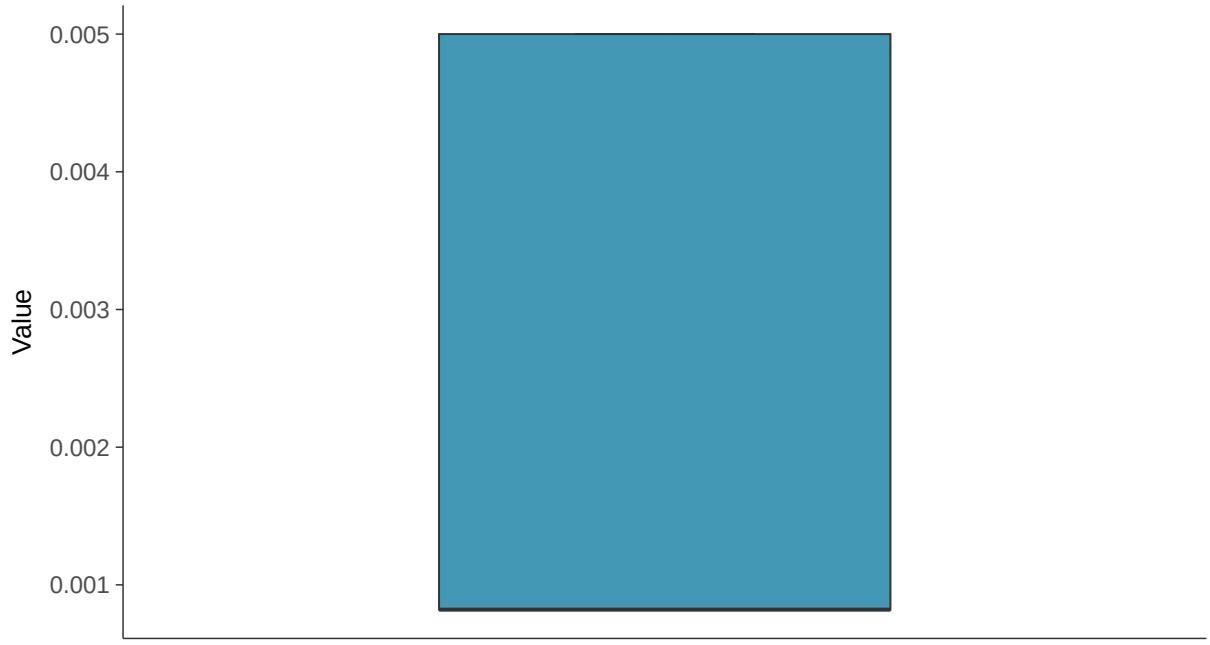
ID: 19_5_128





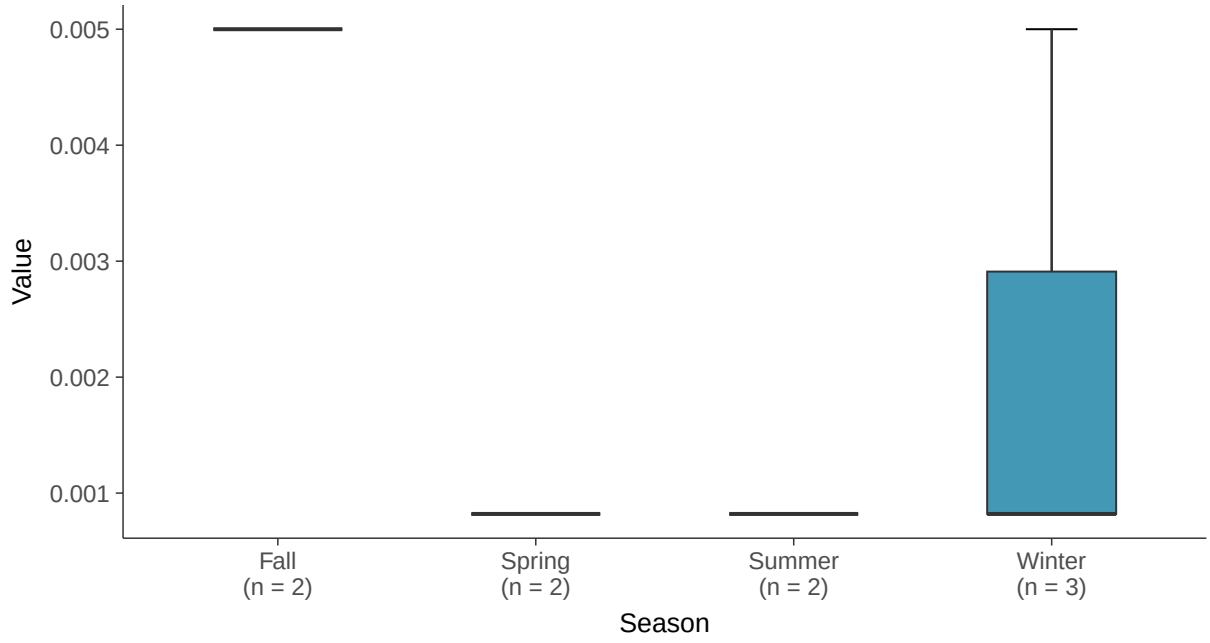
Boxplot

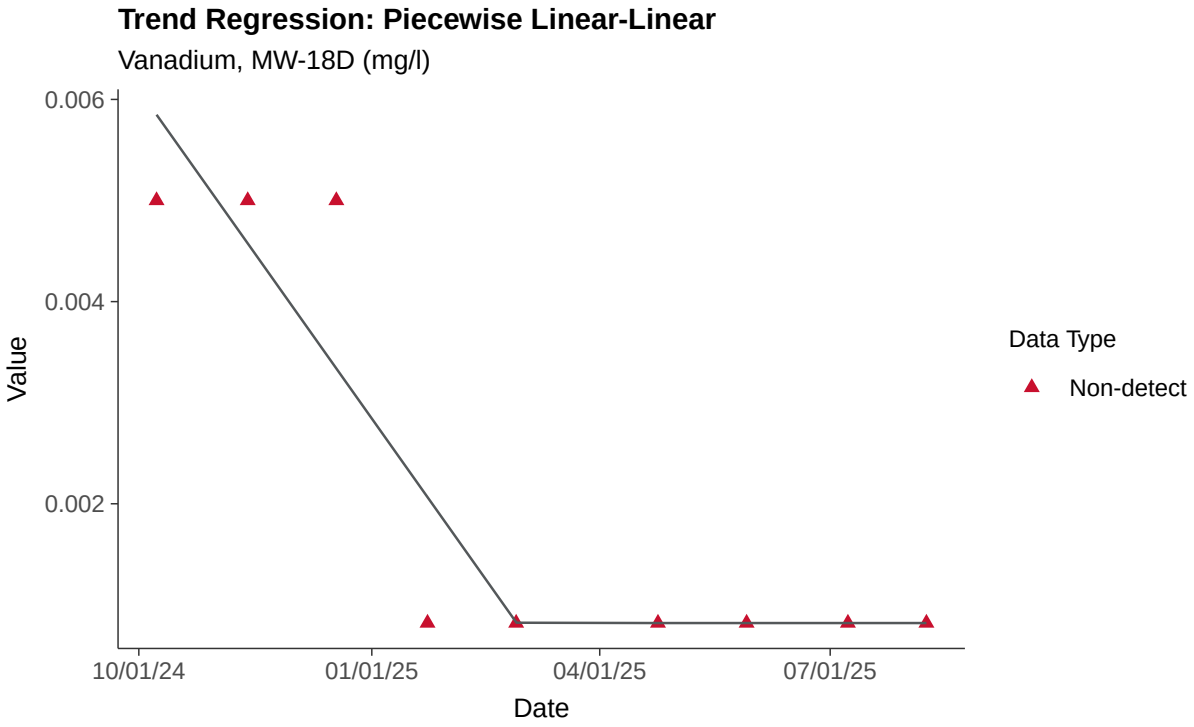
Vanadium, MW-18D (mg/l)



Boxplot by Season

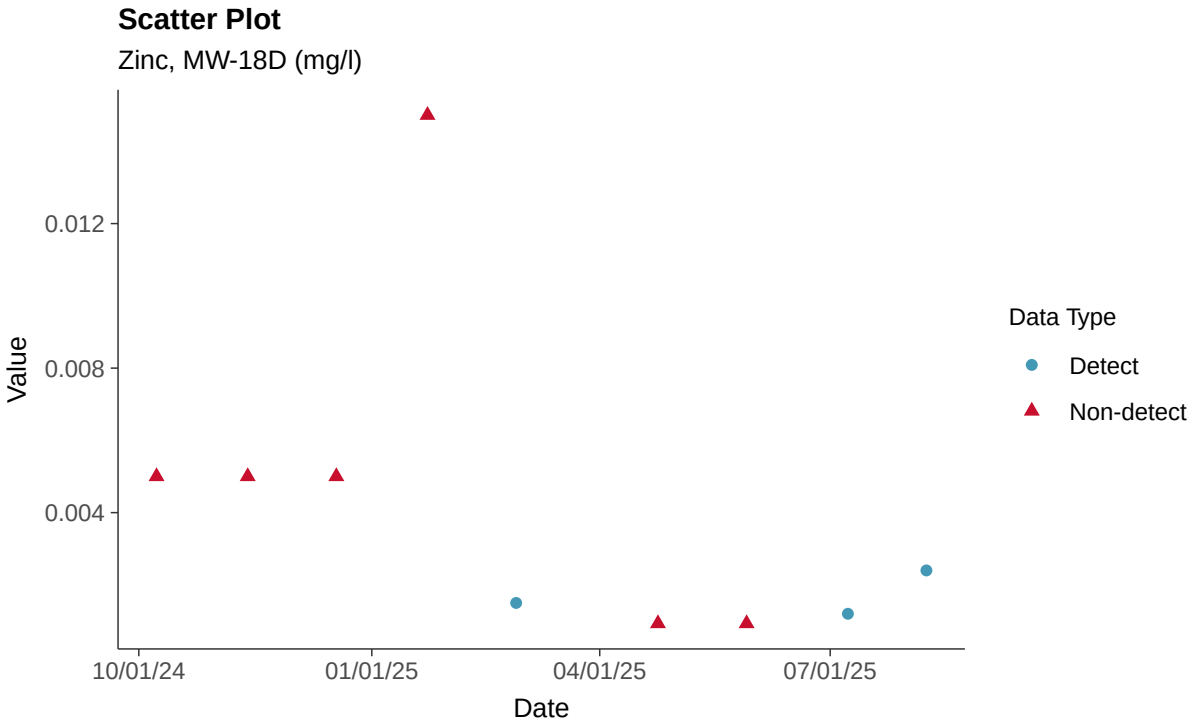
Vanadium, MW-18D (mg/l)

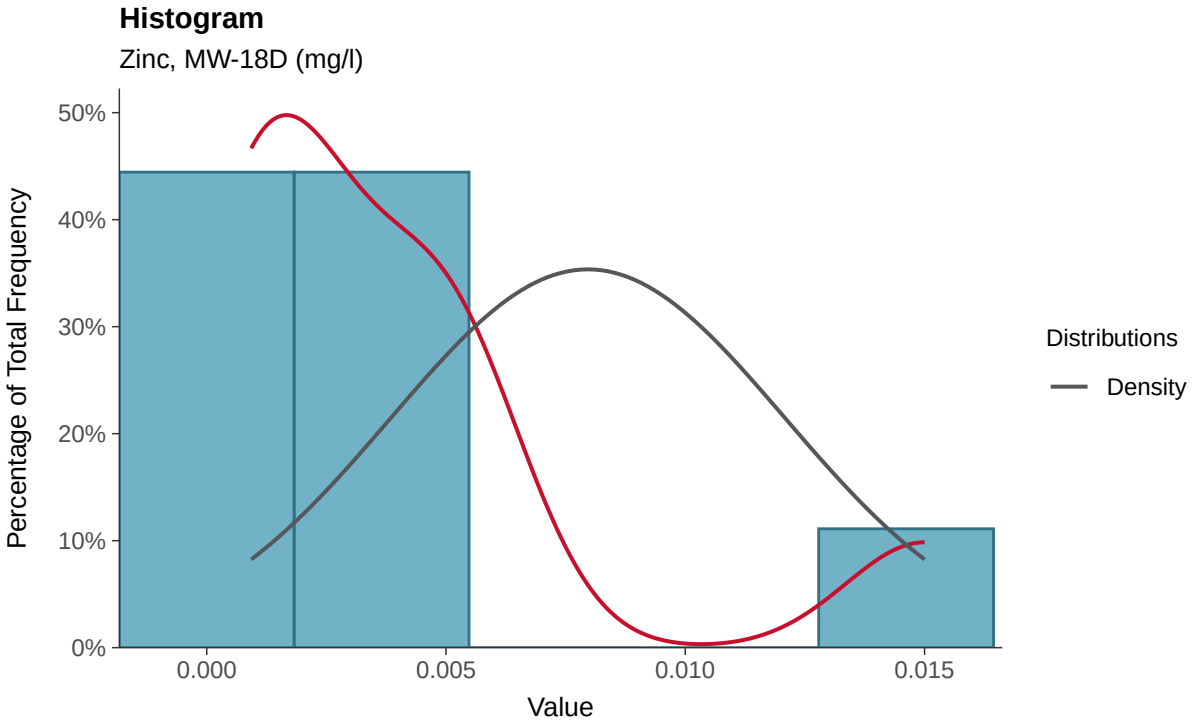



Trend Regression: Piecewise Linear-Linear
Vanadium, MW-18D (mg/l)
0.006
0.004
0.002
Value
10/01/24
01/01/25
04/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Zinc, MW-18D

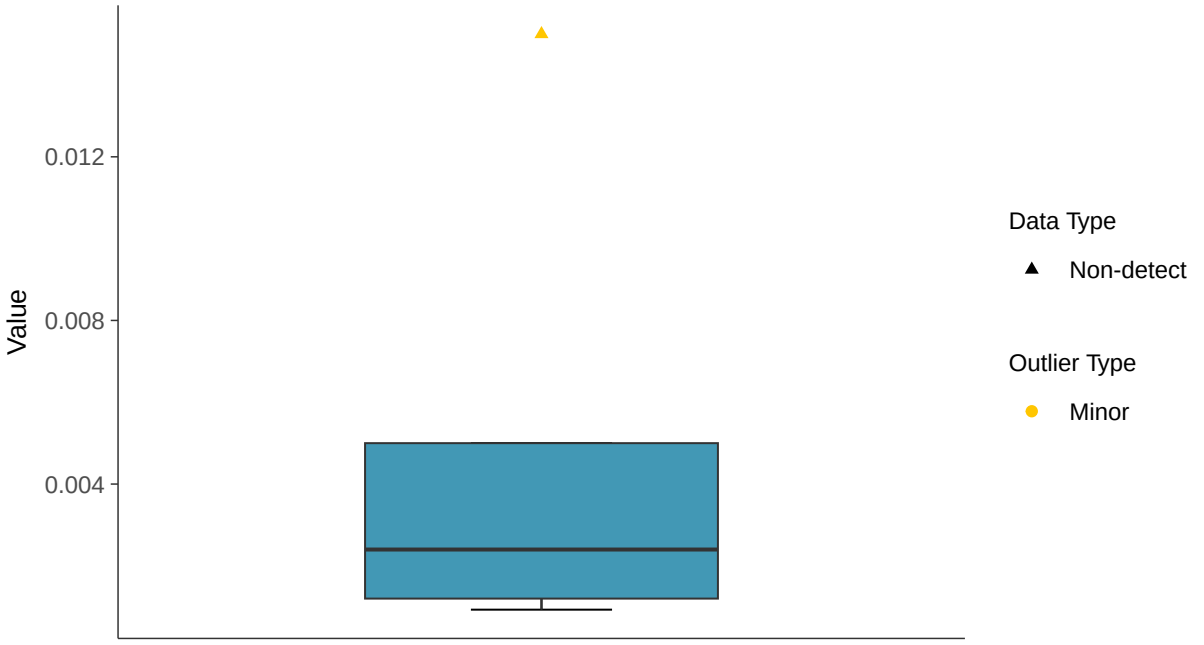
ID: 19_5_129





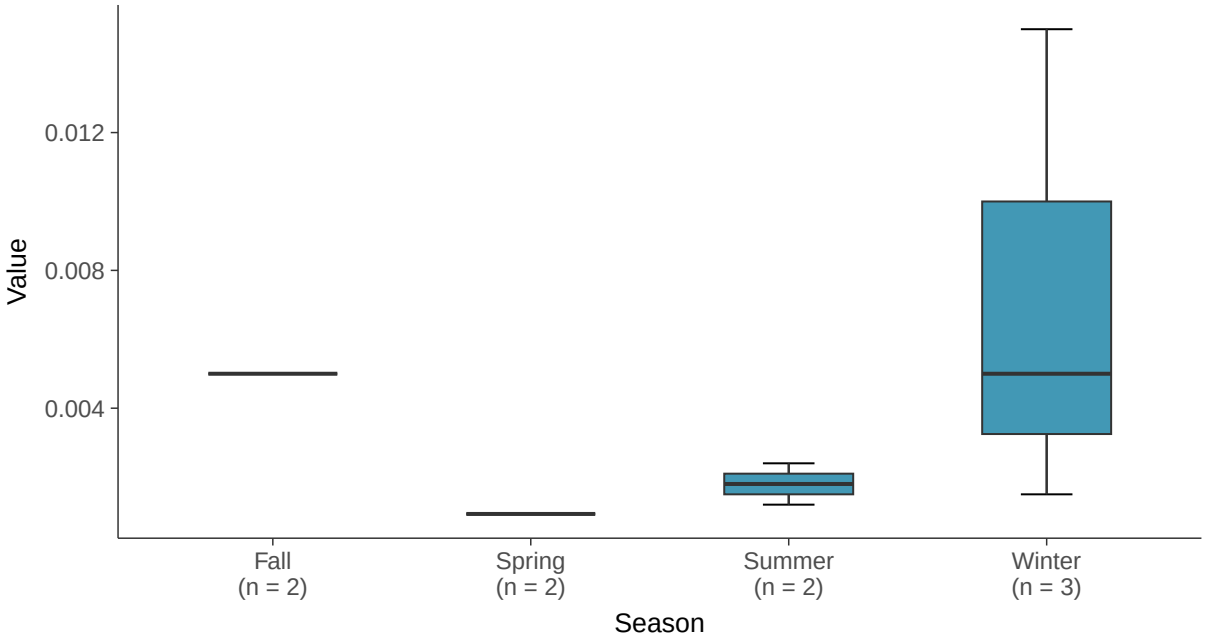
Boxplot

Zinc, MW-18D (mg/l)



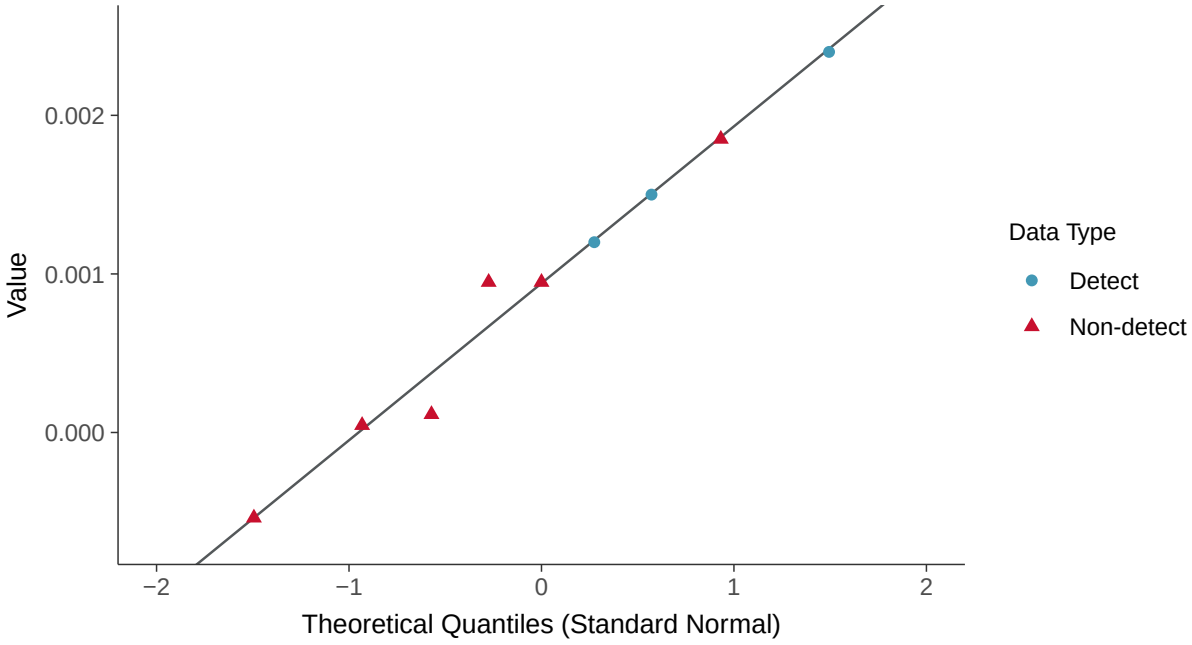
Boxplot by Season

Zinc, MW-18D (mg/l)



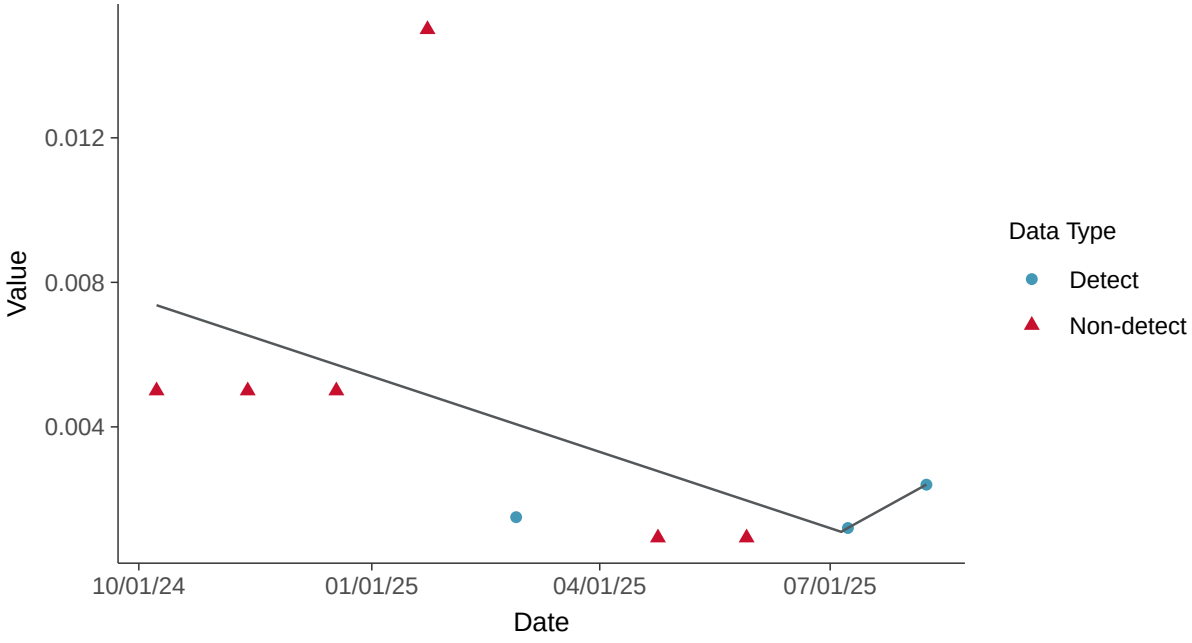
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-18D (mg/l)



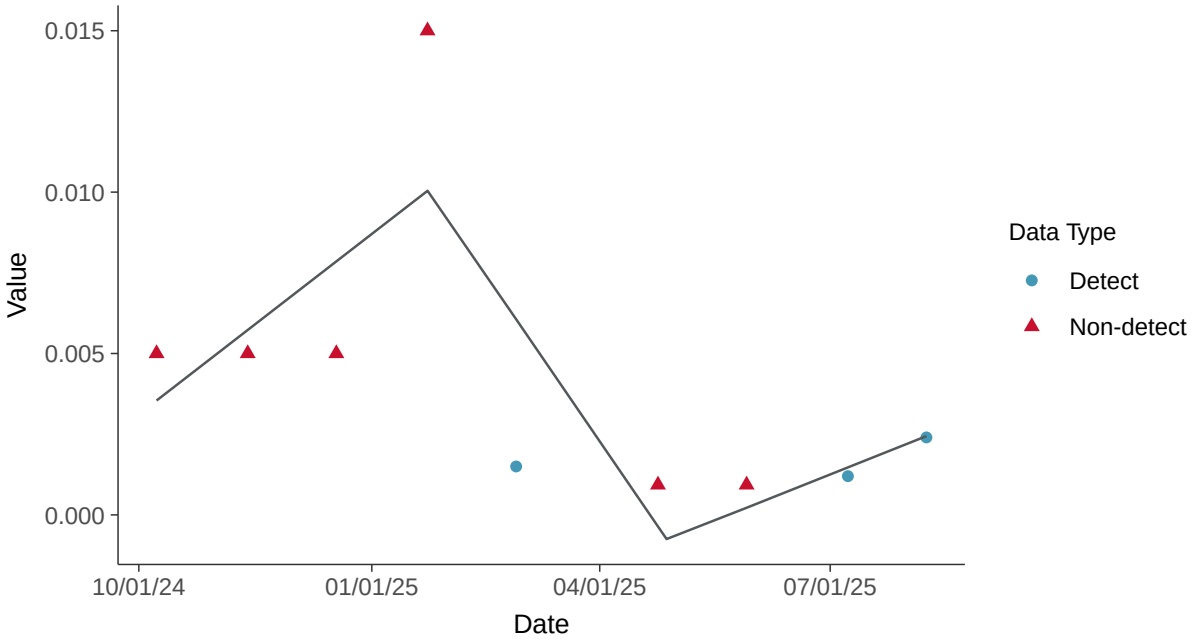
Trend Regression: Piecewise Linear-Linear

Zinc, MW-18D (mg/l)



Trend Regression: Piecewise Linear-Linear-Linear

Zinc, MW-18D (mg/l)

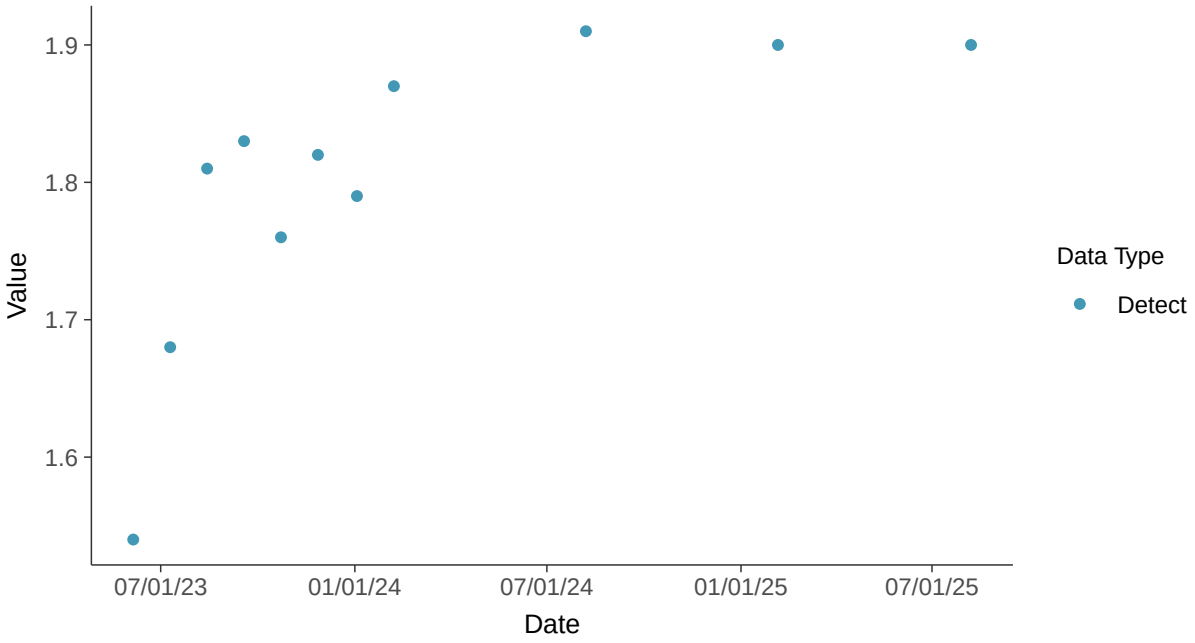


Appendix III: Boron, MW-100C

ID: 20_2_105

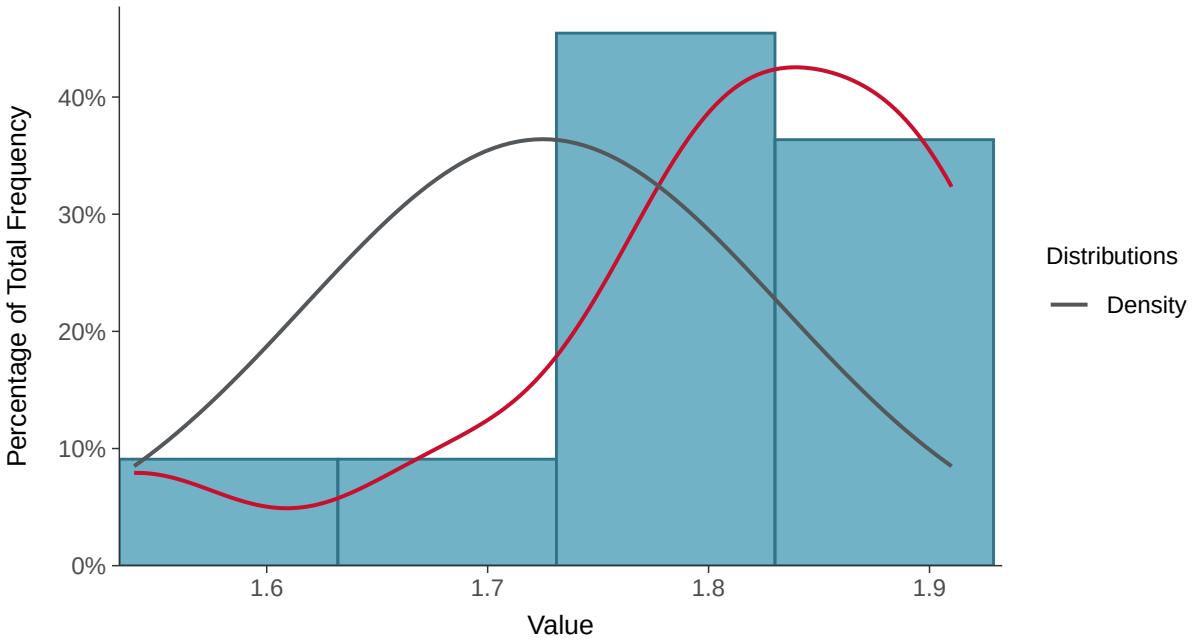
Scatter Plot

Boron, MW-100C (mg/l)



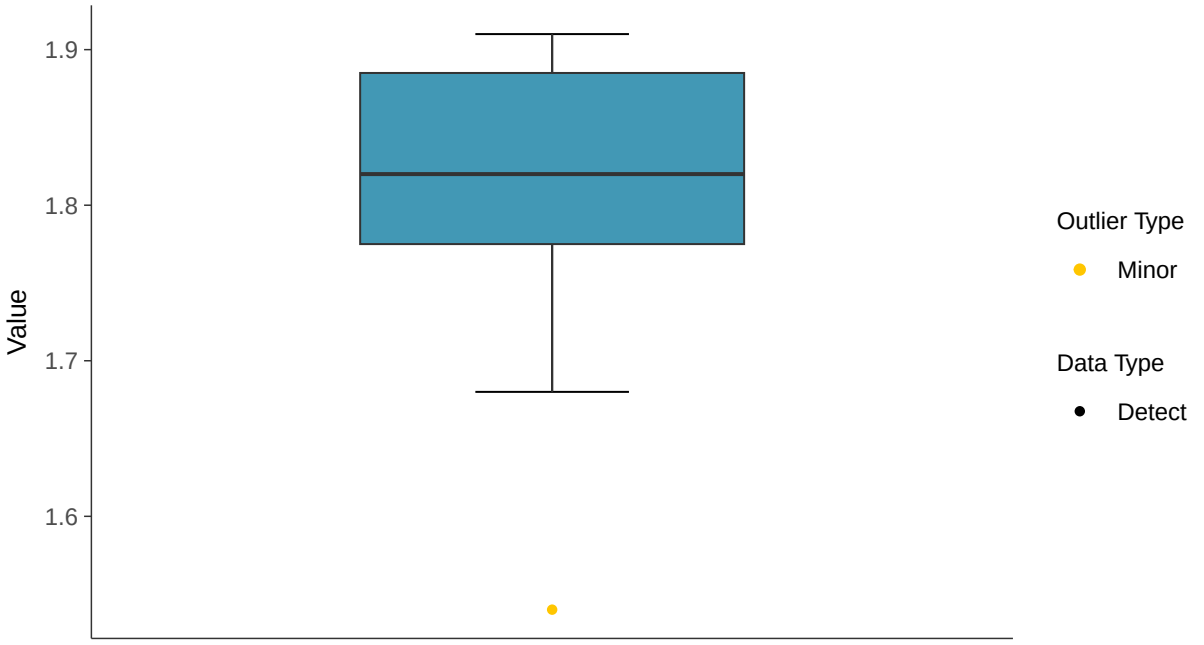
Histogram

Boron, MW-100C (mg/l)



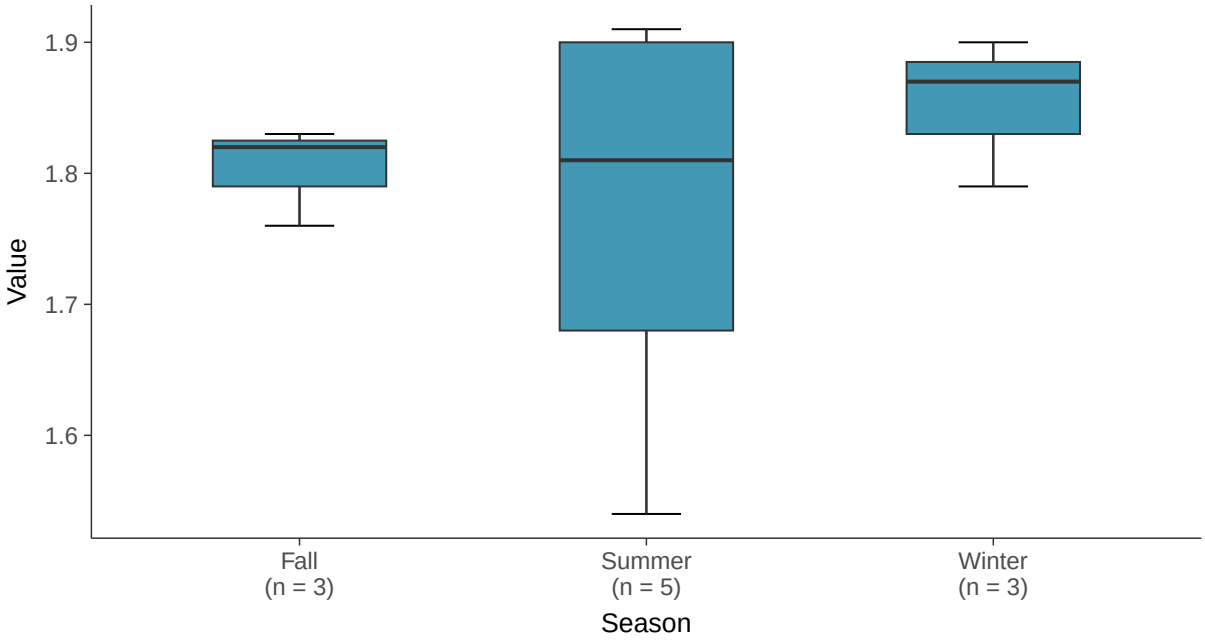
Boxplot

Boron, MW-100C (mg/l)



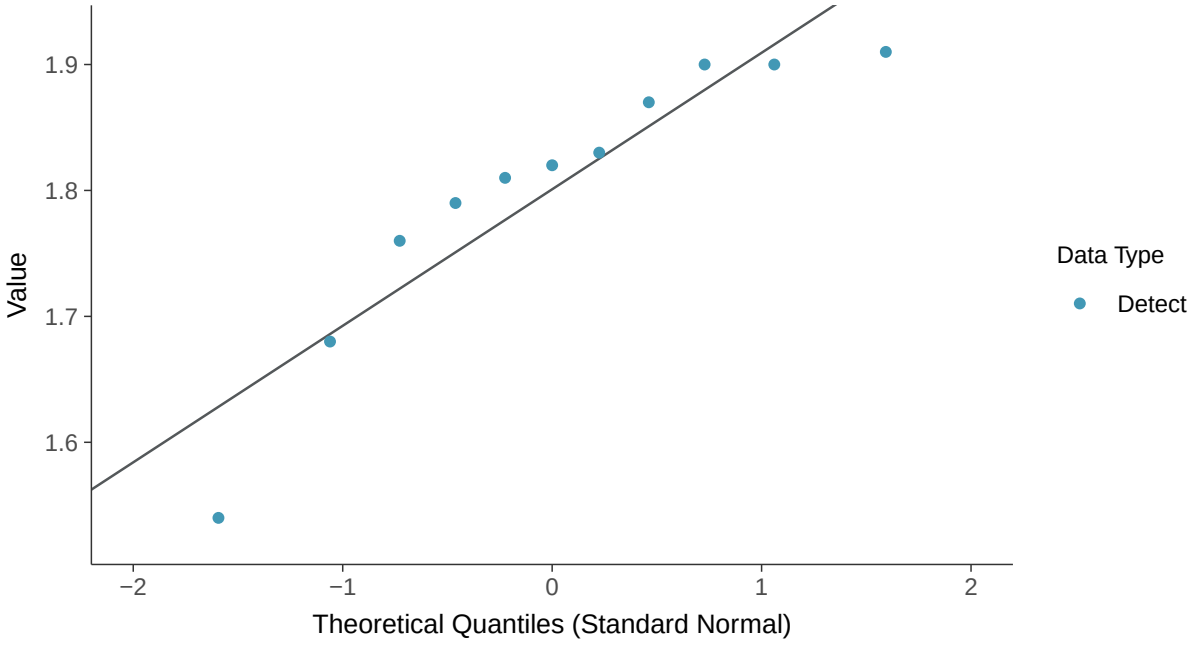
Boxplot by Season

Boron, MW-100C (mg/l)



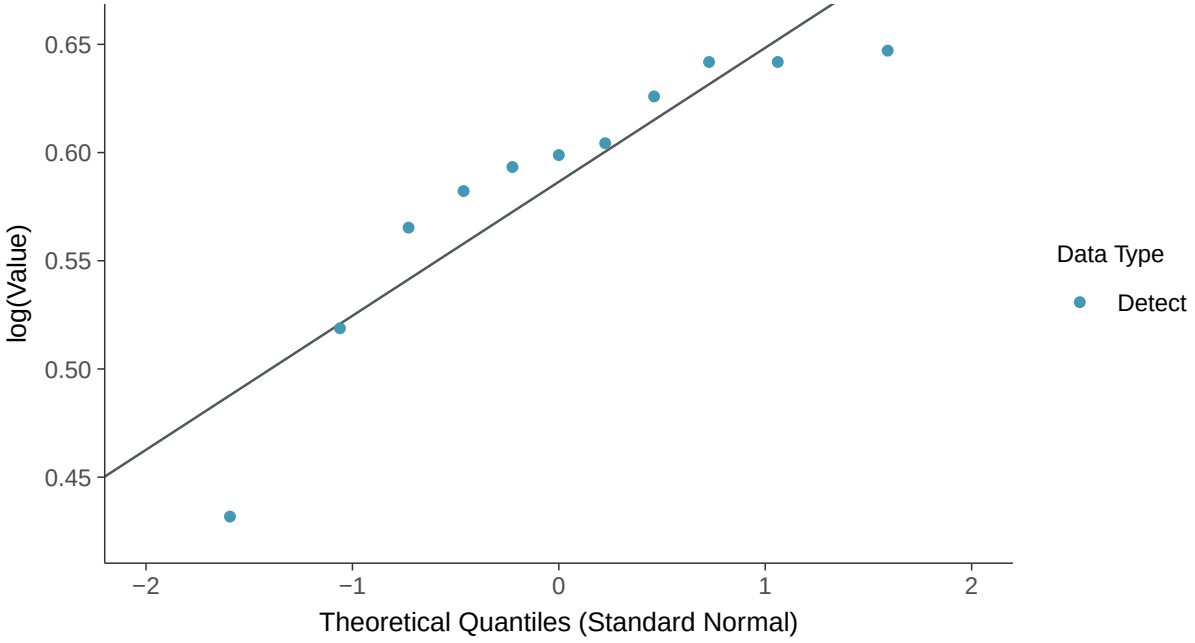
Normal Q-Q plot

Boron, MW-100C (mg/l)



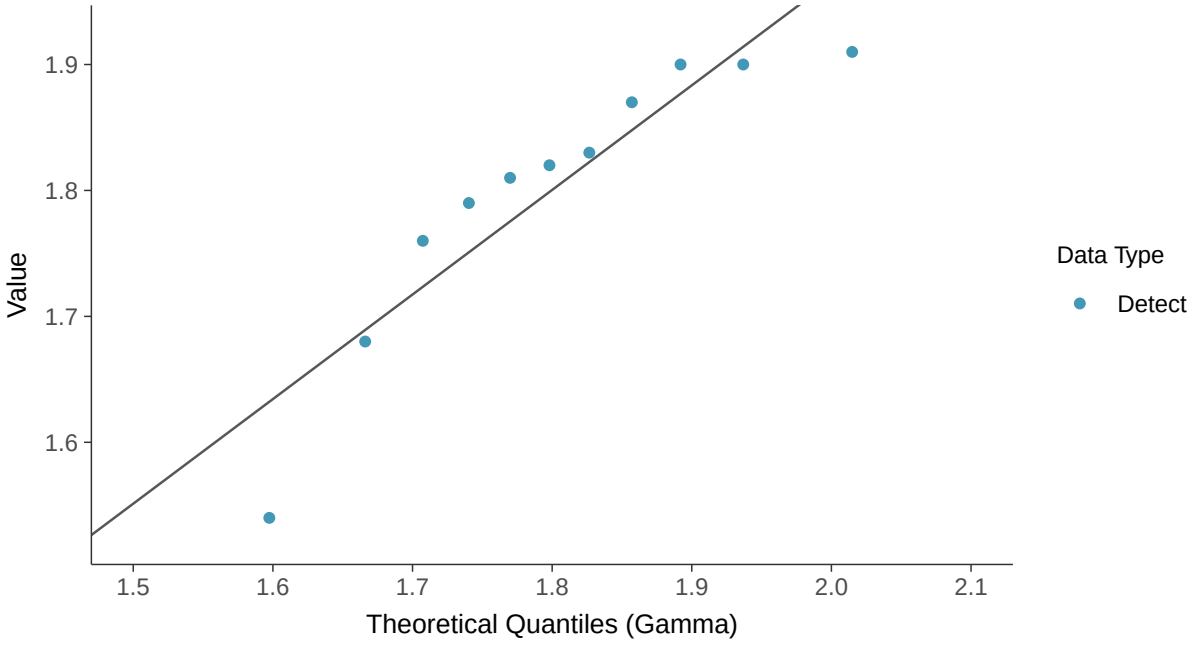
Lognormal Q-Q plot

Boron, MW-100C (mg/l)



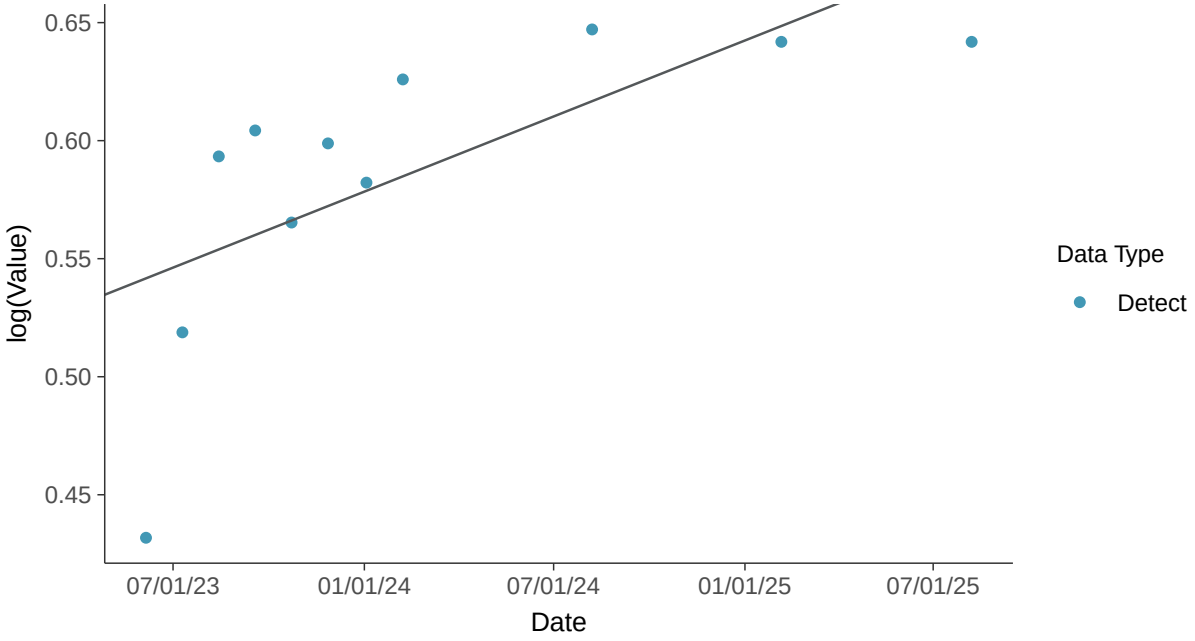
Gamma Q-Q plot

Boron, MW-100C (mg/l)



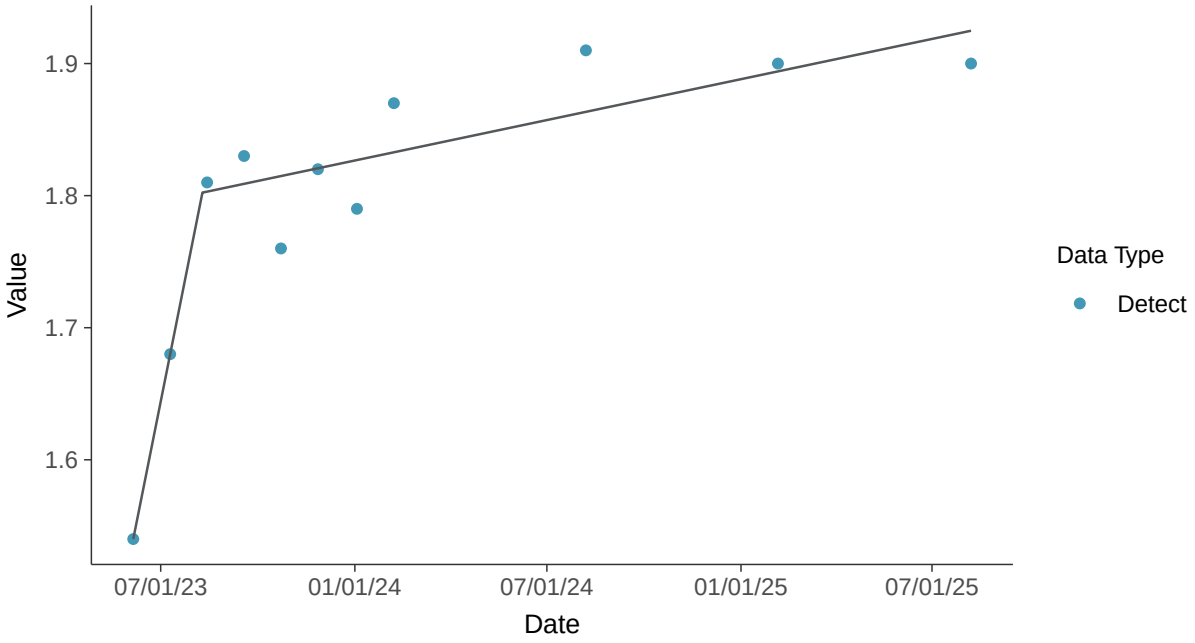
Trend Regression: Lognormal MLE

Boron, MW-100C (mg/l)



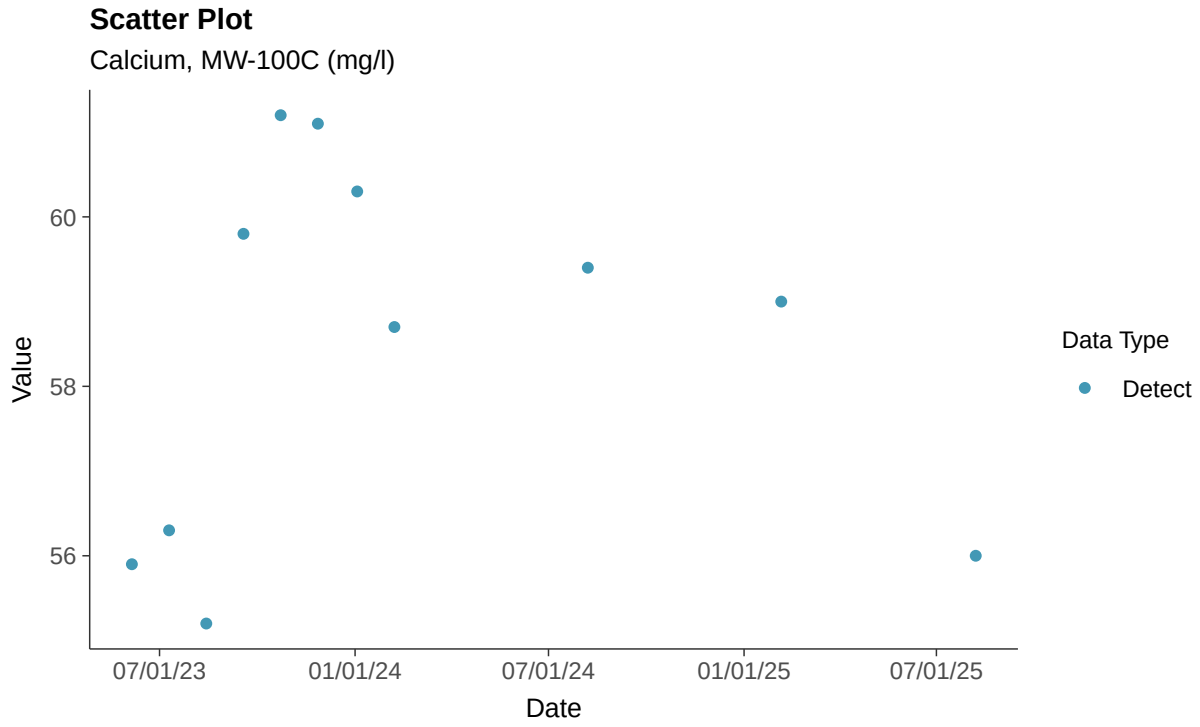
Trend Regression: Piecewise Linear-Linear

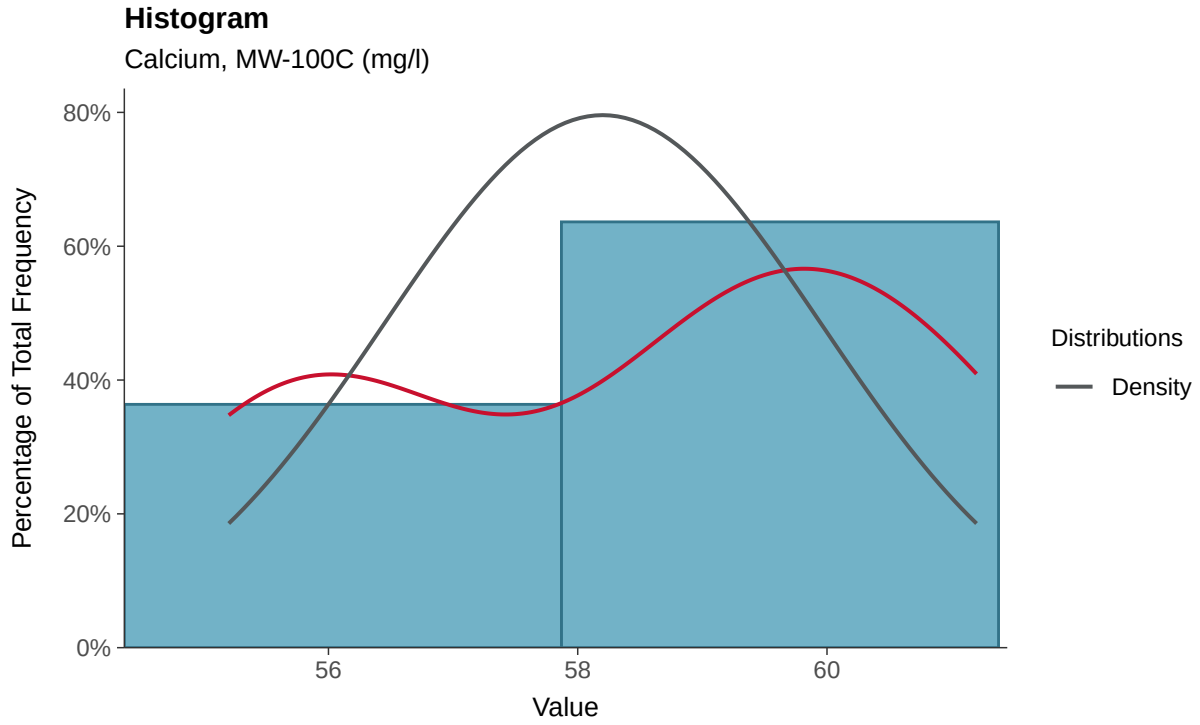
Boron, MW-100C (mg/l)



Appendix III: Calcium, MW-100C

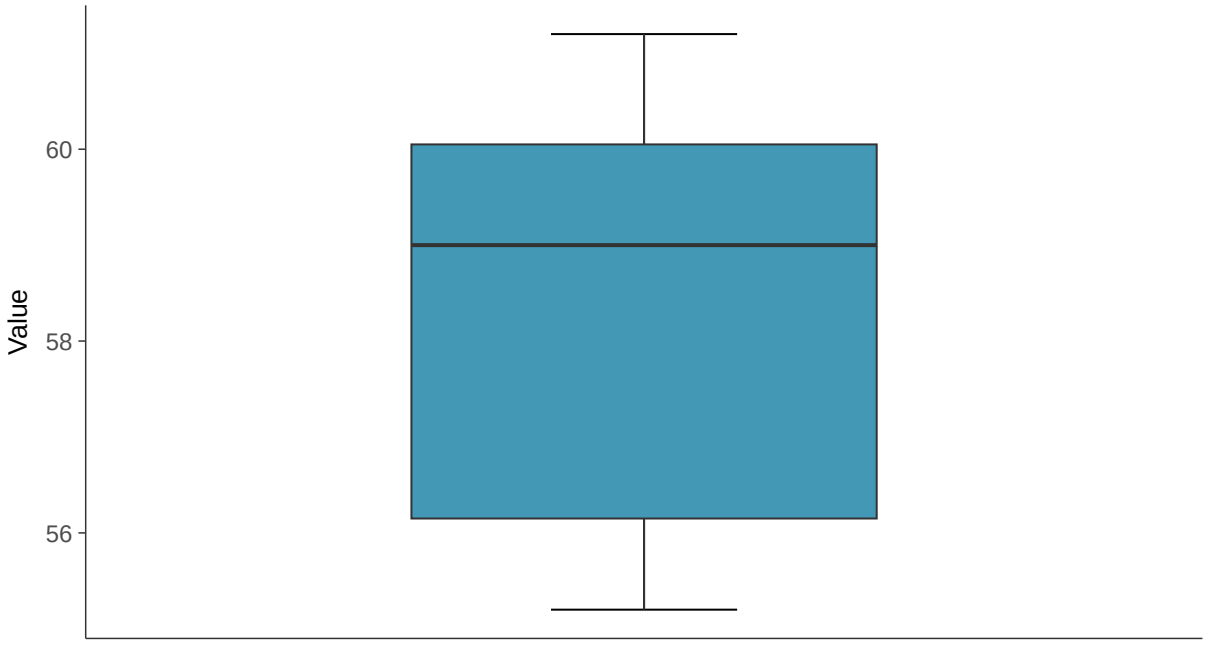
ID: 20_2_107





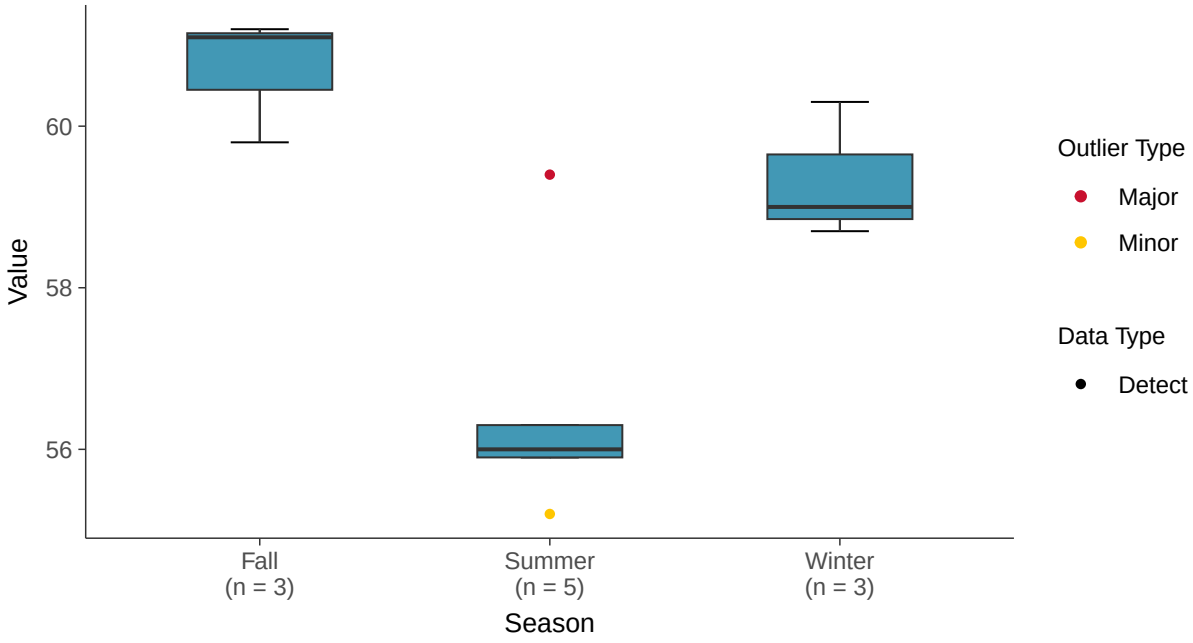
Boxplot

Calcium, MW-100C (mg/l)



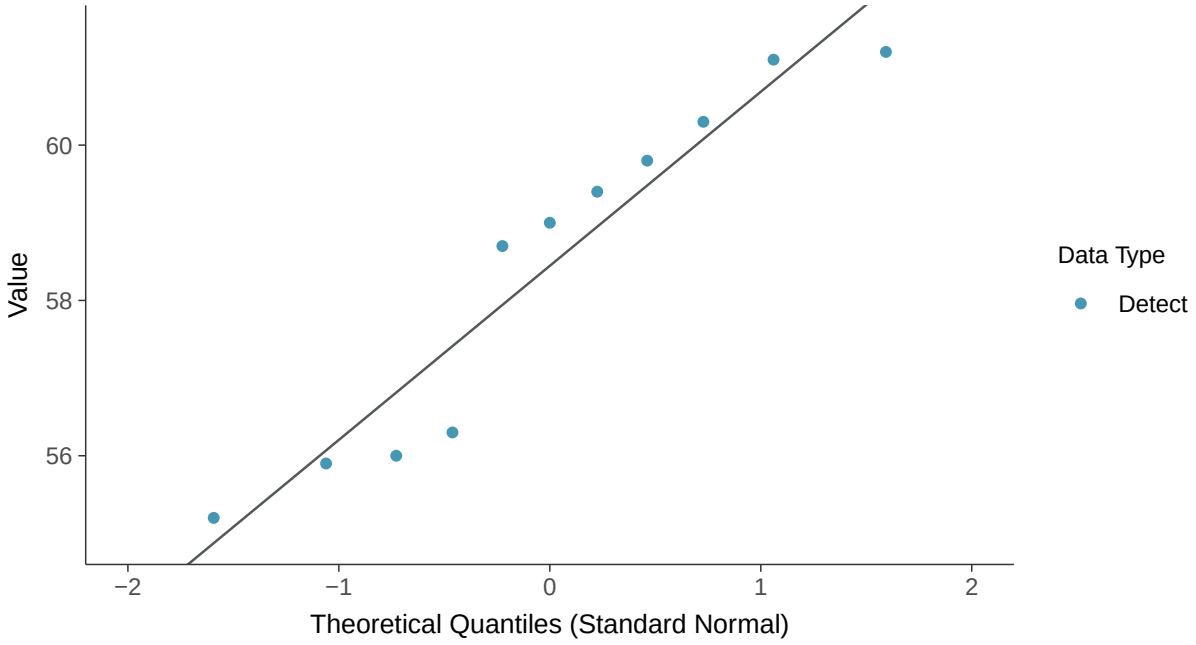
Boxplot by Season

Calcium, MW-100C (mg/l)



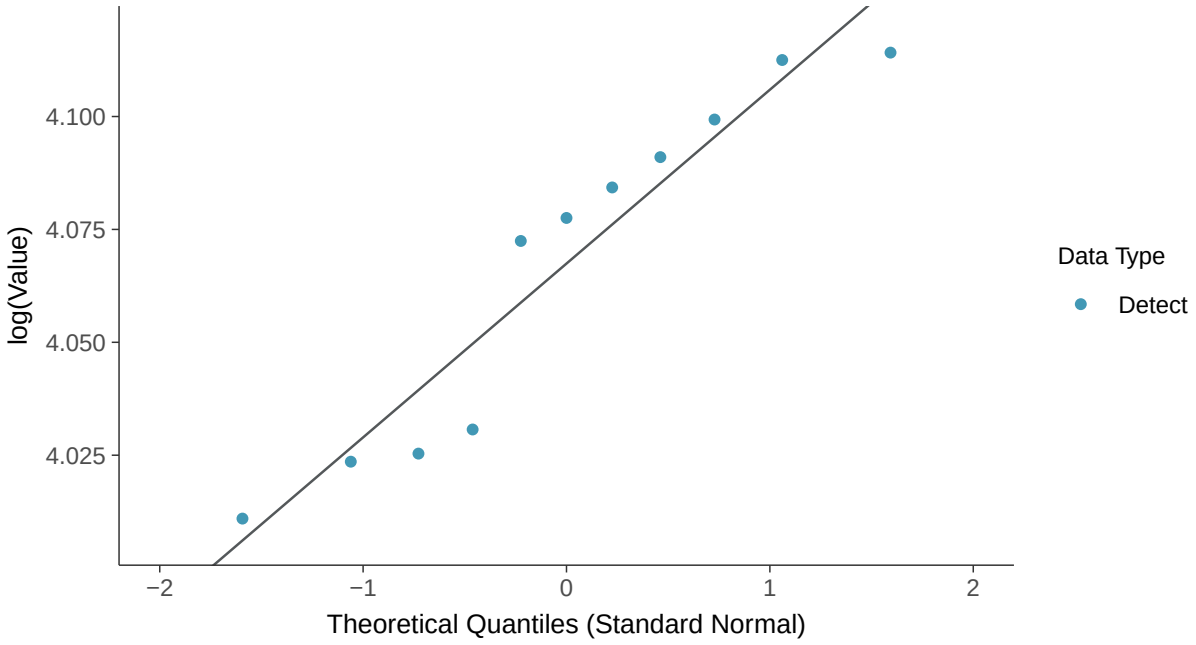
Normal Q-Q plot

Calcium, MW-100C (mg/l)



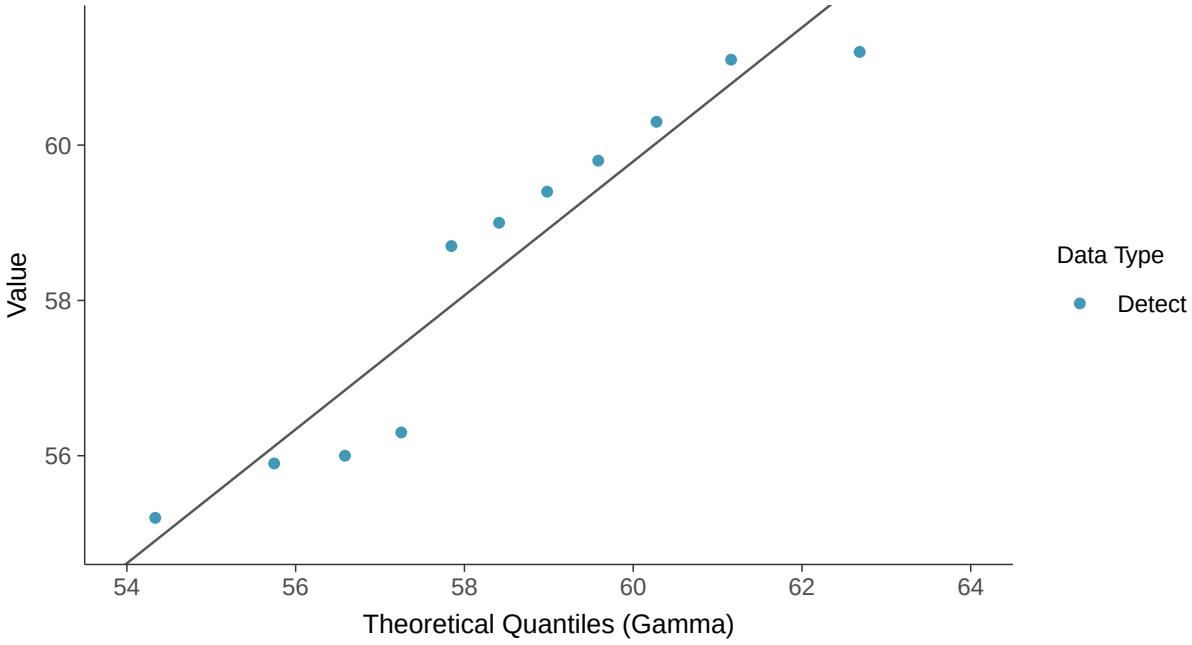
Lognormal Q-Q plot

Calcium, MW-100C (mg/l)



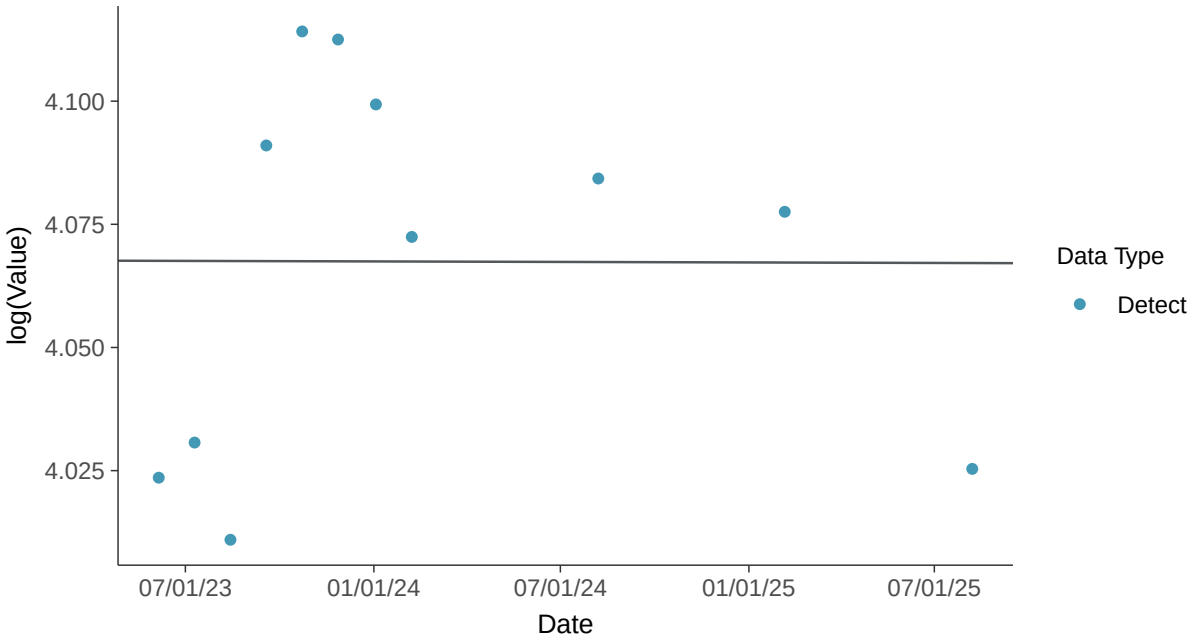
Gamma Q-Q plot

Calcium, MW-100C (mg/l)



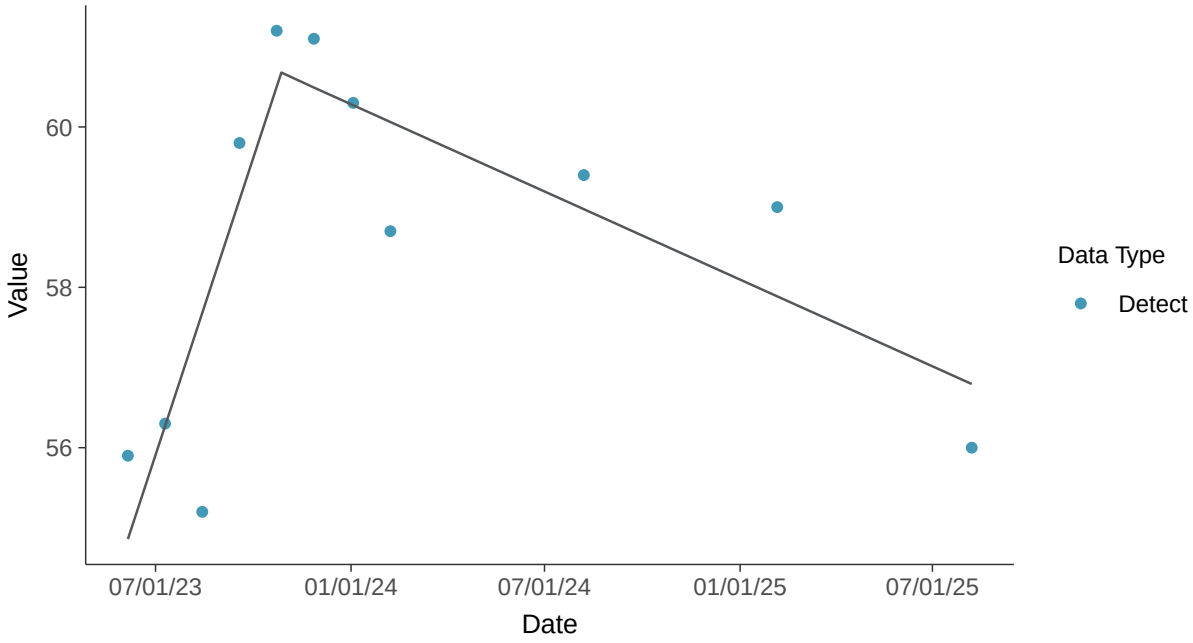
Trend Regression: Lognormal MLE

Calcium, MW-100C (mg/l)



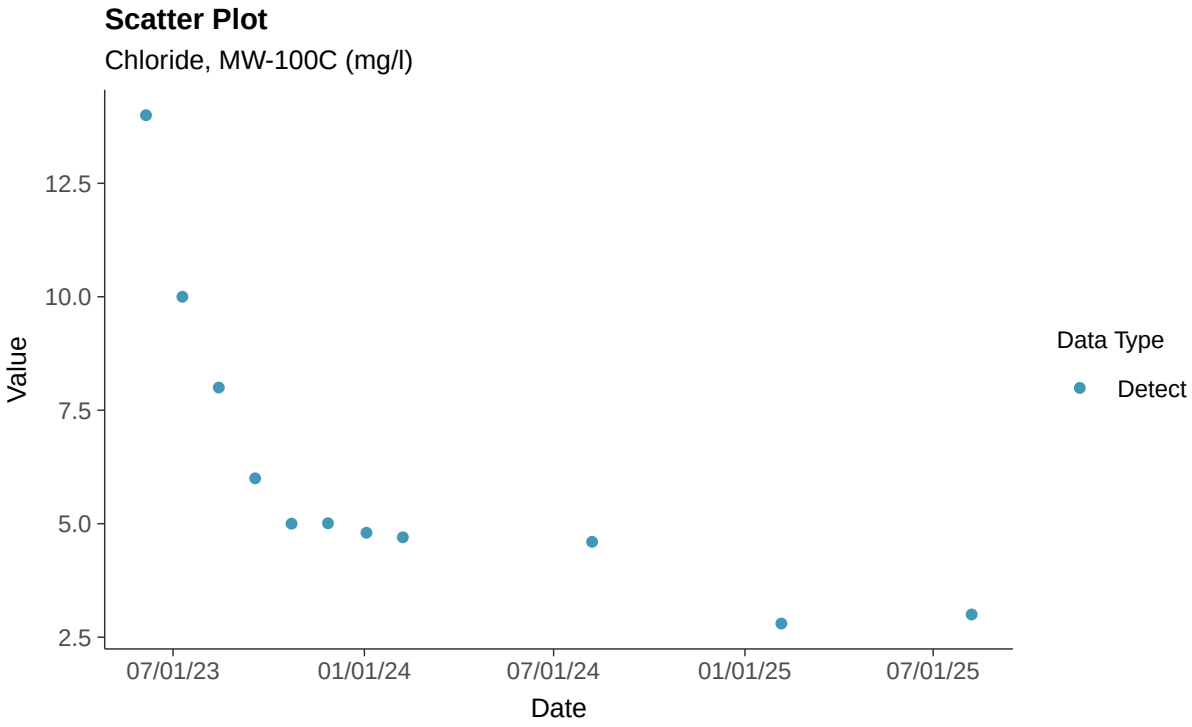
Trend Regression: Piecewise Linear-Linear

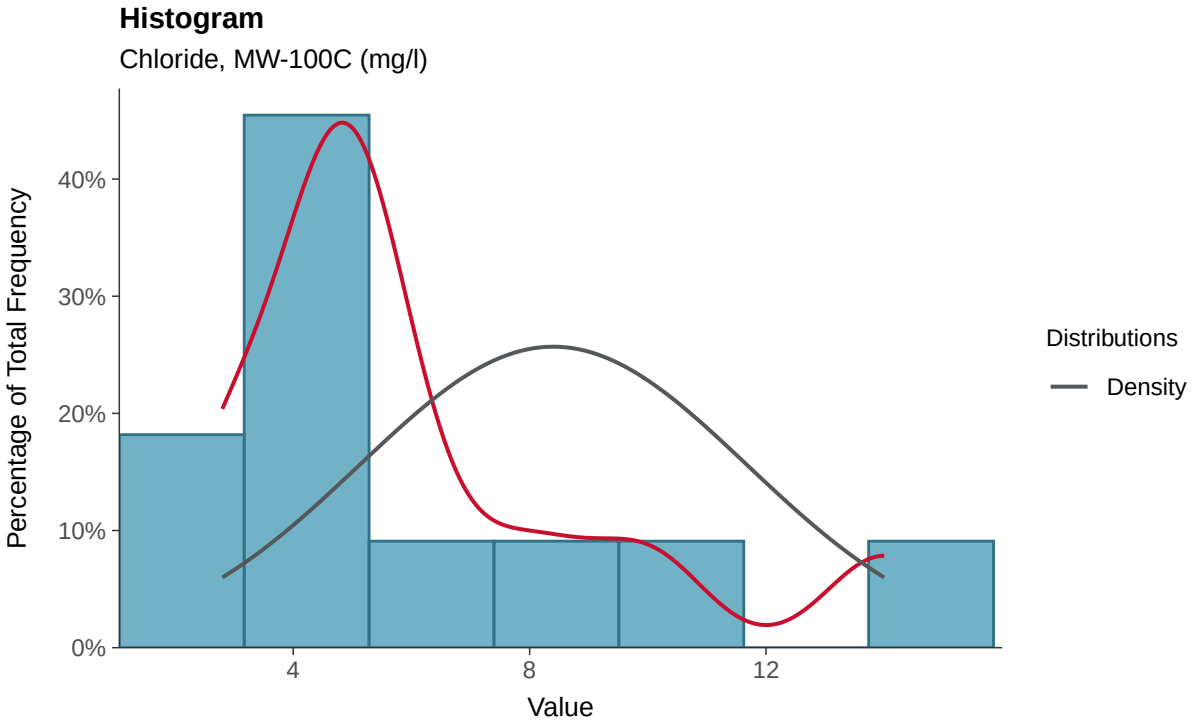
Calcium, MW-100C (mg/l)



Appendix III: Chloride, MW-100C

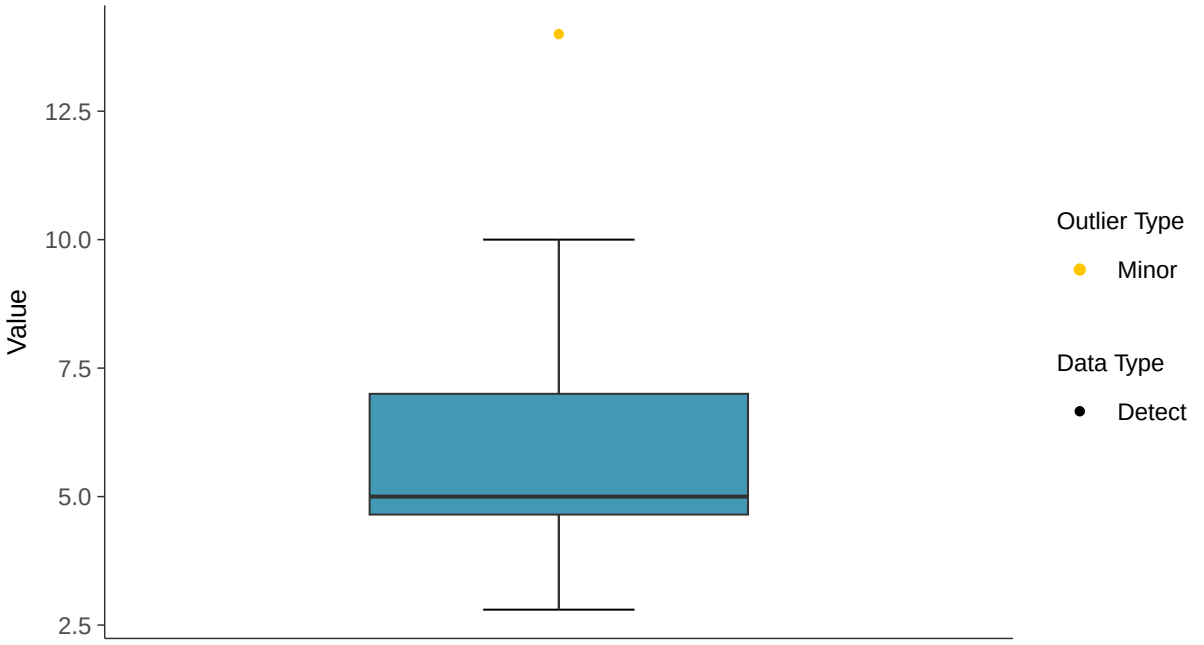
ID: 20_2_108





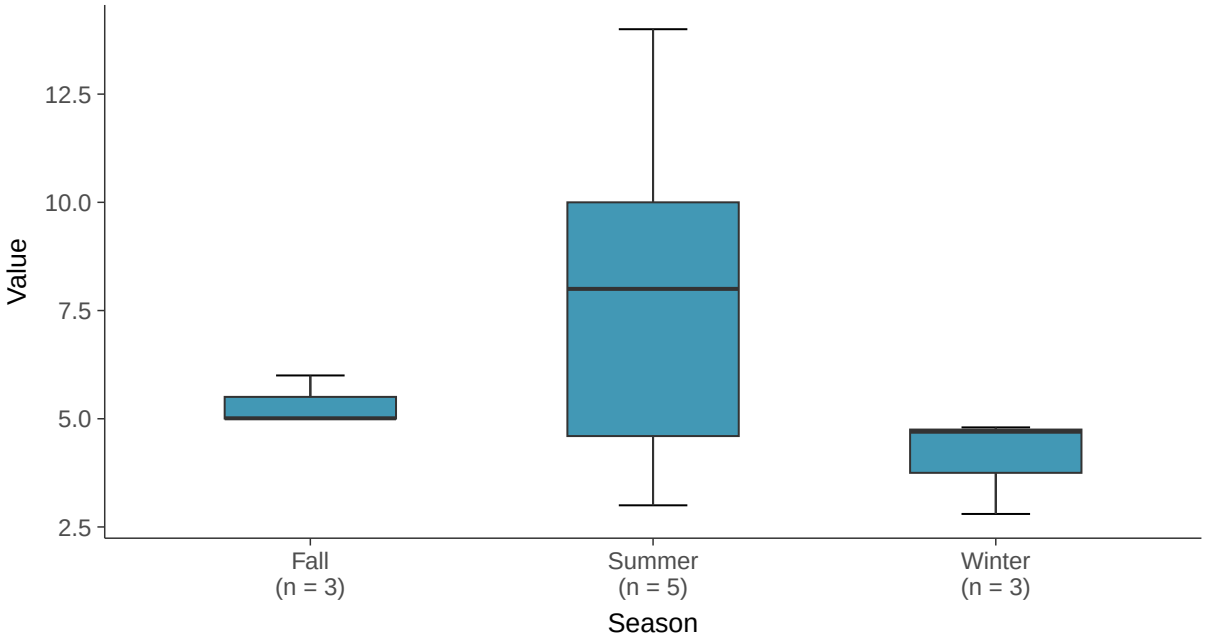
Boxplot

Chloride, MW-100C (mg/l)



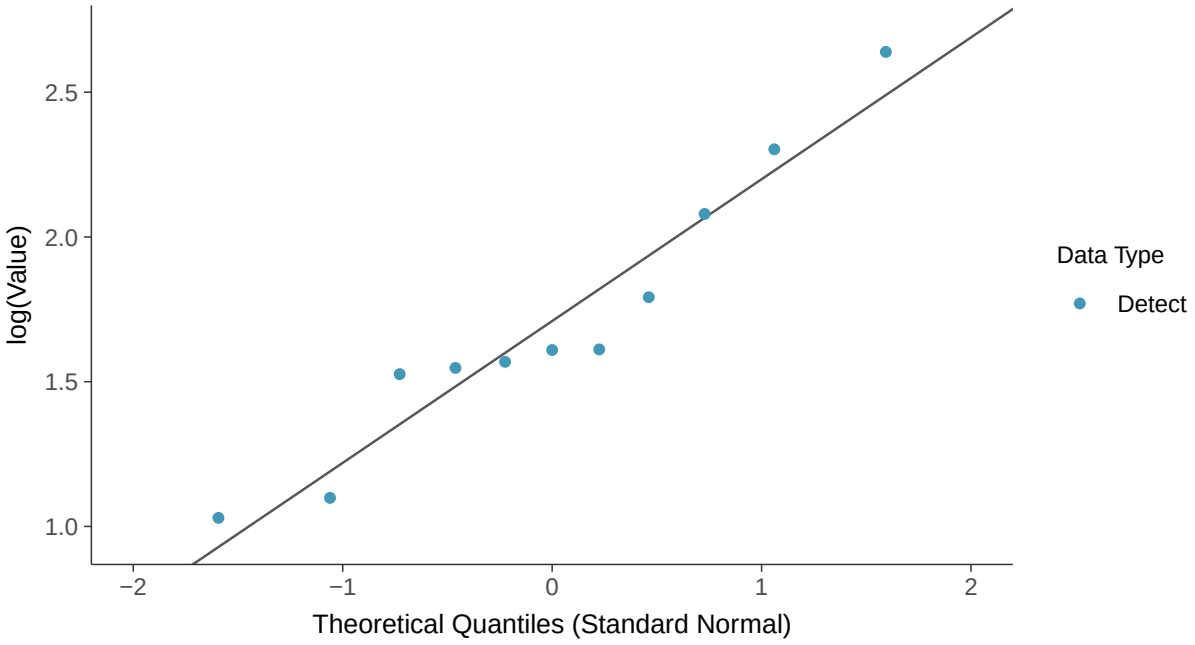
Boxplot by Season

Chloride, MW-100C (mg/l)



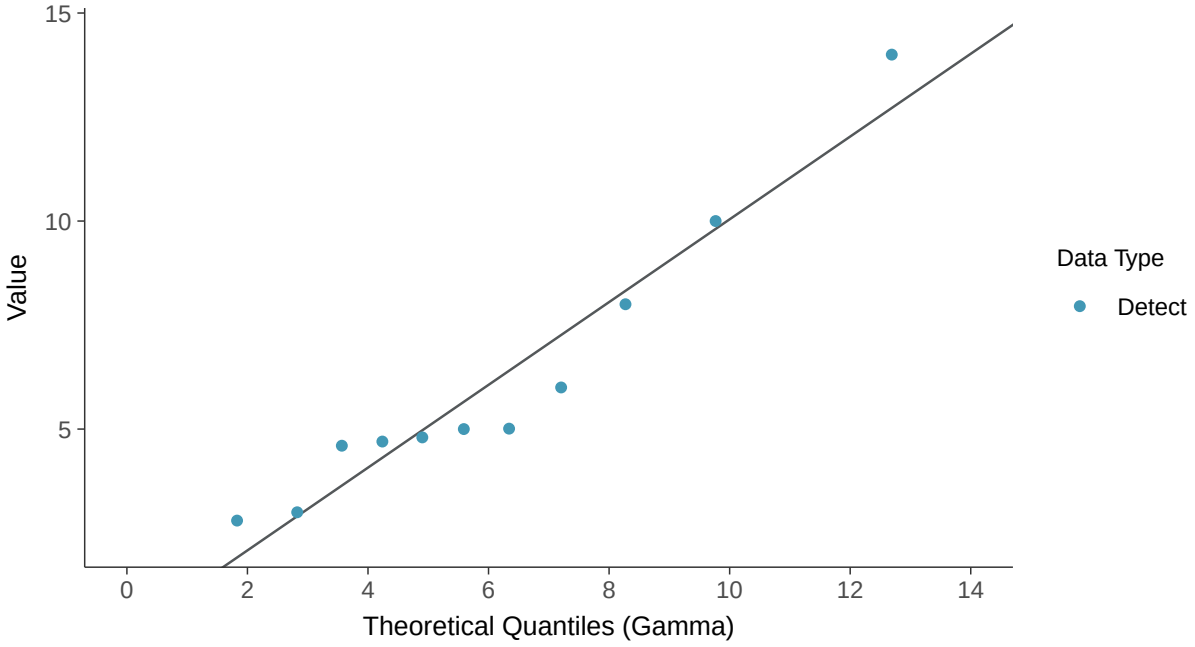
Lognormal Q-Q plot

Chloride, MW-100C (mg/l)



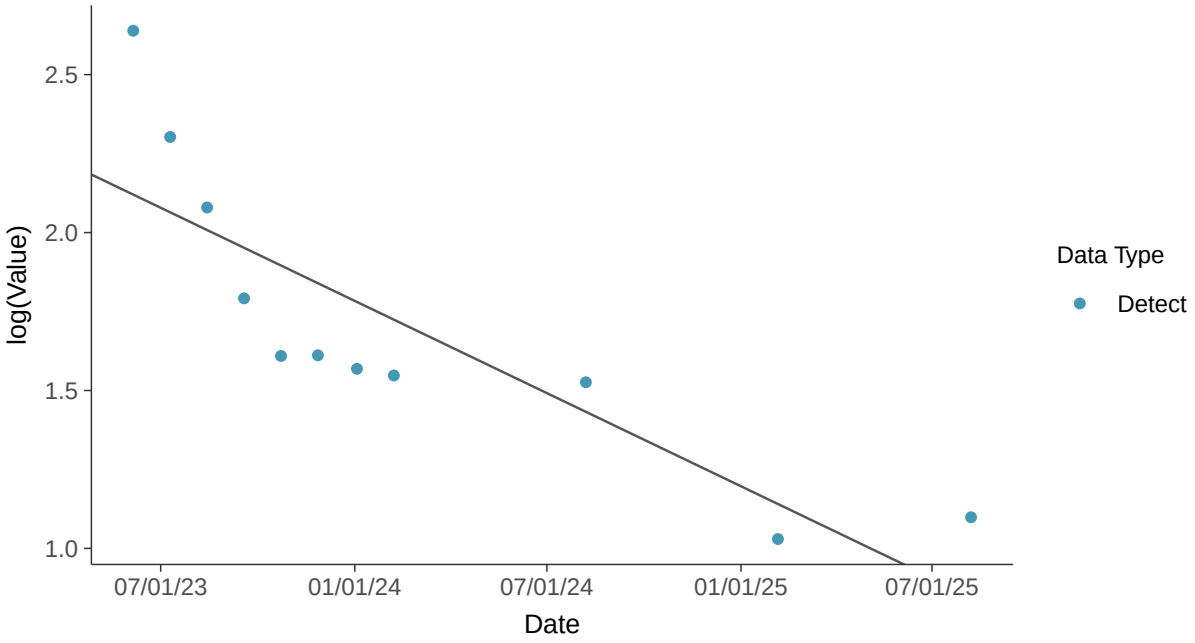
Gamma Q-Q plot

Chloride, MW-100C (mg/l)



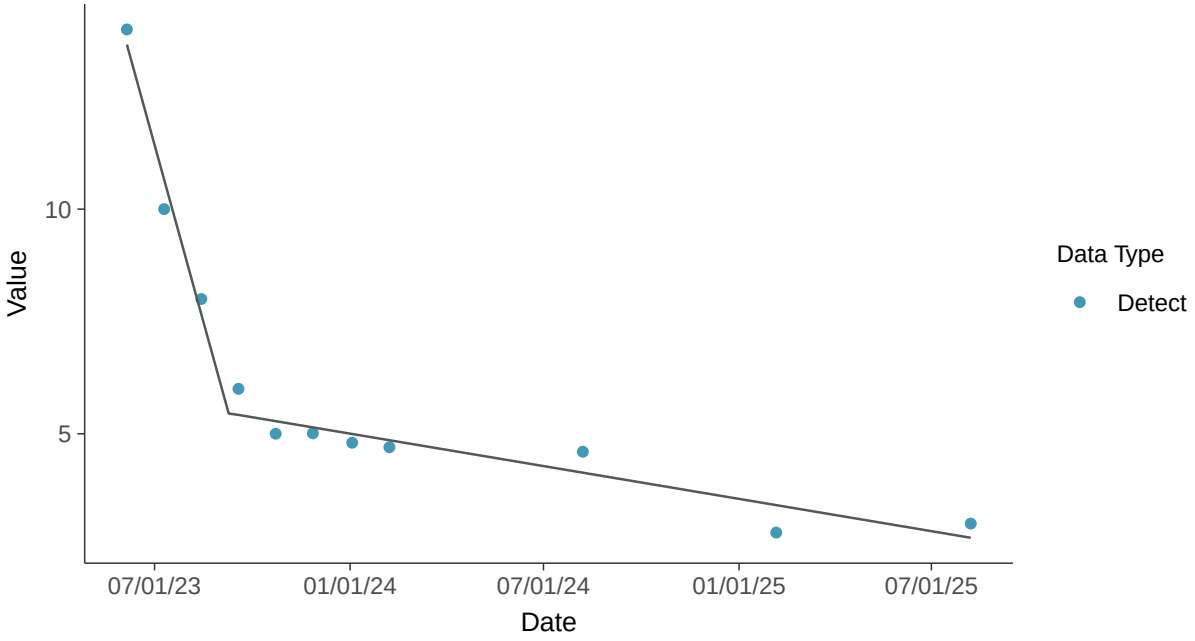
Trend Regression: Lognormal MLE

Chloride, MW-100C (mg/l)



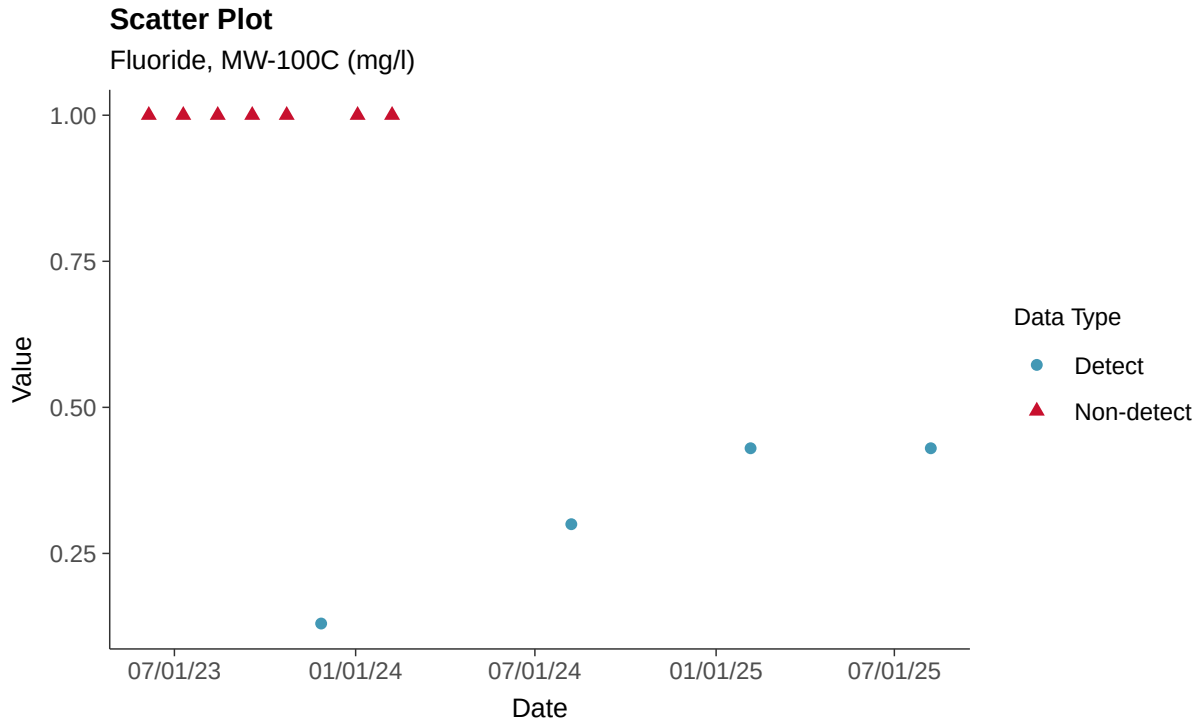
Trend Regression: Piecewise Linear-Linear

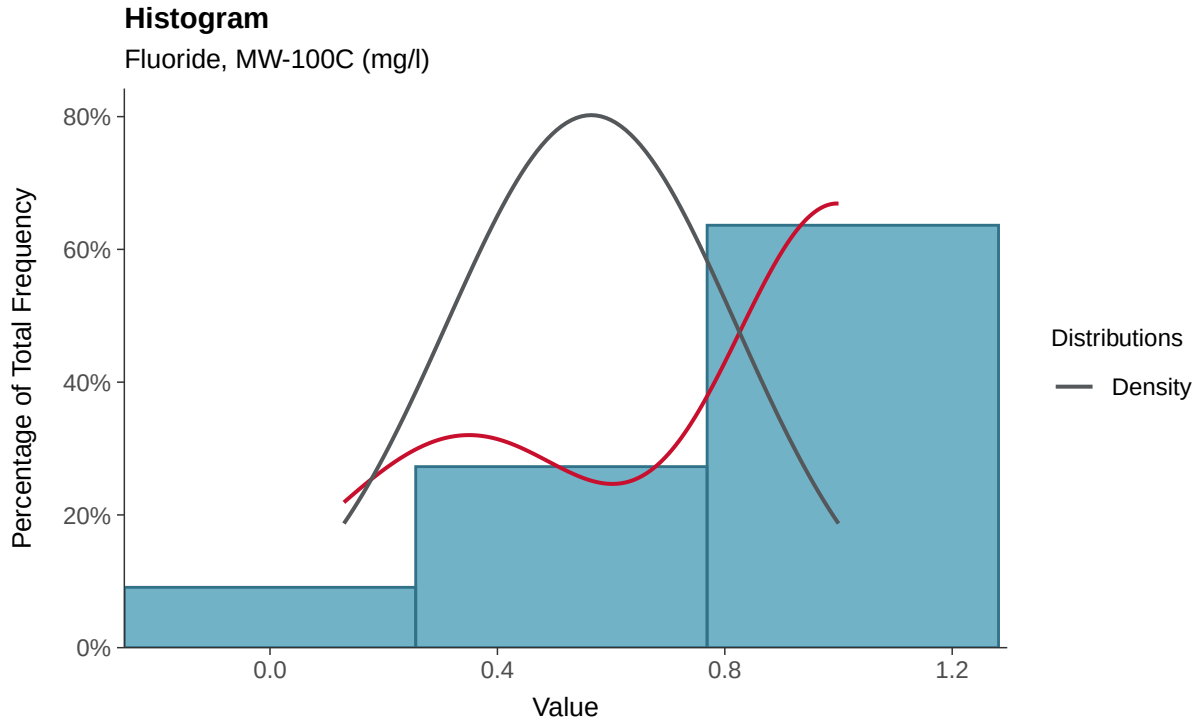
Chloride, MW-100C (mg/l)



Appendix III: Fluoride, MW-100C

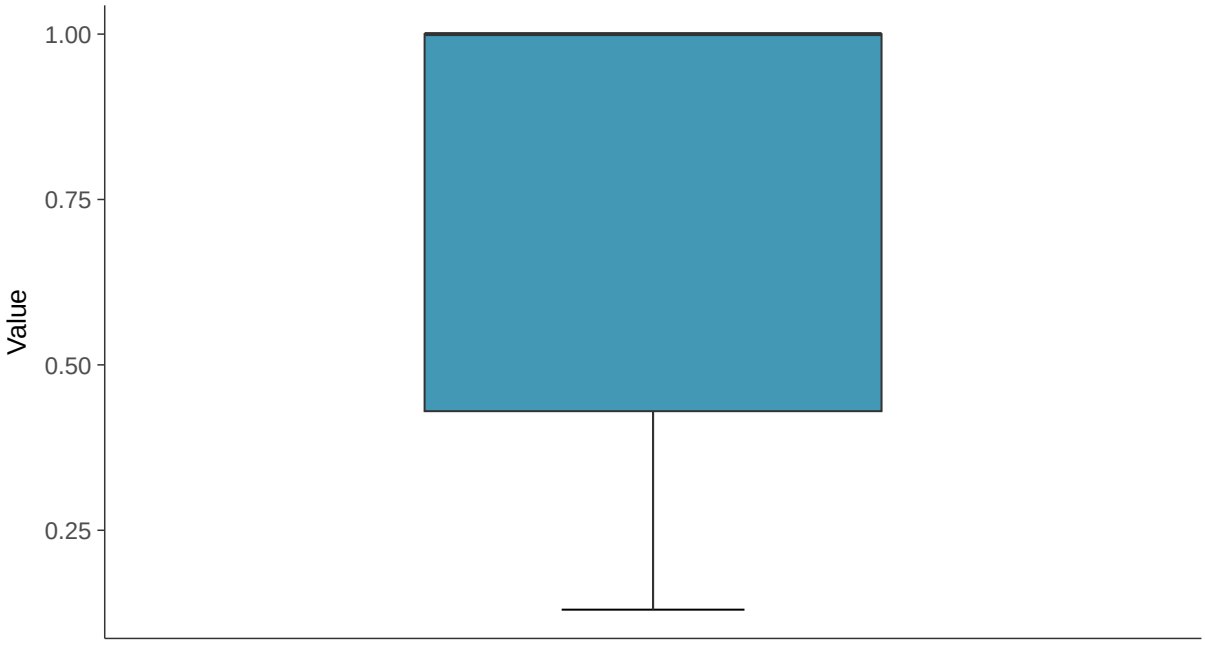
ID: 20_2_112





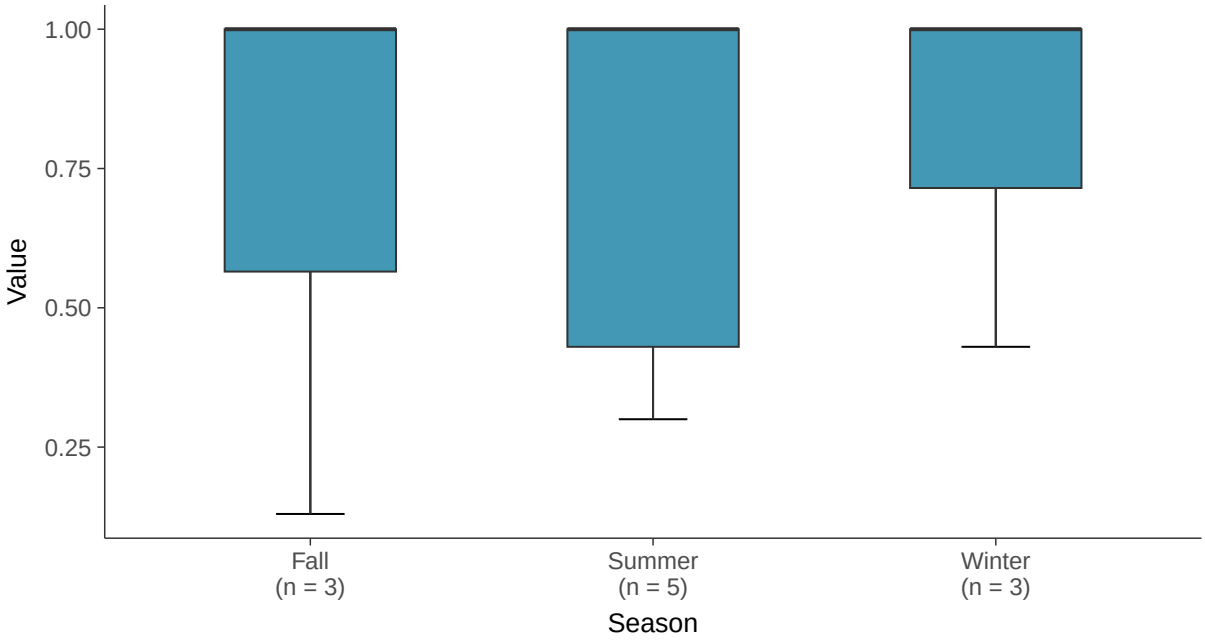
Boxplot

Fluoride, MW-100C (mg/l)



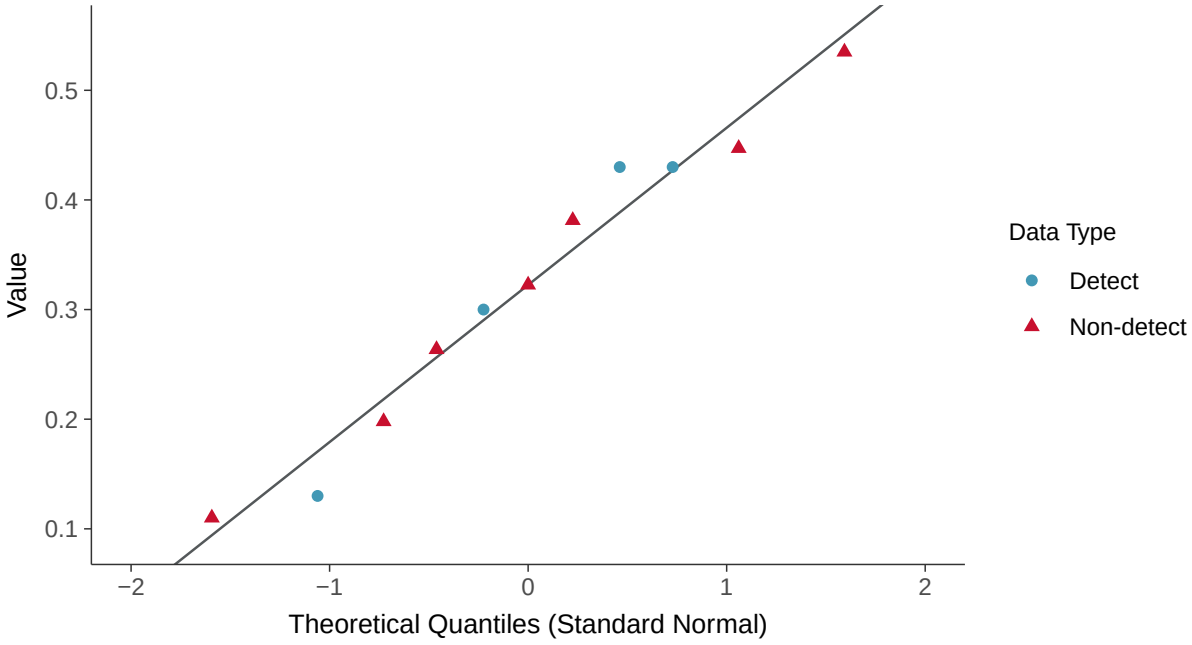
Boxplot by Season

Fluoride, MW-100C (mg/l)



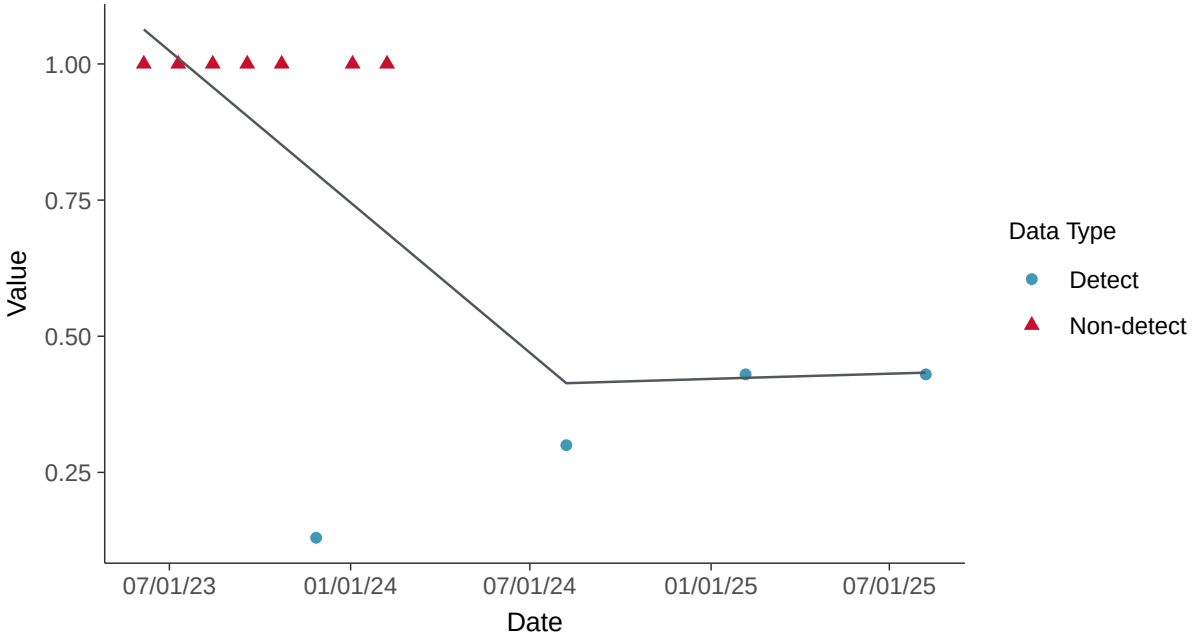
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-100C (mg/l)



Trend Regression: Piecewise Linear-Linear

Fluoride, MW-100C (mg/l)

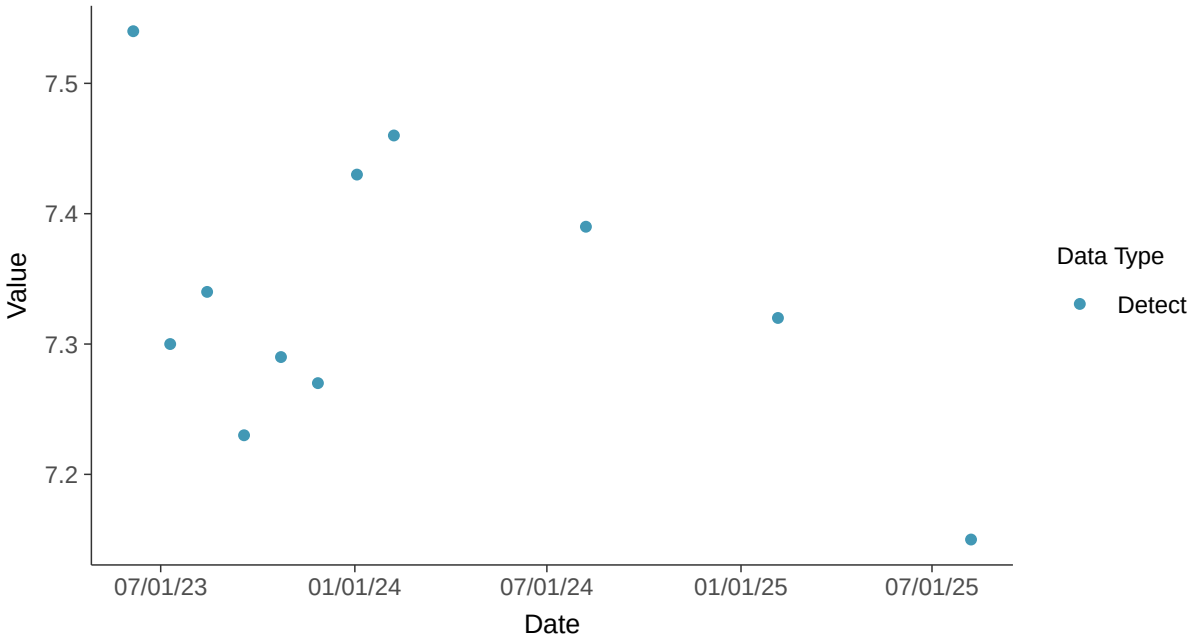


Appendix III: pH, Field, MW-100C

ID: 20_2_120

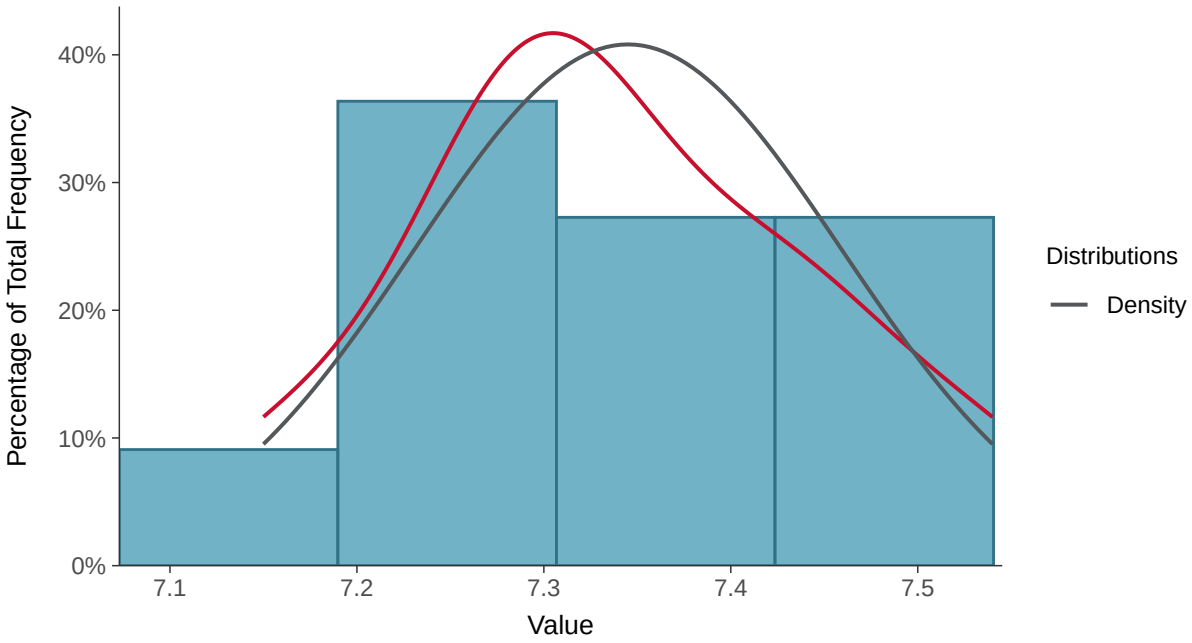
Scatter Plot

pH, Field, MW-100C (su)



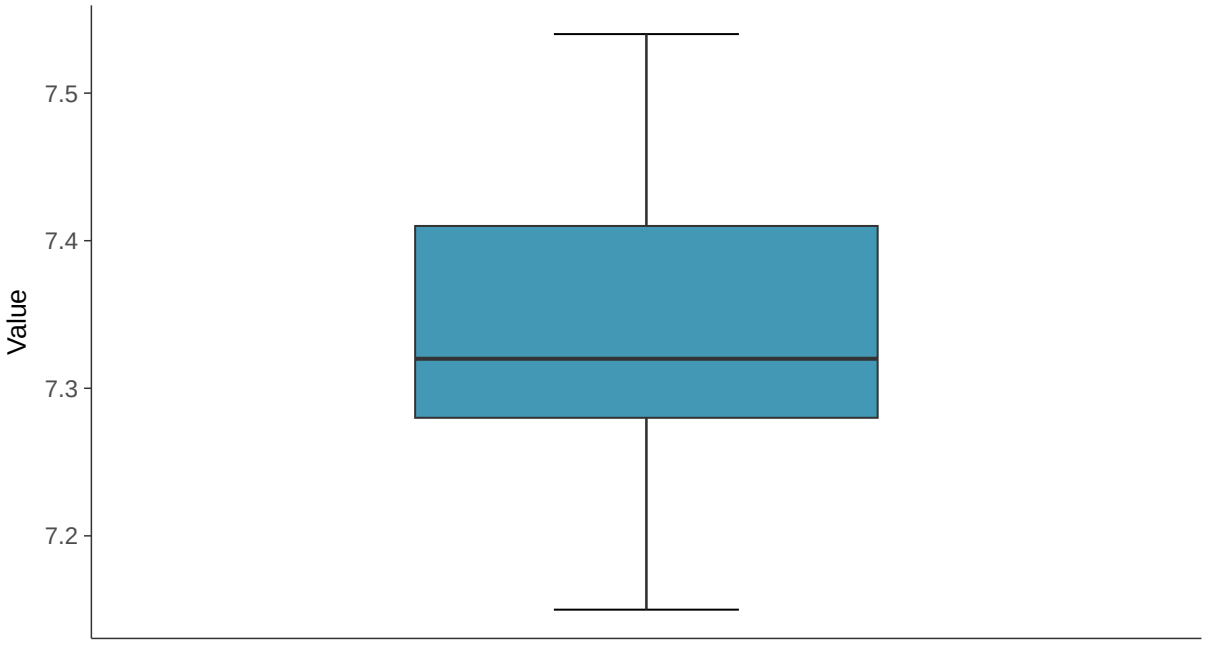
Histogram

pH, Field, MW-100C (su)



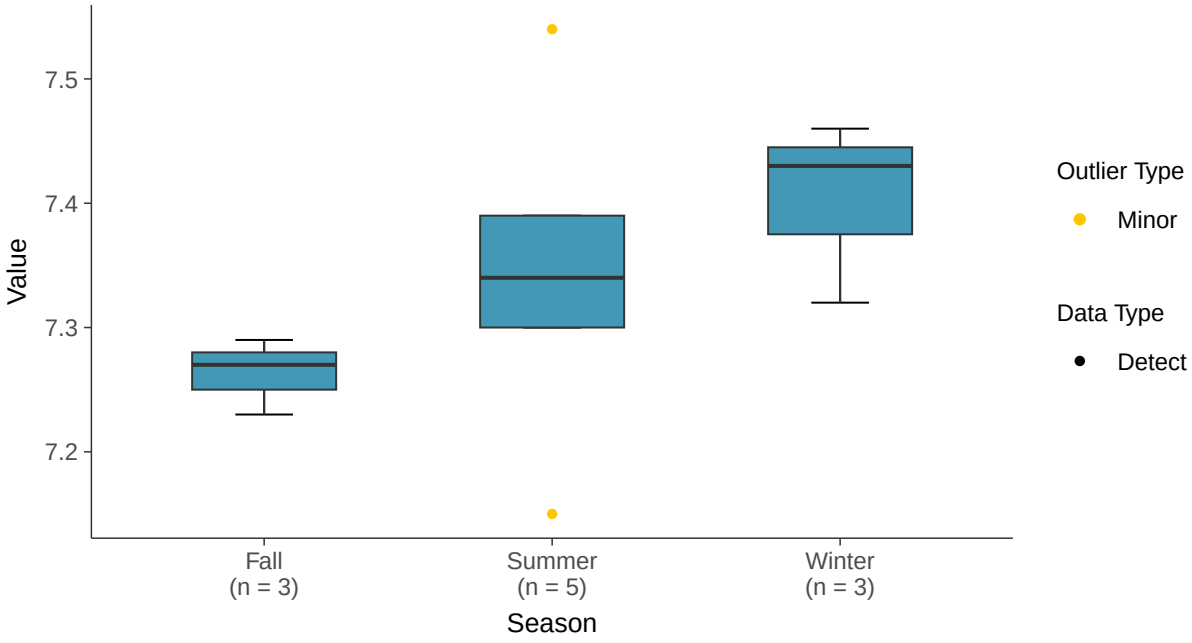
Boxplot

pH, Field, MW-100C (su)



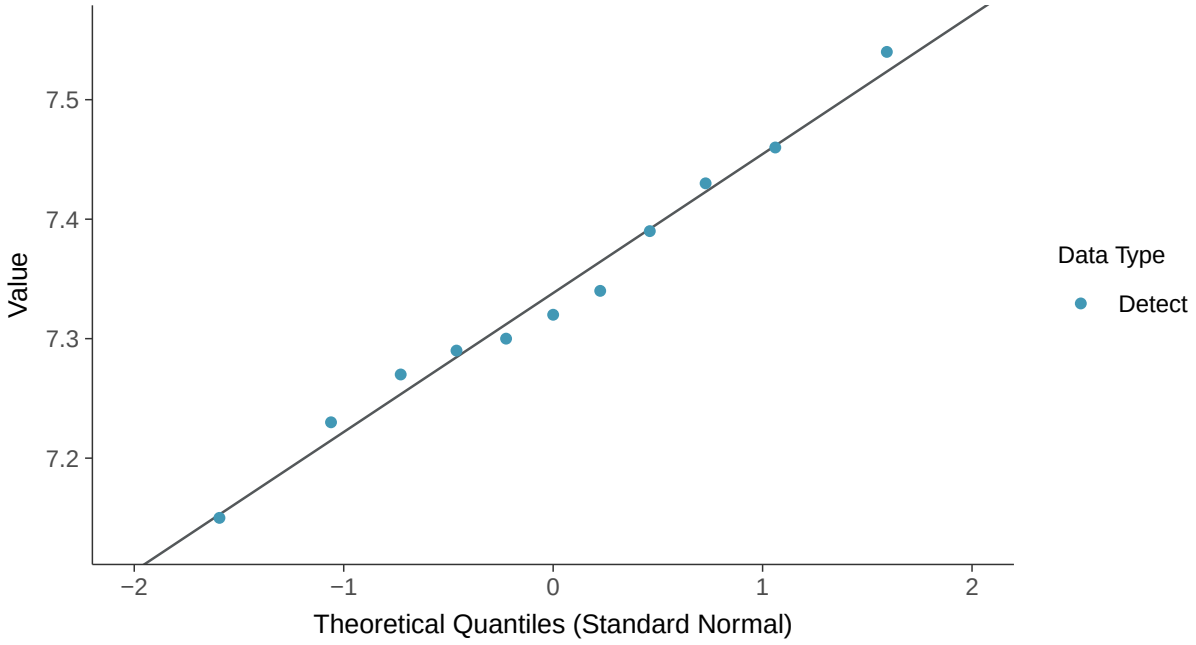
Boxplot by Season

pH, Field, MW-100C (su)



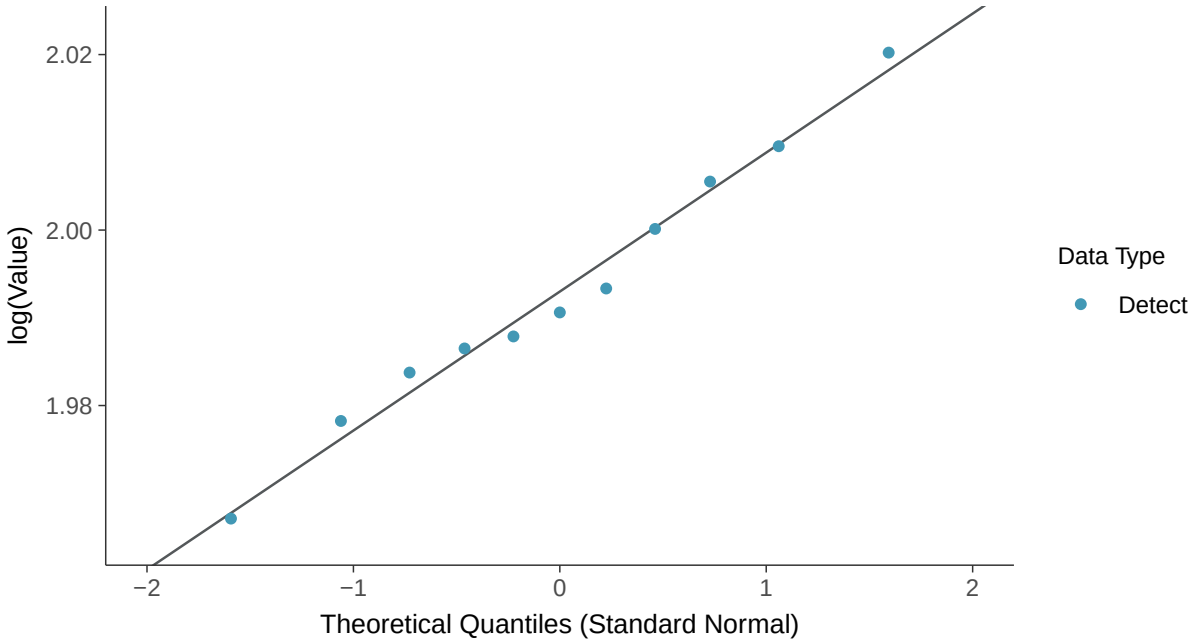
Normal Q-Q plot

pH, Field, MW-100C (su)



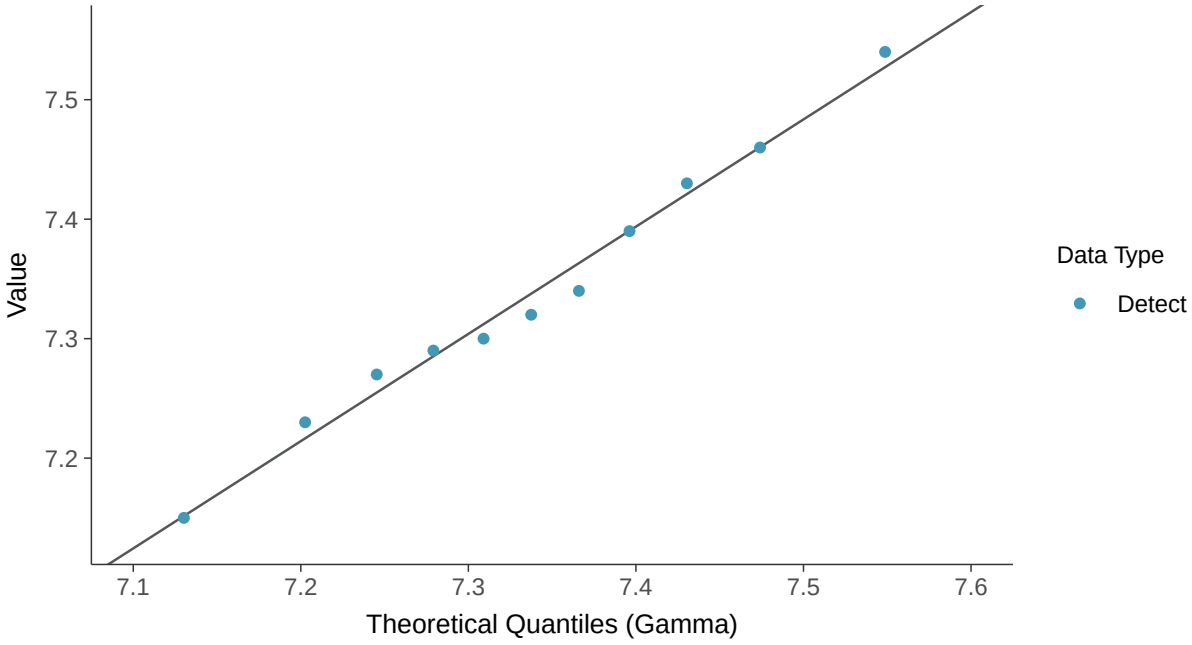
Lognormal Q-Q plot

pH, Field, MW-100C (su)



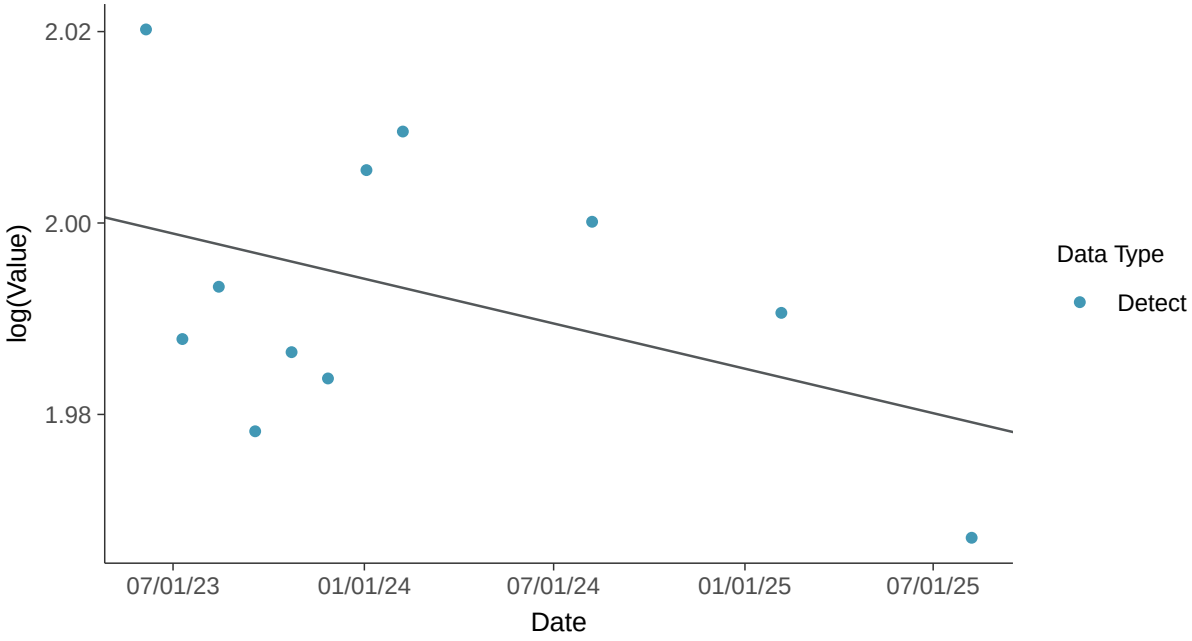
Gamma Q-Q plot

pH, Field, MW-100C (su)



Trend Regression: Lognormal MLE

pH, Field, MW-100C (su)

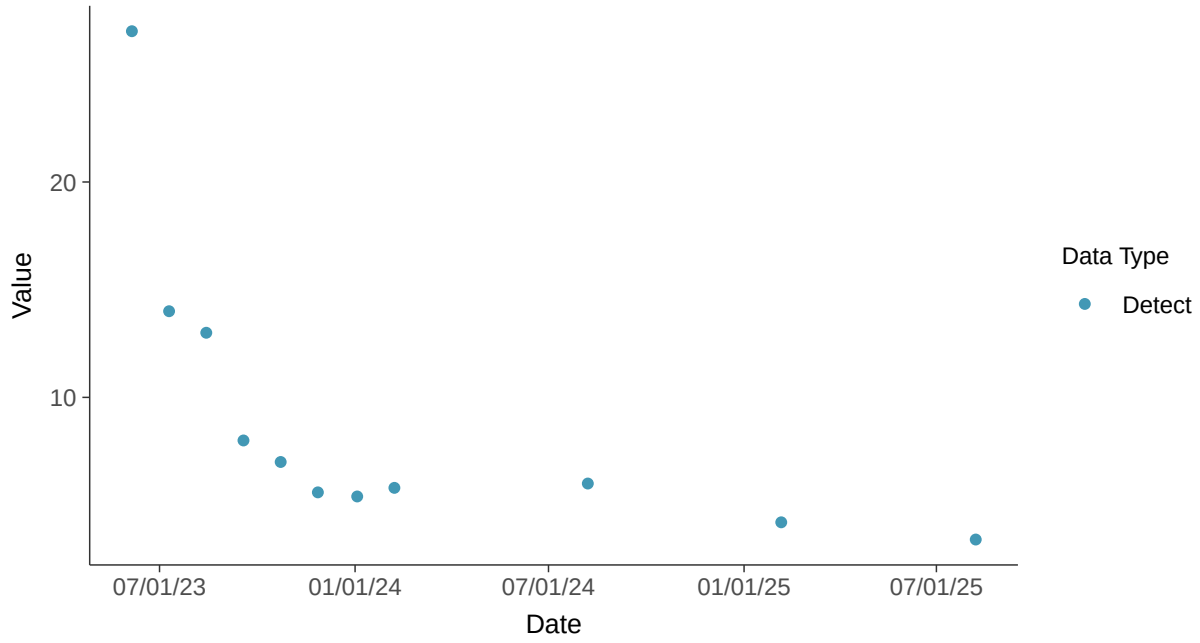


Appendix III: Sulfate, MW-100C

ID: 20_2_124

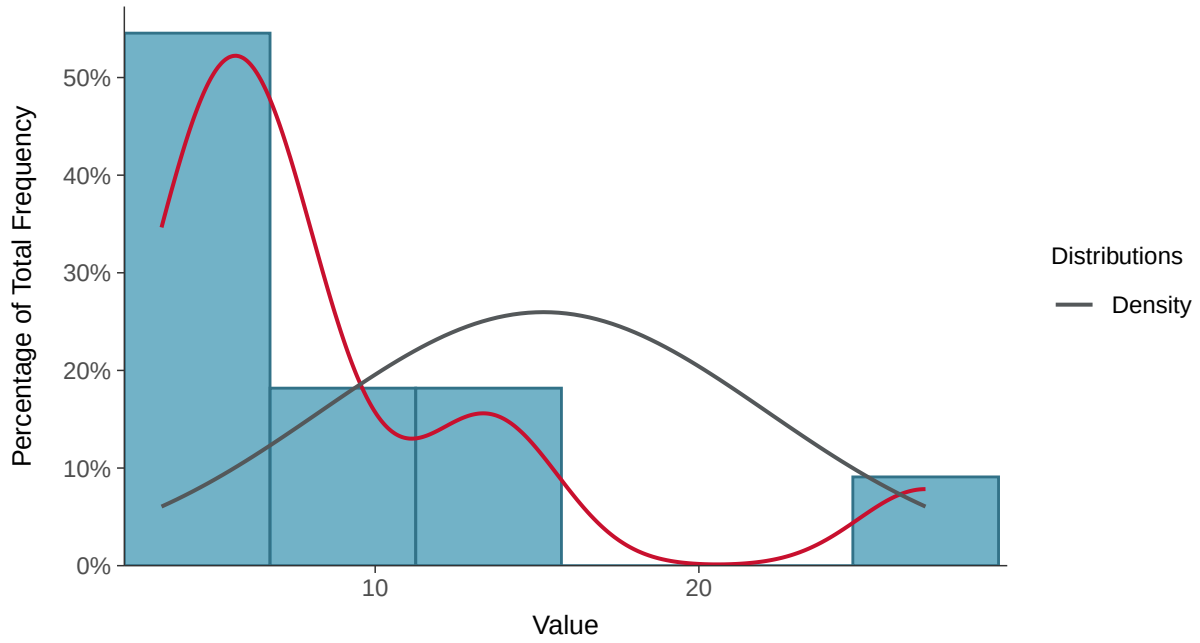
Scatter Plot

Sulfate, MW-100C (mg/l)



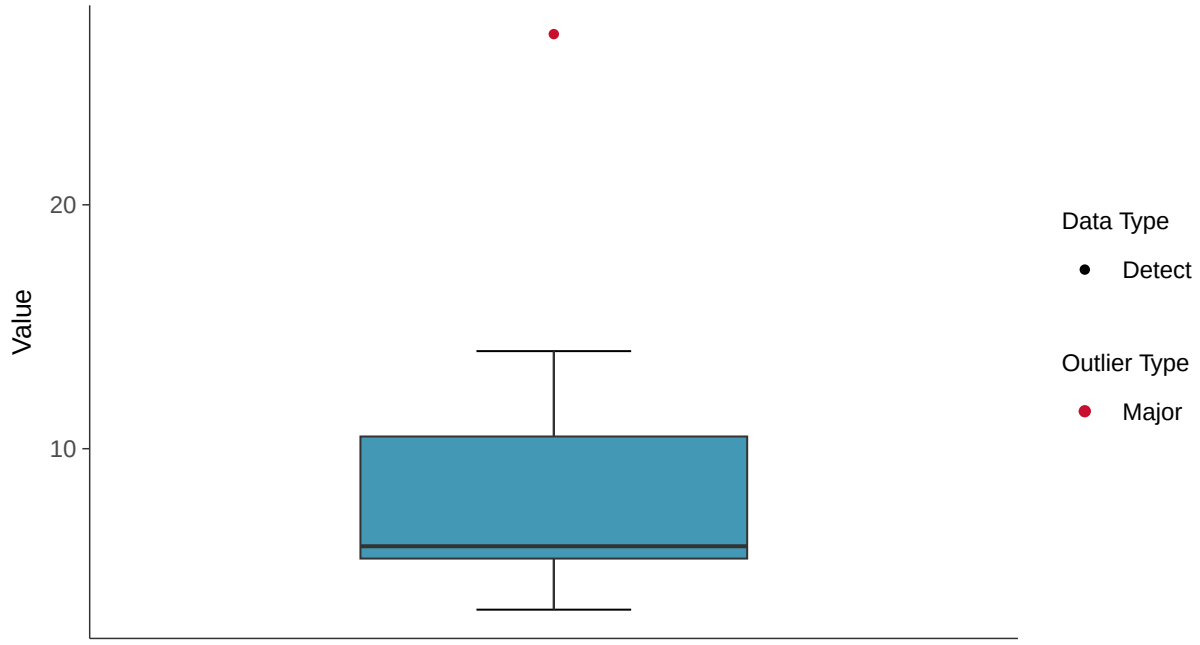
Histogram

Sulfate, MW-100C (mg/l)



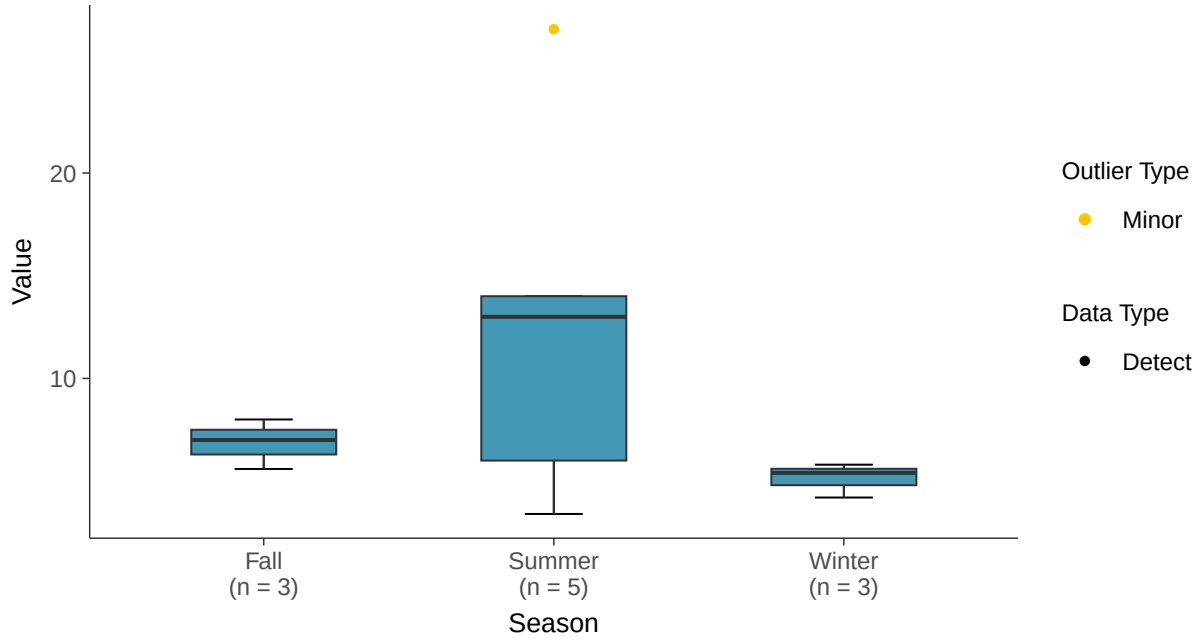
Boxplot

Sulfate, MW-100C (mg/l)



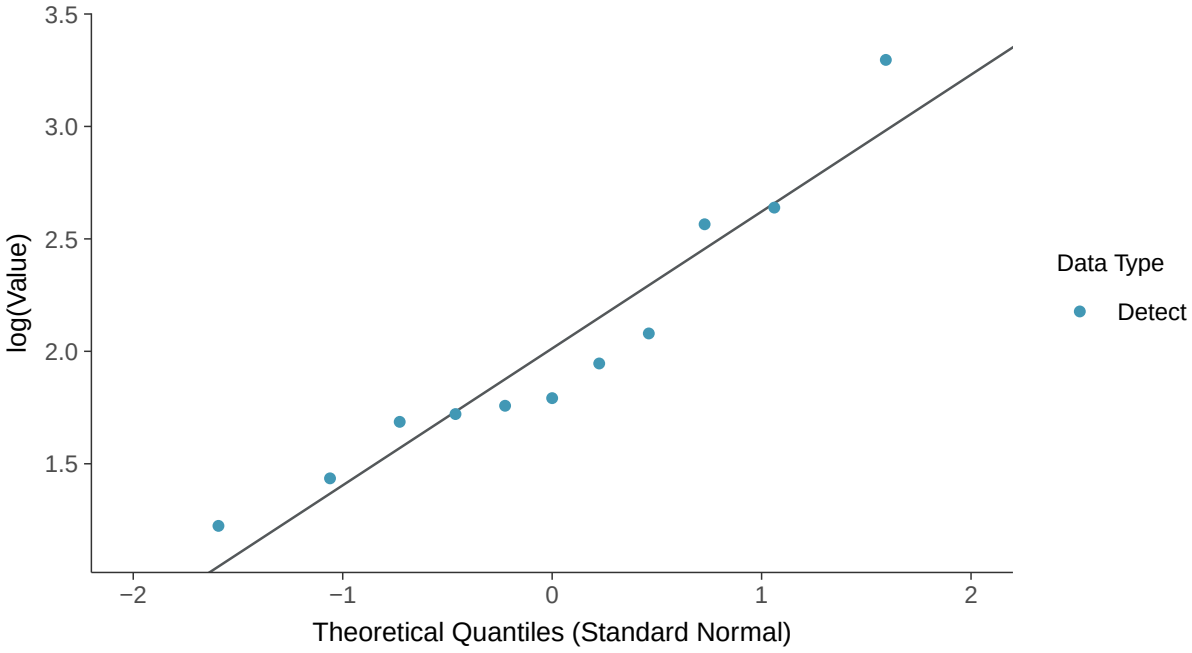
Boxplot by Season

Sulfate, MW-100C (mg/l)



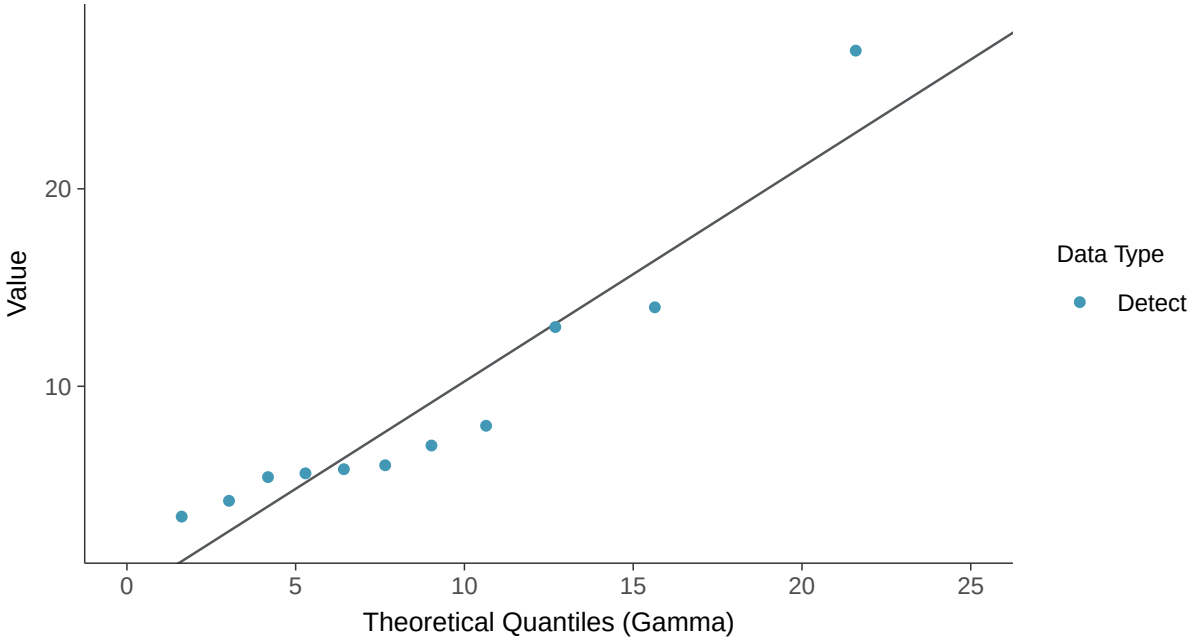
Lognormal Q-Q plot

Sulfate, MW-100C (mg/l)



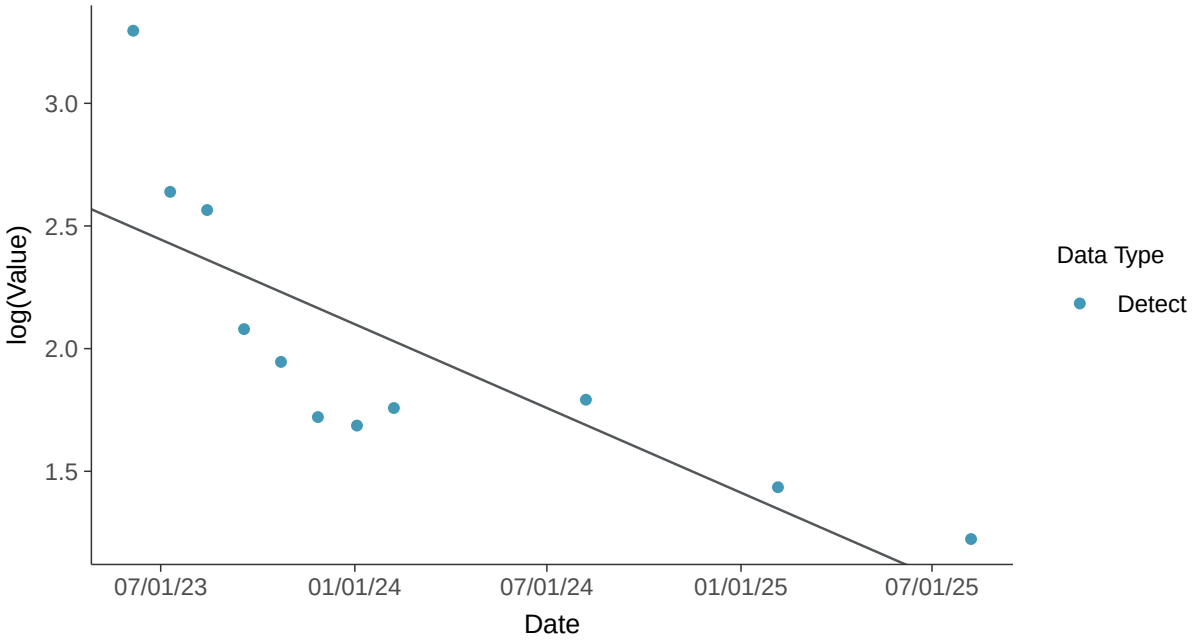
Gamma Q-Q plot

Sulfate, MW-100C (mg/l)



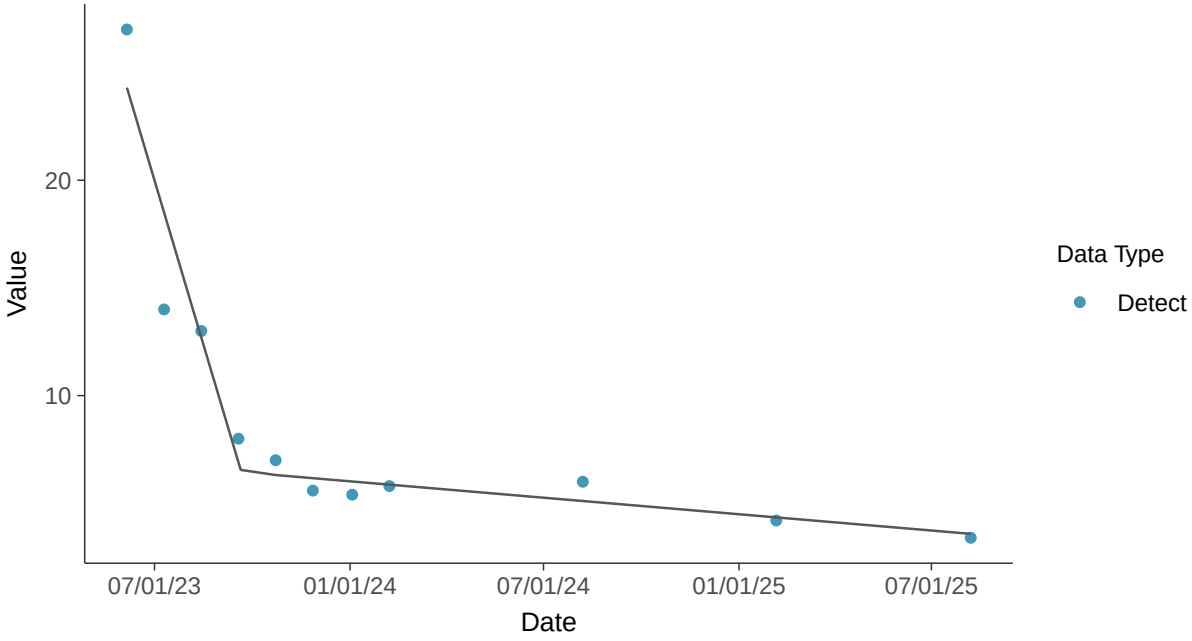
Trend Regression: Lognormal MLE

Sulfate, MW-100C (mg/l)



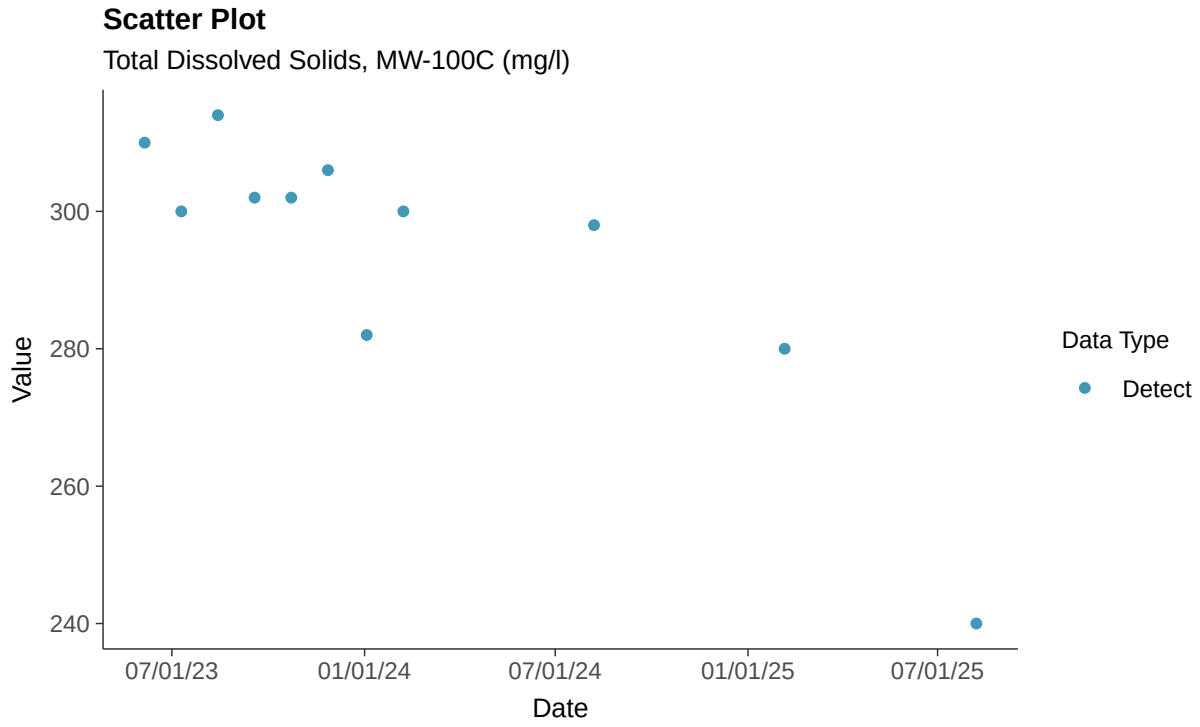
Trend Regression: Piecewise Linear-Linear

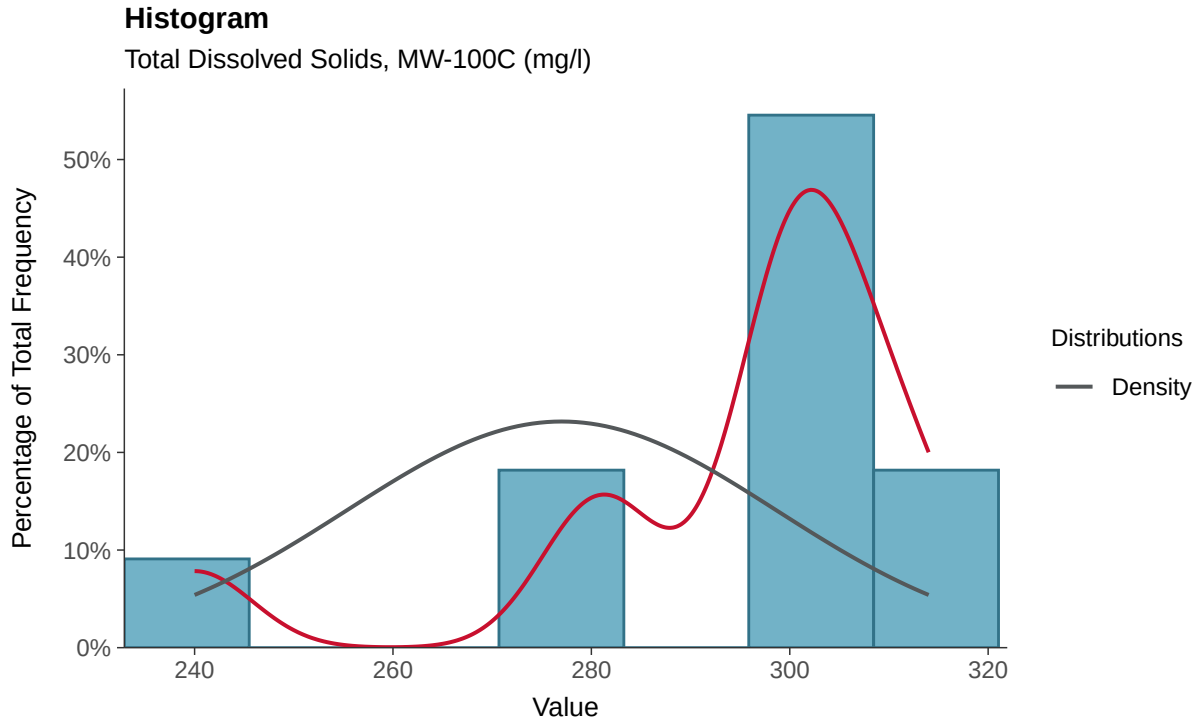
Sulfate, MW-100C (mg/l)



Appendix III: Total Dissolved Solids, MW-100C

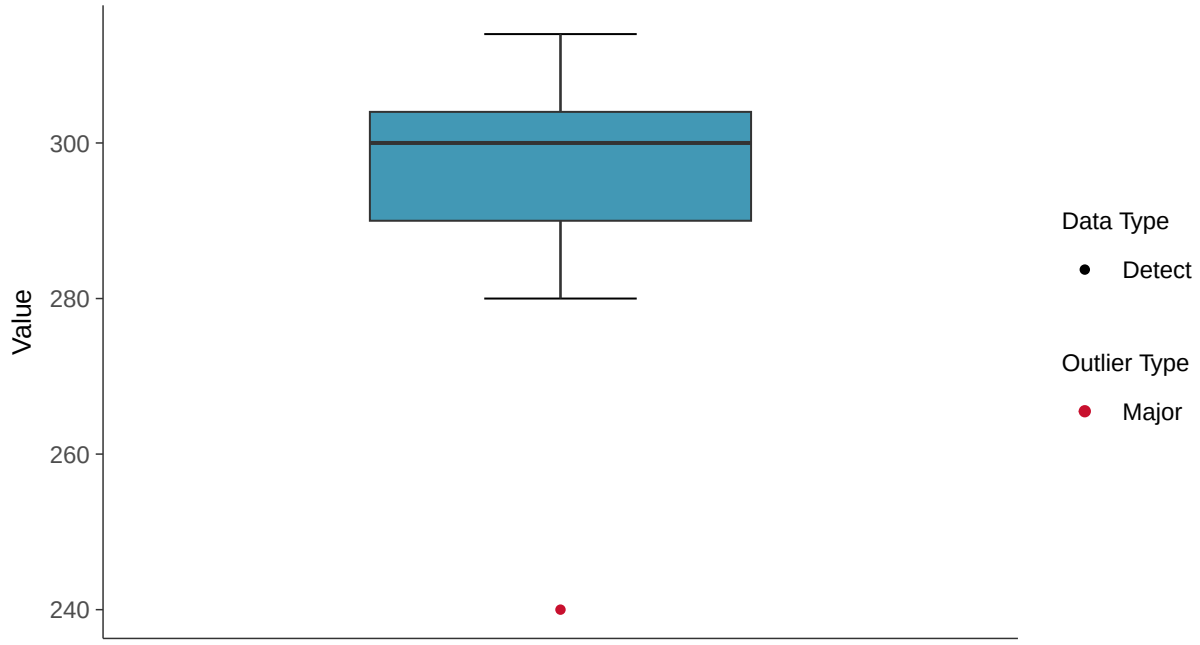
ID: 20_2_126





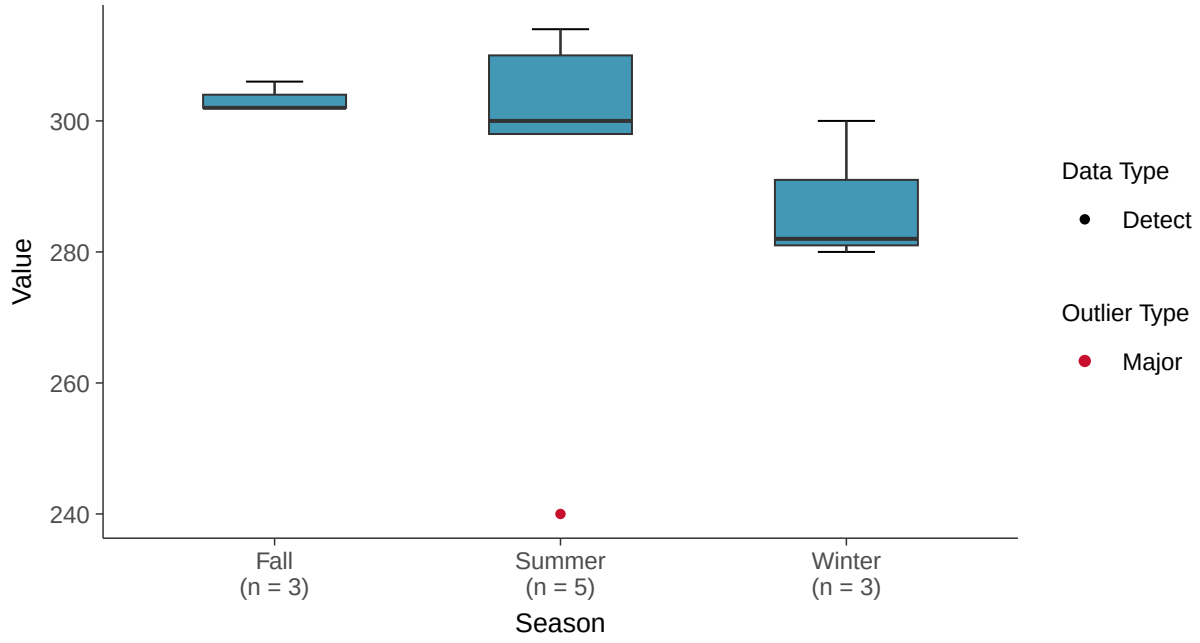
Boxplot

Total Dissolved Solids, MW-100C (mg/l)



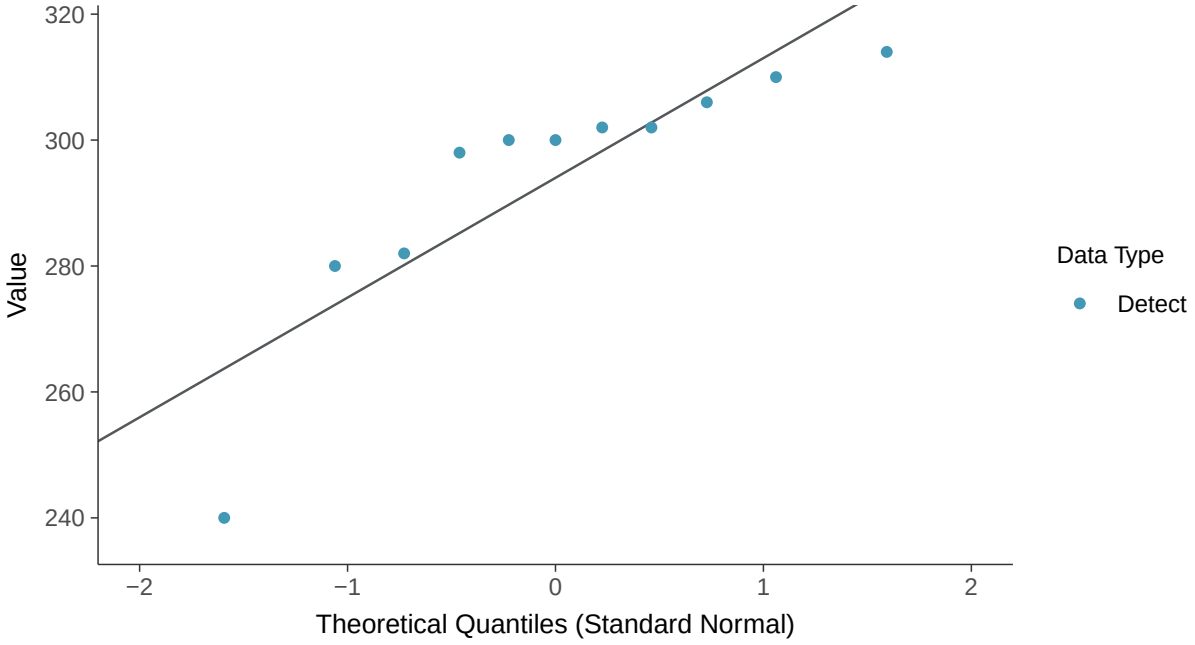
Boxplot by Season

Total Dissolved Solids, MW-100C (mg/l)



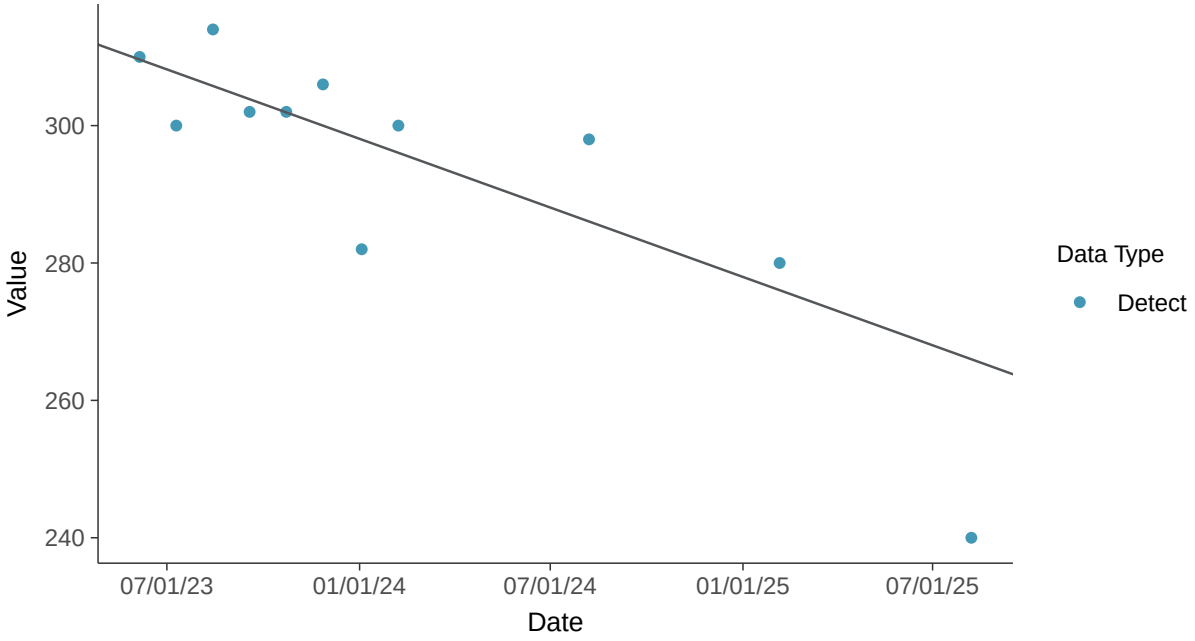
Normal Q-Q plot

Total Dissolved Solids, MW-100C (mg/l)



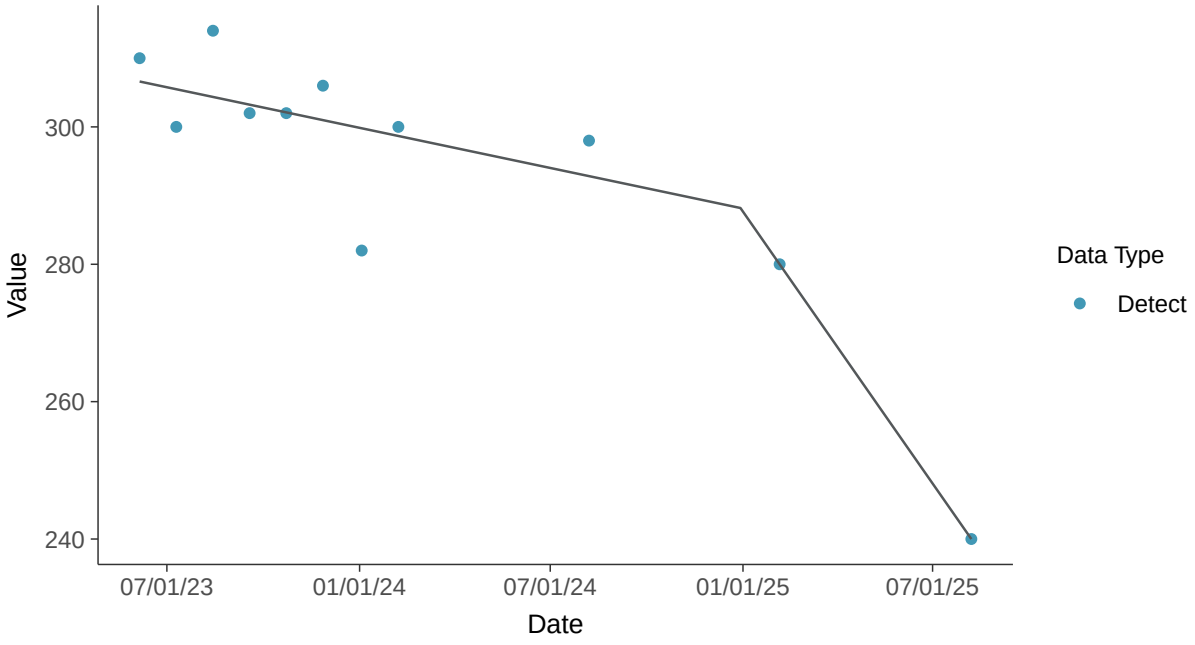
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Total Dissolved Solids, MW-100C (mg/l)



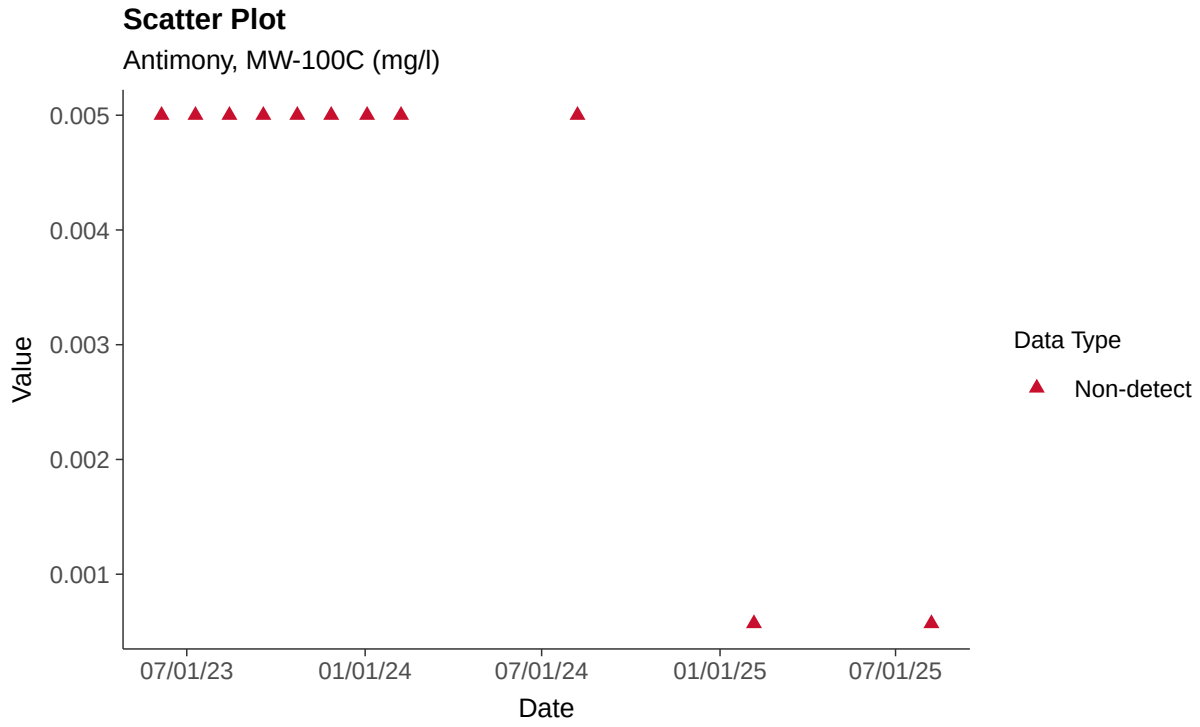
Trend Regression: Piecewise Linear-Linear

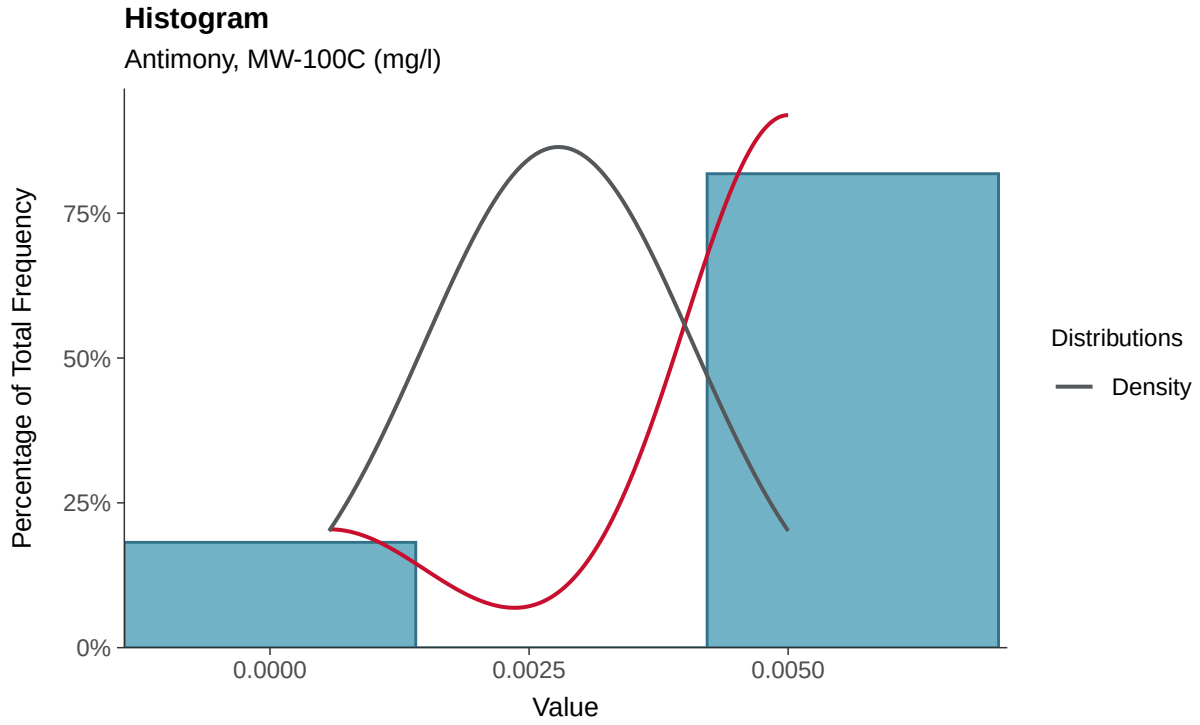
Total Dissolved Solids, MW-100C (mg/l)



Appendix IV: Antimony, MW-100C

ID: 20_3_101



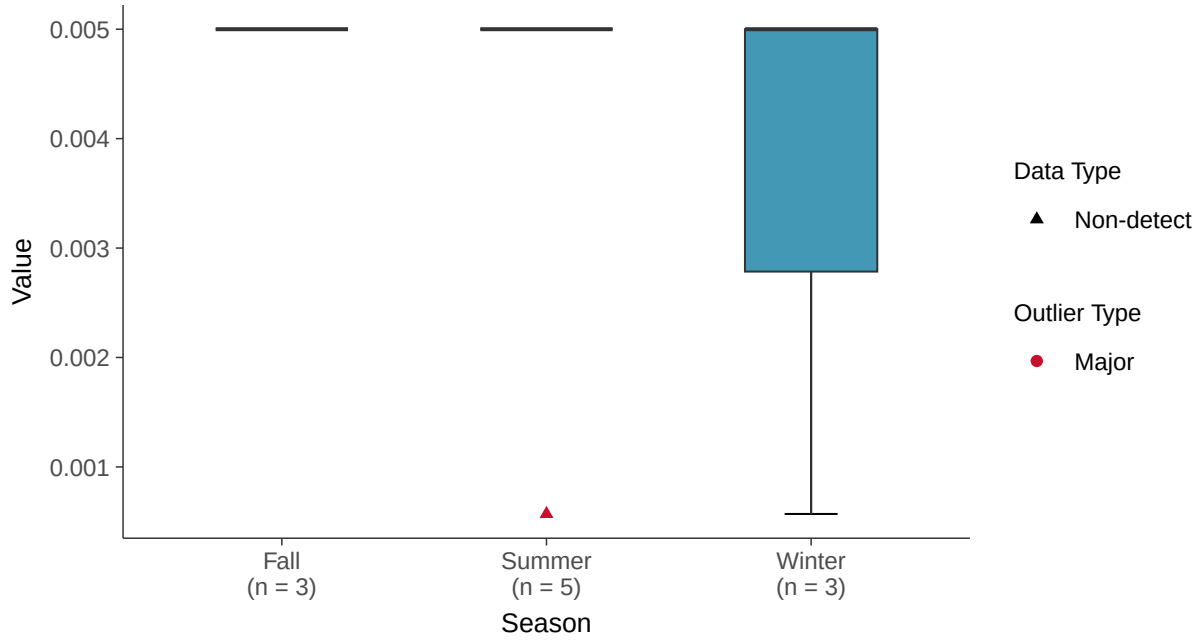


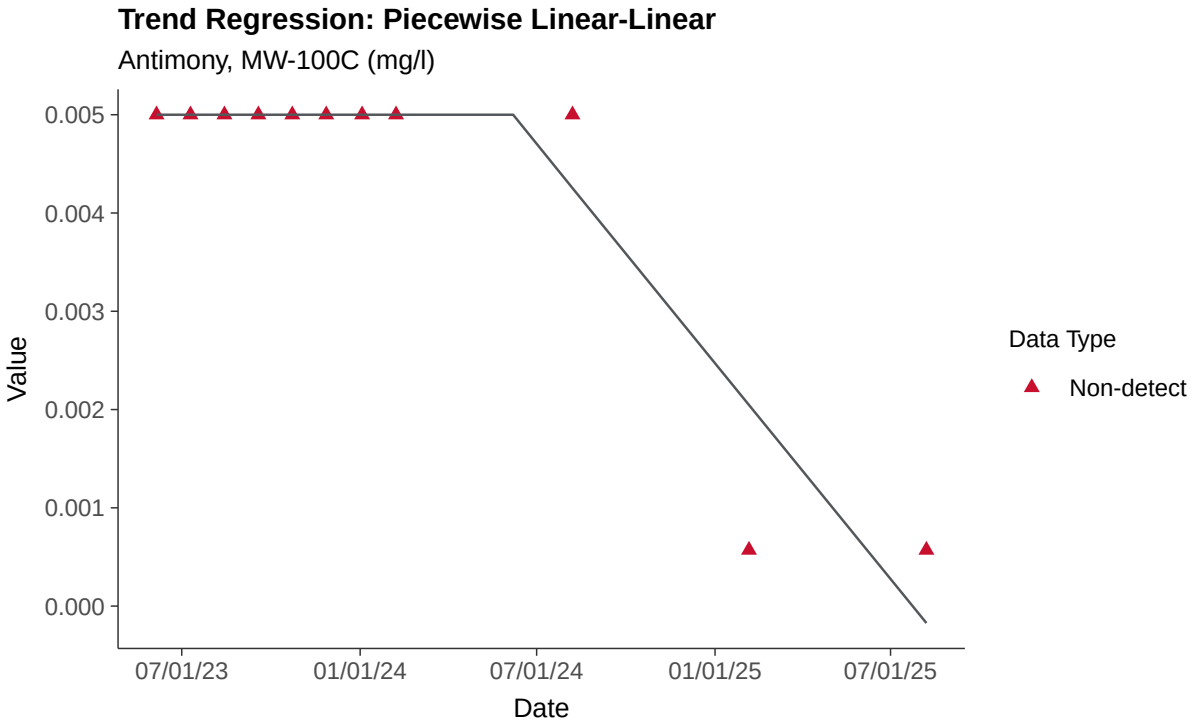
Boxplot

Antimony, MW-100C (mg/l)

Boxplot by Season

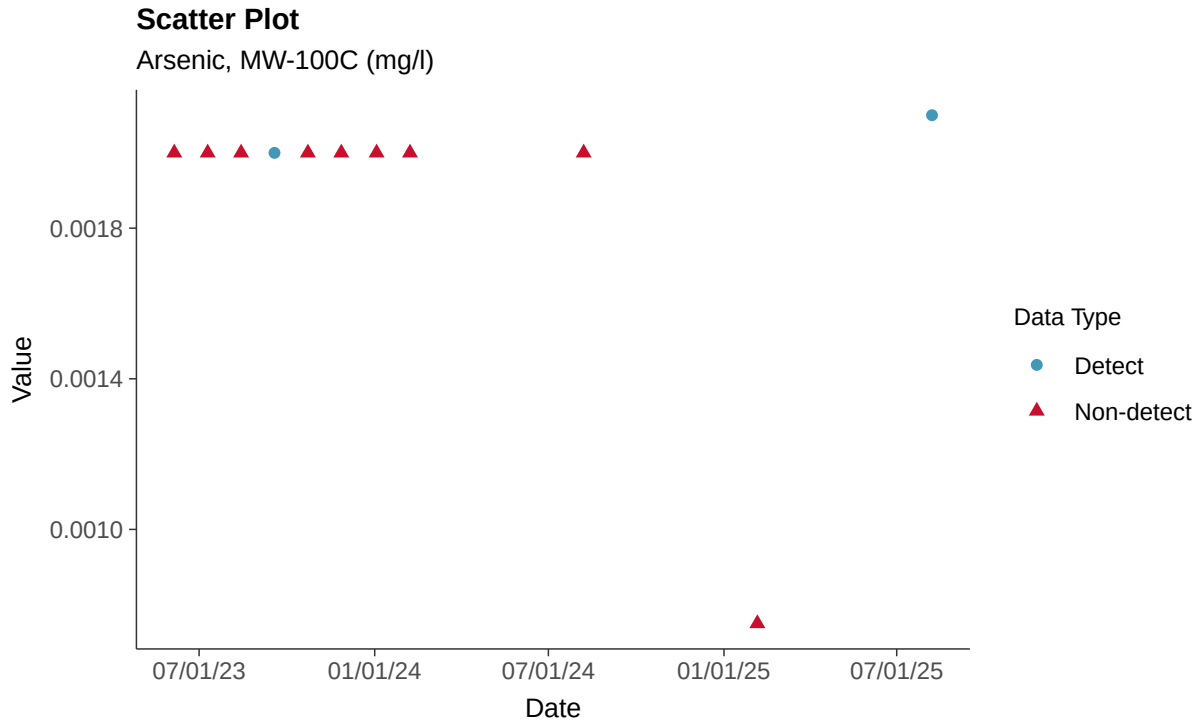
Antimony, MW-100C (mg/l)

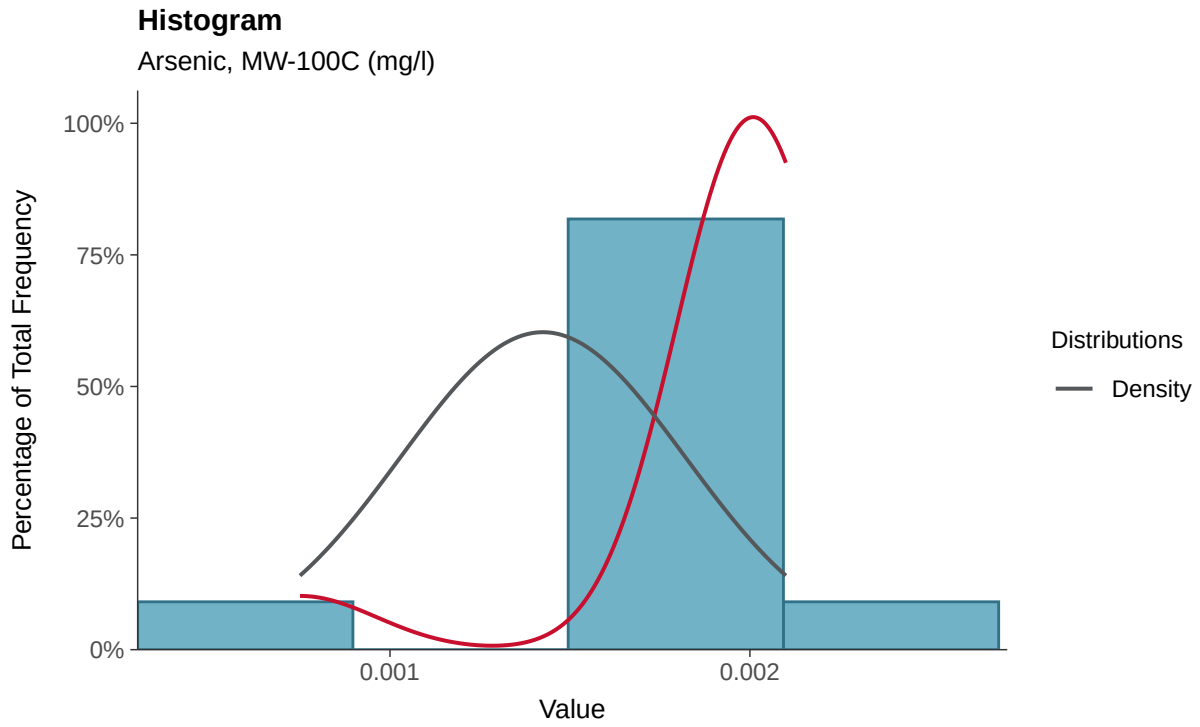



Trend Regression: Piecewise Linear-Linear
Antimony, MW-100C (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Arsenic, MW-100C

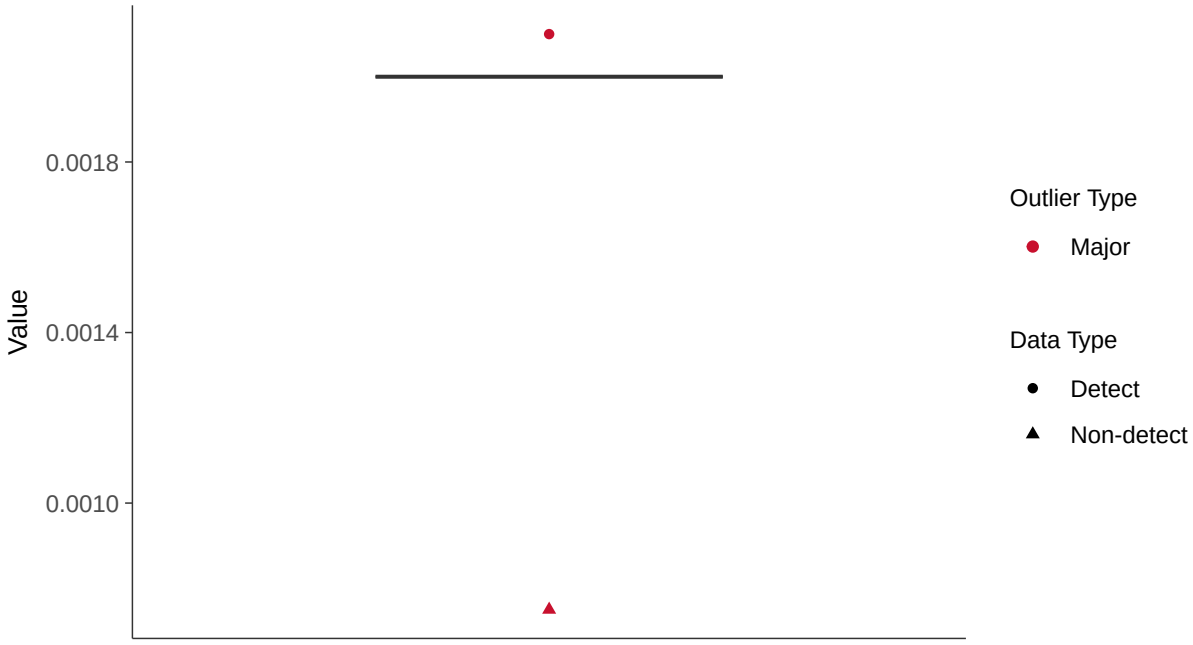
ID: 20_3_102





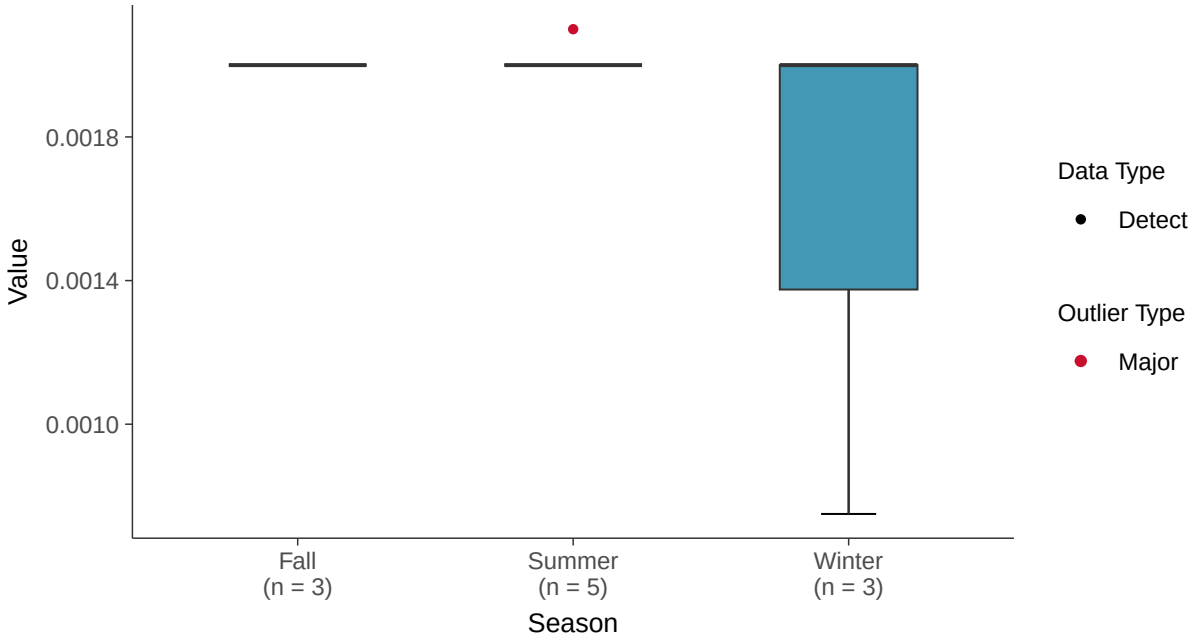
Boxplot

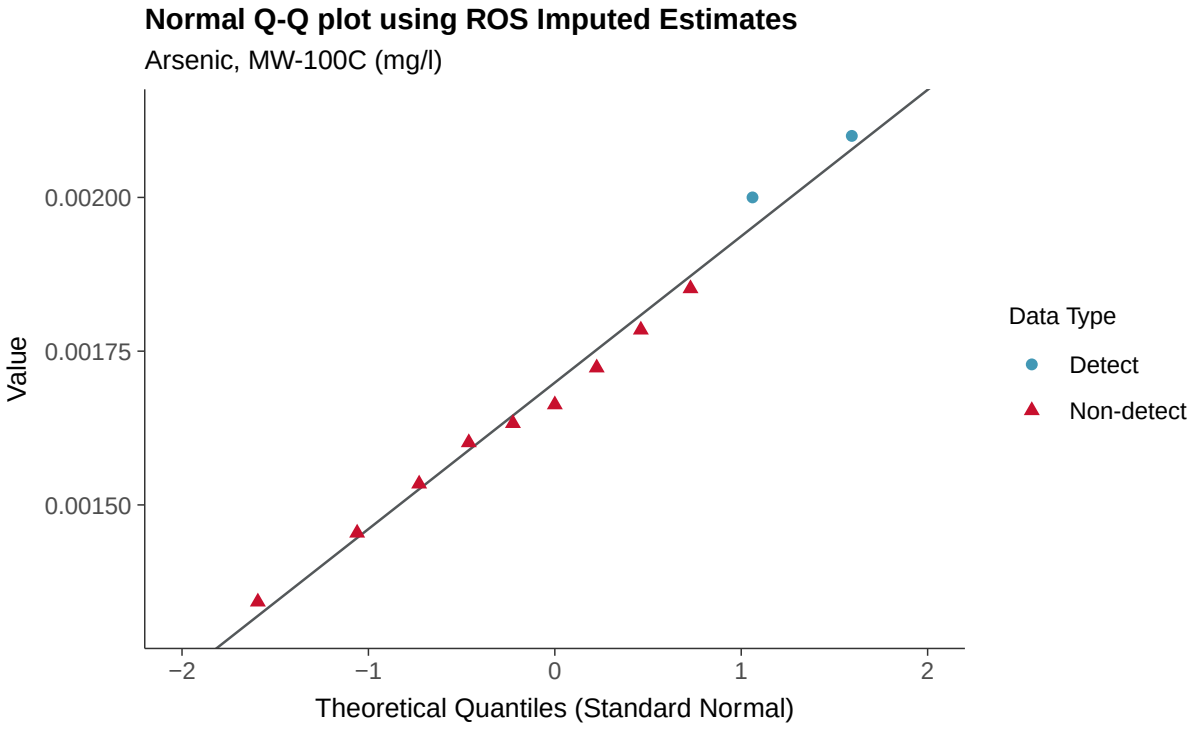
Arsenic, MW-100C (mg/l)



Boxplot by Season

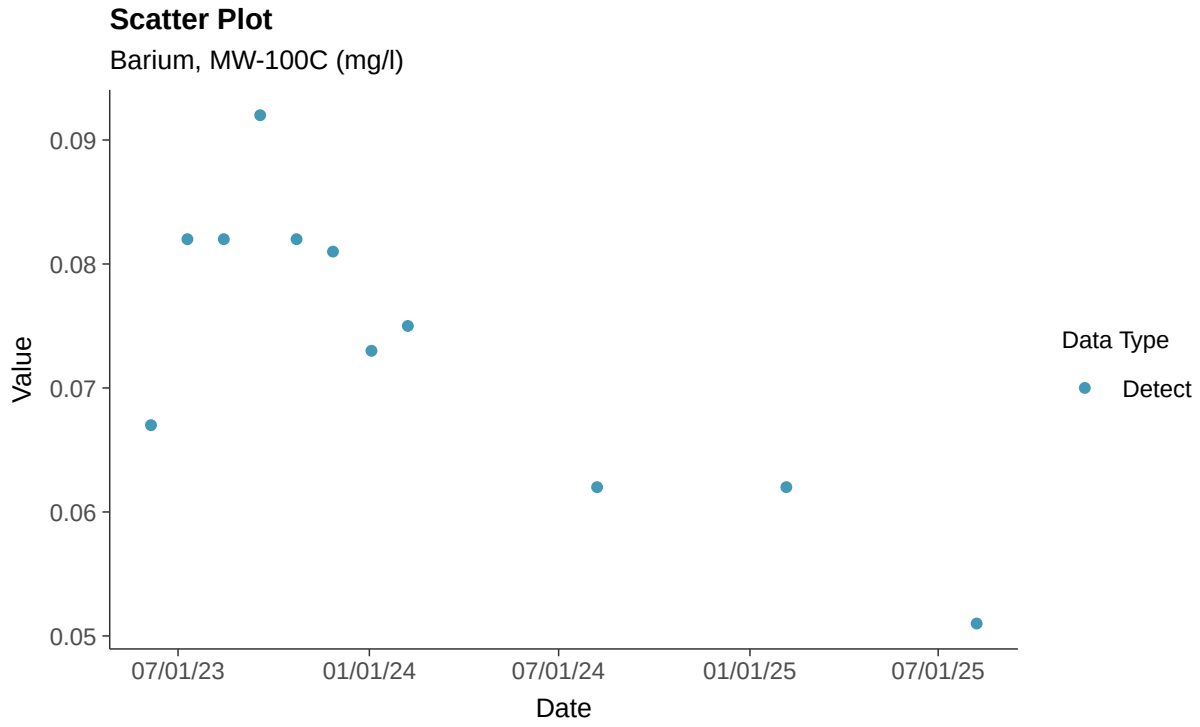
Arsenic, MW-100C (mg/l)

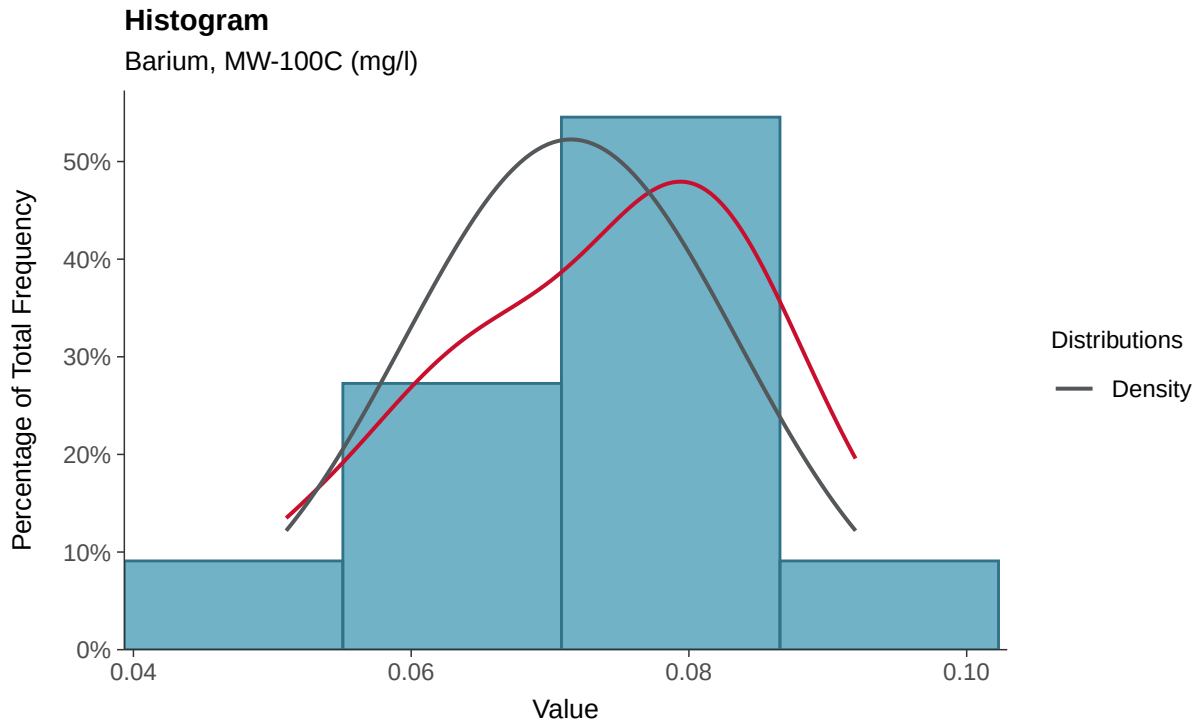



Normal Q-Q plot using ROS Imputed Estimates
Arsenic, MW-100C (mg/l)
Value
0.00200
0.00175
0.00150
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect
Non-detect

Appendix IV: Barium, MW-100C

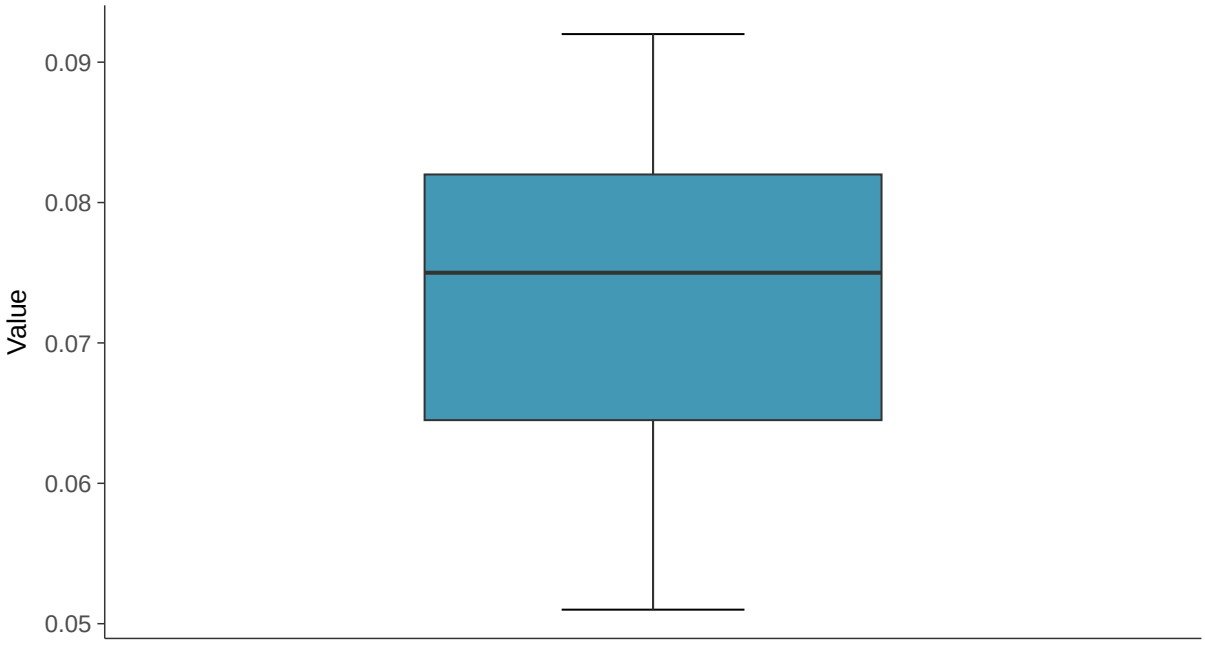
ID: 20_3_103





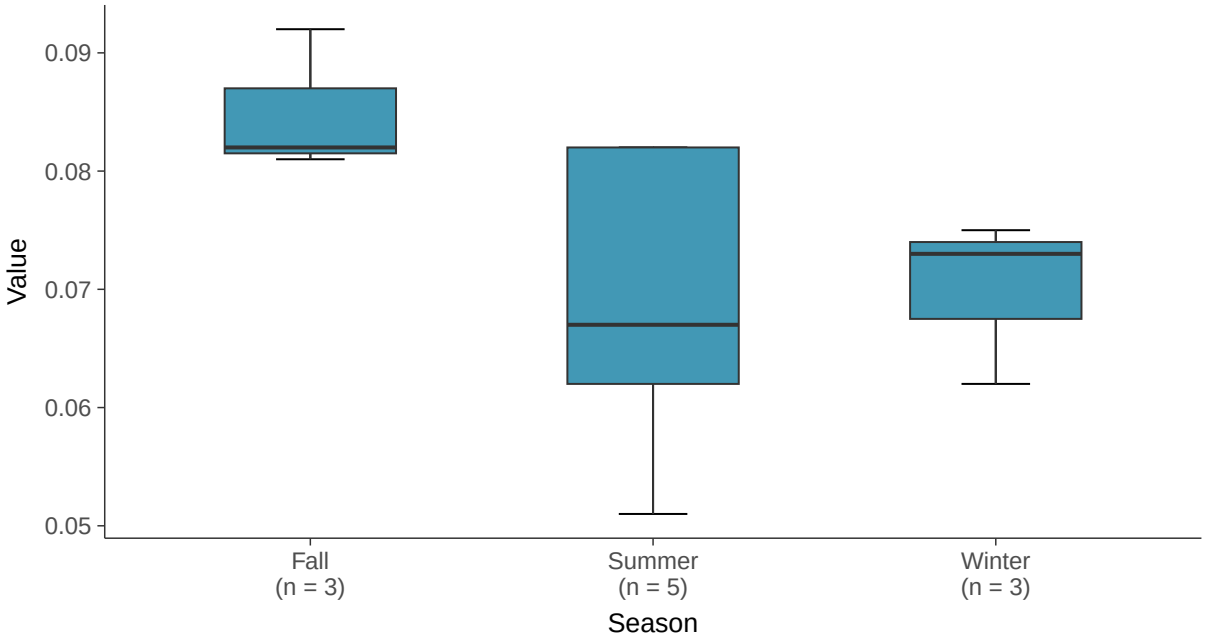
Boxplot

Barium, MW-100C (mg/l)



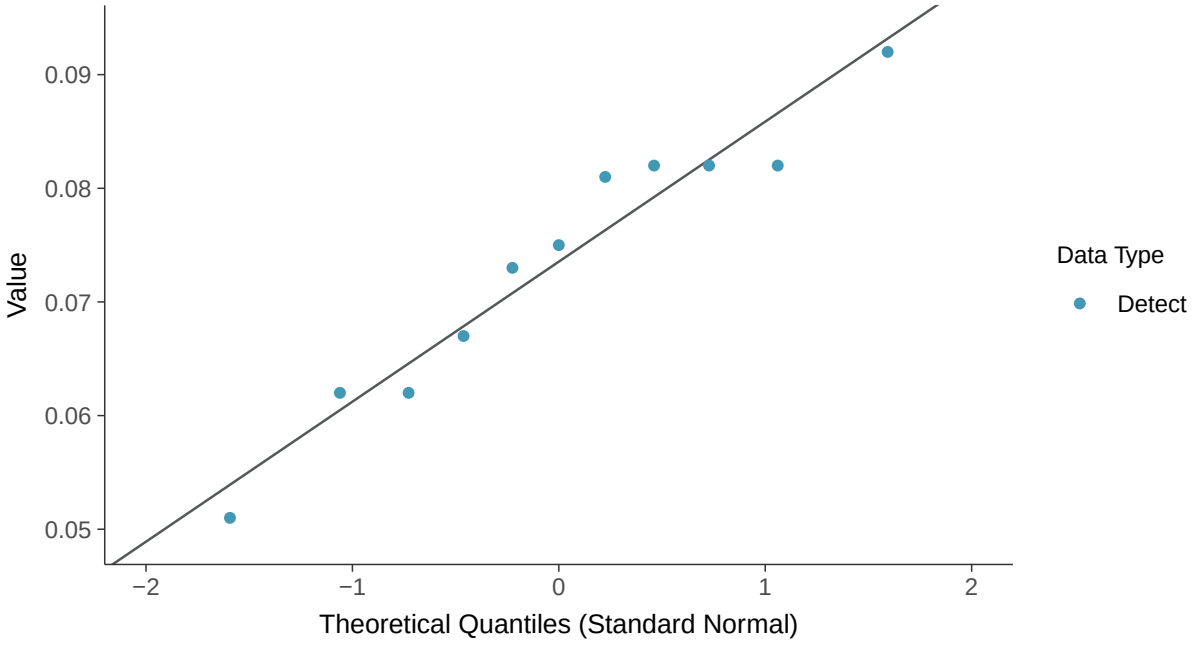
Boxplot by Season

Barium, MW-100C (mg/l)



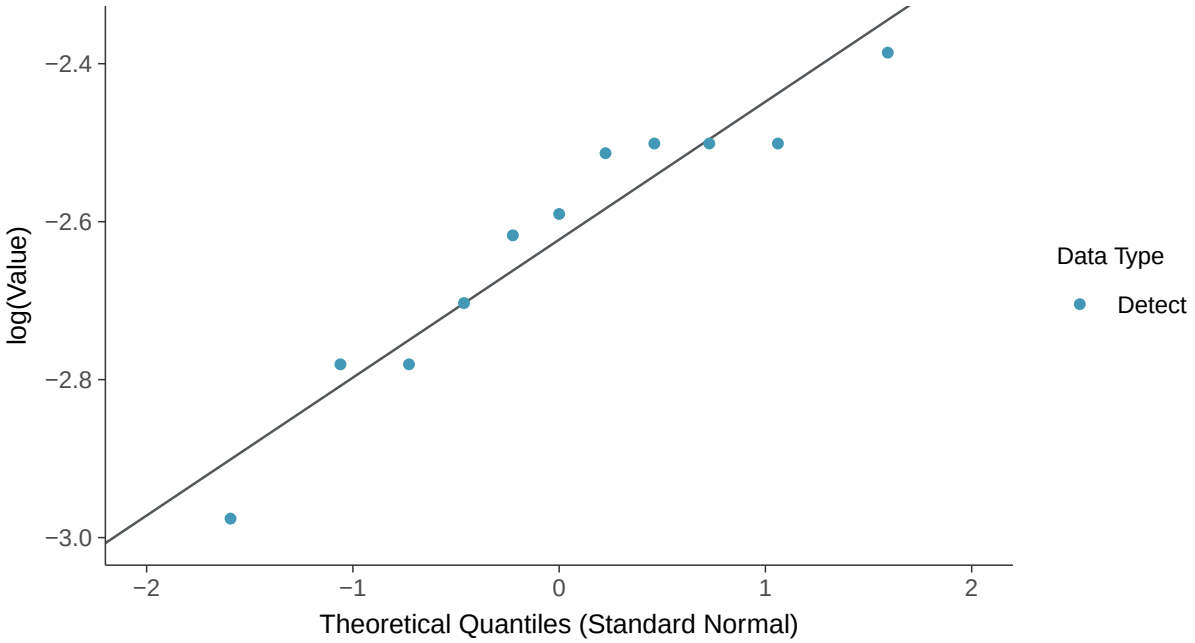
Normal Q-Q plot

Barium, MW-100C (mg/l)



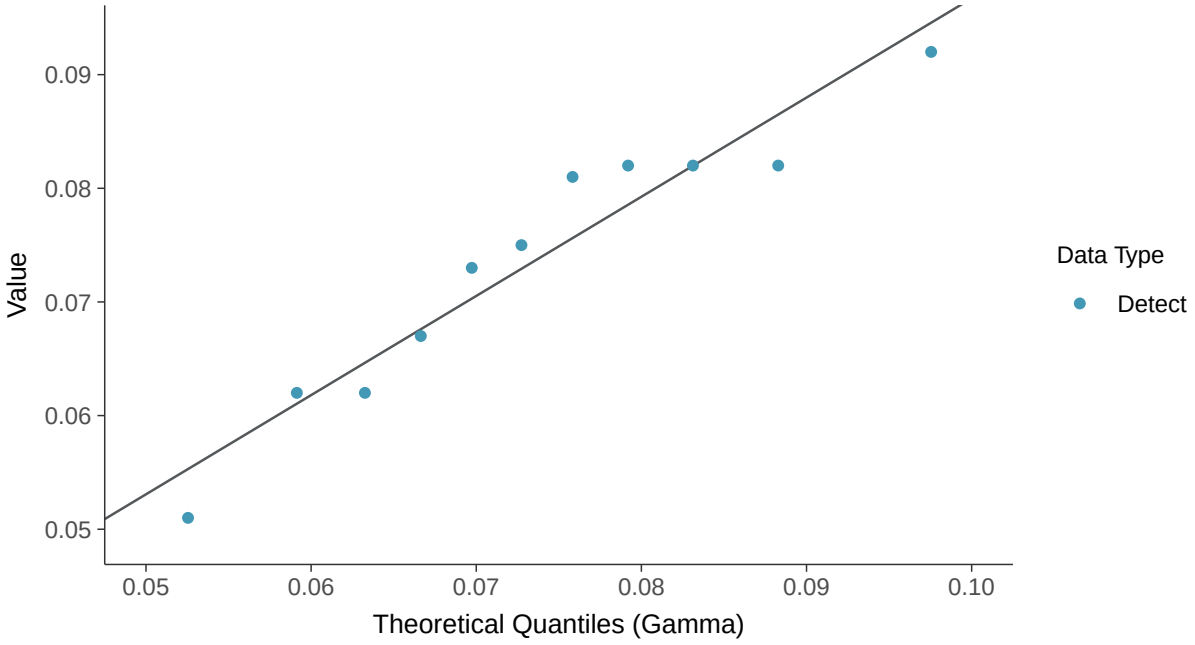
Lognormal Q-Q plot

Barium, MW-100C (mg/l)



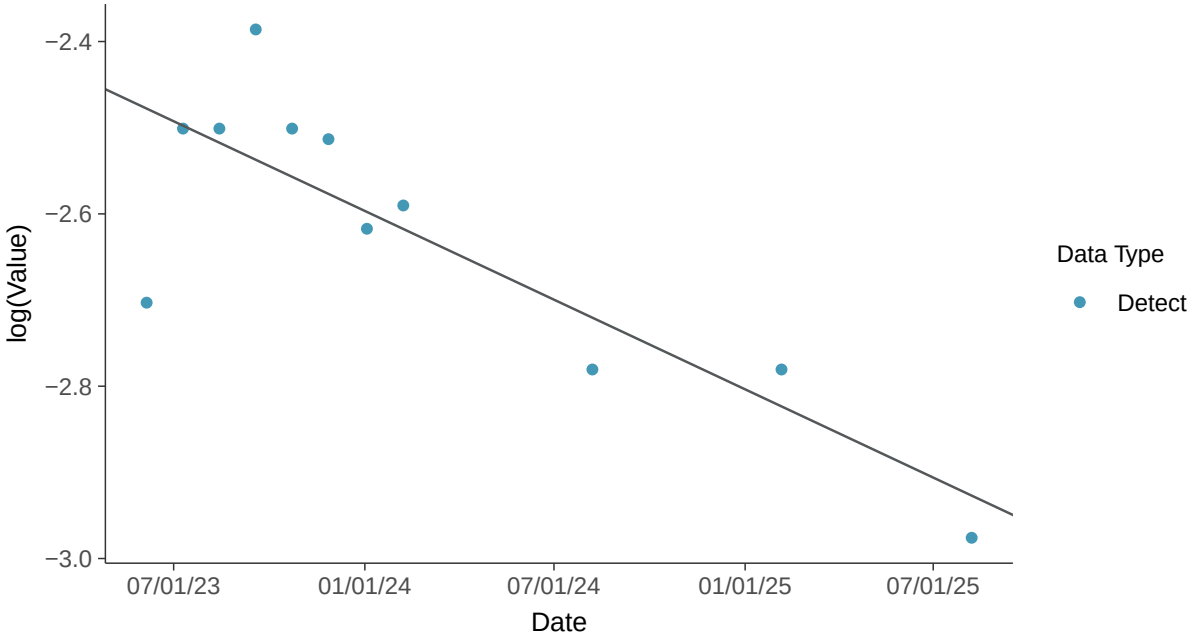
Gamma Q-Q plot

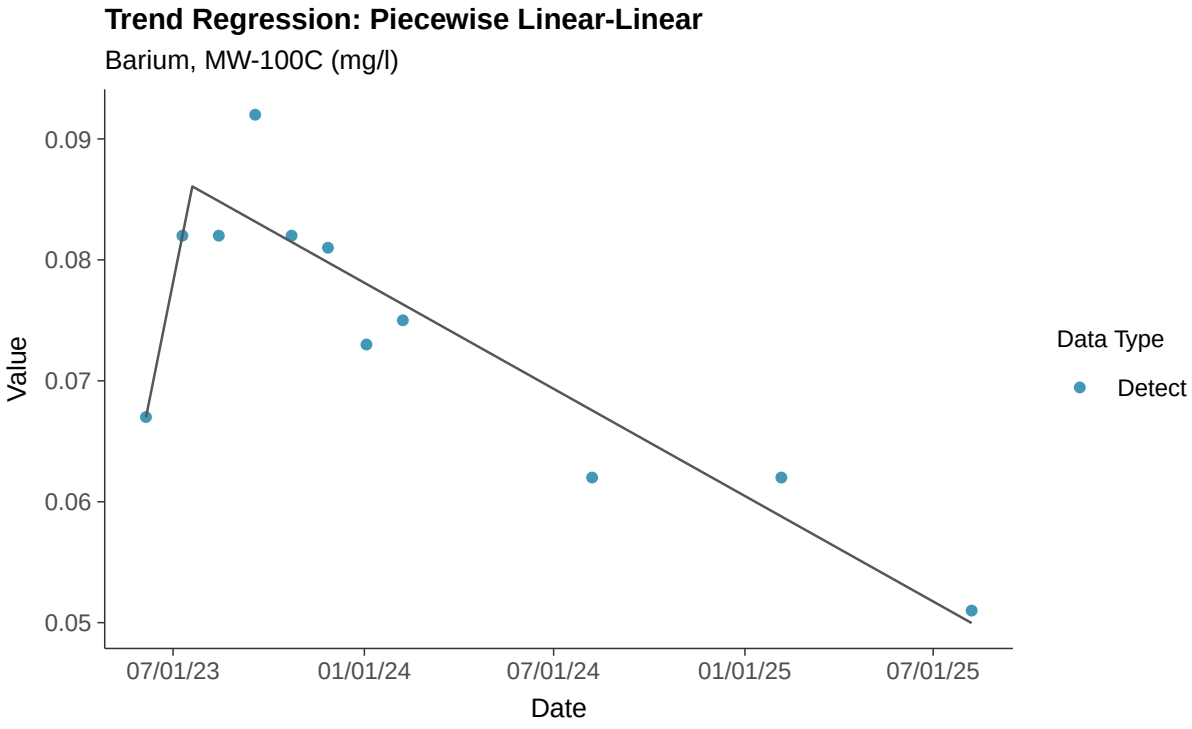
Barium, MW-100C (mg/l)



Trend Regression: Lognormal MLE

Barium, MW-100C (mg/l)



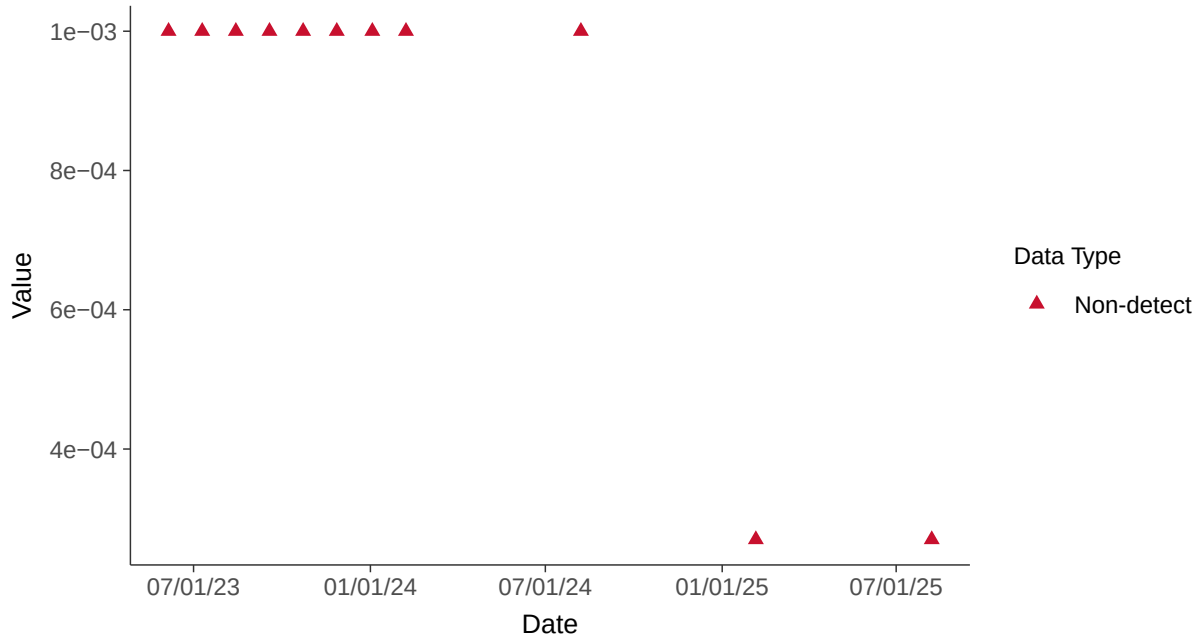

Trend Regression: Piecewise Linear-Linear
Barium, MW-100C (mg/l)
Value
0.09
0.08
0.07
0.06
0.05
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect

Appendix IV: Beryllium, MW-100C

ID: 20_3_104

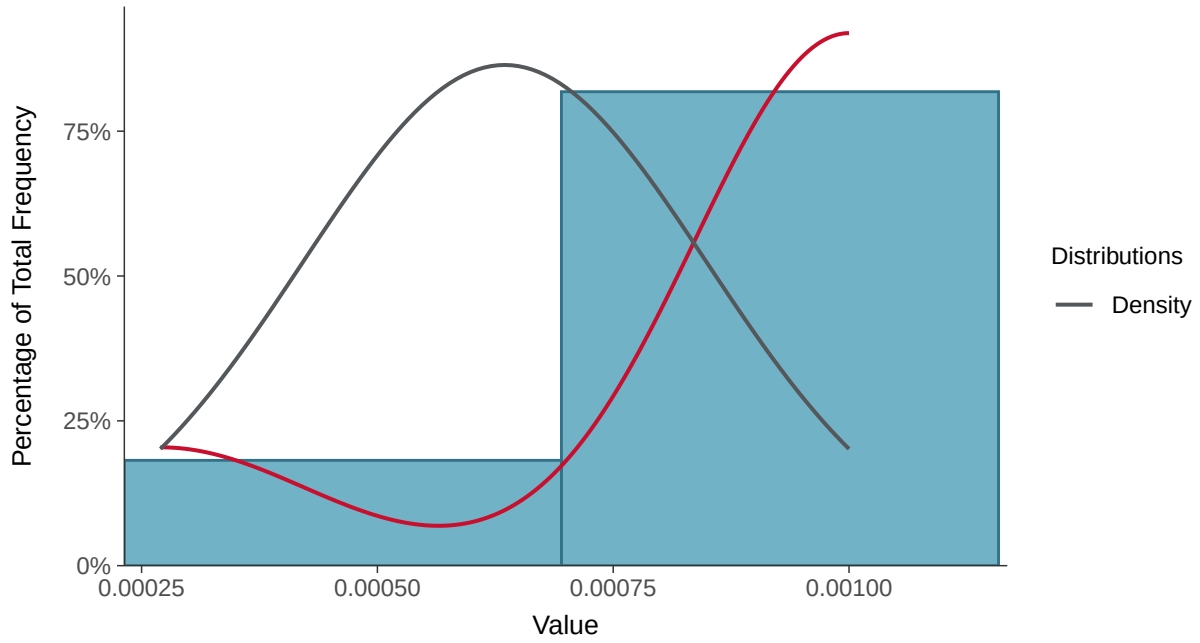
Scatter Plot

Beryllium, MW-100C (mg/l)



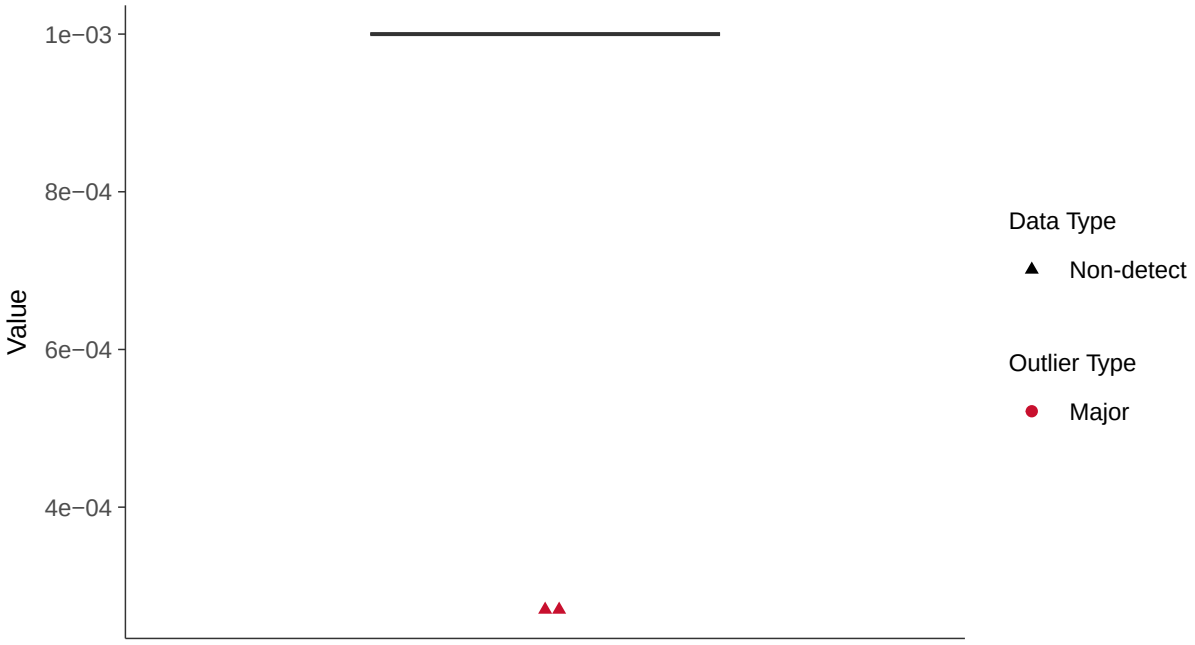
Histogram

Beryllium, MW-100C (mg/l)



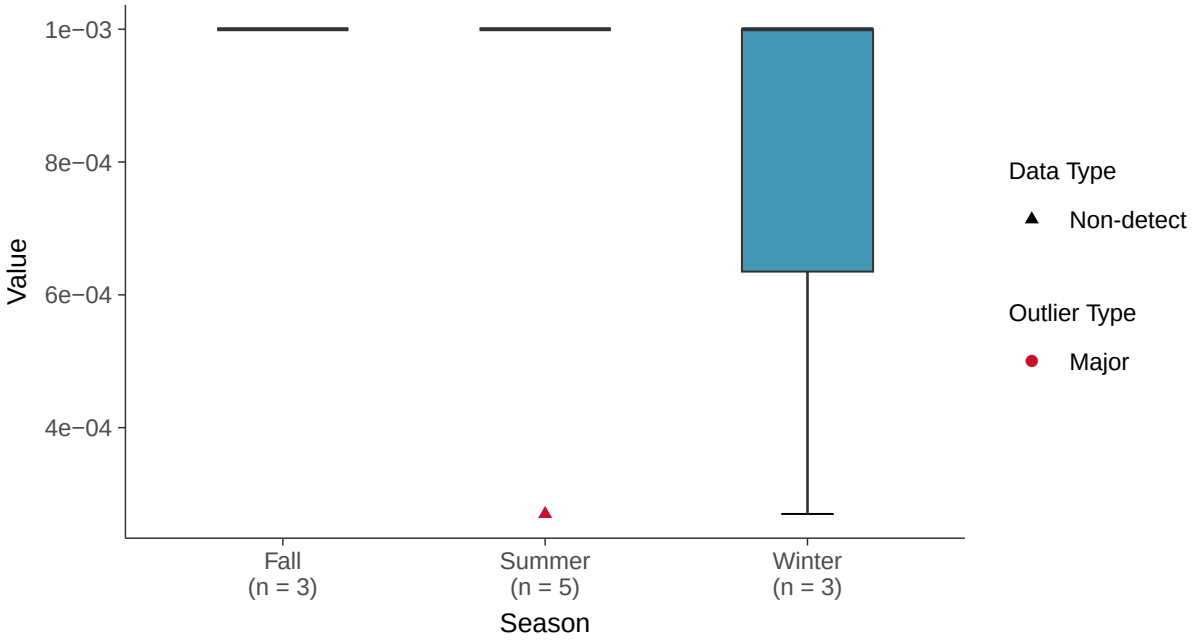
Boxplot

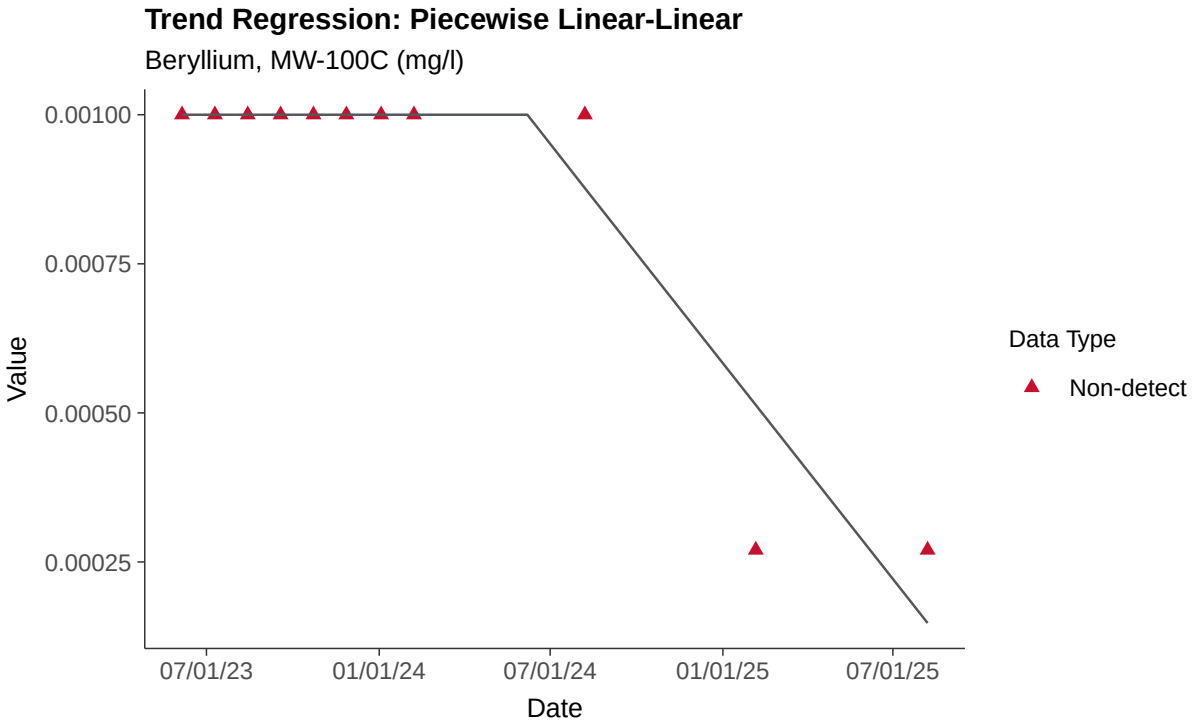
Beryllium, MW-100C (mg/l)



Boxplot by Season

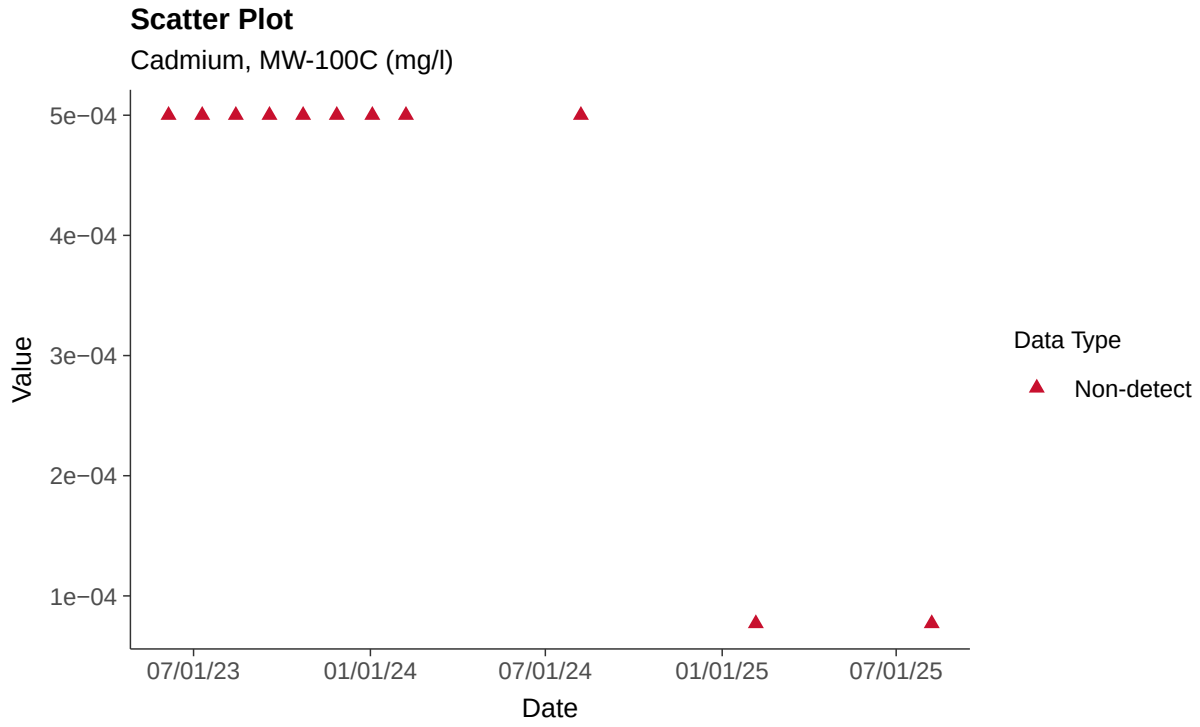
Beryllium, MW-100C (mg/l)

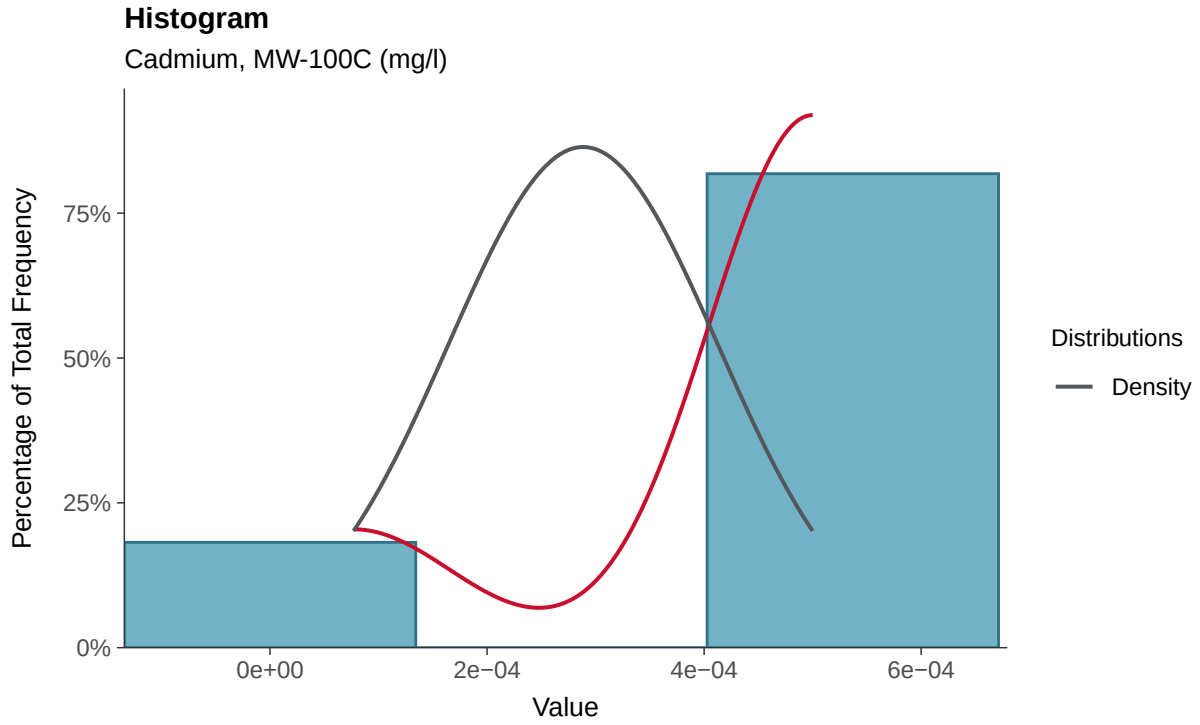



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-100C (mg/l)
0.00100
0.00075
0.00050
0.00025
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Cadmium, MW-100C

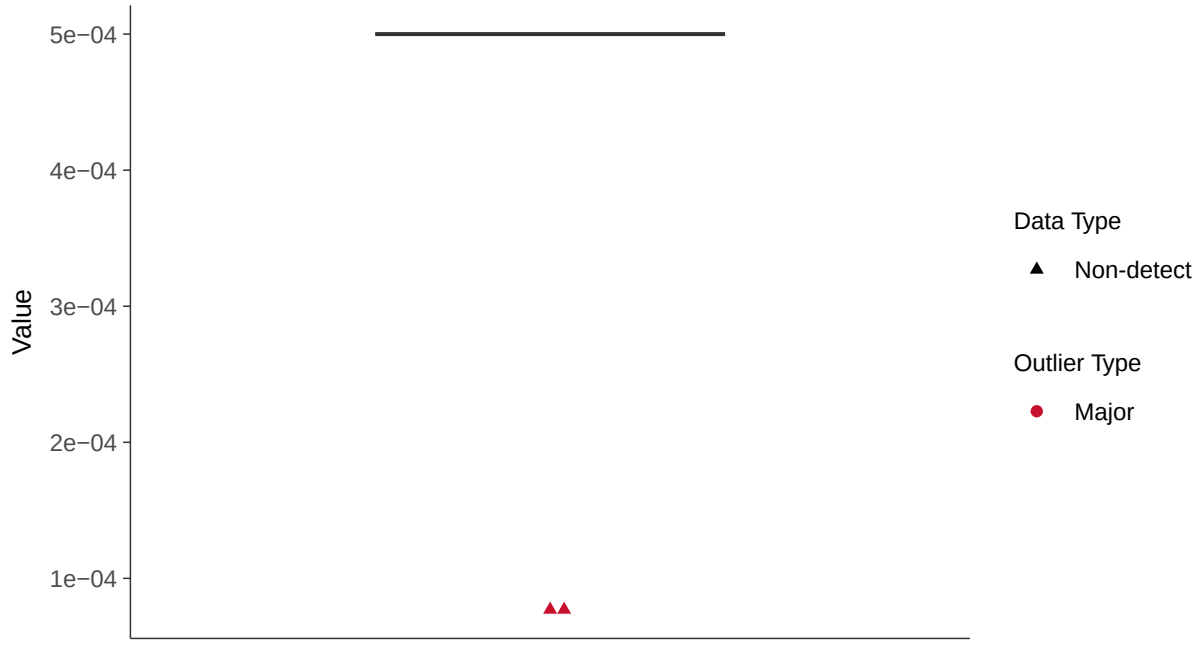
ID: 20_3_106





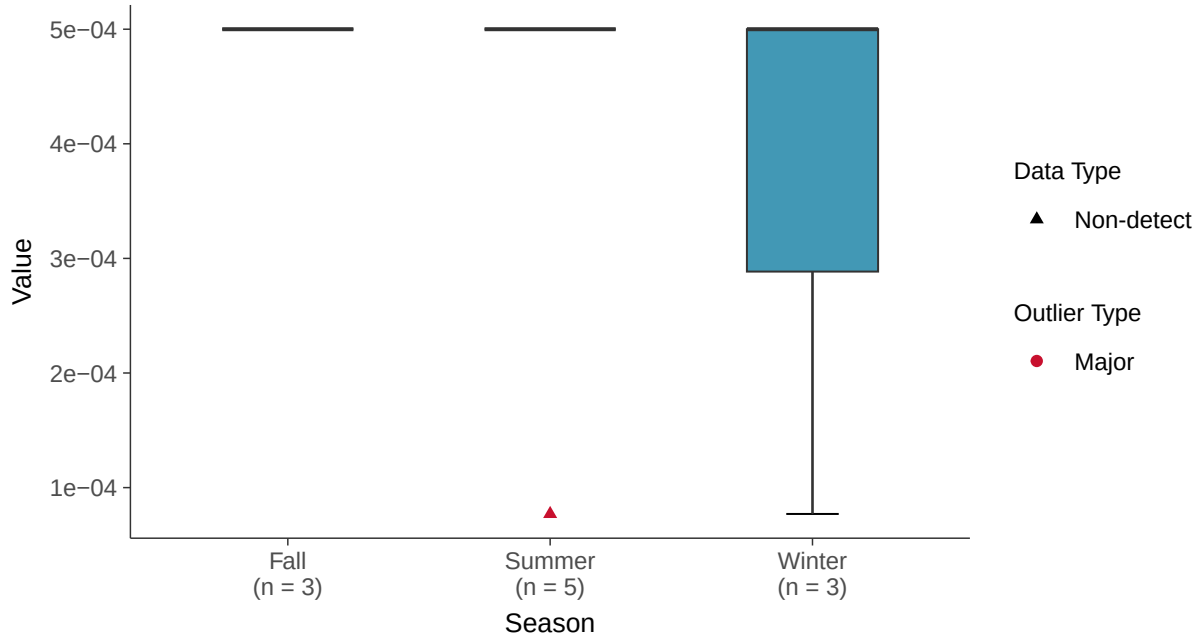
Boxplot

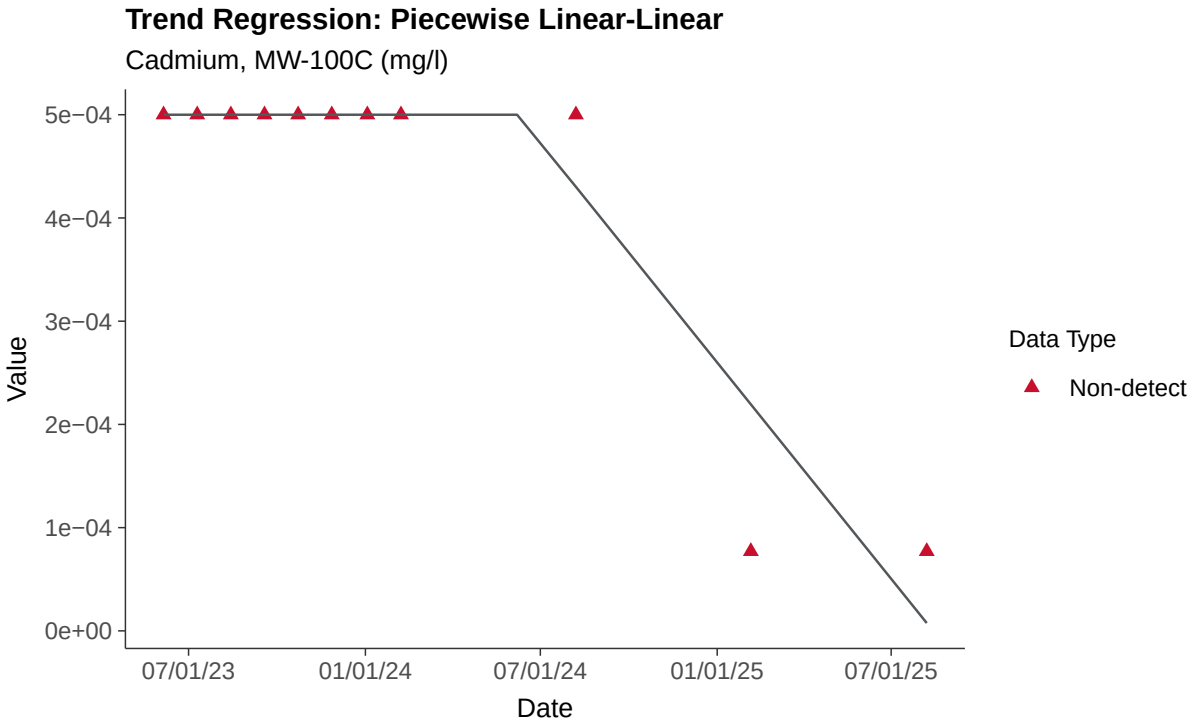
Cadmium, MW-100C (mg/l)



Boxplot by Season

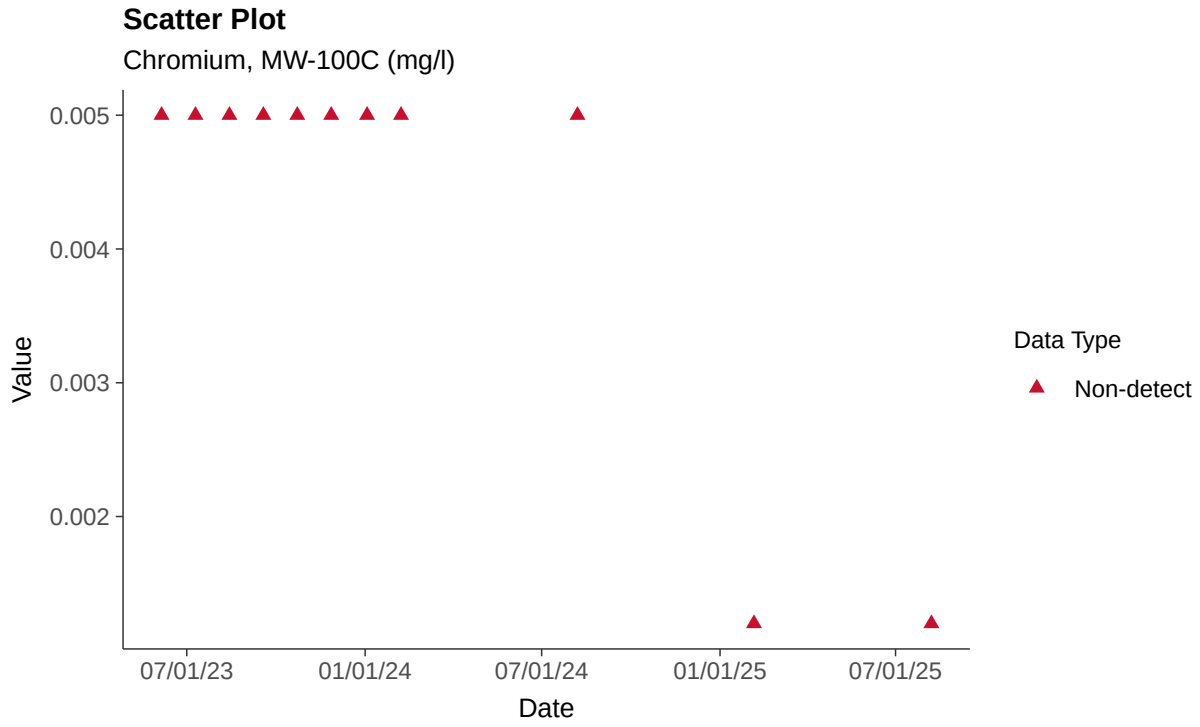
Cadmium, MW-100C (mg/l)

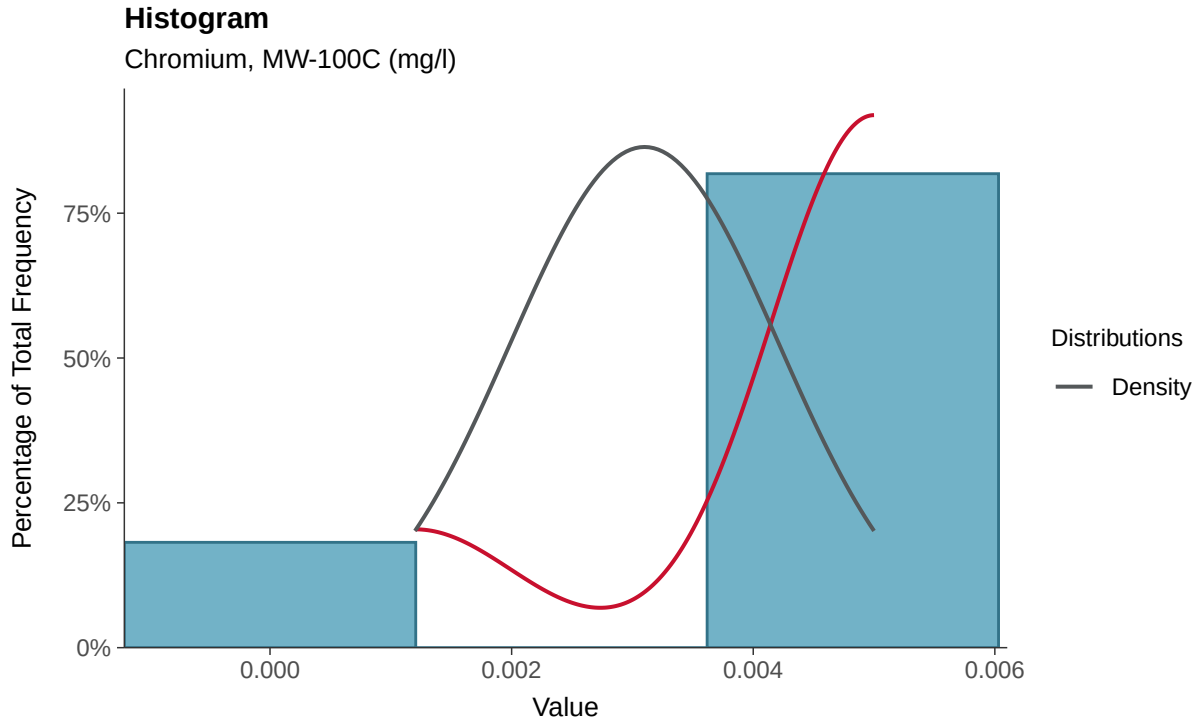



Trend Regression: Piecewise Linear-Linear
Cadmium, MW-100C (mg/l)
Value
5e−04
4e−04
3e−04
2e−04
1e−04
0e+00
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Chromium, MW-100C

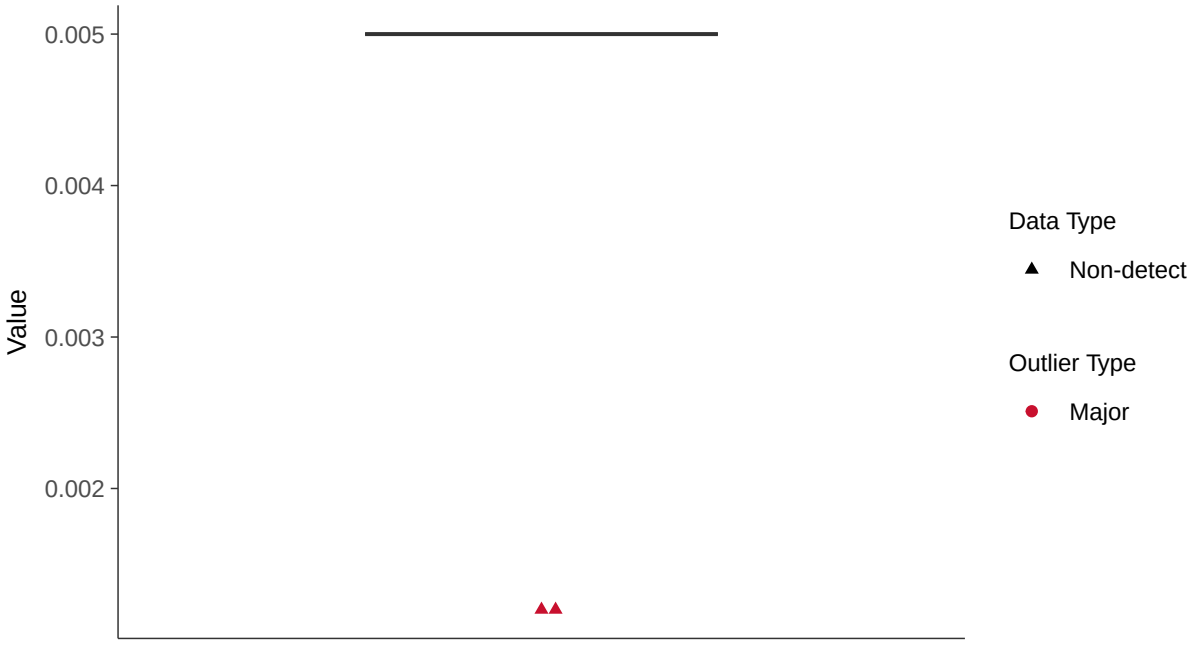
ID: 20_3_109





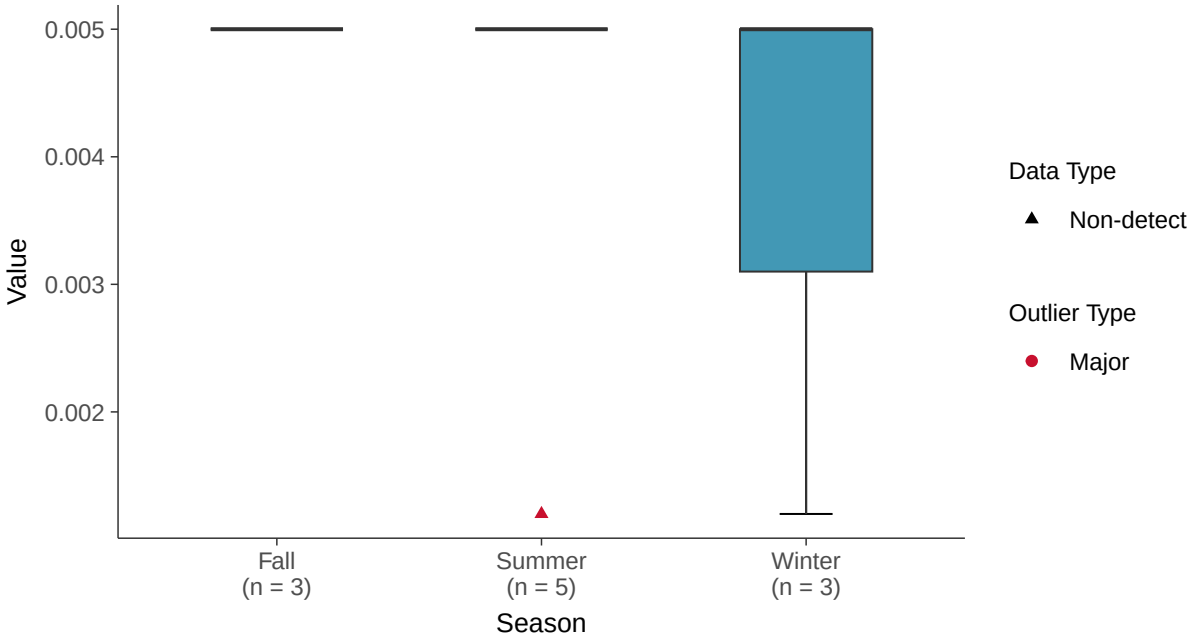
Boxplot

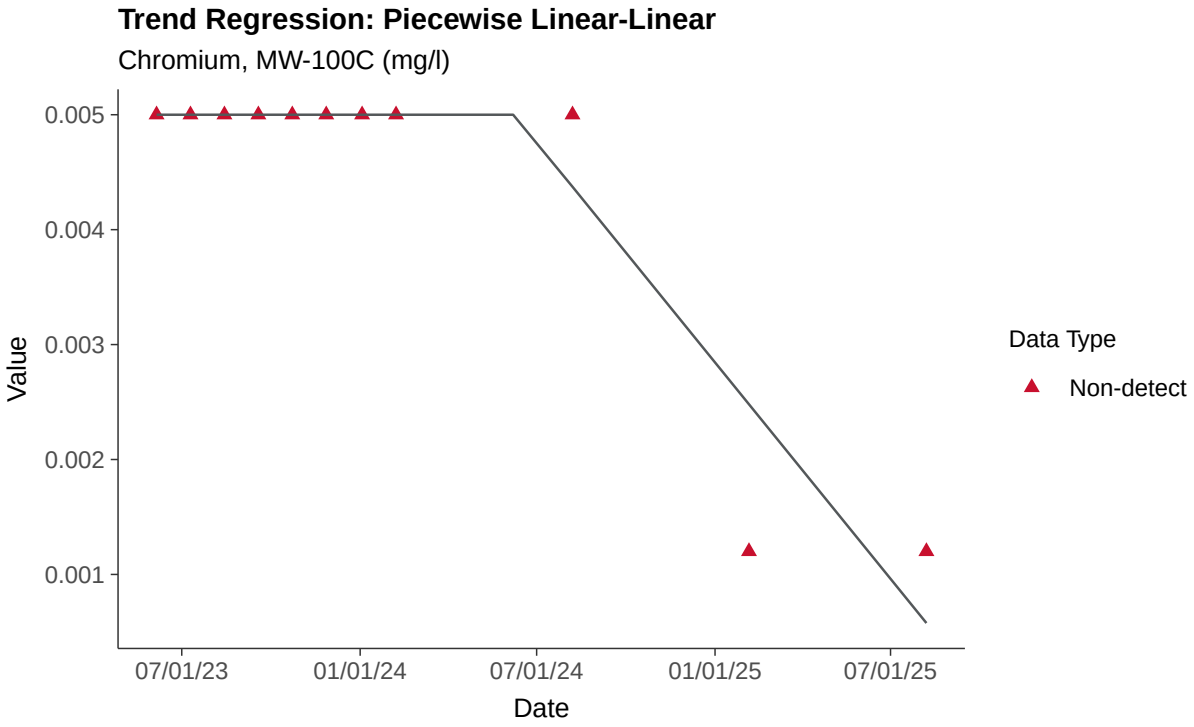
Chromium, MW-100C (mg/l)



Boxplot by Season

Chromium, MW-100C (mg/l)



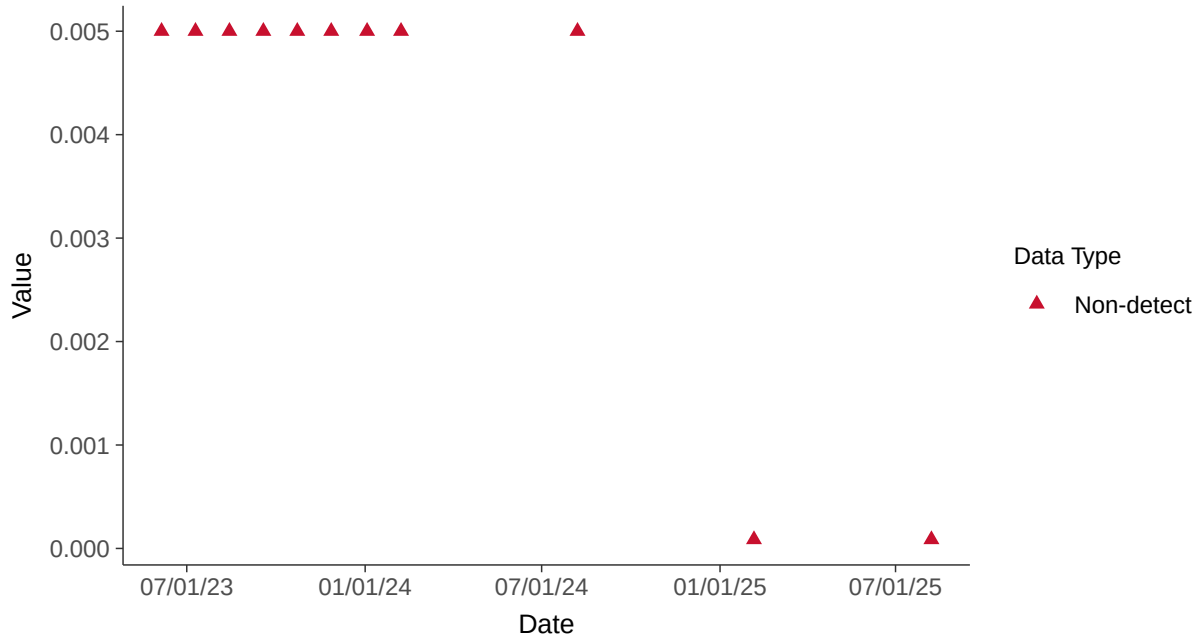

Trend Regression: Piecewise Linear-Linear
Chromium, MW-100C (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Cobalt, MW-100C

ID: 20_3_110

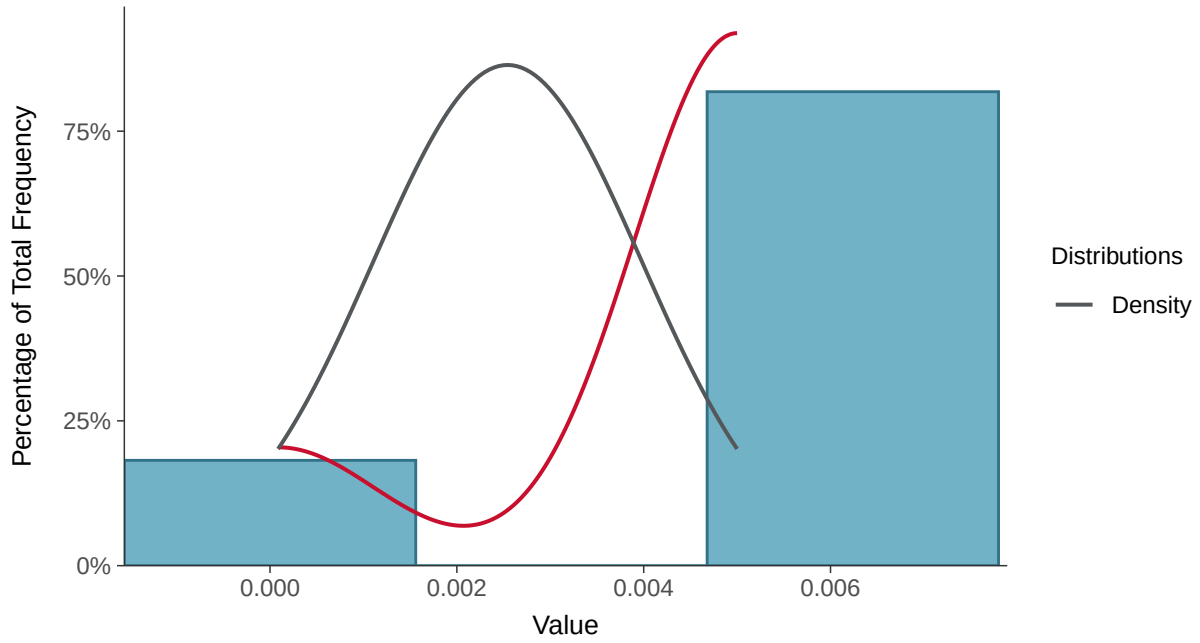
Scatter Plot

Cobalt, MW-100C (mg/l)



Histogram

Cobalt, MW-100C (mg/l)

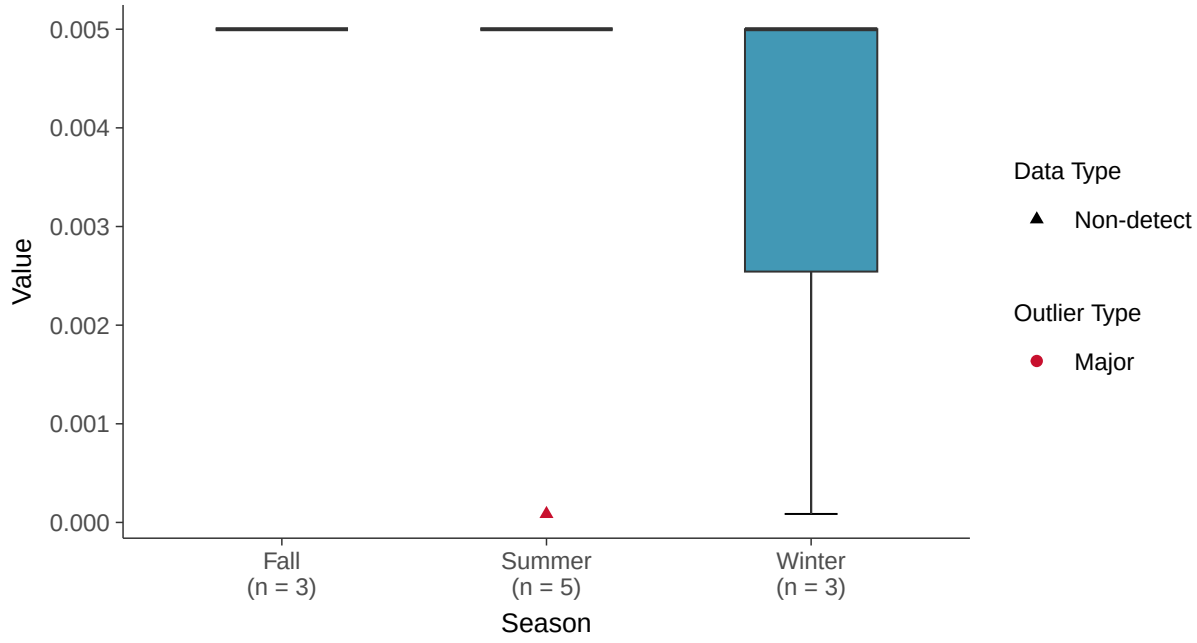


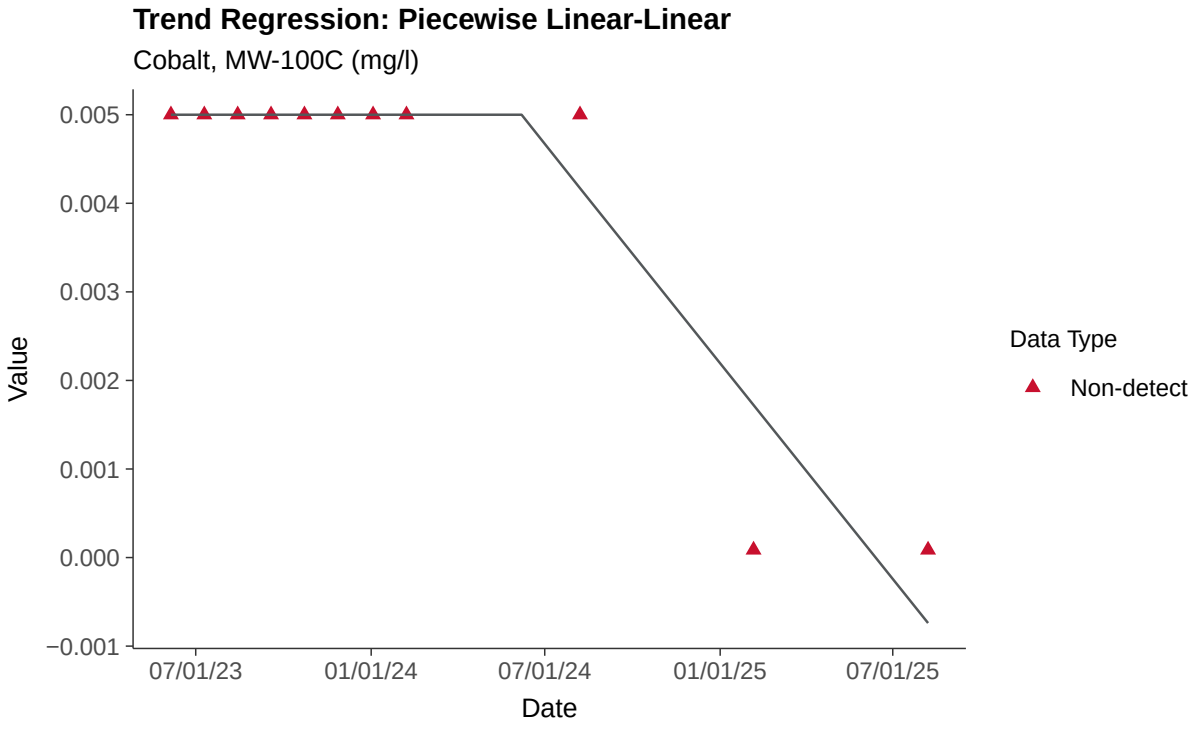
Boxplot

Cobalt, MW-100C (mg/l)

Boxplot by Season

Cobalt, MW-100C (mg/l)



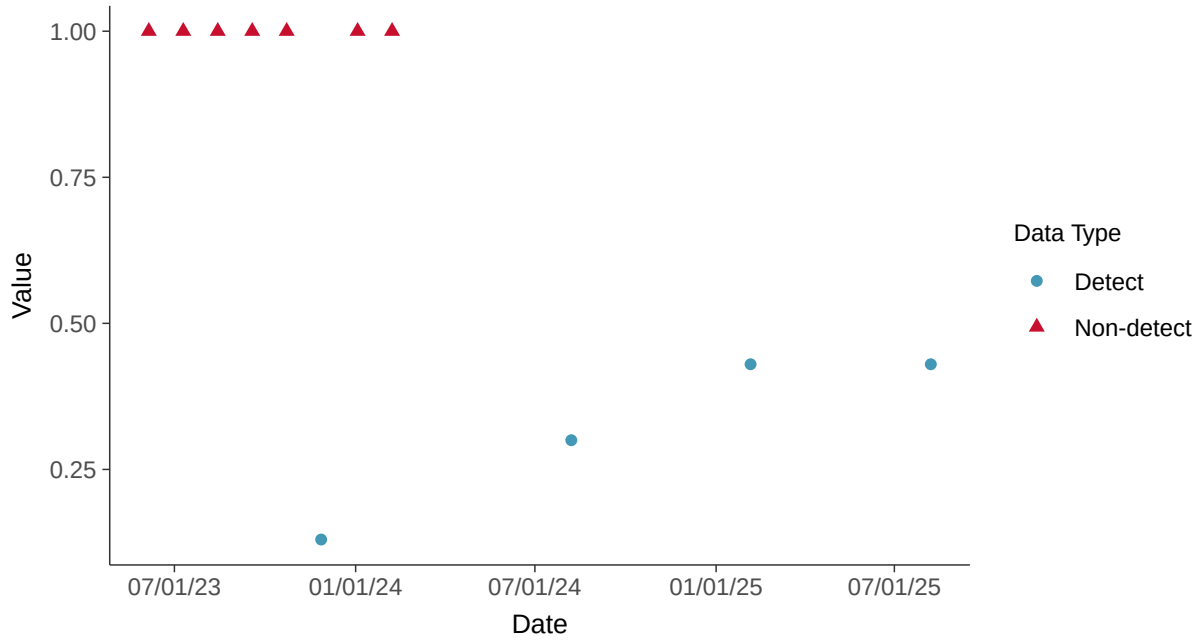

Trend Regression: Piecewise Linear-Linear
Cobalt, MW-100C (mg/l)
0.005
0.004
0.003
0.002
0.001
0.000
−0.001
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Fluoride (App IV), MW-100C

ID: 20_3_113

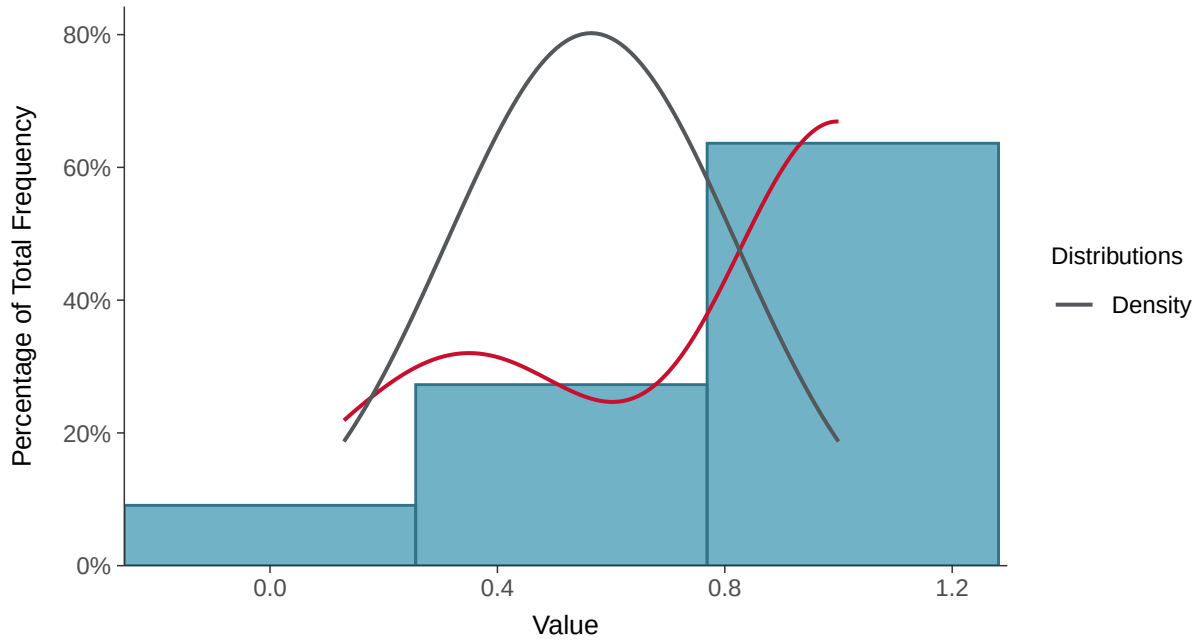
Scatter Plot

Fluoride (App IV), MW-100C (mg/l)



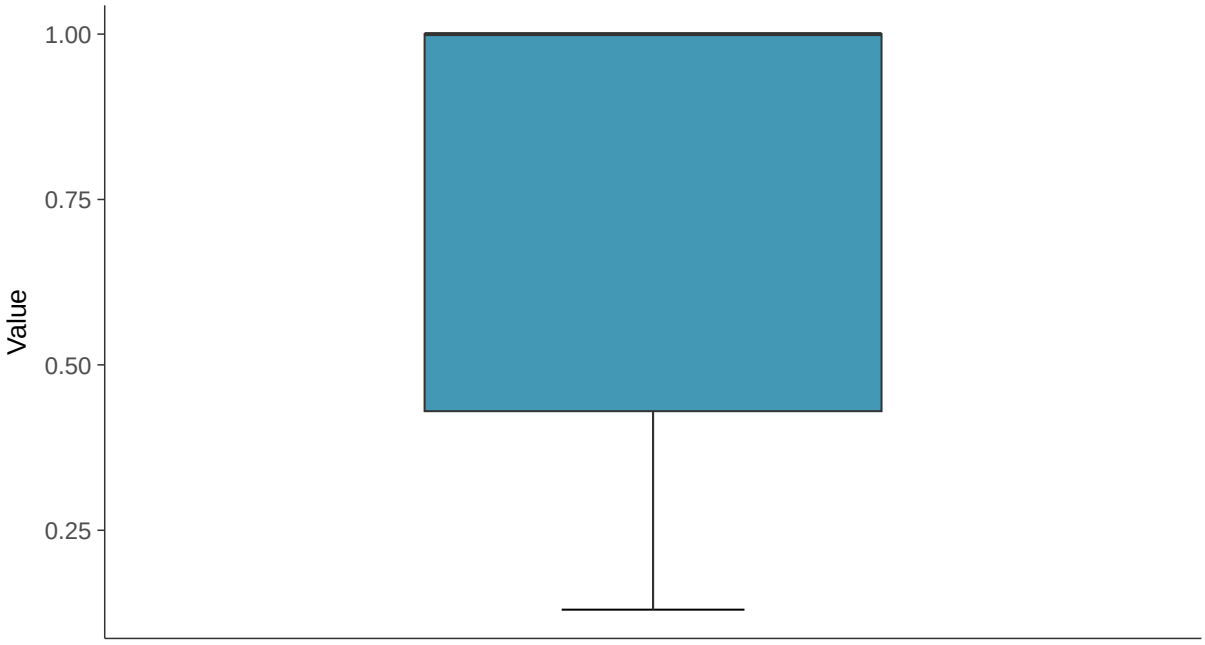
Histogram

Fluoride (App IV), MW-100C (mg/l)



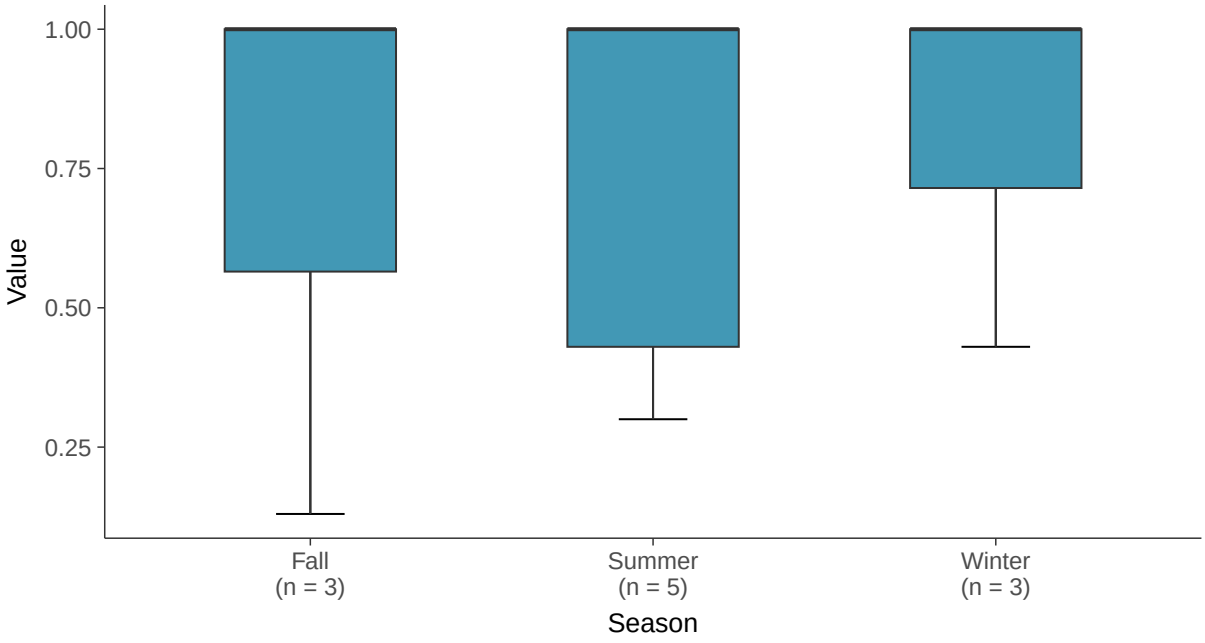
Boxplot

Fluoride (App IV), MW-100C (mg/l)



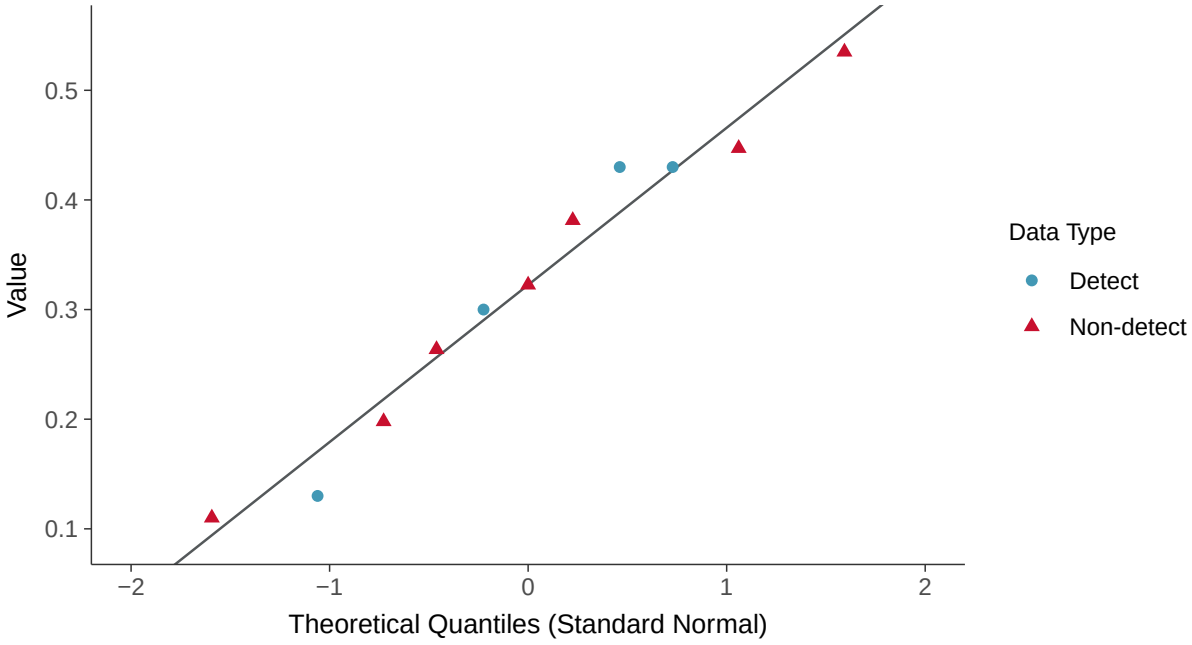
Boxplot by Season

Fluoride (App IV), MW-100C (mg/l)



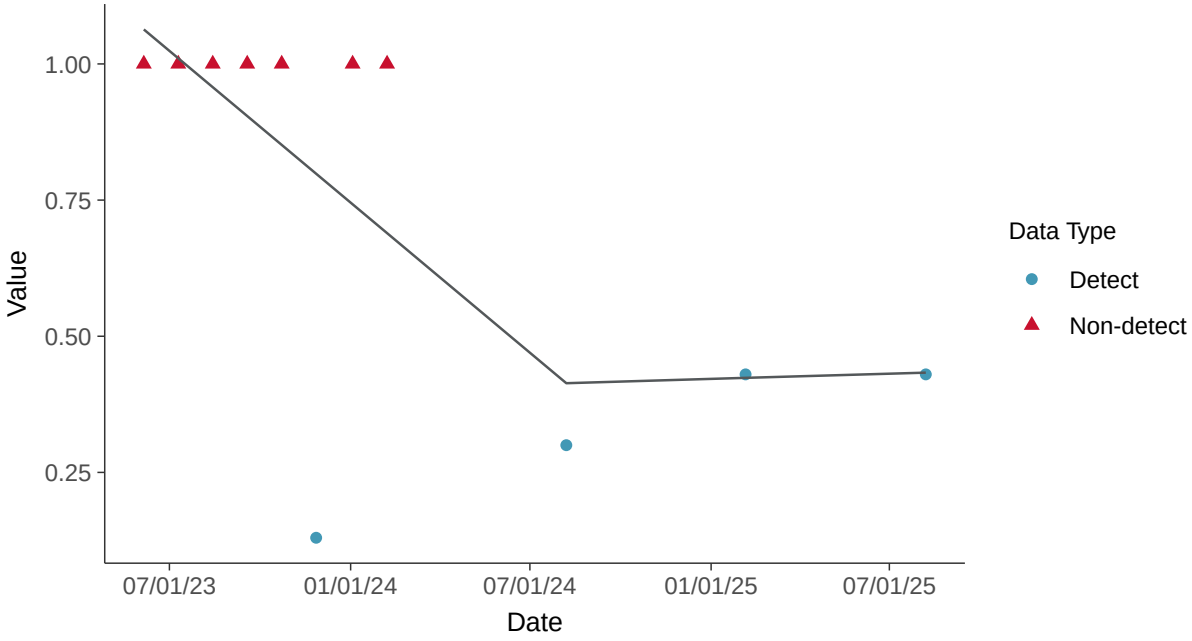
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-100C (mg/l)



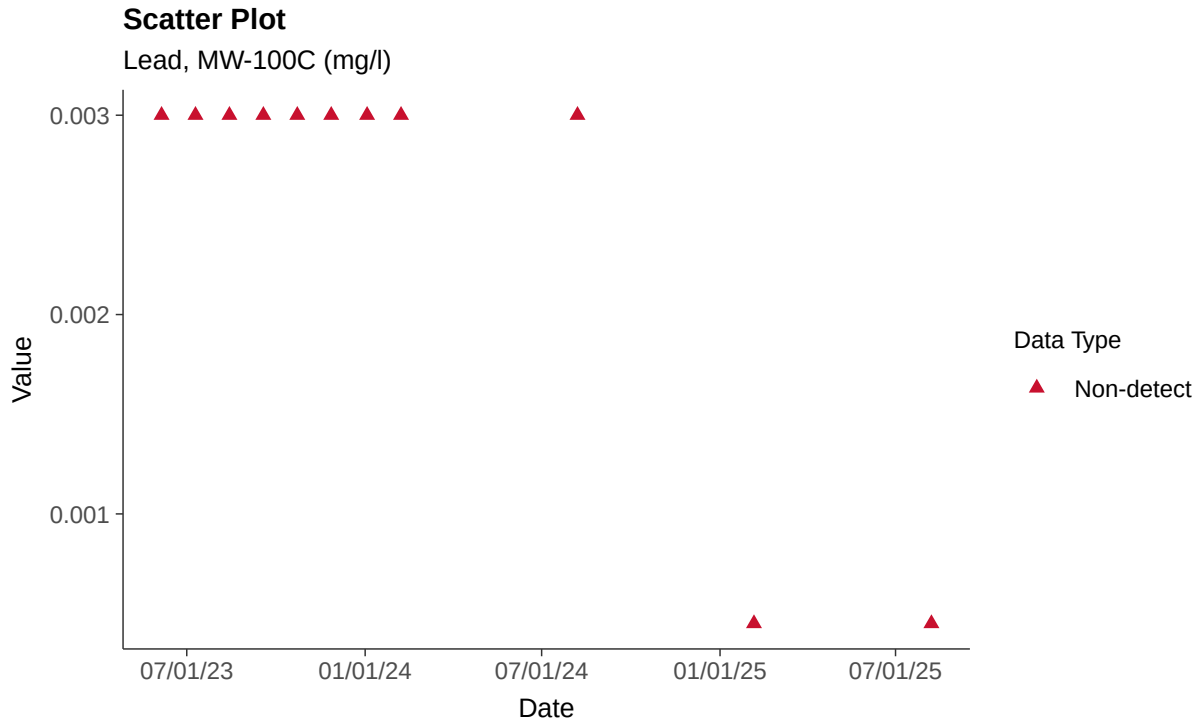
Trend Regression: Piecewise Linear-Linear

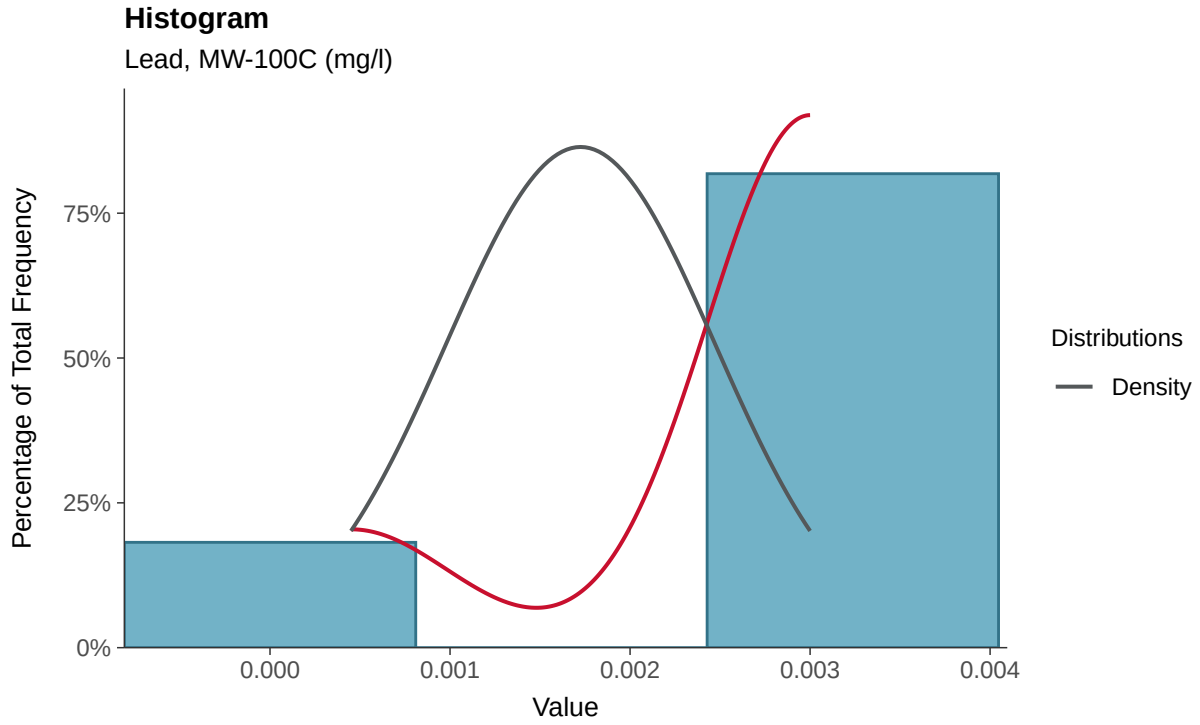
Fluoride (App IV), MW-100C (mg/l)



Appendix IV: Lead, MW-100C

ID: 20_3_115



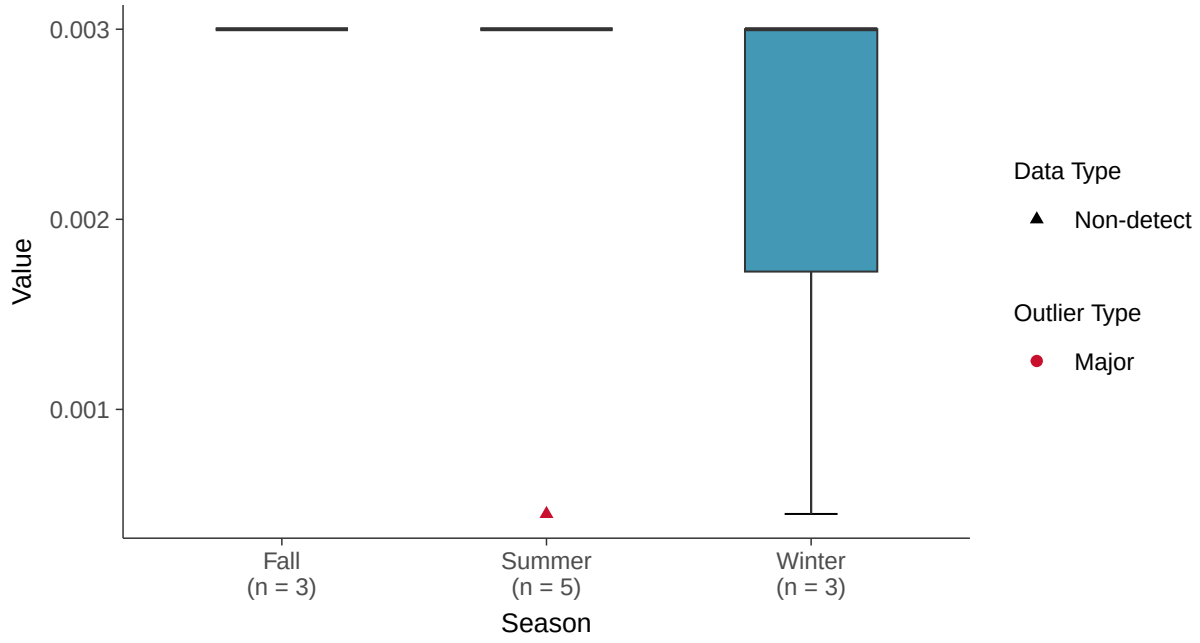


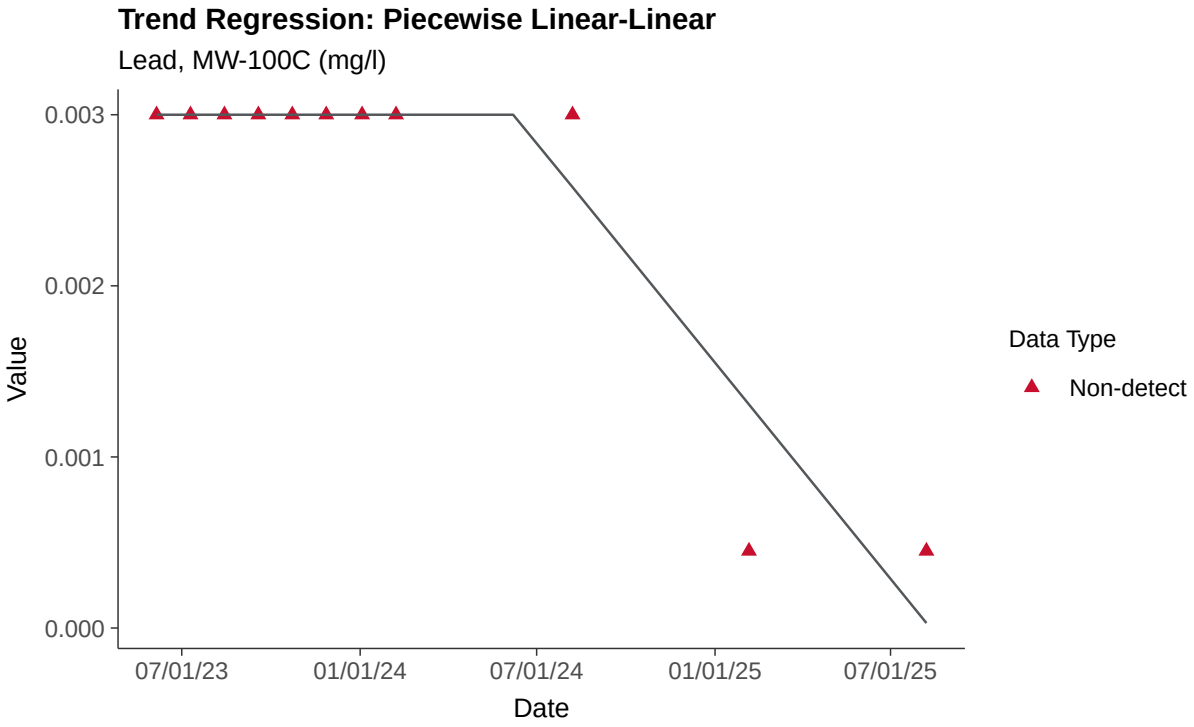
Boxplot

Lead, MW-100C (mg/l)

Boxplot by Season

Lead, MW-100C (mg/l)



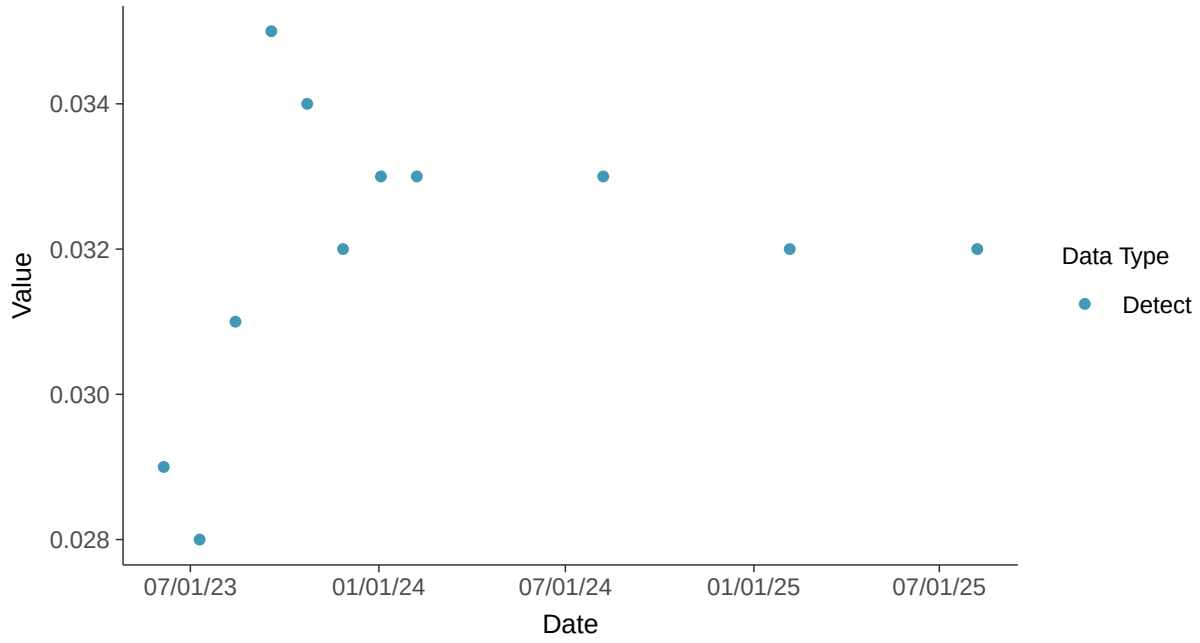

Trend Regression: Piecewise Linear-Linear
Lead, MW-100C (mg/l)
0.003
0.002
0.001
0.000
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Lithium, MW-100C

ID: 20_3_116

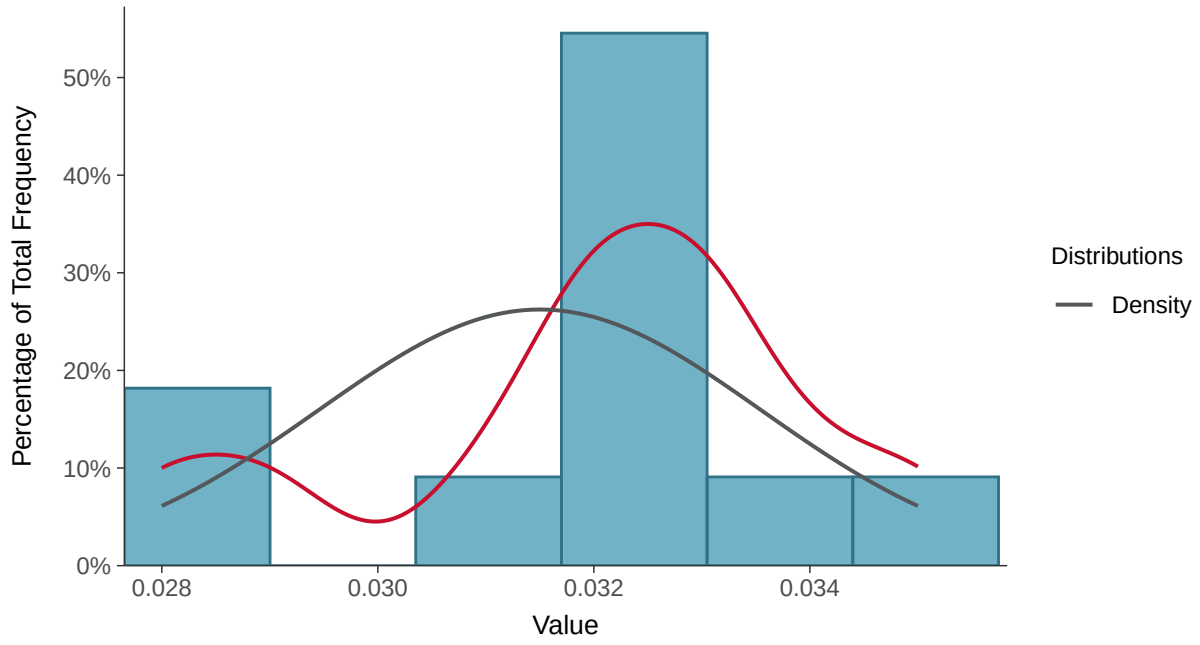
Scatter Plot

Lithium, MW-100C (mg/l)



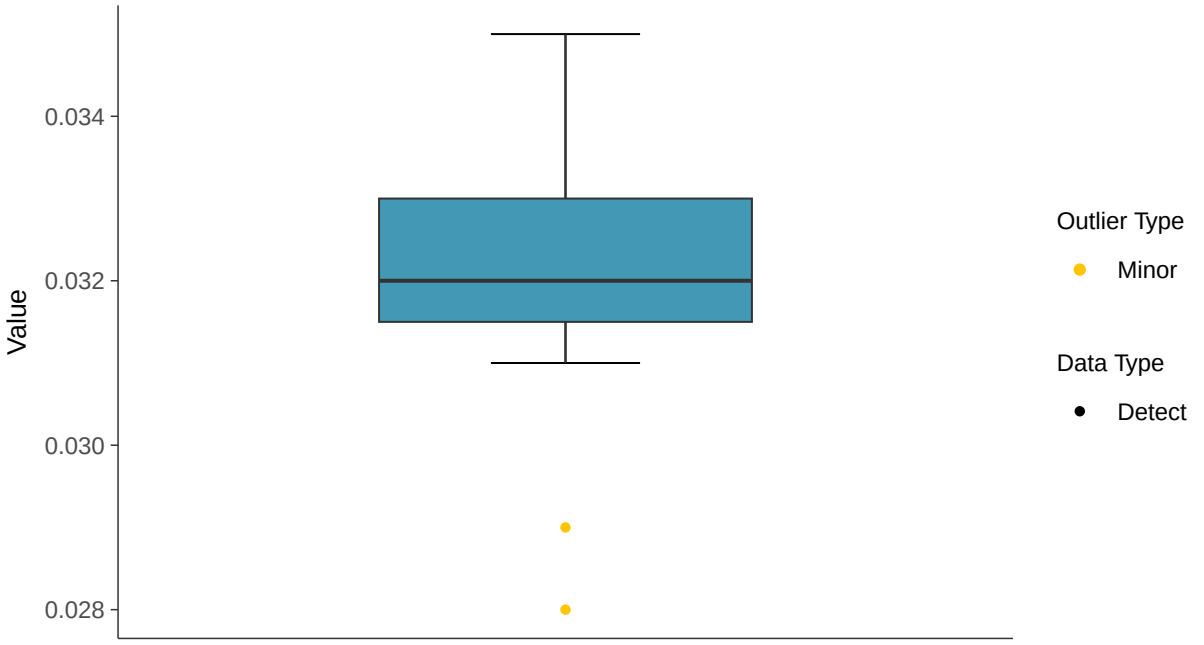
Histogram

Lithium, MW-100C (mg/l)



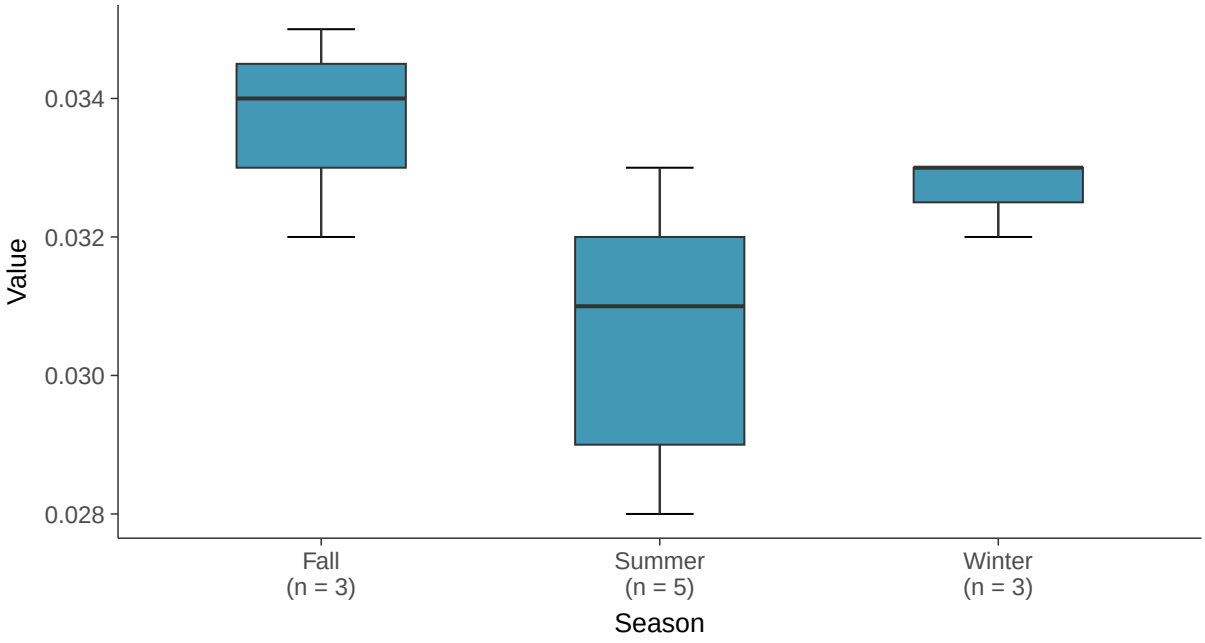
Boxplot

Lithium, MW-100C (mg/l)



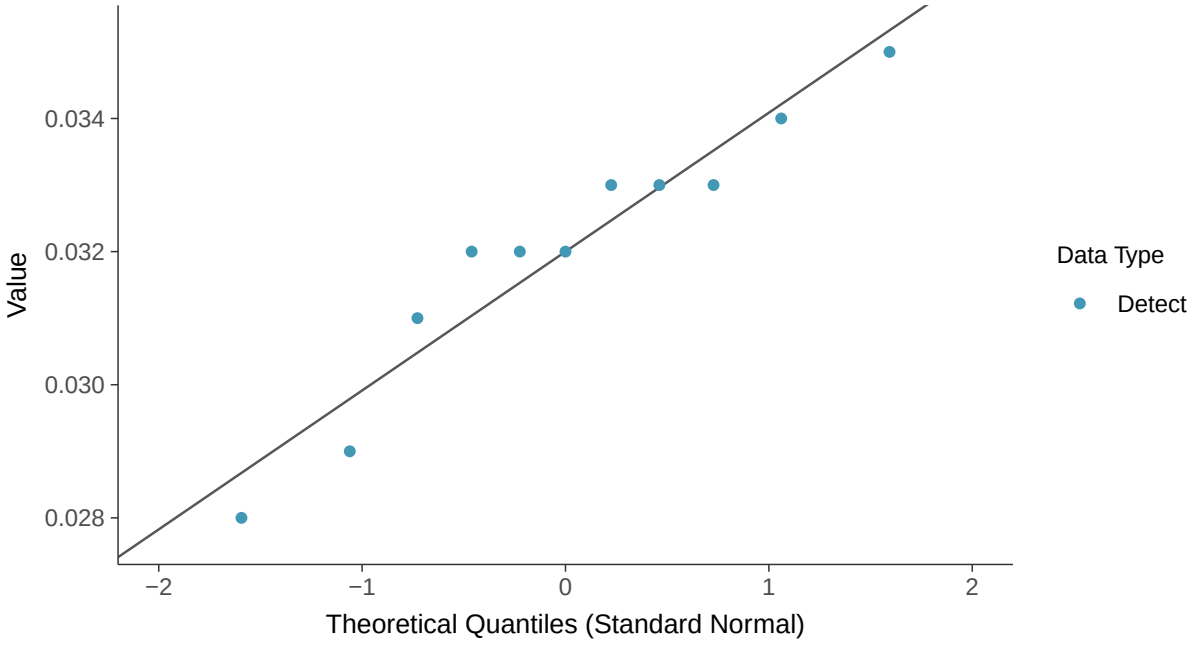
Boxplot by Season

Lithium, MW-100C (mg/l)



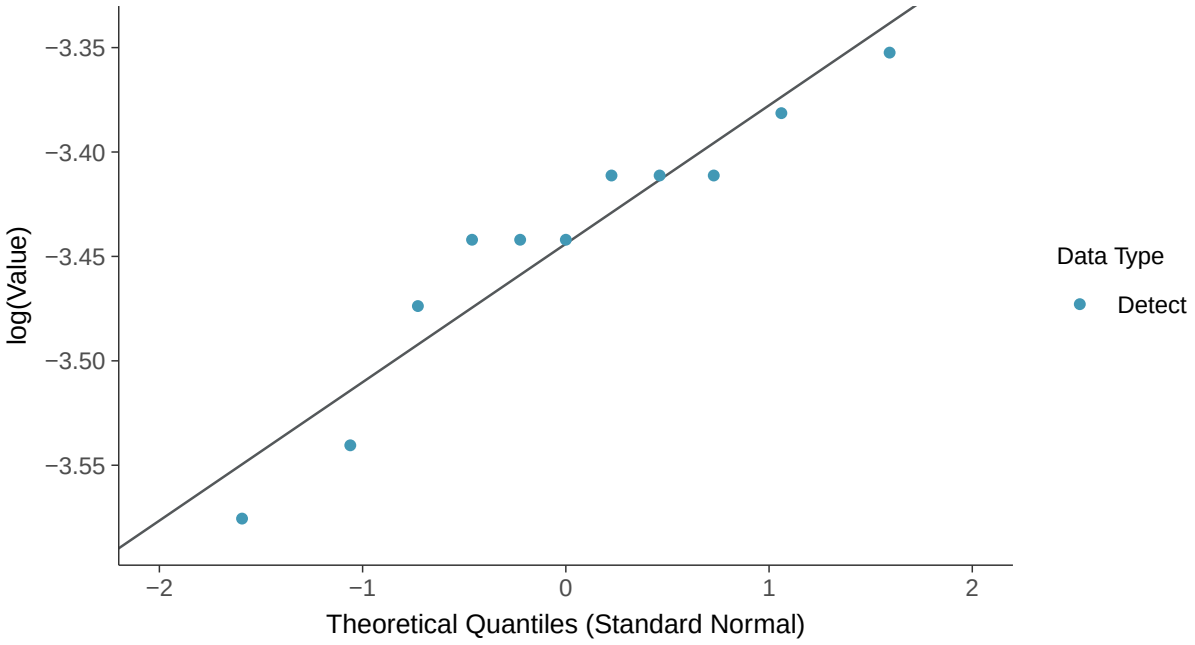
Normal Q-Q plot

Lithium, MW-100C (mg/l)



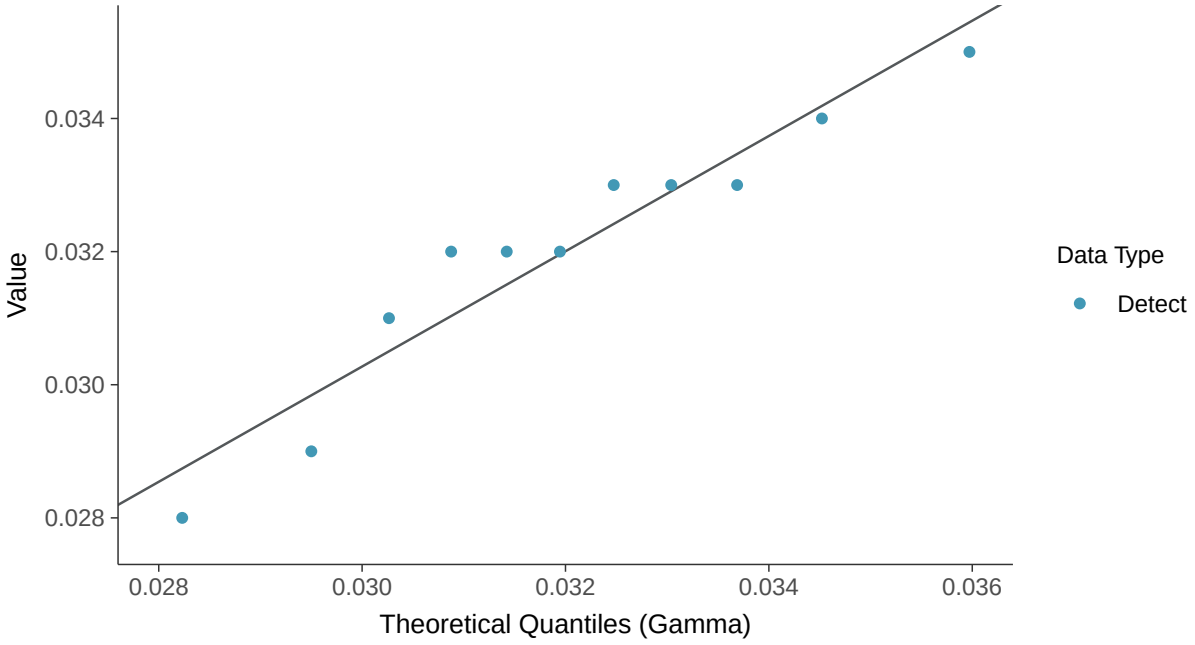
Lognormal Q-Q plot

Lithium, MW-100C (mg/l)



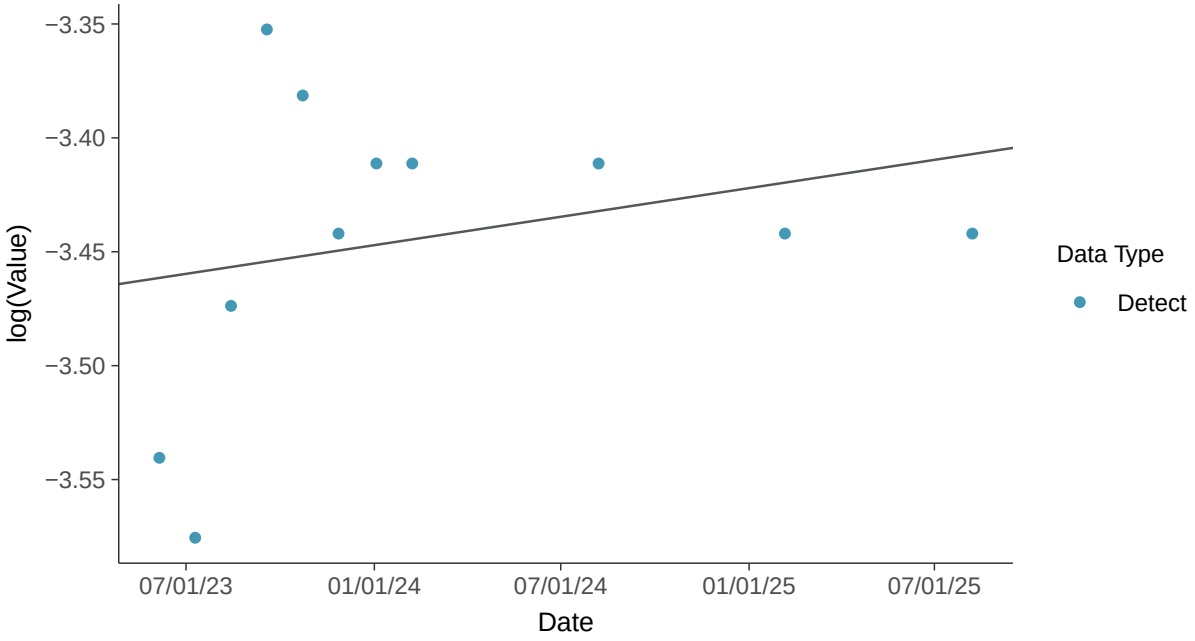
Gamma Q-Q plot

Lithium, MW-100C (mg/l)



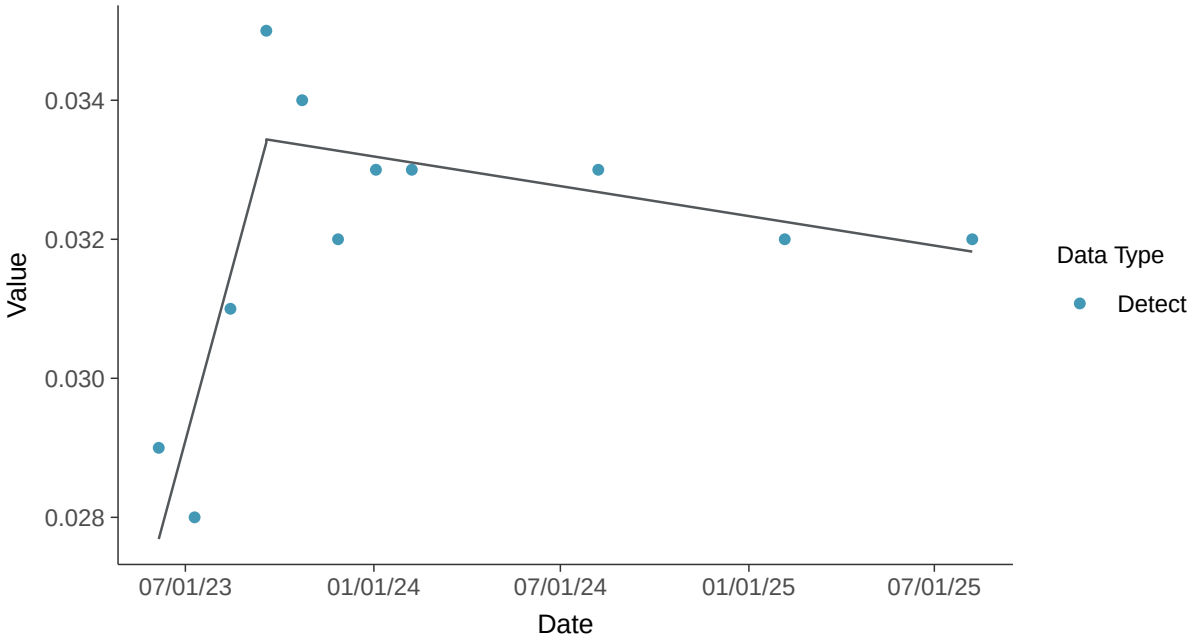
Trend Regression: Lognormal MLE

Lithium, MW-100C (mg/l)



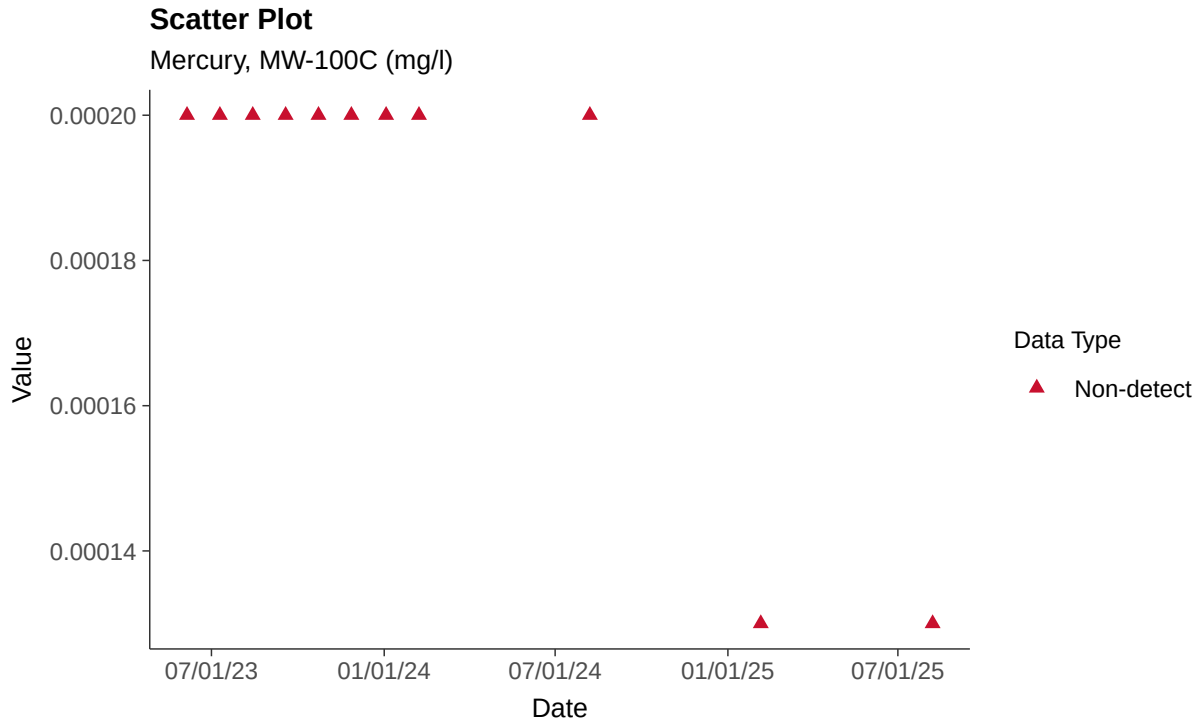
Trend Regression: Piecewise Linear-Linear

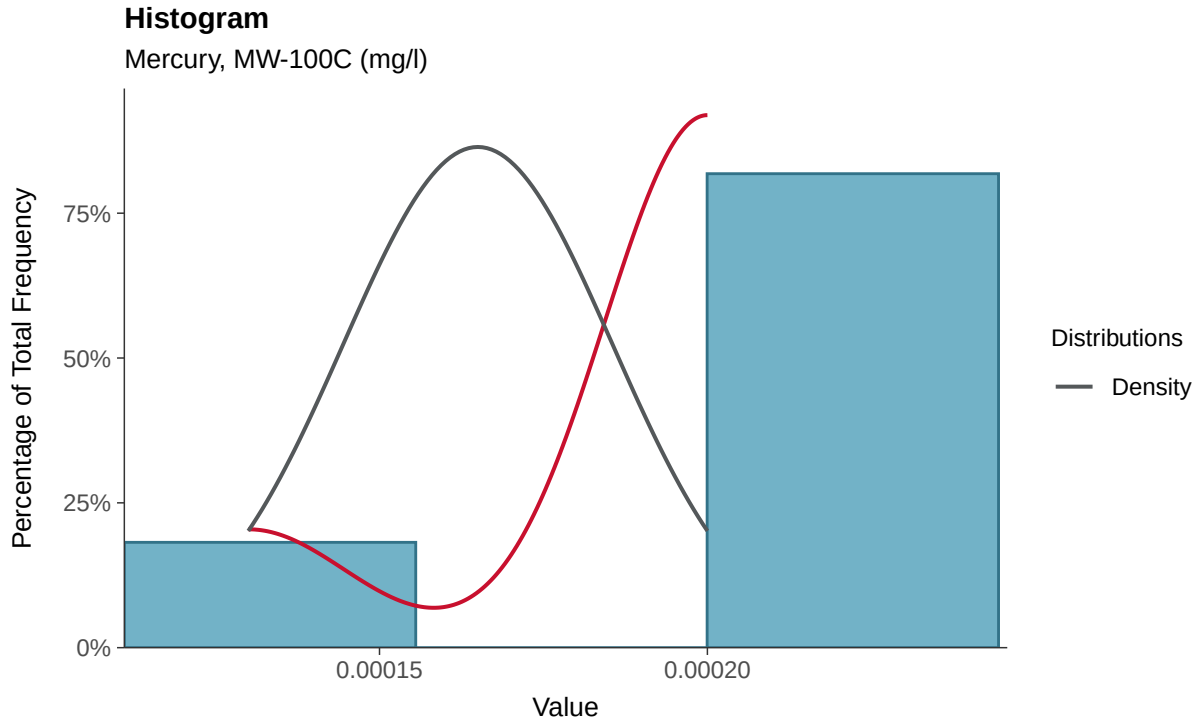
Lithium, MW-100C (mg/l)



Appendix IV: Mercury, MW-100C

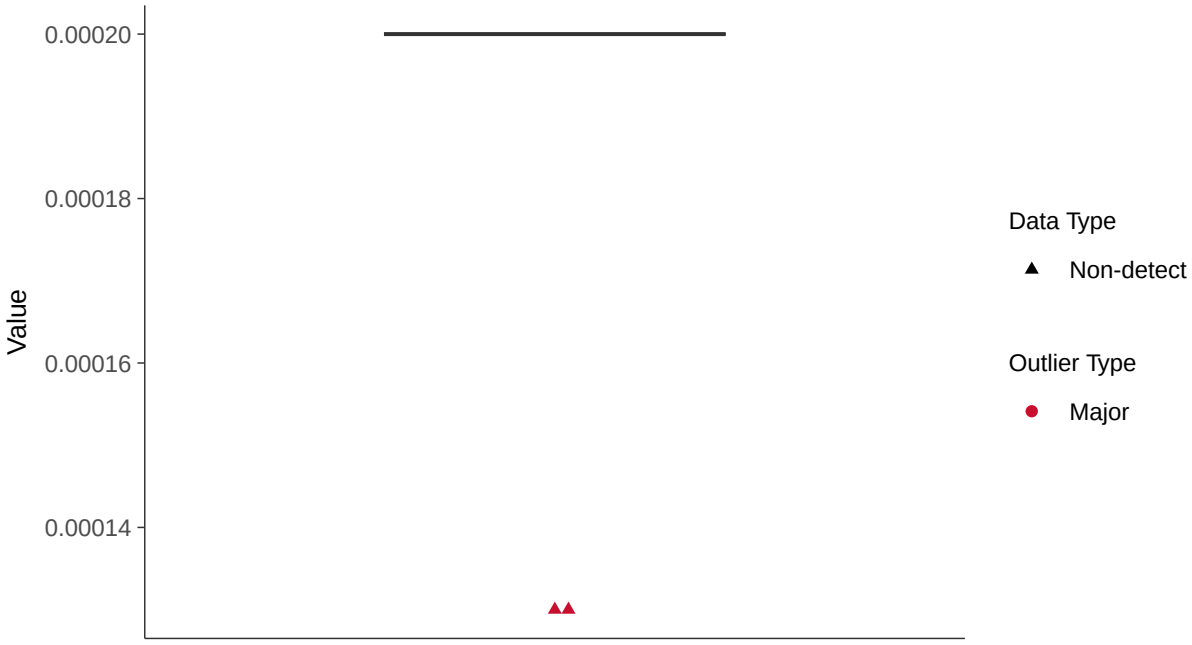
ID: 20_3_117





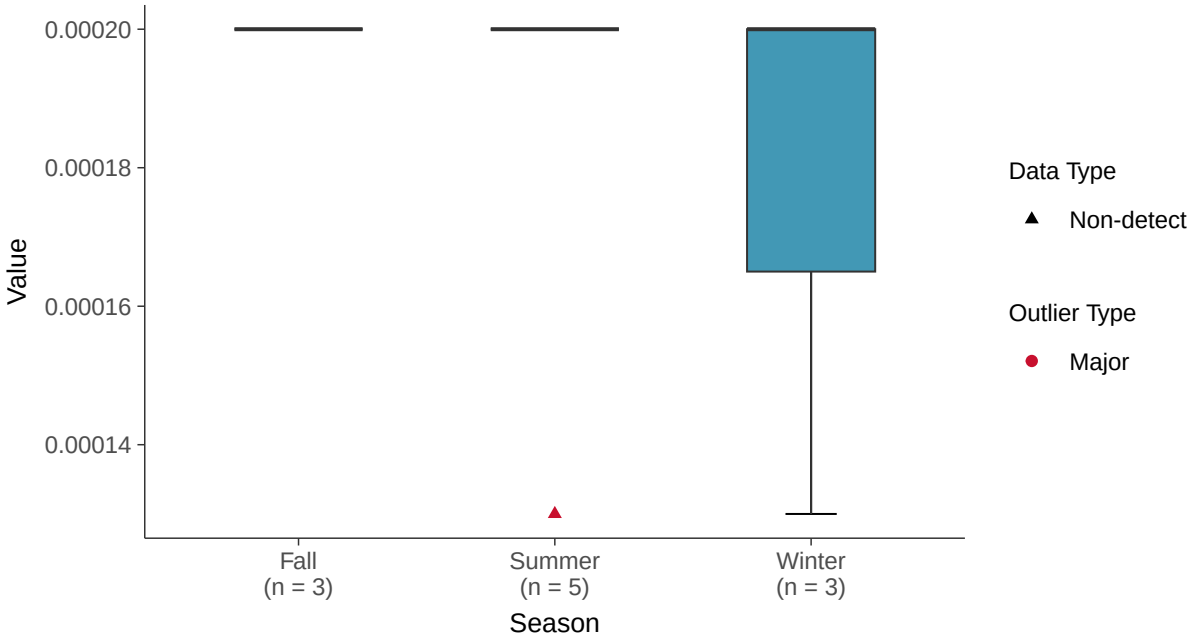
Boxplot

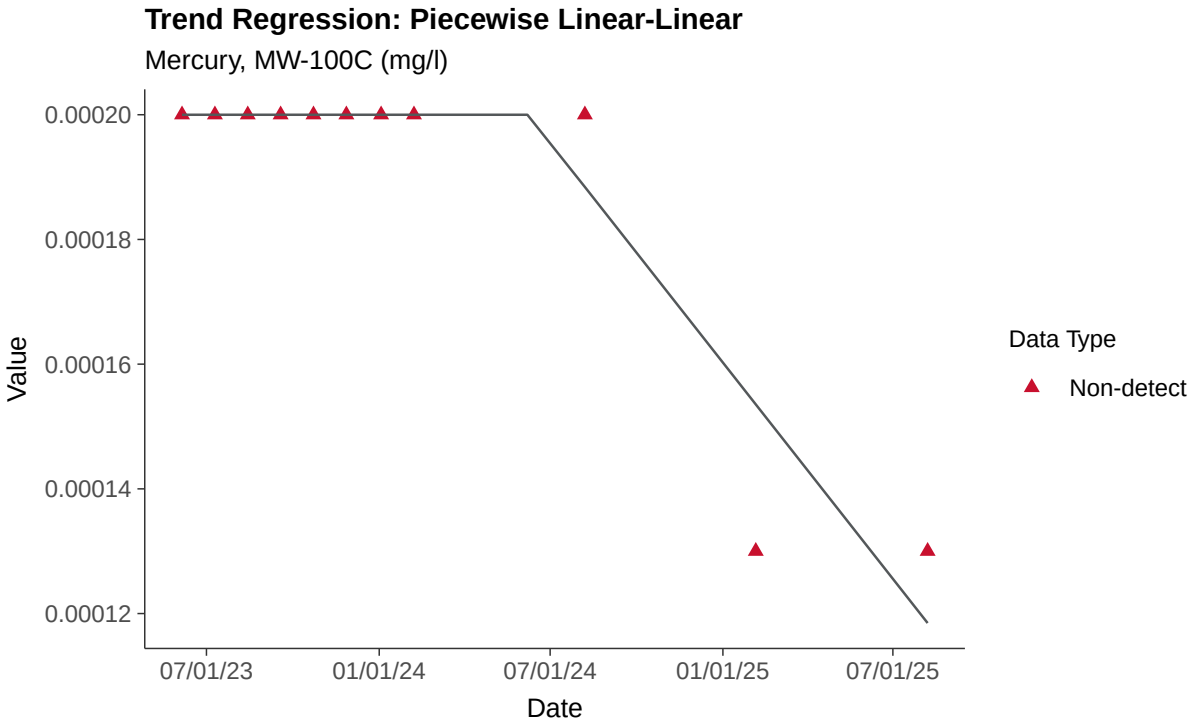
Mercury, MW-100C (mg/l)



Boxplot by Season

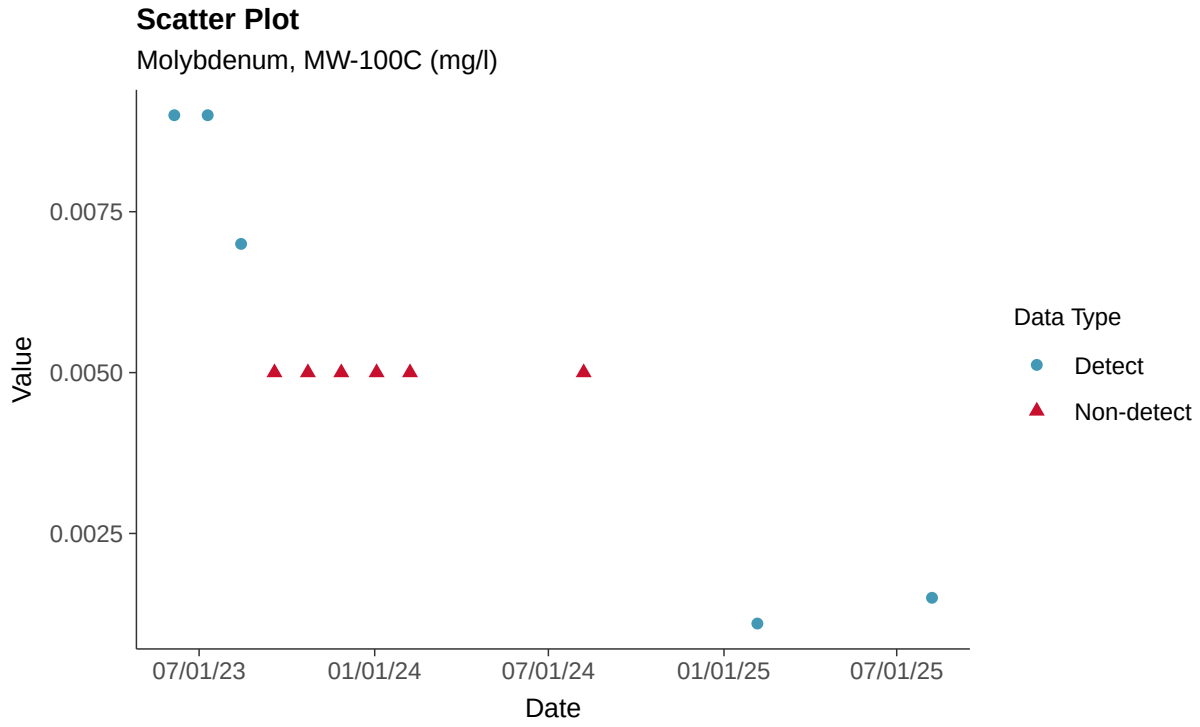
Mercury, MW-100C (mg/l)

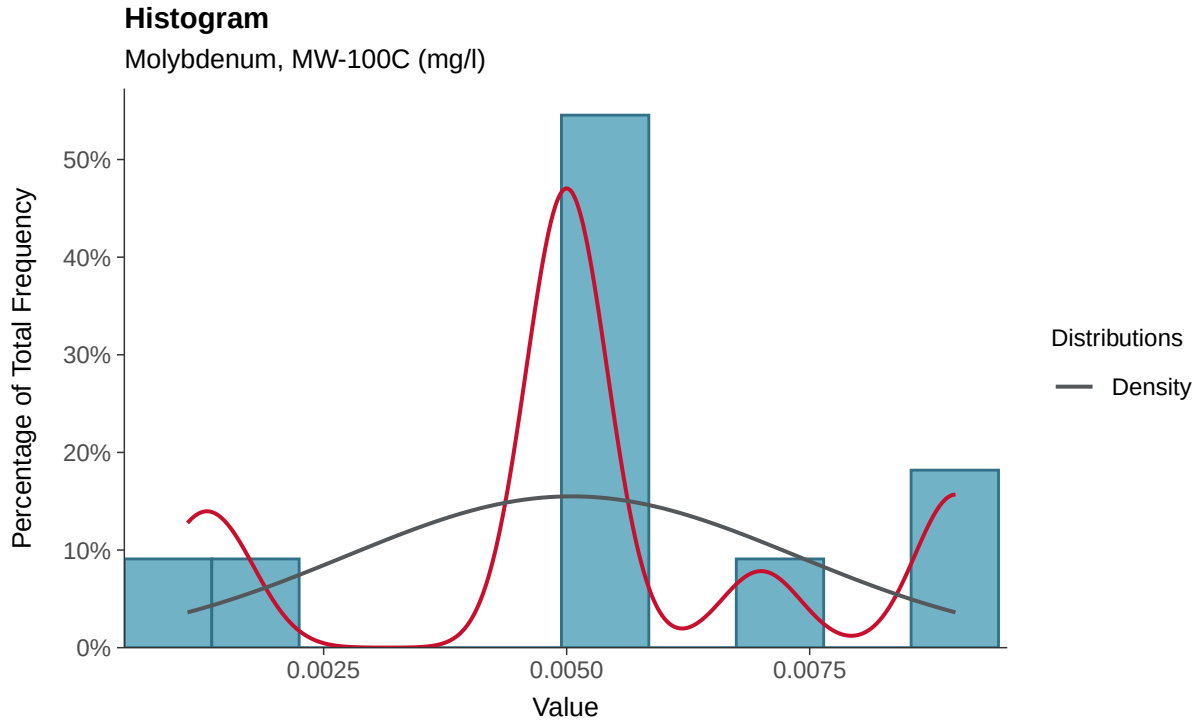



Trend Regression: Piecewise Linear-Linear
Mercury, MW-100C (mg/l)
Value
0.00020
0.00018
0.00016
0.00014
0.00012
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Molybdenum, MW-100C

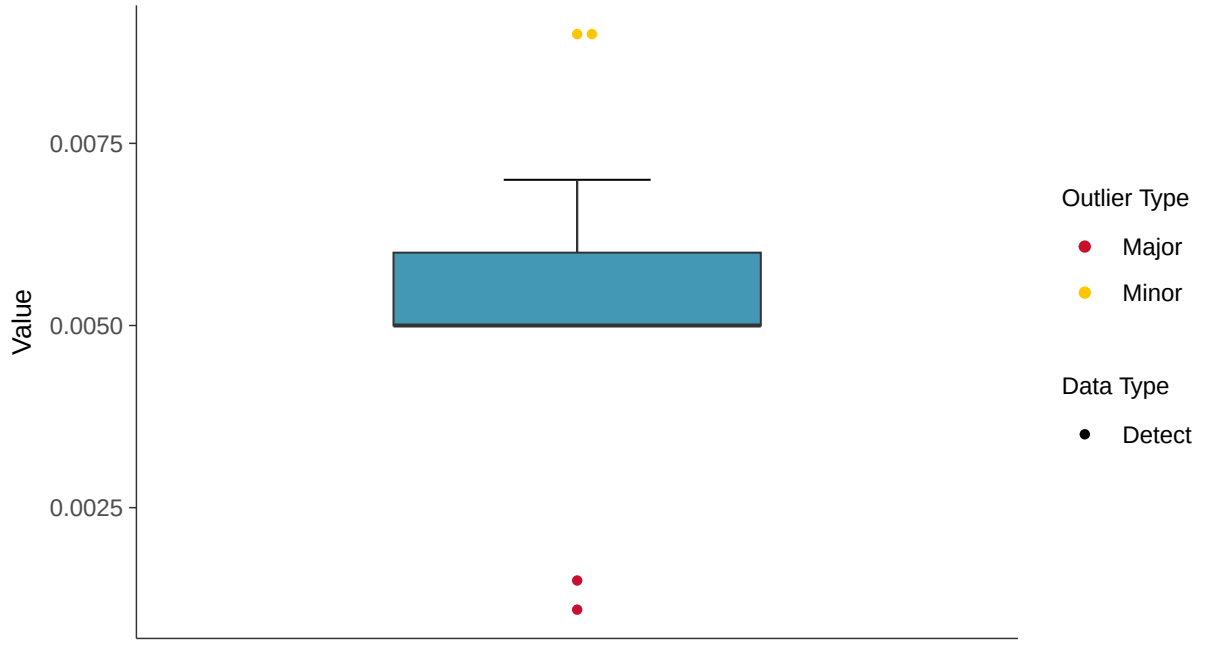
ID: 20_3_118





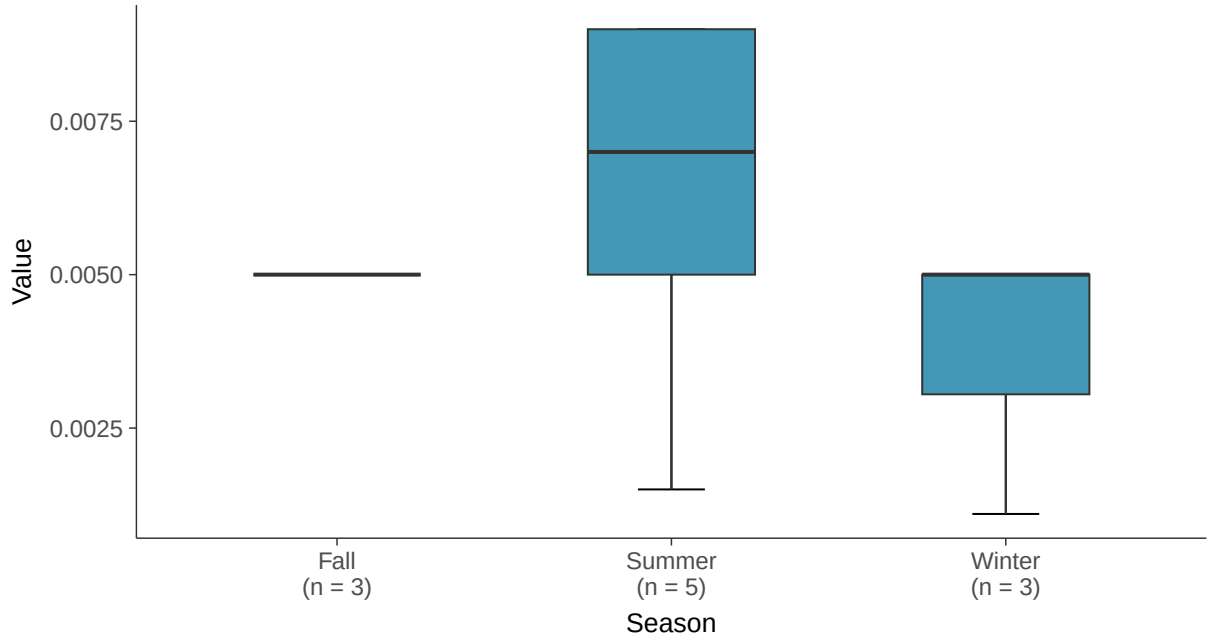
Boxplot

Molybdenum, MW-100C (mg/l)



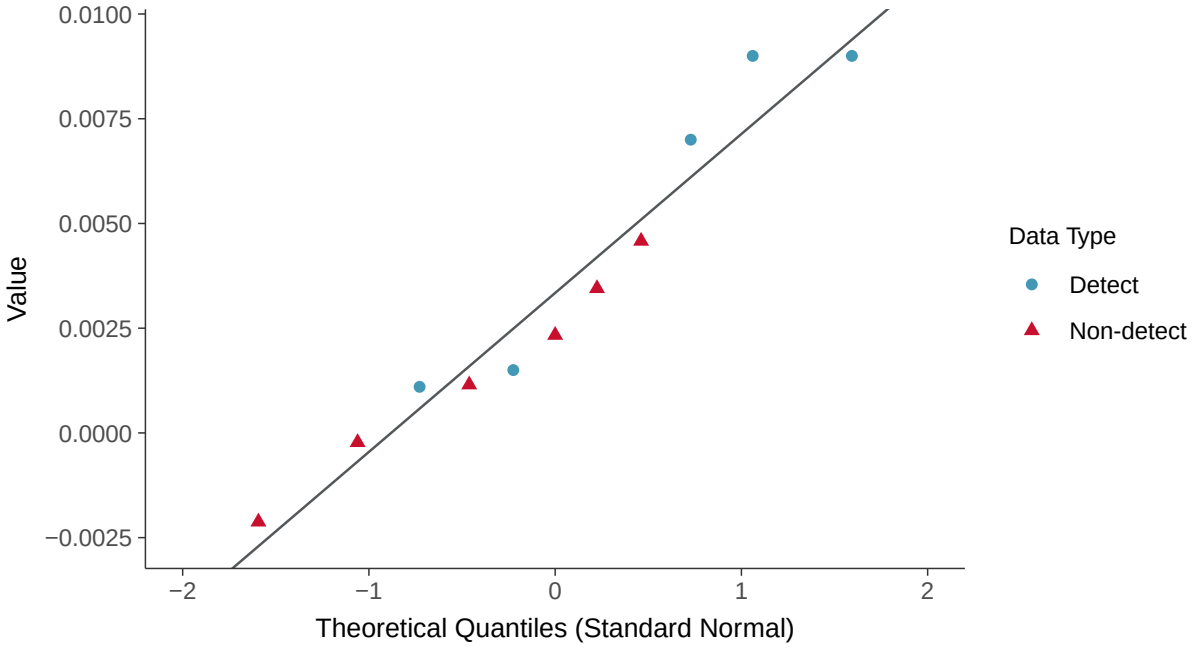
Boxplot by Season

Molybdenum, MW-100C (mg/l)



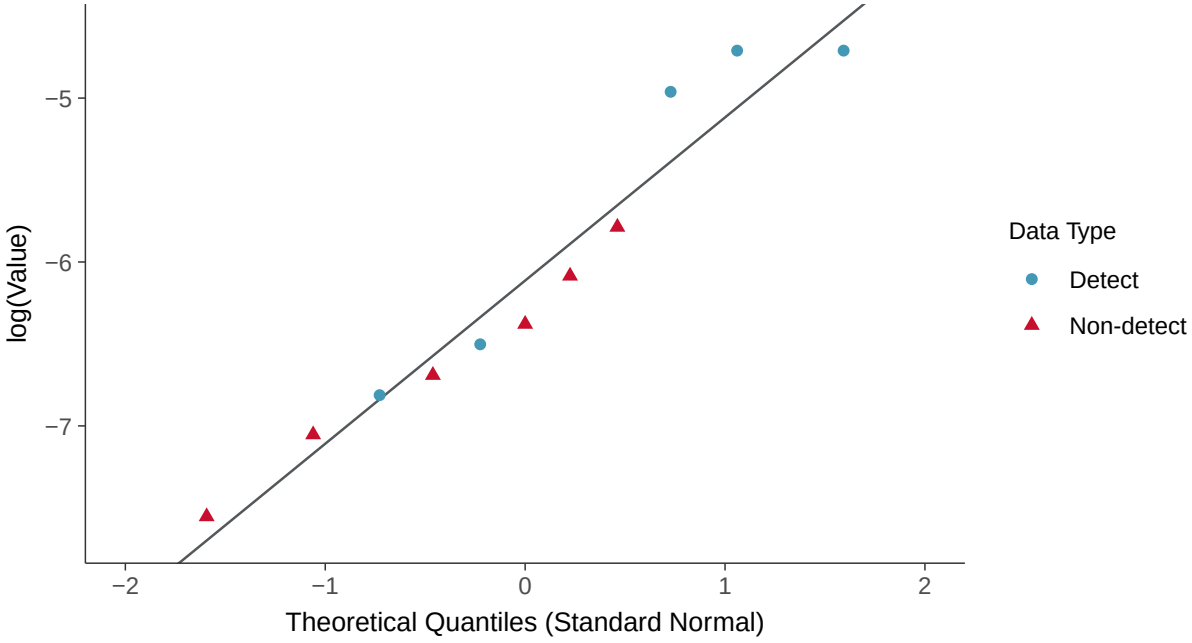
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-100C (mg/l)



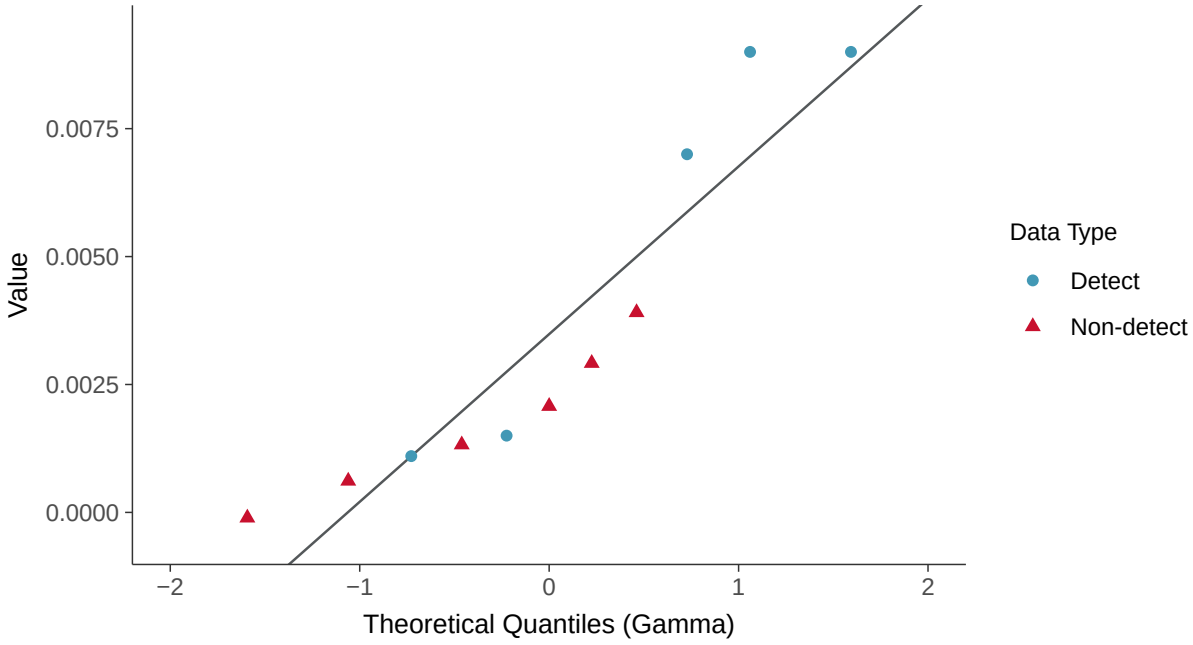
Lognormal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-100C (mg/l)



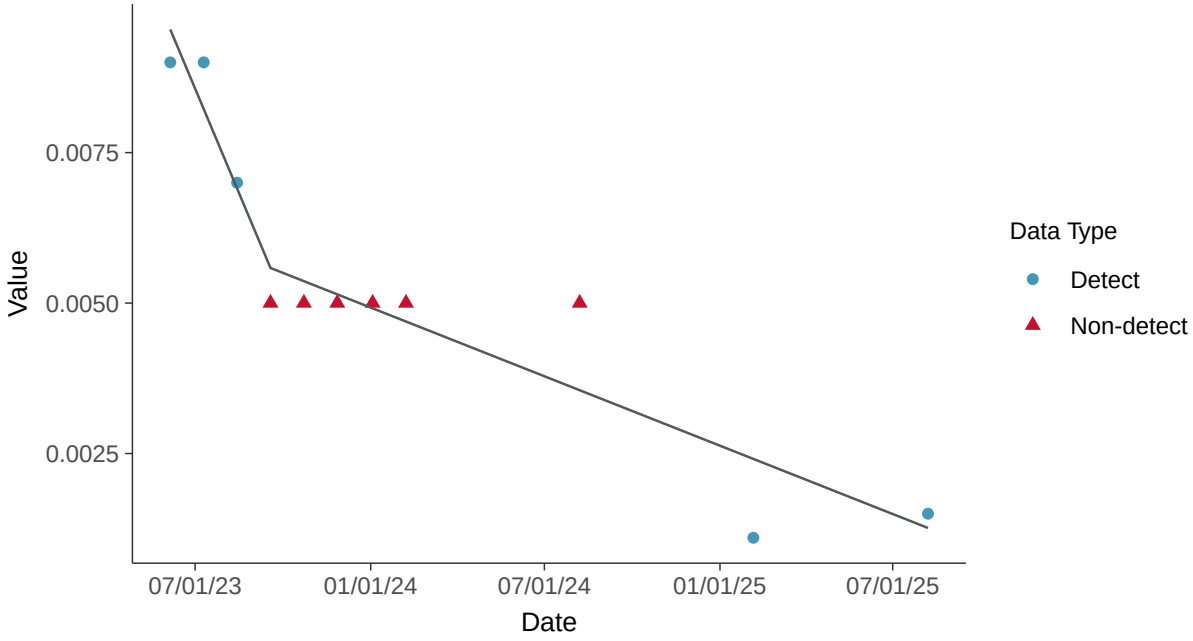
Gamma Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-100C (mg/l)



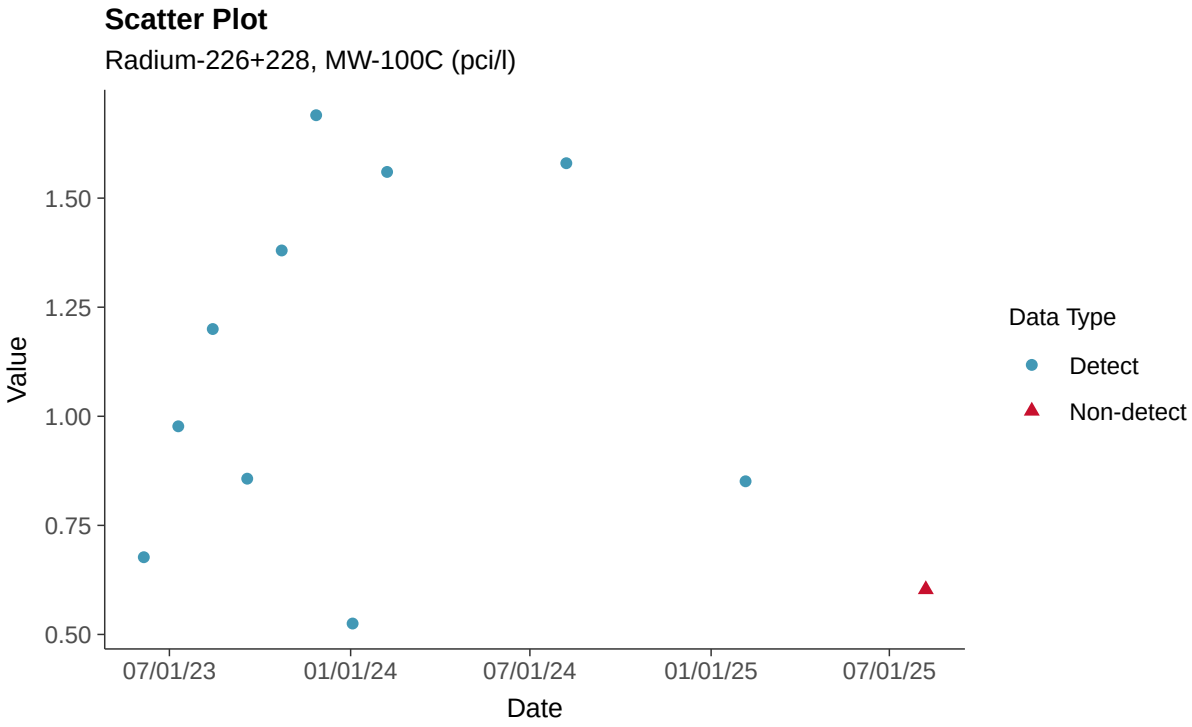
Trend Regression: Piecewise Linear-Linear

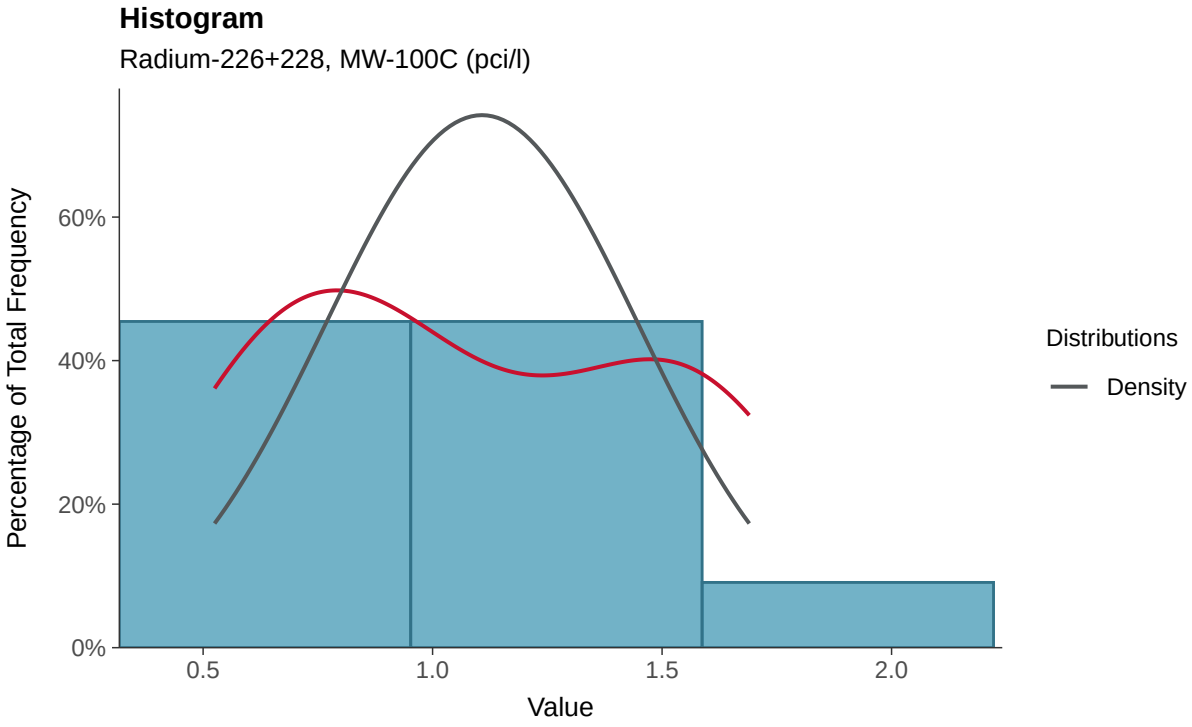
Molybdenum, MW-100C (mg/l)



Appendix IV: Radium-226+228, MW-100C

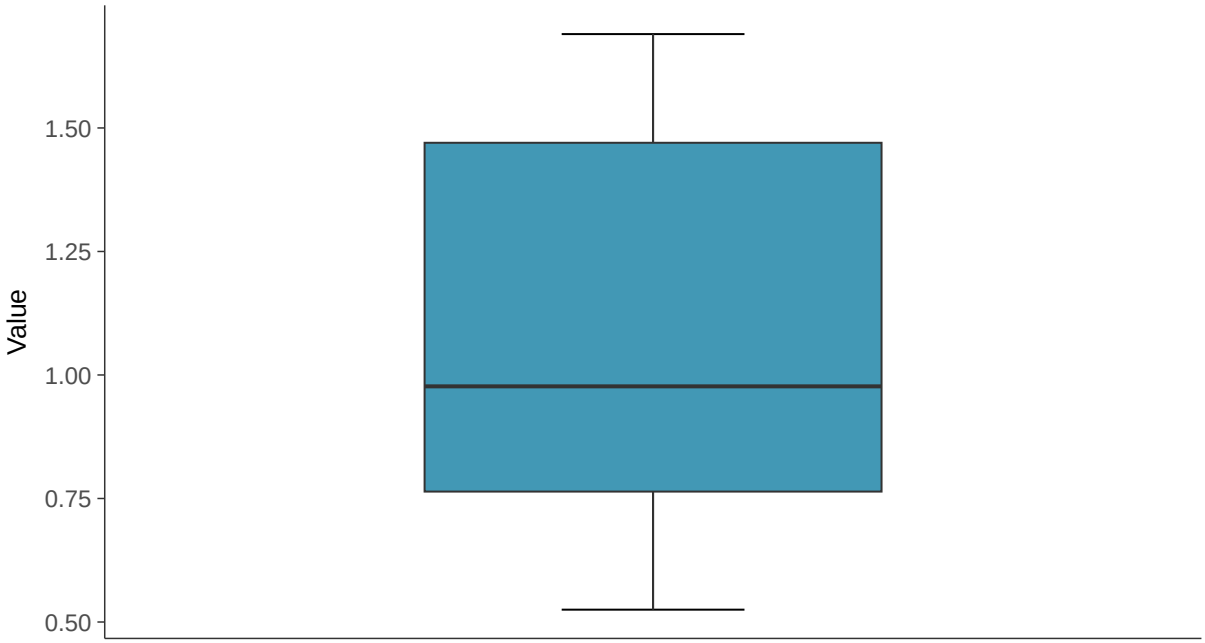
ID: 20_3_121





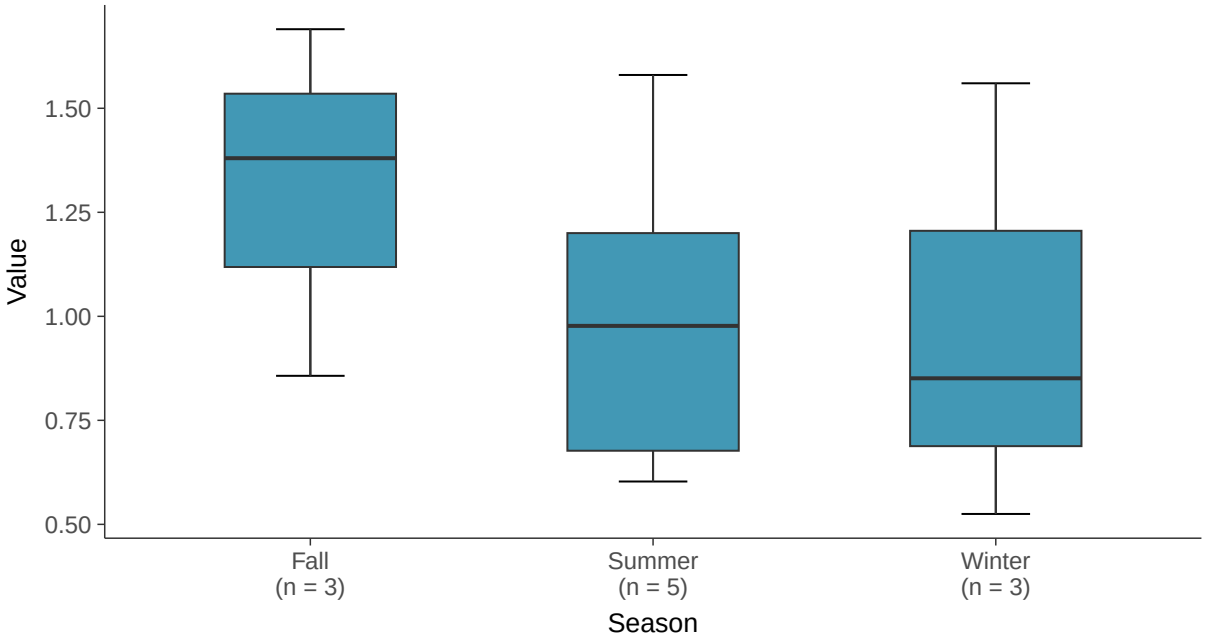
Boxplot

Radium-226+228, MW-100C (pci/l)



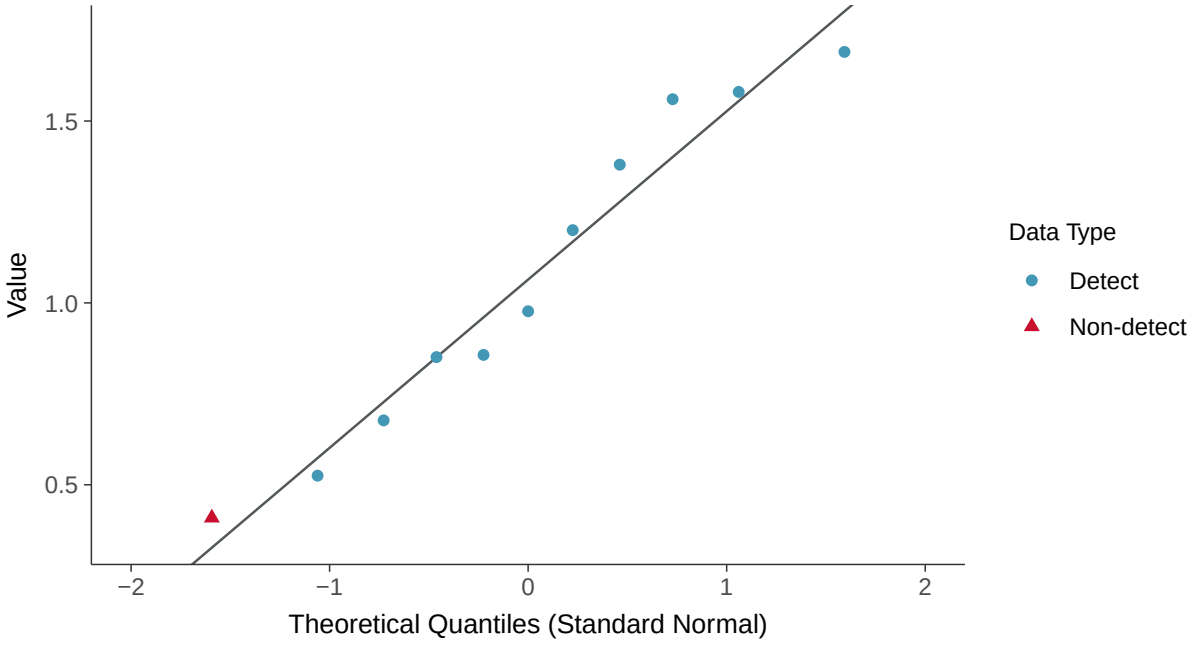
Boxplot by Season

Radium-226+228, MW-100C (pci/l)



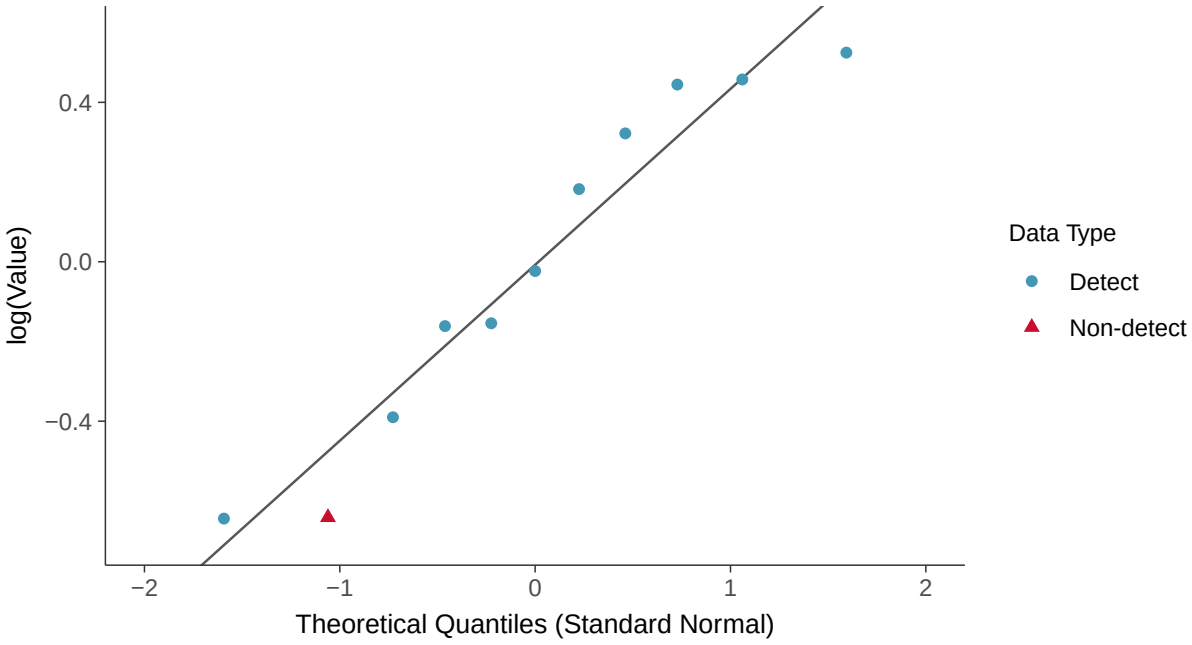
Normal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-100C (pci/l)



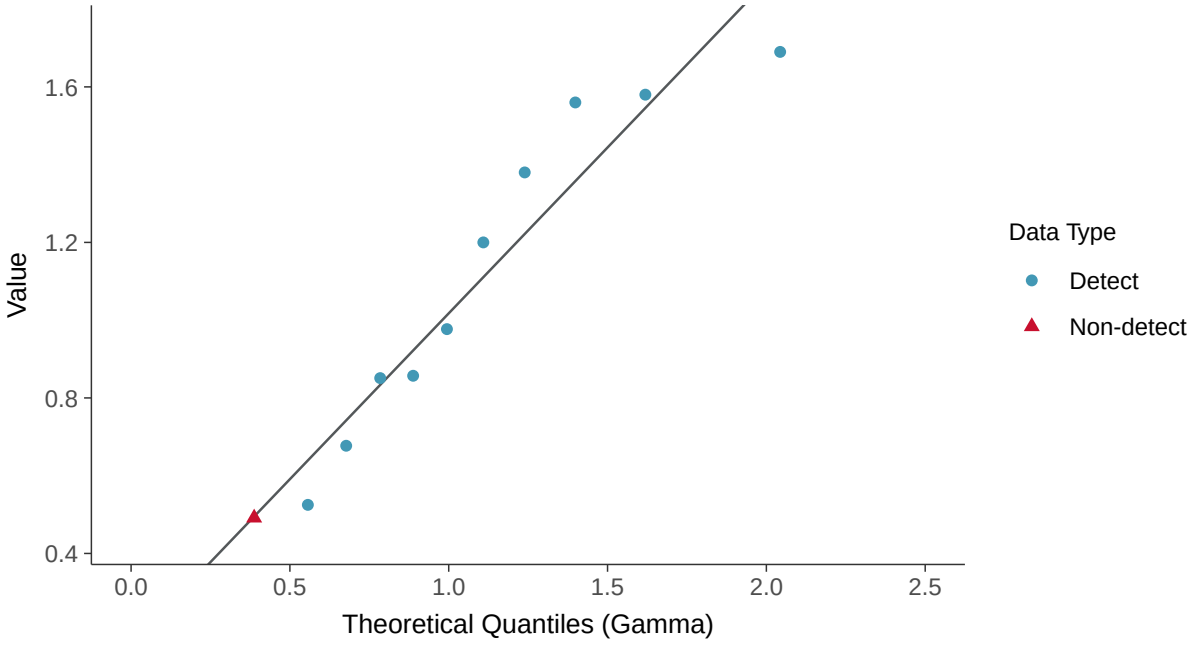
Lognormal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-100C (pci/l)



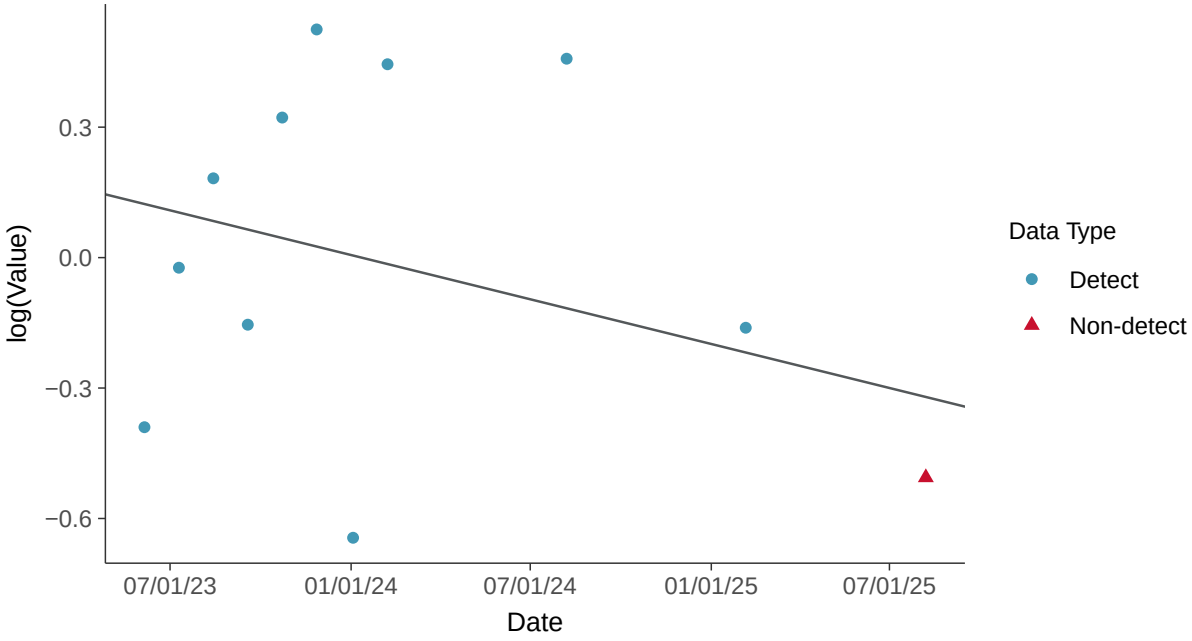
Gamma Q-Q plot using ROS Imputed Estimates

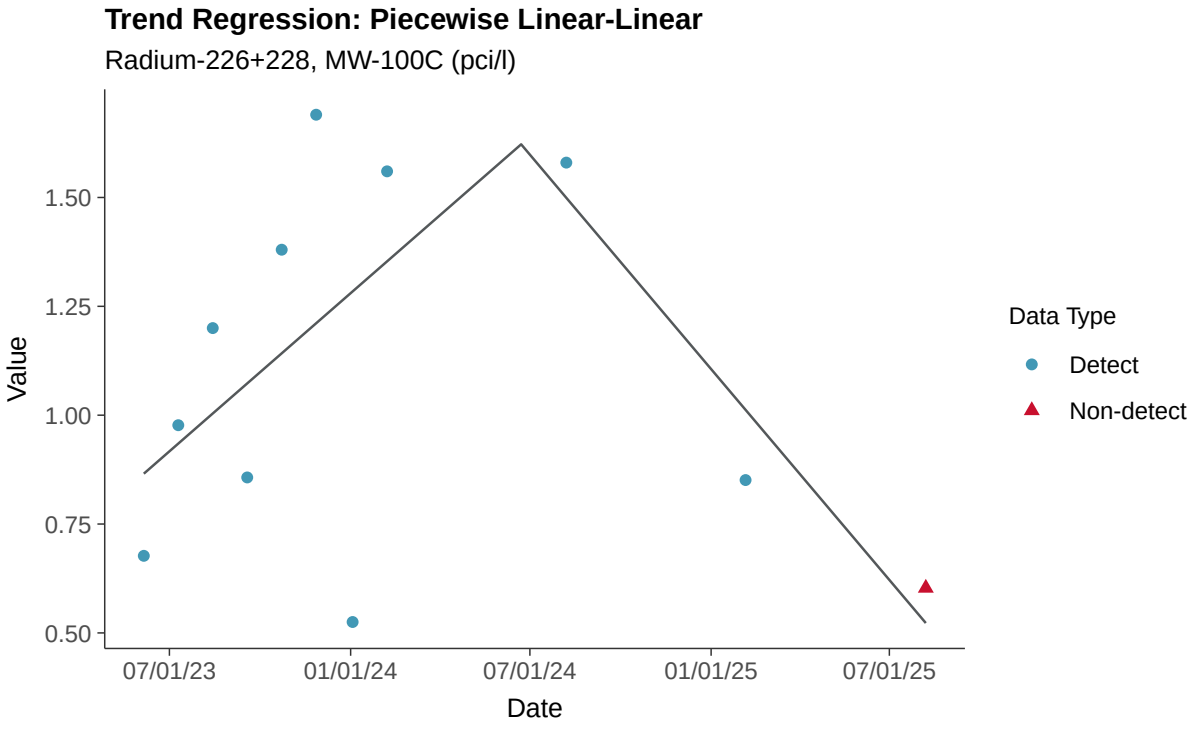
Radium-226+228, MW-100C (pci/l)



Trend Regression: Lognormal MLE

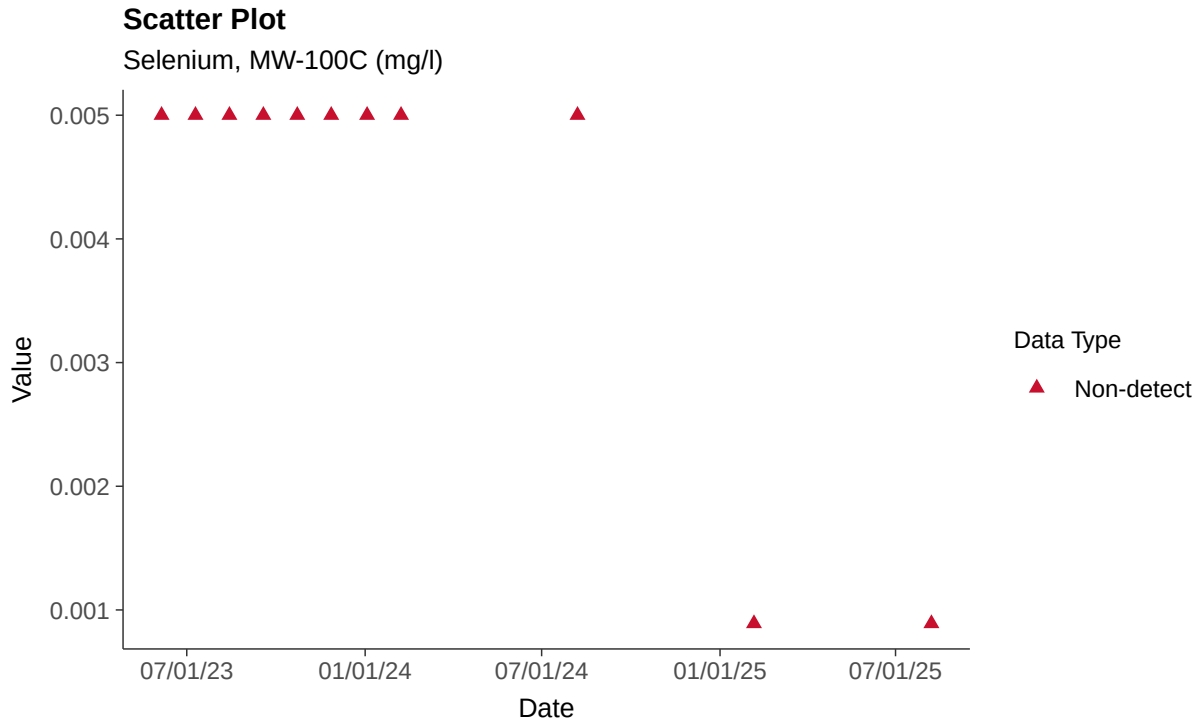
Radium-226+228, MW-100C (pci/l)

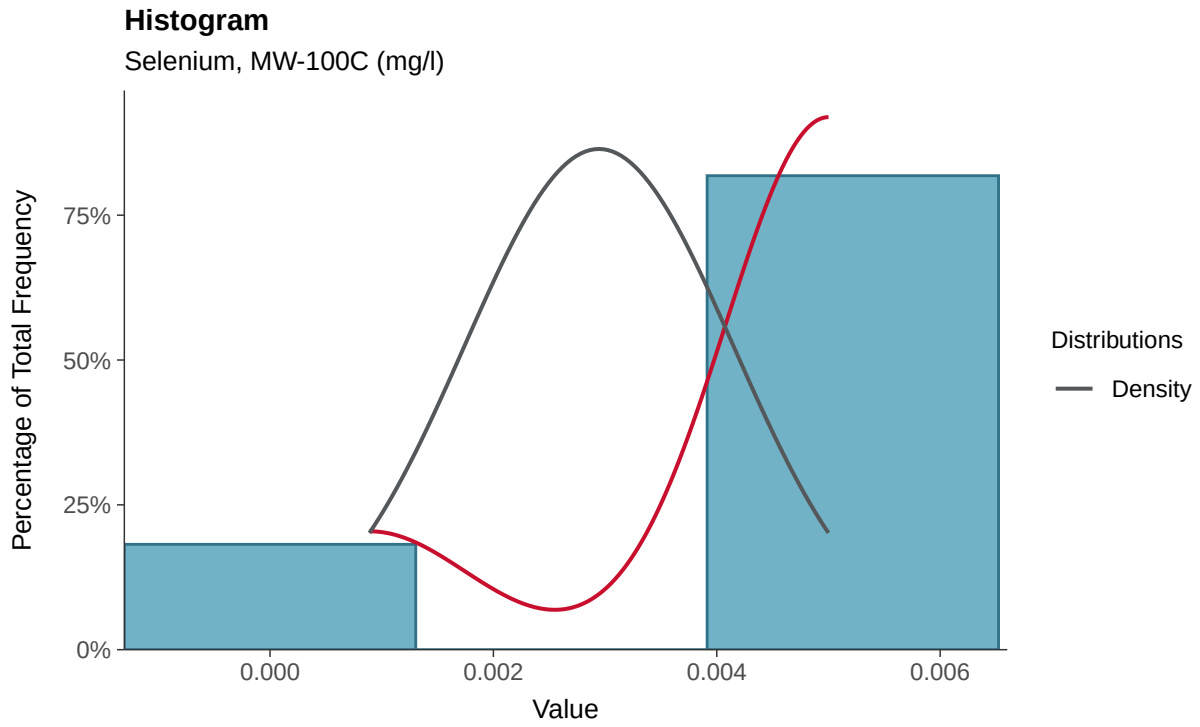



Trend Regression: Piecewise Linear-Linear
Radium-226+228, MW-100C (pci/l)
Value
1.50
1.25
1.00
0.75
0.50
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Selenium, MW-100C

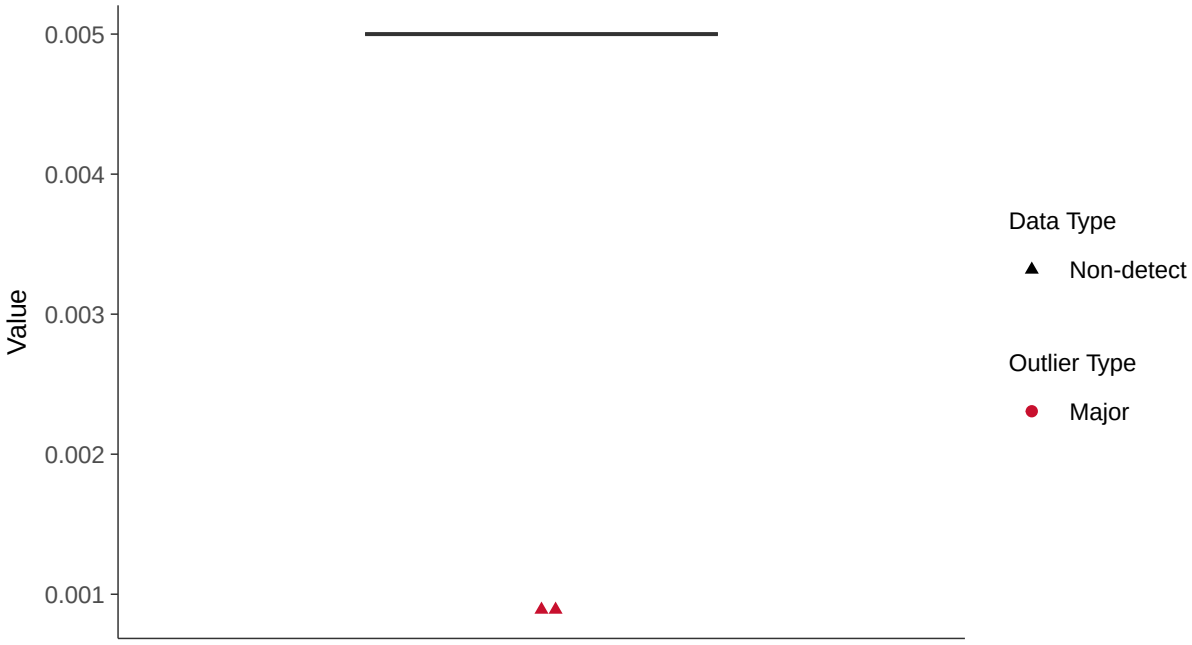
ID: 20_3_122





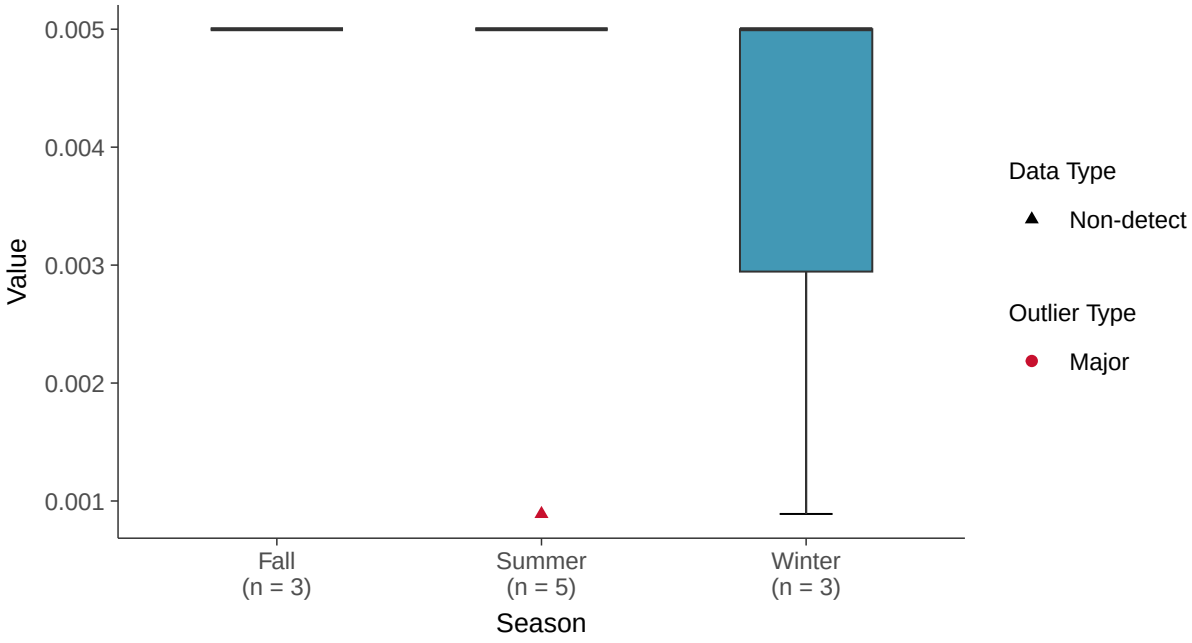
Boxplot

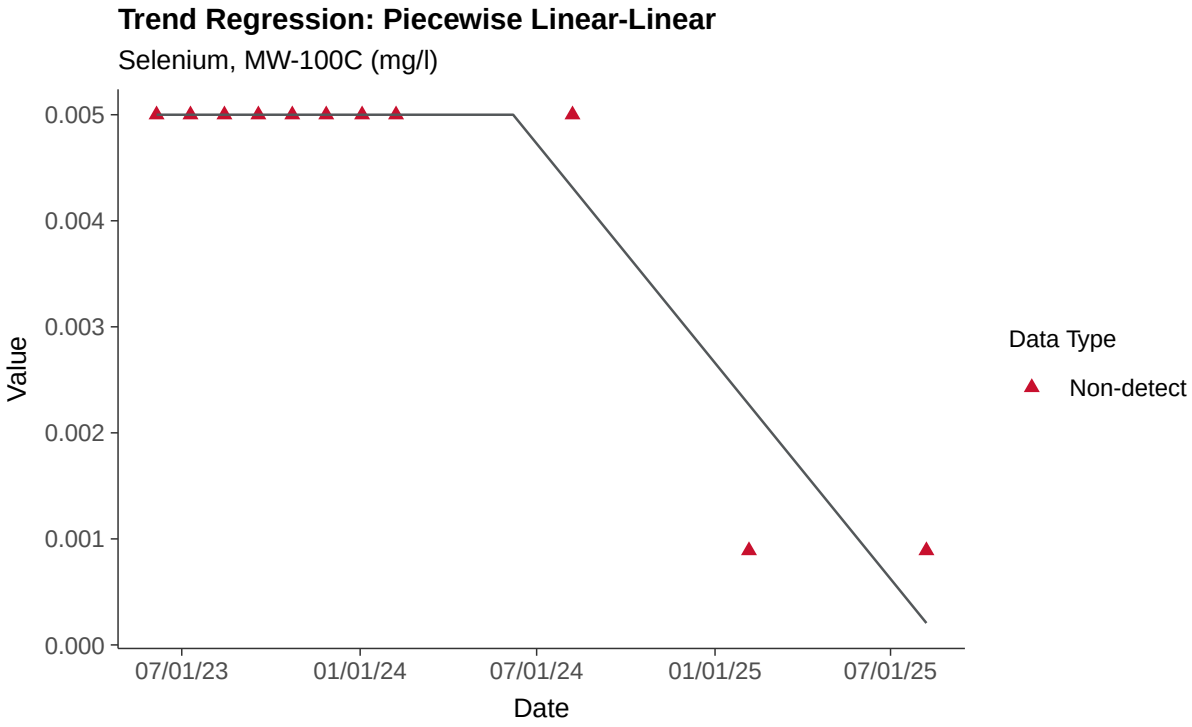
Selenium, MW-100C (mg/l)



Boxplot by Season

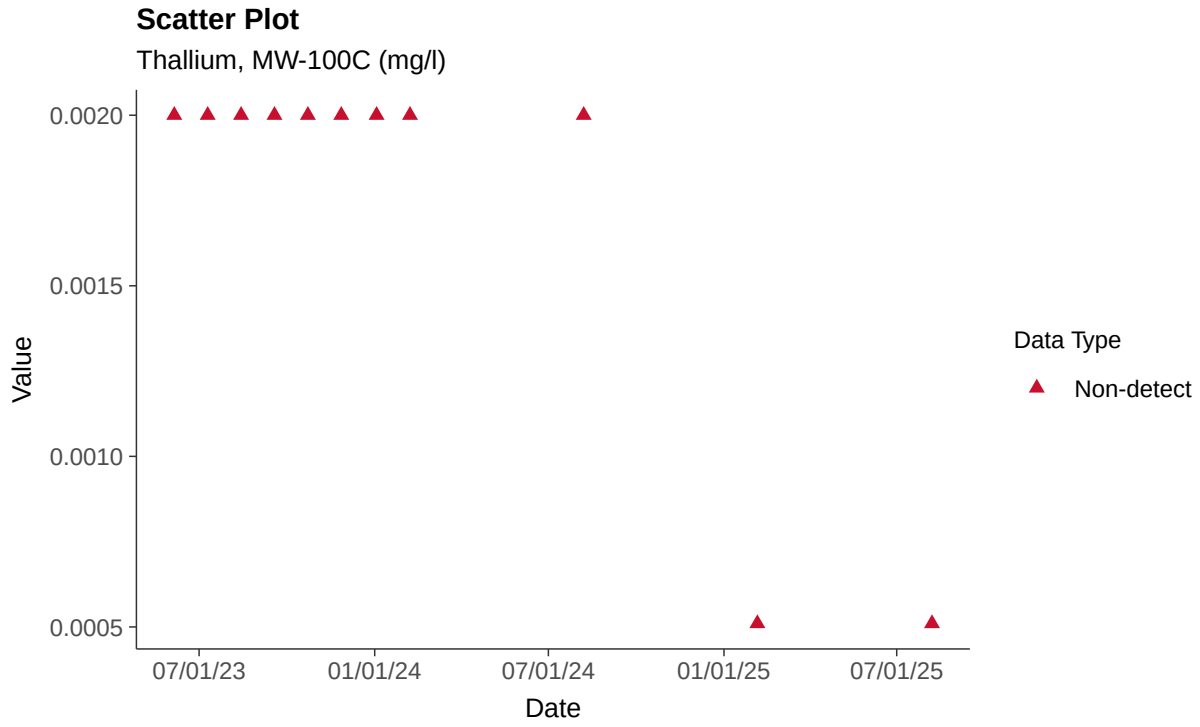
Selenium, MW-100C (mg/l)

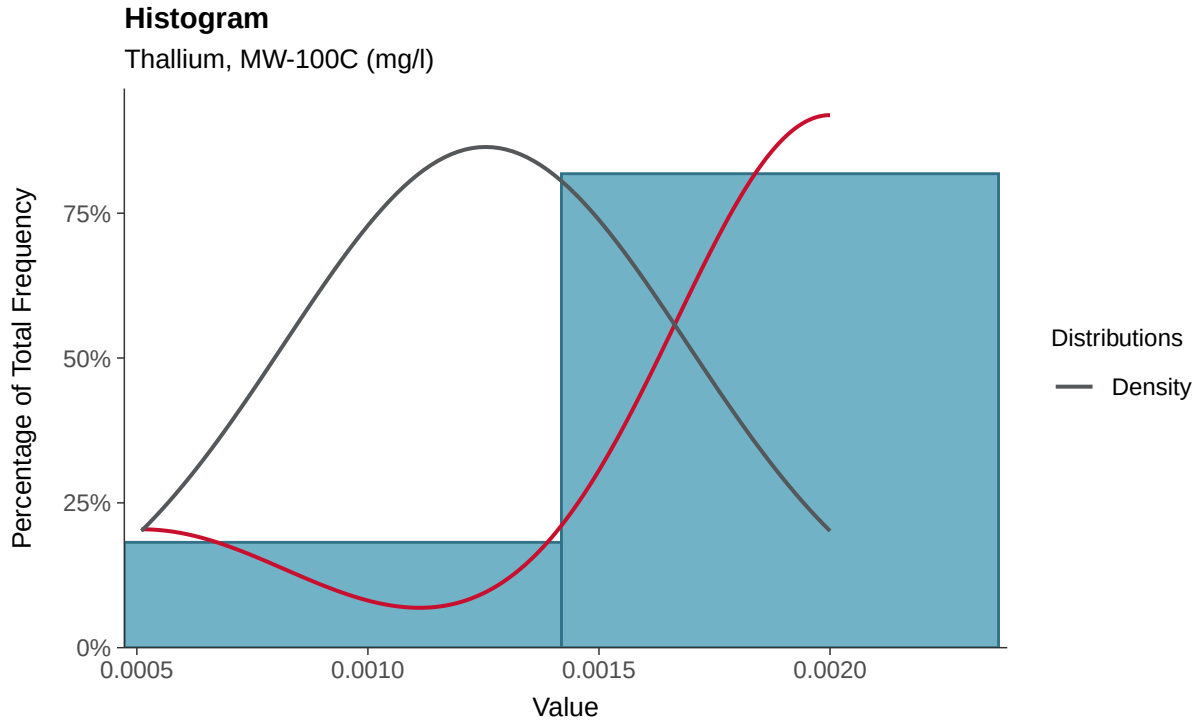



Trend Regression: Piecewise Linear-Linear
Selenium, MW-100C (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Thallium, MW-100C

ID: 20_3_125



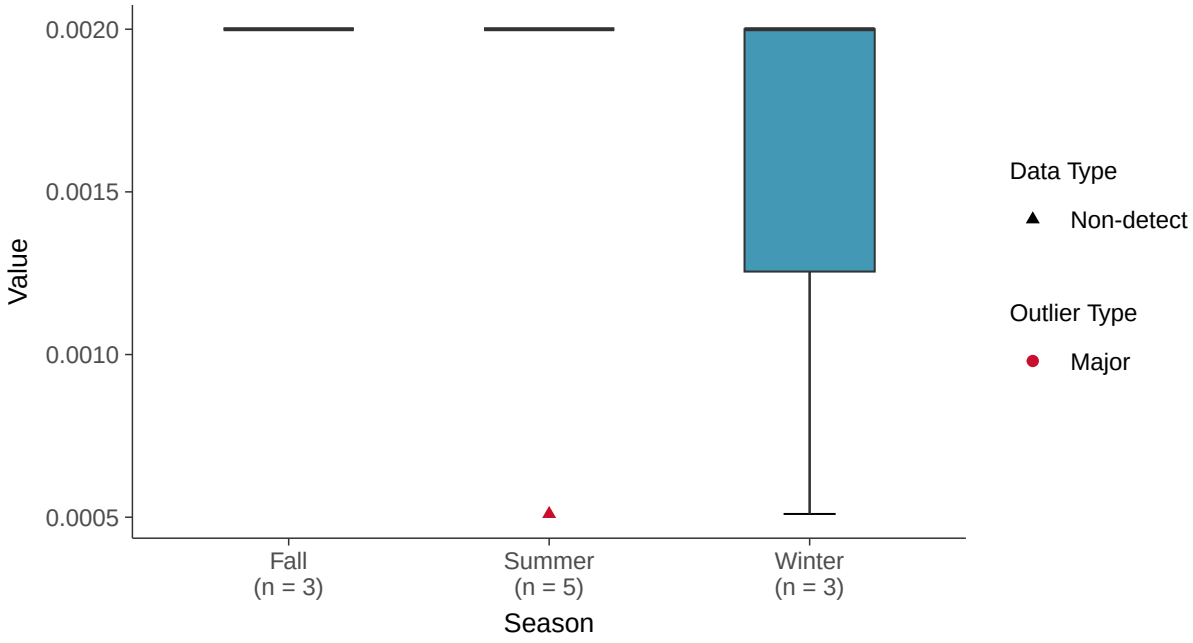


Boxplot

Thallium, MW-100C (mg/l)

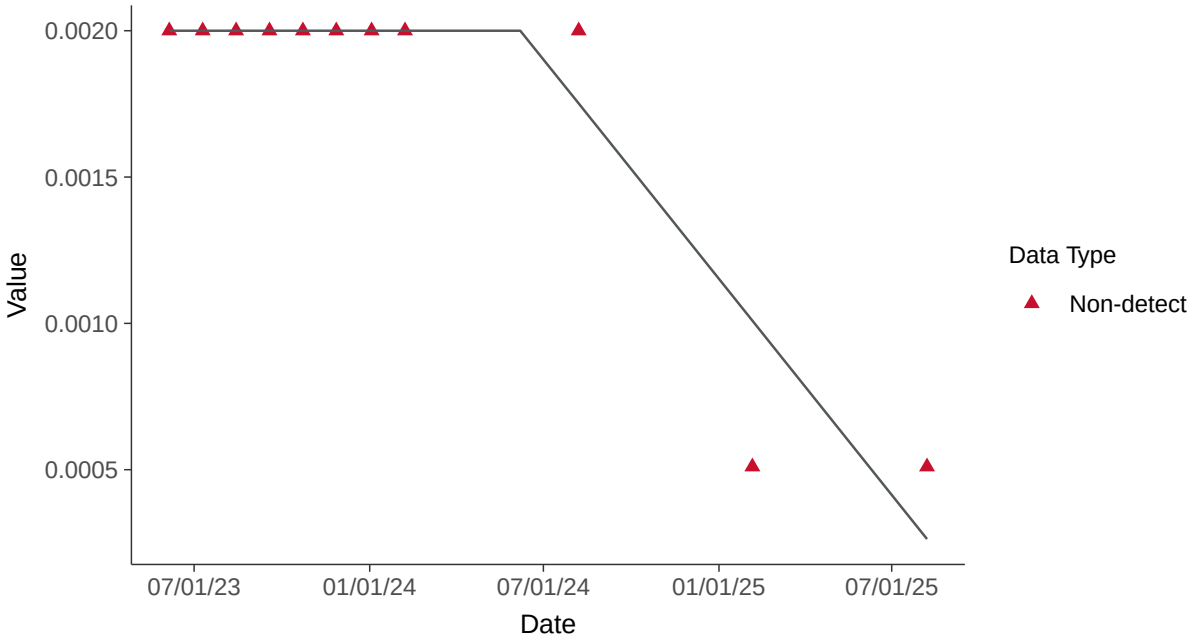
Boxplot by Season

Thallium, MW-100C (mg/l)



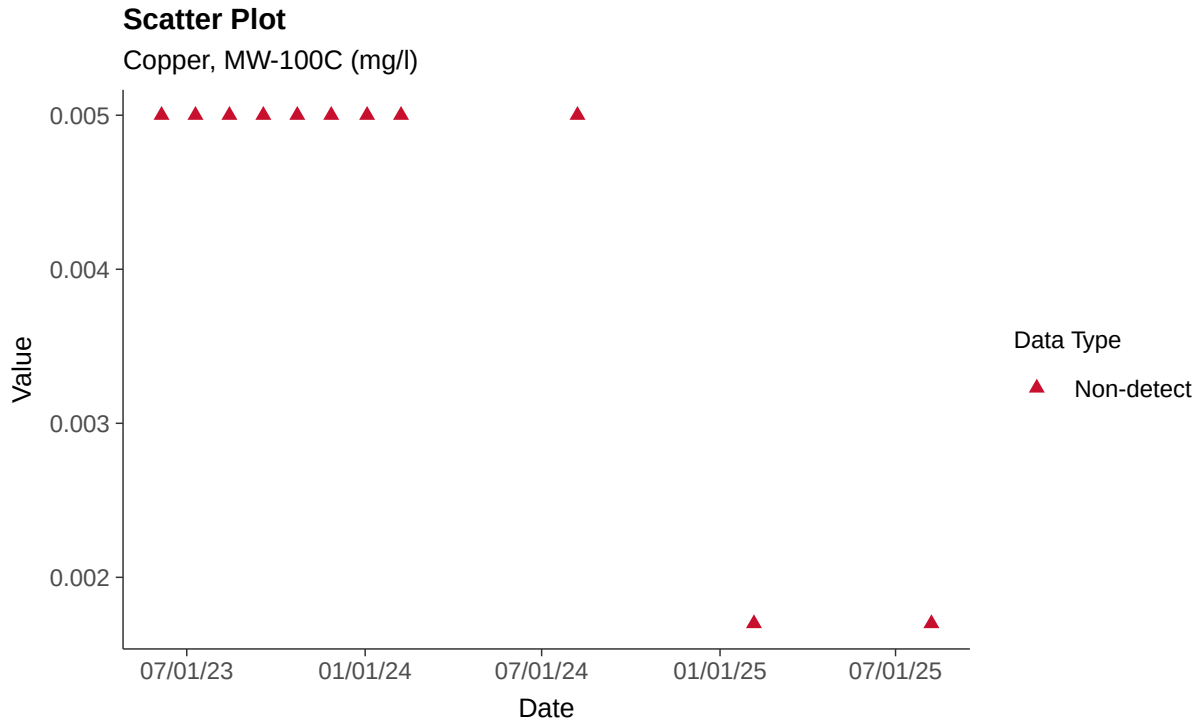
Trend Regression: Piecewise Linear-Linear

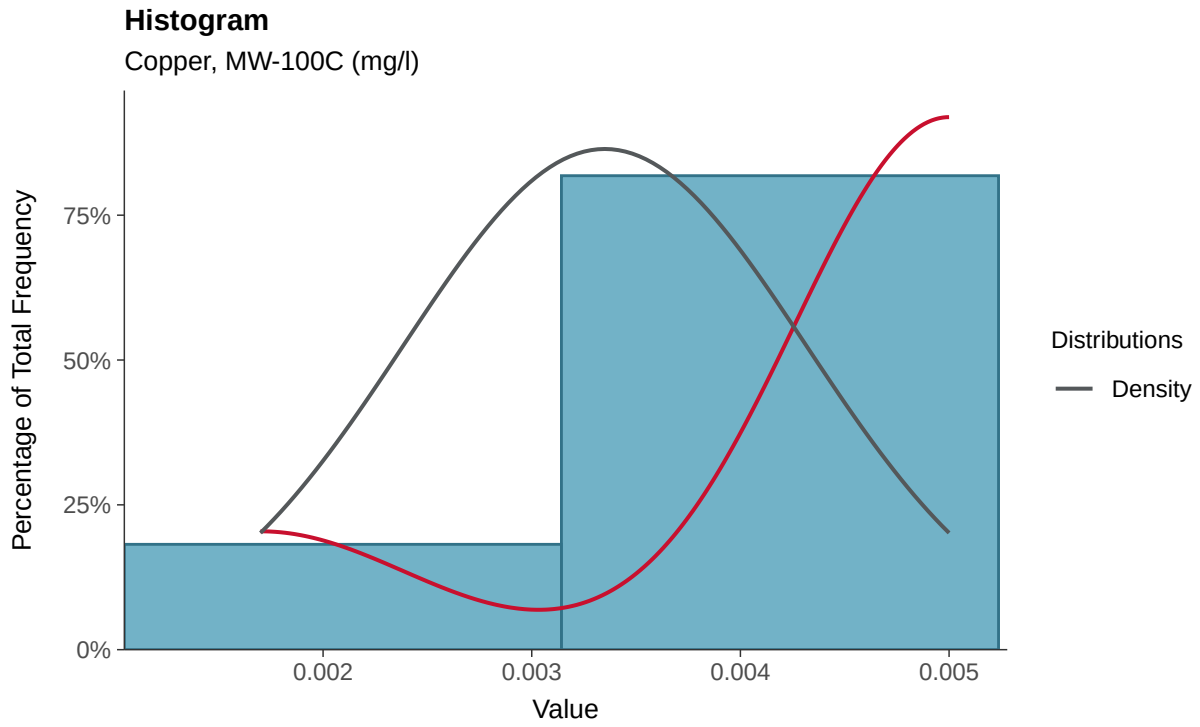
Thallium, MW-100C (mg/l)



Part 115: Copper, MW-100C

ID: 20_5_111



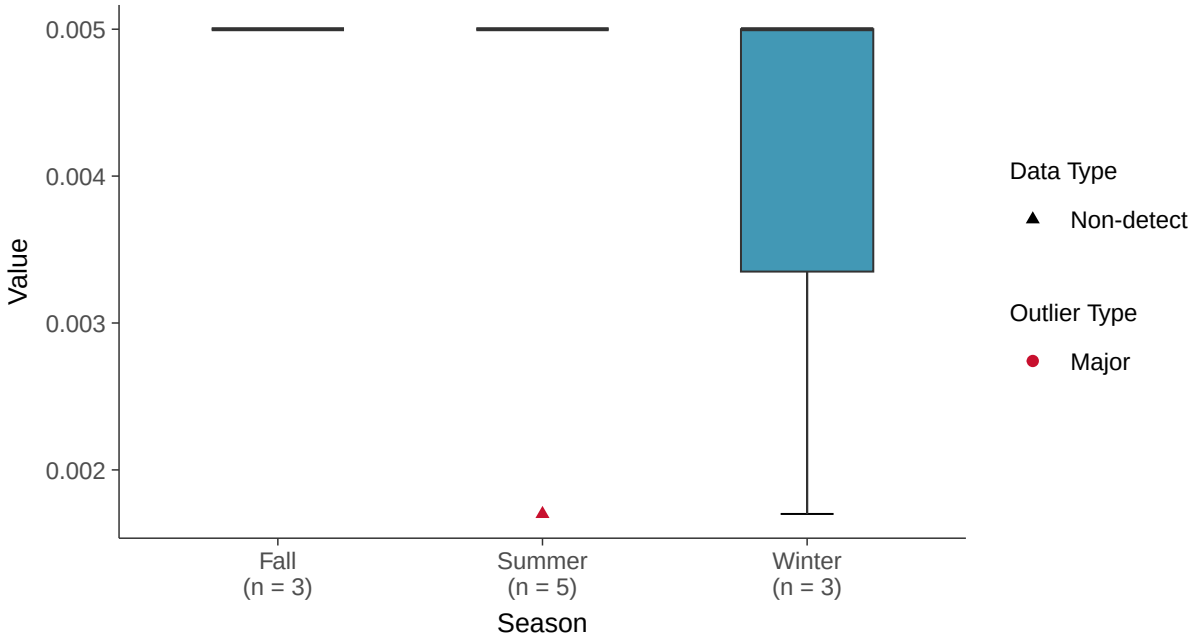


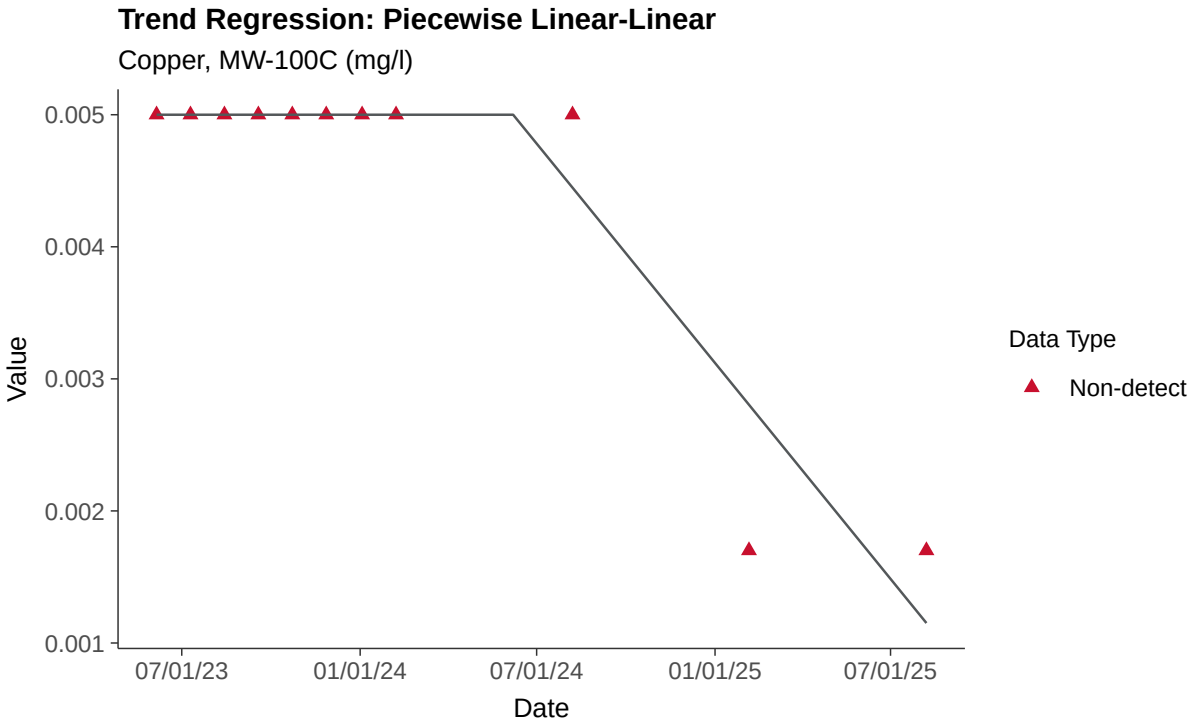
Boxplot

Copper, MW-100C (mg/l)

Boxplot by Season

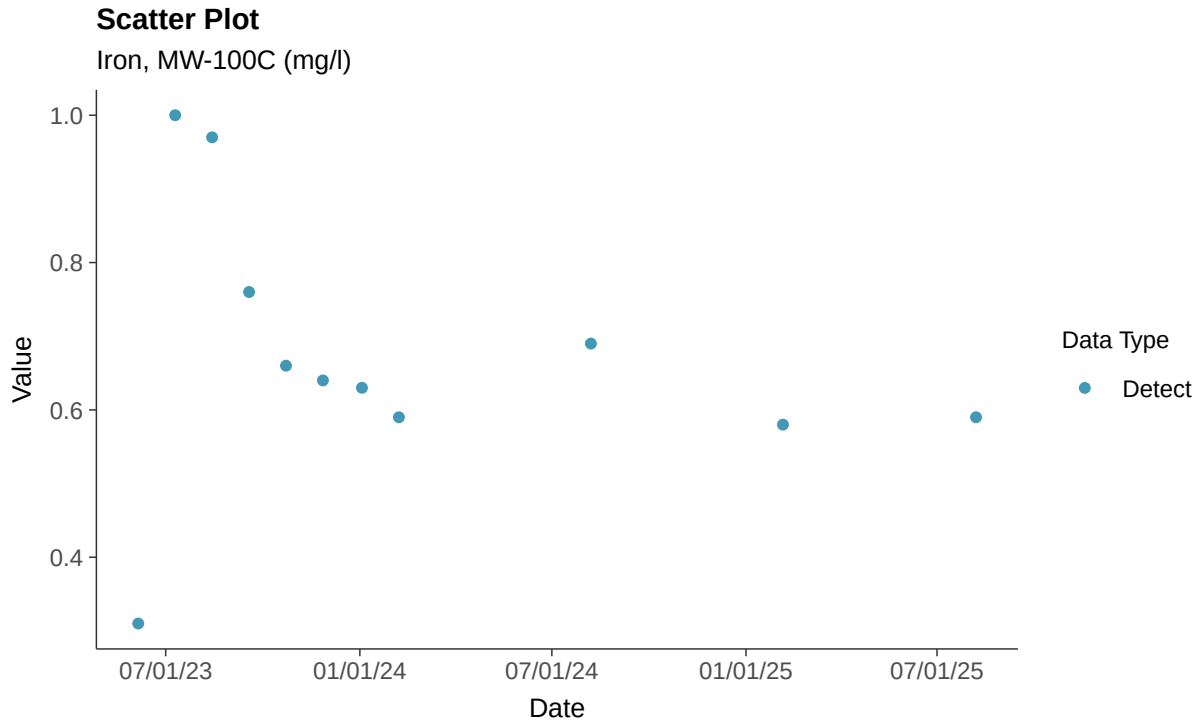
Copper, MW-100C (mg/l)

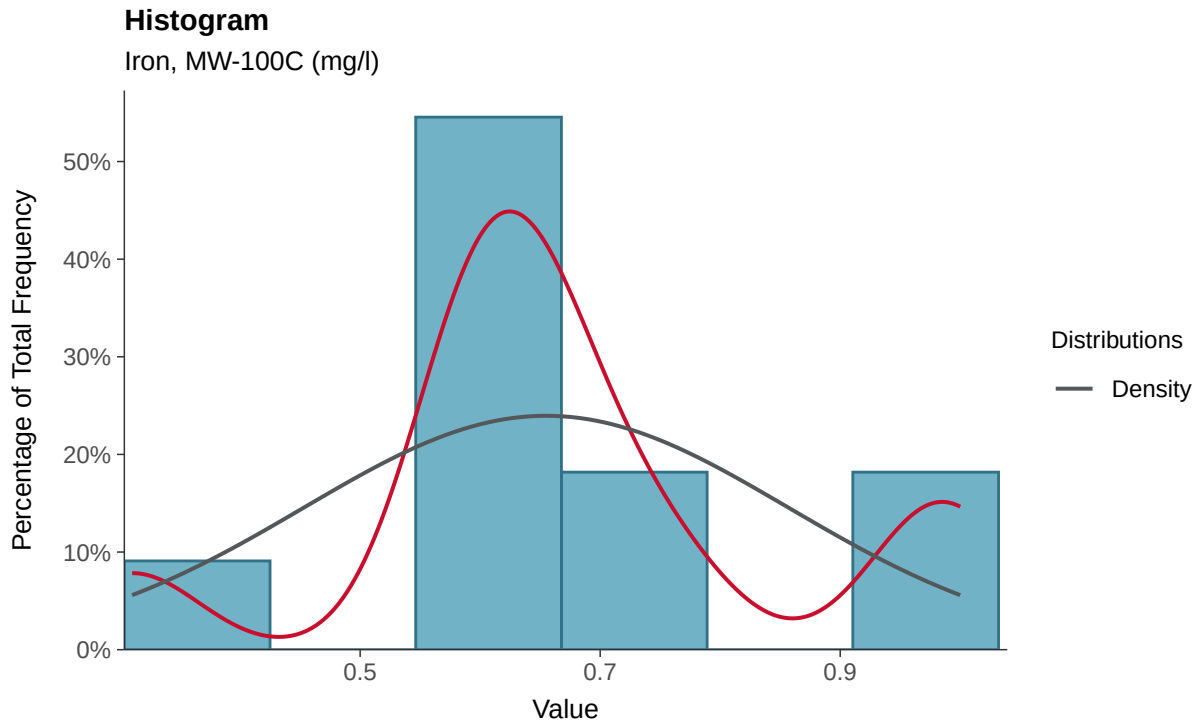



Trend Regression: Piecewise Linear-Linear
Copper, MW-100C (mg/l)
0.005
0.004
0.003
0.002
0.001
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Iron, MW-100C

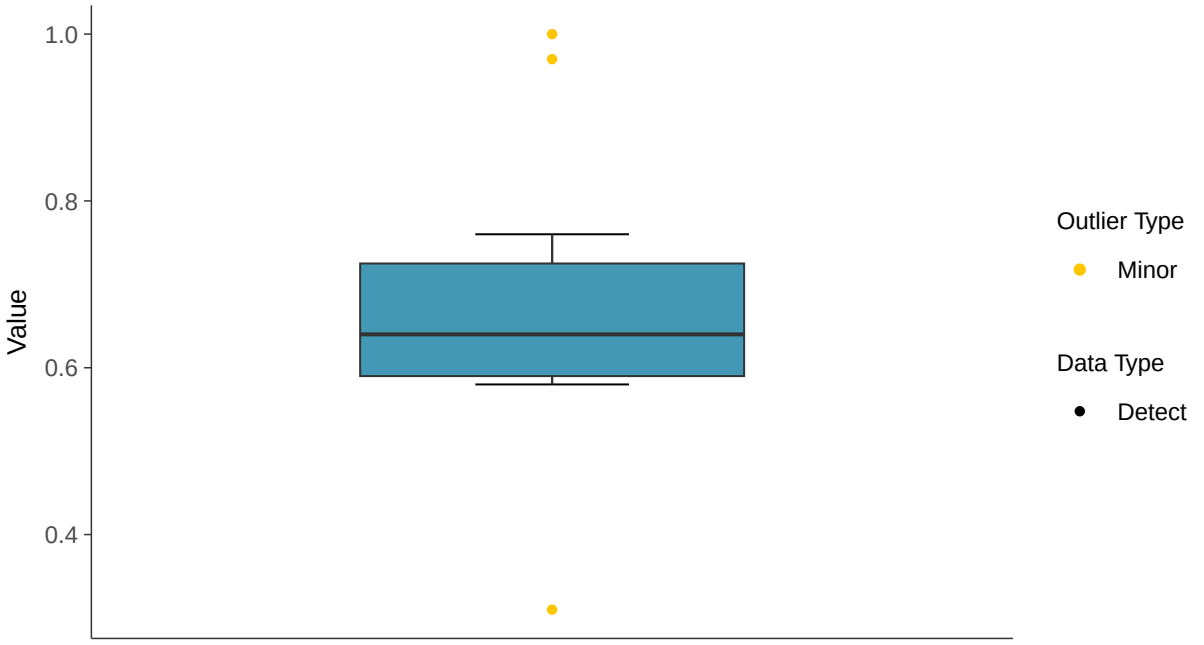
ID: 20_5_114





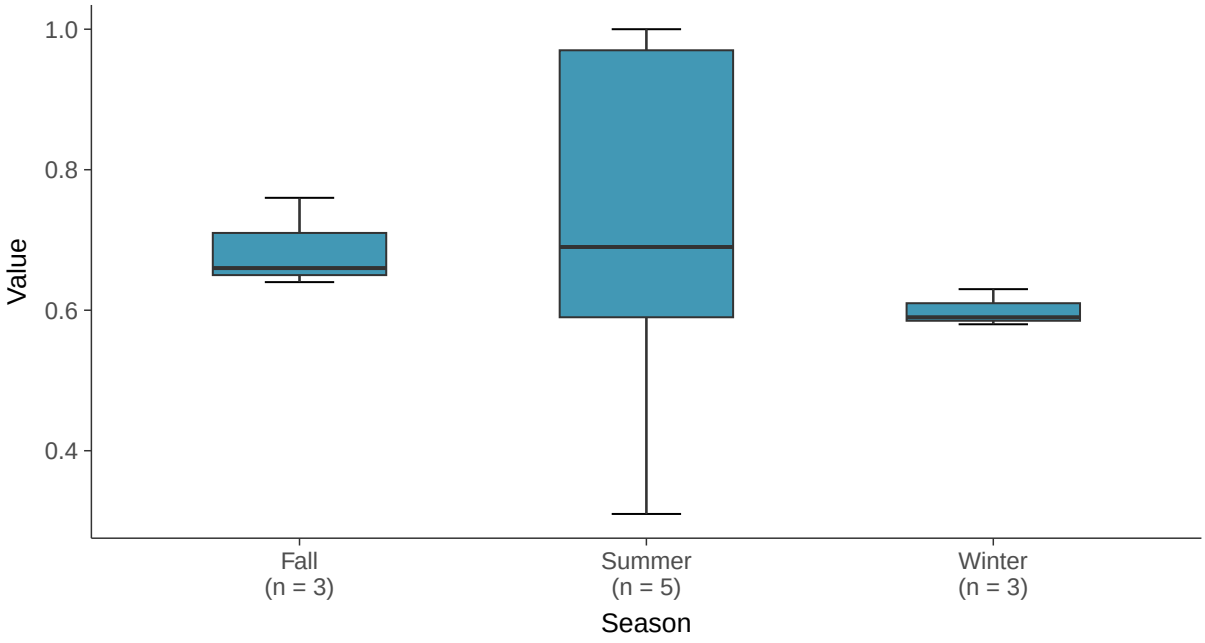
Boxplot

Iron, MW-100C (mg/l)



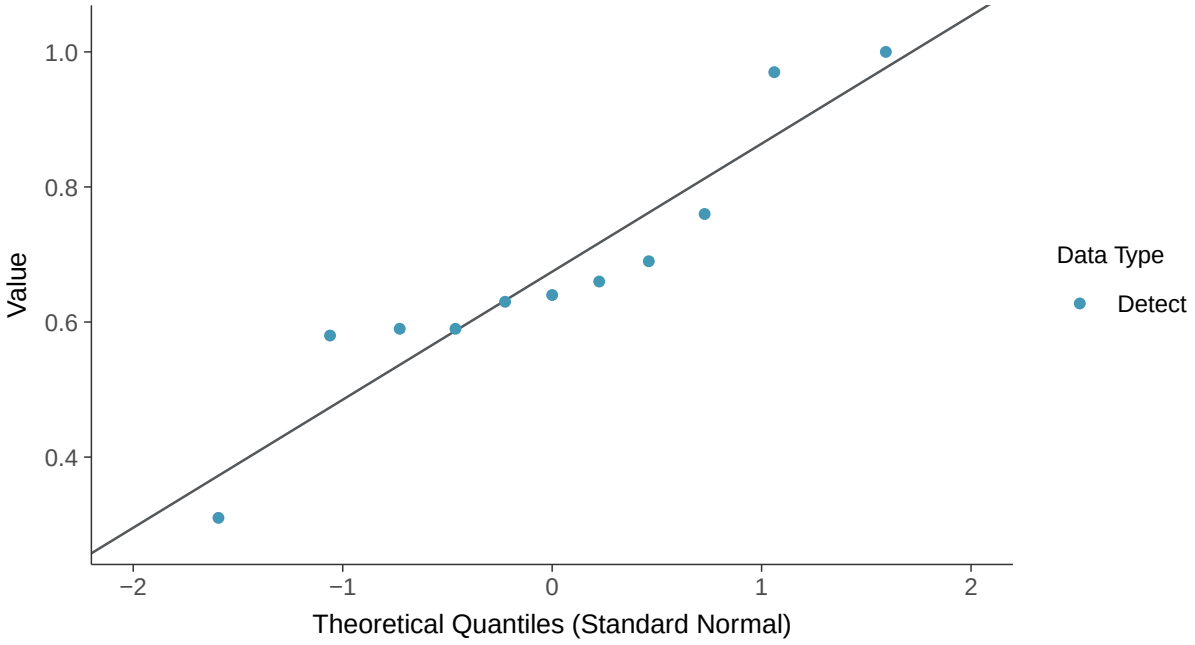
Boxplot by Season

Iron, MW-100C (mg/l)



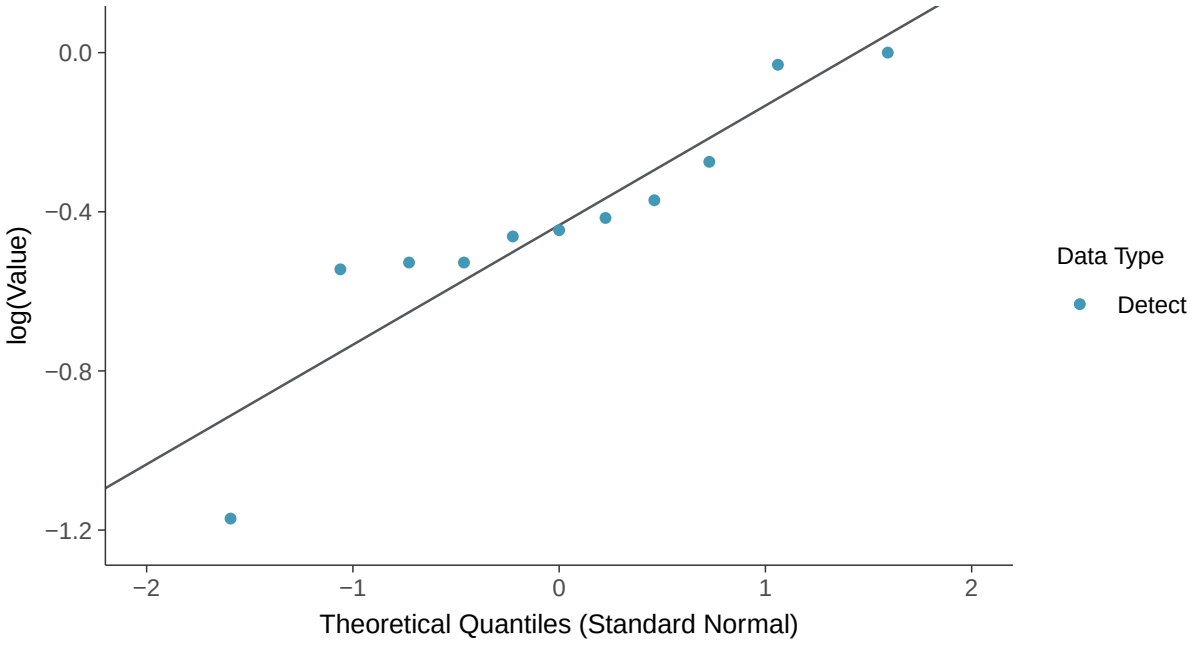
Normal Q-Q plot

Iron, MW-100C (mg/l)



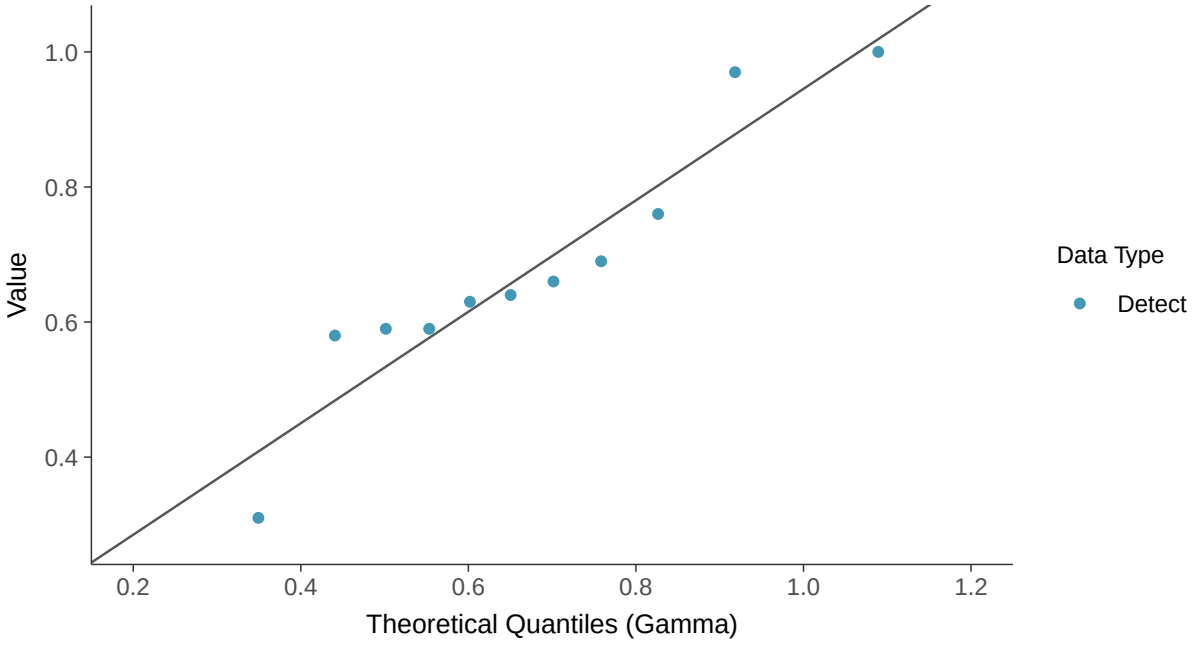
Lognormal Q-Q plot

Iron, MW-100C (mg/l)



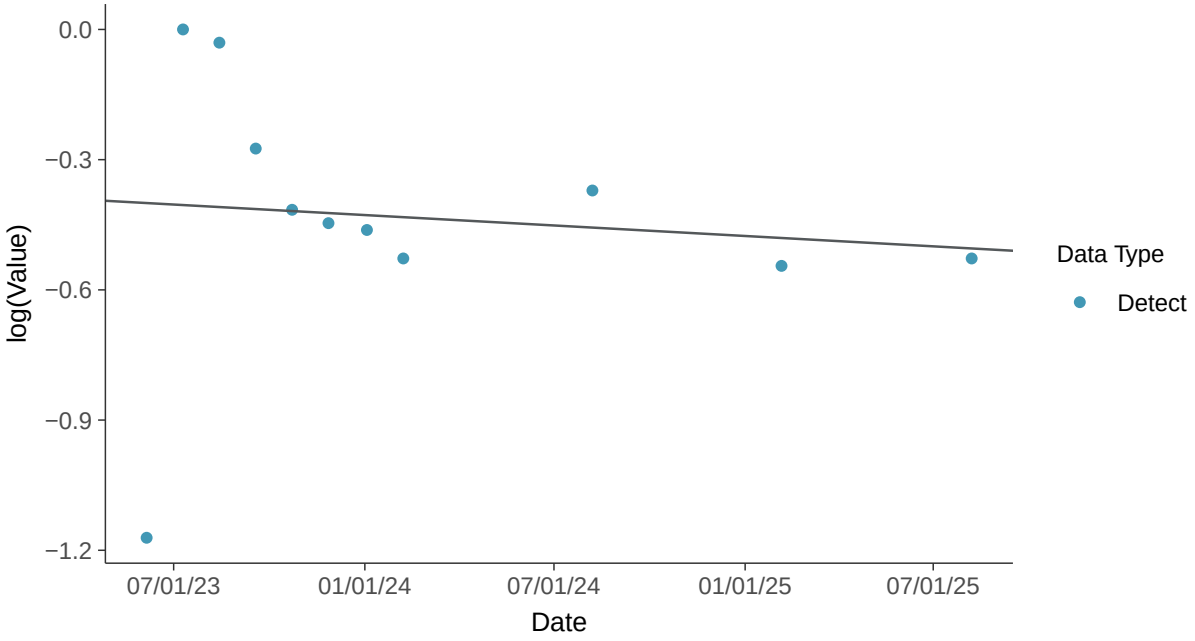
Gamma Q-Q plot

Iron, MW-100C (mg/l)



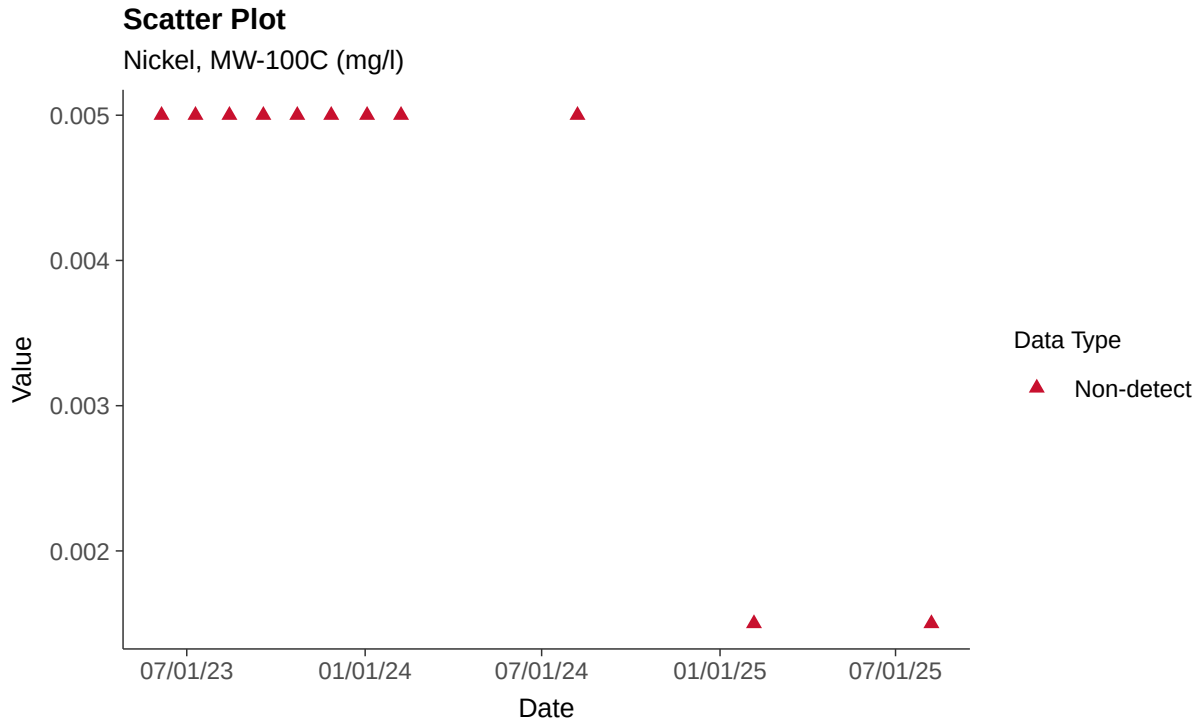
Trend Regression: Lognormal MLE

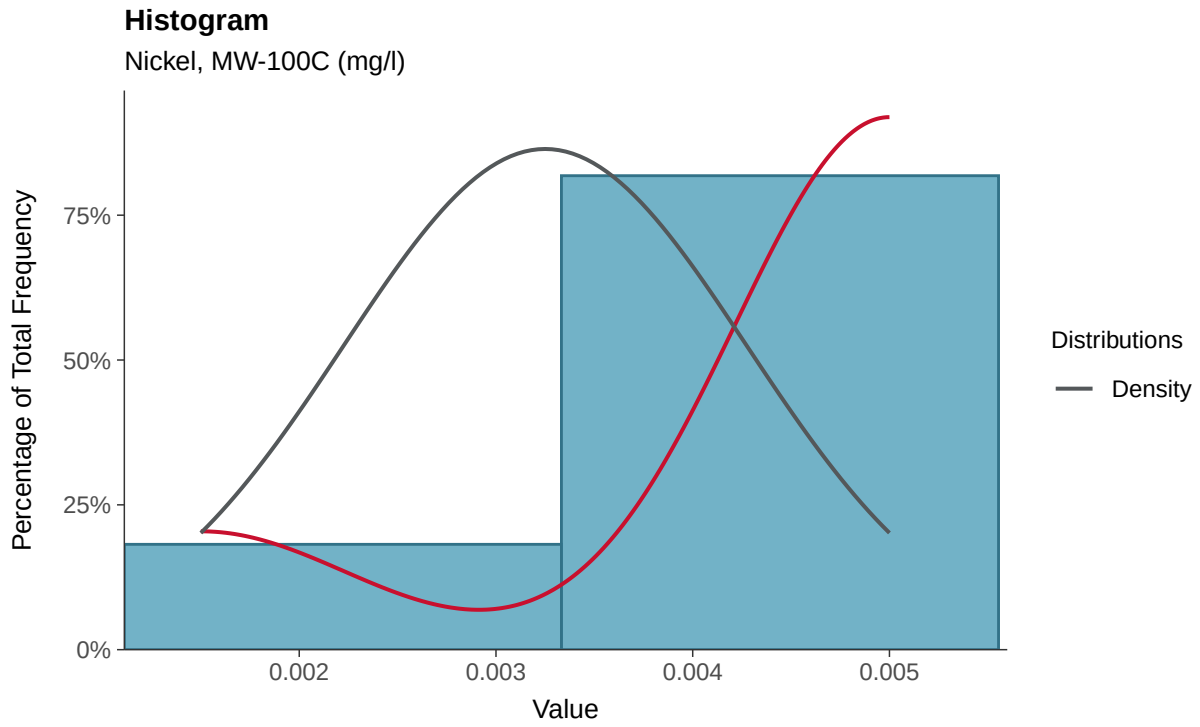
Iron, MW-100C (mg/l)



Part 115: Nickel, MW-100C

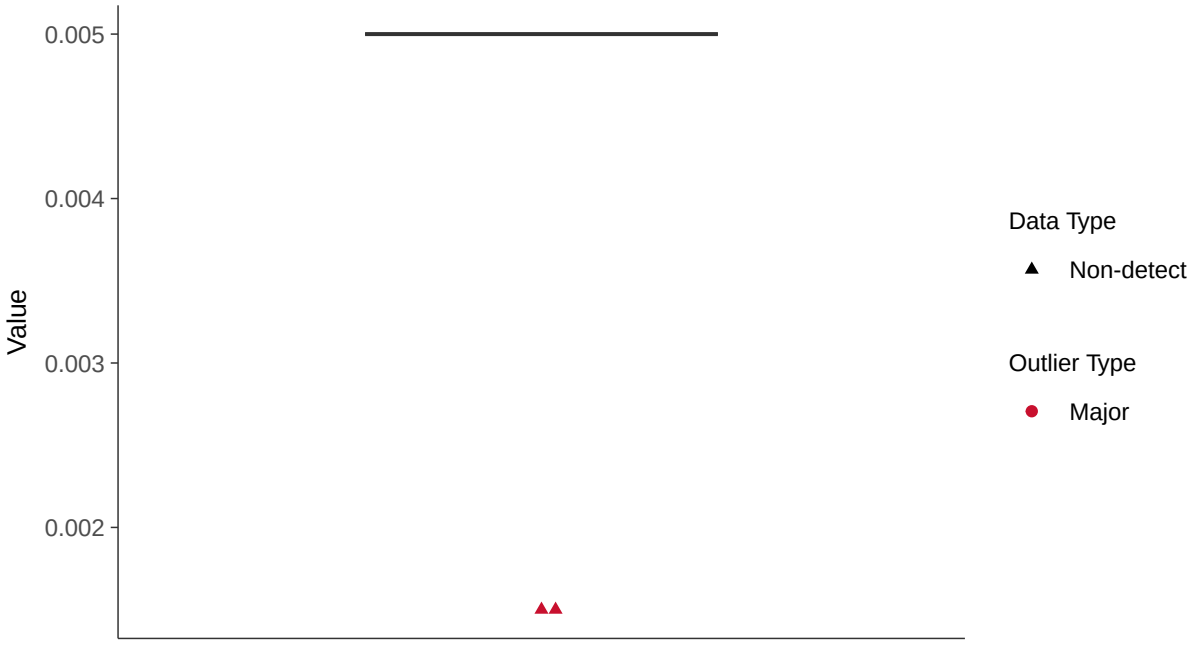
ID: 20_5_119





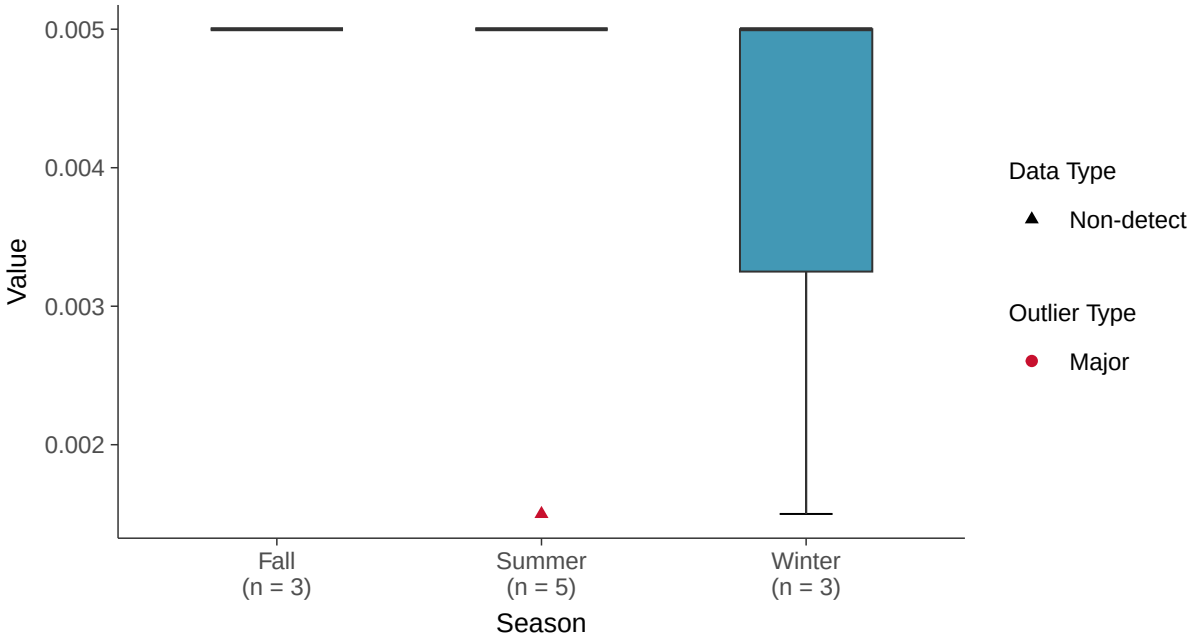
Boxplot

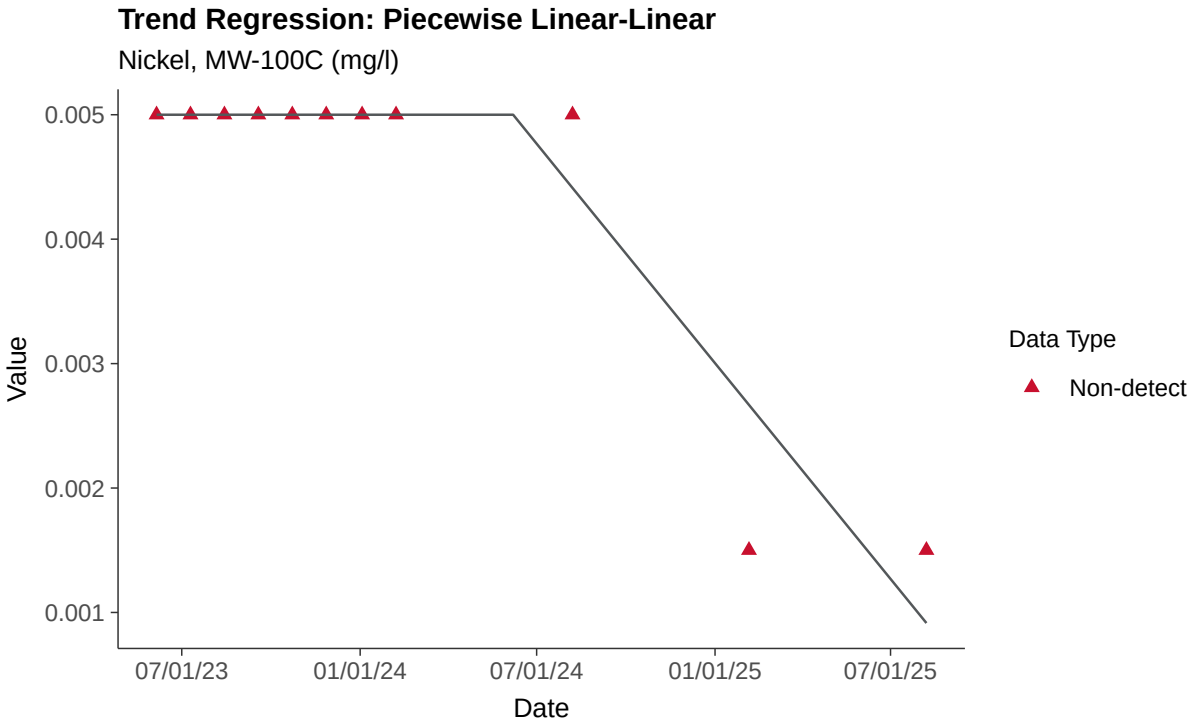
Nickel, MW-100C (mg/l)



Boxplot by Season

Nickel, MW-100C (mg/l)



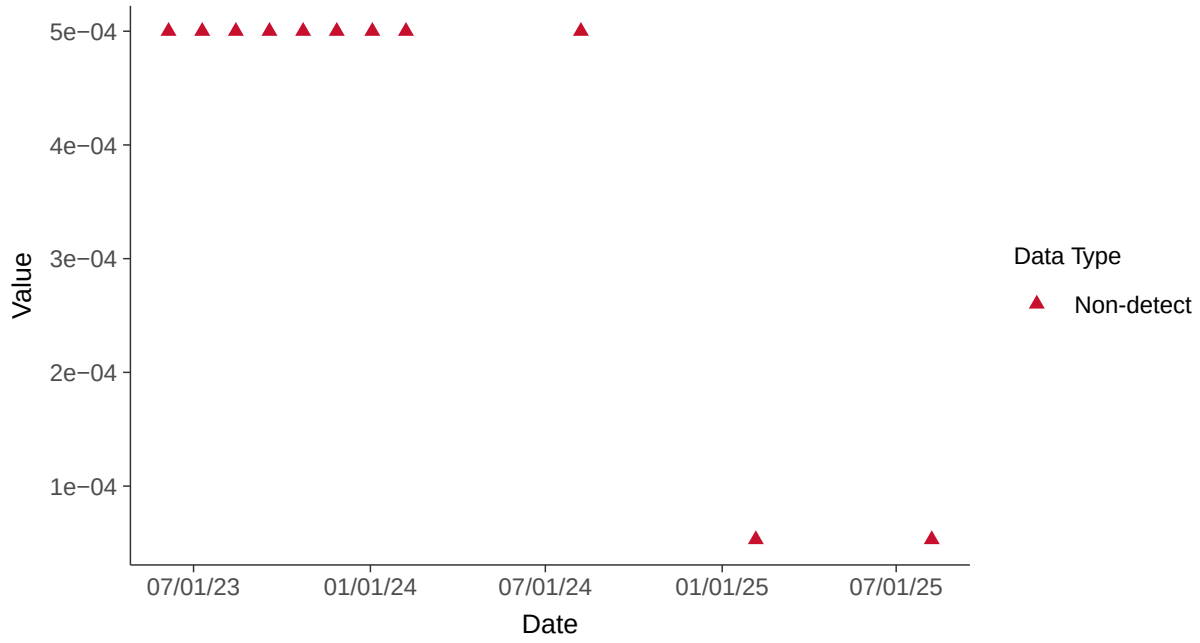

Trend Regression: Piecewise Linear-Linear
Nickel, MW-100C (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Silver, MW-100C

ID: 20_5_123

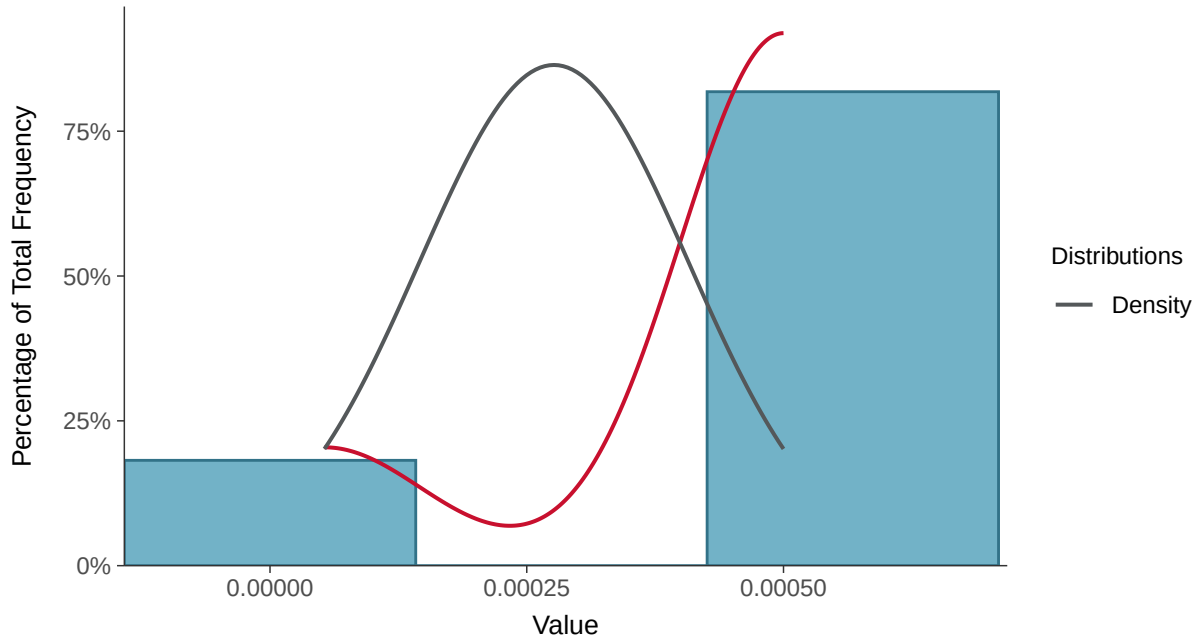
Scatter Plot

Silver, MW-100C (mg/l)



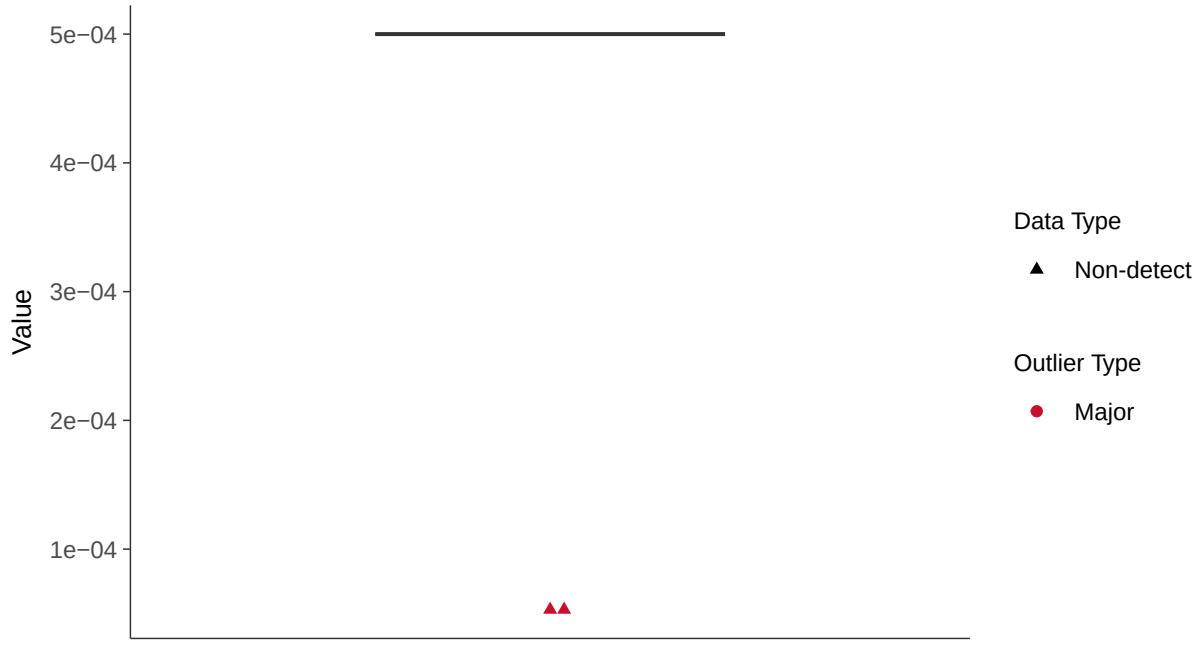
Histogram

Silver, MW-100C (mg/l)



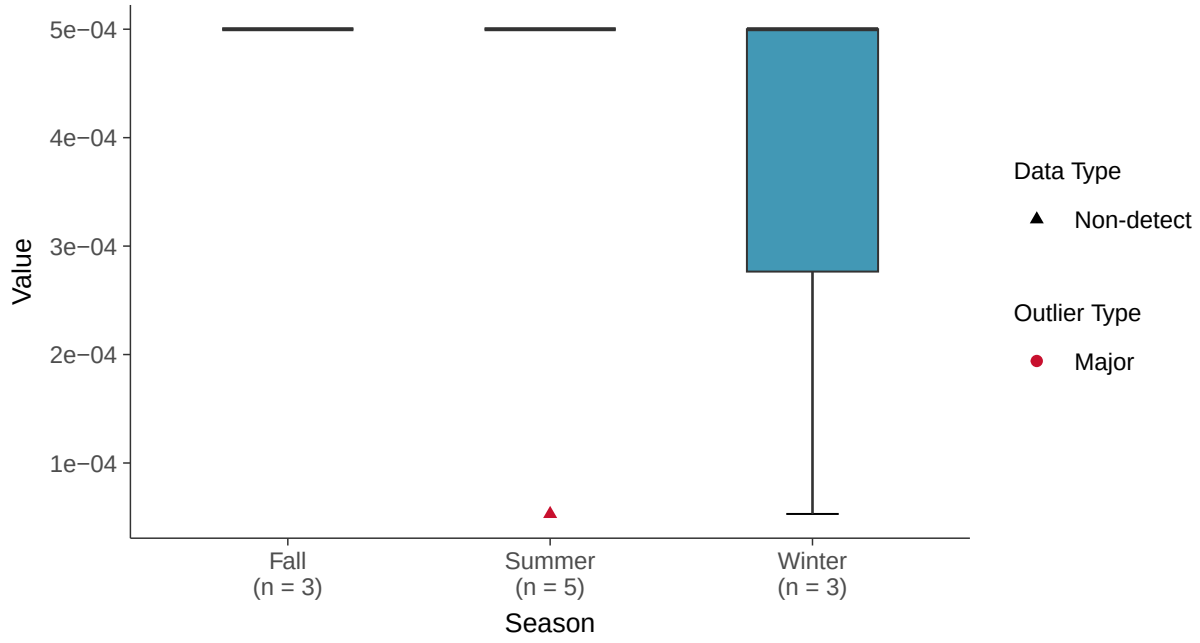
Boxplot

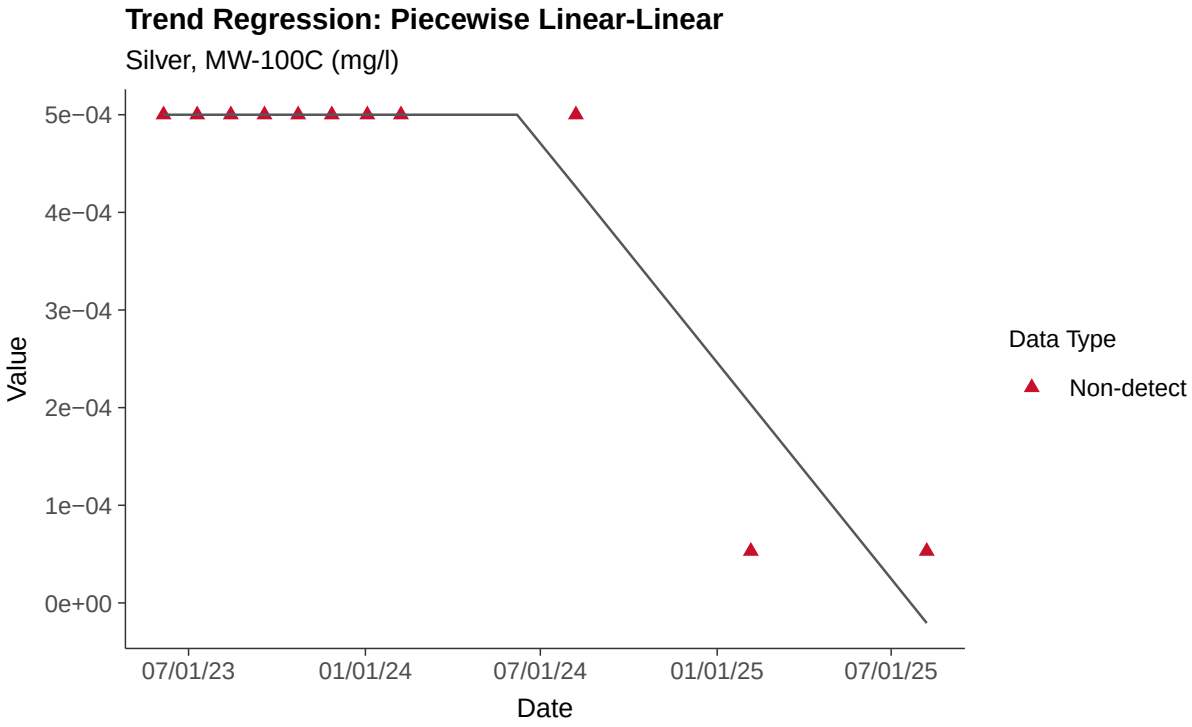
Silver, MW-100C (mg/l)



Boxplot by Season

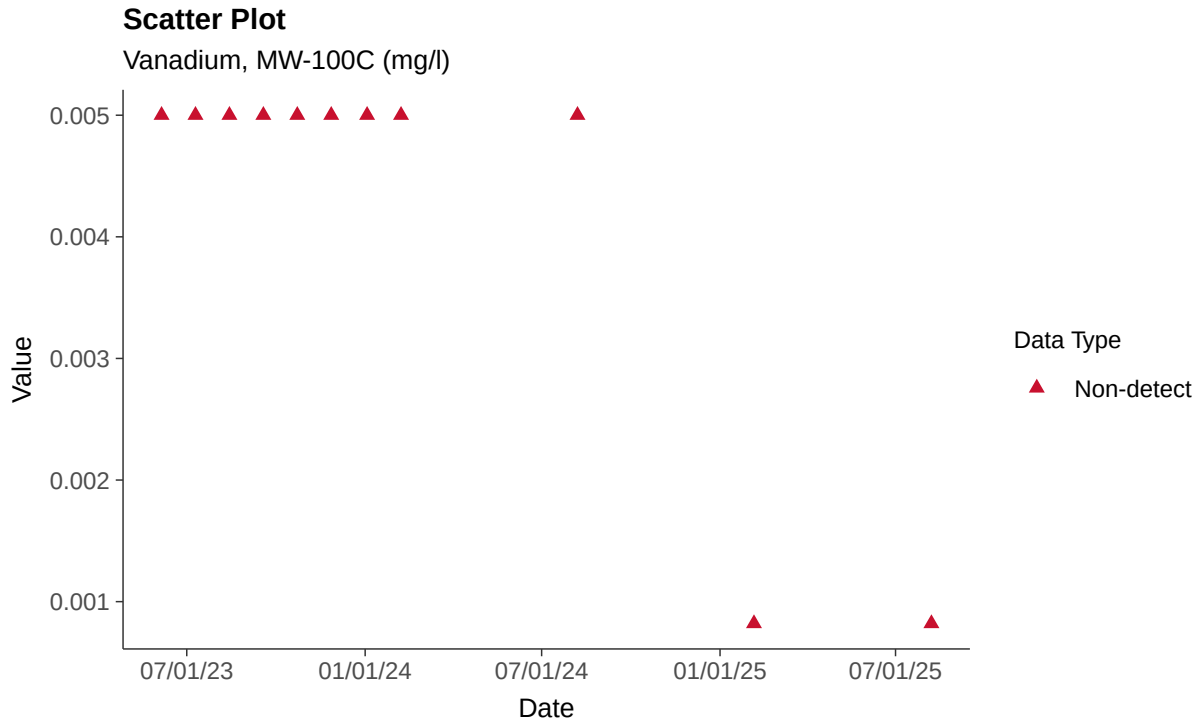
Silver, MW-100C (mg/l)

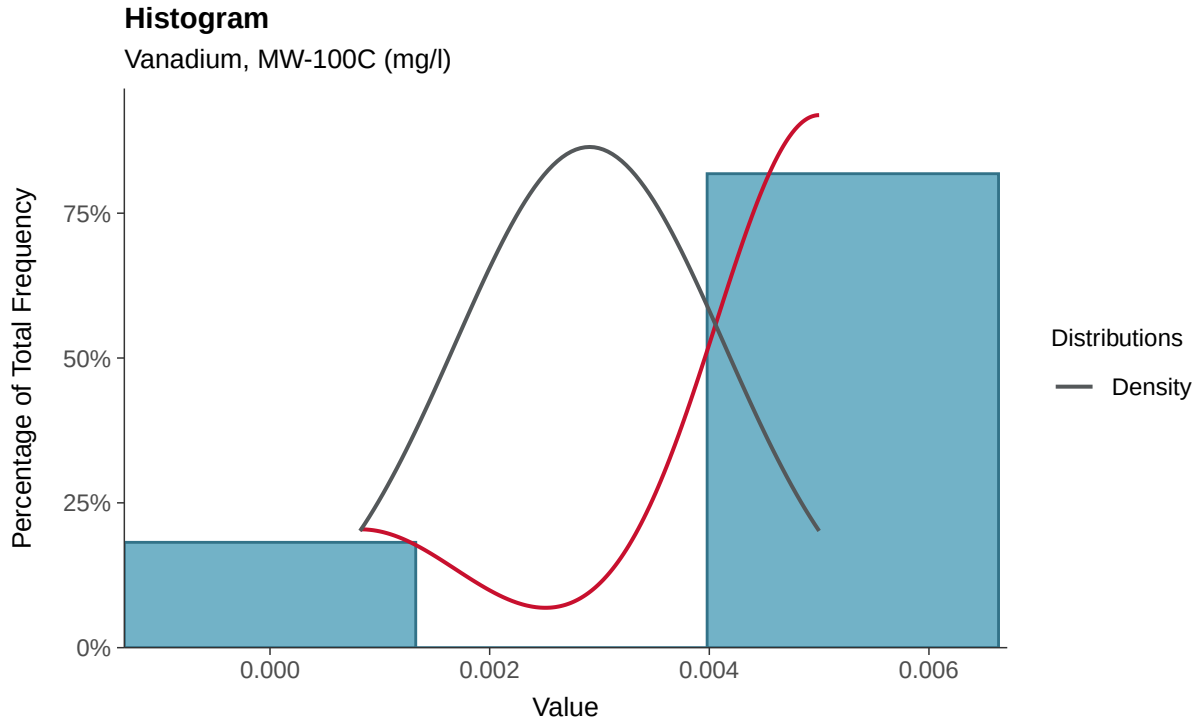



Trend Regression: Piecewise Linear-Linear
Silver, MW-100C (mg/l)
5e−04
4e−04
3e−04
2e−04
1e−04
0e+00
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Vanadium, MW-100C

ID: 20_5_128



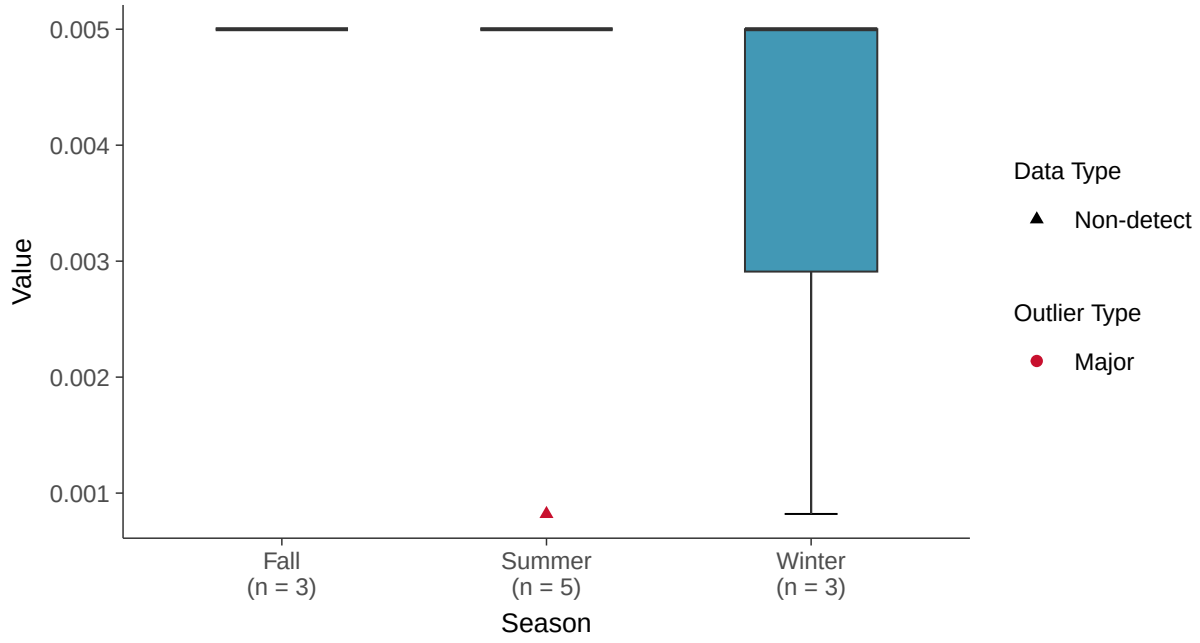


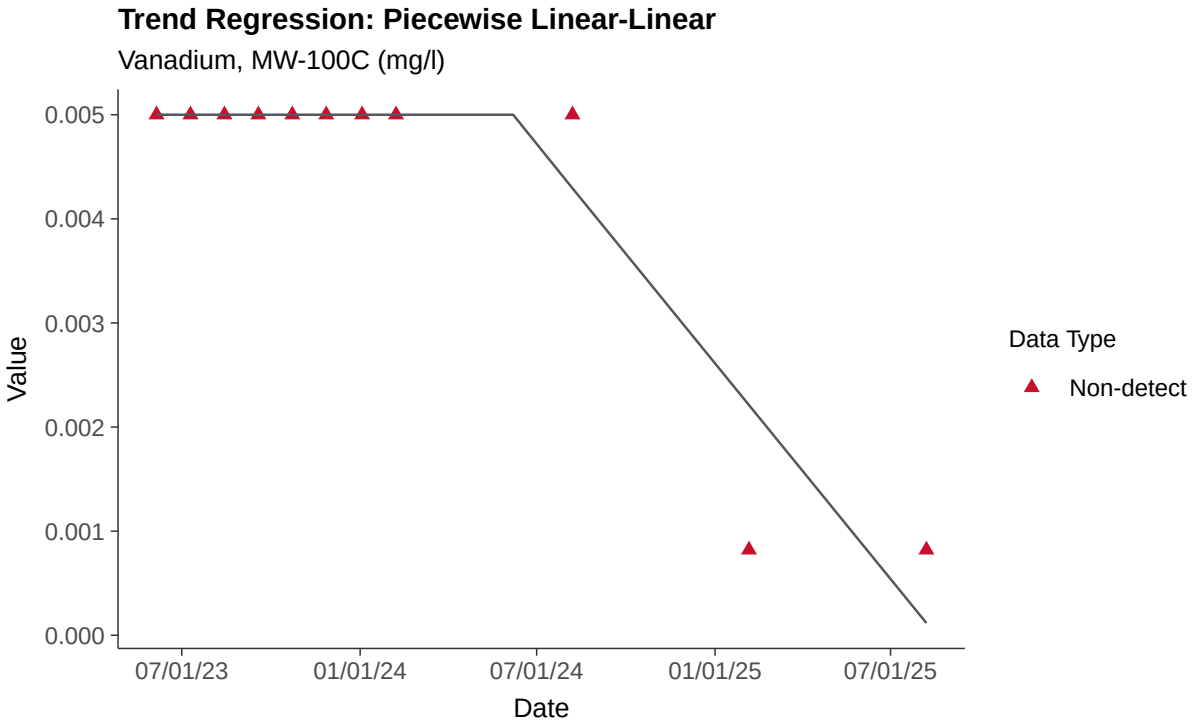
Boxplot

Vanadium, MW-100C (mg/l)

Boxplot by Season

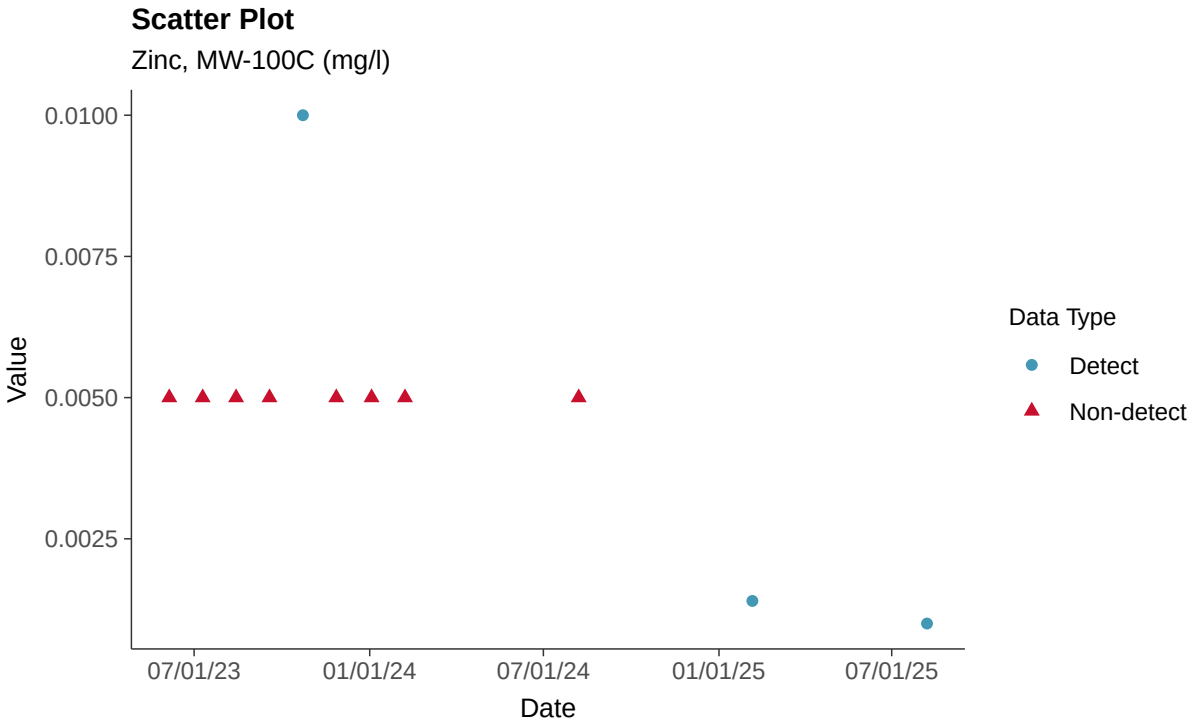
Vanadium, MW-100C (mg/l)

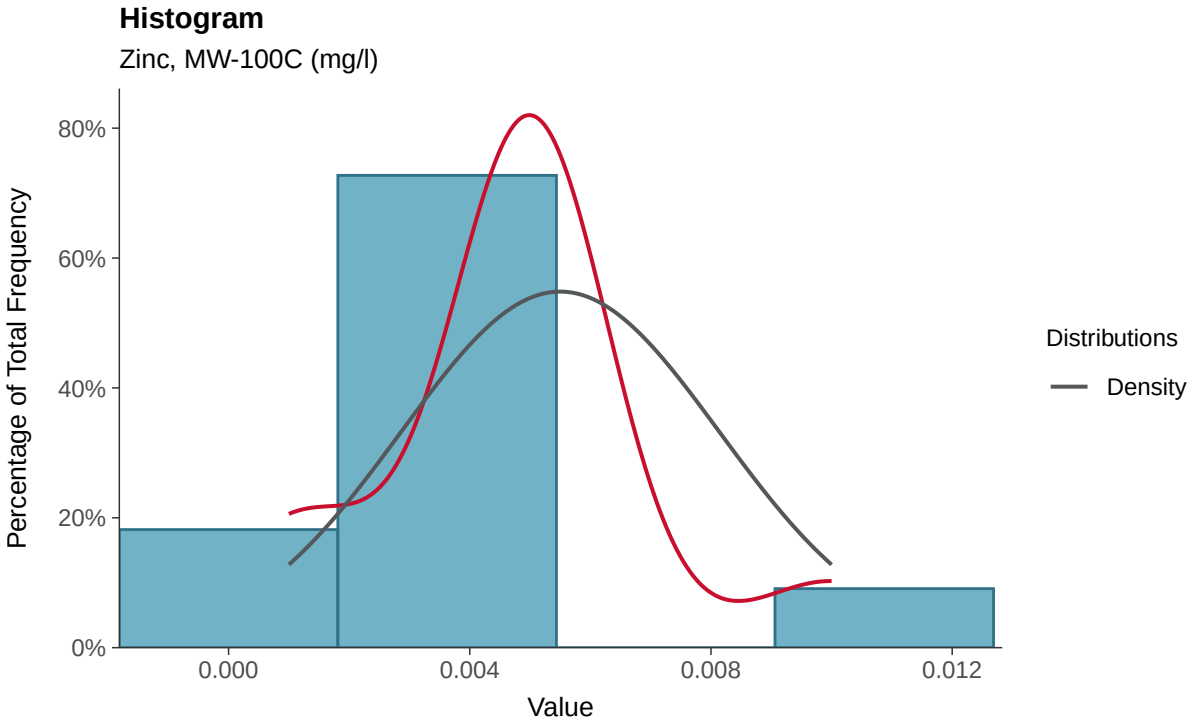



Trend Regression: Piecewise Linear-Linear
Vanadium, MW-100C (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Zinc, MW-100C

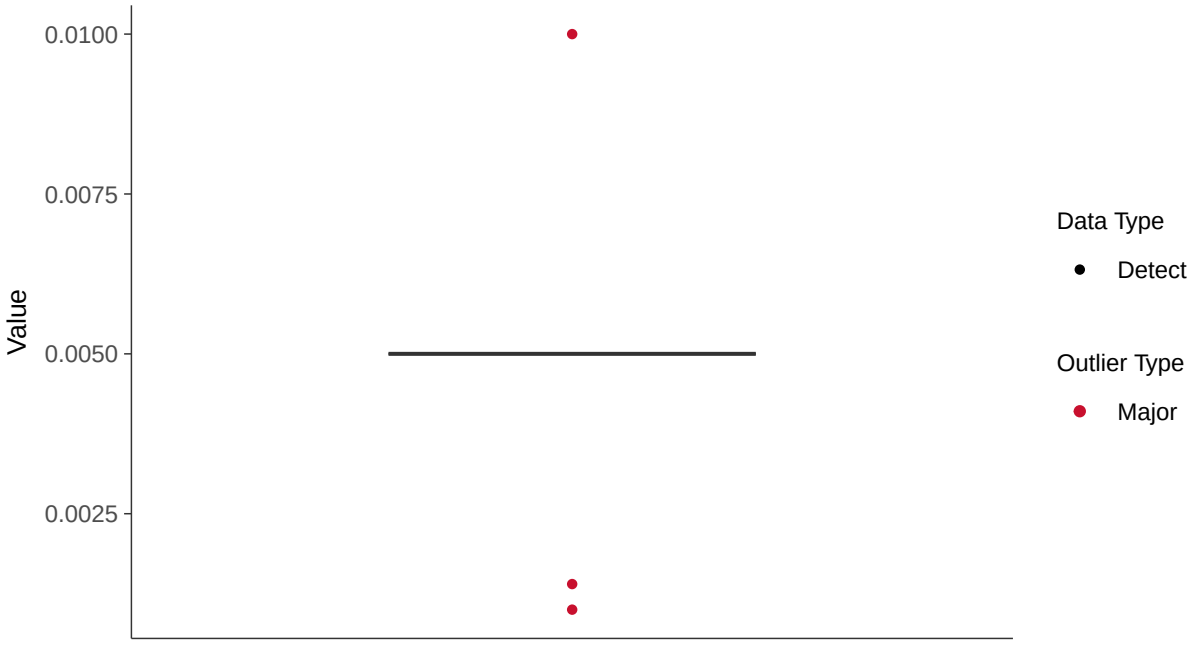
ID: 20_5_129





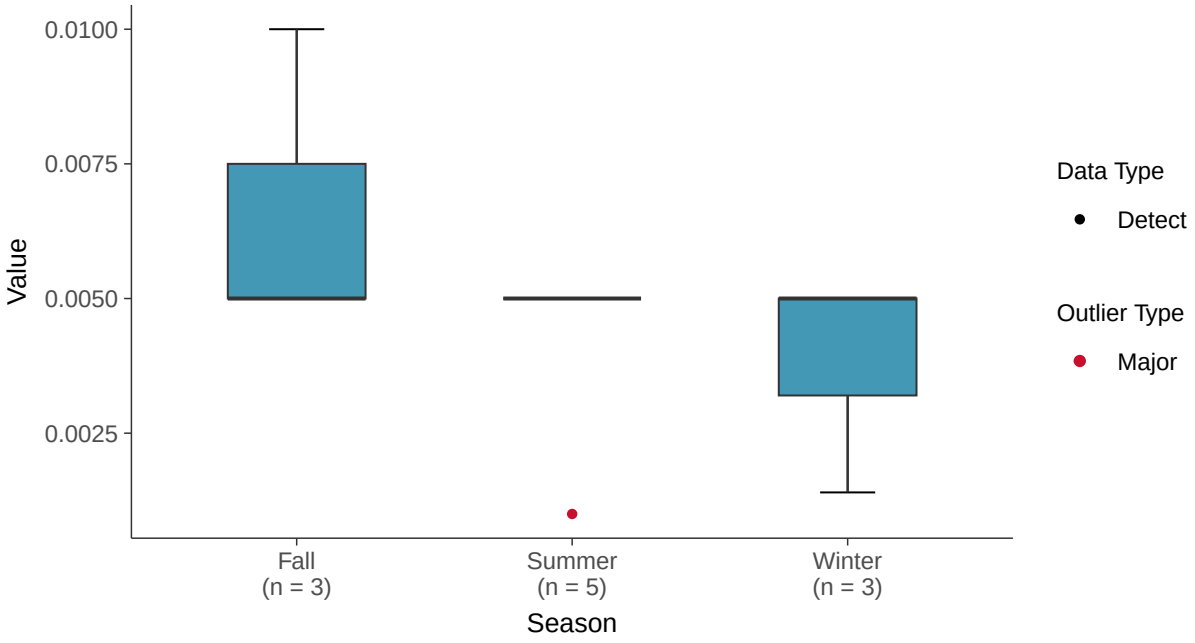
Boxplot

Zinc, MW-100C (mg/l)



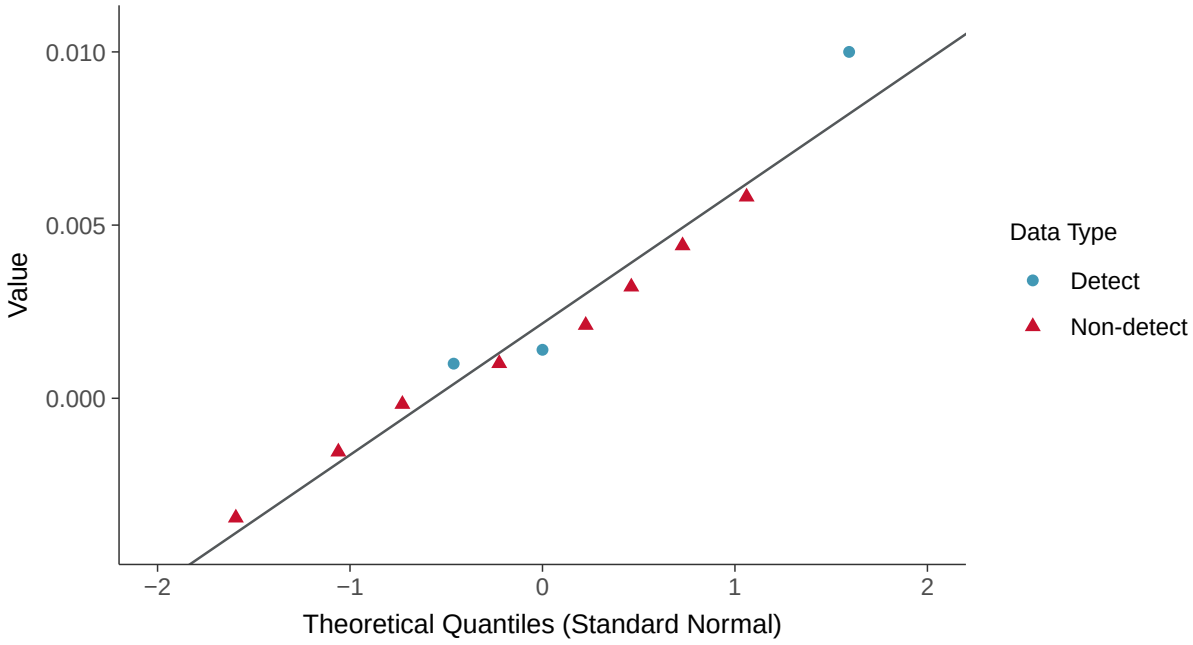
Boxplot by Season

Zinc, MW-100C (mg/l)



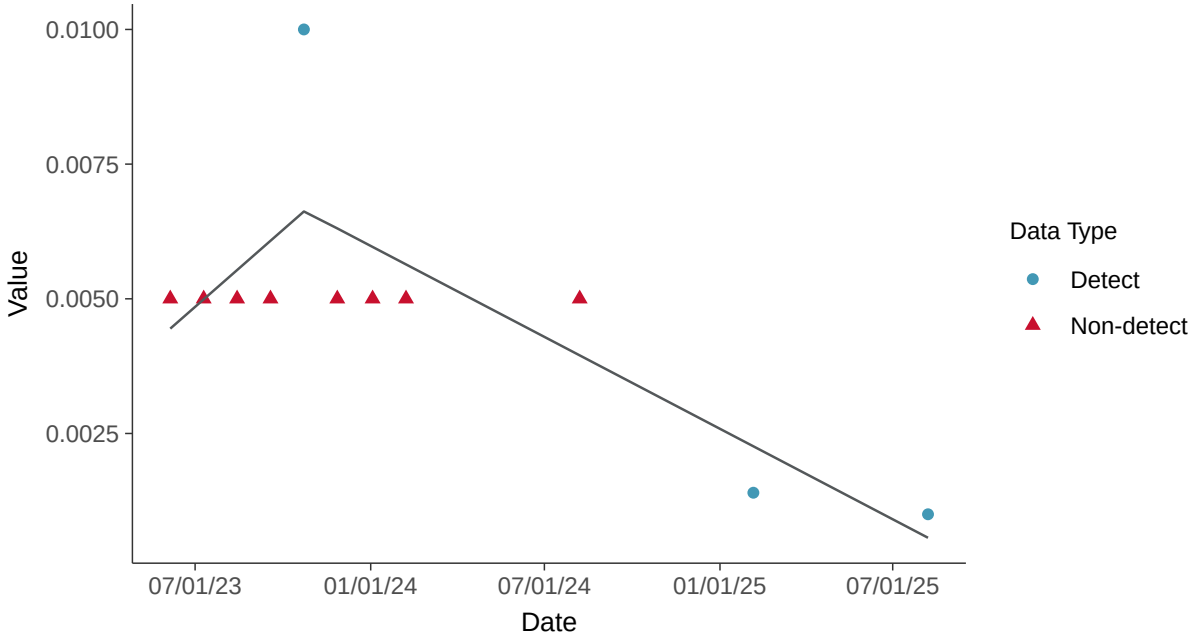
Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-100C (mg/l)



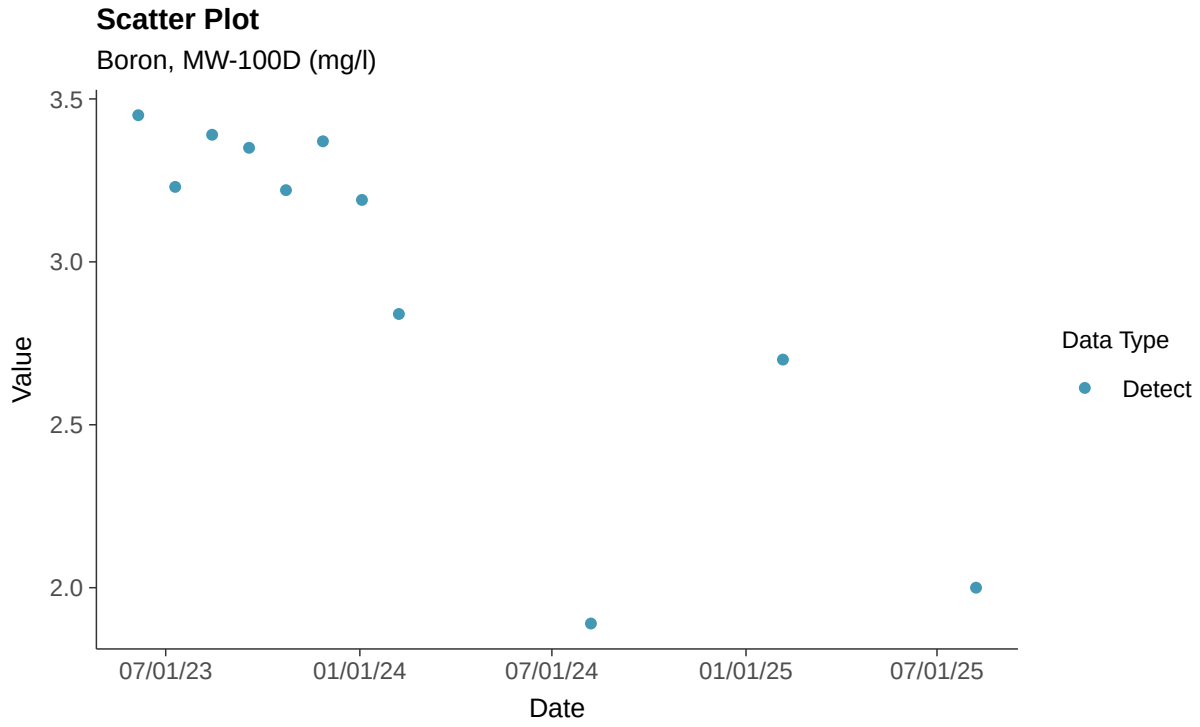
Trend Regression: Piecewise Linear-Linear

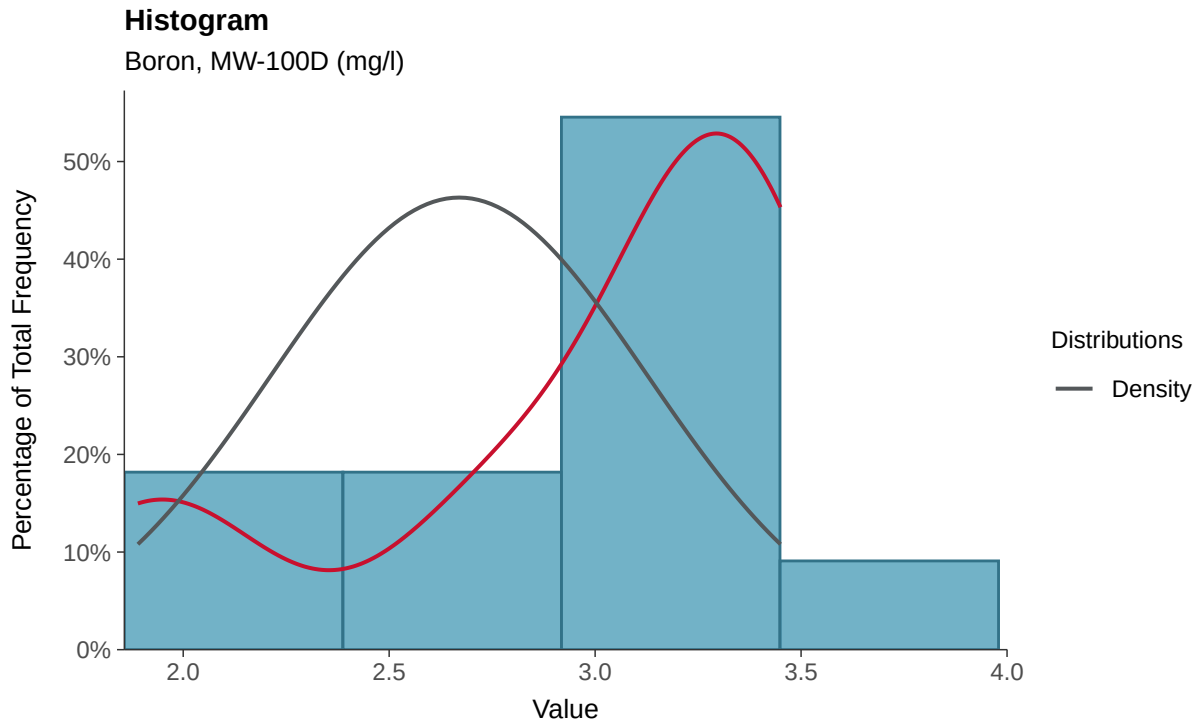
Zinc, MW-100C (mg/l)



Appendix III: Boron, MW-100D

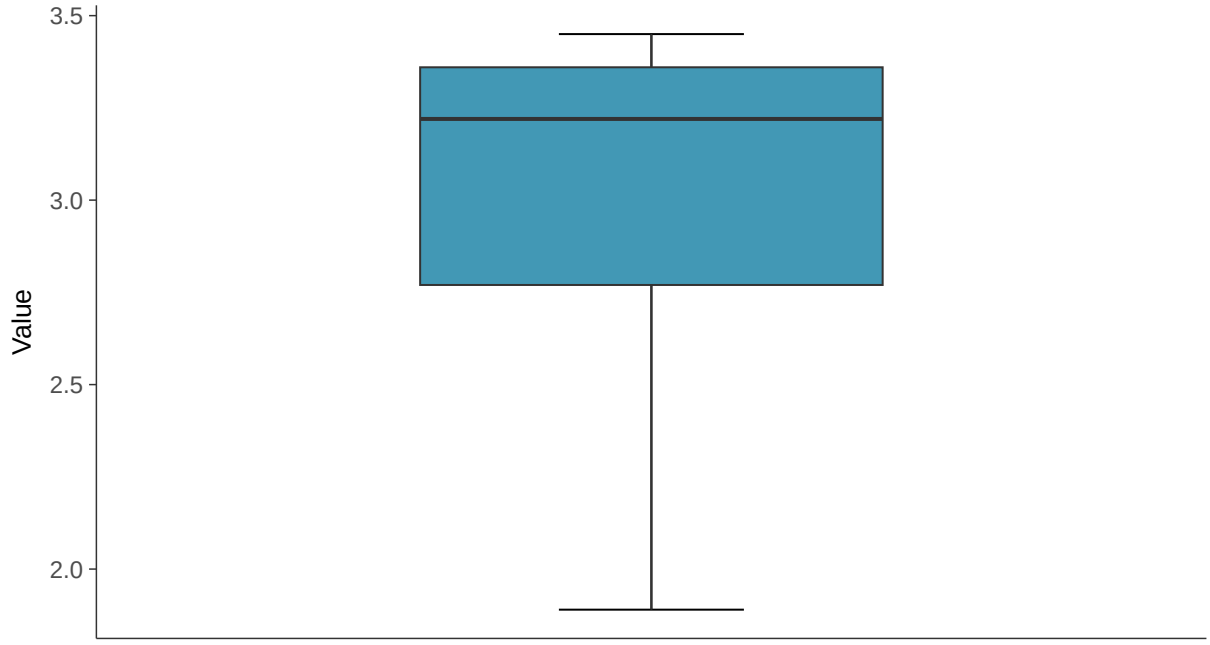
ID: 21_2_105





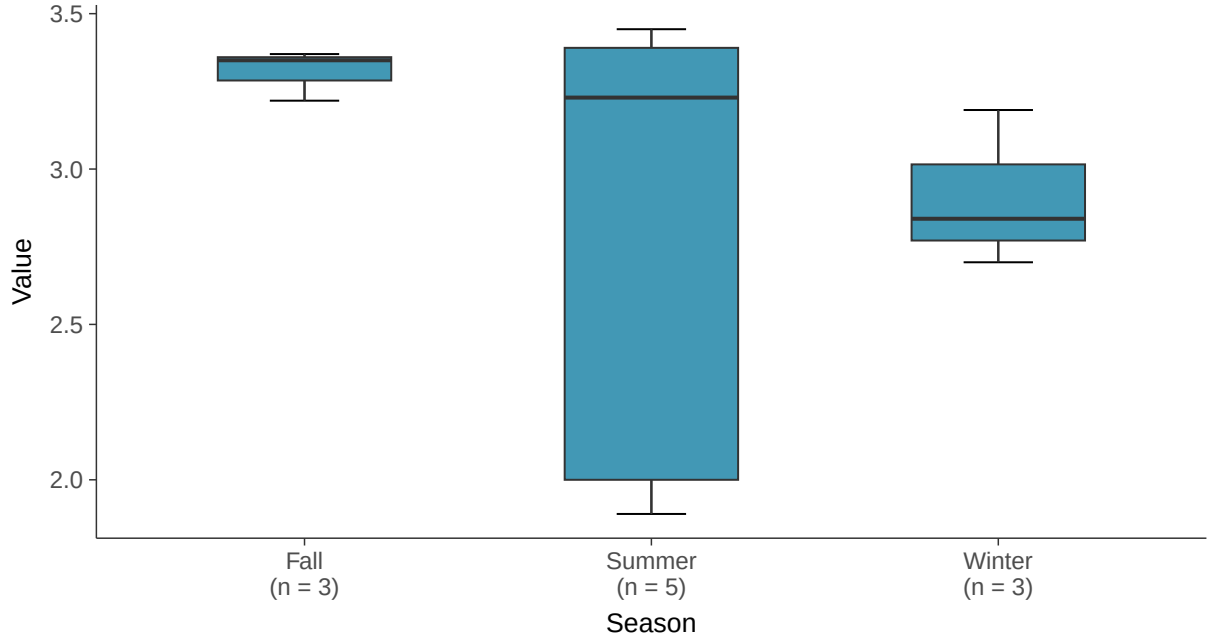
Boxplot

Boron, MW-100D (mg/l)



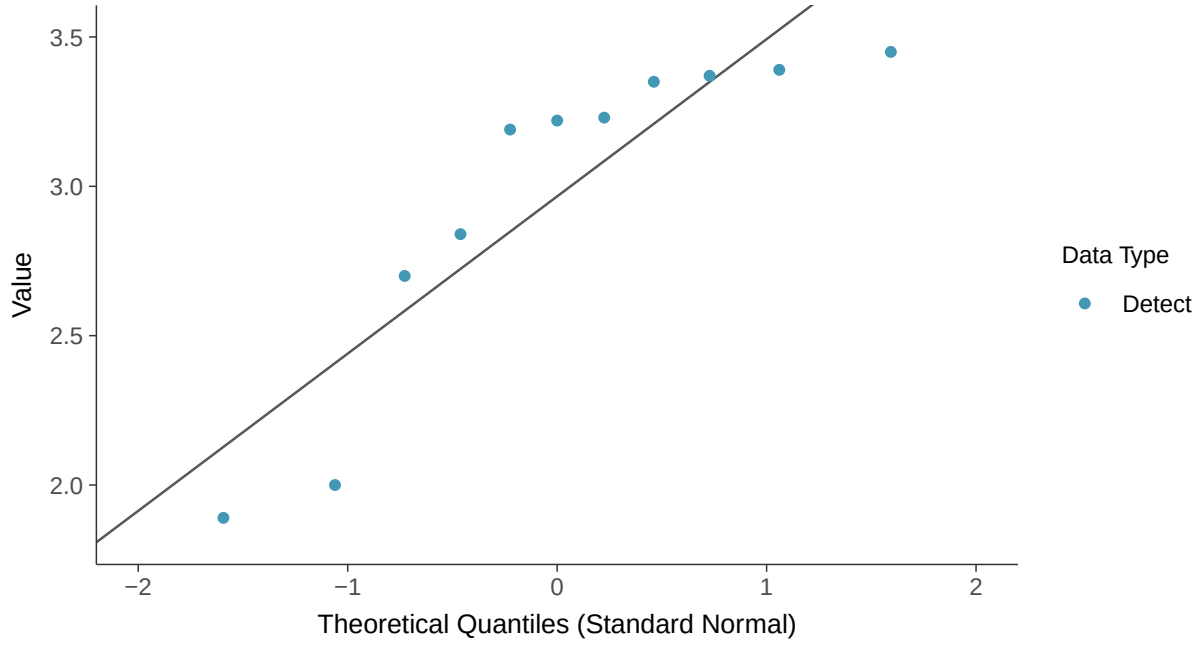
Boxplot by Season

Boron, MW-100D (mg/l)



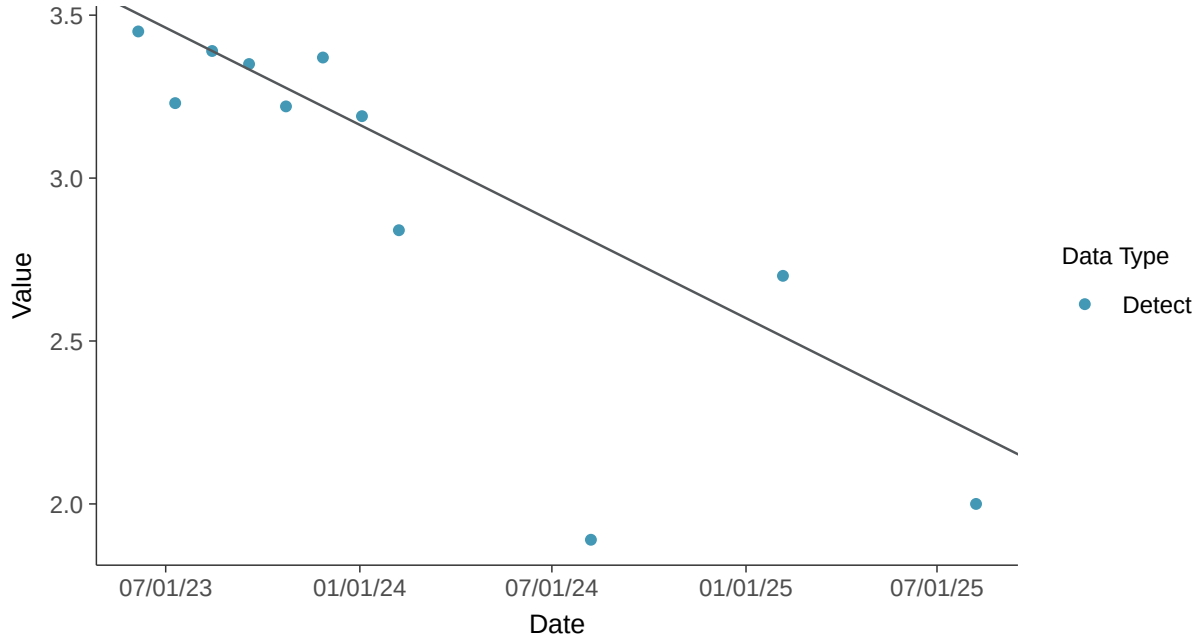
Normal Q-Q plot

Boron, MW-100D (mg/l)



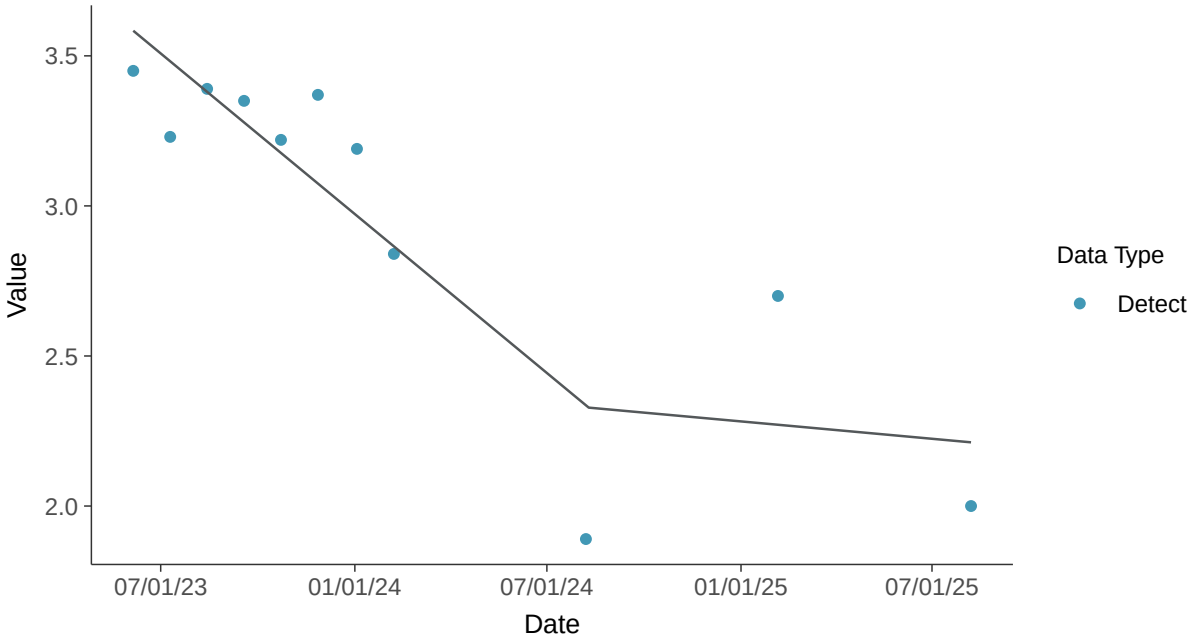
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Boron, MW-100D (mg/l)



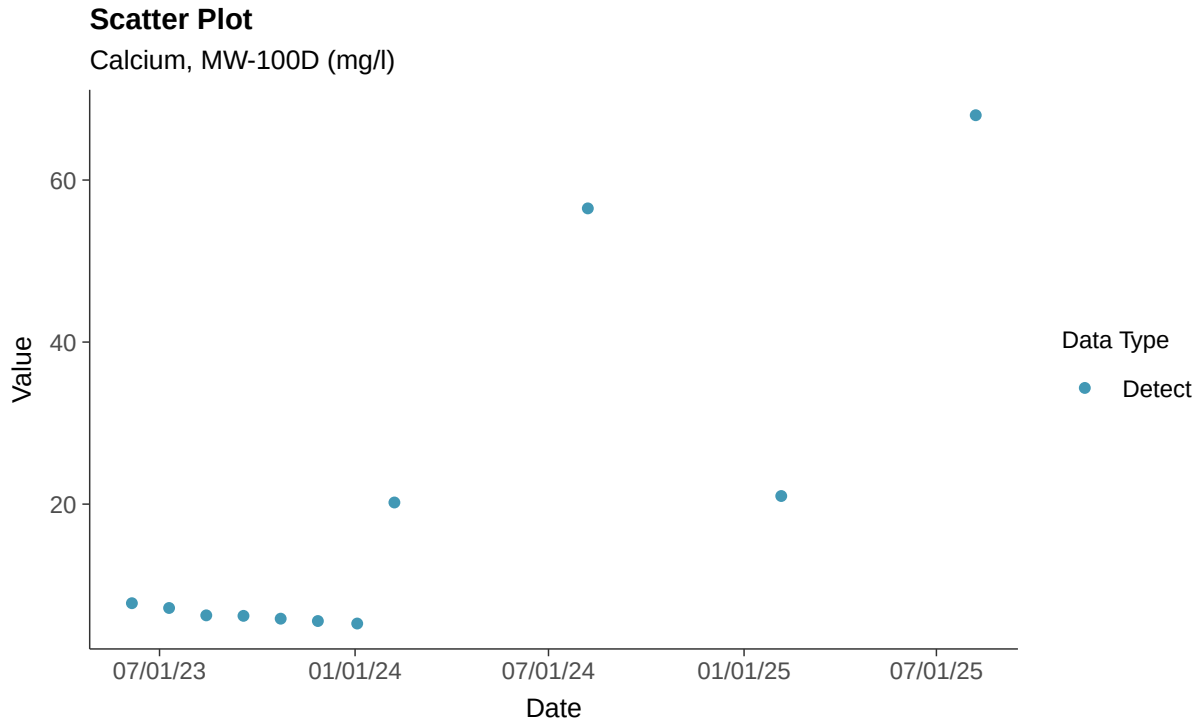
Trend Regression: Piecewise Linear-Linear

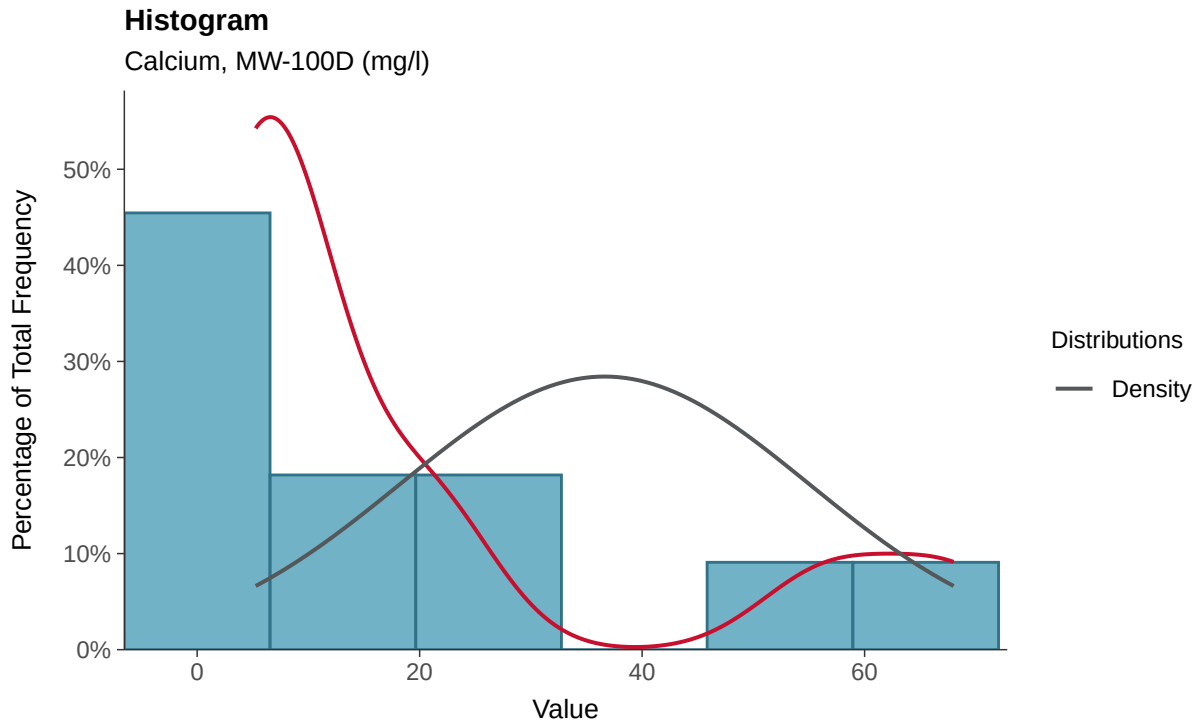
Boron, MW-100D (mg/l)



Appendix III: Calcium, MW-100D

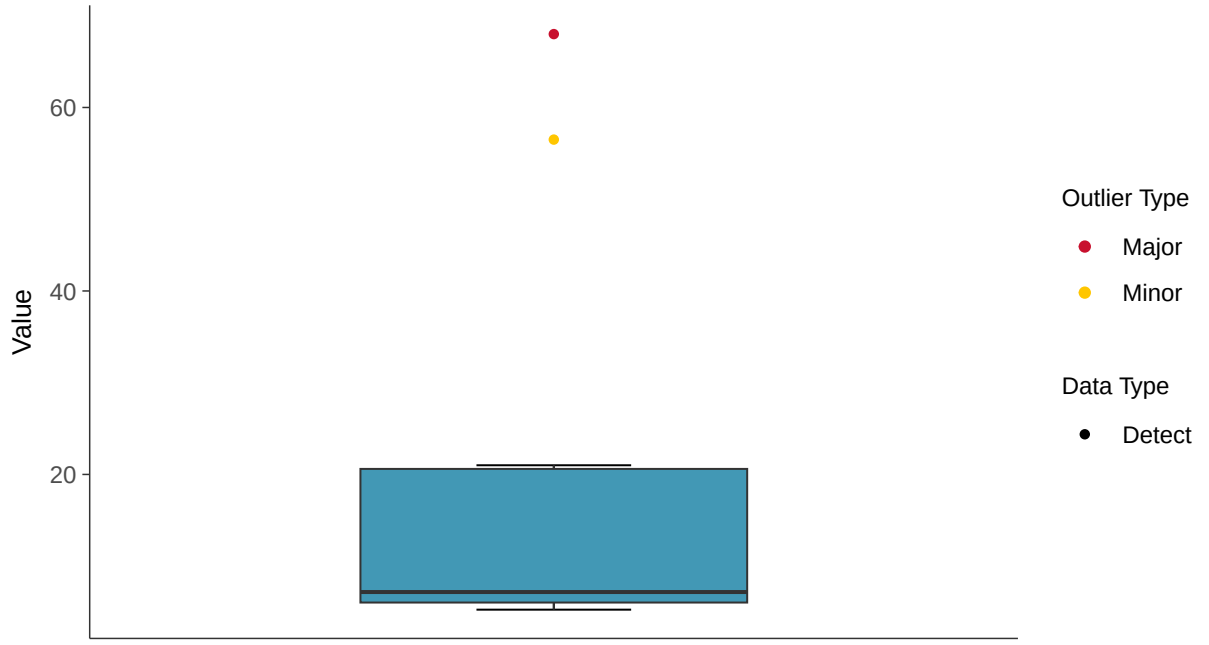
ID: 21_2_107





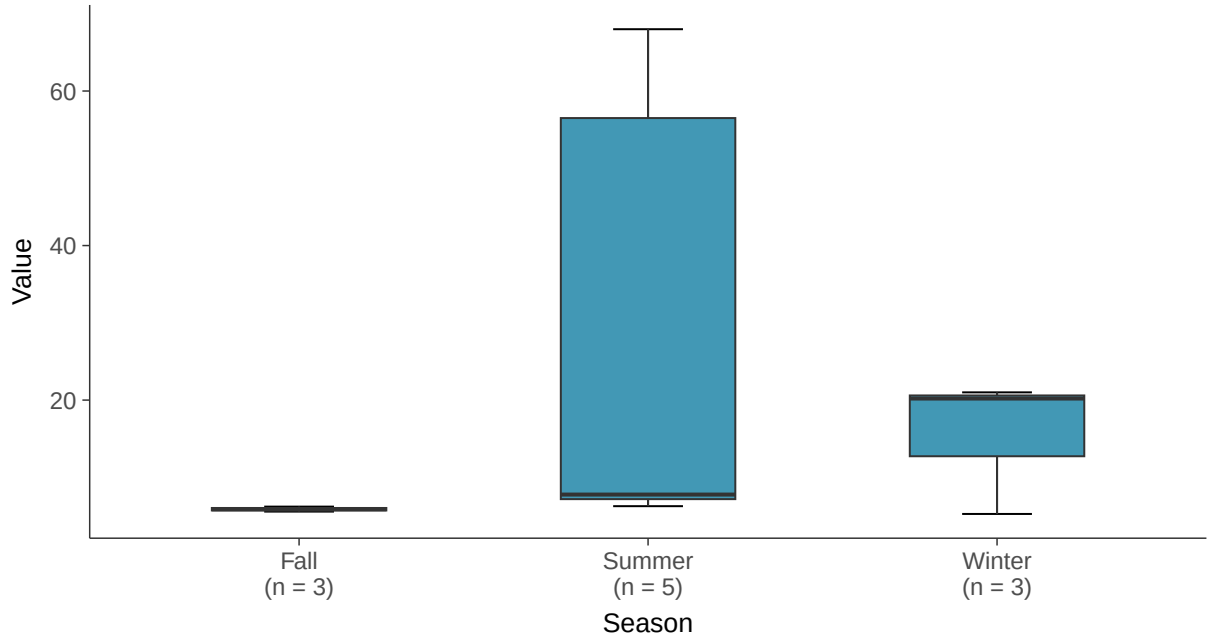
Boxplot

Calcium, MW-100D (mg/l)



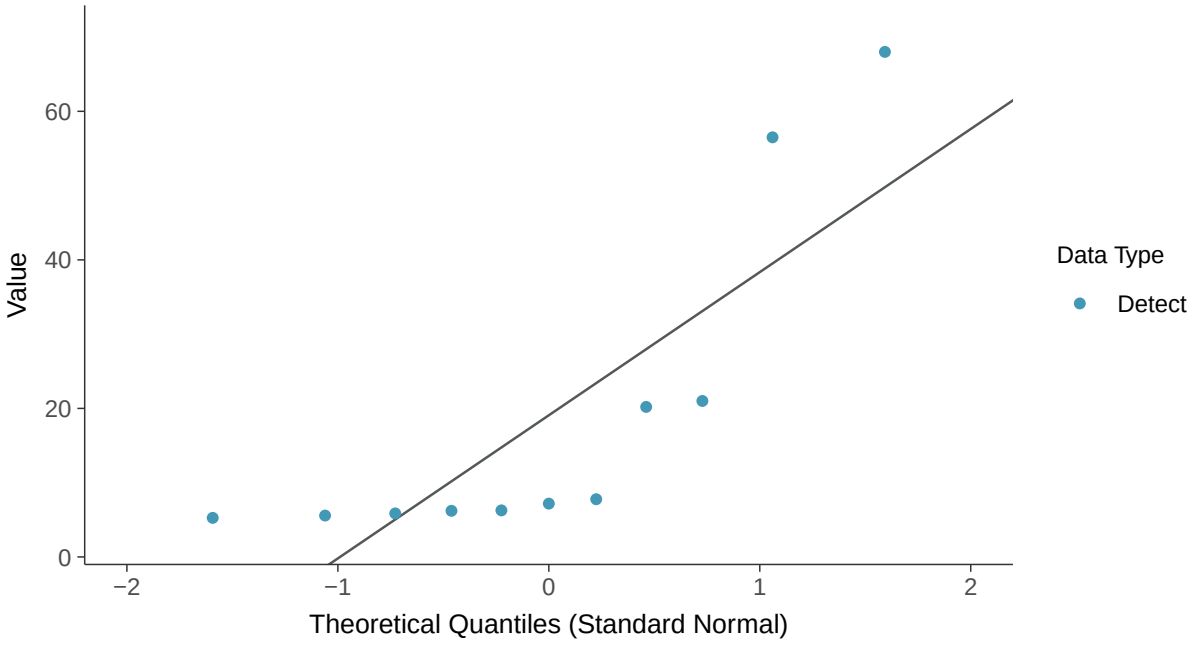
Boxplot by Season

Calcium, MW-100D (mg/l)



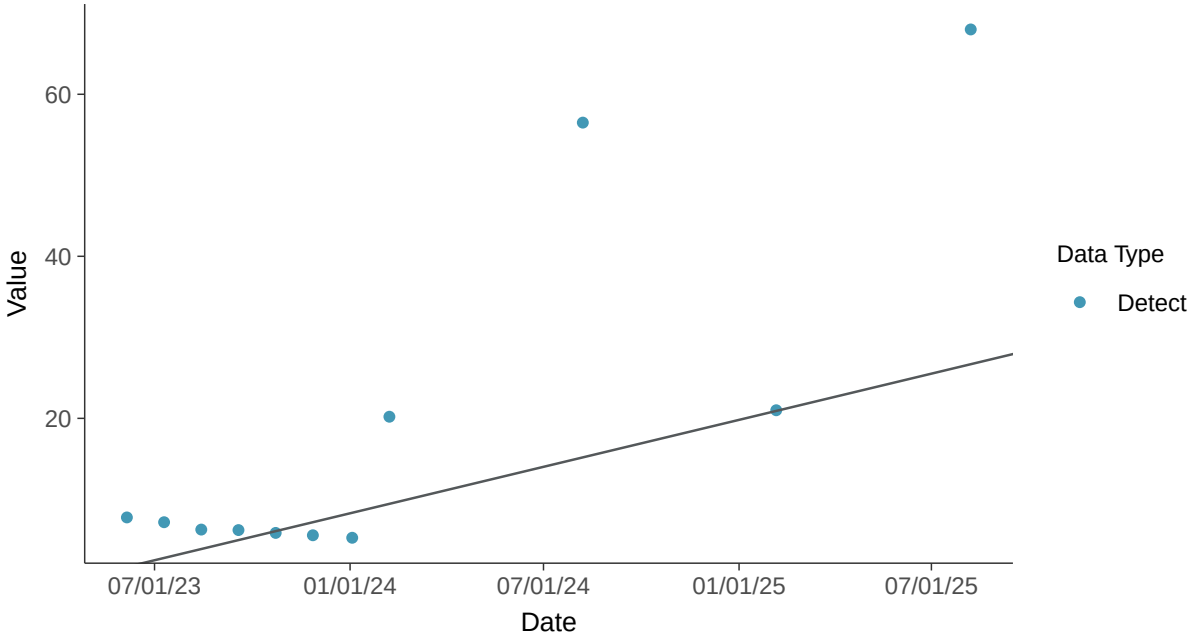
Normal Q-Q plot

Calcium, MW-100D (mg/l)



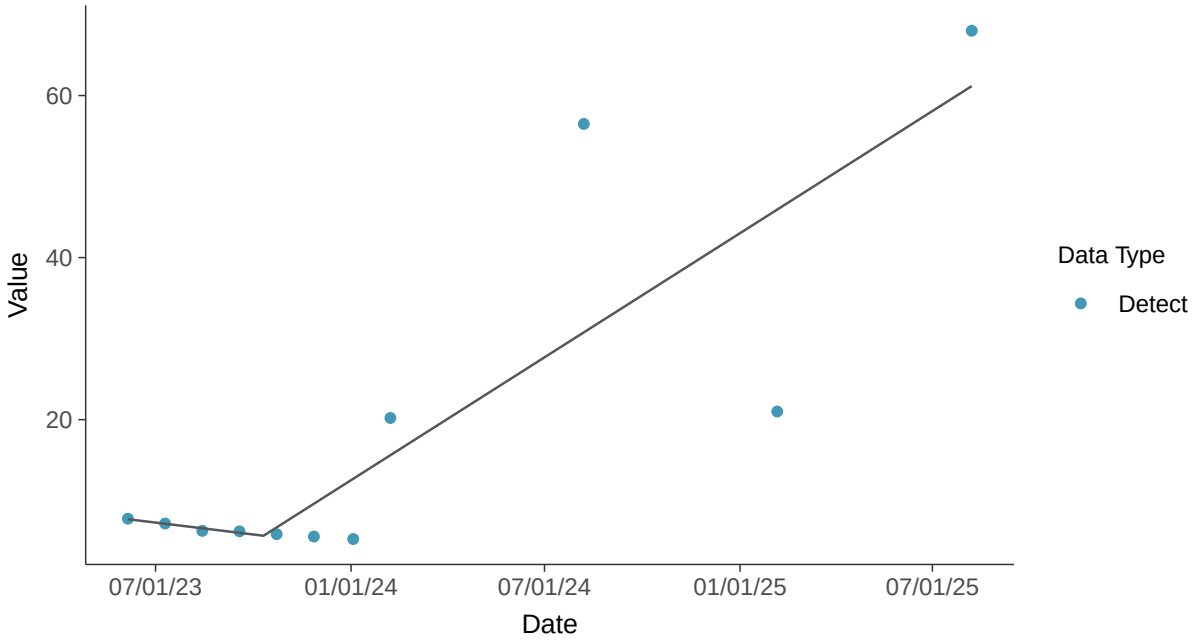
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Calcium, MW-100D (mg/l)



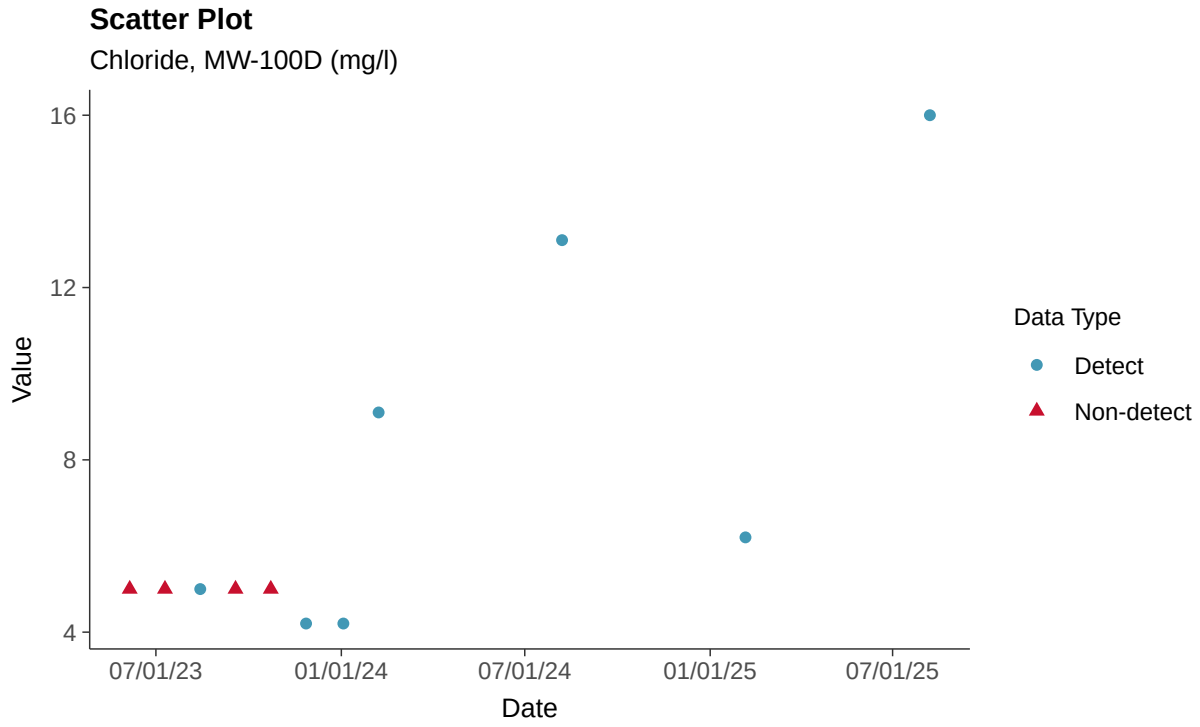
Trend Regression: Piecewise Linear-Linear

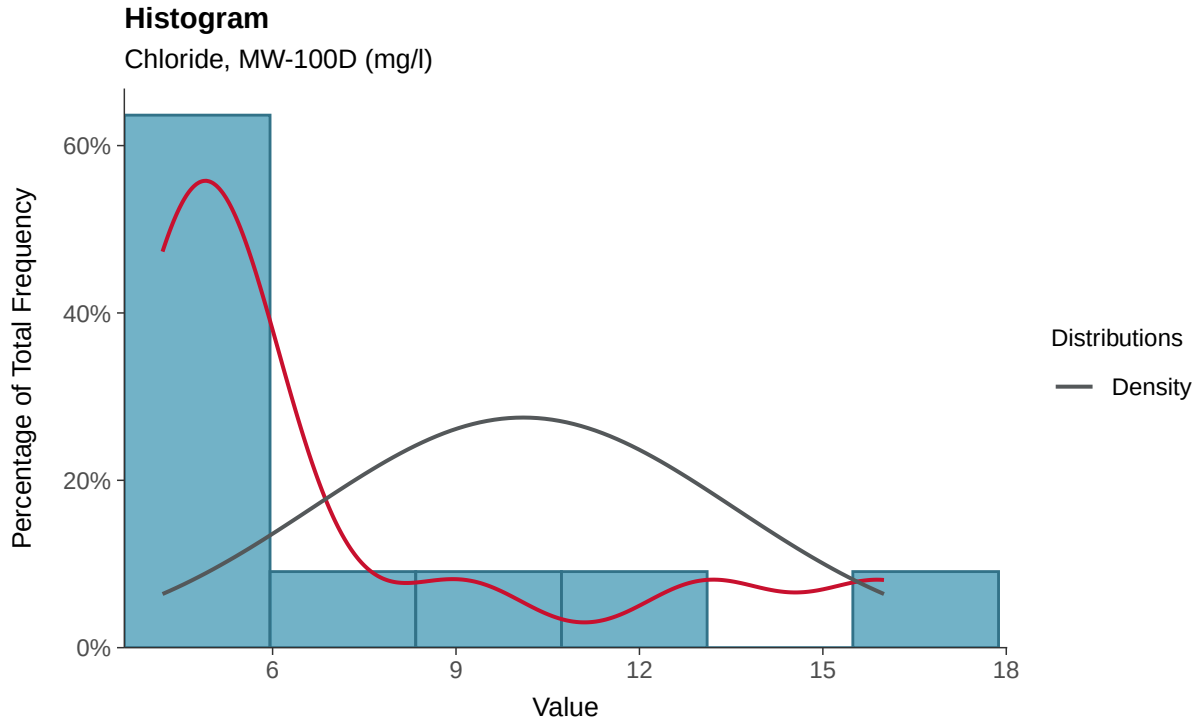
Calcium, MW-100D (mg/l)



Appendix III: Chloride, MW-100D

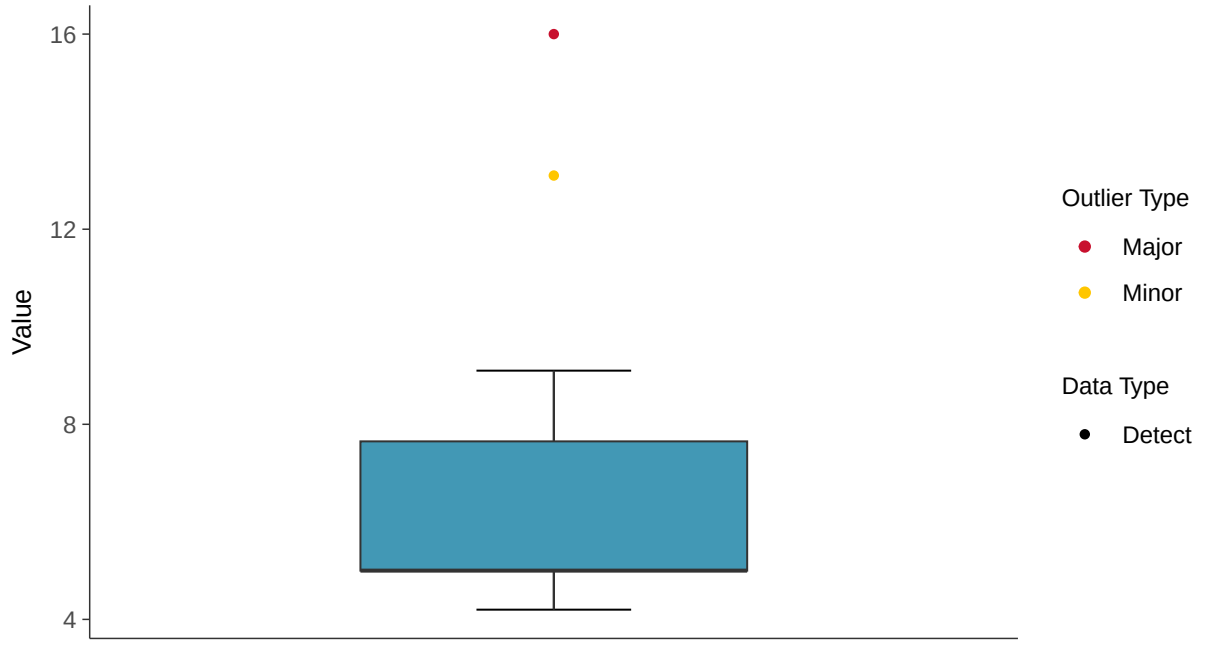
ID: 21_2_108





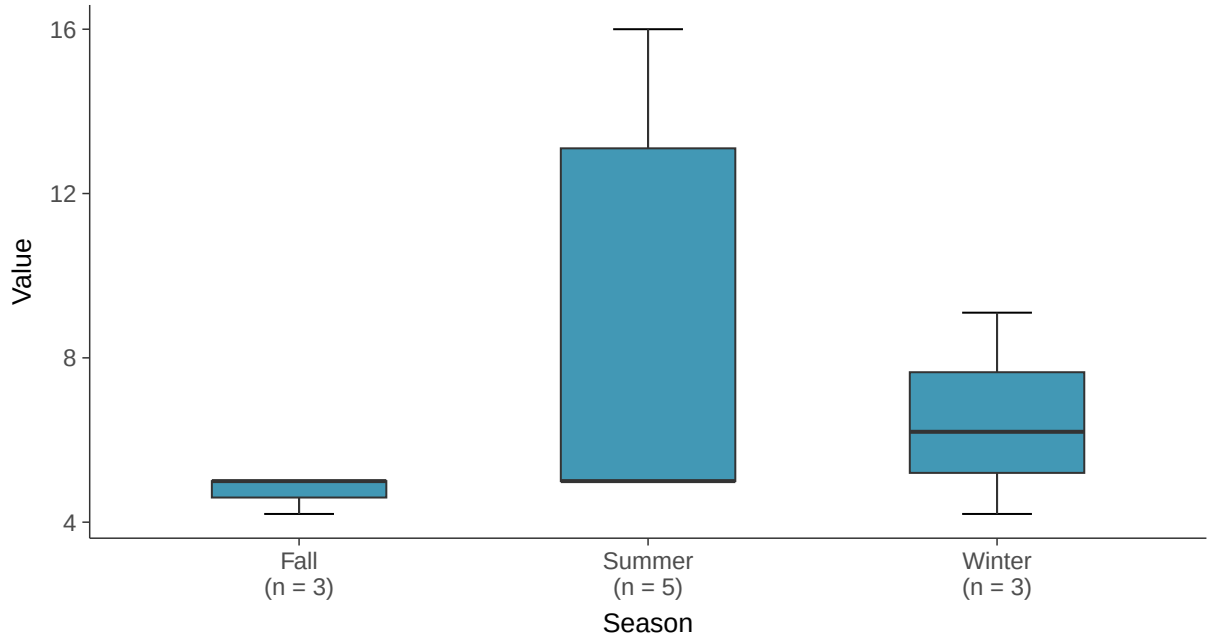
Boxplot

Chloride, MW-100D (mg/l)



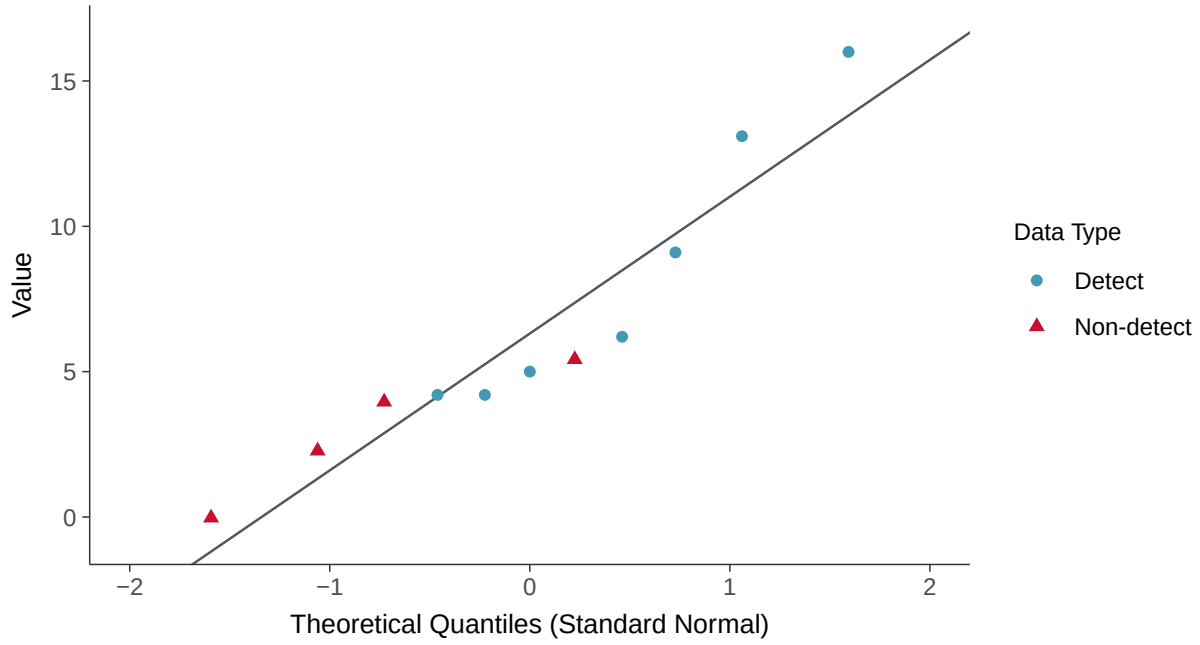
Boxplot by Season

Chloride, MW-100D (mg/l)



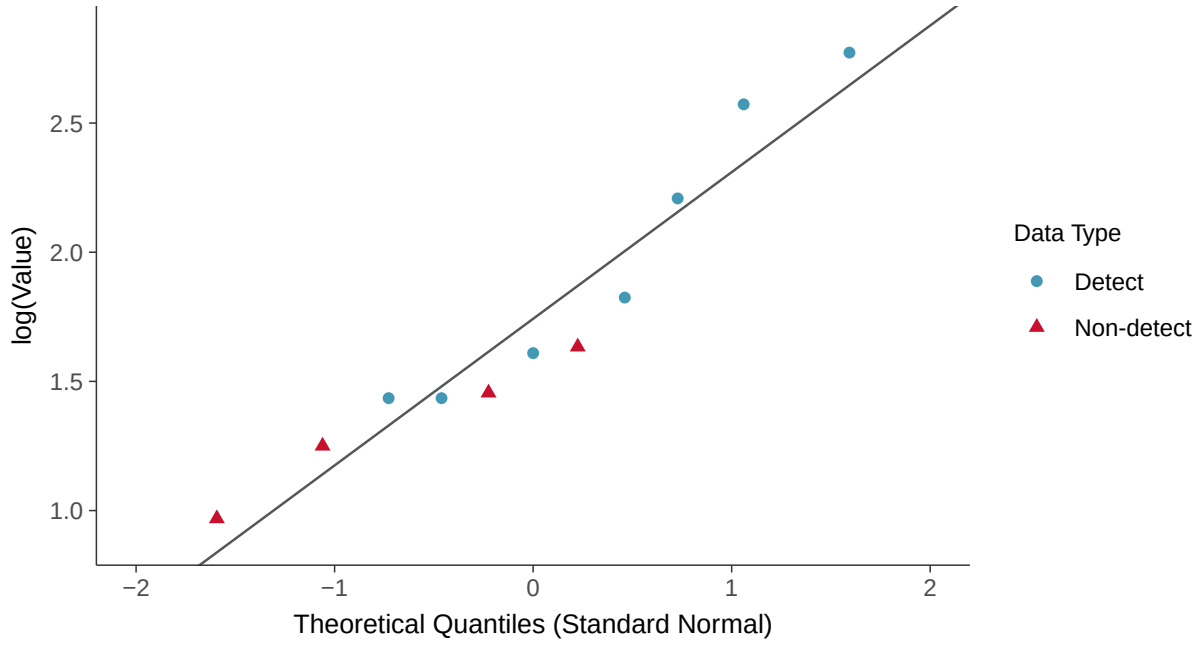
Normal Q-Q plot using ROS Imputed Estimates

Chloride, MW-100D (mg/l)



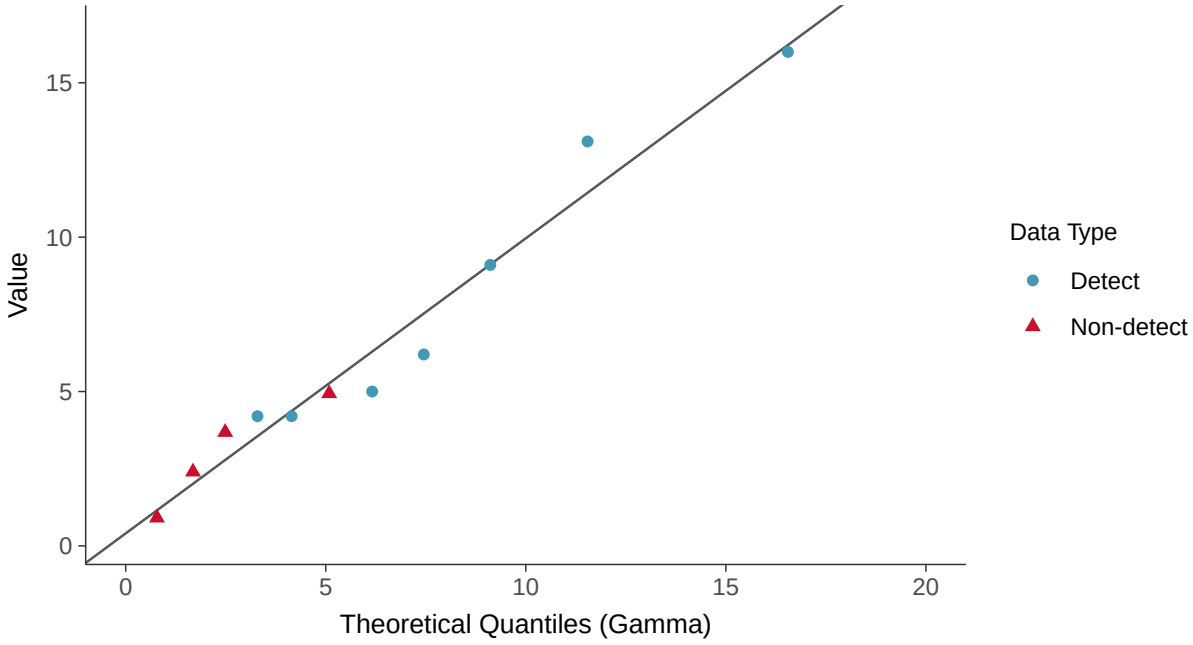
Lognormal Q-Q plot using ROS Imputed Estimates

Chloride, MW-100D (mg/l)



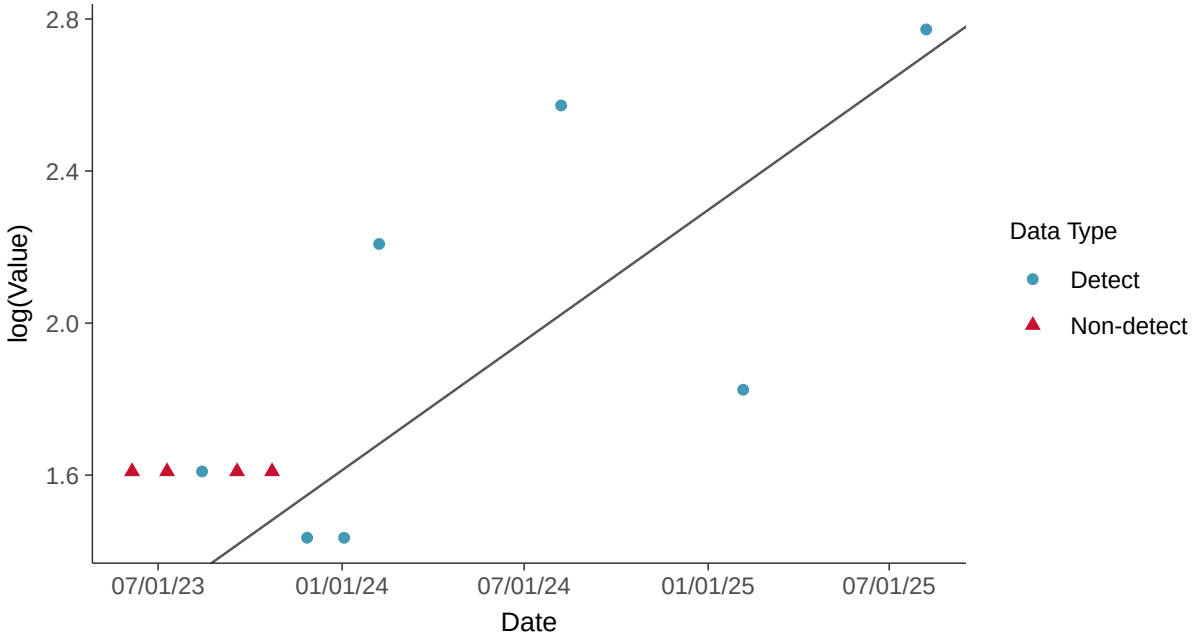
Gamma Q-Q plot using ROS Imputed Estimates

Chloride, MW-100D (mg/l)



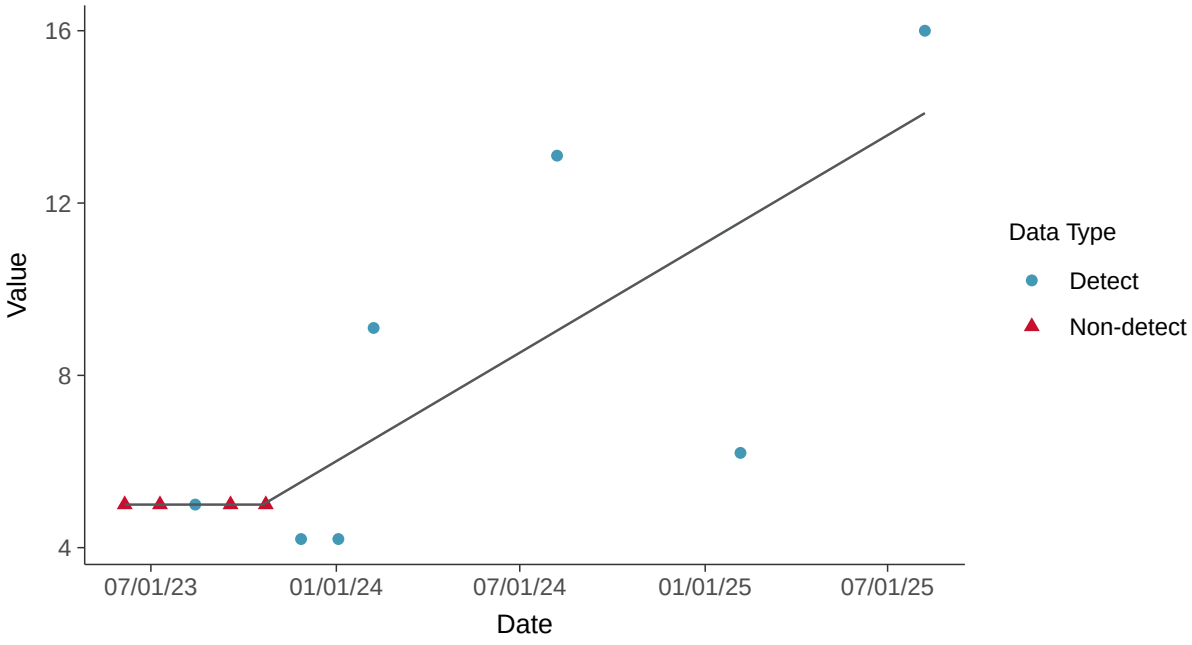
Trend Regression: Lognormal MLE

Chloride, MW-100D (mg/l)



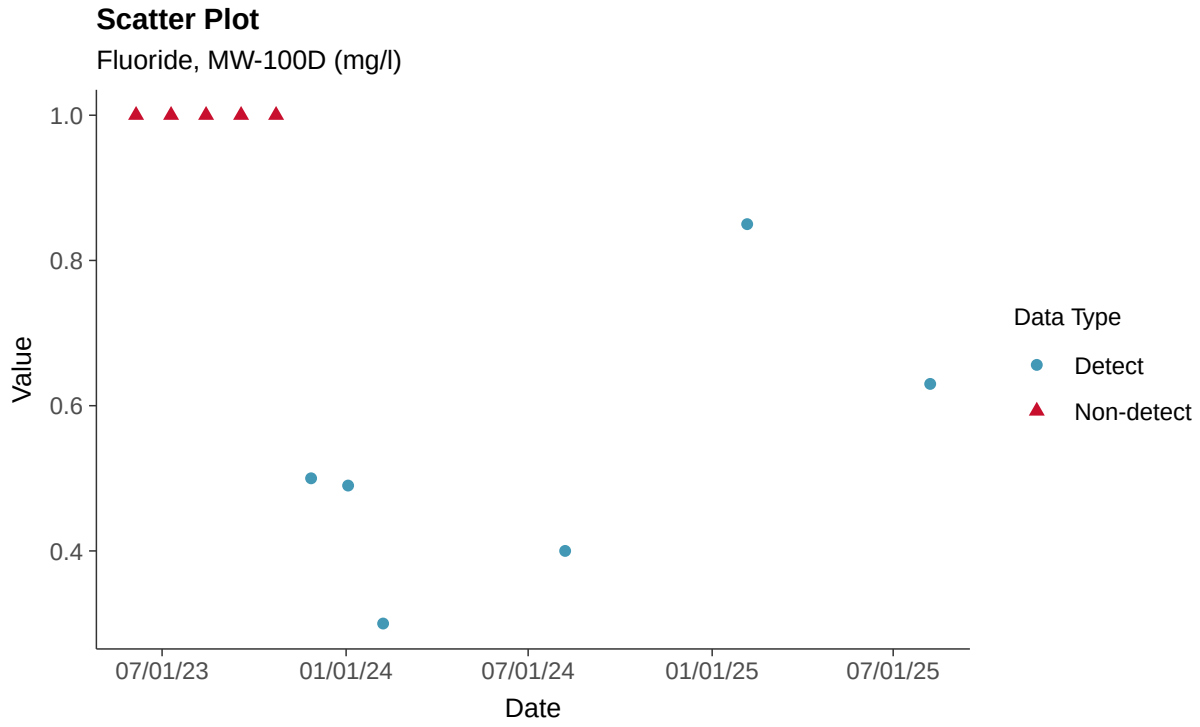
Trend Regression: Piecewise Linear-Linear

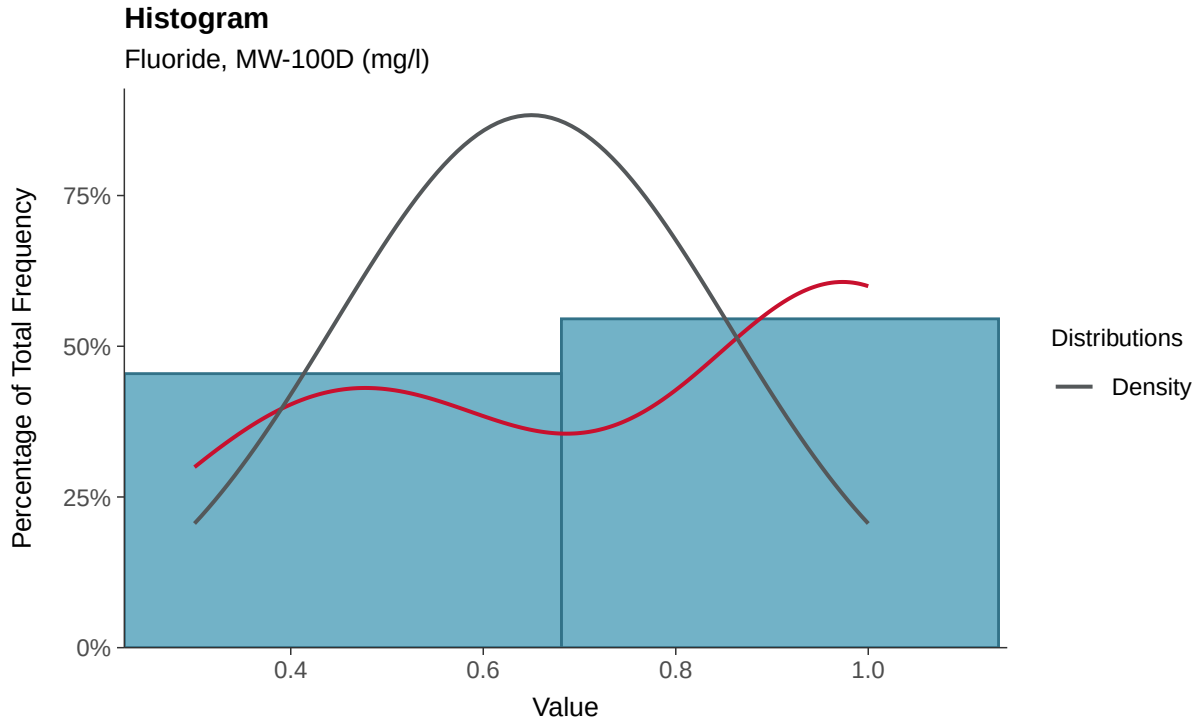
Chloride, MW-100D (mg/l)



Appendix III: Fluoride, MW-100D

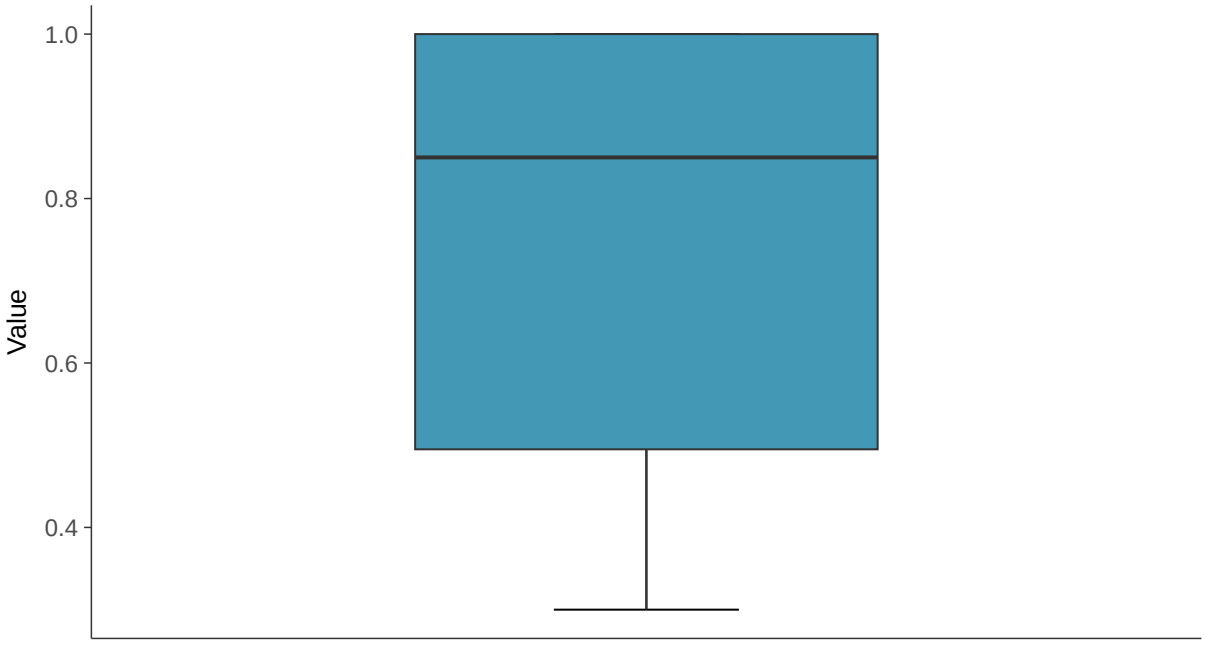
ID: 21_2_112





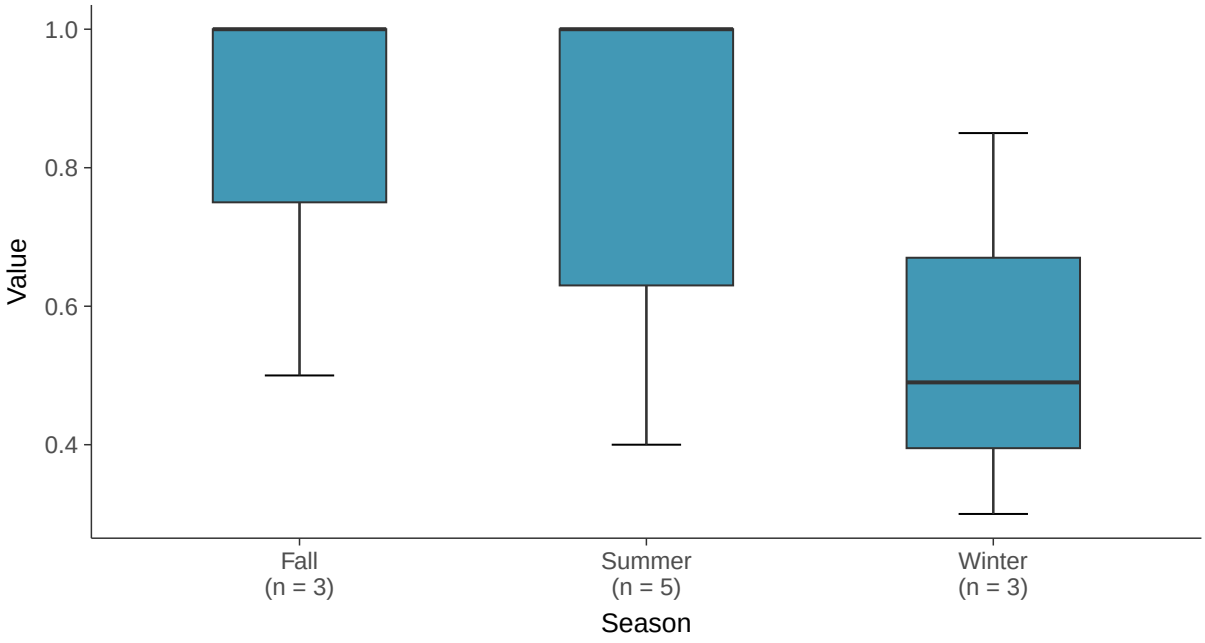
Boxplot

Fluoride, MW-100D (mg/l)



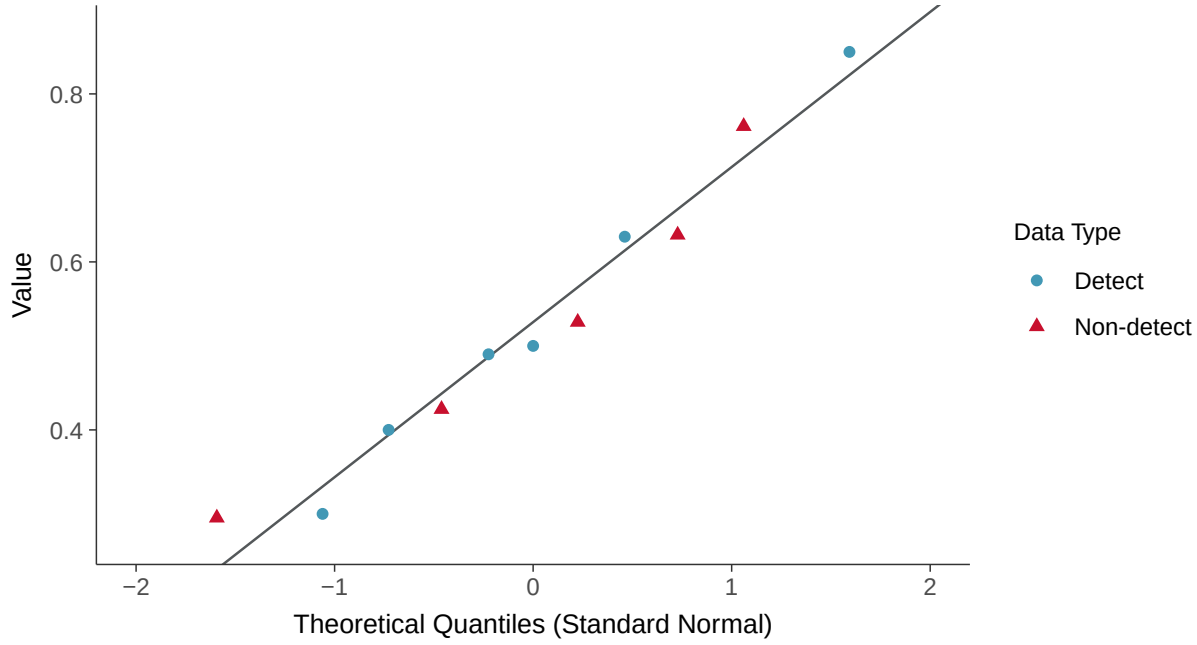
Boxplot by Season

Fluoride, MW-100D (mg/l)



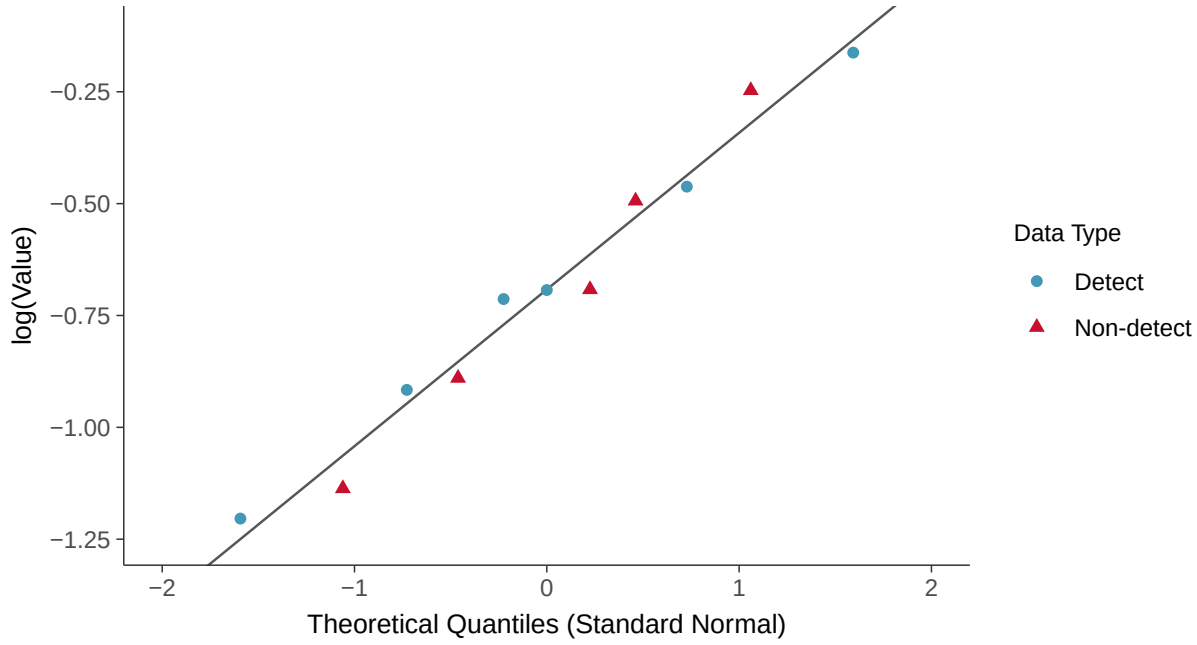
Normal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-100D (mg/l)



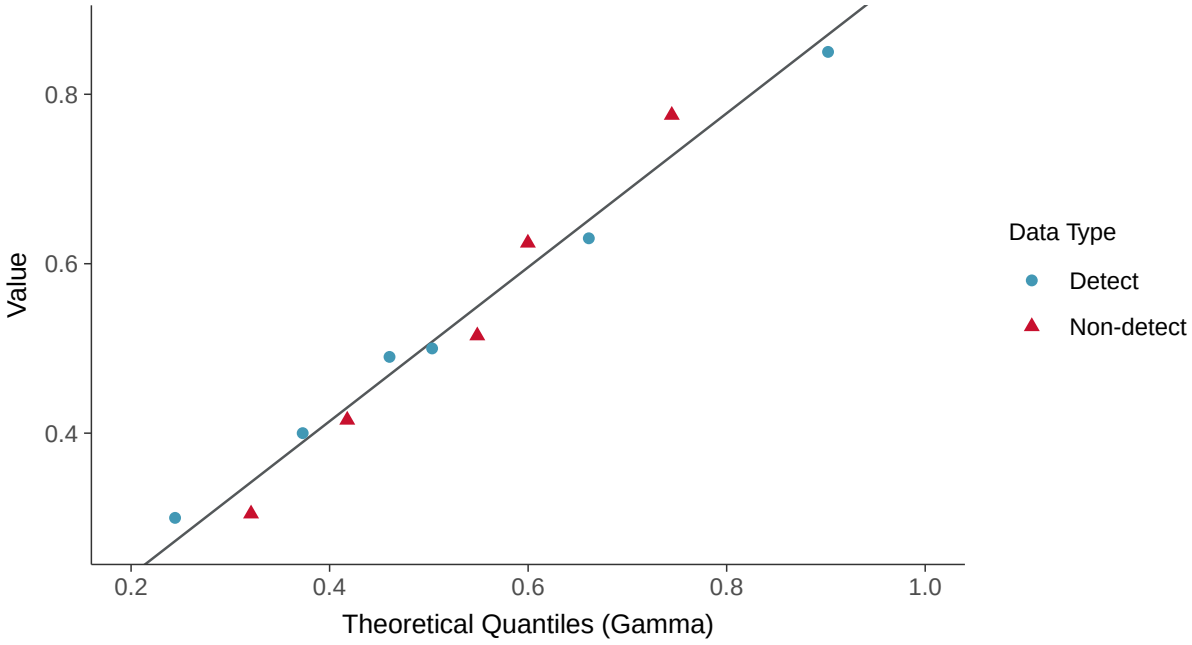
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride, MW-100D (mg/l)



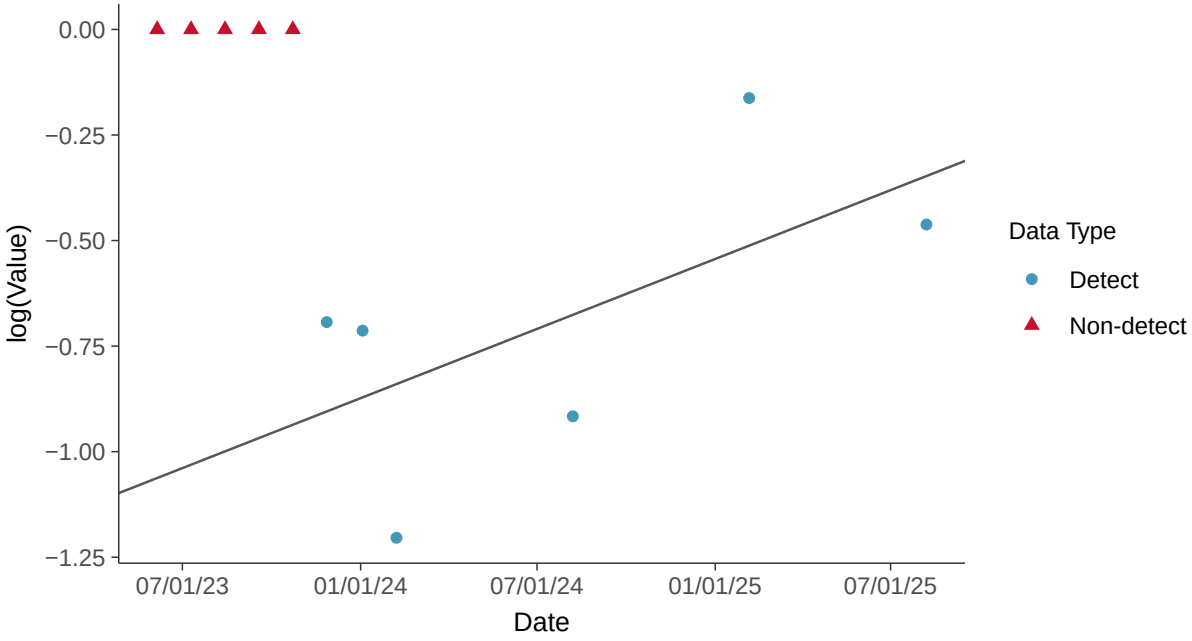
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride, MW-100D (mg/l)



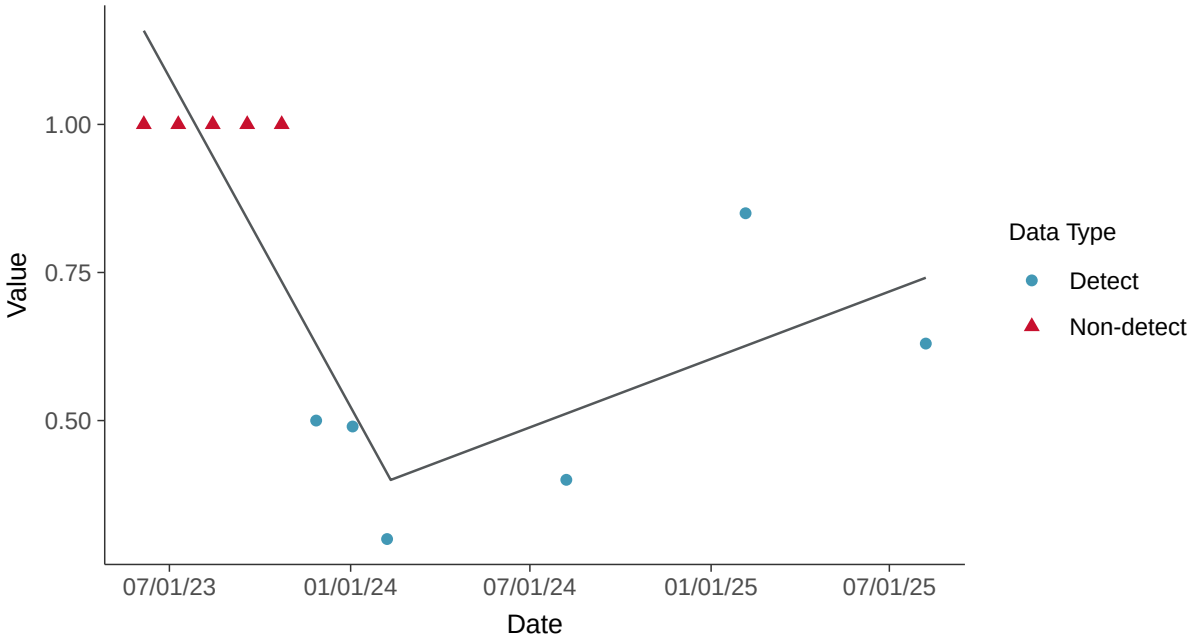
Trend Regression: Lognormal MLE

Fluoride, MW-100D (mg/l)



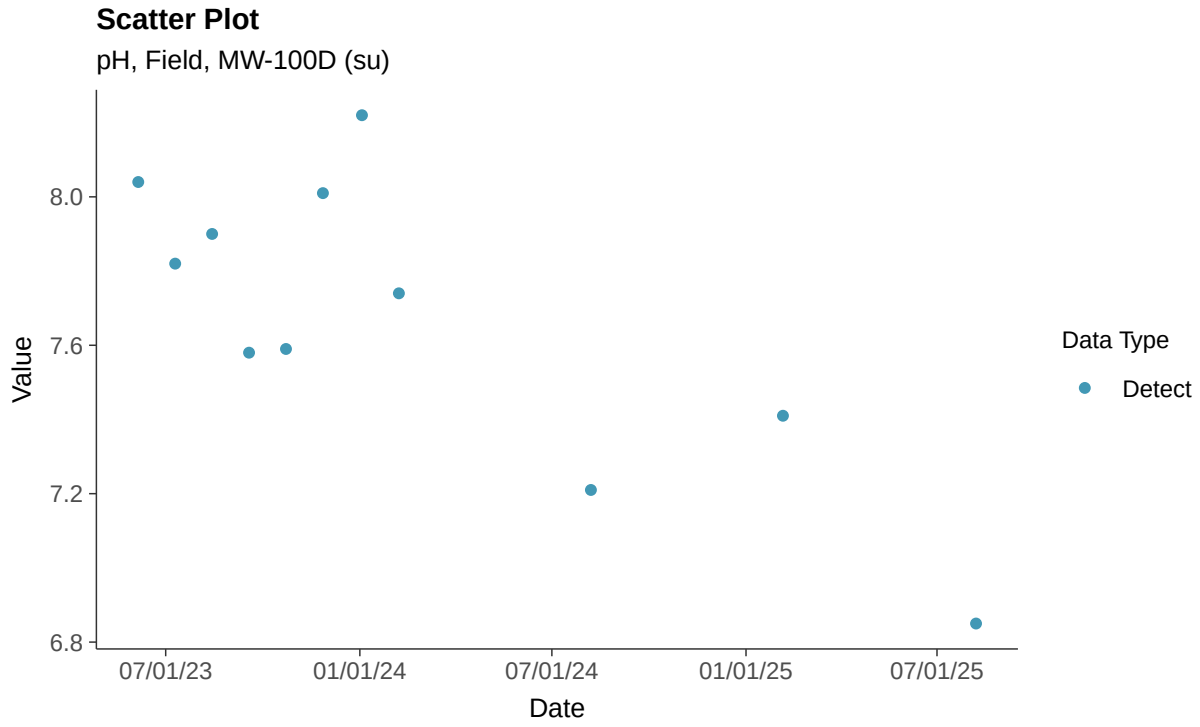
Trend Regression: Piecewise Linear-Linear

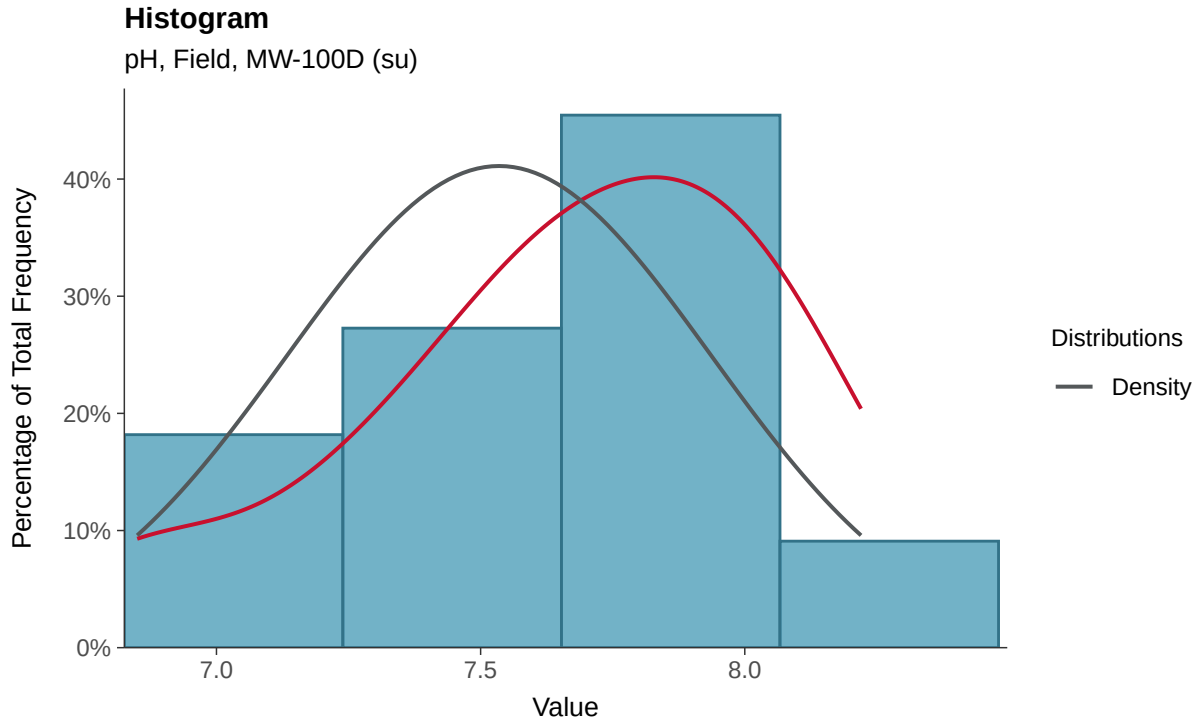
Fluoride, MW-100D (mg/l)



Appendix III: pH, Field, MW-100D

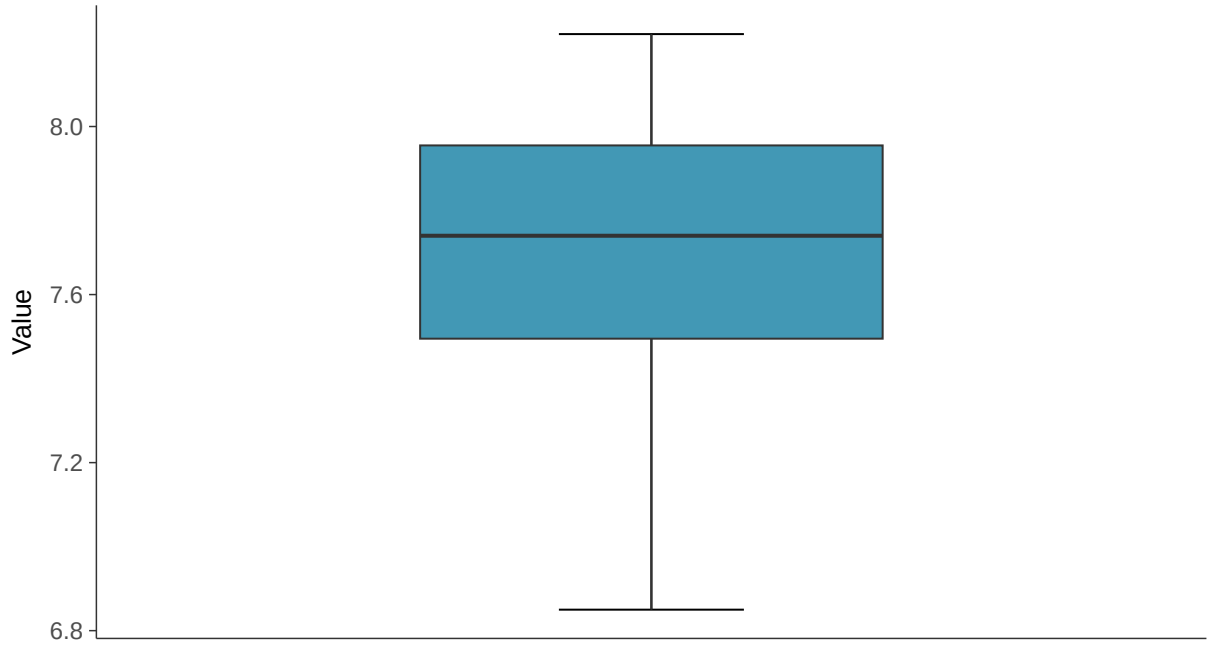
ID: 21_2_120





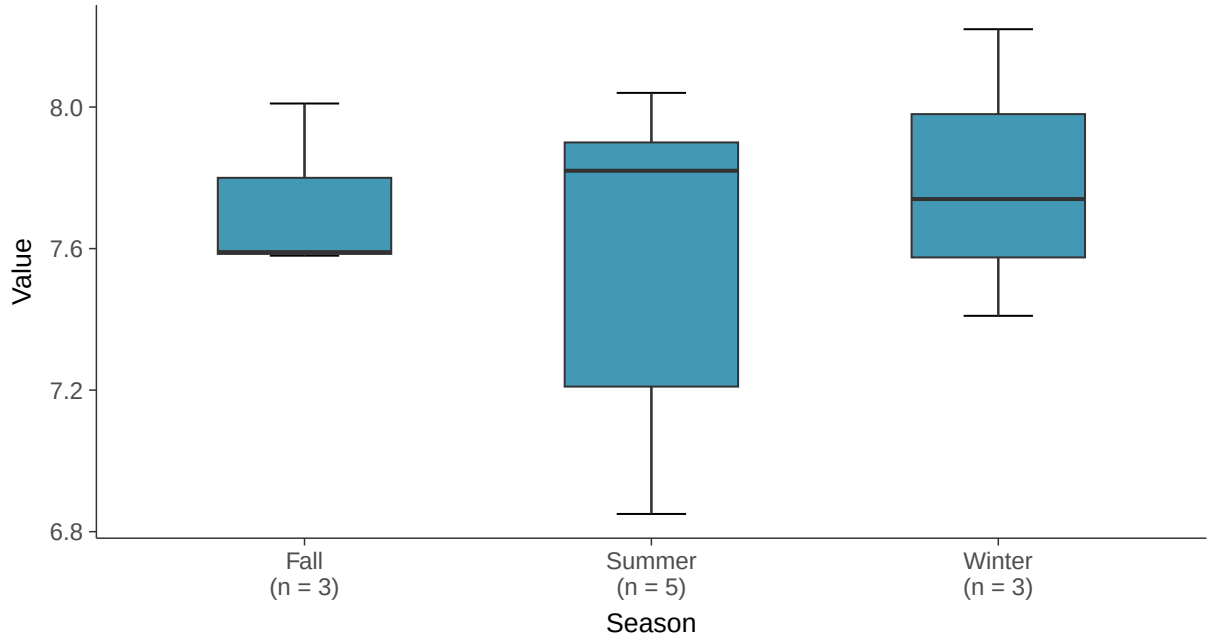
Boxplot

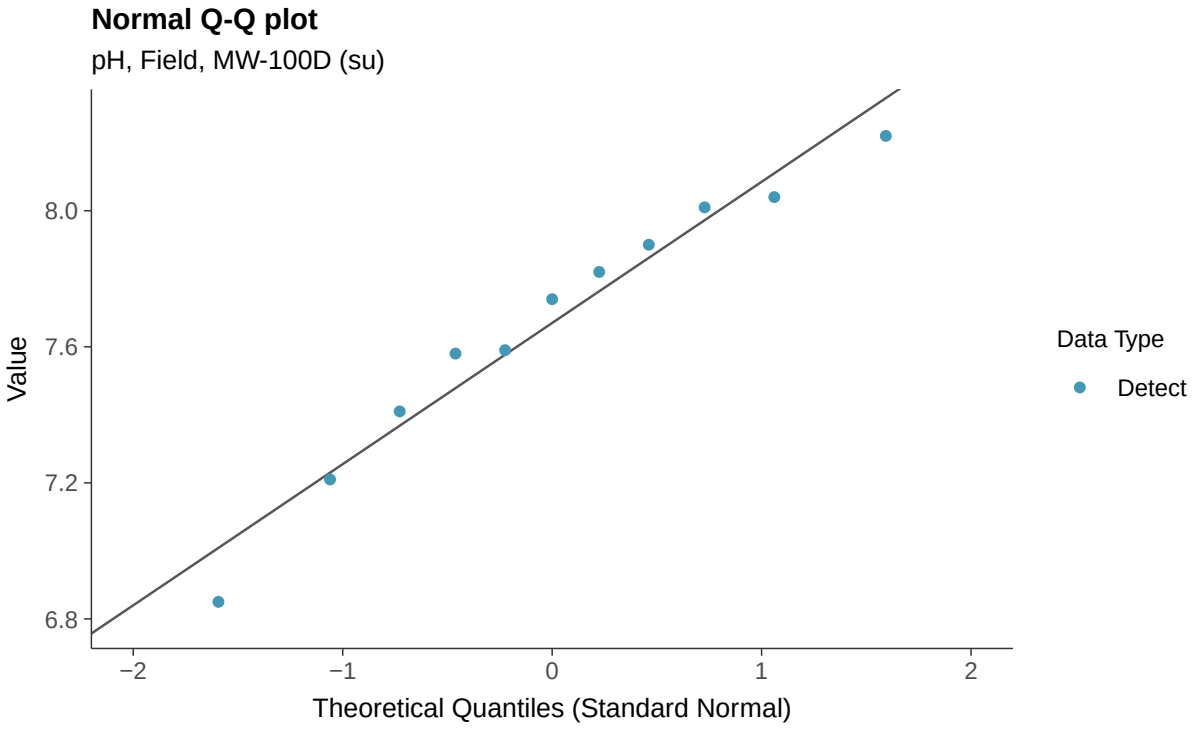
pH, Field, MW-100D (su)

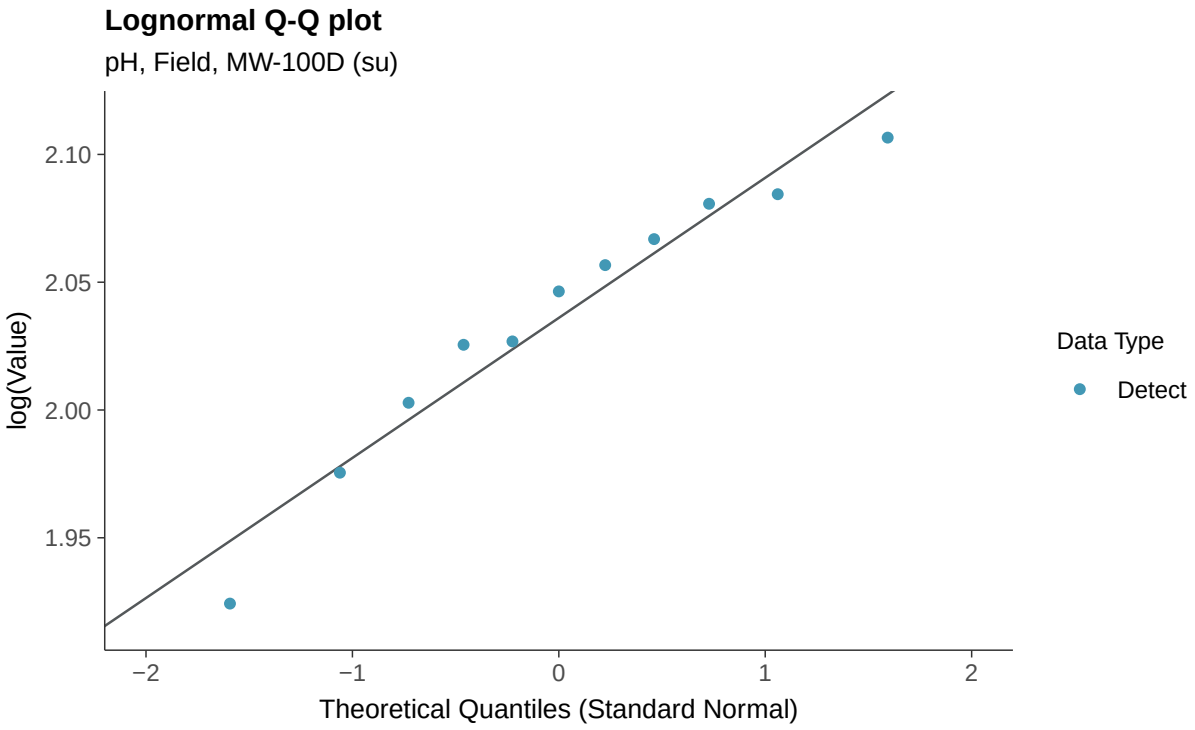


Boxplot by Season

pH, Field, MW-100D (su)

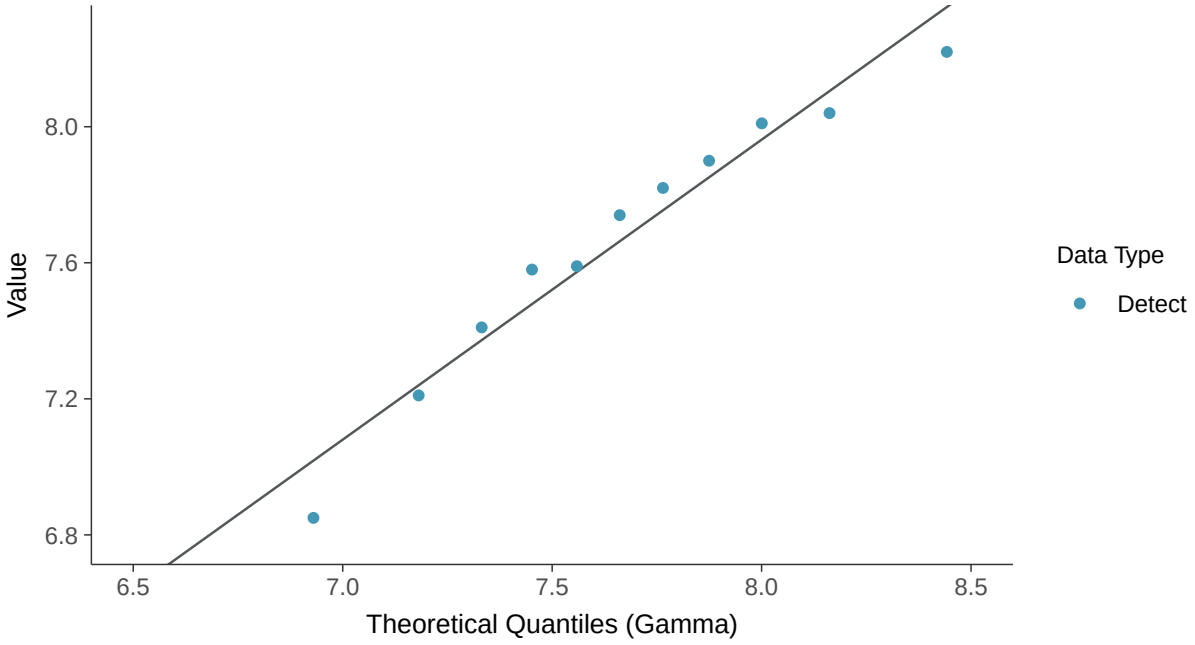



Normal Q-Q plot
pH, Field, MW-100D (su)
Value
8.0
7.6
7.2
6.8
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect


Lognormal Q-Q plot
pH, Field, MW-100D (su)
log(Value)
2.10
2.05
2.00
1.95
−2
−1
0
1
2
Theoretical Quantiles (Standard Normal)
Data Type
Detect

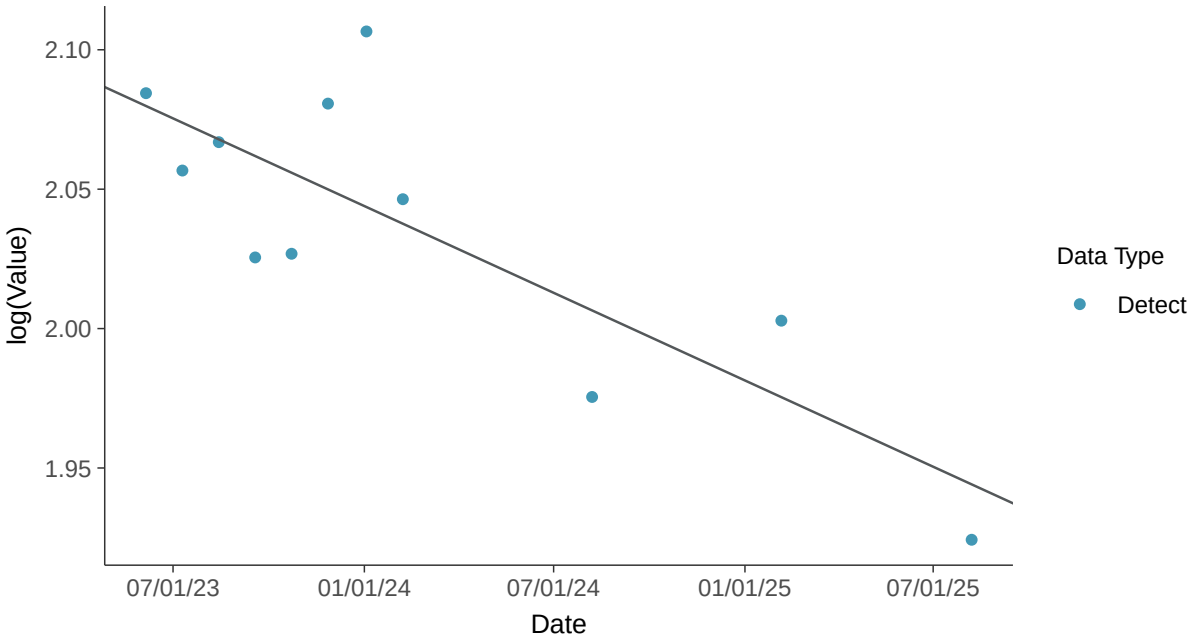
Gamma Q-Q plot

pH, Field, MW-100D (su)



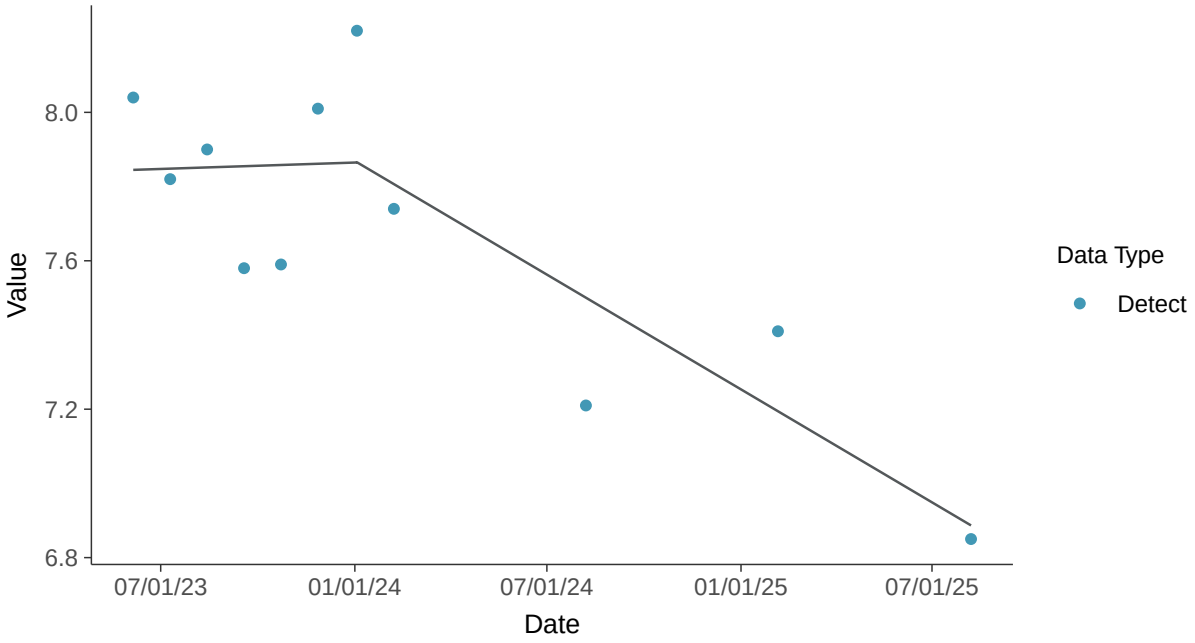
Trend Regression: Lognormal MLE

pH, Field, MW-100D (su)



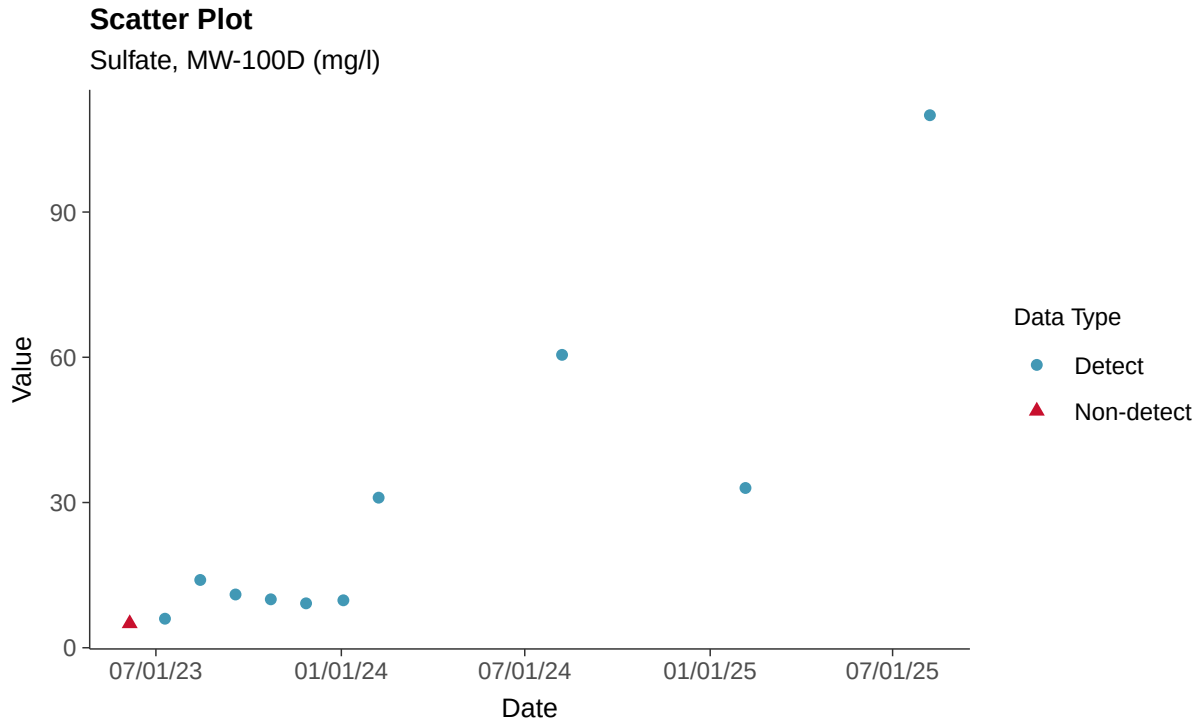
Trend Regression: Piecewise Linear-Linear

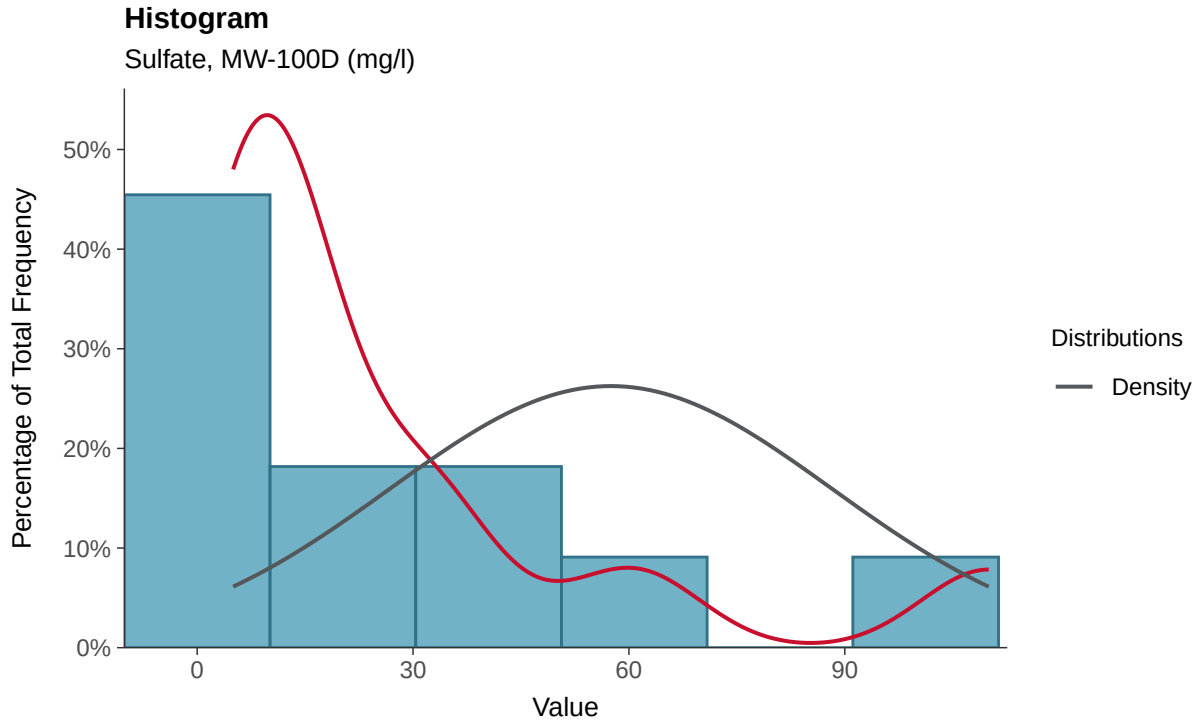
pH, Field, MW-100D (su)



Appendix III: Sulfate, MW-100D

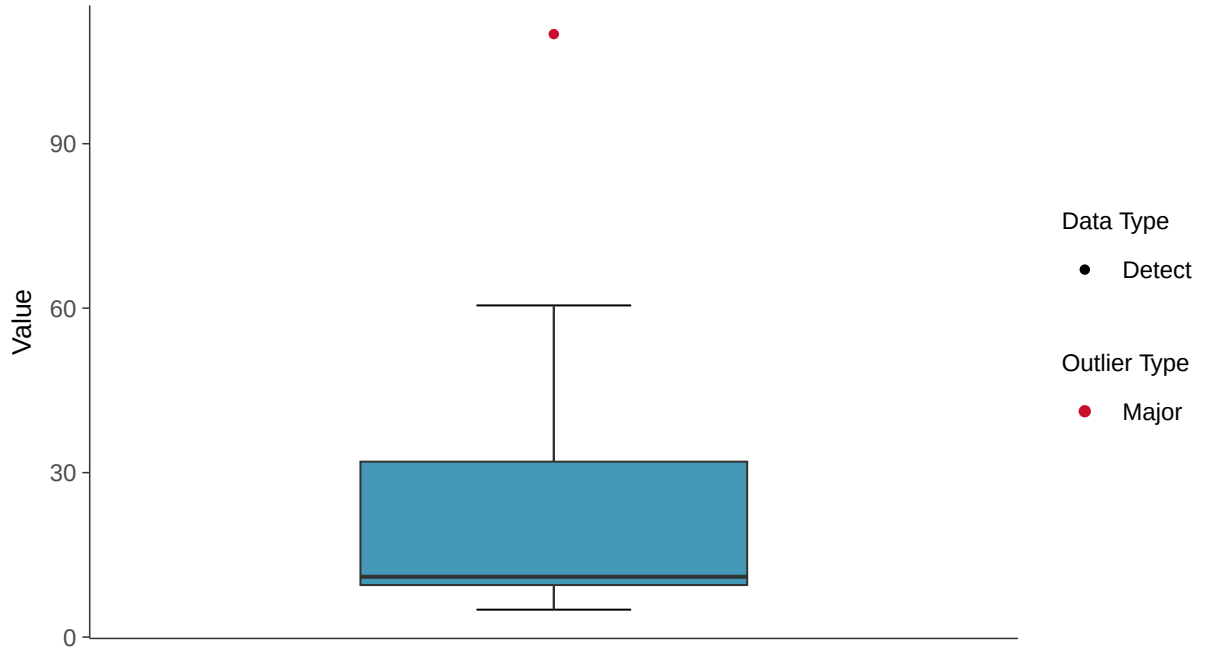
ID: 21_2_124





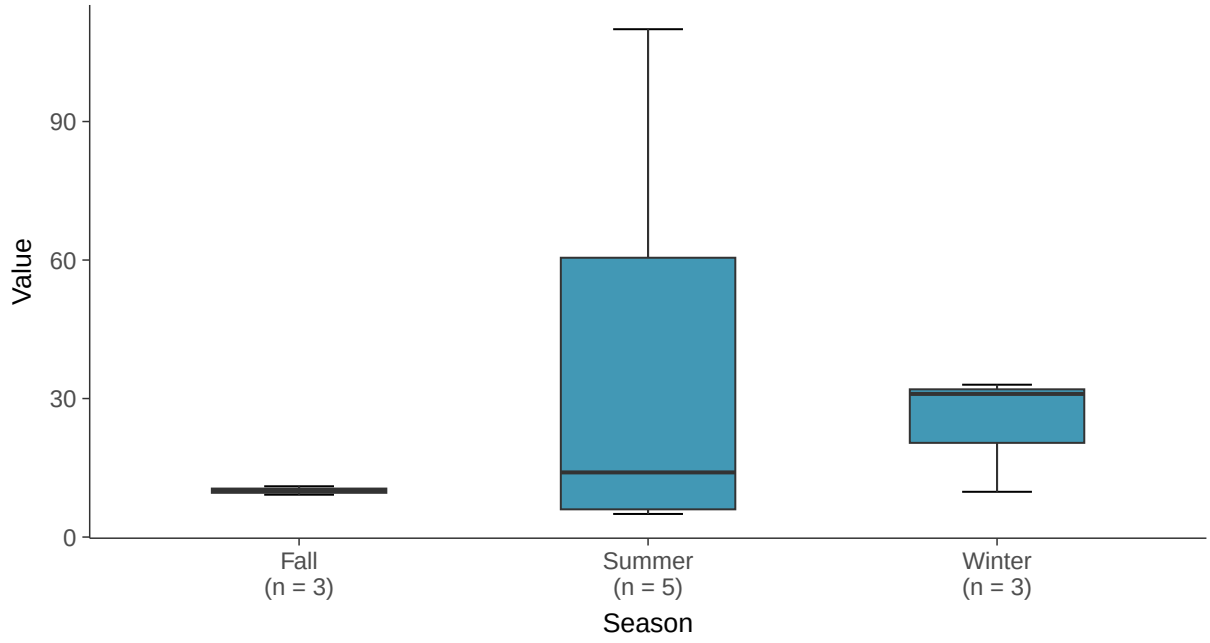
Boxplot

Sulfate, MW-100D (mg/l)



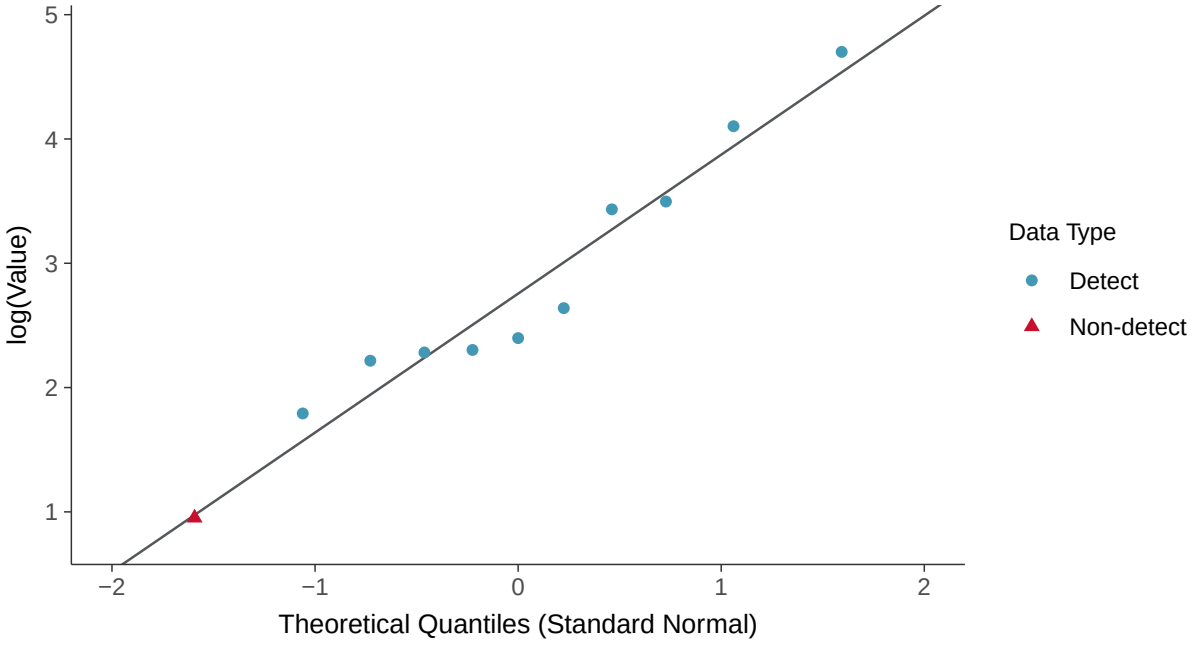
Boxplot by Season

Sulfate, MW-100D (mg/l)



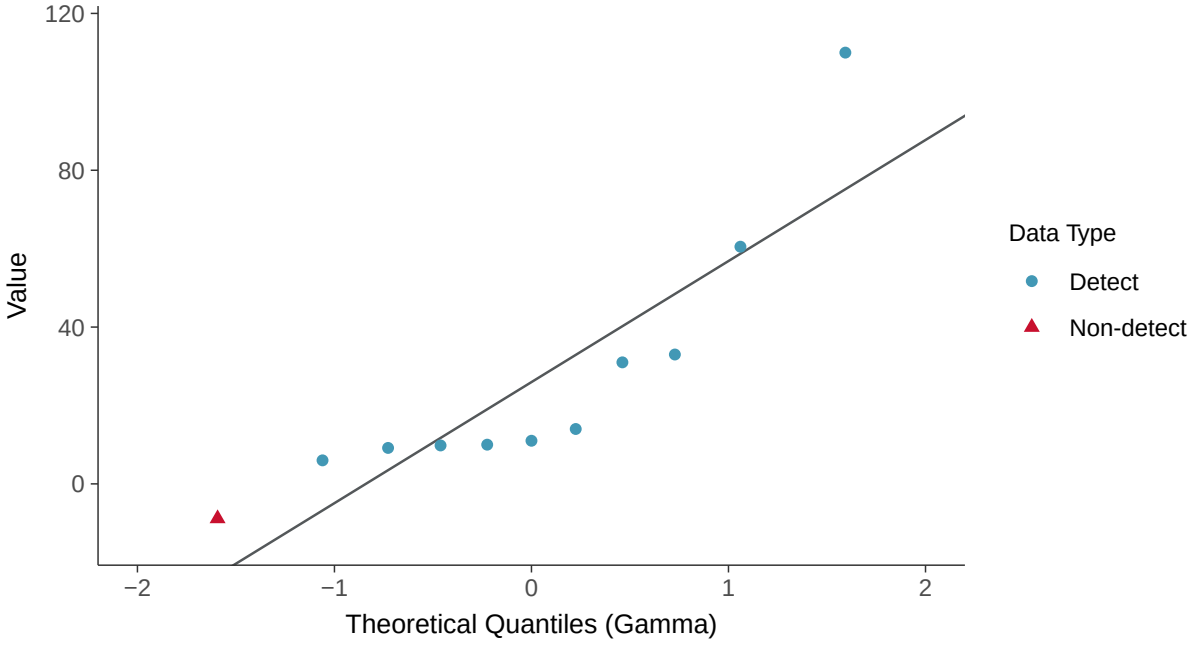
Lognormal Q-Q plot using ROS Imputed Estimates

Sulfate, MW-100D (mg/l)



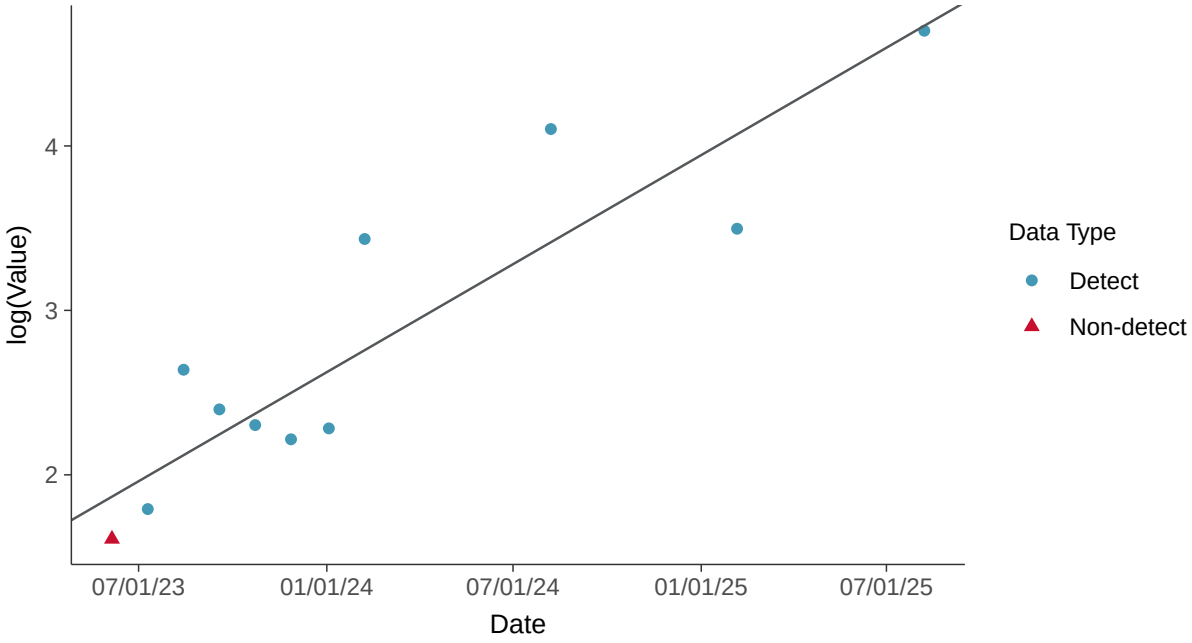
Gamma Q-Q plot using ROS Imputed Estimates

Sulfate, MW-100D (mg/l)



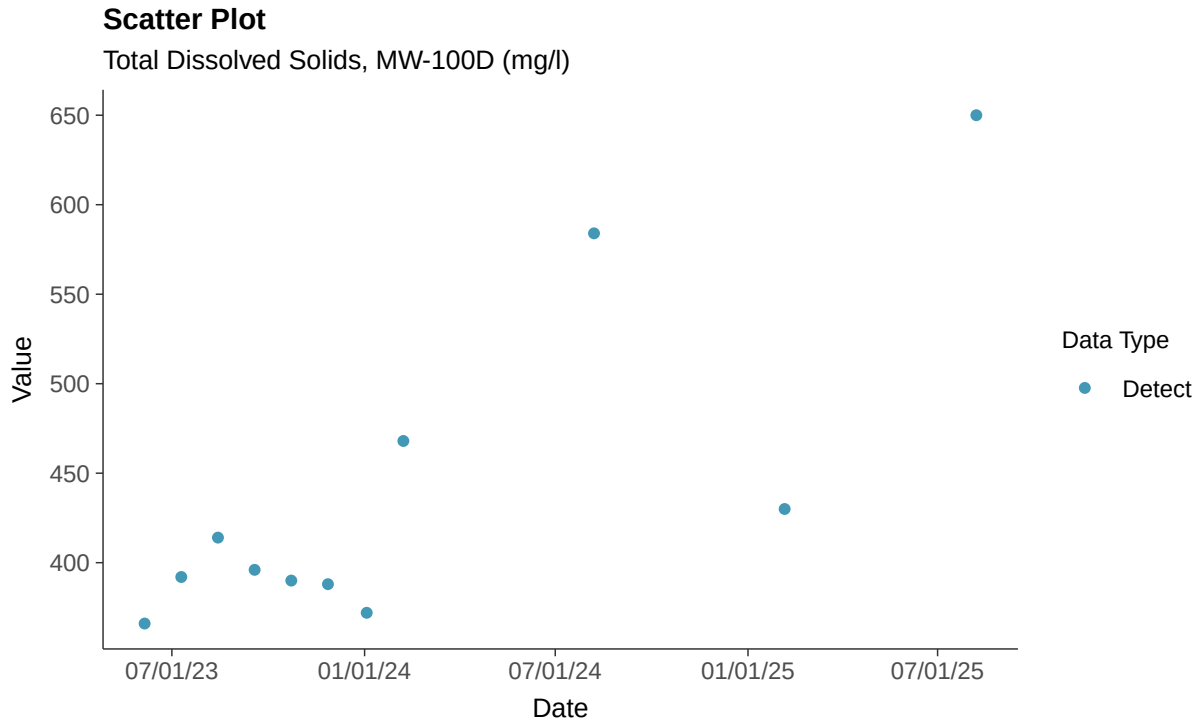
Trend Regression: Lognormal MLE

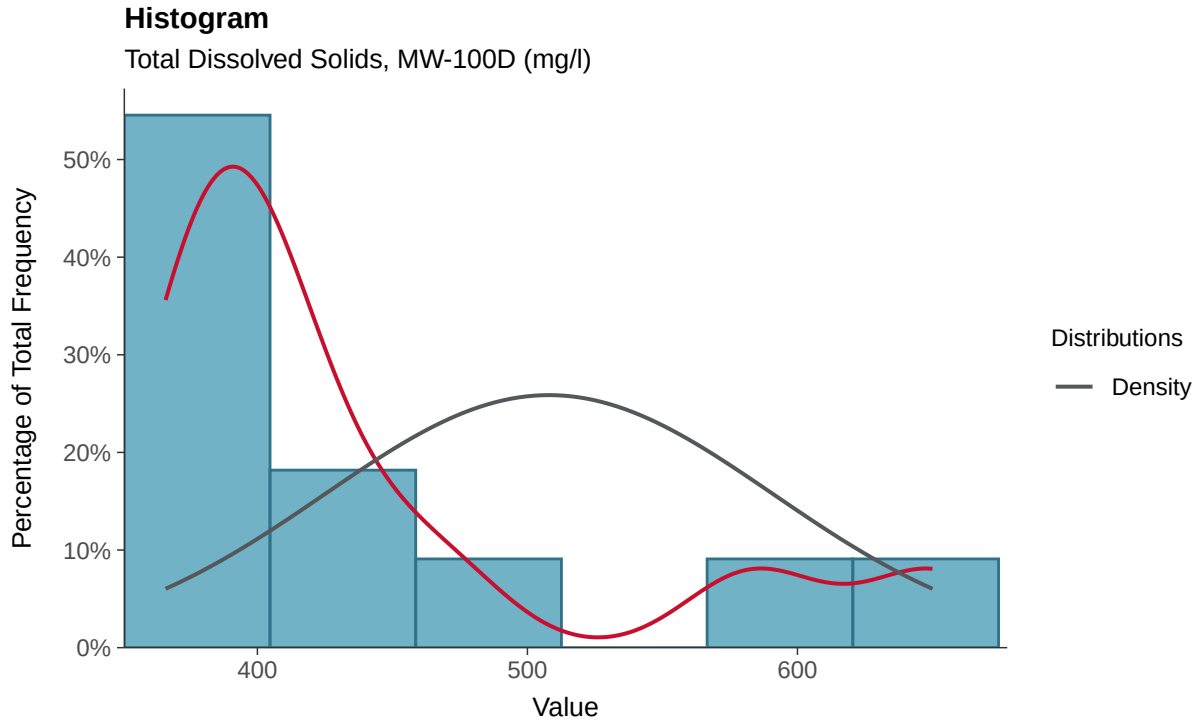
Sulfate, MW-100D (mg/l)



Appendix III: Total Dissolved Solids, MW-100D

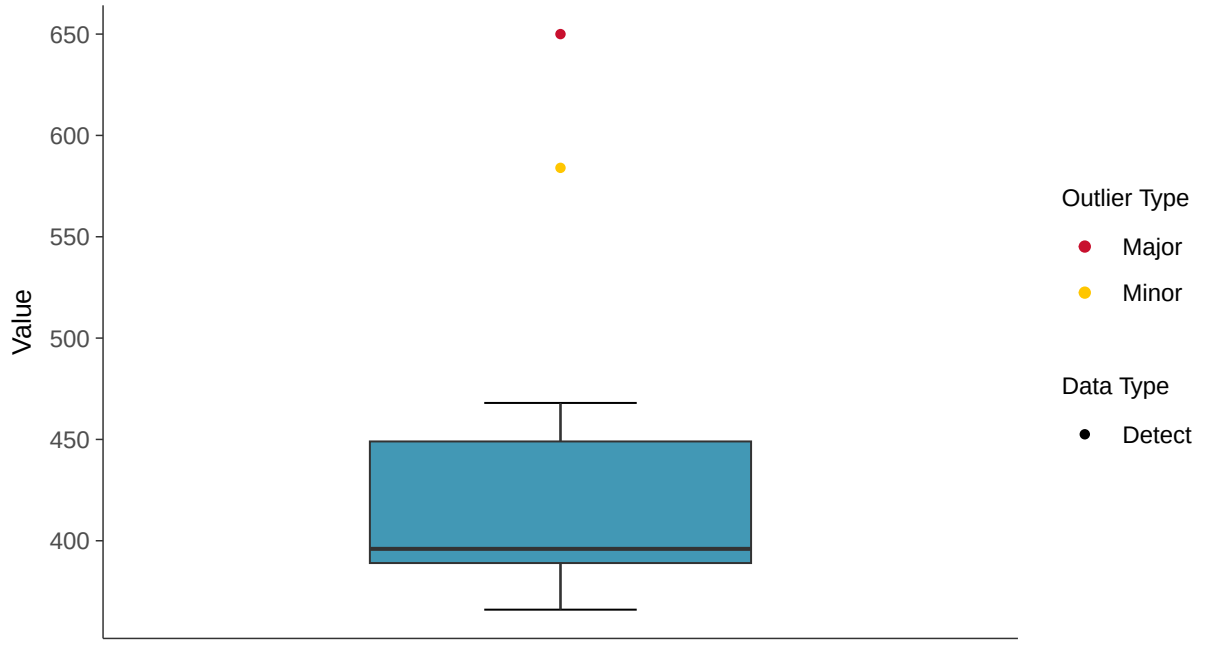
ID: 21_2_126





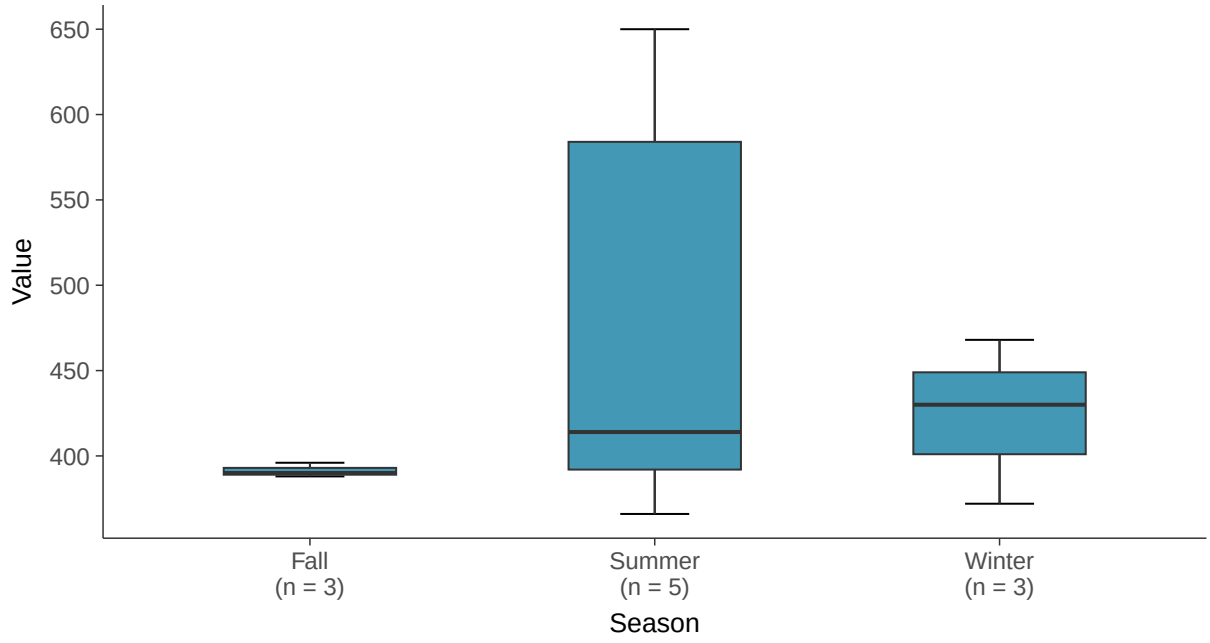
Boxplot

Total Dissolved Solids, MW-100D (mg/l)



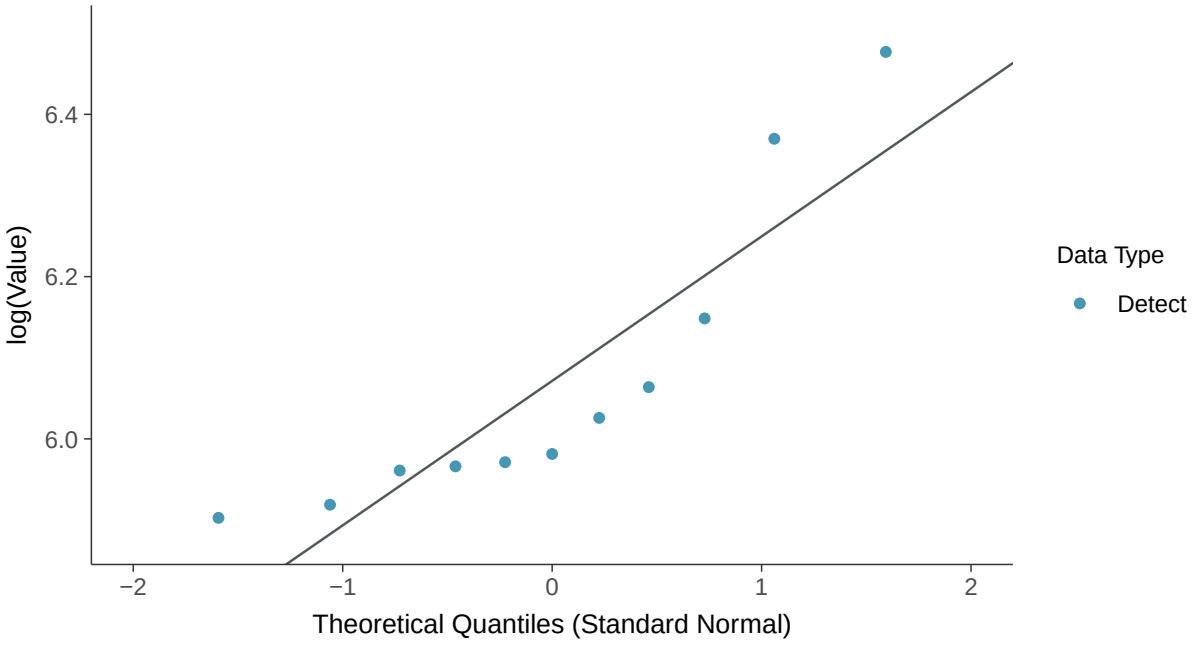
Boxplot by Season

Total Dissolved Solids, MW-100D (mg/l)



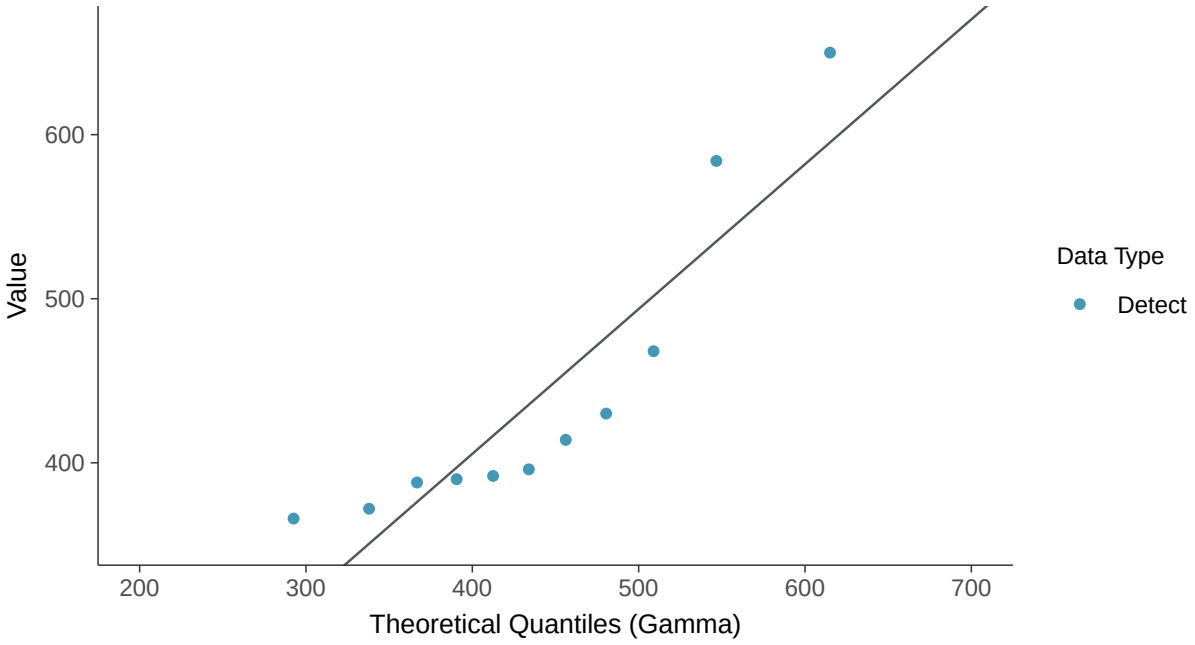
Lognormal Q-Q plot

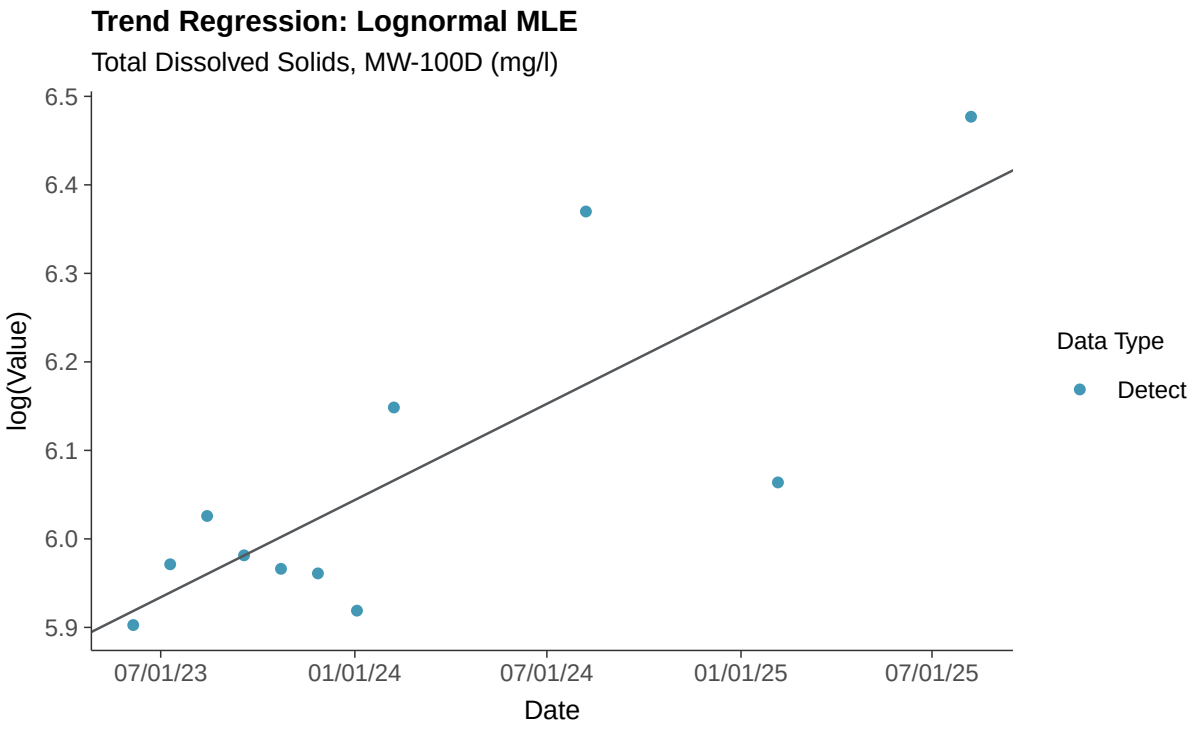
Total Dissolved Solids, MW-100D (mg/l)



Gamma Q-Q plot

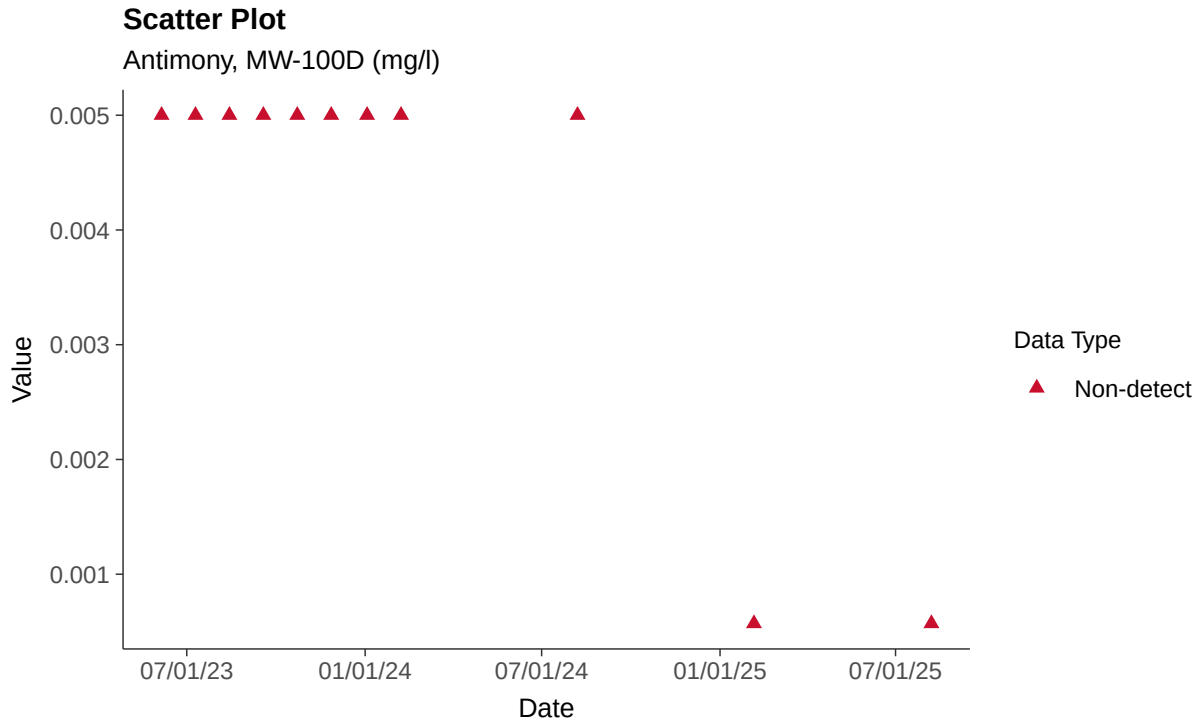
Total Dissolved Solids, MW-100D (mg/l)

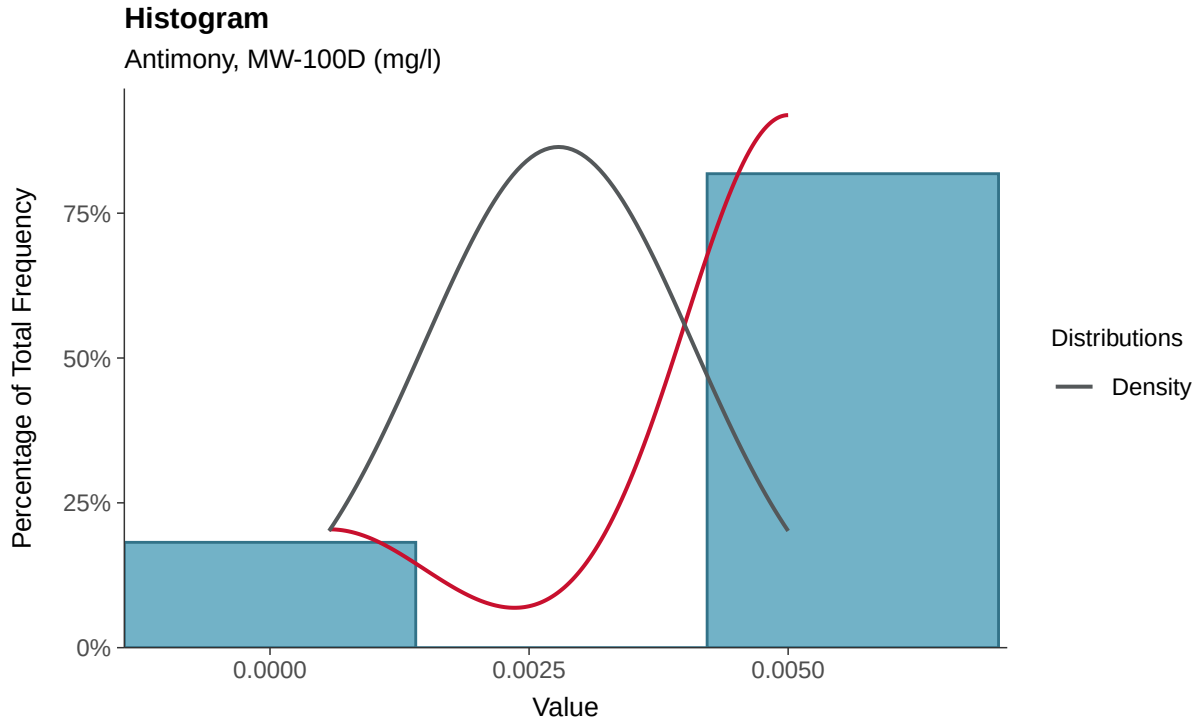



Trend Regression: Lognormal MLE
Total Dissolved Solids, MW-100D (mg/l)
log(Value)
6.5
6.4
6.3
6.2
6.1
6.0
5.9
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect

Appendix IV: Antimony, MW-100D

ID: 21_3_101



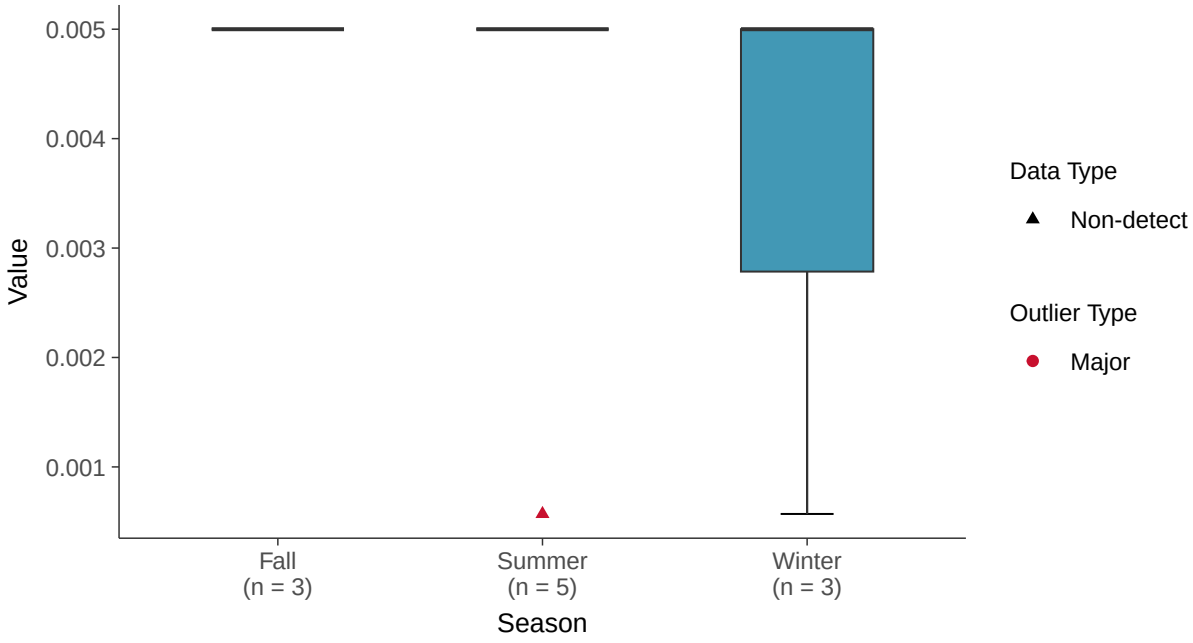


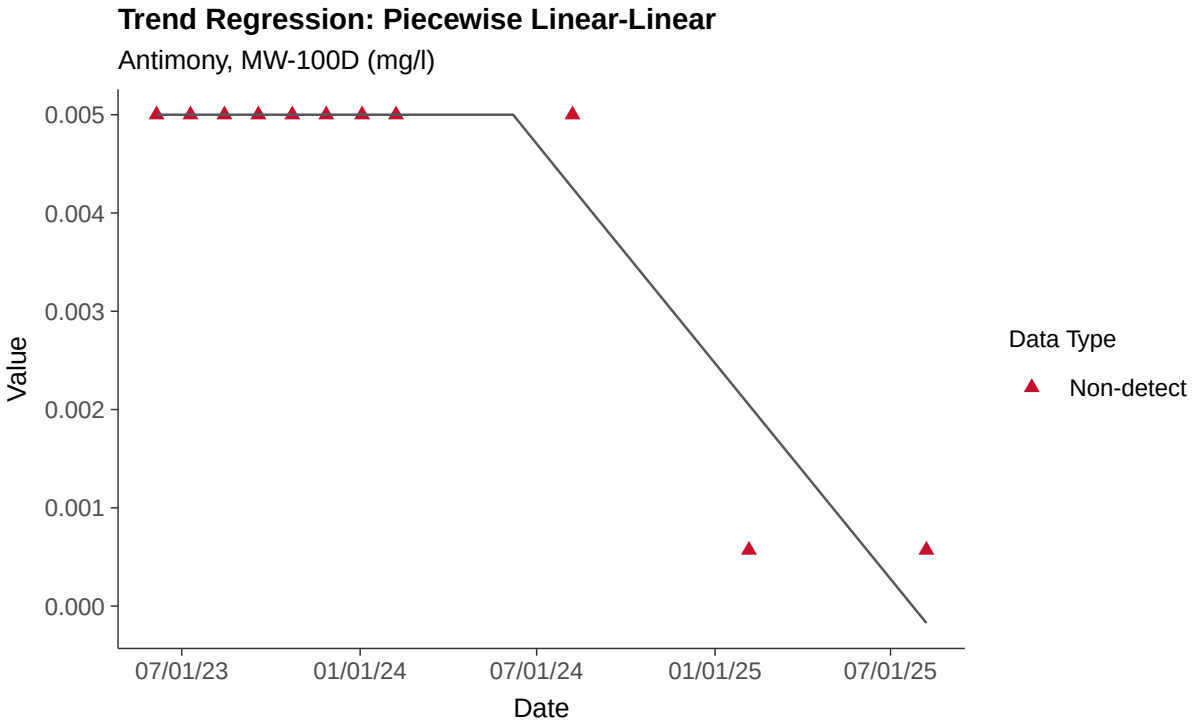
Boxplot

Antimony, MW-100D (mg/l)

Boxplot by Season

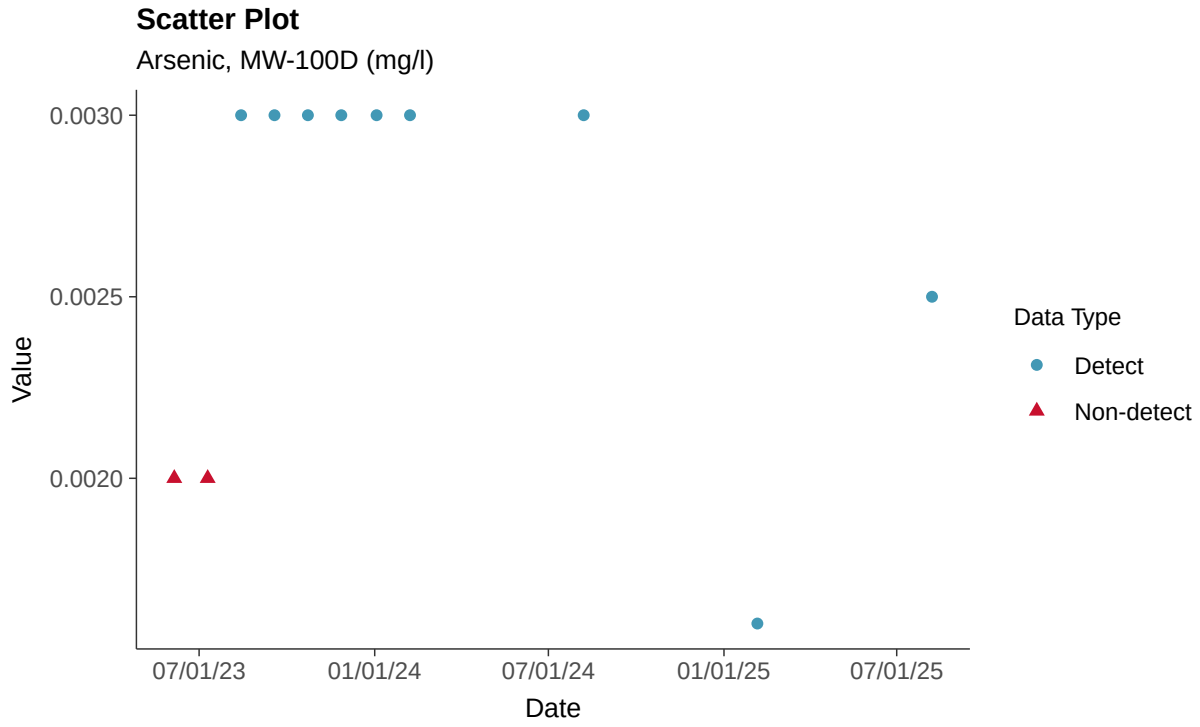
Antimony, MW-100D (mg/l)

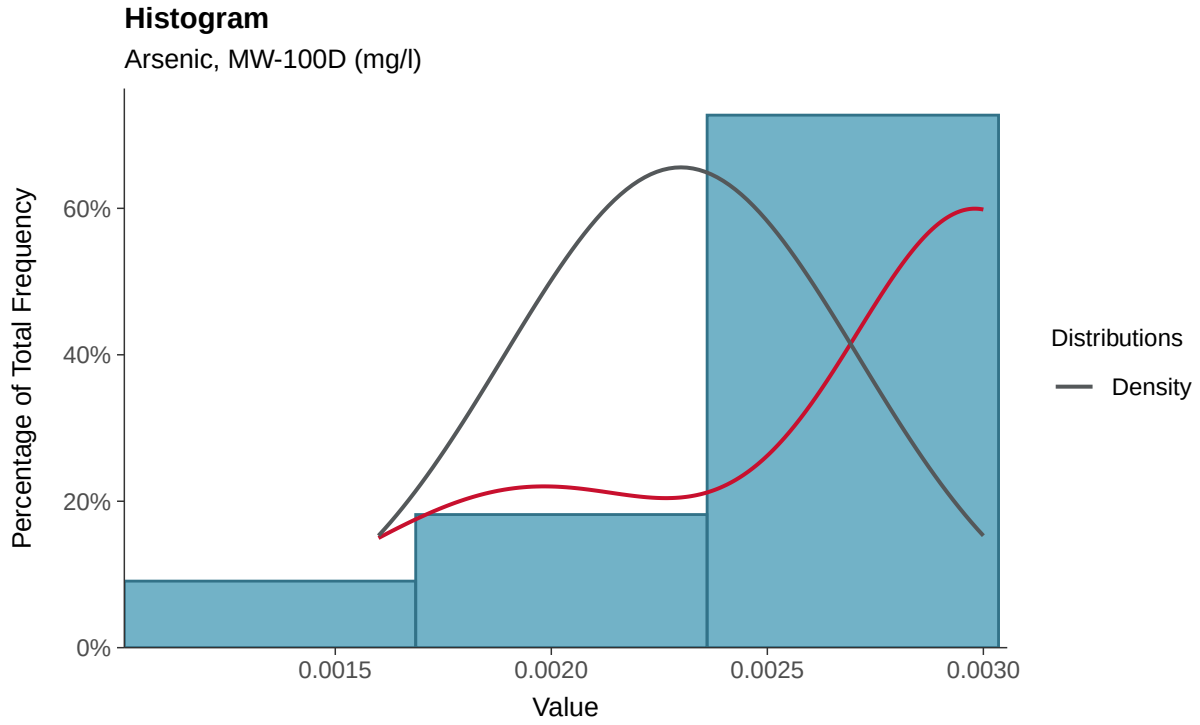



Trend Regression: Piecewise Linear-Linear
Antimony, MW-100D (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Arsenic, MW-100D

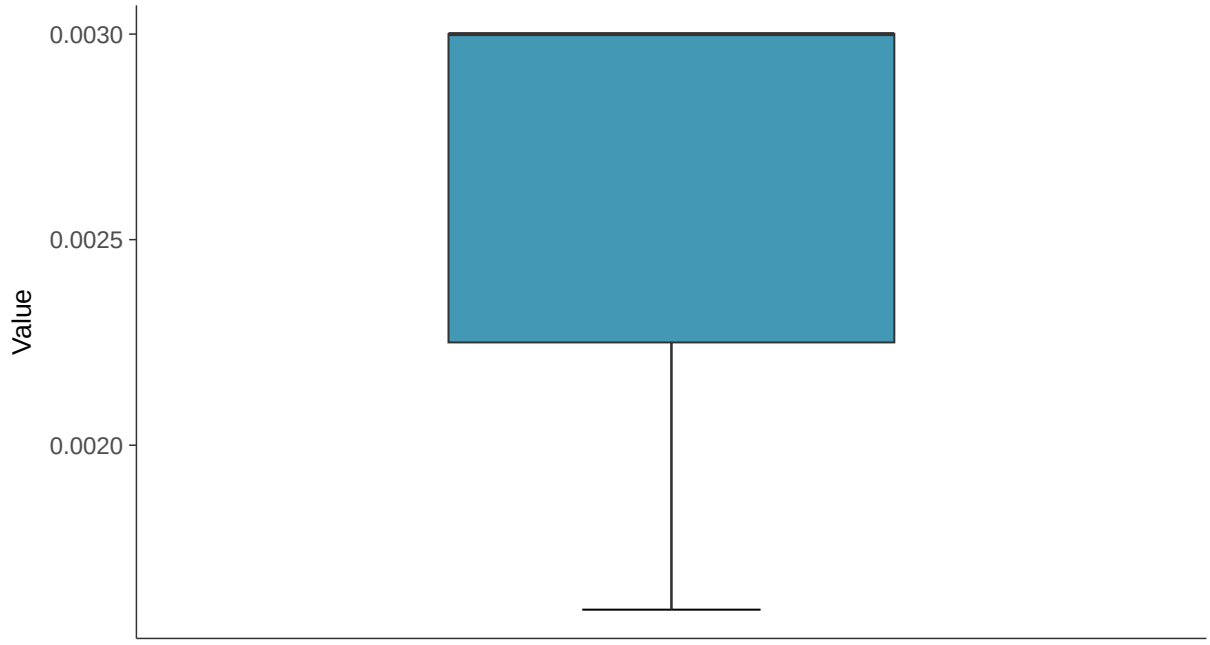
ID: 21_3_102





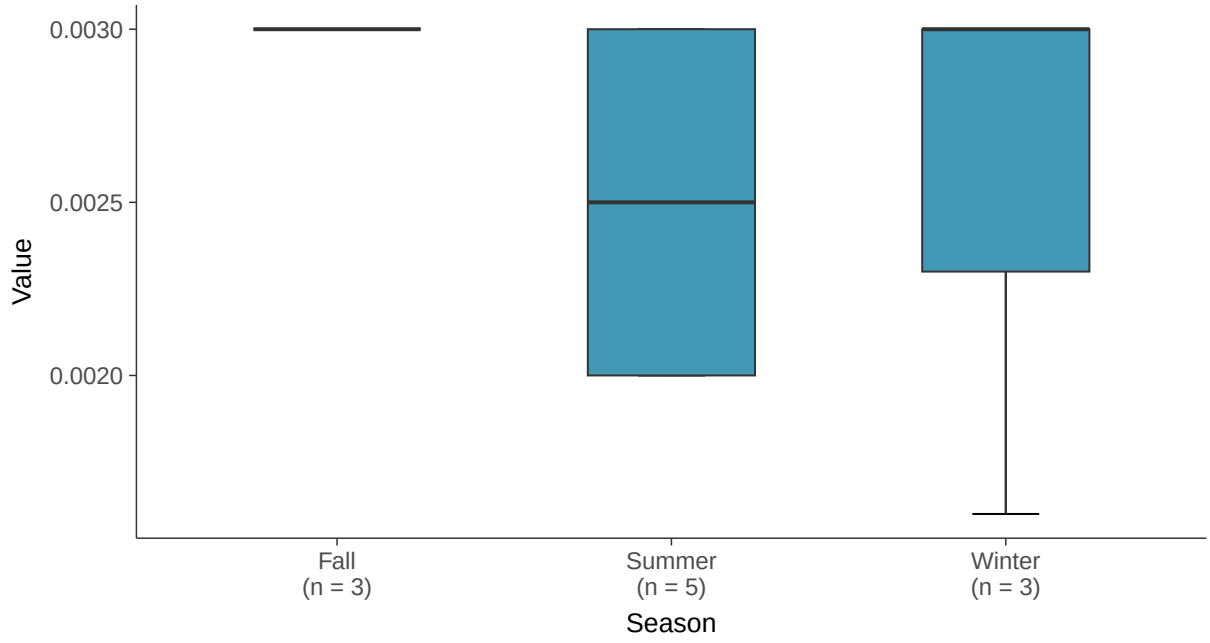
Boxplot

Arsenic, MW-100D (mg/l)



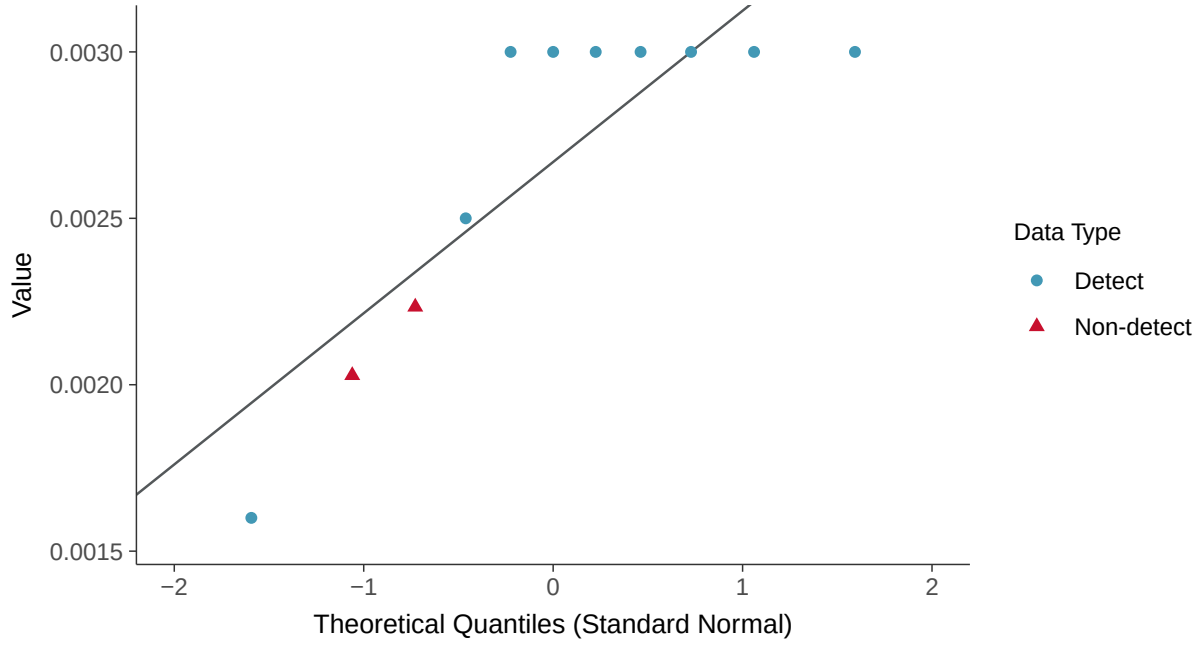
Boxplot by Season

Arsenic, MW-100D (mg/l)



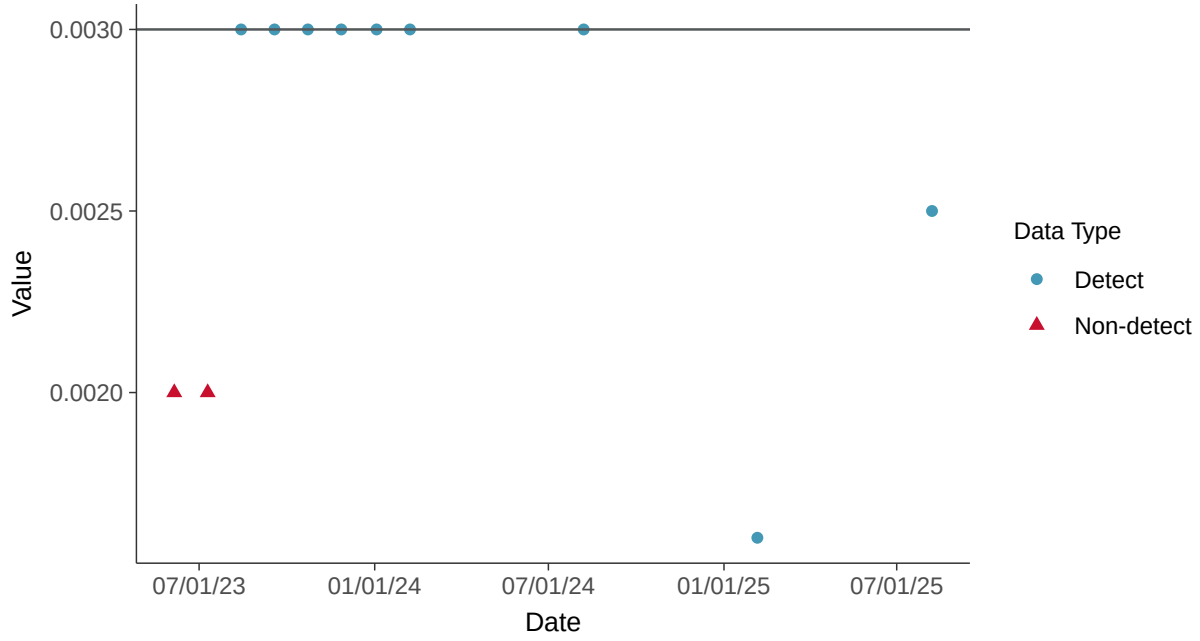
Normal Q-Q plot using ROS Imputed Estimates

Arsenic, MW-100D (mg/l)



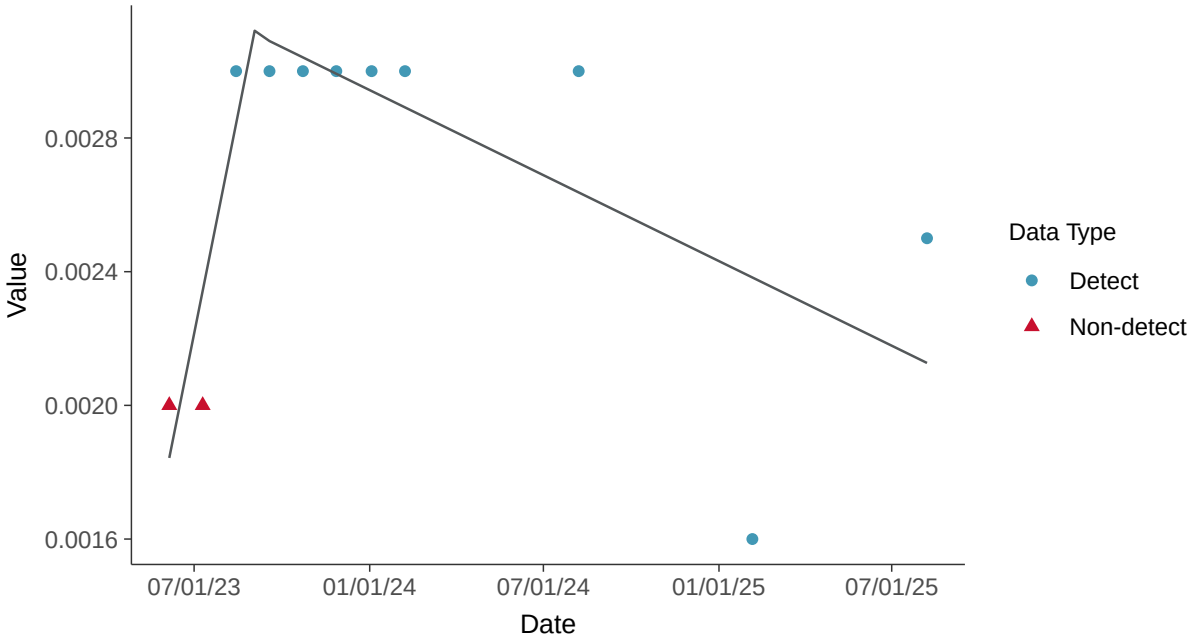
Trend Regression: Mann-Kendall/Theil-Sen Estimate

Arsenic, MW-100D (mg/l)



Trend Regression: Piecewise Linear-Linear

Arsenic, MW-100D (mg/l)

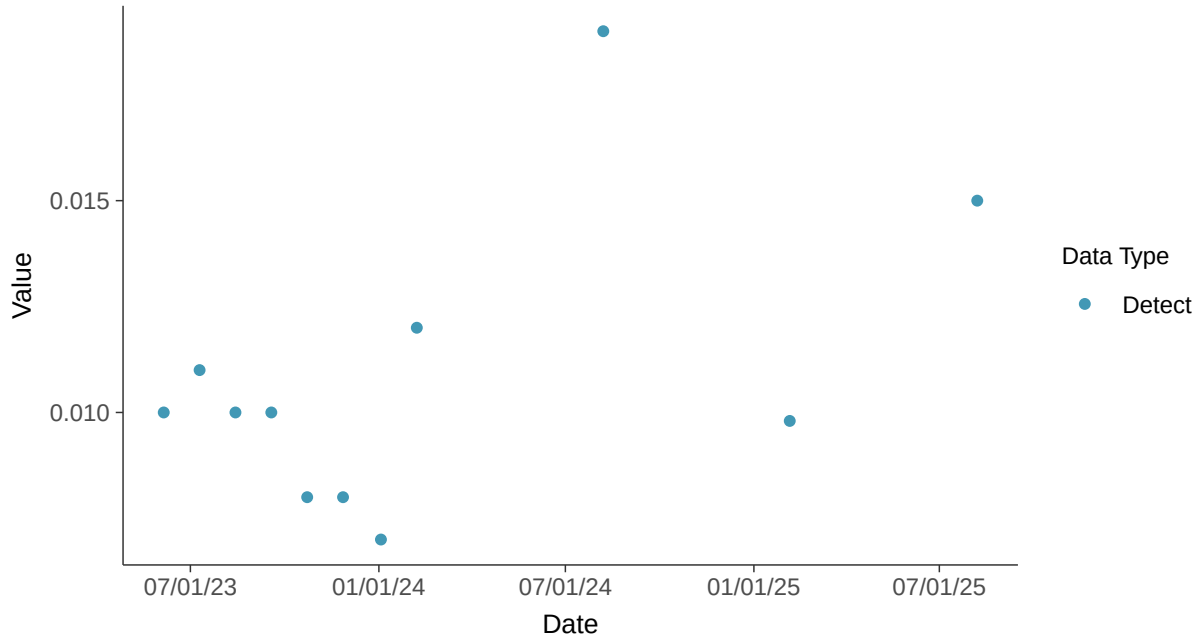


Appendix IV: Barium, MW-100D

ID: 21_3_103

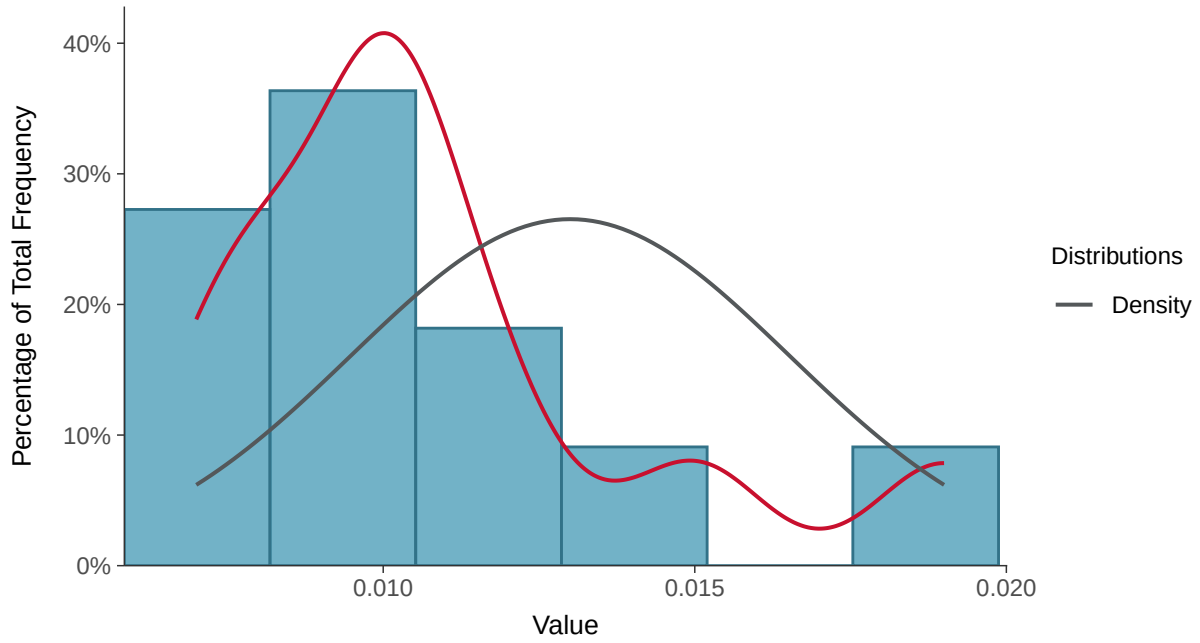
Scatter Plot

Barium, MW-100D (mg/l)



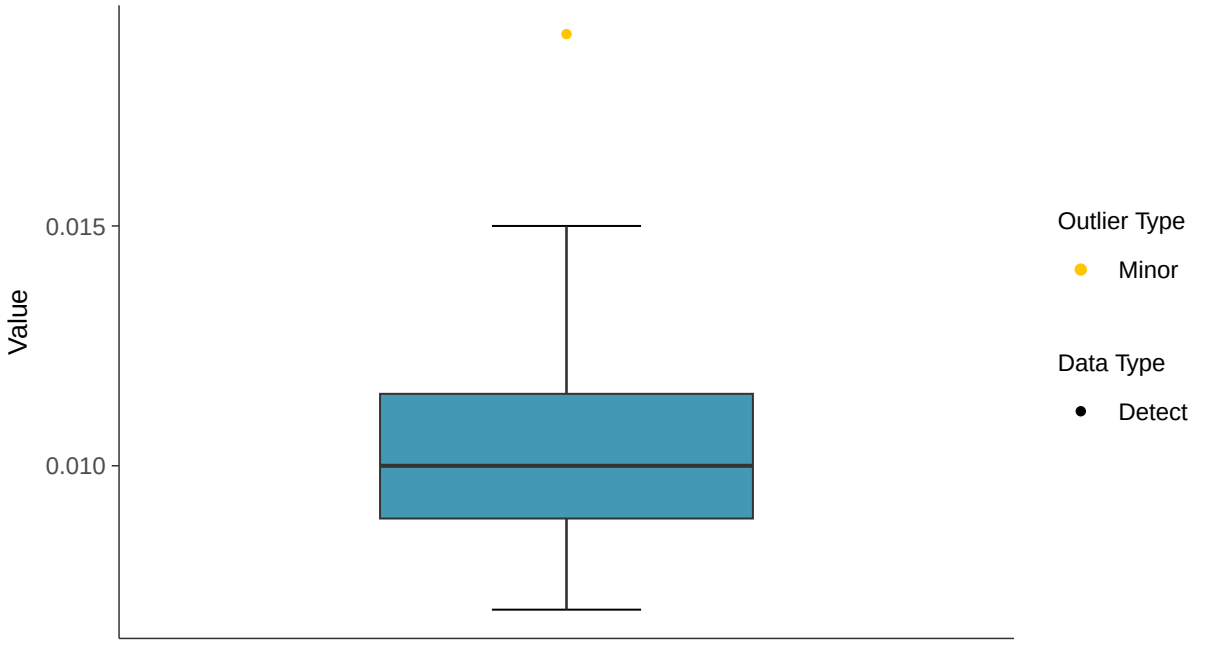
Histogram

Barium, MW-100D (mg/l)



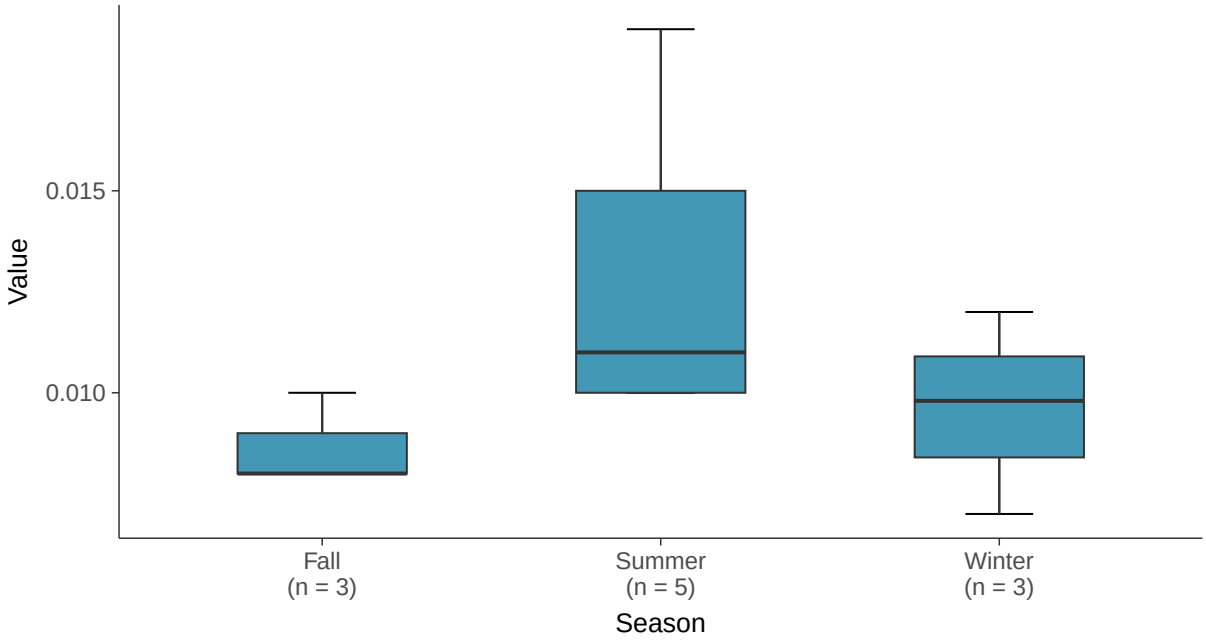
Boxplot

Barium, MW-100D (mg/l)



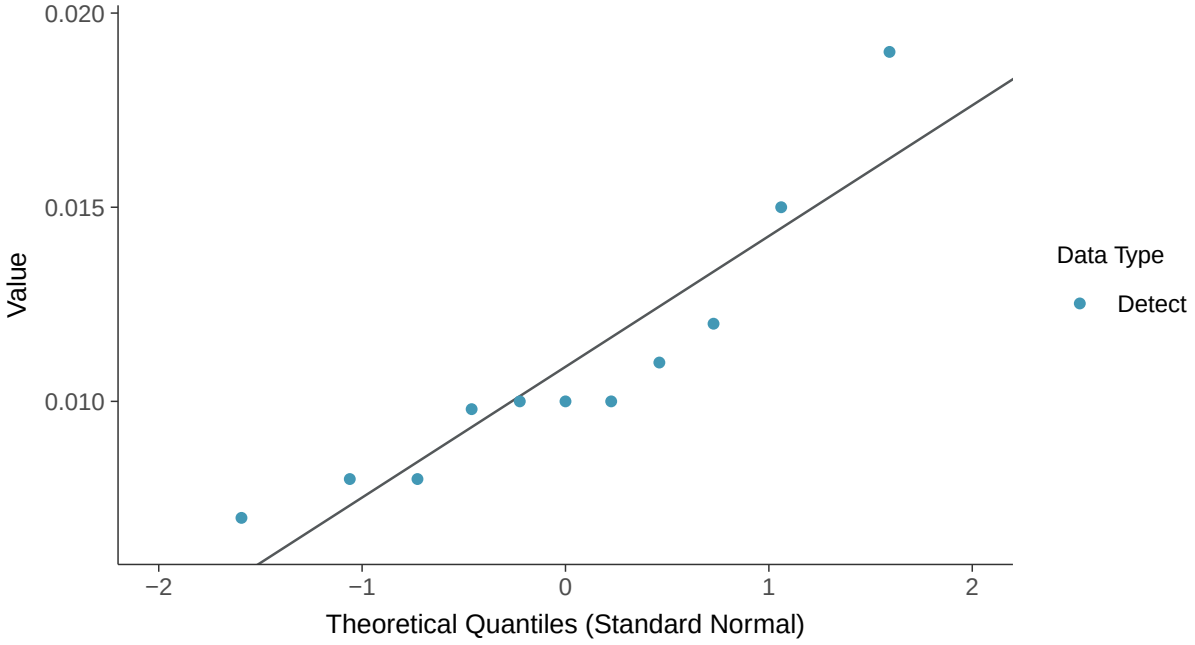
Boxplot by Season

Barium, MW-100D (mg/l)



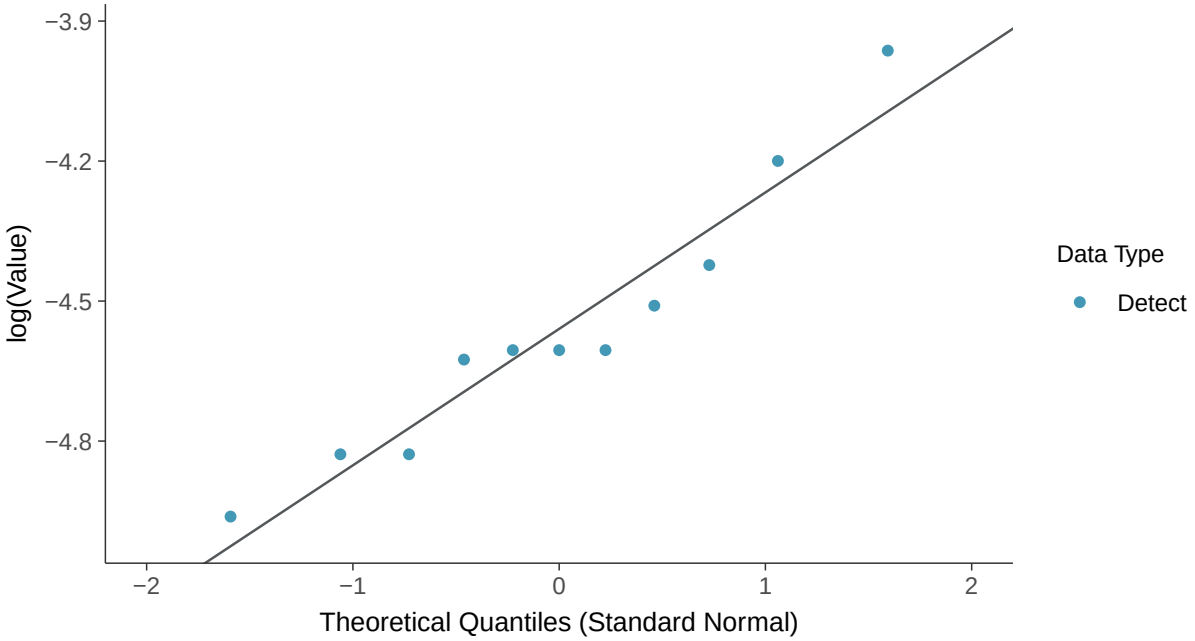
Normal Q-Q plot

Barium, MW-100D (mg/l)



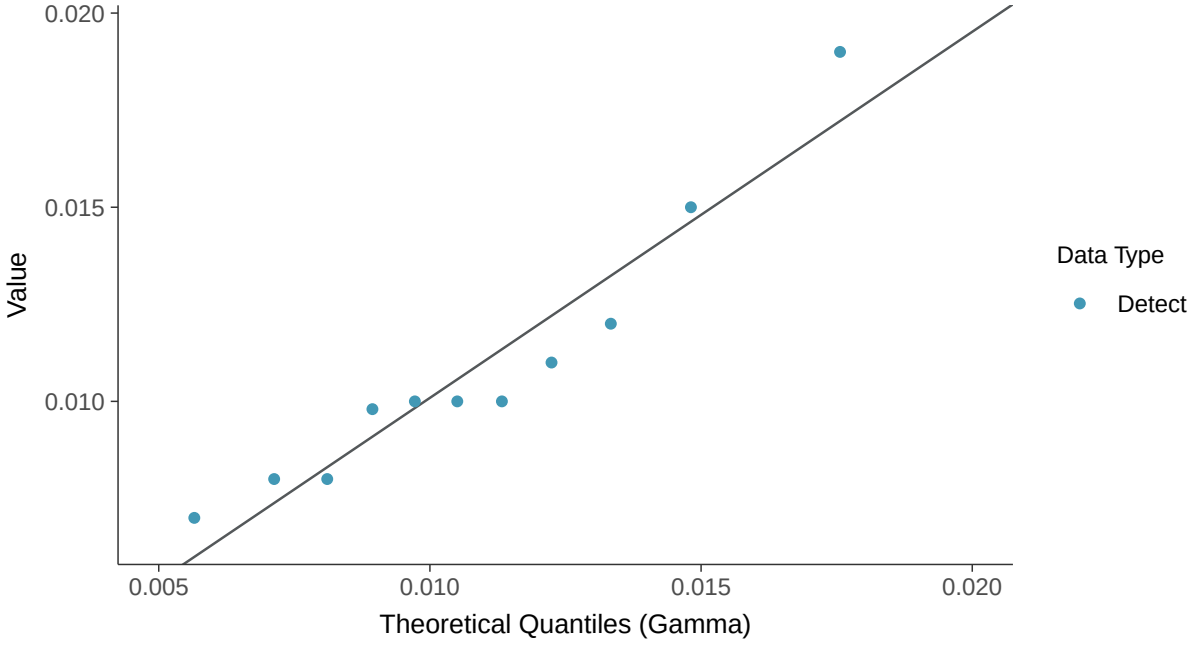
Lognormal Q-Q plot

Barium, MW-100D (mg/l)



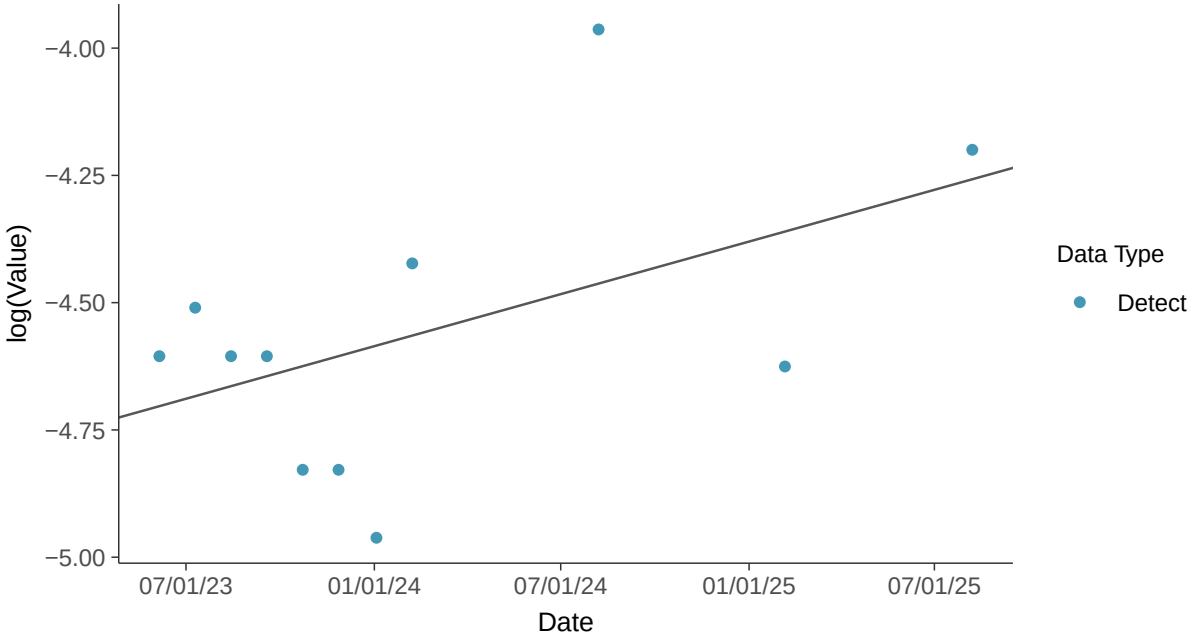
Gamma Q-Q plot

Barium, MW-100D (mg/l)



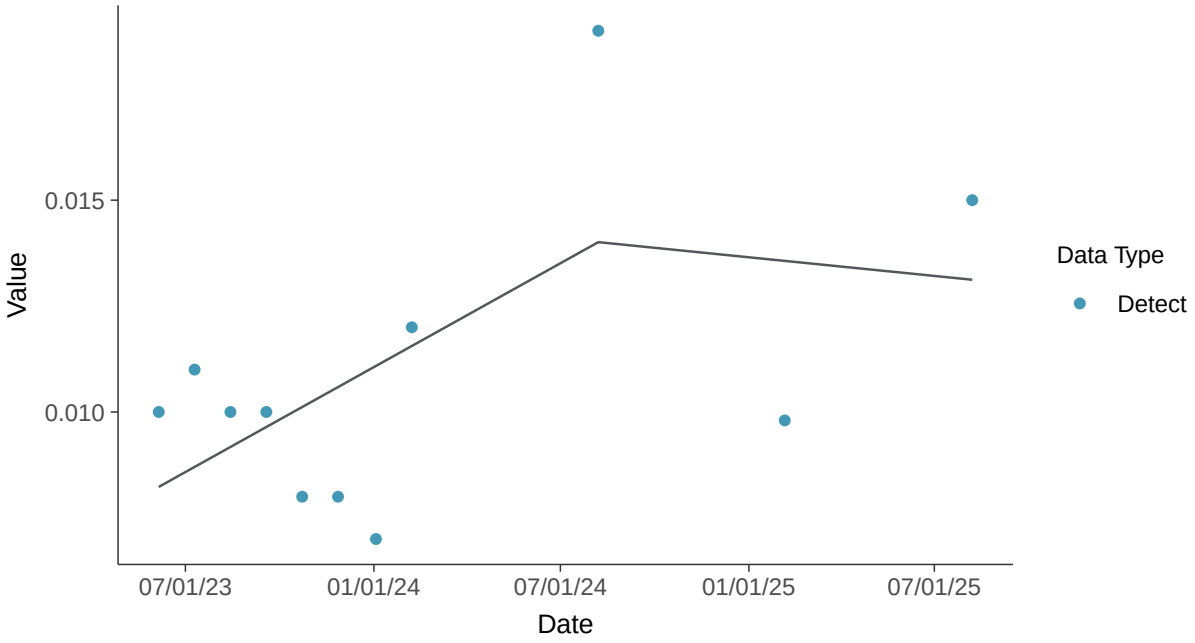
Trend Regression: Lognormal MLE

Barium, MW-100D (mg/l)



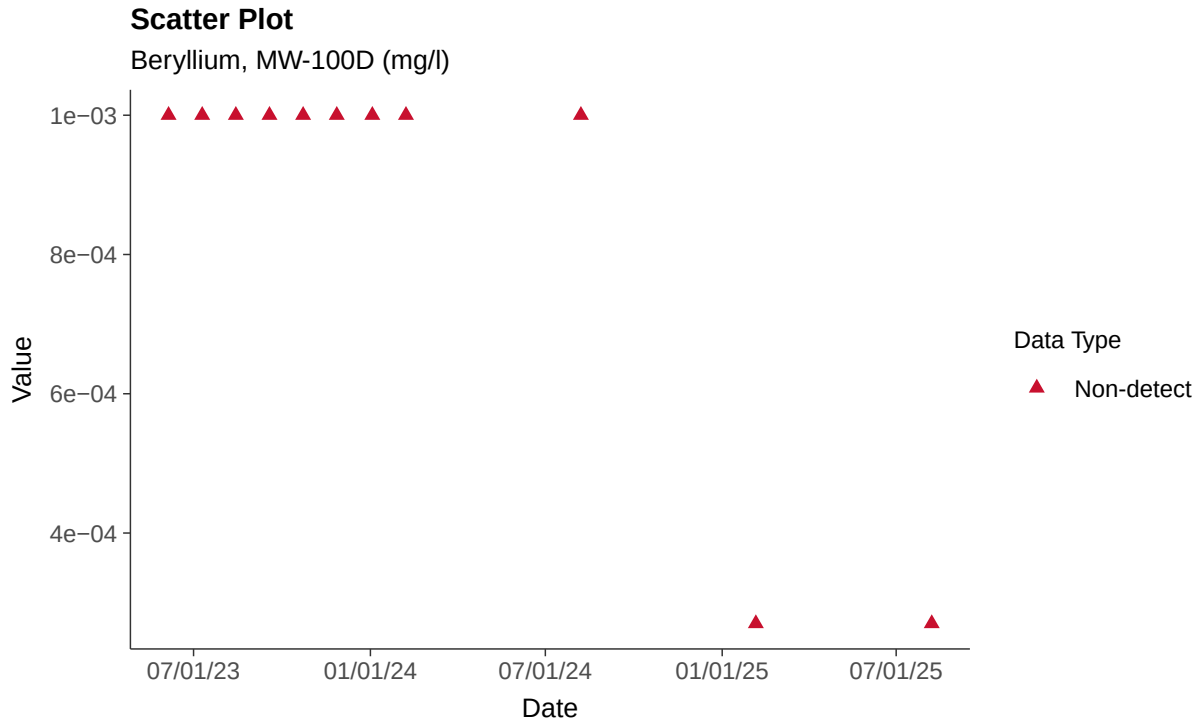
Trend Regression: Piecewise Linear-Linear

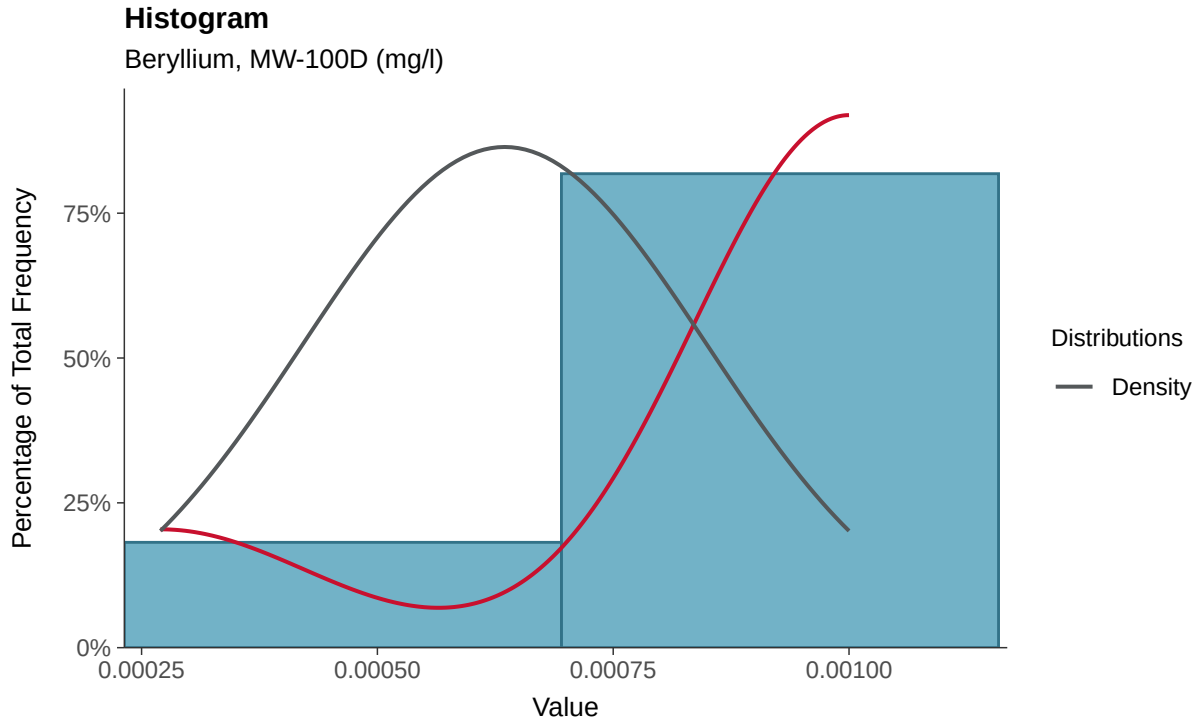
Barium, MW-100D (mg/l)



Appendix IV: Beryllium, MW-100D

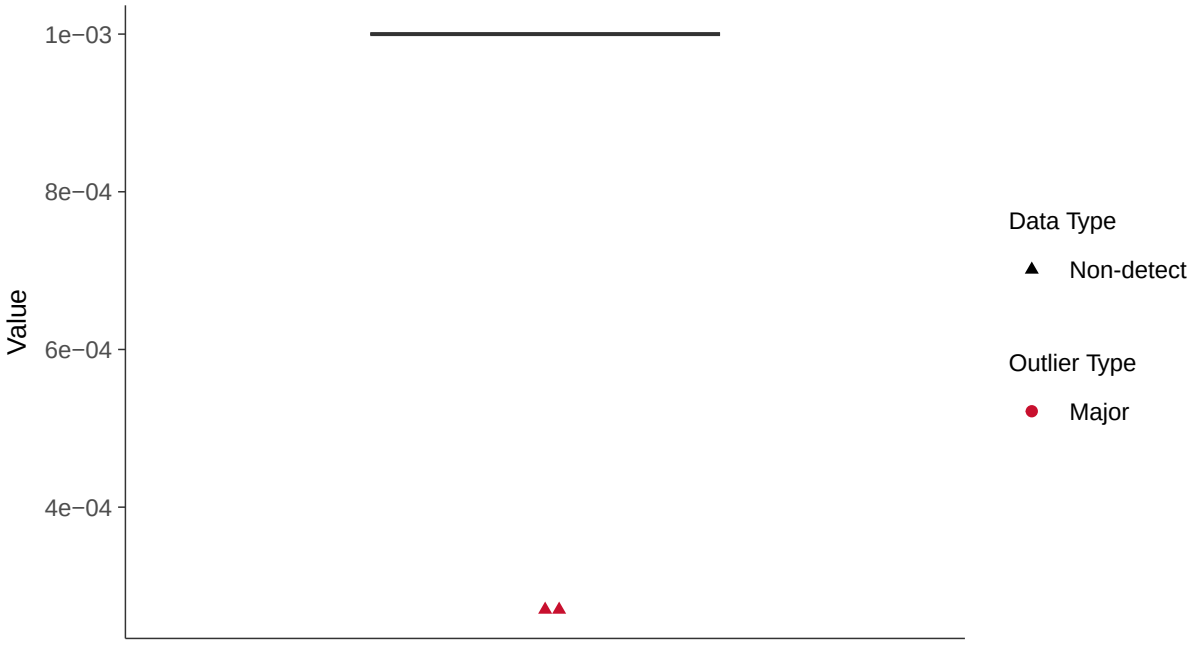
ID: 21_3_104





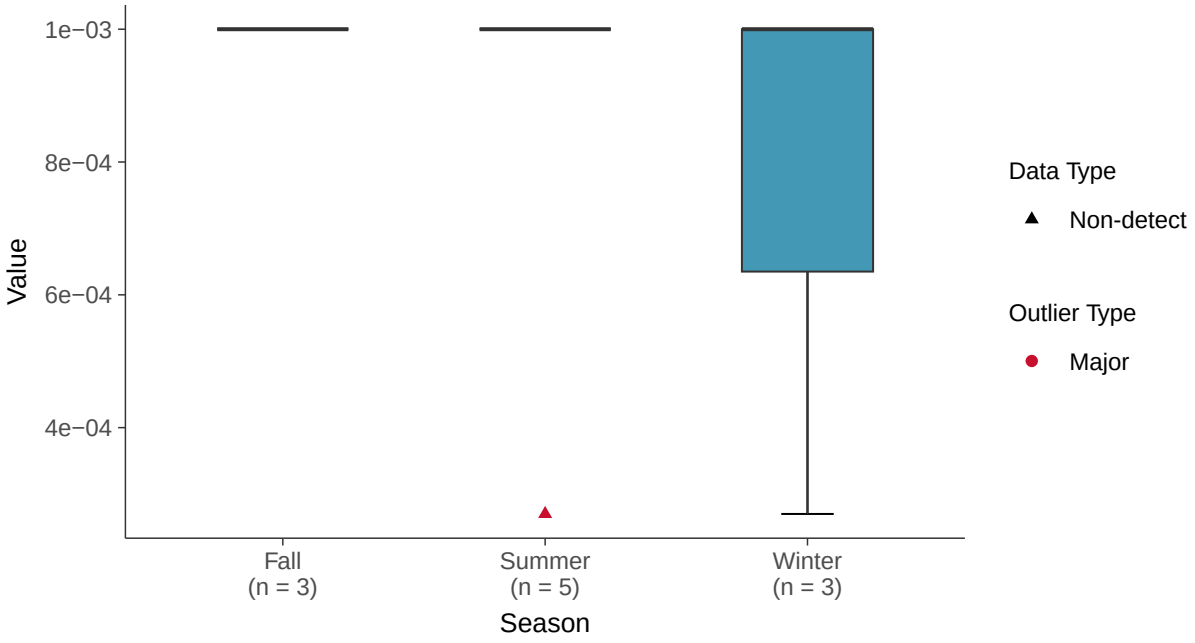
Boxplot

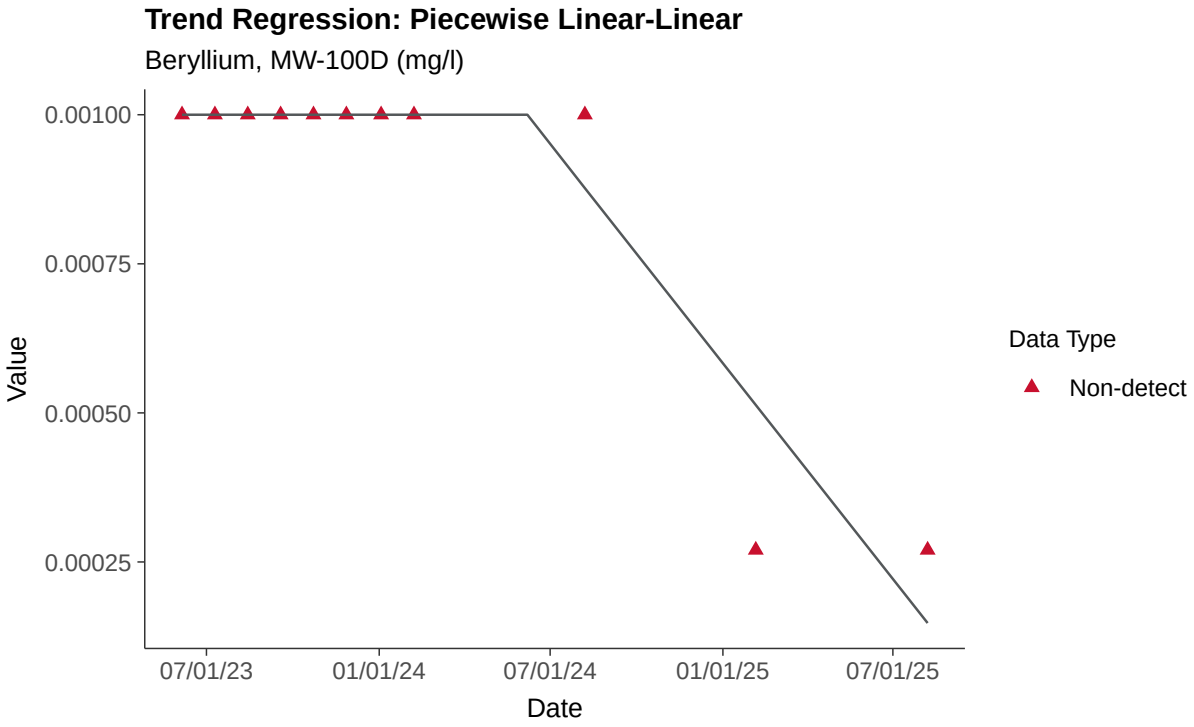
Beryllium, MW-100D (mg/l)



Boxplot by Season

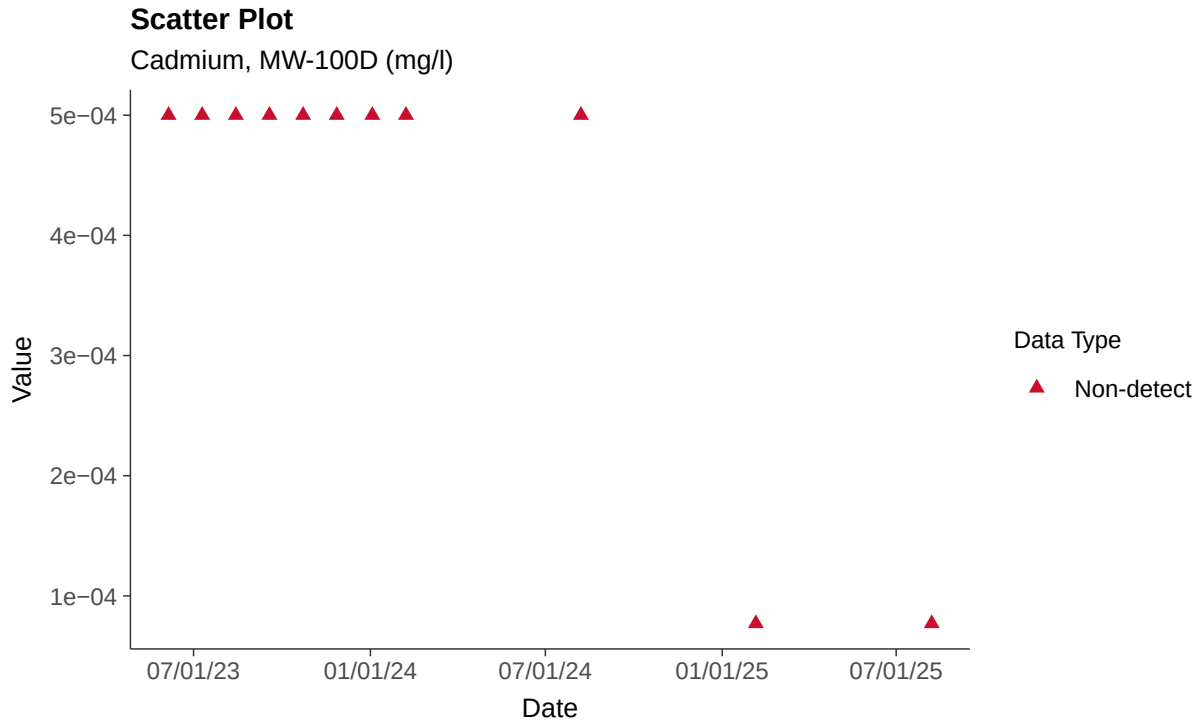
Beryllium, MW-100D (mg/l)

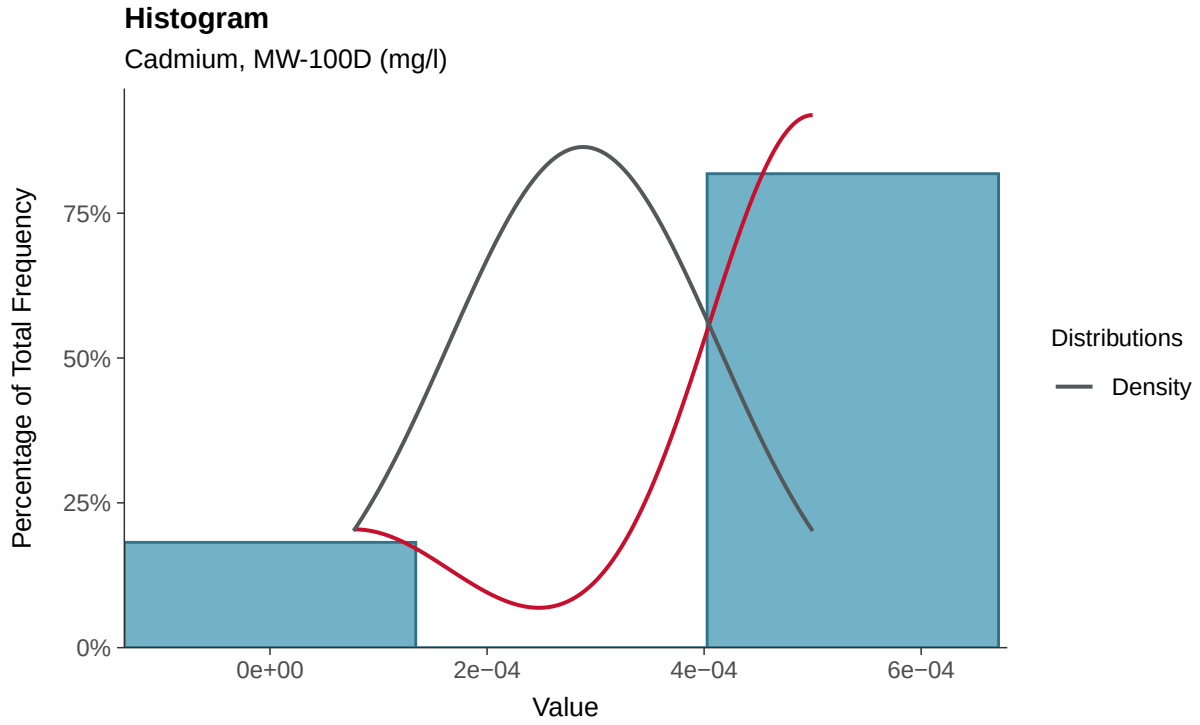



Trend Regression: Piecewise Linear-Linear
Beryllium, MW-100D (mg/l)
0.00100
0.00075
0.00050
0.00025
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Cadmium, MW-100D

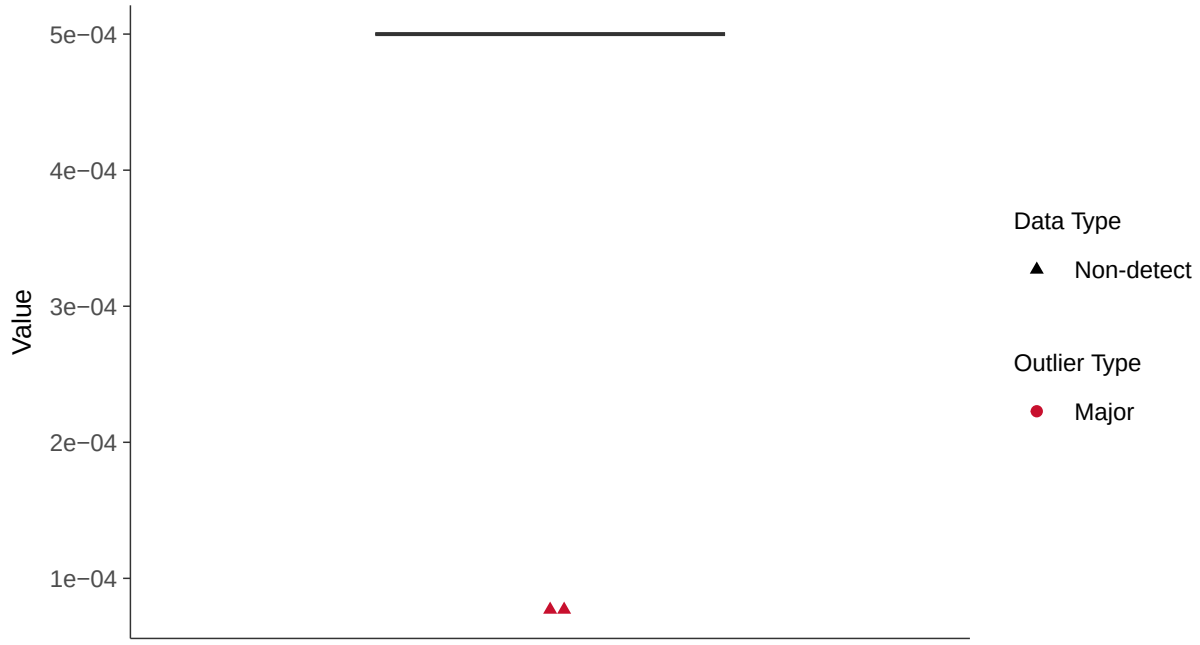
ID: 21_3_106





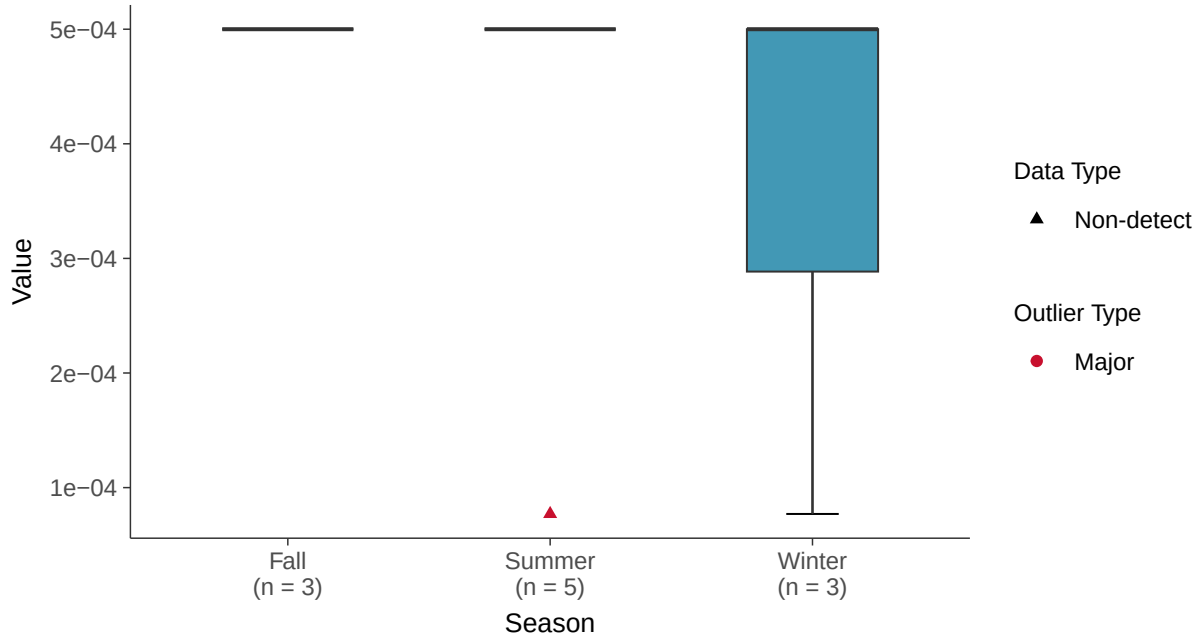
Boxplot

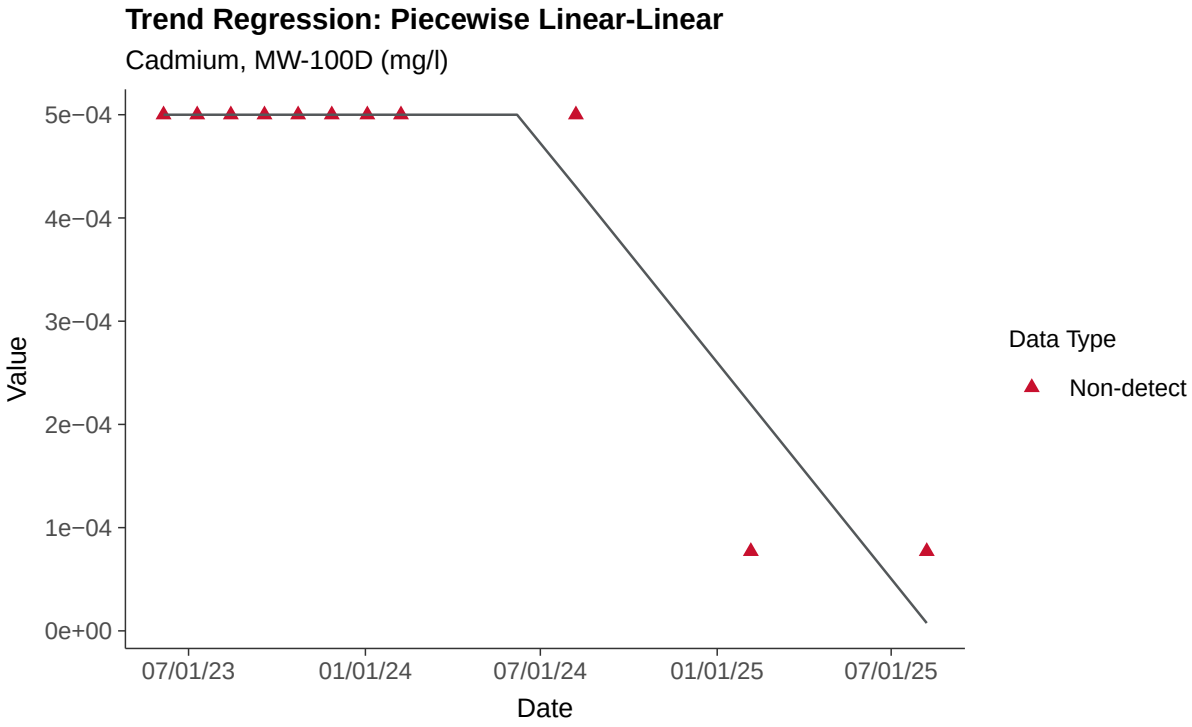
Cadmium, MW-100D (mg/l)



Boxplot by Season

Cadmium, MW-100D (mg/l)



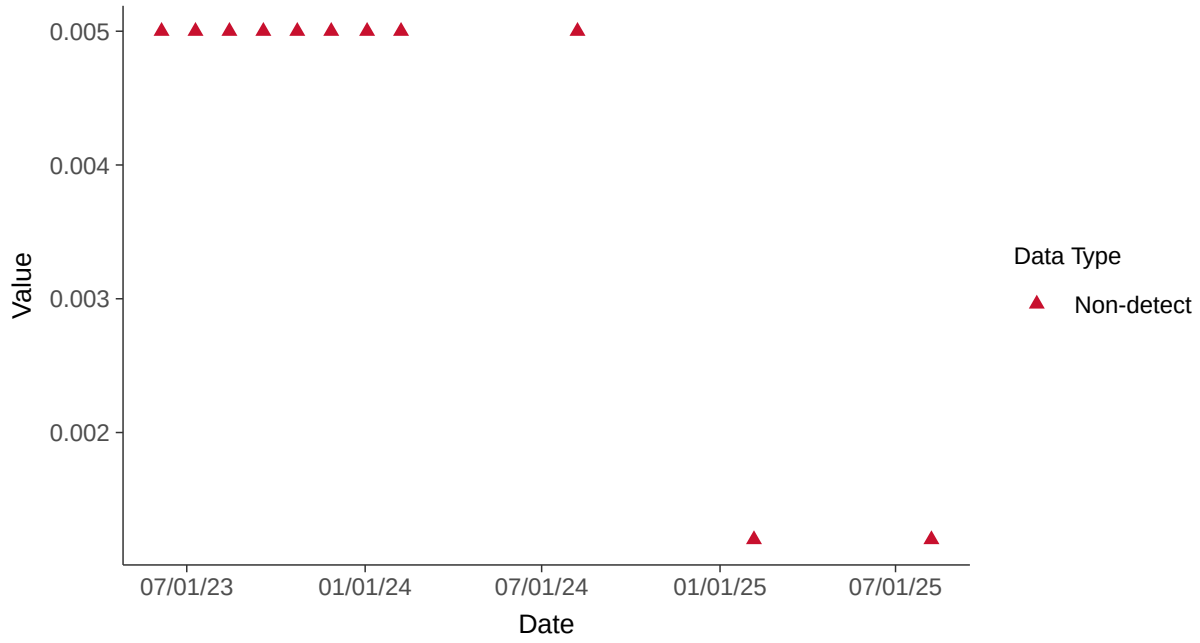

Trend Regression: Piecewise Linear-Linear
Cadmium, MW-100D (mg/l)
5e−04
4e−04
3e−04
2e−04
1e−04
0e+00
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Chromium, MW-100D

ID: 21_3_109

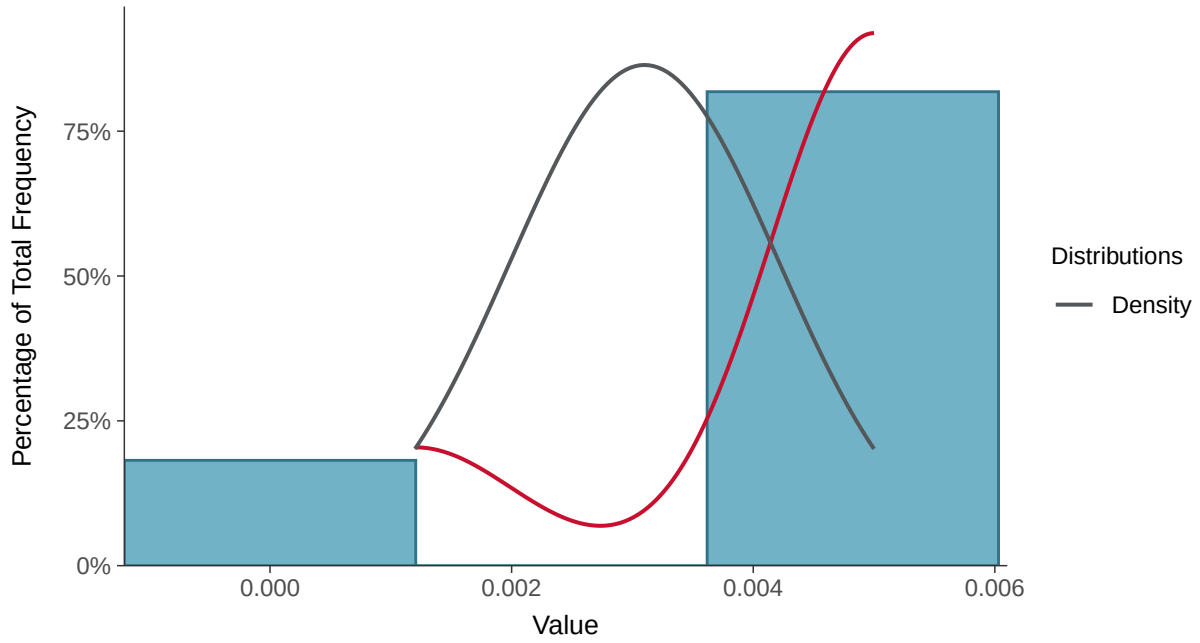
Scatter Plot

Chromium, MW-100D (mg/l)



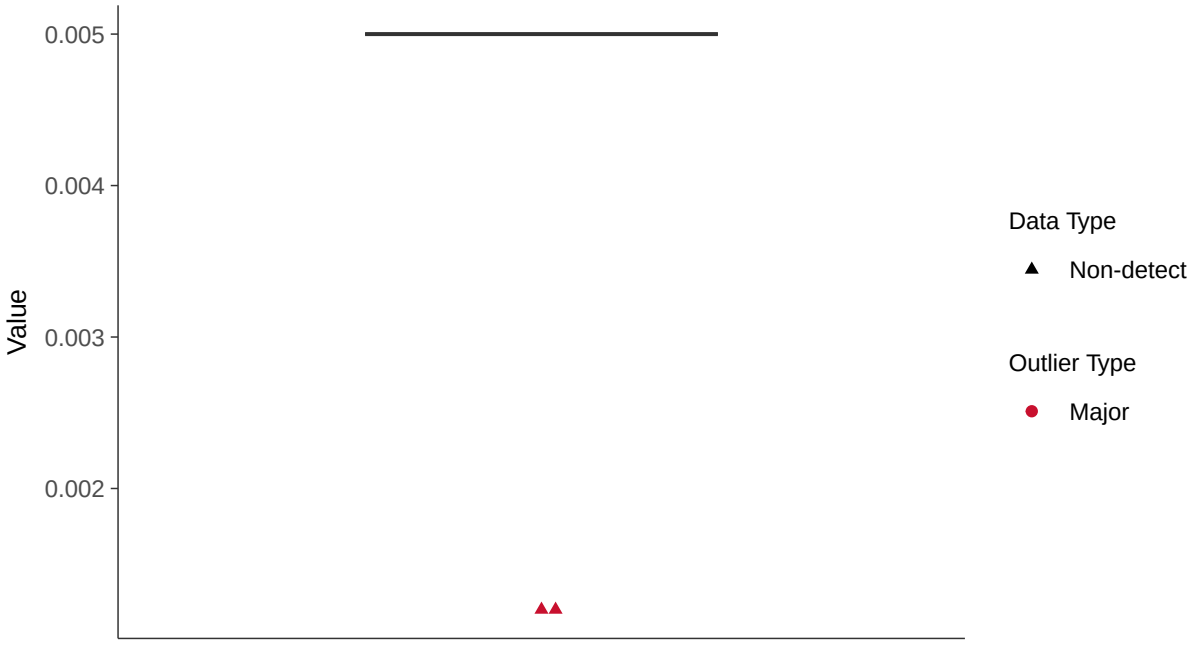
Histogram

Chromium, MW-100D (mg/l)



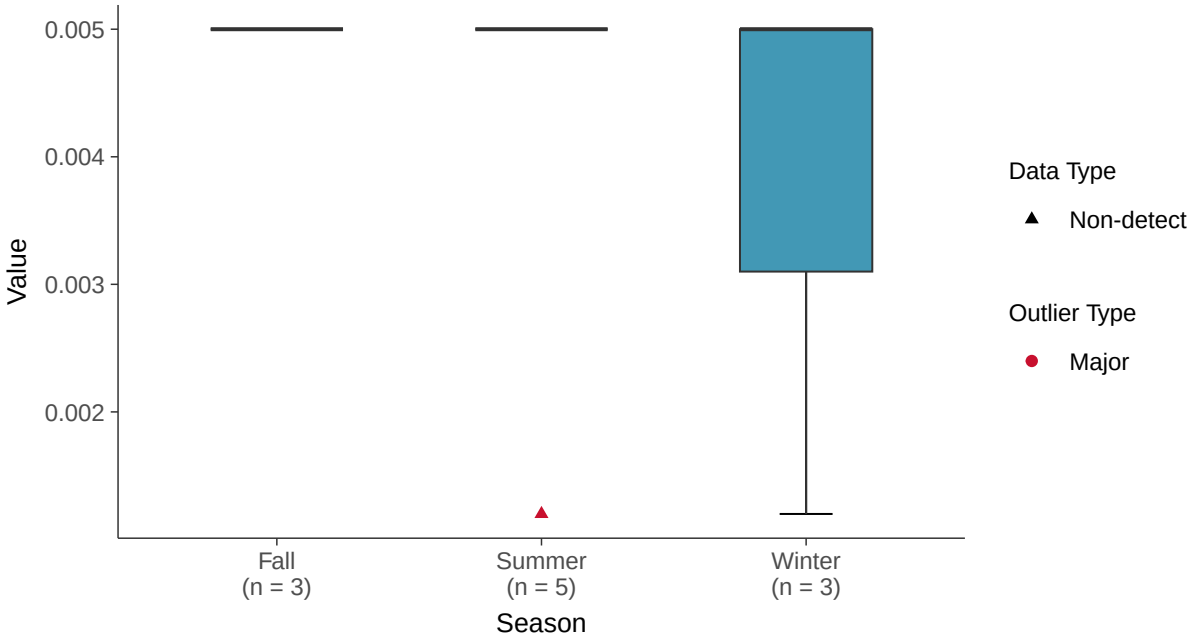
Boxplot

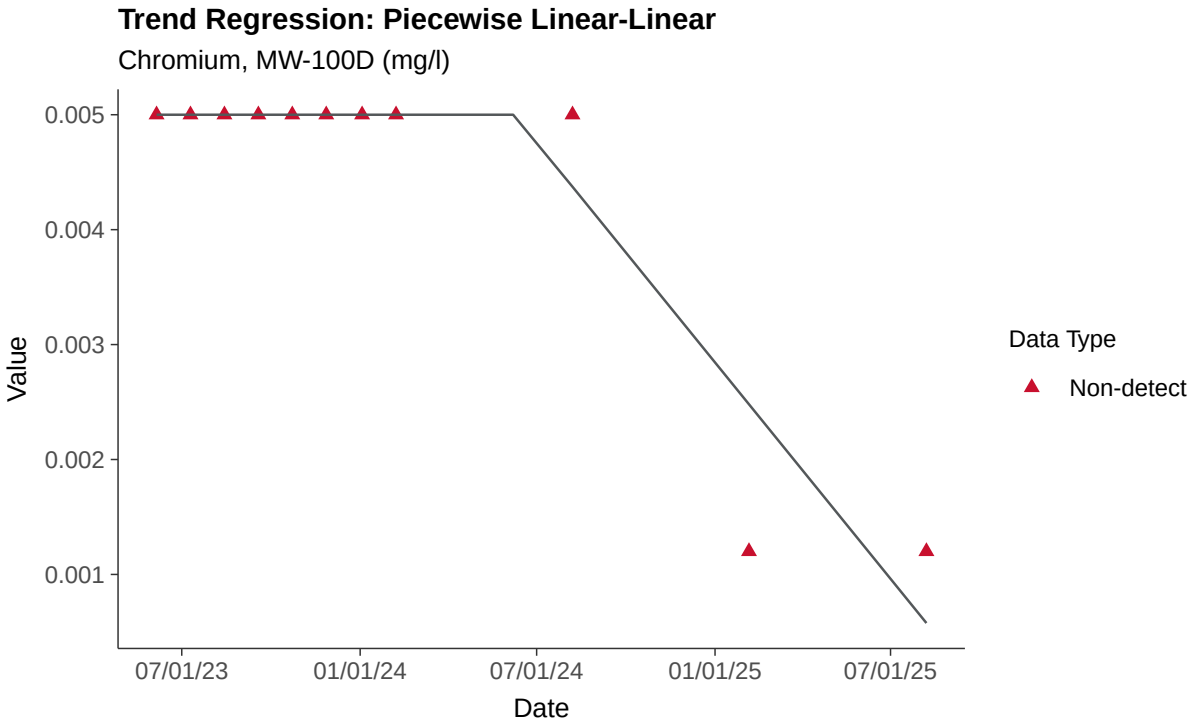
Chromium, MW-100D (mg/l)



Boxplot by Season

Chromium, MW-100D (mg/l)



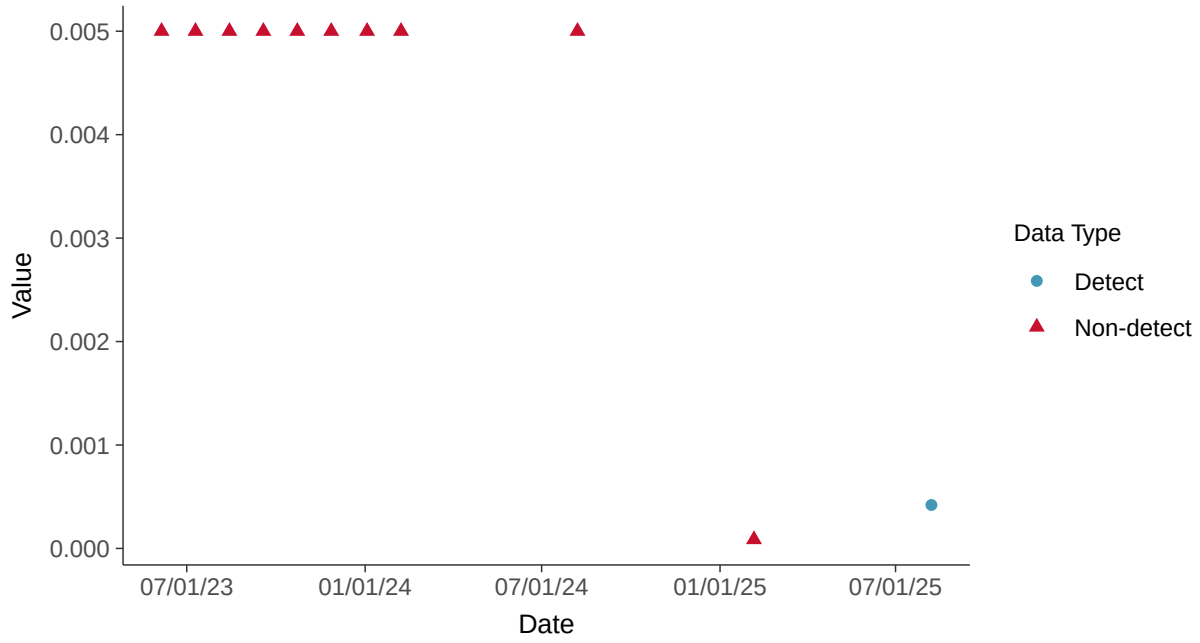

Trend Regression: Piecewise Linear-Linear
Chromium, MW-100D (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Cobalt, MW-100D

ID: 21_3_110

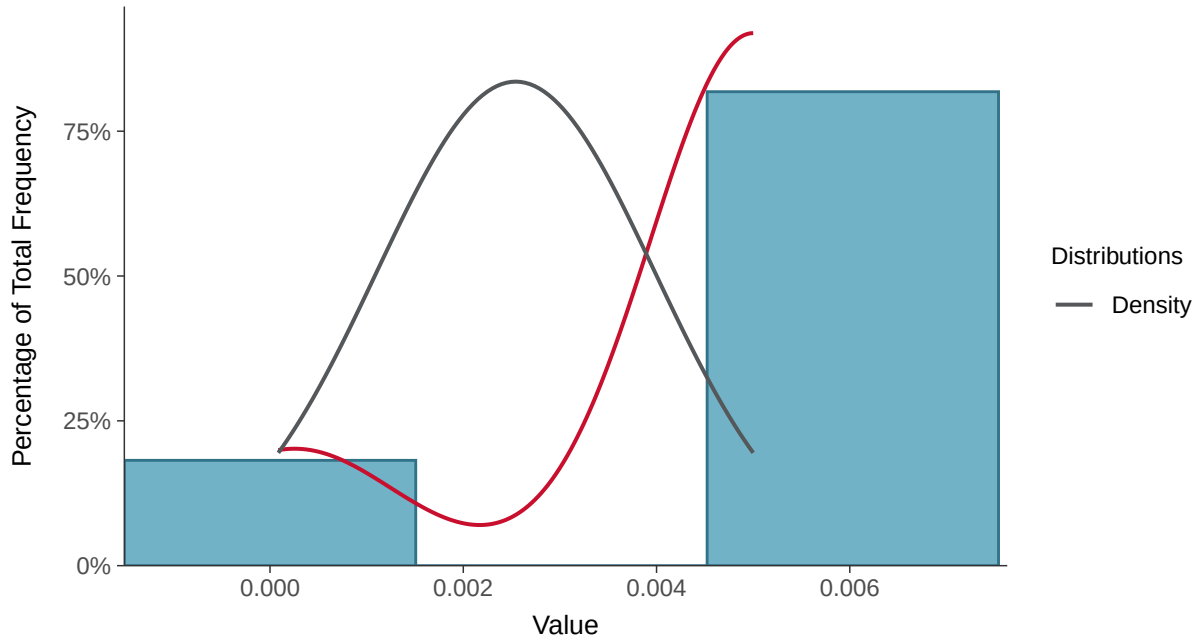
Scatter Plot

Cobalt, MW-100D (mg/l)



Histogram

Cobalt, MW-100D (mg/l)

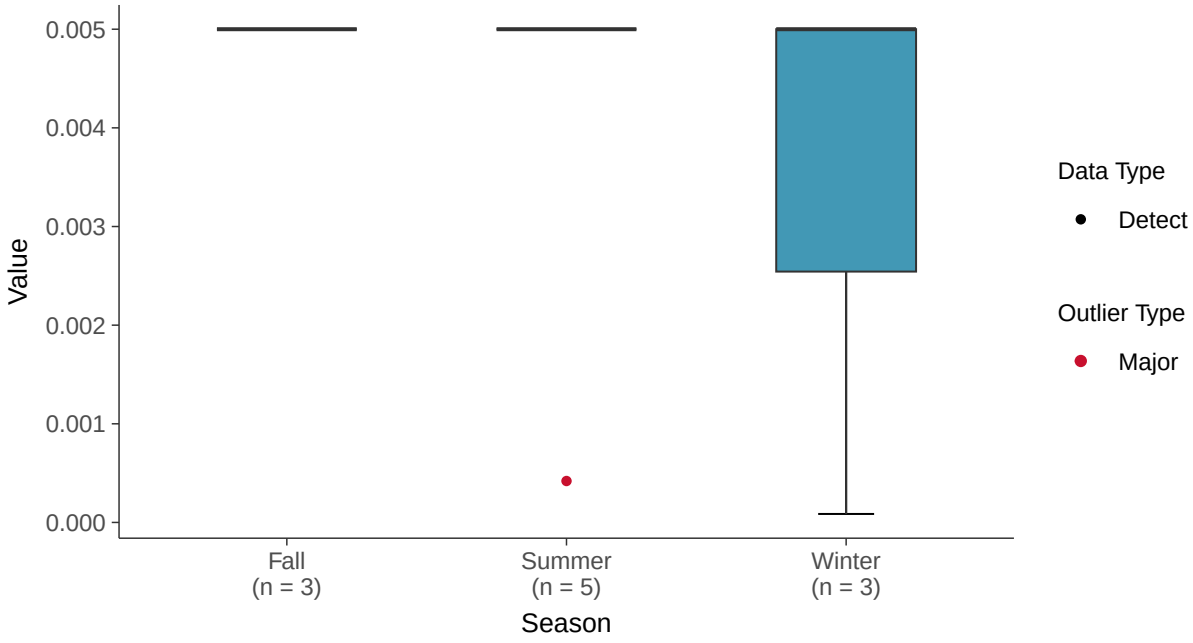


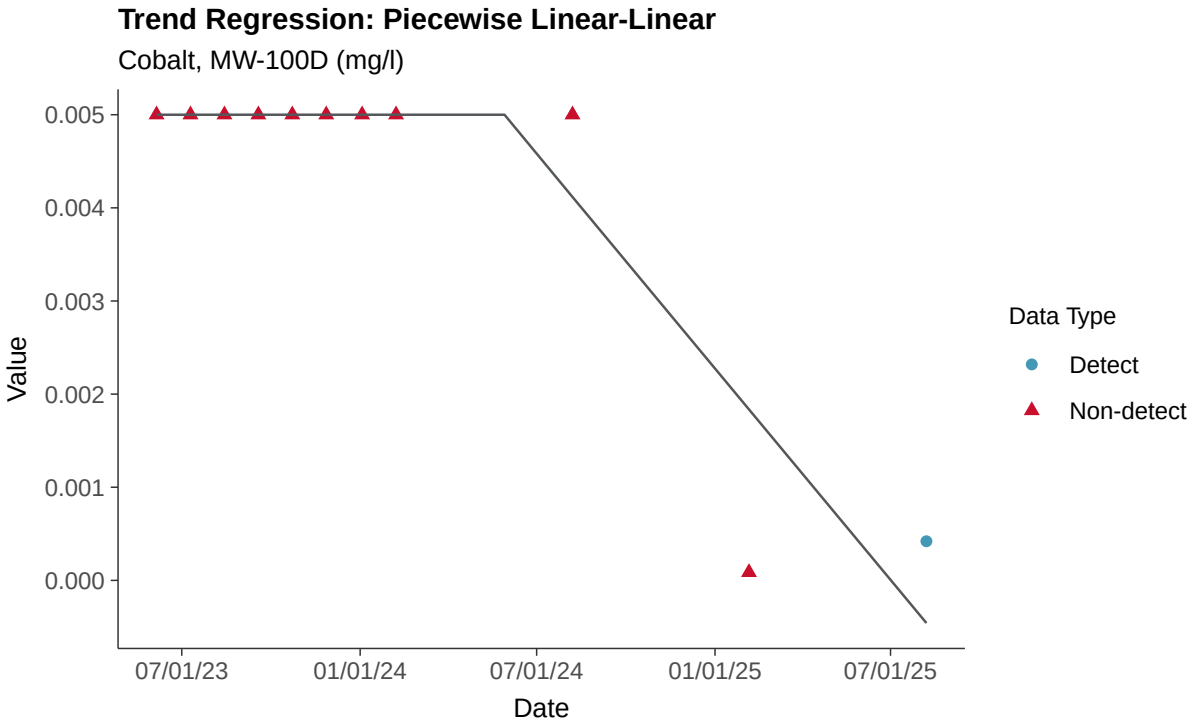
Boxplot

Cobalt, MW-100D (mg/l)

Boxplot by Season

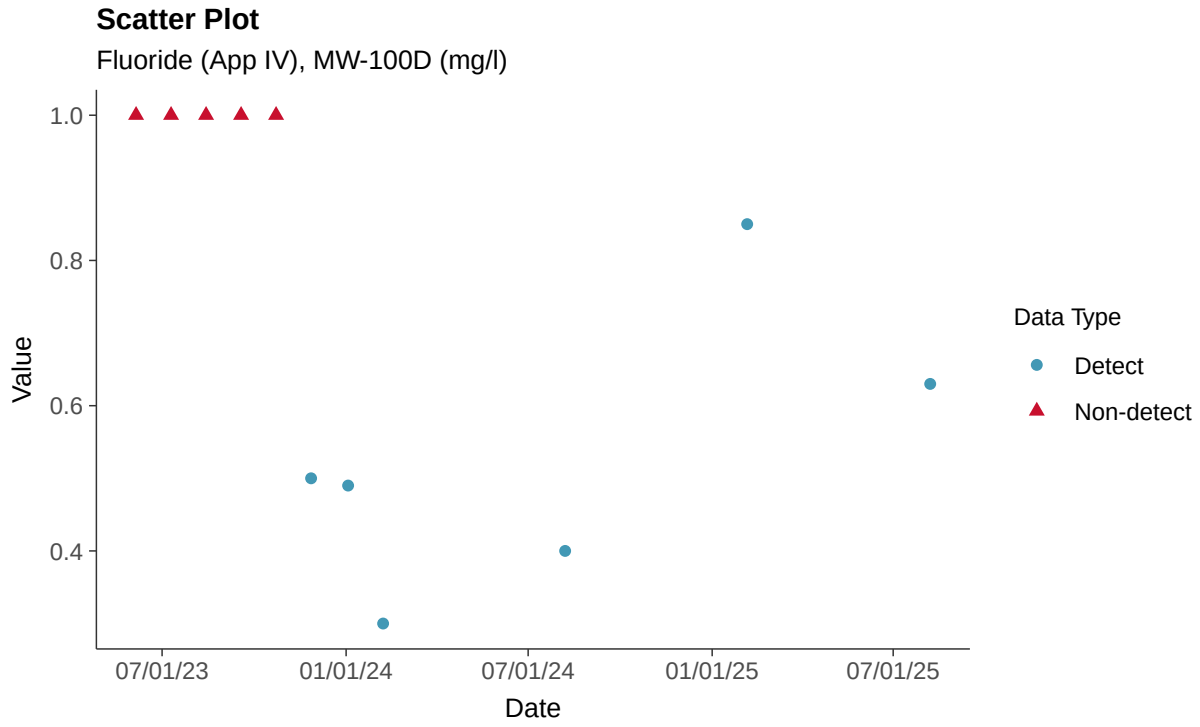
Cobalt, MW-100D (mg/l)

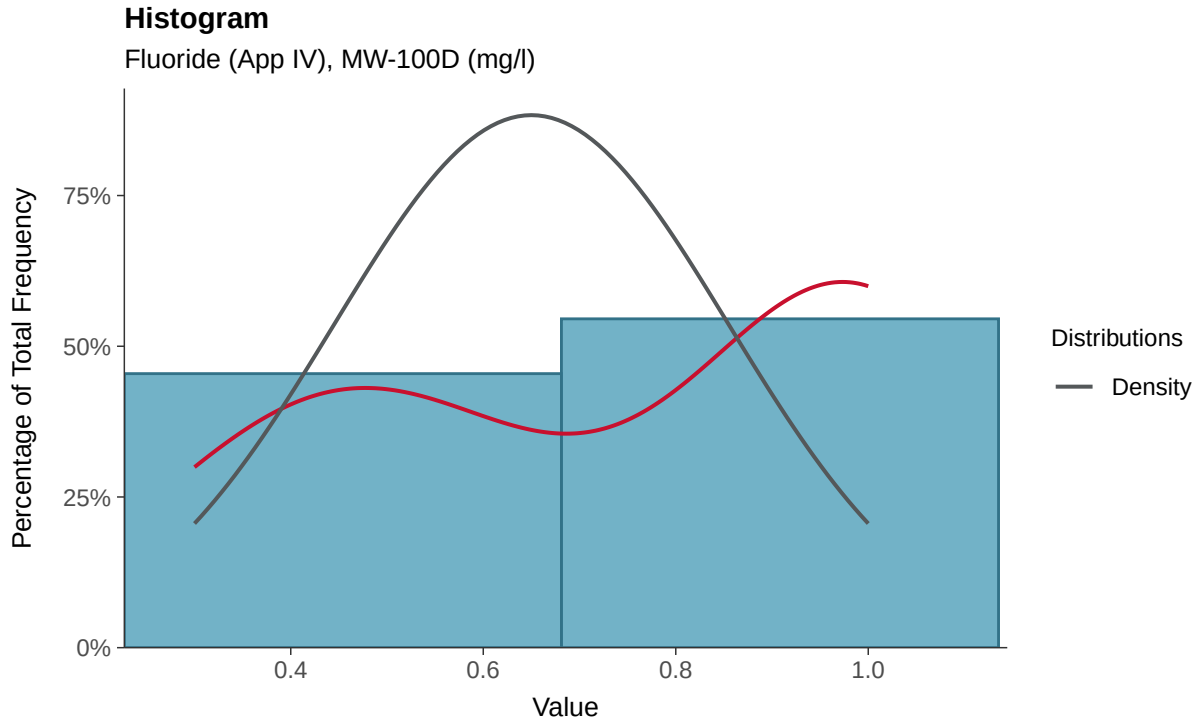



Trend Regression: Piecewise Linear-Linear
Cobalt, MW-100D (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Appendix IV: Fluoride (App IV), MW-100D

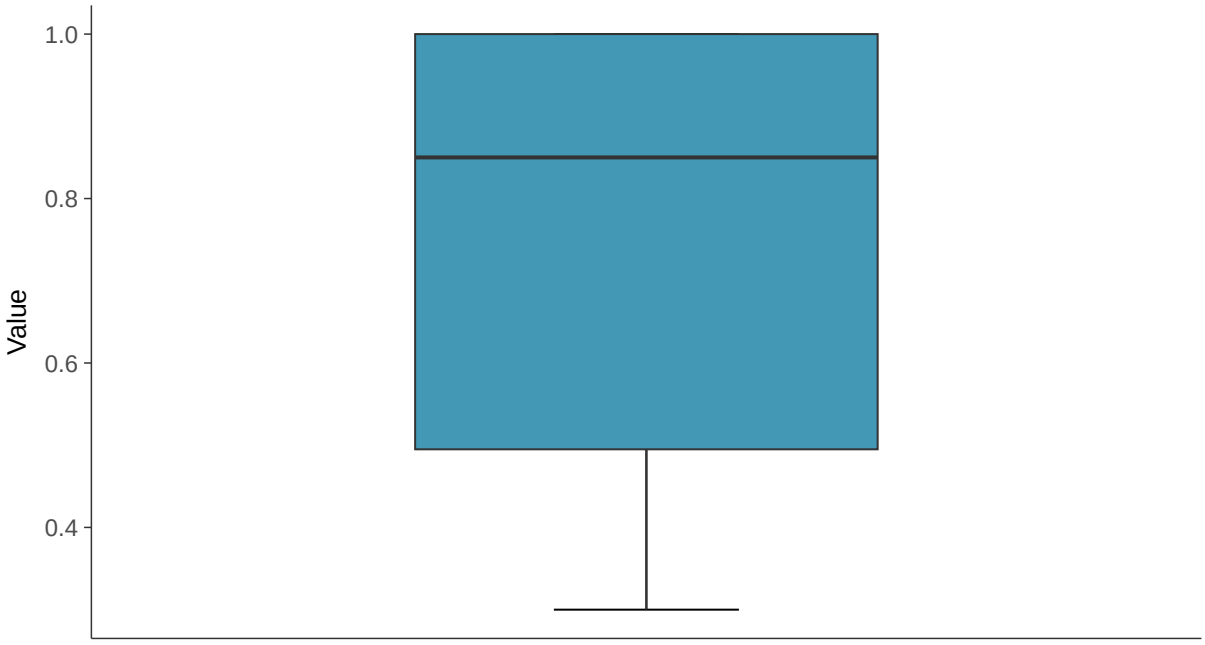
ID: 21_3_113





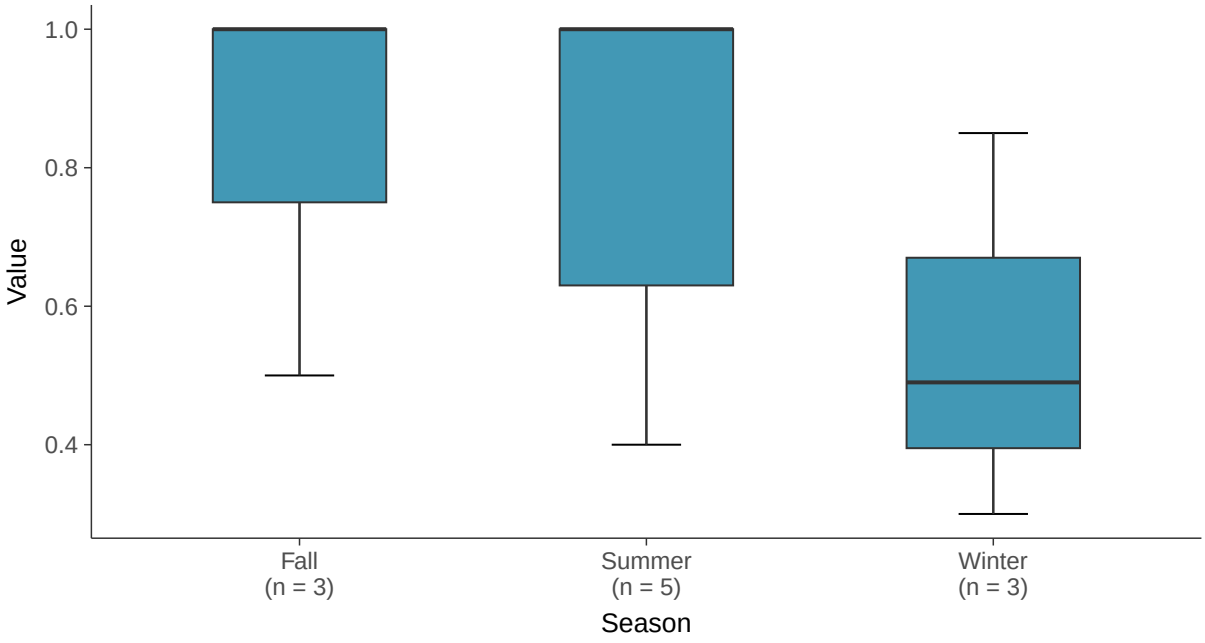
Boxplot

Fluoride (App IV), MW-100D (mg/l)



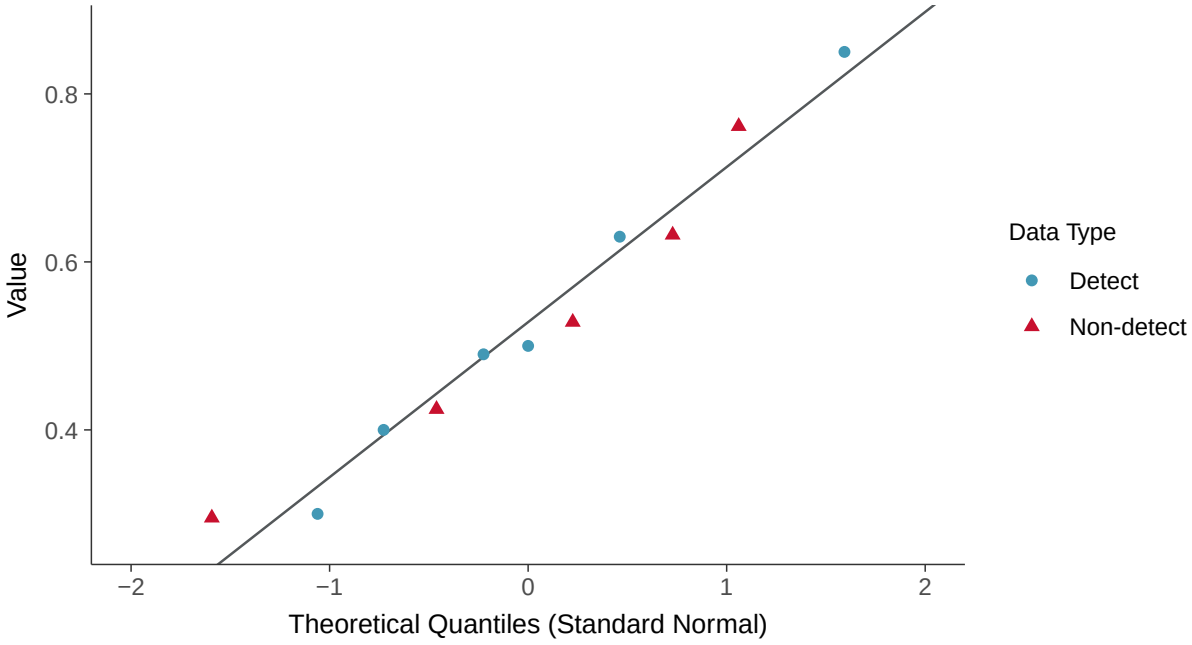
Boxplot by Season

Fluoride (App IV), MW-100D (mg/l)



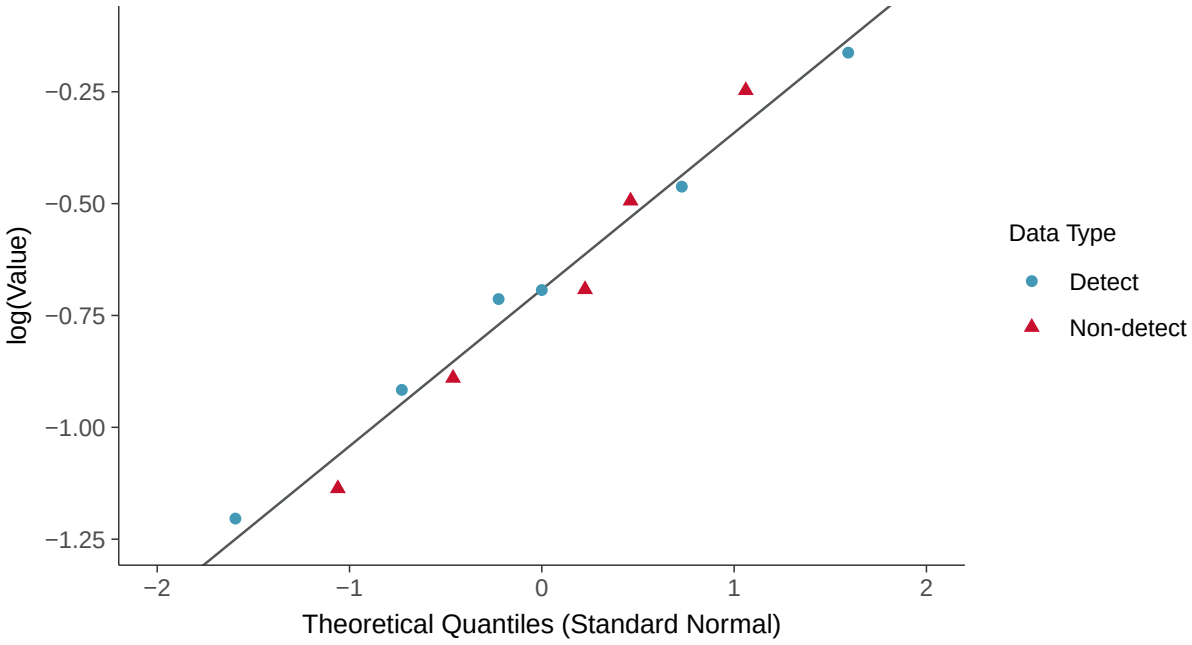
Normal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-100D (mg/l)



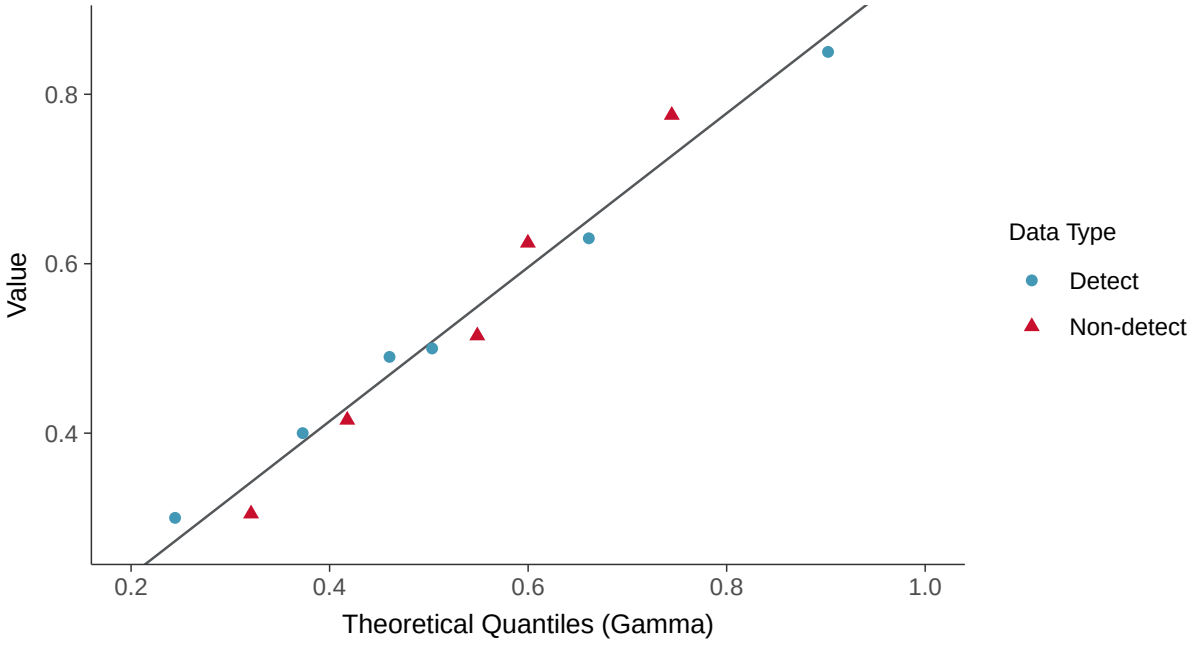
Lognormal Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-100D (mg/l)



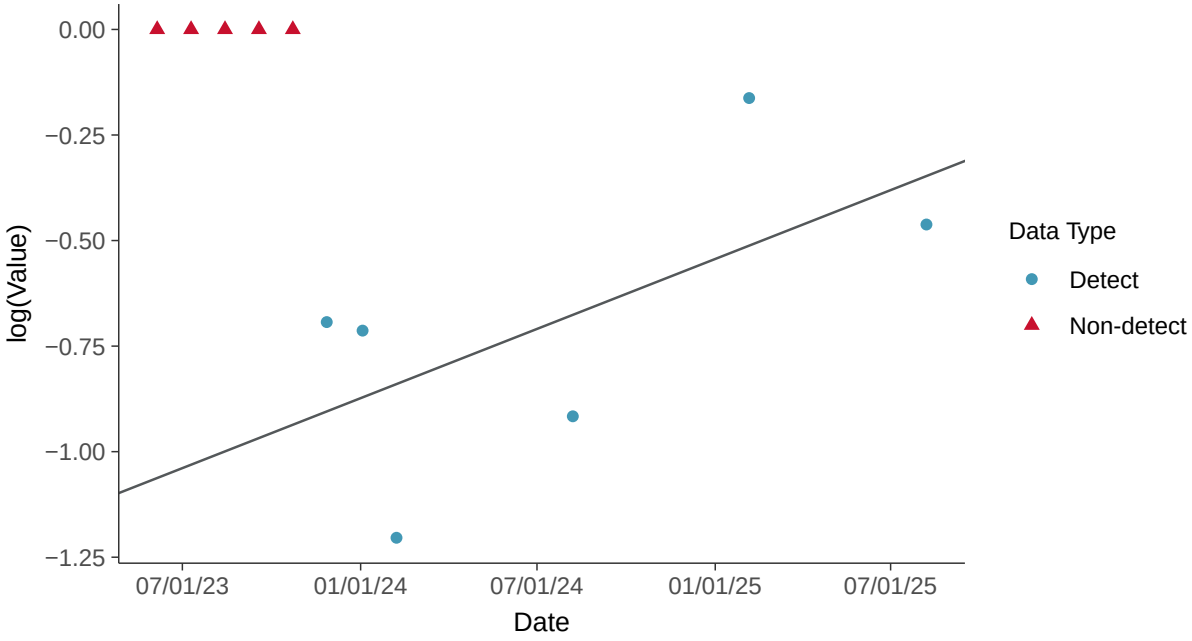
Gamma Q-Q plot using ROS Imputed Estimates

Fluoride (App IV), MW-100D (mg/l)



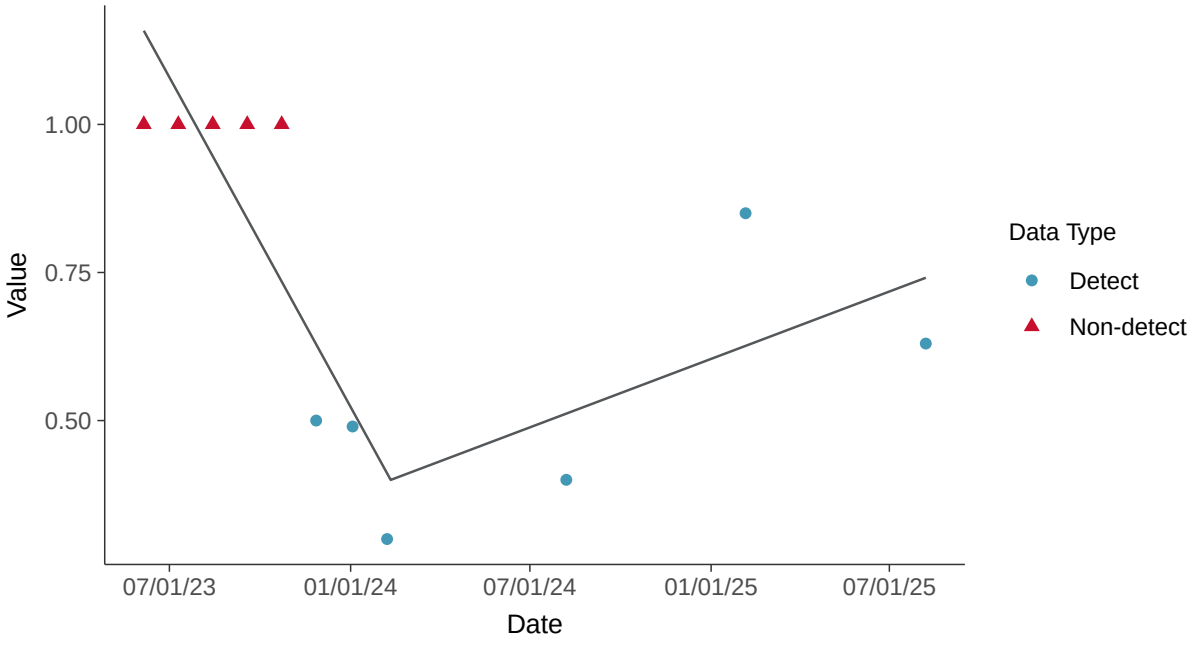
Trend Regression: Lognormal MLE

Fluoride (App IV), MW-100D (mg/l)



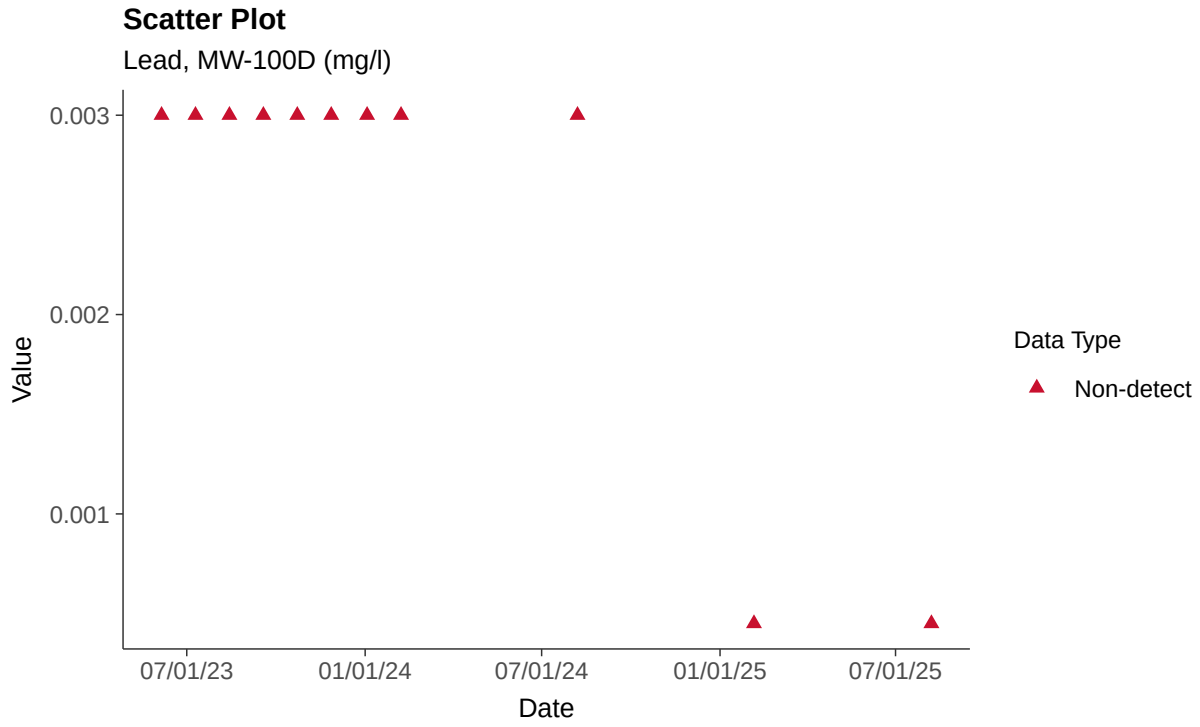
Trend Regression: Piecewise Linear-Linear

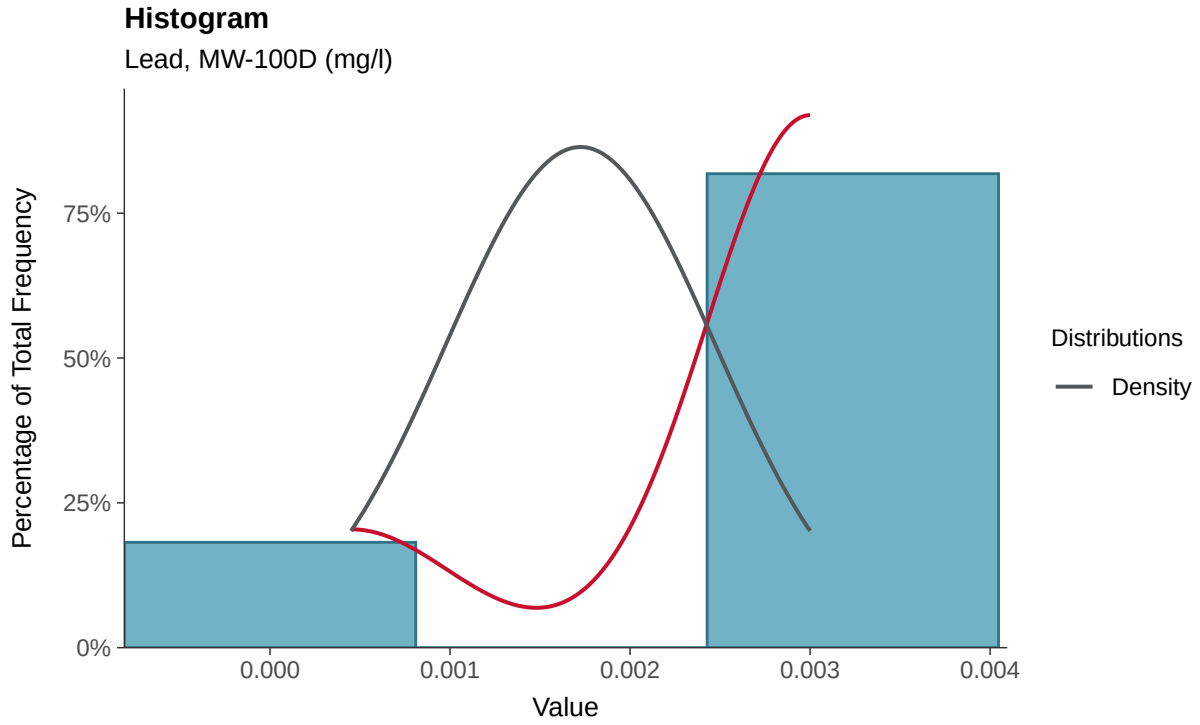
Fluoride (App IV), MW-100D (mg/l)



Appendix IV: Lead, MW-100D

ID: 21_3_115



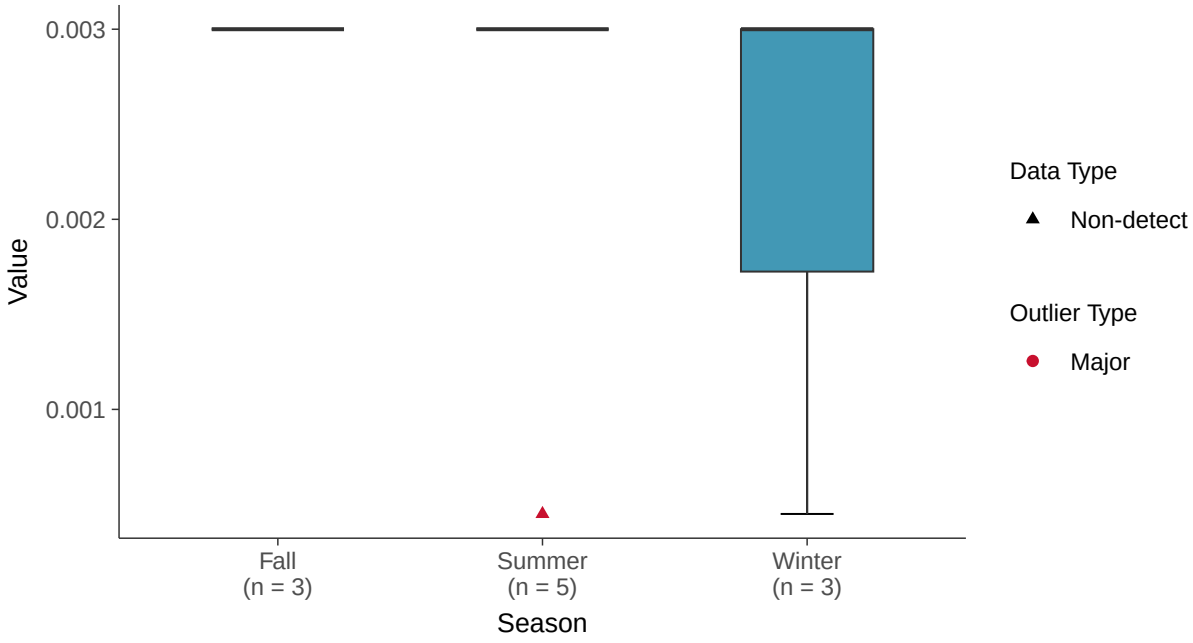


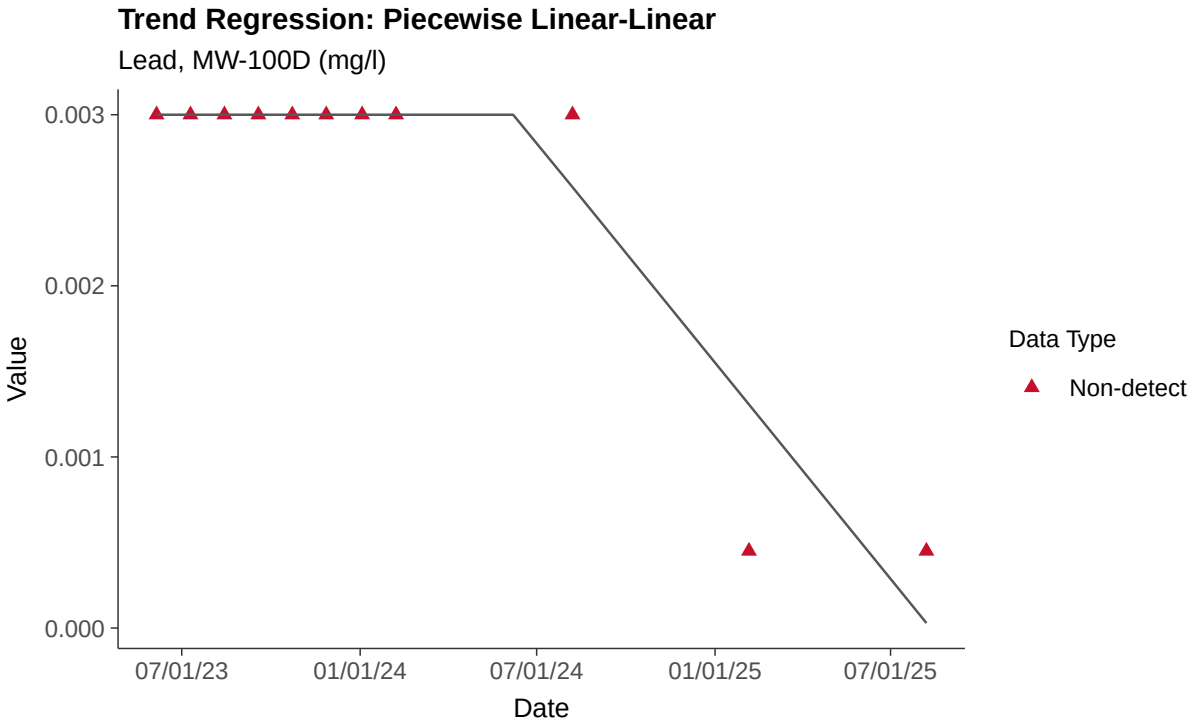
Boxplot

Lead, MW-100D (mg/l)

Boxplot by Season

Lead, MW-100D (mg/l)



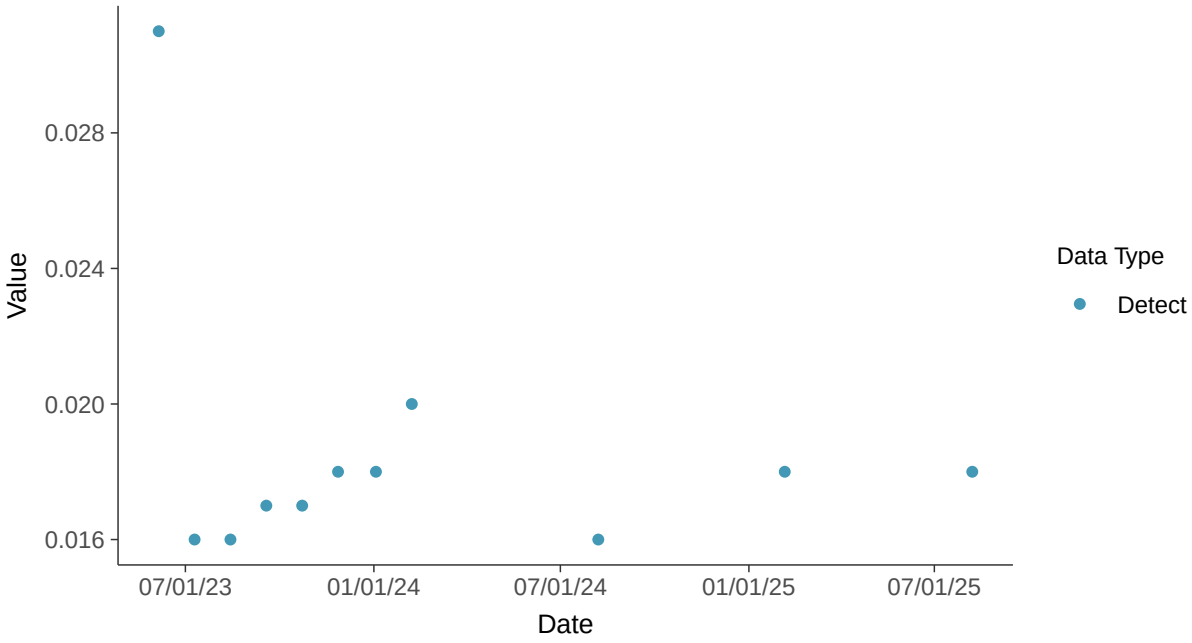

Trend Regression: Piecewise Linear-Linear
Lead, MW-100D (mg/l)
0.003
0.002
0.001
0.000
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Lithium, MW-100D

ID: 21_3_116

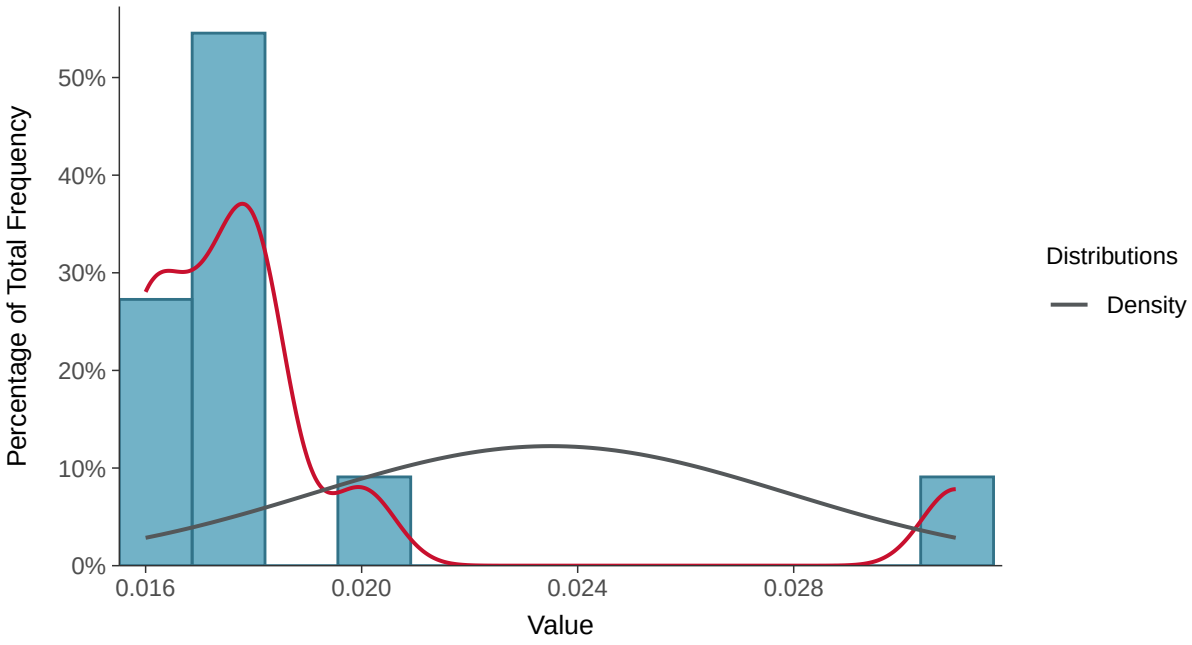
Scatter Plot

Lithium, MW-100D (mg/l)



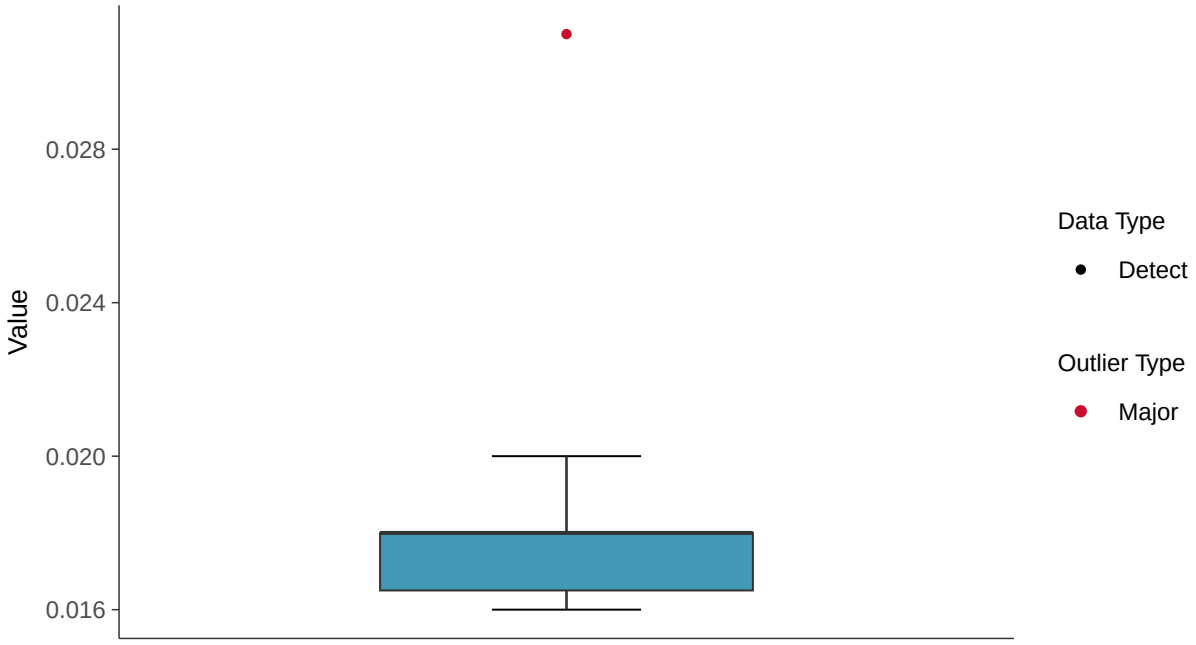
Histogram

Lithium, MW-100D (mg/l)



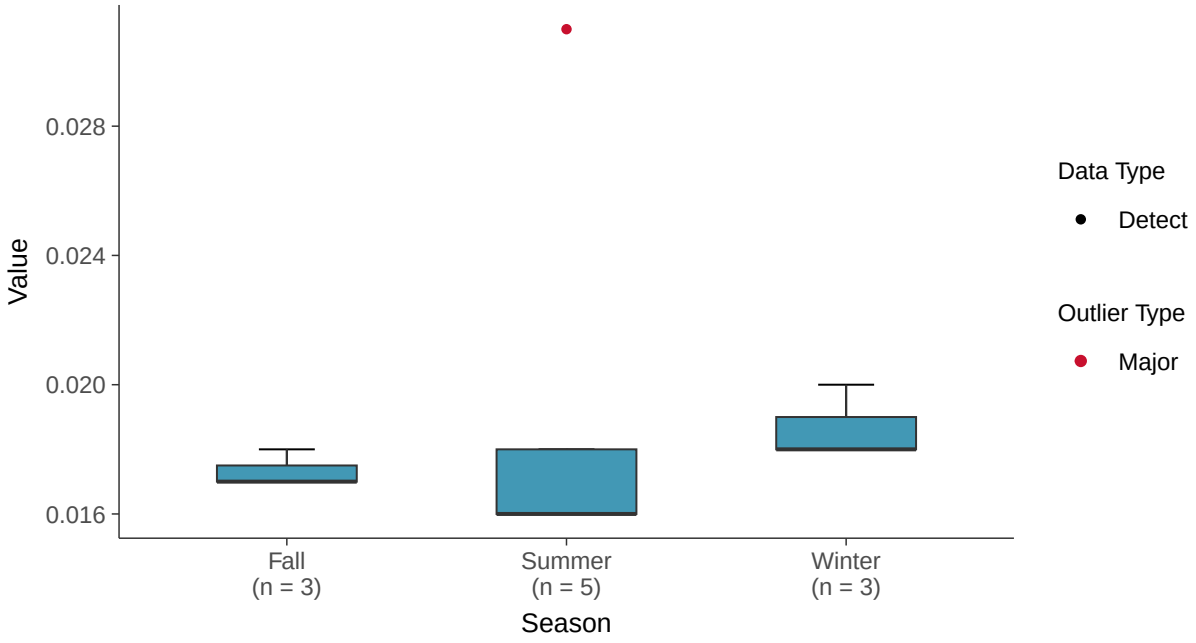
Boxplot

Lithium, MW-100D (mg/l)



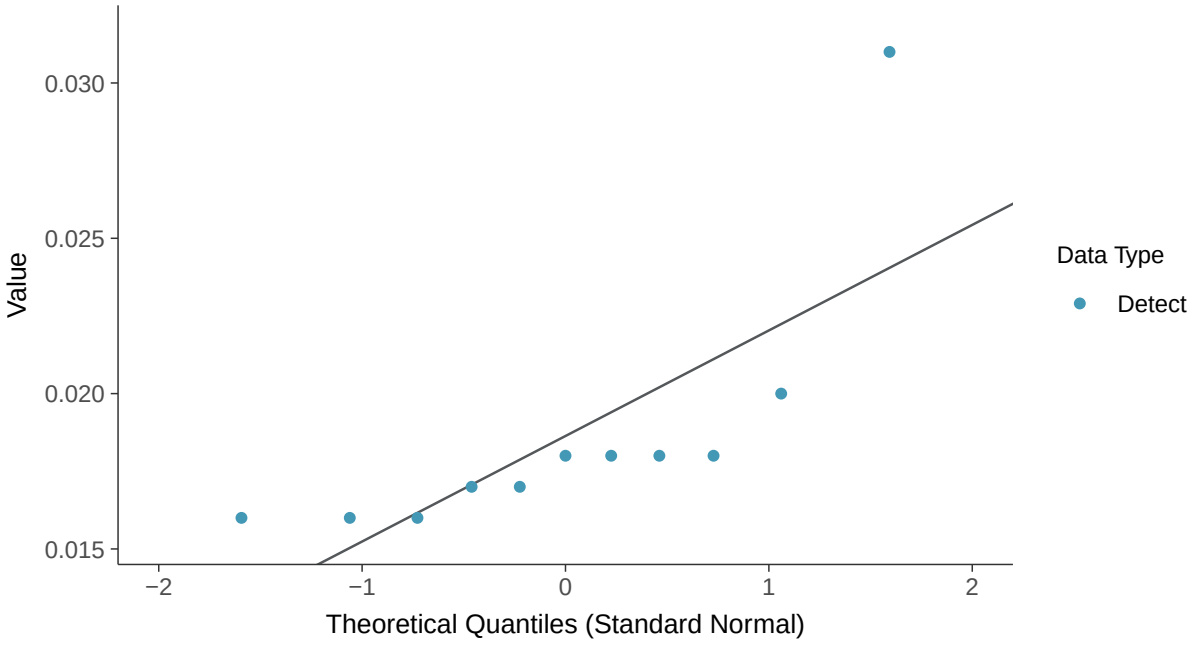
Boxplot by Season

Lithium, MW-100D (mg/l)



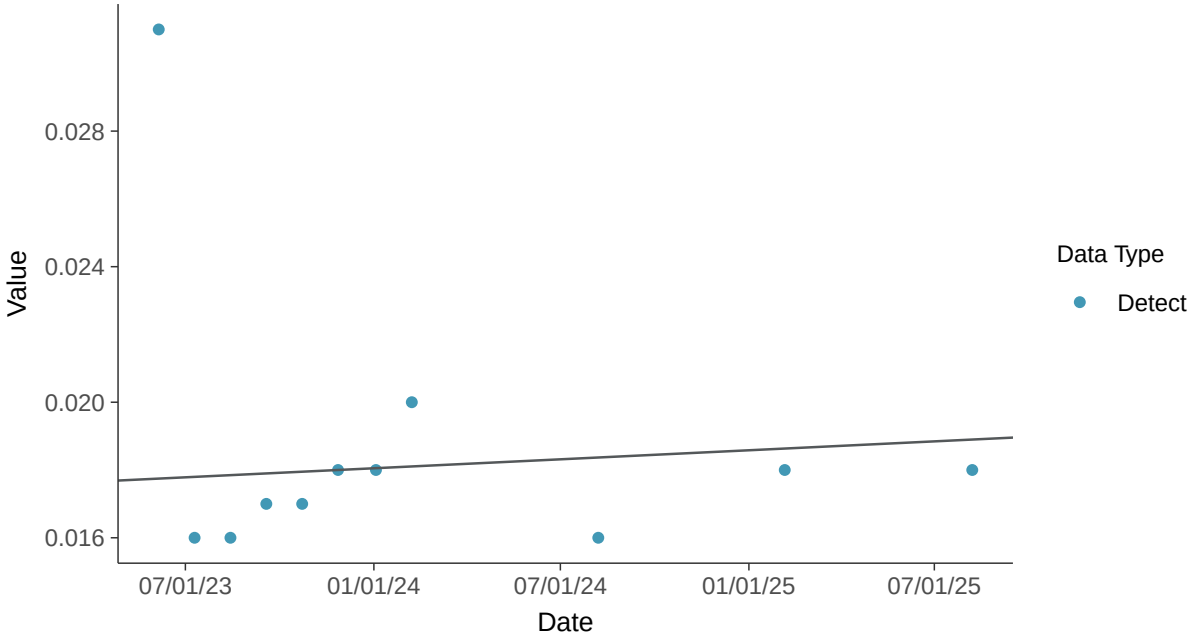
Normal Q-Q plot

Lithium, MW-100D (mg/l)



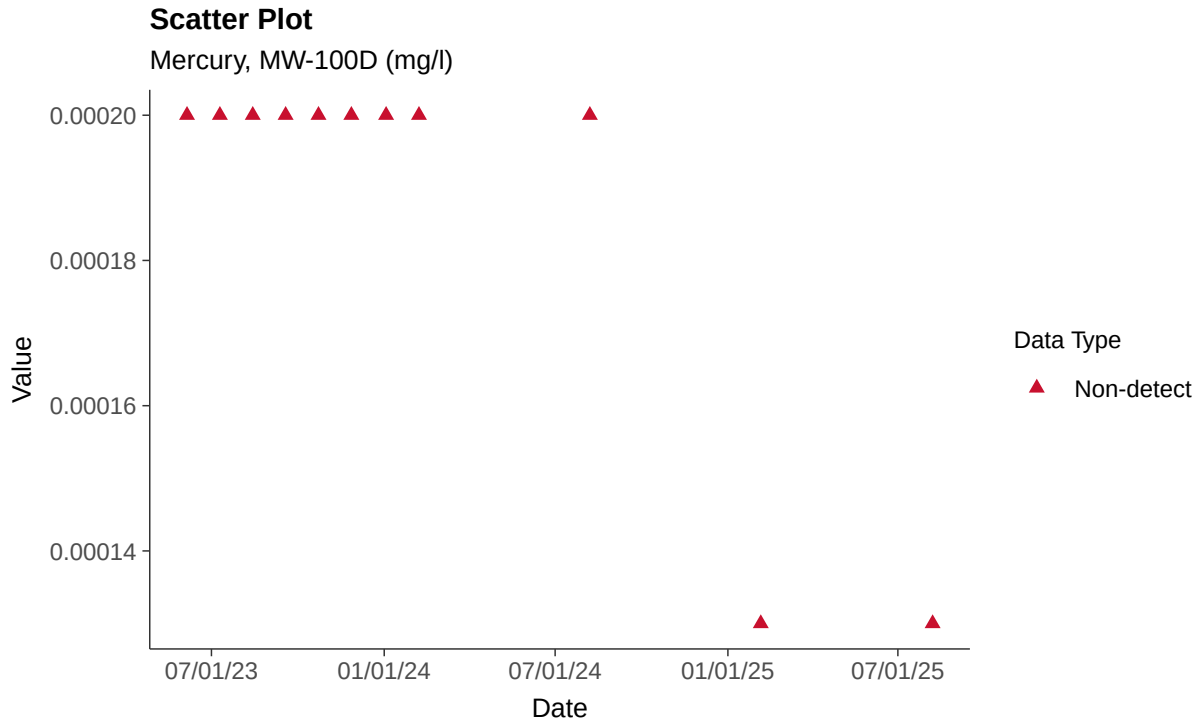
Trend Regression: Mann-Kendall/Theil-Sen Estimate

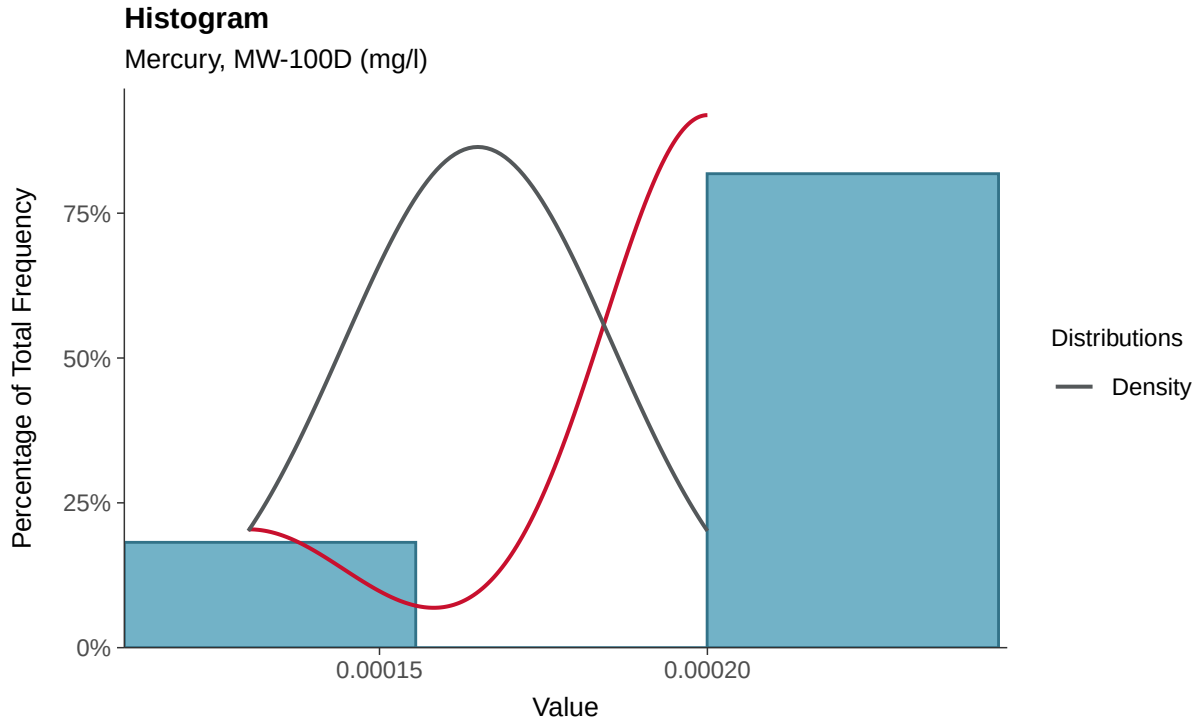
Lithium, MW-100D (mg/l)



Appendix IV: Mercury, MW-100D

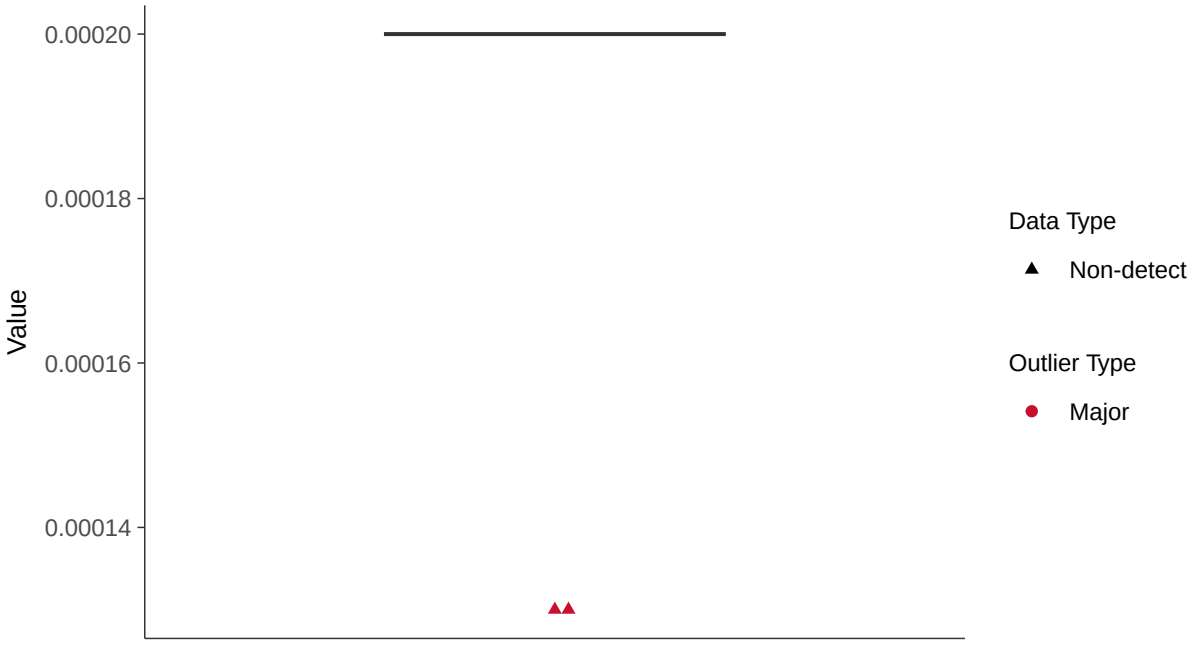
ID: 21_3_117





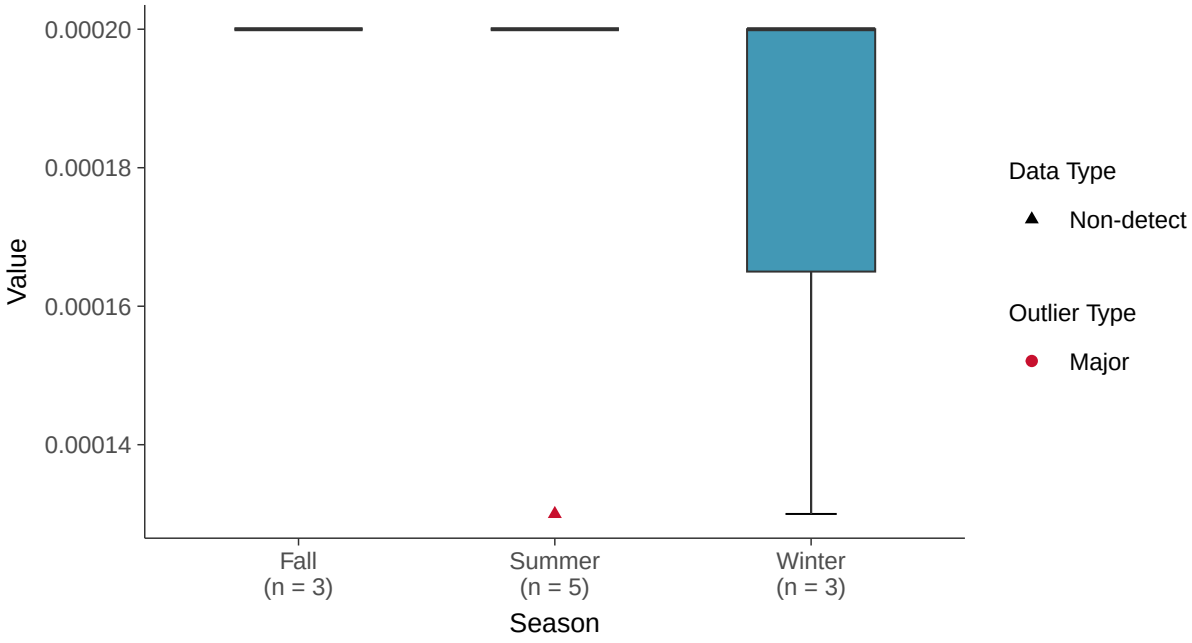
Boxplot

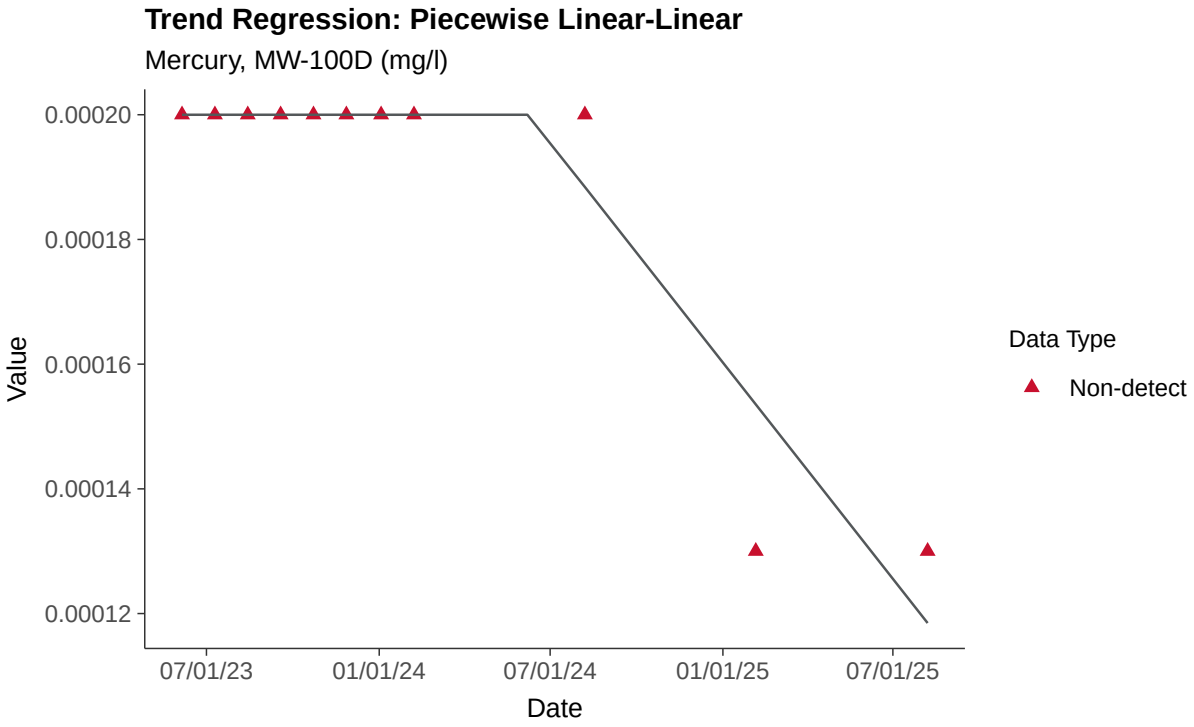
Mercury, MW-100D (mg/l)



Boxplot by Season

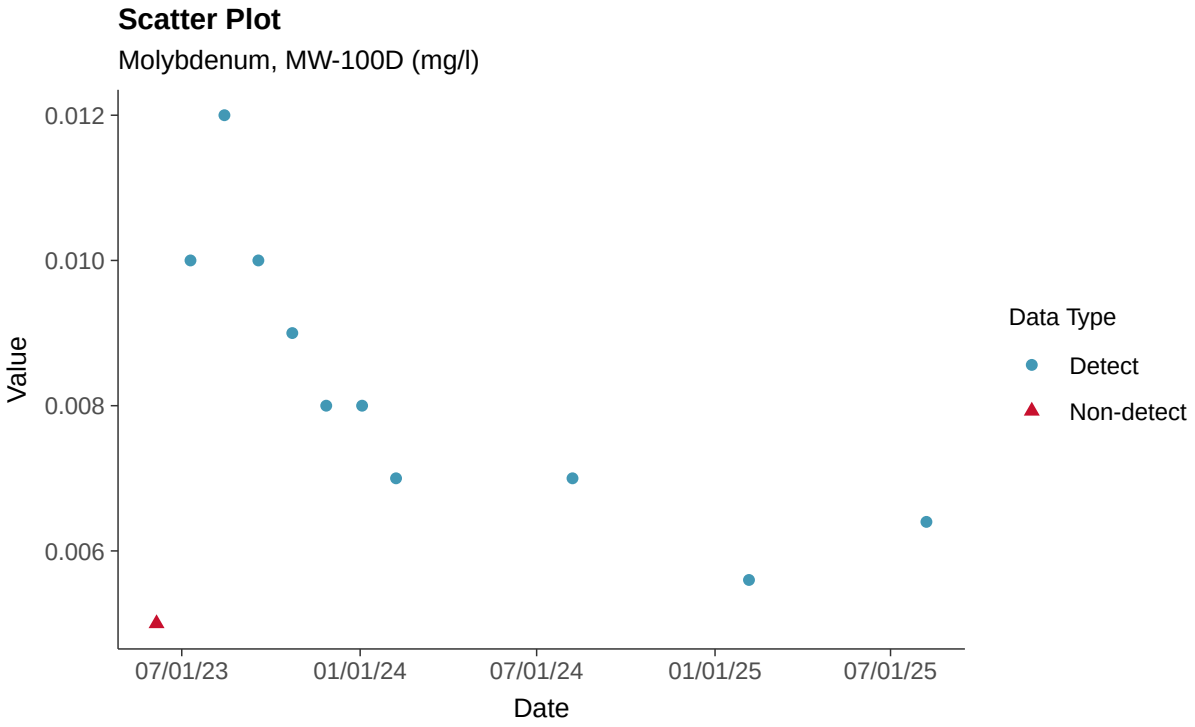
Mercury, MW-100D (mg/l)

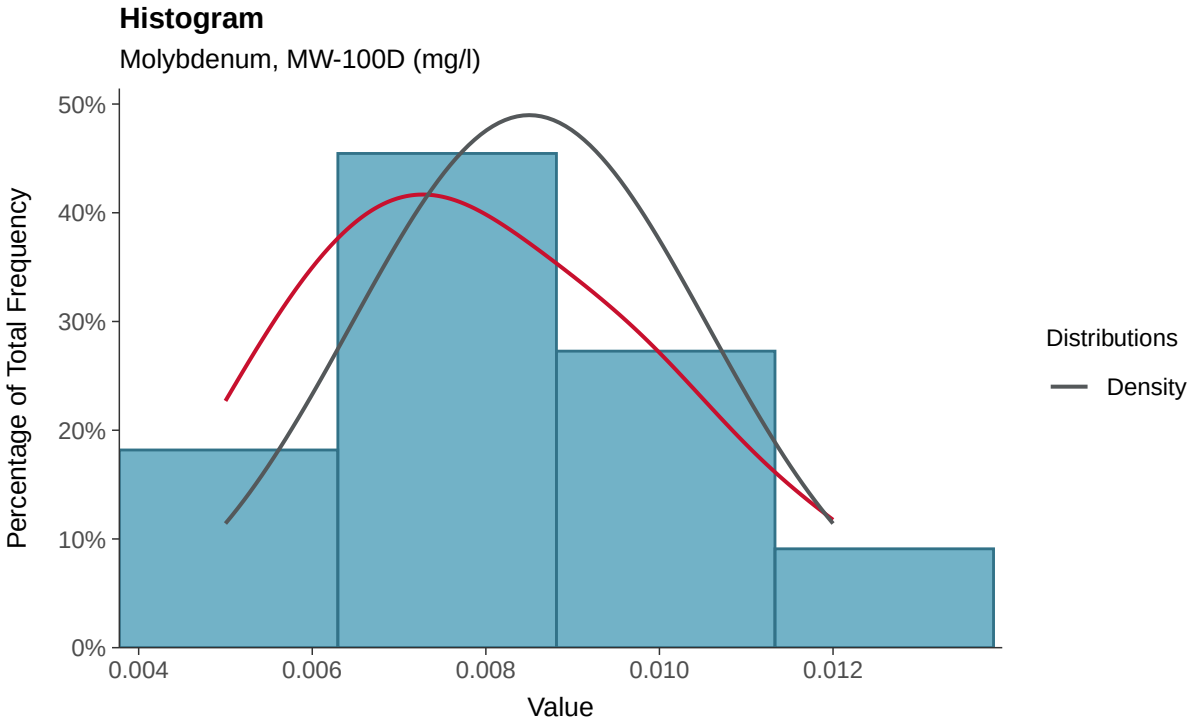



Trend Regression: Piecewise Linear-Linear
Mercury, MW-100D (mg/l)
Value
0.00020
0.00018
0.00016
0.00014
0.00012
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Molybdenum, MW-100D

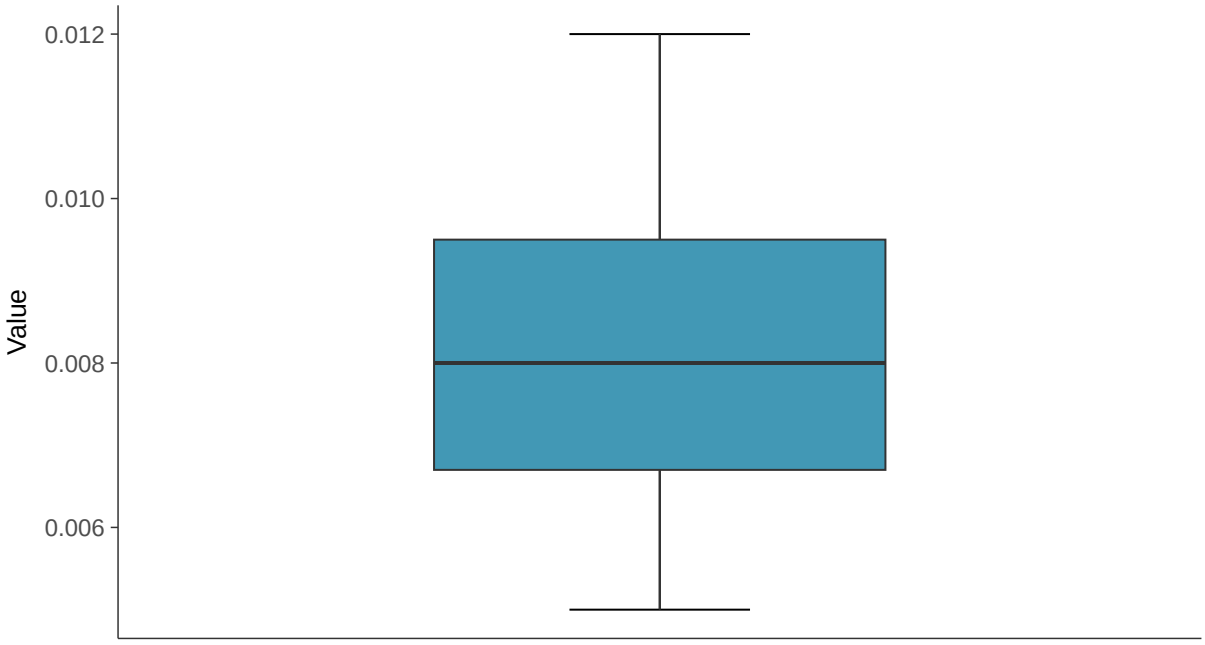
ID: 21_3_118





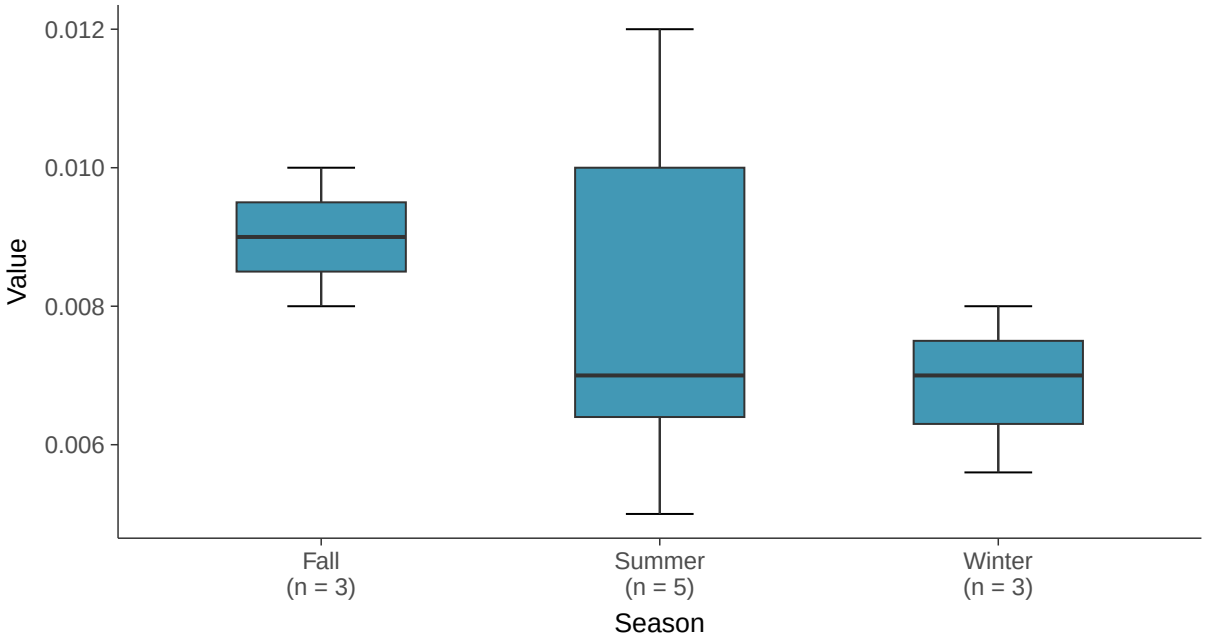
Boxplot

Molybdenum, MW-100D (mg/l)



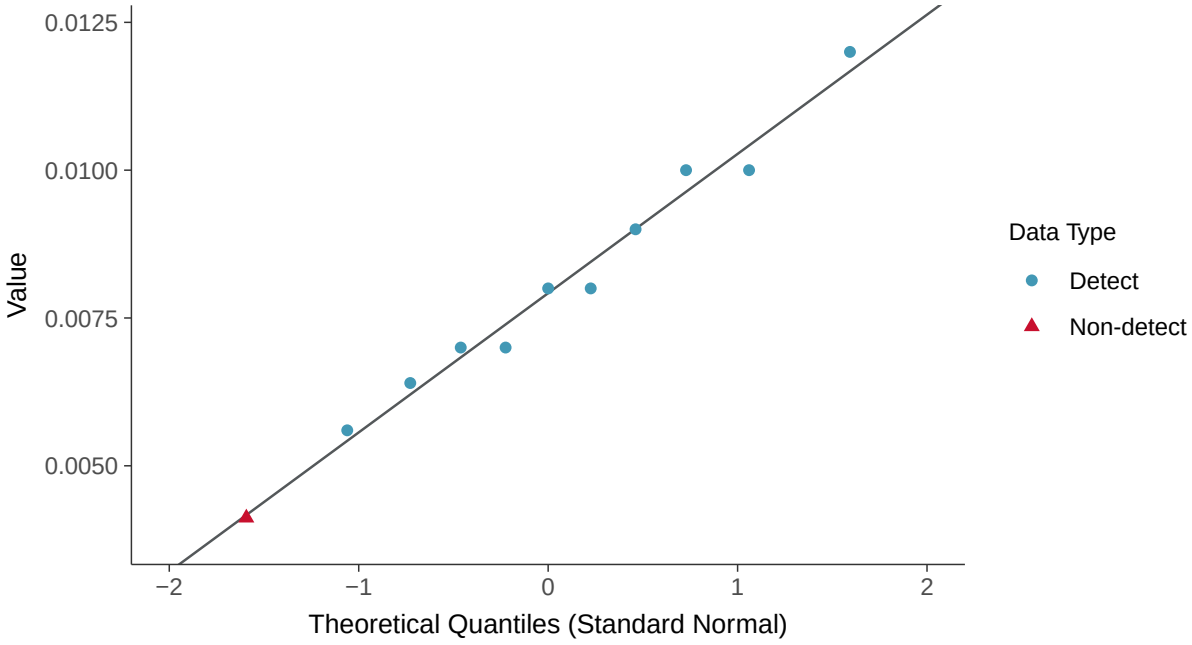
Boxplot by Season

Molybdenum, MW-100D (mg/l)



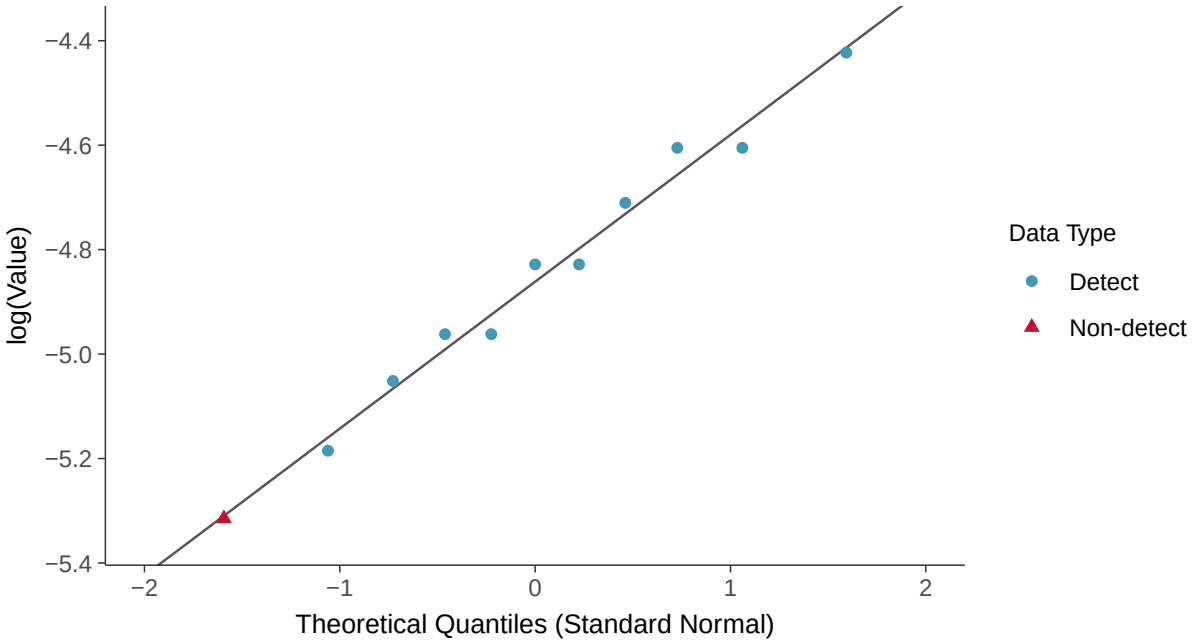
Normal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-100D (mg/l)



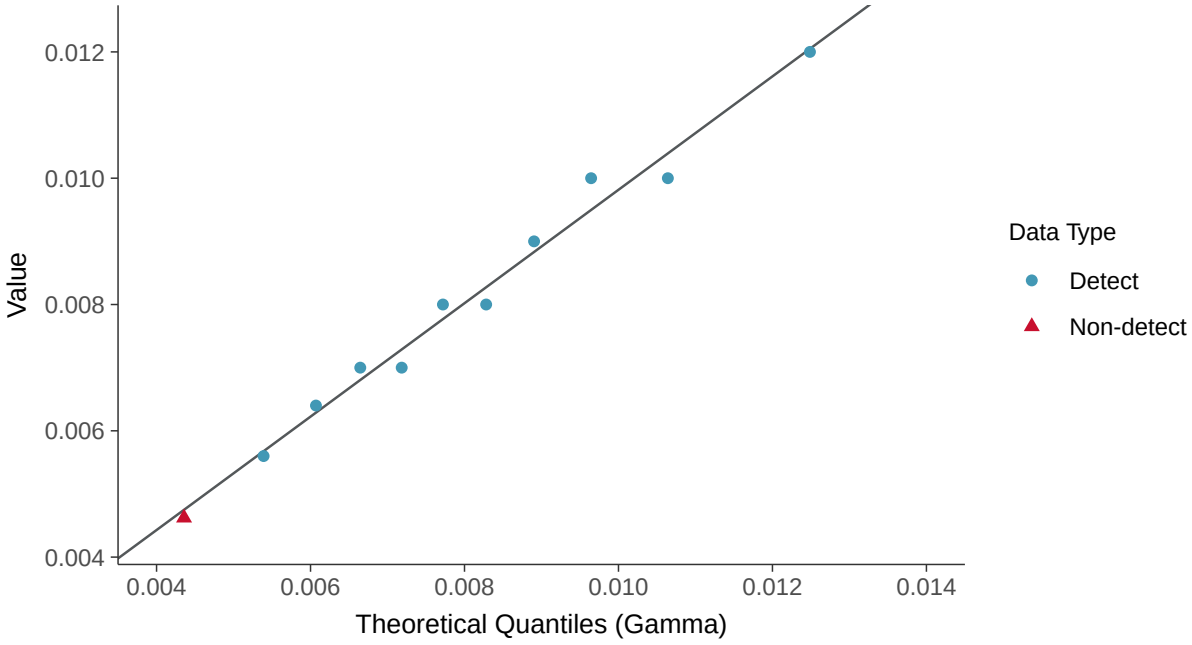
Lognormal Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-100D (mg/l)



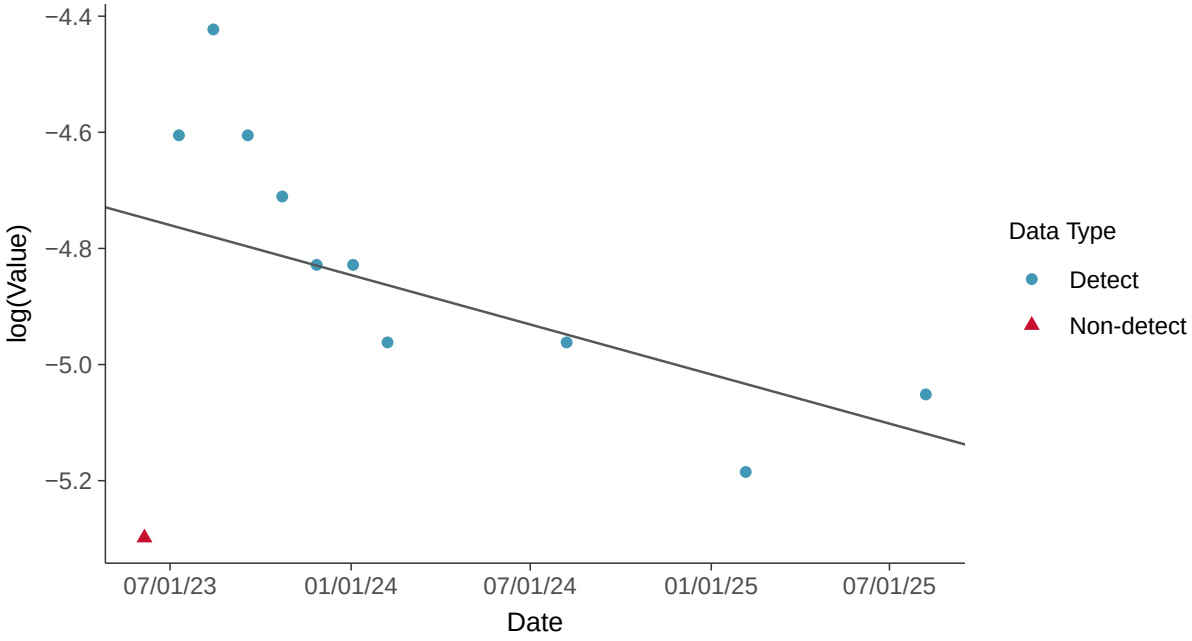
Gamma Q-Q plot using ROS Imputed Estimates

Molybdenum, MW-100D (mg/l)



Trend Regression: Lognormal MLE

Molybdenum, MW-100D (mg/l)

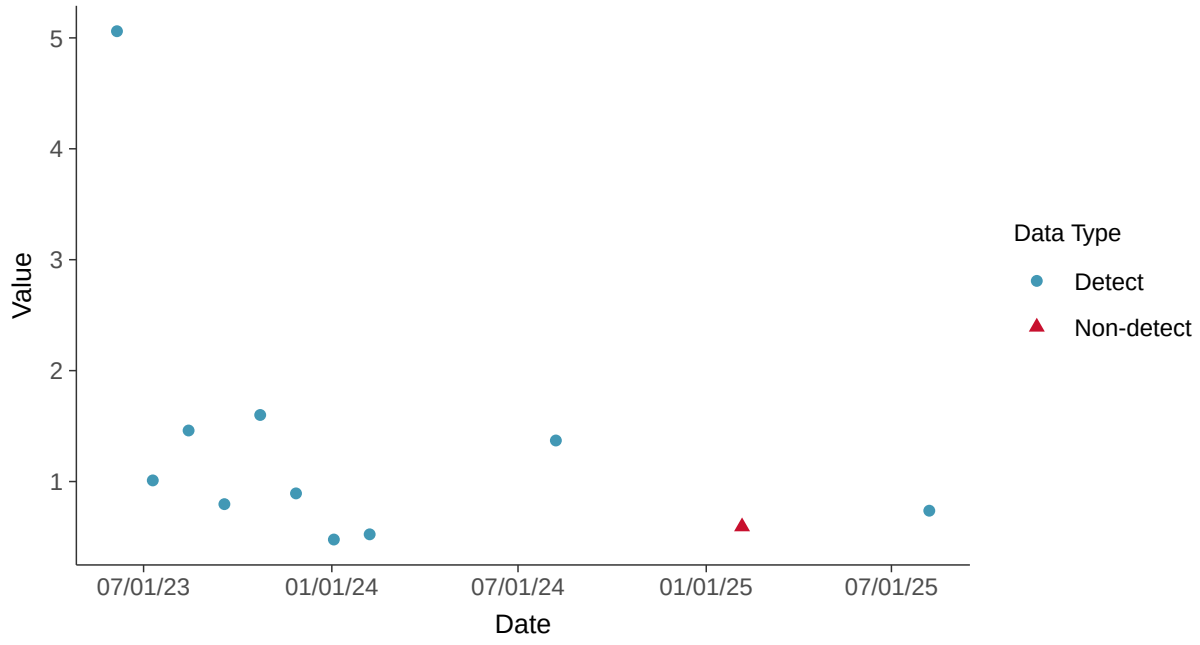


Appendix IV: Radium-226+228, MW-100D

ID: 21_3_121

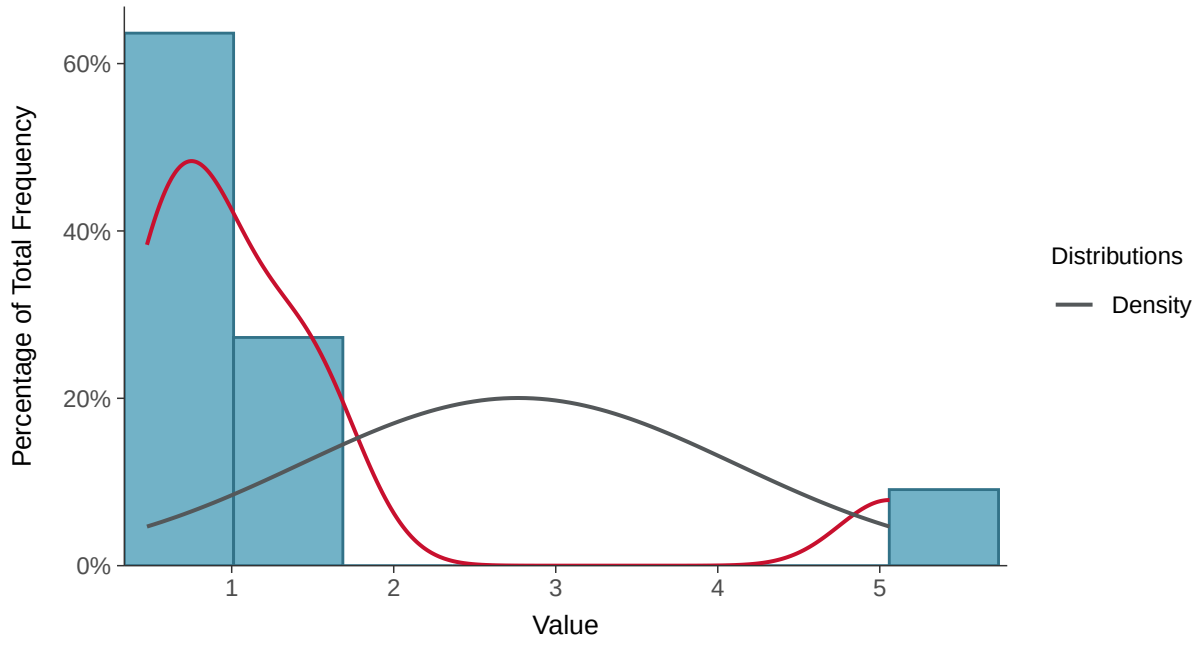
Scatter Plot

Radium-226+228, MW-100D (pci/l)



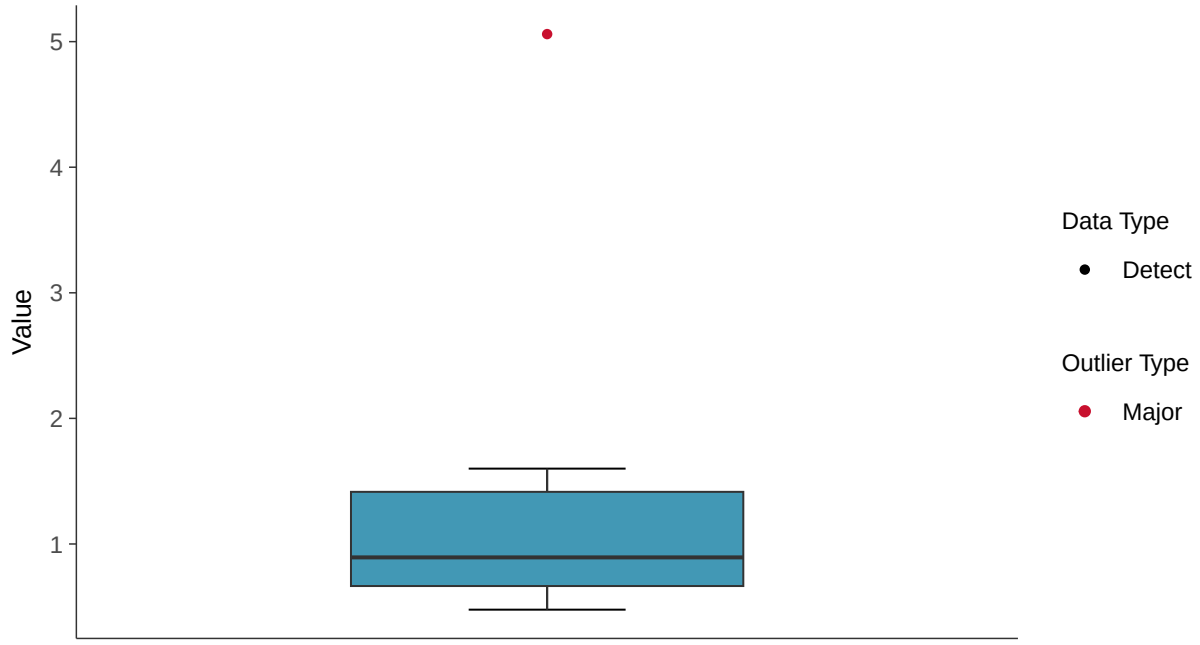
Histogram

Radium-226+228, MW-100D (pci/l)



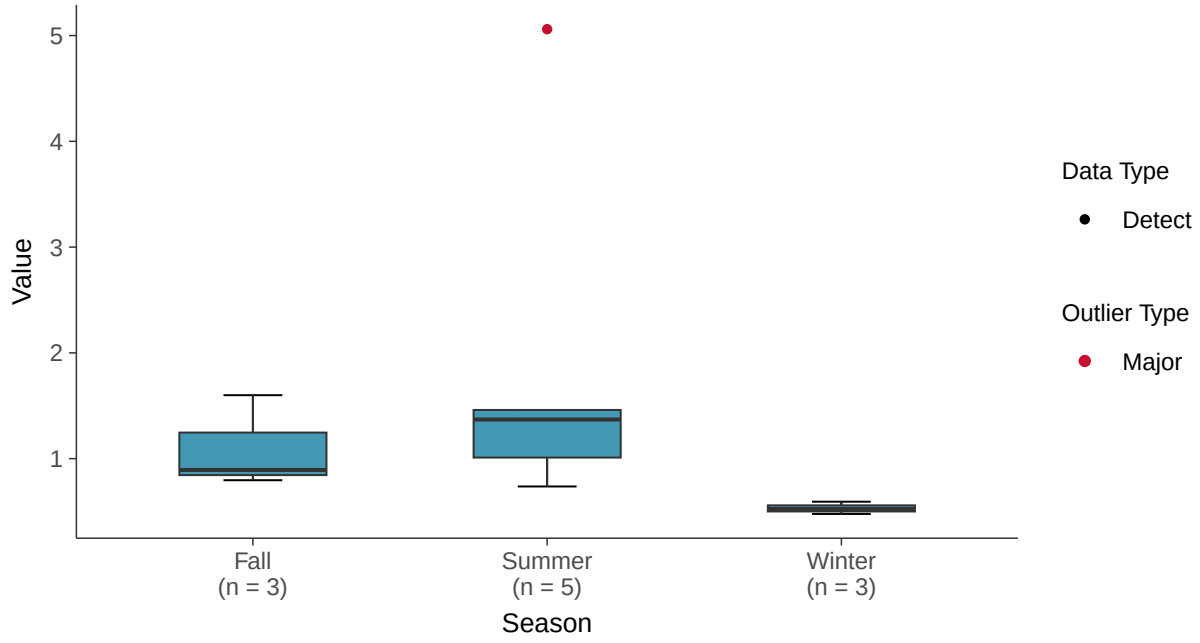
Boxplot

Radium-226+228, MW-100D (pci/l)



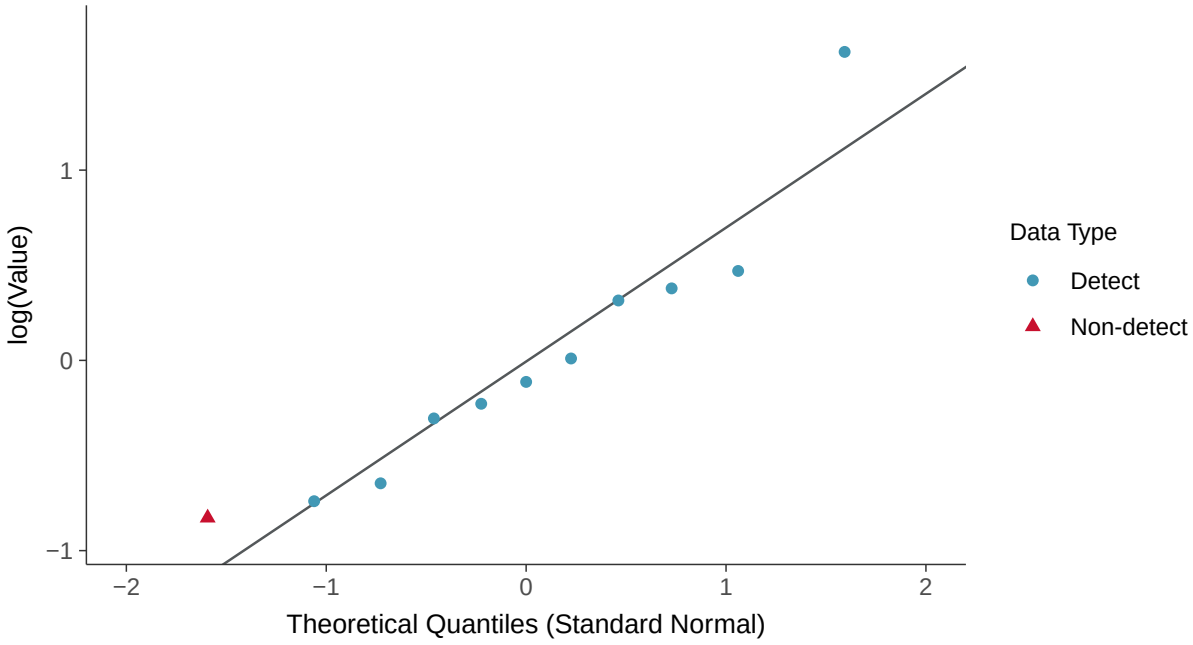
Boxplot by Season

Radium-226+228, MW-100D (pci/l)



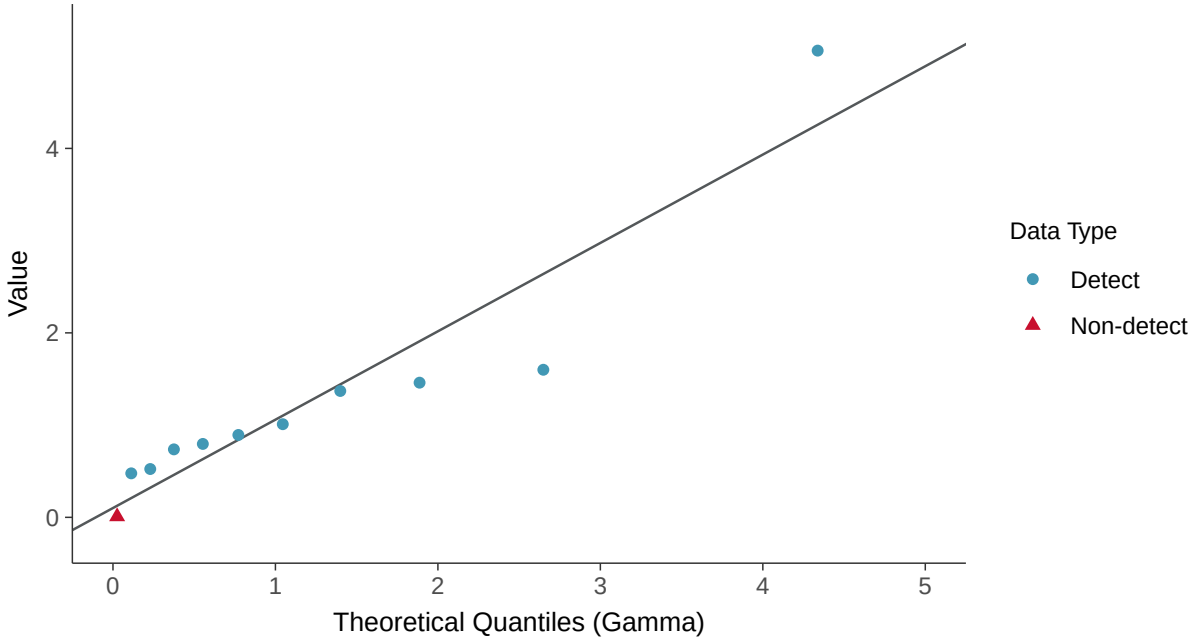
Lognormal Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-100D (pci/l)



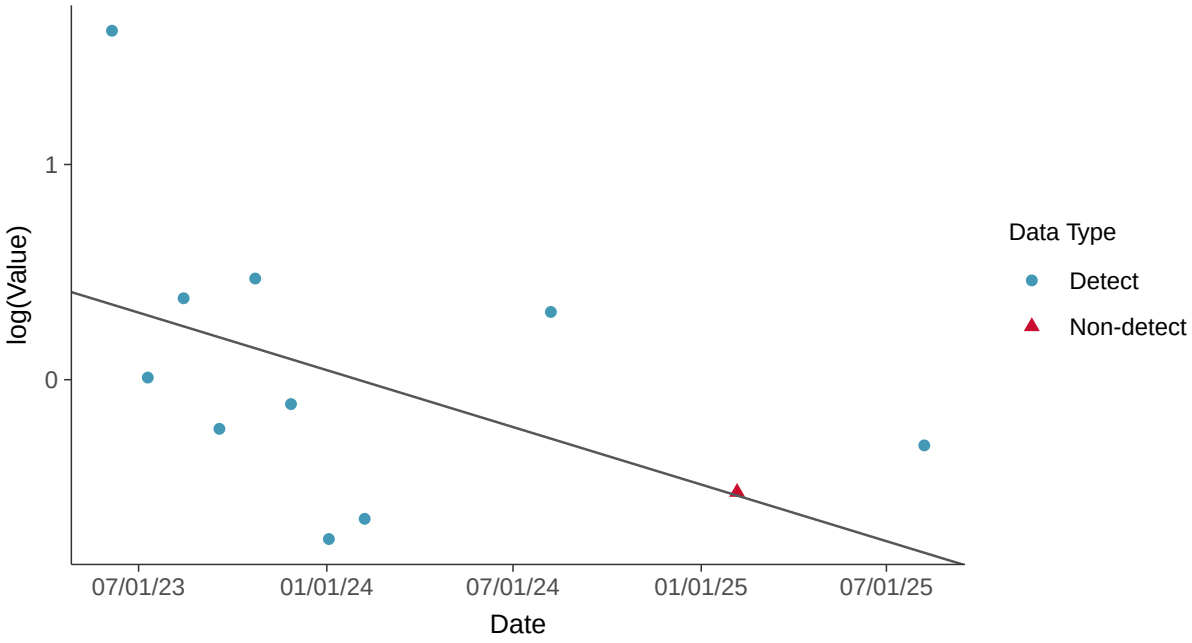
Gamma Q-Q plot using ROS Imputed Estimates

Radium-226+228, MW-100D (pci/l)



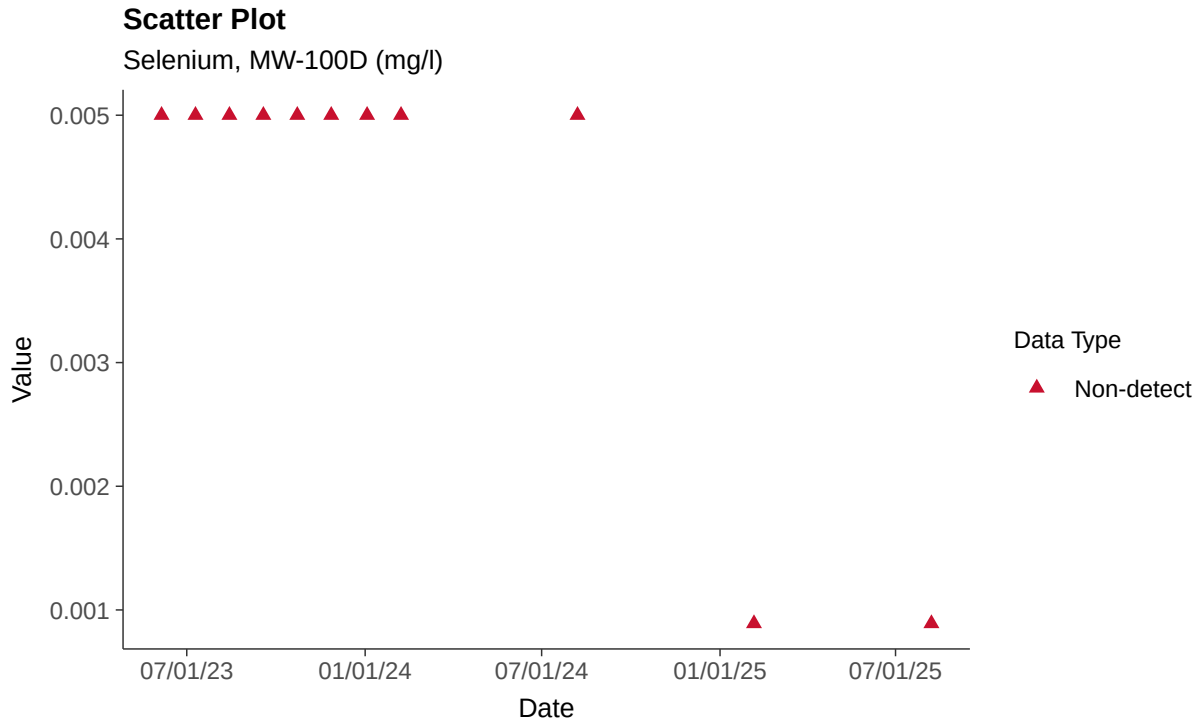
Trend Regression: Lognormal MLE

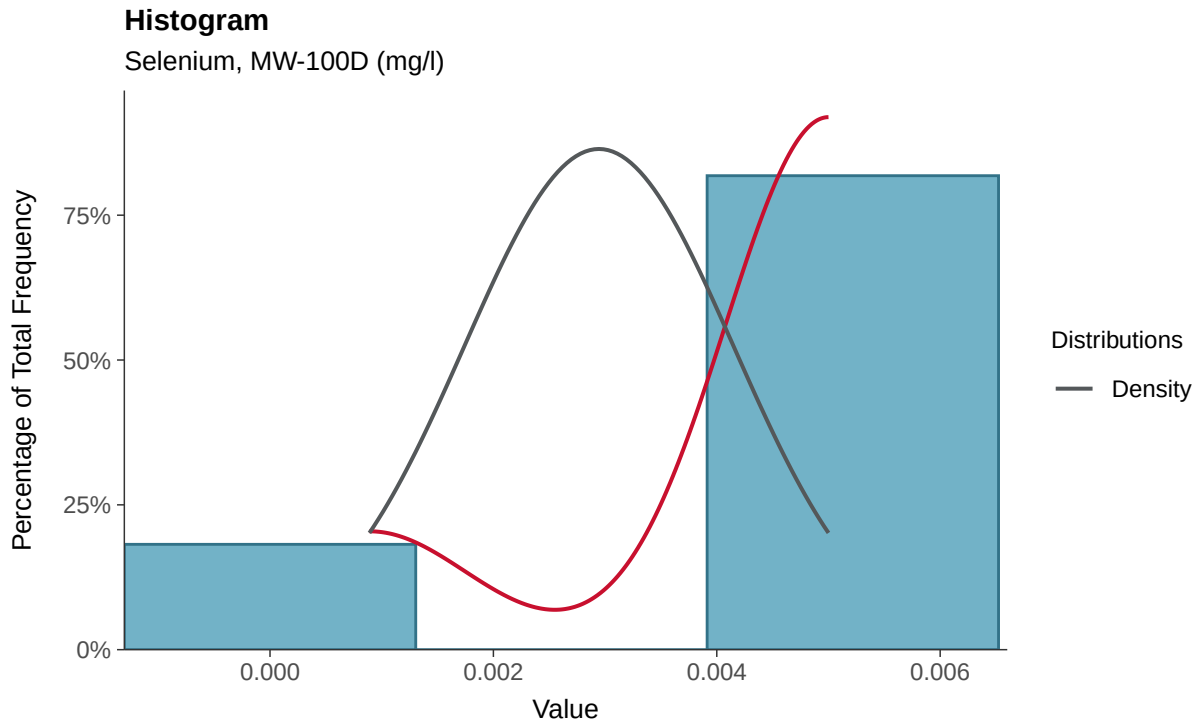
Radium-226+228, MW-100D (pci/l)



Appendix IV: Selenium, MW-100D

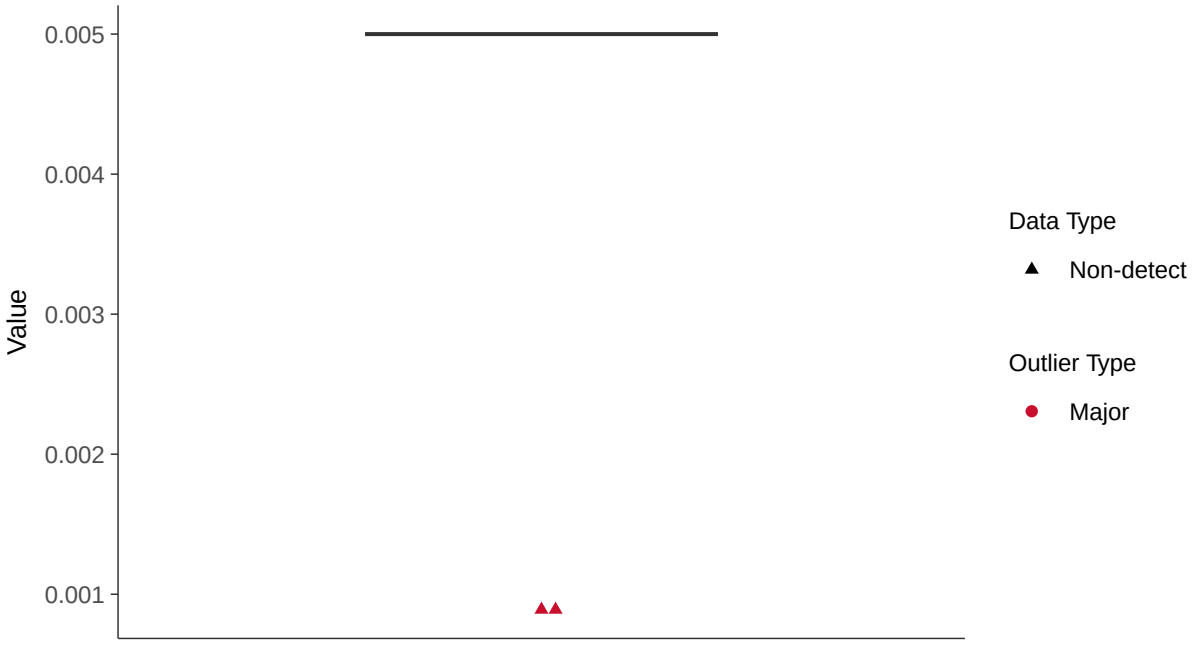
ID: 21_3_122





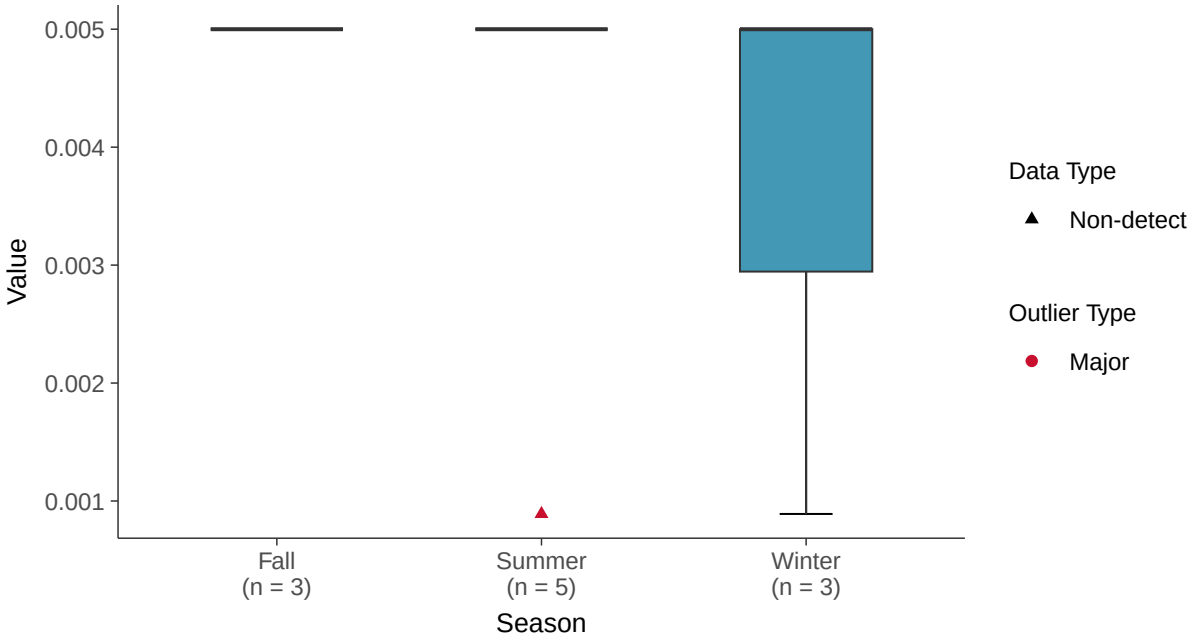
Boxplot

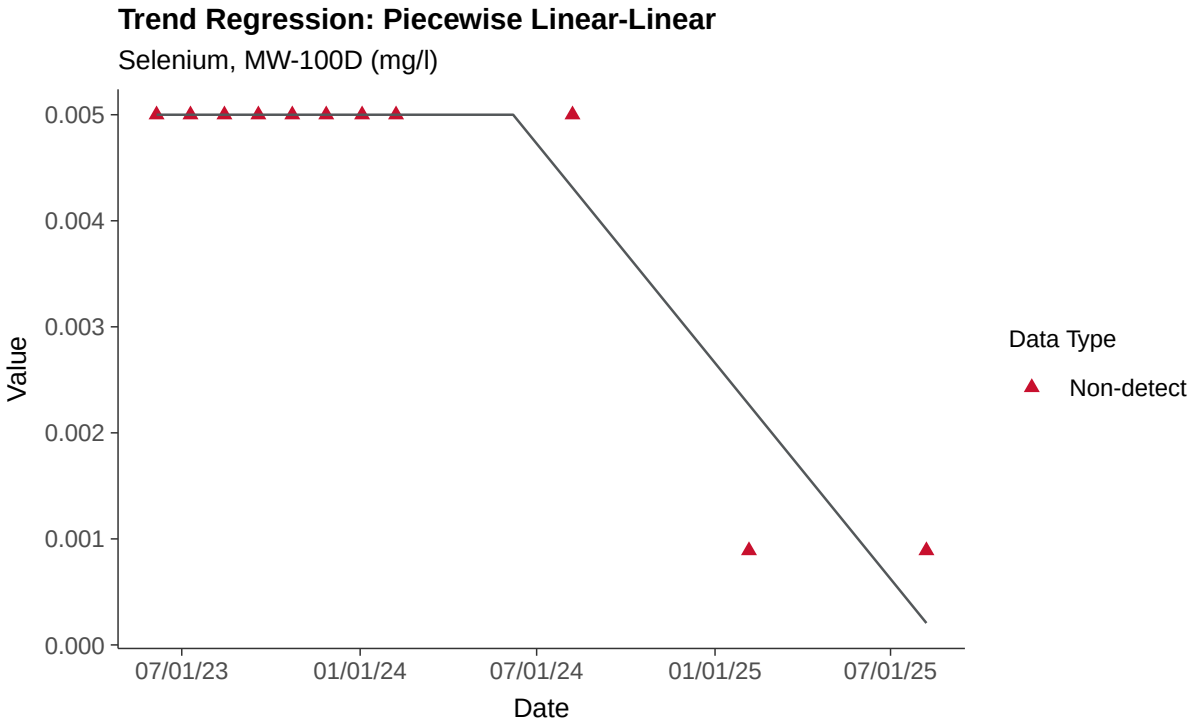
Selenium, MW-100D (mg/l)



Boxplot by Season

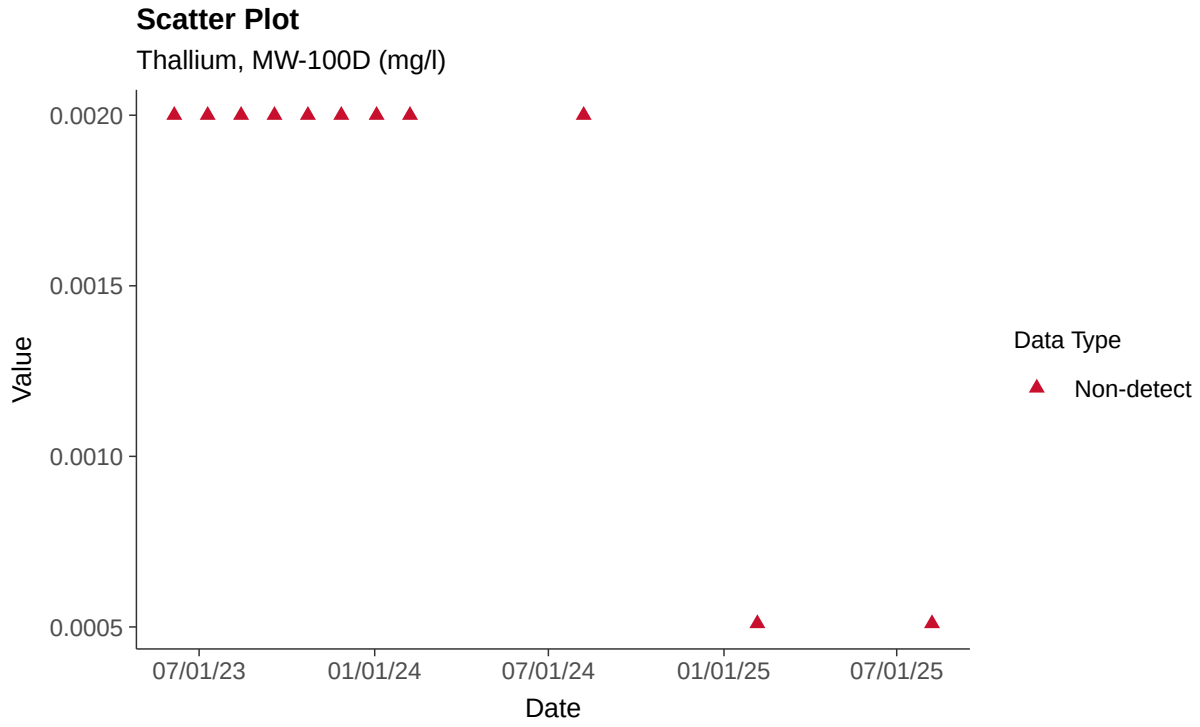
Selenium, MW-100D (mg/l)

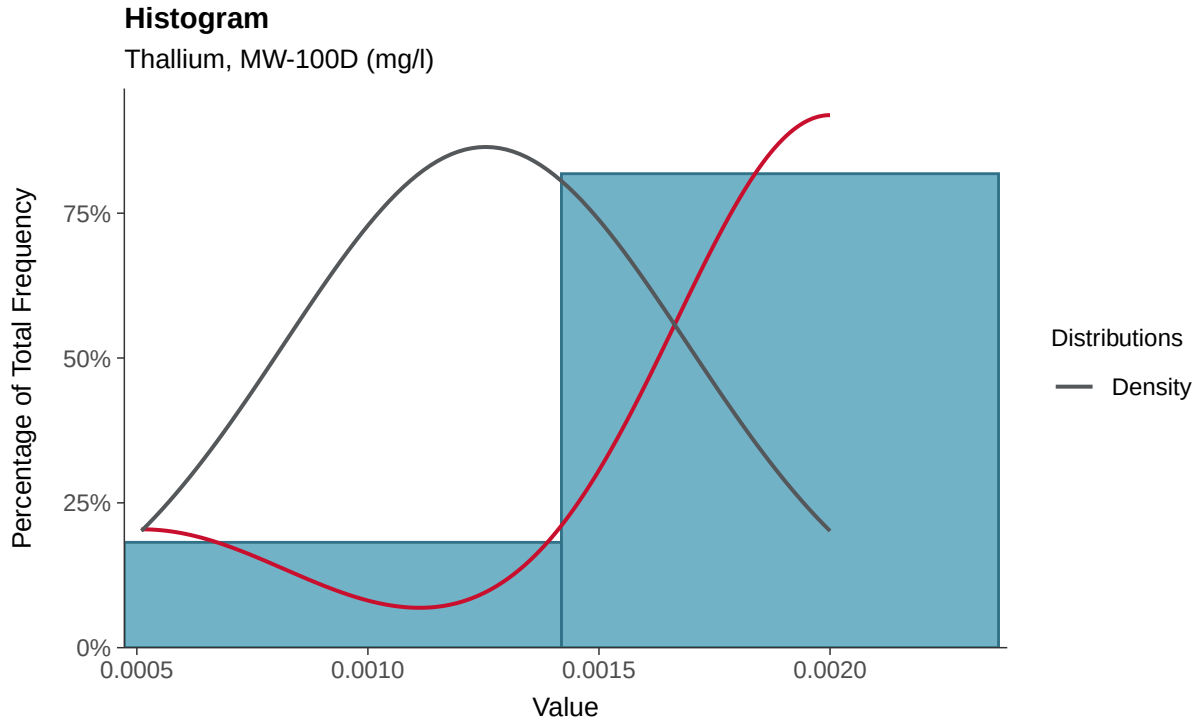



Trend Regression: Piecewise Linear-Linear
Selenium, MW-100D (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Appendix IV: Thallium, MW-100D

ID: 21_3_125



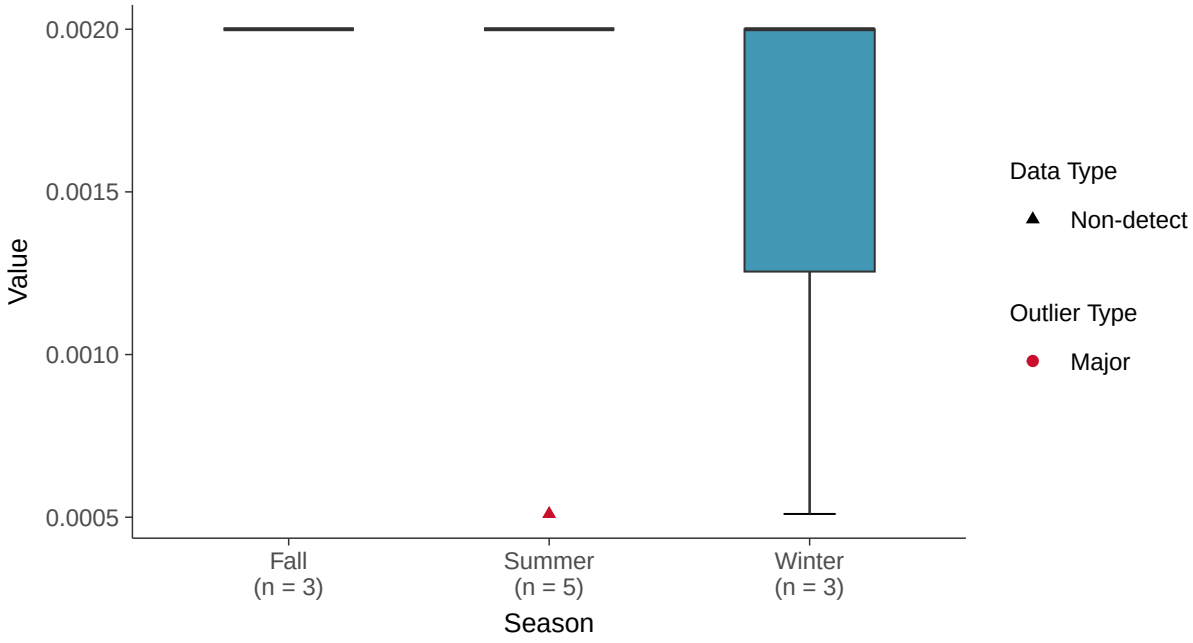


Boxplot

Thallium, MW-100D (mg/l)

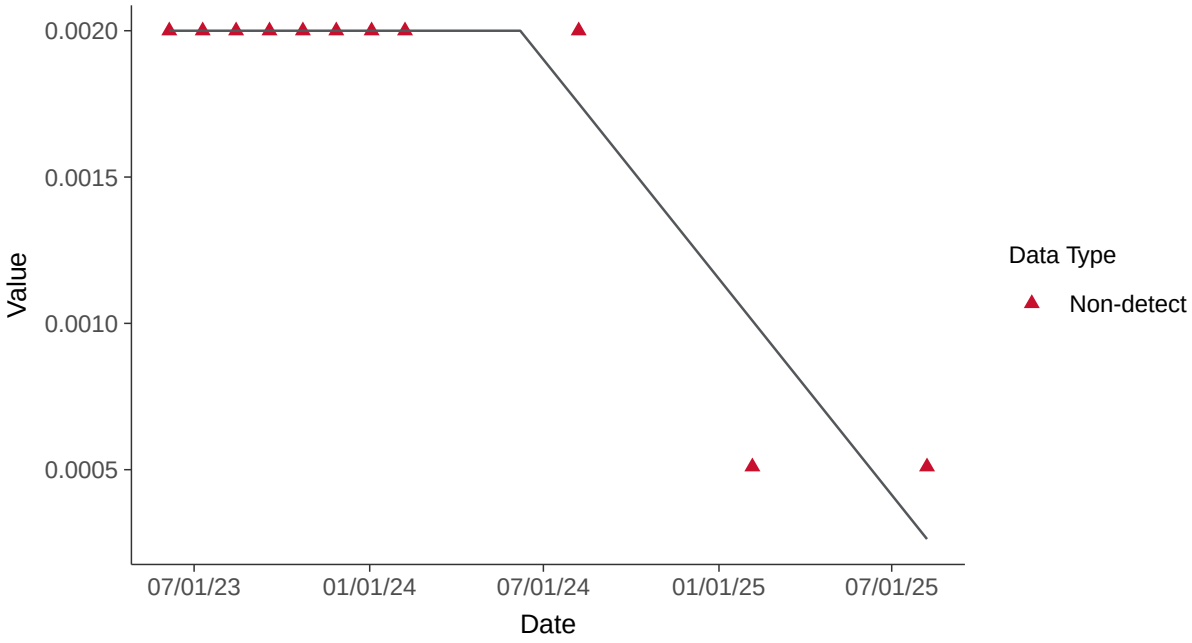
Boxplot by Season

Thallium, MW-100D (mg/l)



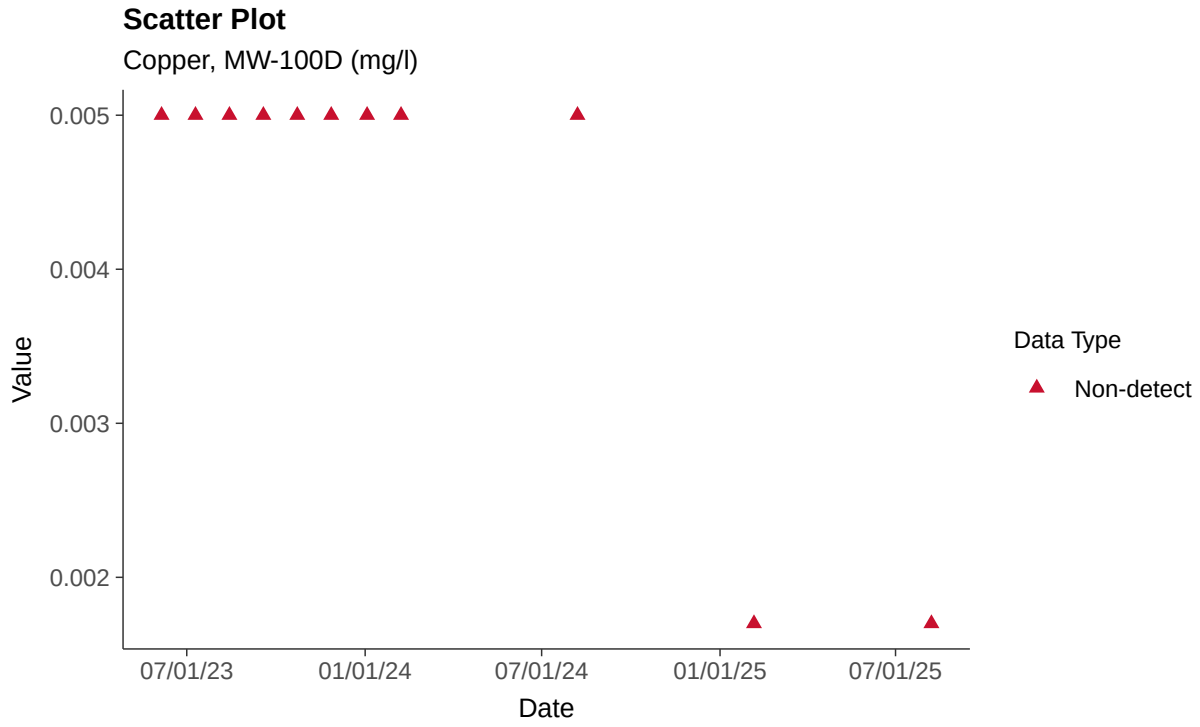
Trend Regression: Piecewise Linear-Linear

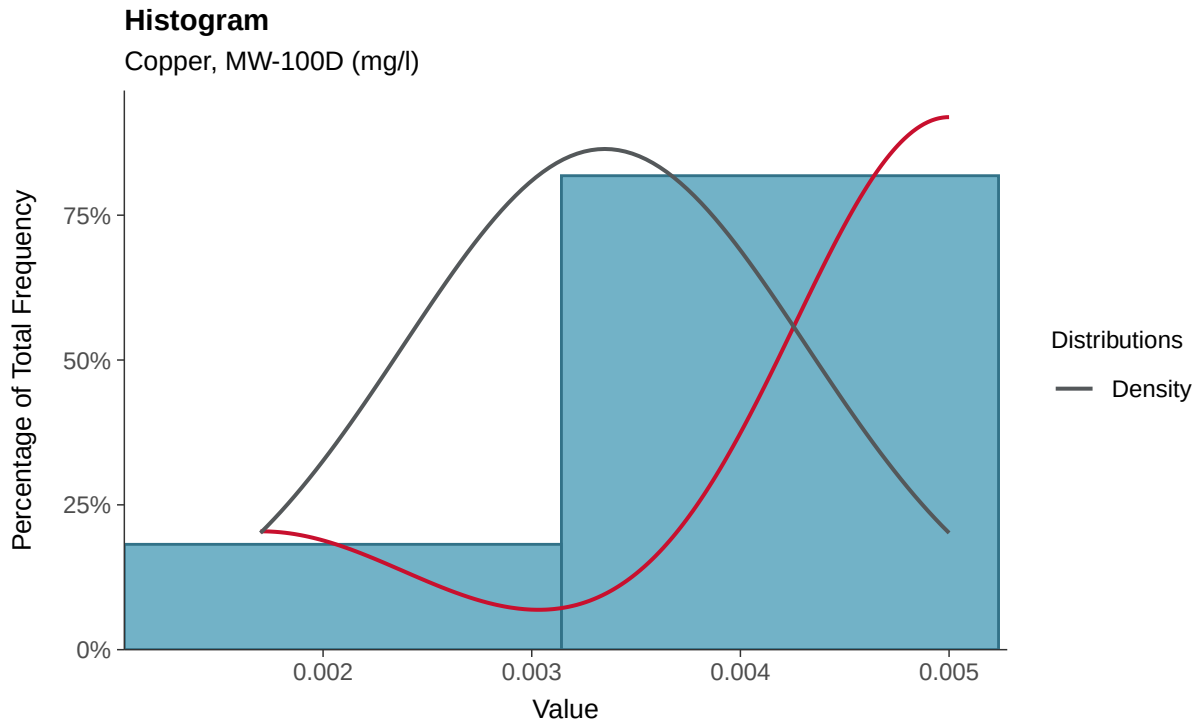
Thallium, MW-100D (mg/l)



Part 115: Copper, MW-100D

ID: 21_5_111



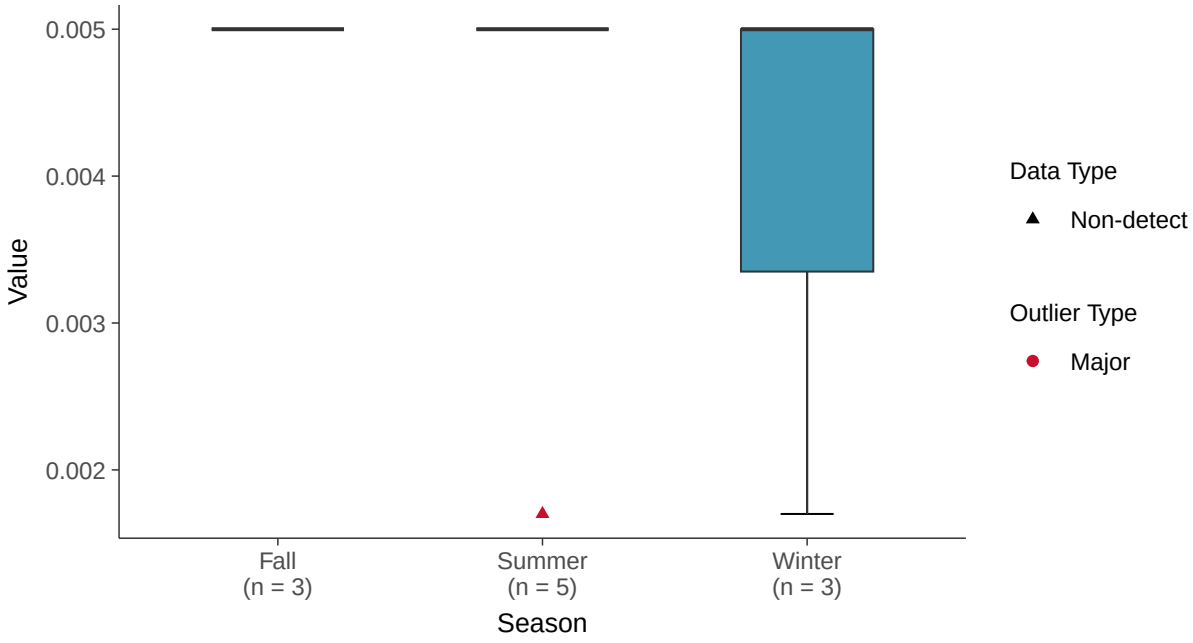


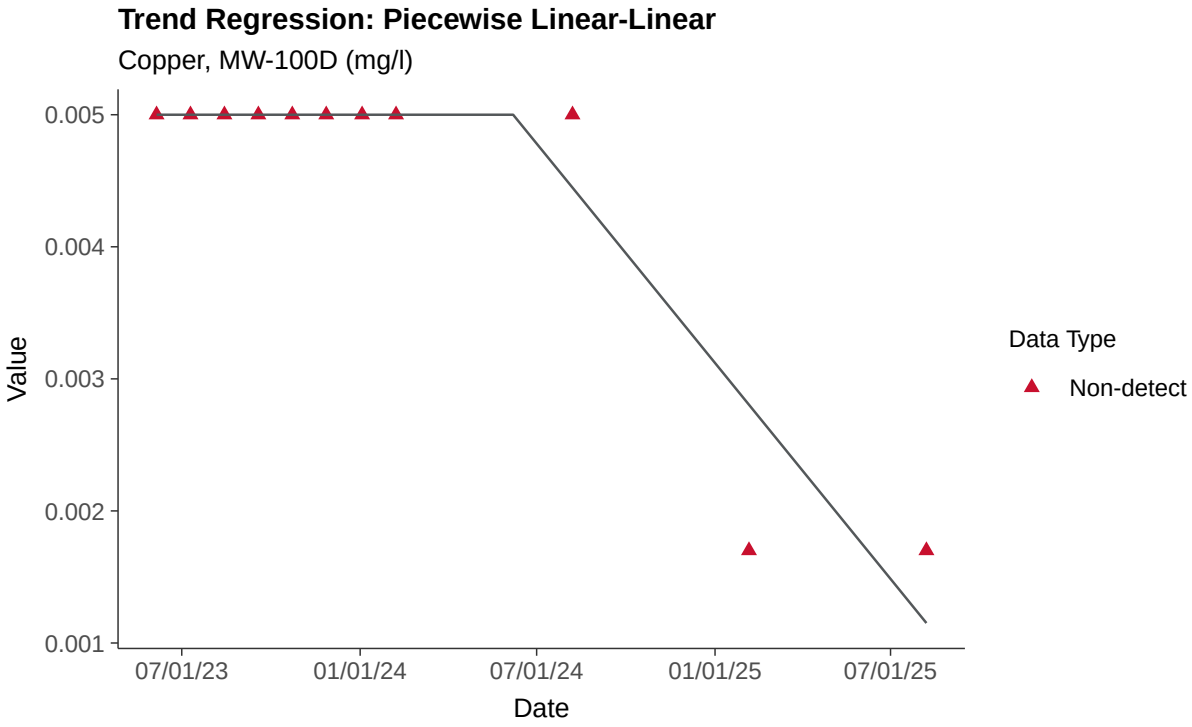
Boxplot

Copper, MW-100D (mg/l)

Boxplot by Season

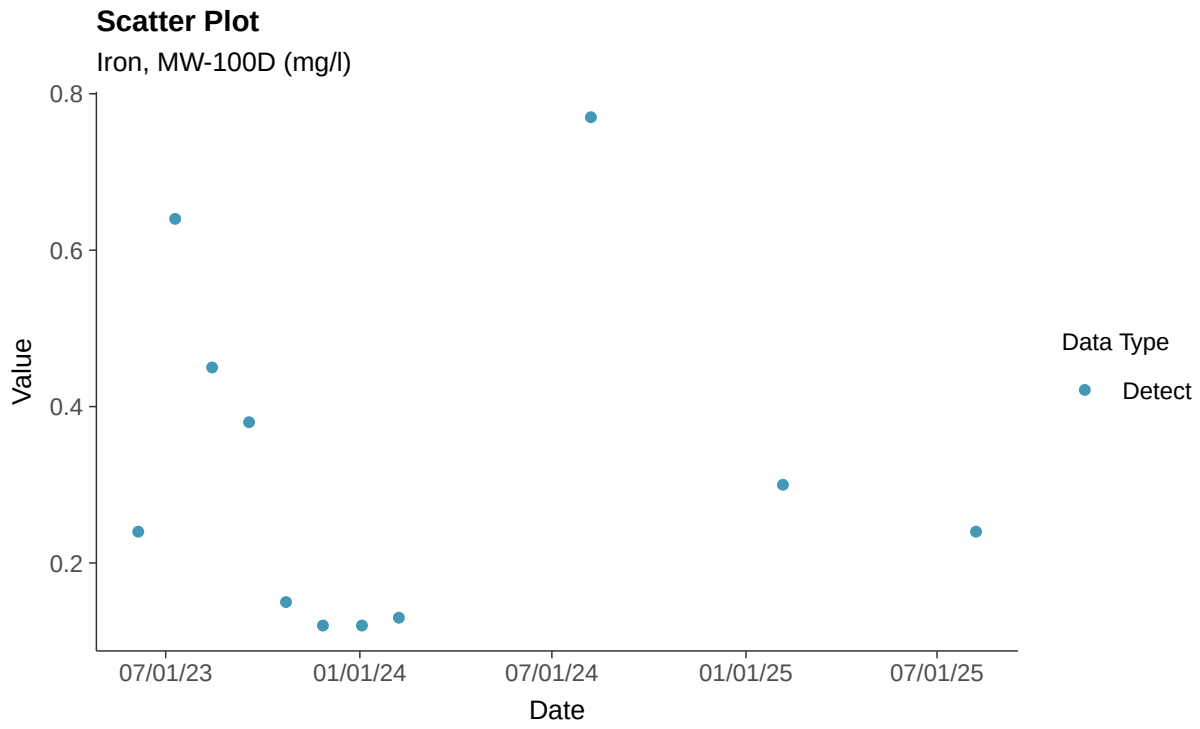
Copper, MW-100D (mg/l)

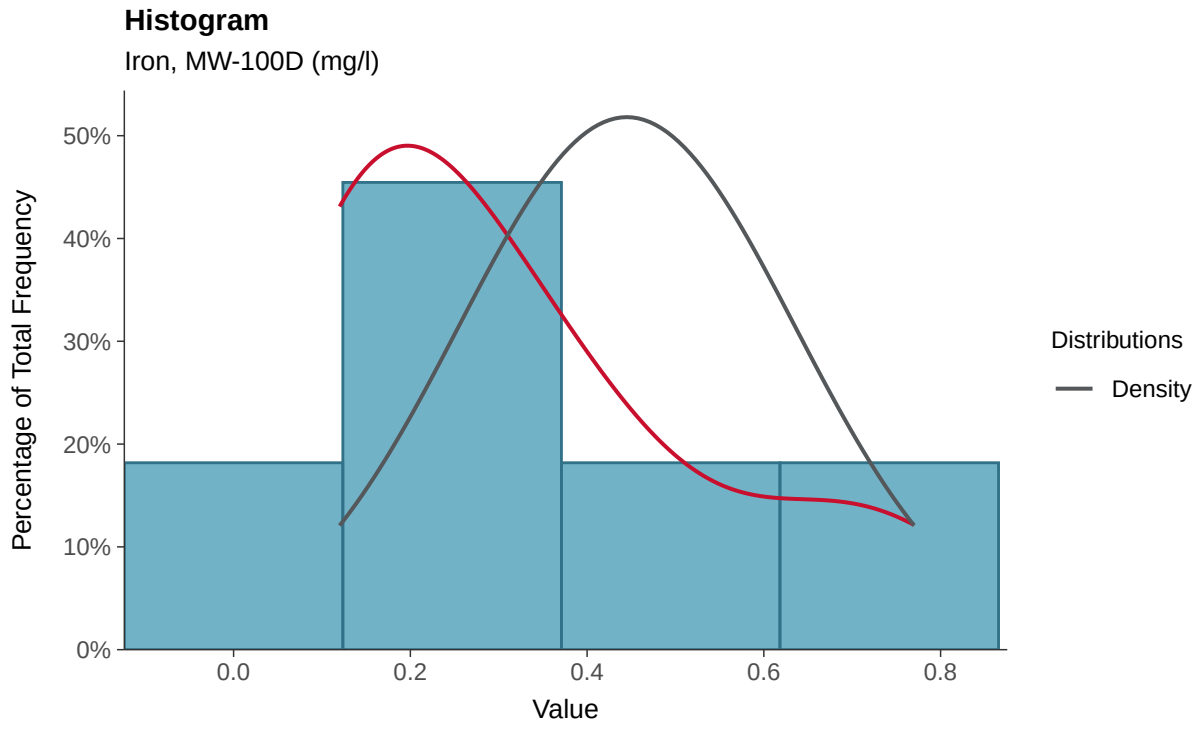



Trend Regression: Piecewise Linear-Linear
Copper, MW-100D (mg/l)
0.005
0.004
0.003
0.002
0.001
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Iron, MW-100D

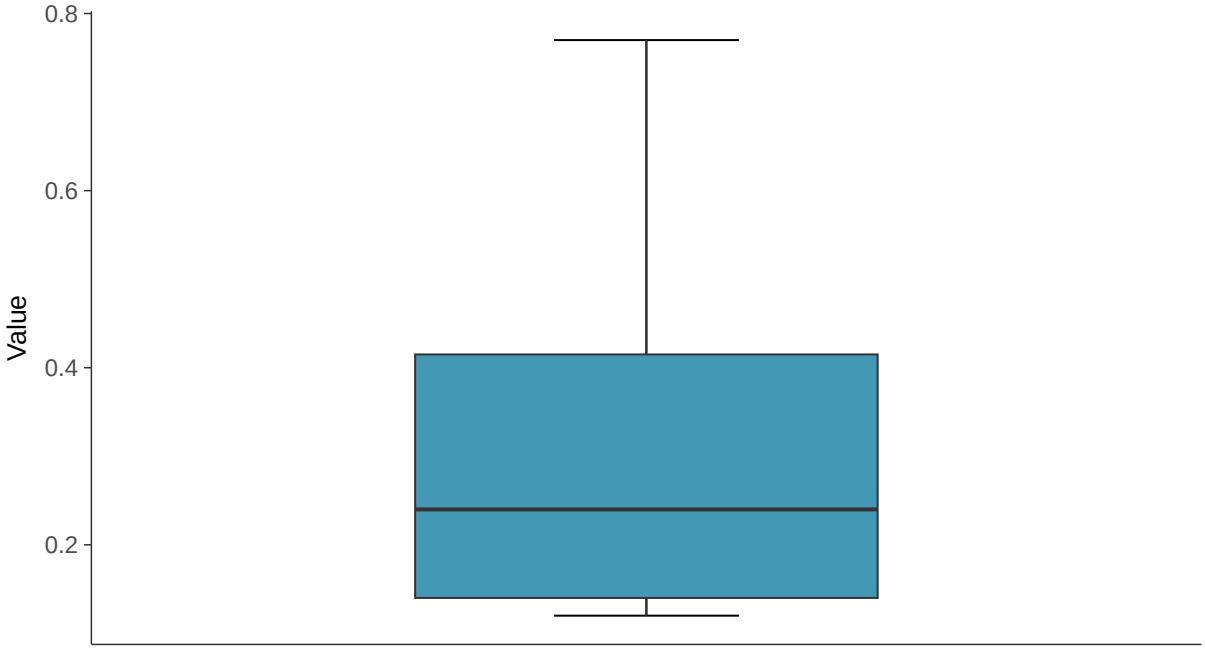
ID: 21_5_114





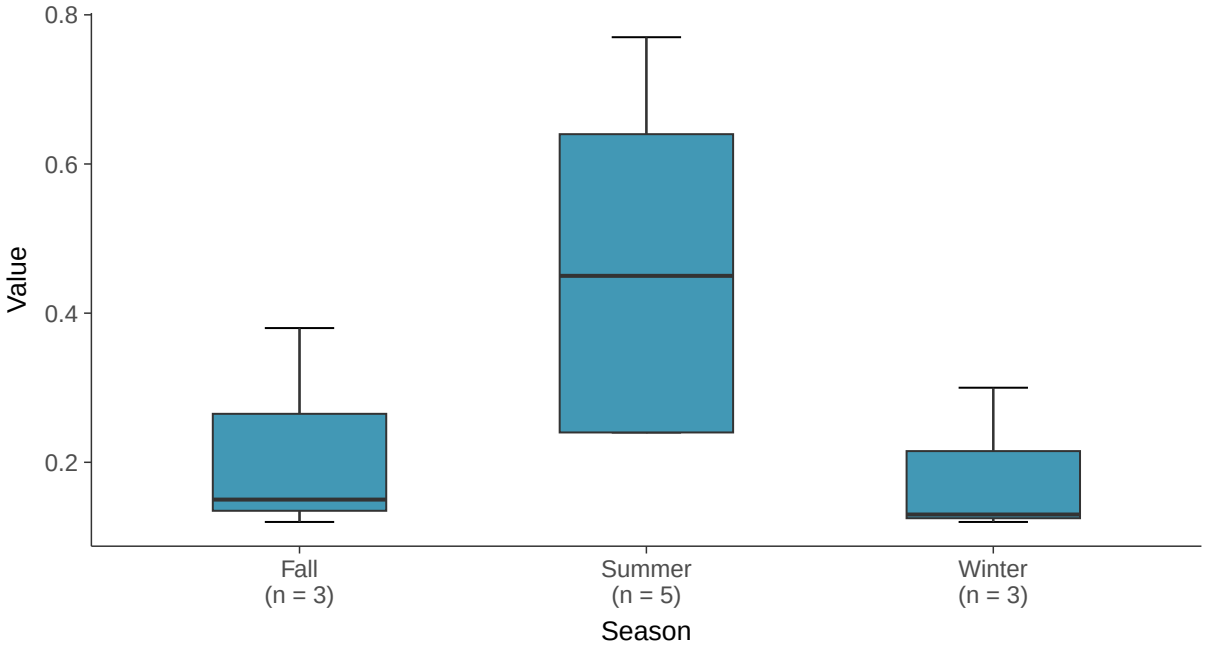
Boxplot

Iron, MW-100D (mg/l)



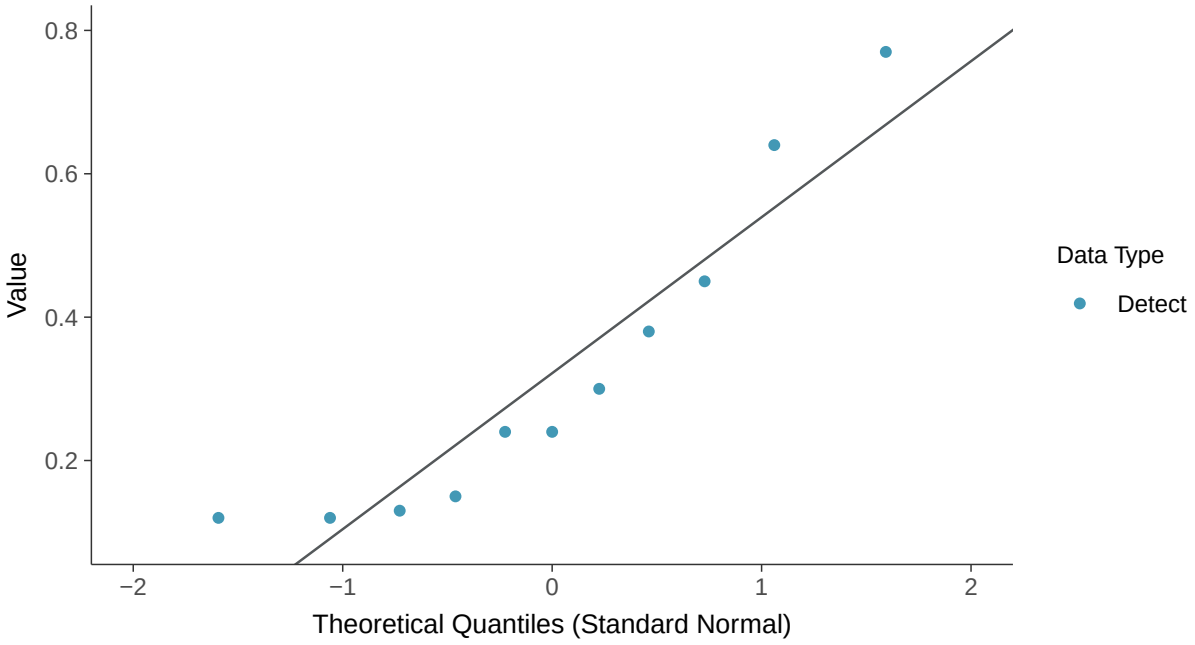
Boxplot by Season

Iron, MW-100D (mg/l)



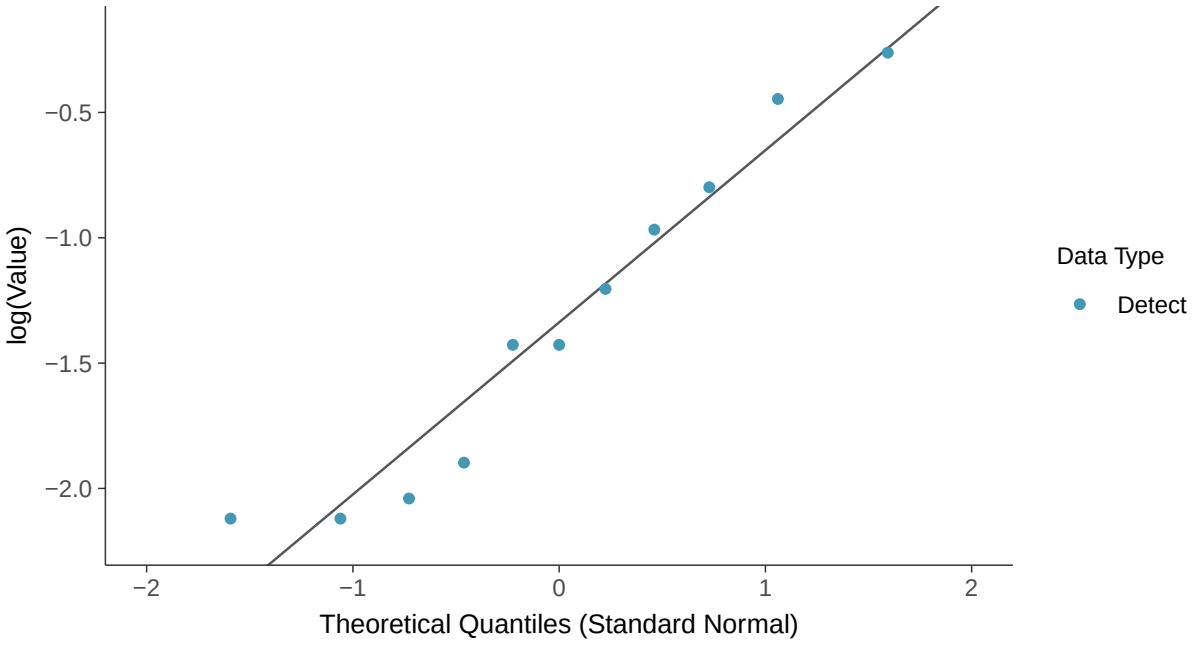
Normal Q-Q plot

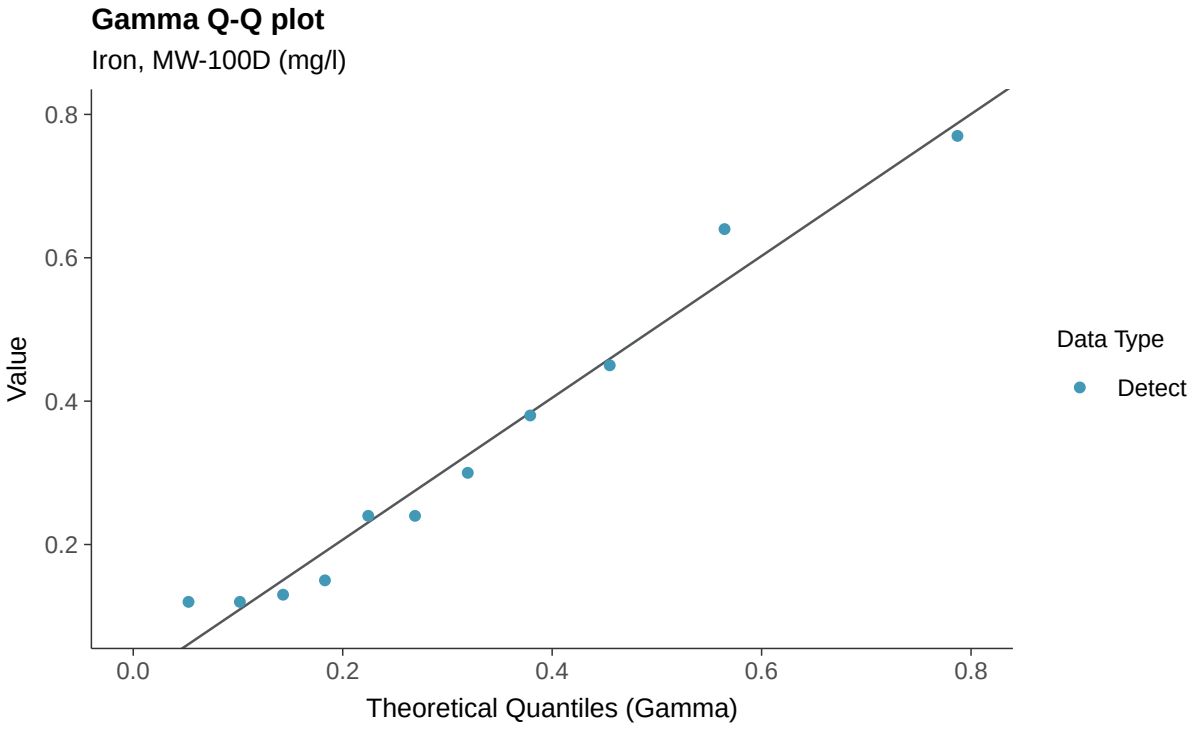
Iron, MW-100D (mg/l)

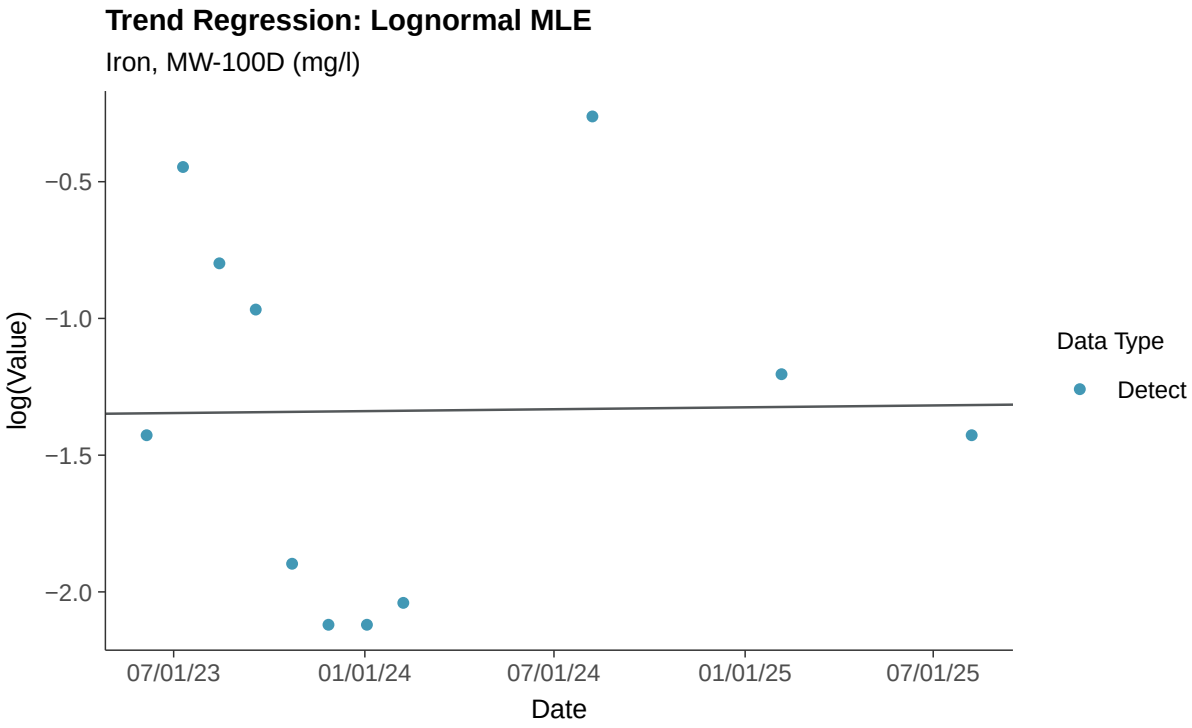


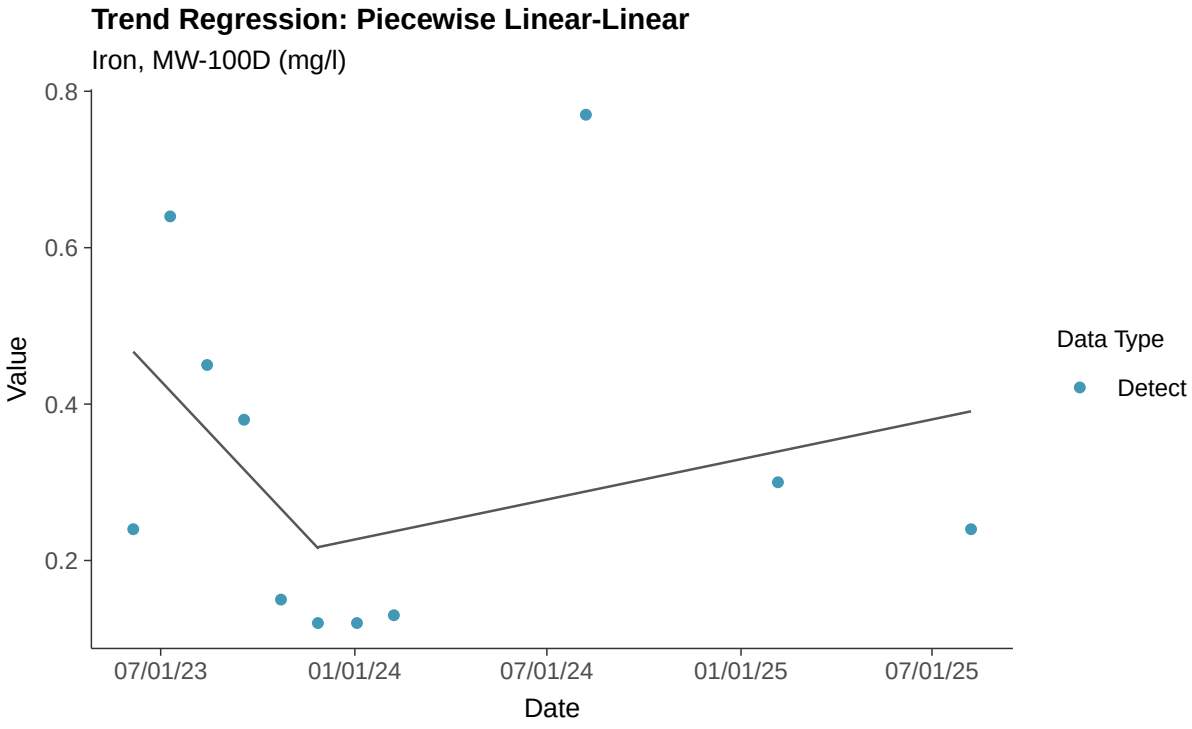
Lognormal Q-Q plot

Iron, MW-100D (mg/l)




Gamma Q-Q plot
Iron, MW-100D (mg/l)
Value
0.8
0.6
0.4
0.2
0.0
0.2
0.4
0.6
0.8
Theoretical Quantiles (Gamma)
Data Type
Detect


Trend Regression: Lognormal MLE
Iron, MW-100D (mg/l)
log(Value)
−0.5
−1.0
−1.5
−2.0
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect

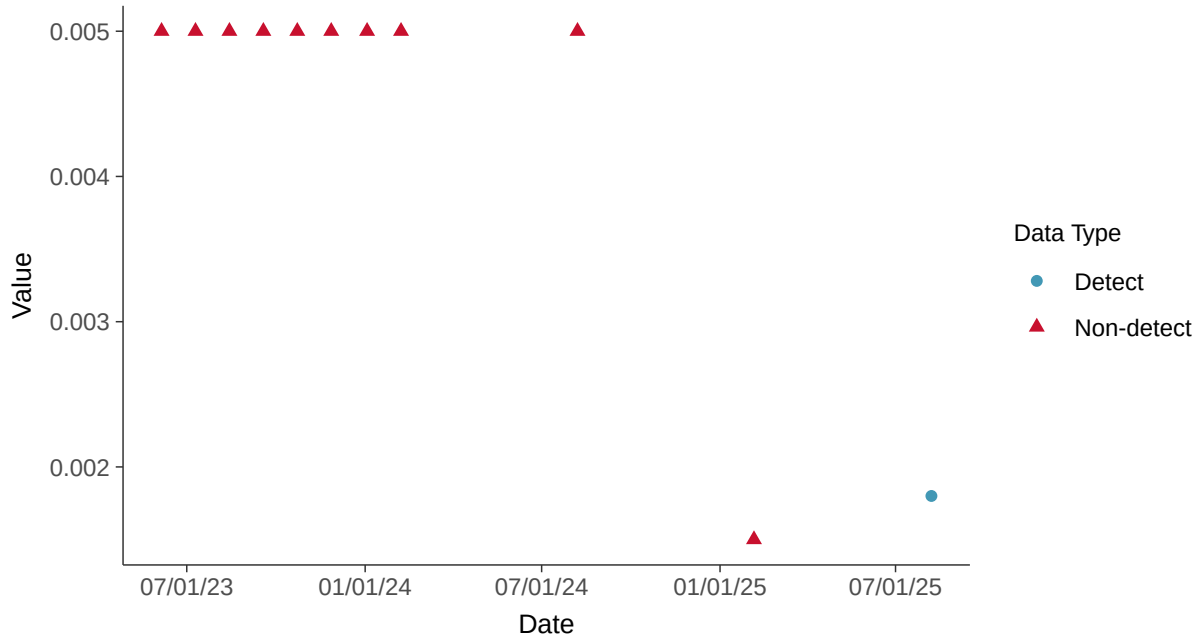

Trend Regression: Piecewise Linear-Linear
Iron, MW-100D (mg/l)
0.8
0.6
0.4
0.2
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect

Part 115: Nickel, MW-100D

ID: 21_5_119

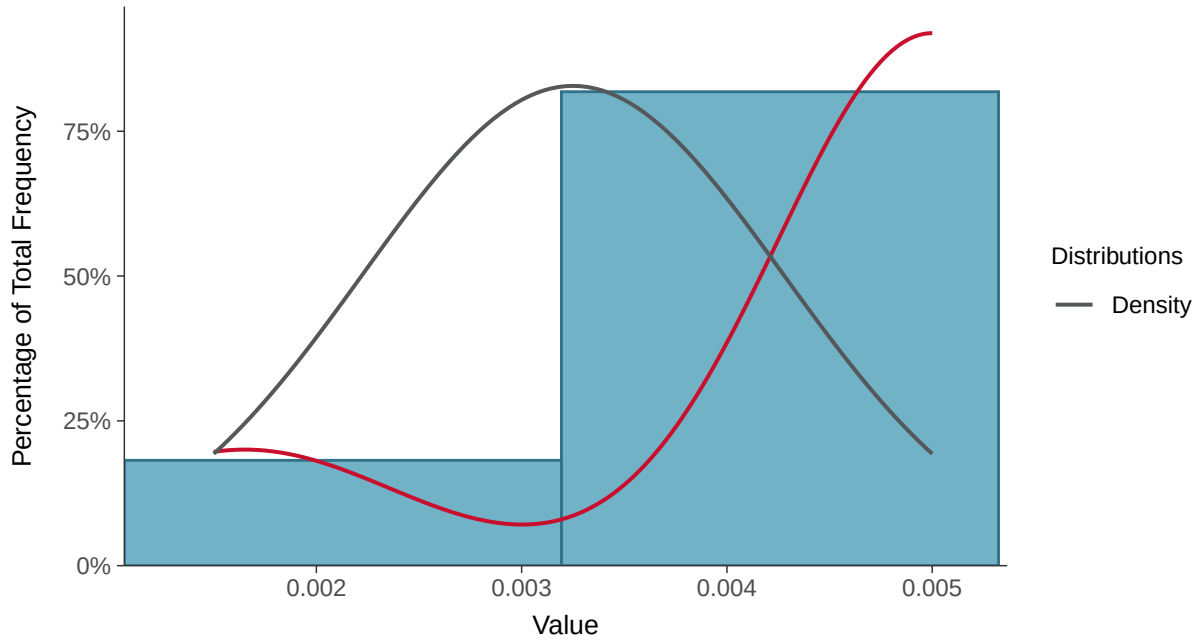
Scatter Plot

Nickel, MW-100D (mg/l)



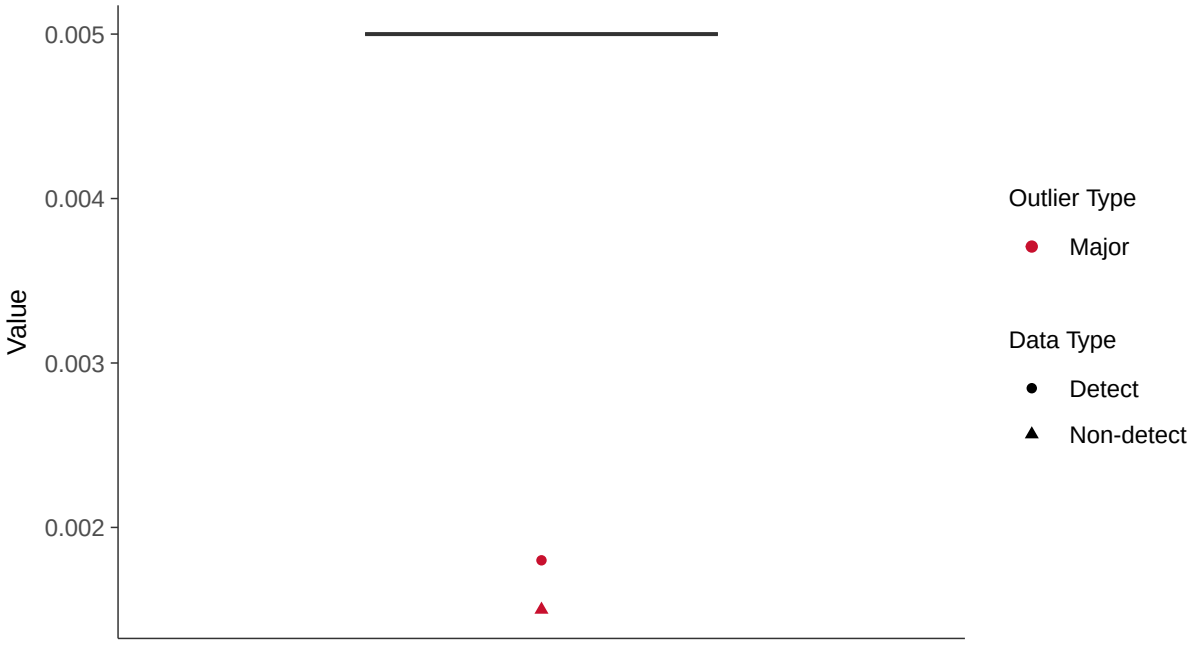
Histogram

Nickel, MW-100D (mg/l)



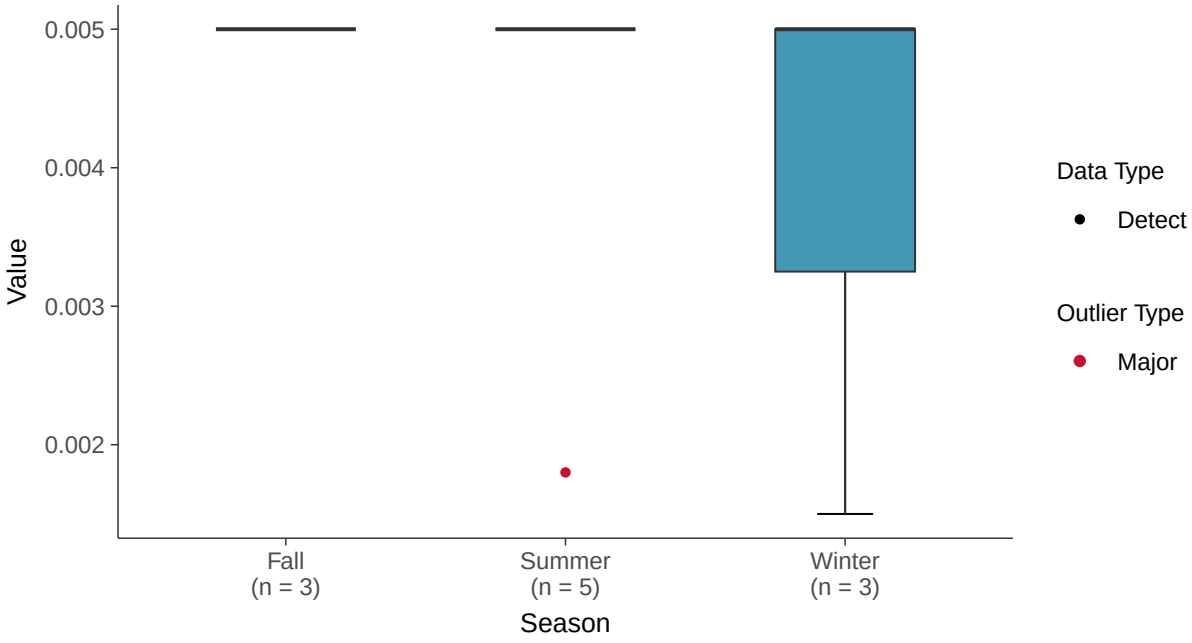
Boxplot

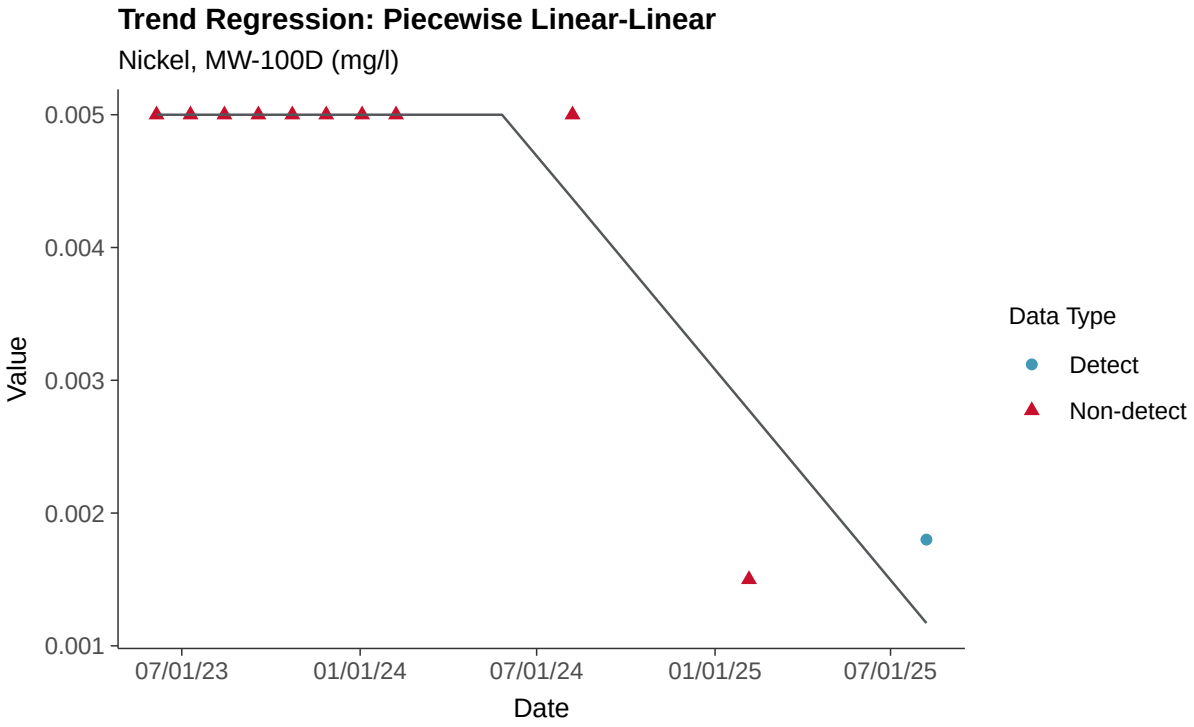
Nickel, MW-100D (mg/l)



Boxplot by Season

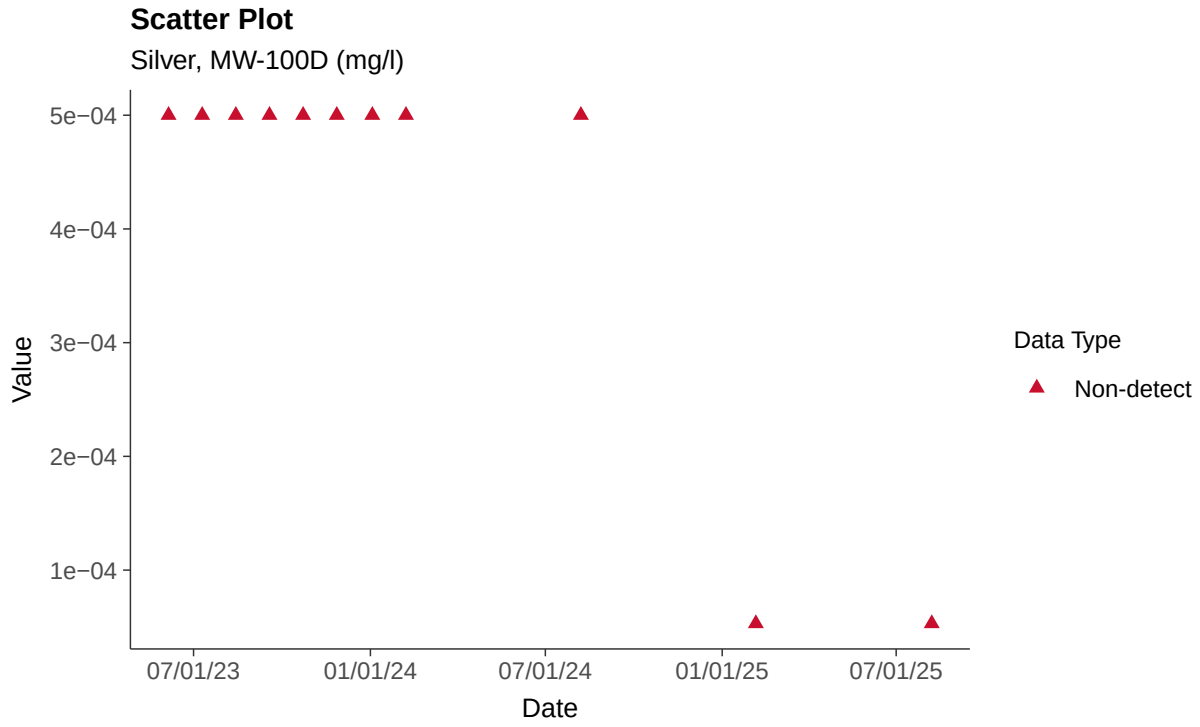
Nickel, MW-100D (mg/l)

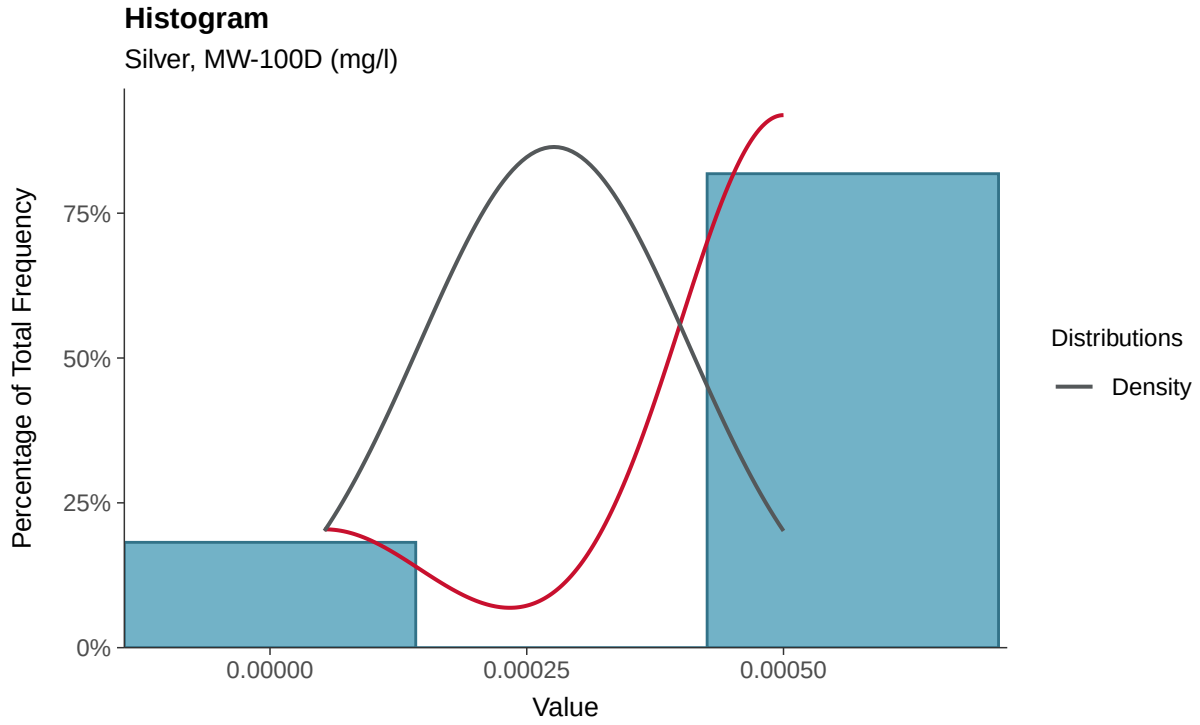



Trend Regression: Piecewise Linear-Linear
Nickel, MW-100D (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Detect
Non-detect

Part 115: Silver, MW-100D

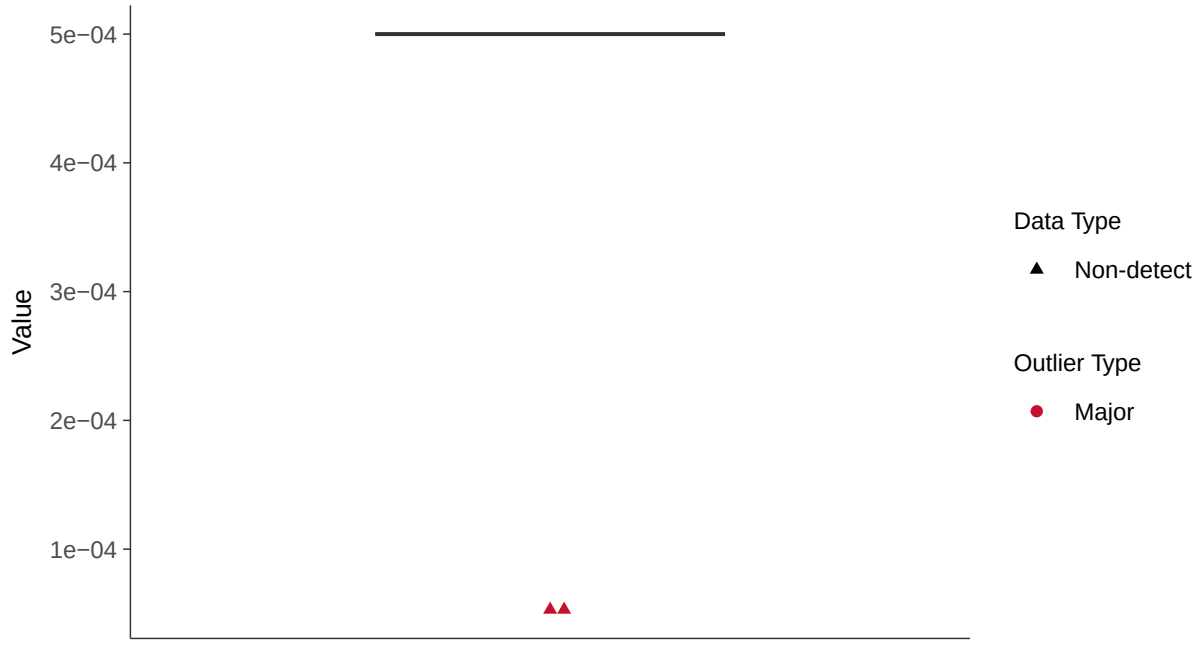
ID: 21_5_123





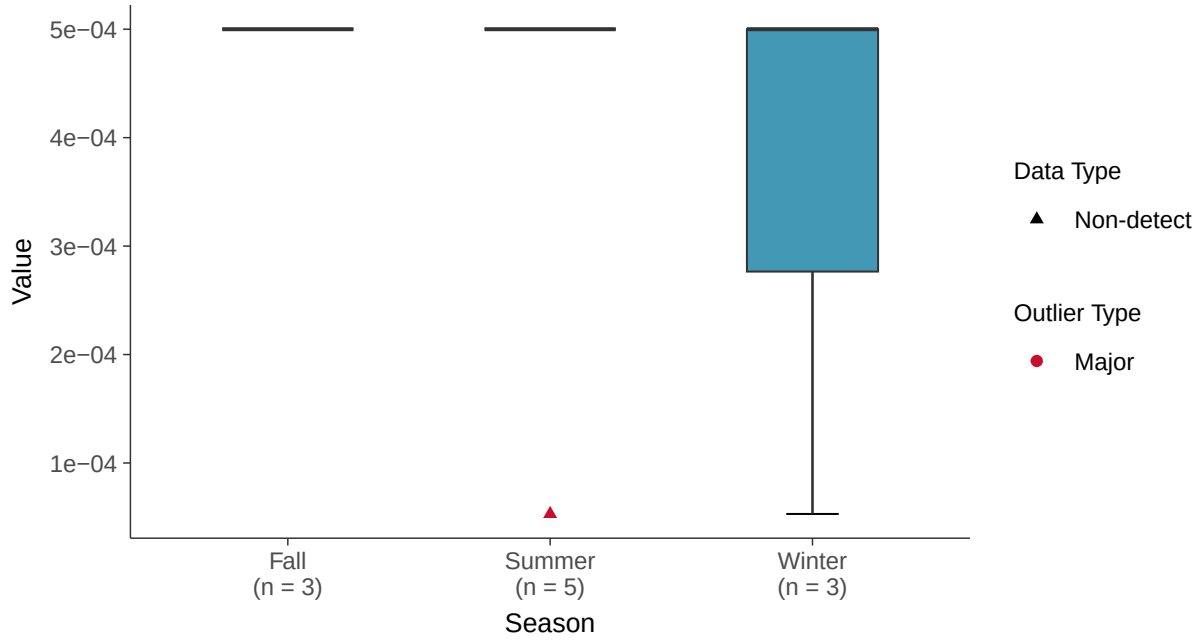
Boxplot

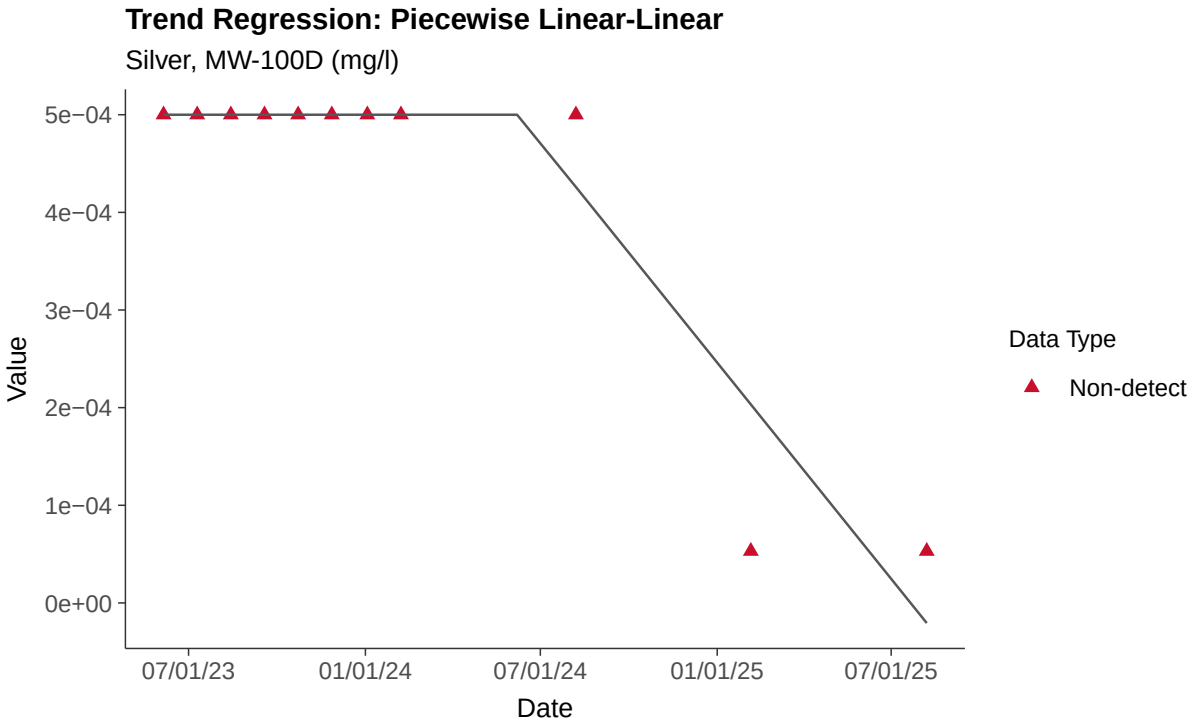
Silver, MW-100D (mg/l)



Boxplot by Season

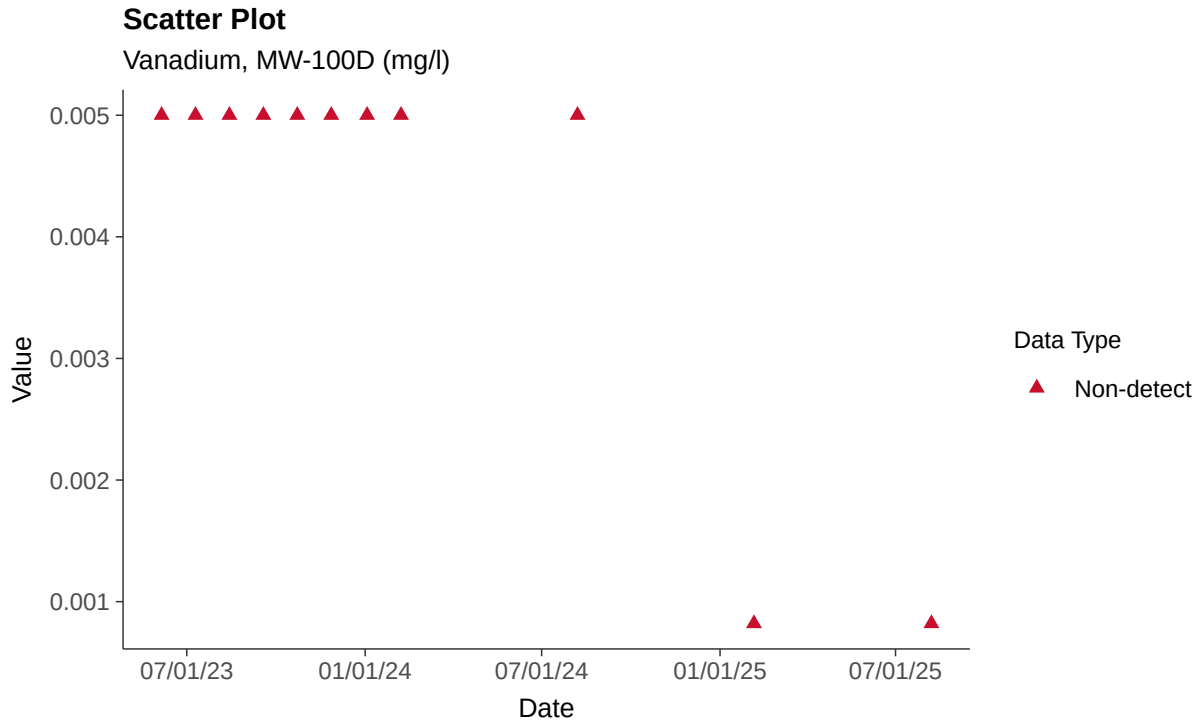
Silver, MW-100D (mg/l)

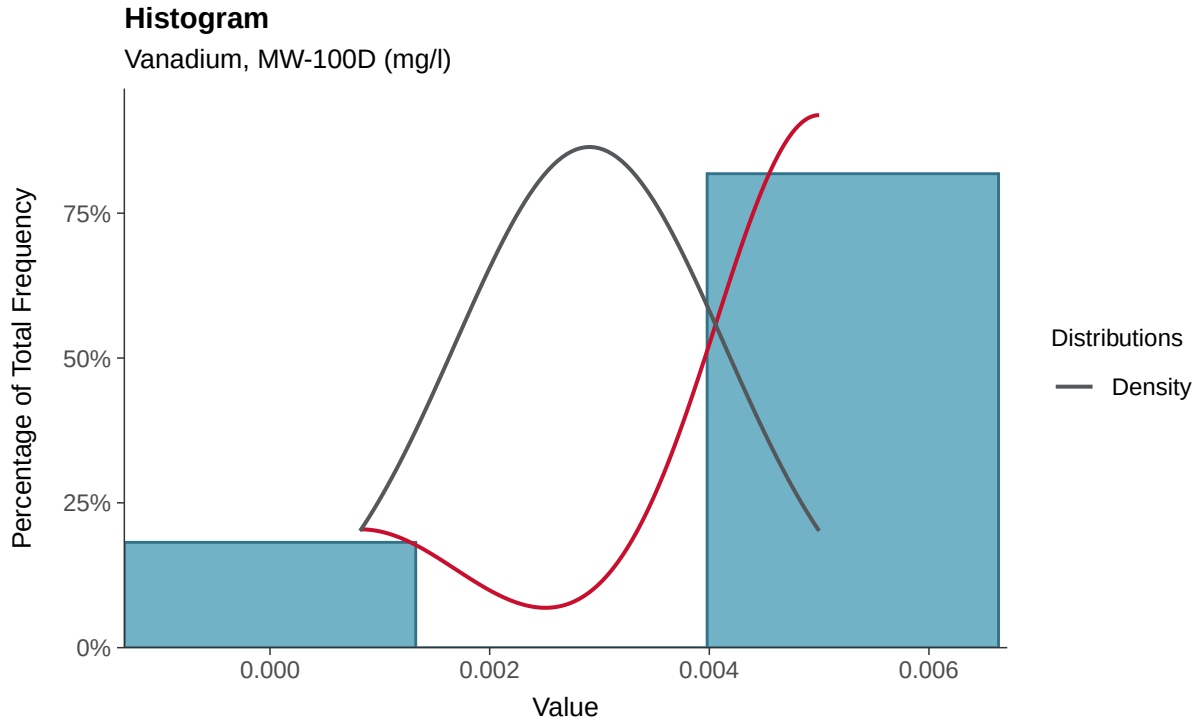



Trend Regression: Piecewise Linear-Linear
Silver, MW-100D (mg/l)
5e−04
4e−04
3e−04
2e−04
1e−04
0e+00
Value
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Vanadium, MW-100D

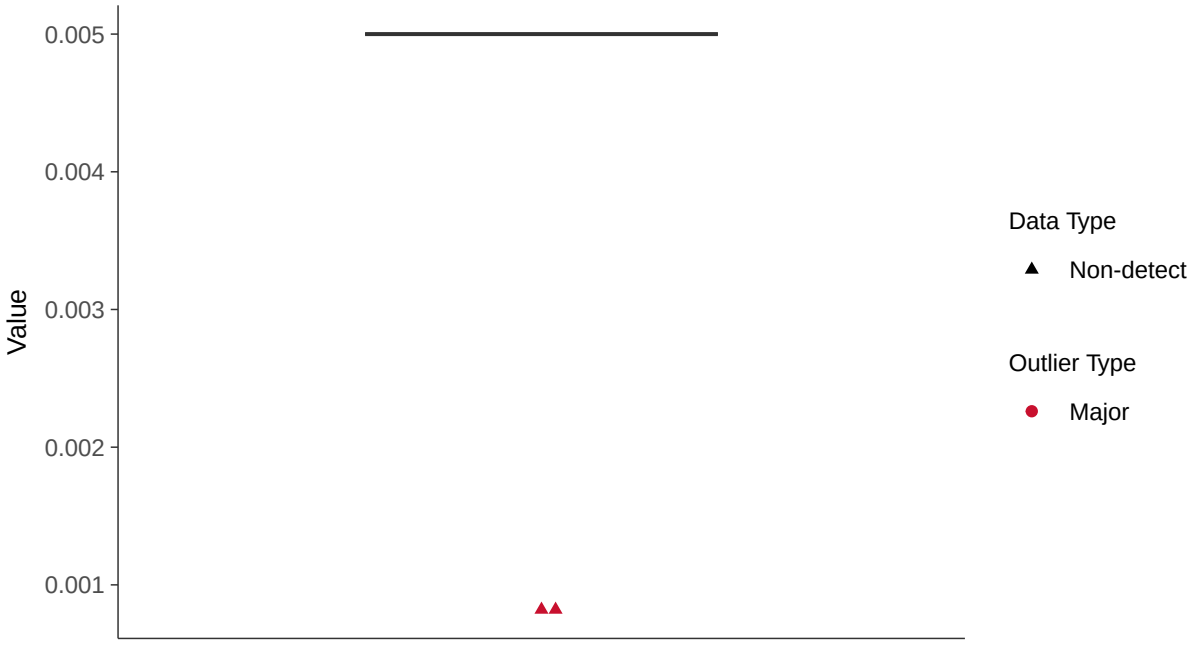
ID: 21_5_128





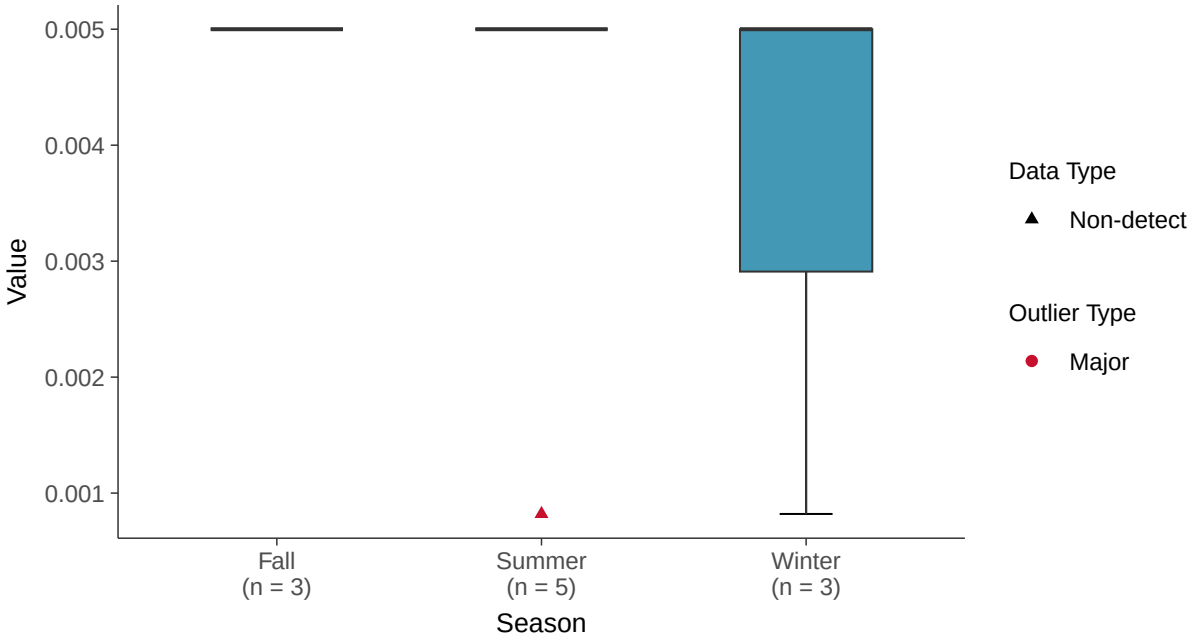
Boxplot

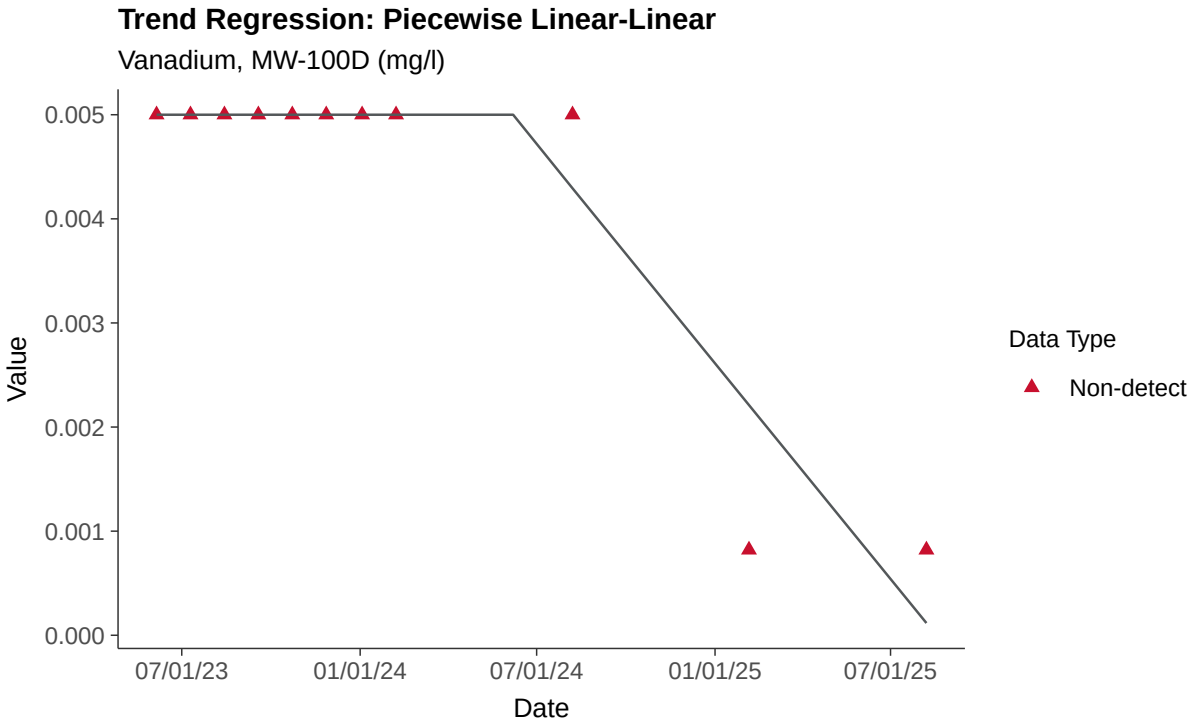
Vanadium, MW-100D (mg/l)



Boxplot by Season

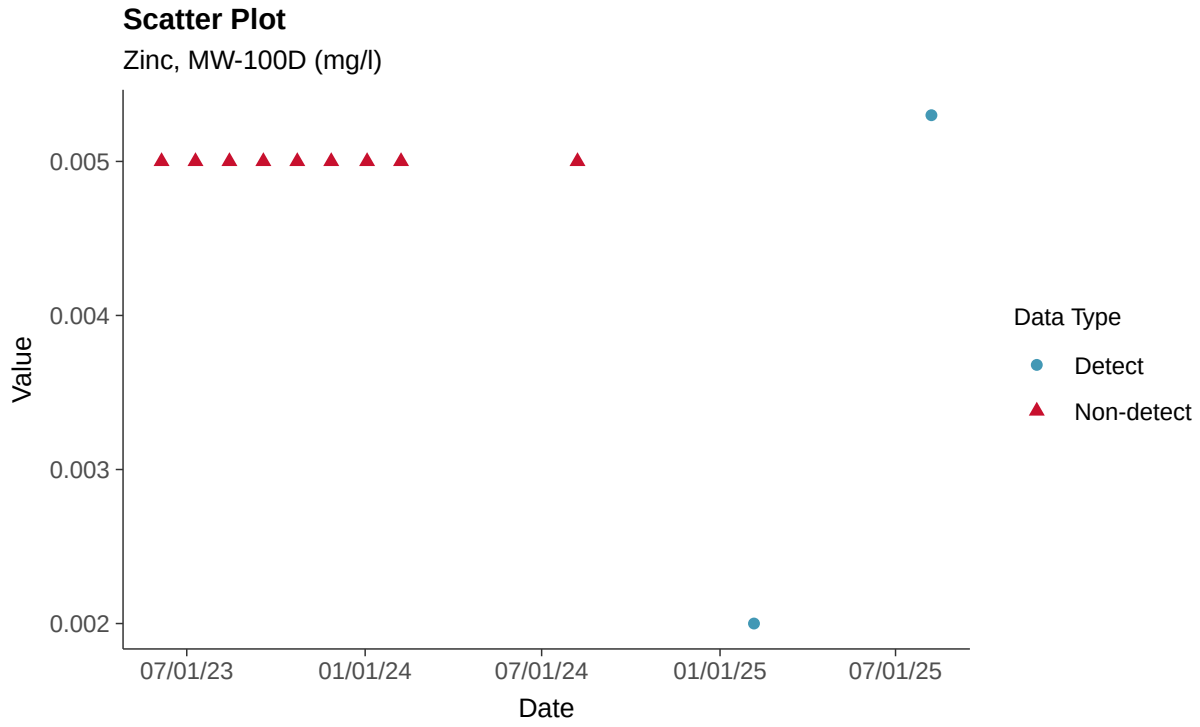
Vanadium, MW-100D (mg/l)

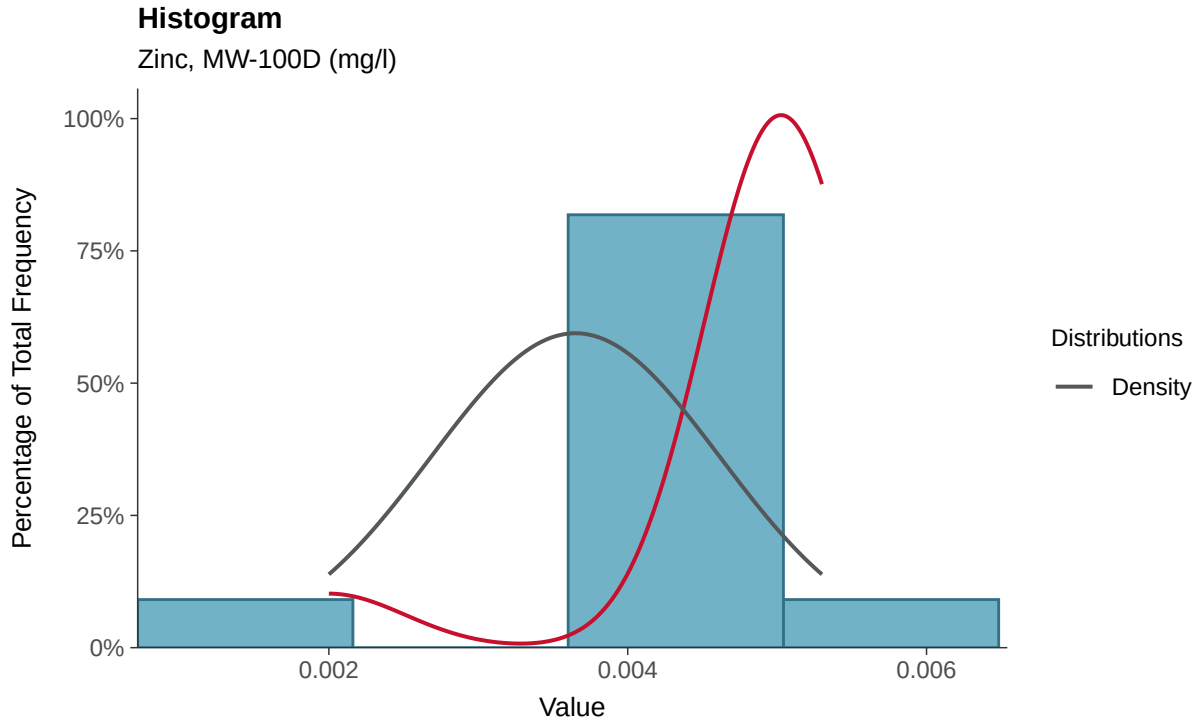



Trend Regression: Piecewise Linear-Linear
Vanadium, MW-100D (mg/l)
Value
0.005
0.004
0.003
0.002
0.001
0.000
07/01/23
01/01/24
07/01/24
01/01/25
07/01/25
Date
Data Type
Non-detect

Part 115: Zinc, MW-100D

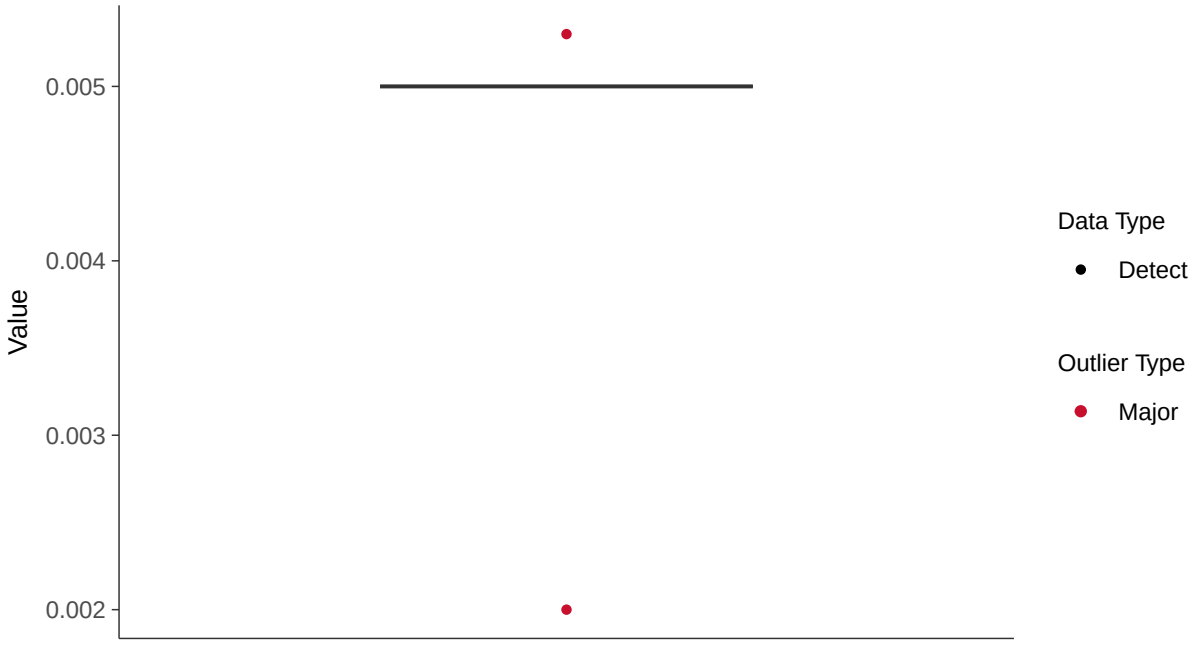
ID: 21_5_129





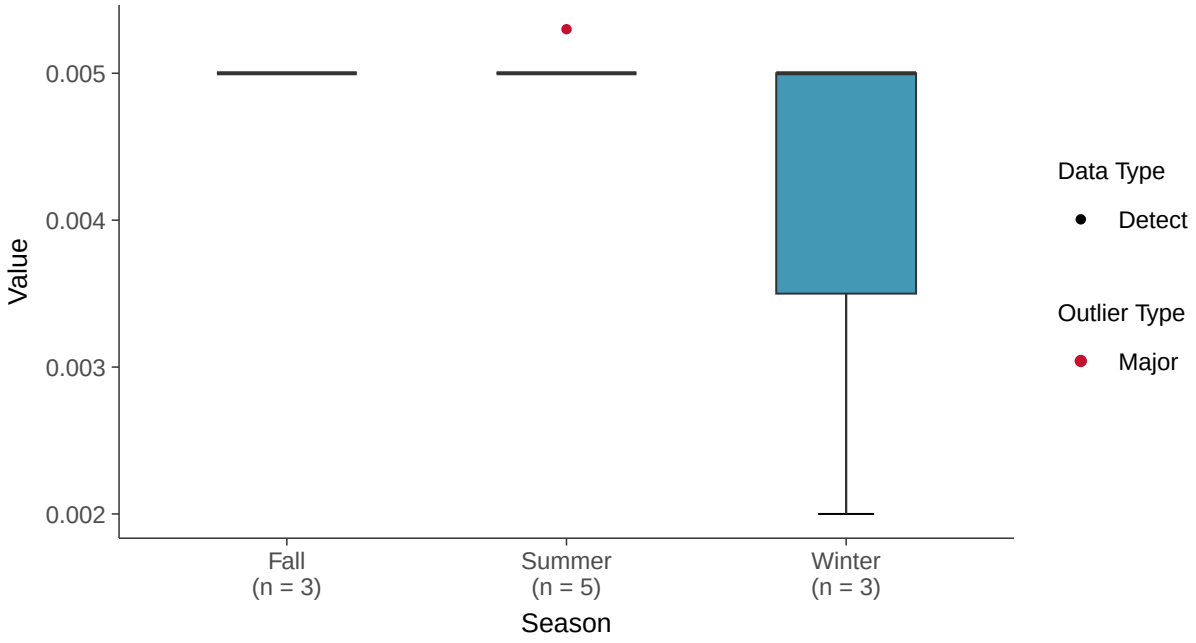
Boxplot

Zinc, MW-100D (mg/l)



Boxplot by Season

Zinc, MW-100D (mg/l)



Normal Q-Q plot using ROS Imputed Estimates

Zinc, MW-100D (mg/l)

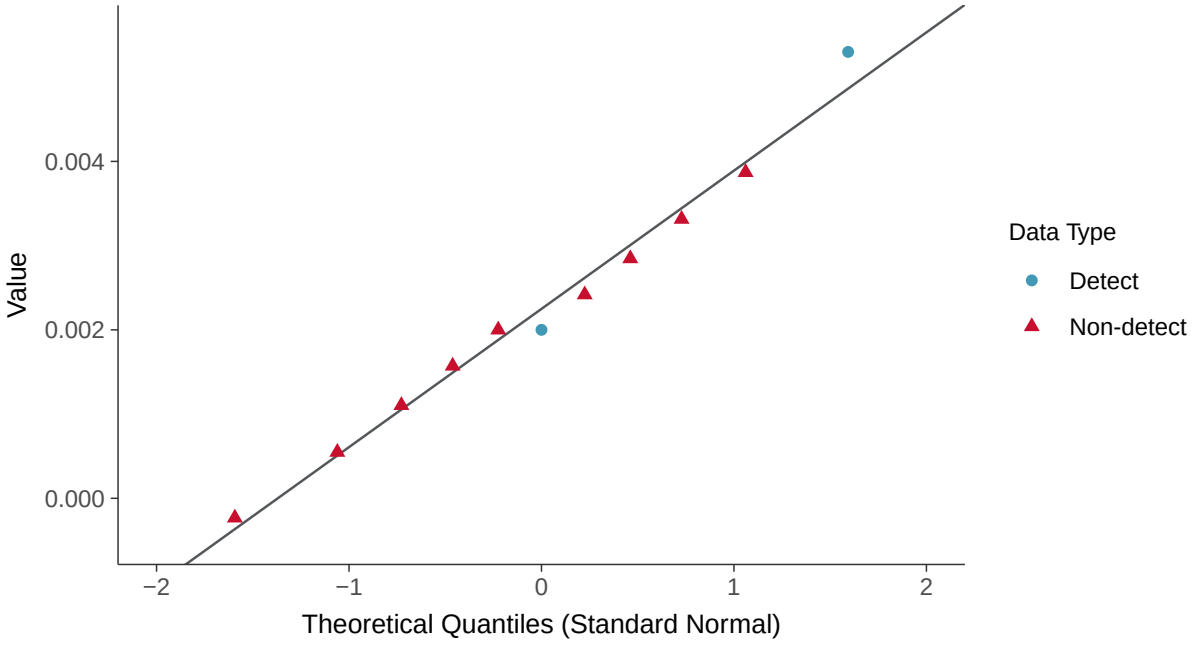


Table 1: Summary Statistics, Non-Detects Included

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
13_2_105	MW-7B	Appendix III	Boron	mg/l	14	0	0%	2022-03-09 to 2025-08-08	Gamma; Lognormal; Normal	Normal	2.98	2.99	2.80	3.17	0.0904	0.0303	0.0596
13_2_107	MW-7B	Appendix III	Calcium	mg/l	14	0	0%	2022-03-09 to 2025-08-08	Gamma; Lognormal; Normal	Normal	8.93	9.01	7.60	10.2	0.665	0.0745	-0.309
13_2_108	MW-7B	Appendix III	Chloride	mg/l	14	10	71%	2022-03-09 to 2025-08-08		Nonparametric	3.97	5.00	0.820	5.00	1.72	0.433	-1.17
13_2_112	MW-7B	Appendix III	Fluoride	mg/l	14	10	71%	2022-03-09 to 2025-08-08		Nonparametric	0.889	1.00	0.300	1.00	0.212	0.238	-2.08
13_2_120	MW-7B	Appendix III	pH, Field	su	14	0	0%	2022-03-09 to 2025-08-08	Gamma; Lognormal; Normal	Normal	7.95	7.95	7.73	8.17	0.154	0.0193	0.0272
13_2_124	MW-7B	Appendix III	Sulfate	mg/l	14	10	71%	2022-03-09 to 2025-08-08		Nonparametric	3.95	5.00	0.550	5.00	1.76	0.444	-1.22
13_2_126	MW-7B	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	2022-03-09 to 2025-08-08	Gamma; Lognormal; Normal	Normal	364	362	350	376	7.65	0.0211	0.191
13_3_101	MW-7B	Appendix IV	Antimony	mg/l	14	14	100%	2022-03-09 to 2025-08-08		Nonparametric	0.00437	0.00500	0.000570	0.00500	0.00161	0.368	-2.29
13_3_102	MW-7B	Appendix IV	Arsenic	mg/l	14	11	79%	2022-03-09 to 2025-08-08		Nonparametric	0.00206	0.00200	0.000750	0.00300	0.000520	0.253	-0.380
13_3_103	MW-7B	Appendix IV	Barium	mg/l	14	0	0%	2022-03-09 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.00887	0.00900	0.00750	0.0110	0.00106	0.120	0.532
13_3_104	MW-7B	Appendix IV	Beryllium	mg/l	14	13	93%	2022-03-09 to 2025-08-08		Nonparametric	0.000896	0.00100	0.000270	0.00100	0.000265	0.296	-2.29
13_3_106	MW-7B	Appendix IV	Cadmium	mg/l	14	13	93%	2022-03-09 to 2025-08-08		Nonparametric	0.000445	0.000500	0.0000770	0.000500	0.000141	0.317	-2.34
13_3_109	MW-7B	Appendix IV	Chromium	mg/l	14	14	100%	2022-03-09 to 2025-08-08		Nonparametric	0.00446	0.00500	0.00120	0.00500	0.00138	0.310	-2.29
13_3_110	MW-7B	Appendix IV	Cobalt	mg/l	14	13	93%	2022-03-09 to 2025-08-08		Nonparametric	0.00430	0.00500	0.0000860	0.00500	0.00178	0.414	-2.29
13_3_113	MW-7B	Appendix IV	Fluoride (App IV)	mg/l	14	10	71%	2022-03-09 to 2025-08-08		Nonparametric	0.889	1.00	0.300	1.00	0.212	0.238	-2.08
13_3_115	MW-7B	Appendix IV	Lead	mg/l	14	13	93%	2022-03-09 to 2025-08-08		Nonparametric	0.00328	0.00300	0.000450	0.0120	0.00267	0.815	2.90
13_3_116	MW-7B	Appendix IV	Lithium	mg/l	14	0	0%	2022-03-09 to 2025-08-08	Nonparametric	Nonparametric	0.0317	0.0320	0.0280	0.0340	0.00138	0.0436	-1.23
13_3_117	MW-7B	Appendix IV	Mercury	mg/l	14	14	100%	2022-03-09 to 2025-08-08		Nonparametric	0.000190	0.000200	0.000130	0.000200	0.0000254	0.134	-2.29
13_3_118	MW-7B	Appendix IV	Molybdenum	mg/l	14	14	100%	2022-03-09 to 2025-08-08		Nonparametric	0.00444	0.00500	0.00110	0.00500	0.00142	0.319	-2.29
13_3_121	MW-7B	Appendix IV	Radium-226+228	pci/l	14	1	7%	2022-03-09 to 2025-08-08	Gamma; Lognormal; Normal	Normal	1.25	1.20	0.378	2.73	0.738	0.592	0.693
13_3_122	MW-7B	Appendix IV	Selenium	mg/l	14	14	100%	2022-03-09 to 2025-08-08		Nonparametric	0.00441	0.00500	0.000890	0.00500	0.00149	0.338	-2.29
13_3_125	MW-7B	Appendix IV	Thallium	mg/l	14	14	100%	2022-03-09 to 2025-08-08		Nonparametric	0.00179	0.00200	0.000510	0.00200	0.000541	0.303	-2.29
13_5_111	MW-7B	Part 115	Copper	mg/l	14	14	100%	2022-03-09 to 2025-08-08		Nonparametric	0.00453	0.00500	0.00170	0.00500	0.00120	0.265	-2.29
13_5_114	MW-7B	Part 115	Iron	mg/l	14	0	0%	2022-03-09 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.0678	0.0650	0.0300	0.120	0.0267	0.394	0.232
13_5_119	MW-7B	Part 115	Nickel	mg/l	14	14	100%	2022-03-09 to 2025-08-08		Nonparametric	0.00450	0.00500	0.00150	0.00500	0.00127	0.282	-2.29
13_5_123	MW-7B	Part 115	Silver	mg/l	14	14	100%	2022-03-09 to 2025-08-08		Nonparametric	0.000436	0.000500	0.0000530	0.000500	0.000162	0.372	-2.29
13_5_128	MW-7B	Part 115	Vanadium	mg/l	14	14	100%	2022-03-09 to 2025-08-08		Nonparametric	0.00440	0.00500	0.000820	0.00500	0.00152	0.345	-2.29
13_5_129	MW-7B	Part 115	Zinc	mg/l	14	13	93%	2022-03-09 to 2025-08-08		Nonparametric	0.00443	0.00500	0.000930	0.00500	0.00145	0.327	-2.30
14_2_105	MW-16C	Appendix III	Boron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.404	0.400	0.390	0.430	0.0119	0.0295	0.844
14_2_107	MW-16C	Appendix III	Calcium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	72.1	73.4	62.1	77.2	5.20	0.0721	-0.948
14_2_108	MW-16C	Appendix III	Chloride	mg/l	13	6	46%	2023-02-02 to 2025-08-11	Gamma; Lognormal	Gamma	3.77	5.00	1.10	8.00	2.07	0.549	0.358
14_2_112	MW-16C	Appendix III	Fluoride	mg/l	13	8	62%	2023-02-02 to 2025-08-11		Nonparametric	0.717	1.00	0.200	1.00	0.333	0.464	-0.474
14_2_120	MW-16C	Appendix III	pH, Field	su	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	7.31	7.32	7.14	7.46	0.115	0.0157	-0.0296
14_2_124	MW-16C	Appendix III	Sulfate	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Nonparametric	Nonparametric	9.19	8.00	7.00	19.0	3.25	0.354	2.61
14_2_126	MW-16C	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Nonparametric	Nonparametric	338	332	310	418	28	0.0827	2.21
14_3_101	MW-16C	Appendix IV	Antimony	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00432	0.00500	0.000570	0.00500	0.00166	0.385	-2.18
14_3_102	MW-16C	Appendix IV	Arsenic	mg/l	13	10	77%	2023-02-02 to 2025-08-11		Nonparametric	0.00196	0.00200	0.000750	0.00300	0.000652	0.333	-0.467
14_3_103	MW-16C	Appendix IV	Barium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal	Gamma	0.0365	0.0320	0.0260	0.0610	0.0110	0.300	1.24
14_3_104	MW-16C	Appendix IV	Beryllium	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.000888	0.00100	0.000270	0.00100	0.000274	0.309	-2.18
14_3_106	MW-16C	Appendix IV	Cadmium	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.000435	0.000500	0.0000770	0.000500	0.000159	0.365	-2.18
14_3_109	MW-16C	Appendix IV	Chromium	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.00488	0.00500	0.00120	0.0110	0.00232	0.476	1.02
14_3_110	MW-16C	Appendix IV	Cobalt	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00424	0.00500	0.0000860	0.00500	0.00185	0.435	-2.18

(Table continues on next page)

[a] Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
14_3_113	MW-16C	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	2023-02-02 to 2025-08-11		Nonparametric	0.717	1.00	0.200	1.00	0.333	0.464	-0.474
14_3_115	MW-16C	Appendix IV	Lead	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00261	0.00300	0.000450	0.00300	0.000958	0.367	-2.18
14_3_116	MW-16C	Appendix IV	Lithium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.0277	0.0280	0.0260	0.0300	0.00144	0.0519	0.0413
14_3_117	MW-16C	Appendix IV	Mercury	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.000189	0.000200	0.000130	0.000200	0.0000263	0.139	-2.18
14_3_118	MW-16C	Appendix IV	Molybdenum	mg/l	13	10	77%	2023-02-02 to 2025-08-11		Nonparametric	0.00486	0.00500	0.00110	0.00900	0.00204	0.421	-0.297
14_3_121	MW-16C	Appendix IV	Radium-226+228	pci/l	13	2	15%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	1.39	1.26	0.225	3.60	1.02	0.738	0.834
14_3_122	MW-16C	Appendix IV	Selenium	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00437	0.00500	0.000890	0.00500	0.00154	0.353	-2.18
14_3_125	MW-16C	Appendix IV	Thallium	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00177	0.00200	0.000510	0.00200	0.000560	0.316	-2.18
14_5_111	MW-16C	Part 115	Copper	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00449	0.00500	0.00170	0.00500	0.00124	0.276	-2.18
14_5_114	MW-16C	Part 115	Iron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal	Gamma	0.545	0.480	0.320	1.10	0.203	0.372	1.90
14_5_119	MW-16C	Part 115	Nickel	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00446	0.00500	0.00150	0.00500	0.00131	0.295	-2.18
14_5_123	MW-16C	Part 115	Silver	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.000431	0.000500	0.0000530	0.000500	0.000168	0.389	-2.18
14_5_128	MW-16C	Part 115	Vanadium	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00436	0.00500	0.000820	0.00500	0.00157	0.360	-2.18
14_5_129	MW-16C	Part 115	Zinc	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.00441	0.00500	0.000930	0.00500	0.00144	0.327	-2.20
15_2_105	MW-16D	Appendix III	Boron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	4.62	4.62	4.30	5.01	0.197	0.0426	0.101
15_2_107	MW-16D	Appendix III	Calcium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma	Gamma	29.4	29.3	28.5	30.5	0.617	0.0210	0.979
15_2_108	MW-16D	Appendix III	Chloride	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	7.17	7.00	6.00	8.00	0.608	0.0849	-0.0708
15_2_112	MW-16D	Appendix III	Fluoride	mg/l	13	8	62%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Nonparametric	0.790	1.00	0.360	1.00	0.261	0.330	-0.682
15_2_120	MW-16D	Appendix III	pH, Field	su	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	7.57	7.53	7.44	7.83	0.116	0.0153	1.16
15_2_124	MW-16D	Appendix III	Sulfate	mg/l	13	1	8%	2023-02-02 to 2025-08-11	Gamma; Lognormal	Gamma	6.37	5.90	4.20	13.0	2.39	0.375	2.0
15_2_126	MW-16D	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	375	376	360	396	9.08	0.0242	0.627
15_3_101	MW-16D	Appendix IV	Antimony	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00432	0.00500	0.000570	0.00500	0.00166	0.385	-2.18
15_3_102	MW-16D	Appendix IV	Arsenic	mg/l	13	3	23%	2023-02-02 to 2025-08-11	Nonparametric	Nonparametric	0.00301	0.00300	0.00200	0.00400	0.000792	0.263	0.0942
15_3_103	MW-16D	Appendix IV	Barium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.0350	0.0350	0.0300	0.0380	0.00212	0.0606	-0.990
15_3_104	MW-16D	Appendix IV	Beryllium	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.000888	0.00100	0.000270	0.00100	0.000274	0.309	-2.18
15_3_106	MW-16D	Appendix IV	Cadmium	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.000435	0.000500	0.0000770	0.000500	0.000159	0.365	-2.18
15_3_109	MW-16D	Appendix IV	Chromium	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00442	0.00500	0.00120	0.00500	0.00143	0.323	-2.18
15_3_110	MW-16D	Appendix IV	Cobalt	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00424	0.00500	0.0000860	0.00500	0.00185	0.435	-2.18
15_3_113	MW-16D	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Nonparametric	0.790	1.00	0.360	1.00	0.261	0.330	-0.682
15_3_115	MW-16D	Appendix IV	Lead	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00261	0.00300	0.000450	0.00300	0.000958	0.367	-2.18
15_3_116	MW-16D	Appendix IV	Lithium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.0298	0.0300	0.0220	0.0390	0.00381	0.128	0.476
15_3_117	MW-16D	Appendix IV	Mercury	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.000189	0.000200	0.000130	0.000200	0.0000263	0.139	-2.18
15_3_118	MW-16D	Appendix IV	Molybdenum	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Nonparametric	Nonparametric	0.00991	0.0100	0.00500	0.0120	0.00174	0.176	-2.04
15_3_121	MW-16D	Appendix IV	Radium-226+228	pci/l	13	1	8%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	1.69	1.33	0.515	4.14	1.14	0.677	0.968
15_3_122	MW-16D	Appendix IV	Selenium	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.00444	0.00500	0.000890	0.00600	0.00160	0.360	-2.02
15_3_125	MW-16D	Appendix IV	Thallium	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00177	0.00200	0.000510	0.00200	0.000560	0.316	-2.18
15_5_111	MW-16D	Part 115	Copper	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.00488	0.00500	0.00170	0.0100	0.00197	0.404	0.906
15_5_114	MW-16D	Part 115	Iron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.313	0.340	0.0600	0.550	0.149	0.475	-0.334
15_5_119	MW-16D	Part 115	Nickel	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00446	0.00500	0.00150	0.00500	0.00131	0.295	-2.18
15_5_123	MW-16D	Part 115	Silver	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.000431	0.000500	0.0000530	0.000500	0.000168	0.389	-2.18
15_5_128	MW-16D	Part 115	Vanadium	mg/l	13	13	100%	2023-02-02 to 2025-08-11		Nonparametric	0.00436	0.00500	0.000820	0.00500	0.00157	0.360	-2.18
15_5_129	MW-16D	Part 115	Zinc	mg/l	13	1	8%	2023-02-02 to 2025-08-11	Gamma; Lognormal	Gamma	0.0536	0.0140	0.00110	0.271	0.0840	1.57	1.97

(Table continues on next page)

[a] Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
16_2_105	MW-17D	Appendix III	Boron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Normal	Normal	2.38	2.48	1.67	2.60	0.305	0.128	-2.27
16_2_107	MW-17D	Appendix III	Calcium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	56.1	51.0	50.0	92.5	14.7	0.263	2.81
16_2_108	MW-17D	Appendix III	Chloride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Lognormal	Lognormal	13.8	6.80	3.60	65.9	21.2	1.54	2.76
16_2_112	MW-17D	Appendix III	Fluoride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.389	0.430	0.270	0.470	0.0863	0.222	-0.562
16_2_120	MW-17D	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	7.48	7.49	7.37	7.60	0.0650	0.00868	0.143
16_2_124	MW-17D	Appendix III	Sulfate	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	44.6	7.65	2.00	315	109	2.45	2.83
16_2_126	MW-17D	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	360	290	280	828	190	0.528	2.81
16_3_101	MW-17D	Appendix IV	Antimony	mg/l	8	6	75%	2024-10-08 to 2025-09-11		Nonparametric	0.00224	0.000625	0.000570	0.00500	0.00228	1.02	0.643
16_3_102	MW-17D	Appendix IV	Arsenic	mg/l	8	2	25%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.00170	0.00150	0.000750	0.00400	0.00105	0.614	1.71
16_3_103	MW-17D	Appendix IV	Barium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.0465	0.0430	0.0390	0.0720	0.0107	0.231	2.42
16_3_104	MW-17D	Appendix IV	Beryllium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.000544	0.000270	0.000270	0.00100	0.000378	0.695	0.644
16_3_106	MW-17D	Appendix IV	Cadmium	mg/l	8	7	88%	2024-10-08 to 2025-09-11		Nonparametric	0.000810	0.000123	0.0000770	0.00500	0.00170	2.10	2.76
16_3_109	MW-17D	Appendix IV	Chromium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00825	0.00120	0.00120	0.0500	0.0170	2.06	2.77
16_3_110	MW-17D	Appendix IV	Cobalt	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00193	0.0000860	0.0000860	0.00500	0.00254	1.32	0.644
16_3_113	MW-17D	Appendix IV	Fluoride (App IV)	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.389	0.430	0.270	0.470	0.0863	0.222	-0.562
16_3_115	MW-17D	Appendix IV	Lead	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00141	0.000450	0.000450	0.00300	0.00132	0.938	0.644
16_3_116	MW-17D	Appendix IV	Lithium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.0392	0.0360	0.0320	0.0690	0.0122	0.310	2.70
16_3_117	MW-17D	Appendix IV	Mercury	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.000156	0.000130	0.000130	0.000200	0.0000362	0.232	0.644
16_3_118	MW-17D	Appendix IV	Molybdenum	mg/l	8	1	12%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.0170	0.00490	0.00240	0.105	0.0356	2.09	2.82
16_3_121	MW-17D	Appendix IV	Radium-226+228	pci/l	8	1	12%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	1.73	1.18	0.569	3.83	1.13	0.654	1.11
16_3_122	MW-17D	Appendix IV	Selenium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00243	0.000890	0.000890	0.00500	0.00213	0.875	0.644
16_3_125	MW-17D	Appendix IV	Thallium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00107	0.000510	0.000510	0.00200	0.000771	0.722	0.644
16_5_111	MW-17D	Part 115	Copper	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00856	0.00170	0.00170	0.0500	0.0168	1.96	2.78
16_5_114	MW-17D	Part 115	Iron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Lognormal	Lognormal	0.811	0.735	0.230	1.98	0.505	0.623	2.05
16_5_119	MW-17D	Part 115	Nickel	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00844	0.00150	0.00150	0.0500	0.0169	2.0	2.78
16_5_123	MW-17D	Part 115	Silver	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.000783	0.0000530	0.0000530	0.00500	0.00172	2.19	2.75
16_5_128	MW-17D	Part 115	Vanadium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00239	0.000820	0.000820	0.00500	0.00216	0.906	0.644
16_5_129	MW-17D	Part 115	Zinc	mg/l	8	5	62%	2024-10-08 to 2025-09-11		Nonparametric	0.00464	0.00405	0.000930	0.0150	0.00453	0.976	2.03
17_2_105	MW-17E	Appendix III	Boron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	3.14	3.25	2.36	3.50	0.355	0.113	-1.75
17_2_107	MW-17E	Appendix III	Calcium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	10.7	5.45	5.20	46.7	14.6	1.36	2.83
17_2_108	MW-17E	Appendix III	Chloride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	2.79	1.45	1.30	10.2	3.05	1.09	2.65
17_2_112	MW-17E	Appendix III	Fluoride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	1.05	1.20	0.220	1.30	0.357	0.341	-2.20
17_2_120	MW-17E	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	8.05	8.05	7.82	8.15	0.105	0.0130	-1.56
17_2_124	MW-17E	Appendix III	Sulfate	mg/l	8	3	38%	2024-10-08 to 2025-09-11	Gamma; Lognormal	Nonparametric	1.99	0.655	0.0400	10.8	3.61	1.81	2.67
17_2_126	MW-17E	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	362	360	316	388	22.9	0.0635	-0.913
17_3_101	MW-17E	Appendix IV	Antimony	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00223	0.000570	0.000570	0.00500	0.00229	1.03	0.644
17_3_102	MW-17E	Appendix IV	Arsenic	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00122	0.000750	0.000750	0.00200	0.000647	0.531	0.644
17_3_103	MW-17E	Appendix IV	Barium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.00946	0.00485	0.00410	0.0420	0.0132	1.39	2.82
17_3_104	MW-17E	Appendix IV	Beryllium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.000544	0.000270	0.000270	0.00100	0.000378	0.695	0.644
17_3_106	MW-17E	Appendix IV	Cadmium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.000798	0.0000770	0.0000770	0.00500	0.00171	2.14	2.76
17_3_109	MW-17E	Appendix IV	Chromium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00825	0.00120	0.00120	0.0500	0.0170	2.06	2.77
17_3_110	MW-17E	Appendix IV	Cobalt	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00193	0.0000860	0.0000860	0.00500	0.00254	1.32	0.644

(Table continues on next page)

[a] Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
17_3_113	MW-17E	Appendix IV	Fluoride (App IV)	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	1.05	1.20	0.220	1.30	0.357	0.341	-2.20
17_3_115	MW-17E	Appendix IV	Lead	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00141	0.000450	0.000450	0.00300	0.00132	0.938	0.644
17_3_116	MW-17E	Appendix IV	Lithium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.0262	0.0255	0.0230	0.0330	0.00320	0.122	1.48
17_3_117	MW-17E	Appendix IV	Mercury	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.000156	0.000130	0.000130	0.000200	0.0000362	0.232	0.644
17_3_118	MW-17E	Appendix IV	Molybdenum	mg/l	8	7	88%	2024-10-08 to 2025-09-11		Nonparametric	0.00319	0.00110	0.00110	0.0100	0.00327	1.03	1.54
17_3_121	MW-17E	Appendix IV	Radium-226+228	pci/l	8	4	50%	2024-10-08 to 2025-09-11		Nonparametric	1.35	0.657	0.531	4.42	1.38	1.02	2.03
17_3_122	MW-17E	Appendix IV	Selenium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00243	0.000890	0.000890	0.00500	0.00213	0.875	0.644
17_3_125	MW-17E	Appendix IV	Thallium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00107	0.000510	0.000510	0.00200	0.000771	0.722	0.644
17_5_111	MW-17E	Part 115	Copper	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00856	0.00170	0.00170	0.0500	0.0168	1.96	2.78
17_5_114	MW-17E	Part 115	Iron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal	Gamma	0.0717	0.0500	0.0170	0.260	0.0794	1.11	2.38
17_5_119	MW-17E	Part 115	Nickel	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00844	0.00150	0.00150	0.0500	0.0169	2.0	2.78
17_5_123	MW-17E	Part 115	Silver	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.000783	0.0000530	0.0000530	0.00500	0.00172	2.19	2.75
17_5_128	MW-17E	Part 115	Vanadium	mg/l	8	8	100%	2024-10-08 to 2025-09-11		Nonparametric	0.00239	0.000820	0.000820	0.00500	0.00216	0.906	0.644
17_5_129	MW-17E	Part 115	Zinc	mg/l	8	6	75%	2024-10-08 to 2025-09-11		Nonparametric	0.00431	0.00315	0.000930	0.0150	0.00473	1.10	1.96
18_2_105	MW-18C	Appendix III	Boron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	2.72	2.80	2.28	3.10	0.312	0.115	-0.347
18_2_107	MW-18C	Appendix III	Calcium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	166	170	95.0	220	36.9	0.222	-0.562
18_2_108	MW-18C	Appendix III	Chloride	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	72.5	82.4	23.0	95.2	22.7	0.313	-1.42
18_2_112	MW-18C	Appendix III	Fluoride	mg/l	9	2	22%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.330	0.230	0.110	1.00	0.275	0.834	2.18
18_2_120	MW-18C	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	7.26	7.28	7.07	7.35	0.0899	0.0124	-1.34
18_2_124	MW-18C	Appendix III	Sulfate	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Normal	Normal	426	420	140	582	137	0.322	-0.993
18_2_126	MW-18C	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	945	940	550	1260	203	0.215	-0.536
18_3_101	MW-18C	Appendix IV	Antimony	mg/l	9	8	89%	2024-10-08 to 2025-08-08		Nonparametric	0.00206	0.000570	0.000570	0.00500	0.00221	1.07	0.856
18_3_102	MW-18C	Appendix IV	Arsenic	mg/l	9	5	56%	2024-10-08 to 2025-08-08		Nonparametric	0.00126	0.00100	0.000750	0.00200	0.000587	0.467	0.561
18_3_103	MW-18C	Appendix IV	Barium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.0492	0.0520	0.0280	0.0600	0.00996	0.202	-1.18
18_3_104	MW-18C	Appendix IV	Beryllium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.000513	0.000270	0.000270	0.00100	0.000365	0.711	0.857
18_3_106	MW-18C	Appendix IV	Cadmium	mg/l	9	8	89%	2024-10-08 to 2025-08-08		Nonparametric	0.000720	0.0000770	0.0000770	0.00500	0.00162	2.24	2.93
18_3_109	MW-18C	Appendix IV	Chromium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00747	0.00120	0.00120	0.0500	0.0160	2.15	2.94
18_3_110	MW-18C	Appendix IV	Cobalt	mg/l	9	5	56%	2024-10-08 to 2025-08-08		Nonparametric	0.00174	0.000140	0.0000860	0.00500	0.00244	1.40	0.857
18_3_113	MW-18C	Appendix IV	Fluoride (App IV)	mg/l	9	2	22%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.330	0.230	0.110	1.00	0.275	0.834	2.18
18_3_115	MW-18C	Appendix IV	Lead	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00130	0.000450	0.000450	0.00300	0.00128	0.981	0.857
18_3_116	MW-18C	Appendix IV	Lithium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.0863	0.0850	0.0570	0.123	0.0174	0.202	0.723
18_3_117	MW-18C	Appendix IV	Mercury	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.000153	0.000130	0.000130	0.000200	0.0000350	0.228	0.857
18_3_118	MW-18C	Appendix IV	Molybdenum	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Normal	Normal	0.0969	0.100	0.0300	0.134	0.0303	0.313	-1.33
18_3_121	MW-18C	Appendix IV	Radium-226+228	pci/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	2.27	2.24	1.44	3.97	0.897	0.395	0.974
18_3_122	MW-18C	Appendix IV	Selenium	mg/l	9	8	89%	2024-10-08 to 2025-08-08		Nonparametric	0.00234	0.000890	0.000890	0.00500	0.00201	0.859	0.811
18_3_125	MW-18C	Appendix IV	Thallium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00101	0.000510	0.000510	0.00200	0.000745	0.740	0.857
18_5_111	MW-18C	Part 115	Copper	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00780	0.00170	0.00170	0.0500	0.0159	2.04	2.95
18_5_114	MW-18C	Part 115	Iron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	2.70	2.70	0.890	4.09	0.939	0.348	-0.486
18_5_119	MW-18C	Part 115	Nickel	mg/l	9	1	11%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.0127	0.00900	0.00250	0.0500	0.0143	1.13	2.79
18_5_123	MW-18C	Part 115	Silver	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.000702	0.0000530	0.0000530	0.00500	0.00162	2.31	2.92
18_5_128	MW-18C	Part 115	Vanadium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00221	0.000820	0.000820	0.00500	0.00209	0.944	0.857
18_5_129	MW-18C	Part 115	Zinc	mg/l	9	6	67%	2024-10-08 to 2025-08-08		Nonparametric	0.00400	0.00200	0.000930	0.0150	0.00453	1.13	2.11

(Table continues on next page)

[a] Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
19_2_105	MW-18D	Appendix III	Boron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Normal	Normal	3.51	3.58	2.66	3.90	0.358	0.102	-1.81
19_2_107	MW-18D	Appendix III	Calcium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal	Gamma	78.2	61.0	34.0	202	49.6	0.635	2.32
19_2_108	MW-18D	Appendix III	Chloride	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	38.6	36.0	13.0	94.1	23.6	0.612	1.78
19_2_112	MW-18D	Appendix III	Fluoride	mg/l	9	1	11%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.913	1.00	0.500	1.30	0.285	0.312	-0.318
19_2_120	MW-18D	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	7.83	7.81	7.70	8.01	0.110	0.0141	0.359
19_2_124	MW-18D	Appendix III	Sulfate	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal	Gamma	215	190	70.0	601	155	0.721	2.27
19_2_126	MW-18D	Appendix III	Total Dissolved Solids	mg/l	9	1	11%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	617	600	78.0	1260	311	0.504	0.571
19_3_101	MW-18D	Appendix IV	Antimony	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00205	0.000570	0.000570	0.00500	0.00221	1.08	0.857
19_3_102	MW-18D	Appendix IV	Arsenic	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00117	0.000750	0.000750	0.00200	0.000625	0.536	0.857
19_3_103	MW-18D	Appendix IV	Barium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.0279	0.0230	0.0140	0.0560	0.0128	0.460	1.44
19_3_104	MW-18D	Appendix IV	Beryllium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.000513	0.000270	0.000270	0.00100	0.000365	0.711	0.857
19_3_106	MW-18D	Appendix IV	Cadmium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.000718	0.0000770	0.0000770	0.00500	0.00162	2.25	2.93
19_3_109	MW-18D	Appendix IV	Chromium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00747	0.00120	0.00120	0.0500	0.0160	2.15	2.94
19_3_110	MW-18D	Appendix IV	Cobalt	mg/l	9	6	67%	2024-10-08 to 2025-08-08		Nonparametric	0.00174	0.000160	0.0000860	0.00500	0.00244	1.40	0.857
19_3_113	MW-18D	Appendix IV	Fluoride (App IV)	mg/l	9	1	11%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.913	1.00	0.500	1.30	0.285	0.312	-0.318
19_3_115	MW-18D	Appendix IV	Lead	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00130	0.000450	0.000450	0.00300	0.00128	0.981	0.857
19_3_116	MW-18D	Appendix IV	Lithium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.0697	0.0670	0.0420	0.0920	0.0172	0.247	-0.103
19_3_117	MW-18D	Appendix IV	Mercury	mg/l	9	8	89%	2024-10-08 to 2025-08-08		Nonparametric	0.000153	0.000130	0.000130	0.000200	0.0000350	0.228	0.857
19_3_118	MW-18D	Appendix IV	Molybdenum	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.0618	0.0520	0.0220	0.116	0.0290	0.470	0.652
19_3_121	MW-18D	Appendix IV	Radium-226+228	pci/l	9	3	33%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Nonparametric	1.68	0.999	0.605	5.17	1.62	0.966	1.67
19_3_122	MW-18D	Appendix IV	Selenium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00226	0.000890	0.000890	0.00500	0.00205	0.909	0.857
19_3_125	MW-18D	Appendix IV	Thallium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00101	0.000510	0.000510	0.00200	0.000745	0.740	0.857
19_5_111	MW-18D	Part 115	Copper	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00780	0.00170	0.00170	0.0500	0.0159	2.04	2.95
19_5_114	MW-18D	Part 115	Iron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal	Gamma	1.48	1.20	0.560	3.73	0.931	0.628	2.05
19_5_119	MW-18D	Part 115	Nickel	mg/l	9	1	11%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.00854	0.00320	0.00150	0.0500	0.0156	1.82	2.97
19_5_123	MW-18D	Part 115	Silver	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.000702	0.0000530	0.0000530	0.00500	0.00162	2.31	2.92
19_5_128	MW-18D	Part 115	Vanadium	mg/l	9	9	100%	2024-10-08 to 2025-08-08		Nonparametric	0.00221	0.000820	0.000820	0.00500	0.00209	0.944	0.857
19_5_129	MW-18D	Part 115	Zinc	mg/l	9	6	67%	2024-10-08 to 2025-08-08		Nonparametric	0.00411	0.00240	0.000930	0.0150	0.00446	1.09	2.14
20_2_105	MW-100C	Appendix III	Boron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	1.80	1.82	1.54	1.91	0.110	0.0614	-1.45
20_2_107	MW-100C	Appendix III	Calcium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	58.4	59.0	55.2	61.2	2.21	0.0378	-0.291
20_2_108	MW-100C	Appendix III	Chloride	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal	Gamma	6.17	5.00	2.80	14.0	3.32	0.537	1.54
20_2_112	MW-100C	Appendix III	Fluoride	mg/l	11	7	64%	2023-06-05 to 2025-08-07		Nonparametric	0.754	1.00	0.130	1.00	0.351	0.465	-0.848
20_2_120	MW-100C	Appendix III	pH, Field	su	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	7.34	7.32	7.15	7.54	0.111	0.0151	0.227
20_2_124	MW-100C	Appendix III	Sulfate	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal	Gamma	9.04	6.00	3.40	27.0	6.84	0.757	2.11
20_2_126	MW-100C	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Nonparametric	Nonparametric	294	300	240	314	20.7	0.0703	-2.03
20_3_101	MW-100C	Appendix IV	Antimony	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00419	0.00500	0.000570	0.00500	0.00179	0.427	-1.92
20_3_102	MW-100C	Appendix IV	Arsenic	mg/l	11	9	82%	2023-06-05 to 2025-08-07		Nonparametric	0.00190	0.00200	0.000750	0.00210	0.000381	0.201	-3.28
20_3_103	MW-100C	Appendix IV	Barium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0735	0.0750	0.0510	0.0920	0.0120	0.163	-0.450
20_3_104	MW-100C	Appendix IV	Beryllium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.000867	0.00100	0.000270	0.00100	0.000295	0.340	-1.92
20_3_106	MW-100C	Appendix IV	Cadmium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.000423	0.000500	0.0000770	0.000500	0.000171	0.404	-1.92
20_3_109	MW-100C	Appendix IV	Chromium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00431	0.00500	0.00120	0.00500	0.00154	0.357	-1.92
20_3_110	MW-100C	Appendix IV	Cobalt	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00411	0.00500	0.0000860	0.00500	0.00199	0.484	-1.92

(Table continues on next page)

[a] Non-detects are excluded from goodness-of-fit tests.

Table 1: Summary Statistics, Non-Detects Included *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit[a]	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
20_3_113	MW-100C	Appendix IV	Fluoride (App IV)	mg/l	11	7	64%	2023-06-05 to 2025-08-07		Nonparametric	0.754	1.00	0.130	1.00	0.351	0.465	-0.848
20_3_115	MW-100C	Appendix IV	Lead	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00254	0.00300	0.000450	0.00300	0.00103	0.407	-1.92
20_3_116	MW-100C	Appendix IV	Lithium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0320	0.0320	0.0280	0.0350	0.00205	0.0640	-0.767
20_3_117	MW-100C	Appendix IV	Mercury	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.000187	0.000200	0.000130	0.000200	0.0000283	0.151	-1.92
20_3_118	MW-100C	Appendix IV	Molybdenum	mg/l	11	6	55%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Nonparametric	0.00524	0.00500	0.00110	0.00900	0.00251	0.479	-0.0846
20_3_121	MW-100C	Appendix IV	Radium-226+228	pci/l	11	1	9%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	1.08	0.977	0.525	1.69	0.420	0.389	0.185
20_3_122	MW-100C	Appendix IV	Selenium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00425	0.00500	0.000890	0.00500	0.00166	0.391	-1.92
20_3_125	MW-100C	Appendix IV	Thallium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00173	0.00200	0.000510	0.00200	0.000603	0.349	-1.92
20_5_111	MW-100C	Part 115	Copper	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00440	0.00500	0.00170	0.00500	0.00133	0.303	-1.92
20_5_114	MW-100C	Part 115	Iron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.675	0.640	0.310	1.00	0.190	0.281	0.183
20_5_119	MW-100C	Part 115	Nickel	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00436	0.00500	0.00150	0.00500	0.00142	0.324	-1.92
20_5_123	MW-100C	Part 115	Silver	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.000419	0.000500	0.0000530	0.000500	0.000181	0.432	-1.92
20_5_128	MW-100C	Part 115	Vanadium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00424	0.00500	0.000820	0.00500	0.00169	0.399	-1.92
20_5_129	MW-100C	Part 115	Zinc	mg/l	11	8	73%	2023-06-05 to 2025-08-07		Nonparametric	0.00476	0.00500	0.00100	0.0100	0.00231	0.485	0.519
21_2_105	MW-100D	Appendix III	Boron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Nonparametric	Nonparametric	2.97	3.22	1.89	3.45	0.556	0.187	-1.29
21_2_107	MW-100D	Appendix III	Calcium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Nonparametric	Nonparametric	19.1	7.18	5.26	68.0	22.2	1.17	1.72
21_2_108	MW-100D	Appendix III	Chloride	mg/l	11	4	36%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	7.07	5.00	4.20	16.0	3.99	0.564	1.63
21_2_112	MW-100D	Appendix III	Fluoride	mg/l	11	5	45%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.743	0.850	0.300	1.00	0.281	0.379	-0.398
21_2_120	MW-100D	Appendix III	pH, Field	su	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	7.67	7.74	6.85	8.22	0.400	0.0522	-0.754
21_2_124	MW-100D	Appendix III	Sulfate	mg/l	11	1	9%	2023-06-05 to 2025-08-07	Gamma; Lognormal	Gamma	27.2	11.0	5.00	110	32.1	1.18	2.07
21_2_126	MW-100D	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal	Gamma	441	396	366	650	92.7	0.210	1.66
21_3_101	MW-100D	Appendix IV	Antimony	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00419	0.00500	0.000570	0.00500	0.00179	0.427	-1.92
21_3_102	MW-100D	Appendix IV	Arsenic	mg/l	11	2	18%	2023-06-05 to 2025-08-07		Nonparametric	0.00265	0.00300	0.00160	0.00300	0.000532	0.201	-1.12
21_3_103	MW-100D	Appendix IV	Barium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0109	0.0100	0.00700	0.0190	0.00345	0.317	1.46
21_3_104	MW-100D	Appendix IV	Beryllium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.000867	0.00100	0.000270	0.00100	0.000295	0.340	-1.92
21_3_106	MW-100D	Appendix IV	Cadmium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.000423	0.000500	0.0000770	0.000500	0.000171	0.404	-1.92
21_3_109	MW-100D	Appendix IV	Chromium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00431	0.00500	0.00120	0.00500	0.00154	0.357	-1.92
21_3_110	MW-100D	Appendix IV	Cobalt	mg/l	11	10	91%	2023-06-05 to 2025-08-07		Nonparametric	0.00414	0.00500	0.0000860	0.00500	0.00192	0.465	-1.93
21_3_113	MW-100D	Appendix IV	Fluoride (App IV)	mg/l	11	5	45%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.743	0.850	0.300	1.00	0.281	0.379	-0.398
21_3_115	MW-100D	Appendix IV	Lead	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00254	0.00300	0.000450	0.00300	0.00103	0.407	-1.92
21_3_116	MW-100D	Appendix IV	Lithium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Nonparametric	Nonparametric	0.0186	0.0180	0.0160	0.0310	0.00427	0.229	2.86
21_3_117	MW-100D	Appendix IV	Mercury	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.000187	0.000200	0.000130	0.000200	0.0000283	0.151	-1.92
21_3_118	MW-100D	Appendix IV	Molybdenum	mg/l	11	1	9%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.00800	0.00800	0.00500	0.0120	0.00211	0.263	0.446
21_3_121	MW-100D	Appendix IV	Radium-226+228	pci/l	11	1	9%	2023-06-05 to 2025-08-07	Gamma; Lognormal	Gamma	1.32	0.893	0.477	5.06	1.30	0.984	2.82
21_3_122	MW-100D	Appendix IV	Selenium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00425	0.00500	0.000890	0.00500	0.00166	0.391	-1.92
21_3_125	MW-100D	Appendix IV	Thallium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00173	0.00200	0.000510	0.00200	0.000603	0.349	-1.92
21_5_111	MW-100D	Part 115	Copper	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00440	0.00500	0.00170	0.00500	0.00133	0.303	-1.92
21_5_114	MW-100D	Part 115	Iron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.322	0.240	0.120	0.770	0.220	0.683	1.09
21_5_119	MW-100D	Part 115	Nickel	mg/l	11	10	91%	2023-06-05 to 2025-08-07		Nonparametric	0.00439	0.00500	0.00150	0.00500	0.00136	0.309	-1.93
21_5_123	MW-100D	Part 115	Silver	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.000419	0.000500	0.0000530	0.000500	0.000181	0.432	-1.92
21_5_128	MW-100D	Part 115	Vanadium	mg/l	11	11	100%	2023-06-05 to 2025-08-07		Nonparametric	0.00424	0.00500	0.000820	0.00500	0.00169	0.399	-1.92
21_5_129	MW-100D	Part 115	Zinc	mg/l	11	9	82%	2023-06-05 to 2025-08-07		Nonparametric	0.00475	0.00500	0.00200	0.00530	0.000918	0.193	-3.26

[a] Non-detects are excluded from goodness-of-fit tests.

Table 2: Summary Statistics, Non-Detects Excluded

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
13_2_105	MW-7B	Appendix III	Boron	mg/l	14	0	0%	2022-03-09 to 2025-08-08	Gamma; Lognormal; Normal	Normal	2.98	2.99	2.80	3.17	0.0904	0.0303	0.0596
13_2_107	MW-7B	Appendix III	Calcium	mg/l	14	0	0%	2022-03-09 to 2025-08-08	Gamma; Lognormal; Normal	Normal	8.93	9.01	7.60	10.2	0.665	0.0745	-0.309
13_2_108	MW-7B	Appendix III	Chloride	mg/l	14	10	71%	2022-03-09 to 2025-08-08		Nonparametric	1.38	1.41	0.820	1.90	0.596	0.430	-0.0243
13_2_112	MW-7B	Appendix III	Fluoride	mg/l	14	10	71%	2022-03-09 to 2025-08-08		Nonparametric	0.613	0.670	0.300	0.810	0.226	0.369	-1.20
13_2_120	MW-7B	Appendix III	pH, Field	su	14	0	0%	2022-03-09 to 2025-08-08	Gamma; Lognormal; Normal	Normal	7.95	7.95	7.73	8.17	0.154	0.0193	0.0272
13_2_124	MW-7B	Appendix III	Sulfate	mg/l	14	10	71%	2022-03-09 to 2025-08-08		Nonparametric	1.34	1.20	0.550	2.40	0.776	0.580	0.995
13_2_126	MW-7B	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	2022-03-09 to 2025-08-08	Gamma; Lognormal; Normal	Normal	364	362	350	376	7.65	0.0211	0.191
13_3_102	MW-7B	Appendix IV	Arsenic	mg/l	14	11	79%	2022-03-09 to 2025-08-08		Nonparametric	0.00270	0.00300	0.00210	0.00300	0.000520	0.192	-1.73
13_3_103	MW-7B	Appendix IV	Barium	mg/l	14	0	0%	2022-03-09 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.00887	0.00900	0.00750	0.0110	0.00106	0.120	0.532
13_3_104	MW-7B	Appendix IV	Beryllium	mg/l	14	13	93%	2022-03-09 to 2025-08-08		Nonparametric	0.000270	0.000270	0.000270	0.000270	NA	NA	NA
13_3_106	MW-7B	Appendix IV	Cadmium	mg/l	14	13	93%	2022-03-09 to 2025-08-08		Nonparametric	0.000150	0.000150	0.000150	0.000150	NA	NA	NA
13_3_110	MW-7B	Appendix IV	Cobalt	mg/l	14	13	93%	2022-03-09 to 2025-08-08		Nonparametric	0.000100	0.000100	0.000100	0.000100	NA	NA	NA
13_3_113	MW-7B	Appendix IV	Fluoride (App IV)	mg/l	14	10	71%	2022-03-09 to 2025-08-08		Nonparametric	0.613	0.670	0.300	0.810	0.226	0.369	-1.20
13_3_115	MW-7B	Appendix IV	Lead	mg/l	14	13	93%	2022-03-09 to 2025-08-08		Nonparametric	0.0120	0.0120	0.0120	0.0120	NA	NA	NA
13_3_116	MW-7B	Appendix IV	Lithium	mg/l	14	0	0%	2022-03-09 to 2025-08-08	Nonparametric	Nonparametric	0.0317	0.0320	0.0280	0.0340	0.00138	0.0436	-1.23
13_3_121	MW-7B	Appendix IV	Radium-226+228	pci/l	14	1	7%	2022-03-09 to 2025-08-08	Gamma; Lognormal; Normal	Normal	1.29	1.31	0.378	2.73	0.745	0.575	0.568
13_5_114	MW-7B	Part 115	Iron	mg/l	14	0	0%	2022-03-09 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.0678	0.0650	0.0300	0.120	0.0267	0.394	0.232
13_5_129	MW-7B	Part 115	Zinc	mg/l	14	13	93%	2022-03-09 to 2025-08-08		Nonparametric	0.00110	0.00110	0.00110	0.00110	NA	NA	NA
14_2_105	MW-16C	Appendix III	Boron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.404	0.400	0.390	0.430	0.0119	0.0295	0.844
14_2_107	MW-16C	Appendix III	Calcium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	72.1	73.4	62.1	77.2	5.20	0.0721	-0.948
14_2_108	MW-16C	Appendix III	Chloride	mg/l	13	6	46%	2023-02-02 to 2025-08-11	Gamma; Lognormal	Gamma	2.71	2.20	1.10	8.00	2.40	0.883	2.34
14_2_112	MW-16C	Appendix III	Fluoride	mg/l	13	8	62%	2023-02-02 to 2025-08-11		Nonparametric	0.364	0.400	0.200	0.510	0.156	0.429	-0.278
14_2_120	MW-16C	Appendix III	pH, Field	su	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	7.31	7.32	7.14	7.46	0.115	0.0157	-0.0296
14_2_124	MW-16C	Appendix III	Sulfate	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Nonparametric	Nonparametric	9.19	8.00	7.00	19.0	3.25	0.354	2.61
14_2_126	MW-16C	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Nonparametric	Nonparametric	338	332	310	418	28	0.0827	2.21
14_3_102	MW-16C	Appendix IV	Arsenic	mg/l	13	10	77%	2023-02-02 to 2025-08-11		Nonparametric	0.00267	0.00300	0.00200	0.00300	0.000577	0.217	-1.73
14_3_103	MW-16C	Appendix IV	Barium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal	Gamma	0.0365	0.0320	0.0260	0.0610	0.0110	0.300	1.24
14_3_109	MW-16C	Appendix IV	Chromium	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.0110	0.0110	0.0110	0.0110	NA	NA	NA
14_3_113	MW-16C	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	2023-02-02 to 2025-08-11		Nonparametric	0.364	0.400	0.200	0.510	0.156	0.429	-0.278
14_3_116	MW-16C	Appendix IV	Lithium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.0277	0.0280	0.0260	0.0300	0.00144	0.0519	0.0413
14_3_118	MW-16C	Appendix IV	Molybdenum	mg/l	13	10	77%	2023-02-02 to 2025-08-11		Nonparametric	0.00570	0.00700	0.00110	0.00900	0.00411	0.721	-1.28
14_3_121	MW-16C	Appendix IV	Radium-226+228	pci/l	13	2	15%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	1.51	1.30	0.225	3.60	1.07	0.712	0.549
14_5_114	MW-16C	Part 115	Iron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal	Gamma	0.545	0.480	0.320	1.10	0.203	0.372	1.90
14_5_129	MW-16C	Part 115	Zinc	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.00140	0.00140	0.00140	0.00140	NA	NA	NA
15_2_105	MW-16D	Appendix III	Boron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	4.62	4.62	4.30	5.01	0.197	0.0426	0.101
15_2_107	MW-16D	Appendix III	Calcium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma	Gamma	29.4	29.3	28.5	30.5	0.617	0.0210	0.979
15_2_108	MW-16D	Appendix III	Chloride	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	7.17	7.00	6.00	8.00	0.608	0.0849	-0.0708
15_2_112	MW-16D	Appendix III	Fluoride	mg/l	13	8	62%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Nonparametric	0.554	0.500	0.360	0.760	0.190	0.344	0.311
15_2_120	MW-16D	Appendix III	pH, Field	su	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	7.57	7.53	7.44	7.83	0.116	0.0153	1.16
15_2_124	MW-16D	Appendix III	Sulfate	mg/l	13	1	8%	2023-02-02 to 2025-08-11	Gamma; Lognormal	Gamma	6.49	5.95	4.20	13.0	2.46	0.379	1.88
15_2_126	MW-16D	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	375	376	360	396	9.08	0.0242	0.627
15_3_102	MW-16D	Appendix IV	Arsenic	mg/l	13	3	23%	2023-02-02 to 2025-08-11	Nonparametric	Nonparametric	0.00331	0.00300	0.00230	0.00400	0.000630	0.190	0.0178
15_3_103	MW-16D	Appendix IV	Barium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.0350	0.0350	0.0300	0.0380	0.00212	0.0606	-0.990

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
15_3_113	MW-16D	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Nonparametric	0.554	0.500	0.360	0.760	0.190	0.344	0.311
15_3_116	MW-16D	Appendix IV	Lithium	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.0298	0.0300	0.0220	0.0390	0.00381	0.128	0.476
15_3_118	MW-16D	Appendix IV	Molybdenum	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Nonparametric	Nonparametric	0.00991	0.0100	0.00500	0.0120	0.00174	0.176	-2.04
15_3_121	MW-16D	Appendix IV	Radium-226+228	pci/l	13	1	8%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	1.77	1.42	0.515	4.14	1.14	0.645	0.873
15_3_122	MW-16D	Appendix IV	Selenium	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.00600	0.00600	0.00600	0.00600	NA	NA	NA
15_5_111	MW-16D	Part 115	Copper	mg/l	13	12	92%	2023-02-02 to 2025-08-11		Nonparametric	0.0100	0.0100	0.0100	0.0100	NA	NA	NA
15_5_114	MW-16D	Part 115	Iron	mg/l	13	0	0%	2023-02-02 to 2025-08-11	Gamma; Lognormal; Normal	Normal	0.313	0.340	0.0600	0.550	0.149	0.475	-0.334
15_5_129	MW-16D	Part 115	Zinc	mg/l	13	1	8%	2023-02-02 to 2025-08-11	Gamma; Lognormal	Gamma	0.0576	0.0185	0.00110	0.271	0.0864	1.50	1.85
16_2_105	MW-17D	Appendix III	Boron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Normal	Normal	2.38	2.48	1.67	2.60	0.305	0.128	-2.27
16_2_107	MW-17D	Appendix III	Calcium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	56.1	51.0	50.0	92.5	14.7	0.263	2.81
16_2_108	MW-17D	Appendix III	Chloride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Lognormal	Lognormal	13.8	6.80	3.60	65.9	21.2	1.54	2.76
16_2_112	MW-17D	Appendix III	Fluoride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.389	0.430	0.270	0.470	0.0863	0.222	-0.562
16_2_120	MW-17D	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	7.48	7.49	7.37	7.60	0.0650	0.00868	0.143
16_2_124	MW-17D	Appendix III	Sulfate	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	44.6	7.65	2.00	315	109	2.45	2.83
16_2_126	MW-17D	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	360	290	280	828	190	0.528	2.81
16_3_101	MW-17D	Appendix IV	Antimony	mg/l	8	6	75%	2024-10-08 to 2025-09-11		Nonparametric	0.000625	0.000625	0.000590	0.000660	0.0000495	0.0792	NA
16_3_102	MW-17D	Appendix IV	Arsenic	mg/l	8	2	25%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.00181	0.00150	0.000890	0.00400	0.00115	0.633	1.77
16_3_103	MW-17D	Appendix IV	Barium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.0465	0.0430	0.0390	0.0720	0.0107	0.231	2.42
16_3_106	MW-17D	Appendix IV	Cadmium	mg/l	8	7	88%	2024-10-08 to 2025-09-11		Nonparametric	0.000170	0.000170	0.000170	0.000170	NA	NA	NA
16_3_113	MW-17D	Appendix IV	Fluoride (App IV)	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.389	0.430	0.270	0.470	0.0863	0.222	-0.562
16_3_116	MW-17D	Appendix IV	Lithium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.0392	0.0360	0.0320	0.0690	0.0122	0.310	2.70
16_3_118	MW-17D	Appendix IV	Molybdenum	mg/l	8	1	12%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.0188	0.00480	0.00240	0.105	0.0381	2.03	2.64
16_3_121	MW-17D	Appendix IV	Radium-226+228	pci/l	8	1	12%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	1.90	1.25	0.961	3.83	1.11	0.586	1.07
16_5_114	MW-17D	Part 115	Iron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Lognormal	Lognormal	0.811	0.735	0.230	1.98	0.505	0.623	2.05
16_5_129	MW-17D	Part 115	Zinc	mg/l	8	5	62%	2024-10-08 to 2025-09-11		Nonparametric	0.00207	0.00210	0.00100	0.00310	0.00105	0.508	-0.143
17_2_105	MW-17E	Appendix III	Boron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	3.14	3.25	2.36	3.50	0.355	0.113	-1.75
17_2_107	MW-17E	Appendix III	Calcium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	10.7	5.45	5.20	46.7	14.6	1.36	2.83
17_2_108	MW-17E	Appendix III	Chloride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	2.79	1.45	1.30	10.2	3.05	1.09	2.65
17_2_112	MW-17E	Appendix III	Fluoride	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	1.05	1.20	0.220	1.30	0.357	0.341	-2.20
17_2_120	MW-17E	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	8.05	8.05	7.82	8.15	0.105	0.0130	-1.56
17_2_124	MW-17E	Appendix III	Sulfate	mg/l	8	3	38%	2024-10-08 to 2025-09-11	Gamma; Lognormal	Nonparametric	2.98	1.10	0.0400	10.8	4.43	1.49	2.10
17_2_126	MW-17E	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	362	360	316	388	22.9	0.0635	-0.913
17_3_103	MW-17E	Appendix IV	Barium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	0.00946	0.00485	0.00410	0.0420	0.0132	1.39	2.82
17_3_113	MW-17E	Appendix IV	Fluoride (App IV)	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Nonparametric	Nonparametric	1.05	1.20	0.220	1.30	0.357	0.341	-2.20
17_3_116	MW-17E	Appendix IV	Lithium	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal; Normal	Normal	0.0262	0.0255	0.0230	0.0330	0.00320	0.122	1.48
17_3_118	MW-17E	Appendix IV	Molybdenum	mg/l	8	7	88%	2024-10-08 to 2025-09-11		Nonparametric	0.0100	0.0100	0.0100	0.0100	NA	NA	NA
17_3_121	MW-17E	Appendix IV	Radium-226+228	pci/l	8	4	50%	2024-10-08 to 2025-09-11		Nonparametric	2.10	1.65	0.674	4.42	1.71	0.817	1.08
17_5_114	MW-17E	Part 115	Iron	mg/l	8	0	0%	2024-10-08 to 2025-09-11	Gamma; Lognormal	Gamma	0.0717	0.0500	0.0170	0.260	0.0794	1.11	2.38
17_5_129	MW-17E	Part 115	Zinc	mg/l	8	6	75%	2024-10-08 to 2025-09-11		Nonparametric	0.00130	0.00130	0.00130	0.00130	0	0	NA
18_2_105	MW-18C	Appendix III	Boron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	2.72	2.80	2.28	3.10	0.312	0.115	-0.347
18_2_107	MW-18C	Appendix III	Calcium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	166	170	95.0	220	36.9	0.222	-0.562
18_2_108	MW-18C	Appendix III	Chloride	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	72.5	82.4	23.0	95.2	22.7	0.313	-1.42
18_2_112	MW-18C	Appendix III	Fluoride	mg/l	9	2	22%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.210	0.200	0.110	0.320	0.0683	0.325	0.242

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
18_2_120	MW-18C	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	7.26	7.28	7.07	7.35	0.0899	0.0124	-1.34
18_2_124	MW-18C	Appendix III	Sulfate	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Normal	Normal	426	420	140	582	137	0.322	-0.993
18_2_126	MW-18C	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	945	940	550	1260	203	0.215	-0.536
18_3_101	MW-18C	Appendix IV	Antimony	mg/l	9	8	89%	2024-10-08 to 2025-08-08		Nonparametric	0.000670	0.000670	0.000670	0.000670	NA	NA	NA
18_3_102	MW-18C	Appendix IV	Arsenic	mg/l	9	5	56%	2024-10-08 to 2025-08-08		Nonparametric	0.00158	0.00165	0.00100	0.00200	0.000506	0.321	-0.296
18_3_103	MW-18C	Appendix IV	Barium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.0492	0.0520	0.0280	0.0600	0.00996	0.202	-1.18
18_3_106	MW-18C	Appendix IV	Cadmium	mg/l	9	8	89%	2024-10-08 to 2025-08-08		Nonparametric	0.0000960	0.0000960	0.0000960	0.0000960	NA	NA	NA
18_3_110	MW-18C	Appendix IV	Cobalt	mg/l	9	5	56%	2024-10-08 to 2025-08-08		Nonparametric	0.000130	0.000135	0.000100	0.000150	0.0000216	0.166	-1.19
18_3_113	MW-18C	Appendix IV	Fluoride (App IV)	mg/l	9	2	22%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.210	0.200	0.110	0.320	0.0683	0.325	0.242
18_3_116	MW-18C	Appendix IV	Lithium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.0863	0.0850	0.0570	0.123	0.0174	0.202	0.723
18_3_118	MW-18C	Appendix IV	Molybdenum	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Normal	Normal	0.0969	0.100	0.0300	0.134	0.0303	0.313	-1.33
18_3_121	MW-18C	Appendix IV	Radium-226+228	pci/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	2.27	2.24	1.44	3.97	0.897	0.395	0.974
18_3_122	MW-18C	Appendix IV	Selenium	mg/l	9	8	89%	2024-10-08 to 2025-08-08		Nonparametric	0.00160	0.00160	0.00160	0.00160	NA	NA	NA
18_5_114	MW-18C	Part 115	Iron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	2.70	2.70	0.890	4.09	0.939	0.348	-0.486
18_5_119	MW-18C	Part 115	Nickel	mg/l	9	1	11%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.00800	0.00830	0.00250	0.0120	0.00286	0.357	-0.774
18_5_129	MW-18C	Part 115	Zinc	mg/l	9	6	67%	2024-10-08 to 2025-08-08		Nonparametric	0.00139	0.00120	0.000960	0.00200	0.000545	0.393	1.36
19_2_105	MW-18D	Appendix III	Boron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Normal	Normal	3.51	3.58	2.66	3.90	0.358	0.102	-1.81
19_2_107	MW-18D	Appendix III	Calcium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal	Gamma	78.2	61.0	34.0	202	49.6	0.635	2.32
19_2_108	MW-18D	Appendix III	Chloride	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	38.6	36.0	13.0	94.1	23.6	0.612	1.78
19_2_112	MW-18D	Appendix III	Fluoride	mg/l	9	1	11%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.965	1.00	0.550	1.30	0.255	0.265	-0.537
19_2_120	MW-18D	Appendix III	pH, Field	su	8	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	7.83	7.81	7.70	8.01	0.110	0.0141	0.359
19_2_124	MW-18D	Appendix III	Sulfate	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal	Gamma	215	190	70.0	601	155	0.721	2.27
19_2_126	MW-18D	Appendix III	Total Dissolved Solids	mg/l	9	1	11%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	684	610	450	1260	252	0.369	2.03
19_3_103	MW-18D	Appendix IV	Barium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.0279	0.0230	0.0140	0.0560	0.0128	0.460	1.44
19_3_110	MW-18D	Appendix IV	Cobalt	mg/l	9	6	67%	2024-10-08 to 2025-08-08		Nonparametric	0.000143	0.000160	0.000100	0.000170	0.0000379	0.264	-1.60
19_3_113	MW-18D	Appendix IV	Fluoride (App IV)	mg/l	9	1	11%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.965	1.00	0.550	1.30	0.255	0.265	-0.537
19_3_116	MW-18D	Appendix IV	Lithium	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.0697	0.0670	0.0420	0.0920	0.0172	0.247	-0.103
19_3_117	MW-18D	Appendix IV	Mercury	mg/l	9	8	89%	2024-10-08 to 2025-08-08		Nonparametric	0.000130	0.000130	0.000130	0.000130	NA	NA	NA
19_3_118	MW-18D	Appendix IV	Molybdenum	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.0618	0.0520	0.0220	0.116	0.0290	0.470	0.652
19_3_121	MW-18D	Appendix IV	Radium-226+228	pci/l	9	3	33%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Nonparametric	2.21	1.40	0.683	5.17	1.79	0.813	1.13
19_5_114	MW-18D	Part 115	Iron	mg/l	9	0	0%	2024-10-08 to 2025-08-08	Gamma; Lognormal	Gamma	1.48	1.20	0.560	3.73	0.931	0.628	2.05
19_5_119	MW-18D	Part 115	Nickel	mg/l	9	1	11%	2024-10-08 to 2025-08-08	Gamma; Lognormal; Normal	Normal	0.00336	0.00300	0.00150	0.00500	0.00122	0.364	0.189
19_5_129	MW-18D	Part 115	Zinc	mg/l	9	6	67%	2024-10-08 to 2025-08-08		Nonparametric	0.00170	0.00150	0.00120	0.00240	0.000624	0.367	1.29
20_2_105	MW-100C	Appendix III	Boron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	1.80	1.82	1.54	1.91	0.110	0.0614	-1.45
20_2_107	MW-100C	Appendix III	Calcium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	58.4	59.0	55.2	61.2	2.21	0.0378	-0.291
20_2_108	MW-100C	Appendix III	Chloride	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal	Gamma	6.17	5.00	2.80	14.0	3.32	0.537	1.54
20_2_112	MW-100C	Appendix III	Fluoride	mg/l	11	7	64%	2023-06-05 to 2025-08-07		Nonparametric	0.323	0.365	0.130	0.430	0.142	0.441	-1.08
20_2_120	MW-100C	Appendix III	pH, Field	su	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	7.34	7.32	7.15	7.54	0.111	0.0151	0.227
20_2_124	MW-100C	Appendix III	Sulfate	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal	Gamma	9.04	6.00	3.40	27.0	6.84	0.757	2.11
20_2_126	MW-100C	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Nonparametric	Nonparametric	294	300	240	314	20.7	0.0703	-2.03
20_3_102	MW-100C	Appendix IV	Arsenic	mg/l	11	9	82%	2023-06-05 to 2025-08-07		Nonparametric	0.00205	0.00205	0.00200	0.00210	0.0000707	0.0345	NA
20_3_103	MW-100C	Appendix IV	Barium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0735	0.0750	0.0510	0.0920	0.0120	0.163	-0.450
20_3_113	MW-100C	Appendix IV	Fluoride (App IV)	mg/l	11	7	64%	2023-06-05 to 2025-08-07		Nonparametric	0.323	0.365	0.130	0.430	0.142	0.441	-1.08

(Table continues on next page)

Table 2: Summary Statistics, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Date Range	Distributions Fit	Recommended Distribution	Mean	Median	Minimum	Maximum	SD	CV	Skewness
20_3_116	MW-100C	Appendix IV	Lithium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0320	0.0320	0.0280	0.0350	0.00205	0.0640	-0.767
20_3_118	MW-100C	Appendix IV	Molybdenum	mg/l	11	6	55%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Nonparametric	0.00552	0.00700	0.00110	0.00900	0.00394	0.714	-0.434
20_3_121	MW-100C	Appendix IV	Radium-226+228	pci/l	11	1	9%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	1.13	1.09	0.525	1.69	0.410	0.363	0.00709
20_5_114	MW-100C	Part 115	Iron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.675	0.640	0.310	1.00	0.190	0.281	0.183
20_5_129	MW-100C	Part 115	Zinc	mg/l	11	8	73%	2023-06-05 to 2025-08-07		Nonparametric	0.00413	0.00140	0.00100	0.0100	0.00508	1.23	1.72
21_2_105	MW-100D	Appendix III	Boron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Nonparametric	Nonparametric	2.97	3.22	1.89	3.45	0.556	0.187	-1.29
21_2_107	MW-100D	Appendix III	Calcium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Nonparametric	Nonparametric	19.1	7.18	5.26	68.0	22.2	1.17	1.72
21_2_108	MW-100D	Appendix III	Chloride	mg/l	11	4	36%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	8.26	6.20	4.20	16.0	4.69	0.568	0.909
21_2_112	MW-100D	Appendix III	Fluoride	mg/l	11	5	45%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.528	0.495	0.300	0.850	0.192	0.364	0.855
21_2_120	MW-100D	Appendix III	pH, Field	su	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	7.67	7.74	6.85	8.22	0.400	0.0522	-0.754
21_2_124	MW-100D	Appendix III	Sulfate	mg/l	11	1	9%	2023-06-05 to 2025-08-07	Gamma; Lognormal	Gamma	29.4	12.5	6.00	110	33	1.12	1.97
21_2_126	MW-100D	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal	Gamma	441	396	366	650	92.7	0.210	1.66
21_3_102	MW-100D	Appendix IV	Arsenic	mg/l	11	2	18%	2023-06-05 to 2025-08-07		Nonparametric	0.00279	0.00300	0.00160	0.00300	0.000476	0.171	-2.45
21_3_103	MW-100D	Appendix IV	Barium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.0109	0.0100	0.00700	0.0190	0.00345	0.317	1.46
21_3_110	MW-100D	Appendix IV	Cobalt	mg/l	11	10	91%	2023-06-05 to 2025-08-07		Nonparametric	0.000420	0.000420	0.000420	0.000420	NA	NA	NA
21_3_113	MW-100D	Appendix IV	Fluoride (App IV)	mg/l	11	5	45%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.528	0.495	0.300	0.850	0.192	0.364	0.855
21_3_116	MW-100D	Appendix IV	Lithium	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Nonparametric	Nonparametric	0.0186	0.0180	0.0160	0.0310	0.00427	0.229	2.86
21_3_118	MW-100D	Appendix IV	Molybdenum	mg/l	11	1	9%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.00830	0.00800	0.00560	0.0120	0.00196	0.236	0.554
21_3_121	MW-100D	Appendix IV	Radium-226+228	pci/l	11	1	9%	2023-06-05 to 2025-08-07	Gamma; Lognormal	Gamma	1.39	0.952	0.477	5.06	1.34	0.965	2.70
21_5_114	MW-100D	Part 115	Iron	mg/l	11	0	0%	2023-06-05 to 2025-08-07	Gamma; Lognormal; Normal	Normal	0.322	0.240	0.120	0.770	0.220	0.683	1.09
21_5_119	MW-100D	Part 115	Nickel	mg/l	11	10	91%	2023-06-05 to 2025-08-07		Nonparametric	0.00180	0.00180	0.00180	0.00180	NA	NA	NA
21_5_129	MW-100D	Part 115	Zinc	mg/l	11	9	82%	2023-06-05 to 2025-08-07		Nonparametric	0.00365	0.00365	0.00200	0.00530	0.00233	0.639	NA

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
13_2_105	MW-7B	Appendix III	Boron	mg/l	14	0	0%	0.983	0.989	0.108	0.927	0.983	0.988	0.109	0.925	0.100	>= 0.10	0.171	>= 0.10	0.030	Gamma; Lognormal; Normal	Normal
13_2_107	MW-7B	Appendix III	Calcium	mg/l	14	0	0%	0.965	0.799	0.167	0.363	0.956	0.655	0.181	0.248	0.171	>= 0.10	0.365	>= 0.10	0.076	Gamma; Lognormal; Normal	Normal
13_2_108	MW-7B	Appendix III	Chloride	mg/l	14	10	71%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.454		Nonparametric
13_2_112	MW-7B	Appendix III	Fluoride	mg/l	14	10	71%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.449		Nonparametric
13_2_120	MW-7B	Appendix III	pH, Field	su	14	0	0%	0.924	0.251	0.146	0.574	0.924	0.253	0.148	0.552	0.155	>= 0.10	0.445	>= 0.10	0.019	Gamma; Lognormal; Normal	Normal
13_2_124	MW-7B	Appendix III	Sulfate	mg/l	14	10	71%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.606		Nonparametric
13_2_126	MW-7B	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	0.962	0.750	0.153	0.504	0.963	0.774	0.149	0.542	0.153	>= 0.10	0.252	>= 0.10	0.021	Gamma; Lognormal; Normal	Normal
13_3_101	MW-7B	Appendix IV	Antimony	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_3_102	MW-7B	Appendix IV	Arsenic	mg/l	14	11	79%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.206		Nonparametric
13_3_103	MW-7B	Appendix IV	Barium	mg/l	14	0	0%	0.906	0.137	0.222	0.059	0.914	0.177	0.223	0.057	0.232	0.01 <= p < 0.05	0.635	0.05 <= p < 0.10	0.118	Gamma; Lognormal; Normal	Normal
13_3_104	MW-7B	Appendix IV	Beryllium	mg/l	14	13	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_3_106	MW-7B	Appendix IV	Cadmium	mg/l	14	13	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_3_109	MW-7B	Appendix IV	Chromium	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_3_110	MW-7B	Appendix IV	Cobalt	mg/l	14	13	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_3_113	MW-7B	Appendix IV	Fluoride (App IV)	mg/l	14	10	71%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.449		Nonparametric
13_3_115	MW-7B	Appendix IV	Lead	mg/l	14	13	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_3_116	MW-7B	Appendix IV	Lithium	mg/l	14	0	0%	0.855	0.026	0.231	0.041	0.837	0.015	0.241	0.027	0.233	0.01 <= p < 0.05	0.918	0.01 <= p < 0.05	0.045	Nonparametric	Nonparametric
13_3_117	MW-7B	Appendix IV	Mercury	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_3_118	MW-7B	Appendix IV	Molybdenum	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_3_121	MW-7B	Appendix IV	Radium-226+228	pci/l	14	1	7%	0.940	0.456	0.118	0.888	0.944	0.504	0.152	0.563	0.123	>= 0.10	0.239	>= 0.10	0.648	Gamma; Lognormal; Normal	Normal
13_3_122	MW-7B	Appendix IV	Selenium	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_3_125	MW-7B	Appendix IV	Thallium	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_5_111	MW-7B	Part 115	Copper	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_5_114	MW-7B	Part 115	Iron	mg/l	14	0	0%	0.960	0.722	0.115	0.886	0.941	0.425	0.145	0.592	0.141	>= 0.10	0.291	>= 0.10	0.430	Gamma; Lognormal; Normal	Normal
13_5_119	MW-7B	Part 115	Nickel	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_5_123	MW-7B	Part 115	Silver	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_5_128	MW-7B	Part 115	Vanadium	mg/l	14	14	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
13_5_129	MW-7B	Part 115	Zinc	mg/l	14	13	93%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_2_105	MW-16C	Appendix III	Boron	mg/l	13	0	0%	0.892	0.105	0.242	0.036	0.897	0.120	0.238	0.042	0.244	0.01 <= p < 0.05	0.609	>= 0.10	0.029	Gamma; Lognormal; Normal	Normal
14_2_107	MW-16C	Appendix III	Calcium	mg/l	13	0	0%	0.866	0.047	0.163	0.448	0.854	0.033	0.178	0.316	0.171	>= 0.10	0.751	0.01 <= p < 0.05	0.075	Gamma; Lognormal; Normal	Normal
14_2_108	MW-16C	Appendix III	Chloride	mg/l	13	6	46%	0.667	0.002	0.393	0.002	0.860	0.153	0.271	0.124	0.319	0.01 <= p < 0.05	0.686	0.05 <= p < 0.10	0.669	Gamma; Lognormal	Gamma
14_2_112	MW-16C	Appendix III	Fluoride	mg/l	13	8	62%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.479		Nonparametric
14_2_120	MW-16C	Appendix III	pH, Field	su	13	0	0%	0.921	0.258	0.159	0.494	0.921	0.259	0.157	0.513	0.165	>= 0.10	0.416	>= 0.10	0.016	Gamma; Lognormal; Normal	Normal
14_2_124	MW-16C	Appendix III	Sulfate	mg/l	13	0	0%	0.651	0.000	0.335	0.000	0.757	0.002	0.329	0.000	0.339	< 0.01	1.379	< 0.01	0.278	Nonparametric	Nonparametric
14_2_126	MW-16C	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	0.753	0.002	0.268	0.011	0.787	0.005	0.249	0.027	0.255	0.01 <= p < 0.05	1.149	< 0.01	0.077	Nonparametric	Nonparametric
14_3_101	MW-16C	Appendix IV	Antimony	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_3_102	MW-16C	Appendix IV	Arsenic	mg/l	13	10	77%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.234		Nonparametric
14_3_103	MW-16C	Appendix IV	Barium	mg/l	13	0	0%	0.836	0.019	0.248	0.028	0.884	0.081	0.210	0.120	0.227	0.05 <= p < 0.10	0.771	0.01 <= p < 0.05	0.272	Gamma; Lognormal	Gamma
14_3_104	MW-16C	Appendix IV	Beryllium	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
14_3_106	MW-16C	Appendix IV	Cadmium	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_3_109	MW-16C	Appendix IV	Chromium	mg/l	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_3_110	MW-16C	Appendix IV	Cobalt	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_3_113	MW-16C	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.479		Nonparametric
14_3_115	MW-16C	Appendix IV	Lead	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_3_116	MW-16C	Appendix IV	Lithium	mg/l	13	0	0%	0.873	0.058	0.203	0.150	0.871	0.054	0.204	0.147	0.213	>= 0.10	0.753	0.01 <= p < 0.05	0.052	Gamma; Lognormal; Normal	Normal
14_3_117	MW-16C	Appendix IV	Mercury	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_3_118	MW-16C	Appendix IV	Molybdenum	mg/l	13	10	77%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.148		Nonparametric
14_3_121	MW-16C	Appendix IV	Radium-226+228	pci/l	13	2	15%	0.939	0.514	0.122	0.917	0.909	0.236	0.198	0.268	0.156	>= 0.10	0.308	>= 0.10	0.945	Gamma; Lognormal; Normal	Normal
14_3_122	MW-16C	Appendix IV	Selenium	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_3_125	MW-16C	Appendix IV	Thallium	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_5_111	MW-16C	Part 115	Copper	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_5_114	MW-16C	Part 115	Iron	mg/l	13	0	0%	0.806	0.008	0.262	0.015	0.916	0.224	0.212	0.114	0.233	0.05 <= p < 0.10	0.683	0.05 <= p < 0.10	0.320	Gamma; Lognormal	Gamma
14_5_119	MW-16C	Part 115	Nickel	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_5_123	MW-16C	Part 115	Silver	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_5_128	MW-16C	Part 115	Vanadium	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
14_5_129	MW-16C	Part 115	Zinc	mg/l	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_2_105	MW-16D	Appendix III	Boron	mg/l	13	0	0%	0.938	0.435	0.215	0.103	0.938	0.428	0.222	0.078	0.218	>= 0.10	0.461	>= 0.10	0.043	Gamma; Lognormal; Normal	Normal
15_2_107	MW-16D	Appendix III	Calcium	mg/l	13	0	0%	0.863	0.042	0.239	0.040	0.868	0.049	0.235	0.047	0.236	0.05 <= p < 0.10	0.835	0.01 <= p < 0.05	0.021	Gamma	Gamma
15_2_108	MW-16D	Appendix III	Chloride	mg/l	13	0	0%	0.933	0.373	0.146	0.632	0.934	0.386	0.138	0.711	0.151	>= 0.10	0.389	>= 0.10	0.086	Gamma; Lognormal; Normal	Normal
15_2_112	MW-16D	Appendix III	Fluoride	mg/l	13	8	62%	0.846	0.181	0.248	0.394	0.871	0.271	0.244	0.423	0.272	>= 0.10	0.450	>= 0.10	0.347	Gamma; Lognormal; Normal	Nonparametric
15_2_120	MW-16D	Appendix III	pH, Field	su	13	0	0%	0.898	0.125	0.164	0.446	0.901	0.139	0.162	0.461	0.167	>= 0.10	0.508	>= 0.10	0.015	Gamma; Lognormal; Normal	Normal
15_2_124	MW-16D	Appendix III	Sulfate	mg/l	13	1	8%	0.806	0.011	0.251	0.035	0.912	0.223	0.179	0.357	0.198	>= 0.10	0.529	>= 0.10	0.325	Gamma; Lognormal	Gamma
15_2_126	MW-16D	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	0.939	0.442	0.205	0.141	0.944	0.505	0.202	0.157	0.196	>= 0.10	0.345	>= 0.10	0.024	Gamma; Lognormal; Normal	Normal
15_3_101	MW-16D	Appendix IV	Antimony	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_3_102	MW-16D	Appendix IV	Arsenic	mg/l	13	3	23%	0.817	0.023	0.289	0.018	0.832	0.036	0.263	0.049	0.283	0.01 <= p < 0.05	0.946	0.01 <= p < 0.05	0.194	Nonparametric	Nonparametric
15_3_103	MW-16D	Appendix IV	Barium	mg/l	13	0	0%	0.930	0.340	0.192	0.210	0.912	0.198	0.204	0.148	0.200	>= 0.10	0.441	>= 0.10	0.062	Gamma; Lognormal; Normal	Normal
15_3_104	MW-16D	Appendix IV	Beryllium	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_3_106	MW-16D	Appendix IV	Cadmium	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_3_109	MW-16D	Appendix IV	Chromium	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_3_110	MW-16D	Appendix IV	Cobalt	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_3_113	MW-16D	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	0.846	0.181	0.248	0.394	0.871	0.271	0.244	0.423	0.272	>= 0.10	0.450	>= 0.10	0.347	Gamma; Lognormal; Normal	Nonparametric
15_3_115	MW-16D	Appendix IV	Lead	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_3_116	MW-16D	Appendix IV	Lithium	mg/l	13	0	0%	0.874	0.058	0.220	0.087	0.880	0.071	0.240	0.040	0.234	0.05 <= p < 0.10	0.837	0.01 <= p < 0.05	0.129	Gamma; Lognormal; Normal	Normal
15_3_117	MW-16D	Appendix IV	Mercury	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_3_118	MW-16D	Appendix IV	Molybdenum	mg/l	13	0	0%	0.774	0.003	0.290	0.004	0.676	0.000	0.324	0.001	0.314	< 0.01	1.493	< 0.01	0.220	Nonparametric	Nonparametric
15_3_121	MW-16D	Appendix IV	Radium-226+228	pci/l	13	1	8%	0.910	0.217	0.172	0.426	0.965	0.854	0.139	0.749	0.152	>= 0.10	0.240	>= 0.10	0.669	Gamma; Lognormal; Normal	Normal
15_3_122	MW-16D	Appendix IV	Selenium	mg/l	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_3_125	MW-16D	Appendix IV	Thallium	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal			Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
15_5_111	MW-16D	Part 115	Copper	mg/l	13	12	92%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_5_114	MW-16D	Part 115	Iron	mg/l	13	0	0%	0.965	0.833	0.110	0.936	0.844	0.024	0.233	0.052	0.190	>= 0.10	0.602	>= 0.10	0.679	Gamma; Lognormal; Normal	Normal
15_5_119	MW-16D	Part 115	Nickel	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_5_123	MW-16D	Part 115	Silver	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_5_128	MW-16D	Part 115	Vanadium	mg/l	13	13	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
15_5_129	MW-16D	Part 115	Zinc	mg/l	13	1	8%	0.691	0.001	0.349	0.000	0.955	0.712	0.145	0.690	0.197	>= 0.10	0.476	>= 0.10	1.722	Gamma; Lognormal	Gamma
16_2_105	MW-17D	Appendix III	Boron	mg/l	8	0	0%	0.712	0.003	0.273	0.081	0.670	0.001	0.302	0.030	0.290	0.05 <= p < 0.10	1.134	< 0.01	0.146	Gamma; Normal	Normal
16_2_107	MW-17D	Appendix III	Calcium	mg/l	8	0	0%	0.472	0.000	0.477	0.000	0.492	0.000	0.463	0.000	0.476	< 0.01	2.099	< 0.01	0.212	Nonparametric	Nonparametric
16_2_108	MW-17D	Appendix III	Chloride	mg/l	8	0	0%	0.524	0.000	0.448	0.000	0.791	0.023	0.284	0.057	0.369	< 0.01	1.163	< 0.01	0.939	Lognormal	Lognormal
16_2_112	MW-17D	Appendix III	Fluoride	mg/l	8	0	0%	0.801	0.029	0.309	0.024	0.791	0.023	0.325	0.013	0.332	0.01 <= p < 0.05	0.880	0.01 <= p < 0.05	0.238	Nonparametric	Nonparametric
16_2_120	MW-17D	Appendix III	pH, Field	su	8	0	0%	0.945	0.663	0.204	0.421	0.945	0.666	0.203	0.433	0.200	>= 0.10	0.346	>= 0.10	0.009	Gamma; Lognormal; Normal	Normal
16_2_124	MW-17D	Appendix III	Sulfate	mg/l	8	0	0%	0.440	0.000	0.503	0.000	0.732	0.005	0.375	0.001	0.479	< 0.01	1.701	< 0.01	1.531	Nonparametric	Nonparametric
16_2_126	MW-17D	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	0.472	0.000	0.470	0.000	0.512	0.000	0.438	0.000	0.459	< 0.01	2.049	< 0.01	0.370	Nonparametric	Nonparametric
16_3_101	MW-17D	Appendix IV	Antimony	mg/l	8	6	75%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.079		Nonparametric
16_3_102	MW-17D	Appendix IV	Arsenic	mg/l	8	2	25%	0.812	0.075	0.269	0.188	0.935	0.620	0.168	0.859	0.192	>= 0.10	0.355	>= 0.10	0.548	Gamma; Lognormal; Normal	Normal
16_3_103	MW-17D	Appendix IV	Barium	mg/l	8	0	0%	0.666	0.001	0.342	0.006	0.727	0.005	0.324	0.014	0.336	0.01 <= p < 0.05	1.087	< 0.01	0.197	Nonparametric	Nonparametric
16_3_104	MW-17D	Appendix IV	Beryllium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_3_106	MW-17D	Appendix IV	Cadmium	mg/l	8	7	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_3_109	MW-17D	Appendix IV	Chromium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_3_110	MW-17D	Appendix IV	Cobalt	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_3_113	MW-17D	Appendix IV	Fluoride (App IV)	mg/l	8	0	0%	0.801	0.029	0.309	0.024	0.791	0.023	0.325	0.013	0.332	0.01 <= p < 0.05	0.880	0.01 <= p < 0.05	0.238	Nonparametric	Nonparametric
16_3_115	MW-17D	Appendix IV	Lead	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_3_116	MW-17D	Appendix IV	Lithium	mg/l	8	0	0%	0.565	0.000	0.448	0.000	0.626	0.000	0.420	0.000	0.436	< 0.01	1.521	< 0.01	0.246	Nonparametric	Nonparametric
16_3_117	MW-17D	Appendix IV	Mercury	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_3_118	MW-17D	Appendix IV	Molybdenum	mg/l	8	1	12%	0.490	0.000	0.478	0.000	0.714	0.005	0.337	0.016	0.433	< 0.01	1.433	< 0.01	1.270	Nonparametric	Nonparametric
16_3_121	MW-17D	Appendix IV	Radium-226+228	pci/l	8	1	12%	0.833	0.085	0.291	0.075	0.873	0.199	0.269	0.131	0.294	0.05 <= p < 0.10	0.547	>= 0.10	0.546	Gamma; Lognormal; Normal	Normal
16_3_122	MW-17D	Appendix IV	Selenium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_3_125	MW-17D	Appendix IV	Thallium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_5_111	MW-17D	Part 115	Copper	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_5_114	MW-17D	Part 115	Iron	mg/l	8	0	0%	0.720	0.004	0.408	0.000	0.839	0.074	0.311	0.022	0.343	< 0.01	0.839	0.01 <= p < 0.05	0.582	Lognormal	Lognormal
16_5_119	MW-17D	Part 115	Nickel	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_5_123	MW-17D	Part 115	Silver	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_5_128	MW-17D	Part 115	Vanadium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
16_5_129	MW-17D	Part 115	Zinc	mg/l	8	5	62%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.575		Nonparametric
17_2_105	MW-17E	Appendix III	Boron	mg/l	8	0	0%	0.838	0.071	0.219	0.311	0.794	0.025	0.248	0.157	0.219	>= 0.10	0.700	0.05 <= p < 0.10	0.124	Gamma; Lognormal; Normal	Normal
17_2_107	MW-17E	Appendix III	Calcium	mg/l	8	0	0%	0.440	0.000	0.497	0.000	0.491	0.000	0.457	0.000	0.495	< 0.01	2.238	< 0.01	0.757	Nonparametric	Nonparametric
17_2_108	MW-17E	Appendix III	Chloride	mg/l	8	0	0%	0.559	0.000	0.386	0.001	0.718	0.004	0.302	0.031	0.318	0.01 <= p < 0.05	1.262	< 0.01	0.706	Nonparametric	Nonparametric
17_2_112	MW-17E	Appendix III	Fluoride	mg/l	8	0	0%	0.708	0.003	0.290	0.046	0.577	0.000	0.395	0.001	0.369	< 0.01	1.454	< 0.01	0.598	Nonparametric	Nonparametric
17_2_120	MW-17E	Appendix III	pH, Field	su	8	0	0%	0.841	0.077	0.272	0.084	0.837	0.070	0.275	0.077	0.266	>= 0.10	0.566	>= 0.10	0.013	Gamma; Lognormal; Normal	Normal

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
17_2_124	MW-17E	Appendix III	Sulfate	mg/l	8	3	38%	0.699	0.009	0.388	0.013	0.920	0.531	0.296	0.160	0.229	>= 0.10	0.314	>= 0.10	2.032	Gamma; Lognormal	Nonparametric
17_2_126	MW-17E	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	0.892	0.243	0.224	0.279	0.879	0.183	0.236	0.212	0.230	>= 0.10	0.482	>= 0.10	0.065	Gamma; Lognormal; Normal	Normal
17_3_101	MW-17E	Appendix IV	Antimony	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_3_102	MW-17E	Appendix IV	Arsenic	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_3_103	MW-17E	Appendix IV	Barium	mg/l	8	0	0%	0.460	0.000	0.479	0.000	0.562	0.000	0.398	0.000	0.452	< 0.01	1.980	< 0.01	0.778	Nonparametric	Nonparametric
17_3_104	MW-17E	Appendix IV	Beryllium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_3_106	MW-17E	Appendix IV	Cadmium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_3_109	MW-17E	Appendix IV	Chromium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_3_110	MW-17E	Appendix IV	Cobalt	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_3_113	MW-17E	Appendix IV	Fluoride (App IV)	mg/l	8	0	0%	0.708	0.003	0.290	0.046	0.577	0.000	0.395	0.001	0.369	< 0.01	1.454	< 0.01	0.598	Nonparametric	Nonparametric
17_3_115	MW-17E	Appendix IV	Lead	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_3_116	MW-17E	Appendix IV	Lithium	mg/l	8	0	0%	0.872	0.159	0.167	0.735	0.904	0.315	0.145	0.888	0.151	>= 0.10	0.390	>= 0.10	0.115	Gamma; Lognormal; Normal	Normal
17_3_117	MW-17E	Appendix IV	Mercury	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_3_118	MW-17E	Appendix IV	Molybdenum	mg/l	8	7	88%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_3_121	MW-17E	Appendix IV	Radium-226+228	pci/l	8	4	50%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.857		Nonparametric
17_3_122	MW-17E	Appendix IV	Selenium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_3_125	MW-17E	Appendix IV	Thallium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_5_111	MW-17E	Part 115	Copper	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_5_114	MW-17E	Part 115	Iron	mg/l	8	0	0%	0.684	0.001	0.334	0.009	0.933	0.547	0.165	0.755	0.215	>= 0.10	0.469	>= 0.10	0.891	Gamma; Lognormal	Gamma
17_5_119	MW-17E	Part 115	Nickel	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_5_123	MW-17E	Part 115	Silver	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_5_128	MW-17E	Part 115	Vanadium	mg/l	8	8	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
17_5_129	MW-17E	Part 115	Zinc	mg/l	8	6	75%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.000		Nonparametric
18_2_105	MW-18C	Appendix III	Boron	mg/l	9	0	0%	0.906	0.291	0.164	0.694	0.898	0.242	0.174	0.599	0.183	>= 0.10	0.449	>= 0.10	0.117	Gamma; Lognormal; Normal	Normal
18_2_107	MW-18C	Appendix III	Calcium	mg/l	9	0	0%	0.967	0.871	0.153	0.789	0.911	0.323	0.194	0.426	0.168	>= 0.10	0.305	>= 0.10	0.247	Gamma; Lognormal; Normal	Normal
18_2_108	MW-18C	Appendix III	Chloride	mg/l	9	0	0%	0.861	0.098	0.224	0.213	0.734	0.004	0.227	0.199	0.240	>= 0.10	0.837	0.01 <= p < 0.05	0.442	Gamma; Lognormal; Normal	Normal
18_2_112	MW-18C	Appendix III	Fluoride	mg/l	9	2	22%	0.994	0.998	0.130	0.976	0.980	0.959	0.155	0.876	0.130	>= 0.10	0.147	>= 0.10	0.346	Gamma; Lognormal; Normal	Normal
18_2_120	MW-18C	Appendix III	pH, Field	su	8	0	0%	0.893	0.248	0.186	0.574	0.889	0.231	0.187	0.559	0.191	>= 0.10	0.404	>= 0.10	0.012	Gamma; Lognormal; Normal	Normal
18_2_124	MW-18C	Appendix III	Sulfate	mg/l	9	0	0%	0.907	0.293	0.205	0.337	0.778	0.011	0.298	0.021	0.261	0.05 <= p < 0.10	0.627	0.05 <= p < 0.10	0.434	Gamma; Normal	Normal
18_2_126	MW-18C	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	0.975	0.935	0.134	0.912	0.919	0.387	0.180	0.548	0.158	>= 0.10	0.287	>= 0.10	0.238	Gamma; Lognormal; Normal	Normal
18_3_101	MW-18C	Appendix IV	Antimony	mg/l	9	8	89%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_3_102	MW-18C	Appendix IV	Arsenic	mg/l	9	5	56%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.342		Nonparametric
18_3_103	MW-18C	Appendix IV	Barium	mg/l	9	0	0%	0.899	0.247	0.165	0.680	0.831	0.045	0.204	0.347	0.186	>= 0.10	0.534	>= 0.10	0.235	Gamma; Lognormal; Normal	Normal
18_3_104	MW-18C	Appendix IV	Beryllium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_3_106	MW-18C	Appendix IV	Cadmium	mg/l	9	8	89%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_3_109	MW-18C	Appendix IV	Chromium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_3_110	MW-18C	Appendix IV	Cobalt	mg/l	9	5	56%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.177		Nonparametric
18_3_113	MW-18C	Appendix IV	Fluoride (App IV)	mg/l	9	2	22%	0.994	0.998	0.130	0.976	0.980	0.959	0.155	0.876	0.130	>= 0.10	0.147	>= 0.10	0.346	Gamma; Lognormal; Normal	Normal
18_3_115	MW-18C	Appendix IV	Lead	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
18_3_116	MW-18C	Appendix IV	Lithium	mg/l	9	0	0%	0.899	0.244	0.240	0.143	0.912	0.327	0.228	0.195	0.211	>= 0.10	0.493	>= 0.10	0.202	Gamma; Lognormal; Normal	Normal
18_3_117	MW-18C	Appendix IV	Mercury	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_3_118	MW-18C	Appendix IV	Molybdenum	mg/l	9	0	0%	0.905	0.281	0.178	0.569	0.743	0.005	0.280	0.041	0.240	>= 0.10	0.750	0.01 <= p < 0.05	0.445	Gamma; Normal	Normal
18_3_121	MW-18C	Appendix IV	Radium-226+228	pci/l	9	0	0%	0.871	0.127	0.196	0.412	0.901	0.260	0.191	0.449	0.207	>= 0.10	0.443	>= 0.10	0.373	Gamma; Lognormal; Normal	Normal
18_3_122	MW-18C	Appendix IV	Selenium	mg/l	9	8	89%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_3_125	MW-18C	Appendix IV	Thallium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_5_111	MW-18C	Part 115	Copper	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_5_114	MW-18C	Part 115	Iron	mg/l	9	0	0%	0.962	0.817	0.163	0.698	0.843	0.063	0.233	0.173	0.193	>= 0.10	0.440	>= 0.10	0.445	Gamma; Lognormal; Normal	Normal
18_5_119	MW-18C	Part 115	Nickel	mg/l	9	1	11%	0.953	0.745	0.187	0.564	0.813	0.039	0.284	0.057	0.245	>= 0.10	0.513	>= 0.10	0.482	Gamma; Lognormal; Normal	Normal
18_5_123	MW-18C	Part 115	Silver	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_5_128	MW-18C	Part 115	Vanadium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
18_5_129	MW-18C	Part 115	Zinc	mg/l	9	6	67%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.376		Nonparametric
19_2_105	MW-18D	Appendix III	Boron	mg/l	9	0	0%	0.829	0.044	0.271	0.056	0.784	0.013	0.297	0.022	0.282	0.01 <= p < 0.05	0.754	0.01 <= p < 0.05	0.111	Normal	Normal
19_2_107	MW-18D	Appendix III	Calcium	mg/l	9	0	0%	0.725	0.003	0.302	0.018	0.917	0.371	0.192	0.445	0.221	>= 0.10	0.576	>= 0.10	0.500	Gamma; Lognormal	Gamma
19_2_108	MW-18D	Appendix III	Chloride	mg/l	9	0	0%	0.833	0.049	0.227	0.198	0.973	0.917	0.143	0.859	0.155	>= 0.10	0.297	>= 0.10	0.559	Gamma; Lognormal; Normal	Normal
19_2_112	MW-18D	Appendix III	Fluoride	mg/l	9	1	11%	0.948	0.694	0.180	0.628	0.905	0.318	0.220	0.305	0.213	>= 0.10	0.376	>= 0.10	0.295	Gamma; Lognormal; Normal	Normal
19_2_120	MW-18D	Appendix III	pH, Field	su	8	0	0%	0.943	0.637	0.183	0.598	0.943	0.642	0.182	0.610	0.193	>= 0.10	0.279	>= 0.10	0.014	Gamma; Lognormal; Normal	Normal
19_2_124	MW-18D	Appendix III	Sulfate	mg/l	9	0	0%	0.737	0.004	0.295	0.023	0.941	0.596	0.178	0.563	0.207	>= 0.10	0.494	>= 0.10	0.591	Gamma; Lognormal	Gamma
19_2_126	MW-18D	Appendix III	Total Dissolved Solids	mg/l	9	1	11%	0.786	0.020	0.270	0.090	0.899	0.282	0.200	0.450	0.214	>= 0.10	0.517	>= 0.10	0.313	Gamma; Lognormal; Normal	Normal
19_3_101	MW-18D	Appendix IV	Antimony	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_3_102	MW-18D	Appendix IV	Arsenic	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_3_103	MW-18D	Appendix IV	Barium	mg/l	9	0	0%	0.878	0.150	0.204	0.346	0.971	0.902	0.160	0.730	0.185	>= 0.10	0.282	>= 0.10	0.419	Gamma; Lognormal; Normal	Normal
19_3_104	MW-18D	Appendix IV	Beryllium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_3_106	MW-18D	Appendix IV	Cadmium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_3_109	MW-18D	Appendix IV	Chromium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_3_110	MW-18D	Appendix IV	Cobalt	mg/l	9	6	67%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.290		Nonparametric
19_3_113	MW-18D	Appendix IV	Fluoride (App IV)	mg/l	9	1	11%	0.948	0.694	0.180	0.628	0.905	0.318	0.220	0.305	0.213	>= 0.10	0.376	>= 0.10	0.295	Gamma; Lognormal; Normal	Normal
19_3_115	MW-18D	Appendix IV	Lead	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_3_116	MW-18D	Appendix IV	Lithium	mg/l	9	0	0%	0.933	0.506	0.176	0.579	0.927	0.458	0.166	0.677	0.184	>= 0.10	0.344	>= 0.10	0.261	Gamma; Lognormal; Normal	Normal
19_3_117	MW-18D	Appendix IV	Mercury	mg/l	9	8	89%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_3_118	MW-18D	Appendix IV	Molybdenum	mg/l	9	0	0%	0.946	0.649	0.187	0.480	0.960	0.797	0.175	0.590	0.157	>= 0.10	0.250	>= 0.10	0.499	Gamma; Lognormal; Normal	Normal
19_3_121	MW-18D	Appendix IV	Radium-226+228	pci/l	9	3	33%	0.842	0.135	0.265	0.208	0.922	0.523	0.232	0.394	0.261	>= 0.10	0.403	>= 0.10	0.795	Gamma; Lognormal; Normal	Nonparametric
19_3_122	MW-18D	Appendix IV	Selenium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_3_125	MW-18D	Appendix IV	Thallium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_5_111	MW-18D	Part 115	Copper	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_5_114	MW-18D	Part 115	Iron	mg/l	9	0	0%	0.777	0.011	0.277	0.045	0.945	0.635	0.210	0.299	0.244	>= 0.10	0.474	>= 0.10	0.529	Gamma; Lognormal	Gamma
19_5_119	MW-18D	Part 115	Nickel	mg/l	9	1	11%	0.916	0.399	0.178	0.643	0.912	0.367	0.222	0.290	0.191	>= 0.10	0.361	>= 0.10	0.396	Gamma; Lognormal; Normal	Normal
19_5_123	MW-18D	Part 115	Silver	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
19_5_128	MW-18D	Part 115	Vanadium	mg/l	9	9	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
19_5_129	MW-18D	Part 115	Zinc	mg/l	9	6	67%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.354		Nonparametric
20_2_105	MW-100C	Appendix III	Boron	mg/l	11	0	0%	0.863	0.063	0.188	0.341	0.844	0.036	0.201	0.248	0.194	>= 0.10	0.628	0.05 <= p < 0.10	0.064	Gamma; Lognormal; Normal	Normal
20_2_107	MW-100C	Appendix III	Calcium	mg/l	11	0	0%	0.895	0.158	0.198	0.266	0.892	0.147	0.197	0.273	0.210	>= 0.10	0.572	>= 0.10	0.038	Gamma; Lognormal; Normal	Normal
20_2_108	MW-100C	Appendix III	Chloride	mg/l	11	0	0%	0.831	0.024	0.274	0.021	0.934	0.448	0.217	0.155	0.246	0.05 <= p < 0.10	0.527	>= 0.10	0.479	Gamma; Lognormal	Gamma
20_2_112	MW-100C	Appendix III	Fluoride	mg/l	11	7	64%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.564		Nonparametric
20_2_120	MW-100C	Appendix III	pH, Field	su	11	0	0%	0.988	0.994	0.130	0.870	0.989	0.996	0.127	0.889	0.128	>= 0.10	0.154	>= 0.10	0.015	Gamma; Lognormal; Normal	Normal
20_2_124	MW-100C	Appendix III	Sulfate	mg/l	11	0	0%	0.740	0.002	0.287	0.012	0.919	0.311	0.189	0.333	0.226	>= 0.10	0.672	0.05 <= p < 0.10	0.601	Gamma; Lognormal	Gamma
20_2_126	MW-100C	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	0.775	0.004	0.304	0.005	0.746	0.002	0.311	0.004	0.316	< 0.01	1.106	< 0.01	0.075	Nonparametric	Nonparametric
20_3_101	MW-100C	Appendix IV	Antimony	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_102	MW-100C	Appendix IV	Arsenic	mg/l	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.034		Nonparametric
20_3_103	MW-100C	Appendix IV	Barium	mg/l	11	0	0%	0.948	0.612	0.188	0.341	0.927	0.377	0.193	0.304	0.208	>= 0.10	0.436	>= 0.10	0.172	Gamma; Lognormal; Normal	Normal
20_3_104	MW-100C	Appendix IV	Beryllium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_106	MW-100C	Appendix IV	Cadmium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_109	MW-100C	Appendix IV	Chromium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_110	MW-100C	Appendix IV	Cobalt	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_113	MW-100C	Appendix IV	Fluoride (App IV)	mg/l	11	7	64%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.564		Nonparametric
20_3_115	MW-100C	Appendix IV	Lead	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_116	MW-100C	Appendix IV	Lithium	mg/l	11	0	0%	0.928	0.390	0.227	0.116	0.915	0.275	0.239	0.079	0.235	>= 0.10	0.498	>= 0.10	0.066	Gamma; Lognormal; Normal	Normal
20_3_117	MW-100C	Appendix IV	Mercury	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_118	MW-100C	Appendix IV	Molybdenum	mg/l	11	6	55%	0.803	0.085	0.246	0.407	0.787	0.063	0.312	0.112	0.317	>= 0.10	0.646	0.05 <= p < 0.10	1.031	Gamma; Lognormal; Normal	Nonparametric
20_3_121	MW-100C	Appendix IV	Radium-226+228	pci/l	11	1	9%	0.935	0.503	0.153	0.730	0.934	0.493	0.150	0.758	0.156	>= 0.10	0.314	>= 0.10	0.395	Gamma; Lognormal; Normal	Normal
20_3_122	MW-100C	Appendix IV	Selenium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_3_125	MW-100C	Appendix IV	Thallium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_5_111	MW-100C	Part 115	Copper	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_5_114	MW-100C	Part 115	Iron	mg/l	11	0	0%	0.904	0.204	0.218	0.151	0.866	0.068	0.269	0.025	0.243	0.05 <= p < 0.10	0.603	>= 0.10	0.309	Gamma; Lognormal; Normal	Normal
20_5_119	MW-100C	Part 115	Nickel	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_5_123	MW-100C	Part 115	Silver	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_5_128	MW-100C	Part 115	Vanadium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
20_5_129	MW-100C	Part 115	Zinc	mg/l	11	8	73%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		1.244		Nonparametric
21_2_105	MW-100D	Appendix III	Boron	mg/l	11	0	0%	0.790	0.007	0.293	0.009	0.754	0.002	0.302	0.006	0.308	< 0.01	1.171	< 0.01	0.214	Nonparametric	Nonparametric
21_2_107	MW-100D	Appendix III	Calcium	mg/l	11	0	0%	0.670	0.000	0.331	0.001	0.787	0.006	0.305	0.005	0.335	< 0.01	1.284	< 0.01	0.953	Nonparametric	Nonparametric
21_2_108	MW-100D	Appendix III	Chloride	mg/l	11	4	36%	0.857	0.141	0.241	0.252	0.892	0.286	0.183	0.678	0.217	>= 0.10	0.435	>= 0.10	0.546	Gamma; Lognormal; Normal	Normal
21_2_112	MW-100D	Appendix III	Fluoride	mg/l	11	5	45%	0.951	0.748	0.225	0.443	0.988	0.983	0.168	0.859	0.190	>= 0.10	0.195	>= 0.10	0.359	Gamma; Lognormal; Normal	Normal
21_2_120	MW-100D	Appendix III	pH, Field	su	11	0	0%	0.960	0.771	0.138	0.805	0.950	0.642	0.149	0.711	0.140	>= 0.10	0.256	>= 0.10	0.053	Gamma; Lognormal; Normal	Normal
21_2_124	MW-100D	Appendix III	Sulfate	mg/l	11	1	9%	0.726	0.002	0.280	0.025	0.902	0.231	0.223	0.169	0.266	0.05 <= p < 0.10	0.703	0.05 <= p < 0.10	0.947	Gamma; Lognormal	Gamma
21_2_126	MW-100D	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	0.755	0.002	0.274	0.020	0.796	0.008	0.244	0.067	0.256	0.05 <= p < 0.10	1.099	< 0.01	0.188	Gamma; Lognormal	Gamma
21_3_101	MW-100D	Appendix IV	Antimony	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_3_102	MW-100D	Appendix IV	Arsenic	mg/l	11	2	18%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.211		Nonparametric
21_3_103	MW-100D	Appendix IV	Barium	mg/l	11	0	0%	0.858	0.054	0.238	0.082	0.932	0.430	0.200	0.255	0.218	>= 0.10	0.491	>= 0.10	0.287	Gamma; Lognormal; Normal	Normal

(Table continues on next page)

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 3: Goodness-of-Fit Tests, Non-Detects Excluded *(continued)*

								Normal				Lognormal				Gamma						
								S-W		Lilliefors		S-W		Lilliefors		K-S		A-D				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Stat.	p-Value	Log-SD (NDs excl.)	ProUCL Distributions Fit	Recommended Distribution
21_3_104	MW-100D	Appendix IV	Beryllium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_3_106	MW-100D	Appendix IV	Cadmium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_3_109	MW-100D	Appendix IV	Chromium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_3_110	MW-100D	Appendix IV	Cobalt	mg/l	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_3_113	MW-100D	Appendix IV	Fluoride (App IV)	mg/l	11	5	45%	0.951	0.748	0.225	0.443	0.988	0.983	0.168	0.859	0.190	>= 0.10	0.195	>= 0.10	0.359	Gamma; Lognormal; Normal	Normal
21_3_115	MW-100D	Appendix IV	Lead	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_3_116	MW-100D	Appendix IV	Lithium	mg/l	11	0	0%	0.592	0.000	0.377	0.000	0.664	0.000	0.353	0.000	0.365	< 0.01	1.583	< 0.01	0.188	Nonparametric	Nonparametric
21_3_117	MW-100D	Appendix IV	Mercury	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_3_118	MW-100D	Appendix IV	Molybdenum	mg/l	11	1	9%	0.959	0.772	0.161	0.654	0.977	0.950	0.134	0.877	0.150	>= 0.10	0.211	>= 0.10	0.233	Gamma; Lognormal; Normal	Normal
21_3_121	MW-100D	Appendix IV	Radium-226+228	pci/l	11	1	9%	0.635	0.000	0.339	0.002	0.905	0.251	0.181	0.464	0.232	>= 0.10	0.696	0.05 <= p < 0.10	0.680	Gamma; Lognormal	Gamma
21_3_122	MW-100D	Appendix IV	Selenium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_3_125	MW-100D	Appendix IV	Thallium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_5_111	MW-100D	Part 115	Copper	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_5_114	MW-100D	Part 115	Iron	mg/l	11	0	0%	0.863	0.062	0.191	0.320	0.923	0.341	0.163	0.569	0.173	>= 0.10	0.385	>= 0.10	0.667	Gamma; Lognormal; Normal	Normal
21_5_119	MW-100D	Part 115	Nickel	mg/l	11	10	91%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_5_123	MW-100D	Part 115	Silver	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_5_128	MW-100D	Part 115	Vanadium	mg/l	11	11	100%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		Nonparametric
21_5_129	MW-100D	Part 115	Zinc	mg/l	11	9	82%	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		0.689		Nonparametric

Note: p-values above 0.05 suggest a fit to the tested distribution; a distribution passes its GOF test when at least one of the two p-values is above 0.05.

Table 4: Autocorrelation Tests, Non-Detects Excluded

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
13_2_105	MW-7B	Appendix III	Boron	mg/l	14	0	0%	-0.176	0.465	
13_2_107	MW-7B	Appendix III	Calcium	mg/l	14	0	0%	0.244	0.312	
13_2_108	MW-7B	Appendix III	Chloride	mg/l	14	10	71%	0.222	0.529	
13_2_112	MW-7B	Appendix III	Fluoride	mg/l	14	10	71%	0.180	0.611	
13_2_120	MW-7B	Appendix III	pH, Field	su	14	0	0%	0.018	0.939	
13_2_124	MW-7B	Appendix III	Sulfate	mg/l	14	10	71%	-0.598	0.091	
13_2_126	MW-7B	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	-0.192	0.426	
13_3_102	MW-7B	Appendix IV	Arsenic	mg/l	14	11	79%	-0.167	0.648	
13_3_103	MW-7B	Appendix IV	Barium	mg/l	14	0	0%	0.560	0.020	*
13_3_104	MW-7B	Appendix IV	Beryllium	mg/l	14	13	93%	NA	NA	
13_3_106	MW-7B	Appendix IV	Cadmium	mg/l	14	13	93%	NA	NA	
13_3_110	MW-7B	Appendix IV	Cobalt	mg/l	14	13	93%	NA	NA	
13_3_113	MW-7B	Appendix IV	Fluoride (App IV)	mg/l	14	10	71%	0.180	0.611	
13_3_115	MW-7B	Appendix IV	Lead	mg/l	14	13	93%	NA	NA	
13_3_116	MW-7B	Appendix IV	Lithium	mg/l	14	0	0%	-0.285	0.237	
13_3_121	MW-7B	Appendix IV	Radium-226+228	pci/l	14	1	7%	-0.421	0.090	
13_5_114	MW-7B	Part 115	Iron	mg/l	14	0	0%	0.791	0.001	**
13_5_129	MW-7B	Part 115	Zinc	mg/l	14	13	93%	NA	NA	
14_2_105	MW-16C	Appendix III	Boron	mg/l	13	0	0%	0.194	0.434	
14_2_107	MW-16C	Appendix III	Calcium	mg/l	13	0	0%	0.645	0.009	**
14_2_108	MW-16C	Appendix III	Chloride	mg/l	13	6	46%	0.106	0.731	
14_2_112	MW-16C	Appendix III	Fluoride	mg/l	13	8	62%	0.487	0.150	
14_2_120	MW-16C	Appendix III	pH, Field	su	13	0	0%	0.260	0.294	
14_2_124	MW-16C	Appendix III	Sulfate	mg/l	13	0	0%	0.091	0.713	
14_2_126	MW-16C	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	0.339	0.172	
14_3_102	MW-16C	Appendix IV	Arsenic	mg/l	13	10	77%	-0.167	0.648	
14_3_103	MW-16C	Appendix IV	Barium	mg/l	13	0	0%	0.760	0.002	**
14_3_109	MW-16C	Appendix IV	Chromium	mg/l	13	12	92%	NA	NA	
14_3_113	MW-16C	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	0.487	0.150	
14_3_116	MW-16C	Appendix IV	Lithium	mg/l	13	0	0%	0.043	0.863	
14_3_118	MW-16C	Appendix IV	Molybdenum	mg/l	13	10	77%	-0.323	0.377	
14_3_121	MW-16C	Appendix IV	Radium-226+228	pci/l	13	2	15%	-0.504	0.057	
14_5_114	MW-16C	Part 115	Iron	mg/l	13	0	0%	0.547	0.027	*
14_5_129	MW-16C	Part 115	Zinc	mg/l	13	12	92%	NA	NA	
15_2_105	MW-16D	Appendix III	Boron	mg/l	13	0	0%	0.090	0.716	
15_2_107	MW-16D	Appendix III	Calcium	mg/l	13	0	0%	0.270	0.277	
15_2_108	MW-16D	Appendix III	Chloride	mg/l	13	0	0%	0.336	0.176	
15_2_112	MW-16D	Appendix III	Fluoride	mg/l	13	8	62%	0.465	0.169	
15_2_120	MW-16D	Appendix III	pH, Field	su	13	0	0%	-0.149	0.549	
15_2_124	MW-16D	Appendix III	Sulfate	mg/l	13	1	8%	0.525	0.040	*
15_2_126	MW-16D	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	0.185	0.456	
15_3_102	MW-16D	Appendix IV	Arsenic	mg/l	13	3	23%	0.093	0.735	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
15_3_103	MW-16D	Appendix IV	Barium	mg/l	13	0	0%	0.463	0.062	
15_3_113	MW-16D	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	0.465	0.169	
15_3_116	MW-16D	Appendix IV	Lithium	mg/l	13	0	0%	0.212	0.393	
15_3_118	MW-16D	Appendix IV	Molybdenum	mg/l	13	0	0%	-0.021	0.932	
15_3_121	MW-16D	Appendix IV	Radium-226+228	pci/l	13	1	8%	-0.399	0.119	
15_3_122	MW-16D	Appendix IV	Selenium	mg/l	13	12	92%	NA	NA	
15_5_111	MW-16D	Part 115	Copper	mg/l	13	12	92%	NA	NA	
15_5_114	MW-16D	Part 115	Iron	mg/l	13	0	0%	0.516	0.038	*
15_5_129	MW-16D	Part 115	Zinc	mg/l	13	1	8%	0.623	0.015	*
16_2_105	MW-17D	Appendix III	Boron	mg/l	8	0	0%	-0.118	0.689	
16_2_107	MW-17D	Appendix III	Calcium	mg/l	8	0	0%	-0.090	0.760	
16_2_108	MW-17D	Appendix III	Chloride	mg/l	8	0	0%	-0.029	0.922	
16_2_112	MW-17D	Appendix III	Fluoride	mg/l	8	0	0%	0.562	0.058	
16_2_120	MW-17D	Appendix III	pH, Field	su	8	0	0%	-0.435	0.141	
16_2_124	MW-17D	Appendix III	Sulfate	mg/l	8	0	0%	-0.142	0.632	
16_2_126	MW-17D	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	-0.085	0.773	
16_3_101	MW-17D	Appendix IV	Antimony	mg/l	8	6	75%	-0.500	0.157	
16_3_102	MW-17D	Appendix IV	Arsenic	mg/l	8	2	25%	0.245	0.449	
16_3_103	MW-17D	Appendix IV	Barium	mg/l	8	0	0%	0.085	0.775	
16_3_106	MW-17D	Appendix IV	Cadmium	mg/l	8	7	88%	NA	NA	
16_3_113	MW-17D	Appendix IV	Fluoride (App IV)	mg/l	8	0	0%	0.562	0.058	
16_3_116	MW-17D	Appendix IV	Lithium	mg/l	8	0	0%	-0.053	0.857	
16_3_118	MW-17D	Appendix IV	Molybdenum	mg/l	8	1	12%	0.006	0.985	
16_3_121	MW-17D	Appendix IV	Radium-226+228	pci/l	8	1	12%	0.108	0.727	
16_5_114	MW-17D	Part 115	Iron	mg/l	8	0	0%	-0.373	0.207	
16_5_129	MW-17D	Part 115	Zinc	mg/l	8	5	62%	-0.484	0.185	
17_2_105	MW-17E	Appendix III	Boron	mg/l	8	0	0%	0.184	0.534	
17_2_107	MW-17E	Appendix III	Calcium	mg/l	8	0	0%	-0.130	0.659	
17_2_108	MW-17E	Appendix III	Chloride	mg/l	8	0	0%	0.086	0.772	
17_2_112	MW-17E	Appendix III	Fluoride	mg/l	8	0	0%	0.259	0.381	
17_2_120	MW-17E	Appendix III	pH, Field	su	8	0	0%	-0.287	0.332	
17_2_124	MW-17E	Appendix III	Sulfate	mg/l	8	3	38%	-0.432	0.201	
17_2_126	MW-17E	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	-0.591	0.046	*
17_3_103	MW-17E	Appendix IV	Barium	mg/l	8	0	0%	-0.120	0.686	
17_3_113	MW-17E	Appendix IV	Fluoride (App IV)	mg/l	8	0	0%	0.259	0.381	
17_3_116	MW-17E	Appendix IV	Lithium	mg/l	8	0	0%	0.356	0.229	
17_3_118	MW-17E	Appendix IV	Molybdenum	mg/l	8	7	88%	NA	NA	
17_3_121	MW-17E	Appendix IV	Radium-226+228	pci/l	8	4	50%	0.220	0.534	
17_5_114	MW-17E	Part 115	Iron	mg/l	8	0	0%	0.179	0.545	
17_5_129	MW-17E	Part 115	Zinc	mg/l	8	6	75%	NA	NA	
18_2_105	MW-18C	Appendix III	Boron	mg/l	9	0	0%	0.159	0.575	
18_2_107	MW-18C	Appendix III	Calcium	mg/l	9	0	0%	0.185	0.516	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
18_2_108	MW-18C	Appendix III	Chloride	mg/l	9	0	0%	0.416	0.144	
18_2_112	MW-18C	Appendix III	Fluoride	mg/l	9	2	22%	0.146	0.635	
18_2_120	MW-18C	Appendix III	pH, Field	su	8	0	0%	-0.357	0.227	
18_2_124	MW-18C	Appendix III	Sulfate	mg/l	9	0	0%	0.238	0.402	
18_2_126	MW-18C	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	0.161	0.572	
18_3_101	MW-18C	Appendix IV	Antimony	mg/l	9	8	89%	NA	NA	
18_3_102	MW-18C	Appendix IV	Arsenic	mg/l	9	5	56%	0.123	0.728	
18_3_103	MW-18C	Appendix IV	Barium	mg/l	9	0	0%	0.371	0.192	
18_3_106	MW-18C	Appendix IV	Cadmium	mg/l	9	8	89%	NA	NA	
18_3_110	MW-18C	Appendix IV	Cobalt	mg/l	9	5	56%	-0.071	0.840	
18_3_113	MW-18C	Appendix IV	Fluoride (App IV)	mg/l	9	2	22%	0.146	0.635	
18_3_116	MW-18C	Appendix IV	Lithium	mg/l	9	0	0%	-0.093	0.744	
18_3_118	MW-18C	Appendix IV	Molybdenum	mg/l	9	0	0%	0.181	0.525	
18_3_121	MW-18C	Appendix IV	Radium-226+228	pci/l	9	0	0%	0.568	0.046	*
18_3_122	MW-18C	Appendix IV	Selenium	mg/l	9	8	89%	NA	NA	
18_5_114	MW-18C	Part 115	Iron	mg/l	9	0	0%	0.369	0.194	
18_5_119	MW-18C	Part 115	Nickel	mg/l	9	1	11%	0.369	0.213	
18_5_129	MW-18C	Part 115	Zinc	mg/l	9	6	67%	-0.059	0.872	
19_2_105	MW-18D	Appendix III	Boron	mg/l	9	0	0%	0.176	0.536	
19_2_107	MW-18D	Appendix III	Calcium	mg/l	9	0	0%	0.214	0.452	
19_2_108	MW-18D	Appendix III	Chloride	mg/l	9	0	0%	0.375	0.187	
19_2_112	MW-18D	Appendix III	Fluoride	mg/l	9	1	11%	0.498	0.092	
19_2_120	MW-18D	Appendix III	pH, Field	su	8	0	0%	-0.389	0.189	
19_2_124	MW-18D	Appendix III	Sulfate	mg/l	9	0	0%	0.234	0.411	
19_2_126	MW-18D	Appendix III	Total Dissolved Solids	mg/l	9	1	11%	0.283	0.339	
19_3_103	MW-18D	Appendix IV	Barium	mg/l	9	0	0%	0.480	0.091	
19_3_110	MW-18D	Appendix IV	Cobalt	mg/l	9	6	67%	-0.097	0.791	
19_3_113	MW-18D	Appendix IV	Fluoride (App IV)	mg/l	9	1	11%	0.498	0.092	
19_3_116	MW-18D	Appendix IV	Lithium	mg/l	9	0	0%	0.477	0.093	
19_3_117	MW-18D	Appendix IV	Mercury	mg/l	9	8	89%	NA	NA	
19_3_118	MW-18D	Appendix IV	Molybdenum	mg/l	9	0	0%	0.510	0.073	
19_3_121	MW-18D	Appendix IV	Radium-226+228	pci/l	9	3	33%	0.295	0.360	
19_5_114	MW-18D	Part 115	Iron	mg/l	9	0	0%	0.143	0.615	
19_5_119	MW-18D	Part 115	Nickel	mg/l	9	1	11%	0.370	0.211	
19_5_129	MW-18D	Part 115	Zinc	mg/l	9	6	67%	-0.321	0.380	
20_2_105	MW-100C	Appendix III	Boron	mg/l	11	0	0%	0.458	0.083	
20_2_107	MW-100C	Appendix III	Calcium	mg/l	11	0	0%	0.490	0.064	
20_2_108	MW-100C	Appendix III	Chloride	mg/l	11	0	0%	0.547	0.039	*
20_2_112	MW-100C	Appendix III	Fluoride	mg/l	11	7	64%	0.222	0.530	
20_2_120	MW-100C	Appendix III	pH, Field	su	11	0	0%	0.116	0.660	
20_2_124	MW-100C	Appendix III	Sulfate	mg/l	11	0	0%	0.406	0.125	
20_2_126	MW-100C	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	0.244	0.355	

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 4: Autocorrelation Tests, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Autocorrelation	Box-Ljung p-value	Sig.
20_3_102	MW-100C	Appendix IV	Arsenic	mg/l	11	9	82%	-0.500	0.157	
20_3_103	MW-100C	Appendix IV	Barium	mg/l	11	0	0%	0.533	0.044	*
20_3_113	MW-100C	Appendix IV	Fluoride (App IV)	mg/l	11	7	64%	0.222	0.530	
20_3_116	MW-100C	Appendix IV	Lithium	mg/l	11	0	0%	0.500	0.059	
20_3_118	MW-100C	Appendix IV	Molybdenum	mg/l	11	6	55%	0.459	0.175	
20_3_121	MW-100C	Appendix IV	Radium-226+228	pci/l	11	1	9%	-0.277	0.312	
20_5_114	MW-100C	Part 115	Iron	mg/l	11	0	0%	0.035	0.895	
20_5_129	MW-100C	Part 115	Zinc	mg/l	11	8	73%	-0.144	0.692	
21_2_105	MW-100D	Appendix III	Boron	mg/l	11	0	0%	0.435	0.100	
21_2_107	MW-100D	Appendix III	Calcium	mg/l	11	0	0%	0.238	0.367	
21_2_108	MW-100D	Appendix III	Chloride	mg/l	11	4	36%	0.034	0.913	
21_2_112	MW-100D	Appendix III	Fluoride	mg/l	11	5	45%	0.165	0.608	
21_2_120	MW-100D	Appendix III	pH, Field	su	11	0	0%	0.359	0.174	
21_2_124	MW-100D	Appendix III	Sulfate	mg/l	11	1	9%	0.226	0.408	
21_2_126	MW-100D	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	0.151	0.568	
21_3_102	MW-100D	Appendix IV	Arsenic	mg/l	11	2	18%	0.199	0.484	
21_3_103	MW-100D	Appendix IV	Barium	mg/l	11	0	0%	0.118	0.654	
21_3_110	MW-100D	Appendix IV	Cobalt	mg/l	11	10	91%	NA	NA	
21_3_113	MW-100D	Appendix IV	Fluoride (App IV)	mg/l	11	5	45%	0.165	0.608	
21_3_116	MW-100D	Appendix IV	Lithium	mg/l	11	0	0%	-0.107	0.685	
21_3_118	MW-100D	Appendix IV	Molybdenum	mg/l	11	1	9%	0.708	0.010	**
21_3_121	MW-100D	Appendix IV	Radium-226+228	pci/l	11	1	9%	-0.025	0.927	
21_5_114	MW-100D	Part 115	Iron	mg/l	11	0	0%	0.067	0.800	
21_5_119	MW-100D	Part 115	Nickel	mg/l	11	10	91%	NA	NA	
21_5_129	MW-100D	Part 115	Zinc	mg/l	11	9	82%	-0.500	0.157	

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 5: Outlier Counts by Date

Date	Count
2023-02-02	6
2023-03-21	1
2023-04-25	1
2023-06-05	2
2024-11-13	22
2025-02-05	1
2025-08-07	1
2025-08-08	1

Table 6: Outliers Identified at the 1% Significance Level, Non-Detects Excluded

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	No. Detects	Date	Dilution	Value
13_3_102	MW-7B	Appendix IV	Arsenic	mg/l	14	11	79%	3	2025-08-08	1	0.00210
14_2_108	MW-16C	Appendix III	Chloride	mg/l	13	6	46%	7	2023-02-02	1	8.00
14_2_124	MW-16C	Appendix III	Sulfate	mg/l	13	0	0%	13	2023-02-02	1	19.0
14_2_126	MW-16C	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	13	2023-02-02	1	418
14_3_102	MW-16C	Appendix IV	Arsenic	mg/l	13	10	77%	3	2023-02-02	1	0.00200
14_5_114	MW-16C	Part 115	Iron	mg/l	13	0	0%	13	2023-03-21	1	1.10
15_2_124	MW-16D	Appendix III	Sulfate	mg/l	13	1	8%	12	2023-04-25	1	13.0
15_3_116	MW-16D	Appendix IV	Lithium	mg/l	13	0	0%	13	2023-02-02	1	0.0390
15_3_118	MW-16D	Appendix IV	Molybdenum	mg/l	13	0	0%	13	2023-02-02	1	0.00500
16_2_107	MW-17D	Appendix III	Calcium	mg/l	8	0	0%	8	2024-11-13	1	92.5
16_2_108	MW-17D	Appendix III	Chloride	mg/l	8	0	0%	8	2024-11-13	1	65.9
16_2_124	MW-17D	Appendix III	Sulfate	mg/l	8	0	0%	8	2024-11-13	1	315
16_2_126	MW-17D	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	8	2024-11-13	1	828
16_3_103	MW-17D	Appendix IV	Barium	mg/l	8	0	0%	8	2024-11-13	1	0.0720
16_3_116	MW-17D	Appendix IV	Lithium	mg/l	8	0	0%	8	2024-11-13	1	0.0690
16_3_118	MW-17D	Appendix IV	Molybdenum	mg/l	8	1	12%	7	2024-11-13	1	0.105
16_5_114	MW-17D	Part 115	Iron	mg/l	8	0	0%	8	2024-11-13	1	1.98
17_2_107	MW-17E	Appendix III	Calcium	mg/l	8	0	0%	8	2024-11-13	1	46.7
17_2_108	MW-17E	Appendix III	Chloride	mg/l	8	0	0%	8	2024-11-13	1	10.2
17_2_112	MW-17E	Appendix III	Fluoride	mg/l	8	0	0%	8	2024-11-13	1	0.220
17_2_124	MW-17E	Appendix III	Sulfate	mg/l	8	3	38%	5	2024-11-13	1	10.8
17_3_103	MW-17E	Appendix IV	Barium	mg/l	8	0	0%	8	2024-11-13	1	0.0420
17_3_113	MW-17E	Appendix IV	Fluoride (App IV)	mg/l	8	0	0%	8	2024-11-13	1	0.220
17_5_114	MW-17E	Part 115	Iron	mg/l	8	0	0%	8	2024-11-13	1	0.260
18_3_116	MW-18C	Appendix IV	Lithium	mg/l	9	0	0%	9	2024-11-13	1	0.123
19_2_105	MW-18D	Appendix III	Boron	mg/l	9	0	0%	9	2024-11-13	1	2.66
19_2_107	MW-18D	Appendix III	Calcium	mg/l	9	0	0%	9	2024-11-13	1	202
19_2_108	MW-18D	Appendix III	Chloride	mg/l	9	0	0%	9	2024-11-13	1	94.1
19_2_124	MW-18D	Appendix III	Sulfate	mg/l	9	0	0%	9	2024-11-13	1	601

(Table continues on next page)

Table 6: Outliers Identified at the 1% Significance Level, Non-Detects Excluded *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	No. Detects	Date	Dilution	Value
19_2_126	MW-18D	Appendix III	Total Dissolved Solids	mg/l	9	1	11%	8	2024-11-13	1	1260
19_5_114	MW-18D	Part 115	Iron	mg/l	9	0	0%	9	2024-11-13	1	3.73
21_2_107	MW-100D	Appendix III	Calcium	mg/l	11	0	0%	11	2025-08-07	1	68.0
21_3_102	MW-100D	Appendix IV	Arsenic	mg/l	11	2	18%	9	2025-02-05	1	0.00160
21_3_116	MW-100D	Appendix IV	Lithium	mg/l	11	0	0%	11	2023-06-05	1	0.0310
21_3_121	MW-100D	Appendix IV	Radium-226+228	pci/l	11	1	9%	10	2023-06-05	1	5.06

Table 7: Seasonality Tests

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
13_2_105	MW-7B	Appendix III	Boron	mg/l	0%	3	3	5	3	14	0.526	0.480	0.468	3	3	5	3	14	0.526	0.480	0.468
13_2_107	MW-7B	Appendix III	Calcium	mg/l	0%	3	3	5	3	14	0.345	0.408	0.421	3	3	5	3	14	0.345	0.408	0.421
13_2_108	MW-7B	Appendix III	Chloride	mg/l	71%	3	3	5	3	14	0.208	0.227	0.262	2	0	2	0	4	0.683	0.952	0.927
13_2_112	MW-7B	Appendix III	Fluoride	mg/l	71%	3	3	5	3	14	0.192	0.208	0.228	2	0	2	0	4	0.439	0.527	0.497
13_2_120	MW-7B	Appendix III	pH, Field	su	0%	3	3	5	3	14	0.020 *	0.001 **	0.001 **	3	3	5	3	14	0.020 *	0.001 **	0.001 **
13_2_124	MW-7B	Appendix III	Sulfate	mg/l	71%	3	3	5	3	14	0.275	0.301	0.381	2	0	2	0	4	0.121	0.237	0.218
13_2_126	MW-7B	Appendix III	Total Dissolved Solids	mg/l	0%	3	3	5	3	14	0.777	0.856	0.853	3	3	5	3	14	0.777	0.856	0.853
13_3_101	MW-7B	Appendix IV	Antimony	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
13_3_102	MW-7B	Appendix IV	Arsenic	mg/l	79%	3	3	5	3	14	0.844	0.814	0.699	1	1	1	0	3	0.368	NA	NA
13_3_103	MW-7B	Appendix IV	Barium	mg/l	0%	3	3	5	3	14	0.058	0.014 *	0.019 *	3	3	5	3	14	0.058	0.014 *	0.019 *
13_3_104	MW-7B	Appendix IV	Beryllium	mg/l	93%	3	3	5	3	14	0.598	0.652	0.652	0	0	1	0	1	NA	NA	NA
13_3_106	MW-7B	Appendix IV	Cadmium	mg/l	93%	3	3	5	3	14	0.566	0.609	0.549	0	0	1	0	1	NA	NA	NA
13_3_109	MW-7B	Appendix IV	Chromium	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
13_3_110	MW-7B	Appendix IV	Cobalt	mg/l	93%	3	3	5	3	14	0.566	0.651	0.643	0	0	1	0	1	NA	NA	NA
13_3_113	MW-7B	Appendix IV	Fluoride (App IV)	mg/l	71%	3	3	5	3	14	0.192	0.208	0.228	2	0	2	0	4	0.439	0.527	0.497
13_3_115	MW-7B	Appendix IV	Lead	mg/l	93%	3	3	5	3	14	0.757	0.773	0.787	0	0	1	0	1	NA	NA	NA
13_3_116	MW-7B	Appendix IV	Lithium	mg/l	0%	3	3	5	3	14	0.890	0.824	0.788	3	3	5	3	14	0.890	0.824	0.788
13_3_117	MW-7B	Appendix IV	Mercury	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
13_3_118	MW-7B	Appendix IV	Molybdenum	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
13_3_121	MW-7B	Appendix IV	Radium-226+228	pci/l	7%	3	3	5	3	14	0.926	0.924	0.956	3	3	4	3	13	0.941	0.941	0.977
13_3_122	MW-7B	Appendix IV	Selenium	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
13_3_125	MW-7B	Appendix IV	Thallium	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
13_5_111	MW-7B	Part 115	Copper	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
13_5_114	MW-7B	Part 115	Iron	mg/l	0%	3	3	5	3	14	0.104	0.099	0.065	3	3	5	3	14	0.104	0.099	0.065
13_5_119	MW-7B	Part 115	Nickel	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
13_5_123	MW-7B	Part 115	Silver	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
13_5_128	MW-7B	Part 115	Vanadium	mg/l	100%	3	3	5	3	14	0.598	0.652	0.652	NA	NA	NA	NA	NA	NA	NA	NA
13_5_129	MW-7B	Part 115	Zinc	mg/l	93%	3	3	5	3	14	0.627	0.661	0.673	1	0	0	0	1	NA	NA	NA
14_2_105	MW-16C	Appendix III	Boron	mg/l	0%	3	3	4	3	13	0.603	0.646	0.648	3	3	4	3	13	0.603	0.646	0.648
14_2_107	MW-16C	Appendix III	Calcium	mg/l	0%	3	3	4	3	13	0.077	0.053	0.057	3	3	4	3	13	0.077	0.053	0.057
14_2_108	MW-16C	Appendix III	Chloride	mg/l	46%	3	3	4	3	13	0.441	0.549	0.417	3	0	3	1	7	0.849	0.667	0.769
14_2_112	MW-16C	Appendix III	Fluoride	mg/l	62%	3	3	4	3	13	0.371	0.395	0.510	2	0	2	1	5	0.472	0.554	0.510
14_2_120	MW-16C	Appendix III	pH, Field	su	0%	3	3	4	3	13	0.121	0.069	0.069	3	3	4	3	13	0.121	0.069	0.069
14_2_124	MW-16C	Appendix III	Sulfate	mg/l	0%	3	3	4	3	13	0.253	0.215	0.193	3	3	4	3	13	0.253	0.215	0.193
14_2_126	MW-16C	Appendix III	Total Dissolved Solids	mg/l	0%	3	3	4	3	13	0.180	0.431	0.413	3	3	4	3	13	0.180	0.431	0.413
14_3_101	MW-16C	Appendix IV	Antimony	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
14_3_102	MW-16C	Appendix IV	Arsenic	mg/l	77%	3	3	4	3	13	0.626	0.693	0.696	2	1	0	0	3	0.480	0.667	0.667
14_3_103	MW-16C	Appendix IV	Barium	mg/l	0%	3	3	4	3	13	0.156	0.038 *	0.039 *	3	3	4	3	13	0.156	0.038 *	0.039 *
14_3_104	MW-16C	Appendix IV	Beryllium	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
14_3_106	MW-16C	Appendix IV	Cadmium	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
14_3_109	MW-16C	Appendix IV	Chromium	mg/l	92%	3	3	4	3	13	0.785	0.827	0.792	0	0	1	0	1	NA	NA	NA
14_3_110	MW-16C	Appendix IV	Cobalt	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
14_3_113	MW-16C	Appendix IV	Fluoride (App IV)	mg/l	62%	3	3	4	3	13	0.371	0.395	0.510	2	0	2	1	5	0.472	0.554	0.510
14_3_115	MW-16C	Appendix IV	Lead	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
14_3_116	MW-16C	Appendix IV	Lithium	mg/l	0%	3	3	4	3	13	0.156	0.119	0.120	3	3	4	3	13	0.156	0.119	0.120
14_3_117	MW-16C	Appendix IV	Mercury	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
14_3_118	MW-16C	Appendix IV	Molybdenum	mg/l	77%	3	3	4	3	13	0.585	0.547	0.617	1	1	1	0	3	0.368	NA	NA
14_3_121	MW-16C	Appendix IV	Radium-226+228	pci/l	15%	3	3	4	3	13	0.852	0.978	0.773	2	3	3	3	11	0.849	0.970	0.711
14_3_122	MW-16C	Appendix IV	Selenium	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
14_3_125	MW-16C	Appendix IV	Thallium	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
14_5_111	MW-16C	Part 115	Copper	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
14_5_114	MW-16C	Part 115	Iron	mg/l	0%	3	3	4	3	13	0.173	0.108	0.103	3	3	4	3	13	0.173	0.108	0.103
14_5_119	MW-16C	Part 115	Nickel	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
14_5_123	MW-16C	Part 115	Silver	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
14_5_128	MW-16C	Part 115	Vanadium	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
14_5_129	MW-16C	Part 115	Zinc	mg/l	92%	3	3	4	3	13	0.561	0.624	0.600	0	0	1	0	1	NA	NA	NA
15_2_105	MW-16D	Appendix III	Boron	mg/l	0%	3	3	4	3	13	0.603	0.584	0.583	3	3	4	3	13	0.603	0.584	0.583
15_2_107	MW-16D	Appendix III	Calcium	mg/l	0%	3	3	4	3	13	0.098	0.212	0.211	3	3	4	3	13	0.098	0.212	0.211
15_2_108	MW-16D	Appendix III	Chloride	mg/l	0%	3	3	4	3	13	0.350	0.299	0.290	3	3	4	3	13	0.350	0.299	0.290
15_2_112	MW-16D	Appendix III	Fluoride	mg/l	62%	3	3	4	3	13	0.384	0.476	0.561	2	0	2	1	5	0.368	0.662	0.597
15_2_120	MW-16D	Appendix III	pH, Field	su	0%	3	3	4	3	13	0.075	0.064	0.063	3	3	4	3	13	0.075	0.064	0.063
15_2_124	MW-16D	Appendix III	Sulfate	mg/l	8%	3	3	4	3	13	0.075	0.024 *	0.020 *	2	3	4	3	12	0.087	0.042 *	0.037 *
15_2_126	MW-16D	Appendix III	Total Dissolved Solids	mg/l	0%	3	3	4	3	13	0.745	0.694	0.704	3	3	4	3	13	0.745	0.694	0.704
15_3_101	MW-16D	Appendix IV	Antimony	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
15_3_102	MW-16D	Appendix IV	Arsenic	mg/l	23%	3	3	4	3	13	0.918	0.937	0.887	2	2	4	2	10	0.842	0.928	0.905
15_3_103	MW-16D	Appendix IV	Barium	mg/l	0%	3	3	4	3	13	0.122	0.125	0.135	3	3	4	3	13	0.122	0.125	0.135
15_3_104	MW-16D	Appendix IV	Beryllium	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
15_3_106	MW-16D	Appendix IV	Cadmium	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
15_3_109	MW-16D	Appendix IV	Chromium	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
15_3_110	MW-16D	Appendix IV	Cobalt	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
15_3_113	MW-16D	Appendix IV	Fluoride (App IV)	mg/l	62%	3	3	4	3	13	0.384	0.476	0.561	2	0	2	1	5	0.368	0.662	0.597
15_3_115	MW-16D	Appendix IV	Lead	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
15_3_116	MW-16D	Appendix IV	Lithium	mg/l	0%	3	3	4	3	13	0.735	0.367	0.328	3	3	4	3	13	0.735	0.367	0.328
15_3_117	MW-16D	Appendix IV	Mercury	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
15_3_118	MW-16D	Appendix IV	Molybdenum	mg/l	0%	3	3	4	3	13	0.195	0.243	0.268	3	3	4	3	13	0.195	0.243	0.268
15_3_121	MW-16D	Appendix IV	Radium-226+228	pci/l	8%	3	3	4	3	13	0.768	0.845	0.811	2	3	4	3	12	0.912	0.932	0.908
15_3_122	MW-16D	Appendix IV	Selenium	mg/l	92%	3	3	4	3	13	0.338	0.548	0.600	0	0	0	1	1	NA	NA	NA
15_3_125	MW-16D	Appendix IV	Thallium	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
15_5_111	MW-16D	Part 115	Copper	mg/l	92%	3	3	4	3	13	0.872	0.864	0.885	1	0	0	0	1	NA	NA	NA
15_5_114	MW-16D	Part 115	Iron	mg/l	0%	3	3	4	3	13	0.498	0.360	0.149	3	3	4	3	13	0.498	0.360	0.149
15_5_119	MW-16D	Part 115	Nickel	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
15_5_123	MW-16D	Part 115	Silver	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
15_5_128	MW-16D	Part 115	Vanadium	mg/l	100%	3	3	4	3	13	0.582	0.641	0.641	NA	NA	NA	NA	NA	NA	NA	NA
15_5_129	MW-16D	Part 115	Zinc	mg/l	8%	3	3	4	3	13	0.113	0.045 *	0.104	3	3	3	3	12	0.142	0.073	0.162
16_2_105	MW-17D	Appendix III	Boron	mg/l	0%	3	0	2	3	8	0.137	0.263	0.291	3	0	2	3	8	0.137	0.263	0.291
16_2_107	MW-17D	Appendix III	Calcium	mg/l	0%	3	0	2	3	8	0.485	0.493	0.489	3	0	2	3	8	0.485	0.493	0.489
16_2_108	MW-17D	Appendix III	Chloride	mg/l	0%	3	0	2	3	8	0.405	0.487	0.441	3	0	2	3	8	0.405	0.487	0.441
16_2_112	MW-17D	Appendix III	Fluoride	mg/l	0%	3	0	2	3	8	0.142	0.278	0.286	3	0	2	3	8	0.142	0.278	0.286
16_2_120	MW-17D	Appendix III	pH, Field	su	0%	3	0	2	3	8	0.286	0.807	0.807	3	0	2	3	8	0.286	0.807	0.807
16_2_124	MW-17D	Appendix III	Sulfate	mg/l	0%	3	0	2	3	8	0.236	0.504	0.395	3	0	2	3	8	0.236	0.504	0.395
16_2_126	MW-17D	Appendix III	Total Dissolved Solids	mg/l	0%	3	0	2	3	8	0.211	0.463	0.434	3	0	2	3	8	0.211	0.463	0.434
16_3_101	MW-17D	Appendix IV	Antimony	mg/l	75%	3	0	2	3	8	0.215	0.424	0.417	2	0	0	0	2	NA	NA	NA
16_3_102	MW-17D	Appendix IV	Arsenic	mg/l	25%	3	0	2	3	8	0.242	0.386	0.290	3	0	1	2	6	0.651	0.675	0.737
16_3_103	MW-17D	Appendix IV	Barium	mg/l	0%	3	0	2	3	8	0.216	0.584	0.584	3	0	2	3	8	0.216	0.584	0.584
16_3_104	MW-17D	Appendix IV	Beryllium	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
16_3_106	MW-17D	Appendix IV	Cadmium	mg/l	88%	3	0	2	3	8	0.311	0.468	0.374	1	0	0	0	1	NA	NA	NA
16_3_109	MW-17D	Appendix IV	Chromium	mg/l	100%	3	0	2	3	8	0.323	0.466	0.370	NA	NA	NA	NA	NA	NA	NA	NA
16_3_110	MW-17D	Appendix IV	Cobalt	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
16_3_113	MW-17D	Appendix IV	Fluoride (App IV)	mg/l	0%	3	0	2	3	8	0.142	0.278	0.286	3	0	2	3	8	0.142	0.278	0.286
16_3_115	MW-17D	Appendix IV	Lead	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
16_3_116	MW-17D	Appendix IV	Lithium	mg/l	0%	3	0	2	3	8	0.192	0.464	0.442	3	0	2	3	8	0.192	0.464	0.442
16_3_117	MW-17D	Appendix IV	Mercury	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
16_3_118	MW-17D	Appendix IV	Molybdenum	mg/l	12%	3	0	2	3	8	0.133	0.511	0.457	3	0	2	2	7	0.153	0.352	0.374
16_3_121	MW-17D	Appendix IV	Radium-226+228	pci/l	12%	3	0	2	3	8	0.607	0.571	0.434	3	0	1	3	7	1.000	0.873	0.890
16_3_122	MW-17D	Appendix IV	Selenium	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
16_3_125	MW-17D	Appendix IV	Thallium	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
16_5_111	MW-17D	Part 115	Copper	mg/l	100%	3	0	2	3	8	0.323	0.471	0.380	NA	NA	NA	NA	NA	NA	NA	NA
16_5_114	MW-17D	Part 115	Iron	mg/l	0%	3	0	2	3	8	0.350	0.836	0.955	3	0	2	3	8	0.350	0.836	0.955
16_5_119	MW-17D	Part 115	Nickel	mg/l	100%	3	0	2	3	8	0.323	0.469	0.376	NA	NA	NA	NA	NA	NA	NA	NA
16_5_123	MW-17D	Part 115	Silver	mg/l	100%	3	0	2	3	8	0.323	0.460	0.363	NA	NA	NA	NA	NA	NA	NA	NA
16_5_128	MW-17D	Part 115	Vanadium	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
16_5_129	MW-17D	Part 115	Zinc	mg/l	62%	3	0	2	3	8	0.694	0.581	0.854	1	0	2	0	3	0.221	0.316	0.220
17_2_105	MW-17E	Appendix III	Boron	mg/l	0%	3	0	2	3	8	0.116	0.184	0.210	3	0	2	3	8	0.116	0.184	0.210
17_2_107	MW-17E	Appendix III	Calcium	mg/l	0%	3	0	2	3	8	0.833	0.504	0.498	3	0	2	3	8	0.833	0.504	0.498
17_2_108	MW-17E	Appendix III	Chloride	mg/l	0%	3	0	2	3	8	0.380	0.435	0.385	3	0	2	3	8	0.380	0.435	0.385
17_2_112	MW-17E	Appendix III	Fluoride	mg/l	0%	3	0	2	3	8	0.310	0.364	0.424	3	0	2	3	8	0.310	0.364	0.424
17_2_120	MW-17E	Appendix III	pH, Field	su	0%	3	0	2	3	8	0.130	0.302	0.306	3	0	2	3	8	0.130	0.302	0.306

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
17_2_124	MW-17E	Appendix III	Sulfate	mg/l	38%	3	0	2	3	8	0.747	0.644	0.935	2	0	1	2	5	0.741	0.744	0.960
17_2_126	MW-17E	Appendix III	Total Dissolved Solids	mg/l	0%	3	0	2	3	8	0.457	0.596	0.583	3	0	2	3	8	0.457	0.596	0.583
17_3_101	MW-17E	Appendix IV	Antimony	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
17_3_102	MW-17E	Appendix IV	Arsenic	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
17_3_103	MW-17E	Appendix IV	Barium	mg/l	0%	3	0	2	3	8	0.363	0.524	0.562	3	0	2	3	8	0.363	0.524	0.562
17_3_104	MW-17E	Appendix IV	Beryllium	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
17_3_106	MW-17E	Appendix IV	Cadmium	mg/l	100%	3	0	2	3	8	0.323	0.462	0.364	NA	NA	NA	NA	NA	NA	NA	NA
17_3_109	MW-17E	Appendix IV	Chromium	mg/l	100%	3	0	2	3	8	0.323	0.466	0.370	NA	NA	NA	NA	NA	NA	NA	NA
17_3_110	MW-17E	Appendix IV	Cobalt	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
17_3_113	MW-17E	Appendix IV	Fluoride (App IV)	mg/l	0%	3	0	2	3	8	0.310	0.364	0.424	3	0	2	3	8	0.310	0.364	0.424
17_3_115	MW-17E	Appendix IV	Lead	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
17_3_116	MW-17E	Appendix IV	Lithium	mg/l	0%	3	0	2	3	8	0.407	0.406	0.413	3	0	2	3	8	0.407	0.406	0.413
17_3_117	MW-17E	Appendix IV	Mercury	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
17_3_118	MW-17E	Appendix IV	Molybdenum	mg/l	88%	3	0	2	3	8	0.323	0.365	0.376	0	0	0	1	1	NA	NA	NA
17_3_121	MW-17E	Appendix IV	Radium-226+228	pci/l	50%	3	0	2	3	8	0.151	0.211	0.161	1	0	0	3	4	0.655	0.552	0.589
17_3_122	MW-17E	Appendix IV	Selenium	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
17_3_125	MW-17E	Appendix IV	Thallium	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
17_5_111	MW-17E	Part 115	Copper	mg/l	100%	3	0	2	3	8	0.323	0.471	0.380	NA	NA	NA	NA	NA	NA	NA	NA
17_5_114	MW-17E	Part 115	Iron	mg/l	0%	3	0	2	3	8	0.401	0.451	0.422	3	0	2	3	8	0.401	0.451	0.422
17_5_119	MW-17E	Part 115	Nickel	mg/l	100%	3	0	2	3	8	0.323	0.469	0.376	NA	NA	NA	NA	NA	NA	NA	NA
17_5_123	MW-17E	Part 115	Silver	mg/l	100%	3	0	2	3	8	0.323	0.460	0.363	NA	NA	NA	NA	NA	NA	NA	NA
17_5_128	MW-17E	Part 115	Vanadium	mg/l	100%	3	0	2	3	8	0.364	0.426	0.426	NA	NA	NA	NA	NA	NA	NA	NA
17_5_129	MW-17E	Part 115	Zinc	mg/l	75%	3	0	2	3	8	0.302	0.428	0.362	1	0	1	0	2	NA	NA	NA
18_2_105	MW-18C	Appendix III	Boron	mg/l	0%	3	2	2	2	9	0.274	0.305	0.313	3	2	2	2	9	0.274	0.305	0.313
18_2_107	MW-18C	Appendix III	Calcium	mg/l	0%	3	2	2	2	9	0.108	0.063	0.092	3	2	2	2	9	0.108	0.063	0.092
18_2_108	MW-18C	Appendix III	Chloride	mg/l	0%	3	2	2	2	9	0.068	0.047 *	0.123	3	2	2	2	9	0.068	0.047 *	0.123
18_2_112	MW-18C	Appendix III	Fluoride	mg/l	22%	3	2	2	2	9	0.591	0.776	0.792	2	2	2	1	7	0.169	0.069	0.045 *
18_2_120	MW-18C	Appendix III	pH, Field	su	0%	3	1	2	2	8	0.280	0.680	0.683	3	1	2	2	8	0.280	0.680	0.683
18_2_124	MW-18C	Appendix III	Sulfate	mg/l	0%	3	2	2	2	9	0.115	0.061	0.143	3	2	2	2	9	0.115	0.061	0.143
18_2_126	MW-18C	Appendix III	Total Dissolved Solids	mg/l	0%	3	2	2	2	9	0.116	0.115	0.131	3	2	2	2	9	0.116	0.115	0.131
18_3_101	MW-18C	Appendix IV	Antimony	mg/l	89%	3	2	2	2	9	0.215	0.116	0.121	0	1	0	0	1	NA	NA	NA
18_3_102	MW-18C	Appendix IV	Arsenic	mg/l	56%	3	2	2	2	9	0.188	0.148	0.166	2	0	1	1	4	0.632	0.807	0.828
18_3_103	MW-18C	Appendix IV	Barium	mg/l	0%	3	2	2	2	9	0.085	0.049 *	0.067	3	2	2	2	9	0.085	0.049 *	0.067
18_3_104	MW-18C	Appendix IV	Beryllium	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
18_3_106	MW-18C	Appendix IV	Cadmium	mg/l	89%	3	2	2	2	9	0.179	0.276	0.084	0	1	0	0	1	NA	NA	NA
18_3_109	MW-18C	Appendix IV	Chromium	mg/l	100%	3	2	2	2	9	0.124	0.284	0.092	NA	NA	NA	NA	NA	NA	NA	NA
18_3_110	MW-18C	Appendix IV	Cobalt	mg/l	56%	3	2	2	2	9	0.268	0.117	0.154	0	2	2	0	4	0.121	0.198	0.219
18_3_113	MW-18C	Appendix IV	Fluoride (App IV)	mg/l	22%	3	2	2	2	9	0.591	0.776	0.792	2	2	2	1	7	0.169	0.069	0.045 *
18_3_115	MW-18C	Appendix IV	Lead	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
18_3_116	MW-18C	Appendix IV	Lithium	mg/l	0%	3	2	2	2	9	0.510	0.423	0.386	3	2	2	2	9	0.510	0.423	0.386
18_3_117	MW-18C	Appendix IV	Mercury	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
18_3_118	MW-18C	Appendix IV	Molybdenum	mg/l	0%	3	2	2	2	9	0.247	0.225	0.261	3	2	2	2	9	0.247	0.225	0.261
18_3_121	MW-18C	Appendix IV	Radium-226+228	pci/l	0%	3	2	2	2	9	0.164	0.020 *	0.038 *	3	2	2	2	9	0.164	0.020 *	0.038 *
18_3_122	MW-18C	Appendix IV	Selenium	mg/l	89%	3	2	2	2	9	0.215	0.133	0.160	0	1	0	0	1	NA	NA	NA
18_3_125	MW-18C	Appendix IV	Thallium	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
18_5_111	MW-18C	Part 115	Copper	mg/l	100%	3	2	2	2	9	0.124	0.294	0.112	NA	NA	NA	NA	NA	NA	NA	NA
18_5_114	MW-18C	Part 115	Iron	mg/l	0%	3	2	2	2	9	0.086	0.036 *	0.101	3	2	2	2	9	0.086	0.036 *	0.101
18_5_119	MW-18C	Part 115	Nickel	mg/l	11%	3	2	2	2	9	0.105	0.321	0.186	3	2	2	1	8	0.112	0.093	0.183
18_5_123	MW-18C	Part 115	Silver	mg/l	100%	3	2	2	2	9	0.124	0.271	0.074	NA	NA	NA	NA	NA	NA	NA	NA
18_5_128	MW-18C	Part 115	Vanadium	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
18_5_129	MW-18C	Part 115	Zinc	mg/l	67%	3	2	2	2	9	0.149	0.487	0.273	1	0	2	0	3	0.221	0.525	0.475
19_2_105	MW-18D	Appendix III	Boron	mg/l	0%	3	2	2	2	9	0.279	0.343	0.347	3	2	2	2	9	0.279	0.343	0.347
19_2_107	MW-18D	Appendix III	Calcium	mg/l	0%	3	2	2	2	9	0.087	0.167	0.081	3	2	2	2	9	0.087	0.167	0.081
19_2_108	MW-18D	Appendix III	Chloride	mg/l	0%	3	2	2	2	9	0.068	0.064	0.029 *	3	2	2	2	9	0.068	0.064	0.029 *
19_2_112	MW-18D	Appendix III	Fluoride	mg/l	11%	3	2	2	2	9	0.063	0.008 **	0.008 **	3	2	2	1	8	0.103	0.044 *	0.050
19_2_120	MW-18D	Appendix III	pH, Field	su	0%	3	1	2	2	8	0.349	0.333	0.339	3	1	2	2	8	0.349	0.333	0.339
19_2_124	MW-18D	Appendix III	Sulfate	mg/l	0%	3	2	2	2	9	0.061	0.111	0.038 *	3	2	2	2	9	0.061	0.111	0.038 *
19_2_126	MW-18D	Appendix III	Total Dissolved Solids	mg/l	11%	3	2	2	2	9	0.057	0.068	0.136	3	2	1	2	8	0.090	0.158	0.087
19_3_101	MW-18D	Appendix IV	Antimony	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
19_3_102	MW-18D	Appendix IV	Arsenic	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
19_3_103	MW-18D	Appendix IV	Barium	mg/l	0%	3	2	2	2	9	0.061	0.022 *	0.013 *	3	2	2	2	9	0.061	0.022 *	0.013 *
19_3_104	MW-18D	Appendix IV	Beryllium	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
19_3_106	MW-18D	Appendix IV	Cadmium	mg/l	100%	3	2	2	2	9	0.124	0.276	0.079	NA	NA	NA	NA	NA	NA	NA	NA
19_3_109	MW-18D	Appendix IV	Chromium	mg/l	100%	3	2	2	2	9	0.124	0.284	0.092	NA	NA	NA	NA	NA	NA	NA	NA
19_3_110	MW-18D	Appendix IV	Cobalt	mg/l	67%	3	2	2	2	9	0.221	0.113	0.108	1	1	1	0	3	0.368	NA	NA
19_3_113	MW-18D	Appendix IV	Fluoride (App IV)	mg/l	11%	3	2	2	2	9	0.063	0.008 **	0.008 **	3	2	2	1	8	0.103	0.044 *	0.050
19_3_115	MW-18D	Appendix IV	Lead	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
19_3_116	MW-18D	Appendix IV	Lithium	mg/l	0%	3	2	2	2	9	0.102	0.032 *	0.034 *	3	2	2	2	9	0.102	0.032 *	0.034 *
19_3_117	MW-18D	Appendix IV	Mercury	mg/l	89%	3	2	2	2	9	0.149	0.114	0.114	1	0	0	0	1	NA	NA	NA
19_3_118	MW-18D	Appendix IV	Molybdenum	mg/l	0%	3	2	2	2	9	0.087	0.040 *	0.039 *	3	2	2	2	9	0.087	0.040 *	0.039 *
19_3_121	MW-18D	Appendix IV	Radium-226+228	pci/l	33%	3	2	2	2	9	0.308	0.325	0.238	2	1	1	2	6	0.370	0.719	0.584
19_3_122	MW-18D	Appendix IV	Selenium	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
19_3_125	MW-18D	Appendix IV	Thallium	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA
19_5_111	MW-18D	Part 115	Copper	mg/l	100%	3	2	2	2	9	0.124	0.294	0.112	NA	NA	NA	NA	NA	NA	NA	NA
19_5_114	MW-18D	Part 115	Iron	mg/l	0%	3	2	2	2	9	0.084	0.291	0.167	3	2	2	2	9	0.084	0.291	0.167
19_5_119	MW-18D	Part 115	Nickel	mg/l	11%	3	2	2	2	9	0.068	0.317	0.146	3	2	2	1	8	0.108	0.087	0.106
19_5_123	MW-18D	Part 115	Silver	mg/l	100%	3	2	2	2	9	0.124	0.271	0.074	NA	NA	NA	NA	NA	NA	NA	NA
19_5_128	MW-18D	Part 115	Vanadium	mg/l	100%	3	2	2	2	9	0.149	0.114	0.114	NA	NA	NA	NA	NA	NA	NA	NA

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
19_5_129	MW-18D	Part 115	Zinc	mg/l	67%	3	2	2	2	9	0.114	0.458	0.167	1	0	2	0	3	1.000	0.821	0.871
20_2_105	MW-100C	Appendix III	Boron	mg/l	0%	3	0	5	3	11	0.765	0.622	0.610	3	0	5	3	11	0.765	0.622	0.610
20_2_107	MW-100C	Appendix III	Calcium	mg/l	0%	3	0	5	3	11	0.032 *	0.006 **	0.006 **	3	0	5	3	11	0.032 *	0.006 **	0.006 **
20_2_108	MW-100C	Appendix III	Chloride	mg/l	0%	3	0	5	3	11	0.264	0.276	0.321	3	0	5	3	11	0.264	0.276	0.321
20_2_112	MW-100C	Appendix III	Fluoride	mg/l	64%	3	0	5	3	11	0.933	0.950	0.807	1	0	2	1	4	0.325	0.373	0.260
20_2_120	MW-100C	Appendix III	pH, Field	su	0%	3	0	5	3	11	0.135	0.329	0.330	3	0	5	3	11	0.135	0.329	0.330
20_2_124	MW-100C	Appendix III	Sulfate	mg/l	0%	3	0	5	3	11	0.239	0.285	0.319	3	0	5	3	11	0.239	0.285	0.319
20_2_126	MW-100C	Appendix III	Total Dissolved Solids	mg/l	0%	3	0	5	3	11	0.239	0.670	0.689	3	0	5	3	11	0.239	0.670	0.689
20_3_101	MW-100C	Appendix IV	Antimony	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
20_3_102	MW-100C	Appendix IV	Arsenic	mg/l	82%	3	0	5	3	11	0.264	0.273	0.279	0	0	1	1	2	0.317	NA	NA
20_3_103	MW-100C	Appendix IV	Barium	mg/l	0%	3	0	5	3	11	0.172	0.148	0.183	3	0	5	3	11	0.172	0.148	0.183
20_3_104	MW-100C	Appendix IV	Beryllium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
20_3_106	MW-100C	Appendix IV	Cadmium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
20_3_109	MW-100C	Appendix IV	Chromium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
20_3_110	MW-100C	Appendix IV	Cobalt	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
20_3_113	MW-100C	Appendix IV	Fluoride (App IV)	mg/l	64%	3	0	5	3	11	0.933	0.950	0.807	1	0	2	1	4	0.325	0.373	0.260
20_3_115	MW-100C	Appendix IV	Lead	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
20_3_116	MW-100C	Appendix IV	Lithium	mg/l	0%	3	0	5	3	11	0.101	0.083	0.088	3	0	5	3	11	0.101	0.083	0.088
20_3_117	MW-100C	Appendix IV	Mercury	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
20_3_118	MW-100C	Appendix IV	Molybdenum	mg/l	55%	3	0	5	3	11	0.271	0.399	0.528	1	0	4	0	5	0.147	0.258	0.197
20_3_121	MW-100C	Appendix IV	Radium-226+228	pci/l	9%	3	0	5	3	11	0.439	0.596	0.575	3	0	4	3	10	0.479	0.665	0.610
20_3_122	MW-100C	Appendix IV	Selenium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
20_3_125	MW-100C	Appendix IV	Thallium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
20_5_111	MW-100C	Part 115	Copper	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
20_5_114	MW-100C	Part 115	Iron	mg/l	0%	3	0	5	3	11	0.298	0.758	0.887	3	0	5	3	11	0.298	0.758	0.887
20_5_119	MW-100C	Part 115	Nickel	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
20_5_123	MW-100C	Part 115	Silver	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
20_5_128	MW-100C	Part 115	Vanadium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
20_5_129	MW-100C	Part 115	Zinc	mg/l	73%	3	0	5	3	11	0.291	0.260	0.444	1	0	1	1	3	0.368	NA	NA
21_2_105	MW-100D	Appendix III	Boron	mg/l	0%	3	0	5	3	11	0.393	0.476	0.467	3	0	5	3	11	0.393	0.476	0.467
21_2_107	MW-100D	Appendix III	Calcium	mg/l	0%	3	0	5	3	11	0.140	0.378	0.346	3	0	5	3	11	0.140	0.378	0.346
21_2_108	MW-100D	Appendix III	Chloride	mg/l	36%	3	0	5	3	11	0.342	0.398	0.397	3	0	3	1	7	0.260	0.342	0.360
21_2_112	MW-100D	Appendix III	Fluoride	mg/l	45%	3	0	5	3	11	0.225	0.405	0.384	3	0	2	1	6	0.953	0.982	1.000
21_2_120	MW-100D	Appendix III	pH, Field	su	0%	3	0	5	3	11	0.908	0.754	0.744	3	0	5	3	11	0.908	0.754	0.744
21_2_124	MW-100D	Appendix III	Sulfate	mg/l	9%	3	0	5	3	11	0.678	0.507	0.619	3	0	4	3	10	0.445	0.352	0.413
21_2_126	MW-100D	Appendix III	Total Dissolved Solids	mg/l	0%	3	0	5	3	11	0.583	0.428	0.453	3	0	5	3	11	0.583	0.428	0.453
21_3_101	MW-100D	Appendix IV	Antimony	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
21_3_102	MW-100D	Appendix IV	Arsenic	mg/l	18%	3	0	5	3	11	0.345	0.443	0.467	3	0	3	3	9	0.558	0.540	0.519
21_3_103	MW-100D	Appendix IV	Barium	mg/l	0%	3	0	5	3	11	0.118	0.176	0.143	3	0	5	3	11	0.118	0.176	0.143

(Table continues on next page)

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 7: Seasonality Tests *(continued)*

						Full								Without Non-Detects							
						Sample Size					p-Value			Sample Size					p-Value		
ID	Well	Constituent Type	Constituent	Unit	% NDs	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA	Winter	Spring	Summer	Fall	Total	Kruskal-Wallis	ANOVA	Log ANOVA
21_3_104	MW-100D	Appendix IV	Beryllium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
21_3_106	MW-100D	Appendix IV	Cadmium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
21_3_109	MW-100D	Appendix IV	Chromium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
21_3_110	MW-100D	Appendix IV	Cobalt	mg/l	91%	3	0	5	3	11	0.549	0.628	0.518	0	0	1	0	1	NA	NA	NA
21_3_113	MW-100D	Appendix IV	Fluoride (App IV)	mg/l	45%	3	0	5	3	11	0.225	0.405	0.384	3	0	2	1	6	0.953	0.982	1.000
21_3_115	MW-100D	Appendix IV	Lead	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
21_3_116	MW-100D	Appendix IV	Lithium	mg/l	0%	3	0	5	3	11	0.324	0.836	0.867	3	0	5	3	11	0.324	0.836	0.867
21_3_117	MW-100D	Appendix IV	Mercury	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
21_3_118	MW-100D	Appendix IV	Molybdenum	mg/l	9%	3	0	5	3	11	0.388	0.509	0.486	3	0	4	3	10	0.297	0.354	0.320
21_3_121	MW-100D	Appendix IV	Radium-226+228	pci/l	9%	3	0	5	3	11	0.047 *	0.353	0.090	2	0	5	3	10	0.106	0.454	0.153
21_3_122	MW-100D	Appendix IV	Selenium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
21_3_125	MW-100D	Appendix IV	Thallium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
21_5_111	MW-100D	Part 115	Copper	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
21_5_114	MW-100D	Part 115	Iron	mg/l	0%	3	0	5	3	11	0.127	0.122	0.090	3	0	5	3	11	0.127	0.122	0.090
21_5_119	MW-100D	Part 115	Nickel	mg/l	91%	3	0	5	3	11	0.549	0.624	0.604	0	0	1	0	1	NA	NA	NA
21_5_123	MW-100D	Part 115	Silver	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
21_5_128	MW-100D	Part 115	Vanadium	mg/l	100%	3	0	5	3	11	0.595	0.645	0.645	NA	NA	NA	NA	NA	NA	NA	NA
21_5_129	MW-100D	Part 115	Zinc	mg/l	82%	3	0	5	3	11	0.264	0.270	0.276	1	0	1	0	2	0.317	NA	NA

*** p < 0.001, ** p < 0.01, * p < 0.05

Table 8: Trend Tests: Lognormal MLE and MK

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
13_2_105	MW-7B	Appendix III	Boron	mg/l	14	0	0%	Parametric	Lognormal MLE	-0.0000294	0.107	↔
13_2_107	MW-7B	Appendix III	Calcium	mg/l	14	0	0%	Parametric	Lognormal MLE	-0.000129	0.000	↓
13_2_120	MW-7B	Appendix III	pH, Field	su	14	0	0%	Parametric	Lognormal MLE	-0.00000209	0.869	↔
13_2_126	MW-7B	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	Parametric	Lognormal MLE	-0.0000235	0.056	↔
13_3_103	MW-7B	Appendix IV	Barium	mg/l	14	0	0%	Parametric	Lognormal MLE	-0.000235	0.000	↓
13_3_116	MW-7B	Appendix IV	Lithium	mg/l	14	0	0%	Nonparametric	MK	0	0.352	↔
13_3_121	MW-7B	Appendix IV	Radium-226+228	pci/l	14	1	7%	Parametric	Lognormal MLE	-0.0000116	0.980	↔
13_5_114	MW-7B	Part 115	Iron	mg/l	14	0	0%	Parametric	Lognormal MLE	0.000798	0.000	↑
14_2_105	MW-16C	Appendix III	Boron	mg/l	13	0	0%	Parametric	Lognormal MLE	0.0000209	0.466	↔
14_2_107	MW-16C	Appendix III	Calcium	mg/l	13	0	0%	Parametric	Lognormal MLE	0.000181	0.001	↑
14_2_108	MW-16C	Appendix III	Chloride	mg/l	13	6	46%	Parametric	Lognormal MLE	-0.00175	0.000	↓
14_2_120	MW-16C	Appendix III	pH, Field	su	13	0	0%	Parametric	Lognormal MLE	-0.0000237	0.097	↔
14_2_124	MW-16C	Appendix III	Sulfate	mg/l	13	0	0%	Nonparametric	MK	0.00320	0.237	↔
14_2_126	MW-16C	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	Nonparametric	MK	-0.0405	0.023	↔
14_3_103	MW-16C	Appendix IV	Barium	mg/l	13	0	0%	Parametric	Lognormal MLE	-0.000772	0.000	↓
14_3_116	MW-16C	Appendix IV	Lithium	mg/l	13	0	0%	Parametric	Lognormal MLE	0.0000474	0.346	↔
14_3_121	MW-16C	Appendix IV	Radium-226+228	pci/l	13	2	15%	Parametric	Lognormal MLE	-0.000920	0.443	↔
14_5_114	MW-16C	Part 115	Iron	mg/l	13	0	0%	Parametric	Lognormal MLE	-0.000935	0.000	↓
15_2_105	MW-16D	Appendix III	Boron	mg/l	13	0	0%	Parametric	Lognormal MLE	-0.0000467	0.251	↔
15_2_107	MW-16D	Appendix III	Calcium	mg/l	13	0	0%	Parametric	Lognormal MLE	0.00000997	0.630	↔
15_2_108	MW-16D	Appendix III	Chloride	mg/l	13	0	0%	Parametric	Lognormal MLE	-0.0000679	0.418	↔
15_2_120	MW-16D	Appendix III	pH, Field	su	13	0	0%	Parametric	Lognormal MLE	-0.00000363	0.811	↔
15_2_124	MW-16D	Appendix III	Sulfate	mg/l	13	1	8%	Parametric	Lognormal MLE	-0.000378	0.233	↔
15_2_126	MW-16D	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	Parametric	Lognormal MLE	-0.0000293	0.196	↔
15_3_102	MW-16D	Appendix IV	Arsenic	mg/l	13	3	23%	Nonparametric	MK	0	0.799	↔
15_3_103	MW-16D	Appendix IV	Barium	mg/l	13	0	0%	Parametric	Lognormal MLE	-0.000208	0.000	↓
15_3_116	MW-16D	Appendix IV	Lithium	mg/l	13	0	0%	Parametric	Lognormal MLE	0.0000272	0.832	↔
15_3_118	MW-16D	Appendix IV	Molybdenum	mg/l	13	0	0%	Nonparametric	MK	-0.00000210	0.083	↔
15_3_121	MW-16D	Appendix IV	Radium-226+228	pci/l	13	1	8%	Parametric	Lognormal MLE	-0.00114	0.101	↔
15_5_114	MW-16D	Part 115	Iron	mg/l	13	0	0%	Parametric	Lognormal MLE	0.00138	0.014	↔
15_5_129	MW-16D	Part 115	Zinc	mg/l	13	1	8%	Parametric	Lognormal MLE	-0.00565	0.000	↓
16_2_105	MW-17D	Appendix III	Boron	mg/l	8	0	0%	Parametric	Lognormal MLE	0.000276	0.480	↔
16_2_107	MW-17D	Appendix III	Calcium	mg/l	8	0	0%	Nonparametric	MK	-0.00597	0.095	↔
16_2_108	MW-17D	Appendix III	Chloride	mg/l	8	0	0%	Parametric	Lognormal MLE	-0.00535	0.003	↓
16_2_112	MW-17D	Appendix III	Fluoride	mg/l	8	0	0%	Nonparametric	MK	0.000508	0.167	↔
16_2_120	MW-17D	Appendix III	pH, Field	su	8	0	0%	Parametric	Lognormal MLE	-0.0000172	0.457	↔
16_2_124	MW-17D	Appendix III	Sulfate	mg/l	8	0	0%	Nonparametric	MK	-0.0205	0.004	↓
16_2_126	MW-17D	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	Nonparametric	MK	-0.0802	0.158	↔
16_3_102	MW-17D	Appendix IV	Arsenic	mg/l	8	2	25%	Parametric	Lognormal MLE	-0.00379	0.000	↓
16_3_103	MW-17D	Appendix IV	Barium	mg/l	8	0	0%	Nonparametric	MK	-0.0000242	0.046	↔
16_3_113	MW-17D	Appendix IV	Fluoride (App IV)	mg/l	8	0	0%	Nonparametric	MK	0.000508	0.167	↔
16_3_116	MW-17D	Appendix IV	Lithium	mg/l	8	0	0%	Nonparametric	MK	-0.0000115	0.379	↔
16_3_118	MW-17D	Appendix IV	Molybdenum	mg/l	8	1	12%	Nonparametric	MK	-0.0000123	0.035	↔

(Table continues on next page)

Table 8: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
16_3_121	MW-17D	Appendix IV	Radium-226+228	pci/l	8	1	12%	Parametric	Lognormal MLE	-0.00418	0.001	↓
16_5_114	MW-17D	Part 115	Iron	mg/l	8	0	0%	Parametric	Lognormal MLE	0.0000383	0.981	↔
17_2_105	MW-17E	Appendix III	Boron	mg/l	8	0	0%	Parametric	Lognormal MLE	0.000353	0.266	↔
17_2_107	MW-17E	Appendix III	Calcium	mg/l	8	0	0%	Nonparametric	MK	-0.00353	0.081	↔
17_2_108	MW-17E	Appendix III	Chloride	mg/l	8	0	0%	Nonparametric	MK	-0.00457	0.004	↓
17_2_112	MW-17E	Appendix III	Fluoride	mg/l	8	0	0%	Nonparametric	MK	0.000834	0.248	↔
17_2_120	MW-17E	Appendix III	pH, Field	su	8	0	0%	Parametric	Lognormal MLE	-0.00000185	0.959	↔
17_2_124	MW-17E	Appendix III	Sulfate	mg/l	8	3	38%	Nonparametric	MK	-0.00303	0.445	↔
17_2_126	MW-17E	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	Parametric	Lognormal MLE	-0.0000776	0.662	↔
17_3_103	MW-17E	Appendix IV	Barium	mg/l	8	0	0%	Nonparametric	MK	-0.00000579	0.009	↓
17_3_113	MW-17E	Appendix IV	Fluoride (App IV)	mg/l	8	0	0%	Nonparametric	MK	0.000834	0.248	↔
17_3_116	MW-17E	Appendix IV	Lithium	mg/l	8	0	0%	Parametric	Lognormal MLE	-0.000493	0.064	↔
17_5_114	MW-17E	Part 115	Iron	mg/l	8	0	0%	Parametric	Lognormal MLE	-0.00613	0.000	↓
18_2_105	MW-18C	Appendix III	Boron	mg/l	9	0	0%	Parametric	Lognormal MLE	0.0000269	0.941	↔
18_2_107	MW-18C	Appendix III	Calcium	mg/l	9	0	0%	Parametric	Lognormal MLE	-0.00141	0.021	↔
18_2_108	MW-18C	Appendix III	Chloride	mg/l	9	0	0%	Parametric	Lognormal MLE	-0.00314	0.000	↓
18_2_112	MW-18C	Appendix III	Fluoride	mg/l	9	2	22%	Parametric	Lognormal MLE	0.00268	0.000	↑
18_2_120	MW-18C	Appendix III	pH, Field	su	8	0	0%	Parametric	Lognormal MLE	-0.0000326	0.397	↔
18_2_124	MW-18C	Appendix III	Sulfate	mg/l	9	0	0%	Parametric	Lognormal MLE	-0.00259	0.013	↔
18_2_126	MW-18C	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	Parametric	Lognormal MLE	-0.00165	0.001	↓
18_3_103	MW-18C	Appendix IV	Barium	mg/l	9	0	0%	Parametric	Lognormal MLE	-0.00184	0.000	↓
18_3_113	MW-18C	Appendix IV	Fluoride (App IV)	mg/l	9	2	22%	Parametric	Lognormal MLE	0.00268	0.000	↑
18_3_116	MW-18C	Appendix IV	Lithium	mg/l	9	0	0%	Parametric	Lognormal MLE	-0.00110	0.031	↔
18_3_118	MW-18C	Appendix IV	Molybdenum	mg/l	9	0	0%	Parametric	Lognormal MLE	-0.00266	0.013	↔
18_3_121	MW-18C	Appendix IV	Radium-226+228	pci/l	9	0	0%	Parametric	Lognormal MLE	-0.00179	0.073	↔
18_5_114	MW-18C	Part 115	Iron	mg/l	9	0	0%	Parametric	Lognormal MLE	-0.00273	0.009	↓
18_5_119	MW-18C	Part 115	Nickel	mg/l	9	1	11%	Parametric	Lognormal MLE	-0.00347	0.001	↓
19_2_105	MW-18D	Appendix III	Boron	mg/l	9	0	0%	Parametric	Lognormal MLE	0.000290	0.384	↔
19_2_107	MW-18D	Appendix III	Calcium	mg/l	9	0	0%	Parametric	Lognormal MLE	-0.00375	0.000	↓
19_2_108	MW-18D	Appendix III	Chloride	mg/l	9	0	0%	Parametric	Lognormal MLE	-0.00465	0.000	↓
19_2_112	MW-18D	Appendix III	Fluoride	mg/l	9	1	11%	Parametric	Lognormal MLE	0.00307	0.000	↑
19_2_120	MW-18D	Appendix III	pH, Field	su	8	0	0%	Parametric	Lognormal MLE	0.00000562	0.901	↔
19_2_124	MW-18D	Appendix III	Sulfate	mg/l	9	0	0%	Parametric	Lognormal MLE	-0.00472	0.000	↓
19_2_126	MW-18D	Appendix III	Total Dissolved Solids	mg/l	9	1	11%	Parametric	Lognormal MLE	-0.00510	0.011	↔
19_3_103	MW-18D	Appendix IV	Barium	mg/l	9	0	0%	Parametric	Lognormal MLE	-0.00353	0.000	↓
19_3_113	MW-18D	Appendix IV	Fluoride (App IV)	mg/l	9	1	11%	Parametric	Lognormal MLE	0.00307	0.000	↑
19_3_116	MW-18D	Appendix IV	Lithium	mg/l	9	0	0%	Parametric	Lognormal MLE	-0.00224	0.000	↓
19_3_118	MW-18D	Appendix IV	Molybdenum	mg/l	9	0	0%	Parametric	Lognormal MLE	-0.00418	0.000	↓
19_5_114	MW-18D	Part 115	Iron	mg/l	9	0	0%	Parametric	Lognormal MLE	-0.00368	0.001	↓
19_5_119	MW-18D	Part 115	Nickel	mg/l	9	1	11%	Parametric	Lognormal MLE	-0.00338	0.000	↓
20_2_105	MW-100C	Appendix III	Boron	mg/l	11	0	0%	Parametric	Lognormal MLE	0.000175	0.001	↑
20_2_107	MW-100C	Appendix III	Calcium	mg/l	11	0	0%	Parametric	Lognormal MLE	-0.000000565	0.990	↔
20_2_108	MW-100C	Appendix III	Chloride	mg/l	11	0	0%	Parametric	Lognormal MLE	-0.00160	0.000	↓

(Table continues on next page)

Table 8: Trend Tests: Lognormal MLE and MK *(continued)*

ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Type	Method	Slope	p-value	Trend
20_2_120	MW-100C	Appendix III	pH, Field	su	11	0	0%	Parametric	Lognormal MLE	-0.0000257	0.113	↔
20_2_124	MW-100C	Appendix III	Sulfate	mg/l	11	0	0%	Parametric	Lognormal MLE	-0.00188	0.000	↓
20_2_126	MW-100C	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	Nonparametric	MK	-0.0549	0.008	↓
20_3_103	MW-100C	Appendix IV	Barium	mg/l	11	0	0%	Parametric	Lognormal MLE	-0.000566	0.000	↓
20_3_116	MW-100C	Appendix IV	Lithium	mg/l	11	0	0%	Parametric	Lognormal MLE	0.0000684	0.364	↔
20_3_121	MW-100C	Appendix IV	Radium-226+228	pci/l	11	1	9%	Parametric	Lognormal MLE	-0.000559	0.318	↔
20_5_114	MW-100C	Part 115	Iron	mg/l	11	0	0%	Parametric	Lognormal MLE	-0.000132	0.719	↔
21_2_105	MW-100D	Appendix III	Boron	mg/l	11	0	0%	Nonparametric	MK	-0.00162	0.002	↓
21_2_107	MW-100D	Appendix III	Calcium	mg/l	11	0	0%	Nonparametric	MK	0.0315	0.436	↔
21_2_108	MW-100D	Appendix III	Chloride	mg/l	11	4	36%	Parametric	Lognormal MLE	0.00187	0.000	↑
21_2_112	MW-100D	Appendix III	Fluoride	mg/l	11	5	45%	Parametric	Lognormal MLE	0.000901	0.051	↔
21_2_120	MW-100D	Appendix III	pH, Field	su	11	0	0%	Parametric	Lognormal MLE	-0.000171	0.000	↓
21_2_124	MW-100D	Appendix III	Sulfate	mg/l	11	1	9%	Parametric	Lognormal MLE	0.00361	0.000	↑
21_2_126	MW-100D	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	Parametric	Lognormal MLE	0.000597	0.000	↑
21_3_102	MW-100D	Appendix IV	Arsenic	mg/l	11	2	18%	Nonparametric	MK	0	1.000	↔
21_3_103	MW-100D	Appendix IV	Barium	mg/l	11	0	0%	Parametric	Lognormal MLE	0.000561	0.059	↔
21_3_113	MW-100D	Appendix IV	Fluoride (App IV)	mg/l	11	5	45%	Parametric	Lognormal MLE	0.000901	0.051	↔
21_3_116	MW-100D	Appendix IV	Lithium	mg/l	11	0	0%	Nonparametric	MK	0.00000145	0.417	↔
21_3_118	MW-100D	Appendix IV	Molybdenum	mg/l	11	1	9%	Parametric	Lognormal MLE	-0.000468	0.125	↔
21_3_121	MW-100D	Appendix IV	Radium-226+228	pci/l	11	1	9%	Parametric	Lognormal MLE	-0.00145	0.066	↔
21_5_114	MW-100D	Part 115	Iron	mg/l	11	0	0%	Parametric	Lognormal MLE	0.0000380	0.962	↔

Table 9: Trend Tests: Piecewise Linear-Linear

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
13_2_107	MW-7B	Appendix III	Calcium	mg/l	14	0	0%	-0.017429	0.369	↔	-0.00084906	0.032	↔	2022-05-09	0.635
13_2_108	MW-7B	Appendix III	Chloride	mg/l	14	10	71%	< 0.0001	1.000	↔	-0.0051324	0.000	↓	2023-01-22	0.921
13_2_112	MW-7B	Appendix III	Fluoride	mg/l	14	10	71%	-0.00072473	0.008	↓	0.0005748	0.332	↔	2024-04-15	0.636
13_2_120	MW-7B	Appendix III	pH, Field	su	14	0	0%	0.00010661	0.549	↔	-0.0015761	0.222	↔	2025-02-02	0.192
13_2_124	MW-7B	Appendix III	Sulfate	mg/l	14	10	71%	< 0.0001	1.000	↔	-0.0047105	0.001	↓	2022-12-04	0.834
13_2_126	MW-7B	Appendix III	Total Dissolved Solids	mg/l	14	0	0%	0.029638	0.763	↔	-0.010914	0.114	↔	2022-07-26	0.247
13_3_101	MW-7B	Appendix IV	Antimony	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.901
13_3_102	MW-7B	Appendix IV	Arsenic	mg/l	14	11	79%	< 0.0001	0.744	↔	< 0.0001	0.492	↔	2024-01-30	0.175
13_3_103	MW-7B	Appendix IV	Barium	mg/l	14	0	0%	< 0.0001	0.021	↔	< 0.0001	0.175	↔	2022-11-10	0.758
13_3_104	MW-7B	Appendix IV	Beryllium	mg/l	14	13	93%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.901
13_3_106	MW-7B	Appendix IV	Cadmium	mg/l	14	13	93%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-05-12	0.840
13_3_109	MW-7B	Appendix IV	Chromium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.901
13_3_110	MW-7B	Appendix IV	Cobalt	mg/l	14	13	93%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.900
13_3_113	MW-7B	Appendix IV	Fluoride (App IV)	mg/l	14	10	71%	-0.00072473	0.008	↓	0.0005748	0.332	↔	2024-04-15	0.636
13_3_115	MW-7B	Appendix IV	Lead	mg/l	14	13	93%	< 0.0001	0.471	↔	< 0.0001	0.762	↔	2024-08-08	0.225

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
13_3_117	MW-7B	Appendix IV	Mercury	mg/l	14	14	100%	< 0.0001	0.725	↔	< 0.0001	0.001	↓	2024-04-15	0.896
13_3_118	MW-7B	Appendix IV	Molybdenum	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.901
13_3_122	MW-7B	Appendix IV	Selenium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.901
13_3_125	MW-7B	Appendix IV	Thallium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.901
13_5_111	MW-7B	Part 115	Copper	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.901
13_5_114	MW-7B	Part 115	Iron	mg/l	14	0	0%	< 0.0001	0.001	↑	< 0.0001	0.060	↔	2024-08-07	0.852
13_5_119	MW-7B	Part 115	Nickel	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.901
13_5_123	MW-7B	Part 115	Silver	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.901
13_5_128	MW-7B	Part 115	Vanadium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-06	0.901
13_5_129	MW-7B	Part 115	Zinc	mg/l	14	13	93%	< 0.0001	1.000	↔	< 0.0001	0.000	↓	2024-06-12	0.913
14_2_105	MW-16C	Appendix III	Boron	mg/l	13	0	0%	< 0.0001	0.127	↔	< 0.0001	0.348	↔	2024-01-13	0.329
14_2_107	MW-16C	Appendix III	Calcium	mg/l	13	0	0%	0.074805	0.002	↑	0.0034449	0.279	↔	2023-07-26	0.875
14_2_108	MW-16C	Appendix III	Chloride	mg/l	13	6	46%	-0.06383	0.072	↔	-0.0051533	0.002	↓	2023-03-23	0.811
14_2_112	MW-16C	Appendix III	Fluoride	mg/l	13	8	62%	-0.0021787	0.013	↔	0.00029676	0.757	↔	2024-02-04	0.600
14_2_124	MW-16C	Appendix III	Sulfate	mg/l	13	0	0%	-0.23404	0.000	↓	0.0052642	0.000	↑	2023-03-26	0.982
14_2_126	MW-16C	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	-1.0213	0.003	↓	-0.02193	0.048	↔	2023-04-24	0.936
14_3_101	MW-16C	Appendix IV	Antimony	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
14_3_102	MW-16C	Appendix IV	Arsenic	mg/l	13	10	77%	< 0.0001	0.676	↔	< 0.0001	0.082	↔	2024-02-29	0.642
14_3_103	MW-16C	Appendix IV	Barium	mg/l	13	0	0%	-0.00013746	0.001	↓	< 0.0001	0.195	↔	2023-08-14	0.889
14_3_104	MW-16C	Appendix IV	Beryllium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
14_3_106	MW-16C	Appendix IV	Cadmium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
14_3_109	MW-16C	Appendix IV	Chromium	mg/l	13	12	92%	< 0.0001	0.084	↔	< 0.0001	0.132	↔	2024-08-06	0.614
14_3_110	MW-16C	Appendix IV	Cobalt	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
14_3_113	MW-16C	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	-0.0021787	0.013	↔	0.00029676	0.757	↔	2024-02-04	0.600
14_3_115	MW-16C	Appendix IV	Lead	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
14_3_117	MW-16C	Appendix IV	Mercury	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
14_3_118	MW-16C	Appendix IV	Molybdenum	mg/l	13	10	77%	< 0.0001	0.329	↔	< 0.0001	0.005	↓	2023-05-19	0.757
14_3_122	MW-16C	Appendix IV	Selenium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
14_3_125	MW-16C	Appendix IV	Thallium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
14_5_111	MW-16C	Part 115	Copper	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
14_5_114	MW-16C	Part 115	Iron	mg/l	13	0	0%	-0.0024872	0.032	↔	-0.00021352	0.227	↔	2023-07-25	0.751
14_5_119	MW-16C	Part 115	Nickel	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
14_5_123	MW-16C	Part 115	Silver	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
14_5_128	MW-16C	Part 115	Vanadium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
14_5_129	MW-16C	Part 115	Zinc	mg/l	13	12	92%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-05-19	0.861
15_2_105	MW-16D	Appendix III	Boron	mg/l	13	0	0%	0.00049683	0.501	↔	-0.00067773	0.187	↔	2024-01-31	0.252
15_2_107	MW-16D	Appendix III	Calcium	mg/l	13	0	0%	0.0025587	0.136	↔	-0.0040467	0.080	↔	2024-08-01	0.432
15_2_108	MW-16D	Appendix III	Chloride	mg/l	13	0	0%	0.021277	0.135	↔	-0.0012889	0.030	↔	2023-04-20	0.624
15_2_112	MW-16D	Appendix III	Fluoride	mg/l	13	8	62%	-0.0016905	0.021	↔	0.00067435	0.420	↔	2024-03-06	0.520
15_2_120	MW-16D	Appendix III	pH, Field	su	13	0	0%	-0.0012418	0.411	↔	< 0.0001	0.731	↔	2023-05-30	0.130
15_2_124	MW-16D	Appendix III	Sulfate	mg/l	13	1	8%	-0.012882	0.076	↔	0.0040457	0.643	↔	2024-02-23	0.362
15_2_126	MW-16D	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	0.16552	0.206	↔	-0.023508	0.025	↔	2023-05-29	0.546

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
15_3_101	MW-16D	Appendix IV	Antimony	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
15_3_102	MW-16D	Appendix IV	Arsenic	mg/l	13	3	23%	< 0.0001	0.219	↔	< 0.0001	0.318	↔	2023-05-08	0.329
15_3_104	MW-16D	Appendix IV	Beryllium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
15_3_106	MW-16D	Appendix IV	Cadmium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
15_3_109	MW-16D	Appendix IV	Chromium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
15_3_110	MW-16D	Appendix IV	Cobalt	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
15_3_113	MW-16D	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	-0.0016905	0.021	↔	0.00067435	0.420	↔	2024-03-06	0.520
15_3_115	MW-16D	Appendix IV	Lead	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
15_3_116	MW-16D	Appendix IV	Lithium	mg/l	13	0	0%	-0.00014894	0.066	↔	< 0.0001	0.081	↔	2023-04-21	0.710
15_3_117	MW-16D	Appendix IV	Mercury	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
15_3_118	MW-16D	Appendix IV	Molybdenum	mg/l	13	0	0%	0.00012766	0.000	↑	< 0.0001	0.002	↓	2023-03-22	0.911
15_3_121	MW-16D	Appendix IV	Radium-226+228	pci/l	13	1	8%	-0.0077449	0.598	↔	-0.000793	0.635	↔	2023-05-31	0.132
15_3_122	MW-16D	Appendix IV	Selenium	mg/l	13	12	92%	< 0.0001	0.826	↔	< 0.0001	0.001	↓	2024-05-15	0.879
15_3_125	MW-16D	Appendix IV	Thallium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
15_5_114	MW-16D	Part 115	Iron	mg/l	13	0	0%	0.00099283	0.004	↑	-0.00051297	0.167	↔	2024-05-17	0.729
15_5_119	MW-16D	Part 115	Nickel	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
15_5_123	MW-16D	Part 115	Silver	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
15_5_128	MW-16D	Part 115	Vanadium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2024-06-04	0.900
15_5_129	MW-16D	Part 115	Zinc	mg/l	13	1	8%	-0.0010204	0.022	↔	< 0.0001	0.808	↔	2023-08-08	0.657
16_2_105	MW-17D	Appendix III	Boron	mg/l	8	0	0%	0.0027714	0.427	↔	-0.0041527	0.580	↔	2025-05-17	0.237
16_2_112	MW-17D	Appendix III	Fluoride	mg/l	8	0	0%	0.0013535	0.040	↔	-0.00055541	0.605	↔	2025-04-15	0.804
16_2_124	MW-17D	Appendix III	Sulfate	mg/l	8	0	0%	-0.86648	0.491	↔	-0.0036899	0.999	↔	2025-03-03	0.212
16_3_101	MW-17D	Appendix IV	Antimony	mg/l	8	6	75%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-28	0.846
16_3_102	MW-17D	Appendix IV	Arsenic	mg/l	8	2	25%	< 0.0001	0.253	↔	< 0.0001	0.935	↔	2025-04-07	0.603
16_3_104	MW-17D	Appendix IV	Beryllium	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
16_3_110	MW-17D	Appendix IV	Cobalt	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
16_3_113	MW-17D	Appendix IV	Fluoride (App IV)	mg/l	8	0	0%	0.0013535	0.040	↔	-0.00055541	0.605	↔	2025-04-15	0.804
16_3_115	MW-17D	Appendix IV	Lead	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
16_3_116	MW-17D	Appendix IV	Lithium	mg/l	8	0	0%	-0.0001249	0.513	↔	< 0.0001	0.867	↔	2025-02-26	0.258
16_3_117	MW-17D	Appendix IV	Mercury	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
16_3_118	MW-17D	Appendix IV	Molybdenum	mg/l	8	1	12%	-0.00027989	0.493	↔	< 0.0001	0.998	↔	2025-03-08	0.217
16_3_121	MW-17D	Appendix IV	Radium-226+228	pci/l	8	1	12%	-0.013036	0.199	↔	-0.0023517	0.906	↔	2025-02-27	0.594
16_3_122	MW-17D	Appendix IV	Selenium	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
16_3_125	MW-17D	Appendix IV	Thallium	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
16_5_123	MW-17D	Part 115	Silver	mg/l	8	8	100%	< 0.0001	0.392	↔	< 0.0001	1.000	↔	2025-02-27	0.288
16_5_128	MW-17D	Part 115	Vanadium	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
16_5_129	MW-17D	Part 115	Zinc	mg/l	8	5	62%	< 0.0001	0.524	↔	< 0.0001	0.338	↔	2025-01-23	0.392
17_2_105	MW-17E	Appendix III	Boron	mg/l	8	0	0%	0.003812	0.292	↔	-0.0069555	0.373	↔	2025-06-03	0.434
17_2_112	MW-17E	Appendix III	Fluoride	mg/l	8	0	0%	0.0042113	0.251	↔	-0.0013757	0.852	↔	2025-04-07	0.442
17_2_120	MW-17E	Appendix III	pH, Field	su	8	0	0%	0.0011081	0.530	↔	-0.00039379	0.675	↔	2025-01-23	0.145
17_2_126	MW-17E	Appendix III	Total Dissolved Solids	mg/l	8	0	0%	-0.01824	0.903	↔	-0.27027	0.823	↔	2025-08-04	0.048
17_3_101	MW-17E	Appendix IV	Antimony	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
17_3_102	MW-17E	Appendix IV	Arsenic	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
17_3_103	MW-17E	Appendix IV	Barium	mg/l	8	0	0%	-0.00010462	0.617	↔	< 0.0001	0.961	↔	2025-02-26	0.220
17_3_104	MW-17E	Appendix IV	Beryllium	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
17_3_106	MW-17E	Appendix IV	Cadmium	mg/l	8	8	100%	< 0.0001	0.397	↔	< 0.0001	1.000	↔	2025-02-27	0.283
17_3_110	MW-17E	Appendix IV	Cobalt	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
17_3_113	MW-17E	Appendix IV	Fluoride (App IV)	mg/l	8	0	0%	0.0042113	0.251	↔	-0.0013757	0.852	↔	2025-04-07	0.442
17_3_115	MW-17E	Appendix IV	Lead	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
17_3_116	MW-17E	Appendix IV	Lithium	mg/l	8	0	0%	< 0.0001	0.171	↔	< 0.0001	0.914	↔	2025-01-26	0.559
17_3_117	MW-17E	Appendix IV	Mercury	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
17_3_118	MW-17E	Appendix IV	Molybdenum	mg/l	8	7	88%	< 0.0001	0.108	↔	< 0.0001	1.000	↔	2025-02-27	0.651
17_3_121	MW-17E	Appendix IV	Radium-226+228	pci/l	8	4	50%	-0.04897	0.000	↓	0.00040404	0.566	↔	2024-12-23	0.995
17_3_122	MW-17E	Appendix IV	Selenium	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
17_3_125	MW-17E	Appendix IV	Thallium	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
17_5_123	MW-17E	Part 115	Silver	mg/l	8	8	100%	< 0.0001	0.392	↔	< 0.0001	1.000	↔	2025-02-27	0.288
17_5_128	MW-17E	Part 115	Vanadium	mg/l	8	8	100%	< 0.0001	0.025	↔	< 0.0001	1.000	↔	2025-02-27	0.841
17_5_129	MW-17E	Part 115	Zinc	mg/l	8	6	75%	< 0.0001	0.683	↔	< 0.0001	0.168	↔	2025-01-22	0.454
18_2_105	MW-18C	Appendix III	Boron	mg/l	9	0	0%	0.0049184	0.034	↔	-0.0066802	0.038	↔	2025-03-29	0.764
18_2_107	MW-18C	Appendix III	Calcium	mg/l	9	0	0%	0.30551	0.378	↔	-0.56577	0.036	↔	2025-02-18	0.710
18_2_112	MW-18C	Appendix III	Fluoride	mg/l	9	2	22%	0.010833	0.370	↔	-0.0017407	0.244	↔	2024-11-21	0.354
18_2_120	MW-18C	Appendix III	pH, Field	su	8	0	0%	-0.00089082	0.538	↔	0.00028734	0.747	↔	2025-02-26	0.214
18_2_124	MW-18C	Appendix III	Sulfate	mg/l	9	0	0%	1.072	0.356	↔	-2.1699	0.022	↔	2025-02-19	0.767
18_2_126	MW-18C	Appendix III	Total Dissolved Solids	mg/l	9	0	0%	2.501	0.403	↔	-2.1518	0.045	↔	2024-12-18	0.714
18_3_101	MW-18C	Appendix IV	Antimony	mg/l	9	8	89%	< 0.0001	0.040	↔	< 0.0001	0.982	↔	2025-02-26	0.850
18_3_102	MW-18C	Appendix IV	Arsenic	mg/l	9	5	56%	< 0.0001	0.013	↔	< 0.0001	0.275	↔	2025-03-30	0.846
18_3_103	MW-18C	Appendix IV	Barium	mg/l	9	0	0%	< 0.0001	0.157	↔	-0.00021586	0.052	↔	2025-05-16	0.885
18_3_104	MW-18C	Appendix IV	Beryllium	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
18_3_110	MW-18C	Appendix IV	Cobalt	mg/l	9	5	56%	< 0.0001	0.040	↔	< 0.0001	0.990	↔	2025-02-26	0.849
18_3_113	MW-18C	Appendix IV	Fluoride (App IV)	mg/l	9	2	22%	0.010833	0.370	↔	-0.0017407	0.244	↔	2024-11-21	0.354
18_3_115	MW-18C	Appendix IV	Lead	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
18_3_116	MW-18C	Appendix IV	Lithium	mg/l	9	0	0%	< 0.0001	0.844	↔	-0.00030624	0.395	↔	2025-05-09	0.433
18_3_117	MW-18C	Appendix IV	Mercury	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
18_3_118	MW-18C	Appendix IV	Molybdenum	mg/l	9	0	0%	0.00011332	0.568	↔	-0.00053052	0.096	↔	2025-03-18	0.706
18_3_121	MW-18C	Appendix IV	Radium-226+228	pci/l	9	0	0%	-0.023458	0.000	↓	0.0055329	0.016	↔	2025-02-06	0.970
18_3_122	MW-18C	Appendix IV	Selenium	mg/l	9	8	89%	< 0.0001	0.045	↔	< 0.0001	0.870	↔	2025-02-19	0.832
18_3_125	MW-18C	Appendix IV	Thallium	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
18_5_114	MW-18C	Part 115	Iron	mg/l	9	0	0%	0.011822	0.123	↔	-0.013324	0.021	↔	2025-01-25	0.817
18_5_119	MW-18C	Part 115	Nickel	mg/l	9	1	11%	-0.00010752	0.460	↔	< 0.0001	0.836	↔	2025-02-28	0.301
18_5_128	MW-18C	Part 115	Vanadium	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
18_5_129	MW-18C	Part 115	Zinc	mg/l	9	6	67%	< 0.0001	0.738	↔	< 0.0001	0.174	↔	2025-01-22	0.379
19_2_105	MW-18D	Appendix III	Boron	mg/l	9	0	0%	0.004945	0.189	↔	-0.0024558	0.613	↔	2025-02-27	0.352
19_2_107	MW-18D	Appendix III	Calcium	mg/l	9	0	0%	-0.42528	0.349	↔	-0.16179	0.790	↔	2025-03-23	0.457
19_2_112	MW-18D	Appendix III	Fluoride	mg/l	9	1	11%	0.0037853	0.103	↔	0.002014	0.016	↔	2025-01-21	0.930

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
19_2_120	MW-18D	Appendix III	pH, Field	su	8	0	0%	0.0038889	0.450	↔	-0.00045199	0.473	↔	2024-12-01	0.341
19_3_101	MW-18D	Appendix IV	Antimony	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
19_3_102	MW-18D	Appendix IV	Arsenic	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
19_3_103	MW-18D	Appendix IV	Barium	mg/l	9	0	0%	-0.00017879	0.338	↔	< 0.0001	0.248	↔	2025-01-22	0.728
19_3_104	MW-18D	Appendix IV	Beryllium	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
19_3_106	MW-18D	Appendix IV	Cadmium	mg/l	9	9	100%	< 0.0001	0.338	↔	< 0.0001	1.000	↔	2025-02-27	0.299
19_3_110	MW-18D	Appendix IV	Cobalt	mg/l	9	6	67%	< 0.0001	0.040	↔	< 0.0001	0.967	↔	2025-02-25	0.849
19_3_113	MW-18D	Appendix IV	Fluoride (App IV)	mg/l	9	1	11%	0.0037853	0.103	↔	0.002014	0.016	↔	2025-01-21	0.930
19_3_115	MW-18D	Appendix IV	Lead	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
19_3_117	MW-18D	Appendix IV	Mercury	mg/l	9	8	89%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
19_3_122	MW-18D	Appendix IV	Selenium	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
19_3_125	MW-18D	Appendix IV	Thallium	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
19_5_119	MW-18D	Part 115	Nickel	mg/l	9	1	11%	-0.00013947	0.542	↔	< 0.0001	0.929	↔	2025-02-23	0.260
19_5_128	MW-18D	Part 115	Vanadium	mg/l	9	9	100%	< 0.0001	0.012	↔	< 0.0001	1.000	↔	2025-02-27	0.851
19_5_129	MW-18D	Part 115	Zinc	mg/l	9	6	67%	< 0.0001	0.375	↔	< 0.0001	0.870	↔	2025-07-05	0.235
20_2_105	MW-100C	Appendix III	Boron	mg/l	11	0	0%	0.004	0.028	↔	0.00016825	0.013	↔	2023-08-09	0.926
20_2_107	MW-100C	Appendix III	Calcium	mg/l	11	0	0%	0.040286	0.012	↔	-0.0059736	0.042	↔	2023-10-27	0.744
20_2_108	MW-100C	Appendix III	Chloride	mg/l	11	0	0%	-0.085714	0.000	↓	-0.0039694	0.001	↓	2023-09-08	0.983
20_2_112	MW-100C	Appendix III	Fluoride	mg/l	11	7	64%	-0.001514	0.112	↔	< 0.0001	0.983	↔	2024-08-07	0.463
20_2_124	MW-100C	Appendix III	Sulfate	mg/l	11	0	0%	-0.16571	0.000	↓	-0.0041766	0.264	↔	2023-09-20	0.934
20_2_126	MW-100C	Appendix III	Total Dissolved Solids	mg/l	11	0	0%	-0.032111	0.207	↔	-0.21858	0.013	↔	2024-12-29	0.881
20_3_101	MW-100C	Appendix IV	Antimony	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
20_3_103	MW-100C	Appendix IV	Barium	mg/l	11	0	0%	0.00042857	0.060	↔	< 0.0001	0.000	↓	2023-07-19	0.890
20_3_104	MW-100C	Appendix IV	Beryllium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
20_3_106	MW-100C	Appendix IV	Cadmium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
20_3_109	MW-100C	Appendix IV	Chromium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
20_3_110	MW-100C	Appendix IV	Cobalt	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
20_3_113	MW-100C	Appendix IV	Fluoride (App IV)	mg/l	11	7	64%	-0.001514	0.112	↔	< 0.0001	0.983	↔	2024-08-07	0.463
20_3_115	MW-100C	Appendix IV	Lead	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
20_3_116	MW-100C	Appendix IV	Lithium	mg/l	11	0	0%	< 0.0001	0.052	↔	< 0.0001	0.222	↔	2023-09-17	0.779
20_3_117	MW-100C	Appendix IV	Mercury	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
20_3_118	MW-100C	Appendix IV	Molybdenum	mg/l	11	6	55%	< 0.0001	0.070	↔	< 0.0001	0.002	↓	2023-09-17	0.914
20_3_121	MW-100C	Appendix IV	Radium-226+228	pci/l	11	1	9%	0.001974	0.285	↔	-0.0026755	0.120	↔	2024-06-22	0.397
20_3_122	MW-100C	Appendix IV	Selenium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
20_3_125	MW-100C	Appendix IV	Thallium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
20_5_111	MW-100C	Part 115	Copper	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
20_5_119	MW-100C	Part 115	Nickel	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
20_5_123	MW-100C	Part 115	Silver	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
20_5_128	MW-100C	Part 115	Vanadium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
20_5_129	MW-100C	Part 115	Zinc	mg/l	11	8	73%	< 0.0001	0.322	↔	< 0.0001	0.015	↔	2023-10-23	0.659
21_2_105	MW-100D	Appendix III	Boron	mg/l	11	0	0%	-0.002909	0.010	↓	-0.00032003	0.896	↔	2024-08-09	0.788
21_2_107	MW-100D	Appendix III	Calcium	mg/l	11	0	0%	-0.015971	0.933	↔	0.083285	0.009	↑	2023-10-10	0.712

(Table continues on next page)

Table 9: Trend Tests: Piecewise Linear-Linear *(continued)*

								Line 1			Line 2				
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	R-Squared
21_2_108	MW-100D	Appendix III	Chloride	mg/l	11	4	36%	< 0.0001	1.000	↔	0.013834	0.024	↔	2023-10-20	0.618
21_2_112	MW-100D	Appendix III	Fluoride	mg/l	11	5	45%	-0.0030249	0.007	↓	0.00062846	0.402	↔	2024-02-10	0.708
21_2_120	MW-100D	Appendix III	pH, Field	su	11	0	0%	< 0.0001	0.959	↔	-0.0016817	0.015	↔	2024-01-02	0.704
21_3_101	MW-100D	Appendix IV	Antimony	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
21_3_102	MW-100D	Appendix IV	Arsenic	mg/l	11	2	18%	< 0.0001	0.114	↔	< 0.0001	0.051	↔	2023-09-02	0.620
21_3_103	MW-100D	Appendix IV	Barium	mg/l	11	0	0%	< 0.0001	0.186	↔	< 0.0001	0.928	↔	2024-08-07	0.330
21_3_104	MW-100D	Appendix IV	Beryllium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
21_3_106	MW-100D	Appendix IV	Cadmium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
21_3_109	MW-100D	Appendix IV	Chromium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
21_3_110	MW-100D	Appendix IV	Cobalt	mg/l	11	10	91%	< 0.0001	1.000	↔	< 0.0001	0.005	↓	2024-05-28	0.875
21_3_113	MW-100D	Appendix IV	Fluoride (App IV)	mg/l	11	5	45%	-0.0030249	0.007	↓	0.00062846	0.402	↔	2024-02-10	0.708
21_3_115	MW-100D	Appendix IV	Lead	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
21_3_117	MW-100D	Appendix IV	Mercury	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
21_3_122	MW-100D	Appendix IV	Selenium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
21_3_125	MW-100D	Appendix IV	Thallium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
21_5_111	MW-100D	Part 115	Copper	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
21_5_114	MW-100D	Part 115	Iron	mg/l	11	0	0%	-0.0014354	0.535	↔	0.00028067	0.542	↔	2023-11-26	0.143
21_5_119	MW-100D	Part 115	Nickel	mg/l	11	10	91%	< 0.0001	1.000	↔	< 0.0001	0.006	↓	2024-05-26	0.869
21_5_123	MW-100D	Part 115	Silver	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898
21_5_128	MW-100D	Part 115	Vanadium	mg/l	11	11	100%	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2024-06-06	0.898

Table 10: Trend Tests: Piecewise Linear-Linear-Linear

								Line 1			Line 2			Line 3					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared
13_2_107	MW-7B	Appendix III	Calcium	mg/l	14	0	0%	-0.017933	0.335	↔	0.0001928	0.803	↔	-0.002552	0.166	↔	2022-05-18	2024-02-23	0.740
13_2_120	MW-7B	Appendix III	pH, Field	su	14	0	0%	-0.0033565	0.068	↔	0.00052441	0.074	↔	-0.00067867	0.203	↔	2022-06-23	2024-03-17	0.585
13_3_101	MW-7B	Appendix IV	Antimony	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-05-22	2024-06-06	0.901
13_3_103	MW-7B	Appendix IV	Barium	mg/l	14	0	0%	< 0.0001	0.198	↔	< 0.0001	0.199	↔	< 0.0001	0.659	↔	2022-07-01	2023-08-02	0.777
13_3_106	MW-7B	Appendix IV	Cadmium	mg/l	14	13	93%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.009	↓	2022-06-26	2024-05-12	0.840
13_3_109	MW-7B	Appendix IV	Chromium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-05-26	2024-06-06	0.901
13_3_110	MW-7B	Appendix IV	Cobalt	mg/l	14	13	93%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-06-26	2024-06-06	0.900
13_3_115	MW-7B	Appendix IV	Lead	mg/l	14	13	93%	< 0.0001	0.650	↔	< 0.0001	0.489	↔	< 0.0001	0.732	↔	2022-06-22	2023-10-06	0.313
13_3_117	MW-7B	Appendix IV	Mercury	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-06-26	2024-06-06	0.901
13_3_118	MW-7B	Appendix IV	Molybdenum	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-05-24	2024-06-06	0.901
13_3_122	MW-7B	Appendix IV	Selenium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-05-19	2024-06-06	0.901
13_5_111	MW-7B	Part 115	Copper	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-07-02	2024-06-06	0.901
13_5_114	MW-7B	Part 115	Iron	mg/l	14	0	0%	0.00010763	0.033	↔	< 0.0001	0.517	↔	< 0.0001	0.129	↔	2023-05-13	2024-08-07	0.860
13_5_119	MW-7B	Part 115	Nickel	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-07-01	2024-06-06	0.901
13_5_123	MW-7B	Part 115	Silver	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-06-05	2024-06-06	0.901

(Table continues on next page)

Table 10: Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

								Line 1			Line 2			Line 3					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared
13_5_128	MW-7B	Part 115	Vanadium	mg/l	14	14	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.001	↓	2022-05-25	2024-06-06	0.901
14_2_107	MW-16C	Appendix III	Calcium	mg/l	13	0	0%	0.073275	0.028	↔	0.024303	0.440	↔	0.0016786	0.716	↔	2023-07-04	2023-11-01	0.885
14_2_108	MW-16C	Appendix III	Chloride	mg/l	13	6	46%	-0.057998	0.117	↔	-0.0073106	0.028	↔	< 0.0001	0.994	↔	2023-03-22	2024-10-02	0.841
14_2_112	MW-16C	Appendix III	Fluoride	mg/l	13	8	62%	< 0.0001	0.999	↔	-0.003358	0.057	↔	0.00053349	0.596	↔	2023-06-25	2024-02-01	0.667
14_2_120	MW-16C	Appendix III	pH, Field	su	13	0	0%	-0.0021206	0.052	↔	0.00135	0.101	↔	-0.0004646	0.044	↔	2023-07-01	2023-12-31	0.725
14_2_124	MW-16C	Appendix III	Sulfate	mg/l	13	0	0%	-0.2333	0.000	↓	0.0044468	0.418	↔	0.0053861	0.001	↑	2023-03-25	2023-09-15	0.982
14_2_126	MW-16C	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	-1.065	0.000	↓	0.00062666	0.988	↔	-0.059213	0.102	↔	2023-04-25	2024-08-05	0.950
14_3_101	MW-16C	Appendix IV	Antimony	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-05-07	2024-06-04	0.900
14_3_103	MW-16C	Appendix IV	Barium	mg/l	13	0	0%	-0.0001376	0.003	↓	< 0.0001	0.751	↔	< 0.0001	0.873	↔	2023-08-08	2024-08-05	0.891
14_3_104	MW-16C	Appendix IV	Beryllium	mg/l	13	13	100%	< 0.0001	0.883	↔	< 0.0001	0.443	↔	< 0.0001	0.054	↔	2023-08-26	2024-08-09	0.896
14_3_106	MW-16C	Appendix IV	Cadmium	mg/l	13	13	100%	< 0.0001	0.926	↔	< 0.0001	0.773	↔	< 0.0001	0.005	↓	2023-06-21	2024-04-08	0.896
14_3_109	MW-16C	Appendix IV	Chromium	mg/l	13	12	92%	< 0.0001	0.843	↔	< 0.0001	0.085	↔	< 0.0001	0.069	↔	2023-11-17	2024-08-06	0.731
14_3_113	MW-16C	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	< 0.0001	0.999	↔	-0.003358	0.057	↔	0.00053349	0.596	↔	2023-06-25	2024-02-01	0.667
14_3_116	MW-16C	Appendix IV	Lithium	mg/l	13	0	0%	< 0.0001	0.045	↔	< 0.0001	0.108	↔	< 0.0001	0.563	↔	2023-03-21	2024-03-27	0.618
14_3_117	MW-16C	Appendix IV	Mercury	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-05-03	2024-06-04	0.900
14_3_118	MW-16C	Appendix IV	Molybdenum	mg/l	13	10	77%	< 0.0001	0.117	↔	< 0.0001	0.938	↔	< 0.0001	0.043	↔	2023-06-05	2024-06-29	0.816
14_3_122	MW-16C	Appendix IV	Selenium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-04-24	2024-06-04	0.900
14_5_111	MW-16C	Part 115	Copper	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-04-18	2024-06-04	0.900
14_5_114	MW-16C	Part 115	Iron	mg/l	13	0	0%	-0.0024086	0.067	↔	-0.00016651	0.722	↔	-0.00036228	0.729	↔	2023-08-02	2025-01-14	0.751
14_5_119	MW-16C	Part 115	Nickel	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-04-30	2024-06-04	0.900
14_5_123	MW-16C	Part 115	Silver	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-04-24	2024-06-04	0.900
14_5_128	MW-16C	Part 115	Vanadium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-03-31	2024-06-04	0.900
14_5_129	MW-16C	Part 115	Zinc	mg/l	13	12	92%	< 0.0001	0.801	↔	< 0.0001	0.392	↔	< 0.0001	0.167	↔	2023-12-05	2024-10-08	0.838
15_2_107	MW-16D	Appendix III	Calcium	mg/l	13	0	0%	-0.0042013	0.322	↔	0.015078	0.453	↔	-0.0017008	0.068	↔	2023-07-07	2023-10-16	0.663
15_2_108	MW-16D	Appendix III	Chloride	mg/l	13	0	0%	0.026138	0.004	↑	-0.011566	0.433	↔	-0.00063816	0.242	↔	2023-05-04	2023-08-06	0.802
15_2_112	MW-16D	Appendix III	Fluoride	mg/l	13	8	62%	< 0.0001	1.000	↔	-0.00246	0.105	↔	0.00067451	0.457	↔	2023-06-09	2024-02-01	0.568
15_2_120	MW-16D	Appendix III	pH, Field	su	13	0	0%	-0.0010059	0.089	↔	0.0027677	0.508	↔	-0.00044904	0.100	↔	2023-10-02	2024-01-25	0.580
15_2_124	MW-16D	Appendix III	Sulfate	mg/l	13	1	8%	0.085106	0.086	↔	-0.035829	0.008	↓	0.0027936	0.340	↔	2023-04-12	2023-10-21	0.795
15_2_126	MW-16D	Appendix III	Total Dissolved Solids	mg/l	13	0	0%	0.15889	0.272	↔	-0.014677	0.510	↔	-0.053763	0.392	↔	2023-05-26	2024-12-13	0.574
15_3_101	MW-16D	Appendix IV	Antimony	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-05-07	2024-06-04	0.900
15_3_104	MW-16D	Appendix IV	Beryllium	mg/l	13	13	100%	< 0.0001	0.883	↔	< 0.0001	0.443	↔	< 0.0001	0.054	↔	2023-08-26	2024-08-09	0.896
15_3_106	MW-16D	Appendix IV	Cadmium	mg/l	13	13	100%	< 0.0001	0.926	↔	< 0.0001	0.773	↔	< 0.0001	0.005	↓	2023-06-21	2024-04-08	0.896
15_3_109	MW-16D	Appendix IV	Chromium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-03-24	2024-06-04	0.900
15_3_113	MW-16D	Appendix IV	Fluoride (App IV)	mg/l	13	8	62%	< 0.0001	1.000	↔	-0.00246	0.105	↔	0.00067451	0.457	↔	2023-06-09	2024-02-01	0.568
15_3_116	MW-16D	Appendix IV	Lithium	mg/l	13	0	0%	-0.00019894	0.001	↓	< 0.0001	0.007	↑	< 0.0001	0.723	↔	2023-04-24	2023-08-10	0.936
15_3_117	MW-16D	Appendix IV	Mercury	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-05-03	2024-06-04	0.900
15_3_121	MW-16D	Appendix IV	Radium-226+228	pci/l	13	1	8%	-0.0096974	0.526	↔	0.0030344	0.695	↔	-0.0059972	0.253	↔	2023-06-30	2024-08-05	0.290
15_3_122	MW-16D	Appendix IV	Selenium	mg/l	13	12	92%	< 0.0001	0.620	↔	< 0.0001	0.838	↔	< 0.0001	0.005	↓	2023-09-12	2024-06-19	0.885
15_5_119	MW-16D	Part 115	Nickel	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-04-30	2024-06-04	0.900
15_5_123	MW-16D	Part 115	Silver	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-04-24	2024-06-04	0.900
15_5_128	MW-16D	Part 115	Vanadium	mg/l	13	13	100%	< 0.0001	1.000	↔	< 0.0001	1.000	↔	< 0.0001	0.003	↓	2023-03-31	2024-06-04	0.900
15_5_129	MW-16D	Part 115	Zinc	mg/l	13	1	8%	-0.0010156	0.045	↔	< 0.0001	0.911	↔	< 0.0001	0.994	↔	2023-08-08	2024-11-26	0.657

(Table continues on next page)

Table 10: Trend Tests: Piecewise Linear-Linear-Linear *(continued)*

								Line 1			Line 2			Line 3					
ID	Well	Constituent Type	Constituent	Unit	n	No. NDs	% NDs	Slope	p-Value	Trend	Slope	p-Value	Trend	Slope	p-Value	Trend	Break 1	Break 2	R-Squared
18_2_105	MW-18C	Appendix III	Boron	mg/l	9	0	0%	0.0060668	0.123	↔	< 0.0001	1.000	↔	-0.0084057	0.159	↔	2025-01-24	2025-05-18	0.802
18_2_107	MW-18C	Appendix III	Calcium	mg/l	9	0	0%	0.44867	0.505	↔	-0.31337	0.381	↔	-1.3437	0.396	↔	2025-01-09	2025-06-28	0.755
18_3_102	MW-18C	Appendix IV	Arsenic	mg/l	9	5	56%	< 0.0001	0.061	↔	< 0.0001	0.975	↔	< 0.0001	0.640	↔	2025-03-25	2025-06-07	0.860
18_3_103	MW-18C	Appendix IV	Barium	mg/l	9	0	0%	< 0.0001	0.968	↔	< 0.0001	0.400	↔	-0.00020232	0.155	↔	2024-12-17	2025-05-14	0.890
18_3_104	MW-18C	Appendix IV	Beryllium	mg/l	9	9	100%	< 0.0001	0.596	↔	< 0.0001	0.040	↔	< 0.0001	0.567	↔	2024-12-03	2025-02-05	0.969
18_3_110	MW-18C	Appendix IV	Cobalt	mg/l	9	5	56%	< 0.0001	0.123	↔	< 0.0001	0.985	↔	< 0.0001	0.995	↔	2025-02-26	2025-06-02	0.849
18_3_115	MW-18C	Appendix IV	Lead	mg/l	9	9	100%	< 0.0001	0.908	↔	< 0.0001	0.070	↔	< 0.0001	0.522	↔	2024-12-10	2025-02-12	0.957
18_3_117	MW-18C	Appendix IV	Mercury	mg/l	9	9	100%	< 0.0001	0.929	↔	< 0.0001	0.452	↔	< 0.0001	0.574	↔	2025-03-25	2024-11-30	0.873
18_3_121	MW-18C	Appendix IV	Radium-226+228	pci/l	9	0	0%	-0.023458	0.002	↓	-0.00089286	0.864	↔	0.0084807	0.110	↔	2025-01-24	2025-04-25	0.983
18_3_122	MW-18C	Appendix IV	Selenium	mg/l	9	8	89%	< 0.0001	0.851	↔	< 0.0001	0.247	↔	< 0.0001	0.758	↔	2024-11-28	2025-02-19	0.905
18_3_125	MW-18C	Appendix IV	Thallium	mg/l	9	9	100%	< 0.0001	0.826	↔	< 0.0001	0.026	↔	< 0.0001	0.472	↔	2024-12-11	2025-02-05	0.975
18_5_114	MW-18C	Part 115	Iron	mg/l	9	0	0%	0.01932	0.199	↔	-0.010133	0.346	↔	-0.015998	0.266	↔	2024-12-25	2025-05-24	0.852
18_5_129	MW-18C	Part 115	Zinc	mg/l	9	6	67%	< 0.0001	0.566	↔	-0.00011396	0.206	↔	< 0.0001	0.783	↔	2025-01-22	2025-04-25	0.614
19_3_104	MW-18D	Appendix IV	Beryllium	mg/l	9	9	100%	< 0.0001	0.596	↔	< 0.0001	0.040	↔	< 0.0001	0.567	↔	2024-12-03	2025-02-05	0.969
19_3_115	MW-18D	Appendix IV	Lead	mg/l	9	9	100%	< 0.0001	0.908	↔	< 0.0001	0.070	↔	< 0.0001	0.522	↔	2024-12-10	2025-02-12	0.957
19_3_116	MW-18D	Appendix IV	Lithium	mg/l	9	0	0%	< 0.0001	0.954	↔	-0.00021292	0.359	↔	-0.00012877	0.373	↔	2024-12-17	2025-04-03	0.877
19_3_117	MW-18D	Appendix IV	Mercury	mg/l	9	8	89%	< 0.0001	0.929	↔	< 0.0001	0.452	↔	< 0.0001	0.574	↔	2025-03-25	2024-11-30	0.873
19_3_125	MW-18D	Appendix IV	Thallium	mg/l	9	9	100%	< 0.0001	0.826	↔	< 0.0001	0.026	↔	< 0.0001	0.472	↔	2024-12-11	2025-02-05	0.975
19_5_129	MW-18D	Part 115	Zinc	mg/l	9	6	67%	< 0.0001	0.353	↔	-0.00011465	0.379	↔	< 0.0001	0.745	↔	2025-01-23	2025-04-27	0.635